

Report No.:

Test Time: 2024/10/7 8:54:35

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: NORDECOR

Luminaire Type: 4251

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): 23.15 W

Power Factor: 0.5590

Lamp Luminous Flux: 2083.74

Photometric Results

CIE Class: Direct

Luminaire Luminous Flux: 2083.736 lm

Downward Ratio: 100.00%

Luminaire Efficacy Rating(LER): 90.01 lm/W

Beam Angle(50%) C0-180,C90-270: 107.7,108.3

Field Angle(10%) C0-180,C90-270: 153.8,154.2

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

Max. Intensity: 780.86 cd

Max.Intensity Angle: C=180 Gamma=2

Upward Ratio: 0.00%

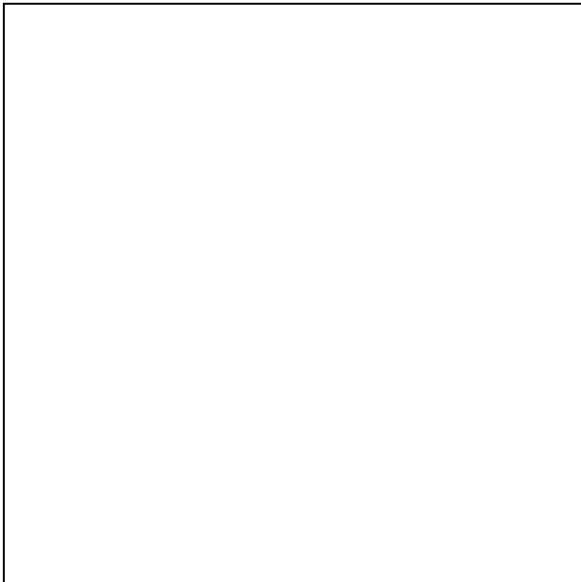
Efficacy: 100.00%

Center Intensity: 780.12 cd

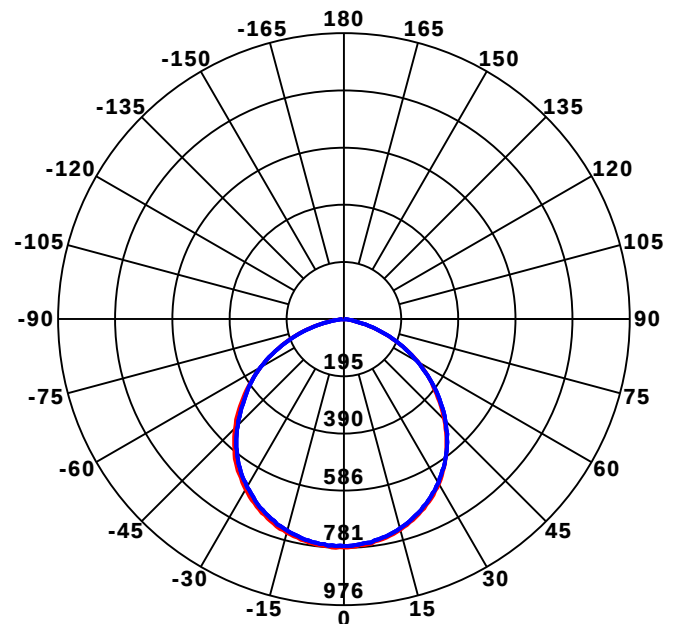
Effective Luminous Flux: 2044.59 lm

ERP(φ use)(120deg): 1716.50 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 107.7 deg,108.3 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 8:54:35

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

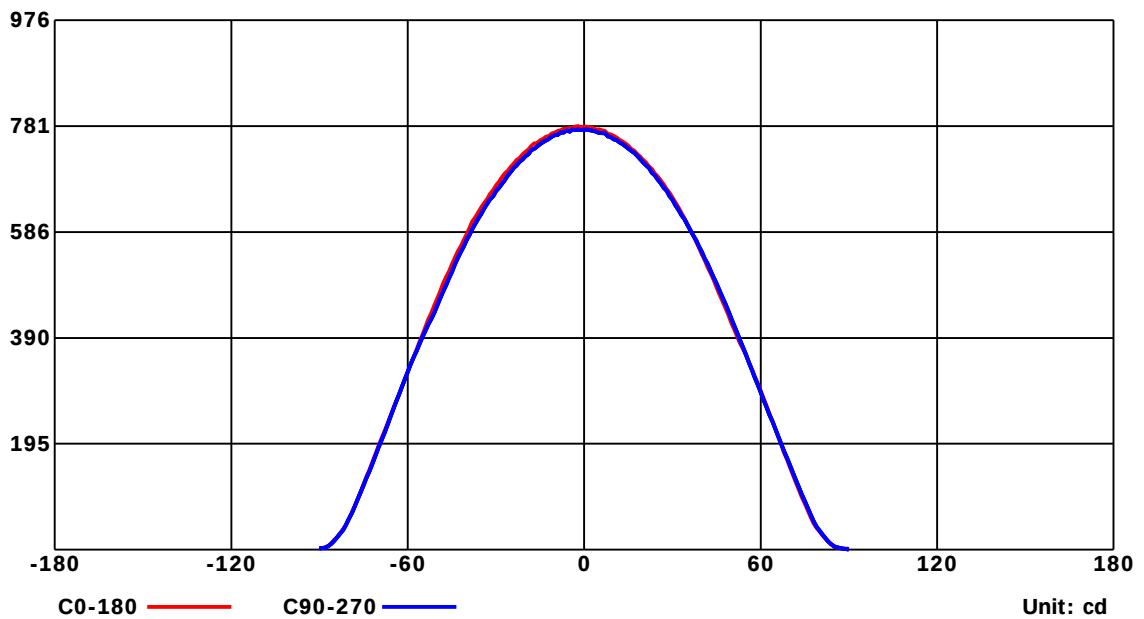
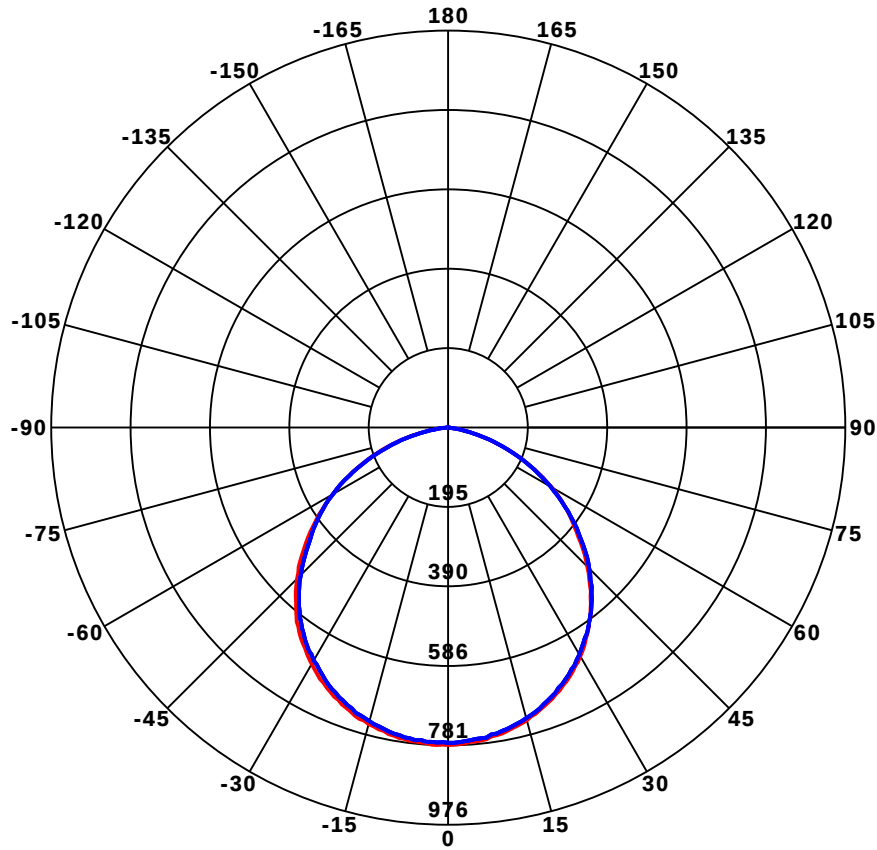
Test Distance: 6.25 m

Remarks:

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Luminous Intensity Distribution Curve



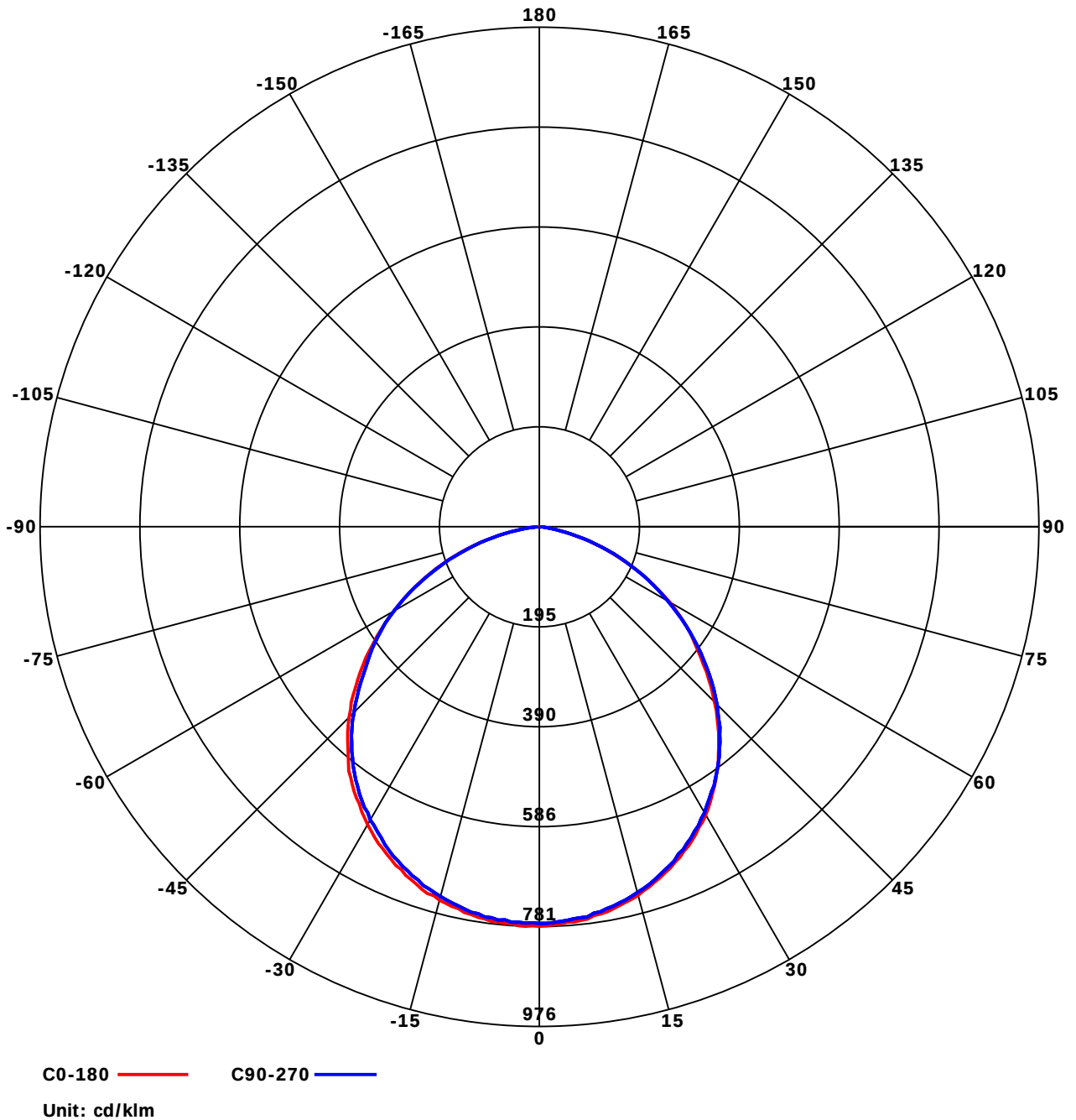
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 8:54:35

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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Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 8:54:35

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

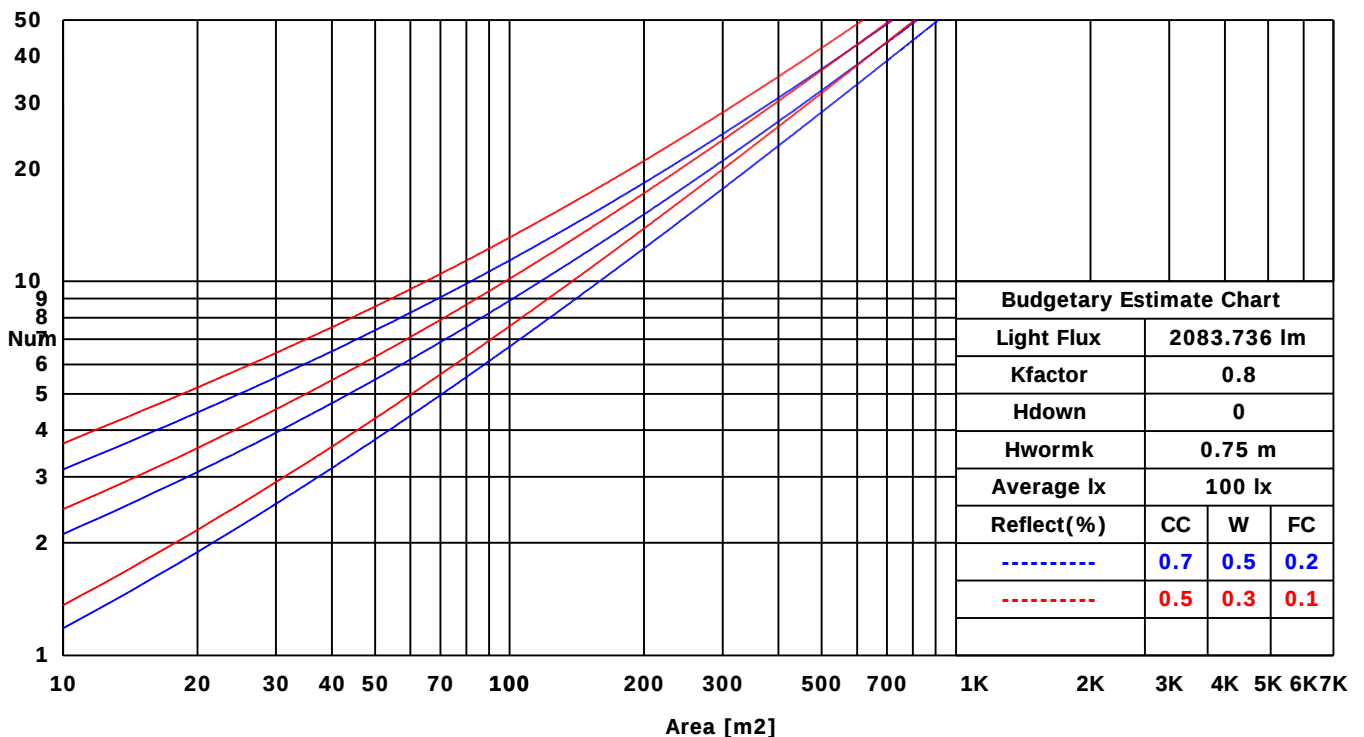
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UTILIZATION FACTORS TABLE

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	1.02	1.01	1.00	0.98	0.97	0.96	0.93	0.92	0.89	0.87	0.85	0.80
2	0.90	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	0.77	0.74	0.72	0.76	0.72	0.69	0.74	0.69	0.65	0.70	0.66	0.61	0.57
4	0.67	0.65	0.63	0.68	0.64	0.61	0.67	0.62	0.59	0.66	0.60	0.56	0.63	0.58	0.53	0.49
5	0.59	0.56	0.54	0.59	0.56	0.53	0.59	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	0.40	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



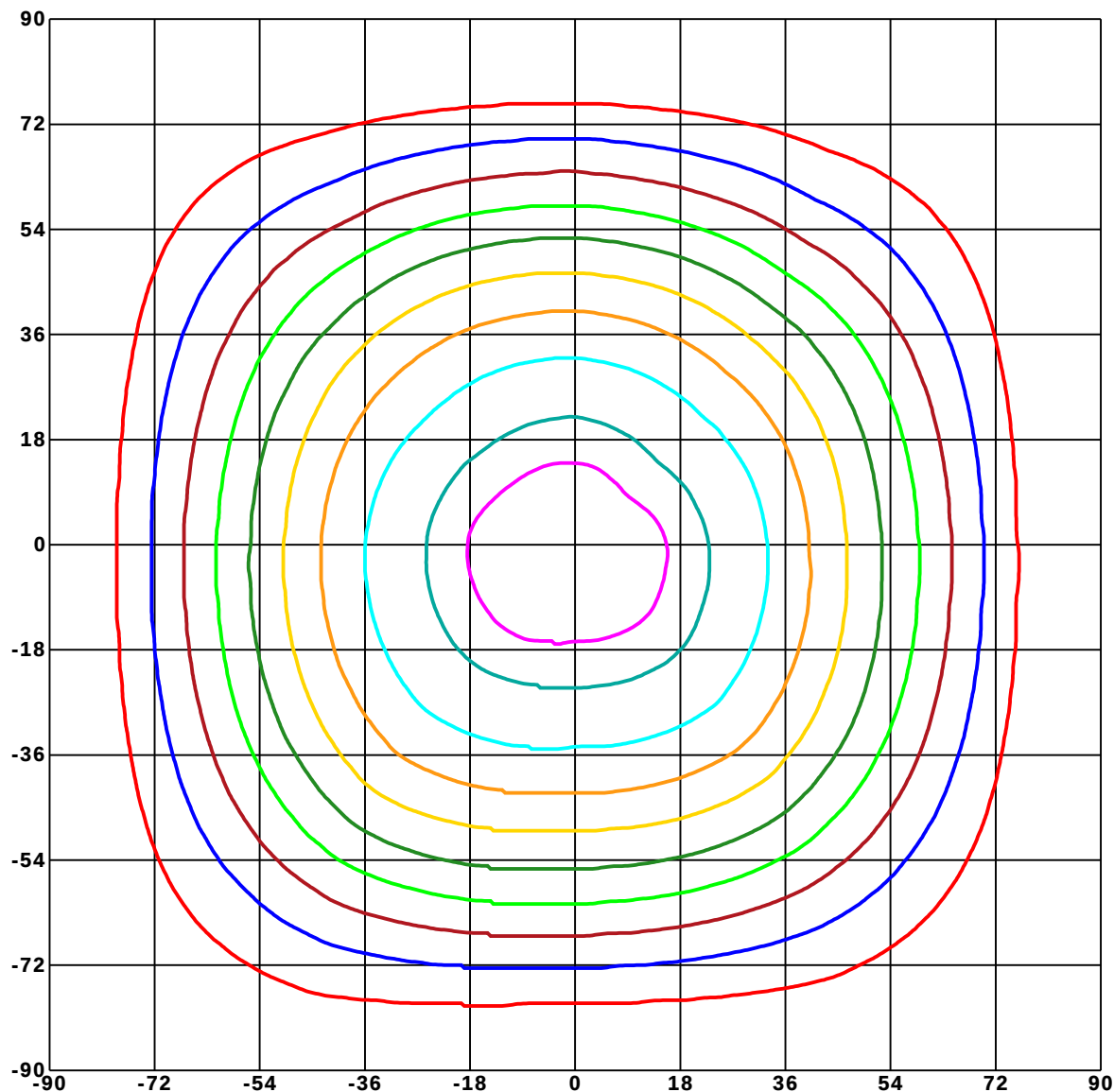
C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature:
 Operators:
 Test Date: 2024/10/7 8:54:35

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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ISOCANDELA DIAGRAM (RECTANGULAR)



Unit of intensity:cd Imax(100%): 780.859 cd

741.816(95%Imax)
702.773(90%Imax)
624.688(80%Imax)
546.602(70%Imax)
468.516(60%Imax)

390.43(50%Imax)
312.344(40%Imax)
234.258(30%Imax)
156.172(20%Imax)
78.086(10%Imax)

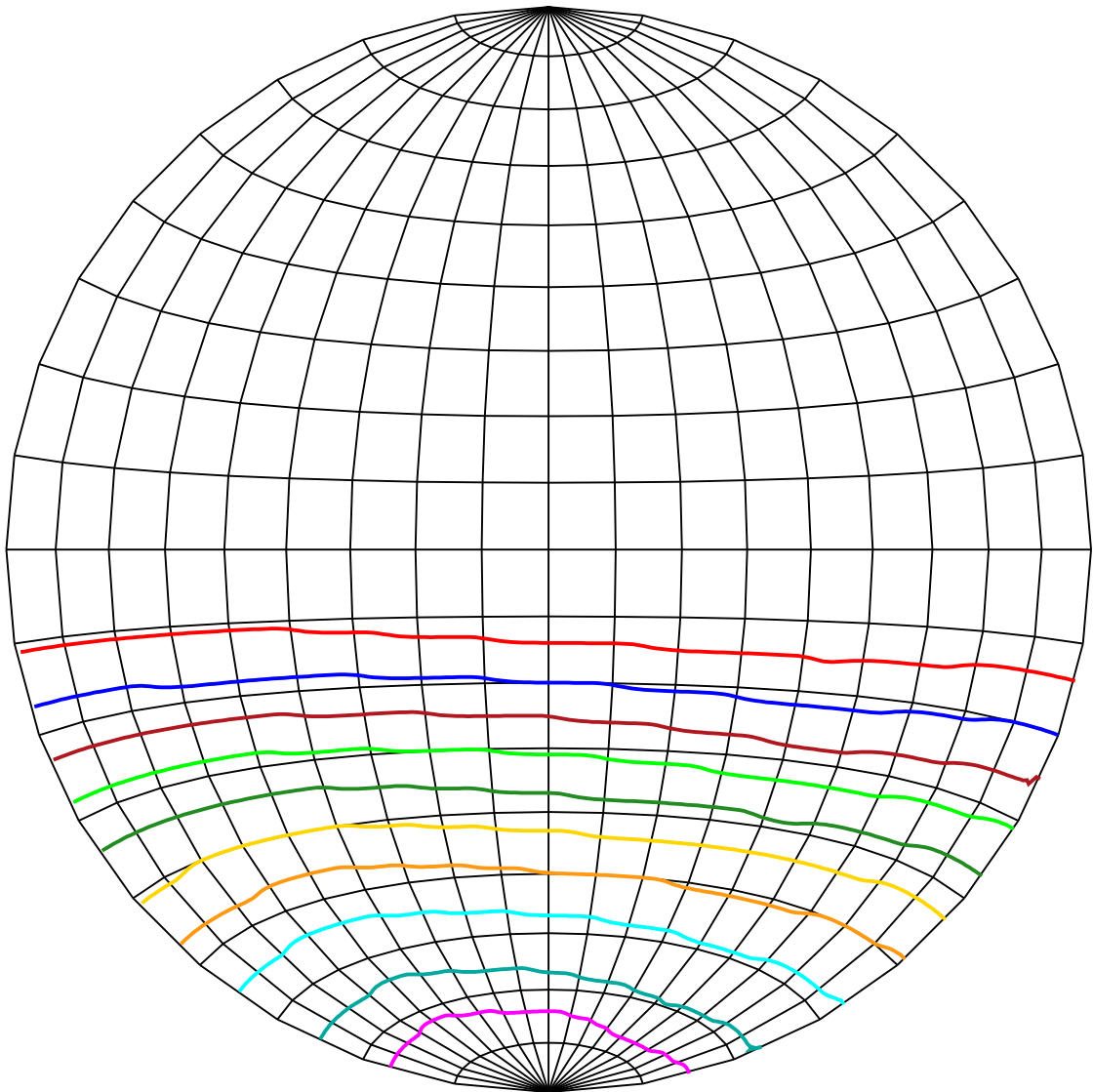
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 8:54:35

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 8:54:35

ISOCANDELA DIAGRAM (SPHERE)



Unit of intensity:cd I_{max}(100%): 780.859 cd

741.816(95%I_{max})
702.773(90%I_{max})
624.688(80%I_{max})
546.602(70%I_{max})
468.516(60%I_{max})

390.43(50%I_{max})
312.344(40%I_{max})
234.258(30%I_{max})
156.172(20%I_{max})
78.086(10%I_{max})

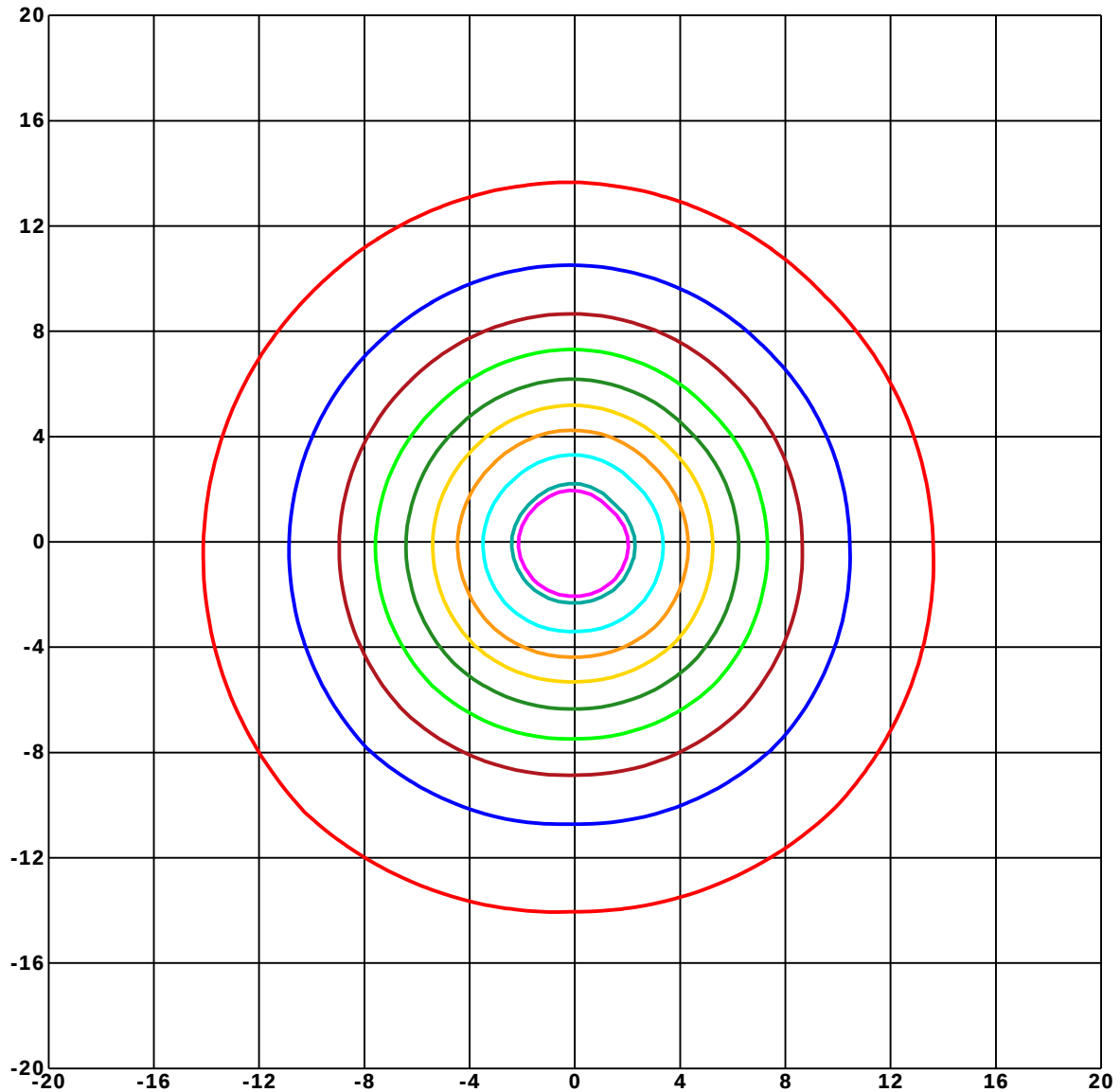
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 8:54:35

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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ISOLX DIAGRAM



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

7.177(92%Emax)	3.901(50%Emax)
7.021(90%Emax)	3.12(40%Emax)
6.241(80%Emax)	2.34(30%Emax)
5.461(70%Emax)	1.56(20%Emax)
4.681(60%Emax)	0.78(10%Emax)

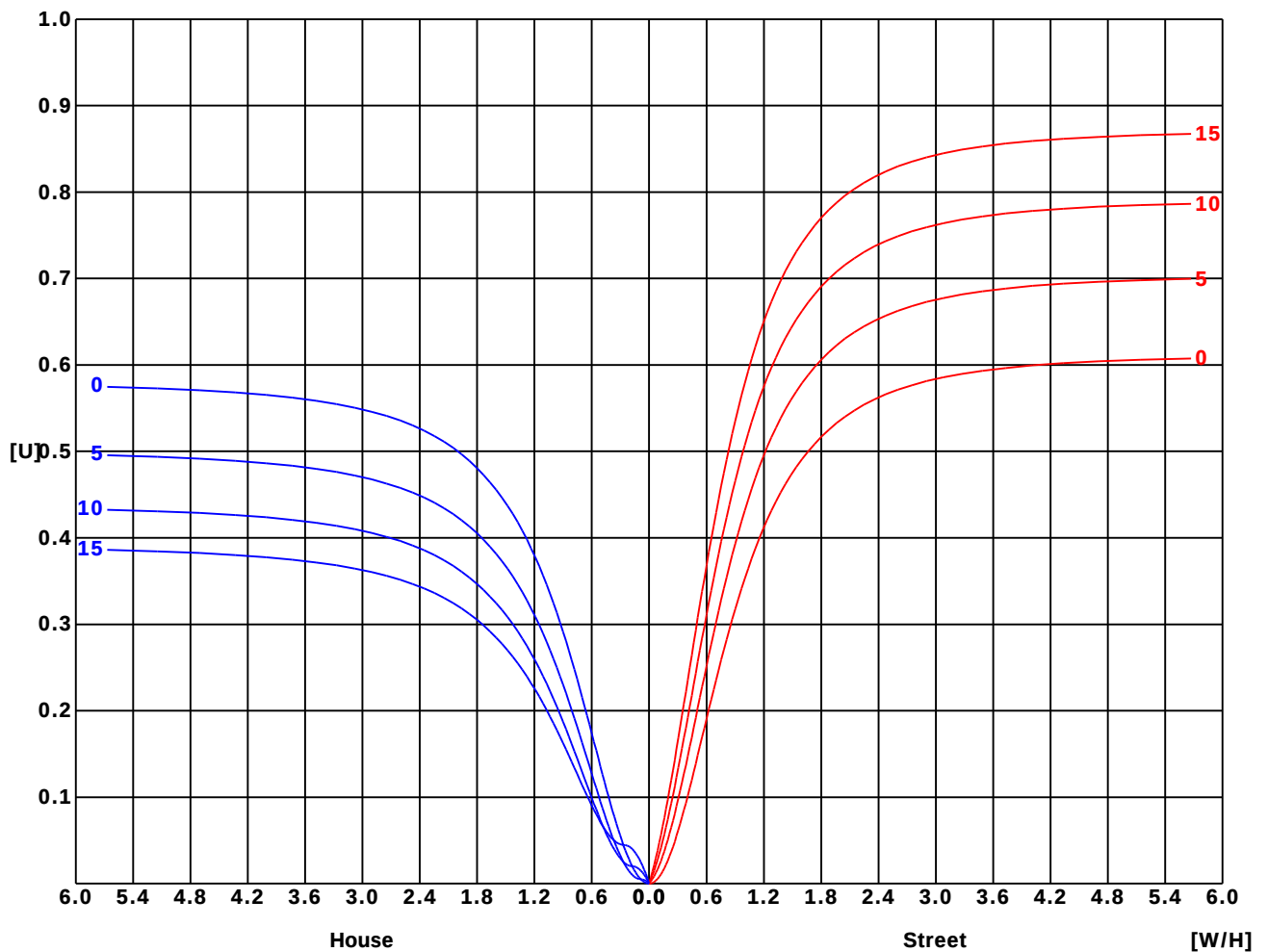
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 8:54:35

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 8:54:35

UTILIZATION FACTOR DIAGRAM (ROAD)



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 8:54:35

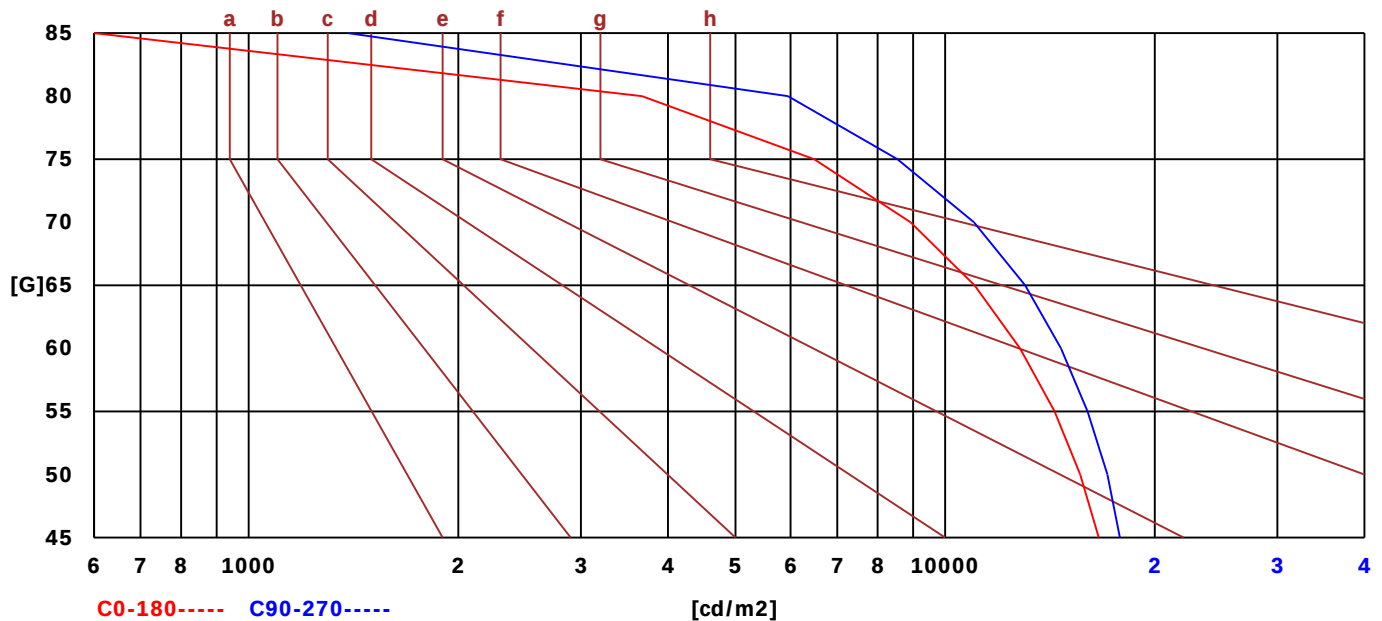
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-2000B Goniophotometer
Humidity:
Test Distance: 6.25 m
Remarks:

Report No.:

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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	16625	15636	14358	12816	11018	8923	6490	3672	168
C90	17819	17098	16021	14662	13028	11004	8546	5950	1389
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



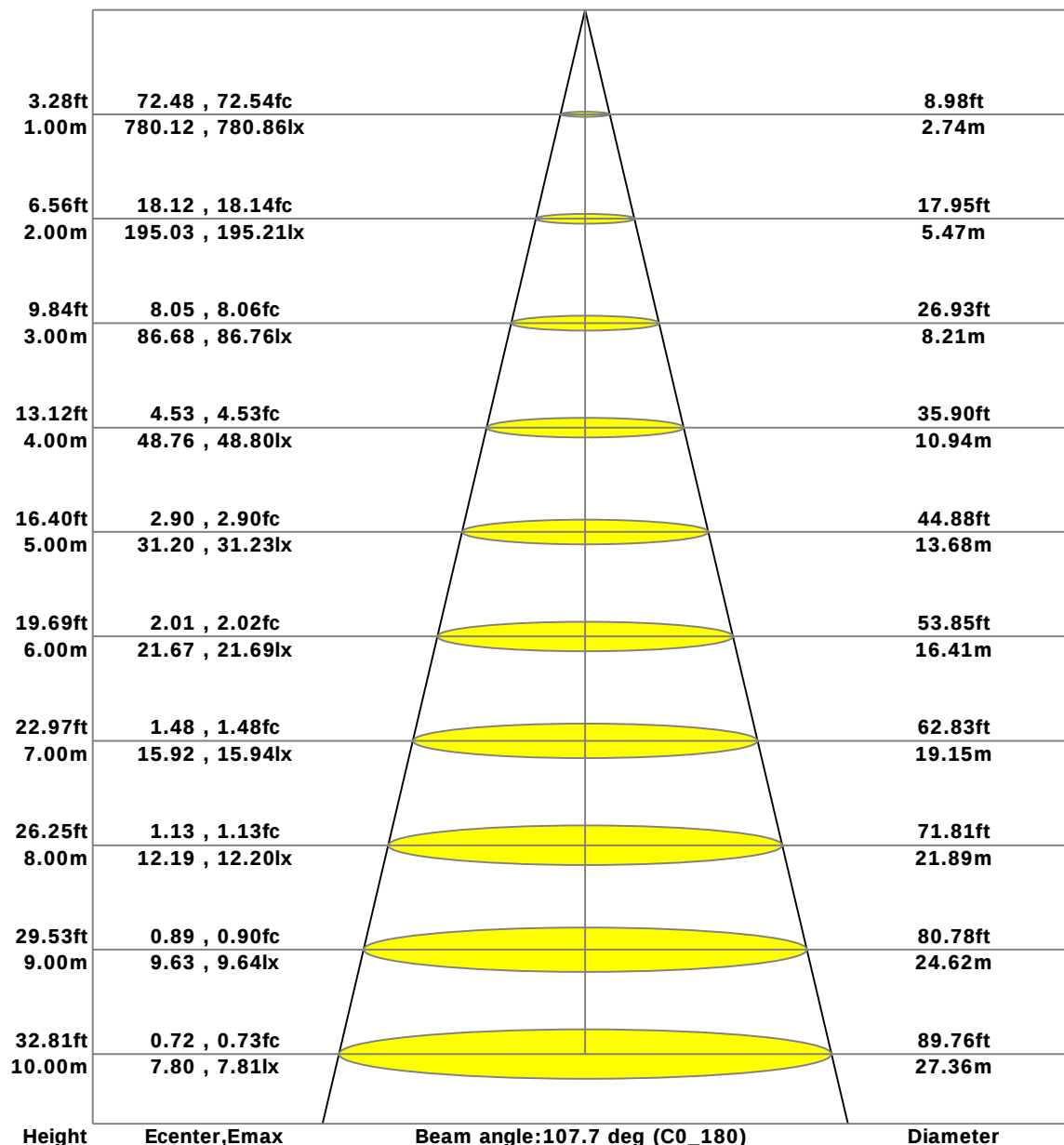
C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature:
 Operators:
 Test Date: 2024/10/7 8:54:35

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 8:54:35

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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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	22.77	23.49	22.57	23.57	23.71	22.78	23.49	22.57	23.57	23.72
3H	22.46	23.12	22.33	23.24	23.44	22.46	23.12	22.33	23.24	23.45
4H	22.25	22.88	22.17	23.03	23.26	22.25	22.88	22.17	23.03	23.27
6H	22.02	22.61	21.99	22.79	23.06	22.03	22.61	21.99	22.79	23.06
8H	21.90	22.47	21.89	22.66	22.96	21.91	22.47	21.89	22.67	22.96
12H	21.78	22.33	21.80	22.54	22.85	21.78	22.33	21.80	22.54	22.85
4H 2H	23.94	24.57	23.86	24.72	24.95	23.99	24.61	23.90	24.76	25.00
3H	23.65	24.19	23.66	24.40	24.71	23.69	24.24	23.71	24.45	24.76
4H	23.44	23.93	23.50	24.17	24.53	23.48	23.98	23.55	24.22	24.57
6H	23.19	23.63	23.32	23.91	24.31	23.23	23.67	23.36	23.95	24.35
8H	23.06	23.47	23.22	23.77	24.19	23.10	23.51	23.26	23.81	24.23
12H	22.93	23.31	23.12	23.62	24.07	22.97	23.35	23.16	23.66	24.11
8H 4H	23.79	24.36	23.78	24.55	24.84	23.86	24.43	23.85	24.62	24.91
6H	23.05	23.40	23.28	23.73	24.20	23.11	23.46	23.34	23.79	24.27
8H	22.92	23.23	23.18	23.57	24.08	22.98	23.29	23.24	23.64	24.14
12H	22.79	23.05	23.08	23.42	23.95	22.85	23.12	23.15	23.48	24.02
12H 4H	23.18	23.56	23.37	23.87	24.32	23.24	23.62	23.44	23.93	24.39
6H	22.93	23.24	23.19	23.59	24.09	23.00	23.30	23.26	23.65	24.16

C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature:
 Operators:
 Test Date: 2024/10/7 8:54:35

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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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 8:54:35

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 8:54:35

ZONAL LUMINOUS FLUX TABLE-2

Y	C0	C45	C90	C135	C180	C225	C270	C315	Y	φ zonal	φ total	%lum	%lamp
10	763.4	749.6	757.0	762.1	768.9	767.5	764.5	765.0	10	73.3	73.3	3.5	3.5
20	718.8	702.3	714.0	716.1	733.4	736.7	725.6	730.6	20	210.3	283.6	13.6	13.6
30	649.5	630.1	645.2	647.9	671.5	680.4	661.3	669.1	30	319.2	602.8	28.9	28.9
40	544.5	530.3	549.2	556.8	581.6	602.0	571.0	585.1	40	383.9	986.7	47.4	47.4
50	418.0	402.0	426.3	439.6	463.0	496.8	449.7	465.8	50	391.6	1378.3	66.1	66.1
60	292.7	256.3	289.9	293.2	327.5	361.8	327.7	326.5	60	338.2	1716.5	82.4	82.4
70	150.9	122.1	154.8	150.5	190.0	213.2	187.0	181.5	70	236.0	1952.5	93.7	93.7
80	33.0	25.5	35.0	41.3	56.6	84.1	57.0	64.6	80	111.1	2063.6	99.0	99.0
90	1.7	0.0	0.0	0.0	0.9	9.2	2.4	4.3	90	20.1	2083.7	100.0	100.0

Conical surface Flux(90deg) : 1185.5 lm

%lum = 56.9%

%lamp = 56.9%

Conical surface Flux(120deg) : 1716.5 lm

%lum = 82.4%

%lamp = 82.4%

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/7 8:54:35

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

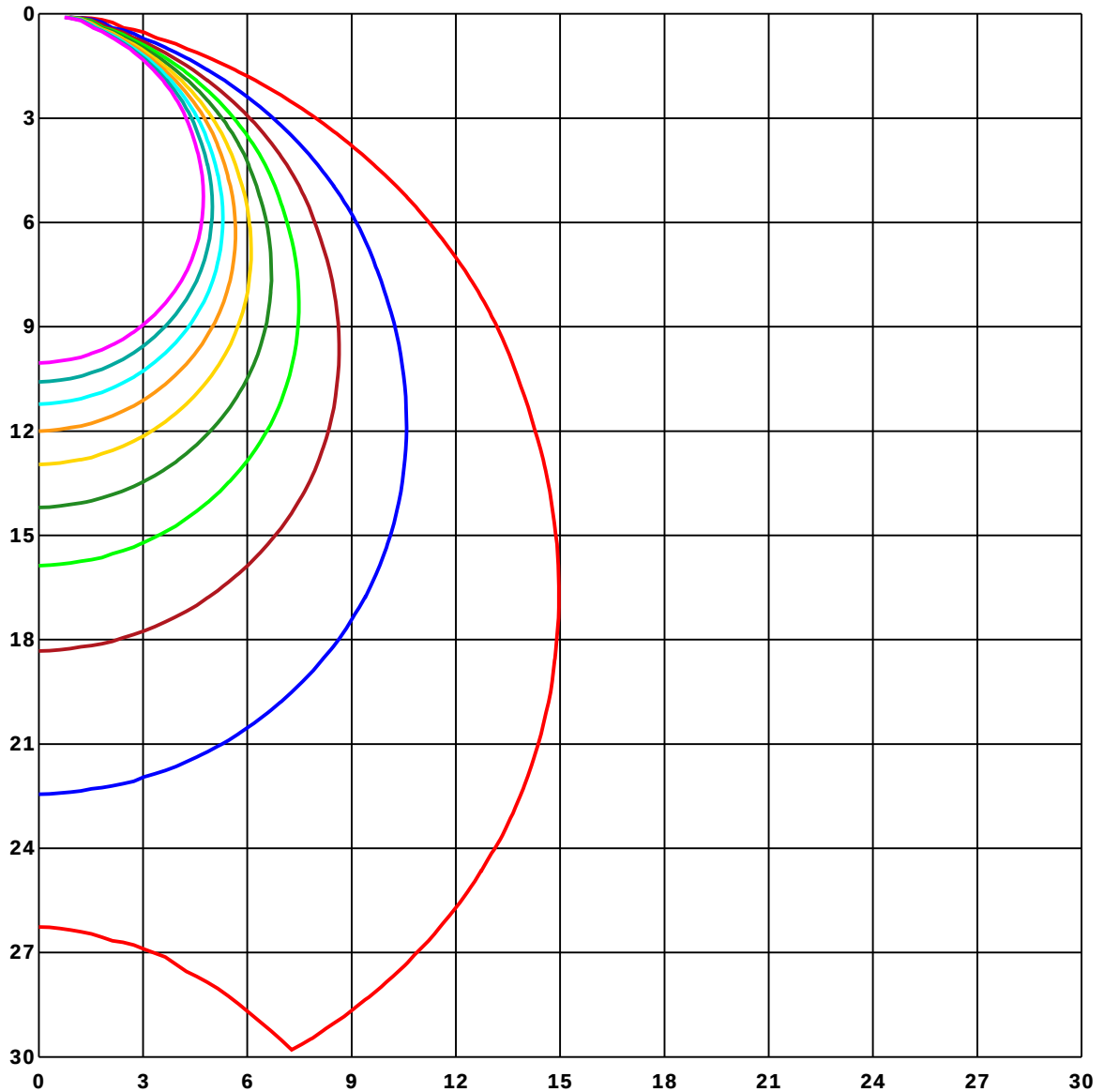
Test Distance: 6.25 m

Remarks:

Report No.:

Test Time: 2024/10/7 8:54:35

SPACE ISOLX DIAGRAM



Unit of illumination:lx

7.744
6.97
6.195
5.421
4.646

3.872
3.098
2.323
1.549
0.774

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2024/10/7 8:54:35

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 8:54:35

LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	780.12	770.94	774.65	775.9	780.12	770.94	774.65	775.9	780.12	
G1	779.61	770.0	774.69	775.0	778.71	771.52	773.63	776.48	779.61	
G2	778.28	769.8	773.44	773.24	780.86	771.33	774.61	774.69	778.28	
G3	777.27	767.77	771.84	773.87	780.51	771.99	773.67	775.39	777.27	
G4	774.34	766.09	770.59	772.15	777.15	772.38	774.57	773.59	774.34	
G5	774.96	762.81	768.52	770.08	777.38	770.27	770.86	773.24	774.96	
G6	773.16	760.98	767.66	767.77	776.25	772.85	772.38	771.45	773.16	
G7	772.15	758.32	767.7	767.27	775.9	770.43	769.34	771.13	772.15	
G8	766.6	754.92	762.03	763.28	773.09	767.97	769.18	768.13	766.6	
G9	765.63	751.37	761.09	761.29	772.19	767.03	765.0	767.19	765.63	
G10	763.36	749.57	756.99	762.15	768.91	767.46	764.53	764.96	763.36	
G11	759.65	744.92	754.92	757.38	767.46	764.92	761.33	761.84	759.65	
G12	755.78	742.62	751.09	752.3	762.54	760.66	757.42	757.97	755.78	
G13	752.62	737.46	747.81	747.66	761.17	759.8	754.26	756.56	752.62	
G14	748.83	735.08	743.87	745.39	757.5	757.23	751.37	751.68	748.83	
G15	745.2	728.48	739.65	741.33	754.96	752.89	747.73	749.38	745.2	
G16	739.14	724.61	735.35	736.48	749.69	750.55	743.32	745.12	739.14	
G17	735.43	718.67	731.09	731.91	748.87	747.11	739.18	742.85	735.43	
G18	729.3	713.79	725.78	727.54	744.18	745.47	736.64	737.97	729.3	
G19	725.0	708.2	720.0	721.99	738.05	740.23	729.22	733.59	725.0	
G20	718.79	702.3	714.02	716.09	733.4	736.68	725.63	730.63	718.79	
G21	713.98	696.68	708.83	711.45	728.95	732.11	719.77	725.66	713.98	
G22	706.8	689.88	703.32	705.04	721.6	727.85	715.0	721.91	706.8	
G23	701.91	683.13	694.65	699.84	718.59	721.29	708.59	714.3	701.91	
G24	693.83	676.56	690.04	692.75	711.8	717.54	703.44	708.98	693.83	
G25	688.52	668.36	682.27	685.66	705.66	710.51	696.64	704.84	688.52	
G26	680.98	662.15	676.02	678.52	698.79	707.27	690.04	696.56	680.98	
G27	673.55	654.92	667.19	671.72	693.59	699.18	681.33	689.57	673.55	
G28	664.49	646.45	661.45	664.69	686.21	693.98	674.38	682.34	664.49	
G29	658.4	636.8	651.68	655.98	678.48	688.05	666.72	677.77	658.4	
G30	649.49	630.08	645.2	647.89	671.48	680.35	661.25	669.1	649.49	
G31	640.66	620.16	634.92	641.13	663.05	672.54	651.72	661.68	640.66	
G32	631.25	611.29	626.25	632.23	656.02	666.37	646.05	653.52	631.25	
G33	621.21	601.41	616.91	622.3	646.09	658.52	637.42	645.59	621.21	
G34	611.25	593.83	609.96	613.09	639.22	652.85	629.34	637.07	611.25	
G35	601.48	581.76	599.77	605.35	631.37	644.53	619.18	629.69	601.48	
G36	589.69	573.16	590.27	594.84	622.46	636.09	610.94	621.64	589.69	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/7 8:54:35

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 8:54:35

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	580.78	561.72	580.39	586.29	612.73	627.89	601.02	613.28	580.78	
G38	567.62	552.66	570.66	575.82	605.43	619.49	591.72	602.81	567.62	
G39	556.52	540.51	559.14	566.45	593.4	610.23	580.27	594.57	556.52	
G40	544.53	530.27	549.22	556.84	581.6	601.99	571.02	585.12	544.53	
G41	533.79	518.55	536.88	547.11	570.82	591.76	558.95	573.52	533.79	
G42	520.94	507.38	526.95	535.98	559.77	583.83	548.79	562.7	520.94	
G43	508.59	495.16	513.44	525.7	549.69	572.23	537.11	552.62	508.59	
G44	497.23	482.97	501.99	514.1	537.81	563.01	525.63	541.21	497.23	
G45	483.48	470.23	490.59	503.98	526.02	551.88	511.91	529.1	483.48	
G46	470.59	458.13	478.09	491.41	512.97	541.37	500.51	515.7	470.59	
G47	458.71	444.73	465.9	479.65	502.93	529.84	487.42	504.22	458.71	
G48	445.35	431.17	452.62	466.64	489.84	519.73	475.27	491.25	445.35	
G49	432.5	416.91	439.57	452.62	476.05	508.32	462.58	479.53	432.5	
G50	418.05	402.03	426.29	439.61	463.01	496.84	449.73	465.82	418.05	
G51	405.98	388.24	413.01	425.78	450.31	483.91	436.91	453.09	405.98	
G52	392.93	373.95	400.51	410.2	436.8	471.88	425.63	439.65	392.93	
G53	380.66	358.83	386.88	396.6	424.34	458.05	414.77	425.94	380.66	
G54	369.84	344.53	372.34	381.37	410.08	445.27	403.32	412.11	369.84	
G55	358.01	329.41	359.65	367.58	396.17	430.66	391.88	398.28	358.01	
G56	345.9	314.69	345.08	351.8	383.87	417.5	379.38	384.14	345.9	
G57	333.32	300.51	331.52	337.85	369.3	403.63	366.72	369.45	333.32	
G58	320.2	286.09	317.81	322.93	355.9	389.38	355.2	354.96	320.2	
G59	306.72	270.86	303.48	308.09	341.72	375.31	341.68	341.17	306.72	
G60	292.7	256.33	289.88	293.24	327.46	361.84	327.7	326.48	292.7	
G61	278.67	241.95	275.66	278.79	314.49	346.48	314.02	312.42	278.67	
G62	264.92	227.97	262.85	263.75	300.31	332.81	300.35	297.27	264.92	
G63	250.74	213.79	248.63	248.95	286.09	317.58	286.29	282.66	250.74	
G64	236.72	200.39	235.35	234.3	272.77	303.24	271.56	267.73	236.72	
G65	221.84	186.25	221.99	220.23	258.95	287.77	257.34	253.91	221.84	
G66	207.3	172.73	208.2	205.66	244.92	272.97	243.05	238.32	207.3	
G67	193.44	159.73	194.73	191.8	231.33	257.7	228.55	224.38	193.44	
G68	178.48	146.99	181.21	177.46	217.89	243.01	214.41	209.57	178.48	
G69	164.73	134.02	167.58	163.87	203.79	228.16	200.04	195.98	164.73	
G70	150.86	122.07	154.77	150.55	190.0	213.24	186.99	181.48	150.86	
G71	136.88	110.08	141.37	137.38	176.09	199.06	173.01	168.01	136.88	
G72	123.59	98.79	128.16	124.69	162.42	184.8	158.67	154.41	123.59	
G73	110.7	87.5	114.96	111.91	148.32	170.78	145.51	141.95	110.7	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/10/7 8:54:35

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 8:54:35

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 8:54:35

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