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Nata

Client: NT

LumCAT: 2-3123-LM

Luminaire: 92.70.412.00 LED HOLDER

Report No: 20251226-C008

Ballast type: DC

Test No: 20251226-C008

Voltage(V): 34.430

LampCAT: PHILIPS SLM 1208 L15 1919 G8N

Current(A): 0.575

Lamp flux(lm): 3373.1

Power (W): 19.790

Number of Lamps: 1

PF: 0.000

Length(mm): 69

Width(mm): 69

Phm Type: C

Height(mm): 35

Photometric Results

Lumens(lm): 3290.59, Efficiency(%): 97.55% , Luminous Efficacy(lm/W): 166.28

Central intensity(cd): 9708.428, Maximum intensity(cd): 9708.428

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=26.8

[C90/270]Total=26.8

Field angle(10%Imax): [C0/180]Total=68.4

[C90/270]Total=68.4

Maximum s/h(1/2): C0_180=0.45 C90_270=0.45

Maximum s/h(1/4): C0_180=0.47 C90_270=0.47

Up flux rate of lamp(%): 0.00%

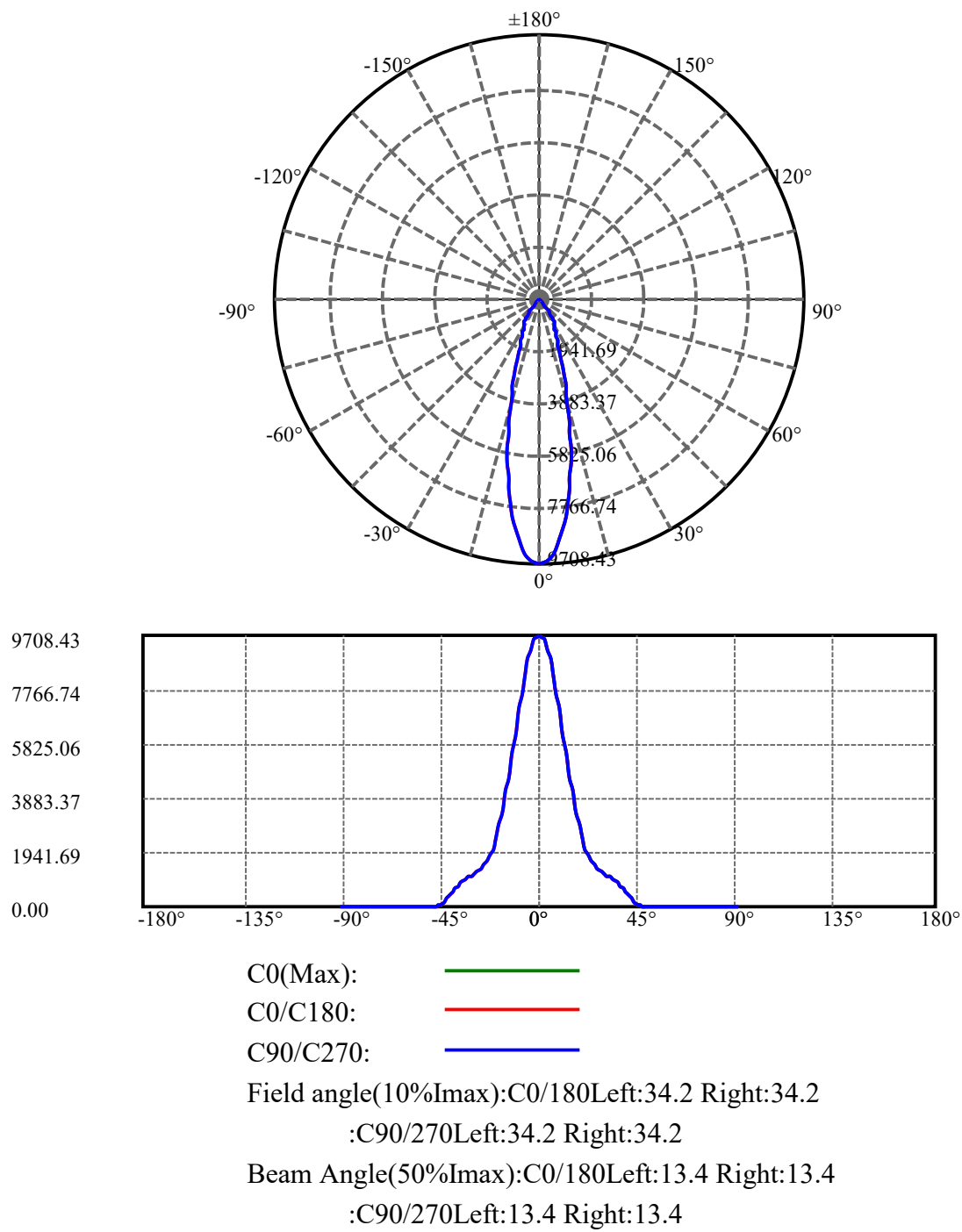
Down flux rate of lamp(%): 97.55%

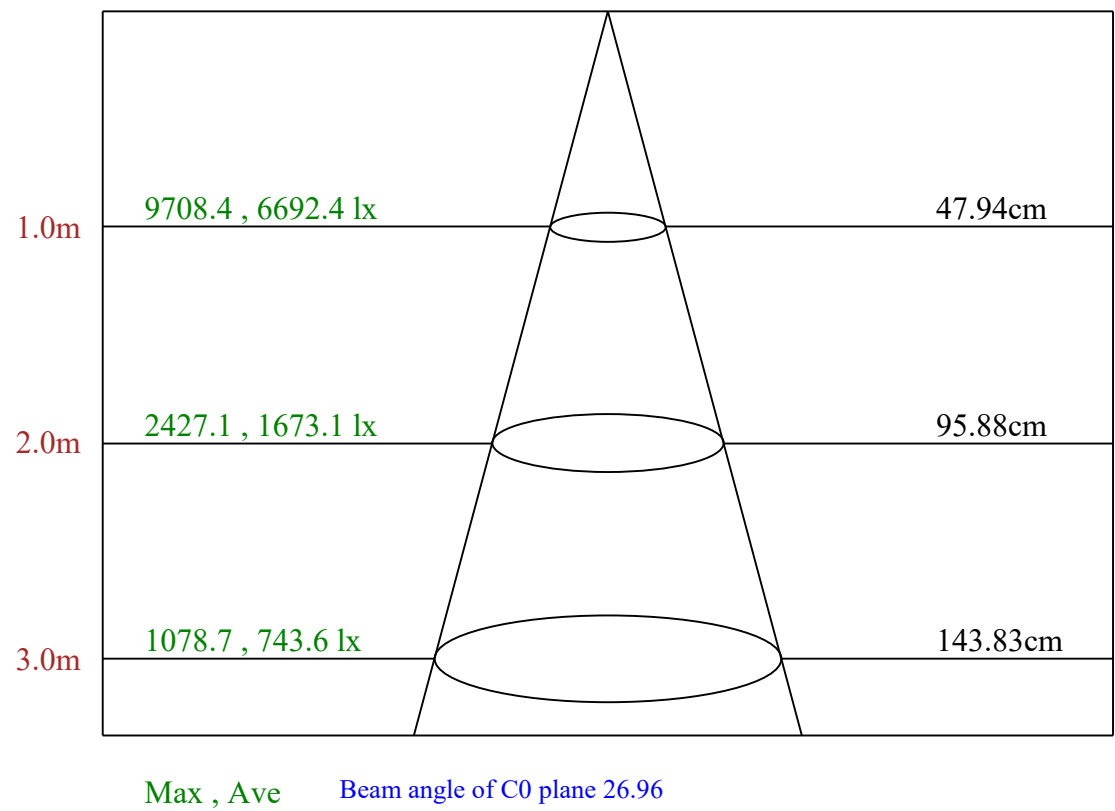
Up flux rate of LUM(%): - -

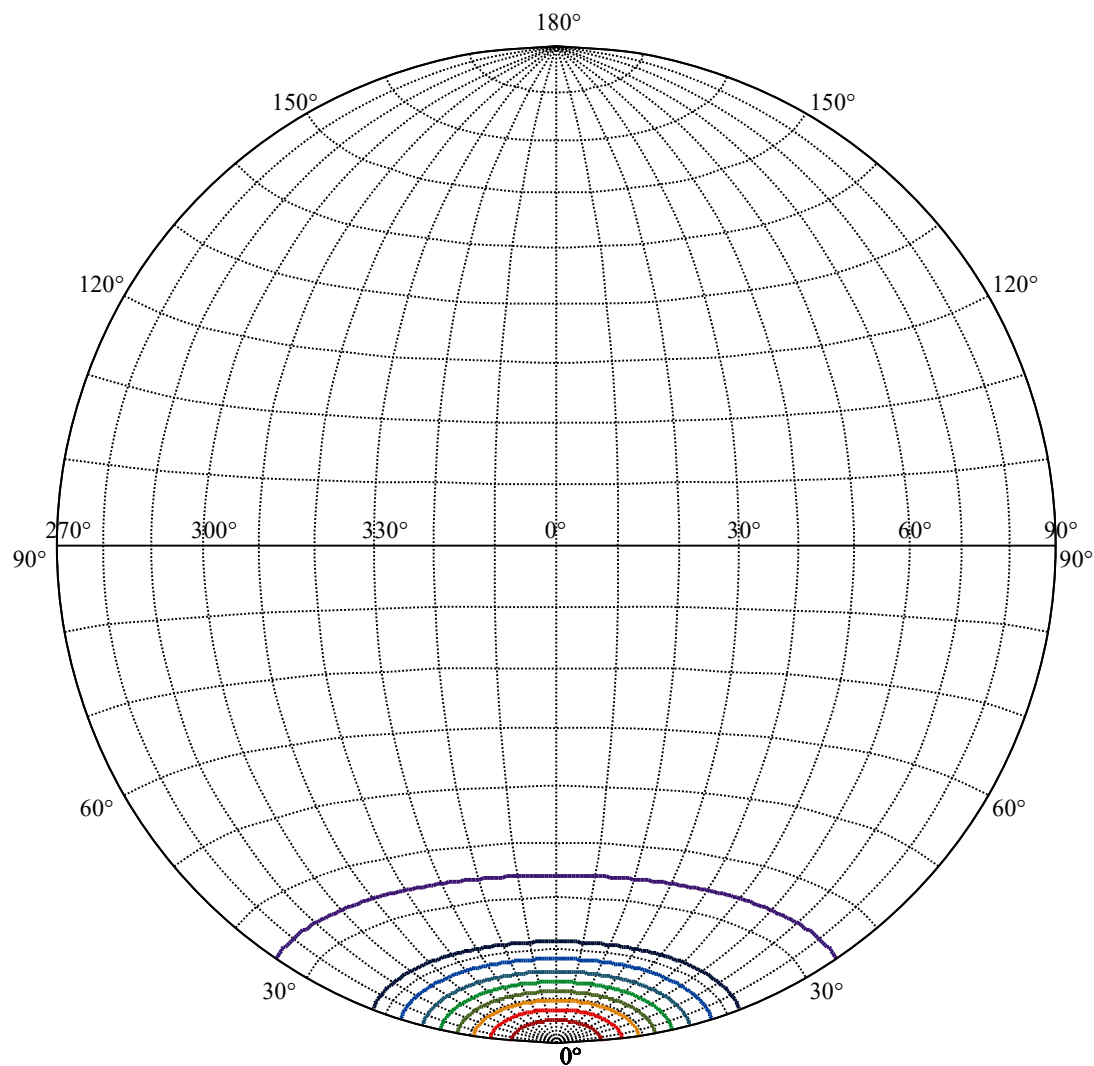
Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.300%





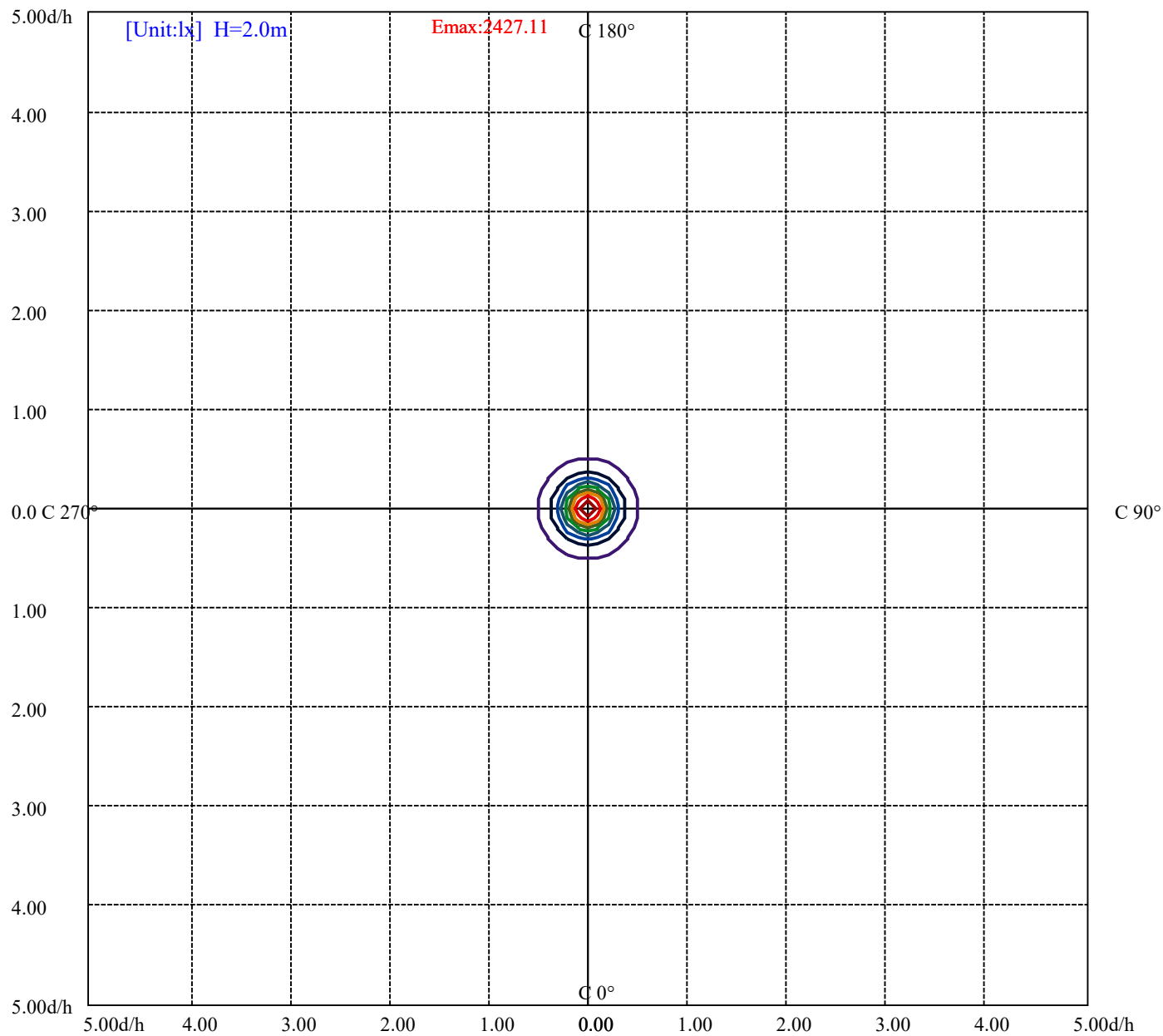


House

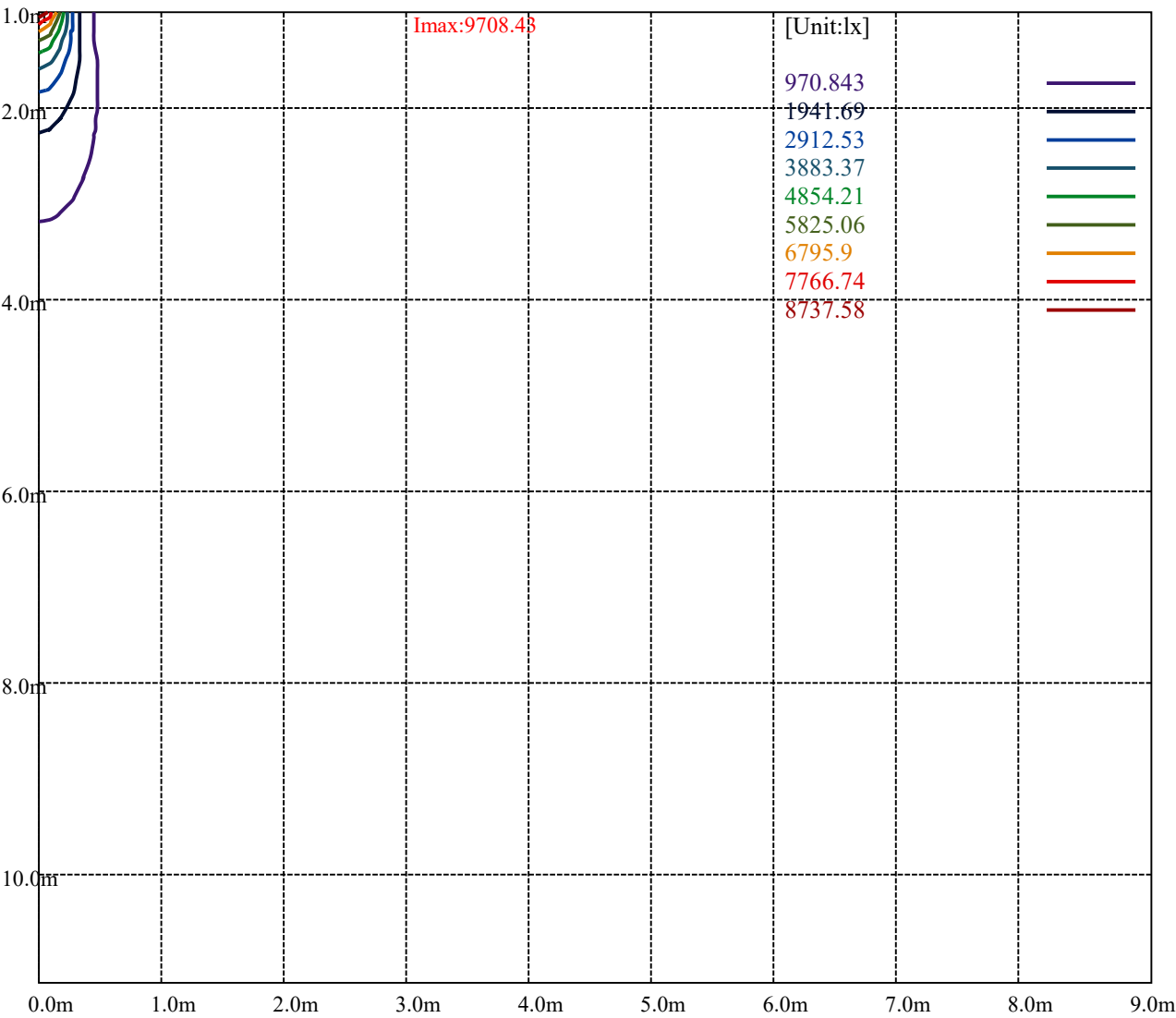
[Unit:cd]

Road

Imax:9708.43	
(10%Imax) 970.843	
(20%Imax) 1941.69	
(30%Imax) 2912.53	
(40%Imax) 3883.37	
(50%Imax) 4854.21	
(60%Imax) 5825.06	
(70%Imax) 6795.9	
(80%Imax) 7766.74	
(90%Imax) 8737.58	



(10%Emax) 242.7105	—
(20%Emax) 485.42	—
(30%Emax) 728.1325	—
(40%Emax) 970.8425	—
(50%Emax) 1213.552	—
(60%Emax) 1456.262	—
(70%Emax) 1698.975	—
(80%Emax) 1941.685	—
(90%Emax) 2184.395	—



Luminance Table

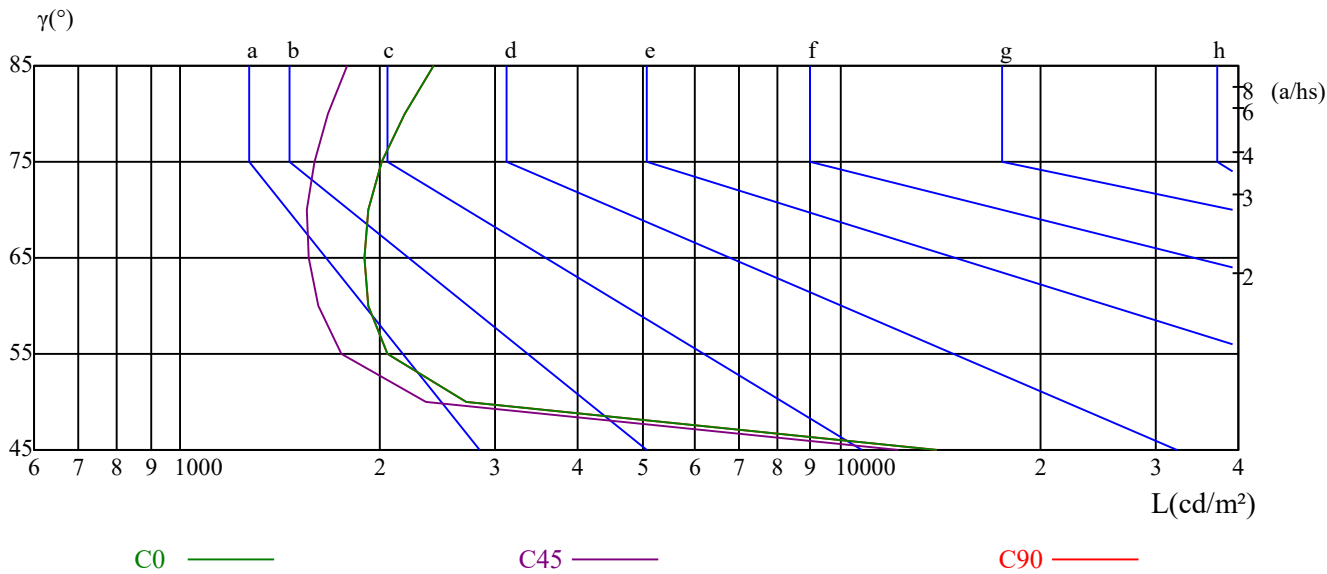
γ	45	50	55	60	65	70	75	80	85
C0	13930	2716	2062	1928	1899	1928	2023	2180	2420
C45	12225	2350	1756	1615	1562	1553	1592	1667	1788
C90	13930	2716	2062	1928	1899	1928	2023	2180	2420

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3964	3964	3964	5853	5853	5853	16448	16448	16448

Glare Table

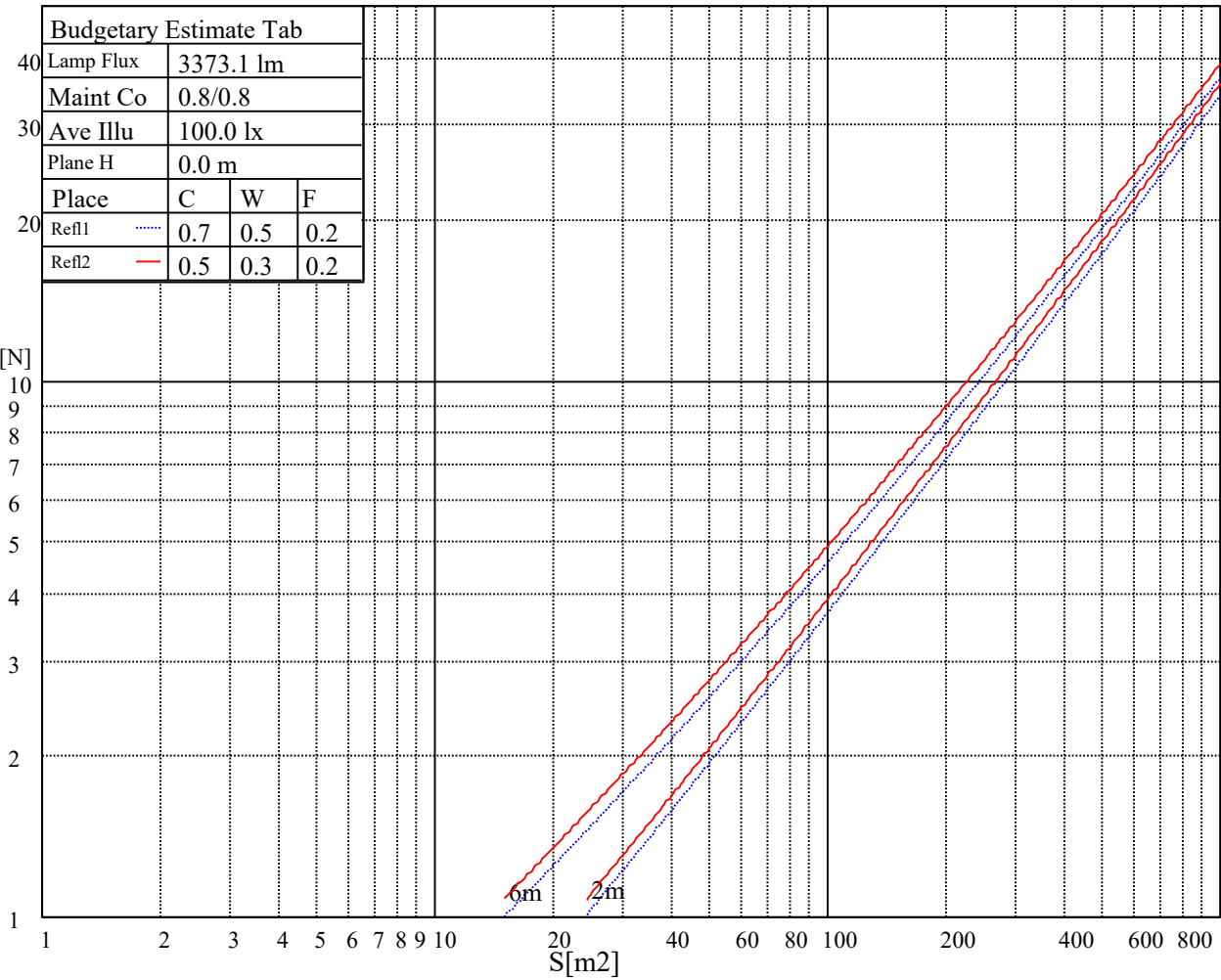
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

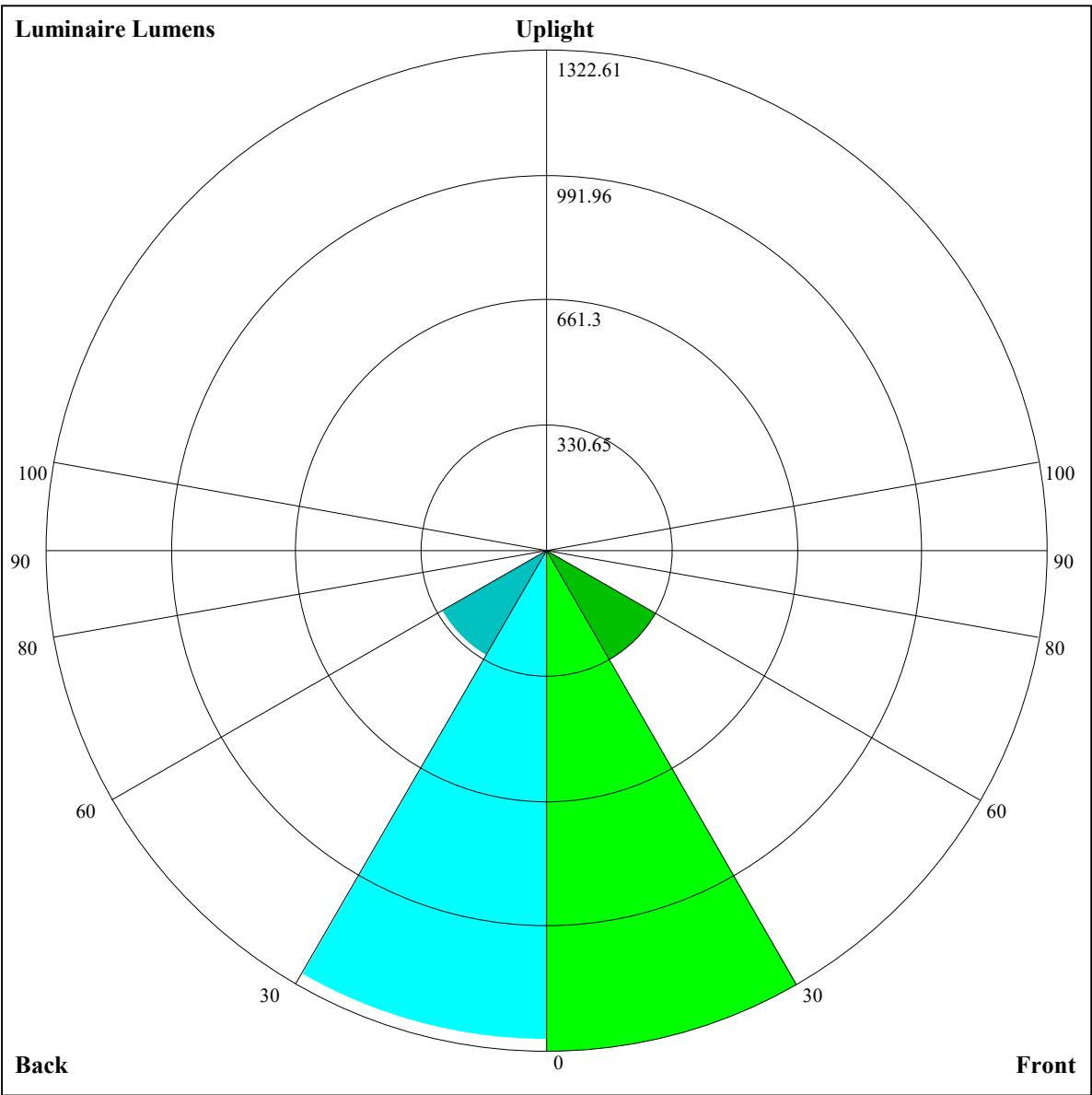


Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	20.03	20.97	20.39	21.28	21.59	19.69	20.62	20.05	20.94	21.25
	3H	19.83	20.66	20.22	21.00	21.34	19.49	20.32	19.88	20.66	21.00
	4H	19.74	20.50	20.14	20.86	21.23	19.39	20.16	19.80	20.52	20.88
	6H	19.66	20.36	20.08	20.74	21.14	19.32	20.02	19.74	20.40	20.80
	8H	19.60	20.27	20.02	20.65	21.06	19.26	19.93	19.69	20.32	20.73
	12H	19.55	20.18	19.97	20.57	20.99	19.21	19.84	19.64	20.24	20.66
4H	2H	19.71	20.48	20.11	20.83	21.20	19.37	20.14	19.77	20.49	20.86
	3H	19.48	20.12	19.90	20.51	20.93	19.14	19.78	19.56	20.17	20.59
	4H	19.42	19.97	19.86	20.39	20.84	19.08	19.63	19.52	20.06	20.51
	6H	19.31	19.79	19.78	20.25	20.70	18.97	19.46	19.44	19.91	20.37
	8H	19.27	19.72	19.76	20.18	20.66	18.94	19.39	19.43	19.85	20.32
	12H	19.25	19.67	19.74	20.12	20.64	18.92	19.34	19.41	19.79	20.31
8H	4H	19.22	19.67	19.71	20.13	20.60	18.88	19.33	19.37	19.79	20.27
	6H	19.11	19.48	19.62	19.96	20.47	18.78	19.15	19.29	19.63	20.14
	8H	19.14	19.44	19.67	19.97	20.46	18.81	19.11	19.34	19.64	20.14
	12H	19.14	19.37	19.68	19.89	20.41	18.81	19.05	19.36	19.57	20.09
12H	4H	19.17	19.58	19.66	20.04	20.56	18.83	19.25	19.32	19.70	20.22
	6H	19.10	19.41	19.64	19.93	20.43	18.77	19.08	19.30	19.60	20.10
	8H	19.09	19.33	19.64	19.85	20.37	18.77	19.00	19.31	19.52	20.04
Variation with the observer position at spacings:											
S = 1.0H		4.6/-13.6					4.6/-13.6				
S = 1.5H		7.3/-11.8					7.3/-11.8				
S = 2.0H		9.3/-10.5					9.3/-10.5				
Standard tables:		BK0					BK0				
Uncorrected UGR		0.4					0.4				

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	1.00	1.00	1.00	0.98
1	1.09	1.07	1.05	1.07	1.05	1.03	1.03	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.92
2	1.02	0.99	0.96	1.01	0.98	0.95	0.98	0.95	0.93	0.95	0.93	0.91	0.92	0.91	0.89	0.88
3	0.97	0.93	0.89	0.95	0.92	0.88	0.93	0.90	0.87	0.91	0.88	0.86	0.89	0.86	0.84	0.83
4	0.92	0.87	0.83	0.91	0.86	0.83	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.79
5	0.87	0.82	0.79	0.86	0.82	0.78	0.85	0.81	0.77	0.83	0.80	0.77	0.82	0.79	0.76	0.75
6	0.83	0.78	0.74	0.82	0.77	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.71
7	0.79	0.74	0.71	0.78	0.74	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.68
8	0.76	0.71	0.67	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.65
9	0.72	0.68	0.64	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.67	0.64	0.70	0.66	0.64	0.62
10	0.70	0.65	0.62	0.69	0.65	0.61	0.68	0.64	0.61	0.68	0.64	0.61	0.67	0.64	0.61	0.60



Luminaire Lumens:

FL=1322.61,FM=333.84,FH=7.8,FVH=3.73

BL=1294.55,BM=319.28,BH=7.78,BVH=3.72

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	9726.30	9704.77	9621.23	9471.39	9268.15	8929.70	8605.90	8241.62	7832.55
45.0	9673.77	9724.58	9700.46	9610.90	9399.91	9163.08	8866.84	8434.52	8040.10
90.0	9727.16	9686.68	9538.56	9349.10	9097.63	8700.63	8332.04	7811.89	7357.18
135.0	9706.49	9727.16	9700.46	9577.31	9399.91	9086.44	8772.97	8409.55	7896.28
180.0	9726.30	9678.93	9566.98	9336.18	9084.72	8777.27	8316.54	7902.31	7455.36
225.0	9673.77	9562.67	9392.16	9100.22	8797.08	8444.86	7935.90	7492.39	7021.32
270.0	9727.16	9713.38	9636.74	9455.89	9244.90	8983.96	8671.35	8206.31	7793.80
315.0	9706.49	9622.96	9431.77	9219.06	8950.37	8630.87	8160.67	7738.69	7283.98
360.0	9726.30	9704.77	9621.23	9471.39	9268.15	8929.70	8605.90	8241.62	7832.55
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	7273.65	6807.75	6335.82	5742.46	5273.98	4709.90	4281.03	3870.25	3495.63
45.0	7612.09	7158.25	6563.17	6087.80	5611.56	5145.66	4579.86	4150.13	3650.65
90.0	6883.53	6281.56	5794.13	5317.90	4856.30	4308.59	3897.80	3515.44	3165.80
135.0	7453.63	6992.04	6514.94	5920.73	5449.66	4992.37	4541.97	4011.48	3612.75
180.0	6873.20	6391.79	5907.81	5309.29	4846.83	4403.32	3986.51	3507.69	3159.77
225.0	6546.81	5953.45	5483.24	5022.51	4578.14	4057.12	3673.04	3229.53	2904.00
270.0	7346.85	6761.24	6286.73	5694.23	5222.31	4767.60	4338.73	3836.66	3466.35
315.0	6812.91	6229.03	5759.68	5185.27	4735.74	4306.87	3799.63	3425.01	3073.65
360.0	7273.65	6807.75	6335.82	5742.46	5273.98	4709.90	4281.03	3870.25	3495.63
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	3071.93	2764.49	2489.77	2250.36	1700.84	1700.84	1666.65	1544.36	1422.50
45.0	3294.11	2970.31	2606.89	2354.56	2135.82	1946.36	1746.57	1612.22	1500.27
90.0	2779.99	2510.44	2271.89	1891.25	1691.11	1691.11	1538.94	1437.40	1353.95
135.0	3250.19	2847.16	2562.11	2310.64	2046.26	1871.44	1689.73	1569.16	1464.96
180.0	2832.52	2543.16	2234.86	2023.01	1801.68	1659.59	1540.74	1416.73	1336.64
225.0	2609.47	2293.42	2076.40	1699.98	1699.98	1573.73	1469.01	1380.74	1306.50
270.0	3114.99	2800.66	2457.91	2216.77	2008.37	1829.24	1649.25	1529.55	1408.12
315.0	2750.71	2406.23	2166.83	1713.93	1713.93	1613.94	1501.13	1406.40	1310.12
360.0	3071.93	2764.49	2489.77	2250.36	1700.84	1700.84	1666.65	1544.36	1422.50
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1341.47	1274.81	1209.36	1166.13	1120.74	1090.17	1062.61	1021.28	943.94
45.0	1404.68	1309.09	1248.80	1200.58	1151.49	1117.90	1089.48	1050.73	999.92
90.0	1268.35	1212.98	1170.52	1134.52	1095.34	1067.09	1026.53	969.09	880.91
135.0	1376.26	1286.70	1229.86	1184.21	1146.32	1104.99	1076.57	1036.09	975.81
180.0	1271.19	1214.36	1157.52	1120.49	1087.76	1058.48	1000.78	937.92	866.44
225.0	1232.10	1182.32	1140.72	1106.28	1069.50	1035.06	969.18	902.87	826.22
270.0	1330.62	1264.30	1197.13	1152.35	1117.90	1080.87	1051.59	1008.53	946.53
315.0	1247.34	1195.84	1144.00	1109.55	1079.75	1040.48	991.14	929.22	856.10
360.0	1341.47	1274.81	1209.36	1166.13	1120.74	1090.17	1062.61	1021.28	943.94
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	870.05	790.31	704.88	592.84	506.72	419.40	316.14	237.00	164.57
45.0	931.89	835.43	753.62	664.06	567.61	452.21	452.21	344.30	194.54
90.0	799.61	713.49	601.54	509.73	421.72	315.19	235.10	162.42	88.96
135.0	881.08	800.99	699.37	611.53	521.10	435.85	435.85	246.82	171.81
180.0	768.26	686.45	581.39	496.99	454.79	454.79	226.15	154.32	93.52
225.0	721.50	633.14	544.44	454.79	346.54	264.73	189.55	124.01	63.38
270.0	858.69	776.87	689.03	600.33	489.24	445.32	445.32	212.20	143.21
315.0	757.15	673.19	587.33	503.71	399.68	319.84	242.77	153.64	93.18
360.0	870.05	790.31	704.88	592.84	506.72	419.40	316.14	237.00	164.57

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	89.30	48.23	29.02	23.17	18.34	14.38	11.45	10.76	10.42
45.0	114.45	65.97	38.06	26.52	21.79	17.31	13.00	11.45	10.94
90.0	49.69	30.14	25.23	19.29	15.24	12.23	10.94	10.59	10.25
135.0	94.99	50.98	30.06	25.06	19.03	15.07	12.06	10.94	10.51
180.0	51.41	29.37	24.63	19.55	15.24	11.63	10.85	10.51	10.16
225.0	37.38	27.99	21.79	17.05	13.43	11.11	10.76	10.33	10.08
270.0	85.95	41.42	28.51	23.94	17.83	13.87	11.28	10.59	10.25
315.0	42.28	28.25	23.68	17.57	13.69	11.11	10.51	10.08	9.82
360.0	89.30	48.23	29.02	23.17	18.34	14.38	11.45	10.76	10.42
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	10.16	9.82	9.56	9.30	9.13	8.87	8.70	8.53	8.35
45.0	10.51	10.25	9.99	9.65	9.39	9.21	9.04	8.78	8.70
90.0	9.90	9.65	9.39	9.13	8.96	8.70	8.53	8.44	8.35
135.0	10.16	9.82	9.56	9.30	9.04	8.87	8.70	8.53	8.35
180.0	9.90	9.56	9.30	9.13	8.96	8.70	8.61	8.44	8.27
225.0	9.82	9.56	9.21	9.04	8.87	8.78	8.53	8.44	8.27
270.0	9.90	9.73	9.47	9.13	8.96	8.78	8.53	8.44	8.27
315.0	9.56	9.30	9.04	8.87	8.70	8.53	8.35	8.27	8.10
360.0	10.16	9.82	9.56	9.30	9.13	8.87	8.70	8.53	8.35
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	8.27	8.10	8.01	7.92	7.84	7.66	7.66	7.58	7.49
45.0	8.53	8.35	8.27	8.10	7.92	7.84	7.75	7.66	7.58
90.0	8.18	8.01	7.92	7.84	7.75	7.58	7.58	7.49	7.41
135.0	8.27	8.18	8.01	7.92	7.84	7.75	7.66	7.49	7.49
180.0	8.18	8.01	8.01	7.84	7.84	7.75	7.58	7.49	7.49
225.0	8.10	8.01	7.92	7.75	7.66	7.66	7.49	7.49	7.41
270.0	8.18	8.01	7.92	7.84	7.75	7.66	7.58	7.49	7.49
315.0	8.01	7.92	7.75	7.66	7.66	7.58	7.49	7.41	7.32
360.0	8.27	8.10	8.01	7.92	7.84	7.66	7.66	7.58	7.49
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.41	7.32	7.32	7.23	7.23	7.15	7.15	7.06	6.98
45.0	7.49	7.49	7.41	7.32	7.23	7.23	7.15	7.15	7.06
90.0	7.32	7.32	7.23	7.15	7.15	7.06	6.98	6.98	6.98
135.0	7.41	7.32	7.32	7.23	7.15	7.15	7.15	7.06	6.98
180.0	7.41	7.41	7.32	7.23	7.23	7.15	7.15	7.06	6.98
225.0	7.41	7.32	7.23	7.23	7.15	7.15	7.06	6.98	6.98
270.0	7.41	7.32	7.23	7.15	7.15	7.06	7.06	6.98	6.98
315.0	7.32	7.23	7.23	7.15	7.06	7.06	6.98	6.98	6.98
360.0	7.41	7.32	7.32	7.23	7.23	7.15	7.15	7.06	6.98
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	6.98	6.89	6.89	6.89	6.80	6.80	6.80	6.80	6.72
45.0	7.06	7.06	6.98	6.89	6.89	6.80	6.80	6.72	6.72
90.0	6.89	6.89	6.89	6.80	6.80	6.80	6.72	6.72	6.63
135.0	6.98	6.98	6.98	6.89	6.89	6.80	6.80	6.72	6.72
180.0	6.98	6.89	6.89	6.89	6.80	6.80	6.80	6.72	6.72
225.0	6.98	6.89	6.80	6.80	6.80	6.80	6.72	6.72	6.63
270.0	6.89	6.89	6.80	6.80	6.80	6.80	6.80	6.72	6.63
315.0	6.89	6.89	6.80	6.80	6.80	6.80	6.80	6.72	6.72
360.0	6.98	6.89	6.89	6.89	6.80	6.80	6.80	6.80	6.72

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	6.72
45.0	6.72
90.0	6.63
135.0	6.72
180.0	6.72
225.0	6.72
270.0	6.72
315.0	6.72
360.0	6.72