



NATA LIGHTING CO.,LTD
www.nata.cn
Email:info@nata.cn
Tel:+86 0750-377 0000(10 lines) Fax:+86 0750-377 1111
Address:380JinOu Road,Gaoxin Zone,Jiang Men City,Guangdong,China

NT

Client: NT

LumCAT: 2-3120-LM

Luminaire: 92.70.121.00 LED HOLDER

Report No: 20251119-B002

Ballast type: AC

Test No: 20251119-C002

Voltage(V): 33.590

LampCAT: PHILIPS SLM 1208 L15 1919 G8 Current(A): 0.360

Lamp flux(lm): 2022.8 Power (W): 12.092

Number of Lamps: 1 PF: 0.000

Length(mm): 65 Width(mm): 65

Phm Type: C Height(mm): 34

Photometric Results

Lumens(lm): 1948.09, Efficiency(%): 96.31% , Luminous Efficacy(lm/W): 161.11

Central intensity(cd): 3467.194, Maximum intensity(cd): 3467.194

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=38.8

[C90/270]Total=38.8

Field angle(10%Imax): [C0/180]Total=77.8

[C90/270]Total=77.8

Maximum s/h(1/2): C0_180=0.63 C90_270=0.63

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

Up flux rate of lamp(%): 0.00%

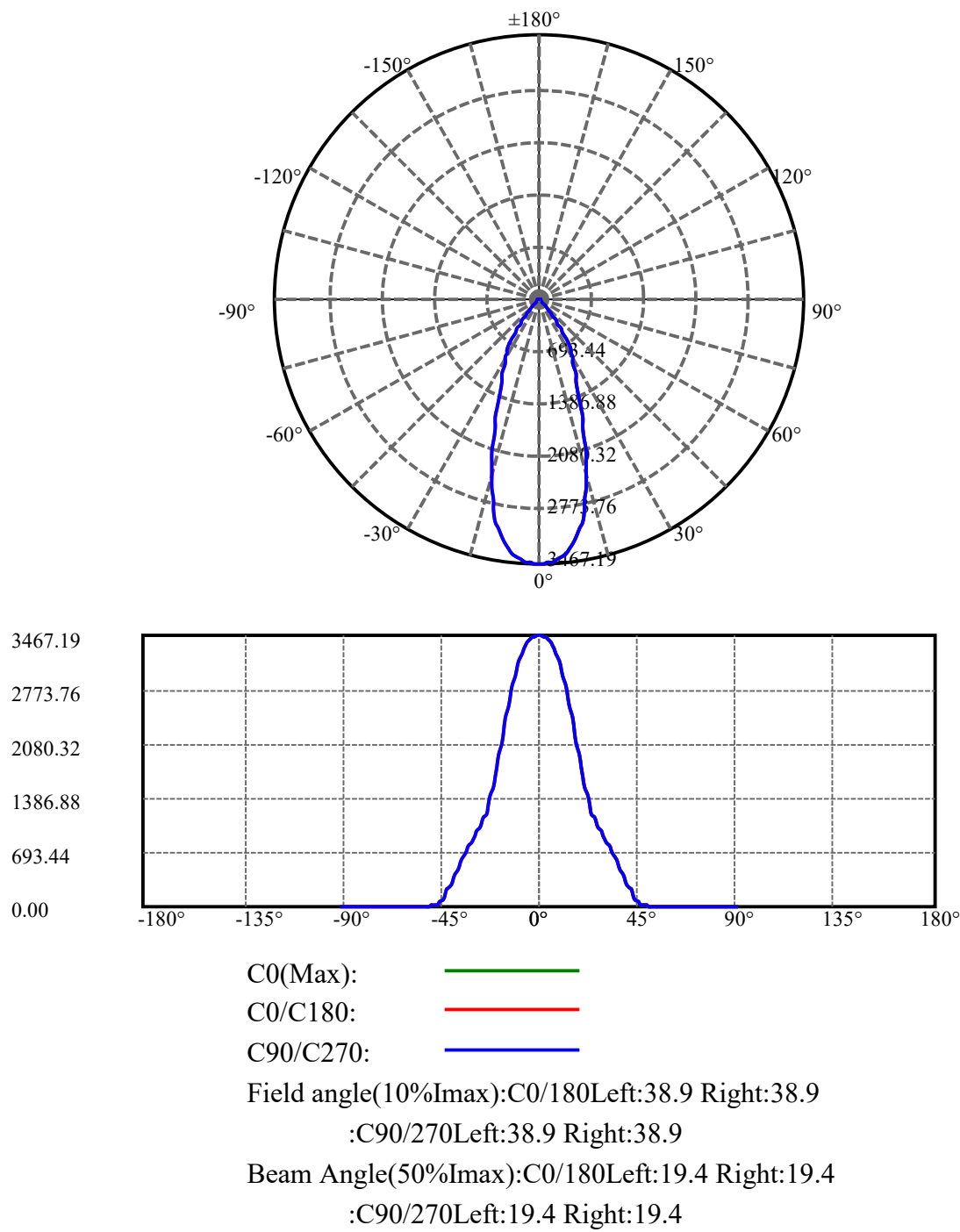
Down flux rate of lamp(%): 96.31%

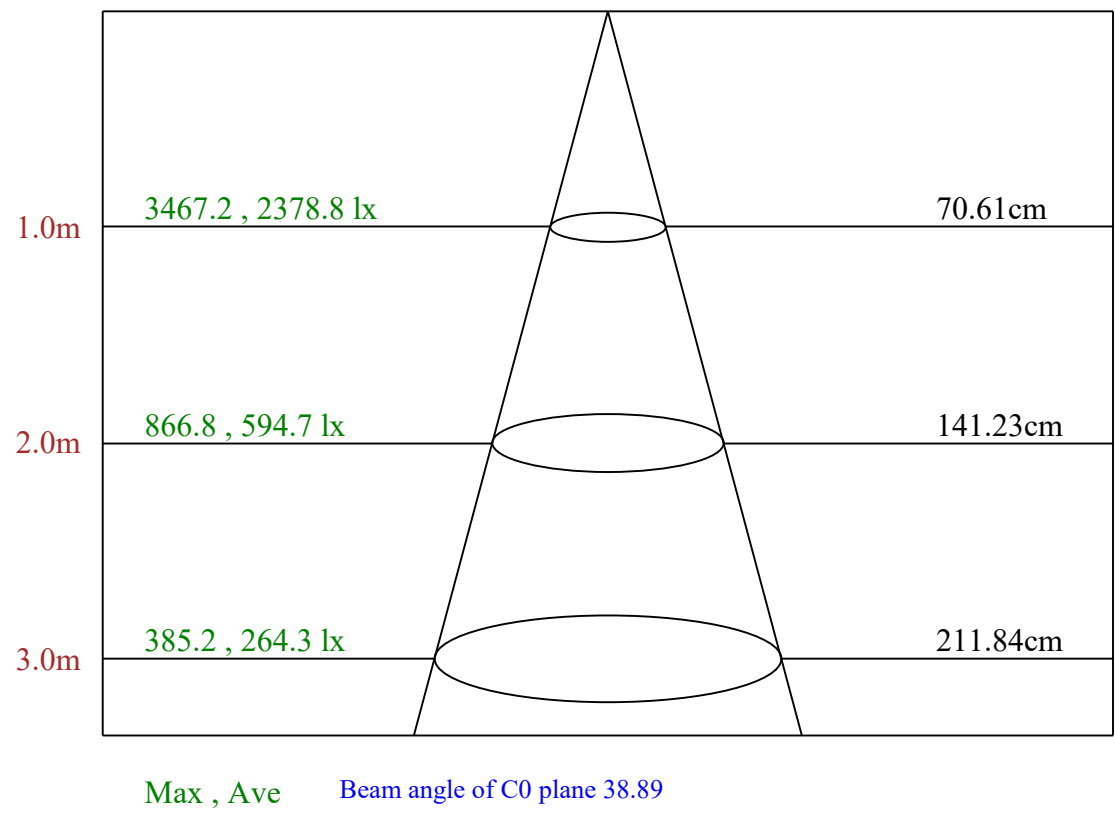
Up flux rate of LUM(%): - -

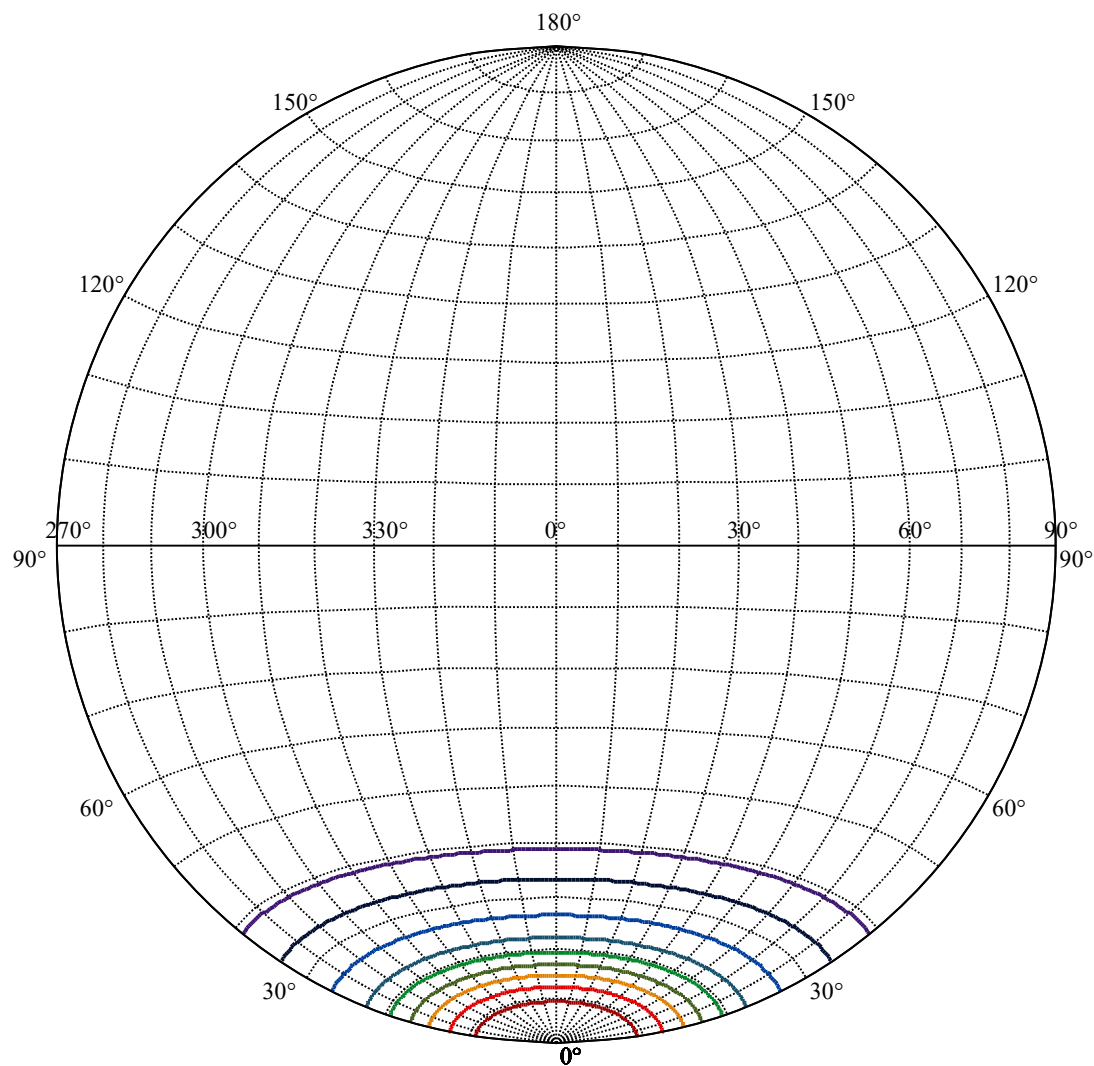
Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.788%





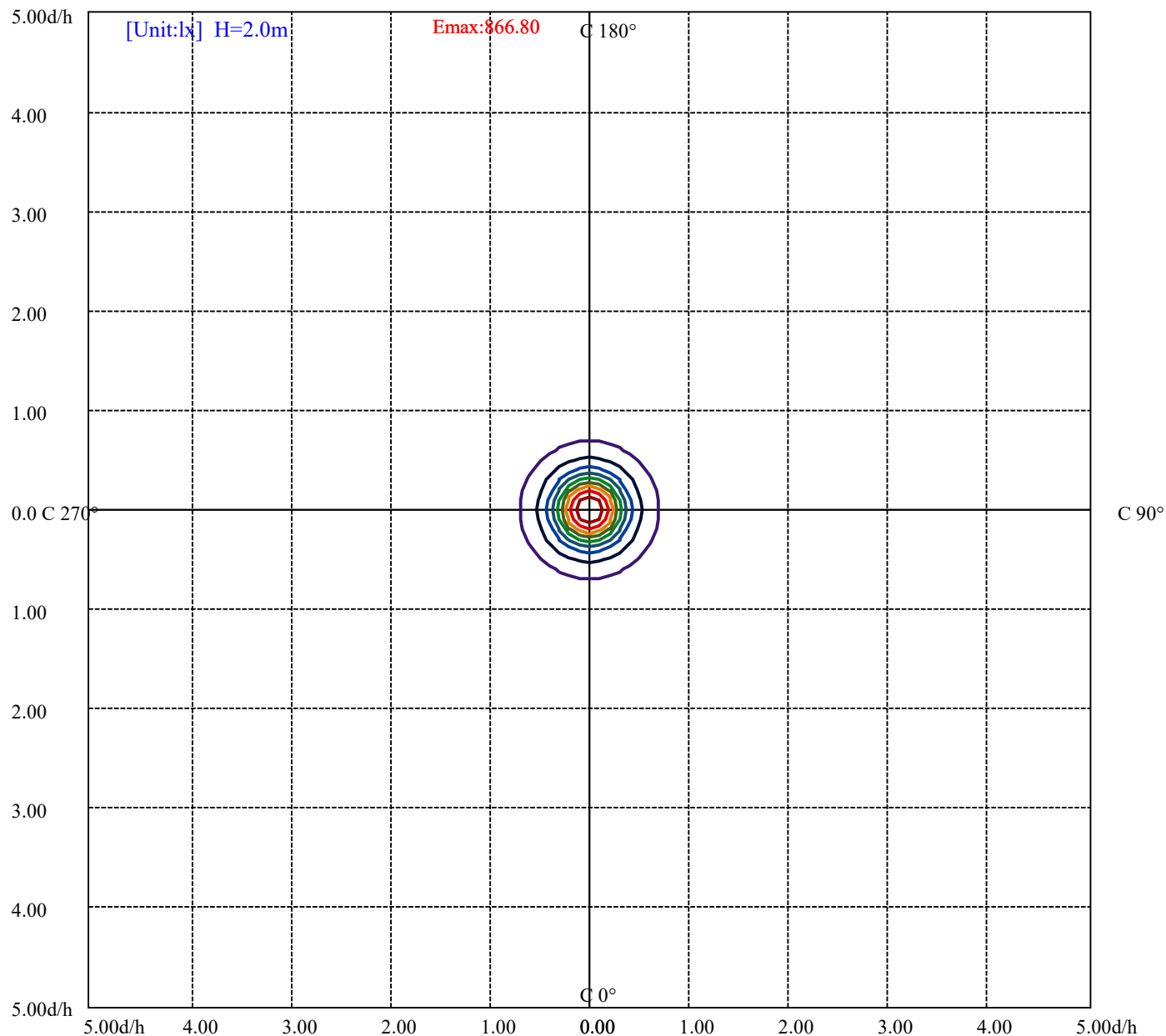


House

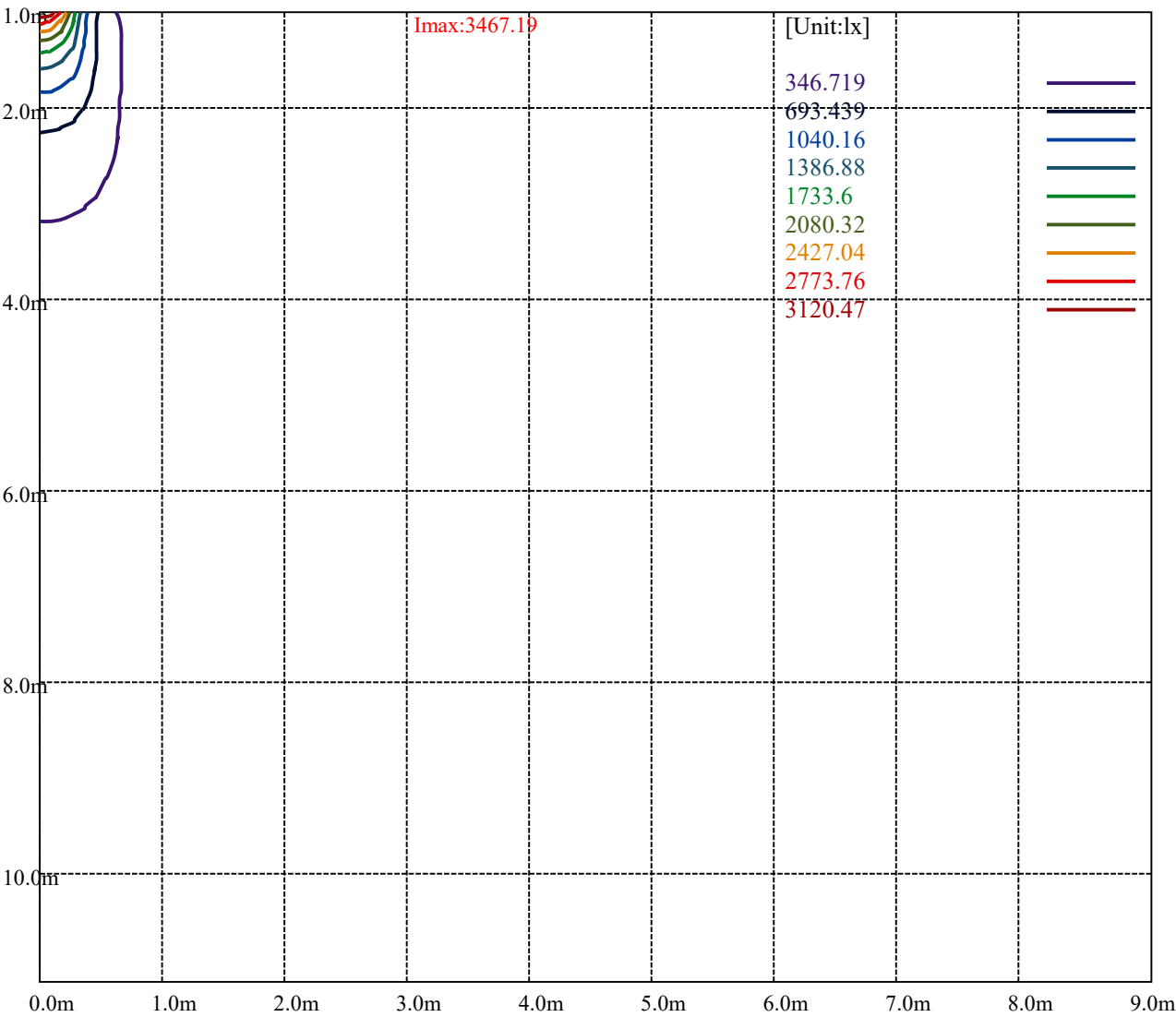
[Unit:cd]

Road

Imax:3467.19	
(10%Imax) 346.719	
(20%Imax) 693.439	
(30%Imax) 1040.16	
(40%Imax) 1386.88	
(50%Imax) 1733.6	
(60%Imax) 2080.32	
(70%Imax) 2427.04	
(80%Imax) 2773.76	
(90%Imax) 3120.47	



(10%Emax)	86.67975	
(20%Emax)	173.3598	
(30%Emax)	260.04	
(40%Emax)	346.72	
(50%Emax)	433.4	
(60%Emax)	520.08	
(70%Emax)	606.76	
(80%Emax)	693.4375	
(90%Emax)	780.1175	



Luminance Table

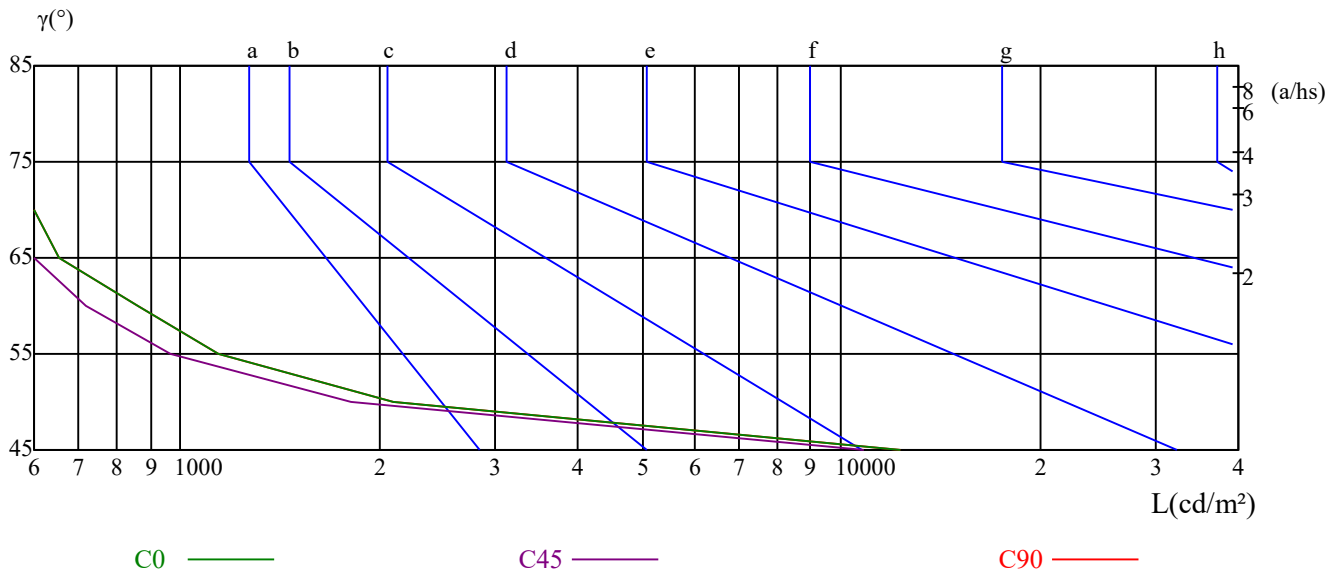
γ	45	50	55	60	65	70	75	80	85
C0	12339	2102	1139	859	653	487	348	237	140
C45	10802	1814	968	718	536	392	274	181	103
C90	12339	2102	1139	859	653	487	348	237	140

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1386	1386	1386	1029	1029	1029	974	974	974

Glare Table

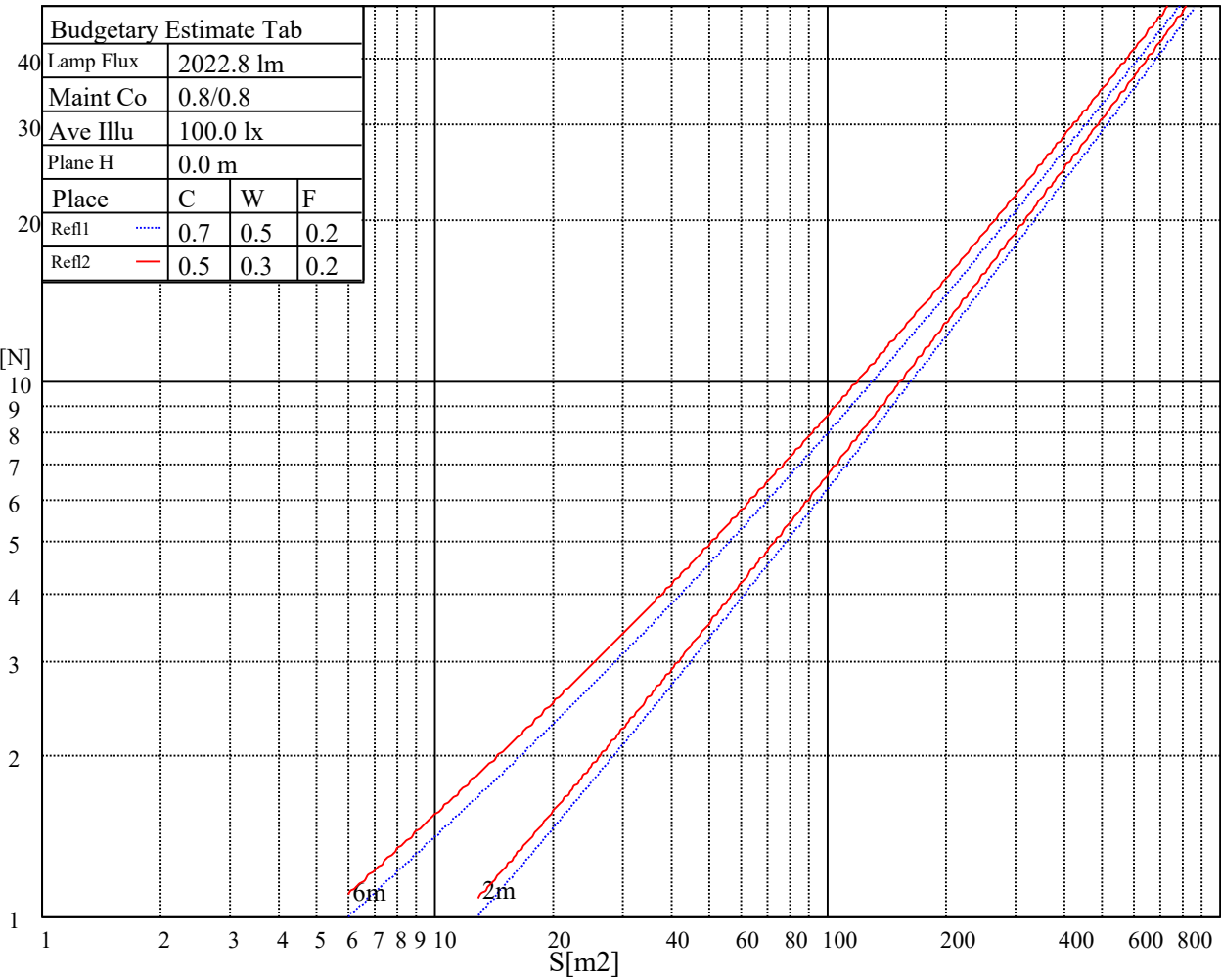
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

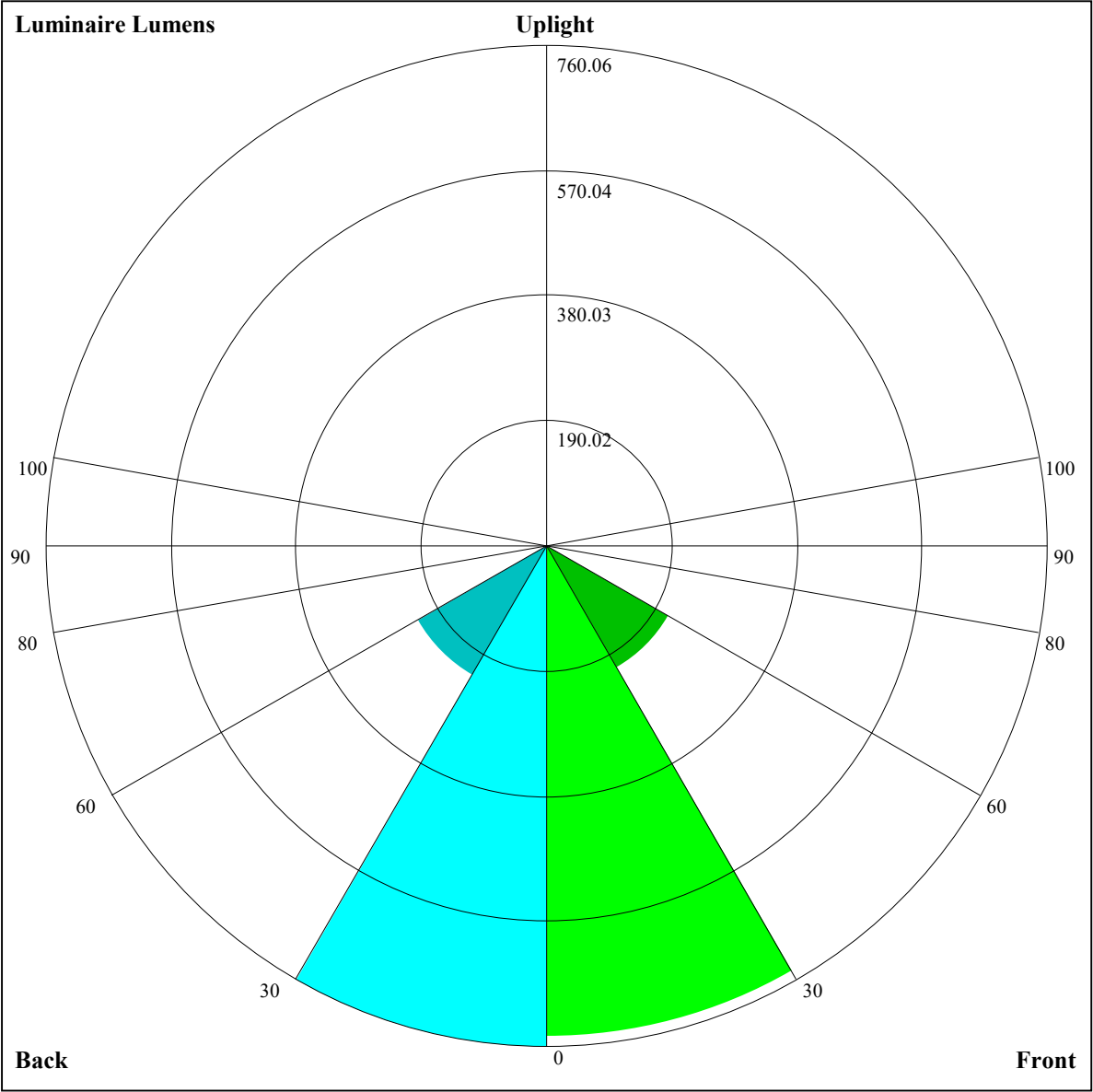


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	18.91	19.84	19.27	20.15	20.46	19.23	20.16	19.59	20.47	20.78
	3H	18.69	19.52	19.08	19.86	20.20	19.01	19.84	19.40	20.17	20.52
	4H	18.59	19.35	18.99	19.70	20.07	18.90	19.67	19.31	20.02	20.39
	6H	18.49	19.19	18.91	19.56	19.96	18.81	19.50	19.23	19.88	20.28
	8H	18.41	19.08	18.84	19.46	19.87	18.73	19.39	19.16	19.78	20.19
	12H	18.34	18.97	18.77	19.36	19.78	18.66	19.29	19.09	19.68	20.10
4H	2H	18.58	19.34	18.98	19.70	20.07	18.90	19.66	19.30	20.02	20.39
	3H	18.33	18.96	18.76	19.36	19.78	18.65	19.28	19.08	19.68	20.10
	4H	18.25	18.79	18.69	19.22	19.67	18.57	19.11	19.01	19.54	19.99
	6H	18.10	18.58	18.57	19.03	19.49	18.42	18.90	18.89	19.35	19.81
	8H	18.04	18.48	18.52	18.94	19.42	18.36	18.80	18.84	19.26	19.74
	12H	17.98	18.39	18.47	18.84	19.37	18.30	18.71	18.79	19.16	19.69
8H	4H	18.04	18.48	18.52	18.94	19.42	18.36	18.80	18.84	19.26	19.73
	6H	17.87	18.24	18.38	18.72	19.23	18.19	18.56	18.70	19.04	19.55
	8H	17.85	18.16	18.39	18.68	19.18	18.17	18.47	18.71	19.00	19.50
	12H	17.80	18.03	18.34	18.54	19.07	18.11	18.34	18.66	18.86	19.39
12H	4H	17.98	18.39	18.47	18.84	19.37	18.30	18.71	18.79	19.16	19.68
	6H	17.85	18.16	18.39	18.68	19.18	18.17	18.47	18.71	19.00	19.50
	8H	17.80	18.02	18.34	18.54	19.07	18.11	18.34	18.66	18.86	19.39
Variation with the observer position at spacings:											
S = 1.0H		4.9/-19.4					4.9/-19.4				
S = 1.5H		7.8/-19.8					7.8/-19.8				
S = 2.0H		9.8/-20.0					9.8/-20.0				
Standard tables:		BK0					BK0				
Uncorrected UGR		-0.3					-0.3				

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	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	1.02	1.02	1.02	0.98	0.98	0.98	0.96
1	1.07	1.05	1.03	1.05	1.03	1.01	1.01	1.00	0.98	0.98	0.97	0.95	0.94	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	0.90	0.89	0.87	0.86
3	0.94	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	0.79	0.77	0.76
5	0.84	0.79	0.75	0.83	0.78	0.75	0.81	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.73	0.71
6	0.79	0.74	0.70	0.79	0.74	0.70	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.71	0.69	0.68
7	0.75	0.70	0.66	0.75	0.70	0.66	0.74	0.69	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.64
8	0.72	0.66	0.63	0.71	0.66	0.63	0.70	0.66	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.61
9	0.68	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	0.59	0.58
10	0.65	0.60	0.56	0.65	0.60	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.55



Luminaire Lumens:

FL=745.19,FM=214.52,FH=1.81,FVH=0.19

BL=760.06,BM=226.6,BH=1.88,BVH=0.21

UL=0,UH=0

BUG Rating:B2-U0-G0

NT NT 2-3120-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	3465.51	3458.19	3443.57	3422.19	3385.07	3339.51	3284.94	3201.13	3150.51
45.0	3467.19	3462.69	3457.07	3445.82	3429.51	3415.44	3379.44	3342.88	3294.51
90.0	3468.32	3460.44	3447.51	3427.82	3397.44	3377.76	3338.38	3287.19	3221.38
135.0	3467.76	3466.63	3458.76	3449.76	3423.32	3394.07	3359.19	3315.88	3283.26
180.0	3465.51	3467.19	3465.51	3454.82	3435.13	3408.13	3387.88	3335.57	3283.82
225.0	3467.19	3462.13	3450.32	3426.69	3414.88	3369.32	3320.94	3257.94	3163.44
270.0	3468.32	3471.13	3468.88	3459.32	3450.32	3423.32	3386.19	3337.82	3276.51
315.0	3467.76	3463.26	3448.07	3436.82	3410.38	3340.07	3304.07	3237.13	3155.57
360.0	3465.51	3458.19	3443.57	3422.19	3385.07	3339.51	3284.94	3201.13	3150.51
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3057.69	2949.69	2831.01	2671.26	2585.76	2436.13	2281.44	2094.69	1941.69
45.0	3232.07	3136.44	3079.63	2924.38	2850.13	2686.44	2541.32	2386.07	2225.76
90.0	3119.57	3059.38	2946.88	2820.32	2649.88	2498.01	2403.51	2181.32	1990.07
135.0	3209.01	3128.57	3034.07	2895.69	2765.19	2625.13	2475.51	2383.26	2195.38
180.0	3217.44	3119.01	3018.32	2901.88	2773.63	2690.94	2516.57	2364.13	2207.76
225.0	3106.07	3001.44	2880.51	2743.26	2564.38	2472.13	2314.63	2059.26	1966.44
270.0	3232.63	3129.69	3025.63	2906.38	2743.26	2597.01	2440.63	2277.51	2181.32
315.0	3059.38	2929.44	2855.19	2720.76	2575.63	2425.44	2238.13	2144.76	1927.07
360.0	3057.69	2949.69	2831.01	2671.26	2585.76	2436.13	2281.44	2094.69	1941.69
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1852.26	1655.38	1504.63	1436.57	1332.51	1223.94	1092.71	1092.71	1029.26
45.0	2127.88	1936.63	1785.88	1645.82	1518.13	1446.69	1279.63	1192.44	1144.63
90.0	1895.57	1749.32	1614.32	1493.38	1364.01	1305.51	1114.48	1087.37	1074.26
135.0	2037.88	1885.44	1743.69	1663.82	1516.44	1406.76	1310.01	1207.63	1132.26
180.0	2051.38	1959.13	1780.26	1592.94	1519.82	1410.69	1294.82	1208.19	1132.82
225.0	1816.26	1676.19	1548.51	1409.01	1346.01	1250.94	1100.08	1100.08	1034.89
270.0	1991.76	1839.88	1695.88	1564.82	1491.13	1357.26	1225.63	1174.44	1099.63
315.0	1751.57	1670.01	1543.44	1428.69	1326.32	1120.11	1092.71	1092.71	1017.51
360.0	1852.26	1655.38	1504.63	1436.57	1332.51	1223.94	1092.71	1092.71	1029.26
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	971.66	908.72	878.85	832.28	787.61	736.48	665.21	626.74	560.76
45.0	1059.13	996.69	941.01	890.38	861.13	807.69	760.44	703.63	642.88
90.0	1012.33	956.53	904.50	847.35	821.31	774.51	718.31	643.16	577.80
135.0	1065.88	1005.69	973.63	911.76	863.38	818.38	770.57	738.51	642.32
180.0	1091.76	1016.38	960.69	909.51	861.13	834.13	779.57	703.07	666.51
225.0	975.99	922.95	864.90	838.24	794.48	741.83	669.99	606.15	568.29
270.0	1020.88	961.82	910.63	881.38	824.57	780.69	730.63	672.13	635.01
315.0	982.07	927.84	877.16	830.87	776.87	746.04	663.86	625.39	560.64
360.0	971.66	908.72	878.85	832.28	787.61	736.48	665.21	626.74	560.76
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	493.99	414.51	349.59	287.27	228.09	163.86	134.27	90.51	55.52
45.0	604.07	527.01	461.76	398.76	326.19	303.13	303.13	161.04	141.86
90.0	512.66	447.92	372.32	334.91	276.53	220.78	169.20	112.73	87.58
135.0	577.63	538.26	470.76	392.57	329.57	292.44	292.44	153.79	107.16
180.0	590.01	524.76	460.07	394.82	356.01	293.57	293.57	177.41	118.29
225.0	477.84	401.51	363.77	303.53	246.94	193.28	133.48	106.37	66.83
270.0	557.38	467.94	429.69	356.01	296.38	296.38	232.54	164.14	91.80
315.0	479.87	412.65	347.74	273.21	237.99	183.04	132.24	88.65	48.66
360.0	493.99	414.51	349.59	287.27	228.09	163.86	134.27	90.51	55.52

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	31.78	19.13	17.21	12.38	8.94	7.65	6.53	6.02	5.63
45.0	89.94	43.26	29.98	18.17	14.79	11.42	8.61	7.31	5.96
90.0	40.50	20.19	17.94	13.95	10.63	7.93	5.91	5.57	5.23
135.0	82.69	44.04	24.86	17.04	13.73	11.70	8.38	6.53	5.74
180.0	77.01	45.28	25.99	19.74	15.41	11.87	8.94	6.75	6.47
225.0	37.58	22.05	16.31	12.60	9.34	6.64	5.96	5.51	5.18
270.0	55.18	38.36	20.03	16.20	12.54	9.28	7.76	5.74	5.34
315.0	34.48	20.48	14.06	12.04	9.06	7.65	5.74	5.23	5.01
360.0	31.78	19.13	17.21	12.38	8.94	7.65	6.53	6.02	5.63
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	5.18	4.95	4.61	4.33	4.05	3.66	3.54	3.21	2.93
45.0	5.51	5.23	4.78	4.44	4.16	3.88	3.71	3.43	3.21
90.0	4.84	4.56	4.22	4.11	3.71	3.38	3.32	3.04	2.81
135.0	5.34	5.12	4.78	4.28	4.11	3.83	3.60	3.32	3.09
180.0	5.91	5.34	5.06	4.73	4.39	4.05	3.83	3.66	3.43
225.0	4.78	4.44	4.22	3.94	3.54	3.43	3.21	3.04	2.81
270.0	4.89	4.56	4.50	4.11	3.77	3.66	3.38	3.15	2.87
315.0	4.73	4.39	4.11	3.77	3.60	3.38	3.09	2.98	2.70
360.0	5.18	4.95	4.61	4.33	4.05	3.66	3.54	3.21	2.93
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	2.76	2.59	2.42	2.25	2.03	1.97	1.86	1.74	1.63
45.0	2.98	2.81	2.70	2.48	2.36	2.19	2.03	1.80	1.74
90.0	2.76	2.48	2.36	2.25	2.08	1.97	1.74	1.69	1.52
135.0	2.98	2.76	2.59	2.42	2.25	2.14	1.97	1.74	1.69
180.0	3.21	2.98	2.81	2.53	2.42	2.25	2.14	1.97	1.80
225.0	2.59	2.48	2.36	2.19	2.03	1.86	1.74	1.63	1.58
270.0	2.70	2.59	2.42	2.25	2.08	1.97	1.80	1.69	1.58
315.0	2.42	2.36	2.14	2.08	1.91	1.74	1.69	1.46	1.46
360.0	2.76	2.59	2.42	2.25	2.03	1.97	1.86	1.74	1.63
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	1.41	1.35	1.24	1.07	1.01	0.96	0.79	0.79	0.62
45.0	1.58	1.58	1.35	1.24	1.18	1.07	1.01	0.84	0.79
90.0	1.35	1.29	1.13	1.07	0.96	0.84	0.79	0.68	0.62
135.0	1.58	1.46	1.29	1.18	1.13	1.01	0.96	0.79	0.73
180.0	1.69	1.58	1.52	1.35	1.18	1.18	1.07	1.01	0.84
225.0	1.41	1.29	1.24	1.07	1.01	0.90	0.84	0.73	0.62
270.0	1.46	1.35	1.18	1.07	1.07	0.96	0.90	0.79	0.67
315.0	1.29	1.24	1.18	0.96	0.90	0.84	0.68	0.68	0.62
360.0	1.41	1.35	1.24	1.07	1.01	0.96	0.79	0.79	0.62
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	0.62	0.56	0.45	0.39	0.39	0.34	0.34	0.28	0.23
45.0	0.73	0.56	0.51	0.45	0.45	0.34	0.28	0.23	0.23
90.0	0.51	0.45	0.39	0.39	0.28	0.23	0.17	0.11	0.06
135.0	0.62	0.56	0.45	0.39	0.34	0.28	0.23	0.17	0.17
180.0	0.79	0.73	0.68	0.51	0.51	0.39	0.39	0.34	0.28
225.0	0.62	0.51	0.45	0.34	0.39	0.34	0.28	0.28	0.28
270.0	0.68	0.51	0.45	0.39	0.28	0.23	0.17	0.17	0.11
315.0	0.51	0.45	0.34	0.28	0.23	0.23	0.17	0.11	0.11
360.0	0.62	0.56	0.45	0.39	0.39	0.34	0.34	0.28	0.23

Intensity data(cd)

C/ γ (°)	90.0
0.0	0.23
45.0	0.11
90.0	0.11
135.0	0.17
180.0	0.34
225.0	0.28
270.0	0.06
315.0	0.11
360.0	0.23