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NT

Client: NT

LumCAT: 1-1705-LM

Luminaire: 92.70.121.00

Report No: 20251217-B006

Ballast type: AC

Test No: 20251217-C006

Voltage(V): 34.600

LampCAT: LUMINUS CXM-11(TC) LES11

Current(A): 0.451

Lamp flux(lm): 2013.0

Power (W): 15.604

Number of Lamps: 1

PF: 0.000

Length(mm): 50

Width(mm): 50

Phm Type: C

Height(mm): 22

Photometric Results

Lumens(lm): 1945.61, Efficiency(%): 96.65% , Luminous Efficacy(lm/W): 124.69

Central intensity(cd): 3195.928, Maximum intensity(cd): 3195.928

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=38.6

[C90/270]Total=38.6

Field angle(10%Imax): [C0/180]Total=85.6

[C90/270]Total=85.6

Maximum s/h(1/2): C0_180=0.62 C90_270=0.62

Maximum s/h(1/4): C0_180=0.65 C90_270=0.65

Up flux rate of lamp(%): 0.00%

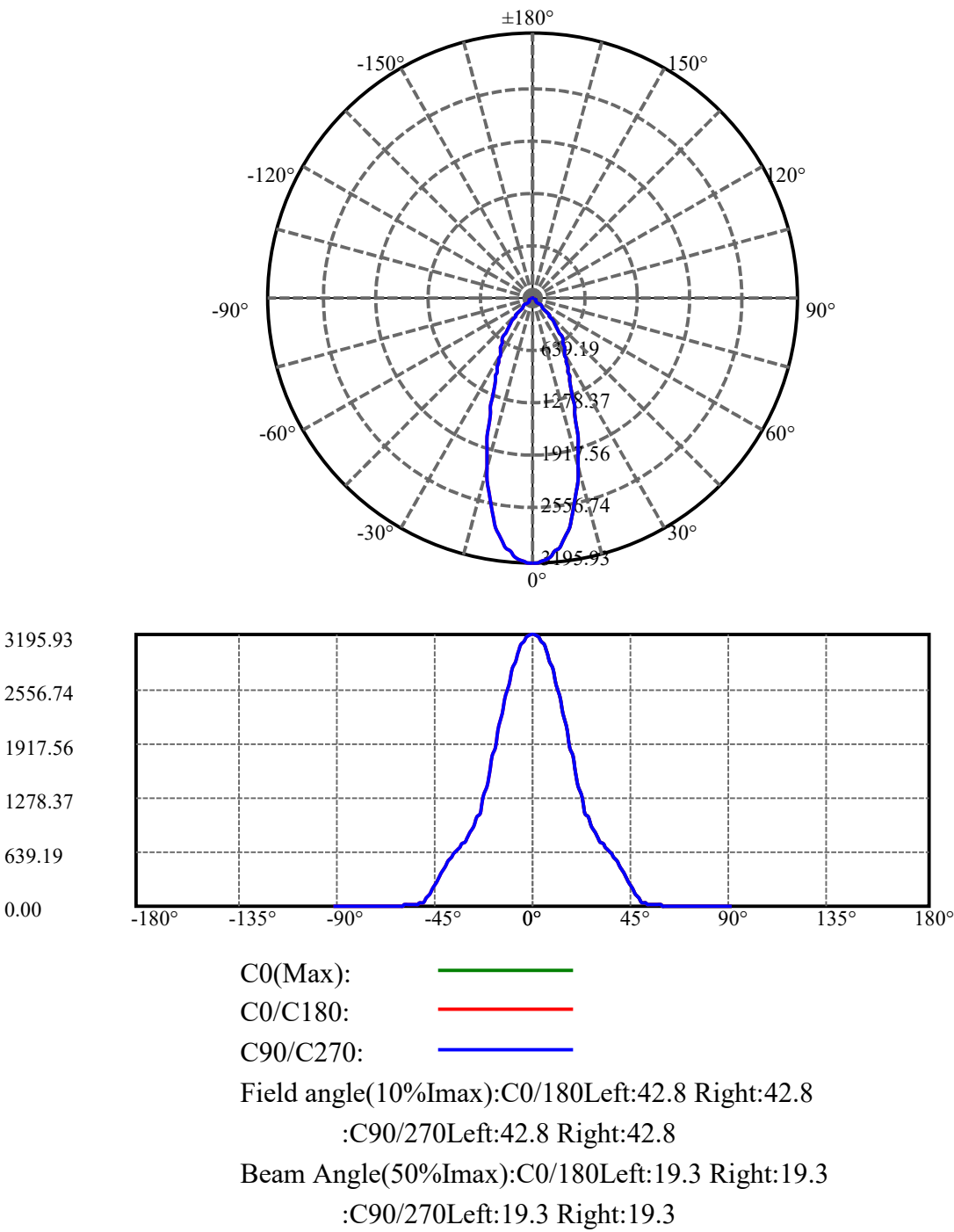
Down flux rate of lamp(%): 96.65%

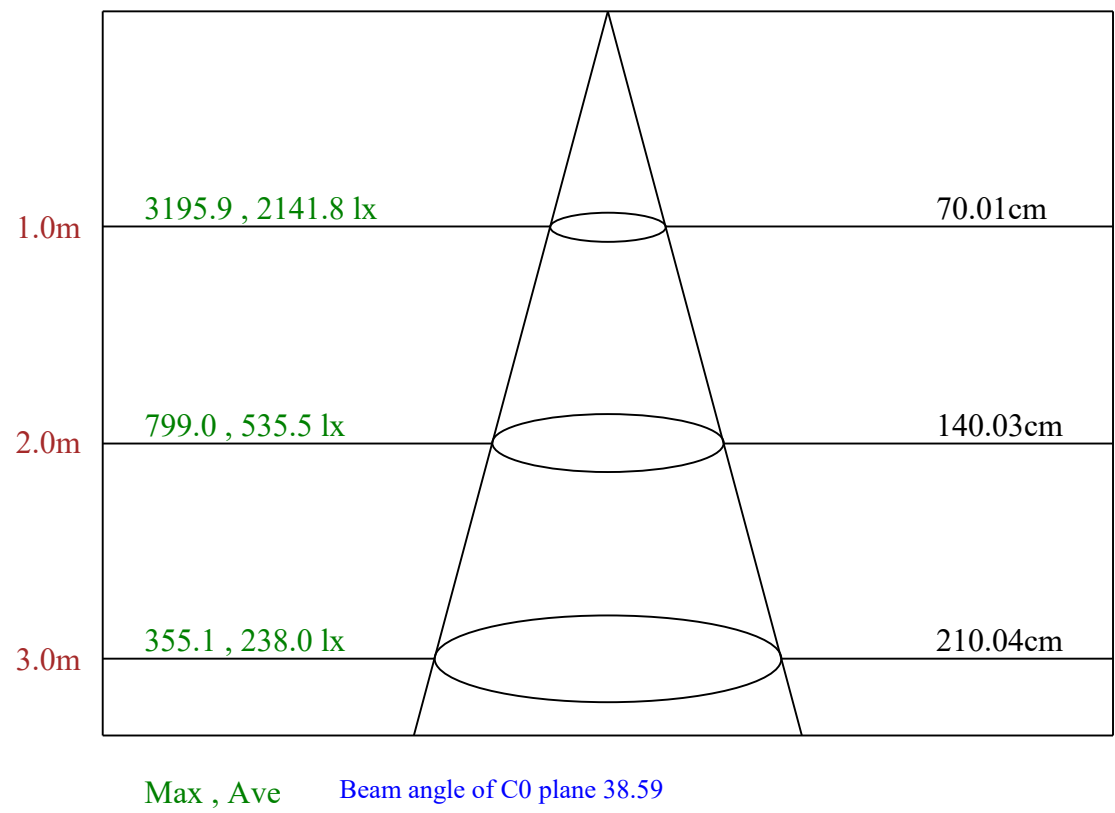
Up flux rate of LUM(%): - -

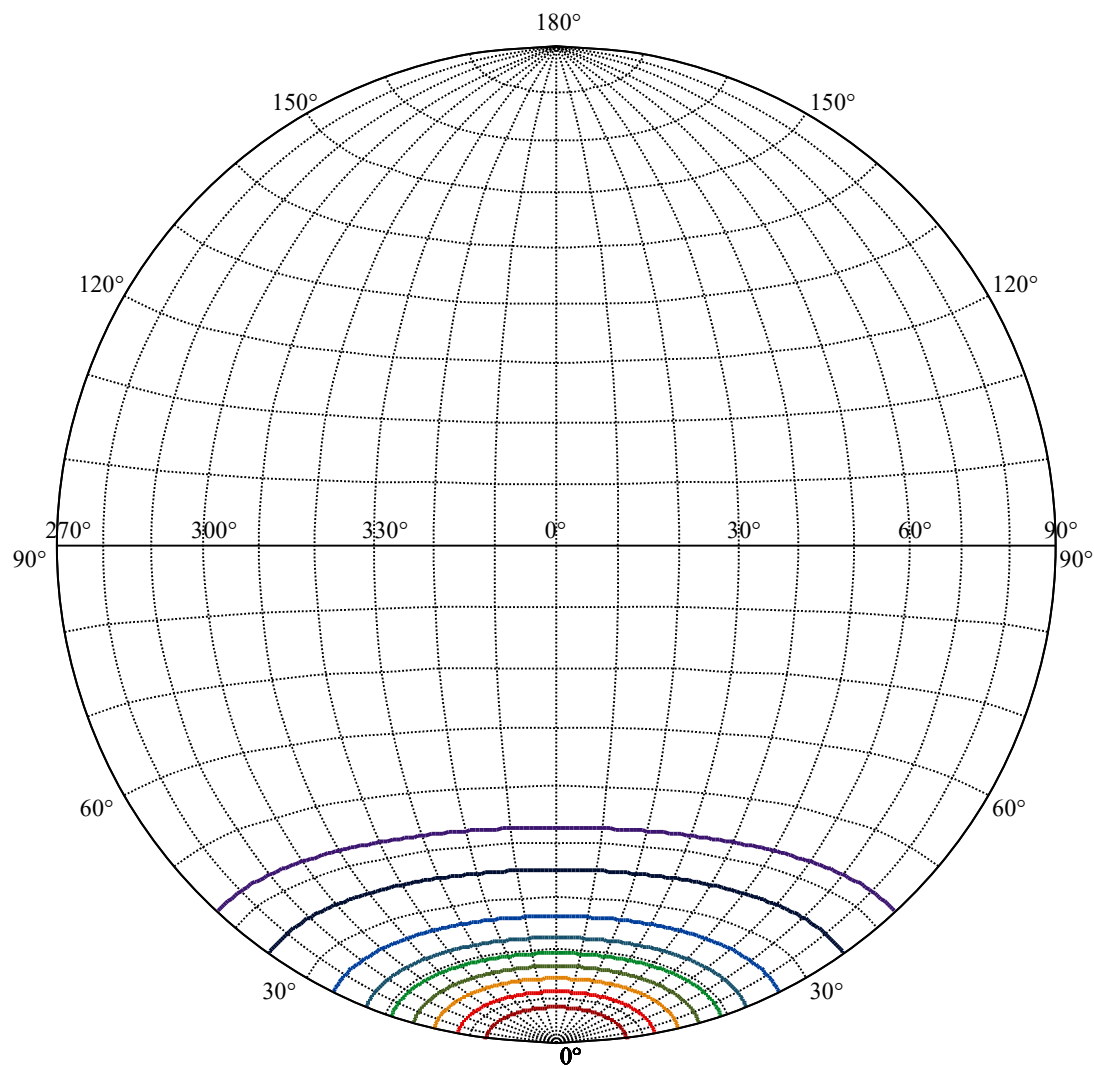
Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.498%





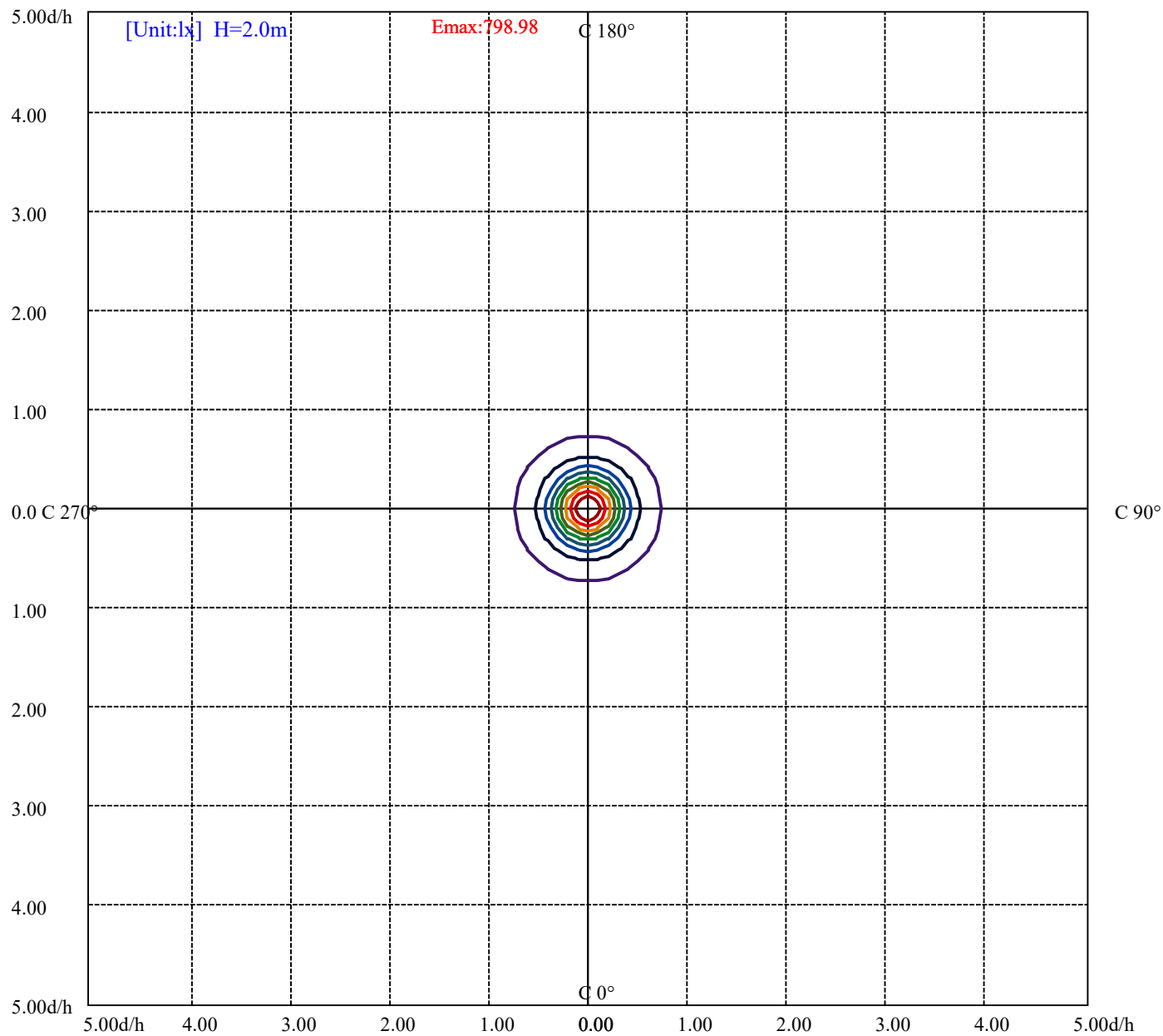


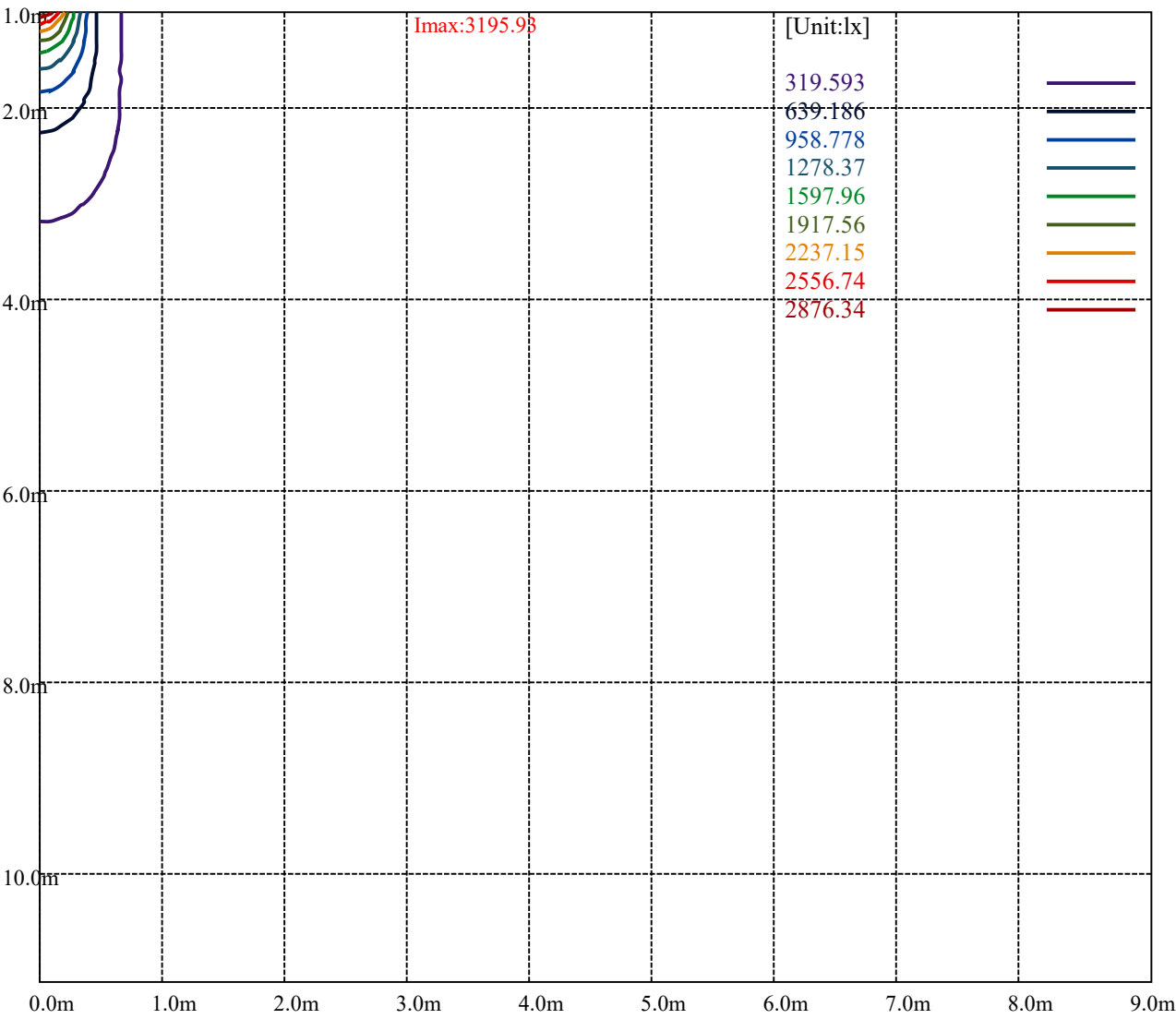
House

[Unit:cd]

Road

Imax:3195.93	
(10%Imax) 319.593	
(20%Imax) 639.186	
(30%Imax) 958.778	
(40%Imax) 1278.37	
(50%Imax) 1597.96	
(60%Imax) 1917.56	
(70%Imax) 2237.15	
(80%Imax) 2556.74	
(90%Imax) 2876.34	





Luminance Table

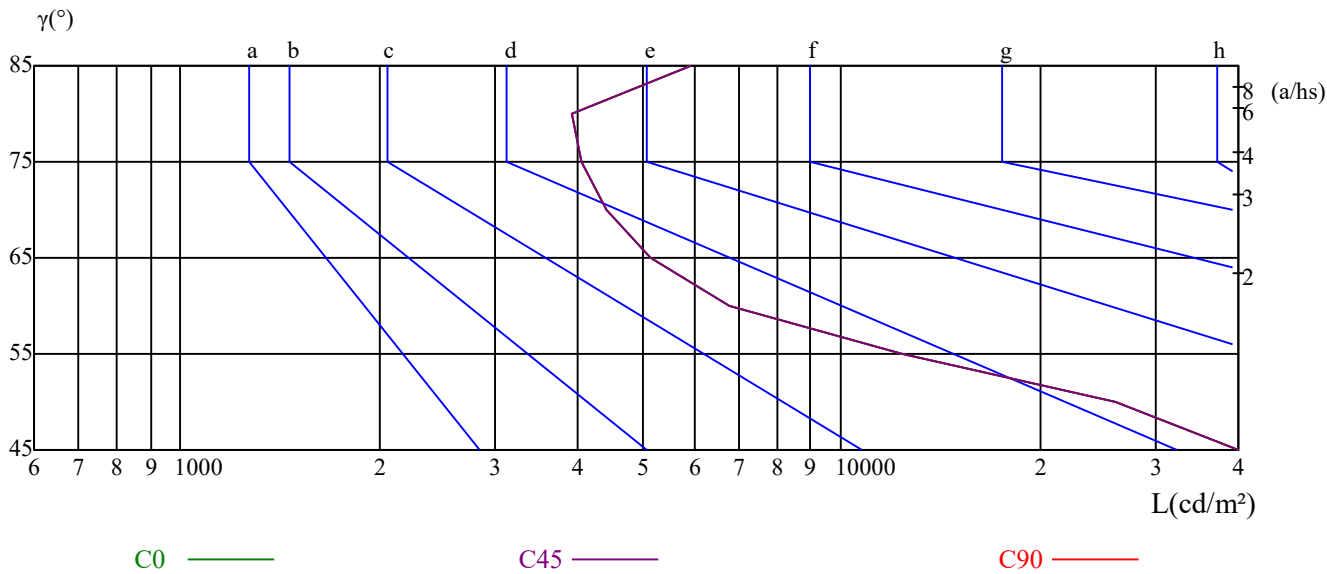
γ	45	50	55	60	65	70	75	80	85
C0	124332	26056	12362	6767	5164	4424	4042	3903	5938
C45	124332	26056	12362	6767	5164	4424	4042	3903	5938
C90	124332	26056	12362	6767	5164	4424	4042	3903	5938

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5164	5164	5164	4042	4042	4042	5938	5938	5938

Glare Table

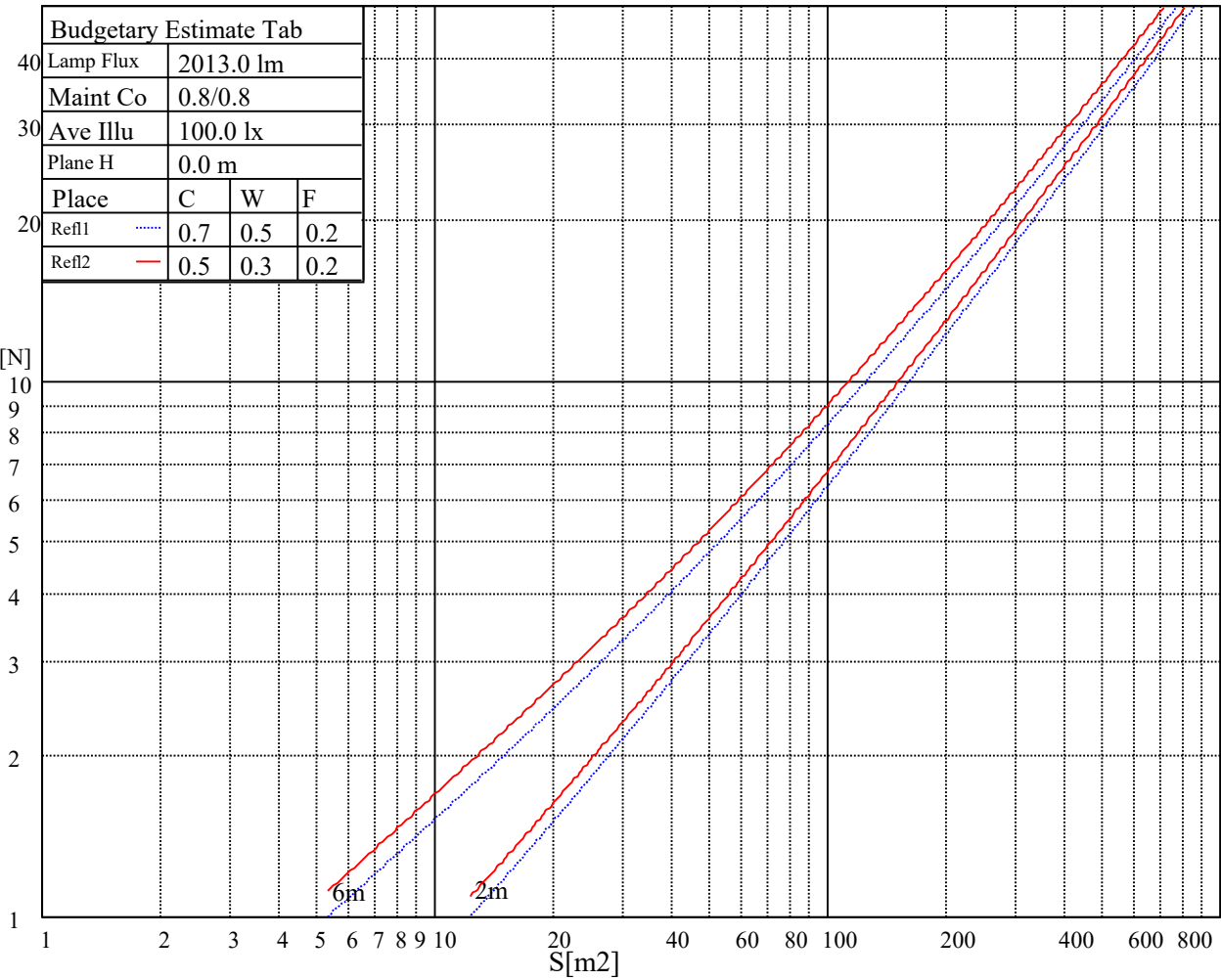
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

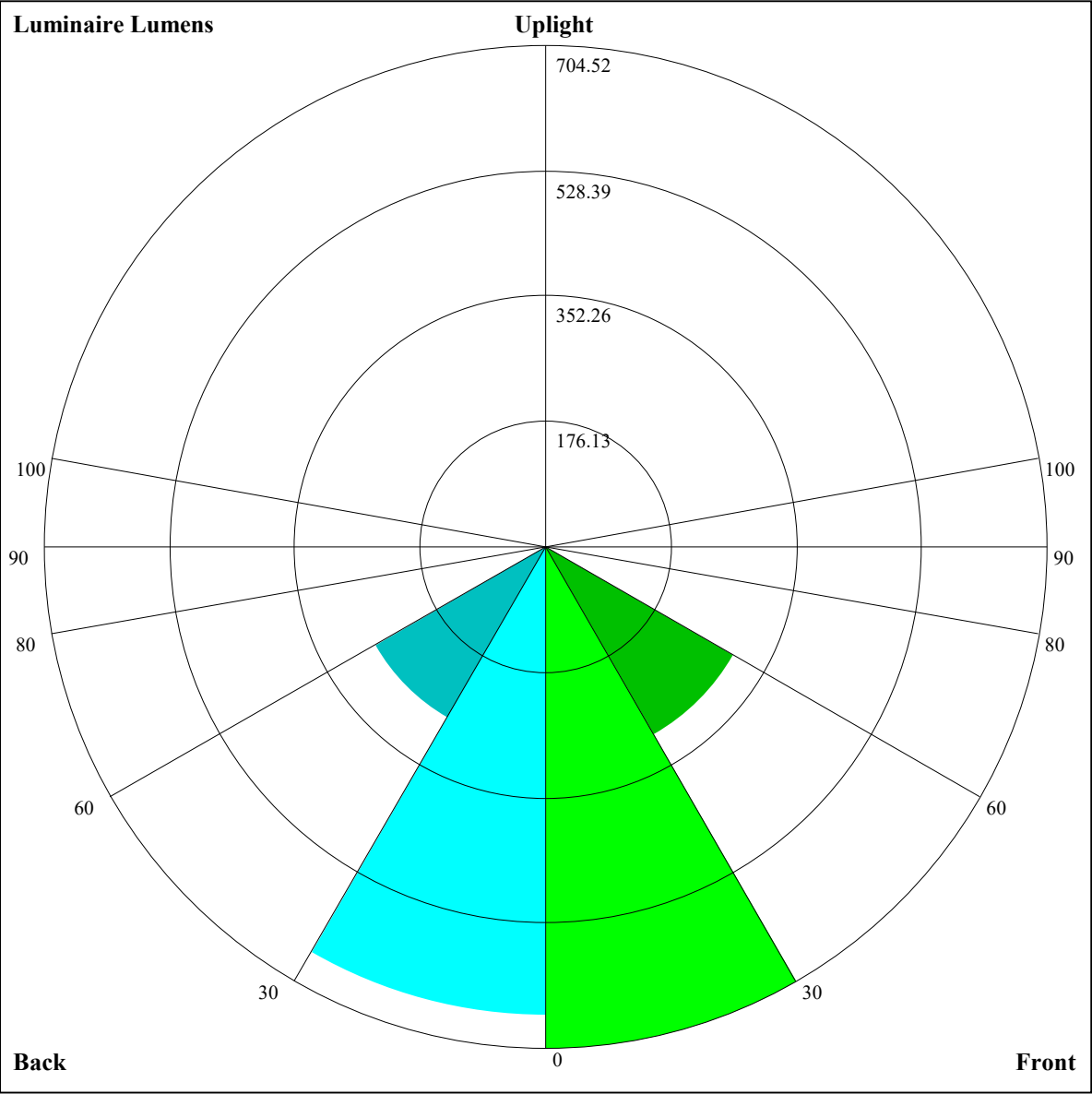


Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	25.34	26.36	25.71	26.67	26.99	25.48	26.50	25.84	26.81	27.12
	3H	25.15	26.05	25.54	26.39	26.73	25.29	26.19	25.68	26.52	26.87
	4H	25.06	25.88	25.46	26.24	26.61	25.19	26.02	25.59	26.38	26.74
	6H	24.97	25.73	25.39	26.10	26.50	25.11	25.86	25.53	26.24	26.64
	8H	24.90	25.62	25.32	26.01	26.41	25.03	25.76	25.45	26.14	26.55
	12H	24.83	25.51	25.26	25.91	26.33	24.96	25.65	25.39	26.04	26.46
4H	2H	25.05	25.88	25.45	26.23	26.60	25.19	26.02	25.59	26.37	26.74
	3H	24.83	25.51	25.25	25.91	26.33	24.96	25.65	25.39	26.04	26.46
	4H	24.76	25.35	25.20	25.77	26.22	24.89	25.49	25.33	25.91	26.36
	6H	24.62	25.14	25.09	25.60	26.05	24.76	25.28	25.23	25.73	26.18
	8H	24.56	25.05	25.05	25.51	25.98	24.70	25.18	25.18	25.64	26.11
	12H	24.52	24.96	25.01	25.42	25.94	24.65	25.09	25.14	25.55	26.07
8H	4H	24.56	25.04	25.04	25.50	25.97	24.69	25.18	25.18	25.64	26.11
	6H	24.41	24.81	24.91	25.28	25.80	24.54	24.94	25.05	25.42	25.93
	8H	24.40	24.73	24.93	25.25	25.75	24.53	24.86	25.06	25.39	25.88
	12H	24.35	24.61	24.89	25.13	25.65	24.48	24.74	25.02	25.26	25.78
12H	4H	24.51	24.95	25.00	25.40	25.92	24.64	25.09	25.13	25.54	26.06
	6H	24.39	24.73	24.93	25.25	25.75	24.53	24.86	25.06	25.38	25.88
	8H	24.34	24.60	24.89	25.12	25.64	24.47	24.74	25.02	25.25	25.78
Variation with the observer position at spacings:											
S = 1.0H		3.2/-12.9					3.2/-12.9				
S = 1.5H		5.6/-14.6					5.6/-14.6				
S = 2.0H		7.6/-14.6					7.6/-14.6				
Standard tables:		BK0					BK0				
Uncorrected UGR		5.5					5.5				

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



RHOC	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 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	0.99	0.99	0.99	0.97
1	1.07	1.05	1.03	1.05	1.03	1.01	1.01	0.99	0.98	0.98	0.96	0.95	0.94	0.93	0.92	0.91
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	0.90	0.88	0.86	0.84
3	0.93	0.89	0.85	0.92	0.88	0.84	0.89	0.86	0.83	0.87	0.84	0.82	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	0.77	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	0.72	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	0.66	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	0.62	0.56	0.53	0.61	0.56	0.53	0.60	0.56	0.53	0.59	0.55	0.52	0.51



Luminaire Lumens:

FL=704.52,FM=304.98,FH=4.35,FVH=0.68

BL=658.96,BM=278.81,BH=4.08,BVH=0.69

UL=0,UH=0

BUG Rating:B2-U0-G0

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	3209.01	3219.13	3217.44	3209.01	3182.57	3146.57	3100.44	3027.32	2984.01
45.0	3177.51	3204.51	3216.88	3220.26	3212.38	3202.82	3171.88	3133.07	3083.57
90.0	3202.82	3199.44	3187.63	3166.26	3126.88	3102.13	3053.76	2994.69	2926.63
135.0	3194.38	3186.51	3167.38	3152.76	3110.57	3064.44	3011.01	2948.57	2906.38
180.0	3209.01	3199.44	3166.26	3128.01	3081.32	3025.07	2985.13	2896.26	2811.32
225.0	3177.51	3143.76	3101.01	3034.07	3008.76	2922.13	2839.44	2744.38	2614.44
270.0	3202.82	3193.26	3174.13	3145.44	3122.94	3070.07	3013.26	2943.51	2865.88
315.0	3194.38	3192.69	3178.07	3164.57	3133.63	3062.76	3027.88	2959.82	2882.76
360.0	3209.01	3219.13	3217.44	3209.01	3182.57	3146.57	3100.44	3027.32	2984.01
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2899.63	2803.44	2695.44	2555.94	2480.01	2347.26	2211.69	2046.32	1909.63
45.0	3021.69	2931.13	2840.57	2736.51	2670.13	2526.13	2397.88	2264.57	2125.63
90.0	2833.26	2782.63	2690.94	2590.82	2480.01	2336.01	2261.76	2089.07	1940.01
135.0	2816.38	2732.01	2636.94	2509.82	2396.76	2281.44	2161.07	2087.38	1943.38
180.0	2717.94	2593.07	2480.57	2360.76	2234.76	2157.13	1995.69	1860.69	1726.82
225.0	2545.82	2424.88	2298.88	2165.57	2004.13	1922.01	1735.26	1582.26	1507.44
270.0	2815.26	2701.63	2553.13	2483.94	2341.07	2219.57	2092.44	1964.19	1887.13
315.0	2798.94	2684.76	2624.01	2516.01	2401.82	2286.51	2141.94	2068.82	1947.32
360.0	2899.63	2803.44	2695.44	2555.94	2480.01	2347.26	2211.69	2046.32	1909.63
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1829.19	1645.82	1497.88	1429.26	1324.07	1108.13	1060.20	1060.20	988.88
45.0	2041.82	1872.51	1736.94	1603.63	1474.26	1400.01	1221.13	1126.07	1072.07
90.0	1866.32	1744.82	1626.13	1513.07	1387.07	1328.01	1216.07	1094.46	1079.78
135.0	1826.38	1708.26	1598.57	1470.88	1409.57	1313.94	1223.94	1126.63	1056.32
180.0	1600.26	1526.01	1387.07	1239.69	1181.19	1096.26	1003.44	938.19	880.26
225.0	1389.88	1280.19	1095.13	1095.13	1041.86	935.33	862.03	830.70	782.33
270.0	1739.19	1622.19	1510.26	1406.19	1347.13	1236.32	1126.63	1084.44	1004.57
315.0	1824.69	1681.26	1567.07	1458.51	1356.13	1245.32	1094.46	1094.46	1027.58
360.0	1829.19	1645.82	1497.88	1429.26	1324.07	1108.13	1060.20	1060.20	988.88
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	926.21	861.13	832.84	790.88	755.44	725.40	693.68	679.05	656.44
45.0	977.01	907.26	850.44	800.38	773.94	728.94	695.19	665.94	638.38
90.0	1009.69	945.68	888.64	828.84	803.98	766.41	733.73	700.26	675.79
135.0	993.32	936.51	906.69	851.57	812.19	777.88	748.07	730.63	698.01
180.0	851.01	798.69	760.44	726.69	697.44	681.69	653.01	626.57	611.94
225.0	740.64	706.39	668.25	652.95	627.75	604.52	579.54	547.37	526.67
270.0	946.07	894.88	848.76	823.44	777.32	743.57	714.32	687.32	672.69
315.0	990.34	933.81	883.18	838.24	790.99	769.89	737.38	707.34	679.67
360.0	926.21	861.13	832.84	790.88	755.44	725.40	693.68	679.05	656.44
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	635.23	601.20	565.43	524.70	480.15	423.51	394.26	343.07	292.16
45.0	623.19	595.63	573.13	546.69	505.07	466.82	425.19	382.44	353.76
90.0	648.84	613.07	565.71	538.20	490.44	443.42	396.90	333.56	302.85
135.0	653.57	629.38	575.38	527.01	476.38	425.19	393.69	332.38	311.57
180.0	574.82	560.76	496.63	455.01	427.44	371.19	323.94	294.13	294.13
225.0	469.52	414.11	387.51	343.97	303.30	261.96	211.11	186.53	145.52
270.0	633.32	575.38	548.38	488.76	439.26	386.38	335.19	302.01	302.01
315.0	638.66	595.29	548.27	488.70	457.76	406.07	353.25	301.84	240.47
360.0	635.23	601.20	565.43	524.70	480.15	423.51	394.26	343.07	292.16

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	242.44	185.06	140.06	99.28	58.89	43.48	27.28	22.89	21.15
45.0	298.07	298.07	280.07	159.98	117.84	82.24	55.01	43.76	30.71
90.0	227.59	200.53	153.62	105.02	70.99	45.28	31.39	29.64	27.28
135.0	311.57	185.57	140.91	100.74	66.94	50.74	33.81	30.15	27.79
180.0	176.79	133.48	95.23	75.60	43.09	28.29	24.08	21.83	21.09
225.0	107.72	74.93	45.28	30.99	25.14	22.05	20.64	18.06	15.30
270.0	183.04	156.77	107.61	71.27	44.89	29.81	25.99	23.06	20.64
315.0	211.11	162.84	94.11	72.28	43.20	33.08	24.47	21.77	20.36
360.0	242.44	185.06	140.06	99.28	58.89	43.48	27.28	22.89	21.15
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	18.84	17.61	15.24	12.94	10.86	8.72	8.16	7.43	6.86
45.0	26.55	23.85	20.81	17.94	14.96	12.49	11.14	9.17	7.99
90.0	24.86	21.99	18.51	16.76	13.11	10.86	10.24	9.34	8.44
135.0	25.31	23.51	20.14	16.14	14.57	12.04	10.69	9.73	8.83
180.0	18.39	14.91	13.44	10.69	9.06	8.21	7.65	7.31	6.53
225.0	12.71	9.96	8.83	7.37	6.08	5.85	5.18	4.67	4.28
270.0	18.00	14.68	11.98	10.58	8.16	7.48	6.86	6.30	5.79
315.0	17.83	15.30	12.77	10.29	9.28	8.21	7.76	7.26	6.86
360.0	18.84	17.61	15.24	12.94	10.86	8.72	8.16	7.43	6.86
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	6.58	6.02	5.68	5.34	4.78	4.61	4.28	3.94	3.71
45.0	7.14	6.53	6.08	5.34	4.73	4.50	4.11	3.77	3.43
90.0	7.65	6.69	6.30	5.74	5.18	4.78	4.22	4.05	3.66
135.0	8.21	7.09	6.30	5.74	5.12	4.56	4.16	3.71	3.49
180.0	6.02	5.57	5.18	4.84	4.56	4.28	4.16	3.83	3.66
225.0	3.88	3.71	3.49	3.32	3.15	2.98	2.93	2.87	2.81
270.0	5.29	5.12	4.78	4.39	4.16	4.11	3.99	3.88	3.77
315.0	6.47	6.13	5.85	5.63	5.23	5.06	4.61	4.22	4.11
360.0	6.58	6.02	5.68	5.34	4.78	4.61	4.28	3.94	3.71
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	3.43	3.38	3.09	2.70	2.48	2.03	1.86	1.74	1.63
45.0	3.21	3.04	2.93	2.81	2.59	2.48	2.42	2.14	2.03
90.0	3.21	3.15	2.87	2.59	2.25	1.86	1.74	1.52	1.46
135.0	3.21	2.98	2.81	2.53	2.36	2.03	1.80	1.63	1.52
180.0	3.54	3.32	3.26	2.81	2.48	2.19	2.03	1.97	1.80
225.0	2.70	2.70	2.59	2.42	2.36	2.31	2.25	2.14	2.03
270.0	3.66	3.43	3.09	2.59	2.14	1.97	1.86	1.69	1.63
315.0	3.77	3.49	3.09	2.47	1.97	1.80	1.58	1.52	1.46
360.0	3.43	3.38	3.09	2.70	2.48	2.03	1.86	1.74	1.63
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.63	1.52	1.52	1.41	1.41	1.29	1.24	1.13	1.01
45.0	1.97	1.86	1.80	1.69	1.63	1.58	1.46	1.29	1.13
90.0	1.35	1.18	1.13	1.07	1.01	0.96	0.90	0.79	0.79
135.0	1.46	1.35	1.35	1.24	1.24	1.18	1.07	1.01	0.96
180.0	1.69	1.69	1.58	1.52	1.41	1.29	1.24	1.18	1.13
225.0	1.97	1.86	1.69	1.46	1.35	1.18	1.01	0.90	0.73
270.0	1.58	1.58	1.46	1.41	1.35	1.24	1.13	1.07	1.01
315.0	1.35	1.24	1.18	1.01	0.96	0.84	0.73	0.73	0.73
360.0	1.63	1.52	1.52	1.41	1.41	1.29	1.24	1.13	1.01

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	0.90
45.0	0.90
90.0	0.67
135.0	0.96
180.0	1.01
225.0	0.68
270.0	0.84
315.0	0.68
360.0	0.90