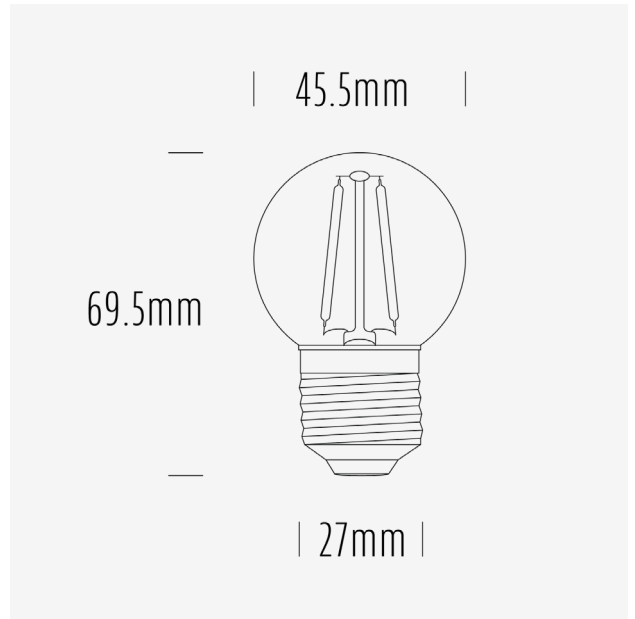


# AGL G Series

E27 LED Globes



## AQF-G-003-2200K / 2200K / E27



### Product Data

Product Code	AQF-G-003-2200K
Description	Aqualux G Series LED Lamp
Type	E27
Construction	PET Shell + LED + Aluminium Base
Warranty	3 Years

### Electrical Data

Input Voltage Range	24V AC/DC			
Nominal Voltage	24VDC			
Nominal Power	1.5W			
Nominal Current	63mA			
Input Voltage	-	-	<b>24VDC</b>	24VAC
Rated Power	-	-	<b>0.4</b>	1.2
Operating Frequency	-	-	-	50Hz
Max. no. of lamps on AQD24-040	-	-	-	-
Max. no. of lamps on AQD24-100	-	-	-	-
Max. no. of lamps on AQD24-240	-	-	-	-
Dimming Compatibility	PWM (PSU dependant)			
Wiring Scheme	Parallel			
Startup Time	< 0.5s			

### Mechanical & Thermal Data

Overall Length	69.5mm
Max Diameter	45.5mm
Lamp Base	E27
Weight	14g
Operating Temp Range	-20° - 60°
IP Rating	IP20

### Photometric Data

Nominal Flux (lm)	82
Input Voltage	- - <b>24VDC</b> 24VAC
Input Power (W)	- - <b>0.4</b> 1.2
Rated Flux (lm)	- - <b>45</b> 99
Efficacy (lm/W)	- - <b>121</b> 81
CCT	2200K
CCT Description	Ultra Warm White
CRI (Ra)	94
CRI (R9)	64
TM-30 (Rf)	92
TM-30 (Rg)	100
SDCM	-
Peak Intensity (cd)	4.9
Nominal Beam Angle	-
Measured Beam Angle (FWHM)	311°

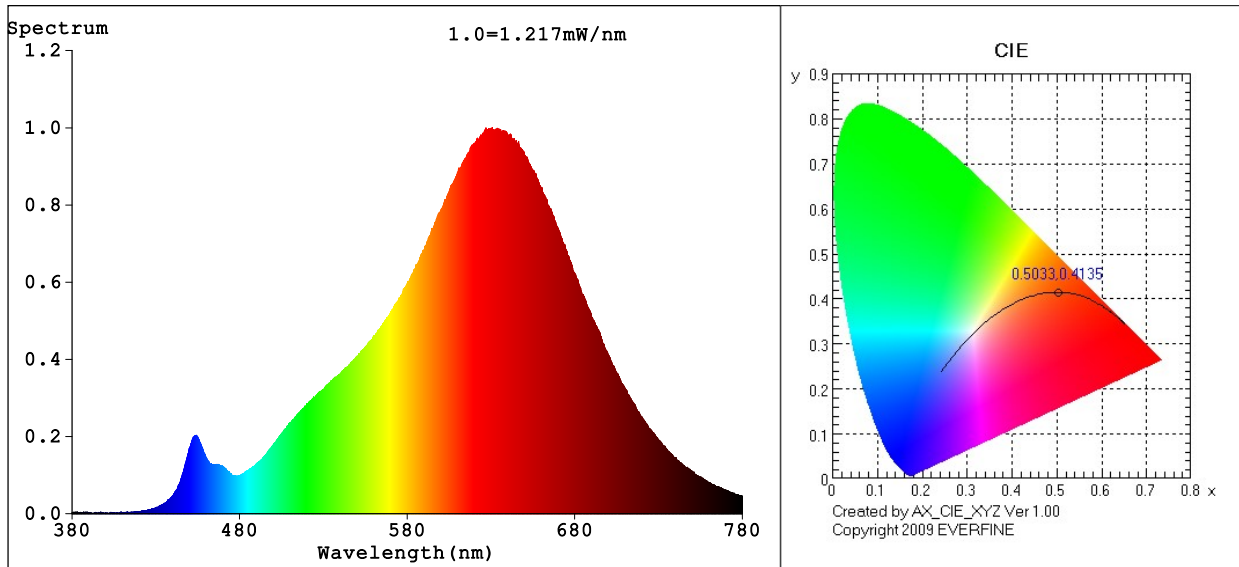
### Lifespan Data

L70	100,000h
Switching Cycles	100,000

### Compliance Data

EMI	Yes
RCM	N/A
Mercury Content	0mg

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.5033$   $y=0.4135$  /  $u'=0.2894$   $v'=0.5351$   
 CCT=2211K (Duv=-0.0006) Dominant WL:Ld =587.3nm WL:Lc = --nm Purity=75.2%  
 Ratio:R=31.6% G=66.7% B=1.7%; Peak WL:Lp=630.8nm FWHM=124.5nm  
 Render Index:Ra=93.9 AvgR=92.1 TM30:Rf=92 Rg=100

R1 =95 R2 =98 R3 =99 R4 =94 R5 =95 R6 =98 R7 =91  
 R8 =82 R9 =64 R10=95 R11=96 R12=90 R13=96 R14=99 R15=90

**Photo Parameters:**

Flux = 44.79 lm Eff. : 121.39 lm/W Fe = 177.9 mW

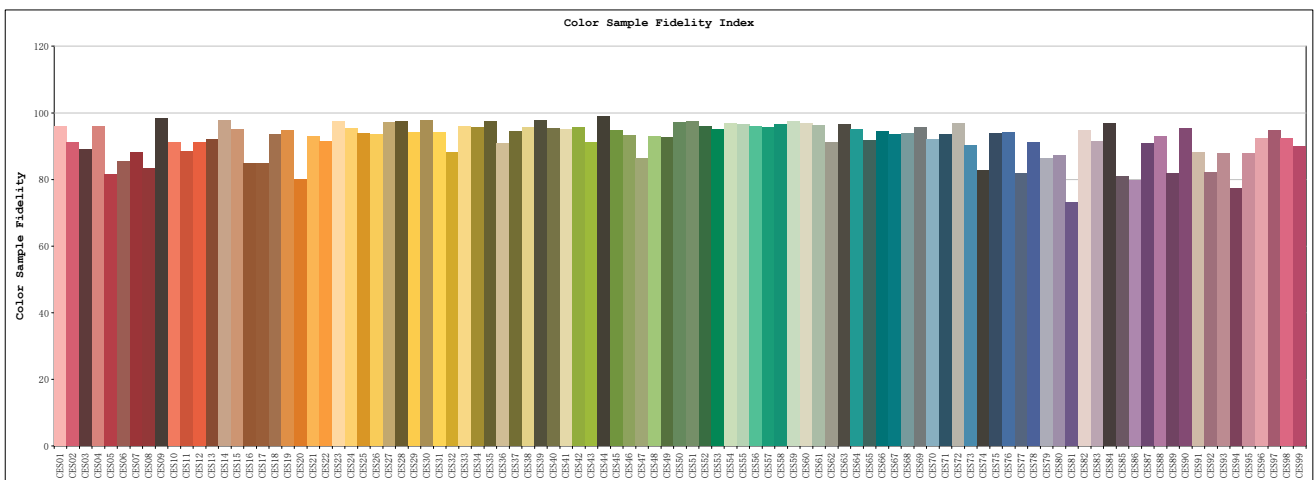
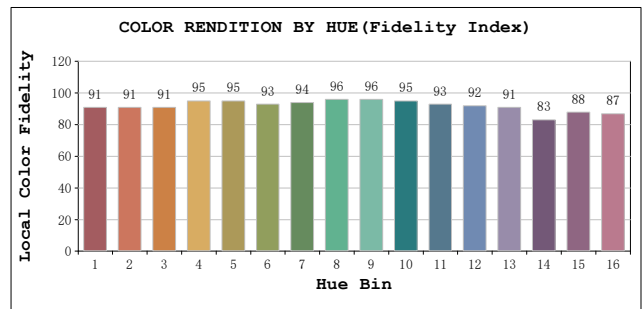
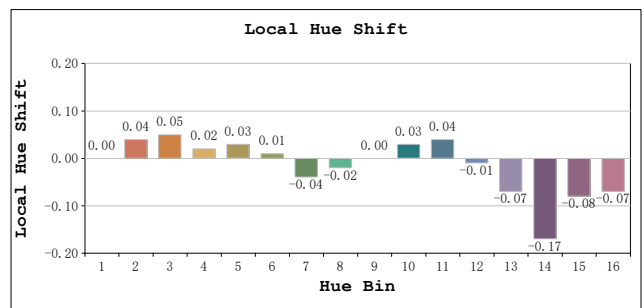
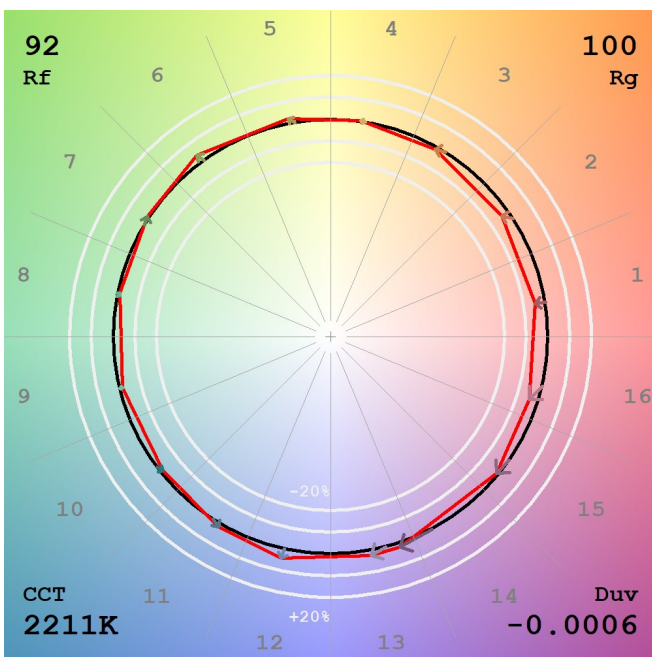
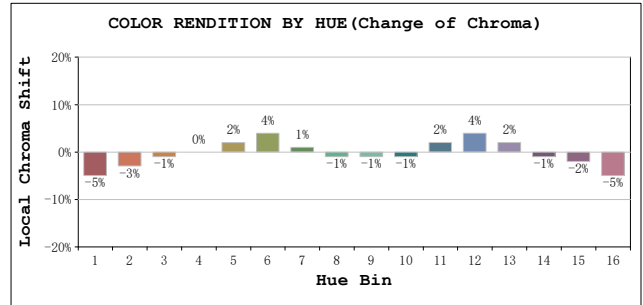
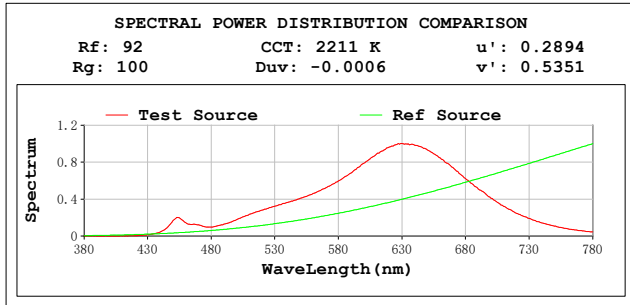
**Electrical parameters:**

V = 24.004 V I = 0.01537 A P = 0.3690 W PF = 1.0000  
 LEVEL:OUT WHITE:EXT\_2200K  
 Status: Integral T = 2000 ms Ip = 37203 (57%)

**GBT5702**

# TM30

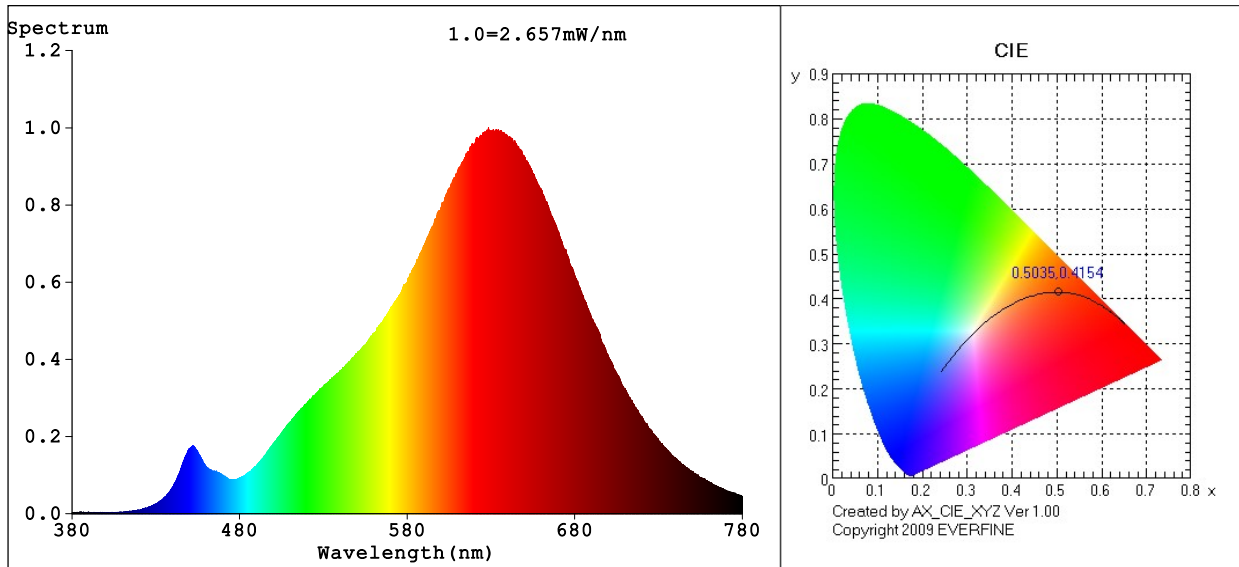
View Angle: 2 Deg



Model:AQF-G-003-2200K  
 Tester:EC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AQF-G-003-2200K 24V DC  
 Date:2023-10-23 16:20:16  
 Humidity:65.0%  
 Remarks:24VDC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.5035$   $y=0.4154$  /  $u'=0.2886$   $v'=0.5358$   
 CCT=2222K (Duv=0.0000) Dominant WL:Ld =587.1nm WL:Lc = --nm Purity=75.8%  
 Ratio:R=31.4% G=67.1% B=1.6%; Peak WL:Lp=628.5nm FWHM=125.8nm  
 Render Index:Ra=93.3 AvgR=91.2 TM30:Rf=92 Rg=100

R1 =93 R2 =97 R3 =99 R4 =94 R5 =93 R6 =98 R7 =91  
 R8 =81 R9 =61 R10=92 R11=96 R12=91 R13=94 R14=98 R15=89

**Photo Parameters:**

Flux = 98.82 lm Eff. : 81.34 lm/W Fe = 388.9 mW

**Electrical parameters:**

V = 23.991 V I = 0.05735 A P = 1.215 W PF = 0.8830

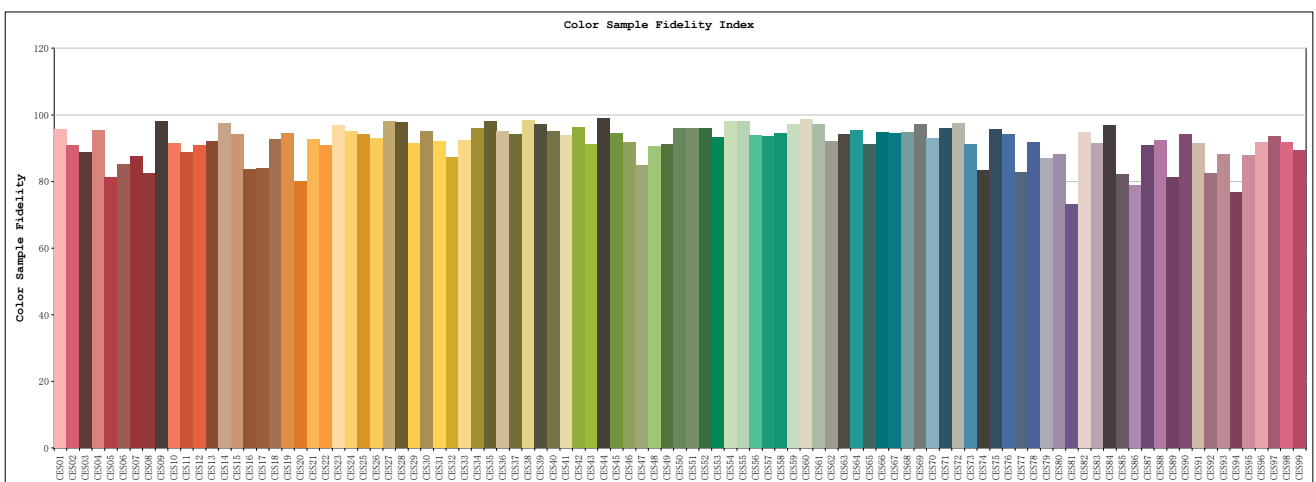
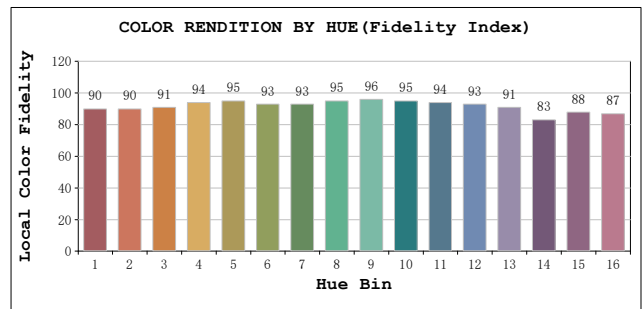
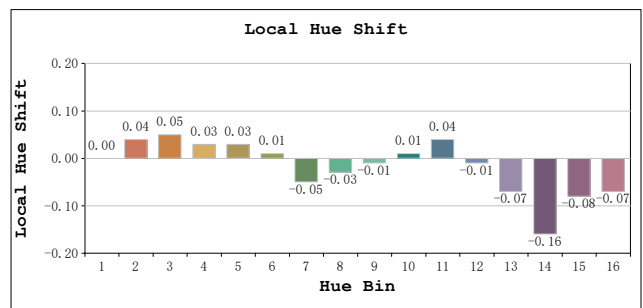
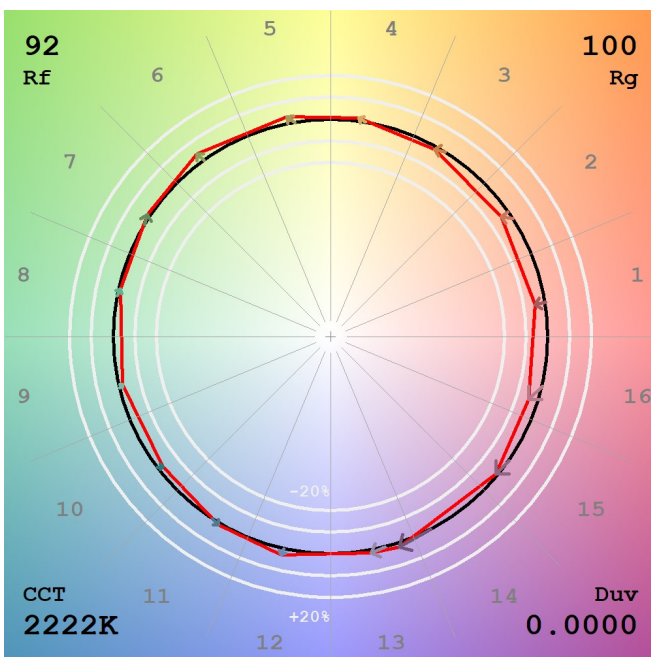
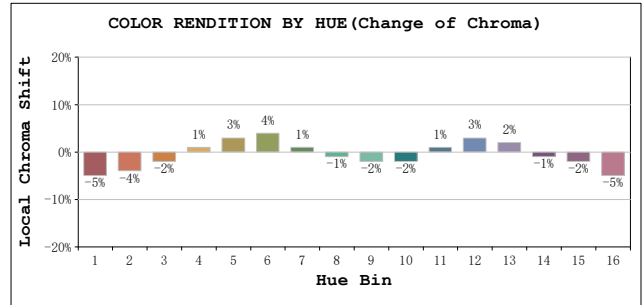
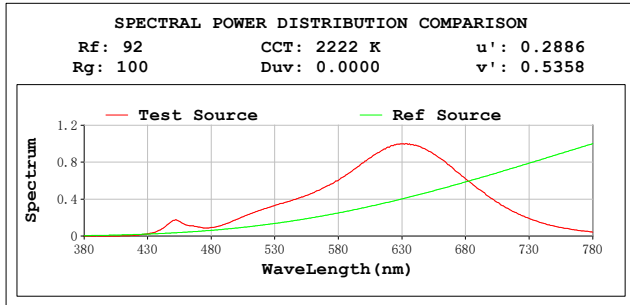
LEVEL:OUT WHITE:EXT\_2200K

Status: Integral T = 1000 ms Ip = 40507 (62%)

**GBT5702**

# TM30

View Angle:2 Deg



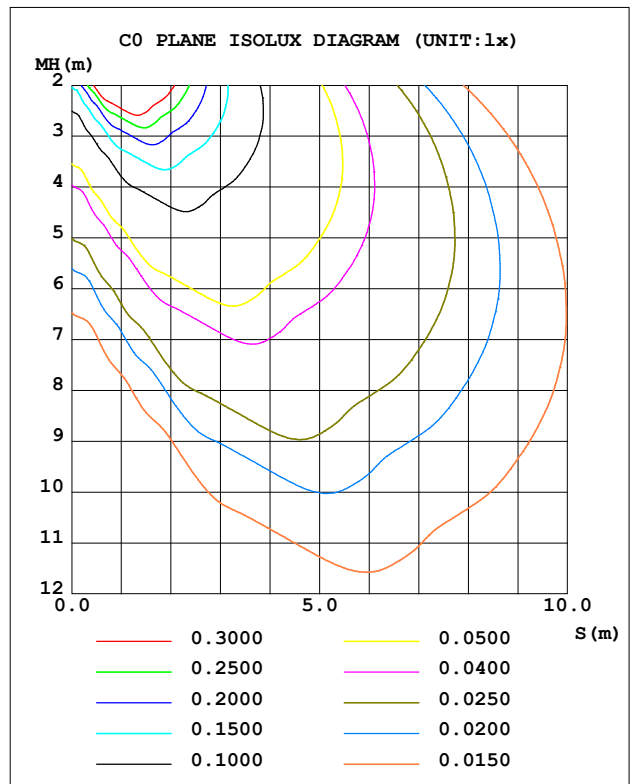
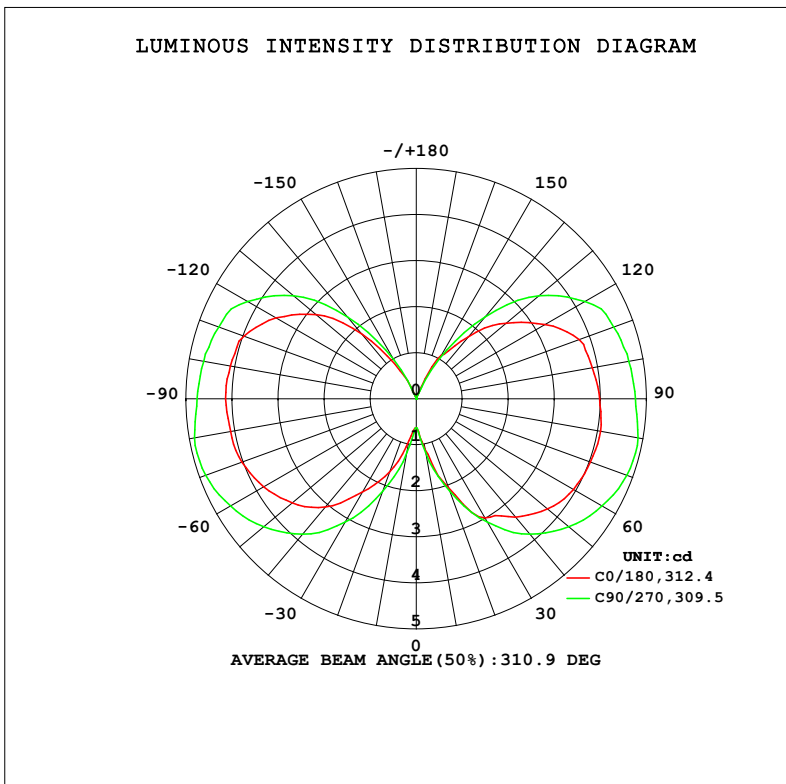
Model:AQF-G-003-2200K  
 Tester:EC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AQF-G-003-2200K 24V AC  
 Date:2023-10-23 16:22:27  
 Humidity:65.0%  
 Remarks:24VAC

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:23.990V I:0.0156A P:0.3748W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:44.0367x1 lm		
NAME: AQF-G-003-2200K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax (cd)	4.943	S/MH (C0/180)	3.93
NOMINAL POWER (W)	1.5	LOR (%)	100.0	S/MH (C90/270)	4.23
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	44.037	$\eta$ UP, DN (C0-180)	22.1, 27.9
NOMINAL FLUX (lm)	44.0367	CIE CLASS	DIFFUSE	$\eta$ UP, DN (C180-360)	22.3, 27.7
LAMPS INSIDE	1	$\eta$ up (%)	44.4	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	24	$\eta$ down (%)	55.6	CIBSE SHR MAX	1.55



C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: ELAINE  
 Test Date: 24 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

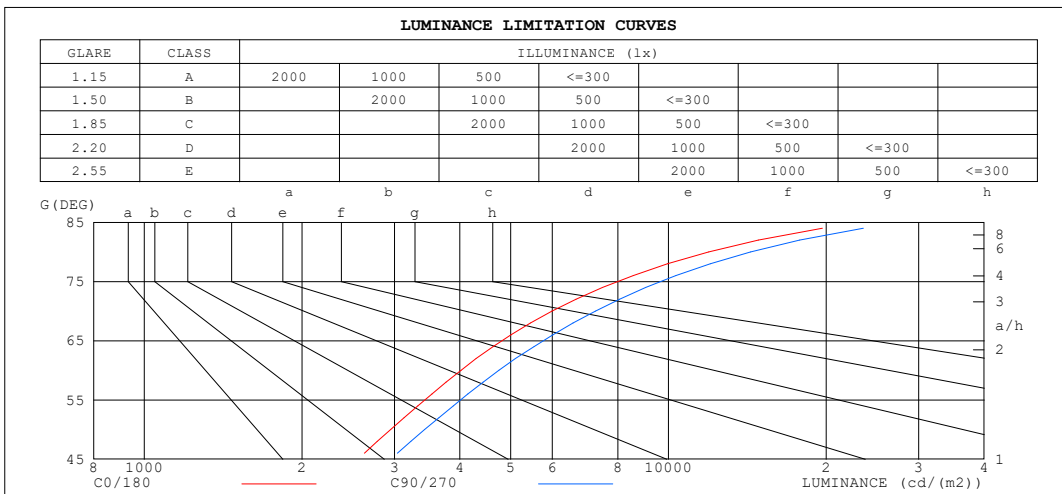
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	∅ zone	∅ total	%lum, lamp
10	1.116	1.234	1.183	1.053	0.9299	1.053	1.183	1.234	0- 10	0.0848	0.0848	0.19,0.19
20	2.056	2.196	2.137	2.096	1.691	2.096	2.137	2.196	10- 20	0.4576	0.5424	1.23,1.23
30	2.986	3.097	3.089	3.126	2.341	3.126	3.089	3.097	20- 30	1.184	1.726	3.92,3.92
40	3.355	3.821	3.839	3.666	3.073	3.666	3.839	3.821	30- 40	2.077	3.803	8.64,8.64
50	3.725	4.291	4.322	4.222	3.521	4.222	4.322	4.291	40- 50	2.972	6.775	15.4,15.4
60	3.945	4.637	4.659	4.534	3.827	4.534	4.659	4.637	50- 60	3.742	10.52	23.9,23.9
70	4.024	4.858	4.869	4.808	4.028	4.808	4.869	4.858	60- 70	4.364	14.88	33.8,33.8
80	4.065	4.854	4.887	4.864	4.092	4.864	4.887	4.854	70- 80	4.759	19.64	44.6,44.6
90	3.984	4.748	4.759	4.798	4.141	4.798	4.759	4.748	80- 90	4.849	24.49	55.6,55.6
100	3.884	4.634	4.688	4.728	4.104	4.728	4.688	4.634	90-100	4.759	29.25	66.4,66.4
110	3.764	4.474	4.563	4.655	3.982	4.655	4.563	4.474	100-110	4.498	33.75	76.6,76.6
120	3.229	4.119	4.229	4.040	3.518	4.040	4.229	4.119	110-120	3.980	37.73	85.7,85.7
130	2.558	3.394	3.481	3.299	2.843	3.299	3.481	3.394	120-130	3.102	40.83	92.7,92.7
140	1.751	2.239	2.321	2.201	1.824	2.201	2.321	2.239	130-140	2.052	42.88	97.4,97.4
150	1.091	0.9147	0.9789	0.9132	0.7104	0.9132	0.9789	0.9147	140-150	0.9484	43.83	99.5,99.5
160	0.0511	0.0187	0.0187	0.0300	0.0184	0.0300	0.0187	0.0187	150-160	0.2063	44.03	100,100
170	0	0	0	0	0.0000	0	0	0	160-170	0.0019	44.04	100,100
180	0	0.0012	0	0	0	0	0	0.0012	170-180	0.0000	44.04	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC

**LUMINANCE LIMITATION CURVES**

Test:U:23.990V I:0.0156A P:0.3748W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:44.0367x1 lm		
NAME: AQF-G-003-2200K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	23570	28228
80	11926	14338
75	7965	9630
70	5994	7252
65	4798	5744
60	4019	4747
55	3409	3983
50	2952	3425
45	2527	2914

C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operator: ELAINE  
 Test Date: 24 October 2023

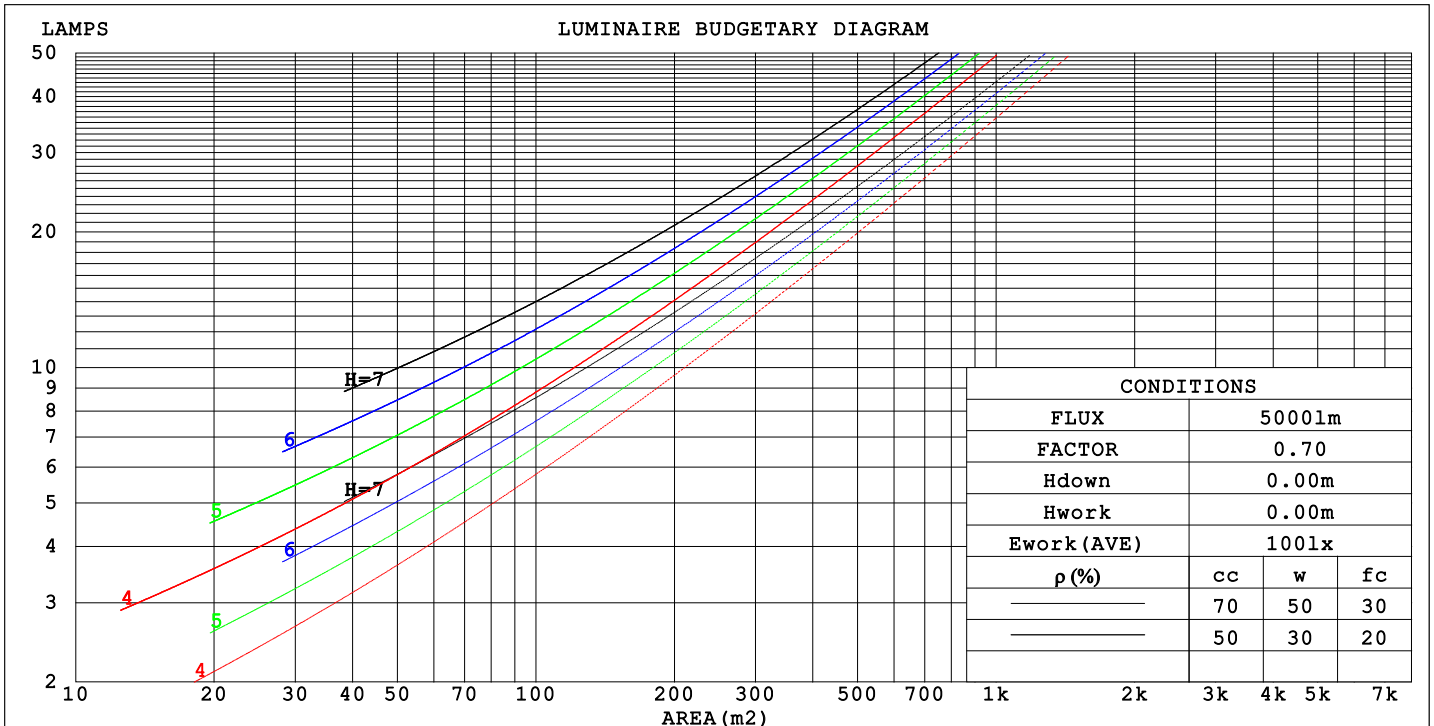
γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC



**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:23.990V I:0.0156A P:0.3748W PF:1.0000 Freq:0Hz		
UTHdi:0.00% ITHdi:0.00% KDisp:0 Lamp Flux:44.0367x1 lm		
NAME: AQF-G-003-2200K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
ρw																
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization (CU)									
0.0	1.08	1.08	1.08	1.01	1.01	1.01	.86	.86	.86	.73	.73	.73	.61	.61	.61	.56
1.0	.87	.80	.75	.80	.74	.70	.67	.63	.59	.56	.53	.50	.45	.43	.40	.35
2.0	.72	.64	.57	.67	.59	.53	.56	.50	.45	.46	.41	.37	.36	.33	.30	.25
3.0	.62	.52	.45	.57	.48	.41	.47	.41	.35	.39	.33	.29	.31	.26	.23	.19
4.0	.53	.44	.36	.49	.40	.33	.41	.34	.28	.33	.28	.23	.26	.22	.18	.14
5.0	.47	.37	.30	.43	.34	.28	.36	.29	.23	.29	.23	.19	.23	.18	.15	.11
6.0	.41	.32	.25	.38	.29	.23	.32	.25	.19	.26	.20	.16	.20	.16	.12	.09
7.0	.37	.28	.21	.34	.26	.20	.28	.22	.17	.23	.18	.13	.18	.14	.10	.08
8.0	.33	.24	.18	.31	.23	.17	.26	.19	.14	.21	.16	.12	.17	.12	.09	.06
9.0	.30	.22	.16	.28	.20	.15	.23	.17	.12	.19	.14	.10	.15	.11	.08	.05
10.0	.27	.19	.14	.25	.18	.13	.21	.15	.11	.17	.12	.09	.14	.10	.07	.05



C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: ELAINE  
 Test Date: 24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC

**WEC AND CCEC**

Test:U:23.990V I:0.0156A P:0.3748W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:44.0367x1 lm		
NAME: AQF-G-003-2200K	TYPE: E27 GLOBE	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	.437	.249	.079	.416	.238	.075	.377	.217	.069	.342	.197	.063	.309	.179	.058	
2.0	.362	.198	.061	.343	.189	.058	.307	.171	.053	.274	.154	.048	.244	.138	.043	
3.0	.314	.167	.050	.296	.159	.048	.264	.143	.043	.234	.128	.039	.206	.114	.035	
4.0	.278	.144	.042	.262	.137	.041	.232	.123	.037	.204	.110	.033	.179	.097	.030	
5.0	.250	.127	.037	.235	.121	.035	.208	.108	.032	.182	.096	.029	.158	.085	.025	
6.0	.227	.114	.033	.214	.108	.031	.188	.096	.028	.165	.086	.025	.143	.075	.022	
7.0	.208	.103	.029	.196	.097	.028	.172	.087	.025	.150	.077	.022	.130	.067	.020	
8.0	.192	.094	.026	.180	.089	.025	.159	.079	.023	.138	.070	.020	.119	.061	.018	
9.0	.178	.086	.024	.167	.082	.023	.147	.073	.021	.128	.064	.018	.110	.056	.016	
10.0	.166	.080	.022	.156	.075	.021	.137	.067	.019	.119	.059	.017	.103	.052	.015	

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	.529	.529	.529	.452	.452	.452	.308	.308	.308	.177	.177	.177	.057	.057	.057	
1.0	.530	.496	.465	.454	.426	.400	.310	.293	.277	.179	.169	.161	.057	.055	.052	
2.0	.525	.475	.433	.450	.409	.374	.308	.283	.261	.178	.165	.153	.057	.053	.050	
3.0	.518	.460	.413	.444	.397	.358	.305	.276	.251	.176	.161	.148	.057	.052	.049	
4.0	.511	.448	.401	.438	.387	.348	.301	.270	.245	.174	.158	.145	.056	.051	.048	
5.0	.503	.439	.392	.432	.380	.341	.298	.265	.241	.172	.156	.143	.056	.051	.047	
6.0	.496	.432	.386	.426	.374	.336	.294	.262	.238	.171	.154	.141	.055	.050	.047	
7.0	.489	.426	.382	.420	.369	.333	.290	.259	.236	.169	.152	.140	.055	.050	.046	
8.0	.482	.421	.378	.415	.365	.330	.287	.256	.234	.167	.151	.139	.054	.050	.046	
9.0	.476	.416	.376	.410	.361	.328	.284	.254	.233	.165	.150	.139	.054	.049	.046	
10.0	.470	.412	.374	.405	.358	.326	.281	.252	.232	.164	.149	.138	.053	.049	.046	

C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC

**UGR(Unified Glare Rating) Table**

Test:U:23.990V I:0.0156A P:0.3748W PF:1.0000 Freq:0Hz										
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:44.0367x1 lm										
NAME: AQF-G-003-2200K					TYPE: E27 GLOBE			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	25.9	27.0	26.7	27.9	28.9	26.3	27.5	27.1	28.3	29.4
3H	29.1	30.1	29.9	31.0	32.1	29.7	30.8	30.6	31.7	32.8
4H	30.9	31.9	31.7	32.8	33.9	31.6	32.7	32.5	33.5	34.7
6H	32.8	33.8	33.7	34.7	35.8	33.7	34.7	34.6	35.6	36.7
8H	33.9	34.8	34.8	35.7	36.9	34.8	35.8	35.7	36.7	37.8
12H	35.1	36.0	36.0	36.9	38.1	36.1	37.0	37.0	37.9	39.1
4H 2H	27.1	28.1	27.9	29.0	30.1	27.4	28.4	28.2	29.3	30.4
3H	30.4	31.3	31.3	32.2	33.4	30.9	31.8	31.8	32.7	33.9
4H	32.4	33.2	33.3	34.1	35.3	32.9	33.7	33.8	34.7	35.8
6H	34.5	35.2	35.4	36.1	37.3	35.1	35.9	36.1	36.8	38.0
8H	35.6	36.3	36.5	37.2	38.5	36.3	37.0	37.3	38.0	39.2
12H	36.9	37.5	37.8	38.5	39.7	37.7	38.4	38.7	39.3	40.6
8H 4H	33.2	33.9	34.1	34.9	36.1	33.6	34.3	34.6	35.3	36.5
6H	35.6	36.2	36.6	37.2	38.4	36.1	36.7	37.1	37.7	38.9
8H	37.0	37.5	37.9	38.5	39.7	37.5	38.0	38.5	39.0	40.3
12H	38.5	38.9	39.4	39.9	41.2	39.1	39.6	40.1	40.6	41.8
12H 4H	33.5	34.1	34.4	35.1	36.3	33.8	34.5	34.8	35.4	36.7
6H	36.0	36.5	36.9	37.5	38.8	36.4	37.0	37.4	37.9	39.2
8H	37.5	37.9	38.4	38.9	40.2	37.9	38.4	38.9	39.4	40.7
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				

CIE Pub.117, 44.04 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -10.8)  
 Area: 0.001963 m2

C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC

**UTILIZATION FACTORS TABLE**

Test:U:23.990V I:0.0156A P:0.3748W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:44.0367x1 lm		
NAME: AQF-G-003-2200K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

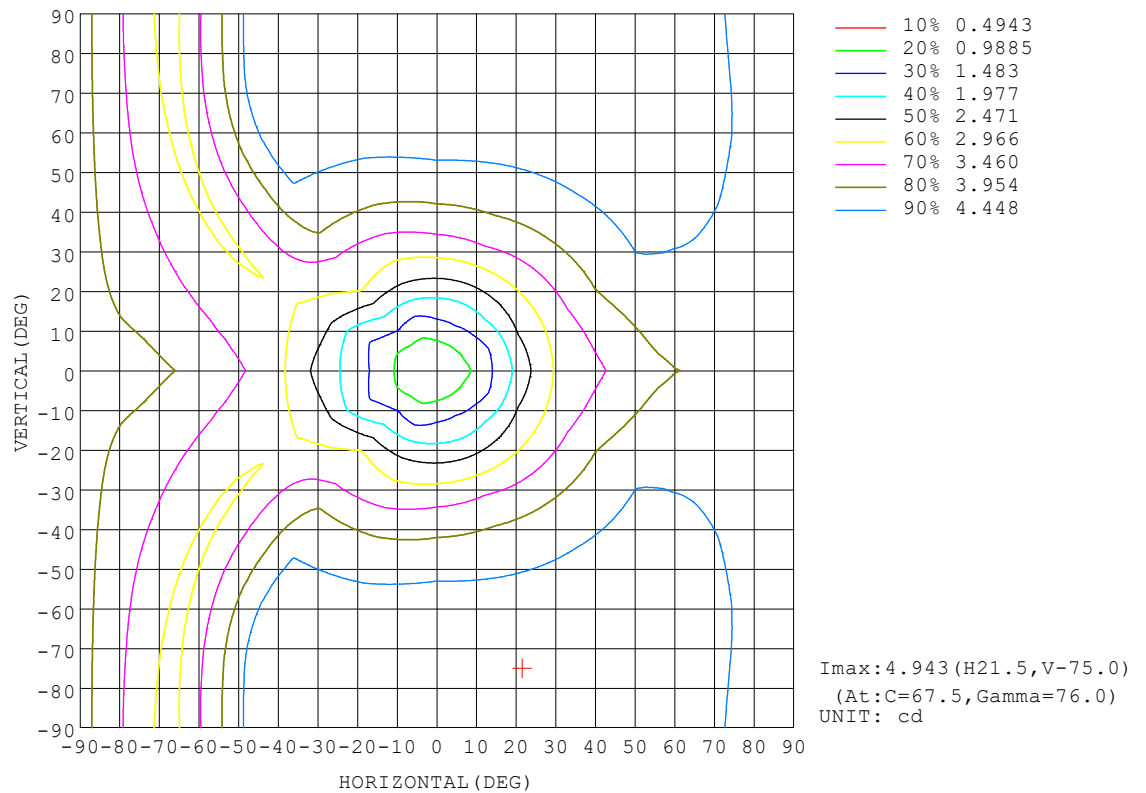
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	35	22	14	33	21	14	30	20	13	6
0.80	44	29	21	41	28	20	37	25	18	9
1.00	51	36	27	48	34	26	42	33	23	12
1.25	58	43	33	54	41	32	47	36	28	16
1.50	63	49	39	59	46	37	51	41	33	18
2.00	71	58	48	66	54	45	57	47	40	23
2.50	76	64	54	71	60	51	61	52	45	26
3.00	81	69	60	75	64	56	64	56	49	29
4.00	86	76	68	80	71	63	68	61	55	33
5.00	90	81	73	83	75	69	71	65	60	36
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC

ISOCANDELA DIAGRAM

Test:U:23.990V I:0.0156A P:0.3748W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:44.0367x1 lm		
NAME: AQF-G-003-2200K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

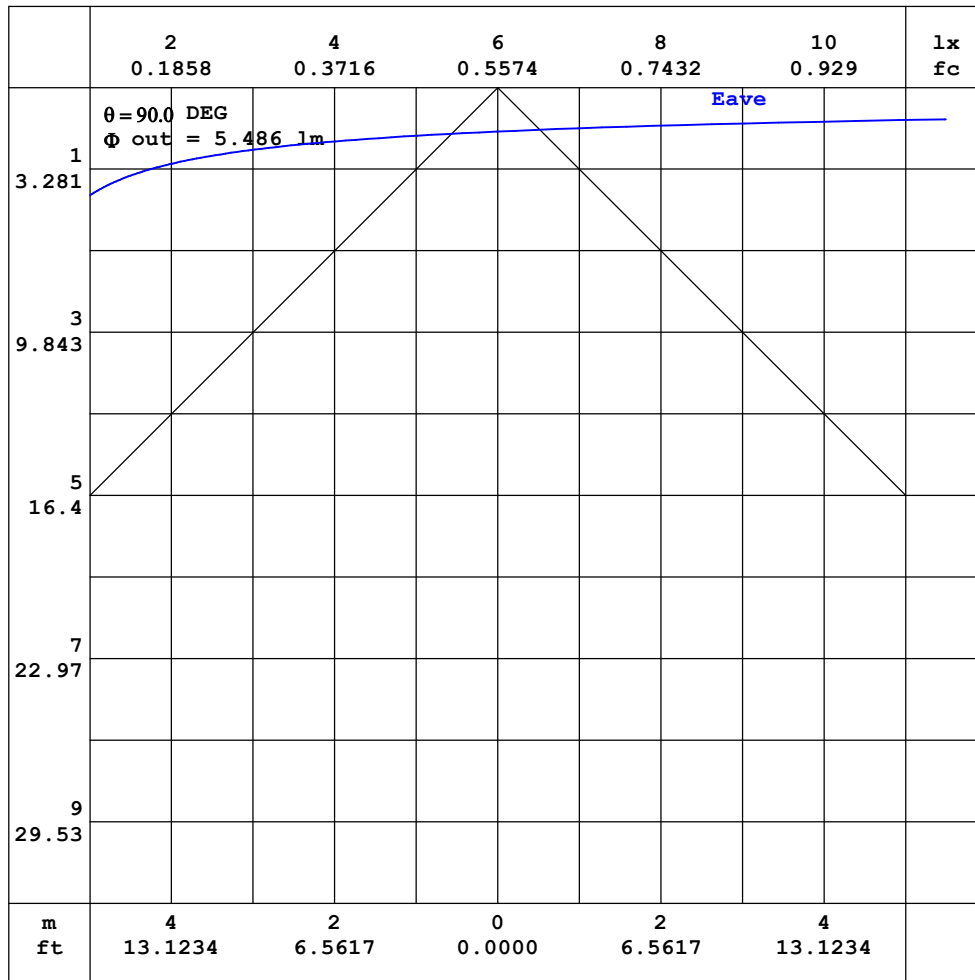


C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: ELAINE  
 Test Date: 24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC

AAI CURVES

Test:U:23.990V I:0.0156A P:0.3748W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:44.0367x1 lm		
NAME: AQF-G-003-2200K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:



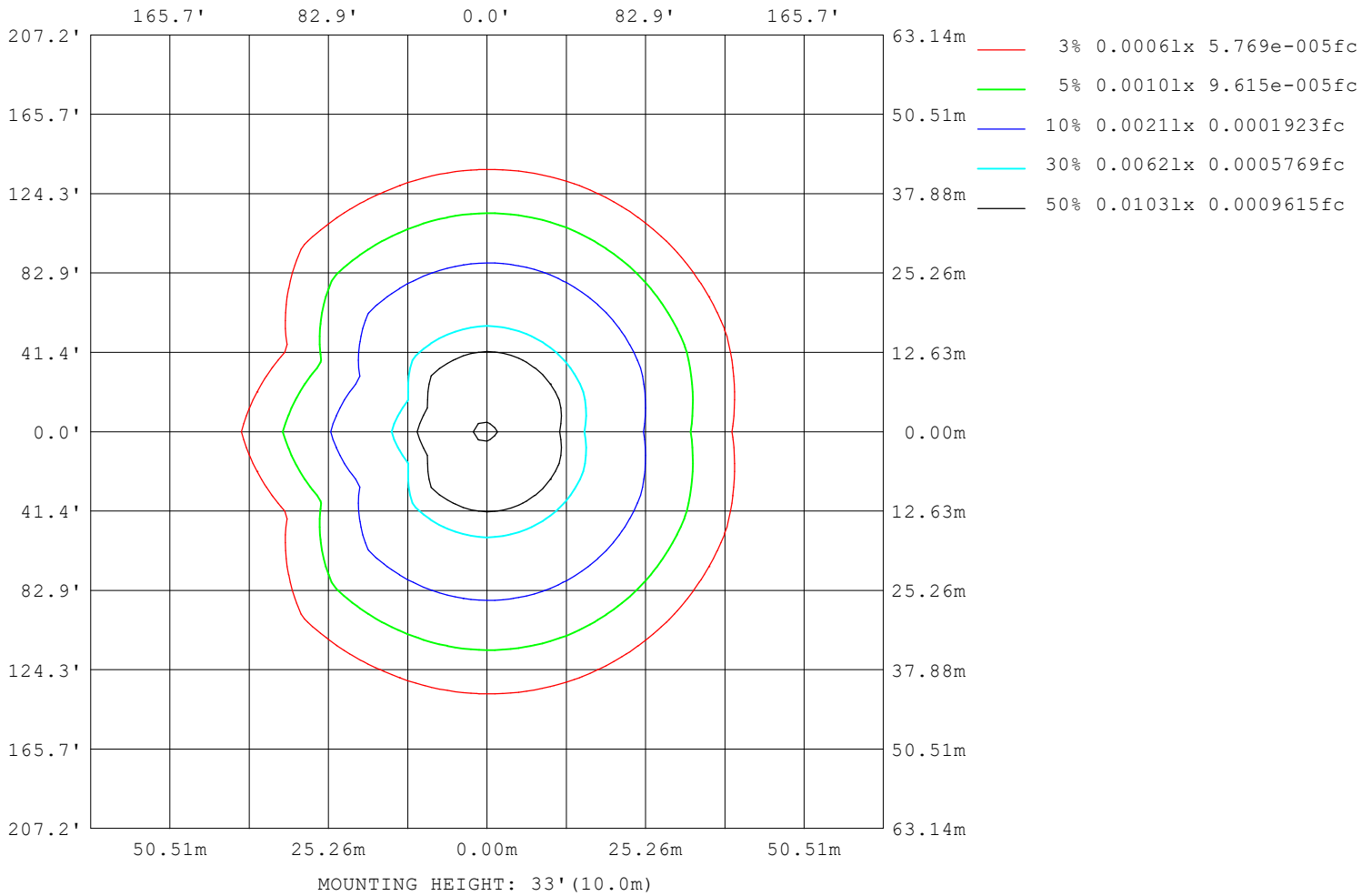
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: ELAINE  
 Test Date: 24 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC

ISOLUX DIAGRAM

Test:U:23.990V I:0.0156A P:0.3748W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:44.0367x1 lm		
NAME: AQF-G-003-2200K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:



C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC

**LED Avg.L Report**

Test:U:23.990V I:0.0156A P:0.3748W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:44.0367x1 lm		
NAME: AQF-G-003-2200K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

AvgL	cd/m2
L_0~180 (65) av	4777
L_0~180 (75) av	8014
L_0~180 (85) av	23790
L_90~270 (65) av	5772
L_90~270 (75) av	9643
L_90~270 (85) av	28139
L_45 (65) av	5695
L_45 (75) av	9589
L_45 (85) av	28082

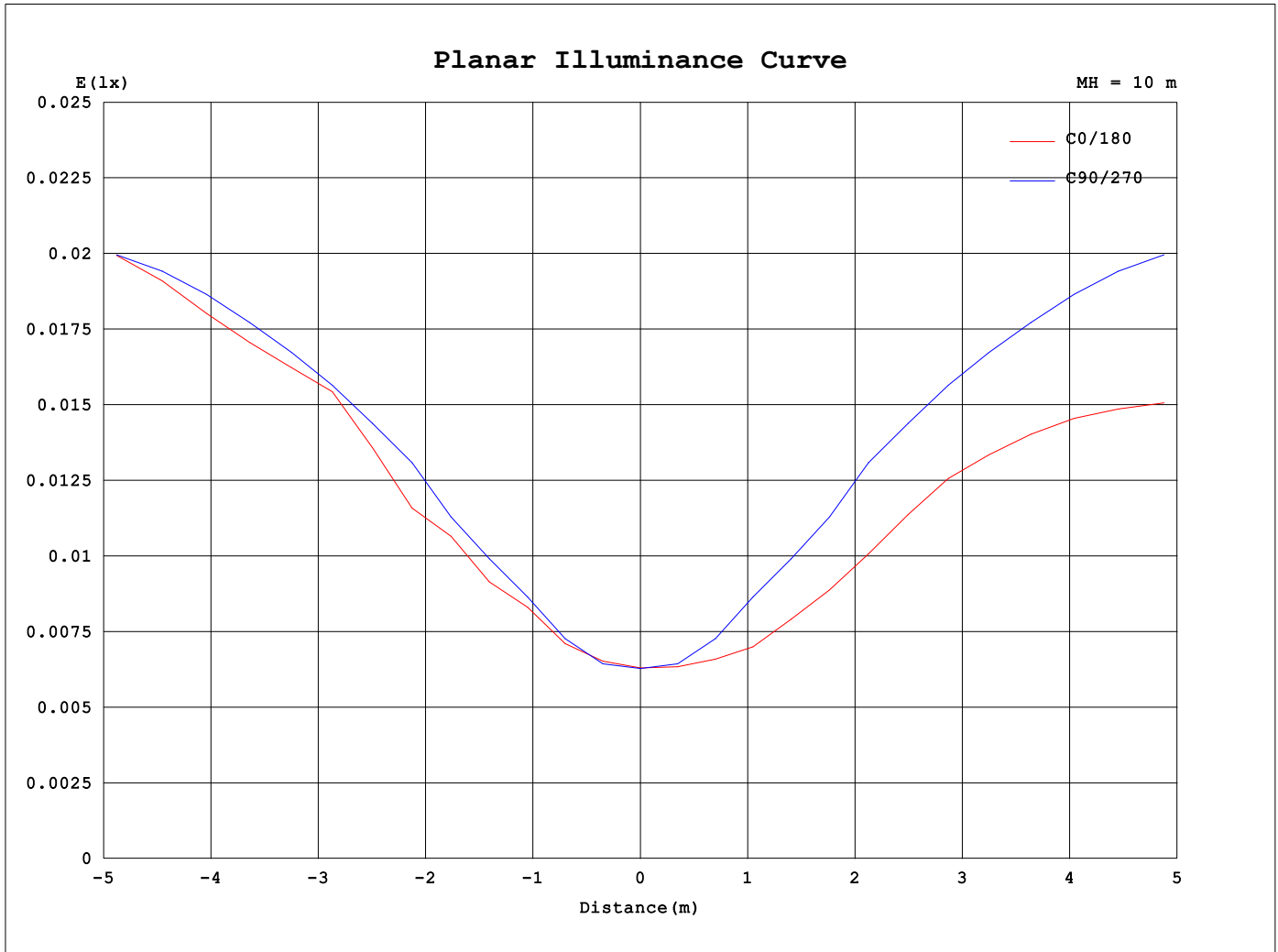
Standard: GB/T 29293-2012

C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC



Planar Illuminance Curve



C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: ELAINE  
 Test Date: 24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:23.990V I:0.0156A P:0.3748W PF:1.0000 Freq:0Hz		
UTHdi:0.00% ITHdi:0.00% KDisp:0 Lamp Flux:44.0367x1 lm		
NAME: AQF-G-003-2200K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63			
5	0.72	0.75	0.76	0.76	0.73	0.71	0.70	0.65	0.66	0.65	0.70	0.71	0.73	0.76	0.76	0.75			
10	1.12	1.13	1.23	1.28	1.18	1.04	1.05	0.93	0.93	0.93	1.05	1.04	1.18	1.28	1.23	1.13			
15	1.49	1.47	1.62	1.63	1.57	1.40	1.48	1.23	1.24	1.23	1.48	1.40	1.57	1.63	1.62	1.47			
20	2.06	2.20	2.20	2.16	2.14	2.11	2.10	1.58	1.69	1.58	2.10	2.11	2.14	2.16	2.20	2.20			
25	2.51	2.63	2.59	2.56	2.55	2.51	2.58	1.90	1.95	1.90	2.58	2.51	2.55	2.56	2.59	2.63			
30	2.99	3.03	3.10	3.18	3.09	3.00	3.13	2.58	2.34	2.58	3.13	3.00	3.09	3.18	3.10	3.03			
35	3.06	3.31	3.40	3.50	3.43	3.27	3.24	2.82	2.63	2.82	3.24	3.27	3.43	3.50	3.40	3.31			
40	3.35	3.75	3.82	3.88	3.84	3.72	3.67	2.99	3.07	2.99	3.67	3.72	3.84	3.88	3.82	3.75			
45	3.51	3.95	4.03	4.07	4.05	3.95	3.93	3.00	3.27	3.00	3.93	3.95	4.05	4.07	4.03	3.95			
50	3.73	4.22	4.29	4.32	4.32	4.23	4.22	2.95	3.52	2.95	4.22	4.23	4.32	4.32	4.29	4.22			
55	3.84	4.37	4.43	4.45	4.48	4.39	4.37	2.92	3.65	2.92	4.37	4.39	4.48	4.45	4.43	4.37			
60	3.95	4.54	4.64	4.64	4.66	4.58	4.53	2.88	3.83	2.88	4.53	4.58	4.66	4.64	4.64	4.54			
65	3.98	4.61	4.75	4.77	4.77	4.69	4.66	2.88	3.92	2.88	4.66	4.69	4.77	4.77	4.75	4.61			
70	4.02	4.70	4.86	4.90	4.87	4.81	4.81	2.85	4.03	2.85	4.81	4.81	4.87	4.90	4.86	4.70			
75	4.05	4.72	4.87	4.93	4.89	4.83	4.86	2.83	4.08	2.83	4.86	4.83	4.89	4.93	4.87	4.72			
80	4.07	4.71	4.85	4.93	4.89	4.85	4.86	2.81	4.09	2.81	4.86	4.85	4.89	4.93	4.85	4.71			
85	4.03	4.68	4.81	4.86	4.83	4.79	4.82	2.77	4.11	2.77	4.82	4.79	4.83	4.86	4.81	4.68			
90	3.98	4.59	4.75	4.77	4.76	4.75	4.80	2.73	4.14	2.73	4.80	4.75	4.76	4.77	4.75	4.59			
95	3.95	4.54	4.71	4.75	4.73	4.74	4.78	2.69	4.14	2.69	4.78	4.74	4.73	4.75	4.71	4.54			
100	3.88	4.47	4.63	4.68	4.69	4.69	4.73	2.60	4.10	2.60	4.73	4.69	4.69	4.68	4.63	4.47			
105	3.85	4.42	4.58	4.64	4.64	4.64	4.70	2.53	4.06	2.53	4.70	4.64	4.64	4.64	4.58	4.42			
110	3.76	4.35	4.47	4.54	4.56	4.56	4.66	2.43	3.98	2.43	4.66	4.56	4.56	4.54	4.47	4.35			
115	3.58	4.20	4.41	4.46	4.52	4.44	4.44	2.34	3.82	2.34	4.44	4.44	4.52	4.46	4.41	4.20			
120	3.23	3.83	4.12	4.37	4.23	4.04	4.04	2.20	3.52	2.20	4.04	4.04	4.23	4.37	4.12	3.83			
125	2.96	3.57	3.86	4.09	3.96	3.76	3.75	2.10	3.26	2.10	3.75	3.76	3.96	4.09	3.86	3.57			
130	2.56	3.16	3.39	3.55	3.48	3.37	3.30	1.90	2.84	1.90	3.30	3.37	3.48	3.55	3.39	3.16			
135	2.30	2.82	2.98	3.12	3.08	3.01	2.95	1.77	2.52	1.77	2.95	3.01	3.08	3.12	2.98	2.82			
140	1.75	2.10	2.24	2.32	2.32	2.26	2.20	1.41	1.82	1.41	2.20	2.26	2.32	2.32	2.24	2.10			
145	1.42	1.60	1.71	1.77	1.78	1.73	1.67	1.15	1.35	1.15	1.67	1.73	1.78	1.77	1.71	1.60			
150	1.09	0.88	0.91	0.96	0.98	0.92	0.91	0.83	0.71	0.83	0.91	0.92	0.98	0.96	0.91	0.88			
155	0.78	0.57	0.41	0.43	0.44	0.48	0.69	0.65	0.45	0.65	0.69	0.48	0.44	0.43	0.41	0.57			
160	0.05	0.02	0.02	0.02	0.02	0.02	0.03	0.06	0.02	0.06	0.03	0.02	0.02	0.02	0.02	0.02			
165	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00			
170	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			
175	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			
180	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: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

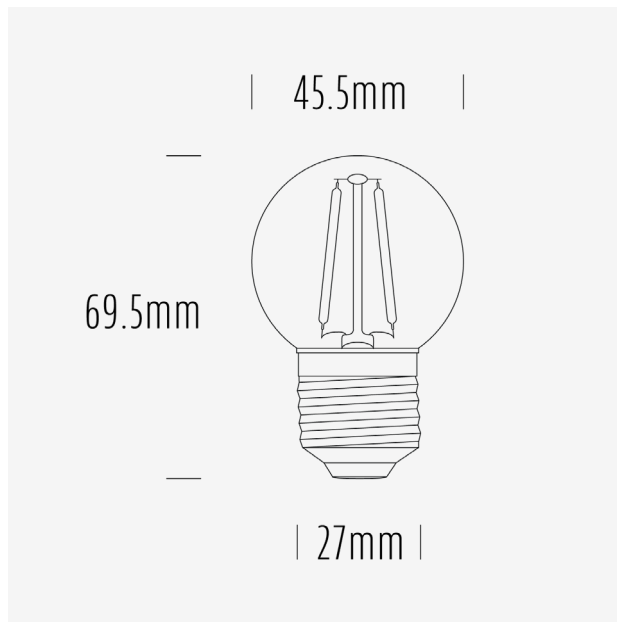
γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2200K  
 1.5W / 2200K  
 24V DC

# AGL G Series

E27 LED Globes



## AQF-G-003-2700K / 2700K / E27



### Product Data

Product Code	AQF-G-003-2700K
Description	Aqualux G Series LED Lamp
Type	E27
Construction	PET Shell + LED + Aluminium Base
Warranty	3 Years

### Electrical Data

Input Voltage Range	24V AC/DC		
Nominal Voltage	24VDC		
Nominal Power	1.5W		
Nominal Current	63mA		
Input Voltage	-	-	<b>24VDC</b> 24VAC
Rated Power	-	-	<b>0.4</b> 1.2
Operating Frequency	-	-	- 50Hz
Max. no. of lamps on AQD24-040	-	-	-
Max. no. of lamps on AQD24-100	-	-	-
Max. no. of lamps on AQD24-240	-	-	-
Dimming Compatibility	PWM (PSU dependant)		
Wiring Scheme	Parallel		
Startup Time	< 0.5s		

### Mechanical & Thermal Data

Overall Length	69.5mm
Max Diameter	45.5mm
Lamp Base	E27
Weight	14g
Operating Temp Range	-20° - 60°
IP Rating	IP20

### Photometric Data

Nominal Flux (lm)	91
Input Voltage	- - <b>24VDC</b> 24VAC
Input Power (W)	- - <b>0.4</b> 1.2
Rated Flux (lm)	- - <b>46</b> 100
Efficacy (lm/W)	- - <b>130</b> 80
CCT	2700K
CCT Description	Warm White
CRI (Ra)	93
CRI (R9)	62
TM-30 (Rf)	93
TM-30 (Rg)	98
SDCM	-
Peak Intensity (cd)	4.4
Nominal Beam Angle	-
Measured Beam Angle (FWHM)	310°

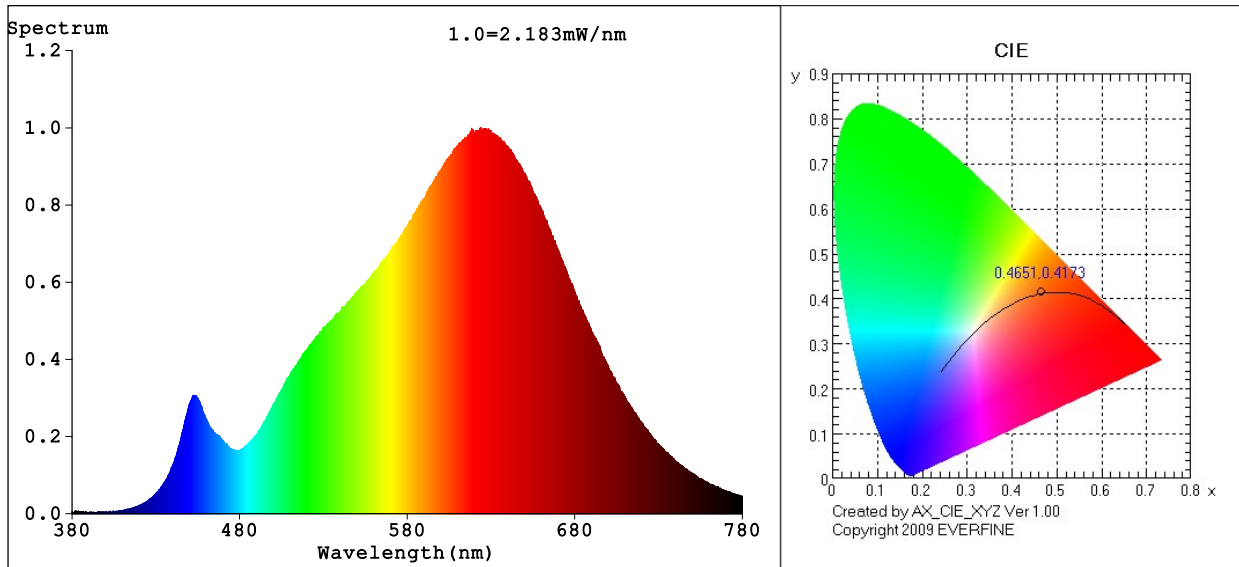
### Lifespan Data

L70	100,000h
Switching Cycles	100,000

### Compliance Data

EMI	Yes
RCM	N/A
Mercury Content	0mg

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4651$   $y=0.4173$  /  $u'=0.2629$   $v'=0.5306$   
 CCT=2680K (Duv=0.0020) Dominant WL:Ld =583.7nm WL:Lc = --nm Purity=64.9%  
 Ratio:R=26.3% G=71.5% B=2.2%; Peak WL:Lp=623.9nm FWHM=152.6nm  
 Render Index:Ra=91.8 AvgR=88.6 TM30:Rf=92 Rg=98

R1 =92 R2 =95 R3 =97 R4 =92 R5 =91 R6 =94 R7 =93  
 R8 =81 R9 =57 R10=87 R11=92 R12=80 R13=92 R14=98 R15=87

**Photo Parameters:**

Flux = 100.3 lm Eff. : 80.49 lm/W Fe = 359.6 mW

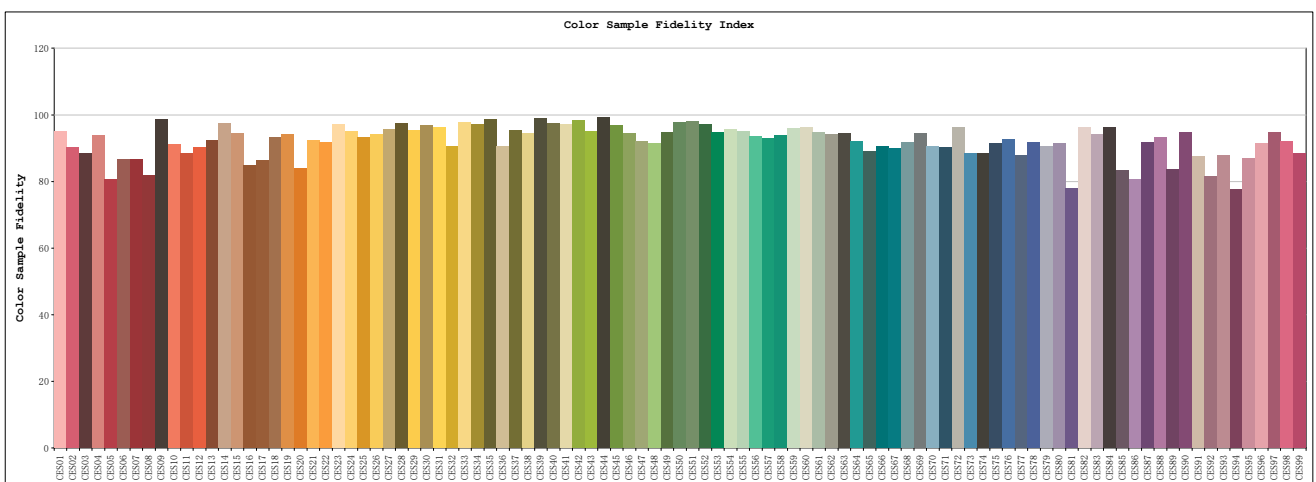
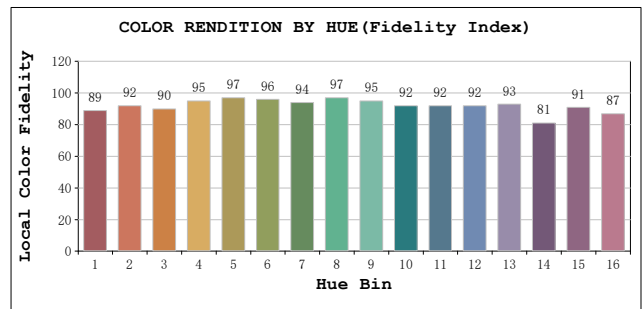
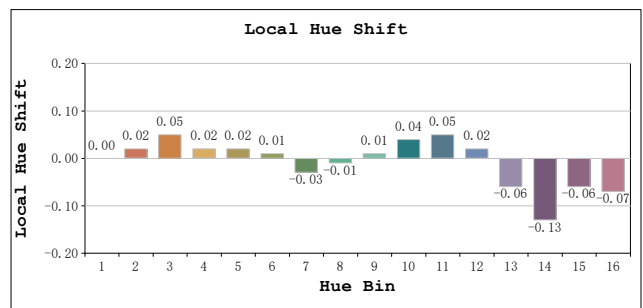
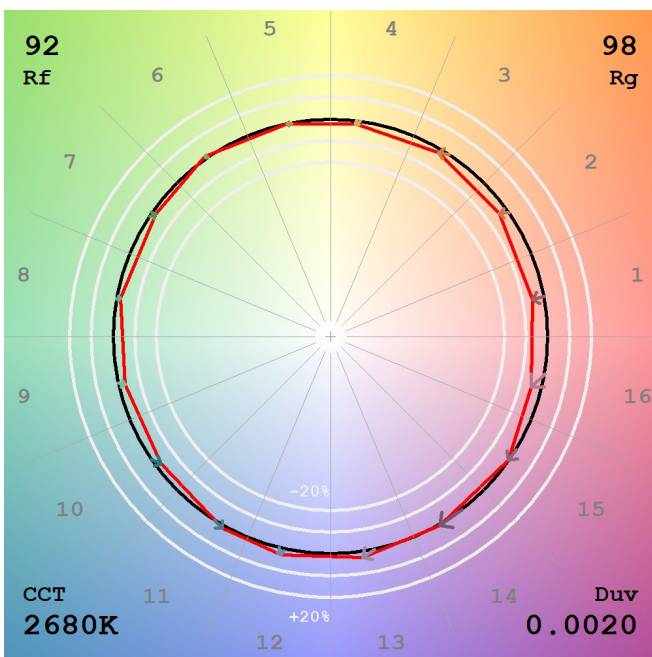
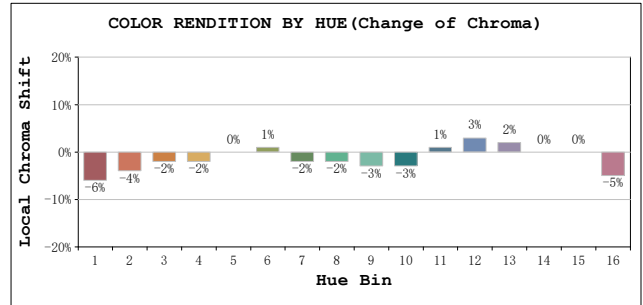
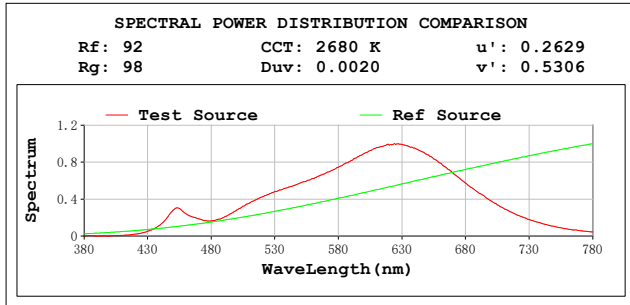
**Electrical parameters:**

V = 23.987 V I = 0.05862 A P = 1.246 W PF = 0.8861  
 LEVEL:OUT WHITE:ANSI\_2700K  
 Status: Integral T = 1000 ms Ip = 34522 (53%)

**GBT5702**

# TM30

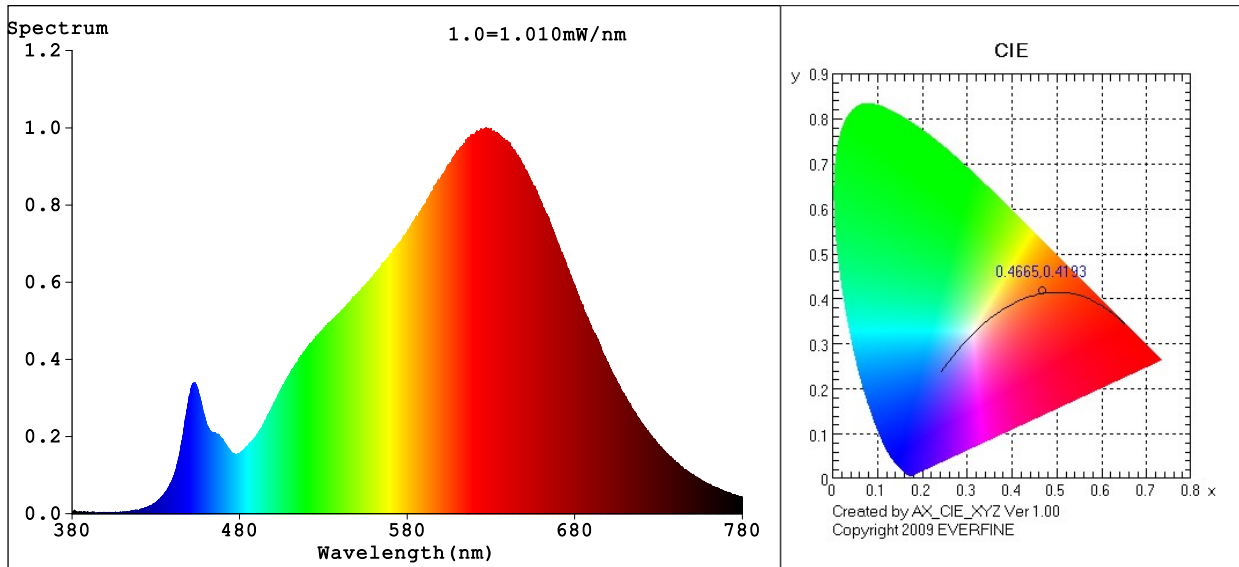
View Angle: 2 Deg



Model:AQF-G-003-2700K  
 Tester:EC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AQF-G-003-2700K 24V AC  
 Date:2023-10-23 16:28:11  
 Humidity:65.0%  
 Remarks:24VAC

**Spectrum Test Report**



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4665$   $y=0.4193$  /  $u'=0.2628$   $v'=0.5316$   
 CCT=2677K (Duv=0.0026) Dominant WL:Ld =583.5nm WL:Lc = --nm Purity=65.9%  
 Ratio:R=26.4% G=71.5% B=2.2%; Peak WL:Lp=627.2nm FWHM=153.2nm  
 Render Index:Ra=92.6 AvgR=89.5 TM30:Rf=93 Rg=98

R1 =92 R2 =95 R3 =97 R4 =93 R5 =92 R6 =94 R7 =94  
 R8 =83 R9 =62 R10=88 R11=94 R12=79 R13=93 R14=97 R15=88

**Photo Parameters:**

Flux = 45.94 lm Eff. : 129.85 lm/W Fe = 165.6 mW

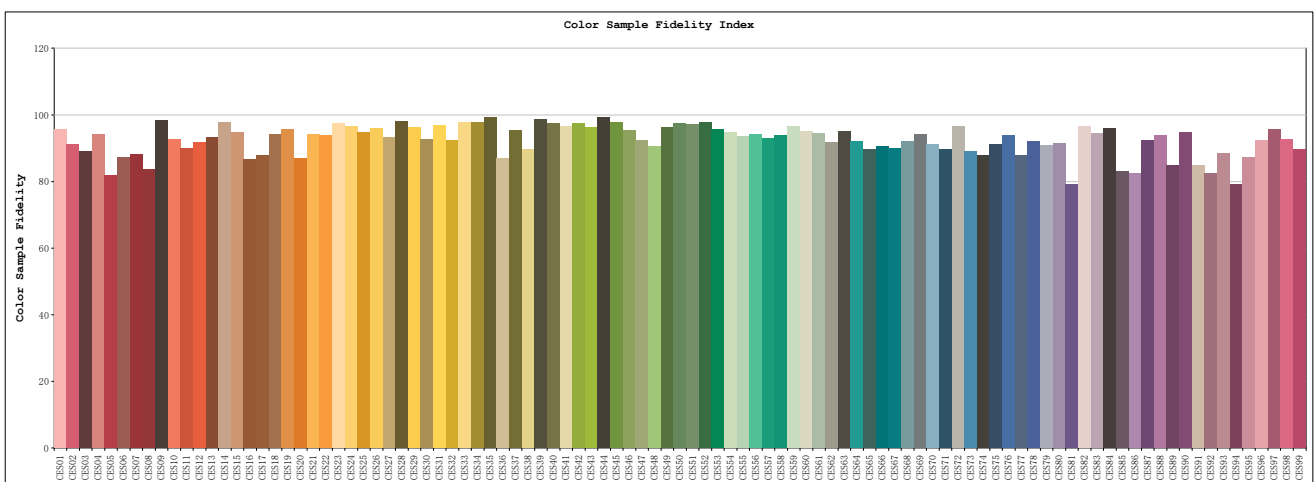
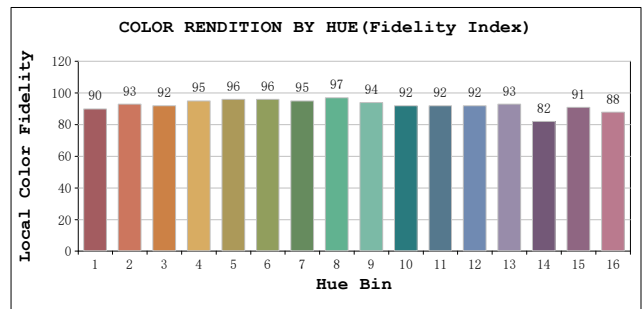
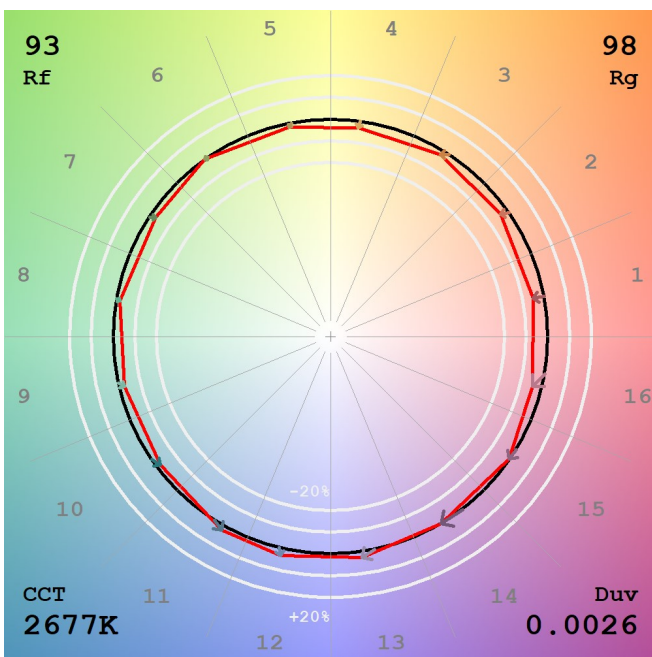
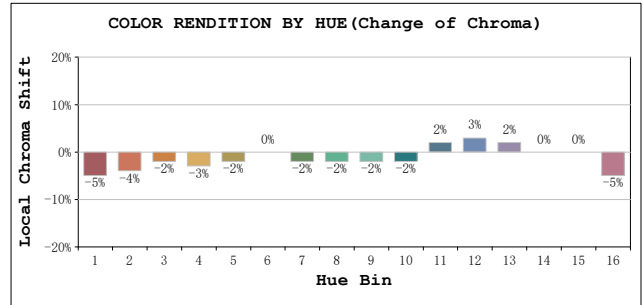
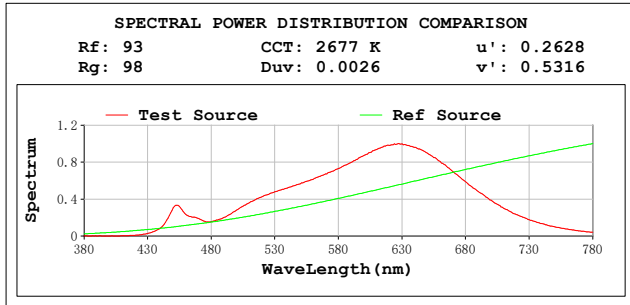
**Electrical parameters:**

V = 24.008 V I = 0.01474 A P = 0.3538 W PF = 1.0000  
 LEVEL:OUT WHITE:ANSI\_2700K  
 Status: Integral T = 3067 ms Ip = 48501 (74%)

**GBT5702**

# TM30

View Angle:2 Deg



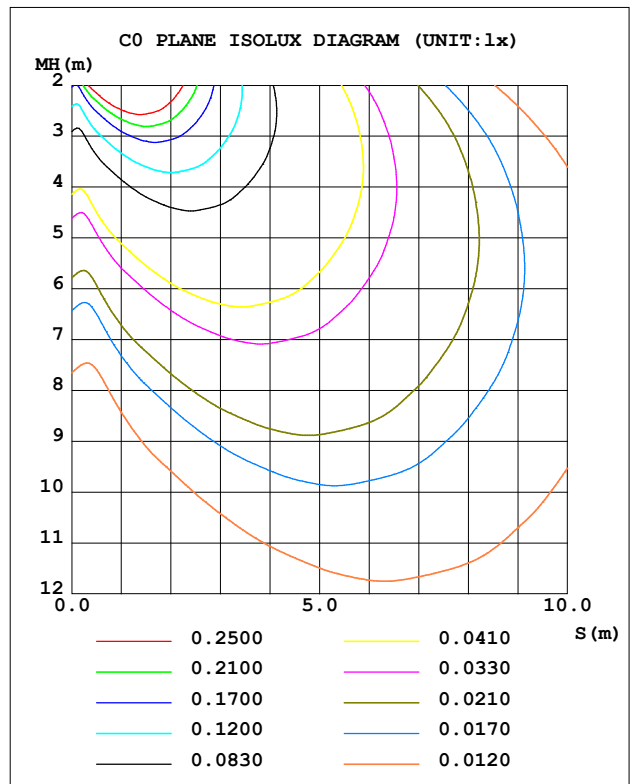
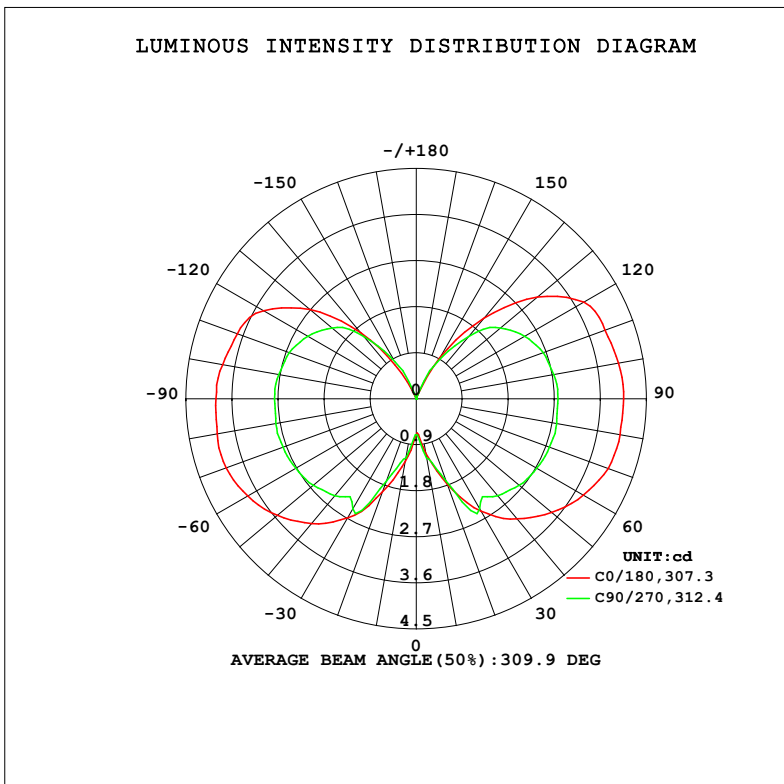
Model:AQF-G-003-2700K  
 Tester:EC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AQF-G-003-2700K 24V DC  
 Date:2023-10-23 16:31:02  
 Humidity:65.0%  
 Remarks:24VDC

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:23.991V I:0.0147A P:0.3522W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:38.6585x1 lm		
NAME: AQF-G-003-2700K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax (cd)	4.416	S/MH (C0/180)	3.74
NOMINAL POWER (W)	1.5	LOR (%)	100.0	S/MH (C90/270)	3.25
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	38.658	$\eta$ UP, DN (C0-180)	22.5, 27.6
NOMINAL FLUX (lm)	38.6585	CIE CLASS	DIFFUSE	$\eta$ UP, DN (C180-360)	22.2, 27.7
LAMPS INSIDE	1	$\eta$ up (%)	44.7	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	24	$\eta$ down (%)	55.3	CIBSE SHR MAX	1.35



C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: ELAINE  
 Test Date: 24 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC



ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

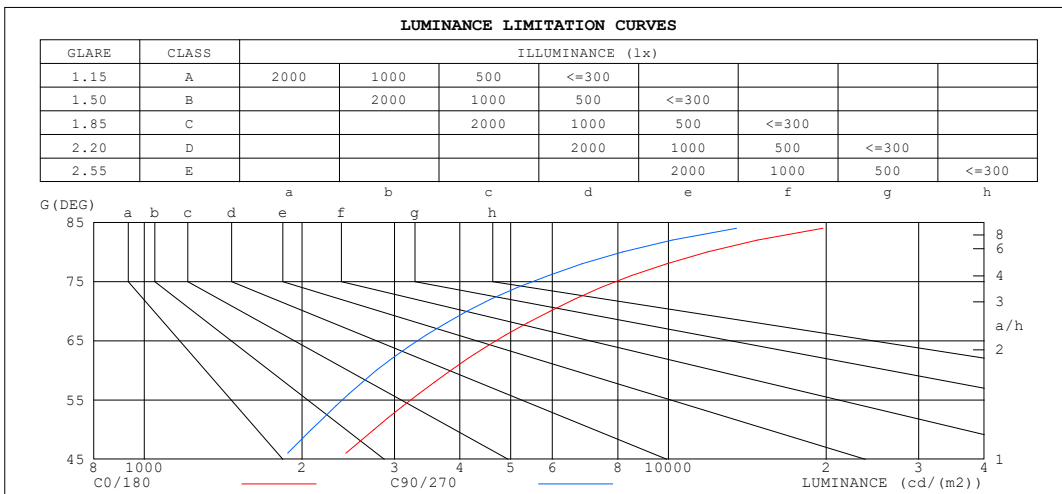
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	Φ zone	Φ total	%lum, lamp
10	1.075	1.082	1.178	1.284	1.239	1.284	1.178	1.082	0- 10	0.0904	0.0904	0.23,0.23
20	1.777	1.845	1.714	2.111	1.939	2.111	1.714	1.845	10- 20	0.4341	0.5245	1.36,1.36
30	2.533	2.555	2.483	2.814	2.687	2.814	2.483	2.555	20- 30	1.073	1.597	4.13,4.13
40	3.063	3.147	2.476	3.493	3.187	3.493	2.476	3.147	30- 40	1.813	3.410	8.82,8.82
50	3.459	3.573	2.628	3.910	3.546	3.910	2.628	3.573	40- 50	2.572	5.982	15.5,15.5
60	3.773	3.839	2.720	4.189	3.802	4.189	2.720	3.839	50- 60	3.251	9.233	23.9,23.9
70	3.994	4.024	2.771	4.384	3.956	4.384	2.771	4.024	60- 70	3.784	13.02	33.7,33.7
80	4.044	4.067	2.786	4.394	3.948	4.394	2.786	4.067	70- 80	4.124	17.14	44.3,44.3
90	4.053	4.045	2.769	4.345	3.915	4.345	2.769	4.045	80- 90	4.227	21.37	55.3,55.3
100	4.012	4.022	2.731	4.258	3.845	4.258	2.731	4.022	90-100	4.189	25.56	66.1,66.1
110	3.926	3.909	2.646	4.099	3.720	4.099	2.646	3.909	100-110	3.956	29.51	76.3,76.3
120	3.785	3.533	2.448	3.666	3.446	3.666	2.448	3.533	110-120	3.516	33.03	85.4,85.4
130	3.100	2.927	2.152	3.049	2.716	3.049	2.152	2.927	120-130	2.760	35.79	92.6,92.6
140	2.048	1.960	1.590	1.972	1.685	1.972	1.590	1.960	130-140	1.827	37.62	97.3,97.3
150	0.9358	0.8384	0.8325	0.8223	0.5783	0.8223	0.8325	0.8384	140-150	0.8507	38.47	99.5,99.5
160	0.0183	0.0179	0.0247	0.0191	0.0131	0.0191	0.0247	0.0179	150-160	0.1891	38.66	100,100
170	0	0	0	0.0008	0	0.0008	0	0	160-170	0.0023	38.66	100,100
180	0.0020	0	0	0.0004	0	0.0004	0	0	170-180	0.0000	38.66	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC

**LUMINANCE LIMITATION CURVES**

<b>Test:U:23.991V I:0.0147A P:0.3522W PF:1.0000 Freq:0Hz</b> <b>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:38.6585x1 lm</b>		
<b>NAME: AQF-G-003-2700K</b>	<b>TYPE: E27 GLOBE</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	23632	16178
80	11862	8175
75	7913	5485
70	5949	4128
65	4660	3312
60	3844	2771
55	3195	2379
50	2741	2083
45	2323	1825

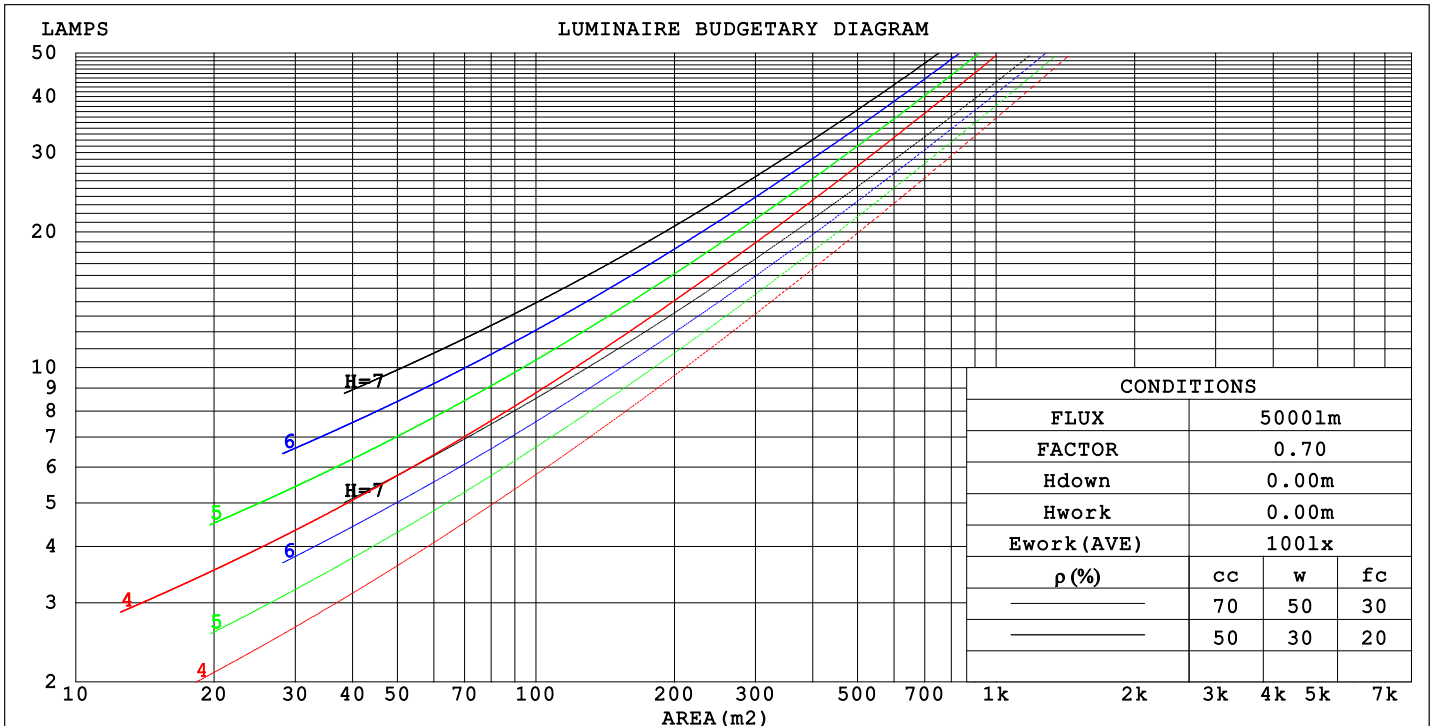
C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: ELAINE  
 Test Date: 24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:23.991V I:0.0147A P:0.3522W PF:1.0000 Freq:0Hz		
UTHdi:0.00% ITHdi:0.00% KDisp:0 Lamp Flux:38.6585x1 lm		
NAME: AQF-G-003-2700K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
ρw																
ρfc																
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization (CU)									
0.0	1.08	1.08	1.08	1.01	1.01	1.01	.86	.86	.86	.73	.73	.73	.61	.61	.61	.55
1.0	.87	.81	.75	.80	.74	.70	.67	.63	.59	.56	.52	.49	.45	.43	.40	.35
2.0	.72	.64	.57	.67	.59	.53	.56	.50	.45	.46	.41	.37	.36	.33	.30	.25
3.0	.62	.52	.45	.57	.48	.41	.47	.41	.35	.39	.33	.29	.30	.26	.23	.19
4.0	.54	.44	.36	.49	.40	.34	.41	.34	.28	.33	.28	.23	.26	.22	.18	.14
5.0	.47	.37	.30	.43	.34	.28	.36	.29	.23	.29	.24	.19	.23	.18	.15	.11
6.0	.42	.32	.25	.38	.30	.23	.32	.25	.20	.26	.20	.16	.20	.16	.12	.09
7.0	.37	.28	.21	.34	.26	.20	.29	.22	.17	.23	.18	.14	.18	.14	.10	.08
8.0	.33	.25	.19	.31	.23	.17	.26	.19	.14	.21	.16	.12	.17	.12	.09	.06
9.0	.30	.22	.16	.28	.20	.15	.23	.17	.13	.19	.14	.10	.15	.11	.08	.06
10.0	.28	.20	.14	.25	.18	.13	.21	.15	.11	.18	.13	.09	.14	.10	.07	.05



C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: ELAINE  
 Test Date: 24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC

**WEC AND CCEC**

Test:U:23.991V I:0.0147A P:0.3522W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:38.6585x1 lm		
NAME: AQF-G-003-2700K	TYPE: E27 GLOBE	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	.435	.248	.078	.414	.236	.075	.375	.215	.069	.339	.196	.063	.306	.177	.057	
2.0	.360	.197	.061	.341	.188	.058	.305	.170	.053	.272	.153	.048	.242	.137	.043	
3.0	.312	.166	.050	.295	.158	.048	.262	.142	.043	.232	.127	.039	.204	.113	.035	
4.0	.277	.144	.042	.261	.137	.040	.231	.122	.037	.203	.109	.033	.177	.096	.029	
5.0	.249	.127	.037	.234	.120	.035	.207	.108	.032	.181	.096	.028	.157	.084	.025	
6.0	.226	.113	.032	.213	.107	.031	.187	.096	.028	.164	.085	.025	.141	.074	.022	
7.0	.207	.102	.029	.195	.097	.028	.171	.087	.025	.149	.077	.022	.129	.067	.020	
8.0	.191	.093	.026	.180	.089	.025	.158	.079	.023	.138	.070	.020	.118	.061	.018	
9.0	.177	.086	.024	.167	.081	.023	.147	.072	.021	.127	.064	.018	.109	.056	.016	
10.0	.165	.079	.022	.156	.075	.021	.137	.067	.019	.119	.059	.017	.102	.051	.015	

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	.531	.531	.531	.454	.454	.454	.310	.310	.310	.178	.178	.178	.057	.057	.057	
1.0	.533	.499	.468	.456	.428	.403	.312	.294	.279	.179	.170	.162	.057	.055	.052	
2.0	.527	.477	.436	.452	.411	.377	.309	.284	.263	.178	.165	.154	.057	.054	.050	
3.0	.520	.462	.416	.446	.399	.361	.306	.277	.253	.177	.162	.149	.057	.053	.049	
4.0	.513	.451	.403	.440	.390	.350	.303	.272	.247	.175	.159	.146	.056	.052	.048	
5.0	.505	.442	.395	.434	.382	.344	.299	.267	.243	.173	.157	.144	.056	.051	.047	
6.0	.498	.434	.389	.428	.376	.339	.295	.263	.240	.171	.155	.142	.055	.051	.047	
7.0	.491	.428	.384	.422	.371	.335	.292	.260	.237	.170	.153	.141	.055	.050	.047	
8.0	.484	.423	.381	.417	.367	.332	.288	.258	.236	.168	.152	.140	.054	.050	.047	
9.0	.478	.419	.379	.412	.363	.330	.285	.255	.234	.166	.151	.140	.054	.050	.046	
10.0	.472	.415	.376	.407	.360	.328	.282	.253	.233	.165	.150	.139	.053	.049	.046	

C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC

**UGR(Unified Glare Rating) Table**

Test:U:23.991V I:0.0147A P:0.3522W PF:1.0000 Freq:0Hz										
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:38.6585x1 lm										
NAME: AQF-G-003-2700K					TYPE: E27 GLOBE			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	25.8	26.9	26.6	27.8	28.8	25.5	26.6	26.3	27.5	28.5
3H	29.2	30.3	30.1	31.2	32.3	28.5	29.6	29.4	30.5	31.6
4H	31.1	32.1	32.0	33.0	34.2	30.2	31.2	31.0	32.1	33.2
6H	33.2	34.2	34.1	35.1	36.2	31.9	32.9	32.8	33.8	34.9
8H	34.4	35.3	35.3	36.2	37.4	32.9	33.8	33.8	34.7	35.9
12H	35.7	36.6	36.6	37.5	38.7	34.0	34.9	34.9	35.8	37.0
4H 2H	26.9	27.9	27.7	28.8	29.9	26.7	27.7	27.5	28.6	29.7
3H	30.4	31.3	31.3	32.2	33.4	30.1	31.0	31.0	31.9	33.0
4H	32.4	33.2	33.3	34.2	35.4	32.0	32.8	32.9	33.7	34.9
6H	34.7	35.4	35.6	36.3	37.5	33.9	34.7	34.9	35.6	36.8
8H	35.9	36.6	36.8	37.5	38.8	35.0	35.7	35.9	36.6	37.8
12H	37.3	37.9	38.3	38.9	40.1	36.1	36.7	37.1	37.7	39.0
8H 4H	33.2	33.9	34.1	34.8	36.0	32.9	33.5	33.8	34.5	35.7
6H	35.7	36.3	36.6	37.2	38.5	35.2	35.8	36.2	36.8	38.1
8H	37.1	37.6	38.0	38.6	39.9	36.5	37.1	37.5	38.1	39.3
12H	38.7	39.2	39.7	40.2	41.4	38.0	38.4	38.9	39.4	40.7
12H 4H	33.4	34.0	34.3	35.0	36.2	33.1	33.7	34.0	34.7	35.9
6H	36.0	36.5	37.0	37.5	38.8	35.6	36.1	36.6	37.1	38.4
8H	37.5	38.0	38.5	39.0	40.3	37.1	37.5	38.1	38.5	39.8
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.4					+ 0.4 / - 0.5				

CIE Pub.117, 38.66 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -11.3)  
 Area: 0.001963 m2

C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC

**UTILIZATION FACTORS TABLE**

Test:U:23.991V I:0.0147A P:0.3522W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:38.6585x1 lm		
NAME: AQF-G-003-2700K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

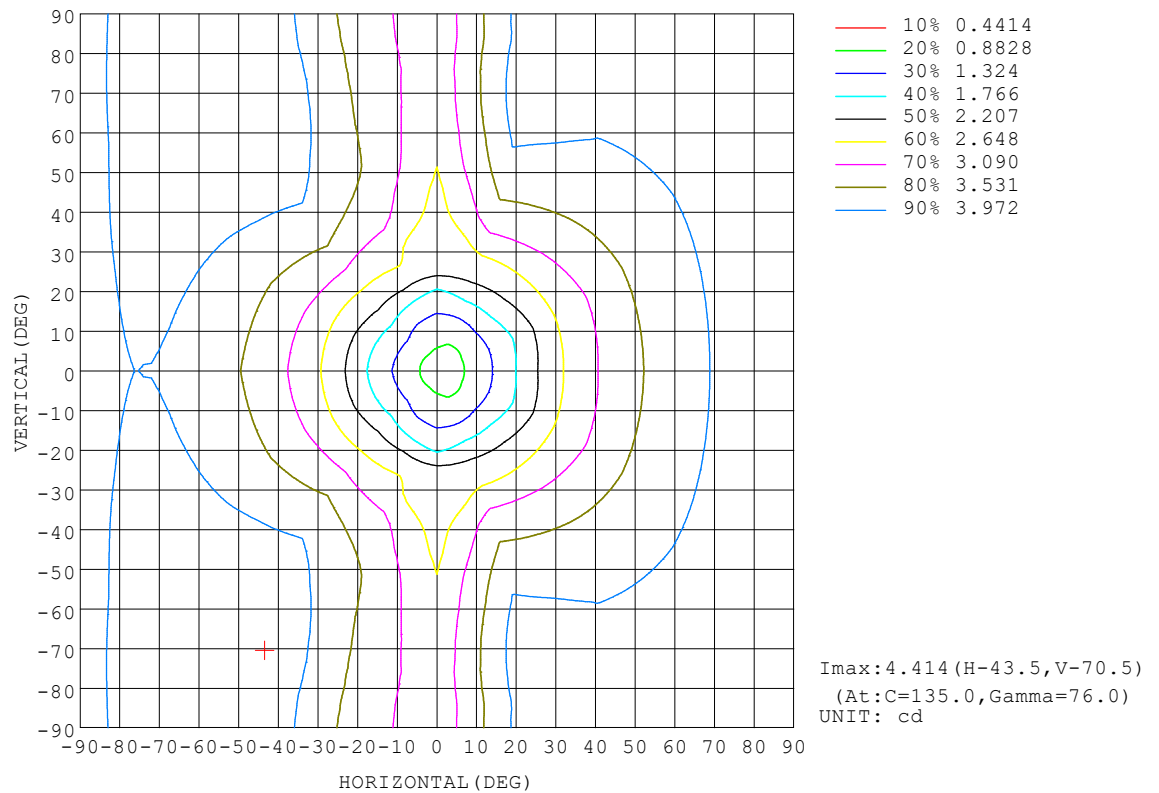
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	35	22	15	34	21	14	30	20	13	6
0.80	44	29	21	41	28	20	37	26	18	9
1.00	51	36	27	48	34	26	42	33	23	12
1.25	58	43	33	54	41	32	47	36	29	16
1.50	63	49	39	59	46	37	51	41	33	18
2.00	71	58	48	66	54	45	57	47	40	23
2.50	76	64	54	71	60	51	61	52	45	26
3.00	81	69	60	75	64	56	64	56	49	29
4.00	86	76	68	80	71	63	68	61	55	33
5.00	90	81	73	83	75	69	71	65	60	36
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC

ISOCANDELA DIAGRAM

Test:U:23.991V I:0.0147A P:0.3522W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:38.6585x1 lm		
NAME: AQF-G-003-2700K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

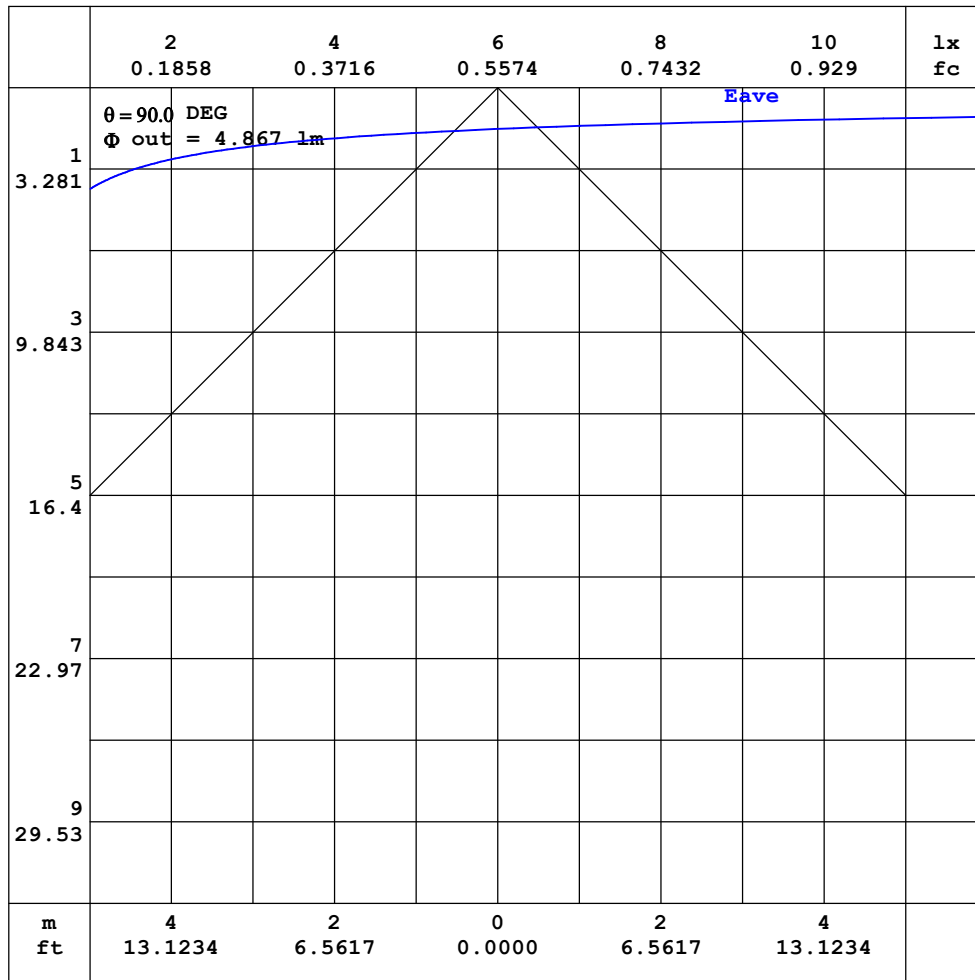


C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC

AAI CURVES

Test:U:23.991V I:0.0147A P:0.3522W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:38.6585x1 lm		
NAME: AQF-G-003-2700K	TYPE: E27 GLOBE	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.

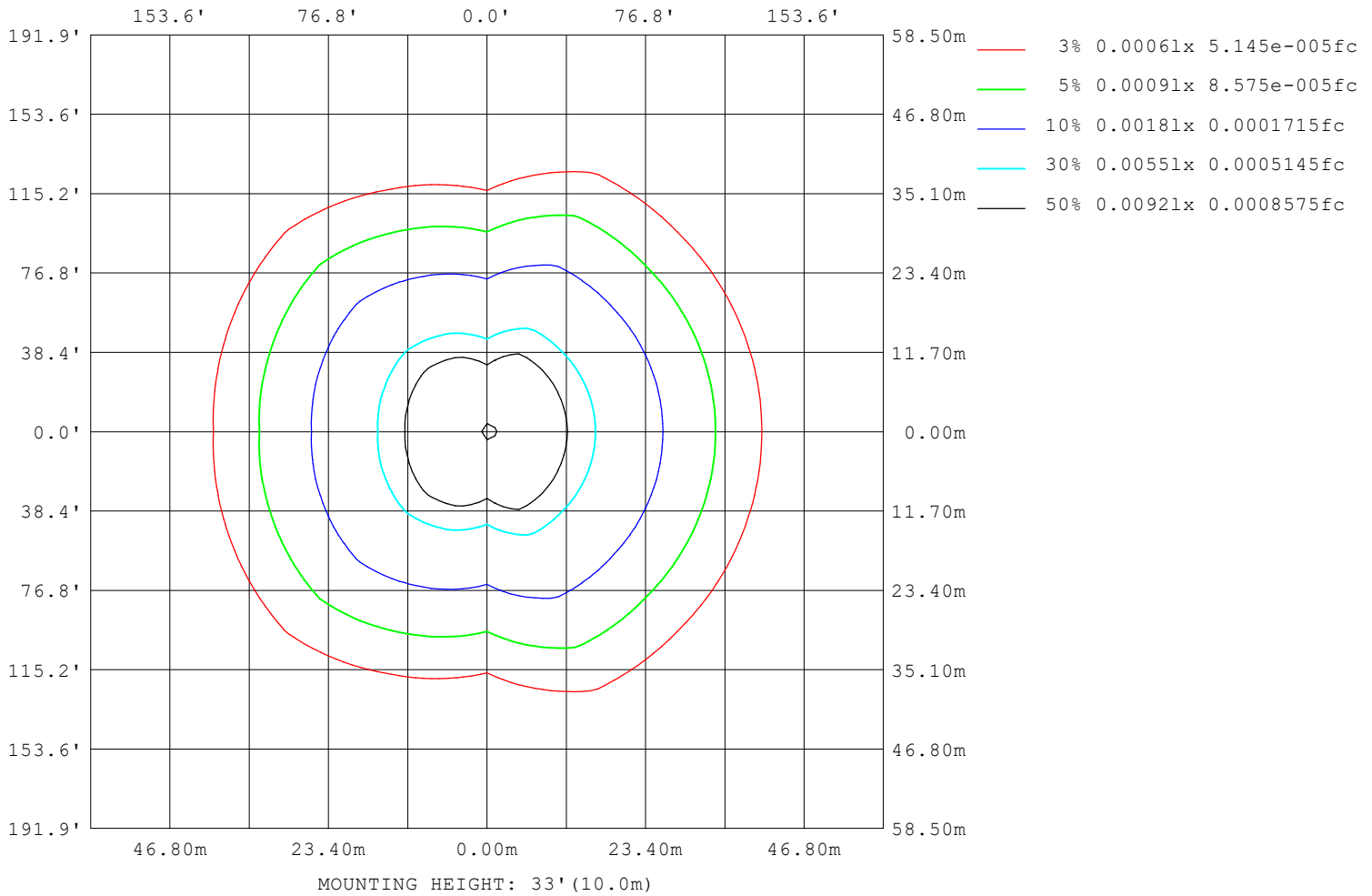
C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: ELAINE  
 Test Date: 24 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC



ISOLUX DIAGRAM

Test:U:23.991V I:0.0147A P:0.3522W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:38.6585x1 lm		
NAME: AQF-G-003-2700K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:



C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operator:ELAINE  
 Test Date:24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC

**LED Avg.L Report**

Test:U:23.991V I:0.0147A P:0.3522W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:38.6585x1 lm		
NAME: AQF-G-003-2700K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

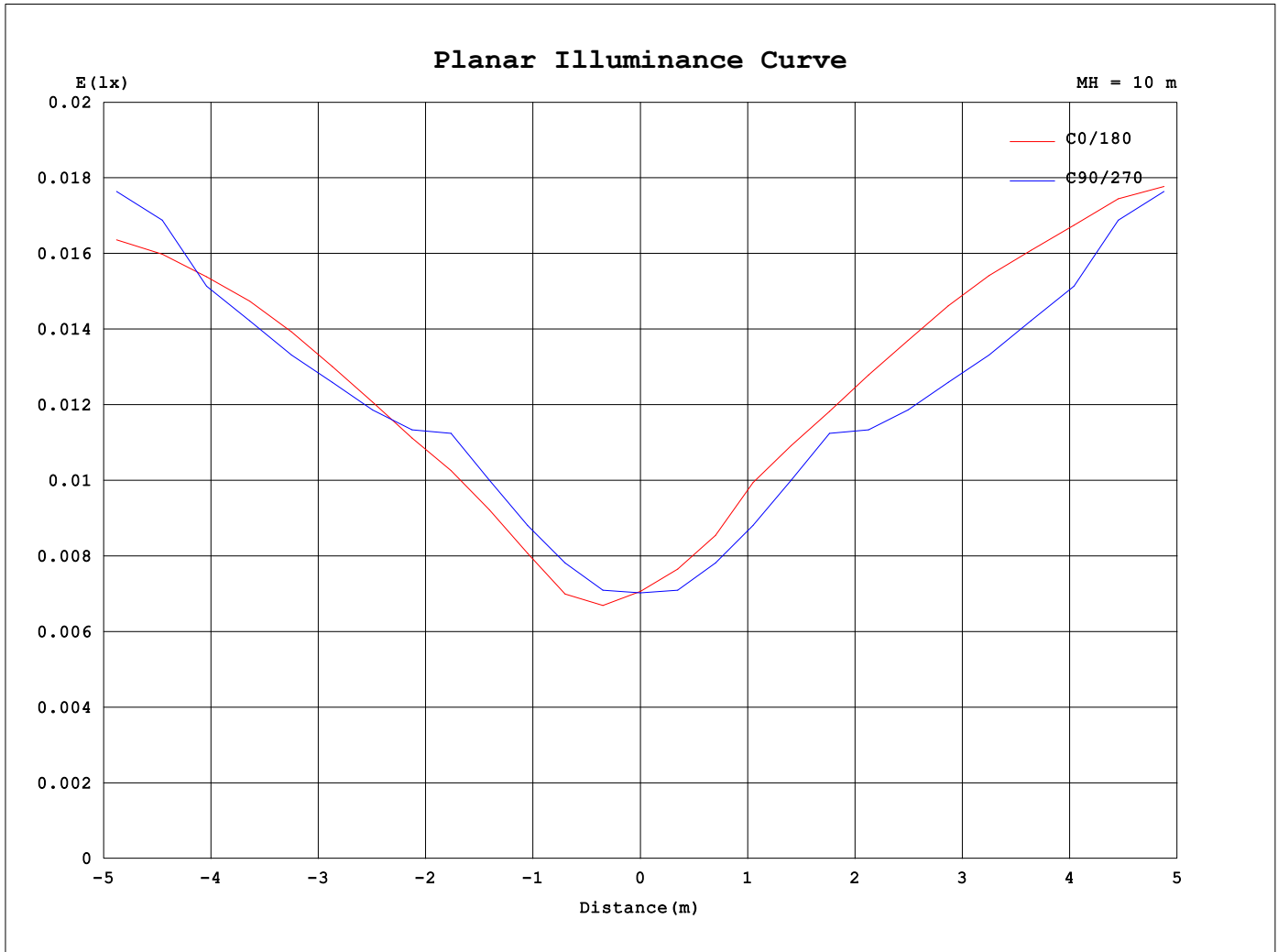
AvgL	cd/m2
L_0~180 (65) av	4690
L_0~180 (75) av	7872
L_0~180 (85) av	23299
L_90~270 (65) av	3318
L_90~270 (75) av	5501
L_90~270 (85) av	16165
L_45 (65) av	4973
L_45 (75) av	8347
L_45 (85) av	24547

Standard: GB/T 29293-2012

C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC

Planar Illuminance Curve



C Range: 0 - 180DEG  
 C Interval: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operator: ELAINE  
 Test Date: 24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:23.991V I:0.0147A P:0.3522W PF:1.0000 Freq:0Hz		
UTHdi:0.00% ITHdi:0.00% KDisp:0 Lamp Flux:38.6585x1 lm		
NAME: AQF-G-003-2700K	TYPE: E27 GLOBE	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	0.70	0.70	0.70	0.70	0.70	0.71	0.70	0.70	0.71	0.70	0.70	0.71	0.70	0.70	0.70	0.70			
5	0.70	0.71	0.69	0.72	0.79	0.85	0.86	0.85	0.86	0.85	0.86	0.85	0.79	0.72	0.69	0.71			
10	1.07	1.07	1.08	1.05	1.18	1.13	1.28	1.28	1.24	1.28	1.28	1.13	1.18	1.05	1.08	1.07			
15	1.32	1.32	1.35	1.30	1.30	1.41	1.58	1.55	1.50	1.55	1.58	1.41	1.30	1.30	1.35	1.32			
20	1.78	1.71	1.85	1.87	1.71	1.97	2.11	2.01	1.94	2.01	2.11	1.97	1.71	1.87	1.85	1.71			
25	2.10	2.02	2.16	2.22	2.22	2.41	2.41	2.30	2.29	2.30	2.41	2.41	2.22	2.22	2.16	2.02			
30	2.53	2.49	2.55	2.58	2.48	2.69	2.81	2.74	2.69	2.74	2.81	2.69	2.48	2.58	2.55	2.49			
35	2.78	2.73	2.81	2.87	2.31	2.86	3.10	2.99	2.91	2.99	3.10	2.86	2.31	2.87	2.81	2.73			
40	3.06	3.03	3.15	3.32	2.48	3.21	3.49	3.27	3.19	3.27	3.49	3.21	2.48	3.32	3.15	3.03			
45	3.22	3.20	3.34	3.47	2.53	3.32	3.67	3.43	3.33	3.43	3.67	3.32	2.53	3.47	3.34	3.20			
50	3.46	3.45	3.57	3.71	2.63	3.45	3.91	3.67	3.55	3.67	3.91	3.45	2.63	3.71	3.57	3.45			
55	3.60	3.61	3.70	3.85	2.68	3.50	4.04	3.82	3.67	3.82	4.04	3.50	2.68	3.85	3.70	3.61			
60	3.77	3.79	3.84	4.01	2.72	3.52	4.19	3.98	3.80	3.98	4.19	3.52	2.72	4.01	3.84	3.79			
65	3.87	3.88	3.92	4.12	2.75	3.51	4.29	4.06	3.88	4.06	4.29	3.51	2.75	4.12	3.92	3.88			
70	3.99	3.99	4.02	4.22	2.77	3.51	4.38	4.14	3.96	4.14	4.38	3.51	2.77	4.22	4.02	3.99			
75	4.02	4.02	4.06	4.25	2.79	3.51	4.41	4.16	3.97	4.16	4.41	3.51	2.79	4.25	4.06	4.02			
80	4.04	4.05	4.07	4.24	2.79	3.49	4.39	4.16	3.95	4.16	4.39	3.49	2.79	4.24	4.07	4.05			
85	4.04	4.04	4.05	4.20	2.77	3.46	4.36	4.13	3.93	4.13	4.36	3.46	2.77	4.20	4.05	4.04			
90	4.05	4.01	4.04	4.22	2.77	3.42	4.34	4.10	3.92	4.10	4.34	3.42	2.77	4.22	4.04	4.01			
95	4.05	3.98	4.04	4.23	2.77	3.38	4.33	4.09	3.91	4.09	4.33	3.38	2.77	4.23	4.04	3.98			
100	4.01	3.96	4.02	4.17	2.73	3.32	4.26	4.03	3.85	4.03	4.26	3.32	2.73	4.17	4.02	3.96			
105	3.97	3.95	3.97	4.11	2.69	3.25	4.20	3.97	3.79	3.97	4.20	3.25	2.69	4.11	3.97	3.95			
110	3.93	3.90	3.91	4.04	2.65	3.13	4.10	3.85	3.72	3.85	4.10	3.13	2.65	4.04	3.91	3.90			
115	3.92	3.88	3.83	3.90	2.57	3.01	3.97	3.77	3.67	3.77	3.97	3.01	2.57	3.90	3.83	3.88			
120	3.79	3.68	3.53	3.54	2.45	2.74	3.67	3.55	3.45	3.55	3.67	2.74	2.45	3.54	3.53	3.68			
125	3.54	3.46	3.32	3.30	2.34	2.54	3.44	3.34	3.18	3.34	3.44	2.54	2.34	3.30	3.32	3.46			
130	3.10	3.01	2.93	2.90	2.15	2.26	3.05	2.94	2.72	2.94	3.05	2.26	2.15	2.90	2.93	3.01			
135	2.71	2.66	2.61	2.61	2.01	2.05	2.69	2.57	2.33	2.57	2.69	2.05	2.01	2.61	2.61	2.66			
140	2.05	2.03	1.96	1.95	1.59	1.58	1.97	1.85	1.69	1.85	1.97	1.58	1.59	1.95	1.96	2.03			
145	1.61	1.58	1.51	1.49	1.28	1.33	1.50	1.36	1.23	1.36	1.50	1.33	1.28	1.49	1.51	1.58			
150	0.94	0.90	0.84	0.79	0.83	1.07	0.82	0.67	0.58	0.67	0.82	1.07	0.83	0.79	0.84	0.90			
155	0.50	0.47	0.42	0.41	0.61	0.84	0.51	0.33	0.17	0.33	0.51	0.84	0.61	0.41	0.42	0.47			
160	0.02	0.02	0.02	0.02	0.02	0.09	0.02	0.02	0.01	0.02	0.02	0.09	0.02	0.02	0.02	0.02			
165	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01			
170	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			
175	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			
180	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: 22.5DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:ELAINE  
 Test Date:24 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AQF-G-003-2700K  
 1.5W / 2700K  
 24V DC