

Report No.:

Test Time: 2024/10/26 14:40:23

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer: InBright
Luminaire Type: IBSP104SCT095H78-2F-45°
Lamp Type:
Luminous Width: 90 mm
Luminous Length: 185 mm
Luminous Height: 70 mm

Voltage(V): 219.80 V
Current(A): 0.0950 A
Power(W): 20.39 W
Power Factor: 0.9720
Lamp Luminous Flux: 2068.37

Photometric Results

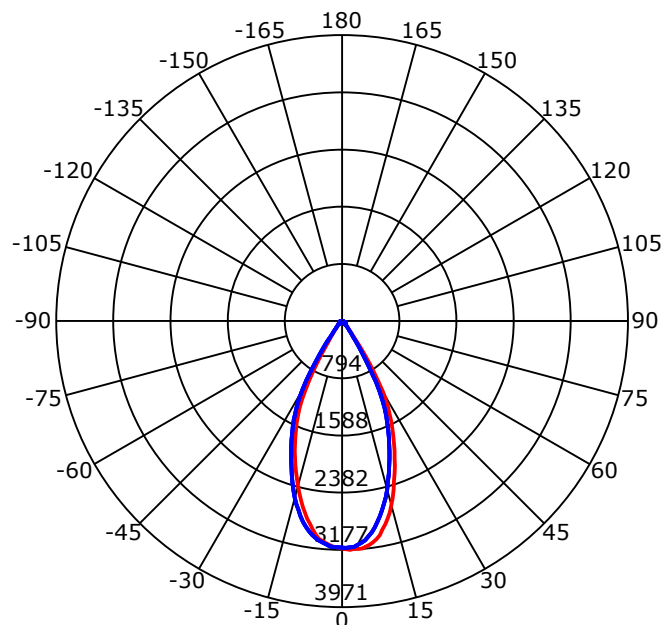
CIE Class: Direct
Luminaire Luminous Flux: 2068.365 lm
Downward Ratio: 100.00%
Luminaire Efficacy Rating(LER): 101.44 lm/W
Beam Angle(50%) C0-180,C90-270: 49.3,49.2
Field Angle(10%) C0-180,C90-270: 70.4,70.8
S/MH C0-180,C90-270: 0.768,0.768

Max. Intensity: 3176.62 cd
Max.Intensity Angle: C=0 Gamma=2
Upward Ratio: 0.00%
Efficacy: 100.00%
Center Intensity: 3159.23 cd
Effective Luminous Flux: 1860.85 lm
ERP(ϕ use)(120deg): 2033.50 lm

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%) C0-180,C90-270: 49.3 deg,49.2 deg

C0-180 — C90-270 —

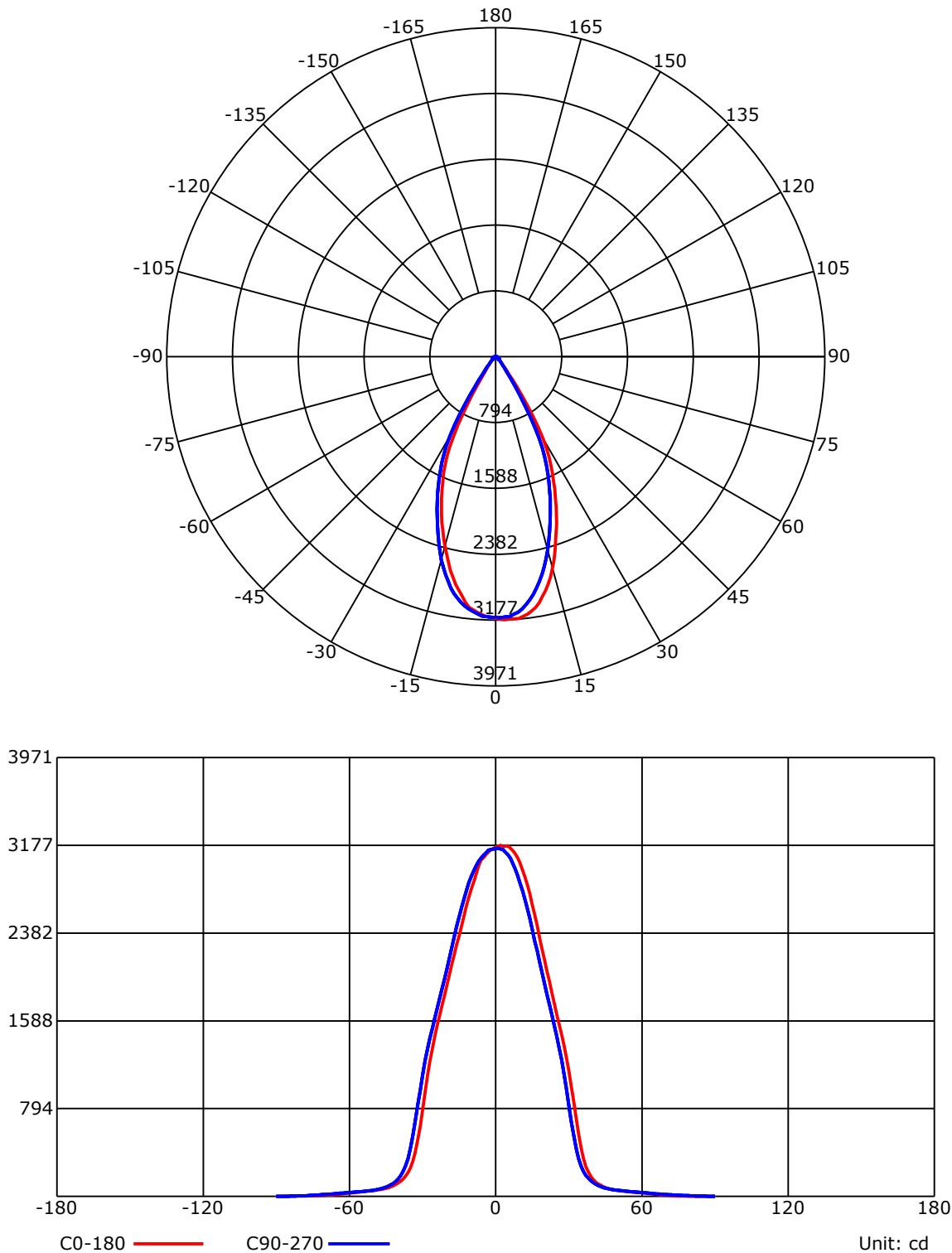
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature: 25
Operators: QC01
Test Date: 2024/10/26 14:40:23

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1600B Goniophotometer
Humidity: 60
Test Distance: 6.81 m
Remarks:

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Luminous Intensity Distribution Curve



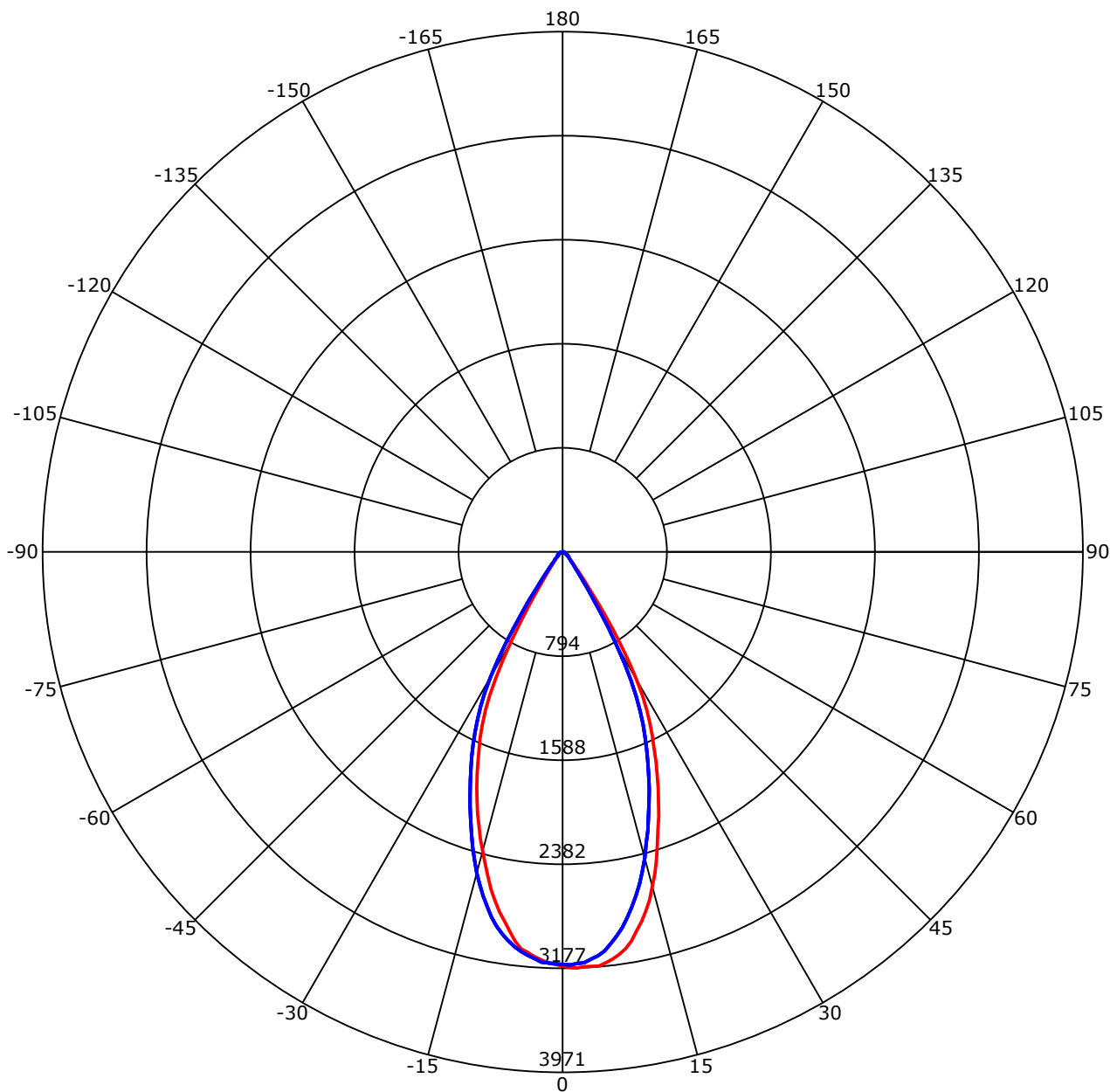
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Luminous Intensity Distribution Curve



C0-180 — C90-270

Unit: cd/klm

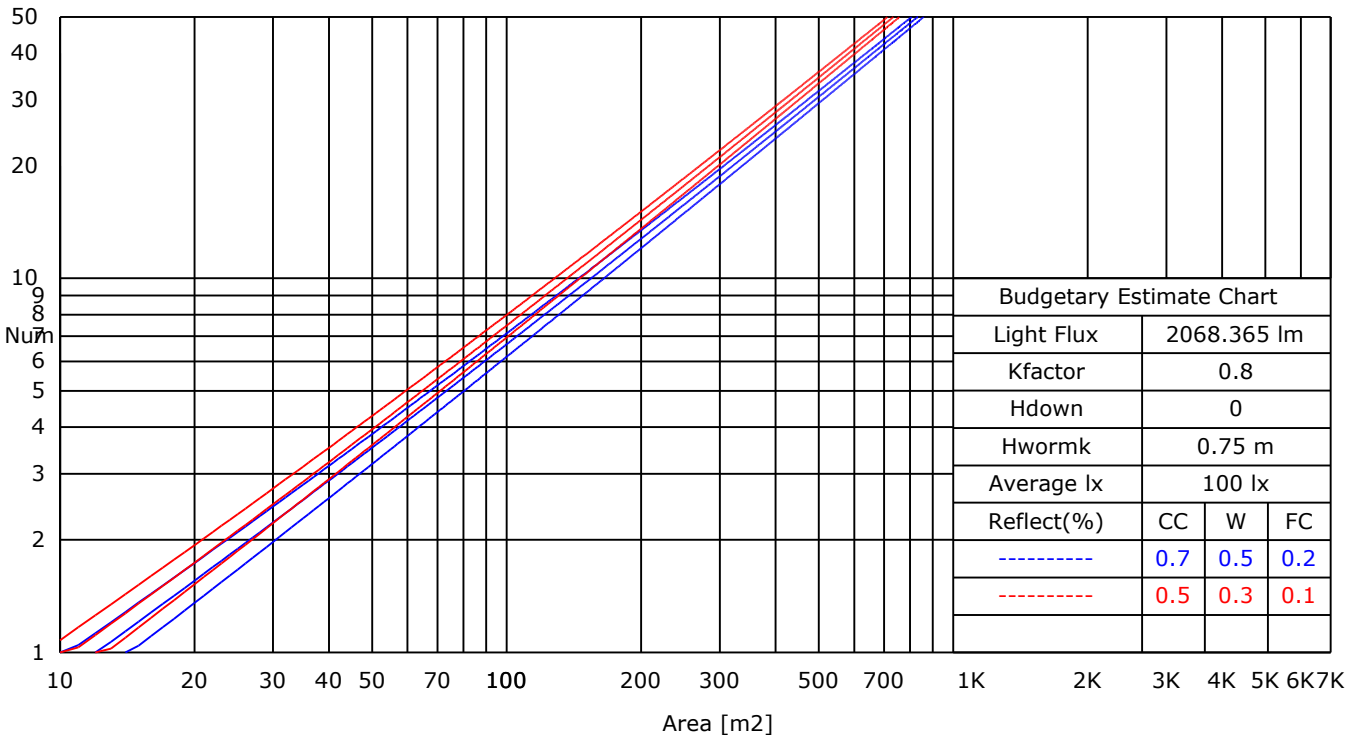
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UTILIZATION FACTORS TABLE

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	1.04	1.02	1.00	1.02	1.00	0.98	0.99	0.96	0.94	0.94	0.92	0.89	0.88	0.85	0.83	0.78
2	0.99	0.97	0.96	0.98	0.96	0.94	0.95	0.92	0.90	0.91	0.88	0.85	0.85	0.82	0.80	0.75
3	0.95	0.93	0.92	0.94	0.92	0.90	0.91	0.88	0.86	0.88	0.84	0.82	0.83	0.80	0.77	0.72
4	0.92	0.90	0.89	0.91	0.89	0.87	0.88	0.85	0.83	0.85	0.81	0.79	0.81	0.77	0.74	0.70
5	0.89	0.87	0.86	0.88	0.86	0.84	0.85	0.82	0.80	0.82	0.79	0.76	0.79	0.75	0.71	0.68
6	0.86	0.84	0.83	0.85	0.83	0.81	0.82	0.80	0.78	0.80	0.76	0.74	0.76	0.72	0.69	0.65
7	0.83	0.82	0.81	0.82	0.80	0.79	0.80	0.77	0.75	0.77	0.74	0.71	0.74	0.70	0.67	0.64
8	0.81	0.79	0.79	0.80	0.78	0.77	0.78	0.75	0.73	0.75	0.72	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	0.75	0.75	0.76	0.74	0.73	0.74	0.71	0.69	0.71	0.68	0.66	0.69	0.65	0.62	0.59

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



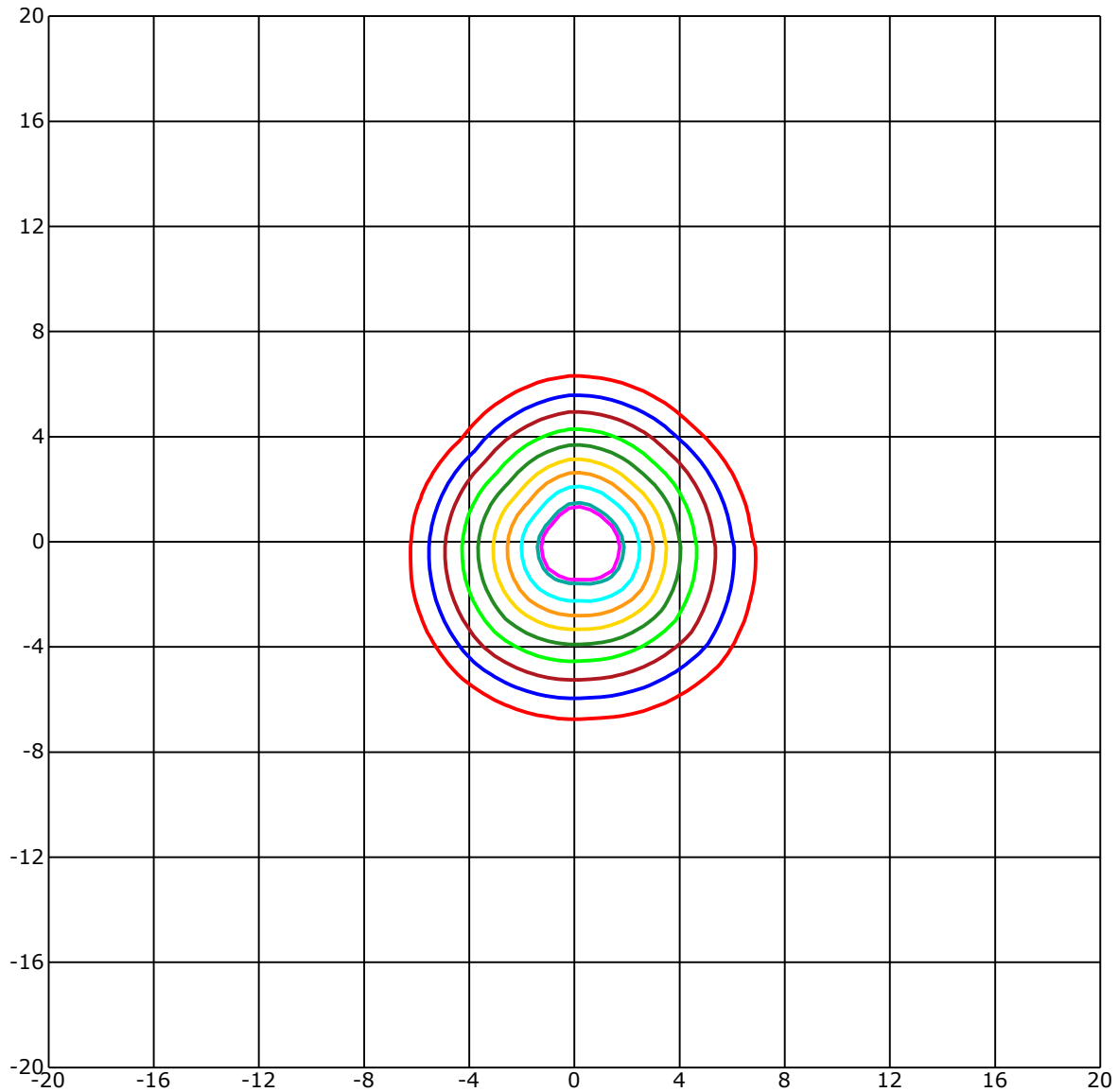
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ISOLX DIAGRAM



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

29.172(92%Emax)	15.854(50%Emax)
28.537(90%Emax)	12.683(40%Emax)
25.367(80%Emax)	9.512(30%Emax)
22.196(70%Emax)	6.342(20%Emax)
19.025(60%Emax)	3.171(10%Emax)

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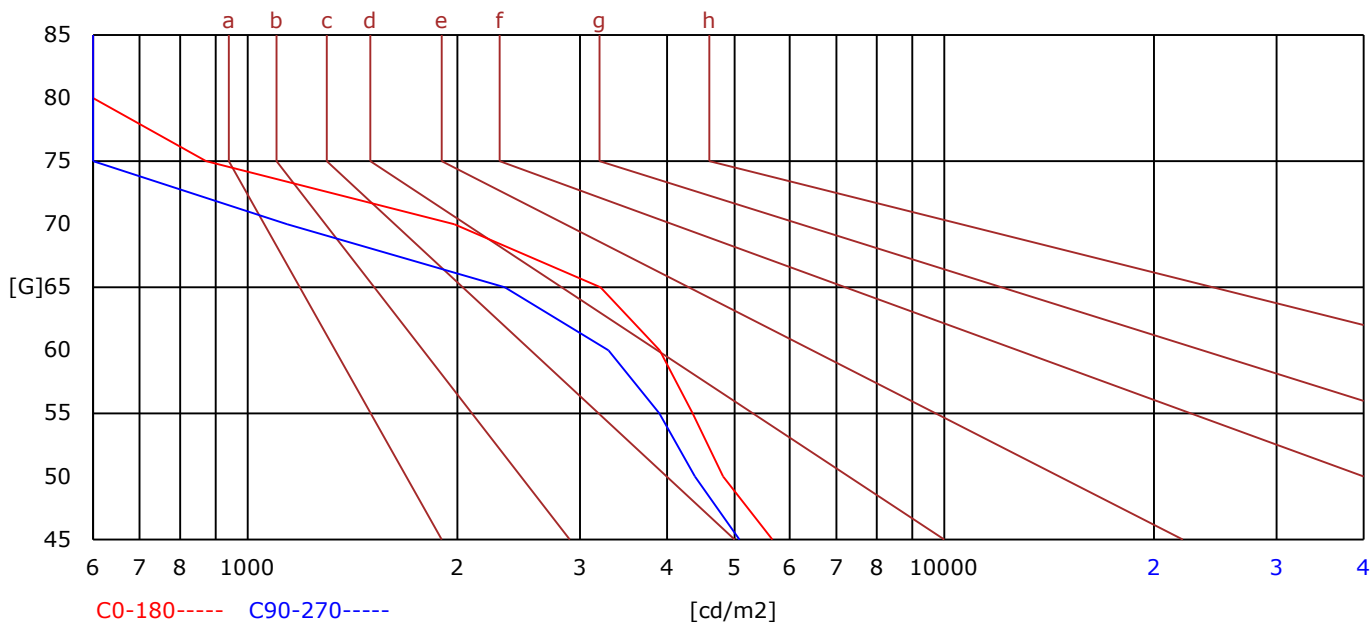
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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	5664	4814	4356	3905	3210	1979	872	321	64
C90	5081	4385	3899	3298	2340	1140	366	144	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



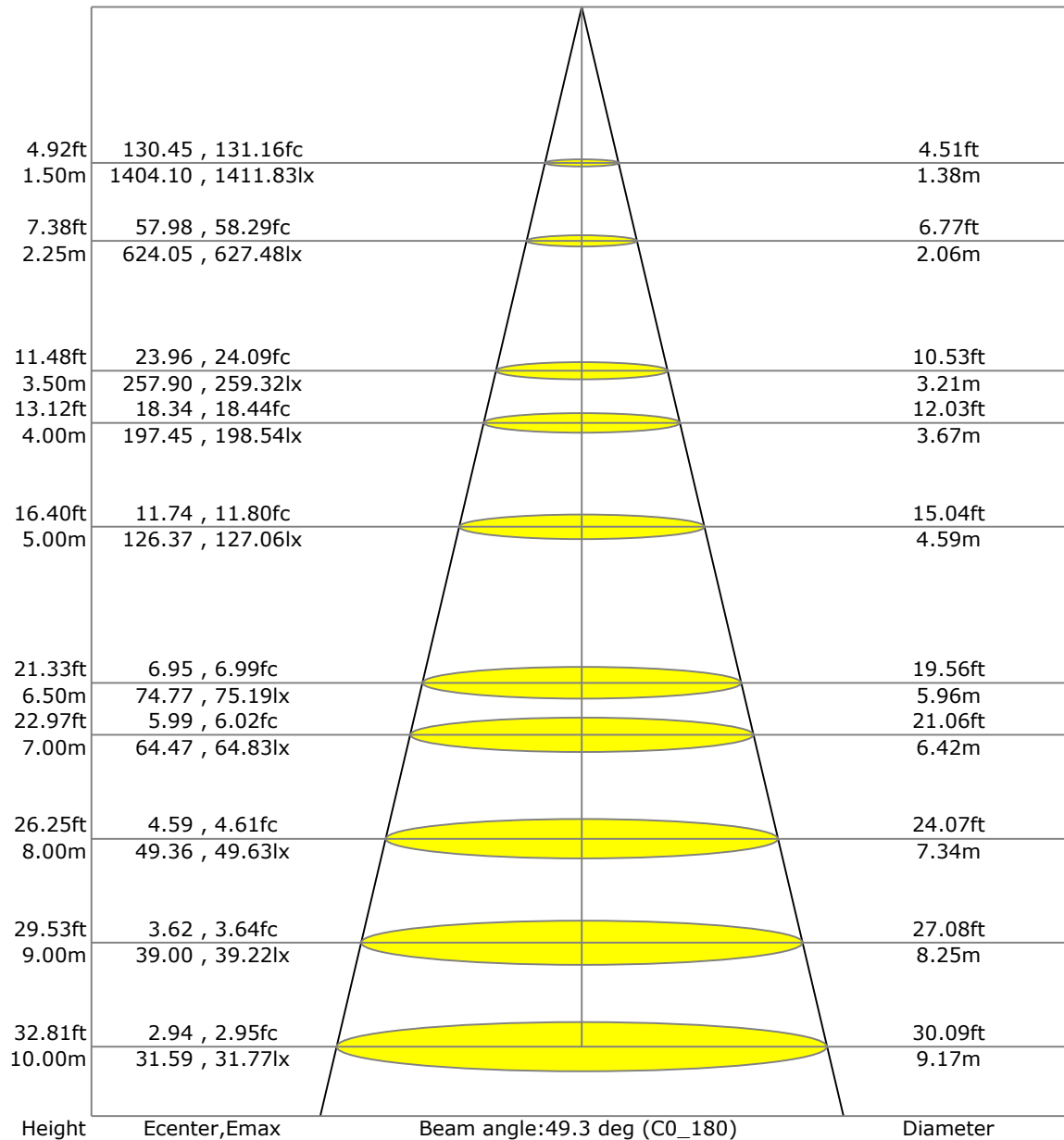
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LX-DISTANCE DIAGRAM



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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	6.58	6.63	6.78	6.82	7.06	6.64	6.69	6.84	6.88	7.12
	3H	6.60	6.66	6.81	6.85	7.09	6.65	6.70	6.86	6.89	7.14
	4H	6.59	6.65	6.80	6.84	7.09	6.64	6.69	6.85	6.88	7.13
	6H	6.58	6.63	6.79	6.83	7.08	6.62	6.67	6.84	6.87	7.12
	8H	6.57	6.62	6.79	6.82	7.08	6.61	6.66	6.83	6.87	7.12
	12H	6.56	6.61	6.78	6.82	7.07	6.60	6.65	6.82	6.86	7.11
4H	2H	7.02	7.07	7.23	7.26	7.51	7.31	7.36	7.52	7.56	7.81
	3H	7.05	7.10	7.27	7.31	7.56	7.34	7.39	7.56	7.59	7.85
	4H	7.04	7.09	7.27	7.30	7.56	7.32	7.37	7.55	7.58	7.84
	6H	7.02	7.07	7.26	7.29	7.55	7.30	7.35	7.54	7.57	7.83
	8H	7.01	7.06	7.25	7.28	7.55	7.29	7.33	7.53	7.56	7.83
	12H	6.99	7.04	7.24	7.27	7.54	7.27	7.32	7.52	7.55	7.82
8H	4H	7.00	7.05	7.22	7.26	7.51	7.39	7.44	7.61	7.65	7.90
	6H	7.00	7.04	7.25	7.28	7.55	7.39	7.43	7.64	7.67	7.95
	8H	6.98	7.03	7.25	7.27	7.55	7.37	7.42	7.64	7.66	7.94
	12H	6.97	7.01	7.24	7.26	7.54	7.36	7.40	7.63	7.65	7.93
12H	4H	7.01	7.06	7.26	7.29	7.56	7.42	7.47	7.67	7.70	7.97
	6H	6.99	7.03	7.25	7.28	7.56	7.40	7.44	7.66	7.69	7.96

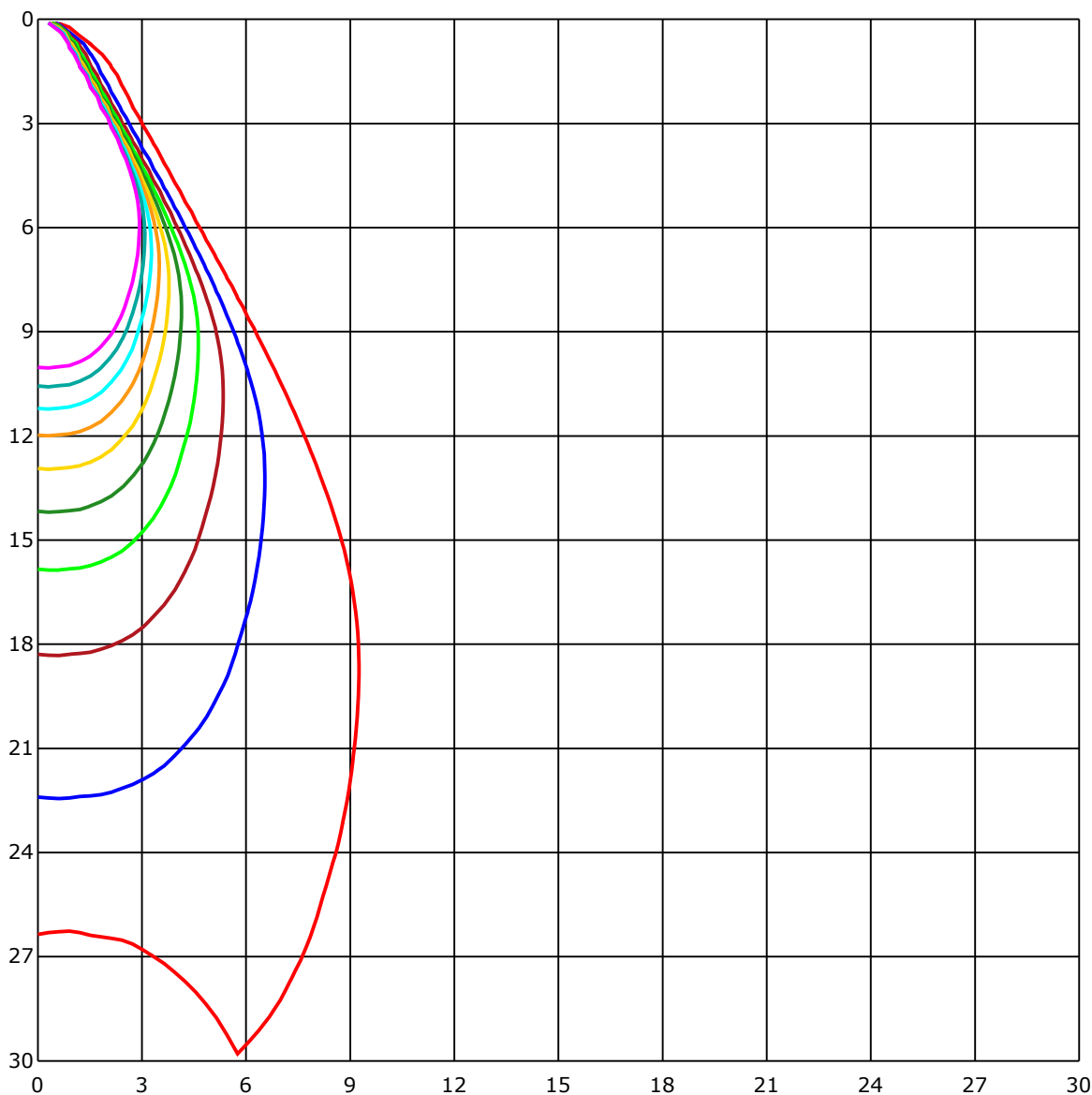
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SPACE ISOLX DIAGRAM



31.475

28.328

25.18

22.033

18.885

15.738

12.59

9.443

6.295

3.148

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LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	3159.23	3145.04	3147.27	3134.47	3159.23	3145.04	3147.27	3134.47	3159.23	
G1	3169.95	3143.65	3150.42	3128.39	3147.41	3136.6	3142.07	3147.92	3169.95	
G2	3176.62	3151.58	3142.4	3110.31	3137.2	3135.4	3137.81	3156.26	3176.62	
G3	3168.04	3137.9	3138.87	3079.09	3116.89	3128.72	3134.61	3154.55	3168.04	
G4	3169.81	3120.97	3113.27	3040.0	3094.58	3110.82	3110.26	3153.95	3169.81	
G5	3170.92	3103.07	3092.13	2998.59	3067.32	3088.88	3086.98	3157.52	3170.92	
G6	3150.24	3068.61	3059.94	2941.87	3043.57	3066.2	3062.49	3144.35	3150.24	
G7	3129.97	3026.41	3011.11	2889.37	2991.72	3029.7	3033.46	3126.68	3129.97	
G8	3100.57	2981.89	2959.72	2808.17	2919.05	2998.26	2995.43	3109.01	3100.57	
G9	3064.63	2917.98	2902.87	2727.05	2850.0	2950.77	2949.47	3089.72	3064.63	
G10	3016.26	2860.62	2832.33	2643.81	2786.83	2895.54	2900.87	3056.32	3016.26	
G11	2947.57	2783.08	2761.98	2561.21	2709.25	2829.04	2841.05	3020.43	2947.57	
G12	2885.75	2699.41	2681.51	2470.04	2632.31	2758.17	2768.75	2964.59	2885.75	
G13	2815.63	2608.8	2599.8	2375.34	2540.76	2682.9	2694.92	2918.4	2815.63	
G14	2736.84	2515.53	2513.68	2285.14	2451.86	2609.31	2617.33	2831.03	2736.84	
G15	2640.05	2414.43	2416.06	2190.02	2363.74	2521.7	2536.73	2757.66	2640.05	
G16	2553.19	2309.48	2312.92	2091.1	2279.29	2439.66	2444.3	2674.74	2553.19	
G17	2446.8	2208.38	2221.32	1989.44	2187.93	2350.76	2350.9	2582.45	2446.8	
G18	2336.29	2107.66	2118.79	1895.72	2102.83	2262.78	2253.74	2483.3	2336.29	
G19	2234.54	2006.32	2024.04	1801.57	2009.52	2168.87	2160.38	2389.76	2234.54	
G20	2144.38	1917.98	1928.18	1708.68	1918.16	2075.56	2065.92	2291.35	2144.38	
G21	2040.36	1817.02	1831.39	1618.39	1824.62	1988.28	1975.2	2198.18	2040.36	
G22	1944.09	1721.9	1733.59	1518.96	1728.76	1911.67	1880.88	2098.66	1944.09	
G23	1842.48	1625.3	1643.71	1420.69	1637.49	1817.16	1794.62	2001.96	1842.48	
G24	1748.89	1532.31	1547.8	1317.73	1550.72	1729.83	1705.57	1906.01	1748.89	
G25	1650.8	1436.87	1453.43	1201.37	1452.18	1644.13	1617.6	1814.74	1650.8	
G26	1561.53	1335.82	1347.83	1066.65	1343.47	1556.06	1525.22	1729.5	1561.53	
G27	1463.72	1224.79	1235.46	920.7	1222.06	1461.31	1431.96	1644.64	1463.72	
G28	1364.57	1105.42	1105.7	776.94	1090.44	1359.98	1332.48	1551.23	1364.57	
G29	1254.8	964.58	970.0	634.38	940.79	1249.09	1229.99	1463.54	1254.8	
G30	1135.1	820.25	822.25	503.64	787.14	1116.78	1101.99	1362.44	1135.1	
G31	997.04	671.85	677.04	396.1	637.25	969.12	963.46	1257.35	997.04	
G32	849.66	535.92	546.4	312.99	509.58	818.54	823.04	1133.62	849.66	
G33	702.69	417.48	430.79	252.84	401.94	670.37	684.88	1001.63	702.69	
G34	563.28	322.31	340.26	209.16	319.44	536.15	552.9	857.4	563.28	
G35	441.31	254.74	275.29	176.0	260.17	422.49	439.65	714.47	441.31	
G36	344.95	207.39	227.1	149.93	217.09	335.76	344.57	580.72	344.95	

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LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	269.91	172.33	191.16	129.06	183.83	272.51	274.82	462.65	269.91	
G38	218.57	145.53	163.01	112.74	157.63	226.5	226.13	366.51	218.57	
G39	180.82	125.22	141.45	99.8	137.78	191.44	189.08	295.04	180.82	
G40	152.53	110.1	124.29	89.27	122.11	164.31	159.49	242.96	152.53	
G41	131.15	97.62	110.0	80.65	107.96	142.61	137.18	203.36	131.15	
G42	114.32	87.47	98.04	73.55	95.91	126.1	119.42	172.47	114.32	
G43	100.31	78.75	88.72	67.89	85.93	112.04	105.32	148.77	100.31	
G44	88.86	72.21	80.93	63.44	78.42	101.19	94.14	130.6	88.86	
G45	79.4	66.69	74.76	59.83	72.35	91.73	84.54	117.1	79.4	
G46	72.02	62.42	69.43	56.86	67.48	84.54	76.47	104.86	72.02	
G47	65.44	58.94	65.2	54.03	63.35	78.05	70.26	95.58	65.44	
G48	60.71	56.3	61.73	51.66	59.92	73.27	64.93	87.42	60.71	
G49	56.67	53.8	58.57	49.44	56.72	69.29	60.38	81.2	56.67	
G50	53.47	51.52	55.74	46.93	53.98	66.32	56.86	75.92	53.47	
G51	50.69	49.48	53.1	44.89	51.11	63.21	53.66	71.65	50.69	
G52	47.91	47.21	50.74	42.99	48.14	60.57	51.01	68.4	47.91	
G53	45.49	45.12	48.46	41.09	45.91	58.29	48.28	65.02	45.49	
G54	43.36	43.41	46.28	39.19	43.55	56.16	46.19	62.1	43.36	
G55	41.14	41.6	44.24	37.24	41.23	53.66	44.24	59.55	41.14	
G56	39.19	39.79	42.2	35.34	39.05	51.62	42.2	57.23	39.19	
G57	37.24	37.98	40.53	33.48	37.01	49.44	40.39	55.05	37.24	
G58	35.29	36.22	38.63	31.44	35.2	46.93	38.72	52.87	35.29	
G59	33.3	34.36	36.78	29.4	32.83	44.85	37.24	50.74	33.3	
G60	31.58	32.51	35.11	27.45	30.56	43.04	35.43	48.23	31.58	
G61	29.54	30.65	33.11	25.51	28.2	40.72	33.81	46.24	29.54	
G62	27.5	28.71	31.12	23.28	25.97	38.72	32.23	44.2	27.5	
G63	25.32	26.76	28.47	21.15	22.31	36.59	30.42	42.16	25.32	
G64	23.19	24.81	26.3	18.83	19.11	34.6	28.75	39.98	23.19	
G65	20.54	22.59	24.76	16.46	17.16	32.14	26.85	37.89	20.54	
G66	17.11	20.5	23.1	14.1	15.3	30.01	24.44	35.71	17.11	
G67	13.96	18.13	21.61	11.78	13.5	27.5	22.17	33.48	13.96	
G68	12.38	15.86	20.08	9.74	11.92	25.18	20.59	31.12	12.38	
G69	10.71	13.5	18.64	7.88	10.39	22.82	19.11	28.75	10.71	
G70	9.28	11.27	17.16	6.49	9.14	20.27	17.72	26.48	9.28	
G71	7.74	9.28	15.68	5.33	7.84	17.76	16.32	23.84	7.74	
G72	6.49	7.37	14.47	4.08	6.72	15.4	14.98	21.1	6.49	
G73	5.29	6.03	12.94	3.11	5.84	13.31	13.4	18.36	5.29	

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