

Report No.:

Test Time: 2024/5/25 11:01:31

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: InBright
Luminaire Type: IBSP104CT095H78-15°-10.7W
Lamp Type:
Luminous Width: 90 mm
Luminous Length: 90 mm
Luminous Height: 74 mm

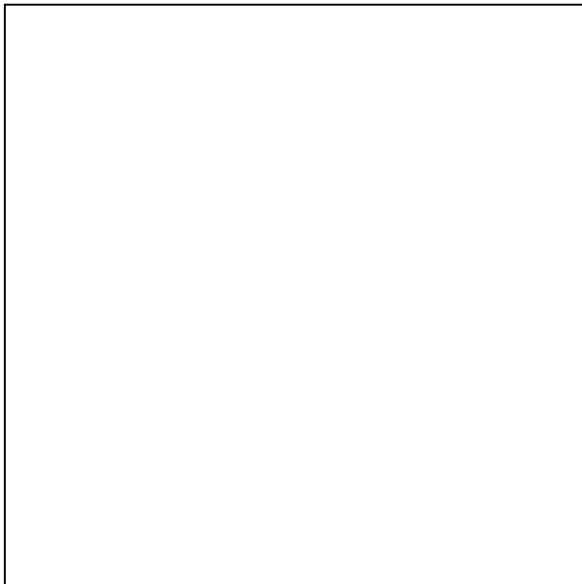
Voltage(V): 220.00 V
Current(A): 0.0520 A
Power(W): 10.70 W
Power Factor: 0.9180
Lamp Luminous Flux: 1186.18

Photometric Results

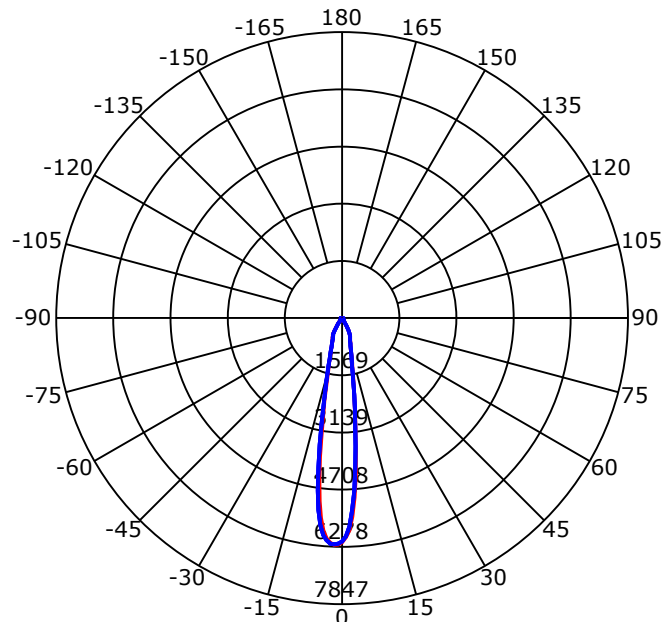
CIE Class: Direct
Luminaire Luminous Flux: 1186.18 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 110.86 lm/W
Beam Angle(50%) C0-180,C90-270: 17.1,17.5
Field Angle(10%) C0-180,C90-270: 45.6,44.9
S/MH C0-180,C90-270: 0.317,0.317

Max. Intensity: 6277.82 cd
Max.Intensity Angle: C=225 Gamma=4
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 6154.28 cd
Effective Luminous Flux: 847.32 lm
ERP(ϕ use)(120deg): 1171.47 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 17.1 deg,17.5 deg

C0-180 — C90-270 —

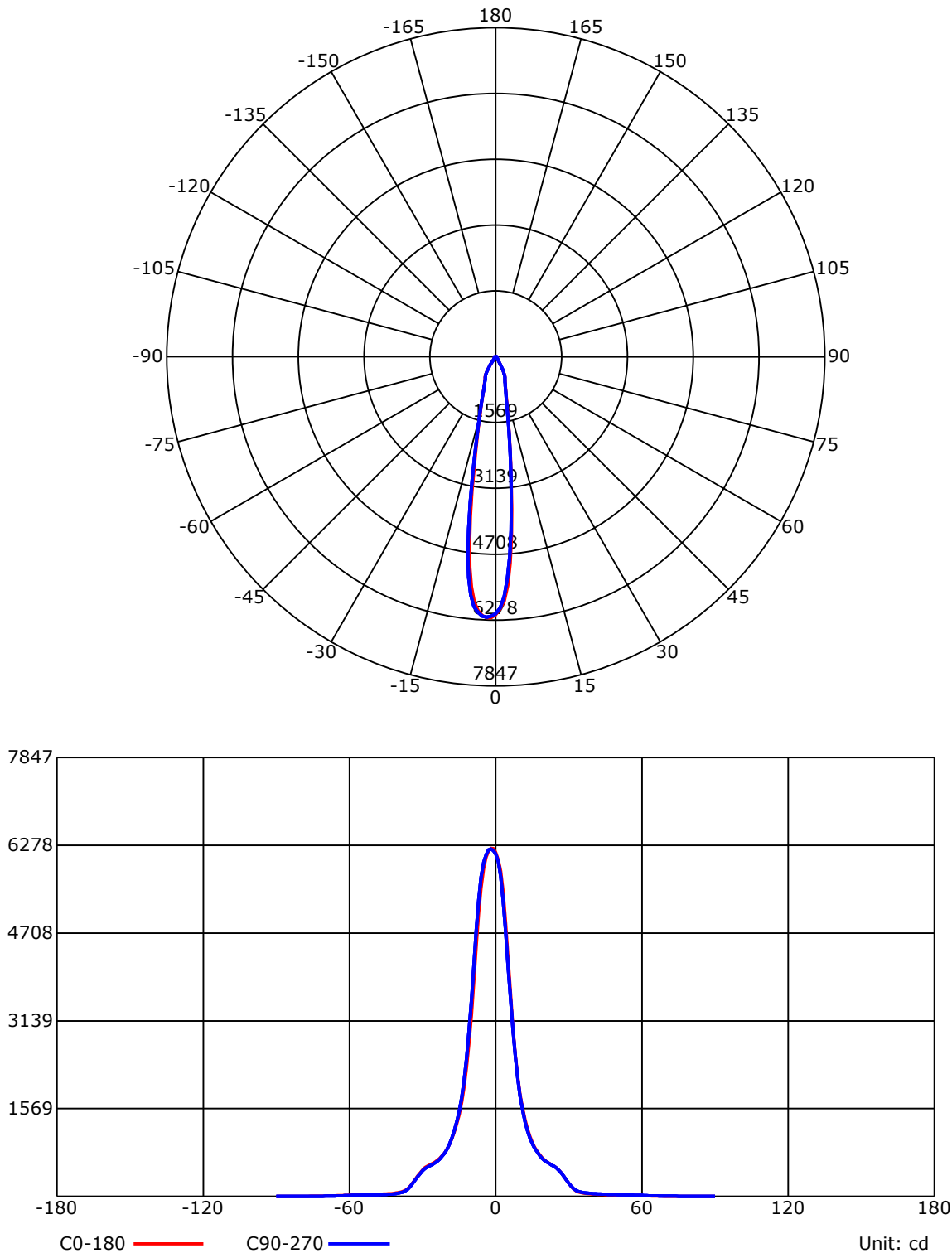
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/5/25 11:01:31

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 Intensity Distribution Curve



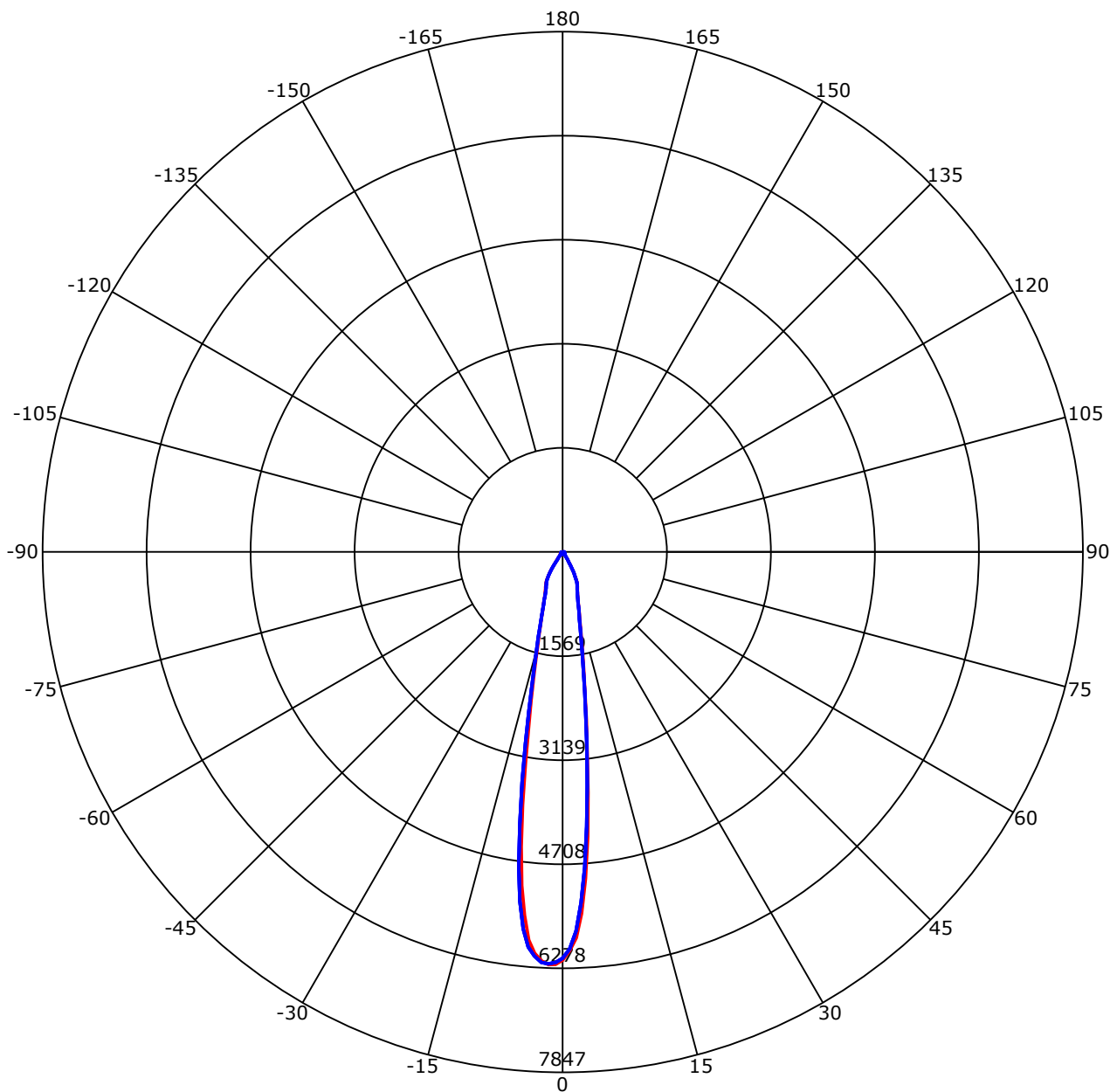
C Range: 0 - 360 Deg
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Luminous Intensity Distribution Curve



C0-180 — C90-270

Unit: cd/klm

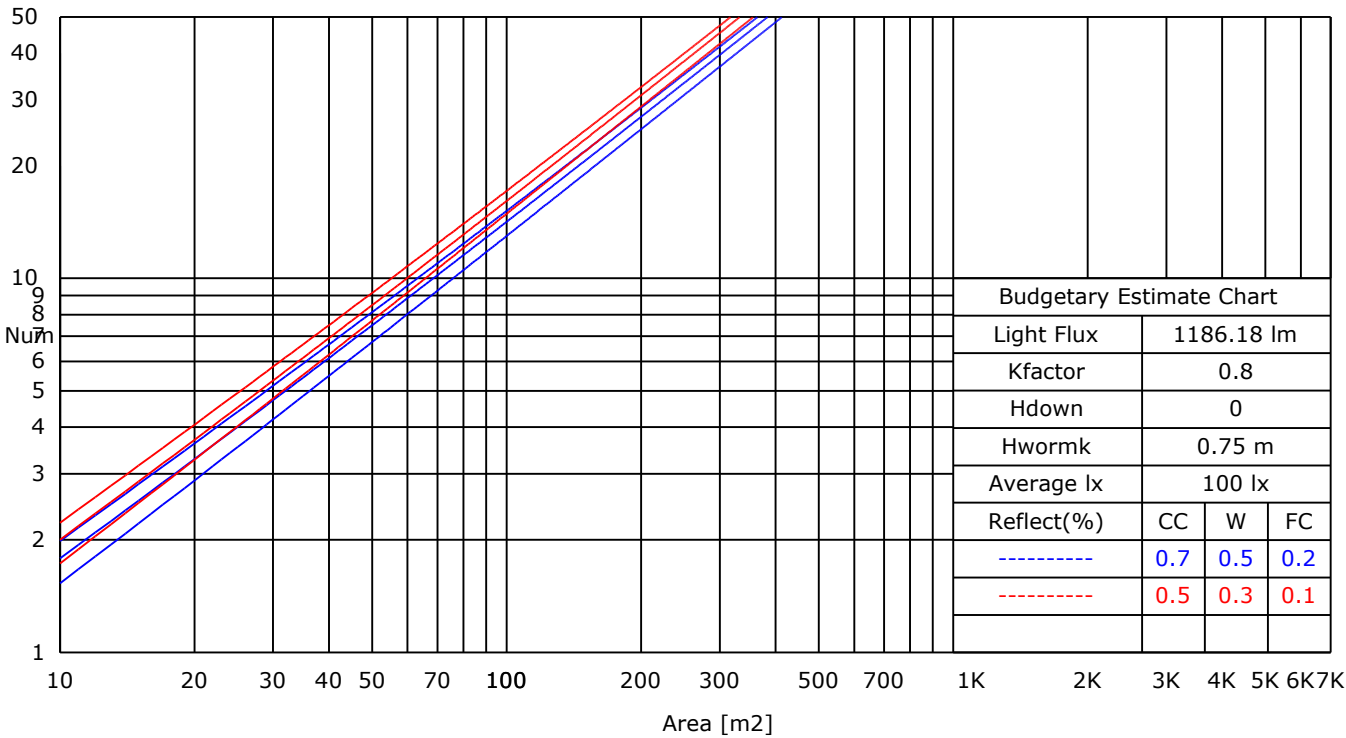
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Humidity: 60
Test Distance: 6.7 m
Remarks:

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	0.88	0.84	0.81	0.87	0.83	0.80	0.85	0.81	0.77	0.81	0.77	0.73	0.76	0.72	0.68	0.63
2	0.81	0.78	0.76	0.81	0.77	0.75	0.80	0.75	0.72	0.77	0.72	0.68	0.73	0.68	0.64	0.59
3	0.78	0.75	0.73	0.77	0.74	0.71	0.76	0.72	0.68	0.74	0.69	0.65	0.71	0.65	0.61	0.57
4	0.75	0.72	0.70	0.74	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	0.72	0.70	0.68	0.72	0.69	0.67	0.71	0.67	0.64	0.69	0.64	0.61	0.67	0.61	0.57	0.53
6	0.70	0.68	0.66	0.70	0.67	0.65	0.69	0.65	0.62	0.67	0.62	0.59	0.65	0.60	0.56	0.52
7	0.68	0.66	0.65	0.68	0.65	0.63	0.67	0.63	0.60	0.65	0.61	0.57	0.63	0.58	0.54	0.51
8	0.66	0.64	0.63	0.66	0.63	0.62	0.65	0.61	0.59	0.63	0.59	0.56	0.62	0.57	0.53	0.50
9	0.64	0.63	0.62	0.64	0.62	0.60	0.63	0.60	0.57	0.62	0.58	0.55	0.60	0.55	0.52	0.48
10	0.63	0.61	0.60	0.63	0.60	0.59	0.62	0.58	0.56	0.60	0.56	0.53	0.59	0.54	0.50	0.47

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



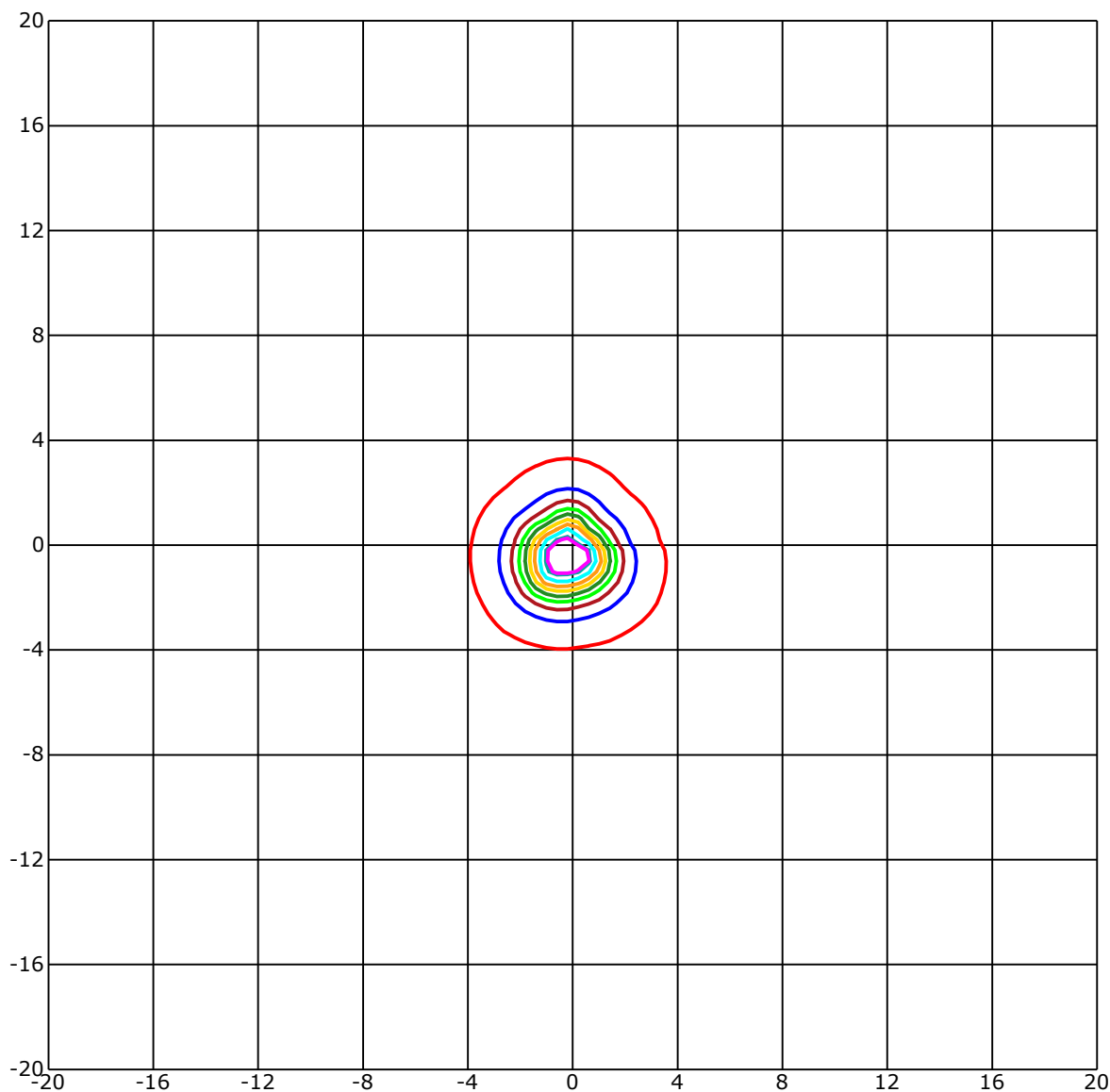
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G Range: 0 - 90 Deg
G Interval: 1.0 Deg
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Humidity: 60
Test Distance: 6.7 m
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ISOLX DIAGRAM



57.335(92%Emax)
56.089(90%Emax)
49.856(80%Emax)
43.624(70%Emax)
37.392(60%Emax)

31.16(50%Emax)
24.928(40%Emax)
18.696(30%Emax)
12.464(20%Emax)
6.232(10%Emax)

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2024/5/25 11:01:31

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 60

Test Distance: 6.7 m

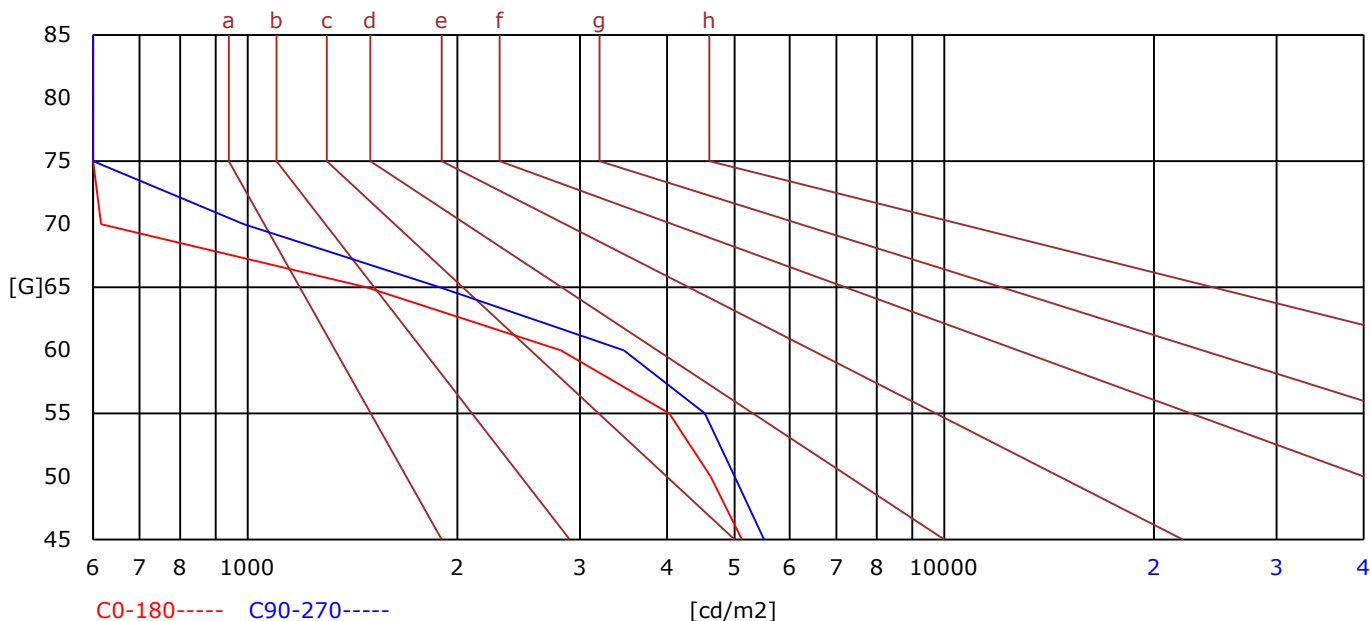
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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	5126	4621	4029	2815	1482	616	343	0	0
C90	5510	5001	4532	3469	1888	988	385	319	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



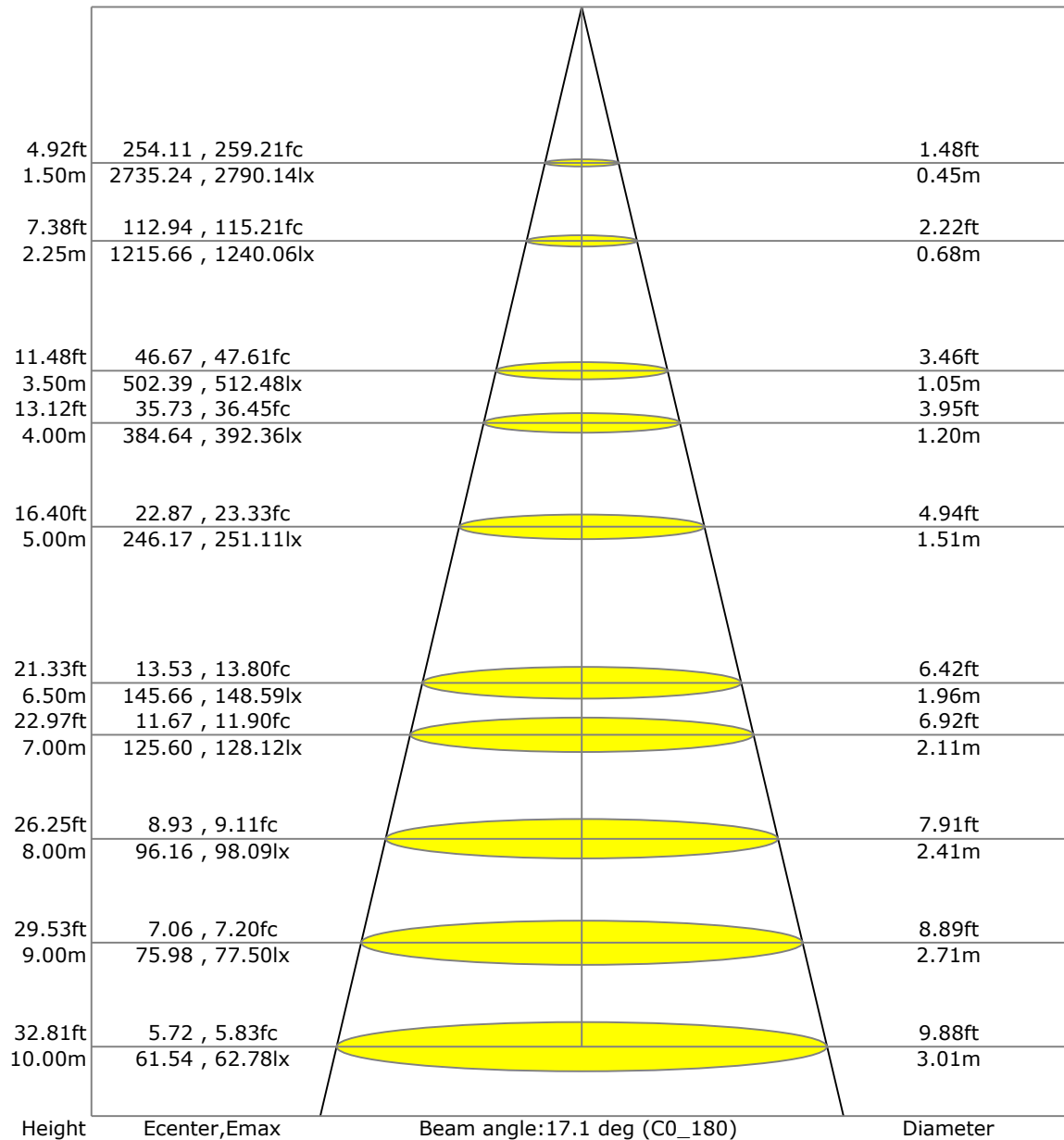
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G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.7 m
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LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

Test Date: 2024/5/25 11:01:31

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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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	5.12	5.18	5.32	5.37	5.61	5.54	5.60	5.74	5.79	6.03
	3H	5.12	5.19	5.33	5.38	5.63	5.53	5.59	5.74	5.79	6.03
	4H	5.11	5.18	5.32	5.37	5.62	5.51	5.58	5.73	5.78	6.03
	6H	5.10	5.16	5.31	5.36	5.62	5.50	5.56	5.71	5.77	6.02
	8H	5.09	5.15	5.31	5.36	5.61	5.49	5.56	5.71	5.76	6.01
	12H	5.08	5.14	5.30	5.35	5.61	5.48	5.55	5.70	5.75	6.01
4H	2H	5.36	5.43	5.58	5.63	5.88	6.07	6.14	6.29	6.34	6.59
	3H	5.37	5.43	5.59	5.64	5.89	6.06	6.13	6.29	6.34	6.59
	4H	5.35	5.42	5.58	5.63	5.89	6.05	6.11	6.28	6.33	6.59
	6H	5.33	5.40	5.57	5.62	5.88	6.02	6.09	6.26	6.31	6.57
	8H	5.32	5.39	5.56	5.61	5.88	6.01	6.07	6.25	6.30	6.57
	12H	5.31	5.37	5.56	5.60	5.87	5.99	6.06	6.24	6.29	6.56
8H	4H	5.35	5.41	5.57	5.62	5.87	6.21	6.27	6.43	6.48	6.73
	6H	5.30	5.36	5.56	5.60	5.88	6.17	6.24	6.43	6.48	6.75
	8H	5.29	5.35	5.55	5.59	5.87	6.16	6.22	6.42	6.46	6.74
	12H	5.27	5.33	5.54	5.58	5.87	6.14	6.20	6.41	6.45	6.73
12H	4H	5.31	5.37	5.56	5.61	5.88	6.27	6.33	6.52	6.56	6.84
	6H	5.28	5.34	5.55	5.59	5.87	6.25	6.31	6.51	6.55	6.83

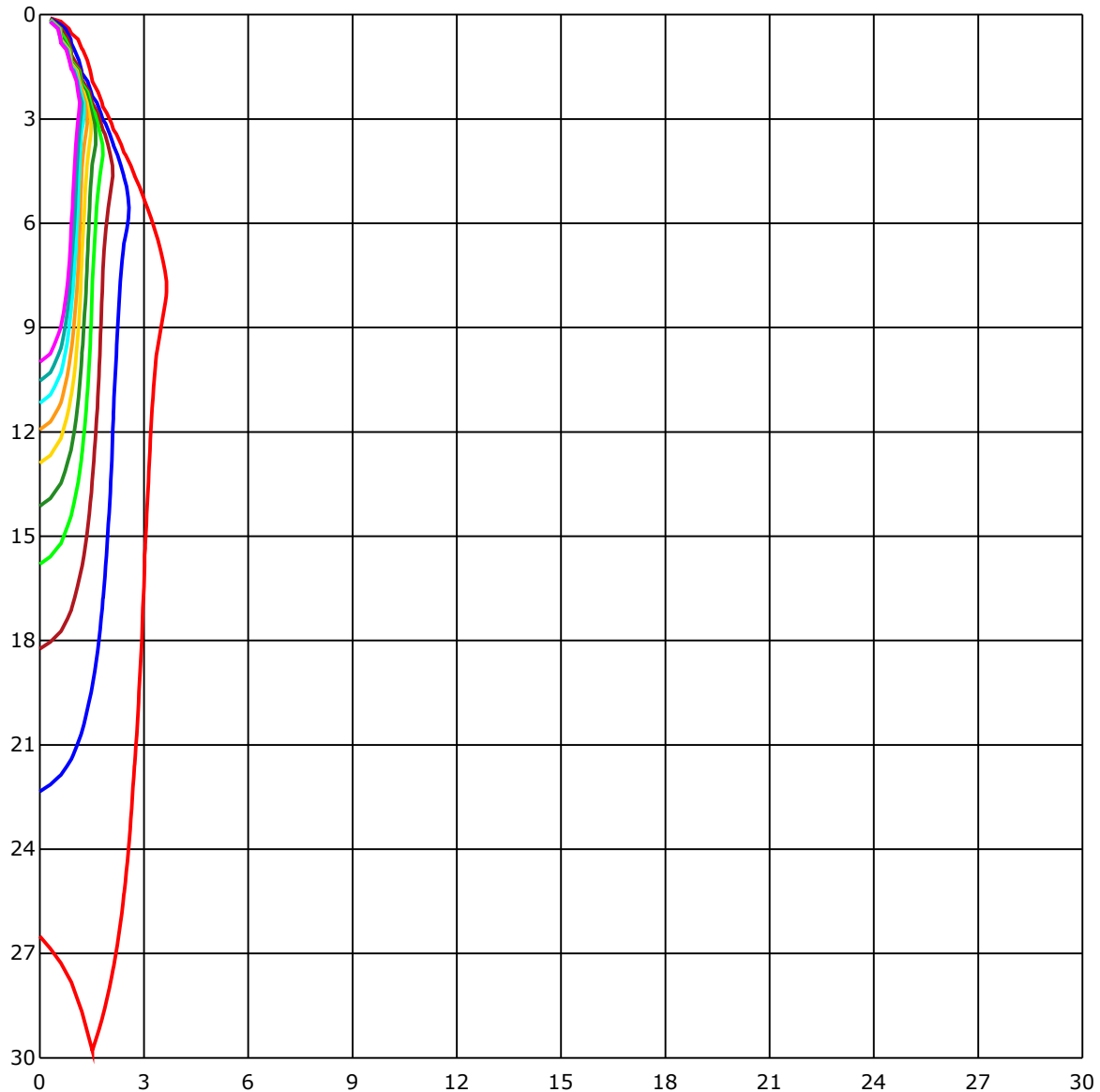
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SPACE ISOLX DIAGRAM



61.65	30.825
55.485	24.66
49.32	18.495
43.155	12.33
36.99	6.165

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LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	6154.28	5885.62	6126.05	6093.28	6154.28	5885.62	6126.05	6093.28	6154.28	
G1	6015.71	5551.46	5988.69	5956.19	6221.44	6085.42	6188.67	6130.67	6015.71	
G2	5821.38	5026.29	5719.7	5734.97	6226.11	6179.56	6211.97	6133.68	5821.38	
G3	5460.38	4393.61	5295.13	5389.54	6173.77	6233.47	6195.45	6063.34	5460.38	
G4	4937.09	3734.04	4768.17	4893.86	6063.92	6277.82	6107.51	5928.98	4937.09	
G5	4313.21	3118.1	4156.46	4297.72	5872.29	6245.59	5978.27	5712.48	4313.21	
G6	3648.7	2607.35	3541.78	3680.58	5512.22	6178.93	5714.5	5322.25	3648.7	
G7	3037.12	2193.15	2990.12	3087.58	5067.54	6044.17	5304.92	4813.11	3037.12	
G8	2548.41	1844.84	2516.0	2576.51	4485.14	5785.74	4778.45	4180.07	2548.41	
G9	2153.51	1568.37	2119.57	2170.97	3856.55	5370.59	4149.36	3560.63	2153.51	
G10	1830.08	1347.37	1791.16	1837.39	3247.61	4824.42	3522.47	2992.14	1830.08	
G11	1572.23	1174.73	1535.33	1585.56	2716.61	4174.41	2939.71	2510.74	1572.23	
G12	1373.77	1035.34	1330.99	1393.3	2298.37	3536.57	2458.13	2137.35	1373.77	
G13	1209.11	926.8	1174.19	1229.36	1952.67	2936.52	2073.69	1844.84	1209.11	
G14	1078.84	833.65	1046.39	1096.12	1682.03	2450.99	1772.75	1610.74	1078.84	
G15	968.37	764.43	945.61	985.38	1464.94	2063.95	1526.75	1421.85	968.37	
G16	878.86	705.09	860.27	892.1	1293.55	1749.54	1330.63	1266.89	878.86	
G17	805.24	658.54	791.37	814.89	1151.43	1498.92	1178.0	1136.26	805.24	
G18	744.19	619.71	730.72	754.15	1032.11	1302.3	1045.13	1025.47	744.19	
G19	692.34	588.01	680.71	698.8	930.93	1149.0	936.94	935.42	692.34	
G20	653.24	560.14	642.51	657.46	850.8	1022.68	847.66	854.97	653.24	
G21	619.71	535.76	611.9	622.27	781.58	924.91	776.78	785.53	619.71	
G22	589.94	510.49	583.35	595.65	726.99	842.14	715.77	732.34	589.94	
G23	562.2	482.43	558.34	568.58	680.4	775.34	667.65	689.87	562.2	
G24	538.37	438.67	535.9	548.33	644.53	721.38	628.28	652.07	538.37	
G25	510.17	387.09	504.07	523.15	613.83	677.93	596.95	622.27	510.17	
G26	467.26	329.9	460.03	494.82	589.18	641.39	569.79	598.02	467.26	
G27	414.2	274.28	407.65	447.37	564.36	612.75	546.22	574.37	414.2	
G28	352.75	218.93	350.95	392.7	542.27	586.67	523.01	548.69	352.75	
G29	291.02	167.57	291.87	335.06	516.24	563.95	499.09	505.64	291.02	
G30	233.74	123.0	232.22	273.38	476.42	540.88	461.92	452.94	233.74	
G31	175.79	93.01	179.43	215.97	422.86	515.88	411.64	391.84	175.79	
G32	127.8	77.79	135.84	163.18	366.21	477.85	353.06	327.11	127.8	
G33	94.94	68.68	105.04	117.75	306.24	427.35	296.09	264.54	94.94	
G34	77.26	60.42	88.61	88.79	246.31	370.97	237.69	205.15	77.26	
G35	67.47	54.14	77.7	74.16	189.75	310.82	182.66	152.0	67.47	
G36	59.12	49.15	68.77	64.73	143.42	251.92	135.88	114.07	59.12	

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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	52.52	45.2	62.13	56.47	108.99	197.16	99.61	92.34	52.52	
G38	47.76	42.6	57.5	50.28	90.27	146.93	77.12	79.77	47.76	
G39	44.08	40.4	54.14	45.92	78.06	110.12	67.2	69.36	44.08	
G40	41.3	37.26	51.04	42.78	68.5	90.05	58.22	61.77	41.3	
G41	38.65	34.92	48.08	39.5	61.01	79.05	51.08	56.38	38.65	
G42	36.5	32.9	44.4	36.81	55.3	69.58	44.62	52.84	36.5	
G43	34.34	31.51	41.75	34.79	51.0	61.5	40.72	49.33	34.34	
G44	32.59	30.21	39.59	33.04	47.72	55.3	37.66	46.24	32.59	
G45	31.15	29.36	38.2	31.56	44.85	51.31	35.6	43.63	31.15	
G46	29.9	28.33	36.63	30.3	42.69	47.9	33.89	41.48	29.9	
G47	28.59	27.16	35.55	29.18	40.98	44.4	32.32	39.55	28.59	
G48	27.52	25.99	34.21	28.24	39.28	42.15	31.11	37.89	27.52	
G49	26.31	24.91	32.81	27.07	37.71	40.31	29.81	36.27	26.31	
G50	25.23	24.06	31.56	26.04	36.36	38.83	28.73	34.79	25.23	
G51	24.2	23.21	30.44	25.36	34.66	37.48	27.74	33.31	24.2	
G52	23.52	22.53	29.45	24.2	33.49	36.18	26.84	32.28	23.52	
G53	22.31	21.59	28.68	23.3	32.19	35.1	25.77	31.11	22.31	
G54	21.46	20.29	27.29	22.09	31.02	33.71	24.87	29.9	21.46	
G55	20.47	18.72	26.17	21.05	29.76	32.46	23.75	28.51	20.47	
G56	19.48	16.83	24.47	20.02	28.46	30.97	22.62	27.34	19.48	
G57	17.73	15.49	22.62	18.58	27.25	29.85	21.59	25.99	17.73	
G58	16.47	14.05	20.92	17.1	25.81	28.68	20.38	24.82	16.47	
G59	14.81	12.75	19.57	15.53	24.42	27.34	19.12	23.25	14.81	
G60	13.42	11.4	17.91	14.05	23.07	25.86	17.64	21.68	13.42	
G61	12.21	9.61	16.38	12.57	21.05	24.33	16.16	19.93	12.21	
G62	10.77	7.81	14.41	11.09	19.48	22.62	14.45	18.45	10.77	
G63	8.89	6.73	12.79	9.34	17.64	20.92	12.84	17.01	8.89	
G64	7.23	5.84	11.18	7.72	16.03	19.26	11.13	15.4	7.23	
G65	6.33	5.07	10.1	6.46	14.23	17.24	9.52	13.11	6.33	
G66	5.52	4.13	9.16	5.61	11.99	15.49	7.54	11.54	5.52	
G67	4.53	3.59	8.26	4.76	10.46	13.33	6.33	10.28	4.53	
G68	3.95	2.83	7.32	4.13	9.56	11.27	5.39	9.34	3.95	
G69	3.23	2.24	6.55	3.41	8.48	10.06	4.76	8.44	3.23	
G70	2.65	1.71	5.84	2.74	7.72	9.11	4.04	7.63	2.65	
G71	2.11	1.39	5.3	2.15	6.87	8.3	3.19	6.69	2.11	
G72	1.75	0.94	4.76	1.8	6.19	7.41	2.65	6.06	1.75	
G73	1.3	0.81	4.22	1.44	5.43	6.64	2.11	5.25	1.3	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature: 25

Operators: QC01

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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:

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

Remarks: