

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

LAMP PHOTOMETRIC REPORT

MODEL: LRD-EGN-7W-50K-D

POWER: 7W

VOLTAGE: 120V

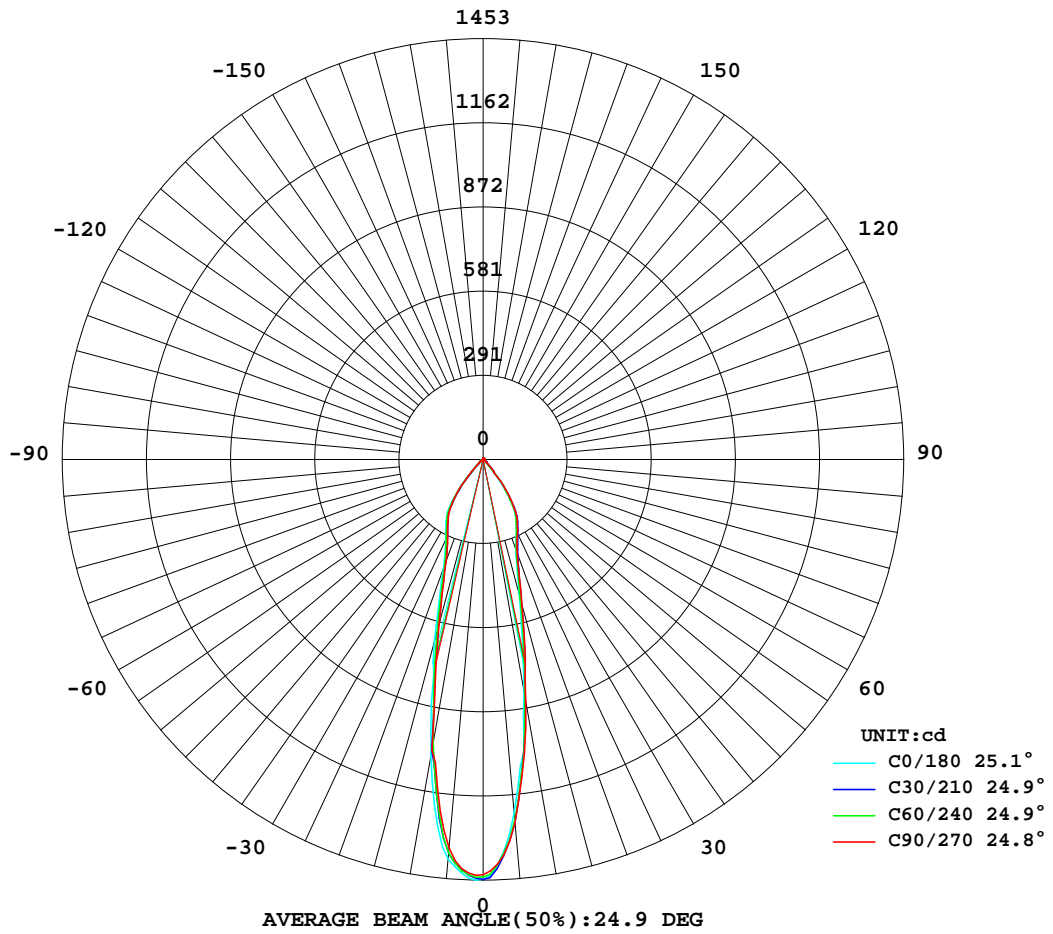
WORKING VOLTAGE: 120.4V

MANUFACTURER:

TOTAL FLUX: 569.35 lm

Efficiency: 90.950 lm/W

Test: U: 120.4V I: 0.053A P: 6.260W PF: 0.964



Test System: HOPOO HPG1800
Temperature: 25.3 DEG
Operators:
Test Date: 2019年08月16日

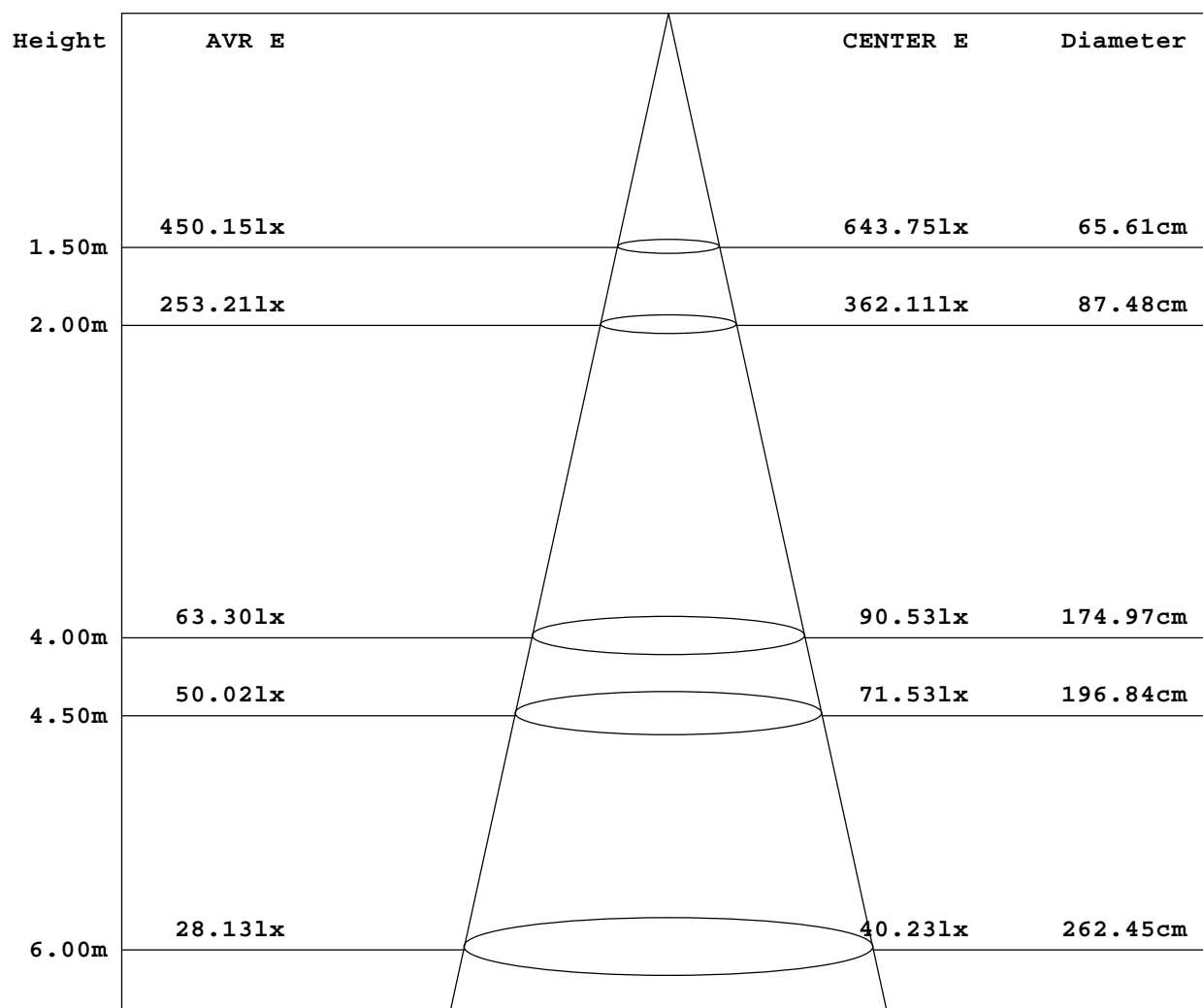
Test Set: 5.0 deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 5.900 m
Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

AVERAGE AND CENTER E Figure

Report number:

| | | |
|----------------|------------|-------------|
| MANUFACTURER: | Address: | |
| NAME: | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: | SERIAL No.: |



Angle: 24.7deg

Test System: HOPOO HPG1800
 Temperature: 25.3DEG
 Operators:
 Test Date: 2019年08月16日

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 5.900 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Report number:

| | | |
|-----------------------|-------------------|--------------------|
| MANUFACTURER: | Address: | |
| NAME: | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: | SERIAL No.: |

| g | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | g | zone | tBtal |
|-------|-----------------------|-------|-------|-------|-------|-------|-------|-------|---------|---------|-------|
| 5.0 | 1386 | 1365 | 1347 | 1364 | 1229 | 1256 | 1261 | 1227 | 0- 5 | 32.78 | 32.78 |
| 10.0 | 1042 | 1006 | 1019 | 1013 | 814.5 | 840.9 | 851.2 | 816.5 | 5- 10 | 78.72 | 111.5 |
| 15.0 | 649.3 | 609.8 | 591.4 | 623.2 | 483.7 | 507.3 | 518.8 | 490.9 | 10- 15 | 84.63 | 196.1 |
| 20.0 | 403.3 | 385.3 | 375.1 | 388.6 | 332.8 | 343.8 | 347.5 | 333.8 | 15- 20 | 73.20 | 269.3 |
| 25.0 | 307.6 | 296.9 | 291.2 | 298.4 | 272.9 | 278.8 | 281.9 | 270.7 | 20- 25 | 66.90 | 336.2 |
| 30.0 | 257.0 | 247.6 | 242.4 | 250.8 | 224.2 | 231.5 | 235.0 | 224.8 | 25- 30 | 66.28 | 402.5 |
| 35.0 | 204.3 | 193.4 | 190.5 | 201.1 | 151.6 | 159.4 | 162.9 | 153.1 | 30- 35 | 61.99 | 464.5 |
| 40.0 | 119.1 | 115.9 | 114.8 | 121.4 | 60.70 | 59.47 | 57.71 | 58.63 | 35- 40 | 44.58 | 509.1 |
| 45.0 | 46.64 | 37.22 | 38.11 | 41.23 | 17.85 | 21.16 | 26.59 | 21.61 | 40- 45 | 20.52 | 529.6 |
| 50.0 | 19.87 | 17.40 | 19.31 | 17.89 | 10.09 | 12.35 | 15.59 | 13.28 | 45- 50 | 8.570 | 538.2 |
| 55.0 | 12.77 | 12.58 | 12.46 | 11.62 | 7.031 | 9.276 | 11.31 | 9.068 | 50- 55 | 5.552 | 543.7 |
| 60.0 | 9.050 | 8.789 | 7.449 | 7.449 | 3.863 | 5.761 | 7.484 | 5.412 | 55- 60 | 4.065 | 547.8 |
| 65.0 | 5.778 | 5.395 | 4.003 | 4.420 | 2.297 | 3.602 | 4.873 | 3.411 | 60- 65 | 2.619 | 550.4 |
| 70.0 | 4.212 | 3.829 | 2.471 | 3.098 | 1.775 | 2.662 | 3.689 | 2.680 | 65- 70 | 1.798 | 552.2 |
| 75.0 | 3.481 | 2.976 | 1.844 | 2.523 | 1.496 | 2.245 | 3.132 | 2.245 | 70- 75 | 1.439 | 553.6 |
| 80.0 | 2.993 | 2.436 | 1.462 | 2.158 | 1.322 | 1.949 | 2.715 | 1.931 | 75- 80 | 1.231 | 554.9 |
| 85.0 | 2.645 | 2.018 | 1.183 | 1.897 | 1.183 | 1.740 | 2.436 | 1.705 | 80- 85 | 1.075 | 556.0 |
| 90.0 | 2.297 | 1.566 | 0.905 | 1.566 | 1.009 | 1.496 | 2.088 | 1.479 | 85- 90 | 0.928 | 556.9 |
| 95.0 | 2.053 | 1.444 | 0.870 | 1.444 | 1.044 | 1.427 | 1.984 | 1.409 | 90- 95 | 0.815 | 557.7 |
| 100.0 | 1.984 | 1.409 | 0.870 | 1.392 | 1.079 | 1.409 | 1.879 | 1.392 | 95-100 | 0.780 | 558.5 |
| 105.0 | 1.879 | 1.392 | 0.905 | 1.374 | 1.113 | 1.392 | 1.844 | 1.392 | 100-105 | 0.755 | 559.2 |
| 110.0 | 1.844 | 1.392 | 0.975 | 1.374 | 1.183 | 1.427 | 1.810 | 1.409 | 105-110 | 0.738 | 560.0 |
| 115.0 | 1.844 | 1.444 | 1.044 | 1.409 | 1.287 | 1.496 | 1.844 | 1.479 | 110-115 | 0.732 | 560.7 |
| 120.0 | 1.879 | 1.496 | 1.148 | 1.479 | 1.427 | 1.566 | 1.879 | 1.566 | 115-120 | 0.734 | 561.4 |
| 125.0 | 1.949 | 1.618 | 1.287 | 1.583 | 1.601 | 1.688 | 1.984 | 1.705 | 120-125 | 0.743 | 562.2 |
| 130.0 | 2.018 | 1.757 | 1.496 | 1.723 | 1.810 | 1.844 | 2.088 | 1.844 | 125-130 | 0.755 | 562.9 |
| 135.0 | 2.193 | 1.949 | 1.705 | 1.931 | 2.088 | 2.088 | 2.297 | 2.088 | 130-135 | 0.773 | 563.7 |
| 140.0 | 2.436 | 2.245 | 2.053 | 2.210 | 2.436 | 2.401 | 2.575 | 2.401 | 135-140 | 0.805 | 564.5 |
| 145.0 | 2.784 | 2.610 | 2.436 | 2.575 | 2.889 | 2.784 | 2.924 | 2.784 | 140-145 | 0.839 | 565.3 |
| 150.0 | 3.167 | 3.011 | 2.854 | 2.958 | 3.306 | 3.167 | 3.272 | 3.167 | 145-150 | 0.855 | 566.2 |
| 155.0 | 3.515 | 3.393 | 3.237 | 3.341 | 3.655 | 3.533 | 3.620 | 3.515 | 150-155 | 0.831 | 567.0 |
| 160.0 | 3.829 | 3.689 | 3.550 | 3.655 | 3.968 | 3.811 | 3.898 | 3.794 | 155-160 | 0.759 | 567.8 |
| 165.0 | 4.072 | 3.933 | 3.794 | 3.881 | 4.177 | 4.020 | 4.107 | 3.985 | 160-165 | 0.639 | 568.4 |
| 170.0 | 4.212 | 4.055 | 3.898 | 4.020 | 4.246 | 4.090 | 4.177 | 4.055 | 165-170 | 0.479 | 568.9 |
| 175.0 | 4.246 | 4.090 | 3.933 | 4.037 | 4.281 | 4.107 | 4.177 | 4.037 | 170-175 | 0.293 | 569.2 |
| 180.0 | 4.212 | 4.124 | 4.003 | 4.055 | 4.351 | 4.107 | 4.142 | 4.055 | 175-180 | 0.098 | 569.3 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | |

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月16日

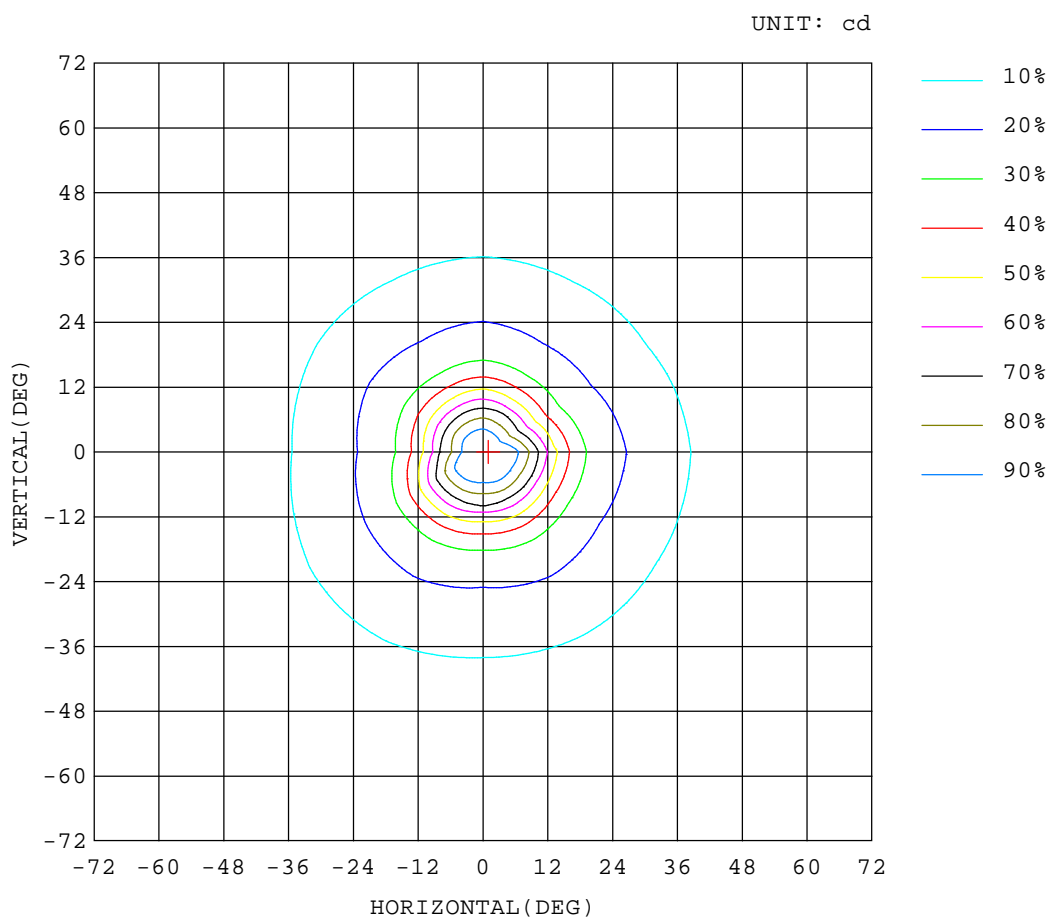
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:5.900 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Report number:

| | | |
|----------------|------------|-------------|
| MANUFACTURER: | Address: | |
| NAME: | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: | SERIAL No.: |



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月16日

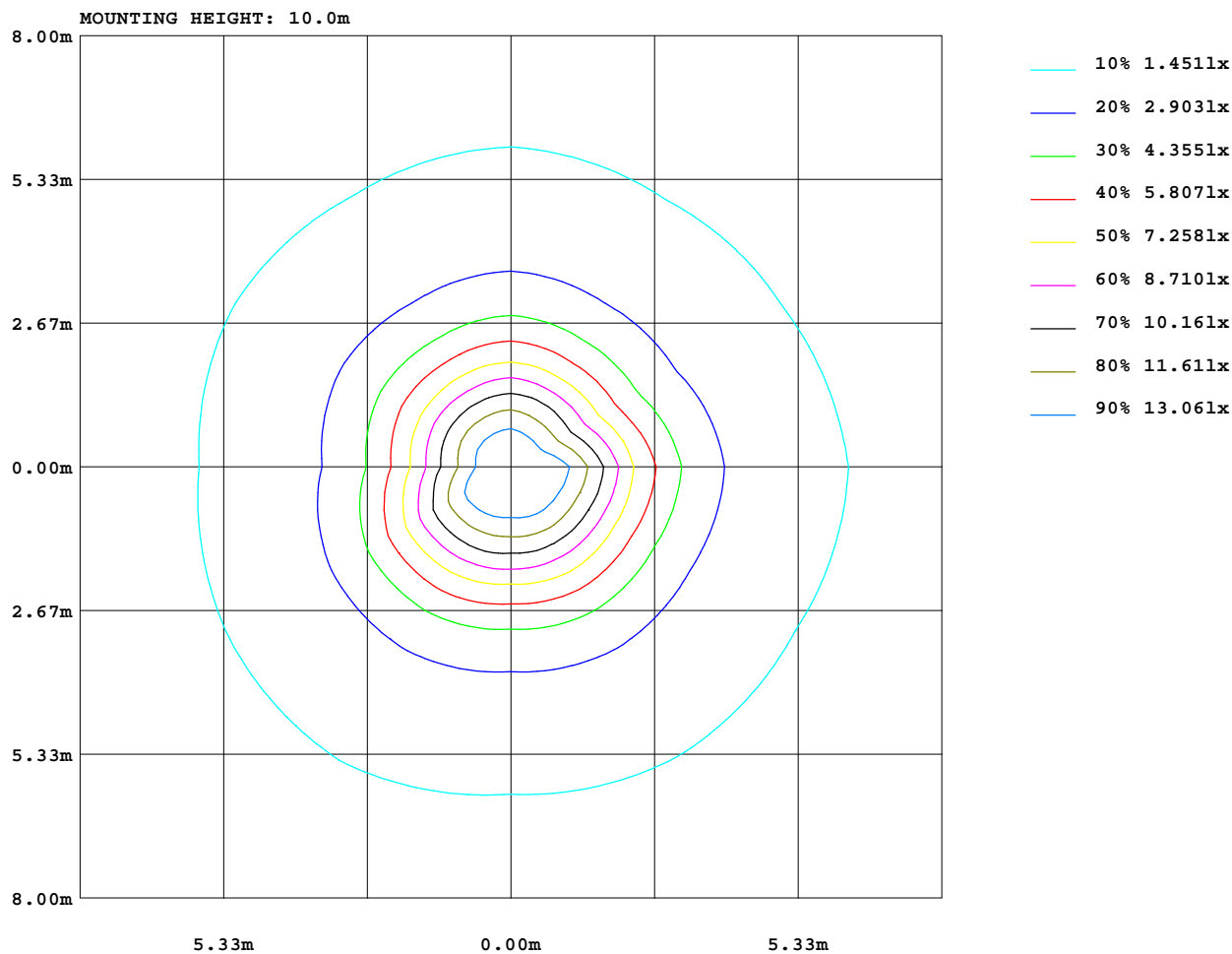
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:5.900 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Report number:

| | | |
|-----------------------|-------------------|--------------------|
| MANUFACTURER: | Address: | |
| NAME: | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: | SERIAL No.: |



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月16日

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:5.900 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

AREA LUMINOUS FLUX

Report number:

| | | | | | | |
|----------------|------------|--|--|--|-------------|--|
| MANUFACTURER: | Address: | | | | | |
| NAME: | TYPE: | | | | WEIGHT: | |
| SPECIFICATION: | DIMENSION: | | | | SERIAL No.: | |

| | | AREA FLUX DIAGRAM | | | | | | | | | | | | | | | | UNIT:lm | | Φt | Φa |
|----------------|------|-------------------|------|------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|---------|------|----------|----------|
| VERTICAL (DEG) | 72 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.06 | 0.07 | 0.07 | 0.06 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.69 | 0.69 | |
| | 64 | 0.02 | 0.03 | 0.04 | 0.04 | 0.05 | 0.05 | 0.08 | 0.11 | 0.14 | 0.14 | 0.11 | 0.07 | 0.05 | 0.04 | 0.04 | 0.04 | 0.03 | 0.02 | 1.08 | 1.08 |
| | 56 | 0.02 | 0.03 | 0.05 | 0.06 | 0.09 | 0.11 | 0.15 | 0.20 | 0.25 | 0.25 | 0.20 | 0.15 | 0.11 | 0.08 | 0.06 | 0.05 | 0.03 | 0.02 | 1.92 | 1.92 |
| | 48 | 0.02 | 0.03 | 0.06 | 0.11 | 0.15 | 0.19 | 0.26 | 0.47 | 0.68 | 0.68 | 0.47 | 0.28 | 0.20 | 0.15 | 0.10 | 0.06 | 0.04 | 0.02 | 3.98 | 3.98 |
| | 40 | 0.02 | 0.04 | 0.08 | 0.16 | 0.24 | 0.48 | 1.16 | 2.08 | 2.69 | 2.66 | 1.99 | 1.08 | 0.47 | 0.25 | 0.16 | 0.09 | 0.05 | 0.03 | 13.7 | 13.7 |
| | 32 | 0.02 | 0.04 | 0.10 | 0.20 | 0.51 | 1.62 | 3.15 | 4.20 | 4.80 | 4.77 | 4.11 | 3.02 | 1.52 | 0.50 | 0.22 | 0.12 | 0.06 | 0.03 | 29.0 | 29.0 |
| | 24 | 0.02 | 0.04 | 0.11 | 0.26 | 1.10 | 3.07 | 4.57 | 5.63 | 6.69 | 6.64 | 5.52 | 4.44 | 2.96 | 1.18 | 0.34 | 0.15 | 0.07 | 0.03 | 42.8 | 42.8 |
| | | 0.02 | 0.04 | 0.12 | 0.34 | 1.72 | 3.89 | 5.57 | 8.37 | 12.6 | 12.4 | 8.11 | 5.45 | 3.98 | 2.09 | 0.55 | 0.18 | 0.08 | 0.03 | 65.6 | 65.6 |
| | | 0.02 | 0.04 | 0.11 | 0.39 | 2.06 | 4.18 | 6.22 | 12.2 | 22.3 | 22.3 | 13.4 | 6.97 | 4.58 | 2.74 | 0.78 | 0.20 | 0.09 | 0.04 | 98.8 | 98.8 |
| | | 0.01 | 0.04 | 0.11 | 0.41 | 2.14 | 4.22 | 6.45 | 13.6 | 24.3 | 24.7 | 14.9 | 7.27 | 4.65 | 2.83 | 0.80 | 0.20 | 0.09 | 0.03 | 107 | 107 |
| | | 0.01 | 0.04 | 0.11 | 0.38 | 1.99 | 4.04 | 5.88 | 9.96 | 15.0 | 14.8 | 9.80 | 5.92 | 4.21 | 2.37 | 0.58 | 0.17 | 0.08 | 0.03 | 75.5 | 75.5 |
| | -24 | 0.01 | 0.04 | 0.10 | 0.27 | 1.47 | 3.50 | 4.91 | 6.30 | 7.45 | 7.42 | 6.26 | 4.87 | 3.46 | 1.54 | 0.34 | 0.14 | 0.07 | 0.03 | 48.2 | 48.2 |
| | -32 | 0.01 | 0.03 | 0.08 | 0.19 | 0.71 | 2.32 | 3.91 | 4.79 | 5.10 | 5.08 | 4.71 | 3.77 | 2.21 | 0.67 | 0.20 | 0.11 | 0.05 | 0.03 | 34.0 | 34.0 |
| | -40 | 0.01 | 0.02 | 0.06 | 0.14 | 0.31 | 0.89 | 2.05 | 3.01 | 3.39 | 3.34 | 2.87 | 1.91 | 0.83 | 0.29 | 0.15 | 0.08 | 0.04 | 0.02 | 19.4 | 19.4 |
| | -48 | 0.01 | 0.02 | 0.04 | 0.10 | 0.19 | 0.33 | 0.60 | 0.87 | 1.06 | 1.04 | 0.84 | 0.56 | 0.33 | 0.20 | 0.12 | 0.05 | 0.03 | 0.02 | 6.42 | 6.42 |
| | -56 | 0.01 | 0.02 | 0.03 | 0.06 | 0.12 | 0.20 | 0.26 | 0.30 | 0.32 | 0.32 | 0.31 | 0.28 | 0.22 | 0.14 | 0.08 | 0.04 | 0.03 | 0.02 | 2.76 | 2.76 |
| -64 | 0.01 | 0.01 | 0.02 | 0.04 | 0.07 | 0.11 | 0.14 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.13 | 0.09 | 0.05 | 0.03 | 0.02 | 0.02 | 1.53 | 1.53 | |
| -72 | 0.01 | 0.01 | 0.02 | 0.04 | 0.05 | 0.07 | 0.07 | 0.07 | 0.06 | 0.07 | 0.08 | 0.08 | 0.08 | 0.06 | 0.04 | 0.03 | 0.02 | 0.01 | 0.89 | 0.89 | |
| | | -72 | -64 | -56 | -48 | -40 | -32 | -24 | -16 | HORIZONTAL(DEG) | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | | | |
| Φt | | 0.26 | 0.56 | 1.28 | 3.22 | 13.0 | 29.3 | 45.5 | 72.5 | 107 | 107 | 74.0 | 46.3 | 30.0 | 15.2 | 4.66 | 1.76 | 0.89 | 0.46 | 569 | |
| Φa | | 0.26 | 0.56 | 1.28 | 3.22 | 13.0 | 29.3 | 45.5 | 72.5 | 107 | 107 | 74.0 | 46.3 | 30.0 | 15.2 | 4.66 | 1.76 | 0.89 | 0.46 | | 569 |

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月16日

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:5.900 m
 Remarks:

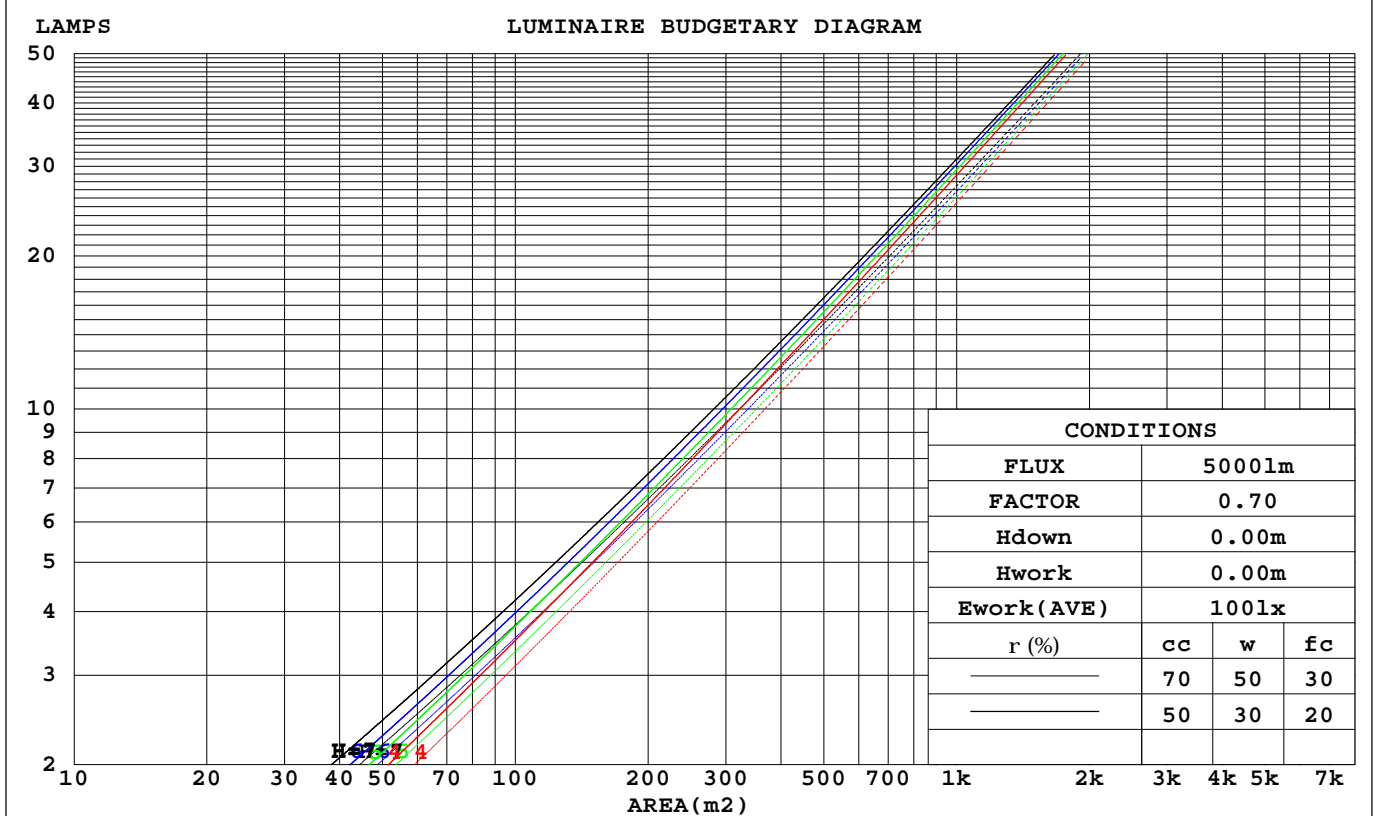
HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

| | | | | | | | | | | | |
|----------------|--|--|--|------------|--|--|--|-------------|--|--|--|
| MANUFACTURER: | | | | Address: | | | | | | | |
| NAME: | | | | TYPE: | | | | WEIGHT: | | | |
| SPECIFICATION: | | | | DIMENSION: | | | | SERIAL No.: | | | |

| | | | | | | | | | | | | | | | | |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|
| rcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
| rw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| r fc | 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 | 1.10 | 1.10 | 1.10 | 1.05 | 1.05 | 1.05 | 1.00 | 1.00 | 1.00 | .98 |
| 1.0 | 1.10 | 1.08 | 1.06 | 1.08 | 1.06 | 1.04 | 1.03 | 1.02 | 1.00 | .99 | .98 | .97 | .96 | .95 | .94 | .92 |
| 2.0 | 1.03 | .99 | .96 | 1.01 | .97 | .94 | .97 | .94 | .92 | .94 | .92 | .90 | .91 | .89 | .88 | .86 |
| 3.0 | .96 | .91 | .88 | .95 | .90 | .87 | .92 | .88 | .85 | .89 | .86 | .84 | .87 | .84 | .82 | .80 |
| 4.0 | .90 | .85 | .81 | .89 | .84 | .81 | .87 | .83 | .79 | .85 | .81 | .78 | .82 | .80 | .77 | .76 |
| 5.0 | .85 | .80 | .76 | .84 | .79 | .75 | .82 | .78 | .74 | .80 | .76 | .73 | .79 | .75 | .73 | .71 |
| 6.0 | .81 | .75 | .71 | .80 | .74 | .70 | .78 | .73 | .70 | .76 | .72 | .69 | .75 | .71 | .69 | .67 |
| 7.0 | .76 | .71 | .67 | .76 | .70 | .66 | .74 | .69 | .66 | .73 | .69 | .65 | .71 | .68 | .65 | .64 |
| 8.0 | .72 | .67 | .63 | .72 | .67 | .63 | .71 | .66 | .62 | .69 | .65 | .62 | .68 | .65 | .62 | .60 |
| 9.0 | .69 | .64 | .60 | .68 | .63 | .60 | .67 | .63 | .59 | .66 | .62 | .59 | .65 | .62 | .59 | .57 |
| 10.0 | .66 | .60 | .57 | .65 | .60 | .57 | .64 | .60 | .56 | .64 | .59 | .56 | .63 | .59 | .56 | .55 |



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月16日

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:5.900 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Report number:

| | | | |
|-----------------------|-------------------|--------------------|--|
| MANUFACTURER: | Address: | | |
| NAME: | TYPE: | WEIGHT: | |
| SPECIFICATION: | DIMENSION: | SERIAL No.: | |

| rcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------------|------------------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|
| rw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| rfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Wall Exitance Coefficients(WEC) | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | |
| 1.0 | .177 | .101 | .032 | .170 | .097 | .031 | .156 | .090 | .029 | .143 | .083 | .027 | .132 | .076 | .025 | |
| 2.0 | .167 | .092 | .028 | .161 | .089 | .027 | .149 | .083 | .026 | .139 | .078 | .024 | .129 | .073 | .023 | |
| 3.0 | .158 | .084 | .025 | .153 | .082 | .025 | .143 | .077 | .023 | .133 | .073 | .022 | .125 | .069 | .021 | |
| 4.0 | .149 | .078 | .023 | .145 | .076 | .022 | .136 | .072 | .022 | .128 | .069 | .021 | .120 | .065 | .020 | |
| 5.0 | .142 | .072 | .021 | .137 | .071 | .021 | .130 | .068 | .020 | .123 | .065 | .019 | .116 | .062 | .019 | |
| 6.0 | .134 | .067 | .019 | .131 | .066 | .019 | .124 | .064 | .018 | .118 | .061 | .018 | .112 | .059 | .017 | |
| 7.0 | .128 | .063 | .018 | .125 | .062 | .018 | .119 | .060 | .017 | .113 | .058 | .017 | .108 | .056 | .016 | |
| 8.0 | .122 | .060 | .017 | .119 | .059 | .017 | .114 | .057 | .016 | .109 | .055 | .016 | .104 | .053 | .016 | |
| 9.0 | .116 | .056 | .016 | .114 | .055 | .016 | .109 | .054 | .015 | .104 | .052 | .015 | .100 | .051 | .015 | |
| 10.0 | .111 | .053 | .015 | .109 | .053 | .015 | .105 | .051 | .014 | .101 | .050 | .014 | .097 | .049 | .014 | |

| rcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------------|------------------------------|------|------|------|------|------|---|------|------|------|------|------|------|------|------|---|
| rw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| rfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Ceiling Cavity Exitance Coefficients(CCEC) | | | | | | | | | |
| 0.0 | .207 | .207 | .207 | .177 | .177 | .177 | .121 | .121 | .121 | .069 | .069 | .069 | .022 | .022 | .022 | |
| 1.0 | .188 | .174 | .162 | .161 | .149 | .139 | .110 | .103 | .096 | .063 | .059 | .056 | .020 | .019 | .018 | |
| 2.0 | .173 | .149 | .130 | .148 | .129 | .112 | .101 | .089 | .078 | .058 | .052 | .046 | .019 | .017 | .015 | |
| 3.0 | .160 | .131 | .107 | .137 | .113 | .093 | .094 | .078 | .065 | .054 | .046 | .038 | .017 | .015 | .013 | |
| 4.0 | .149 | .116 | .090 | .128 | .100 | .078 | .088 | .070 | .055 | .051 | .041 | .033 | .016 | .013 | .011 | |
| 5.0 | .140 | .104 | .077 | .120 | .090 | .067 | .083 | .063 | .048 | .048 | .037 | .028 | .015 | .012 | .009 | |
| 6.0 | .133 | .095 | .068 | .114 | .082 | .059 | .079 | .057 | .042 | .046 | .034 | .025 | .015 | .011 | .008 | |
| 7.0 | .126 | .087 | .060 | .108 | .076 | .052 | .075 | .053 | .037 | .043 | .031 | .022 | .014 | .010 | .007 | |
| 8.0 | .120 | .081 | .054 | .103 | .070 | .047 | .071 | .049 | .033 | .042 | .029 | .020 | .013 | .010 | .007 | |
| 9.0 | .115 | .076 | .049 | .099 | .066 | .043 | .068 | .046 | .031 | .040 | .027 | .018 | .013 | .009 | .006 | |
| 10.0 | .110 | .071 | .045 | .095 | .062 | .040 | .066 | .043 | .028 | .038 | .026 | .017 | .012 | .008 | .006 | |

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月16日

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:5.900 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

Uncorrected UGR Table

Report number:

| | | | | | | | | | | |
|---|-------------------------|------|------|------|-------------------|-----------------------|------|--------------------|------|------|
| MANUFACTURER: | | | | | Address: | | | | | |
| NAME: | | | | | TYPE: | | | WEIGHT: | | |
| SPECIFICATION: | | | | | DIMENSION: | | | SERIAL No.: | | |
| 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 | 20.3 | 21.1 | 20.5 | 21.3 | 21.5 | 20.5 | 21.3 | 20.7 | 21.5 | 21.7 |
| 3H | 20.2 | 21.0 | 20.5 | 21.2 | 21.5 | 20.4 | 21.2 | 20.7 | 21.4 | 21.7 |
| 4H | 20.2 | 20.9 | 20.5 | 21.2 | 21.5 | 20.3 | 21.1 | 20.6 | 21.4 | 21.6 |
| 6H | 20.2 | 20.9 | 20.5 | 21.2 | 21.5 | 20.3 | 21.0 | 20.6 | 21.3 | 21.6 |
| 8H | 20.2 | 20.9 | 20.6 | 21.2 | 21.5 | 20.3 | 21.0 | 20.6 | 21.3 | 21.6 |
| 12H | 20.3 | 21.0 | 20.7 | 21.3 | 21.6 | 20.3 | 20.9 | 20.6 | 21.3 | 21.6 |
| 4H 2H | 20.1 | 20.9 | 20.4 | 21.1 | 21.4 | 20.3 | 21.0 | 20.6 | 21.3 | 21.6 |
| 3H | 20.0 | 20.7 | 20.4 | 21.0 | 21.3 | 20.3 | 20.9 | 20.6 | 21.2 | 21.5 |
| 4H | 20.0 | 20.6 | 20.4 | 21.0 | 21.3 | 20.3 | 20.9 | 20.6 | 21.2 | 21.6 |
| 6H | 20.1 | 20.6 | 20.5 | 21.0 | 21.4 | 20.3 | 20.8 | 20.7 | 21.2 | 21.6 |
| 8H | 20.2 | 20.7 | 20.6 | 21.1 | 21.5 | 20.3 | 20.8 | 20.7 | 21.2 | 21.6 |
| 12H | 20.4 | 20.8 | 20.8 | 21.2 | 21.7 | 20.4 | 20.8 | 20.8 | 21.2 | 21.7 |
| 8H 4H | 19.9 | 20.4 | 20.4 | 20.8 | 21.2 | 20.2 | 20.7 | 20.6 | 21.1 | 21.5 |
| 6H | 20.1 | 20.5 | 20.5 | 20.9 | 21.4 | 20.3 | 20.7 | 20.8 | 21.2 | 21.6 |
| 8H | 20.2 | 20.5 | 20.7 | 21.0 | 21.5 | 20.4 | 20.8 | 20.9 | 21.3 | 21.7 |
| 12H | 20.4 | 20.8 | 20.9 | 21.2 | 21.8 | 20.6 | 20.9 | 21.1 | 21.4 | 21.9 |
| 12H 4H | 19.9 | 20.4 | 20.4 | 20.8 | 21.2 | 20.1 | 20.6 | 20.6 | 21.0 | 21.4 |
| 6H | 20.1 | 20.4 | 20.5 | 20.9 | 21.4 | 20.3 | 20.7 | 20.8 | 21.1 | 21.6 |
| 8H | 20.2 | 20.5 | 20.7 | 21.0 | 21.5 | 20.5 | 20.8 | 21.0 | 21.3 | 21.8 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 3.1 / - 4.4 | | | | | + 2.5 / - 4.0 | | | | |
| 1.5H | + 5.3 / - 4.3 | | | | | + 4.6 / - 3.8 | | | | |
| 2.0H | + 4.4 / - 1.8 | | | | | + 2.5 / - 1.6 | | | | |

CIE Pub.117 Corrected 569.3 lm Total Lamp Luminous Flux. (8log(F/F0) = -2.0)

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月16日

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:5.900 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Report number:

| | | | |
|-----------------------|-------------------|--------------------|--|
| MANUFACTURER: | Address: | | |
| NAME: | TYPE: | WEIGHT: | |
| SPECIFICATION: | DIMENSION: | SERIAL No.: | |

| 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 | 85 | 78 | 74 | 84 | 78 | 74 | 83 | 78 | 74 | 70 |
| 0.80 | 93 | 86 | 82 | 92 | 86 | 82 | 90 | 85 | 82 | 78 |
| 1.00 | 97 | 91 | 87 | 96 | 91 | 87 | 94 | 90 | 86 | 82 |
| 1.25 | 101 | 96 | 92 | 100 | 95 | 92 | 98 | 94 | 91 | 86 |
| 1.50 | 104 | 99 | 96 | 103 | 98 | 95 | 100 | 97 | 94 | 89 |
| 2.00 | 107 | 103 | 99 | 105 | 101 | 98 | 102 | 99 | 97 | 91 |
| 2.50 | 109 | 105 | 102 | 107 | 103 | 101 | 104 | 101 | 98 | 92 |
| 3.00 | 111 | 107 | 104 | 109 | 105 | 103 | 105 | 102 | 100 | 93 |
| 4.00 | 113 | 110 | 107 | 110 | 108 | 106 | 106 | 104 | 103 | 95 |
| 5.00 | 114 | 112 | 109 | 112 | 110 | 108 | 107 | 106 | 104 | 96 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | Suspended | | | | SHRNOM = 1.25 | | | |

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月16日

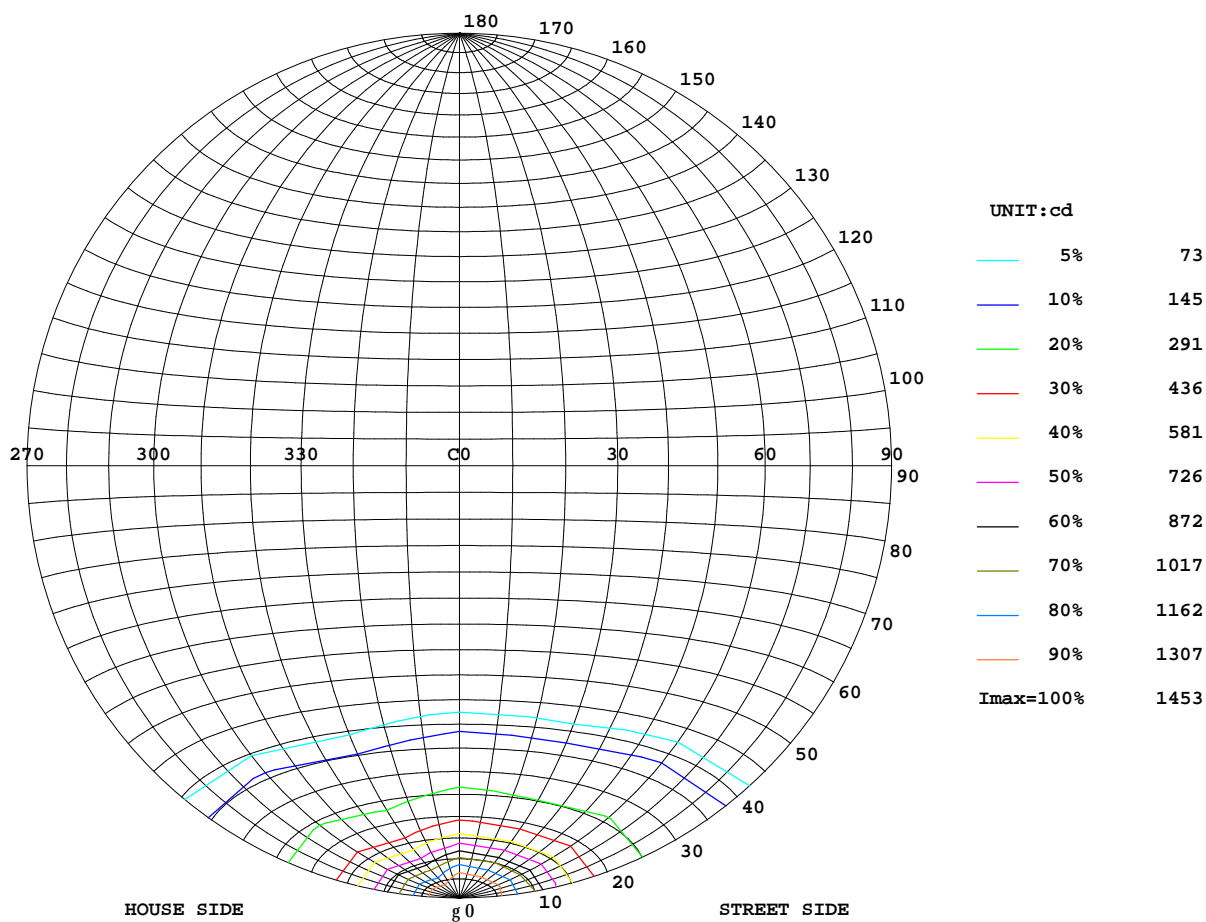
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:5.900 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Report number:

| | | |
|----------------|------------|-------------|
| MANUFACTURER: | Address: | |
| NAME: | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: | SERIAL No.: |



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2019年08月16日

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:5.900 m
 Remarks: