



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: 2-2689-L

Luminaire: 92.70.429.00

Report No: 2024411-B011

Ballast type: AC

Test No: 2024411-C011

Voltage(V): 34.780

LampCAT: CREE CXA1830 LES14

Current(A): 0.530

Lamp flux(lm): 2685.0

Power (W): 18.433

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2244.40, Efficiency(%): 83.59% , Luminous Efficacy(lm/W): 121.76

Central intensity(cd): 4203.584, Maximum intensity(cd): 4203.584

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=43.2

[C90/270]Total=43.2

Field angle(10%Imax): [C0/180]Total=66.6

[C90/270]Total=66.6

Maximum s/h(1/2): C0_180=0.69 C90_270=0.69

Maximum s/h(1/4): C0_180=0.68 C90_270=0.68

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 83.59%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.753%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/4/11
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	4203.583	0.000	0	0.00%	0.00%
1.0	4202.340	4.022	4.022	0.15%	0.18%
2.0	4194.000	12.051	16.073	0.45%	0.72%
3.0	4175.200	20.016	36.09	0.75%	1.61%
4.0	4148.206	27.861	63.951	1.04%	2.85%
5.0	4104.754	35.504	99.455	1.32%	4.43%
6.0	4055.741	42.886	142.34	1.60%	6.34%
7.0	3978.199	49.867	192.207	1.86%	8.56%
8.0	3900.364	56.385	248.592	2.10%	11.08%
9.0	3813.238	62.515	311.107	2.33%	13.86%
10.0	3714.116	68.120	379.226	2.54%	16.90%
11.0	3597.510	73.058	452.285	2.72%	20.15%
12.0	3474.759	77.310	529.595	2.88%	23.60%
13.0	3346.668	80.953	610.548	3.02%	27.20%
14.0	3208.701	83.908	694.456	3.13%	30.94%
15.0	3060.639	86.068	780.524	3.21%	34.78%
16.0	2919.380	87.624	868.148	3.26%	38.68%
17.0	2771.611	88.624	956.772	3.30%	42.63%
18.0	2636.570	89.169	1045.941	3.32%	46.60%
19.0	2487.704	89.152	1135.093	3.32%	50.57%
20.0	2338.252	88.328	1223.422	3.29%	54.51%
21.0	2191.068	86.972	1310.394	3.24%	58.39%
22.0	2033.350	84.891	1395.285	3.16%	62.17%
23.0	1881.045	82.135	1477.42	3.06%	65.83%
24.0	1705.331	78.411	1555.831	2.92%	69.32%
25.0	1551.051	74.043	1629.874	2.76%	72.62%
26.0	1355.242	68.603	1698.477	2.56%	75.68%
27.0	1208.680	62.727	1761.204	2.34%	78.47%
28.0	1090.816	58.218	1819.423	2.17%	81.07%
29.0	941.320	53.166	1872.589	1.98%	83.43%
30.0	798.935	46.987	1919.575	1.75%	85.53%
31.0	667.018	40.795	1960.371	1.52%	87.35%
32.0	552.365	34.934	1995.305	1.30%	88.90%
33.0	448.114	29.474	2024.779	1.10%	90.21%
34.0	355.202	24.311	2049.09	0.91%	91.30%
35.0	295.436	20.206	2069.296	0.75%	92.20%
36.0	245.509	17.224	2086.52	0.64%	92.97%
37.0	176.870	13.776	2100.296	0.51%	93.58%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	148.603	10.864	2111.16	0.40%	94.06%
39.0	108.632	8.780	2119.94	0.33%	94.45%
40.0	88.376	6.871	2126.811	0.26%	94.76%
41.0	74.199	5.789	2132.6	0.22%	95.02%
42.0	64.967	5.056	2137.656	0.19%	95.24%
43.0	57.959	4.554	2142.21	0.17%	95.45%
44.0	52.868	4.183	2146.393	0.16%	95.63%
45.0	49.181	3.922	2150.314	0.15%	95.81%
46.0	46.116	3.727	2154.041	0.14%	95.97%
47.0	43.614	3.569	2157.61	0.13%	96.13%
48.0	41.236	3.430	2161.04	0.13%	96.29%
49.0	39.159	3.301	2164.342	0.12%	96.43%
50.0	37.147	3.181	2167.523	0.12%	96.57%
51.0	35.370	3.068	2170.591	0.11%	96.71%
52.0	33.702	2.964	2173.555	0.11%	96.84%
53.0	32.107	2.863	2176.418	0.11%	96.97%
54.0	30.615	2.765	2179.182	0.10%	97.09%
55.0	29.247	2.672	2181.854	0.10%	97.21%
56.0	28.040	2.589	2184.443	0.10%	97.33%
57.0	26.701	2.503	2186.946	0.09%	97.44%
58.0	25.552	2.416	2189.362	0.09%	97.55%
59.0	24.433	2.337	2191.699	0.09%	97.65%
60.0	23.299	2.255	2193.954	0.08%	97.75%
61.0	22.143	2.169	2196.123	0.08%	97.85%
62.0	20.995	2.079	2198.201	0.08%	97.94%
63.0	19.978	1.993	2200.194	0.07%	98.03%
64.0	18.961	1.911	2202.105	0.07%	98.12%
65.0	18.157	1.837	2203.942	0.07%	98.20%
66.0	17.513	1.780	2205.721	0.07%	98.28%
67.0	17.052	1.738	2207.459	0.06%	98.35%
68.0	16.796	1.715	2209.174	0.06%	98.43%
69.0	16.825	1.715	2210.889	0.06%	98.51%
70.0	16.986	1.736	2212.626	0.06%	98.58%
71.0	17.279	1.771	2214.397	0.07%	98.66%
72.0	17.696	1.819	2216.215	0.07%	98.74%
73.0	18.325	1.884	2218.099	0.07%	98.83%
74.0	18.727	1.948	2220.047	0.07%	98.92%
75.0	19.064	1.997	2222.044	0.07%	99.00%

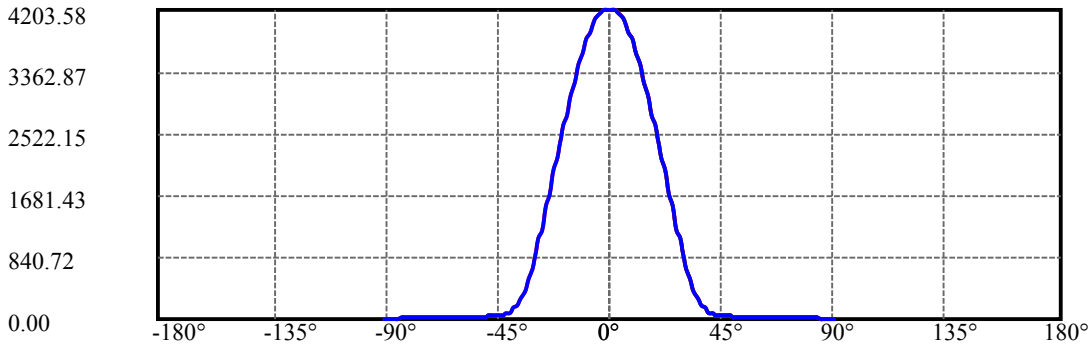
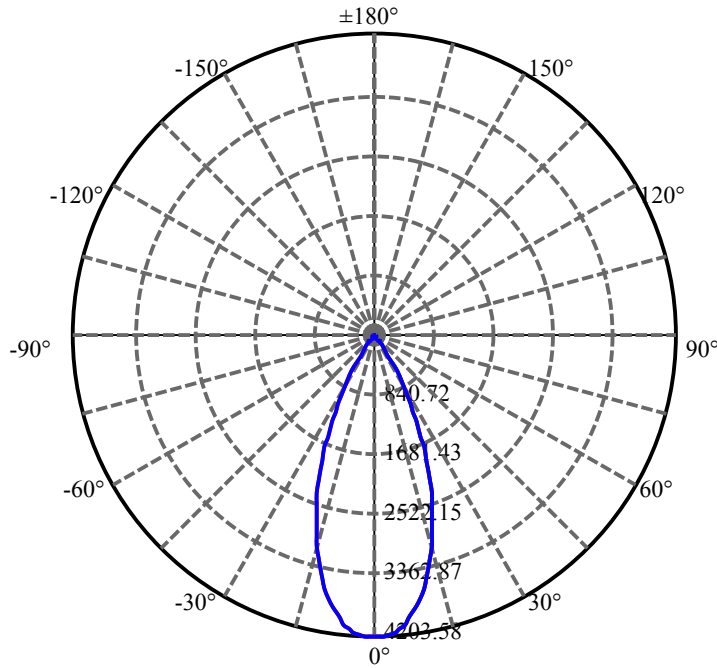
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	18.654	2.002	2224.046	0.07%	99.09%
77.0	18.171	1.963	2226.009	0.07%	99.18%
78.0	17.440	1.906	2227.915	0.07%	99.27%
79.0	16.350	1.815	2229.731	0.07%	99.35%
80.0	15.450	1.714	2231.445	0.06%	99.42%
81.0	14.309	1.609	2233.055	0.06%	99.49%
82.0	13.621	1.515	2234.569	0.06%	99.56%
83.0	13.197	1.458	2236.027	0.05%	99.63%
84.0	12.721	1.412	2237.439	0.05%	99.69%
85.0	11.697	1.333	2238.772	0.05%	99.75%
86.0	10.702	1.224	2239.996	0.05%	99.80%
87.0	10.256	1.147	2241.143	0.04%	99.86%
88.0	9.956	1.107	2242.25	0.04%	99.90%
89.0	9.737	1.079	2243.33	0.04%	99.95%
90.0	9.700	1.066	2244.395	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1919.58	71.49%	85.53%
0-40	2126.81	79.21%	94.76%
0-60	2193.95	81.71%	97.75%
0-90	2243.33	83.55%	99.95%
0-120	2243.33	83.55%	99.95%
0-180	2244.40	83.59%	100.00%
60-90	49.38	1.84%	2.20%
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%
0-27.59	1795.52	66.87%	80.00%

ZONAL LUMEN SUMMARY

0-10	379.23
10-20	844.20
20-30	696.15
30-40	207.24
40-50	40.71
50-60	26.43
60-70	18.67
70-80	18.82
80-90	11.88
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: —————

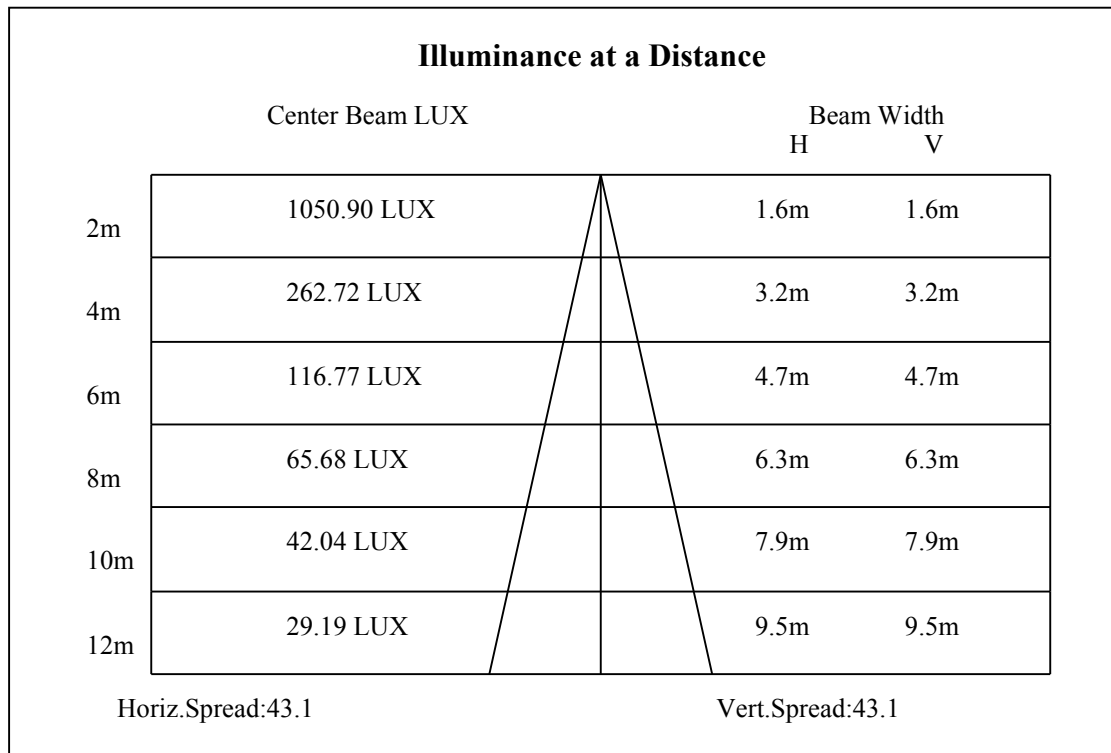
C90/C270: —————

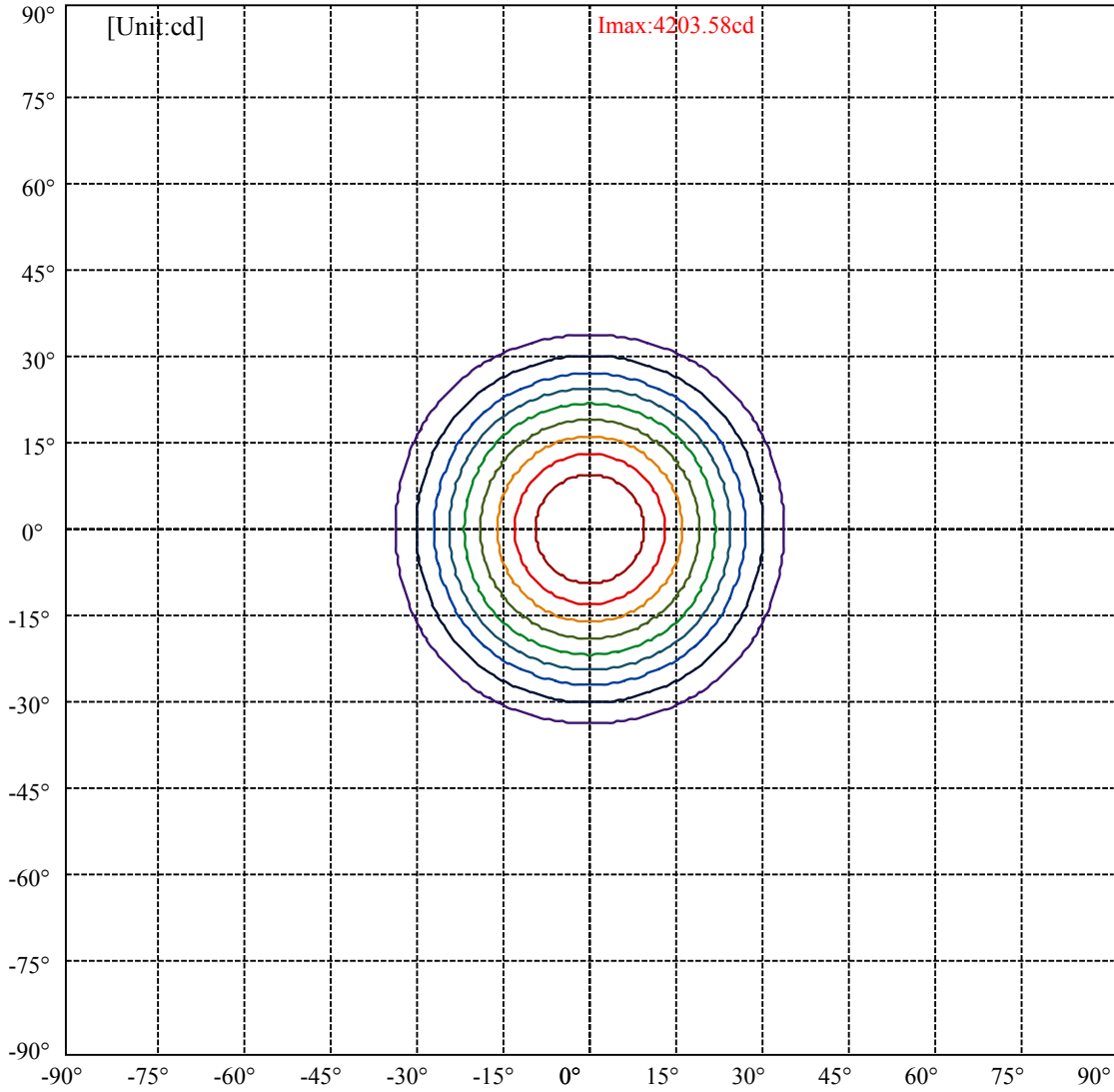
Field angle(10%Imax):C0/180Left:33.3 Right:33.3

:C90/270Left:33.3 Right:33.3

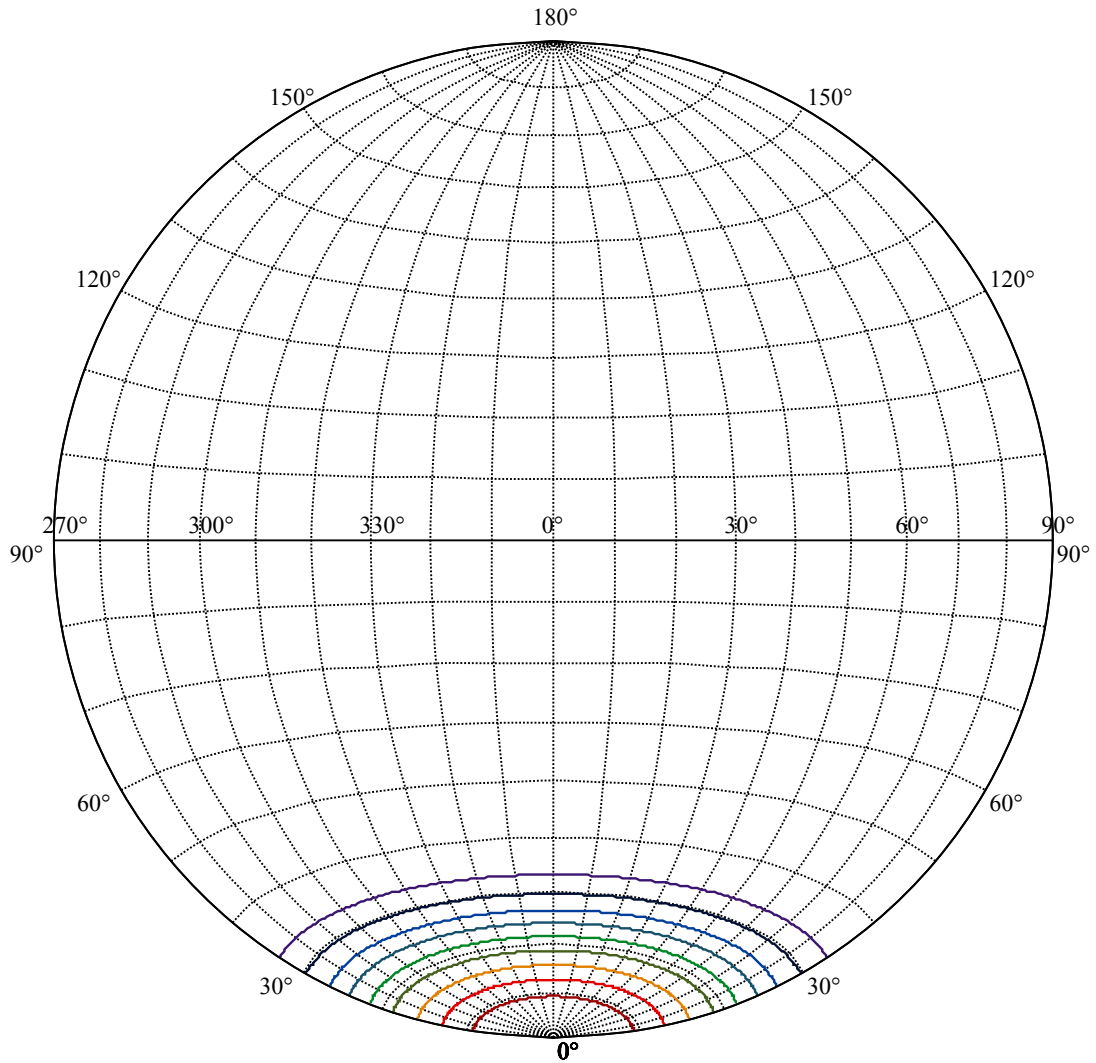
Beam Angle(50%Imax):C0/180Left:21.6 Right:21.6

:C90/270Left:21.6 Right:21.6





(10%Imax) 420.358	—
(20%Imax) 840.717	—
(30%Imax) 1261.08	—
(40%Imax) 1681.43	—
(50%Imax) 2101.79	—
(60%Imax) 2522.15	—
(70%Imax) 2942.51	—
(80%Imax) 3362.87	—
(90%Imax) 3783.23	—



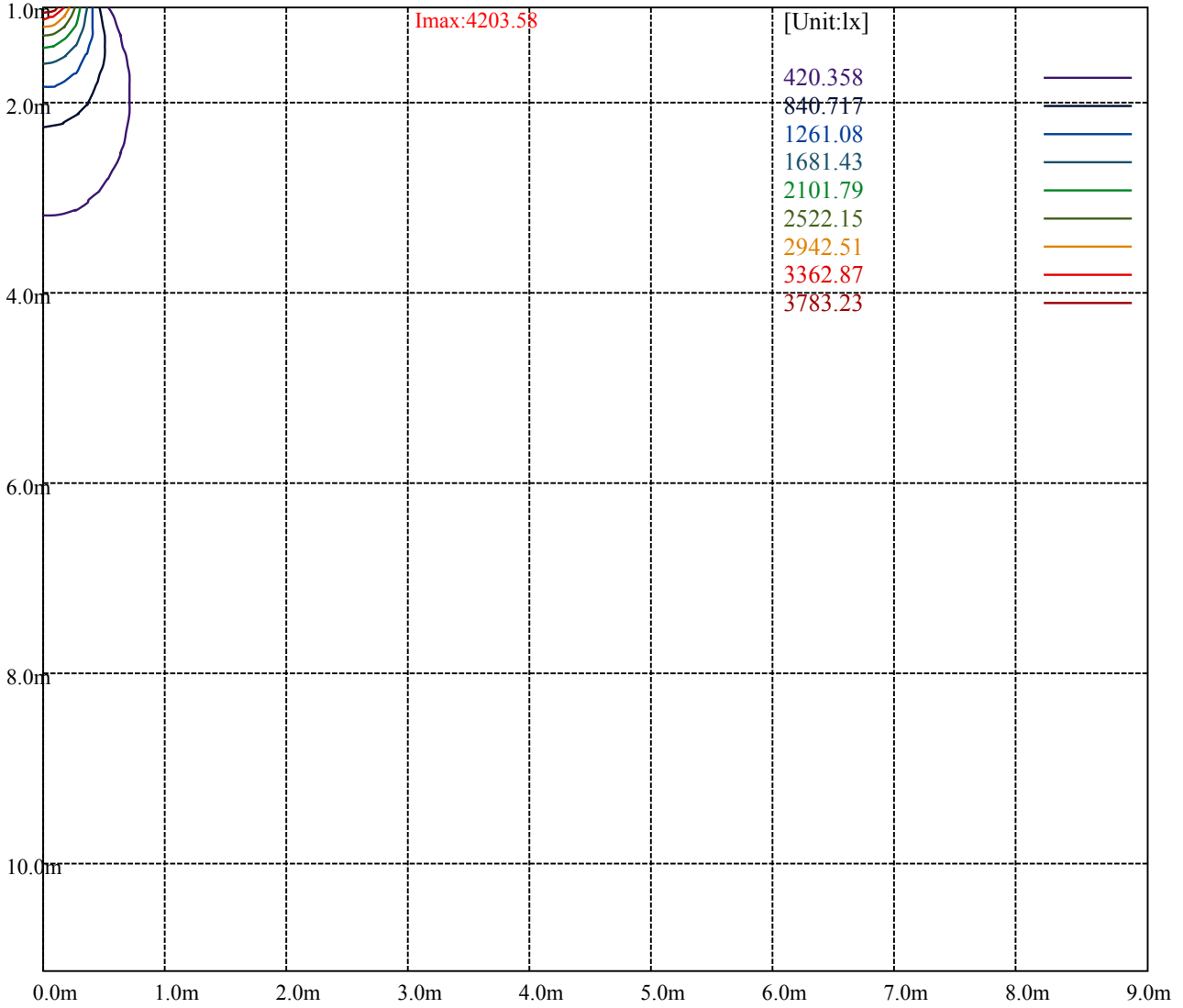
House

[Unit:cd]

Road

Imax:4203.58

(10%Imax)	420.358	—
(20%Imax)	840.717	—
(30%Imax)	1261.08	—
(40%Imax)	1681.43	—
(50%Imax)	2101.79	—
(60%Imax)	2522.15	—
(70%Imax)	2942.51	—
(80%Imax)	3362.87	—
(90%Imax)	3783.23	—



Luminance Table

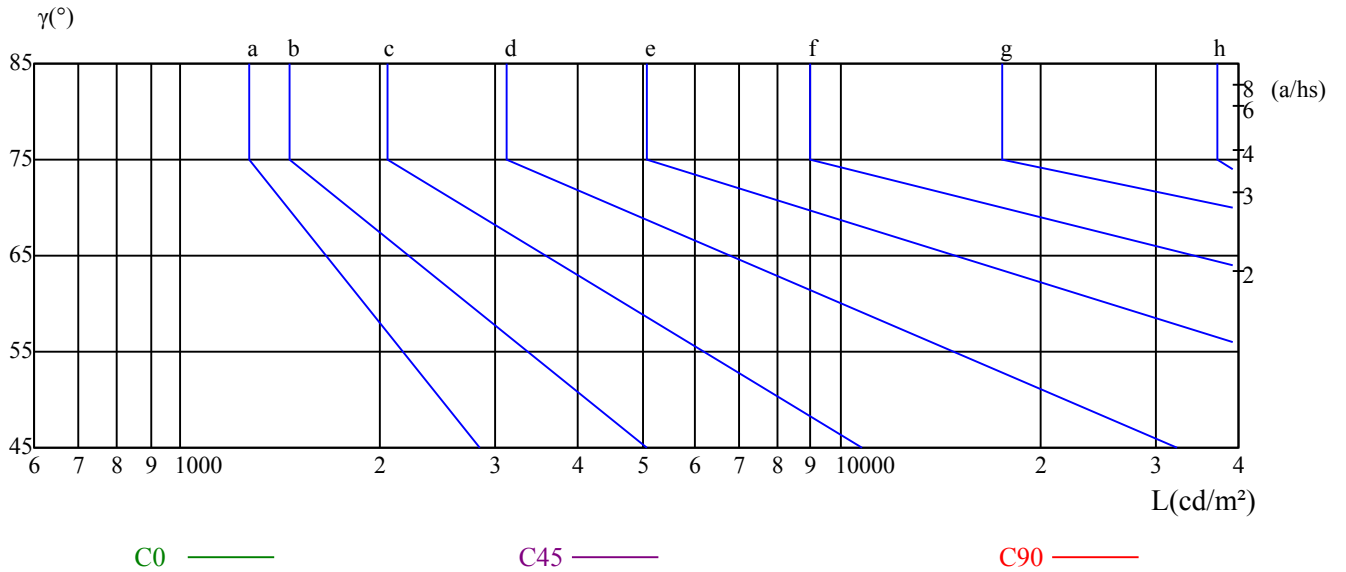
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

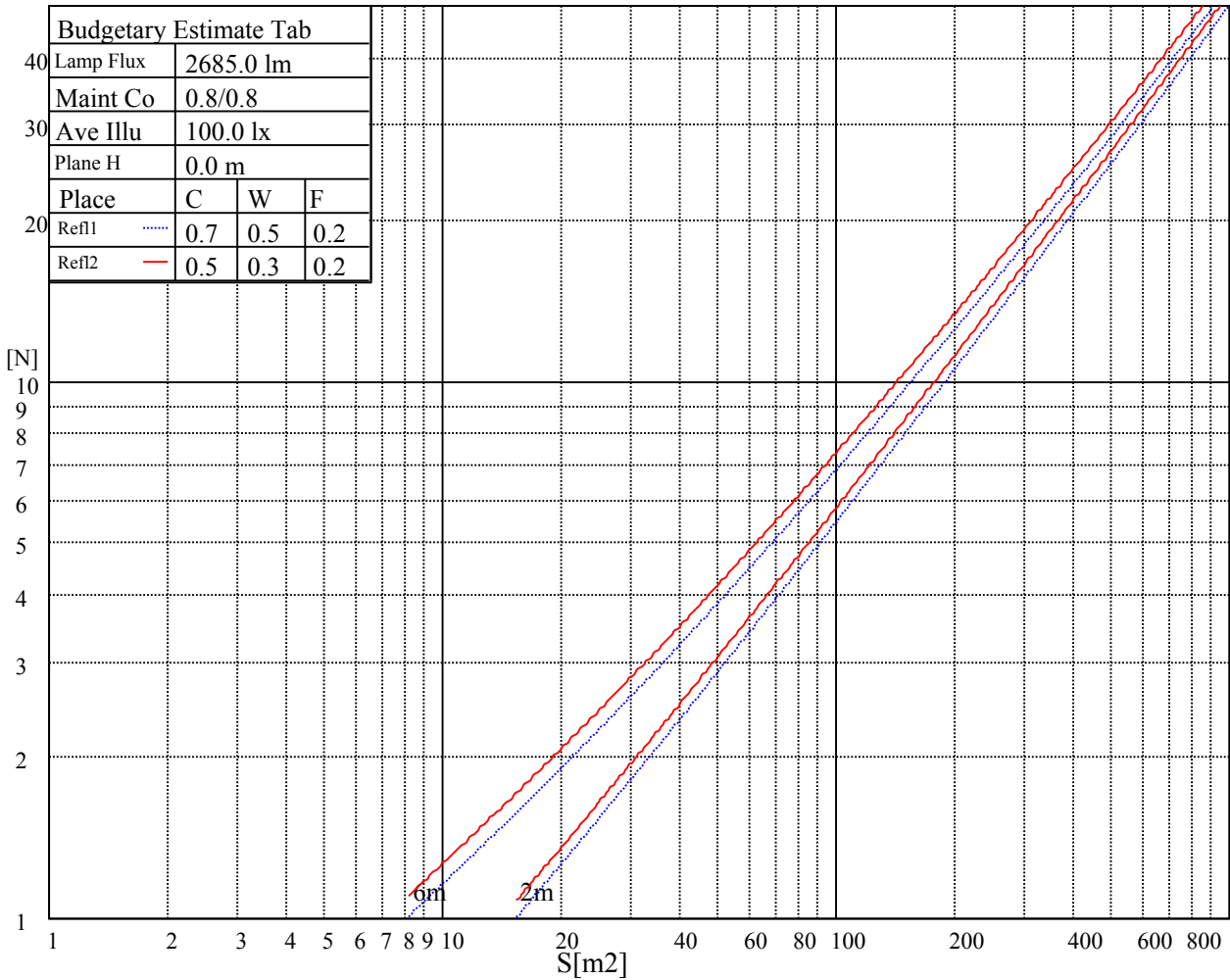
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

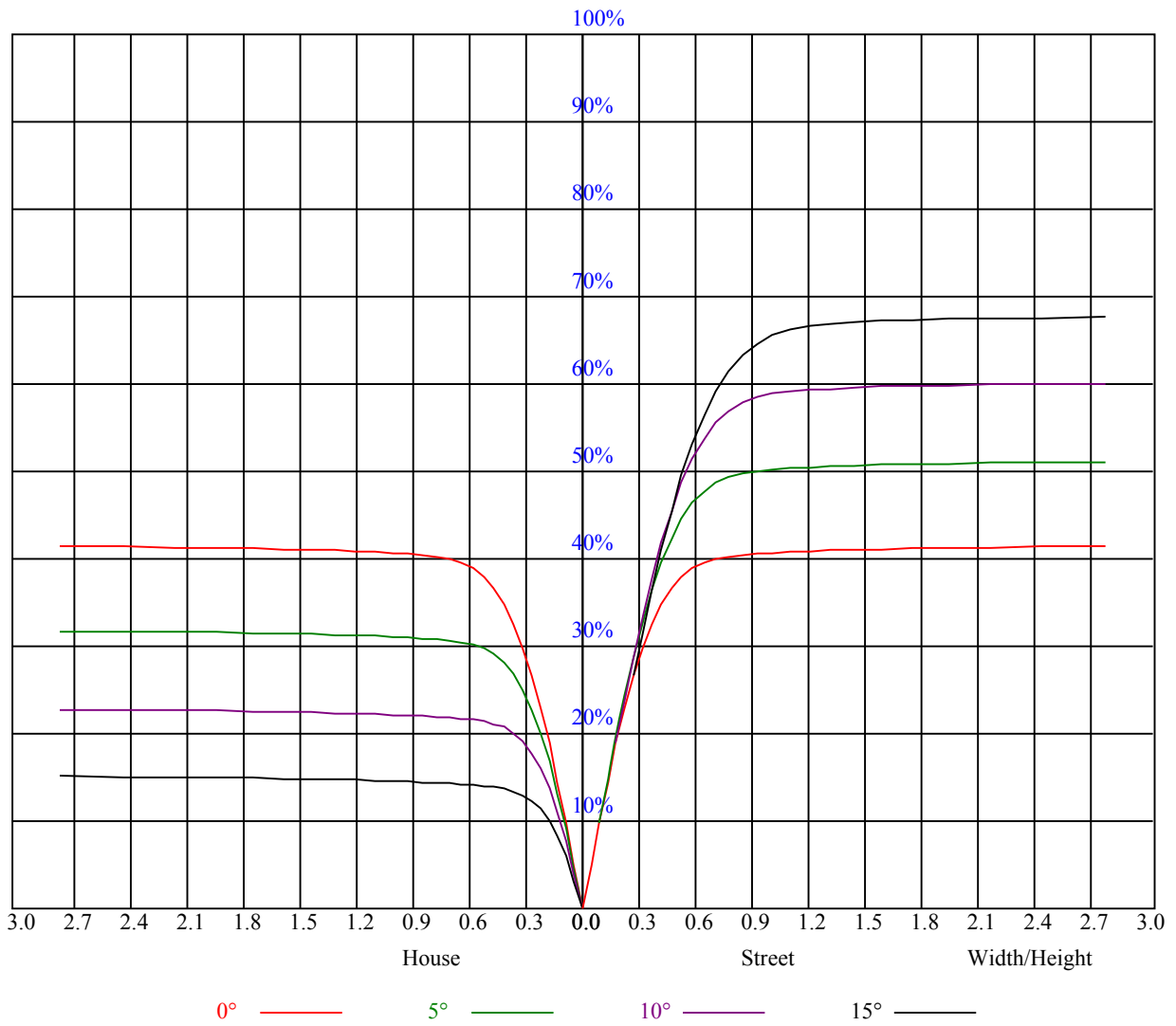


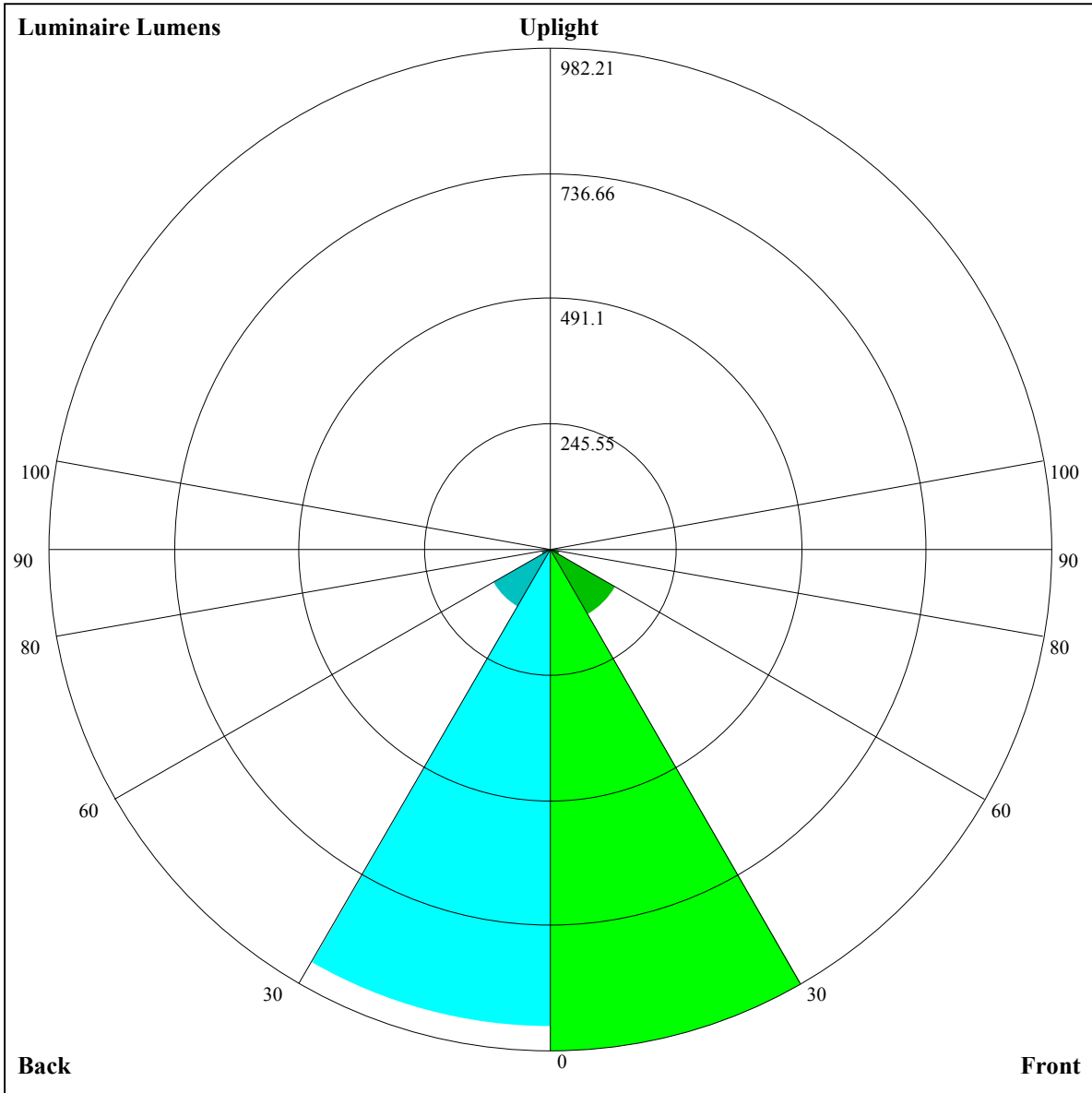
Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
4H	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
8H	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
12H	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字		
Variation with the observer position at spacings:											
S = 1.0H		非数字/非数字					非数字/非数字				
S = 1.5H		非数字/非数字					非数字/非数字				
S = 2.0H		非数字/非数字					非数字/非数字				
Standard tables:		BK0					BK0				
Uncorrected UGR		负无穷大					负无穷大				

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 RHOFC=20 CU															
0	1.00	1.00	1.00	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.85	0.85	0.85	0.84
1	0.93	0.91	0.89	0.91	0.89	0.88	0.88	0.86	0.85	0.85	0.83	0.82	0.82	0.81	0.80	0.79
2	0.87	0.84	0.81	0.86	0.83	0.80	0.83	0.81	0.79	0.81	0.79	0.77	0.78	0.77	0.75	0.74
3	0.82	0.78	0.75	0.81	0.77	0.75	0.79	0.76	0.73	0.77	0.74	0.72	0.75	0.73	0.71	0.70
4	0.78	0.73	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.73	0.70	0.68	0.72	0.69	0.67	0.66
5	0.73	0.69	0.66	0.73	0.69	0.66	0.71	0.68	0.65	0.70	0.67	0.64	0.69	0.66	0.64	0.63
6	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.66	0.63	0.61	0.60
7	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.58	0.64	0.61	0.58	0.63	0.60	0.58	0.57
8	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.55	0.61	0.58	0.55	0.54
9	0.61	0.56	0.53	0.60	0.56	0.53	0.60	0.56	0.53	0.59	0.55	0.53	0.58	0.55	0.53	0.52
10	0.58	0.54	0.51	0.58	0.54	0.51	0.57	0.53	0.51	0.56	0.53	0.51	0.56	0.53	0.50	0.50





Luminaire Lumens:

FL=982.21,FM=147.98,FH=18.92,FVH=6.58

BL=935.62,BM=129.58,BH=19.48,BVH=6.46

UL=0,UH=0

BUG Rating:B2-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	4208.41	4216.02	4213.09	4203.73	4181.49	4152.82	4112.43	4042.21	3969.64
45.0	4198.46	4203.73	4204.90	4201.39	4193.78	4170.37	4148.13	4096.63	4041.04
90.0	4199.63	4195.54	4186.76	4166.86	4141.70	4089.03	4038.11	3978.42	3904.68
135.0	4207.83	4200.22	4185.59	4168.62	4143.45	4098.97	4052.16	3969.64	3895.32
180.0	4208.41	4200.22	4189.10	4159.25	4113.02	4066.79	4008.85	3913.46	3834.45
225.0	4198.46	4188.51	4166.28	4116.53	4079.08	4016.46	3940.96	3838.55	3746.08
270.0	4199.63	4204.31	4203.73	4195.54	4175.64	4127.65	4077.32	4010.02	3914.04
315.0	4207.83	4210.17	4202.56	4189.68	4157.50	4115.95	4067.96	3976.66	3897.66
360.0	4208.41	4216.02	4213.09	4203.73	4181.49	4152.82	4112.43	4042.21	3969.64
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3902.34	3808.70	3685.22	3572.86	3448.79	3284.34	3151.50	3016.89	2816.16
45.0	3983.69	3911.70	3801.09	3707.46	3591.00	3473.95	3344.62	3172.56	3039.72
90.0	3809.29	3713.90	3606.80	3460.49	3332.33	3198.31	3030.35	2898.68	2771.10
135.0	3811.63	3719.16	3598.02	3487.41	3371.54	3242.79	3088.29	2953.69	2792.17
180.0	3719.75	3618.50	3513.16	3394.95	3268.54	3109.36	2978.27	2845.42	2712.58
225.0	3644.25	3506.73	3382.07	3251.57	3089.46	2963.64	2800.95	2673.37	2540.52
270.0	3828.60	3729.11	3623.19	3477.47	3350.47	3214.70	3074.25	2908.04	2778.71
315.0	3806.36	3705.12	3570.52	3445.86	3321.21	3182.51	3016.89	2886.39	2721.94
360.0	3902.34	3808.70	3685.22	3572.86	3448.79	3284.34	3151.50	3016.89	2816.16
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2720.77	2590.85	2448.64	2271.32	2123.25	1977.53	1799.04	1652.73	1470.14
45.0	2902.77	2744.76	2609.58	2480.83	2299.99	2157.20	1976.95	1834.15	1687.26
90.0	2610.75	2478.49	2340.96	2205.19	2028.45	1886.82	1746.96	1600.06	1153.95
135.0	2666.93	2535.25	2370.80	2239.71	2099.85	1962.90	1784.99	1642.20	1494.72
180.0	2558.08	2417.04	2270.73	2102.77	1952.95	1801.97	1622.89	1476.00	1335.54
225.0	2397.14	2215.72	2070.00	1930.72	1790.26	1610.01	1347.25	1165.24	1165.24
270.0	2649.96	2479.07	2331.01	2182.36	1995.09	1852.88	1708.92	1527.50	1388.80
315.0	2586.17	2440.45	2264.29	2115.65	1976.95	1799.04	1655.66	1510.52	1146.28
360.0	2720.77	2590.85	2448.64	2271.32	2123.25	1977.53	1799.04	1652.73	1470.14
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1134.99	1134.99	1025.02	853.84	726.62	609.92	475.26	382.44	305.31
45.0	1534.52	1346.08	1196.26	1049.95	910.08	753.83	640.88	534.37	437.81
90.0	1153.95	1118.01	939.46	807.38	661.42	553.04	453.26	366.06	277.81
135.0	1340.22	1152.37	1006.06	870.29	715.20	601.67	497.50	385.14	310.23
180.0	1142.42	1006.65	872.04	704.67	592.31	492.82	402.69	302.62	302.62
225.0	983.35	844.60	687.81	573.29	470.40	359.74	288.34	230.99	184.35
270.0	1233.71	1090.33	912.42	771.39	649.07	546.07	420.84	331.30	298.52
315.0	1146.28	1033.51	891.47	760.68	611.03	501.83	406.15	308.71	246.85
360.0	1134.99	1134.99	1025.02	853.84	726.62	609.92	475.26	382.44	305.31
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	243.45	183.64	146.19	117.69	97.03	79.12	68.71	59.81	54.78
45.0	334.22	299.11	299.11	155.96	124.59	96.56	80.76	70.05	60.98
90.0	222.21	177.38	141.68	107.86	89.25	75.79	66.13	58.29	53.67
135.0	310.23	182.36	144.32	114.94	89.01	75.08	65.49	58.82	52.79
180.0	228.94	151.11	113.48	92.93	74.79	65.43	58.82	52.67	49.22
225.0	139.34	112.01	91.94	77.78	65.84	59.22	54.31	49.80	47.05
270.0	298.52	159.18	130.27	101.71	85.62	71.81	63.09	57.64	53.14
315.0	187.15	150.17	121.84	100.19	80.88	70.58	62.44	56.59	51.32
360.0	243.45	183.64	146.19	117.69	97.03	79.12	68.71	59.81	54.78

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	50.80	46.94	44.42	42.08	40.03	37.63	35.93	34.29	32.77
45.0	56.01	51.91	48.69	45.41	43.01	40.79	38.86	36.58	35.00
90.0	49.22	46.29	43.77	40.97	38.92	37.04	34.94	33.42	31.95
135.0	49.28	46.47	43.95	41.20	39.15	36.87	35.17	33.65	31.89
180.0	46.17	43.19	40.97	39.03	37.28	35.64	33.65	32.19	30.78
225.0	44.65	41.96	40.03	38.27	36.23	34.65	33.18	31.78	30.14
270.0	49.16	46.58	44.36	42.25	39.91	37.98	36.34	34.35	32.83
315.0	48.16	45.59	42.72	40.67	38.74	36.58	34.88	33.36	31.49
360.0	50.80	46.94	44.42	42.08	40.03	37.63	35.93	34.29	32.77
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	31.02	29.67	28.50	26.92	25.81	24.81	23.53	22.41	21.36
45.0	33.18	31.78	30.43	28.85	27.68	26.51	25.40	23.94	22.77
90.0	30.61	28.97	27.80	26.63	25.52	24.17	23.06	22.00	20.72
135.0	30.55	29.26	28.03	26.51	25.40	24.35	23.35	22.06	21.01
180.0	29.20	27.97	26.86	25.81	24.58	23.29	22.24	21.24	20.25
225.0	28.85	27.74	26.69	25.40	24.40	23.41	22.12	21.13	19.84
270.0	31.37	29.67	28.38	27.21	25.87	24.87	23.76	22.71	21.36
315.0	30.14	28.91	27.62	26.28	25.16	24.05	22.94	21.65	20.66
360.0	31.02	29.67	28.50	26.92	25.81	24.81	23.53	22.41	21.36
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	20.13	19.14	18.14	17.38	16.74	16.33	15.98	15.63	15.33
45.0	21.71	20.72	19.55	18.55	17.79	17.09	16.74	16.33	15.92
90.0	19.78	18.55	17.79	17.21	16.80	16.33	16.04	15.74	15.57
135.0	20.07	18.90	18.08	17.38	16.91	16.56	16.21	15.92	15.68
180.0	19.02	18.20	17.62	17.21	16.85	16.68	16.44	16.27	16.09
225.0	19.02	18.38	17.85	17.50	17.15	17.03	17.50	19.14	21.24
270.0	20.37	19.31	18.49	17.85	17.56	18.02	19.66	21.19	22.94
315.0	19.72	18.49	17.73	17.03	16.62	16.33	16.04	15.68	15.45
360.0	20.13	19.14	18.14	17.38	16.74	16.33	15.98	15.63	15.33
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	15.10	14.86	14.63	14.46	14.28	14.16	13.99	13.87	13.75
45.0	15.63	15.33	15.16	15.39	16.50	18.26	19.02	19.08	18.73
90.0	16.39	18.20	19.90	21.54	21.36	21.07	20.31	19.25	17.15
135.0	15.45	15.27	15.10	15.04	14.98	14.92	14.81	14.75	14.63
180.0	15.98	15.74	15.57	15.45	15.39	15.27	14.98	14.63	14.46
225.0	23.64	26.63	27.56	27.86	24.76	21.01	17.85	14.69	13.99
270.0	24.17	25.52	26.92	27.92	27.15	25.98	23.94	20.01	16.62
315.0	15.22	15.04	14.98	14.86	14.81	14.69	14.63	14.51	14.28
360.0	15.10	14.86	14.63	14.46	14.28	14.16	13.99	13.87	13.75
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	13.64	13.34	13.11	12.58	12.17	10.94	10.36	10.07	9.89
45.0	16.68	13.99	13.34	12.99	12.41	11.82	10.89	10.24	10.01
90.0	13.81	13.11	12.70	12.11	11.35	10.53	10.18	10.07	9.71
135.0	14.51	14.22	13.75	13.28	12.64	10.53	10.24	10.01	9.66
180.0	14.28	13.99	13.69	13.46	10.89	10.24	10.07	9.66	9.71
225.0	13.69	13.58	13.17	12.82	10.59	10.18	9.77	9.66	9.66
270.0	13.81	13.17	12.76	12.17	11.70	10.77	10.36	10.01	9.66
315.0	14.05	13.58	13.05	12.35	11.82	10.59	10.18	9.95	9.60
360.0	13.64	13.34	13.11	12.58	12.17	10.94	10.36	10.07	9.89

Intensity data(cd)

C/ γ (°)	90.0
0.0	9.71
45.0	9.77
90.0	9.71
135.0	9.66
180.0	9.60
225.0	9.71
270.0	9.77
315.0	9.66
360.0	9.71