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NT

Client: NT

LumCAT: 2-3041-LM

Luminaire: 92.70.121.00 LED HOLDER

Report No: 20260126-B008

Ballast type: AC

Test No: 20260126-C008

Voltage(V): 36.940

LampCAT: CITIZEN CLU038 LES14.5

Current(A): 0.712

Lamp flux(lm): 3400.6

Power (W): 26.301

Number of Lamps: 1

PF: 0.000

Length(mm): 65

Width(mm): 65

Phm Type: C

Height(mm): 34

Photometric Results

Lumens(lm): 3275.10, Efficiency(%): 96.31% , Luminous Efficacy(lm/W): 124.52

Central intensity(cd): 6214.022, Maximum intensity(cd): 6214.022

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=36.0

[C90/270]Total=36.0

Field angle(10%Imax): [C0/180]Total=77.6

[C90/270]Total=77.6

Maximum s/h(1/2): C0_180=0.58 C90_270=0.58

Maximum s/h(1/4): C0_180=0.63 C90_270=0.63

Up flux rate of lamp(%): 0.00%

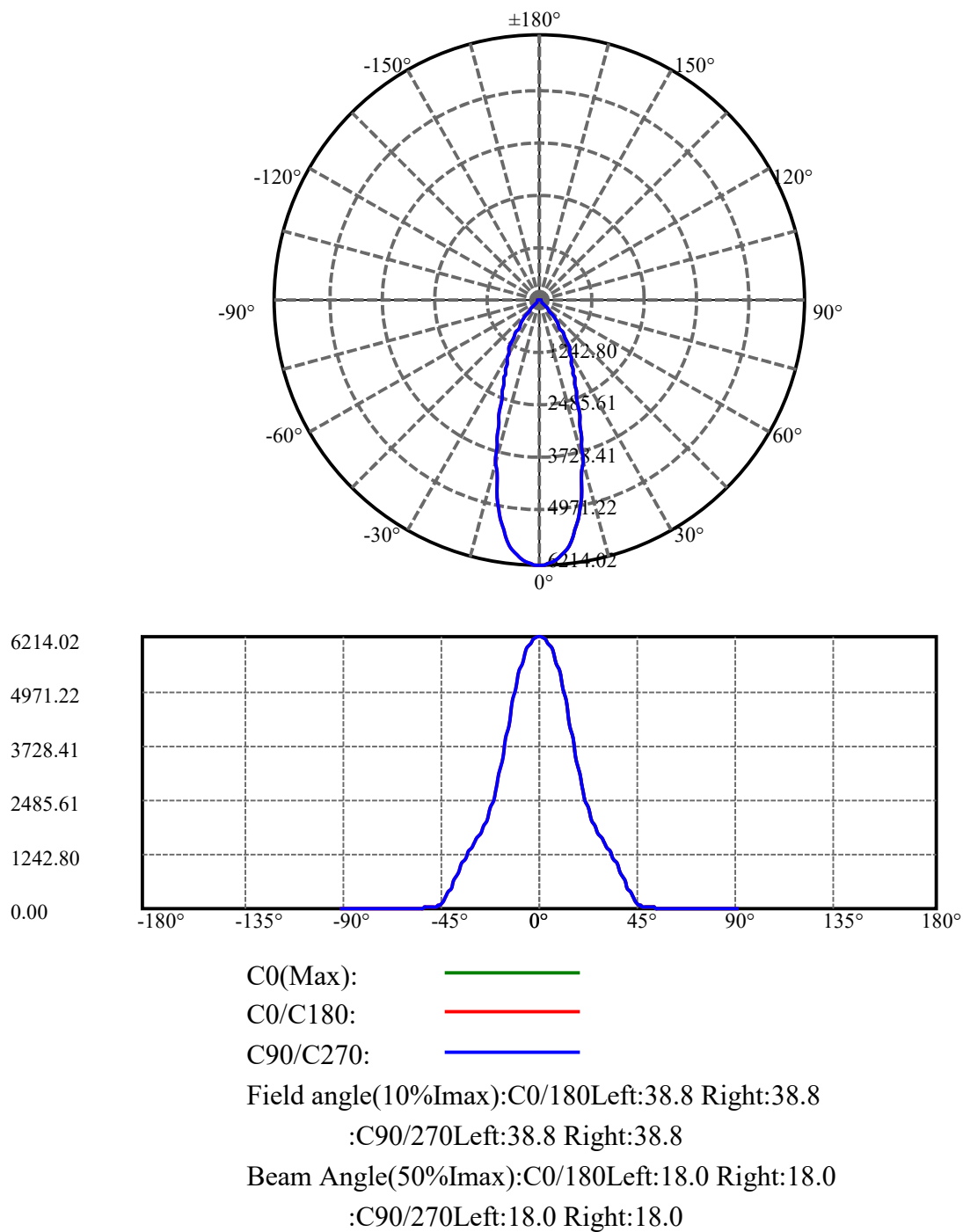
Down flux rate of lamp(%): 96.31%

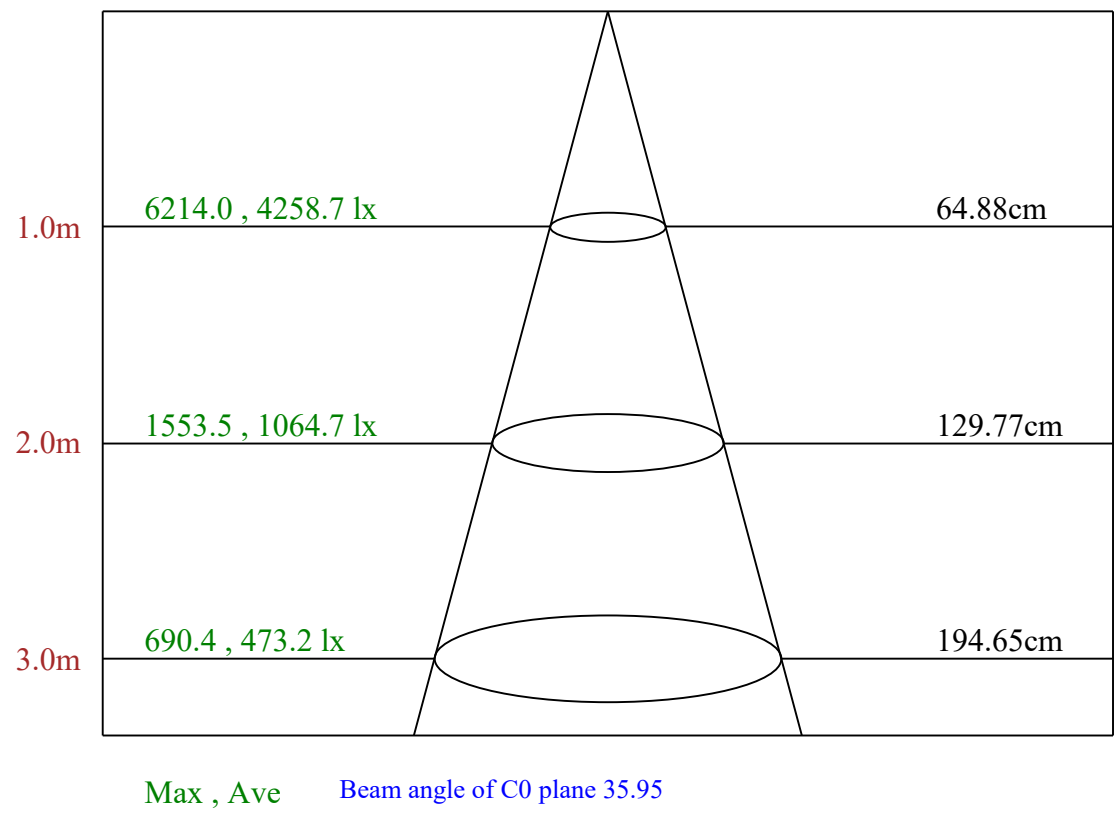
Up flux rate of LUM(%): - -

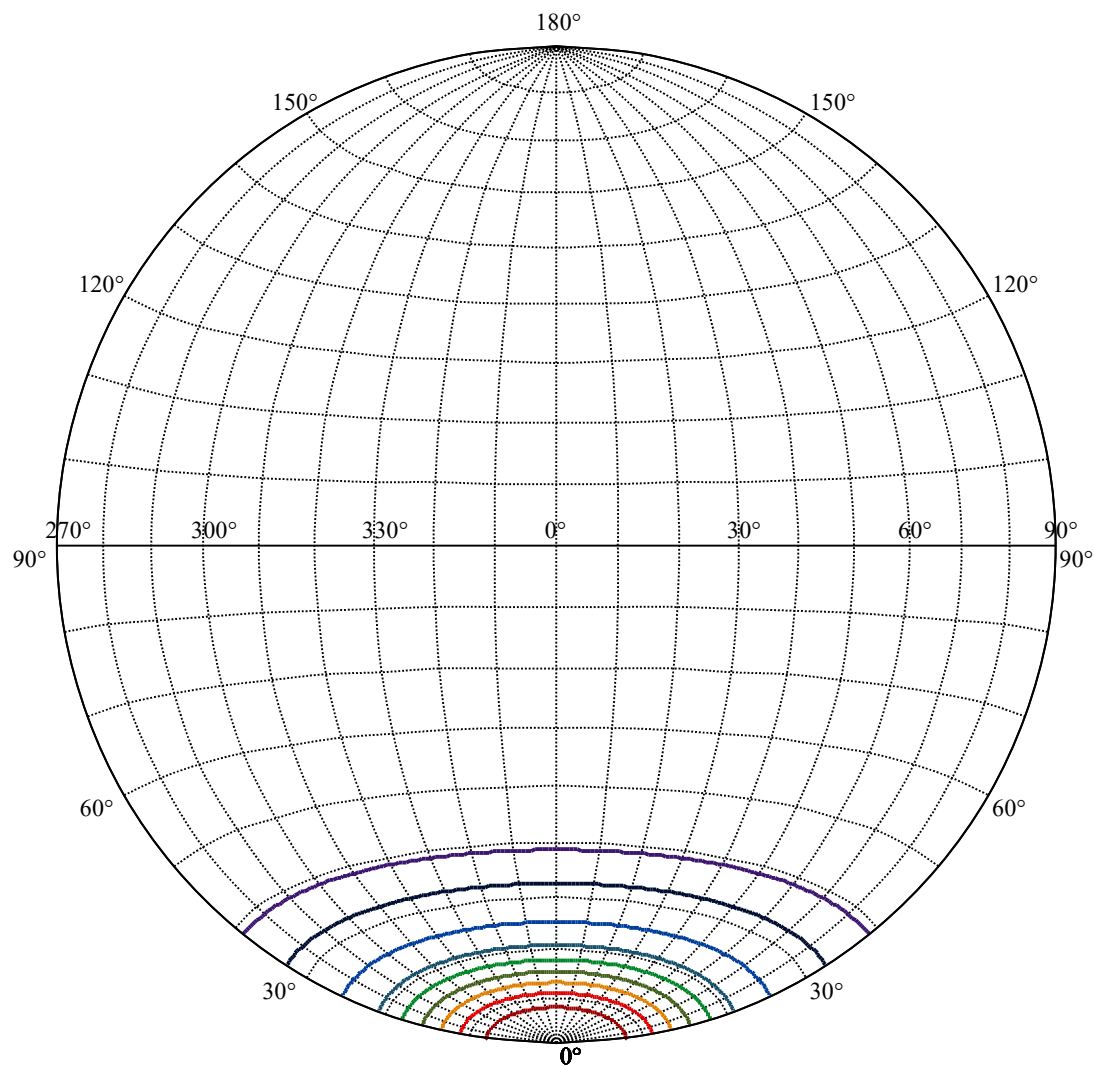
Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.526%





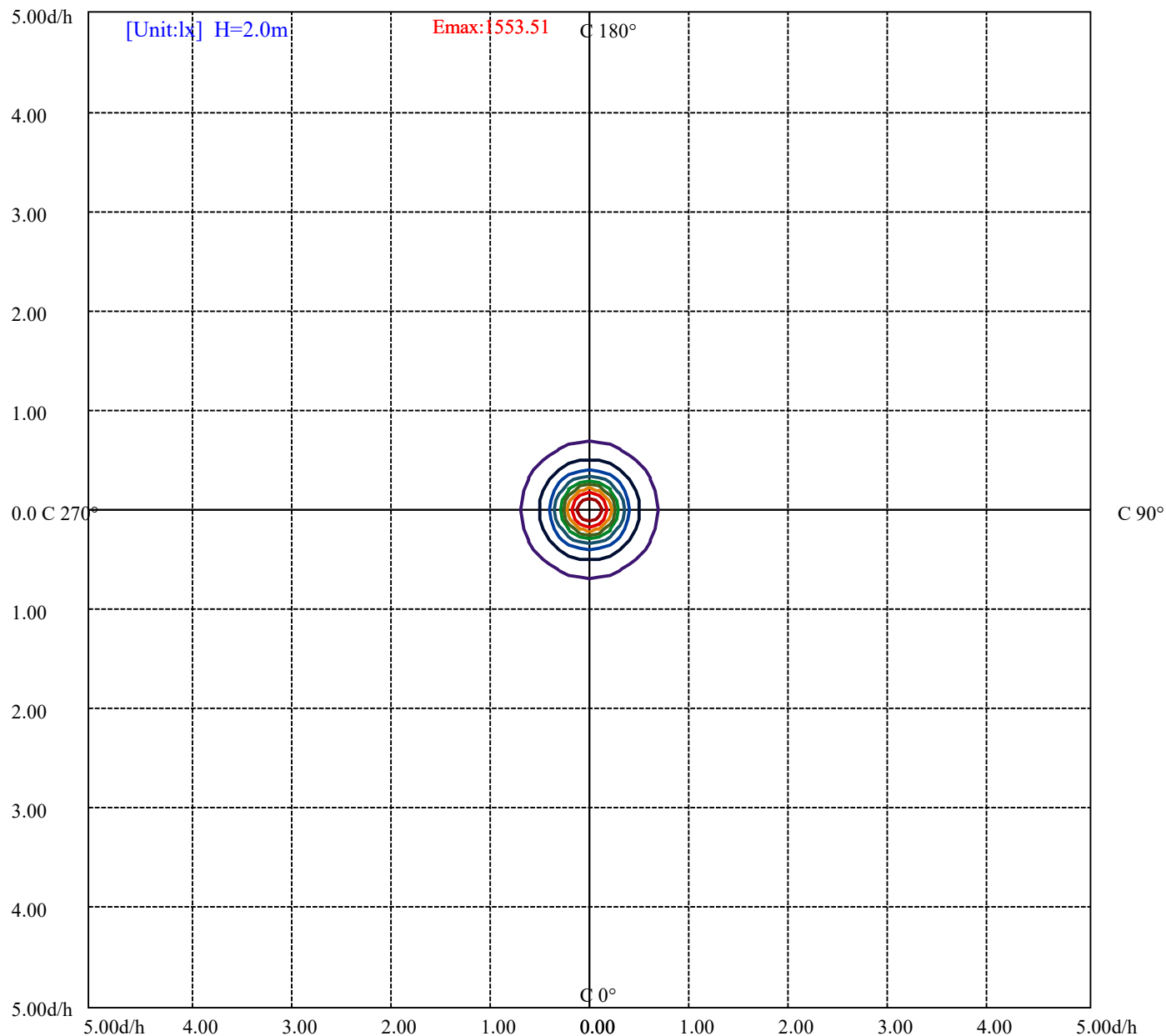


House

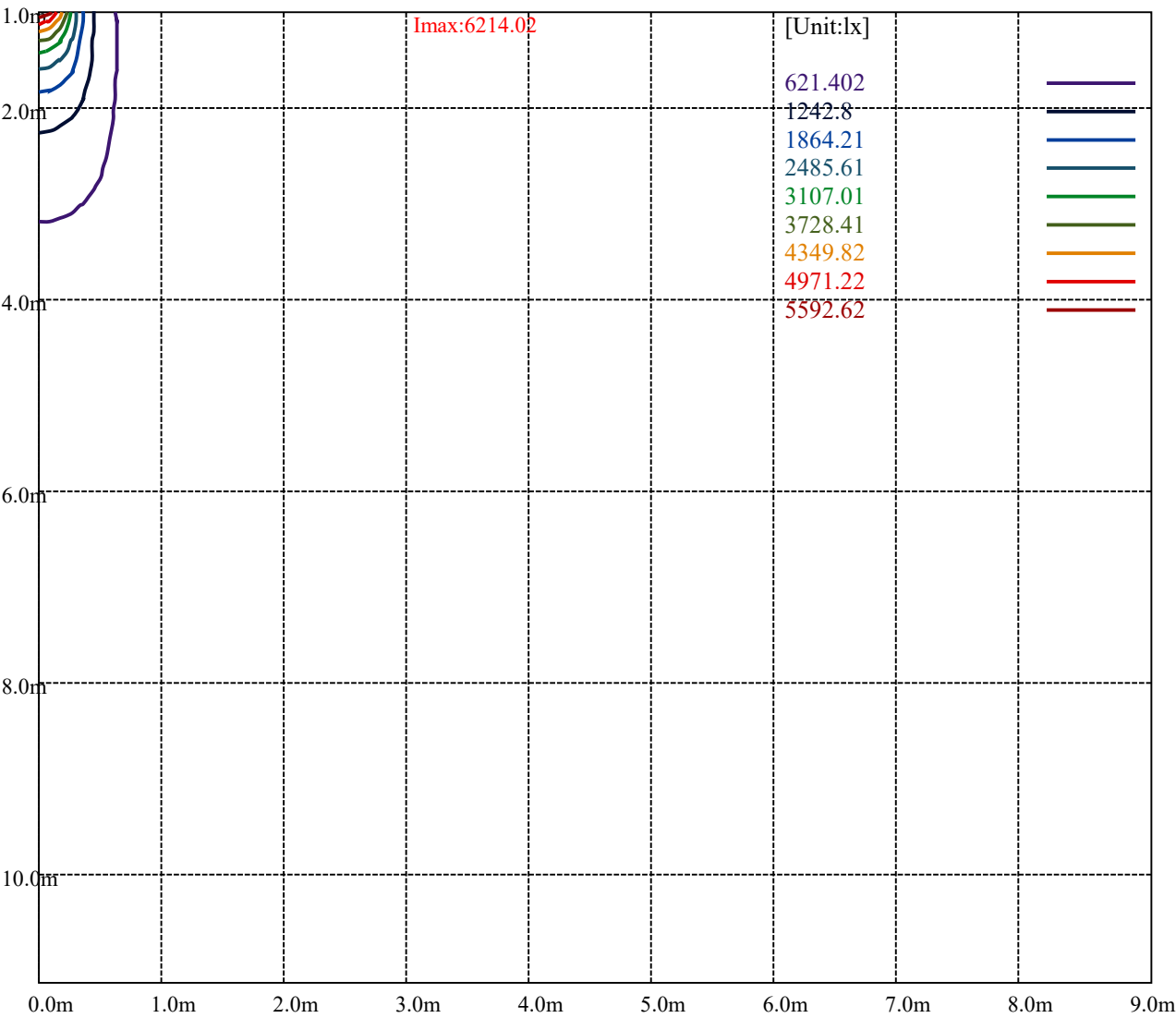
[Unit:cd]

Road

Imax:6214.02	
(10%Imax) 621.402	
(20%Imax) 1242.8	
(30%Imax) 1864.21	
(40%Imax) 2485.61	
(50%Imax) 3107.01	
(60%Imax) 3728.41	
(70%Imax) 4349.82	
(80%Imax) 4971.22	
(90%Imax) 5592.62	



(10%Emax) 155.3505	—
(20%Emax) 310.7	—
(30%Emax) 466.0525	—
(40%Emax) 621.4025	—
(50%Emax) 776.7525	—
(60%Emax) 932.1025	—
(70%Emax) 1087.453	—
(80%Emax) 1242.805	—
(90%Emax) 1398.155	—



Luminance Table

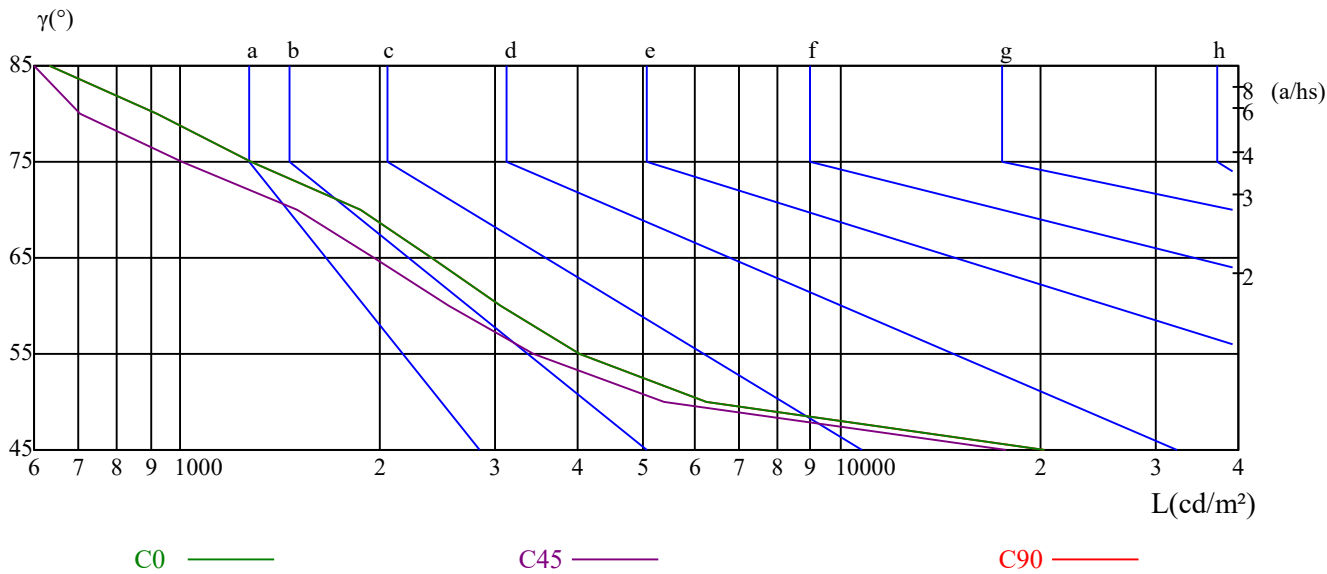
γ	45	50	55	60	65	70	75	80	85
C0	20371	6250	4027	3049	2400	1869	1281	921	632
C45	17834	5392	3421	2547	1969	1502	1005	703	466
C90	20371	6250	4027	3049	2400	1869	1281	921	632

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5092	5092	5092	3781	3781	3781	4411	4411	4411

Glare Table

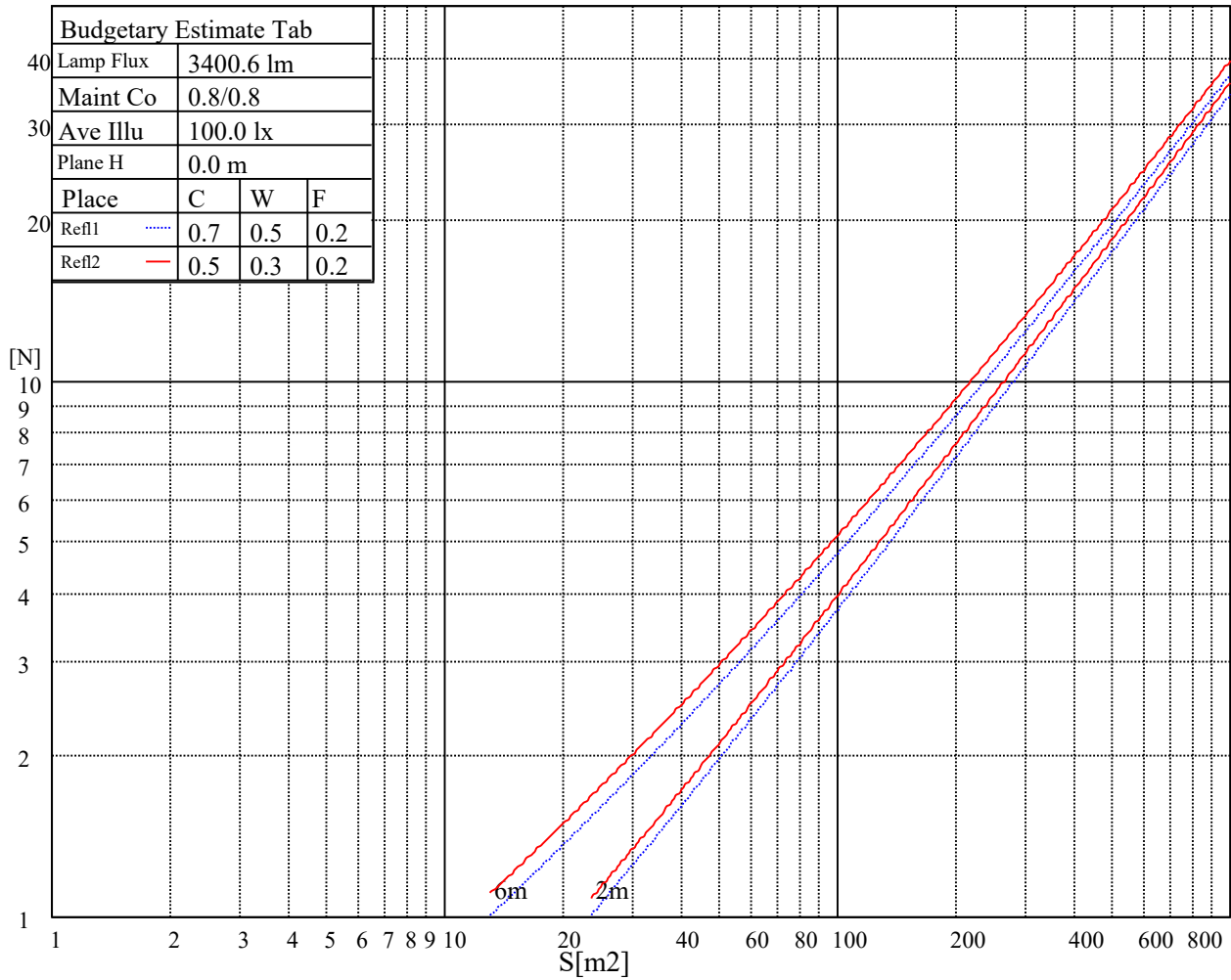
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

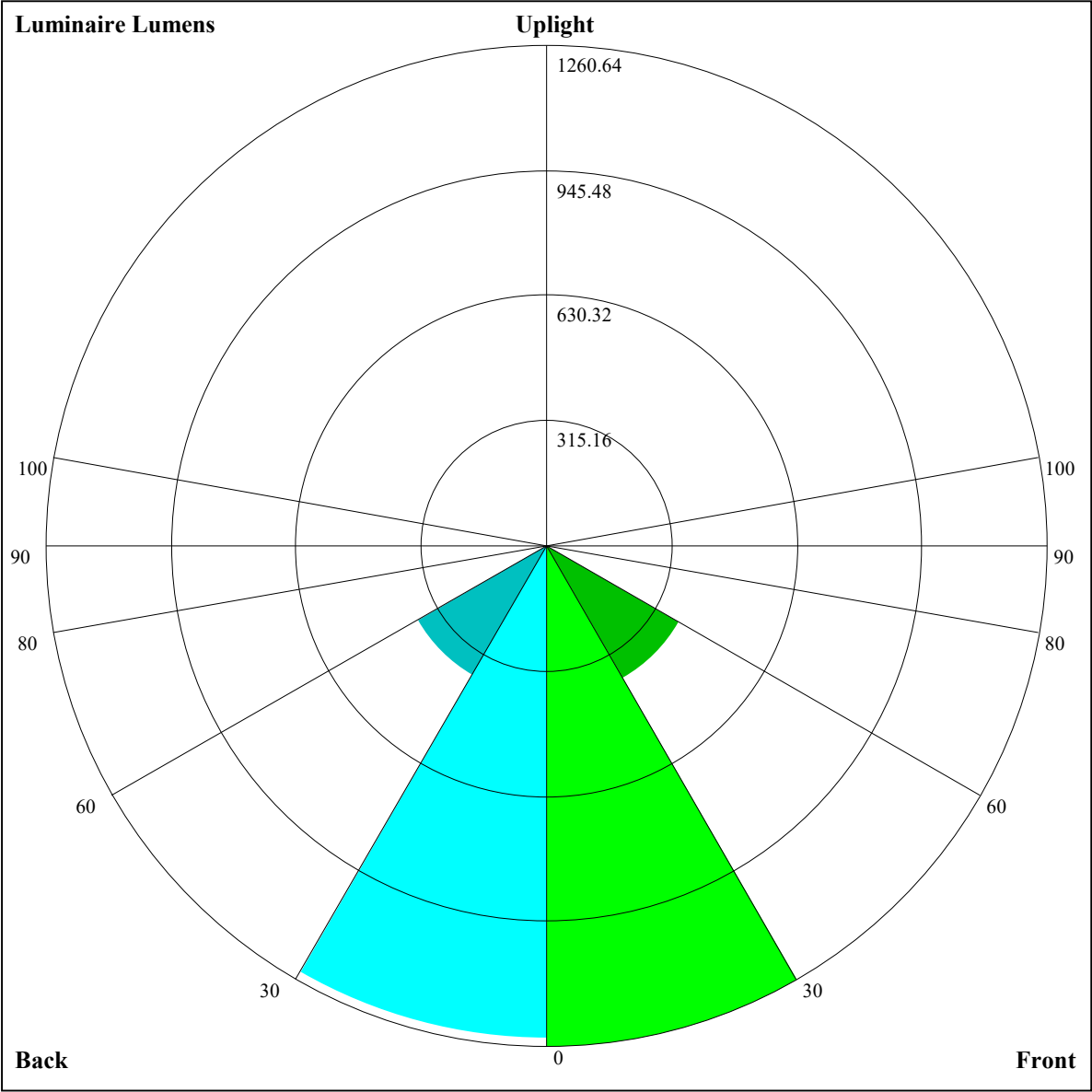


Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	21.10	22.04	21.46	22.35	22.67	21.29	22.23	21.65	22.54	22.86
	3H	20.89	21.73	21.28	22.06	22.41	21.09	21.92	21.47	22.26	22.60
	4H	20.79	21.56	21.19	21.91	22.28	20.98	21.75	21.38	22.11	22.48
	6H	20.70	21.40	21.12	21.78	22.18	20.89	21.59	21.31	21.97	22.37
	8H	20.62	21.29	21.04	21.68	22.08	20.82	21.49	21.24	21.87	22.28
	12H	20.55	21.18	20.98	21.58	22.00	20.74	21.38	21.17	21.77	22.19
4H	2H	20.78	21.55	21.19	21.91	22.28	20.97	21.74	21.37	22.10	22.46
	3H	20.54	21.18	20.97	21.58	21.99	20.73	21.37	21.16	21.77	22.19
	4H	20.46	21.01	20.90	21.44	21.89	20.66	21.21	21.10	21.63	22.08
	6H	20.32	20.80	20.79	21.26	21.71	20.51	21.00	20.99	21.45	21.91
	8H	20.26	20.71	20.74	21.17	21.64	20.45	20.90	20.94	21.36	21.84
	12H	20.20	20.62	20.69	21.07	21.59	20.40	20.81	20.89	21.27	21.79
8H	4H	20.25	20.70	20.74	21.16	21.64	20.45	20.90	20.94	21.36	21.83
	6H	20.10	20.46	20.60	20.94	21.46	20.29	20.66	20.80	21.14	21.65
	8H	20.08	20.39	20.61	20.91	21.41	20.28	20.58	20.81	21.11	21.60
	12H	20.02	20.26	20.57	20.78	21.30	20.22	20.45	20.77	20.97	21.50
12H	4H	20.20	20.61	20.69	21.07	21.59	20.39	20.81	20.88	21.26	21.78
	6H	20.08	20.38	20.61	20.91	21.40	20.27	20.58	20.81	21.10	21.60
	8H	20.02	20.26	20.57	20.77	21.30	20.22	20.45	20.76	20.97	21.49
Variation with the observer position at spacings:											
S = 1.0H		4.9/-14.1					4.9/-14.1				
S = 1.5H		7.7/-14.4					7.7/-14.4				
S = 2.0H		9.7/-14.5					9.7/-14.5				
Standard tables:		BK0					BK0				
Uncorrected UGR		1.6					1.6				

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	1.02	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	0.96	0.95	0.94	0.93	0.93	0.91
2	1.00	0.97	0.94	0.99	0.95	0.93	0.96	0.93	0.91	0.93	0.91	0.89	0.90	0.88	0.87	0.85
3	0.94	0.90	0.86	0.93	0.89	0.86	0.91	0.87	0.84	0.88	0.85	0.83	0.86	0.84	0.82	0.80
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	0.67
7	0.75	0.70	0.66	0.75	0.70	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.64
8	0.71	0.66	0.63	0.71	0.66	0.62	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.60
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	0.57
10	0.65	0.60	0.56	0.64	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=1260.64,FM=387.28,FH=6.87,FVH=0.89

BL=1241.57,BM=375.6,BH=7.1,BVH=0.95

UL=0,UH=0

BUG Rating:B3-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	6221.76	6218.38	6187.44	6168.88	6114.32	6008.57	5916.32	5802.13	5584.44
45.0	6204.88	6201.51	6198.13	6179.57	6134.01	6053.01	5996.19	5932.63	5787.51
90.0	6225.13	6196.44	6147.51	6107.57	6032.19	5918.01	5794.26	5643.51	5553.51
135.0	6204.32	6208.26	6188.01	6159.32	6101.94	6061.44	5959.63	5843.76	5712.13
180.0	6221.76	6226.82	6203.76	6177.32	6123.32	6089.57	5990.57	5889.32	5757.69
225.0	6204.88	6176.19	6117.69	6045.13	5967.51	5845.44	5653.63	5557.44	5365.63
270.0	6225.13	6228.51	6203.76	6160.44	6094.07	6008.57	5942.76	5793.69	5633.94
315.0	6204.32	6200.38	6158.76	6096.88	6055.82	5961.88	5836.44	5687.94	5471.38
360.0	6221.76	6218.38	6187.44	6168.88	6114.32	6008.57	5916.32	5802.13	5584.44
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5484.88	5292.51	5037.13	4784.01	4453.26	4273.26	3864.88	3514.44	3354.13
45.0	5652.51	5456.76	5268.88	5122.07	4827.88	4450.44	4279.44	3933.51	3644.94
90.0	5357.76	5138.38	4911.13	4598.94	4333.44	4064.57	3733.26	3565.63	3309.69
135.0	5551.26	5317.26	5186.19	4849.26	4690.07	4356.51	4069.07	3782.19	3506.01
180.0	5540.57	5458.44	5115.32	4855.44	4566.32	4273.26	4098.32	3747.88	3455.38
225.0	5126.01	4861.63	4548.88	4263.13	3958.82	3597.69	3485.76	3169.07	2915.38
270.0	5439.32	5214.88	5072.57	4760.94	4382.38	4211.38	3925.63	3579.69	3302.94
315.0	5343.69	5127.13	4886.38	4626.51	4299.13	4124.76	3845.76	3400.26	3239.38
360.0	5484.88	5292.51	5037.13	4784.01	4453.26	4273.26	3864.88	3514.44	3354.13
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	3094.82	2850.69	2631.32	2402.38	2298.88	2152.63	2023.26	1906.82	1791.51
45.0	3369.88	3105.51	2956.44	2686.44	2486.19	2310.13	2141.38	2059.26	1905.13
90.0	3067.26	2843.38	2605.44	2499.13	2339.94	2111.57	2062.63	1927.07	1866.88
135.0	3346.82	3040.82	2817.51	2608.82	2422.07	2319.69	2083.44	1960.82	1893.32
180.0	3176.38	2925.51	2784.32	2527.26	2342.19	2179.63	2040.69	1965.32	1789.82
225.0	2693.19	2432.19	2316.32	2162.19	2015.94	1880.94	1742.57	1682.38	1555.82
270.0	3043.63	2899.63	2634.69	2443.44	2280.88	2138.01	2054.76	1912.44	1806.69
315.0	2985.13	2757.88	2549.19	2326.44	2226.88	2078.94	1949.57	1840.44	1721.19
360.0	3094.82	2850.69	2631.32	2402.38	2298.88	2152.63	2023.26	1906.82	1791.51
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1738.63	1656.51	1577.76	1484.38	1414.63	1370.76	1103.63	1080.23	1080.23
45.0	1798.26	1699.82	1598.57	1519.26	1443.88	1368.51	1325.76	1232.94	1142.38
90.0	1740.32	1644.13	1599.13	1524.88	1453.44	1380.32	1255.44	1095.58	1095.58
135.0	1772.94	1686.32	1607.01	1529.38	1483.82	1397.76	1325.76	1236.32	1132.82
180.0	1699.26	1651.44	1559.19	1480.44	1409.01	1338.13	1290.88	1175.01	1069.26
225.0	1464.69	1418.01	1345.44	1276.26	1085.06	1085.06	1027.18	927.90	797.91
270.0	1711.63	1607.57	1524.32	1447.82	1379.19	1337.01	1243.63	1149.69	1047.32
315.0	1669.44	1550.76	1503.51	1415.19	1346.01	1270.07	1079.38	1079.38	1012.67
360.0	1738.63	1656.51	1577.76	1484.38	1414.63	1370.76	1103.63	1080.23	1080.23
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	964.86	776.93	658.24	589.11	477.84	374.40	278.49	180.34	136.80
45.0	1042.82	935.94	800.94	735.69	581.01	516.88	391.44	299.19	299.19
90.0	951.19	875.03	749.87	624.49	502.82	370.07	310.16	221.18	114.24
135.0	1065.88	926.38	758.19	687.88	551.76	444.32	339.13	339.13	339.13
180.0	958.44	840.88	775.63	638.38	484.26	421.26	306.51	306.51	210.49
225.0	730.63	622.63	515.25	412.93	299.81	249.64	174.04	113.79	67.73
270.0	934.82	863.38	719.94	601.82	484.82	354.88	316.07	316.07	113.18
315.0	848.14	708.36	637.26	525.15	420.86	318.83	211.33	166.67	82.97
360.0	964.86	776.93	658.24	589.11	477.84	374.40	278.49	180.34	136.80

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	81.79	54.62	44.10	36.11	31.95	25.99	19.74	18.84	17.61
45.0	209.03	100.69	73.63	60.02	54.39	44.33	37.46	31.84	27.51
90.0	86.06	58.89	48.60	43.43	36.00	32.74	28.01	25.20	23.68
135.0	99.56	58.61	46.07	36.06	29.98	24.24	19.63	17.66	15.69
180.0	84.66	53.27	41.68	35.49	31.50	24.41	19.91	17.55	16.48
225.0	50.79	46.52	37.46	30.60	27.45	23.34	20.48	18.34	16.43
270.0	68.29	52.82	38.53	35.61	29.14	24.36	20.70	19.18	18.73
315.0	61.37	43.37	36.39	30.60	25.76	21.04	19.63	18.73	17.83
360.0	81.79	54.62	44.10	36.11	31.95	25.99	19.74	18.84	17.61
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	16.43	15.30	14.01	13.39	12.49	11.53	10.74	9.90	9.39
45.0	25.54	21.83	19.07	18.00	16.31	14.51	13.28	11.87	11.25
90.0	22.05	21.21	19.46	18.73	17.10	15.92	15.02	14.01	12.99
135.0	15.13	14.46	13.78	13.33	12.94	12.15	11.81	11.31	11.03
180.0	15.53	14.96	13.78	12.66	12.21	11.25	10.97	10.01	9.51
225.0	16.09	15.08	14.23	13.39	12.38	11.59	10.80	10.01	9.73
270.0	17.66	16.93	16.09	15.19	14.18	13.28	12.49	12.09	11.19
315.0	17.21	16.65	16.26	15.41	14.18	13.73	13.11	12.77	11.93
360.0	16.43	15.30	14.01	13.39	12.49	11.53	10.74	9.90	9.39
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	8.78	8.10	7.37	6.92	6.36	5.85	5.40	5.01	4.50
45.0	9.90	8.83	7.99	7.09	6.69	6.08	5.63	5.29	4.89
90.0	12.54	11.76	11.08	10.41	9.62	9.23	8.33	7.54	7.20
135.0	10.74	10.35	10.18	9.68	9.45	9.11	8.78	8.16	7.54
180.0	9.23	8.72	8.27	7.88	7.48	7.26	6.75	6.41	6.02
225.0	9.17	8.61	8.10	7.59	7.31	6.81	6.19	5.68	5.23
270.0	10.63	10.07	9.51	9.23	8.61	8.10	7.48	6.92	6.64
315.0	11.19	10.74	10.24	9.84	9.39	8.72	8.27	7.65	6.98
360.0	8.78	8.10	7.37	6.92	6.36	5.85	5.40	5.01	4.50
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	4.22	3.88	3.71	3.43	3.21	3.09	2.93	2.53	2.42
45.0	4.78	4.39	3.94	3.83	3.43	3.26	3.04	2.87	2.76
90.0	6.41	5.68	5.01	4.28	3.94	3.49	3.09	2.87	2.64
135.0	7.03	6.75	6.08	5.34	4.61	3.88	3.60	3.21	3.04
180.0	5.51	5.06	4.61	4.11	3.88	3.43	3.15	2.93	2.70
225.0	4.95	4.61	4.16	3.94	3.60	3.38	3.21	2.98	2.87
270.0	5.68	5.18	4.78	4.11	3.60	3.21	2.93	2.81	2.53
315.0	6.13	5.51	4.78	4.05	3.38	3.15	2.93	2.70	2.48
360.0	4.22	3.88	3.71	3.43	3.21	3.09	2.93	2.53	2.42
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	2.25	2.08	1.80	1.63	1.52	1.29	1.18	1.07	0.96
45.0	2.53	2.31	2.25	1.97	1.80	1.69	1.46	1.35	1.18
90.0	2.48	2.19	2.03	1.80	1.63	1.46	1.35	1.35	1.24
135.0	2.81	2.53	2.25	2.03	1.86	1.63	1.52	1.46	1.35
180.0	2.64	2.31	2.14	1.86	1.69	1.52	1.35	1.24	1.13
225.0	2.70	2.31	2.14	1.91	1.69	1.46	1.24	1.13	0.96
270.0	2.31	2.19	1.86	1.69	1.46	1.24	1.13	0.96	0.84
315.0	2.25	2.08	1.80	1.58	1.35	1.24	1.13	0.96	0.79
360.0	2.25	2.08	1.80	1.63	1.52	1.29	1.18	1.07	0.96

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	0.90
45.0	1.07
90.0	1.18
135.0	1.29
180.0	1.07
225.0	0.79
270.0	0.67
315.0	0.73
360.0	0.90