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NT

Client: NT

LumCAT: 1-1712-LM

Luminaire: 92.70.121.00 LED HOLDER

Report No: 20251203-B015

Ballast type: AC

Test No: 20251203-C015

Voltage(V): 34.670

LampCAT: LUMINUS CXM-11(TC)

Current(A): 0.450

Lamp flux(lm): 2003.9

Power (W): 15.601

Number of Lamps: 1

PF: 0.000

Length(mm): 50

Width(mm): 50

Phm Type: C

Height(mm): 22

Photometric Results

Lumens(lm): 1937.16, Efficiency(%): 96.67% , Luminous Efficacy(lm/W): 124.17

Central intensity(cd): 5144.147, Maximum intensity(cd): 5144.147

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=27.4

[C90/270]Total=27.4

Field angle(10%Imax): [C0/180]Total=75.8

[C90/270]Total=75.8

Maximum s/h(1/2): C0_180=0.46 C90_270=0.46

Maximum s/h(1/4): C0_180=0.45 C90_270=0.45

Up flux rate of lamp(%): 0.00%

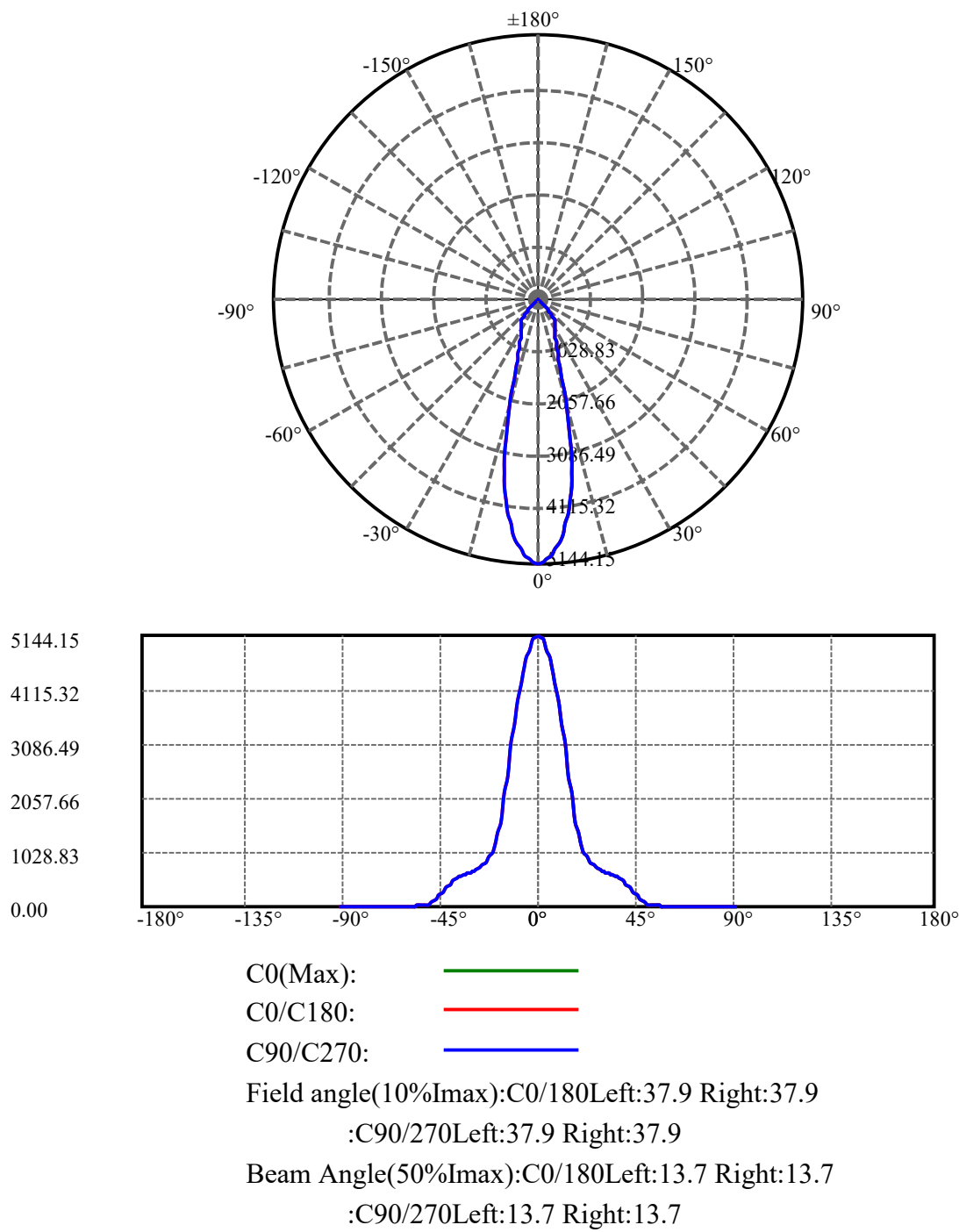
Down flux rate of lamp(%): 96.67%

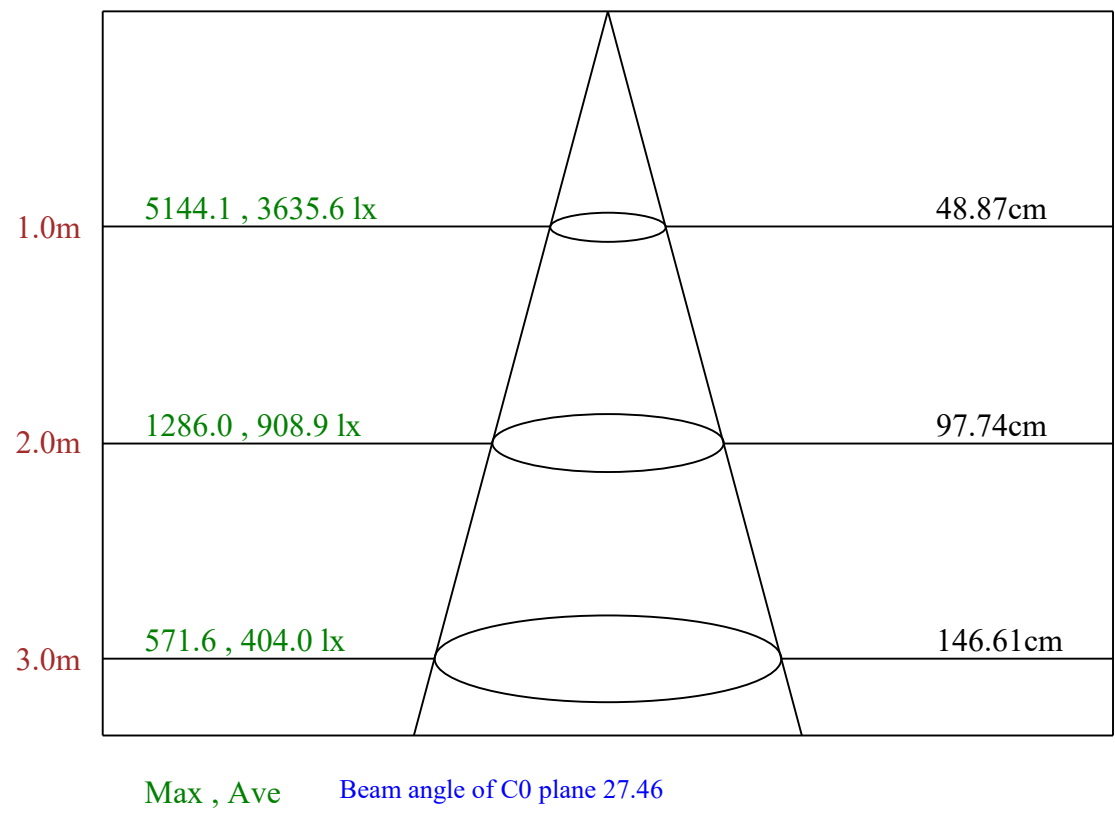
Up flux rate of LUM(%): - -

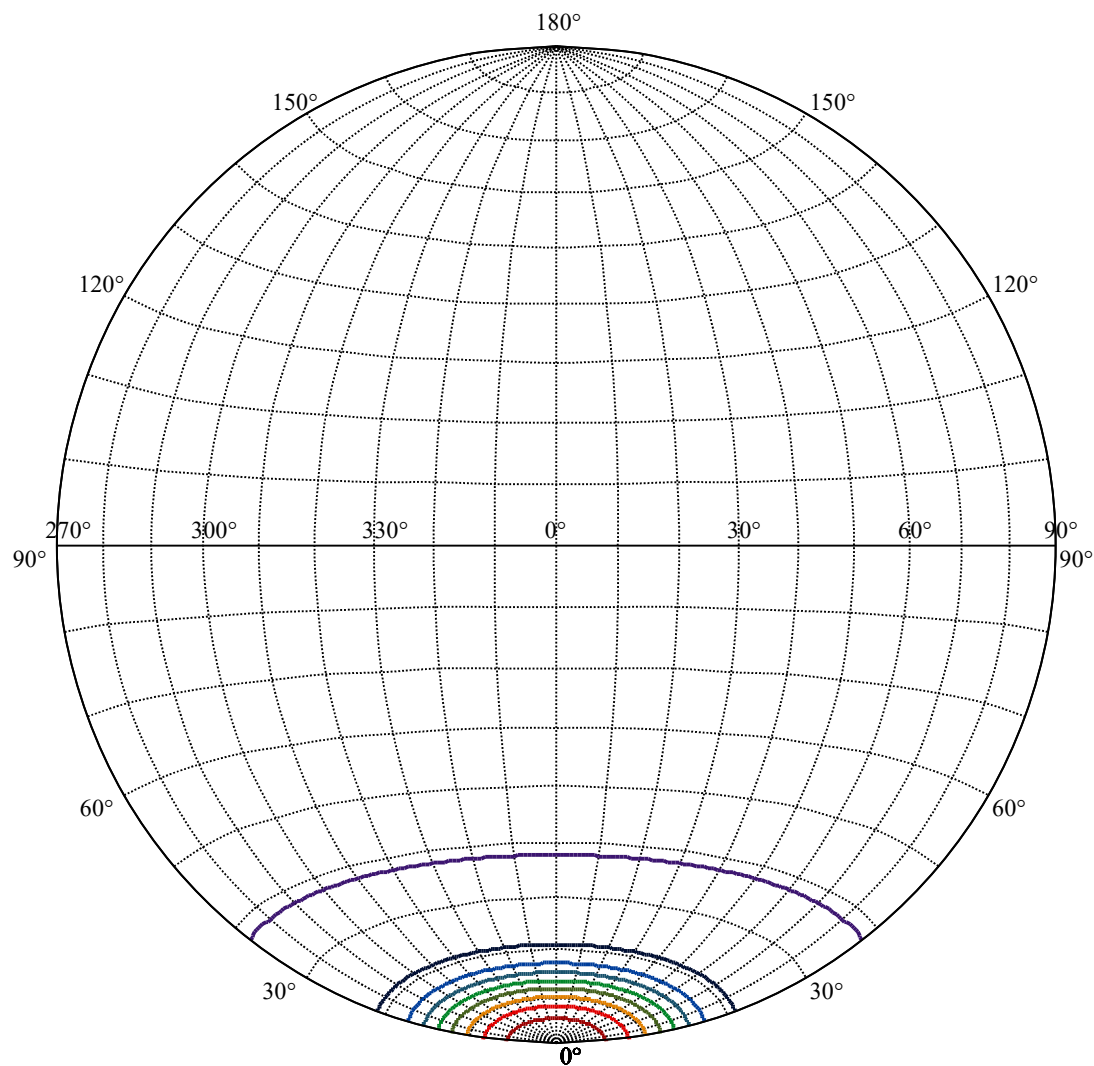
Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.619%





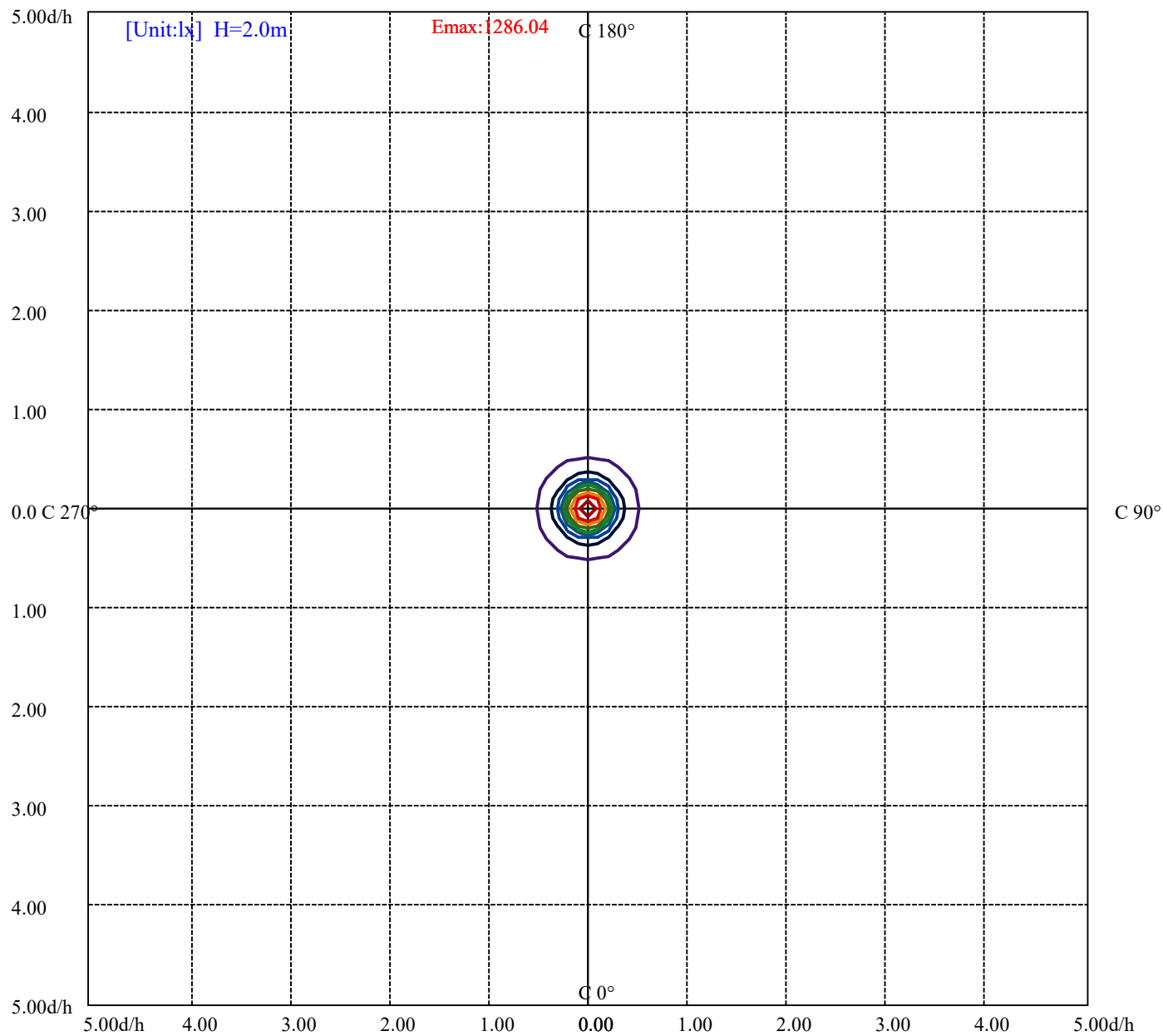


House

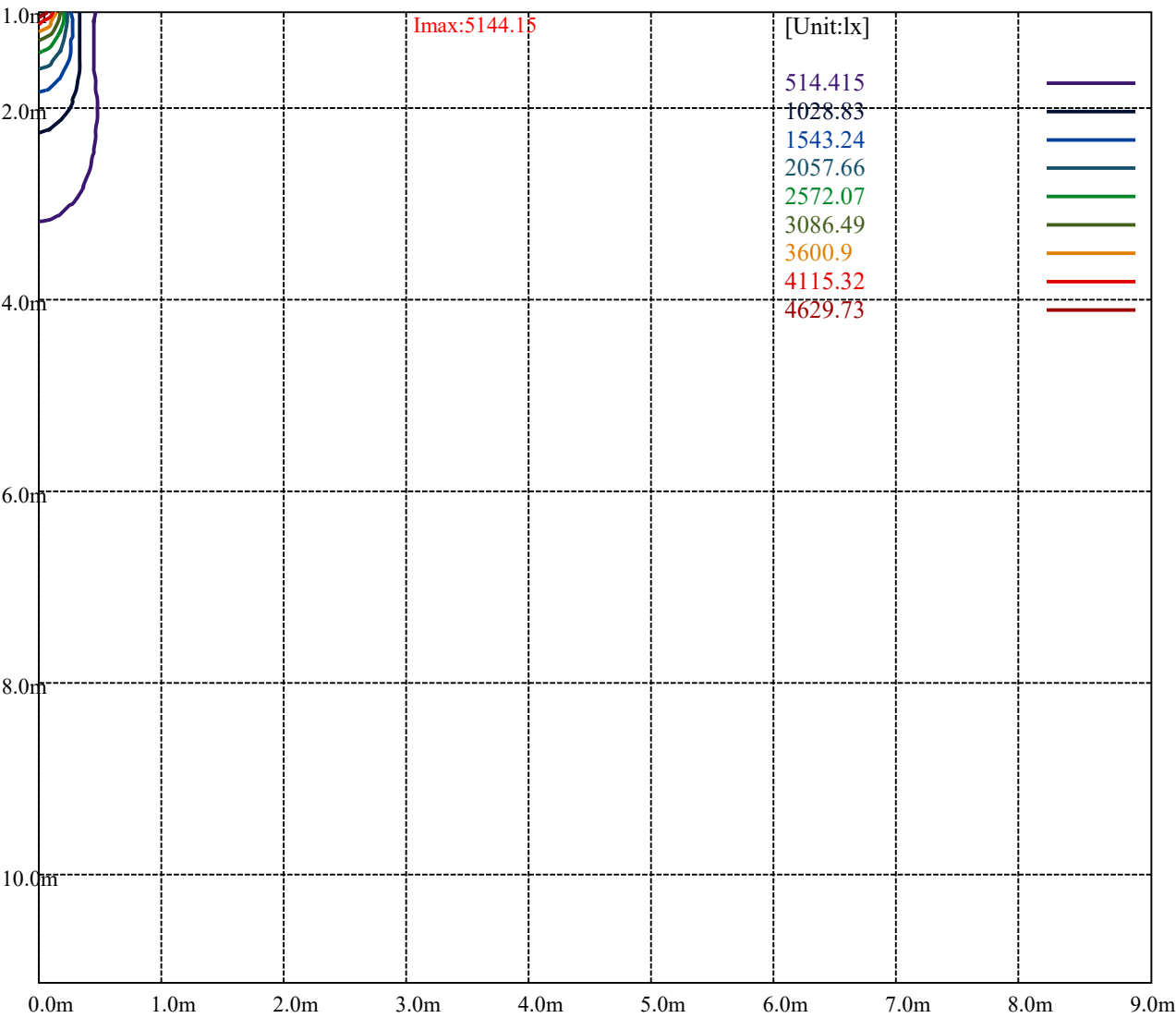
[Unit:cd]

Road

I _{max} :5144.15	
(10%I _{max}) 514.415	
(20%I _{max}) 1028.83	
(30%I _{max}) 1543.24	
(40%I _{max}) 2057.66	
(50%I _{max}) 2572.07	
(60%I _{max}) 3086.49	
(70%I _{max}) 3600.9	
(80%I _{max}) 4115.32	
(90%I _{max}) 4629.73	



(10%Emax)	128.6035	
(20%Emax)	257.2075	
(30%Emax)	385.81	
(40%Emax)	514.415	
(50%Emax)	643.0175	
(60%Emax)	771.6225	
(70%Emax)	900.225	
(80%Emax)	1028.83	
(90%Emax)	1157.432	



Luminance Table

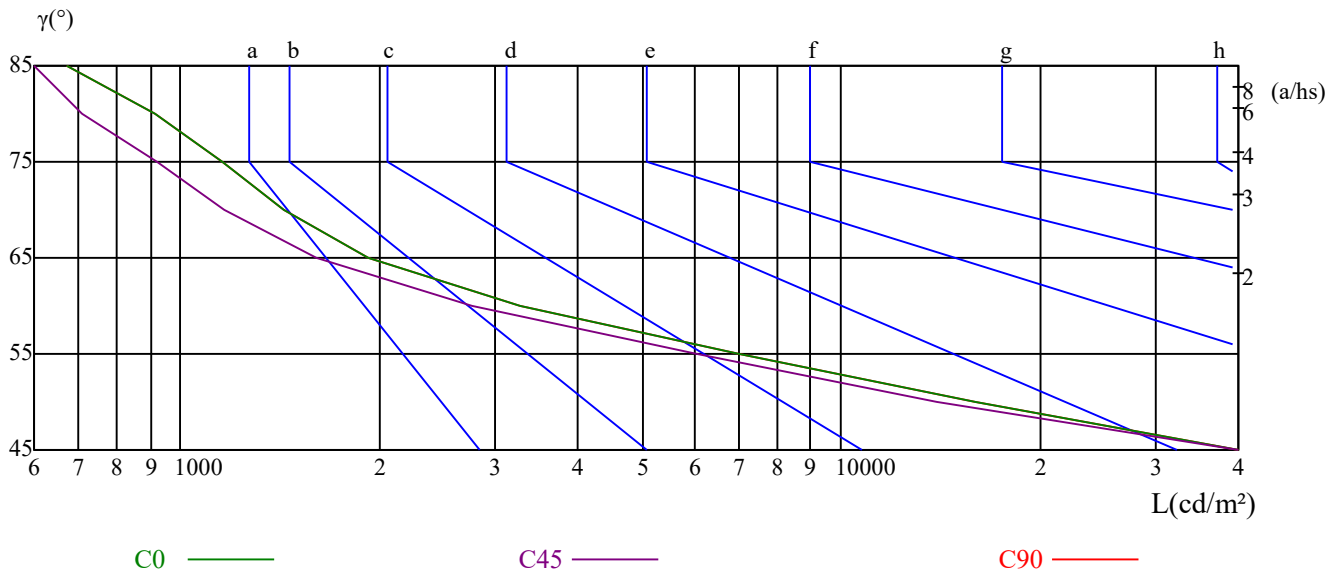
γ	45	50	55	60	65	70	75	80	85
C0	84397	15930	7031	3262	1924	1430	1156	917	674
C45	74915	13944	6062	2767	1602	1165	919	708	501
C90	84397	15930	7031	3262	1924	1430	1156	917	674

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3740	3740	3740	3054	3054	3054	4066	4066	4066

Glare Table

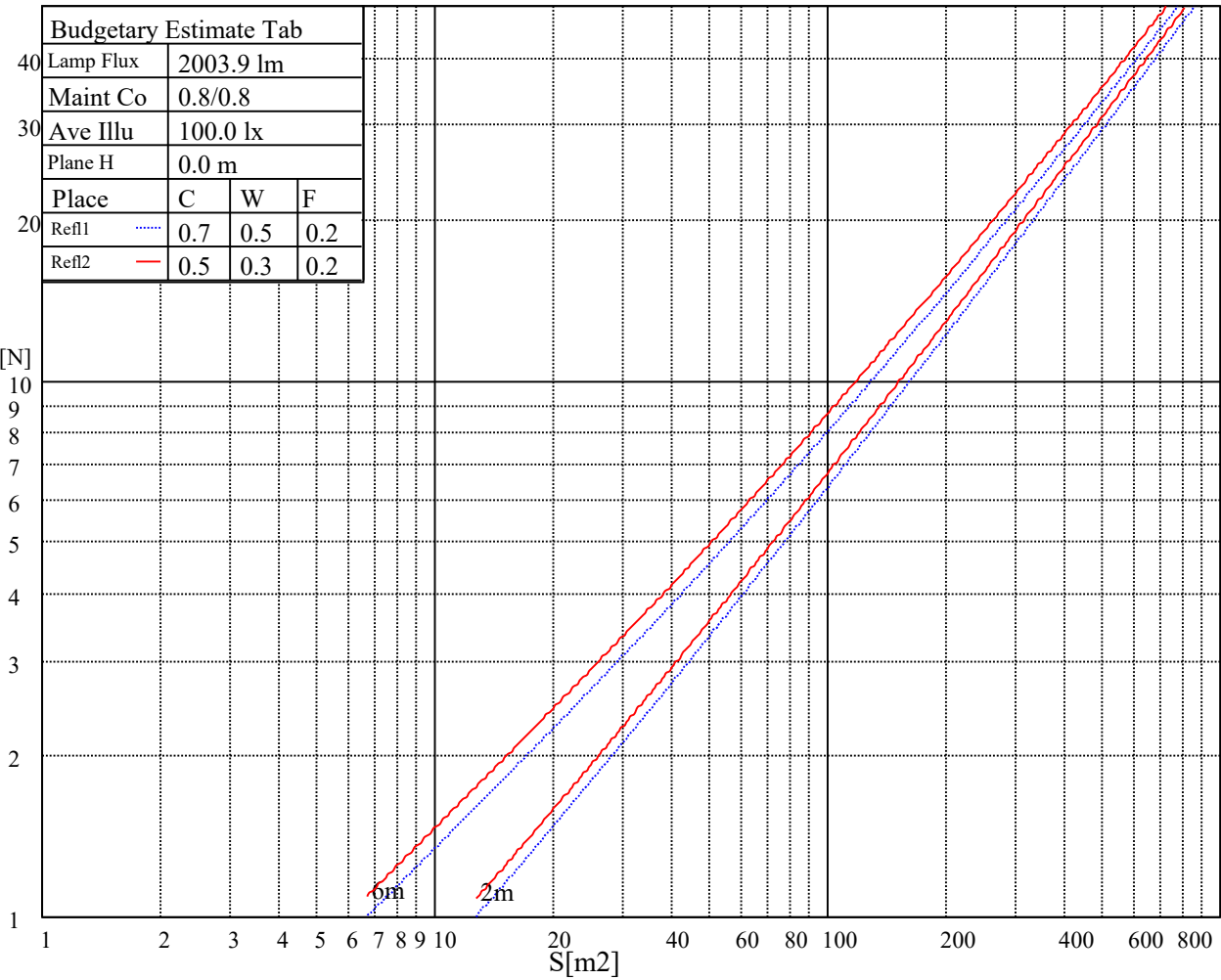
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

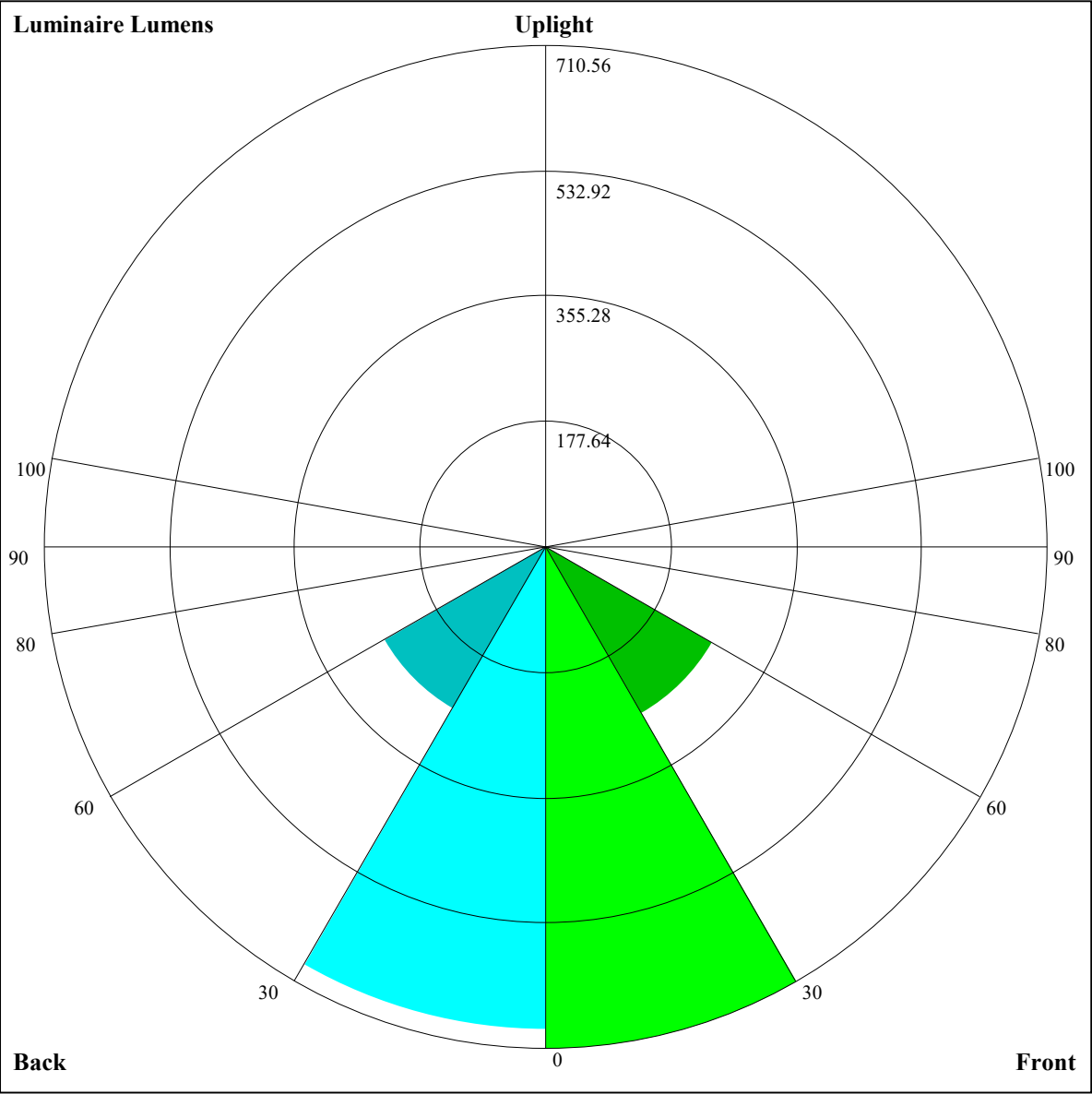


Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	22.14	23.15	22.50	23.46	23.77	21.59	22.60	21.95	22.91	23.22
	3H	21.94	22.83	22.33	23.17	23.52	21.39	22.28	21.78	22.62	22.97
	4H	21.84	22.66	22.24	23.02	23.39	21.29	22.11	21.69	22.47	22.84
	6H	21.76	22.51	22.17	22.88	23.28	21.20	21.95	21.62	22.33	22.73
	8H	21.68	22.40	22.10	22.78	23.19	21.13	21.85	21.55	22.23	22.64
	12H	21.61	22.29	22.04	22.69	23.10	21.06	21.74	21.48	22.13	22.55
4H	2H	21.84	22.66	22.24	23.02	23.39	21.29	22.12	21.69	22.47	22.84
	3H	21.61	22.29	22.03	22.69	23.10	21.06	21.74	21.48	22.14	22.55
	4H	21.54	22.12	21.97	22.55	23.00	20.98	21.57	21.42	22.00	22.45
	6H	21.40	21.92	21.87	22.37	22.82	20.84	21.36	21.32	21.81	22.27
	8H	21.34	21.82	21.82	22.28	22.75	20.78	21.26	21.27	21.72	22.20
	12H	21.29	21.73	21.78	22.18	22.70	20.73	21.17	21.22	21.63	22.15
8H	4H	21.33	21.81	21.82	22.27	22.75	20.78	21.26	21.27	21.72	22.20
	6H	21.18	21.57	21.69	22.05	22.57	20.63	21.02	21.13	21.50	22.01
	8H	21.16	21.50	21.70	22.02	22.52	20.61	20.94	21.14	21.46	21.96
	12H	21.11	21.37	21.65	21.88	22.41	20.55	20.81	21.10	21.33	21.85
12H	4H	21.28	21.72	21.77	22.18	22.70	20.73	21.17	21.22	21.62	22.14
	6H	21.16	21.49	21.70	22.02	22.51	20.61	20.94	21.14	21.46	21.96
	8H	21.11	21.37	21.65	21.88	22.41	20.55	20.81	21.09	21.33	21.85
Variation with the observer position at spacings:											
S = 1.0H		3.3/-13.8					3.3/-13.8				
S = 1.5H		5.3/-16.9					5.3/-16.9				
S = 2.0H		7.4/-17.5					7.4/-17.5				
Standard tables:		BK0					BK0				
Uncorrected UGR		3.0					3.0				

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	0.99	0.99	0.99	0.97
1	1.08	1.05	1.03	1.06	1.04	1.02	1.02	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.91
2	1.01	0.97	0.94	0.99	0.96	0.93	0.96	0.93	0.91	0.93	0.91	0.89	0.91	0.89	0.87	0.86
3	0.95	0.90	0.87	0.93	0.89	0.86	0.91	0.87	0.85	0.88	0.86	0.83	0.86	0.84	0.82	0.81
4	0.89	0.84	0.80	0.88	0.83	0.80	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.80	0.77	0.76
5	0.84	0.79	0.75	0.83	0.78	0.75	0.82	0.77	0.74	0.80	0.76	0.74	0.79	0.75	0.73	0.72
6	0.80	0.74	0.71	0.79	0.74	0.70	0.78	0.73	0.70	0.76	0.72	0.69	0.75	0.72	0.69	0.68
7	0.76	0.70	0.67	0.75	0.70	0.66	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.64
8	0.72	0.67	0.63	0.71	0.66	0.63	0.70	0.66	0.63	0.70	0.65	0.62	0.69	0.65	0.62	0.61
9	0.69	0.64	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.67	0.62	0.60	0.66	0.62	0.59	0.58
10	0.66	0.61	0.57	0.65	0.60	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.56



Luminaire Lumens:

FL=710.56,FM=273.24,FH=3.07,FVH=0.5

BL=683.03,BM=264.64,BH=3.22,BVH=0.5

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	5172.69	5154.69	5092.26	5004.51	4890.32	4732.82	4644.51	4473.51	4274.38
45.0	5121.51	5157.51	5128.82	5045.57	5009.57	4876.26	4740.13	4584.88	4353.69
90.0	5128.82	5063.01	4943.19	4867.26	4725.51	4569.69	4379.57	4115.76	3965.01
135.0	5153.57	5120.94	5083.26	4937.57	4805.94	4718.19	4520.19	4325.57	4101.13
180.0	5172.69	5154.13	5084.94	4989.32	4853.76	4721.57	4562.94	4386.88	4266.51
225.0	5121.51	5038.82	4983.13	4875.69	4743.51	4597.26	4403.19	4290.69	3988.63
270.0	5128.82	5151.32	5120.38	5084.38	4985.94	4876.26	4754.76	4579.82	4425.69
315.0	5153.57	5136.13	5078.76	4971.32	4906.07	4790.76	4647.88	4497.13	4272.69
360.0	5172.69	5154.69	5092.26	5004.51	4890.32	4732.82	4644.51	4473.51	4274.38
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3998.19	3724.26	3542.01	3089.76	2693.76	2498.57	2172.88	1871.38	1613.19
45.0	4127.01	3876.69	3581.38	3392.94	3007.63	2674.63	2343.32	2027.76	1690.82
90.0	3565.07	3189.88	2998.07	2671.82	2345.57	2027.19	1685.76	1538.38	1267.82
135.0	3840.69	3670.26	3307.44	2993.57	2667.88	2344.44	2156.01	1797.13	1448.94
180.0	3986.94	3719.76	3424.44	3111.13	2912.57	2521.63	2199.88	1883.76	1566.51
225.0	3684.88	3509.38	3201.13	2872.07	2539.07	2151.51	1968.13	1692.51	1468.63
270.0	4237.26	4023.51	3880.63	3552.13	3249.51	2927.76	2599.82	2399.01	2024.38
315.0	4058.94	3817.63	3654.51	3291.69	2969.38	2645.94	2328.69	1958.57	1791.51
360.0	3998.19	3724.26	3542.01	3089.76	2693.76	2498.57	2172.88	1871.38	1613.19
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1375.82	1234.07	1087.09	1036.35	989.66	922.89	869.85	822.94	775.24
45.0	1546.82	1281.32	1194.69	1059.13	969.69	896.57	838.07	808.82	755.38
90.0	1088.04	1066.61	975.88	905.01	847.24	791.10	765.51	731.53	704.59
135.0	1333.07	1149.69	1038.32	955.07	889.26	855.51	798.13	759.88	732.32
180.0	1358.94	1199.76	1079.94	1019.19	921.88	854.38	802.63	757.07	734.57
225.0	1117.80	1096.93	1058.29	974.98	894.60	862.76	809.83	764.66	720.90
270.0	1753.26	1531.07	1328.57	1197.51	1093.44	1009.07	967.44	896.57	843.13
315.0	1555.26	1370.76	1087.82	1087.82	1035.56	959.57	886.61	856.80	795.09
360.0	1375.82	1234.07	1087.09	1036.35	989.66	922.89	869.85	822.94	775.24
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	755.16	726.98	703.80	679.39	661.89	646.09	630.45	614.08	606.09
45.0	719.38	691.82	668.76	656.38	627.13	609.13	600.13	583.26	570.88
90.0	676.80	658.46	639.73	627.69	612.51	605.81	596.98	580.11	555.64
135.0	707.57	696.88	676.63	663.13	651.32	641.19	631.07	620.38	602.38
180.0	699.69	672.69	662.01	647.94	633.88	620.94	609.13	602.38	587.19
225.0	692.89	676.91	647.89	624.60	614.98	600.92	586.13	572.96	555.36
270.0	799.26	762.13	743.57	701.38	678.88	667.63	650.19	631.63	617.57
315.0	772.71	740.36	708.86	686.87	667.46	646.99	637.93	623.70	610.54
360.0	755.16	726.98	703.80	679.39	661.89	646.09	630.45	614.08	606.09
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	587.25	558.17	523.97	476.21	450.28	386.55	327.88	308.59	250.31
45.0	554.01	528.69	510.69	468.51	429.13	386.94	346.44	318.88	293.57
90.0	517.89	496.41	438.75	413.38	369.06	315.00	270.62	223.03	171.11
135.0	584.94	541.07	499.44	454.44	408.32	379.63	303.13	303.13	303.13
180.0	569.19	542.19	507.88	485.94	438.13	376.26	348.69	293.57	293.57
225.0	543.09	513.90	477.39	438.02	386.21	342.62	299.19	246.77	221.40
270.0	604.07	596.76	572.01	541.07	505.07	461.19	436.44	380.76	314.38
315.0	596.25	568.80	549.00	511.37	443.48	416.19	368.78	340.71	274.11
360.0	587.25	558.17	523.97	476.21	450.28	386.55	327.88	308.59	250.31

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	202.44	156.66	107.66	85.22	53.38	30.15	19.80	17.49	16.82
45.0	245.93	190.86	141.75	104.85	71.61	42.81	36.84	27.73	24.58
90.0	144.45	105.81	70.31	44.04	27.00	24.64	22.44	20.08	18.90
135.0	181.41	138.94	99.23	64.41	34.48	24.13	21.60	20.59	18.68
180.0	243.62	166.11	141.64	83.31	54.39	40.89	28.74	26.49	24.58
225.0	179.61	140.74	104.29	66.43	51.81	36.34	30.21	27.79	25.37
270.0	303.69	303.69	185.79	144.23	104.18	81.34	35.78	22.22	19.52
315.0	217.58	189.11	144.00	102.15	65.31	31.89	22.95	17.10	15.92
360.0	202.44	156.66	107.66	85.22	53.38	30.15	19.80	17.49	16.82
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	14.79	12.32	11.08	9.17	7.48	6.24	5.68	5.34	4.89
45.0	23.46	20.76	18.06	15.19	12.38	10.97	8.38	7.03	6.02
90.0	16.43	14.06	11.98	9.45	8.44	7.54	6.69	5.68	4.73
135.0	16.54	14.34	12.21	11.08	9.11	8.10	7.48	6.81	6.24
180.0	22.22	20.81	18.06	15.30	12.94	10.52	9.00	8.38	6.86
225.0	23.96	19.91	16.31	14.57	12.15	9.96	8.44	7.09	6.41
270.0	18.00	16.54	14.63	12.49	11.25	8.89	7.14	6.08	5.74
315.0	14.29	12.60	11.36	8.72	6.47	5.63	4.67	4.44	4.33
360.0	14.79	12.32	11.08	9.17	7.48	6.24	5.68	5.34	4.89
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	4.33	3.83	3.43	3.32	3.15	2.93	2.87	2.87	2.81
45.0	4.78	4.05	3.66	3.38	3.15	2.98	2.81	2.76	2.70
90.0	4.33	3.71	3.09	2.98	2.64	2.42	2.25	2.03	1.97
135.0	5.46	4.56	4.16	3.66	3.21	2.64	2.36	2.25	2.08
180.0	6.19	5.23	4.56	4.05	3.71	3.49	3.15	2.87	2.59
225.0	5.57	4.89	4.50	4.05	3.88	3.49	3.26	3.15	3.04
270.0	5.23	4.89	4.22	3.99	3.54	3.15	2.93	2.64	2.53
315.0	4.22	4.11	3.99	3.83	3.66	3.38	3.26	3.04	2.76
360.0	4.33	3.83	3.43	3.32	3.15	2.93	2.87	2.87	2.81
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	2.76	2.64	2.64	2.48	2.25	2.14	1.91	1.80	1.52
45.0	2.59	2.48	2.31	2.19	2.14	1.97	1.86	1.74	1.63
90.0	1.74	1.58	1.46	1.29	1.24	1.07	1.07	1.01	0.90
135.0	1.86	1.74	1.58	1.46	1.46	1.24	1.24	1.18	1.13
180.0	2.42	2.19	1.97	1.80	1.69	1.58	1.41	1.35	1.29
225.0	2.81	2.70	2.42	2.36	2.25	2.14	1.97	1.86	1.74
270.0	2.42	2.25	2.14	2.14	1.91	1.80	1.74	1.69	1.52
315.0	2.59	2.42	2.19	2.08	1.86	1.74	1.69	1.58	1.41
360.0	2.76	2.64	2.64	2.48	2.25	2.14	1.91	1.80	1.52
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.41	1.29	1.24	1.13	0.96	0.90	0.79	0.73	0.62
45.0	1.52	1.41	1.24	1.01	0.90	0.84	0.68	0.62	0.56
90.0	0.90	0.90	0.79	0.73	0.73	0.68	0.68	0.62	0.62
135.0	1.01	1.01	0.96	0.84	0.84	0.79	0.79	0.73	0.68
180.0	1.18	1.07	1.01	0.96	0.90	0.79	0.79	0.68	0.68
225.0	1.58	1.41	1.35	1.13	1.01	0.90	0.79	0.68	0.62
270.0	1.41	1.35	1.18	1.13	1.01	0.90	0.79	0.73	0.62
315.0	1.18	1.07	0.90	0.84	0.73	0.68	0.68	0.62	0.51
360.0	1.41	1.29	1.24	1.13	0.96	0.90	0.79	0.73	0.62

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	0.62
45.0	0.56
90.0	0.45
135.0	0.51
180.0	0.56
225.0	0.56
270.0	0.62
315.0	0.51
360.0	0.62