

Report No.:

Test Time: 2025/10/8 9:04:10

## LUMINAIRE PHOTOMETRIC TEST REPORT

### Luminaire Property

Manufacturer: 0  
Luminaire Type: 63048LEDDCS-CH-OPL  
Lamp Type:  
Luminous Width: 0 mm  
Luminous Length: 0 mm  
Luminous Height: 0 mm

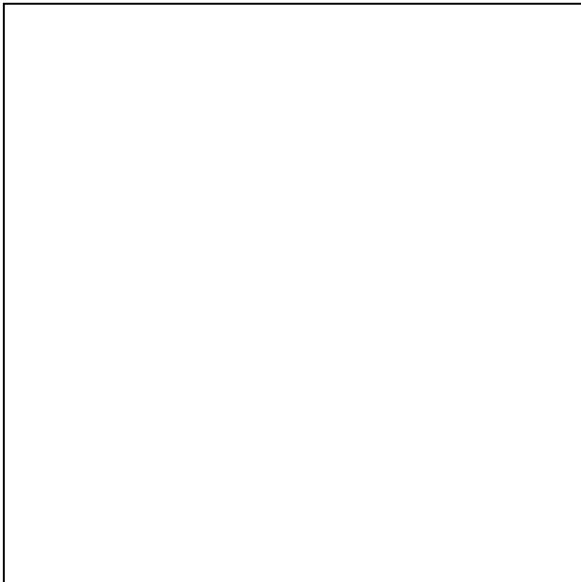
Voltage(V): 119.10 V  
Current(A): 0.3320 A  
Power(W): 35.81 W  
Power Factor: 0.9030  
Lamp Luminous Flux: 2018.98

### Photometric Results

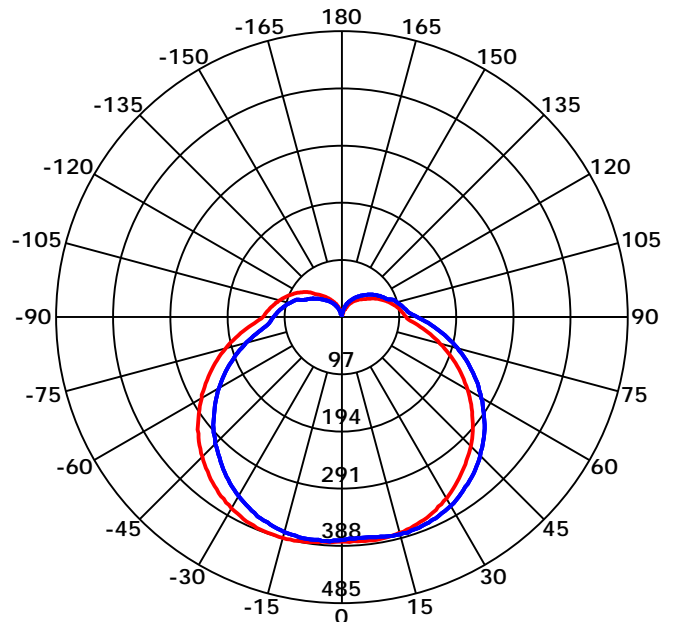
CIE Class: Direct  
Luminaire Luminous Flux: 2018.975 lm  
Downward Ratio: 79.35%  
Luminaire Efficacy Rating(LER): 56.38 lm/W  
Beam Angle(50%) C0-180,C90-270: 147.8,147.6  
Field Angle(10%) C0-180,C90-270: 282.9,284.4  
S/MH C0-180,C90-270: 1.400,1.400

Max. Intensity: 388.16 cd  
Max.Intensity Angle: C=180 Gamma=14  
Upward Ratio: 20.65%  
Efficacy: 100.00%  
Center Intensity: 380.98 cd  
Effective Luminous Flux: 1983.99 lm  
ERP( $\varphi$ use)(120deg): 1028.43 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 147.8 deg,147.6 deg

C0-180 ——— C90-270 ———

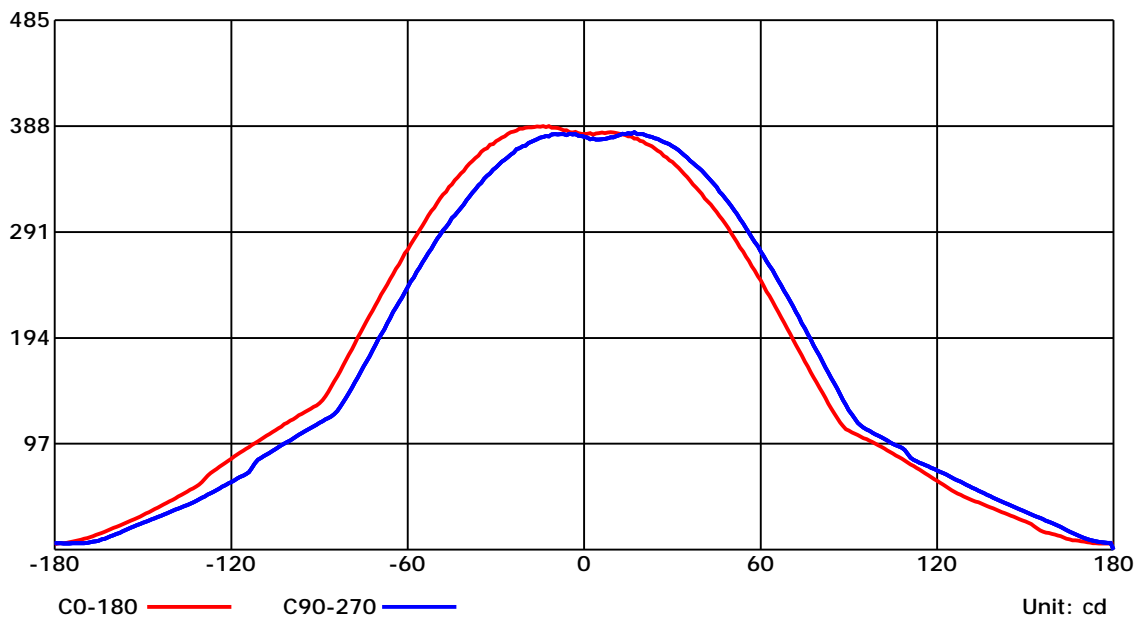
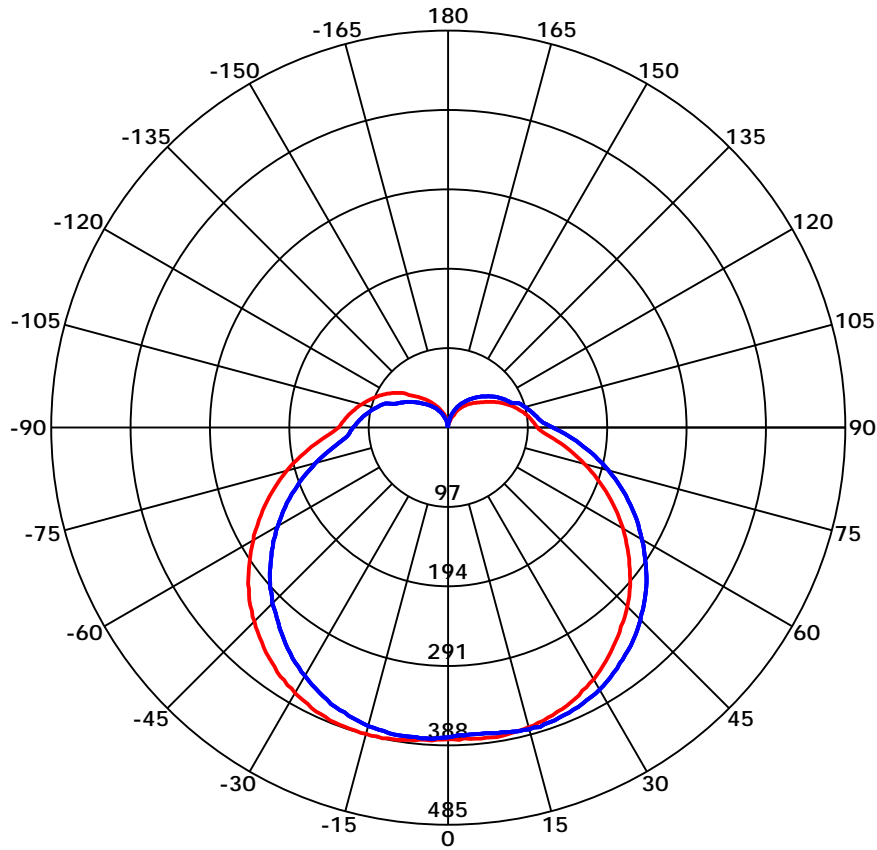
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators:  
Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 65  
Test Distance: 6.25 m  
Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

### Luminous Intensity Distribution Curve



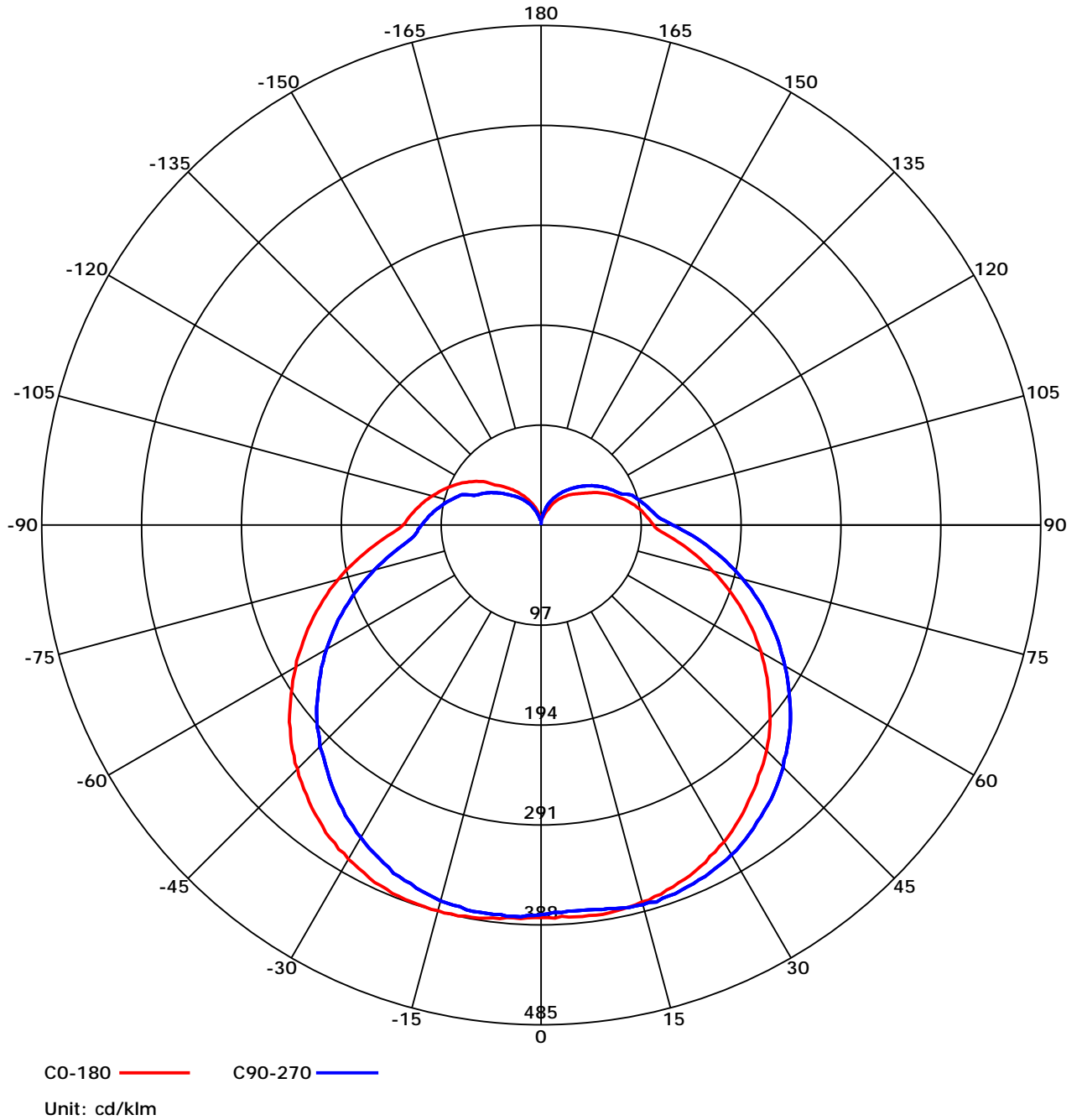
C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature: 25  
 Operators:  
 Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
 Humidity: 65  
 Test Distance: 6.25 m  
 Remarks:

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## Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature: 25  
 Operators:  
 Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
 Humidity: 65  
 Test Distance: 6.25 m  
 Remarks:

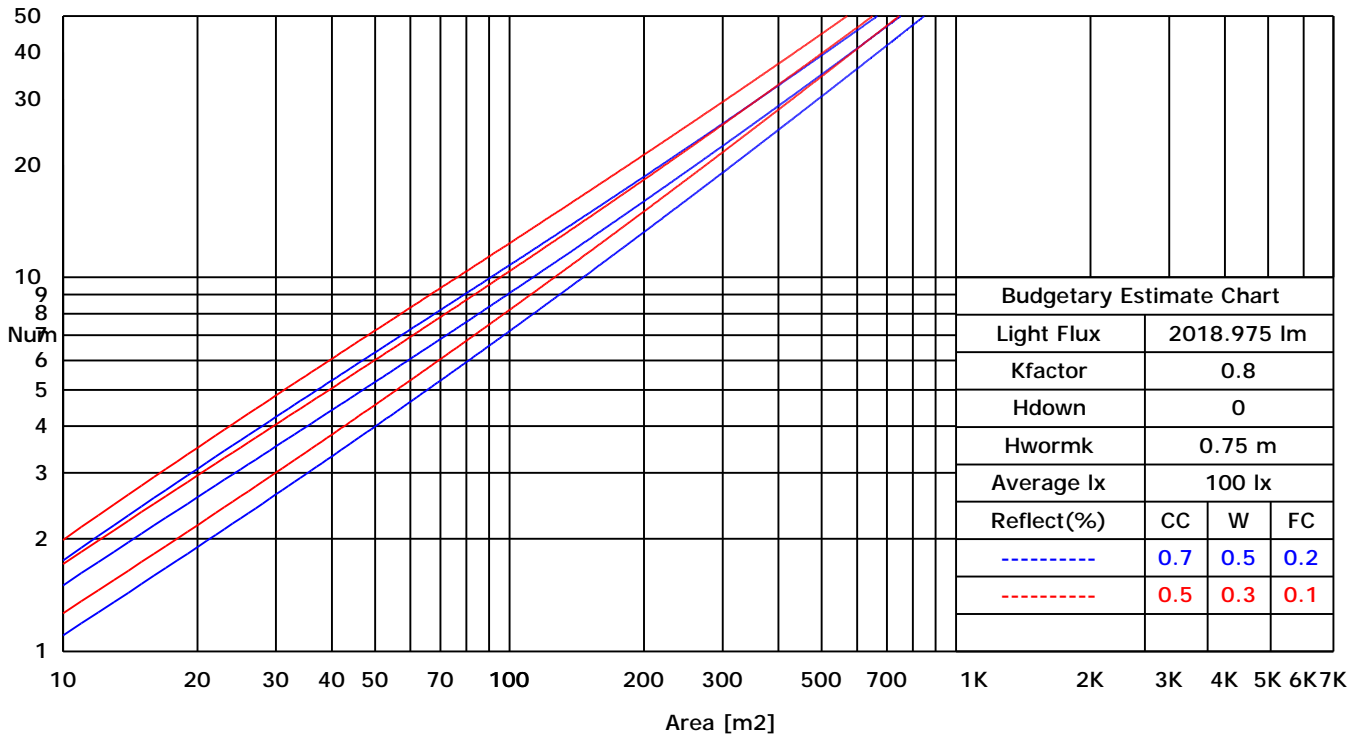
Report No.:

Test Time: 2025/10/8 9:04:10

### 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	1.01	0.99	0.97	1.00	0.97	0.95	0.97	0.94	0.92	0.92	0.89	0.87	0.86	0.83	0.81	0.75
2	0.87	0.84	0.82	0.86	0.83	0.80	0.84	0.80	0.77	0.81	0.77	0.73	0.77	0.72	0.68	0.64
3	0.76	0.73	0.71	0.76	0.72	0.70	0.75	0.70	0.67	0.73	0.68	0.64	0.69	0.64	0.60	0.55
4	0.68	0.65	0.63	0.68	0.65	0.62	0.68	0.63	0.59	0.66	0.61	0.57	0.64	0.58	0.53	0.49
5	0.62	0.59	0.57	0.62	0.59	0.56	0.62	0.57	0.54	0.61	0.56	0.51	0.59	0.53	0.49	0.45
6	0.57	0.54	0.53	0.57	0.54	0.52	0.58	0.53	0.50	0.57	0.51	0.47	0.56	0.50	0.45	0.41
7	0.53	0.51	0.49	0.54	0.50	0.48	0.54	0.49	0.46	0.54	0.48	0.44	0.53	0.47	0.42	0.38
8	0.50	0.48	0.46	0.50	0.47	0.45	0.51	0.46	0.43	0.51	0.45	0.41	0.50	0.44	0.39	0.36
9	0.47	0.45	0.44	0.48	0.45	0.43	0.48	0.44	0.41	0.48	0.43	0.39	0.48	0.42	0.37	0.34
10	0.45	0.43	0.42	0.46	0.43	0.41	0.46	0.42	0.39	0.46	0.41	0.38	0.46	0.40	0.36	0.33

### LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



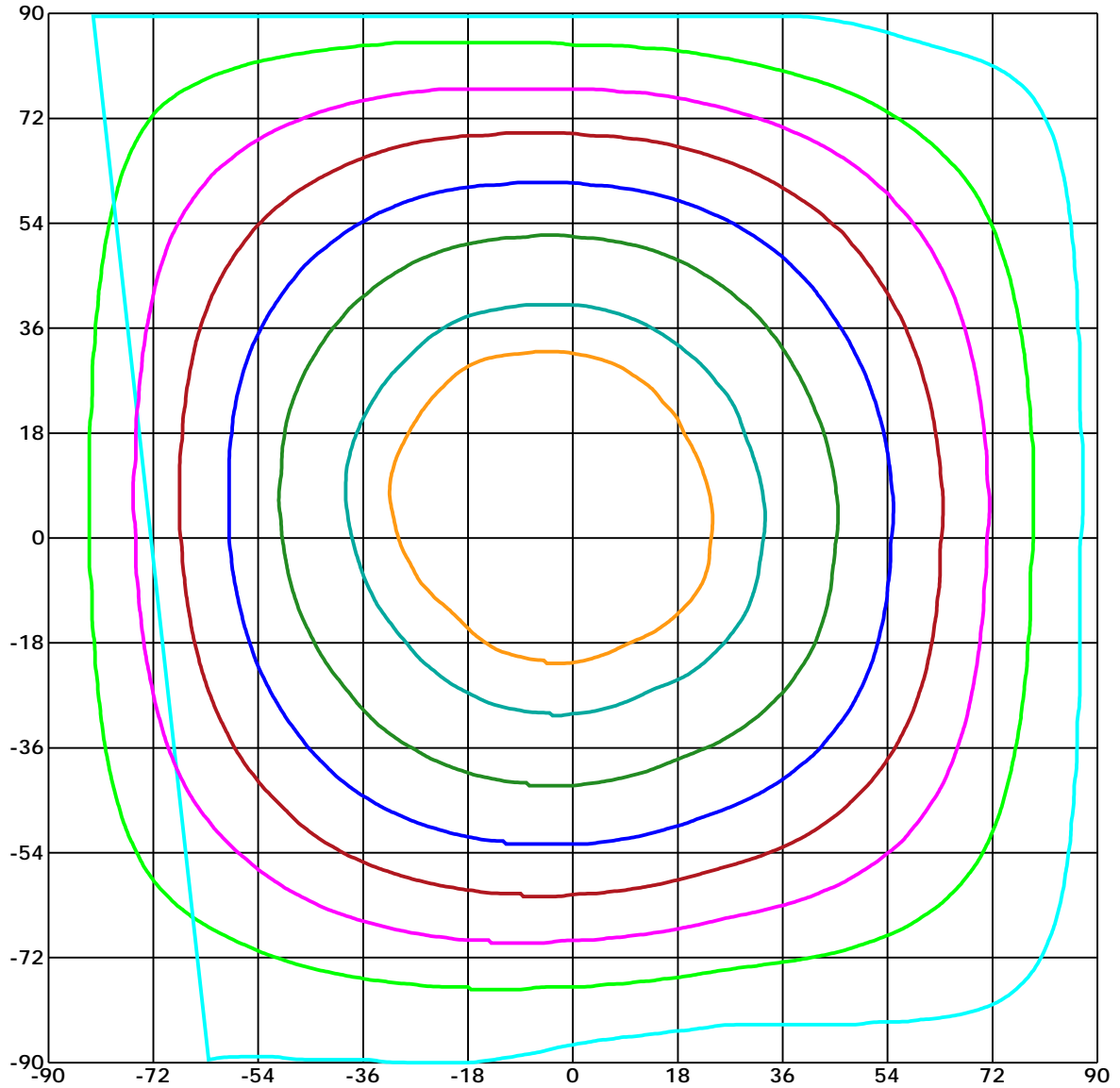
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators:  
Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 65  
Test Distance: 6.25 m  
Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

## ISOCANDELA DIAGRAM (RECTANGULAR)



Unit of intensity:cd    I<sub>max</sub>(100%): 388.164 cd

- |                                 |                                 |
|---------------------------------|---------------------------------|
| — 194.082(50%I <sub>max</sub> ) | — 310.531(80%I <sub>max</sub> ) |
| — 349.348(90%I <sub>max</sub> ) | — 155.266(40%I <sub>max</sub> ) |
| — 116.449(30%I <sub>max</sub> ) | — 232.899(60%I <sub>max</sub> ) |
| — 368.756(95%I <sub>max</sub> ) | — 271.715(70%I <sub>max</sub> ) |
| — 77.633(20%I <sub>max</sub> )  | — 38.816(10%I <sub>max</sub> )  |

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators:

Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 65

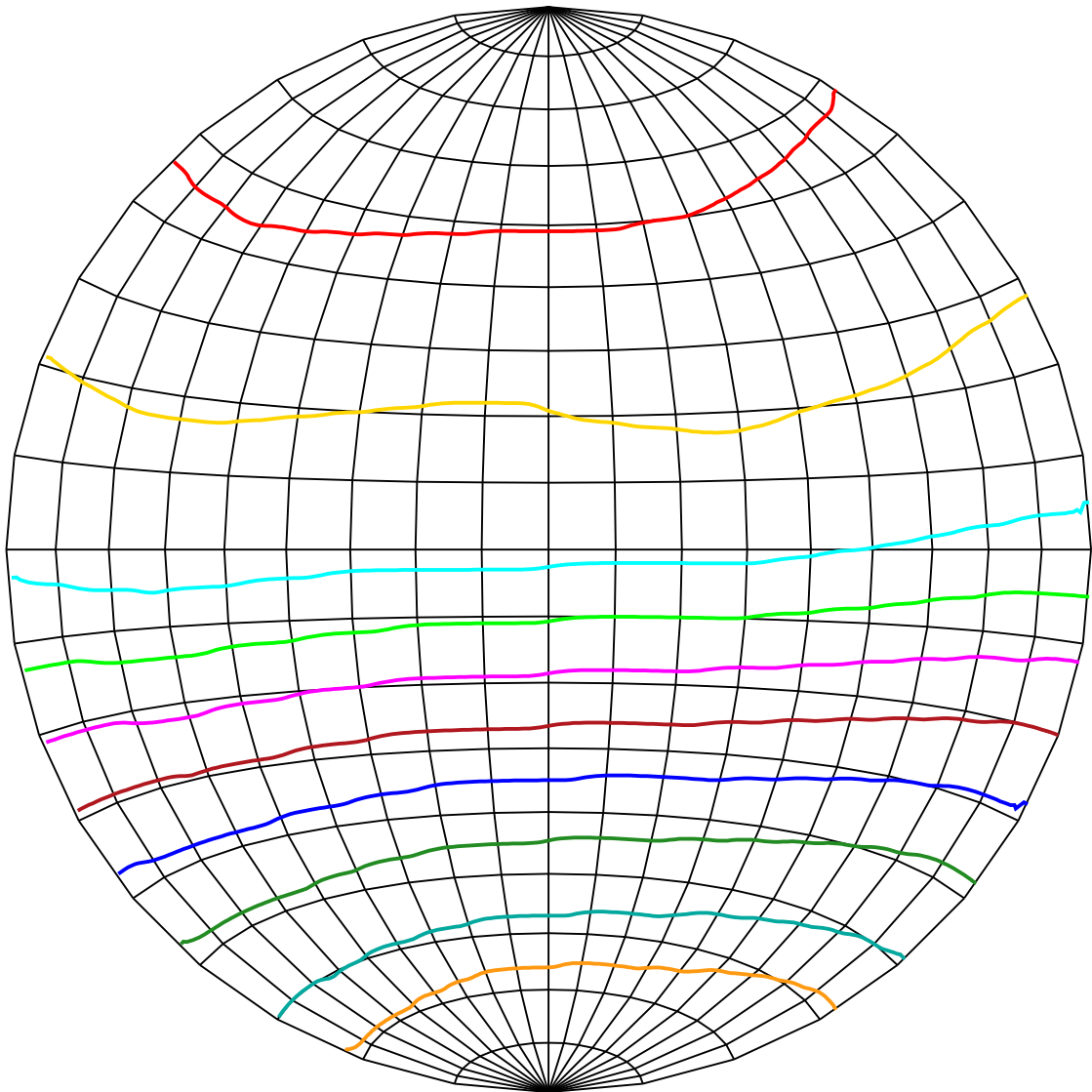
Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

### ISOCANDELA DIAGRAM (SPHERE)



Unit of intensity:cd      Imax(100%): 388.164 cd

- |                    |                    |
|--------------------|--------------------|
| — 194.082(50%Imax) | — 310.531(80%Imax) |
| — 349.348(90%Imax) | — 155.266(40%Imax) |
| — 116.449(30%Imax) | — 232.899(60%Imax) |
| — 368.756(95%Imax) | — 271.715(70%Imax) |
| — 77.633(20%Imax)  | — 38.816(10%Imax)  |

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators:

Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 65

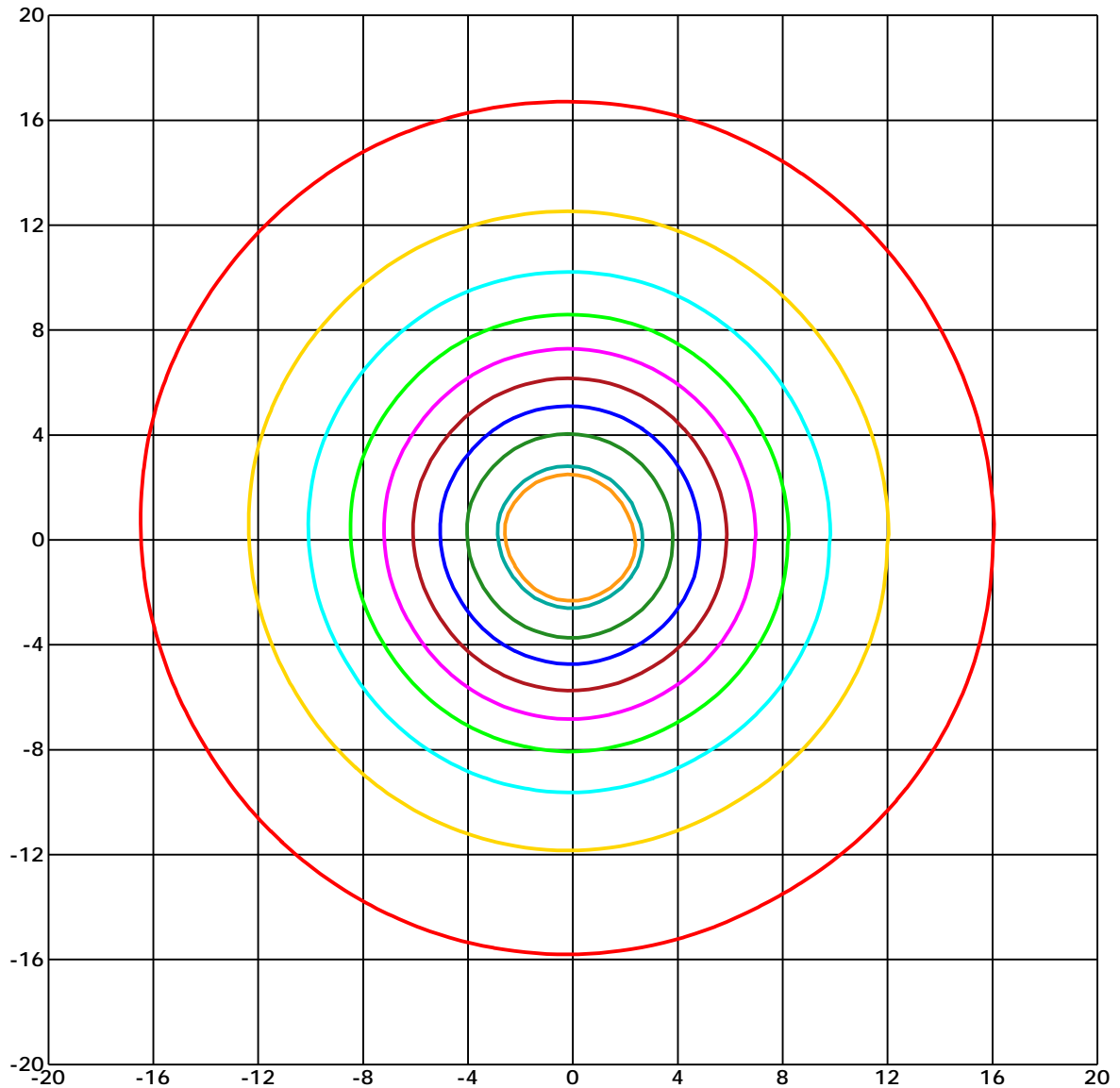
Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

## ISOLX DIAGRAM



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

- |                  |                  |
|------------------|------------------|
| — 1.905(50%Emax) | — 3.048(80%Emax) |
| — 3.43(90%Emax)  | — 1.524(40%Emax) |
| — 1.143(30%Emax) | — 2.286(60%Emax) |
| — 3.506(92%Emax) | — 2.667(70%Emax) |
| — 0.762(20%Emax) | — 0.381(10%Emax) |

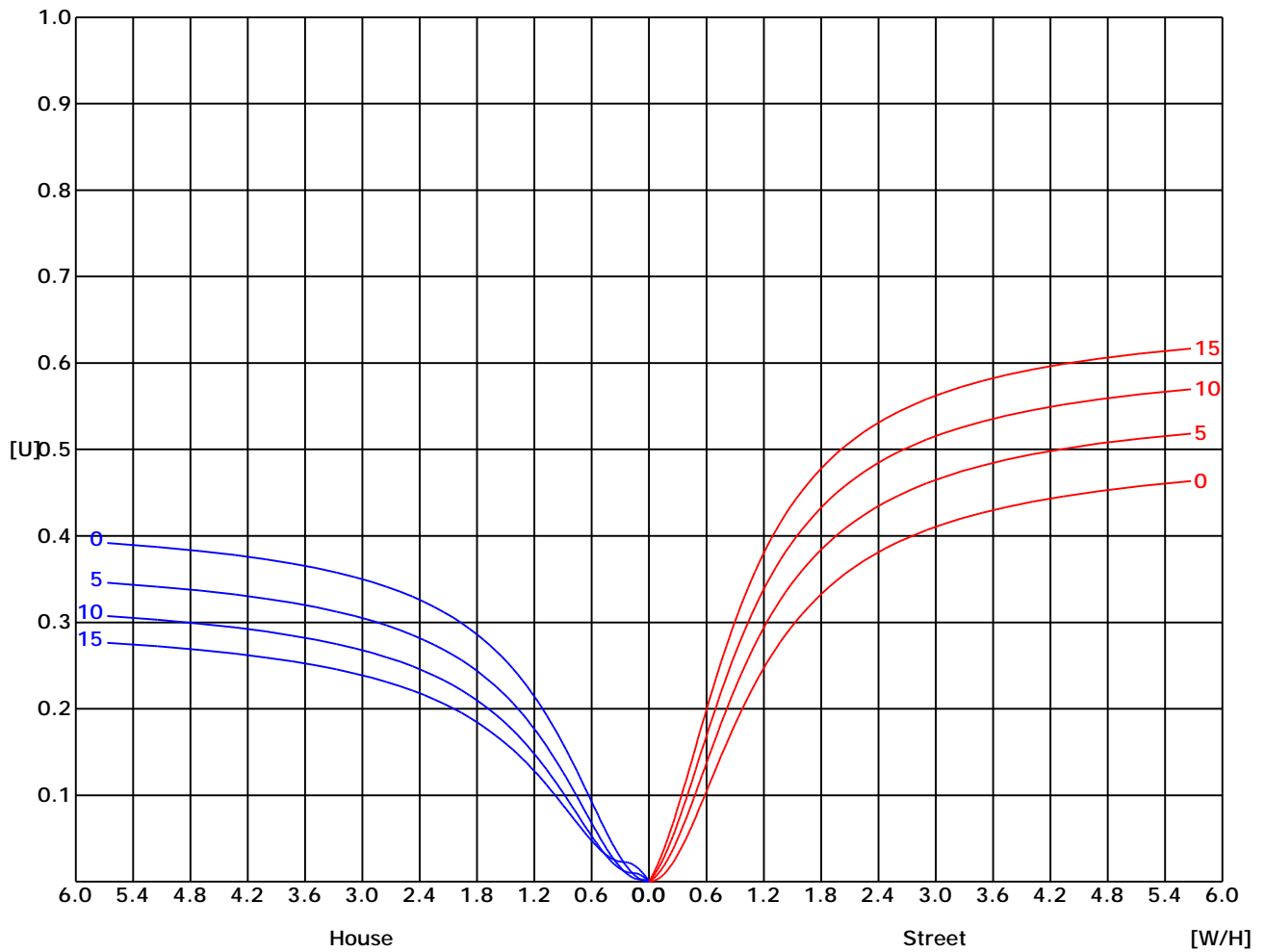
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators:  
Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 65  
Test Distance: 6.25 m  
Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

## UTILIZATION FACTOR DIAGRAM (ROAD)



C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators:  
Test Date: 2025/10/8 9:04:10

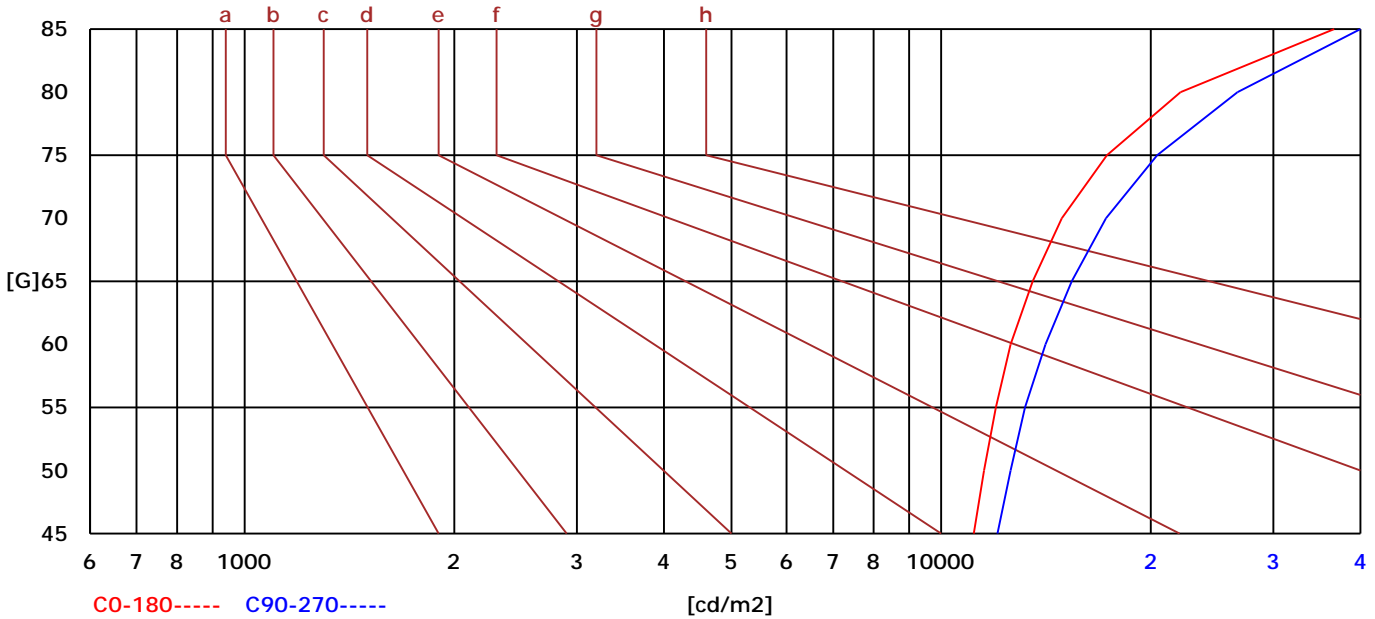
G Range: 0 - 180 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 65  
Test Distance: 6.25 m  
Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

### BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	11144	11521	11986	12580	13534	14905	17296	22057	36662
C90	12051	12575	13202	14119	15396	17240	20420	26651	45850
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



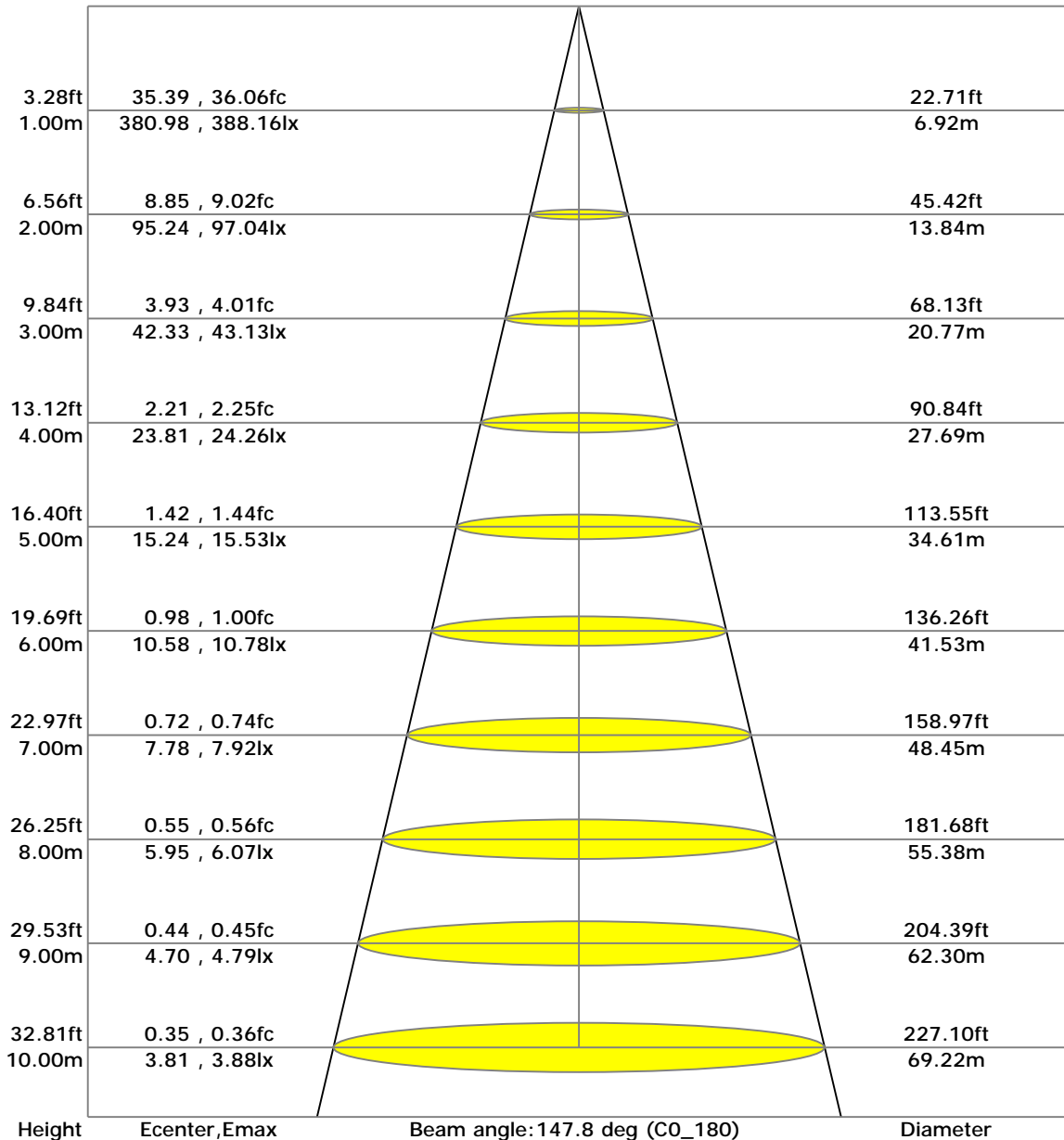
C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature: 25  
 Operators:  
 Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
 Humidity: 65  
 Test Distance: 6.25 m  
 Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

### LX-DISTANCE DIAGRAM



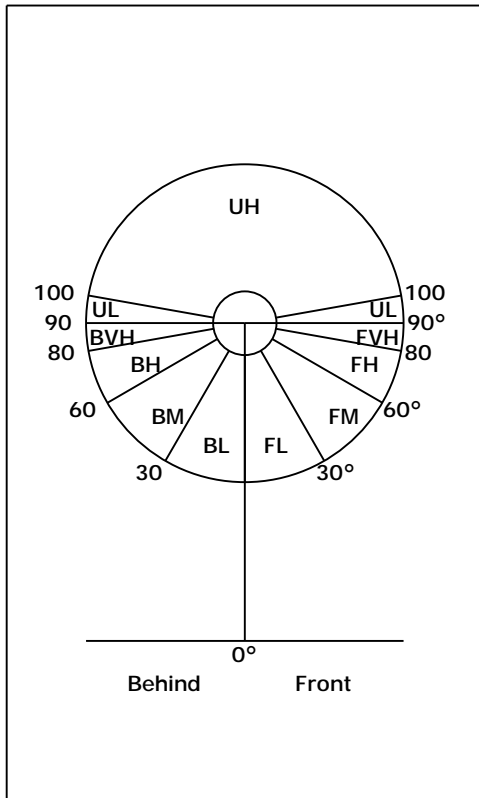
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators:  
Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 65  
Test Distance: 6.25 m  
Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

### BUG Class



Zonal	Light Flux(lm)	Light Flux(%)
Front	829.4	41.1
FL (0°-30°)	158.8	7.9
FM (30°-60°)	367.4	18.2
FH (60°-80°)	224.1	11.1
FVH (80°-90°)	79.2	3.9
Behind	772.7	38.3
BL (0°-30°)	156.1	7.7
BM (30°-60°)	346.2	17.1
BH (60°-80°)	200.8	9.9
BVH (80°-90°)	69.6	3.4
Above	356.3	17.6
UL (90°-100°)	58.0	2.9
UH (100°-180°)	298.4	14.8
Limit Light	NA	NA

BUG Class(TM-15-07)	
Asymmetric Lighting Fixtures (Type I , II , III , IV)	B1 U3 G1
Symmetrical Lighting Fixtures (Type V , Area Light)	B1 U3 G1

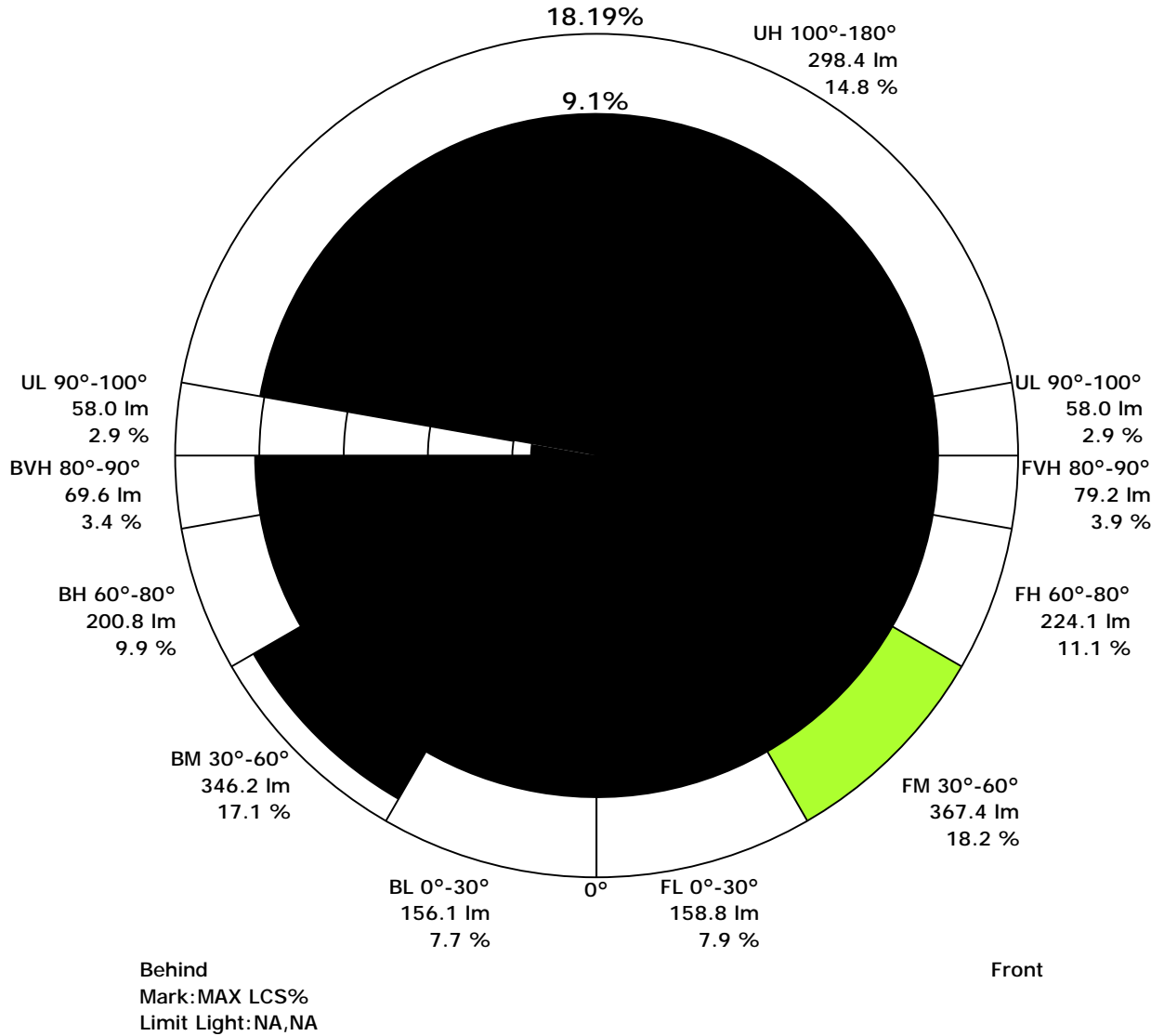
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators:  
Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 65  
Test Distance: 6.25 m  
Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

LCS 图



C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators:  
Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 65  
Test Distance: 6.25 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 Y		Viewed Endwise					Viewed Crosswise				
2H	2H	21.46	22.04	21.39	22.22	22.47	21.78	22.35	21.70	22.53	22.78
	3H	21.55	22.11	21.50	22.30	22.57	21.79	22.36	21.75	22.55	22.82
	4H	21.52	22.07	21.49	22.27	22.55	21.73	22.29	21.71	22.49	22.77
	6H	21.41	21.95	21.42	22.16	22.47	21.61	22.15	21.61	22.36	22.66
	8H	21.32	21.85	21.34	22.07	22.38	21.52	22.05	21.53	22.27	22.58
	12H	21.23	21.75	21.26	21.97	22.30	21.42	21.95	21.46	22.17	22.50
4H	2H	25.05	25.60	25.02	25.80	26.08	25.69	26.24	25.66	26.44	26.72
	3H	25.31	25.83	25.34	26.06	26.38	25.87	26.40	25.91	26.62	26.95
	4H	25.36	25.86	25.43	26.10	26.46	25.88	26.38	25.95	26.62	26.97
	6H	25.35	25.81	25.46	26.07	26.46	25.81	26.27	25.92	26.54	26.92
	8H	25.30	25.74	25.44	26.02	26.43	25.74	26.19	25.88	26.46	26.87
	12H	25.22	25.64	25.38	25.93	26.36	25.65	26.07	25.81	26.36	26.79
8H	4H	26.80	27.33	26.81	27.54	27.86	27.66	28.20	27.68	28.41	28.73
	6H	27.68	28.07	27.87	28.37	28.83	28.39	28.78	28.58	29.08	29.54
	8H	27.74	28.10	27.96	28.42	28.90	28.41	28.76	28.63	29.09	29.56
	12H	27.76	28.09	28.02	28.42	28.93	28.38	28.70	28.64	29.04	29.55
12H	4H	28.29	28.71	28.46	29.00	29.43	29.19	29.61	29.36	29.90	30.33
	6H	28.61	28.97	28.83	29.29	29.76	29.45	29.81	29.68	30.13	30.61

C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
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G Range: 0 - 180 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1600B Goniophotometer  
 Humidity: 65  
 Test Distance: 6.25 m  
 Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

### ZONAL LUMINOUS FLUX TABLE-1

Gamma [deg]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
0	378.81	0.00	0.00	0.00	0.00
5	379.05	9.06	9.06	0.45	0.45
10	380.81	27.21	36.27	1.35	1.80
15	380.73	45.19	81.46	2.24	4.03
20	377.81	62.45	143.91	3.09	7.13
25	371.89	78.43	222.34	3.88	11.01
30	363.09	92.57	314.92	4.59	15.60
35	351.61	104.58	419.49	5.18	20.78
40	337.26	113.97	533.47	5.65	26.42
45	321.25	120.69	654.16	5.98	32.40
50	303.53	124.85	779.01	6.18	38.58
55	282.83	125.76	904.77	6.23	44.81
60	260.85	123.66	1028.43	6.12	50.94
65	237.82	118.96	1147.39	5.89	56.83
70	213.57	111.81	1259.19	5.54	62.37
75	188.68	102.54	1361.73	5.08	67.45
80	163.67	91.58	1453.31	4.54	71.98
85	139.65	79.73	1533.04	3.95	75.93
90	121.05	69.08	1602.12	3.42	79.35
95	109.92	61.78	1663.90	3.06	82.41
100	101.97	56.71	1720.60	2.81	85.22
105	93.87	51.56	1772.16	2.55	87.78
110	85.76	46.11	1818.27	2.28	90.06
115	76.29	40.11	1858.38	1.99	92.05
120	68.54	34.47	1892.85	1.71	93.75
125	60.98	29.26	1922.11	1.45	95.20
130	53.64	24.31	1946.42	1.20	96.41
135	46.98	19.77	1966.19	0.98	97.39
140	40.97	15.84	1982.03	0.78	98.17
145	35.33	12.37	1994.40	0.61	98.78
150	29.63	9.26	2003.66	0.46	99.24
155	23.94	6.52	2010.18	0.32	99.56
160	18.79	4.26	2014.44	0.21	99.78
165	13.88	2.55	2017.00	0.13	99.90
170	9.50	1.29	2018.29	0.06	99.97
175	6.71	0.54	2018.83	0.03	99.99
180	5.90	0.15	2018.98	0.01	100.00

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators:  
Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 65  
Test Distance: 6.25 m  
Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

### ZONAL LUMINOUS FLUX TABLE-2

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	φ zonal	φ total	%lum	%lamp
10	382.3	377.5	377.9	382.0	386.6	381.2	380.8	379.5	10	36.3	36.3	1.8	1.8
20	374.0	375.2	380.8	386.4	386.6	375.5	370.4	368.8	20	107.6	143.9	7.1	7.1
30	355.3	358.8	369.6	376.4	374.5	356.8	350.4	347.3	30	171.0	314.9	15.6	15.6
40	326.0	331.4	347.4	354.9	350.8	328.3	320.4	314.5	40	218.6	533.5	26.4	26.4
50	290.0	296.2	314.8	323.3	317.9	293.9	284.8	277.5	50	245.5	779.0	38.6	38.6
60	246.7	251.6	273.1	282.4	275.0	249.5	240.6	232.3	60	249.4	1028.4	50.9	50.9
70	197.7	203.9	227.9	235.9	228.6	199.9	192.9	182.4	70	230.8	1259.2	62.4	62.4
80	148.3	153.2	177.7	185.1	178.6	150.0	143.6	132.8	80	194.1	1453.3	72.0	72.0
90	109.2	105.4	127.7	135.2	134.1	115.1	116.2	103.0	90	148.8	1602.1	79.4	79.4
100	95.7	87.1	104.5	111.4	118.2	98.7	100.2	87.2	100	118.5	1720.6	85.2	85.2
110	79.8	72.0	87.7	95.0	101.0	81.4	84.1	70.3	110	97.7	1818.3	90.1	90.1
120	63.1	58.8	72.5	78.8	83.4	63.3	62.1	54.1	120	74.6	1892.9	93.8	93.8
130	47.6	47.7	59.4	62.9	61.9	48.1	47.5	42.6	130	53.6	1946.4	96.4	96.4
140	36.7	38.1	46.6	49.1	45.6	35.0	35.5	32.1	140	35.6	1982.0	98.2	98.2
150	25.9	28.1	34.7	36.9	31.6	24.4	24.6	22.0	150	21.6	2003.7	99.2	99.2
160	13.8	18.9	23.2	24.4	19.9	15.5	13.3	13.5	160	10.8	2014.4	99.8	99.8
170	7.4	10.3	10.7	12.6	10.0	7.7	6.0	5.9	170	3.8	2018.3	100.0	100.0
180	5.6	0.0	0.0	0.0	5.0	6.1	5.8	5.4	180	0.7	2019.0	100.0	100.0

Conical surface Flux(90deg) : 654.2 lm

%lum = 32.4%

%lamp = 32.4%

Conical surface Flux(120deg) : 1028.4 lm

%lum = 50.9%

%lamp = 50.9%

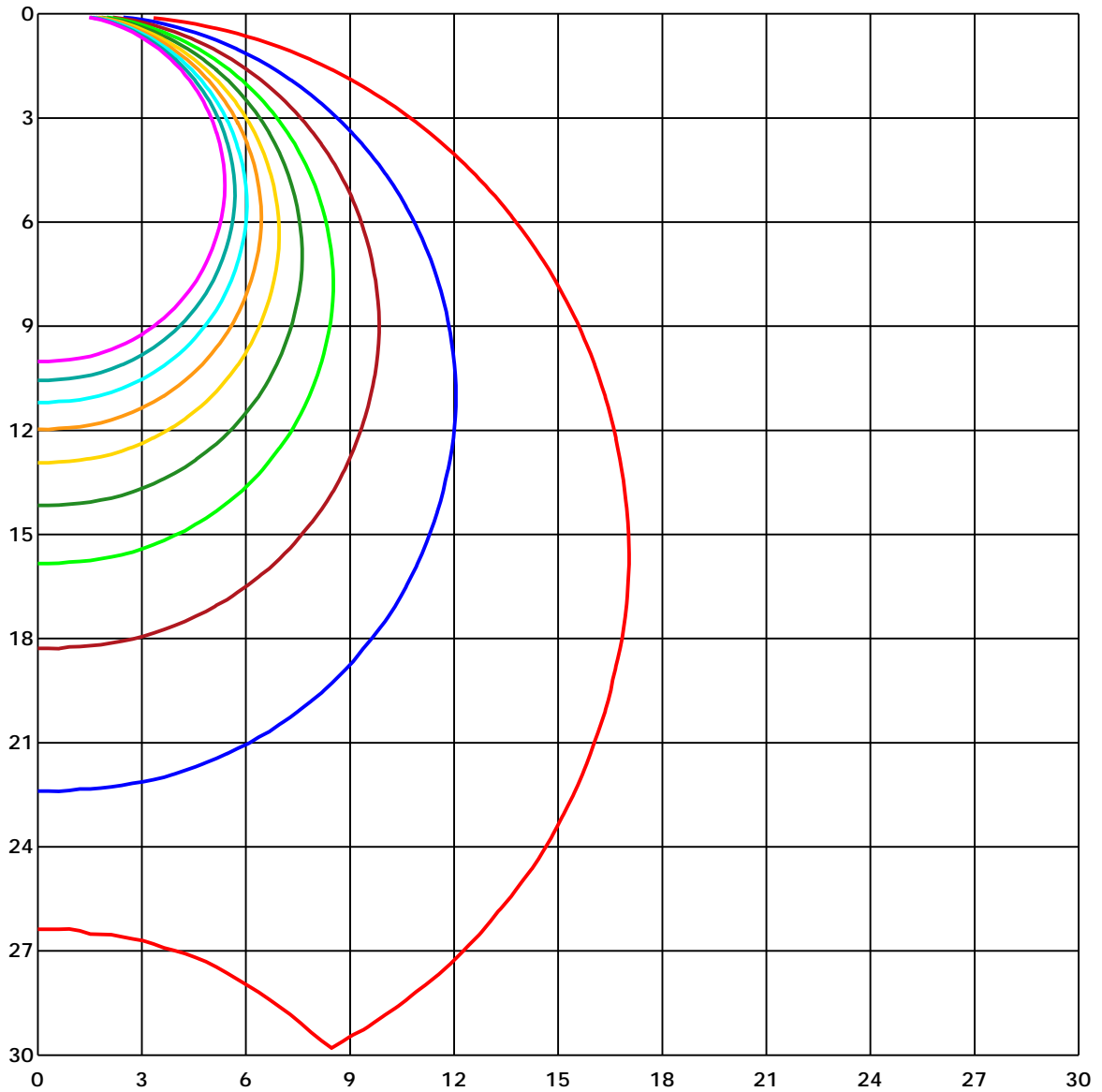
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators:  
Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 65  
Test Distance: 6.25 m  
Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

### SPACE ISOLX DIAGRAM



Unit of illumination: lx

- |         |         |
|---------|---------|
| — 3.798 | — 1.899 |
| — 3.418 | — 1.519 |
| — 3.039 | — 1.139 |
| — 2.659 | — 0.76  |
| — 2.279 | — 0.38  |

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators:

Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 65

Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

## LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360
G0	380.98	377.34	378.36	378.55	380.98	377.34	378.36	378.55	380.98
G1	381.05	376.8	377.54	377.81	381.17	377.15	379.02	378.2	381.05
G2	381.76	375.47	376.09	377.97	381.68	377.7	379.38	380.27	381.76
G3	380.35	375.39	376.64	376.76	382.77	379.14	380.9	379.49	380.35
G4	381.56	375.74	375.78	377.42	382.38	378.83	380.7	379.96	381.56
G5	381.68	375.78	375.94	377.66	382.54	380.12	381.25	380.39	381.68
G6	382.19	375.55	376.25	378.32	384.26	379.84	380.08	381.02	382.19
G7	381.8	376.02	376.37	378.71	384.34	380.98	380.74	381.09	381.8
G8	382.38	377.11	376.91	379.61	385.47	380.2	380.74	380.35	382.38
G9	382.73	377.34	378.01	380.55	386.45	380.47	380.7	380.2	382.73
G10	382.27	377.54	377.89	381.95	386.64	381.17	380.78	379.53	382.27
G11	381.64	378.01	379.22	382.66	386.76	381.02	380.55	379.26	381.64
G12	381.13	377.03	379.96	383.59	388.13	380.63	378.79	378.98	381.13
G13	380.51	377.46	381.02	383.75	387.3	380.04	378.95	377.58	380.51
G14	379.96	377.38	380.94	384.96	388.16	379.73	378.2	376.52	379.96
G15	378.71	378.63	381.6	385.66	387.54	379.77	377.7	375.51	378.71
G16	378.87	376.33	381.02	386.02	388.01	378.52	376.29	375.08	378.87
G17	376.88	376.56	382.66	385.9	387.34	378.09	375.0	373.05	376.88
G18	376.8	375.39	380.98	386.37	387.15	376.8	373.91	372.11	376.8
G19	374.77	375.0	380.74	385.9	386.88	376.13	372.62	370.43	374.77
G20	373.98	375.2	380.82	386.37	386.6	375.55	370.35	368.83	373.98
G21	371.95	373.13	379.61	385.0	385.98	374.61	369.8	367.46	371.95
G22	371.02	372.07	378.79	385.04	385.78	371.64	368.09	365.31	371.02
G23	369.73	371.72	378.32	384.38	383.98	370.63	367.19	363.09	369.73
G24	367.73	370.0	376.95	383.16	383.24	368.75	363.79	361.48	367.73
G25	365.7	368.48	376.45	383.36	382.7	367.3	362.11	359.26	365.7
G26	364.14	365.74	375.04	381.8	381.02	365.16	359.65	356.84	364.14
G27	360.78	365.35	373.63	379.84	378.87	364.22	357.5	353.95	360.78
G28	359.45	362.62	372.62	378.95	377.5	360.94	355.51	352.07	359.45
G29	356.76	360.98	371.45	377.7	375.94	360.0	352.85	349.02	356.76
G30	355.27	358.75	369.65	376.45	374.53	356.8	350.43	347.3	355.27
G31	352.73	356.52	368.24	373.91	371.68	355.27	348.28	343.75	352.73
G32	349.92	353.75	366.09	373.01	371.17	352.34	344.84	341.6	349.92
G33	347.03	351.41	363.95	370.43	367.89	349.8	342.62	338.01	347.03
G34	344.18	348.98	361.45	369.38	366.72	346.76	340.04	335.39	344.18
G35	341.45	347.85	359.45	367.23	364.77	343.79	336.37	332.81	341.45
G36	338.32	344.3	356.37	364.92	361.21	341.29	333.83	329.3	338.32

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators:

Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 65

Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

### LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

GammaC	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	334.84	341.02	354.49	362.23	358.71	337.97	330.23	325.39	334.84	
G38	331.95	337.58	351.95	359.65	356.29	334.65	327.07	322.46	331.95	
G39	329.06	335.43	349.65	356.6	353.75	331.6	323.63	318.32	329.06	
G40	326.02	331.45	347.38	354.88	350.82	328.32	320.43	314.49	326.02	
G41	321.84	328.63	344.61	351.33	347.03	324.53	316.41	310.86	321.84	
G42	319.22	324.92	341.45	348.83	344.65	320.82	313.05	307.62	319.22	
G43	316.33	321.8	338.44	345.82	341.33	318.16	309.53	303.95	316.33	
G44	312.85	318.55	335.39	343.05	338.59	314.02	306.48	301.05	312.85	
G45	309.57	315.2	332.34	340.86	334.65	311.68	304.1	297.93	309.57	
G46	305.86	310.98	328.05	336.84	332.5	307.93	299.22	294.41	305.86	
G47	302.46	307.42	325.47	333.28	328.05	304.53	295.7	289.57	302.46	
G48	298.44	303.44	321.72	330.63	325.43	301.17	292.7	285.82	298.44	
G49	294.61	299.77	318.4	326.37	321.95	297.3	288.55	281.25	294.61	
G50	290.04	296.21	314.84	323.32	317.85	293.91	284.8	277.54	290.04	
G51	285.78	291.8	311.05	319.49	313.4	289.38	280.55	273.67	285.78	
G52	281.6	287.58	307.42	315.78	310.55	285.39	275.86	268.59	281.6	
G53	277.11	283.13	303.24	311.37	306.05	281.21	271.6	263.83	277.11	
G54	273.28	278.52	298.95	307.11	301.41	276.41	267.19	259.8	273.28	
G55	268.52	275.0	294.73	302.89	297.03	272.7	263.2	255.43	268.52	
G56	264.57	269.84	290.43	299.45	292.93	267.5	258.44	250.9	264.57	
G57	259.69	265.86	286.05	295.27	288.32	263.32	254.73	245.94	259.69	
G58	255.82	260.98	281.99	290.86	284.45	258.36	249.45	241.48	255.82	
G59	250.74	256.37	278.05	285.86	279.61	253.91	245.59	236.68	250.74	
G60	246.68	251.6	273.13	282.38	274.96	249.49	240.59	232.27	246.68	
G61	241.68	247.11	269.18	277.23	271.68	244.38	235.9	227.3	241.68	
G62	236.64	242.15	264.26	273.32	266.41	239.45	231.02	222.62	236.64	
G63	232.62	237.54	260.35	268.01	261.52	235.23	226.72	217.23	232.62	
G64	227.54	233.13	256.17	264.06	257.3	230.2	221.76	212.42	227.54	
G65	222.38	228.79	251.29	260.27	252.34	225.08	217.77	207.27	222.38	
G66	217.66	223.52	246.37	254.73	248.09	220.12	212.03	202.54	217.66	
G67	212.66	218.75	242.19	249.69	243.05	215.2	207.38	197.5	212.66	
G68	207.93	213.75	237.07	245.55	238.52	209.84	202.03	192.19	207.93	
G69	202.58	209.26	232.54	241.05	233.98	205.12	197.19	186.88	202.58	
G70	197.7	203.91	227.85	235.86	228.59	199.92	192.93	182.38	197.7	
G71	192.62	198.98	222.89	231.25	223.98	194.92	187.66	177.42	192.62	
G72	187.58	194.53	217.66	226.02	219.02	189.53	182.5	172.19	187.58	
G73	182.7	189.14	213.36	221.17	214.61	184.96	177.34	167.03	182.7	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators:

Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 65

Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

## LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G74	178.01	183.79	207.58	216.64	209.18	179.69	172.38	162.19	178.01	
G75	172.38	179.06	202.93	211.41	204.18	174.77	167.81	157.54	172.38	
G76	167.89	173.63	197.54	206.41	199.14	169.53	162.93	152.23	167.89	
G77	162.7	168.98	192.85	200.43	194.45	164.8	157.85	147.3	162.7	
G78	157.93	163.32	187.23	196.09	188.95	159.57	153.36	142.42	157.93	
G79	153.36	158.4	182.62	190.43	183.71	154.96	148.44	137.42	153.36	
G80	148.28	153.2	177.66	185.12	178.59	149.96	143.55	132.77	148.28	
G81	143.87	148.2	172.23	179.8	173.67	145.39	139.18	128.36	143.87	
G82	139.1	142.89	166.91	174.84	168.87	140.27	134.96	123.98	139.1	
G83	133.98	137.97	162.34	169.49	163.48	135.74	130.94	119.26	133.98	
G84	129.49	132.81	157.34	164.57	158.71	131.52	127.07	115.7	129.49	
G85	124.77	127.81	152.3	159.84	153.95	127.5	124.26	112.58	124.77	
G86	120.74	122.89	147.7	154.65	149.3	123.52	122.23	109.49	120.74	
G87	116.45	118.13	142.3	149.57	144.69	120.66	120.55	107.7	116.45	
G88	113.2	113.44	137.07	144.3	140.55	118.4	119.57	106.13	113.2	
G89	110.51	109.53	132.62	139.73	137.03	116.76	117.77	104.45	110.51	
G90	109.18	105.39	127.66	135.16	134.1	115.12	116.21	103.05	109.18	
G91	107.46	101.91	123.91	130.9	132.19	113.63	114.57	101.48	107.46	
G92	106.33	99.69	120.2	126.99	130.94	111.76	113.05	99.88	106.33	
G93	105.04	97.7	116.25	123.98	129.26	110.31	111.45	98.32	105.04	
G94	103.71	96.17	113.95	121.99	127.66	108.63	110.08	97.15	103.71	
G95	102.27	94.57	111.88	120.16	126.09	106.95	108.63	95.55	102.27	
G96	101.17	93.05	110.16	118.4	124.41	105.43	106.72	93.83	101.17	
G97	99.8	91.72	108.87	116.56	123.16	103.79	105.51	92.23	99.8	
G98	98.79	90.08	107.15	114.92	121.37	101.84	103.75	90.47	98.79	
G99	97.23	88.71	105.78	113.28	119.45	100.47	101.95	88.87	97.23	
G100	95.7	87.07	104.53	111.45	118.2	98.71	100.16	87.23	95.7	
G101	94.18	85.47	102.97	110.0	116.17	96.95	98.71	85.39	94.18	
G102	92.85	83.79	101.52	108.55	115.0	95.08	97.19	83.75	92.85	
G103	91.05	82.42	100.08	106.48	112.81	93.55	95.63	81.95	91.05	
G104	89.45	80.82	98.48	105.0	111.33	91.68	93.83	80.39	89.45	
G105	88.01	79.38	96.99	103.44	109.57	90.27	92.19	78.79	88.01	
G106	86.41	77.66	95.59	101.52	107.77	88.13	90.35	77.03	86.41	
G107	84.77	76.33	94.49	99.84	106.02	86.64	88.79	75.31	84.77	
G108	83.28	74.69	93.28	98.32	104.45	84.61	87.27	73.75	83.28	
G109	81.48	73.36	91.25	96.56	102.66	83.05	85.63	72.11	81.48	
G110	79.84	72.03	87.73	94.96	101.02	81.37	84.1	70.31	79.84	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators:

Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 65

Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

### LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 3)

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360
G111	78.24	70.51	84.22	93.28	99.18	79.53	82.42	68.63	78.24
G112	76.6	69.1	82.15	91.56	97.54	77.5	78.95	67.03	76.6
G113	74.84	67.77	80.9	89.84	95.86	75.98	74.8	65.12	74.84
G114	73.32	66.41	79.61	88.52	94.06	73.83	71.09	63.52	73.32
G115	71.64	65.31	78.55	86.88	92.5	72.34	69.41	61.91	71.64
G116	69.84	63.79	77.66	85.08	90.59	70.43	67.77	60.31	69.84
G117	68.2	62.7	76.21	83.4	88.83	68.67	66.52	58.48	68.2
G118	66.45	61.37	74.92	81.91	87.19	66.72	65.2	57.07	66.45
G119	64.53	60.12	73.98	80.23	85.35	65.2	63.52	55.43	64.53
G120	63.13	58.83	72.54	78.75	83.36	63.32	62.07	54.14	63.13
G121	61.25	57.7	71.25	76.99	81.72	61.68	60.74	52.81	61.25
G122	59.53	56.37	70.08	75.51	79.65	59.96	59.14	51.6	59.53
G123	57.81	55.31	68.91	73.67	77.77	58.52	57.97	50.16	57.81
G124	56.13	54.14	67.5	72.19	76.05	56.68	56.17	48.98	56.13
G125	54.49	53.13	66.13	70.55	74.02	55.31	54.77	47.89	54.49
G126	52.93	51.91	64.69	68.98	72.27	53.63	53.28	46.52	52.93
G127	51.41	50.9	63.32	67.27	70.2	52.27	51.8	45.47	51.41
G128	50.12	49.77	62.27	65.86	67.93	50.74	50.47	44.57	50.12
G129	48.63	48.91	60.74	64.3	64.8	49.34	48.91	43.52	48.63
G130	47.58	47.73	59.38	62.85	61.91	48.09	47.5	42.62	47.58
G131	46.48	46.68	58.2	61.25	59.53	46.6	46.02	41.45	46.48
G132	45.35	45.59	56.72	59.77	57.97	45.16	44.77	40.59	45.35
G133	44.18	44.73	55.59	58.36	56.21	43.75	43.24	39.38	44.18
G134	43.36	43.71	54.1	57.03	54.96	42.27	42.07	38.36	43.36
G135	42.27	42.97	52.85	55.59	53.13	41.02	40.9	37.23	42.27
G136	41.05	41.84	51.6	54.22	51.76	39.57	39.84	36.17	41.05
G137	39.92	40.94	50.35	52.81	50.12	38.4	38.79	35.04	39.92
G138	38.95	39.92	49.1	51.6	48.71	37.11	37.62	34.1	38.95
G139	37.89	39.14	47.7	50.2	47.03	36.05	36.6	33.16	37.89
G140	36.72	38.13	46.56	49.1	45.59	35.0	35.47	32.11	36.72
G141	35.7	37.27	45.39	47.77	44.3	33.83	34.41	31.13	35.7
G142	34.53	36.25	44.1	46.6	42.81	32.7	33.24	30.23	34.53
G143	33.44	35.39	43.01	45.27	41.41	31.6	32.19	29.26	33.44
G144	32.42	34.38	41.64	44.22	40.04	30.59	31.02	28.36	32.42
G145	31.29	33.63	40.55	43.01	38.52	29.69	30.12	27.38	31.29
G146	30.2	32.46	39.41	41.84	37.3	28.52	28.91	26.48	30.2
G147	29.06	31.21	38.24	40.47	35.74	27.34	27.89	25.47	29.06

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators:

Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 65

Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2025/10/8 9:04:10

### LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 4)

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G148	27.97	30.08	36.99	39.34	34.41	26.17	26.72	24.26	27.97	
G149	26.88	29.18	35.86	38.13	33.16	25.2	25.7	22.97	26.88	
G150	25.86	28.13	34.73	36.88	31.64	24.38	24.61	21.95	25.86	
G151	24.8	26.91	33.59	35.43	30.27	23.36	23.59	21.13	24.8	
G152	23.48	25.78	32.34	34.1	29.22	22.27	22.54	20.31	23.48	
G153	21.45	25.0	31.21	32.81	28.01	21.37	21.56	19.49	21.45	
G154	19.57	24.02	30.04	31.45	26.88	20.43	20.35	18.75	19.57	
G155	17.73	23.13	28.98	30.12	25.55	19.69	19.18	18.01	17.73	
G156	16.41	22.23	27.81	28.95	24.41	18.83	17.97	17.15	16.41	
G157	15.74	21.37	26.6	27.73	23.2	18.05	16.72	16.17	15.74	
G158	15.2	20.43	25.51	26.72	22.15	17.11	15.43	15.27	15.2	
G159	14.57	19.73	24.41	25.51	20.9	16.29	14.41	14.49	14.57	
G160	13.83	18.91	23.2	24.41	19.88	15.47	13.32	13.52	13.83	
G161	13.09	18.09	22.11	23.36	18.75	14.73	12.27	12.7	13.09	
G162	12.3	17.23	20.86	22.27	17.66	13.98	11.21	11.88	12.3	
G163	11.29	16.37	19.49	21.13	16.45	13.16	10.2	10.94	11.29	
G164	10.16	15.63	17.97	20.23	15.47	12.27	9.34	9.96	10.16	
G165	9.45	14.8	16.6	19.02	14.49	11.48	8.44	9.02	9.45	
G166	8.71	13.98	15.23	17.81	13.48	10.63	7.77	8.24	8.71	
G167	8.52	12.97	14.06	16.41	12.5	9.88	7.38	7.5	8.52	
G168	8.36	12.03	12.93	14.8	11.6	9.06	6.84	6.91	8.36	
G169	7.85	11.09	11.72	13.52	10.78	8.36	6.33	6.33	7.85	
G170	7.38	10.27	10.66	12.58	10.04	7.73	5.98	5.94	7.38	
G171	6.88	9.41	9.73	11.45	9.3	7.11	5.86	5.66	6.88	
G172	6.48	8.4	8.95	10.31	8.63	6.45	5.82	5.47	6.48	
G173	6.02	7.73	8.24	9.34	7.89	6.13	5.9	5.47	6.02	
G174	5.82	7.11	7.66	8.4	7.34	6.02	5.82	5.51	5.82	
G175	5.66	6.8	7.19	7.62	6.8	6.05	5.78	5.47	5.66	
G176	5.59	6.48	6.76	6.99	6.37	6.02	5.74	5.43	5.59	
G177	5.55	6.45	6.45	6.45	6.02	6.05	5.74	5.39	5.55	
G178	5.59	6.45	6.25	5.98	5.86	6.02	5.82	5.43	5.59	
G179	5.63	6.41	6.25	5.86	5.78	6.02	5.9	5.39	5.63	
G180	5.58	0.0	0.0	0.0	4.99	6.09	5.83	5.44	5.58	

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature: 25  
Operators:  
Test Date: 2025/10/8 9:04:10

G Range: 0 - 180 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1600B Goniophotometer  
Humidity: 65  
Test Distance: 6.25 m  
Remarks: