

Report No.:

Test Time: 2025/6/19 16:35:17

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: InBright
Luminaire Type: IBSP221CT042.(A)-38°-7W
Lamp Type:
Luminous Width: 38 mm
Luminous Length: 38 mm
Luminous Height: 34 mm

Voltage(V): 219.80 V
Current(A): 0.0360 A
Power(W): 7.39 W
Power Factor: 0.9090
Lamp Luminous Flux: 517.20

Photometric Results

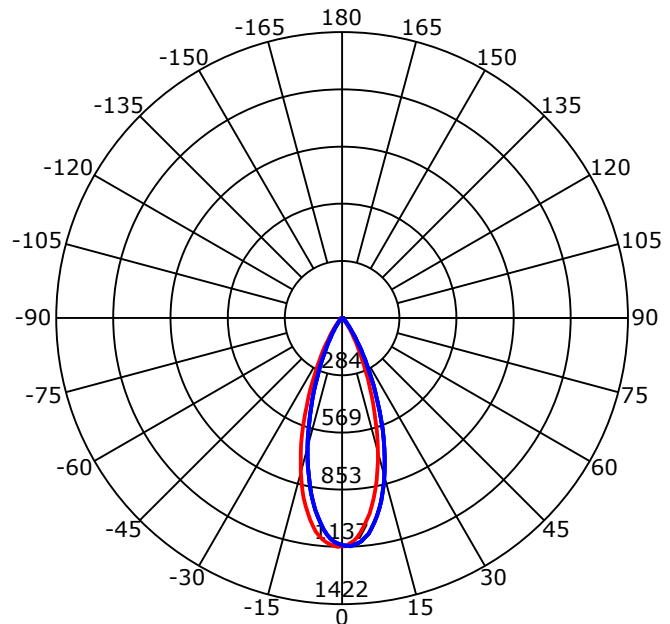
CIE Class: Direct
Luminaire Luminous Flux: 517.1996 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 70.02 lm/W
Beam Angle(50%) C0-180,C90-270: 37.3,37.5
Field Angle(10%) C0-180,C90-270: 64.7,65.0
S/MH C0-180,C90-270: 0.611,0.611

Max. Intensity: 1137.49 cd
Max.Intensity Angle: C=180 Gamma=1
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 1135.04 cd
Effective Luminous Flux: 460.57 lm
ERP(ϕ use)(120deg): 515.90 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 37.3 deg,37.5 deg

C0-180 — C90-270 —

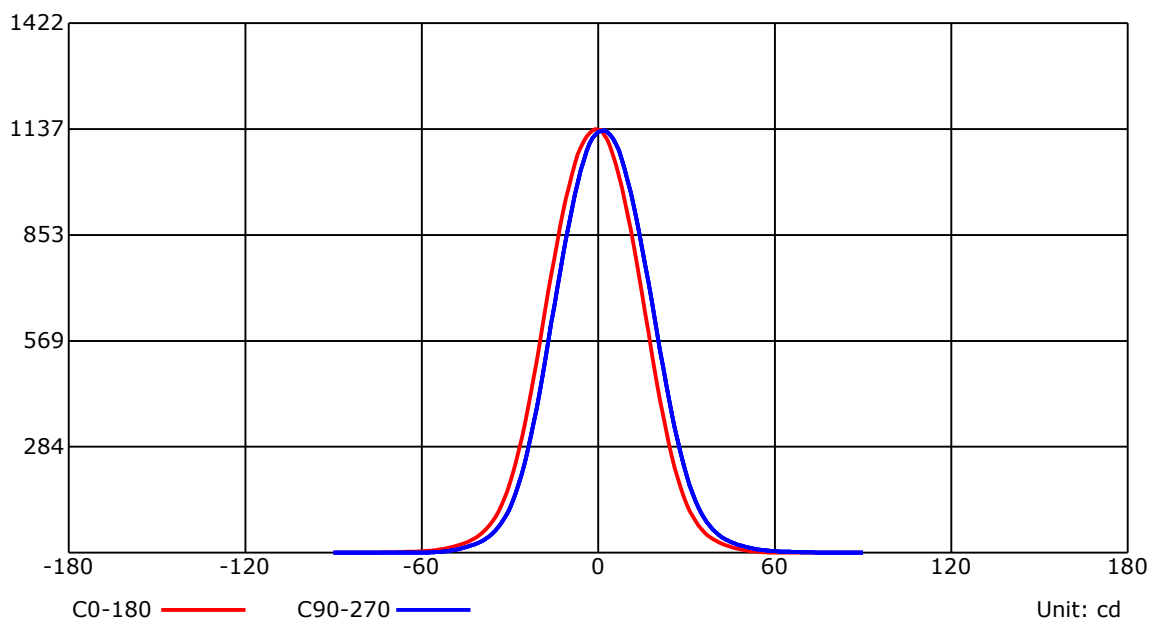
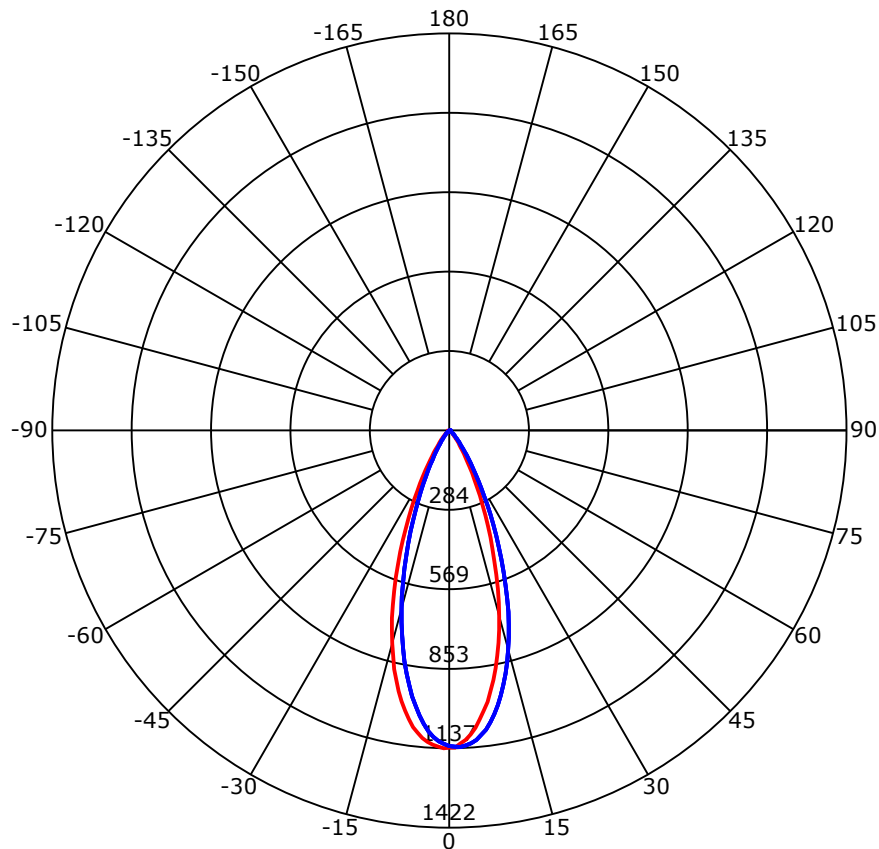
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/6/19 16:35:17

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

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Luminous Intensity Distribution Curve



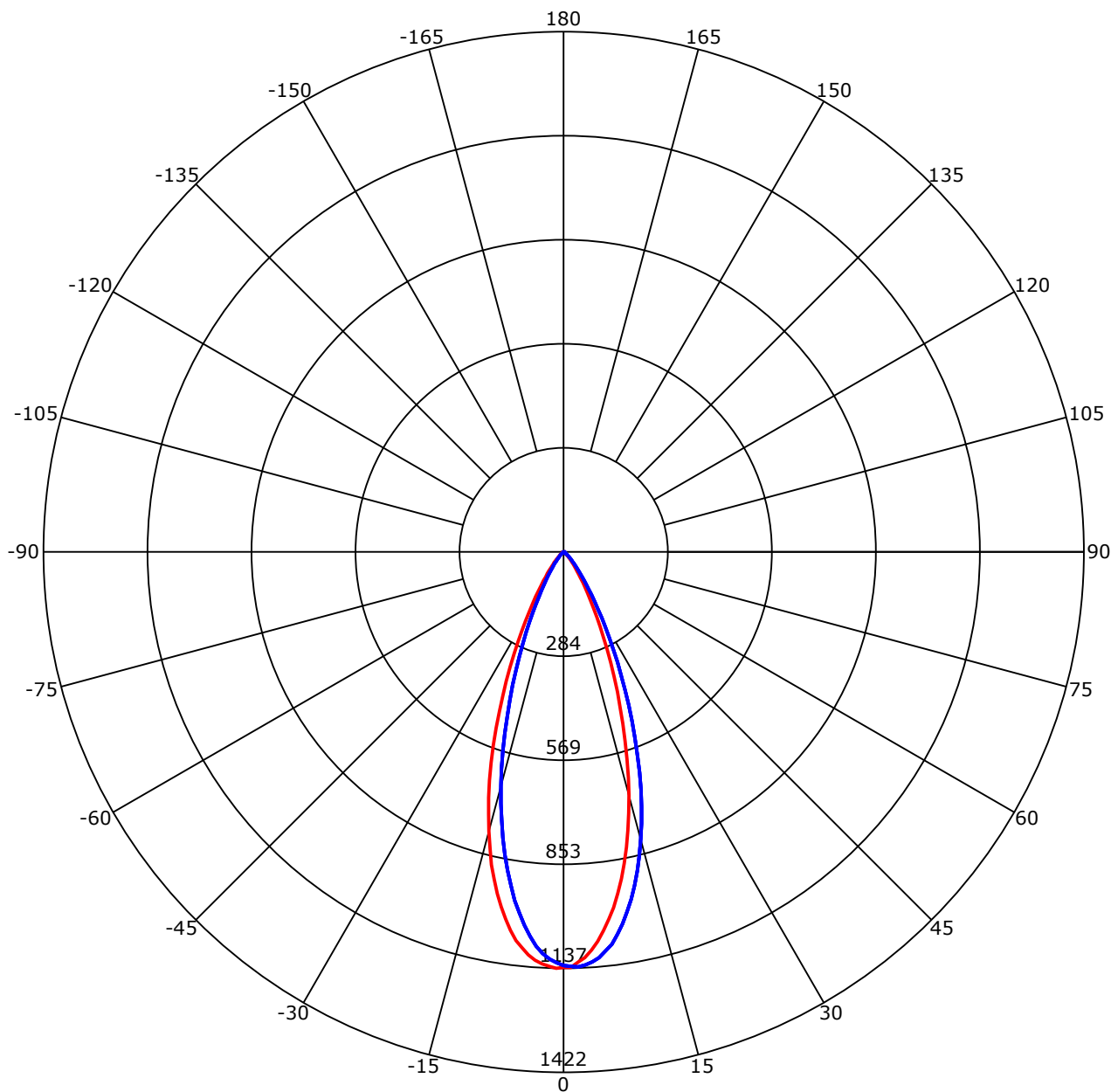
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
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G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

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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: 2025/6/19 16:35:17

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

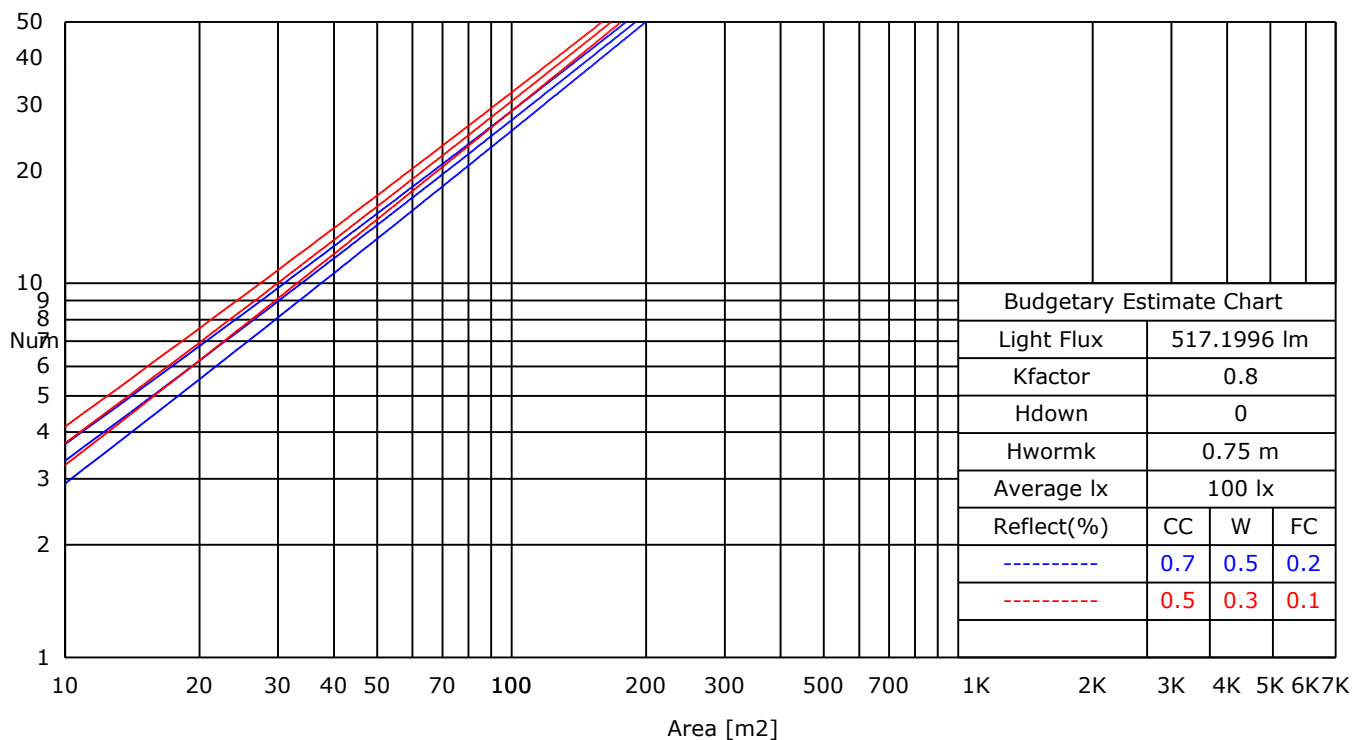
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UTILIZATION FACTORS TABLE

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	0.99	0.97	0.95	0.98	0.96	0.93	0.95	0.92	0.90	0.91	0.88	0.85	0.85	0.82	0.79	0.74
2	0.95	0.93	0.92	0.94	0.92	0.90	0.92	0.89	0.86	0.88	0.85	0.82	0.83	0.79	0.76	0.72
3	0.92	0.90	0.89	0.91	0.89	0.87	0.89	0.86	0.83	0.85	0.82	0.79	0.81	0.77	0.74	0.70
4	0.89	0.88	0.86	0.88	0.86	0.85	0.86	0.83	0.81	0.83	0.79	0.77	0.79	0.75	0.72	0.68
5	0.87	0.85	0.84	0.86	0.84	0.82	0.84	0.81	0.78	0.81	0.77	0.74	0.77	0.73	0.70	0.66
6	0.85	0.83	0.82	0.84	0.82	0.80	0.81	0.78	0.76	0.79	0.75	0.72	0.76	0.71	0.68	0.64
7	0.82	0.81	0.80	0.81	0.80	0.78	0.79	0.76	0.74	0.77	0.73	0.71	0.74	0.70	0.67	0.63
8	0.80	0.79	0.78	0.80	0.78	0.76	0.77	0.75	0.73	0.75	0.71	0.69	0.72	0.68	0.65	0.62
9	0.79	0.77	0.77	0.78	0.76	0.75	0.76	0.73	0.71	0.73	0.70	0.67	0.71	0.67	0.64	0.60
10	0.77	0.76	0.75	0.76	0.74	0.73	0.74	0.71	0.70	0.72	0.68	0.66	0.69	0.65	0.62	0.59

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



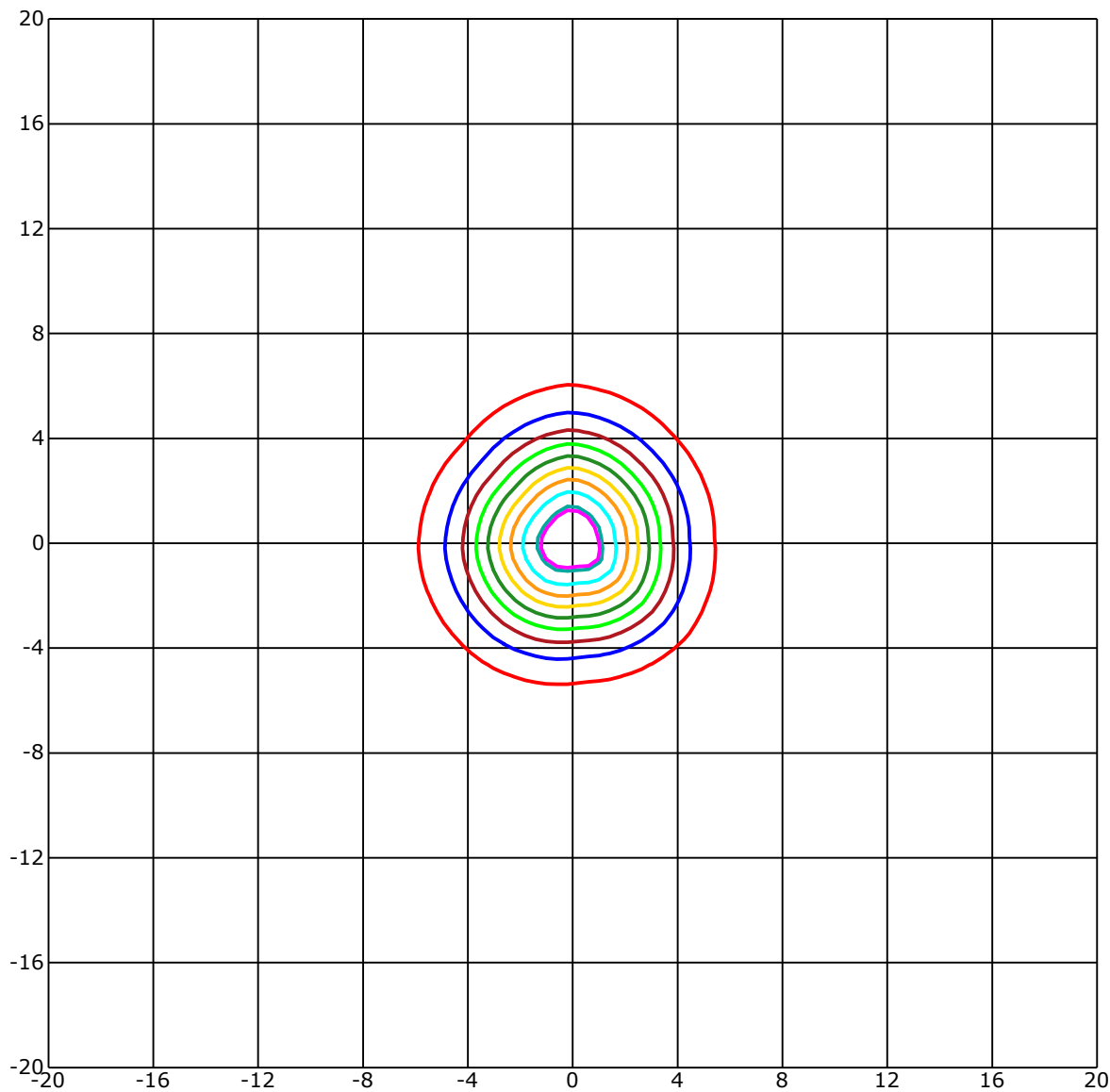
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Temperature: 25
Operators: QC01
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G Range: 0 - 90 Deg
G Interval: 1.0 Deg
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ISOLX DIAGRAM



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

- 10.46(92%Emax)

10.233(90%Emax)

9.096(80%Emax)

7.959(70%Emax)

6.822(60%Emax)
- 5.685(50%Emax)

4.548(40%Emax)

3.411(30%Emax)

2.274(20%Emax)

1.137(10%Emax)

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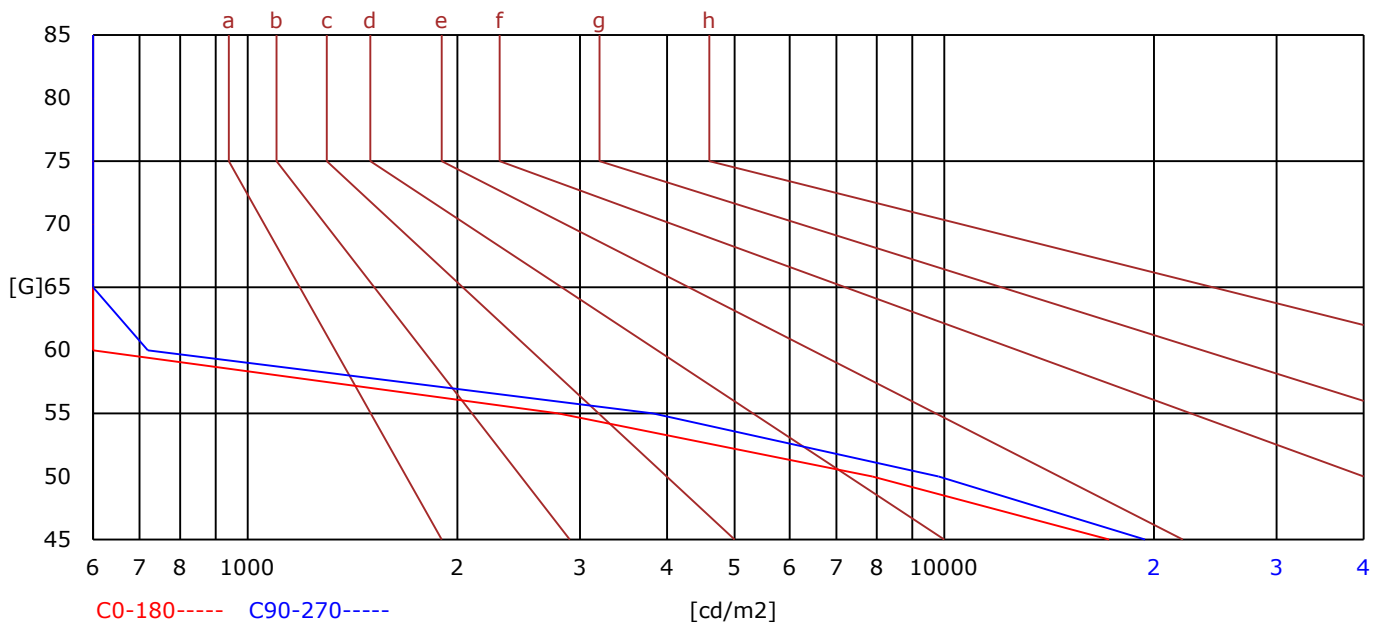
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	17241	7882	2792	261	0	0	0	0	0
C90	19414	9814	3818	719	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



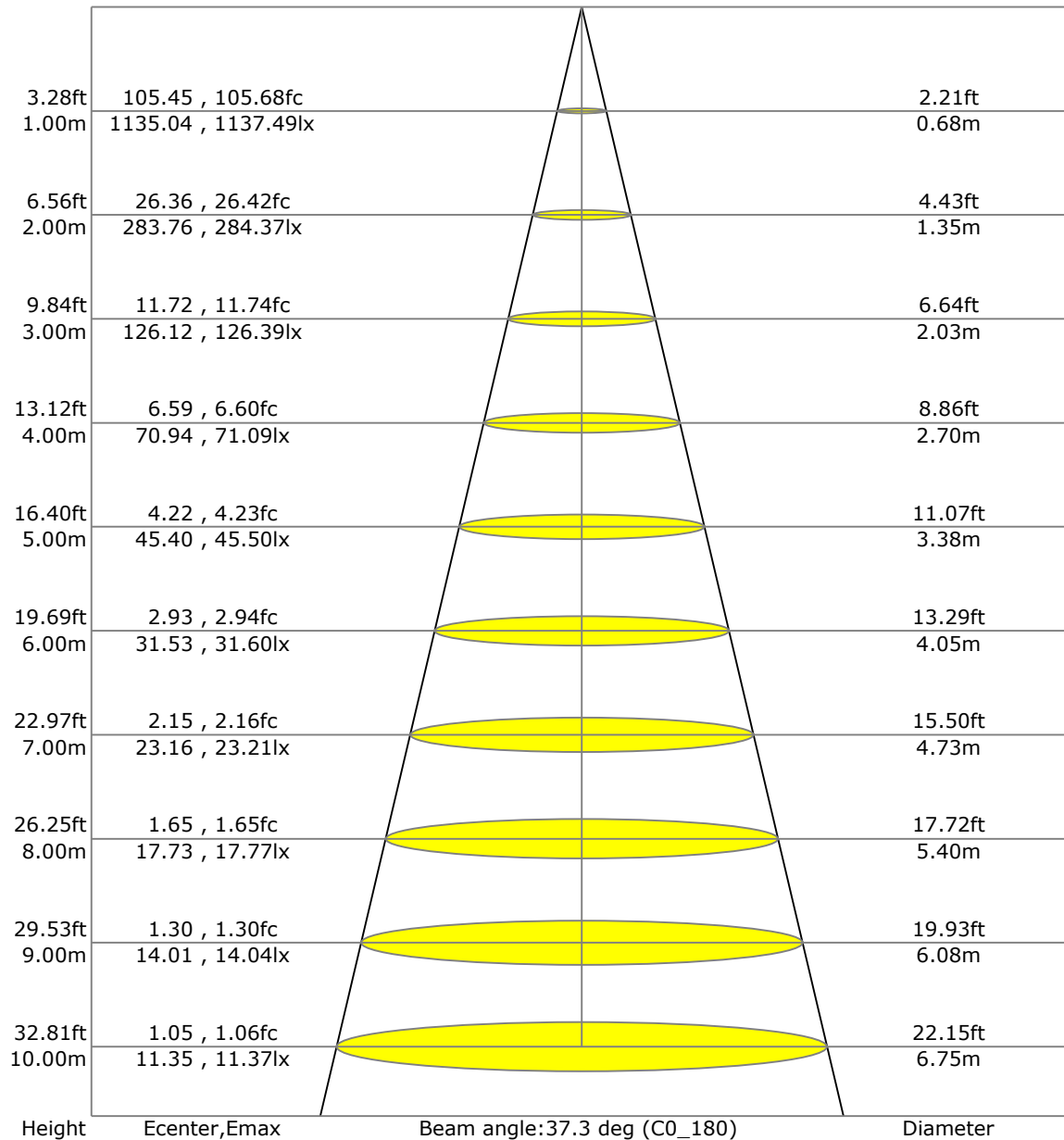
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Temperature: 25
Operators: QC01
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G Range: 0 - 90 Deg
G Interval: 1.0 Deg
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Test Distance: 6.87 m
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LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2025/6/19 16:35:17

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
Remarks:

UGR(Unified Glare Rating) TABLE

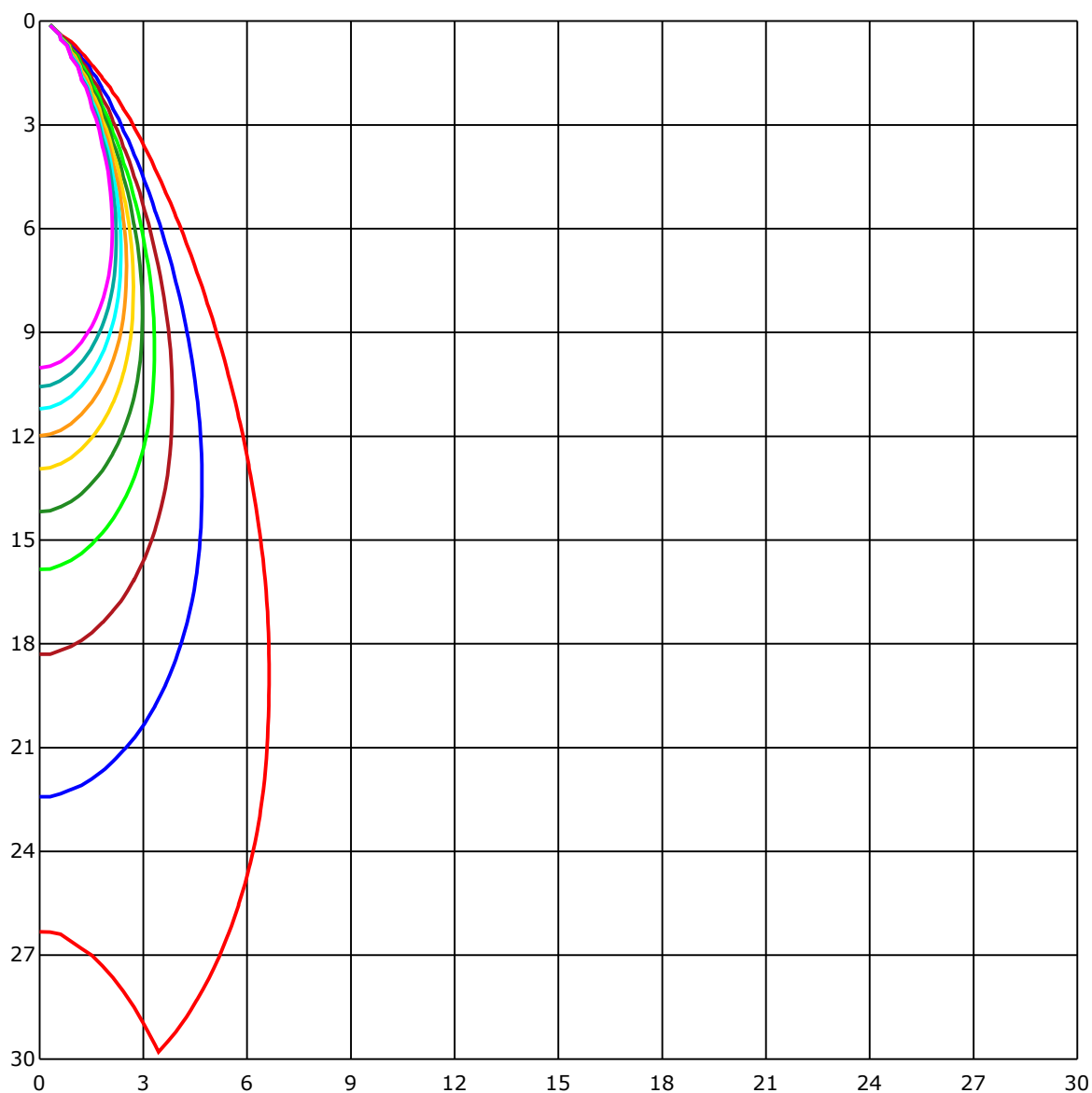
RHOCC	70	70	50	50	30	70	70	50	50	30
RHOW	50	30	50	30	30	50	30	50	30	30
RHOF	20	20	20	20	20	20	20	20	20	20
Room Size X Y	Viewed Endwise					Viewed Crosswise				
2H 2H	14.02	14.07	14.22	14.25	14.50	14.32	14.37	14.52	14.56	14.80
3H	13.99	14.05	14.20	14.24	14.48	14.30	14.35	14.50	14.54	14.79
4H	13.98	14.03	14.19	14.23	14.48	14.28	14.34	14.49	14.53	14.78
6H	13.96	14.02	14.18	14.22	14.47	14.27	14.32	14.48	14.52	14.77
8H	13.96	14.01	14.17	14.21	14.46	14.26	14.31	14.48	14.52	14.77
12H	13.95	14.00	14.17	14.21	14.46	14.25	14.30	14.47	14.51	14.76
4H 2H	13.98	14.03	14.19	14.23	14.47	14.32	14.37	14.53	14.57	14.82
3H	13.95	14.00	14.17	14.21	14.46	14.29	14.34	14.51	14.55	14.80
4H	13.93	13.98	14.16	14.19	14.45	14.27	14.32	14.50	14.54	14.79
6H	13.91	13.96	14.14	14.18	14.44	14.25	14.30	14.49	14.52	14.78
8H	13.89	13.94	14.14	14.17	14.44	14.24	14.29	14.48	14.51	14.78
12H	13.88	13.93	14.13	14.16	14.43	14.22	14.27	14.47	14.51	14.77
8H 4H	13.95	14.01	14.17	14.21	14.46	14.30	14.35	14.52	14.55	14.81
6H	13.87	13.92	14.12	14.15	14.43	14.21	14.26	14.47	14.50	14.77
8H	13.85	13.90	14.11	14.14	14.42	14.20	14.24	14.46	14.49	14.76
12H	13.84	13.88	14.11	14.13	14.42	14.18	14.22	14.45	14.48	14.76
12H 4H	13.88	13.93	14.13	14.16	14.43	14.22	14.27	14.47	14.51	14.78
6H	13.85	13.90	14.11	14.14	14.42	14.20	14.24	14.46	14.49	14.76

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Humidity: 60
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SPACE ISOLX DIAGRAM



Unit of illumination:lx

11.295

10.165

9.036

7.906

6.777

5.647

4.518

3.388

2.259

1.129

C Range: 0 - 360 Deg

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G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1600B Goniophotometer

Humidity: 60

Test Distance: 6.87 m

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LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	1135.04	1130.74	1129.47	1134.19	1135.04	1130.74	1129.47	1134.19	1135.04	
G1	1135.23	1127.58	1132.07	1131.31	1137.49	1128.86	1122.01	1134.28	1135.23	
G2	1121.4	1121.78	1134.47	1124.04	1133.1	1123.62	1113.28	1132.4	1121.4	
G3	1109.65	1113.71	1129.47	1113.04	1126.5	1116.25	1098.51	1124.04	1109.65	
G4	1090.72	1098.27	1122.25	1100.21	1117.72	1103.65	1079.35	1114.46	1090.72	
G5	1068.3	1081.56	1112.29	1084.11	1105.02	1088.64	1053.72	1097.52	1068.3	
G6	1040.17	1060.42	1096.1	1066.08	1087.75	1068.68	1025.64	1080.2	1040.17	
G7	1010.58	1035.74	1079.63	1041.82	1070.14	1045.74	993.26	1054.99	1010.58	
G8	981.13	1006.0	1054.71	1020.44	1043.67	1017.57	961.45	1025.02	981.13	
G9	944.13	973.11	1028.37	985.33	1015.44	989.15	922.32	993.68	944.13	
G10	906.98	937.38	997.93	952.58	984.06	952.39	884.19	957.67	906.98	
G11	866.96	897.78	966.21	914.3	950.88	915.1	841.62	918.03	866.96	
G12	824.29	854.88	931.62	873.85	914.82	875.41	798.52	875.12	824.29	
G13	780.4	811.41	894.05	830.05	877.44	833.07	753.5	830.67	780.4	
G14	735.47	769.07	854.74	784.51	832.74	787.72	709.13	786.73	735.47	
G15	689.41	722.91	813.01	737.88	790.36	742.41	662.46	739.95	689.41	
G16	641.74	676.52	771.62	693.75	745.24	696.82	616.86	694.12	641.74	
G17	592.13	630.65	727.02	646.13	702.38	650.75	567.78	648.11	592.13	
G18	542.43	584.91	682.94	600.01	656.27	604.92	520.39	602.75	542.43	
G19	495.85	538.89	636.54	555.51	608.46	560.18	473.62	555.93	495.85	
G20	451.2	493.49	589.73	509.96	560.84	514.26	430.39	508.17	451.2	
G21	409.62	450.45	543.0	465.31	514.26	470.36	388.19	462.86	409.62	
G22	367.95	408.77	497.83	423.83	468.38	426.66	347.94	418.54	367.95	
G23	329.25	369.08	453.94	382.06	426.19	386.02	310.37	375.03	329.25	
G24	291.54	330.47	412.93	343.07	385.65	346.47	275.49	334.25	291.54	
G25	258.03	294.46	372.29	305.36	346.19	310.13	242.69	296.77	258.03	
G26	227.06	260.48	334.81	271.67	309.56	276.24	213.14	263.22	227.06	
G27	199.17	230.23	298.61	239.43	275.72	244.48	185.91	232.44	199.17	
G28	173.68	201.96	266.19	210.73	243.68	215.03	161.89	204.17	173.68	
G29	150.98	176.71	235.84	184.49	215.41	189.12	140.17	177.93	150.98	
G30	130.5	154.1	207.95	161.13	189.12	165.05	121.34	155.18	130.5	
G31	113.18	134.42	181.99	139.23	165.09	144.0	105.11	135.08	113.18	
G32	98.17	115.96	159.05	120.97	144.19	125.5	91.28	117.66	98.17	
G33	85.43	100.67	139.04	104.73	125.73	109.97	79.15	102.61	85.43	
G34	73.72	87.17	121.63	91.09	109.83	95.86	68.77	89.67	73.72	
G35	63.9	75.42	106.15	78.82	96.05	83.73	59.33	78.39	63.9	
G36	55.5	65.27	92.79	68.53	84.29	73.01	51.44	68.67	55.5	

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Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.87 m
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LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	47.81	56.49	80.94	59.28	73.67	64.28	44.46	60.36	47.81	
G38	41.53	48.24	70.65	51.49	64.66	56.16	38.75	53.57	41.53	
G39	36.34	41.77	61.69	44.37	56.54	48.99	33.65	47.06	36.34	
G40	31.72	36.11	54.04	38.65	49.89	42.95	29.64	41.82	31.72	
G41	27.7	31.29	47.15	33.65	43.89	37.95	25.86	37.1	27.7	
G42	24.07	27.04	41.63	29.59	38.8	33.65	22.65	33.09	24.07	
G43	21.0	23.6	36.72	25.72	34.5	29.83	19.92	29.5	21.0	
G44	18.36	20.44	32.61	22.75	30.49	26.19	17.51	26.24	18.36	
G45	15.91	17.6	29.03	19.82	27.09	23.55	14.96	23.46	15.91	
G46	13.36	15.01	25.86	17.42	24.26	20.77	12.84	20.72	13.36	
G47	11.28	12.79	22.89	14.96	21.76	18.27	10.81	18.27	11.28	
G48	9.44	10.62	20.34	12.7	19.11	16.09	9.11	15.95	9.44	
G49	7.93	8.83	17.93	10.76	16.8	14.21	7.41	13.88	7.93	
G50	6.28	7.32	15.67	9.11	14.63	12.22	6.04	12.08	6.28	
G51	5.1	6.04	13.59	7.5	12.88	10.81	4.81	10.57	5.1	
G52	4.06	4.86	11.99	6.18	11.23	9.39	3.92	9.34	4.06	
G53	3.26	3.87	10.38	5.0	9.77	8.12	3.02	7.98	3.26	
G54	2.45	3.02	9.2	4.11	8.5	6.99	2.36	7.08	2.45	
G55	1.94	2.31	7.98	3.16	7.46	6.14	1.65	6.18	1.94	
G56	1.27	1.79	6.94	2.55	6.47	5.29	1.18	5.33	1.27	
G57	0.9	1.23	6.09	2.03	5.62	4.81	0.71	4.72	0.9	
G58	0.42	0.76	5.43	1.42	5.05	4.11	0.42	4.29	0.42	
G59	0.38	0.57	4.63	0.85	4.39	3.68	0.14	3.73	0.38	
G60	0.09	0.19	4.11	0.52	3.82	3.16	0.09	3.21	0.09	
G61	0.05	0.19	3.63	0.33	3.4	2.97	0.0	2.93	0.05	
G62	0.0	0.0	3.11	0.14	3.11	2.5	0.0	2.83	0.0	
G63	0.0	0.0	2.83	0.0	2.93	2.31	0.0	2.41	0.0	
G64	0.0	0.0	2.69	0.0	2.55	2.27	0.0	2.31	0.0	
G65	0.0	0.0	2.41	0.0	2.5	1.94	0.0	2.08	0.0	
G66	0.0	0.0	2.12	0.0	2.22	1.75	0.0	1.89	0.0	
G67	0.0	0.0	1.98	0.0	2.08	1.65	0.0	1.7	0.0	
G68	0.0	0.0	1.7	0.0	1.7	1.46	0.0	1.37	0.0	
G69	0.0	0.0	1.42	0.0	1.51	1.23	0.0	1.23	0.0	
G70	0.0	0.0	1.32	0.0	1.27	0.99	0.0	0.94	0.0	
G71	0.0	0.0	1.04	0.0	1.09	0.8	0.0	0.71	0.0	
G72	0.0	0.0	0.9	0.0	0.85	0.52	0.0	0.57	0.0	
G73	0.0	0.0	0.66	0.0	0.71	0.24	0.0	0.28	0.0	

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Humidity: 60
Test Distance: 6.87 m
Remarks:

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LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

Remarks: