

Report No.:

Test Time: 2025/5/20 14:57:23

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: InBright
Luminaire Type: IBDL230D168-48W
Lamp Type:
Luminous Width: 166 mm
Luminous Length: 166 mm
Luminous Height: 60 mm

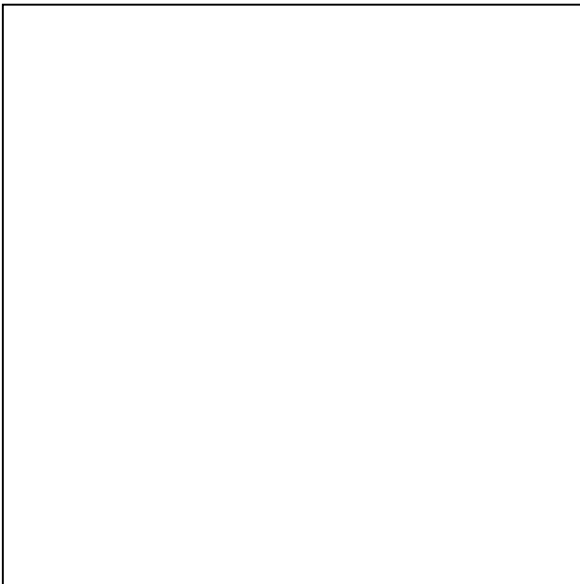
Voltage(V): 220.50 V
Current(A): 0.2240 A
Power(W): 48.04 W
Power Factor: 0.9690
Lamp Luminous Flux: 5704.18

Photometric Results

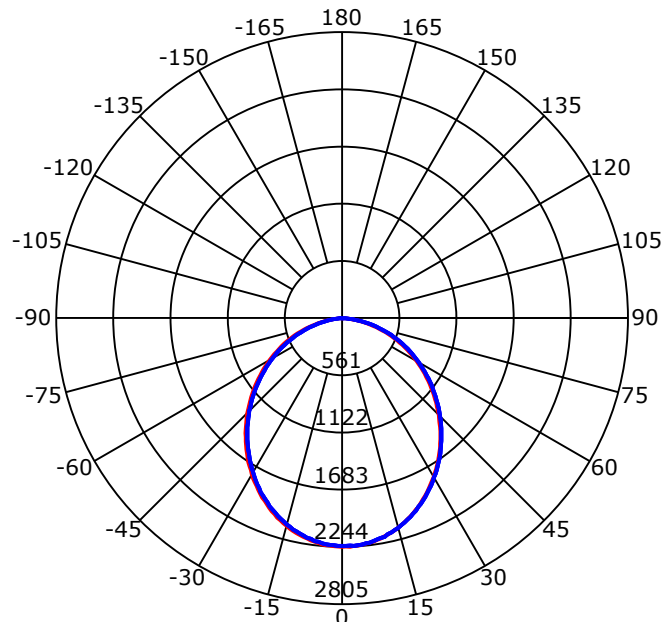
CIE Class: Direct
Luminaire Luminous Flux: 5704.179 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 118.73 lm/W
Beam Angle(50%) C0-180,C90-270: 102.4,102.4
Field Angle(10%) C0-180,C90-270: 157.3,157.3
S/MH C0-180,C90-270: 1.202,1.155

Max. Intensity: 2244.02 cd
Max.Intensity Angle: C=0 Gamma=2
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 2243.32 cd
Effective Luminous Flux: 5604.93 lm
ERP(ϕ use)(120deg): 4615.78 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 102.4 deg,102.4 deg

C0-180 — C90-270 —

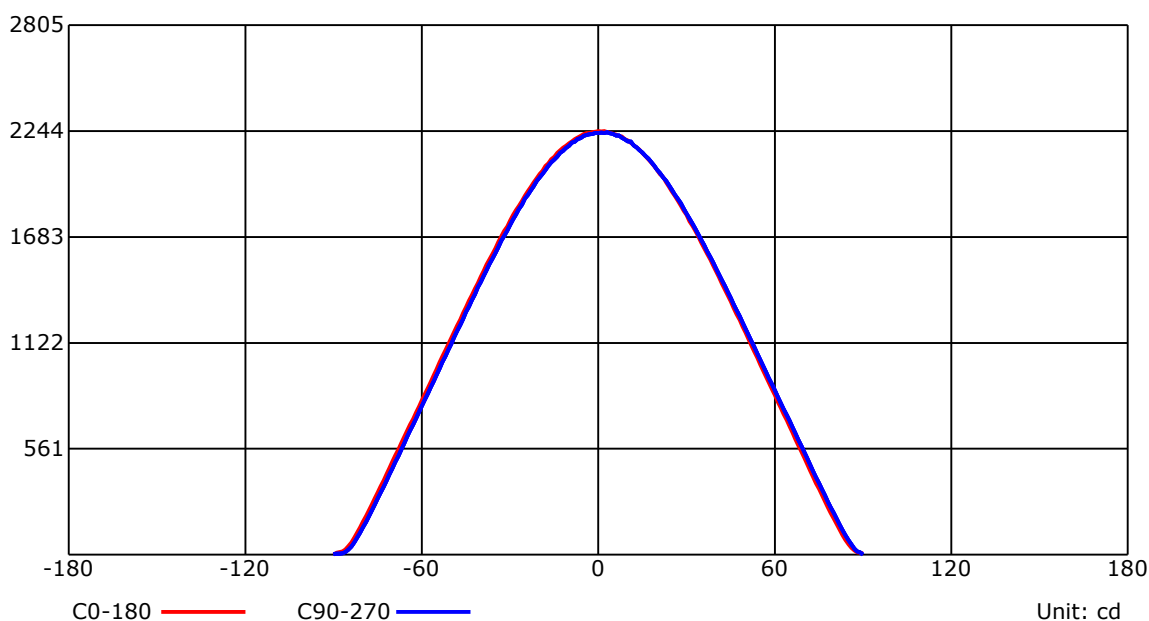
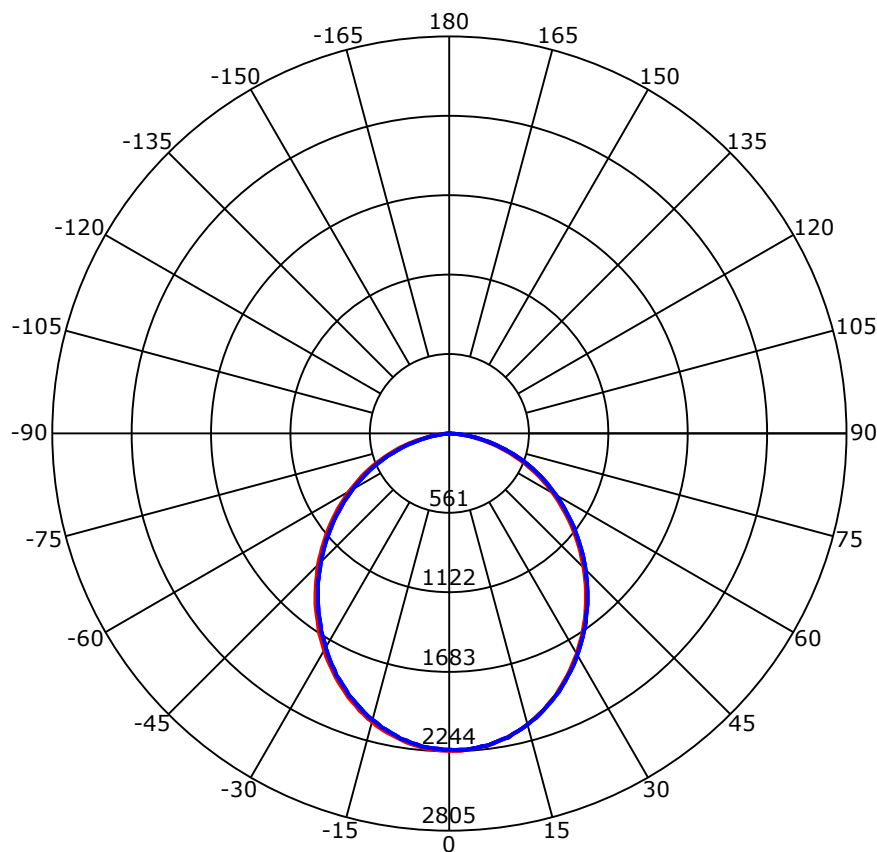
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/5/20 14:57:23

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

Report No.:

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Luminous Intensity Distribution Curve



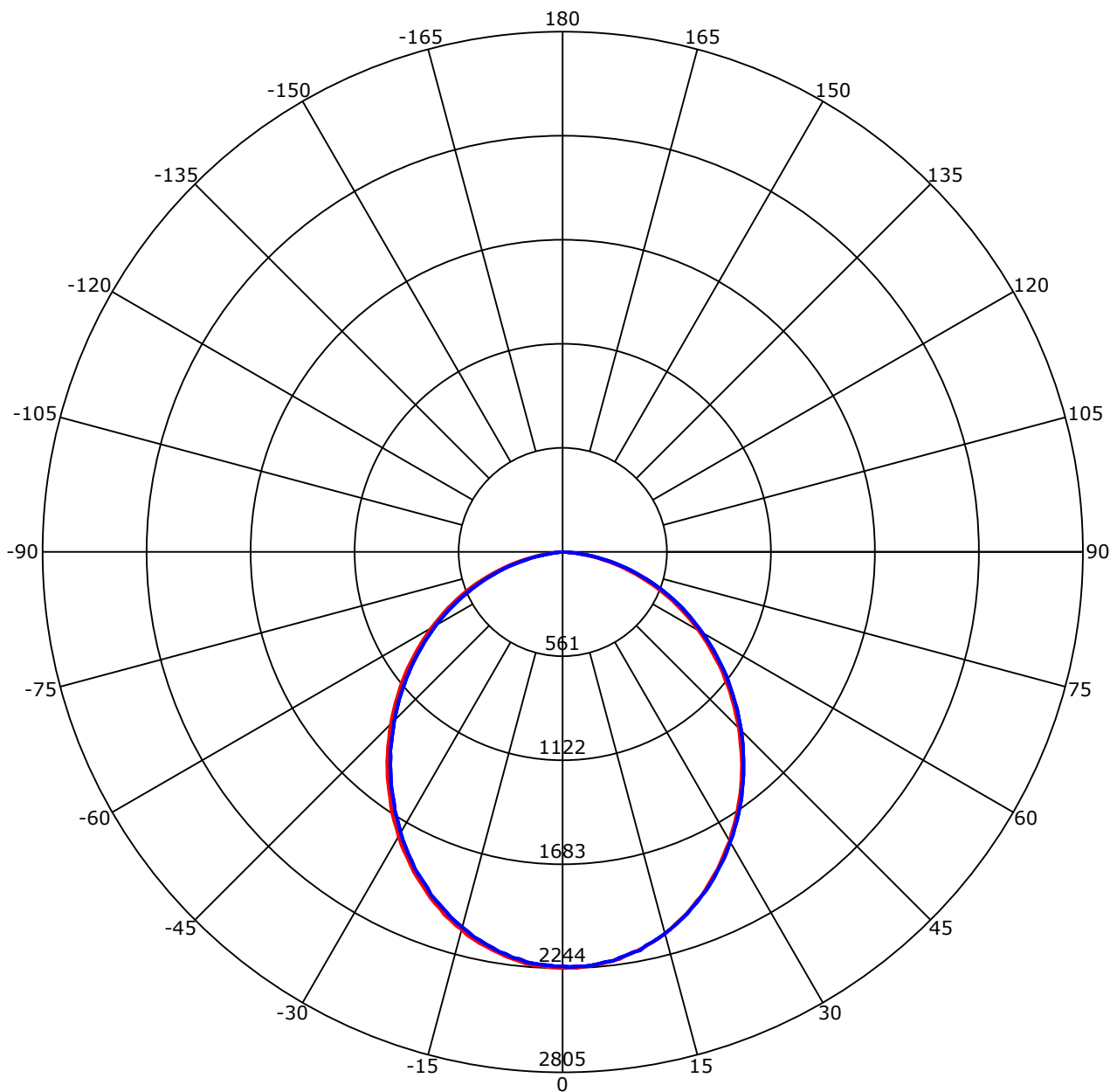
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/5/20 14:57:23

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Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 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: 2025/5/20 14:57:23

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

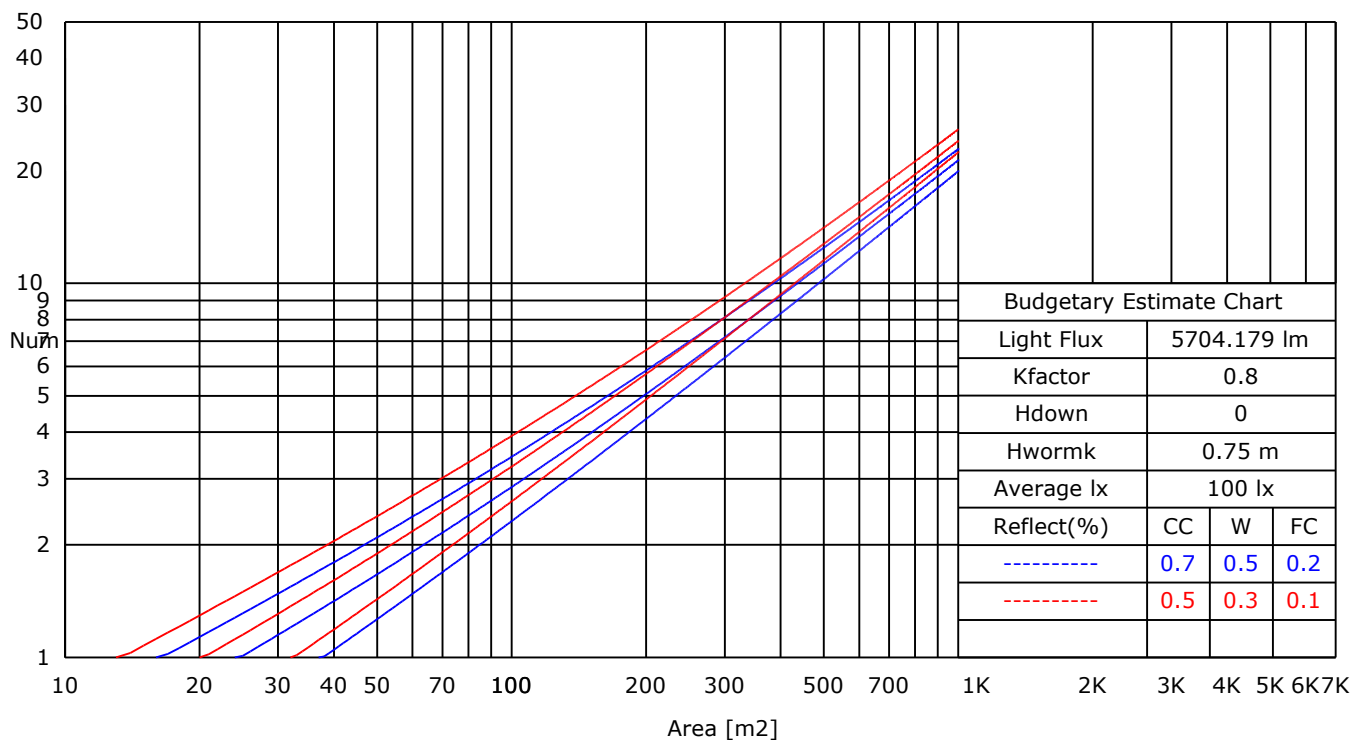
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UTILIZATION FACTORS TABLE

RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION FOR RHOFC=20															
0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.07	1.06	1.04	1.06	1.04	1.02	1.02	1.00	0.98	0.97	0.95	0.93	0.90	0.88	0.86	0.81
2	0.96	0.94	0.92	0.95	0.92	0.90	0.92	0.89	0.86	0.88	0.85	0.82	0.83	0.80	0.77	0.72
3	0.86	0.83	0.82	0.85	0.82	0.80	0.83	0.79	0.77	0.80	0.76	0.73	0.76	0.72	0.68	0.64
4	0.77	0.75	0.73	0.77	0.74	0.72	0.75	0.71	0.68	0.73	0.69	0.65	0.70	0.65	0.61	0.57
5	0.70	0.67	0.66	0.70	0.67	0.65	0.69	0.65	0.62	0.67	0.62	0.59	0.65	0.60	0.55	0.52
6	0.64	0.61	0.60	0.64	0.61	0.59	0.63	0.59	0.56	0.62	0.57	0.53	0.61	0.55	0.50	0.47
7	0.58	0.56	0.55	0.59	0.56	0.54	0.59	0.54	0.51	0.58	0.53	0.49	0.57	0.51	0.46	0.43
8	0.54	0.52	0.51	0.54	0.51	0.49	0.54	0.50	0.47	0.54	0.49	0.45	0.53	0.47	0.43	0.39
9	0.50	0.48	0.47	0.50	0.48	0.46	0.51	0.47	0.44	0.51	0.45	0.42	0.50	0.44	0.40	0.37
10	0.47	0.45	0.44	0.47	0.44	0.43	0.48	0.44	0.41	0.48	0.42	0.39	0.47	0.41	0.37	0.34

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



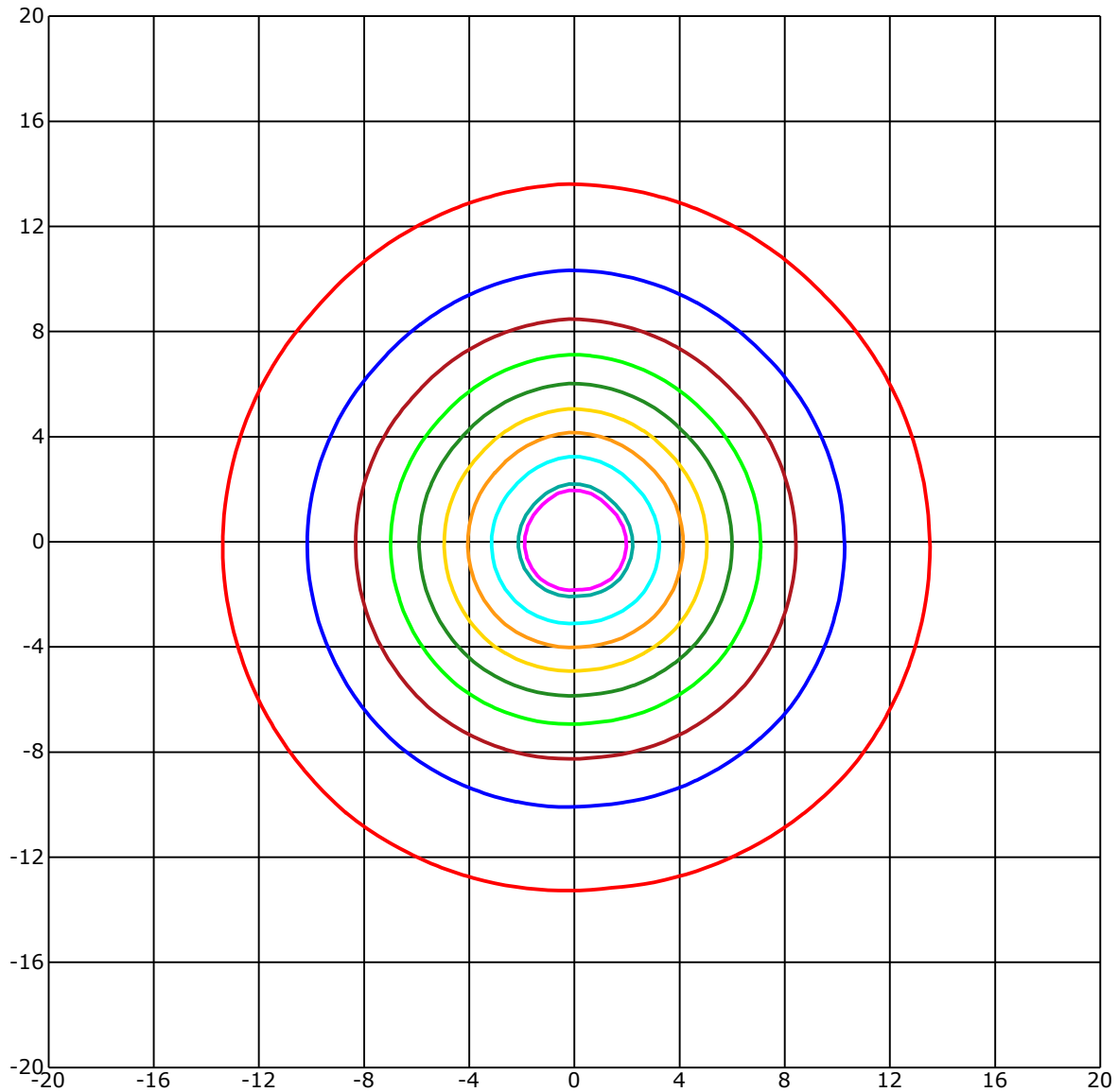
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/5/20 14:57:23

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

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ISOLX DIAGRAM



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

20.639(92%Emax)	11.217(50%Emax)
20.19(90%Emax)	8.973(40%Emax)
17.947(80%Emax)	6.73(30%Emax)
15.703(70%Emax)	4.487(20%Emax)
13.46(60%Emax)	2.243(10%Emax)

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/5/20 14:57:23

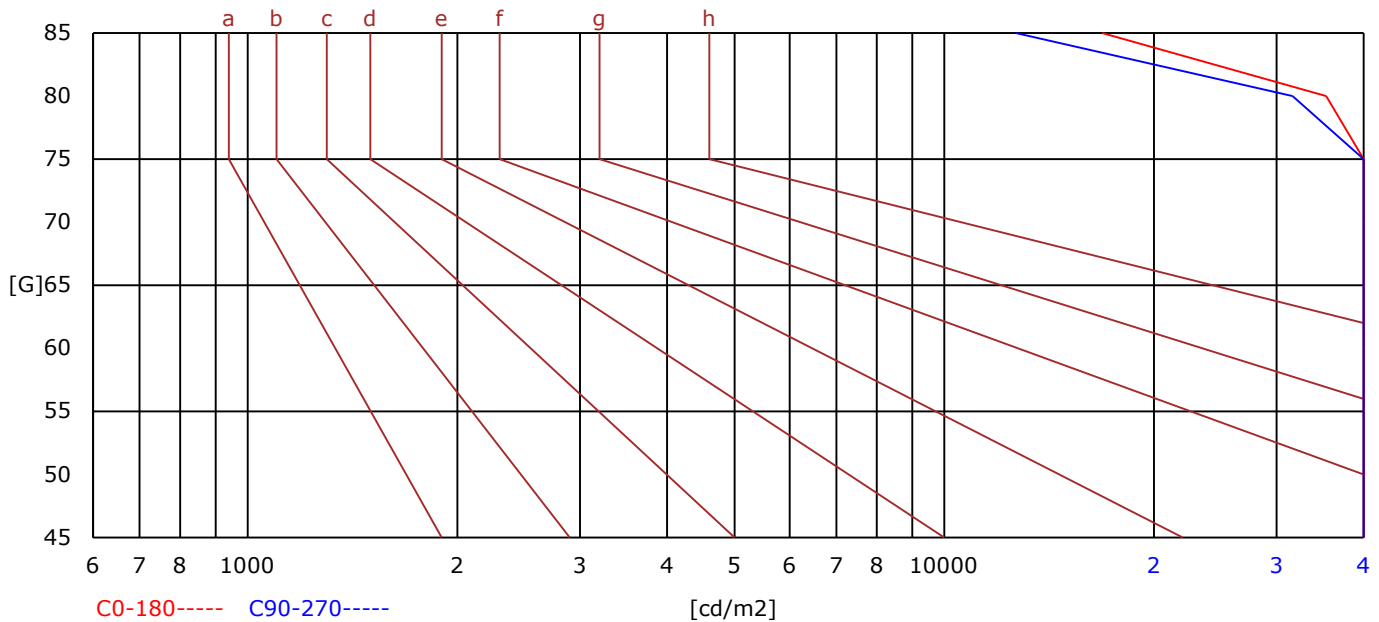
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	66979	64382	61795	59008	55895	51375	45211	35331	16842
C90	65974	63212	60367	57415	53845	49237	42505	31632	12656
Dazzle	Quality	Illuminance	---	---	---	---	---	---	---
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
---	---	a	b	c	d	e	f	g	h



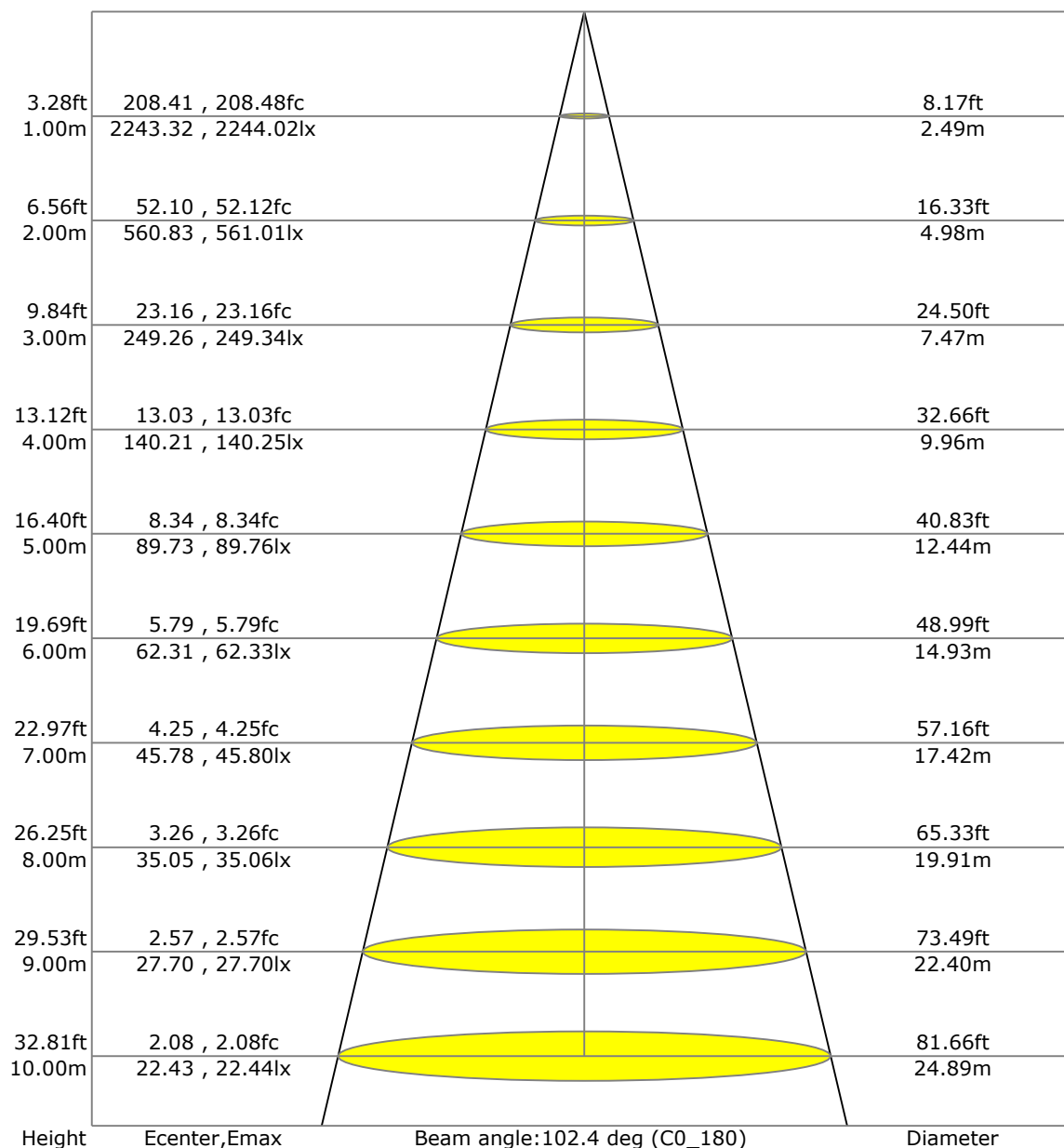
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/5/20 14:57:23

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

Report No.:

Test Time: 2025/5/20 14:57:23

LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2025/5/20 14:57:23

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 60

Test Distance: 6.87 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 X Y	Viewed Endwise					Viewed Crosswise				
2H 2H	17.97	18.04	18.17	18.23	18.47	18.01	18.09	18.21	18.27	18.52
3H	18.11	18.18	18.32	18.37	18.62	18.14	18.21	18.35	18.41	18.66
4H	18.12	18.19	18.33	18.39	18.63	18.15	18.22	18.36	18.42	18.67
6H	18.10	18.17	18.31	18.37	18.62	18.13	18.20	18.34	18.40	18.65
8H	18.08	18.15	18.30	18.35	18.61	18.11	18.18	18.33	18.38	18.64
12H	18.07	18.13	18.29	18.34	18.59	18.09	18.16	18.32	18.37	18.62
4H 2H	20.02	20.09	20.23	20.29	20.54	20.15	20.22	20.36	20.42	20.67
3H	20.30	20.36	20.52	20.57	20.83	20.42	20.48	20.64	20.69	20.95
4H	20.35	20.41	20.58	20.62	20.88	20.46	20.53	20.69	20.74	21.00
6H	20.35	20.40	20.58	20.63	20.89	20.46	20.51	20.70	20.74	21.00
8H	20.33	20.39	20.58	20.61	20.88	20.44	20.50	20.68	20.72	20.99
12H	20.31	20.37	20.56	20.60	20.87	20.42	20.47	20.67	20.71	20.98
8H 4H	20.38	20.44	20.60	20.65	20.90	20.57	20.64	20.79	20.84	21.10
6H	20.85	20.90	21.11	21.14	21.41	21.04	21.09	21.29	21.33	21.60
8H	20.84	20.89	21.11	21.13	21.41	21.03	21.07	21.29	21.32	21.60
12H	20.83	20.87	21.09	21.12	21.40	21.01	21.05	21.28	21.30	21.58
12H 4H	20.86	20.91	21.11	21.15	21.42	21.08	21.13	21.33	21.36	21.63
6H	20.90	20.94	21.16	21.19	21.46	21.11	21.16	21.37	21.40	21.68

C Range: 0 - 360 Deg
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G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

ZONAL LUMINOUS FLUX TABLE

[illegible]

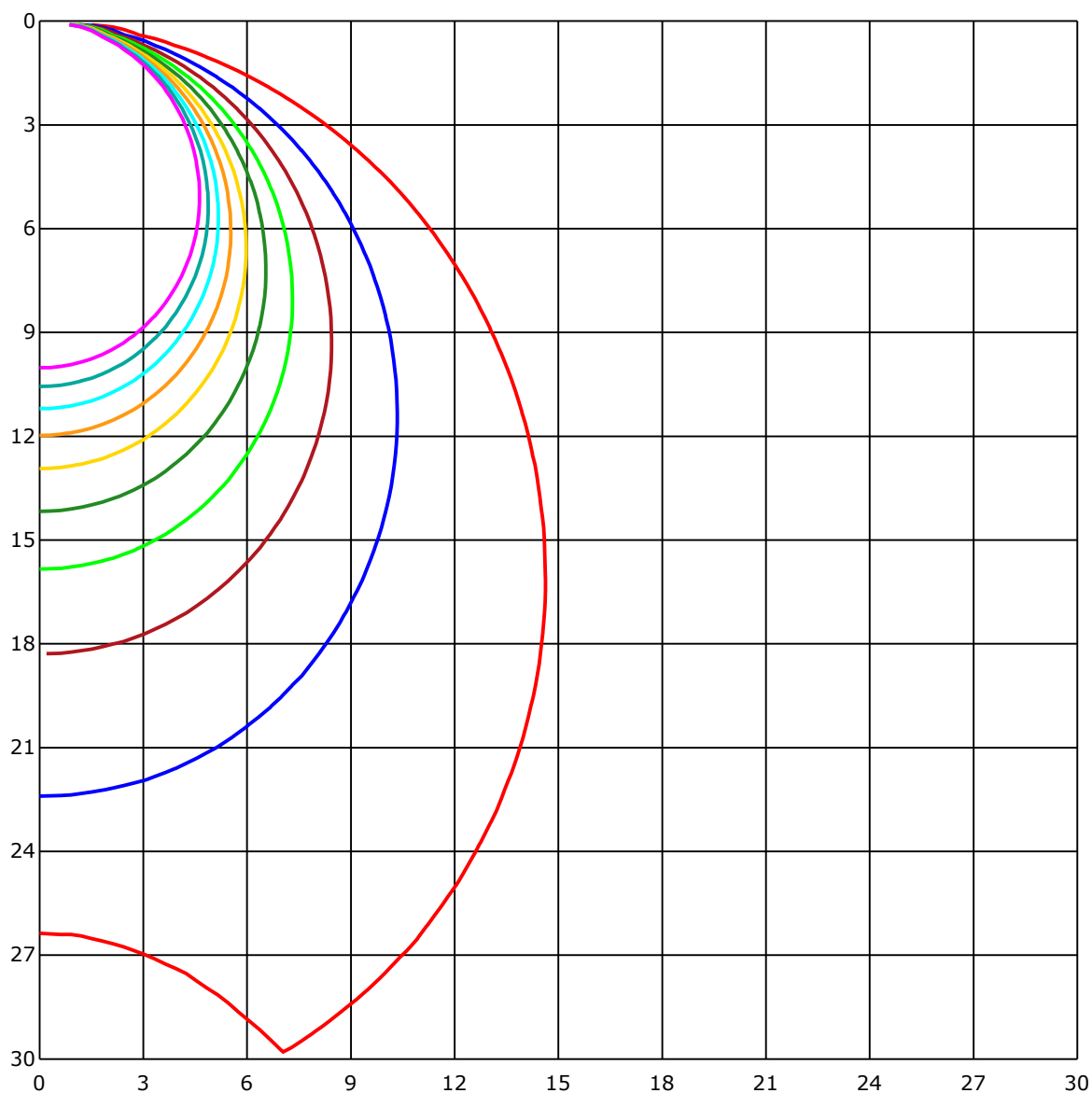
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Temperature: 25
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G Range: 0 - 90 Deg
G Interval: 1.0 Deg
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SPACE ISOLX DIAGRAM



Unit of illumination:lx



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/5/20 14:57:23

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

Report No.:

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LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	2243.32	2233.45	2233.88	2240.39	2243.32	2233.45	2233.88	2240.39	2243.32	
G1	2241.81	2232.41	2236.14	2238.31	2240.58	2230.29	2233.64	2240.96	2241.81	
G2	2244.02	2228.69	2234.02	2232.13	2239.78	2233.92	2229.16	2239.02	2244.02	
G3	2238.64	2225.33	2237.13	2231.23	2234.63	2226.89	2226.8	2240.86	2238.64	
G4	2235.39	2225.71	2232.84	2224.44	2233.31	2223.49	2223.07	2233.17	2235.39	
G5	2230.9	2215.28	2229.02	2221.04	2229.2	2218.96	2218.49	2232.51	2230.9	
G6	2225.29	2212.07	2220.66	2208.77	2219.15	2214.71	2206.46	2226.04	2225.29	
G7	2218.4	2199.33	2220.61	2203.53	2210.99	2209.43	2202.44	2223.26	2218.4	
G8	2215.42	2190.69	2208.72	2193.81	2201.97	2199.8	2188.14	2211.03	2215.42	
G9	2201.88	2182.62	2200.37	2183.0	2190.22	2189.13	2182.39	2202.63	2201.88	
G10	2194.99	2176.25	2189.28	2171.29	2179.03	2182.34	2166.15	2197.91	2194.99	
G11	2180.73	2158.22	2188.1	2157.09	2166.76	2171.15	2155.06	2188.85	2180.73	
G12	2170.16	2146.66	2167.33	2143.26	2156.62	2157.23	2139.72	2172.71	2170.16	
G13	2156.8	2132.4	2157.84	2129.85	2142.36	2142.5	2129.24	2160.25	2156.8	
G14	2145.67	2120.27	2142.65	2110.88	2128.63	2132.88	2109.09	2145.24	2145.67	
G15	2127.68	2099.84	2129.95	2098.8	2108.0	2116.36	2094.03	2138.21	2127.68	
G16	2111.26	2084.26	2112.86	2078.03	2094.13	2101.96	2077.8	2115.41	2111.26	
G17	2092.66	2064.63	2098.09	2059.15	2073.36	2082.0	2059.11	2100.45	2092.66	
G18	2075.86	2047.07	2078.88	2038.15	2058.63	2066.71	2038.01	2084.59	2075.86	
G19	2057.93	2027.3	2061.75	2019.08	2034.09	2046.13	2017.2	2064.49	2057.93	
G20	2036.45	2006.81	2039.57	1996.57	2016.16	2024.61	1997.51	2043.48	2036.45	
G21	2014.93	1984.21	2022.29	1977.6	1994.64	2002.61	1980.29	2026.35	2014.93	
G22	1999.12	1966.41	1998.46	1952.25	1971.04	1984.25	1950.7	2002.52	1999.12	
G23	1972.59	1939.51	1981.37	1931.72	1946.68	1960.28	1928.56	1989.07	1972.59	
G24	1948.24	1915.86	1957.07	1908.83	1925.73	1939.93	1905.76	1959.33	1948.24	
G25	1924.08	1892.69	1933.89	1882.35	1901.28	1915.06	1886.04	1936.11	1924.08	
G26	1902.27	1868.86	1908.64	1853.99	1874.8	1892.22	1853.8	1911.0	1902.27	
G27	1874.71	1842.14	1884.24	1831.85	1847.95	1867.11	1830.58	1891.98	1874.71	
G28	1848.75	1819.63	1862.3	1802.45	1824.68	1845.54	1802.26	1861.49	1848.75	
G29	1821.94	1788.57	1834.07	1775.88	1799.62	1812.88	1776.07	1835.77	1821.94	
G30	1799.95	1762.14	1805.85	1746.47	1770.73	1787.06	1746.8	1809.06	1799.95	
G31	1766.53	1732.79	1781.07	1716.65	1739.58	1759.5	1716.36	1783.05	1766.53	
G32	1740.91	1704.56	1752.37	1689.22	1714.9	1731.04	1688.52	1754.88	1740.91	
G33	1712.73	1677.19	1725.38	1662.56	1685.92	1701.4	1662.32	1727.93	1712.73	
G34	1683.75	1648.02	1695.93	1630.75	1656.75	1675.02	1628.1	1696.97	1683.75	
G35	1652.84	1616.26	1668.17	1603.23	1623.76	1642.17	1597.9	1673.74	1652.84	
G36	1624.19	1588.46	1640.14	1571.52	1594.64	1613.47	1569.82	1639.48	1624.19	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

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G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 60

Test Distance: 6.87 m

Remarks:

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LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	1595.11	1557.92	1607.95	1539.66	1564.25	1582.13	1537.96	1609.79	1595.11	
G38	1563.3	1527.15	1577.75	1507.52	1536.68	1554.34	1506.9	1579.68	1563.3	
G39	1531.59	1495.1	1549.1	1477.41	1502.66	1524.08	1476.08	1550.61	1531.59	
G40	1501.19	1465.98	1516.77	1445.64	1473.02	1494.44	1443.28	1517.85	1501.19	
G41	1470.47	1431.2	1486.56	1414.59	1439.27	1460.27	1417.23	1487.93	1470.47	
G42	1437.38	1401.23	1454.84	1380.37	1408.97	1430.54	1378.86	1455.27	1437.38	
G43	1402.65	1368.0	1424.17	1349.83	1374.75	1396.56	1346.86	1425.35	1402.65	
G44	1372.49	1335.06	1391.13	1315.8	1345.35	1365.22	1313.44	1392.83	1372.49	
G45	1341.53	1305.09	1360.4	1285.5	1312.07	1332.79	1285.22	1359.93	1341.53	
G46	1306.41	1273.8	1326.71	1251.19	1280.31	1303.63	1249.07	1329.07	1306.41	
G47	1273.61	1238.73	1296.31	1219.62	1245.62	1269.17	1216.93	1298.25	1273.61	
G48	1243.5	1206.21	1263.89	1186.72	1213.72	1239.86	1184.93	1262.85	1243.5	
G49	1207.82	1173.17	1229.67	1153.54	1180.02	1203.8	1152.41	1230.19	1207.82	
G50	1177.66	1140.37	1197.01	1119.65	1147.88	1170.15	1116.87	1196.82	1177.66	
G51	1143.11	1107.9	1165.62	1087.61	1115.97	1138.58	1085.01	1166.05	1143.11	
G52	1109.55	1074.86	1132.63	1054.28	1084.44	1106.25	1051.69	1131.97	1109.55	
G53	1077.88	1041.54	1103.56	1020.87	1049.57	1071.65	1019.64	1100.73	1077.88	
G54	1043.67	1008.32	1066.18	986.79	1017.28	1040.6	984.2	1065.9	1043.67	
G55	1008.27	976.69	1033.9	954.13	981.93	1005.81	951.77	1035.64	1008.27	
G56	976.22	943.23	1000.62	922.94	950.64	973.06	917.6	999.16	976.22	
G57	943.56	910.0	969.28	888.76	915.67	940.68	887.87	967.54	943.56	
G58	910.71	878.85	934.78	854.92	884.38	908.35	852.66	934.31	910.71	
G59	876.16	845.06	903.21	823.35	850.72	874.51	819.67	902.36	876.16	
G60	844.59	813.01	869.84	791.07	818.58	841.0	786.87	867.43	844.59	
G61	810.23	779.74	836.66	756.9	784.7	807.77	755.15	835.43	810.23	
G62	779.17	748.31	804.14	723.72	752.7	775.4	720.93	802.25	779.17	
G63	745.1	715.46	772.57	693.46	720.04	744.44	689.5	770.68	745.1	
G64	712.15	682.7	740.33	659.67	689.41	711.92	657.26	738.44	712.15	
G65	679.59	650.94	709.42	627.06	656.51	679.3	624.93	706.16	679.59	
G66	646.93	617.19	674.59	594.44	624.7	647.12	589.68	673.22	646.93	
G67	611.29	582.69	643.15	562.96	592.56	613.7	556.31	639.94	611.29	
G68	578.4	549.32	608.79	529.27	559.19	580.29	522.71	605.87	578.4	
G69	545.17	517.42	575.57	497.69	525.4	547.15	490.23	572.73	545.17	
G70	512.13	484.19	542.67	464.04	493.16	515.96	457.2	539.32	512.13	
G71	477.87	451.16	510.76	431.8	460.26	481.69	425.29	504.68	477.87	
G72	445.02	419.39	476.88	399.33	427.37	448.51	392.21	471.17	445.02	
G73	411.79	386.59	443.65	367.29	394.28	415.99	360.49	438.36	411.79	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2025/5/20 14:57:23

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 60

Test Distance: 6.87 m

Remarks:

[illegible]

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks: