

Report No.:

Test Time: 2024/7/23 17:00:07

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: InBright
Luminaire Type: IBSP104SCT120-38°-28W
Lamp Type:
Luminous Width: 111 mm
Luminous Length: 111 mm
Luminous Height: 97 mm

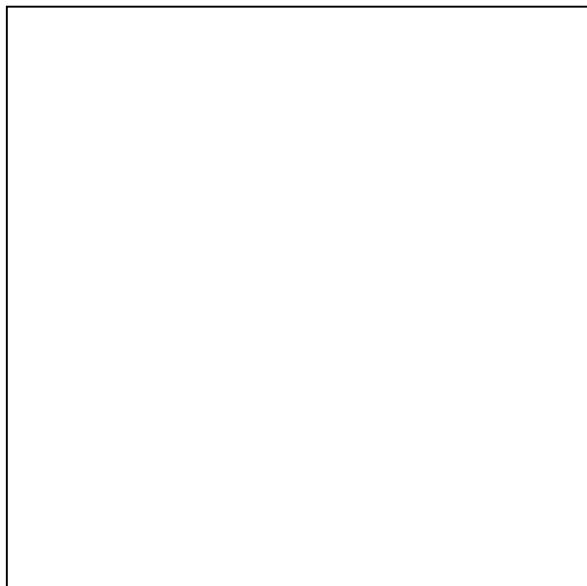
Voltage(V): 219.70 V
Current(A): 0.1350 A
Power(W): 28.44 W
Power Factor: 0.9540
Lamp Luminous Flux: 2737.75

Photometric Results

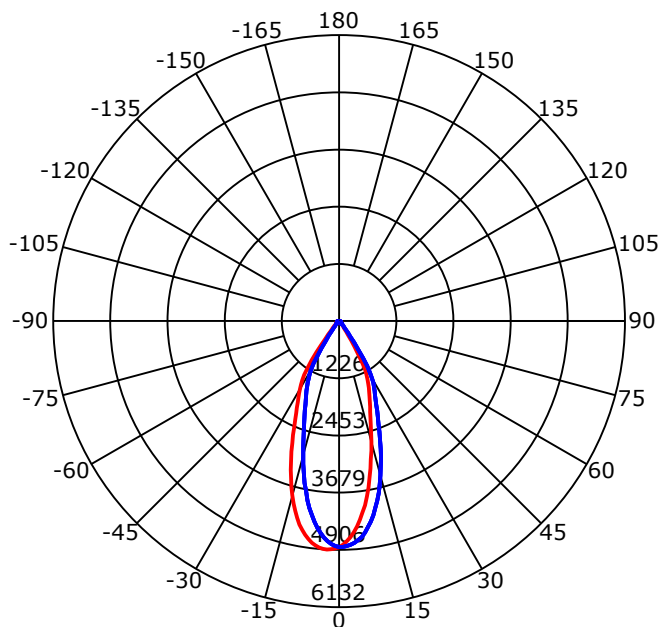
CIE Class: Direct
Luminaire Luminous Flux: 2737.749 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 96.26 lm/W
Beam Angle(50%) C0-180,C90-270: 39.4,38.7
Field Angle(10%) C0-180,C90-270: 69.9,69.7
S/MH C0-180,C90-270: 0.650,0.650

Max. Intensity: 4905.98 cd
Max.Intensity Angle: C=180 Gamma=3
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 4848.57 cd
Effective Luminous Flux: 2478.38 lm
ERP(ϕ use)(120deg): 2695.41 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 39.4 deg,38.7 deg

C0-180 — C90-270 —

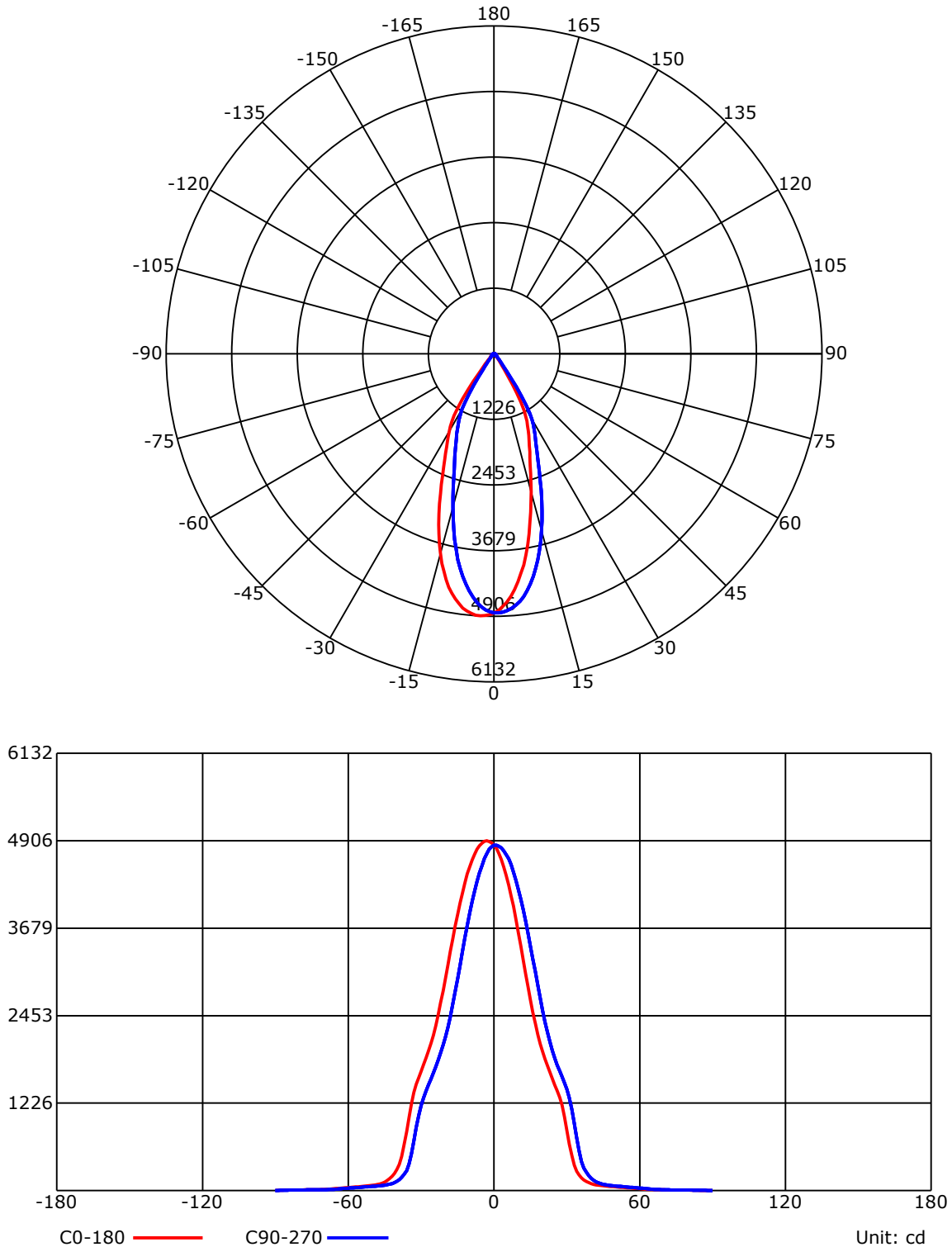
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:00:07

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 17:00:07

Luminous Intensity Distribution Curve



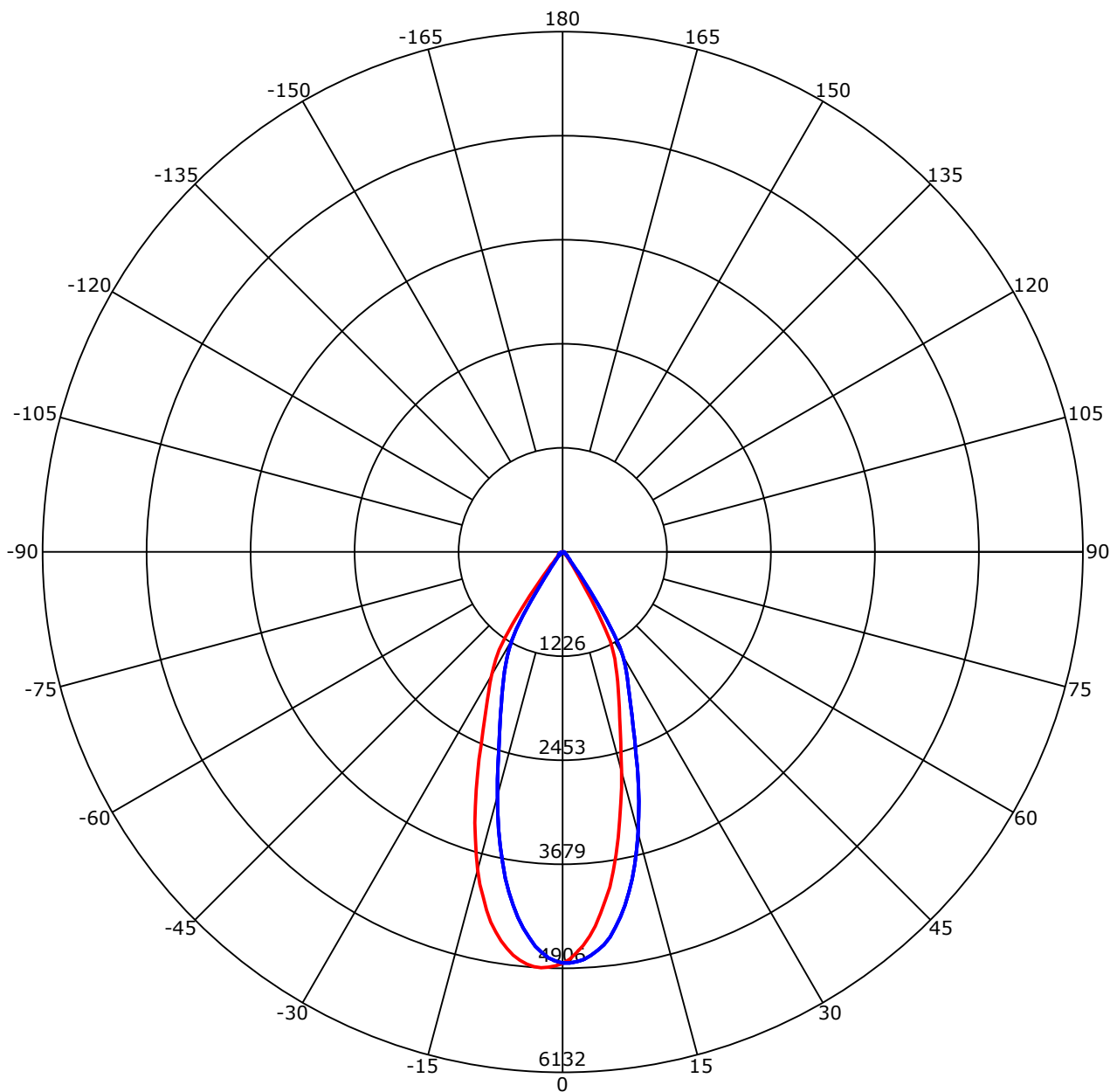
C Range: 0 - 360 Deg
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Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:00:07

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Humidity: 60
Test Distance: 6.7 m
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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: 2024/7/23 17:00:07

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

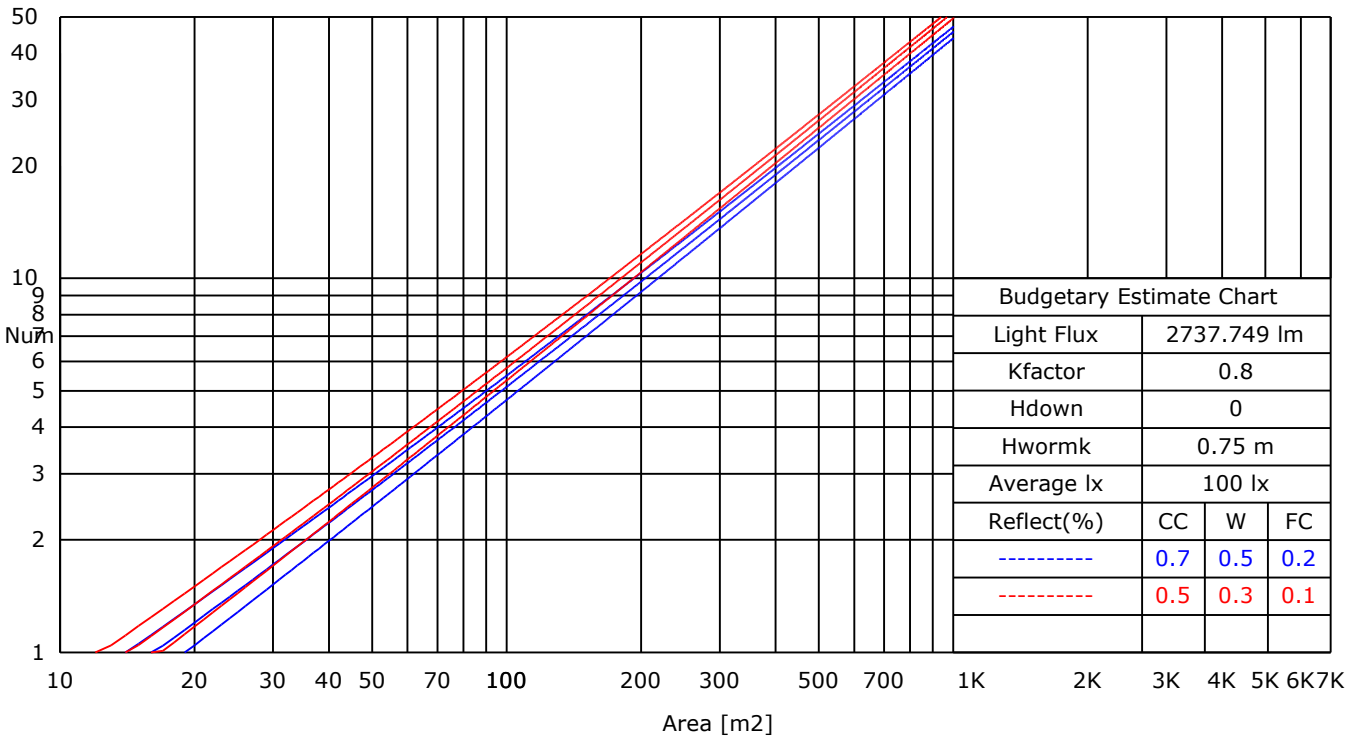
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UTILIZATION FACTORS TABLE

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

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



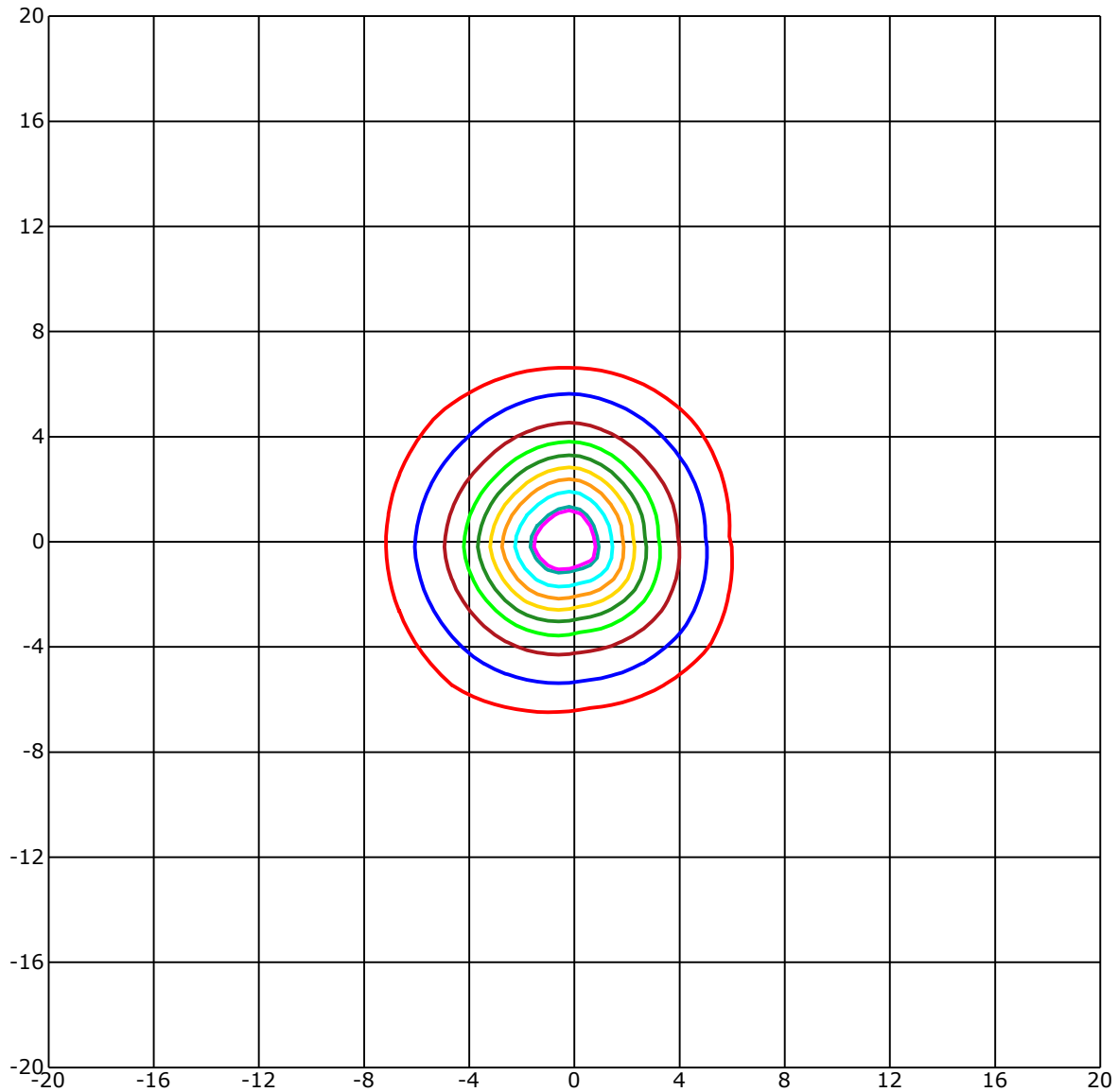
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:00:07

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



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

44.95(92%Emax)	24.429(50%Emax)
43.973(90%Emax)	19.543(40%Emax)
39.087(80%Emax)	14.658(30%Emax)
34.201(70%Emax)	9.772(20%Emax)
29.315(60%Emax)	4.886(10%Emax)

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
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Test Date: 2024/7/23 17:00:07

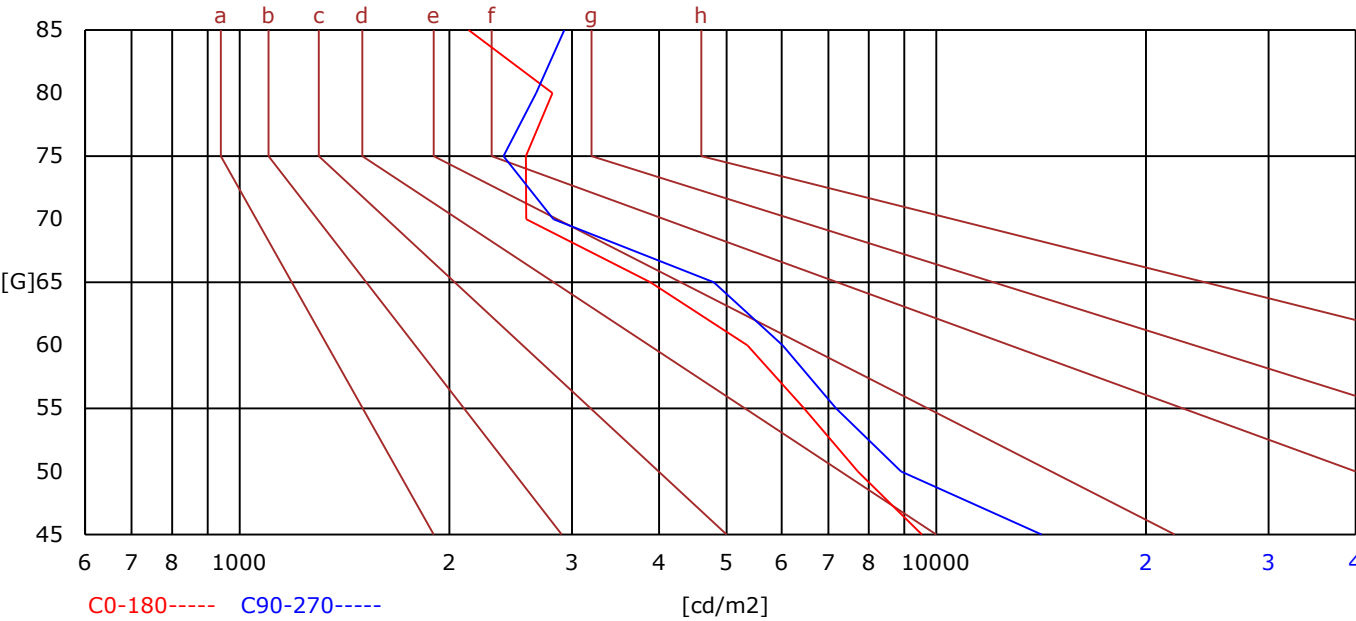
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	9532	7720	6460	5356	3888	2578	2576	2812	2132
C90	14169	8905	7184	6019	4793	2823	2393	2665	2926
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



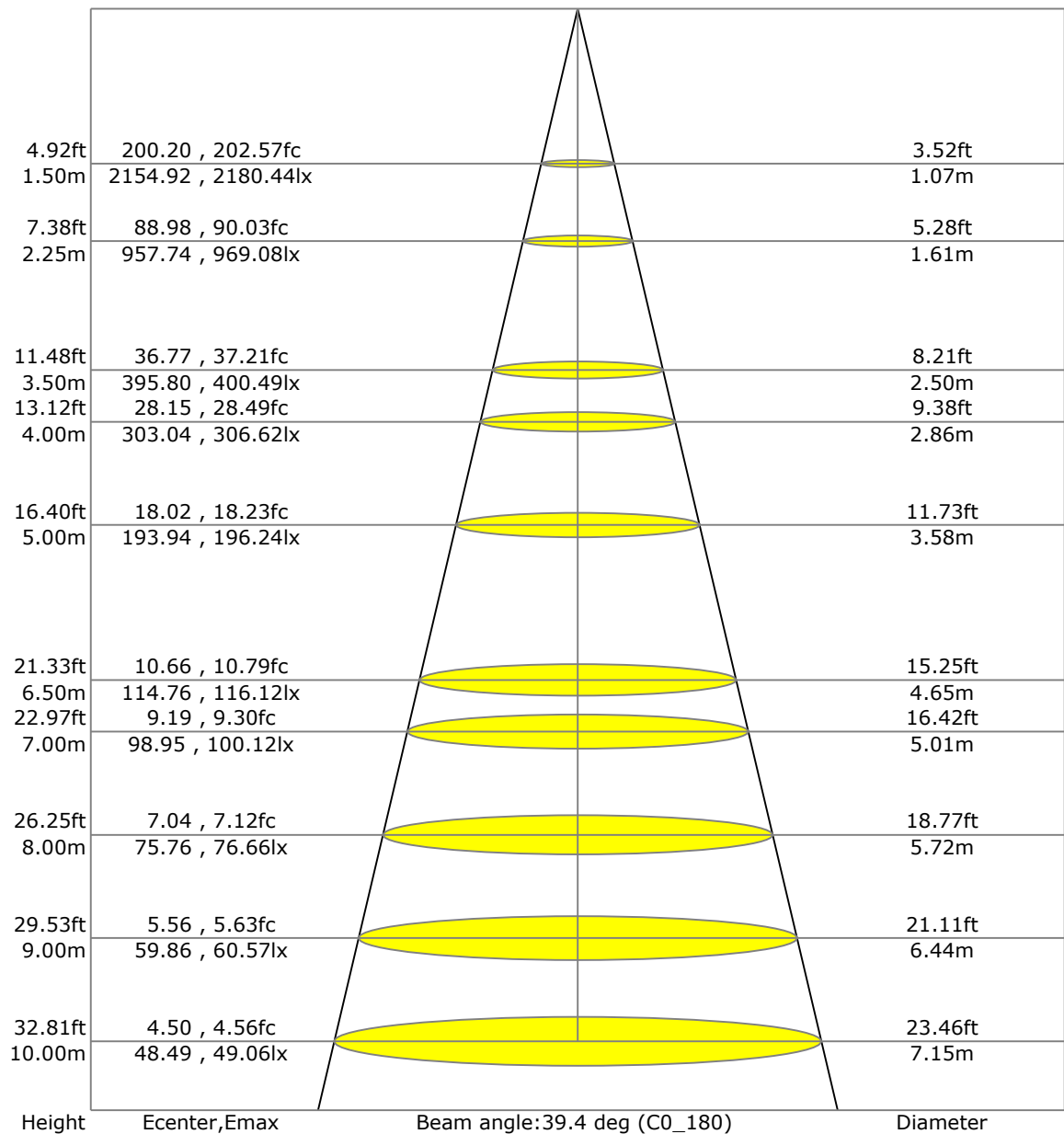
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:00:07

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.:

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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: 2024/7/23 17:00:07

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 17:00:07

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	9.19	9.24	9.39	9.43	9.67	9.28	9.33	9.48	9.52	9.76
3H	9.17	9.23	9.38	9.42	9.66	9.26	9.31	9.47	9.51	9.75
4H	9.16	9.21	9.37	9.41	9.66	9.25	9.30	9.46	9.50	9.74
6H	9.14	9.20	9.36	9.40	9.65	9.23	9.28	9.45	9.48	9.74
8H	9.14	9.19	9.35	9.39	9.64	9.22	9.27	9.44	9.48	9.73
12H	9.13	9.18	9.35	9.38	9.64	9.21	9.27	9.43	9.47	9.73
4H 2H	9.32	9.37	9.53	9.57	9.81	9.44	9.49	9.65	9.69	9.94
3H	9.32	9.37	9.54	9.58	9.83	9.44	9.49	9.66	9.70	9.96
4H	9.31	9.37	9.54	9.58	9.84	9.43	9.49	9.66	9.70	9.96
6H	9.30	9.35	9.54	9.57	9.83	9.42	9.47	9.66	9.69	9.95
8H	9.29	9.34	9.53	9.56	9.83	9.41	9.46	9.65	9.68	9.95
12H	9.28	9.32	9.52	9.56	9.83	9.39	9.44	9.64	9.67	9.94
8H 4H	9.38	9.43	9.60	9.63	9.89	9.51	9.56	9.73	9.77	10.02
6H	9.41	9.46	9.67	9.70	9.97	9.55	9.59	9.80	9.83	10.10
8H	9.40	9.45	9.67	9.69	9.97	9.54	9.58	9.80	9.83	10.10
12H	9.39	9.43	9.66	9.69	9.97	9.52	9.56	9.79	9.82	10.10
12H 4H	9.44	9.49	9.69	9.72	9.99	9.59	9.64	9.84	9.87	10.14
6H	9.44	9.48	9.70	9.73	10.00	9.60	9.64	9.86	9.89	10.16

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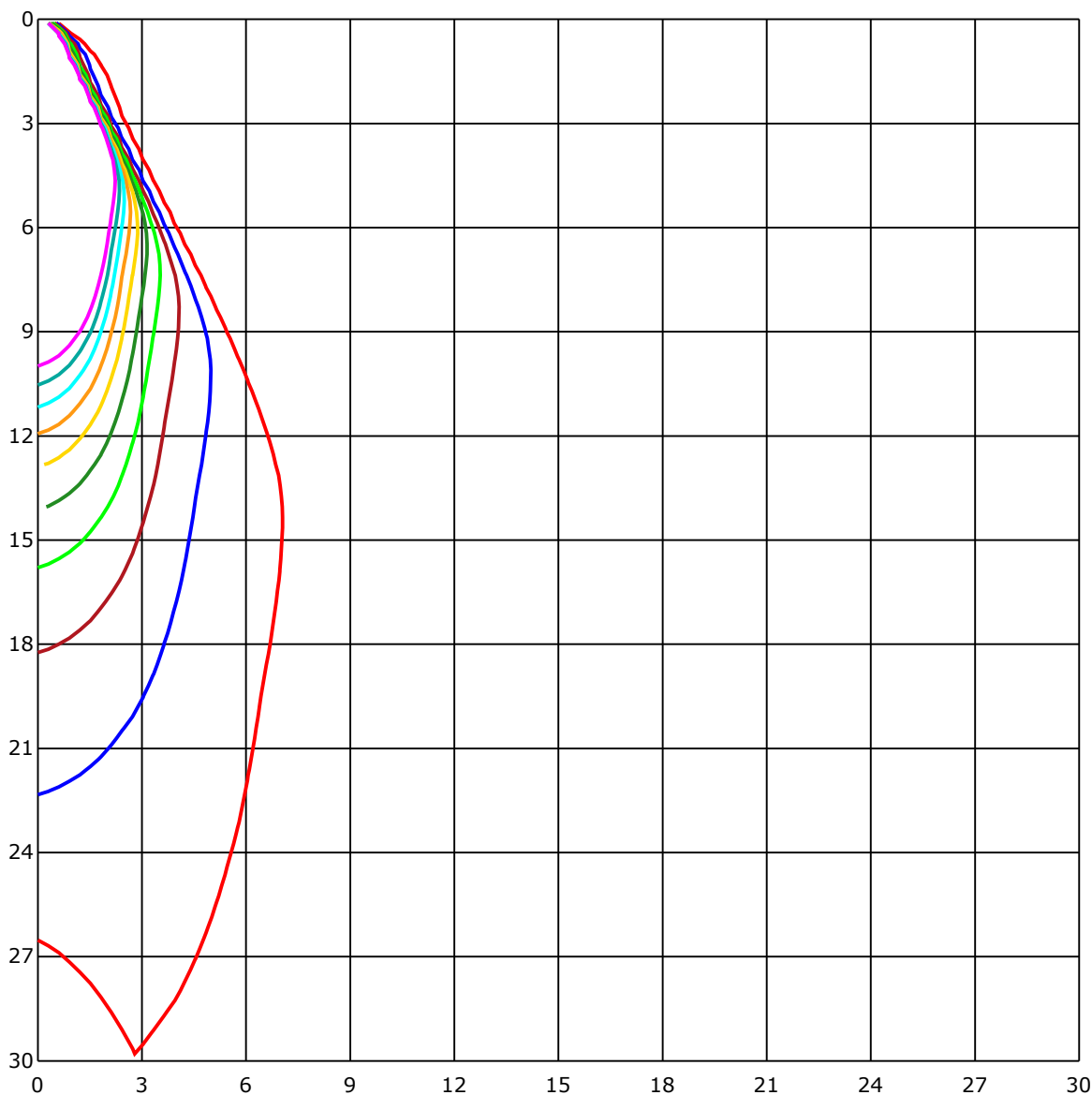
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
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Humidity: 60
Test Distance: 6.7 m
Remarks:

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SPACE ISOLX DIAGRAM



Unit of illumination:lx

48.602
43.742
38.881
34.021
29.161

24.301
19.441
14.581
9.72
4.86

C Range: 0 - 360 Deg
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Operators: QC01
Test Date: 2024/7/23 17:00:07

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

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LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	4848.57	4826.8	4841.7	4858.71	4848.57	4826.8	4841.7	4858.71	4848.57	
G1	4797.21	4794.07	4843.36	4873.53	4877.75	4848.48	4821.68	4853.15	4797.21	
G2	4723.42	4751.02	4829.49	4864.24	4894.4	4855.35	4787.2	4817.82	4723.42	
G3	4642.39	4681.76	4805.56	4855.75	4905.98	4848.08	4725.79	4761.57	4642.39	
G4	4538.33	4604.46	4766.33	4813.24	4897.32	4808.93	4656.8	4682.97	4538.33	
G5	4423.6	4505.7	4713.0	4758.7	4873.53	4761.57	4558.89	4593.15	4423.6	
G6	4281.52	4398.86	4653.75	4690.38	4835.96	4702.14	4454.12	4483.03	4281.52	
G7	4131.0	4269.98	4572.27	4615.46	4787.65	4633.28	4336.87	4363.98	4131.0	
G8	3989.51	4126.87	4464.27	4519.35	4717.63	4550.9	4200.4	4220.02	3989.51	
G9	3807.97	3978.74	4354.06	4418.57	4638.89	4446.58	4059.22	4066.0	3807.97	
G10	3624.82	3810.89	4227.56	4296.87	4548.03	4329.73	3903.86	3902.56	3624.82	
G11	3426.01	3638.65	4082.84	4158.7	4442.99	4189.22	3717.3	3737.18	3426.01	
G12	3230.55	3450.83	3938.15	4014.65	4313.53	4044.5	3545.77	3557.26	3230.55	
G13	3037.66	3265.79	3779.51	3857.85	4173.29	3895.29	3358.04	3356.92	3037.66	
G14	2861.29	3074.29	3608.8	3687.98	4036.78	3723.09	3161.38	3185.98	2861.29	
G15	2674.68	2892.22	3426.54	3494.64	3874.99	3559.37	2974.23	3003.9	2674.68	
G16	2498.85	2711.54	3247.75	3318.09	3705.18	3381.03	2786.95	2813.35	2498.85	
G17	2338.77	2534.49	3067.83	3135.52	3524.4	3184.95	2611.7	2639.98	2338.77	
G18	2189.2	2373.02	2881.22	2947.48	3356.2	2999.46	2435.37	2480.89	2189.2	
G19	2058.93	2217.03	2703.95	2760.51	3162.23	2816.22	2289.39	2327.28	2058.93	
G20	1952.27	2079.31	2524.3	2591.23	2980.74	2633.61	2159.84	2196.29	1952.27	
G21	1846.6	1961.83	2366.2	2424.69	2798.98	2471.6	2042.72	2068.49	1846.6	
G22	1747.39	1858.9	2213.35	2271.84	2633.38	2310.35	1930.32	1960.3	1747.39	
G23	1657.83	1759.37	2085.99	2132.99	2462.67	2181.47	1830.44	1854.41	1657.83	
G24	1570.93	1667.57	1963.71	2011.66	2311.25	2058.07	1737.38	1761.21	1570.93	
G25	1481.73	1587.18	1859.3	1904.55	2177.08	1954.69	1650.61	1672.24	1481.73	
G26	1400.88	1499.73	1762.52	1810.32	2065.66	1851.8	1566.39	1581.07	1400.88	
G27	1306.07	1418.66	1678.26	1713.14	1955.5	1768.53	1479.62	1490.48	1306.07	
G28	1194.03	1340.01	1594.58	1623.94	1858.31	1681.31	1394.37	1409.77	1194.03	
G29	1032.92	1255.8	1511.45	1540.98	1768.4	1603.25	1302.89	1316.62	1032.92	
G30	843.35	1159.6	1422.34	1455.6	1677.54	1524.15	1197.08	1213.33	843.35	
G31	654.72	1042.21	1301.05	1370.72	1586.5	1436.35	1063.04	1088.13	654.72	
G32	491.05	908.53	1136.48	1281.03	1491.11	1354.69	885.59	958.54	491.05	
G33	358.4	778.21	943.05	1188.73	1375.07	1255.04	695.12	823.96	358.4	
G34	272.8	640.8	743.92	1070.0	1217.96	1136.88	517.67	691.8	272.8	
G35	219.74	512.46	559.06	942.38	1028.07	1000.42	375.86	570.55	219.74	
G36	180.28	400.46	410.65	815.52	829.43	856.73	280.02	458.87	180.28	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

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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: 6.7 m

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LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	150.02	308.26	317.87	685.11	640.8	712.67	225.39	366.48	150.02	
G38	128.21	236.93	255.42	563.15	480.73	578.27	185.4	295.91	128.21	
G39	110.7	189.75	209.55	449.62	368.95	456.58	154.47	242.63	110.7	
G40	97.55	155.54	173.32	352.61	296.18	354.36	131.17	203.89	97.55	
G41	87.36	130.41	145.58	274.55	243.21	277.91	112.76	174.62	87.36	
G42	80.49	111.55	123.54	219.06	202.23	225.84	98.49	151.5	80.49	
G43	74.83	98.94	107.33	177.63	168.61	186.7	88.57	133.37	74.83	
G44	70.84	89.47	95.66	146.75	142.17	157.97	81.39	119.86	70.84	
G45	67.11	83.05	87.18	123.45	121.25	136.91	76.13	108.86	67.11	
G46	63.92	77.53	81.3	106.21	106.12	120.13	71.55	100.64	63.92	
G47	60.96	72.86	76.18	93.37	94.9	108.95	68.23	93.82	60.96	
G48	58.09	68.46	72.27	83.9	86.77	99.93	64.96	87.89	58.09	
G49	55.08	65.0	68.46	76.27	80.26	92.65	62.17	82.91	55.08	
G50	52.52	61.14	65.05	70.52	75.59	87.13	59.25	78.78	52.52	
G51	49.69	57.95	61.81	65.18	71.15	81.83	56.65	74.74	49.69	
G52	46.91	54.81	58.54	61.05	67.74	77.93	53.73	71.29	46.91	
G53	44.35	51.62	55.48	57.46	64.24	73.57	51.17	67.56	44.35	
G54	41.93	48.62	52.52	54.09	61.1	69.67	48.66	63.97	41.93	
G55	39.59	45.65	49.69	50.77	57.64	65.9	45.65	60.6	39.59	
G56	37.39	42.91	46.51	47.94	54.63	62.31	43.32	57.77	37.39	
G57	34.83	40.36	43.95	44.67	51.62	59.03	41.07	54.63	34.83	
G58	32.41	37.84	41.25	42.15	48.97	56.07	38.74	51.76	32.41	
G59	29.63	35.42	38.74	39.28	46.15	52.57	36.54	49.06	29.63	
G60	26.75	32.99	35.87	37.08	43.41	49.78	34.03	45.92	26.75	
G61	22.89	30.88	32.95	34.74	40.94	46.6	31.56	43.41	22.89	
G62	18.99	28.24	29.94	32.46	38.02	44.04	29.0	40.98	18.99	
G63	16.88	25.59	26.22	29.94	35.1	41.84	25.99	38.2	16.88	
G64	15.53	22.89	21.5	27.47	32.37	39.05	21.86	35.6	15.53	
G65	14.36	20.25	18.58	24.96	29.45	36.5	18.67	32.64	14.36	
G66	13.2	17.33	16.83	22.22	25.59	33.8	17.33	29.85	13.2	
G67	12.21	14.81	15.44	19.48	21.5	31.33	16.12	27.11	12.21	
G68	11.18	12.93	14.19	16.65	19.48	28.59	14.95	24.24	11.18	
G69	10.55	11.99	12.93	13.92	17.73	26.17	13.92	21.64	10.55	
G70	10.32	10.86	12.03	11.9	16.52	23.07	12.75	19.93	10.32	
G71	9.97	10.19	11.13	10.68	15.04	20.51	11.94	18.85	9.97	
G72	9.83	9.43	10.46	9.83	13.78	18.85	11.45	17.96	9.83	
G73	9.56	8.98	10.1	8.93	12.88	17.55	11.31	16.61	9.56	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2024/7/23 17:00:07

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]

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/23 17:00:07

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