

Report No.:

Test Time: 2025/2/7 16:51:37

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: InBright
Luminaire Type: IBSP112CT085H96-45°-25W
Lamp Type:
Luminous Width: 58 mm
Luminous Length: 58 mm
Luminous Height: 45 mm

Voltage(V): 109.50 V
Current(A): 0.2290 A
Power(W): 24.96 W
Power Factor: 0.9930
Lamp Luminous Flux: 2226.95

Photometric Results

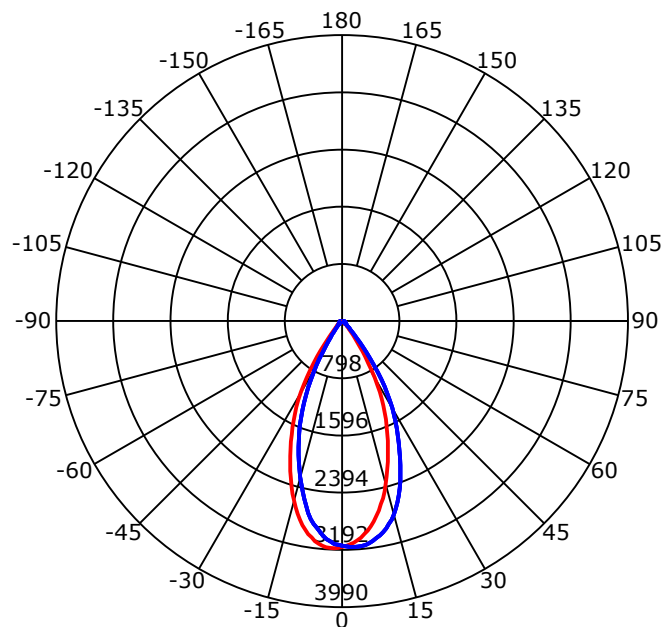
CIE Class: Direct
Luminaire Luminous Flux: 2226.948 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 89.22 lm/W
Beam Angle(50%) C0-180,C90-270: 48.6,50.0
Field Angle(10%) C0-180,C90-270: 75.1,75.5
S/MH C0-180,C90-270: 0.768,0.768

Max. Intensity: 3191.69 cd
Max.Intensity Angle: C=135 Gamma=2
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 3151.05 cd
Effective Luminous Flux: 1986.48 lm
ERP(ϕ use)(120deg): 2162.65 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 48.6 deg,50.0 deg

C0-180 — C90-270 —

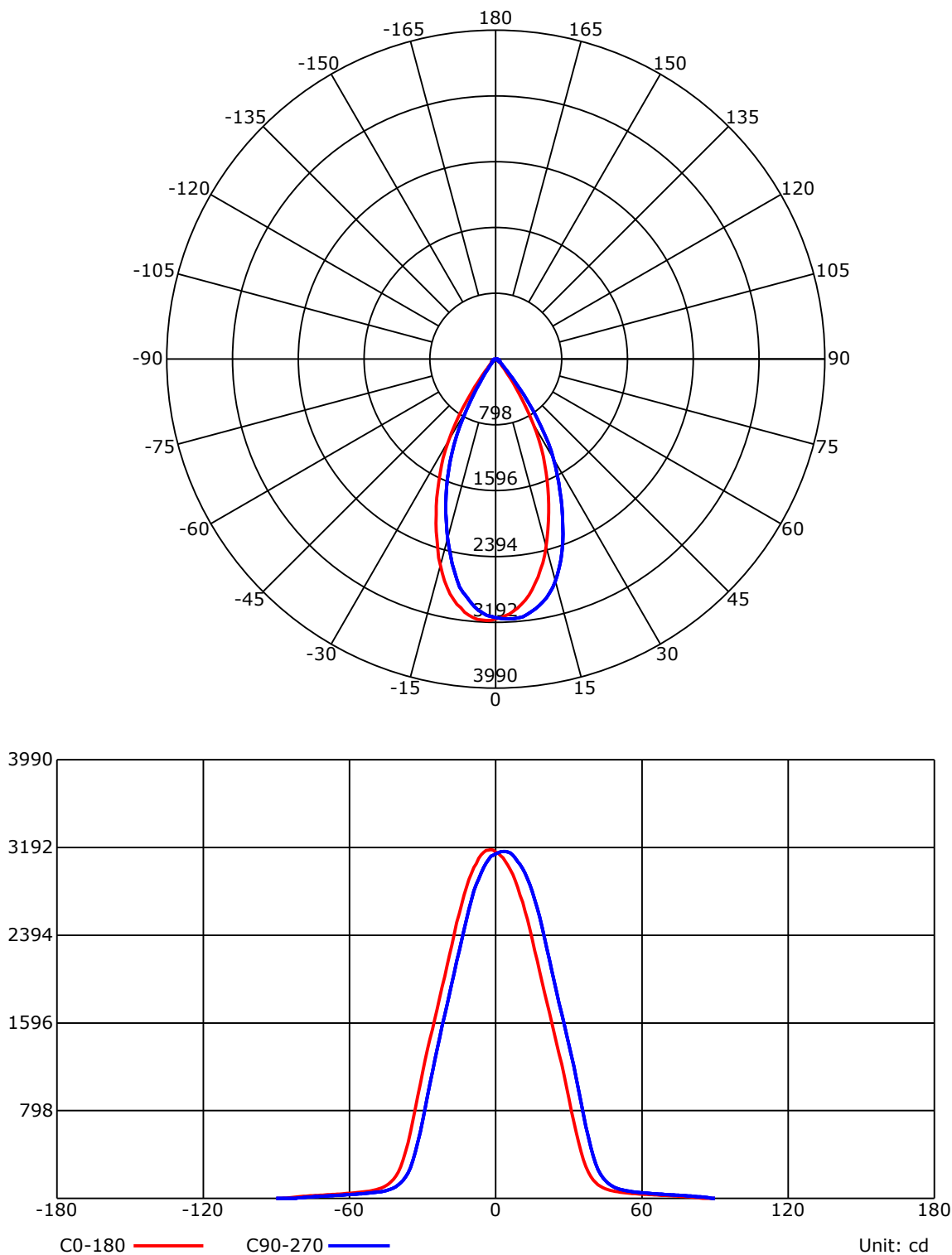
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/2/7 16:51:37

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: 2025/2/7 16:51:37

Luminous Intensity Distribution Curve



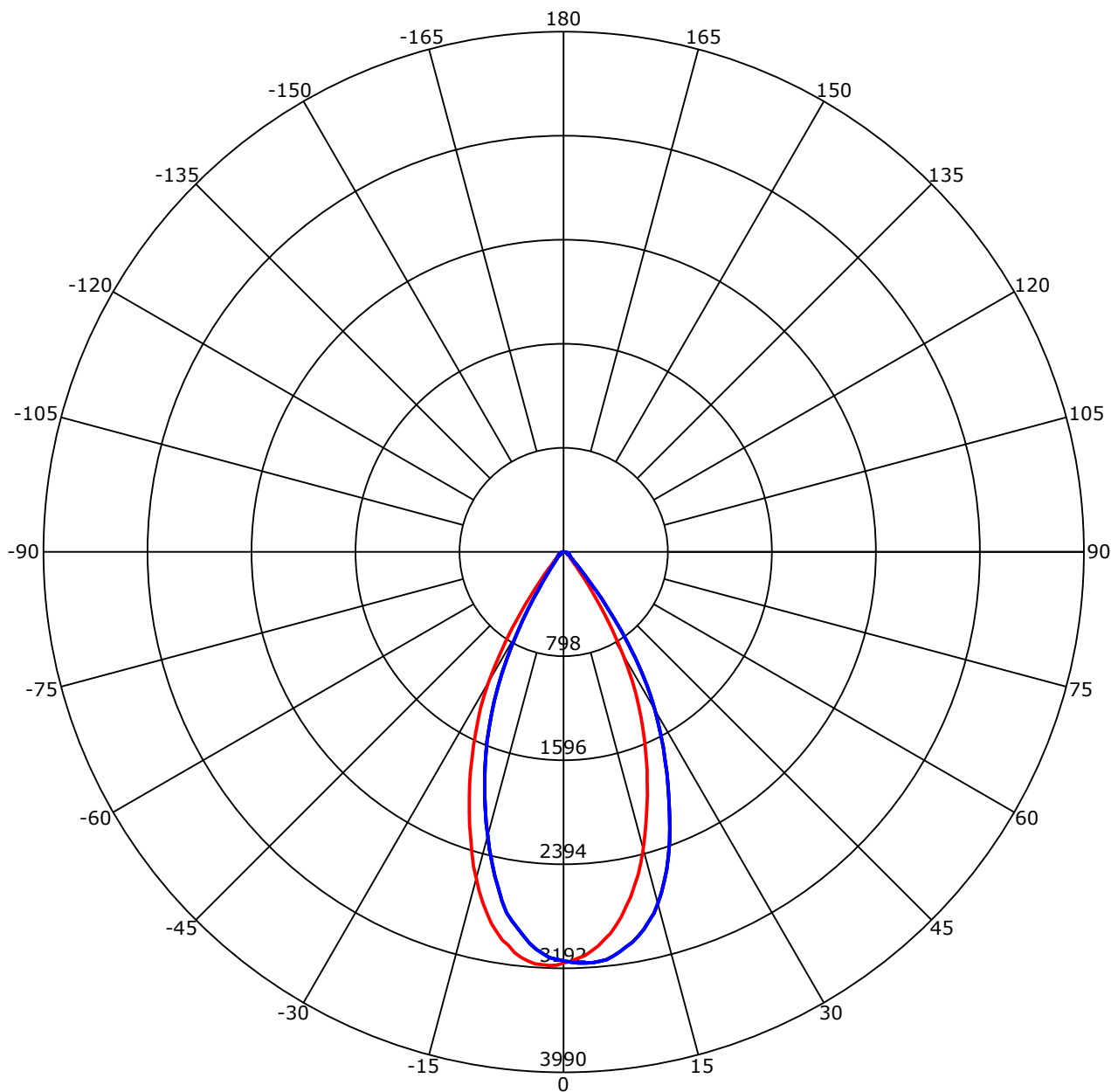
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/2/7 16:51:37

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: 2025/2/7 16:51:37

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: 2025/2/7 16:51:37

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

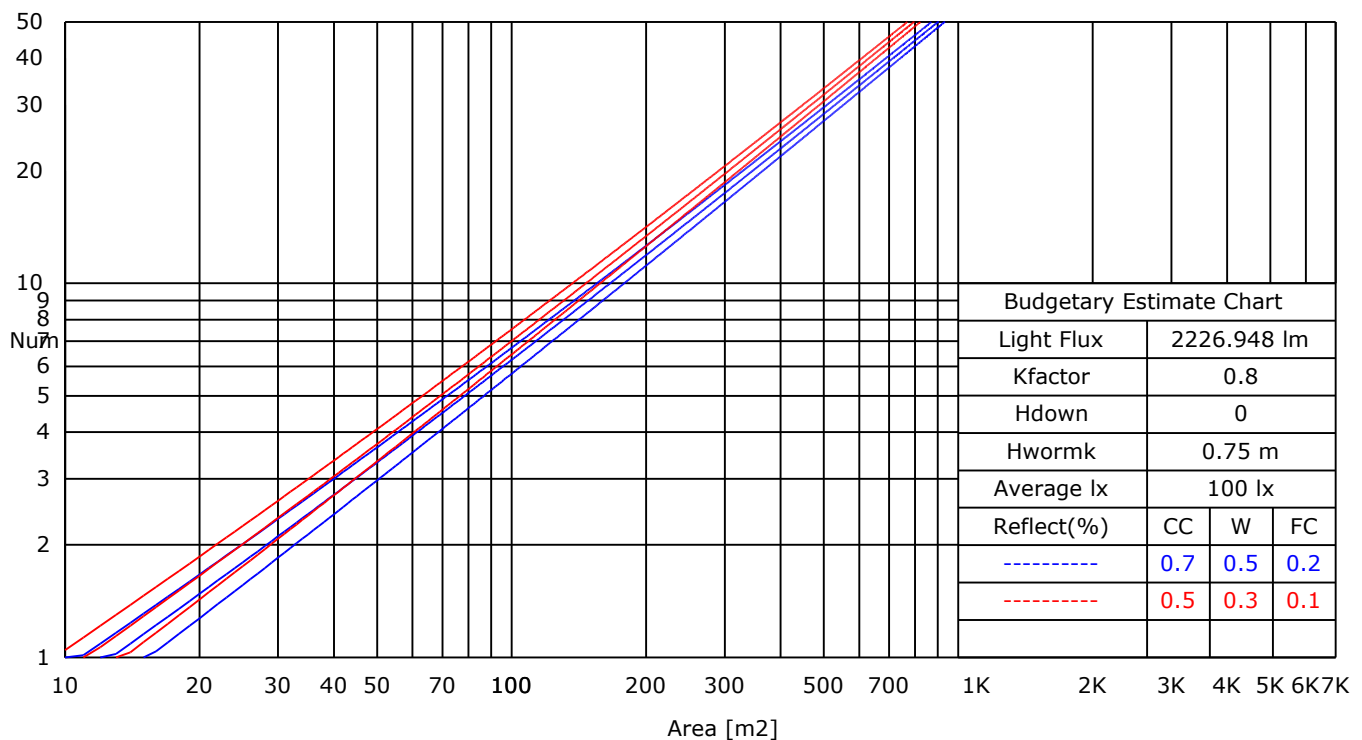
Report No.:

Test Time: 2025/2/7 16:51:37

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	1.04	1.02	1.01	1.03	1.01	0.99	0.99	0.97	0.95	0.94	0.92	0.90	0.88	0.86	0.83	0.78
2	0.99	0.97	0.96	0.98	0.96	0.94	0.95	0.92	0.90	0.91	0.88	0.85	0.85	0.82	0.80	0.75
3	0.95	0.93	0.92	0.94	0.91	0.90	0.91	0.88	0.86	0.87	0.84	0.81	0.83	0.79	0.76	0.72
4	0.91	0.89	0.88	0.90	0.88	0.86	0.87	0.84	0.82	0.84	0.81	0.78	0.80	0.76	0.73	0.69
5	0.87	0.86	0.85	0.87	0.84	0.83	0.84	0.81	0.79	0.81	0.78	0.75	0.78	0.74	0.71	0.67
6	0.84	0.83	0.82	0.83	0.81	0.80	0.81	0.78	0.76	0.79	0.75	0.72	0.75	0.71	0.68	0.64
7	0.82	0.80	0.79	0.81	0.79	0.77	0.79	0.76	0.74	0.76	0.73	0.70	0.73	0.69	0.66	0.62
8	0.79	0.78	0.77	0.78	0.76	0.75	0.76	0.73	0.71	0.74	0.70	0.68	0.71	0.67	0.64	0.60
9	0.77	0.75	0.75	0.76	0.74	0.73	0.74	0.71	0.69	0.72	0.68	0.66	0.69	0.65	0.62	0.59
10	0.75	0.73	0.73	0.74	0.72	0.71	0.72	0.69	0.67	0.70	0.66	0.64	0.67	0.63	0.60	0.57

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



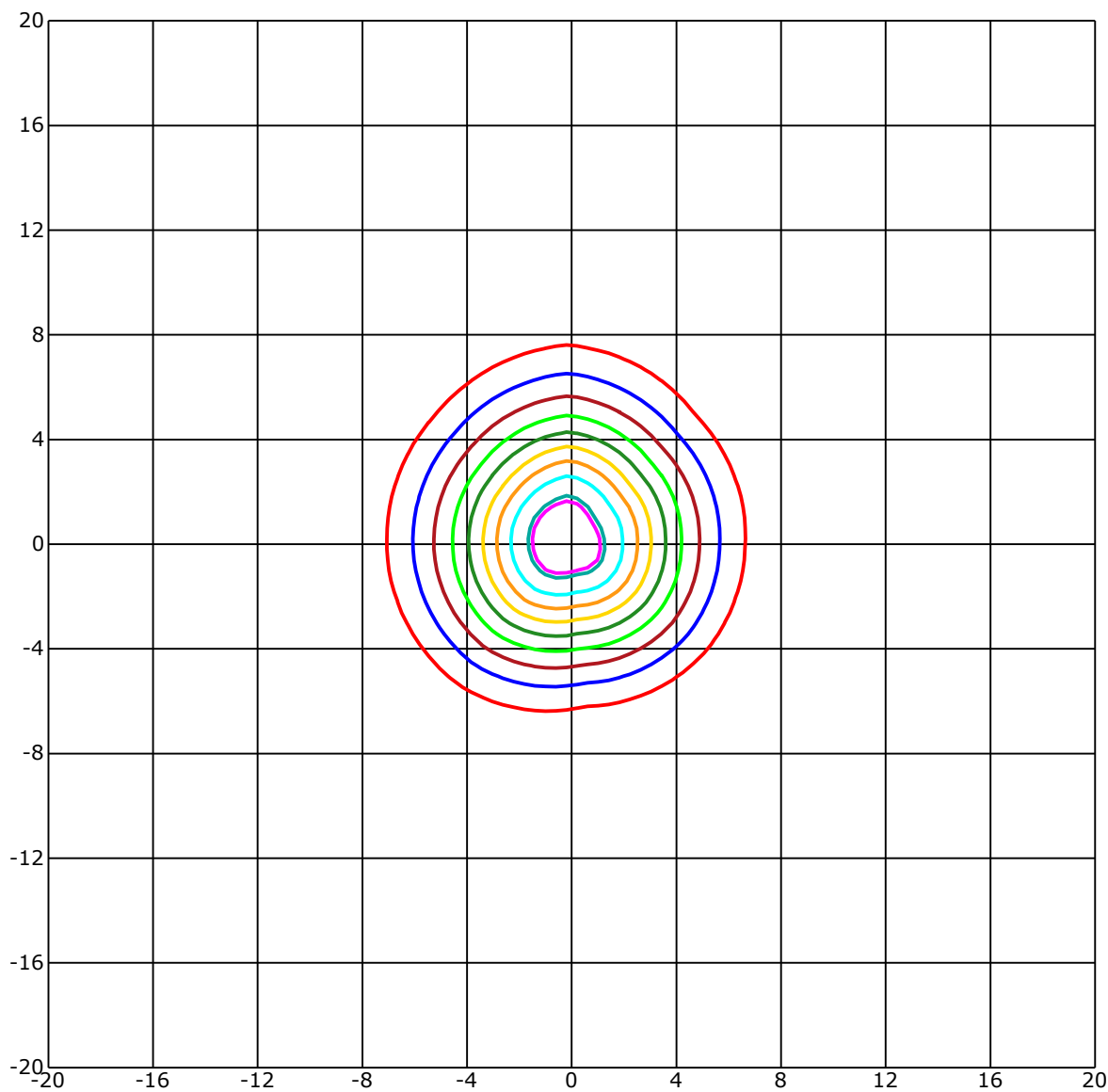
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/2/7 16:51:37

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: 2025/2/7 16:51:37

ISOLX DIAGRAM



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

29.31(92%Emax)	15.929(50%Emax)
28.673(90%Emax)	12.743(40%Emax)
25.487(80%Emax)	9.558(30%Emax)
22.301(70%Emax)	6.372(20%Emax)
19.115(60%Emax)	3.186(10%Emax)

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/2/7 16:51:37

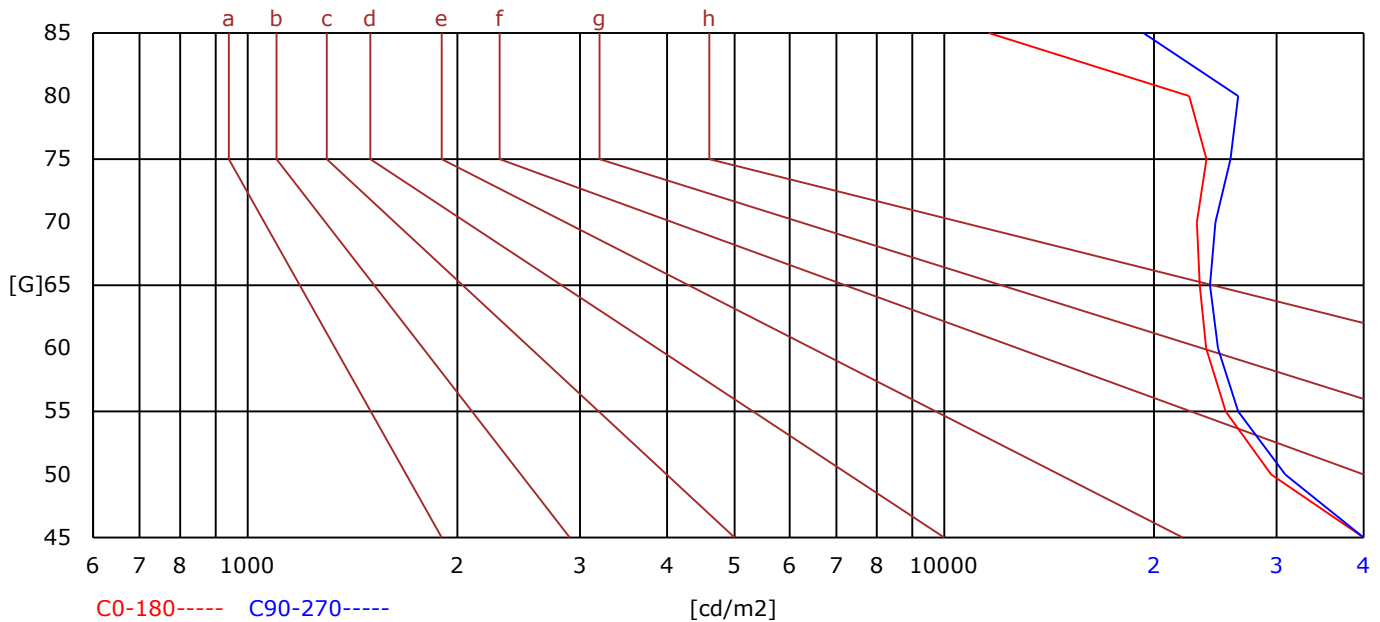
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

Report No.:

Test Time: 2025/2/7 16:51:37

BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	41806	29444	25341	23767	23272	23054	23797	22461	11590
C90	46330	30863	26417	24721	24068	24490	25749	26420	19317
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



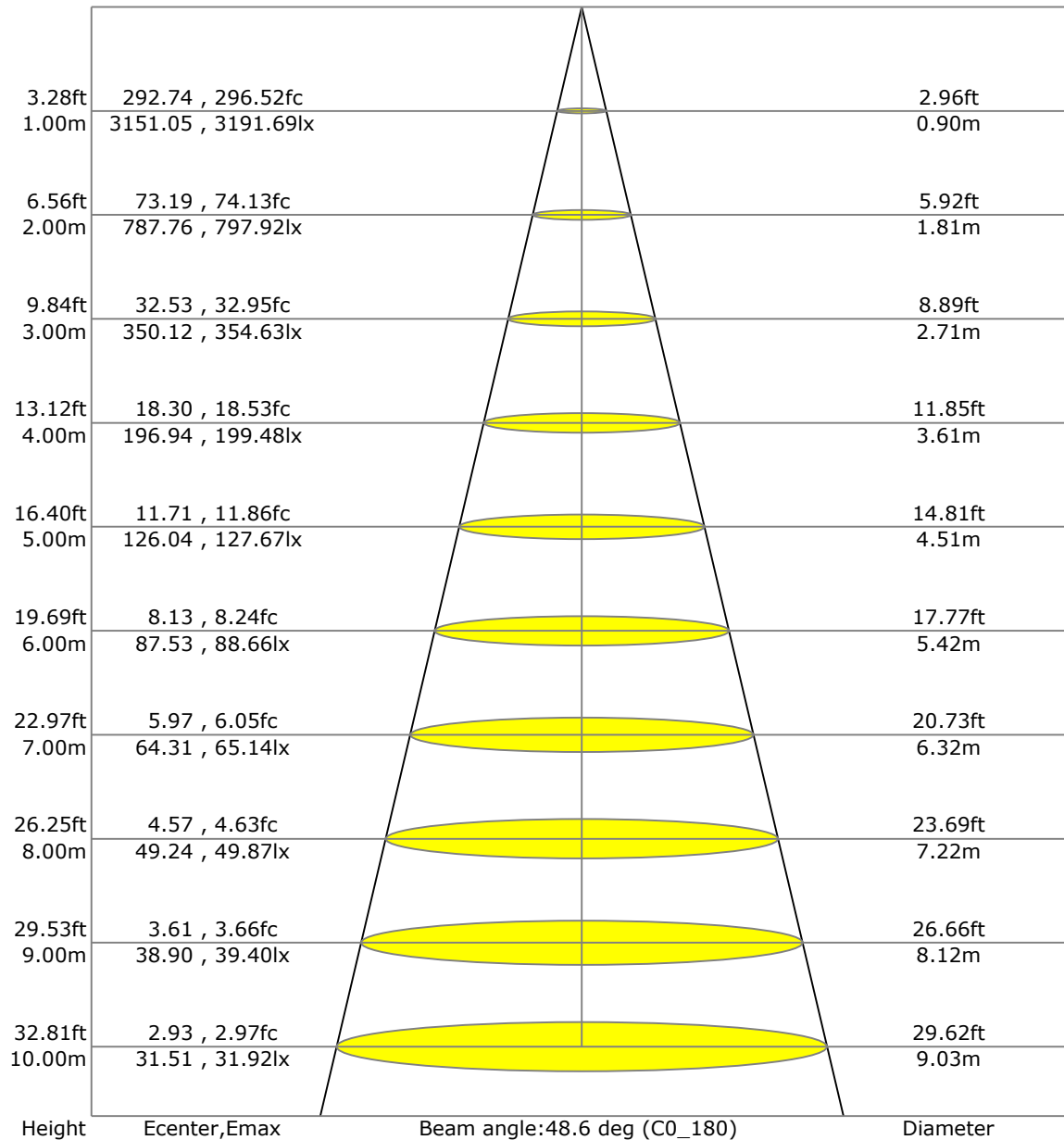
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/2/7 16:51:37

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: 2025/2/7 16:51:37

LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/2/7 16:51:37

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: 2025/2/7 16:51:37

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	15.31	15.37	15.51	15.55	15.80	15.52	15.57	15.72	15.76	16.00
3H	15.35	15.40	15.55	15.59	15.84	15.54	15.59	15.75	15.79	16.03
4H	15.35	15.40	15.56	15.60	15.85	15.54	15.59	15.75	15.79	16.03
6H	15.34	15.39	15.55	15.59	15.84	15.52	15.58	15.74	15.78	16.03
8H	15.33	15.38	15.55	15.58	15.84	15.51	15.57	15.73	15.77	16.02
12H	15.32	15.37	15.54	15.58	15.83	15.50	15.56	15.73	15.76	16.02
4H 2H	15.99	16.04	16.20	16.24	16.49	16.43	16.48	16.64	16.68	16.93
3H	16.14	16.19	16.36	16.40	16.65	16.57	16.62	16.79	16.82	17.08
4H	16.18	16.23	16.41	16.45	16.70	16.59	16.64	16.82	16.86	17.12
6H	16.20	16.25	16.43	16.47	16.73	16.59	16.64	16.83	16.86	17.13
8H	16.19	16.24	16.43	16.47	16.73	16.58	16.63	16.83	16.86	17.12
12H	16.18	16.23	16.43	16.46	16.73	16.57	16.62	16.82	16.85	17.12
8H 4H	16.22	16.27	16.44	16.48	16.73	16.90	16.96	17.12	17.16	17.41
6H	16.58	16.62	16.83	16.86	17.13	17.27	17.32	17.53	17.56	17.83
8H	16.58	16.63	16.85	16.87	17.15	17.27	17.31	17.53	17.56	17.84
12H	16.58	16.62	16.85	16.87	17.15	17.26	17.30	17.53	17.55	17.83
12H 4H	16.55	16.60	16.80	16.83	17.10	17.43	17.48	17.68	17.71	17.98
6H	16.60	16.65	16.87	16.89	17.17	17.49	17.53	17.75	17.78	18.06

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/2/7 16:51:37

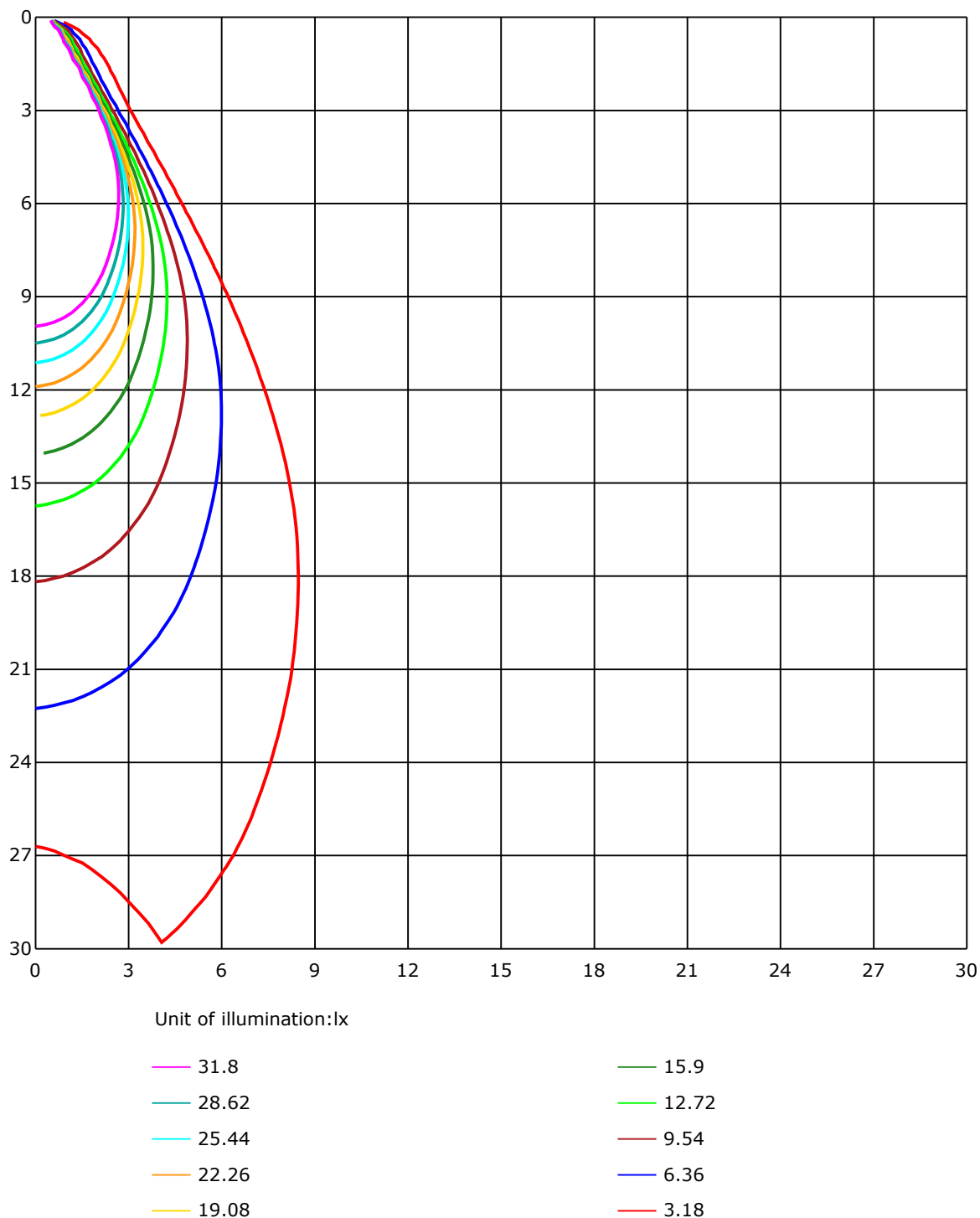
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

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: 2025/2/7 16:51:37

SPACE ISOLX DIAGRAM



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/2/7 16:51:37

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: 2025/2/7 16:51:37

LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	3151.05	3110.56	3133.31	3161.39	3151.05	3110.56	3133.31	3161.39	3151.05	
G1	3139.21	3108.58	3144.02	3174.65	3167.53	3118.68	3122.88	3149.97	3139.21	
G2	3115.89	3099.52	3153.65	3191.69	3173.1	3125.24	3111.27	3134.82	3115.89	
G3	3098.67	3075.44	3155.3	3182.11	3167.57	3125.99	3081.3	3108.86	3098.67	
G4	3065.2	3049.77	3155.82	3172.67	3164.69	3110.56	3050.71	3082.95	3065.2	
G5	3031.32	3033.49	3150.16	3150.44	3147.28	3098.38	3010.83	3048.87	3031.32	
G6	2986.86	2989.5	3141.8	3134.2	3124.62	3066.48	2957.69	3015.93	2986.86	
G7	2945.75	2950.09	3120.85	3107.4	3094.09	3042.69	2903.93	2968.87	2945.75	
G8	2889.54	2913.84	3095.13	3080.68	3045.62	3005.03	2855.55	2914.88	2889.54	
G9	2830.26	2873.73	3064.87	3040.33	3011.26	2973.12	2798.49	2853.38	2830.26	
G10	2758.52	2814.92	3037.26	3000.97	2956.89	2918.47	2717.41	2800.81	2758.52	
G11	2693.86	2757.48	2999.51	2939.85	2901.05	2854.0	2627.64	2705.7	2693.86	
G12	2610.79	2692.02	2958.35	2877.17	2831.06	2780.51	2536.79	2627.64	2610.79	
G13	2538.2	2622.21	2906.34	2808.12	2758.94	2711.84	2442.91	2548.54	2538.2	
G14	2449.24	2533.77	2855.27	2728.78	2676.44	2637.5	2349.41	2471.14	2449.24	
G15	2356.92	2449.52	2790.66	2644.4	2591.58	2552.5	2252.8	2375.56	2356.92	
G16	2256.44	2356.87	2718.4	2557.55	2508.33	2456.32	2155.95	2279.19	2256.44	
G17	2161.62	2265.12	2639.25	2463.49	2405.72	2363.2	2053.68	2184.27	2161.62	
G18	2063.97	2163.98	2558.92	2365.79	2304.77	2267.39	1959.85	2091.44	2063.97	
G19	1969.62	2071.38	2467.12	2259.32	2214.71	2181.77	1861.16	1988.08	1969.62	
G20	1874.09	1983.26	2372.87	2168.6	2117.87	2074.63	1762.33	1891.46	1874.09	
G21	1785.22	1894.25	2271.82	2072.94	2017.34	1972.83	1666.29	1798.11	1785.22	
G22	1688.28	1795.65	2168.89	1978.12	1923.32	1878.67	1568.92	1700.27	1688.28	
G23	1594.36	1695.55	2068.03	1876.6	1827.18	1784.75	1462.54	1604.79	1594.36	
G24	1501.19	1601.49	1971.56	1777.58	1726.6	1690.26	1364.13	1505.82	1501.19	
G25	1407.93	1502.7	1874.71	1678.09	1635.18	1593.6	1261.62	1412.32	1407.93	
G26	1314.76	1407.22	1775.08	1590.16	1539.0	1492.93	1153.3	1312.73	1314.76	
G27	1222.4	1315.71	1682.66	1494.82	1448.24	1390.7	1041.21	1211.07	1222.4	
G28	1121.45	1212.91	1589.07	1400.71	1356.58	1285.83	931.48	1107.85	1121.45	
G29	1016.9	1113.19	1493.78	1301.97	1258.27	1183.56	819.1	997.84	1016.9	
G30	911.89	1006.99	1400.76	1207.06	1150.19	1074.25	710.97	885.98	911.89	
G31	802.16	898.44	1305.7	1100.58	1039.09	958.05	603.7	773.42	802.16	
G32	696.48	795.74	1202.2	994.72	925.72	843.41	506.85	665.38	696.48	
G33	599.92	694.17	1090.72	885.37	815.66	735.71	419.3	563.11	599.92	
G34	509.21	595.53	982.83	771.86	709.32	631.87	344.4	472.87	509.21	
G35	424.91	504.58	872.91	662.74	604.73	534.88	280.92	390.84	424.91	
G36	350.67	423.03	762.56	561.69	508.07	445.92	231.41	321.41	350.67	

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/2/7 16:51:37

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: 2025/2/7 16:51:37

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	288.99	350.67	655.14	465.27	422.22	369.03	193.6	265.15	288.99	
G38	238.11	289.08	555.37	381.21	349.78	305.88	165.09	221.97	238.11	
G39	199.17	240.75	463.52	311.07	288.18	255.9	142.11	187.37	199.17	
G40	168.16	201.72	383.99	253.02	240.28	217.72	122.66	160.75	168.16	
G41	144.56	171.8	316.08	207.34	203.47	186.76	107.18	139.28	144.56	
G42	124.84	147.49	260.95	173.59	174.35	161.32	95.01	122.24	124.84	
G43	108.6	127.57	218.9	147.21	150.56	140.6	85.28	108.74	108.6	
G44	96.23	111.95	187.47	126.77	131.68	123.37	77.45	98.45	96.23	
G45	86.65	99.44	161.56	110.2	116.77	109.69	71.31	89.63	86.65	
G46	79.15	88.68	140.84	96.99	103.93	99.11	66.31	82.83	79.15	
G47	72.87	80.42	123.14	86.75	94.11	90.24	62.02	77.07	72.87	
G48	67.68	73.63	109.5	78.91	86.32	83.02	58.52	72.54	67.68	
G49	63.57	68.15	98.31	72.16	79.95	77.17	55.46	68.25	63.57	
G50	59.89	63.67	89.72	66.74	74.81	72.35	52.91	64.85	59.89	
G51	56.83	59.85	82.64	62.68	70.28	68.58	50.5	61.92	56.83	
G52	54.18	56.73	76.98	59.18	66.69	64.8	48.0	59.61	54.18	
G53	51.87	54.09	72.12	55.88	63.34	61.88	45.88	57.06	51.87	
G54	49.32	51.44	68.34	53.29	60.65	58.85	44.03	54.61	49.32	
G55	47.15	48.9	64.61	50.97	57.96	56.4	42.34	52.39	47.15	
G56	45.26	46.87	61.73	48.47	55.5	53.99	40.73	50.5	45.26	
G57	43.75	45.21	59.09	46.54	53.52	51.96	39.17	48.19	43.75	
G58	42.1	43.23	56.54	44.79	51.3	49.27	37.62	46.25	42.1	
G59	40.4	41.58	54.23	43.14	48.85	47.57	36.11	44.65	40.4	
G60	38.84	39.98	52.29	41.58	46.96	45.64	34.74	42.95	38.84	
G61	37.43	38.61	50.12	39.93	45.31	43.94	33.32	41.44	37.43	
G62	35.96	36.96	47.81	38.65	43.61	42.38	31.95	40.07	35.96	
G63	34.78	35.59	46.02	36.86	41.96	40.68	30.68	38.42	34.78	
G64	33.42	34.22	44.32	35.73	40.4	39.13	29.4	37.1	33.42	
G65	32.33	33.09	42.71	34.22	38.94	37.62	28.03	35.63	32.33	
G66	30.96	31.67	41.2	33.09	37.66	35.92	27.0	34.26	30.96	
G67	29.78	30.35	39.6	31.72	36.06	34.69	25.58	32.9	29.78	
G68	28.37	29.03	38.14	30.73	34.6	33.09	24.35	31.62	28.37	
G69	27.23	28.03	36.81	29.36	33.32	31.72	23.17	30.35	27.23	
G70	26.05	26.52	35.49	28.18	32.0	30.3	21.9	28.84	26.05	
G71	24.83	25.44	33.93	27.14	30.63	28.98	20.58	27.52	24.83	
G72	23.74	24.26	32.71	25.91	29.21	27.33	19.4	26.38	23.74	
G73	22.51	23.17	31.48	24.68	27.89	26.1	18.17	24.87	22.51	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2025/2/7 16:51:37

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 60

Test Distance: 6.87 m

Remarks:

Test Time: 2025/2/7 16:51:37

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

Remarks: