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Nata

LumCAT: 1-1008-M
Luminaire: BJB 47.360.1020
Report No: 210714-B013
Test No: 210714-C013
LampCAT: Fortimo LED SLM 1201 G7N
Lamp flux(lm): 1093.7
Number of Lamps: 1
Length(mm): 570
Phm Type: C

Voltage(V): 39.0700
Current(A): 0.2310
Power (W): 9.0250
PF: 0.0000
Ballast type: DC
Width(mm): 45
Height(mm): 20

Photometric Results

Lumens(lm): 805.73
Efficiency(%): 73.67%
Lumens(lm)/Power(W): 89.28
Central intensity(cd): 6480.984
Maximum intensity(cd): 6480.984
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=16.5
 [C90/270]Total=16.5
Field angle(10%Imax): [C0/180]Total=37.6
 [C90/270]Total=37.6
Maximum s/h(1/2): C0_180=0.28 C90_270=0.28
Maximum s/h(1/4): C0_180=0.32 C90_270=0.32
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 73.67%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.566%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/7/14
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6480.984	0.000	0	.000%	.000%
1.0	6394.078	6.160	6.16	.563%	.765%
2.0	6085.547	17.912	24.072	1.638%	2.988%
3.0	5672.813	28.122	52.195	2.571%	6.478%
4.0	5237.156	36.519	88.714	3.339%	11.010%
5.0	4741.945	42.930	131.643	3.925%	16.338%
6.0	4284.563	47.437	179.08	4.337%	22.226%
7.0	3812.695	50.260	229.34	4.596%	28.464%
8.0	3343.430	51.215	280.555	4.683%	34.820%
9.0	2920.008	50.762	331.316	4.641%	41.120%
10.0	2553.469	49.533	380.849	4.529%	47.268%
11.0	2232.633	47.823	428.672	4.373%	53.203%
12.0	1963.406	45.869	474.541	4.194%	58.896%
13.0	1706.555	43.553	518.094	3.982%	64.301%
14.0	1450.034	40.404	558.498	3.694%	69.316%
15.0	1223.381	36.702	595.2	3.356%	73.871%
16.0	1088.789	33.880	629.08	3.098%	78.076%
17.0	910.448	31.133	660.213	2.847%	81.940%
18.0	754.559	27.452	687.666	2.510%	85.347%
19.0	622.533	23.959	711.624	2.191%	88.320%
20.0	489.600	20.355	731.979	1.861%	90.847%
21.0	364.352	16.398	748.377	1.499%	92.882%
22.0	271.758	12.783	761.16	1.169%	94.468%
23.0	184.092	9.565	770.725	.875%	95.655%
24.0	100.624	6.225	776.95	.569%	96.428%
25.0	48.016	3.380	780.33	.309%	96.847%
26.0	22.163	1.657	781.986	.151%	97.053%
27.0	12.326	0.844	782.83	.077%	97.158%
28.0	8.902	0.537	783.367	.049%	97.224%
29.0	7.601	0.432	783.799	.039%	97.278%
30.0	6.891	0.391	784.19	.036%	97.327%
31.0	6.363	0.369	784.559	.034%	97.372%
32.0	5.913	0.352	784.911	.032%	97.416%
33.0	5.576	0.338	785.249	.031%	97.458%
34.0	5.309	0.329	785.579	.030%	97.499%
35.0	5.055	0.322	785.901	.029%	97.539%
36.0	4.873	0.316	786.217	.029%	97.578%
37.0	4.718	0.313	786.529	.029%	97.617%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	4.591	0.311	786.84	.028%	97.655%
39.0	4.479	0.310	787.15	.028%	97.694%
40.0	4.402	0.310	787.46	.028%	97.732%
41.0	4.317	0.310	787.77	.028%	97.771%
42.0	4.261	0.312	788.082	.028%	97.809%
43.0	4.205	0.314	788.395	.029%	97.848%
44.0	4.170	0.316	788.711	.029%	97.888%
45.0	4.127	0.319	789.03	.029%	97.927%
46.0	4.099	0.322	789.352	.029%	97.967%
47.0	4.064	0.325	789.677	.030%	98.007%
48.0	4.043	0.328	790.004	.030%	98.048%
49.0	4.015	0.331	790.335	.030%	98.089%
50.0	3.987	0.334	790.669	.031%	98.131%
51.0	3.973	0.337	791.006	.031%	98.172%
52.0	3.966	0.341	791.346	.031%	98.215%
53.0	3.938	0.344	791.69	.031%	98.257%
54.0	3.923	0.346	792.036	.032%	98.300%
55.0	3.909	0.350	792.386	.032%	98.344%
56.0	3.902	0.353	792.739	.032%	98.388%
57.0	3.867	0.355	793.094	.032%	98.432%
58.0	3.874	0.358	793.452	.033%	98.476%
59.0	3.867	0.362	793.814	.033%	98.521%
60.0	3.853	0.365	794.179	.033%	98.566%
61.0	3.818	0.366	794.545	.033%	98.612%
62.0	3.832	0.369	794.914	.034%	98.657%
63.0	3.818	0.372	795.286	.034%	98.704%
64.0	3.797	0.374	795.659	.034%	98.750%
65.0	3.790	0.375	796.035	.034%	98.797%
66.0	3.783	0.378	796.413	.035%	98.843%
67.0	3.776	0.380	796.793	.035%	98.891%
68.0	3.769	0.382	797.175	.035%	98.938%
69.0	3.769	0.385	797.559	.035%	98.986%
70.0	3.762	0.387	797.946	.035%	99.034%
71.0	3.748	0.388	798.334	.035%	99.082%
72.0	3.741	0.389	798.724	.036%	99.130%
73.0	3.741	0.391	799.115	.036%	99.179%
74.0	3.727	0.393	799.507	.036%	99.228%
75.0	3.720	0.393	799.901	.036%	99.276%

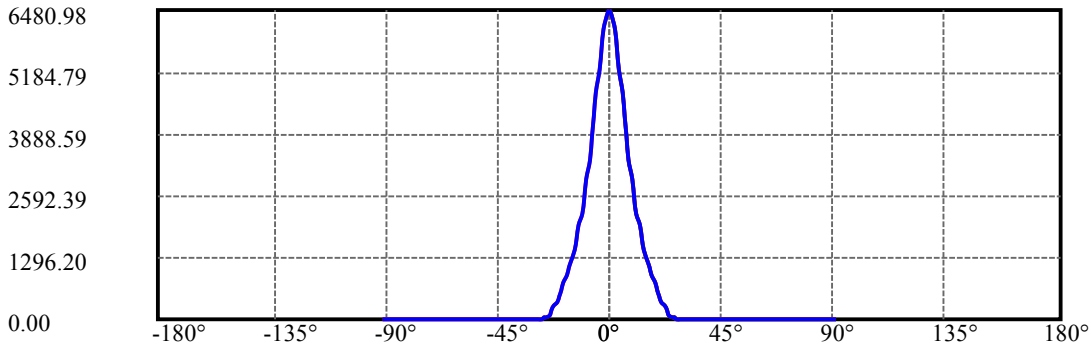
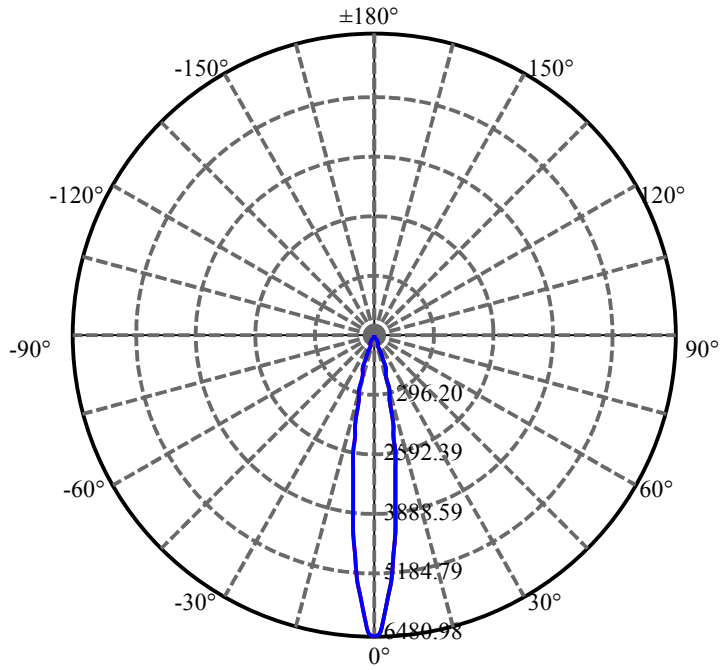
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	3.713	0.395	800.295	.036%	99.325%
77.0	3.698	0.395	800.691	.036%	99.374%
78.0	3.684	0.395	801.086	.036%	99.423%
79.0	3.663	0.395	801.481	.036%	99.472%
80.0	3.635	0.393	801.874	.036%	99.521%
81.0	3.593	0.391	802.265	.036%	99.570%
82.0	3.579	0.389	802.654	.036%	99.618%
83.0	3.558	0.388	803.042	.035%	99.666%
84.0	3.551	0.387	803.429	.035%	99.714%
85.0	3.530	0.386	803.815	.035%	99.762%
86.0	3.509	0.385	804.2	.035%	99.810%
87.0	3.502	0.384	804.584	.035%	99.858%
88.0	3.488	0.383	804.967	.035%	99.905%
89.0	3.480	0.382	805.349	.035%	99.952%
90.0	3.502	0.383	805.731	.035%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	784.19	71.70%	97.33%
0-40	787.46	72.00%	97.73%
0-60	794.18	72.62%	98.57%
0-90	805.35	73.64%	99.95%
0-120	805.35	73.64%	99.95%
0-180	805.73	73.67%	100.00%
60-90	11.53	1.05%	1.43%
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%
0-16.50	644.59	58.94%	80.00%

ZONAL LUMEN SUMMARY

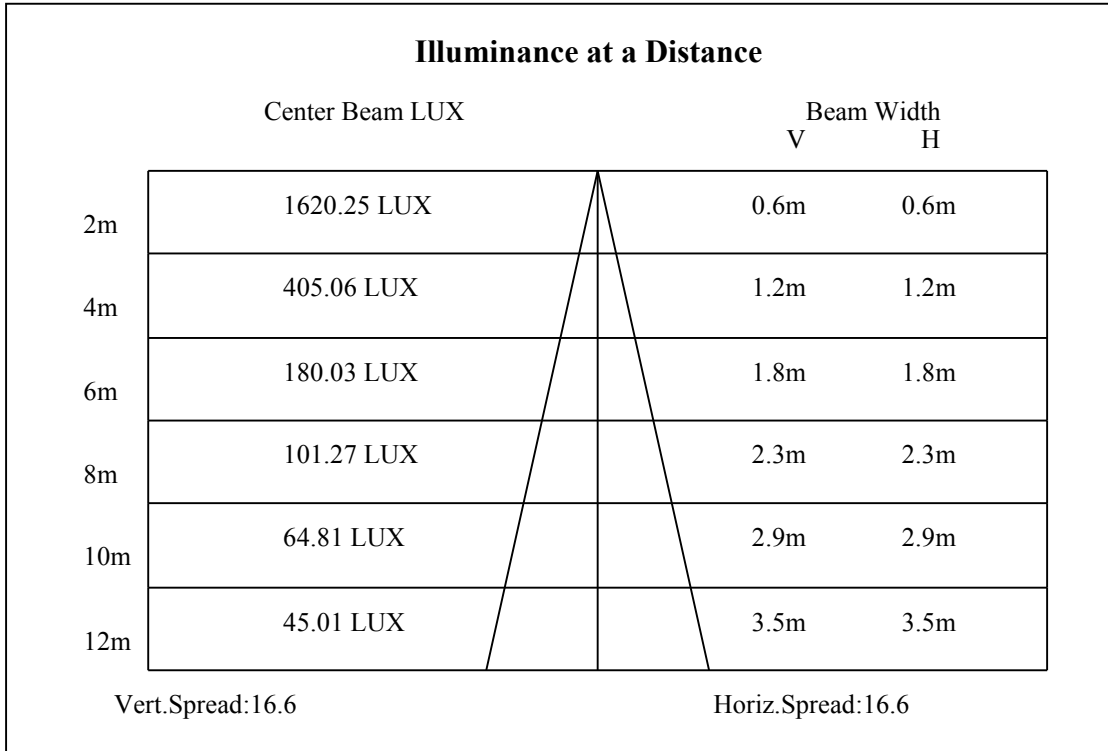
0-10	380.85
10-20	351.13
20-30	52.21
30-40	3.27
40-50	3.21
50-60	3.51
60-70	3.77
70-80	3.93
80-90	3.47
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

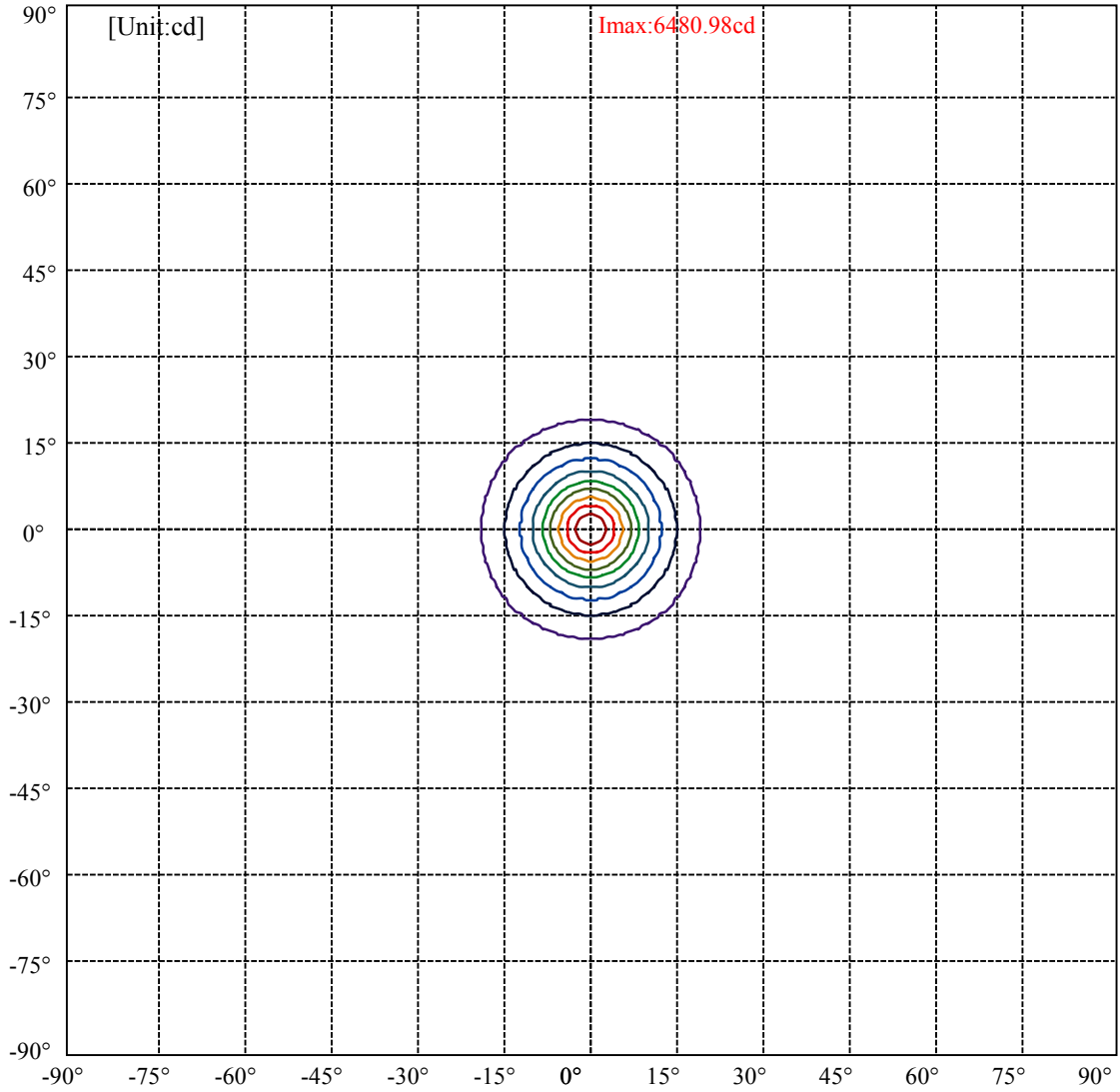


C0(Max): ———
C0/C180: ———
C90/C270: ———

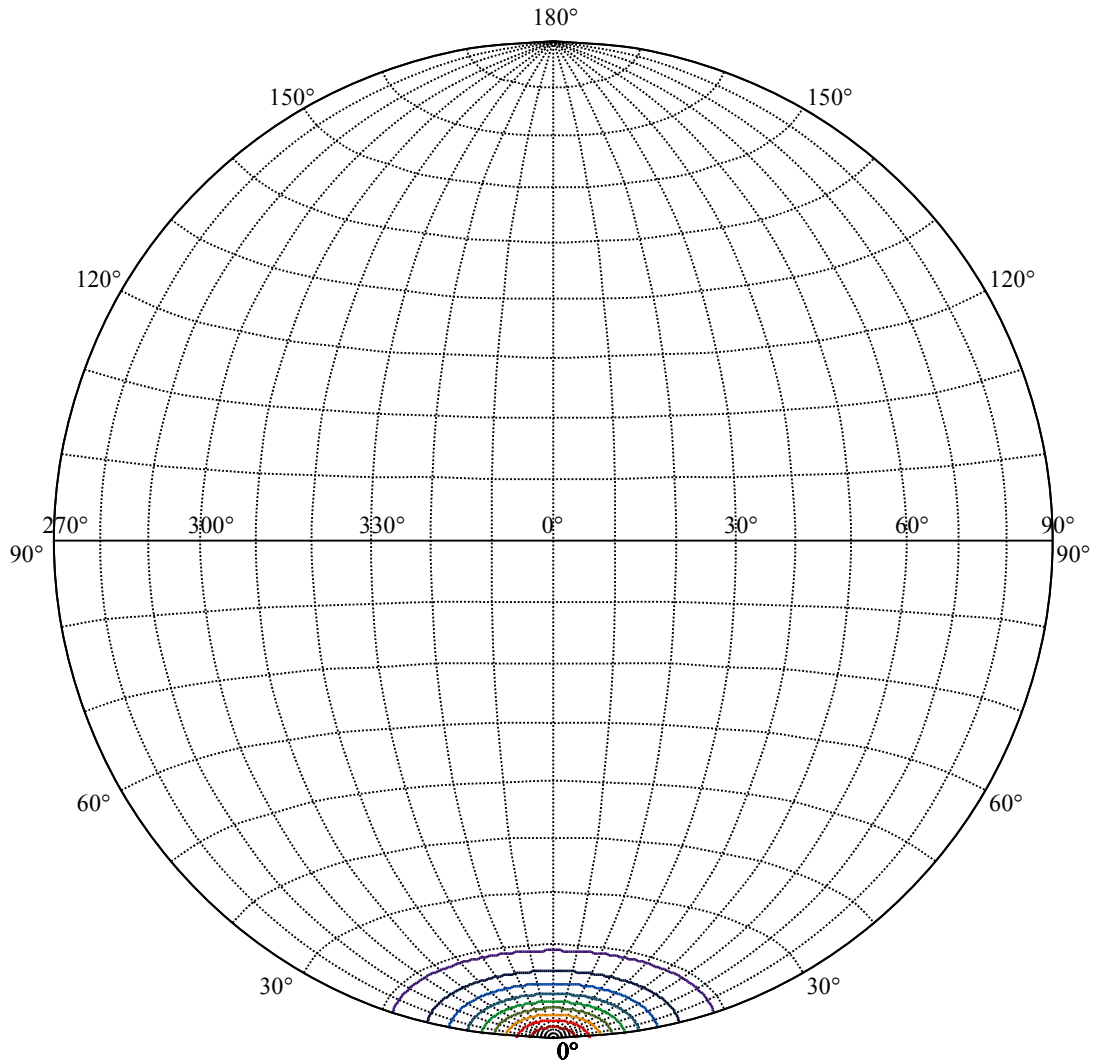
Field angle(10%Imax):C0/180Left:18.8 Right:18.8
:C90/270Left:18.8 Right:18.8

Beam Angle(50%Imax):C0/180Left:8.2 Right:8.2
:C90/270Left:8.2 Right:8.2





(10%I _{max}) 648.098	—
(20%I _{max}) 1296.2	—
(30%I _{max}) 1944.3	—
(40%I _{max}) 2592.39	—
(50%I _{max}) 3240.49	—
(60%I _{max}) 3888.59	—
(70%I _{max}) 4536.69	—
(80%I _{max}) 5184.79	—
(90%I _{max}) 5832.89	—



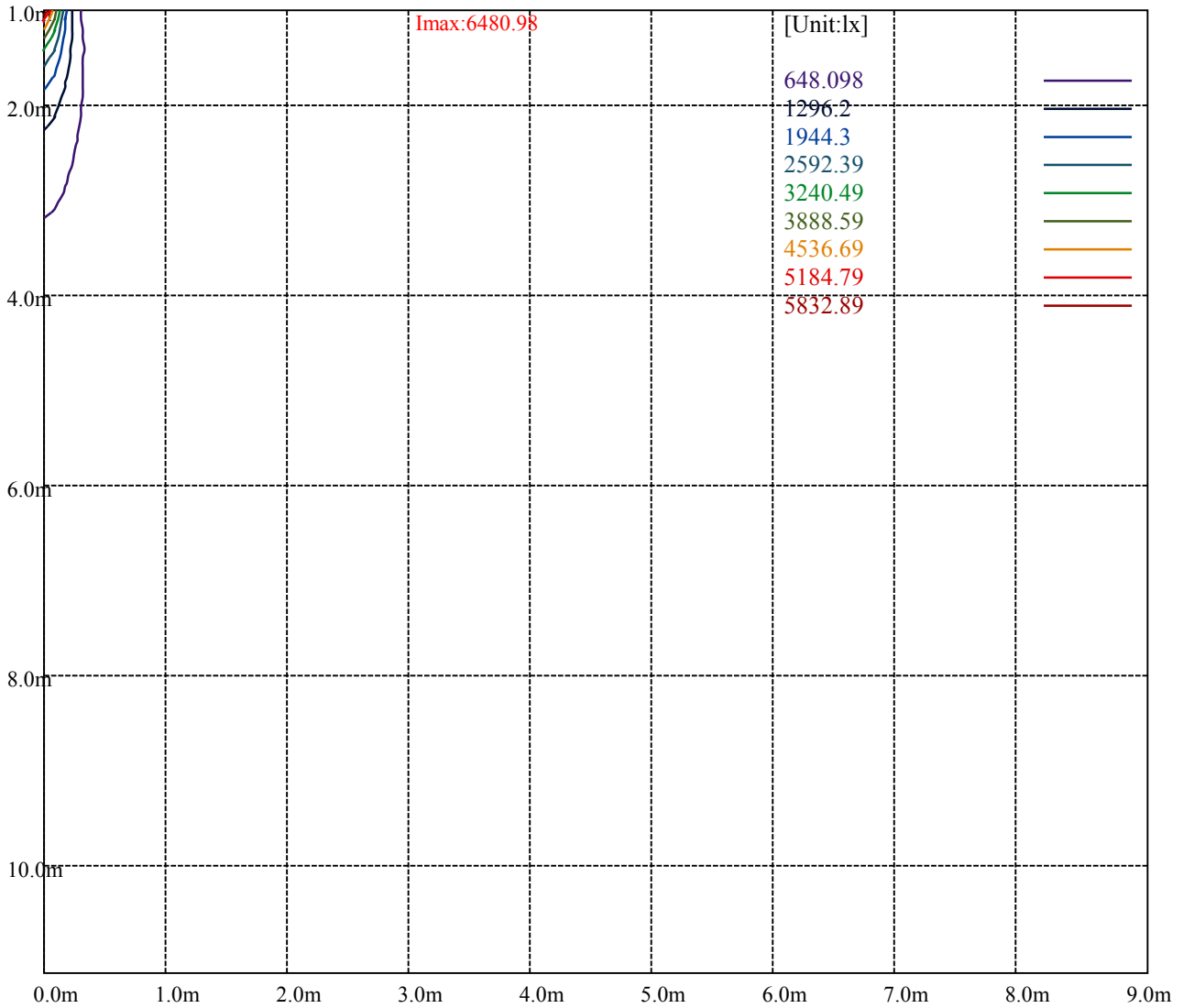
House

[Unit:cd]

Road

Imax:6480.98

(10%Imax) 648.098	—
(20%Imax) 1296.2	—
(30%Imax) 1944.3	—
(40%Imax) 2592.39	—
(50%Imax) 3240.49	—
(60%Imax) 3888.59	—
(70%Imax) 4536.69	—
(80%Imax) 5184.79	—
(90%Imax) 5832.89	—



Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	158	158	163	170	179	193	211	232	260
C45	170	172	179	189	202	222	247	279	324
C90	220	232	253	283	325	391	495	681	1127

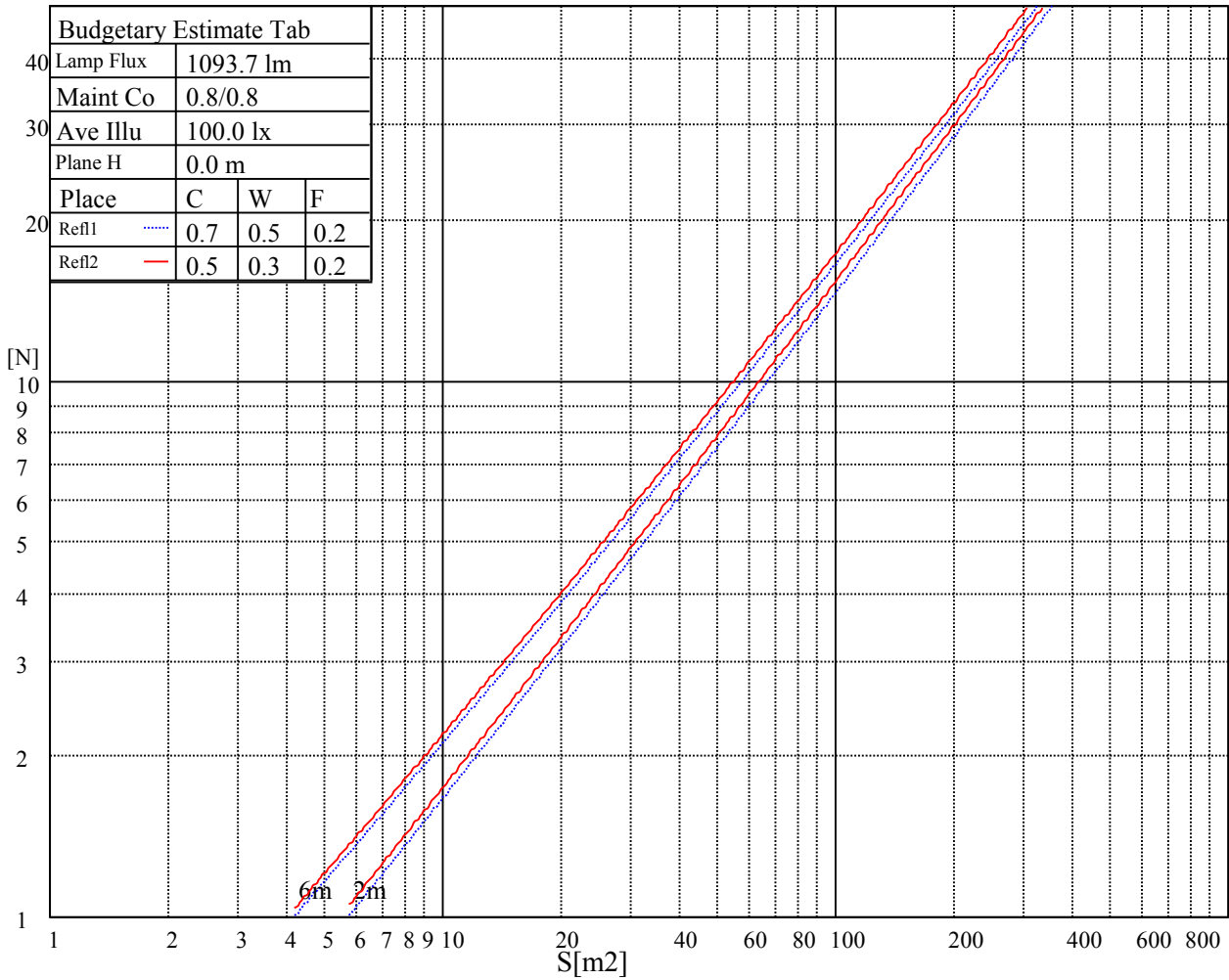
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
350	350	350	560	560	560	1579	1579	1579

Glare Table

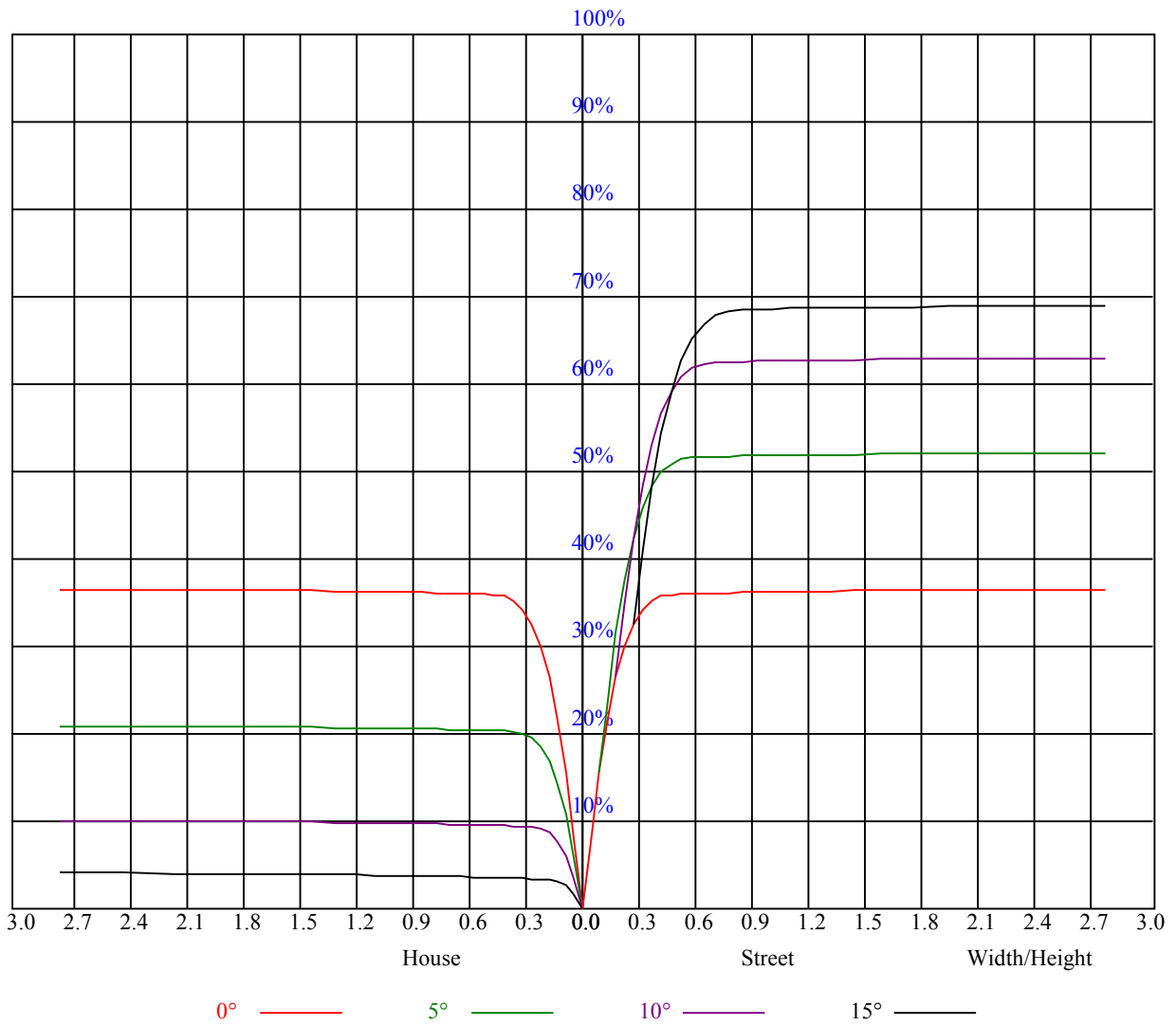
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.88	0.88	0.88	0.86	0.86	0.86	0.82	0.82	0.82	0.78	0.78	0.78	0.75	0.75	0.75	0.74
1	0.83	0.82	0.81	0.82	0.81	0.79	0.79	0.78	0.77	0.76	0.75	0.75	0.74	0.73	0.73	0.71
2	0.80	0.78	0.76	0.79	0.77	0.75	0.76	0.75	0.74	0.74	0.73	0.72	0.72	0.71	0.71	0.69
3	0.77	0.74	0.72	0.76	0.74	0.72	0.74	0.72	0.71	0.72	0.71	0.70	0.71	0.70	0.69	0.68
4	0.74	0.72	0.70	0.74	0.71	0.69	0.72	0.70	0.69	0.71	0.69	0.68	0.70	0.68	0.67	0.66
5	0.72	0.69	0.67	0.72	0.69	0.67	0.70	0.68	0.67	0.69	0.68	0.66	0.68	0.67	0.66	0.65
6	0.70	0.68	0.66	0.70	0.67	0.65	0.69	0.67	0.65	0.68	0.66	0.65	0.67	0.65	0.64	0.63
7	0.69	0.66	0.64	0.68	0.66	0.64	0.67	0.65	0.63	0.67	0.65	0.63	0.66	0.64	0.63	0.62
8	0.67	0.64	0.62	0.67	0.64	0.62	0.66	0.64	0.62	0.65	0.63	0.62	0.65	0.63	0.62	0.61
9	0.65	0.63	0.61	0.65	0.63	0.61	0.65	0.62	0.61	0.64	0.62	0.61	0.64	0.62	0.61	0.60
10	0.64	0.62	0.60	0.64	0.61	0.60	0.63	0.61	0.60	0.63	0.61	0.60	0.63	0.61	0.59	0.59



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	6347.25	6491.81	6392.25	6141.38	5734.69	5267.25	4795.31	4317.75	3878.44
45.0	6526.69	6477.75	6212.81	5850.56	5394.94	4901.06	4410.56	3968.44	3529.69
90.0	6545.25	6436.69	6095.25	5634.56	5244.75	4725.00	4274.44	3767.63	3278.81
135.0	6504.75	6440.63	6114.94	5706.00	5252.06	4755.94	4309.88	3843.00	3349.13
180.0	6347.25	6020.44	5636.25	5149.13	4700.25	4251.94	3687.19	3251.25	2858.06
225.0	6526.69	6382.69	6043.50	5541.75	5088.38	4622.06	4177.69	3681.56	3209.06
270.0	6545.25	6492.94	6176.81	5735.25	5285.25	4758.19	4330.13	3872.81	3382.31
315.0	6504.75	6409.69	6012.56	5623.88	5196.94	4654.13	4291.31	3799.13	3261.94
360.0	6347.25	6491.81	6392.25	6141.38	5734.69	5267.25	4795.31	4317.75	3878.44
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3389.63	2944.13	2608.88	2316.94	1983.38	1740.38	1523.81	1308.94	1111.50
45.0	3017.25	2657.81	2354.63	2046.38	1771.31	1551.94	1338.75	1147.50	978.75
90.0	2885.06	2503.13	2178.00	1914.75	1682.44	1427.63	1121.18	1079.78	879.69
135.0	2901.38	2557.13	2220.19	1949.63	1685.81	1453.50	1271.25	1082.81	896.63
180.0	2476.69	2147.63	1886.63	1626.75	1424.25	1109.64	1004.68	872.27	722.42
225.0	2831.63	2463.19	2140.31	1875.94	1641.38	1385.44	1112.74	1027.18	852.13
270.0	2938.50	2611.13	2283.75	2014.88	1740.38	1497.94	1303.88	1101.38	911.81
315.0	2919.94	2543.63	2188.69	1962.00	1723.50	1433.81	1110.77	1090.46	930.66
360.0	3389.63	2944.13	2608.88	2316.94	1983.38	1740.38	1523.81	1308.94	1111.50
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	948.38	785.81	642.38	523.69	387.00	291.38	182.14	111.94	49.61
45.0	809.44	681.19	537.75	406.13	306.00	294.75	111.71	57.43	24.75
90.0	738.23	604.13	474.64	345.54	257.46	153.73	94.73	37.63	15.69
135.0	755.44	611.44	466.88	357.75	288.00	151.26	91.91	39.04	16.93
180.0	560.03	464.01	344.76	222.24	145.69	88.65	35.33	16.43	11.14
225.0	703.86	571.16	445.78	323.72	227.93	135.11	81.62	33.19	16.43
270.0	766.69	639.00	493.88	372.38	291.94	182.59	103.16	46.69	22.73
315.0	754.43	623.53	510.75	363.38	270.06	175.28	104.40	41.79	20.03
360.0	948.38	785.81	642.38	523.69	387.00	291.38	182.14	111.94	49.61
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	22.44	12.15	9.23	8.04	7.26	6.64	6.19	5.79	5.40
45.0	11.42	8.78	7.59	6.92	6.36	5.96	5.63	5.34	5.12
90.0	9.96	7.82	6.92	6.41	5.96	5.57	5.29	5.12	4.84
135.0	10.29	8.04	6.92	6.36	5.91	5.51	5.23	5.01	4.78
180.0	8.33	7.09	6.53	6.02	5.68	5.34	5.12	4.89	4.73
225.0	11.81	9.11	7.76	7.14	6.58	6.08	5.74	5.51	5.23
270.0	12.43	9.28	8.04	7.20	6.64	6.19	5.79	5.46	5.29
315.0	11.93	8.94	7.82	7.03	6.53	6.02	5.63	5.34	5.06
360.0	22.44	12.15	9.23	8.04	7.26	6.64	6.19	5.79	5.40
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	5.18	4.95	4.73	4.56	4.50	4.39	4.28	4.22	4.11
45.0	4.95	4.78	4.67	4.56	4.50	4.39	4.33	4.28	4.28
90.0	4.73	4.61	4.50	4.39	4.33	4.28	4.22	4.16	4.11
135.0	4.61	4.50	4.39	4.33	4.28	4.16	4.11	4.05	4.05
180.0	4.61	4.50	4.44	4.39	4.28	4.22	4.16	4.16	4.11
225.0	5.06	4.89	4.73	4.61	4.50	4.44	4.39	4.33	4.28
270.0	5.01	4.84	4.73	4.61	4.50	4.44	4.39	4.33	4.33
315.0	4.84	4.67	4.56	4.39	4.33	4.22	4.22	4.11	4.11
360.0	5.18	4.95	4.73	4.56	4.50	4.39	4.28	4.22	4.11

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	4.11	4.05	4.05	3.99	3.94	3.94	3.88	3.88	3.88
45.0	4.22	4.16	4.16	4.11	4.11	4.05	4.05	4.05	3.99
90.0	4.05	4.05	3.99	3.99	3.99	3.94	3.94	3.94	3.94
135.0	3.99	3.99	3.94	3.94	3.88	3.88	3.83	3.83	3.83
180.0	4.05	4.05	3.99	3.99	3.94	3.94	3.94	3.88	3.88
225.0	4.28	4.22	4.16	4.16	4.16	4.11	4.11	4.11	4.05
270.0	4.28	4.22	4.22	4.16	4.16	4.16	4.16	4.16	4.11
315.0	4.05	4.05	3.99	3.99	3.94	3.88	3.88	3.88	3.83
360.0	4.11	4.05	4.05	3.99	3.94	3.94	3.88	3.88	3.88
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	3.88	3.83	3.83	3.77	3.77	3.77	3.77	3.71	3.71
45.0	3.99	3.99	3.99	3.94	3.94	3.94	3.94	3.88	3.94
90.0	3.88	3.88	3.88	3.83	3.88	3.83	3.83	3.83	3.83
135.0	3.83	3.83	3.77	3.77	3.77	3.77	3.71	3.71	3.71
180.0	3.83	3.83	3.83	3.83	3.83	3.83	3.77	3.77	3.77
225.0	4.05	4.05	4.05	3.99	3.99	3.99	3.99	3.94	3.99
270.0	4.11	4.05	4.05	4.05	4.05	4.05	4.05	3.99	3.99
315.0	3.83	3.83	3.83	3.77	3.77	3.77	3.77	3.71	3.71
360.0	3.88	3.83	3.83	3.77	3.77	3.77	3.77	3.71	3.71
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	3.71	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
45.0	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88
90.0	3.83	3.83	3.83	3.83	3.77	3.77	3.77	3.77	3.77
135.0	3.71	3.71	3.66	3.66	3.66	3.66	3.66	3.66	3.60
180.0	3.77	3.71	3.71	3.71	3.71	3.71	3.71	3.66	3.66
225.0	3.94	3.94	3.99	3.94	3.94	3.94	3.94	3.94	3.94
270.0	3.99	3.99	3.94	3.94	3.94	3.88	3.88	3.88	3.88
315.0	3.71	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.60
360.0	3.71	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	3.66	3.66	3.60	3.60	3.60	3.60	3.60	3.60	3.54
45.0	3.88	3.88	3.88	3.88	3.88	3.83	3.83	3.77	3.71
90.0	3.77	3.77	3.71	3.71	3.71	3.71	3.66	3.66	3.66
135.0	3.60	3.60	3.66	3.60	3.60	3.60	3.60	3.54	3.54
180.0	3.66	3.66	3.60	3.60	3.60	3.60	3.60	3.60	3.60
225.0	3.94	3.94	3.94	3.94	3.88	3.83	3.83	3.83	3.77
270.0	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.71	3.71
315.0	3.60	3.60	3.60	3.60	3.60	3.60	3.54	3.60	3.54
360.0	3.66	3.66	3.60	3.60	3.60	3.60	3.60	3.60	3.54
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	3.54	3.54	3.54	3.54	3.49	3.54	3.49	3.49	3.43
45.0	3.60	3.60	3.60	3.60	3.60	3.54	3.54	3.54	3.54
90.0	3.54	3.54	3.54	3.54	3.54	3.49	3.49	3.49	3.49
135.0	3.54	3.60	3.54	3.54	3.49	3.43	3.49	3.43	3.49
180.0	3.60	3.60	3.54	3.54	3.49	3.49	3.43	3.43	3.43
225.0	3.66	3.60	3.60	3.60	3.60	3.54	3.54	3.54	3.54
270.0	3.71	3.60	3.60	3.54	3.54	3.54	3.54	3.49	3.49
315.0	3.54	3.54	3.49	3.49	3.49	3.49	3.49	3.49	3.43
360.0	3.54	3.54	3.54	3.54	3.49	3.54	3.49	3.49	3.43

Intensity data(cd)

C/γ(°)	90.0
0.0	3.49
45.0	3.54
90.0	3.49
135.0	3.49
180.0	3.54
225.0	3.54
270.0	3.49
315.0	3.43
360.0	3.49