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NT

Client: NT

LumCAT: 1-1759-LM

Luminaire: 92.70.494.00 LED HOLDER

Report No: 20251219-B003

Ballast type: AC

Test No: 20251219-C003

Voltage(V): 34.490

LampCAT: LUMINUS CXM-11 (TC) GENIE

Current(A): 0.452

Lamp flux(lm): 2034.0

Power (W): 15.589

Number of Lamps: 1

PF: 0.000

Length(mm): 50

Width(mm): 50

Phm Type: C

Height(mm): 22

Photometric Results

Lumens(lm): 1950.46, Efficiency(%): 95.89% , Luminous Efficacy(lm/W): 125.12

Central intensity(cd): 4681.631, Maximum intensity(cd): 4681.631

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=78.4

[C90/270]Total=78.4

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

Maximum s/h(1/4): C0_180=0.50 C90_270=0.50

Up flux rate of lamp(%): 0.00%

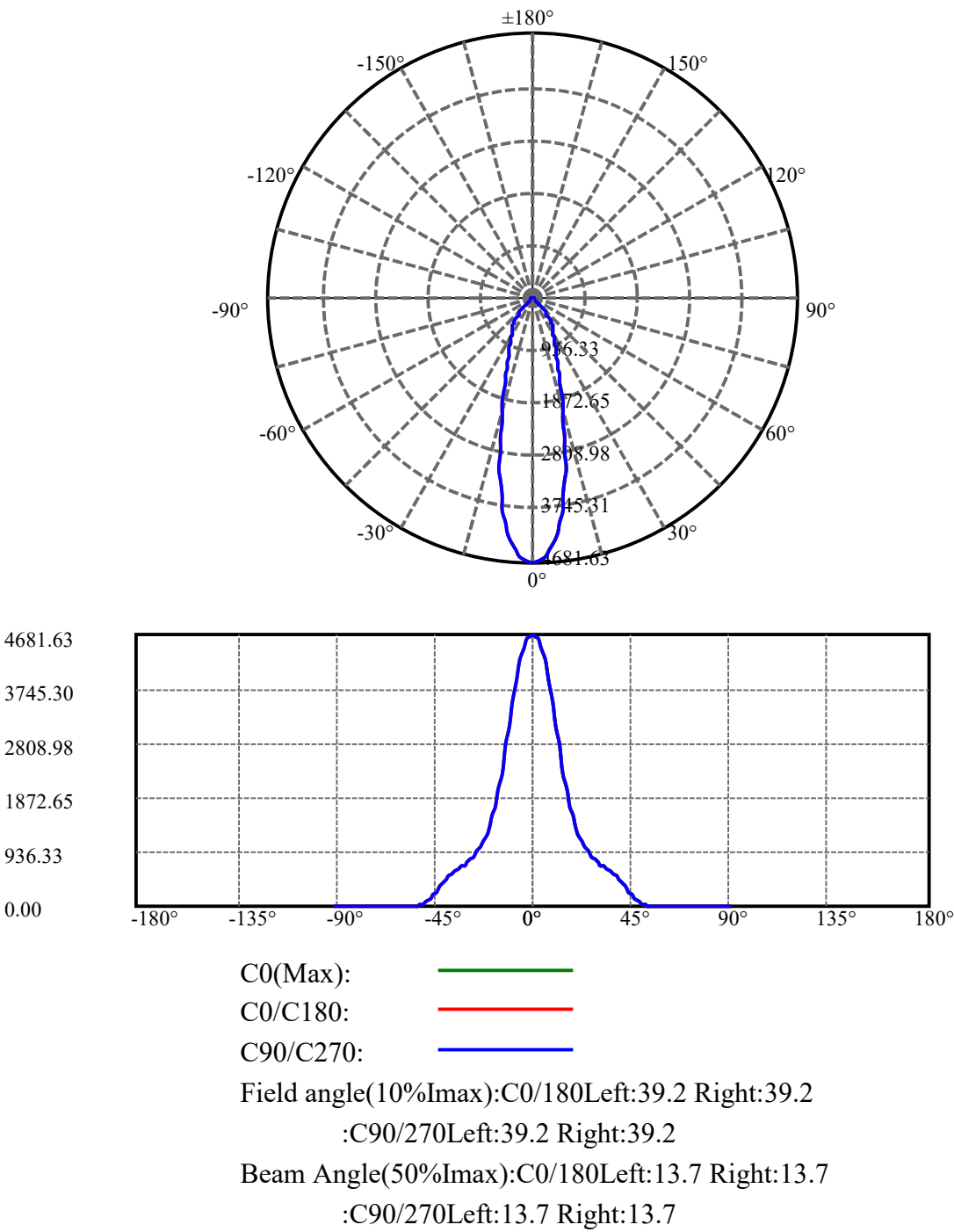
Down flux rate of lamp(%): 95.89%

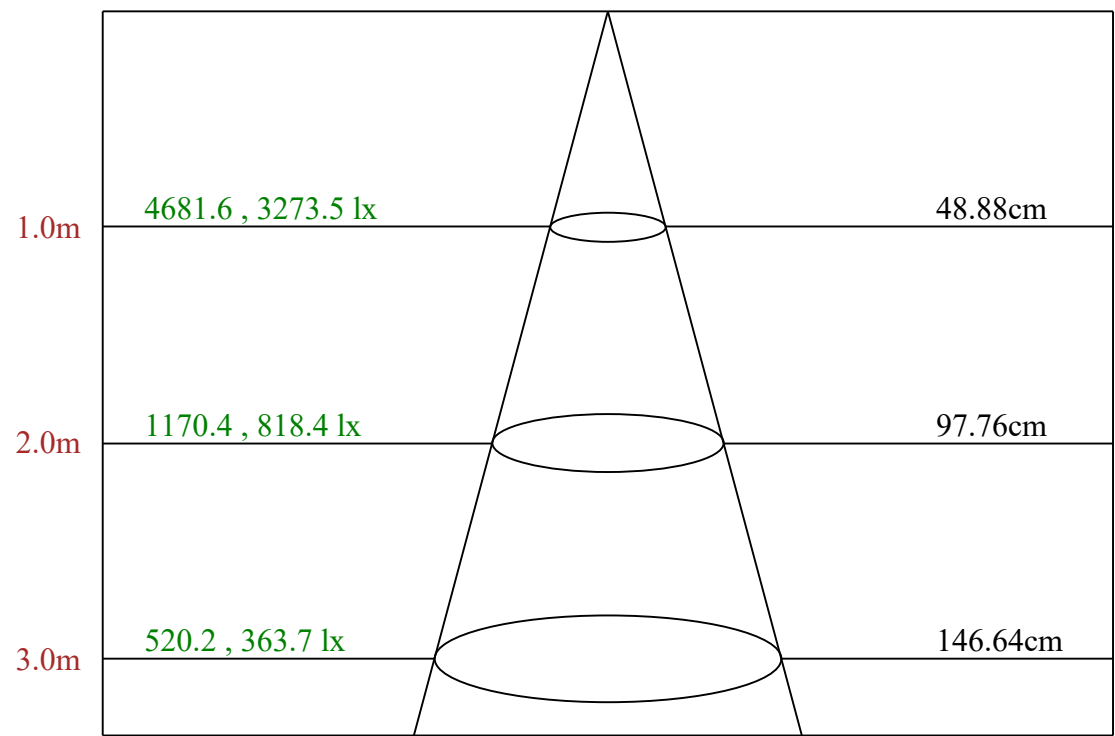
Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

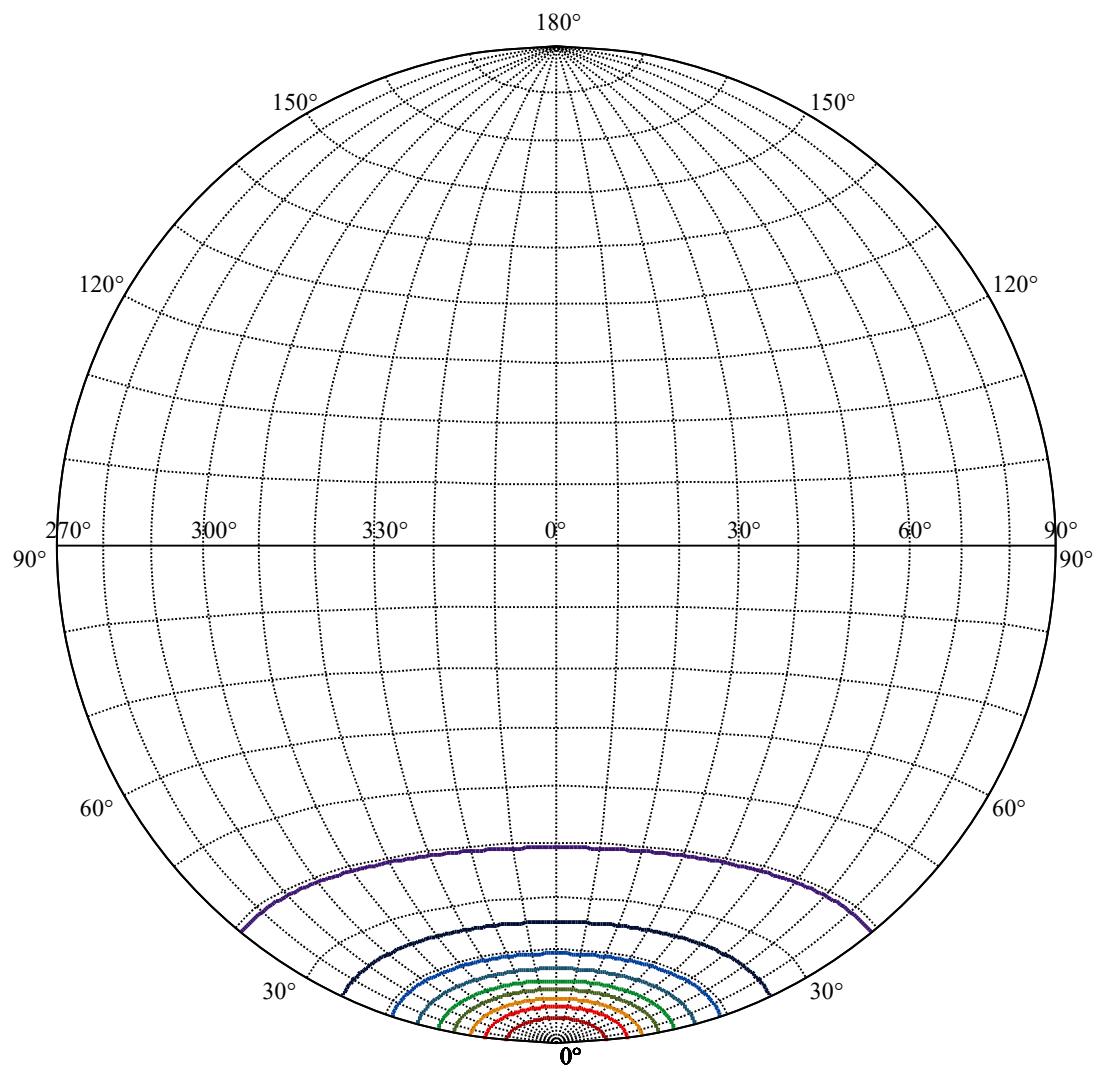
CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.929%





Max , Ave Beam angle of C0 plane 27.47

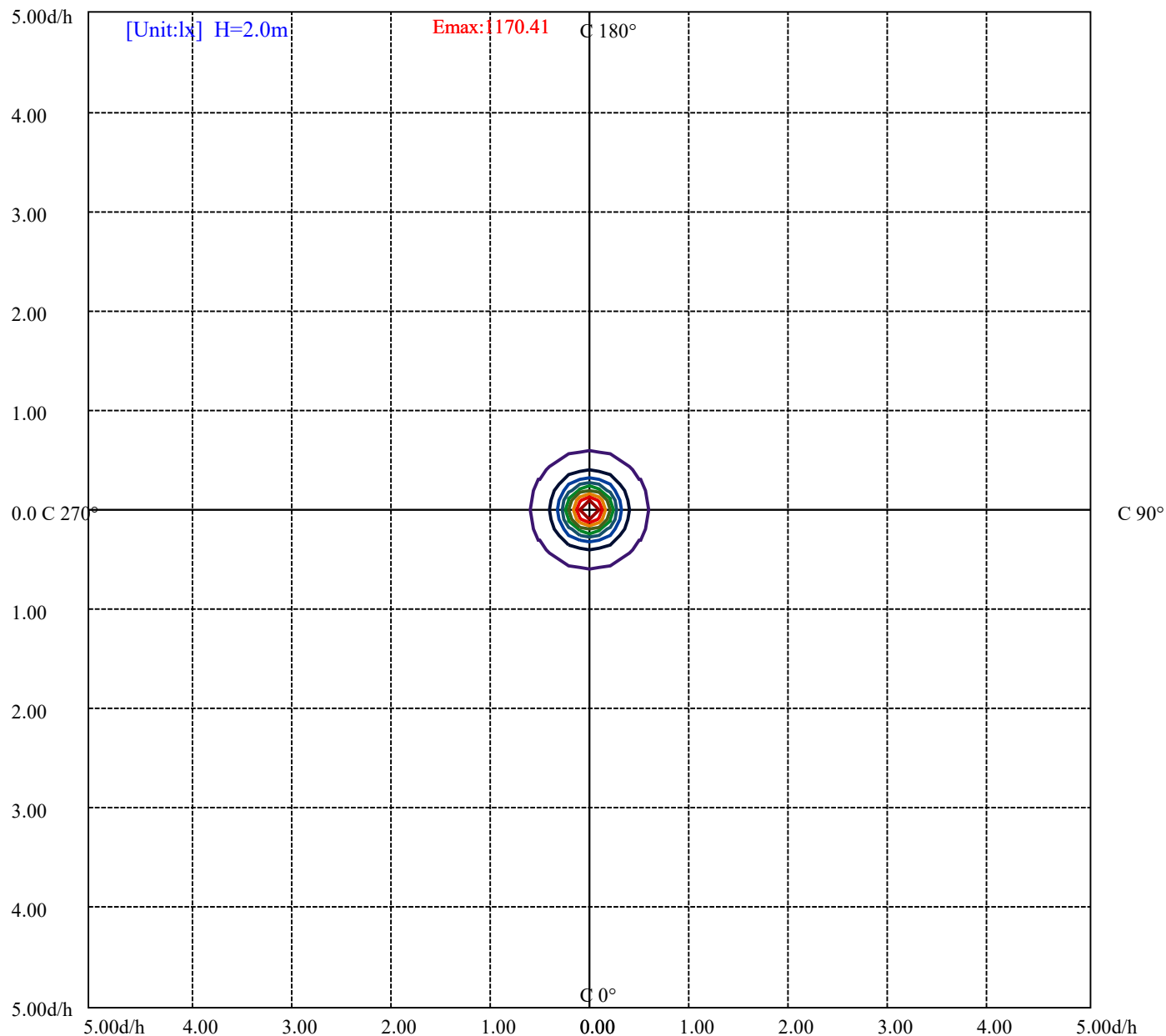


House

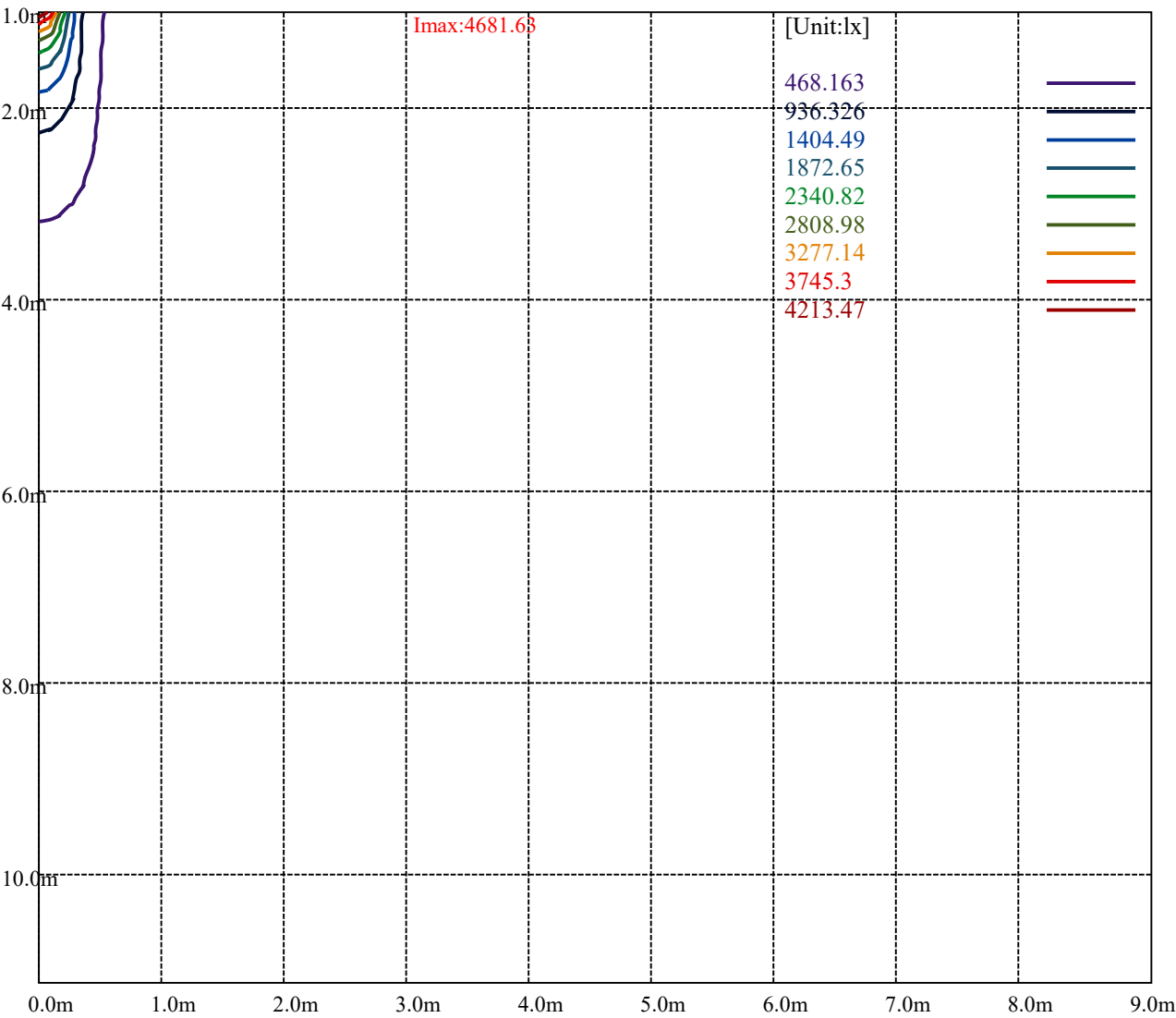
[Unit:cd]

Road

Imax:4681.63	
(10%Imax) 468.163	
(20%Imax) 936.326	
(30%Imax) 1404.49	
(40%Imax) 1872.65	
(50%Imax) 2340.82	
(60%Imax) 2808.98	
(70%Imax) 3277.14	
(80%Imax) 3745.3	
(90%Imax) 4213.47	



(10%Emax)	117.0407	
(20%Emax)	234.0815	
(30%Emax)	351.1225	
(40%Emax)	468.1625	
(50%Emax)	585.2025	
(60%Emax)	702.245	
(70%Emax)	819.285	
(80%Emax)	936.325	
(90%Emax)	1053.368	



Luminance Table

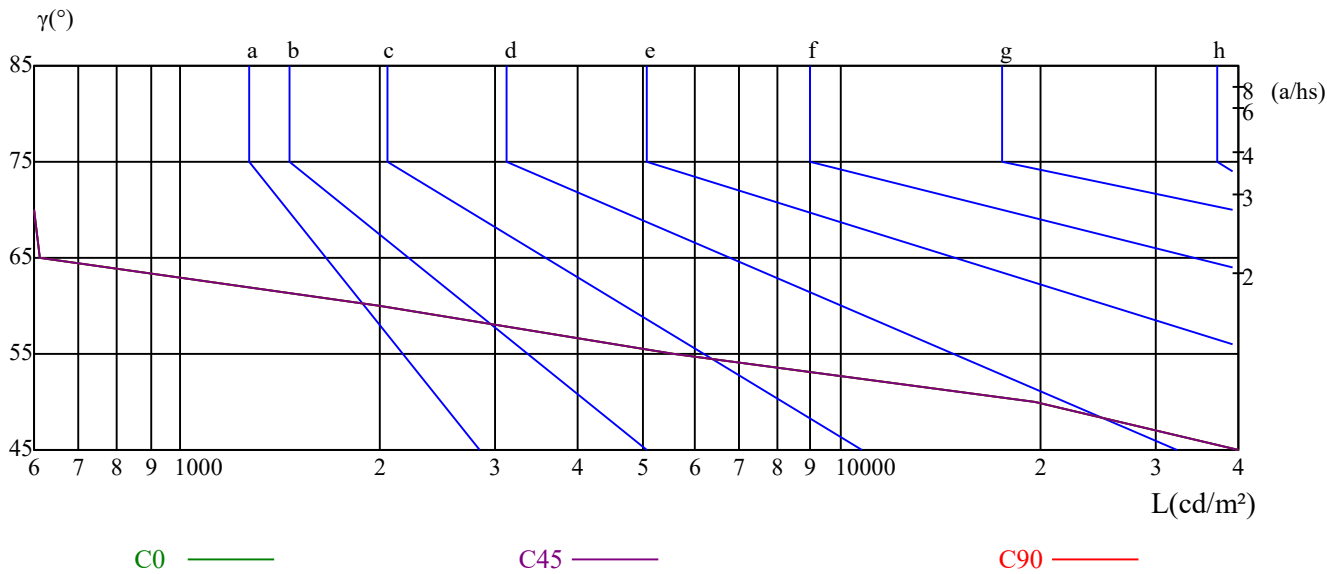
γ	45	50	55	60	65	70	75	80	85
C0	116305	19720	5565	1997	612	403	380	437	1033
C45	116305	19720	5565	1997	612	403	380	437	1033
C90	116305	19720	5565	1997	612	403	380	437	1033

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
612	612	612	380	380	380	1033	1033	1033

Glare Table

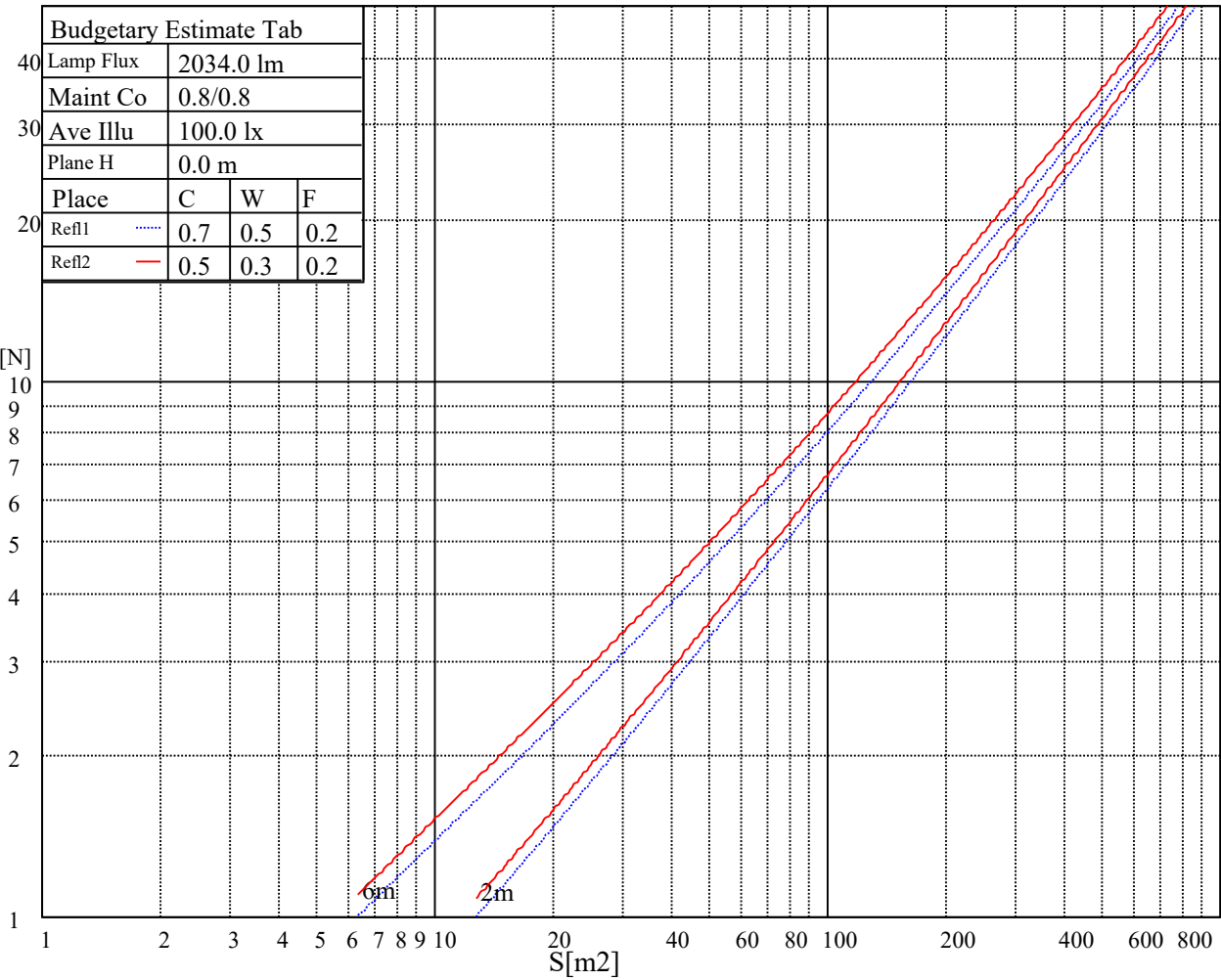
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

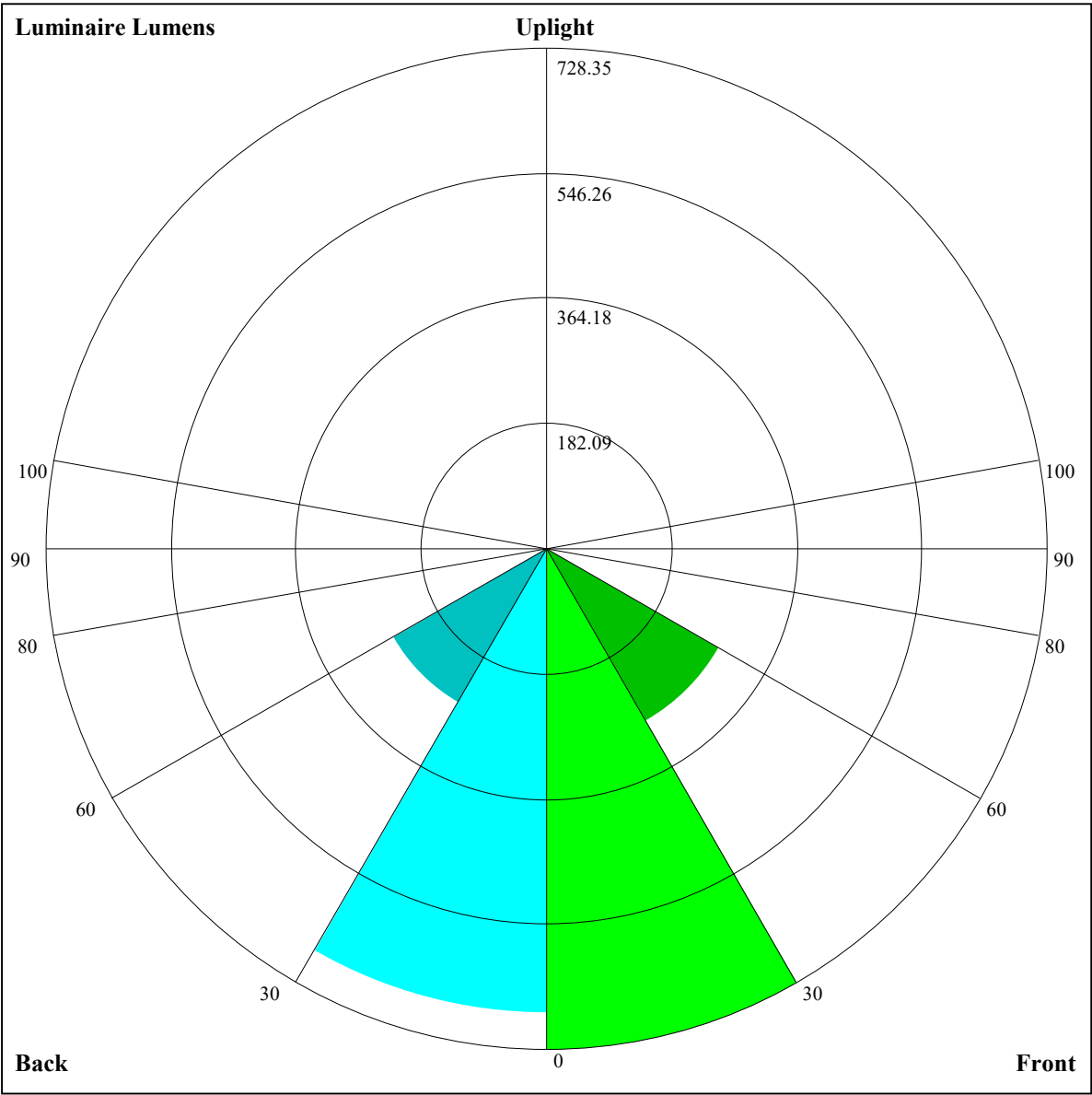


Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	25.59	26.58	25.95	26.89	27.21	25.68	26.68	26.05	26.99	27.30
	3H	25.39	26.26	25.77	26.60	26.95	25.48	26.36	25.87	26.70	27.04
	4H	25.28	26.09	25.68	26.45	26.81	25.38	26.19	25.78	26.54	26.91
	6H	25.19	25.93	25.61	26.31	26.71	25.29	26.03	25.71	26.40	26.80
	8H	25.12	25.82	25.54	26.21	26.61	25.21	25.92	25.63	26.30	26.71
	12H	25.05	25.71	25.47	26.11	26.53	25.14	25.81	25.57	26.20	26.62
4H	2H	25.29	26.09	25.69	26.45	26.82	25.38	26.19	25.78	26.54	26.91
	3H	25.04	25.71	25.47	26.11	26.53	25.14	25.81	25.56	26.20	26.62
	4H	24.97	25.54	25.40	25.97	26.42	25.06	25.64	25.50	26.06	26.51
	6H	24.82	25.33	25.29	25.78	26.23	24.92	25.42	25.39	25.88	26.33
	8H	24.76	25.23	25.25	25.69	26.16	24.85	25.32	25.34	25.78	26.26
	12H	24.70	25.14	25.20	25.59	26.11	24.80	25.23	25.29	25.69	26.21
8H	4H	24.76	25.23	25.24	25.69	26.16	24.85	25.32	25.34	25.78	26.26
	6H	24.60	24.98	25.10	25.46	25.98	24.69	25.08	25.20	25.56	26.07
	8H	24.58	24.90	25.11	25.42	25.92	24.67	25.00	25.21	25.52	26.02
	12H	24.52	24.77	25.06	25.29	25.81	24.61	24.87	25.16	25.38	25.91
12H	4H	24.70	25.14	25.20	25.59	26.11	24.80	25.23	25.29	25.69	26.21
	6H	24.58	24.90	25.11	25.42	25.92	24.67	25.00	25.21	25.52	26.02
	8H	24.52	24.77	25.06	25.29	25.81	24.61	24.87	25.16	25.38	25.91
Variation with the observer position at spacings:											
S = 1.0H		3.3/-19.4					3.3/-19.4				
S = 1.5H		5.8/-28.1					5.8/-28.1				
S = 2.0H		7.8/-29.6					7.8/-29.6				
Standard tables:		BK0					BK0				
Uncorrected UGR		5.1					5.1				

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	1.14	1.14	1.14	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	1.04	1.02	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	0.90	0.88	0.86	0.85
3	0.94	0.89	0.86	0.92	0.88	0.85	0.90	0.86	0.84	0.88	0.85	0.82	0.85	0.83	0.81	0.80
4	0.88	0.83	0.79	0.87	0.82	0.79	0.85	0.81	0.78	0.83	0.80	0.77	0.81	0.79	0.76	0.75
5	0.83	0.78	0.74	0.82	0.77	0.74	0.81	0.76	0.73	0.79	0.75	0.72	0.78	0.74	0.72	0.70
6	0.79	0.73	0.69	0.78	0.73	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.68	0.67
7	0.74	0.69	0.65	0.74	0.69	0.65	0.73	0.68	0.65	0.72	0.67	0.64	0.70	0.67	0.64	0.63
8	0.71	0.65	0.62	0.70	0.65	0.62	0.69	0.65	0.61	0.68	0.64	0.61	0.67	0.64	0.61	0.60
9	0.67	0.62	0.59	0.67	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.57
10	0.64	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.55	0.62	0.58	0.55	0.62	0.58	0.55	0.54



Luminaire Lumens:

FL=728.35,FM=288.49,FH=0.68,FVH=0.12

BL=676.85,BM=257.52,BH=0.49,BVH=0.11

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	4710.88	4705.82	4674.88	4614.69	4525.82	4378.44	4288.44	4114.63	3909.88
45.0	4635.51	4700.19	4737.88	4749.13	4727.76	4679.38	4602.88	4543.82	4393.63
90.0	4717.07	4729.44	4706.38	4679.38	4611.32	4514.57	4387.44	4196.19	4083.69
135.0	4663.07	4676.57	4658.01	4595.01	4506.69	4388.57	4302.51	4092.69	3878.38
180.0	4710.88	4688.38	4637.19	4556.19	4418.94	4270.44	4090.44	3881.19	3741.69
225.0	4635.51	4523.01	4451.01	4309.26	4139.94	3945.88	3681.51	3536.38	3286.07
270.0	4717.07	4675.44	4588.26	4549.44	4408.26	4190.01	4079.76	3828.88	3593.19
315.0	4663.07	4619.76	4525.82	4463.94	4336.26	4177.07	3987.51	3714.69	3560.57
360.0	4710.88	4705.82	4674.88	4614.69	4525.82	4378.44	4288.44	4114.63	3909.88
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3673.63	3355.26	3188.19	2794.44	2471.57	2321.38	2091.32	1889.38	1713.88
45.0	4236.13	4053.88	3844.63	3706.82	3413.76	3054.88	2902.44	2657.19	2381.57
90.0	3777.69	3473.94	3314.19	3040.26	2768.57	2509.26	2226.32	2098.07	1905.13
135.0	3634.82	3364.26	3191.57	2836.63	2548.63	2282.57	2046.32	1918.07	1625.57
180.0	3437.38	3162.88	2881.63	2611.07	2309.57	2085.69	1883.76	1774.63	1582.82
225.0	2875.44	2775.32	2487.32	2264.01	2061.51	1846.63	1749.88	1603.07	1471.44
270.0	3338.38	3070.07	2907.51	2594.19	2351.76	2132.94	1933.82	1723.44	1572.13
315.0	3174.69	2828.19	2712.88	2382.13	2135.19	1917.51	1695.88	1596.88	1451.19
360.0	3673.63	3355.26	3188.19	2794.44	2471.57	2321.38	2091.32	1889.38	1713.88
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1531.63	1452.32	1332.51	1116.79	1071.62	1071.62	1003.78	944.33	882.23
45.0	2170.63	1983.32	1880.94	1694.76	1558.07	1436.01	1328.01	1269.51	1164.88
90.0	1733.01	1582.26	1424.76	1356.69	1231.82	1105.71	1090.69	1020.38	959.06
135.0	1474.82	1395.51	1259.94	1163.76	1083.32	1013.57	976.44	910.07	862.26
180.0	1445.01	1326.32	1222.82	1167.69	1070.94	1002.32	942.69	889.26	860.57
225.0	1355.57	1216.63	1092.71	1092.71	1009.07	972.17	916.65	867.99	824.79
270.0	1439.38	1367.94	1240.82	1149.69	1070.94	1001.76	964.63	898.26	849.88
315.0	1327.44	1106.66	1090.97	1061.10	993.21	924.08	893.48	847.29	806.91
360.0	1531.63	1452.32	1332.51	1116.79	1071.62	1071.62	1003.78	944.33	882.23
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	854.78	813.43	777.38	739.52	712.18	697.39	666.17	642.43	631.24
45.0	1088.38	1019.76	957.88	925.26	867.32	808.26	786.32	745.82	716.01
90.0	894.21	847.63	822.88	771.36	733.78	716.85	691.20	668.48	647.89
135.0	818.38	773.94	761.01	726.13	690.13	677.19	651.88	633.32	616.44
180.0	809.94	760.44	741.88	707.57	682.82	660.32	641.19	629.38	602.94
225.0	779.40	759.15	728.10	685.74	671.34	647.94	618.02	580.73	529.43
270.0	808.82	772.26	752.57	705.32	681.13	667.07	642.88	622.07	592.82
315.0	771.81	735.24	718.59	684.28	658.91	647.49	629.94	613.29	589.89
360.0	854.78	813.43	777.38	739.52	712.18	697.39	666.17	642.43	631.24
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	611.94	584.16	547.93	496.91	469.18	421.93	373.56	315.45	266.63
45.0	689.57	664.82	650.76	614.19	576.51	534.32	477.51	428.57	397.63
90.0	622.86	606.15	569.93	528.92	484.31	427.95	380.25	330.75	272.03
135.0	597.32	581.01	540.51	500.57	455.57	410.01	352.07	303.69	303.69
180.0	571.44	532.63	489.32	460.63	402.69	353.76	305.38	305.38	241.82
225.0	501.58	453.49	402.08	351.39	290.42	259.59	192.21	164.70	114.69
270.0	555.13	530.38	476.38	429.69	380.19	331.26	302.01	302.01	185.63
315.0	549.28	527.63	485.16	440.89	384.81	338.12	307.13	256.16	179.04
360.0	611.94	584.16	547.93	496.91	469.18	421.93	373.56	315.45	266.63

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	219.04	172.46	118.74	94.22	57.71	30.38	15.92	11.76	11.19
45.0	326.19	296.38	296.38	195.24	148.22	98.78	63.73	35.89	19.35
90.0	241.93	195.47	149.06	106.82	61.37	42.69	20.76	12.54	10.97
135.0	303.69	176.79	134.66	94.67	52.76	27.68	13.50	9.68	9.06
180.0	163.01	111.15	73.41	53.72	21.15	14.62	10.91	9.84	8.78
225.0	77.68	46.46	24.53	14.46	13.39	12.04	10.69	9.28	7.71
270.0	158.57	107.83	70.03	39.38	17.66	14.40	10.97	9.68	8.49
315.0	154.69	111.83	73.69	42.86	18.28	12.94	10.80	9.79	8.72
360.0	219.04	172.46	118.74	94.22	57.71	30.38	15.92	11.76	11.19
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	9.73	9.06	8.04	6.75	5.74	4.28	2.25	1.86	1.41
45.0	15.58	13.50	12.15	10.80	9.39	8.66	7.20	4.84	3.26
90.0	9.62	8.55	7.54	6.47	5.85	4.73	2.76	2.08	1.58
135.0	7.93	6.92	6.08	5.12	4.67	3.66	2.03	1.74	1.29
180.0	7.65	6.92	5.74	4.67	3.49	2.25	1.58	1.24	0.96
225.0	6.98	5.34	3.38	2.81	1.97	1.58	1.07	0.68	0.56
270.0	7.99	6.75	5.79	4.78	2.98	2.48	1.63	1.29	0.90
315.0	7.71	6.81	6.08	5.12	3.83	2.03	1.46	1.18	0.84
360.0	9.73	9.06	8.04	6.75	5.74	4.28	2.25	1.86	1.41
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	1.13	0.79	0.62	0.56	0.51	0.45	0.39	0.39	0.28
45.0	2.31	1.74	1.35	0.96	0.73	0.56	0.45	0.45	0.39
90.0	1.29	1.01	0.62	0.56	0.45	0.51	0.39	0.34	0.34
135.0	1.01	0.73	0.56	0.56	0.45	0.45	0.45	0.39	0.39
180.0	0.73	0.56	0.56	0.45	0.45	0.39	0.39	0.28	0.34
225.0	0.51	0.51	0.45	0.34	0.39	0.34	0.28	0.23	0.23
270.0	0.62	0.56	0.51	0.45	0.45	0.39	0.34	0.28	0.34
315.0	0.73	0.62	0.51	0.45	0.45	0.45	0.34	0.39	0.34
360.0	1.13	0.79	0.62	0.56	0.51	0.45	0.39	0.39	0.28
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	0.28	0.28	0.28	0.28	0.23	0.17	0.23	0.17	0.23
45.0	0.39	0.39	0.34	0.28	0.28	0.23	0.23	0.23	0.17
90.0	0.34	0.28	0.28	0.23	0.28	0.23	0.17	0.23	0.17
135.0	0.34	0.34	0.28	0.28	0.34	0.28	0.28	0.28	0.23
180.0	0.28	0.28	0.17	0.17	0.17	0.23	0.23	0.17	0.11
225.0	0.23	0.23	0.17	0.17	0.11	0.17	0.17	0.11	0.17
270.0	0.28	0.28	0.28	0.23	0.23	0.23	0.23	0.23	0.17
315.0	0.34	0.34	0.28	0.34	0.28	0.28	0.28	0.23	0.28
360.0	0.28	0.28	0.28	0.28	0.23	0.17	0.23	0.17	0.23
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.23	0.23
45.0	0.23	0.17	0.11	0.11	0.11	0.11	0.17	0.11	0.17
90.0	0.11	0.17	0.11	0.17	0.17	0.17	0.23	0.23	0.23
135.0	0.23	0.23	0.17	0.34	0.56	0.39	0.17	0.17	0.17
180.0	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
225.0	0.11	0.11	0.11	0.11	0.06	0.11	0.17	0.11	0.11
270.0	0.28	0.23	0.23	0.17	0.23	0.23	0.28	0.34	0.39
315.0	0.28	0.34	0.51	0.62	0.34	0.23	0.23	0.23	0.23
360.0	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.23	0.23

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	0.17
45.0	0.17
90.0	0.23
135.0	0.17
180.0	0.34
225.0	0.06
270.0	0.45
315.0	0.23
360.0	0.17