

Report No.:

Test Time: 2024/10/5 17:09:58

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: NORDECOR

Luminaire Type: 4281

Lamp Type:

Luminous Width: 0 mm

Luminous Length: 0 mm Luminous

Height: 0 mm

Voltage(V): 219.50 V

Current(A): 0.1890 A

Power(W): 23.23 W

Power Factor: 0.5590

Lamp Luminous Flux: 2051.06

Photometric Results

CIE Class: Direct

Luminaire Luminous Flux: 2051.062 lm

Downward Ratio: 100.00%

Luminaire Efficacy Rating(LER): 88.29 lm/W

Beam Angle(50%) C0-180,C90-270: 109.8,110.8

Field Angle(10%) C0-180,C90-270: 153.4,154.7

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

Max. Intensity: 758.16 cd

Max.Intensity Angle: C=0 Gamma=1

Upward Ratio: 0.00%

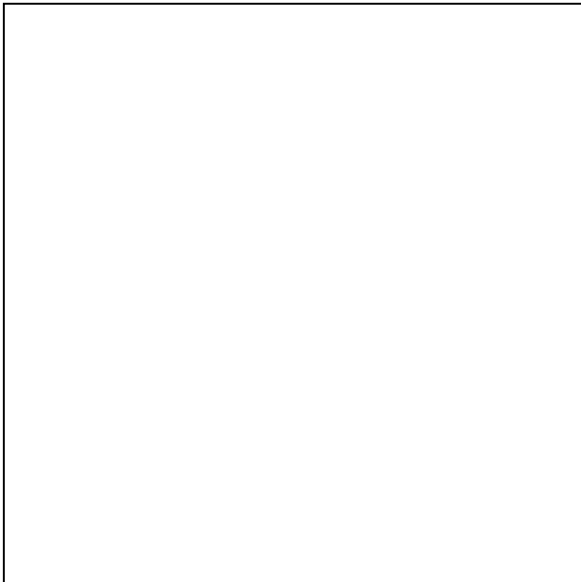
Efficacy: 100.00%

Center Intensity: 757.89 cd

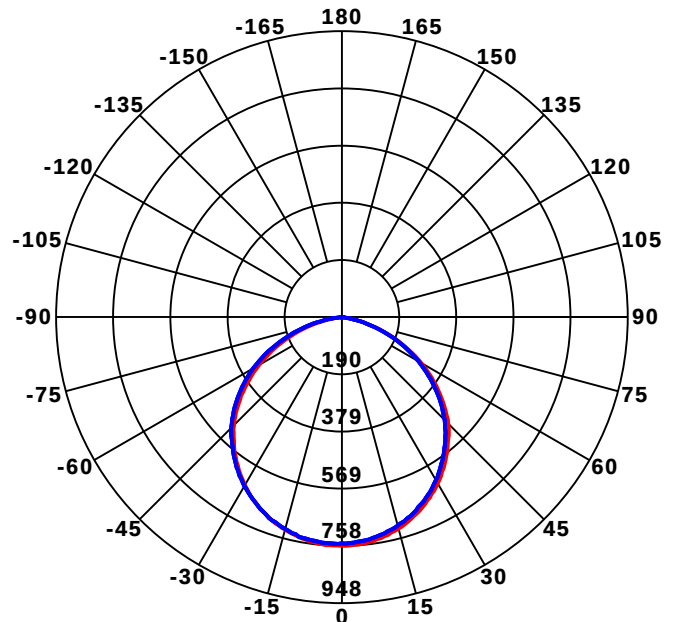
Effective Luminous Flux: 2020.40 lm

ERP(ϕ use)(120deg): 1681.65 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 109.8 deg,110.8 deg

C0-180 — C90-270 —

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

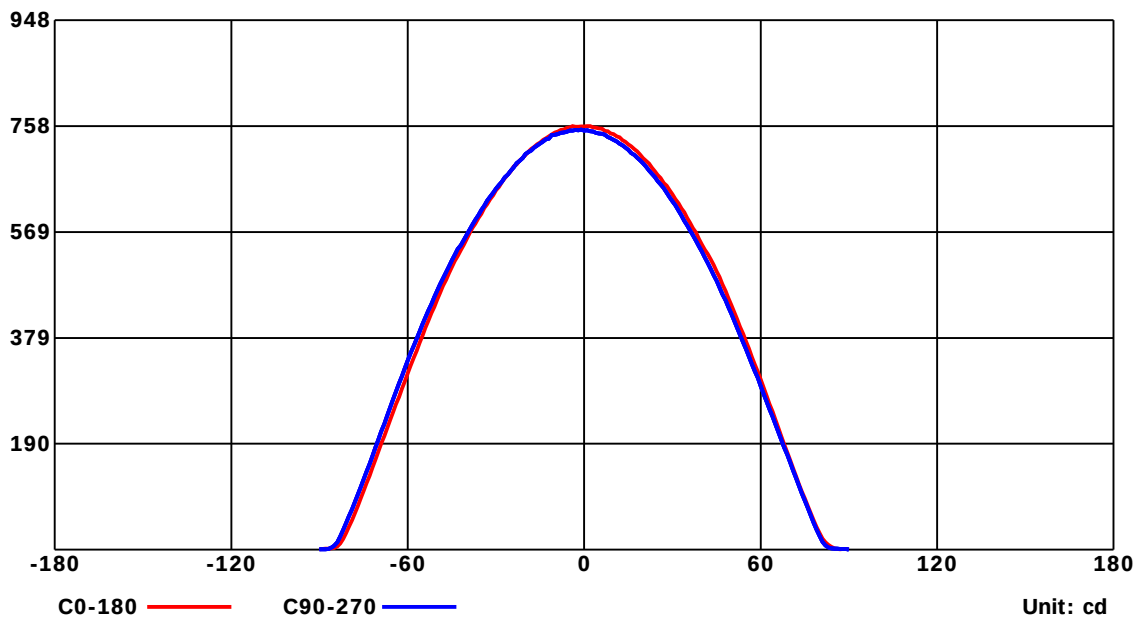
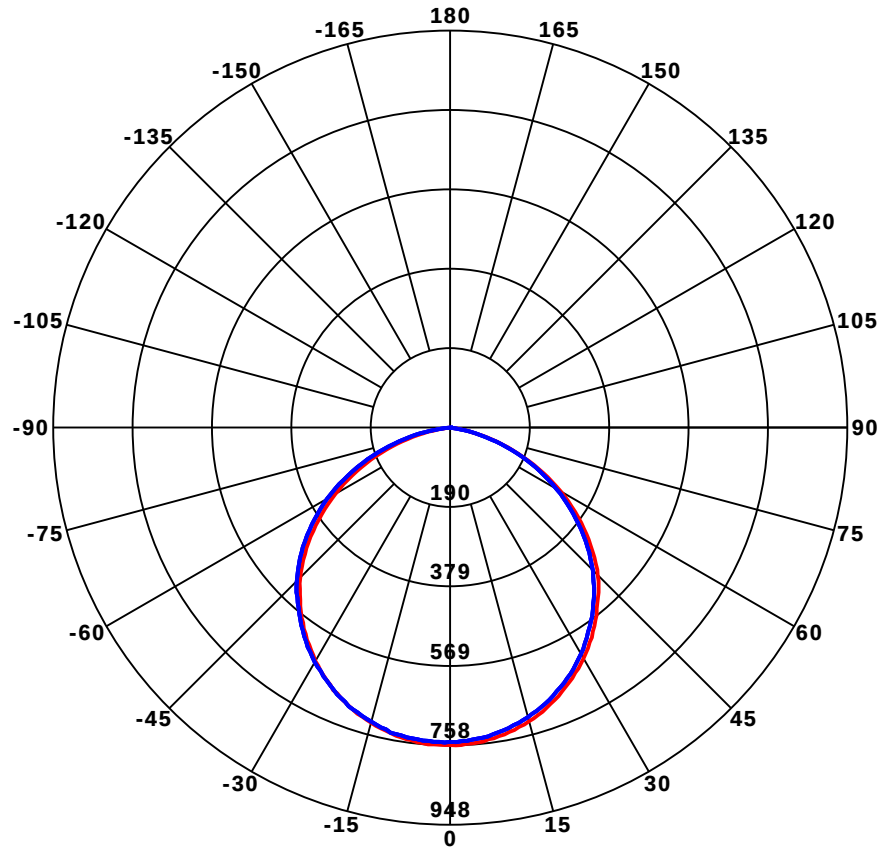
Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2024/10/5 17:09:58

Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

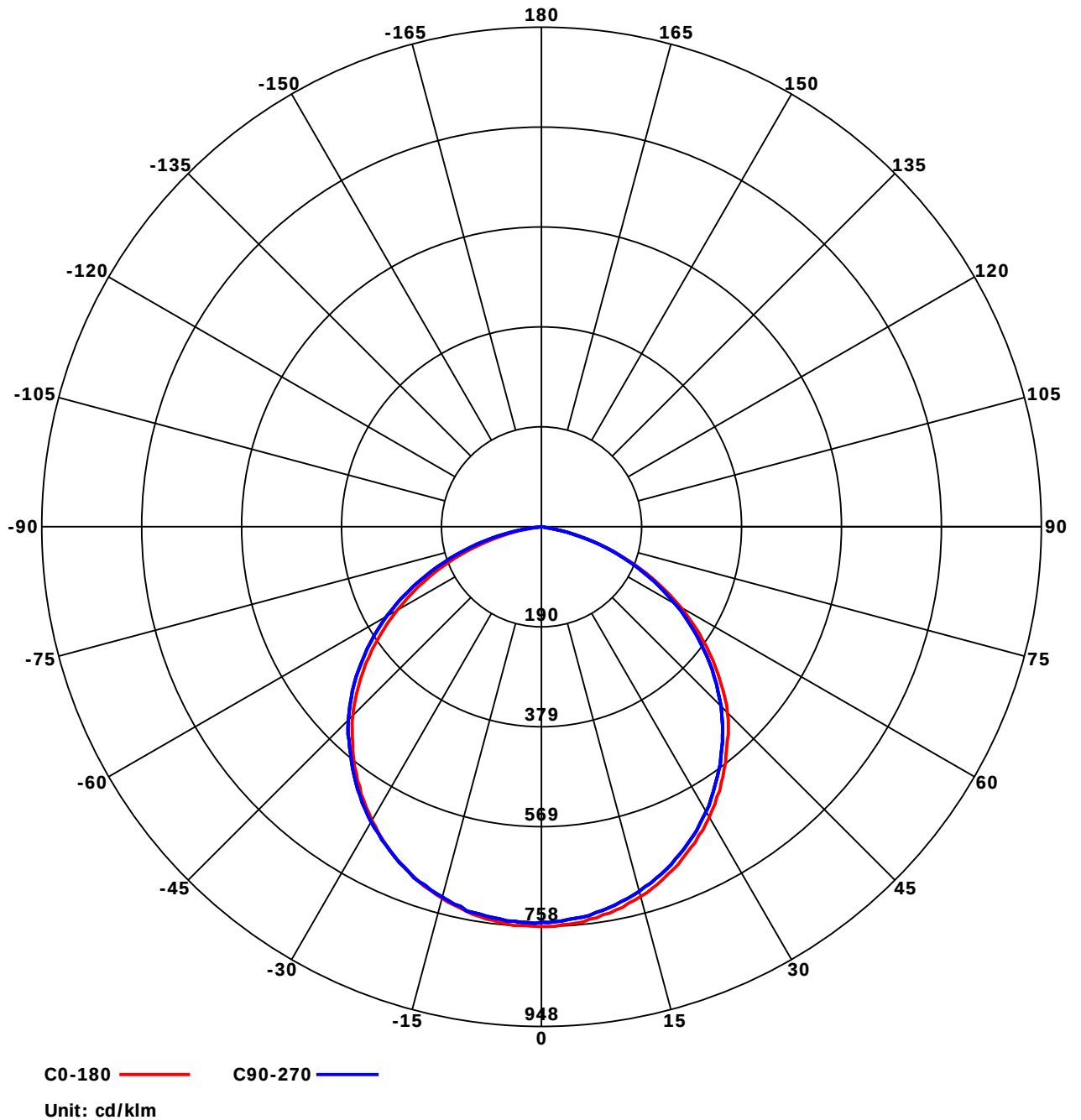
Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2024/10/5 17:09:58

Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/5 17:09:58

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

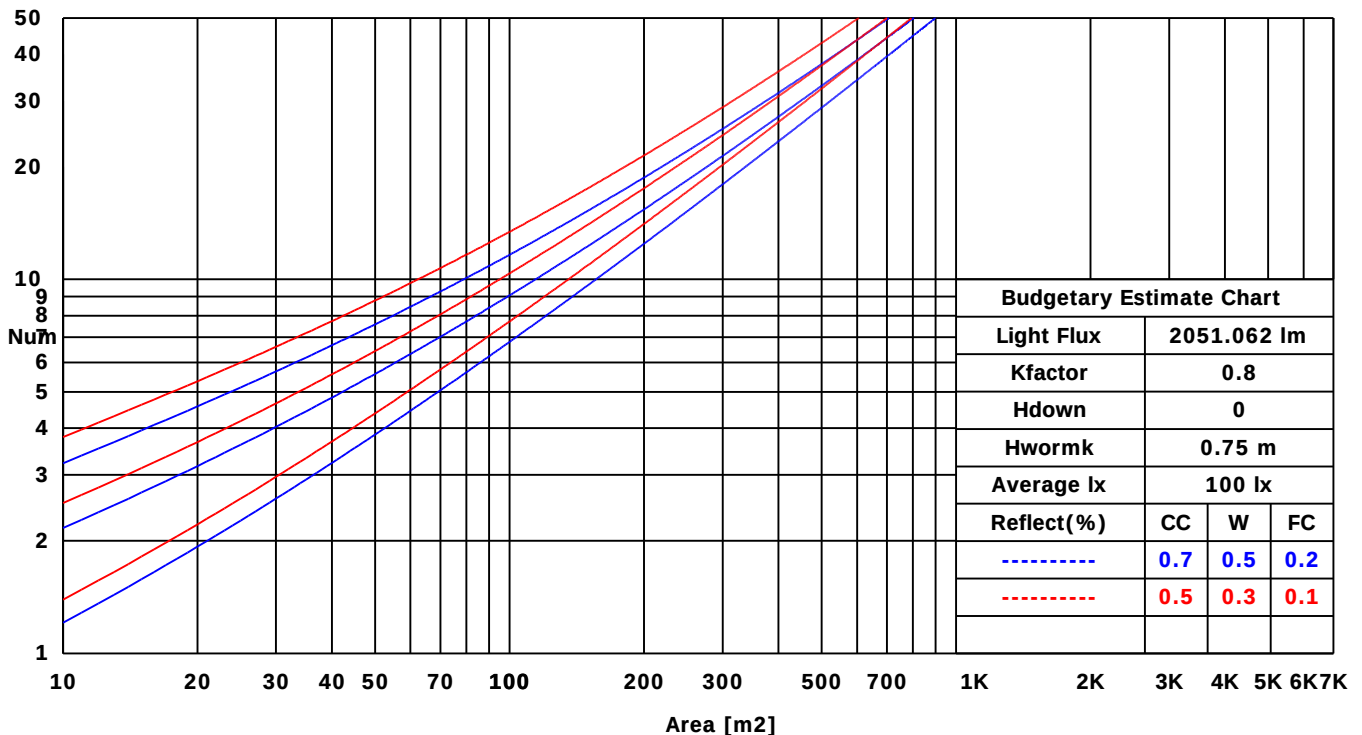
Report No.:

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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	1.06	1.06	1.06	1.01	1.01	1.01	0.99
1	1.06	1.04	1.03	1.04	1.02	1.01	1.00	0.99	0.97	0.96	0.94	0.92	0.89	0.87	0.85	0.80
2	0.90	0.88	0.86	0.90	0.87	0.84	0.87	0.84	0.81	0.84	0.80	0.77	0.79	0.75	0.72	0.67
3	0.77	0.75	0.73	0.77	0.74	0.71	0.76	0.72	0.68	0.74	0.69	0.65	0.70	0.65	0.61	0.57
4	0.67	0.64	0.62	0.67	0.64	0.61	0.67	0.62	0.59	0.65	0.60	0.56	0.63	0.57	0.53	0.49
5	0.59	0.56	0.54	0.59	0.55	0.53	0.59	0.54	0.51	0.58	0.53	0.48	0.57	0.51	0.46	0.42
6	0.52	0.49	0.47	0.52	0.49	0.46	0.53	0.48	0.45	0.53	0.47	0.43	0.52	0.45	0.40	0.37
7	0.46	0.43	0.42	0.47	0.43	0.41	0.48	0.43	0.39	0.48	0.42	0.38	0.48	0.41	0.36	0.33
8	0.41	0.39	0.37	0.42	0.39	0.37	0.43	0.38	0.35	0.44	0.38	0.34	0.44	0.37	0.32	0.29
9	0.37	0.35	0.34	0.38	0.35	0.33	0.40	0.35	0.32	0.40	0.34	0.30	0.41	0.34	0.29	0.26
10	0.34	0.32	0.30	0.35	0.32	0.30	0.36	0.32	0.29	0.37	0.32	0.28	0.38	0.31	0.26	0.24

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

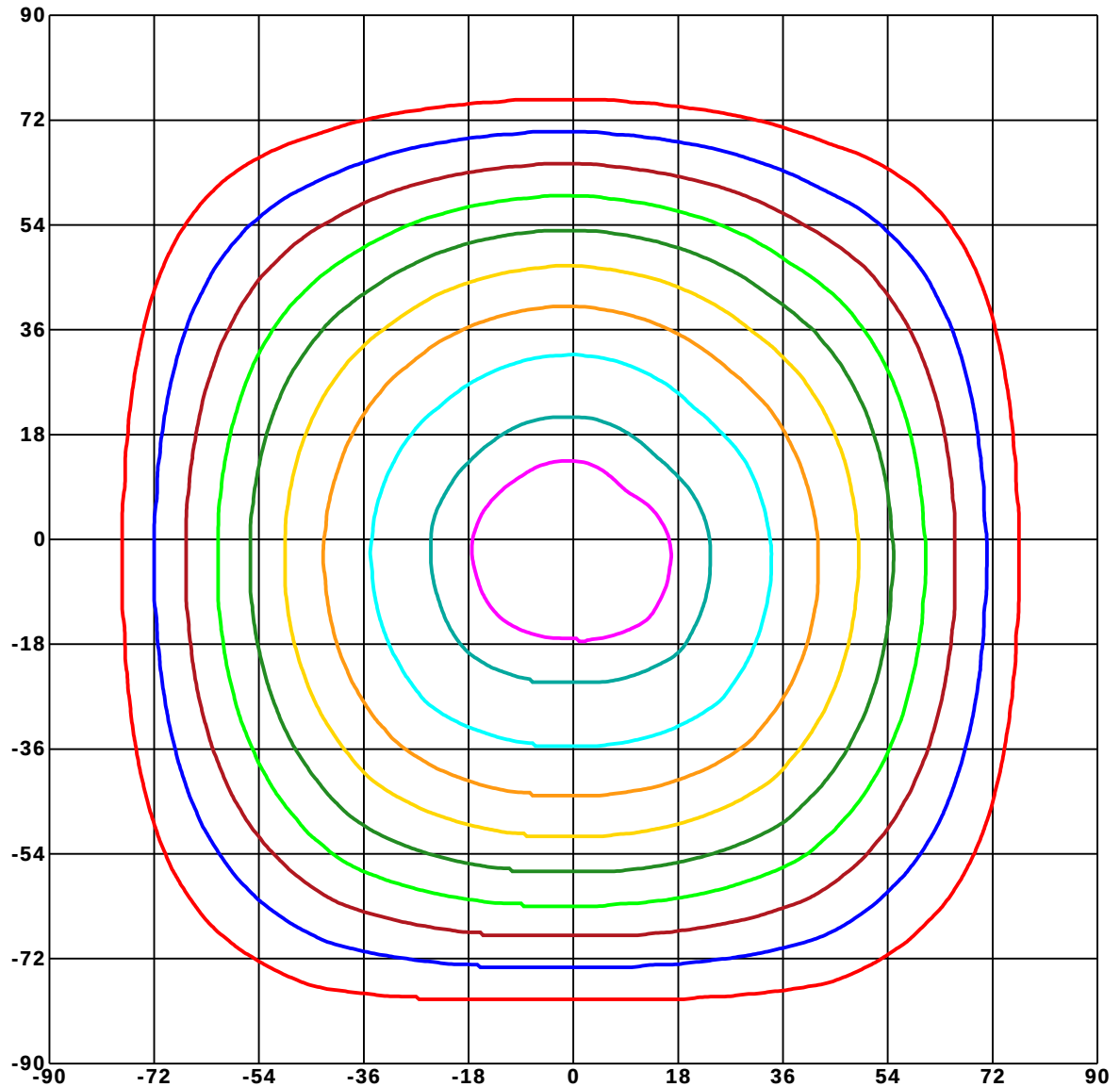
Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2024/10/5 17:09:58

ISOCANDELA DIAGRAM (RECTANGULAR)



Unit of intensity:cd Imax(100%): 758.164 cd

720.256(95%Imax)
682.348(90%Imax)
606.531(80%Imax)
530.715(70%Imax)
454.899(60%Imax)

379.082(50%Imax)
303.266(40%Imax)
227.449(30%Imax)
151.633(20%Imax)
75.816(10%Imax)

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

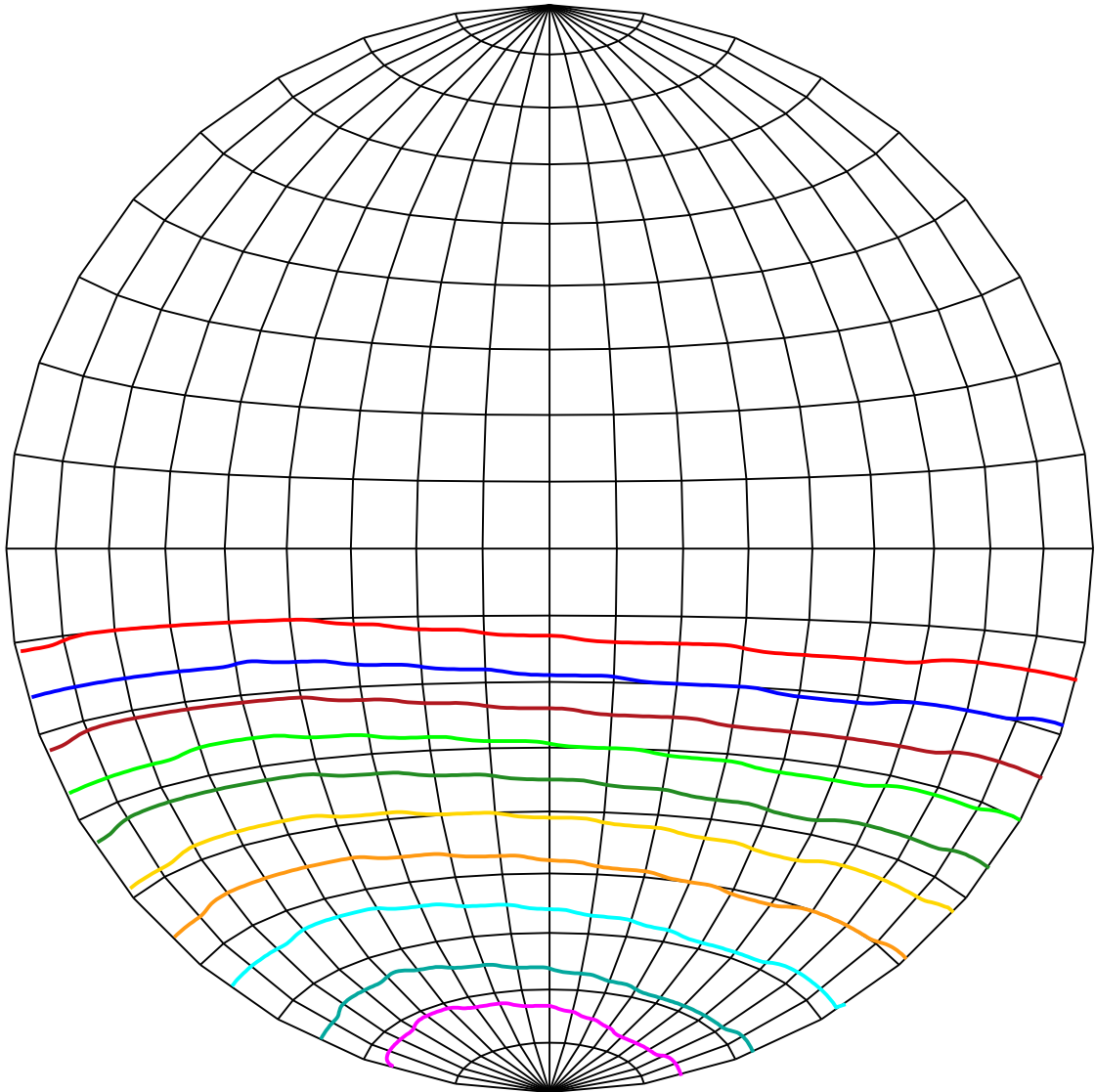
Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2024/10/5 17:09:58

ISOCANDELA DIAGRAM (SPHERE)



Unit of intensity:cd I_{max}(100%): 758.164 cd

720.256(95%I_{max})
682.348(90%I_{max})
606.531(80%I_{max})
530.715(70%I_{max})
454.899(60%I_{max})

379.082(50%I_{max})
303.266(40%I_{max})
227.449(30%I_{max})
151.633(20%I_{max})
75.816(10%I_{max})

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

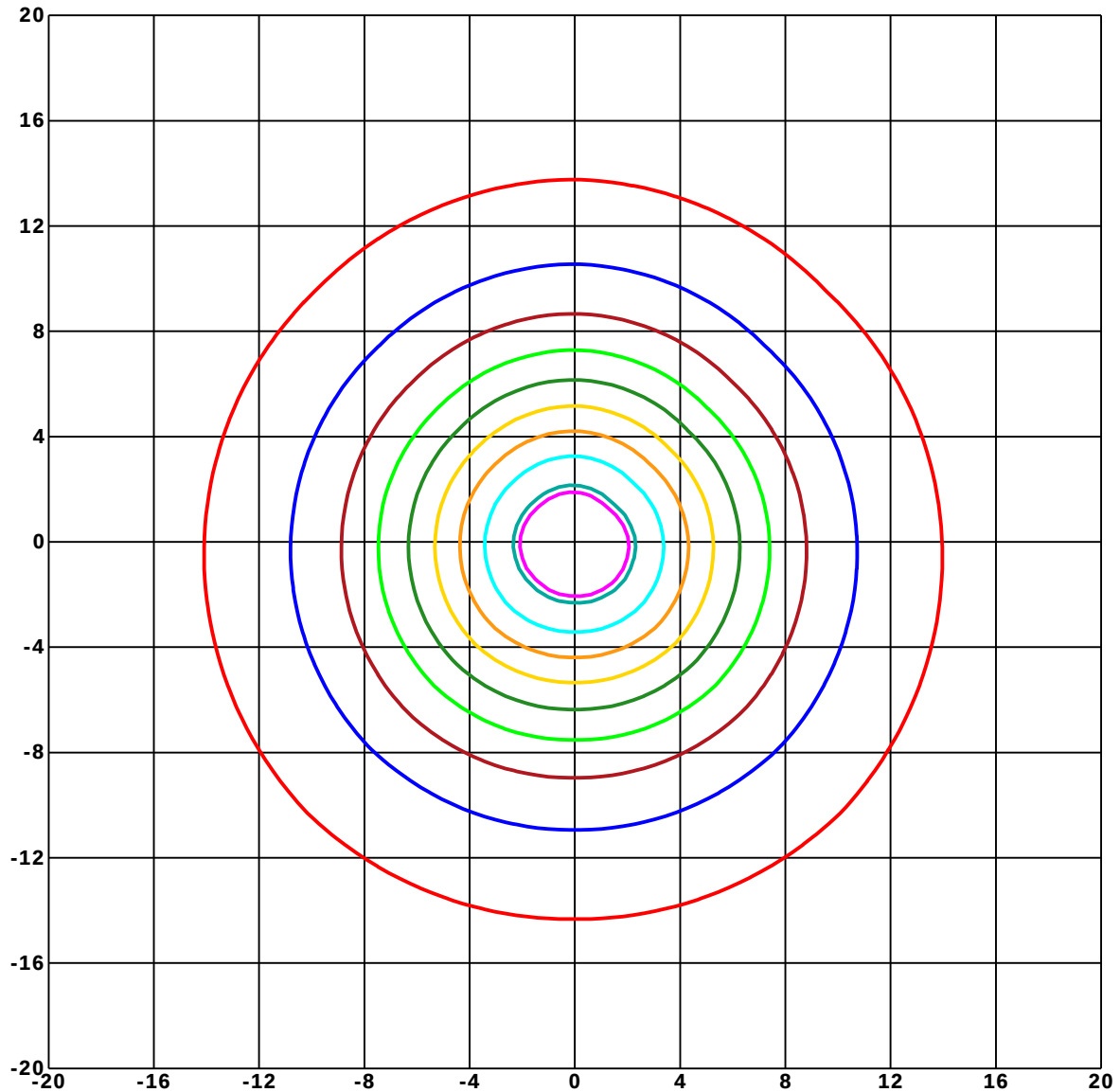
Test Distance: 6.25 m

Remarks:

Report No.:

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ISOLX DIAGRAM



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

6.973(92%E _{max})	3.789(50%E _{max})
6.821(90%E _{max})	3.032(40%E _{max})
6.063(80%E _{max})	2.274(30%E _{max})
5.305(70%E _{max})	1.516(20%E _{max})
4.547(60%E _{max})	0.758(10%E _{max})

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

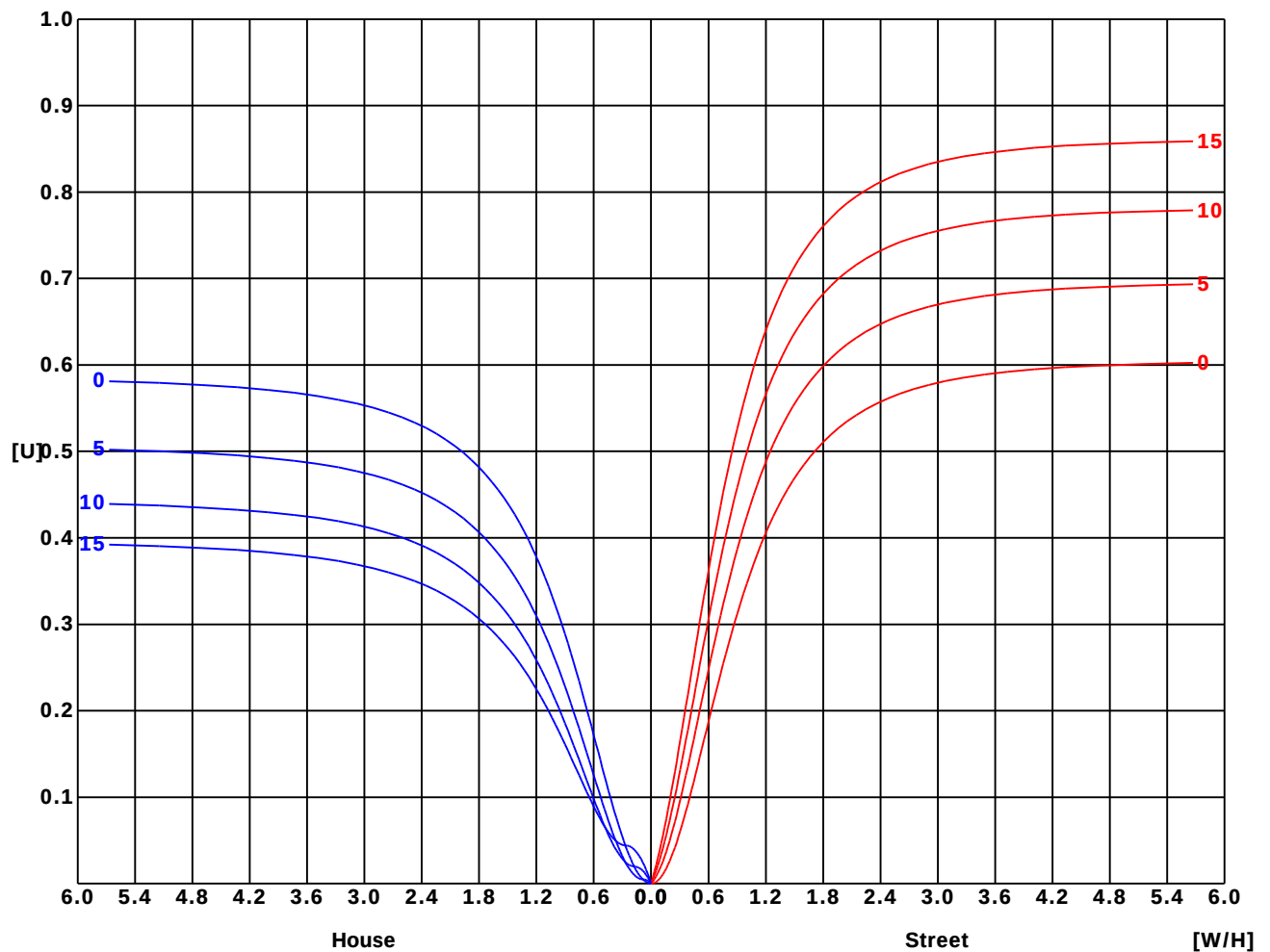
Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2024/10/5 17:09:58

UTILIZATION FACTOR DIAGRAM (ROAD)



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/5 17:09:58

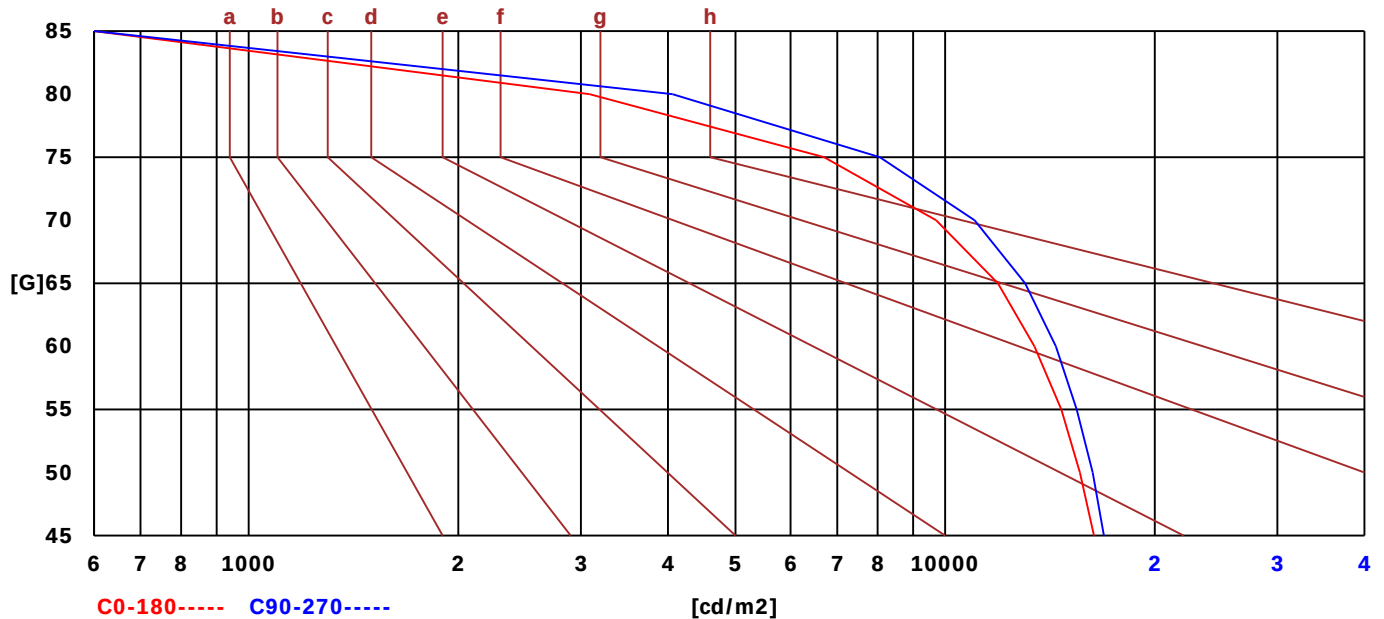
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 m
Remarks:

Report No.:

Test Time: 2024/10/5 17:09:58

BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	16355	15612	14681	13432	11910	9711	6701	3087	0
C90	16908	16279	15448	14420	13030	11027	8056	4060	0
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: 2024/10/5 17:09:58

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

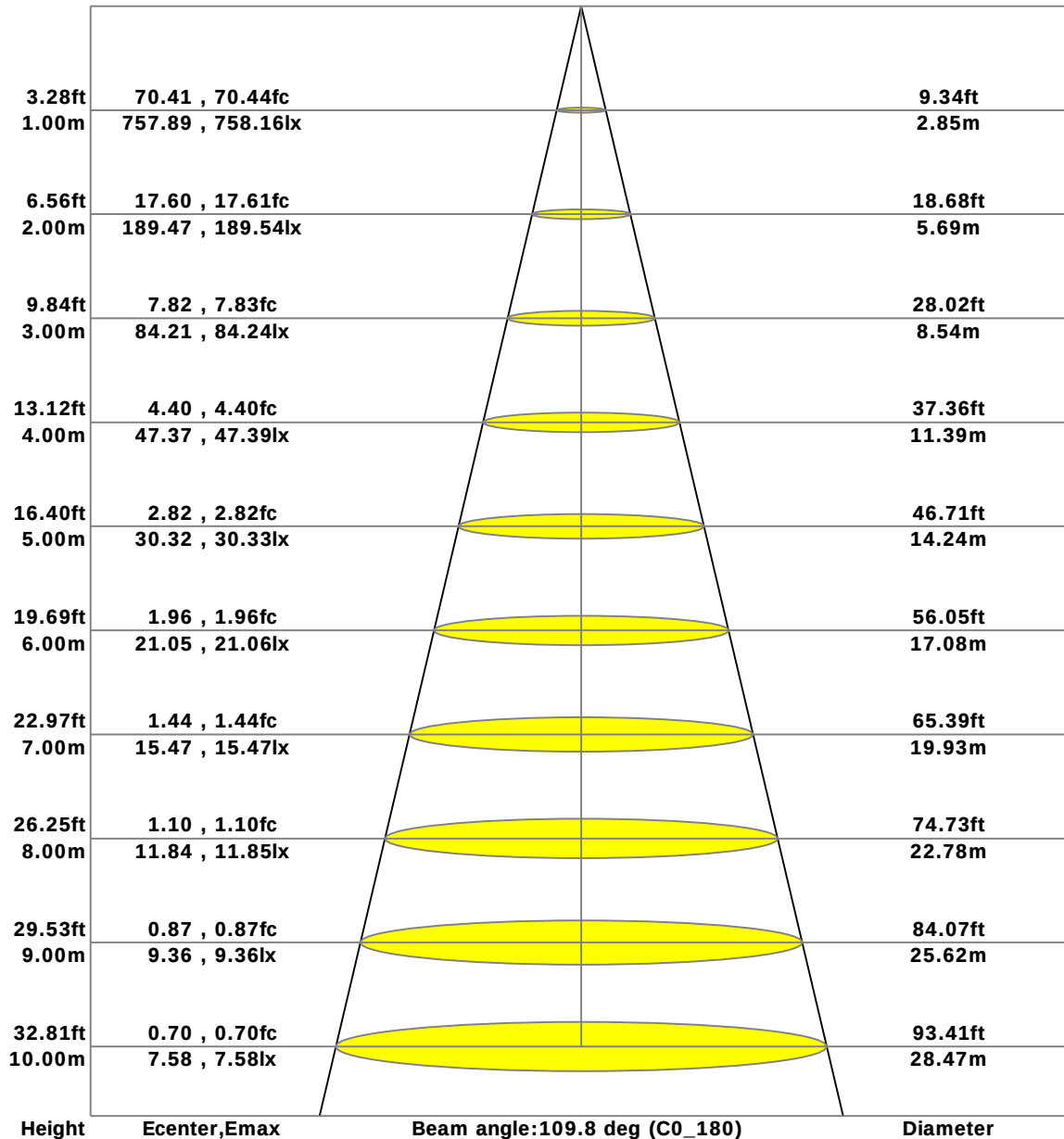
Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2024/10/5 17:09:58

LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

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: 2024/10/5 17:09:58

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	23.05	23.77	22.84	23.84	23.98	22.95	23.67	22.74	23.74	23.88
3H	22.74	23.41	22.60	23.52	23.72	22.64	23.31	22.51	23.43	23.62
4H	22.53	23.16	22.44	23.31	23.54	22.44	23.07	22.34	23.21	23.44
6H	22.30	22.89	22.25	23.07	23.33	22.21	22.80	22.16	22.97	23.24
8H	22.18	22.75	22.16	22.94	23.23	22.08	22.66	22.07	22.85	23.13
12H	22.06	22.61	22.06	22.81	23.12	21.96	22.51	21.97	22.72	23.02
4H 2H	24.31	24.94	24.22	25.09	25.32	24.19	24.82	24.10	24.97	25.20
3H	24.01	24.56	24.02	24.77	25.07	23.90	24.45	23.91	24.65	24.96
4H	23.79	24.30	23.86	24.53	24.88	23.68	24.18	23.74	24.42	24.77
6H	23.54	23.99	23.66	24.26	24.66	23.43	23.88	23.55	24.15	24.55
8H	23.41	23.83	23.56	24.12	24.54	23.30	23.72	23.45	24.01	24.43
12H	23.27	23.66	23.46	23.97	24.42	23.16	23.55	23.35	23.86	24.31
8H 4H	24.13	24.71	24.11	24.89	25.18	23.99	24.56	23.97	24.75	25.04
6H	23.35	23.70	23.57	24.02	24.50	23.21	23.56	23.43	23.89	24.36
8H	23.22	23.52	23.47	23.87	24.38	23.08	23.39	23.34	23.73	24.24
12H	23.08	23.35	23.38	23.71	24.25	22.95	23.21	23.24	23.58	24.11
12H 4H	23.48	23.86	23.67	24.17	24.62	23.33	23.72	23.52	24.03	24.48
6H	23.22	23.53	23.48	23.87	24.38	23.08	23.39	23.34	23.73	24.24

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

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: 2024/10/5 17:09:58

ZONAL LUMINOUS FLUX TABLE-1

[illegible]

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

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: 2024/10/5 17:09:58

ZONAL LUMINOUS FLUX TABLE-2

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	φ zonal	φ total	%lum	%lamp
10	744.1	727.3	733.6	735.0	746.5	743.6	743.0	745.9	10	71.2	71.2	3.5	3.5
20	701.1	682.4	691.6	691.0	706.7	714.8	708.1	714.6	20	204.2	275.4	13.4	13.4
30	635.9	609.6	623.6	623.0	643.4	656.5	646.4	655.4	30	309.6	585.0	28.5	28.5
40	546.3	517.5	533.6	533.6	556.2	578.8	563.3	576.1	40	372.9	958.0	46.7	46.7
50	437.7	401.4	422.3	418.6	447.9	474.6	463.4	471.3	50	385.0	1342.9	65.5	65.5
60	304.4	268.6	292.6	288.4	316.1	353.1	338.8	347.0	60	338.7	1681.7	82.0	82.0
70	159.8	132.9	156.1	150.9	175.4	216.8	196.7	208.6	70	241.9	1923.5	93.8	93.8
80	29.5	21.4	24.3	28.2	40.9	81.6	59.5	75.0	80	112.9	2036.4	99.3	99.3
90	1.5	0.0	0.0	0.0	0.6	2.6	0.6	2.5	90	14.7	2051.1	100.0	100.0

Conical surface Flux(90deg) : 1152.5 lm

%lum = 56.2%

%lamp = 56.2%

Conical surface Flux(120deg) : 1681.7 lm

%lum = 82.0%

%lamp = 82.0%

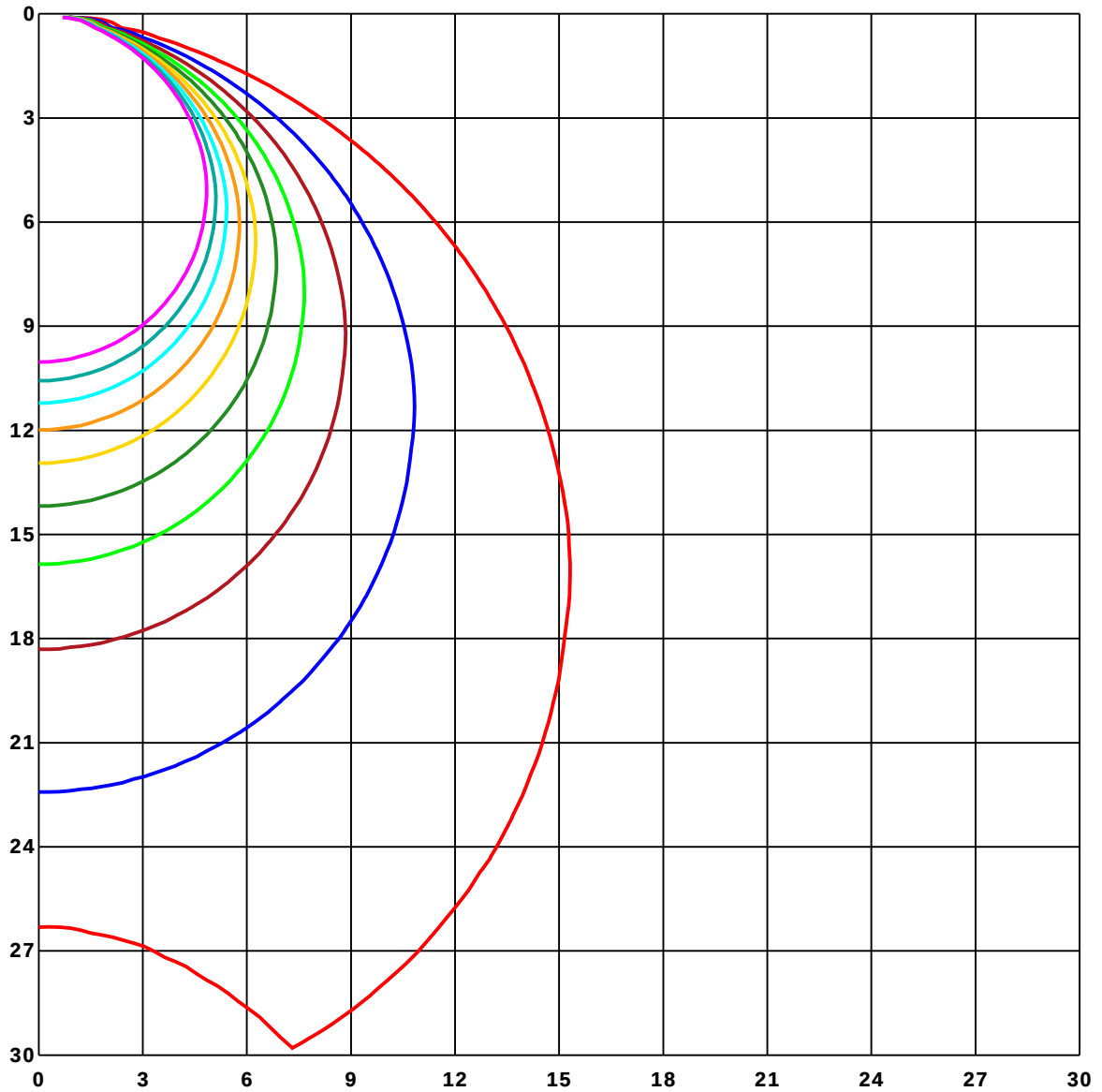
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/5 17:09:58

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

7.538
6.784
6.03
5.276
4.523

3.769
3.015
2.261
1.508
0.754

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

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: 2024/10/5 17:09:58

LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	757.89	748.91	750.12	754.88	757.89	748.91	750.12	754.88	757.89	
G1	758.16	746.88	750.59	753.75	757.5	750.39	751.91	754.61	758.16	
G2	758.09	747.3	749.26	752.81	757.27	750.66	750.82	754.73	758.09	
G3	755.66	746.41	748.67	752.19	757.27	749.18	751.13	755.74	755.66	
G4	755.59	743.63	746.33	749.77	757.97	748.98	749.92	753.01	755.59	
G5	754.26	742.19	745.16	748.55	755.66	747.93	750.16	754.34	754.26	
G6	753.75	739.38	744.34	746.52	754.8	747.77	748.09	751.13	753.75	
G7	749.69	736.33	742.66	744.77	752.11	747.77	746.8	753.09	749.69	
G8	749.14	735.08	738.63	741.29	751.21	744.34	746.29	748.98	749.14	
G9	745.12	732.07	736.45	740.0	748.44	742.85	743.98	748.79	745.12	
G10	744.06	727.27	733.55	734.96	746.52	743.59	743.01	745.86	744.06	
G11	740.04	724.18	730.86	731.76	743.24	739.45	742.19	742.93	740.04	
G12	737.97	720.86	726.48	728.79	739.69	739.38	735.98	740.9	737.97	
G13	732.81	716.29	723.75	726.02	736.45	734.69	734.65	738.71	732.81	
G14	730.12	712.62	719.8	721.02	733.44	733.98	730.47	734.8	730.12	
G15	725.63	709.18	715.74	717.3	729.18	729.06	727.03	732.93	725.63	
G16	722.27	703.36	710.35	712.34	725.66	727.07	723.32	727.73	722.27	
G17	717.19	696.84	706.84	708.09	721.02	724.38	719.88	727.07	717.19	
G18	712.73	694.1	701.48	704.14	717.54	721.17	714.53	722.54	712.73	
G19	706.99	686.17	696.99	698.44	712.27	718.2	711.99	718.32	706.99	
G20	701.05	682.38	691.56	690.98	706.72	714.8	708.13	714.61	701.05	
G21	696.41	675.39	685.9	689.02	701.48	708.91	701.05	709.96	696.41	
G22	690.98	668.2	678.63	680.74	696.52	703.09	695.78	703.98	690.98	
G23	683.75	662.62	673.01	674.92	689.73	700.47	691.6	700.16	683.75	
G24	677.34	655.74	667.15	667.85	686.13	693.2	684.41	693.75	677.34	
G25	670.82	649.06	659.92	660.98	677.3	688.55	678.52	688.13	670.82	
G26	665.66	641.76	653.91	653.32	671.6	683.67	671.8	683.55	665.66	
G27	656.45	632.42	647.11	647.34	664.69	675.78	666.37	676.91	656.45	
G28	651.64	626.76	638.83	638.01	658.05	670.12	658.59	669.77	651.64	
G29	643.44	619.18	631.13	631.09	649.26	663.24	652.89	662.66	643.44	
G30	635.9	609.65	623.59	623.01	643.4	656.52	646.41	655.35	635.9	
G31	627.7	600.35	616.72	614.8	634.22	650.59	639.26	650.23	627.7	
G32	620.16	593.4	606.72	605.08	627.07	643.48	631.37	642.07	620.16	
G33	610.66	585.0	598.24	598.59	618.4	635.7	624.61	635.04	610.66	
G34	603.91	574.88	588.75	588.55	611.33	628.2	615.39	626.99	603.91	
G35	593.55	566.09	580.7	580.0	601.02	621.37	608.13	620.51	593.55	
G36	585.39	557.19	571.21	570.74	593.95	612.27	598.91	611.48	585.39	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

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: 2024/10/5 17:09:58

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	575.43	545.63	563.09	561.02	583.71	605.86	590.59	604.1	575.43	
G38	567.19	538.55	552.34	550.66	575.78	596.56	581.68	594.26	567.19	
G39	555.9	527.42	542.5	542.5	566.09	586.21	572.42	585.94	555.9	
G40	546.29	517.54	533.63	533.63	556.21	578.83	563.28	576.05	546.29	
G41	537.03	506.91	523.13	522.7	545.43	569.18	554.49	567.54	537.03	
G42	529.34	495.55	513.52	510.82	536.52	559.22	545.23	557.07	529.34	
G43	519.18	485.08	501.88	501.91	525.74	549.26	538.01	547.38	519.18	
G44	509.73	474.26	491.41	488.75	516.91	539.26	527.89	536.8	509.73	
G45	497.89	462.58	481.17	478.24	506.17	528.87	518.32	526.68	497.89	
G46	488.2	451.64	469.22	467.46	495.2	518.59	507.42	515.55	488.2	
G47	475.31	439.1	457.15	455.16	482.93	507.34	497.15	505.27	475.31	
G48	463.16	427.15	446.56	442.73	472.11	497.19	485.74	494.3	463.16	
G49	449.96	414.69	433.95	430.39	459.49	484.57	475.08	483.55	449.96	
G50	437.73	401.41	422.3	418.55	447.89	474.57	463.44	471.29	437.73	
G51	425.08	387.85	409.73	406.88	434.65	462.5	452.27	459.26	425.08	
G52	412.46	375.43	397.03	393.2	423.4	451.25	439.61	447.62	412.46	
G53	398.83	362.07	384.41	380.31	409.26	439.06	427.85	435.82	398.83	
G54	386.56	350.08	371.13	367.46	397.34	427.46	415.35	423.91	386.56	
G55	372.42	336.84	358.87	354.41	383.01	414.45	403.59	410.55	372.42	
G56	360.04	322.77	345.43	340.74	370.23	403.44	390.12	398.01	360.04	
G57	344.96	309.3	332.5	328.05	356.25	390.35	377.81	385.94	344.96	
G58	331.91	295.7	319.73	314.53	343.95	378.71	365.12	373.48	331.91	
G59	318.24	282.54	307.27	300.98	329.41	366.02	352.03	360.27	318.24	
G60	304.41	268.63	292.58	288.4	316.05	353.13	338.79	347.03	304.41	
G61	289.8	255.31	278.83	274.53	301.6	340.2	324.8	333.55	289.8	
G62	275.98	242.19	265.27	260.39	288.2	327.54	310.94	319.84	275.98	
G63	260.78	228.63	251.95	247.38	273.63	313.91	297.85	306.68	260.78	
G64	246.99	214.8	238.09	233.44	260.2	301.33	282.73	293.09	246.99	
G65	232.15	201.33	224.45	220.27	246.02	286.95	268.63	279.84	232.15	
G66	217.77	187.58	210.16	206.68	231.99	273.32	254.61	265.47	217.77	
G67	203.01	173.87	196.76	193.13	217.7	259.1	240.08	251.76	203.01	
G68	188.55	160.04	183.01	178.55	203.59	245.08	225.51	237.5	188.55	
G69	173.87	146.13	169.65	165.08	189.73	230.27	211.33	222.81	173.87	
G70	159.84	132.85	156.05	150.86	175.35	216.76	196.68	208.55	159.84	
G71	145.47	119.26	141.88	137.07	161.02	202.11	182.81	194.8	145.47	
G72	131.88	106.33	128.28	123.36	147.34	188.16	167.77	180.66	131.88	
G73	117.7	93.28	114.61	109.14	132.73	174.41	153.71	166.8	117.7	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

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: 2024/10/5 17:09:58

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/5 17:09:58

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 6.25 m

Remarks: