

Report No.:

Test Time: 2024/7/22 14:46:57

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: InBright
 Luminaire Type: IBSP104SCT095H98-24°-15W
 Lamp Type:
 Luminous Width: 90 mm
 Luminous Length: 90 mm
 Luminous Height: 74 mm

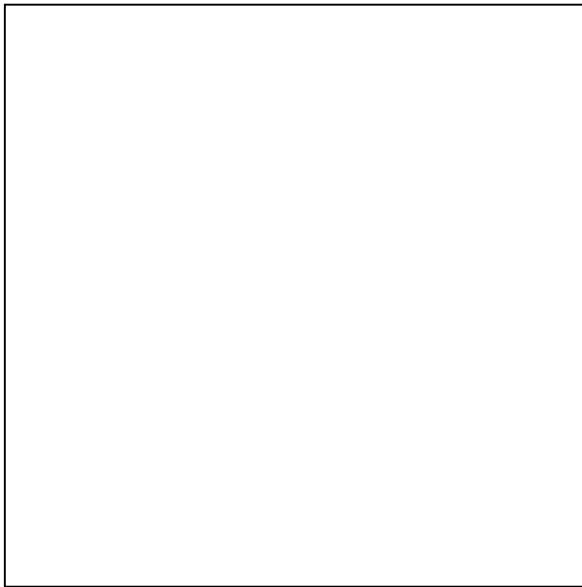
Voltage(V): 219.80 V
 Current(A): 0.0730 A
 Power(W): 15.50 W
 Power Factor: 0.9540
 Lamp Luminous Flux: 1512.68

Photometric Results

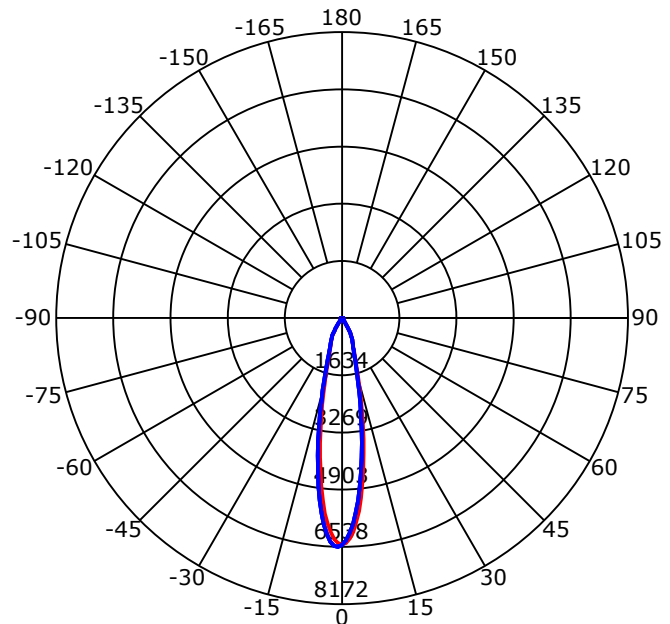
CIE Class: Direct
 Luminaire Luminous Flux: 1512.681 lm
 Downward Ratio: 100.00%
 Luminaire Efficacy Rating(LER): 97.59 lm/W
 Beam Angle(50%) C0-180,C90-270: 21.7,21.6
 Field Angle(10%) C0-180,C90-270: 53.2,53.2
 S/MH C0-180,C90-270: 0.389,0.389

Max. Intensity: 6537.51 cd
 Max.Intensity Angle: C=270 Gamma=1
 Upward Ratio: 0.00%
 Efficacy: 100.00%
 Center Intensity: 6465.15 cd
 Effective Luminous Flux: 1238.13 lm
 ERP(ϕ use)(120deg): 1495.92 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 21.7 deg,21.6 deg

C0-180 — C90-270 —

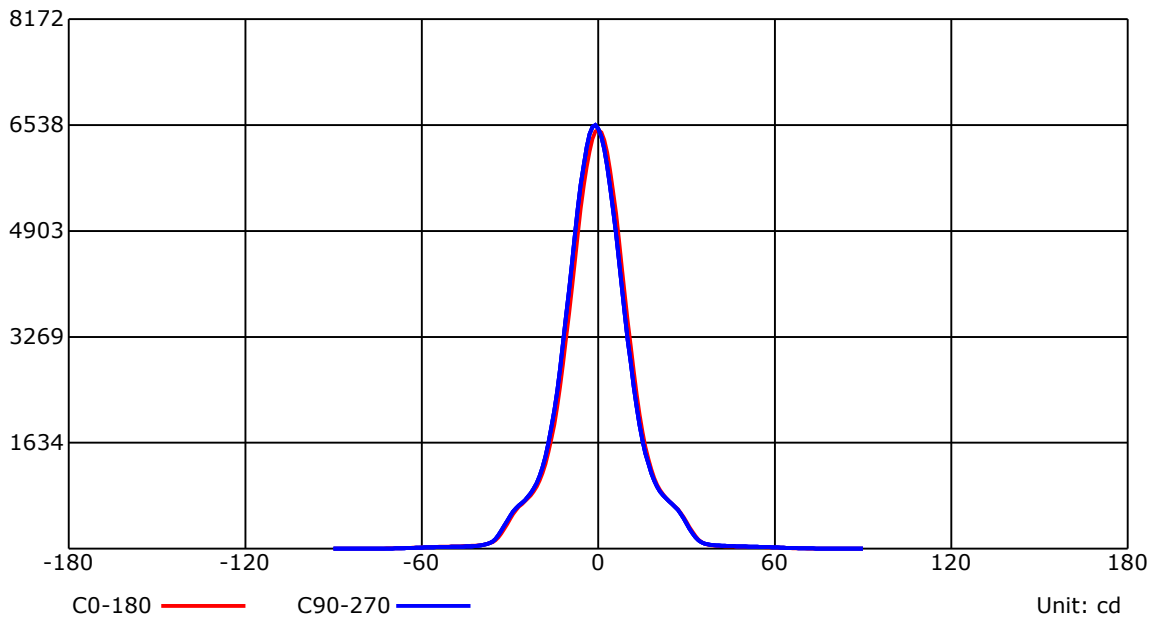
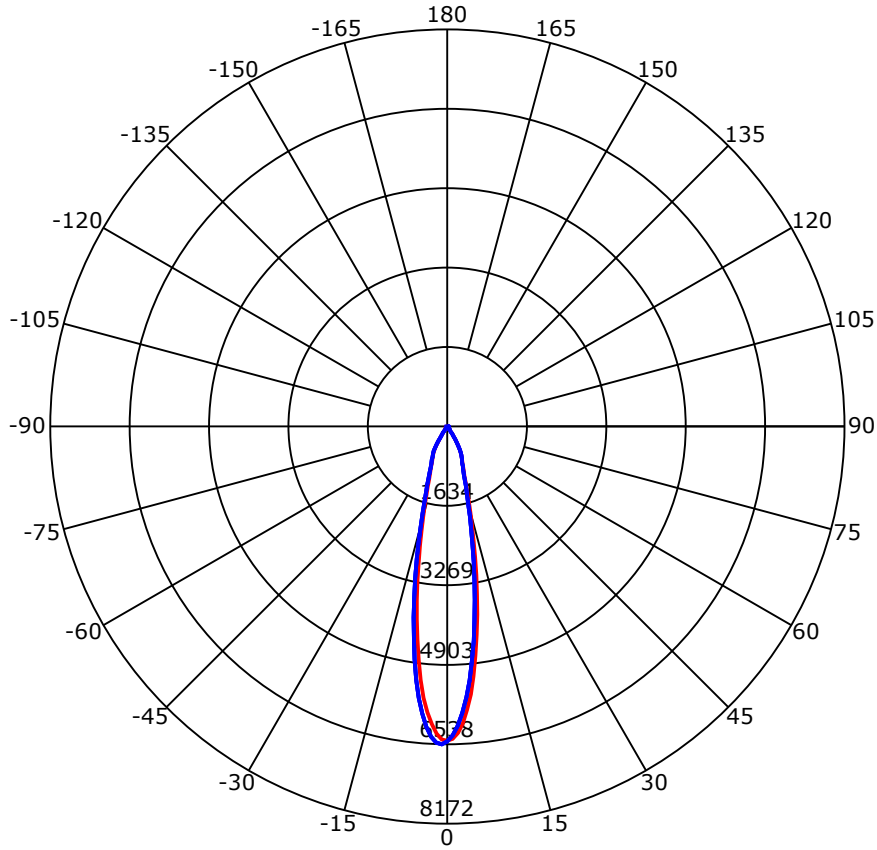
C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature: 25
 Operators: QC01
 Test Date: 2024/7/22 14:46:57

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 Intensity Distribution Curve



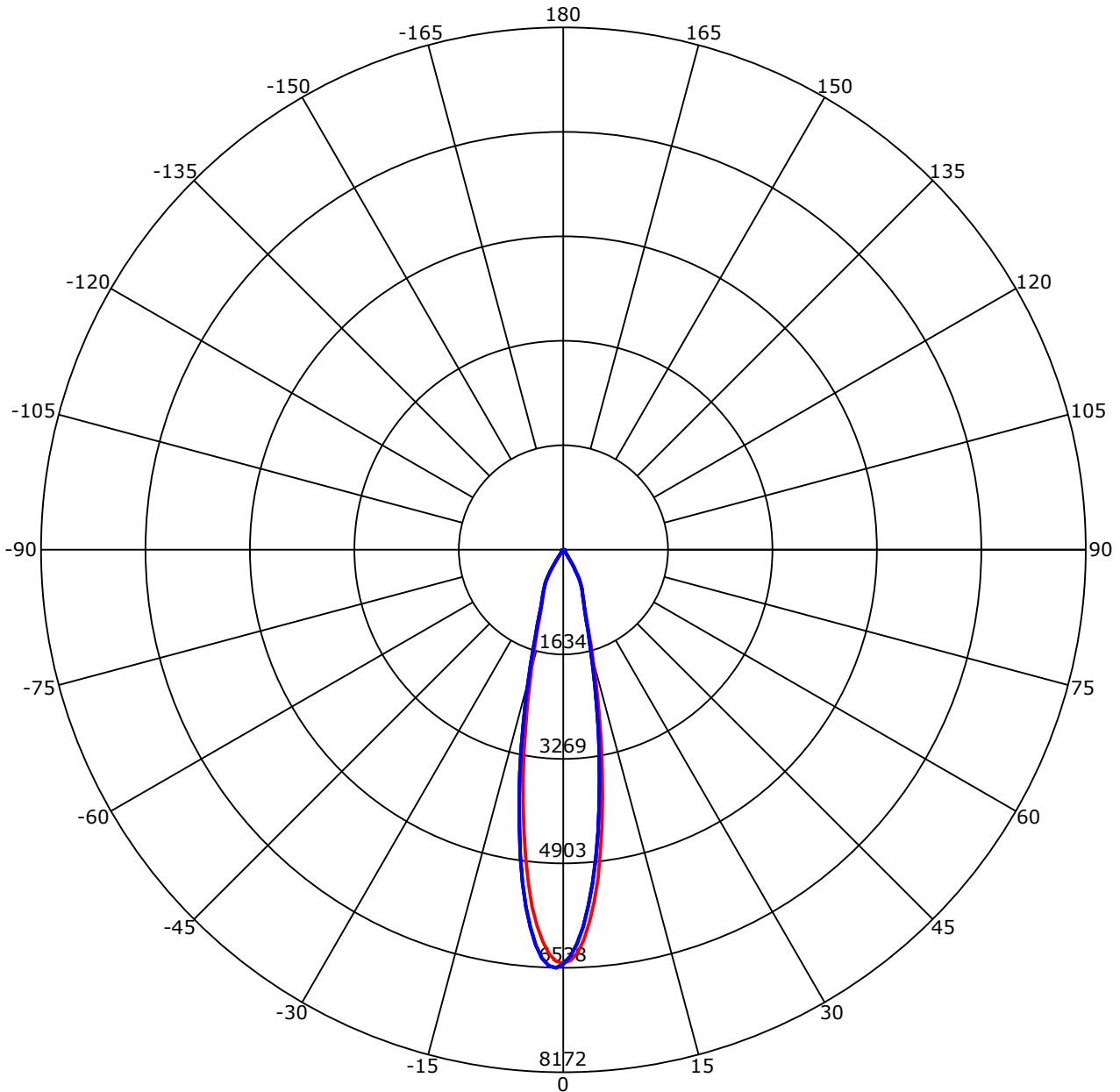
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 Humidity: 60
 Test Distance: 6.7 m
 Remarks:

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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: 2024/7/22 14:46:57

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

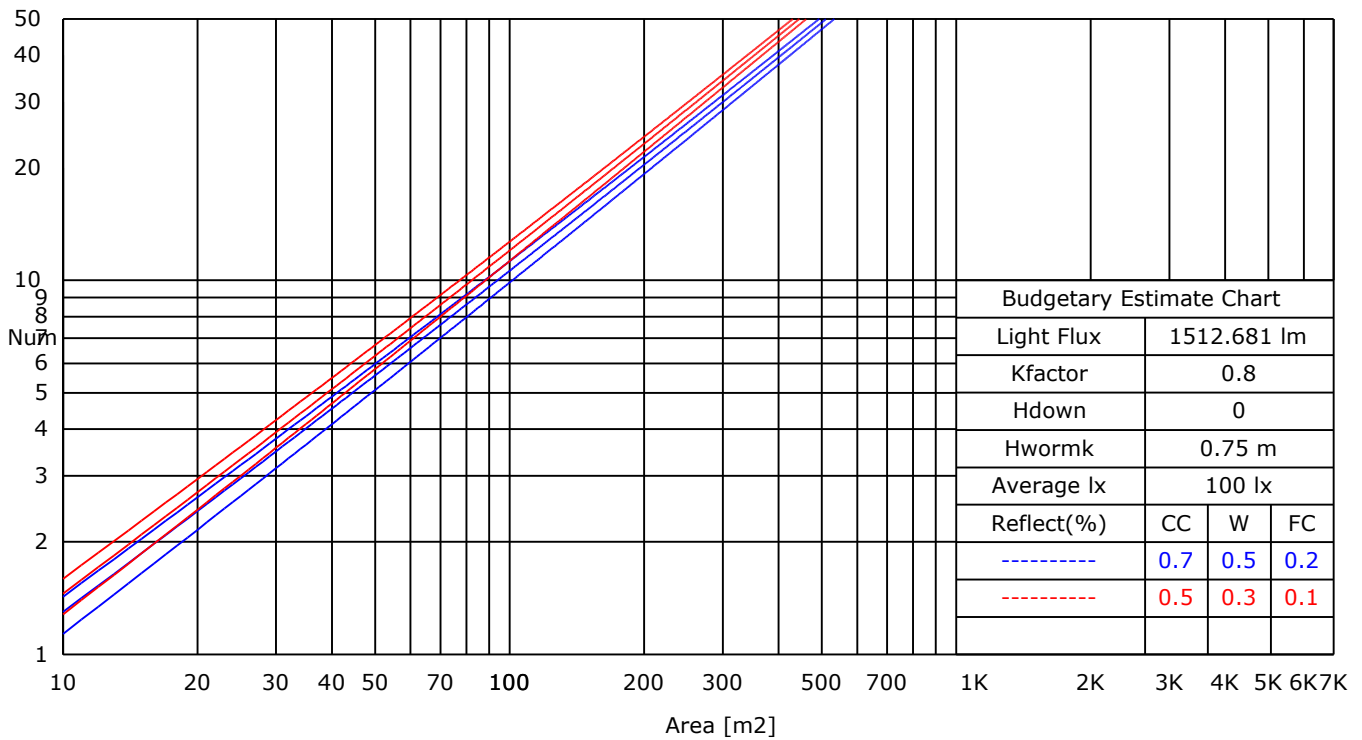
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UTILIZATION FACTORS TABLE

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	0.88	0.85	0.82	0.88	0.84	0.81	0.85	0.81	0.78	0.82	0.77	0.74	0.77	0.72	0.68	0.63
2	0.84	0.81	0.79	0.84	0.80	0.78	0.82	0.78	0.74	0.79	0.75	0.71	0.75	0.70	0.66	0.61
3	0.81	0.78	0.77	0.81	0.77	0.75	0.79	0.75	0.72	0.76	0.72	0.68	0.73	0.68	0.64	0.60
4	0.78	0.76	0.74	0.78	0.75	0.73	0.76	0.73	0.70	0.74	0.70	0.66	0.71	0.66	0.62	0.58
5	0.76	0.74	0.72	0.76	0.73	0.71	0.74	0.70	0.68	0.72	0.68	0.64	0.69	0.65	0.61	0.57
6	0.74	0.72	0.71	0.73	0.71	0.69	0.72	0.69	0.66	0.70	0.66	0.63	0.68	0.63	0.59	0.55
7	0.72	0.70	0.69	0.72	0.69	0.68	0.70	0.67	0.64	0.69	0.64	0.61	0.66	0.62	0.58	0.54
8	0.70	0.69	0.68	0.70	0.68	0.66	0.69	0.65	0.63	0.67	0.63	0.60	0.65	0.60	0.57	0.53
9	0.69	0.67	0.66	0.68	0.66	0.65	0.67	0.64	0.62	0.65	0.61	0.59	0.64	0.59	0.55	0.52
10	0.67	0.66	0.65	0.67	0.65	0.64	0.66	0.63	0.61	0.64	0.60	0.57	0.62	0.58	0.54	0.51

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



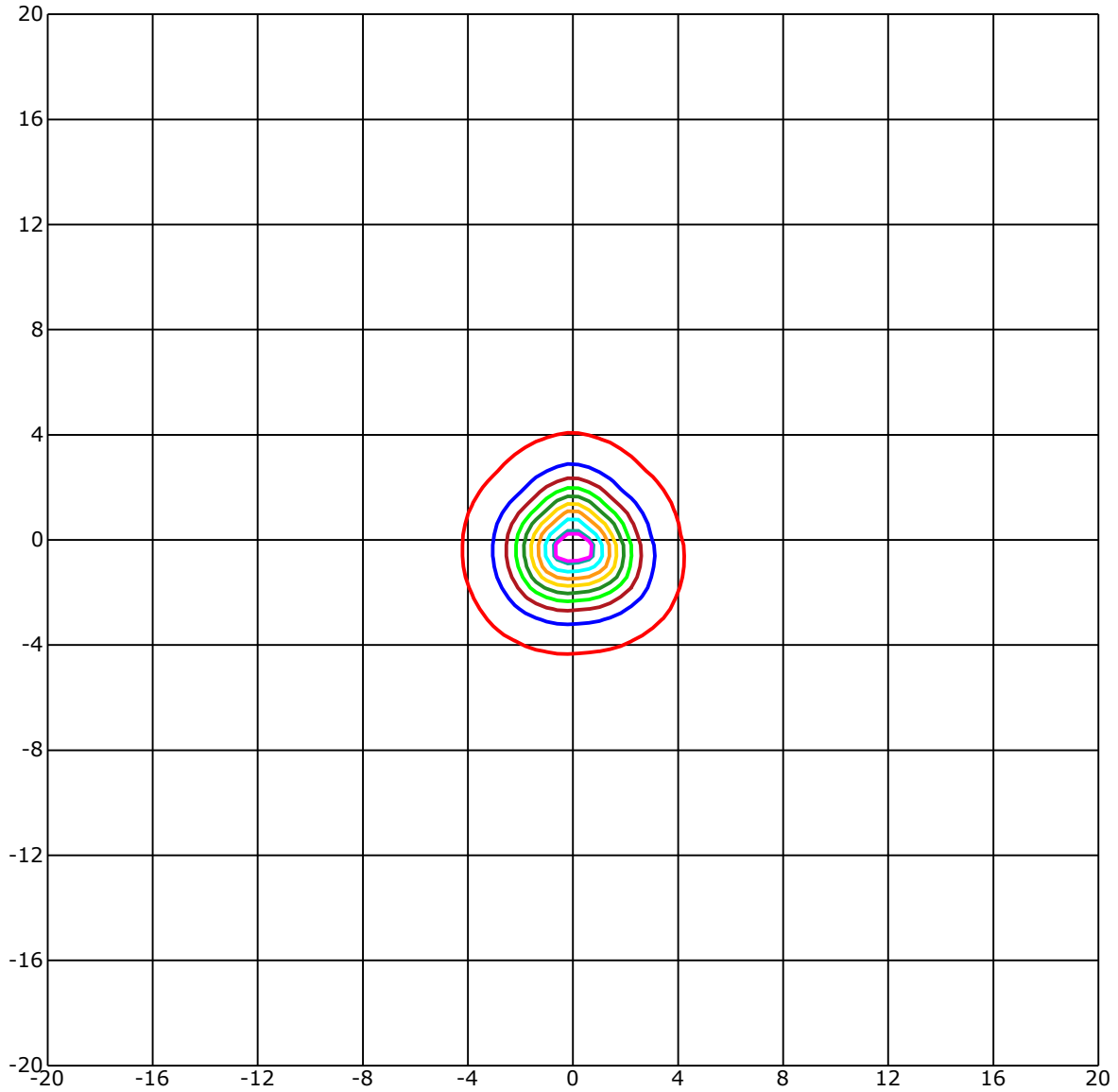
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 C Interval: 45.0 Deg
 Test Speed: High
 Temperature: 25
 Operators: QC01
 Test Date: 2024/7/22 14:46:57

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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ISOLX DIAGRAM



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

— 60.118(92%Emax)	— 32.673(50%Emax)
— 58.811(90%Emax)	— 26.138(40%Emax)
— 52.276(80%Emax)	— 19.604(30%Emax)
— 45.742(70%Emax)	— 13.069(20%Emax)
— 39.207(60%Emax)	— 6.535(10%Emax)

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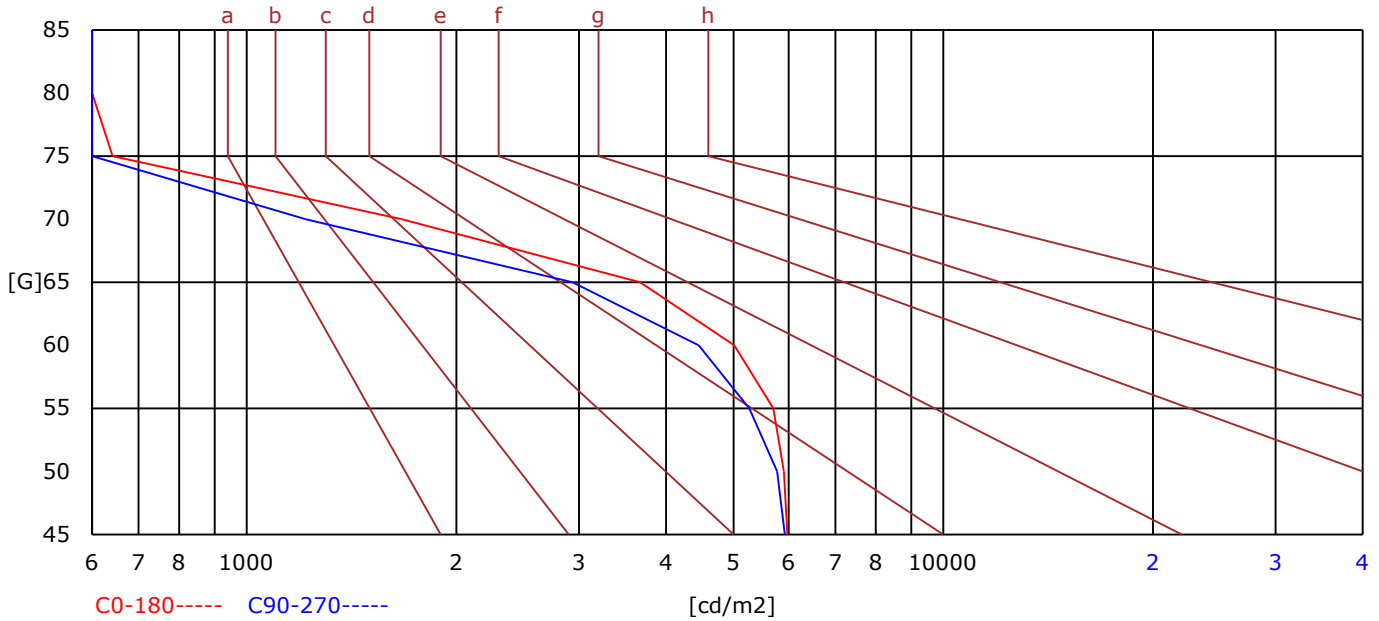
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 G Interval: 1.0 Deg
 Test System: Huipu CPM-1600B Goniophotometer
 Humidity: 60
 Test Distance: 6.7 m
 Remarks:

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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	5972	5906	5701	5010	3672	1669	642	191	0
C90	5925	5777	5266	4456	2937	1215	214	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



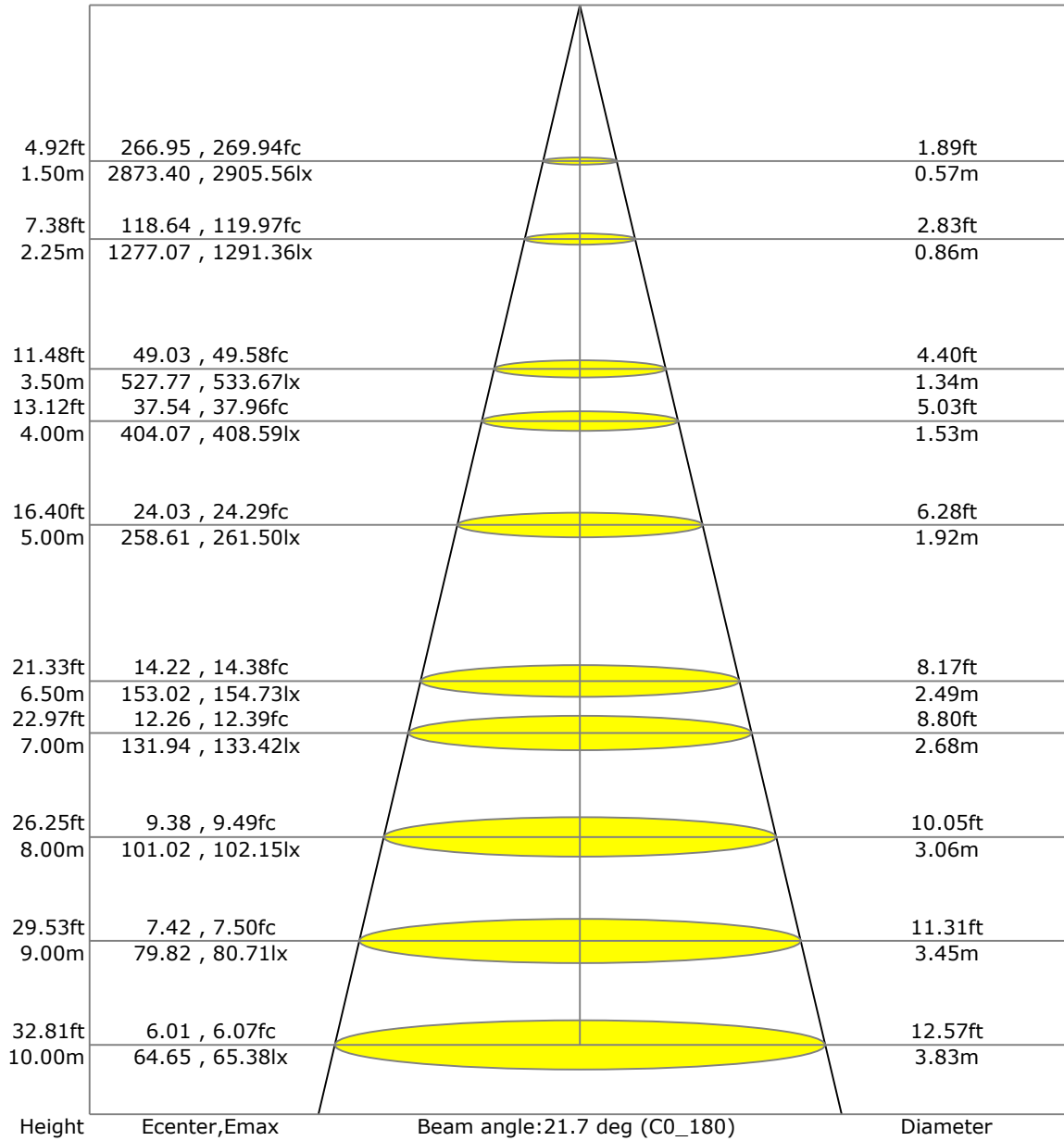
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 Test Speed: High
 Temperature: 25
 Operators: QC01
 Test Date: 2024/7/22 14:46:57

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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LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature: 25
 Operators: QC01
 Test Date: 2024/7/22 14:46:57

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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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	Viewed Endwise					Viewed Crosswise				
2H 2H	5.60	5.66	5.80	5.85	6.09	5.77	5.83	5.97	6.02	6.26
3H	5.63	5.69	5.83	5.88	6.13	5.79	5.85	6.00	6.05	6.29
4H	5.61	5.68	5.83	5.87	6.12	5.78	5.84	5.99	6.04	6.29
6H	5.60	5.66	5.82	5.86	6.11	5.76	5.82	5.98	6.03	6.28
8H	5.59	5.65	5.81	5.86	6.11	5.75	5.82	5.97	6.02	6.27
12H	5.58	5.64	5.80	5.85	6.11	5.74	5.81	5.97	6.01	6.27
4H 2H	6.17	6.23	6.38	6.43	6.68	6.40	6.46	6.61	6.66	6.91
3H	6.20	6.26	6.42	6.47	6.72	6.42	6.48	6.64	6.69	6.95
4H	6.18	6.24	6.41	6.46	6.72	6.40	6.47	6.63	6.68	6.94
6H	6.16	6.22	6.40	6.44	6.71	6.38	6.44	6.62	6.66	6.93
8H	6.15	6.21	6.39	6.44	6.70	6.37	6.43	6.61	6.66	6.92
12H	6.13	6.20	6.38	6.43	6.70	6.35	6.42	6.60	6.65	6.92
8H 4H	6.15	6.21	6.37	6.41	6.67	6.44	6.50	6.66	6.71	6.96
6H	6.13	6.18	6.38	6.42	6.70	6.43	6.49	6.68	6.72	7.00
8H	6.11	6.17	6.37	6.42	6.69	6.41	6.47	6.67	6.71	6.99
12H	6.09	6.15	6.37	6.41	6.69	6.39	6.45	6.67	6.70	6.99
12H 4H	6.14	6.20	6.39	6.43	6.70	6.48	6.54	6.73	6.77	7.04
6H	6.11	6.17	6.37	6.41	6.69	6.45	6.51	6.71	6.75	7.03

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 Humidity: 60
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ZONAL LUMINOUS FLUX TABLE

Gamma [deg]	Imean [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
0	6415.93	0.00	0.00	0.00	0.00
5	5834.67	142.62	142.62	9.43	9.43
10	3988.66	320.70	463.32	21.20	30.63
15	2180.13	313.24	776.56	20.71	51.34
20	1162.55	230.81	1007.37	15.26	66.59
25	765.08	179.20	1186.57	11.85	78.44
30	508.10	148.41	1334.98	9.81	88.25
35	175.65	78.52	1413.50	5.19	93.44
40	58.86	26.69	1440.19	1.76	95.21
45	40.72	16.43	1456.63	1.09	96.29
50	34.34	14.55	1471.17	0.96	97.26
55	29.04	13.33	1484.50	0.88	98.14
60	22.74	11.42	1495.92	0.76	98.89
65	14.82	8.44	1504.36	0.56	99.45
70	7.31	4.70	1509.06	0.31	99.76
75	2.90	2.10	1511.16	0.14	99.90
80	1.30	0.88	1512.04	0.06	99.96
85	0.73	0.50	1512.54	0.03	99.99
90	0.06	0.14	1512.68	0.01	100.00

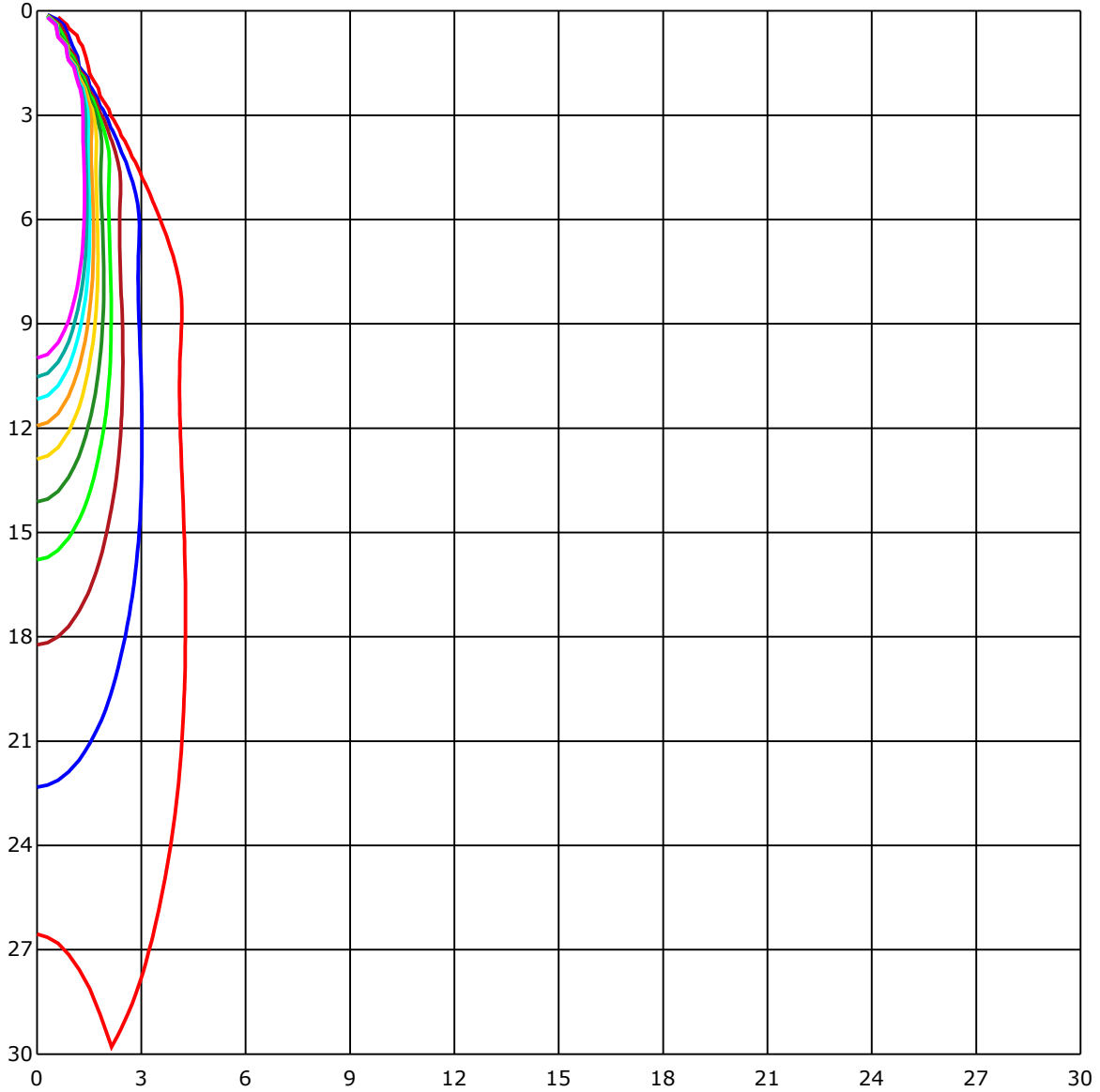
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 Test Speed: High
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G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-1600B Goniophotometer
 Humidity: 60
 Test Distance: 6.7 m
 Remarks:

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SPACE ISOLX DIAGRAM



Unit of illumination:lx

- | | |
|----------|----------|
| — 64.877 | — 32.438 |
| — 58.389 | — 25.951 |
| — 51.902 | — 19.463 |
| — 45.414 | — 12.975 |
| — 38.926 | — 6.488 |

C Range: 0 - 360 Deg
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 Humidity: 60
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LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	6465.15	6373.89	6481.62	6343.05	6465.15	6373.89	6481.62	6343.05	6465.15	
G1	6425.69	6184.54	6355.17	6160.39	6439.11	6481.04	6537.51	6454.87	6425.69	
G2	6303.9	5917.22	6161.56	5902.68	6326.57	6523.59	6510.58	6496.12	6303.9	
G3	6112.76	5594.87	5902.05	5599.31	6133.73	6480.37	6397.23	6454.82	6112.76	
G4	5841.72	5233.28	5586.2	5238.03	5896.44	6346.05	6197.11	6338.51	5841.72	
G5	5532.11	4835.28	5240.95	4840.76	5606.54	6144.81	5927.5	6154.64	5532.11	
G6	5169.35	4412.19	4850.5	4413.58	5241.99	5881.67	5616.41	5900.79	5169.35	
G7	4757.62	4000.55	4438.41	3986.41	4844.13	5551.95	5248.22	5588.13	4757.62	
G8	4330.85	3568.71	4021.07	3574.23	4428.4	5162.31	4837.12	5232.92	4330.85	
G9	3917.78	3179.07	3612.48	3180.14	4023.22	4753.49	4404.83	4838.24	3917.78	
G10	3512.19	2795.84	3218.84	2810.38	3629.72	4344.36	3991.89	4432.62	3512.19	
G11	3115.01	2436.0	2858.77	2465.63	3226.38	3944.84	3574.77	4031.21	3115.01	
G12	2738.6	2116.16	2498.22	2152.48	2850.47	3523.15	3179.16	3623.34	2738.6	
G13	2385.95	1833.67	2191.35	1870.52	2506.43	3135.03	2785.38	3241.28	2385.95	
G14	2076.93	1595.08	1910.74	1627.26	2194.63	2752.79	2432.59	2851.01	2076.93	
G15	1811.4	1400.43	1675.21	1438.72	1920.13	2417.64	2136.5	2506.43	1811.4	
G16	1578.69	1232.19	1472.75	1273.89	1678.89	2116.34	1859.03	2196.33	1578.69	
G17	1379.78	1106.72	1309.89	1133.29	1481.64	1842.29	1619.45	1926.95	1379.78	
G18	1219.53	997.19	1163.86	1023.58	1307.87	1608.63	1418.34	1683.64	1219.53	
G19	1088.94	913.65	1050.47	933.35	1166.15	1411.79	1255.35	1480.7	1088.94	
G20	986.68	844.25	957.23	865.12	1052.27	1247.04	1121.26	1308.45	986.68	
G21	903.37	787.64	883.03	804.07	959.34	1118.52	1013.48	1165.61	903.37	
G22	835.99	738.62	823.91	757.88	881.73	1017.07	924.46	1053.75	835.99	
G23	780.59	701.18	774.62	711.69	820.36	928.55	856.99	964.1	780.59	
G24	735.48	662.17	730.49	669.85	774.8	856.64	799.98	891.25	735.48	
G25	692.56	623.12	690.99	625.27	731.53	799.63	748.94	829.75	692.56	
G26	652.79	571.32	647.45	576.48	689.24	751.55	705.72	779.11	652.79	
G27	607.32	507.57	597.13	511.48	647.67	712.45	666.98	735.79	607.32	
G28	551.74	433.32	535.94	440.55	595.56	675.19	625.77	695.97	551.74	
G29	486.52	354.72	466.5	367.92	535.54	631.92	573.6	648.08	486.52	
G30	410.2	275.98	386.46	290.48	460.93	579.84	506.63	595.11	410.2	
G31	330.35	206.18	307.45	221.89	381.79	511.97	430.5	528.4	330.35	
G32	257.98	149.84	234.55	163.71	304.98	435.97	352.12	453.12	257.98	
G33	194.19	107.38	174.17	119.86	234.46	356.47	277.78	374.16	194.19	
G34	141.4	81.74	129.82	90.63	173.77	280.34	209.01	298.52	141.4	
G35	103.11	66.39	101.05	72.72	130.81	211.61	151.82	229.93	103.11	
G36	80.35	56.29	82.24	60.74	102.26	155.41	110.65	170.94	80.35	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

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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:

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LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	65.58	49.51	70.12	52.7	83.94	117.03	84.62	128.43	65.58	
G38	55.8	45.02	61.54	46.46	70.79	92.47	68.91	100.91	55.8	
G39	49.2	42.24	55.89	43.41	61.23	77.7	58.31	82.87	49.2	
G40	44.85	39.95	52.12	40.63	54.95	67.29	49.65	70.7	44.85	
G41	42.02	38.52	49.29	38.83	50.55	60.56	44.08	62.13	42.02	
G42	39.86	37.03	46.15	37.17	47.4	55.26	40.54	56.38	39.86	
G43	38.11	35.87	43.99	35.82	44.67	51.98	38.07	52.57	38.11	
G44	36.54	35.06	41.97	35.01	42.33	49.02	36.18	49.6	36.54	
G45	35.15	34.21	40.45	33.94	40.67	46.42	34.61	47.4	35.15	
G46	34.12	33.58	39.01	33.17	39.01	44.62	33.22	45.2	34.12	
G47	32.64	32.59	37.57	32.32	37.66	43.54	32.05	43.54	32.64	
G48	31.87	31.87	36.27	31.51	36.27	41.75	30.93	42.15	31.87	
G49	30.61	31.42	35.37	30.57	34.92	40.76	30.12	40.94	30.61	
G50	29.81	30.75	33.98	30.08	33.89	39.59	28.91	39.95	29.81	
G51	28.91	30.12	32.68	28.77	32.5	38.38	28.19	38.7	28.91	
G52	28.1	29.36	31.6	27.88	31.47	37.03	27.02	37.84	28.1	
G53	27.07	28.55	30.39	26.66	30.08	35.82	25.9	36.59	27.07	
G54	26.17	27.34	29.04	25.72	28.73	34.57	25.09	35.64	26.17	
G55	25.09	26.49	27.79	24.47	27.29	33.35	23.79	34.79	25.09	
G56	24.02	25.36	26.49	23.39	26.04	32.14	22.67	33.44	24.02	
G57	22.89	24.2	25.27	22.0	24.6	30.93	21.41	32.37	22.89	
G58	21.73	23.16	23.88	20.56	23.34	29.36	20.34	30.88	21.73	
G59	20.38	21.59	22.4	19.08	21.82	28.01	19.03	29.63	20.38	
G60	19.21	20.29	20.83	18.05	20.29	26.26	17.78	28.46	19.21	
G61	17.78	18.94	19.44	16.43	18.58	24.78	16.47	26.89	17.78	
G62	16.47	17.37	17.6	14.81	17.1	23.07	14.95	25.36	16.47	
G63	14.95	16.03	15.35	13.29	14.81	21.77	13.51	23.88	14.95	
G64	13.06	14.36	12.88	11.76	12.3	19.98	11.81	22.45	13.06	
G65	10.19	12.57	11.13	10.06	10.73	18.27	9.38	20.78	10.19	
G66	8.35	10.73	9.92	8.26	9.52	16.92	7.63	19.21	8.35	
G67	7.23	9.16	8.8	6.33	8.44	14.95	6.46	17.55	7.23	
G68	6.37	7.18	7.72	5.16	7.41	13.06	5.3	15.94	6.37	
G69	5.3	5.93	6.91	4.04	6.24	11.45	4.53	14.1	5.3	
G70	4.49	4.62	5.88	3.37	5.57	9.52	3.59	12.34	4.49	
G71	3.55	4.04	5.16	2.56	4.62	8.13	2.69	10.23	3.55	
G72	2.87	3.05	4.35	1.93	4.04	7.05	1.98	8.8	2.87	
G73	2.11	2.38	3.82	1.57	3.28	6.19	1.44	7.63	2.11	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2024/7/22 14:46:57

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: 2024/7/22 14:46:57

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G74	1.53	1.8	3.32	0.9	2.87	5.16	0.94	6.64	1.53	
G75	1.08	1.35	3.01	0.45	2.47	4.44	0.36	5.7	1.08	
G76	0.81	0.76	2.78	0.04	2.42	3.77	0.22	4.98	0.81	
G77	0.67	0.54	2.65	0.04	2.24	3.23	0.09	4.26	0.67	
G78	0.49	0.31	2.51	0.04	2.06	2.69	0.09	3.64	0.49	
G79	0.49	0.29	2.42	0.0	1.93	2.29	0.04	2.92	0.49	
G80	0.45	0.27	2.24	0.0	1.84	2.11	0.04	2.56	0.45	
G81	0.36	0.09	2.15	0.0	1.66	1.98	0.0	2.47	0.36	
G82	0.31	0.0	1.93	0.0	1.62	1.66	0.0	2.33	0.31	
G83	0.27	0.0	1.84	0.0	1.26	1.57	0.0	2.15	0.27	
G84	0.13	0.0	1.44	0.0	1.03	1.21	0.0	2.02	0.13	
G85	0.0	0.0	1.3	0.0	0.76	0.99	0.0	1.71	0.0	
G86	0.0	0.0	0.9	0.0	0.67	0.85	0.0	1.53	0.0	
G87	0.0	0.0	0.49	0.0	0.22	0.72	0.0	1.03	0.0	
G88	0.0	0.0	0.13	0.0	0.0	0.27	0.0	0.72	0.0	
G89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.0	
G90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.0	

C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature: 25
 Operators: QC01
 Test Date: 2024/7/22 14:46:57

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