

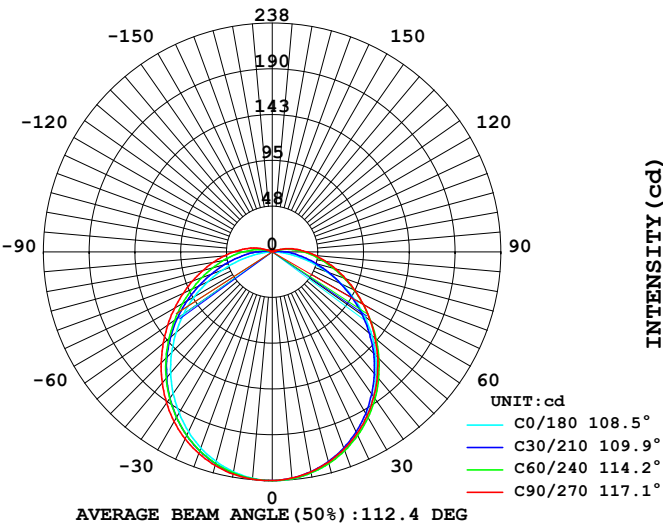
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

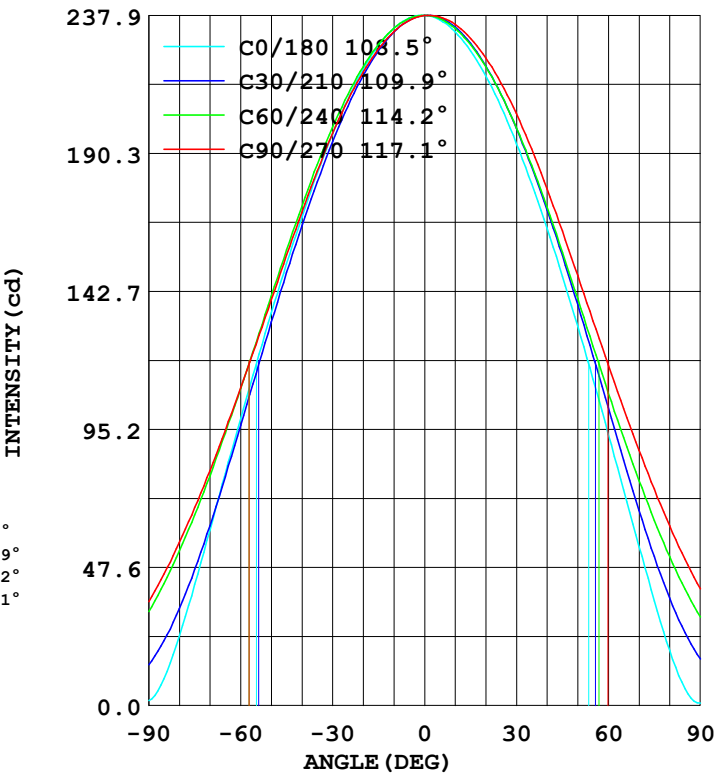
| | | |
|-----------------------------|------------------------------|-------------|
| MANUFACTURER: | | |
| Address: | | |
| NAME: 350mA 3000K with trim | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: 0.265*0.135*0.118 | SERIAL No.: |

| | | | | | |
|------------------|-------|--------------------|--------|------------------|----------|
| DATA OF LAMP | | Imax(cd) | 237.9 | S/MH(C0/180) | 1.24 |
| MODEL | | EFFICIENCY(%) | 100.0 | S/MH(C90/270) | 1.24 |
| NOMINAL POWER(W) | 12 | TOTAL FLUX(lm) | 740.46 | Voltage(V) | 229.6 |
| RATED VOLTAGE(V) | 230 | EFFICIENCY(lm/W) | 64.1 | Current(A) | 0.054 |
| NOMINAL FLUX(lm) | 740.5 | η up(%) | 4.5 | Power(W) | 11.54 |
| LAMPS QUANTITY | 1 | η down(%) | 95.5 | Power Factor(PF) | 0.939 |
| TEST VOLTAGE(V) | 229.7 | Effective Flux(lm) | 711.3 | EEl | 0.000(E) |

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



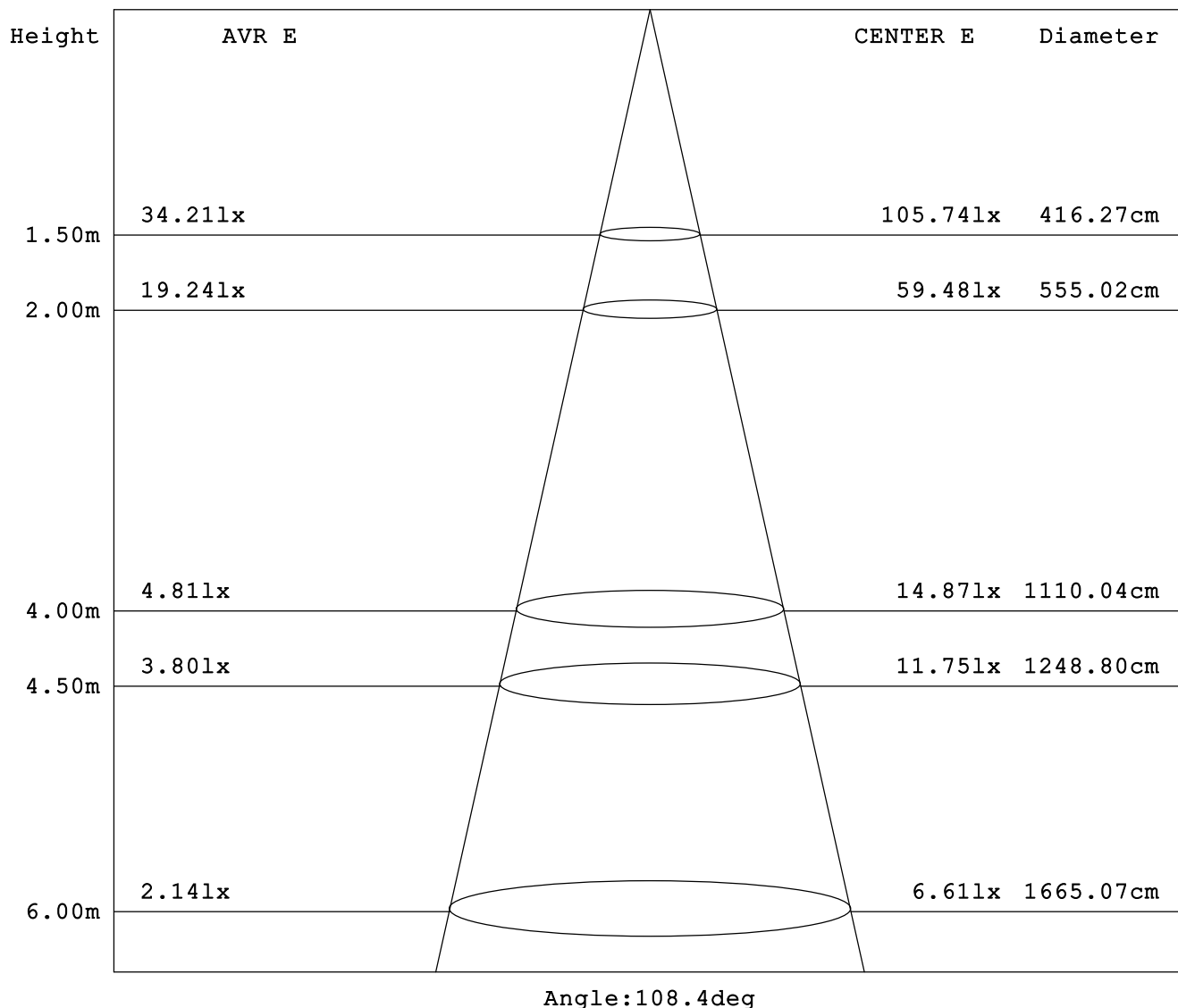
Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks:

AVERAGE AND CENTER E Figure

Report number:

| | | |
|-----------------------------|------------------------------|-------------|
| MANUFACTURER: | | |
| Address: | | |
| NAME: 350mA 3000K with trim | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: 0.265*0.135*0.118 | SERIAL No.: |



Test System: HopooColor HPG1800
 Temperature: 25.3DEG
 Operators: W
 Test Date: 2023年06月17日

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 8.450 m
 Remarks:

ZONAL FLUX DIAGRAM

Report number:

| | | |
|-----------------------------|------------------------------|-------------|
| MANUFACTURER: | | |
| Address: | | |
| NAME: 350mA 3000K with trim | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: 0.265*0.135*0.118 | SERIAL No.: |

| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Zone | total |
|-------|-----------------------|-------|-------|-------|-------|-------|-------|-------|---------|---------|-------|
| 5.0 | 236.9 | 236.5 | 236.1 | 236.2 | 236.3 | 236.9 | 237.3 | 236.9 | 0- 5 | 5.672 | 5.672 |
| 10.0 | 233.4 | 232.7 | 232.2 | 232.3 | 232.2 | 233.6 | 234.7 | 233.7 | 5- 10 | 16.80 | 22.47 |
| 15.0 | 227.5 | 226.8 | 226.3 | 226.3 | 225.6 | 227.9 | 229.9 | 228.1 | 10- 15 | 27.31 | 49.79 |
| 20.0 | 219.3 | 218.7 | 218.4 | 218.0 | 217.1 | 220.3 | 223.2 | 220.6 | 15- 20 | 36.82 | 86.61 |
| 25.0 | 208.9 | 208.5 | 208.5 | 207.8 | 206.2 | 210.5 | 214.4 | 210.9 | 20- 25 | 44.99 | 131.6 |
| 30.0 | 197.1 | 196.9 | 197.2 | 196.0 | 193.6 | 199.0 | 204.0 | 199.5 | 25- 30 | 51.55 | 183.1 |
| 35.0 | 183.3 | 183.4 | 184.2 | 182.5 | 179.8 | 185.9 | 191.7 | 186.5 | 30- 35 | 56.32 | 239.4 |
| 40.0 | 168.2 | 168.6 | 169.9 | 167.5 | 164.4 | 171.2 | 178.0 | 171.8 | 35- 40 | 59.15 | 298.6 |
| 45.0 | 152.4 | 153.1 | 155.3 | 152.0 | 147.8 | 155.6 | 163.5 | 156.3 | 40- 45 | 60.05 | 358.7 |
| 50.0 | 135.2 | 136.5 | 139.8 | 135.3 | 130.7 | 139.2 | 148.2 | 140.0 | 45- 50 | 59.05 | 417.7 |
| 55.0 | 117.3 | 119.5 | 124.3 | 118.3 | 112.4 | 122.2 | 132.5 | 123.0 | 50- 55 | 56.31 | 474.0 |
| 60.0 | 98.96 | 102.9 | 109.6 | 101.7 | 93.46 | 105.2 | 117.4 | 106.2 | 55- 60 | 52.07 | 526.1 |
| 65.0 | 79.89 | 86.36 | 94.89 | 85.18 | 74.33 | 88.50 | 102.3 | 89.61 | 60- 65 | 46.59 | 572.7 |
| 70.0 | 60.40 | 70.54 | 80.97 | 69.47 | 54.83 | 72.40 | 87.96 | 73.65 | 65- 70 | 40.20 | 612.9 |
| 75.0 | 41.77 | 56.37 | 68.26 | 55.40 | 35.98 | 57.58 | 74.61 | 58.94 | 70- 75 | 33.36 | 646.3 |
| 80.0 | 23.91 | 43.34 | 56.19 | 42.52 | 19.06 | 44.23 | 61.97 | 45.62 | 75- 80 | 26.43 | 672.7 |
| 85.0 | 9.210 | 32.16 | 45.34 | 31.55 | 5.783 | 32.63 | 50.33 | 33.98 | 80- 85 | 19.92 | 692.6 |
| 90.0 | 1.713 | 23.24 | 35.84 | 22.74 | 0.785 | 23.31 | 40.19 | 24.45 | 85- 90 | 14.40 | 707.0 |
| 95.0 | 1.356 | 16.06 | 27.41 | 15.67 | 0.857 | 15.88 | 31.13 | 16.92 | 90- 95 | 10.33 | 717.4 |
| 100.0 | 1.285 | 10.28 | 20.06 | 9.853 | 0.928 | 9.639 | 23.20 | 10.38 | 95-100 | 7.124 | 724.5 |
| 105.0 | 1.285 | 5.747 | 12.42 | 5.426 | 1.071 | 4.998 | 15.13 | 5.355 | 100-105 | 4.401 | 728.9 |
| 110.0 | 1.356 | 2.963 | 4.998 | 2.820 | 1.213 | 2.677 | 7.354 | 2.677 | 105-110 | 2.298 | 731.2 |
| 115.0 | 1.428 | 2.213 | 3.284 | 2.142 | 1.428 | 2.034 | 3.998 | 1.999 | 110-115 | 1.305 | 732.5 |
| 120.0 | 1.570 | 1.927 | 2.427 | 1.892 | 1.570 | 1.856 | 2.856 | 1.820 | 115-120 | 1.012 | 733.5 |
| 125.0 | 1.713 | 1.856 | 1.999 | 1.820 | 1.713 | 1.892 | 2.284 | 1.785 | 120-125 | 0.875 | 734.4 |
| 130.0 | 1.785 | 1.963 | 1.999 | 1.927 | 1.856 | 1.999 | 2.142 | 1.927 | 125-130 | 0.828 | 735.2 |
| 135.0 | 1.999 | 2.070 | 2.070 | 2.070 | 1.999 | 2.106 | 2.213 | 2.070 | 130-135 | 0.811 | 736.0 |
| 140.0 | 2.070 | 2.177 | 2.213 | 2.177 | 2.142 | 2.213 | 2.284 | 2.213 | 135-140 | 0.789 | 736.8 |
| 145.0 | 2.213 | 2.284 | 2.284 | 2.249 | 2.356 | 2.320 | 2.427 | 2.320 | 140-145 | 0.749 | 737.6 |
| 150.0 | 2.284 | 2.391 | 2.356 | 2.391 | 2.427 | 2.463 | 2.499 | 2.427 | 145-150 | 0.693 | 738.3 |
| 155.0 | 2.427 | 2.463 | 2.499 | 2.463 | 2.499 | 2.570 | 2.570 | 2.499 | 150-155 | 0.619 | 738.9 |
| 160.0 | 2.499 | 2.570 | 2.570 | 2.534 | 2.641 | 2.641 | 2.641 | 2.641 | 155-160 | 0.532 | 739.4 |
| 165.0 | 2.570 | 2.606 | 2.641 | 2.606 | 2.713 | 2.677 | 2.713 | 2.713 | 160-165 | 0.430 | 739.8 |
| 170.0 | 2.641 | 2.677 | 2.713 | 2.677 | 2.784 | 2.713 | 2.784 | 2.713 | 165-170 | 0.318 | 740.2 |
| 175.0 | 2.713 | 2.713 | 2.713 | 2.713 | 2.856 | 2.784 | 2.784 | 2.784 | 170-175 | 0.196 | 740.3 |
| 180.0 | 2.784 | 2.784 | 2.713 | 2.784 | 2.784 | 2.784 | 2.784 | 2.784 | 175-180 | 0.066 | 740.4 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | |

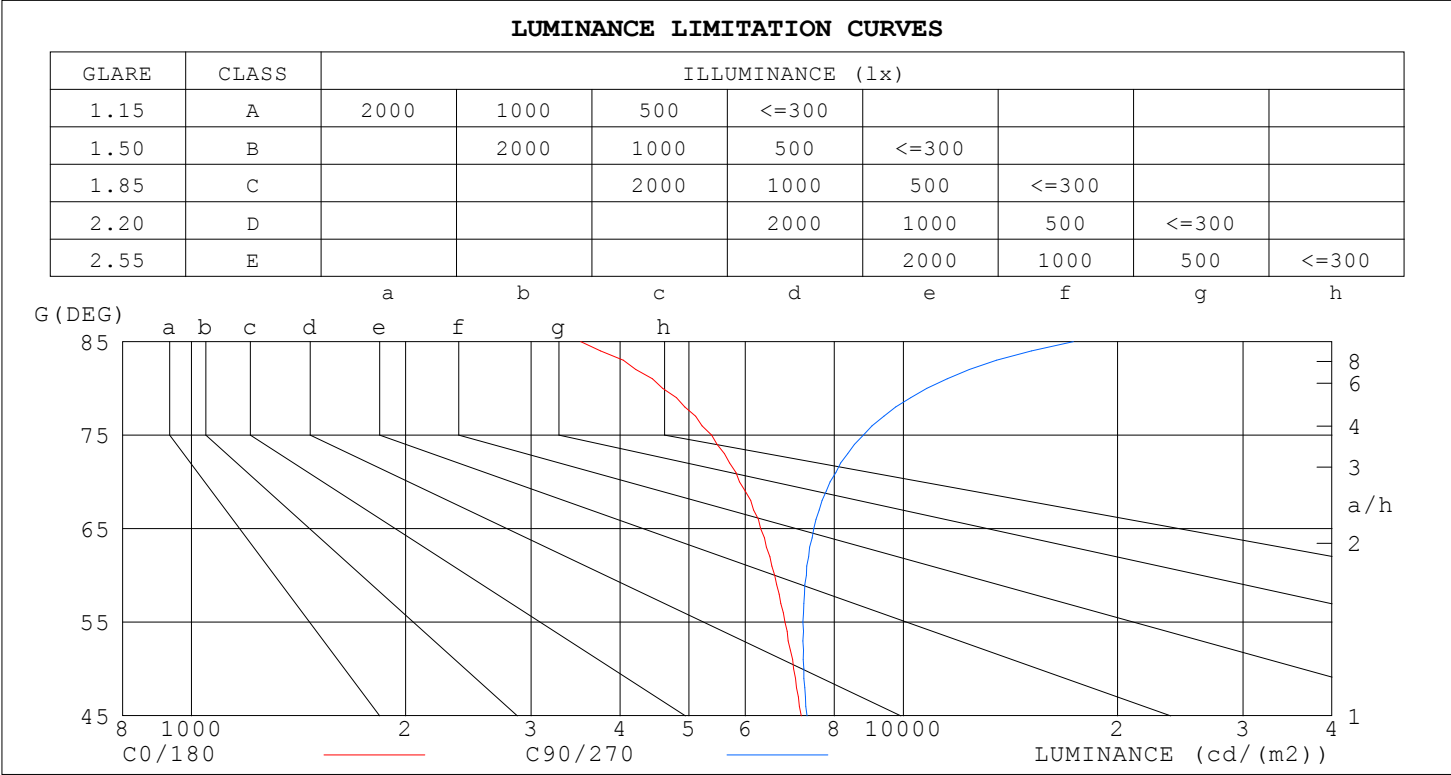
Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks:

LUMINANCE LIMITATION CURVES

Report number:

| | | |
|-----------------------------|------------------------------|-------------|
| MANUFACTURER: | | |
| Address: | | |
| NAME: 350mA 3000K with trim | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: 0.265*0.135*0.118 | SERIAL No.: |



| LUMINANCE cd/m2 | | |
|-----------------|--------|---------|
| G (DEG) | C0/180 | C90/270 |
| 85 | 3523 | 17341 |
| 80 | 4592 | 10787 |
| 75 | 5380 | 8791 |
| 70 | 5887 | 7891 |
| 65 | 6302 | 7485 |
| 60 | 6598 | 7307 |
| 55 | 6818 | 7229 |
| 50 | 7013 | 7250 |
| 45 | 7186 | 7321 |

Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

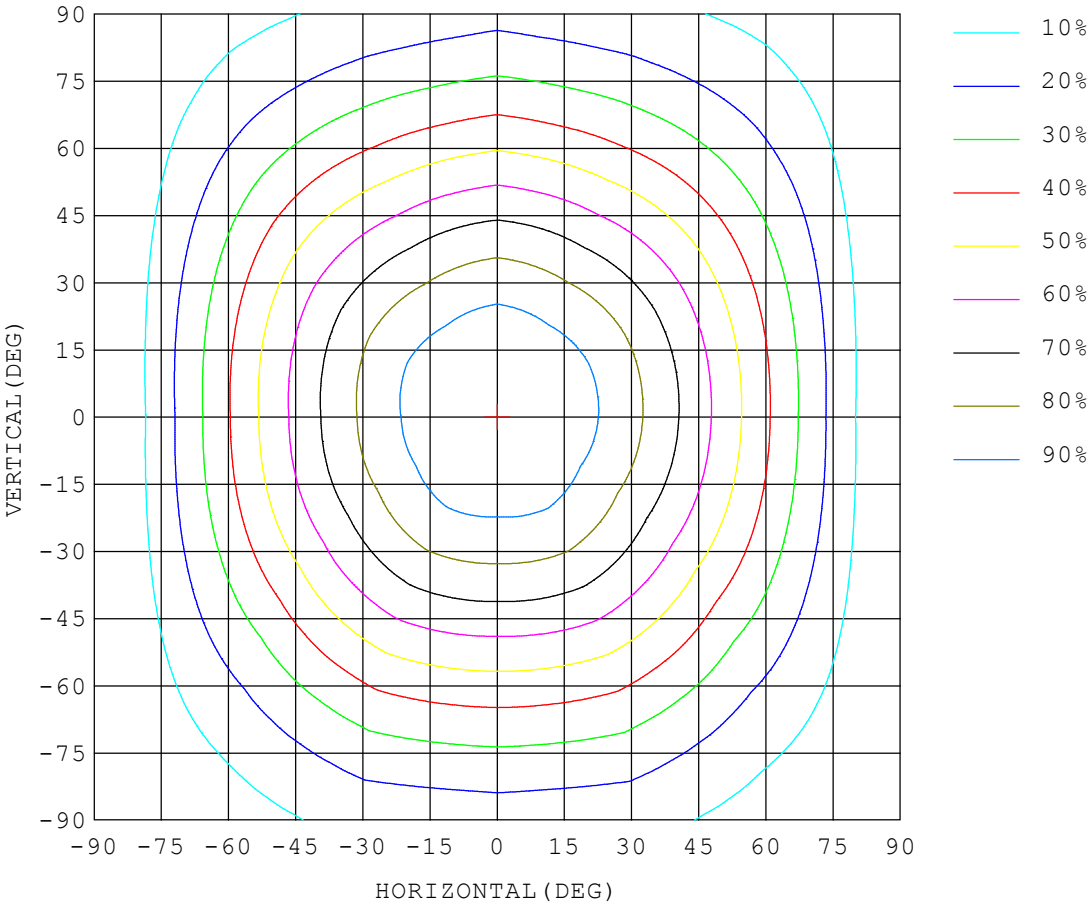
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

| | | |
|-----------------------------|------------------------------|-------------|
| MANUFACTURER: | | |
| Address: | | |
| NAME: 350mA 3000K with trim | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: 0.265*0.135*0.118 | SERIAL No.: |

UNIT: cd



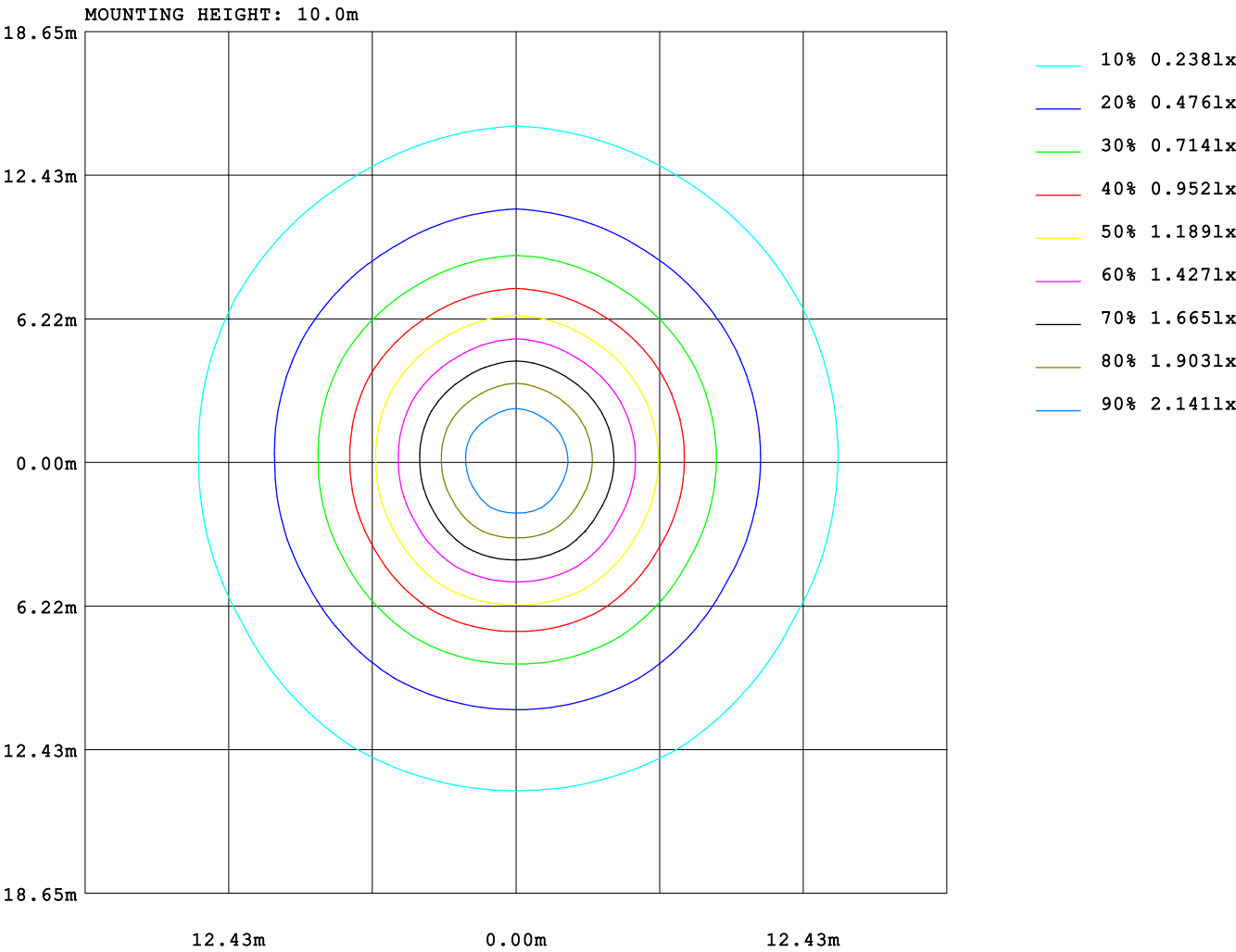
Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks:

ISOLUX DIAGRAM

Report number:

| | | |
|-----------------------------|------------------------------|-------------|
| MANUFACTURER: | | |
| Address: | | |
| NAME: 350mA 3000K with trim | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: 0.265*0.135*0.118 | SERIAL No.: |



Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks:

AREA LUMINOUS FLUX

Report number:

| | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|--|--|--|--|--|--|--|--|--|------------------------------|--|--|--|--|-------------|--|--|--|--|--|
| MANUFACTURER: | | | | | | | | | | | | | | | | | | | | |
| Address: | | | | | | | | | | | | | | | | | | | | |
| NAME: 350mA 3000K with trim | | | | | | | | | | TYPE: | | | | | WEIGHT: | | | | | |
| SPECIFICATION: | | | | | | | | | | DIMENSION: 0.265*0.135*0.118 | | | | | SERIAL No.: | | | | | |

| VERTICAL (DEG) | AREA FLUX DIAGRAM | | | | | | | | | | | | | | | | | | UNIT:lm | | Φ t | Φ a |
|--|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|------|-----|-----|
| | 0.01 | 0.08 | 0.22 | 0.41 | 0.64 | 0.90 | 1.13 | 1.32 | 1.48 | 1.48 | 1.33 | 1.15 | 0.92 | 0.67 | 0.44 | 0.24 | 0.09 | 0.02 | 12.5 | 11.5 | | |
| 90 | 0.01 | 0.11 | 0.32 | 0.62 | 0.97 | 1.35 | 1.70 | 1.99 | 2.20 | 2.20 | 2.00 | 1.72 | 1.37 | 1.00 | 0.65 | 0.35 | 0.13 | 0.02 | 18.7 | 18.2 | | |
| 80 | 0.02 | 0.14 | 0.44 | 0.87 | 1.36 | 1.89 | 2.36 | 2.76 | 3.03 | 3.04 | 2.78 | 2.39 | 1.91 | 1.39 | 0.90 | 0.47 | 0.17 | 0.02 | 25.9 | 25.7 | | |
| 70 | 0.02 | 0.19 | 0.57 | 1.13 | 1.79 | 2.47 | 3.09 | 3.61 | 3.94 | 3.95 | 3.62 | 3.11 | 2.50 | 1.82 | 1.16 | 0.61 | 0.21 | 0.03 | 33.8 | 33.7 | | |
| 60 | 0.02 | 0.22 | 0.70 | 1.39 | 2.22 | 3.07 | 3.84 | 4.47 | 4.87 | 4.87 | 4.48 | 3.86 | 3.10 | 2.25 | 1.42 | 0.74 | 0.26 | 0.03 | 41.8 | 41.7 | | |
| 50 | 0.03 | 0.26 | 0.81 | 1.62 | 2.62 | 3.63 | 4.54 | 5.26 | 5.72 | 5.72 | 5.27 | 4.56 | 3.65 | 2.64 | 1.67 | 0.86 | 0.29 | 0.03 | 49.2 | 49.1 | | |
| 40 | 0.03 | 0.29 | 0.90 | 1.81 | 2.92 | 4.09 | 5.12 | 5.91 | 6.40 | 6.41 | 5.93 | 5.14 | 4.11 | 2.96 | 1.86 | 0.95 | 0.32 | 0.04 | 55.2 | 55.1 | | |
| 30 | 0.03 | 0.30 | 0.95 | 1.93 | 3.11 | 4.37 | 5.53 | 6.39 | 6.88 | 6.88 | 6.40 | 5.55 | 4.41 | 3.17 | 1.99 | 1.01 | 0.34 | 0.04 | 59.3 | 59.2 | | |
| -30 | 0.03 | 0.31 | 0.97 | 1.97 | 3.19 | 4.48 | 5.68 | 6.62 | 7.12 | 7.12 | 6.64 | 5.74 | 4.55 | 3.27 | 2.05 | 1.04 | 0.35 | 0.04 | 61.2 | 61.1 | | |
| | 0.03 | 0.30 | 0.97 | 1.96 | 3.16 | 4.44 | 5.63 | 6.56 | 7.09 | 7.10 | 6.60 | 5.69 | 4.52 | 3.25 | 2.04 | 1.03 | 0.34 | 0.04 | 60.8 | 60.7 | | |
| | 0.03 | 0.30 | 0.93 | 1.88 | 3.04 | 4.26 | 5.40 | 6.32 | 6.82 | 6.83 | 6.34 | 5.43 | 4.31 | 3.10 | 1.95 | 0.99 | 0.33 | 0.04 | 58.3 | 58.2 | | |
| | 0.03 | 0.28 | 0.86 | 1.73 | 2.79 | 3.93 | 5.02 | 5.87 | 6.29 | 6.29 | 5.89 | 5.04 | 3.96 | 2.84 | 1.79 | 0.92 | 0.31 | 0.04 | 53.9 | 53.8 | | |
| -40 | 0.02 | 0.25 | 0.77 | 1.53 | 2.46 | 3.50 | 4.48 | 5.21 | 5.55 | 5.56 | 5.23 | 4.50 | 3.53 | 2.50 | 1.57 | 0.81 | 0.28 | 0.03 | 47.8 | 47.7 | | |
| -50 | 0.02 | 0.21 | 0.65 | 1.28 | 2.09 | 2.98 | 3.81 | 4.39 | 4.68 | 4.68 | 4.41 | 3.84 | 3.01 | 2.12 | 1.31 | 0.68 | 0.24 | 0.03 | 40.4 | 40.3 | | |
| -60 | 0.02 | 0.17 | 0.52 | 1.02 | 1.69 | 2.42 | 3.08 | 3.52 | 3.75 | 3.75 | 3.54 | 3.11 | 2.45 | 1.72 | 1.05 | 0.55 | 0.19 | 0.02 | 32.6 | 32.4 | | |
| -70 | 0.02 | 0.13 | 0.39 | 0.78 | 1.29 | 1.86 | 2.36 | 2.68 | 2.85 | 2.86 | 2.69 | 2.38 | 1.88 | 1.32 | 0.80 | 0.42 | 0.15 | 0.02 | 24.9 | 24.6 | | |
| -80 | 0.01 | 0.09 | 0.28 | 0.56 | 0.94 | 1.35 | 1.70 | 1.92 | 2.04 | 2.05 | 1.93 | 1.72 | 1.37 | 0.95 | 0.58 | 0.29 | 0.11 | 0.02 | 17.9 | 17.3 | | |
| -90 | 0.01 | 0.07 | 0.19 | 0.37 | 0.62 | 0.91 | 1.14 | 1.27 | 1.36 | 1.36 | 1.28 | 1.15 | 0.92 | 0.64 | 0.38 | 0.20 | 0.08 | 0.01 | 11.9 | 10.8 | | |
| -90 -80 -70 -60 -50 -40 -30 -20 HORIZONTAL (DEG) 20 30 40 50 60 70 80 90 | | | | | | | | | | | | | | | | | | | | | | |
| Φ t | 0.38 | 3.69 | 11.4 | 22.9 | 37.0 | 51.9 | 65.7 | 76.1 | 82.1 | 82.2 | 76.4 | 66.1 | 52.5 | 37.6 | 23.6 | 12.1 | 4.19 | 0.51 | 740 | | | |
| Φ a | 0.00 | 2.67 | 10.6 | 22.4 | 36.9 | 51.9 | 65.7 | 76.1 | 82.1 | 82.2 | 76.4 | 66.1 | 52.5 | 37.6 | 23.2 | 11.5 | 3.36 | 0.00 | | 711 | | |

Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

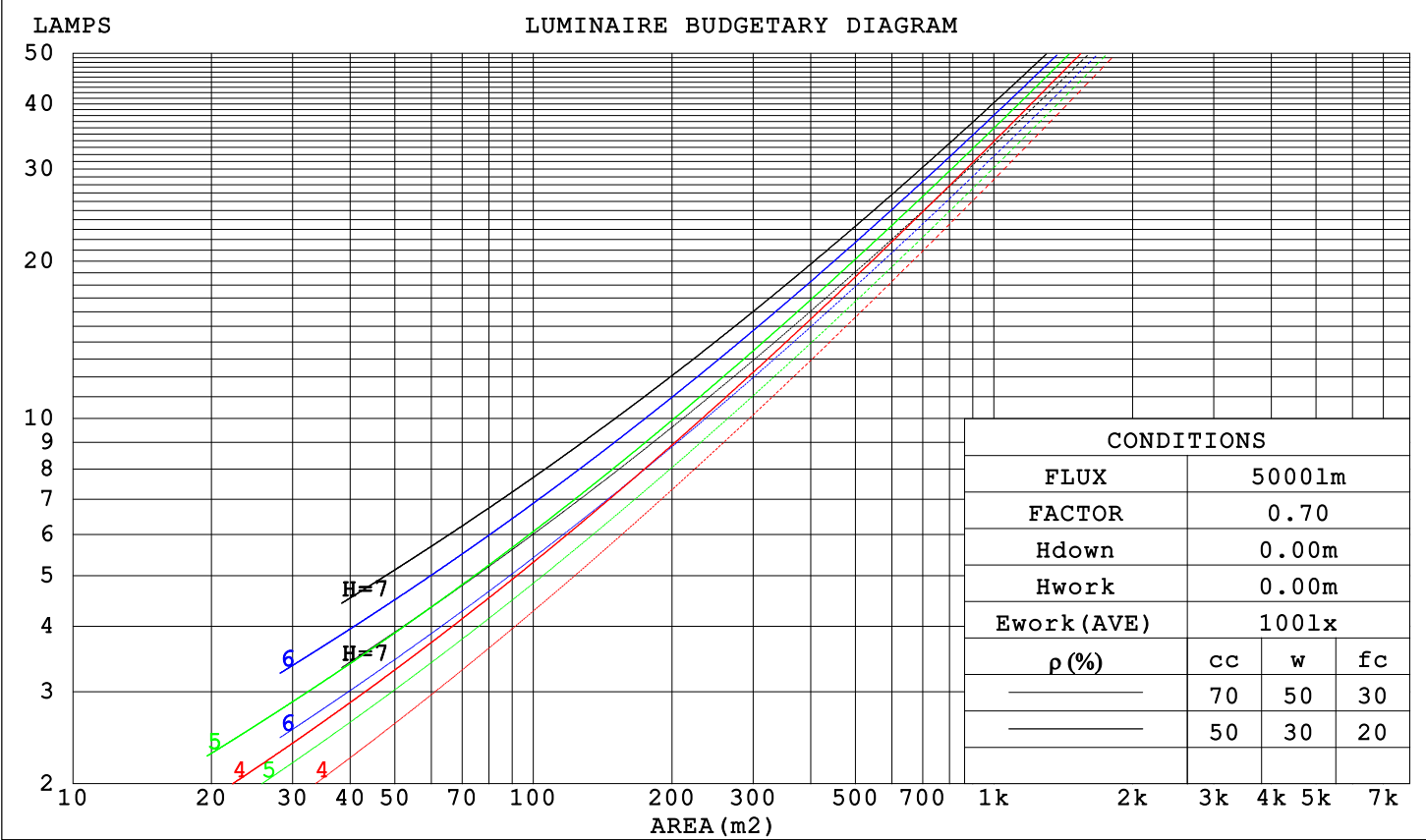
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number:

| | | | | | | | | | | | | | | | |
|-----------------------------|--|--|--|--|--|--|--|------------------------------|--|--|--|-------------|--|--|--|
| MANUFACTURER: | | | | | | | | | | | | | | | |
| Address: | | | | | | | | | | | | | | | |
| NAME: 350mA 3000K with trim | | | | | | | | TYPE: | | | | WEIGHT: | | | |
| SPECIFICATION: | | | | | | | | DIMENSION: 0.265*0.135*0.118 | | | | SERIAL No.: | | | |

| | | | | | | | | | | | | | | | | |
|------|-----------------------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
| pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| pfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | Coefficients of Utilization(CU) | | | | | | | | | | | | |
| 0.0 | 1.18 | 1.18 | 1.18 | 1.15 | 1.15 | 1.15 | 1.09 | 1.09 | 1.09 | 1.03 | 1.03 | 1.03 | .98 | .98 | .98 | .95 |
| 1.0 | 1.01 | .96 | .92 | .98 | .94 | .90 | .93 | .90 | .86 | .88 | .86 | .83 | .84 | .82 | .80 | .77 |
| 2.0 | .88 | .80 | .74 | .85 | .79 | .73 | .81 | .75 | .70 | .77 | .72 | .68 | .73 | .69 | .66 | .63 |
| 3.0 | .77 | .68 | .61 | .75 | .67 | .60 | .71 | .64 | .59 | .68 | .62 | .57 | .64 | .60 | .56 | .53 |
| 4.0 | .68 | .59 | .52 | .66 | .58 | .51 | .63 | .56 | .50 | .60 | .54 | .49 | .57 | .52 | .48 | .45 |
| 5.0 | .60 | .51 | .44 | .59 | .50 | .44 | .56 | .49 | .43 | .54 | .47 | .42 | .52 | .46 | .41 | .39 |
| 6.0 | .54 | .45 | .39 | .53 | .45 | .38 | .51 | .43 | .38 | .49 | .42 | .37 | .47 | .41 | .36 | .34 |
| 7.0 | .49 | .40 | .34 | .48 | .40 | .34 | .46 | .39 | .33 | .44 | .38 | .33 | .43 | .37 | .32 | .30 |
| 8.0 | .45 | .36 | .30 | .44 | .36 | .30 | .42 | .35 | .30 | .41 | .34 | .29 | .39 | .33 | .29 | .27 |
| 9.0 | .41 | .33 | .27 | .40 | .33 | .27 | .39 | .32 | .27 | .38 | .31 | .26 | .36 | .30 | .26 | .24 |
| 10.0 | .38 | .30 | .25 | .37 | .30 | .25 | .36 | .29 | .24 | .35 | .28 | .24 | .34 | .28 | .24 | .22 |



Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks:

WEC AND CCEC

Report number:

| | | | | | | | | | | | | | | | |
|-----------------------------|--|--|--|--|--|--|--|------------------------------|--|--|--|-------------|--|--|--|
| MANUFACTURER: | | | | | | | | | | | | | | | |
| Address: | | | | | | | | | | | | | | | |
| NAME: 350mA 3000K with trim | | | | | | | | TYPE: | | | | WEIGHT: | | | |
| SPECIFICATION: | | | | | | | | DIMENSION: 0.265*0.135*0.118 | | | | SERIAL No.: | | | |

| | | | | | | | | | | | | | | | | |
|-----------------|-----------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|------|------|---|
| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
| pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| pf _c | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Wall Exitance Coefficients (WEC) | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | |
| 1.0 | .343 | .195 | .062 | .335 | .191 | .061 | .319 | .183 | .058 | .304 | .175 | .056 | .290 | .168 | .054 | |
| 2.0 | .309 | .170 | .052 | .302 | .166 | .051 | .288 | .160 | .050 | .274 | .154 | .048 | .262 | .148 | .047 | |
| 3.0 | .281 | .149 | .045 | .274 | .147 | .044 | .261 | .142 | .043 | .250 | .137 | .042 | .239 | .132 | .041 | |
| 4.0 | .256 | .133 | .039 | .250 | .131 | .039 | .239 | .127 | .038 | .228 | .123 | .037 | .218 | .119 | .036 | |
| 5.0 | .235 | .120 | .035 | .230 | .118 | .034 | .220 | .114 | .034 | .210 | .111 | .033 | .201 | .108 | .032 | |
| 6.0 | .217 | .109 | .031 | .212 | .107 | .031 | .203 | .104 | .030 | .194 | .101 | .030 | .186 | .098 | .029 | |
| 7.0 | .201 | .099 | .028 | .197 | .098 | .028 | .189 | .095 | .027 | .181 | .093 | .027 | .174 | .090 | .027 | |
| 8.0 | .187 | .092 | .026 | .183 | .090 | .026 | .176 | .088 | .025 | .169 | .086 | .025 | .162 | .083 | .024 | |
| 9.0 | .175 | .085 | .024 | .172 | .084 | .023 | .165 | .082 | .023 | .159 | .079 | .023 | .153 | .077 | .022 | |
| 10.0 | .164 | .079 | .022 | .161 | .078 | .022 | .155 | .076 | .021 | .149 | .074 | .021 | .144 | .072 | .021 | |

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|-----------------|-----------------------|------|------|------|------|------|---|------|------|------|------|------|------|------|------|---|
| pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| pf _c | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Ceiling Cavity Exitance Coefficients (CCEC) | | | | | | | | | |
| 0.0 | .225 | .225 | .225 | .192 | .192 | .192 | .131 | .131 | .131 | .075 | .075 | .075 | .024 | .024 | .024 | |
| 1.0 | .217 | .190 | .166 | .186 | .163 | .143 | .127 | .112 | .099 | .073 | .065 | .058 | .023 | .021 | .019 | |
| 2.0 | .209 | .167 | .131 | .179 | .143 | .113 | .123 | .099 | .079 | .071 | .058 | .046 | .023 | .019 | .015 | |
| 3.0 | .202 | .149 | .108 | .173 | .129 | .093 | .119 | .090 | .066 | .069 | .052 | .039 | .022 | .017 | .013 | |
| 4.0 | .194 | .136 | .092 | .166 | .118 | .080 | .114 | .082 | .057 | .066 | .048 | .033 | .021 | .016 | .011 | |
| 5.0 | .186 | .126 | .082 | .160 | .109 | .071 | .110 | .076 | .050 | .064 | .045 | .030 | .021 | .015 | .010 | |
| 6.0 | .179 | .118 | .074 | .154 | .102 | .065 | .106 | .071 | .046 | .062 | .042 | .027 | .020 | .014 | .009 | |
| 7.0 | .172 | .111 | .068 | .148 | .096 | .060 | .102 | .067 | .042 | .059 | .040 | .025 | .019 | .013 | .008 | |
| 8.0 | .165 | .105 | .064 | .142 | .091 | .056 | .098 | .064 | .040 | .057 | .038 | .024 | .019 | .012 | .008 | |
| 9.0 | .159 | .100 | .061 | .137 | .087 | .053 | .095 | .061 | .038 | .055 | .036 | .022 | .018 | .012 | .007 | |
| 10.0 | .153 | .096 | .058 | .132 | .083 | .051 | .092 | .059 | .036 | .053 | .035 | .021 | .017 | .011 | .007 | |

Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks:

Uncorrected UGR Table

Report number:

| | | | | | | | | | | | |
|--|---------------|------------------|------|------|------------------------------|---------------|----------------|-------------|------|------|------|
| MANUFACTURER: | | | | | | | | | | | |
| Address: | | | | | | | | | | | |
| NAME: 350mA 3000K with trim | | | | | TYPE: | | | WEIGHT: | | | |
| SPECIFICATION: | | | | | DIMENSION: 0.265*0.135*0.118 | | | 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 | 18.9 | 20.4 | 19.3 | 20.7 | 21.0 | 19.5 | 21.0 | 19.8 | 21.3 | 21.6 | |
| | 20.4 | 21.8 | 20.8 | 22.1 | 22.4 | 21.5 | 22.8 | 21.8 | 23.1 | 23.5 | |
| | 21.0 | 22.3 | 21.4 | 22.7 | 23.0 | 22.5 | 23.8 | 22.8 | 24.1 | 24.5 | |
| | 21.4 | 22.7 | 21.8 | 23.0 | 23.4 | 23.5 | 24.8 | 23.9 | 25.1 | 25.5 | |
| | 21.5 | 22.7 | 22.0 | 23.1 | 23.5 | 24.1 | 25.3 | 24.5 | 25.7 | 26.1 | |
| | 21.6 | 22.8 | 22.0 | 23.1 | 23.5 | 24.7 | 25.9 | 25.2 | 26.3 | 26.7 | |
| 4H | 2H | 19.6 | 20.9 | 20.0 | 21.3 | 21.6 | 20.1 | 21.4 | 20.5 | 21.7 | 22.1 |
| | 3H | 21.3 | 22.4 | 21.7 | 22.8 | 23.2 | 22.3 | 23.4 | 22.7 | 23.8 | 24.2 |
| | 4H | 22.0 | 23.1 | 22.5 | 23.5 | 23.9 | 23.5 | 24.5 | 23.9 | 24.9 | 25.4 |
| | 6H | 22.6 | 23.5 | 23.0 | 24.0 | 24.4 | 24.7 | 25.7 | 25.2 | 26.1 | 26.6 |
| | 8H | 22.8 | 23.7 | 23.3 | 24.1 | 24.6 | 25.4 | 26.3 | 25.9 | 26.8 | 27.2 |
| | 12H | 22.9 | 23.7 | 23.4 | 24.2 | 24.7 | 26.2 | 27.0 | 26.7 | 27.5 | 28.0 |
| 8H | 4H | 22.5 | 23.4 | 23.0 | 23.9 | 24.3 | 23.8 | 24.7 | 24.3 | 25.1 | 25.6 |
| | 6H | 23.3 | 24.1 | 23.8 | 24.5 | 25.1 | 25.3 | 26.1 | 25.9 | 26.6 | 27.1 |
| | 8H | 23.6 | 24.3 | 24.2 | 24.8 | 25.3 | 26.2 | 26.9 | 26.8 | 27.4 | 27.9 |
| | 12H | 23.9 | 24.5 | 24.4 | 25.0 | 25.6 | 27.2 | 27.8 | 27.8 | 28.3 | 28.9 |
| 12H | 4H | 22.7 | 23.5 | 23.2 | 23.9 | 24.4 | 23.8 | 24.6 | 24.3 | 25.1 | 25.6 |
| | 6H | 23.6 | 24.2 | 24.1 | 24.7 | 25.3 | 25.4 | 26.1 | 26.0 | 26.6 | 27.2 |
| | 8H | 24.0 | 24.6 | 24.5 | 25.1 | 25.7 | 26.4 | 27.0 | 27.0 | 27.5 | 28.1 |
| Variations with the observer position at spacings: | | | | | | | | | | | |
| S = 1.0H | + 0.1 / - 0.2 | | | | | + 0.1 / - 0.1 | | | | | |
| 1.5H | + 0.2 / - 0.3 | | | | | + 0.2 / - 0.3 | | | | | |
| 2.0H | + 0.2 / - 0.3 | | | | | + 0.2 / - 0.3 | | | | | |

CIE Pub.117 Corrected 740.4 lm Total Lamp Luminous Flux.(8log(F/F0) = -1.0)

Test System:HopooColor HPG1800
 Temperature:25.3DEG
 Operators:W
 Test Date:2023年06月17日

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.450 m
 Remarks:

UTILIZATION FACTORS TABLE

Report number:

| | | | | | | | | | | |
|-----------------------------|--|--|--|--|------------------------------|--|--|-------------|--|--|
| MANUFACTURER: | | | | | | | | | | |
| Address: | | | | | | | | | | |
| NAME: 350mA 3000K with trim | | | | | TYPE: | | | WEIGHT: | | |
| SPECIFICATION: | | | | | DIMENSION: 0.265*0.135*0.118 | | | 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) $k(RI) \times RCR = 5$ | | | | | | | | | |
| $k = 0.60$ | 55 | 43 | 36 | 54 | 43 | 36 | 53 | 42 | 36 | 29 |
| 0.80 | 65 | 53 | 45 | 63 | 52 | 45 | 61 | 51 | 44 | 37 |
| 1.00 | 73 | 61 | 53 | 71 | 60 | 53 | 69 | 62 | 52 | 45 |
| 1.25 | 80 | 68 | 61 | 78 | 68 | 60 | 75 | 66 | 59 | 51 |
| 1.50 | 85 | 74 | 66 | 83 | 73 | 66 | 79 | 71 | 64 | 56 |
| 2.00 | 91 | 82 | 75 | 89 | 81 | 74 | 85 | 78 | 72 | 63 |
| 2.50 | 96 | 87 | 80 | 93 | 85 | 79 | 89 | 82 | 77 | 67 |
| 3.00 | 99 | 91 | 85 | 96 | 89 | 84 | 92 | 86 | 81 | 71 |
| 4.00 | 103 | 97 | 91 | 100 | 95 | 90 | 95 | 91 | 87 | 76 |
| 5.00 | 106 | 100 | 95 | 103 | 98 | 94 | 98 | 94 | 90 | 79 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | | Suspended | | | | SHRNOM = 1.25 | | |

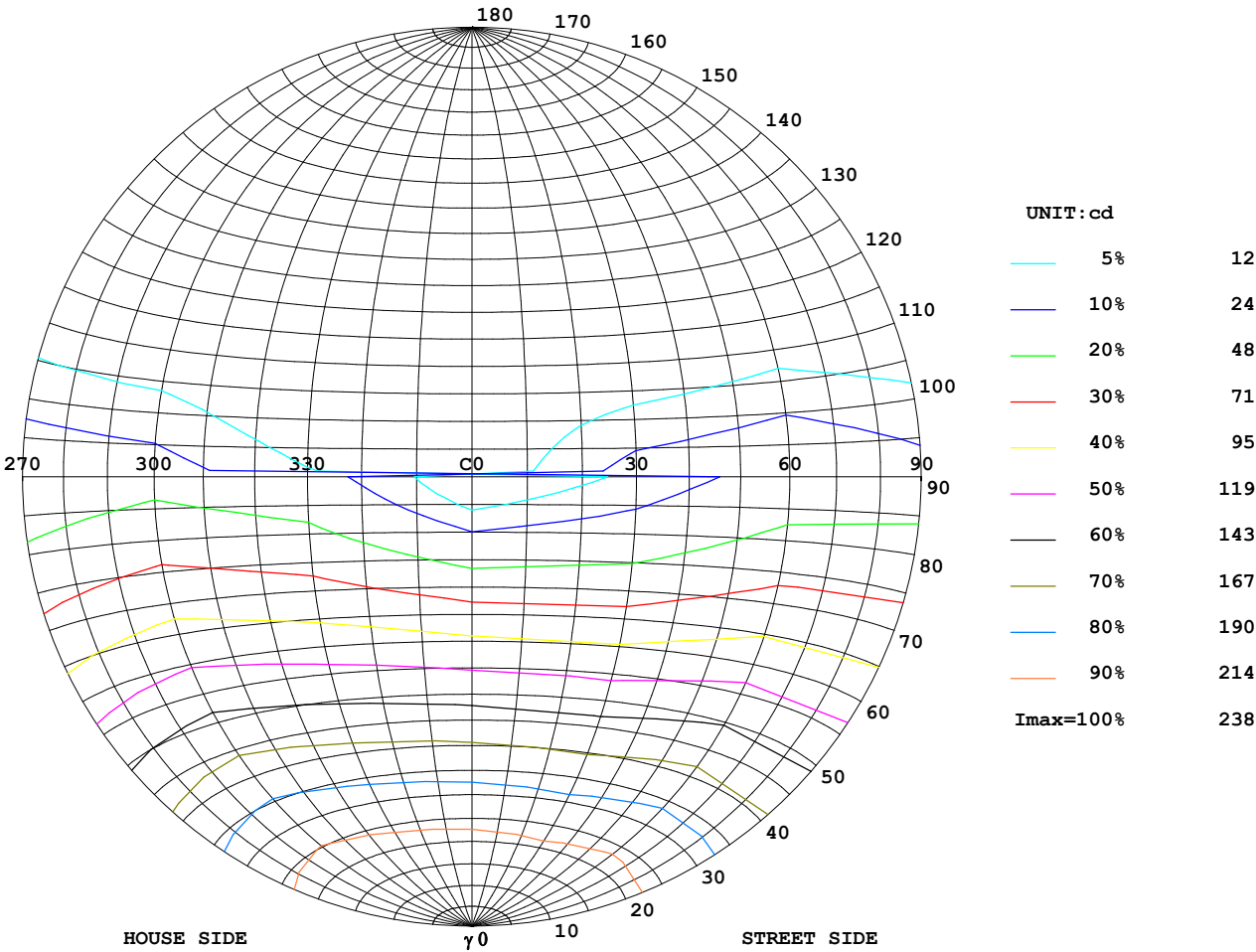
Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

| | | |
|-----------------------------|------------------------------|-------------|
| MANUFACTURER: | | |
| Address: | | |
| NAME: 350mA 3000K with trim | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: 0.265*0.135*0.118 | SERIAL No.: |



Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

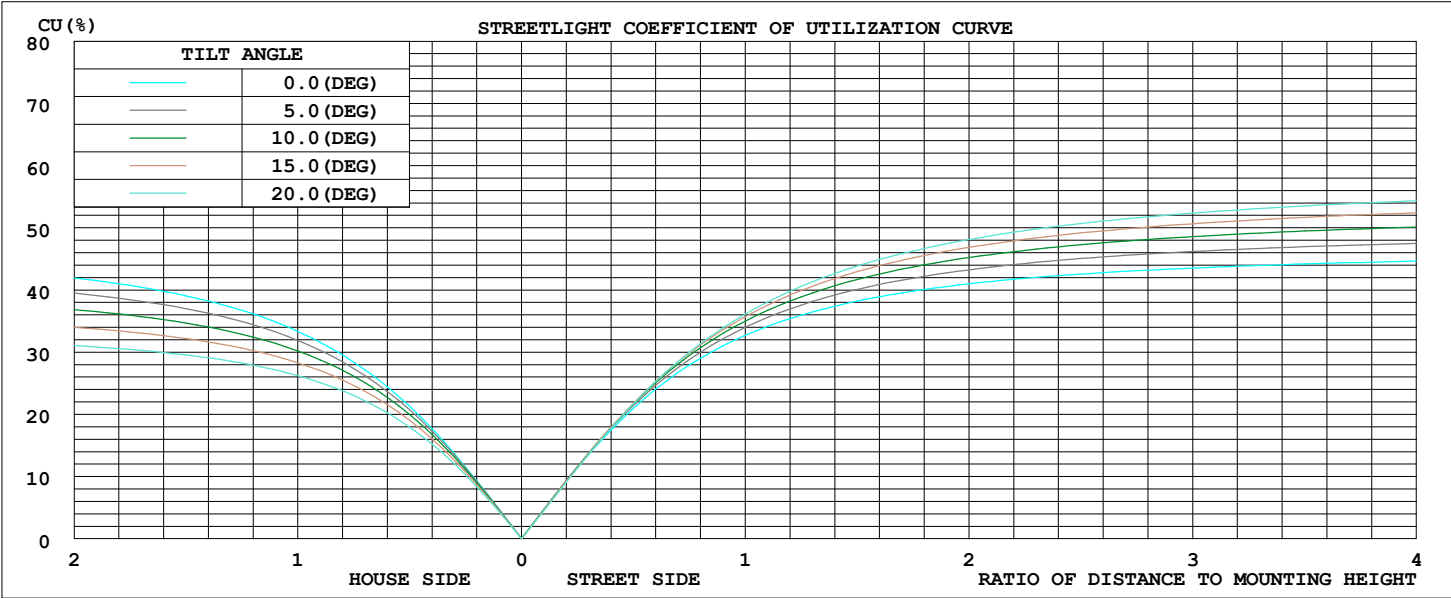
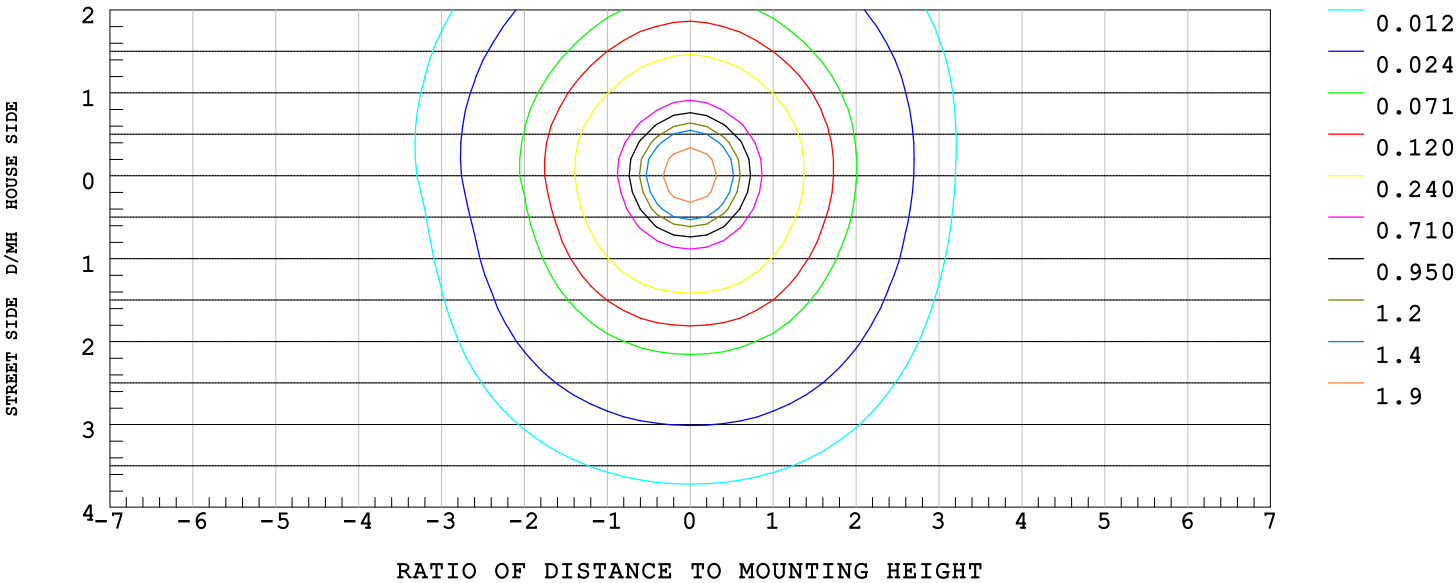
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks:

ISOLUX DIAGRAM

Report number:

| | | |
|-----------------------------|------------------------------|-------------|
| MANUFACTURER: | | |
| Address: | | |
| NAME: 350mA 3000K with trim | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: 0.265*0.135*0.118 | SERIAL No.: |

ILLUMINANCE AT MH=10 m,Enadir = 2.38 lx



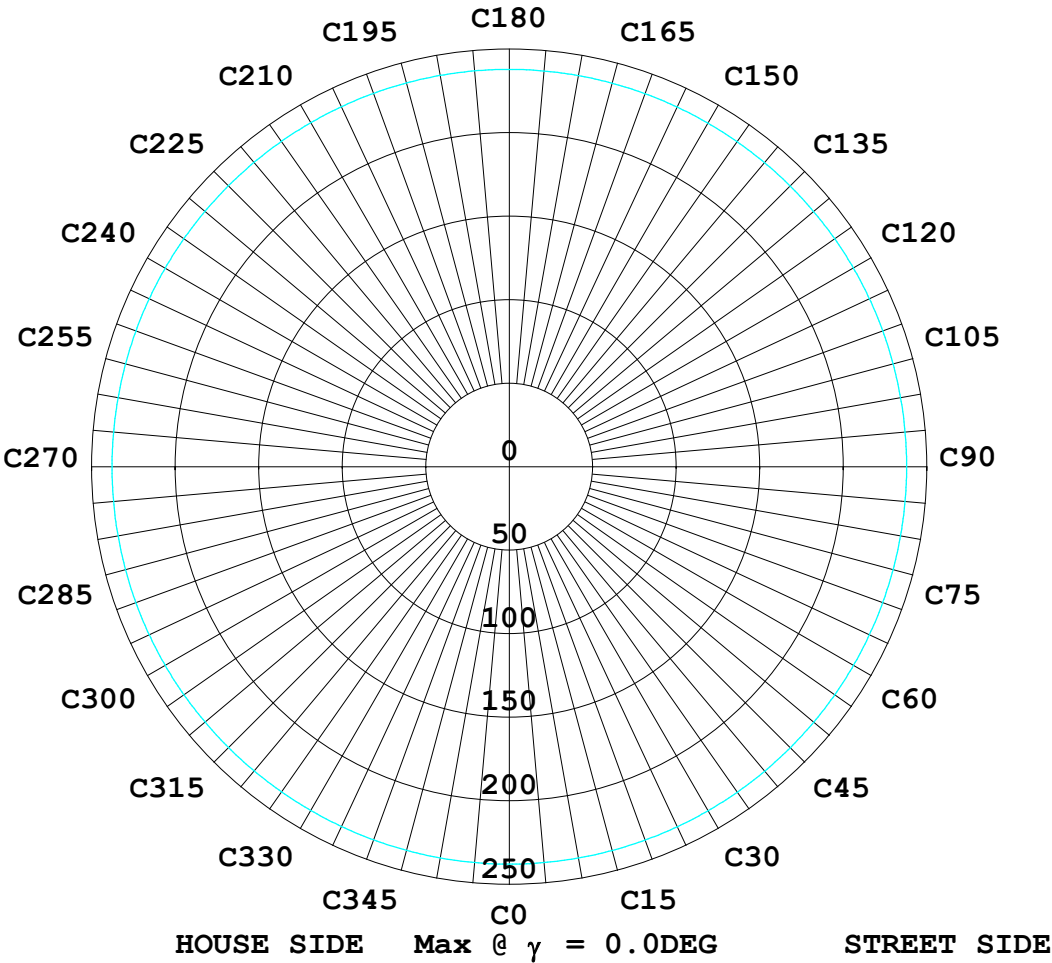
Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks:

ISOCANDELA DIAGRAM

Report number:

| | | |
|-----------------------------|------------------------------|-------------|
| MANUFACTURER: | | |
| Address: | | |
| NAME: 350mA 3000K with trim | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: 0.265*0.135*0.118 | SERIAL No.: |



Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

| | | |
|-----------------------------|------------------------------|-------------|
| MANUFACTURER: | | |
| Address: | | |
| NAME: 350mA 3000K with trim | TYPE: | WEIGHT: |
| SPECIFICATION: | DIMENSION: 0.265*0.135*0.118 | SERIAL No.: |

UNIT: cd

| C (DEG) γ (DEG) | 0 | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0.0 | 238 | 238 | 238 | 238 | 238 | 238 | 238 | 238 | 238 | 238 | 238 | 238 |
| 5.0 | 237 | 236 | 237 | 236 | 237 | 236 | 236 | 237 | 237 | 237 | 237 | 237 |
| 10.0 | 233 | 232 | 233 | 232 | 233 | 232 | 232 | 234 | 233 | 235 | 234 | 234 |
| 15.0 | 228 | 226 | 228 | 226 | 228 | 225 | 226 | 228 | 228 | 230 | 228 | 228 |
| 20.0 | 219 | 217 | 220 | 218 | 220 | 216 | 217 | 220 | 220 | 223 | 220 | 221 |
| 25.0 | 209 | 207 | 211 | 209 | 210 | 206 | 206 | 211 | 211 | 214 | 211 | 211 |
| 30.0 | 197 | 194 | 199 | 197 | 199 | 193 | 194 | 199 | 199 | 204 | 199 | 200 |
| 35.0 | 183 | 181 | 186 | 184 | 186 | 179 | 180 | 186 | 186 | 192 | 187 | 186 |
| 40.0 | 168 | 165 | 172 | 170 | 171 | 164 | 164 | 171 | 172 | 178 | 172 | 172 |
| 45.0 | 152 | 149 | 157 | 155 | 156 | 148 | 148 | 155 | 156 | 164 | 157 | 156 |
| 50.0 | 135 | 132 | 141 | 140 | 140 | 131 | 131 | 138 | 140 | 148 | 141 | 139 |
| 55.0 | 117 | 114 | 125 | 124 | 124 | 113 | 112 | 121 | 124 | 133 | 125 | 122 |
| 60.0 | 98.9 | 96.6 | 109 | 110 | 108 | 94.9 | 93.4 | 103 | 108 | 117 | 108 | 104 |
| 65.0 | 79.8 | 78.8 | 93.8 | 94.8 | 93.1 | 77.2 | 74.3 | 84.6 | 92.3 | 102 | 93.1 | 86.0 |
| 70.0 | 60.4 | 61.9 | 79.1 | 80.9 | 78.3 | 60.5 | 54.8 | 67.2 | 77.5 | 87.9 | 78.3 | 68.9 |
| 75.0 | 41.7 | 46.9 | 65.7 | 68.2 | 65.1 | 45.6 | 35.9 | 51.4 | 63.7 | 74.6 | 64.6 | 53.1 |
| 80.0 | 23.9 | 33.4 | 53.2 | 56.1 | 52.6 | 32.4 | 19.0 | 37.0 | 51.4 | 61.9 | 52.2 | 38.9 |
| 85.0 | 9.21 | 22.3 | 41.9 | 45.3 | 41.4 | 21.6 | 5.78 | 25.1 | 40.1 | 50.3 | 40.9 | 26.9 |
| 90.0 | 1.71 | 14.0 | 32.4 | 35.8 | 31.9 | 13.5 | 0.79 | 16.0 | 30.5 | 40.1 | 31.2 | 17.7 |
| 95.0 | 1.35 | 8.06 | 24.0 | 27.4 | 23.7 | 7.64 | 0.86 | 9.42 | 22.3 | 31.1 | 23.1 | 10.7 |
| 100.0 | 1.28 | 3.49 | 17.0 | 20.0 | 16.6 | 3.07 | 0.93 | 4.28 | 14.9 | 23.2 | 15.7 | 5.06 |
| 105.0 | 1.28 | 1.78 | 9.71 | 12.4 | 9.21 | 1.64 | 1.07 | 2.28 | 7.71 | 15.1 | 8.21 | 2.49 |
| 110.0 | 1.35 | 1.35 | 4.56 | 4.99 | 4.28 | 1.35 | 1.21 | 1.64 | 3.71 | 7.35 | 3.71 | 1.64 |
| 115.0 | 1.42 | 1.42 | 2.99 | 3.28 | 2.85 | 1.42 | 1.42 | 1.57 | 2.49 | 3.99 | 2.42 | 1.57 |
| 120.0 | 1.57 | 1.57 | 2.28 | 2.42 | 2.21 | 1.57 | 1.57 | 1.71 | 1.99 | 2.85 | 1.92 | 1.71 |
| 125.0 | 1.71 | 1.71 | 1.99 | 1.99 | 1.92 | 1.71 | 1.71 | 1.92 | 1.85 | 2.28 | 1.78 | 1.78 |
| 130.0 | 1.78 | 1.85 | 2.07 | 1.99 | 1.99 | 1.85 | 1.85 | 1.99 | 1.99 | 2.14 | 1.92 | 1.92 |
| 135.0 | 1.99 | 1.99 | 2.14 | 2.07 | 2.14 | 1.99 | 1.99 | 2.07 | 2.14 | 2.21 | 2.07 | 2.07 |
| 140.0 | 2.07 | 2.14 | 2.21 | 2.21 | 2.21 | 2.14 | 2.14 | 2.21 | 2.21 | 2.28 | 2.21 | 2.21 |
| 145.0 | 2.21 | 2.21 | 2.35 | 2.28 | 2.28 | 2.21 | 2.35 | 2.28 | 2.35 | 2.42 | 2.35 | 2.28 |
| 150.0 | 2.28 | 2.35 | 2.42 | 2.35 | 2.42 | 2.35 | 2.42 | 2.49 | 2.42 | 2.49 | 2.42 | 2.42 |
| 155.0 | 2.42 | 2.42 | 2.49 | 2.49 | 2.49 | 2.42 | 2.49 | 2.57 | 2.57 | 2.57 | 2.49 | 2.49 |
| 160.0 | 2.49 | 2.57 | 2.57 | 2.57 | 2.57 | 2.49 | 2.64 | 2.64 | 2.64 | 2.64 | 2.64 | 2.64 |
| 165.0 | 2.57 | 2.57 | 2.64 | 2.64 | 2.64 | 2.57 | 2.71 | 2.71 | 2.64 | 2.71 | 2.71 | 2.71 |
| 170.0 | 2.64 | 2.64 | 2.71 | 2.71 | 2.64 | 2.71 | 2.78 | 2.71 | 2.71 | 2.78 | 2.71 | 2.71 |
| 175.0 | 2.71 | 2.71 | 2.71 | 2.71 | 2.71 | 2.71 | 2.85 | 2.78 | 2.78 | 2.78 | 2.78 | 2.78 |
| 180.0 | 2.78 | 2.78 | 2.78 | 2.71 | 2.78 | 2.78 | 2.78 | 2.78 | 2.78 | 2.78 | 2.78 | 2.78 |

Test System:HopooColor HPG1800
Temperature:25.3DEG
Operators:W
Test Date:2023年06月17日

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:8.450 m
Remarks: