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NT

Client: NT

LumCAT: 61-0238

Luminaire: 91.70.427.00

Report No: 20250228-B007

Ballast type: DC

Test No: 20250228-C007

LampCAT: LUMINUS CXM-6

Lamp flux(lm): 1094.0

Number of Lamps: 1

Length(mm): 50

Phm Type: C

Voltage(V): 220.900

Current(A): 0.082

Power (W): 10.100

PF: 0.551

Width(mm): 50

Height(mm): 24

Photometric Results

Lumens(lm): 959.81, Efficiency(%): 87.73% , Luminous Efficacy(lm/W): 95.03

Central intensity(cd): 5609.294, Maximum intensity(cd): 5609.294

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=23.4

[C90/270]Total=23.4

Field angle(10%Imax): [C0/180]Total=36.4

[C90/270]Total=36.4

Maximum s/h(1/2): C0_180=0.40 C90_270=0.40

Maximum s/h(1/4): C0_180=0.37 C90_270=0.37

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 87.73%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.078%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5609.294	0.000	0	0.00%	0.00%
1.0	5587.933	5.358	5.358	0.49%	0.56%
2.0	5538.921	15.970	21.328	1.46%	2.22%
3.0	5452.088	26.287	47.615	2.40%	4.96%
4.0	5310.536	36.026	83.641	3.29%	8.71%
5.0	5082.738	44.711	128.352	4.09%	13.37%
6.0	4829.628	52.092	180.444	4.76%	18.80%
7.0	4538.186	58.146	238.59	5.31%	24.86%
8.0	4188.514	62.455	301.045	5.71%	31.37%
9.0	3853.107	65.173	366.218	5.96%	38.16%
10.0	3477.465	66.339	432.557	6.06%	45.07%
11.0	3106.506	65.787	498.345	6.01%	51.92%
12.0	2703.066	63.507	561.852	5.81%	58.54%
13.0	2142.831	57.509	619.36	5.26%	64.53%
14.0	1685.046	48.996	668.357	4.48%	69.63%
15.0	1432.089	42.793	711.15	3.91%	74.09%
16.0	1129.448	37.534	748.684	3.43%	78.00%
17.0	824.648	30.431	779.114	2.78%	81.17%
18.0	601.436	23.513	802.627	2.15%	83.62%
19.0	425.532	17.867	820.495	1.63%	85.49%
20.0	310.381	13.469	833.964	1.23%	86.89%
21.0	243.015	10.626	844.59	0.97%	88.00%
22.0	213.563	9.175	853.765	0.84%	88.95%
23.0	142.817	7.478	861.243	0.68%	89.73%
24.0	122.341	5.797	867.04	0.53%	90.33%
25.0	105.070	5.171	872.211	0.47%	90.87%
26.0	91.383	4.637	876.849	0.42%	91.36%
27.0	80.995	4.217	881.066	0.39%	91.80%
28.0	71.675	3.865	884.931	0.35%	92.20%
29.0	64.060	3.551	888.482	0.32%	92.57%
30.0	57.089	3.271	891.753	0.30%	92.91%
31.0	52.136	3.040	894.793	0.28%	93.23%
32.0	47.769	2.862	897.655	0.26%	93.52%
33.0	44.053	2.705	900.36	0.25%	93.81%
34.0	40.790	2.568	902.928	0.23%	94.07%
35.0	38.003	2.447	905.375	0.22%	94.33%
36.0	35.677	2.346	907.721	0.21%	94.57%
37.0	33.292	2.249	909.97	0.21%	94.81%

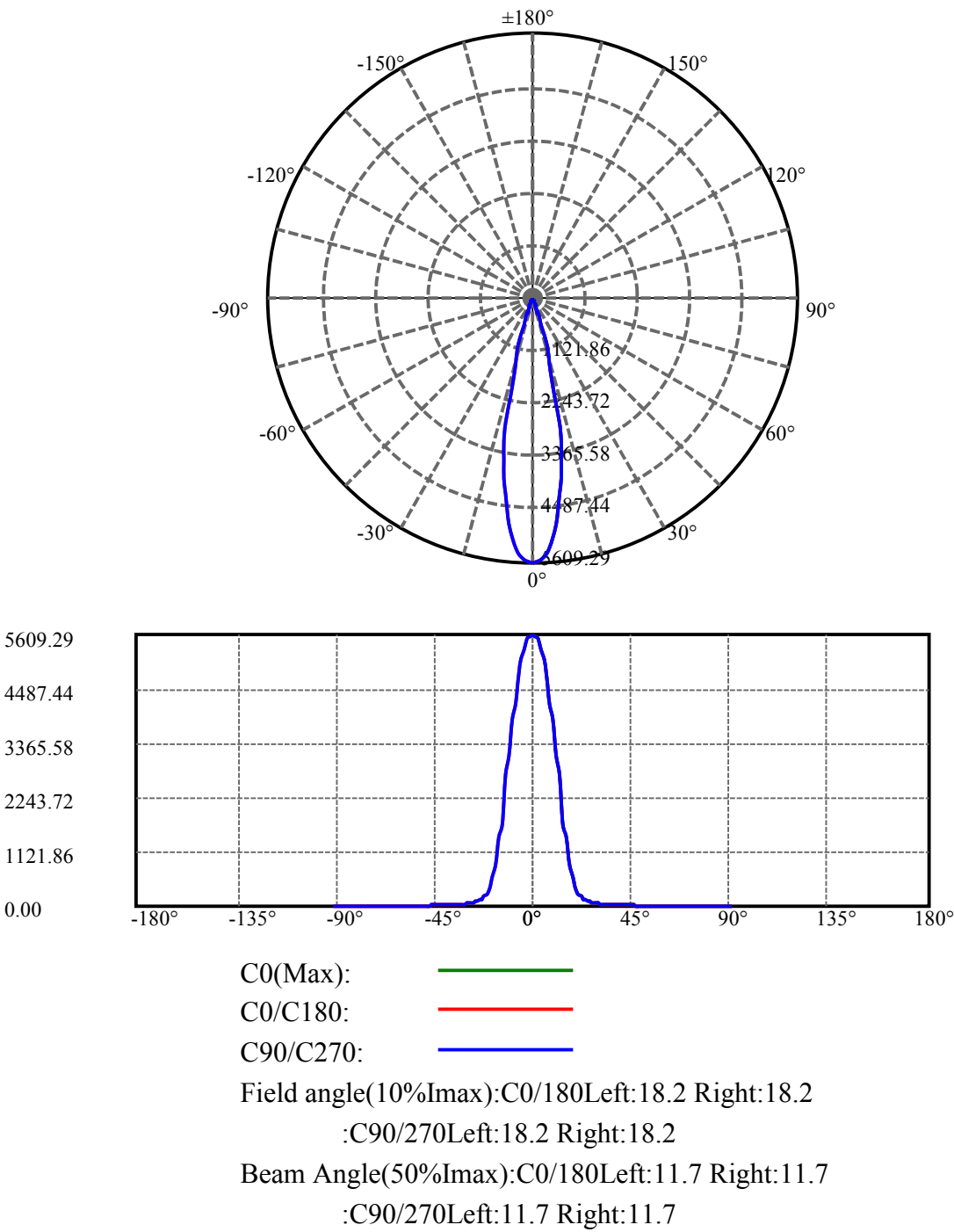
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	31.339	2.157	912.127	0.20%	95.03%
39.0	29.269	2.069	914.196	0.19%	95.25%
40.0	27.469	1.979	916.175	0.18%	95.45%
41.0	25.655	1.892	918.067	0.17%	95.65%
42.0	24.038	1.805	919.872	0.17%	95.84%
43.0	22.509	1.724	921.596	0.16%	96.02%
44.0	21.119	1.647	923.243	0.15%	96.19%
45.0	19.781	1.572	924.815	0.14%	96.35%
46.0	18.457	1.495	926.31	0.14%	96.51%
47.0	17.228	1.419	927.729	0.13%	96.66%
48.0	16.174	1.350	929.08	0.12%	96.80%
49.0	15.165	1.287	930.367	0.12%	96.93%
50.0	14.170	1.223	931.59	0.11%	97.06%
51.0	13.328	1.163	932.753	0.11%	97.18%
52.0	12.582	1.112	933.865	0.10%	97.30%
53.0	11.953	1.067	934.932	0.10%	97.41%
54.0	11.361	1.028	935.96	0.09%	97.52%
55.0	10.797	0.989	936.949	0.09%	97.62%
56.0	10.358	0.956	937.905	0.09%	97.72%
57.0	9.846	0.924	938.829	0.08%	97.81%
58.0	9.276	0.884	939.713	0.08%	97.91%
59.0	8.749	0.843	940.556	0.08%	97.99%
60.0	8.244	0.803	941.359	0.07%	98.08%
61.0	7.827	0.767	942.126	0.07%	98.16%
62.0	7.506	0.739	942.864	0.07%	98.23%
63.0	7.198	0.715	943.579	0.07%	98.31%
64.0	6.986	0.696	944.275	0.06%	98.38%
65.0	6.774	0.681	944.956	0.06%	98.45%
66.0	6.598	0.667	945.624	0.06%	98.52%
67.0	6.437	0.655	946.279	0.06%	98.59%
68.0	6.277	0.644	946.923	0.06%	98.66%
69.0	6.159	0.634	947.558	0.06%	98.72%
70.0	6.050	0.627	948.185	0.06%	98.79%
71.0	5.940	0.620	948.804	0.06%	98.85%
72.0	5.838	0.612	949.417	0.06%	98.92%
73.0	5.743	0.606	950.022	0.06%	98.98%
74.0	5.684	0.601	950.623	0.05%	99.04%
75.0	5.596	0.596	951.219	0.05%	99.11%

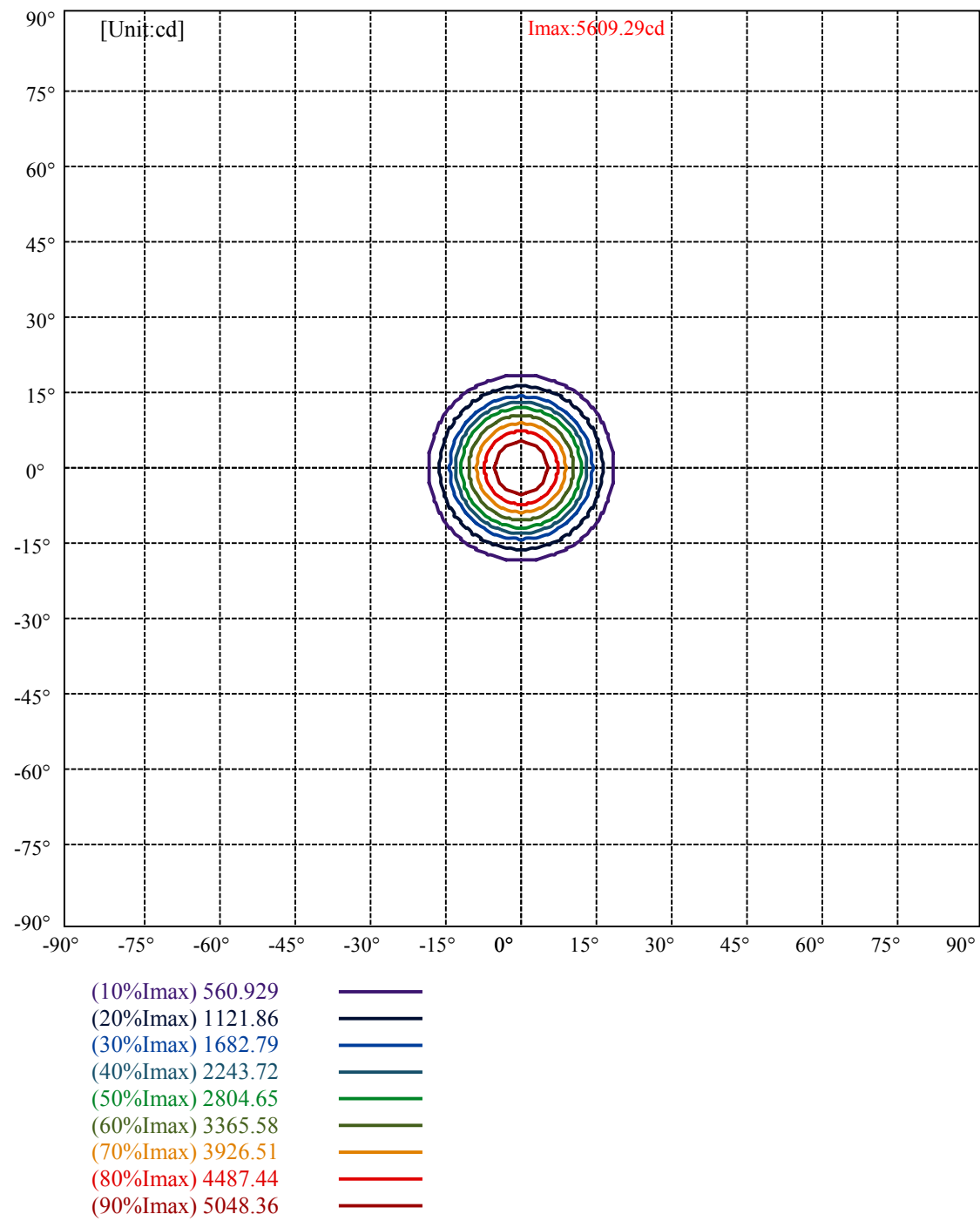
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	5.545	0.591	951.81	0.05%	99.17%
77.0	5.472	0.587	952.398	0.05%	99.23%
78.0	5.428	0.583	952.981	0.05%	99.29%
79.0	5.391	0.581	953.563	0.05%	99.35%
80.0	5.340	0.579	954.141	0.05%	99.41%
81.0	5.318	0.576	954.718	0.05%	99.47%
82.0	5.318	0.577	955.294	0.05%	99.53%
83.0	5.333	0.579	955.873	0.05%	99.59%
84.0	5.260	0.577	956.45	0.05%	99.65%
85.0	5.194	0.571	957.021	0.05%	99.71%
86.0	5.157	0.566	957.587	0.05%	99.77%
87.0	5.106	0.562	958.149	0.05%	99.83%
88.0	5.055	0.557	958.705	0.05%	99.89%
89.0	5.011	0.552	959.257	0.05%	99.94%
90.0	5.018	0.550	959.807	0.05%	100.00%

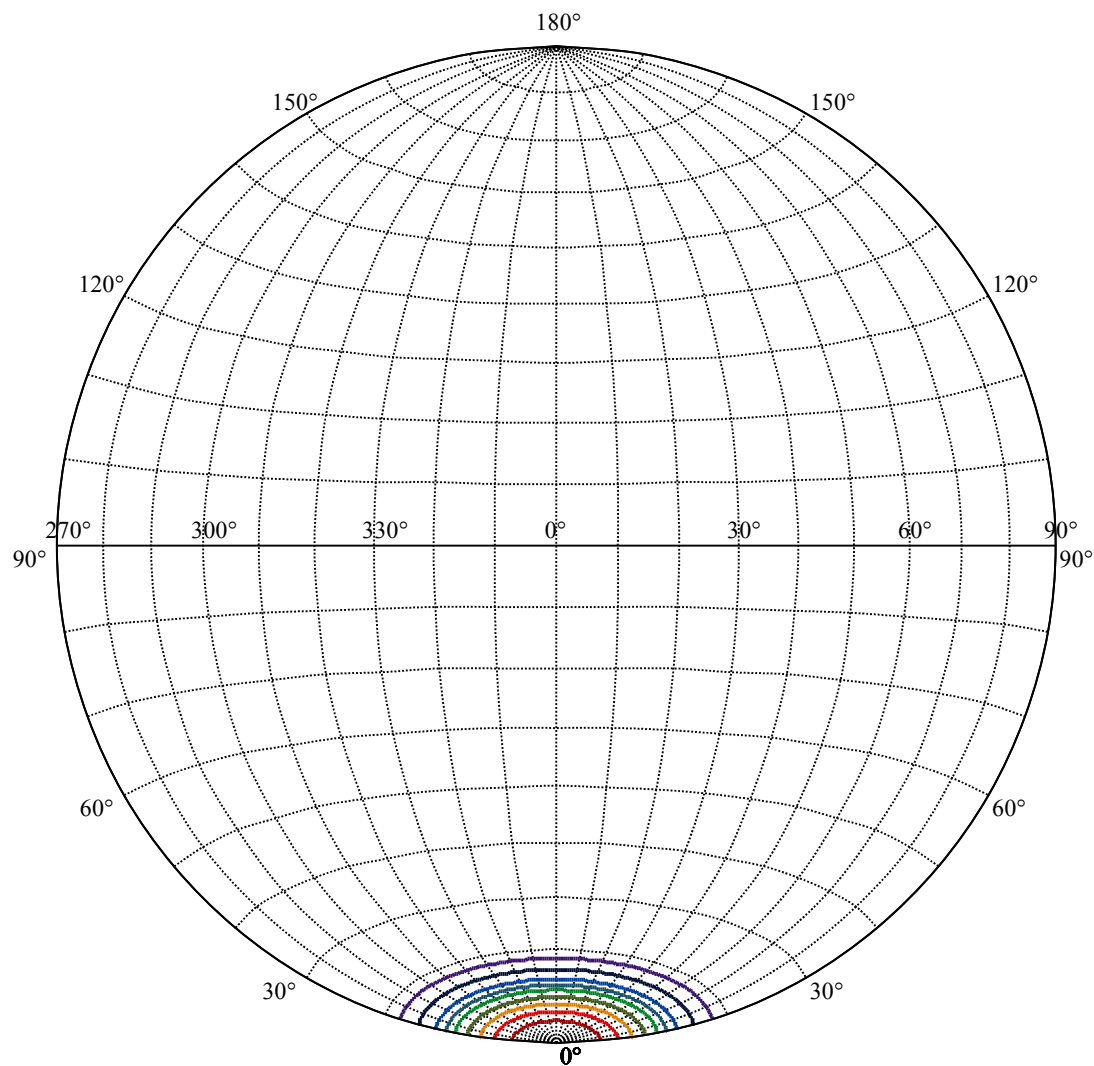
ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	891.75	81.51%	92.91%
0-40	916.17	83.75%	95.45%
0-60	941.36	86.05%	98.08%
0-90	959.26	87.68%	99.94%
0-120	959.26	87.68%	99.94%
0-180	959.81	87.73%	100.00%
60-90	17.90	1.64%	1.86%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-16.63	767.85	70.19%	80.00%

ZONAL LUMEN SUMMARY

0-10	432.56
10-20	401.41
20-30	57.79
30-40	24.42
40-50	15.41
50-60	9.77
60-70	6.83
70-80	5.96
80-90	5.12
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





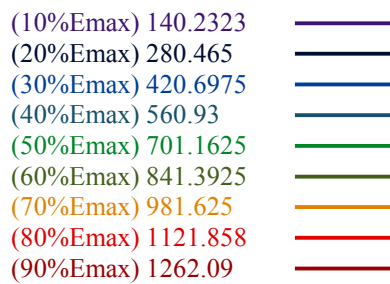


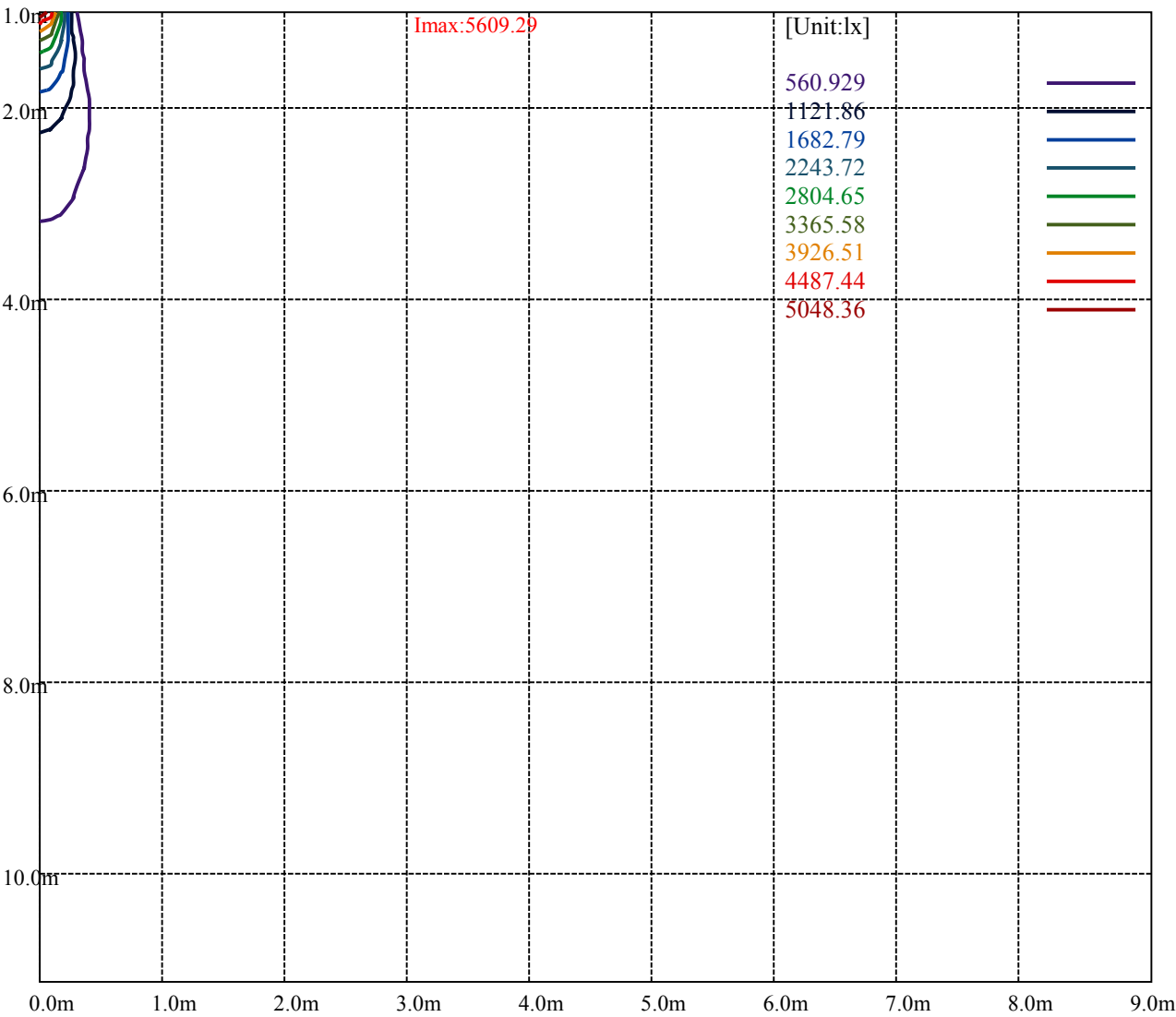
House

[Unit:cd]

Road

Imax:5609.29	
(10%Imax) 560.929	
(20%Imax) 1121.86	
(30%Imax) 1682.79	
(40%Imax) 2243.72	
(50%Imax) 2804.65	
(60%Imax) 3365.58	
(70%Imax) 3926.51	
(80%Imax) 4487.44	
(90%Imax) 5048.36	





Luminance Table

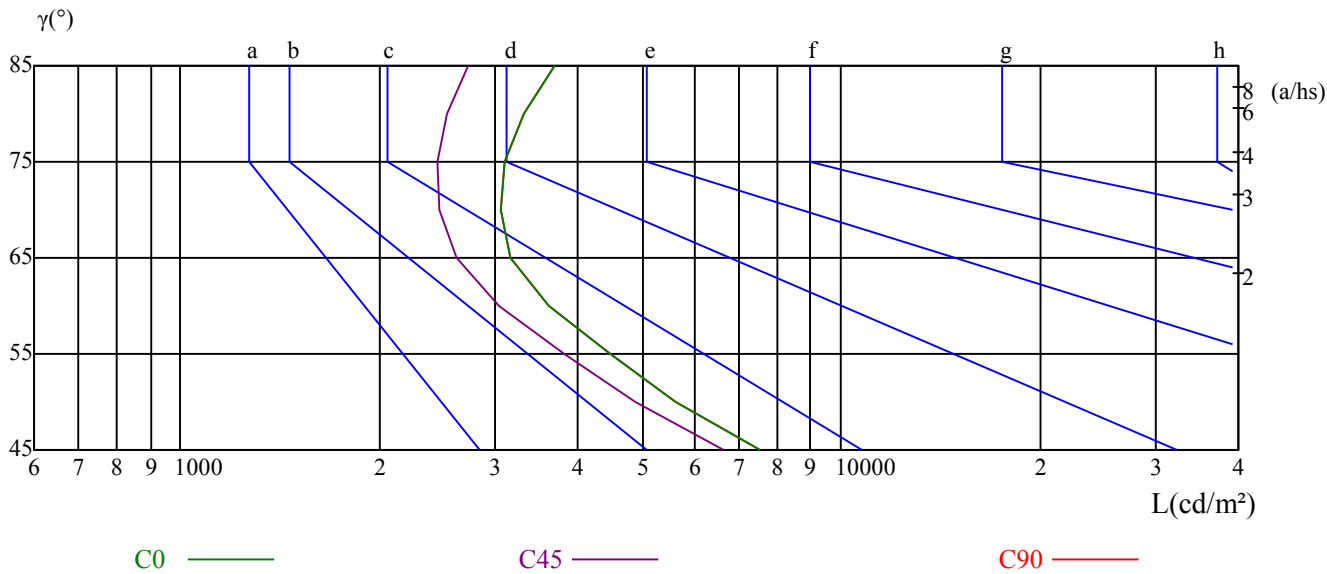
γ	45	50	55	60	65	70	75	80	85
C0	7561	5609	4467	3601	3159	3051	3098	3305	3675
C45	6665	4874	3823	3031	2611	2470	2448	2536	2721
C90	7561	5609	4467	3601	3159	3051	3098	3305	3675

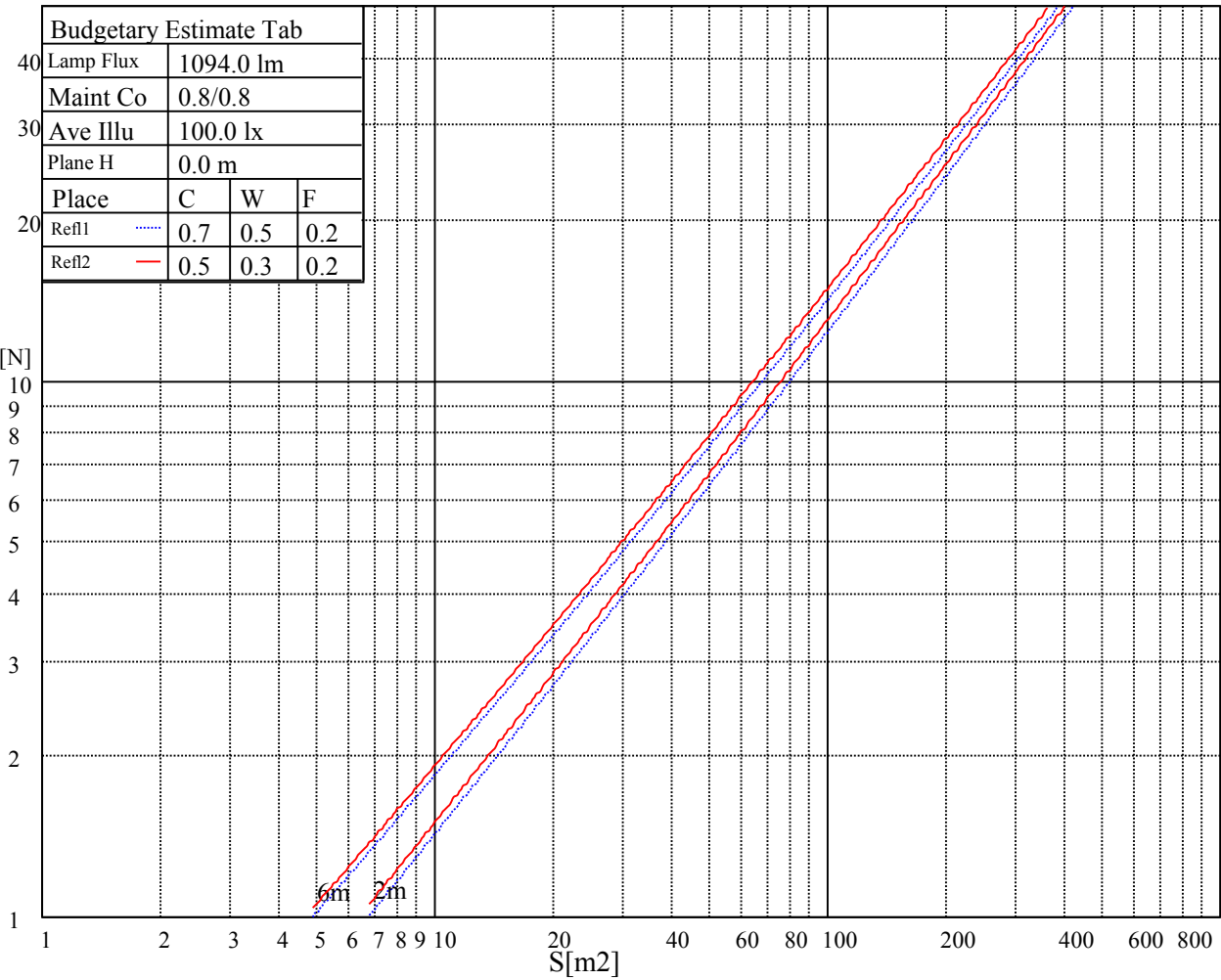
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6411	6411	6411	8649	8649	8649	23837	23837	23837

Glare Table

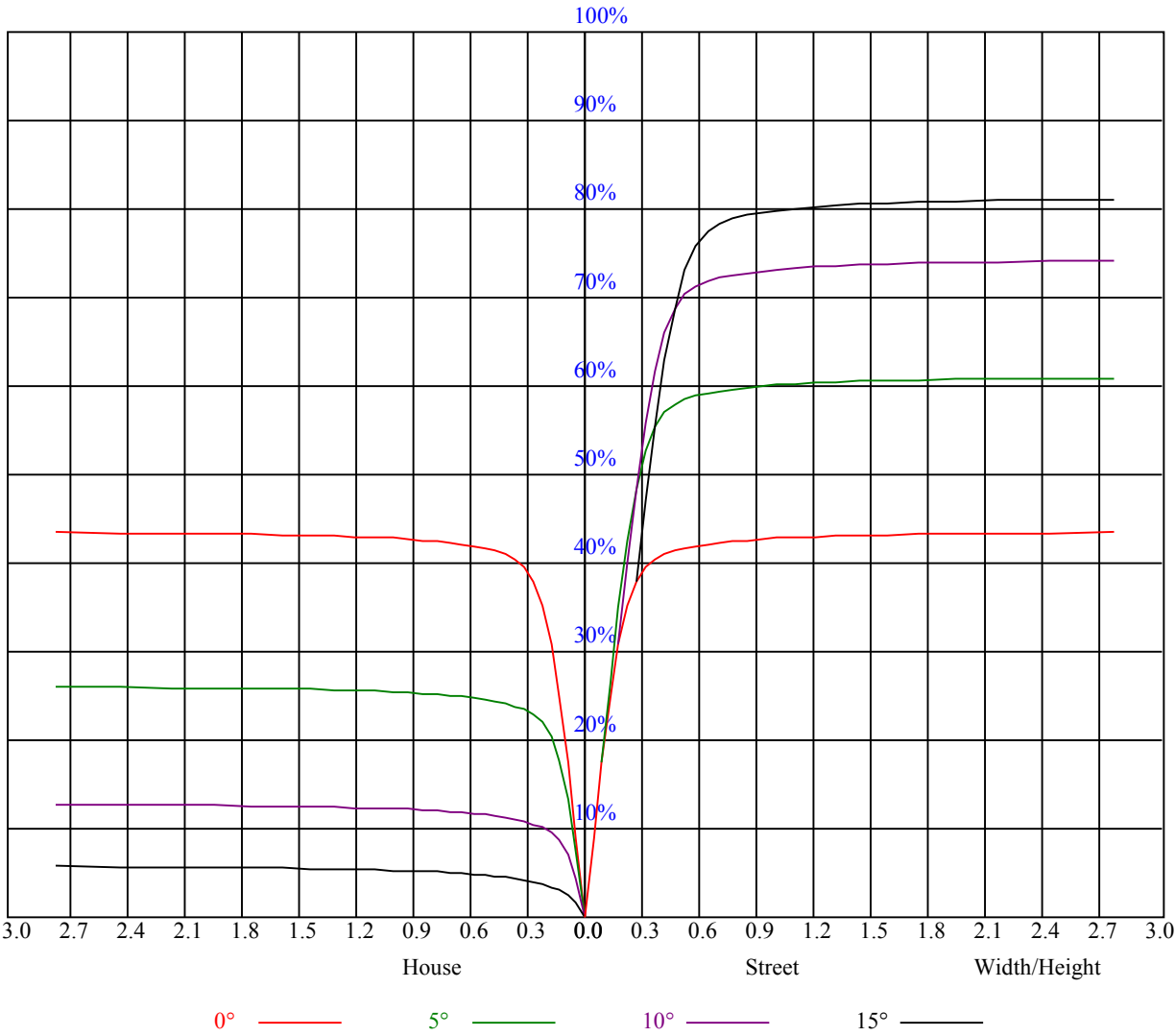
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

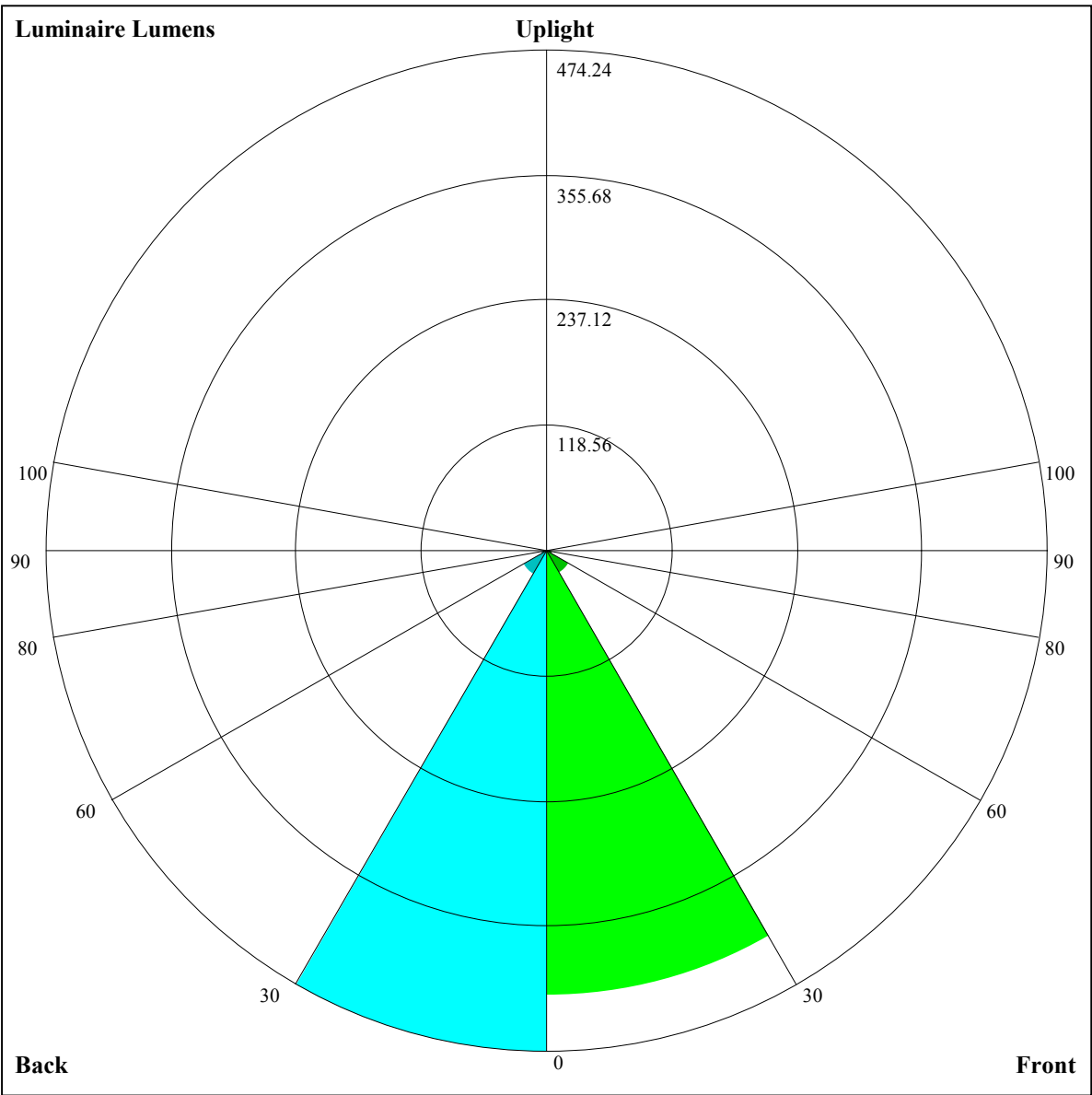
Luminance Limiting Curve





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	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.04	1.04	1.04	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.90	0.90	0.90	0.88
1	0.99	0.97	0.96	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.84
2	0.94	0.92	0.89	0.93	0.91	0.89	0.90	0.88	0.87	0.88	0.86	0.85	0.85	0.84	0.83	0.82
3	0.91	0.87	0.85	0.89	0.87	0.84	0.87	0.85	0.83	0.85	0.83	0.82	0.83	0.82	0.81	0.79
4	0.87	0.84	0.81	0.86	0.83	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.82	0.80	0.78	0.77
5	0.85	0.81	0.79	0.84	0.81	0.78	0.82	0.80	0.78	0.81	0.79	0.77	0.80	0.78	0.76	0.75
6	0.82	0.79	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.79	0.77	0.75	0.78	0.76	0.74	0.74
7	0.80	0.76	0.74	0.79	0.76	0.74	0.78	0.76	0.73	0.77	0.75	0.73	0.77	0.74	0.73	0.72
8	0.78	0.74	0.72	0.77	0.74	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.75	0.73	0.71	0.70
9	0.76	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.70	0.74	0.72	0.70	0.74	0.71	0.70	0.69
10	0.74	0.71	0.69	0.74	0.71	0.69	0.73	0.71	0.69	0.73	0.70	0.68	0.72	0.70	0.68	0.68





Luminaire Lumens:

FL=422.17,FM=24.2,FH=6.34,FVH=2.82

BL=474.24,BM=25.54,BH=6.43,BVH=2.84

UL=0,UH=0

BUG Rating:B1-U0-G0

Intensity data(cd)

Appendix Page: 17 Total:19

C/ γ (°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	5609.44	5508.20	5374.76	5198.03	4969.20	4628.60	4335.41	4031.67	3722.67
45.0	5640.46	5588.37	5513.46	5402.27	5199.20	4973.89	4714.63	4433.72	4052.16
90.0	5583.69	5514.05	5430.36	5311.56	5142.43	4847.48	4558.96	4249.38	3850.25
135.0	5603.59	5602.42	5576.67	5531.02	5448.50	5258.31	5041.77	4781.35	4403.88
180.0	5609.44	5643.97	5649.24	5621.73	5557.94	5394.66	5199.20	4934.09	4557.21
225.0	5640.46	5666.79	5660.35	5595.98	5471.91	5277.62	4961.01	4670.15	4345.94
270.0	5583.69	5625.83	5643.38	5633.43	5562.04	5443.24	5262.40	4942.87	4642.65
315.0	5603.59	5553.84	5463.13	5322.68	5133.07	4838.11	4563.64	4262.25	3933.36
360.0	5609.44	5508.20	5374.76	5198.03	4969.20	4628.60	4335.41	4031.67	3722.67
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3320.04	2980.02	2617.77	2139.06	1167.35	1167.35	1091.85	763.07	566.03
45.0	3746.08	3437.67	3108.19	2672.20	2305.26	1837.08	1481.85	1159.39	821.13
90.0	3511.41	3158.52	2696.78	2312.87	1553.25	1156.76	1156.76	872.80	598.22
135.0	4085.51	3765.98	3428.31	3064.30	2582.66	2182.95	1786.75	1326.76	1012.50
180.0	4252.89	3921.07	3571.10	3191.29	2693.85	2287.70	1887.41	1509.94	1100.87
225.0	3995.97	3537.74	3155.01	2757.64	2351.49	1549.15	1151.25	1151.25	868.88
270.0	4326.04	3883.61	3516.09	3119.89	2611.33	2198.75	1800.21	1429.18	1030.64
315.0	3586.90	3135.11	2758.81	2367.29	1877.46	1100.63	1100.63	823.18	598.92
360.0	3320.04	2980.02	2617.77	2139.06	1167.35	1167.35	1091.85	763.07	566.03
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	384.20	283.95	215.30	170.01	134.66	115.76	101.30	89.71	77.72
45.0	610.45	451.27	333.64	310.23	220.86	148.06	124.77	104.52	92.00
90.0	435.88	317.89	236.84	173.11	141.57	119.97	104.23	89.25	79.42
135.0	756.75	512.13	374.02	296.77	296.77	158.60	133.90	112.48	99.14
180.0	829.32	557.78	404.45	297.35	297.35	172.00	144.84	121.20	106.75
225.0	591.55	432.13	298.52	229.23	184.93	149.76	129.63	113.24	96.45
270.0	771.39	558.36	402.11	295.60	295.60	160.23	136.47	118.57	100.95
315.0	431.95	290.74	218.17	171.82	136.77	118.16	103.58	91.59	78.65
360.0	384.20	283.95	215.30	170.01	134.66	115.76	101.30	89.71	77.72
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	69.41	62.09	55.36	50.91	47.34	42.72	39.97	36.99	34.88
45.0	81.05	70.70	63.73	57.64	51.68	47.93	44.01	40.91	38.27
90.0	70.64	61.74	56.36	50.56	47.05	43.66	40.79	37.86	35.29
135.0	86.96	77.02	66.95	60.22	54.84	50.39	45.76	42.78	39.15
180.0	94.63	83.39	74.09	64.96	58.46	53.31	47.93	44.42	41.38
225.0	85.44	75.85	67.71	59.28	54.31	50.10	46.12	41.79	39.33
270.0	89.36	79.12	70.64	61.92	55.95	51.09	47.34	43.37	40.61
315.0	70.46	63.50	57.64	51.21	47.46	42.96	40.50	38.22	35.11
360.0	69.41	62.09	55.36	50.91	47.34	42.72	39.97	36.99	34.88
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	32.89	31.02	29.32	27.15	25.46	23.94	22.24	20.95	19.72
45.0	36.34	33.42	31.54	29.67	27.92	25.98	24.52	22.94	21.54
90.0	33.18	31.37	29.14	27.45	25.87	23.82	22.47	21.07	19.43
135.0	36.93	34.47	32.30	30.14	28.38	26.39	24.76	23.41	22.06
180.0	38.10	35.76	33.36	31.49	29.67	27.74	25.69	24.17	22.71
225.0	36.93	33.94	31.89	29.67	27.62	25.93	24.40	22.65	21.30
270.0	38.22	35.46	33.65	31.54	29.44	27.68	25.75	24.05	22.53
315.0	32.83	30.90	29.50	27.04	25.40	23.76	22.47	20.83	19.66
360.0	32.89	31.02	29.32	27.15	25.46	23.94	22.24	20.95	19.72

Intensity data(cd)

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C/ γ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	18.26	17.15	16.15	14.98	14.16	13.40	12.52	11.88	11.29
45.0	19.96	18.67	17.26	16.21	15.33	14.28	13.58	12.99	12.47
90.0	18.26	17.15	15.86	14.92	14.05	13.05	12.35	11.65	11.06
135.0	20.83	19.31	18.14	17.09	15.80	14.86	13.93	12.93	12.29
180.0	21.42	19.78	18.61	17.50	16.44	15.22	14.28	13.28	12.47
225.0	20.01	18.90	17.44	16.50	15.57	14.40	13.52	12.82	12.00
270.0	21.13	19.55	18.20	17.03	15.92	14.86	14.16	13.58	13.11
315.0	18.38	17.15	16.15	15.16	14.05	13.28	12.29	11.53	10.94
360.0	18.26	17.15	16.15	14.98	14.16	13.40	12.52	11.88	11.29
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	10.77	10.12	9.71	9.31	8.90	8.49	8.02	7.72	7.37
45.0	12.00	11.70	11.41	10.83	9.95	9.19	8.54	8.02	7.67
90.0	10.53	9.95	9.48	9.01	8.54	8.19	7.78	7.43	7.20
135.0	11.41	10.77	10.24	9.71	9.13	8.72	8.37	7.96	7.61
180.0	11.70	10.94	10.42	9.89	9.31	8.95	8.60	8.19	7.84
225.0	11.35	10.65	10.12	9.66	9.25	8.84	8.31	7.96	7.67
270.0	12.76	12.52	12.23	11.59	10.71	9.54	8.66	8.02	7.67
315.0	10.36	9.71	9.25	8.78	8.43	8.08	7.67	7.32	7.02
360.0	10.77	10.12	9.71	9.31	8.90	8.49	8.02	7.72	7.37
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	7.14	6.91	6.73	6.61	6.44	6.32	6.20	6.09	6.03
45.0	7.43	7.14	6.96	6.73	6.55	6.38	6.20	6.09	5.97
90.0	6.91	6.73	6.50	6.38	6.20	6.09	5.97	5.91	5.74
135.0	7.26	7.02	6.79	6.61	6.44	6.26	6.14	6.03	5.91
180.0	7.49	7.26	7.02	6.85	6.67	6.50	6.38	6.26	6.14
225.0	7.32	7.14	6.91	6.67	6.55	6.38	6.26	6.14	6.03
270.0	7.26	7.08	6.85	6.67	6.50	6.32	6.20	6.09	5.97
315.0	6.79	6.61	6.44	6.26	6.14	5.97	5.91	5.79	5.74
360.0	7.14	6.91	6.73	6.61	6.44	6.32	6.20	6.09	6.03
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	5.91	5.79	5.74	5.62	5.56	5.50	5.44	5.44	5.38
45.0	5.91	5.79	5.74	5.68	5.62	5.56	5.44	5.44	5.44
90.0	5.68	5.62	5.56	5.50	5.44	5.33	5.33	5.27	5.21
135.0	5.79	5.68	5.62	5.56	5.50	5.38	5.38	5.33	5.27
180.0	6.03	5.91	5.85	5.74	5.68	5.62	5.56	5.50	5.44
225.0	5.91	5.85	5.79	5.68	5.62	5.56	5.50	5.50	5.38
270.0	5.85	5.74	5.68	5.56	5.56	5.50	5.44	5.38	5.38
315.0	5.62	5.56	5.50	5.44	5.38	5.33	5.33	5.27	5.21
360.0	5.91	5.79	5.74	5.62	5.56	5.50	5.44	5.44	5.38
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	5.33	5.33	5.38	5.21	5.15	5.09	5.03	5.03	4.97
45.0	5.44	5.38	5.44	5.38	5.33	5.33	5.33	5.33	5.27
90.0	5.21	5.27	5.27	5.09	4.97	4.97	4.92	4.86	4.86
135.0	5.27	5.27	5.27	5.33	5.27	5.27	5.21	5.15	5.09
180.0	5.38	5.38	5.38	5.44	5.33	5.27	5.21	5.15	5.09
225.0	5.38	5.33	5.33	5.21	5.15	5.03	5.03	4.97	4.86
270.0	5.33	5.38	5.44	5.38	5.38	5.38	5.27	5.15	5.15
315.0	5.21	5.21	5.15	5.03	4.97	4.92	4.86	4.80	4.80
360.0	5.33	5.33	5.38	5.21	5.15	5.09	5.03	5.03	4.97

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	4.97
45.0	5.27
90.0	4.80
135.0	5.09
180.0	5.09
225.0	4.92
270.0	5.21
315.0	4.80
360.0	4.97