

Report No.:

Test Time: 2026/3/20 9:54:38

## LUMINAIRE PHOTOMETRIC TEST REPORT

### Luminaire Property

Manufacturer: AVTECNO  
 Luminaire Type: AV0103SYN-E 2700K  
 Lamp Type:  
 Luminous Width: 60 mm  
 Luminous Length: 60 mm  
 Luminous Height: 50 mm

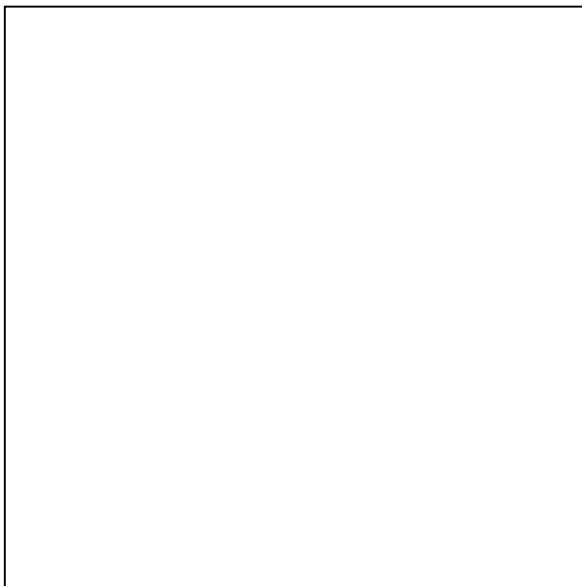
Voltage(V): 219.90 V  
 Current(A): 0.0670 A  
 Power(W): 13.96 W  
 Power Factor: 0.9380  
 Lamp Luminous Flux: 842.82

### Photometric Results

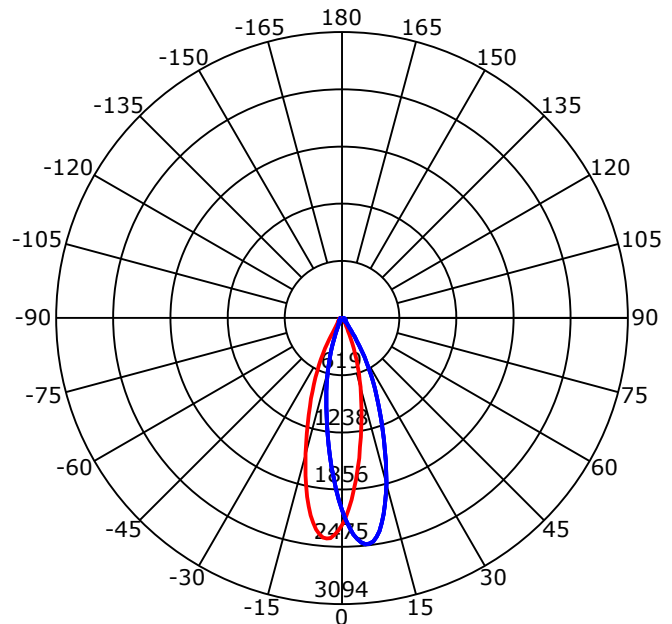
CIE Class: Direct  
 Luminaire Luminous Flux: 842.8186 lm  
 Downward Ratio: 100.00%  
 Luminaire Efficacy Rating(LER): 60.38 lm/W  
 Beam Angle(50%) C0-180,C90-270: 28.2,27.9  
 Field Angle(10%) C0-180,C90-270: 54.7,54.5  
 S/MH C0-180,C90-270: 0.499,0.536

Max. Intensity: 2475.07 cd  
 Max.Intensity Angle: C=135 Gamma=4  
 Upward Ratio: 0.00%  
 Efficacy: 100.00%  
 Center Intensity: 2238.30 cd  
 Effective Luminous Flux: 681.63 lm  
 ERP( $\varphi$ use)(120deg): 819.68 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 28.2 deg,27.9 deg

C0-180 ——— C90-270 ———

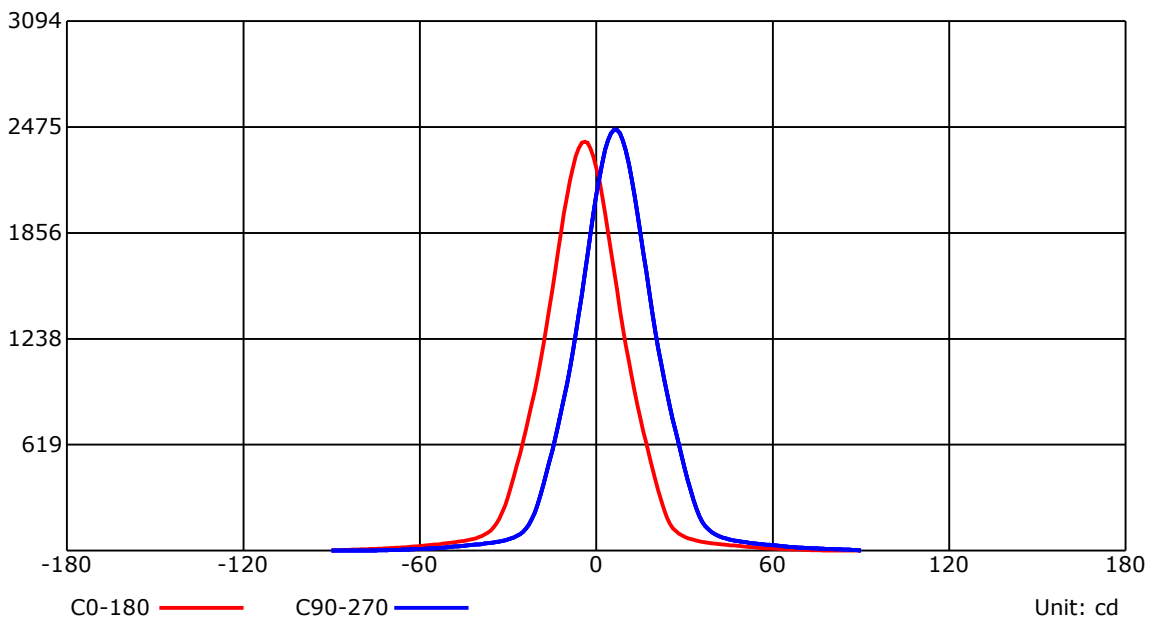
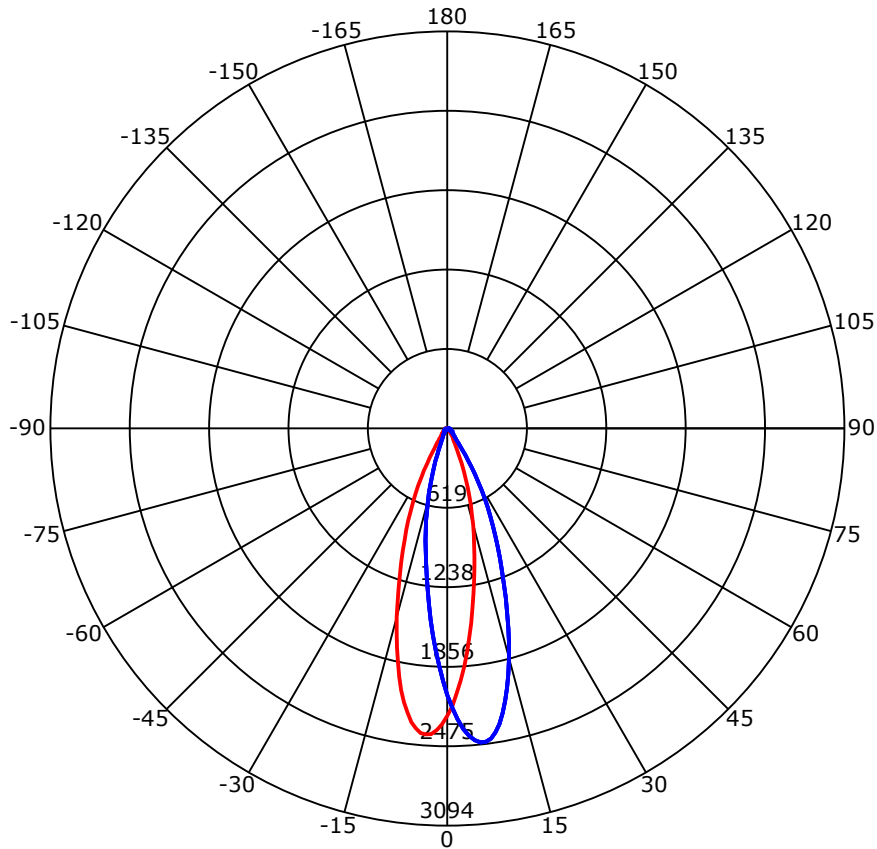
C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature: 25  
 Operators:  
 Test Date: 2026/3/20 9:54:38

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
 Humidity: 65  
 Test Distance: 6.88 m  
 Remarks:

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## Luminous Intensity Distribution Curve



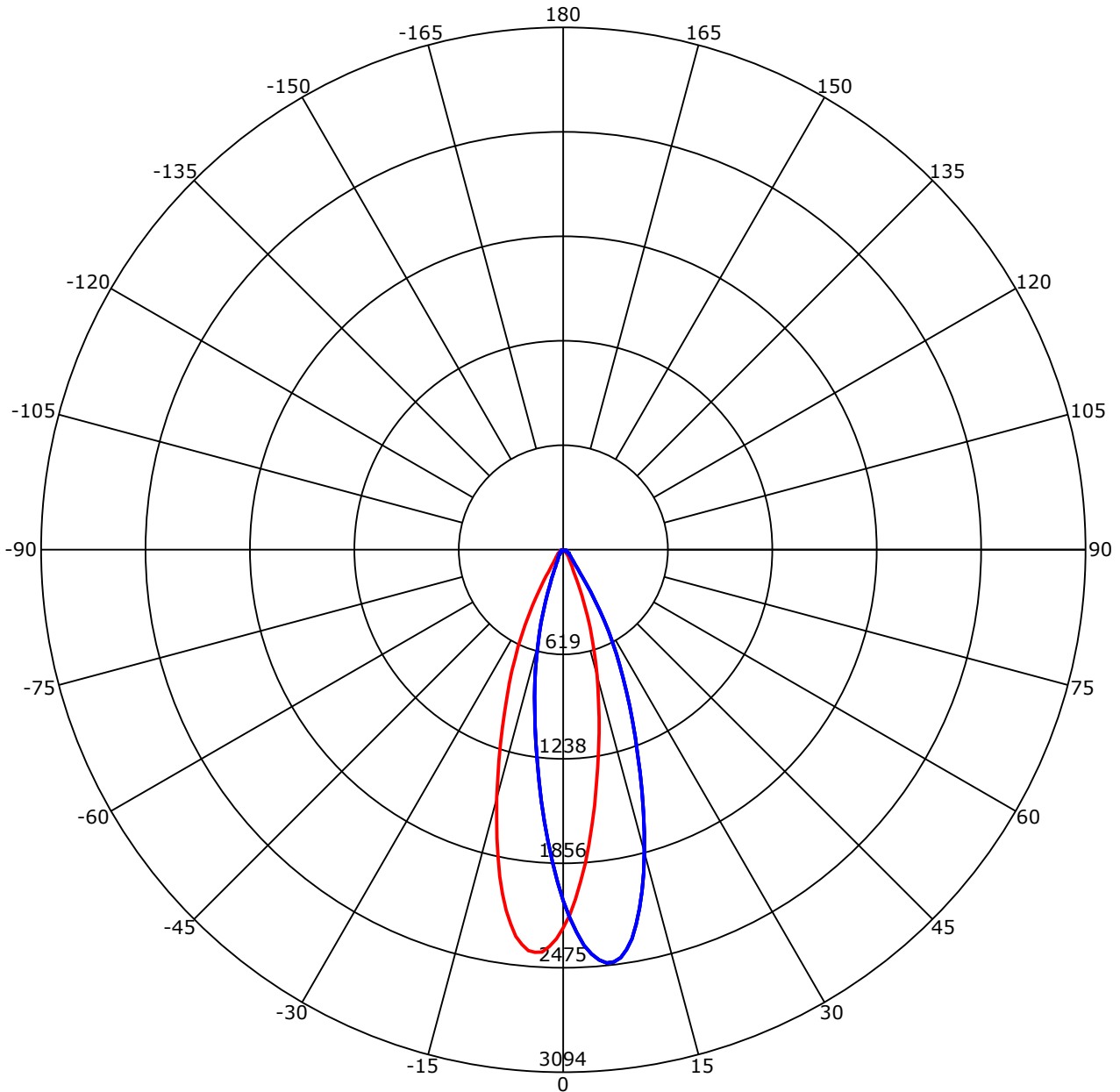
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 C Interval: 45.0 Deg  
 Test Speed: High  
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 Humidity: 65  
 Test Distance: 6.88 m  
 Remarks:

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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:  
 Test Date: 2026/3/20 9:54:38

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
 Humidity: 65  
 Test Distance: 6.88 m  
 Remarks:

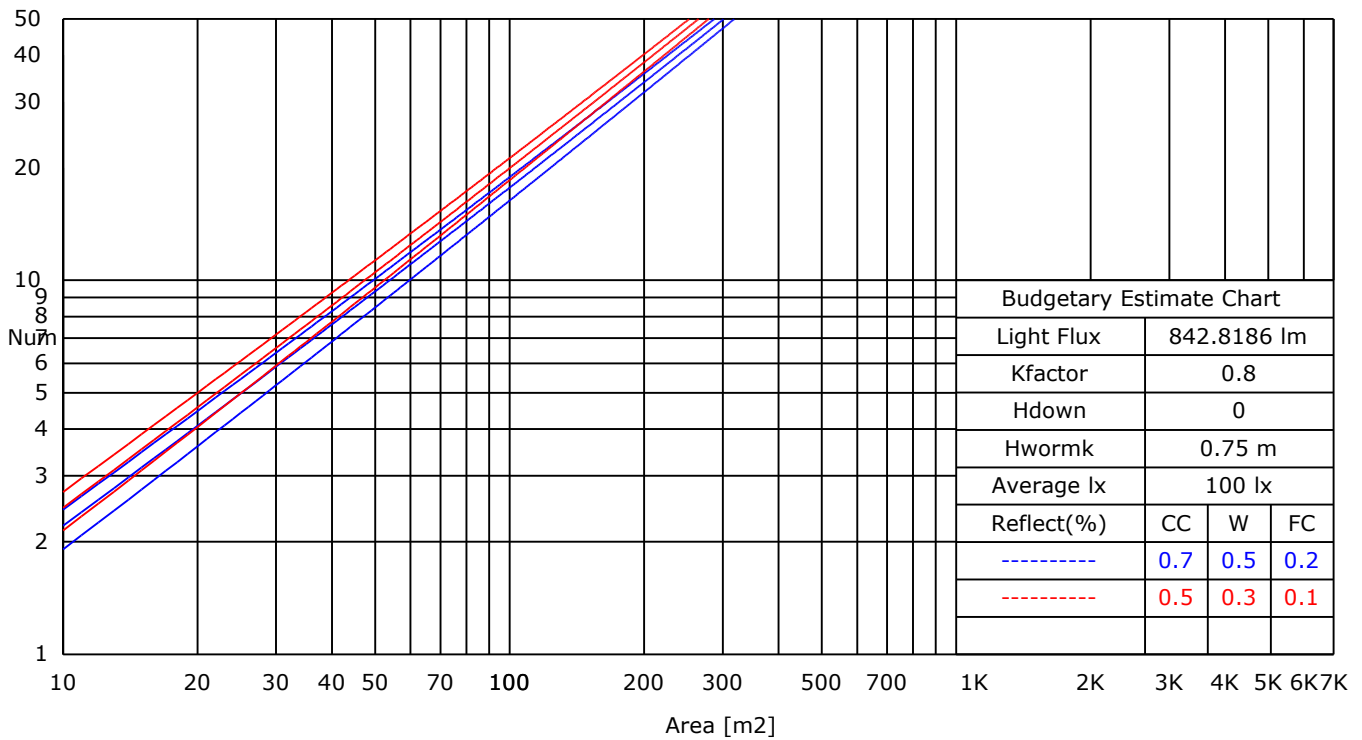
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### UTILIZATION FACTORS TABLE

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	0.96	0.93	0.91	0.95	0.92	0.90	0.92	0.89	0.86	0.88	0.85	0.82	0.82	0.79	0.76	0.71
2	0.91	0.89	0.87	0.91	0.88	0.86	0.88	0.85	0.82	0.85	0.81	0.78	0.80	0.76	0.73	0.68
3	0.88	0.86	0.84	0.87	0.84	0.82	0.85	0.81	0.79	0.82	0.78	0.75	0.78	0.74	0.70	0.66
4	0.84	0.82	0.81	0.84	0.81	0.79	0.82	0.78	0.76	0.79	0.75	0.72	0.76	0.71	0.68	0.64
5	0.82	0.80	0.79	0.81	0.79	0.77	0.79	0.76	0.73	0.77	0.73	0.70	0.74	0.69	0.66	0.62
6	0.79	0.78	0.76	0.79	0.76	0.75	0.77	0.74	0.71	0.75	0.71	0.68	0.72	0.67	0.64	0.60
7	0.77	0.75	0.74	0.76	0.74	0.73	0.75	0.71	0.69	0.73	0.69	0.66	0.70	0.65	0.62	0.58
8	0.75	0.74	0.73	0.74	0.72	0.71	0.73	0.70	0.68	0.71	0.67	0.64	0.68	0.64	0.60	0.57
9	0.73	0.72	0.71	0.73	0.71	0.69	0.71	0.68	0.66	0.69	0.65	0.63	0.67	0.62	0.59	0.56
10	0.72	0.70	0.70	0.71	0.69	0.68	0.69	0.66	0.65	0.67	0.64	0.61	0.65	0.61	0.58	0.55

### LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



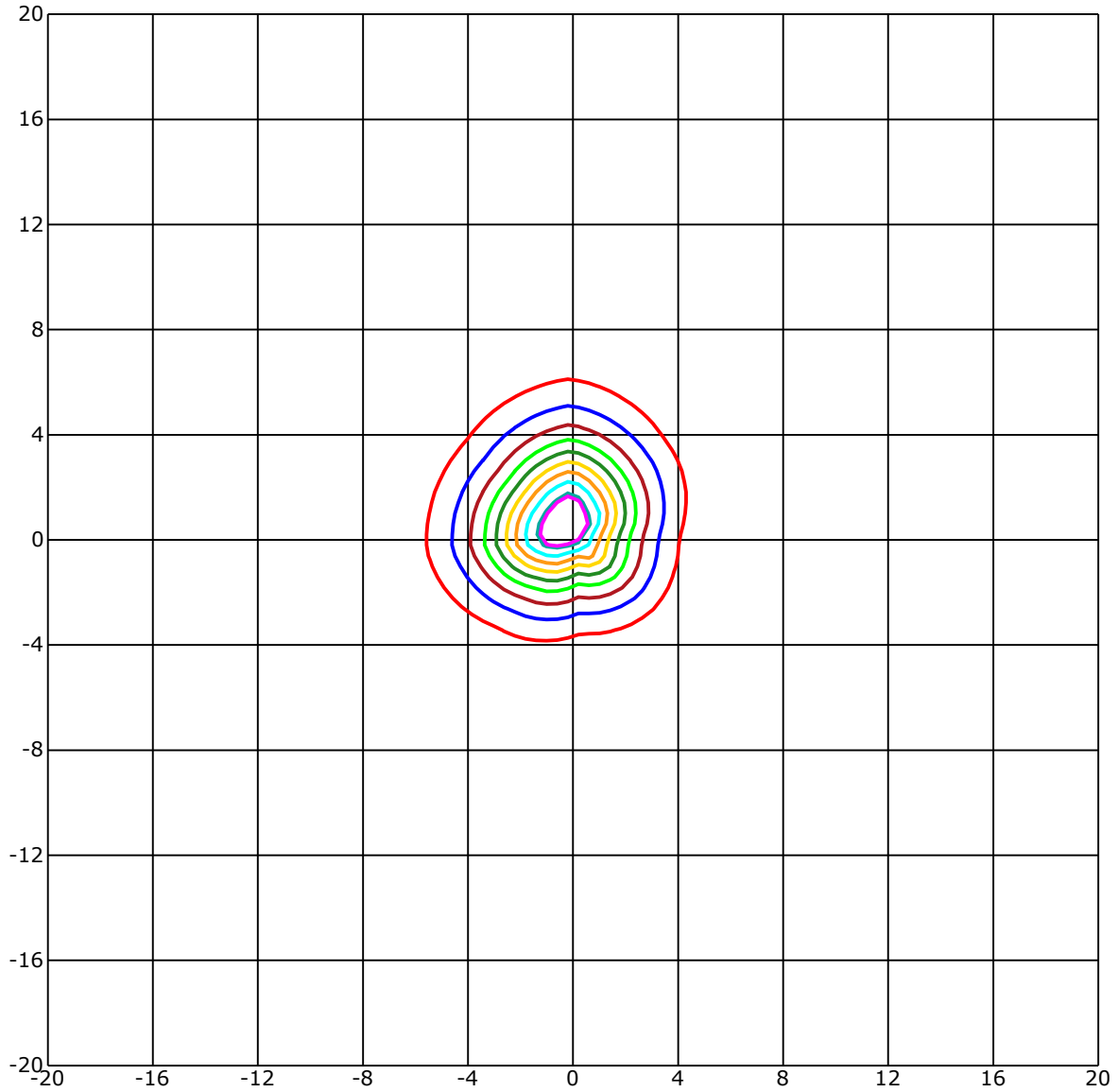
C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature: 25  
 Operators:  
 Test Date: 2026/3/20 9:54:38

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
 Humidity: 65  
 Test Distance: 6.88 m  
 Remarks:

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## ISOLX DIAGRAM



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

- |                   |                   |
|-------------------|-------------------|
| — 22.631(92%Emax) | — 12.299(50%Emax) |
| — 22.139(90%Emax) | — 9.839(40%Emax)  |
| — 19.679(80%Emax) | — 7.38(30%Emax)   |
| — 17.219(70%Emax) | — 4.92(20%Emax)   |
| — 14.759(60%Emax) | — 2.46(10%Emax)   |

C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
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 Operators:  
 Test Date: 2026/3/20 9:54:38

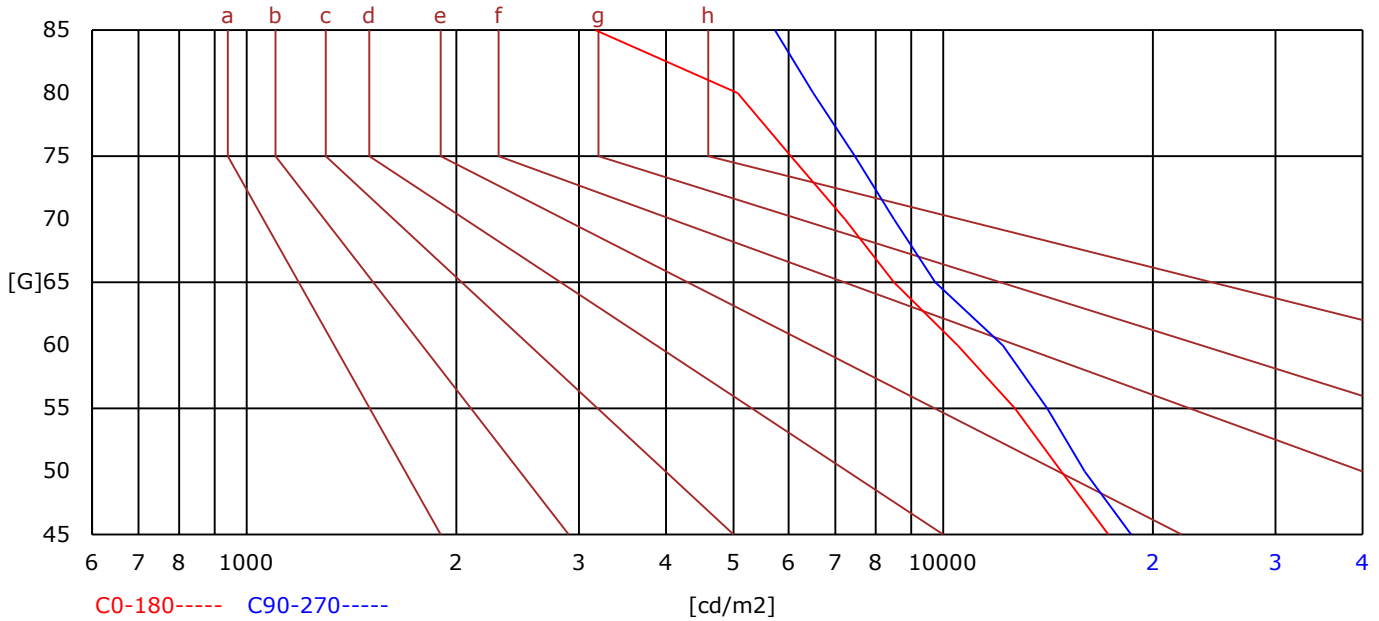
G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
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## BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	17256	14769	12677	10492	8494	7227	6045	5073	3168
C90	18613	15955	14098	12175	9738	8496	7468	6512	5733
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



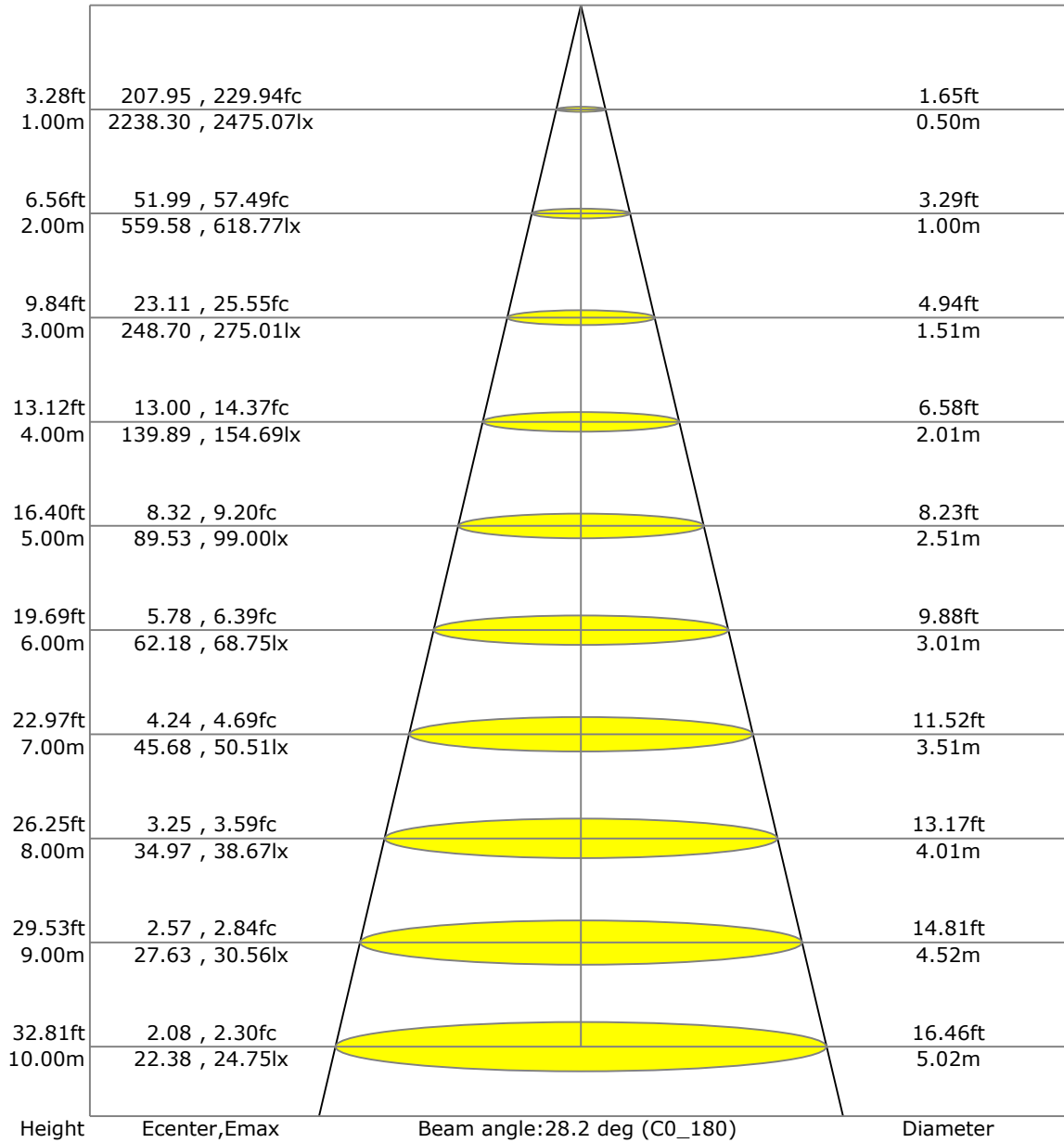
C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature: 25  
 Operators:  
 Test Date: 2026/3/20 9:54:38

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
 Humidity: 65  
 Test Distance: 6.88 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:  
 Test Date: 2026/3/20 9:54:38

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
 Humidity: 65  
 Test Distance: 6.88 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 Y	Viewed Endwise					Viewed Crosswise				
2H 2H	12.60	12.65	12.80	12.84	13.08	13.78	13.84	13.98	14.02	14.27
3H	12.71	12.77	12.92	12.96	13.20	13.80	13.86	14.01	14.05	14.29
4H	12.72	12.78	12.94	12.98	13.23	13.79	13.85	14.00	14.04	14.29
6H	12.72	12.78	12.93	12.98	13.23	13.77	13.83	13.99	14.03	14.28
8H	12.71	12.77	12.93	12.97	13.22	13.76	13.82	13.98	14.02	14.28
12H	12.70	12.76	12.92	12.96	13.22	13.75	13.81	13.98	14.02	14.27
4H 2H	13.19	13.24	13.40	13.44	13.69	15.35	15.41	15.56	15.61	15.85
3H	13.39	13.45	13.61	13.65	13.91	15.45	15.51	15.67	15.72	15.97
4H	13.45	13.50	13.68	13.72	13.98	15.45	15.51	15.68	15.72	15.98
6H	13.47	13.53	13.71	13.75	14.01	15.44	15.49	15.68	15.71	15.98
8H	13.47	13.53	13.72	13.75	14.02	15.43	15.48	15.67	15.71	15.97
12H	13.47	13.52	13.72	13.75	14.02	15.41	15.47	15.66	15.70	15.97
8H 4H	13.20	13.26	13.42	13.46	13.71	15.93	15.98	16.14	16.19	16.44
6H	13.54	13.59	13.80	13.83	14.11	16.19	16.24	16.45	16.48	16.76
8H	13.56	13.61	13.82	13.85	14.13	16.18	16.23	16.44	16.48	16.75
12H	13.57	13.61	13.84	13.87	14.15	16.16	16.21	16.43	16.47	16.75
12H 4H	13.49	13.54	13.74	13.77	14.04	16.48	16.54	16.73	16.77	17.04
6H	13.53	13.58	13.80	13.83	14.11	16.52	16.57	16.79	16.82	17.10

C Range: 0 - 360 Deg  
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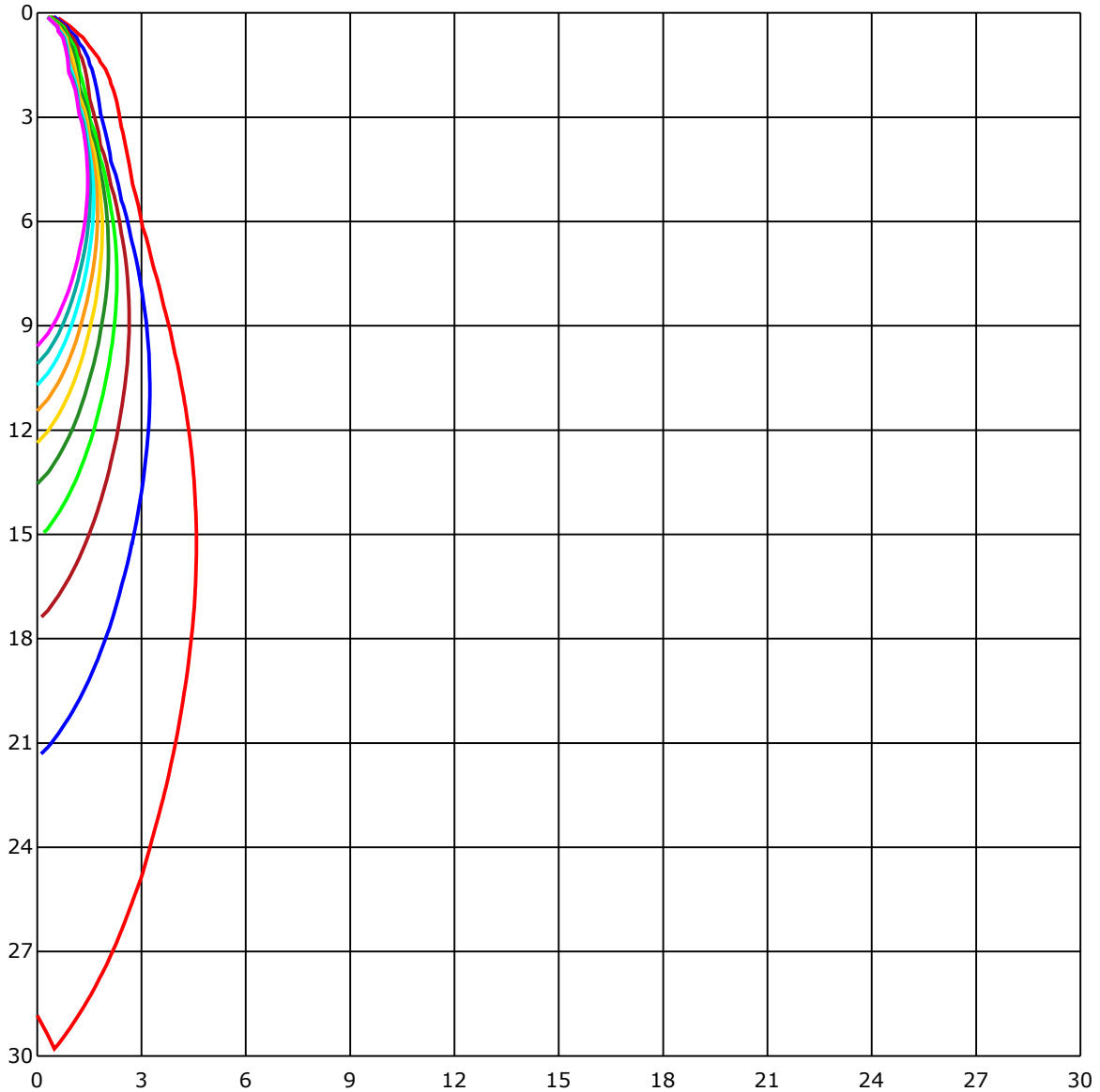
G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
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 Humidity: 65  
 Test Distance: 6.88 m  
 Remarks:



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## SPACE ISOLX DIAGRAM



Unit of illumination:lx

- |          |          |
|----------|----------|
| — 24.394 | — 12.197 |
| — 21.955 | — 9.758  |
| — 19.515 | — 7.318  |
| — 17.076 | — 4.879  |
| — 14.636 | — 2.439  |

C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature: 25  
 Operators:  
 Test Date: 2026/3/20 9:54:38

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
 Humidity: 65  
 Test Distance: 6.88 m  
 Remarks:

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## LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	2238.3	2302.35	2076.94	2331.03	2238.3	2302.35	2076.94	2331.03	2238.3	
G1	2164.93	2329.52	2177.29	2394.79	2303.62	2255.3	1968.59	2252.12	2164.93	
G2	2068.75	2336.71	2266.47	2440.94	2349.82	2193.81	1850.49	2157.98	2068.75	
G3	1967.93	2328.0	2344.57	2470.0	2384.33	2120.77	1729.65	2058.67	1967.93	
G4	1860.67	2299.27	2399.43	2475.07	2389.39	2032.45	1612.16	1947.34	1860.67	
G5	1750.62	2253.88	2437.77	2467.02	2382.96	1931.43	1493.12	1828.34	1750.62	
G6	1633.65	2188.03	2459.97	2429.86	2349.87	1830.85	1377.62	1711.23	1633.65	
G7	1525.97	2106.57	2459.16	2375.57	2305.33	1717.53	1266.67	1590.72	1525.97	
G8	1407.82	2022.5	2439.57	2303.01	2236.65	1607.05	1162.63	1474.89	1407.82	
G9	1304.68	1919.74	2395.74	2218.94	2161.9	1495.15	1065.59	1363.52	1304.68	
G10	1202.86	1814.33	2339.65	2119.68	2070.31	1387.23	974.8	1255.69	1202.86	
G11	1107.53	1706.78	2259.41	2014.93	1971.24	1281.2	888.56	1155.2	1107.53	
G12	1016.22	1599.62	2169.67	1902.61	1858.49	1185.3	810.55	1061.0	1016.22	
G13	930.41	1489.8	2072.16	1784.7	1751.33	1091.2	731.93	971.73	930.41	
G14	847.95	1382.92	1966.98	1662.91	1634.46	1003.73	656.43	885.96	847.95	
G15	772.83	1278.64	1855.46	1541.78	1522.32	920.99	583.68	804.83	772.83	
G16	696.86	1183.12	1741.53	1425.85	1410.8	841.13	517.03	726.82	696.86	
G17	625.71	1089.59	1625.51	1313.67	1304.35	765.02	450.95	651.08	625.71	
G18	552.77	1002.26	1508.12	1204.0	1202.15	691.79	386.58	576.77	552.77	
G19	485.79	918.71	1394.85	1103.37	1107.58	619.42	325.28	505.82	485.79	
G20	420.14	838.72	1288.16	1008.51	1015.65	552.25	270.37	435.86	420.14	
G21	356.29	764.26	1188.05	923.68	932.06	484.8	222.05	370.16	356.29	
G22	293.8	693.26	1093.8	839.1	852.63	419.71	182.0	308.38	293.8	
G23	239.23	622.49	1004.77	763.36	779.22	357.66	150.57	253.81	239.23	
G24	193.6	555.09	923.45	690.09	702.92	302.51	127.0	209.17	193.6	
G25	157.48	488.16	841.37	620.7	634.09	252.48	108.96	174.05	157.48	
G26	131.5	421.51	764.97	551.11	564.46	210.69	95.71	147.87	131.5	
G27	113.89	357.09	692.64	486.46	500.66	175.75	85.72	128.61	113.89	
G28	100.3	299.15	622.78	423.93	435.43	149.29	77.63	113.56	100.3	
G29	89.56	245.81	552.68	365.33	375.6	128.8	71.14	102.43	89.56	
G30	81.08	199.8	483.43	308.19	317.95	113.32	65.79	93.15	81.08	
G31	74.08	163.26	417.58	257.26	267.01	101.01	61.2	85.72	74.08	
G32	68.4	136.89	354.25	212.34	223.47	91.88	57.32	79.52	68.4	
G33	63.19	117.25	296.46	175.0	186.4	84.11	53.77	74.36	63.19	
G34	59.17	102.72	245.62	145.03	156.96	77.82	50.74	69.58	59.17	
G35	55.52	91.64	202.78	122.74	134.67	71.95	47.67	65.7	55.52	
G36	51.88	83.17	169.65	105.37	117.06	67.5	45.44	62.1	51.88	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

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G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 65

Test Distance: 6.88 m

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### LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	48.52	75.55	144.13	91.97	103.71	63.57	43.07	58.98	48.52	
G38	45.73	69.44	125.1	81.7	93.44	60.11	40.85	55.95	45.73	
G39	43.64	64.23	110.34	73.51	85.3	56.8	38.77	53.25	43.64	
G40	41.37	59.93	99.12	67.26	78.24	54.1	36.92	50.79	41.37	
G41	39.43	56.14	89.94	62.01	72.47	51.45	35.17	48.09	39.43	
G42	37.44	52.64	82.55	57.51	67.64	48.61	33.47	45.68	37.44	
G43	35.83	49.09	76.26	53.87	63.52	46.29	31.76	43.74	35.83	
G44	34.03	46.53	71.19	50.55	60.02	44.35	30.34	41.7	34.03	
G45	32.52	43.93	66.69	47.38	57.09	42.27	28.73	39.81	32.52	
G46	30.96	41.8	62.77	44.87	54.2	40.38	27.12	38.01	30.96	
G47	29.58	39.62	59.36	42.65	51.97	38.53	25.51	36.35	29.58	
G48	27.88	37.63	56.33	40.57	48.85	36.97	24.0	34.7	27.88	
G49	26.41	35.83	53.44	38.72	46.58	35.17	22.44	32.9	26.41	
G50	24.85	34.18	51.12	36.92	44.54	33.7	20.92	31.24	24.85	
G51	23.29	32.19	48.28	35.26	42.65	32.0	19.41	29.68	23.29	
G52	21.73	30.67	46.15	33.65	40.9	30.34	18.13	27.79	21.73	
G53	20.16	29.11	44.21	32.14	38.81	28.54	16.28	26.13	20.16	
G54	18.6	27.74	42.17	30.58	36.97	26.89	15.05	24.33	18.6	
G55	17.04	26.18	40.28	29.11	35.45	25.37	13.92	22.77	17.04	
G56	15.72	24.8	38.53	27.6	33.7	23.67	13.06	21.25	15.72	
G57	14.48	23.19	36.73	26.32	32.14	21.96	12.07	20.02	14.48	
G58	13.44	21.82	34.98	24.8	30.39	20.54	11.36	18.74	13.44	
G59	12.73	20.21	33.28	23.48	28.73	19.27	10.51	17.8	12.73	
G60	11.74	18.89	31.62	21.92	27.08	18.27	9.7	16.8	11.74	
G61	10.79	17.32	29.96	20.54	25.56	17.28	8.95	15.76	10.79	
G62	9.94	15.81	28.5	19.08	23.95	16.24	8.24	14.86	9.94	
G63	9.18	14.58	26.79	17.51	22.34	15.38	7.57	14.06	9.18	
G64	8.43	13.58	25.23	16.05	20.83	14.53	6.86	13.11	8.43	
G65	7.81	12.92	23.29	14.82	19.55	13.68	6.34	12.35	7.81	
G66	7.1	11.93	21.73	13.87	18.41	12.92	5.59	11.55	7.1	
G67	6.48	11.08	20.26	13.02	17.37	12.12	5.02	10.79	6.48	
G68	5.87	10.37	19.27	12.02	16.47	11.36	4.59	10.08	5.87	
G69	5.35	9.61	18.13	11.22	15.53	10.6	3.98	9.42	5.35	
G70	4.54	8.9	17.09	10.46	14.67	9.85	3.5	8.71	4.54	
G71	4.12	8.14	16.05	9.75	13.77	9.18	2.98	8.28	4.12	
G72	3.55	7.53	15.19	8.95	12.97	8.52	2.51	7.53	3.55	
G73	3.12	6.91	14.29	8.43	12.21	7.86	2.08	6.96	3.12	

C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature: 25  
 Operators:  
 Test Date: 2026/3/20 9:54:38

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
 Humidity: 65  
 Test Distance: 6.88 m  
 Remarks:

