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Nata

Client: NT

LumCAT: 2-3060-LM

Luminaire: 92.70.121.00 LED HOLDER

Report No: 20260122-B014

Ballast type: DC

Test No: 20260122-C014

Voltage(V): 36.930

LampCAT: CITIZEN CLU038 LES14.5

Current(A): 0.711

Lamp flux(lm): 3690.4

Power (W): 26.250

Number of Lamps: 1

PF: 0.000

Length(mm): 69

Width(mm): 69

Phm Type: C

Height(mm): 35

Photometric Results

Lumens(lm): 3598.05, Efficiency(%): 97.50% , Luminous Efficacy(lm/W): 137.07

Central intensity(cd): 7339.527, Maximum intensity(cd): 7339.527

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=37.0

[C90/270]Total=37.0

Field angle(10%Imax): [C0/180]Total=76.0

[C90/270]Total=76.0

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%

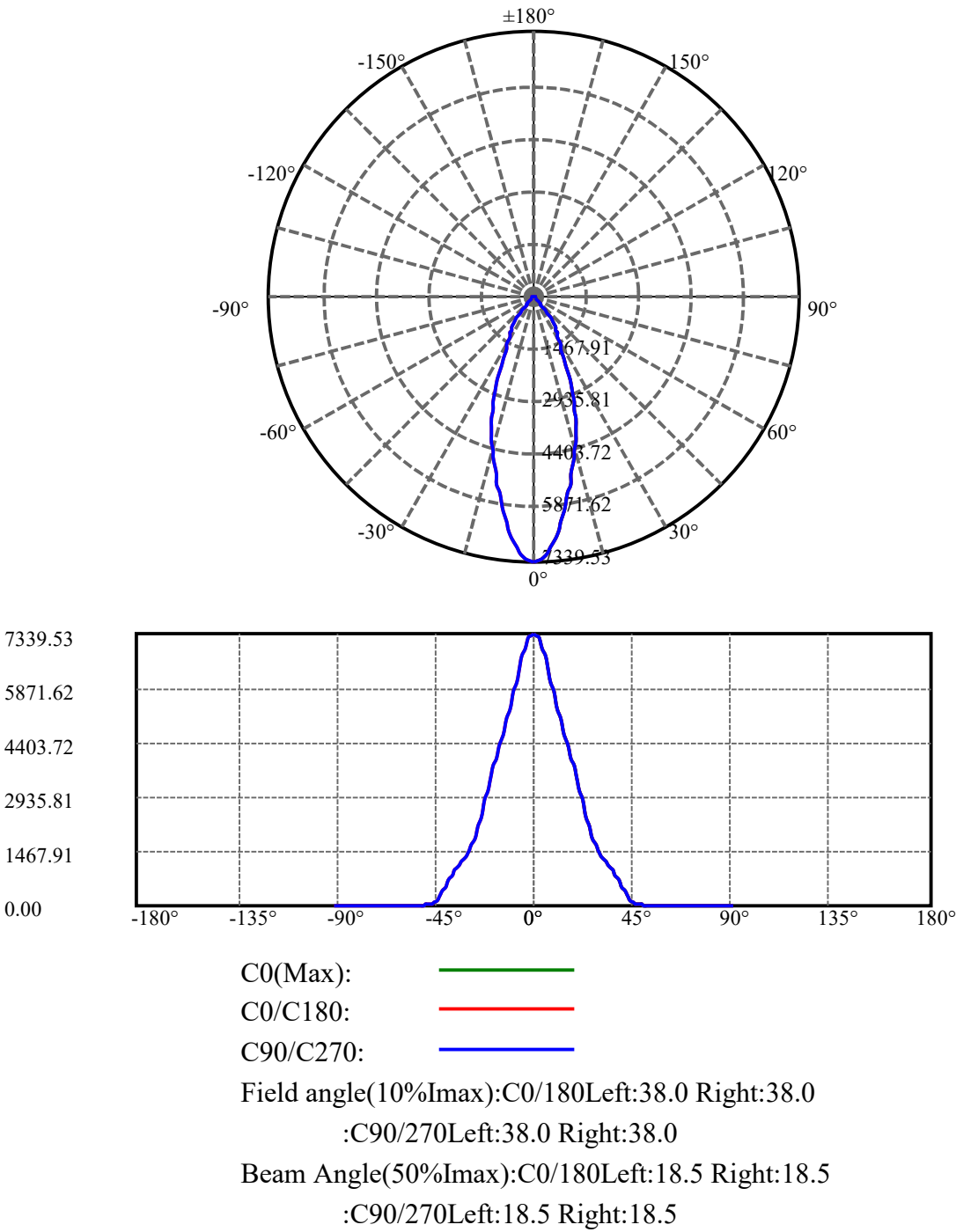
Down flux rate of lamp(%): 97.50%

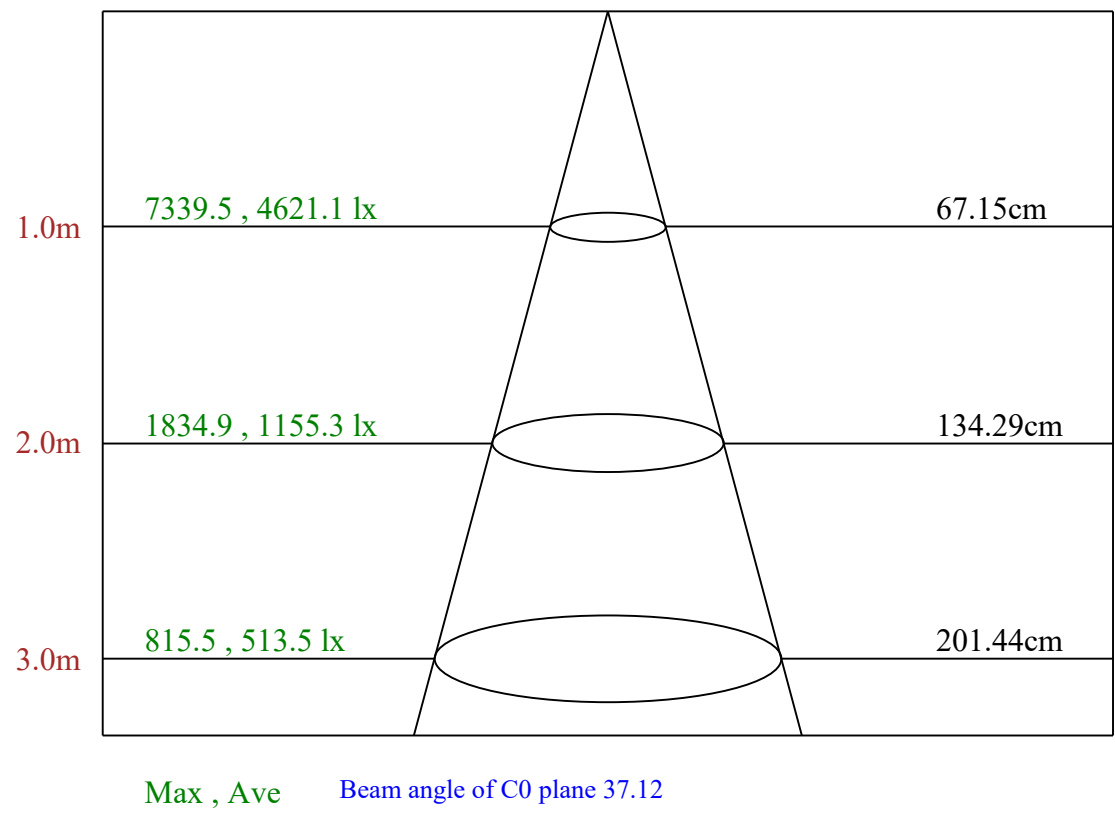
Up flux rate of LUM(%): - -

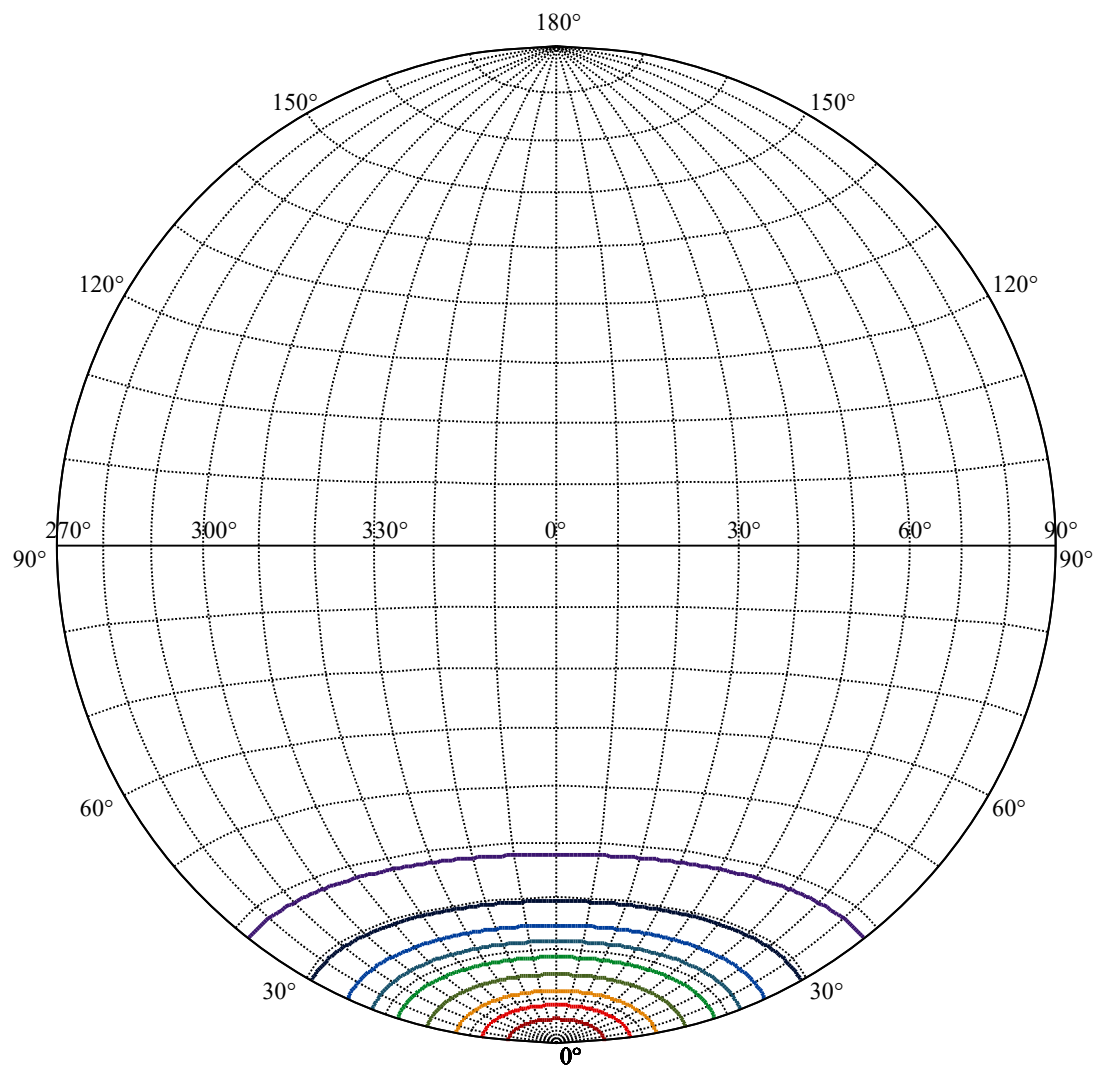
Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.135%





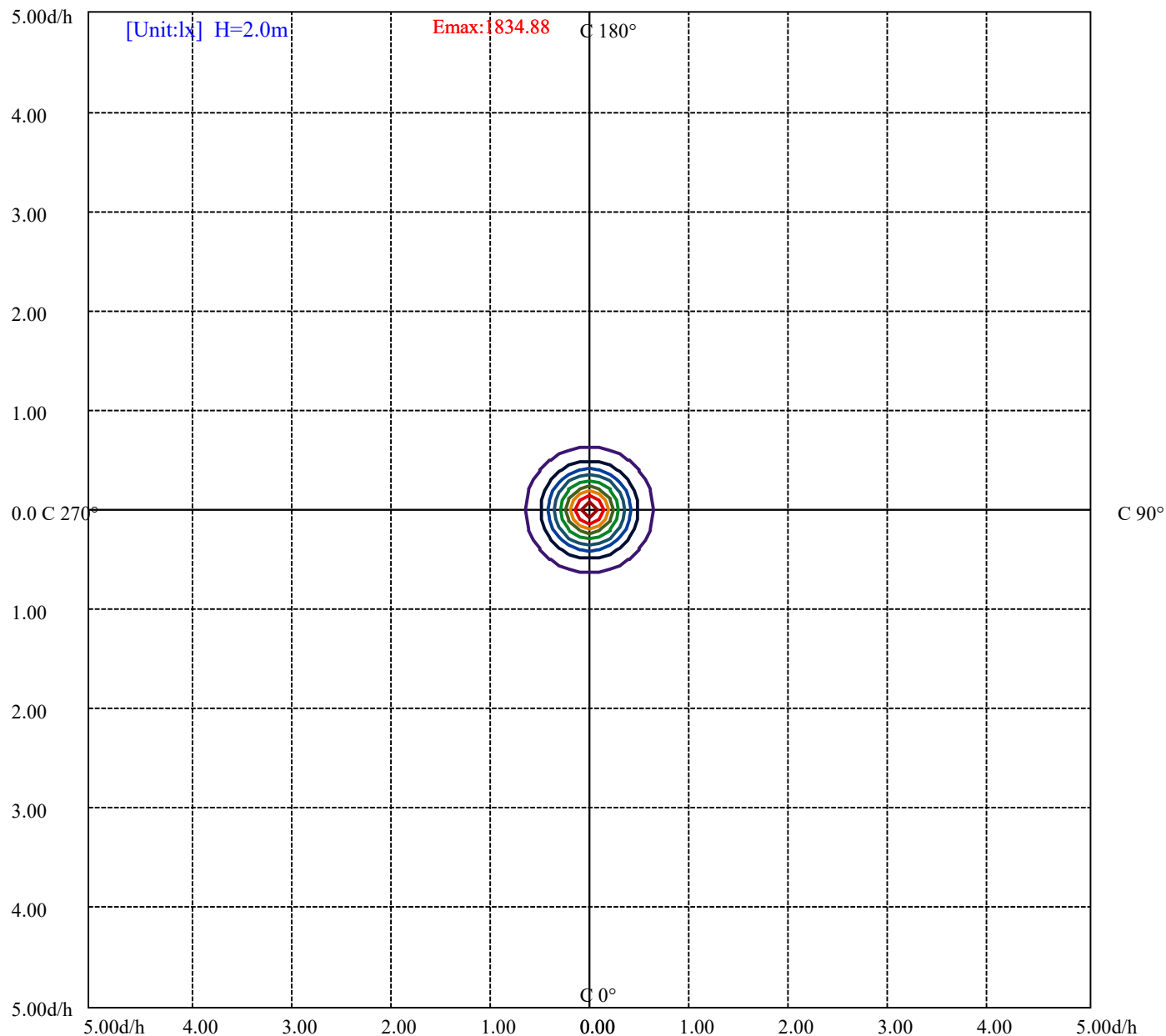


House

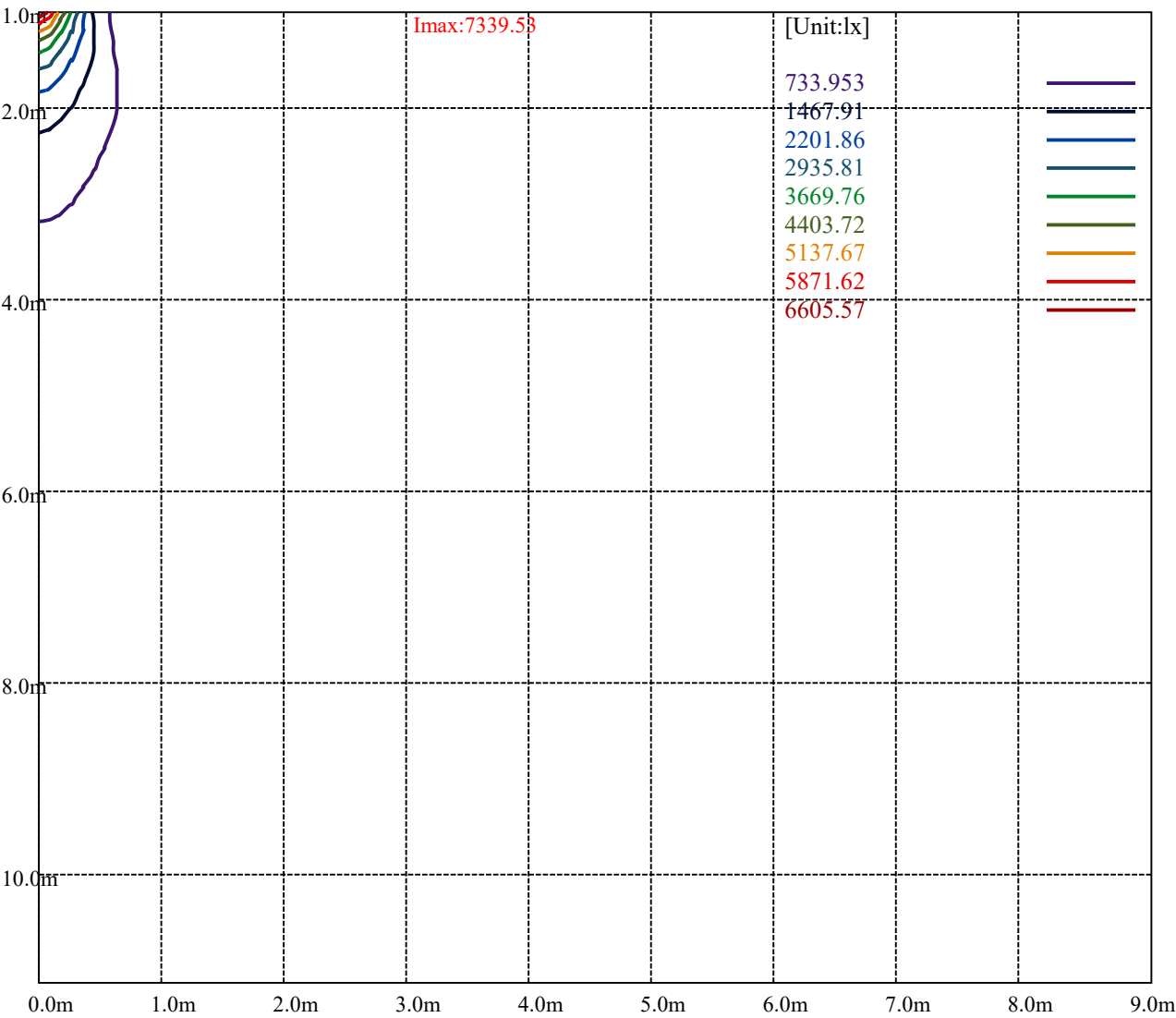
[Unit:cd]

Road

Imax:7339.53	
(10%Imax) 733.953	
(20%Imax) 1467.91	
(30%Imax) 2201.86	
(40%Imax) 2935.81	
(50%Imax) 3669.76	
(60%Imax) 4403.72	
(70%Imax) 5137.67	
(80%Imax) 5871.62	
(90%Imax) 6605.57	



(10%Emax)	183.488	
(20%Emax)	366.975	
(30%Emax)	550.465	
(40%Emax)	733.9525	
(50%Emax)	917.44	
(60%Emax)	1100.927	
(70%Emax)	1284.417	
(80%Emax)	1467.905	
(90%Emax)	1651.392	



Luminance Table

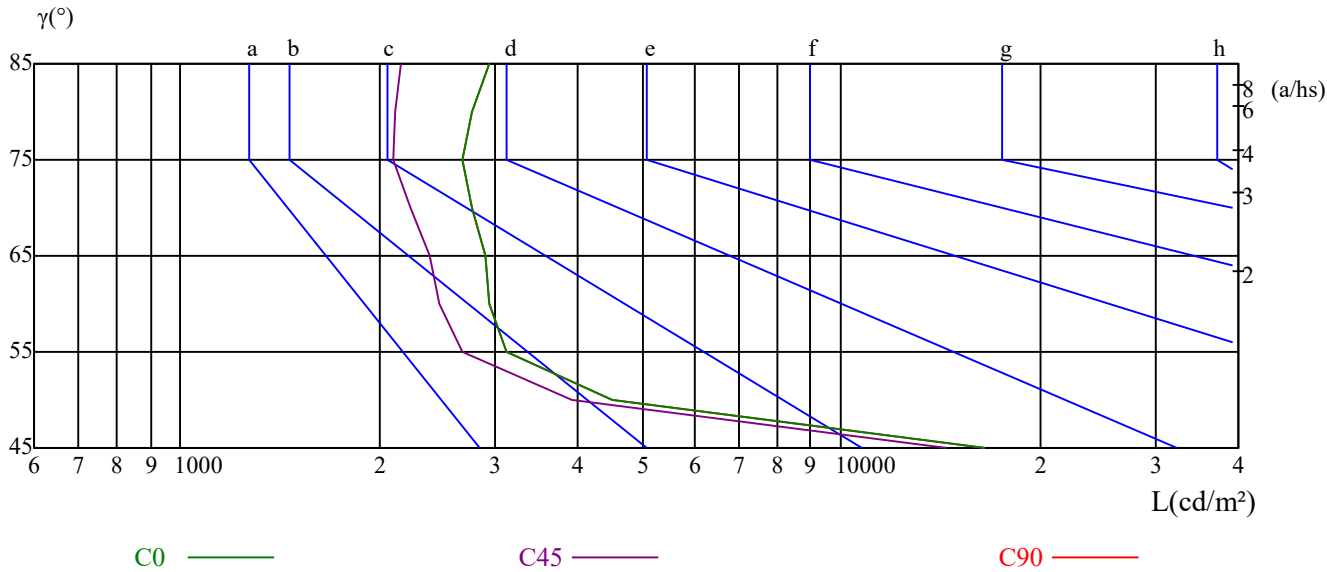
γ	45	50	55	60	65	70	75	80	85
C0	16507	4520	3127	2944	2891	2762	2675	2771	2927
C45	14488	3910	2664	2466	2377	2225	2105	2119	2163
C90	16507	4520	3127	2944	2891	2762	2675	2771	2927

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6035	6035	6035	7740	7740	7740	19898	19898	19898

Glare Table

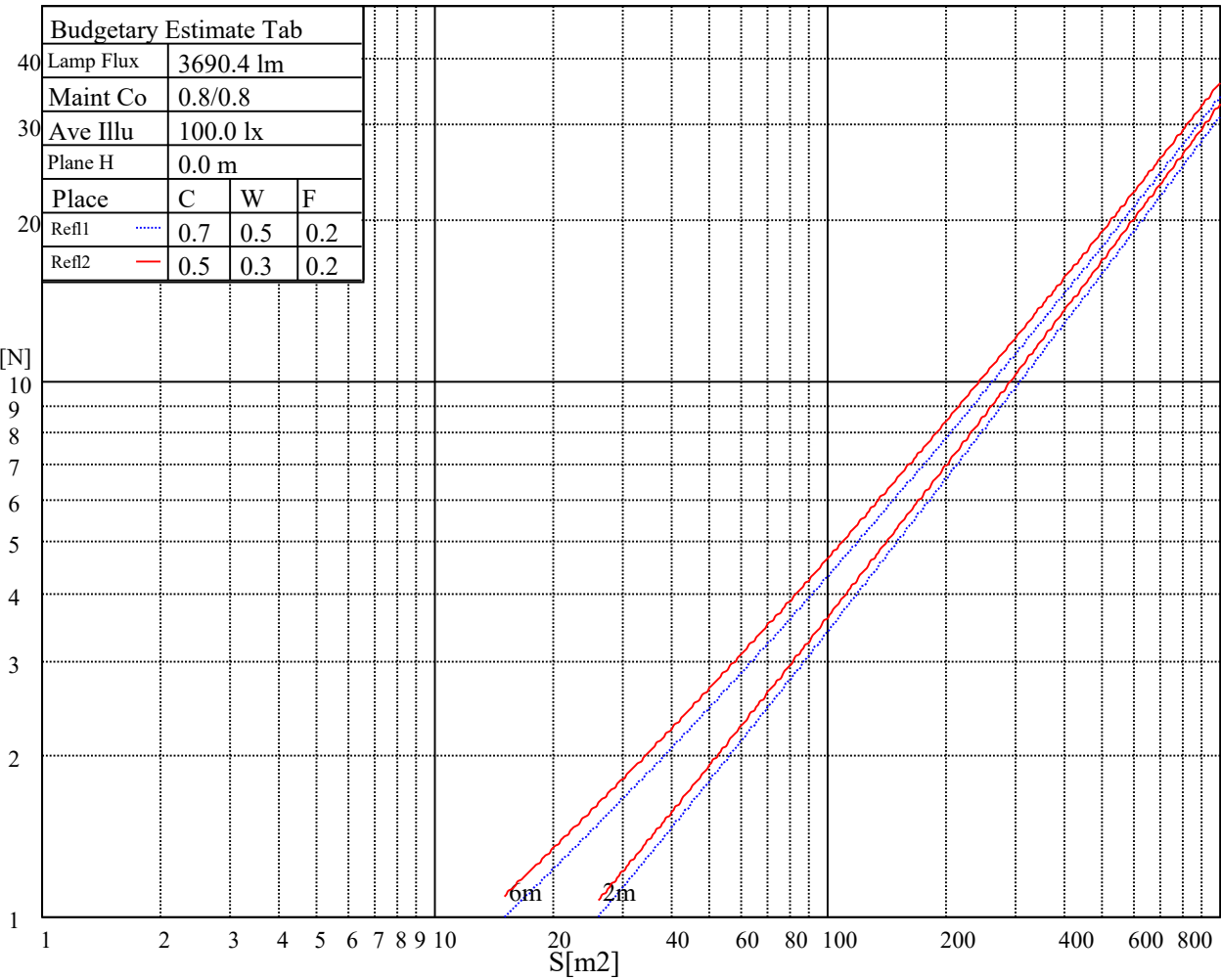
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

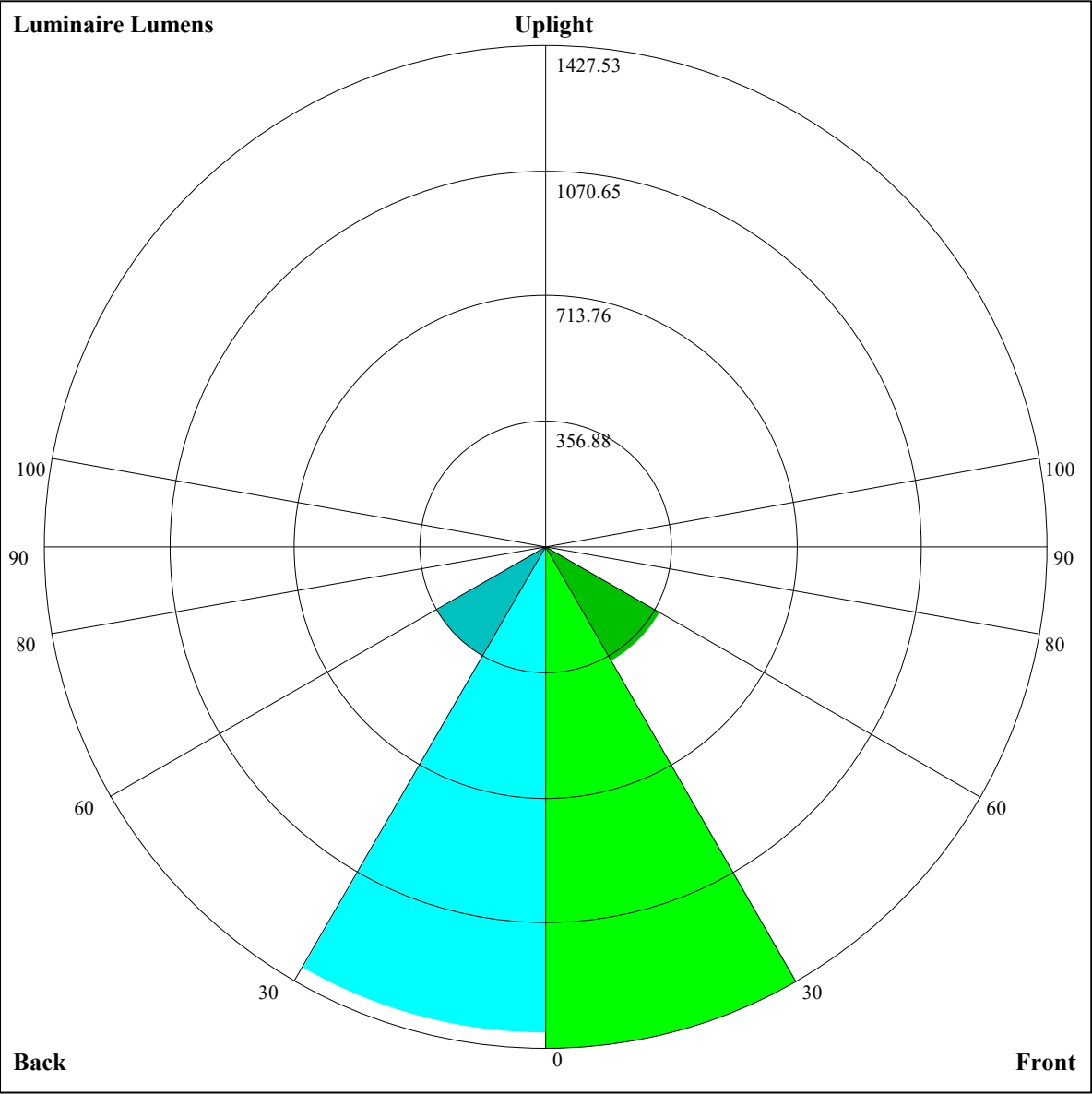


Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	20.80	21.75	21.17	22.06	22.37	20.48	21.42	20.84	21.73	22.05
	3H	20.61	21.45	21.00	21.79	22.13	20.29	21.12	20.67	21.46	21.81
	4H	20.52	21.30	20.92	21.65	22.02	20.20	20.97	20.60	21.32	21.69
	6H	20.46	21.16	20.87	21.54	21.94	20.13	20.84	20.55	21.22	21.62
	8H	20.39	21.07	20.82	21.45	21.86	20.08	20.75	20.50	21.13	21.54
	12H	20.34	20.98	20.77	21.38	21.79	20.03	20.66	20.45	21.06	21.48
4H	2H	20.49	21.26	20.89	21.62	21.98	20.16	20.94	20.56	21.29	21.66
	3H	20.27	20.92	20.70	21.31	21.73	19.94	20.59	20.37	20.99	21.40
	4H	20.22	20.77	20.66	21.20	21.65	19.89	20.45	20.33	20.87	21.32
	6H	20.11	20.60	20.59	21.06	21.51	19.80	20.29	20.27	20.74	21.19
	8H	20.08	20.54	20.57	21.00	21.47	19.77	20.22	20.26	20.68	21.16
	12H	20.07	20.49	20.56	20.94	21.46	19.76	20.18	20.25	20.63	21.15
8H	4H	20.02	20.48	20.51	20.94	21.41	19.70	20.16	20.19	20.62	21.09
	6H	19.92	20.30	20.43	20.78	21.29	19.61	19.98	20.12	20.46	20.98
	8H	19.95	20.26	20.49	20.79	21.29	19.65	19.96	20.18	20.48	20.98
	12H	19.96	20.20	20.51	20.72	21.24	19.67	19.90	20.21	20.42	20.94
12H	4H	19.97	20.39	20.46	20.84	21.37	19.65	20.07	20.14	20.52	21.04
	6H	19.92	20.23	20.45	20.75	21.25	19.60	19.91	20.14	20.44	20.94
	8H	19.92	20.15	20.46	20.67	21.19	19.61	19.85	20.16	20.37	20.89
Variation with the observer position at spacings:											
S = 1.0H		4.7/-12.0					4.7/-12.0				
S = 1.5H		7.4/-10.5					7.4/-10.5				
S = 2.0H		9.3/-9.4					9.3/-9.4				
Standard tables:		BK0					BK0				
Uncorrected UGR		1.0					1.0				

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	1.16	1.16	1.16	1.13	1.13	1.13	1.08	1.08	1.08	1.04	1.04	1.04	0.99	0.99	0.99	0.97
1	1.08	1.06	1.04	1.06	1.04	1.02	1.02	1.01	0.99	0.99	0.98	0.96	0.95	0.94	0.94	0.92
2	1.02	0.98	0.95	1.00	0.97	0.94	0.97	0.94	0.92	0.94	0.92	0.90	0.91	0.90	0.88	0.86
3	0.96	0.91	0.88	0.94	0.90	0.87	0.92	0.88	0.85	0.89	0.87	0.84	0.87	0.85	0.83	0.81
4	0.90	0.85	0.81	0.89	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.77
5	0.85	0.80	0.76	0.84	0.79	0.76	0.83	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.74	0.72
6	0.81	0.75	0.71	0.80	0.75	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.69
7	0.76	0.71	0.67	0.76	0.71	0.67	0.75	0.70	0.67	0.74	0.70	0.67	0.72	0.69	0.66	0.65
8	0.73	0.67	0.64	0.72	0.67	0.64	0.71	0.67	0.63	0.70	0.66	0.63	0.69	0.66	0.63	0.62
9	0.69	0.64	0.61	0.69	0.64	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.59
10	0.66	0.61	0.58	0.66	0.61	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.64	0.60	0.57	0.56



Luminaire Lumens:

FL=1427.53,FM=378.15,FH=11.1,FVH=4.5

BL=1385.18,BM=361.33,BH=10.93,BVH=4.5

UL=0,UH=0

BUG Rating:B3-U0-G0

Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	7328.76	7345.99	7299.48	7181.50	7032.51	6864.58	6619.15	6418.49	6193.72
45.0	7302.07	7341.68	7349.43	7318.43	7204.75	7078.16	6911.95	6680.29	6499.44
90.0	7360.63	7343.40	7255.56	7133.27	6989.46	6813.77	6578.67	6371.99	6154.11
135.0	7366.65	7376.13	7352.01	7258.14	7116.05	6933.48	6736.27	6454.66	6219.56
180.0	7328.76	7281.40	7175.47	7023.90	6831.86	6557.14	6308.26	6055.93	5719.21
225.0	7302.07	7177.19	7019.60	6831.86	6613.98	6308.26	6059.38	5786.38	5463.44
270.0	7360.63	7339.96	7249.53	7131.55	6966.20	6720.77	6502.03	6218.70	5975.84
315.0	7366.65	7284.84	7166.86	6971.37	6777.60	6574.36	6295.34	6072.29	5844.08
360.0	7328.76	7345.99	7299.48	7181.50	7032.51	6864.58	6619.15	6418.49	6193.72
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5916.42	5692.51	5482.38	5267.09	4999.26	4797.74	4601.39	4405.04	4167.36
45.0	6287.59	6019.76	5813.08	5590.89	5317.90	5114.66	4906.25	4663.40	4456.71
90.0	5926.75	5638.26	5411.77	5179.25	4897.64	4686.65	4430.88	4223.33	4003.73
135.0	5980.15	5729.54	5434.16	5200.78	4966.53	4706.46	4504.94	4324.09	4107.07
180.0	5466.88	5225.75	4937.25	4706.46	4510.97	4325.81	4126.02	3962.39	3763.46
225.0	5224.89	4982.04	4719.37	4522.16	4332.70	4128.60	3952.06	3775.52	3598.11
270.0	5729.54	5481.52	5244.70	4957.06	4747.79	4546.28	4360.26	4135.49	3942.59
315.0	5602.09	5380.76	5120.69	4901.08	4714.21	4486.85	4302.56	4120.85	3855.61
360.0	5916.42	5692.51	5482.38	5267.09	4999.26	4797.74	4601.39	4405.04	4167.36
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	3951.20	3723.85	3424.15	3183.88	2879.02	2643.92	2423.46	2216.77	1686.03
45.0	4256.06	4035.59	3784.99	3487.88	3242.44	2939.31	2707.65	2482.02	2226.25
90.0	3778.10	3489.60	3250.19	3013.37	2779.13	2488.91	2279.64	2080.71	1689.73
135.0	3931.39	3754.85	3520.61	3322.53	3133.07	2929.83	2687.84	2491.49	2296.00
180.0	3586.06	3413.82	3232.11	2998.73	2803.24	2610.33	2421.74	2184.91	2008.37
225.0	3350.95	3164.08	2966.00	2773.96	2533.69	2336.48	2111.71	1707.99	1707.99
270.0	3743.65	3475.82	3262.25	2980.64	2760.18	2545.75	2284.81	2088.46	1903.30
315.0	3635.14	3406.93	3108.10	2887.64	2668.90	2407.10	2205.58	1718.15	1718.15
360.0	3951.20	3723.85	3424.15	3183.88	2879.02	2643.92	2423.46	2216.77	1686.03
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1686.03	1649.08	1516.20	1410.19	1313.74	1255.09	1210.65	1158.03	1098.10
45.0	2031.62	1851.63	1657.00	1528.69	1427.07	1347.84	1272.05	1225.55	1180.77
90.0	1689.73	1540.23	1395.12	1302.63	1230.29	1161.31	1115.75	1058.40	968.83
135.0	2110.85	1885.22	1730.20	1592.42	1458.07	1371.95	1286.70	1227.27	1162.68
180.0	1839.58	1655.28	1526.10	1416.73	1311.67	1247.08	1182.49	1087.76	999.06
225.0	1605.25	1484.94	1384.61	1288.16	1226.58	1164.41	1087.16	997.94	877.37
270.0	1744.84	1560.55	1430.51	1318.56	1237.61	1160.10	1105.85	1039.54	940.50
315.0	1643.14	1511.38	1404.59	1323.64	1247.25	1198.08	1142.10	1047.29	958.41
360.0	1686.03	1649.08	1516.20	1410.19	1313.74	1255.09	1210.65	1158.03	1098.10
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	1027.05	919.40	817.18	681.11	569.93	459.61	330.09	236.91	156.13
45.0	1120.49	1016.28	929.30	827.68	695.06	588.27	455.65	455.65	330.18
90.0	887.97	799.44	710.30	589.65	493.98	399.68	312.61	232.35	141.41
135.0	1077.43	962.03	869.88	757.93	648.56	511.63	457.37	457.37	208.06
180.0	904.33	800.99	664.92	551.24	444.46	444.46	219.43	145.63	90.68
225.0	777.13	672.84	567.95	441.53	345.25	232.43	153.89	91.29	51.50
270.0	853.52	767.40	654.59	560.72	472.88	448.76	336.72	190.15	123.58
315.0	864.20	741.39	637.28	530.75	399.68	302.10	211.59	134.43	69.07
360.0	1027.05	919.40	817.18	681.11	569.93	459.61	330.09	236.91	156.13

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	94.30	48.57	35.39	30.57	25.23	19.55	16.71	15.50	14.38
45.0	166.81	85.43	50.47	38.06	33.16	26.52	21.96	18.95	17.40
90.0	87.41	53.48	45.38	38.84	31.17	26.01	22.13	18.69	16.79
135.0	116.26	68.03	42.97	37.89	31.95	24.89	20.50	17.83	16.71
180.0	49.60	38.41	32.47	26.96	22.13	18.52	17.57	17.14	16.53
225.0	40.22	35.31	28.07	23.08	19.20	17.22	16.28	15.76	15.24
270.0	68.89	51.50	45.64	39.10	31.61	27.04	23.42	19.63	17.14
315.0	46.59	38.67	32.81	25.66	20.93	17.83	16.28	15.59	14.98
360.0	94.30	48.57	35.39	30.57	25.23	19.55	16.71	15.50	14.38
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	13.78	13.35	13.43	13.35	13.18	12.92	13.00	13.09	13.00
45.0	16.53	15.93	15.50	15.16	14.90	14.64	14.38	14.04	13.61
90.0	15.42	14.47	13.87	13.35	12.92	12.57	12.31	11.97	11.80
135.0	15.93	15.33	14.81	14.12	13.69	13.26	12.83	12.40	12.23
180.0	16.02	15.67	15.33	14.90	14.64	14.04	13.78	13.35	13.26
225.0	14.73	14.38	14.12	13.87	13.43	13.18	13.00	12.83	12.83
270.0	15.42	14.55	14.12	13.43	13.26	12.92	12.75	12.49	12.31
315.0	14.47	14.12	13.69	13.61	13.43	13.35	13.26	13.18	13.09
360.0	13.78	13.35	13.43	13.35	13.18	12.92	13.00	13.09	13.00
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	12.92	12.83	12.66	12.49	12.31	12.06	11.54	11.28	10.94
45.0	13.18	12.83	12.66	12.40	12.14	11.97	11.54	11.11	10.68
90.0	11.63	11.28	11.20	11.02	10.85	10.59	10.42	10.25	10.08
135.0	12.06	11.88	11.71	11.37	11.11	11.02	10.85	10.51	10.33
180.0	13.18	13.00	12.83	12.57	12.23	11.80	11.54	11.28	10.76
225.0	12.57	12.31	12.06	11.80	11.54	11.11	10.76	10.42	10.16
270.0	12.06	11.88	11.63	11.45	11.28	11.02	10.68	10.51	10.16
315.0	13.00	12.66	12.40	12.14	11.80	11.54	11.11	10.76	10.42
360.0	12.92	12.83	12.66	12.49	12.31	12.06	11.54	11.28	10.94
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	10.51	10.25	9.99	9.73	9.39	9.21	9.13	9.04	8.78
45.0	10.42	10.08	9.82	9.65	9.47	9.39	9.21	9.13	8.96
90.0	9.90	9.73	9.56	9.56	9.39	9.30	9.30	9.21	9.13
135.0	10.08	9.90	9.73	9.56	9.47	9.39	9.21	9.04	8.87
180.0	10.42	10.16	9.82	9.56	9.39	9.21	9.04	8.96	8.78
225.0	9.82	9.56	9.39	9.30	9.21	9.04	8.87	8.78	8.70
270.0	10.08	9.82	9.65	9.56	9.47	9.30	9.21	9.21	9.13
315.0	10.08	9.73	9.56	9.39	9.30	9.13	8.96	8.78	8.70
360.0	10.51	10.25	9.99	9.73	9.39	9.21	9.13	9.04	8.78
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	8.61	8.53	8.44	8.35	8.27	8.01	8.01	7.92	7.84
45.0	8.78	8.70	8.61	8.44	8.35	8.18	8.01	7.92	7.75
90.0	9.04	9.04	8.87	8.70	8.44	8.18	7.92	7.66	7.49
135.0	8.78	8.70	8.53	8.53	8.35	8.35	8.01	8.01	7.84
180.0	8.70	8.61	8.53	8.53	8.35	8.10	8.01	7.92	7.58
225.0	8.61	8.53	8.44	8.27	8.01	8.01	7.84	7.58	7.49
270.0	9.04	8.96	8.78	8.53	8.27	8.01	7.75	7.58	7.58
315.0	8.53	8.35	8.27	8.10	8.01	7.92	7.84	7.66	7.49
360.0	8.61	8.53	8.44	8.35	8.27	8.01	8.01	7.92	7.84

Intensity data(cd)

C/γ(°)	90.0
0.0	7.58
45.0	7.66
90.0	7.49
135.0	7.58
180.0	7.41
225.0	7.49
270.0	7.49
315.0	7.49
360.0	7.58