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Nata

Client: NT

LumCAT: 1-1766-LM

Luminaire: 92.70.494.00 LED HOLDER

Report No: 20260120-B011

Ballast type: DC

Test No: 20260120-C011

Voltage(V): 34.610

LampCAT: LUMINUS CXM-11(TC)

Current(A): 0.454

Lamp flux(lm): 2195.5

Power (W): 15.710

Number of Lamps: 1

PF: 0.000

Length(mm): 50

Width(mm): 50

Phm Type: C

Height(mm): 22

Photometric Results

Lumens(lm): 2103.60, Efficiency(%): 95.81% , Luminous Efficacy(lm/W): 133.90

Central intensity(cd): 7026.485, Maximum intensity(cd): 7026.485

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=22.8

[C90/270]Total=22.8

Field angle(10%Imax): [C0/180]Total=63.2

[C90/270]Total=63.2

Maximum s/h(1/2): C0_180=0.39 C90_270=0.39

Maximum s/h(1/4): C0_180=0.39 C90_270=0.39

Up flux rate of lamp(%): 0.00%

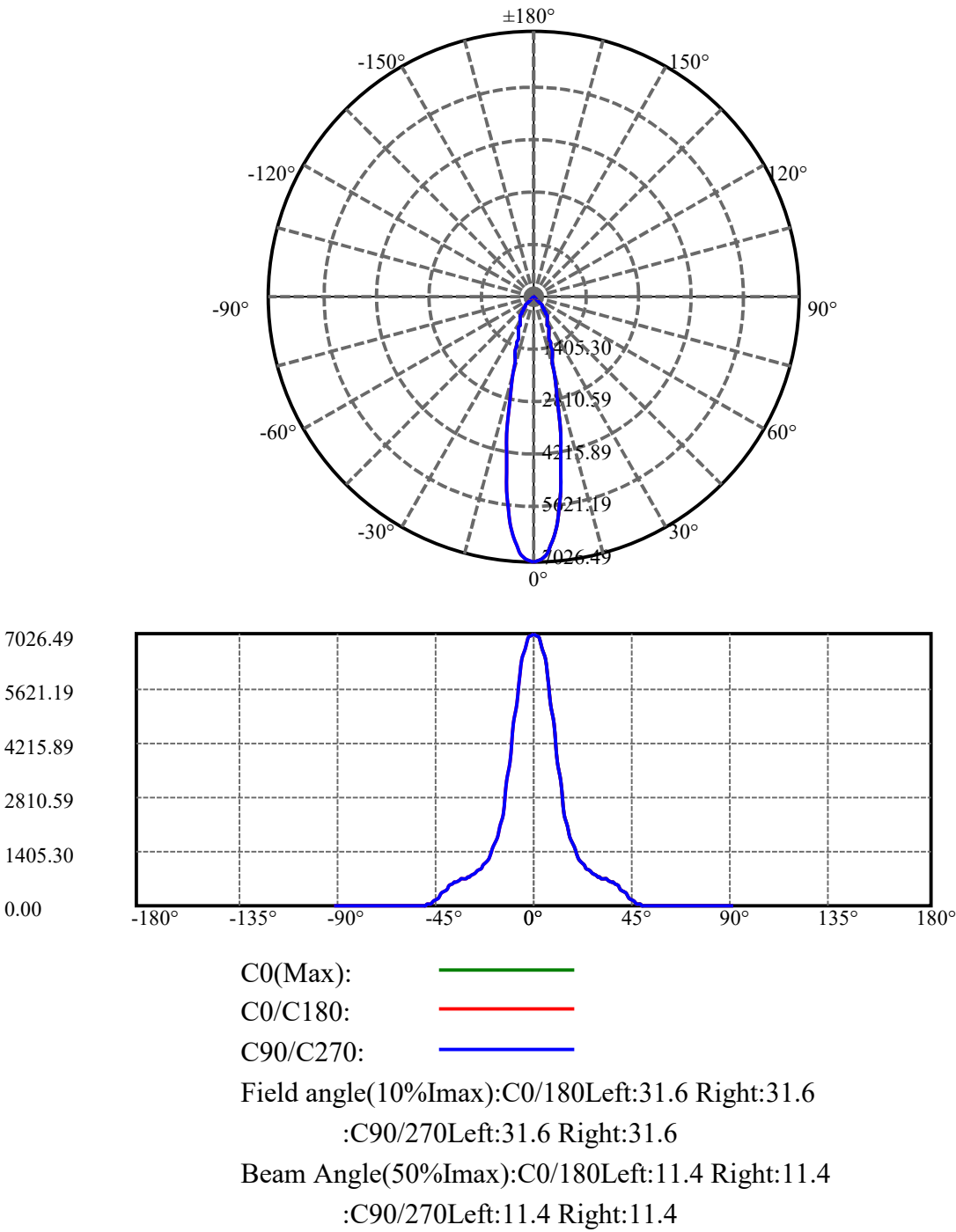
Down flux rate of lamp(%): 95.81%

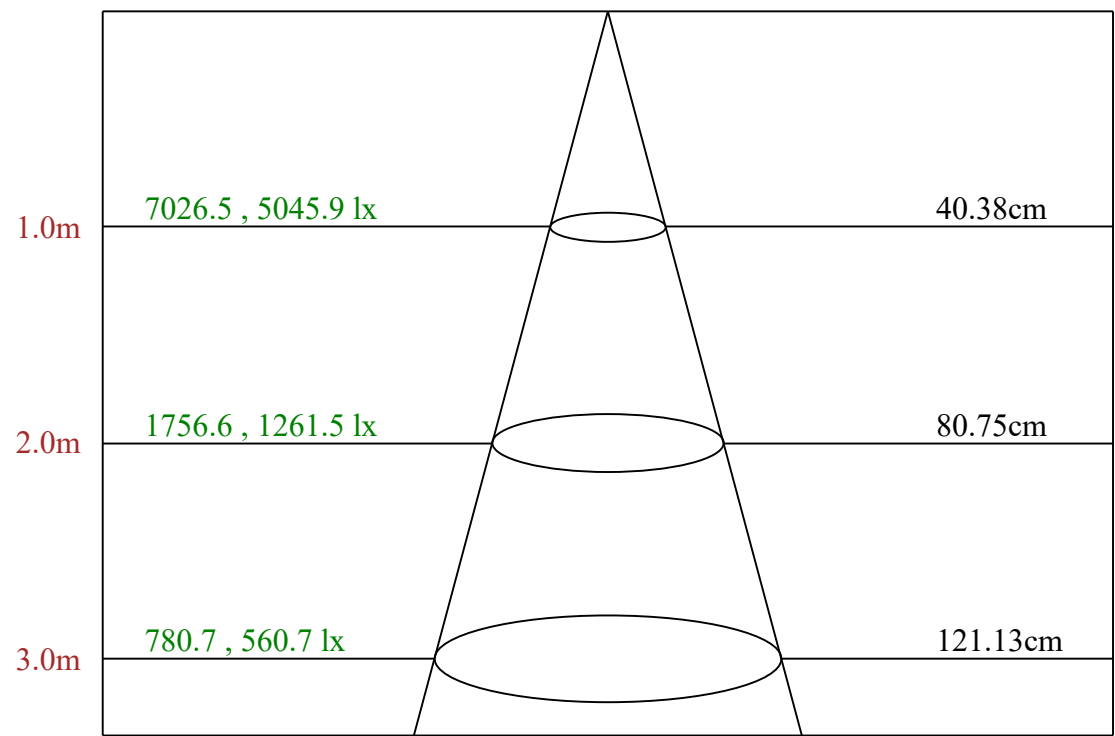
Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

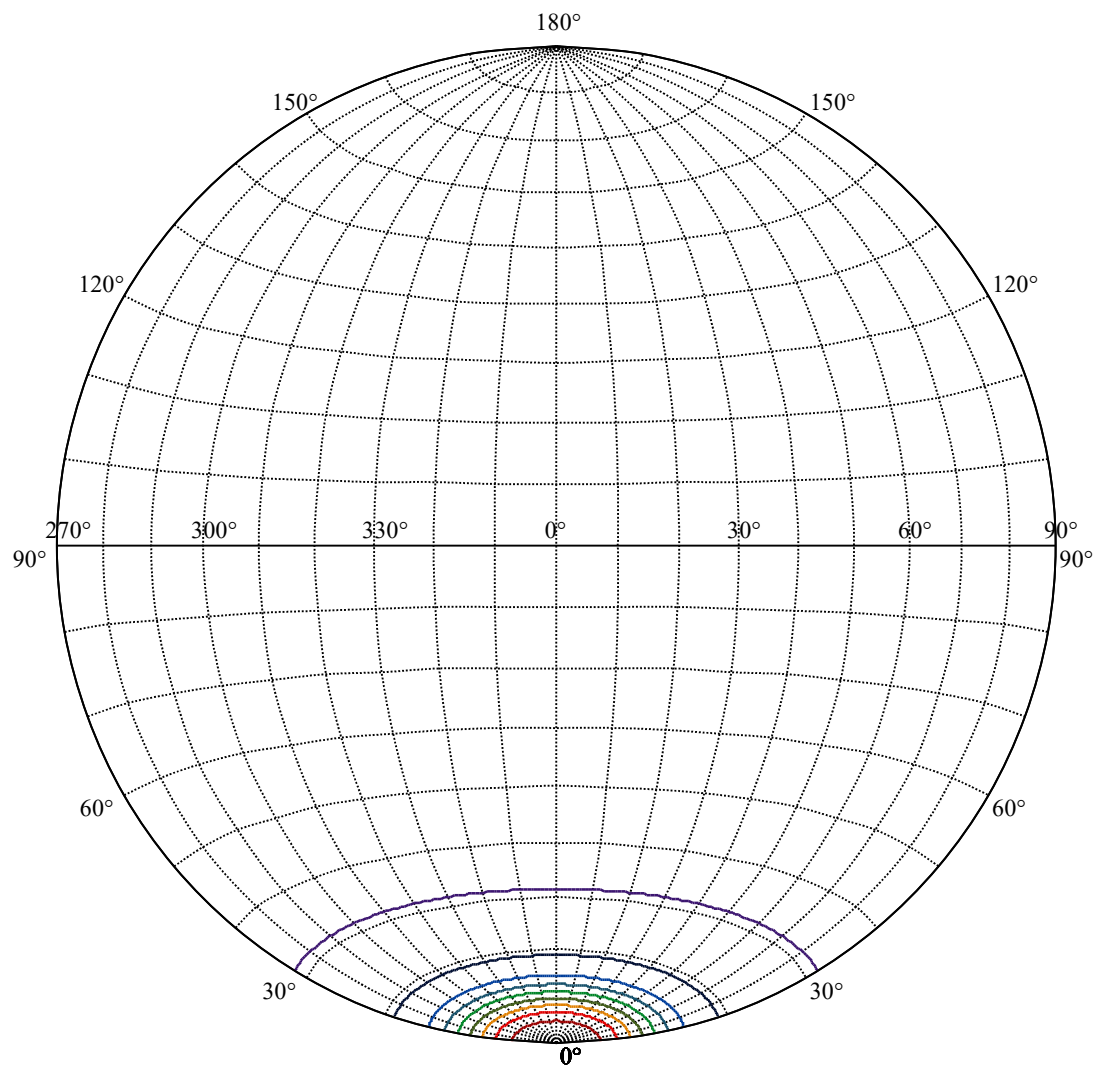
CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.327%

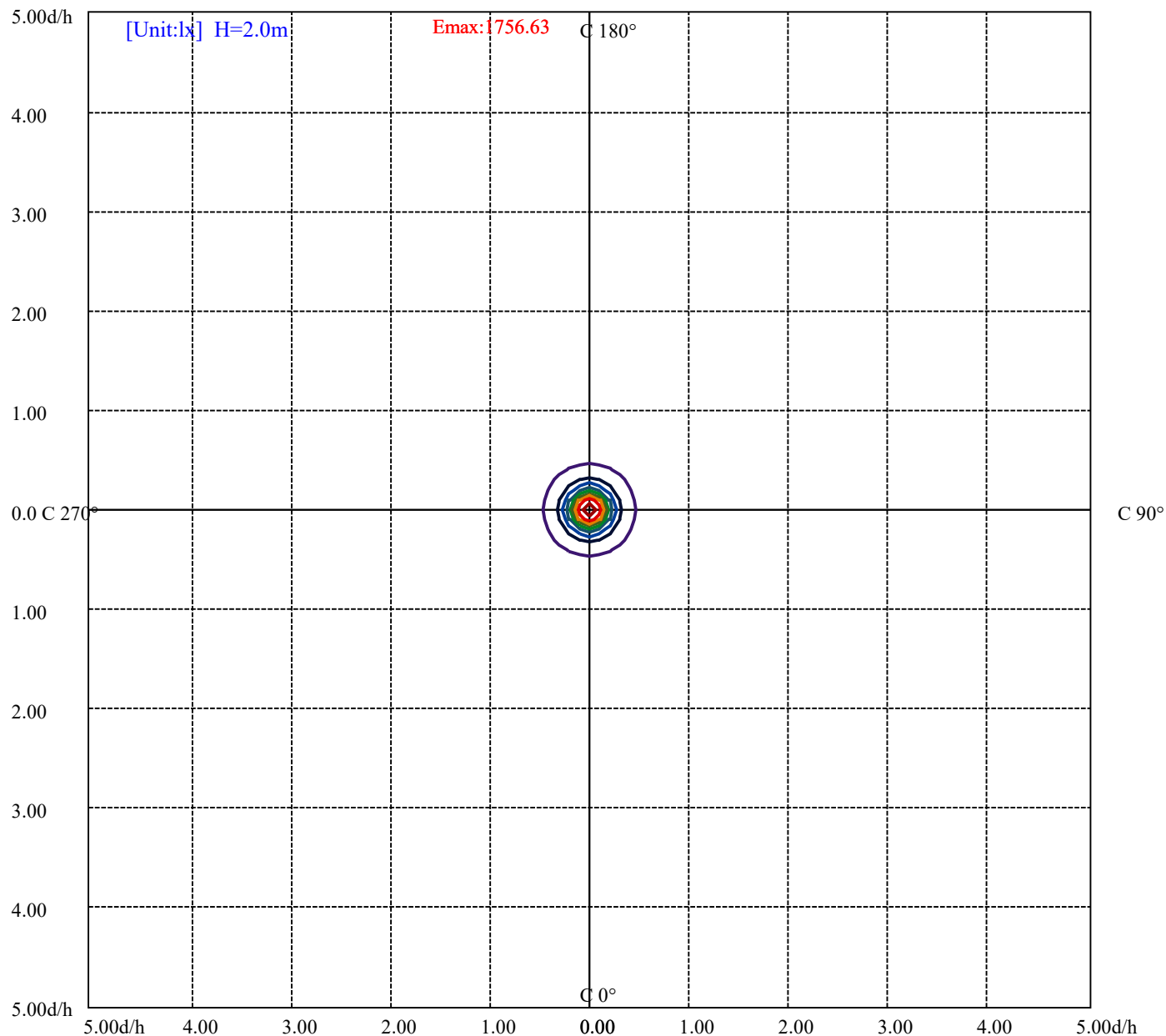


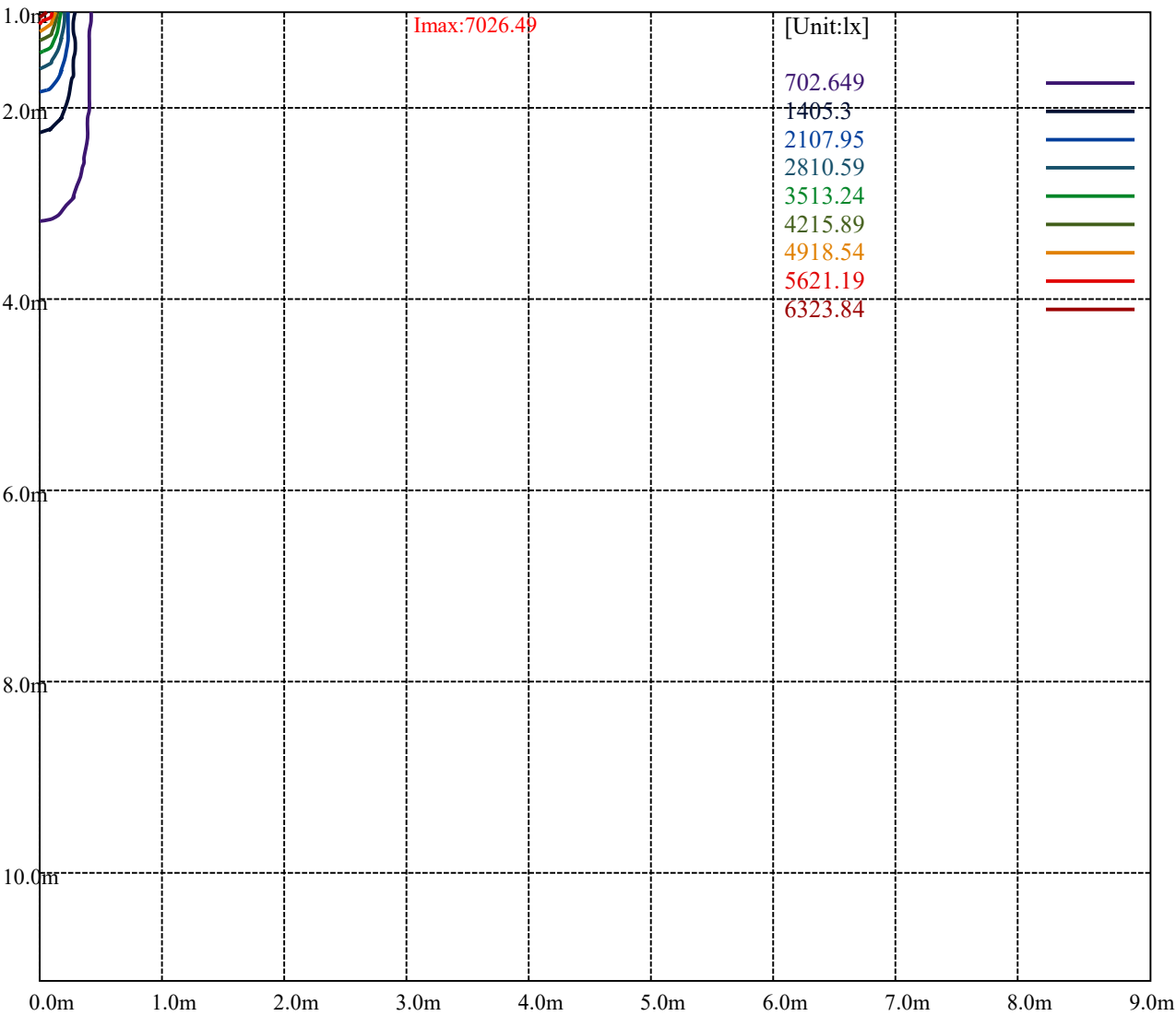


Max , Ave Beam angle of C0 plane 22.83



[Unit:cd]	
Imax:7026.49	
(10%Imax) 702.649	—
(20%Imax) 1405.3	—
(30%Imax) 2107.95	—
(40%Imax) 2810.59	—
(50%Imax) 3513.24	—
(60%Imax) 4215.89	—
(70%Imax) 4918.54	—
(80%Imax) 5621.19	—
(90%Imax) 6323.84	—





Luminance Table

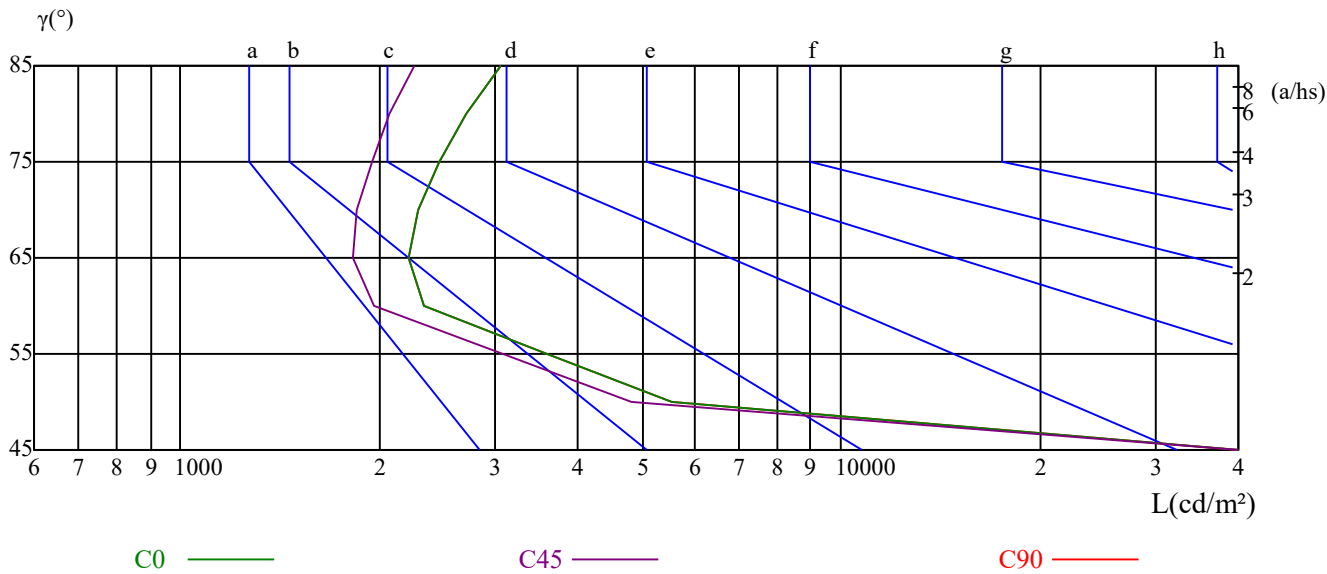
γ	45	50	55	60	65	70	75	80	85
C0	53629	5561	3590	2332	2209	2286	2462	2705	3047
C45	47277	4833	3072	1963	1826	1850	1945	2076	2256
C90	53629	5561	3590	2332	2209	2286	2462	2705	3047

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4483	4483	4483	6871	6871	6871	19762	19762	19762

Glare Table

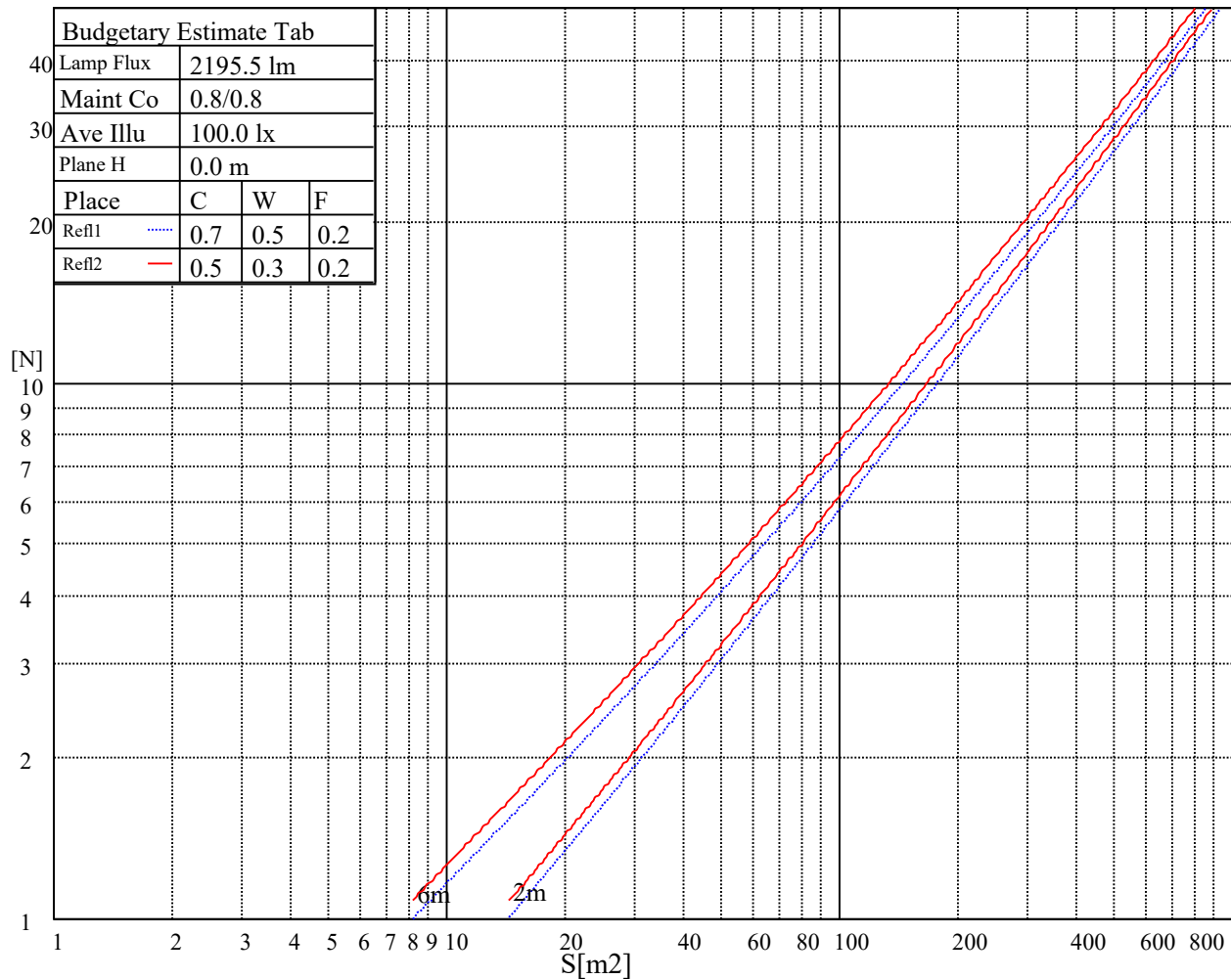
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

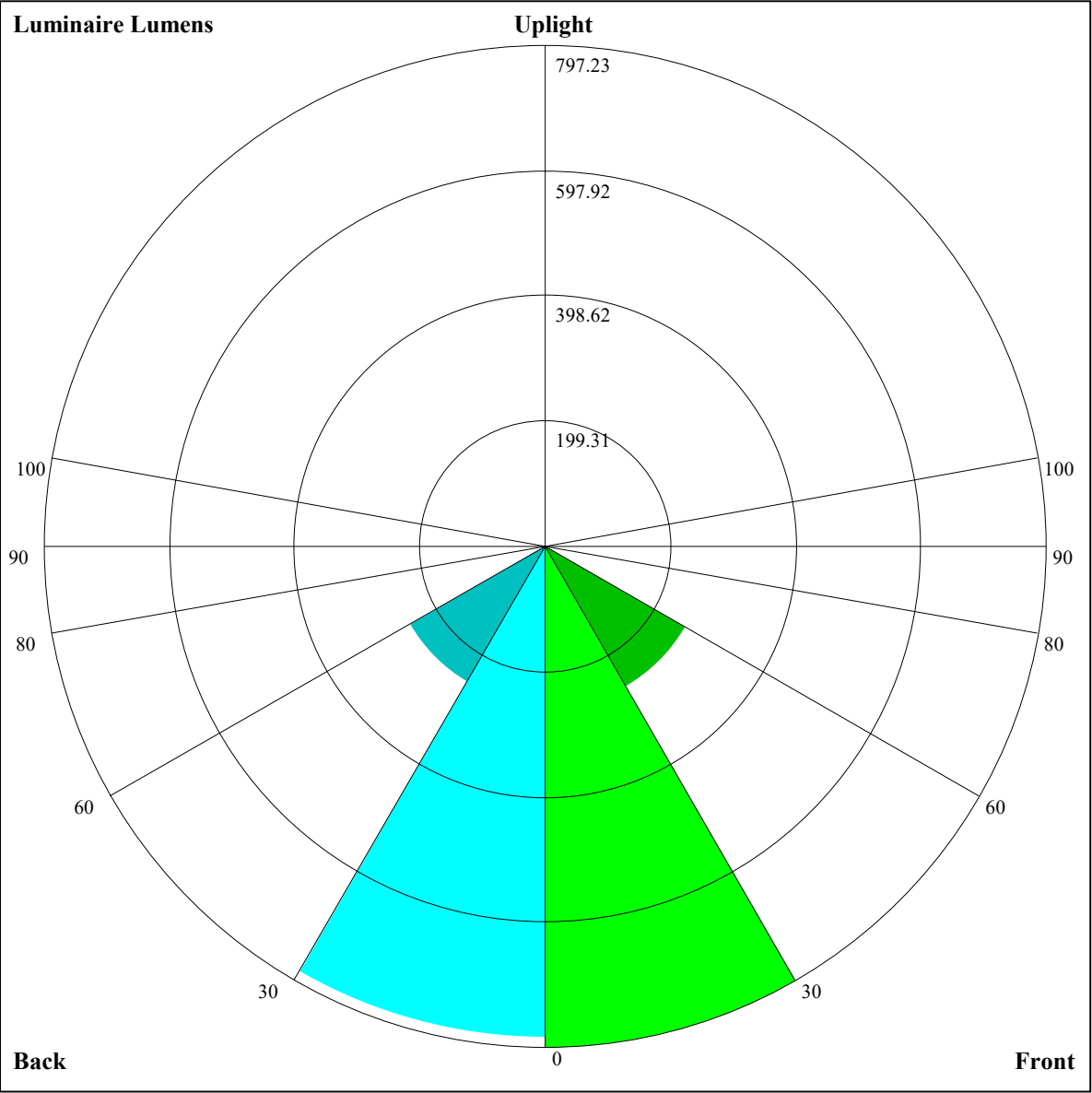


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	22.11	23.08	22.47	23.39	23.71	21.93	22.91	22.30	23.22	23.53
	3H	21.91	22.77	22.30	23.11	23.46	21.73	22.60	22.12	22.93	23.28
	4H	21.81	22.61	22.21	22.97	23.33	21.64	22.43	22.04	22.79	23.16
	6H	21.74	22.46	22.16	22.84	23.24	21.56	22.29	21.98	22.67	23.06
	8H	21.67	22.36	22.09	22.75	23.16	21.49	22.19	21.92	22.57	22.98
	12H	21.61	22.27	22.04	22.66	23.08	21.44	22.09	21.86	22.49	22.91
4H	2H	21.80	22.60	22.20	22.95	23.32	21.62	22.42	22.02	22.77	23.14
	3H	21.56	22.23	21.99	22.62	23.04	21.39	22.05	21.81	22.45	22.86
	4H	21.50	22.07	21.94	22.50	22.95	21.32	21.89	21.76	22.32	22.77
	6H	21.38	21.88	21.85	22.34	22.79	21.20	21.71	21.68	22.16	22.61
	8H	21.34	21.80	21.82	22.26	22.74	21.16	21.63	21.65	22.09	22.56
	12H	21.31	21.74	21.80	22.19	22.71	21.13	21.56	21.62	22.02	22.54
8H	4H	21.30	21.77	21.79	22.23	22.70	21.12	21.59	21.61	22.05	22.52
	6H	21.17	21.56	21.68	22.04	22.55	21.00	21.38	21.51	21.86	22.38
	8H	21.19	21.51	21.72	22.03	22.53	21.01	21.33	21.55	21.86	22.35
	12H	21.17	21.42	21.71	21.94	22.46	21.00	21.25	21.54	21.76	22.29
12H	4H	21.25	21.68	21.74	22.13	22.65	21.07	21.50	21.56	21.96	22.48
	6H	21.16	21.48	21.70	22.01	22.50	20.99	21.31	21.52	21.83	22.33
	8H	21.14	21.39	21.68	21.91	22.43	20.97	21.22	21.51	21.73	22.26
Variation with the observer position at spacings:											
S = 1.0H		3.6/-14.6					3.6/-14.6				
S = 1.5H		6.2/-13.1					6.2/-13.1				
S = 2.0H		8.2/-11.9					8.2/-11.9				
Standard tables:		BK0					BK0				
Uncorrected UGR		2.4					2.4				

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	1.14	1.14	1.14	1.11	1.11	1.11	1.06	1.06	1.06	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	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91
2	1.00	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	0.95	0.90	0.87	0.93	0.89	0.86	0.91	0.88	0.85	0.89	0.86	0.84	0.86	0.84	0.82	0.81
4	0.89	0.85	0.81	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.83	0.80	0.78	0.77
5	0.85	0.80	0.76	0.84	0.79	0.76	0.82	0.78	0.75	0.81	0.77	0.75	0.79	0.76	0.74	0.73
6	0.81	0.76	0.72	0.80	0.75	0.72	0.78	0.74	0.71	0.77	0.74	0.71	0.76	0.73	0.70	0.69
7	0.77	0.72	0.68	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.70	0.67	0.66
8	0.73	0.68	0.65	0.73	0.68	0.65	0.72	0.68	0.64	0.71	0.67	0.64	0.70	0.67	0.64	0.63
9	0.70	0.65	0.62	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.60
10	0.67	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.58



Luminaire Lumens:

FL=797.23,FM=258.89,FH=4.74,FVH=2.35

BL=782.34,BM=249.96,BH=4.71,BVH=2.35

UL=0,UH=0

BUG Rating:B2-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	7041.13	7023.04	6962.76	6828.41	6664.79	6375.43	6086.93	5732.13	5329.09
45.0	7023.04	7046.29	7034.24	6958.45	6846.50	6683.74	6459.83	6101.57	5745.91
90.0	7043.71	7019.60	6930.03	6811.19	6638.95	6404.71	6036.12	5672.71	5245.56
135.0	6998.07	7035.10	7019.60	6953.29	6818.08	6657.90	6433.13	6064.54	5694.23
180.0	7041.13	6999.79	6917.98	6802.58	6577.81	6325.48	6011.15	5622.76	5062.13
225.0	7023.04	6952.42	6791.38	6615.70	6379.74	5987.04	5599.50	5042.32	4554.03
270.0	7043.71	7024.76	6957.59	6808.61	6648.43	6431.41	6070.57	5721.79	5213.69
315.0	6998.07	6914.53	6787.08	6570.06	6332.37	6040.43	5584.86	5155.99	4684.93
360.0	7041.13	7023.04	6962.76	6828.41	6664.79	6375.43	6086.93	5732.13	5329.09
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4765.88	4297.39	3827.19	3377.65	2861.80	2509.58	2219.36	1694.21	1694.21
45.0	5344.59	4788.27	4318.06	3849.58	3284.64	2874.72	2519.05	2153.05	1923.11
90.0	4653.06	4163.91	3681.65	3117.57	2721.43	2312.37	1701.53	1701.53	1661.22
135.0	5263.64	4794.30	4182.00	3702.32	3245.03	2835.10	2403.65	2120.32	1892.11
180.0	4572.97	4079.51	3595.53	3037.48	2646.50	2322.70	1999.76	1795.65	1590.69
225.0	4064.01	3473.24	3034.90	2647.37	2322.70	1703.25	1703.25	1621.87	1480.12
270.0	4754.68	4271.56	3786.71	3213.16	2798.93	2446.71	2158.21	1873.16	1694.04
315.0	4206.11	3623.09	3184.74	2788.60	2449.29	1942.06	1701.44	1701.44	1513.19
360.0	4765.88	4297.39	3827.19	3377.65	2861.80	2509.58	2219.36	1694.21	1694.21
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1581.22	1449.89	1310.03	1215.48	1115.84	1047.89	988.55	937.40	880.47
45.0	1736.23	1581.22	1420.18	1311.67	1216.94	1137.71	1053.31	994.75	942.22
90.0	1516.63	1362.22	1259.05	1170.61	1095.43	1014.65	957.98	909.24	855.93
135.0	1664.75	1518.35	1365.92	1263.44	1177.32	1101.54	1018.87	961.17	912.08
180.0	1450.32	1338.37	1241.05	1135.99	1065.37	1001.64	945.67	885.38	842.32
225.0	1331.13	1232.78	1148.47	1076.74	998.20	944.20	884.87	842.50	807.53
270.0	1537.30	1408.98	1274.64	1183.35	1086.04	1018.01	960.31	896.58	855.24
315.0	1387.20	1254.49	1163.89	1086.47	1020.07	949.02	899.85	855.24	817.44
360.0	1581.22	1449.89	1310.03	1215.48	1115.84	1047.89	988.55	937.40	880.47
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	841.20	808.31	780.32	749.49	728.56	709.70	693.25	673.79	653.64
45.0	883.66	844.91	804.43	776.87	752.76	725.20	707.12	691.62	675.25
90.0	820.36	790.05	758.44	737.09	713.84	697.13	681.45	664.66	629.70
135.0	868.16	822.52	792.38	766.54	738.98	720.90	703.67	683.87	666.64
180.0	809.60	778.60	746.73	724.34	701.09	685.59	670.09	644.25	612.39
225.0	771.79	746.73	724.17	704.28	683.18	667.25	648.90	620.66	576.48
270.0	818.21	780.32	753.62	730.37	710.56	688.17	672.67	656.31	633.06
315.0	777.91	751.73	728.91	709.53	688.34	671.81	651.49	627.54	594.13
360.0	841.20	808.31	780.32	749.49	728.56	709.70	693.25	673.79	653.64
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	615.66	577.34	533.16	473.82	424.99	375.82	325.18	263.52	214.87
45.0	651.14	608.94	570.19	526.27	480.63	442.73	442.73	311.15	249.05
90.0	592.58	551.16	506.29	445.06	396.75	347.14	297.71	235.88	188.86
135.0	638.22	593.44	551.24	503.88	456.51	444.46	381.25	285.48	237.17
180.0	575.36	521.96	474.60	438.43	438.43	325.96	265.68	219.69	173.96
225.0	536.26	490.62	432.14	382.80	332.68	269.90	222.79	165.00	123.24
270.0	590.00	549.52	493.54	446.18	434.98	376.34	285.57	237.51	191.79
315.0	546.51	502.93	458.58	412.25	351.71	301.50	252.33	191.70	148.64
360.0	615.66	577.34	533.16	473.82	424.99	375.82	325.18	263.52	214.87

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	167.16	122.72	73.63	42.71	22.22	13.43	12.40	11.45	10.42
45.0	199.62	142.78	100.76	64.93	31.26	16.88	13.18	12.14	11.02
90.0	132.45	91.72	56.67	25.66	15.85	13.78	12.92	11.71	10.76
135.0	177.23	134.86	94.90	52.45	28.51	17.22	13.95	13.00	11.71
180.0	117.29	79.06	47.37	21.36	13.87	12.49	11.37	10.42	9.65
225.0	85.08	52.62	28.42	14.47	12.49	11.63	10.68	9.56	8.78
270.0	136.24	95.85	60.54	32.64	16.28	13.69	12.75	11.88	10.59
315.0	107.39	70.19	35.39	19.38	14.55	13.26	12.31	10.94	10.08
360.0	167.16	122.72	73.63	42.71	22.22	13.43	12.40	11.45	10.42
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	9.65	8.78	8.01	7.32	6.29	5.68	5.43	5.25	5.08
45.0	10.16	9.39	8.53	7.75	7.06	6.20	5.60	5.43	5.17
90.0	9.90	8.96	8.01	7.06	5.94	5.60	5.34	5.08	4.99
135.0	10.68	9.82	8.96	7.84	6.80	5.86	5.60	5.34	5.17
180.0	8.78	8.10	7.41	6.46	5.77	5.43	5.25	5.08	4.91
225.0	7.92	7.23	6.54	5.68	5.43	5.25	4.99	4.82	4.74
270.0	9.65	8.53	7.66	6.72	5.77	5.51	5.34	5.08	4.91
315.0	9.30	8.61	7.84	5.86	5.60	5.43	5.17	4.99	4.82
360.0	9.65	8.78	8.01	7.32	6.29	5.68	5.43	5.25	5.08
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	4.99	4.91	4.82	4.74	4.65	4.65	4.56	4.65	4.56
45.0	5.08	4.91	4.82	4.74	4.74	4.65	4.56	4.56	4.56
90.0	4.82	4.82	4.74	4.65	4.65	4.56	4.56	4.56	4.48
135.0	4.99	4.91	4.82	4.74	4.74	4.65	4.65	4.56	4.56
180.0	4.82	4.74	4.74	4.56	4.56	4.56	4.56	4.48	4.48
225.0	4.74	4.65	4.65	4.56	4.56	4.48	4.48	4.39	4.48
270.0	4.82	4.74	4.65	4.65	4.65	4.56	4.56	4.48	4.48
315.0	4.74	4.74	4.65	4.65	4.65	4.56	4.56	4.56	4.48
360.0	4.99	4.91	4.82	4.74	4.65	4.65	4.56	4.65	4.56
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	4.48	4.48	4.48	4.48	4.48	4.39	4.39	4.48	4.39
45.0	4.56	4.56	4.48	4.48	4.48	4.48	4.39	4.39	4.39
90.0	4.48	4.39	4.48	4.39	4.48	4.39	4.39	4.39	4.39
135.0	4.48	4.48	4.48	4.48	4.48	4.48	4.39	4.39	4.39
180.0	4.48	4.48	4.39	4.48	4.39	4.39	4.39	4.48	4.39
225.0	4.48	4.39	4.39	4.39	4.39	4.39	4.31	4.39	4.31
270.0	4.48	4.48	4.39	4.39	4.39	4.39	4.39	4.39	4.31
315.0	4.48	4.48	4.48	4.48	4.39	4.39	4.39	4.39	4.39
360.0	4.48	4.48	4.48	4.48	4.48	4.39	4.39	4.48	4.39
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	4.39	4.39	4.39	4.39	4.31	4.31	4.39	4.31	4.22
45.0	4.48	4.31	4.39	4.39	4.39	4.31	4.22	4.31	4.31
90.0	4.39	4.39	4.39	4.39	4.31	4.31	4.31	4.22	4.31
135.0	4.39	4.39	4.39	4.39	4.31	4.22	4.31	4.31	4.22
180.0	4.39	4.39	4.39	4.39	4.31	4.22	4.31	4.31	4.22
225.0	4.31	4.39	4.39	4.31	4.31	4.22	4.22	4.22	4.22
270.0	4.39	4.31	4.31	4.31	4.22	4.31	4.31	4.22	4.31
315.0	4.31	4.39	4.31	4.31	4.31	4.31	4.31	4.31	4.22
360.0	4.39	4.39	4.39	4.39	4.31	4.31	4.39	4.31	4.22

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	4.22
45.0	4.22
90.0	4.22
135.0	4.22
180.0	4.22
225.0	4.22
270.0	4.22
315.0	4.22
360.0	4.22