

Report No.:

Test Time: 2023/1/12 10:35:56

LUMINAIRE PHOTOMETRIC TEST REPORT

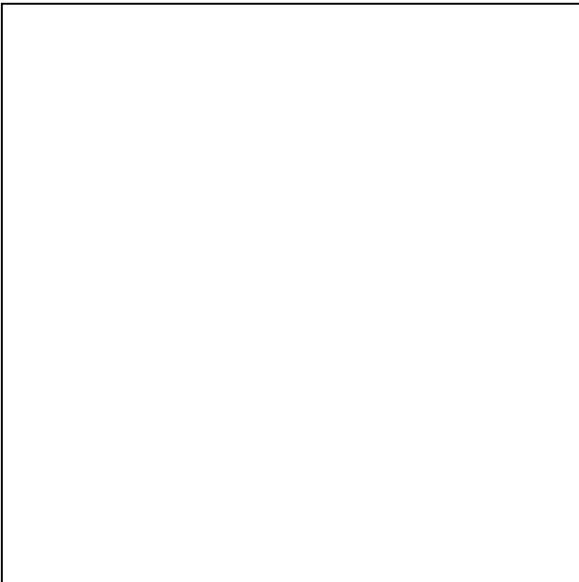
Luminaire Property

Manufacturer: 0	Voltage(V): 219.60 V
Luminaire Type: 24W	Current(A): 0.1990 A
Lamp Type:	Power(W): 24.99 W
Luminous Width: 0 mm	Power Factor: 0.5710
Luminous Length: 0 mm	Lamp Luminous Flux: 1809.16
Luminous Height: 0 mm	

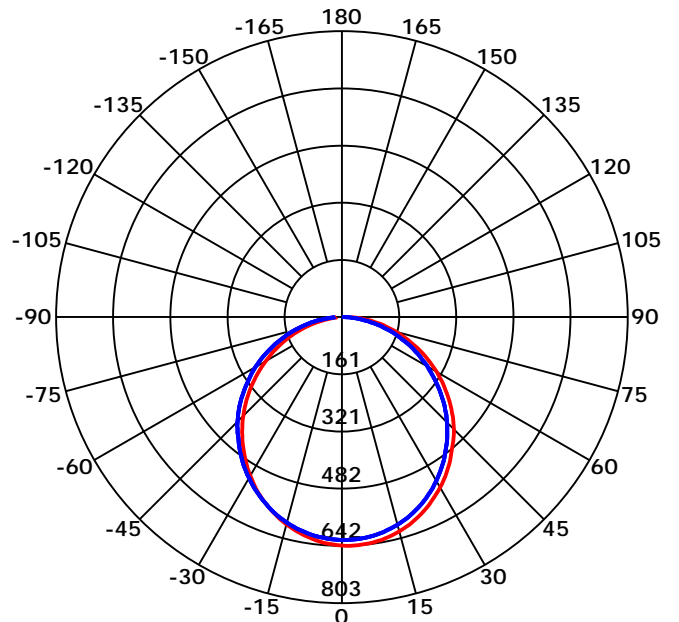
Photometric Results

CIE Class: Direct	Max. Intensity: 642.23 cd
Luminaire Luminous Flux: 1809.157 lm	Max. Intensity Angle: C=0 Gamma=2
Downward Ratio: 100.00%	Upward Ratio: 0.00%
Luminaire Efficacy Rating(LER): 72.40 lm/W	Efficacy: 100.00%
Beam Angle(50%) C0-180,C90-270: 111.0,112.7	Center Intensity: 641.34 cd
Field Angle(10%) C0-180,C90-270: 164.2,165.1	Effective Luminous Flux: 1776.85 lm
S/MH C0-180,C90-270: 1.250,1.202	ERP(φuse)(120deg): 1401.50 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 111.0 deg,112.7 deg

C0-180 ——— C90-270 ———

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2023/1/12 10:35:56

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

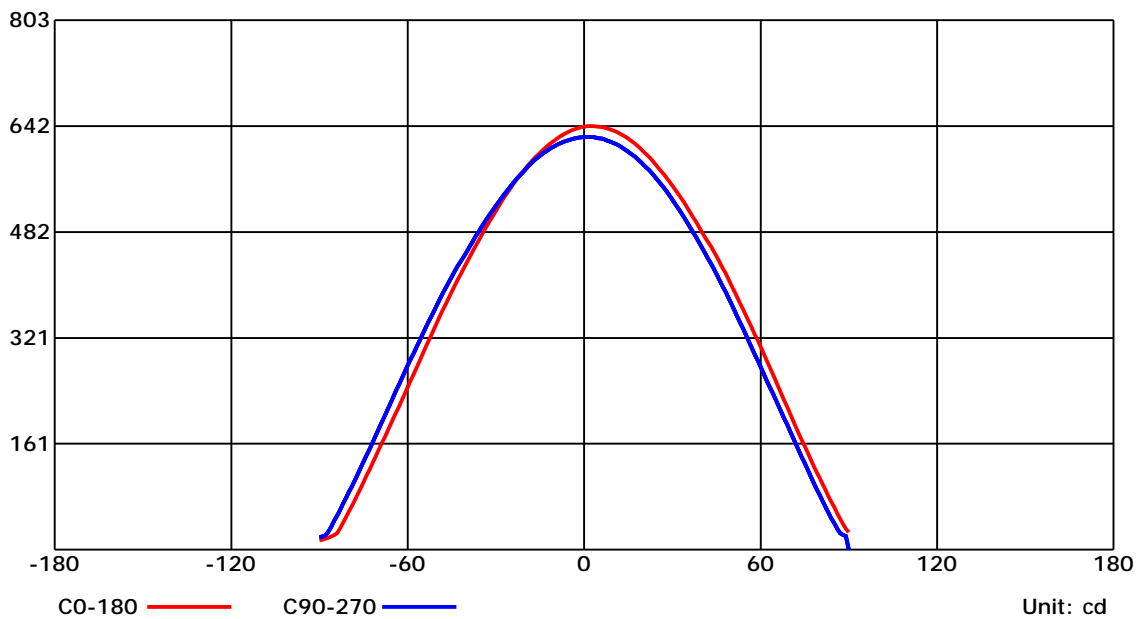
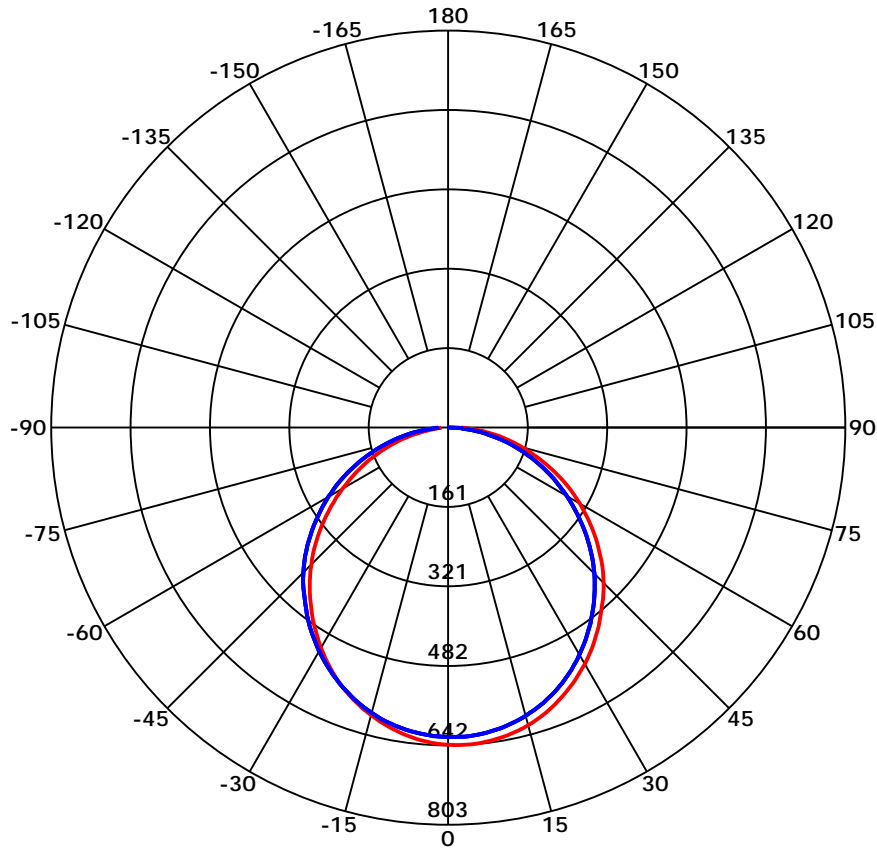
Test Distance: 6.38 m

Remarks:

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Test Time: 2023/1/12 10:35:56

Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2023/1/12 10:35:56

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

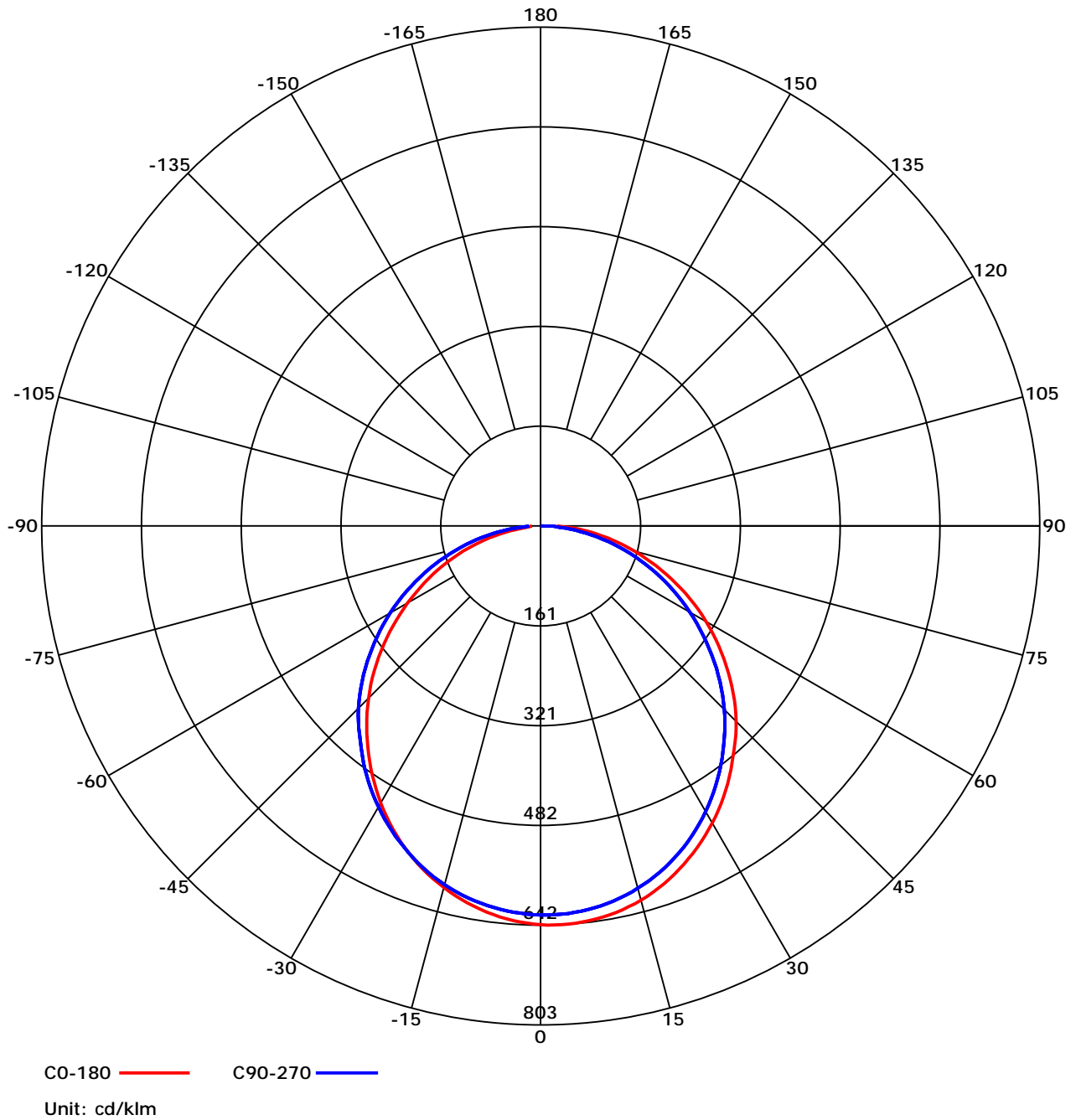
Test Distance: 6.38 m

Remarks:

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Test Time: 2023/1/12 10:35:56

Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2023/1/12 10:35:56

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.38 m

Remarks:

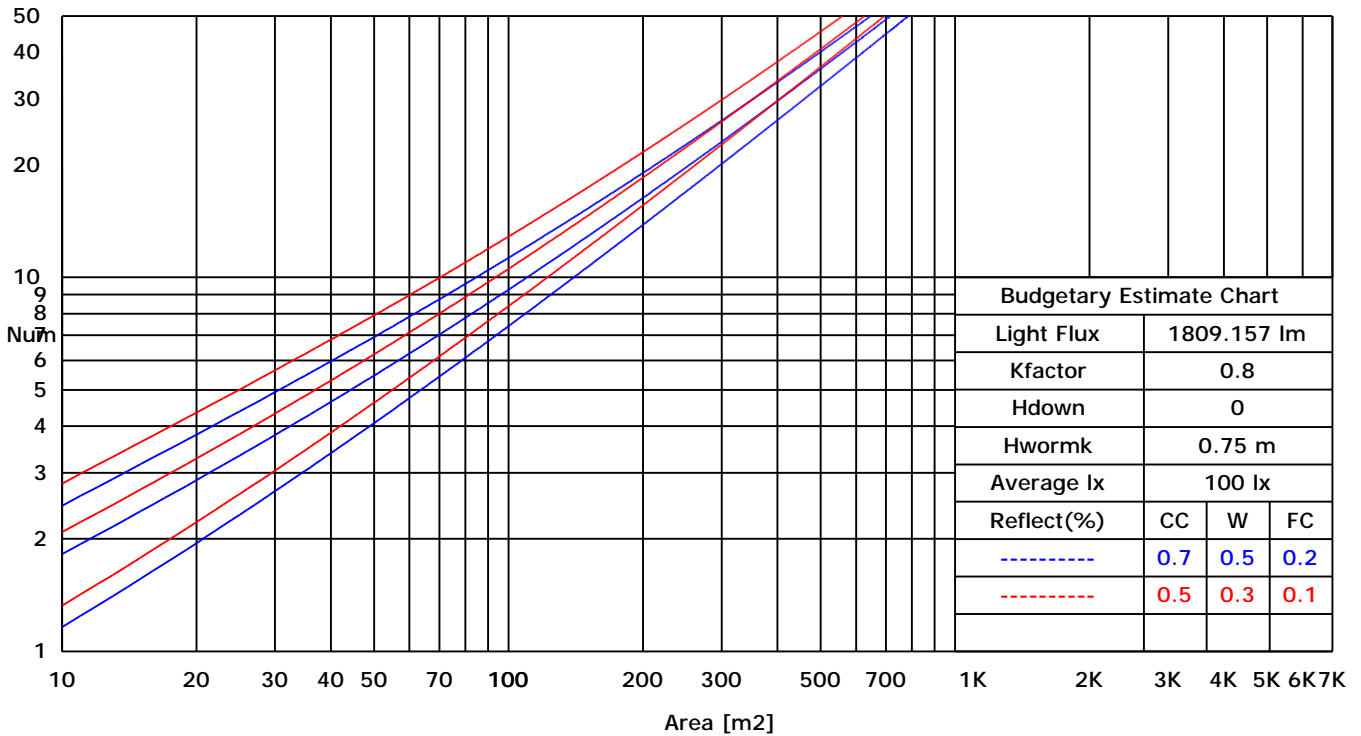
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UTILIZATION FACTORS TABLE

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	1.06	1.05	1.04	1.05	1.03	1.02	1.01	0.99	0.97	0.96	0.94	0.92	0.90	0.88	0.86	0.80
2	0.94	0.92	0.90	0.93	0.91	0.89	0.91	0.87	0.85	0.87	0.83	0.81	0.82	0.78	0.75	0.70
3	0.84	0.81	0.79	0.83	0.80	0.78	0.81	0.78	0.75	0.78	0.74	0.71	0.75	0.70	0.66	0.62
4	0.75	0.72	0.71	0.75	0.71	0.69	0.73	0.69	0.66	0.71	0.67	0.63	0.69	0.63	0.59	0.55
5	0.67	0.65	0.63	0.67	0.64	0.62	0.67	0.62	0.59	0.65	0.60	0.56	0.63	0.58	0.53	0.49
6	0.61	0.59	0.57	0.61	0.58	0.56	0.61	0.57	0.54	0.60	0.55	0.51	0.59	0.53	0.48	0.45
7	0.56	0.53	0.52	0.56	0.53	0.51	0.56	0.52	0.49	0.56	0.50	0.46	0.55	0.49	0.44	0.41
8	0.51	0.49	0.48	0.52	0.49	0.47	0.52	0.48	0.45	0.52	0.47	0.43	0.51	0.45	0.41	0.37
9	0.48	0.45	0.44	0.48	0.45	0.43	0.48	0.44	0.41	0.48	0.43	0.39	0.48	0.42	0.37	0.34
10	0.44	0.42	0.41	0.45	0.42	0.40	0.45	0.41	0.38	0.45	0.40	0.37	0.45	0.39	0.35	0.32

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2023/1/12 10:35:56

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

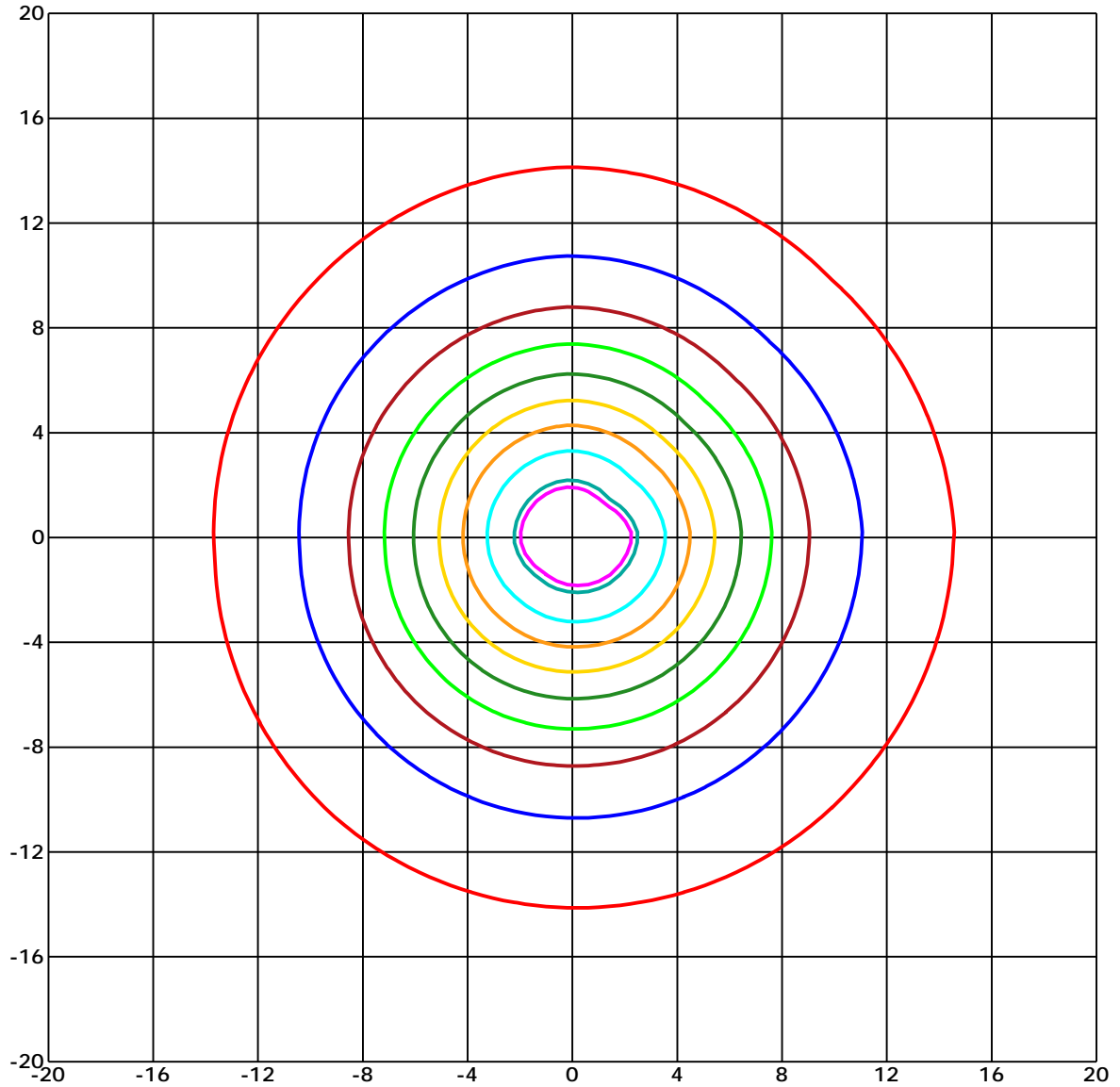
Test Distance: 6.38 m

Remarks:

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ISOLX DIAGRAM



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

- | | |
|-----------------|-----------------|
| — 5.905(1%Emax) | — 3.209(0%Emax) |
| — 5.776(1%Emax) | — 2.567(0%Emax) |
| — 5.135(1%Emax) | — 1.925(0%Emax) |
| — 4.493(1%Emax) | — 1.284(0%Emax) |
| — 3.851(1%Emax) | — 0.642(0%Emax) |

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2023/1/12 10:35:56

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.38 m

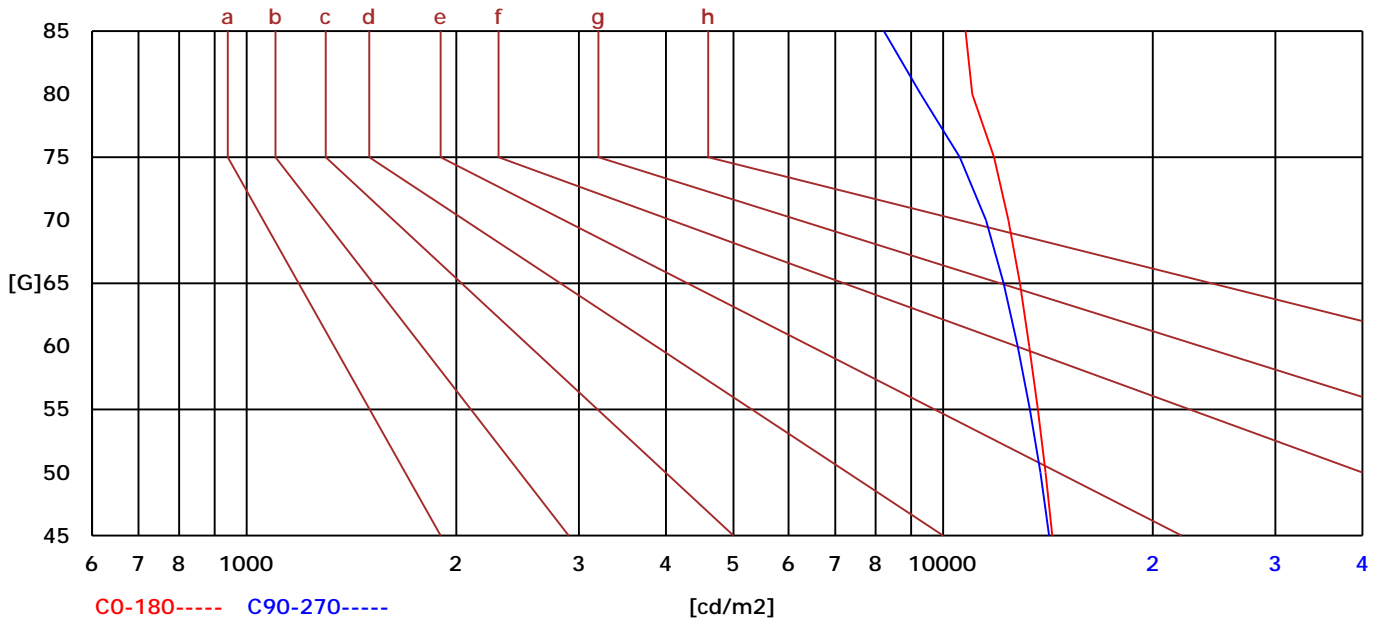
Remarks:

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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	14348	14036	13672	13288	12892	12410	11838	11017	10765
C90	14193	13794	13320	12791	12218	11520	10569	9288	8220
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: 2023/1/12 10:35:56

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

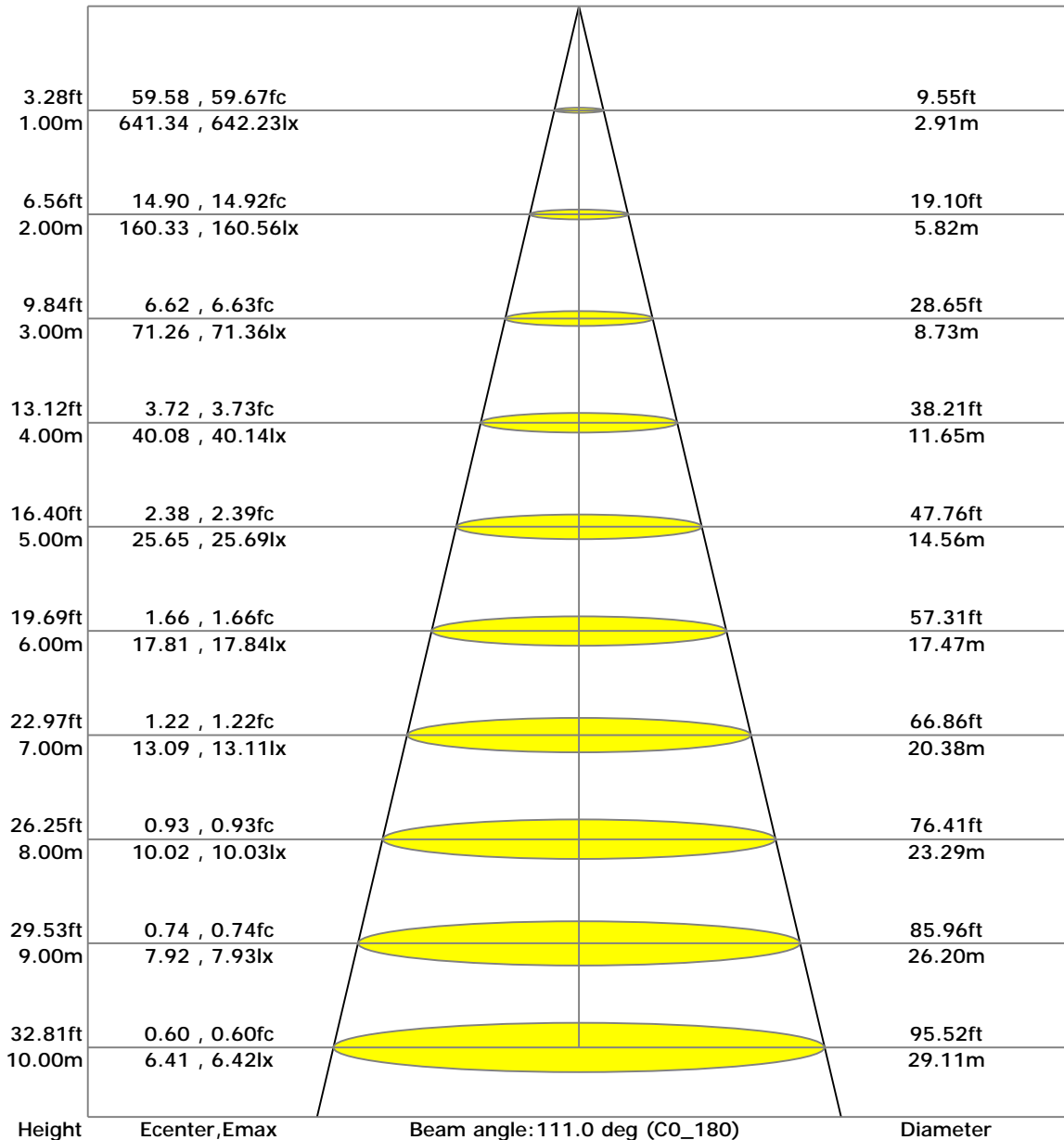
Test Distance: 6.38 m

Remarks:

Report No.:

Test Time: 2023/1/12 10:35:56

LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2023/1/12 10:35:56

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.38 m

Remarks:

Report No.:

Test Time: 2023/1/12 10:35:56

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	19.32	19.40	19.52	19.59	19.84	19.08	19.16	19.28	19.35	19.59
	3H	19.46	19.53	19.66	19.73	19.97	19.24	19.32	19.45	19.51	19.76
	4H	19.47	19.55	19.68	19.74	19.99	19.27	19.34	19.48	19.54	19.79
	6H	19.46	19.53	19.67	19.73	19.98	19.26	19.33	19.48	19.53	19.79
	8H	19.44	19.51	19.66	19.72	19.97	19.25	19.32	19.47	19.52	19.77
	12H	19.42	19.49	19.65	19.70	19.96	19.23	19.30	19.45	19.50	19.76
4H	2H	22.27	22.35	22.48	22.54	22.79	21.79	21.87	22.00	22.06	22.31
	3H	22.54	22.61	22.76	22.82	23.07	22.10	22.17	22.32	22.38	22.63
	4H	22.60	22.67	22.83	22.88	23.14	22.18	22.25	22.41	22.46	22.72
	6H	22.62	22.68	22.86	22.90	23.17	22.22	22.28	22.45	22.50	22.76
	8H	22.61	22.67	22.85	22.89	23.16	22.21	22.27	22.46	22.50	22.77
	12H	22.59	22.65	22.84	22.88	23.15	22.20	22.25	22.45	22.49	22.76
8H	4H	23.31	23.38	23.53	23.58	23.84	22.59	22.66	22.81	22.86	23.12
	6H	23.97	24.02	24.23	24.26	24.53	23.31	23.37	23.57	23.60	23.88
	8H	23.99	24.03	24.25	24.28	24.56	23.34	23.39	23.60	23.64	23.91
	12H	23.98	24.02	24.25	24.28	24.56	23.35	23.40	23.62	23.65	23.93
12H	4H	24.24	24.30	24.49	24.53	24.80	23.42	23.48	23.67	23.71	23.98
	6H	24.39	24.44	24.65	24.68	24.96	23.58	23.62	23.84	23.87	24.15

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2023/1/12 10:35:56

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.38 m

Remarks:

Report No.:

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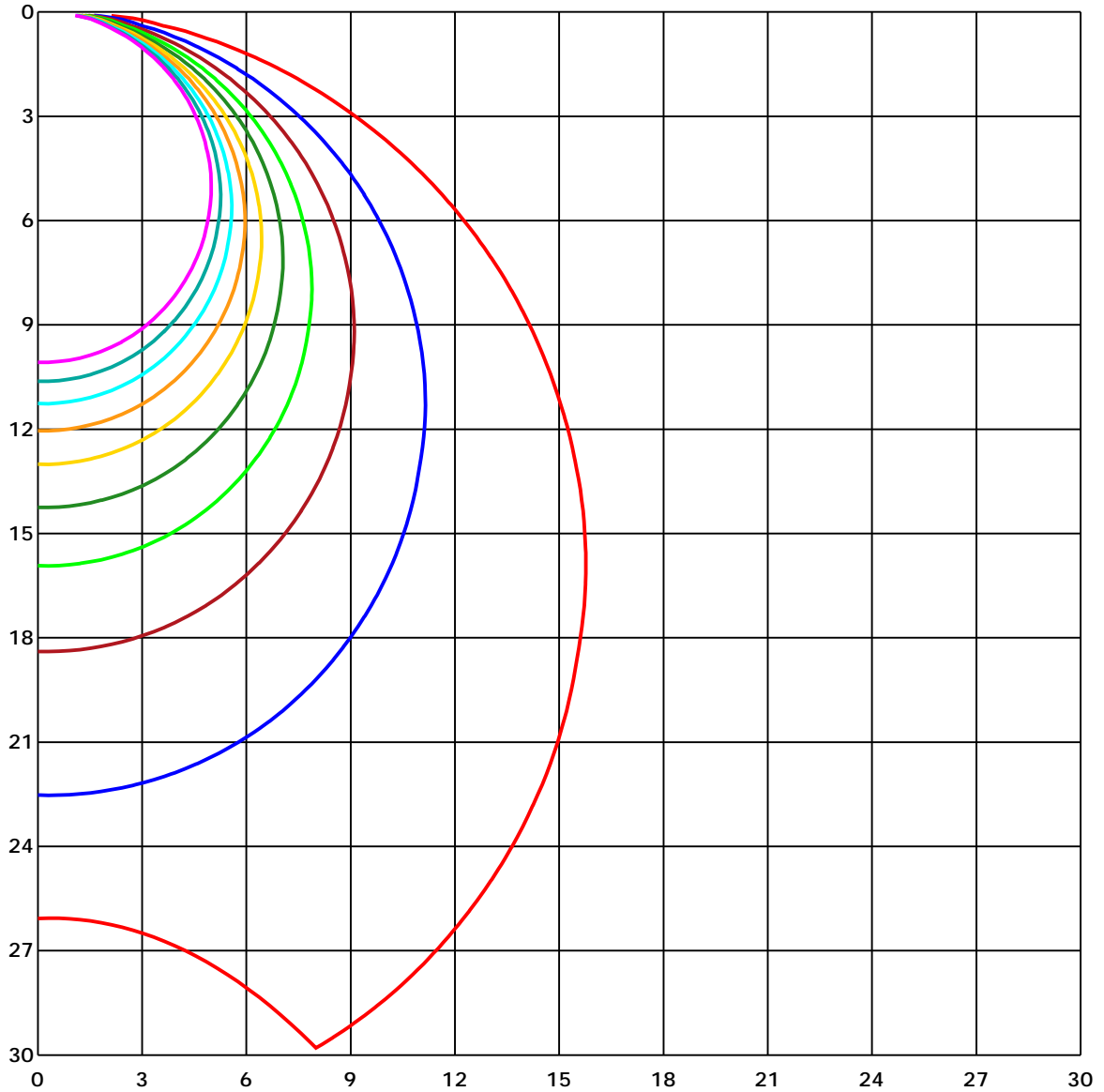
ZONAL LUMINOUS FLUX TABLE

Gamma [deg]	I _{mean} [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
0	629.89	0.00	0.00	0.00	0.00
5	627.91	15.02	15.02	0.83	0.83
10	619.98	44.52	59.54	2.46	3.29
15	606.33	72.40	131.94	4.00	7.29
20	587.12	97.70	229.64	5.40	12.69
25	562.81	119.56	349.20	6.61	19.30
30	533.49	137.24	486.44	7.59	26.89
35	499.92	150.15	636.59	8.30	35.19
40	462.36	158.00	794.59	8.73	43.92
45	422.22	160.75	955.34	8.89	52.81
50	378.31	158.19	1113.53	8.74	61.55
55	331.55	150.24	1263.77	8.30	69.85
60	283.74	137.73	1401.50	7.61	77.47
65	234.97	121.30	1522.80	6.70	84.17
70	185.95	101.56	1624.35	5.61	89.79
75	137.51	79.42	1703.77	4.39	94.17
80	91.20	56.12	1759.90	3.10	97.28
85	48.81	33.36	1793.26	1.84	99.12
90	22.78	15.90	1809.16	0.88	100.00

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SPACE ISOLX DIAGRAM



Unit of illumination: lx

- | | |
|---------|---------|
| — 6.321 | — 3.161 |
| — 5.689 | — 2.529 |
| — 5.057 | — 1.896 |
| — 4.425 | — 1.264 |
| — 3.793 | — 0.632 |

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2023/1/12 10:35:56

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.38 m

Remarks:

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Test Time: 2023/1/12 10:35:56

LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360
G0	641.34	620.01	625.79	632.42	641.34	620.01	625.79	632.42	641.34
G1	642.11	620.09	625.99	632.1	640.65	619.81	625.34	632.55	642.11
G2	642.23	619.85	625.63	631.57	639.34	619.32	624.77	632.3	642.23
G3	642.19	619.44	625.55	630.67	637.96	618.63	623.79	631.85	642.19
G4	641.95	618.71	625.02	629.62	636.29	617.69	622.86	631.16	641.95
G5	641.42	617.49	624.04	628.27	634.34	616.47	621.6	630.27	641.42
G6	640.73	616.22	623.14	626.64	632.14	615.04	620.17	629.05	640.73
G7	639.71	615.0	621.88	625.06	629.66	613.42	618.54	627.78	639.71
G8	638.49	613.37	620.17	622.82	627.01	611.54	616.71	626.16	638.49
G9	637.02	611.14	618.67	620.5	624.12	609.47	614.6	624.36	637.02
G10	635.31	608.98	616.71	618.01	620.99	607.07	612.32	622.29	635.31
G11	633.4	606.58	614.51	615.37	617.65	604.54	609.79	619.97	633.4
G12	631.2	603.89	611.99	612.4	614.07	601.65	607.02	617.49	631.2
G13	628.72	601.08	609.3	609.18	610.28	598.35	604.05	614.76	628.72
G14	626.07	597.99	606.58	605.76	606.29	595.3	600.88	611.75	626.07
G15	623.14	594.73	603.32	602.1	602.1	591.8	597.42	608.53	623.14
G16	619.93	591.23	599.98	598.27	597.7	588.06	593.71	605.07	619.93
G17	616.51	587.57	596.52	594.24	593.23	583.99	590.13	601.33	616.51
G18	612.76	583.74	592.78	589.81	588.38	580.08	585.74	597.46	612.76
G19	608.82	579.59	589.03	585.49	583.38	575.76	581.42	593.43	608.82
G20	604.54	575.32	584.68	580.81	578.21	571.29	576.74	589.28	604.54
G21	600.19	570.64	580.24	575.85	572.71	566.73	572.02	584.96	600.19
G22	595.46	565.91	575.6	570.68	567.09	562.21	567.01	580.49	595.46
G23	590.66	560.99	570.8	565.3	561.31	557.65	561.97	576.01	590.66
G24	585.53	555.37	565.71	559.52	555.25	553.01	556.67	571.45	585.53
G25	580.32	550.12	560.42	553.78	548.78	548.13	551.3	566.77	580.32
G26	574.95	544.22	554.84	547.39	542.26	542.92	545.68	561.72	574.95
G27	569.33	538.44	549.06	541.29	535.59	537.05	539.9	556.27	569.33
G28	563.72	532.21	543.12	534.69	528.67	531.15	534.12	550.49	563.72
G29	557.85	525.78	536.89	528.14	521.55	525.17	527.94	544.58	557.85
G30	551.79	519.35	530.58	521.1	514.3	518.98	521.91	538.64	551.79
G31	545.64	512.75	523.99	514.18	506.85	512.63	515.6	532.54	545.64
G32	539.01	505.92	517.23	506.93	499.32	506.32	509.01	526.27	539.01
G33	532.74	498.95	510.35	499.57	491.67	499.97	502.54	519.8	532.74
G34	526.02	491.87	503.43	492.16	484.02	492.97	495.7	513.16	526.02
G35	519.02	484.71	496.31	484.5	476.12	486.01	488.74	506.44	519.02
G36	511.86	477.3	488.98	476.69	468.06	478.93	481.66	499.4	511.86

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

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G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.38 m

Remarks:

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LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

GammaC	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	504.53	469.73	481.49	468.83	459.88	471.64	474.33	492.24	504.53	
G38	497.12	462.16	473.84	460.94	451.7	464.19	466.68	484.95	497.12	
G39	489.27	454.42	466.15	452.59	443.43	456.62	459.1	477.26	489.27	
G40	481.66	446.53	458.21	444.37	434.97	448.52	451.33	469.48	481.66	
G41	474.49	438.63	450.48	435.98	426.66	440.38	444.17	461.34	474.49	
G42	467.41	430.86	442.5	427.64	418.2	432.28	437.25	453.24	467.41	
G43	460.12	422.43	434.28	419.05	409.32	423.81	430.0	444.7	460.12	
G44	452.51	414.0	426.09	410.3	400.57	415.43	422.39	436.43	452.51	
G45	444.57	405.82	417.51	401.43	391.62	406.8	414.29	427.88	444.57	
G46	436.31	397.03	408.88	392.47	382.62	398.09	406.39	418.89	436.31	
G47	427.88	388.24	400.25	383.39	373.5	389.42	397.97	410.34	427.88	
G48	419.3	379.61	391.25	373.95	364.18	380.5	389.3	401.47	419.3	
G49	410.3	370.21	382.05	364.51	354.74	371.63	380.59	392.47	410.3	
G50	401.26	360.89	372.81	354.66	345.09	362.64	371.75	383.52	401.26	
G51	392.19	351.85	363.65	345.21	335.32	353.8	362.72	374.48	392.19	
G52	382.99	342.36	354.09	335.28	325.68	344.77	353.8	365.44	382.99	
G53	373.75	332.92	344.56	325.55	315.83	335.61	344.6	356.16	373.75	
G54	364.3	323.32	334.83	315.58	305.81	326.37	335.4	346.8	364.3	
G55	354.98	313.67	325.35	305.61	296.08	317.17	326.25	337.6	354.98	
G56	345.7	304.22	315.62	295.68	286.03	307.81	316.8	328.16	345.7	
G57	336.3	294.62	305.85	285.54	276.14	298.65	307.68	318.72	336.3	
G58	326.49	285.09	296.25	275.81	266.49	289.33	298.36	309.31	326.49	
G59	317.05	275.57	286.48	265.88	256.64	279.8	288.84	299.67	317.05	
G60	307.24	265.76	276.75	255.83	246.67	270.6	279.6	290.26	307.24	
G61	297.47	256.11	266.9	245.69	236.7	261.04	269.99	280.49	297.47	
G62	287.5	246.55	257.05	235.88	227.05	251.59	260.3	270.73	287.5	
G63	277.52	236.86	247.48	226.03	217.32	241.82	250.58	260.83	277.52	
G64	267.31	227.13	237.75	216.1	207.59	232.14	240.69	251.02	267.31	
G65	257.13	217.93	228.07	206.53	197.95	222.12	230.83	240.97	257.13	
G66	246.91	208.28	218.5	196.6	188.5	212.52	221.19	230.83	246.91	
G67	236.61	198.76	208.73	187.16	178.81	202.75	211.13	220.9	236.61	
G68	226.52	189.23	199.09	177.23	169.25	193.1	201.36	210.69	226.52	
G69	216.14	179.59	189.23	167.34	159.64	183.45	191.43	200.75	216.14	
G70	205.92	169.78	179.43	157.61	150.16	173.52	181.62	190.54	205.92	
G71	195.95	160.66	169.7	148.33	140.63	164.28	172.06	180.93	195.95	
G72	185.73	150.81	159.97	138.44	131.15	154.88	162.33	171.16	185.73	
G73	175.88	141.61	150.12	128.54	121.5	145.48	152.68	161.31	175.88	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2023/1/12 10:35:56

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.38 m

Remarks:

Report No.:

Test Time: 2023/1/12 10:35:56

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G74	165.91	131.39	140.27	119.02	112.1	136.36	143.04	152.03	165.91	
G75	156.22	122.56	130.54	109.41	102.7	127.2	133.55	142.47	156.22	
G76	146.58	112.91	120.85	100.46	93.5	118.08	124.19	133.02	146.58	
G77	136.89	103.63	111.29	91.02	84.38	109.41	114.66	123.9	136.89	
G78	127.36	95.09	101.76	81.94	75.34	100.34	105.59	114.62	127.36	
G79	117.88	85.36	92.4	73.63	66.47	91.79	96.35	105.75	117.88	
G80	108.76	76.52	83.0	64.52	57.68	83.36	87.43	96.96	108.76	
G81	99.44	69.52	74.08	56.66	49.01	74.94	78.32	88.17	99.44	
G82	90.73	62.07	65.33	49.86	40.87	66.8	69.85	79.7	90.73	
G83	81.33	52.31	56.66	41.44	32.69	58.78	60.49	71.4	81.33	
G84	72.78	44.04	47.87	33.83	25.6	51.0	52.22	63.13	72.78	
G85	64.03	37.53	39.73	28.66	22.14	43.59	43.68	55.15	64.03	
G86	54.99	32.93	31.46	25.48	20.03	36.47	34.8	47.58	54.99	
G87	46.73	29.63	24.87	23.12	18.11	30.32	27.43	39.85	46.73	
G88	39.12	27.03	22.47	21.0	16.53	26.42	22.06	33.09	39.12	
G89	31.63	24.38	20.31	19.29	15.22	23.53	20.23	27.68	31.63	
G90	26.47	22.26	0.0	17.65	14.07	23.53	18.86	27.68	26.47	