



NATA LIGHTING CO.,LTD.
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NT

Client: NT

LumCAT: 61-0188

Luminaire:

Report No: 20260328-B012

Ballast type: AC

Test No: 20260328-C012

Voltage(V): 3.720

LampCAT: LUMINUS SFT-25R

Current(A): 0.705

Lamp flux(lm): 303.7

Power (W): 2.622

Number of Lamps: 1

PF: 0.000

Length(mm): 35

Width(mm): 35

Phm Type: C

Height(mm): 18

Photometric Results

Lumens(lm): 268.82, Efficiency(%): 88.53% , Luminous Efficacy(lm/W): 102.53

Central intensity(cd): 2905.819, Maximum intensity(cd): 19818.000

Angle of maximum intensity: C=270.0 γ =2.0

Beam Angle(50%Imax): [C0/180]Total=3.0

[C90/270]Total=3.2

Field angle(10%Imax): [C0/180]Total=6.0

[C90/270]Total=5.5

Maximum s/h(1/2): C0_180=0.20 C90_270=0.19

Maximum s/h(1/4): C0_180=0.15 C90_270=0.21

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 88.72%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 92.369%

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2026/3/28
Humidity(%): 60.0%

Operator: 杨泽全
Distance(m): 7.50

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	10806.202	0.000	0	0.00%	0.00%
1.0	10160.810	10.032	10.032	3.30%	3.73%
2.0	8826.982	27.253	37.285	8.98%	13.87%
3.0	5759.880	34.887	72.172	11.49%	26.85%
4.0	3106.955	29.680	101.853	9.77%	37.89%
5.0	1335.614	19.112	120.964	6.29%	45.00%
6.0	576.527	10.049	131.013	3.31%	48.74%
7.0	426.178	6.224	137.237	2.05%	51.05%
8.0	350.388	5.558	142.795	1.83%	53.12%
9.0	288.928	5.181	147.976	1.71%	55.05%
10.0	263.152	4.996	152.972	1.65%	56.90%
11.0	239.098	5.019	157.99	1.65%	58.77%
12.0	183.009	4.614	162.605	1.52%	60.49%
13.0	162.612	4.102	166.706	1.35%	62.01%
14.0	143.395	3.917	170.623	1.29%	63.47%
15.0	126.007	3.698	174.322	1.22%	64.85%
16.0	112.071	3.489	177.81	1.15%	66.14%
17.0	99.886	3.301	181.111	1.09%	67.37%
18.0	90.527	3.140	184.25	1.03%	68.54%
19.0	81.577	2.994	187.245	0.99%	69.65%
20.0	73.505	2.838	190.083	0.93%	70.71%
21.0	66.298	2.684	192.768	0.88%	71.71%
22.0	60.314	2.544	195.312	0.84%	72.65%
23.0	55.441	2.429	197.741	0.80%	73.56%
24.0	50.407	2.314	200.055	0.76%	74.42%
25.0	45.998	2.192	202.247	0.72%	75.23%
26.0	42.757	2.095	204.342	0.69%	76.01%
27.0	39.410	2.010	206.352	0.66%	76.76%
28.0	36.429	1.920	208.272	0.63%	77.48%
29.0	34.172	1.847	210.12	0.61%	78.16%
30.0	31.774	1.781	211.9	0.59%	78.83%
31.0	29.869	1.715	213.616	0.56%	79.46%
32.0	28.083	1.660	215.276	0.55%	80.08%
33.0	26.698	1.614	216.89	0.53%	80.68%
34.0	25.334	1.575	218.464	0.52%	81.27%
35.0	24.110	1.536	220	0.51%	81.84%
36.0	23.055	1.502	221.502	0.49%	82.40%
37.0	21.909	1.467	222.968	0.48%	82.94%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	20.897	1.429	224.397	0.47%	83.47%
39.0	20.095	1.399	225.796	0.46%	83.99%
40.0	19.301	1.374	227.17	0.45%	84.51%
41.0	18.485	1.346	228.516	0.44%	85.01%
42.0	17.733	1.316	229.831	0.43%	85.50%
43.0	17.044	1.288	231.12	0.42%	85.98%
44.0	16.334	1.260	232.379	0.41%	86.44%
45.0	15.616	1.228	233.607	0.40%	86.90%
46.0	15.026	1.198	234.806	0.39%	87.35%
47.0	14.379	1.170	235.975	0.39%	87.78%
48.0	13.781	1.138	237.114	0.37%	88.20%
49.0	13.275	1.111	238.225	0.37%	88.62%
50.0	12.705	1.083	239.308	0.36%	89.02%
51.0	12.164	1.052	240.36	0.35%	89.41%
52.0	11.756	1.026	241.386	0.34%	89.79%
53.0	11.355	1.005	242.392	0.33%	90.17%
54.0	10.941	0.983	243.375	0.32%	90.53%
55.0	10.561	0.960	244.334	0.32%	90.89%
56.0	10.181	0.937	245.272	0.31%	91.24%
57.0	9.900	0.918	246.19	0.30%	91.58%
58.0	9.591	0.901	247.091	0.30%	91.92%
59.0	9.316	0.884	247.975	0.29%	92.25%
60.0	9.028	0.867	248.842	0.29%	92.57%
61.0	8.754	0.849	249.69	0.28%	92.88%
62.0	8.515	0.832	250.522	0.27%	93.19%
63.0	8.325	0.819	251.341	0.27%	93.50%
64.0	8.128	0.807	252.149	0.27%	93.80%
65.0	7.966	0.797	252.945	0.26%	94.09%
66.0	7.777	0.785	253.731	0.26%	94.39%
67.0	7.636	0.775	254.506	0.26%	94.67%
68.0	7.502	0.767	255.273	0.25%	94.96%
69.0	7.376	0.759	256.032	0.25%	95.24%
70.0	7.270	0.752	256.784	0.25%	95.52%
71.0	7.151	0.745	257.529	0.25%	95.80%
72.0	7.102	0.741	258.27	0.24%	96.08%
73.0	6.975	0.736	259.006	0.24%	96.35%
74.0	6.926	0.731	259.737	0.24%	96.62%
75.0	6.750	0.723	260.46	0.24%	96.89%

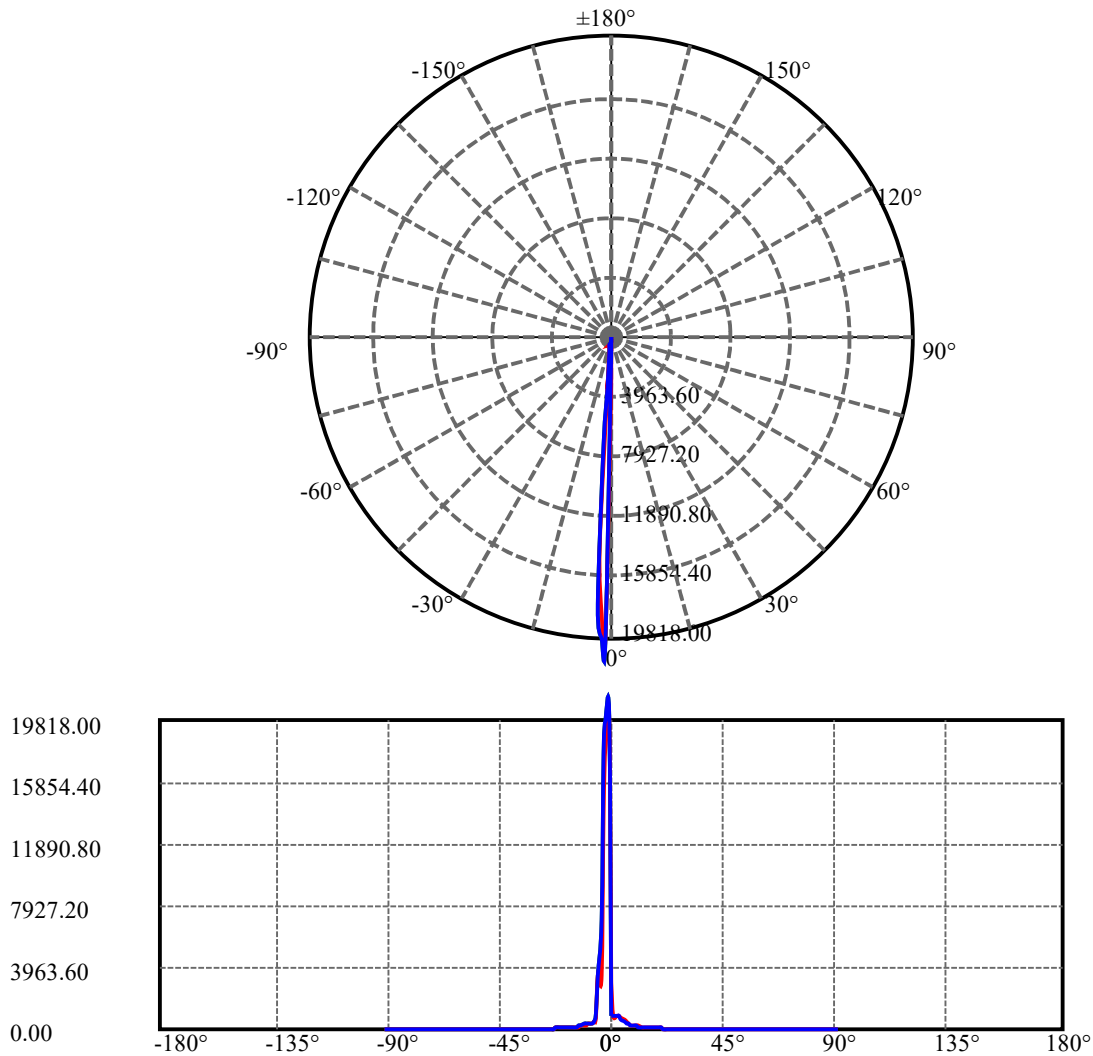
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	6.588	0.708	261.168	0.23%	97.15%
77.0	6.469	0.696	261.864	0.23%	97.41%
78.0	6.216	0.679	262.543	0.22%	97.66%
79.0	5.998	0.656	263.199	0.22%	97.91%
80.0	5.780	0.635	263.834	0.21%	98.14%
81.0	5.484	0.609	264.443	0.20%	98.37%
82.0	5.224	0.581	265.024	0.19%	98.59%
83.0	5.006	0.556	265.58	0.18%	98.79%
84.0	4.774	0.533	266.113	0.18%	98.99%
85.0	4.535	0.508	266.621	0.17%	99.18%
86.0	4.296	0.483	267.104	0.16%	99.36%
87.0	4.092	0.459	267.563	0.15%	99.53%
88.0	3.902	0.438	268.001	0.14%	99.69%
89.0	3.734	0.419	268.419	0.14%	99.85%
90.0	3.600	0.402	268.821	0.13%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	211.90	69.78%	78.83%
0-40	227.17	74.81%	84.51%
0-60	248.84	81.95%	92.57%
0-90	268.42	88.40%	99.85%
0-120	268.42	88.40%	99.85%
0-180	268.82	88.53%	100.00%
60-90	19.58	6.45%	7.28%
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%
0-31.87	215.06	70.82%	80.00%

ZONAL LUMEN SUMMARY

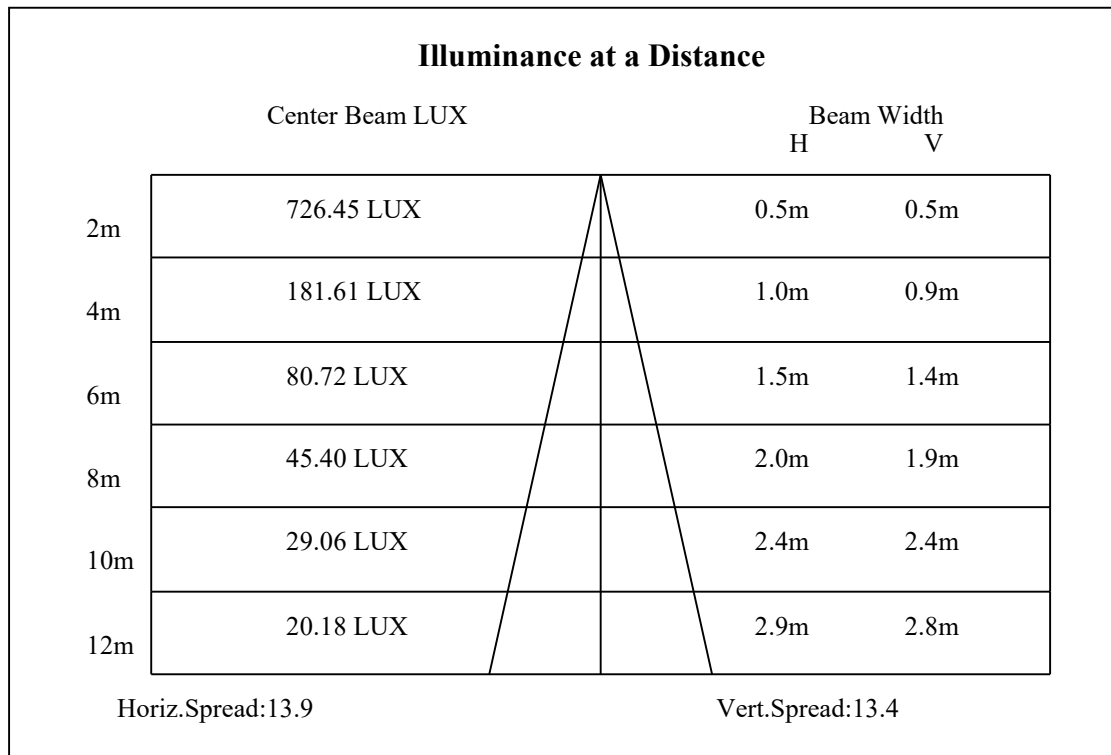
0-10	152.97
10-20	37.11
20-30	21.82
30-40	15.27
40-50	12.14
50-60	9.53
60-70	7.94
70-80	7.05
80-90	4.59
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

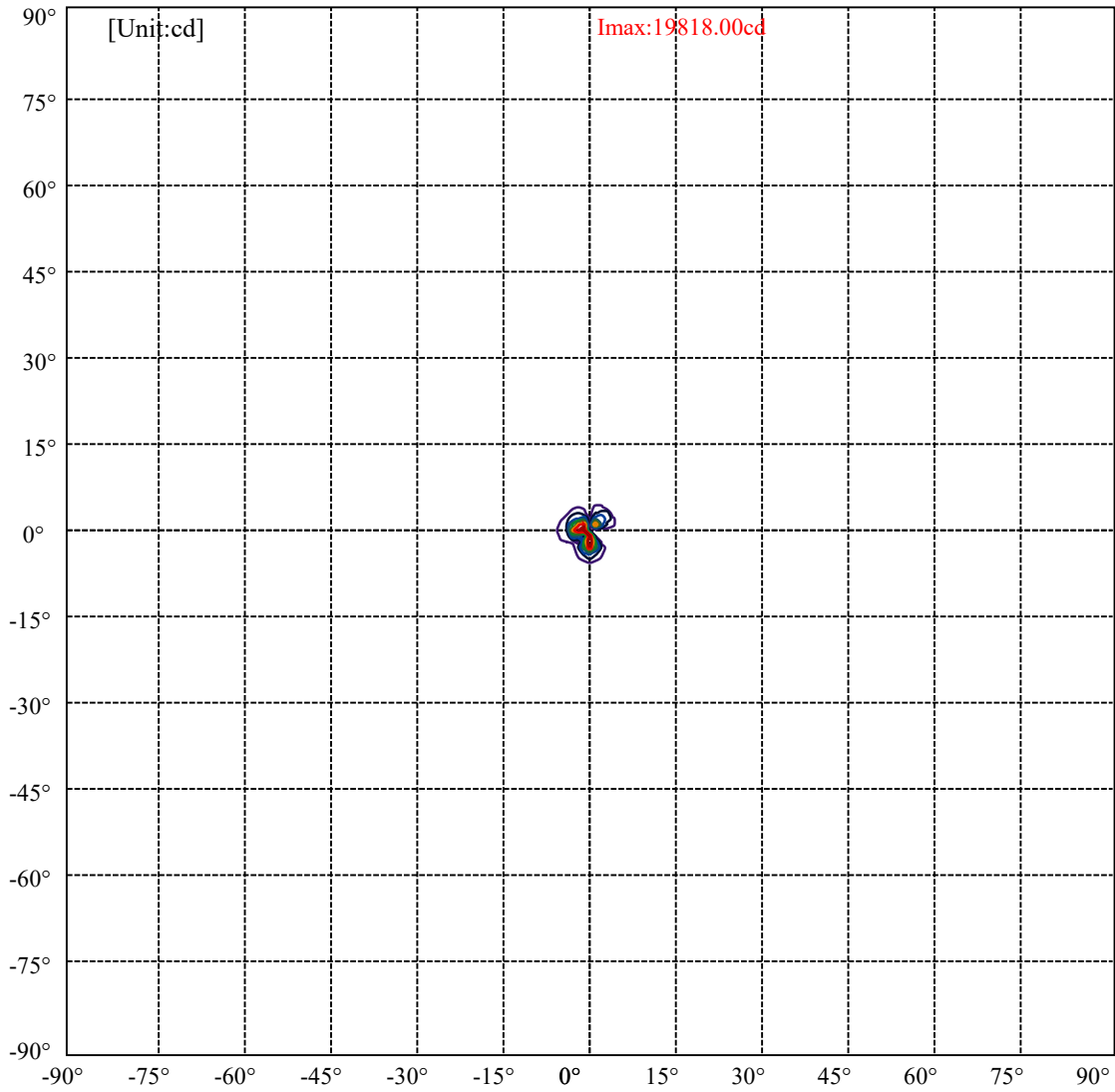


C270(Max): ——
C0/C180: ——
C90/C270: ——

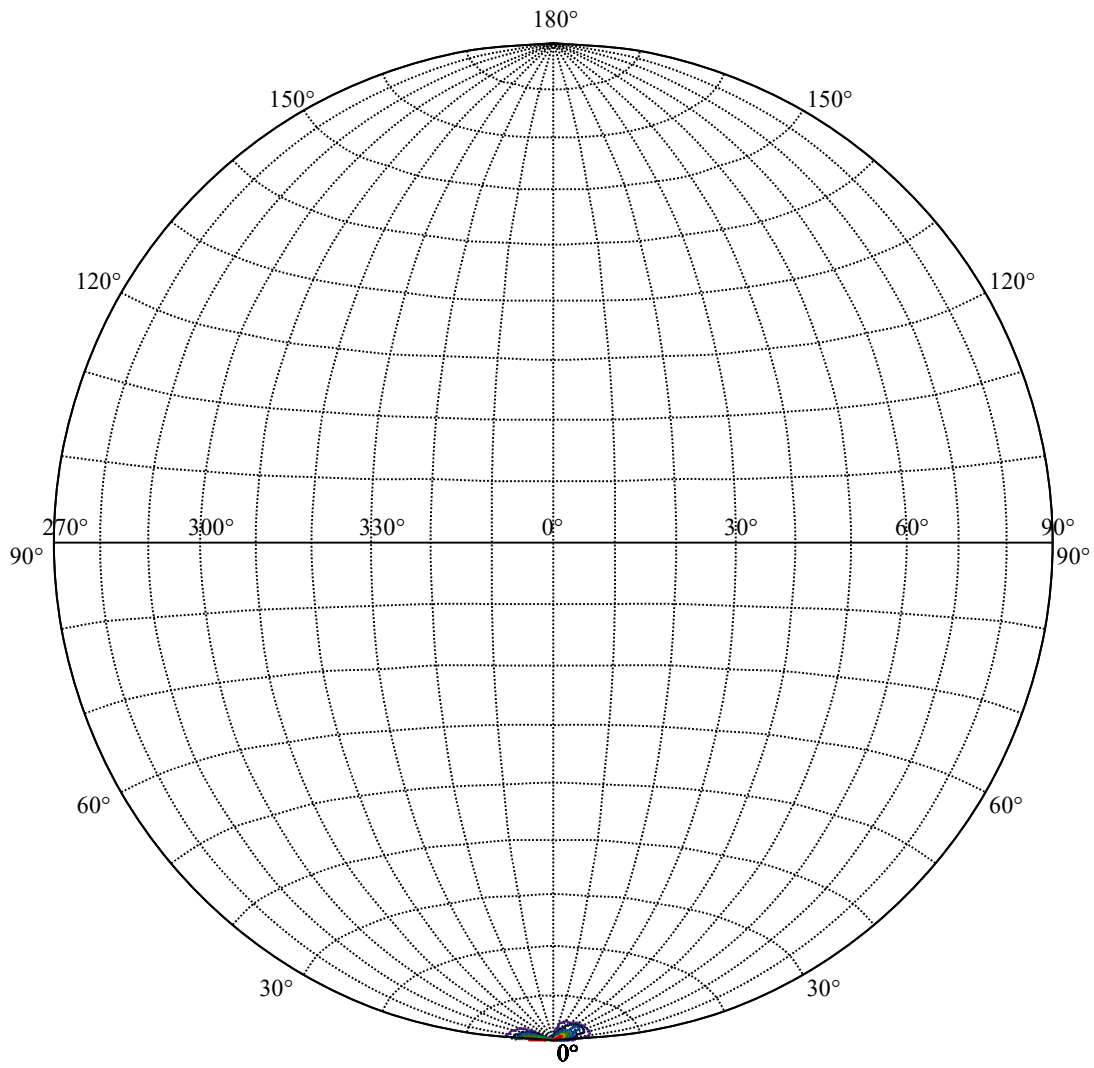
Field angle(10%Imax):C0/180Left:4.5 Right:1.5
:C90/270Left:3.6 Right:1.9

Beam Angle(50%Imax):C0/180Left:2.4 Right:0.6
:C90/270Left:1.7 Right:1.5





(10%Imax) 1981.8	—
(20%Imax) 3963.6	—
(30%Imax) 5945.4	—
(40%Imax) 7927.2	—
(50%Imax) 9909	—
(60%Imax) 11890.8	—
(70%Imax) 13872.6	—
(80%Imax) 15854.4	—
(90%Imax) 17836.2	—



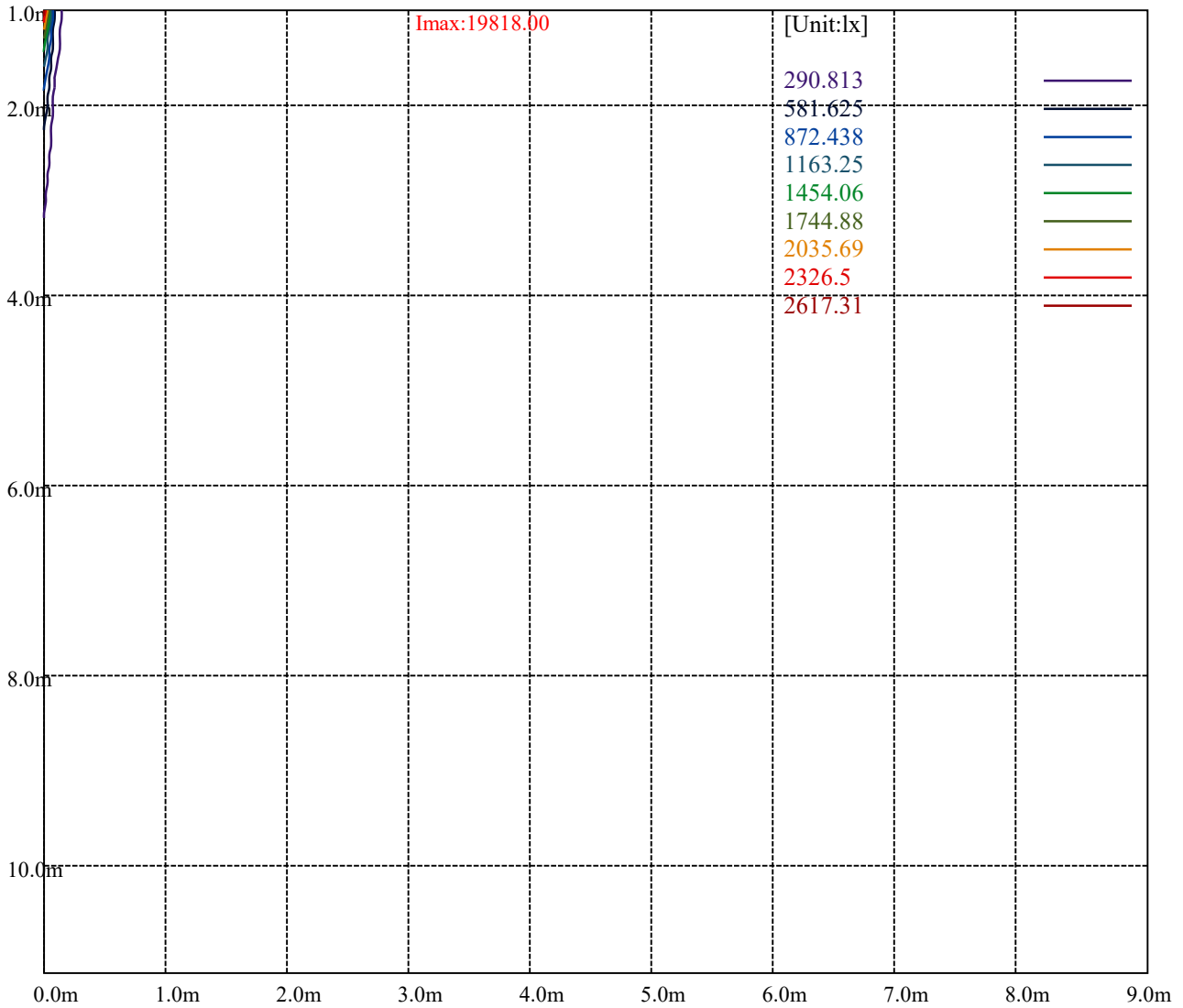
House

[Unit:cd]

Road

Imax:19818.00

(10%Imax) 1981.69	—
(20%Imax) 3963.38	—
(30%Imax) 5945.06	—
(40%Imax) 7926.75	—
(50%Imax) 9908.44	—
(60%Imax) 11890.1	—
(70%Imax) 13871.8	—
(80%Imax) 15853.5	—
(90%Imax) 17835.2	—



Luminance Table

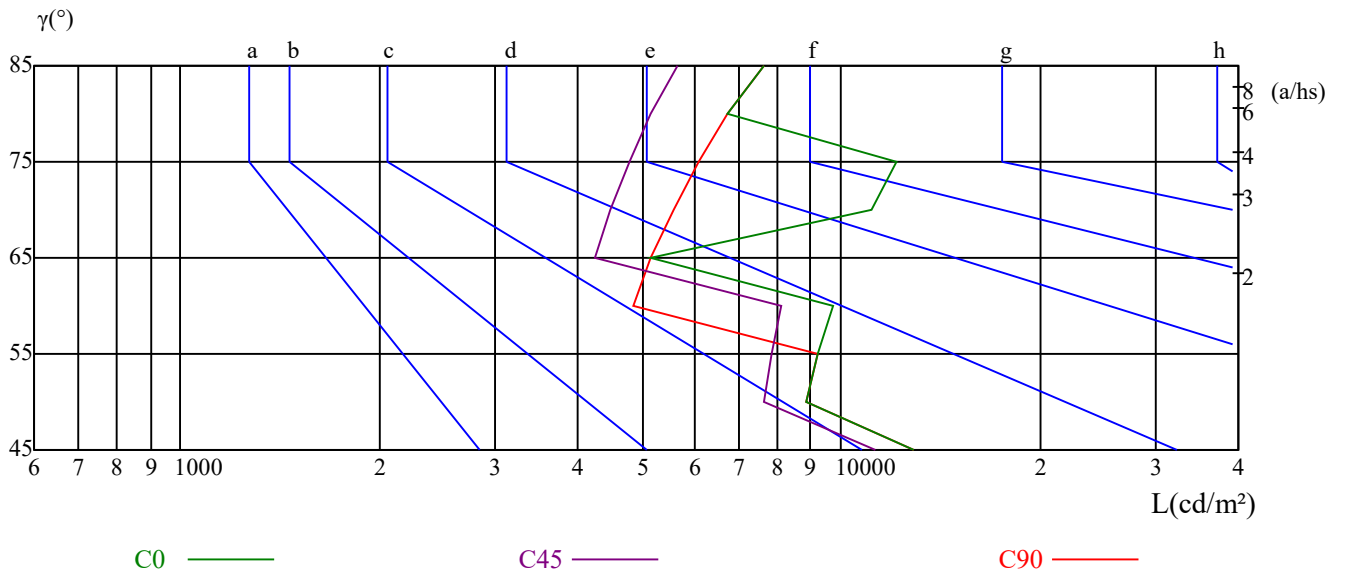
γ	45	50	55	60	65	70	75	80	85
C0	12865	8858	9231	9714	5167	11128	12154	6752	7660
C45	11279	7653	7854	8128	4245	4478	4776	5160	5657
C90	12865	8858	9231	4857	5167	5564	6077	6752	7660

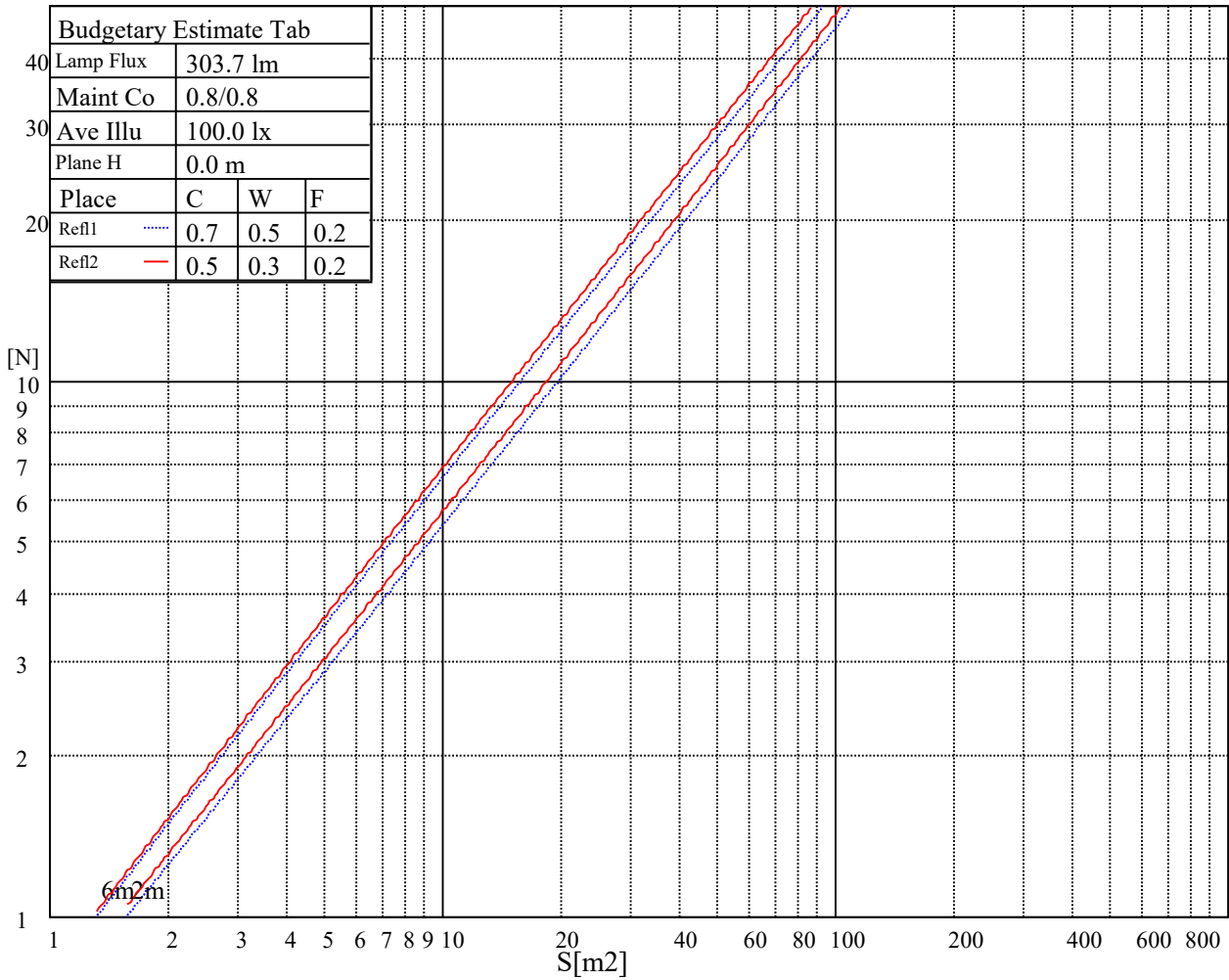
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
16298	10865	13582	26612	17741	17741	52685	52685	52685

Glare Table

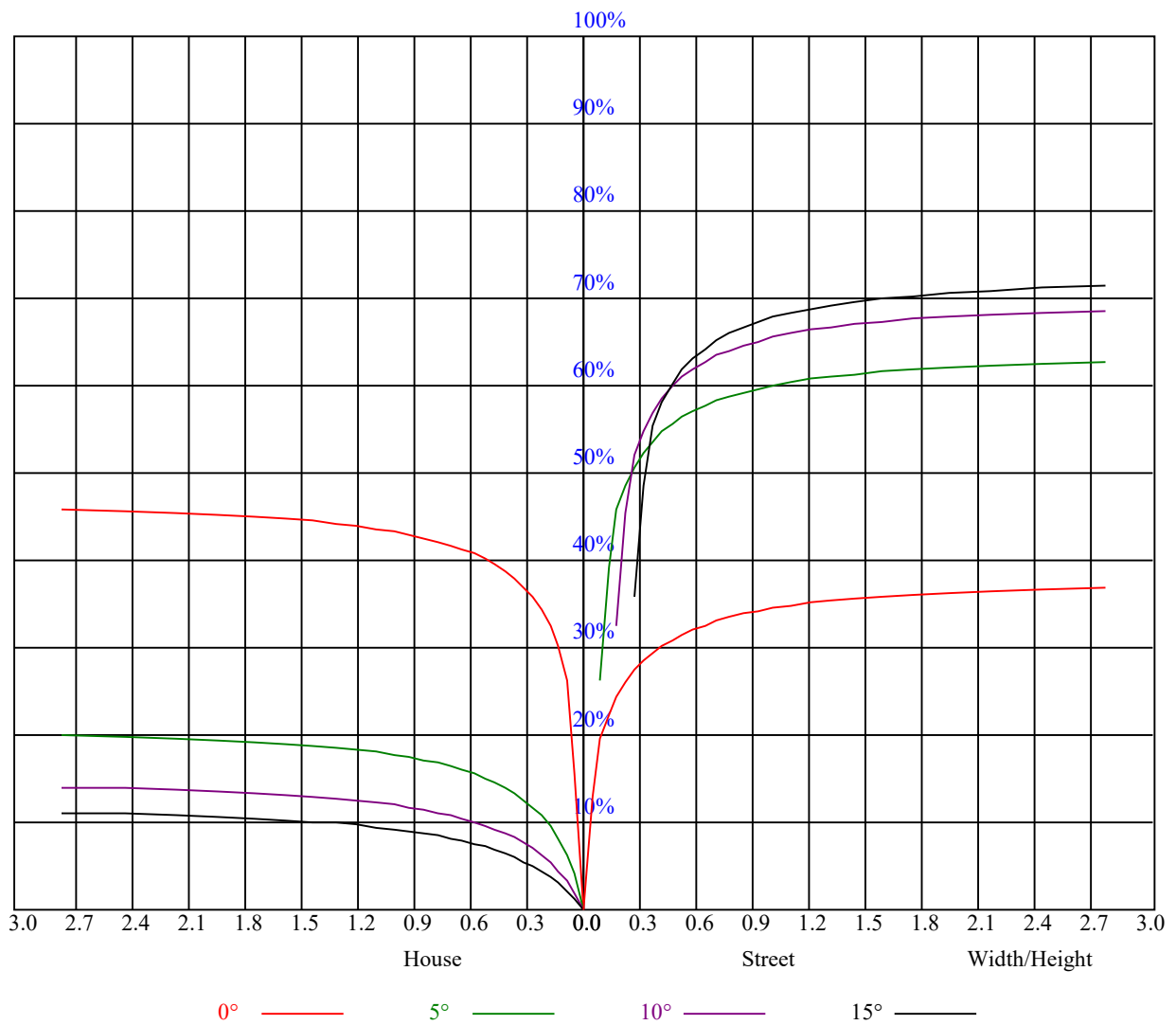
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

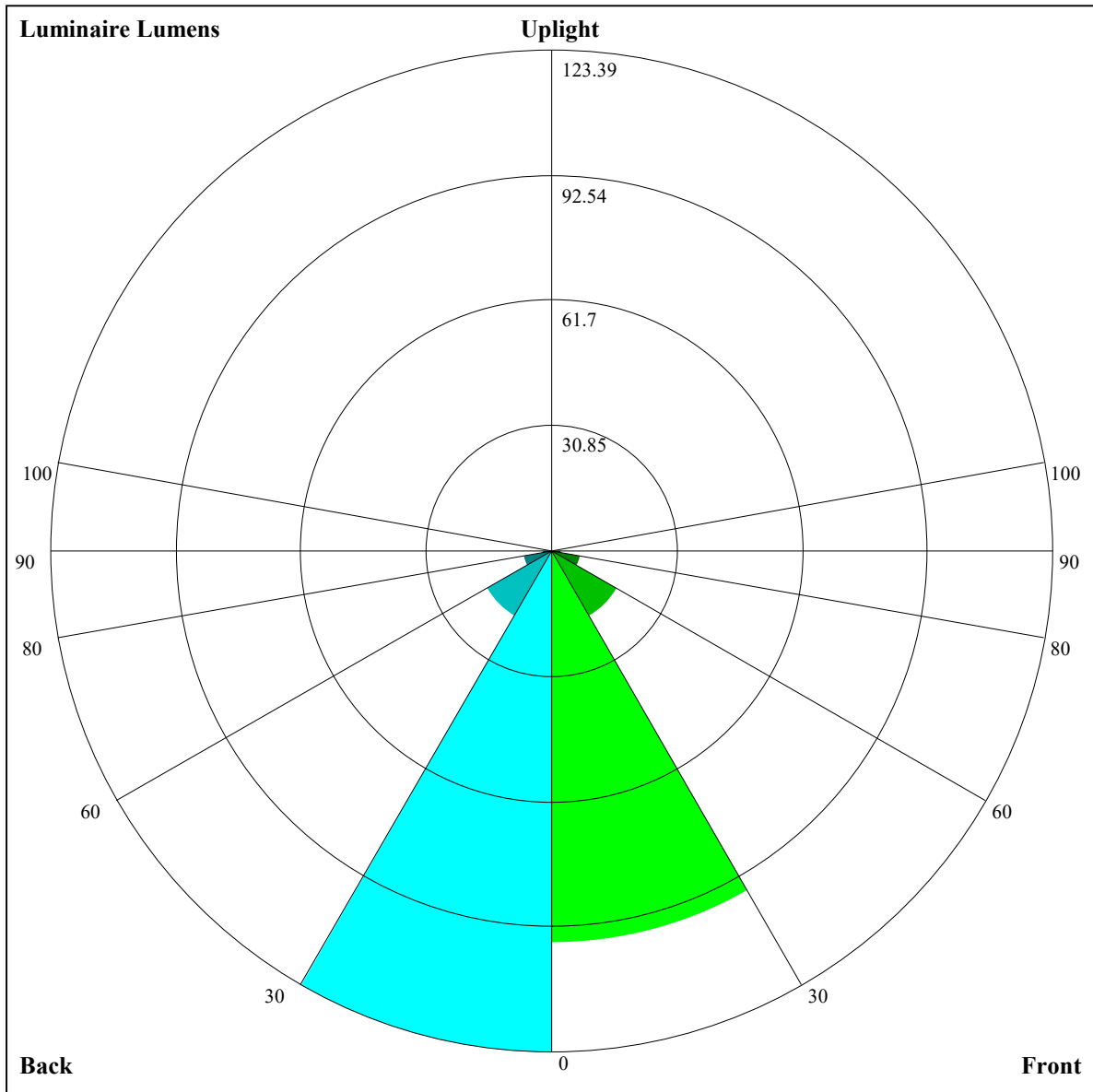
Luminance Limiting Curve





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	1.06	1.06	1.06	1.03	1.03	1.03	0.99	0.99	0.99	0.94	0.94	0.94	0.91	0.91	0.91	0.89
1	0.98	0.96	0.94	0.96	0.94	0.92	0.93	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83
2	0.92	0.89	0.86	0.91	0.88	0.85	0.88	0.86	0.84	0.86	0.84	0.82	0.83	0.81	0.80	0.79
3	0.88	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.79	0.82	0.80	0.78	0.80	0.78	0.77	0.75
4	0.84	0.80	0.77	0.83	0.80	0.77	0.82	0.78	0.76	0.80	0.77	0.75	0.78	0.76	0.74	0.73
5	0.81	0.77	0.74	0.80	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.72	0.76	0.74	0.72	0.71
6	0.79	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.69
7	0.76	0.72	0.70	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.73	0.70	0.68	0.67
8	0.74	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.68	0.72	0.69	0.67	0.72	0.69	0.67	0.66
9	0.73	0.69	0.67	0.72	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.66	0.70	0.68	0.66	0.65
10	0.71	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.70	0.67	0.65	0.69	0.67	0.65	0.64





Luminaire Lumens:

FL=96.54,FM=18.33,FH=7.28,FVH=2.4

BL=123.39,BM=18.35,BH=7.22,BVH=2.37

UL=0,UH=0

BUG Rating:B1-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	2905.82	898.43	898.43	898.43	792.84	571.11	451.86	368.10	294.08
45.0	19683.00	19176.75	13478.63	6649.88	6649.88	710.94	549.51	437.57	385.82
90.0	913.61	913.61	913.61	913.61	658.91	508.44	388.63	319.84	266.79
135.0	19744.88	18721.13	15138.00	4371.75	4371.75	711.51	545.57	418.44	343.07
180.0	2905.82	19638.00	18243.00	13782.38	3466.13	3466.13	715.44	524.19	421.82
225.0	19683.00	1102.22	1102.22	1102.22	1102.22	632.36	474.41	416.87	344.81
270.0	913.61	19812.38	19818.00	17613.00	7066.13	3460.50	1002.32	533.19	423.51
315.0	19699.88	1023.98	1023.98	747.79	747.79	623.93	484.48	391.22	323.21
360.0	2905.82	898.43	898.43	898.43	792.84	571.11	451.86	368.10	294.08
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	265.33	225.45	194.06	169.03	144.79	134.49	113.57	99.00	92.64
45.0	306.51	306.51	285.13	187.71	163.18	143.10	126.39	117.73	98.72
90.0	219.26	199.80	172.80	150.98	133.03	115.59	107.83	96.64	87.08
135.0	286.82	286.82	248.12	180.00	165.32	141.19	124.54	110.42	97.93
180.0	347.57	291.32	291.32	212.01	184.16	169.37	144.28	127.24	113.40
225.0	290.03	246.66	205.82	188.94	164.64	144.56	127.74	110.98	103.73
270.0	333.51	309.88	309.88	210.88	193.73	164.81	144.73	128.19	111.54
315.0	262.41	238.78	205.65	164.53	152.04	134.04	118.97	106.37	94.05
360.0	265.33	225.45	194.06	169.03	144.79	134.49	113.57	99.00	92.64
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	83.59	75.43	68.23	60.86	57.66	52.59	48.54	45.06	41.68
45.0	88.99	83.53	73.74	66.71	60.36	54.96	52.03	46.86	42.86
90.0	78.53	69.75	63.17	57.43	51.36	48.66	44.55	40.95	37.74
135.0	91.52	80.04	72.06	65.25	59.46	56.25	50.63	44.89	42.47
180.0	99.96	96.08	84.77	73.24	69.08	61.48	56.03	51.13	46.74
225.0	93.21	78.13	72.96	65.76	59.46	53.89	48.21	45.68	41.91
270.0	99.62	89.44	80.83	75.88	67.05	60.81	55.29	50.34	47.64
315.0	88.82	80.21	72.28	65.25	58.11	54.90	47.98	43.09	41.01
360.0	83.59	75.43	68.23	60.86	57.66	52.59	48.54	45.06	41.68
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	40.05	37.80	35.83	33.86	31.95	30.21	28.69	26.83	25.99
45.0	39.21	36.28	34.65	31.89	29.19	28.13	26.38	25.03	23.91
90.0	34.48	32.96	30.88	27.90	27.23	25.54	24.75	23.06	21.77
135.0	38.08	35.04	32.57	30.49	29.31	27.23	25.71	24.41	23.23
180.0	44.44	40.44	37.63	34.99	32.23	30.26	28.63	27.17	26.44
225.0	38.53	35.66	32.68	31.44	28.74	26.72	25.82	24.53	23.23
270.0	42.81	38.19	36.39	33.41	31.22	29.25	27.62	26.72	24.86
315.0	37.69	35.04	32.74	30.21	29.08	27.34	25.99	24.92	23.46
360.0	40.05	37.80	35.83	33.86	31.95	30.21	28.69	26.83	25.99
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	24.19	22.16	20.81	19.80	19.24	18.56	17.78	17.04	16.26
45.0	22.89	22.33	21.15	20.25	19.46	18.73	18.23	17.27	16.48
90.0	21.15	20.19	19.29	18.56	17.66	17.16	16.48	15.81	15.08
135.0	22.50	21.43	20.48	19.74	18.73	17.83	17.16	16.48	16.03
180.0	25.03	23.91	22.73	21.77	21.21	20.14	19.01	18.51	17.78
225.0	22.22	21.09	20.59	19.63	18.84	18.11	17.16	16.76	15.86
270.0	23.51	22.50	21.54	20.93	19.91	18.73	18.17	17.38	16.54
315.0	22.95	21.66	20.59	20.08	19.35	18.62	17.89	17.10	16.65
360.0	24.19	22.16	20.81	19.80	19.24	18.56	17.78	17.04	16.26

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	15.58	14.91	14.23	13.84	13.28	12.77	12.21	11.76	11.48
45.0	15.92	15.02	14.34	13.73	13.16	12.83	12.21	11.70	11.36
90.0	14.23	13.84	12.94	12.15	11.87	11.36	10.80	10.41	9.96
135.0	15.36	14.74	14.12	13.61	13.22	12.60	12.09	11.53	11.08
180.0	16.88	16.20	15.53	15.13	14.40	13.84	13.22	12.77	12.49
225.0	15.08	14.79	14.23	13.73	13.28	12.54	12.26	11.81	11.42
270.0	15.92	15.30	14.85	13.95	13.22	12.43	12.04	11.76	11.14
315.0	15.98	15.41	14.79	14.12	13.78	13.28	12.49	12.32	11.93
360.0	15.58	14.91	14.23	13.84	13.28	12.77	12.21	11.76	11.48
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	10.91	10.46	10.29	9.90	9.56	9.28	8.94	8.89	8.61
45.0	10.97	10.80	10.18	9.84	9.68	9.39	9.06	8.78	8.44
90.0	9.79	9.39	8.94	8.72	8.27	8.04	7.71	7.20	7.14
135.0	10.69	10.29	9.90	9.68	9.34	9.06	8.72	8.55	8.33
180.0	11.93	11.36	11.08	10.74	10.63	10.13	9.90	9.68	9.39
225.0	11.08	10.63	10.41	10.07	9.56	9.45	9.11	8.89	8.61
270.0	10.58	10.35	9.84	9.62	9.34	9.06	8.89	8.44	8.21
315.0	11.59	11.19	10.80	10.63	10.35	10.13	9.90	9.62	9.39
360.0	10.91	10.46	10.29	9.90	9.56	9.28	8.94	8.89	8.61
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	8.55	8.55	8.33	8.33	8.21	8.38	8.49	8.55	8.66
45.0	8.33	7.99	7.82	7.54	7.26	7.14	6.75	6.58	6.30
90.0	6.92	6.69	6.41	6.19	6.08	5.79	5.46	5.40	5.18
135.0	8.16	7.93	7.82	7.71	7.71	7.71	7.65	7.71	7.82
180.0	9.11	8.94	8.78	8.72	8.49	8.33	8.27	7.99	7.93
225.0	8.27	8.16	7.99	7.76	7.54	7.31	7.26	7.09	7.03
270.0	8.04	7.82	7.76	7.37	7.26	7.03	6.92	6.75	6.30
315.0	9.23	8.94	8.83	8.61	8.55	8.33	8.21	8.10	7.99
360.0	8.55	8.55	8.33	8.33	8.21	8.38	8.49	8.55	8.66
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	8.89	8.83	9.00	9.06	9.11	8.83	8.10	7.76	7.31
45.0	6.08	5.79	5.51	5.23	5.12	4.95	4.84	4.67	4.50
90.0	4.89	4.61	4.56	4.39	4.28	4.28	4.05	3.83	3.77
135.0	7.82	7.82	7.65	7.59	7.31	7.14	6.86	6.53	6.30
180.0	7.88	7.71	7.65	7.48	7.37	7.31	7.20	7.20	6.98
225.0	6.92	6.92	6.92	6.69	6.36	6.13	5.91	5.57	5.29
270.0	6.47	6.41	6.53	6.08	5.68	5.63	5.34	5.01	4.78
315.0	7.88	7.71	7.59	7.48	7.48	7.48	7.43	7.43	7.31
360.0	8.89	8.83	9.00	9.06	9.11	8.83	8.10	7.76	7.31
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	6.30	6.02	5.51	5.12	4.67	4.50	4.16	3.94	3.71
45.0	4.39	4.16	4.05	3.88	3.77	3.60	3.49	3.38	3.38
90.0	3.60	3.49	3.38	3.26	3.09	3.04	2.93	2.87	2.64
135.0	5.91	5.40	5.06	4.73	4.33	4.11	3.94	3.71	3.54
180.0	6.92	6.75	6.58	6.41	6.13	5.74	5.40	5.12	4.84
225.0	4.95	4.73	4.50	4.28	4.11	3.83	3.66	3.49	3.43
270.0	4.67	4.33	4.28	4.11	4.05	3.71	3.54	3.38	3.26
315.0	7.14	6.92	6.69	6.41	6.13	5.85	5.63	5.34	5.06
360.0	6.30	6.02	5.51	5.12	4.67	4.50	4.16	3.94	3.71

Intensity data(cd)

C/ γ ($^{\circ}$)	90.0
0.0	3.60
45.0	3.32
90.0	2.59
135.0	3.38
180.0	4.50
225.0	3.32
270.0	3.15
315.0	4.95
360.0	3.60