

Report No.:

Test Time: 2024/8/9 15:26:51

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer:
Luminaire Type: L-D332-9-30K-24-WH
Lamp Type:
Luminous Width: 70 mm
Luminous Length: 90 mm
Luminous Height: 30 mm

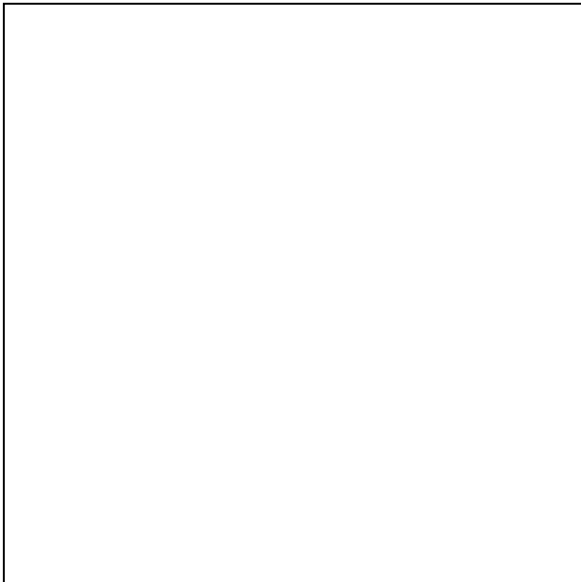
Voltage(V): 221.49 V
Current(A): 0.1066 A
Power(W): 21.16 W
Power Factor: 0.8959
Lamp Luminous Flux: 1655.06

Photometric Results

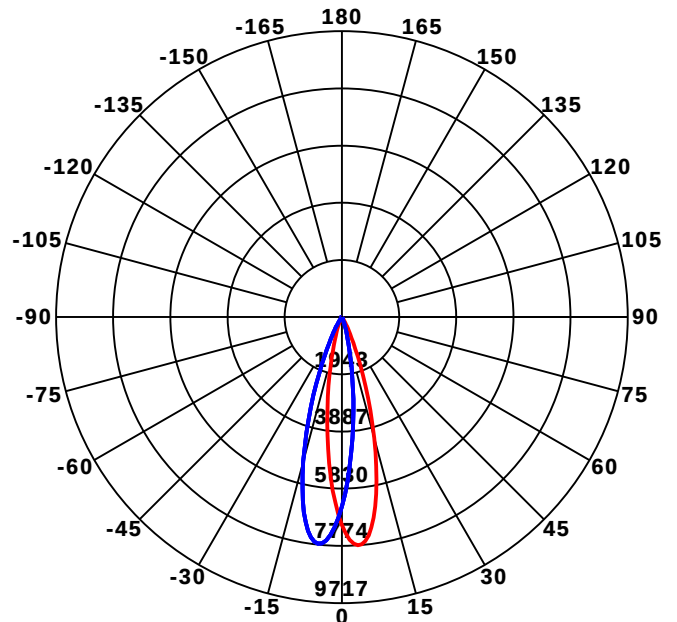
CIE Class: Direct
Luminaire Luminous Flux: 1655.064 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 78.22 lm/W
Beam Angle(50%) C0-180,C90-270: 23.1,23.5
Field Angle(10%) C0-180,C90-270: 42.3,42.2
S/MH C0-180,C90-270: 0.462,0.462

Max. Intensity: 7773.77 cd
Max.Intensity Angle: C=0 Gamma=4
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 7064.25 cd
Effective Luminous Flux: 1494.49 lm
ERP(ϕ use)(120deg): 1655.06 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 23.1 deg,23.5 deg

C0-180 — C90-270 —

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

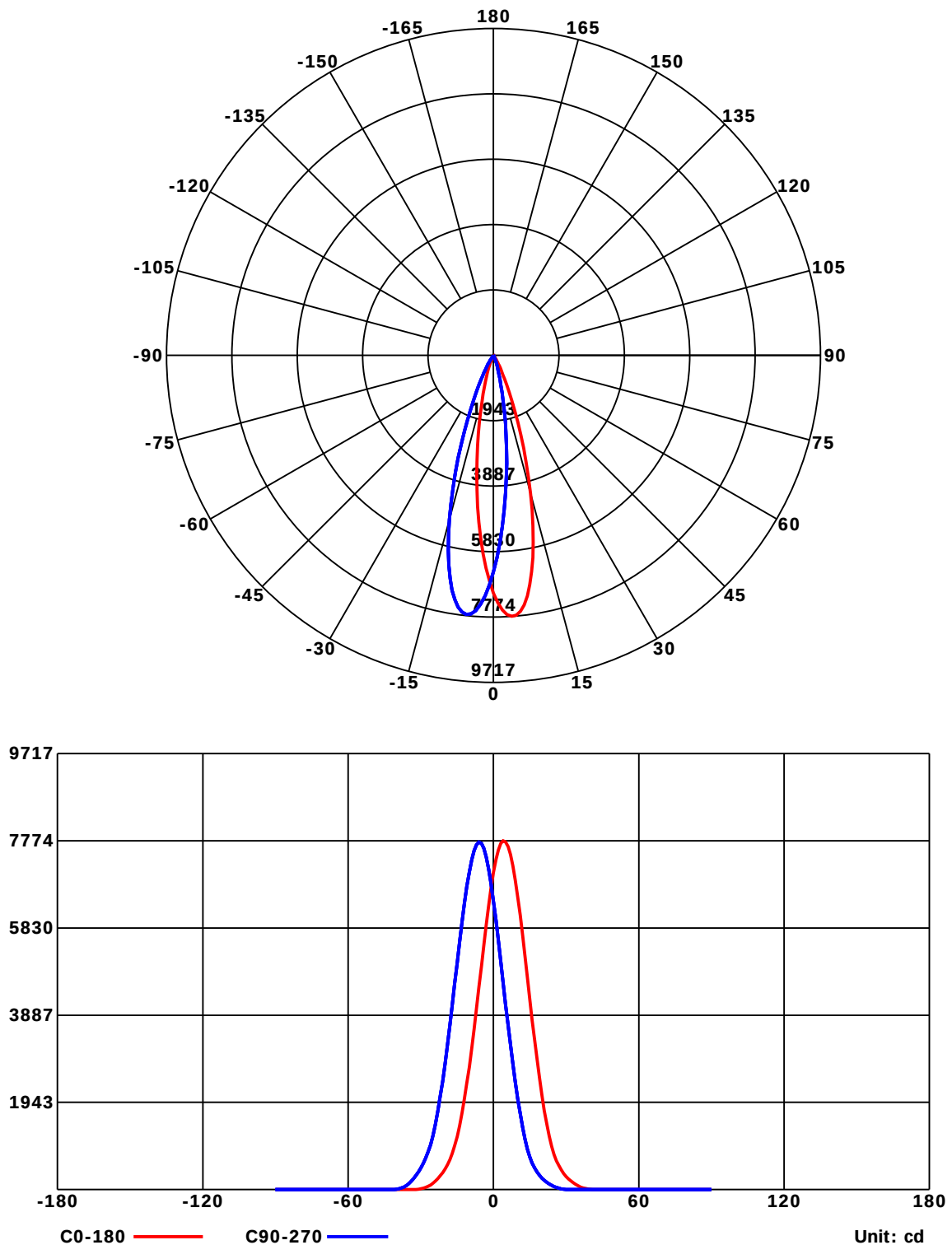
Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks:

Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

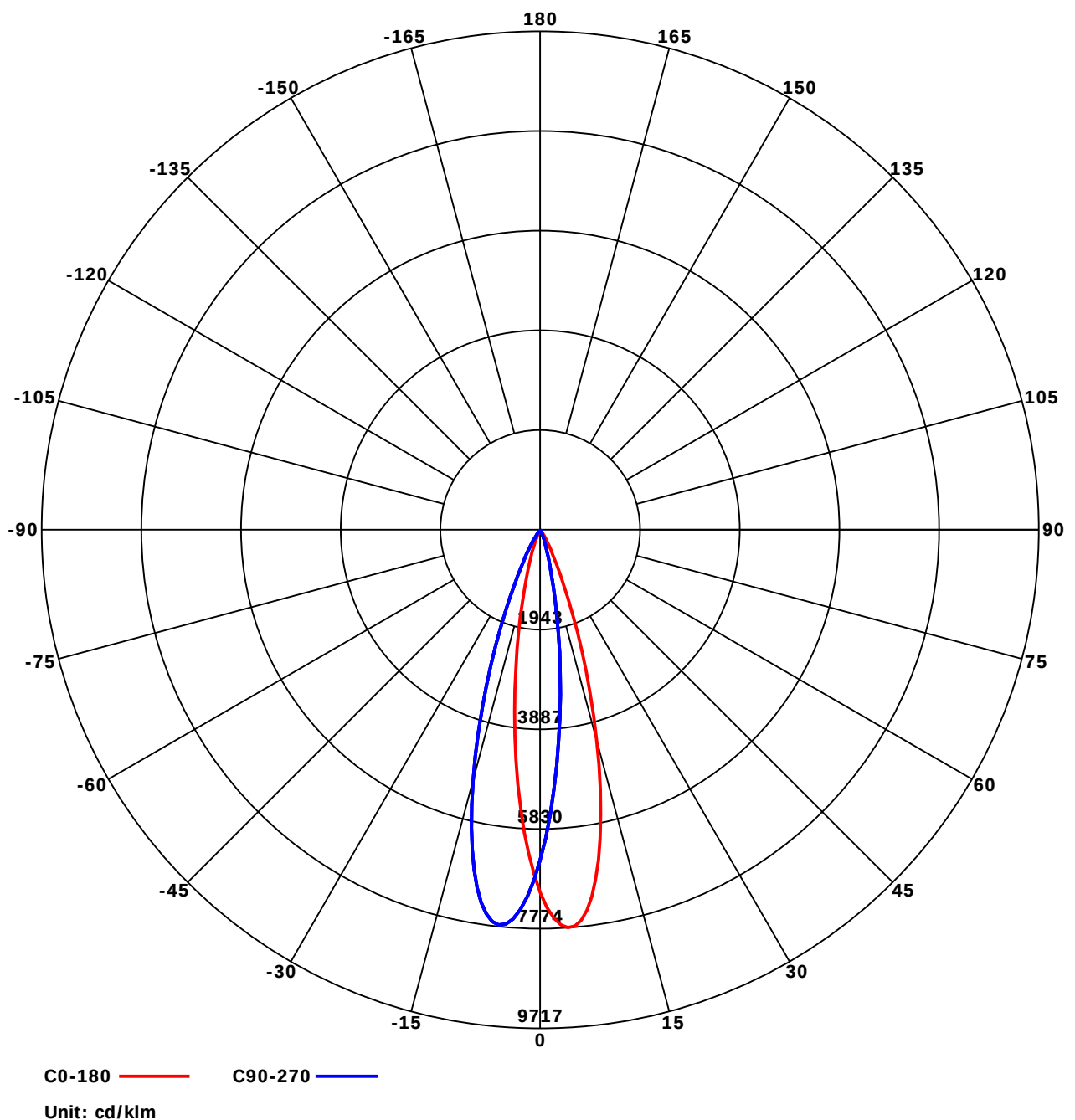
Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks:

Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

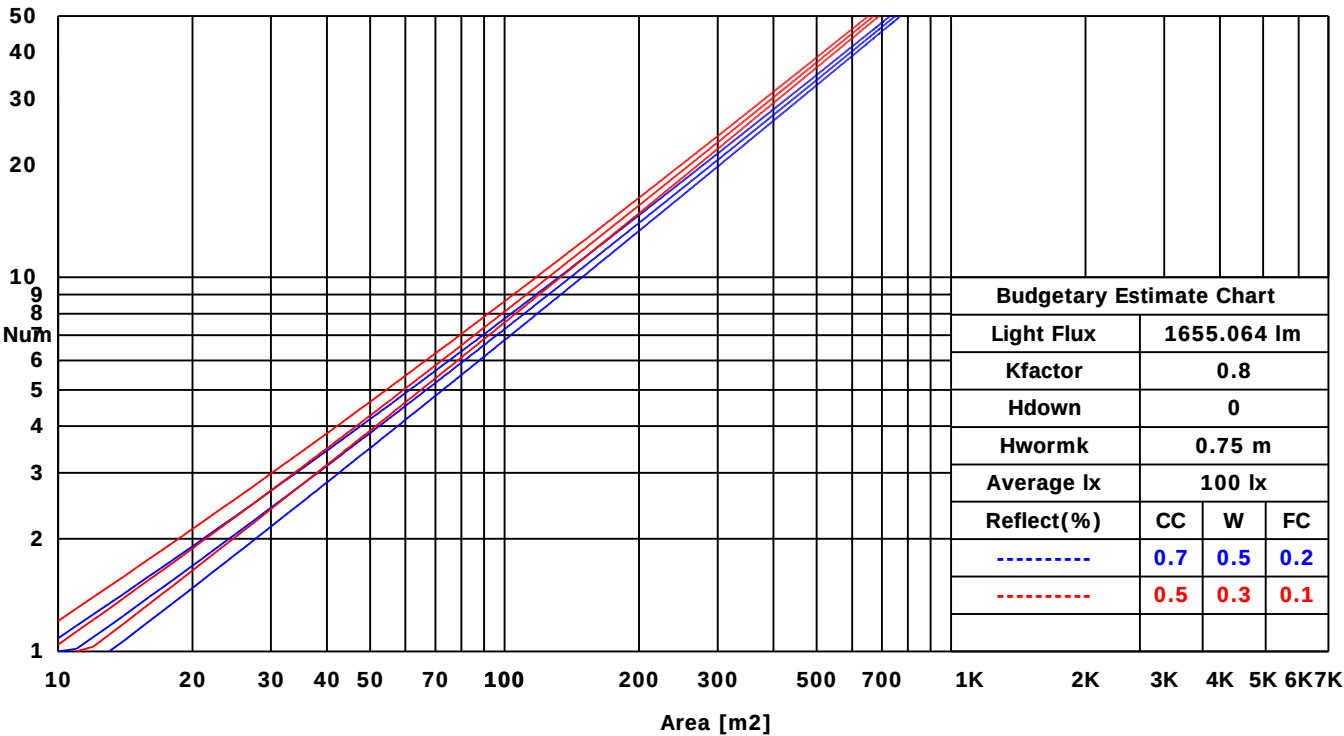
Test Distance: 7.91 m

Remarks:

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	COEFFCIENTS 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	1.17	1.17	1.16	1.15	1.14	1.14	1.11	1.10	1.09	1.05	1.04	1.03	0.97	0.97	0.96	0.91
2	1.13	1.12	1.12	1.11	1.10	1.09	1.07	1.06	1.05	1.02	1.00	0.99	0.95	0.94	0.92	0.87
3	1.09	1.08	1.08	1.07	1.06	1.05	1.03	1.02	1.00	0.99	0.97	0.95	0.93	0.91	0.89	0.85
4	1.06	1.05	1.04	1.04	1.03	1.02	1.00	0.98	0.97	0.96	0.93	0.92	0.91	0.88	0.86	0.82
5	1.02	1.01	1.01	1.01	0.99	0.98	0.97	0.95	0.94	0.93	0.90	0.89	0.88	0.85	0.83	0.79
6	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.92	0.90	0.90	0.88	0.86	0.86	0.83	0.81	0.77
7	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.89	0.88	0.88	0.85	0.83	0.84	0.80	0.78	0.74
8	0.93	0.92	0.92	0.92	0.90	0.89	0.88	0.86	0.85	0.85	0.82	0.80	0.81	0.78	0.76	0.72
9	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.84	0.82	0.83	0.80	0.78	0.79	0.76	0.74	0.70
10	0.88	0.87	0.87	0.87	0.85	0.84	0.84	0.82	0.80	0.81	0.78	0.76	0.77	0.74	0.71	0.68

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

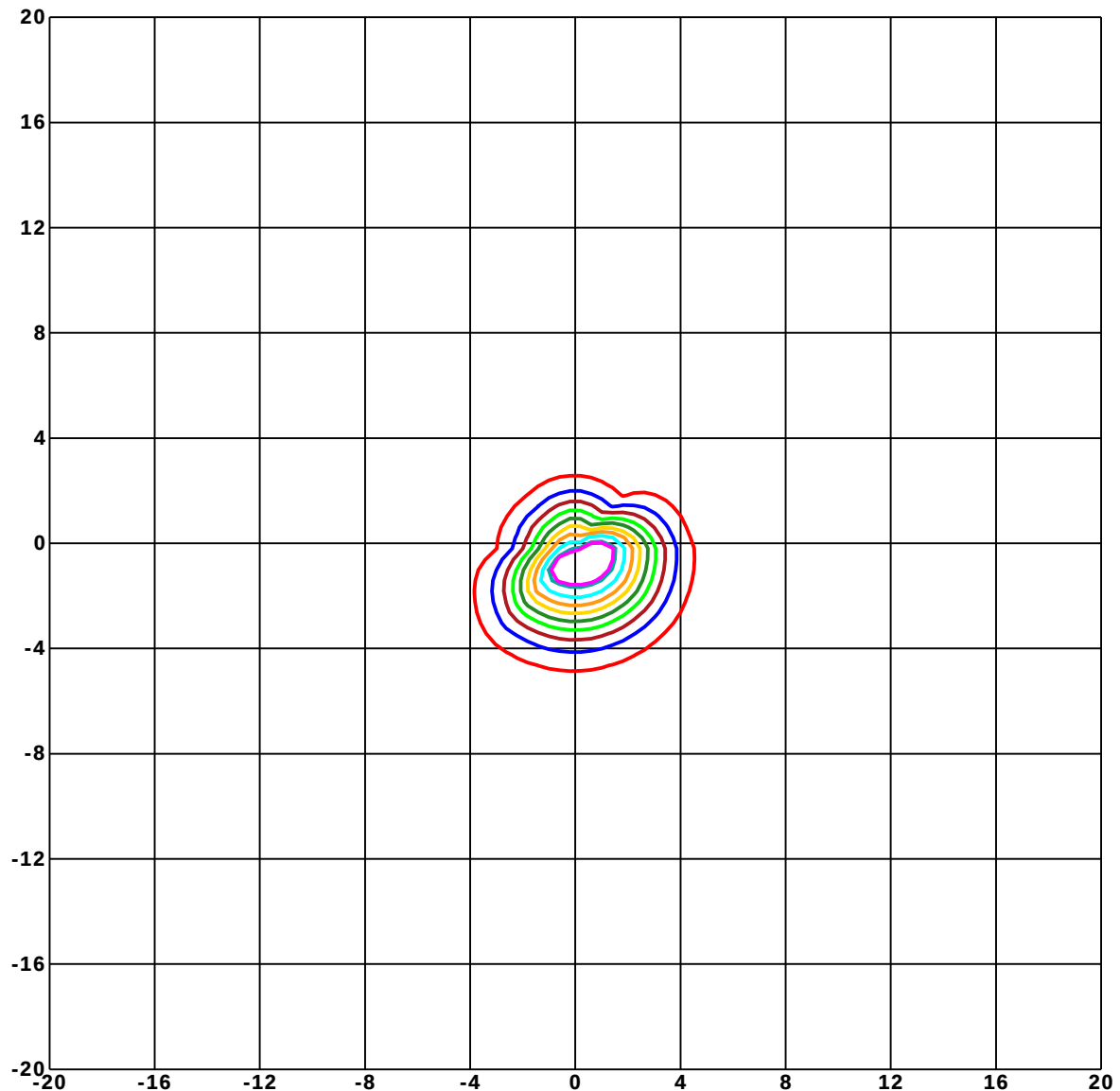
Test Distance: 7.91 m

Remarks:

Report No.:

Test Time: 2024/8/9 15:26:51

ISOLX DIAGRAM



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

70.997(92%Emax)

38.586(50%Emax)

69.454(90%Emax)

30.868(40%Emax)

61.737(80%Emax)

23.151(30%Emax)

54.02(70%Emax)

15.434(20%Emax)

46.303(60%Emax)

7.717(10%Emax)

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

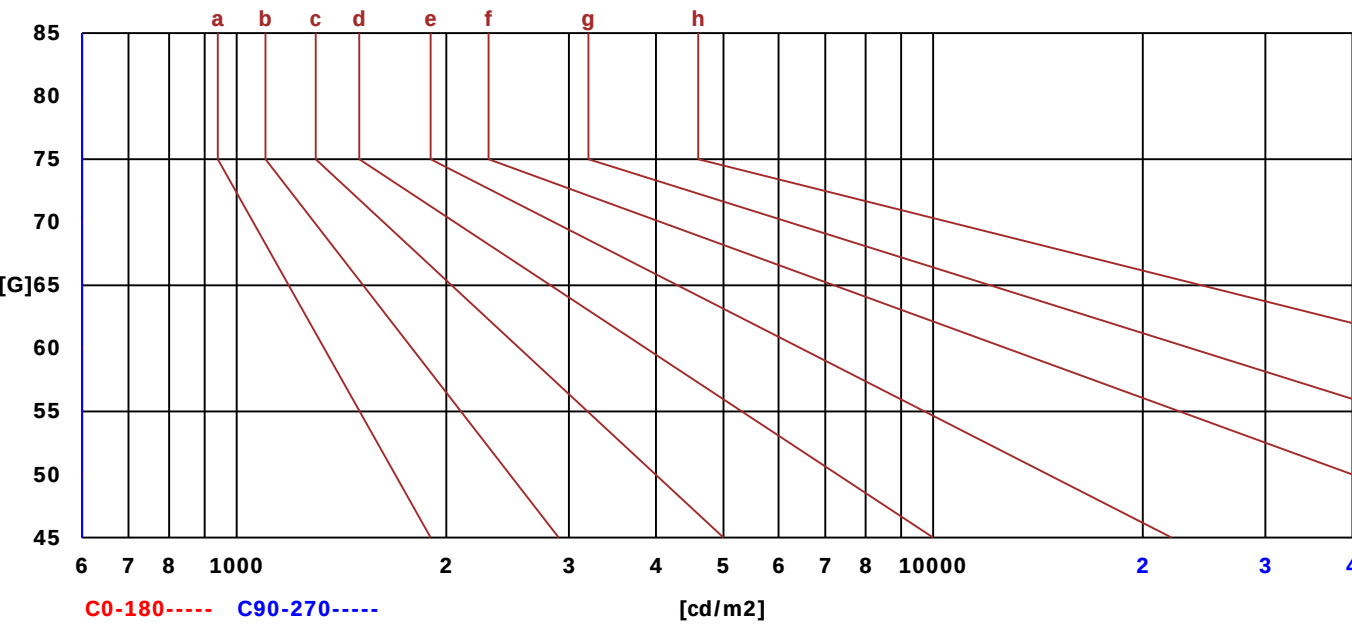
Humidity:

Test Distance: 7.91 m

Remarks:

BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	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: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

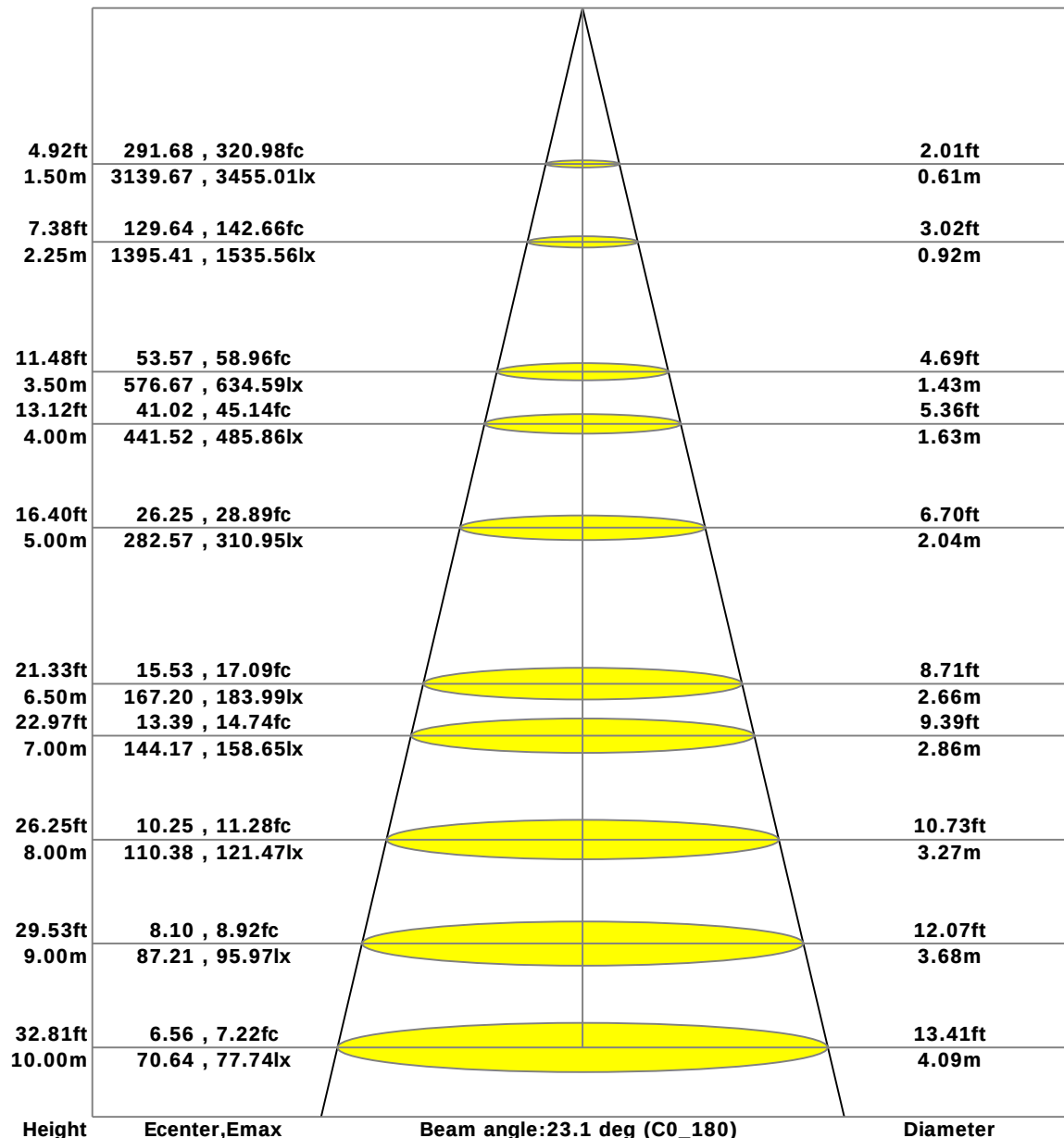
Test Distance: 7.91 m

Remarks:

Report No.:

Test Time: 2024/8/9 15:26:51

LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks:

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	3.56	3.72	3.93	4.20	4.78	3.30	3.45	3.67	3.93	4.51
	3H	3.43	3.57	3.80	4.05	4.63	3.16	3.31	3.54	3.79	4.37
	4H	3.36	3.50	3.73	3.98	4.56	3.09	3.23	3.47	3.71	4.30
	6H	3.28	3.42	3.67	3.90	4.49	3.02	3.16	3.40	3.63	4.22
	8H	3.25	3.38	3.63	3.86	4.45	2.98	3.12	3.37	3.59	4.18
	12H	3.21	3.34	3.60	3.82	4.41	2.94	3.08	3.33	3.55	4.14
4H	2H	3.36	3.50	3.73	3.98	4.56	3.09	3.23	3.47	3.71	4.30
	3H	3.21	3.34	3.60	3.82	4.41	2.94	3.08	3.33	3.55	4.14
	4H	3.13	3.26	3.53	3.73	4.33	2.87	2.99	3.26	3.46	4.06
	6H	3.06	3.17	3.46	3.64	4.25	2.79	2.91	3.19	3.37	3.98
	8H	3.02	3.13	3.42	3.59	4.20	2.75	2.86	3.15	3.33	3.94
	12H	2.98	3.08	3.38	3.54	4.16	2.71	2.82	3.11	3.28	3.89
8H	4H	3.25	3.38	3.63	3.86	4.45	2.98	3.12	3.37	3.59	4.18
	6H	2.93	3.04	3.34	3.49	4.11	2.67	2.77	3.08	3.23	3.84
	8H	2.89	2.99	3.31	3.44	4.06	2.63	2.72	3.04	3.17	3.80
	12H	2.85	2.93	3.27	3.38	4.01	2.58	2.67	3.00	3.12	3.75
12H	4H	2.98	3.08	3.38	3.54	4.16	2.71	2.82	3.11	3.28	3.89
	6H	2.89	2.99	3.31	3.44	4.06	2.63	2.72	3.04	3.17	3.80

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks:

ZONAL LUMINOUS FLUX TABLE-1

[illegible]

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks:

ZONAL LUMINOUS FLUX TABLE-2

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	φ zonal	φ total	%lum	%lamp
10	6532.0	1946.8	2032.3	2026.8	2731.5	7022.5	7081.6	7133.9	10	525.8	525.8	31.8	31.8
20	2111.5	279.9	256.3	270.7	459.1	2871.4	2812.2	2804.5	20	778.9	1304.6	78.8	78.8
30	292.2	4.6	0.0	0.0	18.3	528.8	484.3	453.1	30	301.7	1606.4	97.1	97.1
40	7.2	0.0	0.0	0.0	0.0	19.9	9.1	12.5	40	48.3	1654.6	100.0	100.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50	0.4	1655.1	100.0	100.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60	0.0	1655.1	100.0	100.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70	0.0	1655.1	100.0	100.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80	0.0	1655.1	100.0	100.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90	0.0	1655.1	100.0	100.0

Conical surface Flux(90deg) : 1655.1 lm

%lum = 100.0%

%lamp = 100.0%

Conical surface Flux(120deg) : 1655.1 lm

%lum = 100.0%

%lamp = 100.0%

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

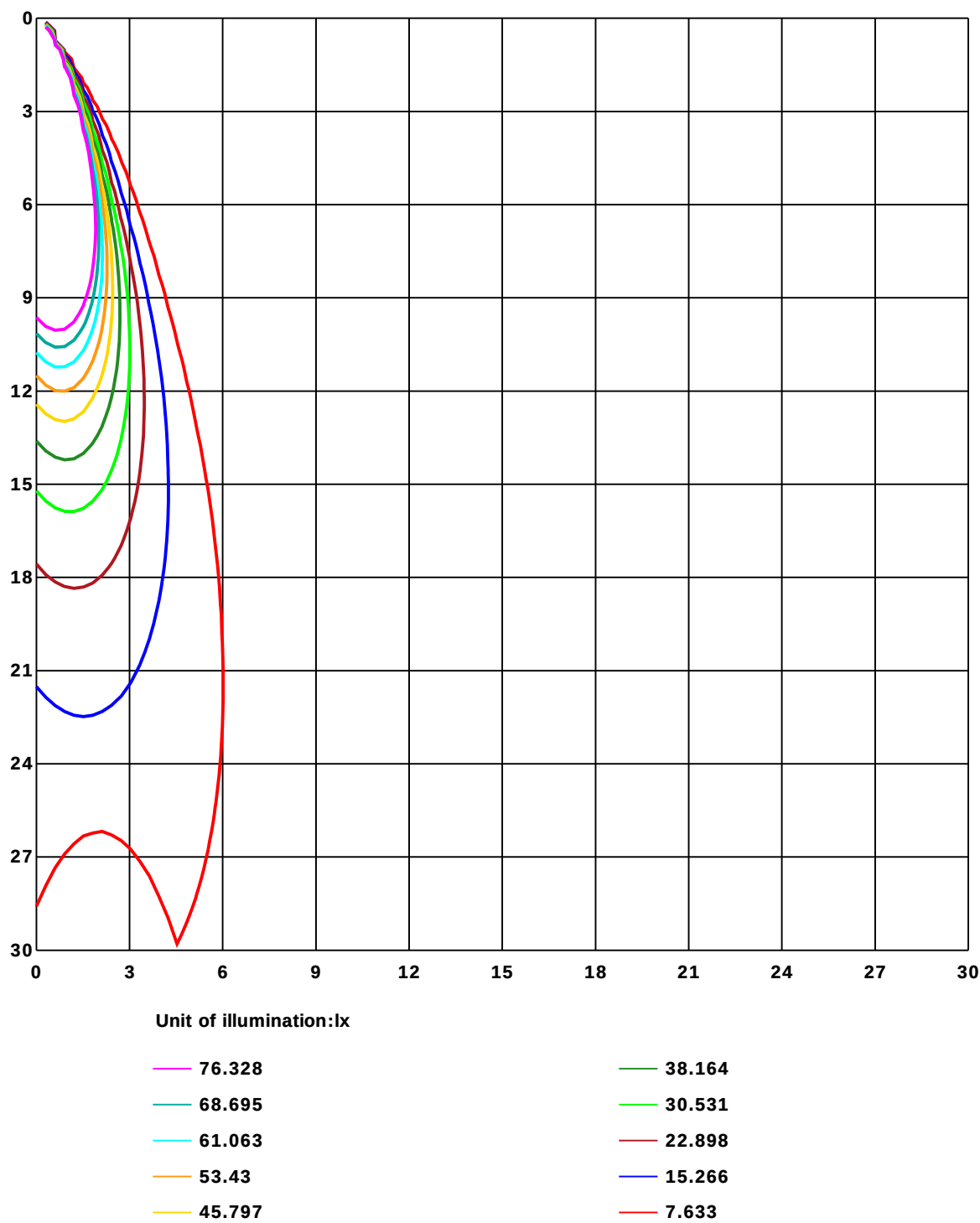
Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks:

SPACE ISOLX DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

GammaC	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	7064.25	6255.68	6434.0	6395.52	7064.25	6255.68	6434.0	6395.52	7064.25	
G1	7355.38	5836.79	6007.35	5959.24	6716.69	6632.34	6819.55	6782.51	7355.38	
G2	7570.93	5386.11	5554.17	5497.42	6322.32	6962.77	7145.53	7123.25	7570.93	
G3	7713.27	4926.24	5087.48	5024.09	5904.43	7239.07	7411.0	7404.43	7713.27	
G4	7773.77	4465.24	4607.27	4553.96	5451.31	7440.41	7605.28	7608.03	7773.77	
G5	7749.44	3998.23	4129.06	4078.5	4983.49	7568.17	7714.9	7731.6	7749.44	
G6	7647.64	3537.1	3662.8	3610.05	4508.03	7614.04	7742.93	7771.33	7647.64	
G7	7469.51	3115.2	3233.14	3183.65	4043.09	7580.94	7687.49	7728.35	7469.51	
G8	7216.6	2705.13	2804.93	2773.89	3578.21	7463.44	7555.54	7603.59	7216.6	
G9	6898.7	2314.71	2404.74	2386.66	3152.24	7277.42	7351.75	7404.93	6898.7	
G10	6531.98	1946.81	2032.27	2026.77	2731.54	7022.46	7081.65	7133.89	6531.98	
G11	6119.85	1612.32	1694.16	1701.35	2366.83	6707.68	6752.47	6797.9	6119.85	
G12	5673.05	1320.69	1387.51	1414.23	2019.89	6349.1	6374.88	6413.54	5673.05	
G13	5201.1	1067.98	1123.1	1158.32	1702.42	5959.24	5958.3	5994.59	5201.1	
G14	4730.65	858.0	902.73	938.4	1422.05	5537.84	5523.14	5546.73	4730.65	
G15	4249.56	697.2	730.29	762.02	1184.73	5086.54	5061.82	5073.33	4249.56	
G16	3773.55	574.88	589.2	620.86	978.38	4629.1	4590.81	4595.19	3773.55	
G17	3312.61	475.96	477.46	505.86	809.07	4169.04	4115.85	4126.43	3312.61	
G18	2897.28	397.37	387.36	410.51	668.29	3716.42	3658.86	3661.86	2897.28	
G19	2491.59	333.86	317.47	334.49	556.54	3272.06	3231.27	3225.51	2491.59	
G20	2111.49	279.93	256.28	270.73	459.12	2871.38	2812.25	2804.49	2111.49	
G21	1760.73	230.94	206.54	213.23	376.85	2489.96	2420.7	2419.13	1760.73	
G22	1454.58	188.2	162.93	162.55	306.21	2136.2	2067.44	2057.74	1454.58	
G23	1186.48	148.72	127.08	122.51	243.89	1809.91	1741.46	1724.38	1186.48	
G24	963.67	115.06	95.29	89.1	191.4	1525.1	1451.52	1431.31	963.67	
G25	782.35	84.78	67.82	59.19	143.16	1281.77	1206.31	1183.54	782.35	
G26	642.07	59.19	46.24	37.6	103.3	1073.54	1000.78	972.0	642.07	
G27	528.01	39.36	28.03	20.65	72.45	896.35	835.85	799.24	528.01	
G28	434.41	24.21	15.2	9.2	48.43	751.57	699.89	658.9	434.41	
G29	356.01	13.26	6.26	1.69	30.97	633.06	584.39	548.03	356.01	
G30	292.19	4.63	0.0	0.0	18.27	528.83	484.34	453.12	292.19	
G31	235.13	0.0	0.0	0.0	9.32	436.66	393.55	370.34	235.13	
G32	189.08	0.0	0.0	0.0	2.13	357.76	315.16	300.7	189.08	
G33	145.85	0.0	0.0	0.0	0.0	287.88	243.01	237.38	145.85	
G34	111.68	0.0	0.0	0.0	0.0	223.74	184.39	184.58	111.68	
G35	82.46	0.0	0.0	0.0	0.0	163.24	130.45	135.65	82.46	
G36	56.25	0.0	0.0	0.0	0.0	117.25	89.47	96.92	56.25	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks:

Report No.:

Test Time: 2024/8/9 15:26:51

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	37.79	0.0	0.0	0.0	0.0	79.21	56.69	66.38	37.79	
G38	24.28	0.0	0.0	0.0	0.0	50.93	34.29	42.36	24.28	
G39	14.64	0.0	0.0	0.0	0.0	32.47	19.52	24.28	14.64	
G40	7.2	0.0	0.0	0.0	0.0	19.9	9.13	12.51	7.2	
G41	0.88	0.0	0.0	0.0	0.0	11.32	1.75	4.25	0.88	
G42	0.0	0.0	0.0	0.0	0.0	4.44	0.0	0.0	0.0	
G43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/9 15:26:51

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks: