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NT

Client: NT

LumCAT: 1-1761-LM

Luminaire: 92.70.494.00 LED HOLDER

Report No: 20251218-C013

Ballast type: AC

Test No: 20251218-C013

Voltage(V): 34.430

LampCAT: LUMINUS CXM-11(TC)

Current(A): 0.452

Lamp flux(lm): 2035.0

Power (W): 15.562

Number of Lamps: 1

PF: 0.000

Length(mm): 50

Width(mm): 50

Phm Type: C

Height(mm): 22

Photometric Results

Lumens(lm): 1957.27, Efficiency(%): 96.18% , Luminous Efficacy(lm/W): 125.77

Central intensity(cd): 2268.928, Maximum intensity(cd): 2268.928

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=52.2

[C90/270]Total=52.2

Field angle(10%Imax): [C0/180]Total=90.8

[C90/270]Total=90.8

Maximum s/h(1/2): C0_180=0.81 C90_270=0.81

Maximum s/h(1/4): C0_180=0.86 C90_270=0.86

Up flux rate of lamp(%): 0.00%

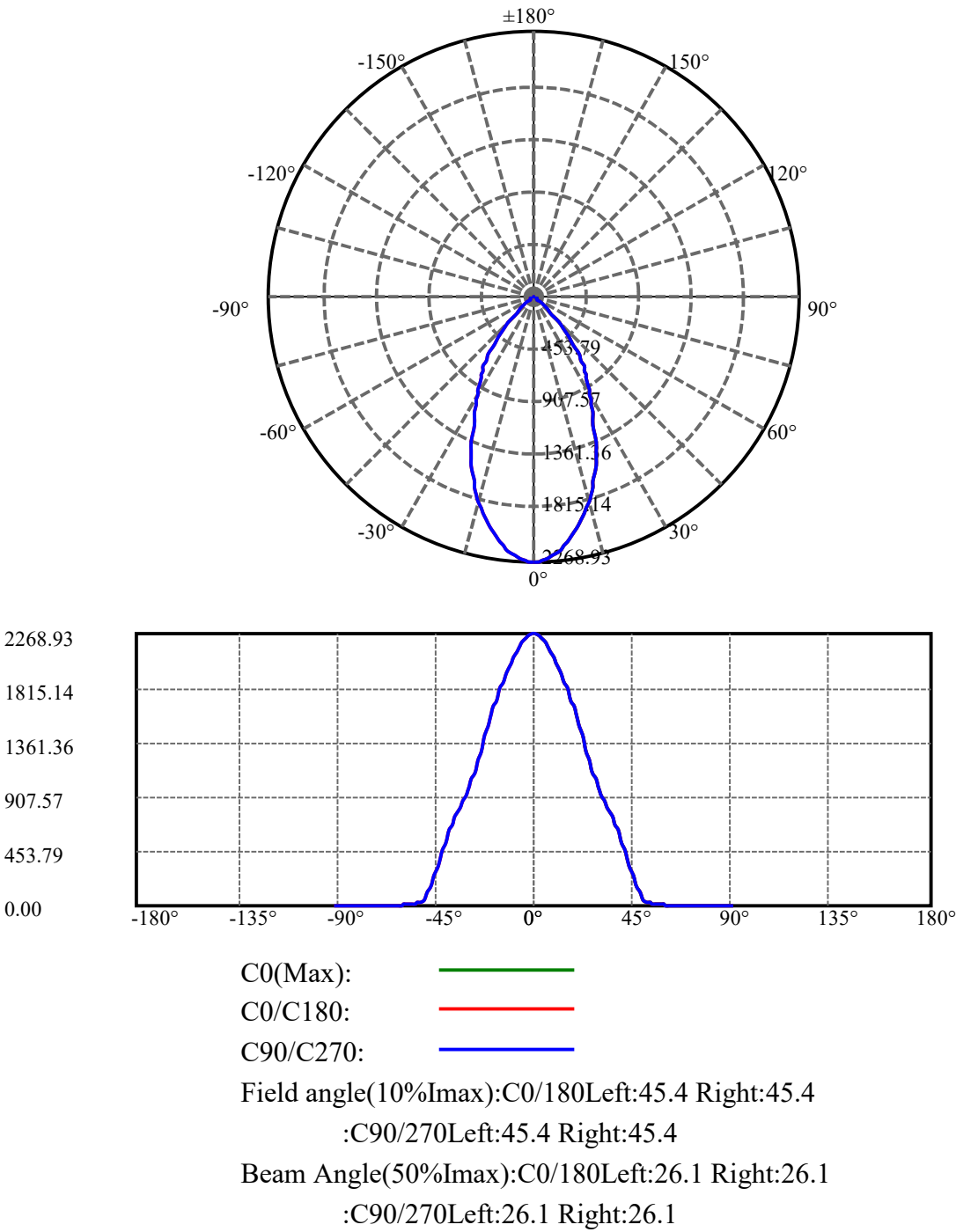
Down flux rate of lamp(%): 96.18%

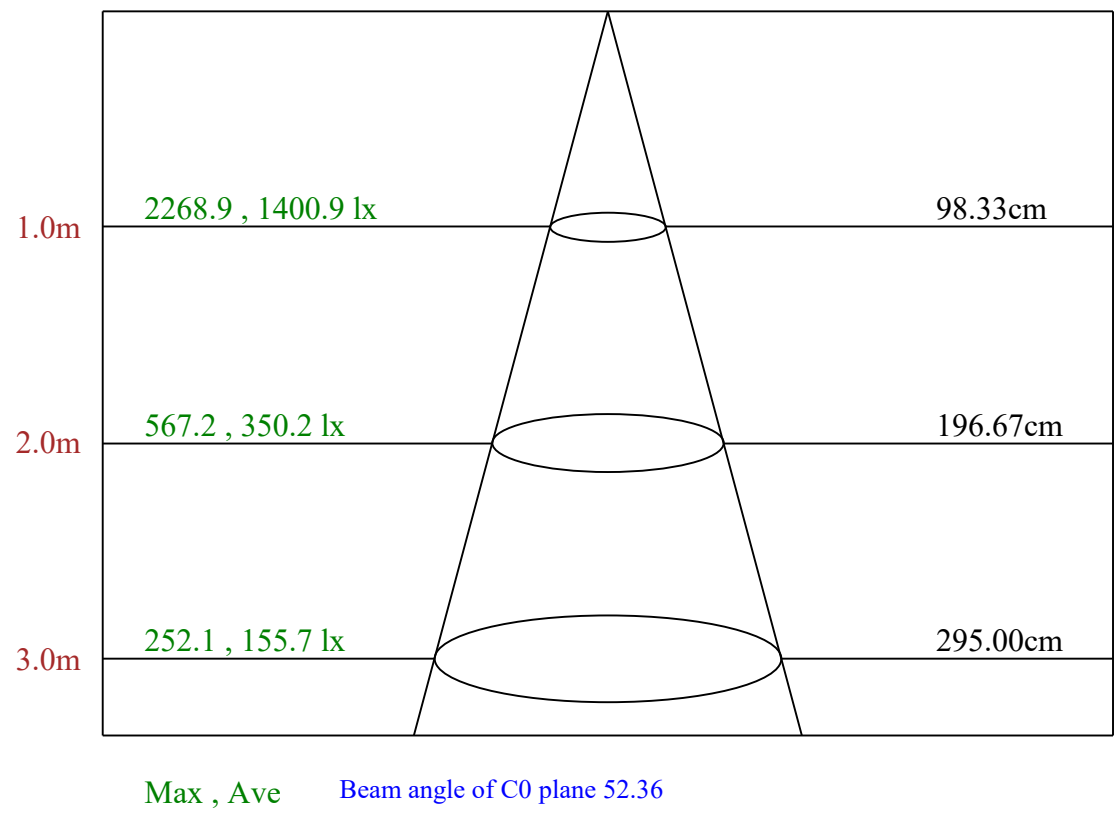
Up flux rate of LUM(%): - -

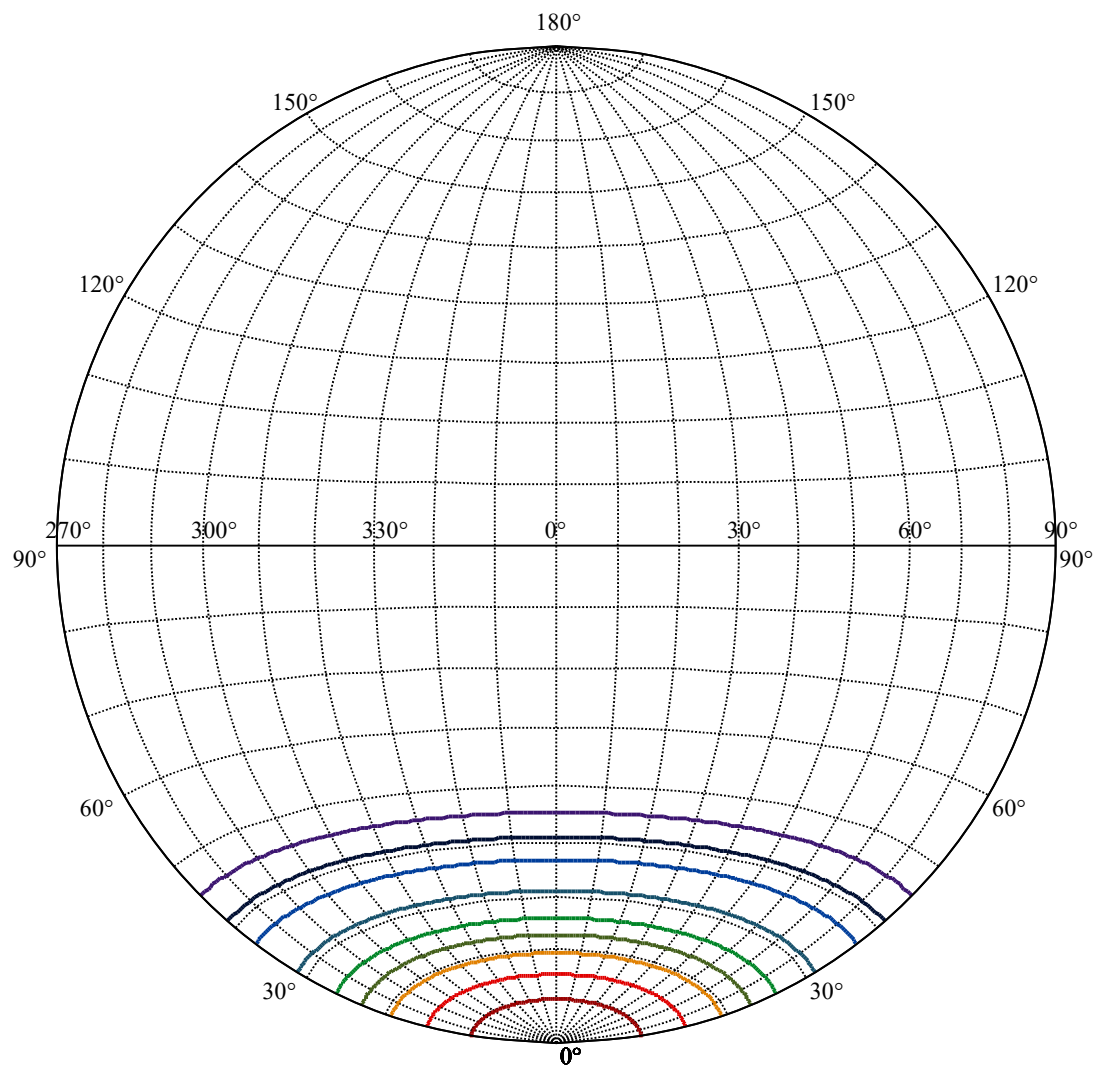
Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.682%





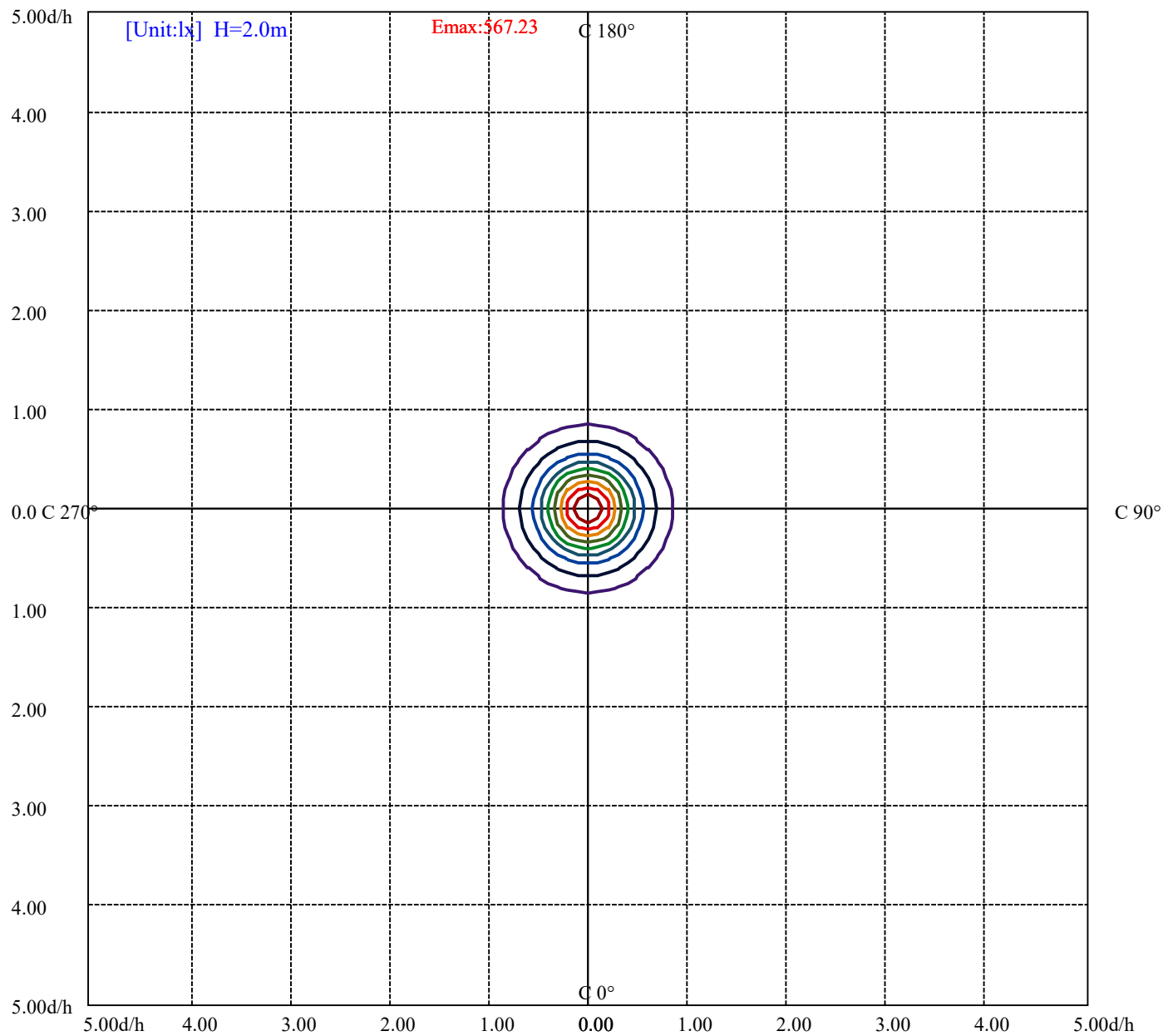


House

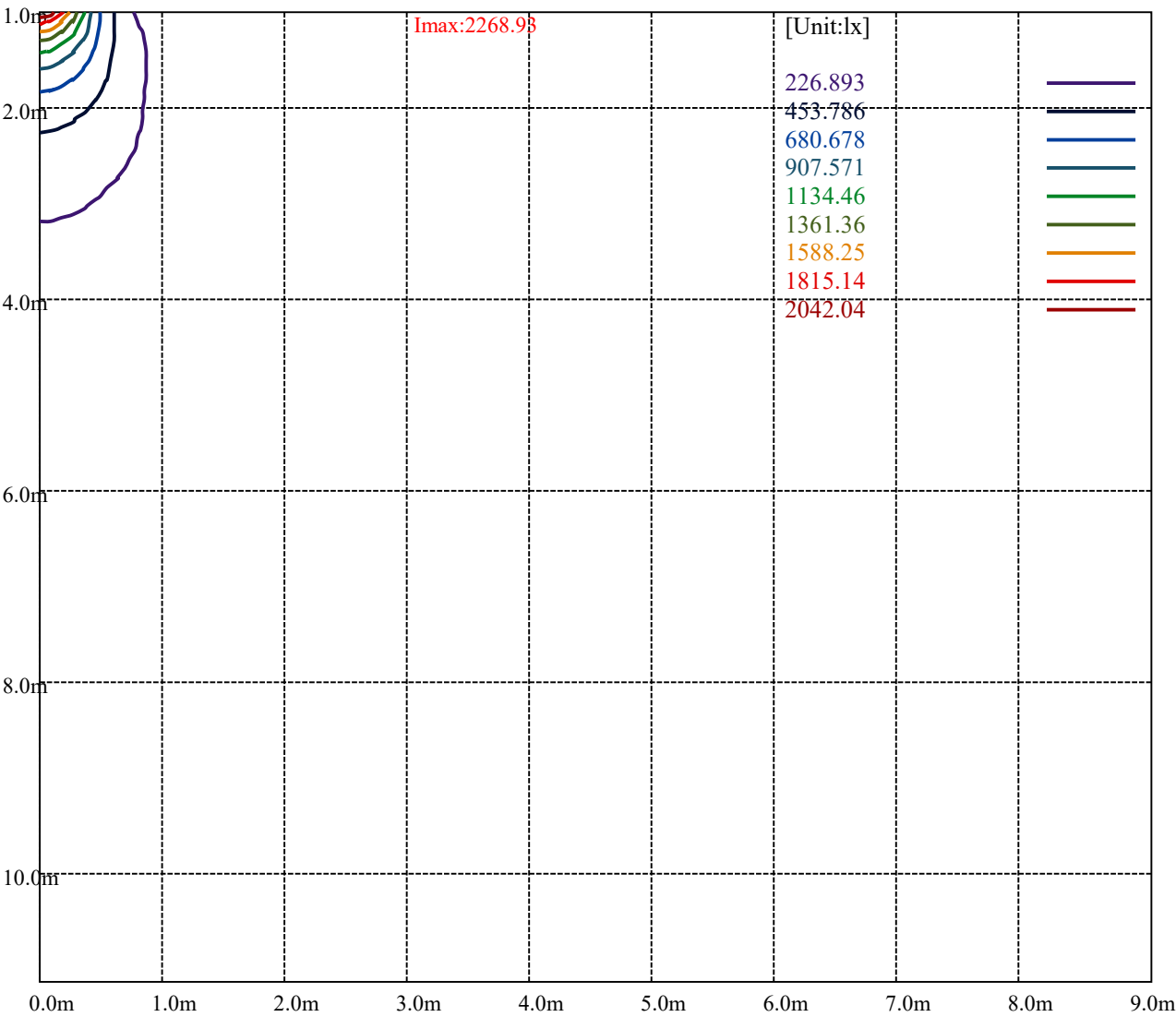
[Unit:cd]

Road

I _{max} :2268.93	
(10%I _{max}) 226.893	
(20%I _{max}) 453.786	
(30%I _{max}) 680.678	
(40%I _{max}) 907.571	
(50%I _{max}) 1134.46	
(60%I _{max}) 1361.36	
(70%I _{max}) 1588.25	
(80%I _{max}) 1815.14	
(90%I _{max}) 2042.04	



(10%Emax) 56.72325	—
(20%Emax) 113.4463	—
(30%Emax) 170.1695	—
(40%Emax) 226.8927	—
(50%Emax) 283.615	—
(60%Emax) 340.34	—
(70%Emax) 397.0625	—
(80%Emax) 453.785	—
(90%Emax) 510.5075	—



Luminance Table

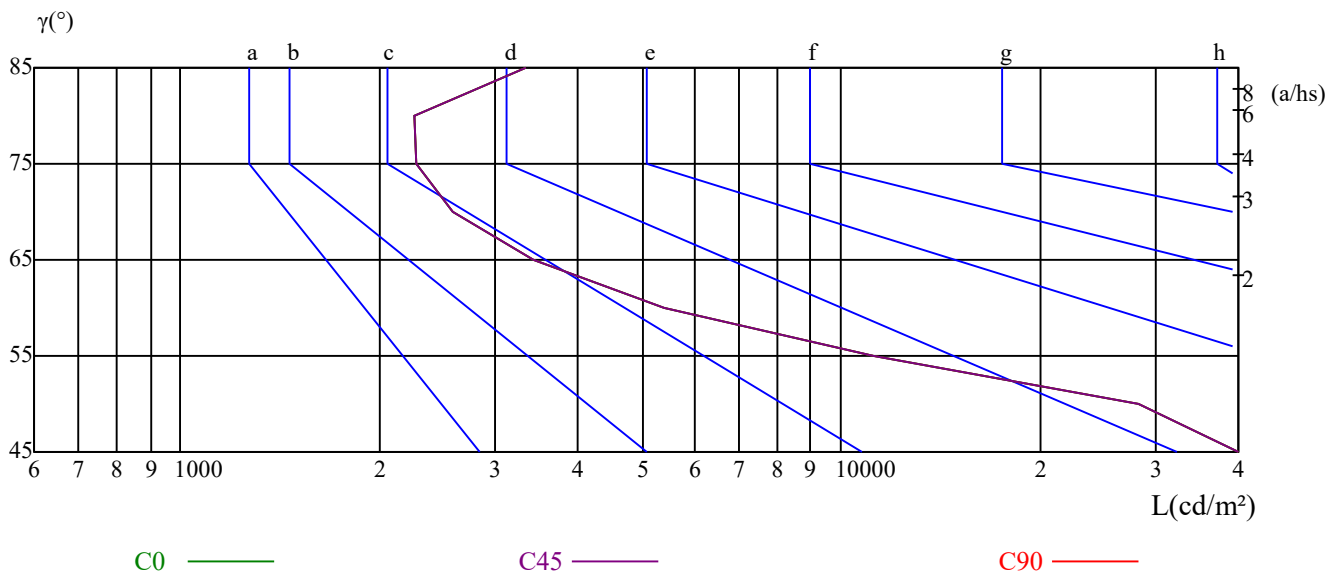
γ	45	50	55	60	65	70	75	80	85
C0	140679	28314	11214	5400	3421	2582	2282	2268	3324
C45	140679	28314	11214	5400	3421	2582	2282	2268	3324
C90	140679	28314	11214	5400	3421	2582	2282	2268	3324

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3421	3421	3421	2282	2282	2282	3324	3324	3324

Glare Table

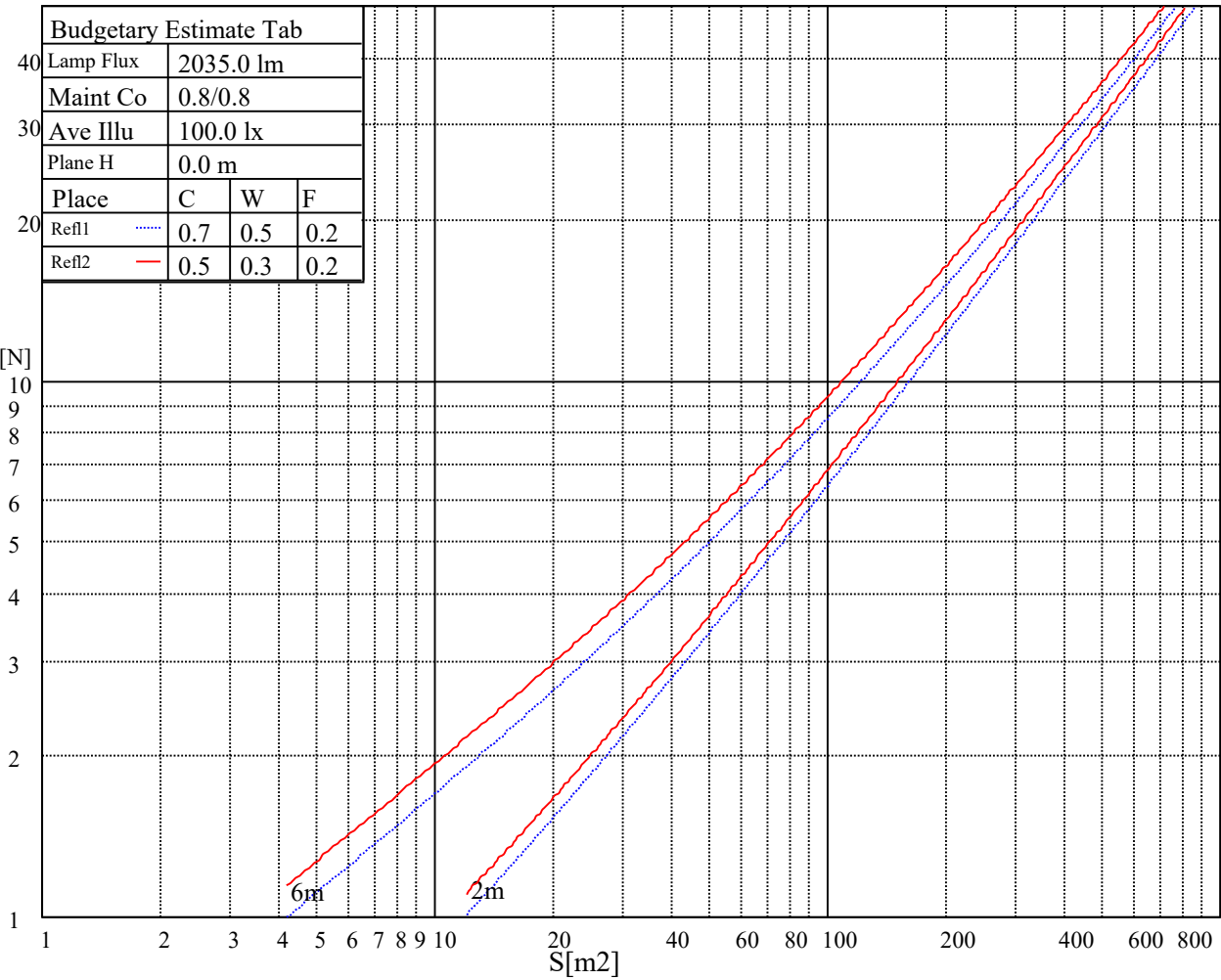
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

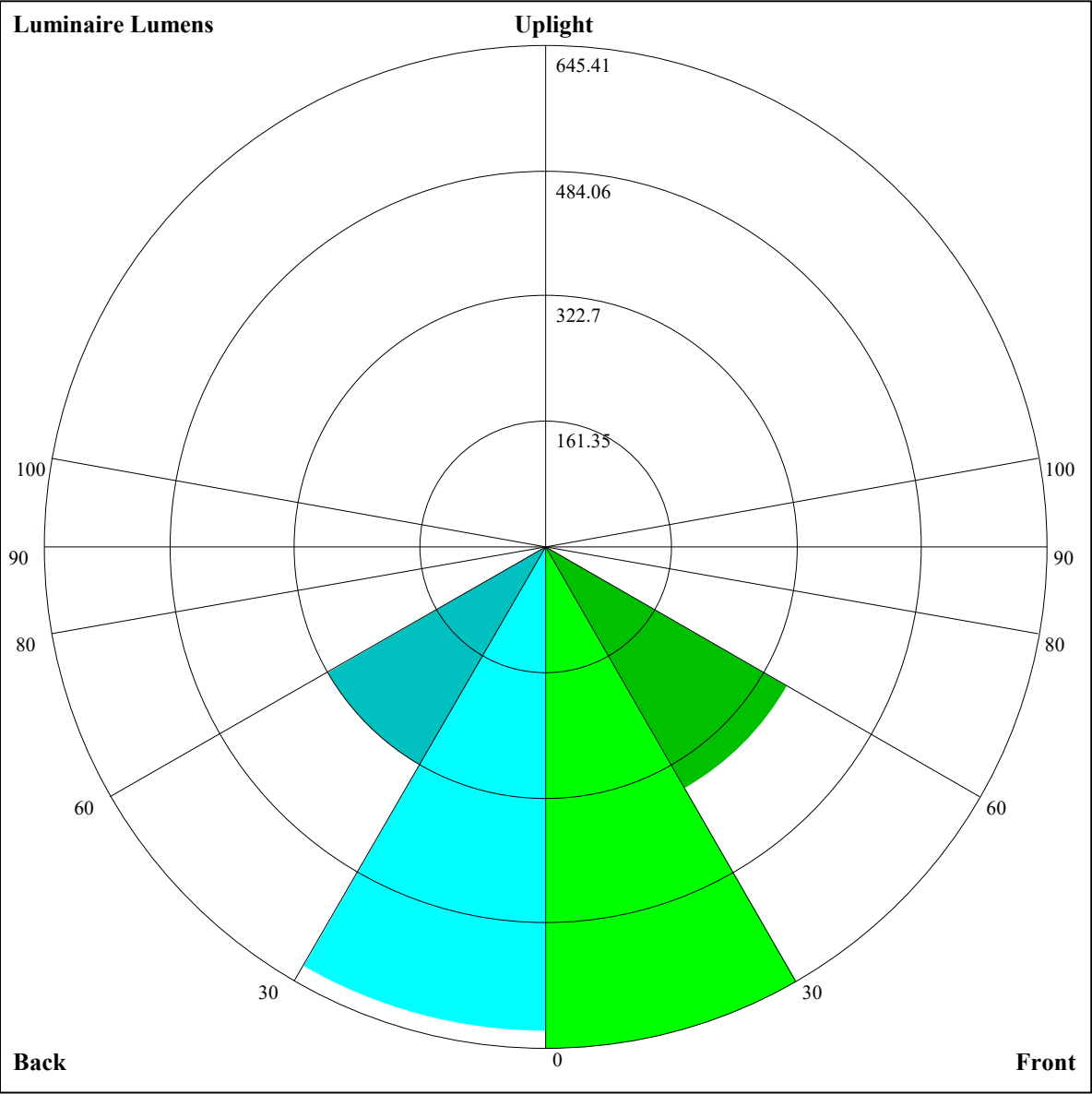


Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	26.55	27.57	26.91	27.88	28.20	26.10	27.13	26.46	27.44	27.75
	3H	26.35	27.26	26.74	27.60	27.94	25.91	26.81	26.29	27.15	27.50
	4H	26.25	27.09	26.65	27.44	27.81	25.81	26.64	26.21	27.00	27.37
	6H	26.17	26.93	26.58	27.31	27.71	25.72	26.49	26.14	26.86	27.26
	8H	26.09	26.82	26.51	27.21	27.61	25.65	26.38	26.07	26.76	27.17
	12H	26.02	26.71	26.45	27.11	27.53	25.58	26.27	26.00	26.66	27.08
4H	2H	26.26	27.10	26.66	27.45	27.82	25.81	26.65	26.21	27.01	27.37
	3H	26.03	26.72	26.45	27.12	27.53	25.58	26.28	26.01	26.67	27.09
	4H	25.96	26.55	26.39	26.98	27.42	25.51	26.11	25.95	26.53	26.98
	6H	25.82	26.34	26.29	26.79	27.25	25.37	25.90	25.85	26.35	26.80
	8H	25.76	26.24	26.24	26.70	27.17	25.31	25.80	25.80	26.26	26.73
	12H	25.70	26.15	26.19	26.61	27.13	25.26	25.71	25.75	26.17	26.69
8H	4H	25.75	26.24	26.24	26.70	27.17	25.31	25.80	25.80	26.26	26.73
	6H	25.60	26.00	26.10	26.48	26.99	25.16	25.56	25.66	26.04	26.55
	8H	25.58	25.92	26.11	26.44	26.94	25.14	25.48	25.67	26.00	26.50
	12H	25.52	25.79	26.07	26.31	26.83	25.09	25.35	25.63	25.87	26.39
12H	4H	25.70	26.15	26.19	26.60	27.12	25.26	25.71	25.75	26.16	26.68
	6H	25.58	25.92	26.11	26.44	26.94	25.14	25.48	25.67	26.00	26.50
	8H	25.52	25.79	26.06	26.31	26.83	25.08	25.35	25.62	25.86	26.39
Variation with the observer position at spacings:											
S = 1.0H		3.3/-15.4					3.3/-15.4				
S = 1.5H		5.9/-18.7					5.9/-18.7				
S = 2.0H		7.9/-19.2					7.9/-19.2				
Standard tables:		BK0					BK0				
Uncorrected UGR		6.6					6.6				

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	1.06	1.04	1.02	1.04	1.02	1.00	1.00	0.99	0.97	0.97	0.95	0.94	0.93	0.92	0.91	0.90
2	0.99	0.95	0.91	0.97	0.93	0.90	0.94	0.91	0.88	0.91	0.89	0.86	0.88	0.86	0.85	0.83
3	0.92	0.87	0.83	0.90	0.86	0.82	0.88	0.84	0.81	0.85	0.82	0.80	0.83	0.81	0.78	0.77
4	0.85	0.80	0.76	0.84	0.79	0.75	0.82	0.78	0.74	0.80	0.77	0.74	0.78	0.75	0.73	0.71
5	0.80	0.74	0.70	0.79	0.73	0.69	0.77	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.67	0.66
6	0.75	0.69	0.64	0.74	0.68	0.64	0.72	0.67	0.64	0.71	0.67	0.63	0.70	0.66	0.63	0.61
7	0.70	0.64	0.60	0.69	0.64	0.60	0.68	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.57
8	0.66	0.60	0.56	0.65	0.59	0.55	0.64	0.59	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.53
9	0.62	0.56	0.52	0.61	0.56	0.52	0.60	0.55	0.52	0.59	0.55	0.52	0.59	0.54	0.51	0.50
10	0.58	0.53	0.49	0.58	0.52	0.49	0.57	0.52	0.48	0.56	0.52	0.48	0.56	0.51	0.48	0.47



Luminaire Lumens:

FL=645.41,FM=358.14,FH=3,FVH=0.44

BL=623.45,BM=324.96,BH=2.39,BVH=0.4

UL=0,UH=0

BUG Rating:B2-U0-G0

NT NT 1-1761-LM

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	2273.57	2276.38	2265.69	2258.38	2242.63	2222.38	2198.19	2163.88	2144.76
45.0	2264.01	2266.26	2263.44	2256.13	2243.19	2220.69	2198.76	2171.76	2141.94
90.0	2265.13	2252.19	2234.19	2211.69	2179.07	2161.07	2113.82	2068.26	2052.51
135.0	2273.01	2262.88	2247.13	2226.32	2194.82	2183.57	2145.32	2095.26	2071.63
180.0	2273.57	2269.07	2253.88	2235.88	2213.94	2187.51	2169.51	2130.13	2093.57
225.0	2264.01	2256.69	2244.88	2228.01	2202.13	2186.94	2158.26	2125.07	2089.63
270.0	2265.13	2270.19	2273.01	2268.51	2258.94	2244.32	2220.13	2194.26	2164.44
315.0	2273.01	2274.13	2270.76	2261.19	2246.01	2222.38	2207.76	2180.19	2129.01
360.0	2273.57	2276.38	2265.69	2258.38	2242.63	2222.38	2198.19	2163.88	2144.76
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2110.44	2072.19	2032.26	1980.51	1953.51	1907.38	1858.44	1799.38	1748.19
45.0	2121.69	2078.38	2039.01	1996.26	1951.82	1923.69	1875.88	1817.38	1766.19
90.0	2002.44	1958.01	1912.44	1856.76	1827.51	1779.69	1729.63	1680.13	1618.26
135.0	2022.69	1979.38	1935.51	1890.51	1862.38	1806.13	1758.88	1711.63	1662.13
180.0	2054.19	2004.13	1985.57	1931.57	1865.19	1836.51	1777.44	1726.82	1675.07
225.0	2042.38	2017.07	1973.76	1898.94	1869.69	1820.19	1768.44	1715.01	1648.07
270.0	2144.76	2102.01	2062.07	2020.44	1975.44	1948.44	1891.07	1841.01	1790.94
315.0	2107.63	2069.94	2046.32	1988.38	1935.51	1907.94	1861.26	1812.32	1762.26
360.0	2110.44	2072.19	2032.26	1980.51	1953.51	1907.38	1858.44	1799.38	1748.19
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1694.76	1639.07	1568.76	1532.19	1468.63	1401.69	1331.94	1246.44	1104.69
45.0	1713.88	1649.19	1626.69	1536.13	1475.38	1438.26	1361.19	1295.94	1230.69
90.0	1585.63	1507.44	1435.44	1397.76	1334.19	1268.38	1203.13	1116.06	1094.85
135.0	1600.26	1546.82	1488.88	1451.76	1373.57	1304.94	1232.94	1163.76	1128.32
180.0	1621.63	1589.01	1519.82	1457.94	1392.13	1324.63	1241.94	1176.13	1140.69
225.0	1613.19	1553.57	1491.13	1425.88	1343.76	1275.69	1211.57	1106.66	1106.66
270.0	1738.63	1706.57	1615.44	1555.26	1517.01	1437.13	1367.94	1295.94	1227.88
315.0	1699.82	1667.19	1609.82	1548.51	1468.07	1397.19	1322.94	1248.69	1085.46
360.0	1694.76	1639.07	1568.76	1532.19	1468.63	1401.69	1331.94	1246.44	1104.69
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1104.69	1071.79	1040.12	989.78	943.14	899.72	851.68	814.05	778.56
45.0	1170.51	1138.44	1078.26	1032.13	989.38	941.01	903.88	869.57	836.38
90.0	1044.56	988.93	962.83	921.21	882.39	845.72	803.87	783.39	744.47
135.0	1058.01	984.32	955.07	908.38	881.94	816.13	777.88	756.51	712.63
180.0	1085.57	1024.26	977.57	932.01	890.38	866.76	822.32	787.44	752.01
225.0	1075.78	1027.52	973.58	931.56	891.96	854.89	812.98	792.79	754.09
270.0	1190.76	1121.57	1067.57	1016.94	959.57	941.01	889.82	834.69	812.76
315.0	1085.46	1085.46	994.67	963.00	912.77	866.08	823.05	775.52	753.30
360.0	1104.69	1071.79	1040.12	989.78	943.14	899.72	851.68	814.05	778.56
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	735.58	709.71	660.77	606.99	550.80	481.11	446.23	387.51	296.66
45.0	816.69	775.07	730.07	680.01	624.32	591.13	520.26	437.01	401.57
90.0	696.38	632.59	574.88	540.00	456.98	386.89	351.96	295.37	239.46
135.0	668.76	617.57	563.57	529.26	461.76	405.51	348.69	294.13	294.13
180.0	709.26	648.51	592.82	535.44	498.32	426.88	367.26	311.57	311.57
225.0	706.28	652.33	583.54	547.88	462.94	389.59	365.51	296.55	241.03
270.0	770.01	733.44	687.32	635.01	601.26	531.51	471.88	412.82	354.32
315.0	717.92	678.77	630.56	568.29	512.94	457.14	390.09	367.54	302.01
360.0	735.58	709.71	660.77	606.99	550.80	481.11	446.23	387.51	296.66

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	274.33	210.60	160.26	114.86	68.57	50.46	30.88	23.57	20.53
45.0	344.76	310.44	310.44	179.16	150.64	86.46	59.01	49.39	40.39
90.0	187.99	131.57	106.43	68.91	41.29	28.24	23.06	20.03	17.27
135.0	189.00	142.03	116.38	69.98	40.05	22.73	16.03	14.06	12.38
180.0	237.83	151.48	107.55	84.49	47.36	29.76	23.34	20.42	18.79
225.0	189.23	132.47	107.27	71.94	48.04	37.07	31.61	29.19	25.59
270.0	318.88	318.88	187.76	158.29	105.19	67.33	39.83	25.76	22.16
315.0	247.50	196.37	139.16	113.29	73.29	41.96	22.95	15.75	14.57
360.0	274.33	210.60	160.26	114.86	68.57	50.46	30.88	23.57	20.53
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	17.27	15.69	13.50	11.53	9.34	7.59	6.19	5.12	4.39
45.0	35.55	31.22	27.34	23.79	21.26	18.39	15.19	12.38	10.86
90.0	14.40	13.22	11.42	9.84	8.27	6.13	5.68	5.01	4.44
135.0	10.86	10.01	8.55	7.59	6.58	4.28	3.99	3.49	3.21
180.0	15.92	12.94	11.87	9.84	9.06	5.46	4.78	4.39	3.83
225.0	20.48	18.73	15.98	14.23	9.79	8.33	7.65	6.69	5.85
270.0	19.18	16.59	15.08	12.54	10.69	8.78	6.41	5.85	4.95
315.0	12.09	10.24	9.28	8.04	6.81	5.34	4.11	3.88	3.49
360.0	17.27	15.69	13.50	11.53	9.34	7.59	6.19	5.12	4.39
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	4.05	3.60	3.21	2.87	2.48	2.36	2.14	1.97	1.86
45.0	10.01	8.61	7.54	6.58	5.74	5.29	4.56	4.11	3.60
90.0	3.99	3.43	3.09	2.81	2.48	2.42	2.19	2.03	1.91
135.0	2.87	2.59	2.36	2.14	1.97	1.97	1.74	1.69	1.63
180.0	3.38	2.98	2.70	2.48	2.25	2.03	1.86	1.69	1.58
225.0	5.06	4.28	3.94	3.49	3.15	2.70	2.42	2.19	1.97
270.0	4.22	3.88	3.49	2.98	2.70	2.48	2.31	2.14	1.91
315.0	3.15	2.87	2.59	2.42	2.25	2.03	1.97	1.86	1.74
360.0	4.05	3.60	3.21	2.87	2.48	2.36	2.14	1.97	1.86
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	1.63	1.52	1.46	1.29	1.24	1.13	1.01	1.01	0.84
45.0	3.15	2.87	2.64	2.36	2.03	1.86	1.69	1.52	1.29
90.0	1.74	1.69	1.58	1.41	1.41	1.24	1.24	1.18	1.07
135.0	1.52	1.46	1.35	1.24	1.18	1.13	1.01	1.01	0.90
180.0	1.41	1.35	1.24	1.18	1.13	1.01	0.96	0.90	0.84
225.0	1.74	1.63	1.46	1.41	1.29	1.07	1.07	0.96	0.84
270.0	1.80	1.69	1.63	1.52	1.35	1.29	1.18	1.13	1.07
315.0	1.63	1.52	1.52	1.41	1.29	1.24	1.18	1.13	1.01
360.0	1.63	1.52	1.46	1.29	1.24	1.13	1.01	1.01	0.84
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	0.90	0.79	0.68	0.62	0.56	0.56	0.51	0.45	0.45
45.0	1.24	1.13	0.96	0.90	0.84	0.73	0.62	0.56	0.51
90.0	1.13	1.07	1.29	1.18	0.90	0.84	0.84	0.90	1.07
135.0	0.90	0.96	1.24	1.24	0.67	0.68	0.62	0.62	0.79
180.0	0.73	0.73	0.62	0.62	0.56	0.51	0.51	0.45	0.34
225.0	0.79	0.68	0.62	0.62	0.56	0.51	0.45	0.45	0.17
270.0	1.01	0.90	0.84	0.84	0.96	0.73	0.73	0.68	0.62
315.0	0.90	0.84	0.73	0.84	0.73	0.62	0.56	0.51	0.56
360.0	0.90	0.79	0.68	0.62	0.56	0.56	0.51	0.45	0.45

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	0.39
45.0	0.62
90.0	0.90
135.0	0.51
180.0	0.17
225.0	0.11
270.0	0.73
315.0	0.56
360.0	0.39