

Report No.:

Test Time: 2024/7/17 17:54:27

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: InBright
Luminaire Type: IBSP104SCT095H78-38°-10W
Lamp Type:
Luminous Width: 90 mm
Luminous Length: 90 mm
Luminous Height: 74 mm

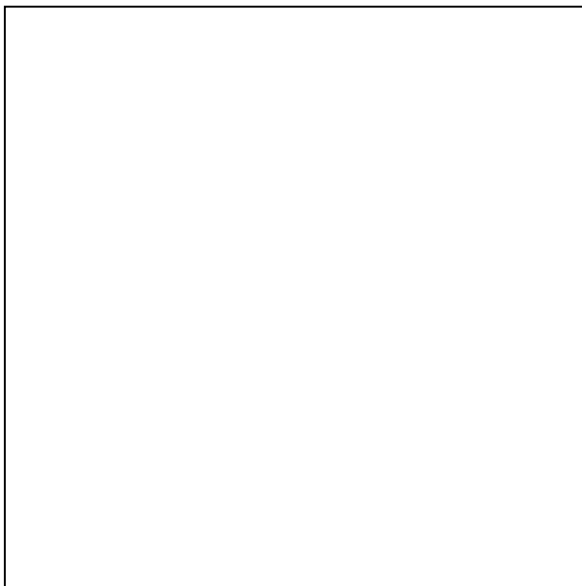
Voltage(V): 219.80 V
Current(A): 0.0520 A
Power(W): 10.69 W
Power Factor: 0.9190
Lamp Luminous Flux: 1000.62

Photometric Results

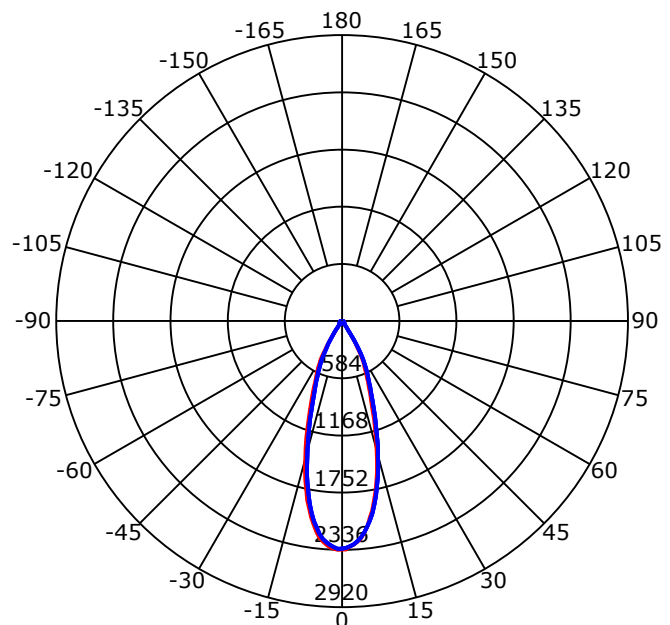
CIE Class: Direct
Luminaire Luminous Flux: 1000.619 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 93.60 lm/W
Beam Angle(50%) C0-180,C90-270: 34.6,34.5
Field Angle(10%) C0-180,C90-270: 64.1,63.6
S/MH C0-180,C90-270: 0.573,0.573

Max. Intensity: 2336.35 cd
Max.Intensity Angle: C=180 Gamma=1
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 2331.68 cd
Effective Luminous Flux: 894.36 lm
ERP(ϕ use)(120deg): 986.98 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 34.6 deg,34.5 deg

C0-180 — C90-270 —

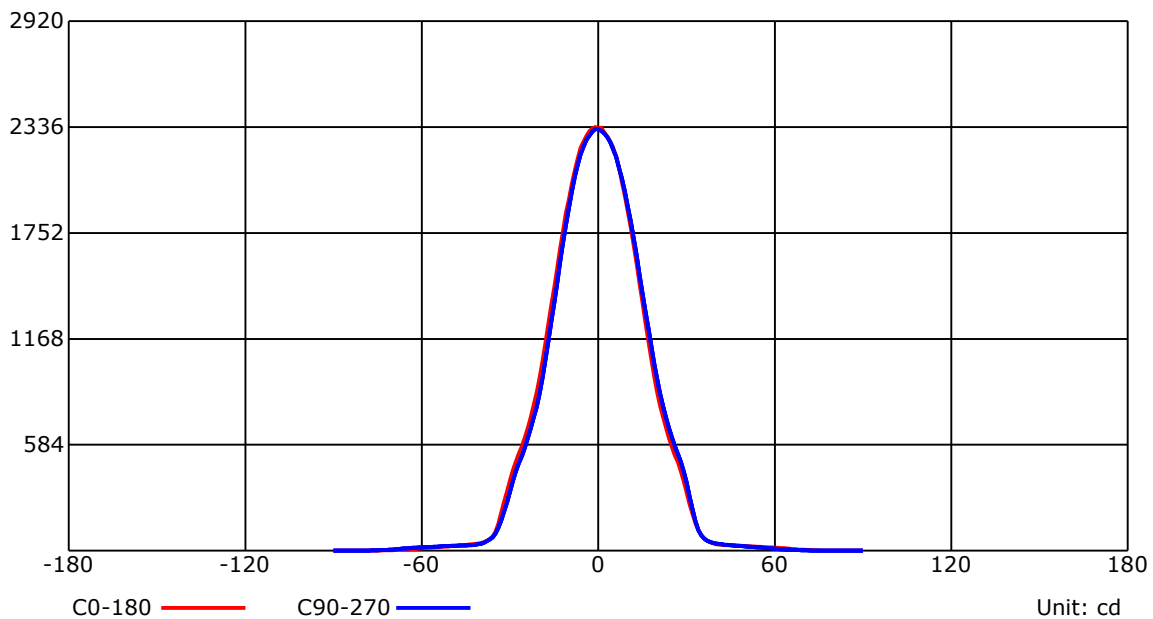
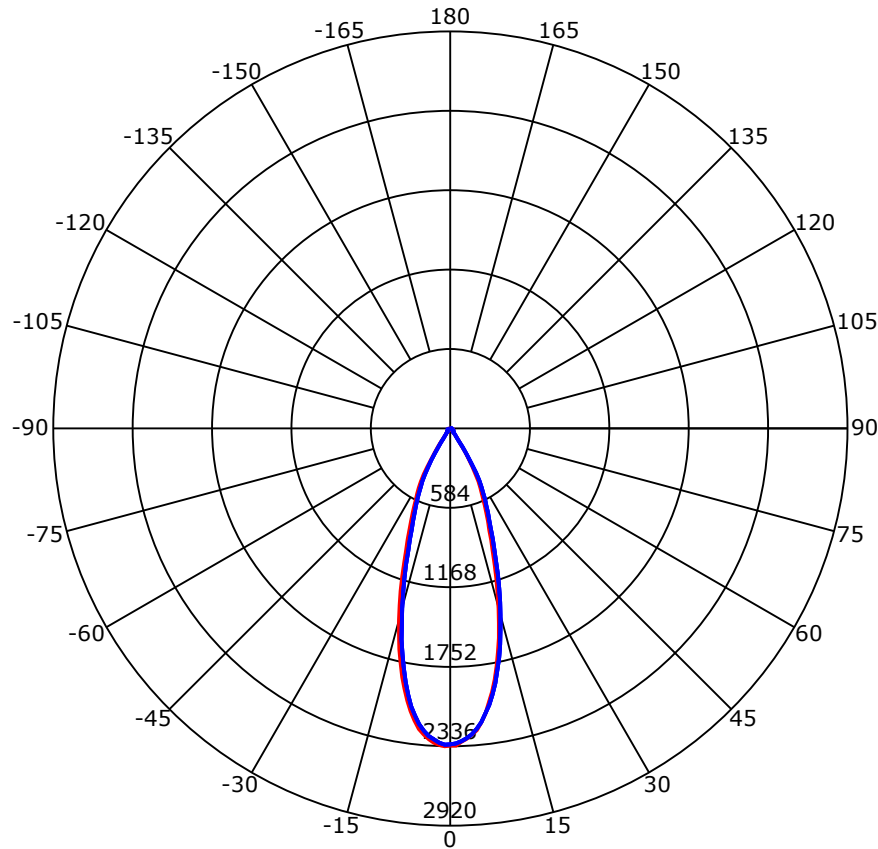
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/17 17:54:27

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

Report No.:

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Luminous Intensity Distribution Curve



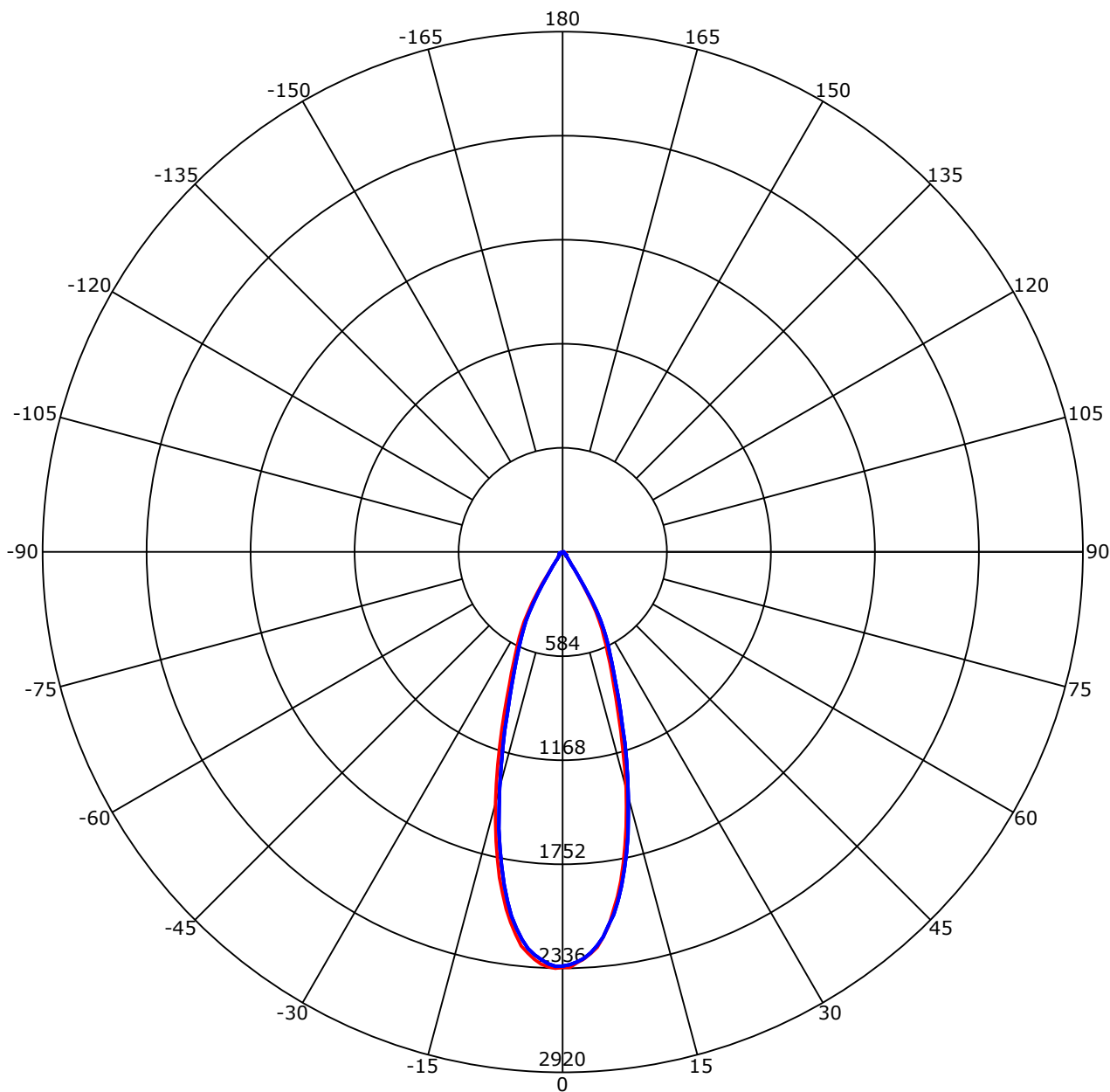
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 Remarks:

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Luminous Intensity Distribution Curve



C0-180 — C90-270

Unit: cd/klm

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/17 17:54:27

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

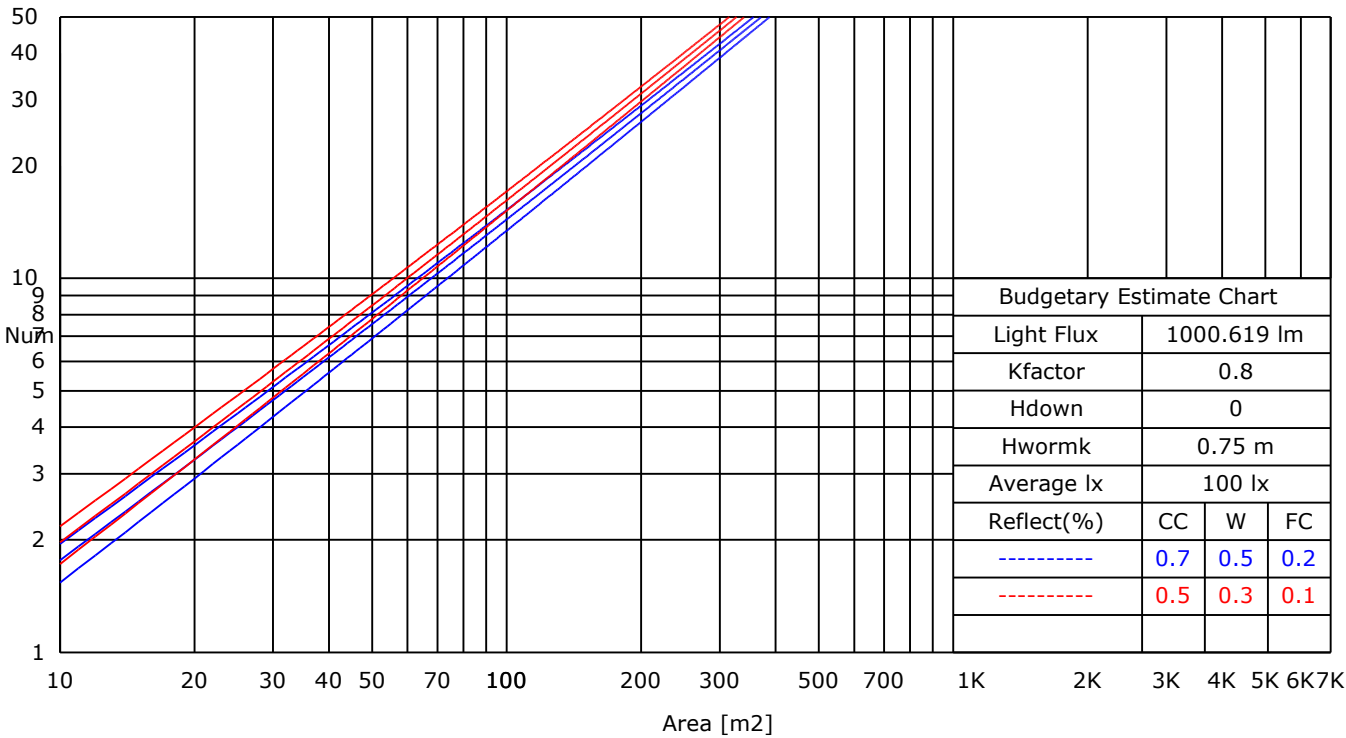
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UTILIZATION FACTORS TABLE

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	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	0.98	0.96	0.94	0.97	0.94	0.92	0.94	0.91	0.88	0.90	0.87	0.84	0.84	0.81	0.78	0.73
2	0.94	0.92	0.90	0.93	0.91	0.89	0.90	0.87	0.85	0.87	0.83	0.80	0.82	0.78	0.75	0.70
3	0.91	0.89	0.87	0.90	0.87	0.86	0.87	0.84	0.82	0.84	0.81	0.78	0.80	0.76	0.73	0.68
4	0.88	0.86	0.85	0.87	0.85	0.83	0.85	0.82	0.79	0.82	0.78	0.75	0.78	0.74	0.70	0.66
5	0.85	0.83	0.82	0.84	0.82	0.81	0.82	0.79	0.77	0.79	0.76	0.73	0.76	0.72	0.69	0.65
6	0.83	0.81	0.80	0.82	0.80	0.78	0.80	0.77	0.75	0.77	0.74	0.71	0.74	0.70	0.67	0.63
7	0.81	0.79	0.78	0.80	0.78	0.77	0.78	0.75	0.73	0.75	0.72	0.69	0.73	0.68	0.65	0.62
8	0.79	0.77	0.77	0.78	0.76	0.75	0.76	0.73	0.71	0.74	0.70	0.67	0.71	0.67	0.64	0.60
9	0.77	0.76	0.75	0.76	0.74	0.73	0.74	0.71	0.70	0.72	0.68	0.66	0.70	0.65	0.62	0.59
10	0.75	0.74	0.73	0.75	0.73	0.72	0.73	0.70	0.68	0.70	0.67	0.65	0.68	0.64	0.61	0.58

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



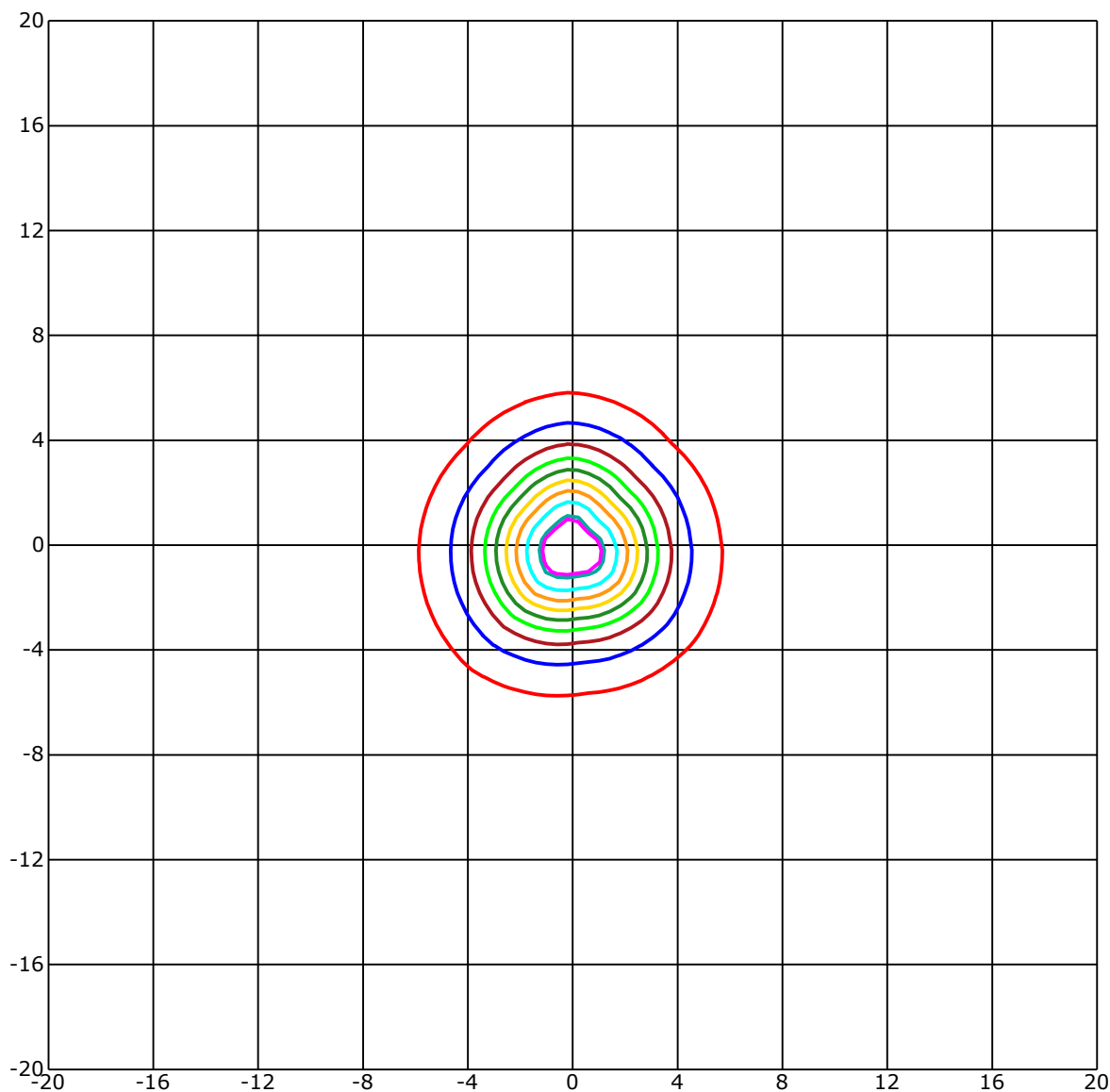
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/17 17:54:27

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

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ISOLX DIAGRAM



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

21.485(92%Emax)	11.676(50%Emax)
21.018(90%Emax)	9.341(40%Emax)
18.682(80%Emax)	7.006(30%Emax)
16.347(70%Emax)	4.671(20%Emax)
14.012(60%Emax)	2.335(10%Emax)

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/17 17:54:27

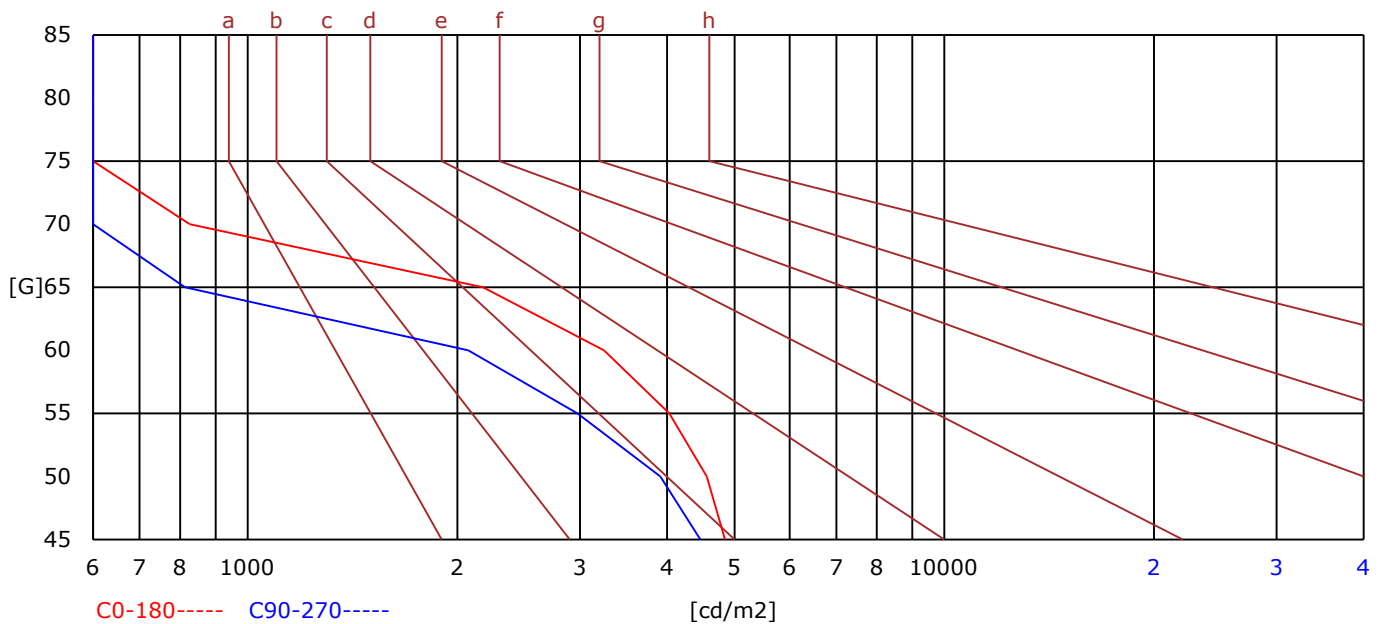
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	4844	4561	4029	3248	2177	826	0	0	0
C90	4467	3914	2976	2073	813	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



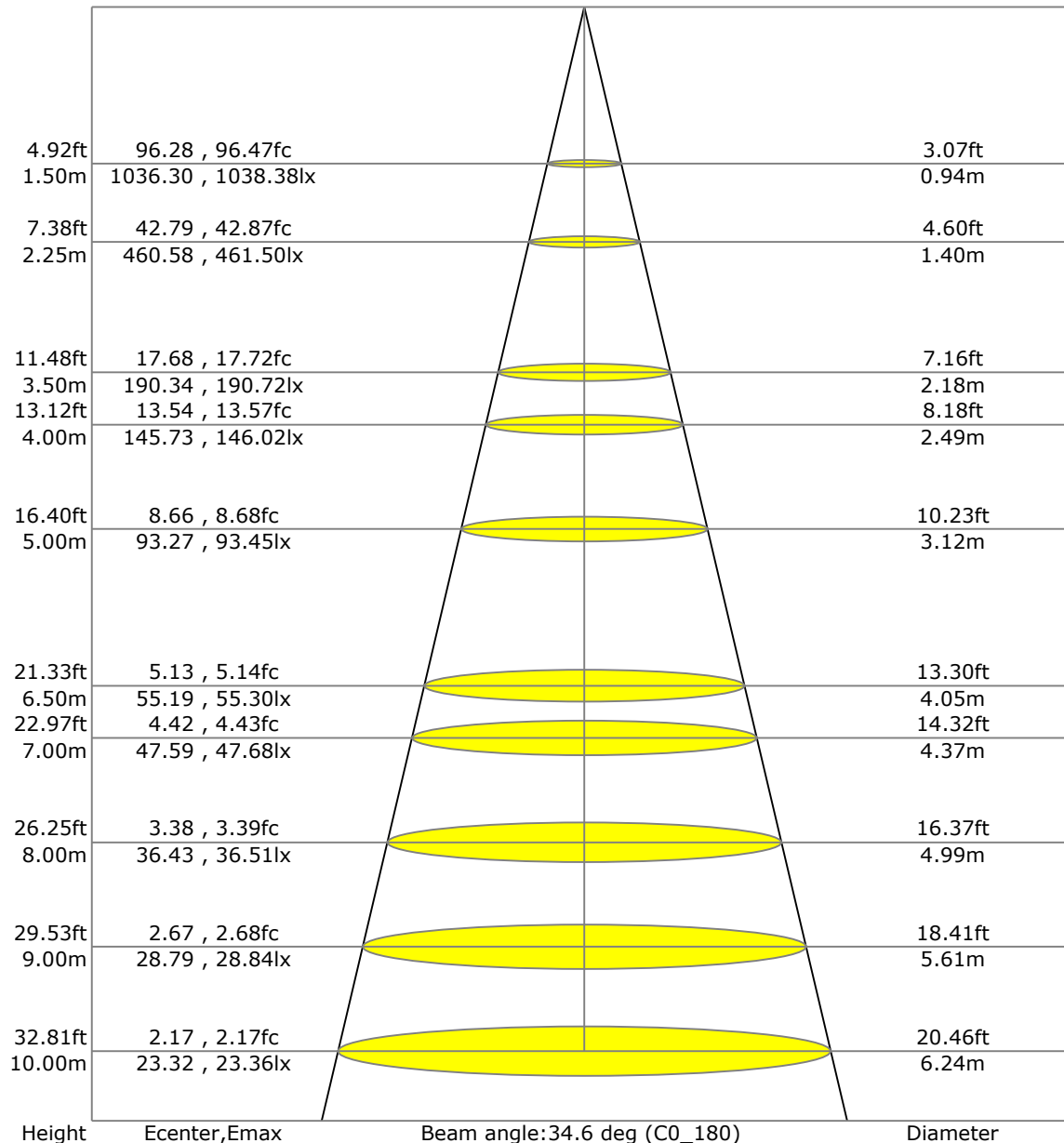
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/17 17:54:27

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

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LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2024/7/17 17:54:27

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 60

Test Distance: 6.7 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	6.81	6.87	7.01	7.05	7.30	6.56	6.61	6.76	6.80	7.04
	3H	6.81	6.86	7.01	7.05	7.30	6.58	6.63	6.78	6.82	7.07
	4H	6.79	6.85	7.00	7.04	7.29	6.56	6.62	6.77	6.81	7.06
	6H	6.78	6.83	6.99	7.03	7.28	6.55	6.60	6.76	6.80	7.05
	8H	6.77	6.82	6.99	7.03	7.28	6.54	6.59	6.76	6.80	7.05
	12H	6.76	6.82	6.98	7.02	7.28	6.53	6.59	6.75	6.79	7.05
4H	2H	7.41	7.46	7.62	7.66	7.91	6.81	6.87	7.02	7.06	7.31
	3H	7.39	7.45	7.62	7.66	7.91	6.82	6.87	7.04	7.08	7.33
	4H	7.38	7.43	7.60	7.64	7.90	6.80	6.86	7.03	7.07	7.33
	6H	7.35	7.41	7.59	7.63	7.89	6.78	6.83	7.02	7.05	7.32
	8H	7.34	7.39	7.58	7.62	7.89	6.77	6.82	7.01	7.05	7.31
	12H	7.33	7.38	7.58	7.61	7.88	6.75	6.81	7.00	7.04	7.31
8H	4H	7.39	7.44	7.61	7.65	7.90	6.79	6.85	7.01	7.05	7.30
	6H	7.32	7.37	7.58	7.61	7.88	6.75	6.80	7.00	7.03	7.31
	8H	7.31	7.35	7.57	7.60	7.88	6.73	6.78	6.99	7.03	7.30
	12H	7.29	7.34	7.56	7.59	7.87	6.72	6.76	6.99	7.01	7.30
12H	4H	7.34	7.39	7.59	7.62	7.89	6.76	6.81	7.01	7.04	7.31
	6H	7.31	7.36	7.57	7.60	7.88	6.73	6.78	6.99	7.03	7.30

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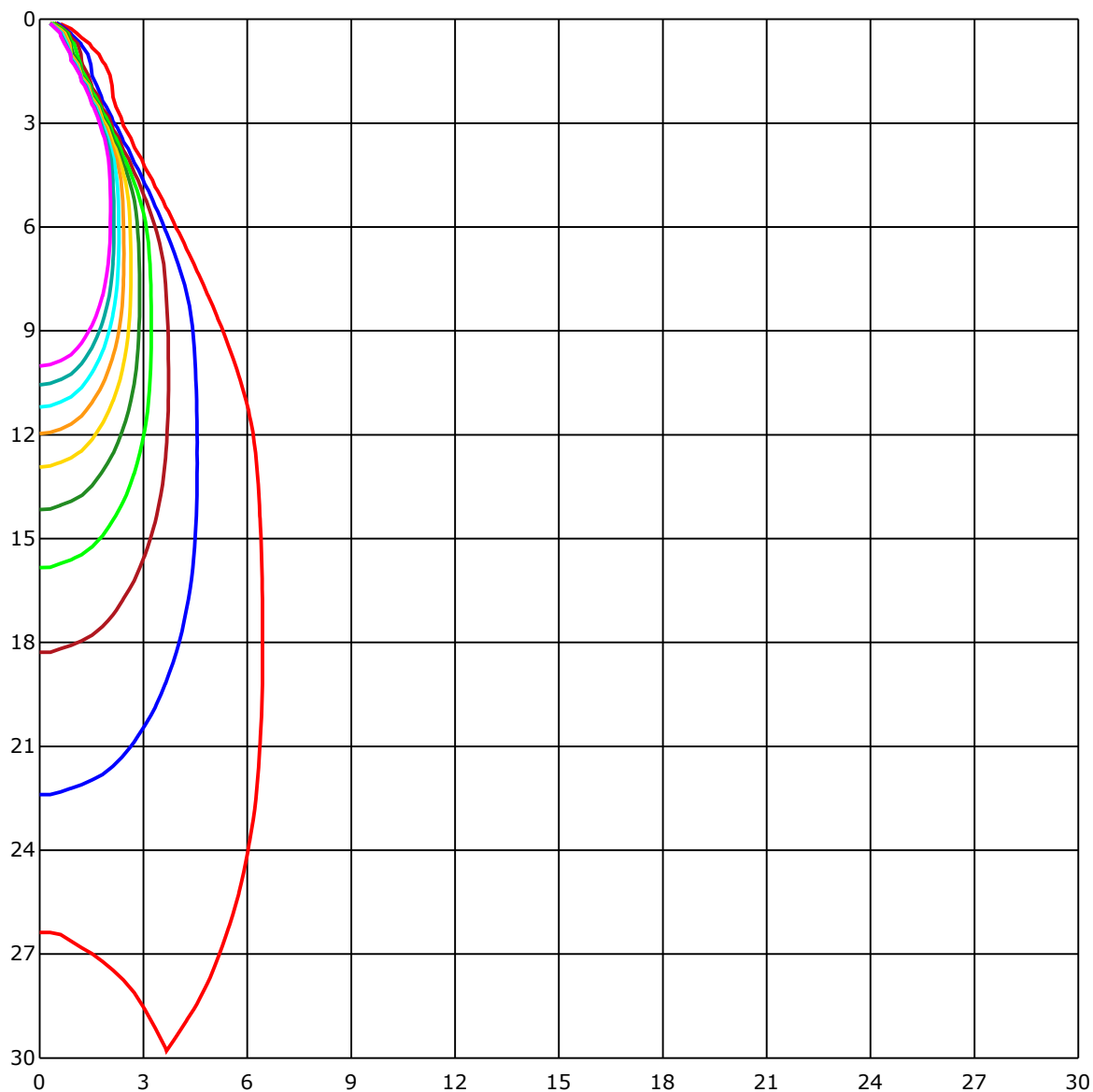
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

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Humidity: 60
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SPACE ISOLX DIAGRAM



Unit of illumination:lx

23.246
20.921
18.597
16.272
13.947

11.623
9.298
6.974
4.649
2.325

C Range: 0 - 360 Deg
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Operators: QC01
Test Date: 2024/7/17 17:54:27

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks:

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LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	2331.68	2303.26	2323.55	2331.63	2331.68	2303.26	2323.55	2331.63	2331.68	
G1	2332.48	2275.97	2315.92	2313.5	2336.35	2313.32	2325.66	2330.02	2332.48	
G2	2305.91	2246.92	2301.65	2291.95	2329.16	2324.49	2312.33	2328.4	2305.91	
G3	2285.75	2211.06	2282.48	2256.71	2315.34	2318.97	2290.06	2315.16	2285.75	
G4	2258.91	2164.6	2254.51	2223.36	2290.92	2308.47	2266.86	2296.48	2258.91	
G5	2227.17	2112.34	2216.0	2171.69	2258.73	2293.43	2232.87	2270.63	2227.17	
G6	2174.34	2043.08	2172.9	2116.38	2222.73	2261.83	2186.91	2241.04	2174.34	
G7	2113.15	1969.82	2110.32	2050.04	2163.2	2227.26	2127.92	2198.62	2113.15	
G8	2032.75	1888.7	2054.39	1978.71	2098.79	2186.46	2063.59	2150.99	2032.75	
G9	1959.04	1805.07	1983.29	1894.9	2028.0	2124.64	1983.96	2077.29	1959.04	
G10	1874.56	1715.07	1901.99	1803.05	1943.56	2059.64	1895.12	2005.24	1874.56	
G11	1778.32	1619.59	1813.78	1706.49	1862.4	1981.27	1794.03	1919.27	1778.32	
G12	1681.85	1511.49	1722.21	1609.26	1763.5	1891.8	1697.7	1821.68	1681.85	
G13	1582.96	1411.39	1630.27	1499.15	1666.77	1799.19	1593.55	1725.35	1582.96	
G14	1474.64	1307.11	1523.16	1395.68	1559.39	1696.71	1476.93	1617.88	1474.64	
G15	1371.93	1209.52	1422.83	1296.2	1455.29	1591.04	1368.43	1508.66	1371.93	
G16	1262.49	1115.65	1326.19	1193.76	1350.61	1485.41	1256.97	1398.95	1262.49	
G17	1152.91	1021.29	1225.23	1091.23	1248.84	1373.19	1151.79	1289.65	1152.91	
G18	1055.14	933.76	1128.04	999.92	1144.88	1267.38	1051.59	1184.87	1055.14	
G19	959.43	857.67	1031.35	914.54	1046.43	1164.49	952.92	1081.89	959.43	
G20	874.5	784.27	948.03	838.14	956.2	1066.68	867.86	988.88	874.5	
G21	801.11	720.66	868.62	765.33	875.0	975.82	793.03	901.62	801.11	
G22	735.7	664.64	795.59	700.1	800.03	892.91	731.93	822.88	735.7	
G23	676.9	609.88	733.5	645.61	735.12	817.4	672.59	752.58	676.9	
G24	620.96	559.28	677.52	595.6	677.48	750.79	620.25	693.77	620.96	
G25	573.38	514.39	627.25	547.39	625.59	694.63	568.98	636.94	573.38	
G26	526.38	471.61	580.34	506.85	577.2	640.31	523.73	588.24	526.38	
G27	487.33	422.77	533.61	463.31	535.76	592.73	481.98	541.91	487.33	
G28	438.04	368.23	490.69	416.09	493.16	544.52	438.04	499.4	438.04	
G29	383.67	309.52	439.07	359.25	447.73	502.36	386.73	454.06	383.67	
G30	322.44	252.87	378.2	300.31	391.93	454.6	328.82	399.48	322.44	
G31	258.79	201.42	302.78	238.14	332.46	403.38	269.88	339.01	258.79	
G32	200.12	153.75	226.83	181.0	270.73	347.49	215.56	275.67	200.12	
G33	150.56	115.64	160.39	133.14	211.12	289.59	166.9	216.06	150.56	
G34	111.01	88.48	112.94	97.91	148.09	234.15	125.29	164.79	111.01	
G35	83.63	70.03	84.8	73.8	104.01	184.41	93.51	123.4	83.63	
G36	66.21	57.59	67.29	58.85	78.74	140.78	73.48	94.85	66.21	

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Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
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LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	54.99	48.44	55.89	48.97	63.34	108.45	60.15	76.54	54.99	
G38	45.97	41.57	48.71	41.34	53.37	86.77	50.86	64.1	45.97	
G39	40.58	37.3	43.05	36.32	46.73	72.0	43.0	55.44	40.58	
G40	36.14	34.21	39.5	33.17	42.47	61.23	38.16	49.33	36.14	
G41	33.8	32.01	36.85	30.93	39.55	53.06	35.01	44.53	33.8	
G42	32.1	30.61	34.92	29.13	37.03	46.91	32.86	41.52	32.1	
G43	30.97	29.67	33.08	27.74	35.19	43.14	31.29	39.59	30.97	
G44	29.76	28.68	31.74	26.66	33.58	40.4	30.53	37.93	29.76	
G45	29.18	27.74	30.26	25.59	32.28	38.38	29.49	36.63	29.18	
G46	28.51	27.07	29.09	24.69	30.88	36.59	28.82	35.42	28.51	
G47	27.97	26.26	27.74	23.66	29.76	35.28	28.19	34.48	27.97	
G48	27.25	25.36	26.49	22.58	28.28	34.03	27.65	33.89	27.25	
G49	26.8	24.64	25.09	21.41	27.02	32.99	27.11	32.9	26.8	
G50	25.72	23.75	23.84	20.38	25.68	31.96	26.4	32.05	25.72	
G51	25.14	23.03	22.27	19.17	24.24	31.06	25.9	31.33	25.14	
G52	24.24	21.86	21.14	17.87	22.89	29.99	25.09	30.39	24.24	
G53	23.34	20.74	19.71	16.52	21.68	29.13	24.42	29.58	23.34	
G54	22.27	19.84	18.49	15.17	20.2	27.97	23.57	28.95	22.27	
G55	21.41	18.72	17.37	13.83	19.21	26.71	22.49	27.88	21.41	
G56	20.11	17.46	16.25	12.66	17.91	25.63	21.73	27.07	20.11	
G57	19.26	16.52	15.13	11.63	16.88	24.51	20.74	26.26	19.26	
G58	18.32	15.44	14.01	10.77	15.67	23.43	19.8	25.36	18.32	
G59	17.46	14.28	12.84	9.52	14.45	22.45	19.26	24.6	17.46	
G60	16.79	13.15	11.76	8.39	13.33	21.37	18.27	23.75	16.79	
G61	15.8	11.99	9.74	7.23	12.12	20.29	17.42	23.03	15.8	
G62	14.72	10.91	8.26	6.11	10.01	19.3	16.56	22.58	14.72	
G63	13.96	9.7	7.41	4.94	8.53	18.4	15.58	21.95	13.96	
G64	12.7	8.62	6.28	3.95	7.36	17.33	14.77	21.1	12.7	
G65	11.63	7.45	5.39	2.78	6.6	16.3	13.56	20.29	11.63	
G66	10.15	6.19	4.76	2.02	5.75	14.95	12.25	19.75	10.15	
G67	8.48	4.85	4.0	1.35	5.07	13.65	10.73	18.45	8.48	
G68	6.64	3.59	3.19	0.81	4.17	12.43	8.57	17.51	6.64	
G69	5.84	3.01	2.78	0.36	3.5	11.09	6.87	16.34	5.84	
G70	5.03	2.29	2.15	0.0	2.83	9.79	6.19	15.26	5.03	
G71	4.44	1.71	1.71	0.0	2.29	8.3	5.21	14.14	4.44	
G72	3.59	1.03	1.3	0.0	1.66	6.78	4.49	12.43	3.59	
G73	3.1	0.58	1.08	0.0	1.44	5.84	3.86	11.09	3.1	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2024/7/17 17:54:27

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 60

Test Distance: 6.7 m

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/7/17 17:54:27

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
Remarks: