

Report No.:

Test Time: 2024/7/23 17:29:47

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: InBright
Luminaire Type: IBSP104SCT120-24°-28W
Lamp Type:
Luminous Width: 111 mm
Luminous Length: 111 mm
Luminous Height: 97 mm

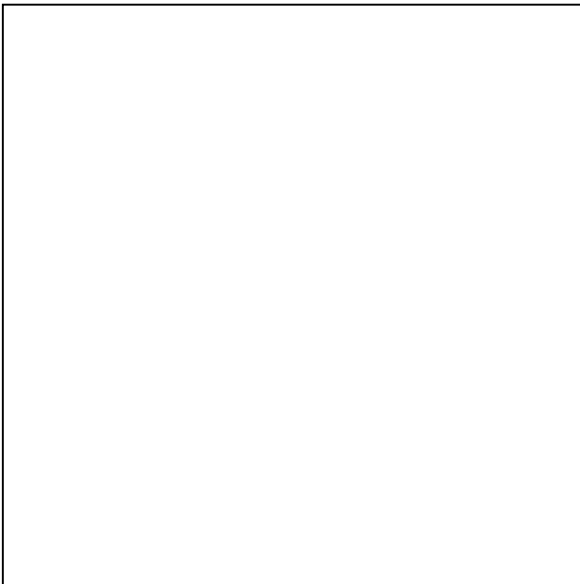
Voltage(V): 219.70 V
Current(A): 0.1330 A
Power(W): 27.96 W
Power Factor: 0.9560
Lamp Luminous Flux: 2630.18

Photometric Results

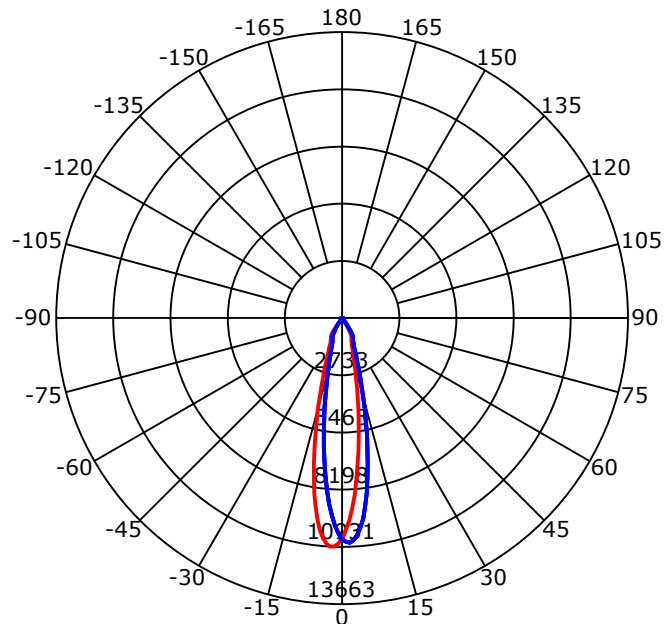
CIE Class: Direct
Luminaire Luminous Flux: 2630.18 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 94.06 lm/W
Beam Angle(50%) C0-180,C90-270: 21.7,21.9
Field Angle(10%) C0-180,C90-270: 53.7,54.1
S/MH C0-180,C90-270: 0.389,0.389

Max. Intensity: 10930.76 cd
Max.Intensity Angle: C=180 Gamma=3
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 10531.55 cd
Effective Luminous Flux: 2075.70 lm
ERP(ϕ use)(120deg): 2616.25 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 21.7 deg,21.9 deg

C0-180 — C90-270 —

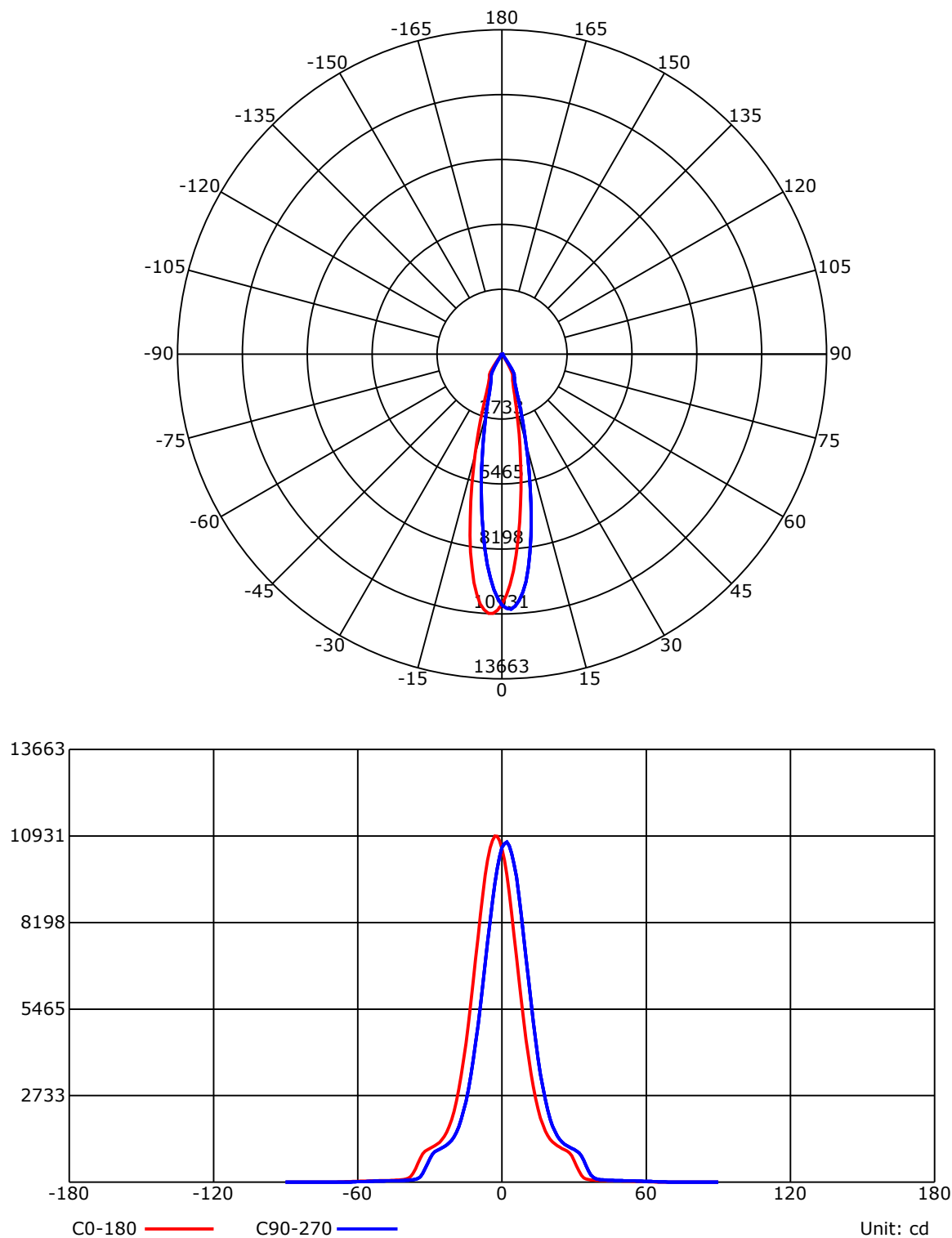
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:29:47

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

Report No.:

Test Time: 2024/7/23 17:29:47

Luminous Intensity Distribution Curve



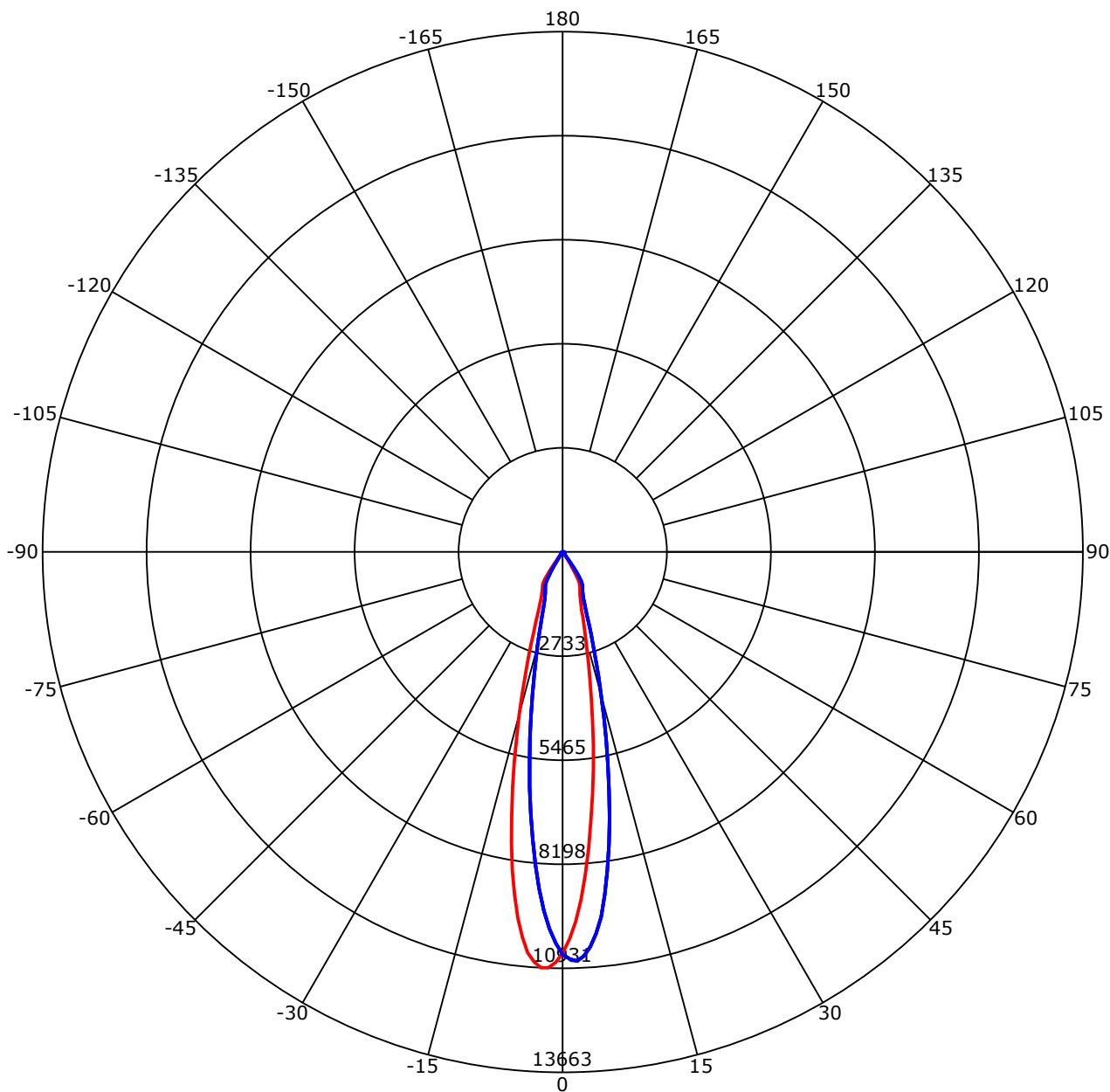
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:29:47

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

Report No.:

Test Time: 2024/7/23 17:29:47

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: 2024/7/23 17:29:47

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

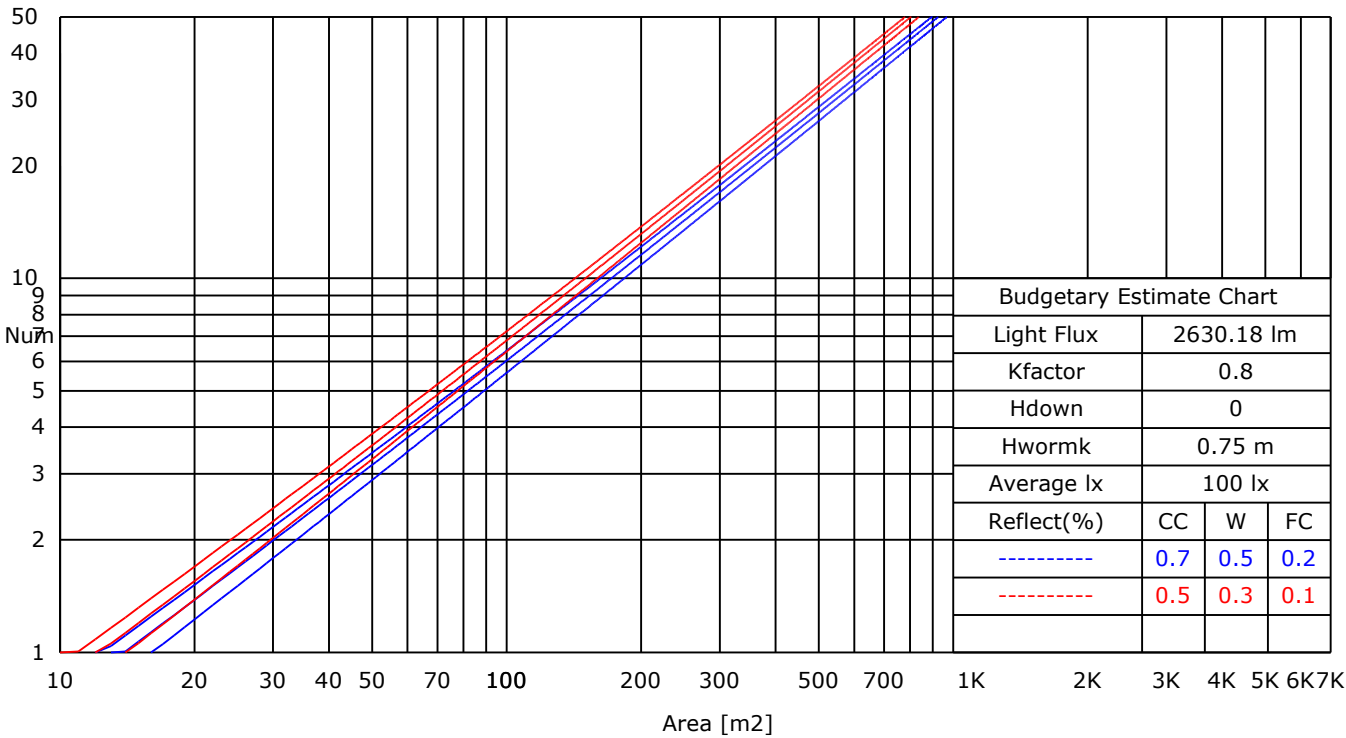
Report No.:

Test Time: 2024/7/23 17:29:47

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	0.90	0.87	0.84	0.90	0.86	0.83	0.87	0.83	0.80	0.83	0.79	0.76	0.78	0.74	0.70	0.65
2	0.85	0.83	0.81	0.85	0.82	0.79	0.83	0.79	0.76	0.80	0.76	0.72	0.76	0.71	0.67	0.63
3	0.82	0.80	0.78	0.82	0.79	0.76	0.80	0.76	0.73	0.77	0.73	0.69	0.74	0.69	0.65	0.61
4	0.79	0.77	0.76	0.79	0.76	0.74	0.77	0.74	0.71	0.75	0.71	0.67	0.72	0.67	0.63	0.59
5	0.77	0.75	0.73	0.76	0.74	0.72	0.75	0.71	0.69	0.73	0.69	0.65	0.70	0.65	0.61	0.57
6	0.75	0.73	0.72	0.74	0.72	0.70	0.73	0.69	0.67	0.71	0.67	0.63	0.68	0.64	0.60	0.56
7	0.73	0.71	0.70	0.72	0.70	0.68	0.71	0.67	0.65	0.69	0.65	0.62	0.67	0.62	0.58	0.55
8	0.71	0.69	0.68	0.70	0.68	0.67	0.69	0.66	0.64	0.67	0.63	0.60	0.65	0.61	0.57	0.54
9	0.69	0.68	0.67	0.69	0.67	0.65	0.67	0.64	0.62	0.66	0.62	0.59	0.64	0.59	0.56	0.52
10	0.68	0.66	0.65	0.67	0.65	0.64	0.66	0.63	0.61	0.64	0.60	0.58	0.62	0.58	0.55	0.51

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



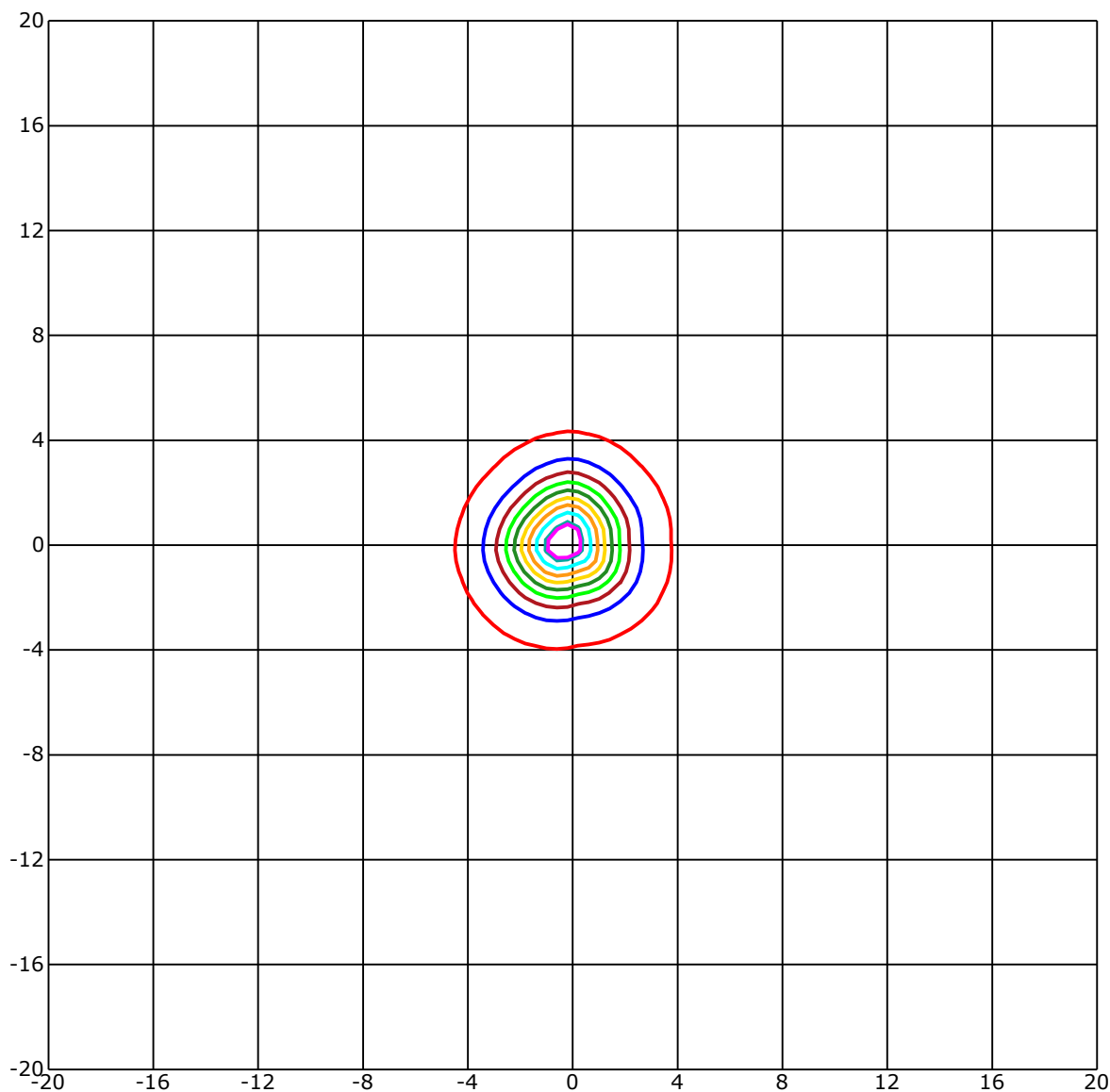
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:29:47

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

Report No.:

Test Time: 2024/7/23 17:29:47

ISOLX DIAGRAM



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

100.284(92%Emax)	54.502(50%Emax)
98.104(90%Emax)	43.602(40%Emax)
87.204(80%Emax)	32.701(30%Emax)
76.303(70%Emax)	21.801(20%Emax)
65.403(60%Emax)	10.9(10%Emax)

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:29:47

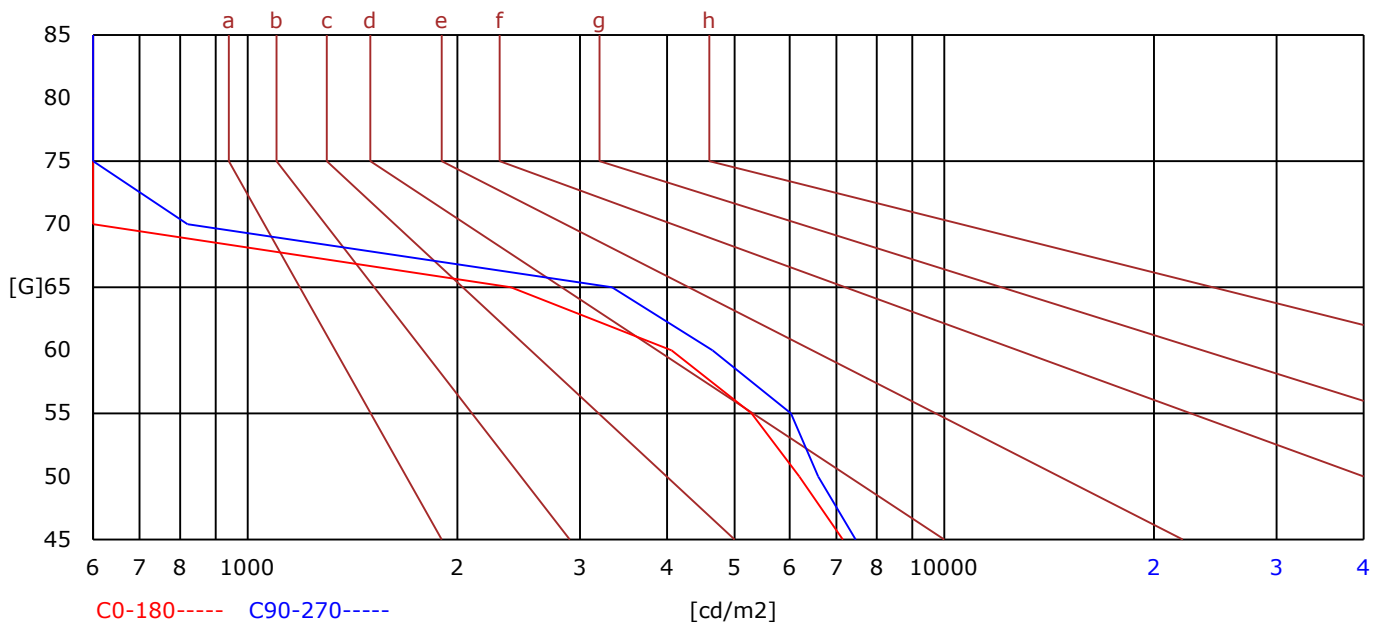
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

Report No.:

Test Time: 2024/7/23 17:29:47

BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	7152	6195	5291	4059	2388	575	0	0	0
C90	7461	6592	6022	4649	3336	820	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



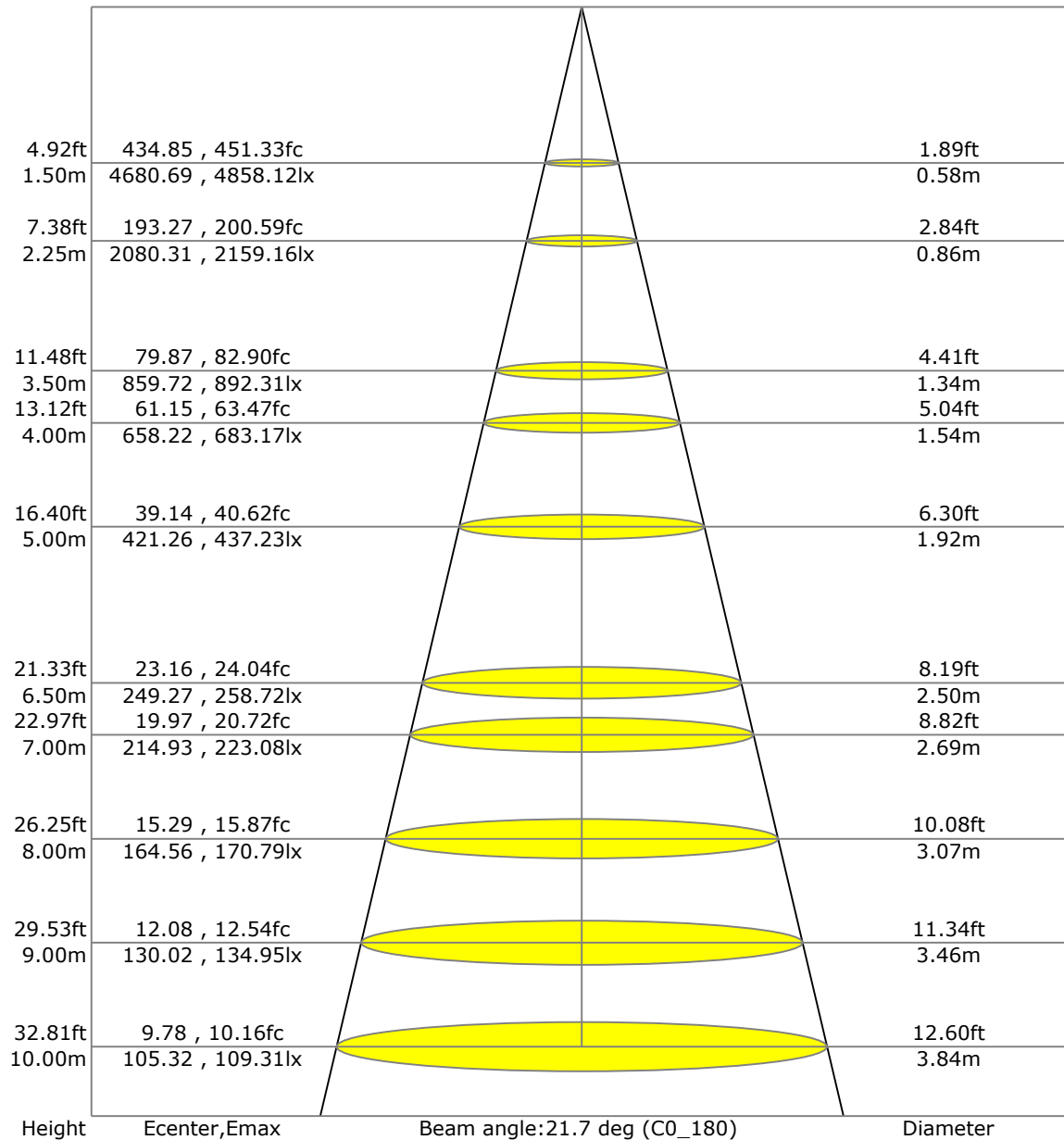
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:29:47

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

Report No.:

Test Time: 2024/7/23 17:29:47

LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:29:47

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

Report No.:

Test Time: 2024/7/23 17:29:47

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	8.17	8.22	8.37	8.41	8.66	8.27	8.33	8.47	8.52	8.76
	3H	8.15	8.21	8.35	8.40	8.65	8.25	8.31	8.46	8.50	8.75
	4H	8.13	8.19	8.34	8.39	8.64	8.24	8.30	8.45	8.49	8.74
	6H	8.11	8.18	8.33	8.38	8.63	8.22	8.28	8.44	8.48	8.73
	8H	8.11	8.17	8.32	8.37	8.62	8.21	8.27	8.43	8.48	8.73
	12H	8.10	8.16	8.32	8.36	8.62	8.20	8.26	8.42	8.47	8.73
4H	2H	8.15	8.21	8.36	8.41	8.66	8.33	8.39	8.54	8.59	8.84
	3H	8.12	8.19	8.35	8.39	8.65	8.30	8.36	8.52	8.57	8.82
	4H	8.10	8.17	8.33	8.38	8.64	8.28	8.34	8.51	8.55	8.81
	6H	8.08	8.14	8.32	8.36	8.63	8.25	8.32	8.49	8.54	8.80
	8H	8.07	8.13	8.31	8.35	8.62	8.24	8.30	8.49	8.53	8.80
	12H	8.05	8.11	8.30	8.35	8.62	8.23	8.29	8.48	8.52	8.79
8H	4H	8.13	8.19	8.35	8.39	8.65	8.30	8.37	8.52	8.57	8.82
	6H	8.04	8.10	8.30	8.34	8.61	8.21	8.27	8.47	8.51	8.78
	8H	8.02	8.08	8.29	8.33	8.60	8.20	8.25	8.46	8.50	8.78
	12H	8.01	8.06	8.28	8.32	8.60	8.18	8.23	8.45	8.49	8.77
12H	4H	8.05	8.11	8.30	8.35	8.62	8.23	8.29	8.48	8.52	8.79
	6H	8.02	8.08	8.29	8.33	8.60	8.20	8.25	8.46	8.50	8.78

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:29:47

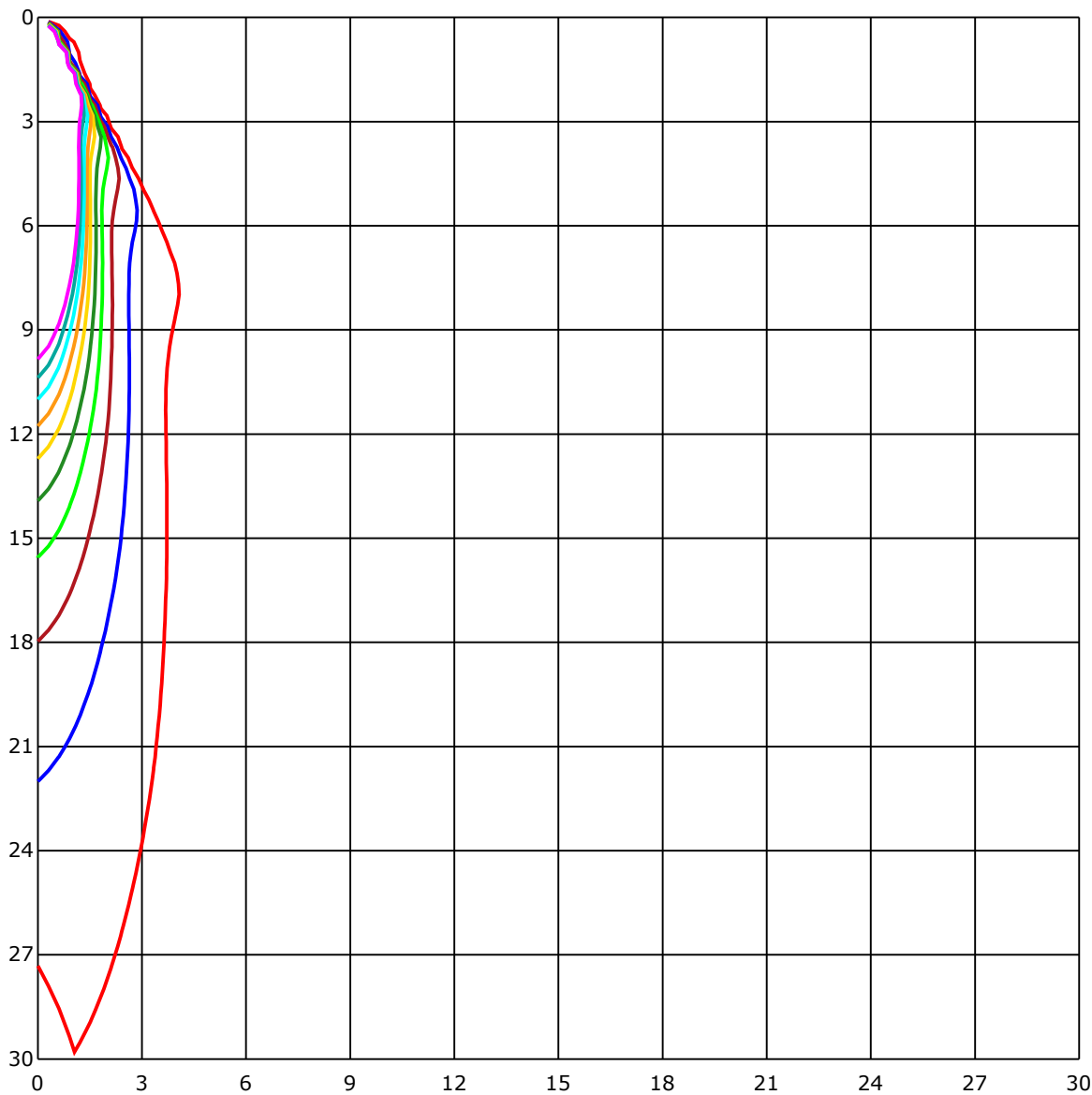
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

Report No.:

Test Time: 2024/7/23 17:29:47

SPACE ISOLX DIAGRAM



108.735

97.861

86.988

76.114

65.241

54.367

43.494

32.62

21.747

10.873

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2024/7/23 17:29:47

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 60

Test Distance: 6.7 m

Remarks:

Report No.:

Test Time: 2024/7/23 17:29:47

LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	10531.55	10714.39	10564.1	10755.42	10531.55	10714.39	10564.1	10755.42	10531.55	
G1	10158.97	10508.7	10689.75	10905.44	10779.88	10767.22	10277.79	10513.55	10158.97	
G2	9701.58	10212.16	10742.67	10888.11	10919.9	10680.23	9902.37	10175.71	9701.58	
G3	9138.26	9790.73	10621.92	10716.54	10930.76	10485.14	9428.65	9730.54	9138.26	
G4	8499.11	9279.98	10388.94	10432.26	10789.89	10184.96	8869.64	9139.2	8499.11	
G5	7815.17	8717.05	10054.06	10043.15	10560.06	9732.2	8249.17	8552.44	7815.17	
G6	7097.29	8066.1	9630.48	9494.41	10161.12	9235.04	7579.86	7883.9	7097.29	
G7	6416.58	7393.74	9050.77	8917.26	9689.28	8620.9	6912.03	7202.38	6416.58	
G8	5753.46	6716.4	8437.84	8257.69	9080.17	7994.24	6237.15	6531.85	5753.46	
G9	5124.55	6042.01	7758.38	7551.75	8452.97	7323.71	5577.9	5851.55	5124.55	
G10	4503.32	5410.59	7089.57	6814.71	7745.99	6629.94	4961.2	5182.51	4503.32	
G11	3952.43	4802.11	6376.36	6111.91	7031.97	5945.28	4379.56	4574.52	3952.43	
G12	3446.16	4215.31	5717.1	5432.59	6324.1	5315.2	3840.34	4012.04	3446.16	
G13	3019.08	3699.88	5067.95	4805.61	5654.25	4712.78	3355.08	3519.92	3019.08	
G14	2635.04	3232.8	4476.16	4191.29	5003.39	4157.98	2922.7	3074.47	2635.04	
G15	2312.42	2809.13	3912.88	3634.74	4397.38	3630.7	2553.16	2694.52	2312.42	
G16	2029.07	2457.19	3415.46	3152.36	3844.38	3188.13	2247.64	2351.25	2029.07	
G17	1811.0	2160.42	2983.17	2758.13	3358.71	2777.52	1973.86	2087.65	1811.0	
G18	1615.41	1911.82	2613.68	2384.69	2928.89	2424.19	1744.25	1841.79	1615.41	
G19	1471.76	1706.9	2279.16	2090.39	2556.53	2132.95	1569.8	1648.9	1471.76	
G20	1358.42	1543.18	2003.35	1847.04	2231.3	1889.91	1434.86	1493.49	1358.42	
G21	1272.0	1417.04	1780.7	1646.48	1974.04	1687.15	1322.19	1377.54	1272.0	
G22	1204.22	1308.9	1605.09	1487.43	1755.6	1531.15	1239.86	1280.71	1204.22	
G23	1151.52	1234.88	1459.87	1371.26	1583.94	1410.35	1174.91	1216.43	1151.52	
G24	1106.0	1172.93	1350.74	1274.74	1446.0	1312.85	1124.54	1159.33	1106.0	
G25	1063.0	1118.43	1263.2	1203.73	1344.64	1237.12	1084.72	1116.01	1063.0	
G26	1026.23	1077.18	1199.6	1146.63	1260.74	1178.23	1046.75	1077.27	1026.23	
G27	981.34	1034.54	1146.54	1103.76	1197.67	1130.33	1005.4	1044.68	981.34	
G28	930.21	994.27	1106.49	1062.19	1146.36	1085.08	960.65	1005.58	930.21	
G29	834.59	952.52	1068.11	1031.93	1109.23	1047.78	880.07	966.53	834.59	
G30	680.94	896.81	1030.9	997.14	1069.82	1011.19	744.5	912.66	680.94	
G31	513.59	826.92	987.31	961.36	1029.78	967.11	587.88	832.08	513.59	
G32	351.76	740.1	929.36	918.94	977.39	917.64	420.17	733.28	351.76	
G33	220.81	641.16	828.85	866.6	891.92	847.25	273.11	619.89	220.81	
G34	137.77	537.15	685.2	789.44	756.8	757.25	167.84	502.05	137.77	
G35	102.12	433.59	517.54	691.35	595.06	653.46	115.1	386.14	102.12	
G36	80.8	336.72	355.3	587.12	424.03	548.6	89.78	287.52	80.8	

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:29:47

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

Report No.:

Test Time: 2024/7/23 17:29:47

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	70.52	254.93	228.94	470.18	278.95	441.54	73.62	211.25	70.52	
G38	64.55	187.77	151.82	356.11	179.78	345.83	65.67	157.97	64.55	
G39	60.42	142.75	112.67	262.61	128.34	261.62	60.38	125.69	60.42	
G40	56.56	113.84	91.76	189.03	99.97	198.05	56.88	104.06	56.56	
G41	52.25	94.81	80.04	135.21	85.78	152.58	52.52	92.34	52.25	
G42	49.92	83.76	74.07	103.16	76.54	124.48	49.83	82.42	49.92	
G43	48.48	72.59	67.78	85.2	71.64	104.59	47.22	76.67	48.48	
G44	45.97	68.5	62.8	71.51	65.49	92.2	45.92	73.31	45.97	
G45	45.29	62.31	59.43	65.0	61.99	82.46	44.22	69.62	45.29	
G46	43.86	59.52	56.07	61.1	58.27	76.22	43.81	67.78	43.86	
G47	43.41	58.36	53.96	58.63	55.66	70.12	42.02	65.31	43.41	
G48	41.48	54.86	51.44	55.48	52.75	67.92	41.39	61.5	41.48	
G49	40.4	51.58	49.96	53.33	52.84	64.6	38.65	60.29	40.4	
G50	38.16	49.06	48.93	52.21	49.2	60.65	36.85	57.1	38.16	
G51	37.44	47.36	47.18	49.33	49.15	58.27	35.28	56.16	37.44	
G52	35.42	45.38	45.7	47.72	47.22	55.21	33.22	52.03	35.42	
G53	31.96	43.32	43.9	46.28	46.78	51.85	31.15	49.02	31.96	
G54	30.12	39.77	42.56	43.18	43.9	49.29	29.49	46.55	30.12	
G55	26.98	37.39	39.41	42.56	42.15	46.55	27.02	43.9	26.98	
G56	24.33	34.83	37.84	38.65	38.7	44.13	25.05	40.09	24.33	
G57	23.12	31.78	34.97	36.99	36.54	41.7	22.67	37.89	23.12	
G58	20.47	29.49	33.76	36.05	34.48	39.14	20.6	34.3	20.47	
G59	18.05	28.82	29.94	31.15	32.68	35.42	17.37	31.87	18.05	
G60	15.17	25.0	28.28	28.64	28.46	32.64	16.65	29.49	15.17	
G61	12.25	21.23	25.63	25.81	26.35	29.9	11.58	27.65	12.25	
G62	8.62	20.07	24.64	23.57	24.47	28.15	8.84	24.02	8.62	
G63	6.51	17.64	20.51	20.87	21.5	24.06	4.49	21.91	6.51	
G64	4.31	16.25	18.54	20.07	18.94	22.76	3.23	18.67	4.31	
G65	3.55	12.43	14.28	17.37	15.44	19.17	1.35	15.85	3.55	
G66	2.29	11.49	10.77	13.47	11.4	16.97	0.99	14.68	2.29	
G67	1.44	7.5	8.08	11.9	8.26	13.65	0.18	10.28	1.44	
G68	0.88	5.48	6.73	8.84	6.64	11.67	0.0	9.16	0.88	
G69	0.31	3.32	6.15	5.7	5.52	7.59	0.0	7.41	0.31	
G70	0.0	2.42	5.16	3.46	4.62	5.84	0.0	6.26	0.0	
G71	0.0	1.44	4.42	2.15	3.23	5.05	0.0	5.12	0.0	
G72	0.0	0.72	3.68	1.39	2.69	4.26	0.0	3.05	0.0	
G73	0.0	0.0	2.81	0.63	1.57	3.52	0.0	3.01	0.0	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2024/7/23 17:29:47

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 60

Test Distance: 6.7 m

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

Remarks: