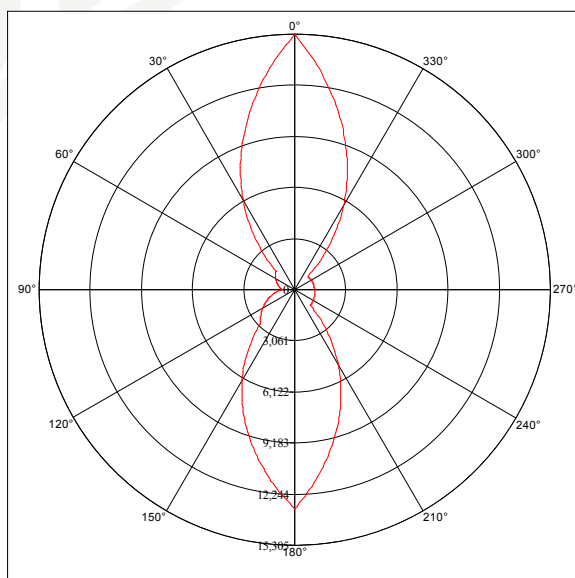
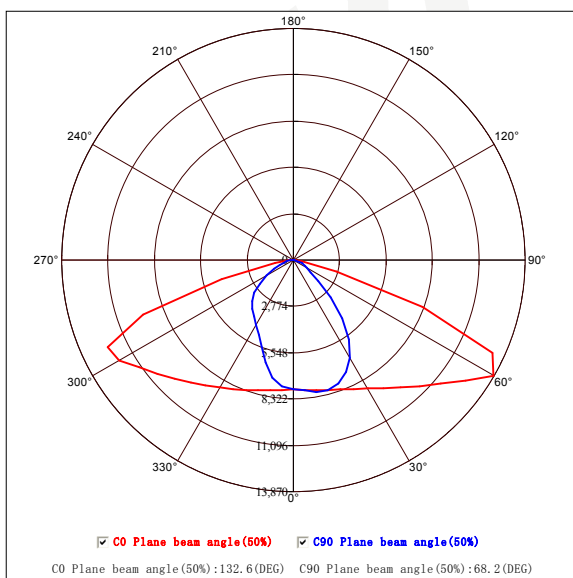


Goniophotometer Test Report

| | | | | | | |
|---|--|-----|-------------------------|-----------|-----------------------|-------|
| Measured Para U: 119.9V I: 1637.0mA P: 196.00W PF: 0.999 Test LM: 27283.2 lm | | | | | | |
| Lamp Name: | | | Lamp Type: | | Weight (kg) : | |
| Lamp ID: | | | Lamp Spec: | | Shape Size: | |
| Manufactory: | | | Sur (m ²) : | | Protect Angle (Deg) : | |
| Light Source Data | | | Photometric Data | | | |
| Model | | | Peak Value (cd) | 15688.3 | Efficiency (lm/w) | 139.2 |
| Nominal P (w) | | 0.0 | Position | 0.0, 60.0 | UP (C0-C180) | 0.0 |
| Rated Volt (v) | | 0.0 | Total Flux (lm) | 27283.2 | Down (C0-C180) | 56.5 |
| Rated Flux (lm) | | 0.0 | Up Flux Rate (%) | 0.0 | UP (C180-C360) | 0.0 |
| Illuminant QTY | | 0 | Dw Flux Rate (%) | 100.0 | Down (C180-C360) | 43.5 |

Planar Intensity Distribution Curve

Peak Point Conical surface Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 5

Temperature(Deg): 25

Tester:

Distance(m): 8.500

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

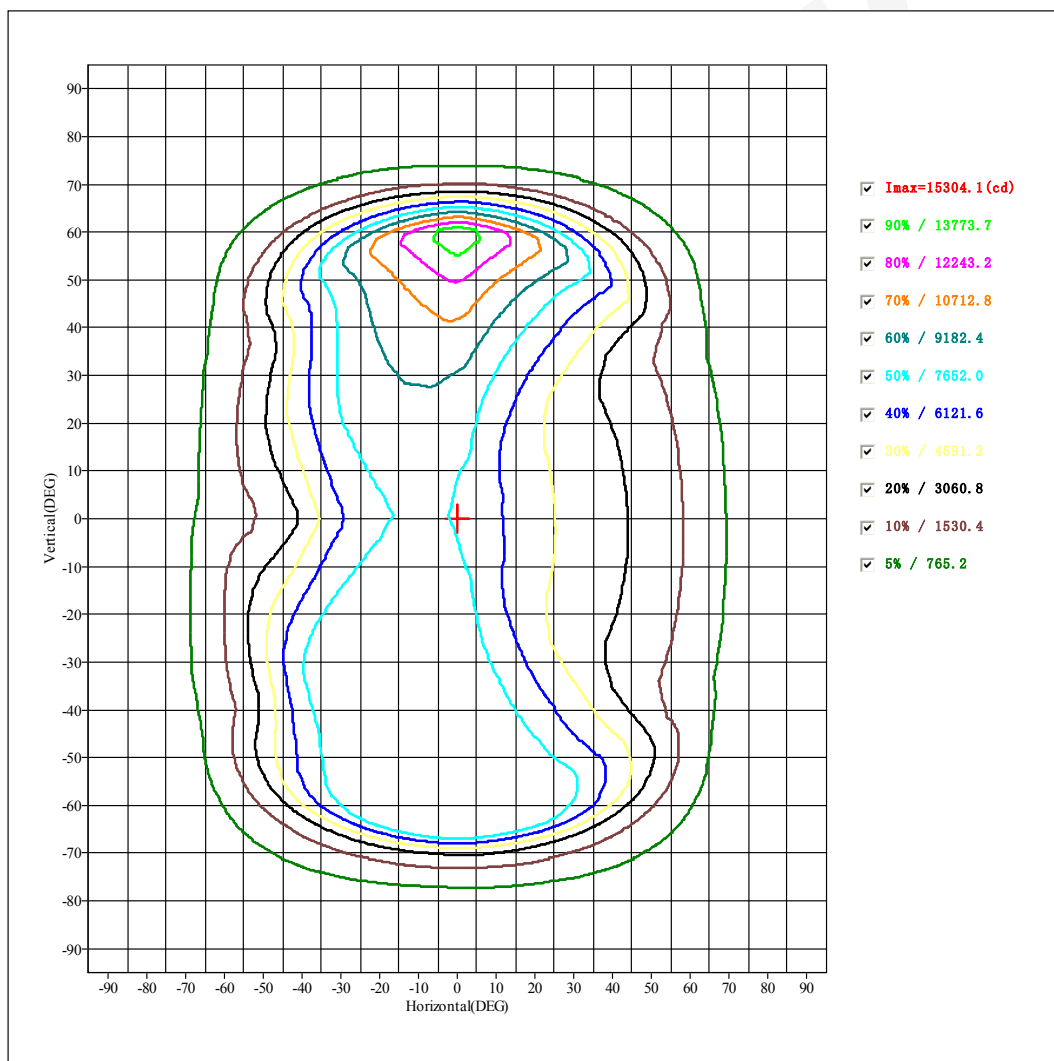
Humidity(%): 60

Date: 2019-5-22

Remark:

| | | |
|--|-----------------------|---------------------|
| Measured Para U: 119.9V I: 1637.0mA P: 196.00W PF: 0.999 Test LM: 27283.2 lm | | |
| Lamp Name: | Lamp Type: | Weight(kg): |
| Lamp ID: | Lamp Spec: | Shape Size: |
| Manufactory: | Sur(m ²): | Protect Angle(Deg): |

Planar IsoCandela Curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 5

Temperature(Deg): 25

Tester:

Distance(m): 8.500

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

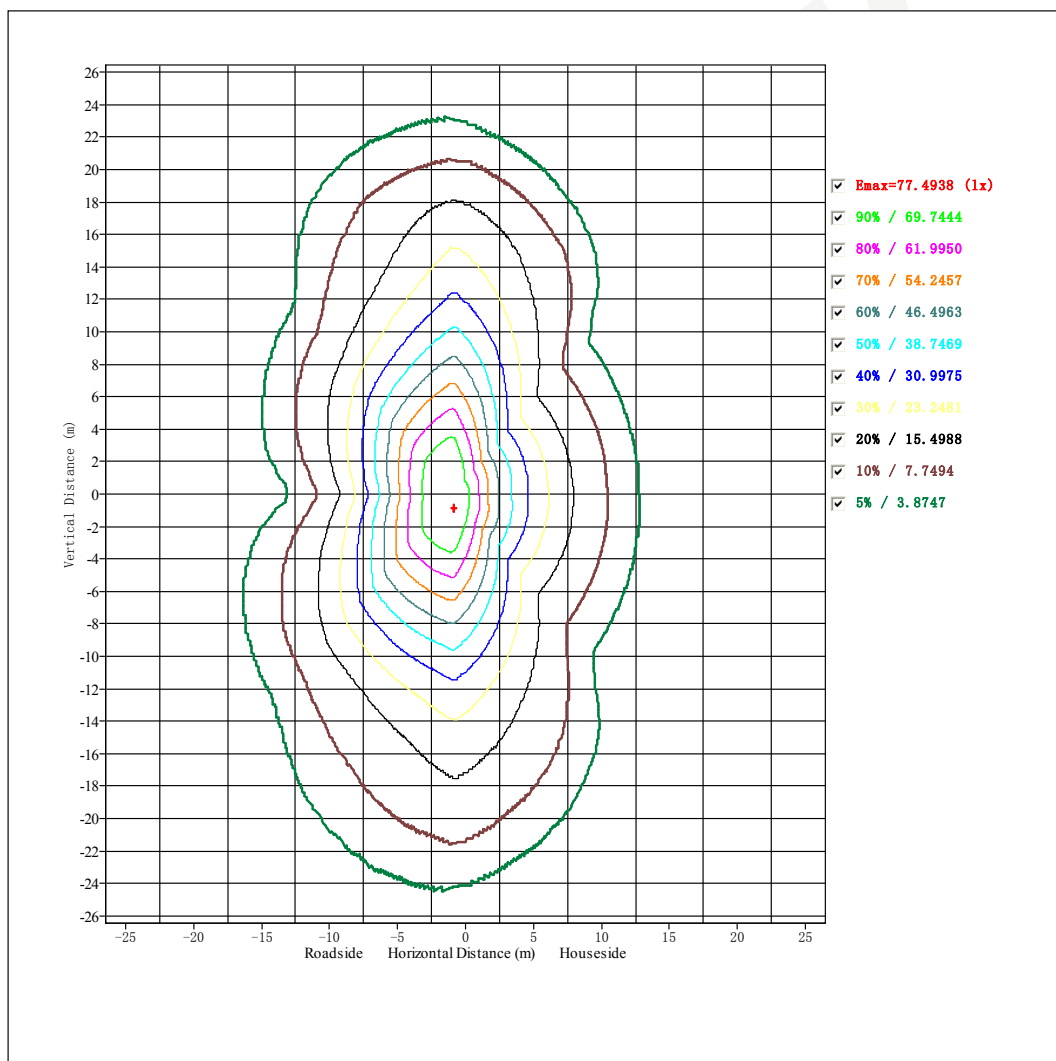
Humidity(%): 60

Date: 2019-5-22

Remark:

| | | |
|--|------------------------|---------------------|
| Measured Para U: 119.9V I: 1637.0mA P: 196.00W PF: 0.999 Test LM: 27283.2 lm | | |
| Lamp Name: | Lamp Type: | Weight(kg): |
| Lamp ID: | Lamp Spec: | Shape Size: |
| Manufactory: | Sur (m ²): | Protect Angle(Deg): |

Planar Isolux curve



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 5

Temperature(Deg): 25

Tester:

Distance(m): 8.500

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

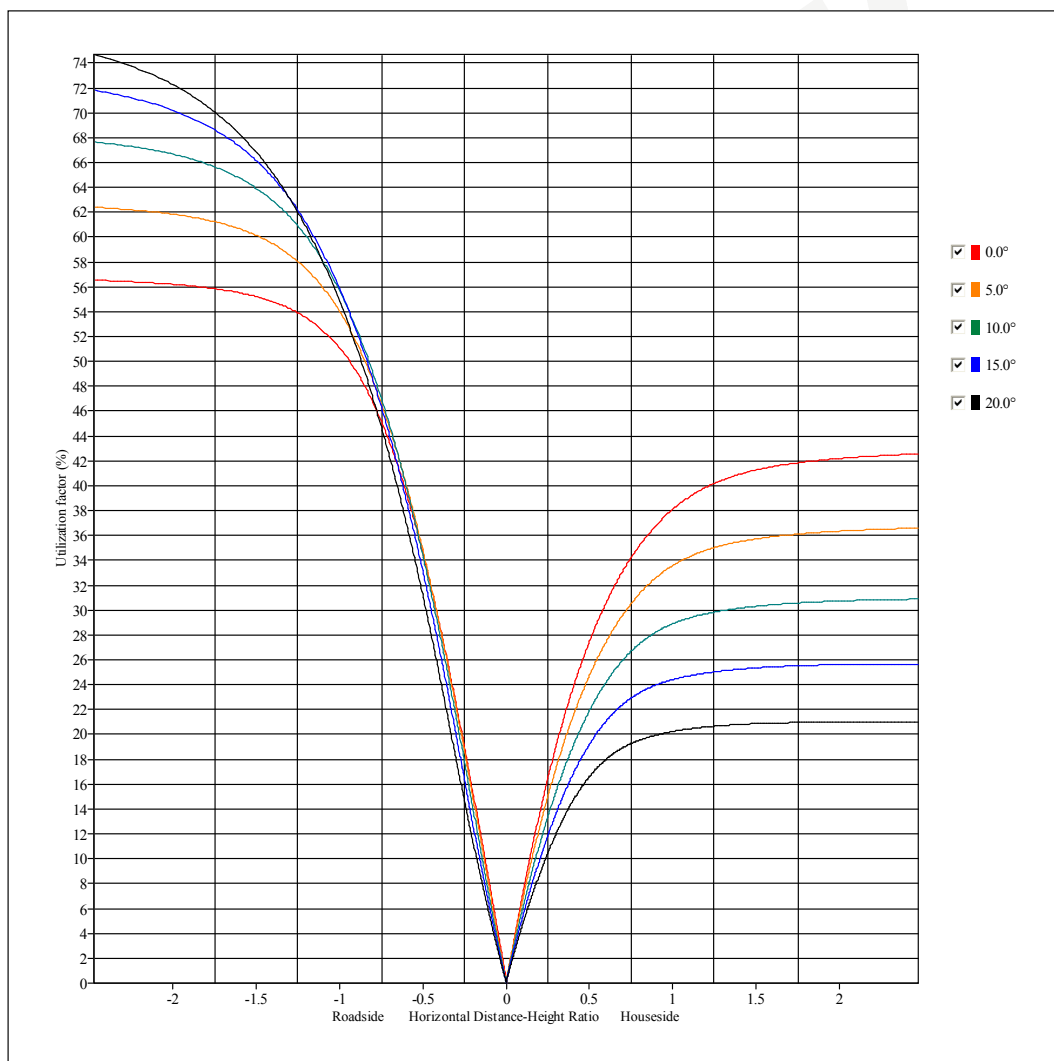
Humidity(%): 60

Date: 2019-5-22

Remark:

| | | |
|--|------------------------|---------------------|
| Measured Para U: 119.9V I: 1637.0mA P: 196.00W PF: 0.999 Test LM: 27283.2 lm | | |
| Lamp Name: | Lamp Type: | Weight(kg): |
| Lamp ID: | Lamp Spec: | Shape Size: |
| Manufactory: | Sur (m ²): | Protect Angle(Deg): |

Utilization Coefficient



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 5

Temperature(Deg): 25

Tester:

Distance(m): 8.500

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

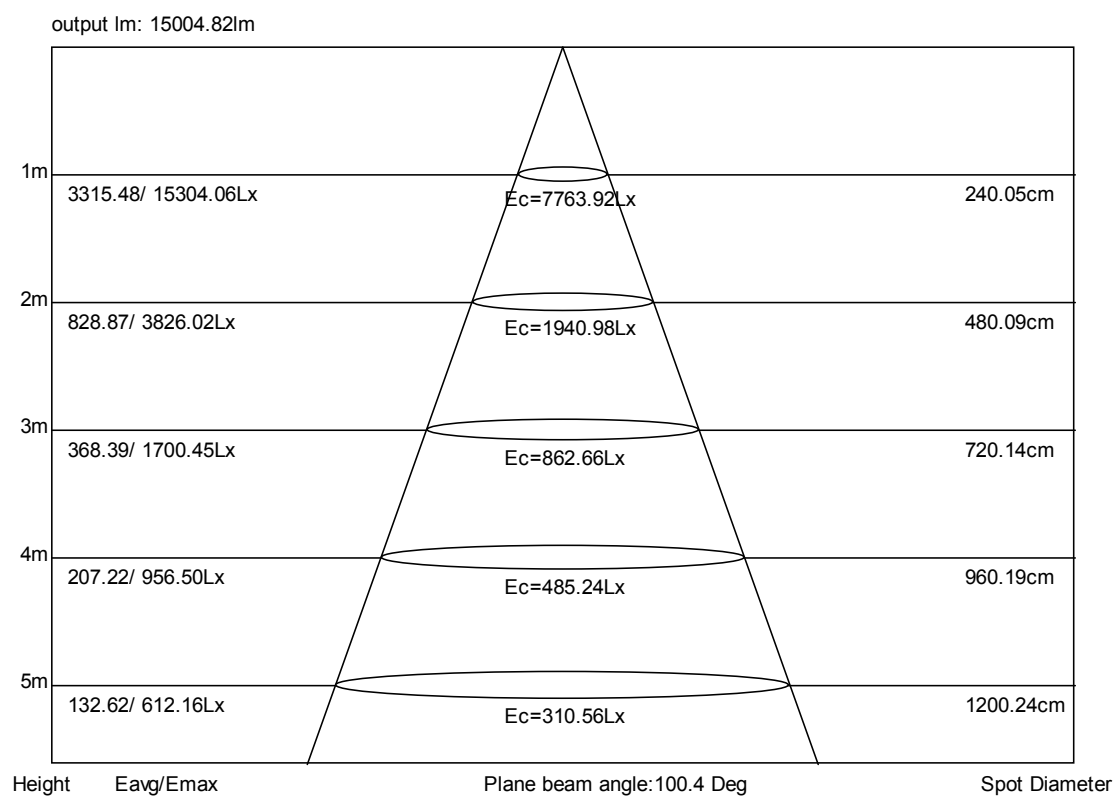
Humidity(%): 60

Date: 2019-5-22

Remark:

| | | |
|--|-----------------------|---------------------|
| Measured Para U: 119.9V I: 1637.0mA P: 196.00W PF: 0.999 Test LM: 27283.2 lm | | |
| Lamp Name: | Lamp Type: | Weight(kg): |
| Lamp ID: | Lamp Spec: | Shape Size: |
| Manufactory: | Sur(m ²): | Protect Angle(Deg): |

Average Illumination



Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 5

Temperature(Deg): 25

Tester:

Distance(m): 8.500

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2019-5-22

Remark:

| | | |
|--|-----------------------|---------------------|
| Measured Para U: 119.9V I: 1637.0mA P: 196.00W PF: 0.999 Test LM: 27283.2 lm | | |
| Lamp Name: | Lamp Type: | Weight (kg): |
| Lamp ID: | Lamp Spec: | Shape Size: |
| Manufactory: | Sur(m ²): | Protect Angle(Deg): |

Ring-shaped Flux Data Table

| Gm\C(Deg) | 0 | 45 | 90 | 135 | 180 | 225 | 270 | 315 | Range | Ring | T(lm) |
|-----------|-------|------|------|------|-------|------|------|------|---------|------|-------|
| 5 | 7896 | 8025 | 8072 | 7954 | 7929 | 7416 | 7200 | 7226 | 0-5 | 185 | 185 |
| 10 | 8029 | 8206 | 8127 | 8238 | 8069 | 6894 | 6390 | 6685 | 5-10 | 547 | 731 |
| 15 | 8249 | 8373 | 7947 | 8503 | 8274 | 6207 | 5500 | 6022 | 10-15 | 887 | 1618 |
| 20 | 8501 | 8504 | 7486 | 8767 | 8516 | 5469 | 4856 | 5341 | 15-20 | 1200 | 2818 |
| 25 | 8865 | 8561 | 6798 | 9003 | 8784 | 4853 | 4463 | 4761 | 20-25 | 1488 | 4306 |
| 30 | 9336 | 8549 | 5885 | 9220 | 9145 | 4391 | 4127 | 4307 | 25-30 | 1756 | 6062 |
| 35 | 9926 | 8379 | 4655 | 9386 | 9556 | 3937 | 3844 | 3836 | 30-35 | 1996 | 8058 |
| 40 | 10639 | 7905 | 3142 | 9306 | 10025 | 3538 | 3536 | 3421 | 35-40 | 2190 | 10248 |
| 45 | 11496 | 6997 | 1735 | 8834 | 10574 | 3127 | 3091 | 2962 | 40-45 | 2321 | 12569 |
| 50 | 12463 | 5403 | 1163 | 7633 | 11187 | 2613 | 2473 | 2379 | 45-50 | 2376 | 14945 |
| 55 | 13841 | 3252 | 940 | 5485 | 11986 | 1997 | 1845 | 1747 | 50-55 | 2347 | 17292 |
| 60 | 15304 | 1576 | 758 | 2924 | 13117 | 1335 | 1183 | 1130 | 55-60 | 2265 | 19557 |
| 65 | 8183 | 848 | 568 | 1263 | 10948 | 844 | 828 | 776 | 60-65 | 1868 | 21426 |
| 70 | 1161 | 520 | 364 | 648 | 3188 | 583 | 593 | 528 | 65-70 | 1005 | 22430 |
| 75 | 280 | 237 | 194 | 336 | 528 | 340 | 443 | 261 | 70-75 | 333 | 22763 |
| 80 | 65.6 | 75.1 | 58.8 | 124 | 183 | 137 | 165 | 93.3 | 75-80 | 118 | 22881 |
| 85 | 4.08 | 4.26 | 2 | 20.4 | 43.9 | 21.4 | 1.71 | 6.29 | 80-85 | 34.1 | 22915 |
| 90 | 5.92 | 1.24 | 0.93 | 1.08 | 3.59 | 0.82 | 0.6 | 1.17 | 85-90 | 4.09 | 22919 |
| 95 | | | | | | | | | 90-95 | | |
| 100 | | | | | | | | | 95-100 | | |
| 105 | | | | | | | | | 100-105 | | |
| 110 | | | | | | | | | 105-110 | | |
| 115 | | | | | | | | | 110-115 | | |
| 120 | | | | | | | | | 115-120 | | |
| 125 | | | | | | | | | 120-125 | | |
| 130 | | | | | | | | | 125-130 | | |
| 135 | | | | | | | | | 130-135 | | |
| 140 | | | | | | | | | 135-140 | | |
| 145 | | | | | | | | | 140-145 | | |
| 150 | | | | | | | | | 145-150 | | |
| 155 | | | | | | | | | 150-155 | | |
| 160 | | | | | | | | | 155-160 | | |
| 165 | | | | | | | | | 160-165 | | |
| 170 | | | | | | | | | 165-170 | | |
| 175 | | | | | | | | | 170-175 | | |
| 180 | | | | | | | | | 175-180 | | |

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 5

Temperature(Deg): 25

Tester:

Distance(m): 8.500

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2019-5-22

Remark:

| | | |
|--|-----------------------|---------------------|
| Measured Para U: 119.9V I: 1637.0mA P: 196.00W PF: 0.999 Test LM: 27283.2 lm | | |
| Lamp Name: | Lamp Type: | Weight (kg): |
| Lamp ID: | Lamp Spec: | Shape Size: |
| Manufactory: | Sur(m ²): | Protect Angle(Deg): |

CD Table

| Gm\C(Deg) | 0 | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 | 300 | 320 | 340 |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 5.0 | 7896 | 7953 | 8011 | 8041 | 8062 | 8046 | 7993 | 7951 | 7940 | 7929 | 7704 | 7472 | 7345 | 7247 | 7205 | 7217 | 7299 | 7603 |
| 10.0 | 8029 | 8107 | 8187 | 8180 | 8144 | 8151 | 8201 | 8219 | 8143 | 8069 | 7555 | 7022 | 6729 | 6501 | 6455 | 6588 | 6832 | 7441 |
| 15.0 | 8249 | 8303 | 8359 | 8233 | 8040 | 8069 | 8321 | 8478 | 8375 | 8274 | 7370 | 6433 | 5975 | 5655 | 5614 | 5851 | 6265 | 7274 |
| 20.0 | 8501 | 8502 | 8504 | 8170 | 7709 | 7766 | 8347 | 8740 | 8626 | 8516 | 7183 | 5802 | 5268 | 4990 | 4962 | 5182 | 5687 | 7118 |
| 25.0 | 8865 | 8732 | 8594 | 7983 | 7184 | 7280 | 8279 | 8979 | 8880 | 8784 | 7064 | 5283 | 4725 | 4548 | 4528 | 4663 | 5210 | 7069 |
| 30.0 | 9336 | 8992 | 8635 | 7675 | 6468 | 6614 | 8126 | 9212 | 9178 | 9145 | 7065 | 4911 | 4304 | 4184 | 4166 | 4248 | 4857 | 7136 |
| 35.0 | 9926 | 9249 | 8548 | 7157 | 5470 | 5690 | 7833 | 9404 | 9482 | 9556 | 7098 | 4551 | 3906 | 3864 | 3842 | 3839 | 4502 | 7261 |
| 40.0 | 11k | 9443 | 8204 | 6342 | 4184 | 4490 | 7284 | 9385 | 9711 | 10k | 7187 | 4247 | 3537 | 3537 | 3511 | 3459 | 4210 | 7481 |
| 45.0 | 11k | 9528 | 7489 | 5270 | 2886 | 3288 | 6504 | 9024 | 9813 | 11k | 7316 | 3941 | 3115 | 3099 | 3063 | 3005 | 3896 | 7763 |
| 50.0 | 12k | 9374 | 6176 | 4012 | 2091 | 2579 | 5510 | 8022 | 9632 | 11k | 7436 | 3551 | 2567 | 2504 | 2452 | 2410 | 3482 | 8051 |
| 55.0 | 14k | 9208 | 4410 | 2494 | 1446 | 1935 | 3994 | 6196 | 9142 | 12k | 7615 | 3089 | 1947 | 1878 | 1824 | 1779 | 3070 | 8550 |
| 60.0 | 15k | 9298 | 3077 | 1307 | 937 | 1232 | 2213 | 4039 | 8658 | 13k | 7963 | 2624 | 1285 | 1217 | 1172 | 1148 | 2680 | 9103 |
| 65.0 | 8183 | 4974 | 1651 | 756 | 629 | 720 | 1035 | 2322 | 6711 | 11k | 6528 | 1949 | 839 | 831 | 817 | 793 | 1586 | 4942 |
| 70.0 | 1161 | 881 | 591 | 469 | 398 | 426 | 555 | 926 | 2077 | 3188 | 2048 | 868 | 586 | 591 | 579 | 549 | 597 | 884 |
| 75.0 | 280 | 261 | 242 | 223 | 204 | 225 | 290 | 357 | 444 | 528 | 445 | 360 | 374 | 420 | 403 | 321 | 263 | 272 |
| 80.0 | 65.6 | 69.8 | 74.1 | 69.8 | 62.4 | 73 | 102 | 130 | 157 | 183 | 163 | 142 | 146 | 159 | 149 | 117 | 90.2 | 77.7 |
| 85.0 | 4.08 | 4.16 | 4.24 | 3.52 | 2.49 | 6.04 | 14.4 | 23 | 33.7 | 43.9 | 34.1 | 23.8 | 14.9 | 6.01 | 2.71 | 4.79 | 6.05 | 5.05 |
| 90.0 | 5.92 | 3.87 | 1.75 | 1.14 | 1 | 0.96 | 1.03 | 1.35 | 2.49 | 3.59 | 2.38 | 1.12 | 0.75 | 0.65 | 0.72 | 0.98 | 1.69 | 3.84 |
| 95.0 | | | | | | | | | | | | | | | | | | |
| 100.0 | | | | | | | | | | | | | | | | | | |
| 105.0 | | | | | | | | | | | | | | | | | | |
| 110.0 | | | | | | | | | | | | | | | | | | |
| 115.0 | | | | | | | | | | | | | | | | | | |
| 120.0 | | | | | | | | | | | | | | | | | | |
| 125.0 | | | | | | | | | | | | | | | | | | |
| 130.0 | | | | | | | | | | | | | | | | | | |
| 135.0 | | | | | | | | | | | | | | | | | | |
| 140.0 | | | | | | | | | | | | | | | | | | |
| 145.0 | | | | | | | | | | | | | | | | | | |
| 150.0 | | | | | | | | | | | | | | | | | | |
| 155.0 | | | | | | | | | | | | | | | | | | |
| 160.0 | | | | | | | | | | | | | | | | | | |
| 165.0 | | | | | | | | | | | | | | | | | | |
| 170.0 | | | | | | | | | | | | | | | | | | |
| 175.0 | | | | | | | | | | | | | | | | | | |
| 180.0 | | | | | | | | | | | | | | | | | | |

Gama Angle Range:-90 - 90(Deg)

Gama interval(Deg): 5

Temperature(Deg): 25

Tester:

Distance(m): 8.500

Test System: ZWL Goniophotometer System V3.0

C Angle Range:0 - 180(Deg)

C interval(Deg): 45

Humidity(%): 60

Date: 2019-5-22

Remark: