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NT

Client: NT

LumCAT: 1-1760-LM

Luminaire: 92.70.494.00 LED HOLDER

Report No: 20251122-B011

Ballast type: AC

Test No: 20251122-C011

Voltage(V): 34.590

LampCAT: LUMINUS CXM-11 (TC) G6 LED

Current(A): 0.455

Lamp flux(lm): 2049.0

Power (W): 15.738

Number of Lamps: 1

PF: 0.000

Length(mm): 50

Width(mm): 50

Phm Type: C

Height(mm): 22

Photometric Results

Lumens(lm): 1963.85, Efficiency(%): 95.84% , Luminous Efficacy(lm/W): 124.78

Central intensity(cd): 3448.772, Maximum intensity(cd): 3448.772

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=37.8

[C90/270]Total=37.8

Field angle(10%Imax): [C0/180]Total=83.6

[C90/270]Total=83.6

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

Maximum s/h(1/4): C0_180=0.62 C90_270=0.62

Up flux rate of lamp(%): 0.00%

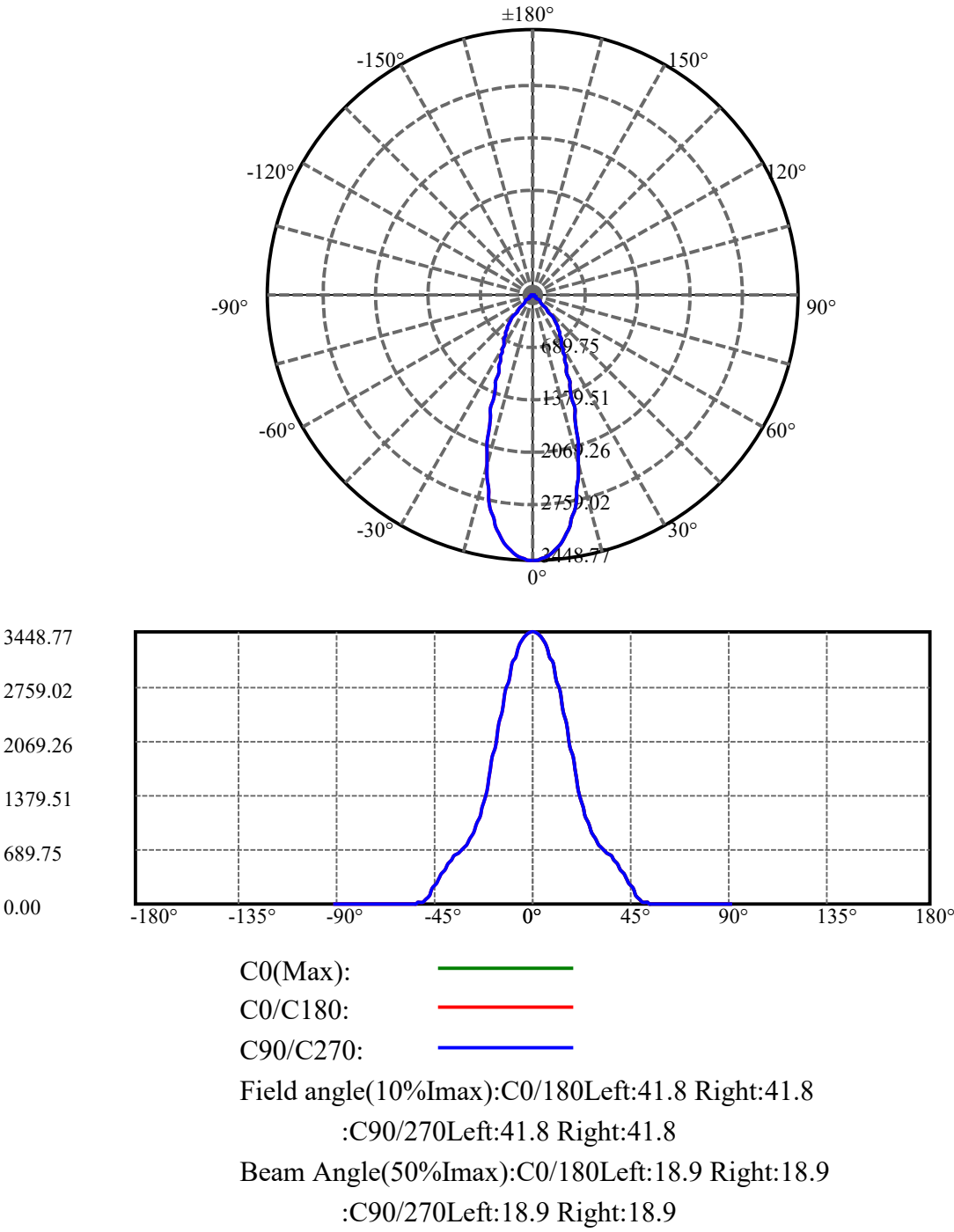
Down flux rate of lamp(%): 95.84%

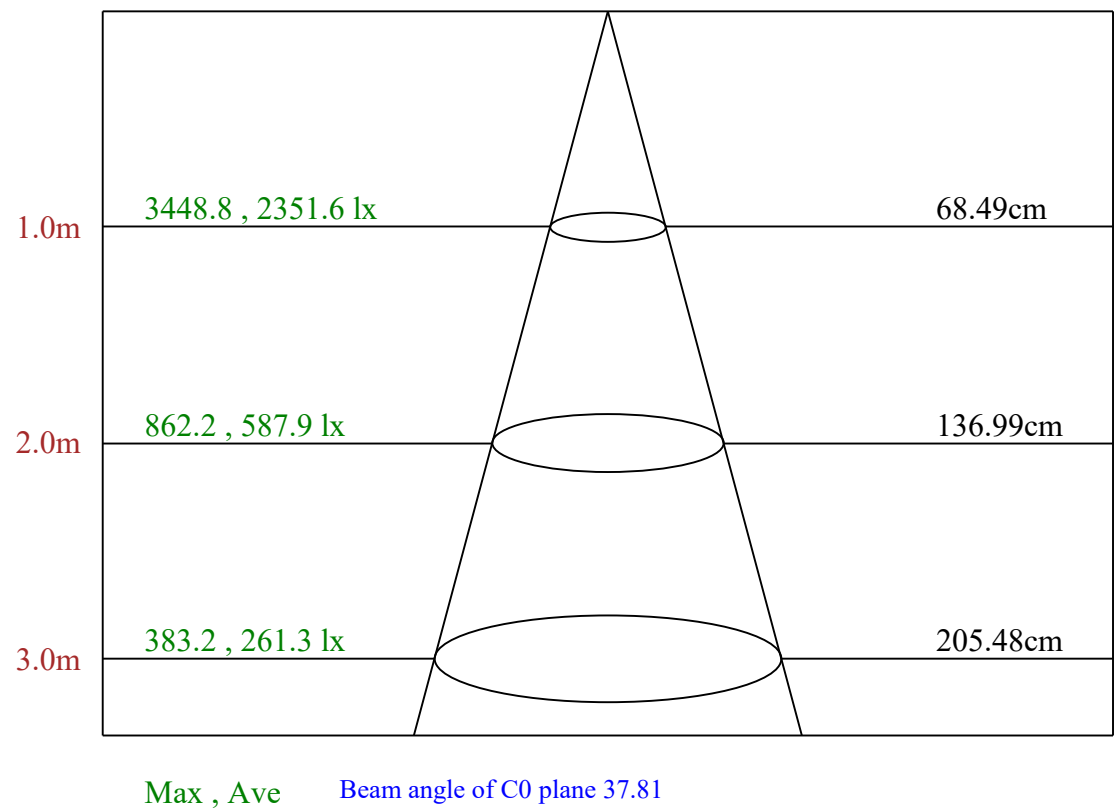
Up flux rate of LUM(%): - -

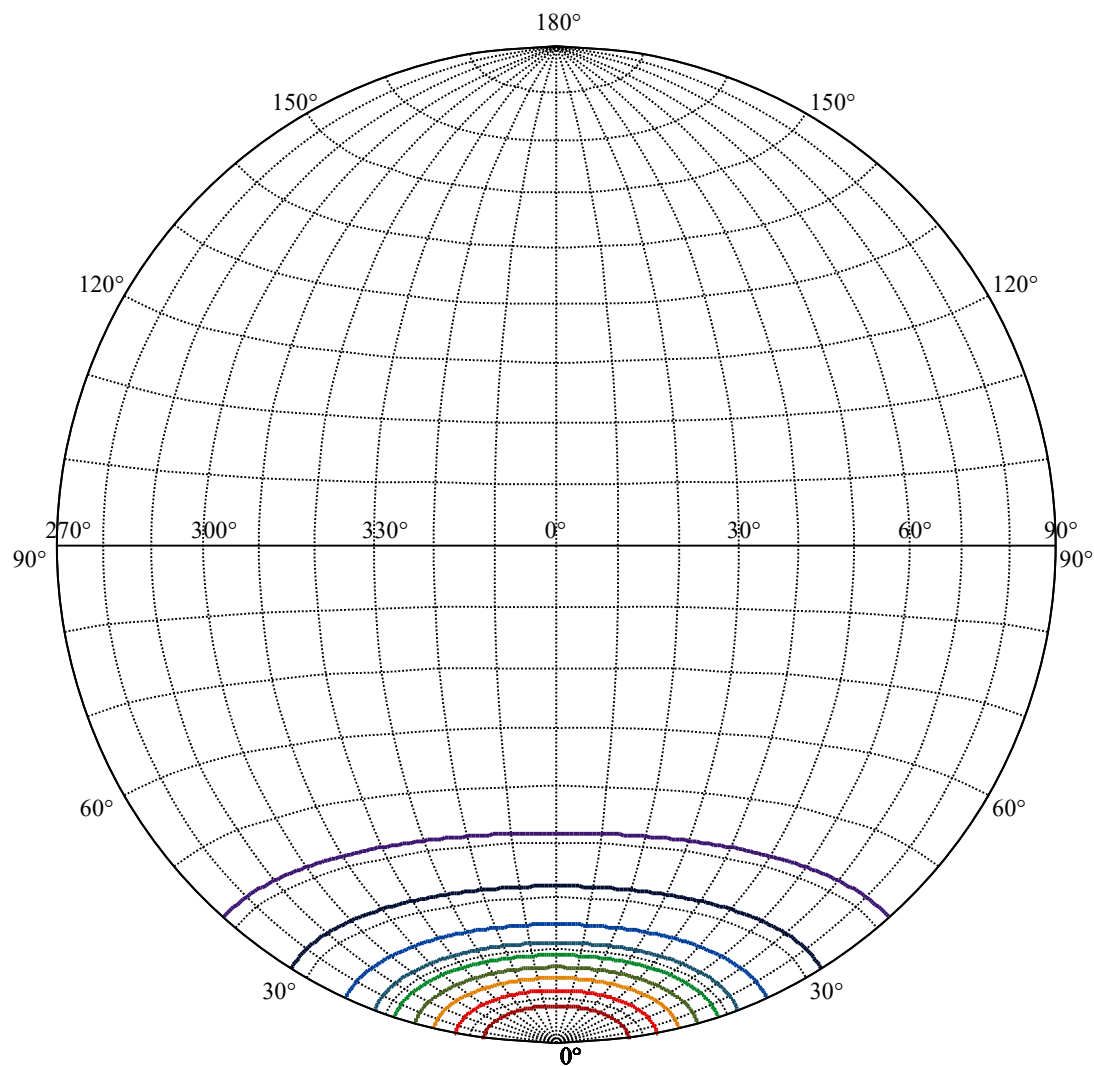
Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.880%





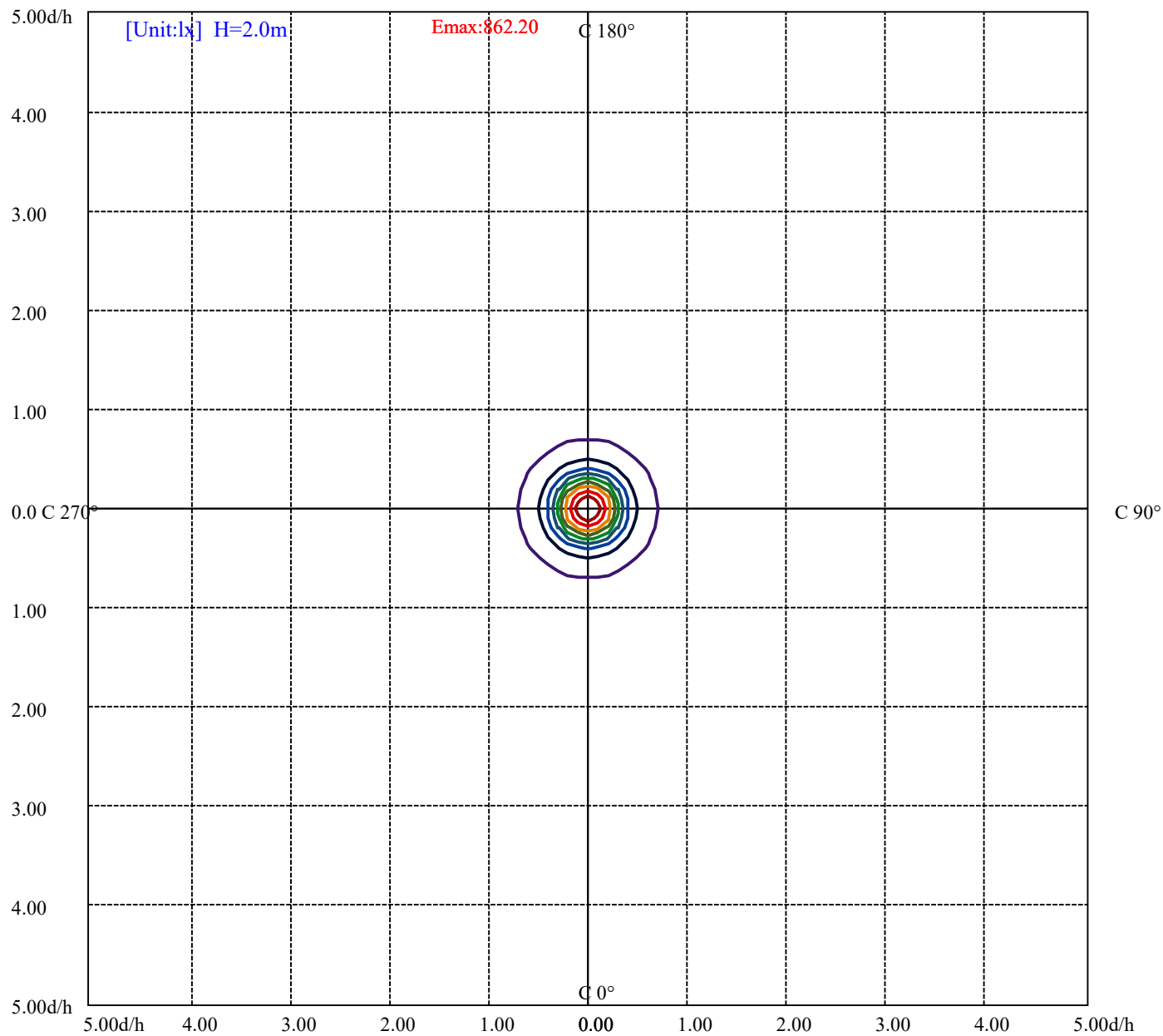


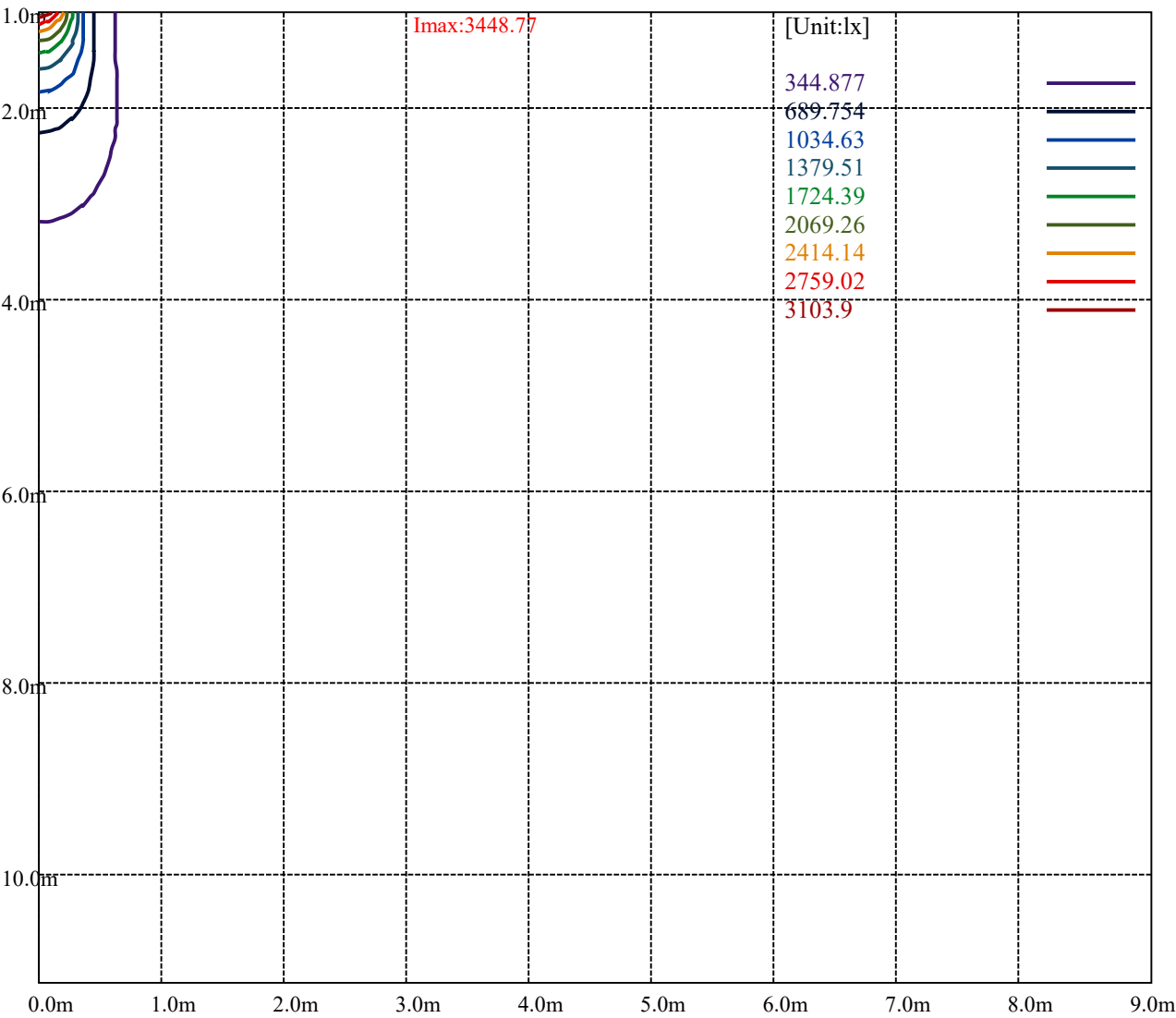
House

[Unit:cd]

Road

Imax:3448.77	
(10%Imax) 344.877	
(20%Imax) 689.754	
(30%Imax) 1034.63	
(40%Imax) 1379.51	
(50%Imax) 1724.39	
(60%Imax) 2069.26	
(70%Imax) 2414.14	
(80%Imax) 2759.02	
(90%Imax) 3103.9	





Luminance Table

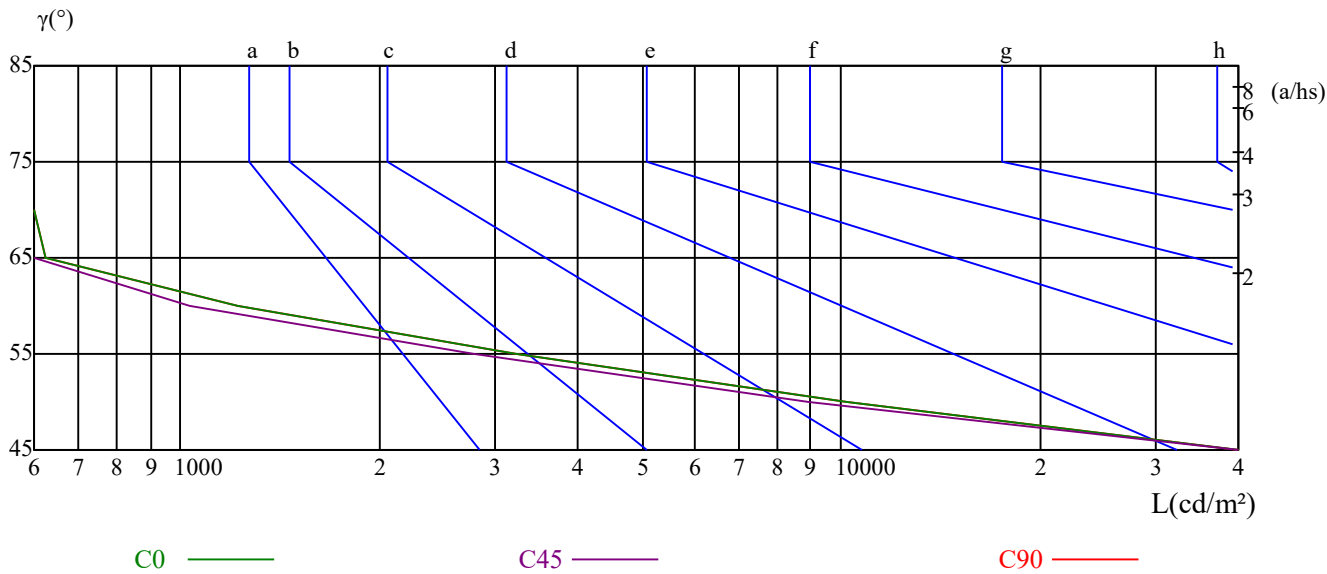
γ	45	50	55	60	65	70	75	80	85
C0	82585	10195	3225	1219	623	432	317	269	412
C45	73307	8924	2781	1034	519	352	252	207	306
C90	82585	10195	3225	1219	623	432	317	269	412

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1211	1211	1211	837	837	837	2485	2485	2485

Glare Table

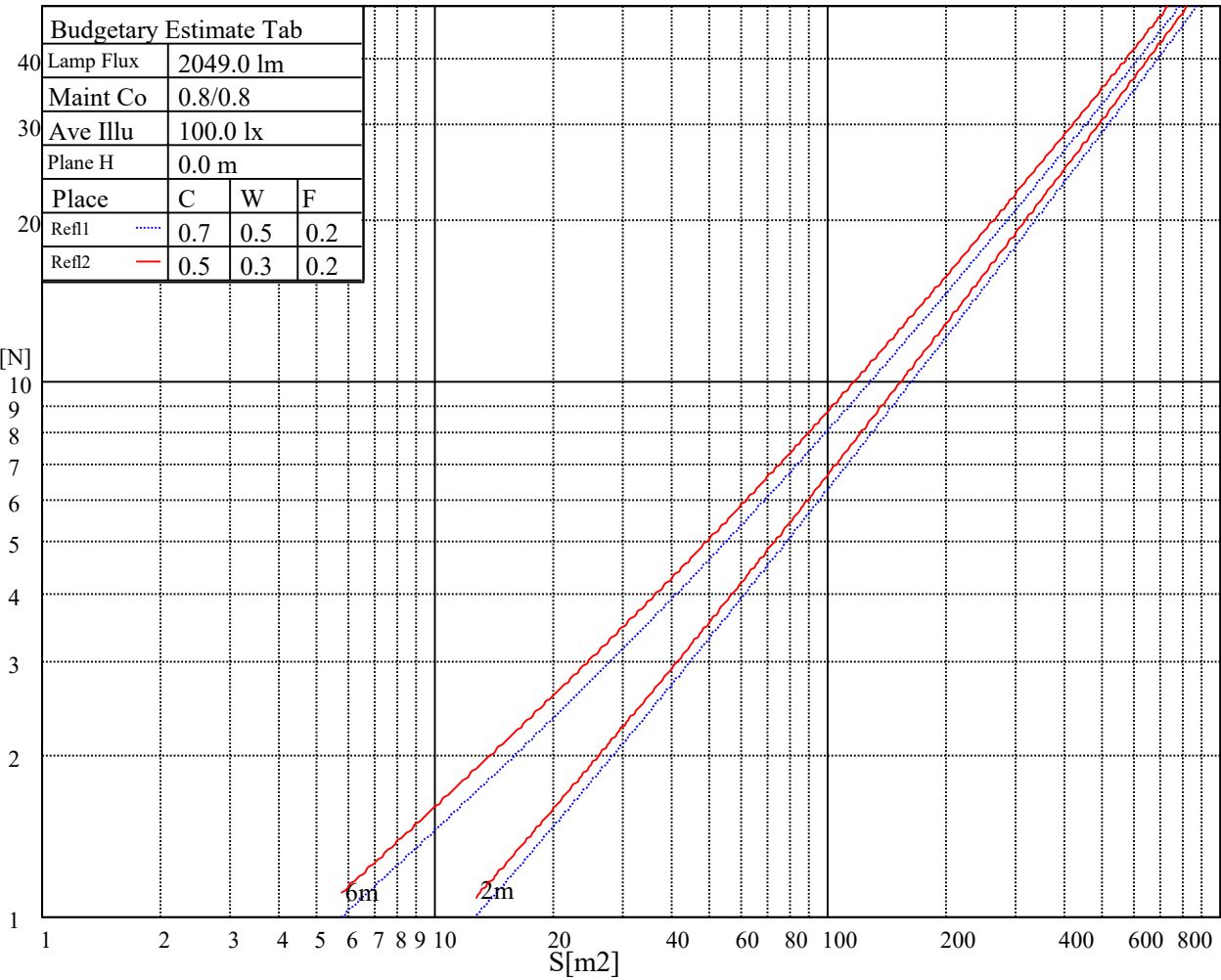
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

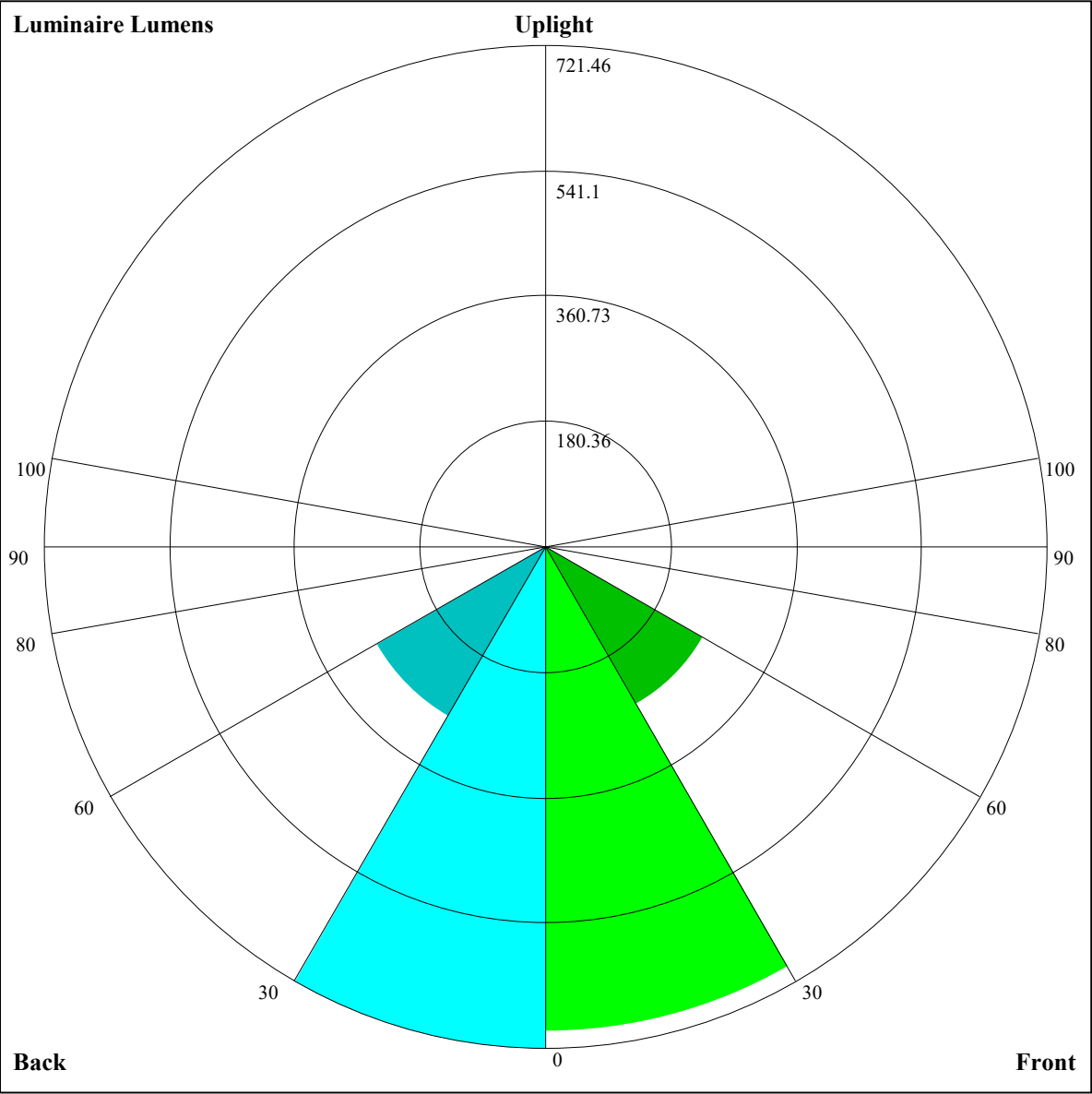


Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	21.62	22.61	21.98	22.92	23.24	21.55	22.54	21.91	22.85	23.17
	3H	21.42	22.29	21.80	22.63	22.97	21.34	22.22	21.73	22.56	22.90
	4H	21.31	22.12	21.71	22.48	22.84	21.24	22.05	21.64	22.40	22.77
	6H	21.22	21.96	21.64	22.34	22.74	21.15	21.89	21.57	22.27	22.67
	8H	21.15	21.85	21.57	22.24	22.64	21.08	21.78	21.50	22.16	22.57
	12H	21.08	21.74	21.50	22.14	22.55	21.00	21.67	21.43	22.07	22.48
4H	2H	21.31	22.12	21.71	22.48	22.84	21.24	22.05	21.64	22.40	22.77
	3H	21.07	21.74	21.50	22.14	22.55	21.00	21.67	21.42	22.06	22.48
	4H	20.99	21.57	21.43	21.99	22.44	20.92	21.50	21.36	21.92	22.37
	6H	20.85	21.36	21.32	21.81	22.26	20.78	21.28	21.25	21.74	22.19
	8H	20.79	21.26	21.27	21.72	22.19	20.72	21.19	21.20	21.64	22.12
	12H	20.73	21.17	21.22	21.62	22.14	20.66	21.10	21.15	21.55	22.07
8H	4H	20.79	21.26	21.27	21.72	22.19	20.72	21.19	21.20	21.64	22.12
	6H	20.63	21.01	21.13	21.49	22.00	20.55	20.94	21.06	21.42	21.93
	8H	20.61	20.93	21.14	21.45	21.95	20.54	20.86	21.07	21.38	21.88
	12H	20.55	20.80	21.09	21.32	21.84	20.48	20.73	21.02	21.25	21.77
12H	4H	20.73	21.17	21.22	21.62	22.14	20.66	21.09	21.15	21.55	22.07
	6H	20.61	20.93	21.14	21.45	21.95	20.54	20.86	21.07	21.38	21.88
	8H	20.55	20.80	21.09	21.32	21.84	20.48	20.73	21.02	21.25	21.77
Variation with the observer position at spacings:											
S = 1.0H		3.4/-19.9					3.4/-19.9				
S = 1.5H		5.8/-25.1					5.8/-25.1				
S = 2.0H		7.8/-26.1					7.8/-26.1				
Standard tables:		BK0					BK0				
Uncorrected UGR		3.1					3.1				

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	1.14	1.14	1.14	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	0.98	0.98	0.98	0.96
1	1.07	1.04	1.02	1.04	1.02	1.01	1.01	0.99	0.97	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	0.89	0.85	0.92	0.88	0.84	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.79
4	0.88	0.82	0.79	0.86	0.82	0.78	0.84	0.80	0.77	0.83	0.79	0.76	0.81	0.78	0.75	0.74
5	0.82	0.77	0.73	0.81	0.77	0.73	0.80	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.70
6	0.78	0.72	0.68	0.77	0.72	0.68	0.76	0.71	0.68	0.74	0.70	0.67	0.73	0.69	0.67	0.65
7	0.73	0.68	0.64	0.73	0.68	0.64	0.72	0.67	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.62
8	0.70	0.64	0.60	0.69	0.64	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.58
9	0.66	0.61	0.57	0.66	0.61	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.56	0.55
10	0.63	0.58	0.54	0.62	0.57	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.60	0.56	0.54	0.52



Luminaire Lumens:

FL=697.63,FM=262.52,FH=1.02,FVH=0.19

BL=721.46,BM=281.35,BH=1.03,BVH=0.18

UL=0,UH=0

BUG Rating:B2-U0-G0

NT NT 1-1760-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	3451.44	3436.26	3410.94	3369.32	3341.76	3263.57	3179.19	3130.26	3038.57
45.0	3449.76	3445.82	3427.82	3401.38	3365.38	3318.69	3286.07	3205.63	3124.63
90.0	3446.38	3435.69	3398.57	3351.32	3322.07	3264.13	3194.38	3112.26	2996.94
135.0	3447.51	3445.82	3435.13	3413.76	3396.88	3354.13	3306.88	3248.38	3179.19
180.0	3451.44	3457.63	3455.94	3443.01	3422.19	3390.13	3348.51	3319.26	3246.69
225.0	3449.76	3445.26	3425.57	3409.82	3376.07	3332.76	3277.63	3194.94	3146.57
270.0	3446.38	3455.94	3453.69	3441.32	3419.38	3400.82	3354.69	3304.07	3243.32
315.0	3447.51	3436.26	3426.13	3401.38	3368.19	3315.32	3260.76	3195.51	3117.88
360.0	3451.44	3436.26	3410.94	3369.32	3341.76	3263.57	3179.19	3130.26	3038.57
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2935.07	2819.19	2667.88	2586.88	2444.57	2297.76	2115.51	1963.63	1873.63
45.0	3029.57	2897.94	2773.63	2693.19	2489.01	2396.76	2208.32	2046.88	1885.44
90.0	2931.69	2814.13	2685.88	2548.07	2372.01	2281.44	2126.76	1880.94	1790.94
135.0	3131.38	2985.69	2878.82	2810.19	2660.57	2527.26	2388.32	2245.44	2157.69
180.0	3173.01	3085.82	2963.76	2849.57	2724.13	2589.13	2504.19	2325.32	2173.44
225.0	3055.44	2949.69	2831.01	2669.57	2583.51	2432.19	2275.82	2084.01	1920.32
270.0	3171.32	3121.26	3007.63	2900.76	2783.19	2627.94	2489.01	2343.32	2194.26
315.0	3011.57	2953.07	2847.32	2730.88	2606.01	2447.94	2311.26	2171.76	2000.76
360.0	2935.07	2819.19	2667.88	2586.88	2444.57	2297.76	2115.51	1963.63	1873.63
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1726.26	1503.51	1425.32	1305.51	1106.83	1106.83	1020.32	946.52	883.91
45.0	1726.82	1635.13	1462.44	1329.13	1209.32	1103.01	993.88	917.94	854.38
90.0	1645.26	1506.88	1377.51	1106.27	1070.33	1070.33	974.87	933.24	872.33
135.0	1981.63	1836.51	1699.26	1566.51	1490.01	1346.57	1238.57	1141.82	1041.13
180.0	2019.32	1866.88	1775.76	1600.82	1412.94	1338.69	1203.13	1103.01	1015.26
225.0	1761.13	1608.13	1437.69	1357.82	1091.48	1091.48	1035.06	953.16	883.80
270.0	2104.26	1924.26	1776.88	1634.57	1499.01	1349.94	1281.88	1137.88	1082.76
315.0	1944.51	1779.13	1648.07	1522.63	1380.88	1316.19	1096.48	1096.48	1049.01
360.0	1726.26	1503.51	1425.32	1305.51	1106.83	1106.83	1020.32	946.52	883.91
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	820.91	793.13	751.89	716.79	687.83	658.58	645.47	623.59	595.52
45.0	822.32	765.51	728.38	696.32	669.88	655.82	631.63	614.19	596.76
90.0	820.41	776.08	731.08	711.28	681.41	655.93	634.28	610.31	582.24
135.0	967.44	902.76	847.63	818.94	767.19	728.94	694.63	666.51	638.38
180.0	942.13	902.19	834.69	786.32	745.82	710.94	692.94	661.44	629.94
225.0	826.03	769.84	746.10	711.39	682.20	657.84	633.94	623.25	599.79
270.0	985.44	917.94	859.44	808.82	782.38	736.82	704.76	676.07	650.76
315.0	977.68	914.96	860.40	804.71	779.96	742.44	709.37	680.57	647.10
360.0	820.91	793.13	751.89	716.79	687.83	658.58	645.47	623.59	595.52
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	550.41	507.83	462.49	414.34	356.12	326.81	278.78	230.40	184.67
45.0	570.32	551.76	507.88	448.82	422.94	365.57	316.63	297.51	297.51
90.0	545.34	493.76	465.69	418.05	368.94	321.08	262.24	234.73	169.48
135.0	624.88	579.88	556.26	503.94	455.57	408.32	357.13	327.88	296.38
180.0	618.13	599.01	564.13	526.44	483.69	456.69	400.44	352.63	304.82
225.0	571.89	553.16	518.46	480.15	437.40	381.60	353.48	303.98	255.09
270.0	637.26	599.57	565.26	542.19	489.32	442.07	395.38	347.57	318.88
315.0	626.18	568.46	511.93	481.22	433.80	381.21	332.33	268.65	240.19
360.0	550.41	507.83	462.49	414.34	356.12	326.81	278.78	230.40	184.67

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	131.29	107.21	56.36	24.08	17.94	10.07	9.17	8.38	7.31
45.0	200.42	128.98	89.94	69.13	34.14	15.30	9.06	8.16	7.71
90.0	117.00	100.74	57.32	29.87	14.51	9.90	9.39	8.61	7.82
135.0	240.92	176.29	124.59	85.73	51.98	27.68	19.13	13.16	11.53
180.0	304.82	239.46	158.63	115.48	90.90	48.49	22.73	12.38	10.52
225.0	208.18	152.21	110.53	71.94	35.49	22.05	10.80	9.06	8.16
270.0	290.19	236.36	174.88	121.39	81.39	47.31	23.34	15.47	10.24
315.0	189.00	146.53	97.82	61.20	45.28	19.01	13.56	12.77	11.42
360.0	131.29	107.21	56.36	24.08	17.94	10.07	9.17	8.38	7.31
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	6.75	5.91	5.12	4.28	2.93	2.31	2.03	1.69	1.52
45.0	6.81	6.13	5.46	4.67	3.88	2.48	2.14	2.03	1.74
90.0	6.86	5.79	5.29	4.16	2.59	2.25	2.03	1.86	1.52
135.0	10.74	9.45	7.82	6.58	5.23	4.05	3.09	2.53	2.19
180.0	10.01	8.94	7.48	6.92	5.68	4.56	2.53	2.14	1.97
225.0	7.14	6.64	5.96	5.23	4.50	2.98	2.14	1.91	1.69
270.0	9.39	8.55	7.48	7.14	5.79	4.95	4.33	2.64	2.25
315.0	10.13	8.83	7.31	6.75	5.63	4.39	3.21	2.59	2.25
360.0	6.75	5.91	5.12	4.28	2.93	2.31	2.03	1.69	1.52
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	1.35	1.18	1.07	0.96	0.84	0.84	0.73	0.68	0.62
45.0	1.58	1.41	1.29	1.24	1.13	1.07	0.96	0.90	0.84
90.0	1.29	1.24	1.13	1.01	0.90	0.84	0.79	0.79	0.68
135.0	1.91	1.69	1.29	1.07	1.01	0.90	0.84	0.73	0.68
180.0	1.74	1.52	1.29	1.13	1.01	0.90	0.84	0.84	0.73
225.0	1.58	1.35	1.24	1.13	1.01	0.96	0.90	0.90	0.79
270.0	1.97	1.74	1.58	1.35	1.18	1.07	0.96	0.90	0.84
315.0	1.97	1.46	1.35	1.18	1.07	1.01	0.84	0.79	0.62
360.0	1.35	1.18	1.07	0.96	0.84	0.84	0.73	0.68	0.62
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	0.56	0.56	0.51	0.39	0.39	0.39	0.28	0.28	0.28
45.0	0.84	0.84	0.79	0.79	0.73	0.79	0.73	0.73	0.73
90.0	0.62	0.56	0.51	0.45	0.45	0.45	0.45	0.39	0.34
135.0	0.56	0.51	0.45	0.39	0.39	0.34	0.28	0.23	0.23
180.0	0.68	0.56	0.56	0.51	0.45	0.39	0.34	0.28	0.34
225.0	0.73	0.73	0.73	0.73	0.68	0.62	0.68	0.68	0.62
270.0	0.79	0.73	0.62	0.62	0.56	0.51	0.56	0.45	0.45
315.0	0.68	0.56	0.51	0.45	0.39	0.39	0.34	0.28	0.28
360.0	0.56	0.56	0.51	0.39	0.39	0.39	0.28	0.28	0.28
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	0.28	0.23	0.17	0.17	0.17	0.11	0.17	0.17	0.11
45.0	0.73	0.73	1.29	1.80	1.52	0.62	0.51	0.39	0.39
90.0	0.34	0.28	0.34	0.34	0.34	0.34	0.34	0.28	0.23
135.0	0.17	0.17	0.17	0.17	0.06	0.06	0.06	0.00	0.00
180.0	0.28	0.23	0.23	0.23	0.17	0.17	0.17	0.11	0.11
225.0	0.62	0.56	0.68	1.24	1.69	0.84	0.45	0.39	0.34
270.0	0.39	0.34	0.28	0.28	0.34	0.28	0.23	0.23	0.23
315.0	0.23	0.23	0.17	0.17	0.06	0.06	0.06	0.00	0.00
360.0	0.28	0.23	0.17	0.17	0.17	0.11	0.17	0.17	0.11

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	0.11
45.0	0.28
90.0	0.28
135.0	0.00
180.0	0.11
225.0	0.34
270.0	0.17
315.0	0.00
360.0	0.11