

Report No.:

Test Time: 2024/10/7 9:08:32

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: NORDECOR

Luminaire Type: 4280

Lamp Type:

Luminous Width: 0 mm

Luminous Length: 0 mm Luminous

Height: 0 mm

Voltage(V): 219.50 V

Current(A): 0.1880 A

Power(W): 23.16 W

Power Factor: 0.5590

Lamp Luminous Flux: 2059.55

Photometric Results

CIE Class: Direct

Luminaire Luminous Flux: 2059.551 lm

Downward Ratio: 100.00%

Luminaire Efficacy Rating(LER): 88.93 lm/W

Beam Angle(50%) C0-180,C90-270: 107.1,108.6

Field Angle(10%) C0-180,C90-270: 151.6,152.6

S/MH C0-180,C90-270: 1.250,1.250

Max. Intensity: 772.38 cd

Max.Intensity Angle: C=180 Gamma=4

Upward Ratio: 0.00%

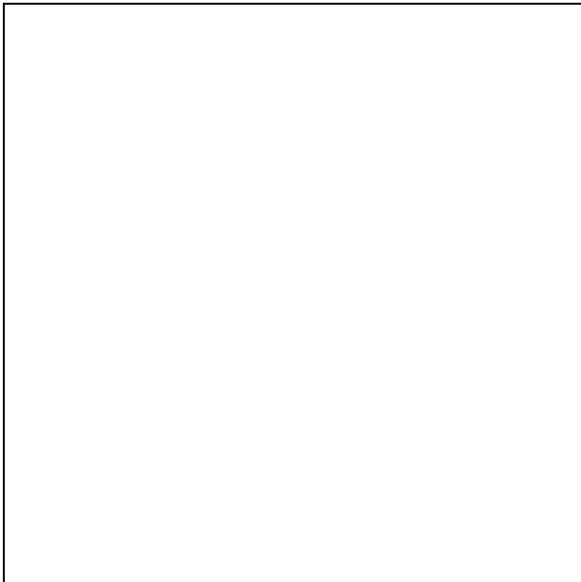
Efficacy: 100.00%

Center Intensity: 772.03 cd

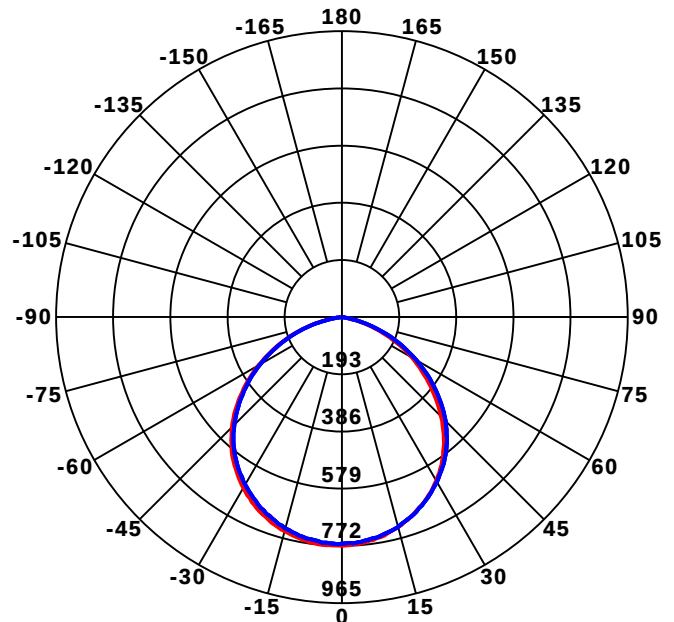
Effective Luminous Flux: 2023.18 lm

ERP(ϕ use)(120deg): 1701.51 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 107.1 deg,108.6 deg

C0-180 — C90-270 —

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

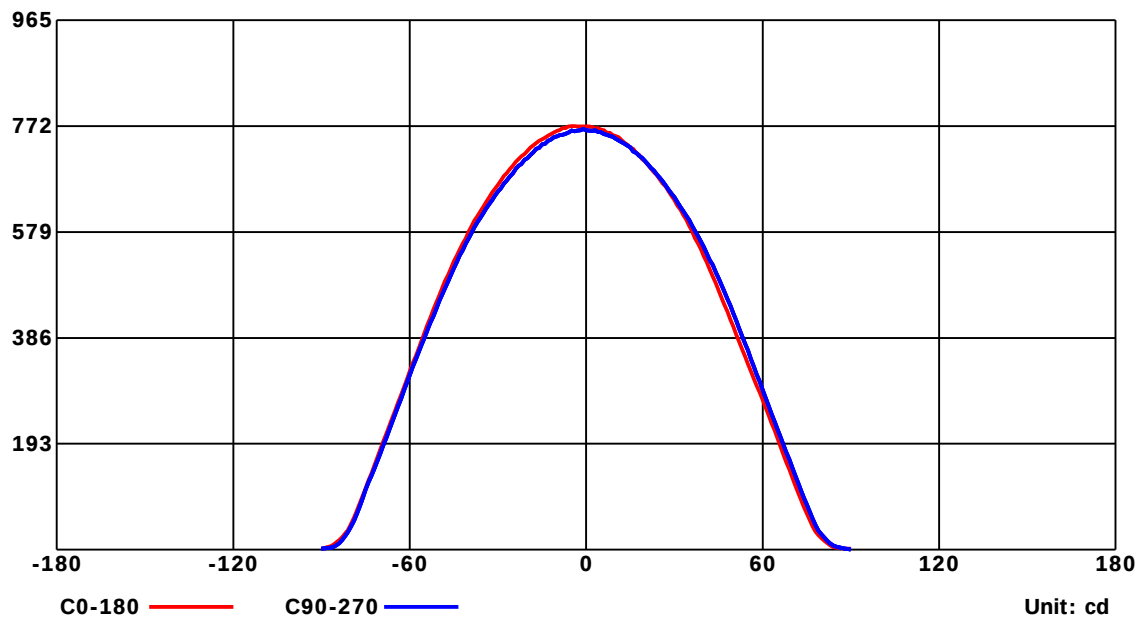
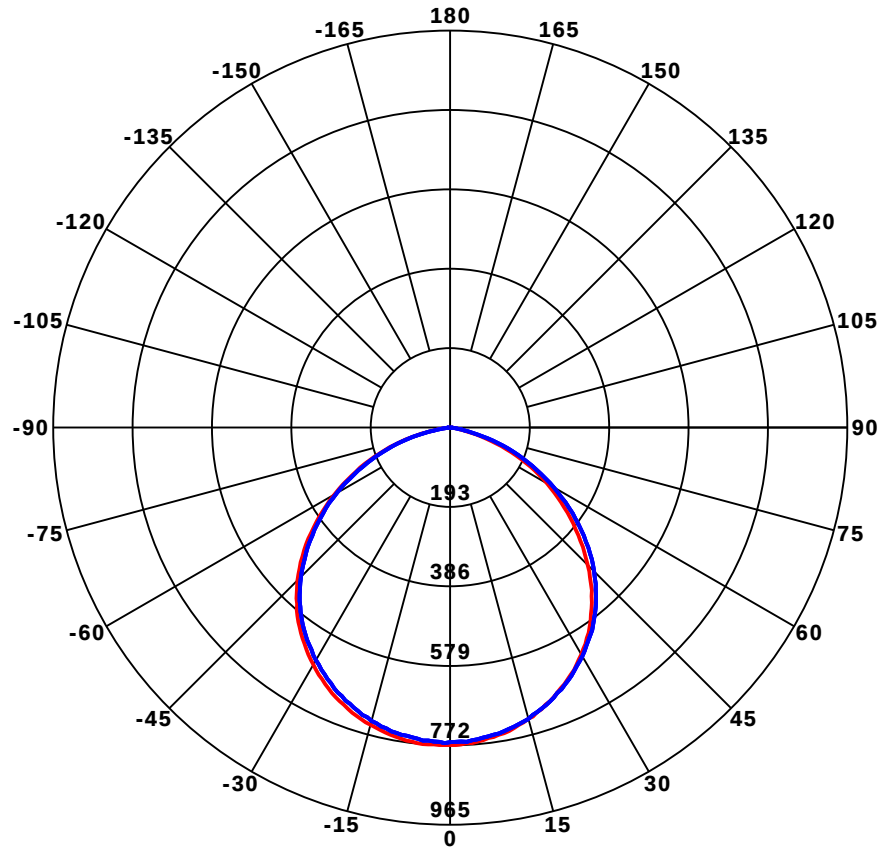
Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2024/10/7 9:08:32

Luminous Intensity Distribution Curve



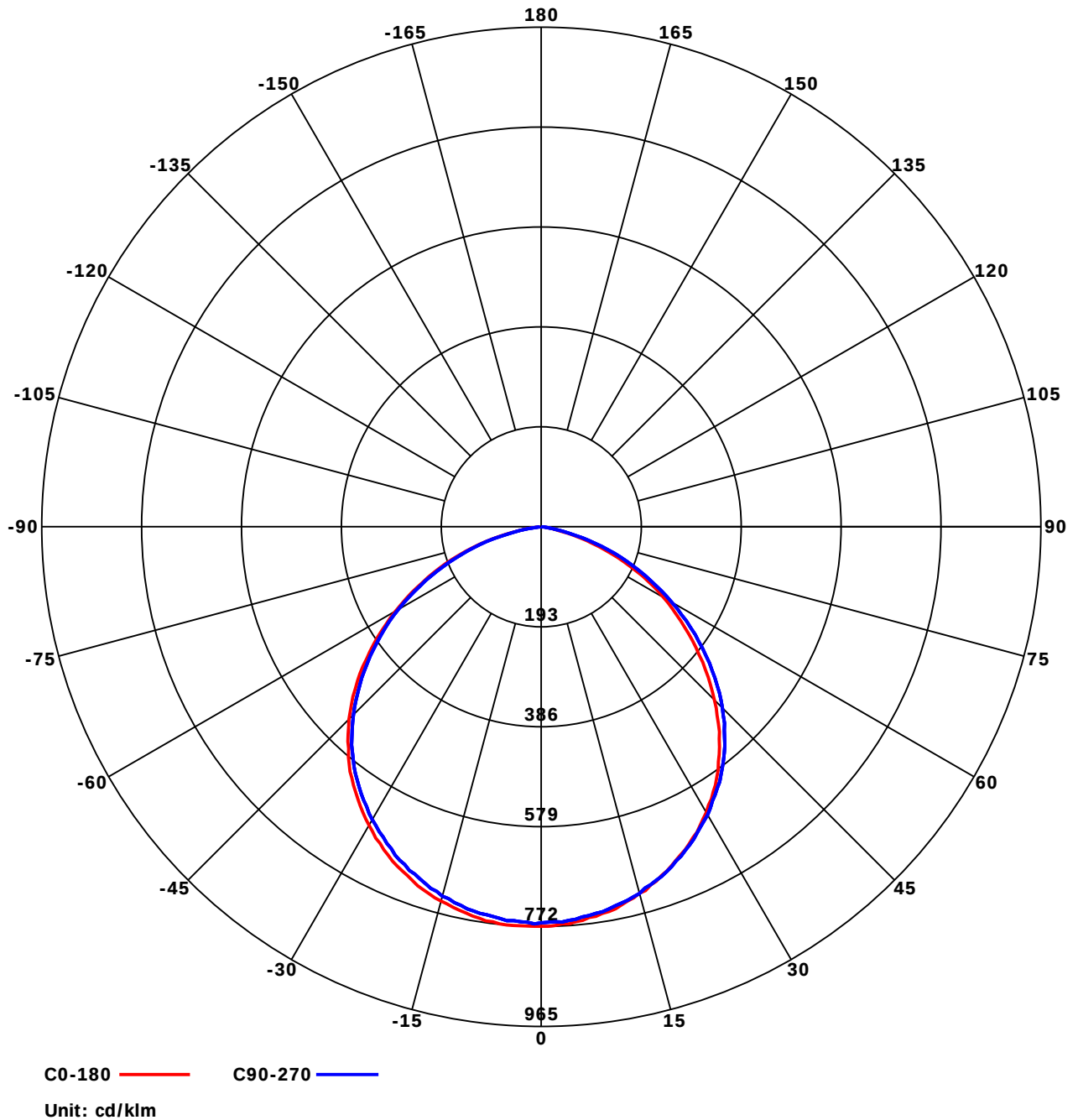
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 m
Remarks:

Report No.:

Test Time: 2024/10/7 9:08:32

Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 m
Remarks:

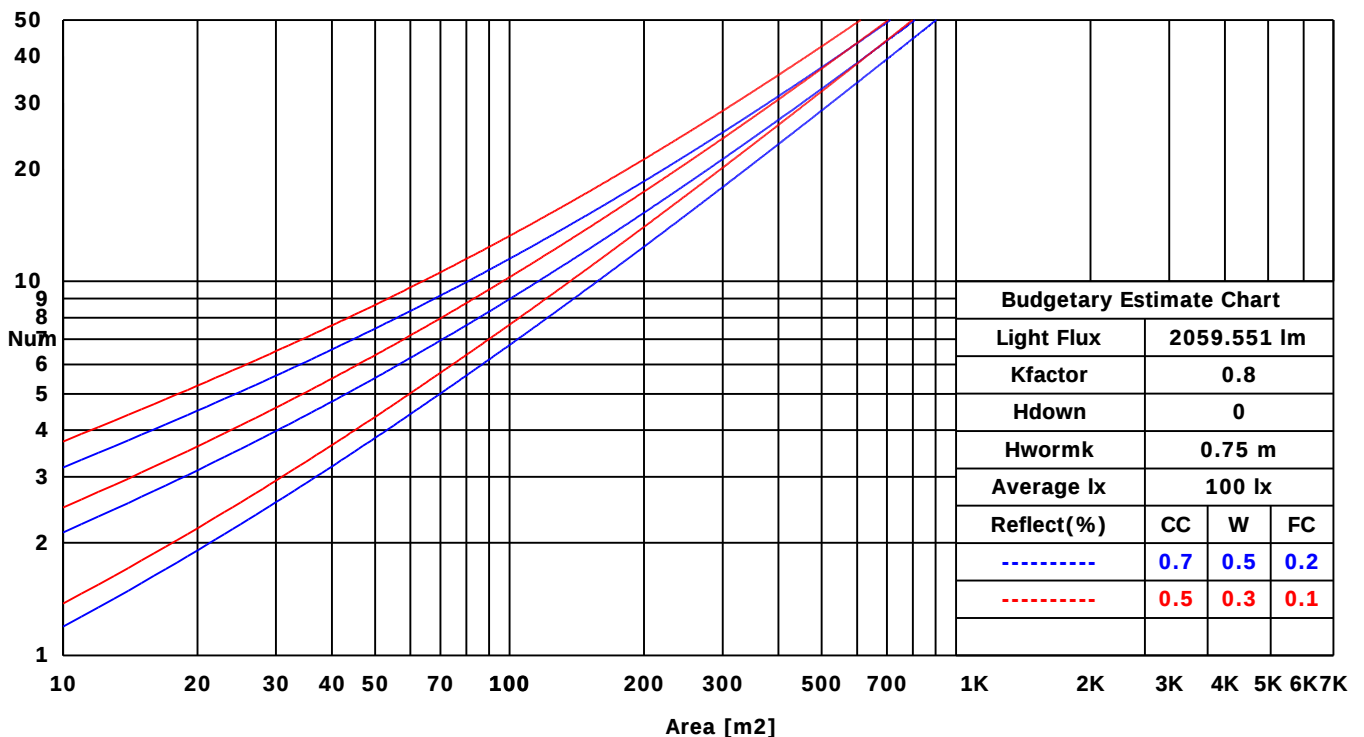
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UTILIZATION FACTORS TABLE

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	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	0.99
1	1.06	1.04	1.03	1.04	1.03	1.01	1.01	0.99	0.97	0.96	0.94	0.92	0.89	0.87	0.85	0.80
2	0.91	0.88	0.86	0.90	0.87	0.85	0.87	0.84	0.81	0.84	0.80	0.77	0.79	0.75	0.72	0.67
3	0.78	0.75	0.73	0.78	0.74	0.72	0.76	0.72	0.69	0.74	0.69	0.65	0.71	0.66	0.61	0.57
4	0.67	0.65	0.63	0.68	0.64	0.62	0.67	0.63	0.59	0.66	0.60	0.56	0.63	0.58	0.53	0.49
5	0.59	0.56	0.54	0.60	0.56	0.53	0.60	0.55	0.51	0.59	0.53	0.49	0.57	0.51	0.46	0.42
6	0.52	0.49	0.48	0.53	0.49	0.47	0.53	0.48	0.45	0.53	0.47	0.43	0.52	0.46	0.41	0.37
7	0.46	0.44	0.42	0.47	0.44	0.41	0.48	0.43	0.40	0.48	0.42	0.38	0.48	0.41	0.36	0.33
8	0.42	0.39	0.38	0.43	0.39	0.37	0.44	0.39	0.36	0.44	0.38	0.34	0.44	0.37	0.32	0.29
9	0.38	0.35	0.34	0.39	0.35	0.33	0.40	0.35	0.32	0.41	0.35	0.31	0.41	0.34	0.29	0.26
10	0.34	0.32	0.31	0.35	0.32	0.30	0.37	0.32	0.29	0.37	0.32	0.28	0.38	0.31	0.27	0.24

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



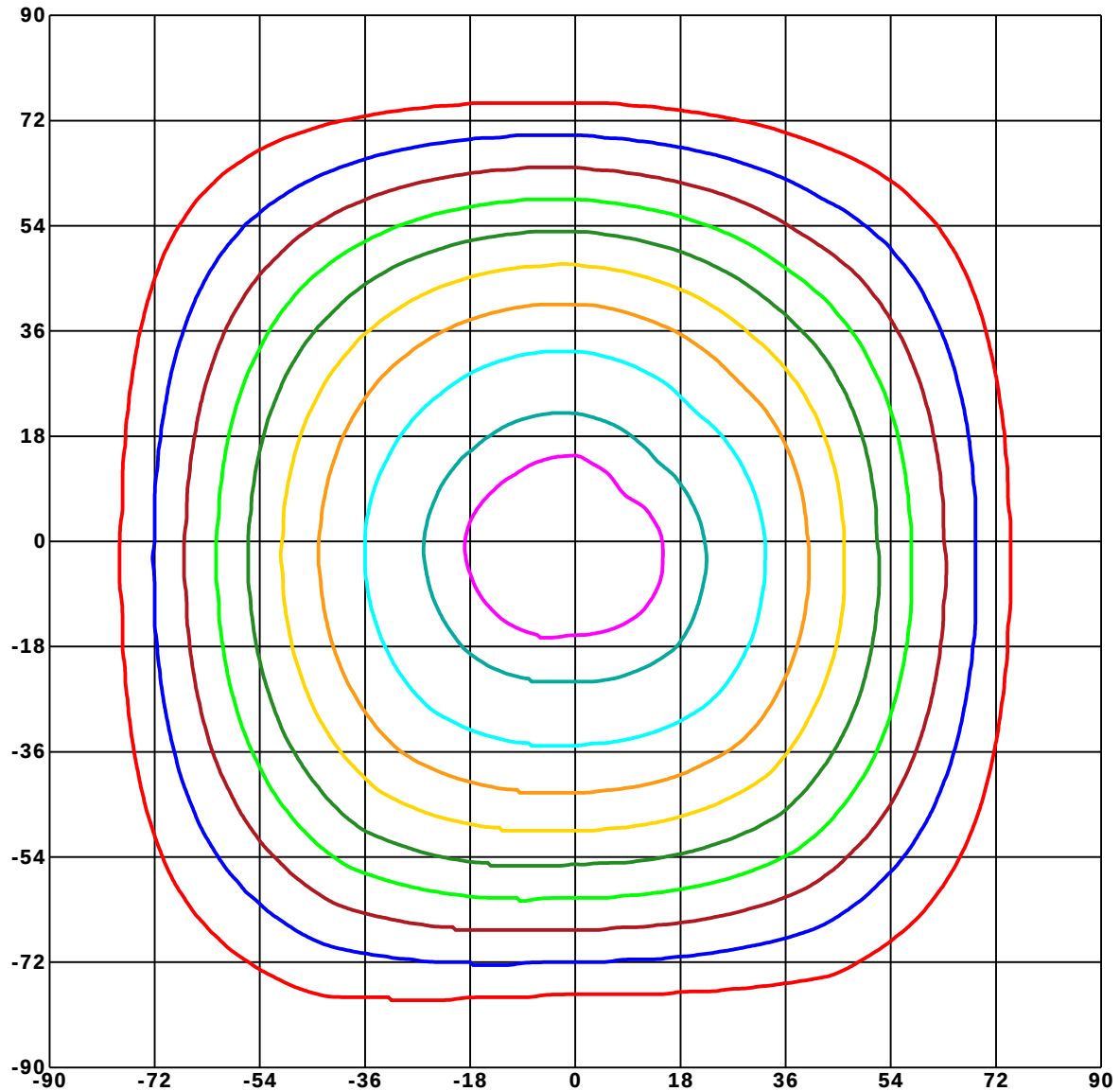
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 m
Remarks:

Report No.:

Test Time: 2024/10/7 9:08:32

ISOCANDELA DIAGRAM (RECTANGULAR)



Unit of intensity:cd Imax(100%): 772.383 cd

733.764(95%Imax)
695.145(90%Imax)
617.906(80%Imax)
540.668(70%Imax)
463.43(60%Imax)

386.191(50%Imax)
308.953(40%Imax)
231.715(30%Imax)
154.477(20%Imax)
77.238(10%Imax)

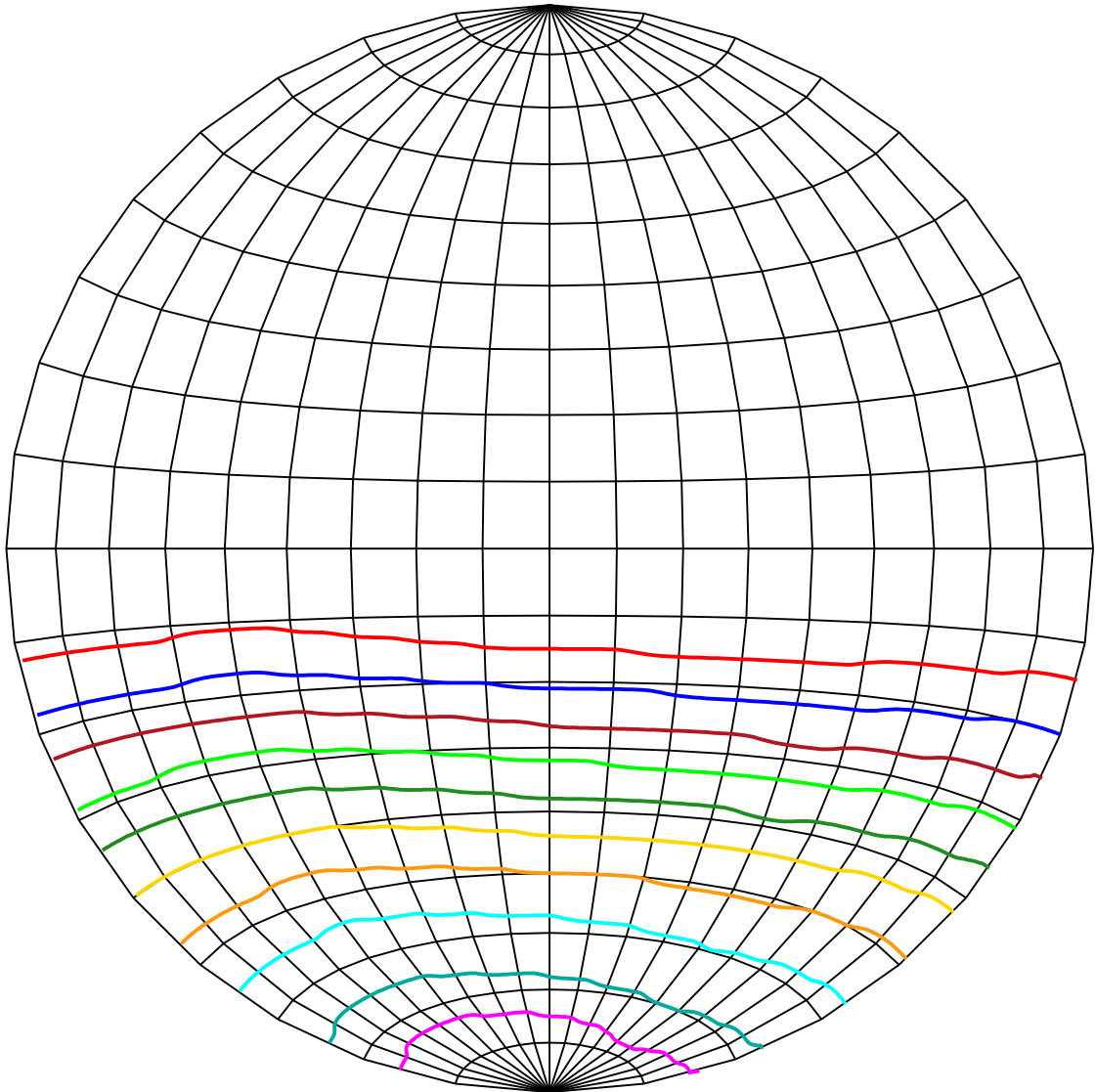
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 m
Remarks:

Report No.:

Test Time: 2024/10/7 9:08:32

ISOCANDELA DIAGRAM (SPHERE)



Unit of intensity:cd Imax(100%): 772.383 cd

733.764(95%Imax)

386.191(50%Imax)

695.145(90%Imax)

308.953(40%Imax)

617.906(80%Imax)

231.715(30%Imax)

540.668(70%Imax)

154.477(20%Imax)

463.43(60%Imax)

77.238(10%Imax)

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

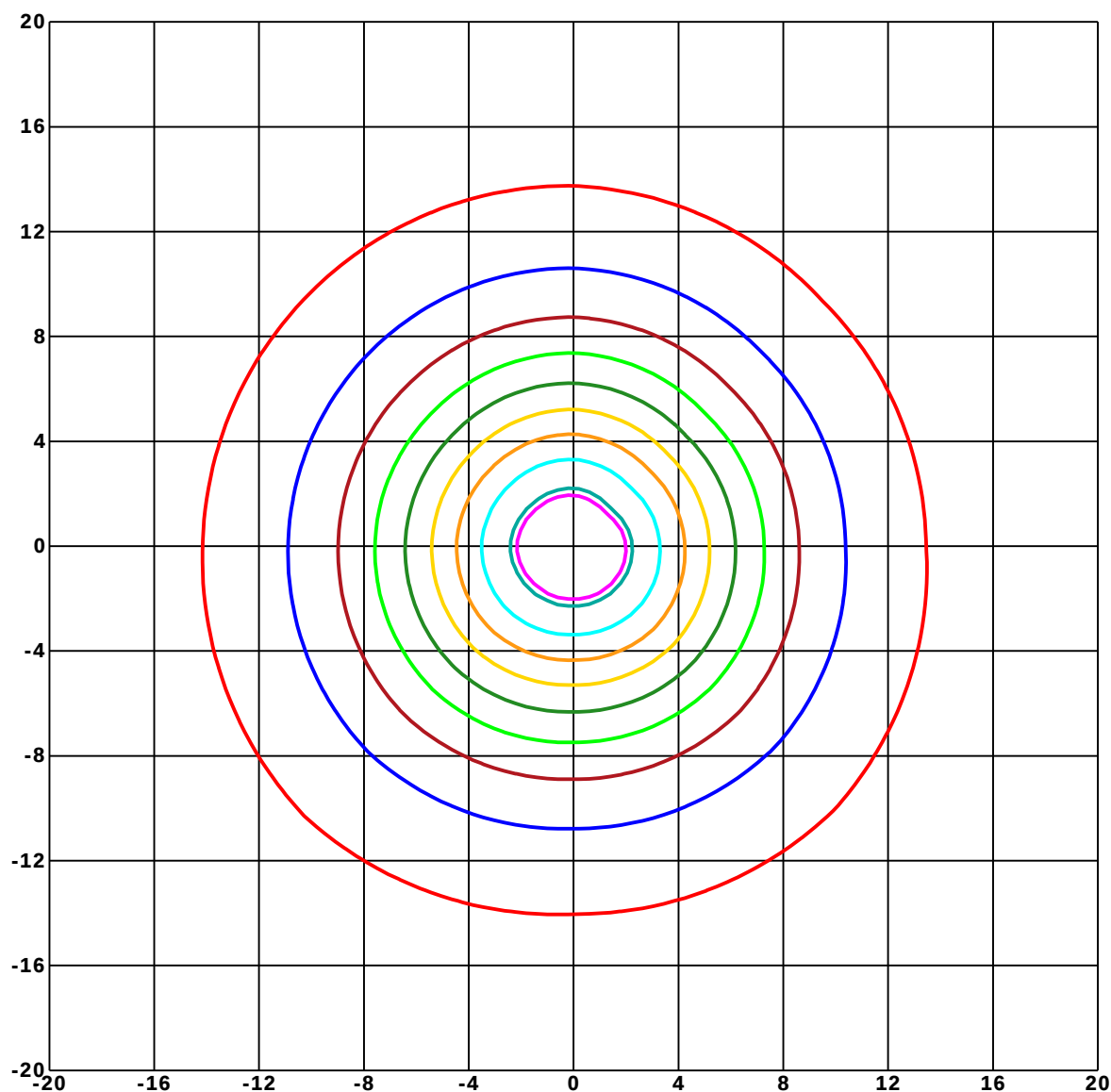
Test Distance: 6.25 m

Remarks:

Report No.:

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ISOLX DIAGRAM



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

7.103(92%Emax)	3.86(50%Emax)
6.948(90%Emax)	3.088(40%Emax)
6.176(80%Emax)	2.316(30%Emax)
5.404(70%Emax)	1.544(20%Emax)
4.632(60%Emax)	0.772(10%Emax)

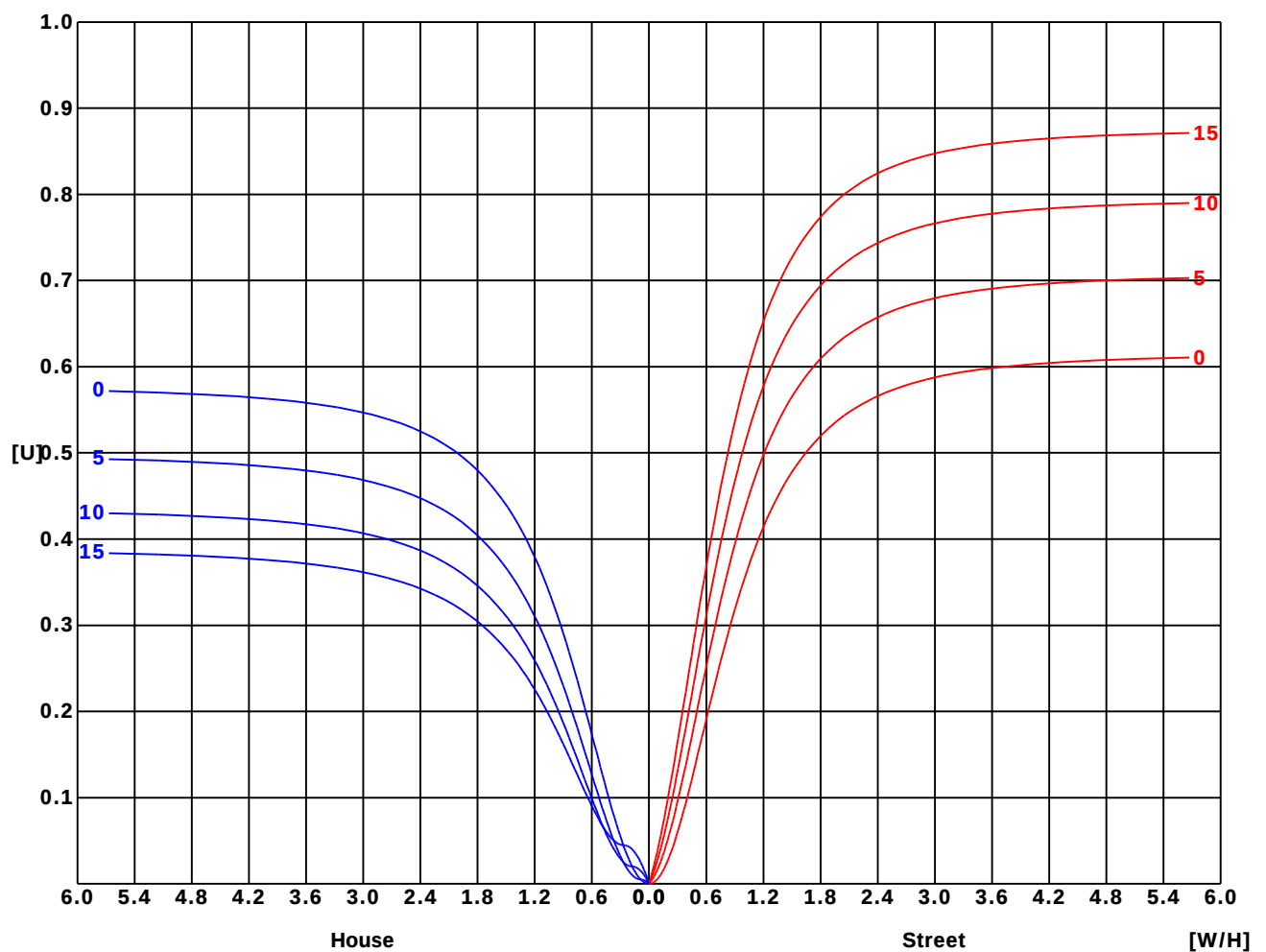
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 m
Remarks:

Report No.:

Test Time: 2024/10/7 9:08:32

UTILIZATION FACTOR DIAGRAM (ROAD)



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 9:08:32

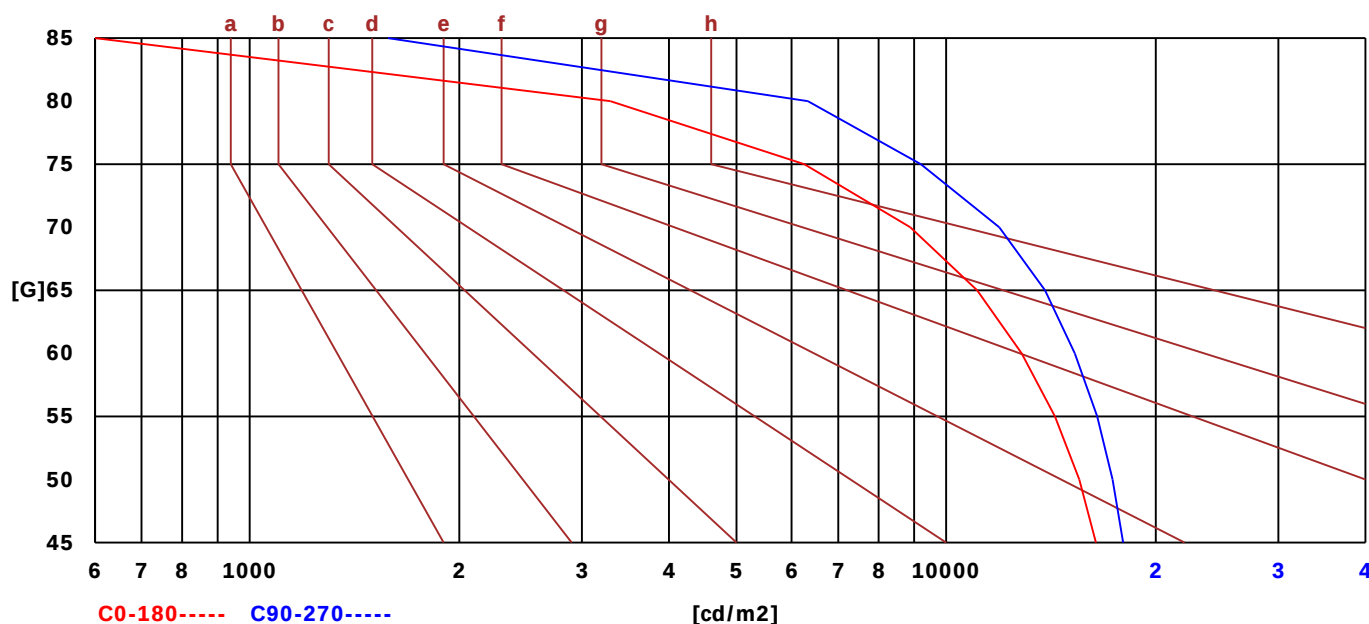
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 m
Remarks:

Report No.:

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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	16411	15522	14326	12838	11085	8880	6256	3296	179
C90	17951	17330	16484	15295	13871	11926	9199	6332	1580
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



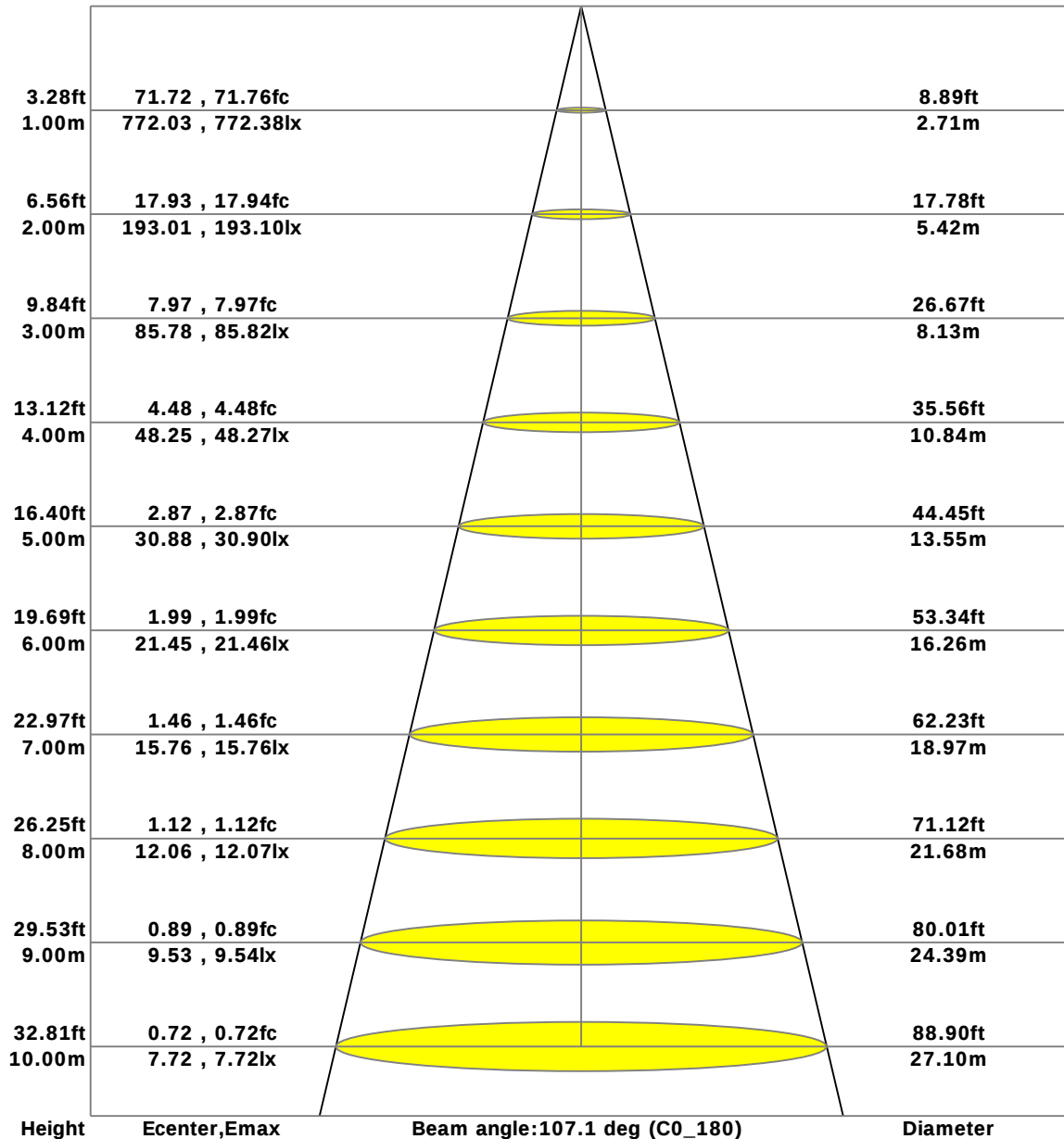
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 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:
 Operators:
 Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-2000B Goniophotometer
 Humidity:
 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	22.64	23.36	22.44	23.43	23.58	22.80	23.52	22.60	23.60	23.74
3H	22.33	22.99	22.20	23.11	23.32	22.48	23.14	22.35	23.26	23.46
4H	22.12	22.75	22.04	22.90	23.13	22.27	22.89	22.18	23.04	23.28
6H	21.89	22.48	21.86	22.66	22.93	22.04	22.62	22.00	22.80	23.07
8H	21.77	22.34	21.76	22.53	22.82	21.92	22.48	21.91	22.68	22.97
12H	21.65	22.20	21.66	22.40	22.72	21.80	22.34	21.81	22.55	22.86
4H 2H	23.62	24.25	23.54	24.40	24.63	23.95	24.57	23.86	24.72	24.96
3H	23.33	23.87	23.34	24.08	24.39	23.64	24.18	23.65	24.39	24.70
4H	23.12	23.61	23.19	23.85	24.21	23.42	23.92	23.49	24.16	24.51
6H	22.87	23.31	23.00	23.59	23.99	23.17	23.61	23.30	23.89	24.29
8H	22.74	23.15	22.90	23.44	23.87	23.04	23.45	23.20	23.74	24.17
12H	22.61	22.99	22.80	23.30	23.75	22.91	23.29	23.10	23.60	24.05
8H 4H	23.39	23.96	23.38	24.15	24.44	23.76	24.33	23.75	24.52	24.81
6H	22.63	22.97	22.85	23.30	23.78	22.98	23.32	23.21	23.65	24.13
8H	22.49	22.80	22.76	23.15	23.65	22.85	23.15	23.11	23.50	24.01
12H	22.36	22.63	22.66	22.99	23.53	22.72	22.98	23.01	23.35	23.88
12H 4H	22.75	23.13	22.94	23.44	23.89	23.11	23.49	23.30	23.80	24.25
6H	22.50	22.80	22.76	23.15	23.66	22.86	23.16	23.12	23.51	24.02

C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature:
 Operators:
 Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-2000B Goniophotometer
 Humidity:
 Test Distance: 6.25 m
 Remarks:

Report No.:

Test Time: 2024/10/7 9:08:32

ZONAL LUMINOUS FLUX TABLE-1

[illegible]

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 m
Remarks:

Report No.:

Test Time: 2024/10/7 9:08:32

ZONAL LUMINOUS FLUX TABLE-2

Y	C0	C45	C90	C135	C180	C225	C270	C315	Y	φ zonal	φ total	%lum	%lamp
10	754.6	738.9	749.8	753.7	763.6	754.9	753.5	754.8	10	72.5	72.5	3.5	3.5
20	708.1	692.0	708.7	712.8	727.5	728.1	714.2	719.5	20	207.8	280.4	13.6	13.6
30	637.4	616.9	642.6	647.8	665.7	670.7	653.5	657.9	30	315.5	595.8	28.9	28.9
40	535.0	521.8	551.5	561.6	580.0	593.5	567.8	574.0	40	380.1	975.9	47.4	47.4
50	407.2	399.1	430.7	445.6	463.3	488.5	453.0	461.3	50	389.2	1365.1	66.3	66.3
60	273.0	256.8	291.1	305.9	325.0	363.1	318.2	328.3	60	336.4	1701.5	82.6	82.6
70	132.3	121.5	150.2	163.2	182.9	219.8	175.3	184.4	70	234.1	1935.6	94.0	94.0
80	20.8	22.9	27.8	44.0	46.2	88.2	41.8	63.0	80	106.6	2042.2	99.2	99.2
90	1.7	0.0	0.0	0.0	1.6	7.7	1.9	3.7	90	17.4	2059.6	100.0	100.0

Conical surface Flux(90deg) : 1173.3 lm

%lum = 57.0%

%lamp = 57.0%

Conical surface Flux(120deg) : 1701.5 lm

%lum = 82.6%

%lamp = 82.6%

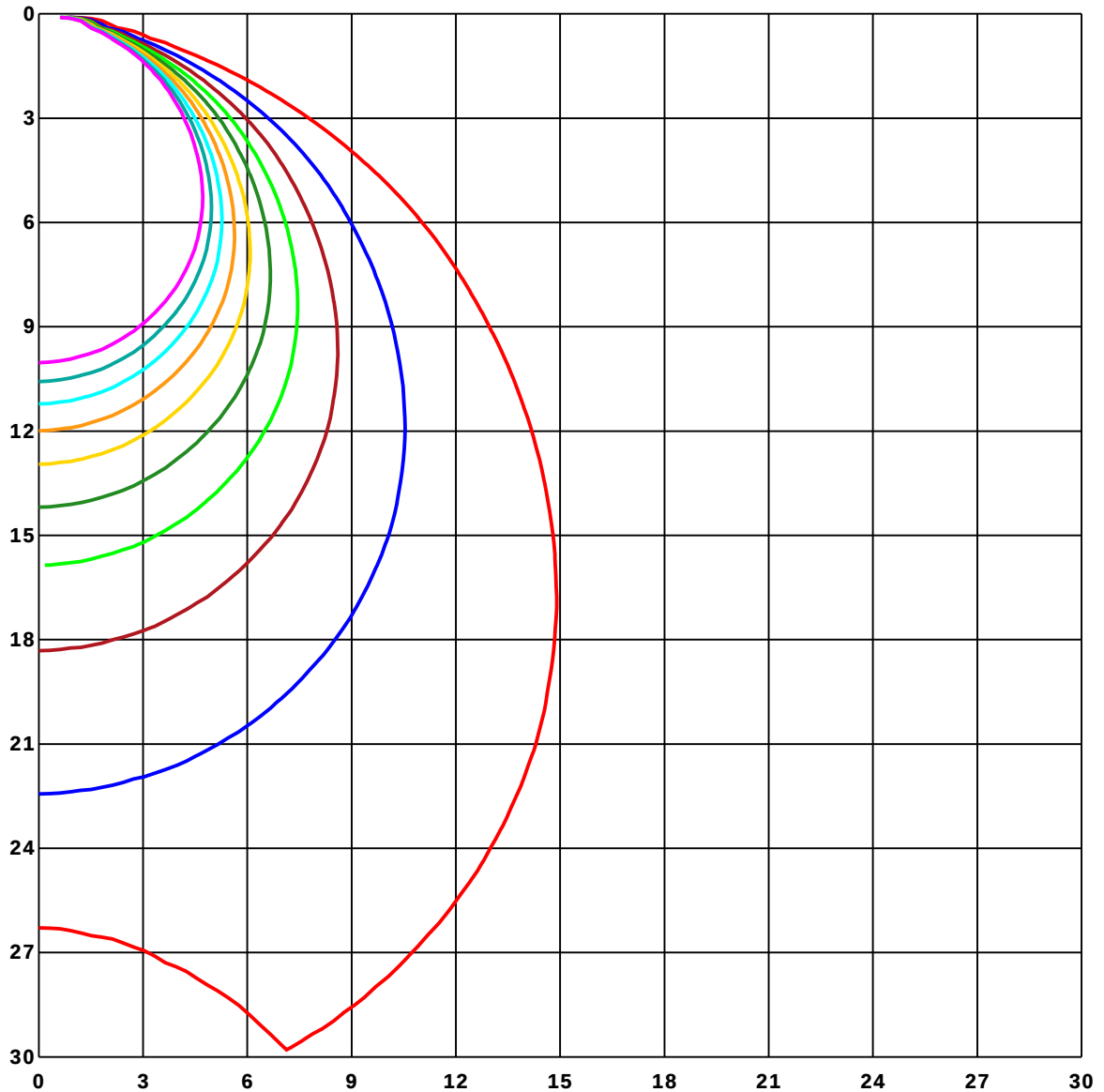
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 m
Remarks:

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SPACE ISOLX DIAGRAM



Unit of illumination:lx

7.672	3.836
6.905	3.069
6.137	2.302
5.37	1.534
4.603	0.767

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 m
Remarks:

Report No.:

Test Time: 2024/10/7 9:08:32

LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	772.03	760.7	765.04	767.03	772.03	760.7	765.04	767.03	772.03	
G1	771.95	759.77	764.14	766.84	771.8	761.95	767.23	766.95	771.95	
G2	770.51	758.01	763.59	767.42	771.95	762.38	764.77	768.79	770.51	
G3	768.2	758.63	764.8	765.59	771.72	763.59	764.26	766.56	768.2	
G4	768.91	755.12	762.03	765.63	772.38	762.38	762.97	766.8	768.91	
G5	766.13	753.01	761.13	763.2	772.15	762.5	764.06	764.45	766.13	
G6	764.65	750.08	757.77	762.11	771.64	762.38	760.7	761.99	764.65	
G7	760.23	750.04	756.88	760.86	768.67	761.48	758.59	760.86	760.23	
G8	759.92	744.96	754.06	759.77	768.71	758.09	756.88	758.91	759.92	
G9	756.09	742.85	753.13	756.91	765.66	758.28	756.37	756.76	756.09	
G10	754.61	738.87	749.8	753.71	763.59	754.92	753.52	754.84	754.61	
G11	751.8	735.7	746.29	750.35	760.63	753.44	752.07	751.09	751.8	
G12	746.6	730.66	743.48	747.07	757.93	752.23	747.66	749.73	746.6	
G13	742.19	729.06	740.51	743.24	754.92	749.3	745.51	745.47	742.19	
G14	738.52	722.54	736.72	740.62	751.21	745.55	740.55	743.13	738.52	
G15	733.09	718.36	733.79	735.2	748.32	743.71	739.02	738.52	733.09	
G16	730.94	712.03	726.48	732.66	745.7	739.65	732.93	735.31	730.94	
G17	723.32	707.93	723.12	727.27	741.25	738.71	730.74	731.56	723.32	
G18	720.04	701.48	718.36	725.7	737.11	734.3	724.61	727.77	720.04	
G19	712.46	696.91	714.38	719.84	733.36	731.48	719.8	723.2	712.46	
G20	708.09	692.03	708.71	712.77	727.5	728.13	714.22	719.53	708.09	
G21	701.6	684.41	703.24	707.34	721.48	723.75	711.05	713.79	701.6	
G22	694.88	677.62	696.05	702.7	717.3	718.48	703.83	711.45	694.88	
G23	688.4	673.79	691.52	696.84	712.3	713.4	700.0	703.28	688.4	
G24	683.09	665.82	684.38	690.51	707.03	706.64	694.14	698.87	683.09	
G25	675.7	658.09	678.28	684.38	699.96	702.58	686.05	693.24	675.7	
G26	668.09	649.57	671.88	677.15	694.06	695.31	680.55	686.91	668.09	
G27	662.23	642.85	663.79	669.3	686.45	692.34	673.05	678.91	662.23	
G28	653.24	633.95	656.09	662.58	681.13	683.2	667.11	673.09	653.24	
G29	645.0	625.74	649.49	655.51	673.05	678.67	659.3	665.59	645.0	
G30	637.38	616.91	642.58	647.77	665.66	670.66	653.48	657.85	637.38	
G31	627.66	609.22	634.22	638.59	658.63	664.3	646.29	649.96	627.66	
G32	620.12	599.65	624.69	631.84	650.86	656.33	636.95	643.83	620.12	
G33	609.92	591.99	617.23	624.53	642.46	650.86	630.04	634.14	609.92	
G34	601.88	581.68	608.71	615.66	633.87	642.07	622.3	627.93	601.88	
G35	590.94	573.55	601.33	605.74	625.51	634.92	613.55	619.26	590.94	
G36	581.25	562.7	591.09	597.77	617.34	626.6	605.31	610.0	581.25	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2024/10/7 9:08:32

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	568.36	554.84	581.6	588.75	607.81	618.98	596.88	601.76	568.36	
G38	558.13	542.73	571.76	579.14	600.12	609.8	587.73	593.28	558.13	
G39	547.42	534.1	561.56	569.3	590.0	602.03	577.7	583.63	547.42	
G40	535.04	521.76	551.52	561.64	580.04	593.52	567.77	573.98	535.04	
G41	524.61	511.8	540.16	549.77	567.77	584.73	558.36	563.52	524.61	
G42	511.25	499.45	528.44	540.78	558.52	574.41	546.76	553.87	511.25	
G43	498.01	489.65	519.06	529.3	547.38	564.84	536.33	542.97	498.01	
G44	486.56	476.33	506.13	518.48	536.25	553.63	524.45	531.25	486.56	
G45	473.09	464.18	494.96	507.73	525.94	544.49	513.28	520.55	473.09	
G46	459.73	451.99	483.16	496.52	513.48	532.77	501.29	509.34	459.73	
G47	446.48	439.26	470.43	483.87	501.05	522.7	489.22	498.16	446.48	
G48	433.75	425.35	456.84	471.91	489.84	511.09	476.29	484.18	433.75	
G49	419.49	412.5	444.77	458.44	476.41	501.33	464.57	473.67	419.49	
G50	407.23	399.1	430.7	445.59	463.32	488.52	453.05	461.29	407.23	
G51	392.5	384.77	418.13	432.03	450.78	477.7	438.91	447.15	392.5	
G52	379.53	370.59	403.55	418.55	437.73	465.86	425.43	436.52	379.53	
G53	365.98	356.68	390.0	405.7	422.27	453.91	413.63	422.93	365.98	
G54	352.27	342.54	375.66	391.8	409.65	440.86	400.0	408.91	352.27	
G55	338.09	328.67	363.16	378.2	395.47	428.75	386.13	394.96	338.09	
G56	325.2	313.67	347.66	363.52	381.37	415.59	373.59	382.73	325.2	
G57	311.6	300.08	334.18	348.63	366.99	402.66	360.2	368.48	311.6	
G58	298.87	286.09	319.3	335.47	352.7	389.45	346.91	355.59	298.87	
G59	285.98	272.19	305.86	320.86	340.04	376.02	333.01	341.17	285.98	
G60	273.01	256.76	291.09	305.9	325.04	363.09	318.24	328.32	273.01	
G61	259.57	242.38	276.95	291.21	310.04	349.45	304.41	313.75	259.57	
G62	245.86	228.36	262.58	277.3	296.33	335.04	290.12	301.21	245.86	
G63	231.37	214.77	248.05	263.71	281.88	321.37	274.92	284.88	231.37	
G64	217.73	200.66	233.59	248.91	267.27	306.76	260.59	270.74	217.73	
G65	203.09	187.38	219.88	234.49	252.97	292.73	246.76	256.05	203.09	
G66	188.87	173.71	206.05	220.31	239.53	278.2	232.38	241.8	188.87	
G67	174.34	160.43	192.07	205.51	225.23	263.83	218.44	227.54	174.34	
G68	160.31	147.03	178.28	191.25	211.25	248.75	203.79	212.77	160.31	
G69	146.48	134.1	164.73	177.11	196.88	234.69	190.12	198.09	146.48	
G70	132.27	121.48	150.23	163.16	182.85	219.84	175.31	184.41	132.27	
G71	117.97	108.98	136.33	148.24	168.32	205.94	161.76	170.04	117.97	
G72	104.61	97.03	122.58	134.84	154.18	191.8	148.44	157.07	104.61	
G73	91.84	85.74	108.91	120.39	139.77	177.81	135.39	142.81	91.84	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 6.25 m

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 9:08:32

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 m
Remarks: