

Report No.:

Test Time: 2024/8/23 15:52:24

LUMINAIRE PHOTOMETRIC TEST REPORT

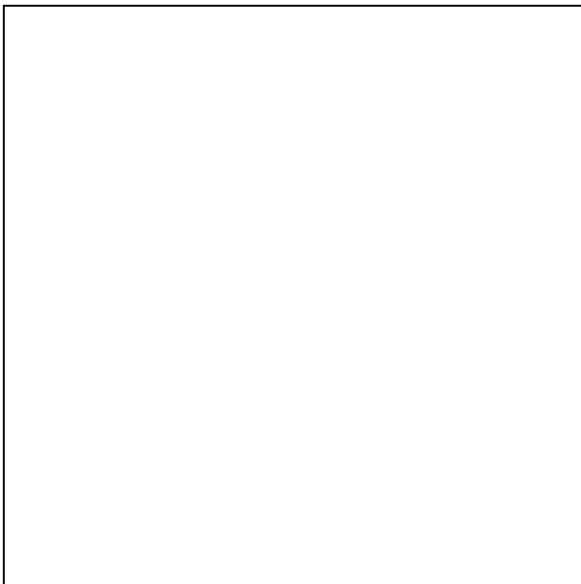
Luminaire Property

Manufacturer: Zhongshan Unite Lighting Co.,Limited	Voltage(V): 221.39 V
Luminaire Type: U-D625-COB4-3000K-50°	Current(A): 0.0745 A
Lamp Type:	Power(W): 15.78 W
Luminous Width: 70 mm	Power Factor: 0.9571
Luminous Length: 90 mm	Lamp Luminous Flux: 1216.82
Luminous Height: 30 mm	

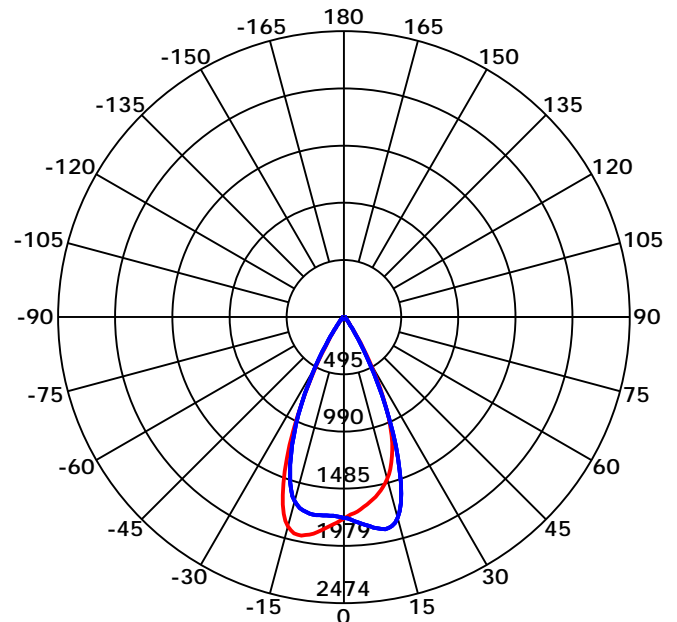
Photometric Results

CIE Class: Direct	Max. Intensity: 1979.40 cd
Luminaire Luminous Flux: 1216.819 lm	Max.Intensity Angle: C=135 Gamma=12
Downward Ratio: 100.00%	Upward Ratio: 0.00%
Luminaire Efficacy Rating(LER): 77.11 lm/W	Efficacy: 100.00%
Beam Angle(50%) C0-180,C90-270: 48.9,49.2	Center Intensity: 1745.15 cd
Field Angle(10%) C0-180,C90-270: 68.9,69.3	Effective Luminous Flux: 1121.07 lm
S/MH C0-180,C90-270: 0.849,0.849	ERP(φuse)(120deg): 1212.96 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 48.9 deg,49.2 deg

C0-180 ——— C90-270 ———

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/23 15:52:24

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

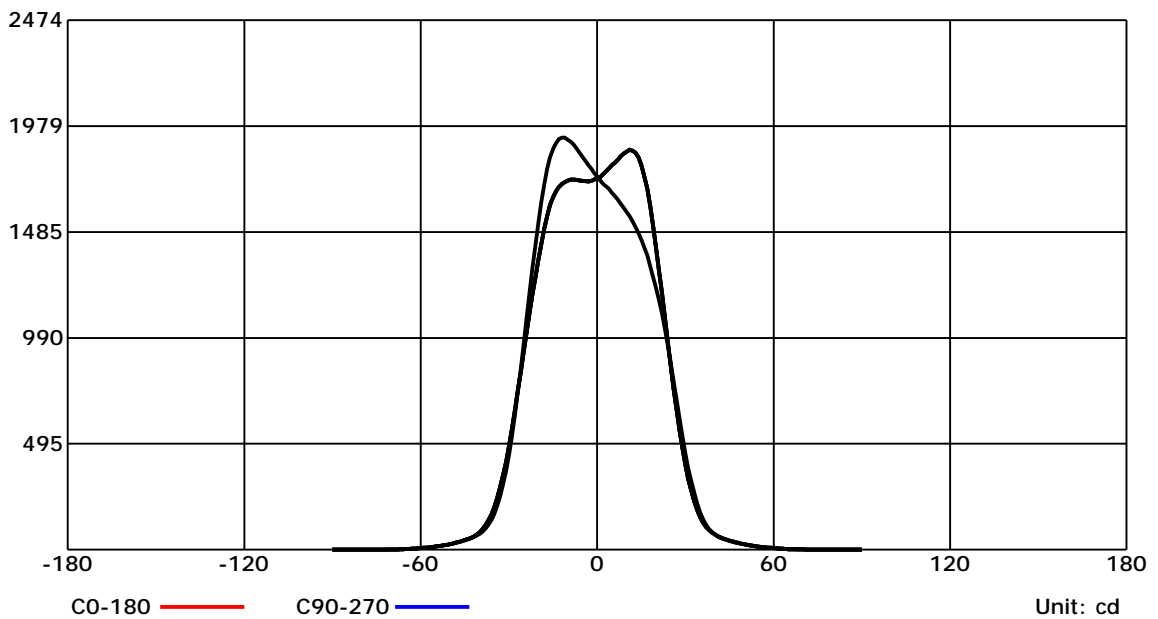
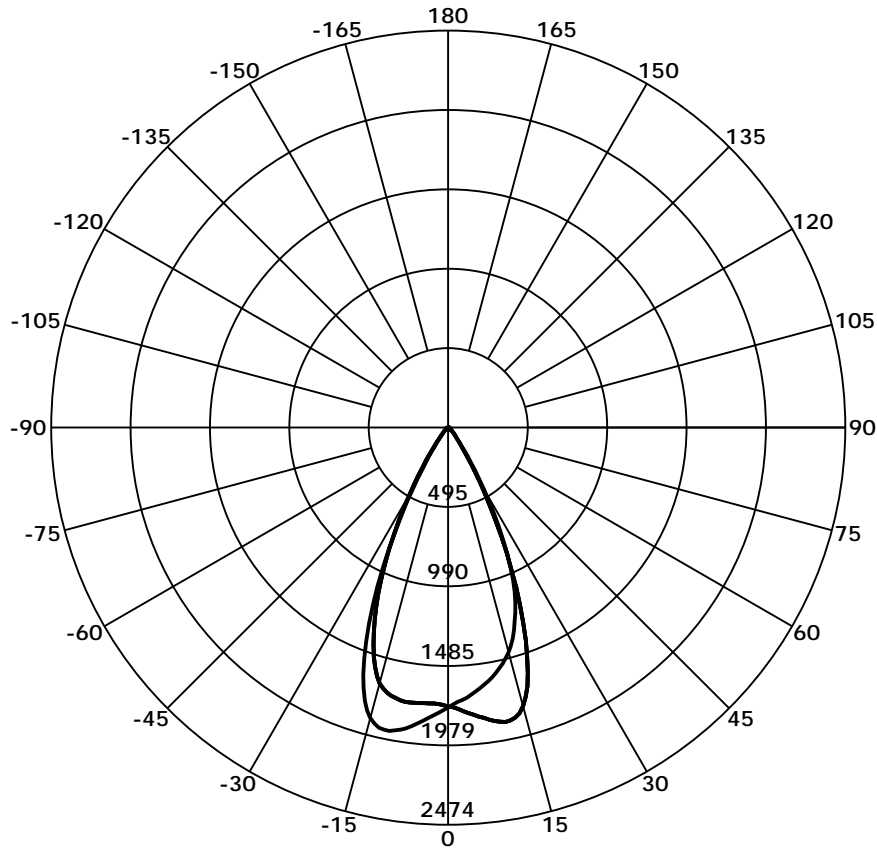
Humidity:

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: 2024/8/23 15:52:24

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

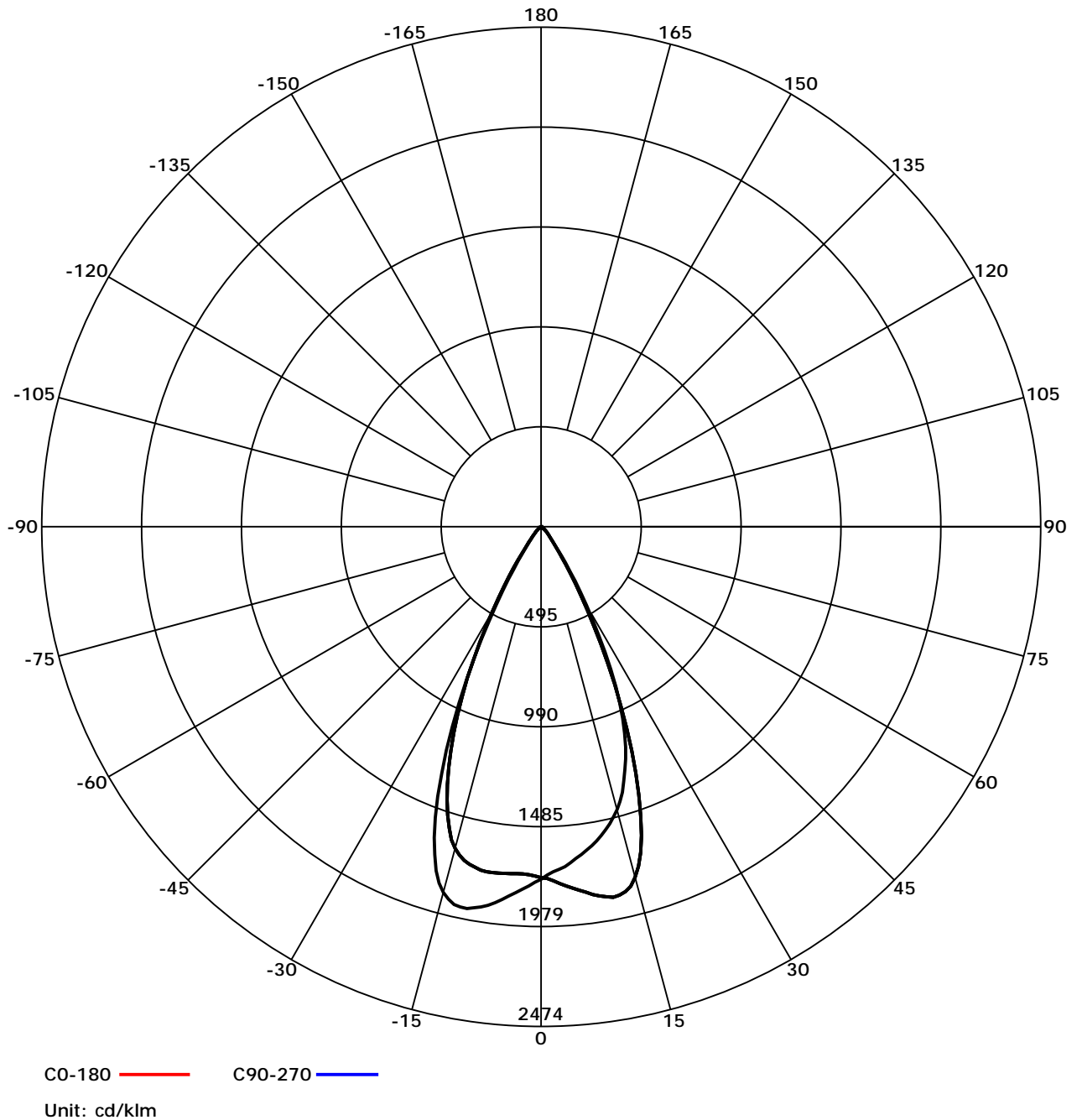
Test Distance: 7.91 m

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Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg
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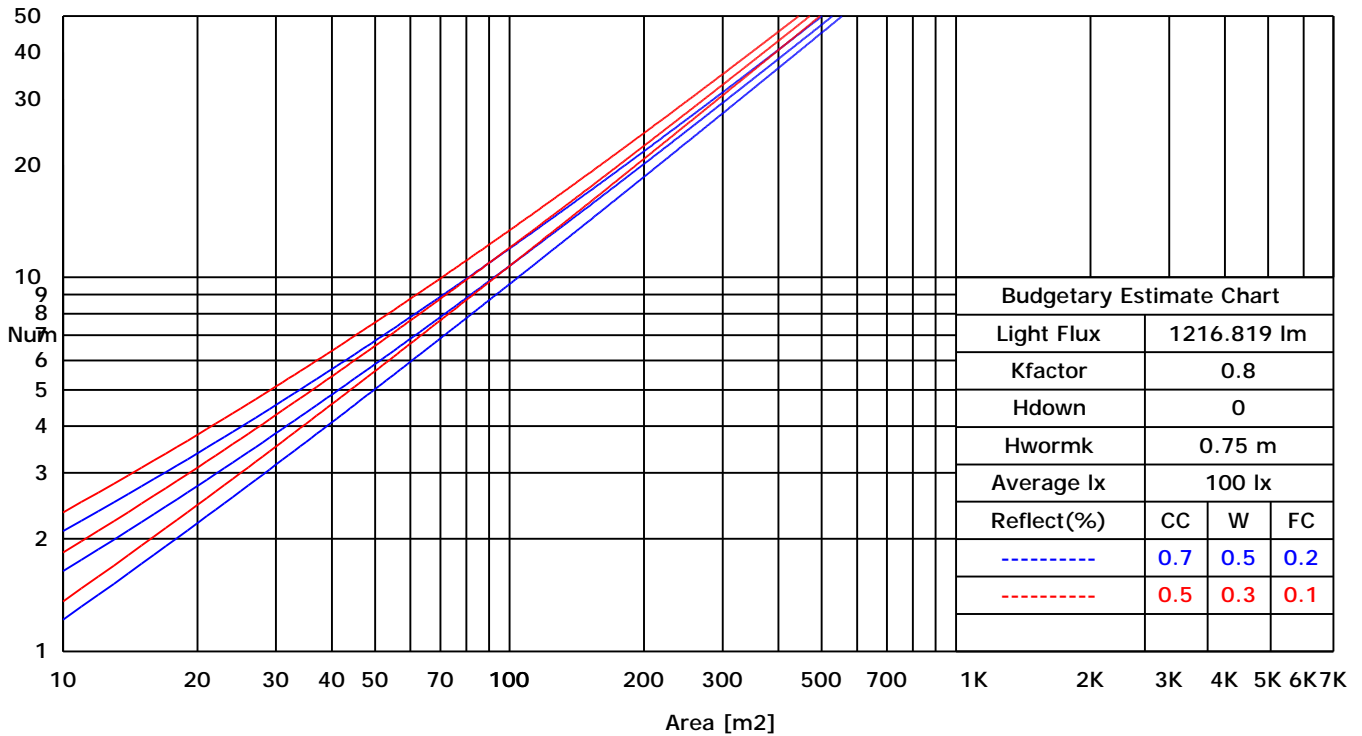
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UTILIZATION FACTORS TABLE

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	1.15	1.14	1.14	1.13	1.12	1.12	1.09	1.08	1.07	1.03	1.02	1.01	0.96	0.95	0.94	0.89
2	1.09	1.08	1.07	1.07	1.06	1.05	1.03	1.01	1.00	0.98	0.96	0.95	0.92	0.90	0.88	0.84
3	1.03	1.01	1.01	1.01	1.00	0.98	0.98	0.96	0.94	0.93	0.91	0.89	0.88	0.86	0.83	0.79
4	0.97	0.96	0.95	0.96	0.94	0.93	0.93	0.90	0.88	0.89	0.86	0.84	0.84	0.81	0.79	0.74
5	0.92	0.90	0.90	0.91	0.89	0.88	0.88	0.85	0.83	0.85	0.81	0.79	0.81	0.77	0.74	0.70
6	0.87	0.86	0.85	0.86	0.84	0.83	0.84	0.81	0.79	0.81	0.77	0.75	0.77	0.73	0.70	0.67
7	0.83	0.81	0.80	0.82	0.80	0.78	0.80	0.77	0.75	0.77	0.73	0.71	0.74	0.70	0.67	0.63
8	0.79	0.77	0.76	0.78	0.76	0.75	0.76	0.73	0.71	0.73	0.70	0.67	0.71	0.67	0.63	0.60
9	0.75	0.73	0.73	0.74	0.72	0.71	0.72	0.69	0.67	0.70	0.67	0.64	0.68	0.64	0.60	0.57
10	0.71	0.70	0.69	0.71	0.69	0.68	0.69	0.66	0.64	0.67	0.63	0.61	0.65	0.61	0.58	0.54

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/23 15:52:24

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

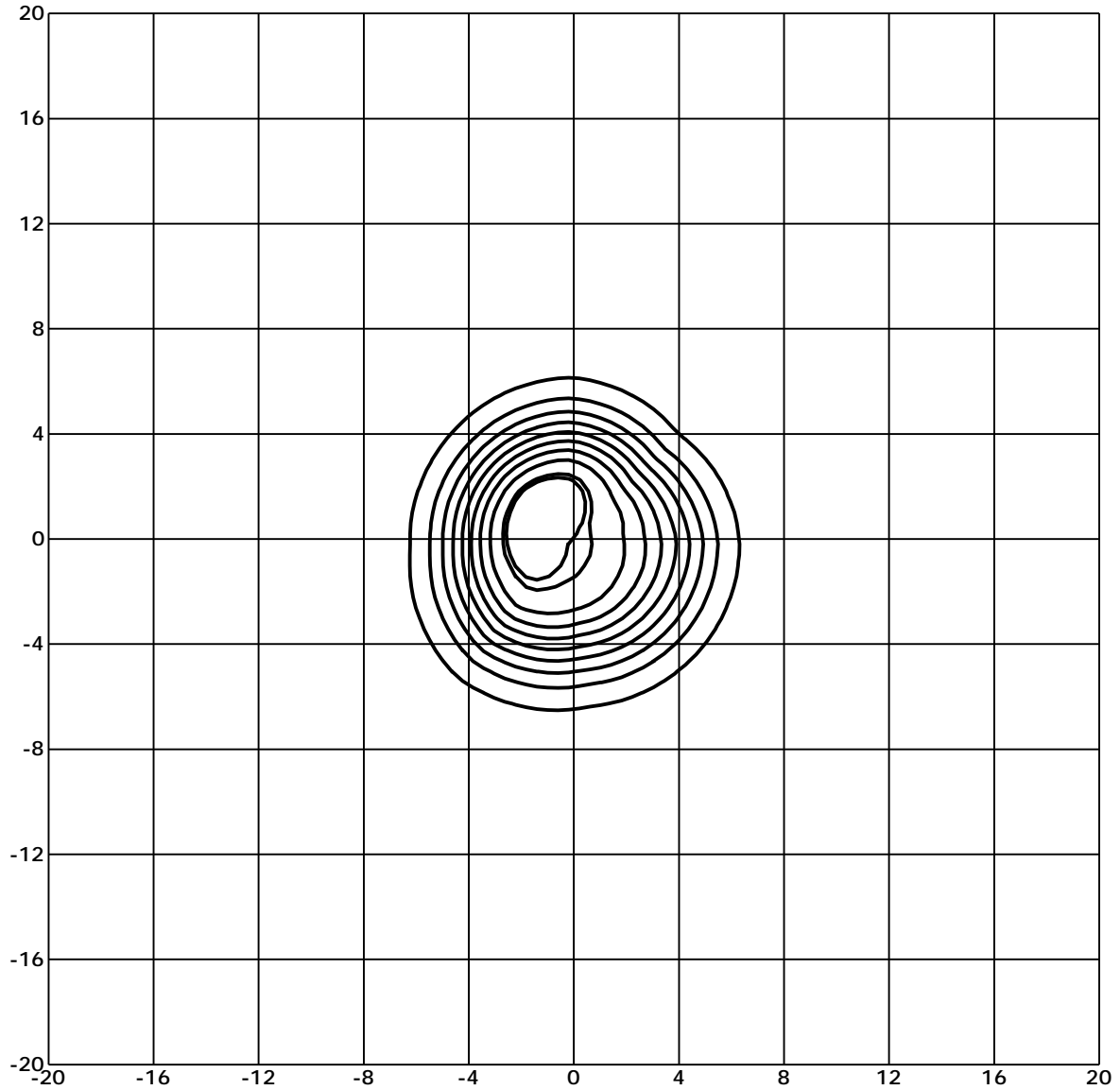
Test Distance: 7.91 m

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ISOLX DIAGRAM



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

- | | |
|-------------------|------------------|
| — 17.25(92%Emax) | — 9.375(50%Emax) |
| — 16.875(90%Emax) | — 7.5(40%Emax) |
| — 15.0(80%Emax) | — 5.625(30%Emax) |
| — 13.125(70%Emax) | — 3.75(20%Emax) |
| — 11.25(60%Emax) | — 1.875(10%Emax) |

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/23 15:52:24

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

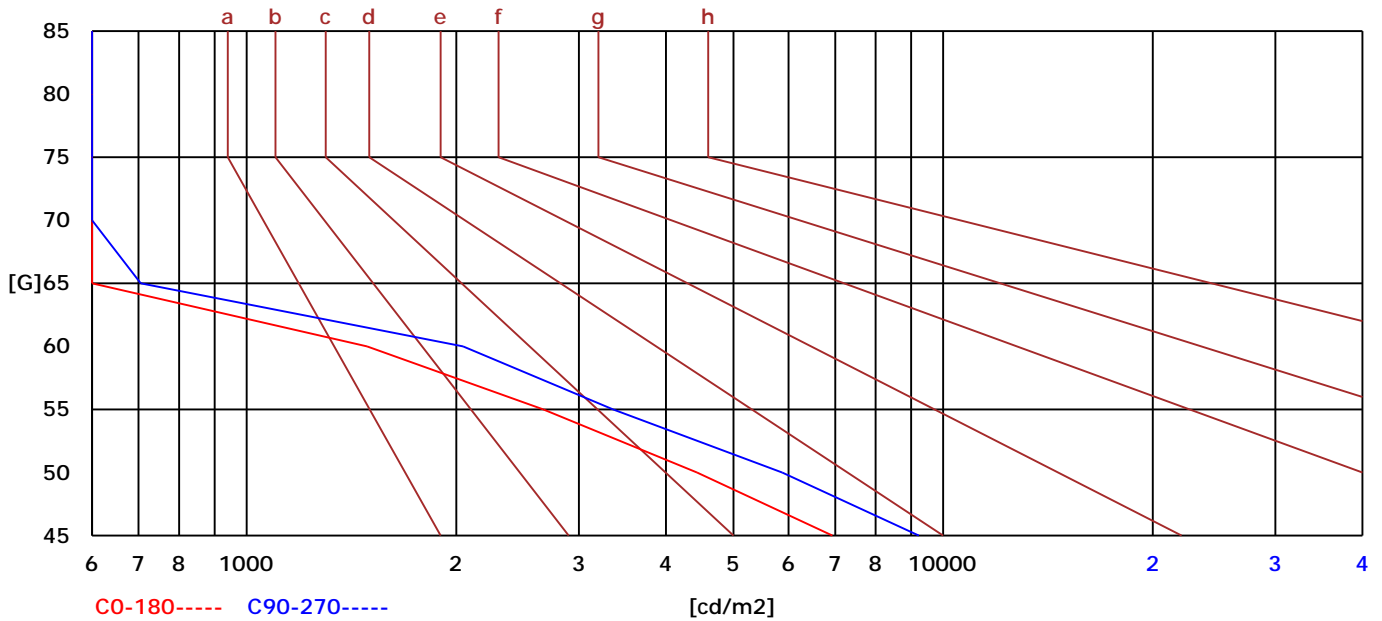
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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	6938	4434	2667	1490	470	232	0	0	0
C90	9228	5871	3359	2046	705	319	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: 2024/8/23 15:52:24

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

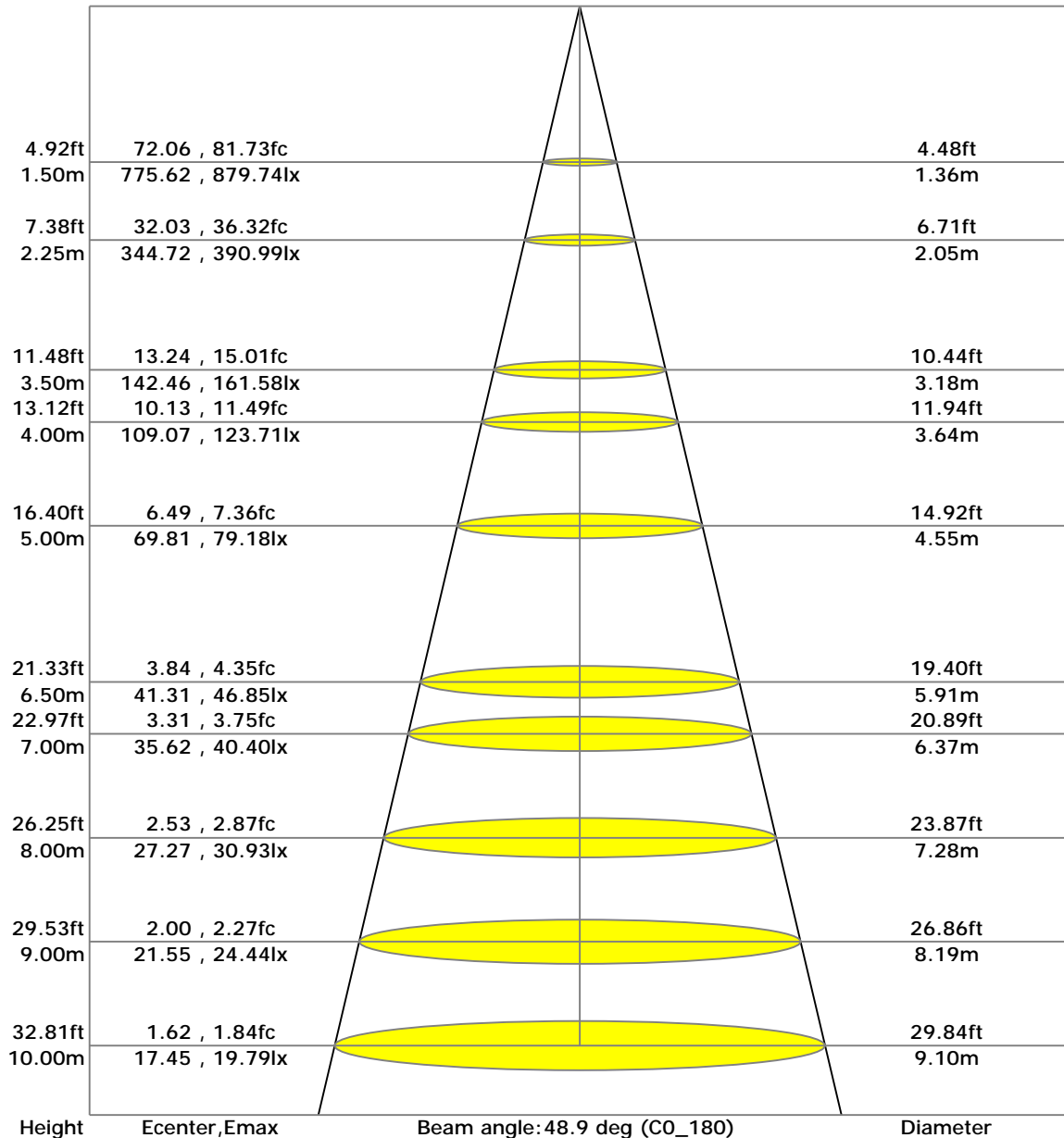
Test Distance: 7.91 m

Remarks:

Report No.:

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LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/23 15:52:24

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.:

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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	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞
3H	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞
4H	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞
6H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
8H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
12H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
4H 2H	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞
3H	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞
4H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
6H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
8H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
12H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
8H 4H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
6H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
8H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
12H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
12H 4H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
6H	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/23 15:52:24

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks:

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ZONAL LUMINOUS FLUX TABLE-2

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	φ zonal	φ total	%lum	%lamp
10	1579.2	1650.6	1860.1	1963.1	1914.9	1809.1	1725.8	1642.7	10	167.9	167.9	13.8	13.8
20	1223.6	1064.2	1412.2	1515.6	1532.5	1675.1	1358.5	1265.8	20	461.6	629.4	51.7	51.7
30	448.3	250.9	395.1	410.5	445.4	704.3	486.0	482.0	30	408.1	1037.6	85.3	85.3
40	71.5	49.7	71.5	70.6	74.1	116.8	81.9	80.3	40	126.9	1164.5	95.7	95.7
50	24.3	18.0	25.1	23.8	26.0	36.2	26.3	27.2	50	35.0	1199.4	98.6	98.6
60	7.5	4.7	7.6	6.4	7.6	11.1	7.6	9.1	60	13.5	1213.0	99.7	99.7
70	0.9	0.5	1.2	0.7	1.3	1.8	0.9	1.4	70	3.4	1216.3	100.0	100.0
80	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1	80	0.5	1216.8	100.0	100.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90	0.0	1216.8	100.0	100.0

Conical surface Flux(90deg) : 1185.7 lm

%lum = 97.4%

%lamp = 97.4%

Conical surface Flux(120deg) : 1213.0 lm

%lum = 99.7%

%lamp = 99.7%

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/23 15:52:24

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

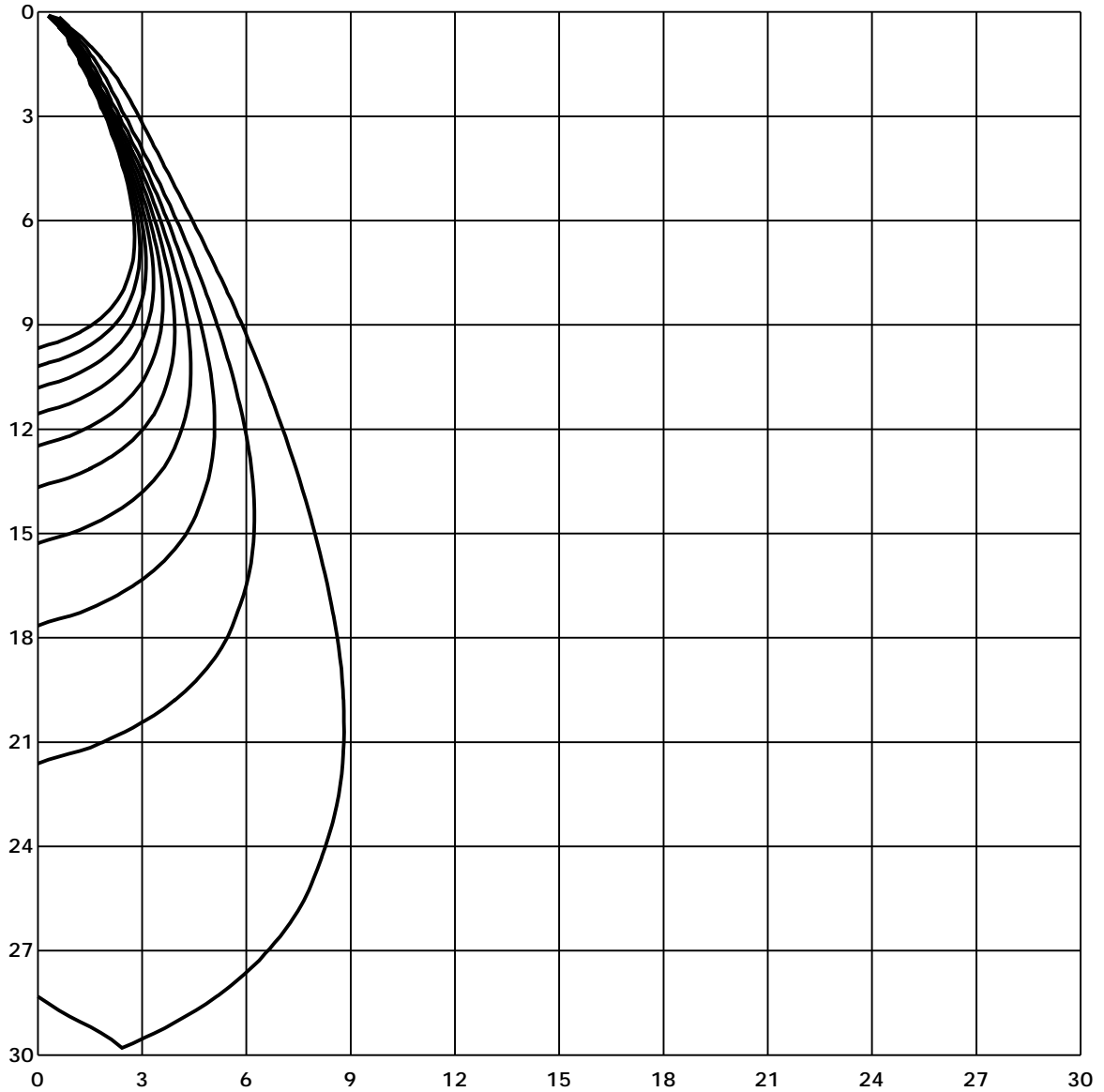
Test Distance: 7.91 m

Remarks:

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SPACE ISOLX DIAGRAM



Unit of illumination: lx

- 18.681
- 16.813
- 14.945
- 13.077
- 11.209
- 9.34
- 7.472
- 5.604
- 3.736
- 1.868

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/23 15:52:24

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks:

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LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	1745.15	1706.04	1737.95	1753.41	1745.15	1706.04	1737.95	1753.41	1745.15	
G1	1724.56	1704.98	1742.02	1771.62	1760.23	1709.99	1729.51	1739.96	1724.56	
G2	1709.05	1699.54	1754.54	1789.32	1780.19	1714.55	1724.31	1728.19	1709.05	
G3	1698.72	1699.6	1768.86	1809.72	1796.46	1722.63	1720.44	1712.99	1698.72	
G4	1686.34	1699.22	1782.32	1831.62	1815.91	1732.39	1722.19	1705.17	1686.34	
G5	1668.75	1698.41	1796.27	1857.02	1835.0	1741.71	1723.81	1697.22	1668.75	
G6	1651.24	1694.66	1809.6	1877.36	1854.96	1755.47	1725.88	1690.15	1651.24	
G7	1635.41	1689.46	1822.05	1898.57	1874.42	1769.99	1727.63	1680.14	1635.41	
G8	1616.13	1679.64	1838.75	1919.71	1892.25	1783.57	1729.32	1669.38	1616.13	
G9	1598.37	1665.94	1850.33	1941.49	1905.64	1796.46	1729.76	1656.12	1598.37	
G10	1579.22	1650.61	1860.09	1963.07	1914.9	1809.09	1725.75	1642.73	1579.22	
G11	1557.13	1627.21	1868.6	1973.84	1925.53	1822.42	1717.24	1628.08	1557.13	
G12	1533.67	1596.68	1864.65	1979.4	1924.97	1833.12	1708.74	1610.94	1533.67	
G13	1509.02	1559.39	1854.64	1975.28	1919.84	1842.94	1695.03	1587.54	1509.02	
G14	1479.3	1511.96	1834.37	1951.37	1900.44	1849.14	1675.32	1562.33	1479.3	
G15	1449.95	1456.46	1797.77	1911.02	1874.79	1847.51	1648.98	1529.92	1449.95	
G16	1414.6	1386.07	1747.9	1863.09	1834.56	1835.94	1611.75	1492.12	1414.6	
G17	1374.56	1310.74	1685.65	1795.83	1780.19	1814.16	1559.32	1443.7	1374.56	
G18	1324.0	1236.03	1606.87	1715.05	1706.8	1779.31	1501.13	1388.14	1324.0	
G19	1273.95	1154.88	1512.83	1622.14	1627.71	1735.64	1430.5	1329.07	1273.95	
G20	1223.64	1064.22	1412.22	1515.59	1532.48	1675.14	1358.54	1265.75	1223.64	
G21	1168.21	970.74	1307.3	1400.02	1429.24	1602.06	1277.45	1202.12	1168.21	
G22	1102.83	878.58	1196.43	1281.65	1316.75	1519.84	1194.86	1133.17	1102.83	
G23	1031.37	783.23	1083.55	1161.77	1202.18	1431.87	1107.89	1062.16	1031.37	
G24	955.16	686.94	969.93	1037.0	1084.56	1333.95	1017.86	984.2	955.16	
G25	875.58	595.52	859.56	917.19	964.55	1232.09	927.32	904.42	875.58	
G26	786.67	512.68	751.38	799.31	848.36	1129.35	834.16	820.83	786.67	
G27	695.44	435.97	648.02	686.87	732.74	1022.55	740.87	732.67	695.44	
G28	608.73	364.52	554.35	583.38	626.37	915.68	650.27	642.07	608.73	
G29	526.51	302.95	471.01	491.1	530.77	807.19	564.86	559.11	526.51	
G30	448.3	250.9	395.06	410.51	445.36	704.27	486.03	481.96	448.3	
G31	377.85	204.91	328.42	338.56	369.53	607.66	412.39	410.38	377.85	
G32	316.66	166.37	271.67	278.37	304.21	518.81	347.94	345.5	316.66	
G33	263.6	135.21	223.49	227.06	250.77	436.29	291.76	288.56	263.6	
G34	214.67	112.56	184.51	186.77	204.97	365.96	243.08	239.39	214.67	
G35	174.13	94.23	151.79	154.42	168.43	304.14	200.03	196.34	174.13	
G36	142.03	80.78	126.51	128.45	138.78	251.52	164.93	160.49	142.03	

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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.:

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LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	116.88	70.95	107.3	107.99	116.31	205.91	136.9	132.39	116.88	
G38	96.73	62.57	91.72	92.23	98.29	169.62	113.5	109.74	96.73	
G39	82.03	55.37	80.21	80.34	84.59	140.09	95.67	92.85	82.03	
G40	71.45	49.74	71.52	70.58	74.08	116.75	81.9	80.27	71.45	
G41	61.94	45.17	63.57	62.69	65.63	98.61	71.27	69.76	61.94	
G42	54.93	41.29	56.75	56.12	58.5	85.16	61.94	61.13	54.93	
G43	49.12	37.54	51.37	50.43	52.49	74.96	55.0	54.56	49.12	
G44	44.67	34.16	46.61	45.05	47.61	65.88	49.43	49.55	44.67	
G45	40.67	30.91	42.3	41.11	43.42	58.75	44.67	44.92	40.67	
G46	36.98	27.53	38.79	37.29	39.54	53.06	40.42	40.61	36.98	
G47	33.6	24.65	34.85	33.66	35.98	47.99	36.41	37.23	33.6	
G48	30.47	22.15	31.22	29.72	32.16	43.55	33.1	33.79	30.47	
G49	27.15	20.02	28.03	26.47	28.72	39.61	29.53	30.35	27.15	
G50	24.34	17.96	25.09	23.78	25.97	36.23	26.28	27.22	24.34	
G51	22.21	16.02	22.52	20.9	23.15	32.6	23.59	24.59	22.21	
G52	19.83	13.83	20.21	18.83	20.71	29.03	21.15	22.34	19.83	
G53	17.83	12.26	17.96	16.52	18.4	26.15	18.96	19.96	17.83	
G54	15.95	10.76	15.95	14.39	16.21	23.46	16.83	18.02	15.95	
G55	13.89	9.64	13.83	12.14	14.02	20.96	14.77	16.08	13.89	
G56	12.33	8.51	12.2	10.57	12.01	18.65	12.7	14.14	12.33	
G57	10.89	7.51	11.01	9.45	10.76	16.58	11.14	12.39	10.89	
G58	9.7	6.44	9.89	8.45	9.76	14.39	10.01	11.07	9.7	
G59	8.57	5.51	8.76	7.51	8.57	12.39	8.63	9.89	8.57	
G60	7.51	4.69	7.57	6.44	7.57	11.07	7.63	9.07	7.51	
G61	6.38	3.75	6.44	5.44	6.57	9.89	6.57	7.82	6.38	
G62	5.63	2.69	5.44	4.5	5.63	8.82	5.57	6.63	5.63	
G63	4.5	1.69	4.44	3.5	4.69	7.76	4.57	5.69	4.5	
G64	3.57	1.47	3.44	2.5	3.69	6.63	3.63	4.69	3.57	
G65	2.63	1.25	2.57	1.88	2.69	5.69	2.69	3.69	2.63	
G66	1.81	1.06	1.94	1.06	1.94	5.07	1.75	2.75	1.81	
G67	1.31	0.75	1.69	0.94	1.69	3.82	1.19	2.06	1.31	
G68	1.13	0.69	1.38	0.88	1.56	2.88	1.06	1.69	1.13	
G69	1.0	0.63	1.38	0.78	1.44	2.06	0.94	1.56	1.0	
G70	0.88	0.5	1.19	0.69	1.25	1.75	0.88	1.44	0.88	
G71	0.75	0.31	1.0	0.5	1.25	1.63	0.75	1.31	0.75	
G72	0.63	0.19	0.88	0.5	0.88	1.44	0.56	1.19	0.63	
G73	0.56	0.0	0.75	0.5	0.75	1.25	0.44	1.06	0.56	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2024/8/23 15:52:24

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-2000B Goniophotometer

Humidity:

Test Distance: 7.91 m

Remarks:



