

Report No.:

Test Time: 2025/6/19 17:12:58

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: InBright
Luminaire Type: IBSP221CT042.(C)-24°-7W
Lamp Type:
Luminous Width: 32 mm
Luminous Length: 32 mm
Luminous Height: 46 mm

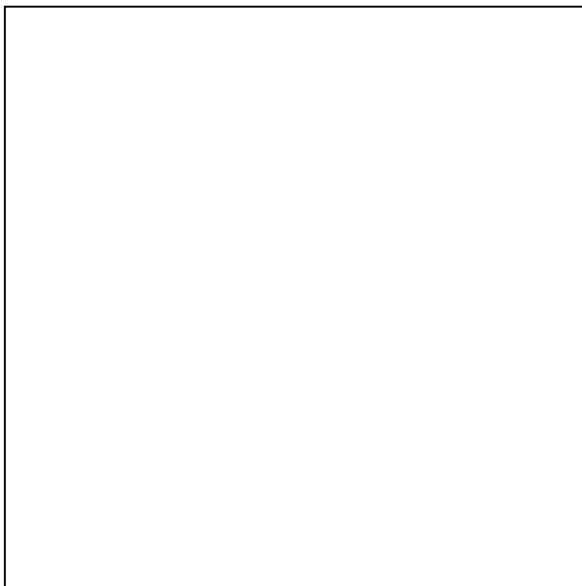
Voltage(V): 219.80 V
Current(A): 0.0360 A
Power(W): 7.35 W
Power Factor: 0.9080
Lamp Luminous Flux: 460.55

Photometric Results

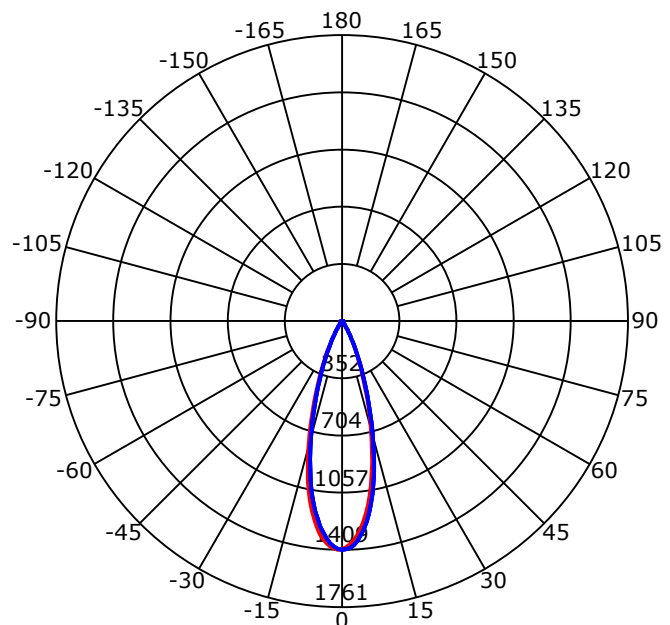
CIE Class: Direct
Luminaire Luminous Flux: 460.5485 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 62.66 lm/W
Beam Angle(50%) C0-180,C90-270: 31.1,30.9
Field Angle(10%) C0-180,C90-270: 55.4,54.9
S/MH C0-180,C90-270: 0.536,0.536

Max. Intensity: 1408.69 cd
Max.Intensity Angle: C=180 Gamma=1
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 1403.59 cd
Effective Luminous Flux: 406.46 lm
ERP(ϕ use)(120deg): 457.84 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 31.1 deg,30.9 deg

C0-180 — C90-270

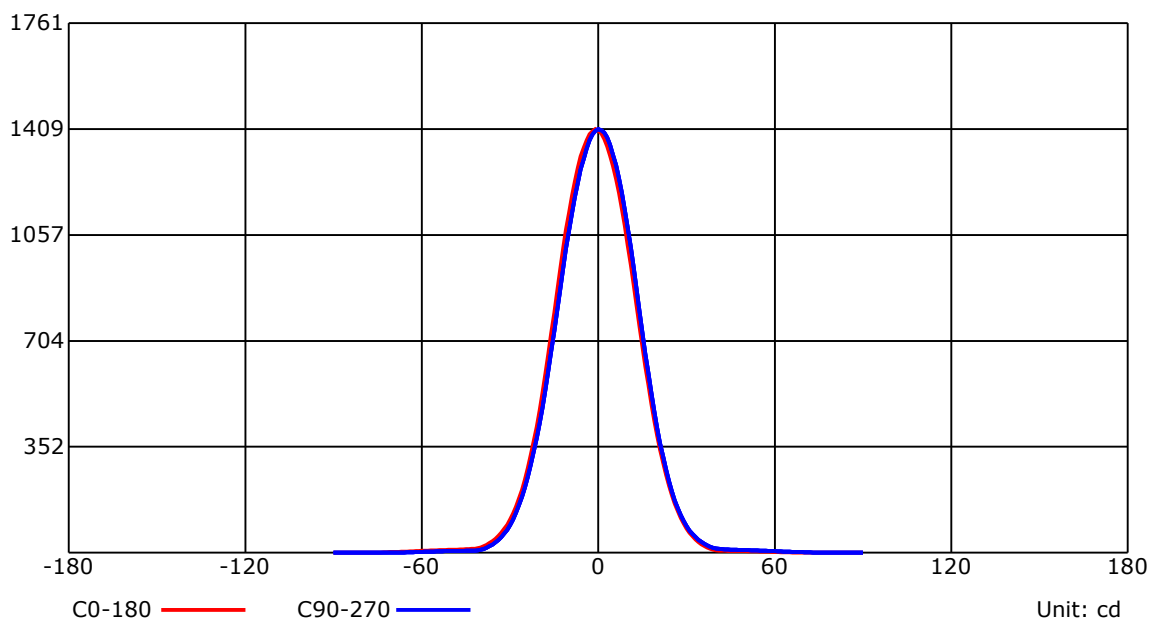
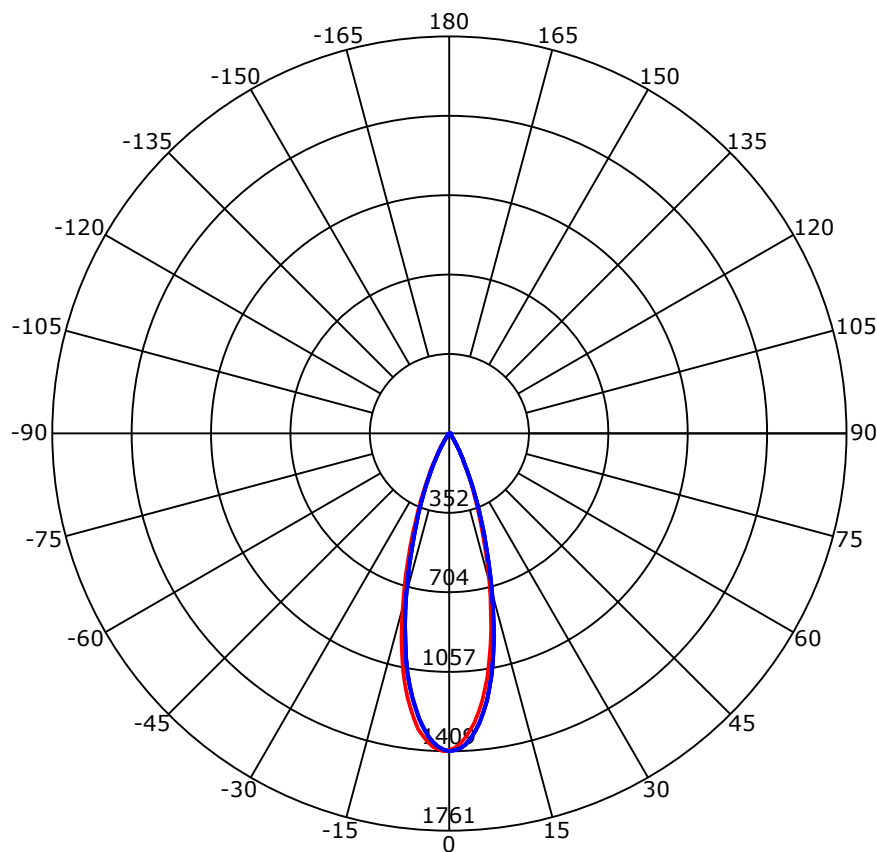
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/6/19 17:12:58

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: 2025/6/19 17:12:58

Luminous Intensity Distribution Curve



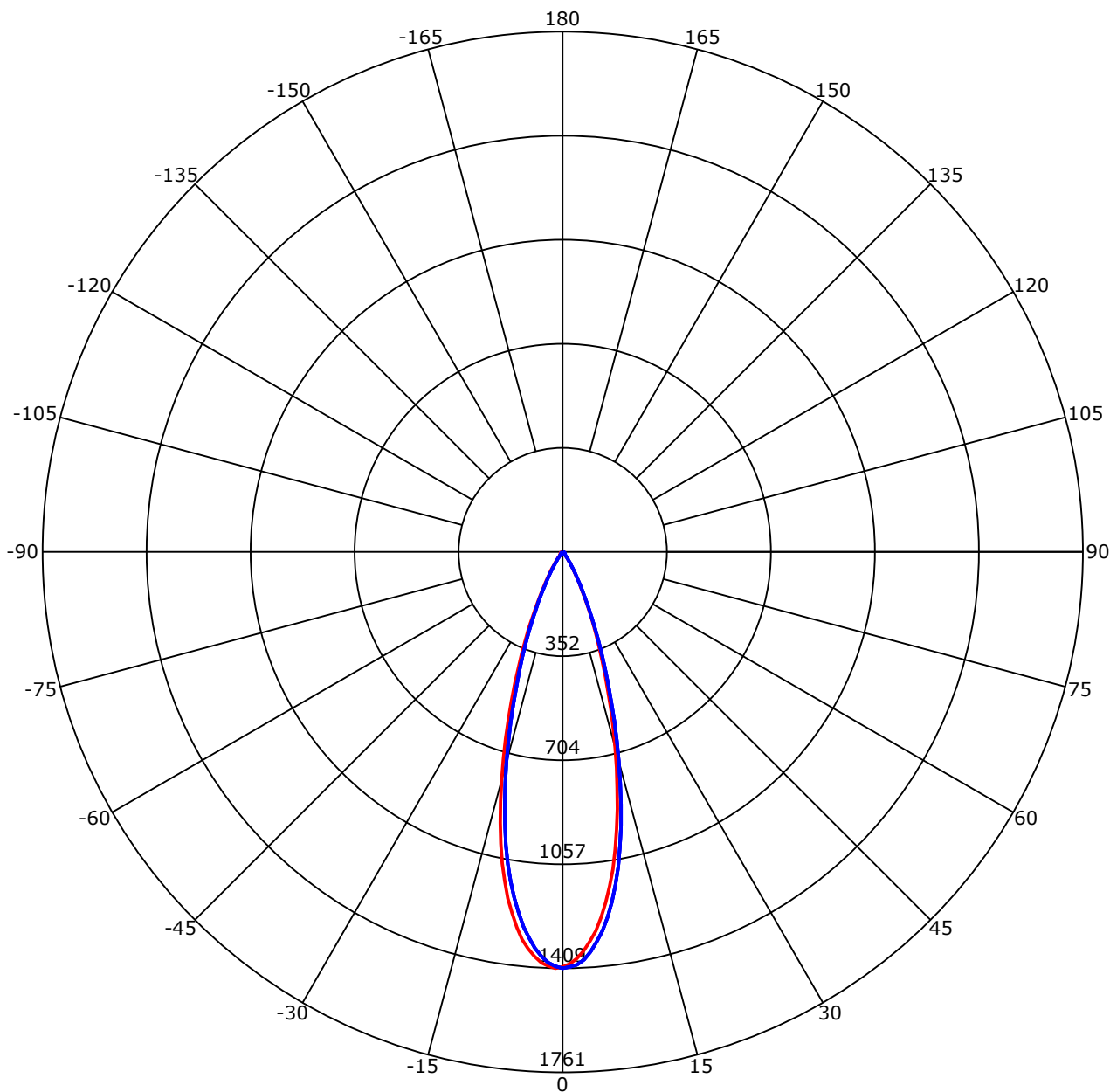
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/6/19 17:12:58

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: 2025/6/19 17:12:58

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: 2025/6/19 17:12:58

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

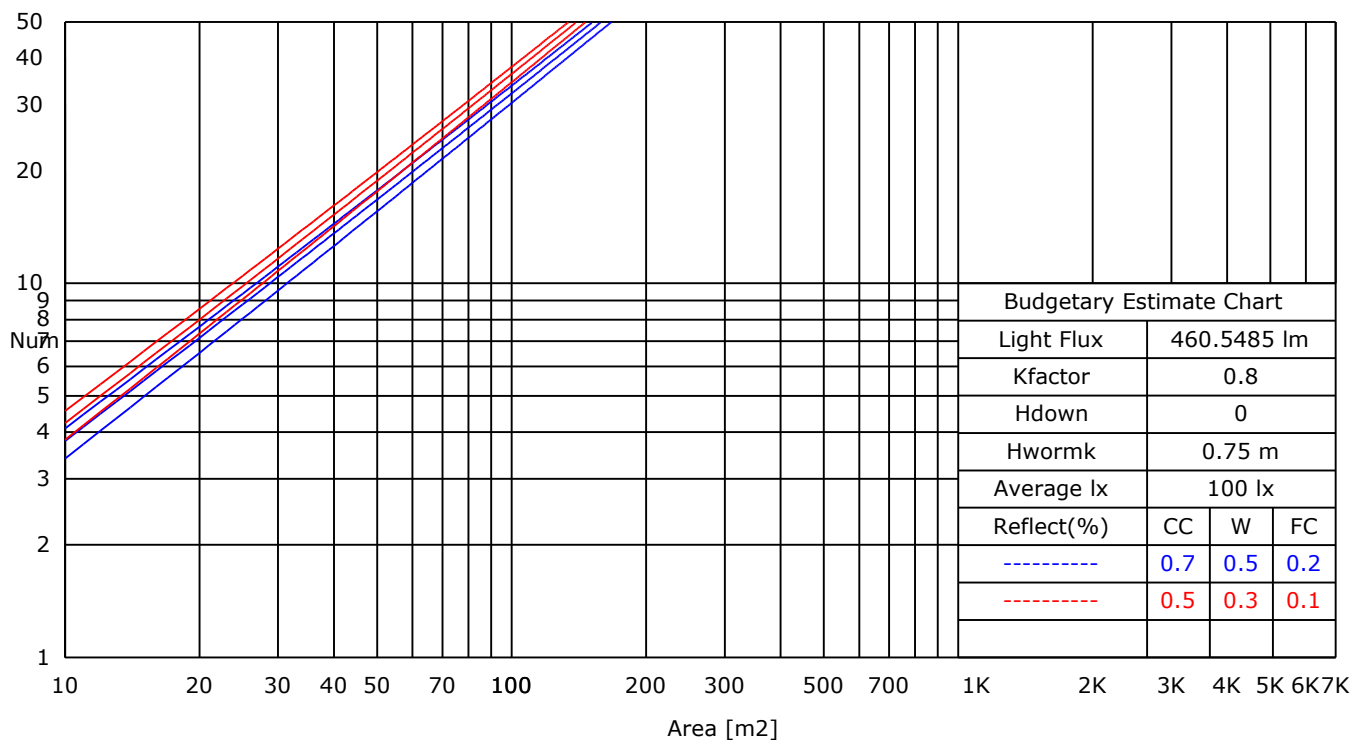
Report No.:

Test Time: 2025/6/19 17:12:58

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	COEFFCIENTS 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	0.94	0.91	0.88	0.93	0.90	0.87	0.90	0.87	0.83	0.86	0.82	0.79	0.81	0.77	0.73	0.68
2	0.90	0.88	0.86	0.89	0.86	0.84	0.87	0.84	0.81	0.84	0.80	0.77	0.79	0.75	0.71	0.67
3	0.87	0.85	0.84	0.87	0.84	0.82	0.84	0.81	0.78	0.81	0.78	0.74	0.77	0.73	0.70	0.65
4	0.85	0.83	0.82	0.84	0.82	0.80	0.82	0.79	0.76	0.79	0.76	0.72	0.76	0.72	0.68	0.64
5	0.83	0.81	0.80	0.82	0.80	0.78	0.80	0.77	0.75	0.78	0.74	0.71	0.74	0.70	0.67	0.63
6	0.81	0.80	0.78	0.80	0.78	0.77	0.78	0.75	0.73	0.76	0.72	0.69	0.73	0.69	0.65	0.62
7	0.80	0.78	0.77	0.79	0.77	0.75	0.77	0.74	0.72	0.74	0.71	0.68	0.72	0.67	0.64	0.61
8	0.78	0.77	0.76	0.77	0.75	0.74	0.75	0.72	0.70	0.73	0.69	0.67	0.70	0.66	0.63	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	0.74	0.73	0.75	0.73	0.72	0.73	0.70	0.68	0.70	0.67	0.65	0.68	0.64	0.61	0.58

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



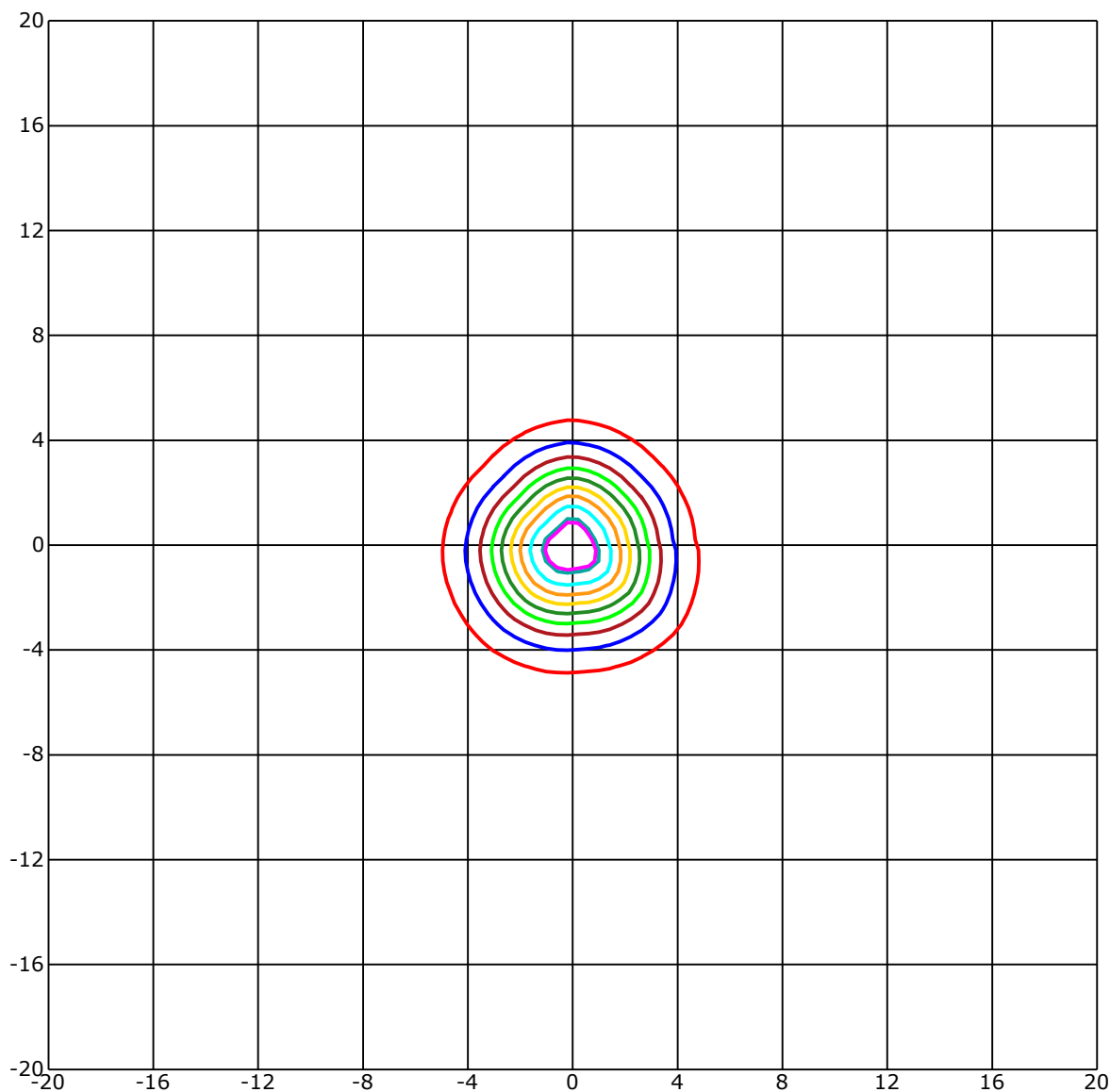
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/6/19 17:12:58

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: 2025/6/19 17:12:58

ISOLX DIAGRAM



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/6/19 17:12:58

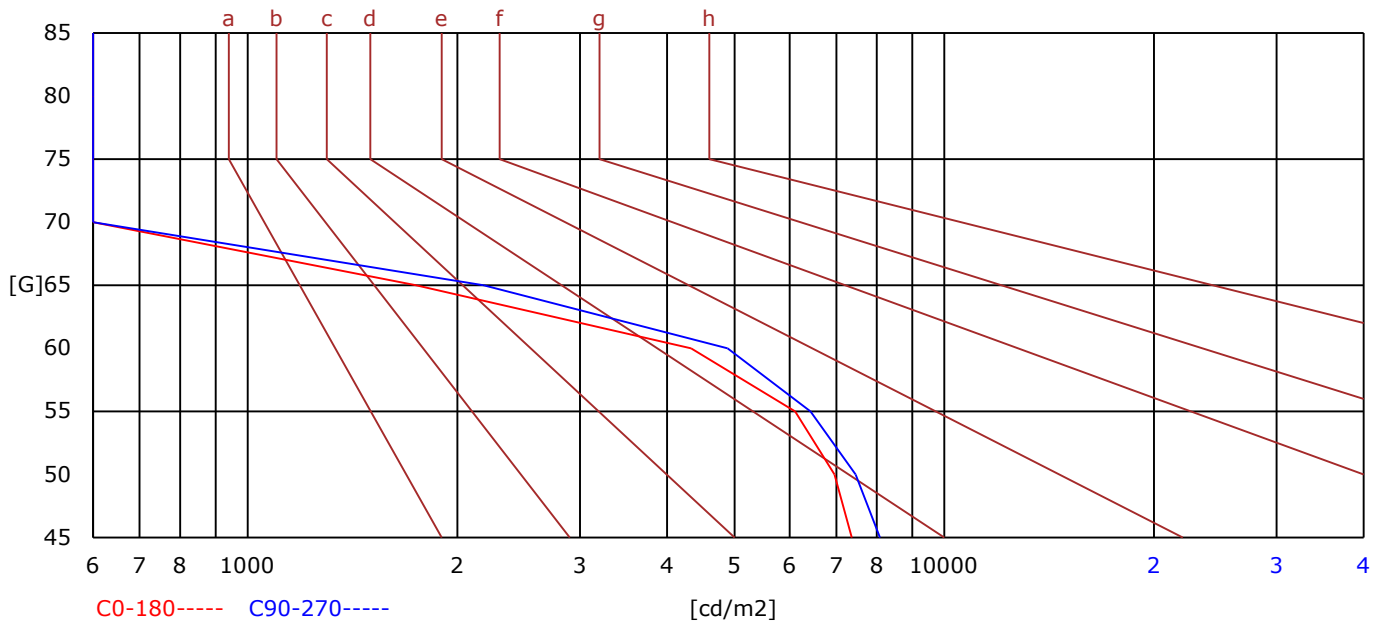
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

Report No.:

Test Time: 2025/6/19 17:12:58

BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	7366	6955	6107	4333	1745	0	0	0	0
C90	8083	7457	6429	4886	2181	0	0	0	0
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



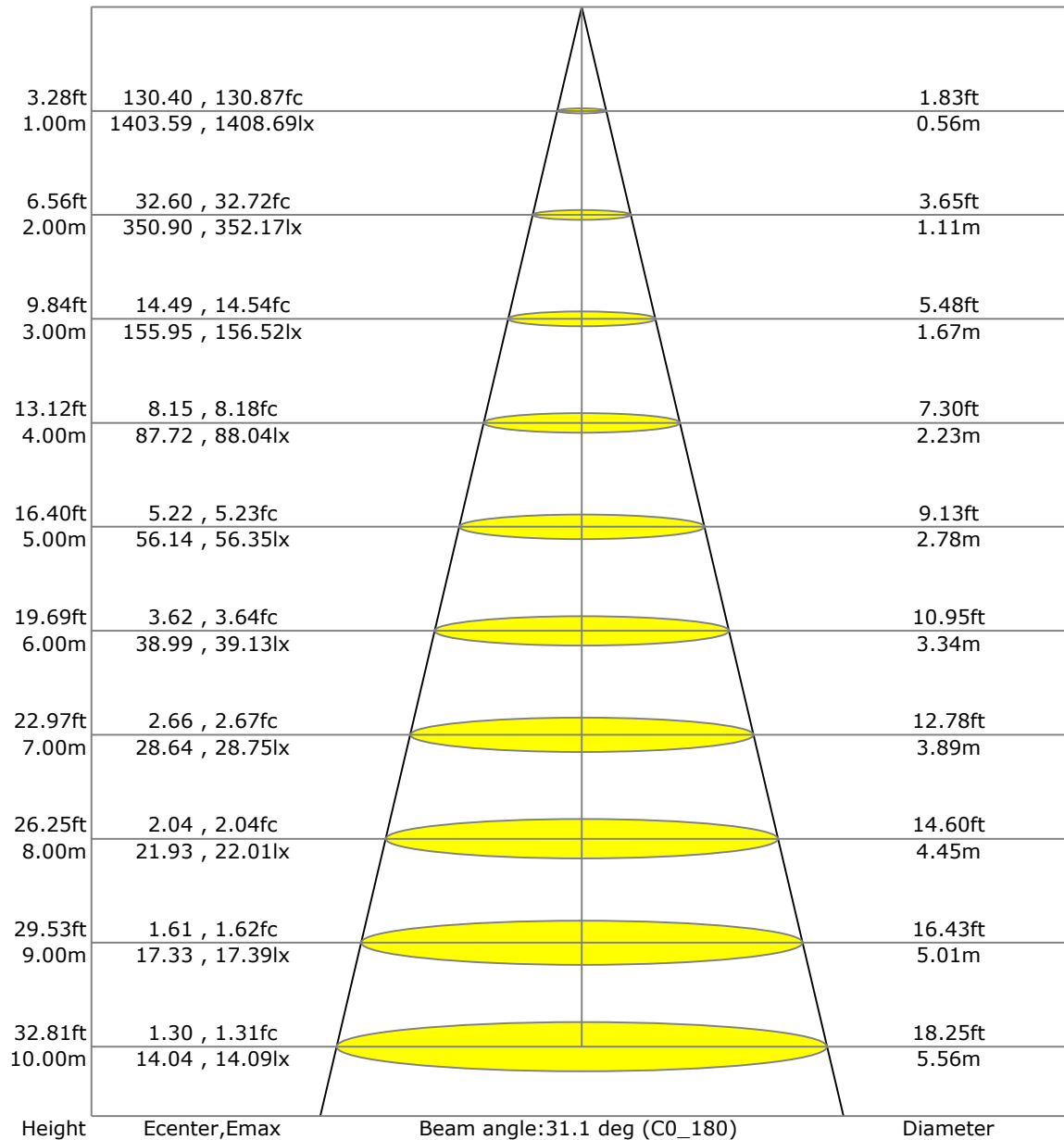
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/6/19 17:12:58

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: 2025/6/19 17:12:58

LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/6/19 17:12:58

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: 2025/6/19 17:12:58

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	9.26	9.31	9.46	9.50	9.74	10.00	10.05	10.20	10.24	10.48
3H	9.26	9.31	9.46	9.50	9.75	9.98	10.03	10.18	10.22	10.47
4H	9.24	9.30	9.45	9.50	9.74	9.96	10.02	10.17	10.22	10.46
6H	9.23	9.29	9.44	9.49	9.74	9.95	10.01	10.17	10.21	10.46
8H	9.22	9.28	9.44	9.48	9.73	9.94	10.00	10.16	10.20	10.45
12H	9.21	9.27	9.43	9.48	9.73	9.93	9.99	10.16	10.20	10.45
4H 2H	9.30	9.35	9.51	9.55	9.80	10.46	10.51	10.67	10.71	10.96
3H	9.29	9.35	9.51	9.55	9.81	10.43	10.49	10.65	10.69	10.95
4H	9.27	9.33	9.50	9.54	9.80	10.41	10.47	10.64	10.68	10.94
6H	9.25	9.31	9.49	9.53	9.79	10.39	10.45	10.63	10.67	10.93
8H	9.24	9.30	9.48	9.52	9.79	10.38	10.43	10.62	10.66	10.93
12H	9.23	9.28	9.48	9.51	9.78	10.37	10.42	10.62	10.65	10.92
8H 4H	9.28	9.33	9.49	9.54	9.79	10.44	10.49	10.66	10.70	10.95
6H	9.21	9.27	9.47	9.51	9.78	10.35	10.41	10.61	10.65	10.92
8H	9.20	9.25	9.46	9.50	9.77	10.34	10.39	10.60	10.64	10.91
12H	9.18	9.23	9.45	9.49	9.77	10.32	10.37	10.59	10.63	10.91
12H 4H	9.23	9.28	9.48	9.51	9.78	10.37	10.42	10.62	10.65	10.92
6H	9.20	9.25	9.46	9.50	9.77	10.34	10.39	10.60	10.64	10.91

C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature: 25
 Operators: QC01
 Test Date: 2025/6/19 17:12:58

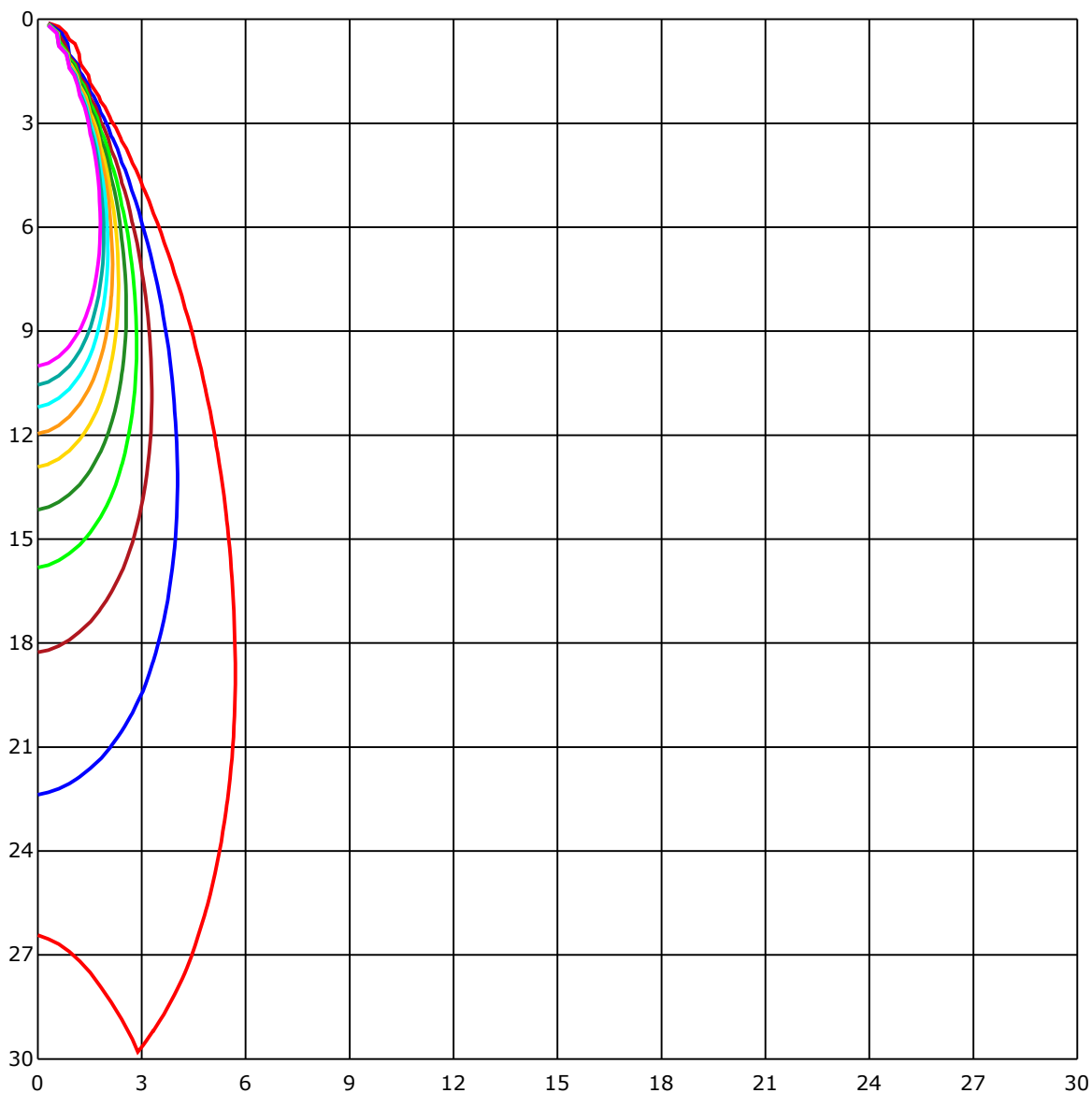
G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-1600B Goniophotometer
 Humidity: 60
 Test Distance: 6.87 m
 Remarks:

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: 2025/6/19 17:12:58

SPACE ISOLX DIAGRAM



14.021	7.011
12.619	5.609
11.217	4.206
9.815	2.804
8.413	1.402

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/6/19 17:12:58

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: 2025/6/19 17:12:58

LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	1403.59	1400.24	1408.64	1403.31	1403.59	1400.24	1408.64	1403.31	1403.59	
G1	1393.96	1387.73	1404.39	1389.1	1408.69	1406.23	1402.08	1405.67	1393.96	
G2	1376.21	1368.85	1396.84	1371.73	1401.7	1402.46	1390.7	1404.49	1376.21	
G3	1351.53	1341.29	1380.75	1343.08	1391.7	1396.84	1371.21	1392.54	1351.53	
G4	1320.24	1310.99	1356.25	1316.27	1371.26	1376.21	1343.93	1377.58	1320.24	
G5	1286.64	1270.59	1323.31	1272.71	1346.72	1354.32	1310.14	1351.48	1286.64	
G6	1241.85	1226.55	1288.24	1231.13	1318.49	1322.32	1274.36	1323.68	1241.85	
G7	1195.59	1178.18	1244.35	1177.19	1278.71	1286.73	1227.26	1286.64	1195.59	
G8	1142.26	1119.79	1196.58	1120.41	1233.68	1245.1	1181.57	1247.41	1142.26	
G9	1086.99	1061.18	1140.56	1060.09	1186.58	1197.1	1127.77	1199.37	1086.99	
G10	1021.91	995.81	1082.23	998.54	1130.6	1145.52	1071.46	1146.7	1021.91	
G11	956.59	929.02	1015.91	928.13	1073.45	1086.8	1009.83	1086.33	956.59	
G12	888.76	858.46	947.38	858.94	1008.93	1027.48	941.72	1027.01	888.76	
G13	820.14	788.8	875.83	786.82	940.21	961.45	872.67	964.04	820.14	
G14	752.41	717.06	802.72	716.78	869.65	894.24	805.37	897.73	752.41	
G15	686.15	648.72	732.35	647.54	798.95	824.44	737.22	832.13	686.15	
G16	620.07	582.74	662.97	583.12	729.19	755.58	669.25	768.22	620.07	
G17	557.21	519.87	596.29	517.99	660.85	685.58	603.55	699.6	557.21	
G18	495.33	460.64	532.38	458.99	595.67	618.18	541.3	635.32	495.33	
G19	439.59	405.99	471.5	405.0	532.99	554.89	481.6	571.98	439.59	
G20	389.52	355.16	415.76	356.38	473.24	494.29	429.63	512.7	389.52	
G21	342.6	310.13	364.83	310.6	418.83	439.4	380.45	458.09	342.6	
G22	298.76	268.13	319.19	269.54	369.03	387.44	333.59	405.56	298.76	
G23	259.25	231.12	276.72	232.49	323.58	339.96	290.92	358.04	259.25	
G24	223.57	197.57	239.15	199.55	281.58	296.4	251.61	314.28	223.57	
G25	191.62	168.16	204.69	168.96	243.39	257.18	216.35	273.84	191.62	
G26	163.44	141.4	174.11	142.39	209.32	221.73	185.72	237.83	163.44	
G27	137.53	118.46	147.02	118.79	178.78	189.64	156.65	205.64	137.53	
G28	115.63	99.3	124.32	98.88	152.59	161.7	132.06	176.47	115.63	
G29	96.94	82.55	105.2	81.75	130.59	137.15	110.25	149.8	96.94	
G30	79.86	67.77	88.49	67.44	110.58	116.15	91.37	126.91	79.86	
G31	66.03	55.79	74.1	55.31	93.26	97.41	75.56	106.9	66.03	
G32	54.37	45.07	62.16	45.03	78.54	81.56	62.68	90.0	54.37	
G33	43.8	36.53	52.06	36.72	66.22	69.0	51.92	75.47	43.8	
G34	35.3	29.5	43.28	29.83	55.6	57.82	42.24	62.82	35.3	
G35	28.13	23.46	36.2	23.88	46.3	47.86	34.31	52.11	28.13	
G36	22.18	18.36	30.16	18.78	38.65	39.93	27.42	43.04	22.18	

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/6/19 17:12:58

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: 2025/6/19 17:12:58

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	16.9	13.97	24.45	14.21	32.14	33.32	21.66	35.49	16.9	
G38	12.65	10.05	19.92	10.43	26.24	27.28	16.71	29.31	12.65	
G39	9.49	7.79	16.09	8.07	21.52	22.47	12.51	23.83	9.49	
G40	7.98	6.94	13.78	7.08	17.18	18.03	9.49	19.35	7.98	
G41	7.17	6.32	12.55	6.51	14.73	14.91	7.93	15.91	7.17	
G42	6.61	5.95	11.66	6.28	13.26	13.4	7.08	14.06	6.61	
G43	6.32	5.71	11.23	5.95	12.55	12.55	6.65	12.93	6.32	
G44	6.14	5.43	10.76	5.85	11.85	11.8	6.61	12.22	6.14	
G45	5.95	5.33	10.29	5.85	11.52	11.37	6.23	11.66	5.95	
G46	5.76	5.05	9.91	5.62	10.86	11.09	6.14	11.23	5.76	
G47	5.66	5.19	9.53	5.33	10.71	10.62	6.04	10.76	5.66	
G48	5.57	4.96	9.3	5.33	10.24	10.29	5.9	10.71	5.57	
G49	5.38	4.91	9.11	5.1	10.01	10.01	5.76	10.24	5.38	
G50	5.1	4.58	8.83	4.91	9.63	9.77	5.66	9.82	5.1	
G51	5.05	4.48	8.4	4.67	9.34	9.3	5.38	9.58	5.05	
G52	4.86	4.29	8.02	4.44	9.01	9.01	5.14	9.3	4.86	
G53	4.53	4.2	7.79	4.29	8.68	8.54	4.91	8.87	4.53	
G54	4.34	3.92	7.55	4.01	8.4	8.26	4.58	8.4	4.34	
G55	4.01	3.59	7.13	3.78	8.07	7.93	4.39	7.98	4.01	
G56	3.73	3.3	6.7	3.54	7.65	7.46	4.01	7.74	3.73	
G57	3.49	3.02	6.37	3.16	7.27	7.08	3.63	7.22	3.49	
G58	3.16	2.83	5.95	3.02	6.84	6.61	3.3	6.61	3.16	
G59	2.93	2.45	5.62	2.6	6.42	6.23	3.11	6.28	2.93	
G60	2.55	2.22	5.14	2.5	6.18	5.76	2.78	6.04	2.55	
G61	2.31	2.03	4.86	2.12	5.62	5.43	2.41	5.52	2.31	
G62	1.84	1.65	4.34	1.84	5.14	4.96	1.94	5.14	1.84	
G63	1.65	1.27	4.01	1.42	4.77	4.53	1.75	4.67	1.65	
G64	1.32	1.04	3.68	1.27	4.44	4.15	1.6	4.29	1.32	
G65	0.99	0.76	3.3	0.94	3.96	3.73	1.04	3.87	0.99	
G66	0.61	0.52	2.88	0.61	3.54	3.49	0.76	3.54	0.61	
G67	0.42	0.14	2.55	0.33	3.21	3.11	0.52	3.07	0.42	
G68	0.09	0.0	2.36	0.0	2.74	2.6	0.24	2.78	0.09	
G69	0.0	0.0	2.08	0.0	2.45	2.31	0.0	2.41	0.0	
G70	0.0	0.0	1.7	0.0	2.17	1.98	0.0	2.12	0.0	
G71	0.0	0.0	1.32	0.0	1.89	1.65	0.0	1.79	0.0	
G72	0.0	0.0	1.18	0.0	1.42	1.37	0.0	1.51	0.0	
G73	0.0	0.0	0.8	0.0	1.18	0.94	0.0	1.27	0.0	

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/6/19 17:12:58

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

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

C Interval: 45.0 Deg

Temperature: 25

Test Date: 2025/

G Interval: 1.0 Deg

Humidity: 60

Remarks: