

Report No.:

Test Time: 2023/7/18 10:05:22

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: InBright
Luminaire Type: IBDL141CT165-20W
Lamp Type:
Luminous Width: 80 mm
Luminous Length: 80 mm
Luminous Height: 80 mm

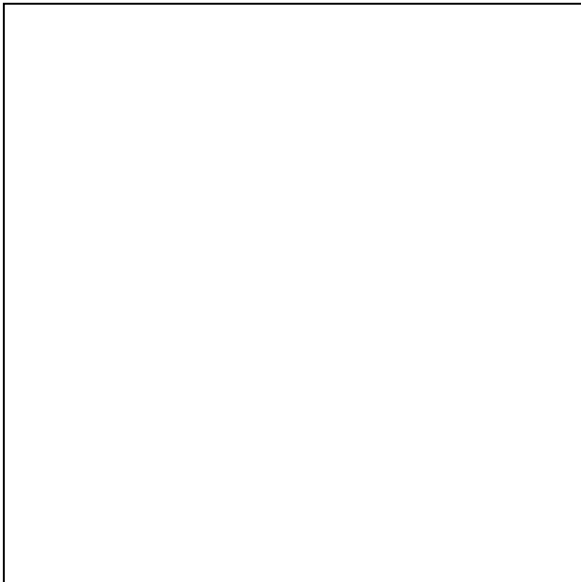
Voltage(V): 219.90 V
Current(A): 0.0950 A
Power(W): 20.00 W
Power Factor: 0.9630
Lamp Luminous Flux: 2001.00

Photometric Results

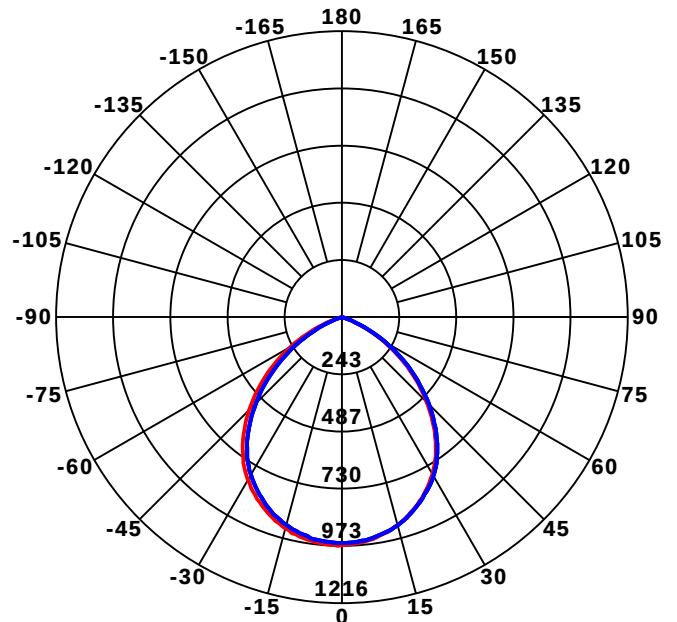
CIE Class: Direct
Luminaire Luminous Flux: 2001.002 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 100.05 lm/W
Beam Angle(50%) C0-180,C90-270: 94.7,93.9
Field Angle(10%) C0-180,C90-270: 133.6,132.2
S/MH C0-180,C90-270: 1.202,1.202

Max. Intensity: 973.04 cd
Max.Intensity Angle: C=180 Gamma=1
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 969.91 cd
Effective Luminous Flux: 1964.50 lm
ERP(ϕ use)(120deg): 1865.83 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 94.7 deg,93.9 deg

C0-180 — C90-270 —

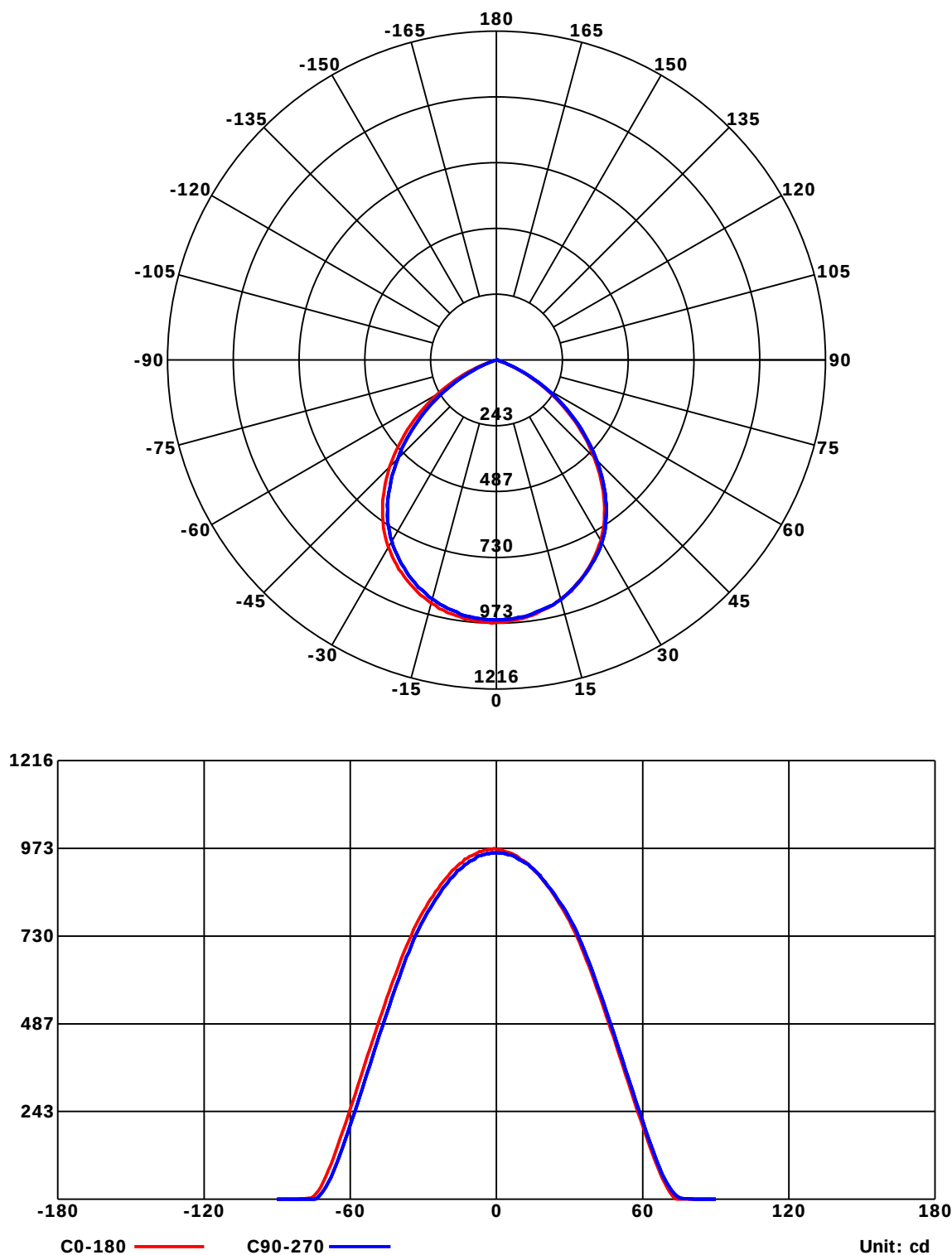
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 30
Operators: QC01
Test Date: 2023/7/18 10:05:22

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800 Goniophotometer
Humidity: 65
Test Distance: 6.66 m
Remarks:

Report No.:

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Luminous Intensity Distribution Curve



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C Interval: 45.0 Deg

Test Speed: High

Temperature: 30

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Test Date: 2023/7/18 10:05:22

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Humidity: 65

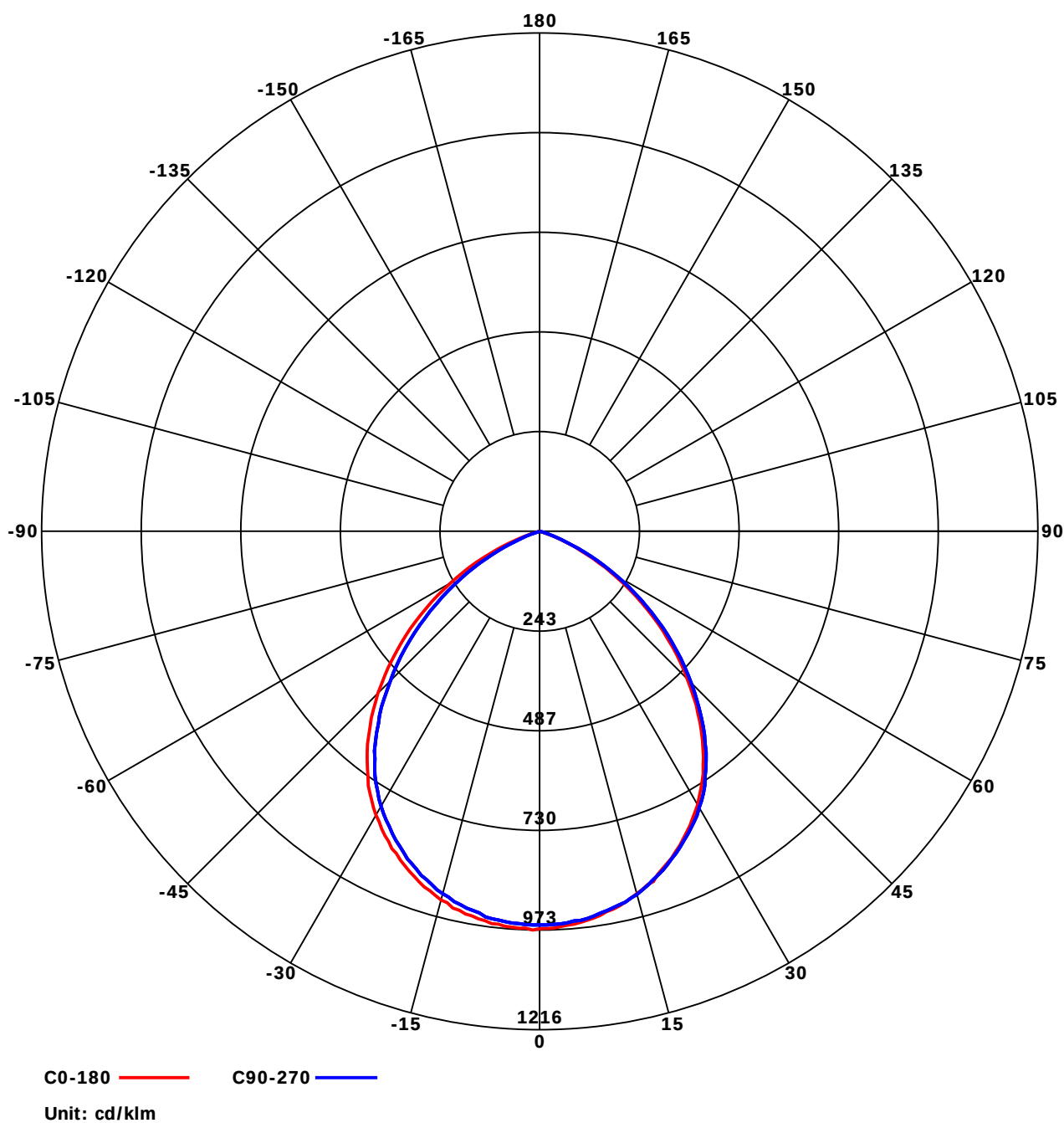
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Luminous Intensity Distribution Curve



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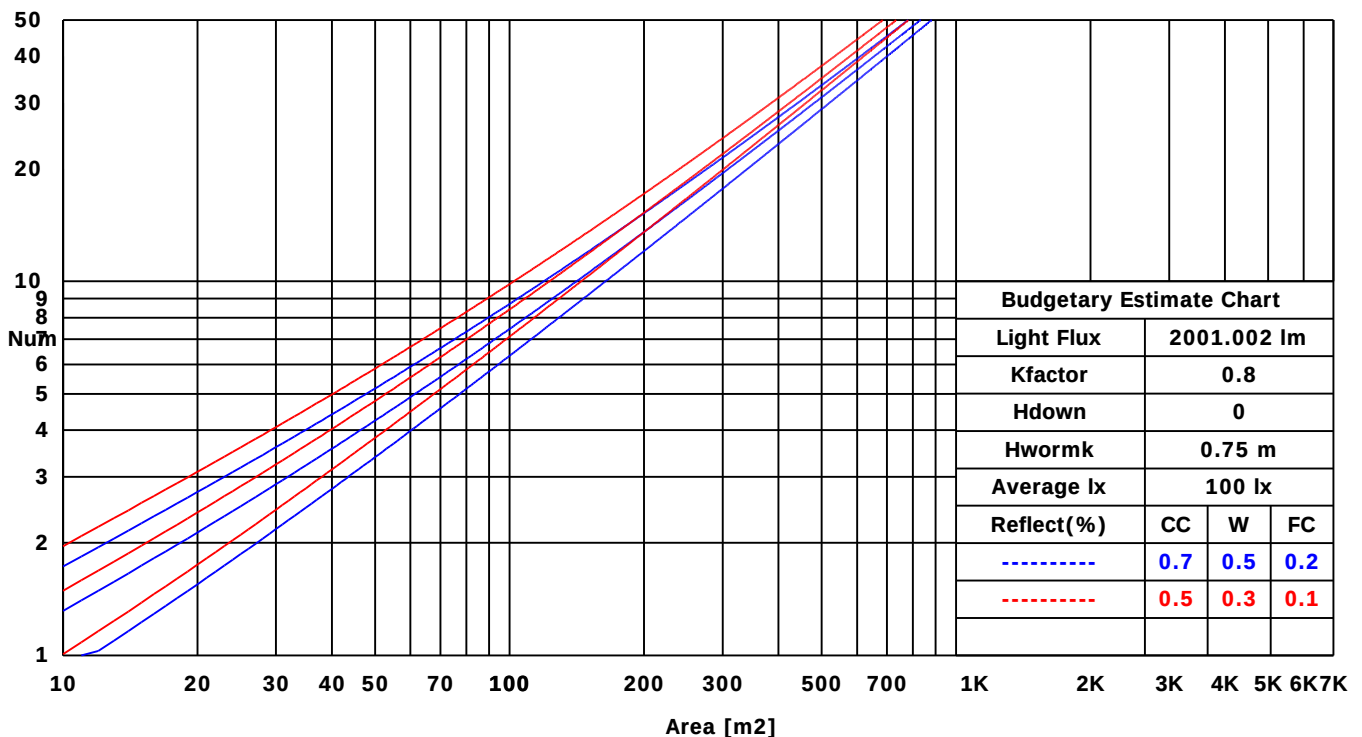
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UTILIZATION FACTORS TABLE

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	1.09	1.07	1.06	1.07	1.06	1.04	1.03	1.02	1.00	0.98	0.96	0.95	0.91	0.90	0.88	0.83
2	1.00	0.98	0.97	0.99	0.97	0.95	0.96	0.93	0.91	0.91	0.89	0.86	0.86	0.83	0.80	0.76
3	0.92	0.90	0.89	0.91	0.88	0.87	0.88	0.85	0.83	0.85	0.81	0.79	0.81	0.77	0.74	0.69
4	0.84	0.82	0.81	0.84	0.81	0.79	0.82	0.78	0.76	0.79	0.75	0.72	0.76	0.71	0.68	0.63
5	0.78	0.76	0.75	0.77	0.75	0.73	0.76	0.72	0.70	0.74	0.69	0.66	0.71	0.66	0.62	0.58
6	0.72	0.70	0.69	0.72	0.69	0.67	0.71	0.67	0.64	0.69	0.64	0.61	0.67	0.62	0.58	0.54
7	0.67	0.65	0.64	0.67	0.64	0.62	0.66	0.62	0.60	0.65	0.60	0.57	0.63	0.57	0.53	0.50
8	0.62	0.61	0.59	0.62	0.60	0.58	0.62	0.58	0.55	0.61	0.56	0.53	0.59	0.54	0.50	0.47
9	0.58	0.57	0.56	0.58	0.56	0.54	0.58	0.54	0.52	0.57	0.53	0.49	0.56	0.51	0.47	0.44
10	0.55	0.53	0.52	0.55	0.53	0.51	0.55	0.51	0.49	0.54	0.49	0.46	0.53	0.48	0.44	0.41

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



C Range: 0 - 360 Deg

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G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800 Goniophotometer

Humidity: 65

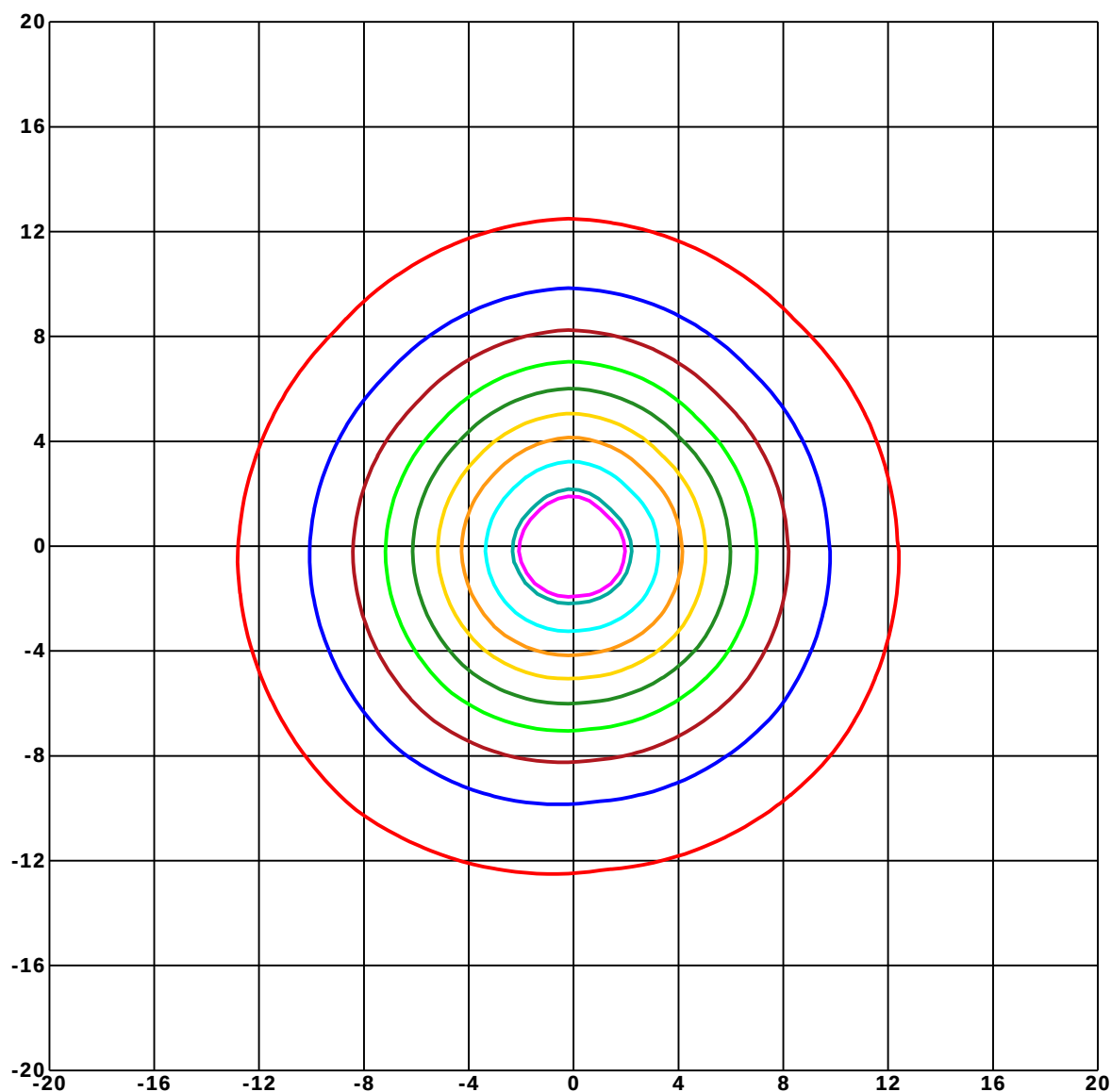
Test Distance: 6.66 m

Remarks:

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ISOLX DIAGRAM



Unit of illumination:lx

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

8.948(1%E_{max})

8.753(1%E_{max})

7.781(1%E_{max})

6.808(1%E_{max})

5.836(1%E_{max})

4.863(0%E_{max})

3.89(0%E_{max})

2.918(0%E_{max})

1.945(0%E_{max})

0.973(0%E_{max})

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G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800 Goniophotometer

Humidity: 65

Test Distance: 6.66 m

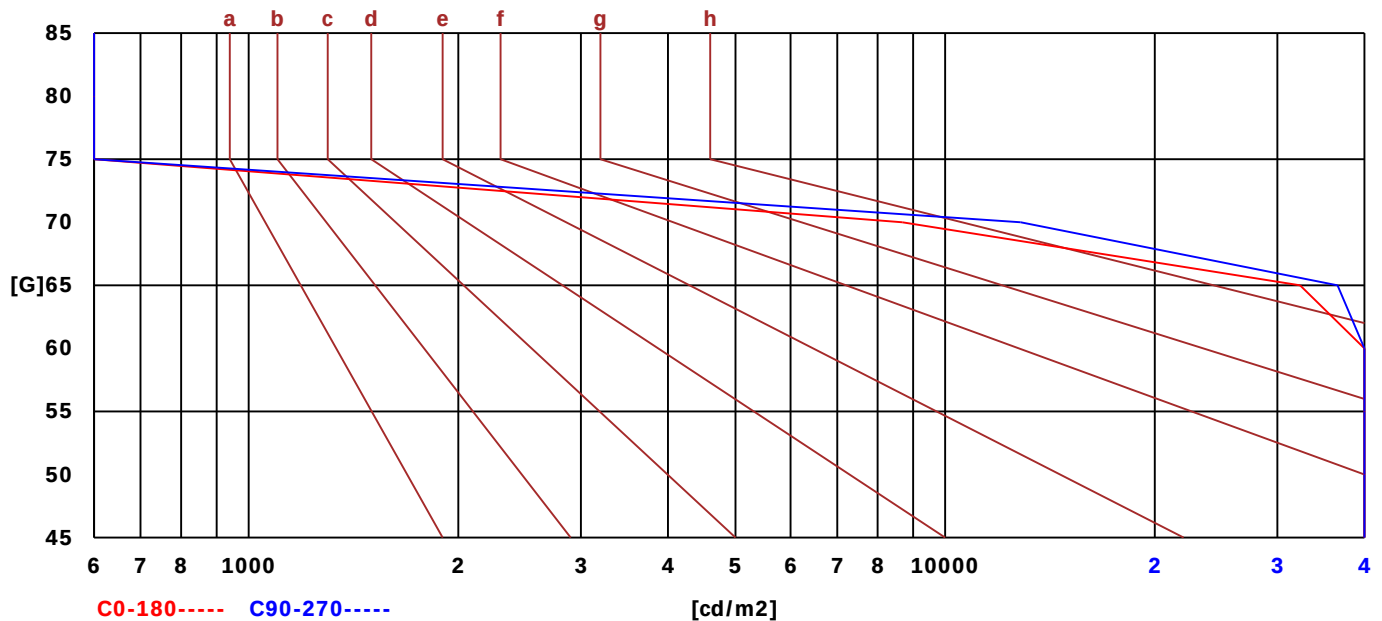
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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	105992	91952	75353	55818	32317	8681	0	0	0
C90	110940	97066	80308	60908	36582	12835	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



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G Interval: 1.0 Deg

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Humidity: 65

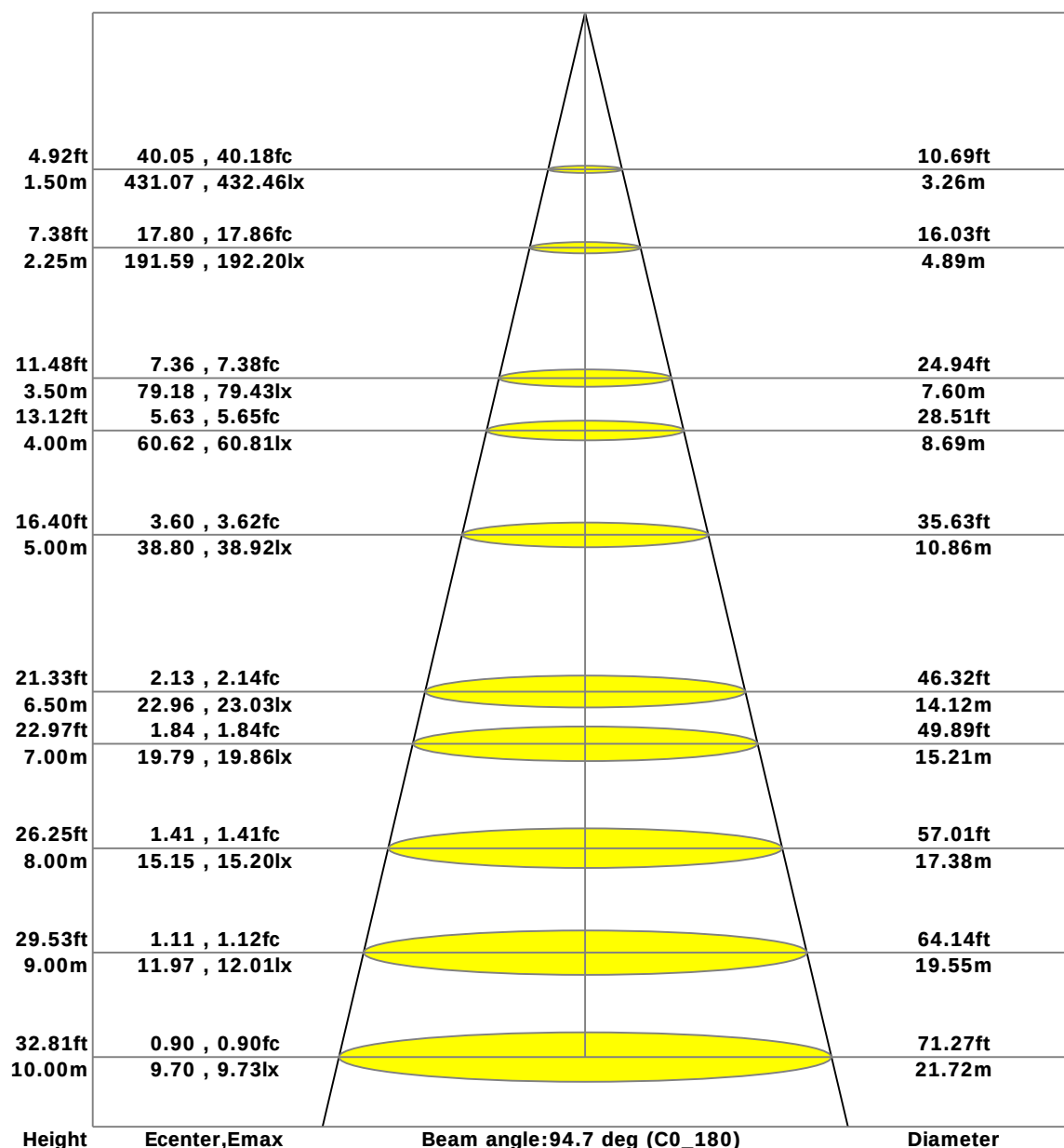
Test Distance: 6.66 m

Remarks:

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LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 30

Operators: QC01

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G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800 Goniophotometer

Humidity: 65

Test Distance: 6.66 m

Remarks:

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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	23.76	23.82	23.96	24.01	24.25	23.88	23.94	24.08	24.13	24.37
	3H	23.72	23.79	23.93	23.98	24.23	23.84	23.91	24.05	24.10	24.35
	4H	23.70	23.76	23.91	23.96	24.21	23.82	23.88	24.03	24.08	24.33
	6H	23.67	23.73	23.89	23.94	24.19	23.79	23.85	24.01	24.05	24.31
	8H	23.66	23.72	23.88	23.92	24.18	23.78	23.84	24.00	24.04	24.29
	12H	23.65	23.70	23.87	23.91	24.17	23.76	23.82	23.99	24.03	24.28
4H	2H	23.98	24.04	24.19	24.24	24.49	24.16	24.22	24.37	24.42	24.67
	3H	23.94	24.00	24.16	24.21	24.46	24.12	24.18	24.34	24.38	24.64
	4H	23.91	23.97	24.14	24.18	24.44	24.09	24.14	24.32	24.36	24.61
	6H	23.88	23.93	24.12	24.15	24.42	24.05	24.11	24.29	24.33	24.59
	8H	23.86	23.91	24.10	24.14	24.40	24.04	24.09	24.28	24.31	24.58
	12H	23.84	23.89	24.09	24.12	24.39	24.02	24.07	24.27	24.30	24.57
8H	4H	23.94	24.00	24.16	24.21	24.46	24.12	24.18	24.34	24.38	24.64
	6H	23.82	23.87	24.08	24.11	24.38	24.00	24.05	24.26	24.28	24.56
	8H	23.80	23.85	24.07	24.09	24.37	23.98	24.02	24.24	24.27	24.54
	12H	23.78	23.82	24.05	24.08	24.36	23.96	24.00	24.23	24.25	24.53
12H	4H	23.84	23.89	24.09	24.12	24.39	24.02	24.07	24.27	24.30	24.57
	6H	23.80	23.85	24.07	24.09	24.37	23.98	24.02	24.24	24.27	24.54

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G Range: 0 - 90 Deg

G Interval: 1.0 Deg

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Humidity: 65

Test Distance: 6.66 m

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ZONAL LUMINOUS FLUX TABLE

[illegible]

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G Range: 0 - 90 Deg

G Interval: 1.0 Deg

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Humidity: 65

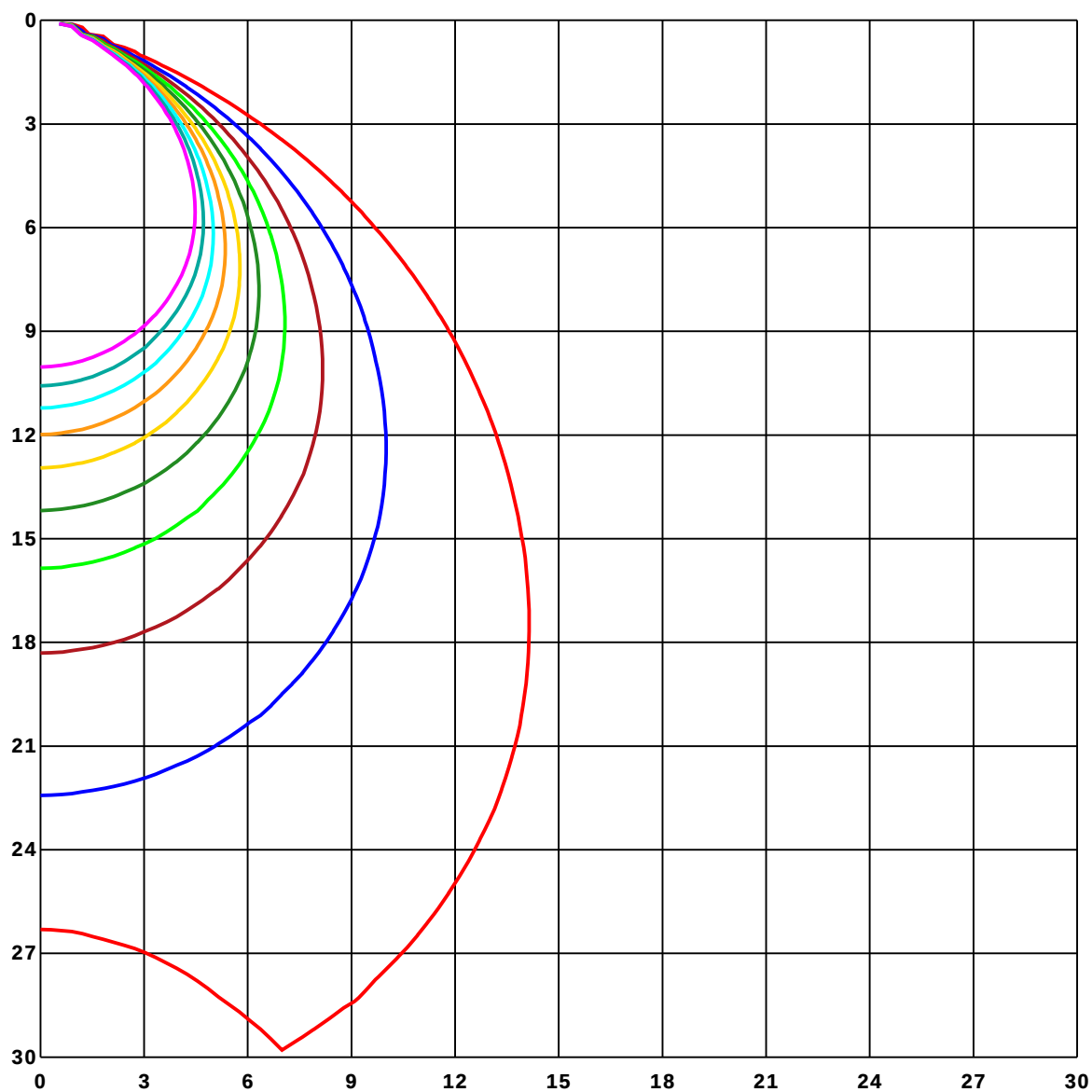
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SPACE ISOLX DIAGRAM



Unit of illumination:lx

9.643
8.678
7.714
6.75
5.786

4.821
3.857
2.893
1.929
0.964

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

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Operators: QC01

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G Interval: 1.0 Deg

Test System: Huipu CPM-1800 Goniophotometer

Humidity: 65

Test Distance: 6.66 m

Remarks:

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LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	969.91	956.07	960.55	965.98	969.91	956.07	960.55	965.98	969.91	
G1	969.1	958.24	960.41	963.26	973.04	959.73	960.41	966.38	969.1	
G2	968.83	955.53	959.6	964.48	969.1	957.29	960.55	966.11	968.83	
G3	965.57	953.9	959.33	961.5	969.91	958.92	958.65	963.81	965.57	
G4	963.67	947.79	957.97	960.41	968.28	957.97	958.11	965.84	963.67	
G5	962.31	948.88	954.71	956.2	967.74	958.24	956.07	962.31	962.31	
G6	959.6	942.09	954.71	955.93	964.21	956.75	953.76	963.53	959.6	
G7	956.2	942.5	952.0	952.4	964.48	955.25	952.54	956.88	956.2	
G8	953.08	936.52	948.2	950.37	959.6	954.71	950.37	957.29	953.08	
G9	948.47	931.5	943.17	945.21	957.02	954.44	942.63	952.4	948.47	
G10	942.5	923.49	940.05	939.37	953.08	949.83	939.65	949.55	942.5	
G11	939.1	922.82	935.85	933.81	951.18	946.43	936.8	944.12	939.1	
G12	934.62	913.31	932.05	930.14	945.07	940.6	930.96	941.95	934.62	
G13	929.06	910.46	929.06	921.19	943.72	937.2	927.43	934.35	929.06	
G14	922.0	900.96	921.87	918.47	934.08	931.23	920.24	930.14	922.0	
G15	915.35	897.3	917.39	910.74	931.37	926.62	914.94	924.58	915.35	
G16	908.56	885.08	910.33	904.36	924.44	922.95	910.33	920.78	908.56	
G17	901.51	880.74	903.14	897.43	916.84	920.64	901.1	913.04	901.51	
G18	898.79	870.97	894.72	888.75	912.64	910.06	893.77	908.29	898.79	
G19	885.08	862.55	887.25	879.11	904.36	903.41	888.34	897.98	885.08	
G20	876.4	852.24	879.65	872.73	896.21	897.43	878.57	892.01	876.4	
G21	868.12	843.69	870.42	862.28	888.34	889.43	869.88	883.18	868.12	
G22	859.57	833.37	861.06	853.46	879.65	881.01	862.01	875.18	859.57	
G23	848.84	826.58	852.92	846.27	871.37	874.36	851.02	865.81	848.84	
G24	839.34	812.33	843.55	835.68	860.79	864.32	840.56	857.53	839.34	
G25	828.35	802.29	832.42	823.33	854.14	856.85	831.88	848.03	828.35	
G26	817.35	791.16	823.19	815.32	841.79	845.72	820.75	838.66	817.35	
G27	806.5	779.62	813.42	801.2	832.96	838.12	808.67	826.86	806.5	
G28	794.28	767.14	803.1	790.35	822.38	826.99	798.62	818.98	794.28	
G29	782.34	757.5	792.25	778.54	809.35	817.76	787.22	805.0	782.34	
G30	771.34	743.79	778.67	765.24	799.85	805.41	774.46	793.47	771.34	
G31	756.14	730.22	766.86	751.93	787.9	796.18	762.52	780.57	756.14	
G32	742.03	713.93	753.83	738.23	774.46	782.88	747.05	769.44	742.03	
G33	727.5	698.86	739.72	722.35	761.43	772.16	734.02	755.06	727.5	
G34	713.66	681.63	722.21	706.6	748.54	758.45	719.77	739.85	713.66	
G35	695.74	667.1	707.28	690.31	731.17	745.96	702.8	725.87	695.74	
G36	680.0	651.36	691.67	673.75	716.1	731.17	684.88	708.23	680.0	

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C Interval: 45.0 Deg

Test Speed: High

Temperature: 30

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G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800 Goniophotometer

Humidity: 65

Test Distance: 6.66 m

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LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

GammaC	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	662.22	631.54	674.57	655.84	700.49	716.78	670.63	691.53	662.22	
G38	644.84	613.9	655.97	636.7	684.75	699.27	651.36	674.98	644.84	
G39	626.93	595.98	639.14	617.29	668.87	685.29	632.9	657.06	626.93	
G40	608.6	576.57	620.41	600.33	649.32	666.7	613.08	639.55	608.6	
G41	588.52	558.66	601.14	580.65	631.27	649.73	595.85	618.92	588.52	
G42	570.87	537.21	582.0	561.64	614.71	632.09	577.79	600.46	570.87	
G43	549.83	519.7	562.46	542.37	596.12	615.39	556.21	581.05	549.83	
G44	529.75	498.94	543.73	522.01	576.17	595.71	534.9	561.64	529.75	
G45	509.12	479.66	523.23	502.06	558.79	579.29	515.63	542.64	509.12	
G46	490.11	459.17	503.28	482.79	537.48	557.71	496.49	522.15	490.11	
G47	469.48	441.52	483.33	460.53	517.8	540.06	476.0	500.7	469.48	
G48	450.07	419.54	462.83	441.39	497.99	518.21	455.91	479.93	450.07	
G49	429.17	399.45	441.25	420.89	477.49	501.24	435.01	459.58	429.17	
G50	407.86	378.27	420.89	399.31	456.86	478.98	414.65	439.89	407.86	
G51	388.05	358.32	401.62	378.0	436.64	459.3	393.07	418.31	388.05	
G52	367.28	337.28	381.12	357.92	416.96	439.49	371.76	397.14	367.28	
G53	345.97	316.93	359.27	336.33	396.33	419.4	350.04	376.78	345.97	
G54	324.66	296.29	337.96	316.79	375.29	397.82	329.82	355.61	324.66	
G55	304.03	276.61	317.6	294.8	354.11	377.46	307.83	334.71	304.03	
G56	283.13	255.85	297.79	274.58	333.21	356.42	287.88	313.4	283.13	
G57	262.63	236.85	276.21	254.35	313.8	335.93	266.43	292.63	262.63	
G58	242.27	217.17	256.53	234.81	291.68	314.21	246.48	272.27	242.27	
G59	222.32	198.03	235.9	214.04	270.37	293.85	225.58	250.01	222.32	
G60	202.91	178.62	217.17	194.91	251.1	272.95	206.44	230.47	202.91	
G61	183.37	159.21	196.13	174.82	230.06	252.86	185.81	210.11	183.37	
G62	164.37	138.99	176.72	154.73	209.97	232.23	166.81	191.11	164.37	
G63	145.23	121.48	158.26	134.64	191.11	213.09	147.27	170.88	145.23	
G64	125.55	104.37	138.44	116.73	171.29	192.73	127.58	152.29	125.55	
G65	107.36	87.41	119.85	98.95	151.74	174.14	109.13	131.93	107.36	
G66	91.62	71.39	102.61	81.84	132.33	154.32	92.43	114.55	91.62	
G67	75.19	56.6	85.92	66.24	113.47	134.78	75.6	96.23	75.19	
G68	58.91	42.21	69.9	51.71	95.82	116.05	59.72	80.08	58.91	
G69	45.06	30.0	56.06	39.5	79.27	99.08	46.28	65.56	45.06	
G70	32.17	19.0	43.84	28.1	63.39	81.98	34.07	51.58	32.17	
G71	20.49	9.64	33.25	18.32	49.13	65.96	23.89	39.23	20.49	
G72	11.13	2.04	23.07	10.32	35.7	51.17	15.2	29.18	11.13	
G73	3.26	0.0	15.34	3.53	24.57	38.68	7.19	20.22	3.26	

C Range: 0 - 360 Deg

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Test Speed: High

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Operators: QC01

Test Date: 2023/7/18 10:05:22

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800 Goniophotometer

Humidity: 65

Test Distance: 6.66 m

Remarks:

Report No.:

Test Time: 2023/7/18 10:05:22

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 30

Operators: QC01

Test Date: 2023/7/18 10:05:22

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800 Goniophotometer

Humidity: 65

Test Distance: 6.66 m

Remarks: