

## HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

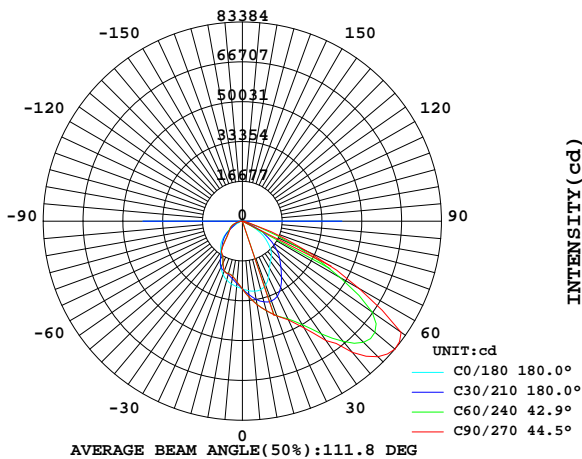
## LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

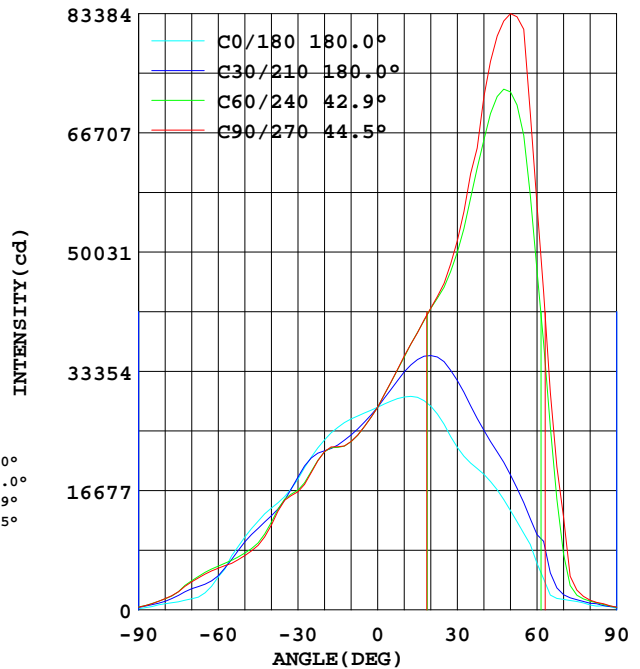
|                                  |            |             |  |
|----------------------------------|------------|-------------|--|
| MANUFACTURER:                    | Address:   |             |  |
| NAME: LSHM-600W-LV (50K)PLUS P50 | TYPE:      | WEIGHT:     |  |
| SPECIFICATION:5000K P50          | DIMENSION: | SERIAL No.: |  |

|                  |         |                    |        |                  |       |
|------------------|---------|--------------------|--------|------------------|-------|
| DATA OF LAMP     |         | Imax(cd)           | 115284 | S/MH(C0/180)     | 1.03  |
| MODEL            | 5050    | EFFICIENCY(%)      | 100.0  | S/MH(C90/270)    | 0.94  |
| NOMINAL POWER(W) | 600     | TOTAL FLUX(lm)     | 88465  | Voltage(V)       | 220.6 |
| RATED VOLTAGE(V) | 220     | EFFICIENCY(lm/W)   | 148.1  | Current(A)       | 2.890 |
| NOMINAL FLUX(lm) | 88465.0 | $\eta$ up(%)       | 0.0    | Power(W)         | 597.2 |
| LAMPS QUANTITY   | 1       | $\eta$ down(%)     | 100.0  | Power Factor(PF) | 0.969 |
| TEST VOLTAGE(V)  | 220.7   | Effective Flux(lm) | 0.0    | EI               | 0.000 |

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:03-30-2020

Test Set: 8.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:6.000 m  
Remarks:

Color Temperature Data List

Report number:

|                                  |            |             |
|----------------------------------|------------|-------------|
| MANUFACTURER:                    | Address:   |             |
| NAME: LSHM-600W-LV (50K)PLUS P50 | TYPE:      | WEIGHT:     |
| SPECIFICATION:5000K P50          | DIMENSION: | SERIAL No.: |

---

Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:03-30-2020

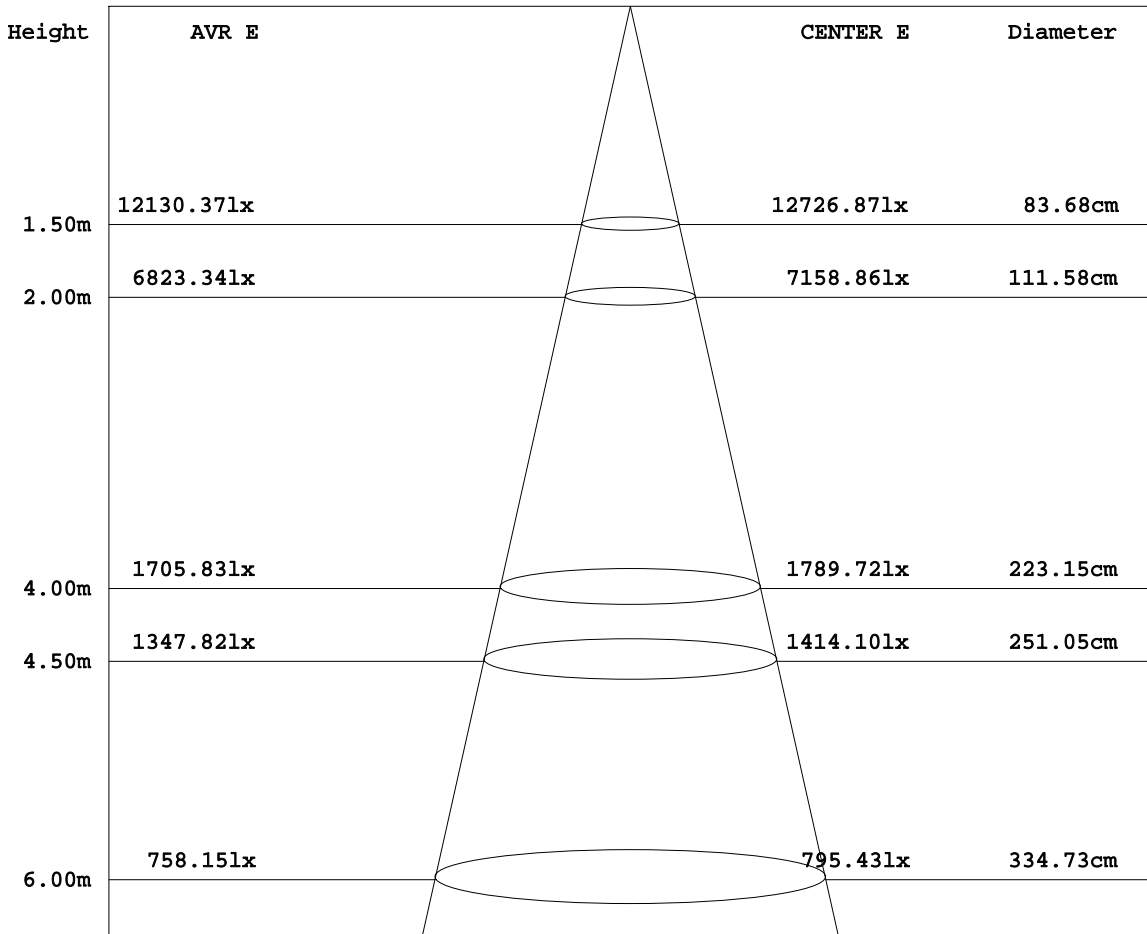
Test Set: 8.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:6.000 m  
Remarks:

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## AVERAGE AND CENTER E Figure

Report number:

|                                  |            |             |
|----------------------------------|------------|-------------|
| MANUFACTURER:                    | Address:   |             |
| NAME: LSHM-600W-LV (50K)PLUS P50 | TYPE:      | WEIGHT:     |
| SPECIFICATION:5000K P50          | DIMENSION: | SERIAL No.: |



Angle:31.2deg

Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:03-30-2020

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:6.000 m  
 Remarks:

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

## ZONAL FLUX DIAGRAM

Report number:

|                                  |            |             |
|----------------------------------|------------|-------------|
| MANUFACTURER:                    | Address:   |             |
| NAME: LSHM-600W-LV (50K)PLUS P50 | TYPE:      | WEIGHT:     |
| SPECIFICATION:5000K P50          | DIMENSION: | SERIAL No.: |

| γ     | C0                        | C45   | C90   | C135  | C180  | C225  | C270  | C315  | γ       | zone  | total |
|-------|---------------------------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 5.0   | 275.3                     | 258.3 | 256.2 | 268.1 | 291.9 | 314.1 | 318.4 | 300.9 | 0- 5    | 680.4 | 680.4 |
| 10.0  | 267.0                     | 238.3 | 235.5 | 253.0 | 297.6 | 346.1 | 355.0 | 317.6 | 5- 10   | 2053  | 2734  |
| 15.0  | 255.1                     | 226.9 | 228.1 | 237.8 | 297.3 | 372.9 | 387.5 | 328.3 | 10- 15  | 3444  | 6177  |
| 20.0  | 237.7                     | 225.2 | 221.4 | 221.8 | 285.0 | 393.6 | 422.1 | 326.1 | 15- 20  | 4813  | 10991 |
| 25.0  | 213.6                     | 207.5 | 192.0 | 202.8 | 259.7 | 402.3 | 456.6 | 308.5 | 20- 25  | 6011  | 17002 |
| 30.0  | 182.8                     | 175.7 | 165.3 | 177.3 | 227.2 | 400.7 | 516.2 | 278.0 | 25- 30  | 6918  | 23920 |
| 35.0  | 158.4                     | 155.6 | 153.3 | 153.8 | 205.2 | 396.7 | 610.1 | 242.9 | 30- 35  | 7727  | 31647 |
| 40.0  | 142.4                     | 137.8 | 118.6 | 136.6 | 189.6 | 392.4 | 717.5 | 216.5 | 35- 40  | 8587  | 40234 |
| 45.0  | 124.0                     | 112.2 | 90.27 | 121.5 | 167.8 | 373.6 | 802.4 | 194.0 | 40- 45  | 9383  | 49616 |
| 50.0  | 101.8                     | 85.02 | 75.95 | 100.4 | 138.8 | 333.8 | 833.8 | 163.4 | 45- 50  | 9781  | 59398 |
| 55.0  | 75.44                     | 65.79 | 64.99 | 72.37 | 107.1 | 269.2 | 811.7 | 128.7 | 50- 55  | 9592  | 68989 |
| 60.0  | 46.28                     | 53.82 | 58.30 | 43.19 | 64.98 | 185.4 | 565.8 | 93.91 | 55- 60  | 8254  | 77244 |
| 65.0  | 23.74                     | 43.62 | 49.96 | 30.20 | 20.75 | 96.14 | 304.3 | 47.77 | 60- 65  | 5408  | 82652 |
| 70.0  | 15.63                     | 31.03 | 39.35 | 23.16 | 14.60 | 25.32 | 129.2 | 18.95 | 65- 70  | 2843  | 85495 |
| 75.0  | 11.35                     | 20.88 | 25.43 | 15.79 | 11.65 | 13.88 | 27.68 | 13.61 | 70- 75  | 1393  | 86888 |
| 80.0  | 8.662                     | 14.08 | 15.69 | 9.764 | 6.912 | 9.916 | 13.49 | 9.446 | 75- 80  | 811.0 | 87699 |
| 85.0  | 4.664                     | 8.755 | 8.694 | 4.792 | 5.794 | 5.547 | 8.655 | 5.621 | 80- 85  | 499.5 | 88199 |
| 90.0  | 1.774                     | 3.957 | 3.785 | 2.023 | 2.111 | 3.444 | 3.712 | 4.003 | 85- 90  | 266.1 | 88465 |
| 95.0  |                           |       |       |       |       |       |       |       | 90- 95  |       |       |
| 100.0 |                           |       |       |       |       |       |       |       | 95-100  |       |       |
| 105.0 |                           |       |       |       |       |       |       |       | 100-105 |       |       |
| 110.0 |                           |       |       |       |       |       |       |       | 105-110 |       |       |
| 115.0 |                           |       |       |       |       |       |       |       | 110-115 |       |       |
| 120.0 |                           |       |       |       |       |       |       |       | 115-120 |       |       |
| 125.0 |                           |       |       |       |       |       |       |       | 120-125 |       |       |
| 130.0 |                           |       |       |       |       |       |       |       | 125-130 |       |       |
| 135.0 |                           |       |       |       |       |       |       |       | 130-135 |       |       |
| 140.0 |                           |       |       |       |       |       |       |       | 135-140 |       |       |
| 145.0 |                           |       |       |       |       |       |       |       | 140-145 |       |       |
| 150.0 |                           |       |       |       |       |       |       |       | 145-150 |       |       |
| 155.0 |                           |       |       |       |       |       |       |       | 150-155 |       |       |
| 160.0 |                           |       |       |       |       |       |       |       | 155-160 |       |       |
| 165.0 |                           |       |       |       |       |       |       |       | 160-165 |       |       |
| 170.0 |                           |       |       |       |       |       |       |       | 165-170 |       |       |
| 175.0 |                           |       |       |       |       |       |       |       | 170-175 |       |       |
| 180.0 |                           |       |       |       |       |       |       |       | 175-180 |       |       |
| DEG   | LUMINOUS INTENSITY:×100cd |       |       |       |       |       |       |       | UNIT:lm |       |       |

Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:03-30-2020

Test Set: 8.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:6.000 m  
Remarks:

# HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

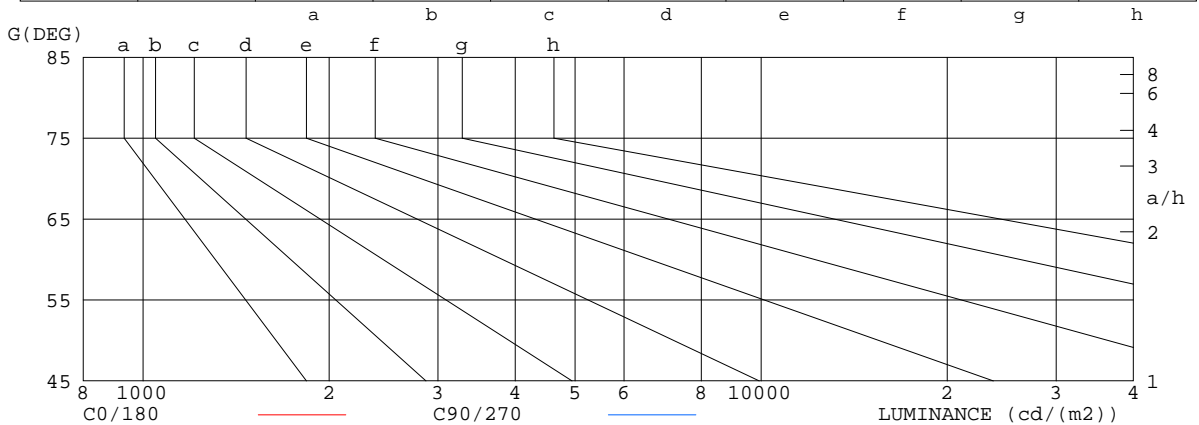
## LUMINANCE LIMITATION CURVES

Report number:

|                                  |            |             |
|----------------------------------|------------|-------------|
| MANUFACTURER:                    | Address:   |             |
| NAME: LSHM-600W-LV (50K)PLUS P50 | TYPE:      | WEIGHT:     |
| SPECIFICATION:5000K P50          | DIMENSION: | SERIAL No.: |

### LUMINANCE LIMITATION CURVES

| GLARE | CLASS | ILLUMINANCE (lx) |      |      |       |       |       |       |       |
|-------|-------|------------------|------|------|-------|-------|-------|-------|-------|
| 1.15  | A     | 2000             | 1000 | 500  | <=300 |       |       |       |       |
| 1.50  | B     |                  | 2000 | 1000 | 500   | <=300 |       |       |       |
| 1.85  | C     |                  |      | 2000 | 1000  | 500   | <=300 |       |       |
| 2.20  | D     |                  |      |      | 2000  | 1000  | 500   | <=300 |       |
| 2.55  | E     |                  |      |      |       | 2000  | 1000  | 500   | <=300 |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(DEC)            | C0/180 | C90/270 |
| 85                | 54065  | 99317   |
| 80                | 50395  | 89958   |
| 75                | 44327  | 97844   |
| 70                | 46174  | 114565  |
| 65                | 56760  | 117689  |
| 60                | 93511  | 116089  |
| 55                | 132878 | 112818  |
| 50                | 160017 | 117639  |
| 45                | 177301 | 127096  |

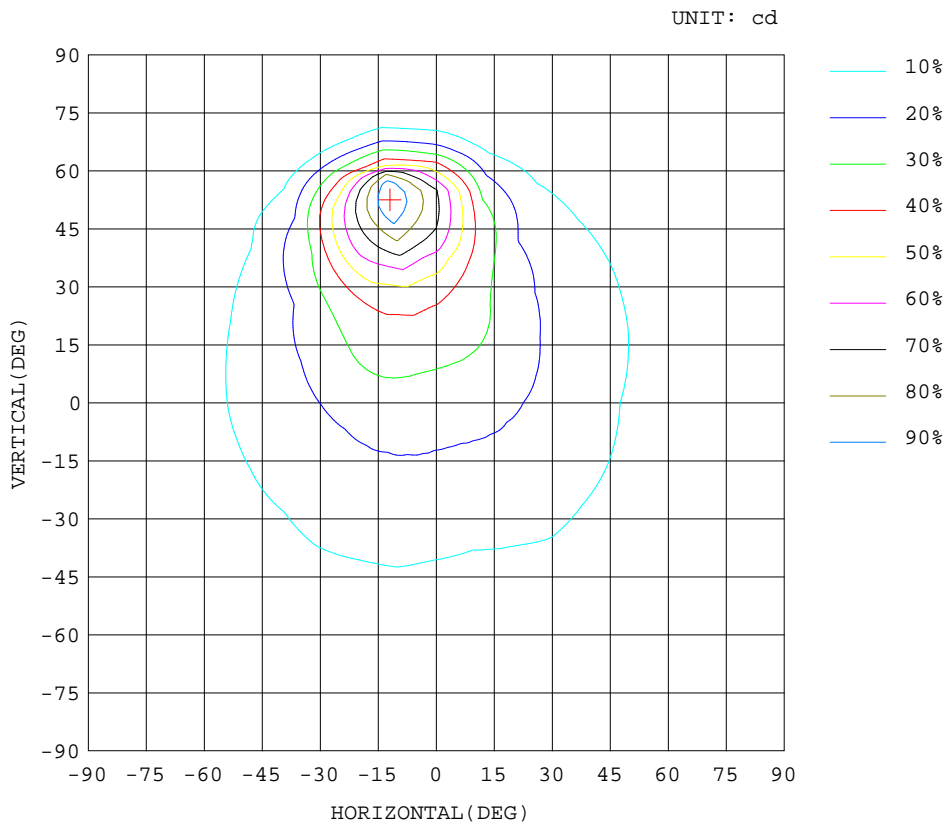
Test System:HOPOO HPG1800  
 Temperature:25.3DEG  
 Operators:  
 Test Date:03-30-2020

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:6.000 m  
 Remarks:

## ISOCANDELA DIAGRAM

Report number:

|                                  |            |             |
|----------------------------------|------------|-------------|
| MANUFACTURER:                    | Address:   |             |
| NAME: LSHM-600W-LV (50K)PLUS P50 | TYPE:      | WEIGHT:     |
| SPECIFICATION:5000K P50          | DIMENSION: | SERIAL No.: |



Test System:HOPOO HPG1800  
Temperature:25.3DEG  
Operators:  
Test Date:03-30-2020

Test Set: 8.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:6.000 m  
Remarks: