



NATA LIGHTING CO.,LTD.  
www.nata.cn  
Email:info@nata.com  
Tel:+86-750-3770000 Fax:+86-750-3771111  
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NT

Client:

LumCAT: 3-2882-L

Luminaire: 92.70.412.00

Report No: 20241111-B010

Ballast type: AC

Test No: 20241111-C010

Voltage(V): 34.460

LampCAT: CITIZEN CLU038 LES14.5

Current(A): 0.452

Lamp flux(lm): 2615.8

Power (W): 15.575

Number of Lamps: 1

PF: 0.000

Length(mm): 92

Width(mm): 92

Phm Type: C

Height(mm): 50

### Photometric Results

Lumens(lm): 2568.93, Efficiency(%): 98.21% , Luminous Efficacy(lm/W): 164.94

Central intensity(cd): 5115.364, Maximum intensity(cd): 5115.364

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=38.0

[C90/270]Total=38.0

Field angle(10%Imax): [C0/180]Total=75.2

[C90/270]Total=75.2

Maximum s/h(1/2): C0\_180=0.62 C90\_270=0.62

Maximum s/h(1/4): C0\_180=0.62 C90\_270=0.62

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 98.21%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 98.464%

Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2024/11/11  
Humidity(%): 60.0%

Operator: NT07  
Distance(m): 7.65

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5115.364	0.000	0	0.00%	0.00%
1.0	5113.901	4.895	4.895	0.19%	0.19%
2.0	5102.050	14.663	19.557	0.56%	0.76%
3.0	5069.497	24.327	43.884	0.93%	1.71%
4.0	5008.780	33.735	77.62	1.29%	3.02%
5.0	4913.096	42.683	120.303	1.63%	4.68%
6.0	4801.171	51.051	171.354	1.95%	6.67%
7.0	4675.714	58.823	230.177	2.25%	8.96%
8.0	4524.872	65.847	296.024	2.52%	11.52%
9.0	4381.784	72.184	368.207	2.76%	14.33%
10.0	4232.186	77.953	446.161	2.98%	17.37%
11.0	4109.874	83.354	529.515	3.19%	20.61%
12.0	3966.348	88.285	617.8	3.38%	24.05%
13.0	3821.431	92.421	710.221	3.53%	27.65%
14.0	3647.254	95.599	805.82	3.65%	31.37%
15.0	3443.669	97.347	903.167	3.72%	35.16%
16.0	3230.501	97.795	1000.962	3.74%	38.96%
17.0	3002.116	97.059	1098.021	3.71%	42.74%
18.0	2788.948	95.482	1193.503	3.65%	46.46%
19.0	2567.441	93.190	1286.693	3.56%	50.09%
20.0	2365.904	90.294	1376.987	3.45%	53.60%
21.0	2168.390	87.068	1464.055	3.33%	56.99%
22.0	1970.731	83.177	1547.232	3.18%	60.23%
23.0	1799.333	79.106	1626.338	3.02%	63.31%
24.0	1626.618	74.904	1701.242	2.86%	66.22%
25.0	1418.732	69.245	1770.486	2.65%	68.92%
26.0	1261.365	63.264	1833.75	2.42%	71.38%
27.0	1179.989	59.728	1893.478	2.28%	73.71%
28.0	1075.943	57.115	1950.594	2.18%	75.93%
29.0	985.760	53.940	2004.534	2.06%	78.03%
30.0	920.486	51.468	2056.002	1.97%	80.03%
31.0	867.289	49.751	2105.753	1.90%	81.97%
32.0	829.761	48.618	2154.372	1.86%	83.86%
33.0	796.338	47.905	2202.277	1.83%	85.73%
34.0	767.501	47.326	2249.604	1.81%	87.57%
35.0	724.406	46.333	2295.937	1.77%	89.37%
36.0	656.900	43.981	2339.918	1.68%	91.09%
37.0	569.022	39.983	2379.901	1.53%	92.64%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	472.313	34.758	2414.659	1.33%	93.99%
39.0	365.985	28.613	2443.272	1.09%	95.11%
40.0	274.295	22.331	2465.603	0.85%	95.98%
41.0	220.630	17.624	2483.227	0.67%	96.66%
42.0	123.607	12.507	2495.734	0.48%	97.15%
43.0	47.974	6.356	2502.09	0.24%	97.40%
44.0	28.859	2.900	2504.989	0.11%	97.51%
45.0	23.036	1.994	2506.984	0.08%	97.59%
46.0	21.324	1.735	2508.719	0.07%	97.66%
47.0	20.198	1.651	2510.37	0.06%	97.72%
48.0	19.371	1.600	2511.97	0.06%	97.78%
49.0	18.617	1.560	2513.53	0.06%	97.84%
50.0	17.944	1.524	2515.054	0.06%	97.90%
51.0	17.367	1.494	2516.548	0.06%	97.96%
52.0	16.869	1.469	2518.017	0.06%	98.02%
53.0	16.459	1.450	2519.467	0.06%	98.07%
54.0	16.167	1.438	2520.905	0.05%	98.13%
55.0	15.918	1.432	2522.337	0.05%	98.19%
56.0	15.713	1.429	2523.766	0.05%	98.24%
57.0	15.538	1.429	2525.195	0.05%	98.30%
58.0	15.362	1.429	2526.624	0.05%	98.35%
59.0	15.157	1.427	2528.051	0.05%	98.41%
60.0	14.989	1.424	2529.475	0.05%	98.46%
61.0	14.784	1.421	2530.896	0.05%	98.52%
62.0	14.616	1.417	2532.313	0.05%	98.57%
63.0	14.426	1.412	2533.725	0.05%	98.63%
64.0	14.228	1.406	2535.131	0.05%	98.68%
65.0	14.067	1.400	2536.532	0.05%	98.74%
66.0	13.892	1.395	2537.927	0.05%	98.79%
67.0	13.709	1.388	2539.314	0.05%	98.85%
68.0	13.548	1.381	2540.695	0.05%	98.90%
69.0	13.372	1.373	2542.069	0.05%	98.95%
70.0	13.204	1.365	2543.433	0.05%	99.01%
71.0	13.021	1.355	2544.789	0.05%	99.06%
72.0	12.853	1.345	2546.134	0.05%	99.11%
73.0	12.685	1.335	2547.47	0.05%	99.16%
74.0	12.487	1.323	2548.793	0.05%	99.22%
75.0	12.319	1.311	2550.104	0.05%	99.27%

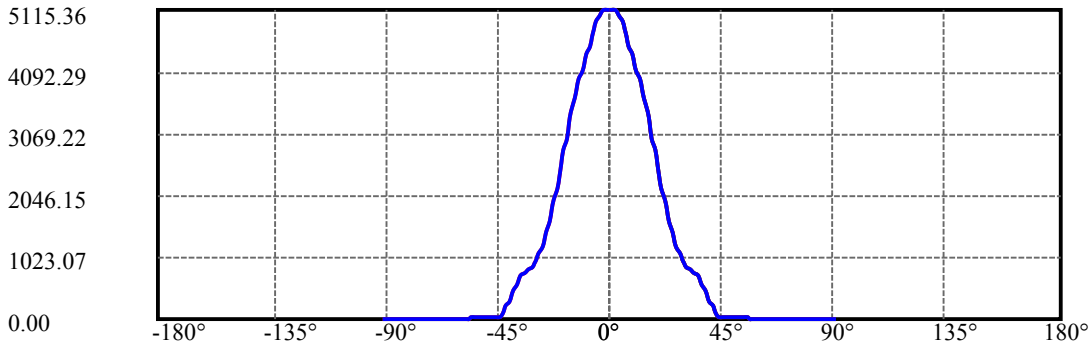
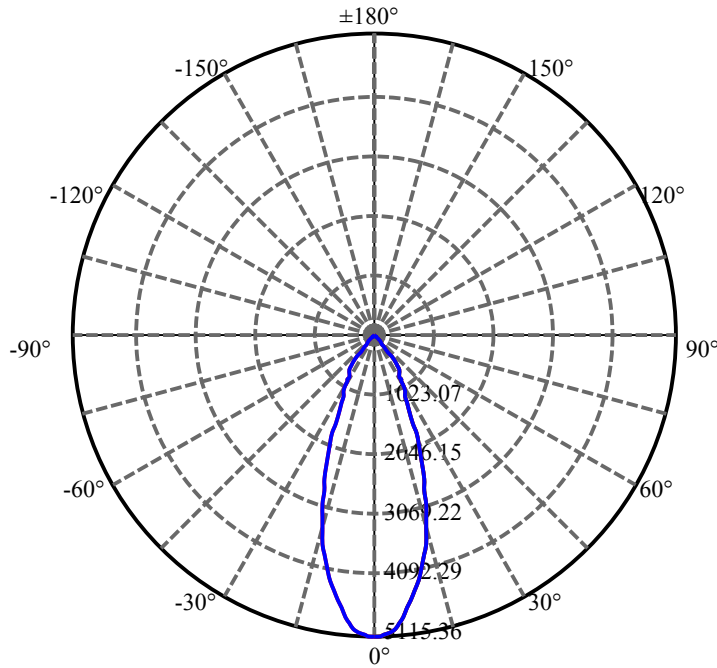
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	12.143	1.299	2551.402	0.05%	99.32%
77.0	12.026	1.289	2552.691	0.05%	99.37%
78.0	11.924	1.282	2553.973	0.05%	99.42%
79.0	11.836	1.277	2555.25	0.05%	99.47%
80.0	11.778	1.273	2556.523	0.05%	99.52%
81.0	11.690	1.269	2557.792	0.05%	99.57%
82.0	11.624	1.264	2559.056	0.05%	99.62%
83.0	11.544	1.259	2560.316	0.05%	99.66%
84.0	11.448	1.253	2561.568	0.05%	99.71%
85.0	11.375	1.246	2562.814	0.05%	99.76%
86.0	11.302	1.240	2564.053	0.05%	99.81%
87.0	11.200	1.231	2565.285	0.05%	99.86%
88.0	11.127	1.223	2566.508	0.05%	99.91%
89.0	11.017	1.214	2567.722	0.05%	99.95%
90.0	10.936	1.204	2568.925	0.05%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2056.00	78.60%	80.03%
0-40	2465.60	94.26%	95.98%
0-60	2529.48	96.70%	98.46%
0-90	2567.72	98.16%	99.95%
0-120	2567.72	98.16%	99.95%
0-180	2568.93	98.21%	100.00%
60-90	38.25	1.46%	1.49%
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%
0-29.98	2055.14	78.57%	80.00%

ZONAL LUMEN SUMMARY

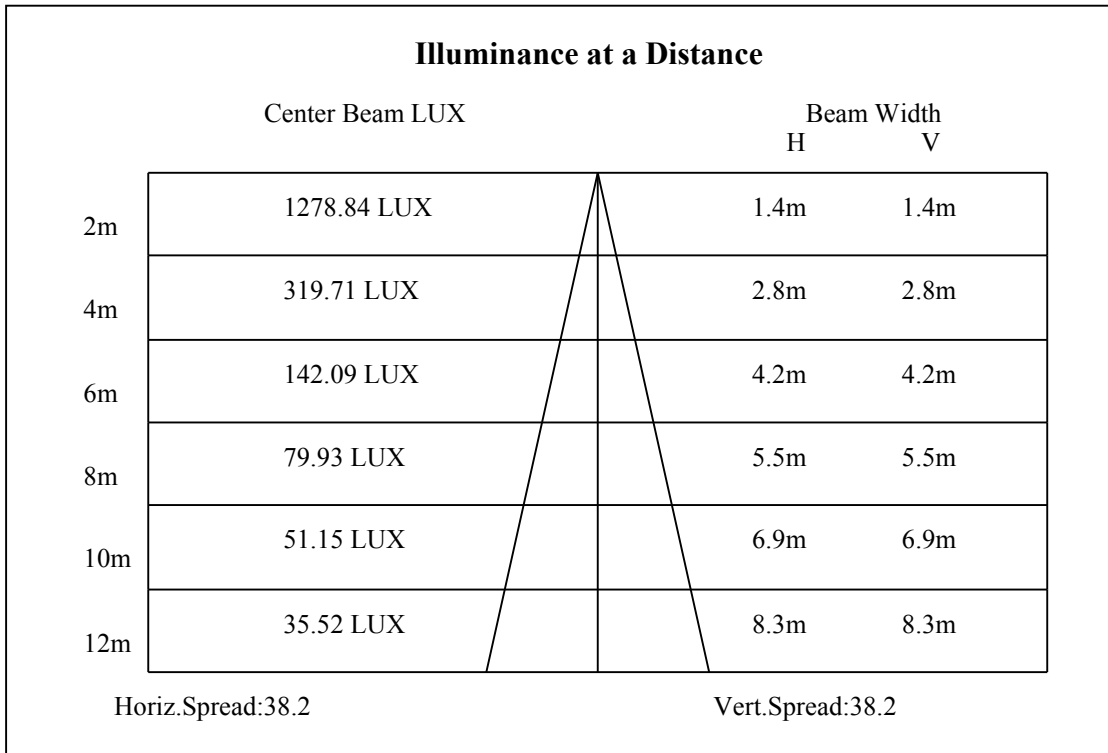
0-10	446.16
10-20	930.83
20-30	679.02
30-40	409.60
40-50	49.45
50-60	14.42
60-70	13.96
70-80	13.09
80-90	11.20
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

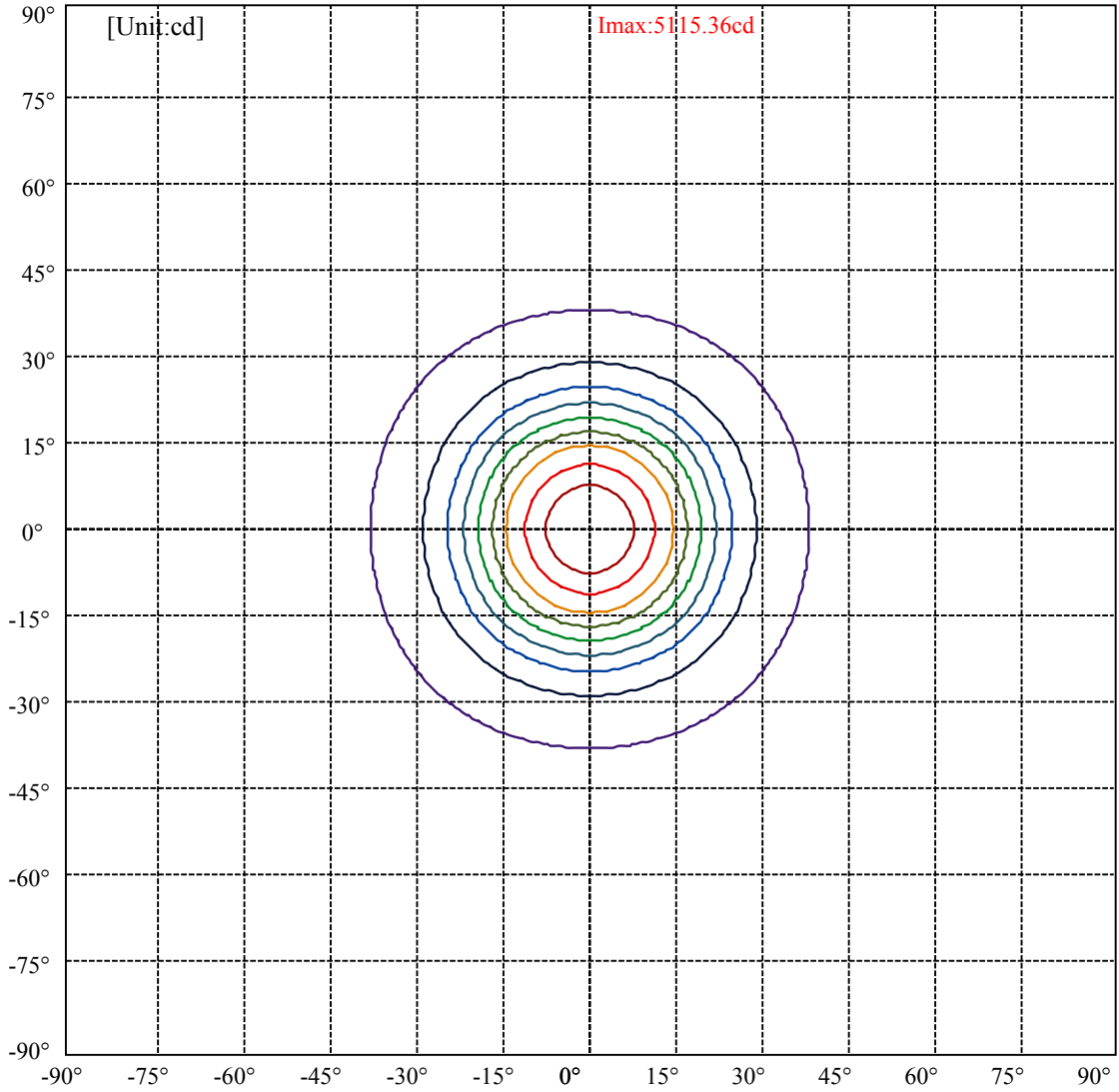


C0(Max): —————  
C0/C180: —————  
C90/C270: —————

Field angle(10%Imax):C0/180Left:37.6 Right:37.6  
:C90/270Left:37.6 Right:37.6

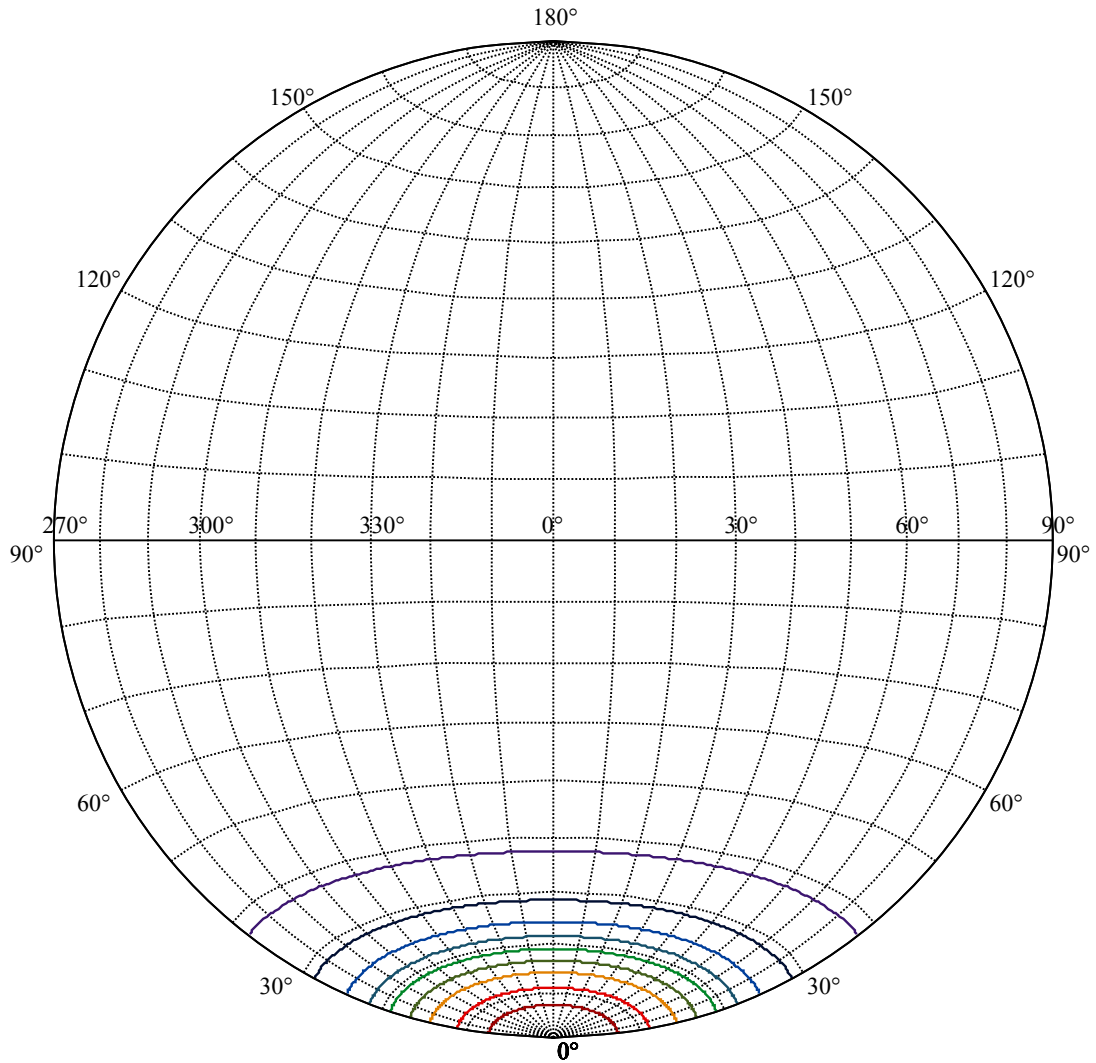
Beam Angle(50%Imax):C0/180Left:19.0 Right:19.0  
:C90/270Left:19.0 Right:19.0





(10%Imax) 511.536	—
(20%Imax) 1023.07	—
(30%Imax) 1534.61	—
(40%Imax) 2046.15	—
(50%Imax) 2557.68	—
(60%Imax) 3069.22	—
(70%Imax) 3580.75	—
(80%Imax) 4092.29	—
(90%Imax) 4603.83	—





House

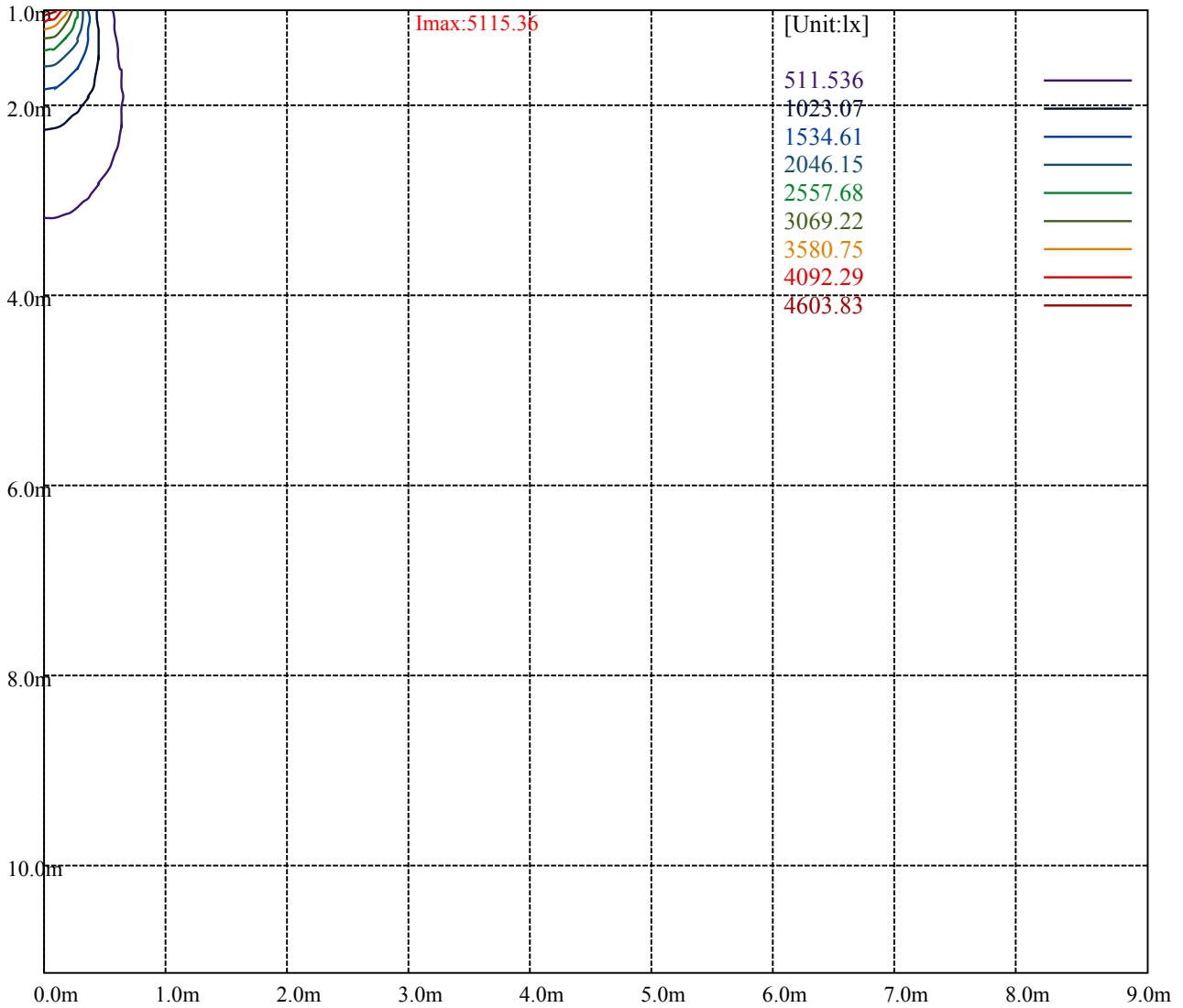
[Unit:cd]

Road

**Imax:5115.36**

(10%Imax)	511.536	—
(20%Imax)	1023.07	—
(30%Imax)	1534.61	—
(40%Imax)	2046.15	—
(50%Imax)	2557.68	—
(60%Imax)	3069.22	—
(70%Imax)	3580.75	—
(80%Imax)	4092.29	—
(90%Imax)	4603.83	—





Luminance Table

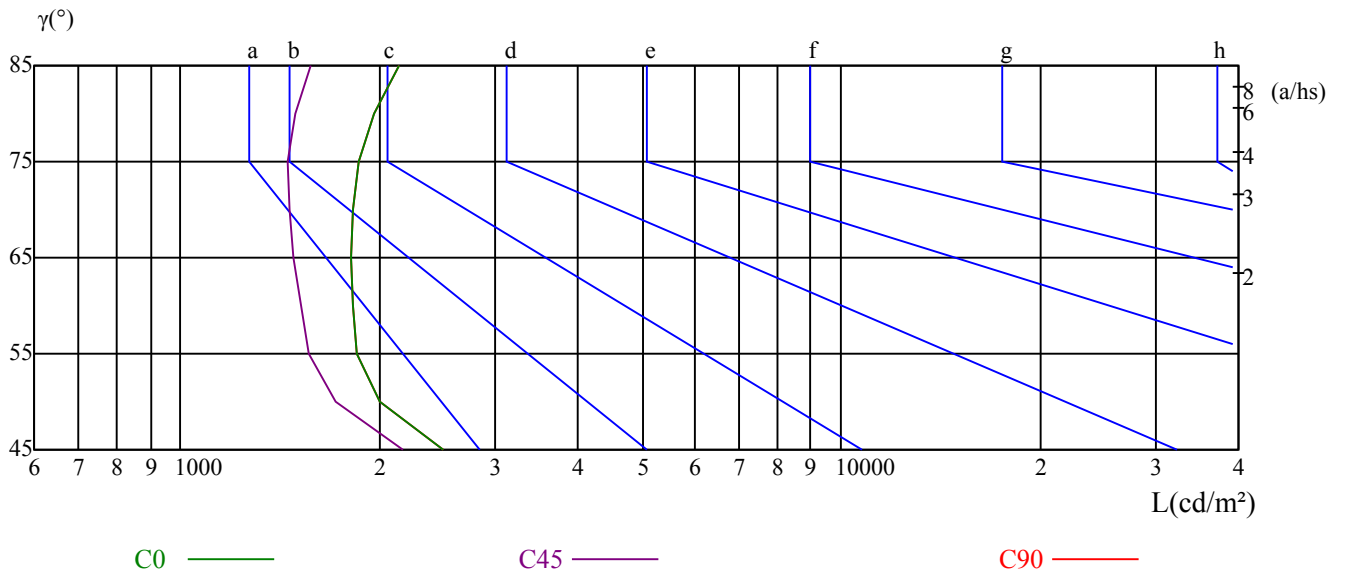
$\gamma$	45	50	55	60	65	70	75	80	85
C0	2494	2002	1846	1824	1816	1829	1857	1963	2138
C45	2176	1721	1563	1519	1485	1466	1454	1495	1576
C90	2494	2002	1846	1824	1816	1829	1857	1963	2138

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3933	3933	3933	5623	5623	5623	15420	15420	15420

Glare Table

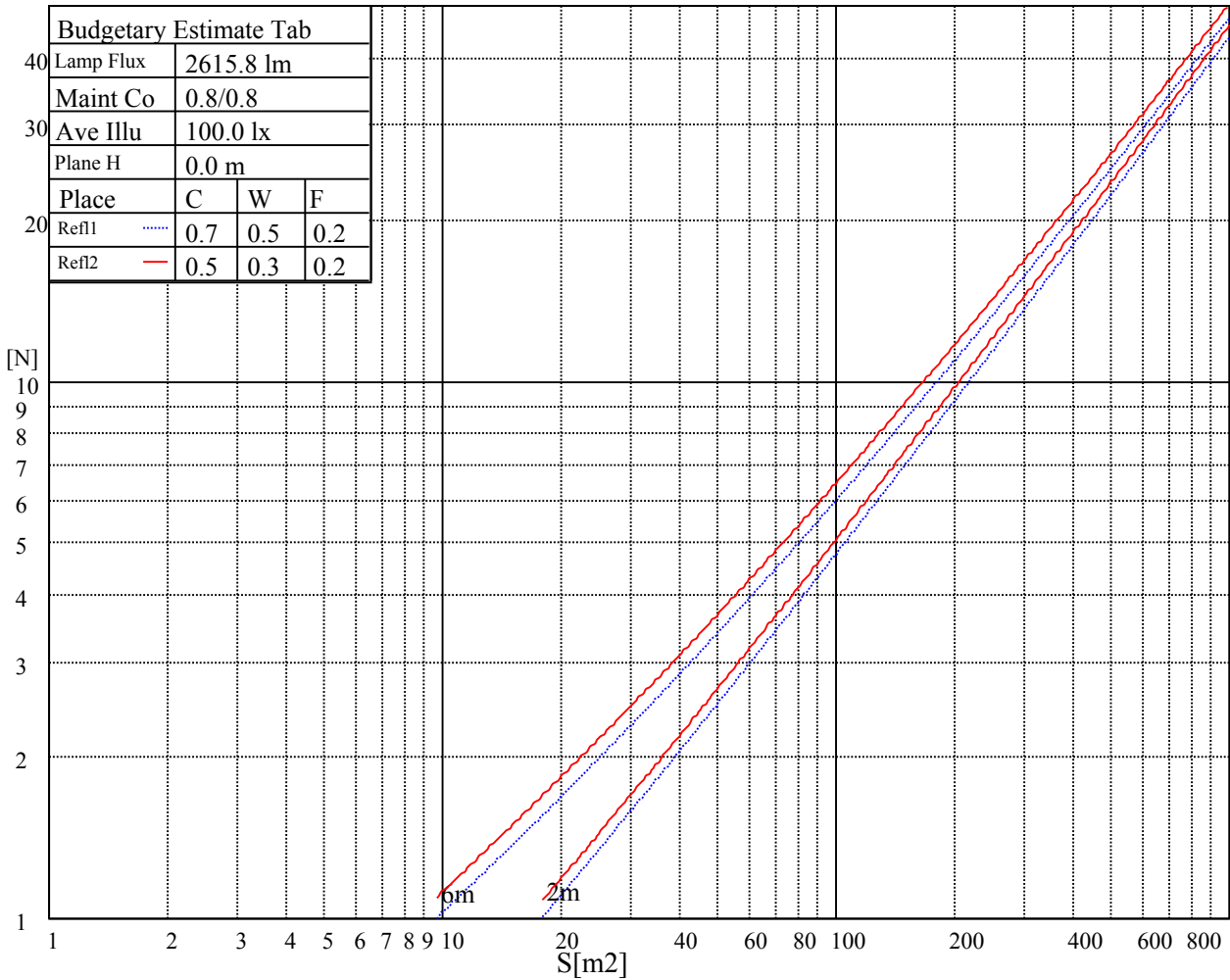
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

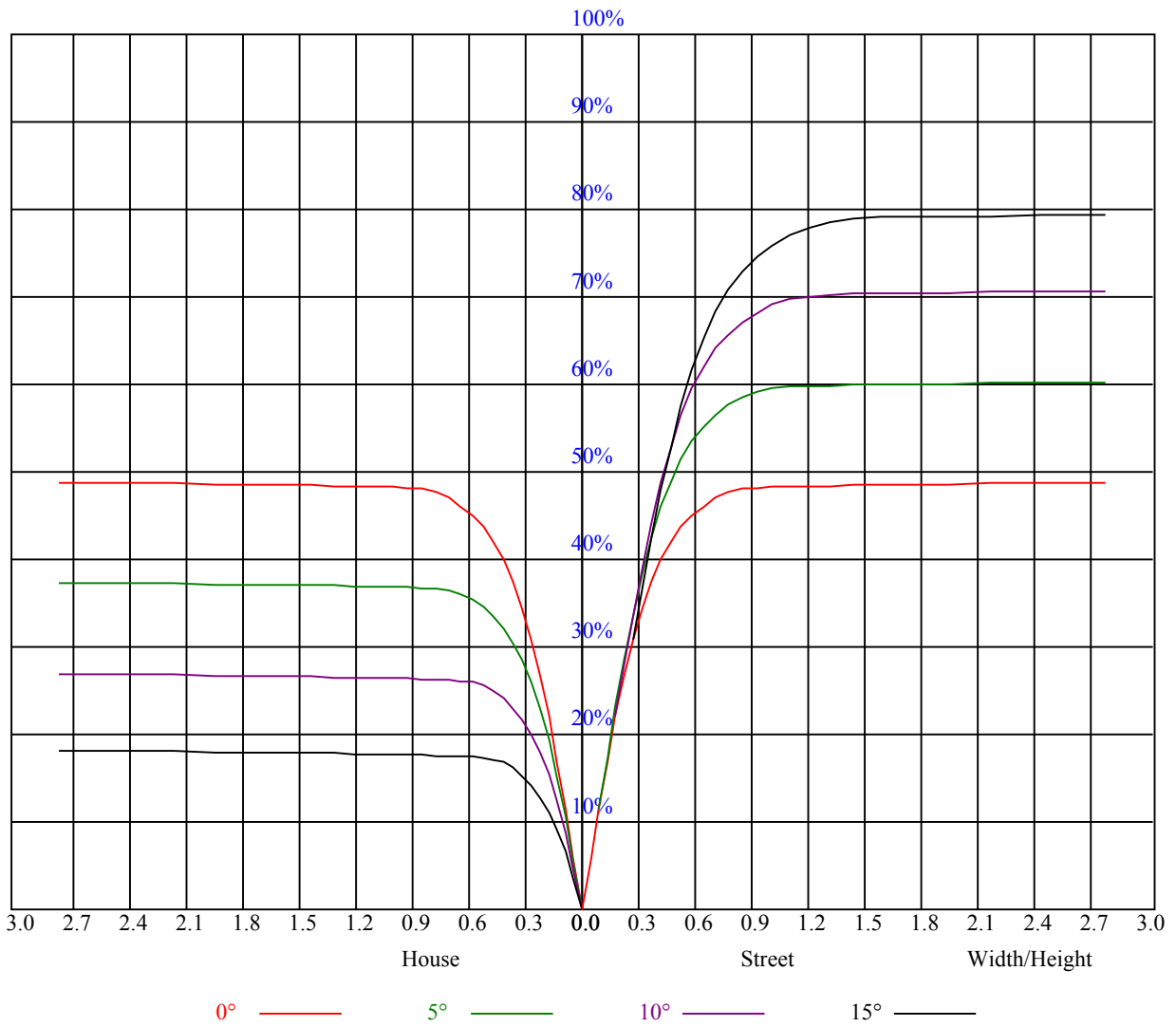


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	16.45	17.38	16.81	17.70	18.01	16.03	16.97	16.40	17.28	17.60
	3H	16.33	17.16	16.71	17.50	17.85	15.92	16.75	16.30	17.09	17.44
	4H	16.30	17.07	16.70	17.42	17.79	15.89	16.66	16.29	17.02	17.39
	6H	16.31	17.02	16.73	17.40	17.80	15.92	16.63	16.34	17.01	17.41
	8H	16.31	16.99	16.73	17.37	17.78	15.94	16.61	16.36	17.00	17.40
	12H	16.33	16.97	16.76	17.37	17.78	15.97	16.61	16.40	17.00	17.42
4H	2H	16.15	16.93	16.55	17.28	17.65	15.74	16.52	16.15	16.87	17.24
	3H	16.04	16.69	16.47	17.09	17.50	15.64	16.29	16.07	16.69	17.10
	4H	16.08	16.65	16.52	17.07	17.52	15.69	16.25	16.13	16.68	17.13
	6H	16.12	16.62	16.60	17.07	17.53	15.76	16.25	16.23	16.71	17.16
	8H	16.19	16.65	16.68	17.11	17.59	15.85	16.30	16.33	16.76	17.24
	12H	16.30	16.72	16.79	17.18	17.70	15.97	16.40	16.46	16.85	17.37
8H	4H	15.95	16.41	16.43	16.87	17.34	15.57	16.02	16.05	16.48	16.96
	6H	16.05	16.42	16.55	16.90	17.42	15.70	16.07	16.21	16.55	17.07
	8H	16.23	16.54	16.76	17.06	17.56	15.90	16.22	16.44	16.74	17.24
	12H	16.42	16.66	16.97	17.18	17.71	16.13	16.37	16.67	16.89	17.41
12H	4H	15.91	16.33	16.40	16.79	17.31	15.53	15.95	16.02	16.41	16.93
	6H	16.07	16.39	16.61	16.91	17.41	15.73	16.04	16.26	16.57	17.07
	8H	16.25	16.49	16.79	17.00	17.53	15.93	16.17	16.47	16.69	17.21
Variation with the observer position at spacings:											
S = 1.0H		4.8/-8.2					4.8/-8.2				
S = 1.5H		7.2/-6.6					7.2/-6.6				
S = 2.0H		8.9/-5.5					8.9/-5.5				
Standard tables:		BK1					BK1				
Uncorrected UGR		-2.3					-2.3				

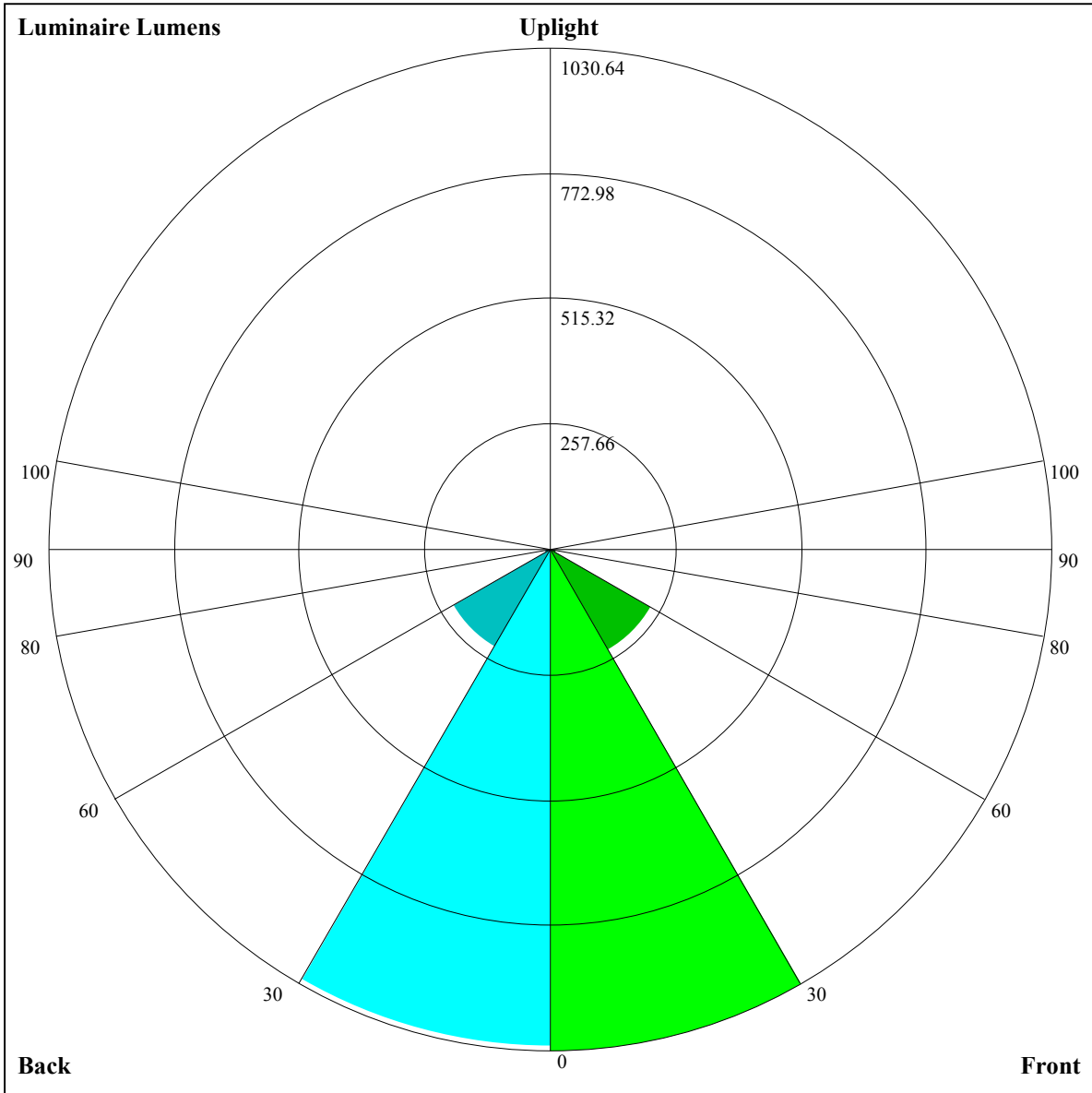
UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



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 RHOF=20 CU															
0	1.17	1.17	1.17	1.14	1.14	1.14	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.98
1	1.09	1.07	1.05	1.07	1.05	1.03	1.03	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.92
2	1.02	0.99	0.96	1.01	0.97	0.95	0.98	0.95	0.92	0.95	0.92	0.90	0.92	0.90	0.89	0.87
3	0.96	0.92	0.88	0.95	0.91	0.88	0.93	0.89	0.86	0.90	0.87	0.85	0.88	0.86	0.84	0.82
4	0.91	0.86	0.82	0.90	0.85	0.82	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.78
5	0.86	0.81	0.77	0.85	0.80	0.77	0.84	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.75	0.74
6	0.82	0.76	0.73	0.81	0.76	0.72	0.80	0.75	0.72	0.78	0.74	0.71	0.77	0.74	0.71	0.70
7	0.78	0.72	0.69	0.77	0.72	0.69	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.66
8	0.74	0.69	0.65	0.74	0.69	0.65	0.72	0.68	0.65	0.72	0.67	0.65	0.71	0.67	0.64	0.63
9	0.71	0.65	0.62	0.70	0.65	0.62	0.69	0.65	0.62	0.69	0.64	0.61	0.68	0.64	0.61	0.60
10	0.68	0.62	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.57







Luminaire Lumens:

FL=1030.64,FM=238.94,FH=13.91,FVH=6.21

BL=1020.17,BM=230.97,BH=13.15,BVH=6.21

UL=0,UH=0

BUG Rating:B3-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	5109.07	5112.00	5101.46	5069.28	4991.44	4901.32	4795.39	4677.76	4517.41
45.0	5111.41	5104.39	5109.66	5104.98	5055.23	4993.20	4914.78	4804.76	4658.45
90.0	5116.10	5113.17	5085.08	5041.77	4965.11	4845.14	4728.09	4605.19	4437.23
135.0	5124.87	5124.29	5117.27	5089.76	5035.92	4922.97	4815.29	4694.15	4509.22
180.0	5109.07	5104.98	5092.69	5059.33	5008.41	4897.81	4785.44	4670.15	4529.11
225.0	5111.41	5100.88	5083.32	5028.31	4958.08	4858.60	4716.97	4585.30	4448.35
270.0	5116.10	5124.29	5122.53	5102.05	5069.86	5001.98	4911.85	4764.38	4640.31
315.0	5124.87	5127.21	5104.39	5060.50	4986.18	4883.76	4741.55	4604.02	4458.89
360.0	5109.07	5112.00	5101.46	5069.28	4991.44	4901.32	4795.39	4677.76	4517.41
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4372.86	4240.60	4108.92	3958.52	3818.07	3657.71	3428.31	3225.82	2978.27
45.0	4534.38	4389.25	4268.10	4124.14	3998.32	3850.25	3622.60	3415.43	3147.98
90.0	4289.17	4119.46	3986.03	3847.91	3686.39	3459.91	3257.42	3054.35	2854.20
135.0	4366.42	4218.36	4090.20	3939.79	3821.58	3685.22	3522.53	3294.29	3095.31
180.0	4348.87	4224.80	4114.78	3996.56	3829.77	3673.52	3496.78	3243.96	3049.67
225.0	4328.38	4196.12	4094.88	3966.13	3805.19	3567.00	3353.40	3129.84	2862.98
270.0	4505.71	4325.46	4198.46	4046.30	3908.19	3747.84	3574.61	3383.83	3124.57
315.0	4308.48	4143.45	4017.63	3851.42	3703.95	3536.57	3293.70	3096.48	2903.94
360.0	4372.86	4240.60	4108.92	3958.52	3818.07	3657.71	3428.31	3225.82	2978.27
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2776.37	2574.46	2371.39	2139.06	1961.73	1796.70	1637.52	1451.42	1158.51
45.0	2940.81	2741.84	2497.21	2301.75	2125.01	1955.30	1751.64	1595.38	1448.49
90.0	2618.36	2422.89	2237.37	2061.22	1848.78	1689.02	1499.99	1143.76	1143.76
135.0	2898.68	2667.51	2476.73	2292.97	2075.27	1910.23	1751.64	1561.44	1419.81
180.0	2849.52	2568.61	2368.46	2181.78	1953.54	1772.71	1611.18	1460.19	1275.26
225.0	2640.01	2369.05	2177.68	1998.02	1824.20	1625.23	1469.56	1141.77	1141.77
270.0	2916.82	2719.60	2511.84	2261.95	2073.51	1895.02	1689.60	1536.27	1358.37
315.0	2671.03	2475.56	2286.53	2110.38	1903.80	1750.47	1601.82	1459.61	1144.93
360.0	2776.37	2574.46	2371.39	2139.06	1961.73	1796.70	1637.52	1451.42	1158.51
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1158.51	1080.97	980.49	918.57	862.97	825.99	798.60	772.03	735.63
45.0	1313.89	1165.83	1066.34	990.84	918.28	876.14	829.32	802.99	780.75
90.0	1087.00	990.79	913.65	842.49	795.55	759.21	728.66	689.22	633.56
135.0	1287.55	1141.25	1045.86	973.87	917.69	873.21	828.74	802.40	762.61
180.0	1154.12	1055.22	977.97	909.50	869.70	834.00	801.82	783.09	731.59
225.0	1067.22	990.14	929.69	883.22	836.17	809.60	788.12	746.40	684.25
270.0	1226.69	1111.40	996.70	930.57	877.90	835.76	797.13	774.31	742.12
315.0	1144.93	1071.96	975.39	914.82	860.05	824.17	798.31	769.57	724.74
360.0	1158.51	1080.97	980.49	918.57	862.97	825.99	798.60	772.03	735.63
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	669.85	567.67	472.92	373.78	278.68	168.25	95.51	46.00	26.39
45.0	739.78	652.00	567.14	471.75	374.02	302.62	302.62	96.68	46.76
90.0	559.77	477.84	371.03	284.54	202.96	116.17	64.49	34.47	29.03
135.0	707.01	631.52	516.23	411.47	306.72	306.72	107.27	54.72	28.15
180.0	667.80	584.11	491.06	368.17	317.84	317.84	94.69	35.17	20.48
225.0	584.99	495.57	400.00	280.03	189.44	112.30	53.67	22.06	19.72
270.0	688.28	594.06	508.03	416.74	300.86	300.86	193.65	60.28	34.82
315.0	637.72	549.41	452.09	321.41	223.85	140.28	76.96	34.41	25.52
360.0	669.85	567.67	472.92	373.78	278.68	168.25	95.51	46.00	26.39

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	22.82	21.13	20.42	19.66	19.25	18.84	18.55	18.26	17.91
45.0	24.99	22.82	21.01	20.19	19.55	18.90	18.55	18.32	18.02
90.0	26.10	24.70	22.88	21.65	20.48	19.43	18.08	17.38	16.97
135.0	21.95	19.72	18.67	17.91	16.97	16.44	16.09	15.80	15.51
180.0	18.32	16.62	15.92	15.51	15.10	14.57	14.34	14.10	13.87
225.0	17.62	16.85	16.04	15.45	14.98	14.63	14.46	14.28	14.10
270.0	29.32	26.69	25.52	24.52	23.12	21.59	20.01	18.32	17.09
315.0	23.17	22.06	21.13	20.07	19.49	19.14	18.84	18.49	18.20
360.0	22.82	21.13	20.42	19.66	19.25	18.84	18.55	18.26	17.91
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	17.67	17.38	17.15	16.91	16.68	16.44	16.21	15.98	15.74
45.0	17.91	17.73	17.56	17.38	17.15	16.91	16.68	16.39	16.21
90.0	16.56	16.27	15.98	15.68	15.51	15.33	15.10	14.81	14.63
135.0	15.27	14.98	14.86	14.69	14.57	14.40	14.28	14.16	14.05
180.0	13.69	13.46	13.28	13.17	13.11	12.87	12.82	12.70	12.64
225.0	13.99	13.87	13.75	13.69	13.64	13.52	13.46	13.34	13.28
270.0	16.21	15.86	15.63	15.45	15.16	15.04	14.86	14.69	14.51
315.0	18.02	17.79	17.50	17.32	17.09	16.74	16.50	16.21	15.86
360.0	17.67	17.38	17.15	16.91	16.68	16.44	16.21	15.98	15.74
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	15.45	15.16	14.92	14.69	14.46	14.28	14.05	13.87	13.58
45.0	15.98	15.57	15.27	15.04	14.75	14.57	14.34	13.99	13.75
90.0	14.46	14.28	14.10	13.99	13.87	13.58	13.34	13.17	12.99
135.0	13.87	13.75	13.69	13.52	13.34	13.23	13.11	12.99	12.82
180.0	12.52	12.47	12.41	12.35	12.29	12.29	12.29	12.29	12.29
225.0	13.23	13.17	13.05	12.93	12.82	12.70	12.52	12.47	12.35
270.0	14.34	14.16	14.05	13.87	13.69	13.58	13.40	13.23	13.05
315.0	15.57	15.27	15.04	14.75	14.46	14.16	13.93	13.64	13.34
360.0	15.45	15.16	14.92	14.69	14.46	14.28	14.05	13.87	13.58
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	13.34	13.11	12.87	12.58	12.23	12.06	11.88	11.76	11.70
45.0	13.46	13.17	12.87	12.58	12.41	12.11	11.94	11.88	11.82
90.0	12.76	12.64	12.41	12.23	12.06	12.00	11.94	11.94	11.82
135.0	12.64	12.58	12.35	12.23	12.11	12.06	12.00	11.94	11.88
180.0	12.35	12.35	12.29	12.23	12.11	12.06	11.94	11.82	11.70
225.0	12.29	12.17	12.06	11.94	11.94	11.82	11.76	11.65	11.65
270.0	12.87	12.64	12.47	12.35	12.17	12.11	12.06	11.94	11.94
315.0	13.11	12.82	12.58	12.41	12.11	12.00	11.88	11.76	11.70
360.0	13.34	13.11	12.87	12.58	12.23	12.06	11.88	11.76	11.70
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.65	11.59	11.47	11.35	11.35	11.29	11.24	11.18	11.12
45.0	11.65	11.59	11.53	11.41	11.35	11.29	11.24	11.18	11.12
90.0	11.82	11.76	11.65	11.53	11.41	11.29	11.18	11.06	11.00
135.0	11.76	11.70	11.65	11.59	11.47	11.41	11.29	11.18	11.06
180.0	11.59	11.47	11.41	11.35	11.29	11.24	11.12	11.12	11.00
225.0	11.53	11.47	11.35	11.29	11.29	11.18	11.12	11.06	10.94
270.0	11.94	11.88	11.82	11.70	11.53	11.41	11.24	11.18	11.00
315.0	11.59	11.53	11.47	11.35	11.29	11.29	11.18	11.06	10.89
360.0	11.65	11.59	11.47	11.35	11.35	11.29	11.24	11.18	11.12

Intensity data(cd)

C/γ(°)	90.0
0.0	10.94
45.0	11.00
90.0	10.94
135.0	10.94
180.0	10.89
225.0	10.94
270.0	10.94
315.0	10.89
360.0	10.94