

Report No.:

Test Time: 2024/9/18 17:21:22

## LUMINAIRE PHOTOMETRIC TEST REPORT

### Luminaire Property

Manufacturer: InBright  
Luminaire Type: IBSP104SCT095H98-2F-45°  
Lamp Type:  
Luminous Width: 90 mm  
Luminous Length: 185 mm  
Luminous Height: 70 mm

Voltage(V): 219.80 V  
Current(A): 0.1410 A  
Power(W): 29.46 W  
Power Factor: 0.9470  
Lamp Luminous Flux: 2845.30

### Photometric Results

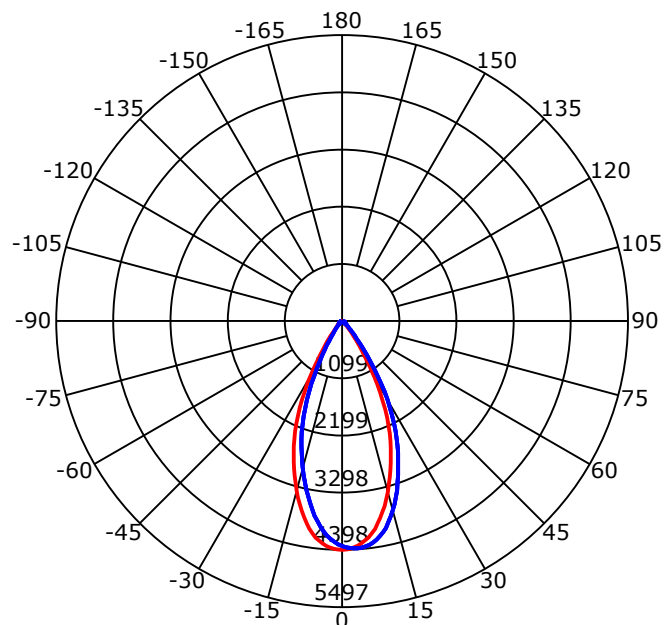
CIE Class: Direct  
Luminaire Luminous Flux: 2845.298 lm  
Downward Ratio: 100.00%  
Luminaire Efficacy Rating(LER): 96.58 lm/W  
Beam Angle(50%) C0-180,C90-270: 47.7,47.6  
Field Angle(10%) C0-180,C90-270: 72.9,73.4  
S/MH C0-180,C90-270: 0.768,0.768

Max. Intensity: 4397.66 cd  
Max.Intensity Angle: C=180 Gamma=0  
Upward Ratio: 0.00%  
Efficacy: 100.00%  
Center Intensity: 4397.66 cd  
Effective Luminous Flux: 2549.96 lm  
ERP( $\phi$ use)(120deg): 2797.98 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 47.7 deg,47.6 deg

C0-180 — C90-270 —

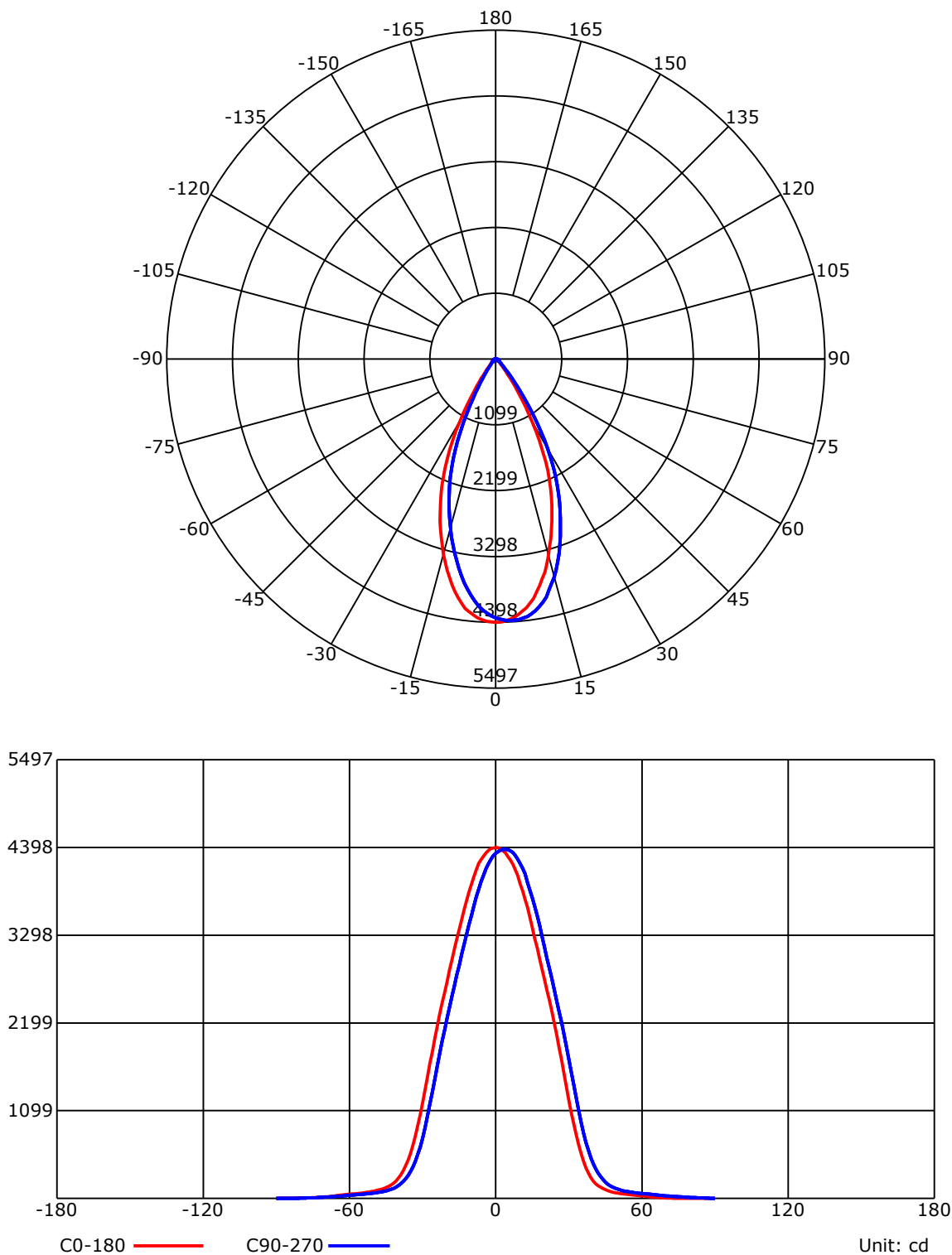
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/9/18 17:21:22

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



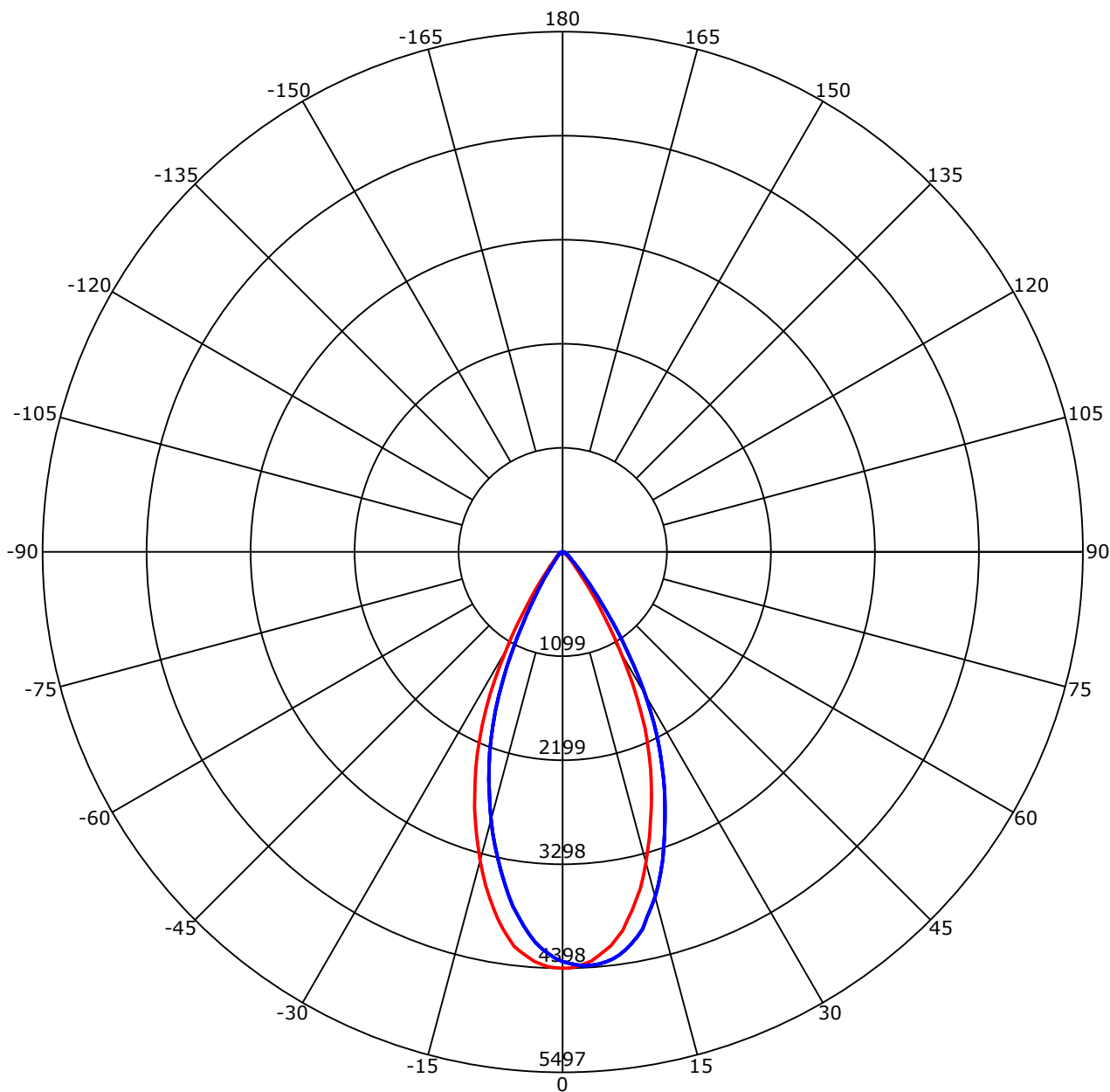
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Test Speed: High  
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Humidity: 60  
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## Luminous Intensity Distribution Curve



C0-180 — C90-270 —

Unit: cd/klm

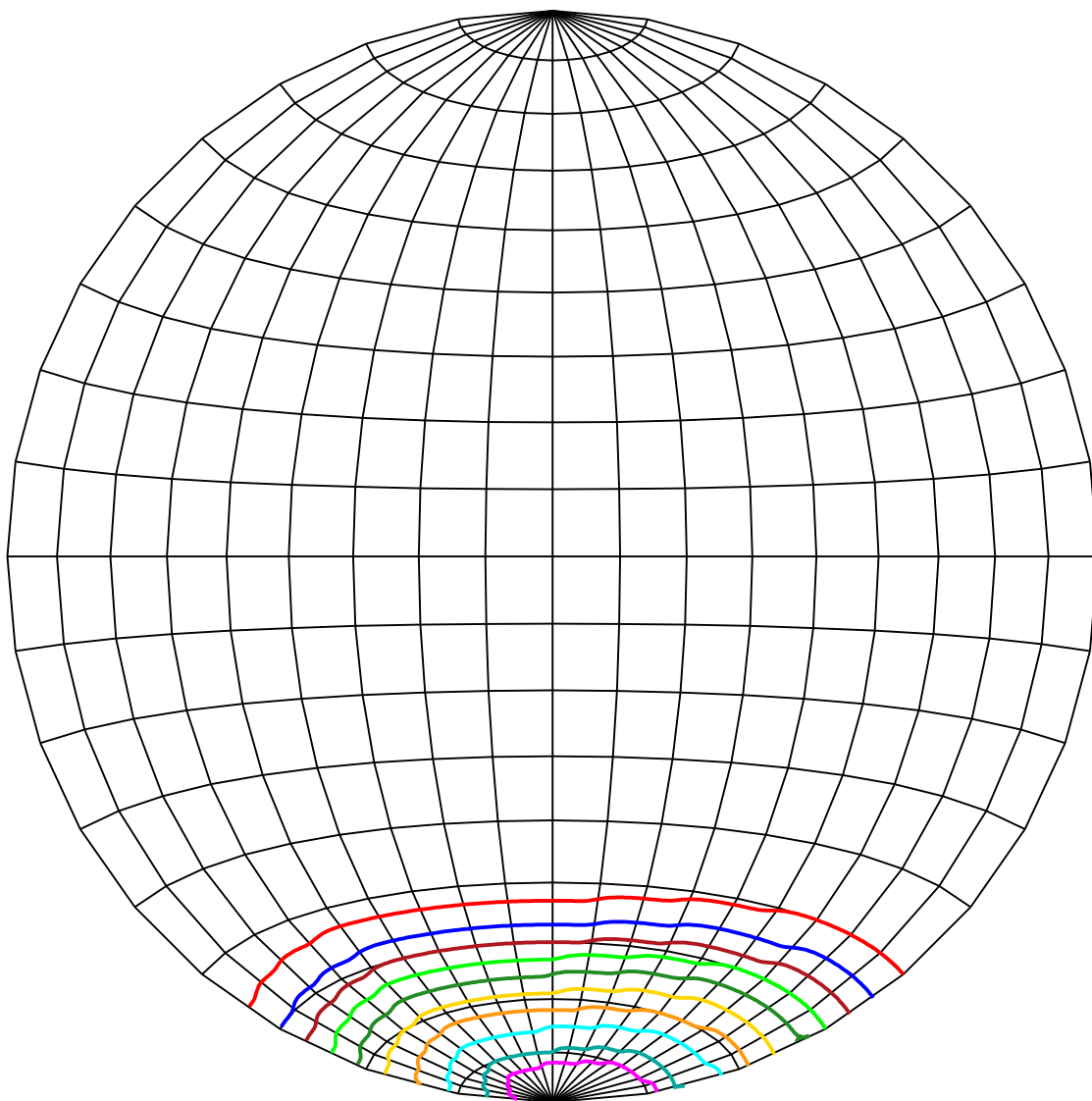
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C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/9/18 17:21:22

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Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 60  
Test Distance: 6.81 m  
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## ISOCANDELA DIAGRAM (SPHERE)



Unit of intensity:cd    I<sub>max</sub>(100%): 4397.66 cd

|                                |                                |
|--------------------------------|--------------------------------|
| 4177.777(95%I <sub>max</sub> ) | 2198.83(50%I <sub>max</sub> )  |
| 3957.894(90%I <sub>max</sub> ) | 1759.064(40%I <sub>max</sub> ) |
| 3518.128(80%I <sub>max</sub> ) | 1319.298(30%I <sub>max</sub> ) |
| 3078.362(70%I <sub>max</sub> ) | 879.532(20%I <sub>max</sub> )  |
| 2638.596(60%I <sub>max</sub> ) | 439.766(10%I <sub>max</sub> )  |

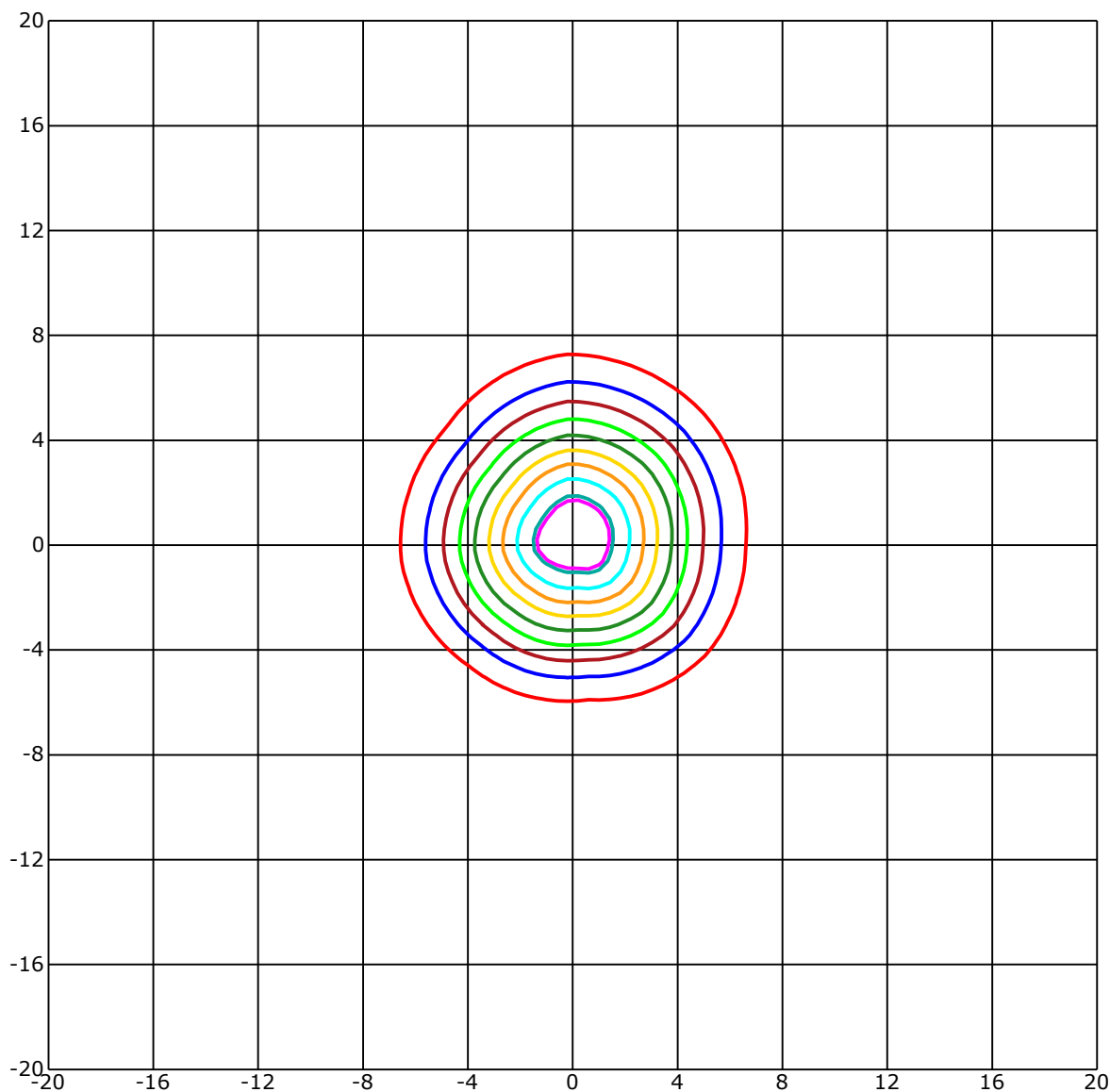
C Range: 0 - 360 Deg  
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Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/9/18 17:21:22

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



Unit of illumination:lx      Height of plane:10.0(m)/32.81(ft)

|                 |                 |
|-----------------|-----------------|
| 40.458(92%Emax) | 21.988(50%Emax) |
| 39.579(90%Emax) | 17.591(40%Emax) |
| 35.181(80%Emax) | 13.193(30%Emax) |
| 30.784(70%Emax) | 8.795(20%Emax)  |
| 26.386(60%Emax) | 4.398(10%Emax)  |

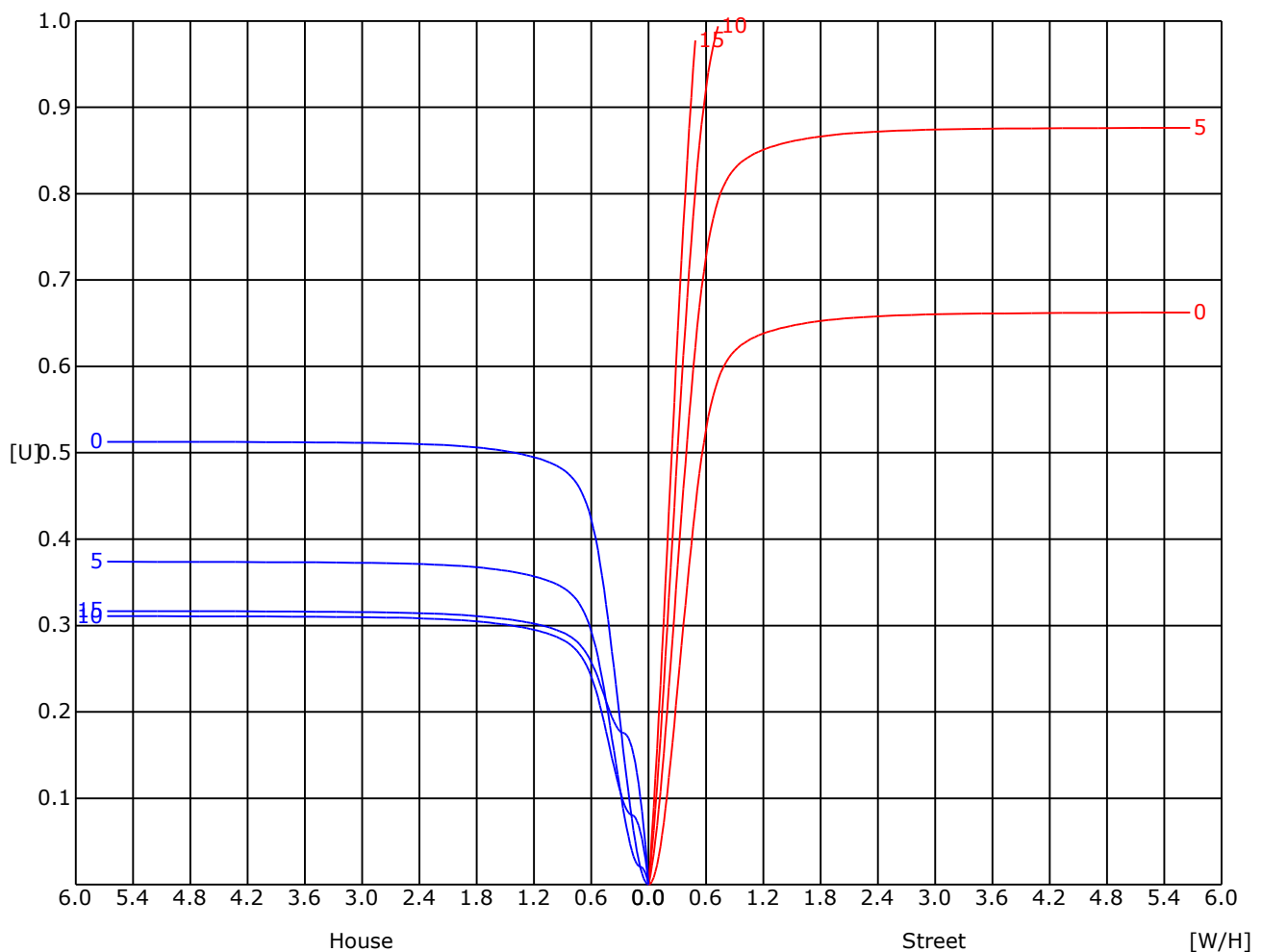
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/9/18 17:21:22

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)



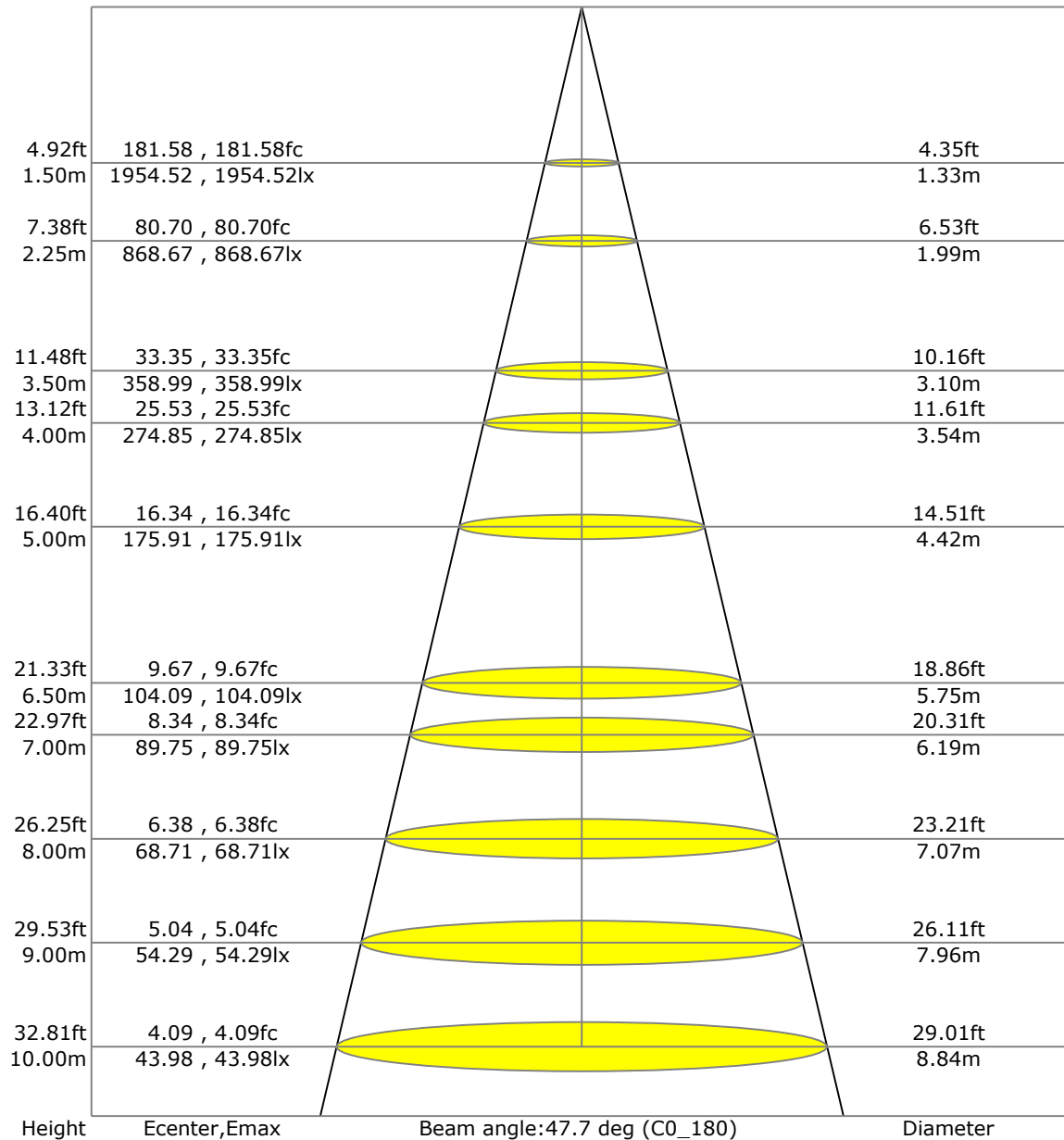
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/9/18 17:21:22

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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## LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature: 25  
 Operators: QC01  
 Test Date: 2024/9/18 17:21:22

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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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            | 11.36          | 11.41 | 11.56 | 11.60 | 11.84 | 11.56            | 11.61 | 11.75 | 11.79 | 12.04 |
| 3H               | 11.35          | 11.41 | 11.56 | 11.60 | 11.84 | 11.54            | 11.59 | 11.74 | 11.78 | 12.03 |
| 4H               | 11.34          | 11.39 | 11.55 | 11.59 | 11.84 | 11.52            | 11.57 | 11.73 | 11.77 | 12.02 |
| 6H               | 11.32          | 11.38 | 11.54 | 11.58 | 11.83 | 11.51            | 11.56 | 11.72 | 11.76 | 12.01 |
| 8H               | 11.32          | 11.37 | 11.53 | 11.57 | 11.82 | 11.50            | 11.55 | 11.71 | 11.75 | 12.00 |
| 12H              | 11.31          | 11.36 | 11.53 | 11.56 | 11.82 | 11.49            | 11.54 | 11.71 | 11.74 | 12.00 |
| 4H 2H            | 11.41          | 11.46 | 11.62 | 11.66 | 11.91 | 11.85            | 11.90 | 12.06 | 12.09 | 12.34 |
| 3H               | 11.41          | 11.46 | 11.63 | 11.67 | 11.92 | 11.84            | 11.89 | 12.06 | 12.09 | 12.35 |
| 4H               | 11.40          | 11.45 | 11.62 | 11.66 | 11.92 | 11.82            | 11.87 | 12.05 | 12.08 | 12.34 |
| 6H               | 11.37          | 11.42 | 11.61 | 11.64 | 11.91 | 11.79            | 11.84 | 12.03 | 12.06 | 12.33 |
| 8H               | 11.36          | 11.41 | 11.61 | 11.64 | 11.90 | 11.78            | 11.83 | 12.02 | 12.06 | 12.32 |
| 12H              | 11.35          | 11.40 | 11.60 | 11.63 | 11.90 | 11.77            | 11.82 | 12.02 | 12.05 | 12.32 |
| 8H 4H            | 11.39          | 11.44 | 11.61 | 11.64 | 11.90 | 11.89            | 11.94 | 12.11 | 12.15 | 12.40 |
| 6H               | 11.34          | 11.38 | 11.59 | 11.62 | 11.89 | 11.84            | 11.89 | 12.10 | 12.13 | 12.40 |
| 8H               | 11.32          | 11.37 | 11.58 | 11.61 | 11.89 | 11.83            | 11.87 | 12.09 | 12.12 | 12.39 |
| 12H              | 11.31          | 11.35 | 11.58 | 11.60 | 11.88 | 11.81            | 11.85 | 12.08 | 12.11 | 12.39 |
| 12H 4H           | 11.35          | 11.40 | 11.60 | 11.63 | 11.90 | 11.89            | 11.93 | 12.13 | 12.16 | 12.43 |
| 6H               | 11.32          | 11.37 | 11.58 | 11.61 | 11.89 | 11.86            | 11.90 | 12.12 | 12.15 | 12.43 |

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/9/18 17:21:22

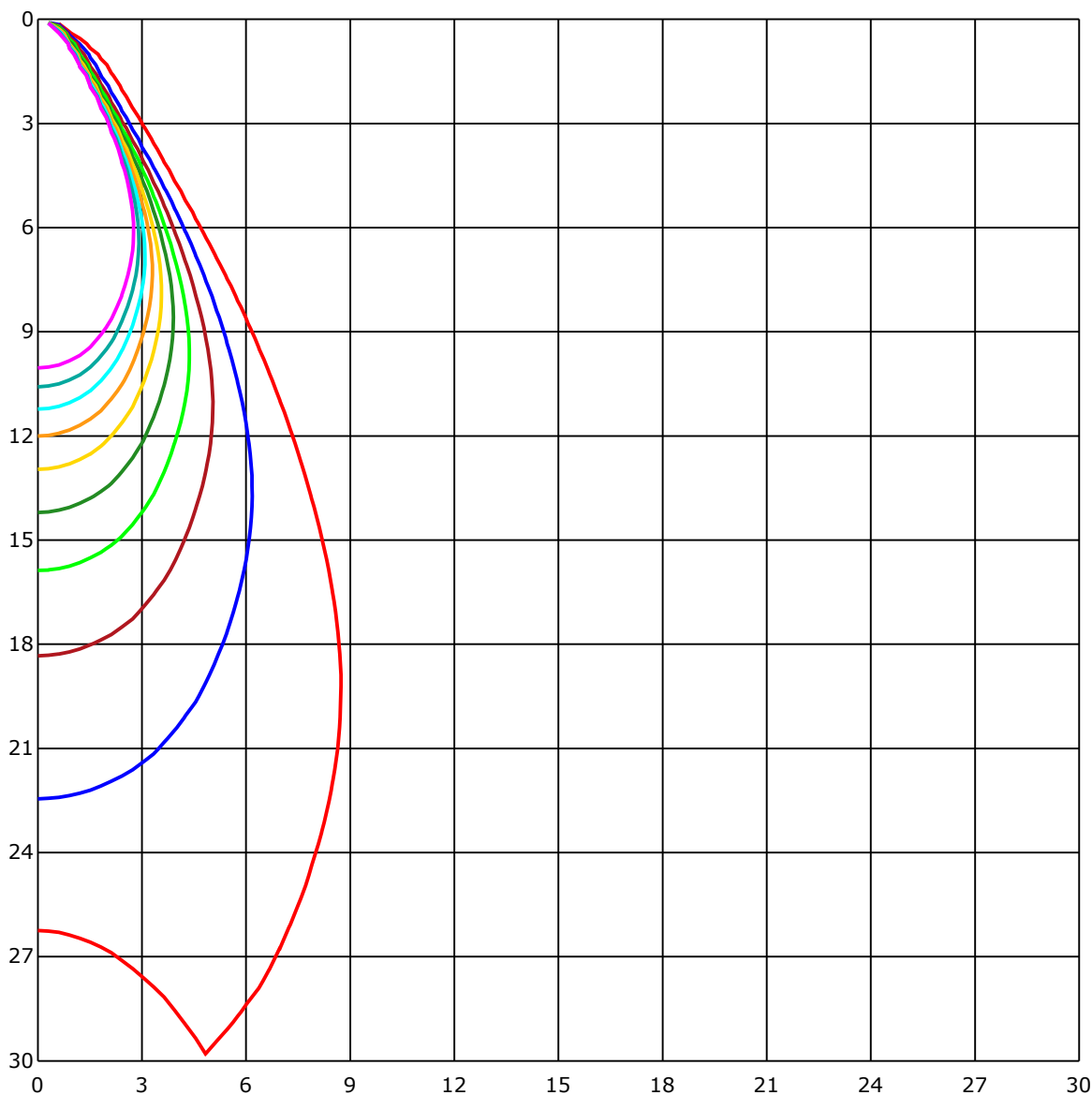
G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 60  
Test Distance: 6.81 m  
Remarks:

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

43.628  
 39.266  
 34.903  
 30.54  
 26.177

21.814  
 17.451  
 13.089  
 8.726  
 4.363

C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature: 25  
 Operators: QC01  
 Test Date: 2024/9/18 17:21:22

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 DISTRIBUTION INTENSITY DATA

| Gamma\C | C0      | C45     | C90     | C135    | C180    | C225    | C270    | C315    | C360    |  |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| G0      | 4397.66 | 4343.03 | 4325.08 | 4372.25 | 4397.66 | 4343.03 | 4325.08 | 4372.25 | 4397.66 |  |
| G1      | 4393.86 | 4358.75 | 4348.83 | 4373.36 | 4392.28 | 4315.11 | 4295.59 | 4363.81 | 4393.86 |  |
| G2      | 4379.25 | 4365.24 | 4365.99 | 4365.85 | 4384.58 | 4280.33 | 4247.54 | 4350.54 | 4379.25 |  |
| G3      | 4356.34 | 4368.63 | 4375.4  | 4352.17 | 4359.73 | 4237.15 | 4195.55 | 4323.6  | 4356.34 |  |
| G4      | 4329.81 | 4359.68 | 4374.8  | 4330.55 | 4332.78 | 4185.03 | 4135.82 | 4283.99 | 4329.81 |  |
| G5      | 4284.87 | 4343.35 | 4370.25 | 4298.65 | 4291.04 | 4117.18 | 4055.45 | 4241.74 | 4284.87 |  |
| G6      | 4238.22 | 4313.81 | 4354.21 | 4254.17 | 4245.45 | 4046.27 | 3968.64 | 4193.7  | 4238.22 |  |
| G7      | 4188.32 | 4287.7  | 4333.62 | 4199.36 | 4197.92 | 3952.45 | 3874.26 | 4136.79 | 4188.32 |  |
| G8      | 4117.13 | 4244.02 | 4297.21 | 4127.15 | 4117.36 | 3855.85 | 3779.37 | 4065.7  | 4117.13 |  |
| G9      | 4049.61 | 4199.5  | 4251.44 | 4054.43 | 4033.24 | 3750.81 | 3665.71 | 3984.26 | 4049.61 |  |
| G10     | 3947.16 | 4128.35 | 4198.34 | 3966.83 | 3940.53 | 3642.98 | 3546.66 | 3892.16 | 3947.16 |  |
| G11     | 3853.25 | 4050.54 | 4136.05 | 3868.69 | 3835.21 | 3526.81 | 3427.1  | 3795.51 | 3853.25 |  |
| G12     | 3746.35 | 3969.61 | 4067.51 | 3770.28 | 3726.83 | 3407.86 | 3304.72 | 3691.35 | 3746.35 |  |
| G13     | 3650.31 | 3872.64 | 3958.2  | 3655.23 | 3617.29 | 3278.74 | 3181.35 | 3585.89 | 3650.31 |  |
| G14     | 3523.84 | 3765.04 | 3864.24 | 3533.44 | 3495.37 | 3152.93 | 3060.45 | 3466.34 | 3523.84 |  |
| G15     | 3396.77 | 3661.81 | 3768.99 | 3407.48 | 3375.3  | 3021.87 | 2922.39 | 3346.69 | 3396.77 |  |
| G16     | 3262.84 | 3545.69 | 3662.14 | 3279.81 | 3244.15 | 2891.09 | 2796.2  | 3231.53 | 3262.84 |  |
| G17     | 3139.01 | 3421.03 | 3539.29 | 3150.1  | 3117.63 | 2763.32 | 2656.98 | 3098.71 | 3139.01 |  |
| G18     | 3000.21 | 3293.96 | 3421.44 | 3014.54 | 2985.42 | 2632.08 | 2528.7  | 2966.96 | 3000.21 |  |
| G19     | 2873.7  | 3169.06 | 3281.9  | 2874.67 | 2860.9  | 2502.97 | 2393.66 | 2833.44 | 2873.7  |  |
| G20     | 2744.68 | 3038.28 | 3151.91 | 2737.26 | 2716.85 | 2368.47 | 2259.72 | 2703.68 | 2744.68 |  |
| G21     | 2612.69 | 2904.58 | 3011.94 | 2596.83 | 2583.66 | 2227.72 | 2115.21 | 2575.59 | 2612.69 |  |
| G22     | 2480.66 | 2778.44 | 2880.56 | 2460.16 | 2447.59 | 2087.16 | 1969.45 | 2441.1  | 2480.66 |  |
| G23     | 2343.62 | 2641.12 | 2753.12 | 2312.17 | 2309.95 | 1935.97 | 1815.62 | 2305.22 | 2343.62 |  |
| G24     | 2196.88 | 2509.88 | 2616.26 | 2170.03 | 2156.77 | 1777.74 | 1658.83 | 2162.01 | 2196.88 |  |
| G25     | 2055.67 | 2371.21 | 2477.83 | 2020.33 | 2011.05 | 1619.36 | 1499.8  | 2016.39 | 2055.67 |  |
| G26     | 1891.54 | 2234.54 | 2342.64 | 1865.8  | 1847.02 | 1464.23 | 1342.08 | 1857.97 | 1891.54 |  |
| G27     | 1727.7  | 2082.57 | 2201.47 | 1703.67 | 1692.36 | 1300.11 | 1183.05 | 1700.01 | 1727.7  |  |
| G28     | 1561.11 | 1933.19 | 2052.84 | 1546.41 | 1523.32 | 1143.22 | 1035.67 | 1535.7  | 1561.11 |  |
| G29     | 1393.32 | 1770.73 | 1898.31 | 1379.36 | 1363.69 | 996.16  | 888.71  | 1375.98 | 1393.32 |  |
| G30     | 1226.93 | 1608.56 | 1743.79 | 1218.39 | 1205.04 | 855.78  | 759.04  | 1214.5  | 1226.93 |  |
| G31     | 1074.63 | 1440.12 | 1584.95 | 1064.66 | 1055.52 | 730.66  | 646.39  | 1061.55 | 1074.63 |  |
| G32     | 929.42  | 1277.06 | 1417.63 | 921.17  | 909.3   | 621.53  | 550.72  | 924.41  | 929.42  |  |
| G33     | 796.32  | 1121.98 | 1257.16 | 790.02  | 779.58  | 527.25  | 463.62  | 793.73  | 796.32  |  |
| G34     | 673.15  | 974.64  | 1104.4  | 673.89  | 664.24  | 446.97  | 394.29  | 677.04  | 673.15  |  |
| G35     | 566.95  | 837.14  | 959.29  | 573.21  | 564.21  | 379.91  | 335.02  | 576.13  | 566.95  |  |
| G36     | 468.82  | 714.28  | 826.28  | 485.14  | 477.95  | 322.17  | 285.26  | 490.98  | 468.82  |  |

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/9/18 17:21:22

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 DISTRIBUTION INTENSITY DATA(Continue 1)

| Gamma\C | C0     | C45    | C90    | C135   | C180   | C225   | C270   | C315   | C360   |  |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| G37     | 387.29 | 607.57 | 705.38 | 411.96 | 405.19 | 275.43 | 244.59 | 418.5  | 387.29 |  |
| G38     | 316.52 | 512.78 | 601.13 | 346.75 | 344.67 | 237.17 | 210.55 | 359.09 | 316.52 |  |
| G39     | 260.77 | 432.36 | 510.46 | 295.88 | 294.49 | 205.86 | 182.07 | 308.35 | 260.77 |  |
| G40     | 218.2  | 366.93 | 436.77 | 252.52 | 252.47 | 180.77 | 159.44 | 266.25 | 218.2  |  |
| G41     | 185.04 | 311.55 | 372.12 | 218.11 | 218.52 | 160.14 | 139.41 | 231.83 | 185.04 |  |
| G42     | 160.55 | 265.09 | 320.55 | 188.15 | 190.93 | 143.95 | 124.57 | 202.9  | 160.55 |  |
| G43     | 141.12 | 226.04 | 274.59 | 164.87 | 168.62 | 131.11 | 113.02 | 179.34 | 141.12 |  |
| G44     | 124.75 | 195.06 | 236.1  | 146.32 | 150.35 | 120.49 | 103.56 | 159.86 | 124.75 |  |
| G45     | 110.24 | 170.06 | 203.78 | 131.62 | 136.9  | 111.95 | 94.98  | 144.32 | 110.24 |  |
| G46     | 98.18  | 150.07 | 178.41 | 119.74 | 124.57 | 104.3  | 87.93  | 130.92 | 98.18  |  |
| G47     | 87.37  | 134.12 | 158.05 | 109.91 | 114.97 | 97.85  | 81.44  | 120.35 | 87.37  |  |
| G48     | 78.7   | 122.2  | 142.0  | 101.7  | 106.48 | 92.24  | 76.2   | 111.67 | 78.7   |  |
| G49     | 72.02  | 111.07 | 127.91 | 94.79  | 98.97  | 87.28  | 71.19  | 103.65 | 72.02  |  |
| G50     | 66.41  | 102.21 | 116.54 | 88.9   | 91.87  | 83.2   | 67.01  | 96.56  | 66.41  |  |
| G51     | 61.87  | 94.24  | 107.04 | 83.85  | 85.98  | 79.4   | 63.35  | 90.57  | 61.87  |  |
| G52     | 57.69  | 87.47  | 98.69  | 79.4   | 80.51  | 75.92  | 60.24  | 85.01  | 57.69  |  |
| G53     | 53.94  | 81.48  | 91.82  | 75.45  | 76.06  | 72.86  | 57.23  | 79.95  | 53.94  |  |
| G54     | 50.6   | 76.15  | 85.93  | 72.11  | 71.88  | 70.31  | 54.45  | 75.18  | 50.6   |  |
| G55     | 47.4   | 71.23  | 80.51  | 68.91  | 68.17  | 67.15  | 51.8   | 70.91  | 47.4   |  |
| G56     | 44.38  | 66.78  | 76.06  | 66.04  | 64.74  | 64.65  | 49.34  | 66.83  | 44.38  |  |
| G57     | 41.32  | 62.56  | 71.7   | 63.21  | 62.14  | 61.77  | 46.61  | 62.79  | 41.32  |  |
| G58     | 38.31  | 59.13  | 68.08  | 60.57  | 58.8   | 59.13  | 44.2   | 58.76  | 38.31  |  |
| G59     | 35.43  | 55.65  | 64.69  | 57.92  | 55.93  | 56.3   | 41.69  | 55.42  | 35.43  |  |
| G60     | 32.19  | 52.27  | 61.68  | 55.09  | 52.78  | 53.38  | 39.23  | 51.94  | 32.19  |  |
| G61     | 29.26  | 49.11  | 58.71  | 52.59  | 50.23  | 50.36  | 36.64  | 48.14  | 29.26  |  |
| G62     | 25.27  | 45.59  | 56.02  | 49.76  | 46.28  | 46.93  | 33.3   | 44.98  | 25.27  |  |
| G63     | 20.59  | 42.16  | 52.87  | 46.56  | 43.22  | 43.87  | 30.33  | 41.88  | 20.59  |  |
| G64     | 17.48  | 39.05  | 50.13  | 43.55  | 40.02  | 40.63  | 28.06  | 38.26  | 17.48  |  |
| G65     | 14.98  | 35.85  | 47.03  | 40.67  | 36.31  | 37.43  | 26.06  | 35.25  | 14.98  |  |
| G66     | 12.66  | 32.65  | 44.29  | 37.66  | 31.49  | 34.13  | 24.02  | 31.67  | 12.66  |  |
| G67     | 10.76  | 29.5   | 40.58  | 34.55  | 27.04  | 30.52  | 21.94  | 28.15  | 10.76  |  |
| G68     | 9.04   | 26.34  | 37.1   | 31.3   | 24.02  | 26.94  | 19.99  | 24.58  | 9.04   |  |
| G69     | 7.1    | 23.0   | 34.46  | 28.15  | 21.56  | 23.65  | 18.36  | 21.29  | 7.1    |  |
| G70     | 5.47   | 19.62  | 32.14  | 24.9   | 19.29  | 20.45  | 16.65  | 18.18  | 5.47   |  |
| G71     | 4.13   | 16.42  | 29.91  | 21.56  | 16.97  | 17.76  | 14.79  | 15.44  | 4.13   |  |
| G72     | 2.97   | 13.73  | 27.73  | 18.04  | 14.89  | 15.26  | 12.75  | 13.12  | 2.97   |  |
| G73     | 2.23   | 11.22  | 25.41  | 15.16  | 12.89  | 13.26  | 10.57  | 11.18  | 2.23   |  |

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators: QC01  
Test Date: 2024/9/18 17:21:22

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

Test Time: 2024/9/18 17:21:22

Remarks: