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NT

Client: NT

LumCAT: 1-1713-LM

Luminaire: 92.70.121.00 LED HOLDER

Report No: 20260122-B008

Ballast type: AC

Test No: 20260122-C008

Voltage(V): 34.940

LampCAT: LUMINUS CXM-11 (TC) LES Current(A): 0.452

Lamp flux(lm): 2024.4

Power (W): 15.792

Number of Lamps: 1

PF: 0.000

Length(mm): 50

Width(mm): 50

Phm Type: C

Height(mm): 22

Photometric Results

Lumens(lm): 1952.30, Efficiency(%): 96.44% , Luminous Efficacy(lm/W): 123.63

Central intensity(cd): 3000.600, Maximum intensity(cd): 3000.600

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=41.6

[C90/270]Total=41.6

Field angle(10%Imax): [C0/180]Total=86.0

[C90/270]Total=86.0

Maximum s/h(1/2): C0_180=0.67 C90_270=0.67

Maximum s/h(1/4): C0_180=0.70 C90_270=0.70

Up flux rate of lamp(%): 0.00%

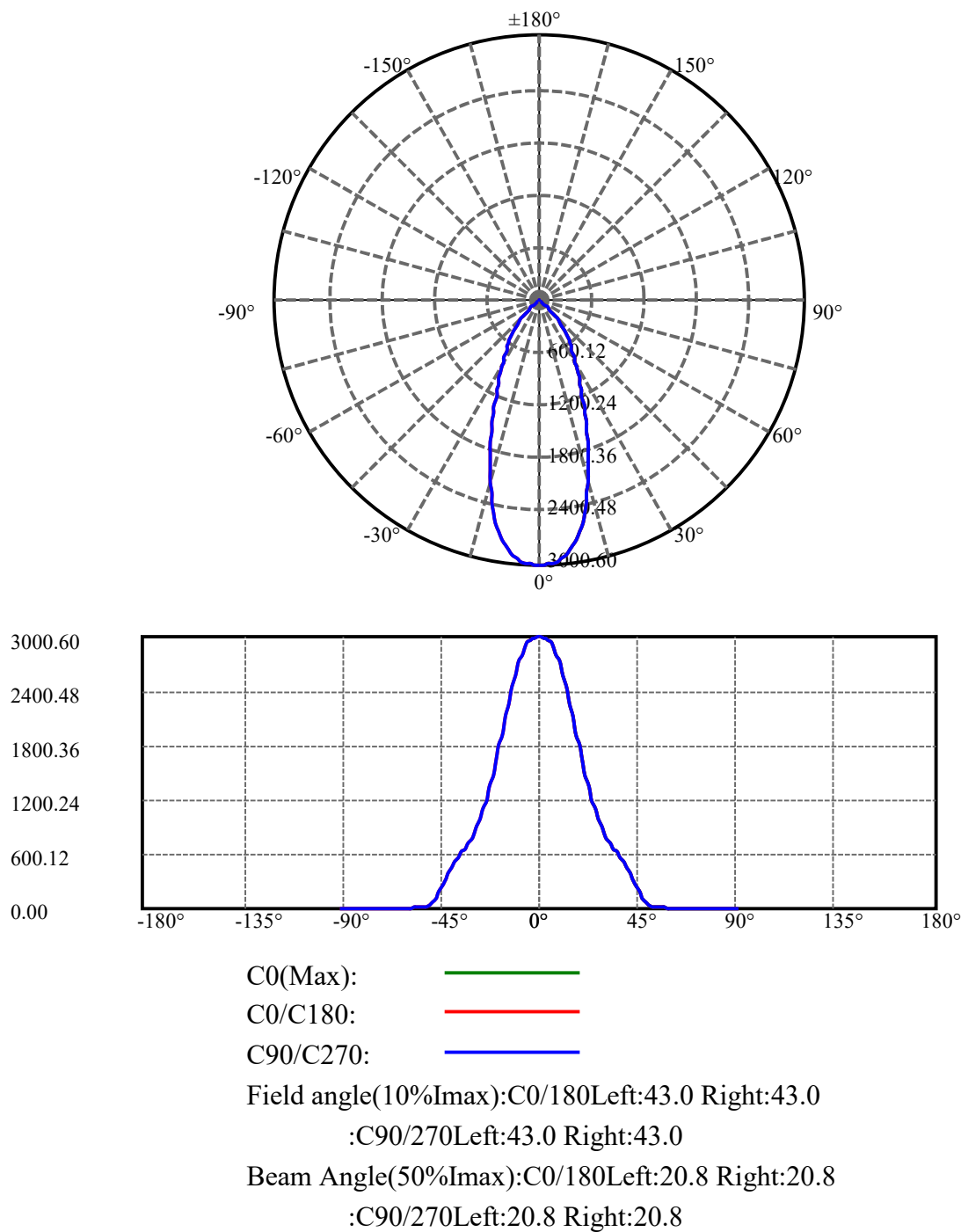
Down flux rate of lamp(%): 96.44%

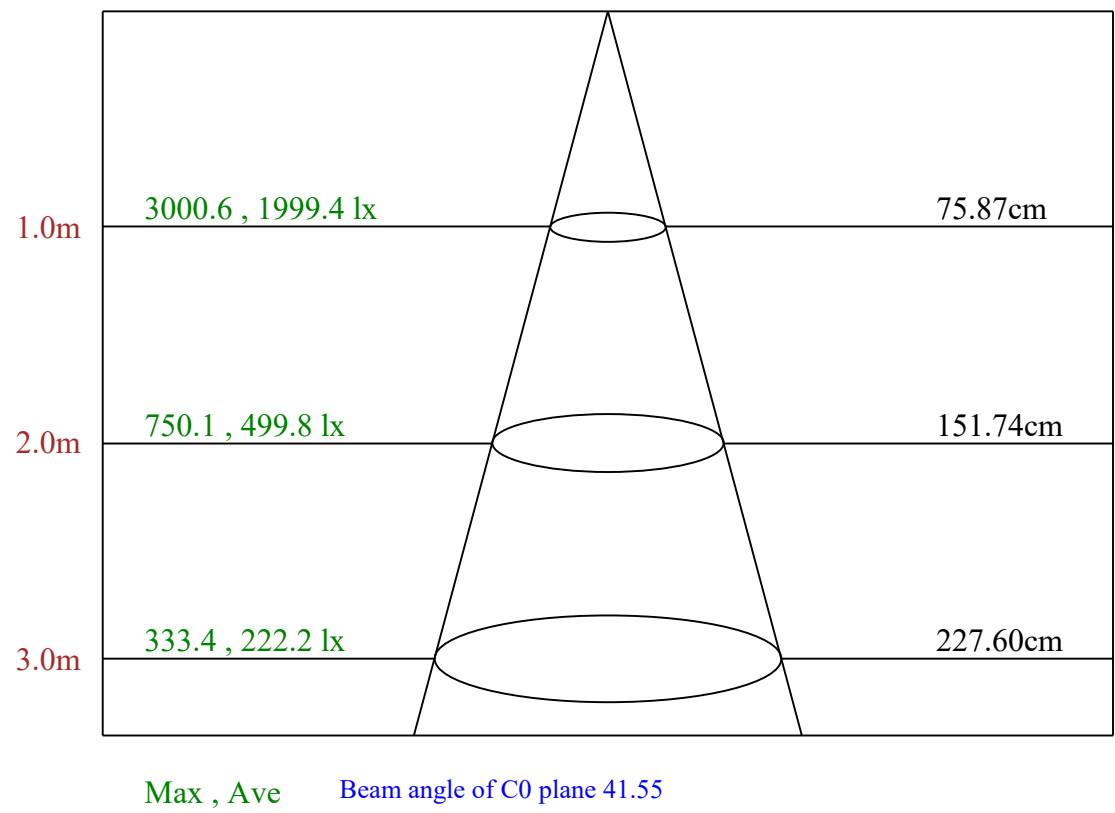
Up flux rate of LUM(%): - -

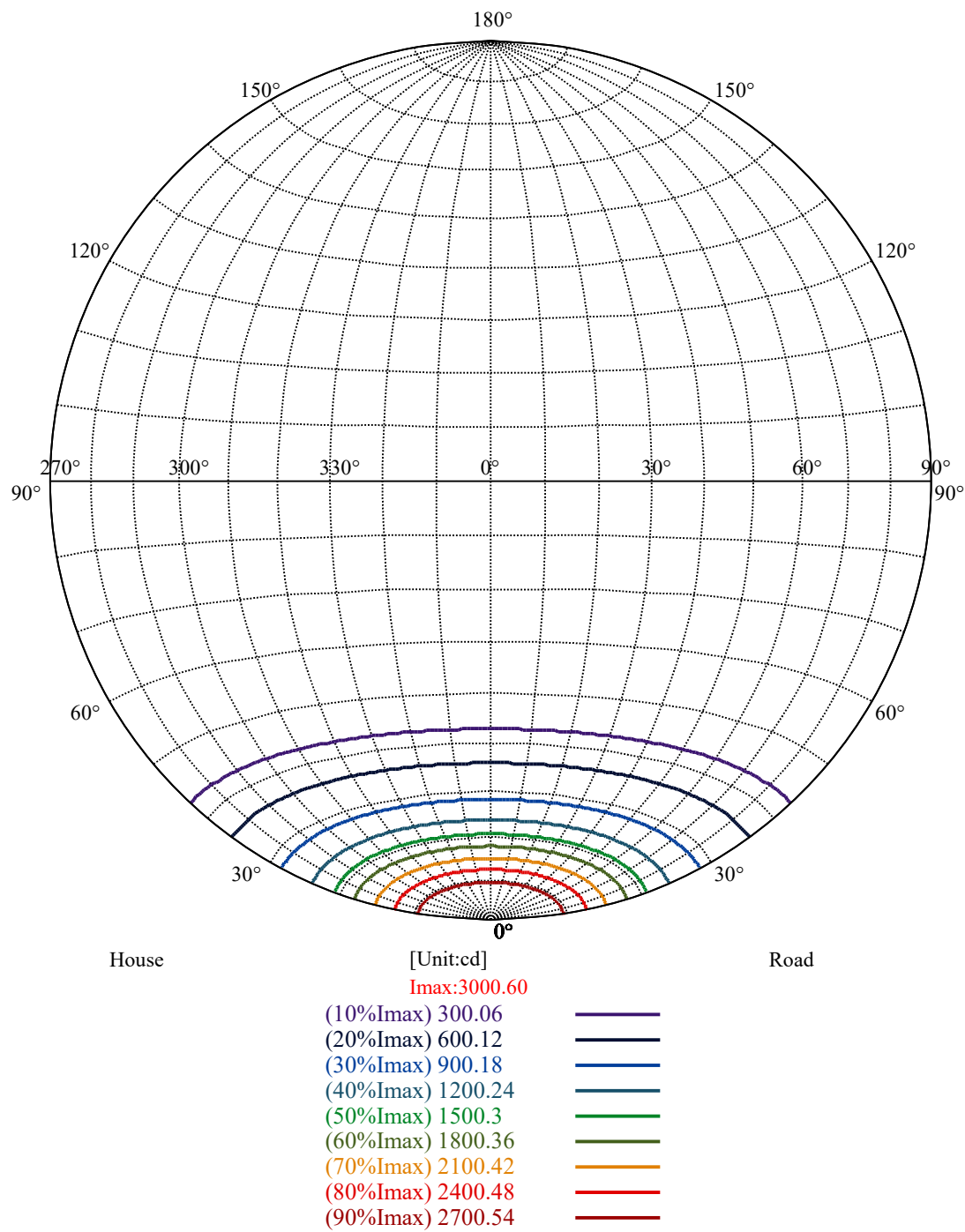
Down flux rate of LUM(%): 100.00%

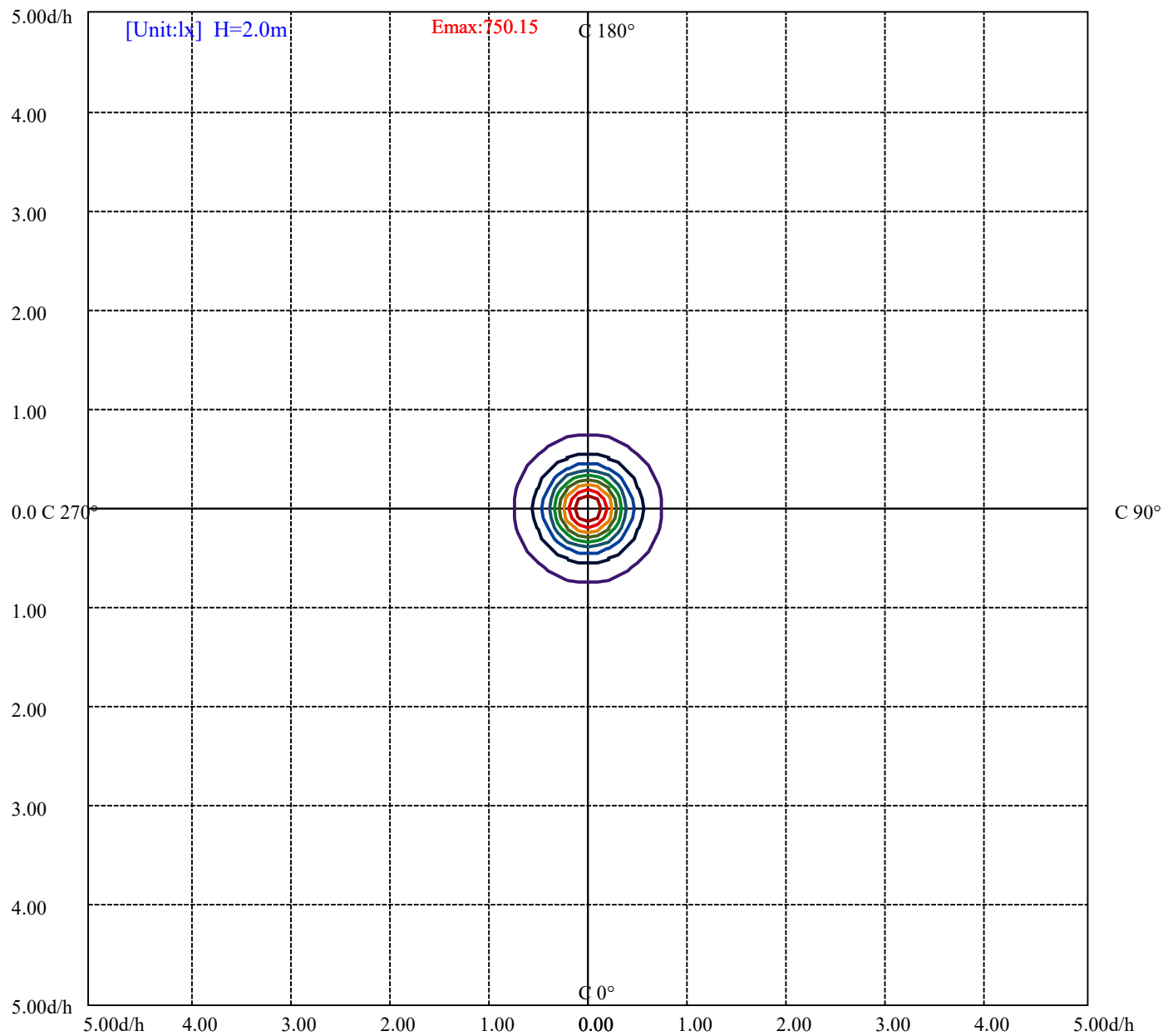
CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.608%

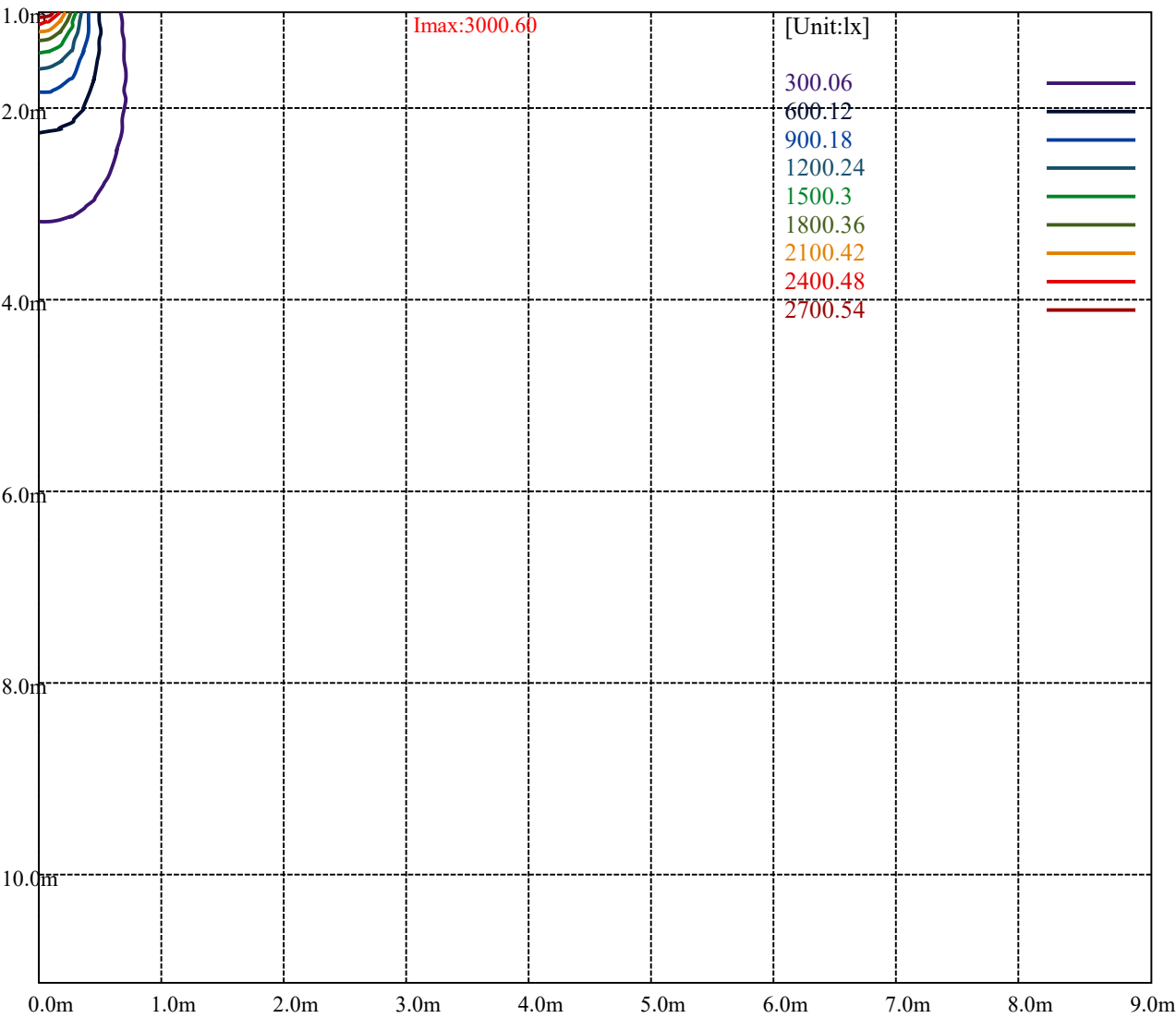








(10%Emax) 75.015	
(20%Emax) 150.03	
(30%Emax) 225.045	
(40%Emax) 300.06	
(50%Emax) 375.075	
(60%Emax) 450.09	
(70%Emax) 525.105	
(80%Emax) 600.12	
(90%Emax) 675.135	



Luminance Table

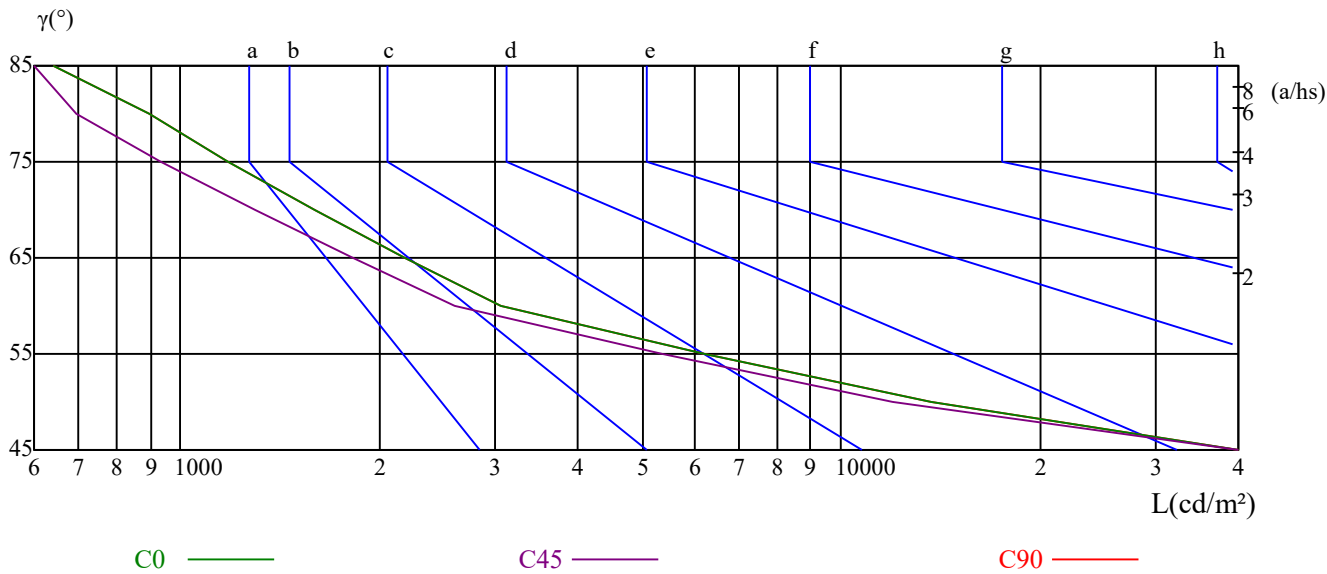
γ	45	50	55	60	65	70	75	80	85
C0	83160	13717	6227	3061	2191	1593	1176	899	642
C45	73817	12007	5369	2596	1825	1299	935	694	477
C90	83160	13717	6227	3061	2191	1593	1176	899	642

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4259	4259	4259	3108	3108	3108	3872	3872	3872

Glare Table

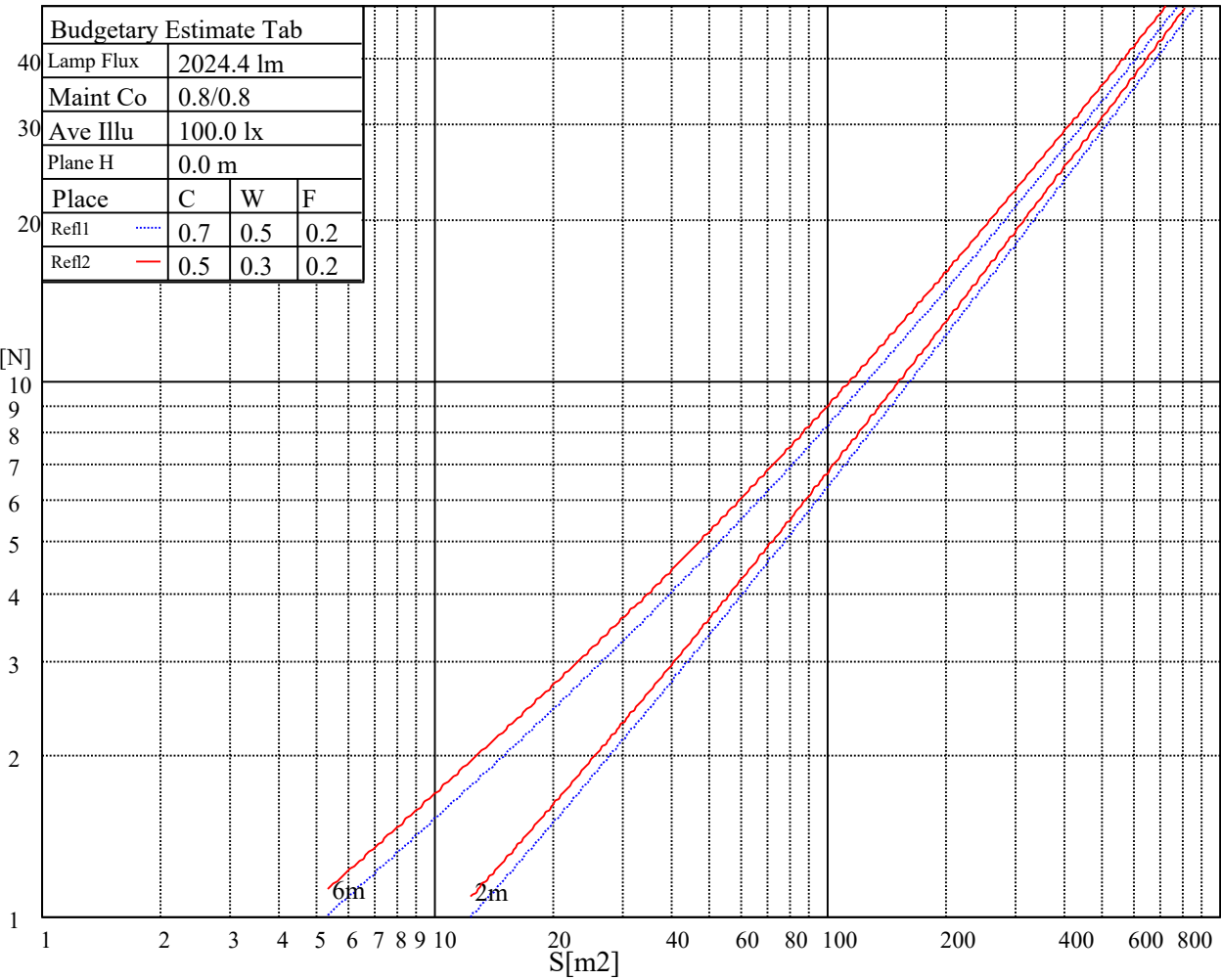
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

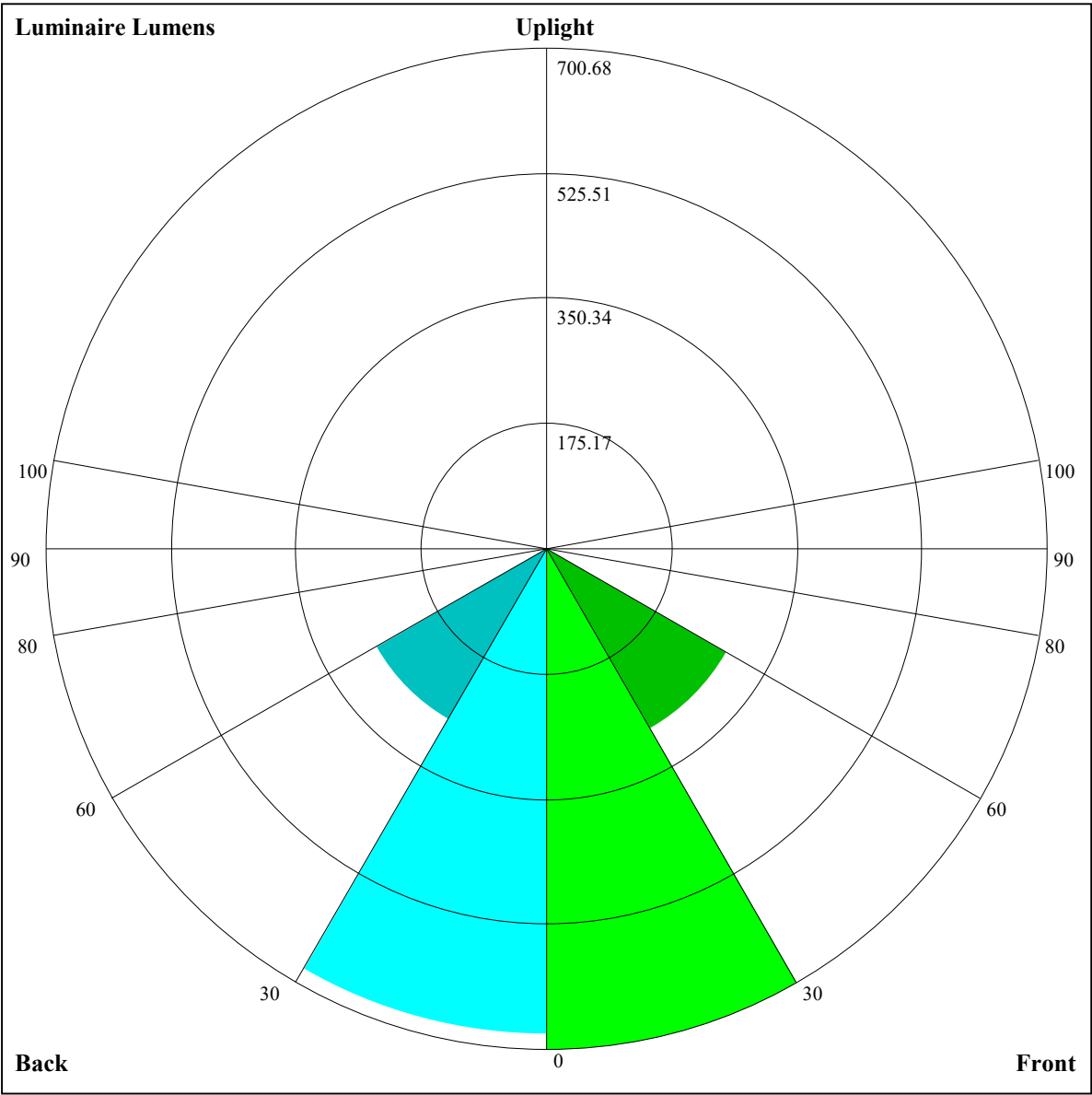


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	22.84	23.84	23.20	24.15	24.47	22.89	23.89	23.25	24.20	24.52
	3H	22.64	23.53	23.03	23.87	24.22	22.69	23.58	23.08	23.92	24.26
	4H	22.54	23.36	22.94	23.72	24.09	22.59	23.41	22.99	23.76	24.13
	6H	22.46	23.21	22.87	23.58	23.98	22.50	23.25	22.92	23.63	24.03
	8H	22.38	23.10	22.80	23.48	23.89	22.43	23.14	22.85	23.53	23.93
	12H	22.31	22.99	22.74	23.38	23.80	22.36	23.03	22.78	23.43	23.84
4H	2H	22.54	23.36	22.94	23.71	24.08	22.59	23.41	22.99	23.76	24.13
	3H	22.31	22.99	22.73	23.38	23.80	22.35	23.03	22.78	23.43	23.85
	4H	22.24	22.82	22.67	23.25	23.69	22.28	22.87	22.72	23.29	23.74
	6H	22.10	22.61	22.57	23.06	23.52	22.14	22.66	22.61	23.11	23.56
	8H	22.04	22.51	22.52	22.97	23.45	22.08	22.56	22.56	23.02	23.49
	12H	21.98	22.42	22.47	22.88	23.40	22.03	22.47	22.52	22.92	23.44
8H	4H	22.03	22.51	22.52	22.97	23.44	22.08	22.56	22.56	23.01	23.49
	6H	21.88	22.27	22.38	22.75	23.26	21.92	22.31	22.43	22.79	23.30
	8H	21.86	22.19	22.39	22.71	23.21	21.90	22.23	22.44	22.76	23.25
	12H	21.80	22.06	22.35	22.58	23.10	21.85	22.10	22.39	22.62	23.14
12H	4H	21.98	22.42	22.47	22.87	23.39	22.02	22.46	22.51	22.92	23.44
	6H	21.86	22.19	22.39	22.71	23.21	21.90	22.23	22.44	22.76	23.25
	8H	21.80	22.06	22.35	22.58	23.10	21.85	22.10	22.39	22.62	23.14
Variation with the observer position at spacings:											
S = 1.0H		3.3/-14.7					3.3/-14.7				
S = 1.5H		5.8/-17.0					5.8/-17.0				
S = 2.0H		7.8/-17.3					7.8/-17.3				
Standard tables:		BK0					BK0				
Uncorrected UGR		3.3					3.3				

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



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 RHOFC=20 CU															
0	1.15	1.15	1.15	1.12	1.12	1.12	1.07	1.07	1.07	1.03	1.03	1.03	0.98	0.98	0.98	0.96
1	1.07	1.05	1.03	1.05	1.03	1.01	1.01	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.90
2	1.00	0.96	0.93	0.98	0.95	0.92	0.95	0.92	0.90	0.92	0.90	0.88	0.89	0.88	0.86	0.84
3	0.93	0.88	0.85	0.92	0.88	0.84	0.89	0.86	0.83	0.87	0.84	0.81	0.85	0.82	0.80	0.79
4	0.87	0.82	0.78	0.86	0.81	0.78	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.74
5	0.82	0.76	0.72	0.81	0.76	0.72	0.79	0.75	0.71	0.78	0.74	0.71	0.76	0.73	0.70	0.69
6	0.77	0.71	0.67	0.76	0.71	0.67	0.75	0.70	0.67	0.74	0.69	0.66	0.72	0.69	0.66	0.65
7	0.73	0.67	0.63	0.72	0.67	0.63	0.71	0.66	0.63	0.70	0.65	0.62	0.69	0.65	0.62	0.61
8	0.69	0.63	0.59	0.68	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.58	0.57
9	0.65	0.60	0.56	0.65	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.55	0.62	0.58	0.55	0.54
10	0.62	0.56	0.53	0.61	0.56	0.53	0.61	0.56	0.53	0.60	0.55	0.52	0.59	0.55	0.52	0.51



Luminaire Lumens:

FL=700.68,FM=290,FH=3.29,FVH=0.46

BL=680.8,BM=276.74,BH=3.27,BVH=0.46

UL=0,UH=0

BUG Rating:B2-U0-G0

NT NT 1-1713-LM

Intensity data(cd)

Appendix Page: 12 Total:14

C/ γ (°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	3006.51	3011.01	3003.13	2999.19	2976.13	2953.63	2922.13	2876.57	2842.82
45.0	2993.01	3003.69	3008.19	3007.63	2999.19	2990.19	2963.76	2940.13	2902.44
90.0	3004.26	3003.69	2996.38	2987.38	2962.07	2945.76	2912.57	2867.01	2810.19
135.0	2998.63	2996.38	2988.51	2976.13	2968.26	2941.82	2908.63	2865.32	2811.88
180.0	3006.51	3004.82	2992.44	2976.13	2953.63	2924.38	2903.01	2851.26	2791.63
225.0	2993.01	2978.38	2959.26	2927.76	2905.26	2861.94	2807.38	2743.82	2647.07
270.0	3004.26	3000.88	2990.76	2977.26	2969.38	2946.88	2917.07	2872.07	2814.69
315.0	2998.63	2994.13	2986.82	2976.69	2954.19	2937.32	2900.76	2855.19	2790.51
360.0	3006.51	3011.01	3003.13	2999.19	2976.13	2953.63	2922.13	2876.57	2842.82
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2774.76	2693.19	2602.63	2480.57	2414.76	2305.07	2186.38	2039.01	1912.44
45.0	2853.51	2818.63	2738.19	2622.32	2562.69	2442.88	2327.57	2204.94	2085.69
90.0	2725.26	2677.44	2590.82	2491.82	2361.32	2247.13	2176.26	2013.69	1872.51
135.0	2772.51	2687.57	2562.13	2501.38	2396.19	2262.32	2146.44	2033.38	1965.88
180.0	2721.88	2624.01	2532.32	2425.44	2313.51	2242.63	2109.88	1999.07	1884.88
225.0	2596.44	2499.13	2387.19	2270.76	2130.13	2058.69	1898.38	1762.82	1694.19
270.0	2775.32	2685.32	2594.19	2491.82	2358.51	2244.88	2126.19	2009.76	1941.13
315.0	2691.51	2640.32	2546.94	2443.44	2328.13	2186.38	2072.19	1959.13	1825.82
360.0	2774.76	2693.19	2602.63	2480.57	2414.76	2305.07	2186.38	2039.01	1912.44
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1840.44	1685.19	1553.01	1487.19	1385.94	1289.76	1095.47	1095.47	1048.95
45.0	2013.13	1868.01	1753.26	1643.57	1536.69	1473.69	1352.19	1229.57	1178.38
90.0	1803.32	1692.51	1586.76	1489.44	1376.94	1322.94	1238.57	1093.33	1093.33
135.0	1835.94	1728.51	1631.76	1539.51	1481.01	1374.13	1290.88	1212.13	1115.38
180.0	1775.19	1713.32	1583.94	1445.01	1389.88	1303.26	1201.44	1125.51	1048.44
225.0	1589.01	1484.38	1386.51	1274.01	1111.44	1111.44	1032.36	988.43	914.79
270.0	1809.51	1700.38	1590.69	1484.38	1421.38	1308.88	1192.44	1143.51	1066.44
315.0	1760.01	1653.69	1549.07	1446.69	1331.94	1280.19	1092.77	1092.77	1047.54
360.0	1840.44	1685.19	1553.01	1487.19	1385.94	1289.76	1095.47	1095.47	1048.95
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	977.29	893.42	855.11	796.11	745.43	703.80	662.74	646.09	614.14
45.0	1083.88	1010.19	940.44	876.88	837.51	772.26	723.32	684.51	650.76
90.0	1023.75	957.15	892.07	822.15	790.88	744.41	705.43	668.03	642.60
135.0	1038.88	965.19	899.38	860.57	790.82	743.57	703.07	671.57	655.26
180.0	1007.38	926.38	867.32	807.69	757.07	732.32	692.94	655.82	640.63
225.0	851.74	789.30	727.31	701.27	663.19	634.05	602.27	577.86	545.01
270.0	978.13	910.63	848.19	813.32	755.38	714.32	681.13	654.69	640.07
315.0	976.16	909.28	851.91	793.58	766.46	726.53	675.00	659.36	633.04
360.0	977.29	893.42	855.11	796.11	745.43	703.80	662.74	646.09	614.14
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	600.58	562.56	527.34	488.64	446.51	392.01	363.43	316.01	267.41
45.0	632.76	604.63	576.51	541.63	492.13	448.26	401.01	355.44	326.19
90.0	613.46	576.84	528.41	499.16	452.98	402.69	355.39	291.15	241.88
135.0	624.88	593.38	555.13	502.26	455.01	407.19	357.69	328.44	280.07
180.0	604.07	590.01	527.57	483.69	454.44	395.94	344.76	293.01	293.01
225.0	507.88	457.82	430.48	386.21	341.16	294.98	242.27	216.00	158.06
270.0	611.38	566.38	545.01	490.44	472.44	394.82	346.44	314.38	314.38
315.0	614.48	559.13	505.29	476.55	428.79	378.45	329.79	271.07	242.94
360.0	600.58	562.56	527.34	488.64	446.51	392.01	363.43	316.01	267.41

Intensity data(cd)

C/ γ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	218.08	161.94	118.69	81.90	46.80	33.98	24.13	21.99	20.19
45.0	281.76	281.76	191.87	140.57	101.31	67.61	41.63	31.50	23.12
90.0	193.11	140.18	124.48	78.92	48.88	27.00	17.66	16.71	15.30
135.0	280.07	185.68	132.75	91.69	57.54	32.29	24.08	18.56	17.44
180.0	194.74	151.14	110.03	88.76	52.09	30.32	21.83	20.19	19.41
225.0	134.94	95.96	58.44	37.35	27.84	24.13	22.89	20.87	18.68
270.0	195.30	169.09	118.52	80.38	51.47	30.54	24.24	20.64	18.84
315.0	195.53	151.14	100.52	64.18	36.68	22.95	18.79	17.94	16.31
360.0	218.08	161.94	118.69	81.90	46.80	33.98	24.13	21.99	20.19
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	17.78	16.48	14.29	12.04	10.13	8.49	8.16	7.43	6.75
45.0	21.04	19.07	16.54	13.89	11.48	9.39	8.33	6.69	5.79
90.0	13.73	11.70	9.17	7.99	5.68	4.44	4.28	3.94	3.71
135.0	16.03	14.34	13.33	10.18	8.38	7.48	6.30	5.79	5.40
180.0	17.55	14.63	13.39	10.97	9.17	7.88	7.26	6.92	6.30
225.0	16.26	13.50	12.32	10.46	8.49	8.04	7.37	7.03	6.24
270.0	17.16	14.40	13.44	10.69	8.21	7.43	6.64	6.08	5.68
315.0	14.40	12.21	9.68	8.61	6.47	5.96	5.63	5.18	4.78
360.0	17.78	16.48	14.29	12.04	10.13	8.49	8.16	7.43	6.75
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	6.41	5.91	5.46	5.06	4.50	4.22	3.88	3.60	3.32
45.0	5.40	4.95	4.73	4.28	3.99	3.71	3.49	3.21	2.98
90.0	3.49	3.21	3.04	2.81	2.70	2.53	2.36	2.31	2.19
135.0	5.01	4.84	4.44	4.16	3.83	3.54	3.38	2.98	2.64
180.0	5.79	5.34	5.01	4.39	4.05	3.71	3.49	3.15	2.87
225.0	5.57	5.34	4.89	4.56	4.16	3.71	3.54	3.21	2.93
270.0	5.23	5.01	4.56	4.22	3.94	3.66	3.26	2.98	2.64
315.0	4.39	4.11	3.88	3.71	3.38	3.09	2.81	2.64	2.48
360.0	6.41	5.91	5.46	5.06	4.50	4.22	3.88	3.60	3.32
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	2.98	2.81	2.59	2.19	2.03	1.86	1.74	1.52	1.35
45.0	2.76	2.64	2.48	2.36	2.19	2.03	1.97	1.91	1.74
90.0	2.08	1.97	1.86	1.74	1.63	1.52	1.52	1.35	1.29
135.0	2.53	2.31	2.14	1.97	1.80	1.74	1.58	1.41	1.29
180.0	2.59	2.36	2.25	1.97	1.86	1.80	1.74	1.69	1.52
225.0	2.64	2.36	2.25	2.03	1.86	1.86	1.69	1.63	1.46
270.0	2.59	2.36	2.14	2.03	1.74	1.63	1.41	1.24	1.18
315.0	2.19	2.14	1.91	1.80	1.58	1.41	1.29	1.18	1.07
360.0	2.98	2.81	2.59	2.19	2.03	1.86	1.74	1.52	1.35
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.29	1.07	1.01	0.84	0.79	0.68	0.62	0.56	0.51
45.0	1.63	1.58	1.41	1.29	1.18	1.07	0.96	0.79	0.68
90.0	1.18	1.07	0.96	0.84	0.79	0.68	0.68	0.51	0.45
135.0	1.24	1.07	0.96	0.84	0.79	0.62	0.62	0.51	0.45
180.0	1.46	1.41	1.24	1.18	1.07	0.90	0.79	0.68	0.45
225.0	1.35	1.29	1.07	0.96	0.84	0.73	0.62	0.45	0.39
270.0	1.01	0.90	0.84	0.73	0.68	0.56	0.51	0.45	0.45
315.0	1.01	0.90	0.79	0.73	0.62	0.62	0.56	0.51	0.45
360.0	1.29	1.07	1.01	0.84	0.79	0.68	0.62	0.56	0.51

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	0.45
45.0	0.45
90.0	0.45
135.0	0.39
180.0	0.39
225.0	0.34
270.0	0.34
315.0	0.39
360.0	0.45