

Report No.:

Test Time: 2025/5/30 14:49:45

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: 0
Luminaire Type: 20w 格栅 BK
Lamp Type:
Luminous Width: 35 mm
Luminous Length: 300 mm
Luminous Height: 0 mm

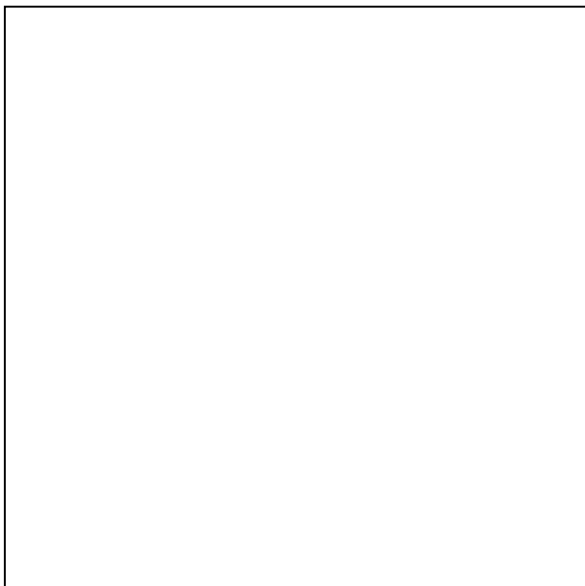
Voltage(V): 231.33 V
Current(A): 0.1487 A
Power(W): 19.28 W
Power Factor: 0.5516
Lamp Luminous Flux: 1520.11

Photometric Results

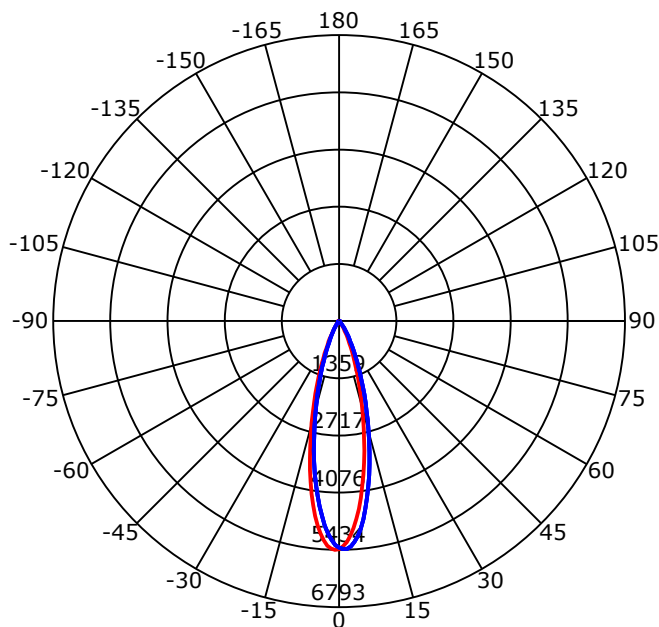
CIE Class: Direct
Luminaire Luminous Flux: 1520.109 lm
Downward Ratio: 0.00%
Luminaire Efficacy Rating(LER): 78.84 lm/W
Beam Angle(50%) C0-180,C90-270: 26.8,27.7
Field Angle(10%) C0-180,C90-270: 52.5,54.7
S/MH C0-180,C90-270: 0.462,0.462

Max. Intensity: 5434.07 cd
Max.Intensity Angle: C=180 Gamma=1
Upward Ratio: 100.00%
Efficacy: 100.00%
Center Intensity: 5415.91 cd
Effective Luminous Flux: 1333.04 lm
ERP(ϕ use)(120deg): 1520.11 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 26.8 deg,27.7 deg

C0-180 — C90-270

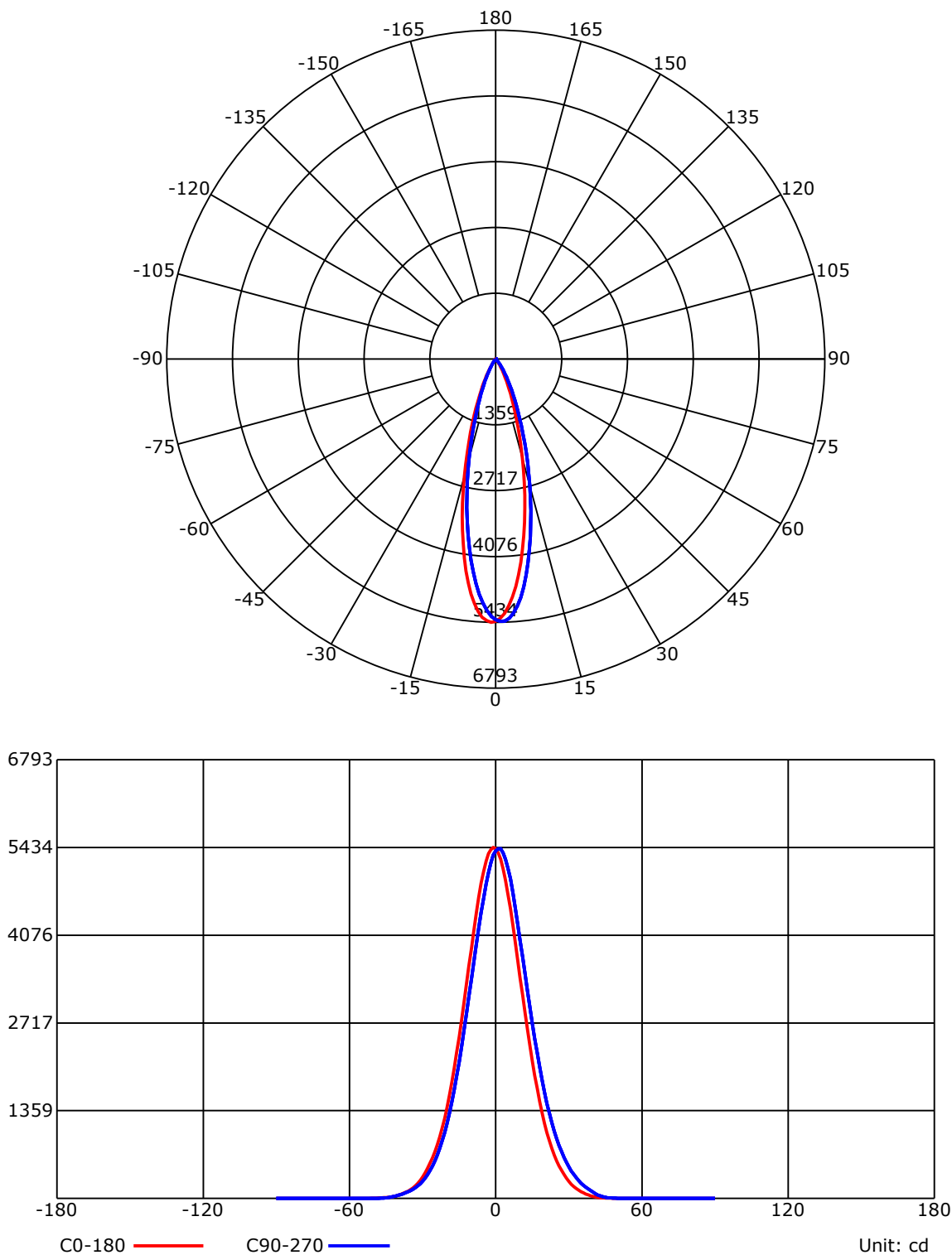
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

Report No.:

Test Time: 2025/5/30 14:49:45

Luminous Intensity Distribution Curve



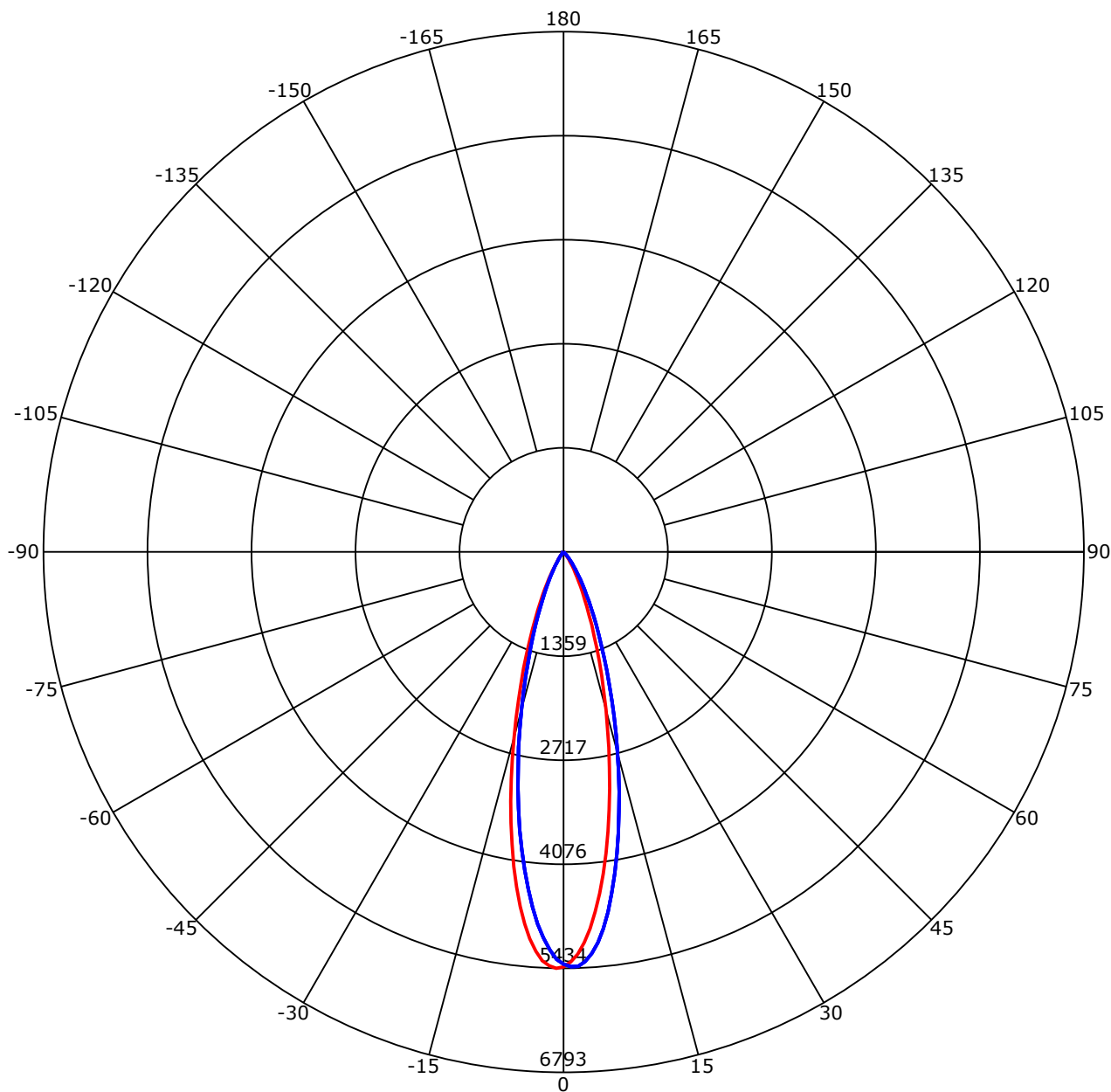
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

Report No.:

Test Time: 2025/5/30 14:49:45

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:
Operators:
Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

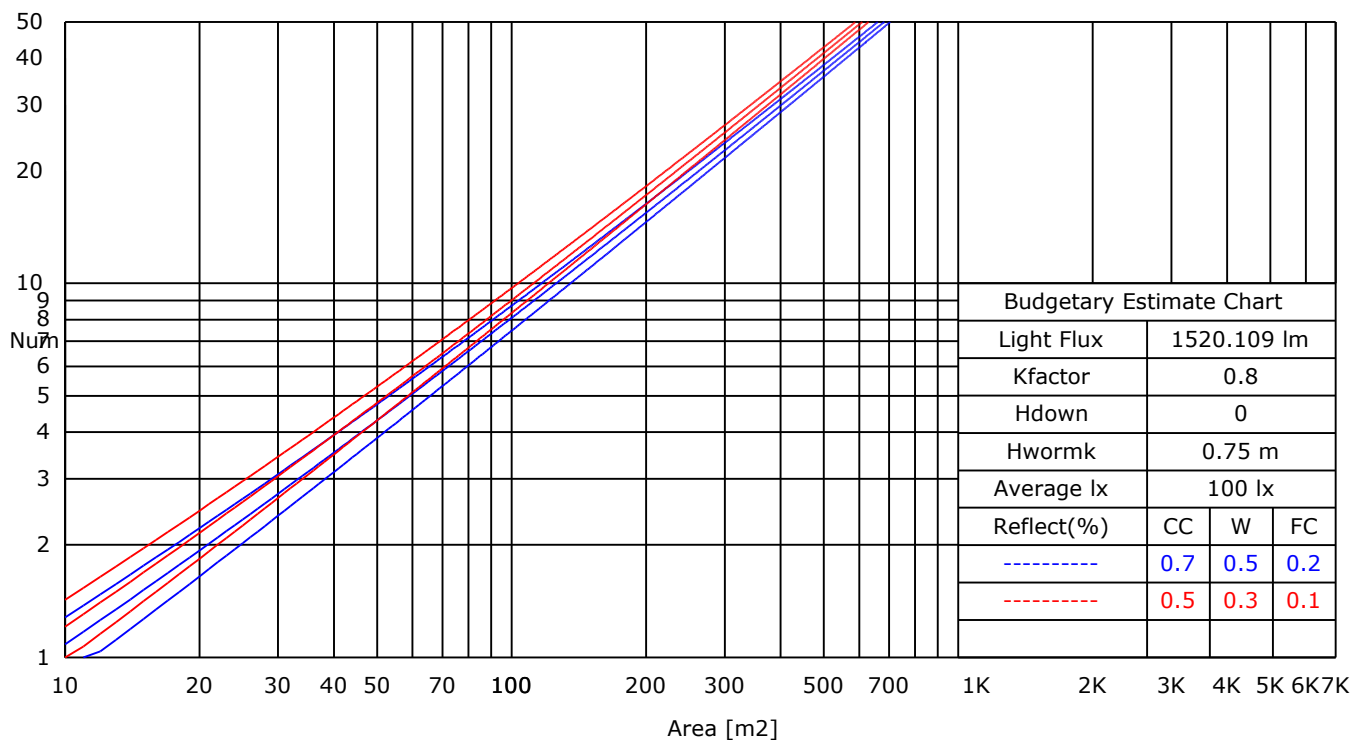
Report No.:

Test Time: 2025/5/30 14:49:45

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	1.17	1.16	1.15	1.15	1.14	1.13	1.10	1.09	1.09	1.04	1.04	1.03	0.97	0.96	0.95	0.90
2	1.12	1.11	1.10	1.10	1.09	1.08	1.06	1.05	1.03	1.01	0.99	0.98	0.94	0.93	0.91	0.86
3	1.08	1.07	1.06	1.06	1.04	1.04	1.02	1.00	0.99	0.97	0.95	0.94	0.92	0.89	0.87	0.83
4	1.03	1.02	1.02	1.02	1.00	0.99	0.98	0.96	0.95	0.94	0.92	0.90	0.89	0.86	0.84	0.80
5	0.99	0.98	0.98	0.98	0.96	0.95	0.95	0.92	0.91	0.91	0.88	0.86	0.86	0.83	0.81	0.77
6	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.89	0.87	0.88	0.85	0.83	0.84	0.80	0.78	0.74
7	0.92	0.91	0.91	0.91	0.90	0.89	0.88	0.86	0.84	0.85	0.82	0.80	0.81	0.78	0.75	0.71
8	0.89	0.88	0.88	0.88	0.86	0.85	0.85	0.83	0.81	0.82	0.79	0.77	0.79	0.75	0.72	0.69
9	0.86	0.85	0.85	0.85	0.84	0.83	0.82	0.80	0.78	0.79	0.76	0.74	0.76	0.73	0.70	0.67
10	0.84	0.83	0.82	0.82	0.81	0.80	0.80	0.77	0.76	0.77	0.74	0.72	0.74	0.70	0.68	0.64

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



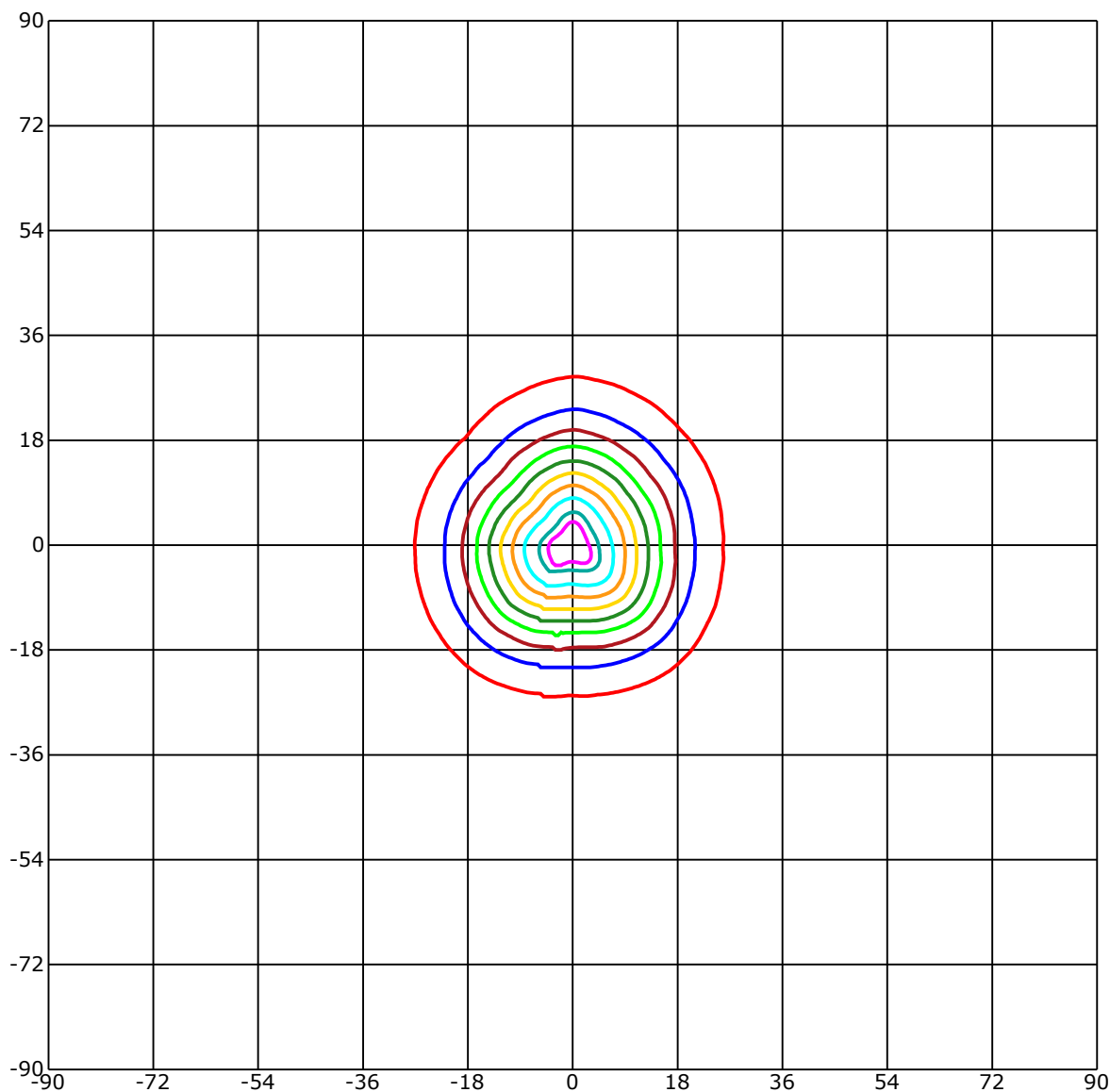
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

Report No.:

Test Time: 2025/5/30 14:49:45

ISOCANDELA DIAGRAM (RECTANGULAR)



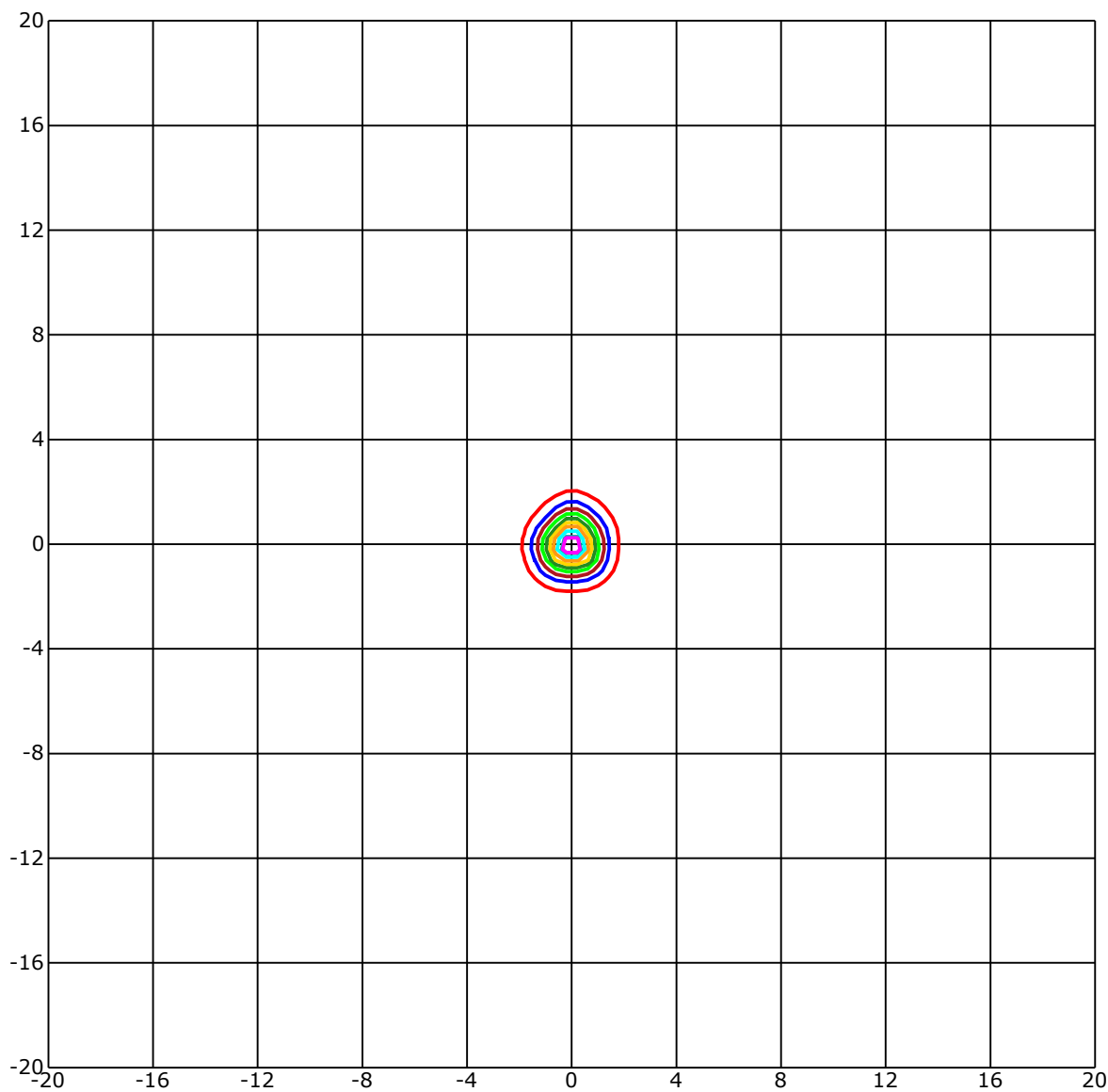
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

Report No.:

Test Time: 2025/5/30 14:49:45

ISOLX DIAGRAM



Unit of illumination:lx Height of plane:4.0(m)/13.12(ft)

312.316(92%Emax)	169.737(50%Emax)
305.527(90%Emax)	135.79(40%Emax)
271.579(80%Emax)	101.842(30%Emax)
237.632(70%Emax)	67.895(20%Emax)
203.685(60%Emax)	33.947(10%Emax)

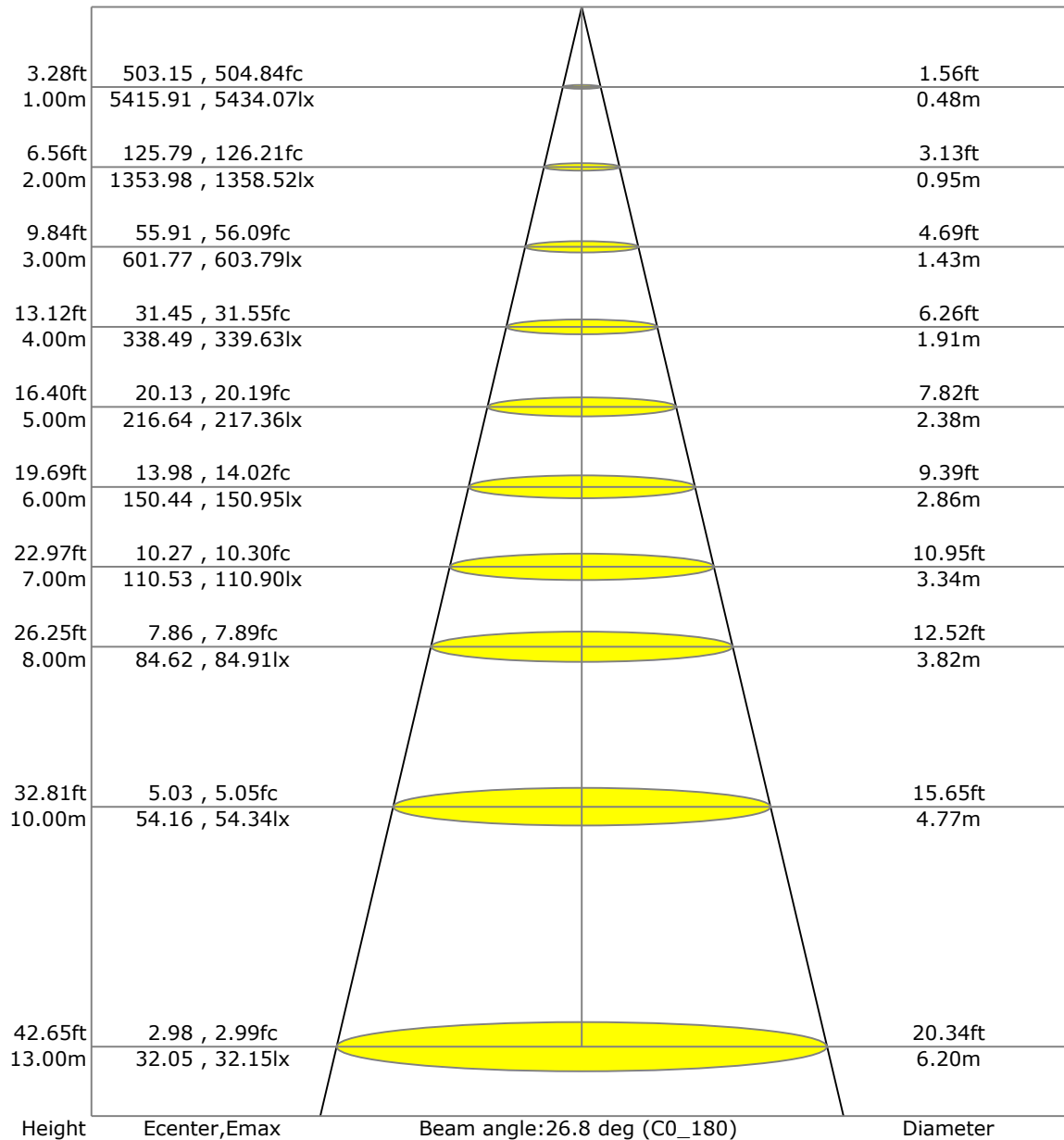
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

Report No.:

Test Time: 2025/5/30 14:49:45

LX-DISTANCE DIAGRAM



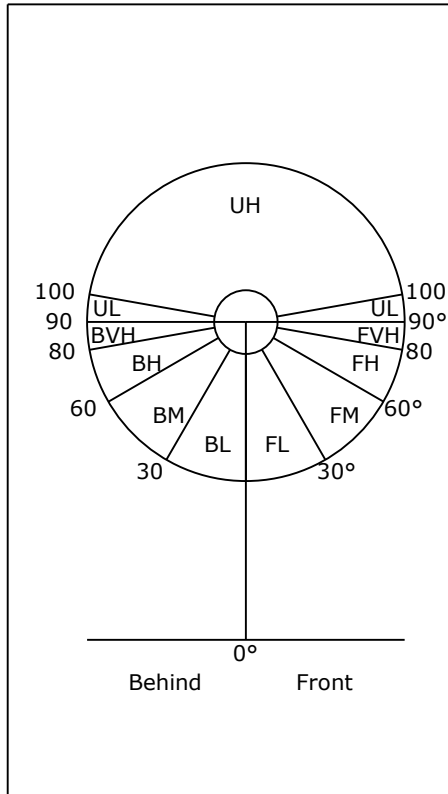
C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature:
 Operators:
 Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-1600B Goniophotometer
 Humidity:
 Test Distance: 5.95 m
 Remarks:

Report No.:

Test Time: 2025/5/30 14:49:45

BUG Class



Zonal	Light Flux(lm)	Light Flux(%)
Front	760.8	50.1
FL (0°-30°)	702.2	46.2
FM (30°-60°)	58.7	3.9
FH (60°-90°)	0.0	0.0
FVH (90°-120°)	0.0	0.0

Behind	759.3	49.9
BL (0°-30°)	706.6	46.5
BM (30°-60°)	52.7	3.5
BH (60°-90°)	0.0	0.0
BVH (90°-120°)	0.0	0.0

Above	0.0	0.0
UL (90°-100°)	0.0	0.0
UH (100°-180°)	0.0	0.0

Limit Light	NA	NA
-------------	----	----

BUG Class(TM-15-07)	
Asymmetric Lighting Fixtures (Type I , II , III , IV)	B2 U0 G0
Symmetrical Lighting Fixtures (Type V , Area Light)	B2 U0 G0

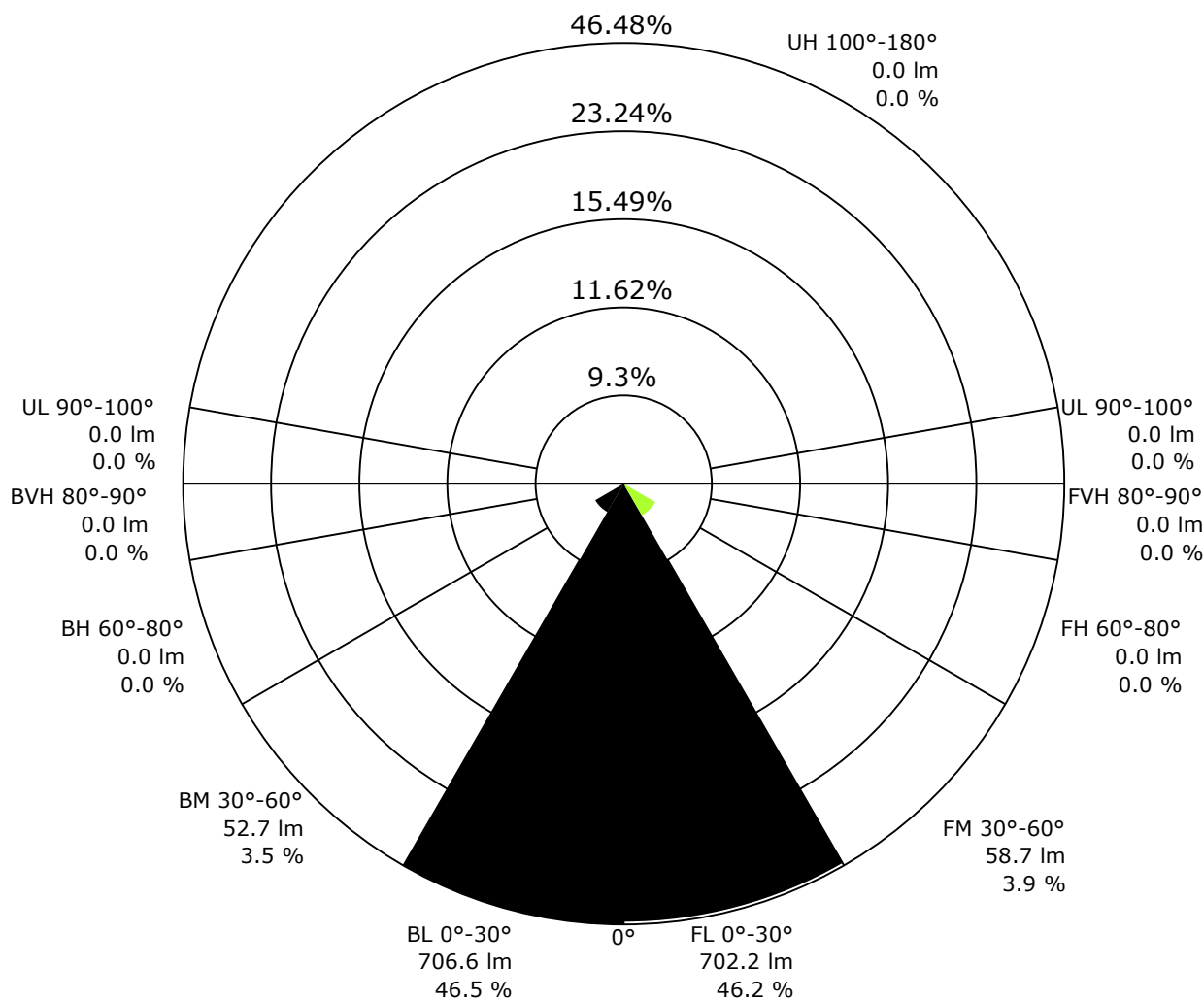
C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature:
 Operators:
 Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-1600B Goniophotometer
 Humidity:
 Test Distance: 5.95 m
 Remarks:

Report No.:

Test Time: 2025/5/30 14:49:45

LCS 图



Behind
Mark:MAX LCS%
Limit Light:NA,NA

Front

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

ZONAL LUMINOUS FLUX TABLE-1

[illegible]

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

Report No.:

Test Time: 2025/5/30 14:49:45

ZONAL LUMINOUS FLUX TABLE-2

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	φ zonal	φ total	%lum	%lamp
10	3415.4	3435.2	3995.8	3369.0	3874.4	3928.1	3402.6	3940.6	10	426.3	426.3	28.0	28.0
20	1163.6	1272.7	1649.0	1175.7	1413.5	1497.8	1164.9	1450.8	20	650.5	1076.7	70.8	70.8
30	265.7	353.1	490.3	293.6	334.4	347.4	267.8	337.9	30	332.1	1408.8	92.7	92.7
40	29.2	38.6	93.5	33.7	51.2	61.3	49.0	56.5	40	98.7	1507.4	99.2	99.2
50	0.4	0.0	2.6	0.0	4.5	4.4	0.2	3.2	50	12.4	1519.9	100.0	100.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60	0.2	1520.1	100.0	100.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70	0.0	1520.1	100.0	100.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80	0.0	1520.1	100.0	100.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90	0.0	1520.1	100.0	100.0

Conical surface Flux(90deg) : 1517.5 lm

%lum = 99.8%

%lamp = 99.8%

Conical surface Flux(120deg) : 1520.1 lm

%lum = 100.0%

%lamp = 100.0%

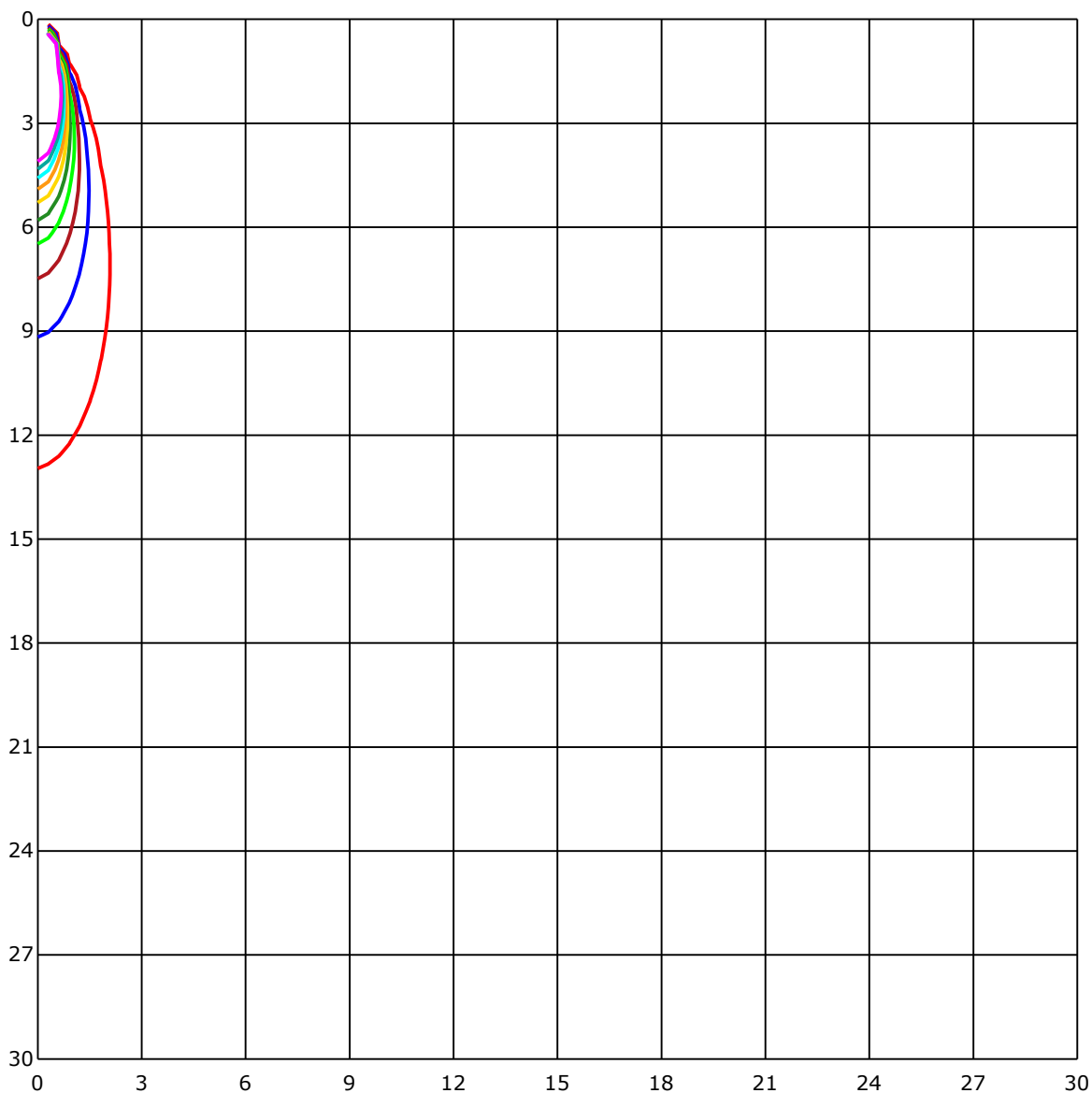
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

Report No.:

Test Time: 2025/5/30 14:49:45

SPACE ISOLX DIAGRAM



Unit of illumination:lx

322.387

290.148

257.909

225.671

193.432

161.193

128.955

96.716

64.477

32.239

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity:

Test Distance: 5.95 m

Remarks:

Report No.:

Test Time: 2025/5/30 14:49:45

LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	5415.91	5381.25	5380.12	5411.94	5415.91	5381.25	5380.12	5411.94	5415.91	
G1	5348.93	5317.14	5414.14	5353.57	5434.07	5398.42	5318.02	5424.37	5348.93	
G2	5251.96	5215.18	5412.48	5240.07	5403.24	5375.27	5194.75	5394.81	5251.96	
G3	5105.82	5071.23	5354.06	5099.73	5341.35	5314.06	5043.37	5322.24	5105.82	
G4	4928.91	4895.6	5254.86	4913.19	5222.44	5210.68	4865.79	5210.22	4928.91	
G5	4715.01	4687.29	5116.12	4696.25	5067.51	5054.2	4652.46	5064.43	4715.01	
G6	4485.11	4457.71	4947.96	4448.11	4879.39	4878.46	4425.81	4880.09	4485.11	
G7	4230.53	4208.19	4736.89	4190.03	4662.65	4665.09	4179.9	4676.35	4230.53	
G8	3967.59	3954.92	4498.03	3913.22	4415.12	4440.96	3932.69	4442.55	3967.59	
G9	3692.23	3699.56	4252.09	3640.51	4154.84	4198.1	3667.06	4213.29	3692.23	
G10	3415.35	3435.18	3995.85	3369.01	3874.45	3928.12	3402.64	3940.58	3415.35	
G11	3144.17	3176.6	3733.97	3097.79	3602.1	3661.72	3128.06	3671.81	3144.17	
G12	2873.76	2918.79	3473.69	2835.6	3323.3	3389.22	2858.33	3397.76	2873.76	
G13	2618.12	2674.09	3214.37	2583.32	3043.16	3116.45	2613.55	3127.63	2618.12	
G14	2368.85	2434.38	2964.78	2340.85	2772.69	2858.61	2359.12	2851.92	2368.85	
G15	2131.73	2209.51	2715.2	2116.36	2509.68	2596.35	2119.44	2592.67	2131.73	
G16	1906.39	1997.02	2479.31	1901.11	2262.08	2351.36	1896.05	2336.39	1906.39	
G17	1699.5	1791.72	2251.35	1697.02	2021.66	2112.64	1685.55	2092.85	1699.5	
G18	1500.78	1604.05	2039.61	1507.76	1805.74	1891.56	1497.53	1861.96	1500.78	
G19	1327.81	1431.39	1837.96	1333.79	1603.84	1688.38	1324.44	1649.26	1327.81	
G20	1163.65	1272.72	1649.05	1175.72	1413.48	1497.84	1164.88	1450.83	1163.65	
G21	1019.31	1135.11	1471.89	1040.76	1239.41	1319.59	1019.27	1271.87	1019.31	
G22	886.27	1006.74	1313.79	911.97	1084.66	1157.24	888.18	1110.01	886.27	
G23	772.55	890.16	1171.33	799.88	950.45	1009.64	772.62	965.82	772.55	
G24	671.94	786.47	1041.51	700.08	830.54	880.78	670.13	837.41	671.94	
G25	580.88	691.38	924.64	610.94	722.95	761.54	580.57	724.9	580.88	
G26	503.6	609.67	819.18	531.99	628.78	656.08	500.8	625.28	503.6	
G27	431.91	532.49	724.26	462.11	543.53	563.75	427.7	539.68	431.91	
G28	369.53	465.86	635.55	399.06	464.62	481.97	365.99	464.62	369.53	
G29	313.56	406.46	558.69	344.68	395.27	409.82	312.46	398.53	313.56	
G30	265.66	353.14	490.29	293.56	334.38	347.4	267.78	337.88	265.66	
G31	220.52	307.36	425.96	250.51	280.1	295.29	228.74	286.87	220.52	
G32	183.1	263.75	369.78	208.49	233.05	251.25	194.68	243.89	183.1	
G33	152.87	223.89	319.68	174.46	193.69	212.24	166.71	206.22	152.87	
G34	126.56	189.83	275.43	145.08	161.75	180.55	142.25	174.39	126.56	
G35	105.15	158.85	235.29	119.73	135.73	152.55	120.37	147.2	105.15	
G36	86.35	130.99	202.64	98.24	112.9	128.62	103.2	124.69	86.35	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity:

Test Distance: 5.95 m

Remarks:

Report No.:

Test Time: 2025/5/30 14:49:45

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	68.04	103.98	172.98	78.13	94.28	107.98	87.48	104.69	68.04	
G38	52.57	79.27	145.15	60.93	78.24	90.17	72.15	86.38	52.57	
G39	40.0	56.57	118.49	46.45	64.36	74.88	59.3	70.8	40.0	
G40	29.21	38.62	93.53	33.74	51.19	61.28	48.96	56.5	29.21	
G41	20.85	24.78	70.7	25.14	39.72	49.32	37.6	44.25	20.85	
G42	14.34	16.57	52.08	17.38	30.91	38.13	28.82	33.84	14.34	
G43	10.66	11.86	36.89	13.24	23.54	29.45	21.91	25.77	10.66	
G44	8.32	8.57	25.6	9.35	18.52	22.66	15.22	19.61	8.32	
G45	6.69	6.16	16.96	6.83	14.9	17.31	10.41	15.19	6.69	
G46	5.06	5.17	11.01	4.71	11.97	13.52	6.62	11.01	5.06	
G47	3.61	3.22	7.75	3.33	9.91	10.23	4.57	8.14	3.61	
G48	2.66	1.98	5.66	2.02	7.65	8.11	2.94	6.41	2.66	
G49	1.42	0.85	3.89	0.85	6.09	6.37	1.38	5.03	1.42	
G50	0.42	0.0	2.58	0.0	4.46	4.39	0.18	3.19	0.42	
G51	0.0	0.0	1.13	0.0	3.22	2.97	0.0	1.98	0.0	
G52	0.0	0.0	0.0	0.0	2.02	1.42	0.0	0.85	0.0	
G53	0.0	0.0	0.0	0.0	0.64	0.35	0.0	0.0	0.0	
G54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2025/5/30 14:49:45

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

Remarks: