

Report No.:

Test Time: 2021/10/20 17:26:12

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: 0
Luminaire Type: FL0210-40-40W 3000K
Lamp Type:
Luminous Width: 0 mm
Luminous Length: 0 mm
Luminous Height: 0 mm

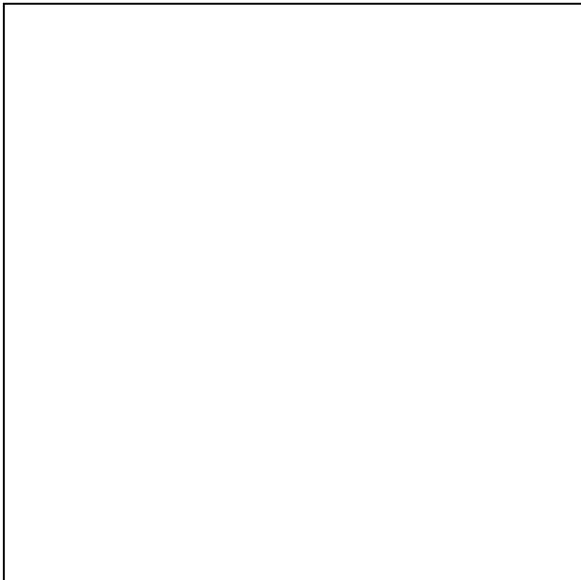
Voltage(V): 219.40 V
Current(A): 0.1880 A
Power(W): 39.27 W
Power Factor: 0.9510
Lamp Luminous Flux: 3802.83

Photometric Results

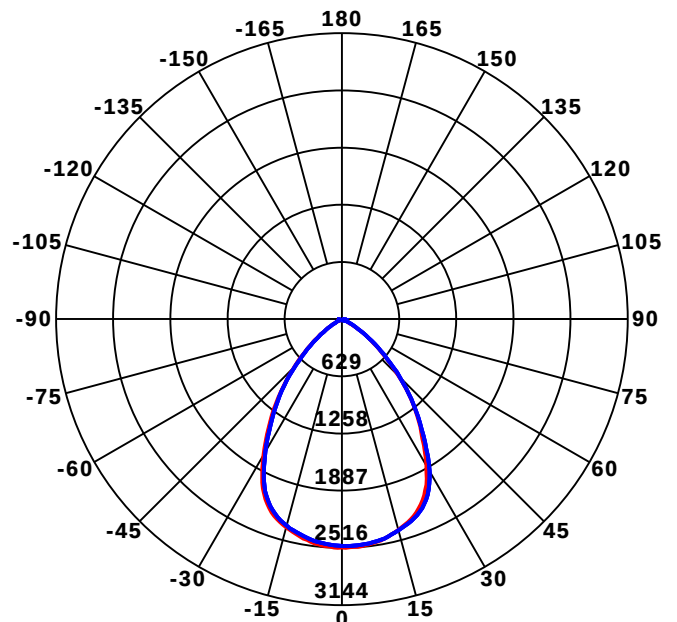
CIE Class: Direct
Luminaire Luminous Flux: 3802.828 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 96.84 lm/W
Beam Angle(50%) C0-180,C90-270: 76.2,76.1
Field Angle(10%) C0-180,C90-270: 112.5,112.7
S/MH C0-180,C90-270: 1.109,1.109

Max. Intensity: 2515.56 cd
Max.Intensity Angle: C=0 Gamma=1
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 2511.61 cd
Effective Luminous Flux: 3615.03 lm
ERP(ϕ use)(120deg): 3673.97 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 76.2 deg,76.1 deg

C0-180 — C90-270

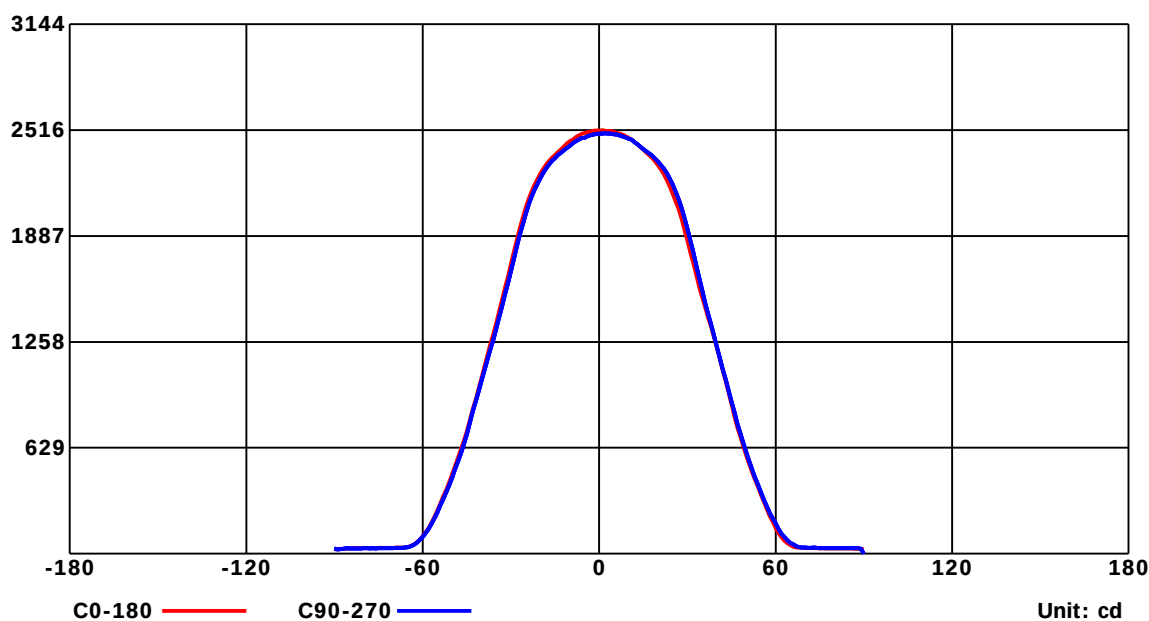
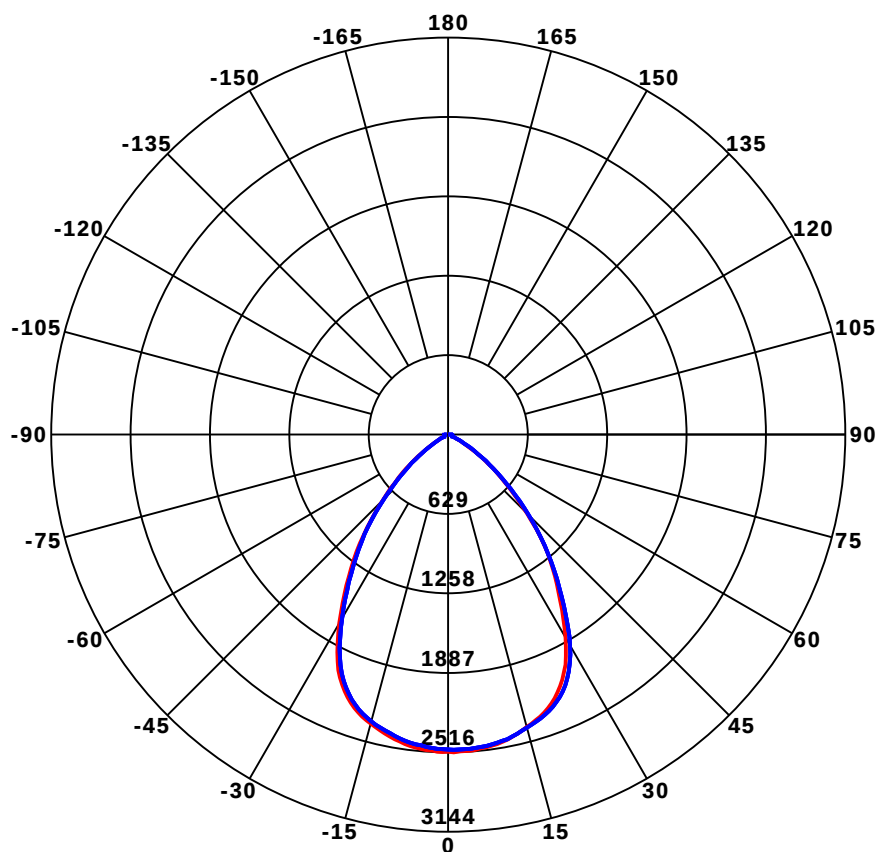
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 6.22 m
Remarks:

Report No.:

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Luminous Intensity Distribution Curve



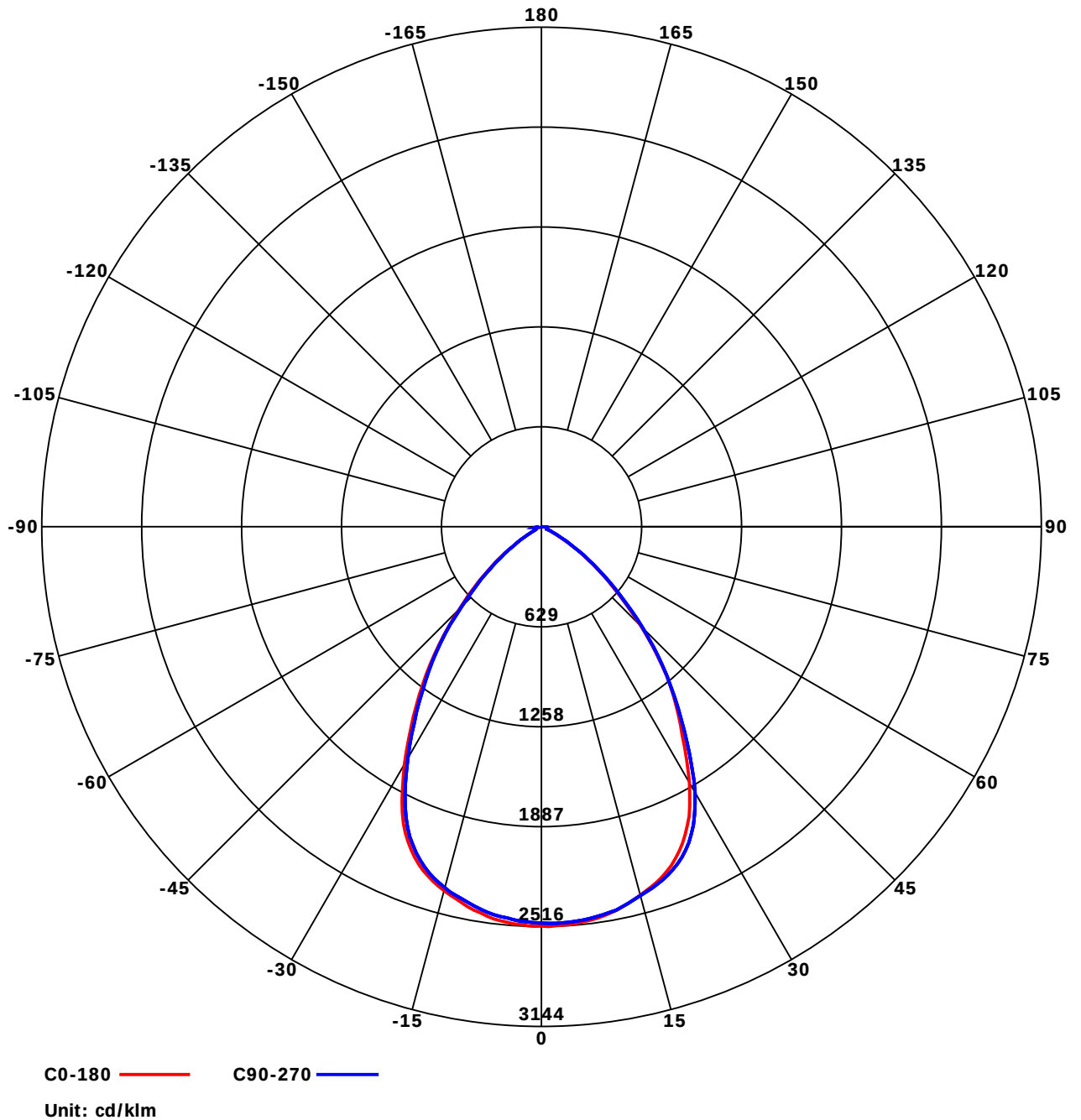
C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature:
 Operators:
 Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-1800B Goniophotometer
 Humidity:
 Test Distance: 6.22 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: 2021/10/20 17:26:12

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 6.22 m
Remarks:

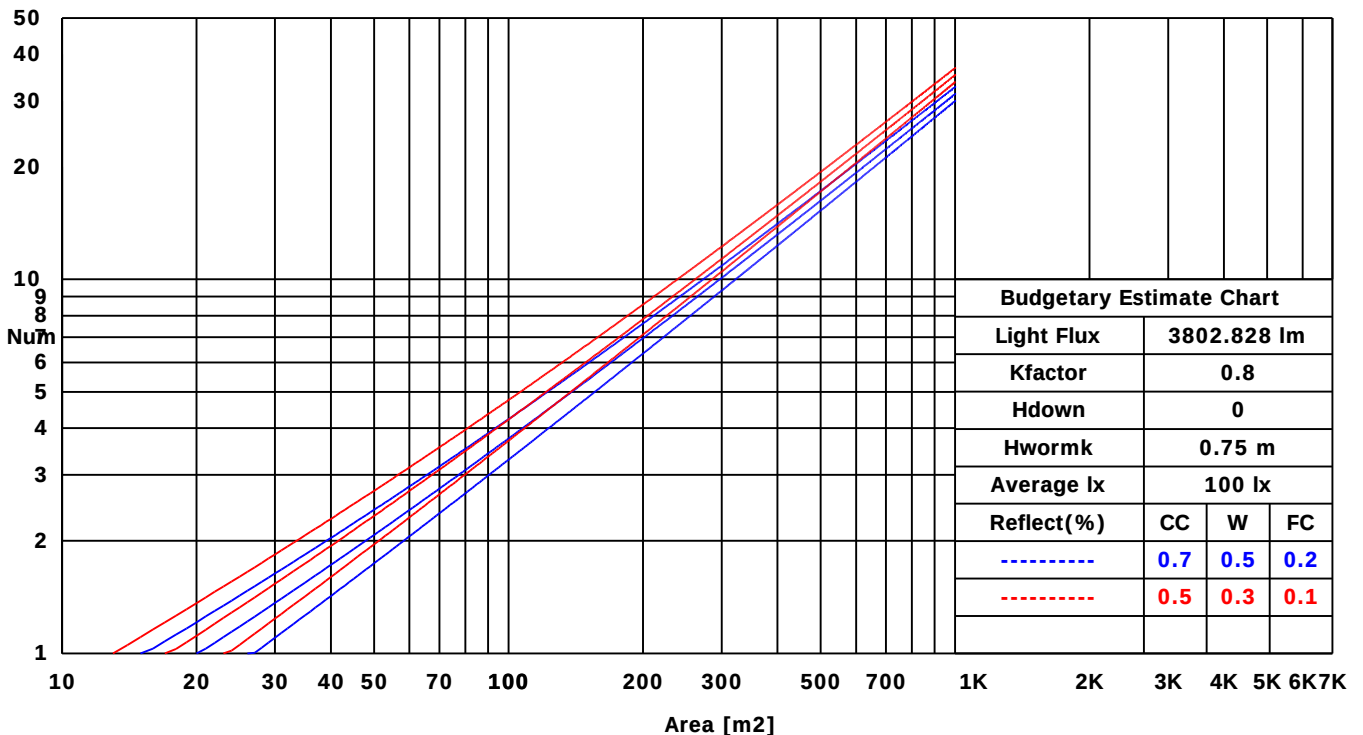
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UTILIZATION FACTORS TABLE

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	1.19	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	1.08	1.07	1.06	1.07	1.05	1.04	1.03	1.01	1.00	0.98	0.96	0.94	0.91	0.89	0.87	0.82
2	1.01	0.99	0.98	1.00	0.98	0.96	0.96	0.94	0.92	0.92	0.90	0.87	0.87	0.84	0.81	0.77
3	0.94	0.93	0.91	0.93	0.91	0.89	0.91	0.88	0.86	0.87	0.84	0.81	0.82	0.79	0.76	0.72
4	0.88	0.87	0.85	0.88	0.85	0.84	0.85	0.82	0.80	0.82	0.79	0.76	0.78	0.74	0.71	0.67
5	0.83	0.81	0.80	0.82	0.80	0.78	0.80	0.77	0.75	0.78	0.74	0.71	0.75	0.70	0.67	0.63
6	0.78	0.77	0.75	0.78	0.75	0.74	0.76	0.73	0.70	0.74	0.70	0.67	0.71	0.67	0.63	0.59
7	0.74	0.72	0.71	0.73	0.71	0.70	0.72	0.69	0.66	0.70	0.66	0.63	0.68	0.63	0.59	0.56
8	0.70	0.68	0.67	0.70	0.67	0.66	0.68	0.65	0.63	0.67	0.63	0.60	0.65	0.60	0.56	0.53
9	0.67	0.65	0.64	0.66	0.64	0.63	0.65	0.62	0.60	0.64	0.60	0.57	0.62	0.57	0.53	0.50
10	0.63	0.62	0.61	0.63	0.61	0.60	0.62	0.59	0.57	0.61	0.57	0.54	0.59	0.54	0.51	0.48

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

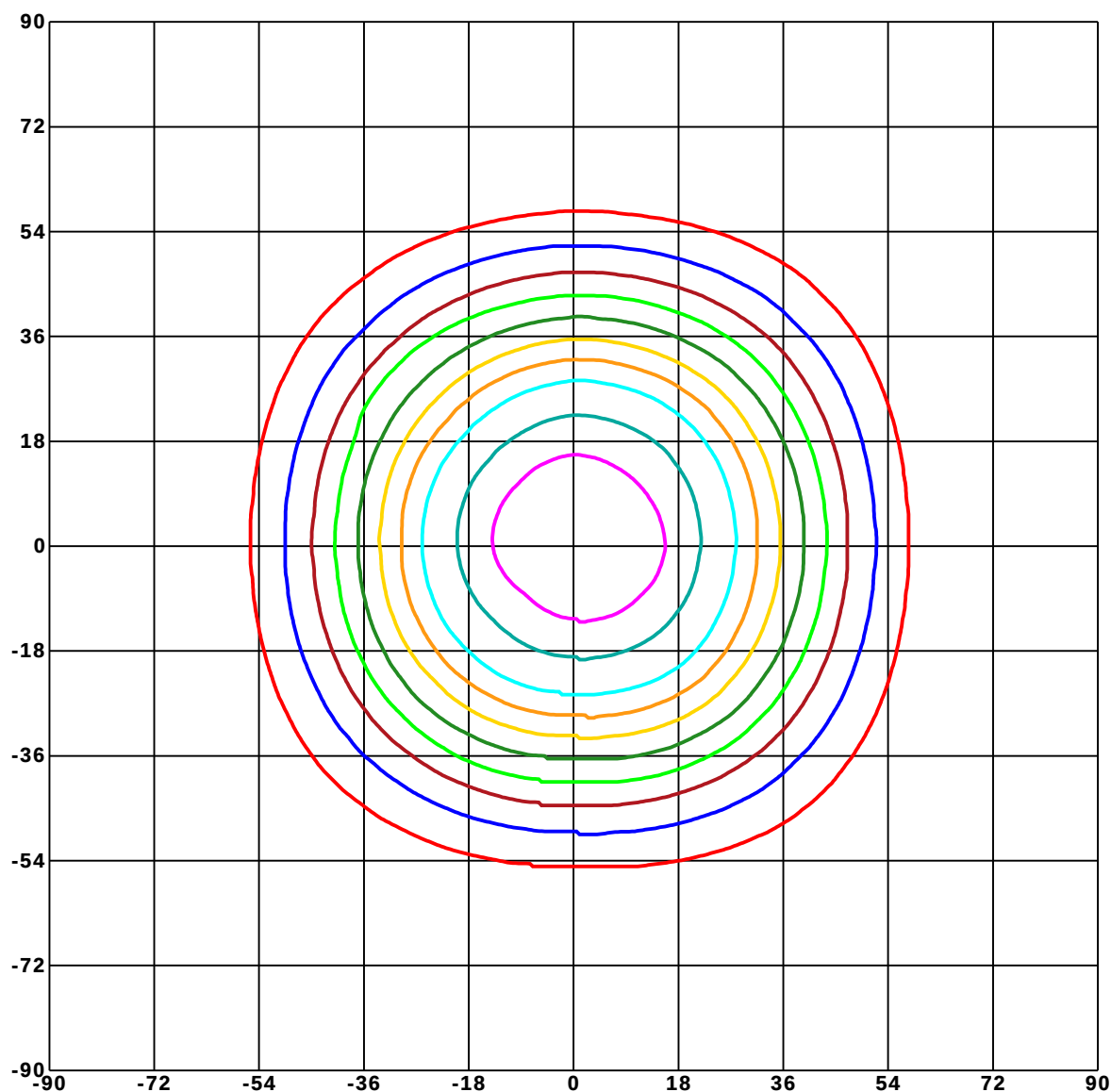
Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/20 17:26:12

ISOCANDELA DIAGRAM (RECTANGULAR)



Unit of intensity:cd Imax(100%): 2515.558 cd

2389.781(95%Imax)	1257.779(50%Imax)
2264.002(90%Imax)	1006.223(40%Imax)
2012.447(80%Imax)	754.668(30%Imax)
1760.891(70%Imax)	503.112(20%Imax)
1509.335(60%Imax)	251.556(10%Imax)

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

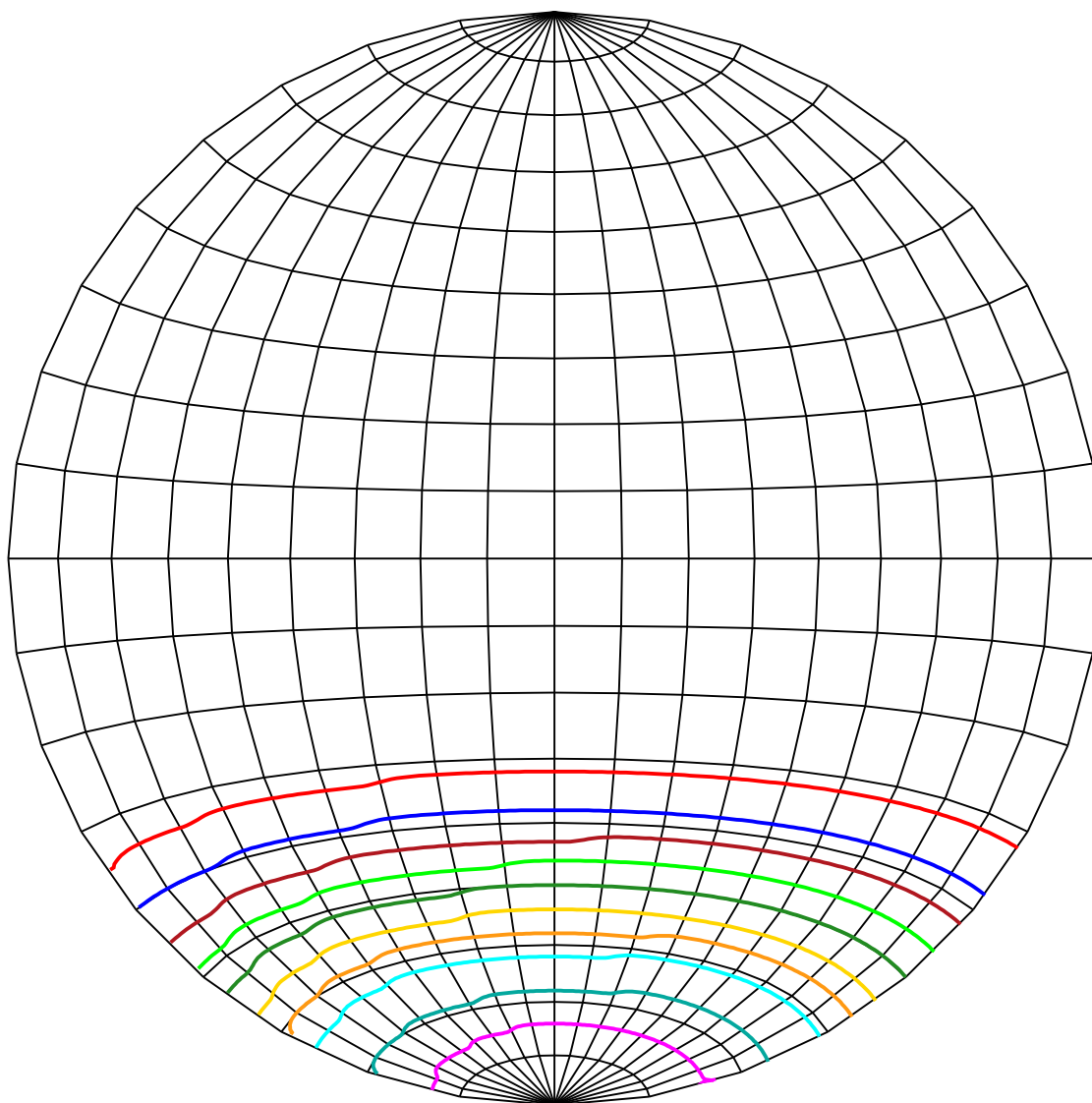
Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/20 17:26:12

ISOCANDELA DIAGRAM (SPHERE)



Unit of intensity:cd I_{max}(100%): 2515.558 cd

— 2389.781(95%I_{max})
— 2264.002(90%I_{max})
— 2012.447(80%I_{max})
— 1760.891(70%I_{max})
— 1509.335(60%I_{max})

— 1257.779(50%I_{max})
— 1006.223(40%I_{max})
— 754.668(30%I_{max})
— 503.112(20%I_{max})
— 251.556(10%I_{max})

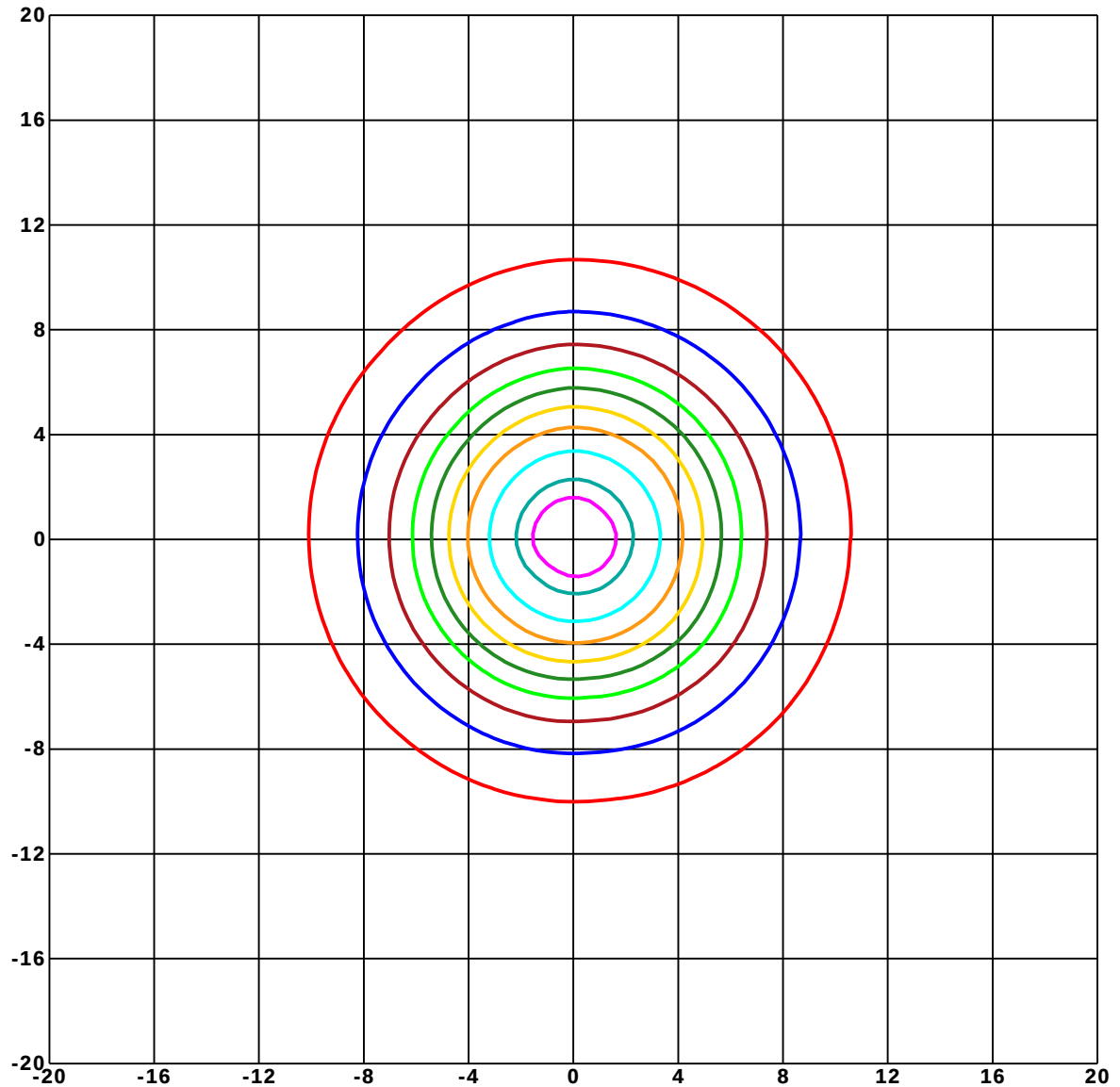
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 6.22 m
Remarks:

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ISOLX DIAGRAM



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

23.887(1%Emax)	12.572(0%Emax)
22.63(1%Emax)	10.058(0%Emax)
20.115(1%Emax)	7.543(0%Emax)
17.601(1%Emax)	5.029(0%Emax)
15.086(1%Emax)	2.514(0%Emax)

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

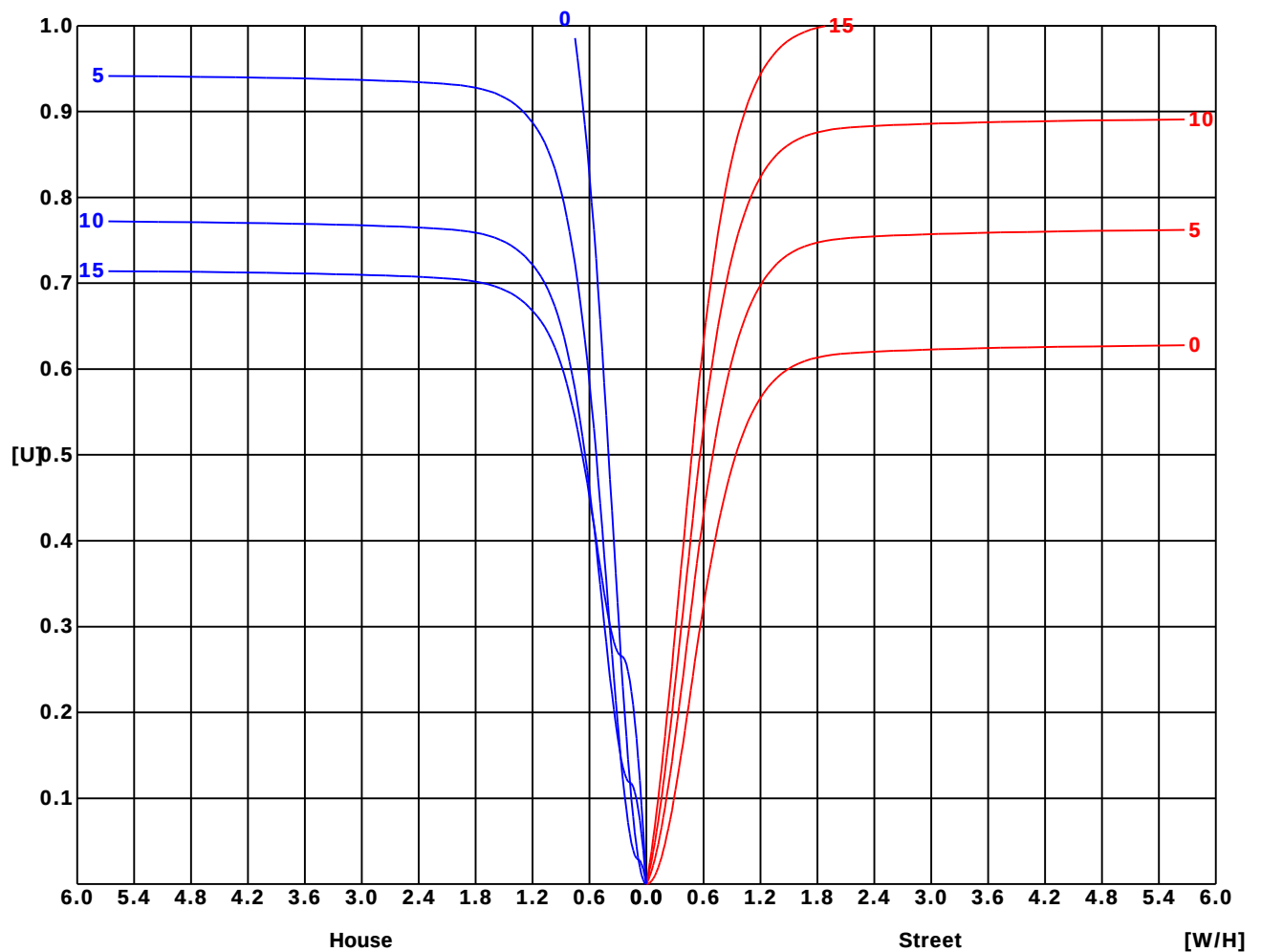
Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/20 17:26:12

UTILIZATION FACTOR DIAGRAM (ROAD)



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2021/10/20 17:26:12

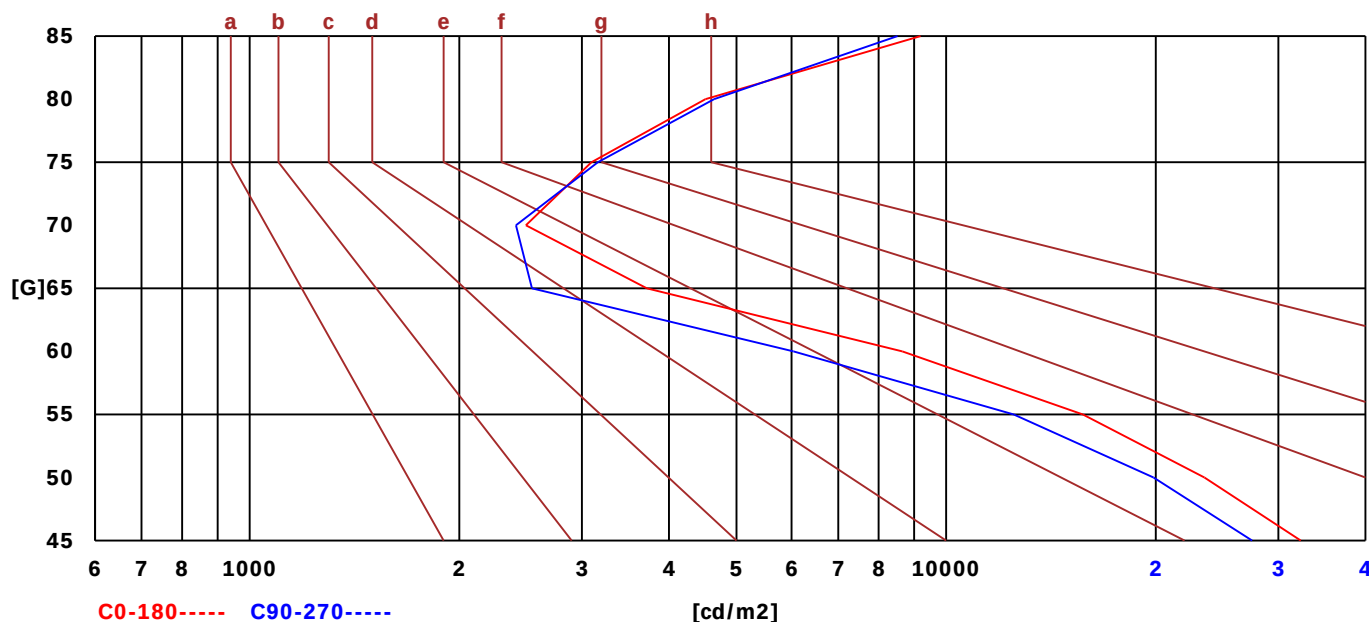
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 6.22 m
Remarks:

Report No.:

Test Time: 2021/10/20 17:26:12

BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	32292	23493	15711	8651	3719	2494	3098	4512	9189
C90	27507	19849	12507	6039	2543	2412	3162	4645	8512
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: 2021/10/20 17:26:12

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

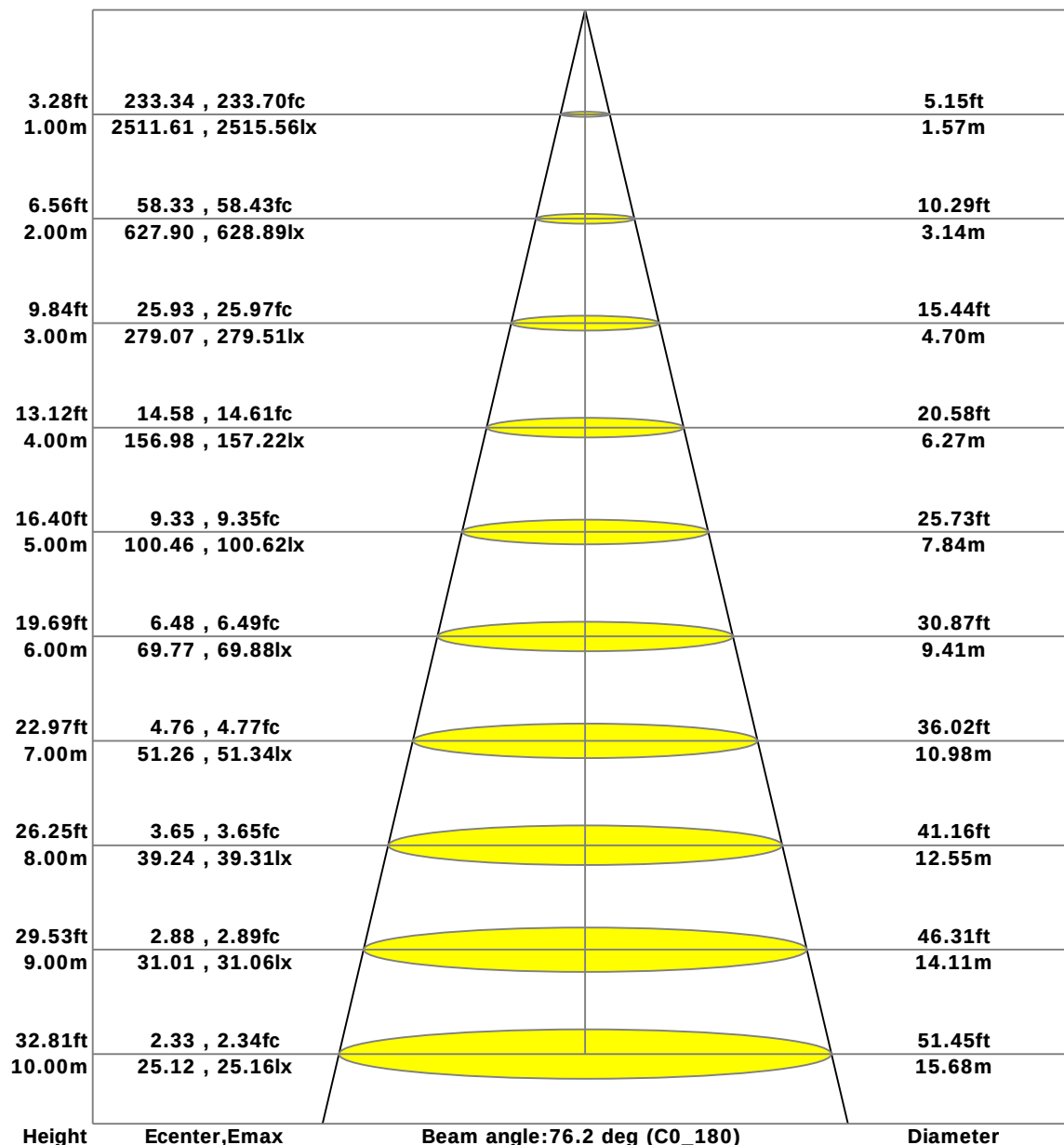
Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/20 17:26:12

LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 6.22 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	16.07	16.13	16.27	16.32	16.56	16.17	16.22	16.37	16.41	16.65
3H	16.04	16.10	16.24	16.29	16.54	16.13	16.19	16.34	16.38	16.63
4H	16.02	16.08	16.23	16.27	16.52	16.11	16.17	16.32	16.37	16.61
6H	16.00	16.05	16.21	16.25	16.51	16.09	16.15	16.31	16.35	16.60
8H	15.99	16.04	16.20	16.24	16.50	16.08	16.13	16.30	16.34	16.59
12H	15.97	16.03	16.20	16.23	16.49	16.07	16.12	16.29	16.33	16.58
4H 2H	16.13	16.19	16.34	16.38	16.63	16.24	16.30	16.45	16.50	16.74
3H	16.12	16.17	16.34	16.38	16.63	16.22	16.28	16.45	16.49	16.74
4H	16.10	16.16	16.33	16.37	16.63	16.21	16.27	16.44	16.48	16.74
6H	16.09	16.14	16.33	16.36	16.62	16.20	16.25	16.43	16.47	16.73
8H	16.08	16.13	16.32	16.35	16.62	16.19	16.23	16.43	16.46	16.73
12H	16.07	16.11	16.31	16.34	16.61	16.17	16.22	16.42	16.45	16.72
8H 4H	16.26	16.31	16.48	16.52	16.77	16.38	16.44	16.60	16.64	16.89
6H	16.37	16.41	16.62	16.65	16.92	16.49	16.53	16.74	16.77	17.04
8H	16.38	16.43	16.65	16.67	16.95	16.50	16.55	16.77	16.79	17.07
12H	16.40	16.43	16.66	16.69	16.97	16.51	16.55	16.78	16.81	17.09
12H 4H	16.51	16.56	16.76	16.79	17.06	16.65	16.70	16.90	16.93	17.20
6H	16.60	16.65	16.87	16.89	17.17	16.74	16.78	17.00	17.03	17.31

C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature:
 Operators:
 Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-1800B Goniophotometer
 Humidity:
 Test Distance: 6.22 m
 Remarks:

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ZONAL LUMINOUS FLUX TABLE

[illegible]

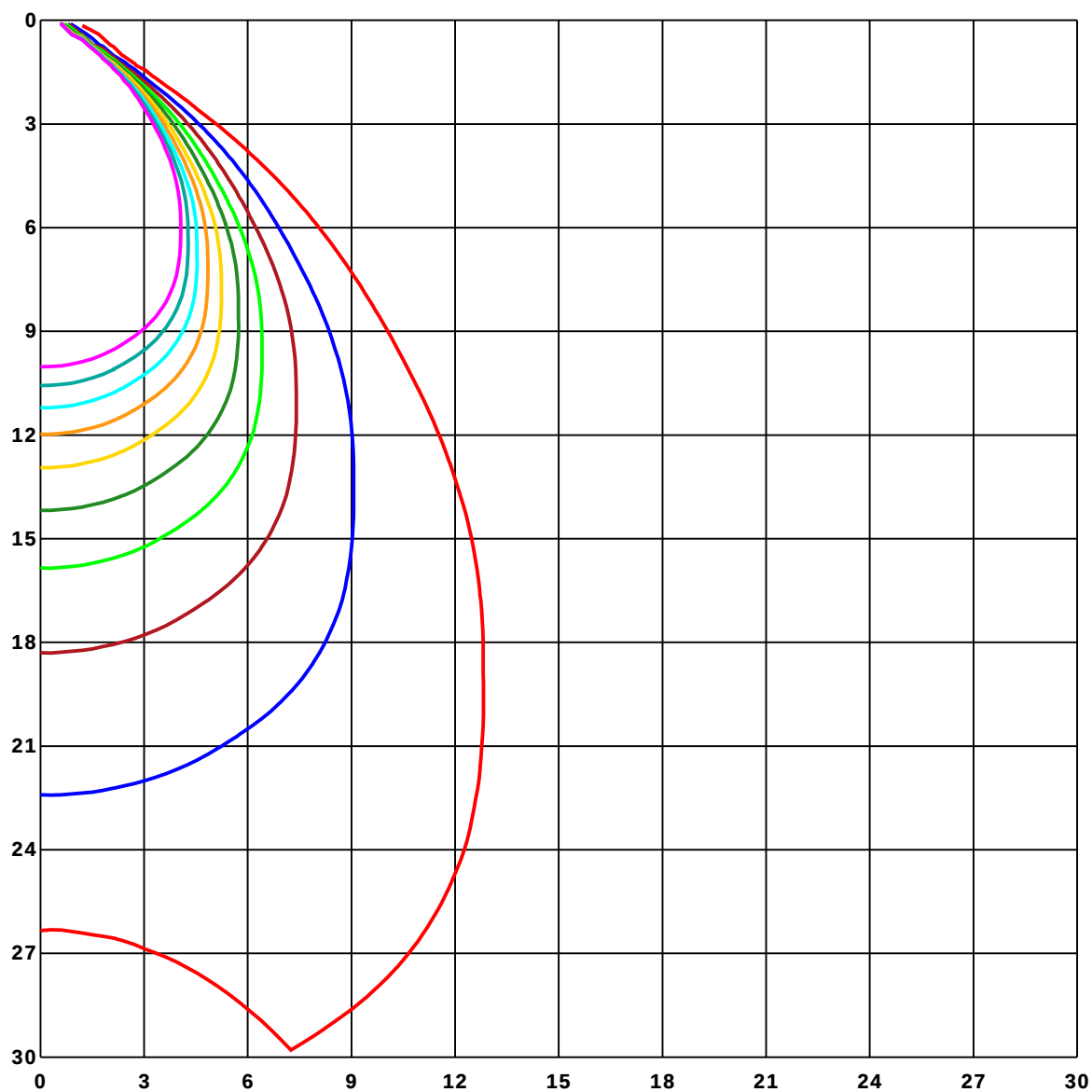
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 6.22 m
Remarks:

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Test Time: 2021/10/20 17:26:12

SPACE ISOLX DIAGRAM



Unit of illumination:lx



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/20 17:26:12

LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	2511.61	2486.89	2494.01	2500.43	2511.61	2486.89	2494.01	2500.43	2511.61	
G1	2515.56	2487.86	2495.4	2504.8	2514.59	2484.49	2492.04	2503.91	2515.56	
G2	2511.11	2488.48	2495.87	2503.37	2512.15	2481.13	2488.94	2502.17	2511.11	
G3	2509.79	2487.66	2495.36	2501.32	2504.65	2476.72	2484.69	2499.23	2509.79	
G4	2510.37	2486.35	2494.05	2498.54	2504.26	2471.53	2479.73	2495.71	2510.37	
G5	2506.04	2483.18	2490.95	2494.16	2498.69	2465.07	2470.49	2490.26	2506.04	
G6	2498.07	2479.85	2488.13	2486.7	2492.19	2455.4	2467.24	2484.3	2498.07	
G7	2495.02	2475.05	2483.45	2482.36	2484.18	2448.09	2458.73	2477.14	2495.02	
G8	2488.21	2469.33	2477.64	2473.78	2474.39	2437.14	2449.13	2469.06	2488.21	
G9	2480.27	2462.71	2471.14	2464.95	2459.46	2424.22	2437.02	2459.65	2480.27	
G10	2470.64	2455.24	2463.75	2454.66	2450.37	2409.9	2423.33	2449.6	2470.64	
G11	2459.34	2445.92	2457.95	2441.43	2435.32	2394.85	2408.82	2436.21	2459.34	
G12	2446.07	2435.74	2444.22	2429.09	2418.57	2381.16	2395.2	2421.2	2446.07	
G13	2430.79	2427.23	2431.14	2409.94	2401.85	2367.46	2381.39	2403.94	2430.79	
G14	2414.5	2409.17	2416.67	2394.66	2386.42	2352.84	2369.51	2387.42	2414.5	
G15	2398.87	2393.73	2402.67	2380.23	2370.01	2336.82	2350.9	2376.16	2398.87	
G16	2383.09	2379.92	2390.09	2364.05	2353.11	2318.63	2332.72	2356.55	2383.09	
G17	2366.3	2366.84	2376.86	2347.69	2333.57	2298.01	2312.75	2340.18	2366.3	
G18	2350.28	2353.03	2362.78	2328.54	2311.67	2274.22	2289.54	2325.99	2350.28	
G19	2329.39	2337.36	2347.42	2307.49	2288.03	2247.29	2262.81	2301.46	2329.39	
G20	2306.22	2322.31	2330.01	2283.27	2259.79	2219.98	2232.2	2278.28	2306.22	
G21	2281.07	2300.72	2309.19	2254.99	2227.49	2185.93	2198.93	2251.47	2281.07	
G22	2250.81	2278.67	2285.94	2223.27	2191.5	2146.86	2159.94	2221.45	2250.81	
G23	2217.27	2252.86	2258.4	2186.71	2150.92	2109.64	2120.12	2188.99	2217.27	
G24	2179.7	2222.73	2227.1	2148.48	2106.39	2070.99	2072.46	2155.87	2179.7	
G25	2138.04	2188.22	2192.59	2100.47	2057.22	2024.95	2016.94	2119.54	2138.04	
G26	2092.04	2148.95	2149.84	2048.4	1998.1	1968.74	1957.36	2076.17	2092.04	
G27	2044.49	2104.19	2103.76	1988.0	1932.64	1906.06	1892.64	2021.82	2044.49	
G28	1987.04	2054.47	2051.3	1924.67	1864.01	1837.78	1823.0	1958.76	1987.04	
G29	1921.58	1994.54	1993.23	1858.32	1794.64	1769.88	1751.62	1897.28	1921.58	
G30	1860.41	1930.24	1930.74	1789.45	1724.23	1698.85	1680.59	1832.28	1860.41	
G31	1789.07	1866.29	1861.92	1718.07	1651.3	1628.59	1611.06	1765.31	1789.07	
G32	1721.21	1794.76	1785.16	1645.46	1580.31	1559.18	1540.19	1697.14	1721.21	
G33	1652.61	1725.0	1709.8	1576.4	1510.47	1490.2	1469.27	1628.55	1652.61	
G34	1582.43	1650.45	1636.83	1505.6	1441.53	1424.08	1406.09	1560.65	1582.43	
G35	1523.39	1577.48	1567.23	1435.42	1374.06	1354.52	1338.0	1493.06	1523.39	
G36	1465.4	1507.69	1493.8	1368.76	1308.29	1293.55	1272.81	1425.9	1465.4	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/20 17:26:12

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	1406.17	1438.13	1428.84	1302.06	1243.17	1224.68	1210.87	1358.78	1406.17	
G38	1345.93	1370.19	1361.1	1235.55	1178.06	1160.46	1151.1	1290.95	1345.93	
G39	1283.99	1303.34	1294.28	1168.82	1112.45	1092.37	1090.67	1224.06	1283.99	
G40	1223.21	1237.76	1228.78	1102.7	1046.83	1027.33	1029.23	1157.52	1223.21	
G41	1156.51	1172.8	1163.4	1034.26	982.88	961.06	966.32	1088.69	1156.51	
G42	1087.38	1107.53	1097.55	1064.98	919.58	896.14	904.65	1022.11	1087.38	
G43	1019.52	1046.17	1032.48	906.24	856.99	829.44	842.56	954.25	1019.52	
G44	952.31	977.73	965.66	843.45	791.53	761.16	775.39	886.93	952.31	
G45	884.34	913.36	901.75	778.02	729.43	700.22	709.97	816.13	884.34	
G46	813.69	849.33	840.27	718.48	673.76	643.58	652.02	754.35	813.69	
G47	749.63	782.47	773.11	663.0	623.85	589.92	599.98	696.89	749.63	
G48	690.94	717.82	711.4	609.19	569.49	540.21	546.32	642.73	690.94	
G49	635.26	659.02	655.3	559.24	521.79	493.05	502.02	590.46	635.26	
G50	581.18	604.04	601.06	510.34	473.31	446.46	451.76	541.95	581.18	
G51	533.2	550.3	549.34	460.93	427.27	401.55	406.42	494.09	533.2	
G52	483.8	500.32	500.01	416.56	382.01	358.29	367.04	447.32	483.8	
G53	438.96	452.65	452.77	369.98	340.81	321.31	323.05	402.94	438.96	
G54	393.62	405.14	407.04	330.59	298.06	278.9	286.68	360.38	393.62	
G55	347.89	360.46	362.9	286.95	258.79	242.46	246.41	319.6	347.89	
G56	306.49	317.48	320.38	247.49	221.53	207.87	211.74	281.46	306.49	
G57	264.98	278.05	280.96	211.39	186.9	175.41	179.48	244.2	264.98	
G58	222.92	240.68	242.5	178.08	155.41	146.51	149.49	209.58	222.92	
G59	189.11	205.59	207.33	147.56	127.75	120.59	122.87	177.62	189.11	
G60	151.35	173.01	178.43	120.79	104.46	98.96	100.24	147.6	151.35	
G61	120.01	143.15	144.81	97.96	84.46	80.63	81.67	121.17	120.01	
G62	98.19	117.11	118.66	82.06	69.17	65.5	65.96	98.96	98.19	
G63	77.3	95.44	100.05	63.76	56.41	53.51	53.54	80.28	77.3	
G64	61.24	77.69	78.38	51.65	46.66	44.99	44.18	65.42	61.24	
G65	49.37	62.87	63.87	42.98	40.58	35.79	38.53	52.65	49.37	
G66	41.36	49.68	55.09	37.64	36.48	34.24	36.52	43.45	41.36	
G67	37.1	42.63	43.91	35.83	36.87	37.18	35.48	39.73	37.1	
G68	35.83	37.41	38.73	34.7	36.21	36.56	34.78	37.57	35.83	
G69	34.32	35.36	37.37	33.27	35.71	35.79	34.36	36.75	34.32	
G70	33.77	34.12	35.94	33.0	35.13	35.21	33.77	36.37	33.77	
G71	33.35	35.28	35.21	32.73	34.97	34.63	33.47	35.75	33.35	
G72	33.0	32.89	34.63	32.89	34.66	34.32	32.81	35.52	33.0	
G73	32.77	34.7	36.21	32.81	34.43	33.81	32.61	35.05	32.77	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/20 17:26:12

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/20 17:26:12

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.22 m

Remarks: