

Report No.:

Test Time: 2025/2/11 18:13:13

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: InBright
 Luminaire Type: IBSP104SCT120H140-45°-40W
 Lamp Type:
 Luminous Width: 111 mm
 Luminous Length: 111 mm
 Luminous Height: 105 mm

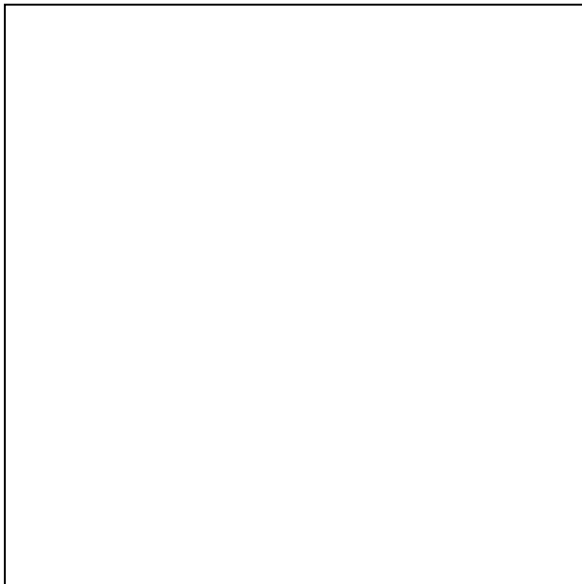
Voltage(V): 219.20 V
 Current(A): 0.1830 A
 Power(W): 39.09 W
 Power Factor: 0.9720
 Lamp Luminous Flux: 3459.66

Photometric Results

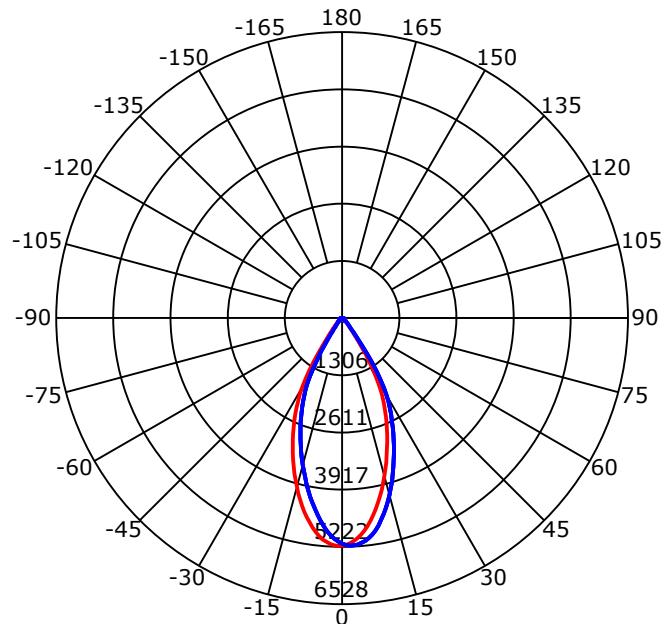
CIE Class: Direct
 Luminaire Luminous Flux: 3459.662 lm
 Downward Ratio: 100.00%
 Luminaire Efficacy Rating(LER): 88.52 lm/W
 Beam Angle(50%) C0-180,C90-270: 47.8,47.3
 Field Angle(10%) C0-180,C90-270: 73.5,72.3
 S/MH C0-180,C90-270: 0.728,0.728

Max. Intensity: 5222.10 cd
 Max.Intensity Angle: C=135 Gamma=1
 Upward Ratio: 0.00%
 Efficacy: 100.00%
 Center Intensity: 5194.02 cd
 Effective Luminous Flux: 3116.36 lm
 ERP(ϕ use)(120deg): 3397.79 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 47.8 deg,47.3 deg

C0-180 — C90-270

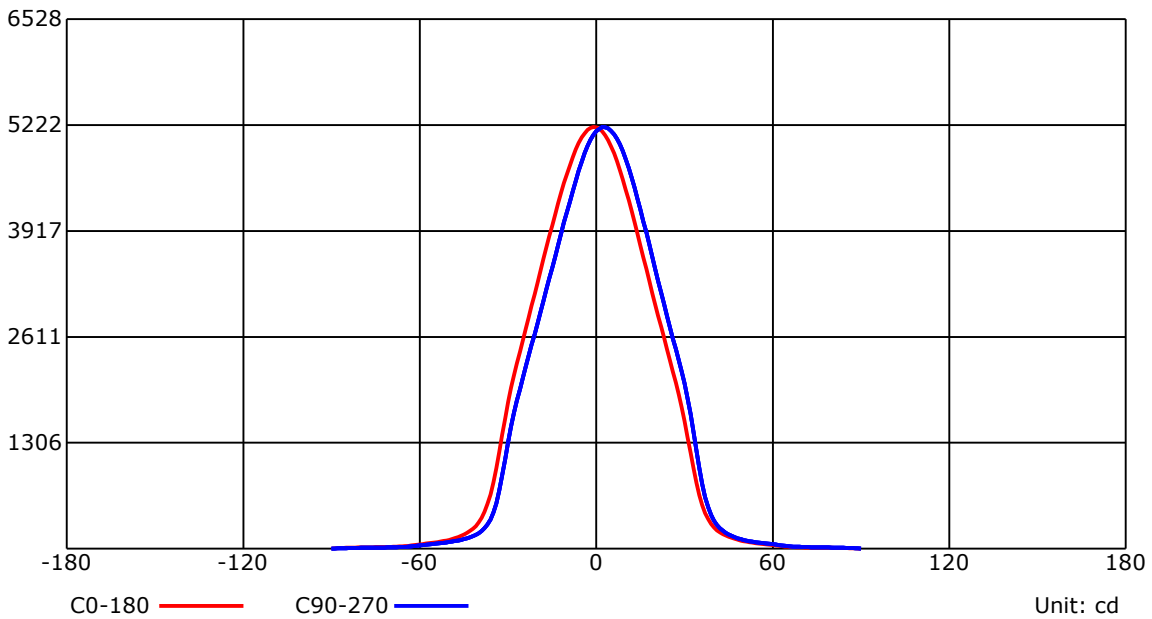
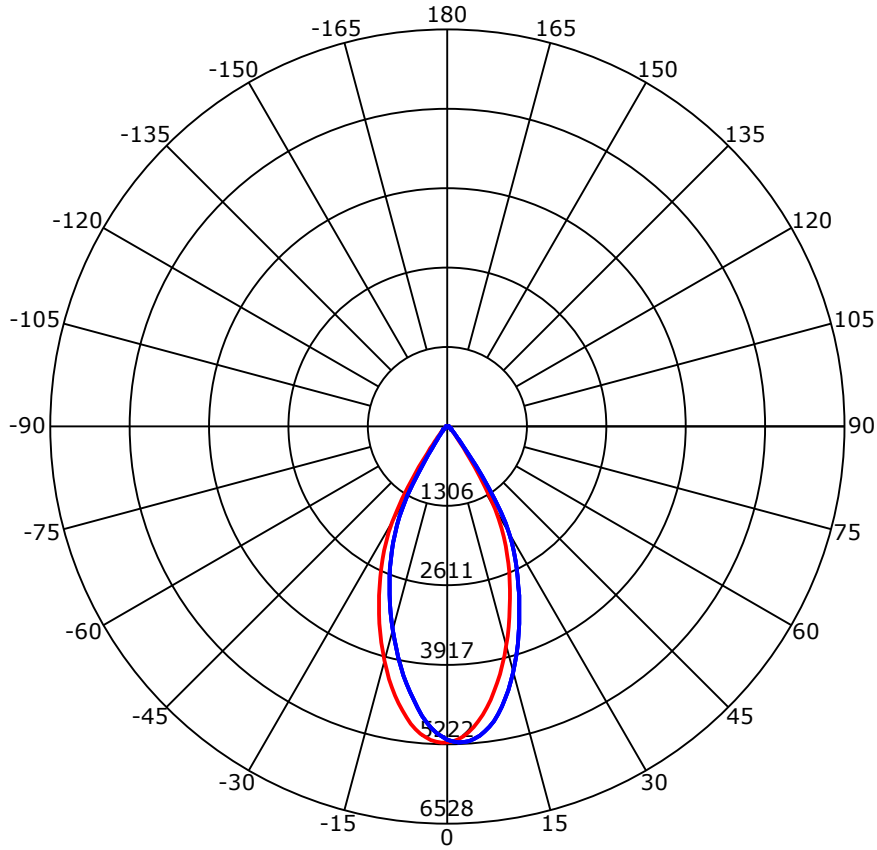
C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature: 25
 Operators: QC01
 Test Date: 2025/2/11 18:13:13

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

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Luminous Intensity Distribution Curve



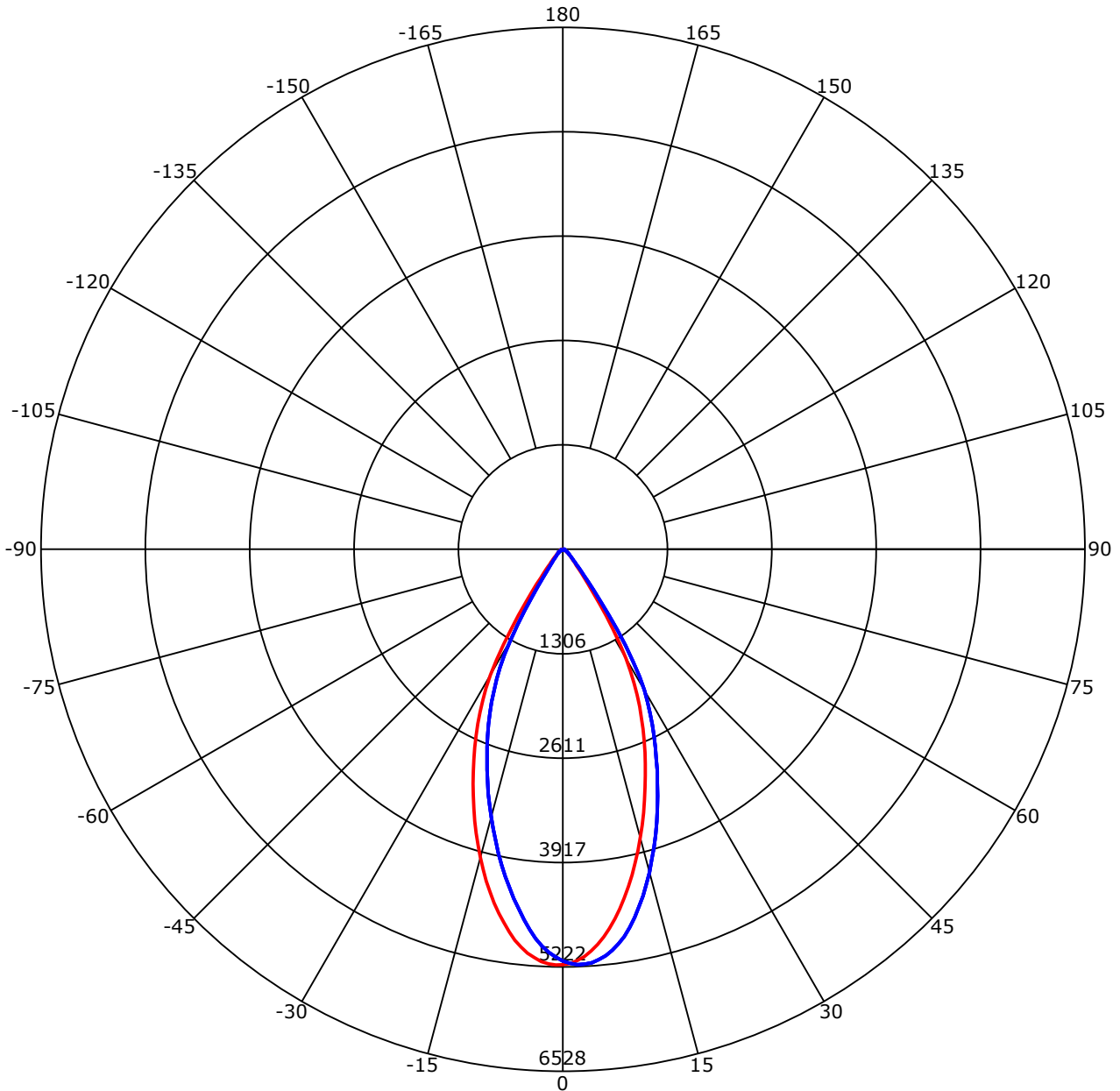
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 Test Distance: 6.87 m
 Remarks:

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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: 2025/2/11 18:13:13

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

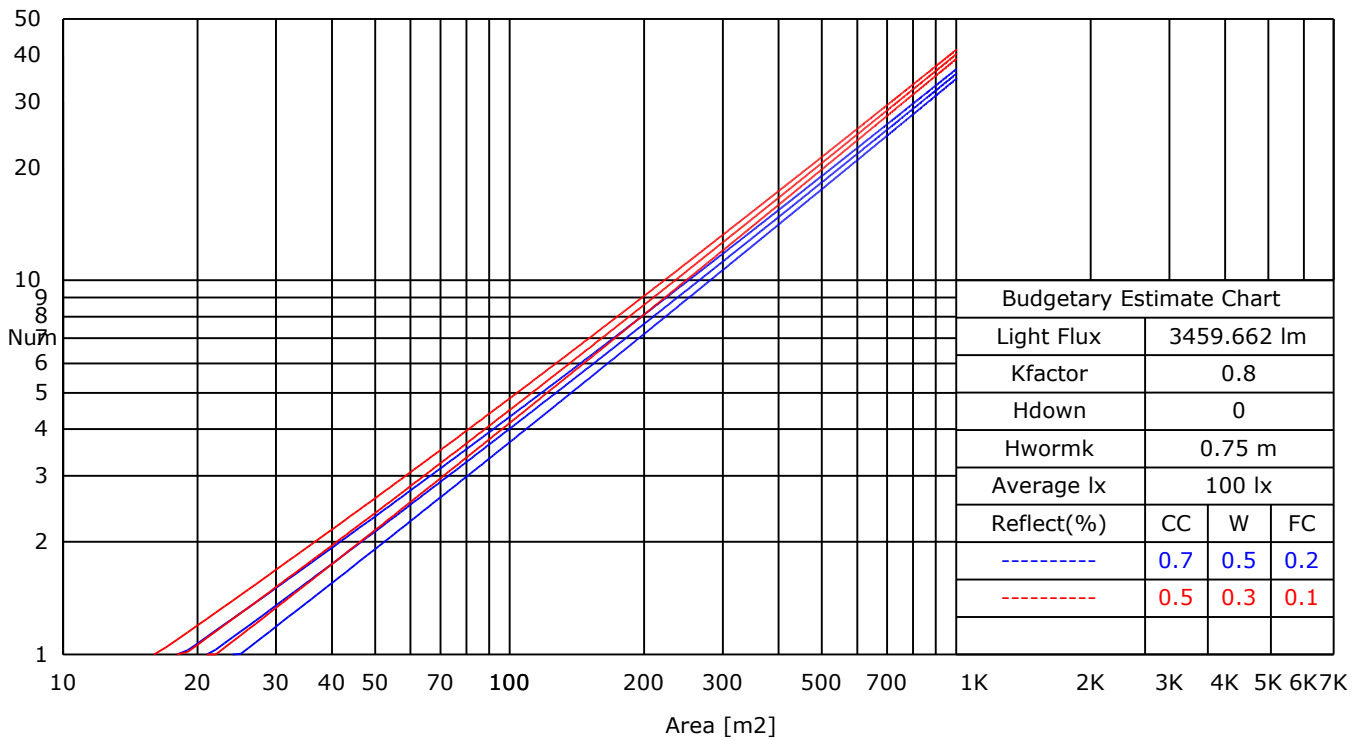
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UTILIZATION FACTORS TABLE

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	1.04	1.02	1.00	1.03	1.00	0.99	0.99	0.97	0.95	0.94	0.92	0.90	0.88	0.85	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	0.92	0.90	0.91	0.88	0.86	0.87	0.84	0.82	0.83	0.79	0.76	0.72
4	0.91	0.89	0.88	0.90	0.88	0.86	0.88	0.85	0.82	0.84	0.81	0.78	0.80	0.77	0.73	0.69
5	0.88	0.86	0.85	0.87	0.85	0.83	0.84	0.81	0.79	0.81	0.78	0.75	0.78	0.74	0.71	0.67
6	0.85	0.83	0.82	0.84	0.82	0.80	0.82	0.79	0.77	0.79	0.75	0.73	0.76	0.72	0.68	0.65
7	0.82	0.80	0.80	0.81	0.79	0.78	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	0.77	0.75	0.76	0.74	0.72	0.74	0.70	0.68	0.71	0.67	0.64	0.61
9	0.77	0.76	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	0.68	0.70	0.66	0.64	0.68	0.63	0.60	0.57

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



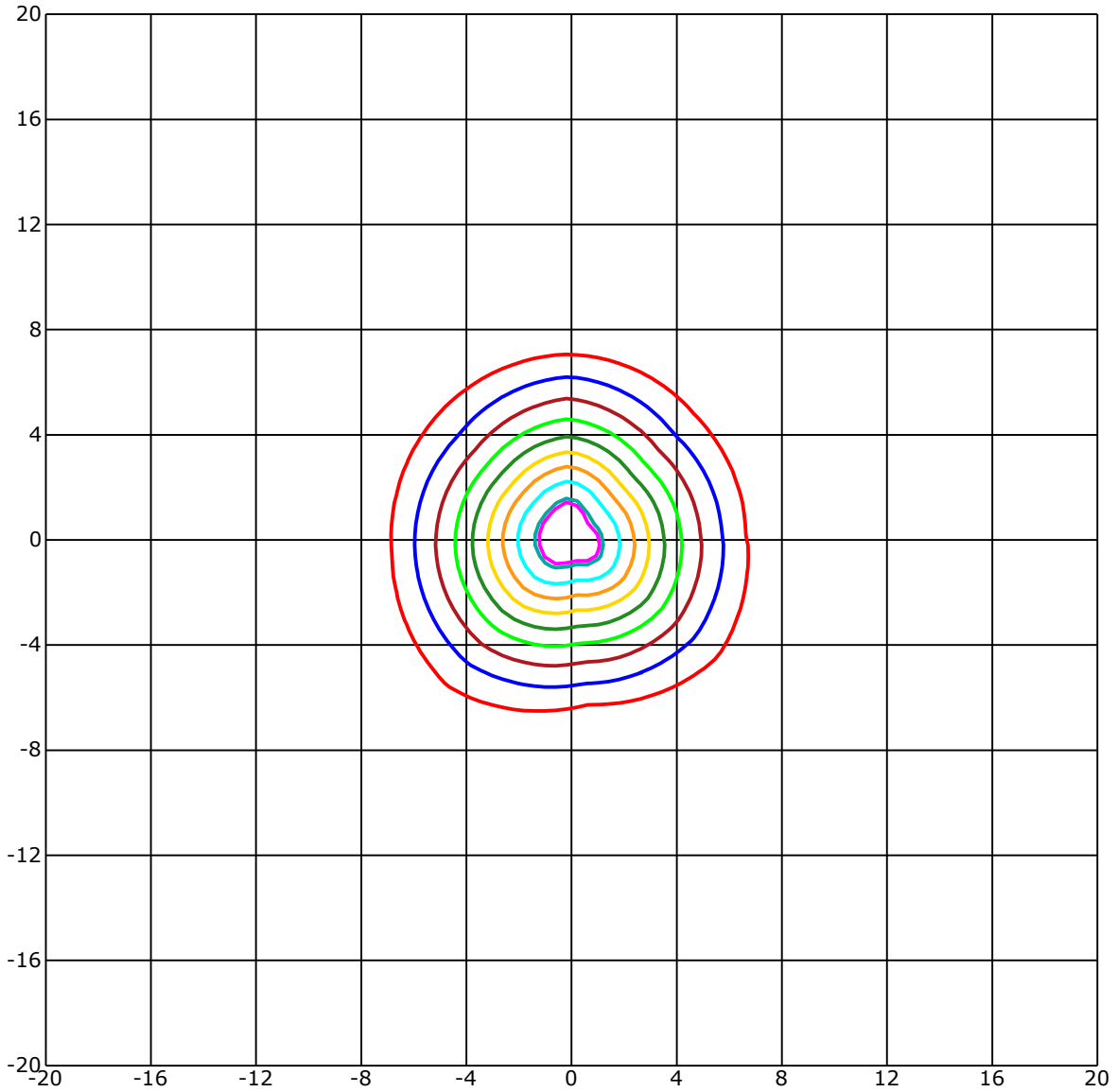
C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature: 25
 Operators: QC01
 Test Date: 2025/2/11 18:13:13

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

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ISOLX DIAGRAM



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

— 48.042(92%Emax)	— 26.11(50%Emax)
— 46.997(90%Emax)	— 20.888(40%Emax)
— 41.775(80%Emax)	— 15.666(30%Emax)
— 36.553(70%Emax)	— 10.444(20%Emax)
— 31.331(60%Emax)	— 5.222(10%Emax)

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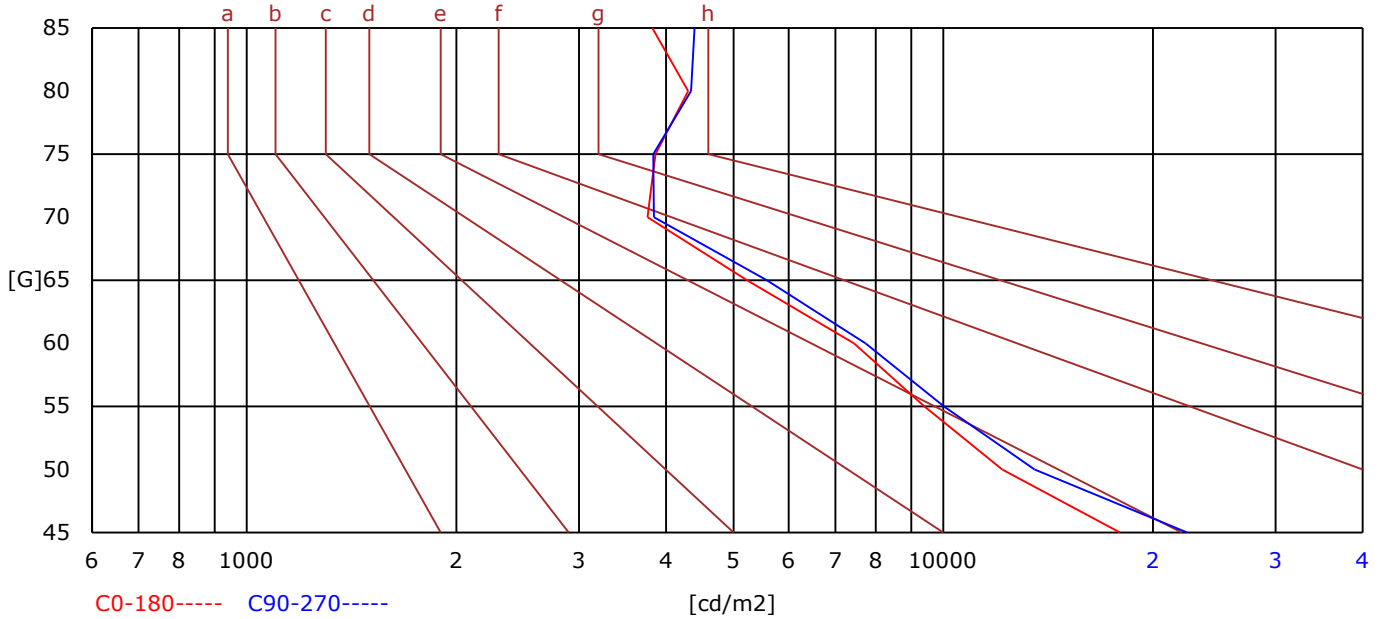
G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-1600B Goniophotometer
 Humidity: 60
 Test Distance: 6.87 m
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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	17926	12151	9397	7447	5230	3763	3863	4302	3824
C90	22384	13516	10024	7730	5583	3842	3833	4346	4395
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



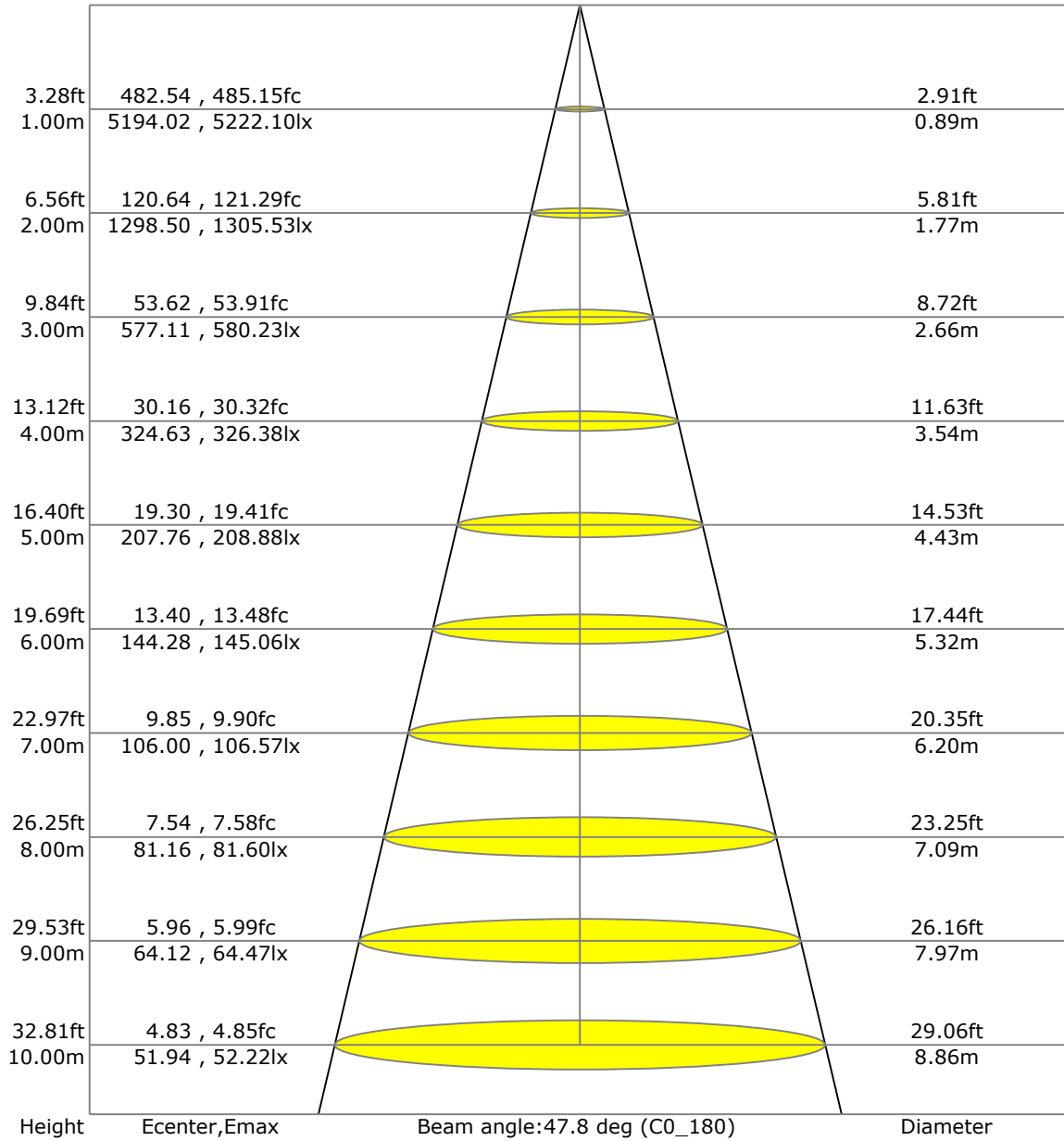
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 C Interval: 45.0 Deg
 Test Speed: High
 Temperature: 25
 Operators: QC01
 Test Date: 2025/2/11 18:13:13

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.:

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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: 2025/2/11 18:13:13

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

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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	10.43	10.48	10.63	10.67	10.91	10.51	10.56	10.71	10.75	10.99
3H	10.42	10.47	10.62	10.66	10.91	10.49	10.55	10.70	10.74	10.98
4H	10.41	10.46	10.62	10.65	10.90	10.48	10.53	10.69	10.73	10.98
6H	10.39	10.44	10.61	10.64	10.89	10.46	10.52	10.68	10.72	10.97
8H	10.38	10.43	10.60	10.64	10.89	10.45	10.51	10.67	10.71	10.96
12H	10.37	10.42	10.59	10.63	10.88	10.44	10.50	10.67	10.70	10.96
4H 2H	10.56	10.61	10.77	10.81	11.06	10.70	10.76	10.92	10.95	11.20
3H	10.57	10.62	10.79	10.82	11.08	10.71	10.76	10.93	10.97	11.22
4H	10.56	10.61	10.79	10.82	11.08	10.70	10.75	10.93	10.96	11.22
6H	10.55	10.59	10.78	10.82	11.08	10.68	10.73	10.92	10.96	11.22
8H	10.54	10.58	10.78	10.81	11.08	10.67	10.72	10.92	10.95	11.21
12H	10.52	10.57	10.77	10.80	11.07	10.66	10.71	10.91	10.94	11.21
8H 4H	10.63	10.68	10.85	10.89	11.14	10.82	10.88	11.04	11.08	11.33
6H	10.68	10.73	10.93	10.96	11.24	10.88	10.93	11.14	11.17	11.44
8H	10.67	10.72	10.93	10.96	11.24	10.88	10.92	11.14	11.16	11.44
12H	10.66	10.70	10.93	10.96	11.24	10.86	10.90	11.13	11.16	11.44
12H 4H	10.73	10.77	10.97	11.01	11.27	10.98	11.03	11.23	11.26	11.53
6H	10.74	10.78	11.00	11.03	11.30	11.00	11.04	11.26	11.28	11.56

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 Test System: Huipu CPM-1600B Goniophotometer
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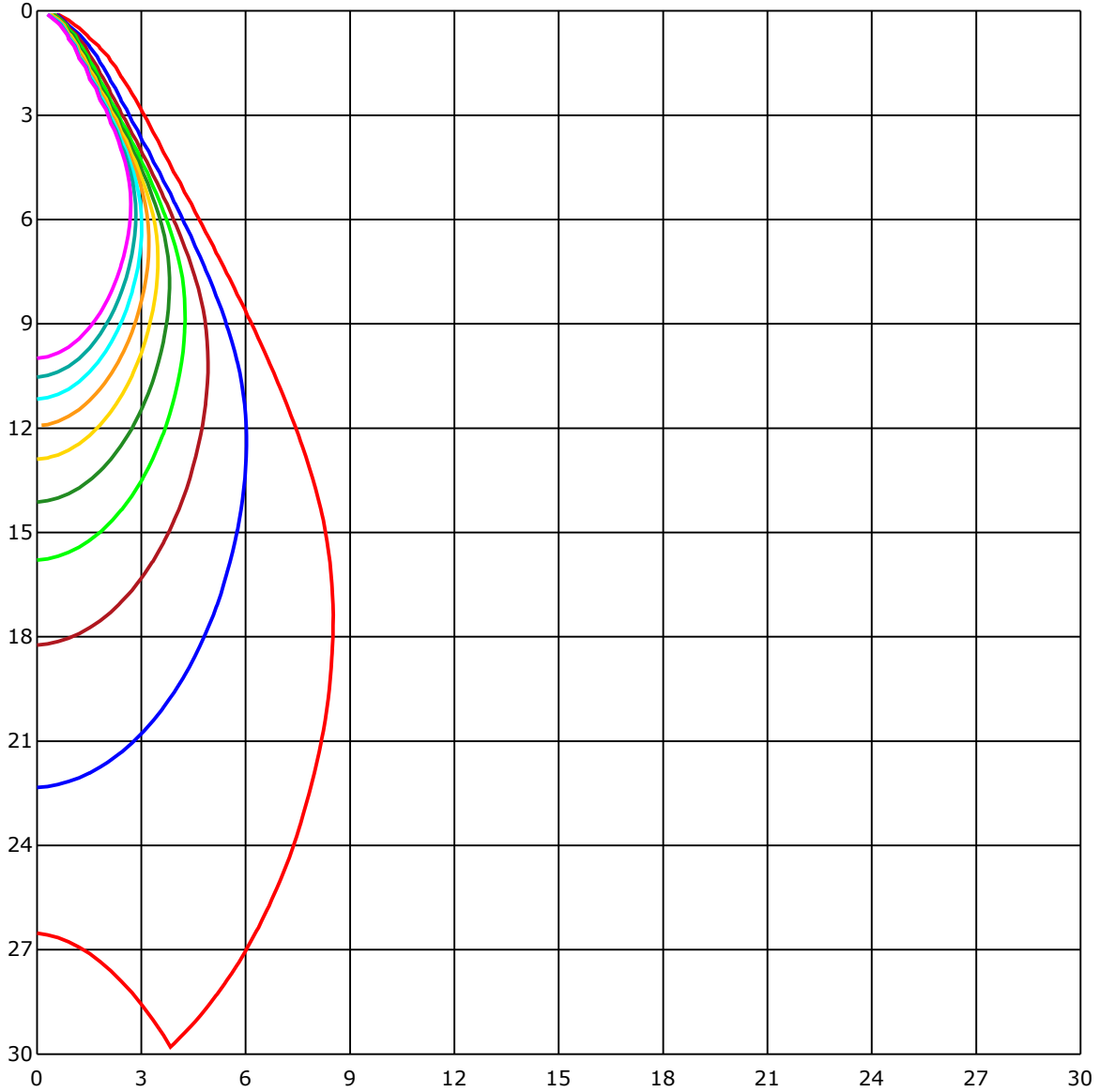
ZONAL LUMINOUS FLUX TABLE

Gamma [deg]	I _{mean} [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
0	5168.84	0.00	0.00	0.00	0.00
5	5053.32	121.44	121.44	3.51	3.51
10	4609.36	338.67	460.10	9.79	13.30
15	3969.58	492.22	952.32	14.23	27.53
20	3262.26	570.42	1522.74	16.49	44.01
25	2563.94	579.01	2101.74	16.74	60.75
30	1854.20	521.52	2623.26	15.07	75.82
35	996.90	368.25	2991.51	10.64	86.47
40	418.29	186.20	3177.71	5.38	91.85
45	203.29	93.67	3271.38	2.71	94.56
50	119.71	56.61	3328.00	1.64	96.19
55	81.93	39.82	3367.82	1.15	97.35
60	58.21	29.97	3397.79	0.87	98.21
65	36.81	21.05	3418.84	0.61	98.82
70	23.09	13.46	3432.31	0.39	99.21
75	17.46	9.77	3442.08	0.28	99.49
80	14.60	8.27	3450.35	0.24	99.73
85	10.21	6.32	3456.68	0.18	99.91
90	2.99	2.99	3459.66	0.09	100.00

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SPACE ISOLX DIAGRAM



Unit of illumination:lx

- | | |
|----------|----------|
| — 52.077 | — 26.038 |
| — 46.869 | — 20.831 |
| — 41.661 | — 15.623 |
| — 36.454 | — 10.415 |
| — 31.246 | — 5.208 |

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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	5194.02	5111.09	5148.33	5221.91	5194.02	5111.09	5148.33	5221.91	5194.02	
G1	5178.96	5086.6	5176.89	5222.1	5199.78	5124.64	5098.59	5205.96	5178.96	
G2	5143.9	5049.6	5197.94	5211.2	5186.04	5116.71	5041.76	5179.39	5143.9	
G3	5097.6	4998.44	5195.39	5180.47	5161.97	5099.39	4967.43	5133.7	5097.6	
G4	5035.06	4927.17	5181.84	5137.15	5118.6	5067.91	4878.6	5080.23	5035.06	
G5	4961.15	4849.67	5150.08	5079.52	5070.55	5019.53	4772.36	5015.61	4961.15	
G6	4873.69	4750.79	5108.31	5009.15	5001.64	4951.29	4657.3	4937.5	4873.69	
G7	4777.22	4647.15	5051.96	4917.11	4923.86	4868.36	4531.04	4837.73	4777.22	
G8	4664.66	4531.71	4984.28	4818.85	4829.56	4775.52	4410.5	4732.43	4664.66	
G9	4551.01	4412.77	4903.0	4714.07	4726.25	4674.9	4280.57	4612.32	4551.01	
G10	4424.8	4282.27	4802.76	4602.59	4621.66	4564.79	4157.15	4494.14	4424.8	
G11	4293.41	4148.7	4690.48	4473.7	4506.31	4451.56	4020.99	4368.17	4293.41	
G12	4162.2	4007.21	4571.16	4339.61	4384.36	4328.15	3881.95	4244.94	4162.2	
G13	4020.8	3868.68	4447.27	4207.42	4258.67	4202.46	3741.82	4115.48	4020.8	
G14	3880.15	3728.46	4311.58	4069.55	4122.41	4074.23	3601.41	3968.88	3880.15	
G15	3732.71	3577.53	4182.35	3922.06	3987.1	3941.84	3465.62	3838.48	3732.71	
G16	3590.5	3427.06	4034.49	3769.05	3848.72	3812.19	3327.57	3695.33	3590.5	
G17	3448.02	3278.44	3898.23	3617.93	3712.27	3676.45	3193.53	3572.85	3448.02	
G18	3299.96	3137.51	3750.55	3462.93	3571.34	3550.34	3050.95	3427.39	3299.96	
G19	3151.95	2992.47	3599.8	3310.11	3426.07	3407.29	2919.36	3290.99	3151.95	
G20	3013.05	2856.69	3450.99	3158.61	3281.13	3274.52	2778.91	3148.08	3013.05	
G21	2874.24	2718.68	3303.03	3010.55	3139.54	3129.11	2644.73	3016.97	2874.24	
G22	2737.75	2585.97	3154.69	2864.9	2995.78	2995.97	2513.99	2875.94	2737.75	
G23	2600.41	2447.07	3017.91	2724.58	2852.3	2858.53	2379.95	2741.05	2600.41	
G24	2459.38	2315.86	2871.32	2572.7	2711.56	2727.89	2246.24	2606.54	2459.38	
G25	2324.02	2174.64	2733.17	2433.43	2568.64	2595.88	2108.19	2468.59	2324.02	
G26	2186.16	2041.41	2593.75	2284.09	2426.35	2471.32	1966.27	2330.58	2186.16	
G27	2044.76	1895.33	2460.47	2141.32	2284.0	2332.24	1825.2	2190.03	2044.76	
G28	1897.88	1754.78	2320.67	1985.76	2136.6	2197.44	1674.59	2050.61	1897.88	
G29	1742.56	1606.82	2184.65	1836.62	1987.08	2058.78	1507.8	1909.26	1742.56	
G30	1572.46	1457.63	2037.07	1684.55	1812.55	1913.27	1318.3	1767.05	1572.46	
G31	1379.09	1304.95	1861.4	1531.59	1612.58	1765.35	1109.22	1619.66	1379.09	
G32	1180.77	1152.45	1660.29	1369.61	1402.13	1617.58	902.07	1467.12	1180.77	
G33	993.02	1006.24	1437.95	1216.31	1189.55	1457.35	713.99	1316.09	993.02	
G34	815.14	867.57	1213.24	1064.48	992.31	1297.4	559.47	1165.62	815.14	
G35	660.66	737.73	994.82	923.17	816.88	1142.5	445.21	1021.62	660.66	
G36	535.97	622.57	799.89	788.28	668.83	992.08	361.72	885.46	535.97	

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LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	440.11	524.26	638.39	671.05	549.09	852.47	298.95	760.58	440.11	
G38	365.26	442.99	511.99	569.05	455.54	721.97	252.13	648.63	365.26	
G39	306.31	374.65	416.65	483.58	380.78	611.25	218.0	555.13	306.31	
G40	261.9	318.3	345.43	409.34	323.25	517.99	191.43	476.12	261.9	
G41	227.68	271.48	291.91	349.12	279.26	439.69	171.37	409.01	227.68	
G42	201.11	233.44	251.75	300.08	245.66	374.04	154.66	352.14	201.11	
G43	179.58	201.86	221.73	259.25	217.96	320.8	140.65	306.02	179.58	
G44	161.98	176.61	196.06	224.37	195.35	276.81	128.56	266.62	161.98	
G45	147.4	156.17	175.29	195.02	176.33	240.7	117.99	234.76	147.4	
G46	134.04	139.51	157.17	170.62	159.71	211.63	109.12	207.95	134.04	
G47	122.05	125.59	142.11	150.65	144.75	188.69	101.14	186.81	122.05	
G48	110.91	113.98	129.04	133.1	131.4	169.72	94.16	168.68	110.91	
G49	101.24	104.07	118.04	118.98	119.64	154.15	87.69	153.86	101.24	
G50	92.88	96.23	108.27	107.04	109.54	141.31	82.45	141.02	92.88	
G51	85.99	88.73	100.2	97.6	101.0	130.17	77.64	130.45	85.99	
G52	79.72	82.59	93.5	89.72	93.92	121.15	73.11	120.92	79.72	
G53	74.24	76.36	87.46	82.64	87.46	112.71	68.67	113.04	74.24	
G54	69.52	71.36	81.75	76.46	81.51	105.11	64.52	105.25	69.52	
G55	64.75	66.41	76.55	70.84	76.18	98.45	60.55	98.83	64.75	
G56	60.55	62.11	71.93	65.6	71.13	92.32	56.83	92.46	60.55	
G57	56.64	57.72	67.54	60.84	66.64	86.56	53.19	87.17	56.64	
G58	52.62	53.85	63.29	56.26	62.49	81.41	49.13	81.41	52.62	
G59	47.95	50.03	59.33	52.15	57.86	76.6	45.26	76.46	47.95	
G60	43.7	45.88	54.98	47.62	53.52	72.45	41.34	71.88	43.7	
G61	39.5	42.1	50.83	43.99	48.9	67.82	37.29	67.21	39.5	
G62	35.4	38.32	46.02	40.12	44.74	63.67	32.99	62.87	35.4	
G63	31.1	34.83	41.58	36.48	39.74	59.47	28.08	58.57	31.1	
G64	25.91	31.01	36.01	32.8	34.45	55.55	24.35	54.42	25.91	
G65	22.8	27.23	31.24	29.07	31.34	51.44	22.56	50.36	22.8	
G66	21.1	23.79	28.41	25.49	29.07	47.1	20.86	45.88	21.1	
G67	19.54	20.44	26.24	21.99	27.09	43.14	19.4	41.86	19.54	
G68	18.12	18.31	24.45	19.07	25.25	39.41	18.17	37.95	18.12	
G69	16.85	16.94	22.94	17.46	23.69	35.68	16.94	34.22	16.85	
G70	15.62	15.86	21.19	16.19	22.28	32.05	15.81	31.01	15.62	
G71	14.77	14.96	20.01	15.2	21.1	29.45	15.06	28.93	14.77	
G72	14.02	14.11	19.07	14.06	20.2	27.61	14.82	27.23	14.02	
G73	13.78	13.31	18.45	13.36	19.68	26.01	14.68	25.96	13.78	

C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature: 25
 Operators: QC01
 Test Date: 2025/2/11 18:13:13

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: 2025/2/11 18:13:13

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G74	13.69	12.7	17.84	12.6	19.3	24.54	14.49	24.5	13.69	
G75	13.26	12.32	17.56	12.22	18.83	23.32	14.3	23.41	13.26	
G76	13.07	11.8	16.99	11.66	18.5	22.37	13.78	22.51	13.07	
G77	12.74	11.23	16.66	11.28	17.93	21.47	13.4	21.8	12.74	
G78	12.46	10.71	16.09	10.57	17.32	20.72	12.74	21.0	12.46	
G79	11.89	9.91	15.53	10.05	16.57	19.96	12.46	20.39	11.89	
G80	11.33	9.2	14.82	9.3	15.76	19.16	11.52	19.63	11.33	
G81	10.57	8.26	14.02	8.5	14.91	18.36	10.81	18.83	10.57	
G82	9.82	7.46	13.22	7.65	14.16	17.51	10.01	17.84	9.82	
G83	8.92	6.37	12.51	6.7	13.17	16.52	9.06	16.75	8.92	
G84	8.07	5.19	11.61	5.71	12.13	15.43	7.93	15.62	8.07	
G85	7.22	4.11	10.76	4.72	10.95	14.21	6.94	14.3	7.22	
G86	6.14	3.07	9.44	3.68	9.39	12.74	5.76	12.41	6.14	
G87	5.0	1.75	7.83	2.6	7.65	10.48	4.44	10.15	5.0	
G88	3.73	0.52	5.85	1.37	5.71	8.35	3.07	7.79	3.73	
G89	2.5	0.0	4.34	0.28	3.54	6.09	1.65	5.52	2.5	
G90	1.86	0.0	0.0	0.0	0.0	6.09	0.81	5.52	1.86	

C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature: 25
 Operators: QC01
 Test Date: 2025/2/11 18:13:13

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