

Report No.:

Test Time: 2021/10/21 9:21:50

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: 0
Luminaire Type: FL0405-20-20W 3000K
Lamp Type:
Luminous Width: 0 mm
Luminous Length: 0 mm
Luminous Height: 0 mm

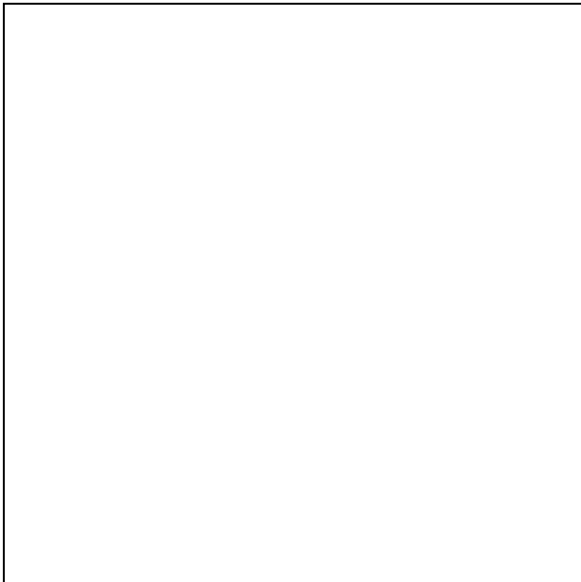
Voltage(V): 219.80 V
Current(A): 0.0530 A
Power(W): 10.55 W
Power Factor: 0.8980
Lamp Luminous Flux: 884.58

Photometric Results

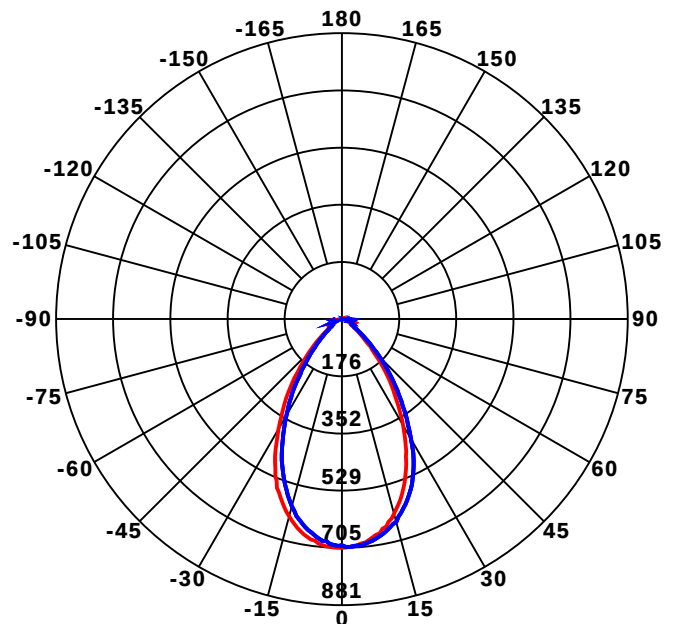
CIE Class: Direct
Luminaire Luminous Flux: 884.5778 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 83.85 lm/W
Beam Angle(50%) C0-180,C90-270: 63.3,63.4
Field Angle(10%) C0-180,C90-270: 102.8,102.7
S/MH C0-180,C90-270: 0.933,0.933

Max. Intensity: 704.71 cd
Max.Intensity Angle: C=180 Gamma=0
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 704.71 cd
Effective Luminous Flux: 756.23 lm
ERP(ϕ use)(120deg): 791.79 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 63.3 deg,63.4 deg

C0-180 — C90-270 —

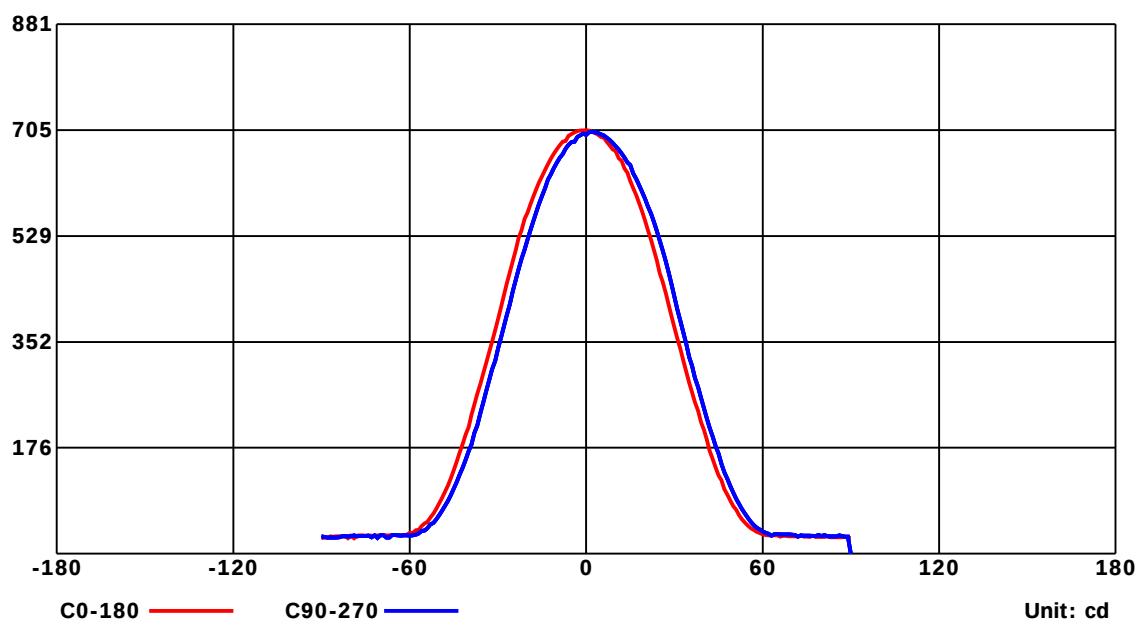
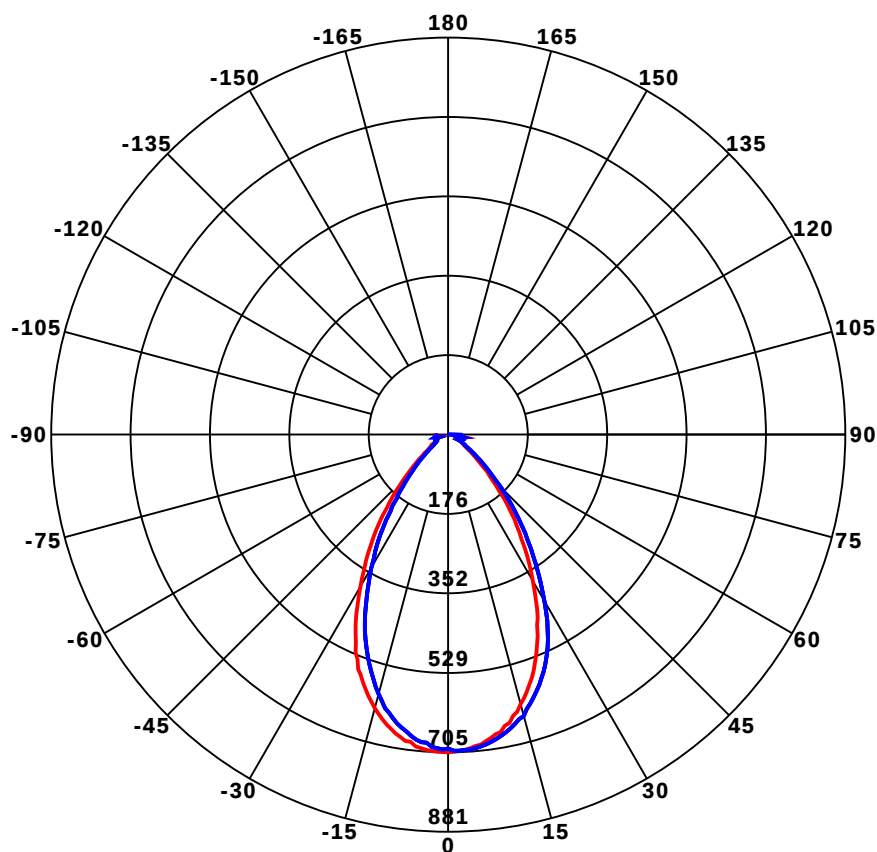
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2021/10/21 9:21:50

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: 2021/10/21 9:21:50

Luminous Intensity Distribution Curve



C0-180

C90-270

Unit: cd

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/21 9:21:50

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

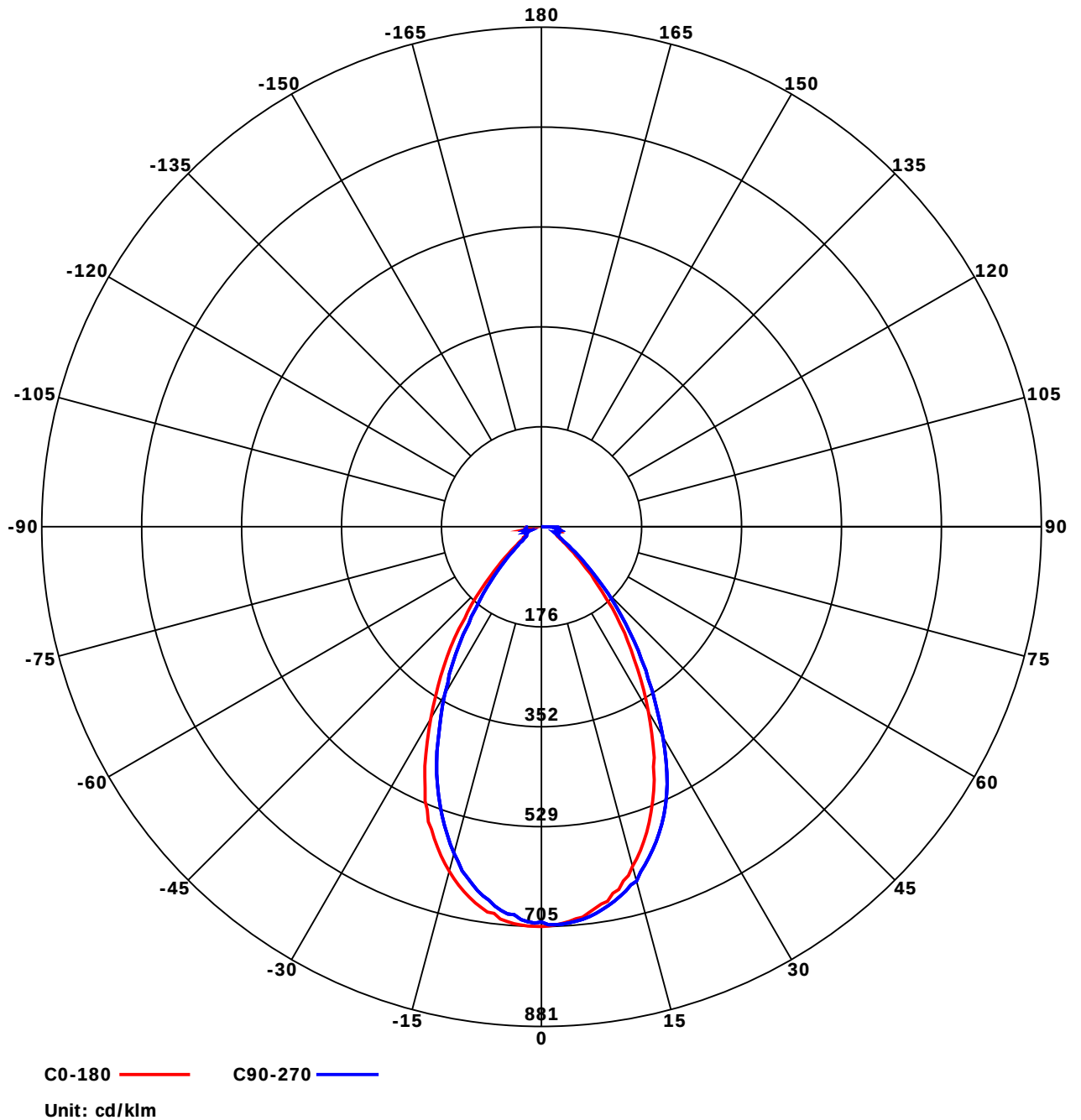
Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/21 9:21:50

Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/21 9:21:50

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.22 m

Remarks:

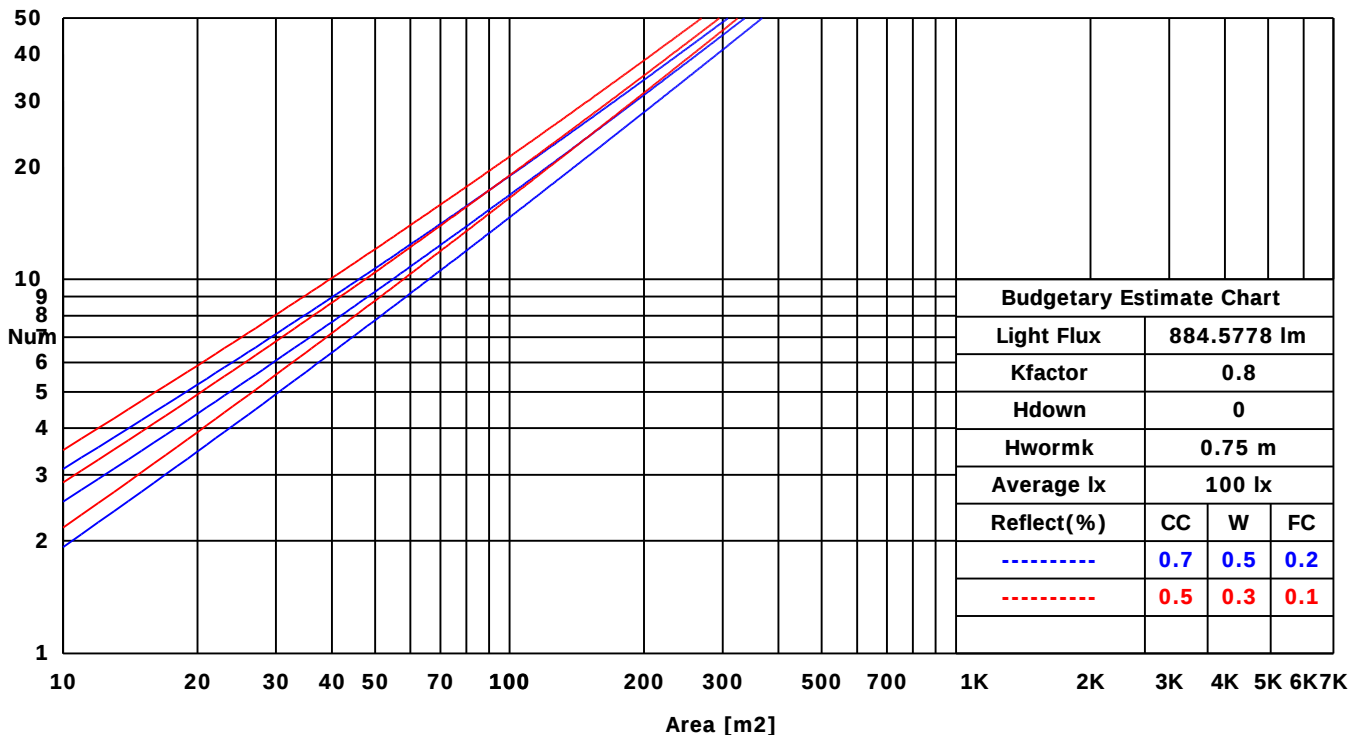
Report No.:

Test Time: 2021/10/21 9:21:50

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	1.06	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	0.98	0.96	0.94	0.96	0.94	0.92	0.93	0.91	0.88	0.89	0.86	0.84	0.84	0.81	0.78	0.73
3	0.91	0.89	0.87	0.90	0.87	0.85	0.87	0.84	0.82	0.84	0.80	0.77	0.80	0.76	0.73	0.68
4	0.85	0.83	0.81	0.84	0.81	0.80	0.82	0.79	0.76	0.79	0.75	0.72	0.76	0.71	0.68	0.64
5	0.80	0.78	0.76	0.79	0.77	0.75	0.77	0.74	0.71	0.75	0.71	0.68	0.72	0.68	0.64	0.60
6	0.75	0.73	0.72	0.75	0.72	0.71	0.73	0.70	0.67	0.71	0.67	0.64	0.69	0.64	0.60	0.57
7	0.71	0.70	0.68	0.71	0.69	0.67	0.70	0.66	0.64	0.68	0.64	0.61	0.66	0.61	0.57	0.54
8	0.68	0.66	0.65	0.68	0.65	0.64	0.66	0.63	0.61	0.65	0.61	0.58	0.63	0.58	0.54	0.51
9	0.65	0.63	0.62	0.64	0.62	0.61	0.64	0.60	0.58	0.62	0.58	0.55	0.61	0.56	0.52	0.49
10	0.62	0.60	0.60	0.62	0.60	0.58	0.61	0.58	0.55	0.60	0.56	0.53	0.58	0.53	0.50	0.47

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/21 9:21:50

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

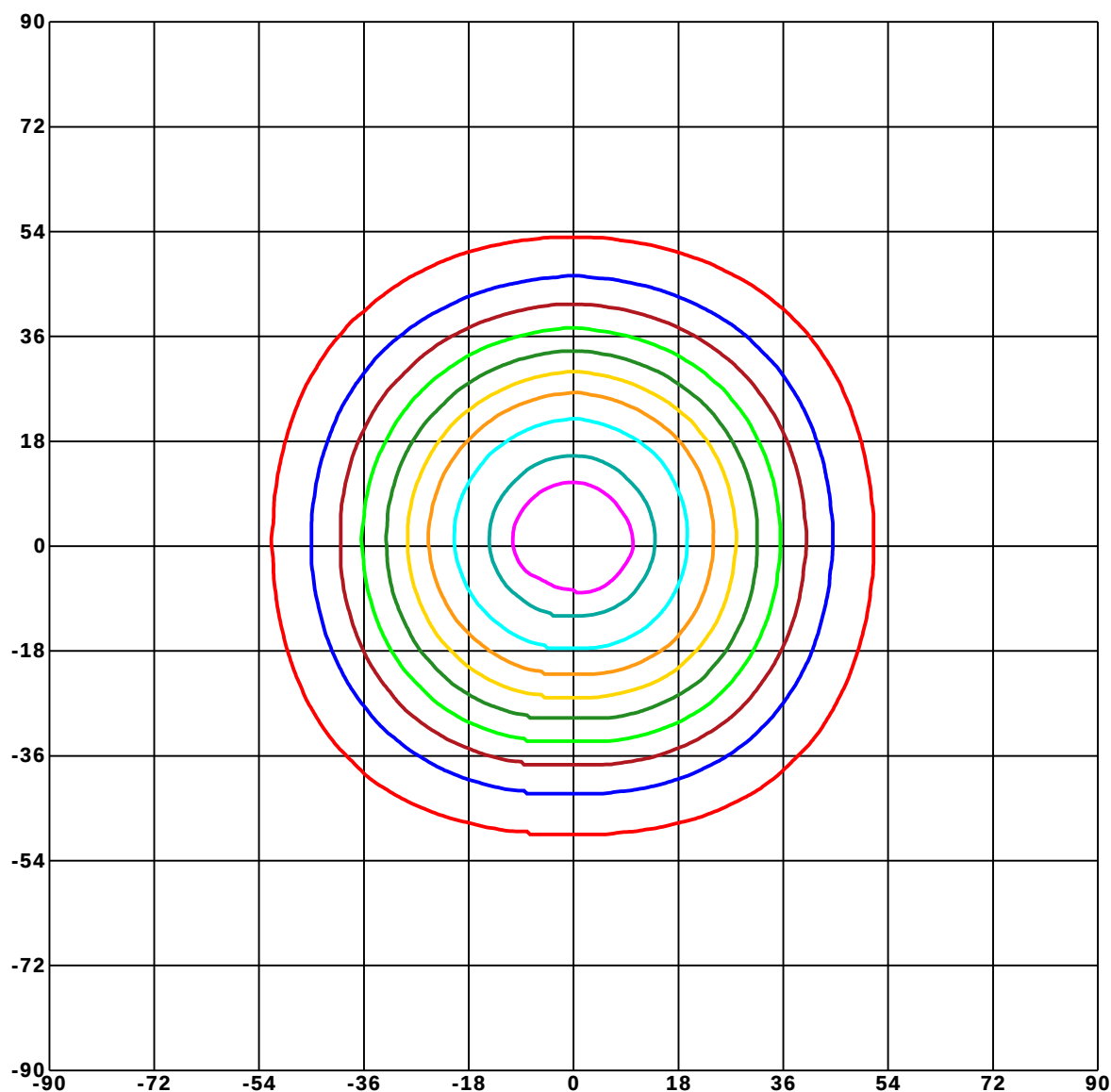
Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/21 9:21:50

ISOCANDELA DIAGRAM (RECTANGULAR)



Unit of intensity:cd Imax(100%): 704.709 cd

669.474(95%Imax)	352.355(50%Imax)
634.238(90%Imax)	281.884(40%Imax)
563.767(80%Imax)	211.413(30%Imax)
493.296(70%Imax)	140.942(20%Imax)
422.826(60%Imax)	70.471(10%Imax)

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/21 9:21:50

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

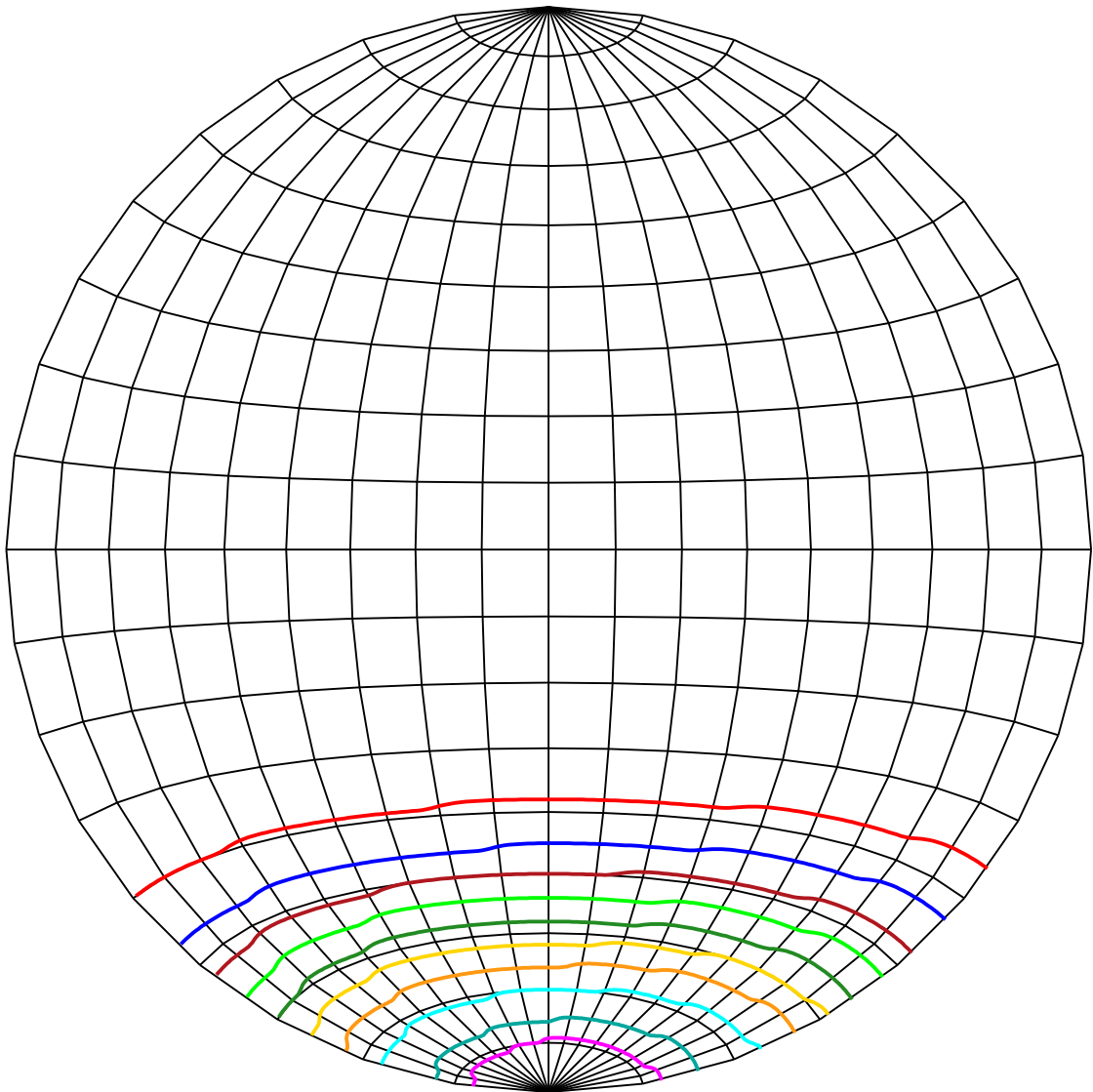
Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/21 9:21:50

ISOCANDELA DIAGRAM (SPHERE)



Unit of intensity:cd Imax(100%): 704.709 cd

669.474(95%Imax)
634.238(90%Imax)
563.767(80%Imax)
493.296(70%Imax)
422.826(60%Imax)

352.355(50%Imax)
281.884(40%Imax)
211.413(30%Imax)
140.942(20%Imax)
70.471(10%Imax)

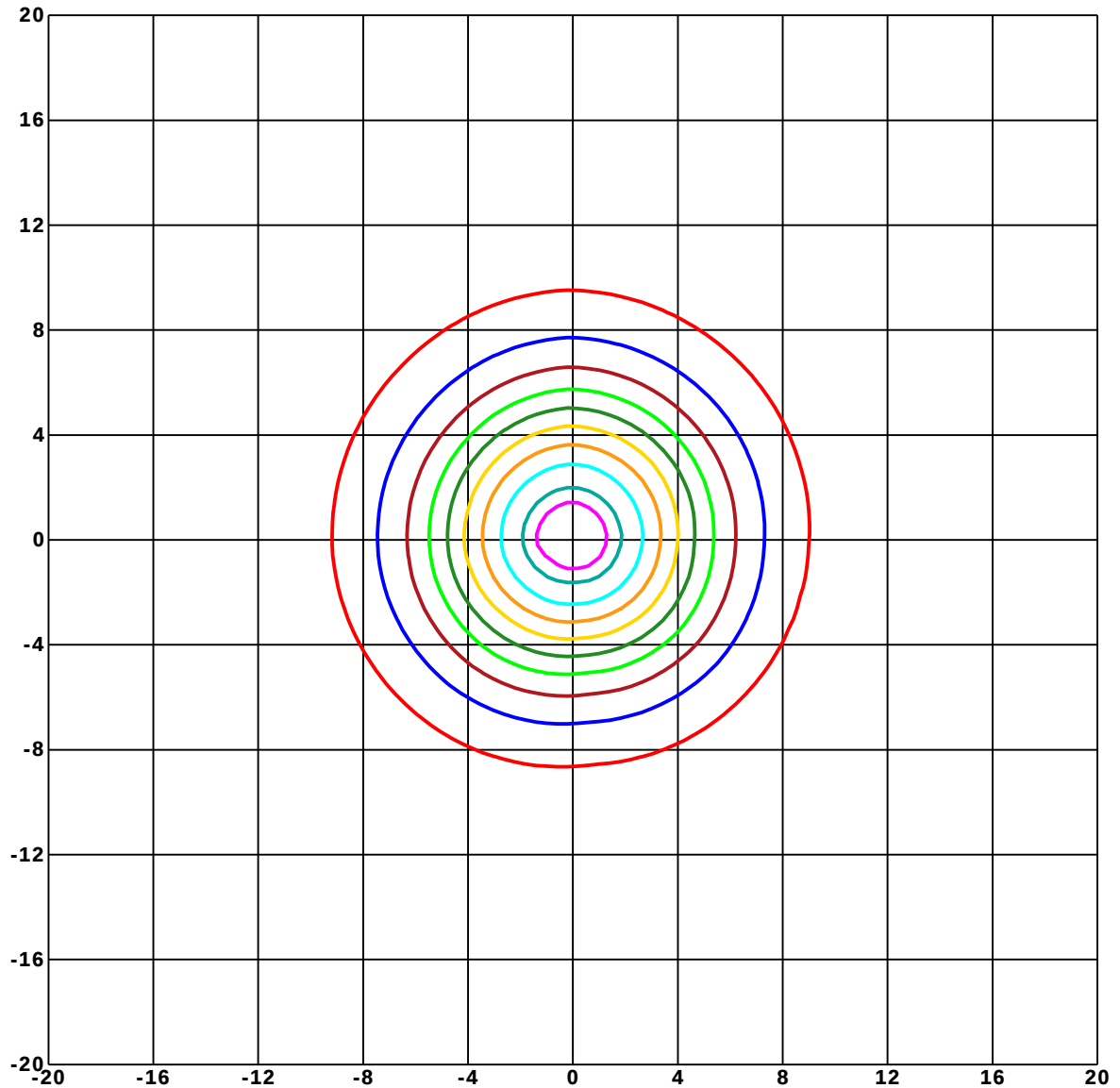
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2021/10/21 9:21:50

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: 2021/10/21 9:21:50

ISOLX DIAGRAM



Unit of illumination:lx

Height of plane:10.0(m)/32.81(ft)

6.695(1%E_{max})

3.524(1%E_{max})

6.342(1%E_{max})

2.819(0%E_{max})

5.638(1%E_{max})

2.114(0%E_{max})

4.933(1%E_{max})

1.409(0%E_{max})

4.228(1%E_{max})

0.705(0%E_{max})

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/21 9:21:50

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

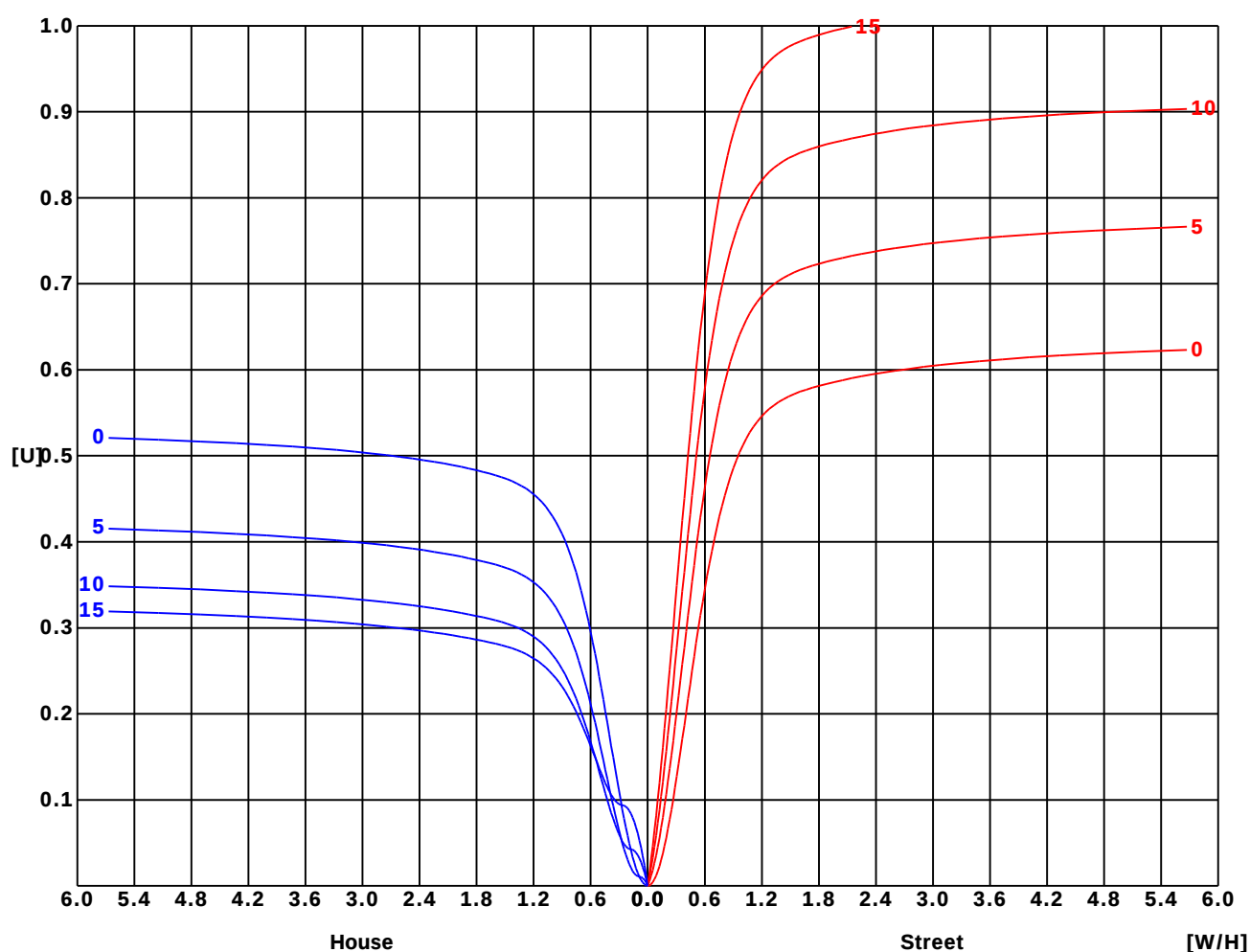
Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/21 9:21:50

UTILIZATION FACTOR DIAGRAM (ROAD)



C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature:
 Operators:
 Test Date: 2021/10/21 9:21:50

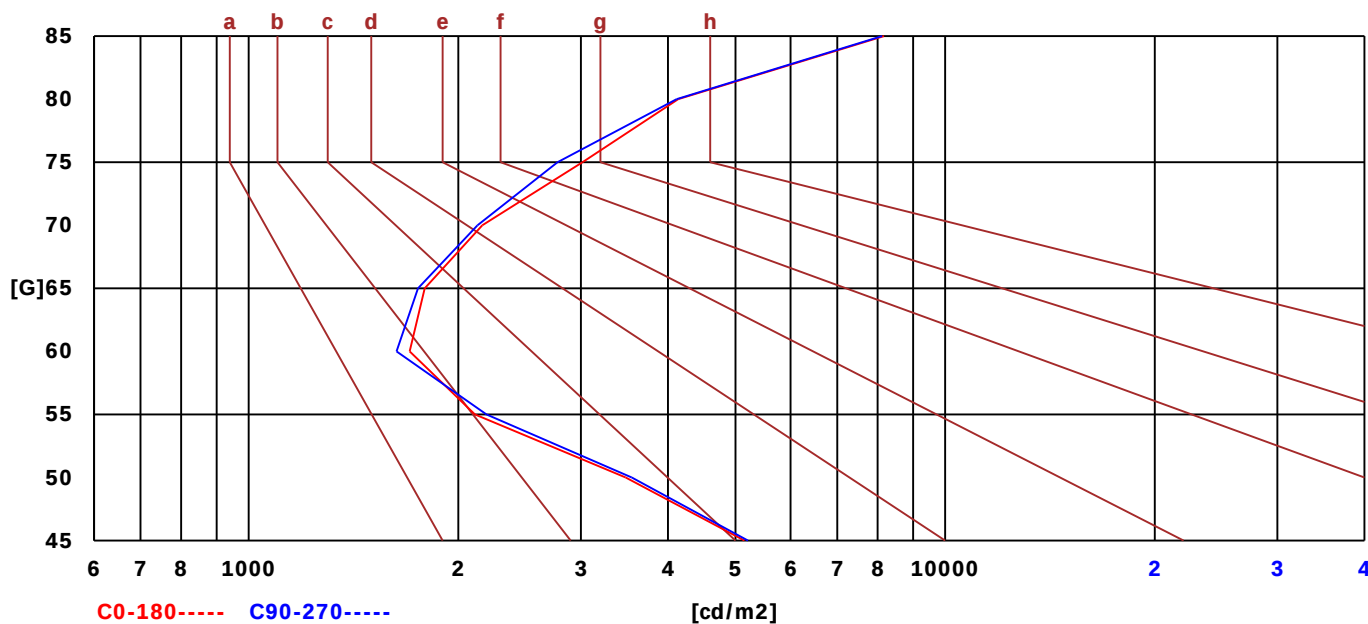
G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-1800B Goniophotometer
 Humidity:
 Test Distance: 6.22 m
 Remarks:

Report No.:

Test Time: 2021/10/21 9:21:50

BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	5149	3480	2113	1704	1790	2166	3016	4138	8168
C90	5214	3550	2197	1631	1751	2132	2777	4116	8123
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: 2021/10/21 9:21:50

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

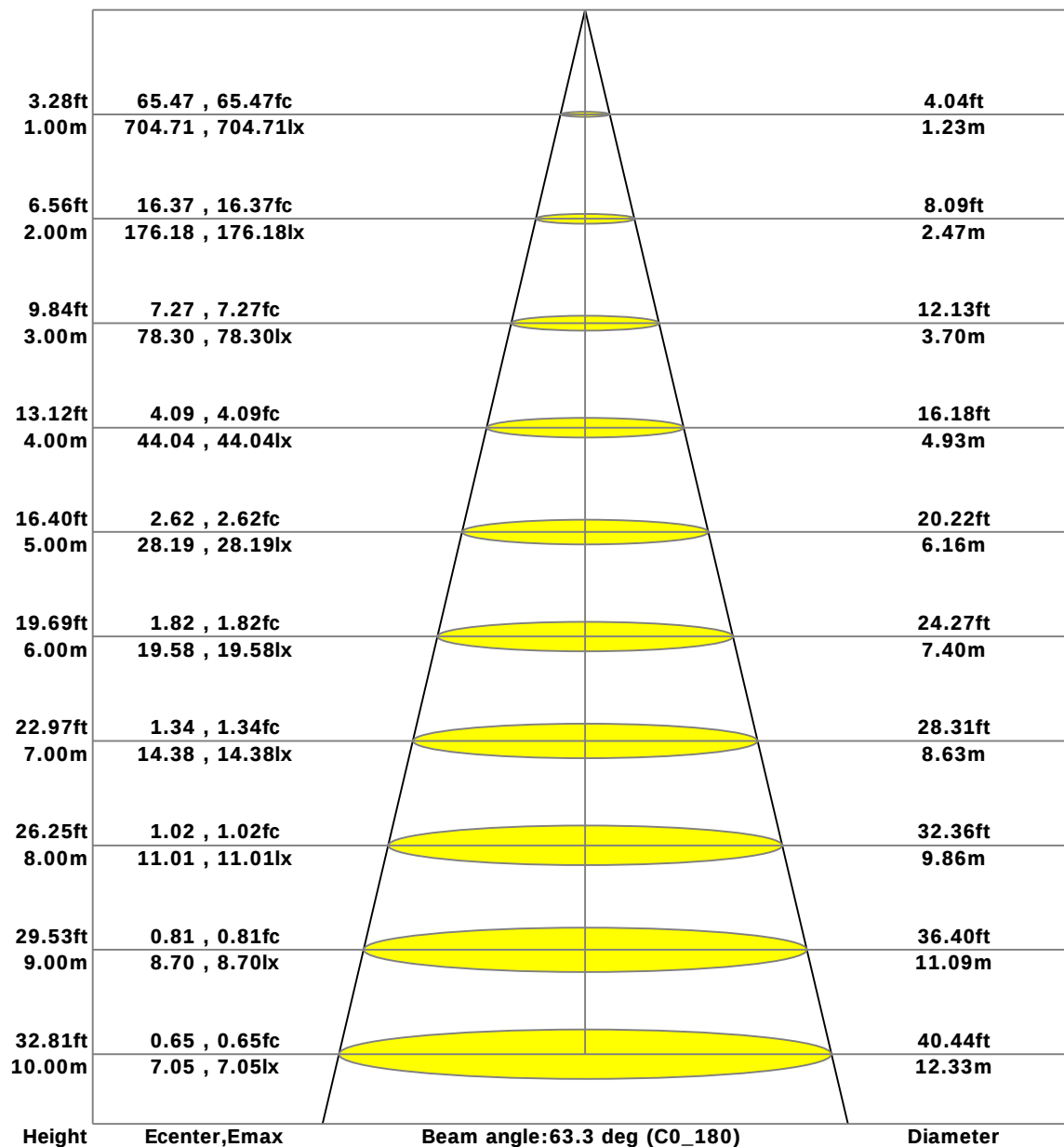
Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/21 9:21:50

LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/21 9:21:50

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: 2021/10/21 9:21:50

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	13.41	13.47	13.61	13.66	13.90	13.85	13.91	14.05	14.10	14.35
3H	13.49	13.55	13.69	13.74	13.99	13.91	13.97	14.12	14.16	14.41
4H	13.52	13.58	13.73	13.77	14.02	13.93	13.99	14.14	14.19	14.44
6H	13.52	13.58	13.74	13.78	14.04	13.94	14.00	14.15	14.20	14.45
8H	13.51	13.57	13.73	13.77	14.03	13.93	13.98	14.14	14.19	14.44
12H	13.50	13.56	13.72	13.76	14.02	13.91	13.97	14.14	14.18	14.43
4H 2H	15.34	15.40	15.56	15.60	15.85	15.70	15.76	15.91	15.96	16.21
3H	15.75	15.80	15.97	16.01	16.27	16.06	16.12	16.28	16.33	16.58
4H	15.92	15.98	16.15	16.19	16.45	16.22	16.28	16.45	16.49	16.75
6H	16.06	16.12	16.30	16.34	16.60	16.34	16.40	16.58	16.62	16.88
8H	16.12	16.17	16.36	16.40	16.66	16.39	16.44	16.63	16.67	16.93
12H	16.14	16.19	16.39	16.42	16.69	16.40	16.45	16.65	16.68	16.95
8H 4H	17.31	17.37	17.53	17.57	17.82	17.63	17.68	17.85	17.89	18.14
6H	18.89	18.94	19.15	19.18	19.45	19.12	19.17	19.37	19.40	19.68
8H	19.07	19.12	19.34	19.36	19.64	19.29	19.33	19.55	19.58	19.85
12H	19.22	19.26	19.49	19.52	19.80	19.42	19.46	19.69	19.71	19.99
12H 4H	19.58	19.63	19.83	19.86	20.13	19.85	19.90	20.10	20.14	20.40
6H	20.16	20.21	20.43	20.45	20.73	20.41	20.45	20.67	20.70	20.98

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/21 9:21:50

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: 2021/10/21 9:21:50

ZONAL LUMINOUS FLUX TABLE

[illegible]

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/21 9:21:50

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

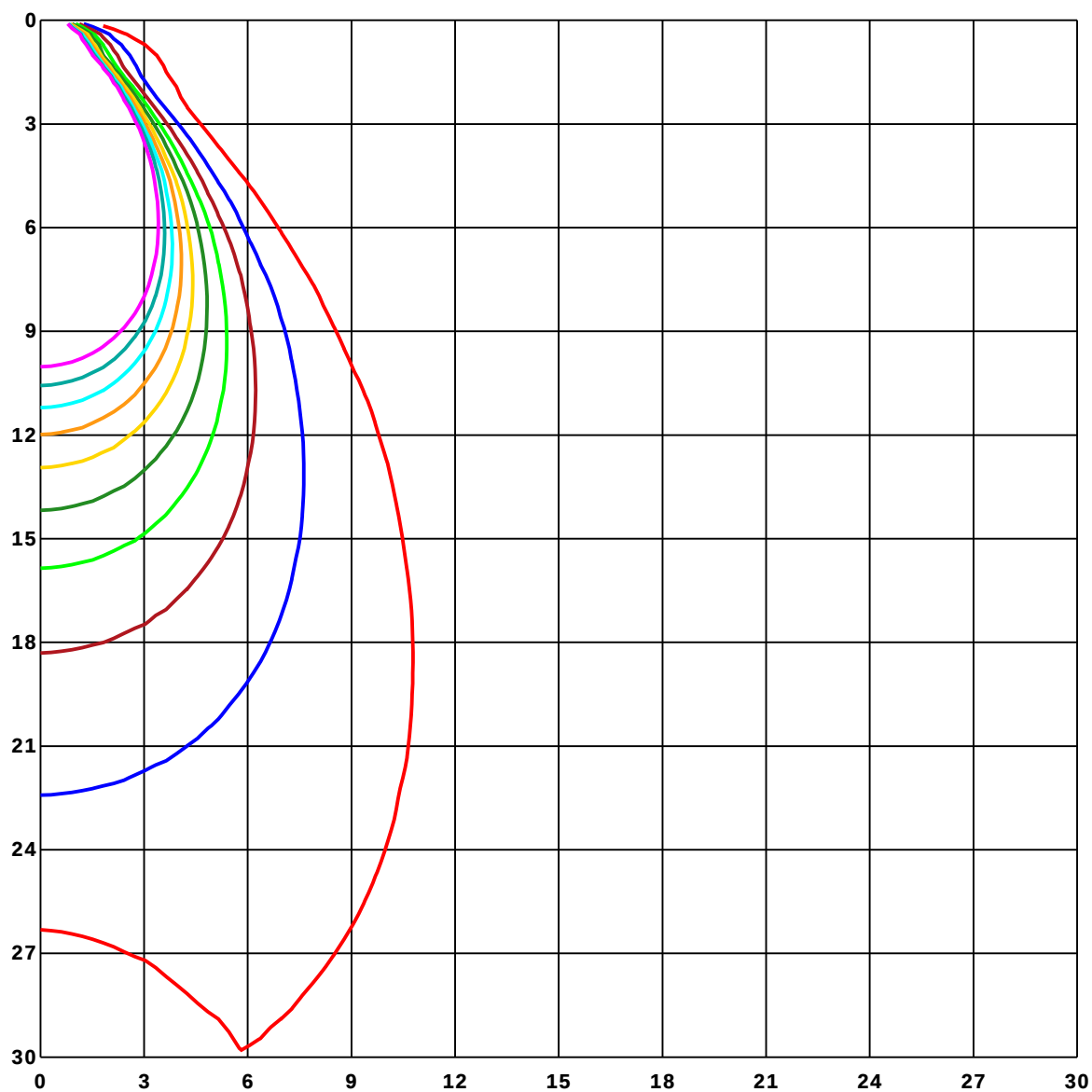
Test Distance: 6.22 m

Remarks:

Report No.:

Test Time: 2021/10/21 9:21:50

SPACE ISOLX DIAGRAM



Unit of illumination:lx



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/21 9:21:50

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: 2021/10/21 9:21:50

LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	704.71	699.6	696.55	701.69	704.71	699.6	696.55	701.69	704.71	
G1	703.78	699.8	701.46	702.0	704.44	695.73	698.75	700.38	703.78	
G2	702.16	697.36	701.81	701.85	703.97	694.26	696.35	698.71	702.16	
G3	700.03	698.29	701.19	701.15	703.01	691.01	693.49	696.47	700.03	
G4	697.32	696.58	699.95	702.35	701.19	691.52	685.56	697.47	697.32	
G5	693.68	693.92	698.02	697.13	698.56	687.53	685.17	689.62	693.68	
G6	691.98	690.78	695.62	693.95	695.19	683.43	680.1	684.86	691.98	
G7	685.06	686.6	692.21	690.7	686.84	673.6	673.64	679.68	685.06	
G8	679.25	682.27	688.34	685.95	685.79	667.57	664.94	677.9	679.25	
G9	672.98	678.63	683.39	680.92	679.56	665.4	658.71	666.99	672.98	
G10	670.39	671.05	678.25	675.19	673.06	657.9	650.93	659.48	670.39	
G11	658.05	664.13	672.4	668.57	665.48	649.31	641.38	650.85	658.05	
G12	653.83	657.01	665.94	661.11	657.47	640.1	631.28	641.61	653.83	
G13	640.64	648.8	658.9	651.51	648.49	629.62	622.65	631.78	640.64	
G14	633.75	639.98	650.78	644.47	638.94	618.98	608.41	620.87	633.75	
G15	619.83	631.01	646.56	635.03	628.53	607.21	596.19	609.34	619.83	
G16	608.34	620.64	632.98	625.05	617.7	594.72	582.3	597.27	608.34	
G17	596.11	610.12	623.35	614.49	606.13	581.76	568.1	584.35	596.11	
G18	583.0	598.86	612.79	603.19	593.71	568.1	553.13	570.65	583.0	
G19	569.53	587.1	601.91	591.0	580.94	553.98	538.23	556.61	569.53	
G20	554.52	574.68	590.58	578.28	567.29	538.97	522.8	542.49	554.52	
G21	538.74	561.6	578.2	565.39	557.15	523.96	506.2	527.63	538.74	
G22	522.25	547.4	565.62	551.85	537.73	506.82	489.99	512.16	522.25	
G23	505.27	536.3	551.89	537.5	525.23	491.61	472.97	496.49	505.27	
G24	488.13	519.2	537.19	521.25	504.34	476.72	454.7	481.13	488.13	
G25	466.81	501.6	521.17	503.72	486.66	461.09	436.75	464.26	466.81	
G26	452.65	479.27	504.77	483.72	468.9	444.03	415.63	445.34	452.65	
G27	433.66	460.86	486.35	464.84	449.29	426.31	396.21	428.09	433.66	
G28	413.93	441.78	467.86	445.46	429.25	406.65	377.56	408.9	413.93	
G29	394.93	424.76	448.13	425.65	409.44	388.28	359.34	389.79	394.93	
G30	376.05	401.7	427.12	400.89	390.44	370.09	341.58	371.6	376.05	
G31	357.87	382.55	406.31	382.2	371.83	351.99	320.65	353.92	357.87	
G32	339.76	363.13	386.42	366.84	352.3	334.23	306.41	335.97	339.76	
G33	320.96	344.98	367.5	348.2	335.2	316.43	288.34	314.85	320.96	
G34	302.39	326.8	348.97	329.7	317.59	299.45	270.59	299.68	302.39	
G35	284.63	309.0	326.92	311.33	300.26	282.08	252.21	281.73	284.63	
G36	268.42	291.48	312.87	293.57	283.04	264.78	234.61	263.47	268.42	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/21 9:21:50

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: 2021/10/21 9:21:50

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	252.02	274.03	292.41	275.85	265.94	247.33	212.94	241.22	252.02	
G38	237.7	256.27	276.97	258.67	248.57	230.04	200.87	227.02	237.7	
G39	219.25	238.78	259.29	240.33	231.4	213.25	181.49	209.61	219.25	
G40	206.05	221.68	242.31	223.85	210.5	196.42	170.77	192.71	206.05	
G41	190.04	206.05	225.51	207.83	198.97	179.94	156.57	176.19	190.04	
G42	170.89	190.42	209.38	192.09	183.23	164.5	143.73	157.0	170.89	
G43	156.49	175.26	193.75	177.39	168.26	149.69	131.58	147.67	156.49	
G44	142.84	160.48	178.7	162.26	153.28	136.22	119.55	134.6	142.84	
G45	130.15	145.62	166.05	147.48	139.43	123.92	108.83	122.95	130.15	
G46	121.87	132.59	149.07	133.4	126.16	112.43	98.31	111.85	121.87	
G47	107.36	120.59	135.68	120.9	114.13	101.63	88.6	101.52	107.36	
G48	97.46	109.49	123.53	109.14	102.87	92.08	79.7	91.88	97.46	
G49	87.98	98.73	112.0	98.58	92.97	82.83	71.46	82.75	87.98	
G50	79.12	89.49	101.36	91.27	83.64	74.59	64.15	74.63	79.12	
G51	72.93	80.82	91.46	79.35	74.86	69.52	57.26	67.12	72.93	
G52	64.11	72.27	82.87	70.76	66.7	60.32	51.38	60.32	64.11	
G53	57.26	64.8	74.2	66.27	59.54	54.05	48.75	54.09	57.26	
G54	51.53	58.46	66.12	56.64	53.0	48.94	42.05	48.59	51.53	
G55	46.66	48.48	59.23	50.41	50.37	44.22	38.69	44.18	46.66	
G56	42.33	43.95	52.81	47.66	45.77	40.85	38.07	40.43	42.33	
G57	39.35	42.71	47.28	40.89	39.62	37.99	33.62	37.3	39.35	
G58	36.44	39.31	43.02	37.49	38.8	35.28	31.69	34.94	36.44	
G59	34.2	34.7	39.97	34.63	34.16	33.77	30.49	33.27	34.2	
G60	32.27	34.08	37.06	32.61	34.74	32.73	30.22	32.0	32.27	
G61	30.83	32.15	34.94	30.83	31.41	32.61	30.37	31.65	30.83	
G62	30.68	31.14	33.39	32.19	31.14	32.34	30.29	33.12	30.68	
G63	30.72	30.64	30.18	29.83	30.99	32.46	29.79	33.39	30.72	
G64	30.68	30.6	32.46	29.75	30.76	32.46	30.72	31.22	30.68	
G65	30.33	30.25	32.54	29.6	30.91	32.58	31.03	31.22	30.33	
G66	28.4	30.33	32.27	29.67	30.99	32.42	30.91	31.14	28.4	
G67	29.71	30.1	32.27	29.67	30.76	32.23	26.93	30.8	29.71	
G68	29.48	30.06	32.23	31.69	30.64	32.0	26.66	30.53	29.48	
G69	29.05	29.87	32.0	29.6	31.03	31.76	30.8	30.29	29.05	
G70	29.02	29.64	31.65	29.17	30.25	31.72	30.72	30.06	29.02	
G71	28.78	29.52	31.14	29.05	30.29	31.38	26.31	32.11	28.78	
G72	28.4	29.21	28.32	30.53	29.48	31.22	30.33	31.8	28.4	
G73	30.41	29.25	30.56	28.94	29.98	31.11	27.51	29.64	30.41	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/21 9:21:50

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: 2021/10/21 9:21:50

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2021/10/21 9:21:50

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.22 m

Remarks: