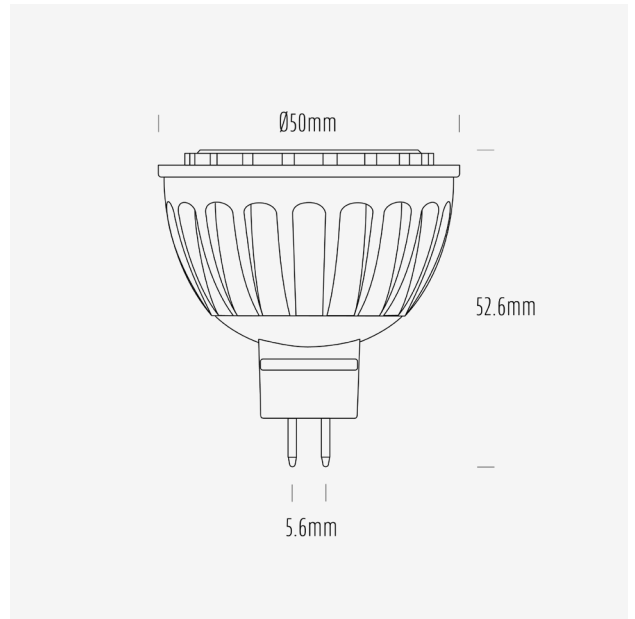


# AGL 300 Series

MR16 LED Globes



## AGL-300-22X40 / 2200K / MR16 / 40°



### Product Data

|              |                                 |  |  |  |
|--------------|---------------------------------|--|--|--|
| Product Code | AGL-300-22X40                   |  |  |  |
| Description  | Aqualux 300 Series LED Lamp     |  |  |  |
| Type         | MR16 GU5.6                      |  |  |  |
| Construction | Aluminium Heatsink + PMMA Optic |  |  |  |
| Warranty     | 3 Years                         |  |  |  |

### Electrical Data

|                     |              |       |              |       |
|---------------------|--------------|-------|--------------|-------|
| Input Voltage Range | 12~24V AC/DC |       |              |       |
| Nominal Voltage     | 24VDC        |       |              |       |
| Nominal Power       | 3W           |       |              |       |
| Nominal Current     | 125mA        |       |              |       |
| Input Voltage       | 12VDC        | 12VAC | <b>24VDC</b> | 24VAC |
| Rated Power         | 3.4          | 2.8   | <b>3.3</b>   | 3.4   |
| Operating Frequency | -            | 50Hz  | -            | 50Hz  |

|                                |     |   |               |   |
|--------------------------------|-----|---|---------------|---|
| Max. no. of lamps on AQD24-040 | 9   | - | <b>9</b>      | - |
| Max. no. of lamps on AQD24-100 | >22 | - | <b>&gt;22</b> | - |
| Max. no. of lamps on AQD24-240 | -   | - | -             | - |

|                       |             |
|-----------------------|-------------|
| Dimming Compatibility | Non dimming |
| Wiring Scheme         | Parallel    |
| Startup Time          | < 0.5s      |

### Mechanical & Thermal Data

|                      |            |
|----------------------|------------|
| Overall Length       | 52.6mm     |
| Max Diameter         | 50mm       |
| Lamp Base            | GU5.6      |
| Weight               | 55g        |
| Operating Temp Range | -20° - 45° |
| IP Rating            | IP20       |

### Photometric Data

|                   |       |       |              |       |
|-------------------|-------|-------|--------------|-------|
| Nominal Flux (lm) | 300   |       |              |       |
| Input Voltage     | 12VDC | 12VAC | <b>24VDC</b> | 24VAC |
| Input Power (W)   | 3.4   | 2.8   | <b>3.3</b>   | 3.4   |
| Rated Flux (lm)   | 357   | 293   | <b>363</b>   | 364   |
| Efficacy (lm/W)   | 105   | 103   | <b>110</b>   | 105   |

|                            |                  |
|----------------------------|------------------|
| CCT                        | 2200K            |
| CCT Description            | Ultra Warm White |
| CRI (Ra)                   | 82               |
| CRI (R9)                   | 11               |
| TM-30 (Rf)                 | 85               |
| TM-30 (Rg)                 | 91               |
| SDCM                       | -                |
| Peak Intensity (cd)        | 419              |
| Nominal Beam Angle         | 40°              |
| Measured Beam Angle (FWHM) | 43°              |

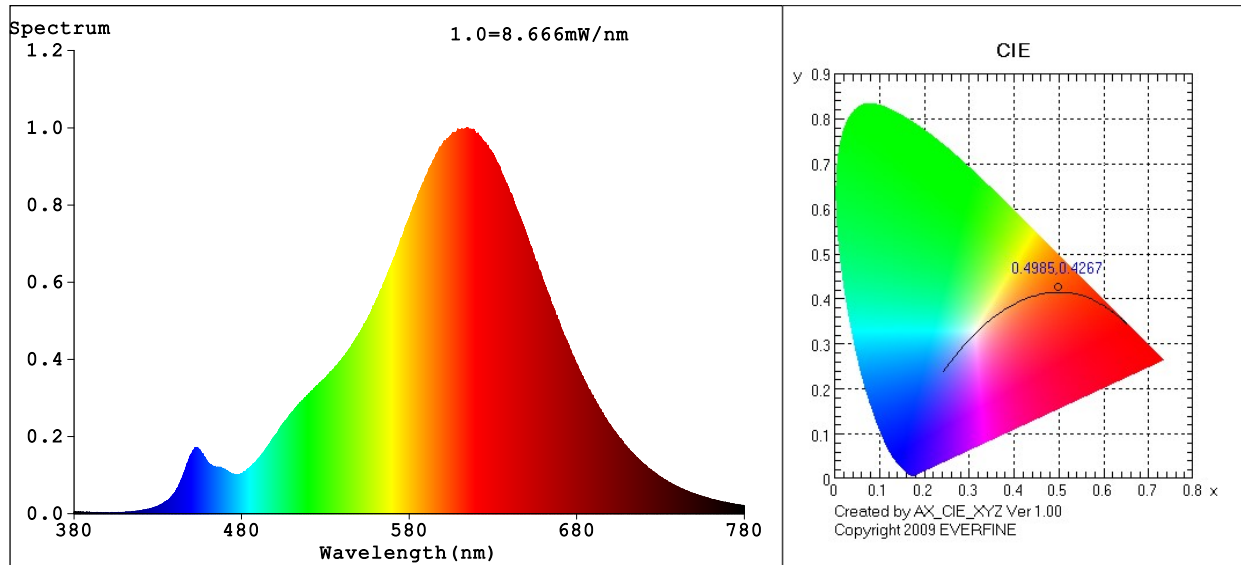
### Lifespan Data

|                  |         |
|------------------|---------|
| L70              | 15,000h |
| Switching Cycles | 15,000  |

### Compliance Data

|                 |     |
|-----------------|-----|
| EMI             | Yes |
| RCM             | N/A |
| Mercury Content | 0mg |

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4985$   $y=0.4267$  /  $u'=0.2799$   $v'=0.5391$   
 CCT=2350K (Duv=0.0037) Dominant WL:Ld =585.2nm WL:Lc = --nm Purity=77.7%  
 Ratio:R=28.2% G=70.2% B=1.5%; Peak WL:Lp=614.5nm FWHM=114.6nm  
 Render Index:Ra=82.0 AvgR=76.7 TM30:Rf=85 Rg=91

R1 =80 R2 =90 R3 =97 R4 =79 R5 =80 R6 =90 R7 =82  
 R8 =58 R9 =11 R10=79 R11=78 R12=74 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 363.4 lm Eff. : 109.64 lm/W Fe = 1.178 W

**Electrical parameters:**

V = 23.980 V I = 0.1382 A P = 3.314 W PF = 1.0000

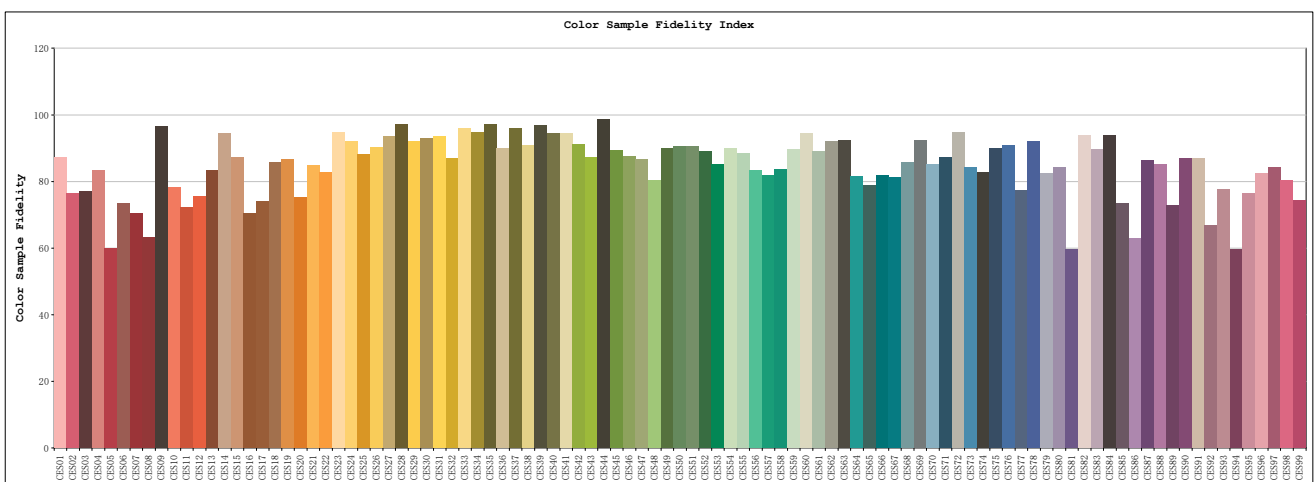
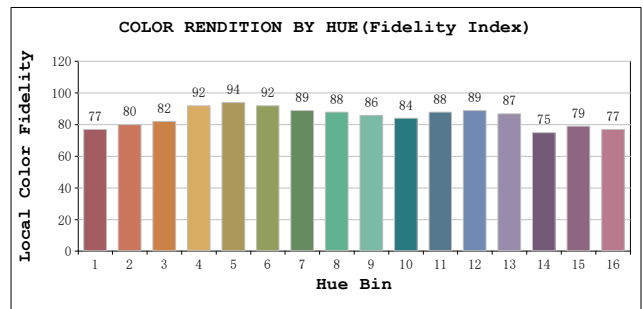
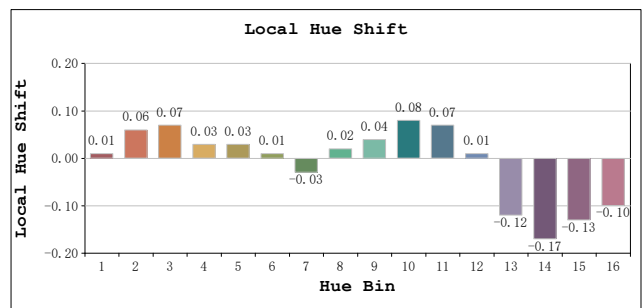
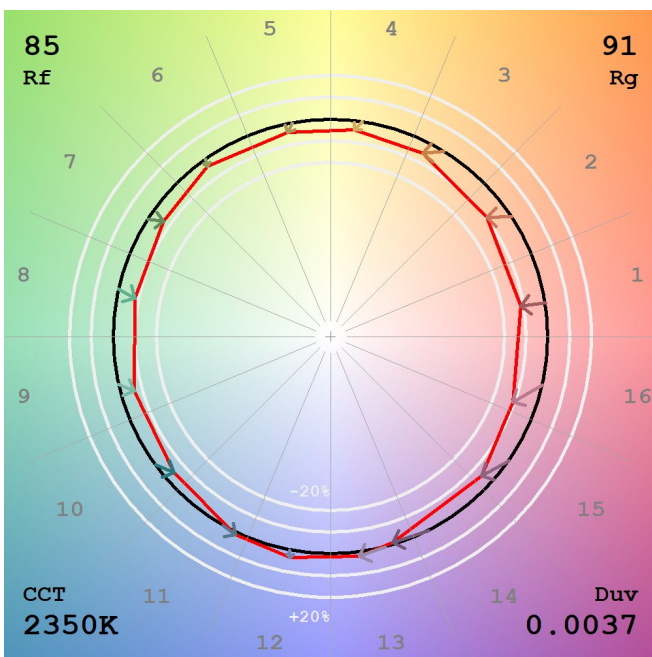
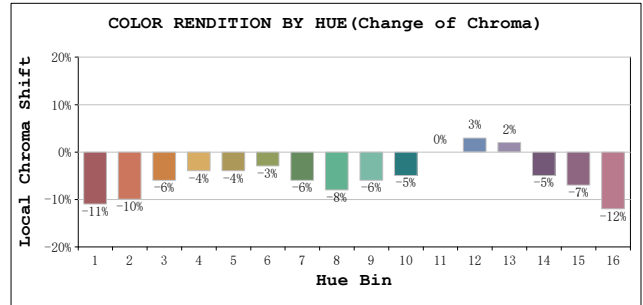
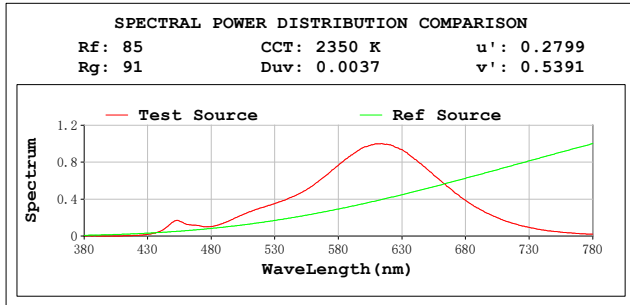
LEVEL:OUT WHITE:EXT\_2500K

Status: Integral T = 351 ms Ip = 50727 (77%)

**GBT5702**

# TM30

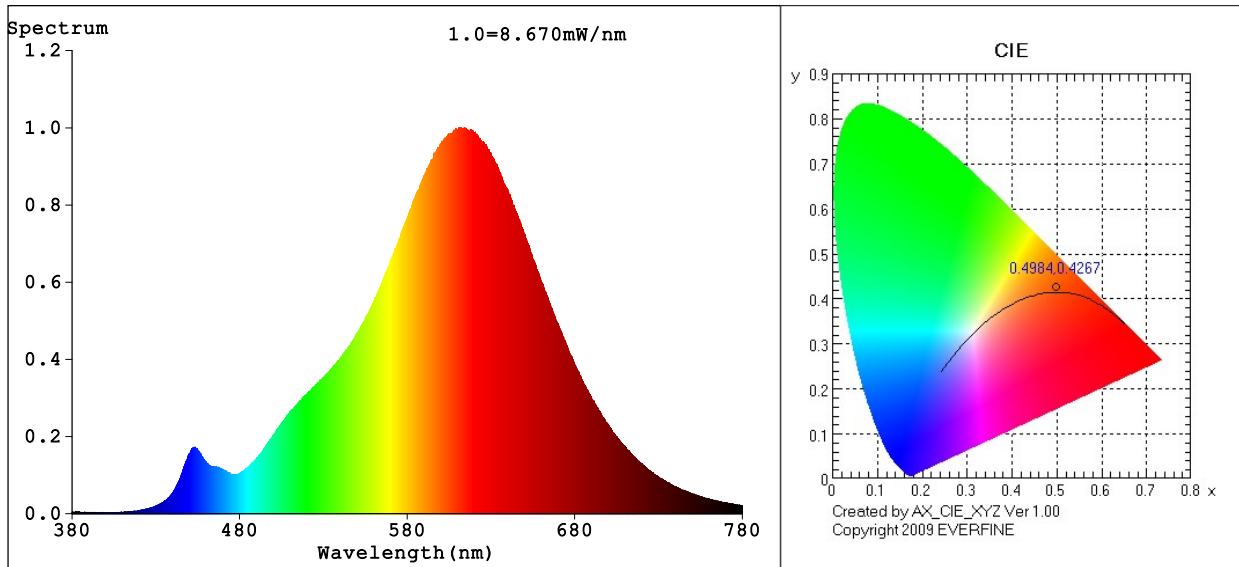
View Angle:2 Deg



Model:AGL-300-22X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-22X40 24VDC  
 Date:2023-10-16 15:31  
 Humidity:65.0%  
 Remarks:24V DC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4984$   $y=0.4267$  /  $u'=0.2799$   $v'=0.5391$   
 CCT=2351K (Duv=0.0037) Dominant WL:Ld =585.2nm WL:Lc = --nm Purity=77.7%  
 Ratio:R=28.2% G=70.2% B=1.5%; Peak WL:Lp=611.0nm FWHM=114.5nm  
 Render Index:Ra=82.0 AvgR=76.7 TM30:Rf=85 Rg=91

R1 =80 R2 =90 R3 =97 R4 =79 R5 =80 R6 =90 R7 =82  
 R8 =58 R9 =11 R10=79 R11=78 R12=74 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 363.7 lm Eff. : 105.49 lm/W Fe = 1.179 W

**Electrical parameters:**

V = 23.975 V I = 0.2332 A P = 3.448 W PF = 0.6168

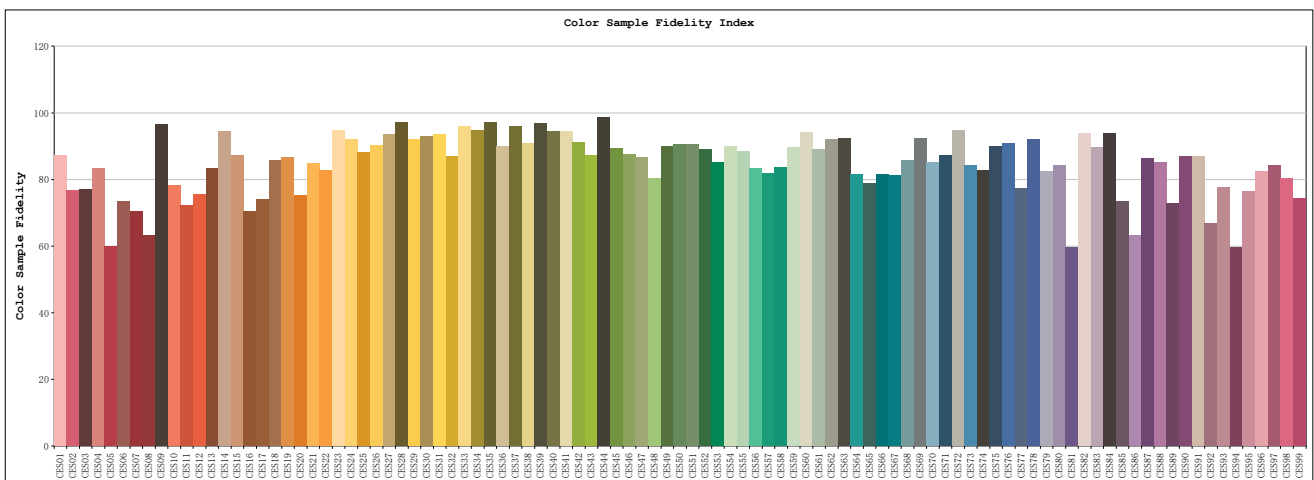
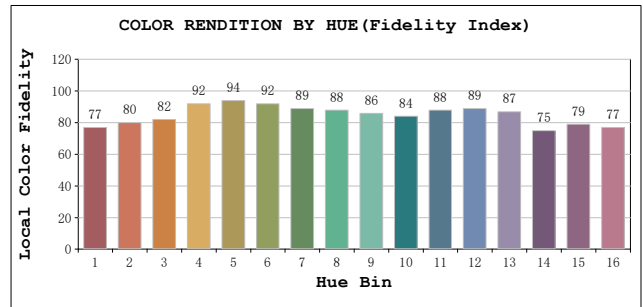
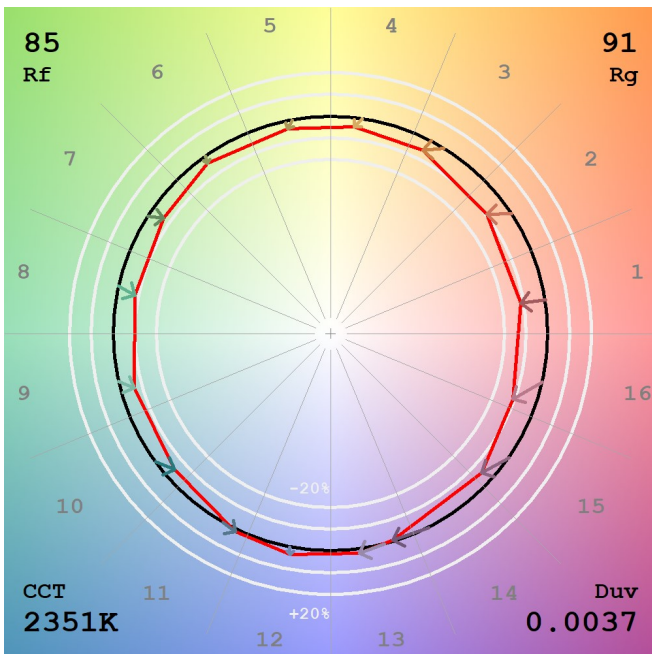
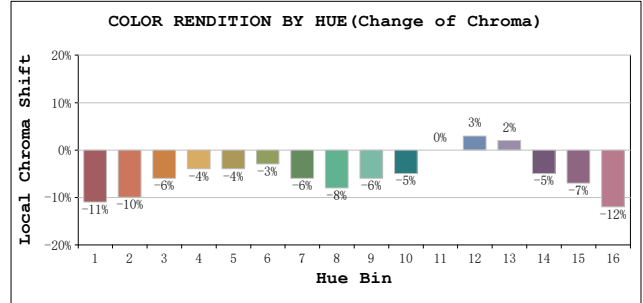
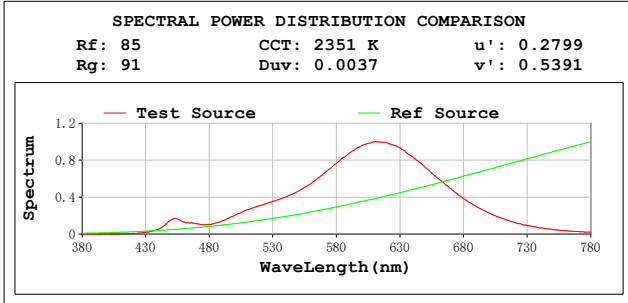
LEVEL:OUT WHITE:EXT\_2500K

Status: Integral T = 351 ms Ip = 50790 (78%)

**GBT5702**

# TM30

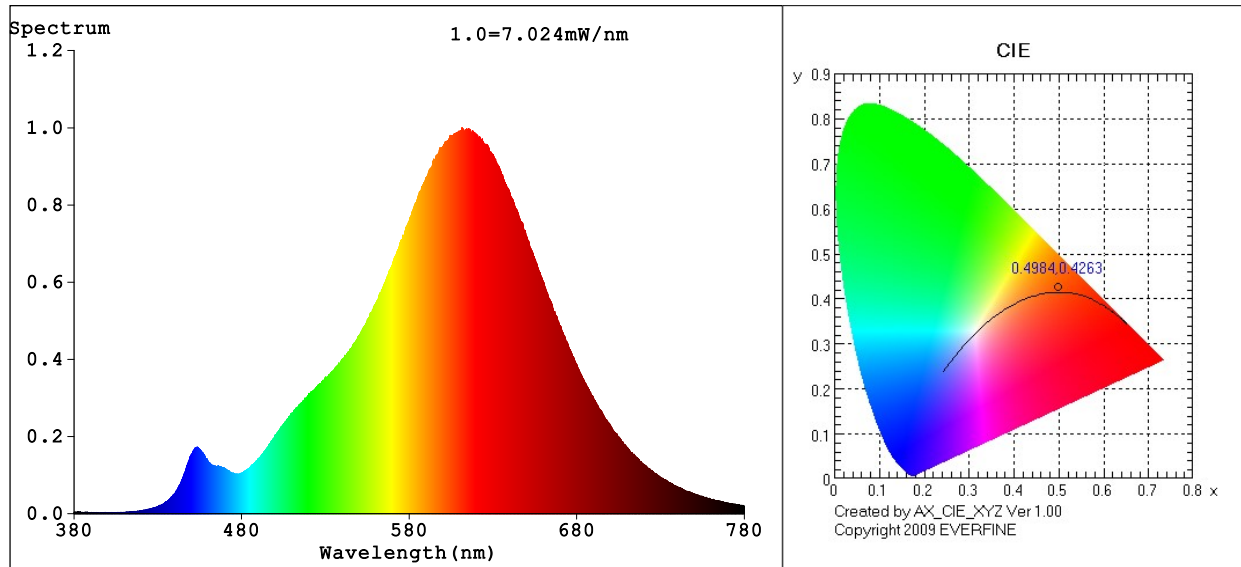
View Angle: 2 Deg



Model:AGL-300-22X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-22X40 24VAC  
 Date:2023-10-16 15:31:17  
 Humidity:65.0%  
 Remarks:24V AC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4984$   $y=0.4263$  /  $u'=0.2801$   $v'=0.5390$   
 CCT=2348K (Duv=0.0035) Dominant WL:Ld =585.2nm WL:Lc = --nm Purity=77.6%  
 Ratio:R=28.3% G=70.2% B=1.6%; Peak WL:Lp=611.6nm FWHM=114.5nm  
 Render Index:Ra=82.0 AvgR=76.8 TM30:Rf=85 Rg=91

R1 =80 R2 =91 R3 =97 R4 =79 R5 =80 R6 =90 R7 =82  
 R8 =58 R9 =11 R10=80 R11=78 R12=74 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 292.8 lm Eff. : 103.17 lm/W Fe = 949.9 mW

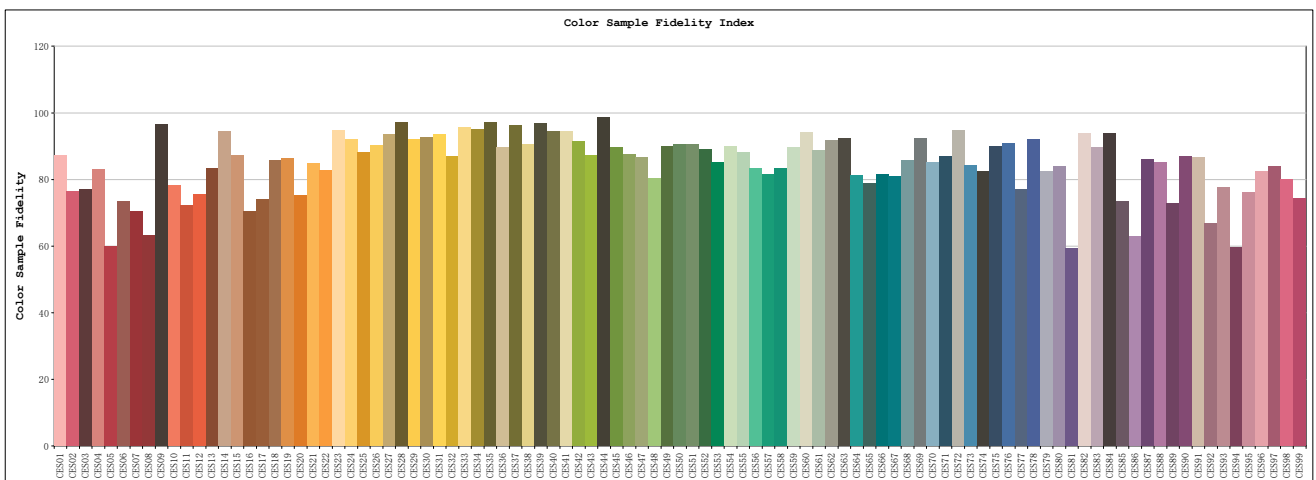
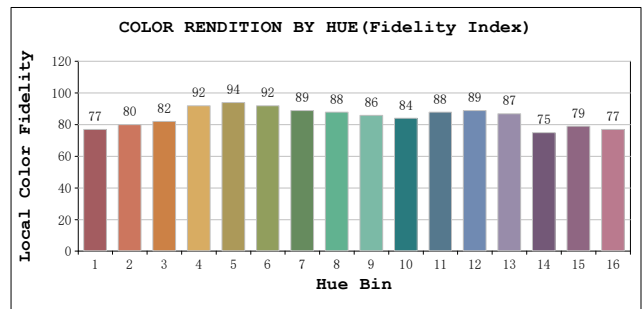
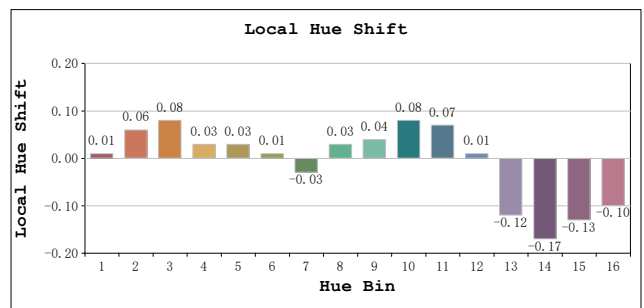
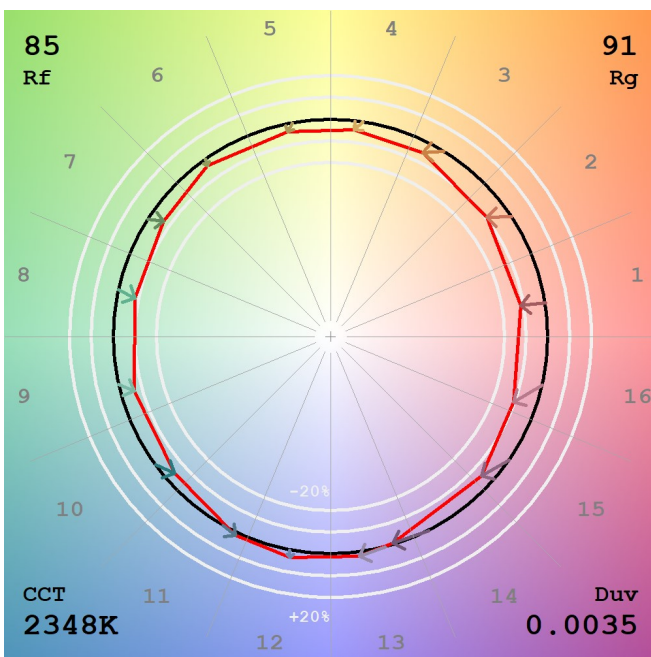
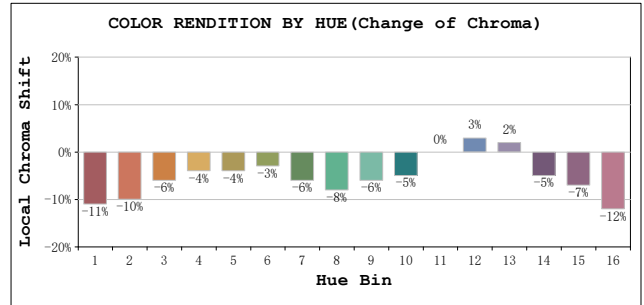
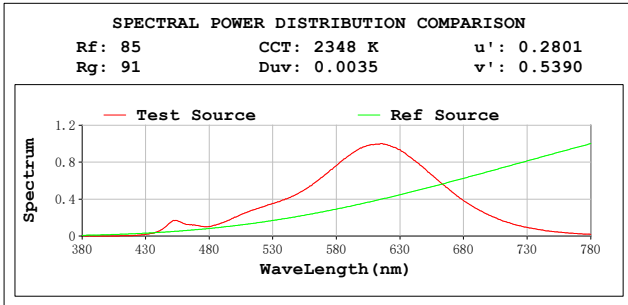
**Electrical parameters:**

V = 11.996 V I = 0.3333 A P = 2.838 W PF = 0.7098  
 LEVEL:OUT WHITE:EXT\_2500K  
 Status: Integral T = 351 ms Ip = 41035 (63%)

**GBT5702**

# TM30

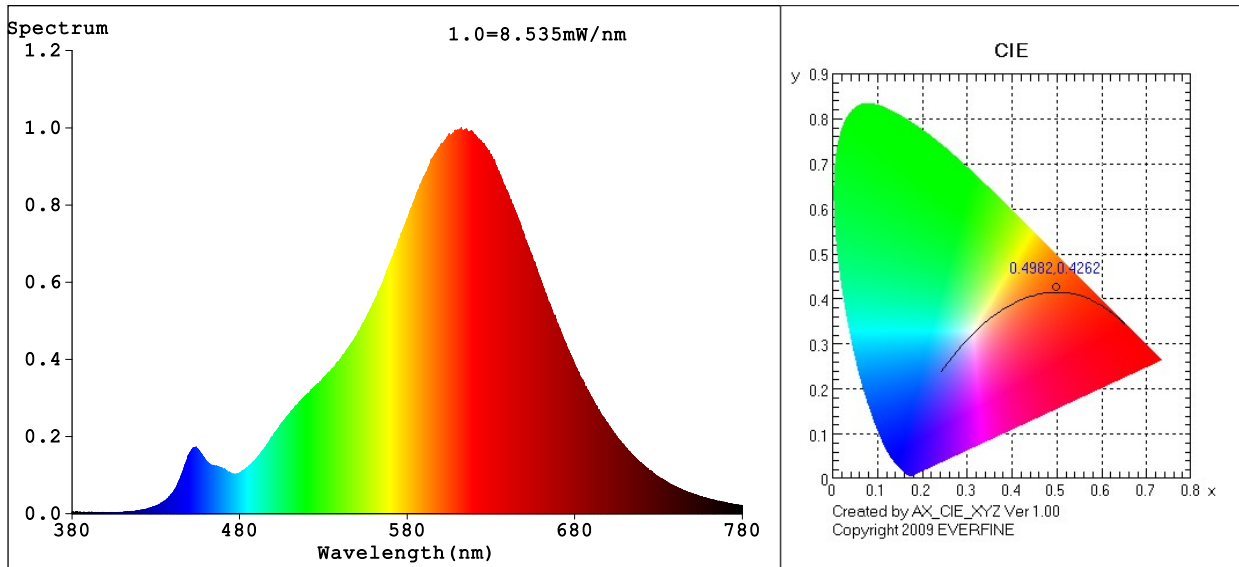
View Angle: 2 Deg



Model:AGL-300-22X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-22X40 12VAC  
 Date:2023-10-16 15:33:18  
 Humidity:65.0%  
 Remarks:12VAC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4982$   $y=0.4262$  /  $u'=0.2799$   $v'=0.5389$   
 CCT=2350K (Duv=0.0035) Dominant WL:Ld =585.2nm WL:Lc = --nm Purity=77.5%  
 Ratio:R=28.2% G=70.2% B=1.6%; Peak WL:Lp=612.3nm FWHM=114.9nm  
 Render Index:Ra=81.9 AvgR=76.7 TM30:Rf=85 Rg=91

R1 =80 R2 =91 R3 =96 R4 =79 R5 =79 R6 =90 R7 =82  
 R8 =58 R9 =11 R10=80 R11=78 R12=74 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 356.6 lm Eff. : 105.27 lm/W Fe = 1.157 W

**Electrical parameters:**

V = 11.963 V I = 0.2832 A P = 3.388 W PF = 1.000

LEVEL:OUT WHITE:EXT\_2500K

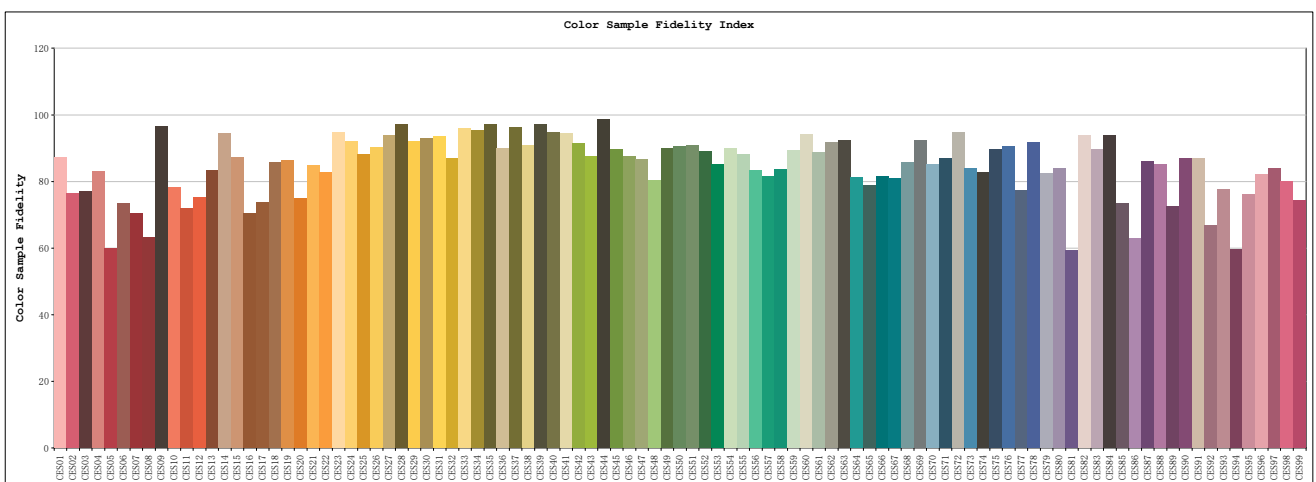
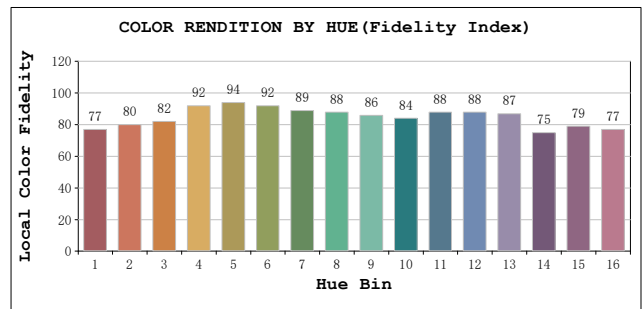
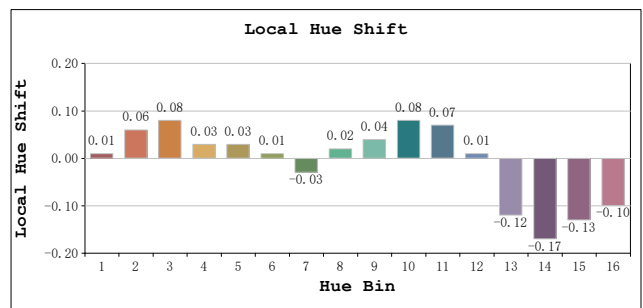
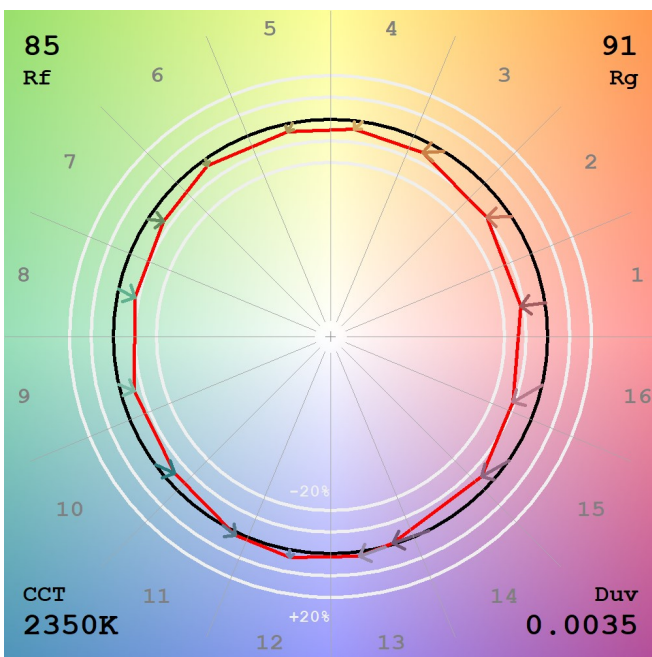
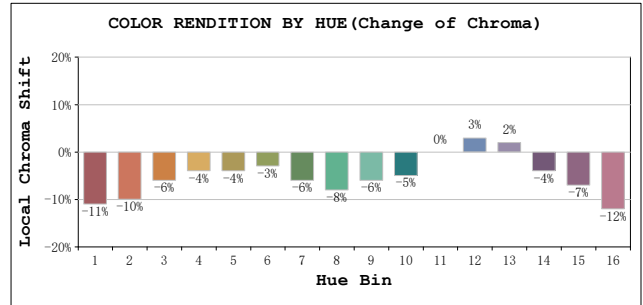
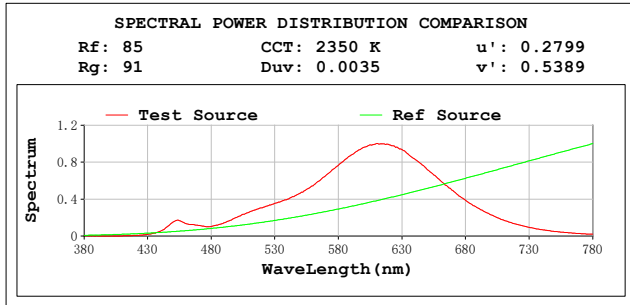
Status: Integral T = 351 ms Ip = 49907 (76%)

**GBT5702**



# TM30

View Angle: 2 Deg



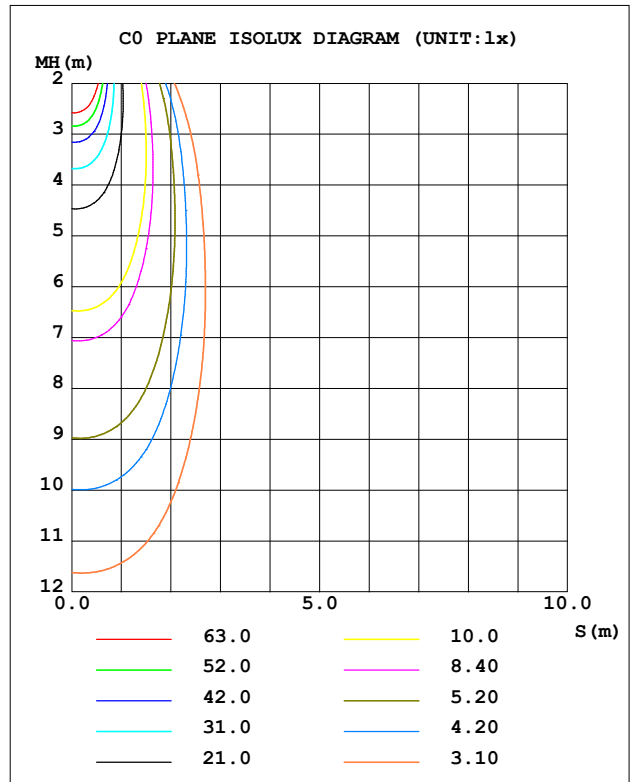
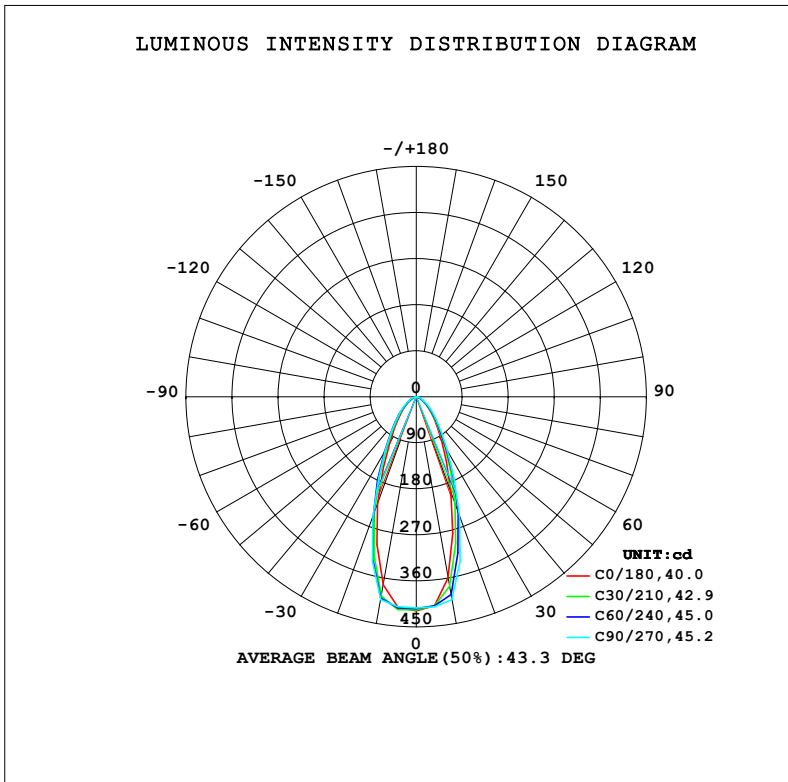
Model:AGL-300-22X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-22X40 12VDC  
 Date:2023-10-16 15:34:16  
 Humidity:65.0%  
 Remarks:12VDC

LUMINAIRE PHOTOMETRIC TEST REPORT

|                                                       |       |                  |
|-------------------------------------------------------|-------|------------------|
| Test:U:23.872V I:0.1346A P:3.2132W PF:1.0000 Freq:0Hz |       |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:325.55x1 lm |       |                  |
| NAME: AGL-300-22X40                                   | TYPE: | WEIGHT:          |
| SPEC.:                                                | DIM.: | SERIAL No.:      |
| MFR.: AQUALUX                                         | SUR.: | Shielding Angle: |

| DATA OF LAMP      |        | PHOTOMETRIC DATA      |        |                     |           |
|-------------------|--------|-----------------------|--------|---------------------|-----------|
| MODEL             | -      | I <sub>max</sub> (cd) | 418.5  | S/MH (C0/180)       | 0.68      |
| NOMINAL POWER (W) | 3      | LOR (%)               | 100.0  | S/MH (C90/270)      | 0.73      |
| RATED VOLTAGE (V) | 24     | TOTAL FLUX (lm)       | 325.55 | η UP, DN (C0-180)   | 0.0, 49.9 |
| NOMINAL FLUX (lm) | 325.55 | CIE CLASS             | DIRECT | η UP, DN (C180-360) | 0.0, 50.1 |
| LAMPS INSIDE      | 1      | η up (%)              | 0.0    | CIBSE SHR NOM       | 0.75      |
| TEST VOLTAGE (V)  | 24     | η down (%)            | 100.0  | CIBSE SHR MAX       | 0.75      |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 11 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

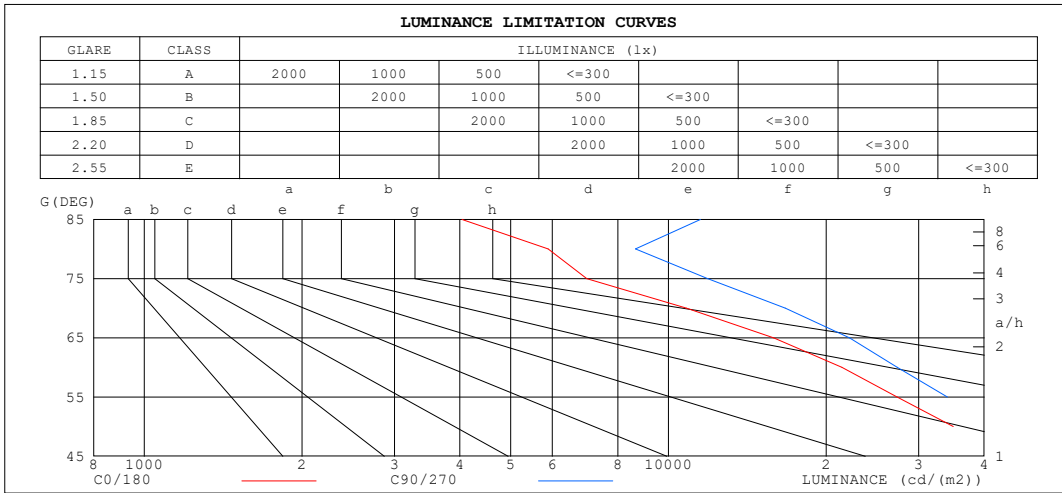
| $\gamma$ | C0                    | C45   | C90    | C135   | C180  | C225   | C270   | C315  | $\gamma$ | ⊙ zone  | ⊙ total | %lum, lamp |
|----------|-----------------------|-------|--------|--------|-------|--------|--------|-------|----------|---------|---------|------------|
| 10       | 359.5                 | 385.4 | 402.9  | 400.6  | 373.3 | 400.6  | 402.9  | 385.4 | 0- 10    | 38.56   | 38.56   | 11.8,11.8  |
| 20       | 198.2                 | 232.4 | 247.1  | 245.1  | 221.6 | 245.1  | 247.1  | 232.4 | 10- 20   | 87.07   | 125.6   | 38.6,38.6  |
| 30       | 99.24                 | 114.5 | 121.4  | 121.9  | 104.9 | 121.9  | 121.4  | 114.5 | 20- 30   | 77.84   | 203.5   | 62.5,62.5  |
| 40       | 54.21                 | 59.54 | 64.02  | 63.77  | 54.35 | 63.77  | 64.02  | 59.54 | 30- 40   | 52.83   | 256.3   | 78.7,78.7  |
| 50       | 28.18                 | 29.42 | 34.49  | 32.93  | 27.92 | 32.93  | 34.49  | 29.42 | 40- 50   | 34.52   | 290.8   | 89.3,89.3  |
| 60       | 13.45                 | 13.37 | 17.15  | 15.35  | 13.24 | 15.35  | 17.15  | 13.37 | 50- 60   | 19.99   | 310.8   | 95.5,95.5  |
| 70       | 4.646                 | 5.223 | 7.169  | 6.345  | 5.075 | 6.345  | 7.169  | 5.223 | 60- 70   | 10.03   | 320.8   | 98.6,98.6  |
| 80       | 1.284                 | 1.500 | 1.887  | 1.883  | 1.449 | 1.883  | 1.887  | 1.500 | 70- 80   | 3.660   | 324.5   | 99.7,99.7  |
| 90       | 0                     | 0     | 0.1927 | 0.1190 | 0     | 0.1190 | 0.1927 | 0     | 80- 90   | 1.040   | 325.5   | 100,100    |
| 100      |                       |       |        |        |       |        |        |       | 90-100   |         |         |            |
| 110      |                       |       |        |        |       |        |        |       | 100-110  |         |         |            |
| 120      |                       |       |        |        |       |        |        |       | 110-120  |         |         |            |
| 130      |                       |       |        |        |       |        |        |       | 120-130  |         |         |            |
| 140      |                       |       |        |        |       |        |        |       | 130-140  |         |         |            |
| 150      |                       |       |        |        |       |        |        |       | 140-150  |         |         |            |
| 160      |                       |       |        |        |       |        |        |       | 150-160  |         |         |            |
| 170      |                       |       |        |        |       |        |        |       | 160-170  |         |         |            |
| 180      |                       |       |        |        |       |        |        |       | 170-180  |         |         |            |
| DEG      | LUMINOUS INTENSITY:cd |       |        |        |       |        |        |       |          | UNIT:lm |         |            |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:11 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

**LUMINANCE LIMITATION CURVES**

|                                                                                                                              |              |                         |
|------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------|
| <b>Test:U:23.872V I:0.1346A P:3.2132W PF:1.0000 Freq:0Hz</b><br><b>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:325.55x1 lm</b> |              |                         |
| <b>NAME: AGL-300-22X40</b>                                                                                                   | <b>TYPE:</b> | <b>WEIGHT:</b>          |
| <b>SPEC.:</b>                                                                                                                | <b>DIM.:</b> | <b>SERIAL No.:</b>      |
| <b>MFR.: AQUALUX</b>                                                                                                         | <b>SUR.:</b> | <b>Shielding Angle:</b> |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 4038   | 11504   |
| 80                | 5888   | 8651    |
| 75                | 6980   | 11881   |
| 70                | 10816  | 16689   |
| 65                | 15865  | 22148   |
| 60                | 21412  | 27310   |
| 55                | 27305  | 34067   |
| 50                | 34902  | 42718   |
| 45                | 44520  | 53349   |

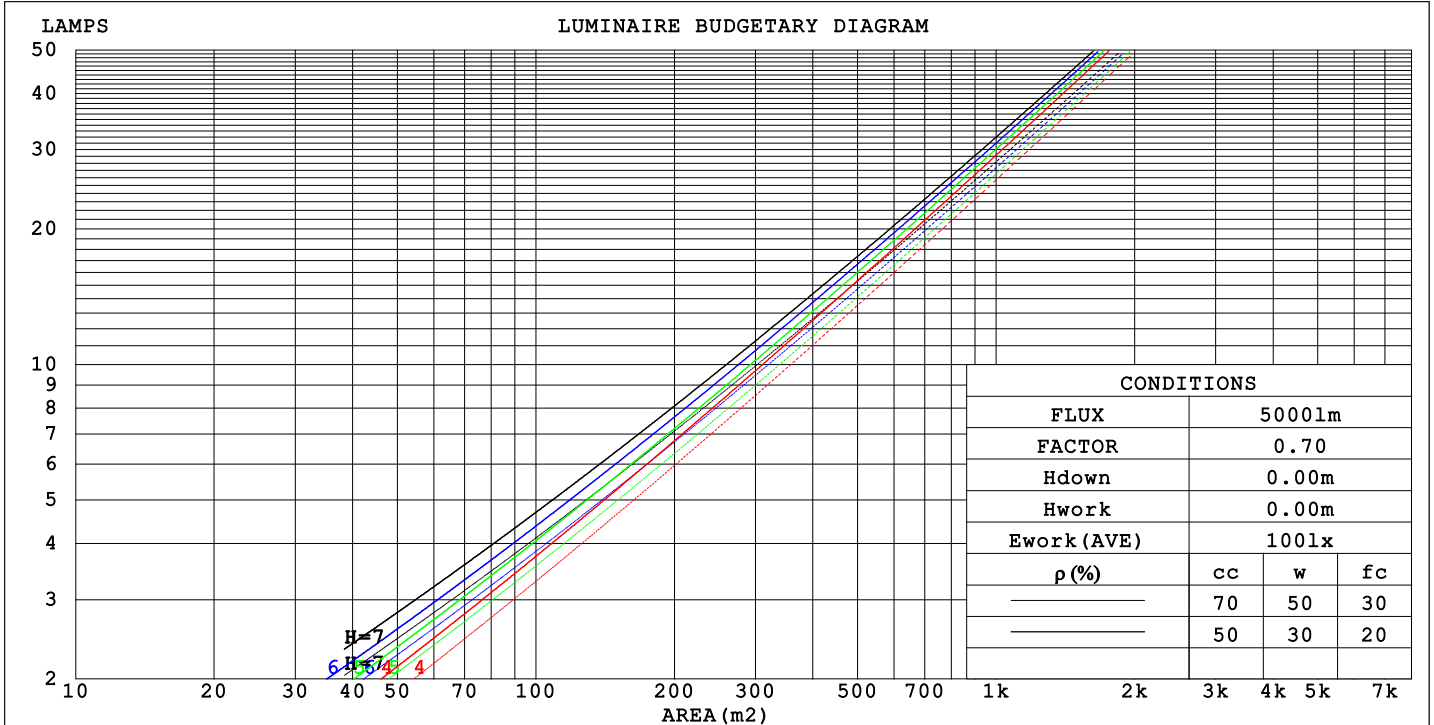
C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operator:NICK  
 Test Date:11 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

|                                                       |       |                  |
|-------------------------------------------------------|-------|------------------|
| Test:U:23.872V I:0.1346A P:3.2132W PF:1.0000 Freq:0Hz |       |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:325.55x1 lm |       |                  |
| NAME: AGL-300-22X40                                   | TYPE: | WEIGHT:          |
| SPEC.:                                                | DIM.: | SERIAL No.:      |
| MFR.: AQUALUX                                         | SUR.: | Shielding Angle: |

| pcc             | 80%                   |      |      | 70%  |      |      | 50%                              |      |      | 30%  |      |      | 10%  |      |      | 0    |
|-----------------|-----------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|------|------|------|
|                 | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                              | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  |      |
| p <sub>w</sub>  |                       |      |      |      |      |      |                                  |      |      |      |      |      |      |      |      |      |
| p <sub>fc</sub> | 20%                   |      |      | 20%  |      |      | 20%                              |      |      | 20%  |      |      | 20%  |      |      | 0    |
| RCR             | RCR:Room Cavity Ratio |      |      |      |      |      | Coefficients of Utilization (CU) |      |      |      |      |      |      |      |      |      |
| 0.0             | 1.19                  | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11                             | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1.00 |
| 1.0             | 1.09                  | 1.07 | 1.04 | 1.07 | 1.05 | 1.02 | 1.03                             | 1.01 | .99  | .99  | .98  | .96  | .96  | .95  | .94  | .92  |
| 2.0             | 1.01                  | .96  | .92  | .99  | .95  | .91  | .96                              | .92  | .89  | .93  | .90  | .87  | .90  | .87  | .85  | .84  |
| 3.0             | .93                   | .87  | .83  | .91  | .86  | .82  | .89                              | .84  | .81  | .86  | .83  | .80  | .84  | .81  | .78  | .77  |
| 4.0             | .86                   | .80  | .75  | .85  | .79  | .75  | .83                              | .78  | .74  | .81  | .76  | .73  | .79  | .75  | .72  | .70  |
| 5.0             | .80                   | .74  | .69  | .79  | .73  | .69  | .77                              | .72  | .68  | .76  | .71  | .67  | .74  | .70  | .67  | .65  |
| 6.0             | .75                   | .68  | .64  | .74  | .68  | .63  | .72                              | .67  | .63  | .71  | .66  | .63  | .70  | .65  | .62  | .61  |
| 7.0             | .70                   | .64  | .59  | .69  | .63  | .59  | .68                              | .63  | .59  | .67  | .62  | .58  | .66  | .61  | .58  | .56  |
| 8.0             | .66                   | .60  | .55  | .65  | .59  | .55  | .64                              | .59  | .55  | .63  | .58  | .55  | .62  | .58  | .54  | .53  |
| 9.0             | .62                   | .56  | .52  | .62  | .56  | .52  | .61                              | .55  | .51  | .60  | .55  | .51  | .59  | .54  | .51  | .50  |
| 10.0            | .59                   | .53  | .49  | .58  | .53  | .49  | .58                              | .52  | .49  | .57  | .52  | .48  | .56  | .52  | .48  | .47  |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 11 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

**WEC AND CCEC**

|                                                       |       |                  |
|-------------------------------------------------------|-------|------------------|
| Test:U:23.872V I:0.1346A P:3.2132W PF:1.0000 Freq:0Hz |       |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:325.55x1 lm |       |                  |
| NAME: AGL-300-22X40                                   | TYPE: | WEIGHT:          |
| SPEC.:                                                | DIM.: | SERIAL No.:      |
| MFR.: AQUALUX                                         | SUR.: | Shielding Angle: |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                              |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                              | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                              |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients (WEC) |      |      |      |      |      |      |      |      |   |
| 0.0  |                       |      |      |      |      |      |                                  |      |      |      |      |      |      |      |      |   |
| 1.0  | .202                  | .115 | .036 | .195 | .111 | .035 | .182                             | .105 | .033 | .171 | .099 | .032 | .160 | .093 | .030 |   |
| 2.0  | .193                  | .106 | .033 | .188 | .103 | .032 | .177                             | .098 | .031 | .167 | .094 | .029 | .158 | .089 | .028 |   |
| 3.0  | .183                  | .097 | .029 | .178 | .095 | .029 | .169                             | .092 | .028 | .160 | .088 | .027 | .152 | .084 | .026 |   |
| 4.0  | .173                  | .090 | .026 | .169 | .088 | .026 | .161                             | .085 | .025 | .153 | .082 | .025 | .146 | .079 | .024 |   |
| 5.0  | .163                  | .083 | .024 | .160 | .082 | .024 | .153                             | .079 | .023 | .146 | .077 | .023 | .140 | .075 | .022 |   |
| 6.0  | .155                  | .077 | .022 | .151 | .076 | .022 | .145                             | .074 | .022 | .139 | .072 | .021 | .134 | .070 | .021 |   |
| 7.0  | .146                  | .072 | .021 | .143 | .071 | .020 | .138                             | .070 | .020 | .133 | .068 | .020 | .128 | .066 | .020 |   |
| 8.0  | .139                  | .068 | .019 | .136 | .067 | .019 | .131                             | .066 | .019 | .127 | .064 | .019 | .122 | .063 | .018 |   |
| 9.0  | .132                  | .064 | .018 | .130 | .063 | .018 | .125                             | .062 | .018 | .121 | .061 | .017 | .117 | .060 | .017 |   |
| 10.0 | .126                  | .060 | .017 | .124 | .060 | .017 | .120                             | .059 | .017 | .116 | .058 | .016 | .113 | .057 | .016 |   |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                                         |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                         | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                                         |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients (CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                        | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .173                  | .157 | .143 | .148 | .135 | .123 | .101                                        | .093 | .085 | .058 | .054 | .049 | .019 | .017 | .016 |   |
| 2.0  | .159                  | .132 | .110 | .136 | .114 | .095 | .093                                        | .079 | .066 | .054 | .046 | .039 | .017 | .015 | .013 |   |
| 3.0  | .148                  | .114 | .087 | .127 | .098 | .075 | .087                                        | .068 | .053 | .050 | .040 | .031 | .016 | .013 | .010 |   |
| 4.0  | .138                  | .099 | .070 | .118 | .086 | .061 | .081                                        | .060 | .043 | .047 | .035 | .025 | .015 | .011 | .008 |   |
| 5.0  | .130                  | .088 | .057 | .111 | .076 | .050 | .077                                        | .053 | .035 | .044 | .031 | .021 | .014 | .010 | .007 |   |
| 6.0  | .122                  | .079 | .048 | .105 | .068 | .041 | .072                                        | .048 | .029 | .042 | .028 | .017 | .014 | .009 | .006 |   |
| 7.0  | .116                  | .071 | .040 | .099 | .062 | .035 | .069                                        | .043 | .025 | .040 | .026 | .015 | .013 | .008 | .005 |   |
| 8.0  | .110                  | .065 | .035 | .094 | .057 | .030 | .065                                        | .040 | .021 | .038 | .023 | .013 | .012 | .008 | .004 |   |
| 9.0  | .104                  | .060 | .030 | .090 | .052 | .026 | .062                                        | .037 | .019 | .036 | .022 | .011 | .012 | .007 | .004 |   |
| 10.0 | .099                  | .056 | .027 | .086 | .048 | .023 | .059                                        | .034 | .016 | .035 | .020 | .010 | .011 | .007 | .003 |   |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:11 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

UGR(Unified Glare Rating) Table

|                                                       |       |                  |
|-------------------------------------------------------|-------|------------------|
| Test:U:23.872V I:0.1346A P:3.2132W PF:1.0000 Freq:0Hz |       |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:325.55x1 lm |       |                  |
| NAME: AGL-300-22X40                                   | TYPE: | WEIGHT:          |
| SPEC.:                                                | DIM.: | SERIAL No.:      |
| MFR.: AQUALUX                                         | SUR.: | Shielding Angle: |

|                |     |     |     |     |     |     |     |     |     |     |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ceiling/cavity | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| walls          | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| working plane  | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

| Room dimensions |        | Viewed crosswise |      |      |      |      | Viewed endwise |      |      |      |      |
|-----------------|--------|------------------|------|------|------|------|----------------|------|------|------|------|
| x = 2H          | y = 2H | 25.3             | 26.4 | 25.6 | 26.6 | 26.8 | 26.4           | 27.4 | 26.6 | 27.6 | 27.8 |
|                 | 3H     | 25.5             | 26.5 | 25.8 | 26.7 | 26.9 | 26.8           | 27.7 | 27.0 | 27.9 | 28.1 |
|                 | 4H     | 25.5             | 26.4 | 25.8 | 26.7 | 26.9 | 26.8           | 27.7 | 27.1 | 28.0 | 28.2 |
|                 | 6H     | 25.5             | 26.4 | 25.8 | 26.6 | 26.9 | 26.8           | 27.7 | 27.1 | 27.9 | 28.2 |
|                 | 8H     | 25.5             | 26.3 | 25.8 | 26.6 | 26.8 | 26.8           | 27.7 | 27.2 | 27.9 | 28.2 |
|                 | 12H    | 25.5             | 26.3 | 25.9 | 26.6 | 26.9 | 26.8           | 27.6 | 27.2 | 27.9 | 28.2 |
| 4H              | 2H     | 25.5             | 26.4 | 25.8 | 26.6 | 26.9 | 26.4           | 27.3 | 26.7 | 27.6 | 27.8 |
|                 | 3H     | 25.7             | 26.5 | 26.1 | 26.8 | 27.1 | 26.9           | 27.7 | 27.2 | 27.9 | 28.2 |
|                 | 4H     | 25.8             | 26.5 | 26.1 | 26.8 | 27.1 | 27.0           | 27.7 | 27.3 | 28.0 | 28.3 |
|                 | 6H     | 25.8             | 26.4 | 26.1 | 26.7 | 27.1 | 27.0           | 27.6 | 27.4 | 28.0 | 28.3 |
|                 | 8H     | 25.7             | 26.3 | 26.1 | 26.7 | 27.1 | 27.1           | 27.7 | 27.5 | 28.0 | 28.4 |
|                 | 12H    | 25.9             | 26.5 | 26.4 | 26.9 | 27.3 | 27.1           | 27.6 | 27.5 | 28.0 | 28.4 |
| 8H              | 4H     | 25.7             | 26.3 | 26.1 | 26.7 | 27.0 | 26.9           | 27.5 | 27.3 | 27.8 | 28.2 |
|                 | 6H     | 25.8             | 26.3 | 26.2 | 26.6 | 27.1 | 27.0           | 27.5 | 27.4 | 27.9 | 28.3 |
|                 | 8H     | 25.8             | 26.2 | 26.2 | 26.6 | 27.1 | 27.1           | 27.5 | 27.5 | 27.9 | 28.4 |
|                 | 12H    | 26.3             | 26.7 | 26.8 | 27.1 | 27.6 | 27.2           | 27.5 | 27.6 | 28.0 | 28.5 |
| 12H             | 4H     | 25.7             | 26.2 | 26.1 | 26.6 | 27.0 | 26.8           | 27.4 | 27.2 | 27.8 | 28.1 |
|                 | 6H     | 25.8             | 26.2 | 26.2 | 26.6 | 27.0 | 27.0           | 27.4 | 27.4 | 27.8 | 28.2 |
|                 | 8H     | 25.8             | 26.2 | 26.3 | 26.6 | 27.1 | 27.1           | 27.5 | 27.6 | 27.9 | 28.4 |

|                                                                 |               |               |
|-----------------------------------------------------------------|---------------|---------------|
| Variations with the observer position at spacings(CIE Pub.117): |               |               |
| S = 1.0H                                                        | + 1.0 / - 1.5 | + 0.8 / - 1.1 |
| 1.5H                                                            | + 1.2 / - 1.4 | + 1.1 / - 1.3 |
| 2.0H                                                            | + 2.2 / - 1.8 | + 2.2 / - 1.7 |

CIE Pub.117, 325.5 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.9)  
 Area: 0.001256 m2

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:11 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

**UTILIZATION FACTORS TABLE**

|                                                       |       |                  |
|-------------------------------------------------------|-------|------------------|
| Test:U:23.872V I:0.1346A P:3.2132W PF:1.0000 Freq:0Hz |       |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:325.55x1 lm |       |                  |
| NAME: AGL-300-22X40                                   | TYPE: | WEIGHT:          |
| SPEC.:                                                | DIM.: | SERIAL No.:      |
| MFR.: AQUALUX                                         | SUR.: | Shielding Angle: |

| REFLECTANCE                      |                                                      |     |           |     |     |     |               |     |     |        |
|----------------------------------|------------------------------------------------------|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8                                                  | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 0.5           | 0.5 | 0.5 | 0      |
| Walls                            | 0.7                                                  | 0.5 | 0.3       | 0.7 | 0.5 | 0.3 | 0.7           | 0.5 | 0.3 | 0      |
| Working plane                    | 0.2                                                  | 0.2 | 0.2       | 0.2 | 0.2 | 0.2 | 0.2           | 0.2 | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$ |     |           |     |     |     |               |     |     |        |
| k = 0.60                         | 78                                                   | 70  | 65        | 78  | 70  | 65  | 77            | 70  | 65  | 61     |
| 0.80                             | 87                                                   | 79  | 74        | 86  | 79  | 74  | 85            | 78  | 74  | 69     |
| 1.00                             | 93                                                   | 86  | 81        | 92  | 85  | 81  | 90            | 85  | 80  | 75     |
| 1.25                             | 98                                                   | 91  | 87        | 97  | 91  | 86  | 94            | 89  | 85  | 80     |
| 1.50                             | 101                                                  | 95  | 91        | 100 | 94  | 90  | 97            | 93  | 89  | 84     |
| 2.00                             | 105                                                  | 100 | 96        | 104 | 99  | 95  | 101           | 97  | 94  | 88     |
| 2.50                             | 107                                                  | 103 | 99        | 106 | 101 | 98  | 102           | 99  | 96  | 90     |
| 3.00                             | 109                                                  | 105 | 102       | 108 | 104 | 101 | 104           | 101 | 98  | 92     |
| 4.00                             | 112                                                  | 108 | 106       | 110 | 107 | 104 | 106           | 104 | 101 | 94     |
| 5.00                             | 113                                                  | 110 | 108       | 111 | 109 | 106 | 107           | 105 | 103 | 95     |
| ROOM INDEX                       | UF(total)                                            |     |           |     |     |     |               |     |     | Direct |
| According to DIN EN 13032-2 2004 |                                                      |     | Suspended |     |     |     | SHRNOM = 1.25 |     |     |        |

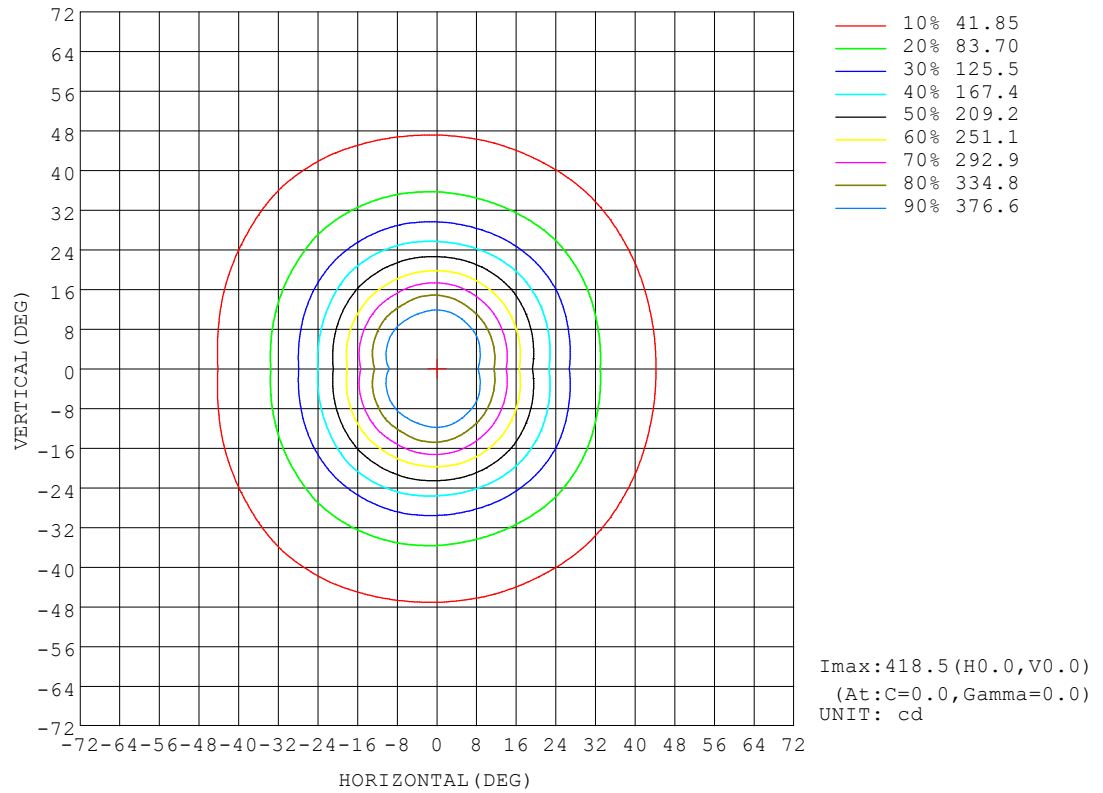
C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:11 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM



ISOCANDELA DIAGRAM

|                                                       |       |                  |
|-------------------------------------------------------|-------|------------------|
| Test:U:23.872V I:0.1346A P:3.2132W PF:1.0000 Freq:0Hz |       |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:325.55x1 lm |       |                  |
| NAME: AGL-300-22X40                                   | TYPE: | WEIGHT:          |
| SPEC.:                                                | DIM.: | SERIAL No.:      |
| MFR.: AQUALUX                                         | SUR.: | Shielding Angle: |

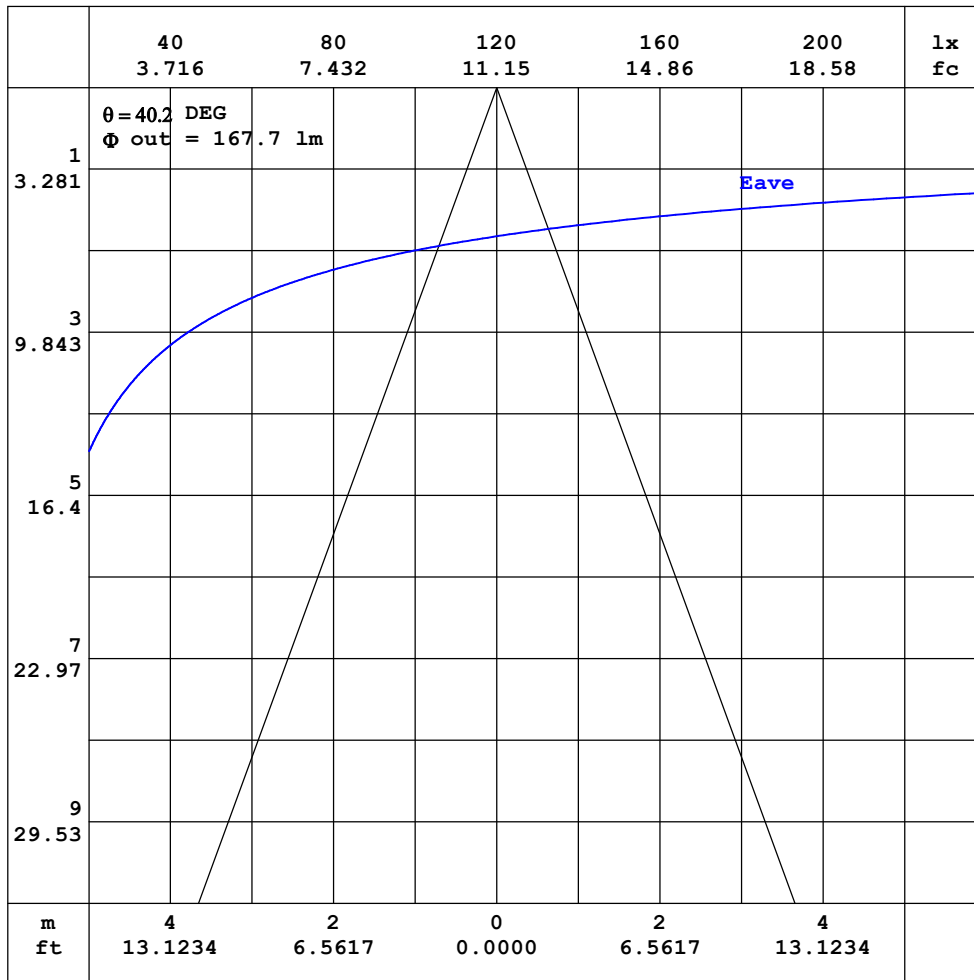


C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 11 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

AAI CURVES

|                                                       |       |                  |
|-------------------------------------------------------|-------|------------------|
| Test:U:23.872V I:0.1346A P:3.2132W PF:1.0000 Freq:0Hz |       |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:325.55x1 lm |       |                  |
| NAME: AGL-300-22X40                                   | TYPE: | WEIGHT:          |
| SPEC.:                                                | DIM.: | SERIAL No.:      |
| MFR.: AQUALUX                                         | SUR.: | Shielding Angle: |



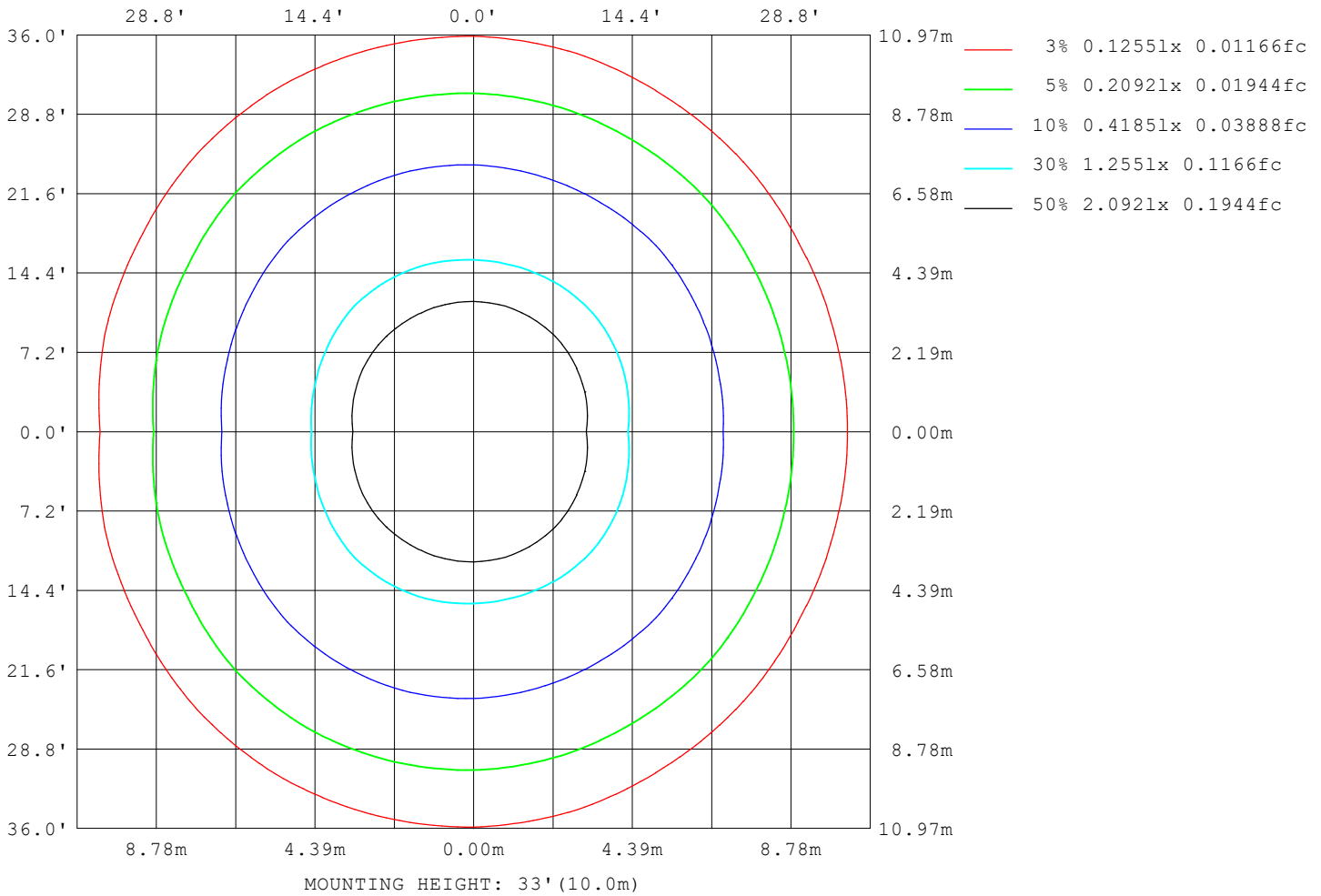
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 11 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

ISOLUX DIAGRAM

|                                                       |       |                  |
|-------------------------------------------------------|-------|------------------|
| Test:U:23.872V I:0.1346A P:3.2132W PF:1.0000 Freq:0Hz |       |                  |
| UTHdi:0.00% ITHdi:0.00% KDisp:0 Lamp Flux:325.55x1 lm |       |                  |
| NAME: AGL-300-22X40                                   | TYPE: | WEIGHT:          |
| SPEC.:                                                | DIM.: | SERIAL No.:      |
| MFR.: AQUALUX                                         | SUR.: | Shielding Angle: |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:11 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

**LED Avg.L Report**

|                                                                                                                |       |                  |
|----------------------------------------------------------------------------------------------------------------|-------|------------------|
| Test:U:23.872V I:0.1346A P:3.2132W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:325.55x1 lm |       |                  |
| NAME: AGL-300-22X40                                                                                            | TYPE: | WEIGHT:          |
| SPEC.:                                                                                                         | DIM.: | SERIAL No.:      |
| MFR.: AQUALUX                                                                                                  | SUR.: | Shielding Angle: |

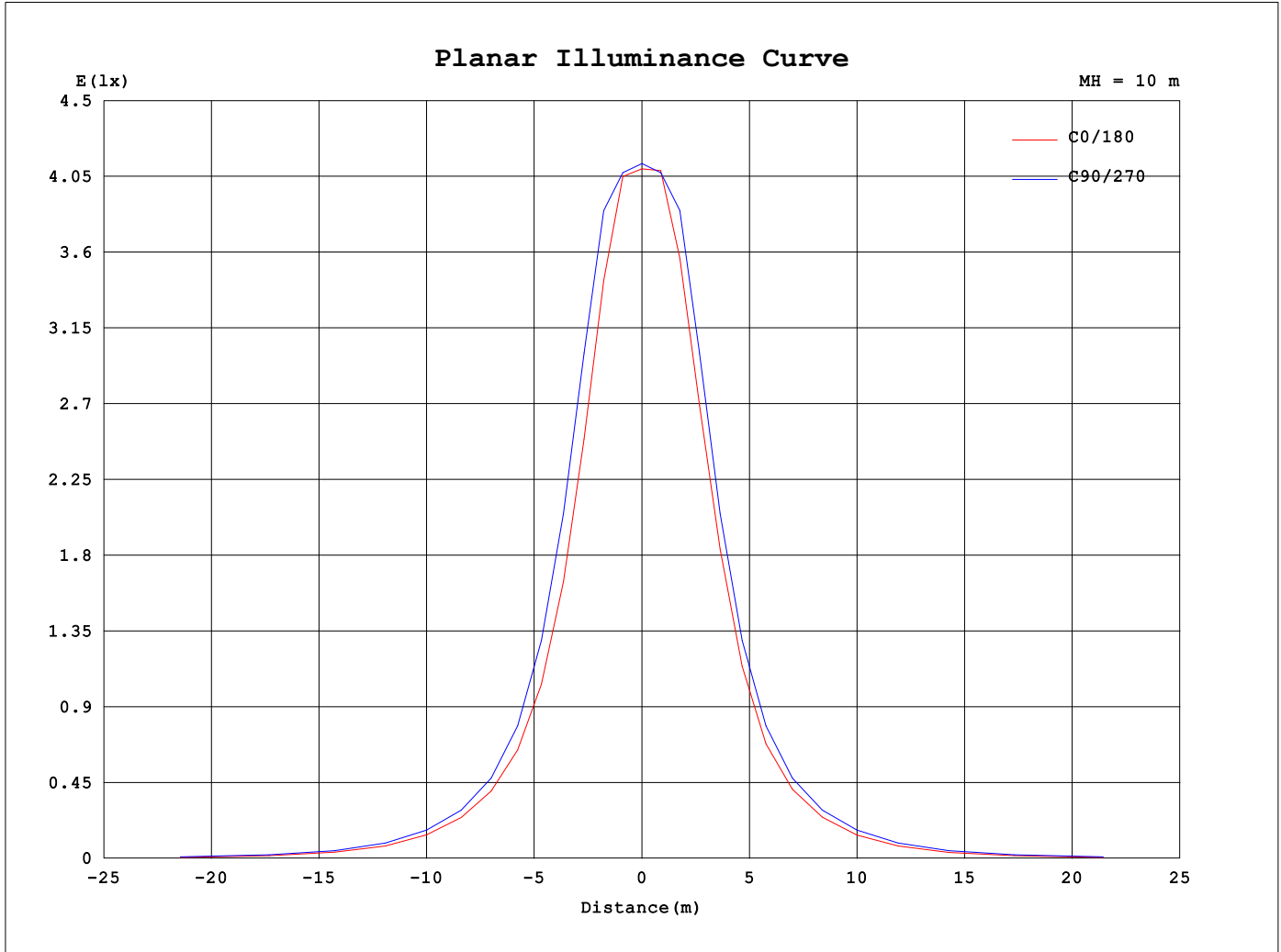
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 16105 |
| L_0~180 (75) av  | 7528  |
| L_0~180 (85) av  | 5639  |
| L_90~270 (65) av | 22148 |
| L_90~270 (75) av | 11881 |
| L_90~270 (85) av | 11504 |
| L_45 (65) av     | 18118 |
| L_45 (75) av     | 9535  |
| L_45 (85) av     | 10062 |

Standard: GB/T 29293-2012

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:11 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

Planar Illuminance Curve



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 11 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

**LUMINOUS DISTRIBUTION INTENSITY DATA**

|                                                                                                                |       |                  |
|----------------------------------------------------------------------------------------------------------------|-------|------------------|
| Test:U:23.872V I:0.1346A P:3.2132W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:325.55x1 lm |       |                  |
| NAME: AGL-300-22X40                                                                                            | TYPE: | WEIGHT:          |
| SPEC.:                                                                                                         | DIM.: | SERIAL No.:      |
| MFR.: AQUALUX                                                                                                  | SUR.: | Shielding Angle: |

Table--1

UNIT: cd

| γ (DEG) | C (DEG) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|         | 0       | 15   | 30   | 45   | 60   | 75   | 90   | 105  | 120  | 135  | 150  | 165  | 180  | 195  | 210  | 225  | 240  | 255  | 270  |
| 0       | 418     | 417  | 416  | 415  | 414  | 413  | 413  | 412  | 411  | 411  | 411  | 410  | 410  | 410  | 411  | 411  | 411  | 412  | 413  |
| 5       | 410     | 410  | 410  | 409  | 410  | 411  | 412  | 413  | 414  | 416  | 418  | 415  | 413  | 415  | 418  | 416  | 414  | 413  | 412  |
| 10      | 359     | 369  | 376  | 385  | 393  | 401  | 403  | 399  | 400  | 401  | 396  | 386  | 373  | 386  | 396  | 401  | 400  | 399  | 403  |
| 15      | 276     | 287  | 297  | 308  | 316  | 327  | 333  | 333  | 328  | 328  | 321  | 313  | 299  | 313  | 321  | 328  | 328  | 333  | 333  |
| 20      | 198     | 211  | 221  | 232  | 240  | 246  | 247  | 248  | 246  | 245  | 239  | 231  | 222  | 231  | 239  | 245  | 246  | 248  | 247  |
| 25      | 139     | 148  | 159  | 167  | 171  | 172  | 174  | 178  | 179  | 177  | 169  | 160  | 153  | 160  | 169  | 177  | 179  | 178  | 174  |
| 30      | 99.2    | 104  | 111  | 115  | 117  | 118  | 121  | 124  | 124  | 122  | 117  | 111  | 105  | 111  | 117  | 122  | 124  | 124  | 121  |
| 35      | 73.0    | 74.9 | 78.1 | 81.7 | 82.6 | 84.4 | 86.7 | 88.0 | 87.5 | 86.2 | 82.0 | 78.3 | 74.8 | 78.3 | 82.0 | 86.2 | 87.5 | 88.0 | 86.7 |
| 40      | 54.2    | 54.9 | 56.7 | 59.5 | 60.7 | 62.4 | 64.0 | 65.0 | 65.0 | 63.8 | 59.8 | 57.4 | 54.4 | 57.4 | 59.8 | 63.8 | 65.0 | 65.0 | 64.0 |
| 45      | 39.5    | 39.6 | 40.4 | 42.6 | 44.0 | 46.1 | 47.4 | 47.8 | 48.0 | 46.5 | 43.6 | 42.2 | 39.4 | 42.2 | 43.6 | 46.5 | 48.0 | 47.8 | 47.4 |
| 50      | 28.2    | 27.8 | 28.0 | 29.4 | 31.2 | 33.4 | 34.5 | 34.6 | 34.1 | 32.9 | 31.3 | 30.4 | 27.9 | 30.4 | 31.3 | 32.9 | 34.1 | 34.6 | 34.5 |
| 55      | 19.7    | 19.1 | 18.9 | 19.8 | 21.4 | 23.9 | 24.5 | 24.6 | 23.4 | 22.6 | 21.8 | 21.4 | 19.3 | 21.4 | 21.8 | 22.6 | 23.4 | 24.6 | 24.5 |
| 60      | 13.4    | 12.9 | 12.7 | 13.4 | 14.6 | 16.4 | 17.2 | 16.6 | 15.8 | 15.4 | 15.0 | 14.9 | 13.2 | 14.9 | 15.0 | 15.4 | 15.8 | 16.6 | 17.2 |
| 65      | 8.42    | 8.25 | 8.31 | 8.86 | 9.76 | 11.1 | 11.8 | 11.2 | 10.7 | 10.4 | 10.1 | 9.95 | 8.68 | 9.95 | 10.1 | 10.4 | 10.7 | 11.2 | 11.8 |
| 70      | 4.65    | 4.64 | 4.79 | 5.22 | 5.83 | 6.76 | 7.17 | 6.90 | 6.58 | 6.34 | 6.11 | 5.97 | 5.07 | 5.97 | 6.11 | 6.34 | 6.58 | 6.90 | 7.17 |
| 75      | 2.27    | 2.35 | 2.50 | 2.76 | 3.09 | 3.61 | 3.86 | 3.73 | 3.57 | 3.44 | 3.26 | 3.13 | 2.63 | 3.13 | 3.26 | 3.44 | 3.57 | 3.73 | 3.86 |
| 80      | 1.28    | 1.33 | 1.37 | 1.50 | 1.64 | 1.79 | 1.89 | 1.92 | 1.93 | 1.88 | 1.73 | 1.61 | 1.45 | 1.61 | 1.73 | 1.88 | 1.93 | 1.92 | 1.89 |
| 85      | 0.44    | 0.62 | 0.76 | 0.94 | 1.10 | 1.23 | 1.26 | 1.28 | 1.29 | 1.26 | 1.13 | 0.98 | 0.79 | 0.98 | 1.13 | 1.26 | 1.29 | 1.28 | 1.26 |
| 90      | 0.00    | 0.00 | 0.00 | 0.00 | 0.05 | 0.11 | 0.19 | 0.23 | 0.20 | 0.12 | 0.04 | 0.00 | 0.00 | 0.00 | 0.04 | 0.12 | 0.20 | 0.23 | 0.19 |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:11 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                                                |       |                  |
|----------------------------------------------------------------------------------------------------------------|-------|------------------|
| Test:U:23.872V I:0.1346A P:3.2132W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:325.55x1 lm |       |                  |
| NAME: AGL-300-22X40                                                                                            | TYPE: | WEIGHT:          |
| SPEC.:                                                                                                         | DIM.: | SERIAL No.:      |
| MFR.: AQUALUX                                                                                                  | SUR.: | Shielding Angle: |

Table--2

UNIT: cd

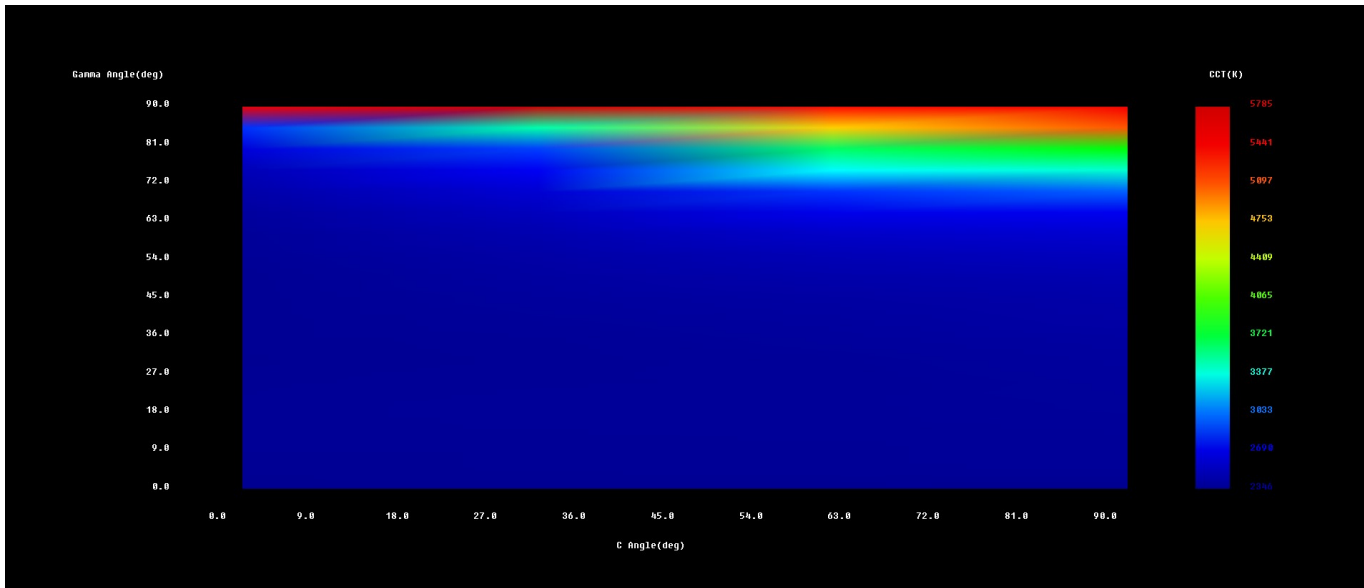
| C (DEG) \ γ (DEG) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                 | 413  | 414  | 415  | 416  | 417  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                 | 411  | 410  | 409  | 410  | 410  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                | 401  | 393  | 385  | 376  | 369  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                | 327  | 316  | 308  | 297  | 287  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                | 246  | 240  | 232  | 221  | 211  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                | 172  | 171  | 167  | 159  | 148  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                | 118  | 117  | 115  | 111  | 104  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                | 84.4 | 82.6 | 81.7 | 78.1 | 74.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                | 62.4 | 60.7 | 59.5 | 56.7 | 54.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                | 46.1 | 44.0 | 42.6 | 40.4 | 39.6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                | 33.4 | 31.2 | 29.4 | 28.0 | 27.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                | 23.9 | 21.4 | 19.8 | 18.9 | 19.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                | 16.4 | 14.6 | 13.4 | 12.7 | 12.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                | 11.1 | 9.76 | 8.86 | 8.31 | 8.25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                | 6.76 | 5.83 | 5.22 | 4.79 | 4.64 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                | 3.61 | 3.09 | 2.76 | 2.50 | 2.35 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                | 1.79 | 1.64 | 1.50 | 1.37 | 1.33 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                | 1.23 | 1.10 | 0.94 | 0.76 | 0.62 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                | 0.11 | 0.05 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:11 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-22X40  
 3W / 2200K / 40D / 300LM

### Spatial Color Distribution Report

|                     |        |             |
|---------------------|--------|-------------|
| NAME: AGL-300-22X40 | TYPE:  | WEIGHT:     |
| DIM.:               | SPEC.: | SERIAL No.: |
| MFR.: AQUALUX       |        |             |



**Color Parameters:**

Average: x=0.4941,y=0.4229 u'=0.2789,v'=0.5371 CCT=2370K Ra=82.1 Rf=85 Rg=93  
 Center : x=0.4976,y=0.4248 u'=0.2803,v'=0.5383 CCT=2346K Ra=81.7 Rf=85 Rg=91  
 IESNA LM-79-2019 Max. du'v': 0.0066 / max.du'v': 0.0000[Set Range]  
 GB/T 24824(LB/T 001-2009):: avg. color nonuniformity du'v':0.0018  
 GB/T 24824(LB/T 001-2009):: max. color nonuniformity du'v':0.0023  
 Average: R1=80 R2=91 R3=96 R4=79 R5=80 R6=91 R7=82 R8=58 R9=12 R10=81  
 R11=78 R12=77 R13=82 R14=98 R15=72

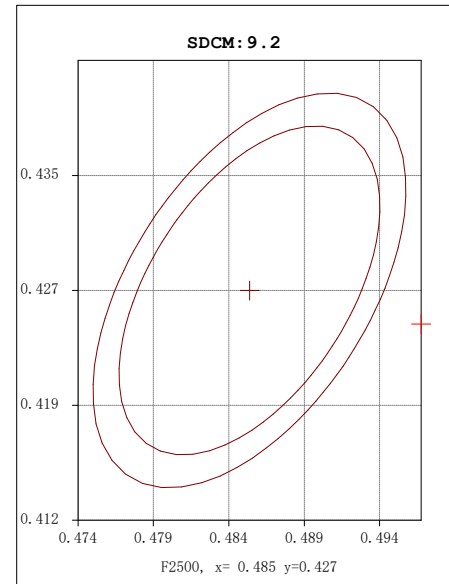
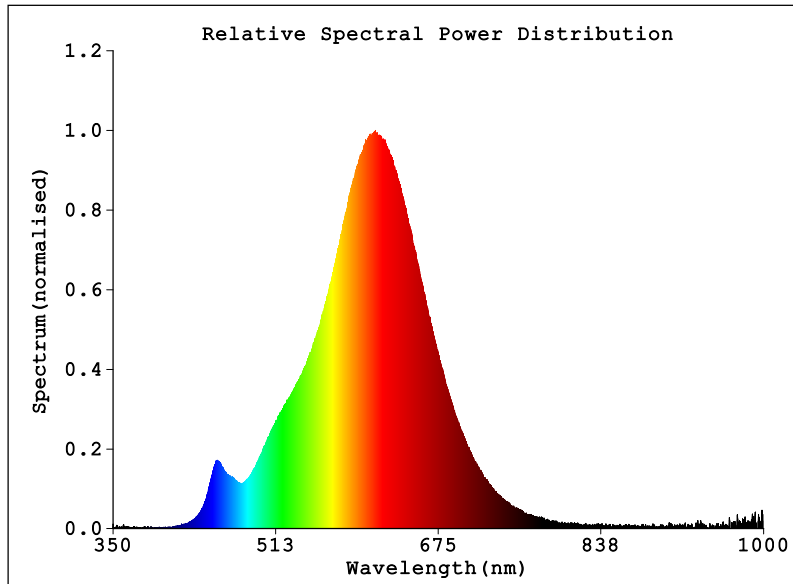
Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX  
 System: GO-SPEX500\_V1

Date: 11 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-22X40 COLOUR TEST3W / 2200K / 40D / 300LM



**Spectral Radiant Test Report**

|                     |        |             |
|---------------------|--------|-------------|
| NAME: AGL-300-22X40 | TYPE:  | WEIGHT:     |
| DIM.:               | SPEC.: | SERIAL No.: |
| MFR.: AQUALUX       |        |             |



**Photon & Colormetric & Photometric Quantities:**

Chromaticity Coordinates: x=0.4976 y=0.4248/u'=0.2803 v'=0.5383 duv=0.00306

Tc=2346K Dominant WL: Ld=585.3nm Purity=76.9%

Ratio: R=28.3% G=70.1% B=1.6% Peak WL: Lp=612.1nm HWL: 113.4nm

Rendering Index: Ra=81.7 TM-30: Rf=85 Rg=91

R1 =80 R2 =91 R3 =96 R4 =78 R5 =79 R6 =91 R7 =82

R8 =57 R9 =10 R10=80 R11=77 R12=75 R13=82 R14=99 R15=72

E = 41.61 lx Ee = 0.1369 W/m<sup>2</sup>

Status: T=1152.00ms Ip=48781 (74%) [ HAAS-1200(CAN) ]

Electrical: U=23.872V I=0.13416A P=3.2027W PF=1.0000

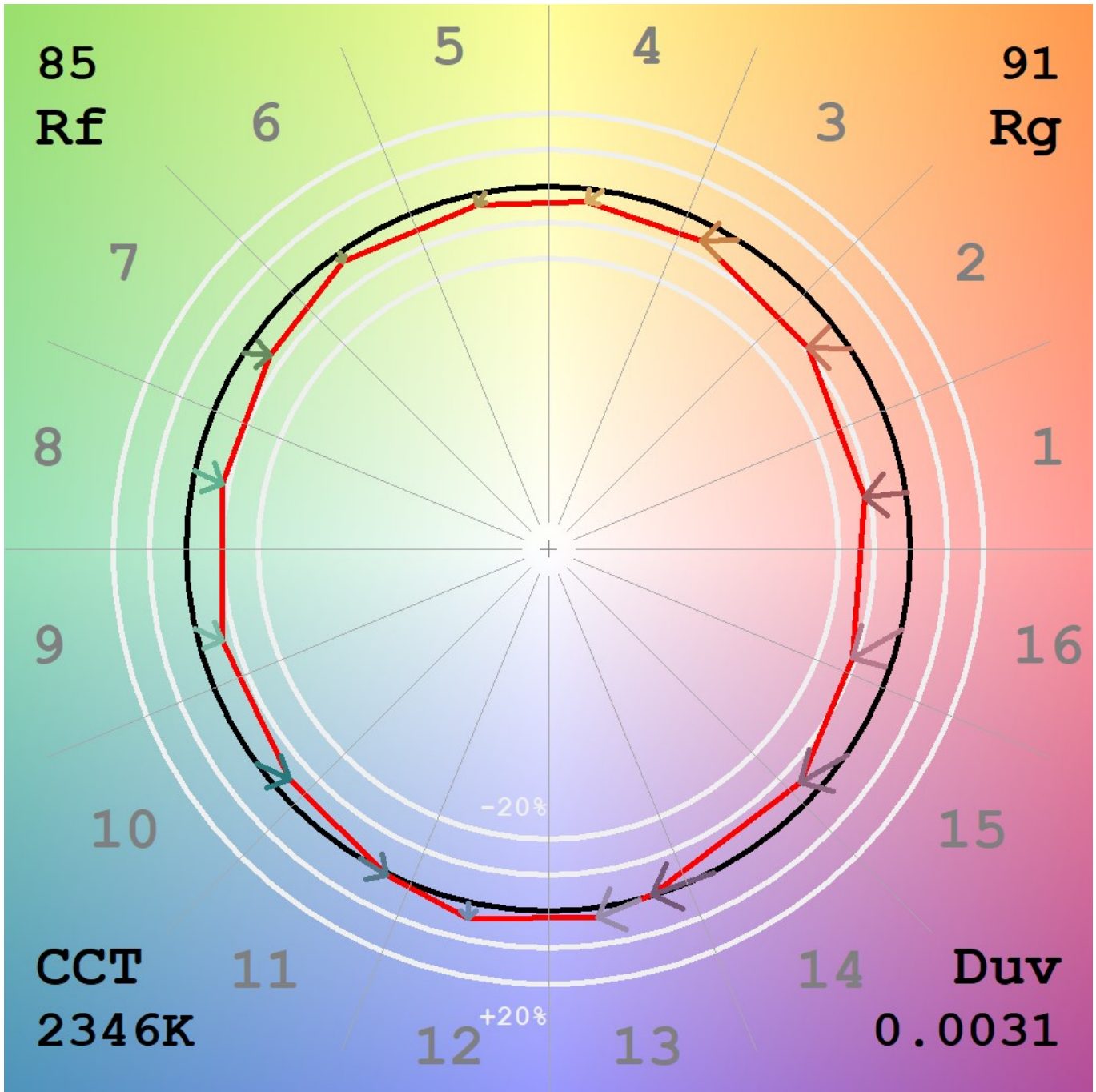
Test position: Center

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX

Date: 11 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-22X40 COLOUR TEST3W / 2200K / 40D / 300LM

System: GO-SPEX500\_V1

**TM30**



Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX  
 System: GO-SPEX500\_V1

Date: 11 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-22X40 COLOUR TEST3W / 2200K / 40D / 300LM

| Gamma\c | C0    |               |               | CCT (K) | Ra   | du'v'  | Rf, Rg  | Ip    |
|---------|-------|---------------|---------------|---------|------|--------|---------|-------|
|         | I (%) | CIE x,y       | u',v'         |         |      |        |         |       |
| 0.0     | 98.79 | 0.4976,0.4248 | 0.2803,0.5383 | 2346    | 81.7 | 0.0000 | 85, 91  | 48781 |
| 10.0    | 91.51 | 0.4963,0.4250 | 0.2793,0.5382 | 2361    | 81.9 | 0.0010 | 85, 91  | 45255 |
| 20.0    | 54.89 | 0.4961,0.4249 | 0.2792,0.5381 | 2363    | 81.8 | 0.0011 | 85, 91  | 29115 |
| 30.0    | 25.95 | 0.4973,0.4244 | 0.2802,0.5381 | 2347    | 81.7 | 0.0002 | 85, 91  | 32812 |
| 40.0    | 13.40 | 0.4966,0.4245 | 0.2797,0.5380 | 2355    | 81.7 | 0.0007 | 85, 91  | 21650 |
| 50.0    | 6.90  | 0.4971,0.4252 | 0.2798,0.5384 | 2354    | 81.8 | 0.0005 | 85, 91  | 29816 |
| 60.0    | 3.31  | 0.4948,0.4245 | 0.2786,0.5378 | 2373    | 82.1 | 0.0018 | 85, 91  | 29167 |
| 70.0    | 1.33  | 0.4864,0.4204 | 0.2751,0.5350 | 2439    | 83.2 | 0.0062 | 86, 93  | 29201 |
| 80.0    | 0.45  | 0.4581,0.4015 | 0.2655,0.5236 | 2653    | 86.5 | 0.0209 | 86, 99  | 29220 |
| 90.0    | 0.10  | 0.3326,0.3097 | 0.2199,0.4606 | 5477    | 86.5 | 0.0984 | 85, 110 | 29102 |
|         | C90   |               |               |         |      |        |         |       |
| 0.0     | 99.14 | 0.4976,0.4248 | 0.2803,0.5383 | 2346    | 81.7 | 0.0000 | 85, 91  | 48781 |
| 10.0    | 82.02 | 0.4941,0.4235 | 0.2786,0.5373 | 2375    | 82.1 | 0.0020 | 85, 91  | 41057 |
| 20.0    | 43.47 | 0.4923,0.4216 | 0.2783,0.5363 | 2381    | 82.3 | 0.0028 | 85, 91  | 24009 |
| 30.0    | 21.76 | 0.4897,0.4192 | 0.2778,0.5351 | 2392    | 82.8 | 0.0041 | 85, 91  | 28962 |
| 40.0    | 12.24 | 0.4848,0.4161 | 0.2761,0.5332 | 2426    | 83.5 | 0.0066 | 85, 91  | 20430 |
| 50.0    | 6.62  | 0.4775,0.4109 | 0.2738,0.5301 | 2474    | 84.6 | 0.0105 | 85, 91  | 29481 |
| 60.0    | 3.38  | 0.4607,0.3997 | 0.2680,0.5233 | 2603    | 87.3 | 0.0194 | 85, 91  | 29522 |
| 70.0    | 1.43  | 0.4229,0.3744 | 0.2545,0.5070 | 2993    | 92.3 | 0.0406 | 86, 93  | 29735 |
| 80.0    | 0.80  | 0.3766,0.3422 | 0.2371,0.4847 | 3819    | 93.4 | 0.0688 | 86, 99  | 29615 |
| 90.0    | 0.51  | 0.3336,0.3114 | 0.2198,0.4617 | 5423    | 86.3 | 0.0976 | 85, 110 | 29456 |

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX  
 System: GO-SPEX500\_V1

Date: 11 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-22X40 COLOUR TEST3W / 2200K / 40D / 300LM

| Gamma\C | C30   |               | u',v'         | CCT (K) | Ra   | du'v'  | Rf, Rg  | Ip    |
|---------|-------|---------------|---------------|---------|------|--------|---------|-------|
|         | I (%) | CIE x,y       |               |         |      |        |         |       |
| 0.0     | 98.86 | 0.4976,0.4248 | 0.2803,0.5383 | 2346    | 81.7 | 0.0000 | 85, 91  | 48781 |
| 10.0    | 86.04 | 0.4959,0.4242 | 0.2794,0.5378 | 2360    | 81.9 | 0.0010 | 85, 91  | 42878 |
| 20.0    | 51.28 | 0.4942,0.4238 | 0.2786,0.5374 | 2375    | 82.1 | 0.0019 | 85, 92  | 27397 |
| 30.0    | 24.54 | 0.4945,0.4224 | 0.2794,0.5370 | 2362    | 82.1 | 0.0016 | 85, 92  | 31605 |
| 40.0    | 12.75 | 0.4922,0.4212 | 0.2785,0.5362 | 2379    | 82.4 | 0.0028 | 85, 93  | 21030 |
| 50.0    | 6.08  | 0.4887,0.4198 | 0.2769,0.5351 | 2408    | 82.8 | 0.0047 | 86, 93  | 29410 |
| 60.0    | 2.79  | 0.4803,0.4143 | 0.2740,0.5319 | 2465    | 84.3 | 0.0090 | 86, 95  | 29230 |
| 70.0    | 1.08  | 0.4631,0.4051 | 0.2671,0.5257 | 2613    | 86.3 | 0.0182 | 87, 98  | 29413 |
| 80.0    | 0.45  | 0.4295,0.3801 | 0.2564,0.5104 | 2923    | 91.8 | 0.0367 | 88, 102 | 29101 |
| 90.0    | 0.13  | 0.3268,0.3216 | 0.2107,0.4664 | 5785    | 88.3 | 0.1001 | 90, 107 | 29170 |
|         | C0    |               |               |         |      |        |         |       |
| 0.0     | 98.79 | 0.4976,0.4248 | 0.2803,0.5383 | 2346    | 81.7 | 0.0000 | 85, 91  | 48781 |
| 10.0    | 91.51 | 0.4963,0.4250 | 0.2793,0.5382 | 2361    | 81.9 | 0.0010 | 85, 91  | 45255 |
| 20.0    | 54.89 | 0.4961,0.4249 | 0.2792,0.5381 | 2363    | 81.8 | 0.0011 | 85, 92  | 29115 |
| 30.0    | 25.95 | 0.4973,0.4244 | 0.2802,0.5381 | 2347    | 81.7 | 0.0002 | 85, 92  | 32812 |
| 40.0    | 13.40 | 0.4966,0.4245 | 0.2797,0.5380 | 2355    | 81.7 | 0.0007 | 85, 93  | 21650 |
| 50.0    | 6.90  | 0.4971,0.4252 | 0.2798,0.5384 | 2354    | 81.8 | 0.0005 | 86, 93  | 29816 |
| 60.0    | 3.31  | 0.4948,0.4245 | 0.2786,0.5378 | 2373    | 82.1 | 0.0018 | 86, 95  | 29167 |
| 70.0    | 1.33  | 0.4864,0.4204 | 0.2751,0.5350 | 2439    | 83.2 | 0.0062 | 87, 98  | 29201 |
| 80.0    | 0.45  | 0.4581,0.4015 | 0.2655,0.5236 | 2653    | 86.5 | 0.0209 | 88, 102 | 29220 |
| 90.0    | 0.10  | 0.3326,0.3097 | 0.2199,0.4606 | 5477    | 86.5 | 0.0984 | 90, 107 | 29102 |
|         |       |               |               |         |      |        |         |       |

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX

Date: 11 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-22X40 COLOUR TEST3W / 2200K / 40D / 300LM

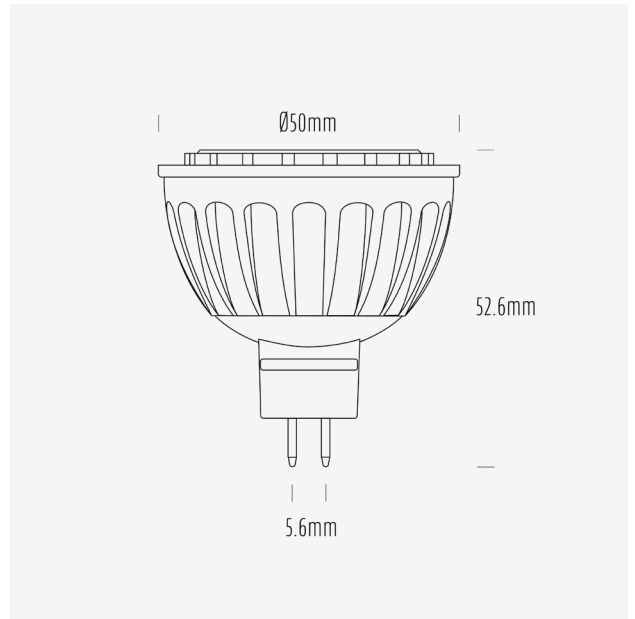
System: GO-SPEX500\_V1

# AGL 300 Series

MR16 LED Globes



## AGL-300-27X40 / 2700K / MR16 / 40°



### Product Data

|              |                                 |  |  |  |
|--------------|---------------------------------|--|--|--|
| Product Code | AGL-300-27X40                   |  |  |  |
| Description  | Aqualux 300 Series LED Lamp     |  |  |  |
| Type         | MR16 GU5.6                      |  |  |  |
| Construction | Aluminium Heatsink + PMMA Optic |  |  |  |
| Warranty     | 3 Years                         |  |  |  |

### Electrical Data

|                     |              |       |              |       |
|---------------------|--------------|-------|--------------|-------|
| Input Voltage Range | 12~24V AC/DC |       |              |       |
| Nominal Voltage     | 24VDC        |       |              |       |
| Nominal Power       | 3W           |       |              |       |
| Nominal Current     | 125mA        |       |              |       |
| Input Voltage       | 12VDC        | 12VAC | <b>24VDC</b> | 24VAC |
| Rated Power         | 3.5          | 2.8   | <b>3.3</b>   | 3.5   |
| Operating Frequency | -            | 50Hz  | -            | 50Hz  |

|                                |     |   |               |   |
|--------------------------------|-----|---|---------------|---|
| Max. no. of lamps on AQD24-040 | 9   | - | <b>9</b>      | - |
| Max. no. of lamps on AQD24-100 | >22 | - | <b>&gt;22</b> | - |
| Max. no. of lamps on AQD24-240 | -   | - | -             | - |

|                       |             |  |  |  |
|-----------------------|-------------|--|--|--|
| Dimming Compatibility | Non dimming |  |  |  |
| Wiring Scheme         | Parallel    |  |  |  |
| Startup Time          | < 0.5s      |  |  |  |

### Mechanical & Thermal Data

|                      |            |  |  |  |
|----------------------|------------|--|--|--|
| Overall Length       | 52.6mm     |  |  |  |
| Max Diameter         | 50mm       |  |  |  |
| Lamp Base            | GU5.6      |  |  |  |
| Weight               | 55g        |  |  |  |
| Operating Temp Range | -20° - 45° |  |  |  |
| IP Rating            | IP20       |  |  |  |

### Photometric Data

|                   |       |       |              |       |
|-------------------|-------|-------|--------------|-------|
| Nominal Flux (lm) | 300   |       |              |       |
| Input Voltage     | 12VDC | 12VAC | <b>24VDC</b> | 24VAC |
| Input Power (W)   | 3.5   | 2.8   | <b>3.3</b>   | 3.5   |
| Rated Flux (lm)   | 421   | 331   | <b>419</b>   | 418   |
| Efficacy (lm/W)   | 119   | 116   | <b>126</b>   | 121   |

|                            |            |  |  |  |
|----------------------------|------------|--|--|--|
| CCT                        | 2700K      |  |  |  |
| CCT Description            | Warm White |  |  |  |
| CRI (Ra)                   | 82         |  |  |  |
| CRI (R9)                   | 6          |  |  |  |
| TM-30 (Rf)                 | 85         |  |  |  |
| TM-30 (Rg)                 | 93         |  |  |  |
| SDCM                       | -          |  |  |  |
| Peak Intensity (cd)        | 493        |  |  |  |
| Nominal Beam Angle         | 40°        |  |  |  |
| Measured Beam Angle (FWHM) | 42°        |  |  |  |

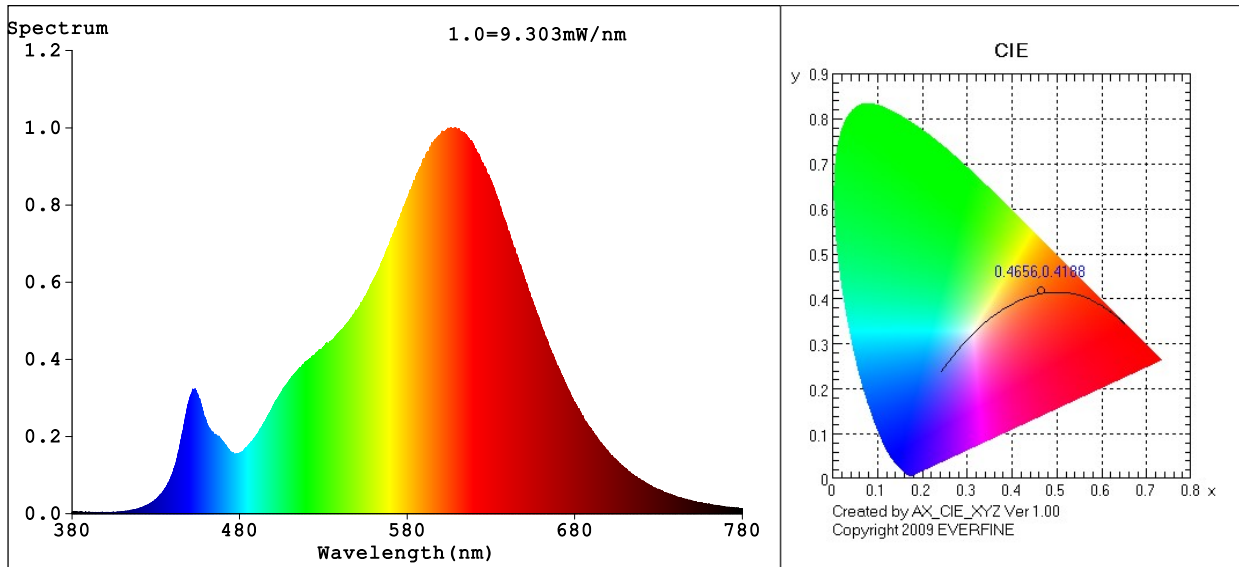
### Lifespan Data

|                  |         |  |  |  |
|------------------|---------|--|--|--|
| L70              | 15,000h |  |  |  |
| Switching Cycles | 15,000  |  |  |  |

### Compliance Data

|                 |     |  |  |  |
|-----------------|-----|--|--|--|
| EMI             | Yes |  |  |  |
| RCM             | N/A |  |  |  |
| Mercury Content | 0mg |  |  |  |

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4656$   $y=0.4188$ / $u'=0.2625$   $v'=0.5313$   
 CCT=2684K (Duv=0.0025) Dominant WL:Ld =583.5nm WL:Lc = --nm Purity=65.5%  
 Ratio:R=25.2% G=72.7% B=2.2%; Peak WL:Lp=606.1nm FWHM=113.7nm  
 Render Index:Ra=82.4 AvgR=77.0 TM30:Rf=85 Rg=93

R1 =81 R2 =92 R3 =95 R4 =80 R5 =81 R6 =91 R7 =82  
 R8 =57 R9 =6 R10=82 R11=80 R12=75 R13=83 R14=98 R15=72

**Photo Parameters:**

Flux = 421.3 lm Eff. : 119.00 lm/W Fe = 1.283 W

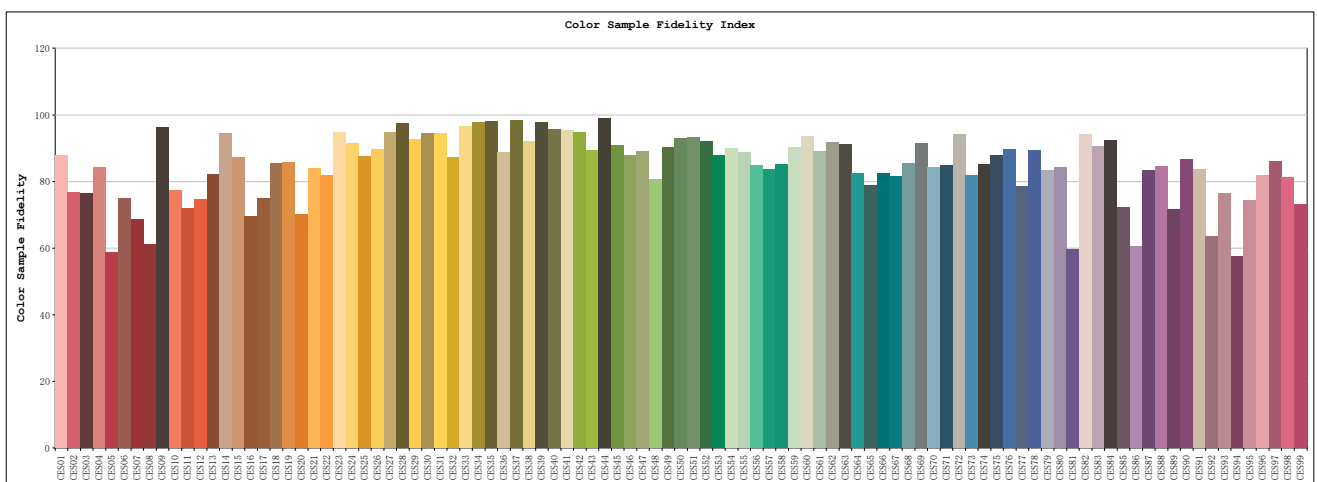
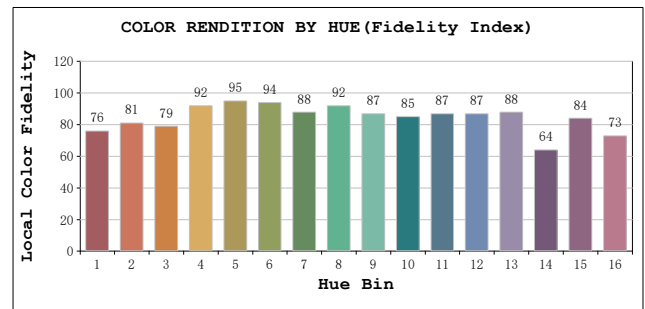
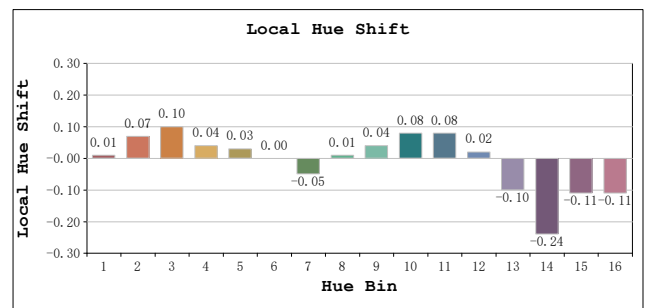
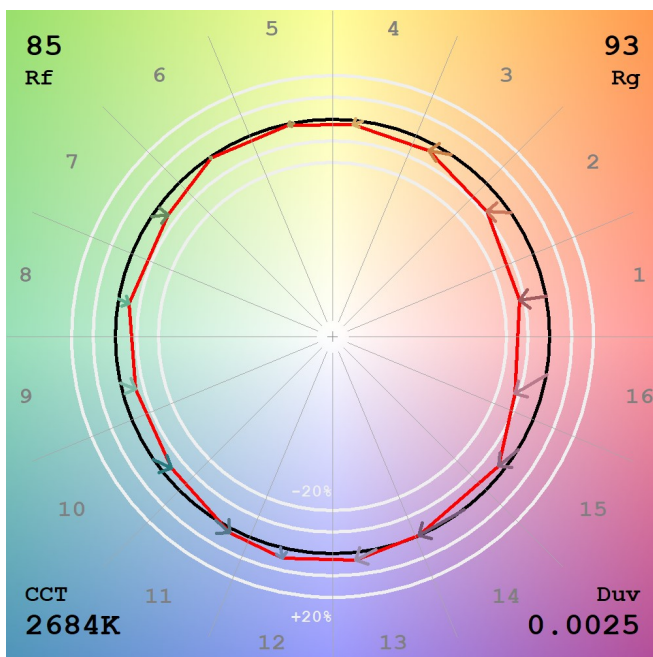
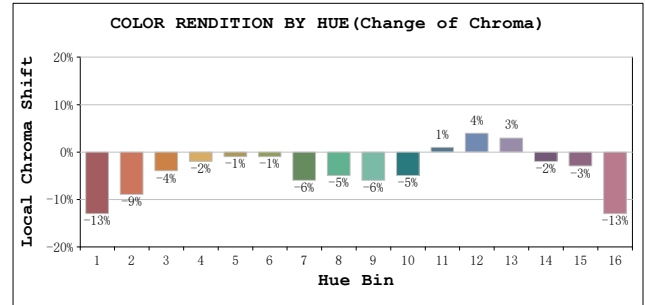
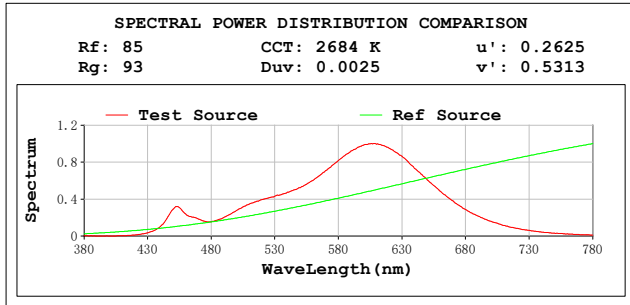
**Electrical parameters:**

V = 11.972 V I = 0.2957 A P = 3.540 W PF = 1.0000  
 LEVEL:OUT WHITE:ANSI\_2700K  
 Status: Integral T = 320 ms Ip = 51171 (78%)

**GBT5702**

# TM30

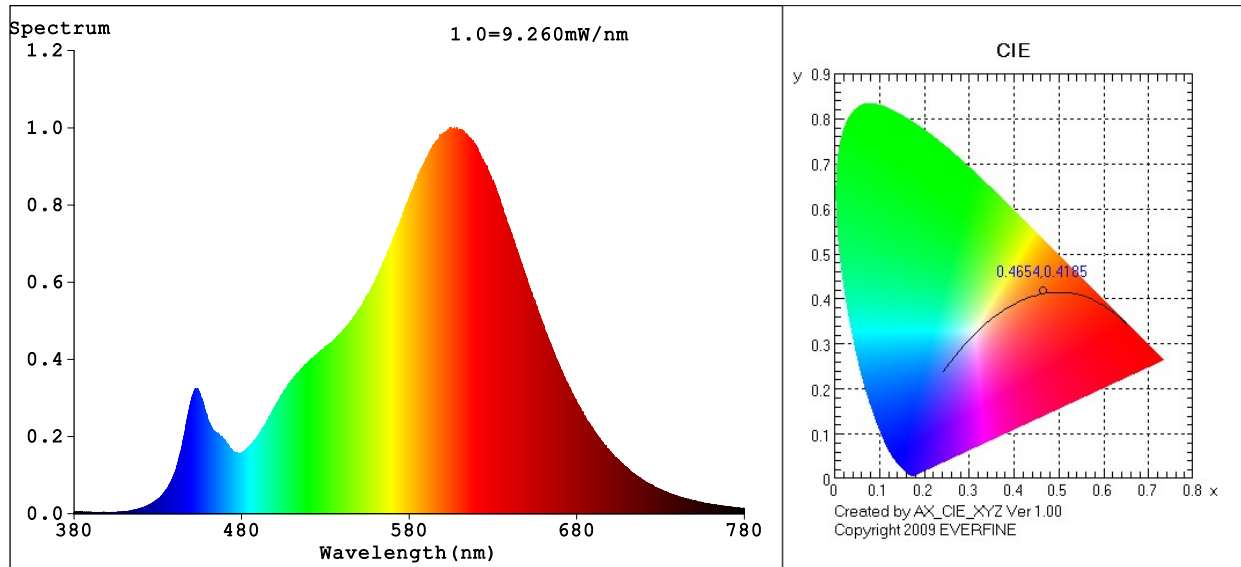
View Angle: 2 Deg



Model:AGL-300-27X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-27X40 12VDC  
 Date:2023-10-17 16:03:05  
 Humidity:65.0%  
 Remarks:12VDC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4654$   $y=0.4185$  /  $u'=0.2625$   $v'=0.5312$   
 CCT=2685K (Duv=0.0024) Dominant WL:Ld =583.5nm WL:Lc = --nm Purity=65.3%  
 Ratio:R=25.1% G=72.7% B=2.2%; Peak WL:Lp=605.1nm FWHM=113.4nm  
 Render Index:Ra=82.3 AvgR=76.9 TM30:Rf=85 Rg=93

R1 =81 R2 =92 R3 =95 R4 =80 R5 =81 R6 =91 R7 =82  
 R8 =57 R9 =6 R10=82 R11=80 R12=75 R13=83 R14=98 R15=72

**Photo Parameters:**

Flux = 419.4 lm Eff. : 125.91 lm/W Fe = 1.278 W

**Electrical parameters:**

V = 23.991 V I = 0.1388 A P = 3.331 W PF = 1.0000

LEVEL:OUT WHITE:ANSI\_2700K

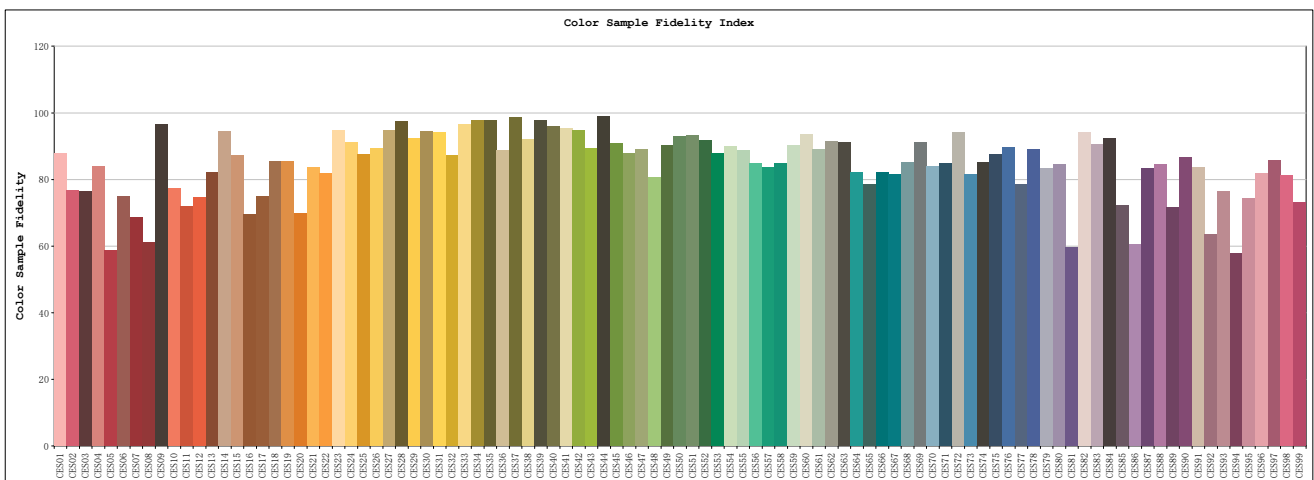
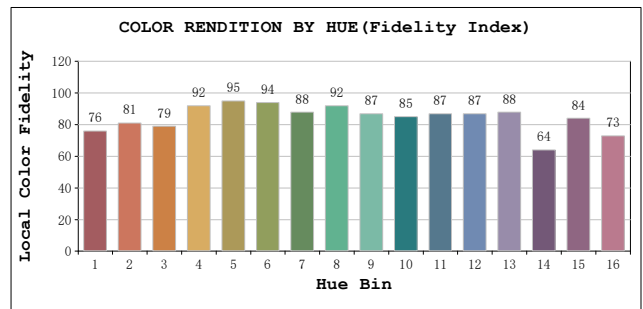
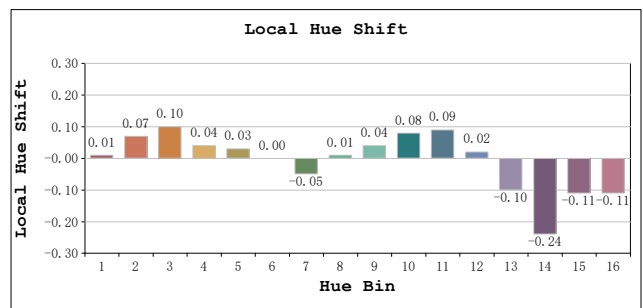
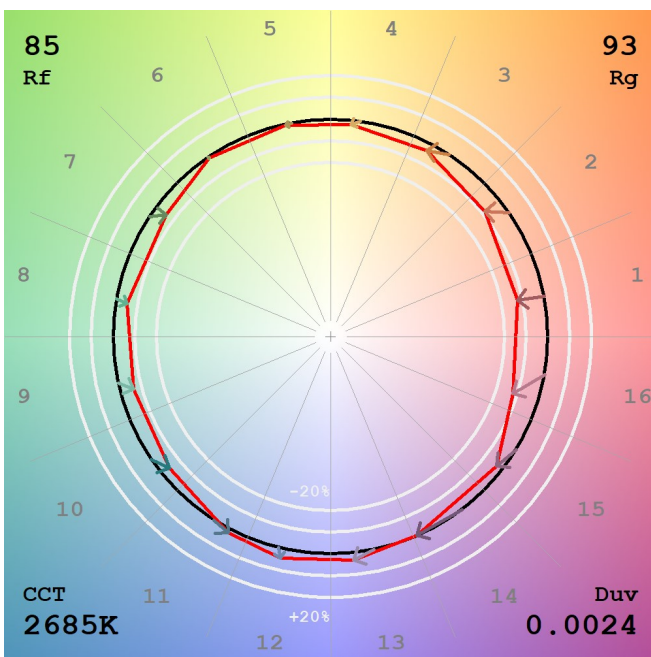
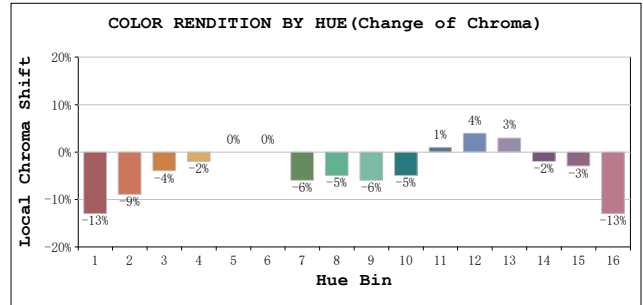
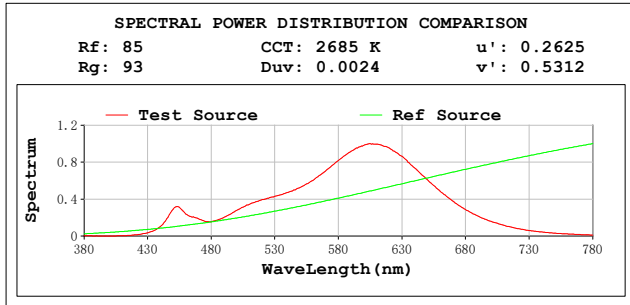
Status: Integral T = 320 ms Ip = 50911 (78%)

**GBT5702**



TM30

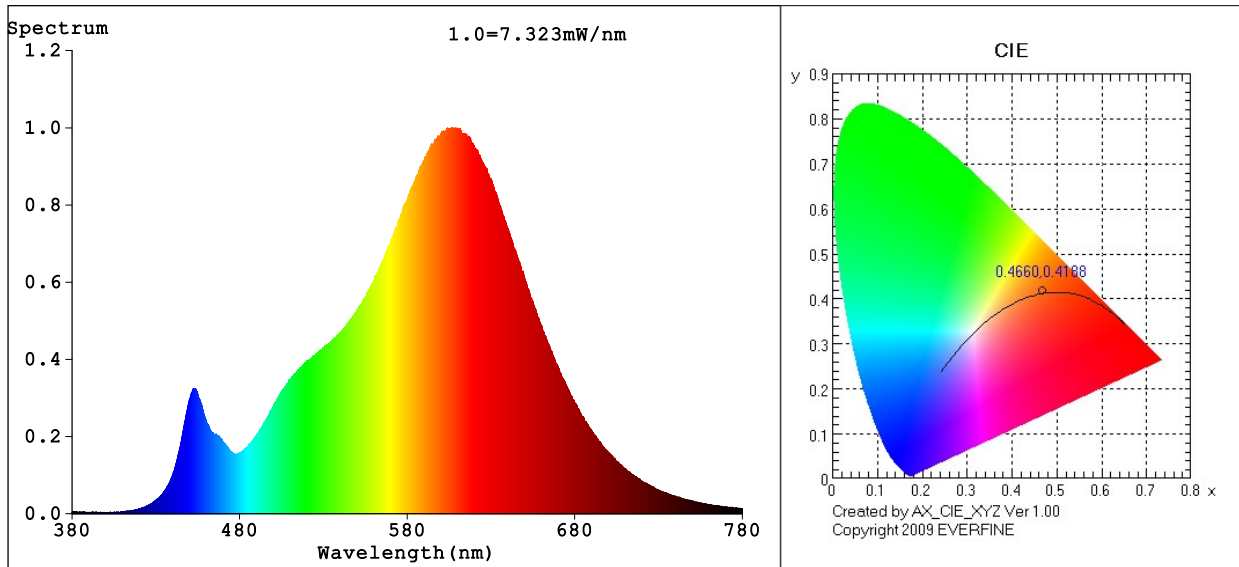
View Angle:2 Deg



Model:AGL-300-27X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-27X40 24VDC  
 Date:2023-10-17 16:03:57  
 Humidity:65.0%  
 Remarks:24VDC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4660$   $y=0.4188$  /  $u'=0.2627$   $v'=0.5314$   
 CCT=2680K (Duv=0.0025) Dominant WL:Ld =583.5nm WL:Lc = --nm Purity=65.6%  
 Ratio:R=25.2% G=72.6% B=2.2%; Peak WL:Lp=606.7nm FWHM=113.1nm  
 Render Index:Ra=82.4 AvgR=77.0 TM30:Rf=85 Rg=93

R1 =81 R2 =92 R3 =95 R4 =80 R5 =81 R6 =92 R7 =82  
 R8 =57 R9 =6 R10=82 R11=80 R12=75 R13=83 R14=98 R15=72

**Photo Parameters:**

Flux = 331.1 lm Eff. : 116.33 lm/W Fe = 1.009 W

**Electrical parameters:**

V = 11.988 V I = 0.3200 A P = 2.846 W PF = 0.7419

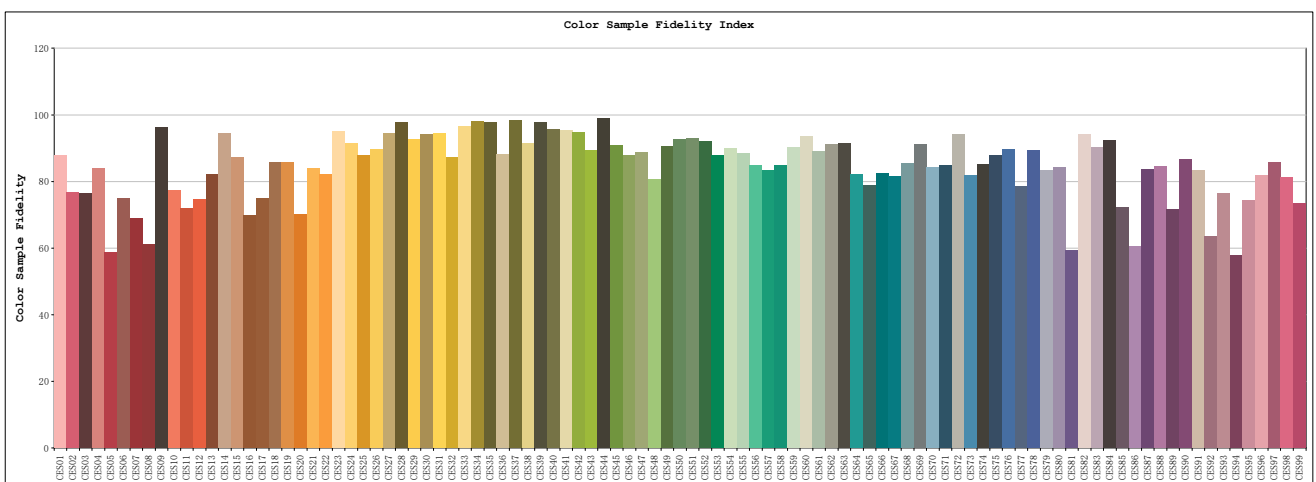
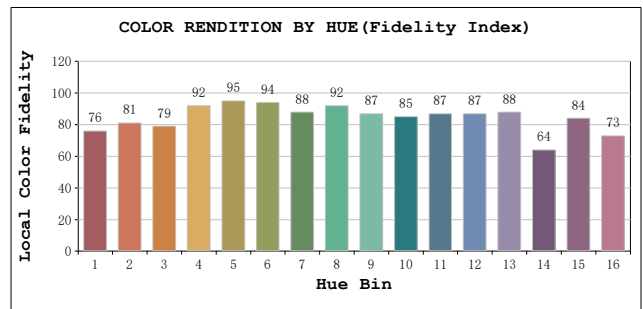
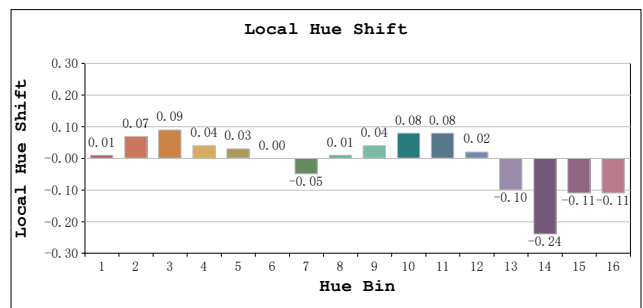
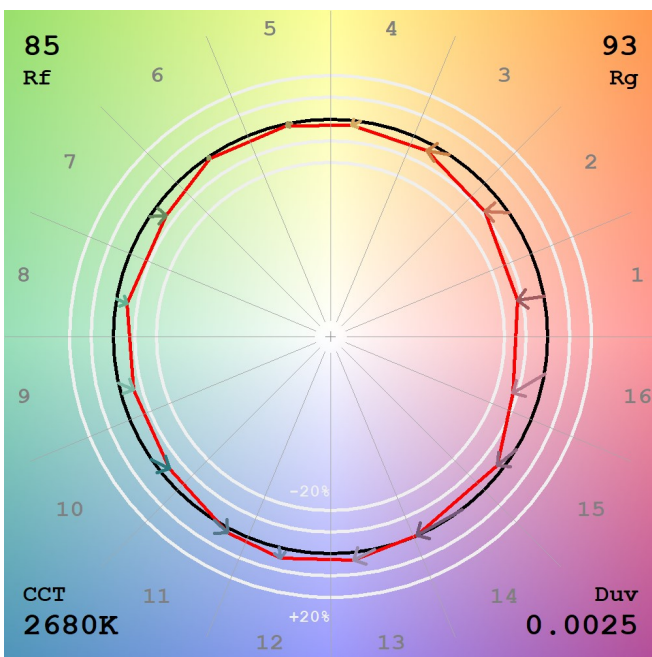
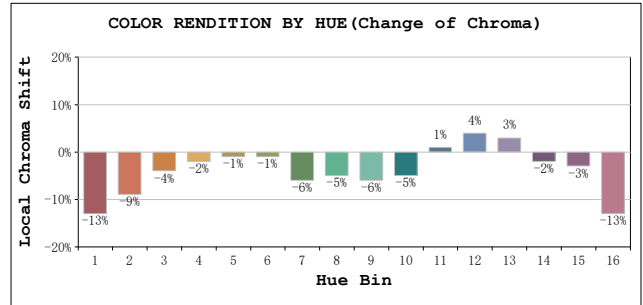
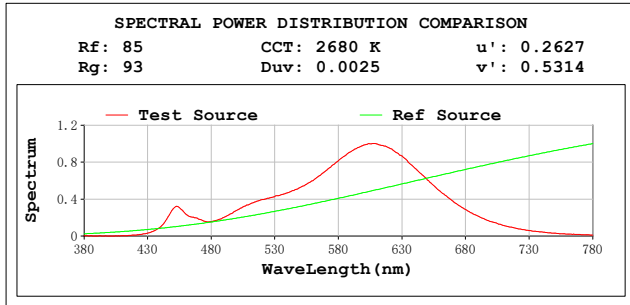
LEVEL:OUT WHITE:ANSI\_2700K

Status: Integral T = 320 ms Ip = 40270 (61%)

**GBT5702**

# TM30

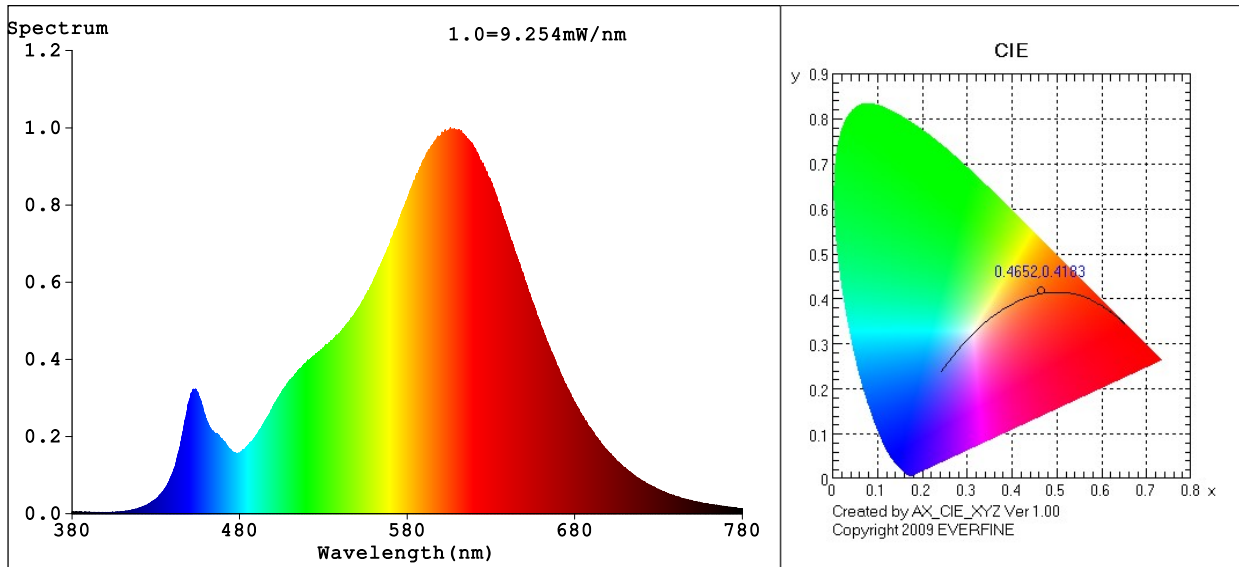
View Angle: 2 Deg



Model:AGL-300-27X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-27X40 12VAC  
 Date:2023-10-17 16:06:30  
 Humidity:65.0%  
 Remarks:12VAC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4652$   $y=0.4183$  /  $u'=0.2625$   $v'=0.5310$   
 CCT=2686K (Duv=0.0024) Dominant WL:Ld =583.5nm WL:Lc = --nm Purity=65.2%  
 Ratio:R=25.1% G=72.7% B=2.2%; Peak WL:Lp=605.8nm FWHM=113.3nm  
 Render Index:Ra=82.3 AvgR=76.9 TM30:Rf=85 Rg=93

R1 =81 R2 =92 R3 =95 R4 =80 R5 =81 R6 =91 R7 =82  
 R8 =57 R9 =5 R10=82 R11=80 R12=75 R13=83 R14=98 R15=72

**Photo Parameters:**

Flux = 417.9 lm Eff. : 120.83 lm/W Fe = 1.274 W

**Electrical parameters:**

V = 23.965 V I = 0.2331 A P = 3.459 W PF = 0.6192

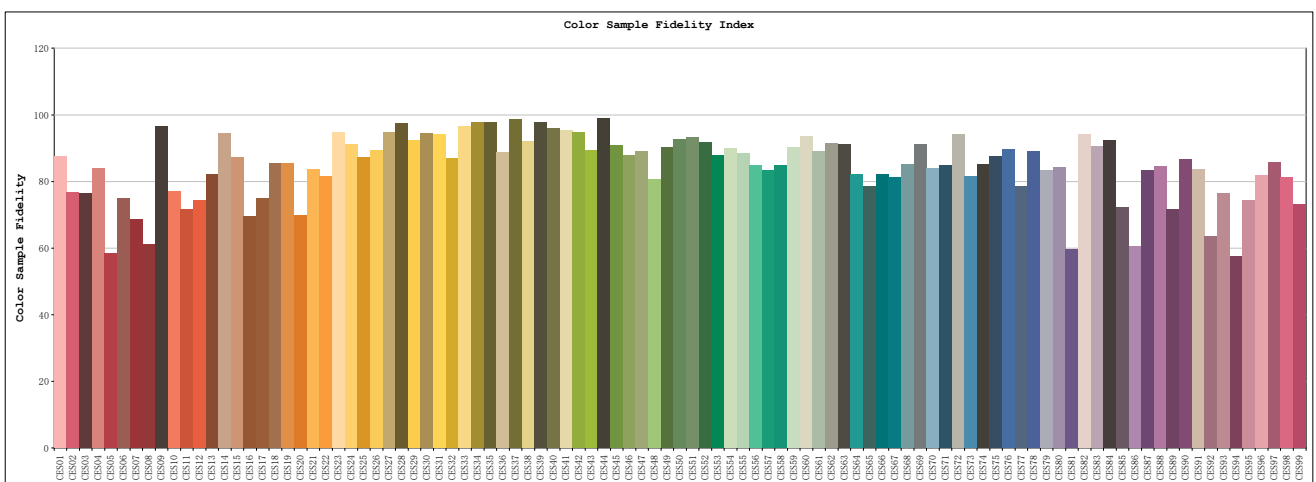
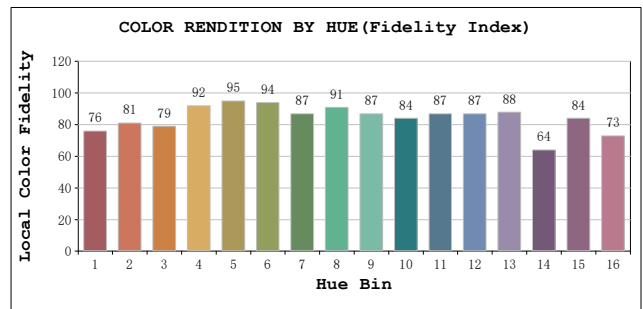
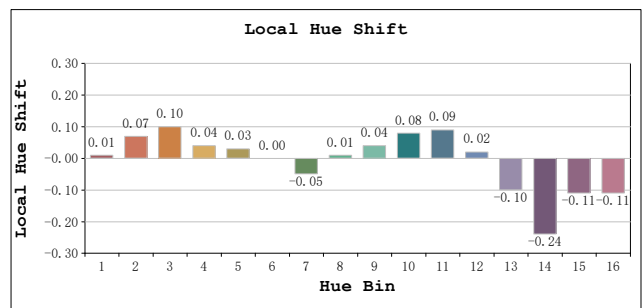
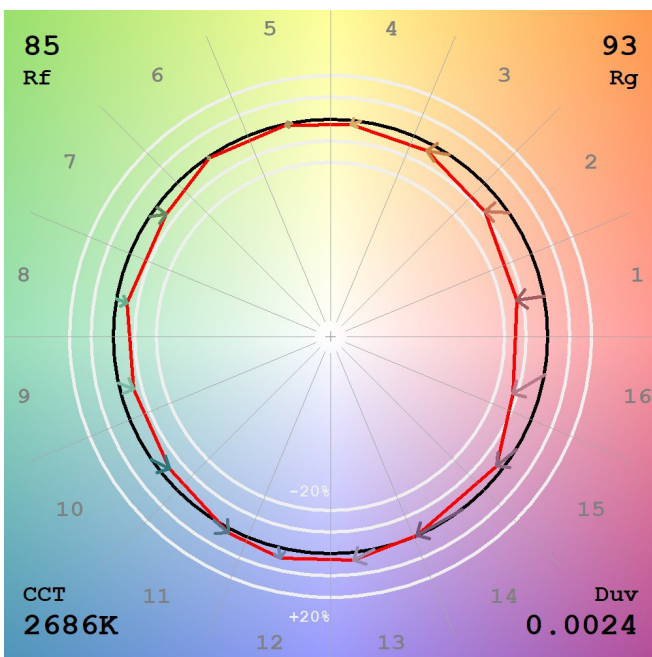
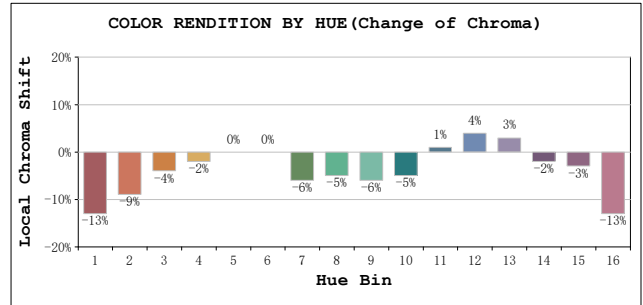
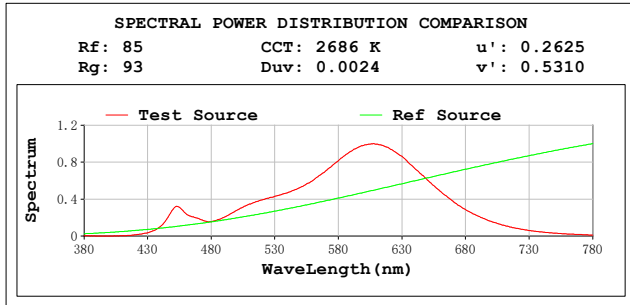
LEVEL:OUT WHITE:ANSI\_2700K

Status: Integral T = 320 ms Ip = 50831 (78%)

**GBT5702**

# TM30

View Angle: 2 Deg



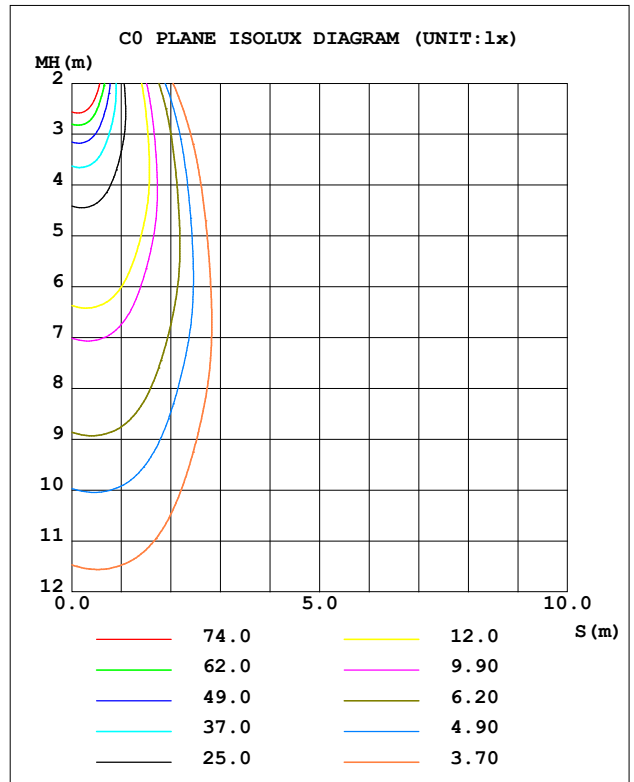
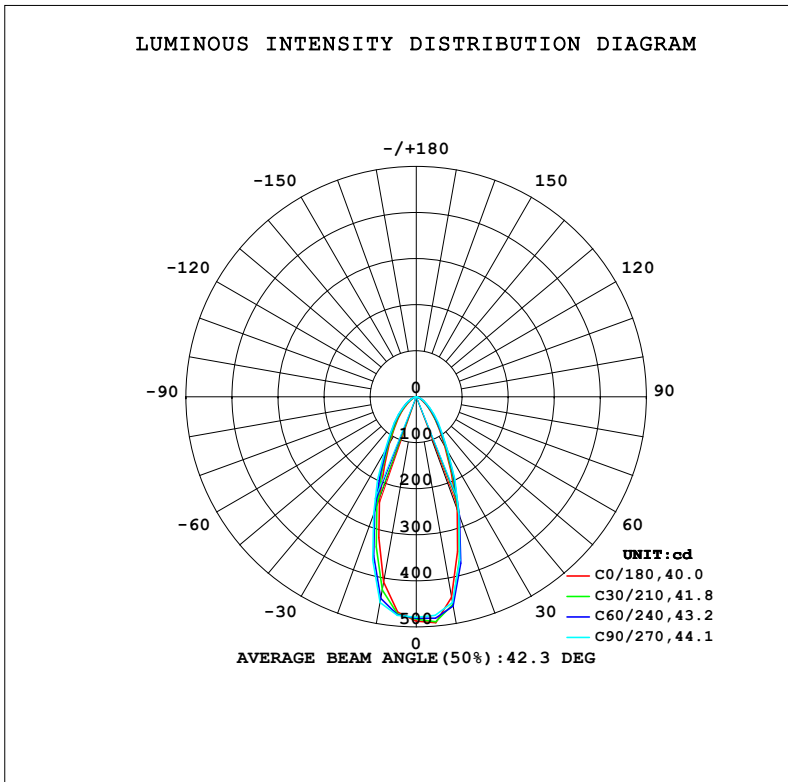
Model:AGL-300-27X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-27X40 24VAC  
 Date:2023-10-17 16:07:13  
 Humidity:65.0%  
 Remarks:24VAC

LUMINAIRE PHOTOMETRIC TEST REPORT

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm |                 |                  |
| NAME: AGL-300-27X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-27X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

| DATA OF LAMP      |        | PHOTOMETRIC DATA      |        |                     |           |
|-------------------|--------|-----------------------|--------|---------------------|-----------|
| MODEL             | LED    | I <sub>max</sub> (cd) | 492.6  | S/MH (C0/180)       | 0.63      |
| NOMINAL POWER (W) | 3      | LOR (%)               | 100.0  | S/MH (C90/270)      | 0.70      |
| RATED VOLTAGE (V) | 24     | TOTAL FLUX (lm)       | 370.16 | η UP, DN (C0-180)   | 0.0, 50.1 |
| NOMINAL FLUX (lm) | 370.16 | CIE CLASS             | DIRECT | η UP, DN (C180-360) | 0.0, 49.9 |
| LAMPS INSIDE      | 1      | η up (%)              | 0.0    | CIBSE SHR NOM       | 0.50      |
| TEST VOLTAGE (V)  | 24     | η down (%)            | 100.0  | CIBSE SHR MAX       | 0.70      |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

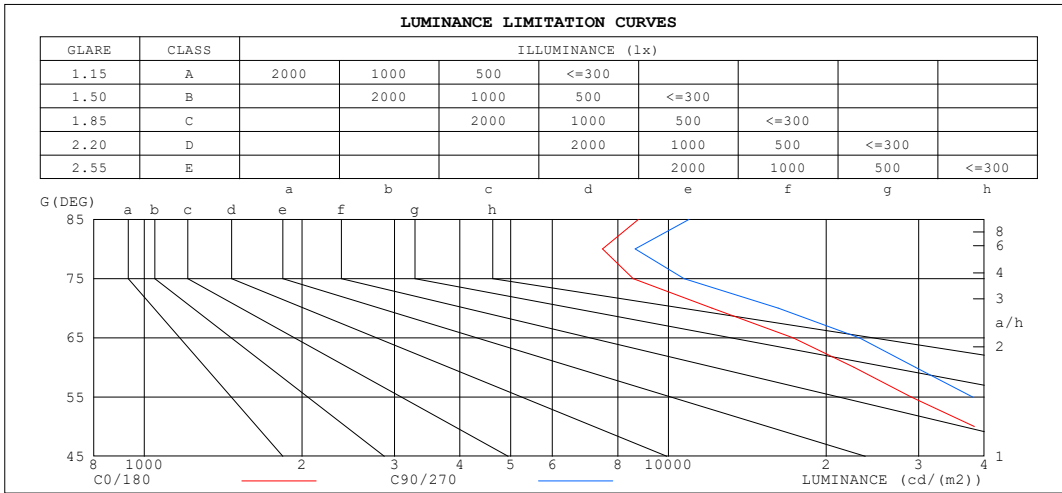
| $\gamma$ | C0                    | C45    | C90    | C135  | C180  | C225  | C270   | C315   | $\gamma$ | ∅ zone | ∅ total | %lum, lamp |
|----------|-----------------------|--------|--------|-------|-------|-------|--------|--------|----------|--------|---------|------------|
| 10       | 442.2                 | 464.1  | 454.0  | 436.4 | 408.7 | 436.4 | 454.0  | 464.1  | 0- 10    | 44.57  | 44.57   | 12,12      |
| 20       | 260.1                 | 275.1  | 271.0  | 259.4 | 234.4 | 259.4 | 271.0  | 275.1  | 10- 20   | 98.69  | 143.3   | 38.7,38.7  |
| 30       | 124.3                 | 133.5  | 138.7  | 126.8 | 116.9 | 126.8 | 138.7  | 133.5  | 20- 30   | 87.41  | 230.7   | 62.3,62.3  |
| 40       | 63.80                 | 69.88  | 75.00  | 69.26 | 61.86 | 69.26 | 75.00  | 69.88  | 30- 40   | 60.15  | 290.8   | 78.6,78.6  |
| 50       | 30.96                 | 36.75  | 39.71  | 37.72 | 30.63 | 37.72 | 39.71  | 36.75  | 40- 50   | 39.74  | 330.5   | 89.3,89.3  |
| 60       | 14.19                 | 18.19  | 18.57  | 18.77 | 14.07 | 18.77 | 18.57  | 18.19  | 50- 60   | 23.23  | 353.8   | 95.6,95.6  |
| 70       | 5.200                 | 7.096  | 6.954  | 6.854 | 4.701 | 6.854 | 6.954  | 7.096  | 60- 70   | 11.47  | 365.2   | 98.7,98.7  |
| 80       | 1.631                 | 1.830  | 1.885  | 1.704 | 1.453 | 1.704 | 1.885  | 1.830  | 70- 80   | 3.871  | 369.1   | 99.7,99.7  |
| 90       | 0                     | 0.0484 | 0.0301 | 0     | 0     | 0     | 0.0301 | 0.0484 | 80- 90   | 1.042  | 370.2   | 100,100    |
| 100      |                       |        |        |       |       |       |        |        | 90-100   |        |         |            |
| 110      |                       |        |        |       |       |       |        |        | 100-110  |        |         |            |
| 120      |                       |        |        |       |       |       |        |        | 110-120  |        |         |            |
| 130      |                       |        |        |       |       |       |        |        | 120-130  |        |         |            |
| 140      |                       |        |        |       |       |       |        |        | 130-140  |        |         |            |
| 150      |                       |        |        |       |       |       |        |        | 140-150  |        |         |            |
| 160      |                       |        |        |       |       |       |        |        | 150-160  |        |         |            |
| 170      |                       |        |        |       |       |       |        |        | 160-170  |        |         |            |
| 180      |                       |        |        |       |       |       |        |        | 170-180  |        |         |            |
| DEG      | LUMINOUS INTENSITY:cd |        |        |       |       |       |        |        | UNIT:lm  |        |         |            |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM

**LUMINANCE LIMITATION CURVES**

|                                                                                                                              |                        |                         |
|------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|
| <b>Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz</b><br><b>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm</b> |                        |                         |
| <b>NAME: AGL-300-27X40</b>                                                                                                   | <b>TYPE: MR16 LAMP</b> | <b>WEIGHT: 100GM</b>    |
| <b>SPEC.: AGL-300-27X40</b>                                                                                                  | <b>DIM.: 50MM</b>      | <b>SERIAL No.: -</b>    |
| <b>MFR.: AQUALUX</b>                                                                                                         | <b>SUR.:</b>           | <b>Shielding Angle:</b> |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 8754   | 10937   |
| 80                | 7480   | 8642    |
| 75                | 8565   | 10713   |
| 70                | 12106  | 16189   |
| 65                | 17301  | 23124   |
| 60                | 22602  | 29571   |
| 55                | 29062  | 38074   |
| 50                | 38342  | 49186   |
| 45                | 50702  | 62500   |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

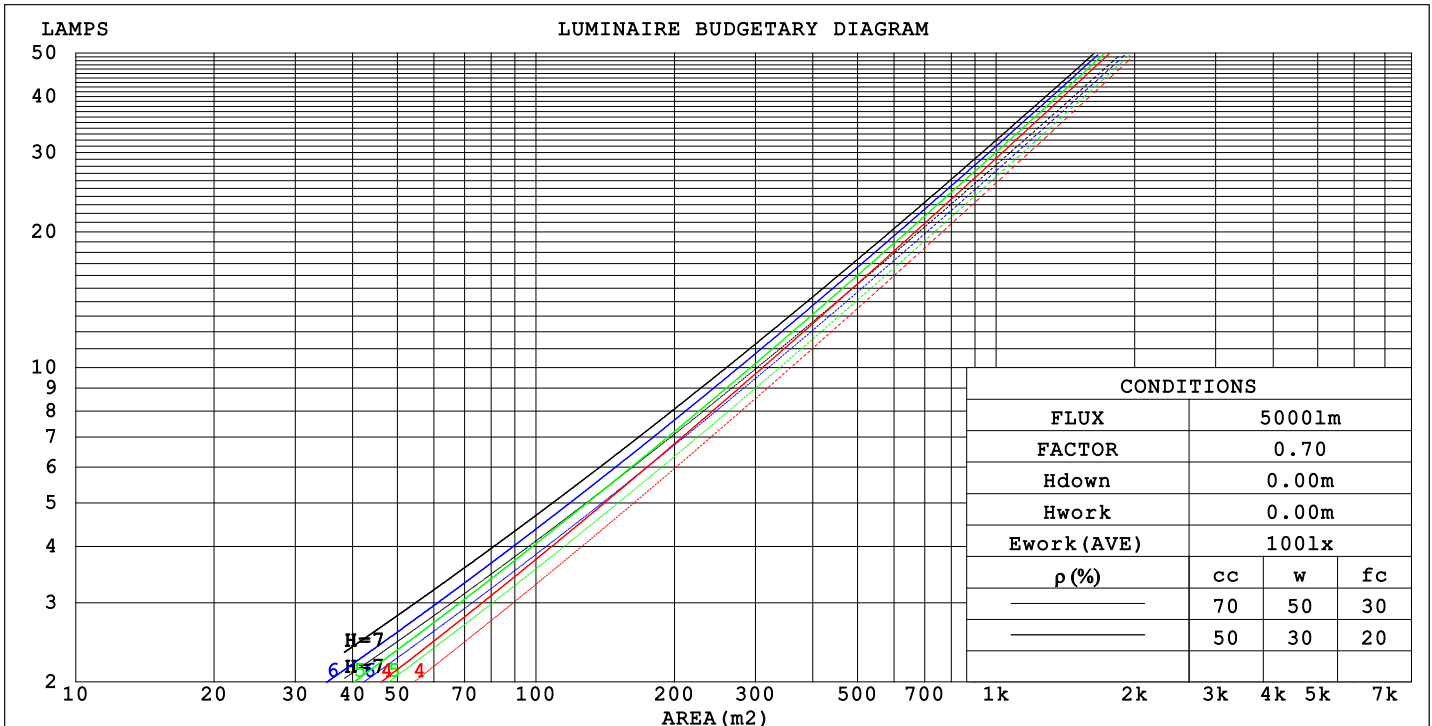
γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM



**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm |                 |                  |
| NAME: AGL-300-27X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-27X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

| pcc             | 80%                   |      |      | 70%  |      |      | 50%                              |      |      | 30%  |      |      | 10%  |      |      | 0    |
|-----------------|-----------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|------|------|------|
|                 | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                              | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  |      |
| p <sub>w</sub>  |                       |      |      |      |      |      |                                  |      |      |      |      |      |      |      |      | 0    |
| p <sub>fc</sub> | 20%                   |      |      | 20%  |      |      | 20%                              |      |      | 20%  |      |      | 20%  |      |      | 0    |
| RCR             | RCR:Room Cavity Ratio |      |      |      |      |      | Coefficients of Utilization (CU) |      |      |      |      |      |      |      |      |      |
| 0.0             | 1.19                  | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11                             | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1.00 |
| 1.0             | 1.10                  | 1.07 | 1.04 | 1.07 | 1.05 | 1.03 | 1.03                             | 1.01 | .99  | .90  | .98  | .96  | .96  | .95  | .94  | .92  |
| 2.0             | 1.01                  | .96  | .92  | .99  | .95  | .91  | .96                              | .92  | .89  | .93  | .90  | .87  | .90  | .88  | .85  | .84  |
| 3.0             | .93                   | .87  | .83  | .92  | .86  | .82  | .89                              | .84  | .81  | .86  | .83  | .80  | .84  | .81  | .78  | .77  |
| 4.0             | .86                   | .80  | .75  | .85  | .79  | .75  | .83                              | .78  | .74  | .81  | .76  | .73  | .79  | .75  | .72  | .71  |
| 5.0             | .80                   | .74  | .69  | .79  | .73  | .69  | .77                              | .72  | .68  | .76  | .71  | .67  | .74  | .70  | .67  | .65  |
| 6.0             | .75                   | .68  | .64  | .74  | .68  | .63  | .72                              | .67  | .63  | .71  | .66  | .63  | .70  | .65  | .62  | .61  |
| 7.0             | .70                   | .64  | .59  | .69  | .63  | .59  | .68                              | .63  | .59  | .67  | .62  | .58  | .66  | .61  | .58  | .56  |
| 8.0             | .66                   | .60  | .55  | .65  | .59  | .55  | .64                              | .59  | .55  | .63  | .58  | .55  | .62  | .58  | .54  | .53  |
| 9.0             | .62                   | .56  | .52  | .62  | .56  | .52  | .61                              | .55  | .52  | .60  | .55  | .51  | .59  | .54  | .51  | .50  |
| 10.0            | .59                   | .53  | .49  | .59  | .53  | .49  | .58                              | .52  | .49  | .57  | .52  | .48  | .56  | .52  | .48  | .47  |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM

**WEC AND CCEC**

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm |                 |                  |
| NAME: AGL-300-27X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-27X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                              |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                              | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                              |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients (WEC) |      |      |      |      |      |      |      |      |   |
| 0.0  |                       |      |      |      |      |      |                                  |      |      |      |      |      |      |      |      |   |
| 1.0  | .201                  | .115 | .036 | .195 | .111 | .035 | .182                             | .104 | .033 | .170 | .098 | .032 | .159 | .092 | .030 |   |
| 2.0  | .193                  | .106 | .032 | .187 | .103 | .032 | .177                             | .098 | .030 | .167 | .093 | .029 | .157 | .089 | .028 |   |
| 3.0  | .183                  | .097 | .029 | .178 | .095 | .029 | .169                             | .091 | .028 | .160 | .088 | .027 | .152 | .084 | .026 |   |
| 4.0  | .173                  | .090 | .026 | .169 | .088 | .026 | .161                             | .085 | .025 | .153 | .082 | .025 | .146 | .079 | .024 |   |
| 5.0  | .163                  | .083 | .024 | .160 | .082 | .024 | .152                             | .079 | .023 | .146 | .077 | .023 | .140 | .075 | .022 |   |
| 6.0  | .154                  | .077 | .022 | .151 | .076 | .022 | .145                             | .074 | .022 | .139 | .072 | .021 | .134 | .070 | .021 |   |
| 7.0  | .146                  | .072 | .021 | .143 | .071 | .020 | .138                             | .070 | .020 | .133 | .068 | .020 | .128 | .066 | .020 |   |
| 8.0  | .139                  | .068 | .019 | .136 | .067 | .019 | .131                             | .066 | .019 | .127 | .064 | .019 | .122 | .063 | .018 |   |
| 9.0  | .132                  | .064 | .018 | .130 | .063 | .018 | .125                             | .062 | .018 | .121 | .061 | .017 | .117 | .060 | .017 |   |
| 10.0 | .126                  | .060 | .017 | .124 | .060 | .017 | .120                             | .059 | .017 | .116 | .058 | .016 | .112 | .057 | .016 |   |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                                         |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                         | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                                         |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients (CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                        | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .173                  | .157 | .143 | .148 | .135 | .123 | .101                                        | .093 | .085 | .058 | .054 | .049 | .019 | .017 | .016 |   |
| 2.0  | .159                  | .132 | .110 | .136 | .114 | .095 | .093                                        | .079 | .066 | .054 | .046 | .039 | .017 | .015 | .013 |   |
| 3.0  | .148                  | .114 | .087 | .127 | .098 | .075 | .087                                        | .068 | .053 | .050 | .040 | .031 | .016 | .013 | .010 |   |
| 4.0  | .138                  | .099 | .070 | .118 | .086 | .061 | .081                                        | .060 | .043 | .047 | .035 | .025 | .015 | .011 | .008 |   |
| 5.0  | .130                  | .088 | .057 | .111 | .076 | .050 | .077                                        | .053 | .035 | .044 | .031 | .021 | .014 | .010 | .007 |   |
| 6.0  | .122                  | .079 | .048 | .105 | .068 | .042 | .072                                        | .048 | .029 | .042 | .028 | .017 | .014 | .009 | .006 |   |
| 7.0  | .116                  | .071 | .040 | .099 | .062 | .035 | .069                                        | .043 | .025 | .040 | .026 | .015 | .013 | .008 | .005 |   |
| 8.0  | .110                  | .065 | .035 | .094 | .057 | .030 | .065                                        | .040 | .021 | .038 | .023 | .013 | .012 | .008 | .004 |   |
| 9.0  | .104                  | .060 | .030 | .090 | .052 | .026 | .062                                        | .037 | .019 | .036 | .022 | .011 | .012 | .007 | .004 |   |
| 10.0 | .099                  | .056 | .027 | .086 | .048 | .023 | .059                                        | .034 | .016 | .035 | .020 | .010 | .011 | .007 | .003 |   |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM

**UGR(Unified Glare Rating) Table**

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm |                 |                  |
| NAME: AGL-300-27X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-27X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

|                |     |     |     |     |     |     |     |     |     |     |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ceiling/cavity | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| walls          | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| working plane  | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

| Room dimensions |        | Viewed crosswise |      |      |      |      | Viewed endwise |      |      |      |      |
|-----------------|--------|------------------|------|------|------|------|----------------|------|------|------|------|
| x = 2H          | y = 2H | 25.7             | 26.7 | 25.9 | 26.9 | 27.1 | 26.6           | 27.7 | 26.9 | 27.8 | 28.0 |
|                 | 3H     | 25.8             | 26.8 | 26.1 | 27.0 | 27.2 | 26.9           | 27.9 | 27.1 | 28.1 | 28.3 |
|                 | 4H     | 25.8             | 26.8 | 26.1 | 27.0 | 27.2 | 26.9           | 27.8 | 27.2 | 28.0 | 28.3 |
|                 | 6H     | 25.8             | 26.7 | 26.1 | 26.9 | 27.2 | 26.9           | 27.7 | 27.2 | 28.0 | 28.2 |
|                 | 8H     | 25.8             | 26.7 | 26.1 | 26.9 | 27.2 | 26.9           | 27.7 | 27.2 | 28.0 | 28.2 |
|                 | 12H    | 25.8             | 26.6 | 26.1 | 26.9 | 27.2 | 26.9           | 27.7 | 27.2 | 27.9 | 28.2 |
| 4H              | 2H     | 25.9             | 26.8 | 26.2 | 27.0 | 27.3 | 26.7           | 27.6 | 27.0 | 27.9 | 28.1 |
|                 | 3H     | 26.1             | 26.9 | 26.5 | 27.2 | 27.5 | 27.1           | 27.9 | 27.4 | 28.1 | 28.4 |
|                 | 4H     | 26.2             | 26.9 | 26.5 | 27.2 | 27.5 | 27.1           | 27.8 | 27.5 | 28.1 | 28.4 |
|                 | 6H     | 26.2             | 26.8 | 26.6 | 27.2 | 27.5 | 27.1           | 27.8 | 27.5 | 28.1 | 28.5 |
|                 | 8H     | 26.2             | 26.8 | 26.6 | 27.2 | 27.5 | 27.2           | 27.8 | 27.6 | 28.1 | 28.5 |
|                 | 12H    | 26.2             | 26.8 | 26.6 | 27.1 | 27.5 | 27.2           | 27.7 | 27.6 | 28.1 | 28.5 |
| 8H              | 4H     | 26.1             | 26.7 | 26.5 | 27.1 | 27.4 | 27.0           | 27.6 | 27.4 | 28.0 | 28.4 |
|                 | 6H     | 26.2             | 26.7 | 26.6 | 27.1 | 27.5 | 27.1           | 27.6 | 27.5 | 28.0 | 28.4 |
|                 | 8H     | 26.3             | 26.7 | 26.7 | 27.1 | 27.6 | 27.2           | 27.6 | 27.6 | 28.0 | 28.5 |
|                 | 12H    | 26.3             | 26.7 | 26.8 | 27.1 | 27.6 | 27.2           | 27.6 | 27.7 | 28.1 | 28.5 |
| 12H             | 4H     | 26.1             | 26.6 | 26.5 | 27.0 | 27.4 | 27.0           | 27.5 | 27.4 | 27.9 | 28.3 |
|                 | 6H     | 26.2             | 26.6 | 26.6 | 27.0 | 27.5 | 27.1           | 27.5 | 27.5 | 27.9 | 28.4 |
|                 | 8H     | 26.3             | 26.7 | 26.8 | 27.1 | 27.6 | 27.2           | 27.6 | 27.7 | 28.0 | 28.5 |

|                                                                 |               |               |
|-----------------------------------------------------------------|---------------|---------------|
| Variations with the observer position at spacings(CIE Pub.117): |               |               |
| S = 1.0H                                                        | + 1.0 / - 1.5 | + 0.9 / - 1.2 |
| 1.5H                                                            | + 1.1 / - 1.2 | + 1.0 / - 1.0 |
| 2.0H                                                            | + 1.8 / - 1.8 | + 2.1 / - 1.4 |

CIE Pub.117, 370.2 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.5)  
 Area: 0.001256 m2

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM

**UTILIZATION FACTORS TABLE**

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm |                 |                  |
| NAME: AGL-300-27X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-27X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

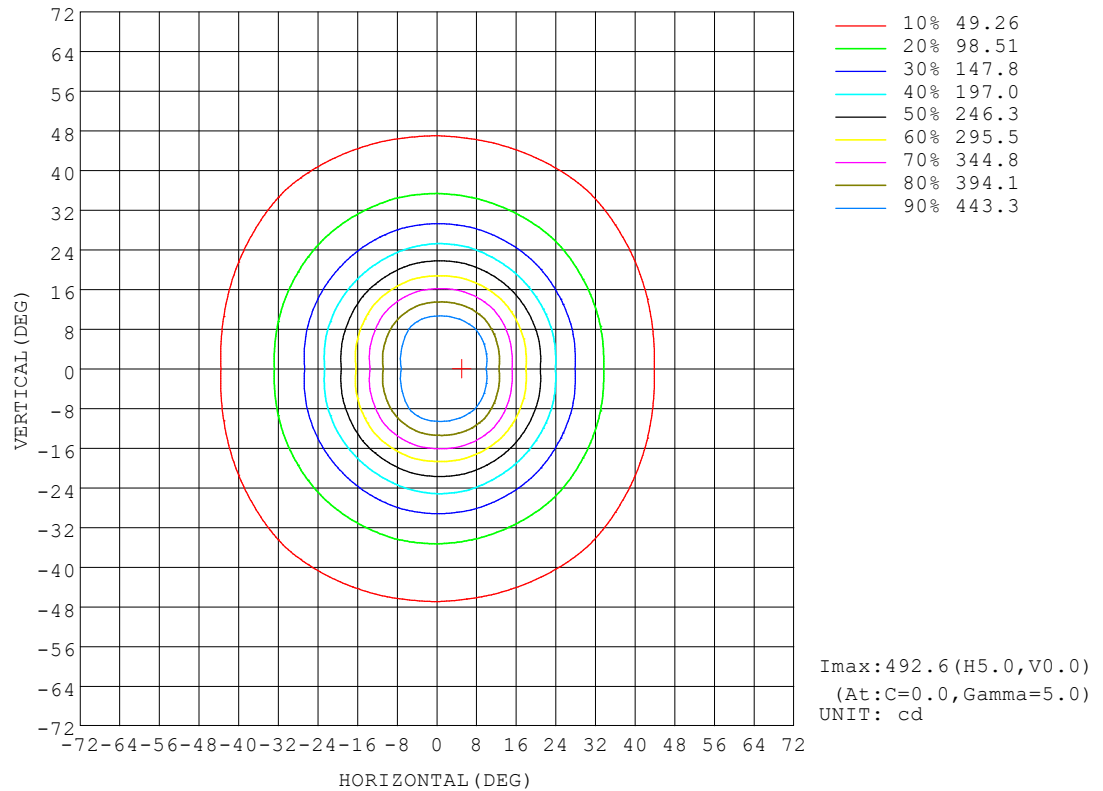
| REFLECTANCE                      |                                               |     |           |     |     |     |               |     |     |        |
|----------------------------------|-----------------------------------------------|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8                                           | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 0.5           | 0.5 | 0.5 | 0      |
| Walls                            | 0.7                                           | 0.5 | 0.3       | 0.7 | 0.5 | 0.3 | 0.7           | 0.5 | 0.3 | 0      |
| Working plane                    | 0.2                                           | 0.2 | 0.2       | 0.2 | 0.2 | 0.2 | 0.2           | 0.2 | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5 |     |           |     |     |     |               |     |     |        |
| k = 0.60                         | 78                                            | 70  | 65        | 77  | 70  | 65  | 77            | 69  | 65  | 60     |
| 0.80                             | 87                                            | 79  | 74        | 86  | 79  | 74  | 84            | 78  | 74  | 69     |
| 1.00                             | 93                                            | 86  | 81        | 92  | 85  | 81  | 90            | 85  | 80  | 75     |
| 1.25                             | 98                                            | 91  | 87        | 97  | 91  | 86  | 94            | 89  | 85  | 80     |
| 1.50                             | 101                                           | 95  | 91        | 100 | 94  | 90  | 97            | 93  | 89  | 84     |
| 2.00                             | 105                                           | 100 | 96        | 104 | 99  | 95  | 101           | 97  | 94  | 88     |
| 2.50                             | 107                                           | 103 | 99        | 106 | 101 | 98  | 102           | 99  | 96  | 90     |
| 3.00                             | 109                                           | 105 | 102       | 108 | 104 | 101 | 104           | 101 | 98  | 92     |
| 4.00                             | 112                                           | 108 | 106       | 110 | 107 | 104 | 106           | 104 | 101 | 94     |
| 5.00                             | 113                                           | 110 | 108       | 111 | 109 | 106 | 107           | 105 | 103 | 95     |
| ROOM INDEX                       | UF(total)                                     |     |           |     |     |     |               |     |     | Direct |
| According to DIN EN 13032-2 2004 |                                               |     | Suspended |     |     |     | SHRNOM = 1.25 |     |     |        |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM

ISOCANDELA DIAGRAM

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm |                 |                  |
| NAME: AGL-300-27X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-27X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

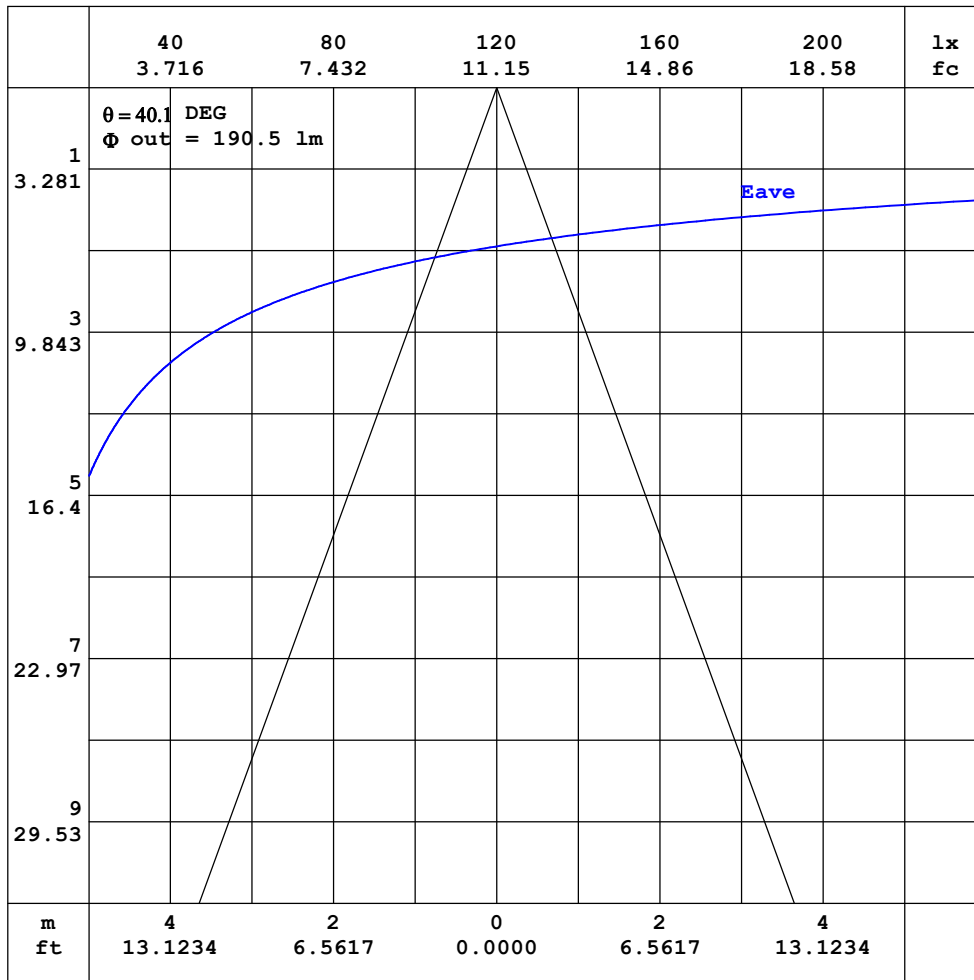


C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM

**AAI CURVES**

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm |                 |                  |
| NAME: AGL-300-27X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-27X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |



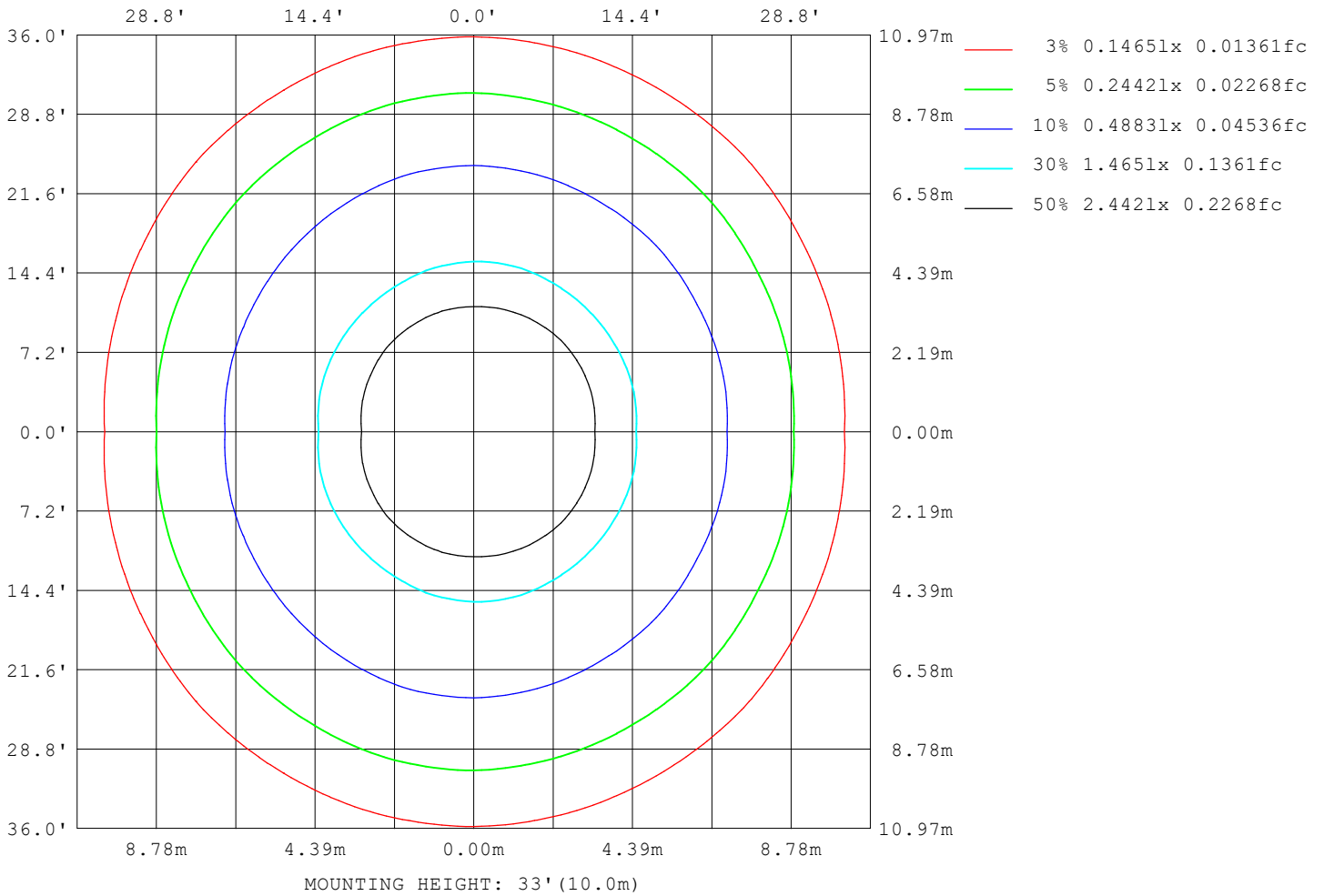
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM

**ISOLUX DIAGRAM**

|                                                                                                                |                 |                  |
|----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm |                 |                  |
| NAME: AGL-300-27X40                                                                                            | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-27X40                                                                                           | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                  | SUR.:           | Shielding Angle: |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM

**LED Avg.L Report**

|                                                                                                                |                 |                  |
|----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm |                 |                  |
| NAME: AGL-300-27X40                                                                                            | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-27X40                                                                                           | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                  | SUR.:           | Shielding Angle: |

| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 16897 |
| L_0~180 (75) av  | 8177  |
| L_0~180 (85) av  | 6680  |
| L_90~270 (65) av | 23124 |
| L_90~270 (75) av | 10713 |
| L_90~270 (85) av | 10937 |
| L_45 (65) av     | 22776 |
| L_45 (75) av     | 10778 |
| L_45 (85) av     | 9903  |

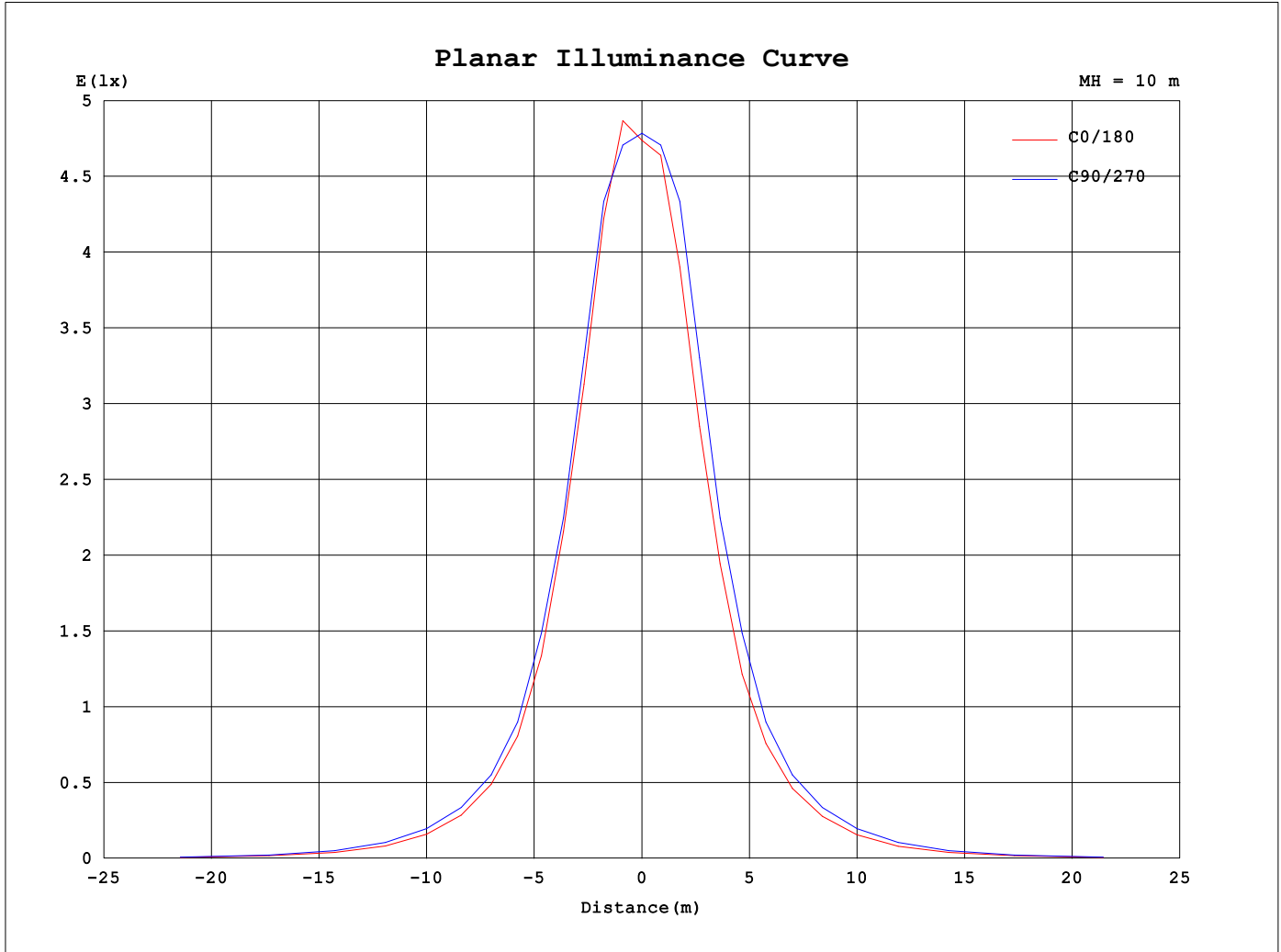
Standard: GB/T 29293-2012

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM



Planar Illuminance Curve



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM

LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                                                |                 |                  |
|----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm |                 |                  |
| NAME: AGL-300-27X40                                                                                            | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-27X40                                                                                           | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                  | SUR.:           | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG) \ γ (DEG) | 0    | 15   | 30   | 45   | 60   | 75   | 90   | 105  | 120  | 135  | 150  | 165  | 180  | 195  | 210  | 225  | 240  | 255  | 270  |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                 | 487  | 484  | 483  | 481  | 481  | 479  | 479  | 477  | 477  | 476  | 475  | 474  | 474  | 474  | 475  | 476  | 477  | 477  | 479  |
| 5                 | 493  | 491  | 491  | 487  | 483  | 478  | 476  | 475  | 475  | 475  | 473  | 471  | 469  | 471  | 473  | 475  | 475  | 475  | 476  |
| 10                | 442  | 451  | 458  | 464  | 461  | 457  | 454  | 452  | 445  | 436  | 426  | 418  | 409  | 418  | 426  | 436  | 445  | 452  | 454  |
| 15                | 347  | 355  | 364  | 373  | 374  | 371  | 367  | 364  | 358  | 351  | 337  | 327  | 317  | 327  | 337  | 351  | 358  | 364  | 367  |
| 20                | 260  | 268  | 272  | 275  | 275  | 275  | 271  | 270  | 264  | 259  | 250  | 243  | 234  | 243  | 250  | 259  | 264  | 270  | 271  |
| 25                | 180  | 187  | 189  | 191  | 195  | 200  | 200  | 195  | 186  | 180  | 176  | 171  | 163  | 171  | 176  | 180  | 186  | 195  | 200  |
| 30                | 124  | 128  | 130  | 133  | 135  | 138  | 139  | 137  | 132  | 127  | 123  | 119  | 117  | 119  | 123  | 127  | 132  | 137  | 139  |
| 35                | 88.9 | 91.1 | 92.2 | 95.3 | 96.5 | 98.9 | 100  | 99.6 | 95.7 | 92.4 | 89.1 | 87.1 | 84.1 | 87.1 | 89.1 | 92.4 | 95.7 | 99.6 | 100  |
| 40                | 63.8 | 65.7 | 66.9 | 69.9 | 71.2 | 73.3 | 75.0 | 74.3 | 71.5 | 69.3 | 66.1 | 64.0 | 61.9 | 64.0 | 66.1 | 69.3 | 71.5 | 74.3 | 75.0 |
| 45                | 45.0 | 46.7 | 48.4 | 51.2 | 52.5 | 54.1 | 55.5 | 54.9 | 53.1 | 51.7 | 48.6 | 46.4 | 44.3 | 46.4 | 48.6 | 51.7 | 53.1 | 54.9 | 55.5 |
| 50                | 31.0 | 32.5 | 34.4 | 36.8 | 38.0 | 39.2 | 39.7 | 39.4 | 38.6 | 37.7 | 35.0 | 32.5 | 30.6 | 32.5 | 35.0 | 37.7 | 38.6 | 39.4 | 39.7 |
| 55                | 20.9 | 22.1 | 23.9 | 26.0 | 26.9 | 27.4 | 27.4 | 27.5 | 27.4 | 26.9 | 24.5 | 22.4 | 20.8 | 22.4 | 24.5 | 26.9 | 27.4 | 27.5 | 27.4 |
| 60                | 14.2 | 15.1 | 16.4 | 18.2 | 18.7 | 18.8 | 18.6 | 18.9 | 19.0 | 18.8 | 16.8 | 15.2 | 14.1 | 15.2 | 16.8 | 18.8 | 19.0 | 18.9 | 18.6 |
| 65                | 9.18 | 9.82 | 10.8 | 12.1 | 12.5 | 12.3 | 12.3 | 12.2 | 12.5 | 12.1 | 10.7 | 9.52 | 8.75 | 9.52 | 10.7 | 12.1 | 12.5 | 12.2 | 12.3 |
| 70                | 5.20 | 5.63 | 6.24 | 7.10 | 7.27 | 7.11 | 6.95 | 6.96 | 7.01 | 6.85 | 5.92 | 5.18 | 4.70 | 5.18 | 5.92 | 6.85 | 7.01 | 6.96 | 6.95 |
| 75                | 2.78 | 2.97 | 3.24 | 3.66 | 3.72 | 3.58 | 3.48 | 3.44 | 3.42 | 3.34 | 2.95 | 2.70 | 2.53 | 2.70 | 2.95 | 3.34 | 3.42 | 3.44 | 3.48 |
| 80                | 1.63 | 1.67 | 1.73 | 1.83 | 1.88 | 1.88 | 1.88 | 1.81 | 1.75 | 1.70 | 1.61 | 1.52 | 1.45 | 1.52 | 1.61 | 1.70 | 1.75 | 1.81 | 1.88 |
| 85                | 0.96 | 1.08 | 1.14 | 1.21 | 1.24 | 1.23 | 1.20 | 1.13 | 1.05 | 0.96 | 0.81 | 0.66 | 0.50 | 0.66 | 0.81 | 0.96 | 1.05 | 1.13 | 1.20 |
| 90                | 0.00 | 0.00 | 0.01 | 0.05 | 0.07 | 0.06 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM

**LUMINOUS DISTRIBUTION INTENSITY DATA**

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm |                 |                  |
| NAME: AGL-300-27X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-27X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

Table--2

UNIT: cd

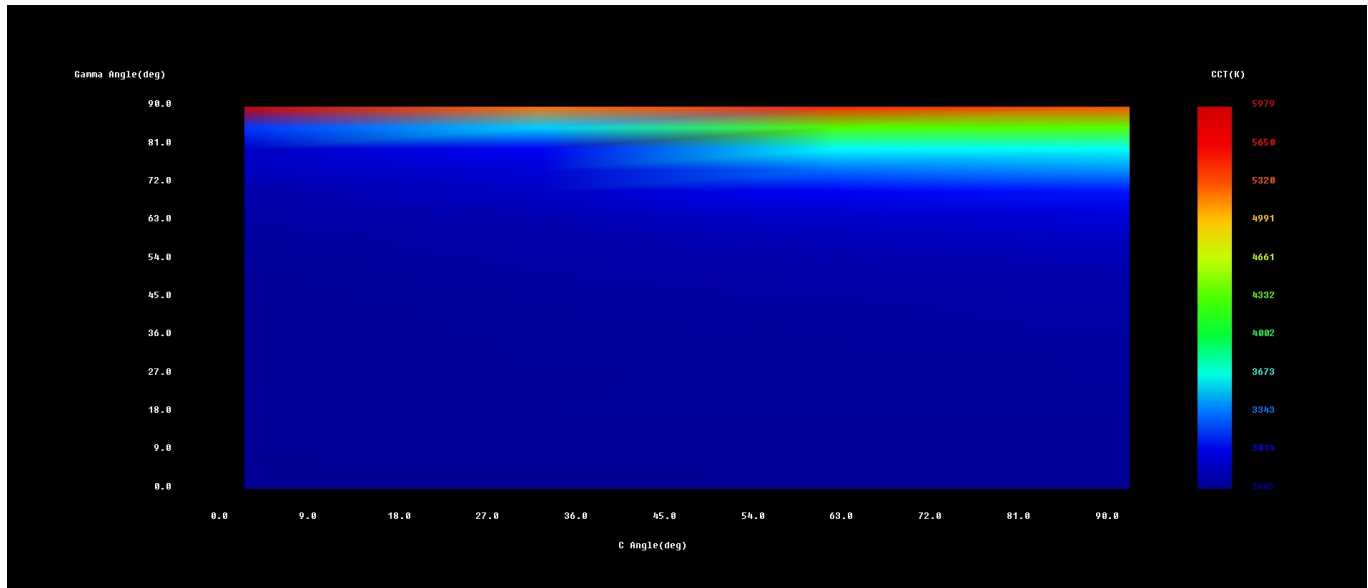
| C (DEG) \ γ (DEG) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                 | 479  | 481  | 481  | 483  | 484  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                 | 478  | 483  | 487  | 491  | 491  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                | 457  | 461  | 464  | 458  | 451  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                | 371  | 374  | 373  | 364  | 355  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                | 275  | 275  | 275  | 272  | 268  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                | 200  | 195  | 191  | 189  | 187  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                | 138  | 135  | 133  | 130  | 128  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                | 98.9 | 96.5 | 95.3 | 92.2 | 91.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                | 73.3 | 71.2 | 69.9 | 66.9 | 65.7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                | 54.1 | 52.5 | 51.2 | 48.4 | 46.7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                | 39.2 | 38.0 | 36.8 | 34.4 | 32.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                | 27.4 | 26.9 | 26.0 | 23.9 | 22.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                | 18.8 | 18.7 | 18.2 | 16.4 | 15.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                | 12.3 | 12.5 | 12.1 | 10.8 | 9.82 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                | 7.11 | 7.27 | 7.10 | 6.24 | 5.63 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                | 3.58 | 3.72 | 3.66 | 3.24 | 2.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                | 1.88 | 1.88 | 1.83 | 1.73 | 1.67 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                | 1.23 | 1.24 | 1.21 | 1.14 | 1.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                | 0.06 | 0.07 | 0.05 | 0.01 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-27X40  
 3W / 2700K / 40D / 300LM

### Spatial Color Distribution Report

|                     |                      |               |
|---------------------|----------------------|---------------|
| NAME: AGL-300-27X40 | TYPE: MR16 LAMP      | WEIGHT: 100GM |
| DIM.: 50MM          | SPEC.: AGL-300-27X40 | SERIAL No.: - |
| MFR.: AQUALUX       |                      |               |



**Color Parameters:**

Average: x=0.4615,y=0.4156 u'=0.2613,v'=0.5295 CCT=2716K Ra=82.3 Rf=85 Rg=94  
Center : x=0.4647,y=0.4172 u'=0.2626,v'=0.5306 CCT=2685K Ra=82.0 Rf=85 Rg=93  
IESNA LM-79-2019 Max. du'v': 0.0043 / max.du'v': 0.0000[Set Range]  
GB/T 24824(LB/T 001-2009):: avg. color nonuniformity du'v':0.0017  
GB/T 24824(LB/T 001-2009):: max. color nonuniformity du'v':0.0017  
Average: R1=81 R2=92 R3=95 R4=80 R5=81 R6=92 R7=81 R8=57 R9=6 R10=83  
R11=79 R12=76 R13=83 R14=98 R15=72

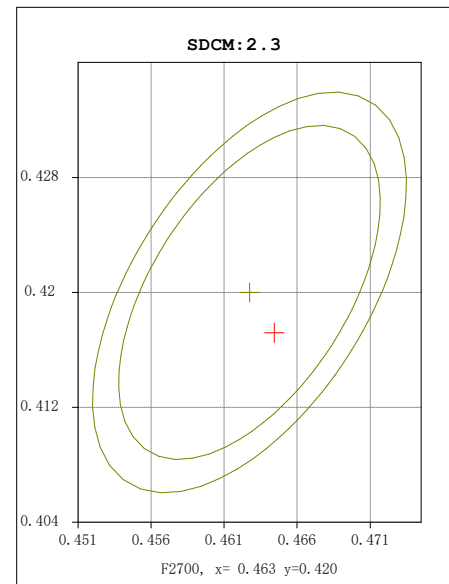
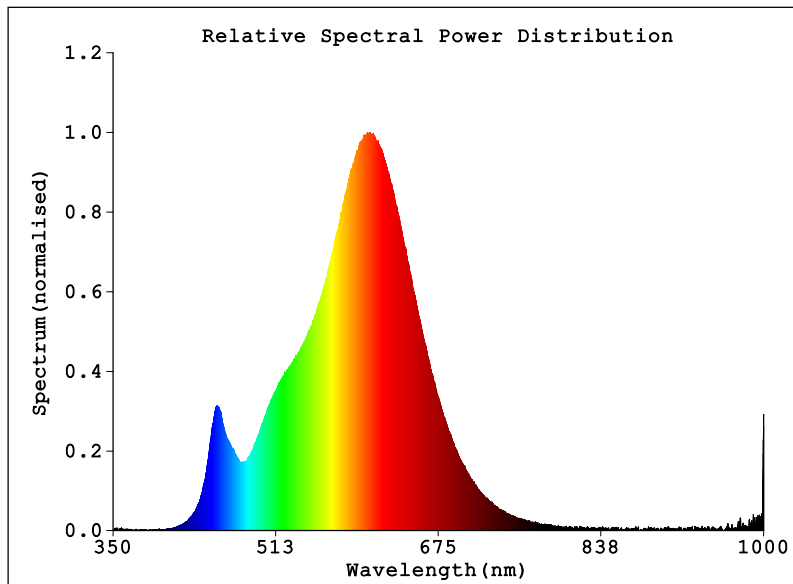
Tester: NICK  
Temperature: 20°C  
Manufacturer: AQUALUX

Date: 12 October 2023  
Humidity: 65.0%  
Remarks: AGL-300-27X403W / 2700K / 40D / 300LM

System: GO-SPEX500\_V1

### Spectral Radiant Test Report

|                     |                      |               |
|---------------------|----------------------|---------------|
| NAME: AGL-300-27X40 | TYPE: MR16 LAMP      | WEIGHT: 100GM |
| DIM.: 50MM          | SPEC.: AGL-300-27X40 | SERIAL No.: - |
| MFR.: AQUALUX       |                      |               |



#### Photon & Colormetric & Photometric Quantities:

Chromaticity Coordinates: x=0.4647 y=0.4172/u'=0.2626 v'=0.5306 duv=0.00203

Tc=2685K Dominant WL: Ld=583.7nm Purity=64.7%

Ratio: R=25.1% G=72.6% B=2.2% Peak WL: Lp=606.9nm HWL: 112.3nm

Rendering Index: Ra=82.0 TM-30: Rf=85 Rg=93

R1 =80 R2 =92 R3 =95 R4 =79 R5 =81 R6 =92 R7 =81

R8 =56 R9 =4 R10=82 R11=79 R12=75 R13=83 R14=98 R15=72

E = 48.66 lx Ee = 0.1501 W/m<sup>2</sup>

Status: T=1152.00ms Ip=52487 (80%) [ HAAS-1200(CAN) ]

Electrical: U=23.868V I=0.13567A P=3.2382W PF=1.0000

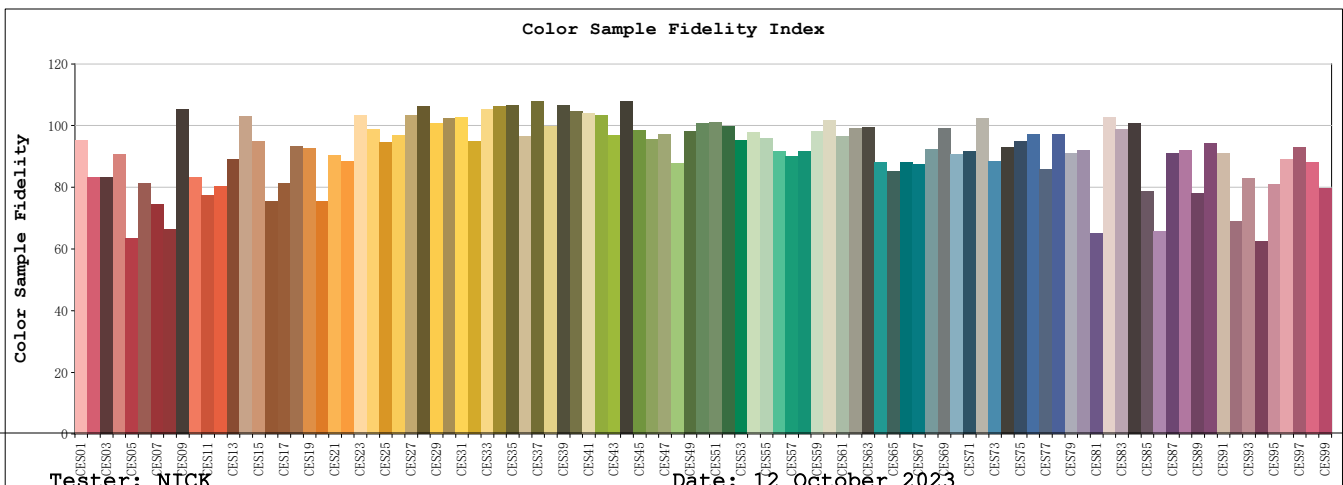
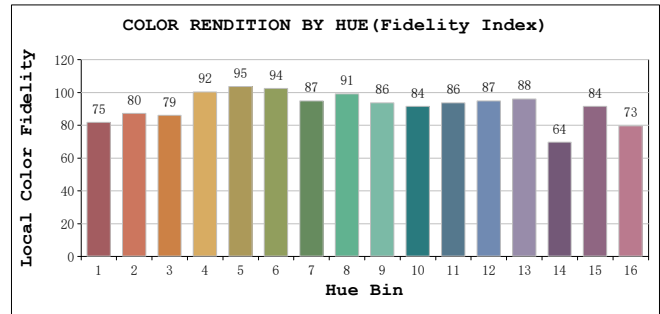
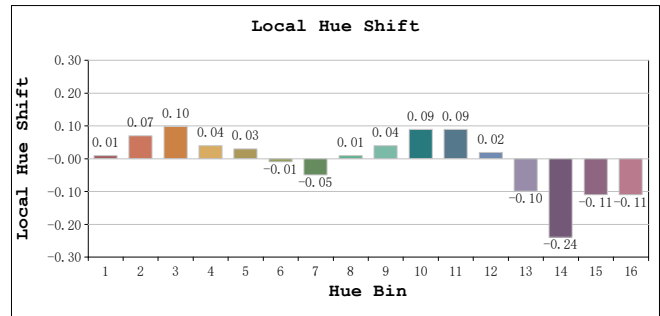
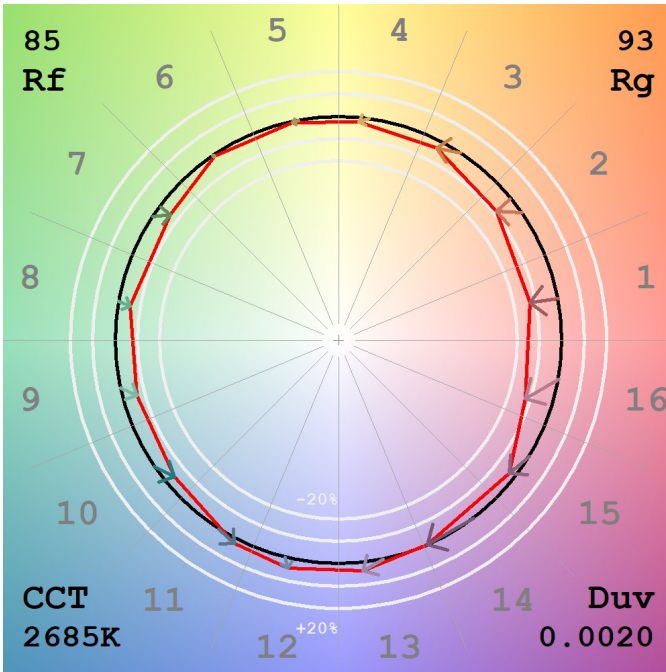
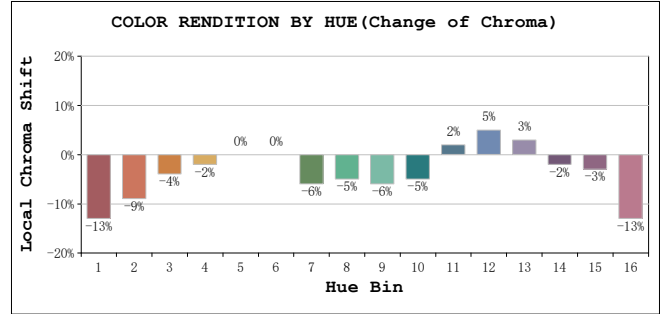
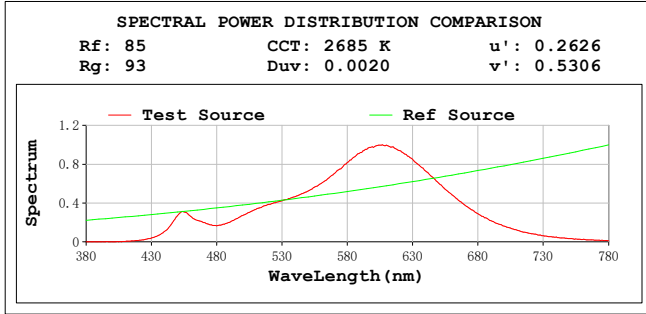
Test position: Center

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-27X403W / 2700K / 40D / 300LM

System: GO-SPEX500\_V1

# TM30



**All Rf:**

|             |             |             |
|-------------|-------------|-------------|
| Rf1 = 87.4  | Rf2 = 76.3  | Rf3 = 76.3  |
| Rf4 = 83.2  | Rf5 = 58.1  | Rf6 = 74.6  |
| Rf7 = 68.3  | Rf8 = 60.9  | Rf9 = 96.5  |
| Rf10 = 76.5 | Rf11 = 70.9 | Rf12 = 73.6 |
| Rf13 = 81.8 | Rf14 = 94.4 | Rf15 = 87.1 |
| Rf16 = 69.3 | Rf17 = 74.5 | Rf18 = 85.4 |
| Rf19 = 84.9 | Rf20 = 69.4 | Rf21 = 82.9 |
| Rf22 = 81.1 | Rf23 = 94.8 | Rf24 = 90.7 |
| Rf25 = 86.7 | Rf26 = 88.9 | Rf27 = 94.9 |
| Rf28 = 97.4 | Rf29 = 92.5 | Rf30 = 93.8 |
| Rf31 = 94.2 | Rf32 = 86.9 | Rf33 = 96.6 |
| Rf34 = 97.5 | Rf35 = 97.8 | Rf36 = 88.6 |
| Rf37 = 98.8 | Rf38 = 91.4 | Rf39 = 97.9 |
| Rf40 = 96.1 | Rf41 = 95.3 | Rf42 = 94.6 |
| Rf43 = 88.9 | Rf44 = 98.9 | Rf45 = 90.4 |
| Rf46 = 87.7 | Rf47 = 89.2 | Rf48 = 80.5 |
| Rf49 = 90.1 | Rf50 = 92.5 | Rf51 = 92.8 |
| Rf52 = 91.4 | Rf53 = 87.3 | Rf54 = 89.7 |
| Rf55 = 88.0 | Rf56 = 84.2 | Rf57 = 82.7 |
| Rf58 = 84.1 | Rf59 = 90.0 | Rf60 = 93.2 |
| Rf61 = 88.6 | Rf62 = 90.8 | Rf63 = 91.3 |
| Rf64 = 81.0 | Rf65 = 78.2 | Rf66 = 81.0 |
| Rf67 = 80.2 | Rf68 = 84.5 | Rf69 = 90.8 |
| Rf70 = 83.4 | Rf71 = 84.0 | Rf72 = 93.8 |
| Rf73 = 81.2 | Rf74 = 85.4 | Rf75 = 87.1 |
| Rf76 = 89.2 | Rf77 = 78.7 | Rf78 = 89.0 |
| Rf79 = 83.5 | Rf80 = 84.3 | Rf81 = 59.7 |
| Rf82 = 94.1 | Rf83 = 90.5 | Rf84 = 92.4 |
| Rf85 = 72.1 | Rf86 = 60.4 | Rf87 = 83.4 |
| Rf88 = 84.4 | Rf89 = 71.6 | Rf90 = 86.5 |
| Rf91 = 83.5 | Rf92 = 63.4 | Rf93 = 76.1 |
| Rf94 = 57.5 | Rf95 = 74.2 | Rf96 = 81.7 |
| Rf97 = 85.3 | Rf98 = 80.8 | Rf99 = 73.0 |

Tester: NICK  
Temperature: 20°C  
Manufacturer: AQUALUX

Date: 12 October 2023  
Humidity: 65.0%  
Remarks: AGL-300-27X403W / 2700K / 40D / 300LM

System: GO-SPEX500\_V1





| Gamma\C | C30    |               | u',v'         | CCT (K) | Ra   | du'v'  | Rf,Rg   | Ip    |
|---------|--------|---------------|---------------|---------|------|--------|---------|-------|
|         | I (%)  | CIE x,y       |               |         |      |        |         |       |
| 0.0     | 99.68  | 0.4647,0.4172 | 0.2626,0.5306 | 2685    | 82.0 | 0.0000 | 85, 93  | 52487 |
| 10.0    | 85.79  | 0.4626,0.4165 | 0.2616,0.5300 | 2708    | 82.1 | 0.0012 | 85, 93  | 45325 |
| 20.0    | 47.34  | 0.4611,0.4156 | 0.2611,0.5294 | 2721    | 82.2 | 0.0019 | 85, 93  | 26599 |
| 30.0    | 22.98  | 0.4611,0.4150 | 0.2613,0.5292 | 2717    | 82.3 | 0.0019 | 85, 94  | 29653 |
| 40.0    | 12.65  | 0.4600,0.4145 | 0.2609,0.5288 | 2728    | 82.5 | 0.0025 | 85, 94  | 19779 |
| 50.0    | 6.66   | 0.4583,0.4136 | 0.2602,0.5283 | 2745    | 82.7 | 0.0033 | 85, 94  | 26851 |
| 60.0    | 3.24   | 0.4550,0.4116 | 0.2589,0.5270 | 2777    | 83.3 | 0.0052 | 86, 94  | 26939 |
| 70.0    | 1.17   | 0.4430,0.4032 | 0.2549,0.5219 | 2893    | 85.1 | 0.0116 | 87, 96  | 26885 |
| 80.0    | 0.40   | 0.4244,0.3862 | 0.2502,0.5122 | 3071    | 89.1 | 0.0222 | 89, 99  | 26789 |
| 90.0    | 0.08   | 0.3368,0.3065 | 0.2244,0.4594 | 5233    | 86.4 | 0.0808 | 85, 110 | 26919 |
|         | C0     |               |               |         |      |        |         |       |
| 0.0     | 100.00 | 0.4647,0.4172 | 0.2626,0.5306 | 2685    | 82.0 | 0.0000 | 85, 93  | 52487 |
| 10.0    | 87.31  | 0.4635,0.4172 | 0.2619,0.5304 | 2701    | 82.0 | 0.0007 | 85, 93  | 46327 |
| 20.0    | 50.37  | 0.4620,0.4162 | 0.2614,0.5298 | 2713    | 82.2 | 0.0014 | 85, 93  | 28217 |
| 30.0    | 24.61  | 0.4630,0.4163 | 0.2620,0.5300 | 2700    | 82.1 | 0.0008 | 85, 94  | 31474 |
| 40.0    | 13.27  | 0.4627,0.4161 | 0.2619,0.5298 | 2703    | 82.1 | 0.0011 | 85, 94  | 20279 |
| 50.0    | 6.60   | 0.4626,0.4169 | 0.2615,0.5301 | 2710    | 82.1 | 0.0012 | 85, 94  | 26841 |
| 60.0    | 3.05   | 0.4603,0.4159 | 0.2604,0.5294 | 2735    | 82.5 | 0.0025 | 86, 94  | 26715 |
| 70.0    | 1.07   | 0.4554,0.4135 | 0.2583,0.5278 | 2786    | 83.2 | 0.0051 | 87, 96  | 26881 |
| 80.0    | 0.36   | 0.4412,0.3986 | 0.2558,0.5198 | 2884    | 85.9 | 0.0128 | 89, 99  | 26792 |
| 90.0    | 0.07   | 0.3241,0.3080 | 0.2143,0.4583 | 5979    | 87.2 | 0.0869 | 85, 110 | 26627 |

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-27X403W / 2700K / 40D / 300LM

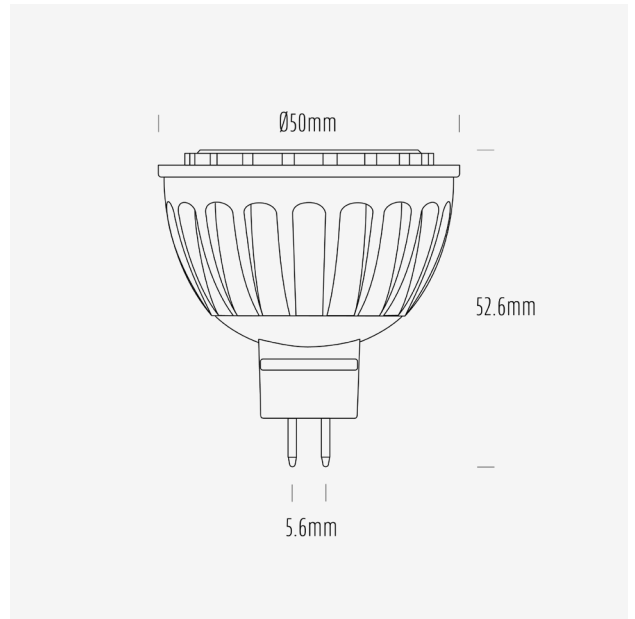
System: GO-SPEX500\_V1

# AGL 300 Series

MR16 LED Globes



## AGL-300-30X15 / 3000K / MR16 / 15°



### Product Data

|              |                                 |  |  |  |
|--------------|---------------------------------|--|--|--|
| Product Code | AGL-300-30X15                   |  |  |  |
| Description  | Aqualux 300 Series LED Lamp     |  |  |  |
| Type         | MR16 GU5.6                      |  |  |  |
| Construction | Aluminium Heatsink + PMMA Optic |  |  |  |
| Warranty     | 3 Years                         |  |  |  |

### Electrical Data

|                     |              |       |              |       |
|---------------------|--------------|-------|--------------|-------|
| Input Voltage Range | 12~24V AC/DC |       |              |       |
| Nominal Voltage     | 24VDC        |       |              |       |
| Nominal Power       | 3W           |       |              |       |
| Nominal Current     | 125mA        |       |              |       |
| Input Voltage       | 12VDC        | 12VAC | <b>24VDC</b> | 24VAC |
| Rated Power         | 3.4          | 2.9   | <b>3.3</b>   | 3.4   |
| Operating Frequency | -            | 50Hz  | -            | 50Hz  |

|                                |     |   |               |   |
|--------------------------------|-----|---|---------------|---|
| Max. no. of lamps on AQD24-040 | 9   | - | <b>9</b>      | - |
| Max. no. of lamps on AQD24-100 | >22 | - | <b>&gt;22</b> | - |
| Max. no. of lamps on AQD24-240 | -   | - | -             | - |

|                       |             |
|-----------------------|-------------|
| Dimming Compatibility | Non dimming |
| Wiring Scheme         | Parallel    |
| Startup Time          | < 0.5s      |

### Mechanical & Thermal Data

|                      |            |
|----------------------|------------|
| Overall Length       | 52.6mm     |
| Max Diameter         | 50mm       |
| Lamp Base            | GU5.6      |
| Weight               | 55g        |
| Operating Temp Range | -20° - 45° |
| IP Rating            | IP20       |

### Photometric Data

|                   |       |       |              |       |
|-------------------|-------|-------|--------------|-------|
| Nominal Flux (lm) | 300   |       |              |       |
| Input Voltage     | 12VDC | 12VAC | <b>24VDC</b> | 24VAC |
| Input Power (W)   | 3.4   | 2.9   | <b>3.3</b>   | 3.4   |
| Rated Flux (lm)   | 492   | 396   | <b>492</b>   | 491   |
| Efficacy (lm/W)   | 144   | 138   | <b>151</b>   | 145   |

|                            |            |
|----------------------------|------------|
| CCT                        | 3000K      |
| CCT Description            | Warm White |
| CRI (Ra)                   | 82         |
| CRI (R9)                   | 1          |
| TM-30 (Rf)                 | 83         |
| TM-30 (Rg)                 | 96         |
| SDCM                       | -          |
| Peak Intensity (cd)        | 2615       |
| Nominal Beam Angle         | 15°        |
| Measured Beam Angle (FWHM) | 17°        |

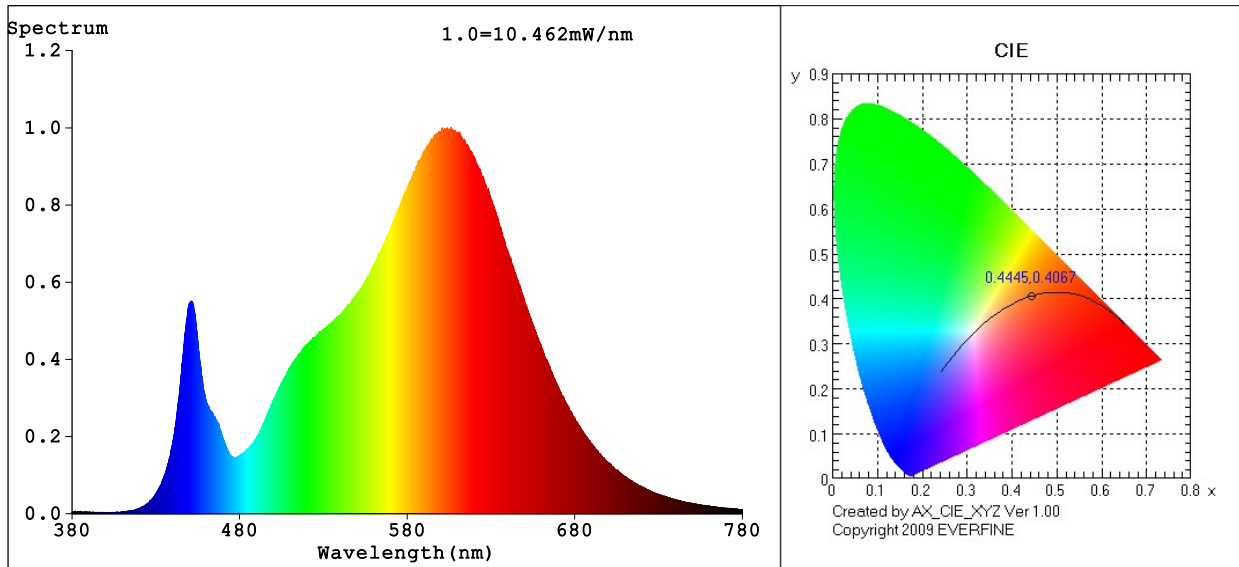
### Lifespan Data

|                  |         |
|------------------|---------|
| L70              | 15,000h |
| Switching Cycles | 15,000  |

### Compliance Data

|                 |     |
|-----------------|-----|
| EMI             | Yes |
| RCM             | N/A |
| Mercury Content | 0mg |

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4445$   $y=0.4067$ / $u'=0.2543$   $v'=0.5236$   
 CCT=2898K (Duv=0.0001) Dominant WL:Ld =583.2nm WL:Lc = --nm Purity=55.5%  
 Ratio:R=23.5% G=74.2% B=2.3%; Peak WL:Lp=606.1nm FWHM=118.0nm  
 Render Index:Ra=81.6 AvgR=75.7 TM30:Rf=83 Rg=96

R1 =80 R2 =90 R3 =96 R4 =80 R5 =80 R6 =89 R7 =81  
 R8 =56 R9 =1 R10=79 R11=80 R12=70 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 491.5 lm Eff. : 144.30 lm/W Fe = 1.469 W

**Electrical parameters:**

V = 11.972 V I = 0.2845 A P = 3.406 W PF = 1.000

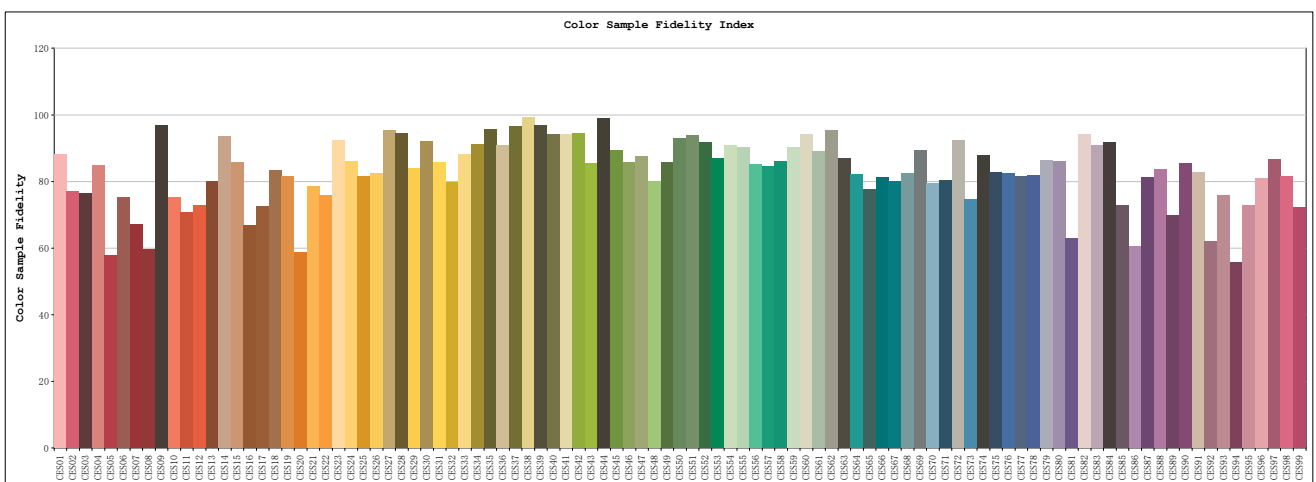
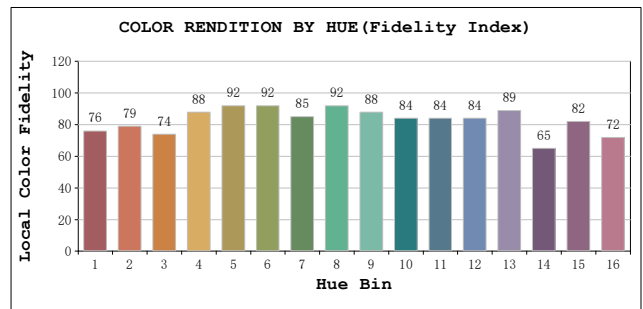
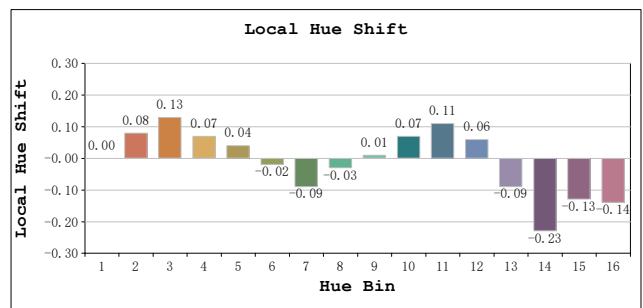
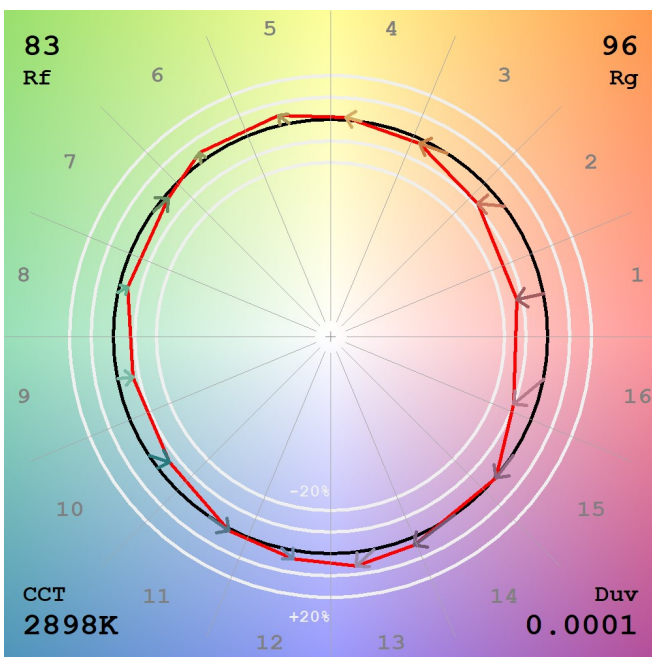
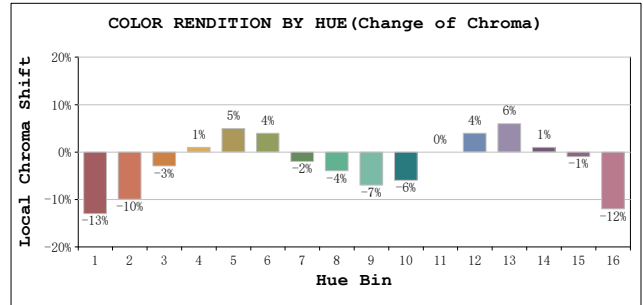
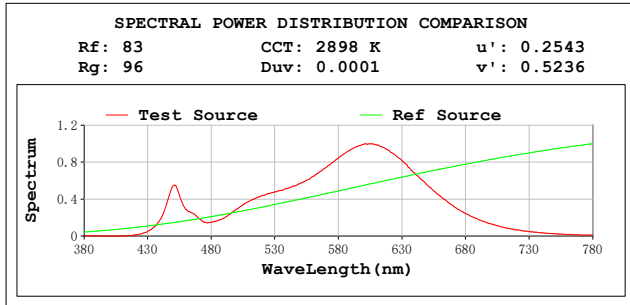
LEVEL:OUT WHITE:ANSI\_3000K

Status: Integral T = 281 ms Ip = 51155 (78%)

**GBT5702**

# TM30

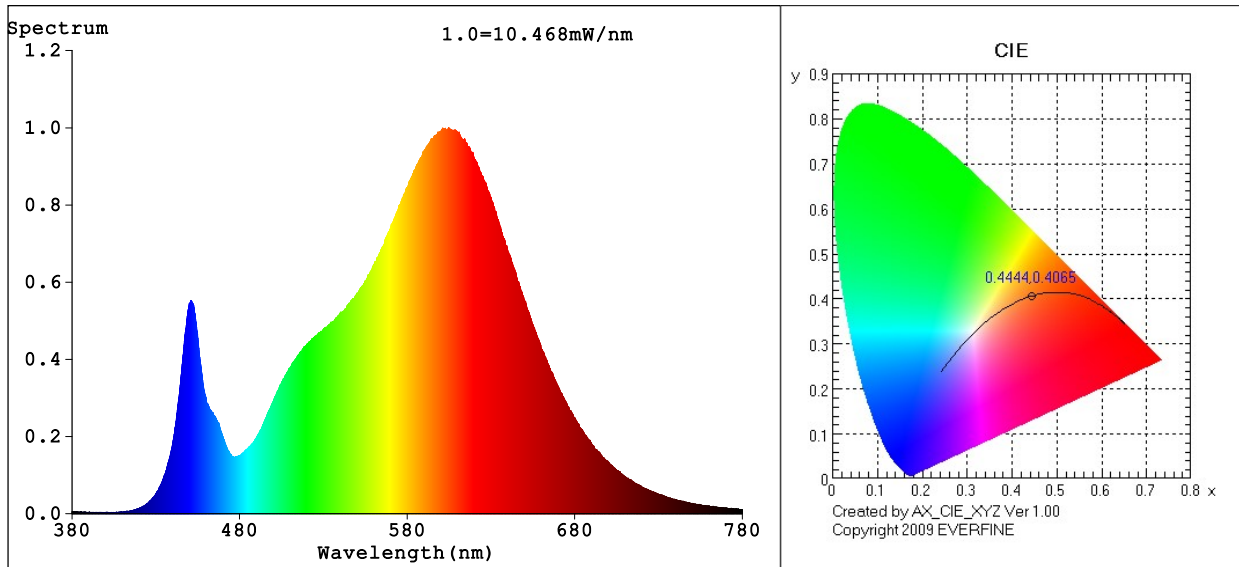
View Angle: 2 Deg



Model:AGL-300-30X15  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X15 12VDC  
 Date:2023-10-17 16:16:11  
 Humidity:65.0%  
 Remarks:12VDC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4444$   $y=0.4065$  /  $u'=0.2543$   $v'=0.5235$   
 CCT=2898K (Duv=0.0000) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=55.4%  
 Ratio:R=23.5% G=74.2% B=2.3%; Peak WL:Lp=604.8nm FWHM=118.1nm  
 Render Index:Ra=81.6 AvgR=75.7 TM30:Rf=83 Rg=96

R1 =80 R2 =91 R3 =96 R4 =80 R5 =80 R6 =89 R7 =81  
 R8 =56 R9 =1 R10=79 R11=80 R12=70 R13=83 R14=99 R15=72

**Photo Parameters:**

Flux = 492.3 lm Eff. : 150.96 lm/W Fe = 1.472 W

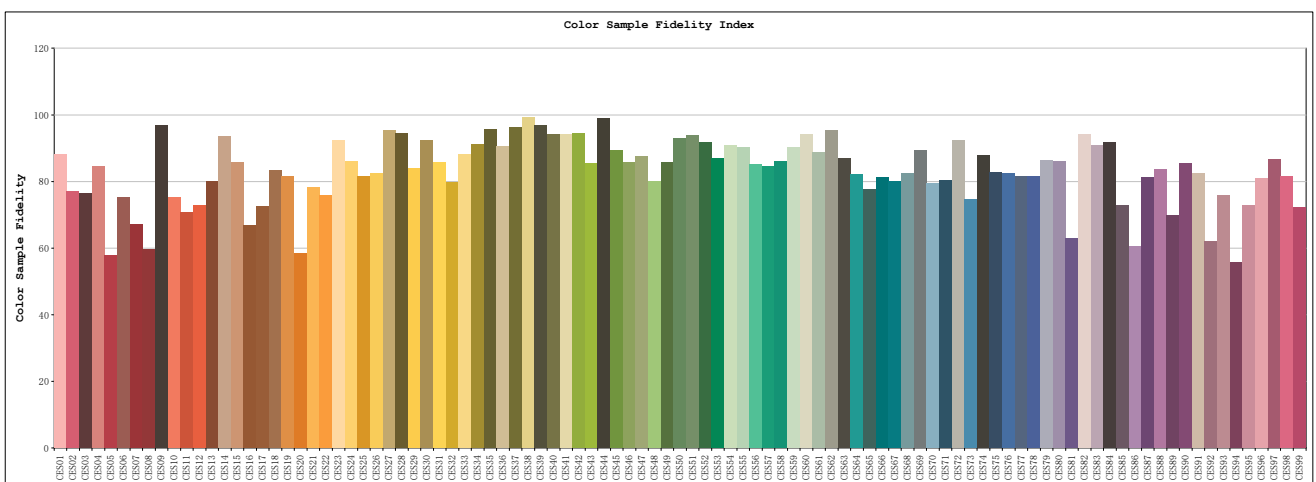
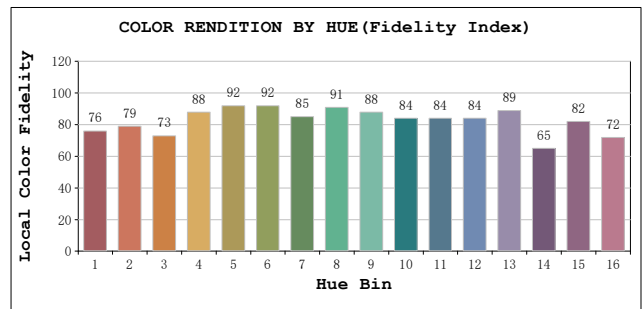
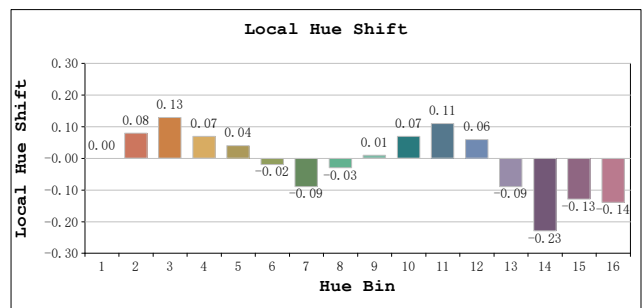
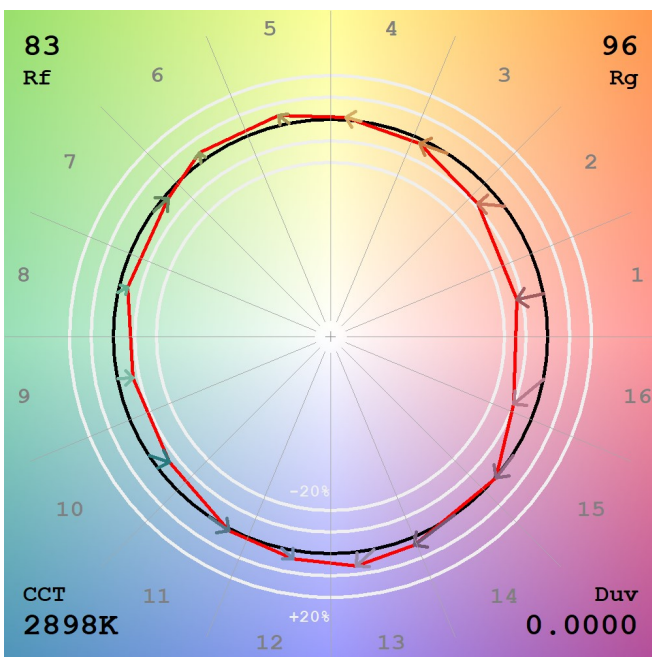
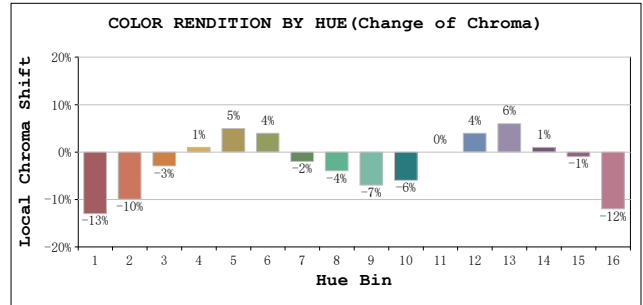
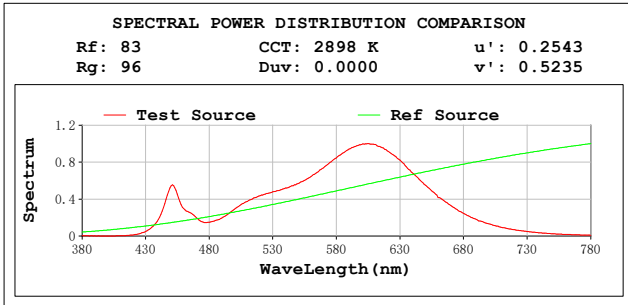
**Electrical parameters:**

V = 23.990 V I = 0.1359 A P = 3.261 W PF = 1.0000  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 281 ms Ip = 51144 (78%)

**GBT5702**

TM30

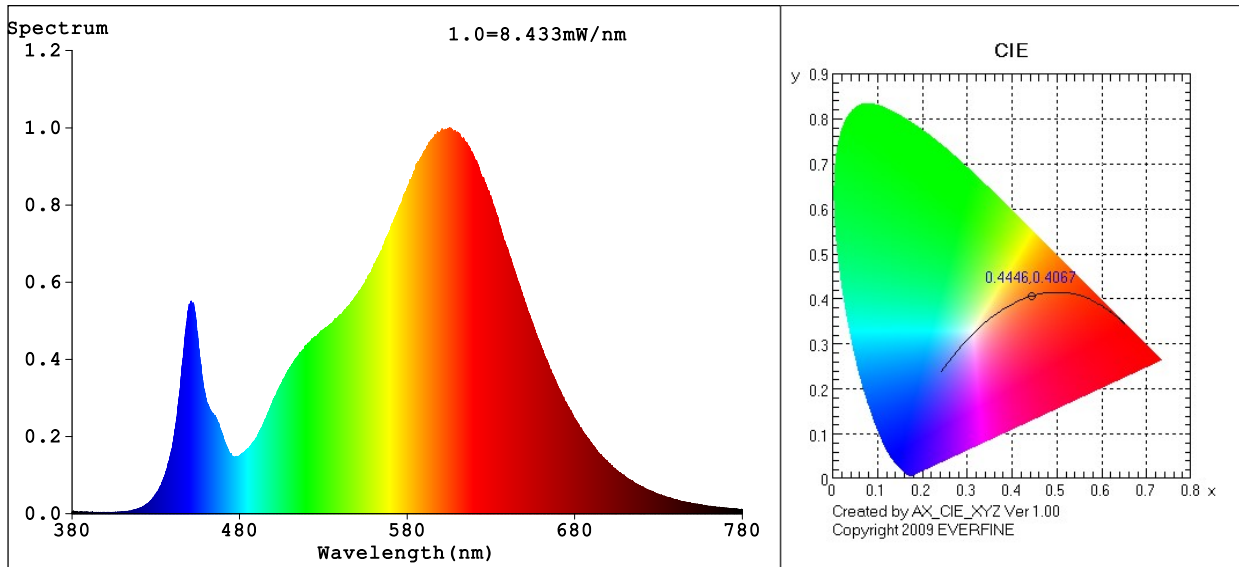
View Angle:2 Deg



Model:AGL-300-30X15  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X15 24VDC  
 Date:2023-10-17 16:17:02  
 Humidity:65.0%  
 Remarks:24VDC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4446$   $y=0.4067$  /  $u'=0.2544$   $v'=0.5236$   
 CCT=2895K (Duv=0.0000) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=55.5%  
 Ratio:R=23.6% G=74.1% B=2.3%; Peak WL:Lp=605.4nm FWHM=118.5nm  
 Render Index:Ra=81.7 AvgR=75.8 TM30:Rf=83 Rg=96

R1 =80 R2 =91 R3 =96 R4 =80 R5 =80 R6 =89 R7 =81  
 R8 =56 R9 =1 R10=79 R11=80 R12=70 R13=83 R14=99 R15=72

**Photo Parameters:**

Flux = 395.6 lm Eff. : 138.27 lm/W Fe = 1.182 W

**Electrical parameters:**

V = 11.990 V I = 0.3310 A P = 2.861 W PF = 0.7209

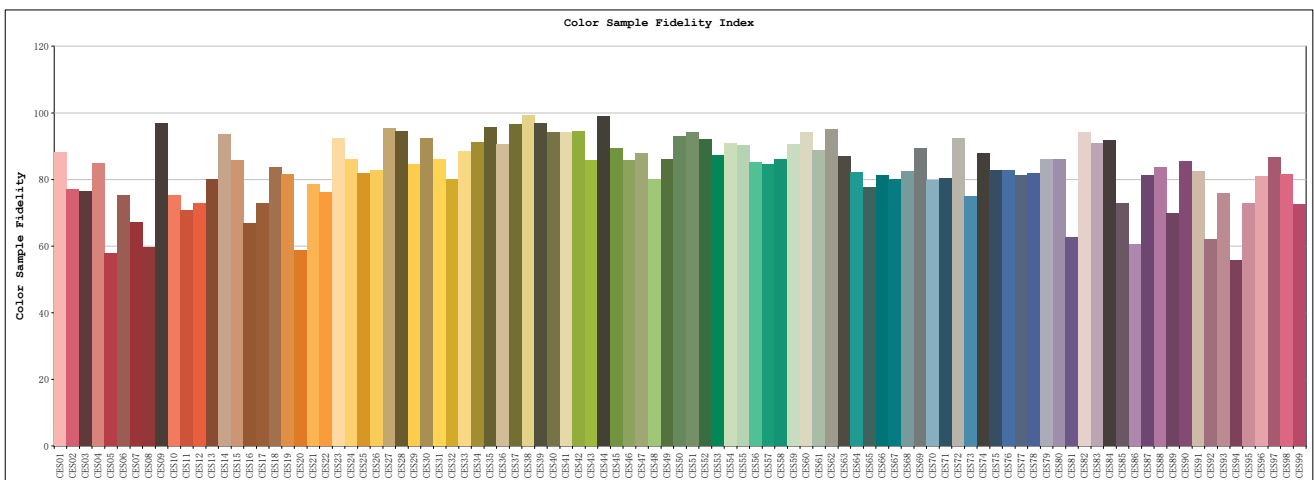
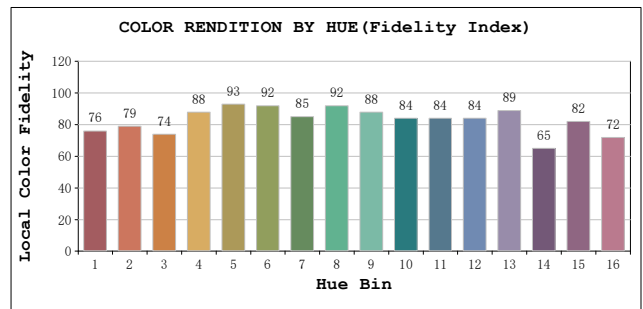
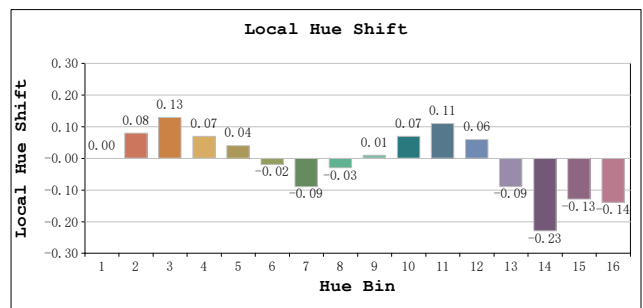
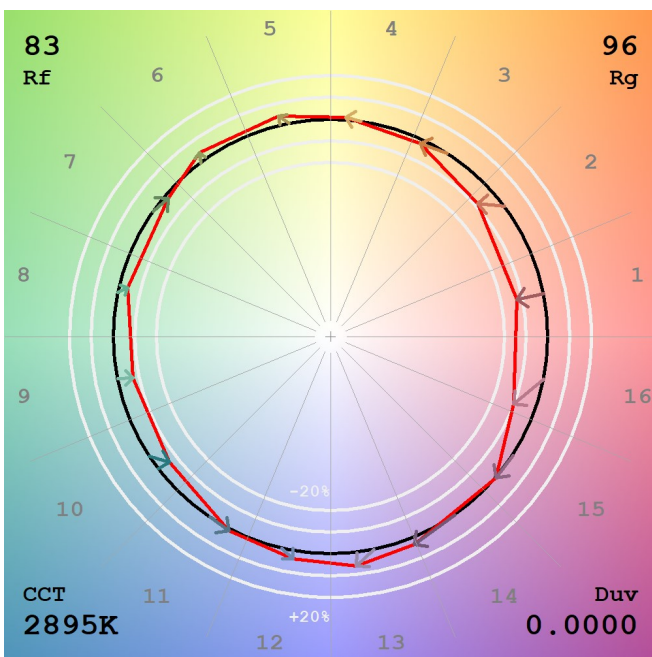
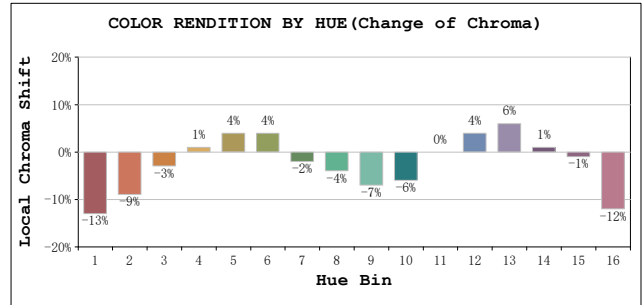
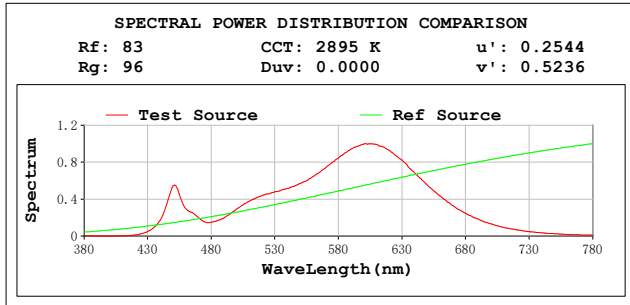
LEVEL:OUT WHITE:ANSI\_3000K

Status: Integral T = 281 ms Ip = 41238 (63%)

**GBT5702**

# TM30

View Angle: 2 Deg

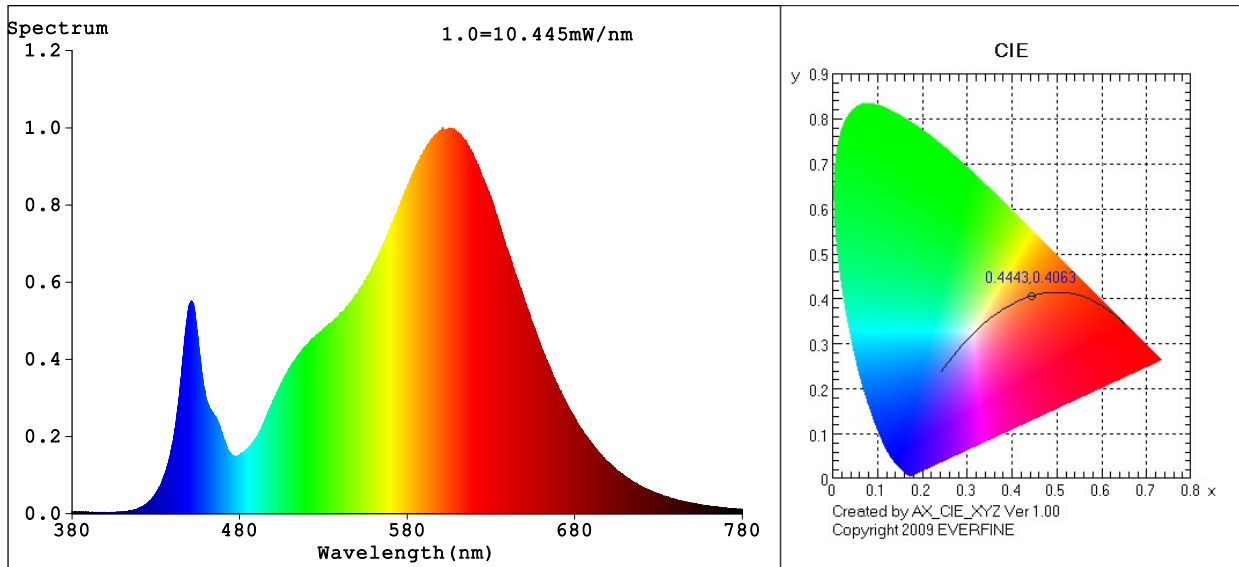


Model:AGL-300-30X15  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X15 12VAC  
 Date:2023-10-17 16:17:48  
 Humidity:65.0%  
 Remarks:12VAC



### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4443$   $y=0.4063$  /  $u'=0.2543$   $v'=0.5233$   
 CCT=2898K (Duv=-0.0001) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=55.3%  
 Ratio:R=23.5% G=74.1% B=2.3%; Peak WL:Lp=601.2nm FWHM=118.1nm  
 Render Index:Ra=81.6 AvgR=75.7 TM30:Rf=83 Rg=96

R1 =80 R2 =91 R3 =96 R4 =80 R5 =80 R6 =89 R7 =81  
 R8 =56 R9 =1 R10=79 R11=79 R12=70 R13=83 R14=99 R15=72

**Photo Parameters:**

Flux = 491.4 lm Eff. : 145.45 lm/W Fe = 1.470 W

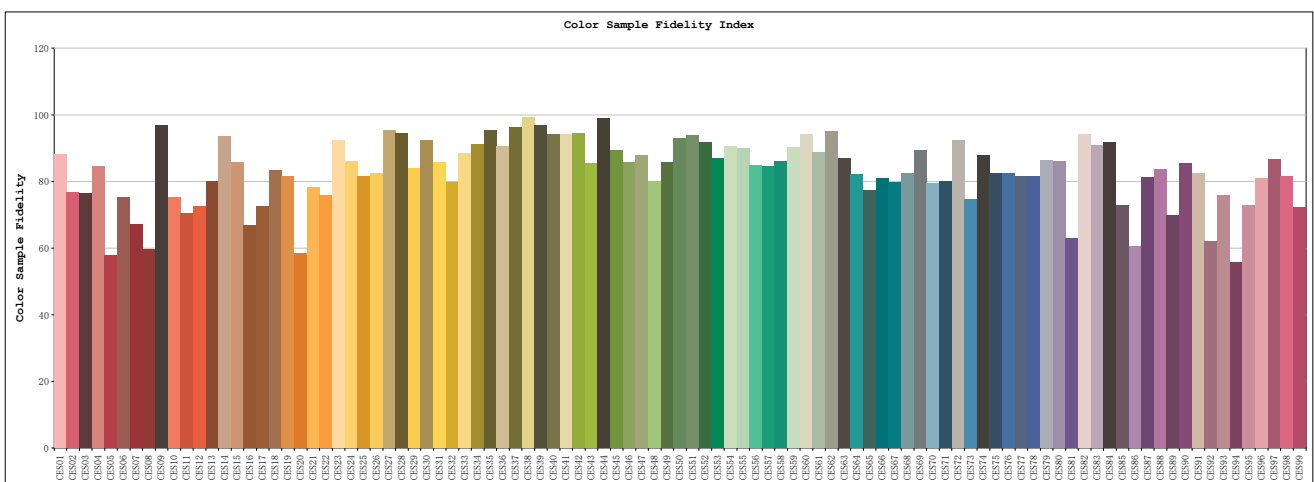
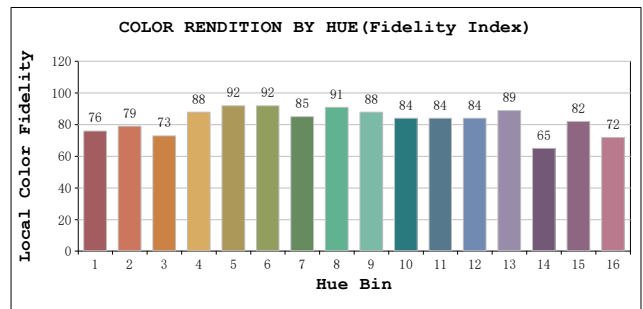
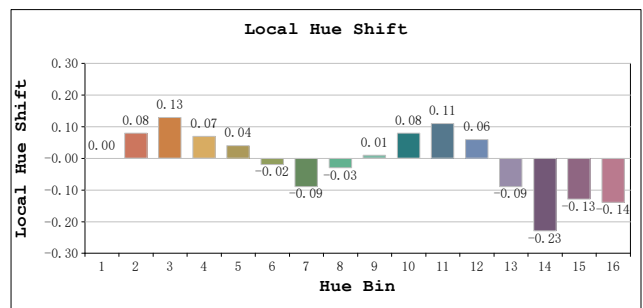
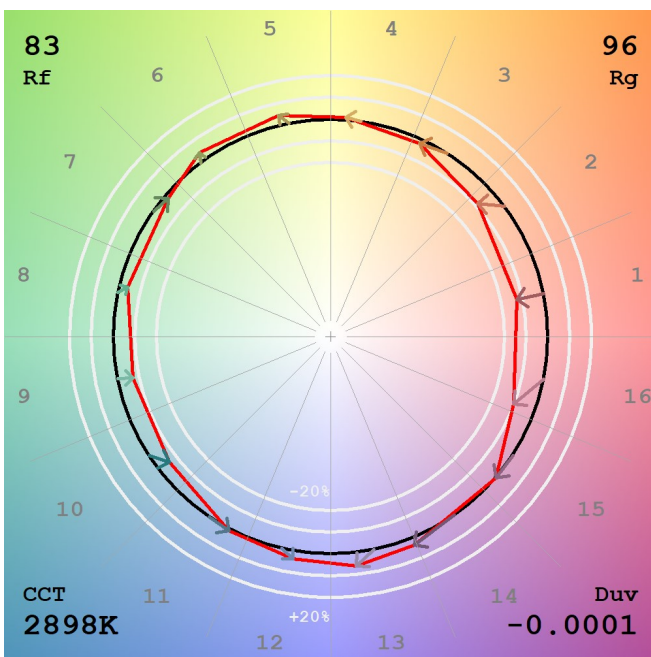
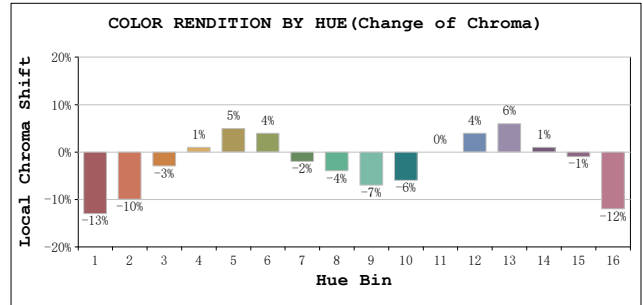
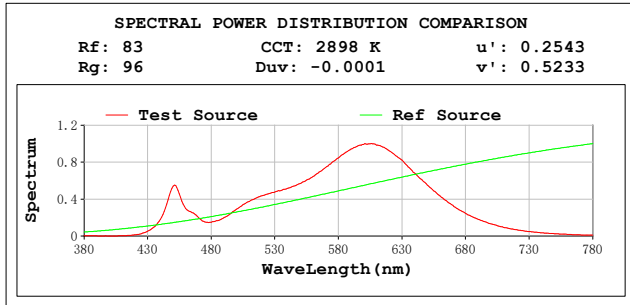
**Electrical parameters:**

V = 23.967 V I = 0.2322 A P = 3.379 W PF = 0.6072  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 281 ms Ip = 51111 (78%)

**GBT5702**

# TM30

View Angle: 2 Deg



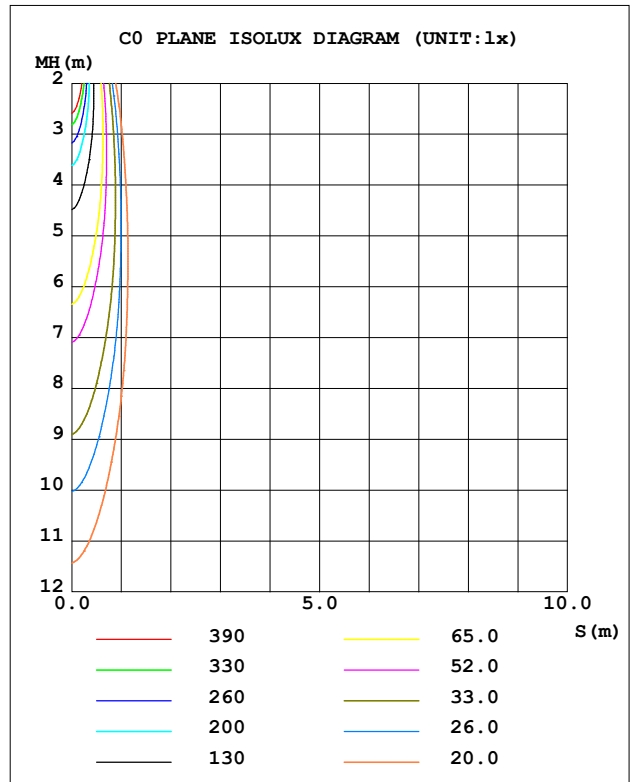
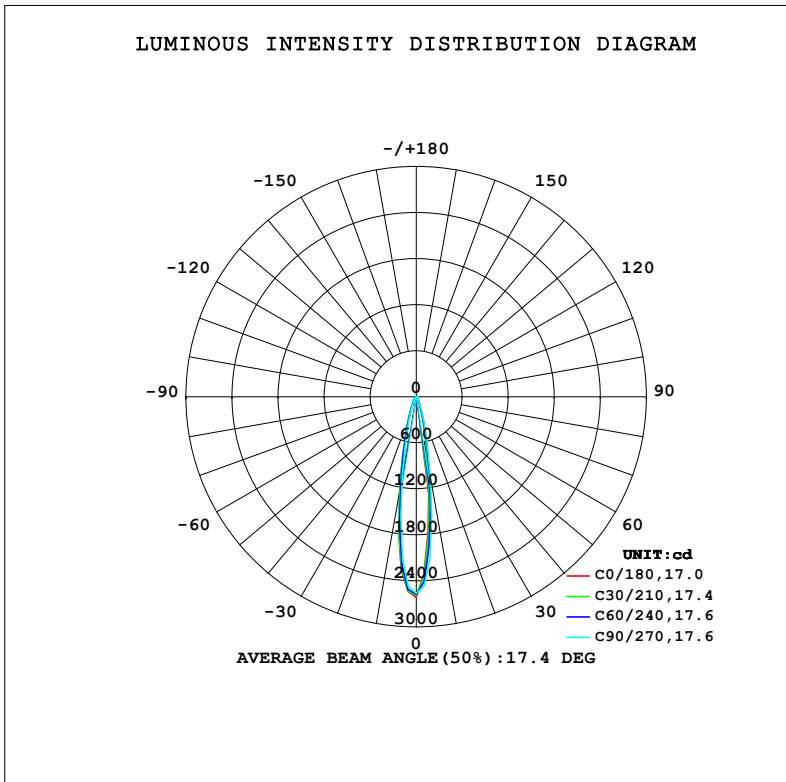
Model:AGL-300-30X15  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X15 24VAC  
 Date:2023-10-17 16:18:19  
 Humidity:65.0%  
 Remarks:24VAC

LUMINAIRE PHOTOMETRIC TEST REPORT

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.880V I:0.1333A P:3.1829W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:409.816x1 lm |                 |                  |
| NAME: AGL-300-30X15                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X15                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |

| DATA OF LAMP      |         | PHOTOMETRIC DATA      |        |                     |           |
|-------------------|---------|-----------------------|--------|---------------------|-----------|
| MODEL             | LED     | I <sub>max</sub> (cd) | 2615   | S/MH (C0/180)       | 0.34      |
| NOMINAL POWER (W) | 3       | LOR (%)               | 100.0  | S/MH (C90/270)      | 0.31      |
| RATED VOLTAGE (V) | 24      | TOTAL FLUX (lm)       | 409.82 | η UP, DN (C0-180)   | 0.0, 49.3 |
| NOMINAL FLUX (lm) | 409.816 | CIE CLASS             | DIRECT | η UP, DN (C180-360) | 0.0, 50.7 |
| LAMPS INSIDE      | 1       | η up (%)              | 0.0    | CIBSE SHR NOM       | 0.00      |
| TEST VOLTAGE (V)  | 24      | η down (%)            | 100.0  | CIBSE SHR MAX       | 0.30      |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

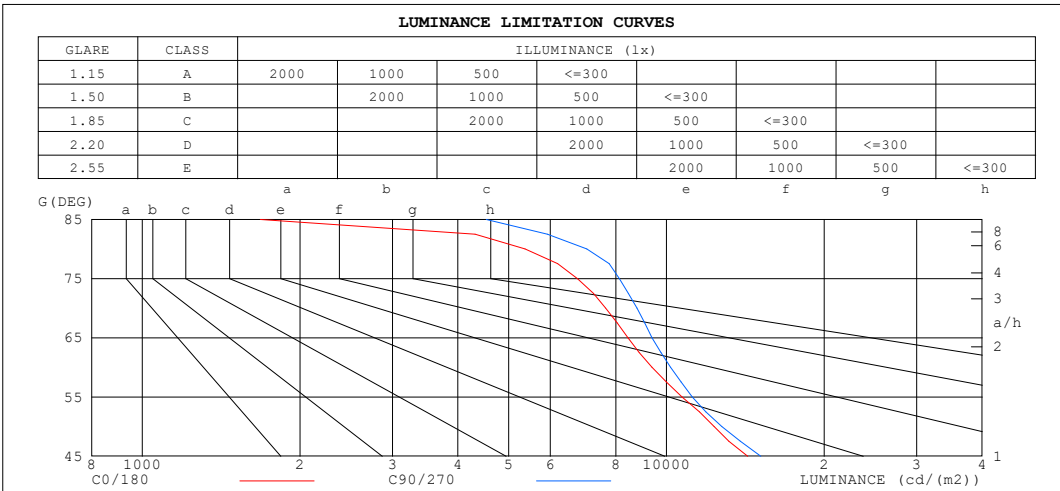
| $\gamma$ | C0                    | C45   | C90   | C135  | C180  | C225  | C270  | C315  | $\gamma$ | ∅ zone  | ∅ total | %lum, lamp |
|----------|-----------------------|-------|-------|-------|-------|-------|-------|-------|----------|---------|---------|------------|
| 10       | 843.9                 | 925.8 | 1060  | 1215  | 1267  | 1215  | 1060  | 925.8 | 0- 10    | 163.5   | 163.5   | 39.9,39.9  |
| 20       | 177.3                 | 187.6 | 221.5 | 266.9 | 283.3 | 266.9 | 221.5 | 187.6 | 10- 20   | 142.2   | 305.7   | 74.6,74.6  |
| 30       | 47.57                 | 49.94 | 57.95 | 68.32 | 75.05 | 68.32 | 57.95 | 49.94 | 20- 30   | 55.74   | 361.5   | 88.2,88.2  |
| 40       | 16.75                 | 17.82 | 19.35 | 21.55 | 22.95 | 21.55 | 19.35 | 17.82 | 30- 40   | 21.72   | 383.2   | 93.5,93.5  |
| 50       | 9.957                 | 10.03 | 10.30 | 10.98 | 11.26 | 10.98 | 10.30 | 10.03 | 40- 50   | 10.89   | 394.1   | 96.2,96.2  |
| 60       | 5.893                 | 6.096 | 6.397 | 6.840 | 6.839 | 6.840 | 6.397 | 6.096 | 50- 60   | 7.383   | 401.5   | 98,98      |
| 70       | 3.289                 | 3.491 | 3.772 | 4.067 | 4.055 | 4.067 | 3.772 | 3.491 | 60- 70   | 4.973   | 406.4   | 99.2,99.2  |
| 80       | 1.170                 | 1.282 | 1.536 | 1.763 | 1.800 | 1.763 | 1.536 | 1.282 | 70- 80   | 2.770   | 409.2   | 99.8,99.8  |
| 90       | 0                     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 80- 90   | 0.6223  | 409.8   | 100,100    |
| 100      |                       |       |       |       |       |       |       |       | 90-100   |         |         |            |
| 110      |                       |       |       |       |       |       |       |       | 100-110  |         |         |            |
| 120      |                       |       |       |       |       |       |       |       | 110-120  |         |         |            |
| 130      |                       |       |       |       |       |       |       |       | 120-130  |         |         |            |
| 140      |                       |       |       |       |       |       |       |       | 130-140  |         |         |            |
| 150      |                       |       |       |       |       |       |       |       | 140-150  |         |         |            |
| 160      |                       |       |       |       |       |       |       |       | 150-160  |         |         |            |
| 170      |                       |       |       |       |       |       |       |       | 160-170  |         |         |            |
| 180      |                       |       |       |       |       |       |       |       | 170-180  |         |         |            |
| DEG      | LUMINOUS INTENSITY:cd |       |       |       |       |       |       |       |          | UNIT:lm |         |            |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM

**LUMINANCE LIMITATION CURVES**

|                                                                                                                               |                        |                         |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|
| <b>Test:U:23.880V I:0.1333A P:3.1829W PF:1.0000 Freq:0Hz</b><br><b>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:409.816x1 lm</b> |                        |                         |
| <b>NAME: AGL-300-30X15</b>                                                                                                    | <b>TYPE: MR16 LAMP</b> | <b>WEIGHT: 100GM</b>    |
| <b>SPEC.: AGL-300-30X15</b>                                                                                                   | <b>DIM.: 50MM</b>      | <b>SERIAL No.: -</b>    |
| <b>MFR.: AQUALUX</b>                                                                                                          | <b>SUR.:</b>           | <b>Shielding Angle:</b> |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 1679   | 4532    |
| 80                | 5367   | 7045    |
| 75                | 6763   | 8125    |
| 70                | 7657   | 8780    |
| 65                | 8441   | 9386    |
| 60                | 9383   | 10186   |
| 55                | 10714  | 11203   |
| 50                | 12333  | 12755   |
| 45                | 14286  | 15131   |

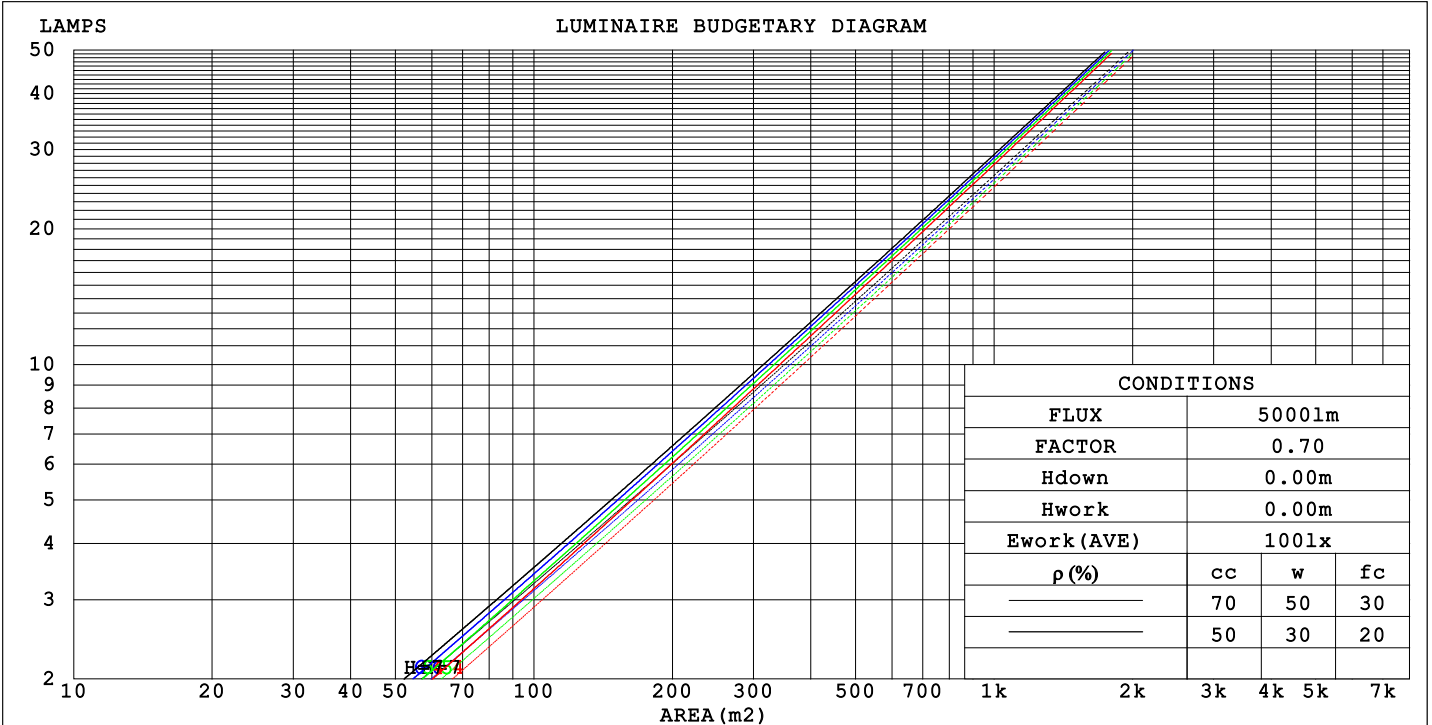
C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operator: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.880V I:0.1333A P:3.1829W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:409.816x1 lm |                 |                  |
| NAME: AGL-300-30X15                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X15                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |

| pcc  | 80%                                                         |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0    |
|------|-------------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|      | 50%                                                         | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  |      |
| pw   |                                                             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| pfc  | 20%                                                         |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0    |
| RCR  | RCR:Room Cavity Ratio      Coefficients of Utilization (CU) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.0  | 1.19                                                        | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1.00 |
| 1.0  | 1.12                                                        | 1.10 | 1.08 | 1.10 | 1.08 | 1.07 | 1.06 | 1.05 | 1.03 | 1.02 | 1.01 | 1.00 | .99  | .98  | .97  | .96  |
| 2.0  | 1.06                                                        | 1.03 | 1.01 | 1.05 | 1.02 | .99  | 1.02 | .99  | .97  | .99  | .97  | .95  | .96  | .95  | .93  | .92  |
| 3.0  | 1.02                                                        | .98  | .95  | 1.00 | .97  | .94  | .98  | .95  | .92  | .95  | .93  | .91  | .93  | .91  | .90  | .88  |
| 4.0  | .97                                                         | .93  | .90  | .96  | .92  | .89  | .94  | .91  | .88  | .92  | .90  | .87  | .91  | .88  | .86  | .85  |
| 5.0  | .93                                                         | .89  | .86  | .93  | .89  | .85  | .91  | .87  | .85  | .89  | .86  | .84  | .88  | .85  | .83  | .82  |
| 6.0  | .90                                                         | .86  | .83  | .89  | .85  | .82  | .88  | .84  | .82  | .87  | .84  | .81  | .86  | .83  | .81  | .80  |
| 7.0  | .87                                                         | .83  | .80  | .87  | .82  | .80  | .85  | .82  | .79  | .84  | .81  | .79  | .83  | .81  | .78  | .77  |
| 8.0  | .85                                                         | .80  | .77  | .84  | .80  | .77  | .83  | .79  | .77  | .82  | .79  | .76  | .81  | .78  | .76  | .75  |
| 9.0  | .82                                                         | .78  | .75  | .82  | .78  | .75  | .81  | .77  | .75  | .80  | .77  | .74  | .79  | .76  | .74  | .73  |
| 10.0 | .80                                                         | .76  | .73  | .79  | .76  | .73  | .79  | .75  | .73  | .78  | .75  | .73  | .78  | .75  | .72  | .71  |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM

**WEC AND CCEC**

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.880V I:0.1333A P:3.1829W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:409.816x1 lm |                 |                  |
| NAME: AGL-300-30X15                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X15                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                              |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                              | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                              |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients (WEC) |      |      |      |      |      |      |      |      |   |
| 0.0  |                       |      |      |      |      |      |                                  |      |      |      |      |      |      |      |      |   |
| 1.0  | .148                  | .084 | .027 | .142 | .081 | .026 | .129                             | .074 | .024 | .118 | .068 | .022 | .107 | .062 | .020 |   |
| 2.0  | .138                  | .075 | .023 | .132 | .073 | .022 | .122                             | .068 | .021 | .112 | .063 | .020 | .104 | .059 | .018 |   |
| 3.0  | .128                  | .068 | .020 | .123 | .066 | .020 | .115                             | .062 | .019 | .107 | .058 | .018 | .099 | .055 | .017 |   |
| 4.0  | .119                  | .062 | .018 | .115 | .060 | .018 | .108                             | .057 | .017 | .101 | .054 | .016 | .095 | .052 | .016 |   |
| 5.0  | .112                  | .057 | .016 | .108 | .056 | .016 | .102                             | .053 | .016 | .096 | .051 | .015 | .091 | .049 | .015 |   |
| 6.0  | .105                  | .053 | .015 | .102 | .052 | .015 | .097                             | .050 | .014 | .092 | .048 | .014 | .087 | .046 | .014 |   |
| 7.0  | .099                  | .049 | .014 | .097 | .048 | .014 | .092                             | .047 | .013 | .088 | .045 | .013 | .084 | .043 | .013 |   |
| 8.0  | .094                  | .046 | .013 | .092 | .045 | .013 | .088                             | .044 | .013 | .084 | .043 | .012 | .080 | .041 | .012 |   |
| 9.0  | .089                  | .043 | .012 | .088 | .043 | .012 | .084                             | .042 | .012 | .081 | .040 | .012 | .077 | .039 | .011 |   |
| 10.0 | .085                  | .041 | .011 | .084 | .040 | .011 | .080                             | .039 | .011 | .077 | .038 | .011 | .074 | .037 | .011 |   |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                                         |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                         | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                                         |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients (CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                        | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .169                  | .158 | .147 | .145 | .135 | .127 | .099                                        | .093 | .088 | .057 | .054 | .051 | .018 | .017 | .016 |   |
| 2.0  | .152                  | .133 | .117 | .130 | .114 | .101 | .089                                        | .079 | .070 | .051 | .046 | .041 | .016 | .015 | .013 |   |
| 3.0  | .137                  | .113 | .094 | .118 | .098 | .082 | .081                                        | .068 | .057 | .047 | .040 | .034 | .015 | .013 | .011 |   |
| 4.0  | .125                  | .098 | .078 | .107 | .085 | .067 | .074                                        | .059 | .048 | .043 | .035 | .028 | .014 | .011 | .009 |   |
| 5.0  | .114                  | .086 | .065 | .098 | .074 | .056 | .068                                        | .052 | .040 | .039 | .030 | .024 | .013 | .010 | .008 |   |
| 6.0  | .105                  | .076 | .055 | .091 | .066 | .048 | .063                                        | .046 | .034 | .036 | .027 | .020 | .012 | .009 | .007 |   |
| 7.0  | .098                  | .068 | .047 | .084 | .059 | .041 | .058                                        | .041 | .029 | .034 | .024 | .017 | .011 | .008 | .006 |   |
| 8.0  | .091                  | .061 | .040 | .078 | .053 | .035 | .054                                        | .037 | .025 | .032 | .022 | .015 | .010 | .007 | .005 |   |
| 9.0  | .085                  | .055 | .035 | .074 | .048 | .031 | .051                                        | .034 | .022 | .030 | .020 | .013 | .010 | .007 | .004 |   |
| 10.0 | .080                  | .051 | .031 | .069 | .044 | .027 | .048                                        | .031 | .019 | .028 | .018 | .011 | .009 | .006 | .004 |   |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM

**UGR(Unified Glare Rating) Table**

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.880V I:0.1333A P:3.1829W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:409.816x1 lm |                 |                  |
| NAME: AGL-300-30X15                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X15                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |

|                |     |     |     |     |     |     |     |     |     |     |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ceiling/cavity | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| walls          | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| working plane  | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

| Room dimensions |        | Viewed crosswise |      |      |      |      | Viewed endwise |      |      |      |      |
|-----------------|--------|------------------|------|------|------|------|----------------|------|------|------|------|
| x = 2H          | y = 2H | 17.3             | 18.0 | 17.5 | 18.1 | 18.3 | 17.5           | 18.2 | 17.7 | 18.4 | 18.5 |
|                 | 3H     | 18.2             | 18.8 | 18.4 | 19.0 | 19.2 | 18.5           | 19.2 | 18.8 | 19.4 | 19.6 |
|                 | 4H     | 18.6             | 19.2 | 18.8 | 19.4 | 19.6 | 19.0           | 19.6 | 19.2 | 19.8 | 20.0 |
|                 | 6H     | 18.8             | 19.4 | 19.1 | 19.6 | 19.8 | 19.3           | 19.9 | 19.6 | 20.1 | 20.4 |
|                 | 8H     | 18.8             | 19.4 | 19.1 | 19.6 | 19.9 | 19.4           | 19.9 | 19.7 | 20.2 | 20.4 |
|                 | 12H    | 18.8             | 19.3 | 19.1 | 19.6 | 19.9 | 19.4           | 19.9 | 19.7 | 20.2 | 20.5 |
| 4H              | 2H     | 17.7             | 18.3 | 18.0 | 18.5 | 18.7 | 17.9           | 18.5 | 18.1 | 18.7 | 18.9 |
|                 | 3H     | 18.8             | 19.3 | 19.1 | 19.6 | 19.9 | 19.1           | 19.6 | 19.4 | 19.9 | 20.2 |
|                 | 4H     | 19.3             | 19.8 | 19.6 | 20.1 | 20.4 | 19.6           | 20.2 | 20.0 | 20.4 | 20.7 |
|                 | 6H     | 19.6             | 20.0 | 19.9 | 20.3 | 20.7 | 20.1           | 20.5 | 20.4 | 20.8 | 21.2 |
|                 | 8H     | 19.6             | 20.0 | 20.0 | 20.4 | 20.8 | 20.2           | 20.6 | 20.5 | 20.9 | 21.3 |
|                 | 12H    | 19.6             | 20.0 | 20.0 | 20.3 | 20.7 | 20.2           | 20.6 | 20.6 | 20.9 | 21.3 |
| 8H              | 4H     | 19.4             | 19.8 | 19.8 | 20.2 | 20.6 | 19.8           | 20.2 | 20.2 | 20.5 | 20.9 |
|                 | 6H     | 19.8             | 20.2 | 20.2 | 20.6 | 21.0 | 20.3           | 20.6 | 20.7 | 21.0 | 21.4 |
|                 | 8H     | 19.9             | 20.2 | 20.3 | 20.6 | 21.1 | 20.4           | 20.7 | 20.9 | 21.1 | 21.6 |
|                 | 12H    | 19.9             | 20.1 | 20.3 | 20.6 | 21.0 | 20.5           | 20.7 | 20.9 | 21.2 | 21.6 |
| 12H             | 4H     | 19.4             | 19.8 | 19.8 | 20.2 | 20.6 | 19.8           | 20.1 | 20.2 | 20.5 | 20.9 |
|                 | 6H     | 19.8             | 20.1 | 20.3 | 20.6 | 21.0 | 20.3           | 20.6 | 20.7 | 21.0 | 21.4 |
|                 | 8H     | 19.9             | 20.2 | 20.4 | 20.6 | 21.1 | 20.4           | 20.7 | 20.9 | 21.1 | 21.6 |

|                                                                 |               |               |
|-----------------------------------------------------------------|---------------|---------------|
| Variations with the observer position at spacings(CIE Pub.117): |               |               |
| S = 1.0H                                                        | + 0.4 / - 0.5 | + 0.5 / - 0.5 |
| 1.5H                                                            | + 0.4 / - 0.3 | + 0.9 / - 0.3 |
| 2.0H                                                            | + 0.6 / - 0.6 | + 0.6 / - 0.4 |

CIE Pub.117, 409.8 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.1)  
 Area: 0.001256 m2

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM



**UTILIZATION FACTORS TABLE**

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.880V I:0.1333A P:3.1829W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:409.816x1 lm |                 |                  |
| NAME: AGL-300-30X15                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X15                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |

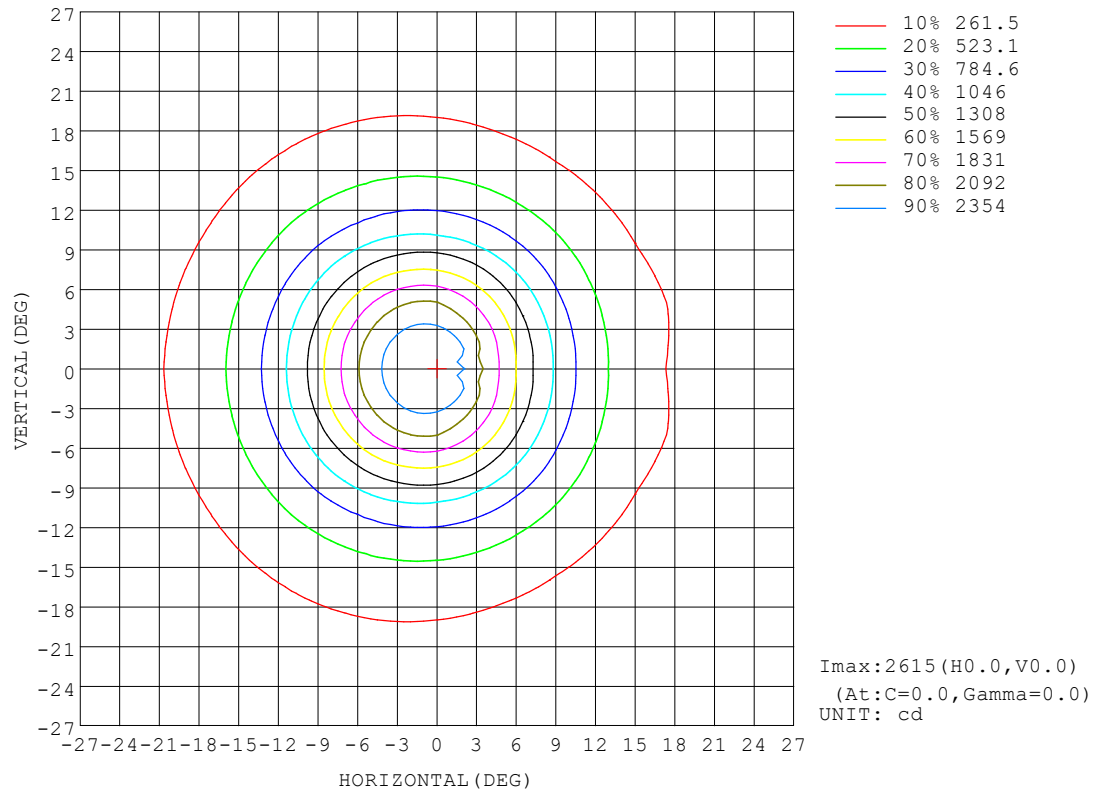
| REFLECTANCE                      |                                               |     |           |     |     |     |               |     |     |        |
|----------------------------------|-----------------------------------------------|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8                                           | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 0.5           | 0.5 | 0.5 | 0      |
| Walls                            | 0.7                                           | 0.5 | 0.3       | 0.7 | 0.5 | 0.3 | 0.7           | 0.5 | 0.3 | 0      |
| Working plane                    | 0.2                                           | 0.2 | 0.2       | 0.2 | 0.2 | 0.2 | 0.2           | 0.2 | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5 |     |           |     |     |     |               |     |     |        |
| k = 0.60                         | 88                                            | 81  | 77        | 87  | 81  | 77  | 86            | 81  | 77  | 74     |
| 0.80                             | 95                                            | 89  | 85        | 94  | 89  | 85  | 93            | 88  | 85  | 81     |
| 1.00                             | 99                                            | 94  | 90        | 98  | 93  | 90  | 97            | 93  | 89  | 85     |
| 1.25                             | 103                                           | 98  | 94        | 102 | 97  | 94  | 100           | 96  | 93  | 89     |
| 1.50                             | 106                                           | 101 | 98        | 104 | 100 | 97  | 102           | 99  | 96  | 91     |
| 2.00                             | 108                                           | 104 | 101       | 107 | 103 | 100 | 104           | 101 | 99  | 93     |
| 2.50                             | 110                                           | 106 | 103       | 108 | 105 | 102 | 105           | 103 | 100 | 94     |
| 3.00                             | 112                                           | 108 | 105       | 110 | 107 | 104 | 106           | 104 | 102 | 96     |
| 4.00                             | 114                                           | 111 | 109       | 112 | 109 | 107 | 108           | 106 | 105 | 97     |
| 5.00                             | 115                                           | 113 | 111       | 113 | 111 | 109 | 109           | 107 | 106 | 99     |
| ROOM INDEX                       | UF(total)                                     |     |           |     |     |     |               |     |     | Direct |
| According to DIN EN 13032-2 2004 |                                               |     | Suspended |     |     |     | SHRNOM = 1.25 |     |     |        |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM

ISOCANDELA DIAGRAM

|                                                                                                                 |                 |                  |
|-----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.880V I:0.1333A P:3.1829W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:409.816x1 lm |                 |                  |
| NAME: AGL-300-30X15                                                                                             | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X15                                                                                            | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                   | SUR.:           | Shielding Angle: |

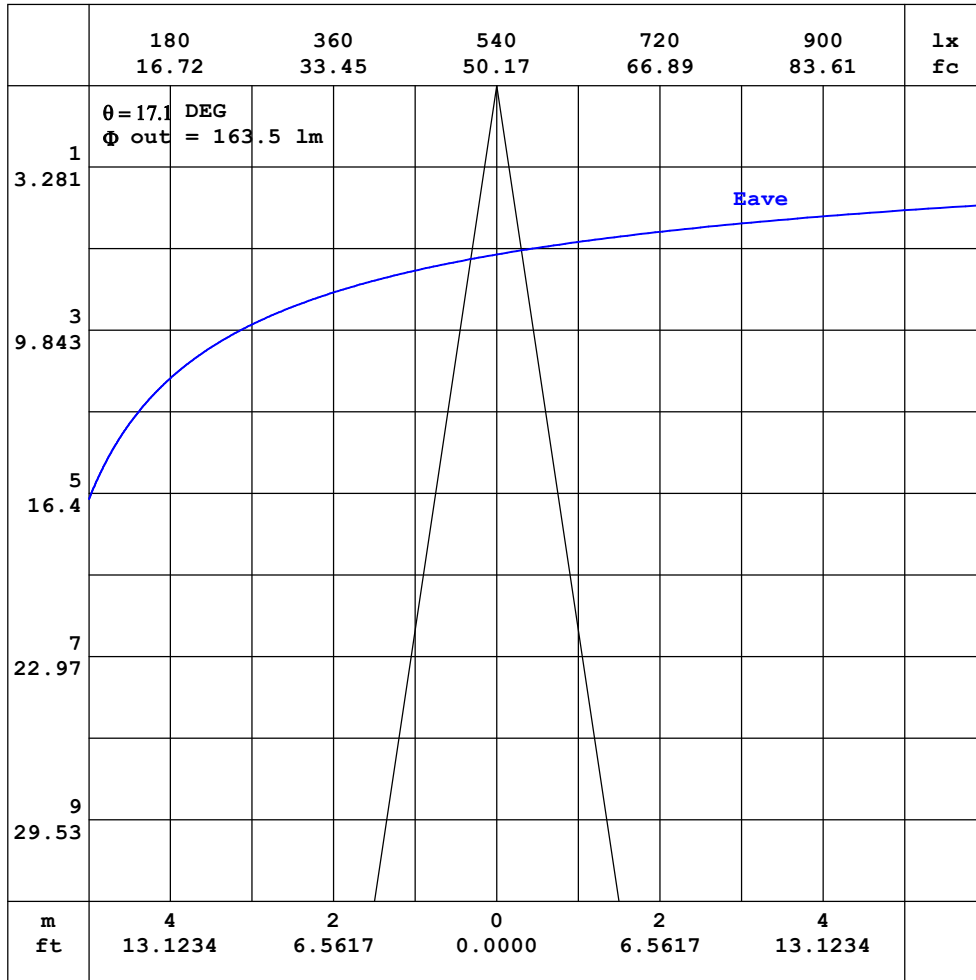


C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM

AAI CURVES

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.880V I:0.1333A P:3.1829W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:409.816x1 lm |                 |                  |
| NAME: AGL-300-30X15                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X15                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |



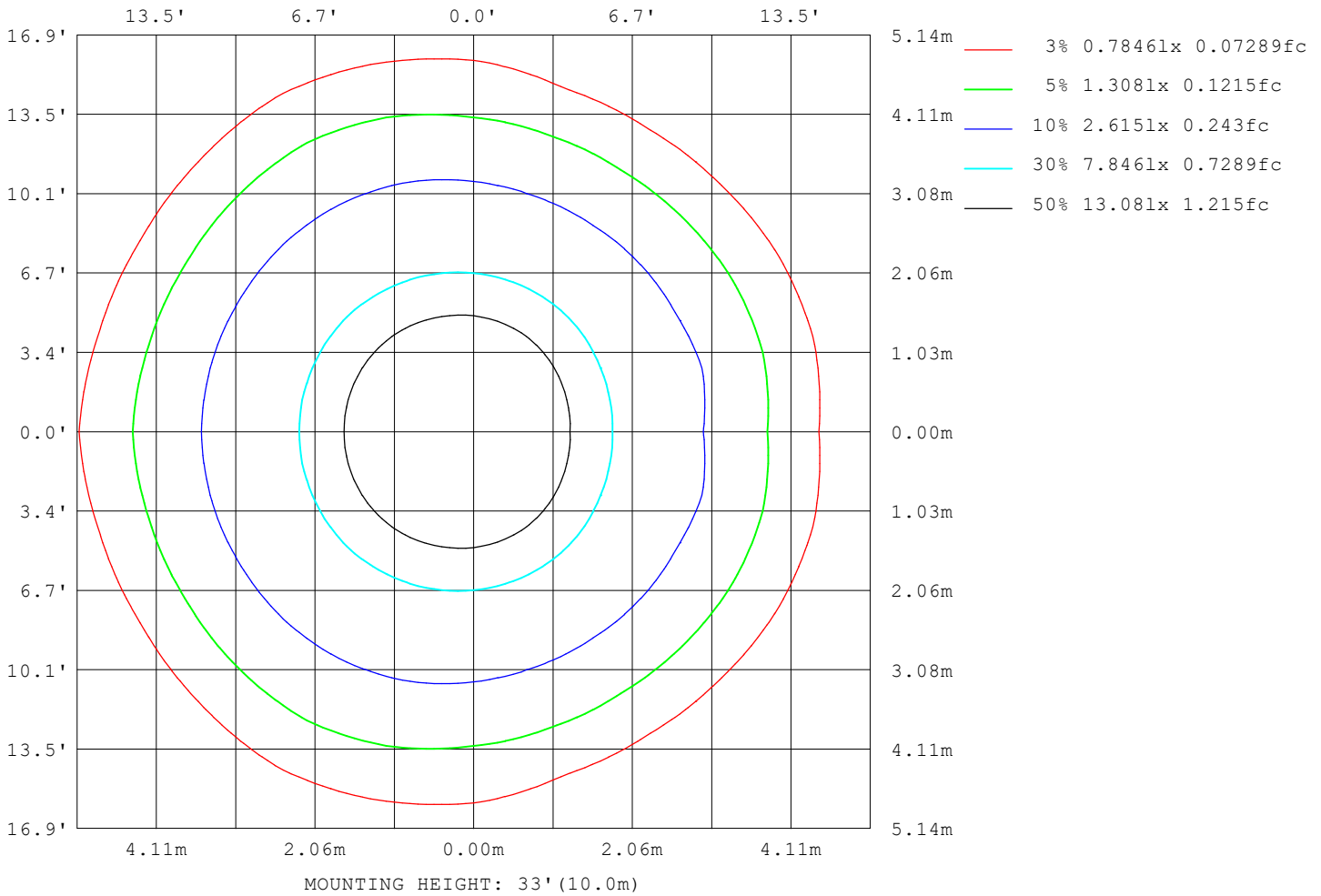
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM

ISOLUX DIAGRAM

|                                                                                                                 |                 |                  |
|-----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.880V I:0.1333A P:3.1829W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:409.816x1 lm |                 |                  |
| NAME: AGL-300-30X15                                                                                             | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X15                                                                                            | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                   | SUR.:           | Shielding Angle: |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM

**LED Avg.L Report**

|                                                                                                                 |                 |                  |
|-----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.880V I:0.1333A P:3.1829W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:409.816x1 lm |                 |                  |
| NAME: AGL-300-30X15                                                                                             | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X15                                                                                            | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                   | SUR.:           | Shielding Angle: |

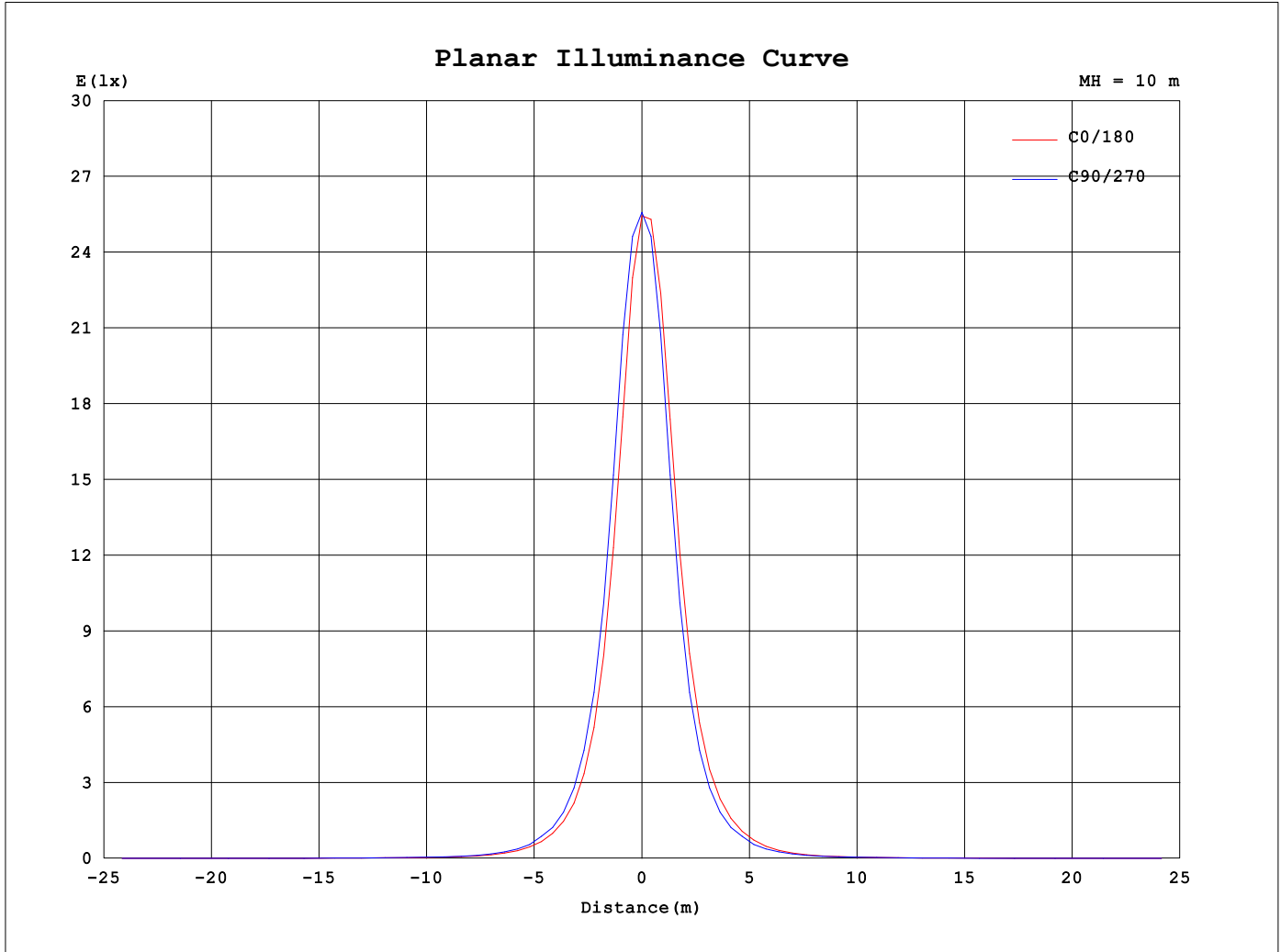
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 9244  |
| L_0~180 (75) av  | 7823  |
| L_0~180 (85) av  | 4066  |
| L_90~270 (65) av | 9386  |
| L_90~270 (75) av | 8125  |
| L_90~270 (85) av | 4532  |
| L_45 (65) av     | 9478  |
| L_45 (75) av     | 8094  |
| L_45 (85) av     | 4289  |

Standard: GB/T 29293-2012

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM

Planar Illuminance Curve



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM

LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.880V I:0.1333A P:3.1829W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:409.816x1 lm |                 |                  |
| NAME: AGL-300-30X15                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X15                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG) \ γ (DEG) | 0    | 15   | 30   | 45   | 60   | 75   | 90   | 105  | 120  | 135  | 150  | 165  | 180  | 195  | 210  | 225  | 240  | 255  | 270  |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                 | 2615 | 2593 | 2590 | 2575 | 2571 | 2561 | 2559 | 2552 | 2552 | 2548 | 2548 | 2545 | 2545 | 2545 | 2548 | 2548 | 2552 | 2552 | 2559 |
| 5                 | 1769 | 1796 | 1838 | 1893 | 1954 | 2026 | 2097 | 2153 | 2196 | 2226 | 2246 | 2260 | 2263 | 2260 | 2246 | 2226 | 2196 | 2153 | 2097 |
| 10                | 844  | 856  | 881  | 926  | 968  | 1015 | 1060 | 1110 | 1167 | 1215 | 1247 | 1263 | 1267 | 1263 | 1247 | 1215 | 1167 | 1110 | 1060 |
| 15                | 372  | 380  | 391  | 406  | 422  | 446  | 476  | 508  | 537  | 563  | 578  | 590  | 595  | 590  | 578  | 563  | 537  | 508  | 476  |
| 20                | 177  | 187  | 188  | 188  | 190  | 202  | 221  | 243  | 258  | 267  | 270  | 278  | 283  | 278  | 270  | 267  | 258  | 243  | 221  |
| 25                | 90.2 | 97.0 | 96.8 | 93.9 | 94.0 | 99.6 | 118  | 126  | 136  | 133  | 132  | 136  | 144  | 136  | 132  | 133  | 136  | 126  | 118  |
| 30                | 47.6 | 50.5 | 50.7 | 49.9 | 50.1 | 52.7 | 58.0 | 66.5 | 70.8 | 68.3 | 67.0 | 69.5 | 75.0 | 69.5 | 67.0 | 68.3 | 70.8 | 66.5 | 58.0 |
| 35                | 26.7 | 28.1 | 28.5 | 28.6 | 28.8 | 30.0 | 32.4 | 36.1 | 37.8 | 37.0 | 36.2 | 37.7 | 40.1 | 37.7 | 36.2 | 37.0 | 37.8 | 36.1 | 32.4 |
| 40                | 16.8 | 17.3 | 17.6 | 17.8 | 17.9 | 18.4 | 19.4 | 21.0 | 21.7 | 21.6 | 21.4 | 22.1 | 22.9 | 22.1 | 21.4 | 21.6 | 21.7 | 21.0 | 19.4 |
| 45                | 12.7 | 12.8 | 12.9 | 12.9 | 12.9 | 13.0 | 13.4 | 14.2 | 14.5 | 14.5 | 14.4 | 14.8 | 15.1 | 14.8 | 14.4 | 14.5 | 14.5 | 14.2 | 13.4 |
| 50                | 9.96 | 10.1 | 10.1 | 10.0 | 9.95 | 9.99 | 10.3 | 10.7 | 10.9 | 11.0 | 10.9 | 11.1 | 11.3 | 11.1 | 10.9 | 11.0 | 10.9 | 10.7 | 10.3 |
| 55                | 7.72 | 7.79 | 7.82 | 7.79 | 7.77 | 7.80 | 8.07 | 8.33 | 8.47 | 8.63 | 8.54 | 8.69 | 8.71 | 8.69 | 8.54 | 8.63 | 8.47 | 8.33 | 8.07 |
| 60                | 5.89 | 5.99 | 6.05 | 6.10 | 6.12 | 6.18 | 6.40 | 6.58 | 6.70 | 6.84 | 6.81 | 6.88 | 6.84 | 6.88 | 6.81 | 6.84 | 6.70 | 6.58 | 6.40 |
| 65                | 4.48 | 4.57 | 4.63 | 4.71 | 4.75 | 4.84 | 4.98 | 5.14 | 5.25 | 5.36 | 5.35 | 5.38 | 5.33 | 5.38 | 5.35 | 5.36 | 5.25 | 5.14 | 4.98 |
| 70                | 3.29 | 3.36 | 3.42 | 3.49 | 3.55 | 3.65 | 3.77 | 3.92 | 4.00 | 4.07 | 4.06 | 4.09 | 4.06 | 4.09 | 4.06 | 4.07 | 4.00 | 3.92 | 3.77 |
| 75                | 2.20 | 2.26 | 2.31 | 2.38 | 2.44 | 2.54 | 2.64 | 2.78 | 2.84 | 2.88 | 2.87 | 2.90 | 2.89 | 2.90 | 2.87 | 2.88 | 2.84 | 2.78 | 2.64 |
| 80                | 1.17 | 1.21 | 1.23 | 1.28 | 1.34 | 1.43 | 1.54 | 1.66 | 1.71 | 1.76 | 1.76 | 1.80 | 1.80 | 1.80 | 1.76 | 1.76 | 1.71 | 1.66 | 1.54 |
| 85                | 0.18 | 0.21 | 0.23 | 0.28 | 0.34 | 0.43 | 0.50 | 0.57 | 0.61 | 0.66 | 0.67 | 0.70 | 0.71 | 0.70 | 0.67 | 0.66 | 0.61 | 0.57 | 0.50 |
| 90                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM

LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                                                 |                 |                  |
|-----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.880V I:0.1333A P:3.1829W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:409.816x1 lm |                 |                  |
| NAME: AGL-300-30X15                                                                                             | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X15                                                                                            | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                   | SUR.:           | Shielding Angle: |

Table--2

UNIT: cd

| C (DEG) \ γ (DEG) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                 | 2561 | 2571 | 2575 | 2590 | 2593 |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                 | 2026 | 1954 | 1893 | 1838 | 1796 |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                | 1015 | 968  | 926  | 881  | 856  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                | 446  | 422  | 406  | 391  | 380  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                | 202  | 190  | 188  | 188  | 187  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                | 99.6 | 94.0 | 93.9 | 96.8 | 97.0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                | 52.7 | 50.1 | 49.9 | 50.7 | 50.5 |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                | 30.0 | 28.8 | 28.6 | 28.5 | 28.1 |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                | 18.4 | 17.9 | 17.8 | 17.6 | 17.3 |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                | 13.0 | 12.9 | 12.9 | 12.9 | 12.8 |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                | 9.99 | 9.95 | 10.0 | 10.1 | 10.1 |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                | 7.80 | 7.77 | 7.79 | 7.82 | 7.79 |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                | 6.18 | 6.12 | 6.10 | 6.05 | 5.99 |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                | 4.84 | 4.75 | 4.71 | 4.63 | 4.57 |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                | 3.65 | 3.55 | 3.49 | 3.42 | 3.36 |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                | 2.54 | 2.44 | 2.38 | 2.31 | 2.26 |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                | 1.43 | 1.34 | 1.28 | 1.23 | 1.21 |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                | 0.43 | 0.34 | 0.28 | 0.23 | 0.21 |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |

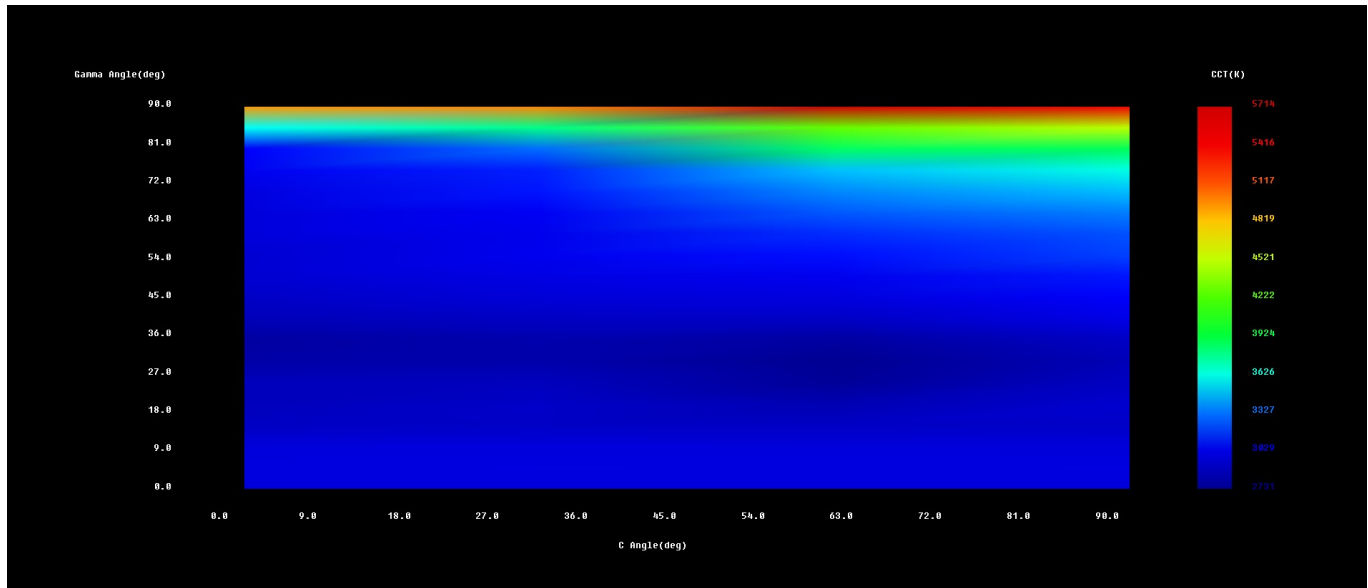
C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X15  
 3W / 3000K / 15D / 300LM



### Spatial Color Distribution Report

|                     |                      |               |
|---------------------|----------------------|---------------|
| NAME: AGL-300-30X15 | TYPE: MR16 LAMP      | WEIGHT: 100GM |
| DIM.: 50MM          | SPEC.: AGL-300-30X15 | SERIAL No.: - |
| MFR.: AQUALUX       |                      |               |



**Color Parameters:**

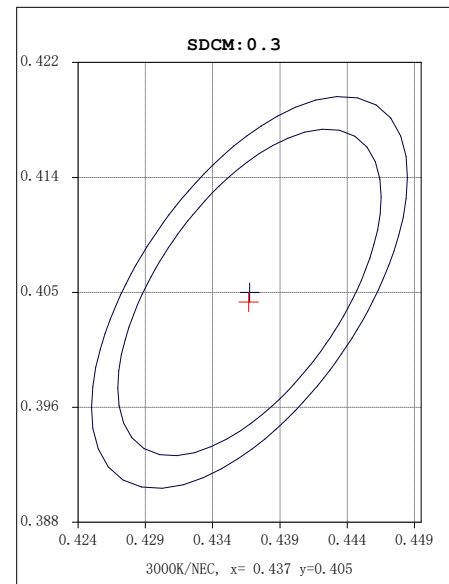
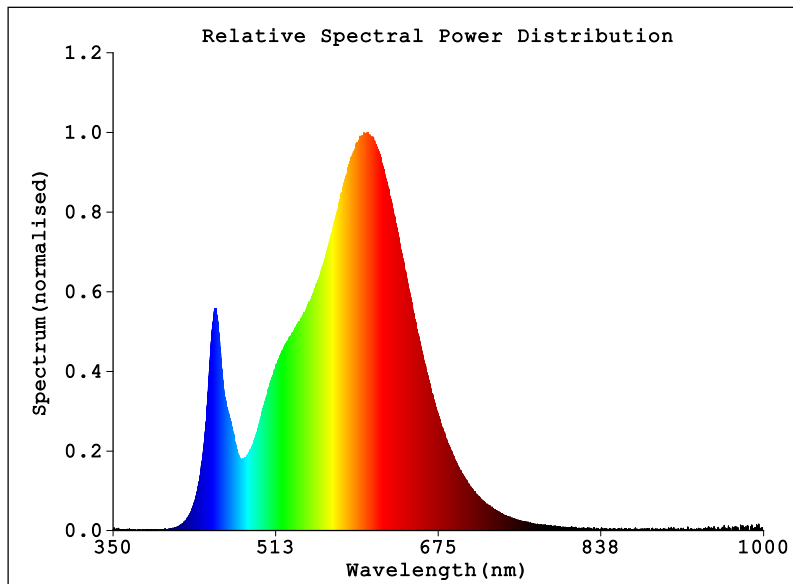
Average: x=0.4383,y=0.4028 u'=0.2520,v'=0.5211 CCT=2967K Ra=81.7 Rf=83 Rg=96  
 Center : x=0.4369,y=0.4043 u'=0.2505,v'=0.5215 CCT=3002K Ra=81.8 Rf=83 Rg=95  
 IESNA LM-79-2019 Max. du'v': 0.0064 / max.du'v': 0.0000[Set Range]  
 GB/T 24824(LB/T 001-2009):: avg. color nonuniformity du'v':0.0016  
 GB/T 24824(LB/T 001-2009):: max. color nonuniformity du'v':0.0011  
 Average: R1=80 R2=91 R3=96 R4=79 R5=81 R6=89 R7=81 R8=56 R9=2 R10=79  
 R11=79 R12=71 R13=83 R14=98 R15=72

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX  
 System: GO-SPEX500\_V1

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-30X153W / 3000K / 15D / 300LM

### Spectral Radiant Test Report

|                     |                      |               |
|---------------------|----------------------|---------------|
| NAME: AGL-300-30X15 | TYPE: MR16 LAMP      | WEIGHT: 100GM |
| DIM.: 50MM          | SPEC.: AGL-300-30X15 | SERIAL No.: - |
| MFR.: AQUALUX       |                      |               |



#### Photon & Colormetric & Photometric Quantities:

Chromaticity Coordinates: x=0.4369 y=0.4043/u'=0.2505 v'=0.5215 duv=0.00008

Tc=3002K Dominant WL: Ld=582.8nm Purity=52.5%

Ratio: R=22.8% G=74.7% B=2.5% Peak WL: Lp=605.0nm HWL: 123.2nm

Rendering Index: Ra=81.8 TM-30: Rf=83 Rg=95

R1 =80 R2 =91 R3 =96 R4 =80 R5 =80 R6 =89 R7 =82

R8 =57 R9 =2 R10=79 R11=79 R12=69 R13=83 R14=99 R15=72

E = 258.8 lx Ee = 0.7794 W/m<sup>2</sup>

Status: T=216.00ms Ip=48869 (75%) [ HAAS-1200(CAN) ]

Electrical: U=23.88V I=0.13305A P=3.1773W PF=1.0000

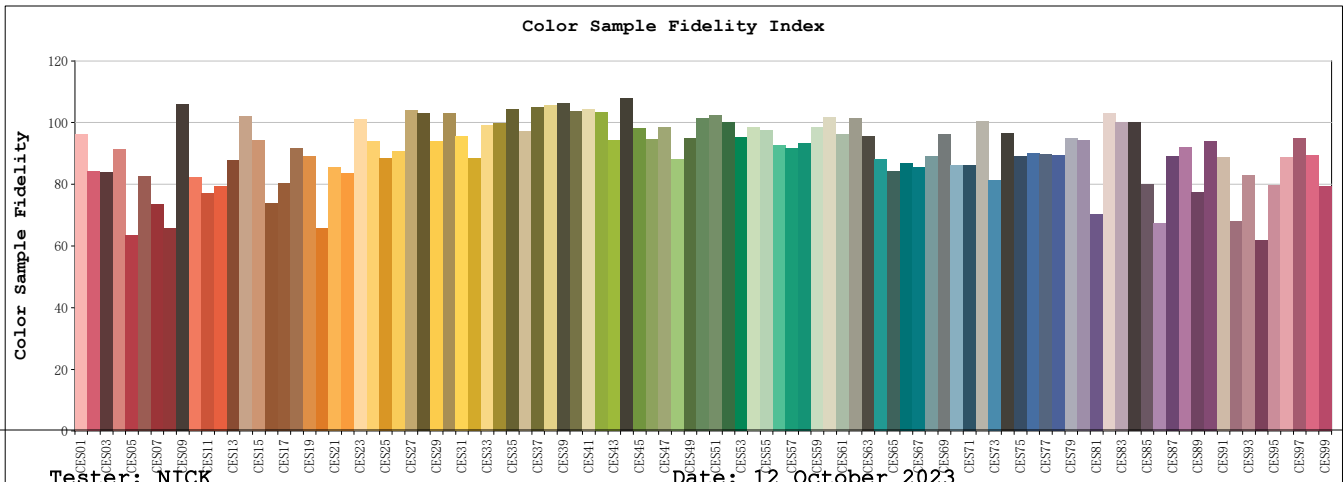
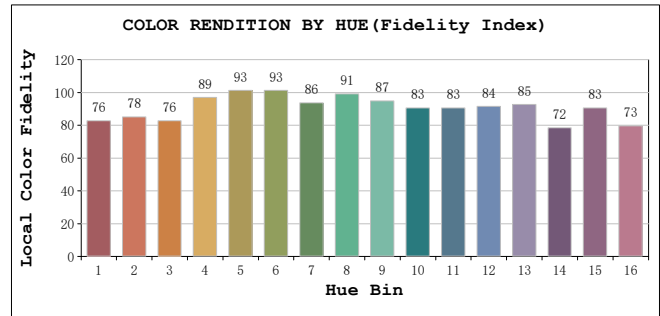
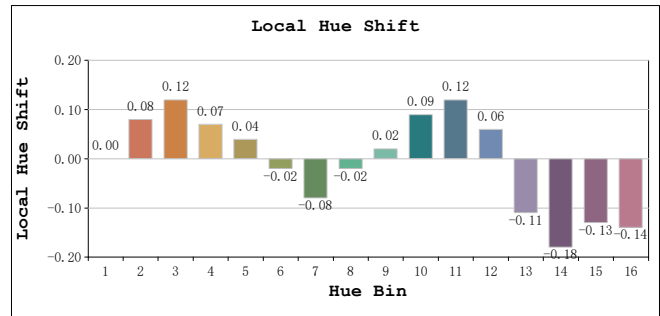
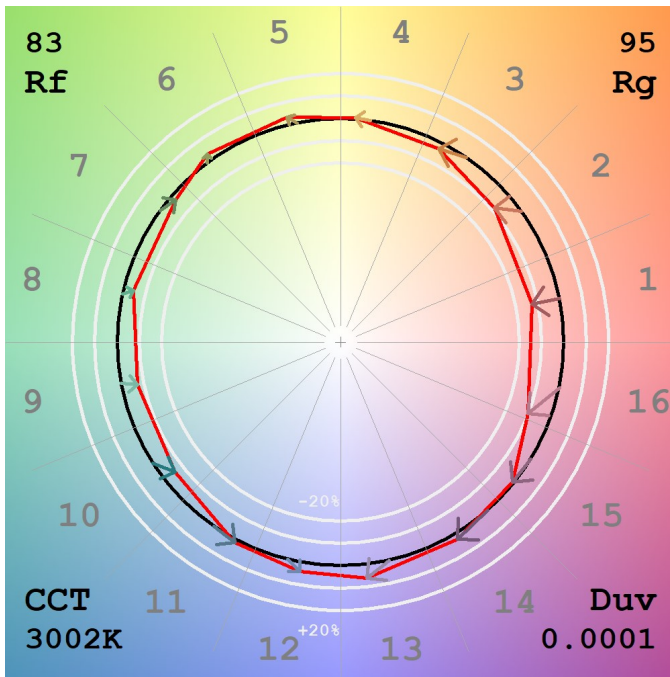
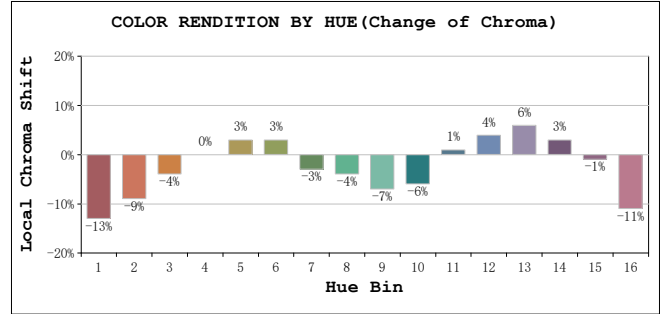
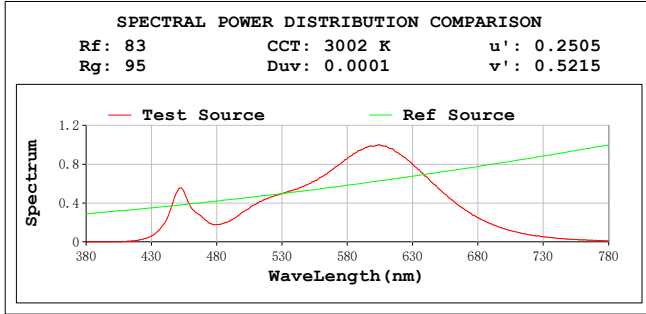
Test position: Center

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-30X153W / 3000K / 15D / 300LM

System: GO-SPEX500\_V1

# TM30



Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX  
 System: GO-SPEX500\_V1

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-30X153W / 3000K / 15D / 300LM

**All Rf:**

|             |             |             |
|-------------|-------------|-------------|
| Rf1 = 88.3  | Rf2 = 77.1  | Rf3 = 76.8  |
| Rf4 = 83.9  | Rf5 = 58.4  | Rf6 = 75.9  |
| Rf7 = 67.5  | Rf8 = 60.3  | Rf9 = 97.1  |
| Rf10 = 75.5 | Rf11 = 70.8 | Rf12 = 72.7 |
| Rf13 = 80.4 | Rf14 = 93.7 | Rf15 = 86.5 |
| Rf16 = 67.9 | Rf17 = 73.6 | Rf18 = 84.2 |
| Rf19 = 81.6 | Rf20 = 60.5 | Rf21 = 78.5 |
| Rf22 = 76.5 | Rf23 = 92.8 | Rf24 = 86.1 |
| Rf25 = 81.3 | Rf26 = 83.3 | Rf27 = 95.3 |
| Rf28 = 94.4 | Rf29 = 86.1 | Rf30 = 94.5 |
| Rf31 = 87.7 | Rf32 = 81.0 | Rf33 = 91.0 |
| Rf34 = 91.4 | Rf35 = 95.6 | Rf36 = 89.2 |
| Rf37 = 96.4 | Rf38 = 97.0 | Rf39 = 97.6 |
| Rf40 = 94.9 | Rf41 = 95.7 | Rf42 = 94.7 |
| Rf43 = 86.5 | Rf44 = 99.0 | Rf45 = 89.9 |
| Rf46 = 86.6 | Rf47 = 90.3 | Rf48 = 81.0 |
| Rf49 = 87.0 | Rf50 = 93.0 | Rf51 = 93.9 |
| Rf52 = 91.7 | Rf53 = 87.2 | Rf54 = 90.4 |
| Rf55 = 89.3 | Rf56 = 85.0 | Rf57 = 84.2 |
| Rf58 = 85.6 | Rf59 = 90.2 | Rf60 = 93.3 |
| Rf61 = 88.3 | Rf62 = 93.0 | Rf63 = 87.6 |
| Rf64 = 80.8 | Rf65 = 77.2 | Rf66 = 79.6 |
| Rf67 = 78.3 | Rf68 = 81.6 | Rf69 = 88.4 |
| Rf70 = 79.0 | Rf71 = 78.9 | Rf72 = 92.1 |
| Rf73 = 74.5 | Rf74 = 88.6 | Rf75 = 81.8 |
| Rf76 = 82.6 | Rf77 = 82.4 | Rf78 = 82.1 |
| Rf79 = 87.1 | Rf80 = 86.6 | Rf81 = 64.5 |
| Rf82 = 94.5 | Rf83 = 91.7 | Rf84 = 91.7 |
| Rf85 = 73.3 | Rf86 = 61.9 | Rf87 = 81.8 |
| Rf88 = 84.3 | Rf89 = 70.9 | Rf90 = 86.1 |
| Rf91 = 81.5 | Rf92 = 62.5 | Rf93 = 76.1 |
| Rf94 = 56.8 | Rf95 = 73.0 | Rf96 = 81.3 |
| Rf97 = 87.0 | Rf98 = 82.0 | Rf99 = 72.7 |

Tester: NICK  
Temperature: 20°C  
Manufacturer: AQUALUX

Date: 12 October 2023  
Humidity: 65.0%  
Remarks: AGL-300-30X153W / 3000K / 15D / 300LM

System: GO-SPEX500\_V1

| Gamma\C | C0     |                |                | CCT (K) | Ra   | du'v'  | Rf, Rg  | Ip    |
|---------|--------|----------------|----------------|---------|------|--------|---------|-------|
|         | I (%)  | CIE x, y       | u', v'         |         |      |        |         |       |
| 0.0     | 99.54  | 0.4369, 0.4043 | 0.2505, 0.5215 | 3002    | 81.8 | 0.0000 | 83, 95  | 48869 |
| 10.0    | 52.58  | 0.4368, 0.4024 | 0.2512, 0.5207 | 2988    | 81.9 | 0.0011 | 83, 96  | 27138 |
| 20.0    | 11.74  | 0.4445, 0.4046 | 0.2553, 0.5227 | 2880    | 81.2 | 0.0049 | 83, 96  | 26656 |
| 30.0    | 3.10   | 0.4535, 0.4128 | 0.2574, 0.5272 | 2809    | 80.5 | 0.0089 | 83, 94  | 37435 |
| 40.0    | 0.94   | 0.4488, 0.4113 | 0.2551, 0.5260 | 2867    | 80.8 | 0.0064 | 83, 95  | 22169 |
| 50.0    | 0.46   | 0.4392, 0.4035 | 0.2523, 0.5215 | 2958    | 82.0 | 0.0018 | 84, 96  | 22022 |
| 60.0    | 0.28   | 0.4361, 0.4017 | 0.2511, 0.5203 | 2995    | 82.8 | 0.0013 | 84, 96  | 22171 |
| 70.0    | 0.18   | 0.4330, 0.3978 | 0.2507, 0.5183 | 3016    | 84.0 | 0.0032 | 85, 97  | 22134 |
| 80.0    | 0.09   | 0.4222, 0.3860 | 0.2488, 0.5118 | 3111    | 88.1 | 0.0098 | 87, 99  | 22231 |
| 90.0    | 0.02   | 0.3430, 0.3133 | 0.2259, 0.4643 | 4932    | 86.3 | 0.0623 | 86, 111 | 22067 |
|         | C90    |                |                |         |      |        |         |       |
| 0.0     | 100.00 | 0.4369, 0.4043 | 0.2505, 0.5215 | 3002    | 81.8 | 0.0000 | 83, 95  | 48869 |
| 10.0    | 42.95  | 0.4361, 0.4007 | 0.2515, 0.5199 | 2987    | 81.9 | 0.0019 | 83, 96  | 22616 |
| 20.0    | 9.53   | 0.4377, 0.3991 | 0.2532, 0.5195 | 2946    | 81.8 | 0.0034 | 83, 96  | 22288 |
| 30.0    | 2.53   | 0.4480, 0.4089 | 0.2556, 0.5249 | 2860    | 81.5 | 0.0061 | 83, 94  | 33229 |
| 40.0    | 0.85   | 0.4312, 0.3959 | 0.2504, 0.5173 | 3032    | 84.1 | 0.0042 | 83, 95  | 22482 |
| 50.0    | 0.51   | 0.4198, 0.3861 | 0.2472, 0.5115 | 3158    | 86.7 | 0.0105 | 84, 96  | 22226 |
| 60.0    | 0.34   | 0.4109, 0.3776 | 0.2450, 0.5065 | 3265    | 88.9 | 0.0160 | 84, 96  | 22316 |
| 70.0    | 0.23   | 0.3983, 0.3675 | 0.2409, 0.5001 | 3459    | 91.7 | 0.0235 | 85, 97  | 22389 |
| 80.0    | 0.14   | 0.3773, 0.3494 | 0.2344, 0.4884 | 3865    | 95.5 | 0.0368 | 87, 99  | 22217 |
| 90.0    | 0.07   | 0.3337, 0.3141 | 0.2187, 0.4633 | 5420    | 87.4 | 0.0663 | 86, 111 | 22477 |

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-30X153W / 3000K / 15D / 300LM

System: GO-SPEX500\_V1

| Gamma\C | C30   | CIE x,y       | u',v'         | CCT (K) | Ra   | du'v'  | Rf, Rg  | Ip    |
|---------|-------|---------------|---------------|---------|------|--------|---------|-------|
| 0.0     | 99.49 | 0.4369,0.4043 | 0.2505,0.5215 | 3002    | 81.8 | 0.0000 | 83, 95  | 48869 |
| 10.0    | 51.63 | 0.4364,0.4020 | 0.2511,0.5205 | 2993    | 81.9 | 0.0012 | 83, 96  | 26688 |
| 20.0    | 11.56 | 0.4396,0.4002 | 0.2540,0.5202 | 2924    | 81.6 | 0.0037 | 83, 97  | 26320 |
| 30.0    | 3.04  | 0.4519,0.4114 | 0.2570,0.5265 | 2822    | 80.7 | 0.0082 | 83, 95  | 37089 |
| 40.0    | 0.94  | 0.4432,0.4055 | 0.2539,0.5229 | 2910    | 81.9 | 0.0037 | 84, 96  | 22317 |
| 50.0    | 0.47  | 0.4322,0.3970 | 0.2506,0.5179 | 3023    | 83.7 | 0.0036 | 85, 97  | 22363 |
| 60.0    | 0.30  | 0.4284,0.3930 | 0.2499,0.5157 | 3056    | 84.6 | 0.0058 | 85, 98  | 22313 |
| 70.0    | 0.19  | 0.4214,0.3893 | 0.2468,0.5131 | 3156    | 86.3 | 0.0092 | 86, 98  | 22233 |
| 80.0    | 0.10  | 0.4103,0.3815 | 0.2429,0.5081 | 3313    | 89.2 | 0.0154 | 88, 100 | 22179 |
| 90.0    | 0.02  | 0.3434,0.3288 | 0.2195,0.4728 | 4983    | 93.5 | 0.0577 | 88, 106 | 22084 |
|         | C0    |               |               |         |      |        |         |       |
| 0.0     | 99.54 | 0.4369,0.4043 | 0.2505,0.5215 | 3002    | 81.8 | 0.0000 | 83, 95  | 48869 |
| 10.0    | 52.58 | 0.4368,0.4024 | 0.2512,0.5207 | 2988    | 81.9 | 0.0011 | 83, 96  | 27138 |
| 20.0    | 11.74 | 0.4445,0.4046 | 0.2553,0.5227 | 2880    | 81.2 | 0.0049 | 83, 97  | 26656 |
| 30.0    | 3.10  | 0.4535,0.4128 | 0.2574,0.5272 | 2809    | 80.5 | 0.0089 | 83, 95  | 37435 |
| 40.0    | 0.94  | 0.4488,0.4113 | 0.2551,0.5260 | 2867    | 80.8 | 0.0064 | 84, 96  | 22169 |
| 50.0    | 0.46  | 0.4392,0.4035 | 0.2523,0.5215 | 2958    | 82.0 | 0.0018 | 85, 97  | 22022 |
| 60.0    | 0.28  | 0.4361,0.4017 | 0.2511,0.5203 | 2995    | 82.8 | 0.0013 | 85, 98  | 22171 |
| 70.0    | 0.18  | 0.4330,0.3978 | 0.2507,0.5183 | 3016    | 84.0 | 0.0032 | 86, 98  | 22134 |
| 80.0    | 0.09  | 0.4222,0.3860 | 0.2488,0.5118 | 3111    | 88.1 | 0.0098 | 88, 100 | 22231 |
| 90.0    | 0.02  | 0.3430,0.3133 | 0.2259,0.4643 | 4932    | 86.3 | 0.0623 | 88, 106 | 22067 |

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-30X153W / 3000K / 15D / 300LM

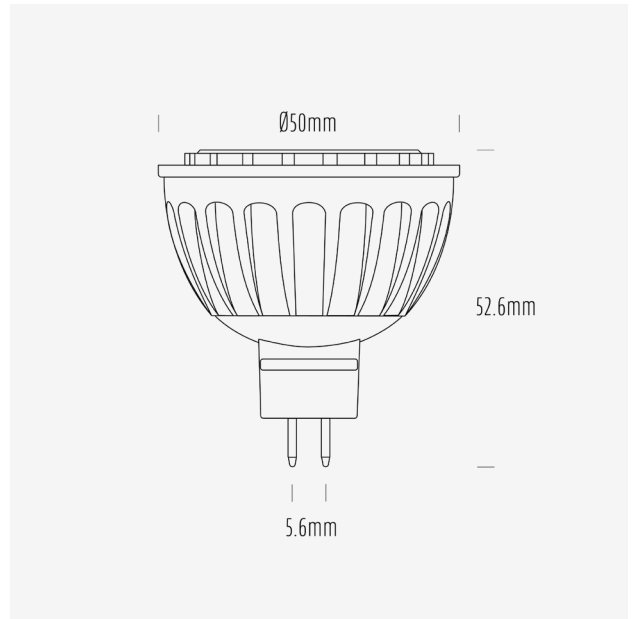
System: GO-SPEX500\_V1

# AGL 300 Series

MR16 LED Globes



## AGL-300-30X40 / 3000K / MR16 / 40°



### Product Data

|              |                                 |  |  |  |
|--------------|---------------------------------|--|--|--|
| Product Code | AGL-300-30X40                   |  |  |  |
| Description  | Aqualux 300 Series LED Lamp     |  |  |  |
| Type         | MR16 GU5.6                      |  |  |  |
| Construction | Aluminium Heatsink + PMMA Optic |  |  |  |
| Warranty     | 3 Years                         |  |  |  |

### Electrical Data

|                     |              |       |              |       |
|---------------------|--------------|-------|--------------|-------|
| Input Voltage Range | 12~24V AC/DC |       |              |       |
| Nominal Voltage     | 24VDC        |       |              |       |
| Nominal Power       | 3W           |       |              |       |
| Nominal Current     | 125mA        |       |              |       |
| Input Voltage       | 12VDC        | 12VAC | <b>24VDC</b> | 24VAC |
| Rated Power         | 3.6          | 2.9   | <b>3.4</b>   | 3.6   |
| Operating Frequency | -            | 50Hz  | -            | 50Hz  |

|                                |     |   |               |   |
|--------------------------------|-----|---|---------------|---|
| Max. no. of lamps on AQD24-040 | 9   | - | <b>9</b>      | - |
| Max. no. of lamps on AQD24-100 | >22 | - | <b>&gt;22</b> | - |
| Max. no. of lamps on AQD24-240 | -   | - | -             | - |

|                       |             |
|-----------------------|-------------|
| Dimming Compatibility | Non dimming |
| Wiring Scheme         | Parallel    |
| Startup Time          | < 0.5s      |

### Mechanical & Thermal Data

|                      |            |
|----------------------|------------|
| Overall Length       | 52.6mm     |
| Max Diameter         | 50mm       |
| Lamp Base            | GU5.6      |
| Weight               | 55g        |
| Operating Temp Range | -20° - 45° |
| IP Rating            | IP20       |

### Photometric Data

|                   |       |       |              |       |
|-------------------|-------|-------|--------------|-------|
| Nominal Flux (lm) | 300   |       |              |       |
| Input Voltage     | 12VDC | 12VAC | <b>24VDC</b> | 24VAC |
| Input Power (W)   | 3.6   | 2.9   | <b>3.4</b>   | 3.6   |
| Rated Flux (lm)   | 458   | 361   | <b>463</b>   | 466   |
| Efficacy (lm/W)   | 128   | 126   | <b>136</b>   | 129   |

|                            |            |
|----------------------------|------------|
| CCT                        | 3000K      |
| CCT Description            | Warm White |
| CRI (Ra)                   | 82         |
| CRI (R9)                   | 2          |
| TM-30 (Rf)                 | 83         |
| TM-30 (Rg)                 | 97         |
| SDCM                       | -          |
| Peak Intensity (cd)        | 548        |
| Nominal Beam Angle         | 40°        |
| Measured Beam Angle (FWHM) | 39°        |

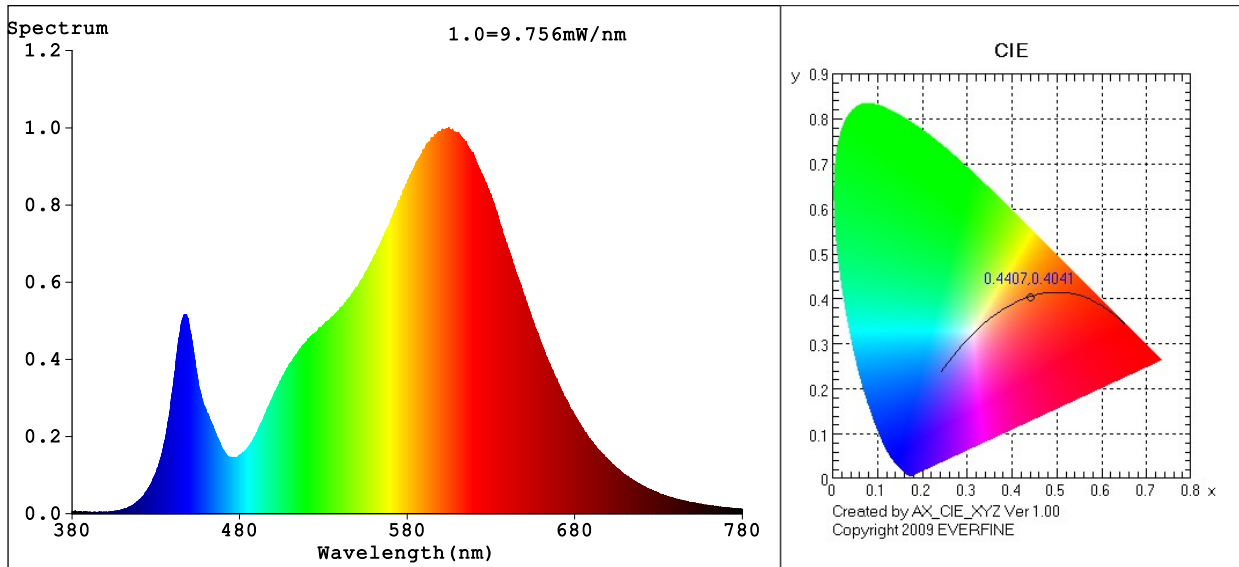
### Lifespan Data

|                  |         |
|------------------|---------|
| L70              | 15,000h |
| Switching Cycles | 15,000  |

### Compliance Data

|                 |     |
|-----------------|-----|
| EMI             | Yes |
| RCM             | N/A |
| Mercury Content | 0mg |

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4407$   $y=0.4041$  /  $u'=0.2530$   $v'=0.5220$   
 CCT=2937K (Duv=-0.0005) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=53.6%  
 Ratio:R=23.2% G=74.5% B=2.3%; Peak WL:Lp=604.8nm FWHM=121.9nm  
 Render Index:Ra=81.6 AvgR=75.7 TM30:Rf=83 Rg=97

R1 =80 R2 =90 R3 =97 R4 =80 R5 =80 R6 =88 R7 =82  
 R8 =57 R9 =2 R10=77 R11=80 R12=72 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 466.0 lm Eff. : 129.39 lm/W Fe = 1.402 W

**Electrical parameters:**

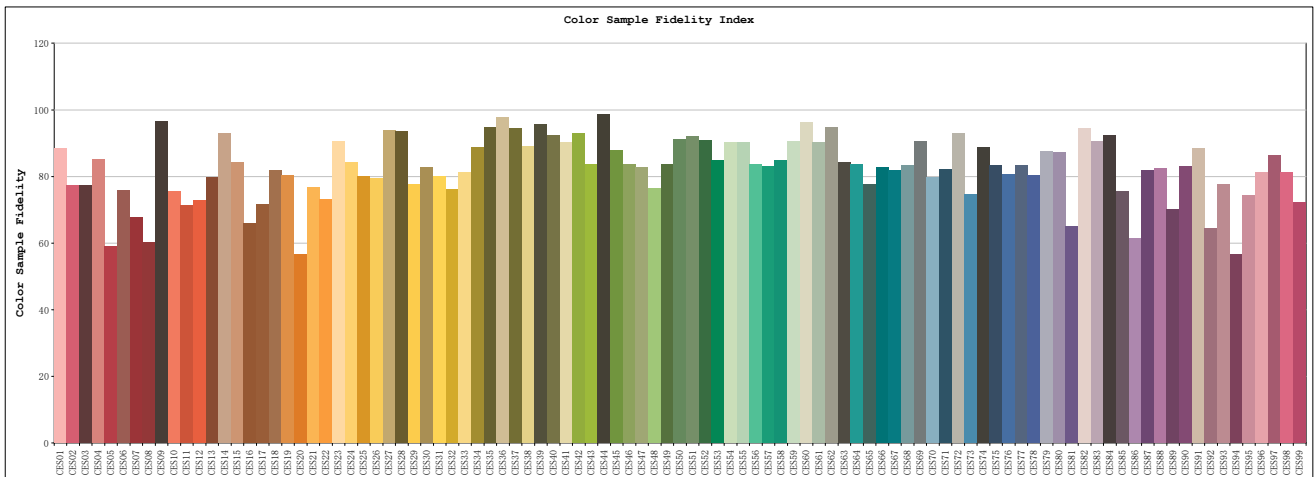
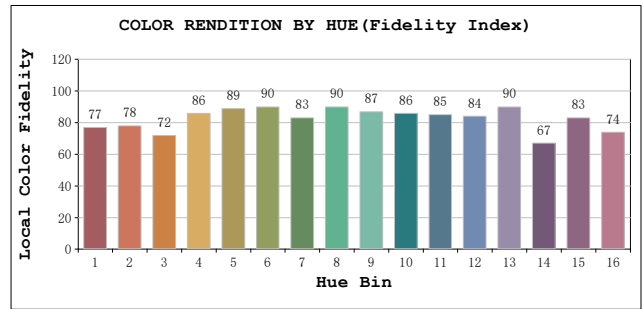
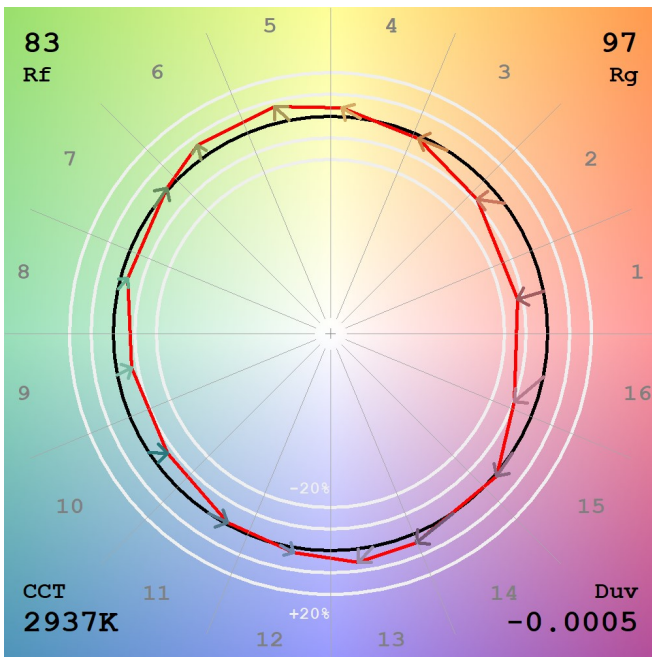
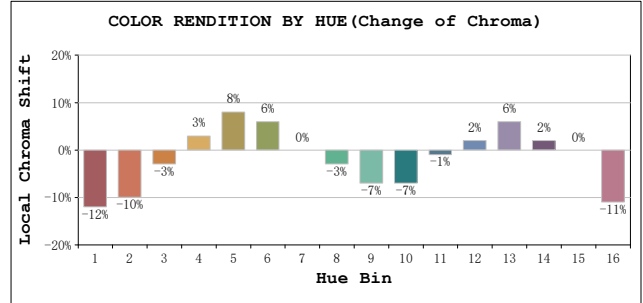
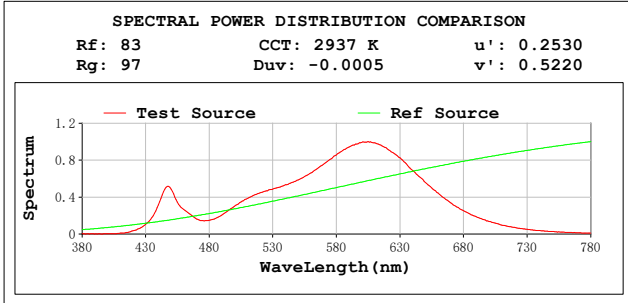
V = 23.968 V I = 0.2346 A P = 3.601 W PF = 0.6406  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 281 ms Ip = 47801 (73%)

**GBT5702**



TM30

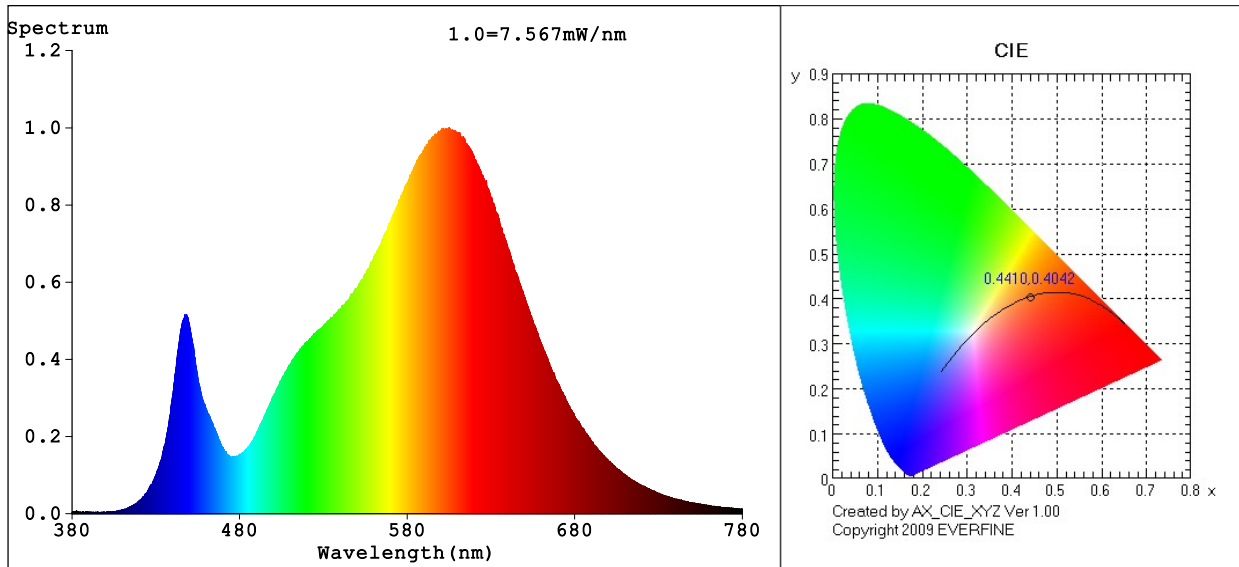
View Angle:2 Deg



Model:AGL-300-30X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X40 24VAC  
 Date:2023-10-17 16:20:19  
 Humidity:65.0%  
 Remarks:24VAC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4410$   $y=0.4042$  /  $u'=0.2532$   $v'=0.5220$   
 CCT=2933K (Duv=-0.0005) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=53.7%  
 Ratio:R=23.3% G=74.4% B=2.3%; Peak WL:Lp=605.1nm FWHM=122.2nm  
 Render Index:Ra=81.6 AvgR=75.8 TM30:Rf=83 Rg=97

R1 =80 R2 =90 R3 =97 R4 =80 R5 =80 R6 =88 R7 =82  
 R8 =57 R9 =2 R10=77 R11=80 R12=72 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 361.3 lm Eff. : 125.69 lm/W Fe = 1.087 W

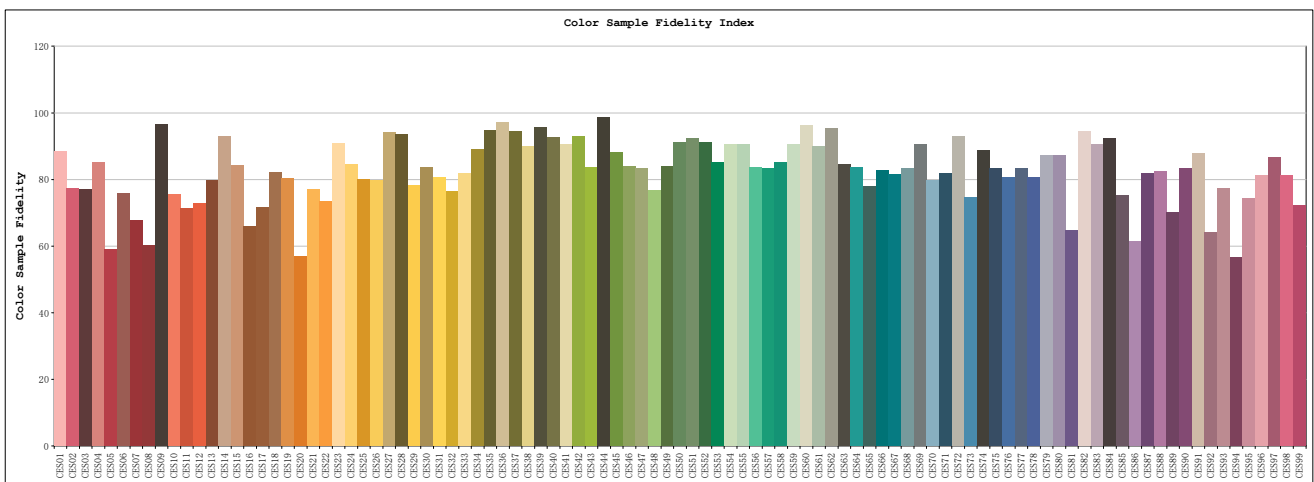
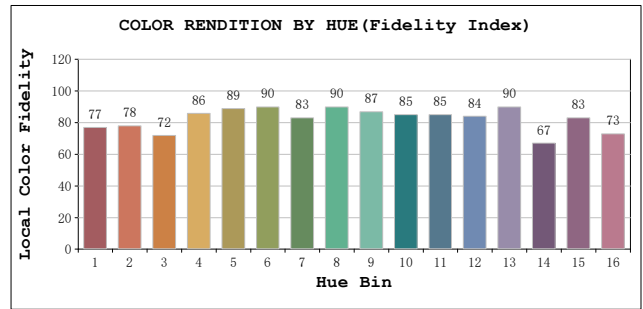
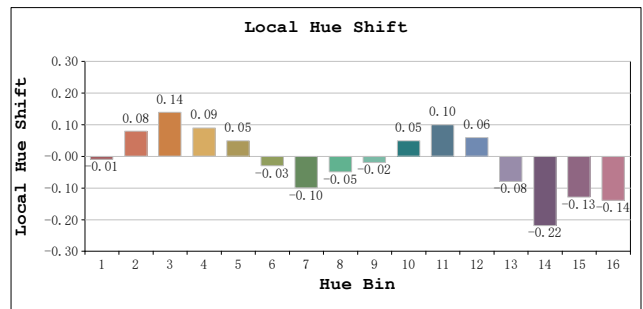
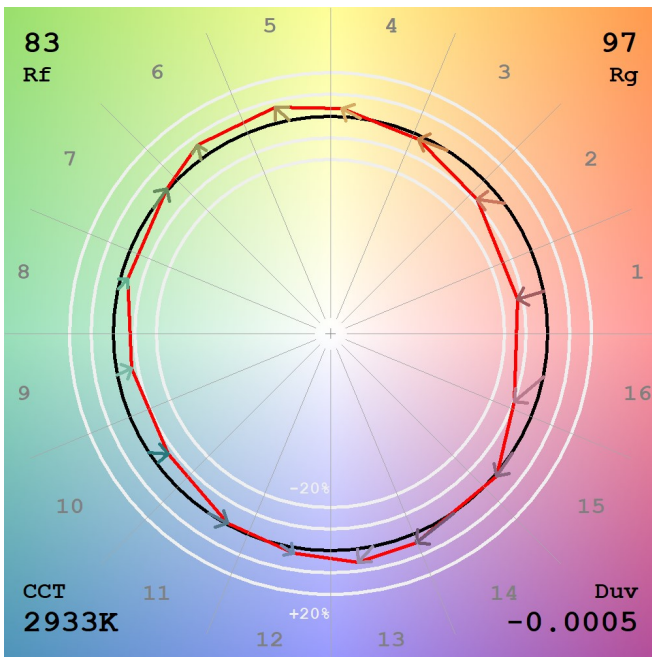
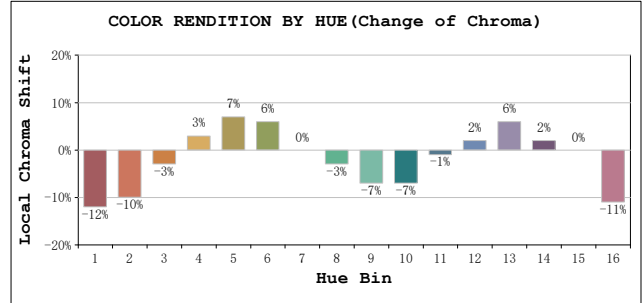
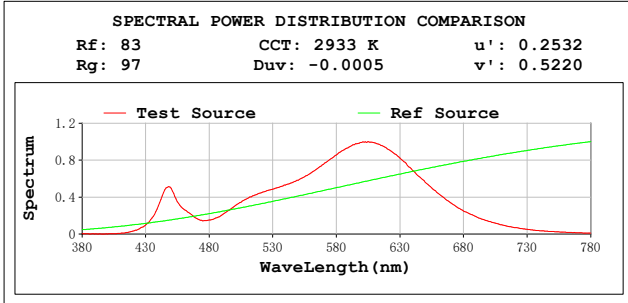
**Electrical parameters:**

V = 11.992 V I = 0.3268 A P = 2.875 W PF = 0.7336  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 281 ms Ip = 37144 (57%)

**GBT5702**

TM30

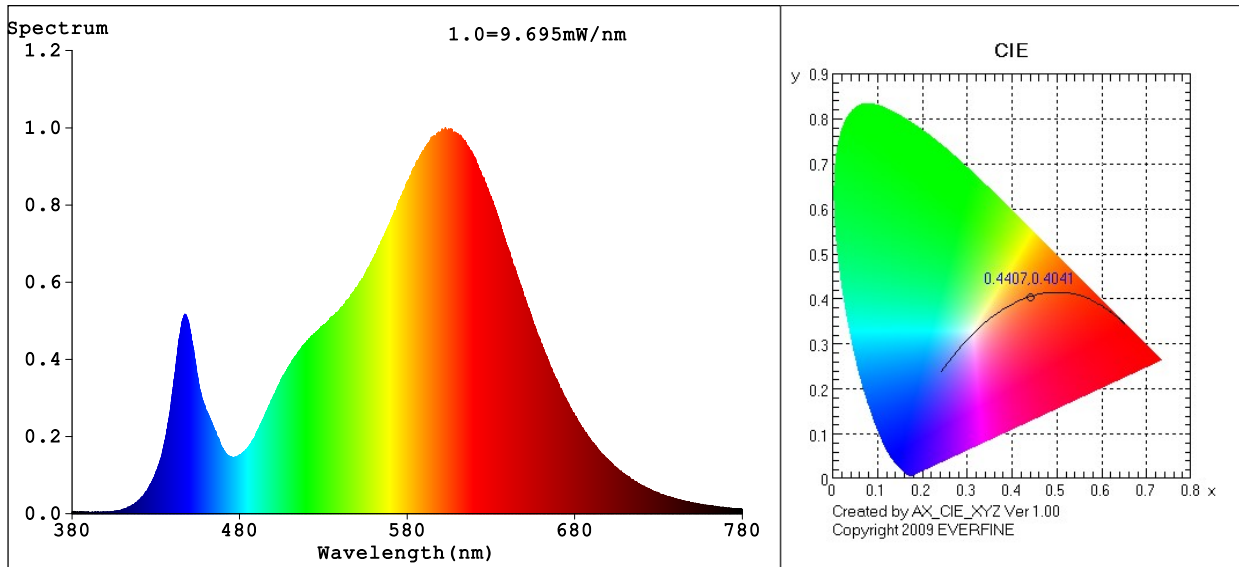
View Angle:2 Deg



Model:AGL-300-30X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X40 12VAC  
 Date:2023-10-17 16:20:51  
 Humidity:65.0%  
 Remarks:12VAC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4407$   $y=0.4041$  /  $u'=0.2530$   $v'=0.5219$   
 CCT=2937K (Duv=-0.0005) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=53.6%  
 Ratio:R=23.2% G=74.5% B=2.3%; Peak WL:Lp=602.8nm FWHM=122.2nm  
 Render Index:Ra=81.6 AvgR=75.7 TM30:Rf=83 Rg=97

R1 =80 R2 =90 R3 =97 R4 =80 R5 =80 R6 =88 R7 =82  
 R8 =57 R9 =2 R10=77 R11=80 R12=72 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 462.8 lm Eff. : 135.55 lm/W Fe = 1.393 W

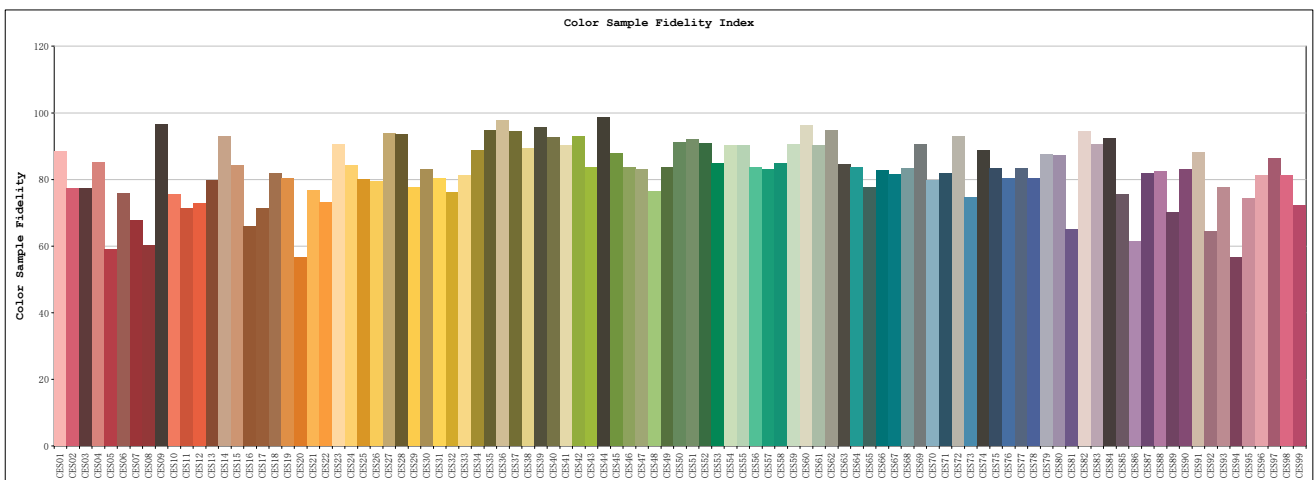
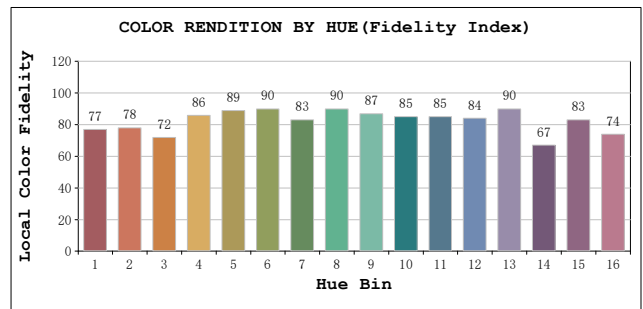
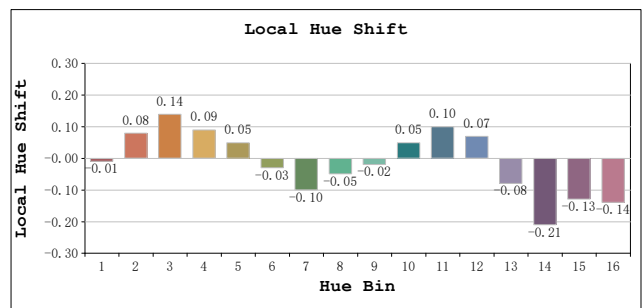
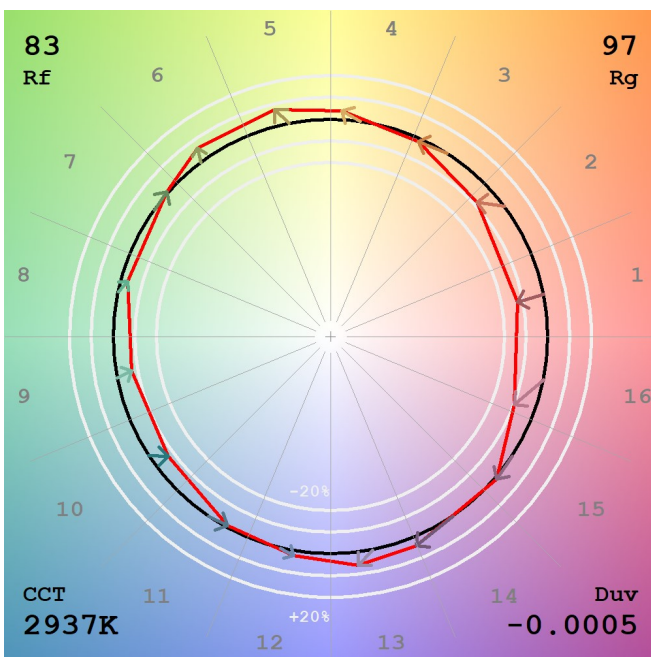
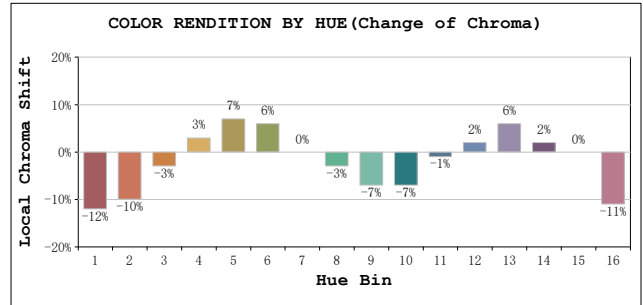
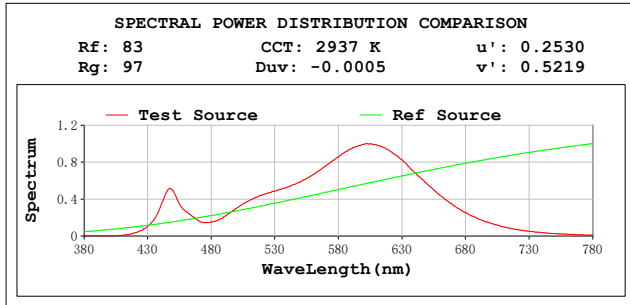
**Electrical parameters:**

V = 23.990 V I = 0.1423 A P = 3.414 W PF = 1.0000  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 281 ms Ip = 47672 (73%)

**GBT5702**

TM30

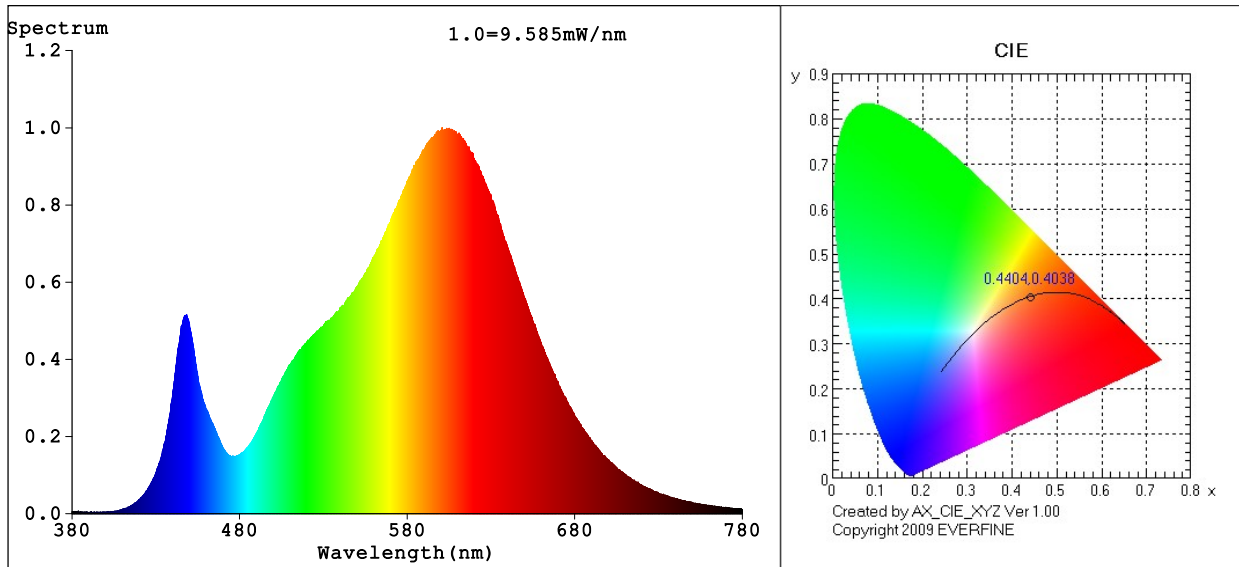
View Angle:2 Deg



Model:AGL-300-30X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X40 24VDC  
 Date:2023-10-17 16:21:48  
 Humidity:65.0%  
 Remarks:24VDC

**Spectrum Test Report**



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4404$   $y=0.4038$  /  $u'=0.2530$   $v'=0.5218$   
 CCT=2940K (Duv=-0.0006) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=53.4%  
 Ratio:R=23.2% G=74.5% B=2.3%; Peak WL:Lp=600.9nm FWHM=122.6nm  
 Render Index:Ra=81.5 AvgR=75.6 TM30:Rf=83 Rg=97

R1 =80 R2 =90 R3 =97 R4 =80 R5 =80 R6 =88 R7 =82  
 R8 =57 R9 =2 R10=77 R11=80 R12=72 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 458.1 lm Eff. : 128.45 lm/W Fe = 1.379 W

**Electrical parameters:**

V = 11.977 V I = 0.2978 A P = 3.566 W PF = 1.000

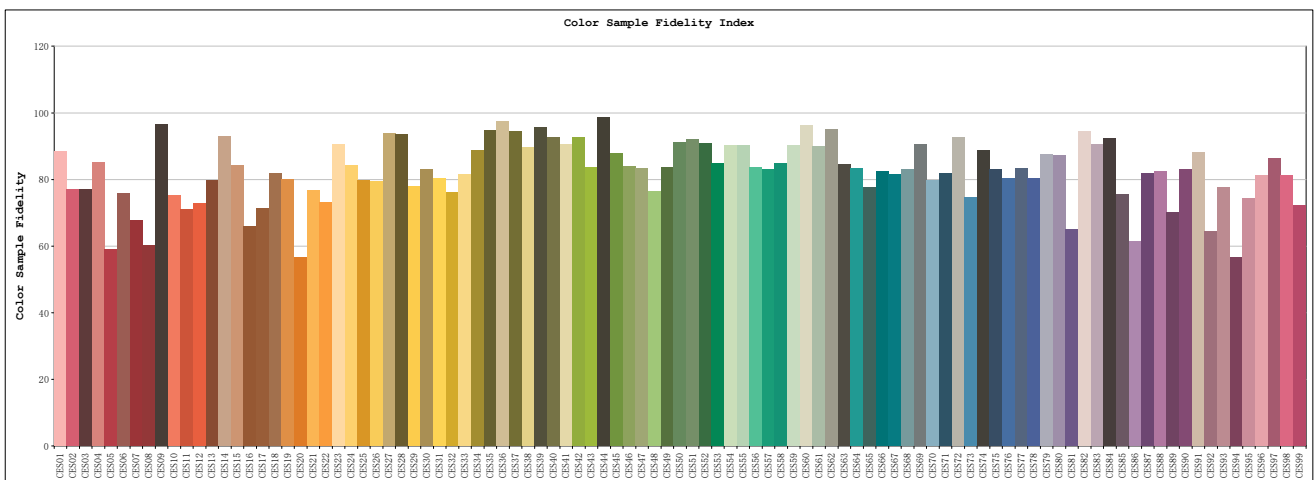
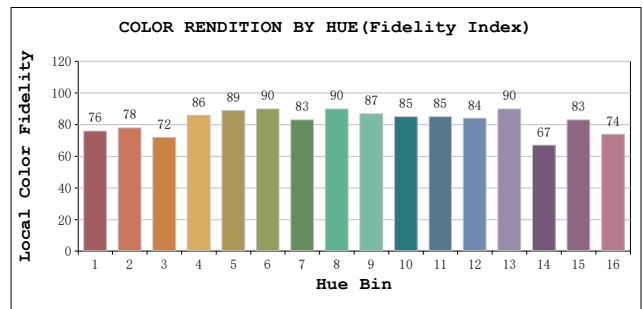
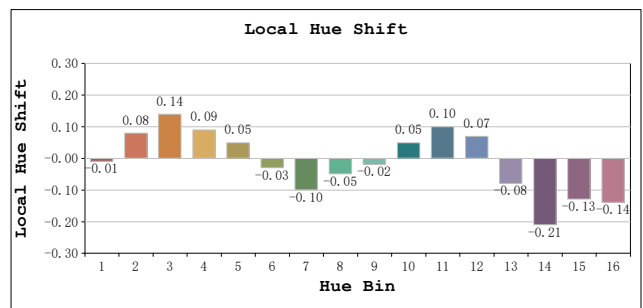
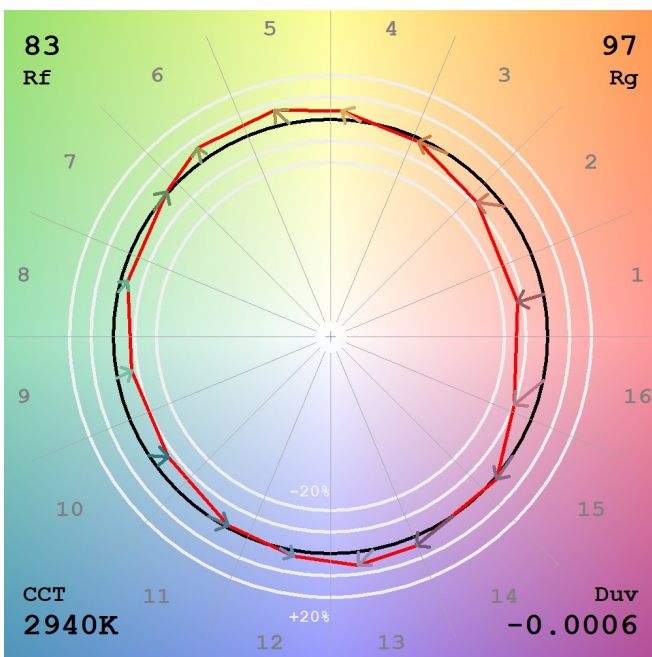
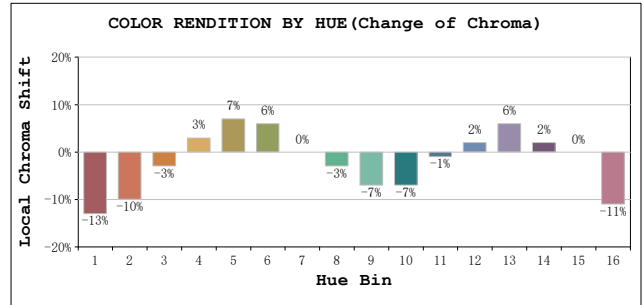
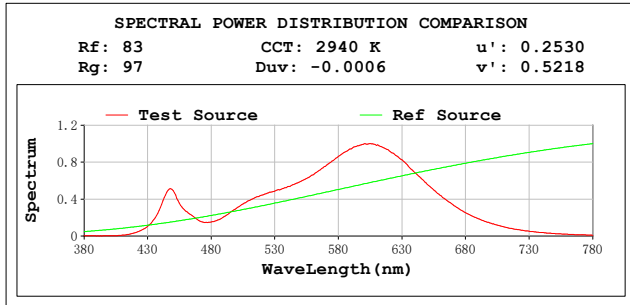
LEVEL:OUT WHITE:ANSI\_3000K

Status: Integral T = 281 ms Ip = 47012 (72%)

**GBT5702**

# TM30

View Angle:2 Deg



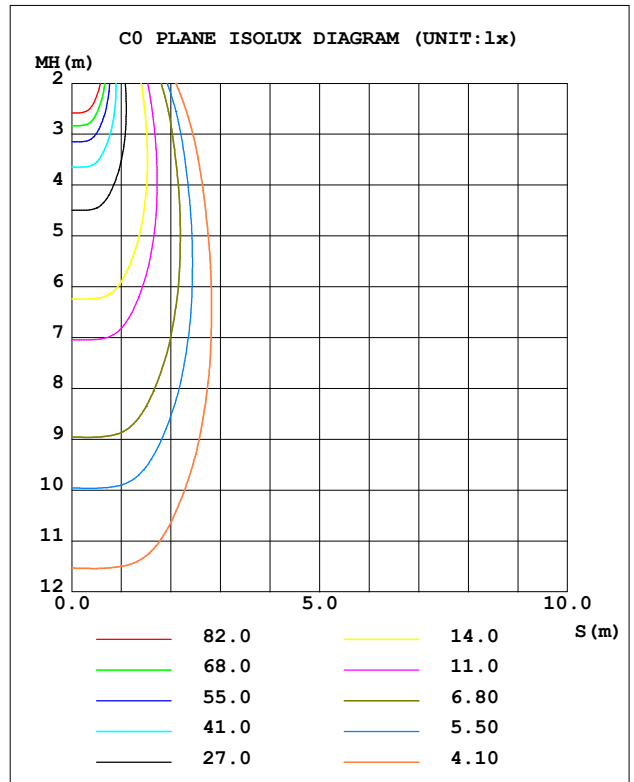
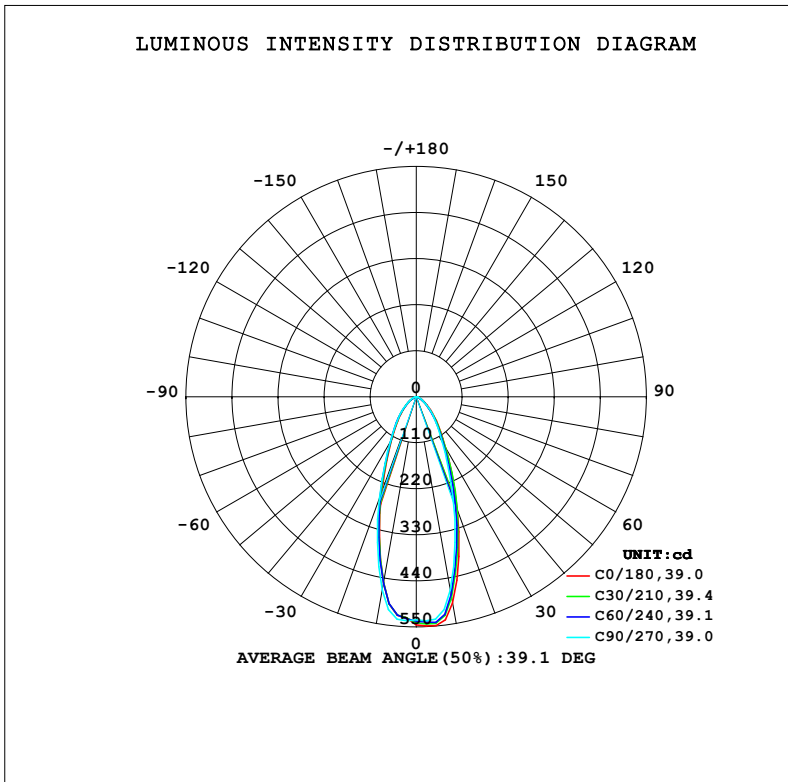
Model:AGL-300-30X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X40 12VDC  
 Date:2023-10-17 16:22:18  
 Humidity:65.0%  
 Remarks:12VDC

LUMINAIRE PHOTOMETRIC TEST REPORT

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm |                 |                  |
| NAME: AGL-300-30X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

| DATA OF LAMP      |        | PHOTOMETRIC DATA      |        |                     |           | Eff: 110.94 lm/W |
|-------------------|--------|-----------------------|--------|---------------------|-----------|------------------|
| MODEL             | LED    | I <sub>max</sub> (cd) | 548.4  | S/MH (C0/180)       | 0.61      |                  |
| NOMINAL POWER (W) | 3      | LOR (%)               | 100.0  | S/MH (C90/270)      | 0.63      |                  |
| RATED VOLTAGE (V) | 24     | TOTAL FLUX (lm)       | 366.44 | η UP, DN (C0-180)   | 0.0, 50.3 |                  |
| NOMINAL FLUX (lm) | 366.44 | CIE CLASS             | DIRECT | η UP, DN (C180-360) | 0.0, 49.7 |                  |
| LAMPS INSIDE      | 1      | η up (%)              | 0.0    | CIBSE SHR NOM       | 0.50      |                  |
| TEST VOLTAGE (V)  | 24     | η down (%)            | 100.0  | CIBSE SHR MAX       | 0.70      |                  |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM



**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

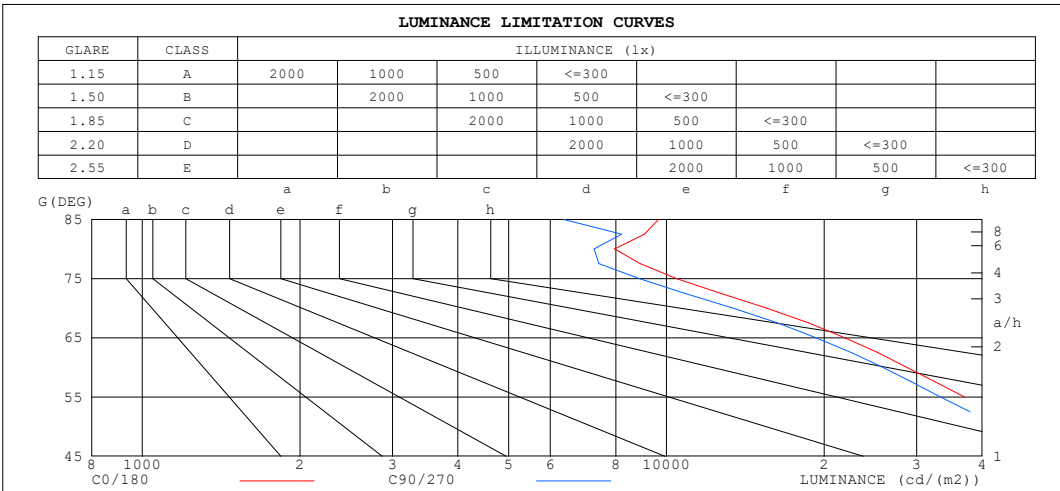
| $\gamma$ | C0                    | C45    | C90   | C135   | C180  | C225   | C270  | C315   | $\gamma$ | ∅ zone  | ∅ total | %lum, lamp |
|----------|-----------------------|--------|-------|--------|-------|--------|-------|--------|----------|---------|---------|------------|
| 10       | 501.0                 | 481.4  | 469.5 | 451.9  | 451.0 | 451.9  | 469.5 | 481.4  | 0- 10    | 48.86   | 48.86   | 13.3,13.3  |
| 20       | 287.5                 | 281.6  | 258.1 | 250.2  | 242.5 | 250.2  | 258.1 | 281.6  | 10- 20   | 100.2   | 149.0   | 40.7,40.7  |
| 30       | 140.5                 | 136.2  | 125.1 | 121.5  | 117.6 | 121.5  | 125.1 | 136.2  | 20- 30   | 85.36   | 234.4   | 64,64      |
| 40       | 75.17                 | 69.98  | 67.53 | 67.56  | 63.47 | 67.56  | 67.53 | 69.98  | 30- 40   | 58.95   | 293.4   | 80.1,80.1  |
| 50       | 38.78                 | 32.97  | 34.82 | 33.42  | 32.31 | 33.42  | 34.82 | 32.97  | 40- 50   | 38.25   | 331.6   | 90.5,90.5  |
| 60       | 18.03                 | 14.23  | 16.23 | 14.79  | 14.90 | 14.79  | 16.23 | 14.23  | 50- 60   | 21.04   | 352.6   | 96.2,96.2  |
| 70       | 6.666                 | 5.147  | 5.749 | 4.985  | 5.103 | 4.985  | 5.749 | 5.147  | 60- 70   | 9.782   | 362.4   | 98.9,98.9  |
| 80       | 1.737                 | 1.677  | 1.587 | 1.537  | 1.481 | 1.537  | 1.587 | 1.677  | 70- 80   | 3.198   | 365.6   | 99.8,99.8  |
| 90       | 0                     | 0.0004 | 0     | 0.0000 | 0     | 0.0000 | 0     | 0.0004 | 80- 90   | 0.8202  | 366.4   | 100,100    |
| 100      |                       |        |       |        |       |        |       |        | 90-100   |         |         |            |
| 110      |                       |        |       |        |       |        |       |        | 100-110  |         |         |            |
| 120      |                       |        |       |        |       |        |       |        | 110-120  |         |         |            |
| 130      |                       |        |       |        |       |        |       |        | 120-130  |         |         |            |
| 140      |                       |        |       |        |       |        |       |        | 130-140  |         |         |            |
| 150      |                       |        |       |        |       |        |       |        | 140-150  |         |         |            |
| 160      |                       |        |       |        |       |        |       |        | 150-160  |         |         |            |
| 170      |                       |        |       |        |       |        |       |        | 160-170  |         |         |            |
| 180      |                       |        |       |        |       |        |       |        | 170-180  |         |         |            |
| DEG      | LUMINOUS INTENSITY:cd |        |       |        |       |        |       |        |          | UNIT:lm |         |            |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM

**LUMINANCE LIMITATION CURVES**

|                                                                                                                              |                        |                         |
|------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|
| <b>Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz</b><br><b>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm</b> |                        |                         |
| <b>NAME: AGL-300-30X40</b>                                                                                                   | <b>TYPE: MR16 LAMP</b> | <b>WEIGHT: 100GM</b>    |
| <b>SPEC.: AGL-300-30X40</b>                                                                                                  | <b>DIM.: 50MM</b>      | <b>SERIAL No.: -</b>    |
| <b>MFR.: AQUALUX</b>                                                                                                         | <b>SUR.:</b>           | <b>Shielding Angle:</b> |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 9646   | 6364    |
| 80                | 7965   | 7278    |
| 75                | 10451  | 8880    |
| 70                | 15517  | 13383   |
| 65                | 21892  | 19293   |
| 60                | 28708  | 25851   |
| 55                | 37040  | 33322   |
| 50                | 48032  | 43123   |
| 45                | 61616  | 55313   |

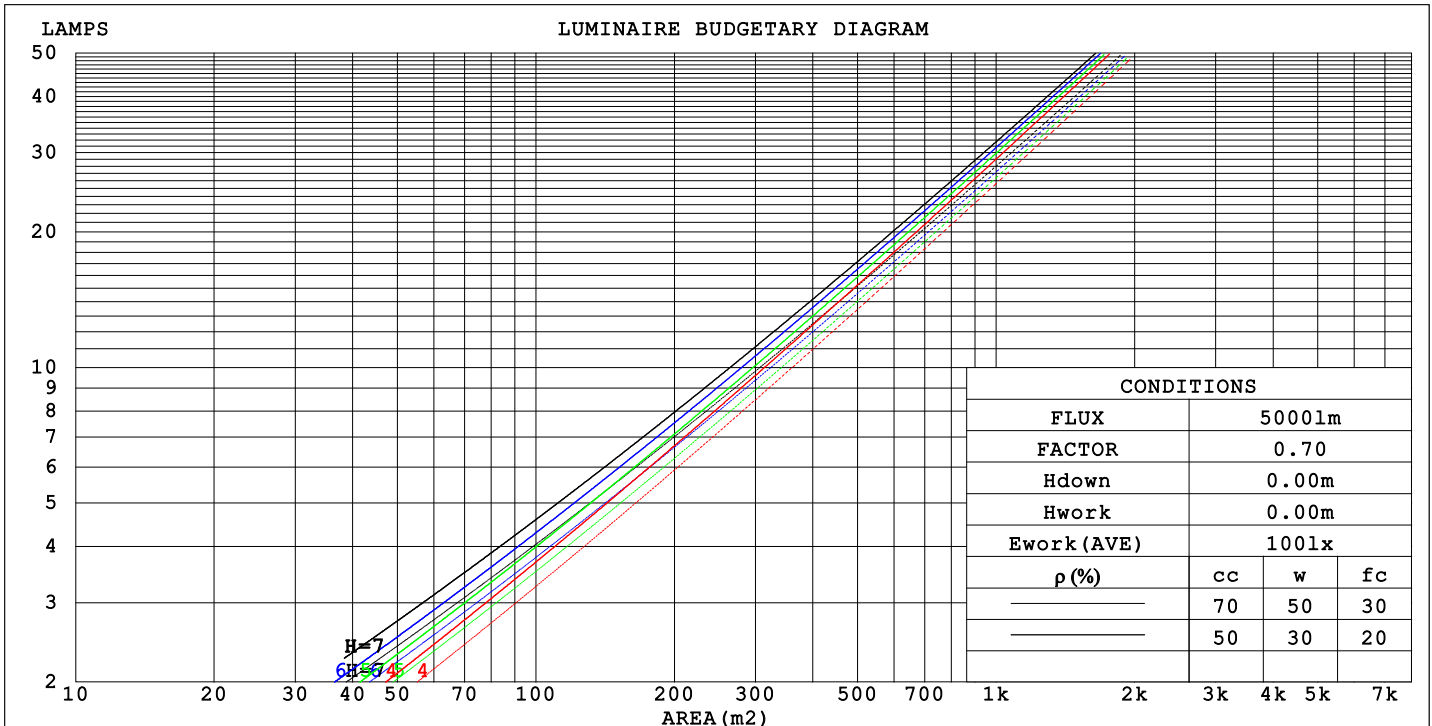
C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operator: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm |                 |                  |
| NAME: AGL-300-30X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

| pcc             | 80%                              |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0    |
|-----------------|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                 | 50%                              | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  |      |
| p <sub>w</sub>  | 20%                              |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0    |
| p <sub>fc</sub> | 20%                              |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      |      |
| RCR             | RCR:Room Cavity Ratio            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                 | Coefficients of Utilization (CU) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.0             | 1.19                             | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1.00 |
| 1.0             | 1.10                             | 1.07 | 1.05 | 1.08 | 1.05 | 1.03 | 1.04 | 1.02 | .00  | .00  | .98  | .97  | .96  | .95  | .94  | .92  |
| 2.0             | 1.01                             | .97  | .93  | .99  | .95  | .92  | .96  | .93  | .90  | .93  | .90  | .88  | .90  | .88  | .86  | .84  |
| 3.0             | .94                              | .88  | .84  | .92  | .87  | .83  | .90  | .85  | .82  | .87  | .84  | .81  | .85  | .82  | .79  | .78  |
| 4.0             | .87                              | .81  | .76  | .86  | .80  | .76  | .84  | .79  | .75  | .82  | .77  | .74  | .80  | .76  | .73  | .72  |
| 5.0             | .81                              | .75  | .70  | .80  | .74  | .70  | .78  | .73  | .69  | .77  | .72  | .69  | .75  | .71  | .68  | .66  |
| 6.0             | .76                              | .70  | .65  | .75  | .69  | .65  | .74  | .68  | .64  | .72  | .67  | .64  | .71  | .67  | .63  | .62  |
| 7.0             | .71                              | .65  | .61  | .71  | .65  | .60  | .69  | .64  | .60  | .68  | .63  | .60  | .67  | .63  | .59  | .58  |
| 8.0             | .67                              | .61  | .57  | .67  | .61  | .57  | .66  | .60  | .56  | .64  | .60  | .56  | .63  | .59  | .56  | .54  |
| 9.0             | .64                              | .57  | .53  | .63  | .57  | .53  | .62  | .57  | .53  | .61  | .56  | .53  | .60  | .56  | .53  | .51  |
| 10.0            | .60                              | .54  | .50  | .60  | .54  | .50  | .59  | .54  | .50  | .58  | .53  | .50  | .57  | .53  | .50  | .48  |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM

**WEC AND CCEC**

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm |                 |                  |
| NAME: AGL-300-30X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                              |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                              | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                              |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients (WEC) |      |      |      |      |      |      |      |      |   |
| 0.0  |                       |      |      |      |      |      |                                  |      |      |      |      |      |      |      |      |   |
| 1.0  | .196                  | .112 | .035 | .189 | .108 | .034 | .177                             | .101 | .032 | .165 | .095 | .031 | .154 | .089 | .029 |   |
| 2.0  | .188                  | .103 | .032 | .182 | .101 | .031 | .172                             | .095 | .030 | .162 | .091 | .028 | .153 | .086 | .027 |   |
| 3.0  | .178                  | .095 | .028 | .174 | .093 | .028 | .164                             | .089 | .027 | .156 | .085 | .026 | .148 | .082 | .025 |   |
| 4.0  | .169                  | .088 | .026 | .164 | .086 | .025 | .156                             | .083 | .025 | .149 | .080 | .024 | .142 | .077 | .024 |   |
| 5.0  | .160                  | .081 | .024 | .156 | .080 | .023 | .149                             | .077 | .023 | .142 | .075 | .022 | .136 | .073 | .022 |   |
| 6.0  | .151                  | .076 | .022 | .148 | .075 | .021 | .142                             | .073 | .021 | .136 | .071 | .021 | .130 | .069 | .020 |   |
| 7.0  | .143                  | .071 | .020 | .140 | .070 | .020 | .135                             | .068 | .020 | .130 | .066 | .019 | .125 | .065 | .019 |   |
| 8.0  | .136                  | .066 | .019 | .133 | .066 | .019 | .129                             | .064 | .018 | .124 | .063 | .018 | .120 | .061 | .018 |   |
| 9.0  | .129                  | .063 | .017 | .127 | .062 | .017 | .123                             | .061 | .017 | .119 | .059 | .017 | .115 | .058 | .017 |   |
| 10.0 | .123                  | .059 | .016 | .121 | .059 | .016 | .117                             | .058 | .016 | .114 | .056 | .016 | .110 | .055 | .016 |   |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                                         |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                         | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                                         |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients (CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                        | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .172                  | .157 | .143 | .148 | .135 | .123 | .101                                        | .093 | .085 | .058 | .054 | .050 | .019 | .017 | .016 |   |
| 2.0  | .158                  | .132 | .111 | .136 | .114 | .096 | .093                                        | .079 | .067 | .054 | .046 | .039 | .017 | .015 | .013 |   |
| 3.0  | .147                  | .114 | .087 | .126 | .098 | .076 | .086                                        | .068 | .053 | .050 | .040 | .031 | .016 | .013 | .010 |   |
| 4.0  | .137                  | .099 | .070 | .118 | .086 | .061 | .081                                        | .060 | .043 | .047 | .035 | .025 | .015 | .011 | .008 |   |
| 5.0  | .129                  | .088 | .058 | .110 | .076 | .050 | .076                                        | .053 | .035 | .044 | .031 | .021 | .014 | .010 | .007 |   |
| 6.0  | .121                  | .079 | .048 | .104 | .068 | .042 | .072                                        | .048 | .030 | .042 | .028 | .018 | .013 | .009 | .006 |   |
| 7.0  | .114                  | .071 | .041 | .098 | .062 | .036 | .068                                        | .043 | .025 | .040 | .025 | .015 | .013 | .008 | .005 |   |
| 8.0  | .108                  | .065 | .035 | .093 | .056 | .031 | .065                                        | .040 | .022 | .038 | .023 | .013 | .012 | .008 | .004 |   |
| 9.0  | .103                  | .060 | .030 | .089 | .052 | .027 | .062                                        | .036 | .019 | .036 | .022 | .011 | .012 | .007 | .004 |   |
| 10.0 | .098                  | .055 | .027 | .085 | .048 | .023 | .059                                        | .034 | .017 | .034 | .020 | .010 | .011 | .007 | .003 |   |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM

**UGR(Unified Glare Rating) Table**

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm |                 |                  |
| NAME: AGL-300-30X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

|                |     |     |     |     |     |     |     |     |     |     |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ceiling/cavity | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| walls          | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| working plane  | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

| Room dimensions |     | Viewed crosswise |     |      |      |      | Viewed endwise |      |      |      |      |      |      |
|-----------------|-----|------------------|-----|------|------|------|----------------|------|------|------|------|------|------|
| x =             | 2H  | y =              | 2H  | 26.3 | 27.4 | 26.6 | 27.5           | 27.7 | 26.0 | 27.0 | 26.2 | 27.2 | 27.4 |
|                 |     |                  | 3H  | 26.6 | 27.5 | 26.9 | 27.7           | 27.9 | 26.2 | 27.2 | 26.5 | 27.4 | 27.6 |
|                 |     |                  | 4H  | 26.6 | 27.5 | 26.9 | 27.7           | 28.0 | 26.2 | 27.1 | 26.5 | 27.4 | 27.6 |
|                 |     |                  | 6H  | 26.6 | 27.4 | 26.9 | 27.7           | 27.9 | 26.2 | 27.1 | 26.5 | 27.3 | 27.6 |
|                 |     |                  | 8H  | 26.6 | 27.4 | 26.9 | 27.7           | 27.9 | 26.2 | 27.0 | 26.5 | 27.3 | 27.5 |
|                 |     |                  | 12H | 26.6 | 27.4 | 26.9 | 27.6           | 27.9 | 26.2 | 27.0 | 26.5 | 27.2 | 27.5 |
|                 | 4H  |                  | 2H  | 26.4 | 27.3 | 26.6 | 27.5           | 27.7 | 26.1 | 26.9 | 26.3 | 27.2 | 27.4 |
|                 |     |                  | 3H  | 26.7 | 27.4 | 27.0 | 27.7           | 28.0 | 26.3 | 27.1 | 26.7 | 27.4 | 27.7 |
|                 |     |                  | 4H  | 26.7 | 27.4 | 27.1 | 27.7           | 28.0 | 26.4 | 27.1 | 26.7 | 27.4 | 27.7 |
|                 |     |                  | 6H  | 26.7 | 27.4 | 27.1 | 27.7           | 28.0 | 26.4 | 27.0 | 26.8 | 27.4 | 27.7 |
|                 |     |                  | 8H  | 26.7 | 27.3 | 27.1 | 27.7           | 28.0 | 26.4 | 27.0 | 26.8 | 27.3 | 27.7 |
|                 |     |                  | 12H | 26.8 | 27.3 | 27.2 | 27.7           | 28.1 | 26.4 | 26.9 | 26.8 | 27.3 | 27.7 |
|                 | 8H  |                  | 4H  | 26.6 | 27.2 | 27.0 | 27.6           | 27.9 | 26.3 | 26.9 | 26.7 | 27.2 | 27.6 |
|                 |     |                  | 6H  | 26.7 | 27.2 | 27.1 | 27.6           | 28.0 | 26.4 | 26.8 | 26.8 | 27.2 | 27.7 |
|                 |     |                  | 8H  | 26.7 | 27.2 | 27.2 | 27.6           | 28.0 | 26.4 | 26.8 | 26.9 | 27.3 | 27.7 |
|                 |     |                  | 12H | 26.8 | 27.2 | 27.3 | 27.6           | 28.1 | 26.4 | 26.8 | 26.9 | 27.2 | 27.7 |
|                 | 12H |                  | 4H  | 26.6 | 27.1 | 27.0 | 27.5           | 27.9 | 26.3 | 26.8 | 26.7 | 27.2 | 27.6 |
|                 |     |                  | 6H  | 26.7 | 27.1 | 27.1 | 27.5           | 27.9 | 26.3 | 26.8 | 26.8 | 27.2 | 27.6 |
|                 |     |                  | 8H  | 26.7 | 27.1 | 27.2 | 27.5           | 28.0 | 26.4 | 26.8 | 26.9 | 27.2 | 27.7 |

|                                                                 |               |               |
|-----------------------------------------------------------------|---------------|---------------|
| Variations with the observer position at spacings(CIE Pub.117): |               |               |
| S = 1.0H                                                        | + 1.1 / - 1.5 | + 1.1 / - 1.6 |
| 1.5H                                                            | + 1.5 / - 1.6 | + 1.1 / - 1.3 |
| 2.0H                                                            | + 2.6 / - 2.3 | + 2.2 / - 2.1 |

CIE Pub.117, 366.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.5)  
 Area: 0.001256 m2

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM

**UTILIZATION FACTORS TABLE**

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm |                 |                  |
| NAME: AGL-300-30X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

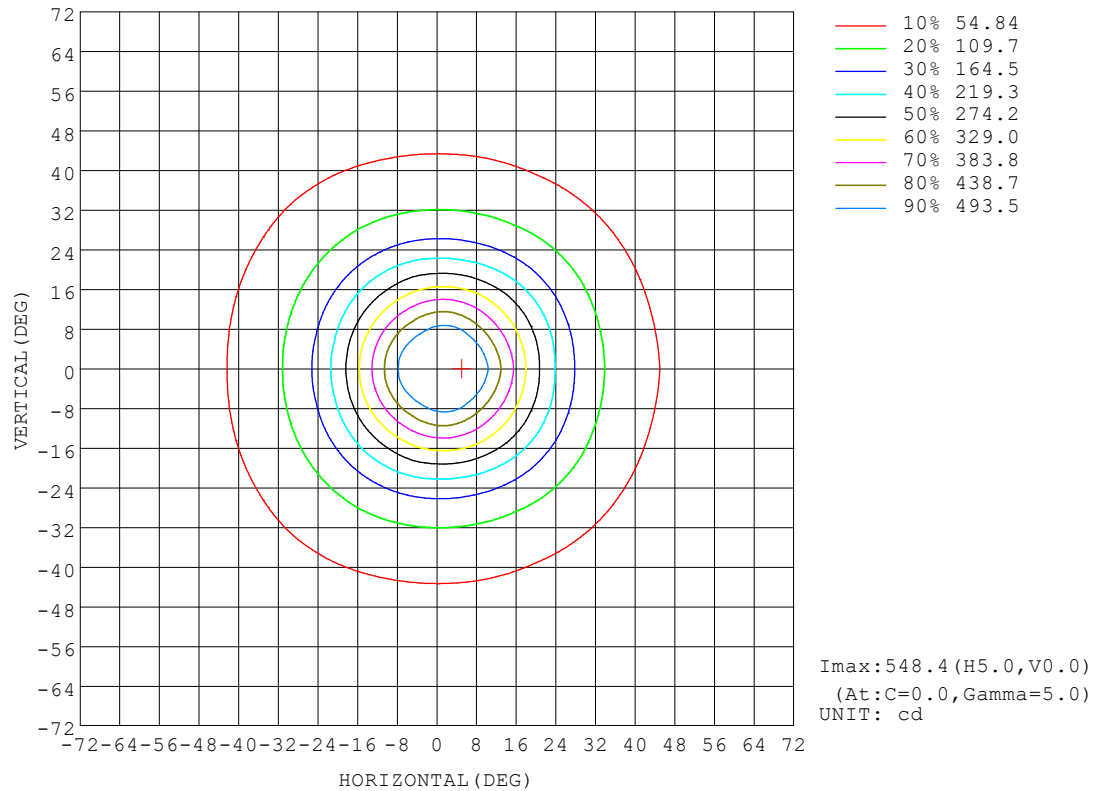
| REFLECTANCE                      |                                               |     |           |     |     |     |               |     |     |        |
|----------------------------------|-----------------------------------------------|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8                                           | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 0.5           | 0.5 | 0.5 | 0      |
| Walls                            | 0.7                                           | 0.5 | 0.3       | 0.7 | 0.5 | 0.3 | 0.7           | 0.5 | 0.3 | 0      |
| Working plane                    | 0.2                                           | 0.2 | 0.2       | 0.2 | 0.2 | 0.2 | 0.2           | 0.2 | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5 |     |           |     |     |     |               |     |     |        |
| k = 0.60                         | 79                                            | 71  | 66        | 78  | 71  | 66  | 77            | 70  | 66  | 62     |
| 0.80                             | 87                                            | 80  | 75        | 87  | 80  | 75  | 85            | 79  | 75  | 70     |
| 1.00                             | 93                                            | 86  | 82        | 92  | 86  | 82  | 91            | 86  | 81  | 76     |
| 1.25                             | 98                                            | 92  | 88        | 97  | 91  | 87  | 95            | 90  | 86  | 81     |
| 1.50                             | 102                                           | 96  | 92        | 100 | 95  | 91  | 98            | 93  | 90  | 85     |
| 2.00                             | 106                                           | 100 | 97        | 104 | 99  | 96  | 101           | 97  | 94  | 88     |
| 2.50                             | 108                                           | 103 | 99        | 106 | 102 | 98  | 103           | 99  | 97  | 90     |
| 3.00                             | 110                                           | 106 | 102       | 108 | 104 | 101 | 104           | 101 | 99  | 92     |
| 4.00                             | 112                                           | 109 | 106       | 110 | 107 | 105 | 106           | 104 | 102 | 94     |
| 5.00                             | 114                                           | 111 | 108       | 111 | 109 | 107 | 107           | 105 | 104 | 96     |
| ROOM INDEX                       | UF(total)                                     |     |           |     |     |     |               |     |     | Direct |
| According to DIN EN 13032-2 2004 |                                               |     | Suspended |     |     |     | SHRNOM = 1.25 |     |     |        |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM

ISOCANDELA DIAGRAM

|                                                                                                                |                 |                  |
|----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm |                 |                  |
| NAME: AGL-300-30X40                                                                                            | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X40                                                                                           | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                  | SUR.:           | Shielding Angle: |

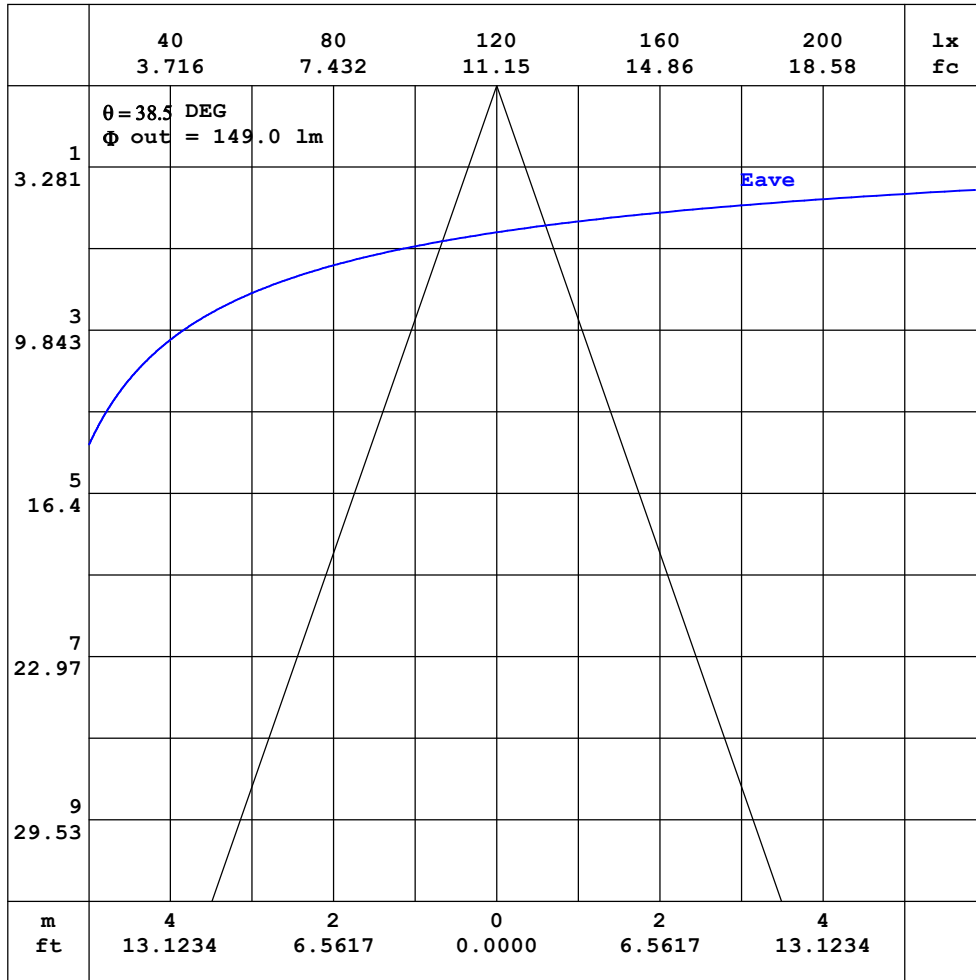


C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM

**AAI CURVES**

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm |                 |                  |
| NAME: AGL-300-30X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

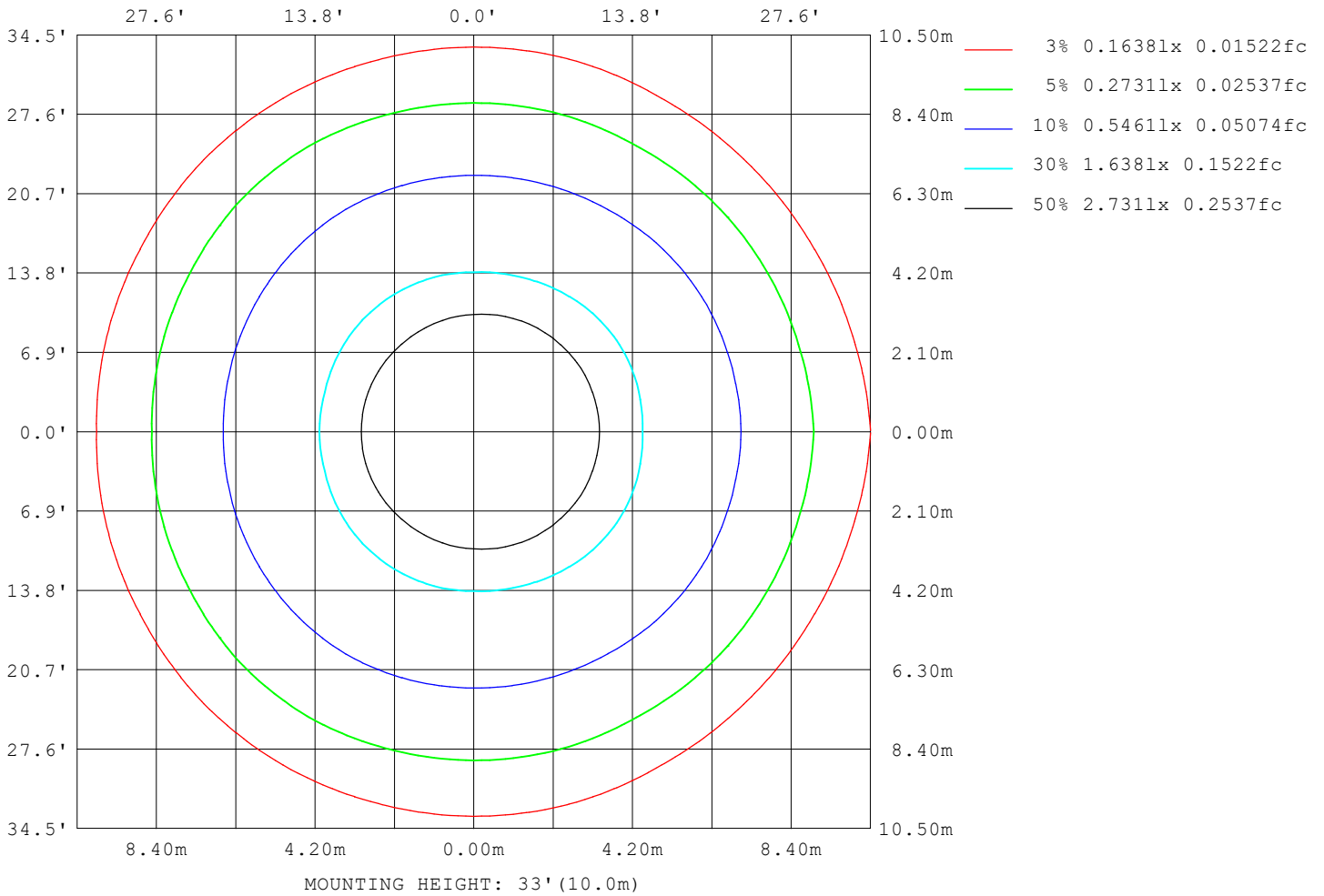
C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM



**ISOLUX DIAGRAM**

|                                                                                                                |                 |                  |
|----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm |                 |                  |
| NAME: AGL-300-30X40                                                                                            | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X40                                                                                           | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                  | SUR.:           | Shielding Angle: |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM

**LED Avg.L Report**

|                                                                                                                |                 |                  |
|----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm |                 |                  |
| NAME: AGL-300-30X40                                                                                            | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X40                                                                                           | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                  | SUR.:           | Shielding Angle: |

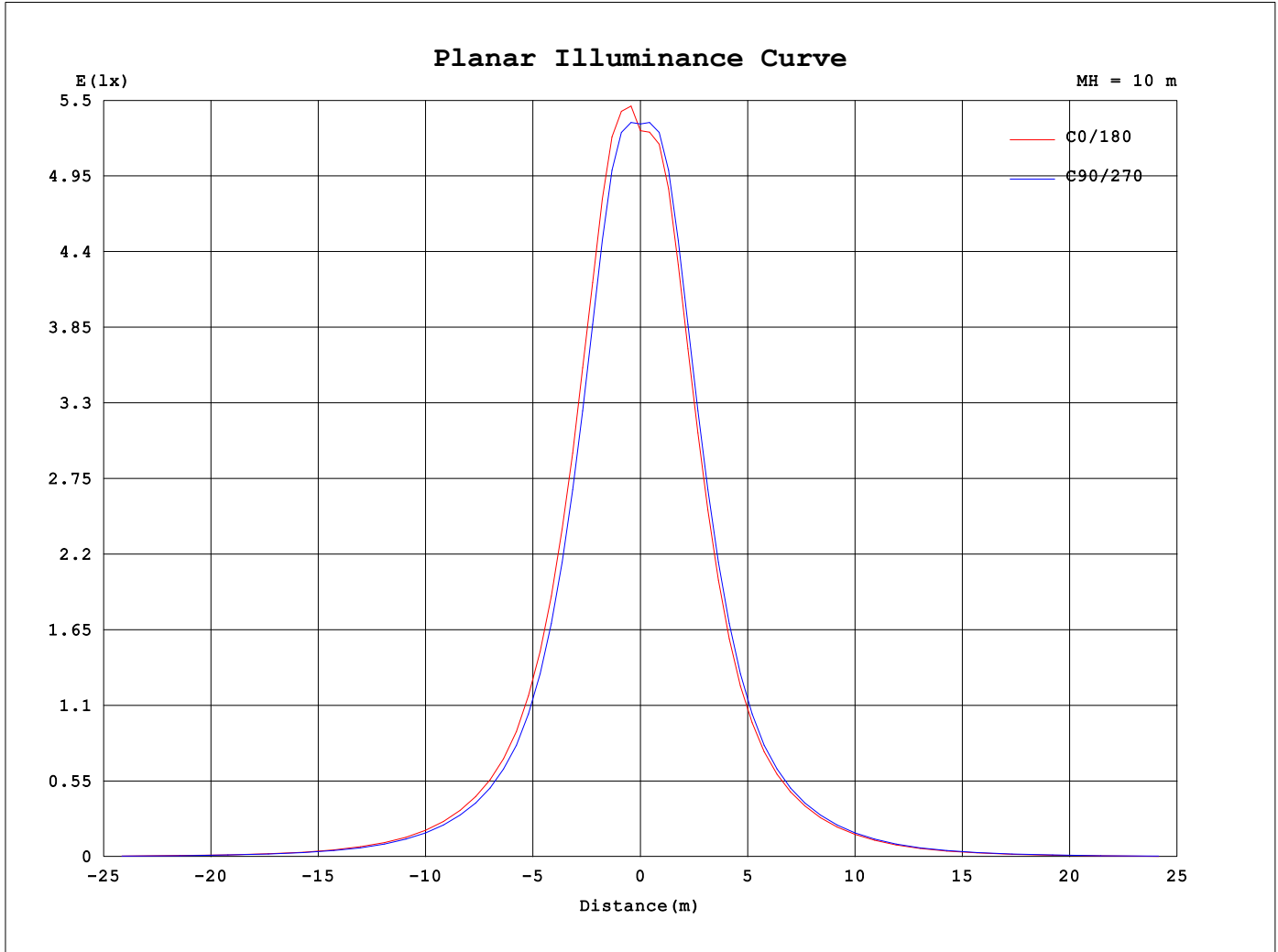
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 19677 |
| L_0~180 (75) av  | 9185  |
| L_0~180 (85) av  | 6946  |
| L_90~270 (65) av | 19293 |
| L_90~270 (75) av | 8880  |
| L_90~270 (85) av | 6364  |
| L_45 (65) av     | 17182 |
| L_45 (75) av     | 8334  |
| L_45 (85) av     | 6789  |

Standard: GB/T 29293-2012

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM

Planar Illuminance Curve



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM

LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                       |                 |                  |
|-------------------------------------------------------|-----------------|------------------|
| Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm |                 |                  |
| NAME: AGL-300-30X40                                   | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X40                                  | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                         | SUR.:           | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG) \ γ (DEG) | 0    | 15   | 30   | 45   | 60   | 75   | 90   | 105  | 120  | 135  | 150  | 165  | 180  | 195  | 210  | 225  | 240  | 255  | 270  |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                 | 545  | 540  | 539  | 536  | 536  | 533  | 533  | 531  | 531  | 530  | 529  | 528  | 528  | 528  | 529  | 530  | 531  | 531  | 533  |
| 5                 | 548  | 545  | 543  | 541  | 541  | 537  | 533  | 527  | 524  | 523  | 523  | 524  | 524  | 524  | 523  | 523  | 524  | 527  | 533  |
| 10                | 501  | 494  | 487  | 481  | 480  | 475  | 470  | 460  | 453  | 452  | 451  | 452  | 451  | 452  | 451  | 452  | 453  | 460  | 470  |
| 15                | 395  | 388  | 382  | 377  | 373  | 367  | 360  | 354  | 348  | 345  | 343  | 343  | 342  | 343  | 343  | 345  | 348  | 354  | 360  |
| 20                | 288  | 288  | 286  | 282  | 273  | 264  | 258  | 259  | 253  | 250  | 247  | 243  | 242  | 243  | 247  | 250  | 253  | 259  | 258  |
| 25                | 201  | 204  | 203  | 198  | 189  | 182  | 179  | 178  | 177  | 174  | 171  | 167  | 167  | 167  | 171  | 174  | 177  | 178  | 179  |
| 30                | 141  | 140  | 140  | 136  | 130  | 127  | 125  | 125  | 123  | 121  | 120  | 118  | 118  | 118  | 120  | 121  | 123  | 125  | 125  |
| 35                | 102  | 101  | 99.7 | 97.3 | 93.8 | 92.0 | 91.1 | 91.4 | 91.7 | 90.4 | 88.4 | 87.1 | 85.8 | 87.1 | 88.4 | 90.4 | 91.7 | 91.4 | 91.1 |
| 40                | 75.2 | 73.0 | 71.5 | 70.0 | 67.9 | 67.9 | 67.5 | 67.5 | 68.3 | 67.6 | 65.5 | 64.5 | 63.5 | 64.5 | 65.5 | 67.6 | 68.3 | 67.5 | 67.5 |
| 45                | 54.7 | 52.0 | 50.1 | 48.9 | 48.4 | 49.2 | 49.1 | 48.9 | 49.1 | 48.6 | 47.4 | 46.8 | 46.0 | 46.8 | 47.4 | 48.6 | 49.1 | 48.9 | 49.1 |
| 50                | 38.8 | 36.0 | 33.7 | 33.0 | 33.3 | 34.5 | 34.8 | 34.2 | 33.6 | 33.4 | 33.1 | 33.1 | 32.3 | 33.1 | 33.1 | 33.4 | 33.6 | 34.2 | 34.8 |
| 55                | 26.7 | 24.6 | 22.1 | 21.6 | 22.2 | 24.1 | 24.0 | 23.2 | 22.4 | 22.4 | 22.4 | 23.0 | 22.2 | 23.0 | 22.4 | 22.4 | 22.4 | 23.2 | 24.0 |
| 60                | 18.0 | 16.0 | 14.6 | 14.2 | 14.7 | 16.0 | 16.2 | 15.5 | 14.8 | 14.8 | 14.9 | 15.5 | 14.9 | 15.5 | 14.9 | 14.8 | 14.8 | 15.5 | 16.2 |
| 65                | 11.6 | 10.3 | 9.33 | 9.06 | 9.32 | 10.1 | 10.2 | 9.66 | 9.24 | 9.18 | 9.27 | 9.68 | 9.27 | 9.68 | 9.27 | 9.18 | 9.24 | 9.66 | 10.2 |
| 70                | 6.67 | 5.86 | 5.31 | 5.15 | 5.25 | 5.67 | 5.75 | 5.35 | 5.06 | 4.99 | 5.01 | 5.29 | 5.10 | 5.29 | 5.01 | 4.99 | 5.06 | 5.35 | 5.75 |
| 75                | 3.40 | 3.07 | 2.87 | 2.81 | 2.79 | 2.89 | 2.89 | 2.73 | 2.64 | 2.61 | 2.54 | 2.61 | 2.57 | 2.61 | 2.54 | 2.61 | 2.64 | 2.73 | 2.89 |
| 80                | 1.74 | 1.69 | 1.65 | 1.68 | 1.61 | 1.60 | 1.59 | 1.58 | 1.54 | 1.54 | 1.50 | 1.49 | 1.48 | 1.49 | 1.50 | 1.54 | 1.54 | 1.58 | 1.59 |
| 85                | 1.06 | 1.01 | 0.99 | 0.96 | 0.83 | 0.78 | 0.70 | 0.63 | 0.57 | 0.53 | 0.48 | 0.47 | 0.46 | 0.47 | 0.48 | 0.53 | 0.57 | 0.63 | 0.70 |
| 90                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM

LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                                                |                 |                  |
|----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm |                 |                  |
| NAME: AGL-300-30X40                                                                                            | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X40                                                                                           | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                  | SUR.:           | Shielding Angle: |

Table--2

UNIT: cd

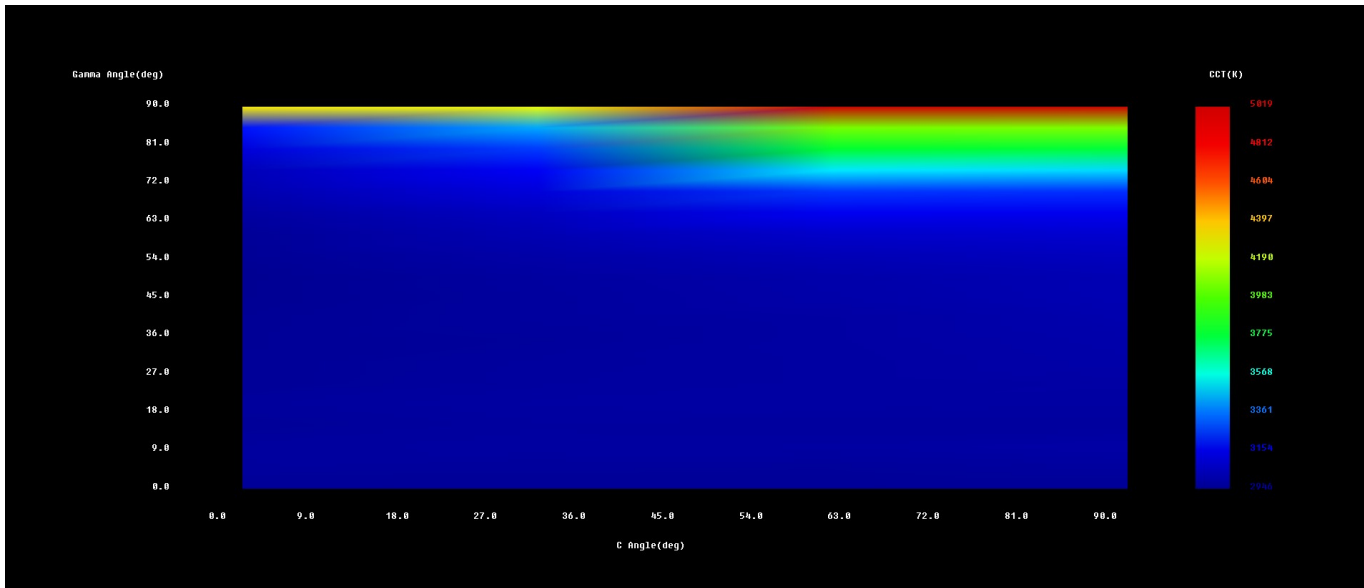
| $\gamma$ (DEG) \ C (DEG) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                        | 533  | 536  | 536  | 539  | 540  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                        | 537  | 541  | 541  | 543  | 545  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                       | 475  | 480  | 481  | 487  | 494  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                       | 367  | 373  | 377  | 382  | 388  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                       | 264  | 273  | 282  | 286  | 288  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                       | 182  | 189  | 198  | 203  | 204  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                       | 127  | 130  | 136  | 140  | 140  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                       | 92.0 | 93.8 | 97.3 | 99.7 | 101  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                       | 67.9 | 67.9 | 70.0 | 71.5 | 73.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                       | 49.2 | 48.4 | 48.9 | 50.1 | 52.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                       | 34.5 | 33.3 | 33.0 | 33.7 | 36.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                       | 24.1 | 22.2 | 21.6 | 22.1 | 24.6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                       | 16.0 | 14.7 | 14.2 | 14.6 | 16.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                       | 10.1 | 9.32 | 9.06 | 9.33 | 10.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                       | 5.67 | 5.25 | 5.15 | 5.31 | 5.86 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                       | 2.89 | 2.79 | 2.81 | 2.87 | 3.07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                       | 1.60 | 1.61 | 1.68 | 1.65 | 1.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                       | 0.78 | 0.83 | 0.96 | 0.99 | 1.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |      |      |      |      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM

### Spatial Color Distribution Report

|                     |                      |               |
|---------------------|----------------------|---------------|
| NAME: AGL-300-30X40 | TYPE: MR16 LAMP      | WEIGHT: 100GM |
| DIM.: 50MM          | SPEC.: AGL-300-30X40 | SERIAL No.: - |
| MFR.: AQUALUX       |                      |               |



**Color Parameters:**

Average: x=0.4362,y=0.4002 u'=0.2518,v'=0.5197 CCT=2980K Ra=81.5 Rf=83 Rg=97  
Center : x=0.4383,y=0.4017 u'=0.2525,v'=0.5207 CCT=2958K Ra=81.2 Rf=82 Rg=97  
IESNA LM-79-2019 Max. du'v': 0.0036 / max.du'v': 0.0000[Set Range]  
GB/T 24824(LB/T 001-2009):: avg. color nonuniformity du'v':0.0012  
GB/T 24824(LB/T 001-2009):: max. color nonuniformity du'v':0.0017  
Average: R1=80 R2=90 R3=96 R4=80 R5=80 R6=88 R7=82 R8=57 R9=2 R10=78  
R11=79 R12=73 R13=82 R14=98 R15=72

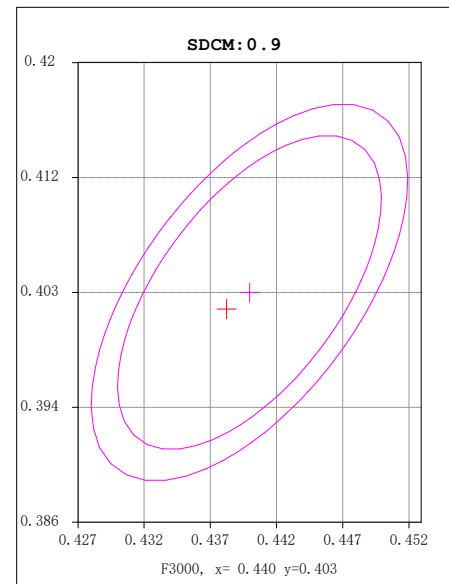
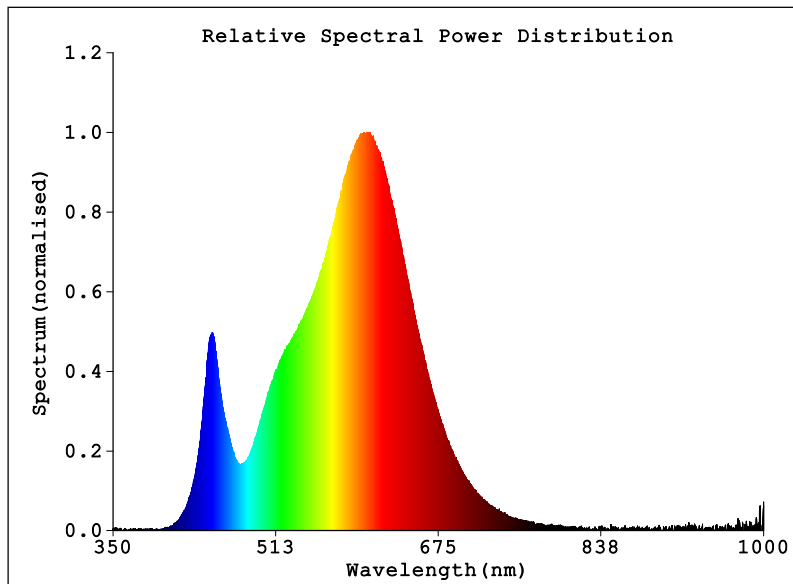
Tester: NICK  
Temperature: 20°C  
Manufacturer: AQUALUX

Date: 12 October 2023  
Humidity: 65.0%  
Remarks: AGL-300-30X403W / 3000K / 40D / 300LM

System: GO-SPEX500\_V1

### Spectral Radiant Test Report

|                     |                      |               |
|---------------------|----------------------|---------------|
| NAME: AGL-300-30X40 | TYPE: MR16 LAMP      | WEIGHT: 100GM |
| DIM.: 50MM          | SPEC.: AGL-300-30X40 | SERIAL No.: - |
| MFR.: AQUALUX       |                      |               |



#### Photon & Colormetric & Photometric Quantities:

Chromaticity Coordinates:  $x=0.4383$   $y=0.4017/u'=0.2525$   $v'=0.5207$   $duv=-0.00112$

Tc=2958K Dominant WL: Ld=583.4nm Purity=52.1%

Ratio: R=23.0% G=74.6% B=2.4% Peak WL: Lp=606.6nm HWL: 121.1nm

Rendering Index: Ra=81.2 TM-30: Rf=82 Rg=97

R1 =79 R2 =90 R3 =96 R4 =79 R5 =80 R6 =88 R7 =82

R8 =56 R9 =1 R10=77 R11=78 R12=72 R13=82 R14=98 R15=72

E = 54.07 lx Ee = 0.1648 W/m<sup>2</sup>

Status: T=1036.80ms Ip=51717 (79%) [ HAAS-1200(CAN) ]

Electrical: U=23.879V I=0.1383A P=3.3021W PF=1.0000

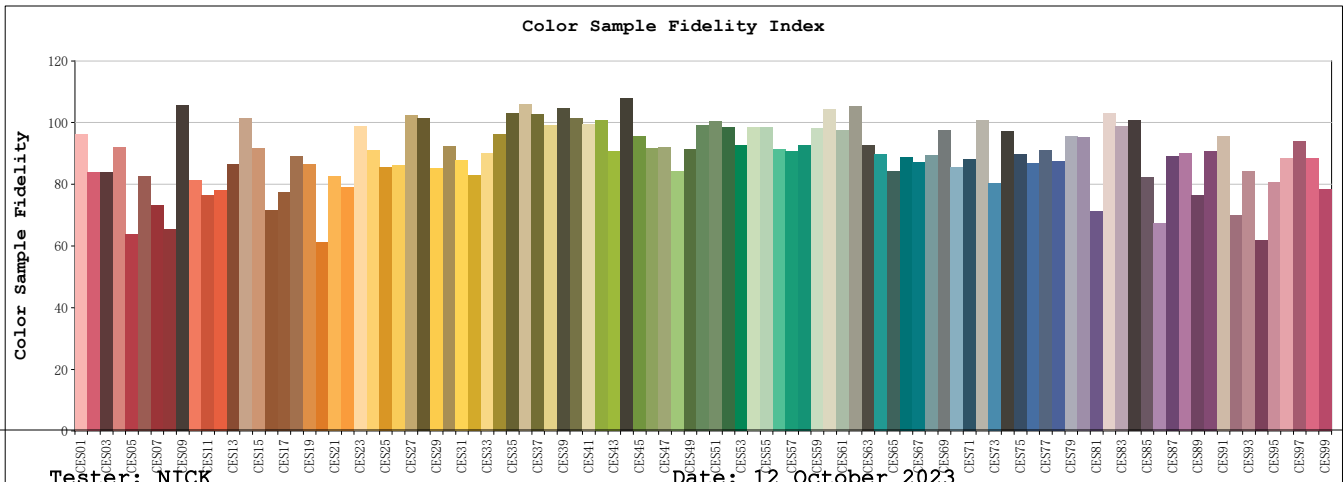
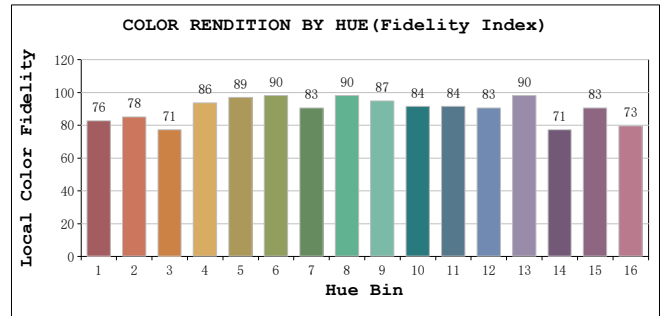
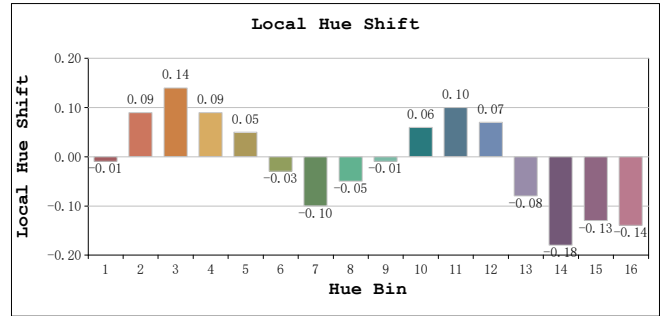
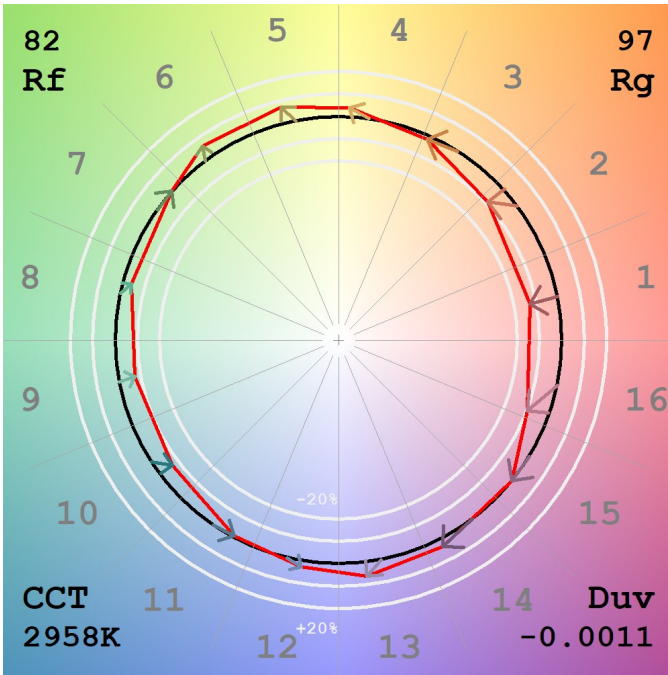
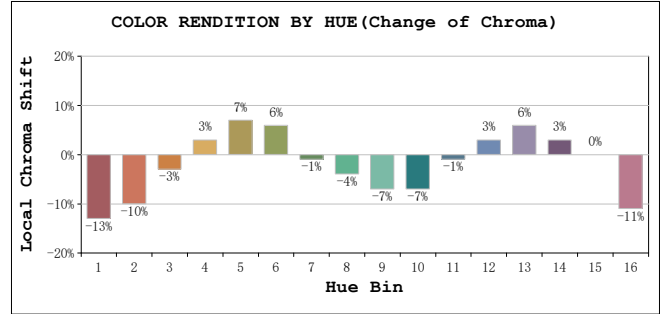
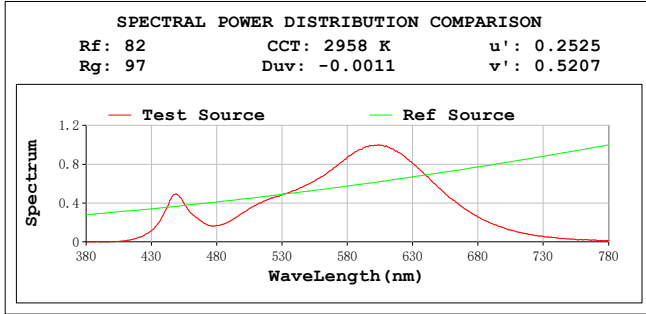
Test position: Center

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-30X403W / 3000K / 40D / 300LM

System: GO-SPEX500\_V1

# TM30



Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX  
 System: GO-SPEX500\_V1

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-30X403W / 3000K / 40D / 300LM



**All Rf:**

|             |             |             |
|-------------|-------------|-------------|
| Rf1 = 88.3  | Rf2 = 76.9  | Rf3 = 77.1  |
| Rf4 = 84.4  | Rf5 = 58.6  | Rf6 = 75.6  |
| Rf7 = 67.3  | Rf8 = 60.0  | Rf9 = 96.9  |
| Rf10 = 74.5 | Rf11 = 70.0 | Rf12 = 71.7 |
| Rf13 = 79.4 | Rf14 = 92.9 | Rf15 = 84.2 |
| Rf16 = 65.8 | Rf17 = 71.1 | Rf18 = 81.8 |
| Rf19 = 79.3 | Rf20 = 56.2 | Rf21 = 75.6 |
| Rf22 = 72.4 | Rf23 = 90.5 | Rf24 = 83.5 |
| Rf25 = 78.6 | Rf26 = 79.0 | Rf27 = 93.8 |
| Rf28 = 93.1 | Rf29 = 78.2 | Rf30 = 84.6 |
| Rf31 = 80.6 | Rf32 = 76.0 | Rf33 = 82.6 |
| Rf34 = 88.2 | Rf35 = 94.3 | Rf36 = 97.1 |
| Rf37 = 94.1 | Rf38 = 91.0 | Rf39 = 96.0 |
| Rf40 = 92.9 | Rf41 = 91.3 | Rf42 = 92.4 |
| Rf43 = 83.3 | Rf44 = 98.9 | Rf45 = 87.7 |
| Rf46 = 84.0 | Rf47 = 84.5 | Rf48 = 77.2 |
| Rf49 = 83.8 | Rf50 = 91.0 | Rf51 = 92.0 |
| Rf52 = 90.3 | Rf53 = 84.9 | Rf54 = 90.4 |
| Rf55 = 90.2 | Rf56 = 83.7 | Rf57 = 83.2 |
| Rf58 = 85.0 | Rf59 = 90.1 | Rf60 = 95.8 |
| Rf61 = 89.4 | Rf62 = 96.5 | Rf63 = 85.0 |
| Rf64 = 82.3 | Rf65 = 77.4 | Rf66 = 81.3 |
| Rf67 = 80.0 | Rf68 = 82.1 | Rf69 = 89.5 |
| Rf70 = 78.6 | Rf71 = 80.6 | Rf72 = 92.4 |
| Rf73 = 73.6 | Rf74 = 89.1 | Rf75 = 82.4 |
| Rf76 = 79.7 | Rf77 = 83.5 | Rf78 = 80.1 |
| Rf79 = 87.8 | Rf80 = 87.3 | Rf81 = 65.4 |
| Rf82 = 94.6 | Rf83 = 90.8 | Rf84 = 92.3 |
| Rf85 = 75.4 | Rf86 = 61.9 | Rf87 = 81.8 |
| Rf88 = 82.6 | Rf89 = 70.2 | Rf90 = 83.3 |
| Rf91 = 87.7 | Rf92 = 64.2 | Rf93 = 77.3 |
| Rf94 = 56.7 | Rf95 = 74.2 | Rf96 = 81.2 |
| Rf97 = 86.3 | Rf98 = 81.1 | Rf99 = 72.0 |

Tester: NICK  
Temperature: 20°C  
Manufacturer: AQUALUX

Date: 12 October 2023  
Humidity: 65.0%  
Remarks: AGL-300-30X403W / 3000K / 40D / 300LM

System: GO-SPEX500\_V1

| Gamma\C | C0     | CIE x,y       | u',v'         | CCT (K) | Ra   | du'v'  | Rf, Rg  | Ip    |
|---------|--------|---------------|---------------|---------|------|--------|---------|-------|
| 0.0     | 100.00 | 0.4383,0.4017 | 0.2525,0.5207 | 2958    | 81.2 | 0.0000 | 82, 97  | 51717 |
|         | 86.90  | 0.4370,0.4011 | 0.2519,0.5202 | 2974    | 81.3 | 0.0008 | 82, 96  | 45491 |
| 10.0    | 47.14  | 0.4368,0.4006 | 0.2520,0.5200 | 2974    | 81.4 | 0.0009 | 82, 97  | 27013 |
| 20.0    | 22.77  | 0.4379,0.4012 | 0.2525,0.5204 | 2960    | 81.3 | 0.0003 | 82, 97  | 32093 |
| 30.0    | 12.28  | 0.4387,0.4022 | 0.2525,0.5209 | 2955    | 81.2 | 0.0002 | 82, 96  | 22550 |
| 40.0    | 6.26   | 0.4402,0.4041 | 0.2527,0.5219 | 2946    | 81.3 | 0.0012 | 83, 96  | 32391 |
| 50.0    | 2.91   | 0.4390,0.4034 | 0.2522,0.5214 | 2960    | 81.6 | 0.0008 | 83, 96  | 29350 |
| 60.0    | 1.05   | 0.4351,0.4026 | 0.2500,0.5205 | 3019    | 82.6 | 0.0025 | 84, 96  | 29465 |
| 70.0    | 0.34   | 0.4250,0.3938 | 0.2472,0.5155 | 3126    | 86.9 | 0.0074 | 86, 99  | 29623 |
| 80.0    | 0.07   | 0.3602,0.3348 | 0.2288,0.4785 | 4326    | 83.8 | 0.0484 | 87, 110 | 29605 |
|         | C90    |               |               |         |      |        |         |       |
| 0.0     | 99.88  | 0.4383,0.4017 | 0.2525,0.5207 | 2958    | 81.2 | 0.0000 | 82, 97  | 51717 |
|         | 91.92  | 0.4352,0.3998 | 0.2513,0.5194 | 2994    | 81.6 | 0.0018 | 82, 96  | 47767 |
| 10.0    | 51.11  | 0.4357,0.3997 | 0.2516,0.5195 | 2985    | 81.6 | 0.0015 | 82, 97  | 28857 |
| 20.0    | 25.33  | 0.4342,0.3986 | 0.2512,0.5188 | 3002    | 81.8 | 0.0023 | 82, 97  | 34512 |
| 30.0    | 14.09  | 0.4330,0.3977 | 0.2508,0.5183 | 3015    | 82.1 | 0.0029 | 82, 96  | 24230 |
| 40.0    | 7.59   | 0.4315,0.3963 | 0.2504,0.5175 | 3029    | 82.9 | 0.0038 | 83, 96  | 34748 |
| 50.0    | 3.82   | 0.4252,0.3913 | 0.2485,0.5145 | 3101    | 84.7 | 0.0074 | 83, 96  | 29637 |
| 60.0    | 1.63   | 0.4102,0.3771 | 0.2447,0.5062 | 3275    | 89.1 | 0.0165 | 84, 96  | 29471 |
| 70.0    | 0.69   | 0.3814,0.3527 | 0.2358,0.4906 | 3774    | 95.4 | 0.0344 | 86, 99  | 29710 |
| 80.0    | 0.34   | 0.3412,0.3122 | 0.2251,0.4634 | 5019    | 83.0 | 0.0635 | 87, 110 | 29591 |
| 90.0    |        |               |               |         |      |        |         |       |

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-30X403W / 3000K / 40D / 300LM

System: GO-SPEX500\_V1

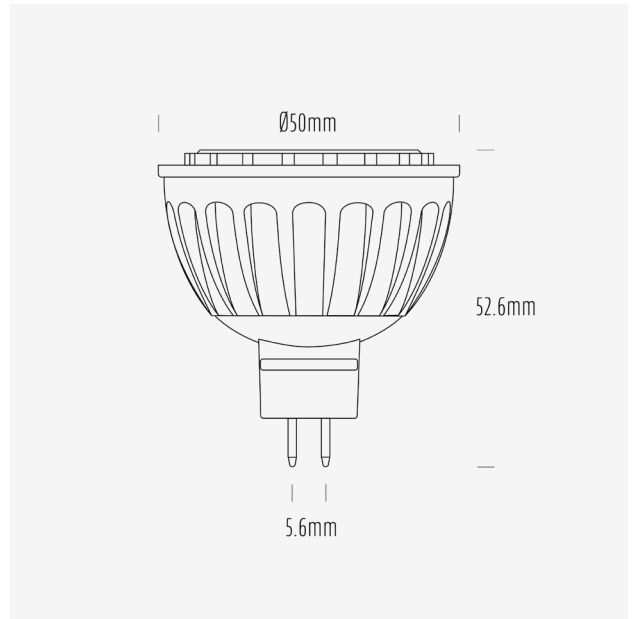


# AGL 300 Series

MR16 LED Globes



## AGL-300-30X60 / 3000K / MR16 / 60°



### Product Data

|              |                                 |  |  |  |
|--------------|---------------------------------|--|--|--|
| Product Code | AGL-300-30X60                   |  |  |  |
| Description  | Aqualux 300 Series LED Lamp     |  |  |  |
| Type         | MR16 GU5.6                      |  |  |  |
| Construction | Aluminium Heatsink + PMMA Optic |  |  |  |
| Warranty     | 3 Years                         |  |  |  |

### Electrical Data

|                     |              |       |              |       |
|---------------------|--------------|-------|--------------|-------|
| Input Voltage Range | 12~24V AC/DC |       |              |       |
| Nominal Voltage     | 24VDC        |       |              |       |
| Nominal Power       | 3W           |       |              |       |
| Nominal Current     | 125mA        |       |              |       |
| Input Voltage       | 12VDC        | 12VAC | <b>24VDC</b> | 24VAC |
| Rated Power         | 3.6          | 2.9   | <b>3.4</b>   | 3.6   |
| Operating Frequency | -            | 50Hz  | -            | 50Hz  |

|                                |     |   |               |   |
|--------------------------------|-----|---|---------------|---|
| Max. no. of lamps on AQD24-040 | 9   | - | <b>9</b>      | - |
| Max. no. of lamps on AQD24-100 | >22 | - | <b>&gt;22</b> | - |
| Max. no. of lamps on AQD24-240 | -   | - | -             | - |

|                       |             |  |  |  |
|-----------------------|-------------|--|--|--|
| Dimming Compatibility | Non dimming |  |  |  |
| Wiring Scheme         | Parallel    |  |  |  |
| Startup Time          | < 0.5s      |  |  |  |

### Mechanical & Thermal Data

|                      |            |  |  |  |
|----------------------|------------|--|--|--|
| Overall Length       | 52.6mm     |  |  |  |
| Max Diameter         | 50mm       |  |  |  |
| Lamp Base            | GU5.6      |  |  |  |
| Weight               | 55g        |  |  |  |
| Operating Temp Range | -20° - 45° |  |  |  |
| IP Rating            | IP20       |  |  |  |

### Photometric Data

|                   |       |       |              |       |
|-------------------|-------|-------|--------------|-------|
| Nominal Flux (lm) | 300   |       |              |       |
| Input Voltage     | 12VDC | 12VAC | <b>24VDC</b> | 24VAC |
| Input Power (W)   | 3.6   | 2.9   | <b>3.4</b>   | 3.6   |
| Rated Flux (lm)   | 449   | 353   | <b>453</b>   | 457   |
| Efficacy (lm/W)   | 125   | 122   | <b>132</b>   | 126   |

|                            |            |  |  |  |
|----------------------------|------------|--|--|--|
| CCT                        | 3000K      |  |  |  |
| CCT Description            | Warm White |  |  |  |
| CRI (Ra)                   | 82         |  |  |  |
| CRI (R9)                   | 2          |  |  |  |
| TM-30 (Rf)                 | 82         |  |  |  |
| TM-30 (Rg)                 | 97         |  |  |  |
| SDCM                       | -          |  |  |  |
| Peak Intensity (cd)        | 356        |  |  |  |
| Nominal Beam Angle         | 60°        |  |  |  |
| Measured Beam Angle (FWHM) | 55°        |  |  |  |

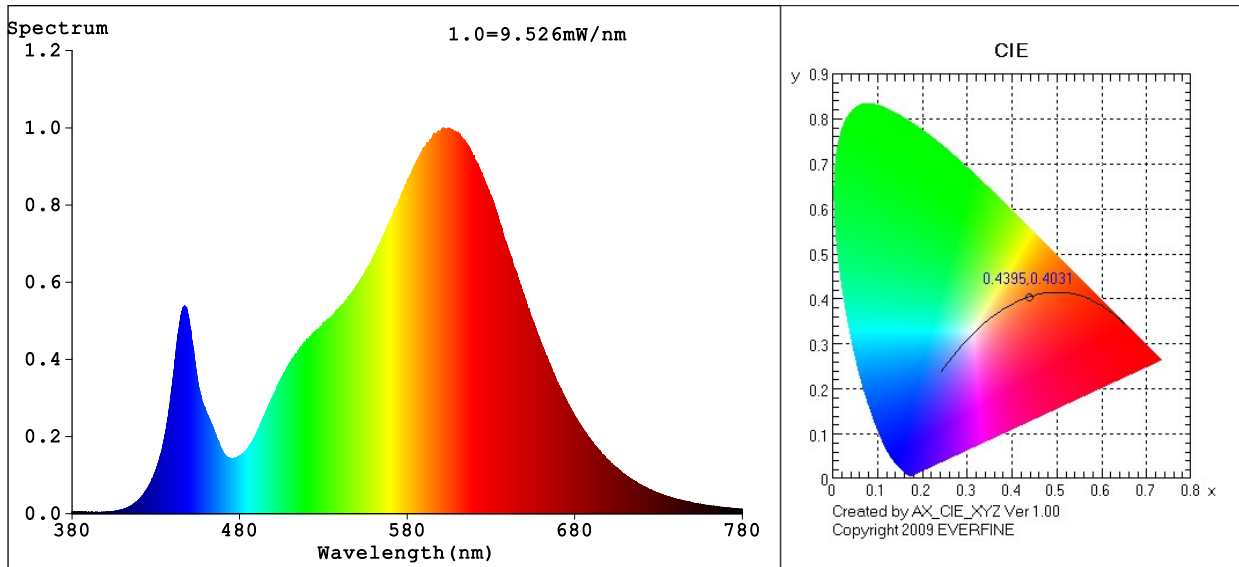
### Lifespan Data

|                  |         |  |  |  |
|------------------|---------|--|--|--|
| L70              | 15,000h |  |  |  |
| Switching Cycles | 15,000  |  |  |  |

### Compliance Data

|                 |     |  |  |  |
|-----------------|-----|--|--|--|
| EMI             | Yes |  |  |  |
| RCM             | N/A |  |  |  |
| Mercury Content | 0mg |  |  |  |

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4395$   $y=0.4031$  /  $u'=0.2526$   $v'=0.5214$   
 CCT=2950K (Duv=-0.0007) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=52.9%  
 Ratio:R=23.1% G=74.6% B=2.3%; Peak WL:Lp=601.5nm FWHM=123.2nm  
 Render Index:Ra=81.6 AvgR=75.7 TM30:Rf=82 Rg=97

R1 =80 R2 =90 R3 =97 R4 =80 R5 =80 R6 =87 R7 =82  
 R8 =57 R9 =2 R10=77 R11=80 R12=72 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 456.8 lm Eff. : 126.22 lm/W Fe = 1.375 W

**Electrical parameters:**

V = 23.961 V I = 0.2333 A P = 3.619 W PF = 0.6474

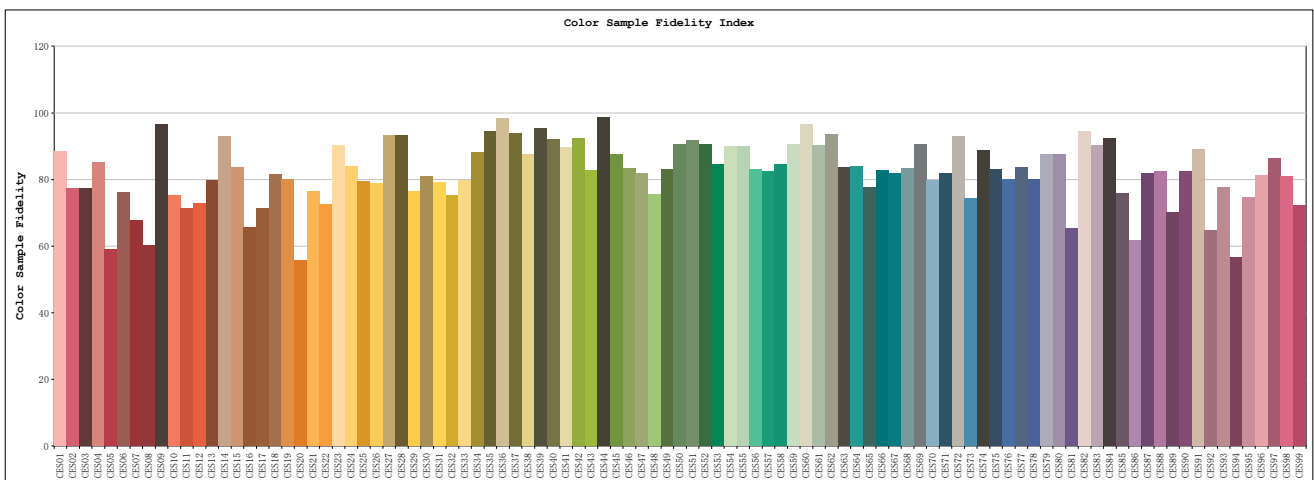
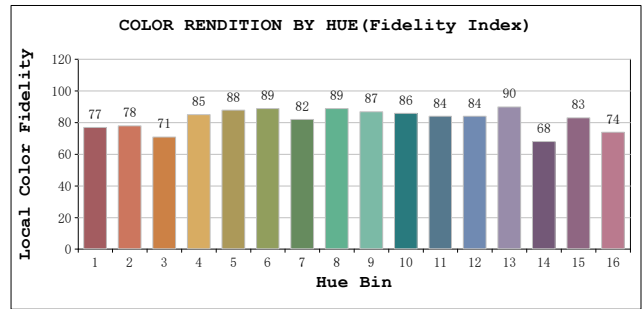
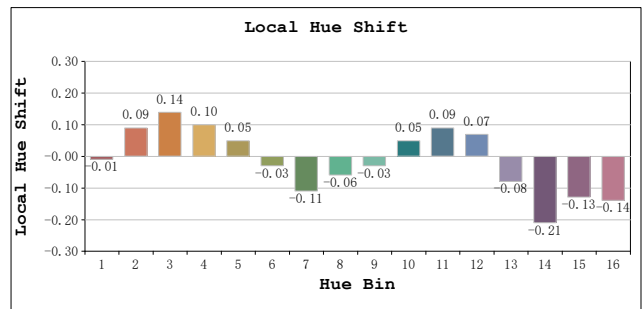
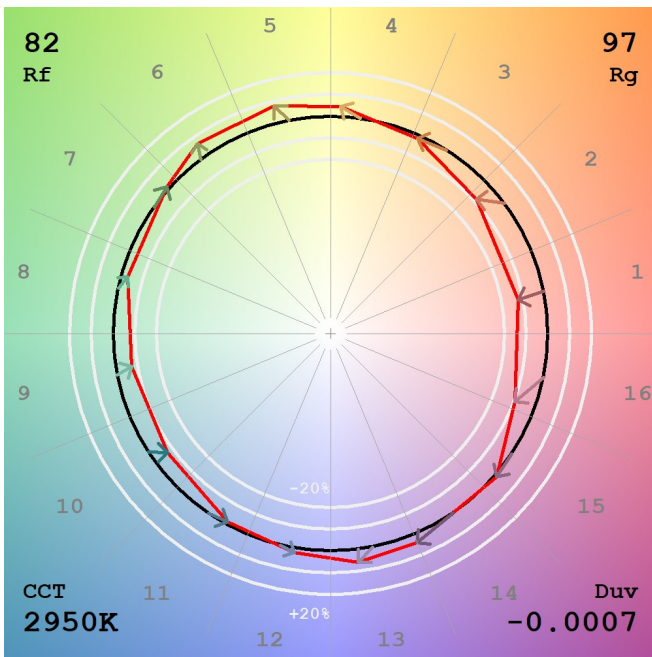
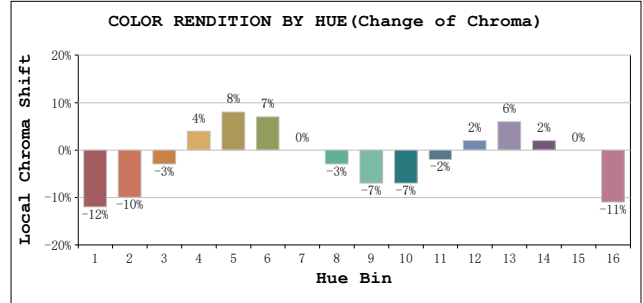
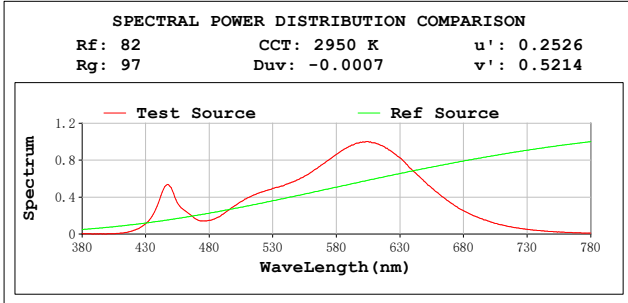
LEVEL:OUT WHITE:ANSI\_3000K

Status: Integral T = 320 ms Ip = 53430 (82%)

**GBT5702**

TM30

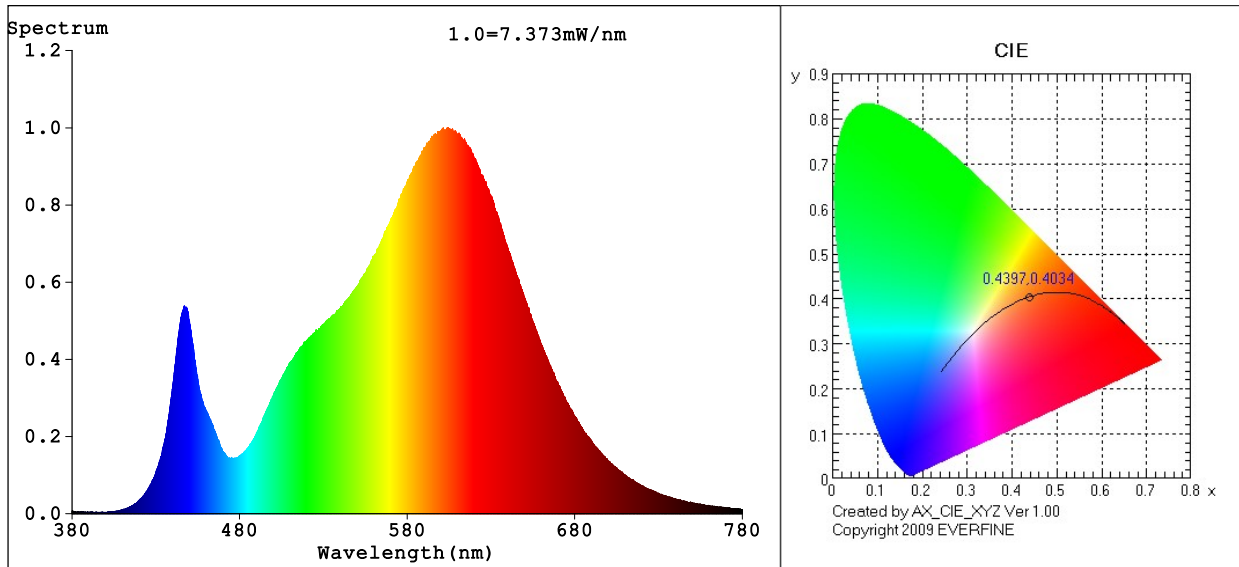
View Angle:2 Deg



Model:AGL-300-30X60  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X60 24VAC  
 Date:2023-10-17 16:09:34  
 Humidity:65.0%  
 Remarks:24VAC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4397$   $y=0.4034$  /  $u'=0.2527$   $v'=0.5215$   
 CCT=2948K (Duv=-0.0007) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=53.1%  
 Ratio:R=23.2% G=74.5% B=2.3%; Peak WL:Lp=604.4nm FWHM=122.9nm  
 Render Index:Ra=81.6 AvgR=75.7 TM30:Rf=82 Rg=97

R1 =80 R2 =90 R3 =97 R4 =80 R5 =80 R6 =88 R7 =82  
 R8 =57 R9 =2 R10=77 R11=80 R12=72 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 352.9 lm Eff. : 122.27 lm/W Fe = 1.062 W

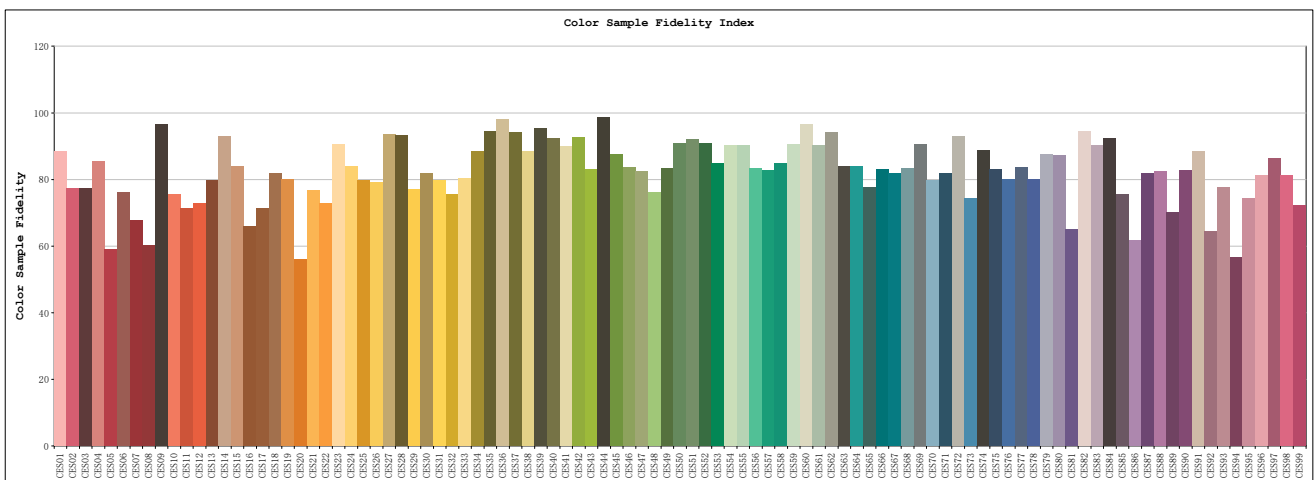
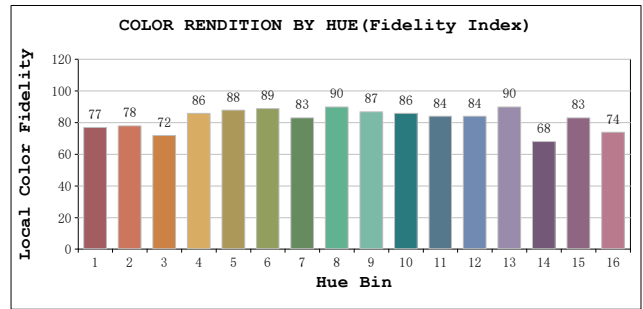
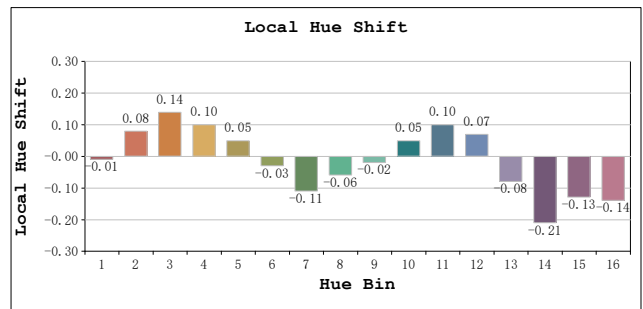
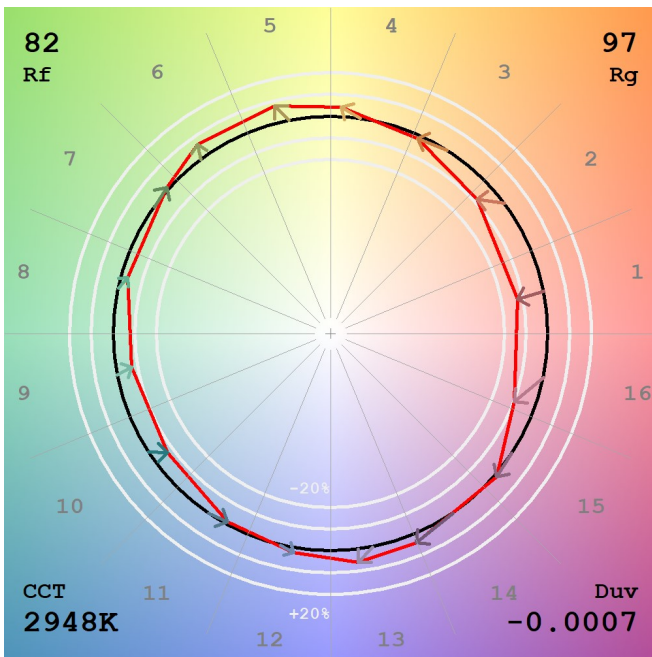
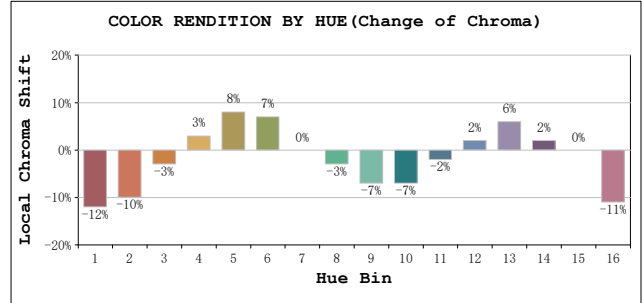
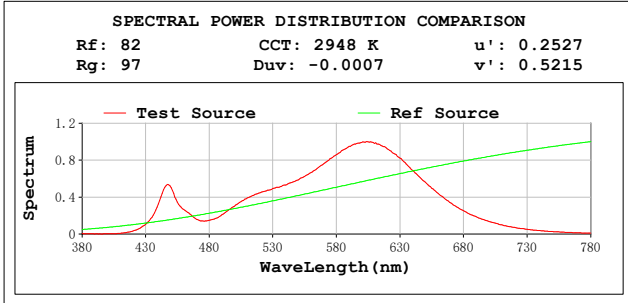
**Electrical parameters:**

V = 11.991 V I = 0.3251 A P = 2.886 W PF = 0.7403  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 320 ms Ip = 41262 (63%)

**GBT5702**

TM30

View Angle:2 Deg

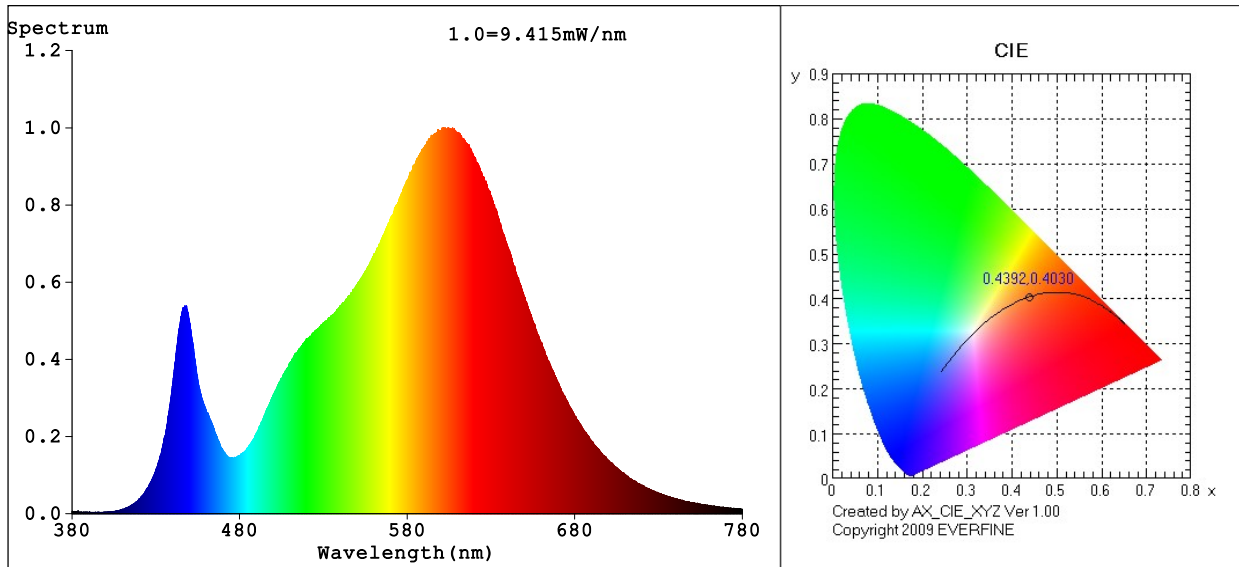


Model:AGL-300-30X60  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X60 12VAC  
 Date:2023-10-17 16:10:15  
 Humidity:65.0%  
 Remarks:12VAC



### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4392$   $y=0.4030$  /  $u'=0.2525$   $v'=0.5213$   
 CCT=2953K (Duv=-0.0007) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=52.8%  
 Ratio:R=23.1% G=74.6% B=2.3%; Peak WL:Lp=601.5nm FWHM=123.4nm  
 Render Index:Ra=81.5 AvgR=75.7 TM30:Rf=82 Rg=97

R1 =80 R2 =89 R3 =97 R4 =80 R5 =80 R6 =87 R7 =82  
 R8 =57 R9 =2 R10=76 R11=80 R12=72 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 452.9 lm Eff. : 132.28 lm/W Fe = 1.364 W

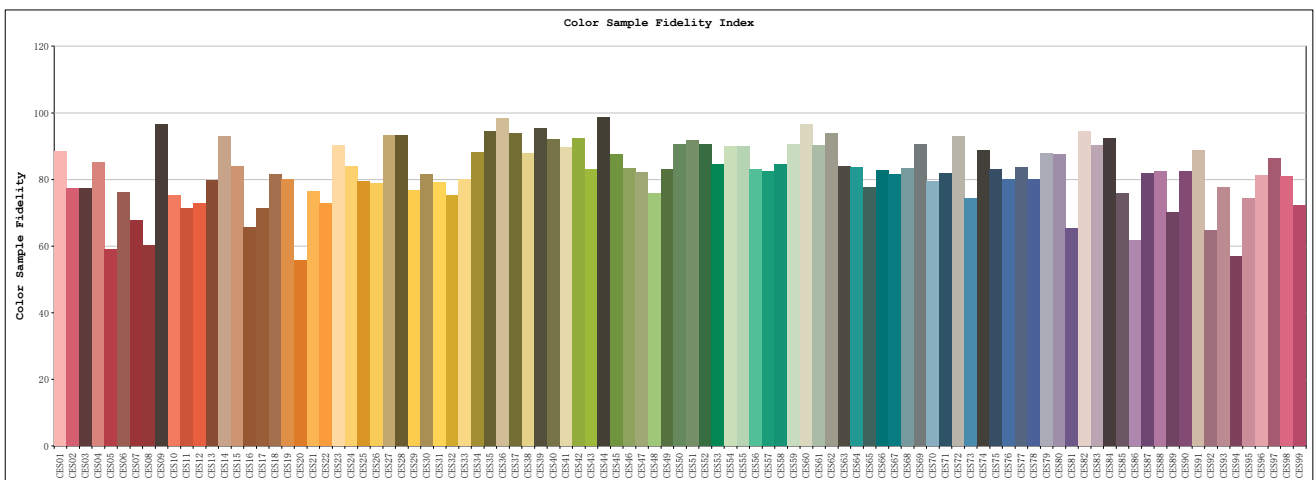
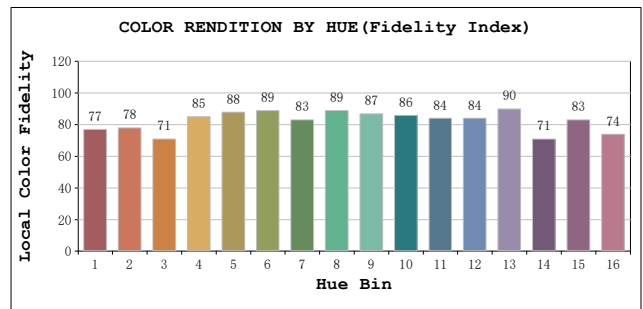
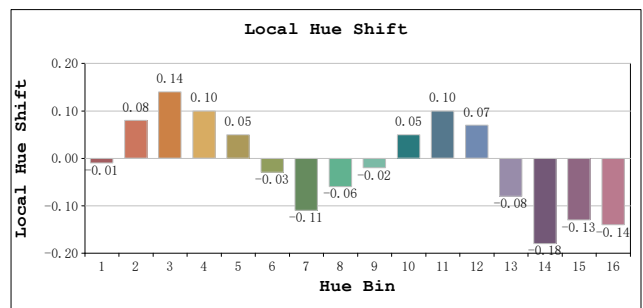
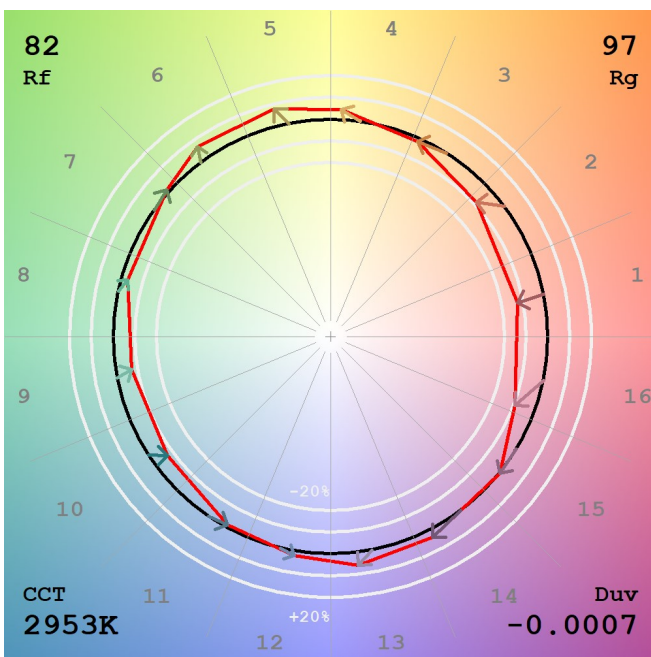
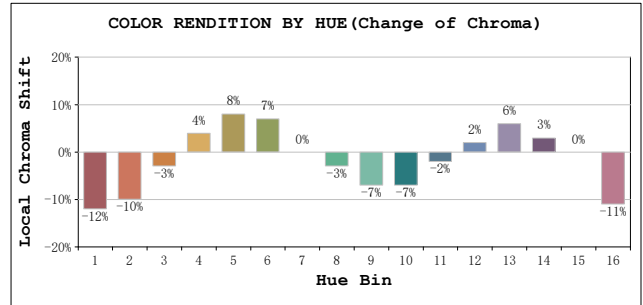
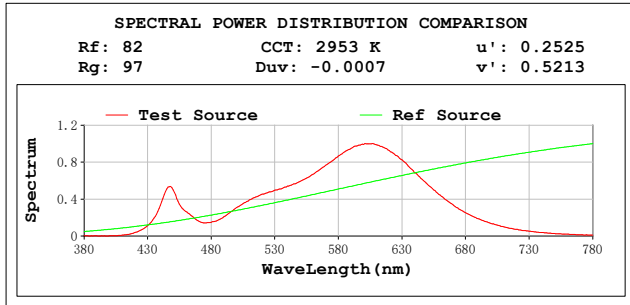
**Electrical parameters:**

V = 23.989 V I = 0.1427 A P = 3.424 W PF = 1.0000  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 320 ms Ip = 52890 (81%)

**GBT5702**

# TM30

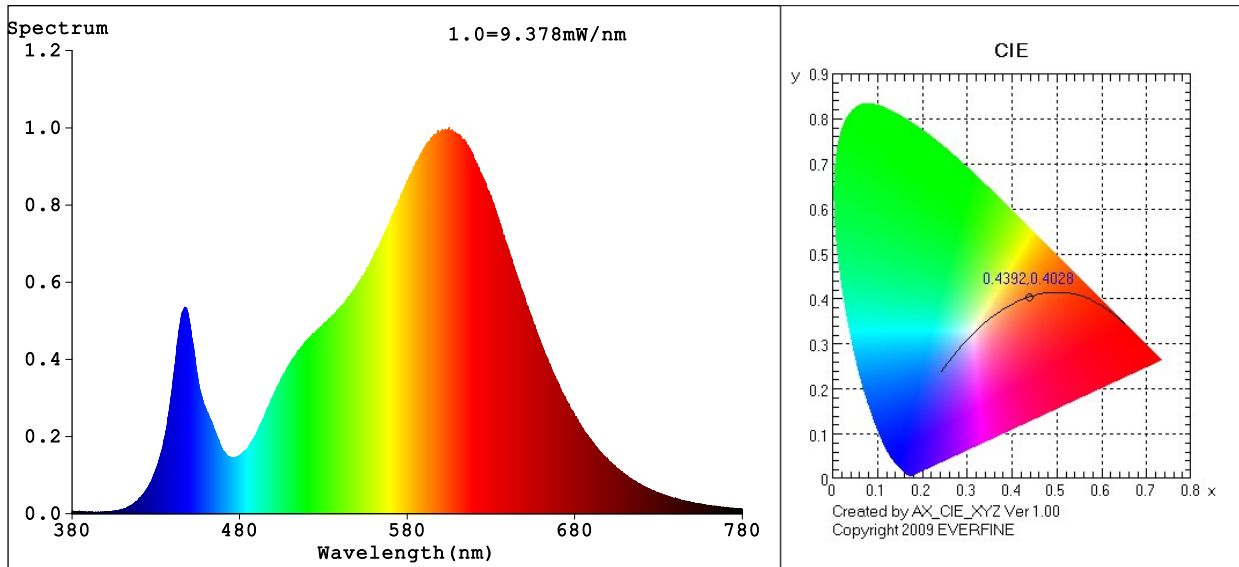
View Angle:2 Deg



Model:AGL-300-30X60  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X60 24VDC  
 Date:2023-10-17 16:11:34  
 Humidity:65.0%  
 Remarks:24VDC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4392$   $y=0.4028$  /  $u'=0.2526$   $v'=0.5212$   
 CCT=2952K (Duv=-0.0008) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=52.7%  
 Ratio:R=23.1% G=74.6% B=2.3%; Peak WL:Lp=605.1nm FWHM=122.6nm  
 Render Index:Ra=81.5 AvgR=75.6 TM30:Rf=82 Rg=97

R1 =80 R2 =90 R3 =96 R4 =80 R5 =80 R6 =87 R7 =82  
 R8 =57 R9 =2 R10=77 R11=80 R12=72 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 449.0 lm Eff. : 124.91 lm/W Fe = 1.353 W

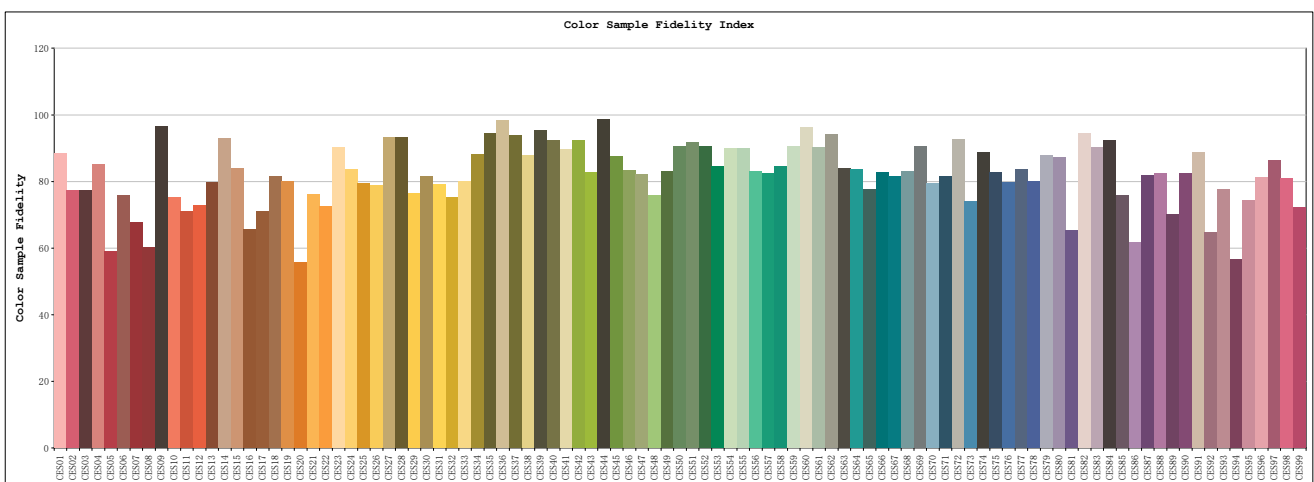
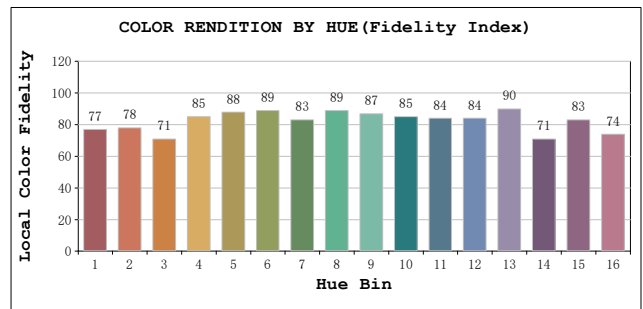
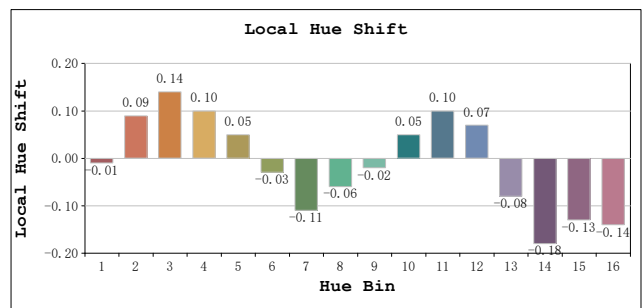
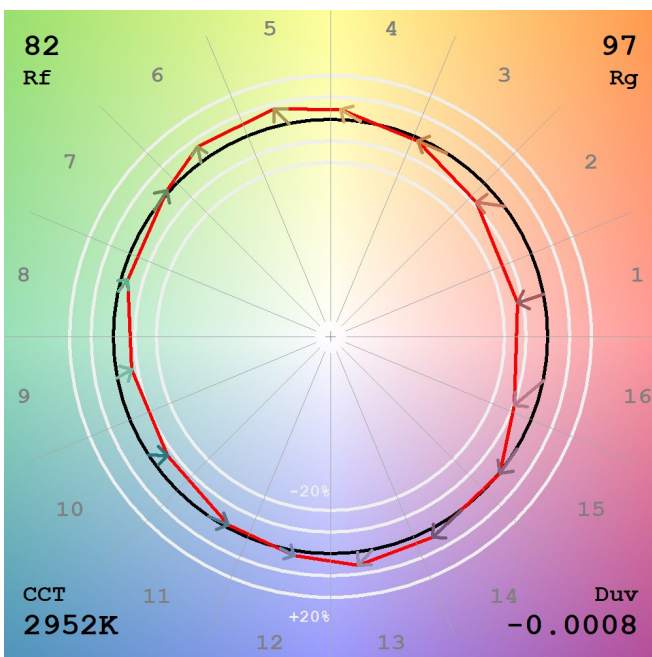
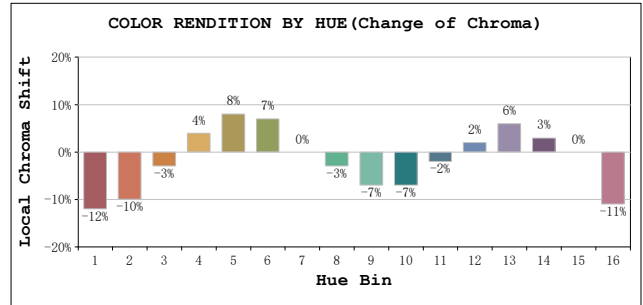
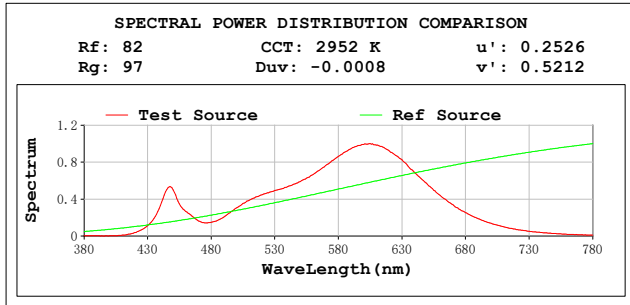
**Electrical parameters:**

V = 11.971 V I = 0.3002 A P = 3.594 W PF = 1.000  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 320 ms Ip = 52386 (80%)

**GBT5702**

# TM30

View Angle:2 Deg



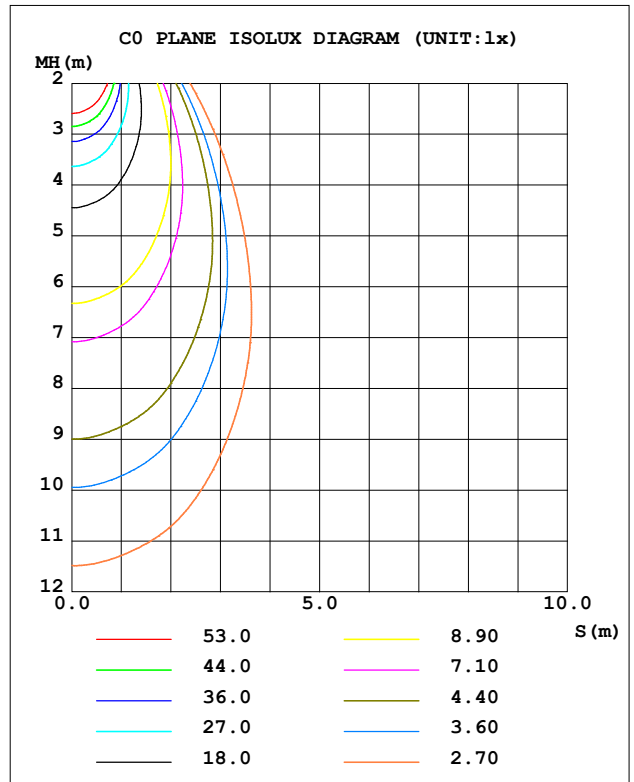
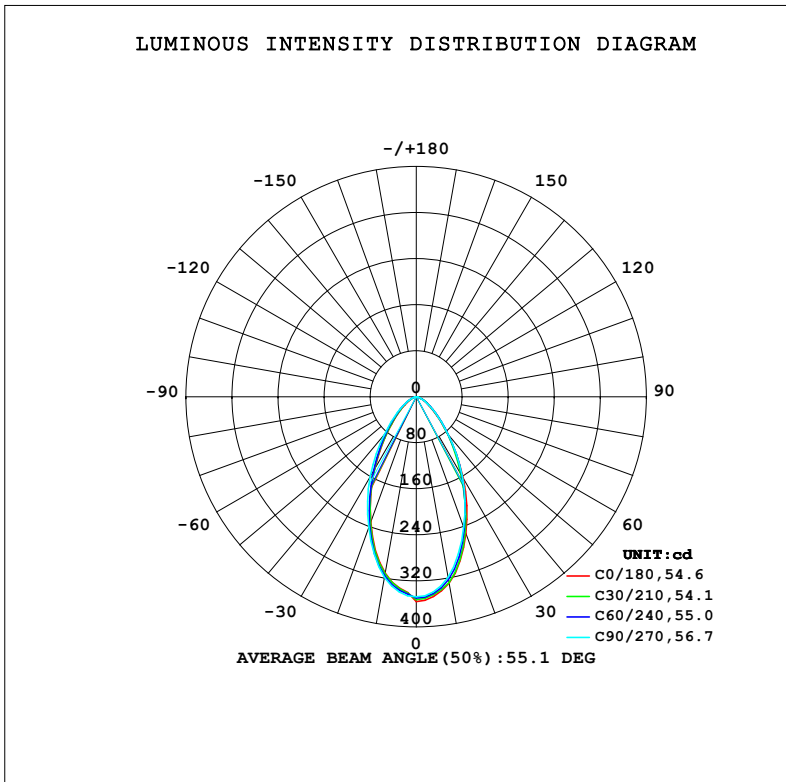
Model:AGL-300-30X60  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X60 12VDC  
 Date:2023-10-17 16:12:13  
 Humidity:65.0%  
 Remarks:12VDC

LUMINAIRE PHOTOMETRIC TEST REPORT

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm |                 |                  |
| NAME: AGL-300-30X60                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X60                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |

| DATA OF LAMP      |         | PHOTOMETRIC DATA      |        |                     |           |
|-------------------|---------|-----------------------|--------|---------------------|-----------|
| MODEL             | LED     | I <sub>max</sub> (cd) | 356.0  | S/MH (C0/180)       | 0.80      |
| NOMINAL POWER (W) | 3       | LOR (%)               | 100.0  | S/MH (C90/270)      | 0.83      |
| RATED VOLTAGE (V) | 24      | TOTAL FLUX (lm)       | 365.33 | η UP, DN (C0-180)   | 0.0, 50.2 |
| NOMINAL FLUX (lm) | 365.327 | CIE CLASS             | DIRECT | η UP, DN (C180-360) | 0.0, 49.8 |
| LAMPS INSIDE      | 1       | η up (%)              | 0.0    | CIBSE SHR NOM       | 0.75      |
| TEST VOLTAGE (V)  | 24      | η down (%)            | 100.0  | CIBSE SHR MAX       | 0.85      |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

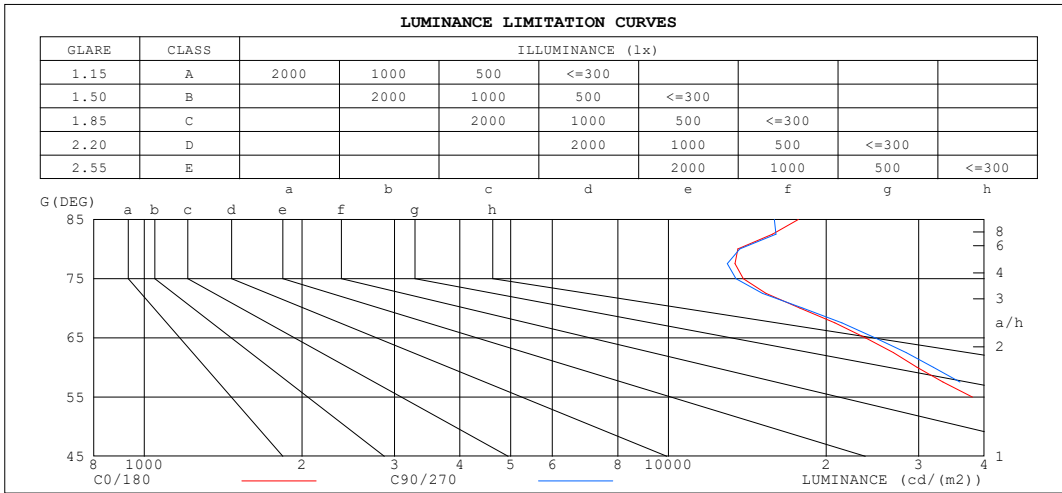
| $\gamma$ | C0                    | C45    | C90   | C135   | C180  | C225   | C270  | C315   | $\gamma$ | ∅ zone | ∅ total | %lum, lamp |
|----------|-----------------------|--------|-------|--------|-------|--------|-------|--------|----------|--------|---------|------------|
| 10       | 329.1                 | 325.4  | 318.8 | 314.2  | 311.1 | 314.2  | 318.8 | 325.4  | 0- 10    | 31.83  | 31.83   | 8.71,8.71  |
| 20       | 252.6                 | 246.3  | 241.1 | 234.5  | 231.1 | 234.5  | 241.1 | 246.3  | 10- 20   | 79.10  | 110.9   | 30.4,30.4  |
| 30       | 163.6                 | 156.5  | 160.3 | 145.1  | 145.0 | 145.1  | 160.3 | 156.5  | 20- 30   | 90.09  | 201.0   | 55,55      |
| 40       | 86.74                 | 86.91  | 87.91 | 78.11  | 75.74 | 78.11  | 87.91 | 86.91  | 30- 40   | 72.38  | 273.4   | 74.8,74.8  |
| 50       | 40.86                 | 44.04  | 43.08 | 39.44  | 35.99 | 39.44  | 43.08 | 44.04  | 40- 50   | 46.23  | 319.6   | 87.5,87.5  |
| 60       | 18.72                 | 21.47  | 20.10 | 19.23  | 16.82 | 19.23  | 20.10 | 21.47  | 50- 60   | 25.98  | 345.6   | 94.6,94.6  |
| 70       | 7.655                 | 8.770  | 7.752 | 7.332  | 6.474 | 7.332  | 7.752 | 8.770  | 60- 70   | 13.06  | 358.7   | 98.2,98.2  |
| 80       | 2.958                 | 3.090  | 2.982 | 2.801  | 2.908 | 2.801  | 2.982 | 3.090  | 70- 80   | 5.008  | 363.7   | 99.5,99.5  |
| 90       | 0.0016                | 0.0020 | 0     | 0.0036 | 0     | 0.0036 | 0     | 0.0020 | 80- 90   | 1.658  | 365.3   | 100,100    |
| 100      |                       |        |       |        |       |        |       |        | 90-100   |        |         |            |
| 110      |                       |        |       |        |       |        |       |        | 100-110  |        |         |            |
| 120      |                       |        |       |        |       |        |       |        | 110-120  |        |         |            |
| 130      |                       |        |       |        |       |        |       |        | 120-130  |        |         |            |
| 140      |                       |        |       |        |       |        |       |        | 130-140  |        |         |            |
| 150      |                       |        |       |        |       |        |       |        | 140-150  |        |         |            |
| 160      |                       |        |       |        |       |        |       |        | 150-160  |        |         |            |
| 170      |                       |        |       |        |       |        |       |        | 160-170  |        |         |            |
| 180      |                       |        |       |        |       |        |       |        | 170-180  |        |         |            |
| DEG      | LUMINOUS INTENSITY:cd |        |       |        |       |        |       |        | UNIT:lm  |        |         |            |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**LUMINANCE LIMITATION CURVES**

|                                                                                                                               |                        |                         |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|
| <b>Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz</b><br><b>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm</b> |                        |                         |
| <b>NAME: AGL-300-30X60</b>                                                                                                    | <b>TYPE: MR16 LAMP</b> | <b>WEIGHT: 100GM</b>    |
| <b>SPEC.: AGL-300-30X60</b>                                                                                                   | <b>DIM.: 50MM</b>      | <b>SERIAL No.: -</b>    |
| <b>MFR.: AQUALUX</b>                                                                                                          | <b>SUR.:</b>           | <b>Shielding Angle:</b> |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 17680  | 15924   |
| 80                | 13560  | 13672   |
| 75                | 13884  | 13443   |
| 70                | 17820  | 18045   |
| 65                | 23767  | 24802   |
| 60                | 29814  | 32013   |
| 55                | 37986  | 40698   |
| 50                | 50609  | 53364   |
| 45                | 67675  | 69957   |

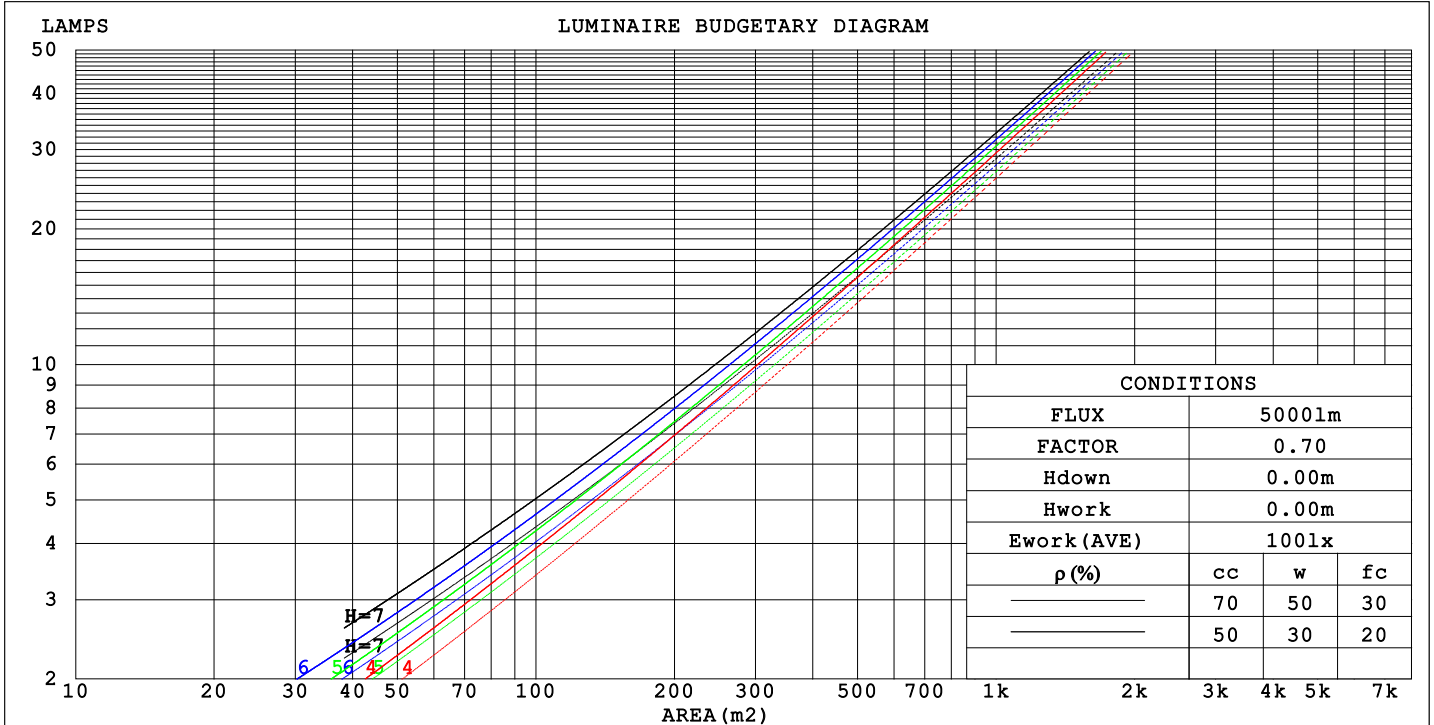
C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operator: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm |                 |                  |
| NAME: AGL-300-30X60                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X60                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |

| pcc             | 80%                   |      |      | 70%  |      |      | 50%  |      |      | 30%                              |      |      | 10%  |      |      | 0    |
|-----------------|-----------------------|------|------|------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|
|                 | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                              | 30%  | 10%  | 50%  | 30%  | 10%  |      |
| p <sub>w</sub>  |                       |      |      |      |      |      |      |      |      |                                  |      |      |      |      |      |      |
| p <sub>fc</sub> | 20%                   |      |      | 20%  |      |      | 20%  |      |      | 20%                              |      |      | 20%  |      |      | 0    |
| RCR             | RCR:Room Cavity Ratio |      |      |      |      |      |      |      |      | Coefficients of Utilization (CU) |      |      |      |      |      |      |
| 0.0             | 1.19                  | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06                             | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1.00 |
| 1.0             | 1.09                  | 1.06 | 1.03 | 1.07 | 1.04 | 1.01 | 1.03 | 1.00 | .98  | .99                              | .97  | .95  | .95  | .94  | .93  | .91  |
| 2.0             | .99                   | .94  | .90  | .98  | .93  | .89  | .94  | .91  | .87  | .91                              | .88  | .85  | .88  | .86  | .84  | .82  |
| 3.0             | .91                   | .85  | .80  | .89  | .84  | .80  | .87  | .82  | .78  | .84                              | .80  | .77  | .82  | .79  | .76  | .74  |
| 4.0             | .84                   | .77  | .72  | .82  | .76  | .72  | .80  | .75  | .71  | .78                              | .74  | .70  | .76  | .72  | .69  | .67  |
| 5.0             | .77                   | .70  | .65  | .76  | .70  | .65  | .74  | .69  | .64  | .73                              | .68  | .64  | .71  | .67  | .63  | .61  |
| 6.0             | .72                   | .65  | .60  | .71  | .64  | .59  | .69  | .63  | .59  | .68                              | .62  | .59  | .66  | .62  | .58  | .56  |
| 7.0             | .67                   | .60  | .55  | .66  | .59  | .55  | .64  | .59  | .54  | .63                              | .58  | .54  | .62  | .57  | .54  | .52  |
| 8.0             | .62                   | .55  | .51  | .62  | .55  | .51  | .60  | .54  | .50  | .59                              | .54  | .50  | .58  | .53  | .50  | .48  |
| 9.0             | .58                   | .52  | .47  | .58  | .51  | .47  | .57  | .51  | .47  | .56                              | .50  | .47  | .55  | .50  | .46  | .45  |
| 10.0            | .55                   | .48  | .44  | .54  | .48  | .44  | .53  | .48  | .44  | .53                              | .47  | .44  | .52  | .47  | .43  | .42  |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM



**WEC AND CCEC**

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm |                 |                  |
| NAME: AGL-300-30X60                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X60                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                              |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                              | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                              |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients (WEC) |      |      |      |      |      |      |      |      |   |
| 0.0  |                       |      |      |      |      |      |                                  |      |      |      |      |      |      |      |      |   |
| 1.0  | .215                  | .122 | .039 | .208 | .119 | .038 | .195                             | .112 | .036 | .184 | .106 | .034 | .173 | .100 | .032 |   |
| 2.0  | .206                  | .113 | .035 | .201 | .111 | .034 | .190                             | .106 | .033 | .180 | .101 | .032 | .170 | .096 | .030 |   |
| 3.0  | .196                  | .104 | .031 | .191 | .102 | .031 | .181                             | .098 | .030 | .173 | .095 | .029 | .164 | .091 | .028 |   |
| 4.0  | .185                  | .096 | .028 | .181 | .094 | .028 | .172                             | .091 | .027 | .165 | .088 | .027 | .157 | .086 | .026 |   |
| 5.0  | .175                  | .089 | .026 | .171 | .088 | .026 | .164                             | .085 | .025 | .157 | .083 | .025 | .150 | .080 | .024 |   |
| 6.0  | .165                  | .083 | .024 | .162 | .082 | .024 | .155                             | .080 | .023 | .149 | .078 | .023 | .144 | .076 | .022 |   |
| 7.0  | .156                  | .077 | .022 | .153 | .076 | .022 | .148                             | .075 | .021 | .142 | .073 | .021 | .137 | .071 | .021 |   |
| 8.0  | .148                  | .072 | .020 | .146 | .072 | .020 | .140                             | .070 | .020 | .136 | .069 | .020 | .131 | .067 | .020 |   |
| 9.0  | .141                  | .068 | .019 | .138 | .067 | .019 | .134                             | .066 | .019 | .130 | .065 | .019 | .126 | .064 | .018 |   |
| 10.0 | .134                  | .064 | .018 | .132 | .064 | .018 | .128                             | .063 | .018 | .124 | .062 | .017 | .120 | .060 | .017 |   |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                                         |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                         | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                                         |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients (CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                        | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .174                  | .157 | .142 | .149 | .135 | .122 | .102                                        | .093 | .084 | .059 | .054 | .049 | .019 | .017 | .016 |   |
| 2.0  | .161                  | .132 | .108 | .138 | .114 | .094 | .094                                        | .079 | .065 | .054 | .046 | .038 | .017 | .015 | .012 |   |
| 3.0  | .150                  | .114 | .085 | .129 | .098 | .074 | .088                                        | .068 | .052 | .051 | .040 | .030 | .016 | .013 | .010 |   |
| 4.0  | .141                  | .100 | .068 | .121 | .086 | .059 | .083                                        | .060 | .042 | .048 | .035 | .025 | .015 | .011 | .008 |   |
| 5.0  | .133                  | .088 | .055 | .114 | .076 | .048 | .079                                        | .053 | .034 | .046 | .031 | .020 | .015 | .010 | .007 |   |
| 6.0  | .126                  | .079 | .046 | .108 | .069 | .040 | .075                                        | .048 | .028 | .043 | .028 | .017 | .014 | .009 | .006 |   |
| 7.0  | .119                  | .072 | .039 | .103 | .063 | .034 | .071                                        | .044 | .024 | .041 | .026 | .014 | .013 | .008 | .005 |   |
| 8.0  | .114                  | .066 | .033 | .098 | .057 | .029 | .068                                        | .040 | .021 | .039 | .024 | .012 | .013 | .008 | .004 |   |
| 9.0  | .108                  | .061 | .029 | .093 | .053 | .025 | .065                                        | .037 | .018 | .038 | .022 | .011 | .012 | .007 | .004 |   |
| 10.0 | .103                  | .057 | .026 | .089 | .049 | .022 | .062                                        | .035 | .016 | .036 | .020 | .009 | .012 | .007 | .003 |   |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**UGR(Unified Glare Rating) Table**

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm |                 |                  |
| NAME: AGL-300-30X60                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X60                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |

|                |     |     |     |     |     |     |     |     |     |     |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ceiling/cavity | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| walls          | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| working plane  | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

| Room dimensions |        | Viewed crosswise |      |      |      |      | Viewed endwise |      |      |      |      |
|-----------------|--------|------------------|------|------|------|------|----------------|------|------|------|------|
| x = 2H          | y = 2H | 27.7             | 28.8 | 27.9 | 29.0 | 29.2 | 27.8           | 28.9 | 28.0 | 29.1 | 29.3 |
|                 | 3H     | 27.9             | 29.0 | 28.2 | 29.2 | 29.4 | 28.1           | 29.1 | 28.3 | 29.3 | 29.5 |
|                 | 4H     | 28.0             | 29.0 | 28.3 | 29.2 | 29.4 | 28.1           | 29.1 | 28.4 | 29.3 | 29.6 |
|                 | 6H     | 28.0             | 29.0 | 28.3 | 29.2 | 29.5 | 28.1           | 29.1 | 28.4 | 29.3 | 29.6 |
|                 | 8H     | 28.1             | 29.0 | 28.4 | 29.2 | 29.5 | 28.2           | 29.1 | 28.5 | 29.3 | 29.6 |
|                 | 12H    | 28.1             | 29.0 | 28.4 | 29.2 | 29.5 | 28.2           | 29.1 | 28.5 | 29.3 | 29.6 |
| 4H              | 2H     | 27.8             | 28.8 | 28.1 | 29.0 | 29.3 | 27.9           | 28.9 | 28.2 | 29.2 | 29.4 |
|                 | 3H     | 28.2             | 29.1 | 28.5 | 29.3 | 29.6 | 28.3           | 29.2 | 28.6 | 29.4 | 29.7 |
|                 | 4H     | 28.3             | 29.1 | 28.7 | 29.4 | 29.7 | 28.4           | 29.2 | 28.7 | 29.5 | 29.8 |
|                 | 6H     | 28.4             | 29.1 | 28.8 | 29.4 | 29.8 | 28.5           | 29.2 | 28.9 | 29.5 | 29.8 |
|                 | 8H     | 28.5             | 29.1 | 28.9 | 29.5 | 29.9 | 28.6           | 29.2 | 29.0 | 29.6 | 29.9 |
|                 | 12H    | 28.6             | 29.2 | 29.0 | 29.5 | 29.9 | 28.6           | 29.2 | 29.0 | 29.6 | 30.0 |
| 8H              | 4H     | 28.3             | 28.9 | 28.7 | 29.3 | 29.7 | 28.4           | 29.0 | 28.8 | 29.4 | 29.7 |
|                 | 6H     | 28.5             | 29.0 | 28.9 | 29.4 | 29.8 | 28.5           | 29.1 | 29.0 | 29.5 | 29.9 |
|                 | 8H     | 28.6             | 29.1 | 29.1 | 29.5 | 30.0 | 28.7           | 29.2 | 29.2 | 29.6 | 30.0 |
|                 | 12H    | 28.8             | 29.2 | 29.3 | 29.6 | 30.1 | 28.8           | 29.2 | 29.3 | 29.7 | 30.1 |
| 12H             | 4H     | 28.3             | 28.8 | 28.7 | 29.2 | 29.6 | 28.3           | 28.9 | 28.7 | 29.3 | 29.7 |
|                 | 6H     | 28.5             | 28.9 | 28.9 | 29.4 | 29.8 | 28.5           | 29.0 | 29.0 | 29.4 | 29.9 |
|                 | 8H     | 28.7             | 29.1 | 29.2 | 29.5 | 30.0 | 28.7           | 29.1 | 29.2 | 29.6 | 30.1 |

|                                                                 |               |               |
|-----------------------------------------------------------------|---------------|---------------|
| Variations with the observer position at spacings(CIE Pub.117): |               |               |
| S = 1.0H                                                        | + 0.9 / - 1.4 | + 1.0 / - 1.3 |
| 1.5H                                                            | + 1.1 / - 0.9 | + 1.1 / - 0.9 |
| 2.0H                                                            | + 1.7 / - 1.4 | + 1.9 / - 1.3 |

CIE Pub.117, 365.3 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.5)  
 Area: 0.001256 m2

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**UTILIZATION FACTORS TABLE**

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm |                 |                  |
| NAME: AGL-300-30X60                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X60                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |

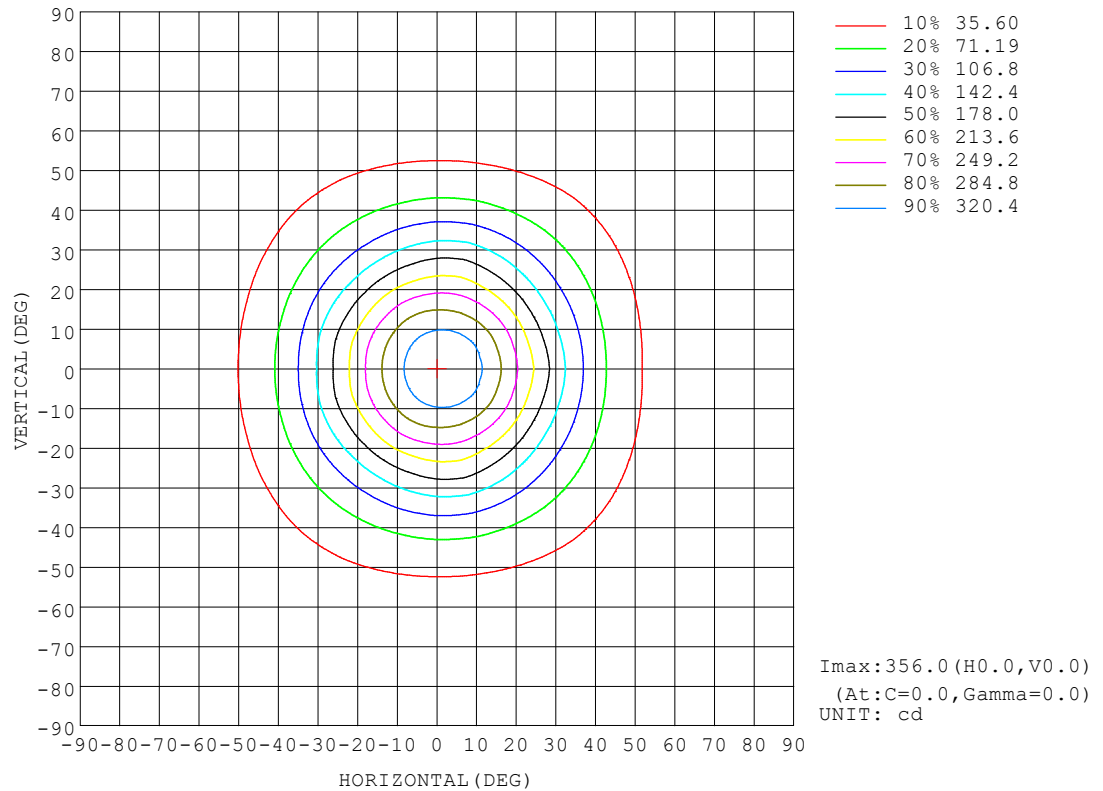
| REFLECTANCE                      |                                               |     |           |     |     |     |               |     |     |        |
|----------------------------------|-----------------------------------------------|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8                                           | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 0.5           | 0.5 | 0.5 | 0      |
| Walls                            | 0.7                                           | 0.5 | 0.3       | 0.7 | 0.5 | 0.3 | 0.7           | 0.5 | 0.3 | 0      |
| Working plane                    | 0.2                                           | 0.2 | 0.2       | 0.2 | 0.2 | 0.2 | 0.2           | 0.2 | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5 |     |           |     |     |     |               |     |     |        |
| k = 0.60                         | 76                                            | 67  | 62        | 75  | 67  | 62  | 74            | 67  | 62  | 57     |
| 0.80                             | 85                                            | 77  | 71        | 84  | 76  | 71  | 82            | 75  | 71  | 66     |
| 1.00                             | 91                                            | 83  | 78        | 90  | 83  | 78  | 88            | 83  | 78  | 73     |
| 1.25                             | 96                                            | 89  | 85        | 95  | 89  | 84  | 93            | 87  | 83  | 78     |
| 1.50                             | 100                                           | 93  | 89        | 99  | 93  | 88  | 96            | 91  | 87  | 82     |
| 2.00                             | 104                                           | 99  | 94        | 103 | 98  | 94  | 100           | 95  | 92  | 86     |
| 2.50                             | 107                                           | 102 | 98        | 105 | 100 | 97  | 102           | 98  | 95  | 88     |
| 3.00                             | 109                                           | 104 | 101       | 107 | 103 | 100 | 103           | 100 | 97  | 90     |
| 4.00                             | 111                                           | 108 | 105       | 109 | 106 | 103 | 105           | 103 | 101 | 93     |
| 5.00                             | 113                                           | 110 | 107       | 111 | 108 | 106 | 107           | 104 | 103 | 94     |
| ROOM INDEX                       | UF(total)                                     |     |           |     |     |     |               |     |     | Direct |
| According to DIN EN 13032-2 2004 |                                               |     | Suspended |     |     |     | SHRNOM = 1.25 |     |     |        |

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

ISOCANDELA DIAGRAM

|                                                                                                                 |                 |                  |
|-----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm |                 |                  |
| NAME: AGL-300-30X60                                                                                             | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X60                                                                                            | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                   | SUR.:           | Shielding Angle: |

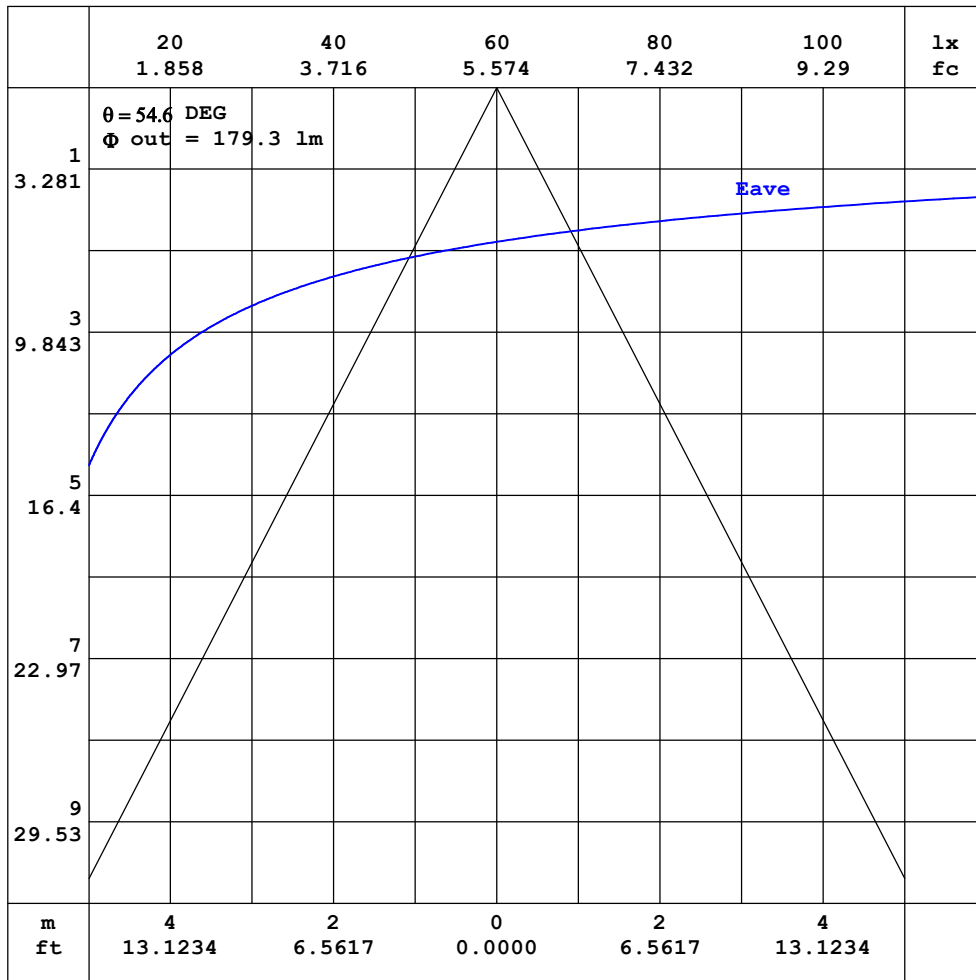


C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**AAI CURVES**

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm |                 |                  |
| NAME: AGL-300-30X60                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X60                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |



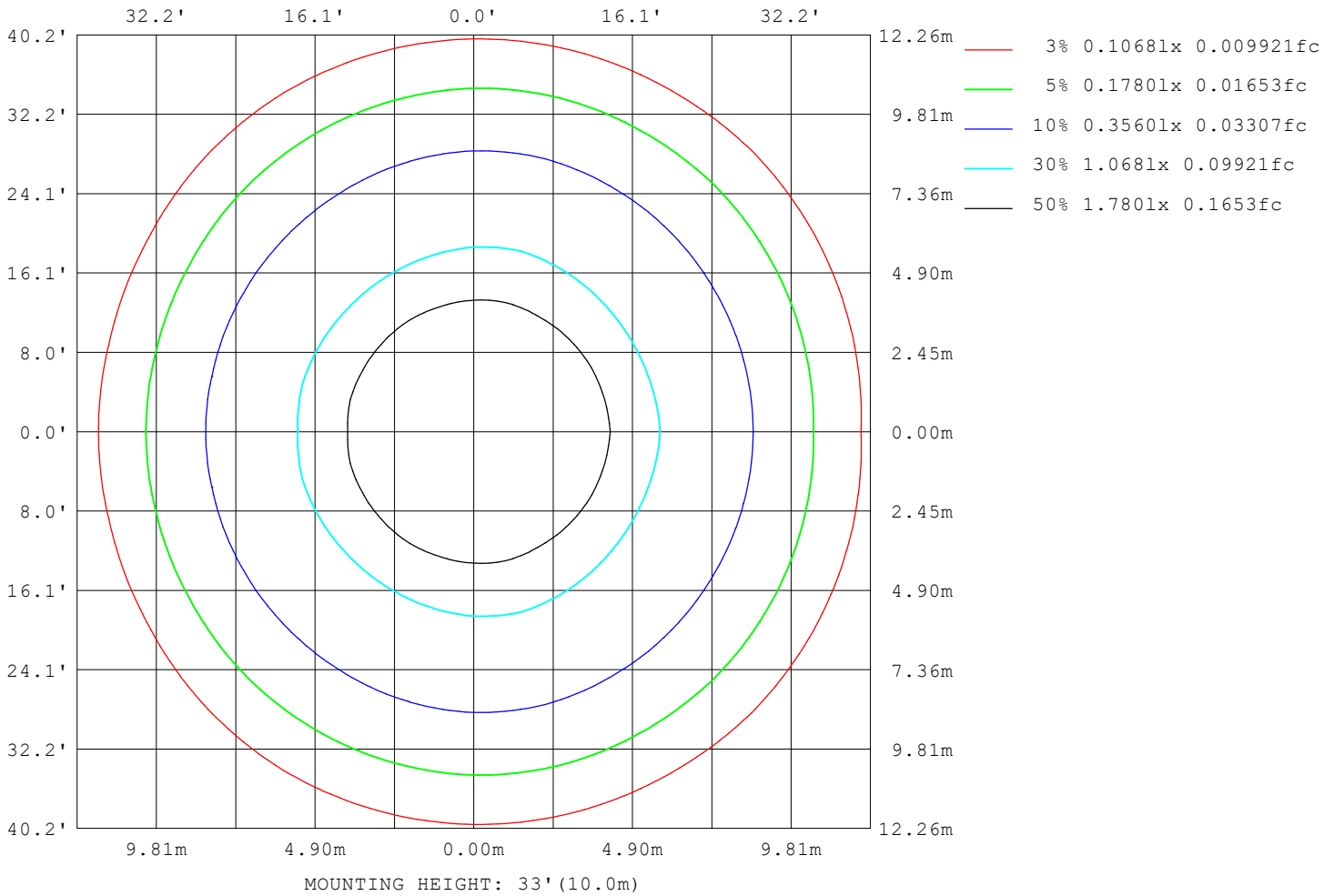
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

ISOLUX DIAGRAM

|                                                                                                                 |                 |                  |
|-----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm |                 |                  |
| NAME: AGL-300-30X60                                                                                             | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X60                                                                                            | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                   | SUR.:           | Shielding Angle: |



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**LED Avg.L Report**

|                                                                                                                 |                 |                  |
|-----------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz<br>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm |                 |                  |
| NAME: AGL-300-30X60                                                                                             | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X60                                                                                            | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                                                                                   | SUR.:           | Shielding Angle: |

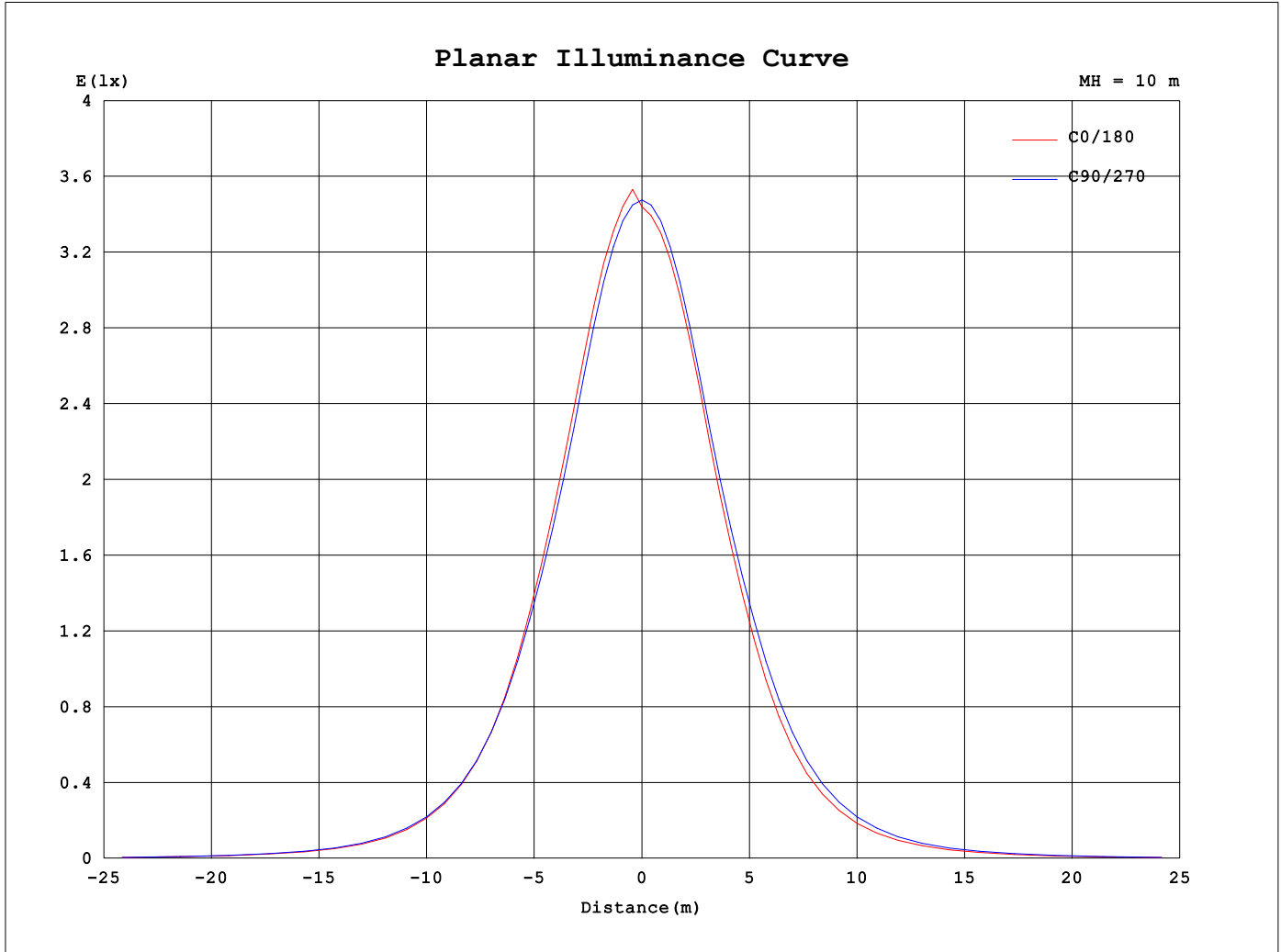
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 22236 |
| L_0~180 (75) av  | 13010 |
| L_0~180 (85) av  | 14427 |
| L_90~270 (65) av | 24802 |
| L_90~270 (75) av | 13443 |
| L_90~270 (85) av | 15924 |
| L_45 (65) av     | 25393 |
| L_45 (75) av     | 13924 |
| L_45 (85) av     | 15251 |

Standard: GB/T 29293-2012

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

Planar Illuminance Curve



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operator: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM



LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                        |                 |                  |
|--------------------------------------------------------|-----------------|------------------|
| Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz  |                 |                  |
| UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm |                 |                  |
| NAME: AGL-300-30X60                                    | TYPE: MR16 LAMP | WEIGHT: 100GM    |
| SPEC.: AGL-300-30X60                                   | DIM.: 50MM      | SERIAL No.: -    |
| MFR.: AQUALUX                                          | SUR.:           | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG) \ γ (DEG) | 0    | 15   | 30   | 45   | 60   | 75   | 90   | 105  | 120  | 135  | 150  | 165  | 180  | 195  | 210  | 225  | 240  | 255  | 270  |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                 | 356  | 353  | 352  | 350  | 350  | 348  | 348  | 346  | 346  | 345  | 345  | 344  | 344  | 344  | 345  | 345  | 346  | 346  | 348  |
| 5                 | 348  | 346  | 345  | 344  | 343  | 342  | 341  | 339  | 338  | 336  | 335  | 334  | 334  | 334  | 335  | 336  | 338  | 339  | 341  |
| 10                | 329  | 328  | 328  | 325  | 323  | 321  | 319  | 317  | 316  | 314  | 313  | 311  | 311  | 311  | 313  | 314  | 316  | 317  | 319  |
| 15                | 295  | 294  | 293  | 291  | 288  | 285  | 283  | 282  | 281  | 279  | 278  | 277  | 276  | 277  | 278  | 279  | 281  | 282  | 283  |
| 20                | 253  | 250  | 249  | 246  | 244  | 244  | 241  | 238  | 237  | 235  | 234  | 234  | 231  | 234  | 234  | 235  | 237  | 238  | 241  |
| 25                | 209  | 203  | 201  | 200  | 200  | 204  | 201  | 195  | 192  | 189  | 188  | 191  | 188  | 191  | 188  | 189  | 192  | 195  | 201  |
| 30                | 164  | 158  | 155  | 157  | 160  | 164  | 160  | 154  | 148  | 145  | 146  | 148  | 145  | 148  | 146  | 145  | 148  | 154  | 160  |
| 35                | 121  | 119  | 117  | 118  | 121  | 124  | 121  | 116  | 111  | 108  | 108  | 107  | 106  | 107  | 108  | 108  | 111  | 116  | 121  |
| 40                | 86.7 | 86.3 | 86.2 | 86.9 | 87.9 | 89.2 | 87.9 | 84.6 | 80.8 | 78.1 | 76.4 | 75.4 | 75.7 | 75.4 | 76.4 | 78.1 | 80.8 | 84.6 | 87.9 |
| 45                | 60.1 | 61.0 | 61.7 | 62.5 | 62.5 | 63.0 | 62.1 | 59.9 | 57.8 | 55.7 | 53.5 | 52.6 | 52.6 | 52.6 | 53.5 | 55.7 | 57.8 | 59.9 | 62.1 |
| 50                | 40.9 | 42.3 | 43.3 | 44.0 | 43.7 | 43.6 | 43.1 | 42.2 | 41.2 | 39.4 | 37.2 | 36.0 | 36.0 | 36.0 | 37.2 | 39.4 | 41.2 | 42.2 | 43.1 |
| 55                | 27.4 | 28.9 | 30.3 | 30.7 | 29.9 | 29.4 | 29.3 | 29.3 | 29.0 | 27.6 | 25.7 | 24.5 | 24.4 | 24.5 | 25.7 | 27.6 | 29.0 | 29.3 | 29.3 |
| 60                | 18.7 | 19.9 | 21.0 | 21.5 | 20.7 | 20.3 | 20.1 | 20.3 | 20.2 | 19.2 | 17.7 | 16.9 | 16.8 | 16.9 | 17.7 | 19.2 | 20.2 | 20.3 | 20.1 |
| 65                | 12.6 | 13.4 | 14.2 | 14.4 | 13.8 | 13.4 | 13.2 | 13.2 | 13.2 | 12.5 | 11.6 | 11.0 | 11.0 | 11.0 | 11.6 | 12.5 | 13.2 | 13.2 | 13.2 |
| 70                | 7.66 | 8.12 | 8.66 | 8.77 | 8.27 | 7.91 | 7.75 | 7.75 | 7.74 | 7.33 | 6.73 | 6.47 | 6.47 | 6.47 | 6.73 | 7.33 | 7.74 | 7.75 | 7.75 |
| 75                | 4.51 | 4.68 | 4.88 | 4.93 | 4.67 | 4.47 | 4.37 | 4.33 | 4.29 | 4.13 | 3.88 | 3.98 | 3.95 | 3.98 | 3.88 | 4.13 | 4.29 | 4.33 | 4.37 |
| 80                | 2.96 | 3.01 | 3.05 | 3.09 | 3.09 | 3.01 | 2.98 | 2.96 | 2.88 | 2.80 | 2.71 | 2.93 | 2.91 | 2.93 | 2.71 | 2.80 | 2.88 | 2.96 | 2.98 |
| 85                | 1.94 | 1.99 | 2.02 | 2.04 | 1.96 | 1.86 | 1.74 | 1.61 | 1.45 | 1.29 | 1.11 | 1.29 | 1.22 | 1.29 | 1.11 | 1.29 | 1.45 | 1.61 | 1.74 |
| 90                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

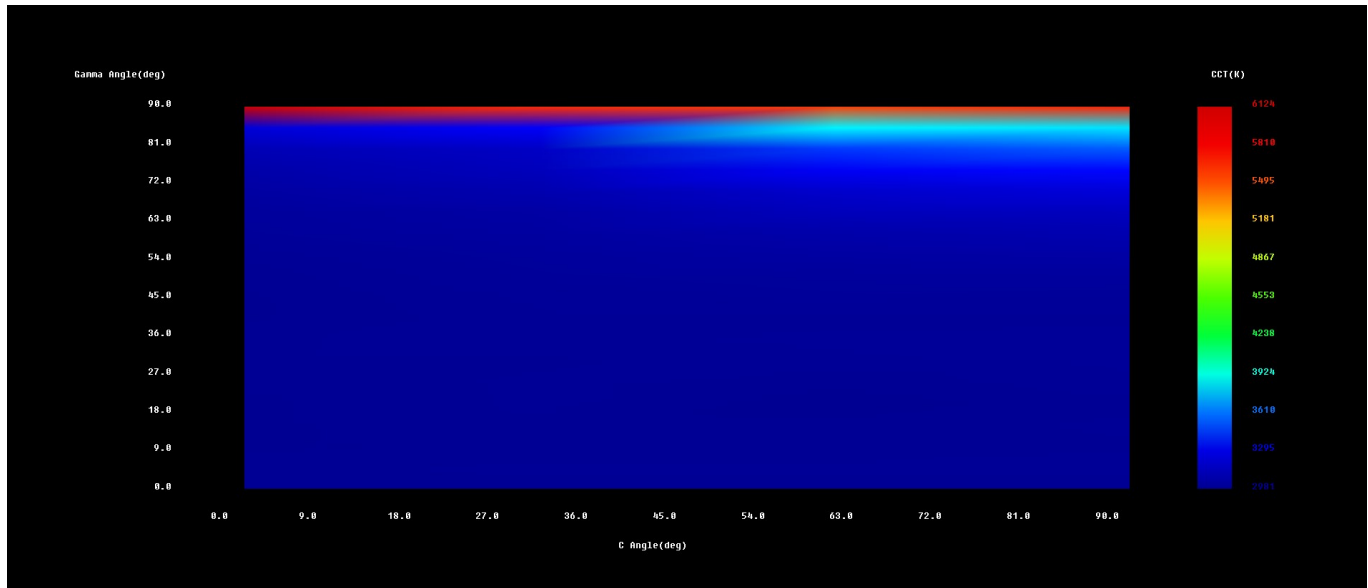
C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM



### Spatial Color Distribution Report

|                     |                      |               |
|---------------------|----------------------|---------------|
| NAME: AGL-300-30X60 | TYPE: MR16 LAMP      | WEIGHT: 100GM |
| DIM.: 50MM          | SPEC.: AGL-300-30X60 | SERIAL No.: - |
| MFR.: AQUALUX       |                      |               |



**Color Parameters:**

Average: x=0.4347,y=0.3988 u'=0.2514,v'=0.5189 CCT=2994K Ra=81.7 Rf=83 Rg=97  
Center : x=0.4349,y=0.3985 u'=0.2517,v'=0.5189 CCT=2989K Ra=81.4 Rf=82 Rg=97  
IESNA LM-79-2019 Max. du'v': 0.0016 / max.du'v': 0.0000[Set Range]  
GB/T 24824(LB/T 001-2009):: avg. color nonuniformity du'v':0.0002  
GB/T 24824(LB/T 001-2009):: max. color nonuniformity du'v':0.0007  
Average: R1=80 R2=90 R3=96 R4=80 R5=80 R6=88 R7=82 R8=57 R9=3 R10=78  
R11=79 R12=73 R13=82 R14=98 R15=73

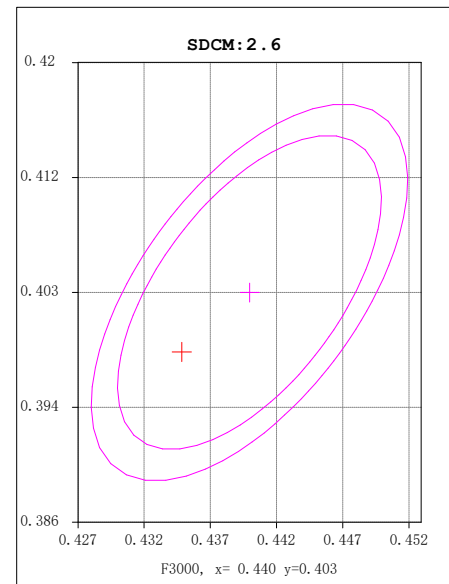
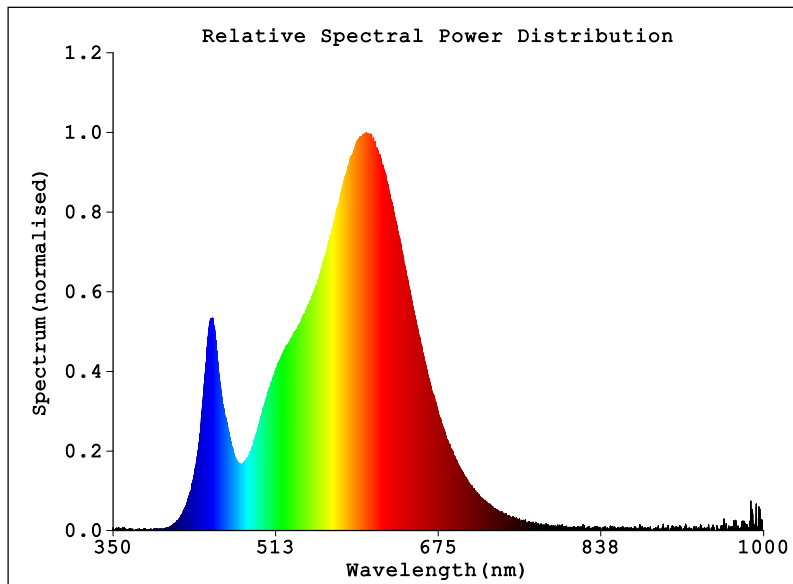
Tester: NICK  
Temperature: 20°C  
Manufacturer: AQUALUX

Date: 12 October 2023  
Humidity: 65.0%  
Remarks: AGL-300-30X603W / 3000K / 60D / 300LM

System: GO-SPEX500\_V1

### Spectral Radiant Test Report

|                     |                      |               |
|---------------------|----------------------|---------------|
| NAME: AGL-300-30X60 | TYPE: MR16 LAMP      | WEIGHT: 100GM |
| DIM.: 50MM          | SPEC.: AGL-300-30X60 | SERIAL No.: - |
| MFR.: AQUALUX       |                      |               |



#### Photon & Colormetric & Photometric Quantities:

Chromaticity Coordinates: x=0.4349 y=0.3985/u'=0.2517 v'=0.5189 duv=-0.00196

Tc=2989K Dominant WL: Ld=583.6nm Purity=50.1%

Ratio: R=22.9% G=74.6% B=2.4% Peak WL: Lp=603.0nm HWL: 122.6nm

Rendering Index: Ra=81.4 TM-30: Rf=82 Rg=97

R1 =80 R2 =90 R3 =96 R4 =79 R5 =80 R6 =88 R7 =81

R8 =57 R9 =2 R10=77 R11=79 R12=73 R13=82 R14=98 R15=72

E = 35.29 lx Ee = 0.1080 W/m<sup>2</sup>

Status: T=1728.00ms Ip=55935 (85%) [ HAAS-1200(CAN) ]

Electrical: U=23.872V I=0.13861A P=3.309W PF=1.0000

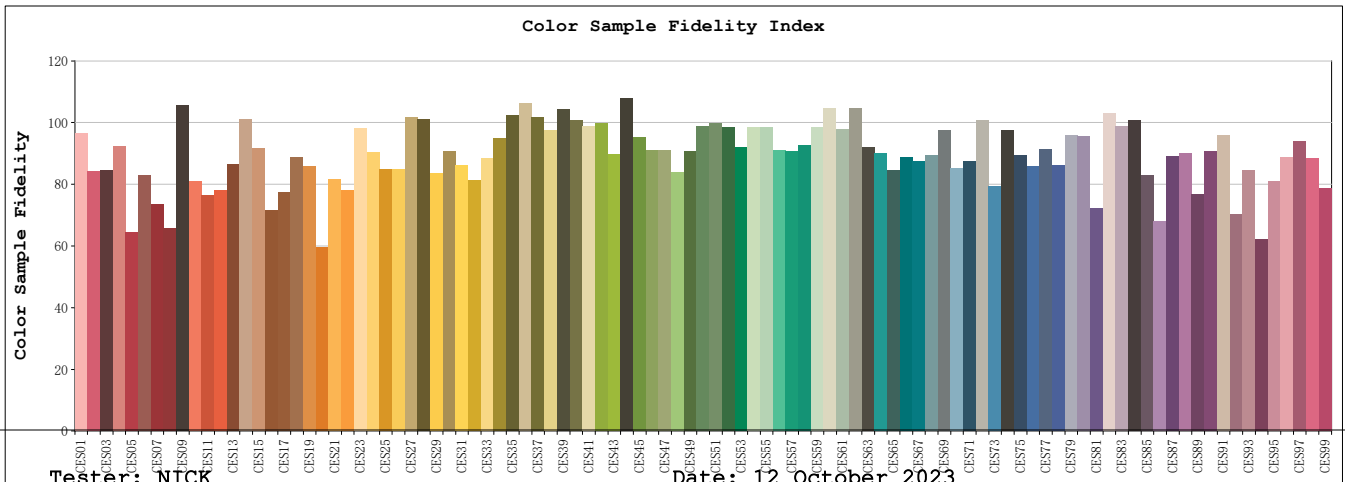
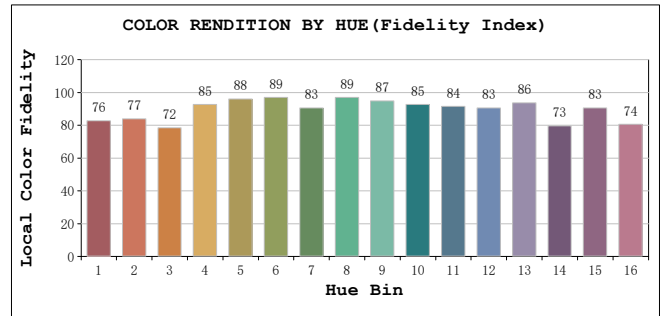
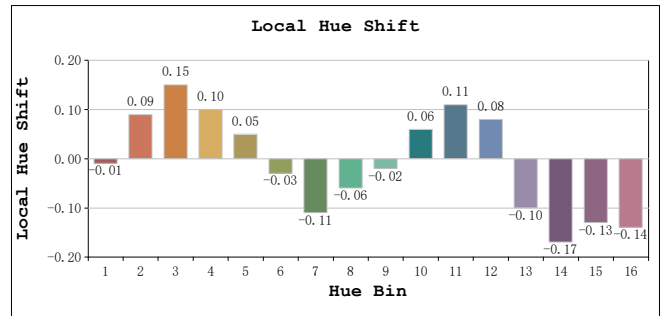
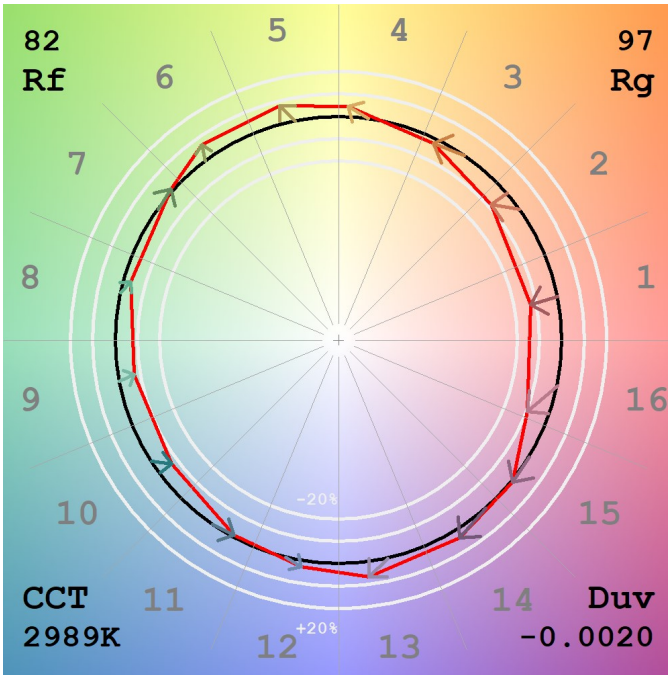
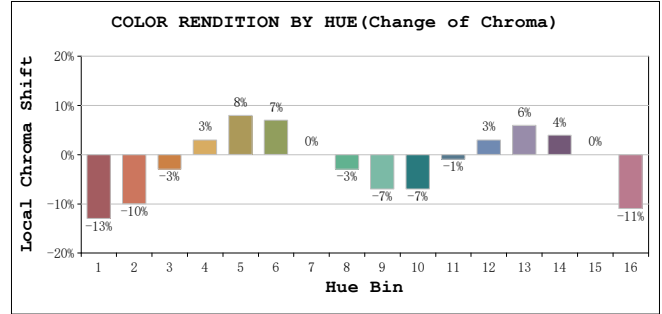
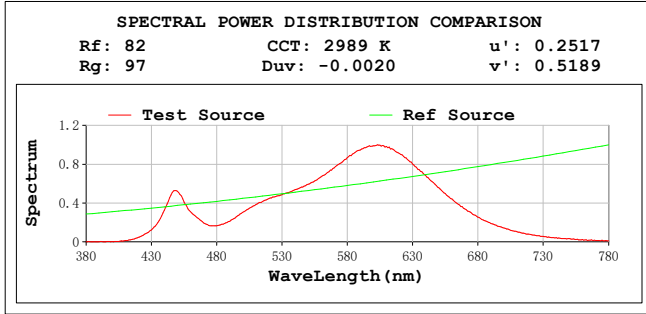
Test position: Center

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-30X603W / 3000K / 60D / 300LM

System: GO-SPEX500\_V1

# TM30



**All Rf:**

|             |             |             |
|-------------|-------------|-------------|
| Rf1 = 88.5  | Rf2 = 77.2  | Rf3 = 77.4  |
| Rf4 = 84.6  | Rf5 = 59.0  | Rf6 = 75.9  |
| Rf7 = 67.6  | Rf8 = 60.4  | Rf9 = 96.9  |
| Rf10 = 74.4 | Rf11 = 70.0 | Rf12 = 71.6 |
| Rf13 = 79.4 | Rf14 = 92.9 | Rf15 = 84.0 |
| Rf16 = 65.7 | Rf17 = 70.8 | Rf18 = 81.6 |
| Rf19 = 78.7 | Rf20 = 54.7 | Rf21 = 75.0 |
| Rf22 = 71.6 | Rf23 = 90.1 | Rf24 = 82.7 |
| Rf25 = 77.8 | Rf26 = 77.9 | Rf27 = 93.2 |
| Rf28 = 92.6 | Rf29 = 76.6 | Rf30 = 83.1 |
| Rf31 = 79.0 | Rf32 = 74.7 | Rf33 = 81.1 |
| Rf34 = 87.1 | Rf35 = 93.8 | Rf36 = 97.6 |
| Rf37 = 93.4 | Rf38 = 89.5 | Rf39 = 95.7 |
| Rf40 = 92.3 | Rf41 = 90.5 | Rf42 = 91.5 |
| Rf43 = 82.2 | Rf44 = 98.8 | Rf45 = 87.2 |
| Rf46 = 83.6 | Rf47 = 83.4 | Rf48 = 76.9 |
| Rf49 = 83.1 | Rf50 = 90.6 | Rf51 = 91.6 |
| Rf52 = 90.1 | Rf53 = 84.5 | Rf54 = 90.4 |
| Rf55 = 90.3 | Rf56 = 83.5 | Rf57 = 83.1 |
| Rf58 = 84.9 | Rf59 = 90.2 | Rf60 = 95.9 |
| Rf61 = 89.6 | Rf62 = 96.0 | Rf63 = 84.5 |
| Rf64 = 82.6 | Rf65 = 77.6 | Rf66 = 81.5 |
| Rf67 = 80.1 | Rf68 = 81.9 | Rf69 = 89.4 |
| Rf70 = 78.2 | Rf71 = 80.3 | Rf72 = 92.2 |
| Rf73 = 72.9 | Rf74 = 89.4 | Rf75 = 81.9 |
| Rf76 = 78.6 | Rf77 = 83.8 | Rf78 = 79.0 |
| Rf79 = 88.1 | Rf80 = 87.5 | Rf81 = 66.3 |
| Rf82 = 94.5 | Rf83 = 90.6 | Rf84 = 92.3 |
| Rf85 = 75.9 | Rf86 = 62.4 | Rf87 = 81.9 |
| Rf88 = 82.6 | Rf89 = 70.4 | Rf90 = 83.2 |
| Rf91 = 88.0 | Rf92 = 64.6 | Rf93 = 77.6 |
| Rf94 = 57.1 | Rf95 = 74.4 | Rf96 = 81.3 |
| Rf97 = 86.3 | Rf98 = 81.3 | Rf99 = 72.3 |

Tester: NICK  
Temperature: 20°C  
Manufacturer: AQUALUX

Date: 12 October 2023  
Humidity: 65.0%  
Remarks: AGL-300-30X603W / 3000K / 60D / 300LM

System: GO-SPEX500\_V1



