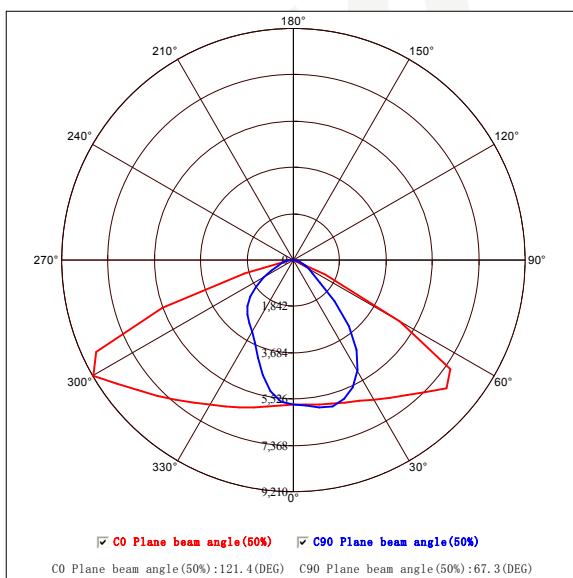


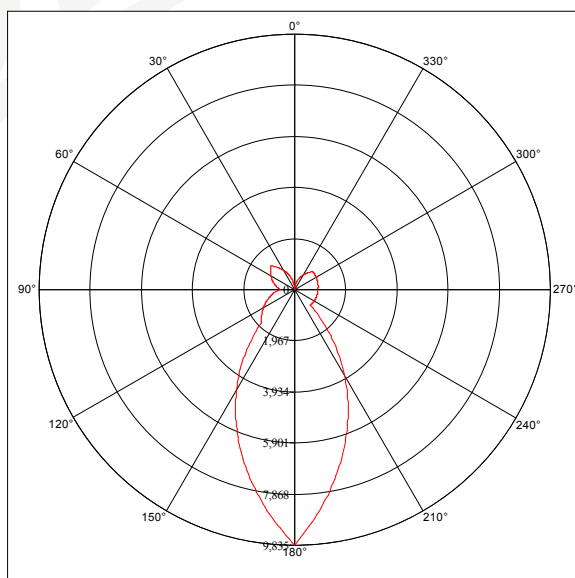
## Goniophotometer Test Report

|  |  |     |                         |             |                       |       |
|--|--|-----|-------------------------|-------------|-----------------------|-------|
| Measured Para   U: 120.0V   I: 1034.0mA   P: 123.70W   PF: 0.997   Test LM: 16551.06lm |  |     |                         |             |                       |       |
| Lamp Name:   |  |     | Lamp Type:              |             | Weight (kg) :         |       |
| Lamp ID:   |  |     | Lamp Spec:              |             | Shape Size:           |       |
| Manufactory:   |  |     | Sur (m <sup>2</sup> ) : |             | Protect Angle (Deg) : |       |
| Light Source Data  |  |     | Photometric Data        |             |                       |       |
| Model  |  |     | Peak Value (cd)         | 9675.3      | Efficiency (lm/w)     | 133.8 |
| Nominal P (w)  |  | 0.0 | Position                | 180.0, 60.0 | UP (C0-C180)          | 0.0   |
| Rated Volt (v)   |  | 0.0 | Total Flux (lm)         | 16551.06    | Down (C0-C180)        | 57.3  |
| 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)      | 42.7  |

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

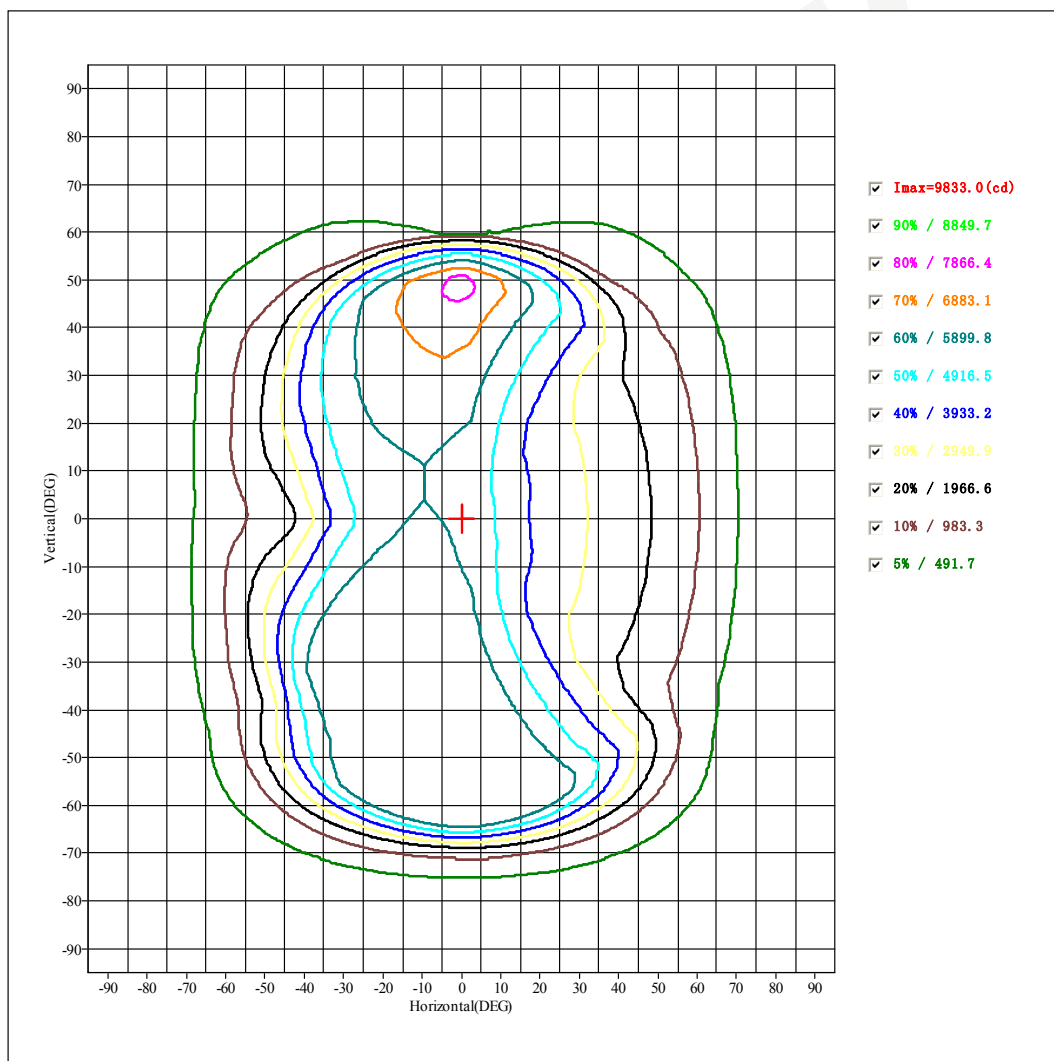
Humidity(%): 60

Date: 2019-5-22

Remark:

|  |                       |                     |
|--|-----------------------|---------------------|
| Measured Para U: 120.0V I: 1034.0mA P: 123.70W PF: 0.997 Test LM: 16551.06lm |                       |                     |
| Lamp Name:   | Lamp Type:            | Weight(kg):         |
| Lamp ID:   | Lamp Spec:            | Shape Size:         |
| Manufactory:   | Sur(m <sup>2</sup> ): | 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

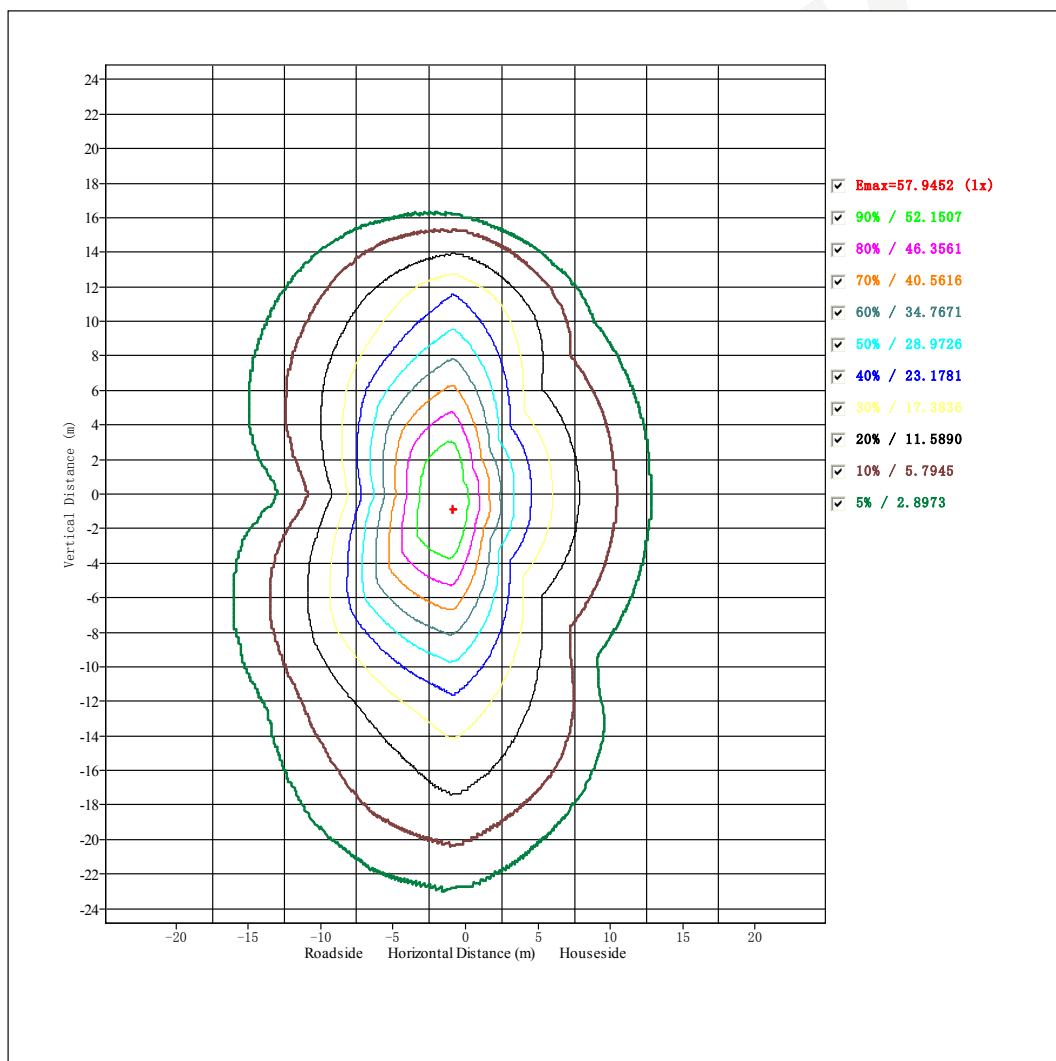
Humidity(%): 60

Date: 2019-5-22

Remark:

|  |                        |                     |
|--|------------------------|---------------------|
| Measured Para U: 120.0V I: 1034.0mA P: 123.70W PF: 0.997 Test LM: 16551.06lm |                        |                     |
| Lamp Name:   | Lamp Type:             | Weight(kg):         |
| Lamp ID:   | Lamp Spec:             | Shape Size:         |
| Manufactory:   | Sur (m <sup>2</sup> ): | 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

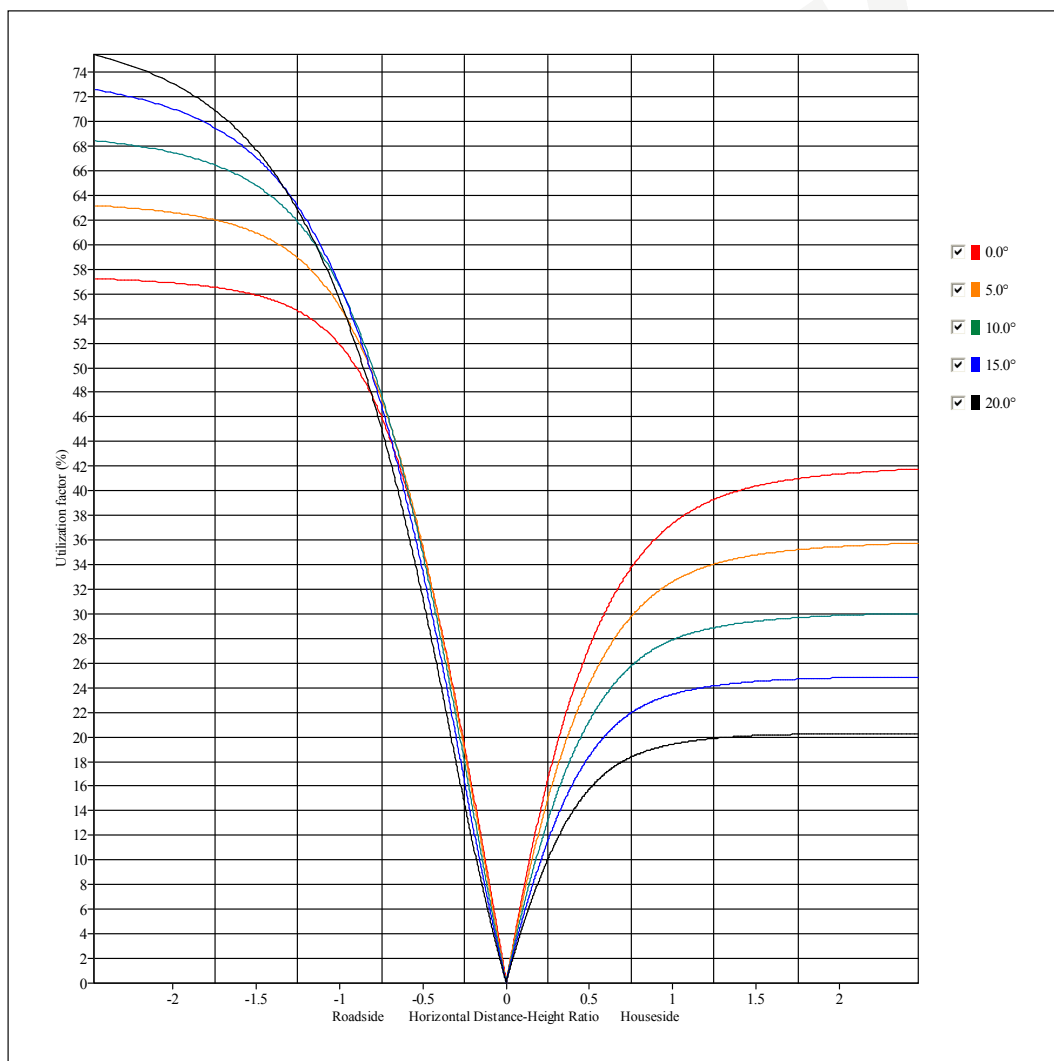
Humidity(%): 60

Date: 2019-5-22

Remark:

|  |                        |                     |
|--|------------------------|---------------------|
| Measured Para U: 120.0V I: 1034.0mA P: 123.70W PF: 0.997 Test LM: 16551.06lm |                        |                     |
| Lamp Name:   | Lamp Type:             | Weight(kg):         |
| Lamp ID:   | Lamp Spec:             | Shape Size:         |
| Manufactory:   | Sur (m <sup>2</sup> ): | 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

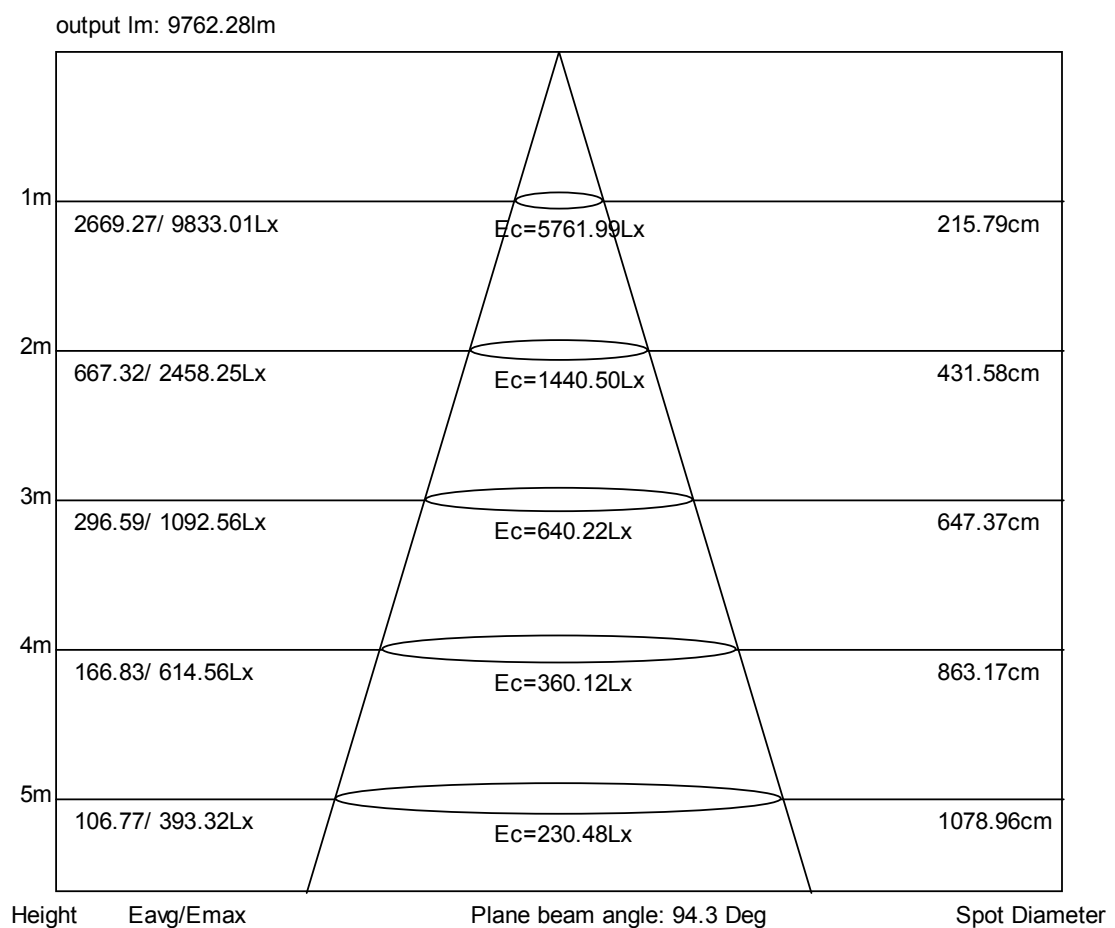
Humidity(%): 60

Date: 2019-5-22

Remark:

|  |                        |                     |
|--|------------------------|---------------------|
| Measured Para U: 120.0V I: 1034.0mA P: 123.70W PF: 0.997 Test LM: 16551.06lm |                        |                     |
| Lamp Name:   | Lamp Type:             | Weight(kg):         |
| Lamp ID:   | Lamp Spec:             | Shape Size:         |
| Manufactory:   | Sur (m <sup>2</sup> ): | 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: 120.0V I: 1034.0mA P: 123.70W PF: 0.997 Test LM: 16551.061m |                       |                     |
| Lamp Name:   | Lamp Type:            | Weight (kg):        |
| Lamp ID:   | Lamp Spec:            | Shape Size:         |
| Manufactory:   | Sur(m <sup>2</sup> ): | Protect Angle(Deg): |

Ring-shaped Flux Data Table

| Gm\C(Deg) | 0    | 45   | 90   | 135  | 180  | 225  | 270  | 315  | Range   | Ring | T(lm) |
|-----------|------|------|------|------|------|------|------|------|---------|------|-------|
| 5         | 5834 | 5927 | 5997 | 5935 | 5929 | 5508 | 5330 | 5338 | 0-5     | 137  | 137   |
| 10        | 5892 | 6035 | 6059 | 6188 | 6057 | 5108 | 4733 | 4939 | 5-10    | 406  | 543   |
| 15        | 6020 | 6116 | 5943 | 6439 | 6226 | 4588 | 4090 | 4466 | 10-15   | 659  | 1202  |
| 20        | 6179 | 6177 | 5623 | 6690 | 6405 | 4024 | 3590 | 3972 | 15-20   | 891  | 2093  |
| 25        | 6377 | 6205 | 5110 | 6932 | 6638 | 3559 | 3300 | 3549 | 20-25   | 1105 | 3198  |
| 30        | 6660 | 6162 | 4423 | 7173 | 6918 | 3186 | 3042 | 3227 | 25-30   | 1304 | 4502  |
| 35        | 6998 | 6032 | 3474 | 7341 | 7248 | 2834 | 2816 | 2907 | 30-35   | 1480 | 5982  |
| 40        | 7411 | 5692 | 2310 | 7283 | 7628 | 2522 | 2596 | 2602 | 35-40   | 1620 | 7602  |
| 45        | 7915 | 5084 | 1239 | 6839 | 8054 | 2199 | 2283 | 2284 | 40-45   | 1711 | 9312  |
| 50        | 8492 | 4023 | 857  | 5713 | 8519 | 1789 | 1827 | 1896 | 45-50   | 1742 | 11054 |
| 55        | 5488 | 2509 | 696  | 3814 | 9227 | 1327 | 1383 | 1443 | 50-55   | 1601 | 12656 |
| 60        | 3.32 | 1296 | 554  | 1808 | 9833 | 857  | 897  | 986  | 55-60   | 1214 | 13870 |
| 65        | 3.36 | 707  | 415  | 749  | 5675 | 571  | 626  | 650  | 60-65   | 777  | 14648 |
| 70        | 3.57 | 465  | 265  | 405  | 1046 | 379  | 448  | 467  | 65-70   | 406  | 15054 |
| 75        | 3.36 | 233  | 142  | 177  | 238  | 188  | 325  | 279  | 70-75   | 165  | 15219 |
| 80        | 3.33 | 84.5 | 39.9 | 58.5 | 75.4 | 73.4 | 125  | 105  | 75-80   | 71.8 | 15291 |
| 85        | 3.33 | 12.6 | 1.34 | 2.54 | 8.67 | 5.36 | 1.55 | 18.8 | 80-85   | 21   | 15312 |
| 90        | 3.38 | 0.64 | 0.61 | 0.77 | 4.26 | 0.63 | 0.38 | 0.7  | 85-90   | 2.24 | 15314 |
| 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: 120.0V I: 1034.0mA P: 123.70W PF: 0.997 Test LM: 16551.061m |                       |                     |
| Lamp Name:   | Lamp Type:            | Weight (kg):        |
| Lamp ID:   | Lamp Spec:            | Shape Size:         |
| Manufactory:   | Sur(m <sup>2</sup> ): | 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       | 5834 | 5874 | 5917 | 5950 | 5982 | 5983 | 5955 | 5934 | 5931 | 5929 | 5745 | 5554 | 5450 | 5369 | 5331 | 5336 | 5393 | 5617 |
| 10.0      | 5892 | 5955 | 6019 | 6043 | 6054 | 6088 | 6146 | 6174 | 6114 | 6057 | 5642 | 5212 | 4985 | 4815 | 4778 | 4871 | 5043 | 5475 |
| 15.0      | 6020 | 6062 | 6106 | 6059 | 5981 | 6052 | 6276 | 6416 | 6320 | 6226 | 5510 | 4768 | 4425 | 4199 | 4172 | 4343 | 4636 | 5340 |
| 20.0      | 6179 | 6178 | 6177 | 5995 | 5744 | 5857 | 6340 | 6659 | 6530 | 6405 | 5363 | 4284 | 3881 | 3685 | 3673 | 3847 | 4214 | 5214 |
| 25.0      | 6377 | 6302 | 6224 | 5846 | 5350 | 5509 | 6334 | 6900 | 6767 | 6638 | 5291 | 3896 | 3474 | 3356 | 3354 | 3467 | 3858 | 5139 |
| 30.0      | 6660 | 6442 | 6217 | 5592 | 4803 | 5024 | 6271 | 7145 | 7030 | 6918 | 5285 | 3594 | 3138 | 3073 | 3082 | 3166 | 3603 | 5158 |
| 35.0      | 6998 | 6575 | 6137 | 5192 | 4034 | 4320 | 6072 | 7331 | 7289 | 7248 | 5317 | 3317 | 2828 | 2820 | 2836 | 2877 | 3355 | 5209 |
| 40.0      | 7411 | 6659 | 5880 | 4582 | 3050 | 3398 | 5651 | 7320 | 7477 | 7628 | 5394 | 3080 | 2546 | 2580 | 2597 | 2600 | 3128 | 5307 |
| 45.0      | 7915 | 6677 | 5394 | 3822 | 2080 | 2464 | 5002 | 6972 | 7522 | 8054 | 5492 | 2840 | 2227 | 2265 | 2283 | 2284 | 2900 | 5451 |
| 50.0      | 8492 | 6537 | 4512 | 2984 | 1550 | 1919 | 4119 | 6020 | 7291 | 8519 | 5575 | 2525 | 1802 | 1819 | 1842 | 1873 | 2617 | 5606 |
| 55.0      | 5488 | 4185 | 2835 | 1914 | 1092 | 1378 | 2791 | 4406 | 6859 | 9227 | 5771 | 2191 | 1345 | 1371 | 1396 | 1424 | 1886 | 3718 |
| 60.0      | 3.32 | 569  | 1155 | 1053 | 716  | 828  | 1397 | 2686 | 6322 | 9833 | 5906 | 1838 | 870  | 888  | 916  | 957  | 878  | 433  |
| 65.0      | 3.36 | 311  | 630  | 611  | 479  | 488  | 639  | 1288 | 3520 | 5675 | 3442 | 1129 | 589  | 614  | 632  | 642  | 579  | 286  |
| 70.0      | 3.57 | 205  | 414  | 399  | 309  | 296  | 359  | 475  | 765  | 1046 | 754  | 452  | 402  | 433  | 452  | 461  | 416  | 206  |
| 75.0      | 3.36 | 104  | 208  | 203  | 162  | 150  | 165  | 183  | 211  | 238  | 216  | 194  | 233  | 295  | 315  | 294  | 249  | 124  |
| 80.0      | 3.33 | 38.8 | 75.6 | 69.9 | 49.7 | 44   | 52.4 | 60.4 | 68   | 75.4 | 74.5 | 73.6 | 90.2 | 113  | 120  | 111  | 93.9 | 47.8 |
| 85.0      | 3.33 | 7.41 | 11.6 | 8.94 | 3.82 | 1.6  | 2.14 | 3.21 | 5.99 | 8.67 | 7.22 | 5.72 | 4.11 | 2.38 | 5.32 | 13.1 | 17.1 | 10.1 |
| 90.0      | 3.38 | 2.18 | 0.94 | 0.63 | 0.62 | 0.65 | 0.72 | 1.15 | 2.73 | 4.26 | 2.67 | 1.03 | 0.55 | 0.43 | 0.45 | 0.59 | 0.99 | 2.21 |
| 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: