

Report No.:

Test Time: 2024/4/24 10:53:03

## LUMINAIRE PHOTOMETRIC TEST REPORT

### Luminaire Property

Manufacturer: InBright  
Luminaire Type: IBSP104CT120-24°-28.2W  
Lamp Type:  
Luminous Width: 108 mm  
Luminous Length: 108 mm  
Luminous Height: 104 mm

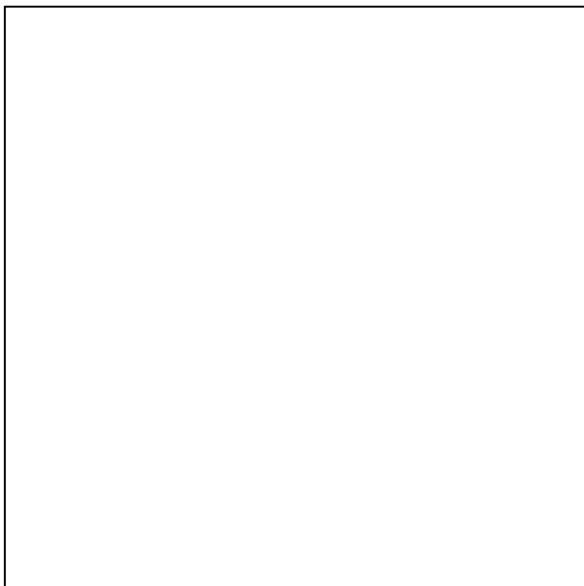
Voltage(V): 219.80 V  
Current(A): 0.1350 A  
Power(W): 28.18 W  
Power Factor: 0.9440  
Lamp Luminous Flux: 2966.92

### Photometric Results

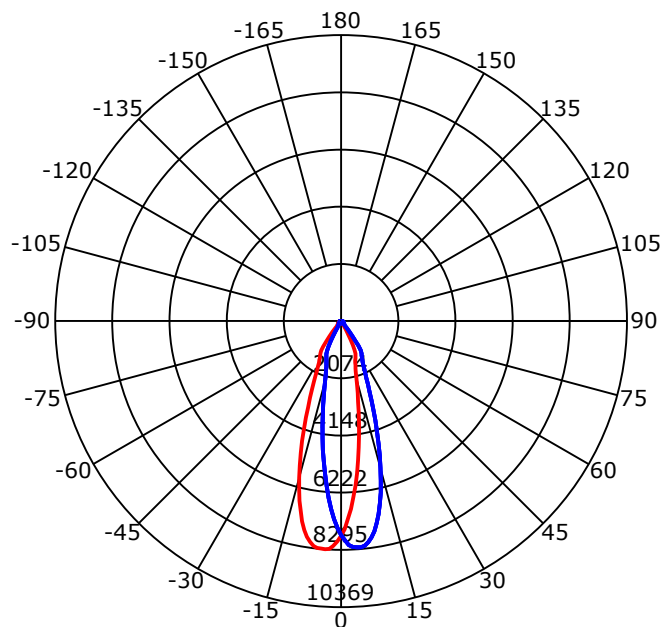
CIE Class: Direct  
Luminaire Luminous Flux: 2966.915 lm  
Downward Ratio: 100.00%  
Luminaire Efficacy Rating(LER): 105.28 lm/W  
Beam Angle(50%) C0-180,C90-270: 28.1,27.6  
Field Angle(10%) C0-180,C90-270: 63.1,63.2  
S/MH C0-180,C90-270: 0.536,0.499

Max. Intensity: 8295.36 cd  
Max.Intensity Angle: C=180 Gamma=4  
Upward Ratio: 0.00%  
Efficacy: 100.00%  
Center Intensity: 7783.88 cd  
Effective Luminous Flux: 2582.98 lm  
ERP( $\phi$ use)(120deg): 2910.32 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 28.1 deg,27.6 deg

C0-180 — C90-270 —

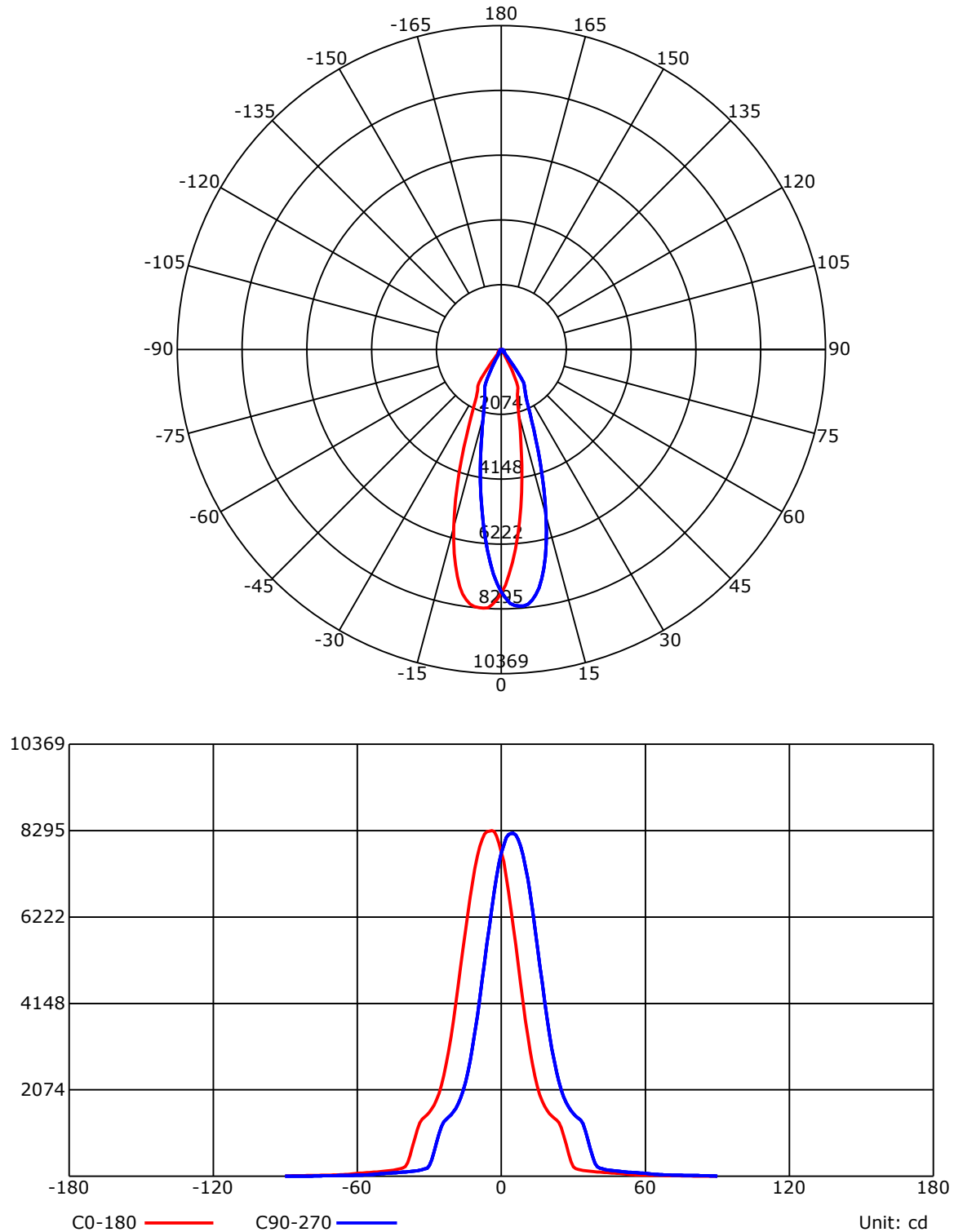
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/4/24 10:53:03

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 60  
Test Distance: 6.81 m  
Remarks:

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## Luminous Intensity Distribution Curve



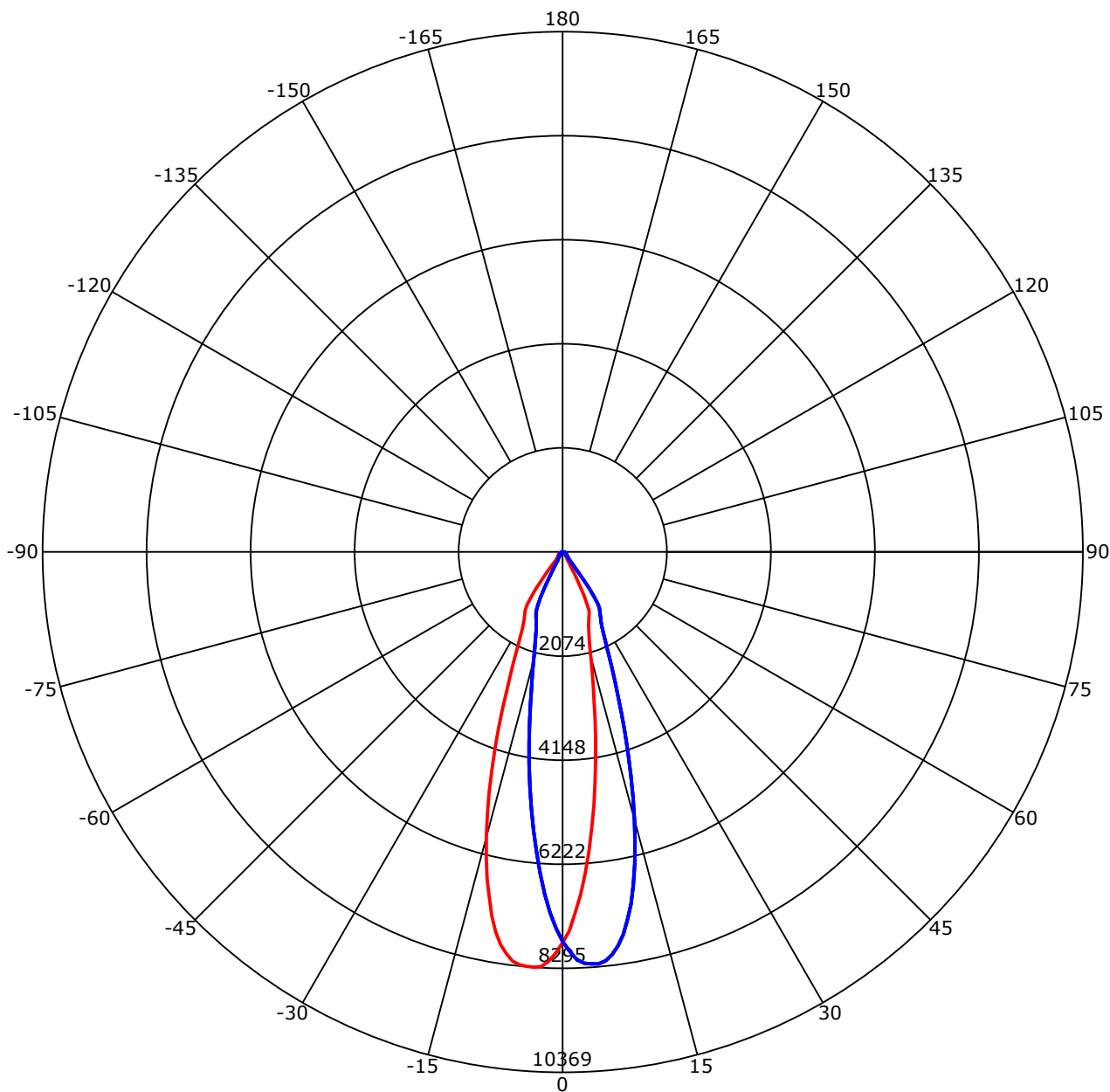
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/4/24 10:53:03

G Range: 0 - 90 Deg  
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Humidity: 60  
Test Distance: 6.81 m  
Remarks:

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## Luminous Intensity Distribution Curve



C0-180 — C90-270

Unit: cd/klm

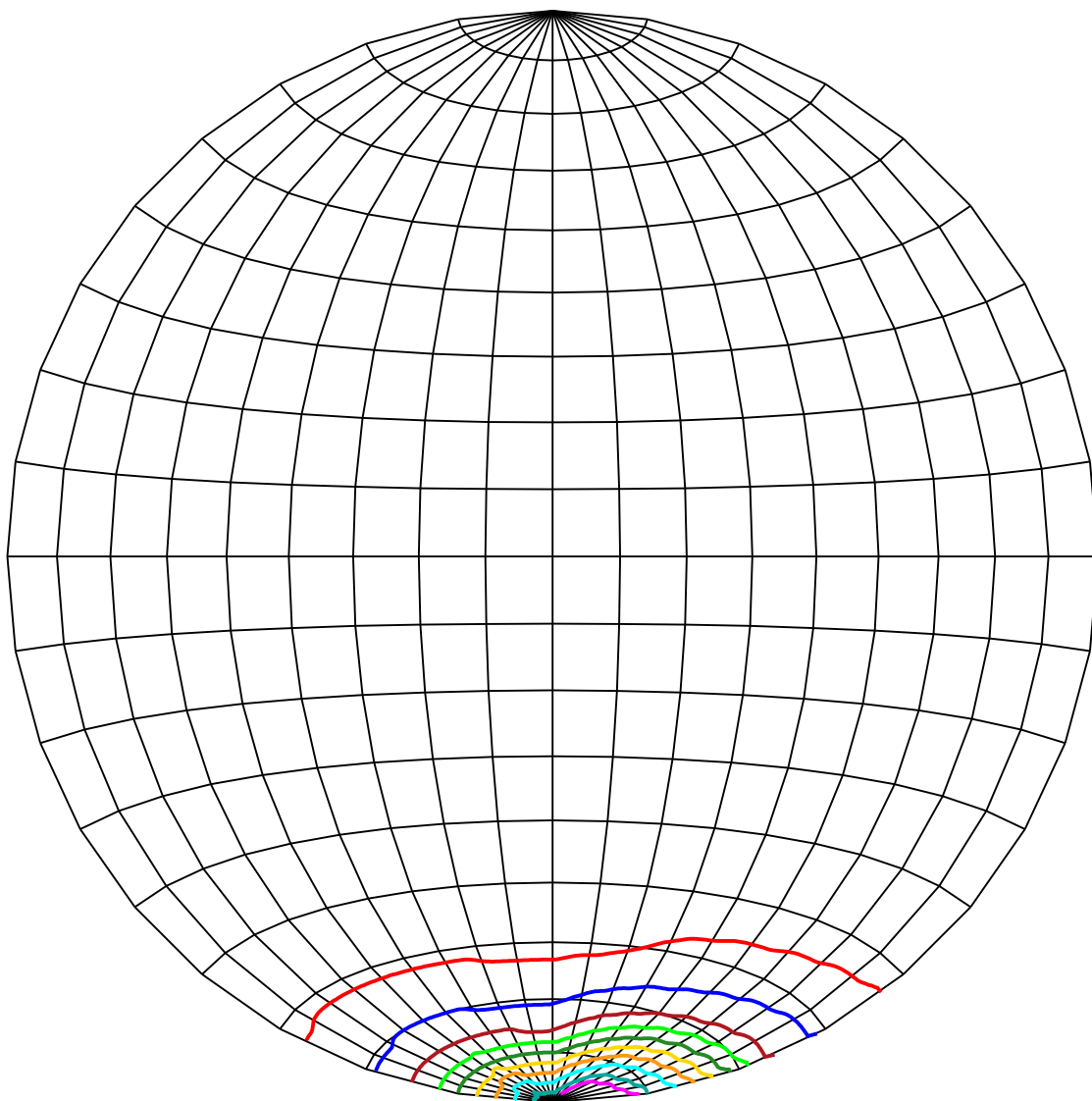
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/4/24 10:53:03

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 60  
Test Distance: 6.81 m  
Remarks:

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## ISOCANDELA DIAGRAM (SPHERE)



Unit of intensity:cd    Imax(100%): 8295.357 cd

|                   |                   |
|-------------------|-------------------|
| 7880.589(95%Imax) | 4147.679(50%Imax) |
| 7465.821(90%Imax) | 3318.143(40%Imax) |
| 6636.286(80%Imax) | 2488.607(30%Imax) |
| 5806.75(70%Imax)  | 1659.072(20%Imax) |
| 4977.215(60%Imax) | 829.536(10%Imax)  |

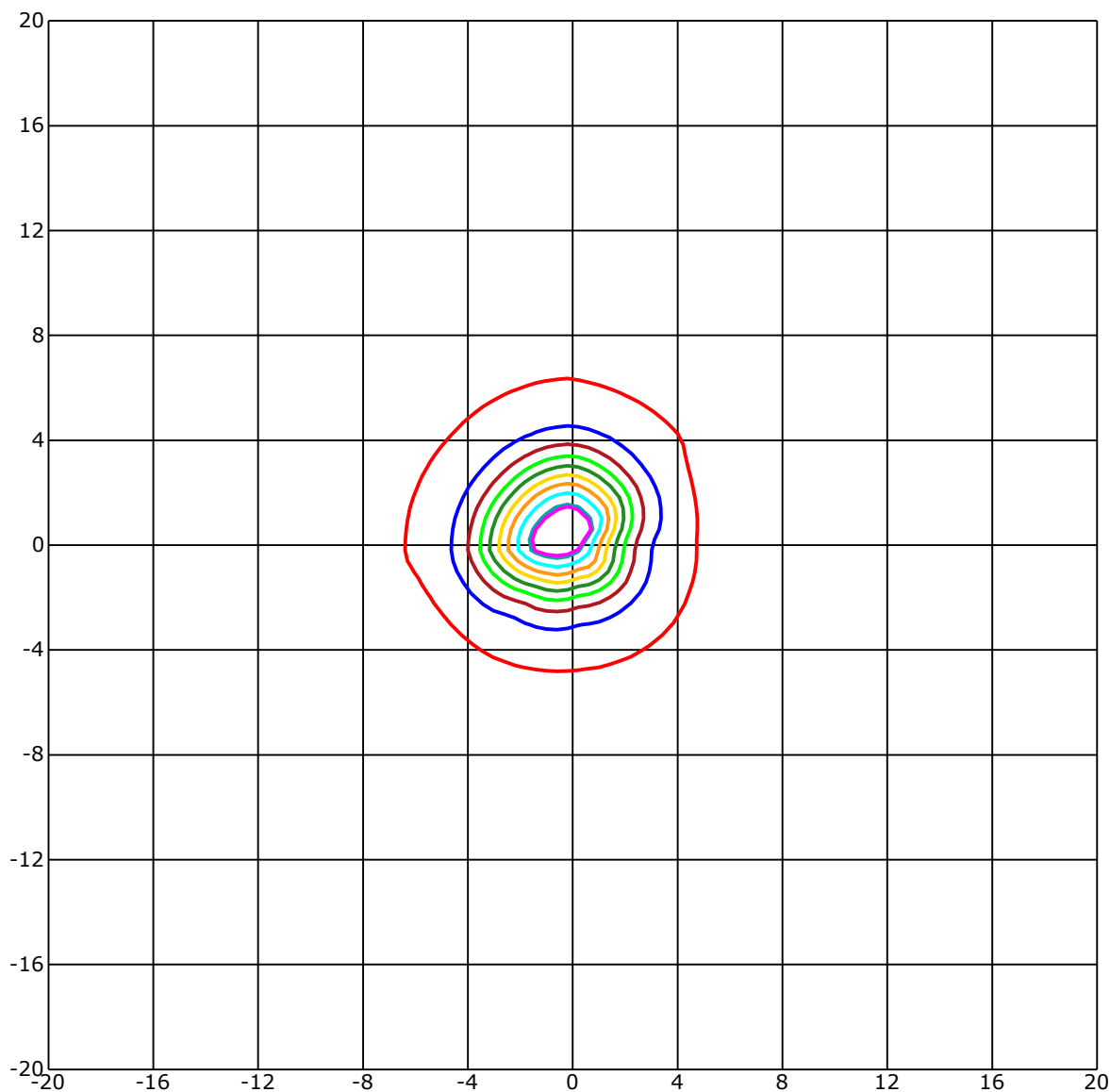
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/4/24 10:53:03

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 60  
Test Distance: 6.81 m  
Remarks:

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## ISOLX DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2024/4/24 10:53:03

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 60

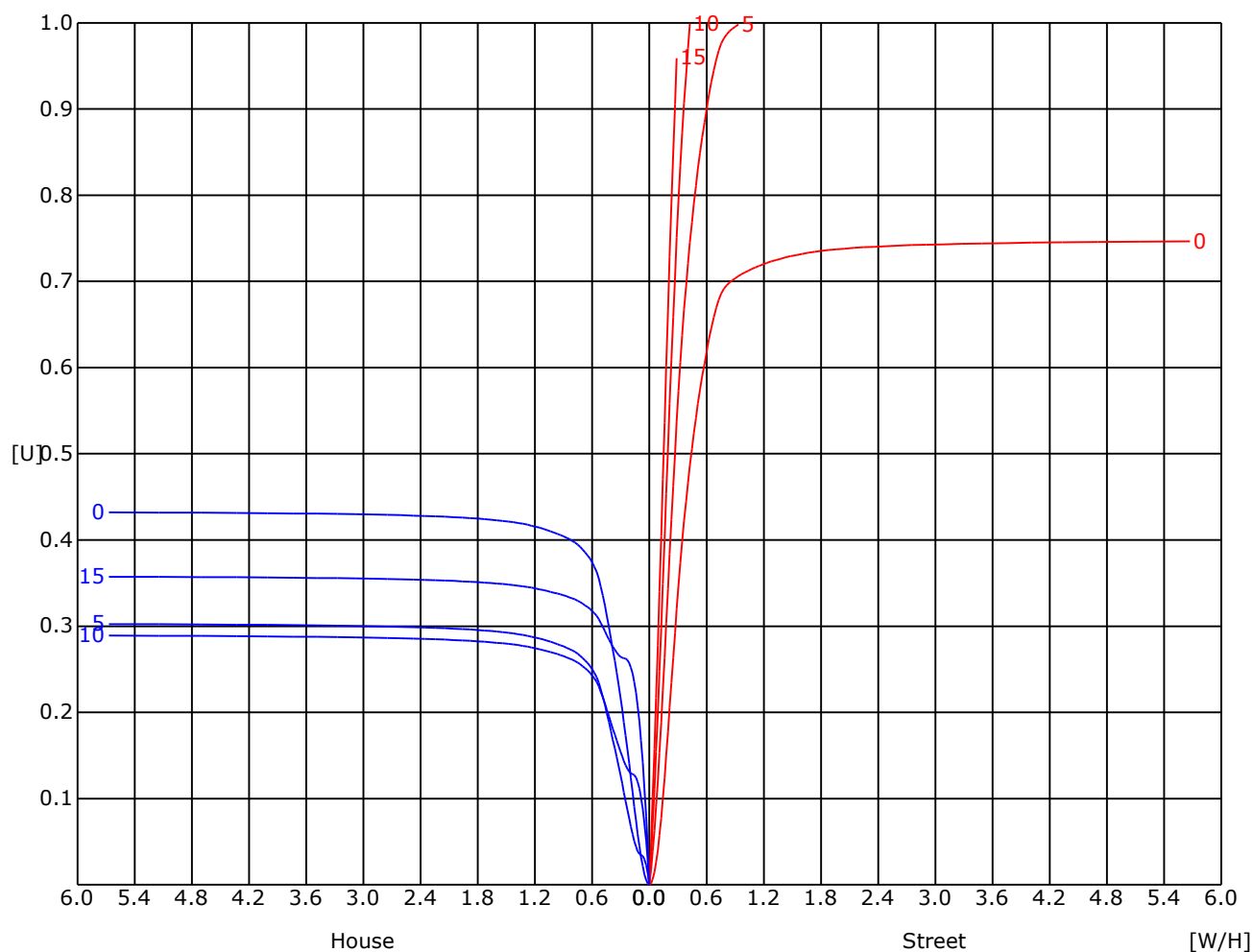
Test Distance: 6.81 m

Remarks:

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## UTILIZATION FACTOR DIAGRAM (ROAD)



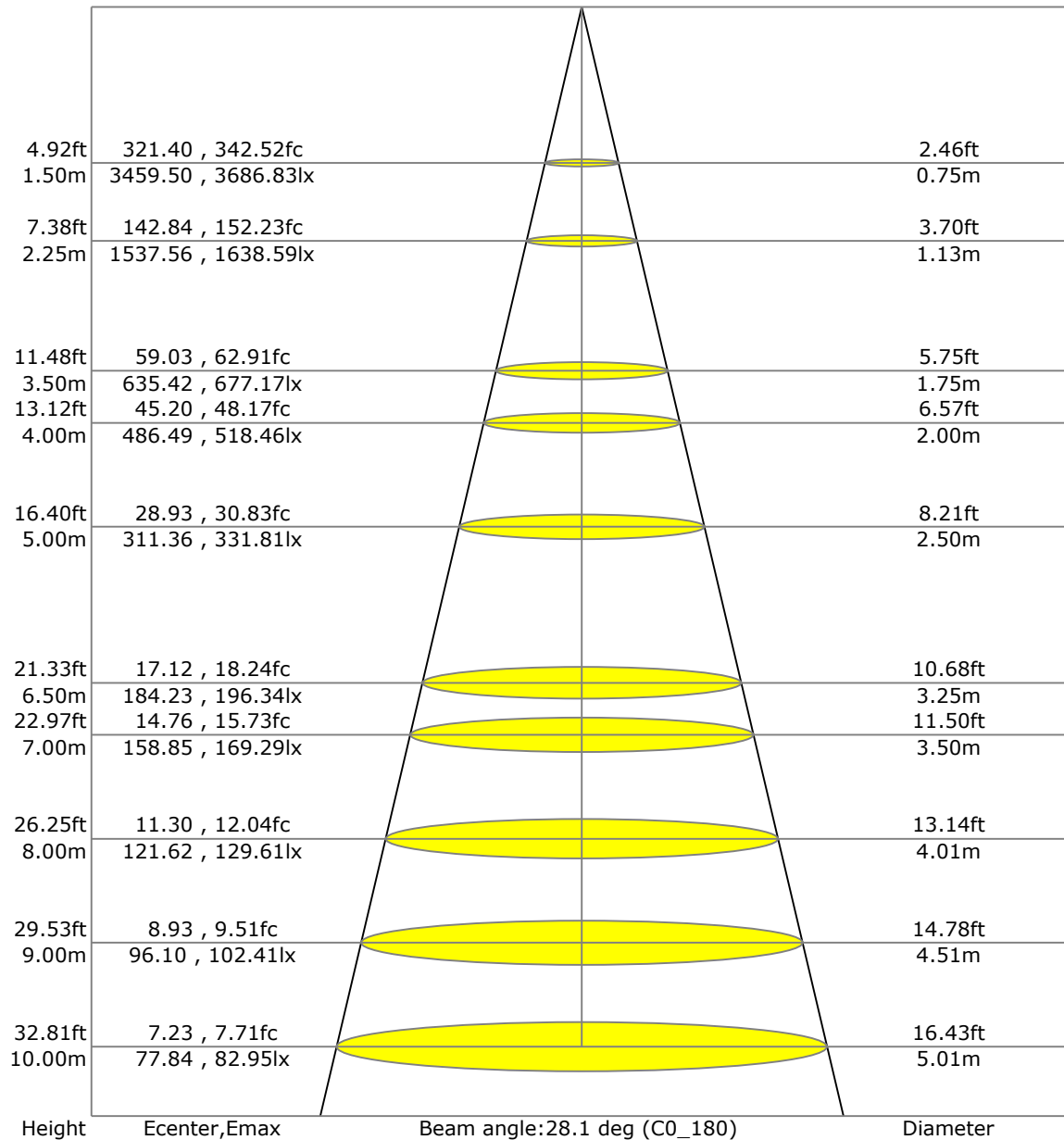
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/4/24 10:53:03

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 60  
Test Distance: 6.81 m  
Remarks:

Report No.:

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## LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/4/24 10:53:03

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 60  
Test Distance: 6.81 m  
Remarks:

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UGR(Unified Glare Rating) TABLE

|                  |     |                |      |      |      |       |                  |       |       |       |       |
|------------------|-----|----------------|------|------|------|-------|------------------|-------|-------|-------|-------|
| RHOCC            |     | 70             | 70   | 50   | 50   | 30    | 70               | 70    | 50    | 50    | 30    |
| RHOW             |     | 50             | 30   | 50   | 30   | 30    | 50               | 30    | 50    | 30    | 30    |
| RHOF             |     | 20             | 20   | 20   | 20   | 20    | 20               | 20    | 20    | 20    | 20    |
| Room Size<br>X Y |     | Viewed Endwise |      |      |      |       | Viewed Crosswise |       |       |       |       |
| 2H               | 2H  | 8.66           | 8.71 | 8.86 | 8.90 | 9.14  | 9.26             | 9.31  | 9.46  | 9.50  | 9.74  |
|                  | 3H  | 8.68           | 8.74 | 8.89 | 8.93 | 9.18  | 9.26             | 9.31  | 9.46  | 9.51  | 9.75  |
|                  | 4H  | 8.68           | 8.74 | 8.89 | 8.94 | 9.18  | 9.25             | 9.30  | 9.46  | 9.50  | 9.75  |
|                  | 6H  | 8.67           | 8.73 | 8.89 | 8.93 | 9.18  | 9.23             | 9.29  | 9.45  | 9.49  | 9.74  |
|                  | 8H  | 8.66           | 8.72 | 8.88 | 8.92 | 9.18  | 9.22             | 9.28  | 9.44  | 9.48  | 9.74  |
|                  | 12H | 8.65           | 8.71 | 8.88 | 8.92 | 9.17  | 9.21             | 9.27  | 9.44  | 9.48  | 9.73  |
| 4H               | 2H  | 9.05           | 9.10 | 9.26 | 9.30 | 9.55  | 10.02            | 10.08 | 10.23 | 10.27 | 10.52 |
|                  | 3H  | 9.16           | 9.22 | 9.38 | 9.42 | 9.68  | 10.10            | 10.16 | 10.33 | 10.37 | 10.62 |
|                  | 4H  | 9.20           | 9.26 | 9.43 | 9.47 | 9.73  | 10.12            | 10.18 | 10.35 | 10.39 | 10.65 |
|                  | 6H  | 9.22           | 9.27 | 9.46 | 9.49 | 9.76  | 10.11            | 10.17 | 10.35 | 10.39 | 10.65 |
|                  | 8H  | 9.22           | 9.27 | 9.46 | 9.50 | 9.76  | 10.10            | 10.16 | 10.34 | 10.38 | 10.65 |
|                  | 12H | 9.21           | 9.26 | 9.46 | 9.49 | 9.76  | 10.09            | 10.14 | 10.34 | 10.37 | 10.64 |
| 8H               | 4H  | 9.11           | 9.17 | 9.33 | 9.37 | 9.63  | 10.44            | 10.50 | 10.66 | 10.70 | 10.96 |
|                  | 6H  | 9.41           | 9.47 | 9.67 | 9.70 | 9.98  | 10.78            | 10.83 | 11.04 | 11.07 | 11.35 |
|                  | 8H  | 9.44           | 9.49 | 9.70 | 9.73 | 10.01 | 10.78            | 10.83 | 11.04 | 11.08 | 11.35 |
|                  | 12H | 9.45           | 9.50 | 9.72 | 9.75 | 10.03 | 10.77            | 10.82 | 11.04 | 11.07 | 11.35 |
| 12H              | 4H  | 9.35           | 9.40 | 9.60 | 9.63 | 9.90  | 11.02            | 11.07 | 11.27 | 11.30 | 11.57 |
|                  | 6H  | 9.42           | 9.47 | 9.68 | 9.72 | 9.99  | 11.11            | 11.16 | 11.37 | 11.40 | 11.68 |

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/4/24 10:53:03

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 60  
Test Distance: 6.81 m  
Remarks:

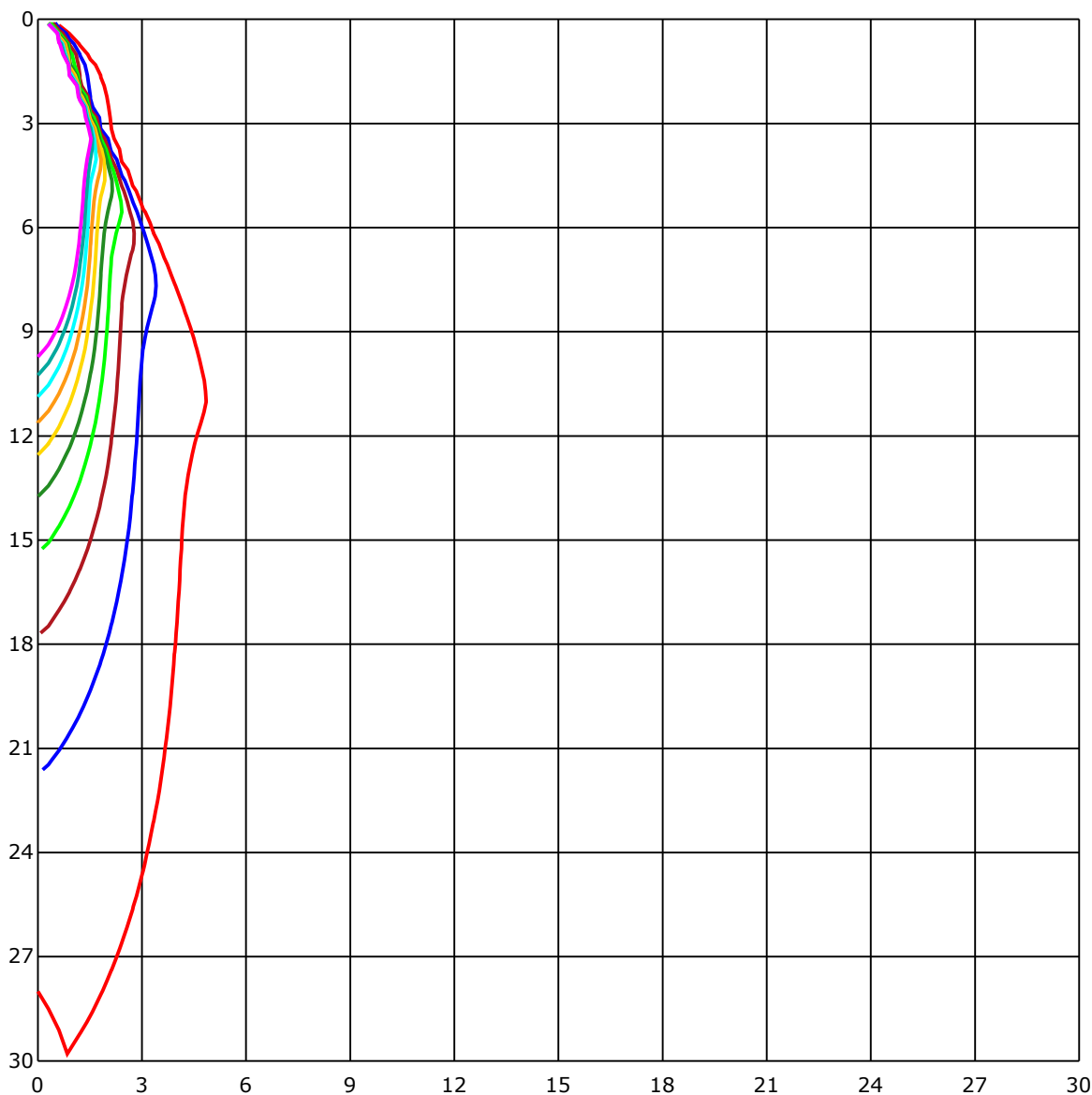


G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 60  
Test Distance: 6.81 m  
Remarks:

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## SPACE ISOLX DIAGRAM



Unit of illumination:lx

|        |        |
|--------|--------|
| 82.376 | 41.188 |
| 74.138 | 32.95  |
| 65.9   | 24.713 |
| 57.663 | 16.475 |
| 49.425 | 8.238  |

C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature: 25  
 Operators: QC01  
 Test Date: 2024/4/24 10:53:03

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
 Humidity: 60  
 Test Distance: 6.81 m  
 Remarks:

Report No.:

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LUMINOUS DISTRIBUTION INTENSITY DATA

| Gamma\C | C0      | C45     | C90     | C135    | C180    | C225    | C270    | C315    | C360    |  |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| G0      | 7783.88 | 8148.7  | 7757.53 | 7968.87 | 7783.88 | 8148.7  | 7757.53 | 7968.87 | 7783.88 |  |
| G1      | 7549.2  | 8182.77 | 7954.1  | 8142.06 | 7995.58 | 8033.38 | 7503.45 | 7744.6  | 7549.2  |  |
| G2      | 7188.06 | 8182.86 | 8125.99 | 8256.03 | 8163.61 | 7889.69 | 7188.1  | 7488.46 | 7188.06 |  |
| G3      | 6820.59 | 8148.03 | 8204.32 | 8289.03 | 8274.08 | 7679.38 | 6830.01 | 7153.98 | 6820.59 |  |
| G4      | 6417.65 | 8073.24 | 8225.15 | 8287.55 | 8295.36 | 7432.89 | 6428.88 | 6765.91 | 6417.65 |  |
| G5      | 5991.92 | 7896.6  | 8235.7  | 8254.78 | 8286.15 | 7132.39 | 6007.27 | 6373.57 | 5991.92 |  |
| G6      | 5540.55 | 7733.6  | 8191.62 | 8188.83 | 8269.68 | 6782.79 | 5578.97 | 5915.87 | 5540.55 |  |
| G7      | 5088.28 | 7435.44 | 8080.11 | 8084.2  | 8212.4  | 6401.22 | 5134.92 | 5478.24 | 5088.28 |  |
| G8      | 4626.86 | 7125.93 | 7924.03 | 7907.01 | 8085.23 | 5990.12 | 4716.28 | 5015.78 | 4626.86 |  |
| G9      | 4199.73 | 6760.57 | 7716.91 | 7708.51 | 7919.36 | 5555.32 | 4276.58 | 4575.91 | 4199.73 |  |
| G10     | 3757.47 | 6390.09 | 7440.16 | 7411.79 | 7695.67 | 5127.79 | 3851.92 | 4135.76 | 3757.47 |  |
| G11     | 3363.74 | 5960.94 | 7136.07 | 7097.78 | 7394.91 | 4700.3  | 3462.14 | 3717.61 | 3363.74 |  |
| G12     | 2994.3  | 5515.9  | 6774.44 | 6735.83 | 7047.06 | 4269.62 | 3102.26 | 3326.98 | 2994.3  |  |
| G13     | 2677.37 | 5068.08 | 6380.71 | 6358.04 | 6694.58 | 3864.31 | 2766.39 | 2989.18 | 2677.37 |  |
| G14     | 2396.77 | 4623.89 | 5960.05 | 5948.55 | 6294.43 | 3487.55 | 2490.9  | 2668.17 | 2396.77 |  |
| G15     | 2158.72 | 4182.85 | 5522.82 | 5495.21 | 5881.62 | 3124.16 | 2244.46 | 2395.87 | 2158.72 |  |
| G16     | 1956.44 | 3772.2  | 5085.27 | 5040.83 | 5439.99 | 2804.86 | 2032.89 | 2163.34 | 1956.44 |  |
| G17     | 1800.72 | 3364.95 | 4645.94 | 4602.48 | 5013.32 | 2518.6  | 1868.82 | 1973.28 | 1800.72 |  |
| G18     | 1680.23 | 3020.42 | 4210.28 | 4165.12 | 4569.62 | 2278.98 | 1735.76 | 1814.81 | 1680.23 |  |
| G19     | 1584.75 | 2707.54 | 3806.31 | 3755.68 | 4145.05 | 2069.97 | 1625.15 | 1696.53 | 1584.75 |  |
| G20     | 1509.07 | 2435.33 | 3427.89 | 3368.68 | 3730.9  | 1901.18 | 1548.53 | 1598.26 | 1509.07 |  |
| G21     | 1447.84 | 2188.52 | 3072.09 | 3029.99 | 3348.12 | 1767.32 | 1476.07 | 1525.95 | 1447.84 |  |
| G22     | 1391.86 | 1992.08 | 2770.43 | 2713.83 | 2988.82 | 1660.57 | 1416.82 | 1457.13 | 1391.86 |  |
| G23     | 1350.02 | 1830.21 | 2496.87 | 2445.38 | 2691.43 | 1576.22 | 1360.26 | 1403.67 | 1350.02 |  |
| G24     | 1289.6  | 1699.67 | 2263.85 | 2208.68 | 2413.33 | 1511.9  | 1307.65 | 1357.79 | 1289.6  |  |
| G25     | 1158.84 | 1599.92 | 2061.48 | 2010.94 | 2181.97 | 1443.84 | 1195.2  | 1278.33 | 1158.84 |  |
| G26     | 972.45  | 1522.0  | 1903.11 | 1852.43 | 1986.38 | 1395.72 | 1020.48 | 1118.21 | 972.45  |  |
| G27     | 759.4   | 1449.86 | 1764.76 | 1723.1  | 1835.19 | 1341.45 | 806.13  | 920.74  | 759.4   |  |
| G28     | 540.79  | 1393.03 | 1661.11 | 1619.45 | 1708.24 | 1212.3  | 591.74  | 704.77  | 540.79  |  |
| G29     | 355.53  | 1347.51 | 1574.88 | 1538.65 | 1617.12 | 1025.42 | 399.43  | 498.28  | 355.53  |  |
| G30     | 230.24  | 1301.36 | 1505.48 | 1461.39 | 1537.26 | 812.46  | 259.46  | 327.88  | 230.24  |  |
| G31     | 183.11  | 1217.28 | 1443.26 | 1405.64 | 1475.18 | 596.18  | 190.96  | 233.65  | 183.11  |  |
| G32     | 167.08  | 1056.49 | 1396.17 | 1353.3  | 1421.04 | 399.57  | 174.67  | 199.98  | 167.08  |  |
| G33     | 154.74  | 855.92  | 1348.99 | 1298.62 | 1370.0  | 263.15  | 159.49  | 184.09  | 154.74  |  |
| G34     | 142.39  | 645.83  | 1261.27 | 1189.54 | 1282.33 | 210.71  | 147.06  | 168.56  | 142.39  |  |
| G35     | 133.73  | 451.32  | 1090.78 | 999.39  | 1126.56 | 189.53  | 134.22  | 156.89  | 133.73  |  |
| G36     | 126.9   | 290.57  | 892.19  | 787.55  | 922.85  | 173.37  | 126.19  | 146.57  | 126.9   |  |

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/4/24 10:53:03

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 60  
Test Distance: 6.81 m  
Remarks:

Report No.:

Test Time: 2024/4/24 10:53:03

## LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

| Gamma\C | C0     | C45    | C90    | C135   | C180   | C225   | C270   | C315   | C360   |  |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| G37     | 121.16 | 201.51 | 676.18 | 584.24 | 707.56 | 157.97 | 120.31 | 139.7  | 121.16 |  |
| G38     | 114.69 | 175.48 | 470.31 | 389.15 | 498.68 | 150.16 | 114.07 | 131.57 | 114.69 |  |
| G39     | 109.76 | 159.27 | 307.72 | 253.58 | 329.0  | 140.95 | 109.08 | 125.96 | 109.76 |  |
| G40     | 103.65 | 147.33 | 225.75 | 192.89 | 233.88 | 133.77 | 104.1  | 120.13 | 103.65 |  |
| G41     | 100.15 | 134.63 | 197.43 | 174.53 | 201.11 | 127.44 | 99.03  | 114.96 | 100.15 |  |
| G42     | 95.39  | 128.43 | 180.95 | 159.36 | 182.12 | 121.2  | 96.02  | 108.77 | 95.39  |  |
| G43     | 91.31  | 123.54 | 165.91 | 149.93 | 168.25 | 115.55 | 90.05  | 104.37 | 91.31  |  |
| G44     | 86.68  | 115.5  | 155.18 | 140.46 | 157.7  | 110.34 | 86.14  | 100.01 | 86.68  |  |
| G45     | 83.76  | 108.81 | 146.88 | 132.65 | 148.81 | 104.86 | 82.42  | 96.24  | 83.76  |  |
| G46     | 79.5   | 104.64 | 138.76 | 126.19 | 140.33 | 99.43  | 79.14  | 91.4   | 79.5   |  |
| G47     | 76.99  | 99.66  | 131.39 | 119.09 | 132.52 | 94.99  | 75.06  | 87.89  | 76.99  |  |
| G48     | 72.23  | 96.69  | 124.93 | 114.47 | 125.56 | 91.53  | 72.59  | 84.39  | 72.23  |  |
| G49     | 69.4   | 91.98  | 117.97 | 107.87 | 120.57 | 87.27  | 66.98  | 79.59  | 69.4   |  |
| G50     | 63.79  | 89.6   | 113.3  | 102.3  | 113.71 | 84.3   | 63.61  | 76.76  | 63.79  |  |
| G51     | 58.63  | 84.17  | 108.23 | 97.59  | 109.49 | 79.23  | 58.18  | 69.62  | 58.63  |  |
| G52     | 52.52  | 81.79  | 103.34 | 92.02  | 103.38 | 74.83  | 52.34  | 63.29  | 52.52  |  |
| G53     | 47.45  | 77.97  | 98.22  | 89.2   | 99.43  | 70.48  | 46.37  | 58.54  | 47.45  |  |
| G54     | 42.38  | 74.79  | 95.71  | 84.3   | 95.17  | 64.82  | 42.33  | 52.3   | 42.38  |  |
| G55     | 38.65  | 72.09  | 91.62  | 81.74  | 91.22  | 59.97  | 37.8   | 48.44  | 38.65  |  |
| G56     | 34.34  | 66.75  | 87.58  | 78.15  | 86.5   | 54.9   | 32.95  | 43.23  | 34.34  |  |
| G57     | 32.01  | 61.81  | 84.35  | 74.38  | 84.03  | 48.48  | 29.99  | 40.58  | 32.01  |  |
| G58     | 28.55  | 57.41  | 79.37  | 70.52  | 79.77  | 45.25  | 28.77  | 35.6   | 28.55  |  |
| G59     | 28.51  | 50.41  | 74.29  | 64.82  | 75.15  | 41.07  | 26.35  | 33.26  | 28.51  |  |
| G60     | 26.13  | 47.0   | 69.31  | 60.15  | 69.8   | 37.66  | 24.91  | 33.31  | 26.13  |  |
| G61     | 24.87  | 41.25  | 62.76  | 55.3   | 64.96  | 36.68  | 23.88  | 30.48  | 24.87  |  |
| G62     | 22.89  | 37.84  | 58.81  | 48.93  | 58.72  | 33.31  | 21.73  | 27.79  | 22.89  |  |
| G63     | 21.55  | 34.79  | 52.39  | 45.79  | 54.18  | 30.66  | 20.83  | 26.4   | 21.55  |  |
| G64     | 20.38  | 32.64  | 48.53  | 40.18  | 48.35  | 28.68  | 19.48  | 25.0   | 20.38  |  |
| G65     | 20.51  | 28.1   | 42.74  | 36.0   | 44.17  | 26.84  | 17.87  | 24.96  | 20.51  |  |
| G66     | 18.49  | 27.56  | 39.64  | 33.26  | 40.49  | 25.77  | 17.73  | 24.42  | 18.49  |  |
| G67     | 18.14  | 24.24  | 37.26  | 31.2   | 37.48  | 25.05  | 17.55  | 23.03  | 18.14  |  |
| G68     | 16.97  | 23.88  | 34.57  | 29.13  | 35.19  | 24.42  | 18.0   | 21.32  | 16.97  |  |
| G69     | 16.97  | 22.98  | 32.01  | 26.31  | 32.95  | 23.03  | 15.71  | 21.64  | 16.97  |  |
| G70     | 15.76  | 21.46  | 31.2   | 24.69  | 30.93  | 22.62  | 14.72  | 19.89  | 15.76  |  |
| G71     | 15.08  | 19.53  | 29.36  | 23.97  | 29.49  | 20.74  | 14.05  | 19.98  | 15.08  |  |
| G72     | 13.65  | 19.89  | 28.51  | 22.0   | 27.92  | 20.74  | 14.01  | 17.82  | 13.65  |  |
| G73     | 13.02  | 18.72  | 27.29  | 21.68  | 27.25  | 19.21  | 11.9   | 17.87  | 13.02  |  |

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2024/4/24 10:53:03

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 60

Test Distance: 6.81 m

Remarks:

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 60  
Test Distance: 6.81 m  
Remarks: