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LumCAT: 2-1778-L  
Luminaire: 92.70.131.00  
Report No: NATA0100  
Test No: GC2019120410  
LampCAT: TRIDONIC SLE G7 15MM  
Lamp flux(lm): 2031.0  
Number of Lamps: 1  
Length(mm): 0  
Phm Type: C

Voltage(V): 34.0300  
Current(A): 0.4470  
Power (W): 15.2100  
PF: 1.0000  
Ballast type: DC  
Width(mm): 0  
Height(mm): 0

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### Photometric Results

Lumens(lm): 1942.60  
Efficiency(%): 95.65%  
Lumens(lm)/Power(W): 127.72  
Central intensity(cd): 6864.891  
Maximum intensity(cd): 6864.891  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [C0/180]Total=26.3  
                                  [C90/270]Total=26.3  
Field angle(10%Imax): [C0/180]Total=55.8  
                                  [C90/270]Total=55.8  
Maximum s/h(1/2): C0\_180=0.45 C90\_270=0.45  
Maximum s/h(1/4): C0\_180=0.43 C90\_270=0.43  
Up flux rate of lamp(%): 0.00%  
Down flux rate of lamp(%): 95.65%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 98.108%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6864.891	0.000	0	.000%	.000%
1.0	6848.719	6.562	6.562	.323%	.338%
2.0	6792.609	19.579	26.141	.964%	1.346%
3.0	6700.078	32.270	58.411	1.589%	3.007%
4.0	6588.563	44.481	102.892	2.190%	5.297%
5.0	6456.094	56.117	159.01	2.763%	8.185%
6.0	6250.430	66.776	225.786	3.288%	11.623%
7.0	6016.641	76.141	301.928	3.749%	15.542%
8.0	5740.453	84.143	386.071	4.143%	19.874%
9.0	5351.273	89.892	475.963	4.426%	24.501%
10.0	4913.719	92.894	568.858	4.574%	29.283%
11.0	4483.898	93.902	662.759	4.623%	34.117%
12.0	3993.891	92.674	755.434	4.563%	38.888%
13.0	3488.133	88.793	844.226	4.372%	43.458%
14.0	3058.664	83.798	928.025	4.126%	47.772%
15.0	2622.094	77.988	1006.013	3.840%	51.787%
16.0	2255.625	71.472	1077.485	3.519%	55.466%
17.0	1879.664	64.398	1141.882	3.171%	58.781%
18.0	1588.641	57.185	1199.067	2.816%	61.725%
19.0	1368.141	51.442	1250.509	2.533%	64.373%
20.0	1180.188	46.641	1297.151	2.296%	66.774%
21.0	1050.448	42.833	1339.983	2.109%	68.979%
22.0	959.920	40.399	1380.383	1.989%	71.058%
23.0	886.936	38.752	1419.135	1.908%	73.053%
24.0	824.245	37.413	1456.547	1.842%	74.979%
25.0	781.193	36.504	1493.051	1.797%	76.858%
26.0	743.541	35.992	1529.043	1.772%	78.711%
27.0	711.752	35.604	1564.647	1.753%	80.544%
28.0	683.445	35.323	1599.97	1.739%	82.362%
29.0	656.719	35.062	1635.033	1.726%	84.167%
30.0	615.966	34.362	1669.395	1.692%	85.936%
31.0	567.984	32.948	1702.343	1.622%	87.632%
32.0	510.195	30.889	1733.231	1.521%	89.222%
33.0	450.457	28.301	1761.532	1.393%	90.679%
34.0	391.233	25.472	1787.004	1.254%	91.990%
35.0	321.497	22.135	1809.139	1.090%	93.130%
36.0	267.012	18.738	1827.877	.923%	94.094%
37.0	213.863	15.683	1843.561	.772%	94.901%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	146.770	12.037	1855.598	.593%	95.521%
39.0	92.827	8.178	1863.776	.403%	95.942%
40.0	57.248	5.234	1869.01	.258%	96.212%
41.0	36.063	3.323	1872.333	.164%	96.383%
42.0	29.827	2.394	1874.727	.118%	96.506%
43.0	27.155	2.111	1876.838	.104%	96.615%
44.0	24.722	1.958	1878.796	.096%	96.715%
45.0	23.238	1.843	1880.639	.091%	96.810%
46.0	22.486	1.788	1882.427	.088%	96.902%
47.0	21.923	1.766	1884.193	.087%	96.993%
48.0	21.480	1.755	1885.948	.086%	97.083%
49.0	21.038	1.746	1887.694	.086%	97.173%
50.0	20.355	1.726	1889.42	.085%	97.262%
51.0	19.828	1.700	1891.12	.084%	97.350%
52.0	19.455	1.686	1892.806	.083%	97.436%
53.0	18.970	1.672	1894.477	.082%	97.523%
54.0	18.612	1.656	1896.134	.082%	97.608%
55.0	18.345	1.650	1897.783	.081%	97.693%
56.0	18.056	1.645	1899.428	.081%	97.777%
57.0	17.648	1.633	1901.061	.080%	97.861%
58.0	17.248	1.614	1902.674	.079%	97.945%
59.0	16.854	1.594	1904.269	.078%	98.027%
60.0	16.453	1.574	1905.842	.077%	98.108%
61.0	16.066	1.552	1907.394	.076%	98.187%
62.0	15.708	1.531	1908.925	.075%	98.266%
63.0	15.420	1.514	1910.439	.075%	98.344%
64.0	15.110	1.498	1911.937	.074%	98.421%
65.0	14.787	1.480	1913.417	.073%	98.497%
66.0	14.477	1.460	1914.877	.072%	98.573%
67.0	14.048	1.434	1916.311	.071%	98.646%
68.0	13.535	1.397	1917.708	.069%	98.718%
69.0	13.078	1.358	1919.066	.067%	98.788%
70.0	12.600	1.319	1920.385	.065%	98.856%
71.0	12.171	1.280	1921.665	.063%	98.922%
72.0	11.784	1.246	1922.911	.061%	98.986%
73.0	11.384	1.212	1924.122	.060%	99.049%
74.0	11.018	1.178	1925.3	.058%	99.109%
75.0	10.716	1.148	1926.448	.057%	99.168%

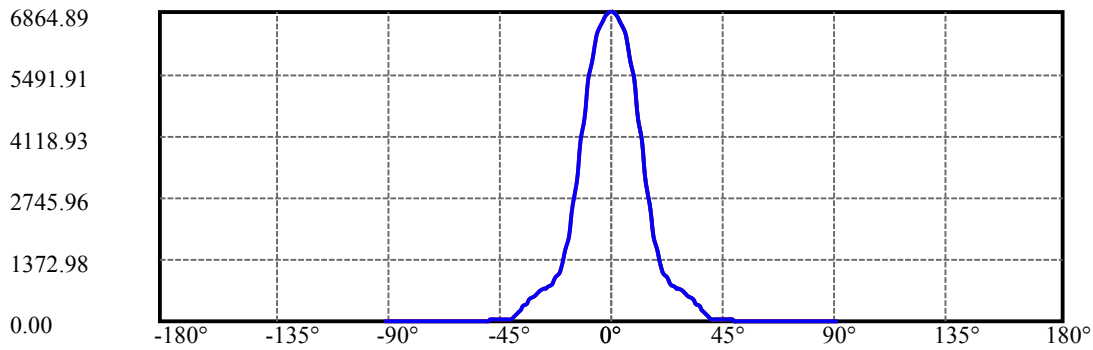
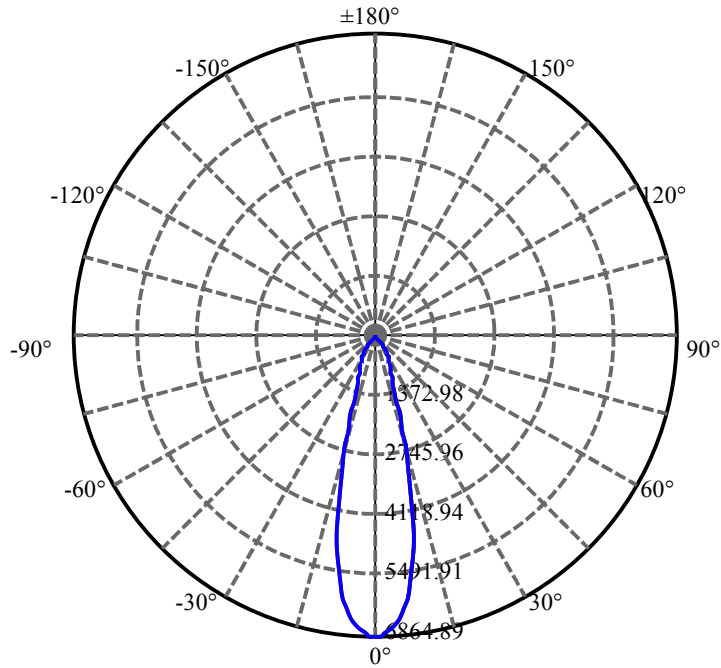
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	10.540	1.128	1927.577	.056%	99.226%
77.0	10.406	1.117	1928.693	.055%	99.284%
78.0	10.308	1.109	1929.802	.055%	99.341%
79.0	10.209	1.102	1930.905	.054%	99.398%
80.0	10.118	1.096	1932.001	.054%	99.454%
81.0	10.041	1.090	1933.091	.054%	99.510%
82.0	9.963	1.085	1934.176	.053%	99.566%
83.0	9.879	1.079	1935.254	.053%	99.622%
84.0	9.802	1.072	1936.326	.053%	99.677%
85.0	9.731	1.066	1937.392	.052%	99.732%
86.0	9.640	1.059	1938.451	.052%	99.786%
87.0	9.563	1.051	1939.502	.052%	99.840%
88.0	9.506	1.045	1940.547	.051%	99.894%
89.0	9.373	1.035	1941.581	.051%	99.947%
90.0	9.288	1.023	1942.605	.050%	100.000%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1669.40	82.20%	85.94%
0-40	1869.01	92.02%	96.21%
0-60	1905.84	93.84%	98.11%
0-90	1941.58	95.60%	99.95%
0-120	1941.58	95.60%	99.95%
0-180	1942.60	95.65%	100.00%
60-90	37.31	1.84%	1.92%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.70	1554.08	76.52%	80.00%

## ZONAL LUMEN SUMMARY

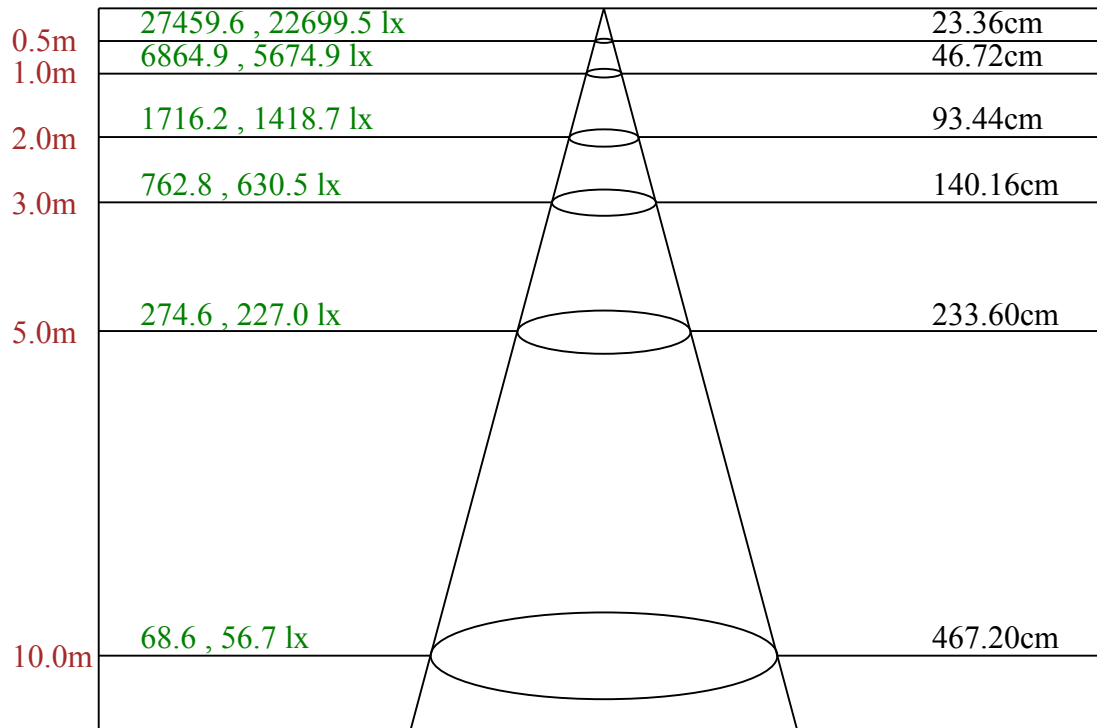
0-10	568.86
10-20	728.29
20-30	372.24
30-40	199.62
40-50	20.41
50-60	16.42
60-70	14.54
70-80	11.62
80-90	9.58
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



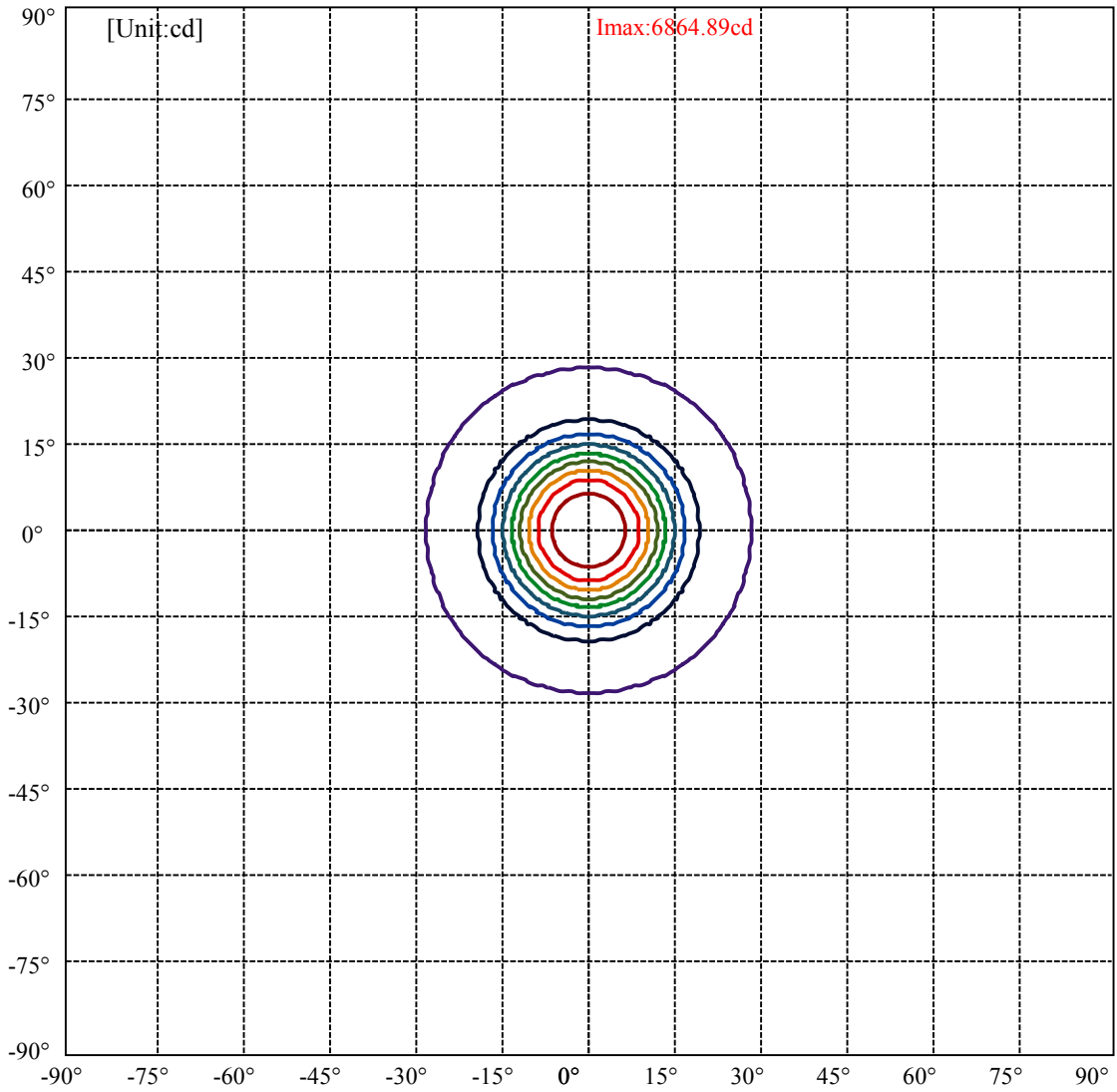
C0(Max): ———  
C0/C180: ———  
C90/C270: ———

Field angle(10%Imax):C0/180Left:27.9 Right:27.9  
:C90/270Left:27.9 Right:27.9

Beam Angle(50%Imax):C0/180Left:13.1 Right:13.1  
:C90/270Left:13.1 Right:13.1

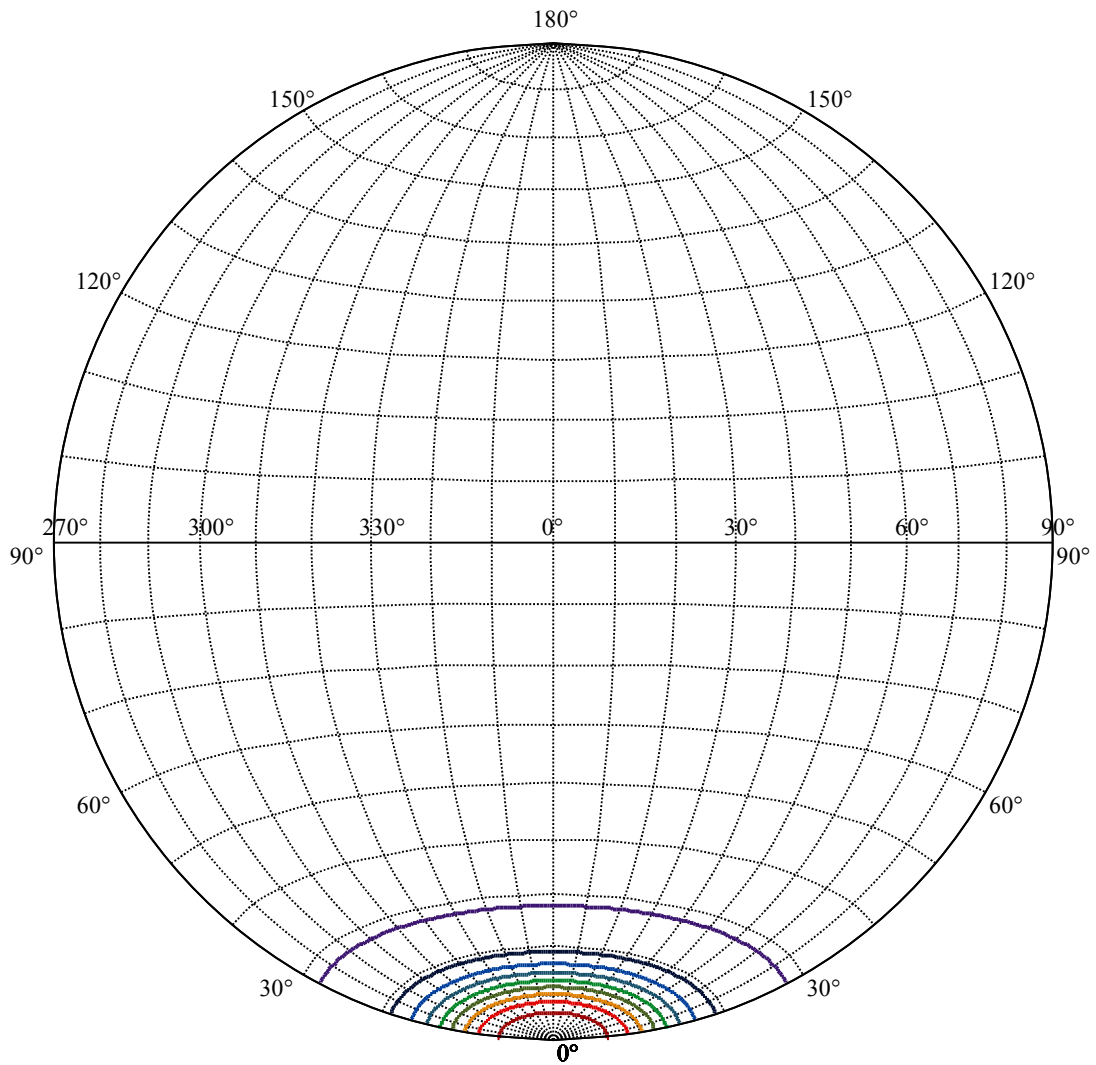


Max , Ave      Beam angle of C0 plane 26.30



(10%Imax) 686.489	—
(20%Imax) 1372.98	—
(30%Imax) 2059.47	—
(40%Imax) 2745.96	—
(50%Imax) 3432.45	—
(60%Imax) 4118.93	—
(70%Imax) 4805.42	—
(80%Imax) 5491.91	—
(90%Imax) 6178.4	—





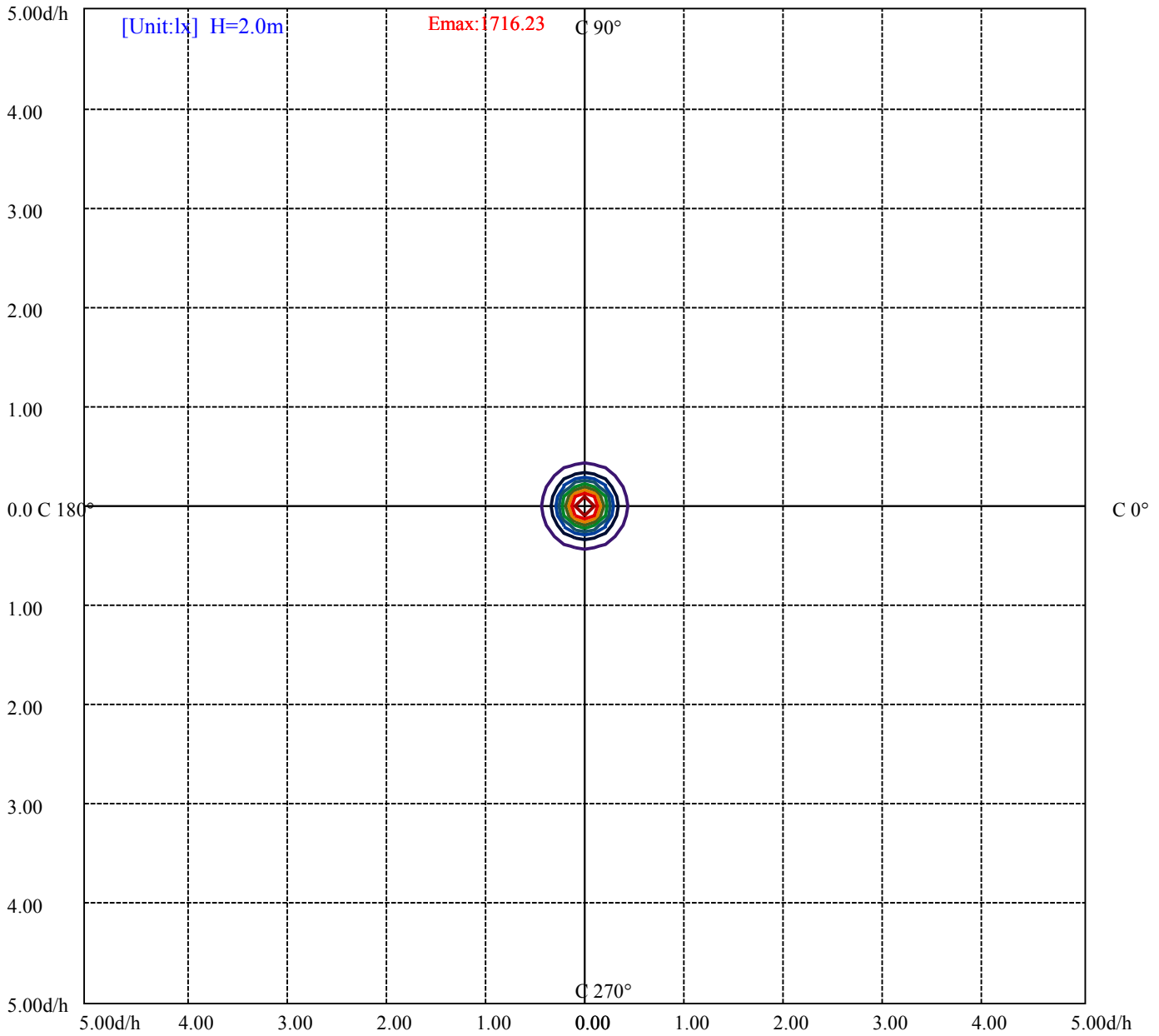
House

[Unit:cd]

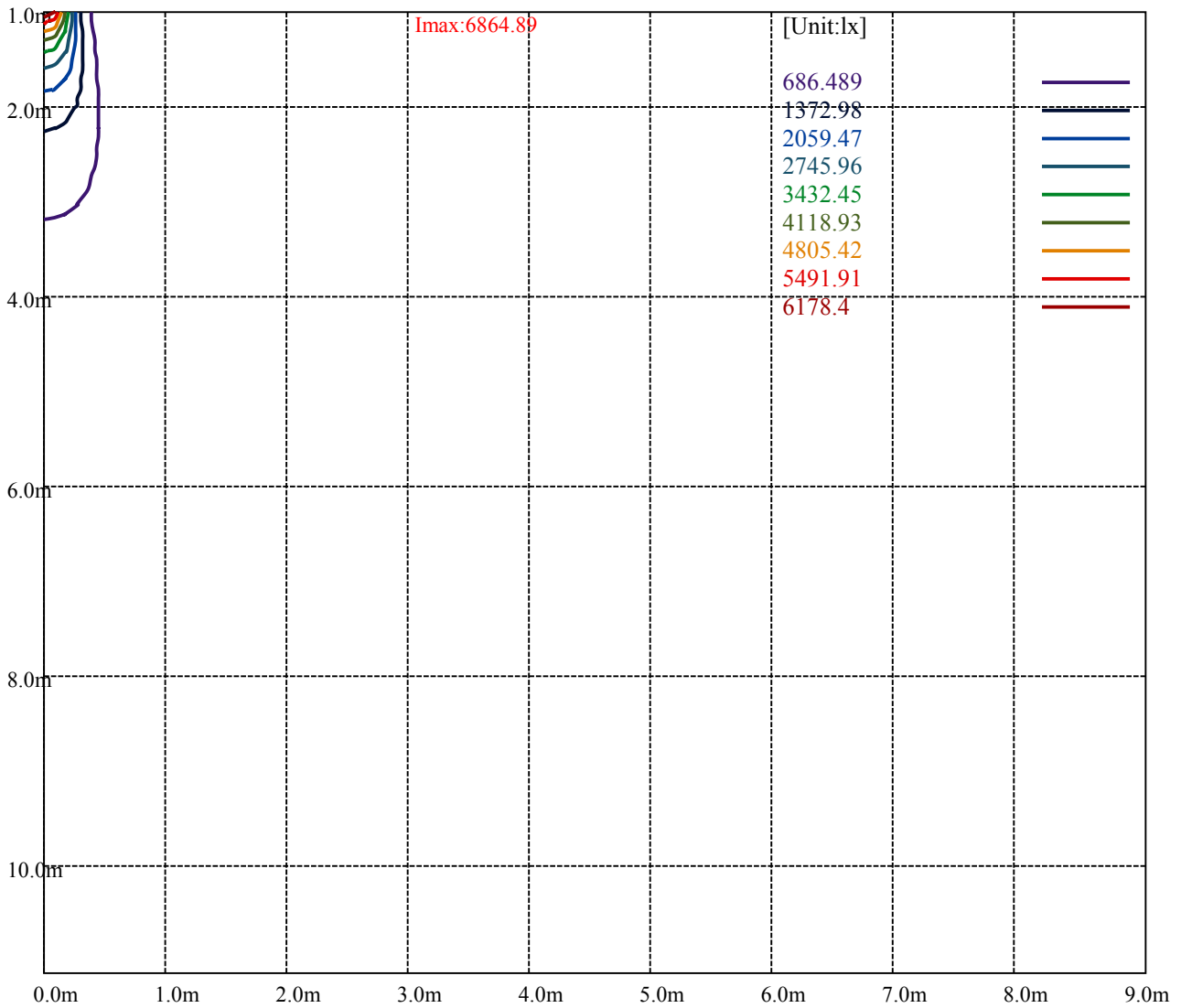
Road

**Imax:6864.89**

(10%Imax) 686.489	—
(20%Imax) 1372.98	—
(30%Imax) 2059.47	—
(40%Imax) 2745.96	—
(50%Imax) 3432.45	—
(60%Imax) 4118.93	—
(70%Imax) 4805.42	—
(80%Imax) 5491.91	—
(90%Imax) 6178.4	—



(10%Emax) 171.6223	—
(20%Emax) 343.245	—
(30%Emax) 514.8675	—
(40%Emax) 686.49	—
(50%Emax) 858.11	—
(60%Emax) 1029.733	—
(70%Emax) 1201.355	—
(80%Emax) 1372.978	—
(90%Emax) 1544.6	—



Luminance Table

$\gamma$	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

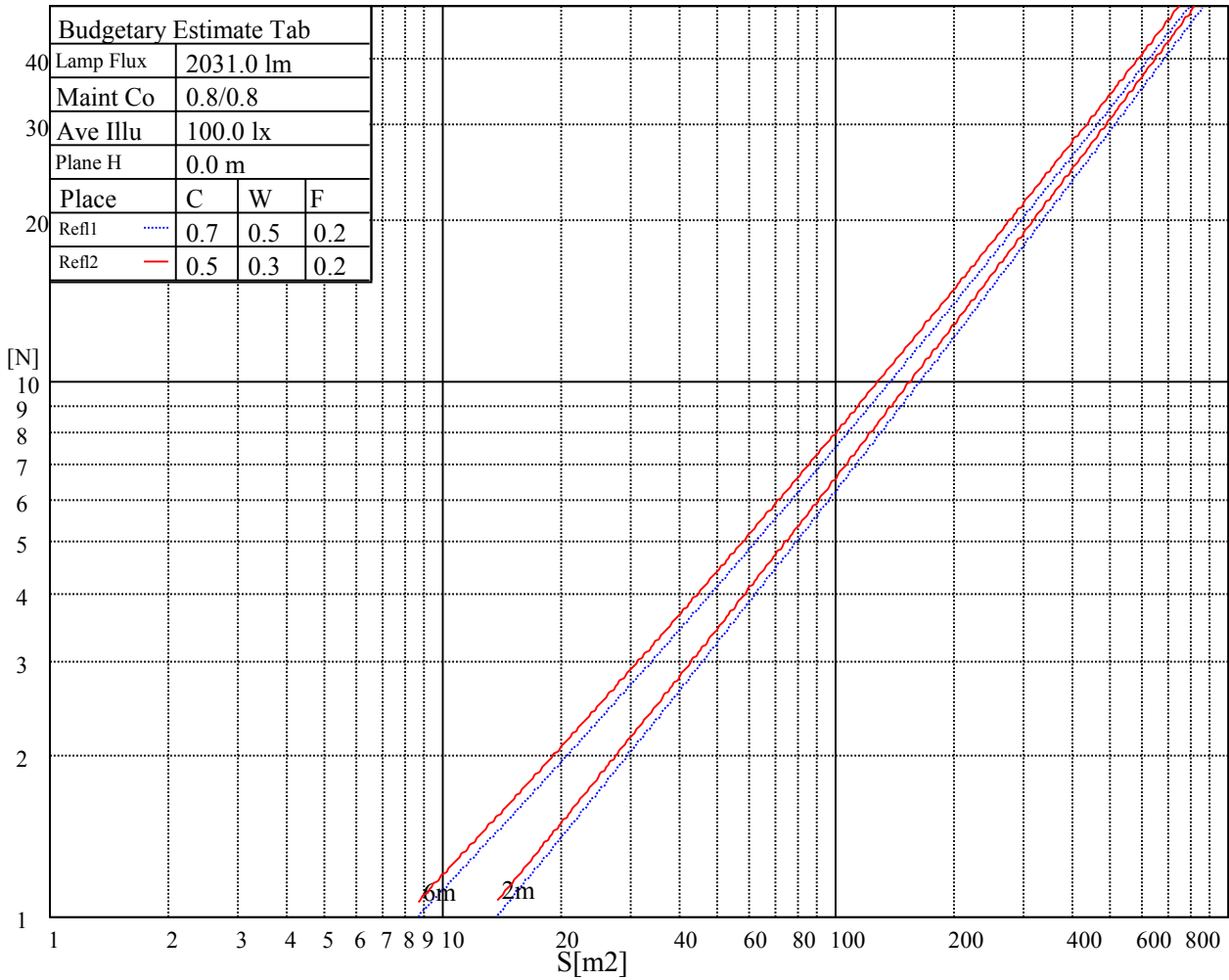
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

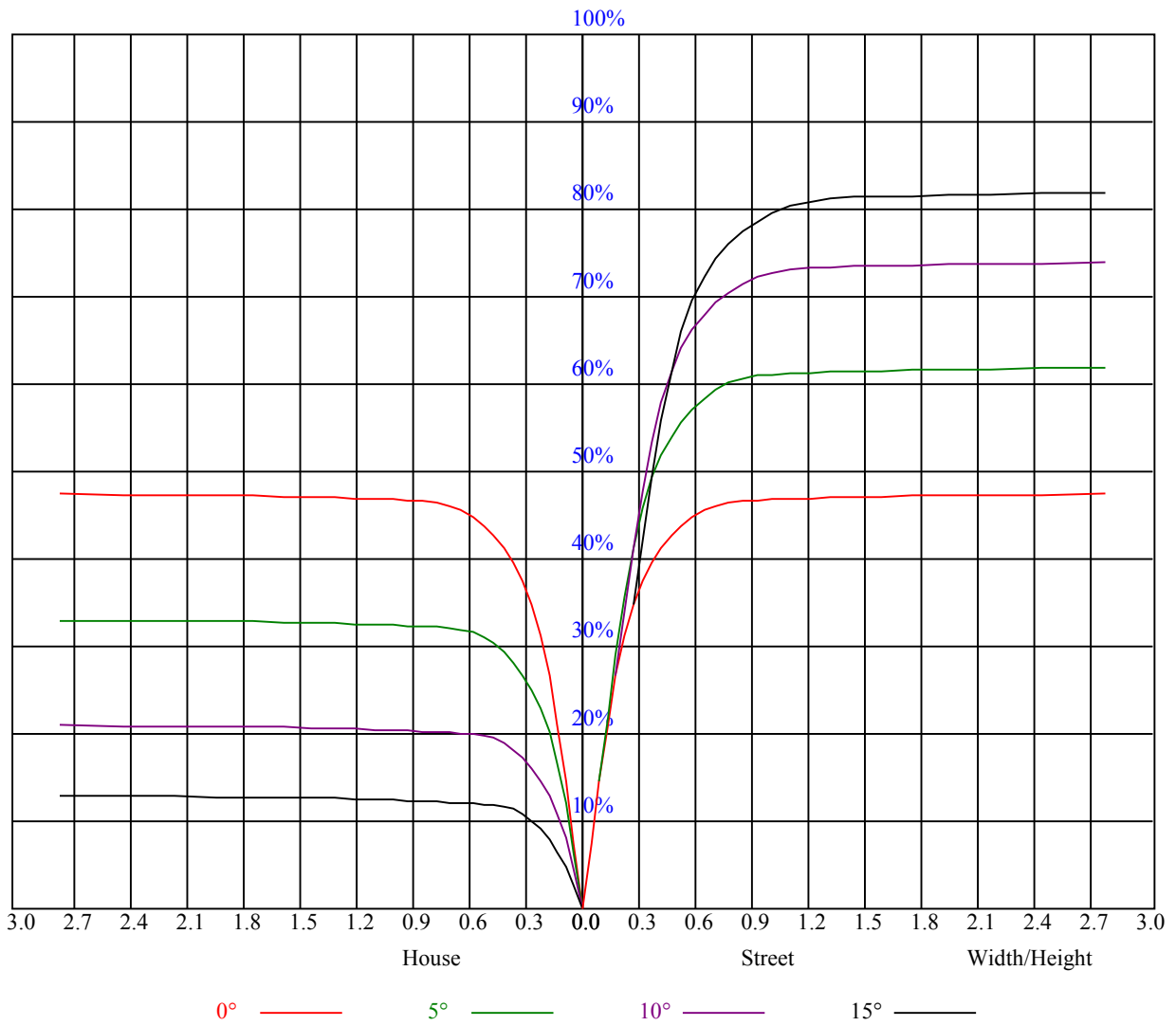
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





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	COEFFICIENTS 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	1.00	0.98	0.97	0.96	0.95	0.94	0.93	0.93	0.91
2	1.01	0.98	0.95	0.99	0.96	0.94	0.96	0.94	0.92	0.94	0.92	0.90	0.91	0.89	0.88	0.87
3	0.96	0.92	0.89	0.95	0.91	0.88	0.92	0.89	0.87	0.90	0.87	0.85	0.88	0.86	0.84	0.83
4	0.91	0.87	0.84	0.90	0.86	0.83	0.88	0.85	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.79
5	0.87	0.83	0.80	0.87	0.82	0.79	0.85	0.81	0.78	0.83	0.80	0.78	0.82	0.79	0.77	0.76
6	0.84	0.79	0.76	0.83	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.73
7	0.80	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.70
8	0.77	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.68
9	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.66
10	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.70	0.67	0.64	0.63



## Intensity data(cd)

C/ $\gamma$ ( $^{\circ}$ )	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	6849.56	6881.63	6867.00	6816.94	6744.94	6639.19	6485.63	6336.56	6165.56
45.0	6869.25	6886.69	6870.94	6820.31	6742.69	6649.31	6514.88	6346.69	6140.81
90.0	6873.75	6851.81	6802.88	6733.13	6636.94	6518.81	6338.81	6082.88	5776.88
135.0	6867.00	6843.38	6772.50	6684.75	6583.50	6475.50	6233.06	5980.50	5705.44
180.0	6849.56	6786.00	6690.94	6558.19	6406.88	6234.75	5934.38	5623.31	5230.69
225.0	6869.25	6813.56	6724.69	6591.94	6438.94	6271.31	6035.06	5729.06	5399.44
270.0	6873.75	6859.13	6805.69	6688.69	6577.31	6413.06	6209.44	6003.56	5743.13
315.0	6867.00	6867.56	6806.25	6706.69	6577.31	6446.81	6252.19	6030.56	5761.69
360.0	6849.56	6881.63	6867.00	6816.94	6744.94	6639.19	6485.63	6336.56	6165.56
C/ $\gamma$ ( $^{\circ}$ )	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5804.44	5457.38	5119.31	4554.00	4019.06	3600.56	3039.75	2608.88	2218.50
45.0	5782.50	5416.88	4948.31	4350.94	3849.19	3376.69	2856.38	2459.25	2041.31
90.0	5385.94	4809.38	4354.31	3897.00	3311.44	2874.38	2469.38	2112.19	1738.13
135.0	5202.00	4785.75	4339.13	3813.75	3365.44	2954.25	2513.81	2172.38	1842.75
180.0	4845.38	4373.44	3885.75	3475.13	3029.63	2616.19	2271.38	1965.94	1640.25
225.0	5034.38	4551.19	4136.06	3706.88	3186.56	2802.94	2435.63	2093.63	1732.50
270.0	5326.31	4965.19	4575.94	4104.56	3602.81	3180.94	2738.25	2361.38	1974.94
315.0	5429.25	4950.56	4512.38	4048.88	3540.94	3063.38	2652.19	2271.38	1848.94
360.0	5804.44	5457.38	5119.31	4554.00	4019.06	3600.56	3039.75	2608.88	2218.50
C/ $\gamma$ ( $^{\circ}$ )	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1806.19	1553.63	1348.88	1155.38	1038.94	949.50	868.50	819.56	779.63
45.0	1706.06	1469.25	1269.00	1110.38	1005.75	929.81	855.00	808.88	771.19
90.0	1499.63	1280.81	1114.88	1003.78	923.40	848.93	790.88	746.27	706.33
135.0	1566.56	1365.75	1195.88	1065.38	981.00	916.31	851.63	808.31	772.31
180.0	1428.19	1258.88	1111.89	1005.69	932.63	869.46	816.24	777.49	739.69
225.0	1494.00	1278.00	1115.61	1009.01	931.16	861.64	815.68	774.00	738.62
270.0	1630.69	1384.31	1171.69	1023.19	927.00	855.00	785.81	743.06	704.25
315.0	1577.81	1354.50	1113.69	1030.78	939.49	864.84	810.23	771.98	736.31
360.0	1806.19	1553.63	1348.88	1155.38	1038.94	949.50	868.50	819.56	779.63
C/ $\gamma$ ( $^{\circ}$ )	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	741.94	709.88	686.81	655.88	608.63	560.81	501.75	444.94	379.13
45.0	736.31	705.38	681.75	645.19	598.50	549.00	486.00	427.50	362.81
90.0	678.09	650.93	624.71	583.65	542.36	482.79	427.67	370.58	300.49
135.0	739.13	708.75	686.25	645.75	596.81	541.69	475.31	412.88	345.94
180.0	709.88	682.59	645.86	600.36	547.93	475.14	415.58	354.77	281.03
225.0	710.72	684.73	652.44	606.38	557.04	487.52	426.43	362.93	285.58
270.0	669.94	642.38	620.44	576.56	525.38	482.06	424.69	369.56	304.88
315.0	708.02	682.93	655.48	613.97	567.23	502.54	446.23	386.72	312.13
360.0	741.94	709.88	686.81	655.88	608.63	560.81	501.75	444.94	379.13
C/ $\gamma$ ( $^{\circ}$ )	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	312.19	290.25	191.93	127.07	81.90	48.71	33.81	31.44	28.74
45.0	294.75	286.31	174.21	112.16	70.54	40.16	30.09	27.96	25.71
90.0	247.95	194.46	139.50	91.46	56.19	33.36	29.59	26.89	24.36
135.0	286.31	217.86	163.52	104.18	63.73	36.28	28.07	25.82	23.51
180.0	223.59	170.33	117.28	71.94	43.09	31.78	29.03	25.71	23.51
225.0	226.35	172.18	116.94	69.69	42.13	30.54	27.73	24.30	21.77
270.0	291.38	183.88	134.94	82.01	51.13	36.23	31.39	28.74	26.33
315.0	253.58	195.64	135.84	84.09	49.28	31.44	28.91	26.38	23.85
360.0	312.19	290.25	191.93	127.07	81.90	48.71	33.81	31.44	28.74



## 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	26.33	25.20	24.36	23.85	23.40	22.89	22.39	22.05	21.66
45.0	24.30	24.02	23.68	23.18	22.61	21.66	20.64	19.97	19.58
90.0	23.23	22.50	21.71	21.54	21.38	20.64	20.14	20.03	19.69
135.0	21.94	21.04	20.64	20.48	20.08	19.18	18.51	18.34	17.66
180.0	22.44	21.71	21.21	20.64	20.19	19.63	19.24	18.84	18.45
225.0	20.70	20.14	19.63	19.07	18.56	18.00	17.55	16.99	16.43
270.0	24.58	23.51	22.95	22.33	21.77	21.15	21.04	20.70	19.86
315.0	22.39	21.77	21.21	20.76	20.31	19.69	19.13	18.73	18.45
360.0	26.33	25.20	24.36	23.85	23.40	22.89	22.39	22.05	21.66
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	21.38	21.09	20.70	20.14	19.58	19.01	18.23	17.66	17.04
45.0	19.18	18.79	18.56	18.06	17.66	17.33	16.82	16.26	15.81
90.0	18.96	18.68	18.39	17.89	17.44	16.99	16.88	16.88	16.82
135.0	17.33	17.10	16.93	16.65	16.43	16.14	15.69	15.24	14.91
180.0	18.34	18.11	17.89	17.66	17.33	16.88	16.59	16.09	15.75
225.0	16.09	15.92	15.53	15.24	15.08	14.68	14.40	14.23	13.95
270.0	19.52	19.35	19.13	18.68	18.00	17.78	17.27	16.76	16.37
315.0	18.11	17.72	17.33	16.88	16.48	16.03	15.75	15.41	15.02
360.0	21.38	21.09	20.70	20.14	19.58	19.01	18.23	17.66	17.04
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	16.48	16.14	15.86	15.53	15.19	14.74	14.29	13.73	13.22
45.0	15.53	15.13	14.91	14.57	14.18	13.73	13.28	12.83	12.38
90.0	16.65	16.14	15.53	15.19	14.74	14.23	13.78	13.11	12.43
135.0	14.57	14.29	14.01	13.73	13.33	12.94	12.54	12.26	11.87
180.0	15.53	15.24	14.96	14.74	14.40	13.84	13.39	12.88	12.38
225.0	13.67	13.44	13.28	13.05	12.71	12.43	12.04	11.70	11.42
270.0	16.09	15.98	15.53	15.08	14.12	13.28	12.60	12.04	11.93
315.0	14.85	14.51	14.23	13.95	13.73	13.11	12.71	12.26	11.76
360.0	16.48	16.14	15.86	15.53	15.19	14.74	14.29	13.73	13.22
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	12.66	12.09	11.59	11.08	10.80	10.63	10.46	10.35	10.24
45.0	12.04	11.53	11.19	10.86	10.58	10.46	10.41	10.24	10.13
90.0	11.98	11.59	11.14	10.86	10.69	10.52	10.46	10.41	10.35
135.0	11.53	11.19	10.97	10.63	10.46	10.35	10.24	10.13	10.01
180.0	11.81	11.48	10.97	10.69	10.52	10.41	10.24	10.13	10.01
225.0	11.08	10.86	10.63	10.46	10.35	10.18	10.13	10.07	9.96
270.0	11.76	11.25	10.91	10.63	10.52	10.41	10.35	10.29	10.24
315.0	11.42	11.08	10.74	10.52	10.41	10.29	10.18	10.07	10.01
360.0	12.66	12.09	11.59	11.08	10.80	10.63	10.46	10.35	10.24
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.07	9.96	9.84	9.79	9.73	9.73	9.62	9.62	9.51
45.0	10.07	9.96	9.90	9.84	9.79	9.73	9.62	9.56	9.45
90.0	10.24	10.18	10.07	9.96	9.79	9.62	9.51	9.45	9.34
135.0	9.96	9.90	9.79	9.73	9.68	9.62	9.51	9.51	9.34
180.0	9.90	9.84	9.73	9.68	9.62	9.56	9.51	9.45	9.28
225.0	9.96	9.84	9.79	9.73	9.68	9.62	9.56	9.45	9.34
270.0	10.18	10.13	10.07	9.96	9.84	9.62	9.56	9.45	9.34
315.0	9.96	9.90	9.84	9.73	9.73	9.62	9.62	9.56	9.39
360.0	10.07	9.96	9.84	9.79	9.73	9.73	9.62	9.62	9.51

Intensity data(cd)

C/γ(°)	90.0
0.0	9.39
45.0	9.34
90.0	9.34
135.0	9.23
180.0	9.17
225.0	9.28
270.0	9.28
315.0	9.28
360.0	9.39