
LumCAT: 4-2202-L
Luminaire: 92.70.131.00
Report No: NATA0100
Test No: GC2019120414
LampCAT: TRIDONIC SLE G7 15MM
Lamp flux(lm): 2031.0
Number of Lamps: 1
Length(mm): 0
Phm Type: C

Voltage(V): 34.1000
Current(A): 0.4470
Power (W): 15.2400
PF: 1.0000
Ballast type: DC
Width(mm): 0
Height(mm): 0

Photometric Results

Lumens(lm): 1942.53
Efficiency(%): 95.64%
Lumens(lm)/Power(W): 127.46
Central intensity(cd): 9569.039
Maximum intensity(cd): 9569.039
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=22.0
 [C90/270]Total=22.0
Field angle(10%Imax): [C0/180]Total=39.2
 [C90/270]Total=39.2
Maximum s/h(1/2): C0_180=0.38 C90_270=0.38
Maximum s/h(1/4): C0_180=0.36 C90_270=0.36
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 95.64%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.369%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9569.039	0.000	0	.000%	.000%
1.0	9490.430	9.120	9.12	.449%	.469%
2.0	9232.523	26.873	35.993	1.323%	1.853%
3.0	8838.070	43.219	79.211	2.128%	4.078%
4.0	8423.930	57.781	136.993	2.845%	7.052%
5.0	8042.063	70.836	207.829	3.488%	10.699%
6.0	7642.406	82.426	290.255	4.058%	14.942%
7.0	7190.578	92.068	382.323	4.533%	19.682%
8.0	6687.492	99.323	481.646	4.890%	24.795%
9.0	6122.250	103.816	585.462	5.112%	30.139%
10.0	5442.117	104.653	690.115	5.153%	35.527%
11.0	4790.531	102.245	792.36	5.034%	40.790%
12.0	4153.711	97.773	890.133	4.814%	45.823%
13.0	3353.695	89.094	979.227	4.387%	50.410%
14.0	2692.266	77.388	1056.615	3.810%	54.394%
15.0	2164.500	66.676	1123.291	3.283%	57.826%
16.0	1661.695	56.064	1179.356	2.760%	60.712%
17.0	1283.632	45.867	1225.222	2.258%	63.074%
18.0	1128.431	39.770	1264.992	1.958%	65.121%
19.0	1002.607	37.076	1302.068	1.825%	67.030%
20.0	927.077	35.319	1337.386	1.739%	68.848%
21.0	876.213	34.627	1372.013	1.705%	70.630%
22.0	832.676	34.341	1406.354	1.691%	72.398%
23.0	800.958	34.278	1440.632	1.688%	74.163%
24.0	772.875	34.410	1475.042	1.694%	75.934%
25.0	746.740	34.553	1509.594	1.701%	77.713%
26.0	724.409	34.727	1544.321	1.710%	79.501%
27.0	703.013	34.922	1579.243	1.719%	81.298%
28.0	679.697	35.007	1614.25	1.724%	83.101%
29.0	660.452	35.062	1649.312	1.726%	84.906%
30.0	644.161	35.224	1684.537	1.734%	86.719%
31.0	622.076	35.238	1719.774	1.735%	88.533%
32.0	582.054	34.497	1754.271	1.699%	90.309%
33.0	519.996	32.467	1786.738	1.599%	91.980%
34.0	427.247	28.666	1815.404	1.411%	93.456%
35.0	330.159	23.522	1838.927	1.158%	94.667%
36.0	266.386	18.994	1857.921	.935%	95.645%
37.0	151.980	13.645	1871.565	.672%	96.347%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	81.330	7.788	1879.353	.383%	96.748%
39.0	39.537	4.126	1883.479	.203%	96.960%
40.0	26.719	2.311	1885.789	.114%	97.079%
41.0	22.838	1.765	1887.554	.087%	97.170%
42.0	20.489	1.574	1889.128	.078%	97.251%
43.0	18.837	1.457	1890.585	.072%	97.326%
44.0	17.740	1.381	1891.965	.068%	97.397%
45.0	16.833	1.329	1893.294	.065%	97.466%
46.0	16.116	1.289	1894.583	.063%	97.532%
47.0	15.645	1.263	1895.846	.062%	97.597%
48.0	15.117	1.244	1897.089	.061%	97.661%
49.0	14.639	1.222	1898.311	.060%	97.724%
50.0	14.175	1.201	1899.513	.059%	97.786%
51.0	13.809	1.184	1900.697	.058%	97.847%
52.0	13.416	1.168	1901.865	.058%	97.907%
53.0	13.078	1.152	1903.017	.057%	97.966%
54.0	12.762	1.139	1904.156	.056%	98.025%
55.0	12.509	1.128	1905.284	.056%	98.083%
56.0	12.291	1.121	1906.405	.055%	98.140%
57.0	12.073	1.114	1907.519	.055%	98.198%
58.0	11.897	1.108	1908.627	.055%	98.255%
59.0	11.770	1.106	1909.734	.054%	98.312%
60.0	11.616	1.105	1910.839	.054%	98.369%
61.0	11.475	1.102	1911.94	.054%	98.425%
62.0	11.384	1.101	1913.042	.054%	98.482%
63.0	11.264	1.101	1914.143	.054%	98.539%
64.0	11.138	1.099	1915.243	.054%	98.595%
65.0	11.018	1.096	1916.339	.054%	98.652%
66.0	10.863	1.092	1917.431	.054%	98.708%
67.0	10.744	1.086	1918.517	.053%	98.764%
68.0	10.617	1.082	1919.599	.053%	98.820%
69.0	10.498	1.077	1920.677	.053%	98.875%
70.0	10.378	1.072	1921.749	.053%	98.930%
71.0	10.280	1.068	1922.816	.053%	98.985%
72.0	10.174	1.064	1923.88	.052%	99.040%
73.0	10.055	1.058	1924.938	.052%	99.095%
74.0	9.963	1.052	1925.99	.052%	99.149%
75.0	9.900	1.050	1927.04	.052%	99.203%

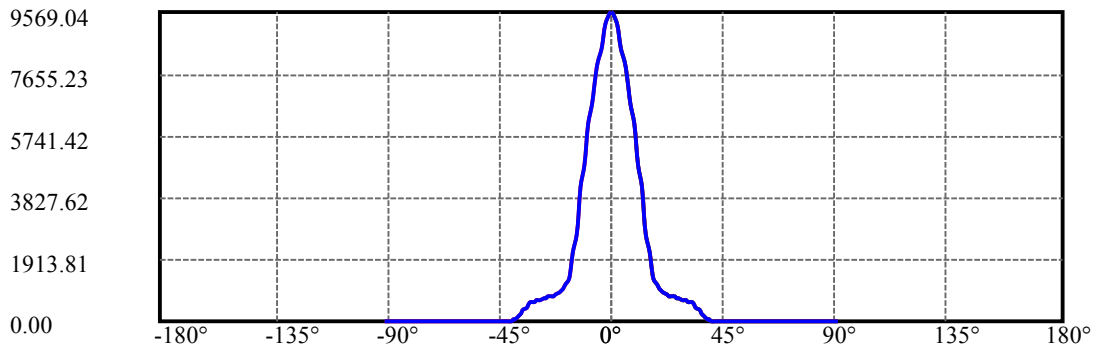
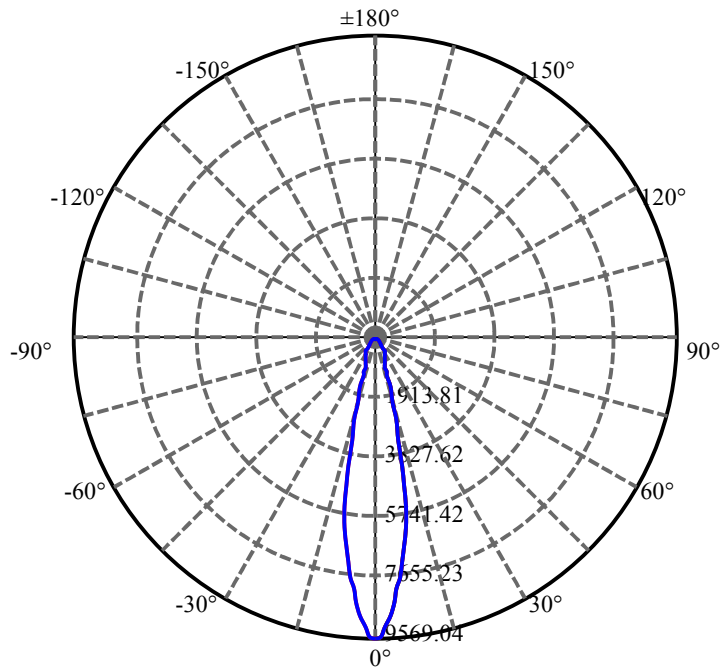
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	9.851	1.048	1928.088	.052%	99.257%
77.0	9.788	1.047	1929.135	.052%	99.311%
78.0	9.738	1.045	1930.18	.051%	99.364%
79.0	9.675	1.043	1931.223	.051%	99.418%
80.0	9.626	1.041	1932.264	.051%	99.472%
81.0	9.570	1.038	1933.302	.051%	99.525%
82.0	9.541	1.036	1934.338	.051%	99.578%
83.0	9.548	1.038	1935.376	.051%	99.632%
84.0	9.464	1.036	1936.412	.051%	99.685%
85.0	9.443	1.032	1937.444	.051%	99.738%
86.0	9.436	1.032	1938.476	.051%	99.791%
87.0	9.323	1.027	1939.502	.051%	99.844%
88.0	9.204	1.015	1940.517	.050%	99.897%
89.0	9.155	1.006	1941.524	.050%	99.948%
90.0	9.134	1.003	1942.526	.049%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1684.54	82.94%	86.72%
0-40	1885.79	92.85%	97.08%
0-60	1910.84	94.08%	98.37%
0-90	1941.52	95.59%	99.95%
0-120	1941.52	95.59%	99.95%
0-180	1942.53	95.64%	100.00%
60-90	31.79	1.57%	1.64%
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%
0-26.28	1554.02	76.52%	80.00%

ZONAL LUMEN SUMMARY

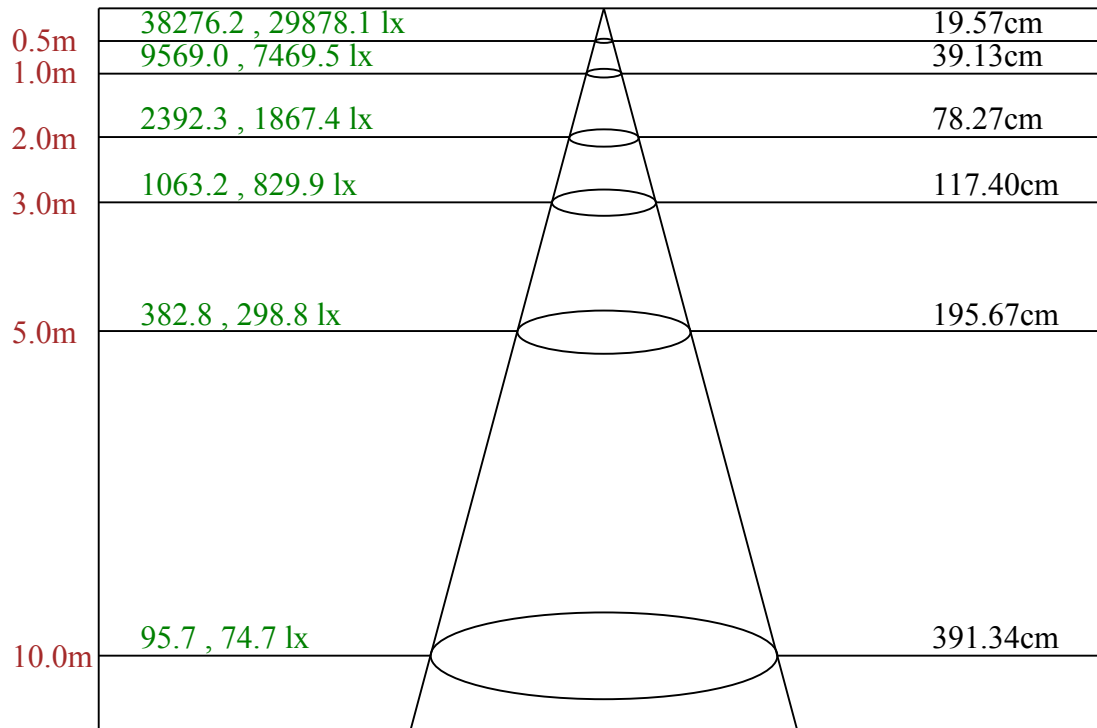
0-10	690.11
10-20	647.27
20-30	347.15
30-40	201.25
40-50	13.72
50-60	11.33
60-70	10.91
70-80	10.52
80-90	9.26
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



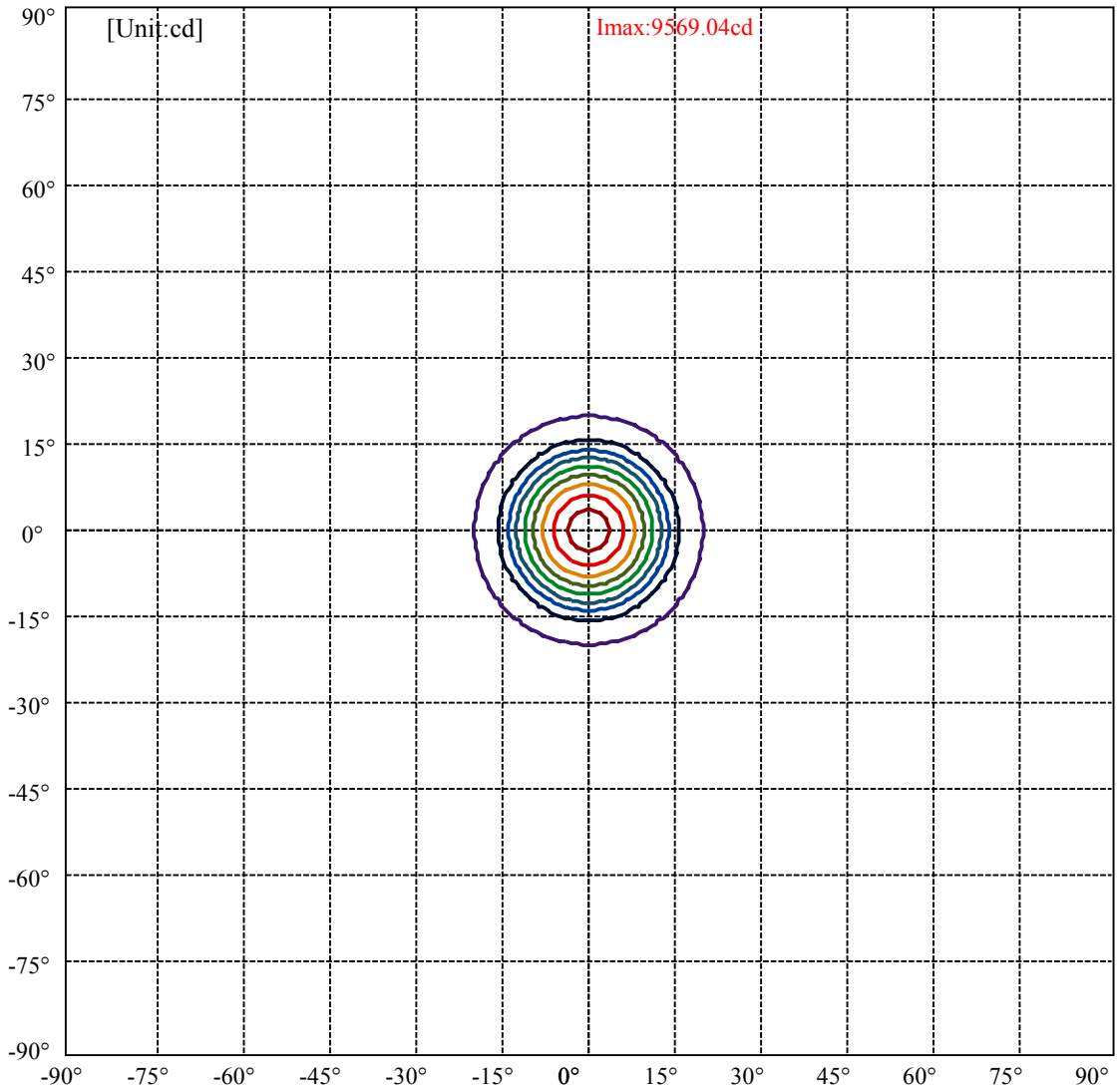
C0(Max): —————
 C0/C180: —————
 C90/C270: —————

Field angle(10%Imax):C0/180Left:19.6 Right:19.6
 :C90/270Left:19.6 Right:19.6

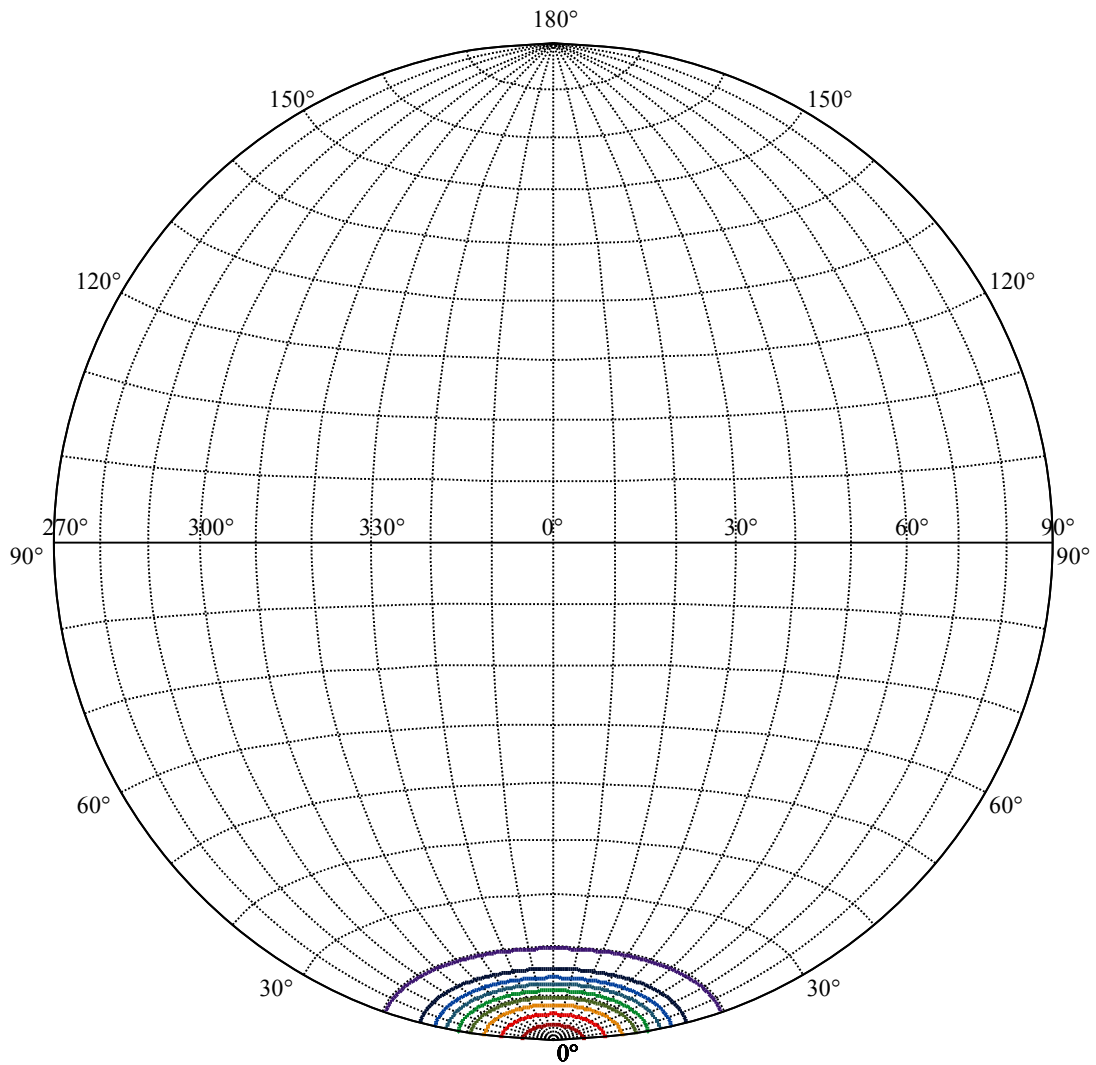
Beam Angle(50%Imax):C0/180Left:11.0 Right:11.0
 :C90/270Left:11.0 Right:11.0



Max , Ave Beam angle of C0 plane 22.14



(10%Imax) 956.904	—
(20%Imax) 1913.81	—
(30%Imax) 2870.71	—
(40%Imax) 3827.62	—
(50%Imax) 4784.52	—
(60%Imax) 5741.42	—
(70%Imax) 6698.33	—
(80%Imax) 7655.23	—
(90%Imax) 8612.13	—



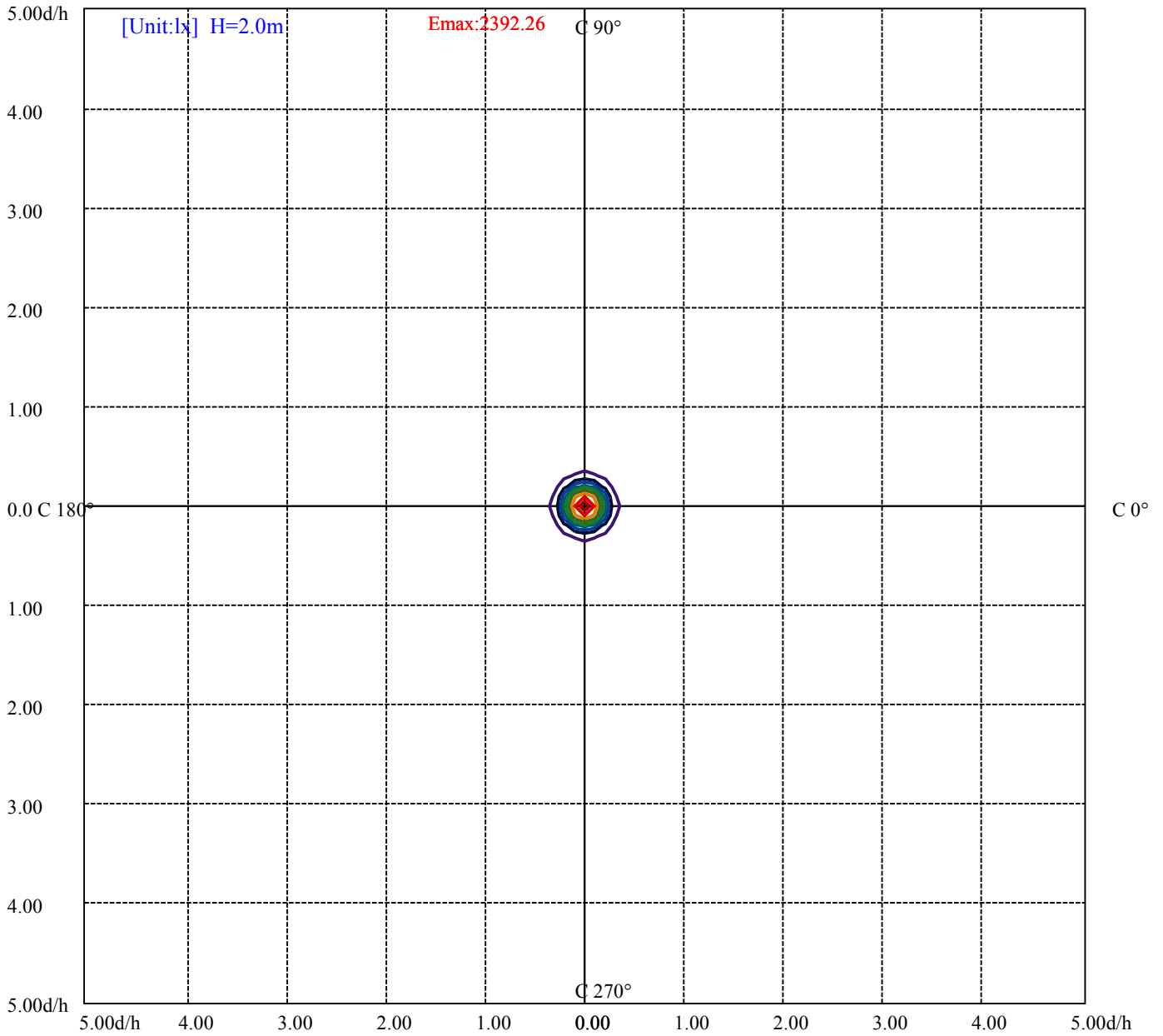
House

[Unit:cd]

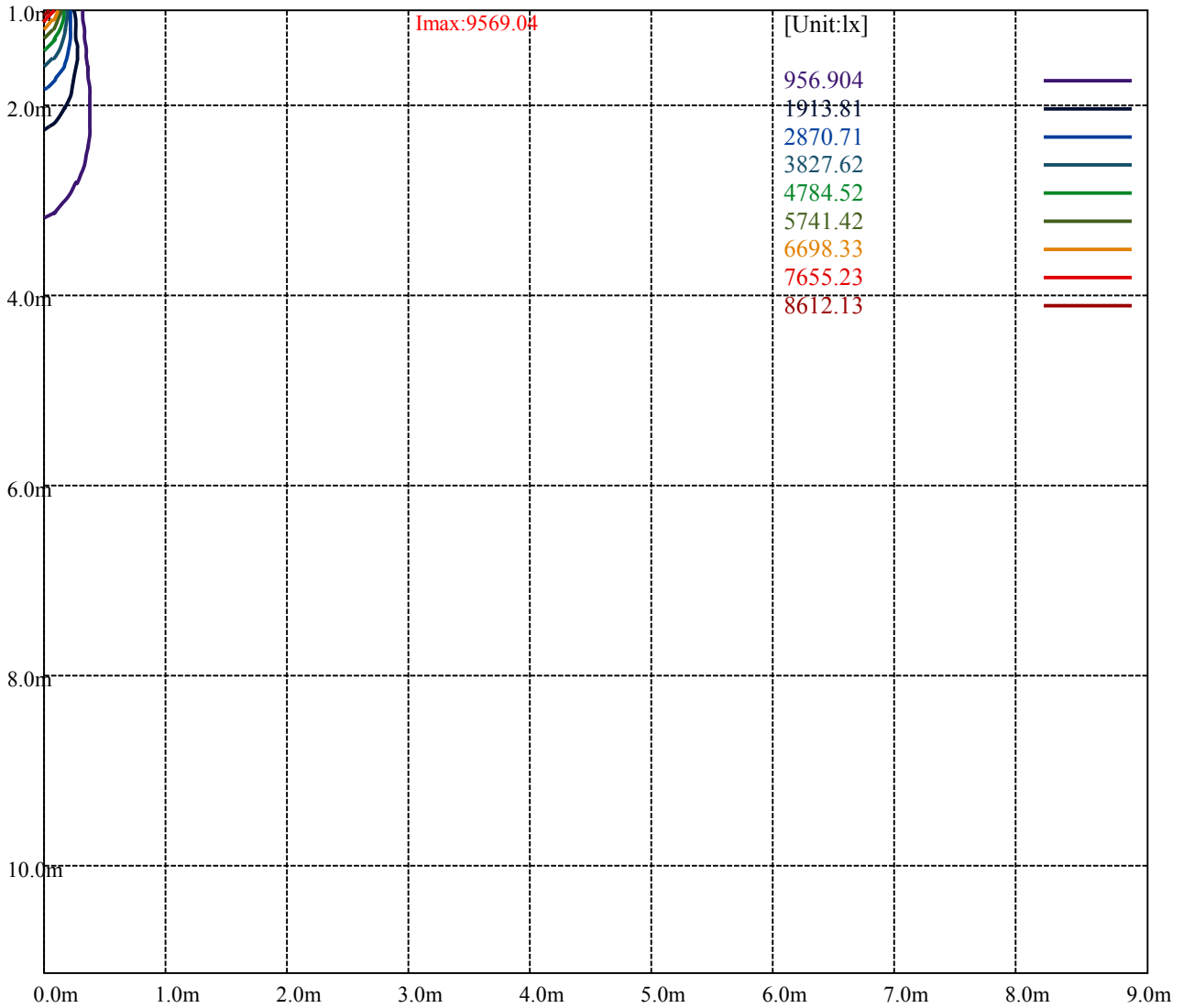
Road

Imax:9569.04

(10%Imax) 956.904	—
(20%Imax) 1913.81	—
(30%Imax) 2870.71	—
(40%Imax) 3827.62	—
(50%Imax) 4784.52	—
(60%Imax) 5741.42	—
(70%Imax) 6698.33	—
(80%Imax) 7655.23	—
(90%Imax) 8612.13	—



(10%Emax) 239.2258	—
(20%Emax) 478.4525	—
(30%Emax) 717.6775	—
(40%Emax) 956.9025	—
(50%Emax) 1196.127	—
(60%Emax) 1435.355	—
(70%Emax) 1674.58	—
(80%Emax) 1913.805	—
(90%Emax) 2153.032	—



Luminance Table

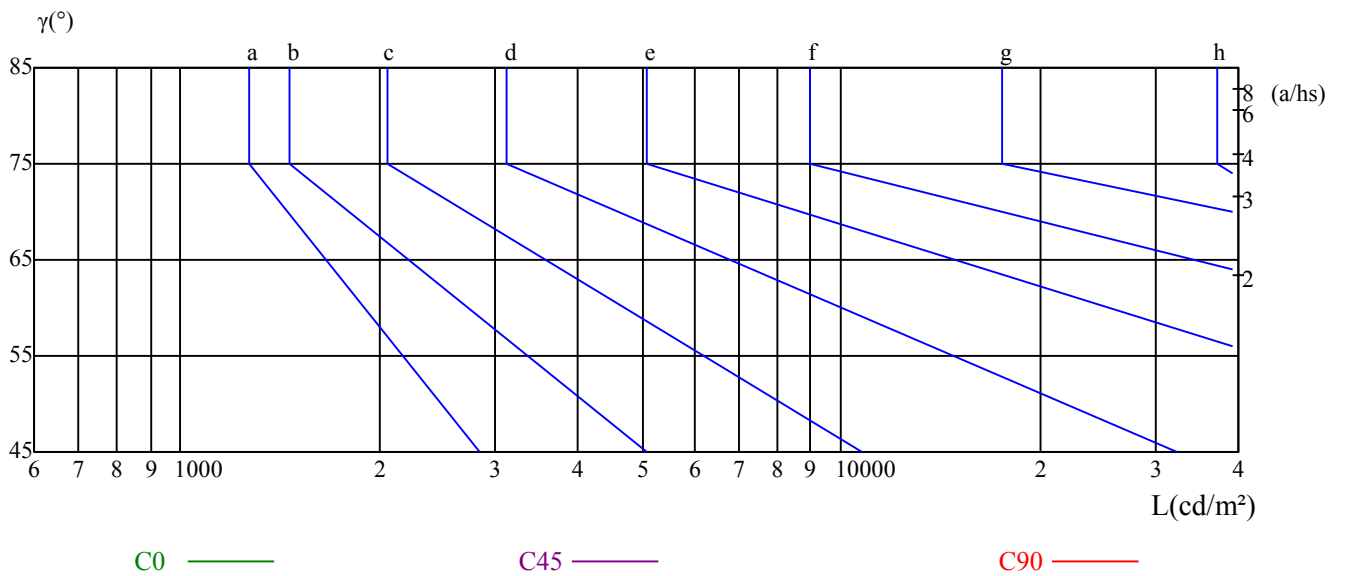
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

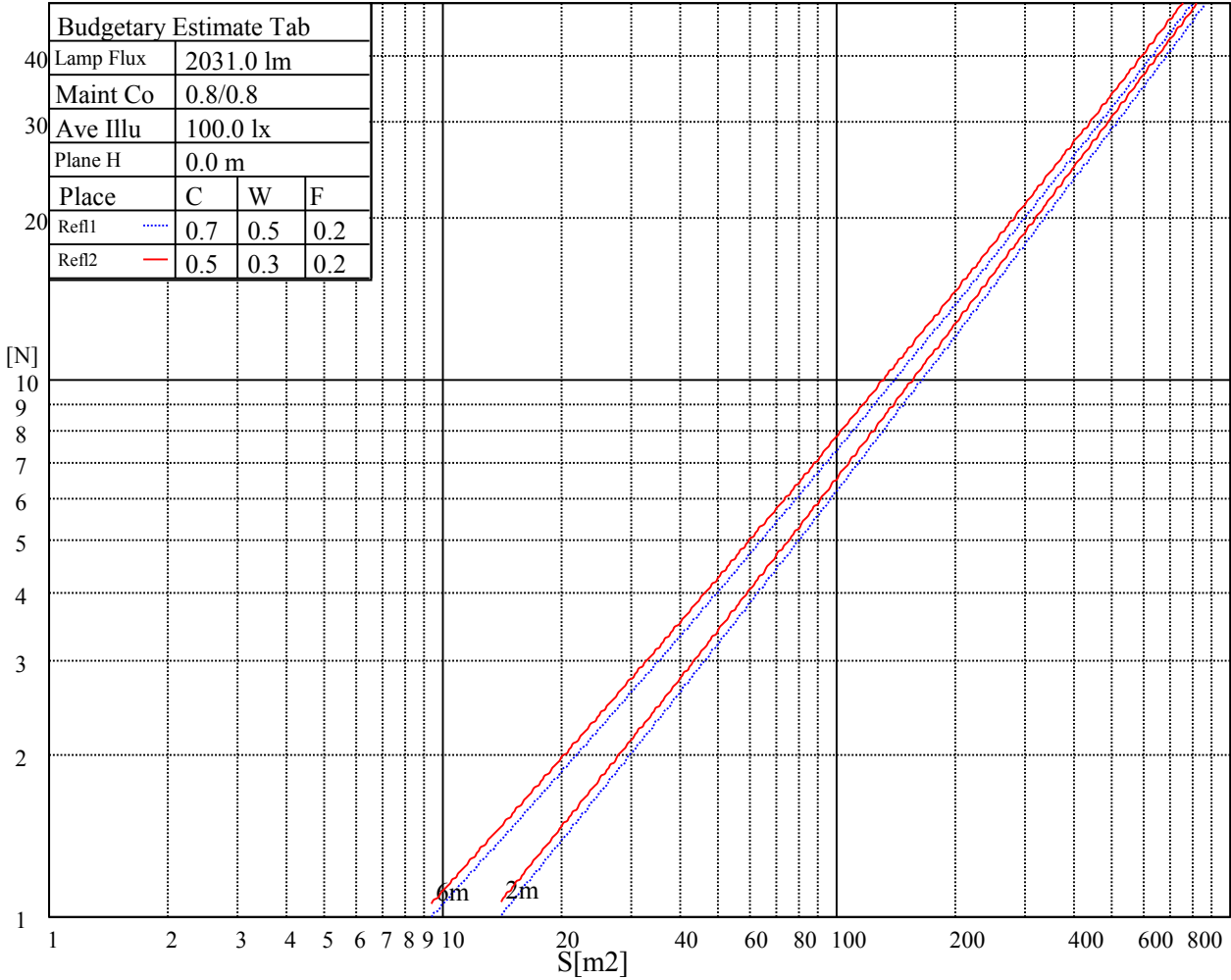
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

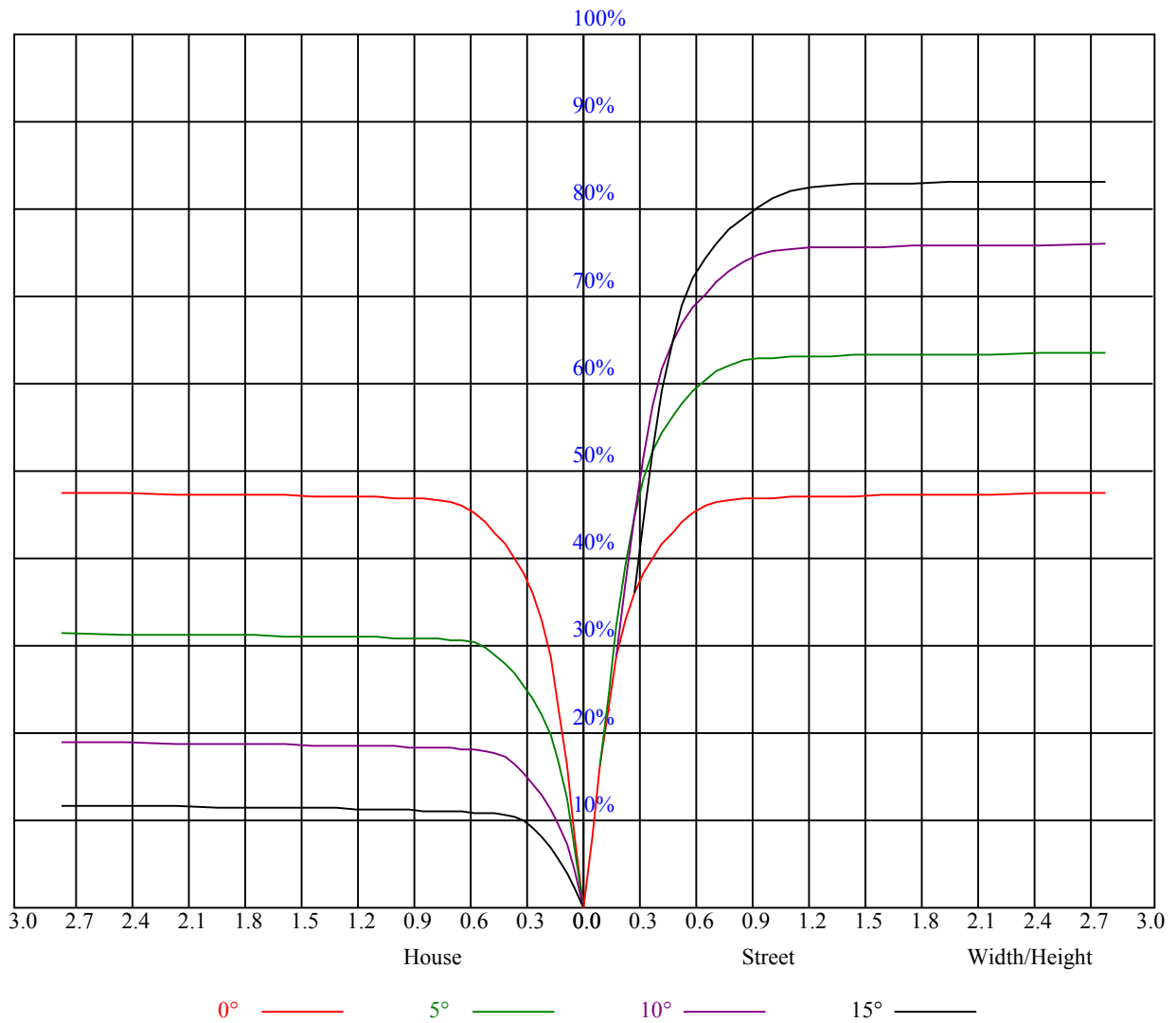
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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



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	9592.31	9464.06	9147.38	8687.25	8274.94	7880.63	7484.63	7041.94	6580.69
45.0	9545.06	9501.19	9249.75	8879.06	8438.63	7978.50	7616.81	7232.06	6708.38
90.0	9604.69	9610.88	9408.38	9001.13	8627.63	8245.69	7842.94	7434.56	7031.25
135.0	9546.19	9630.00	9582.75	9367.31	8953.88	8554.50	8150.06	7788.38	7372.13
180.0	9592.31	9560.25	9381.94	8955.00	8557.88	8198.44	7811.44	7299.00	6766.88
225.0	9545.06	9470.81	9161.44	8773.31	8365.50	7960.50	7614.00	7102.13	6474.94
270.0	9604.69	9444.38	9104.06	8697.94	8238.94	7926.75	7494.19	6986.81	6466.50
315.0	9522.00	9241.88	8824.50	8343.56	7934.06	7591.50	7125.19	6639.75	6099.19
360.0	9592.31	9464.06	9147.38	8687.25	8274.94	7880.63	7484.63	7041.94	6580.69
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5981.06	5340.38	4744.13	4084.31	3247.31	2611.13	2052.00	1575.00	1278.56
45.0	6140.81	5598.56	4923.00	4232.81	3538.69	2808.56	2226.94	1722.94	1369.13
90.0	6492.94	5706.56	5100.19	4433.63	3578.06	2935.69	2334.38	1759.50	1100.59
135.0	6780.38	6147.56	5559.75	4956.19	4100.63	3441.38	2866.50	2189.25	1702.13
180.0	6225.19	5480.44	4854.38	4205.81	3381.19	2760.19	2216.25	1735.31	1389.38
225.0	5984.44	5316.19	4476.38	3884.06	3246.75	2435.06	1986.75	1595.81	1120.11
270.0	5869.13	5209.31	4577.06	4000.50	3095.44	2473.31	1999.69	1494.00	1208.25
315.0	5504.06	4737.94	4089.38	3432.38	2641.50	2072.81	1633.50	1221.75	1100.93
360.0	5981.06	5340.38	4744.13	4084.31	3247.31	2611.13	2052.00	1575.00	1278.56
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1117.69	1004.06	930.38	880.88	834.19	797.63	762.19	733.50	710.44
45.0	1163.25	1039.50	942.19	884.25	841.50	798.75	768.94	741.38	712.69
90.0	1077.81	940.05	874.46	824.68	776.25	748.52	721.01	700.59	682.54
135.0	1398.38	1126.13	1000.69	938.81	875.81	838.69	809.44	778.50	755.44
180.0	1106.61	1024.76	954.23	898.37	853.48	820.80	792.06	766.46	744.08
225.0	1087.20	990.73	930.99	877.39	846.45	821.70	801.34	779.12	756.68
270.0	1081.69	978.19	912.38	871.88	833.63	810.56	787.50	760.50	740.81
315.0	994.84	917.44	871.31	833.46	800.10	771.02	740.53	713.87	692.61
360.0	1117.69	1004.06	930.38	880.88	834.19	797.63	762.19	733.50	710.44
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	692.44	671.63	657.56	647.44	629.44	579.38	514.69	408.38	302.06
45.0	689.63	672.19	653.06	638.44	623.81	582.19	511.88	412.31	309.38
90.0	661.56	638.27	621.84	606.38	592.03	576.17	529.76	445.11	353.48
135.0	732.38	704.81	683.44	663.19	639.00	621.00	601.31	532.69	444.38
180.0	721.74	694.58	670.50	650.59	628.14	609.02	553.28	457.31	371.36
225.0	730.07	706.84	681.19	659.53	641.31	600.13	523.80	439.71	346.61
270.0	720.56	693.00	672.19	655.88	634.50	582.75	507.38	407.81	302.06
315.0	675.73	656.27	643.84	631.86	588.38	505.80	417.88	314.66	211.95
360.0	692.44	671.63	657.56	647.44	629.44	579.38	514.69	408.38	302.06
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	289.69	121.73	57.99	28.52	23.79	20.64	19.24	17.89	16.82
45.0	285.75	140.68	61.37	32.01	27.45	23.34	21.21	20.14	19.18
90.0	266.74	173.70	103.16	45.90	30.43	25.99	22.28	19.97	18.45
135.0	356.63	289.13	166.44	83.08	32.18	25.03	21.09	18.56	17.44
180.0	281.48	171.23	105.36	42.41	27.56	23.51	20.25	18.17	17.04
225.0	229.39	144.96	74.59	31.56	27.51	23.63	21.77	20.36	19.13
270.0	290.25	115.59	55.07	30.49	25.88	22.73	21.21	19.80	18.45
315.0	131.18	58.84	26.66	22.33	18.96	17.83	16.88	15.81	15.41
360.0	289.69	121.73	57.99	28.52	23.79	20.64	19.24	17.89	16.82

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	16.03	15.24	14.79	14.23	13.84	13.39	13.11	12.83	12.60
45.0	18.23	17.55	17.21	16.65	16.31	15.98	15.41	14.96	14.51
90.0	17.16	16.20	15.69	15.24	14.74	14.40	14.18	13.78	13.50
135.0	16.48	15.98	15.58	15.13	14.63	13.84	13.44	12.94	12.49
180.0	16.20	15.53	15.08	14.51	13.95	13.44	13.05	12.71	12.43
225.0	18.17	17.66	17.10	16.59	16.20	15.58	15.24	14.79	14.34
270.0	17.33	16.26	15.64	15.08	14.57	14.23	13.89	13.50	13.05
315.0	15.08	14.51	14.06	13.50	12.88	12.54	12.15	11.81	11.70
360.0	16.03	15.24	14.79	14.23	13.84	13.39	13.11	12.83	12.60
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	12.43	12.26	12.15	11.98	11.87	11.76	11.64	11.53	11.53
45.0	14.01	13.56	13.22	12.83	12.54	12.38	12.04	11.87	11.70
90.0	13.22	12.99	12.83	12.66	12.43	12.32	12.15	11.87	11.76
135.0	12.26	11.93	11.70	11.48	11.36	11.25	11.08	10.97	10.91
180.0	12.21	12.04	11.93	11.81	11.70	11.64	11.64	11.59	11.59
225.0	13.78	13.50	13.05	12.71	12.38	12.15	11.93	11.70	11.53
270.0	12.77	12.54	12.32	12.15	11.98	11.87	11.76	11.64	11.48
315.0	11.42	11.25	11.14	10.97	10.91	10.80	10.69	10.63	10.58
360.0	12.43	12.26	12.15	11.98	11.87	11.76	11.64	11.53	11.53
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.48	11.36	11.25	11.14	10.97	10.80	10.63	10.46	10.29
45.0	11.53	11.31	11.14	10.91	10.80	10.69	10.58	10.46	10.41
90.0	11.59	11.48	11.31	11.14	11.03	10.80	10.74	10.52	10.41
135.0	10.80	10.69	10.58	10.46	10.35	10.29	10.18	10.13	10.07
180.0	11.59	11.53	11.48	11.31	11.14	10.97	10.80	10.58	10.41
225.0	11.25	11.14	10.97	10.74	10.63	10.52	10.41	10.35	10.29
270.0	11.42	11.19	11.14	10.97	10.86	10.74	10.63	10.52	10.41
315.0	10.46	10.41	10.29	10.24	10.18	10.13	10.01	10.01	9.96
360.0	11.48	11.36	11.25	11.14	10.97	10.80	10.63	10.46	10.29
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	10.18	9.96	9.90	9.79	9.73	9.68	9.56	9.51	9.45
45.0	10.24	10.18	10.13	10.07	10.01	9.90	9.90	9.84	9.79
90.0	10.24	10.13	10.01	9.96	9.90	9.90	9.84	9.79	9.79
135.0	10.01	9.90	9.84	9.79	9.73	9.68	9.62	9.51	9.45
180.0	10.24	10.07	9.90	9.73	9.68	9.62	9.56	9.51	9.45
225.0	10.24	10.13	10.07	10.01	9.96	9.84	9.79	9.73	9.62
270.0	10.35	10.24	10.07	10.13	10.07	10.01	10.01	9.96	9.96
315.0	9.90	9.84	9.79	9.73	9.73	9.68	9.62	9.56	9.51
360.0	10.18	9.96	9.90	9.79	9.73	9.68	9.56	9.51	9.45
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	9.39	9.39	9.39	9.34	9.34	9.34	9.23	9.17	9.11
45.0	9.68	9.62	9.56	9.51	9.39	9.39	9.28	9.23	9.23
90.0	9.73	9.73	9.73	9.51	9.39	9.34	9.23	9.17	9.17
135.0	9.45	9.39	9.39	9.39	9.34	9.28	9.23	9.28	9.17
180.0	9.39	9.34	9.34	9.28	9.28	9.28	9.23	9.17	9.11
225.0	9.56	9.51	9.51	9.45	9.45	9.51	9.51	9.23	9.17
270.0	9.90	9.90	10.01	9.79	9.84	9.73	9.68	9.23	9.17
315.0	9.45	9.45	9.45	9.45	9.51	9.62	9.23	9.17	9.11
360.0	9.39	9.39	9.39	9.34	9.34	9.34	9.23	9.17	9.11

Intensity data(cd)

C/γ(°)	90.0
0.0	9.11
45.0	9.17
90.0	9.17
135.0	9.17
180.0	9.06
225.0	9.17
270.0	9.11
315.0	9.11
360.0	9.11