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Address:Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NT

Client: NT

LumCAT: 62-0068-1

Luminaire: 92.70.429.00

Report No: 20250317-B001

Ballast type: AC

Test No: 20250317-C001

Voltage(V): 34.680

LampCAT: CREE CXA1820

Current(A): 0.453

Lamp flux(lm): 2372.0

Power (W): 15.700

Number of Lamps: 1

PF: 0.000

Length(mm): 62

Width(mm): 62

Phm Type: C

Height(mm): 33

### Photometric Results

Lumens(lm): 2127.13, Efficiency(%): 89.68% , Luminous Efficacy(lm/W): 135.49

Central intensity(cd): 15861.130, Maximum intensity(cd): 15861.130

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

Beam Angle(50%Imax): [C0/180]Total=18.4

[C90/270]Total=18.4

Field angle(10%Imax): [C0/180]Total=34.2

[C90/270]Total=34.2

Maximum s/h(1/2): C0\_180=0.31 C90\_270=0.31

Maximum s/h(1/4): C0\_180=0.31 C90\_270=0.31

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 89.68%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 98.565%

Equipment: GMS 1800  
Temperature( $^{\circ}$ C): 25.0

Date: 2025/3/17  
Humidity(%): 60.0%

Operator: NT  
Distance(m): 7.30

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	15861.129	0.000	0	0.00%	0.00%
1.0	15759.212	15.130	15.13	0.64%	0.71%
2.0	15511.413	44.883	60.012	1.89%	2.82%
3.0	15006.491	72.989	133.001	3.08%	6.25%
4.0	14355.687	98.285	231.286	4.14%	10.87%
5.0	13085.986	118.053	349.338	4.98%	16.42%
6.0	11666.007	130.078	479.417	5.48%	22.54%
7.0	10722.374	138.964	618.381	5.86%	29.07%
8.0	9688.348	146.076	764.457	6.16%	35.94%
9.0	8143.471	144.517	908.974	6.09%	42.73%
10.0	6775.117	135.008	1043.982	5.69%	49.08%
11.0	5714.580	124.798	1168.779	5.26%	54.95%
12.0	4605.815	112.817	1281.596	4.76%	60.25%
13.0	3677.903	98.307	1379.903	4.14%	64.87%
14.0	2942.101	84.735	1464.638	3.57%	68.86%
15.0	2439.709	73.884	1538.522	3.11%	72.33%
16.0	2121.768	66.838	1605.361	2.82%	75.47%
17.0	1609.771	58.110	1663.471	2.45%	78.20%
18.0	1224.251	46.727	1710.198	1.97%	80.40%
19.0	1057.533	39.698	1749.896	1.67%	82.27%
20.0	880.471	35.471	1785.367	1.50%	83.93%
21.0	739.132	31.100	1816.466	1.31%	85.40%
22.0	624.639	27.406	1843.872	1.16%	86.68%
23.0	529.036	24.207	1868.079	1.02%	87.82%
24.0	446.244	21.323	1889.402	0.90%	88.82%
25.0	382.229	18.838	1908.24	0.79%	89.71%
26.0	325.489	16.706	1924.946	0.70%	90.50%
27.0	278.587	14.779	1939.725	0.62%	91.19%
28.0	248.005	13.332	1953.057	0.56%	91.82%
29.0	218.649	12.209	1965.266	0.51%	92.39%
30.0	182.218	10.823	1976.089	0.46%	92.90%
31.0	152.476	9.314	1985.403	0.39%	93.34%
32.0	132.252	8.157	1993.56	0.34%	93.72%
33.0	115.886	7.310	2000.871	0.31%	94.06%
34.0	102.490	6.609	2007.479	0.28%	94.38%
35.0	90.533	5.995	2013.474	0.25%	94.66%
36.0	81.361	5.473	2018.947	0.23%	94.91%
37.0	73.180	5.040	2023.987	0.21%	95.15%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	66.746	4.671	2028.658	0.20%	95.37%
39.0	60.990	4.360	2033.018	0.18%	95.58%
40.0	56.741	4.106	2037.124	0.17%	95.77%
41.0	52.424	3.887	2041.011	0.16%	95.95%
42.0	48.854	3.680	2044.691	0.16%	96.12%
43.0	46.149	3.519	2048.21	0.15%	96.29%
44.0	43.511	3.384	2051.594	0.14%	96.45%
45.0	41.280	3.259	2054.853	0.14%	96.60%
46.0	39.541	3.161	2058.013	0.13%	96.75%
47.0	37.769	3.075	2061.088	0.13%	96.90%
48.0	36.304	2.994	2064.083	0.13%	97.04%
49.0	35.111	2.933	2067.015	0.12%	97.17%
50.0	34.019	2.882	2069.898	0.12%	97.31%
51.0	33.053	2.838	2072.735	0.12%	97.44%
52.0	32.187	2.800	2075.535	0.12%	97.57%
53.0	31.388	2.766	2078.3	0.12%	97.70%
54.0	30.668	2.735	2081.035	0.12%	97.83%
55.0	29.922	2.705	2083.74	0.11%	97.96%
56.0	29.130	2.668	2086.408	0.11%	98.09%
57.0	28.344	2.628	2089.036	0.11%	98.21%
58.0	27.471	2.581	2091.617	0.11%	98.33%
59.0	26.572	2.527	2094.144	0.11%	98.45%
60.0	25.579	2.464	2096.608	0.10%	98.57%
61.0	24.573	2.393	2099.001	0.10%	98.68%
62.0	23.481	2.316	2101.317	0.10%	98.79%
63.0	22.302	2.227	2103.543	0.09%	98.89%
64.0	21.169	2.133	2105.676	0.09%	98.99%
65.0	19.904	2.033	2107.709	0.09%	99.09%
66.0	18.545	1.918	2109.627	0.08%	99.18%
67.0	17.166	1.796	2111.423	0.08%	99.26%
68.0	15.421	1.651	2113.074	0.07%	99.34%
69.0	13.855	1.494	2114.567	0.06%	99.41%
70.0	12.736	1.366	2115.933	0.06%	99.47%
71.0	11.817	1.269	2117.202	0.05%	99.53%
72.0	10.958	1.184	2118.386	0.05%	99.59%
73.0	10.132	1.103	2119.489	0.05%	99.64%
74.0	9.352	1.024	2120.513	0.04%	99.69%
75.0	8.546	0.946	2121.459	0.04%	99.73%

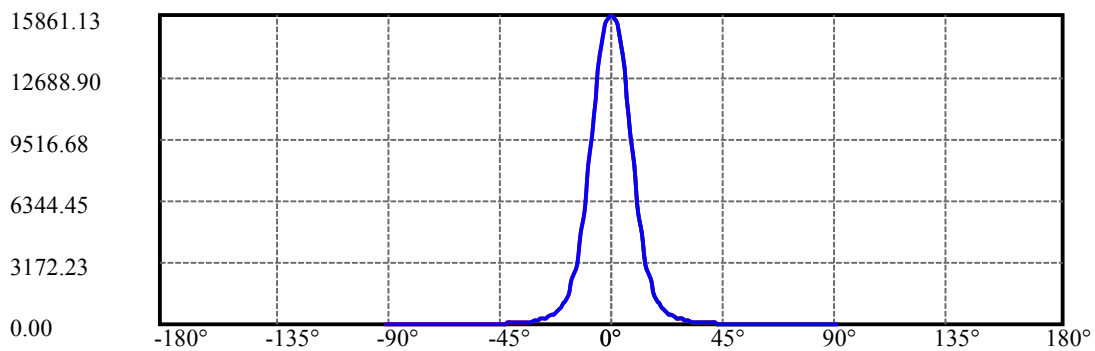
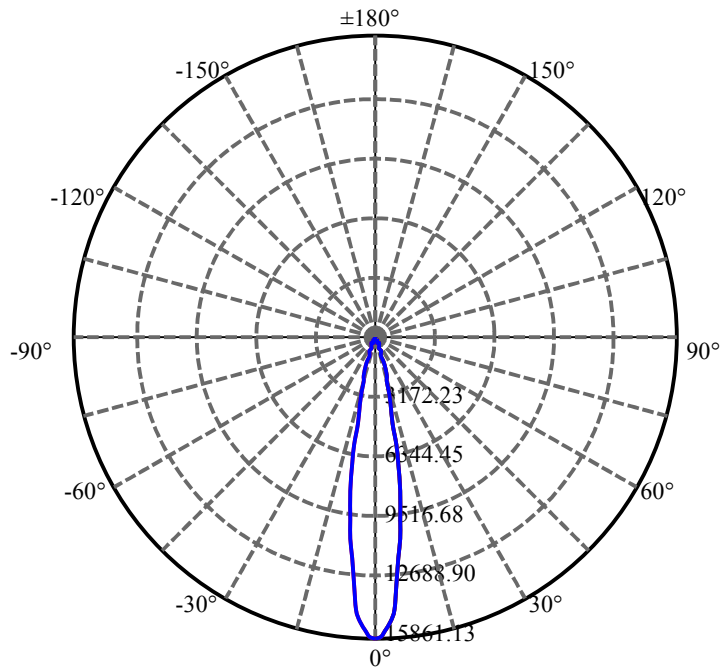
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.780	0.867	2122.326	0.04%	99.77%
77.0	6.974	0.787	2123.113	0.03%	99.81%
78.0	6.228	0.707	2123.819	0.03%	99.84%
79.0	5.449	0.627	2124.447	0.03%	99.87%
80.0	4.729	0.549	2124.995	0.02%	99.90%
81.0	4.030	0.474	2125.469	0.02%	99.92%
82.0	3.377	0.402	2125.871	0.02%	99.94%
83.0	2.771	0.334	2126.205	0.01%	99.96%
84.0	2.192	0.270	2126.475	0.01%	99.97%
85.0	1.672	0.211	2126.686	0.01%	99.98%
86.0	1.172	0.155	2126.842	0.01%	99.99%
87.0	0.786	0.107	2126.949	0.00%	99.99%
88.0	0.546	0.073	2127.022	0.00%	100.00%
89.0	0.466	0.055	2127.077	0.00%	100.00%
90.0	0.406	0.048	2127.125	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1976.09	83.31%	92.90%
0-40	2037.12	85.88%	95.77%
0-60	2096.61	88.39%	98.57%
0-90	2127.08	89.67%	100.00%
0-120	2127.08	89.67%	100.00%
0-180	2127.13	89.68%	100.00%
60-90	30.47	1.28%	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%
0-17.82	1701.70	71.74%	80.00%

ZONAL LUMEN SUMMARY

0-10	1043.98
10-20	741.39
20-30	190.72
30-40	61.03
40-50	32.77
50-60	26.71
60-70	19.33
70-80	9.06
80-90	2.08
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



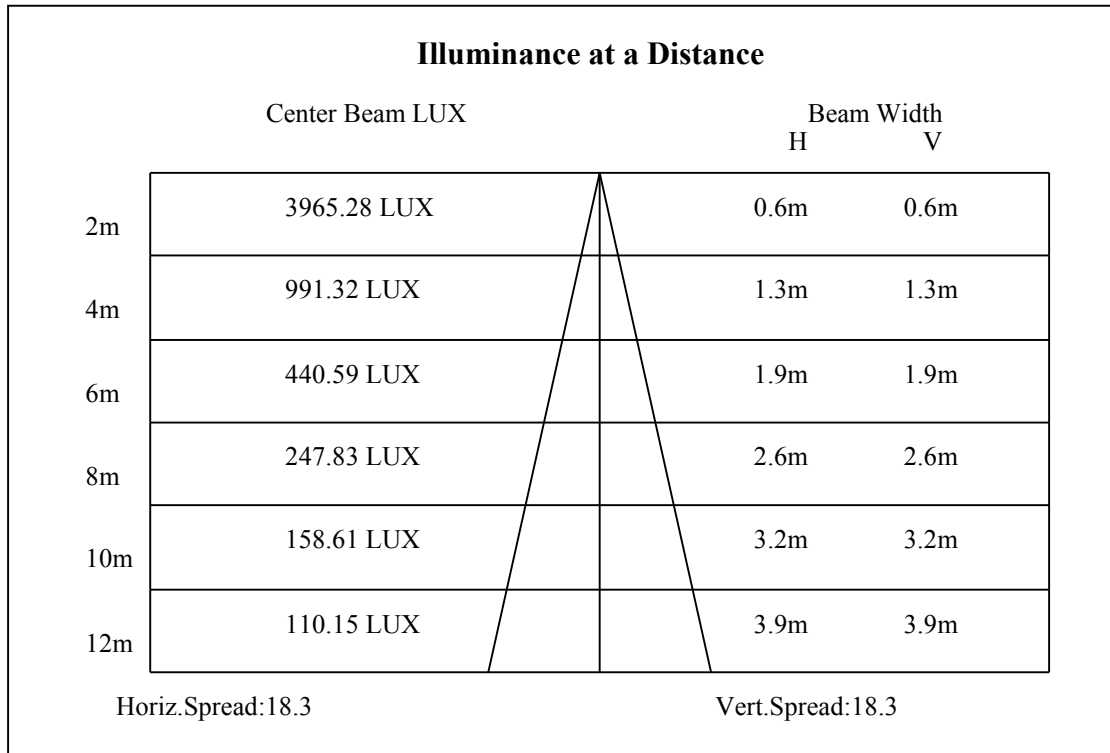
C0(Max): —————

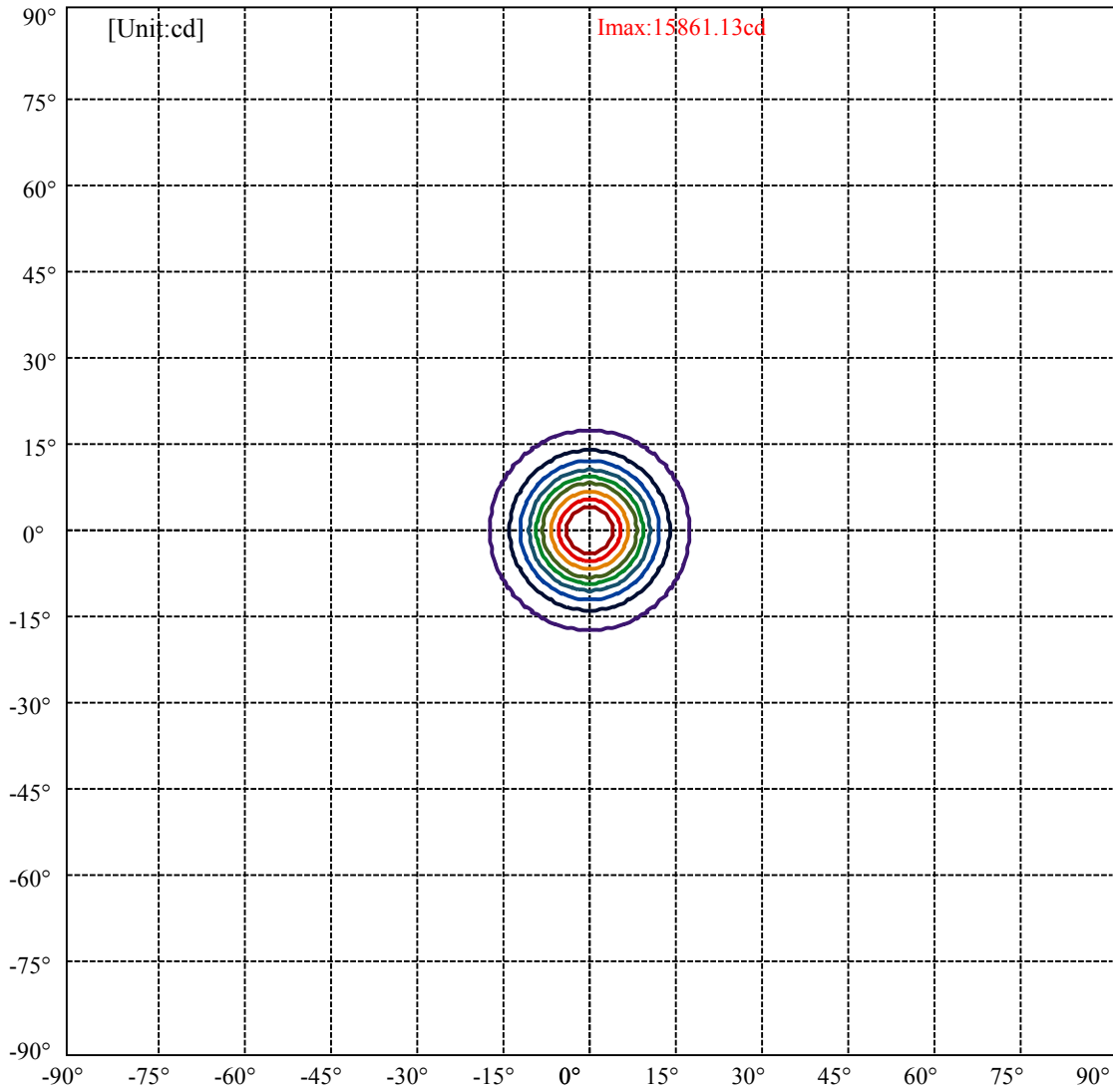
C0/C180: —————

C90/C270: —————

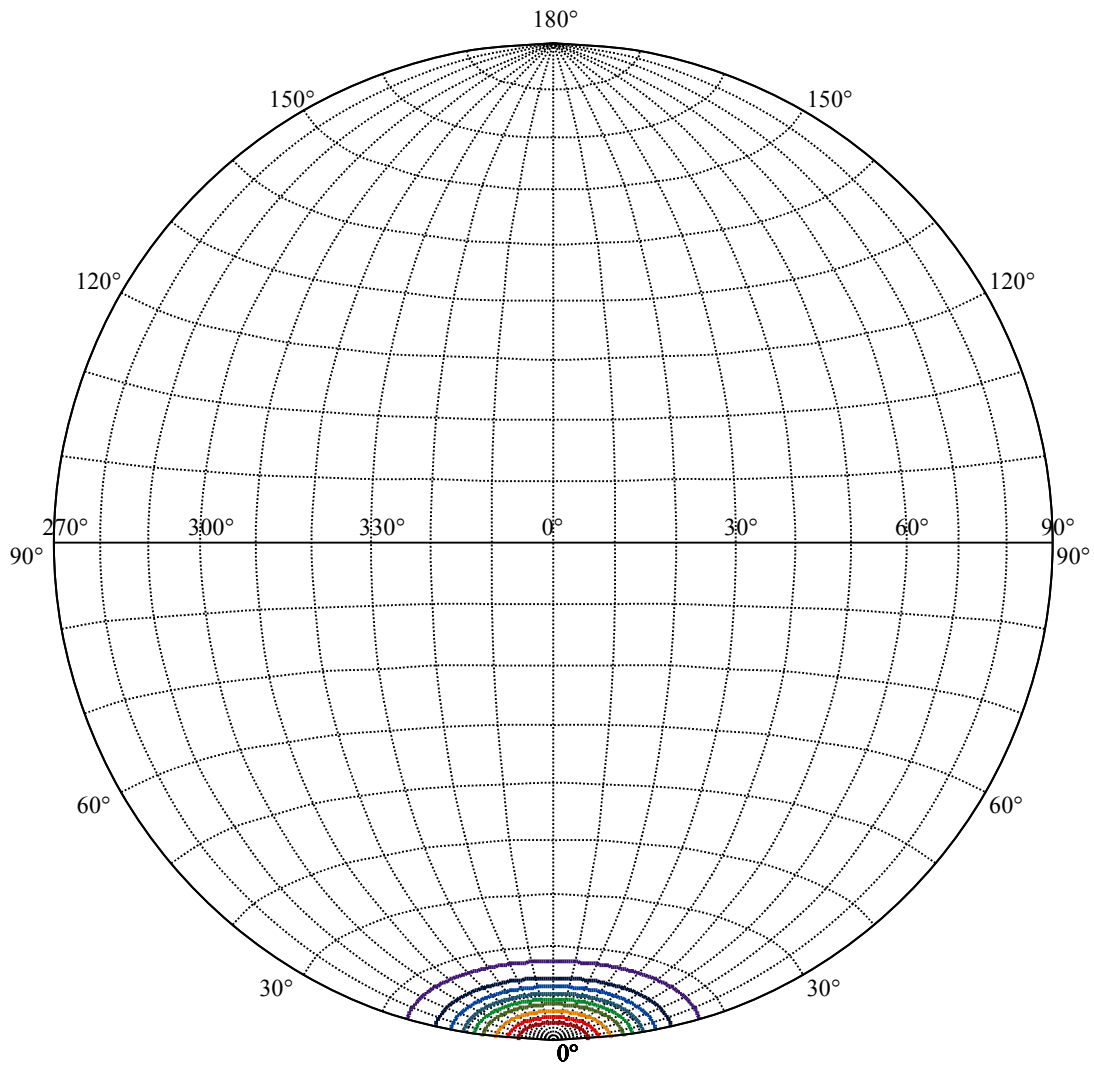
Field angle(10%Imax):C0/180Left:17.1 Right:17.1  
:C90/270Left:17.1 Right:17.1

Beam Angle(50%Imax):C0/180Left:9.2 Right:9.2  
:C90/270Left:9.2 Right:9.2





(10%Imax) 1586.11	—
(20%Imax) 3172.23	—
(30%Imax) 4758.34	—
(40%Imax) 6344.45	—
(50%Imax) 7930.56	—
(60%Imax) 9516.68	—
(70%Imax) 11102.8	—
(80%Imax) 12688.9	—
(90%Imax) 14275	—



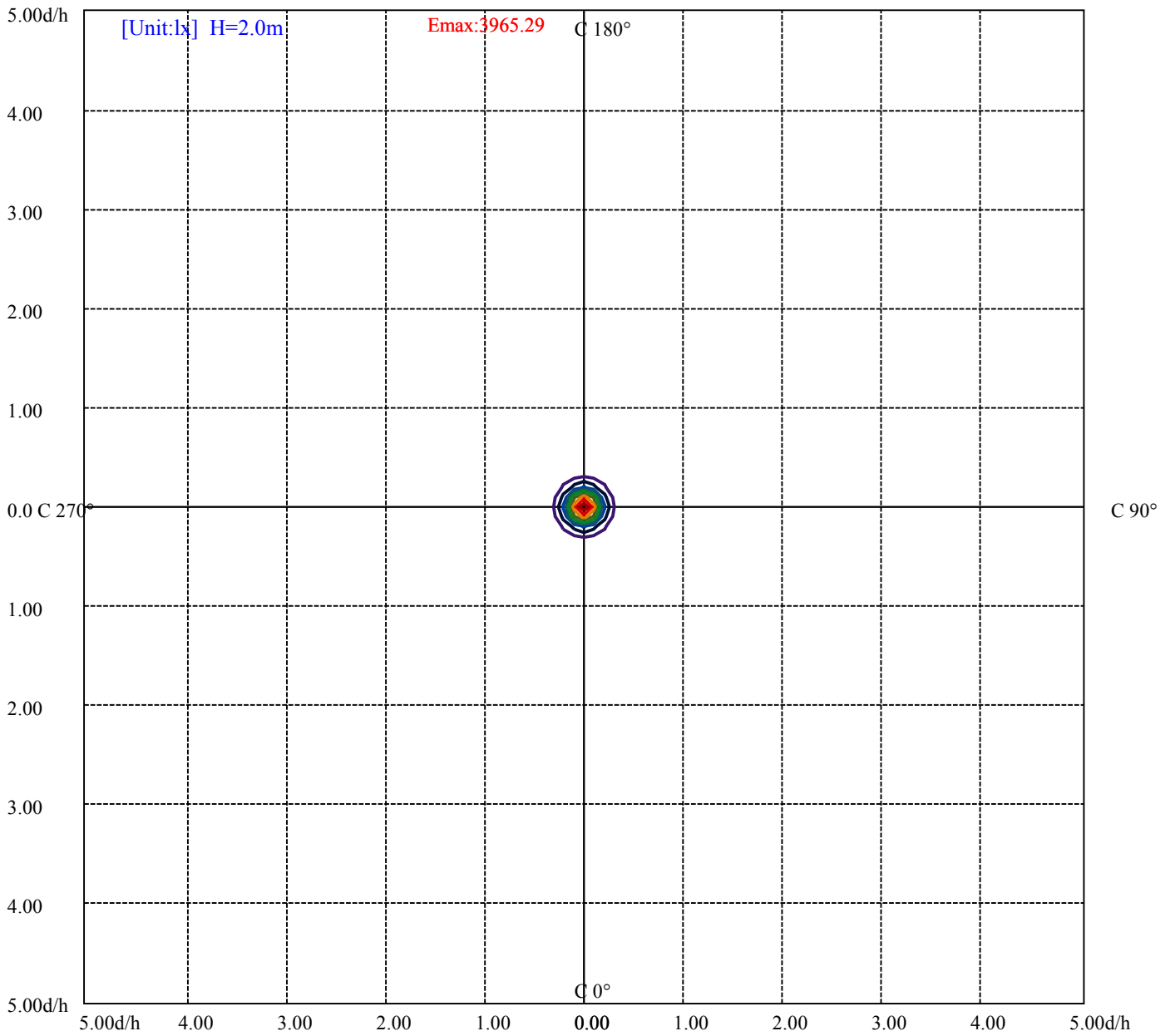
House

[Unit:cd]

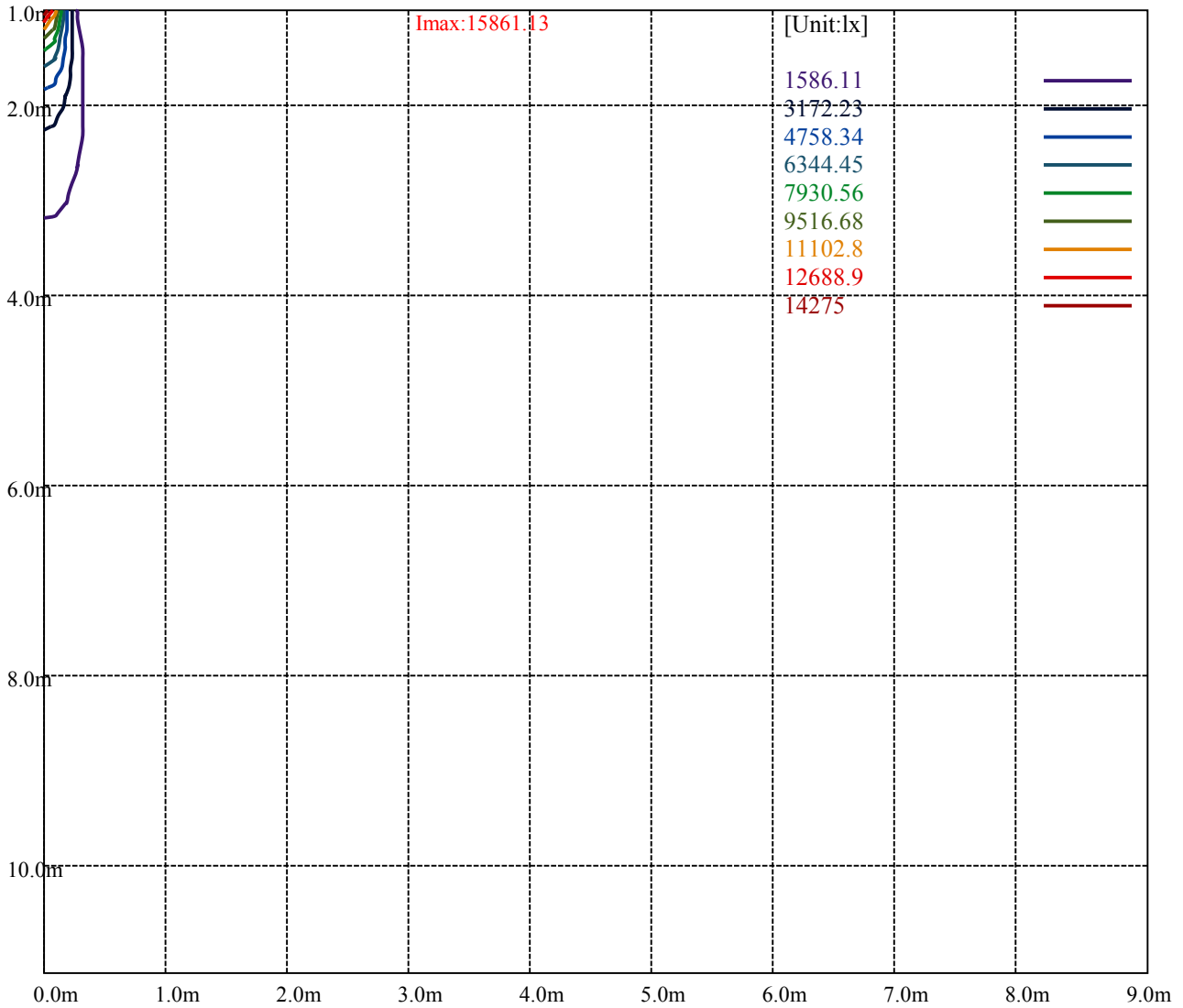
Road

**Imax:15861.13**

(10%Imax) 1586.11	—
(20%Imax) 3172.23	—
(30%Imax) 4758.34	—
(40%Imax) 6344.45	—
(50%Imax) 7930.56	—
(60%Imax) 9516.68	—
(70%Imax) 11102.8	—
(80%Imax) 12688.9	—
(90%Imax) 14275	—



- (10%Emax) 396.5275
- (20%Emax) 793.055
- (30%Emax) 1189.583
- (40%Emax) 1586.113
- (50%Emax) 1982.64
- (60%Emax) 2379.167
- (70%Emax) 2775.7
- (80%Emax) 3172.225
- (90%Emax) 3568.75



Luminance Table

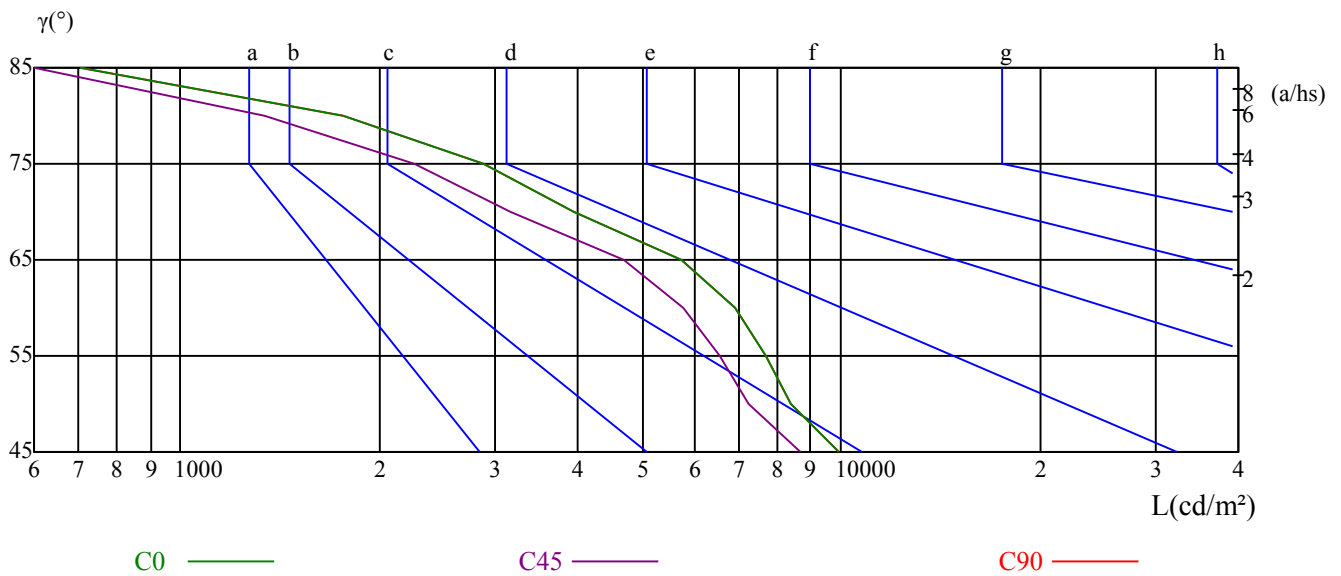
$\gamma$	45	50	55	60	65	70	75	80	85
C0	9911	8424	7710	6925	5721	3934	2876	1763	705
C45	8665	7258	6540	5777	4687	3157	2255	1345	520
C90	9911	8424	7710	6925	5721	3934	2876	1763	705

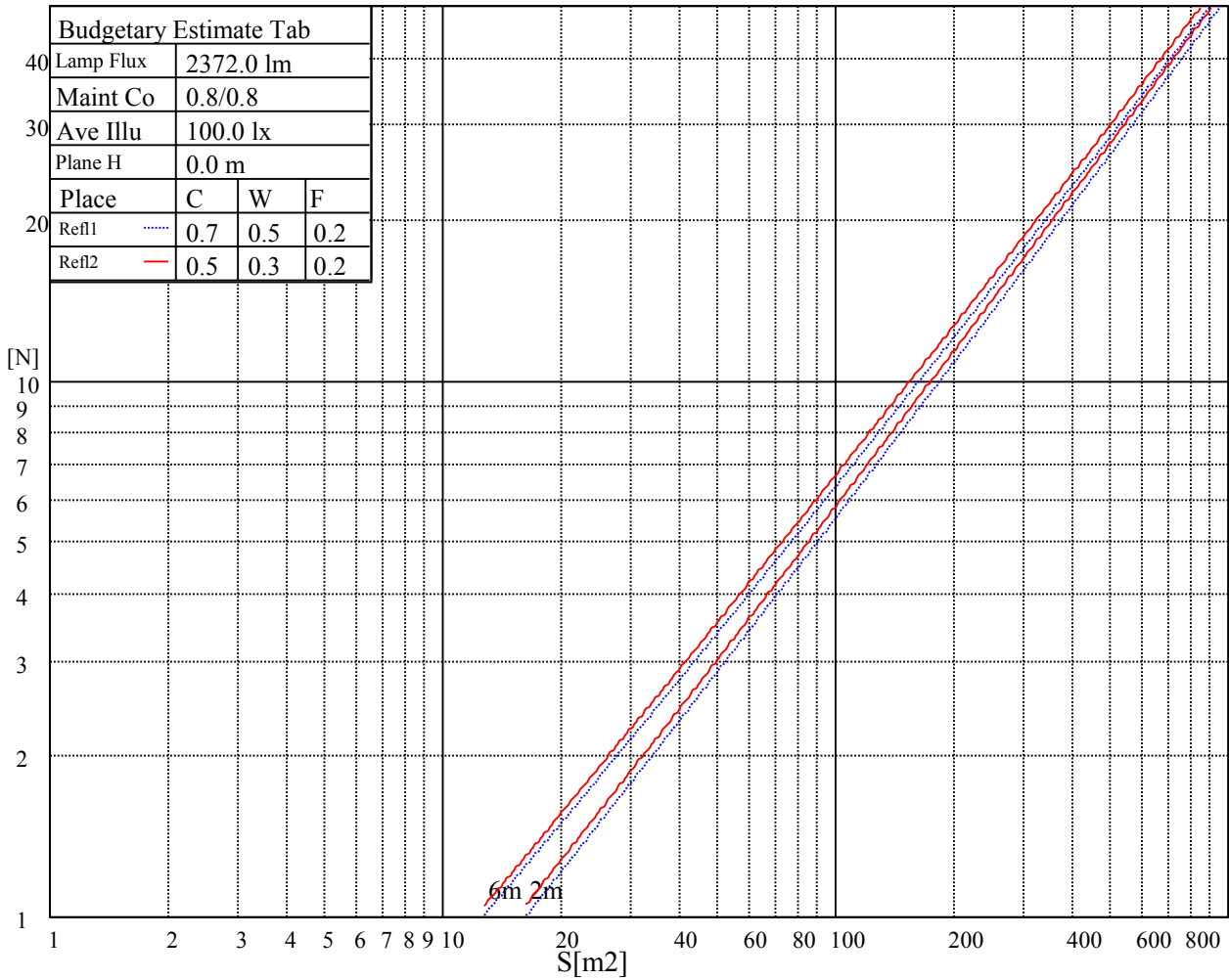
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
12252	12252	12252	8590	8590	8590	4991	4991	4991

Glare Table

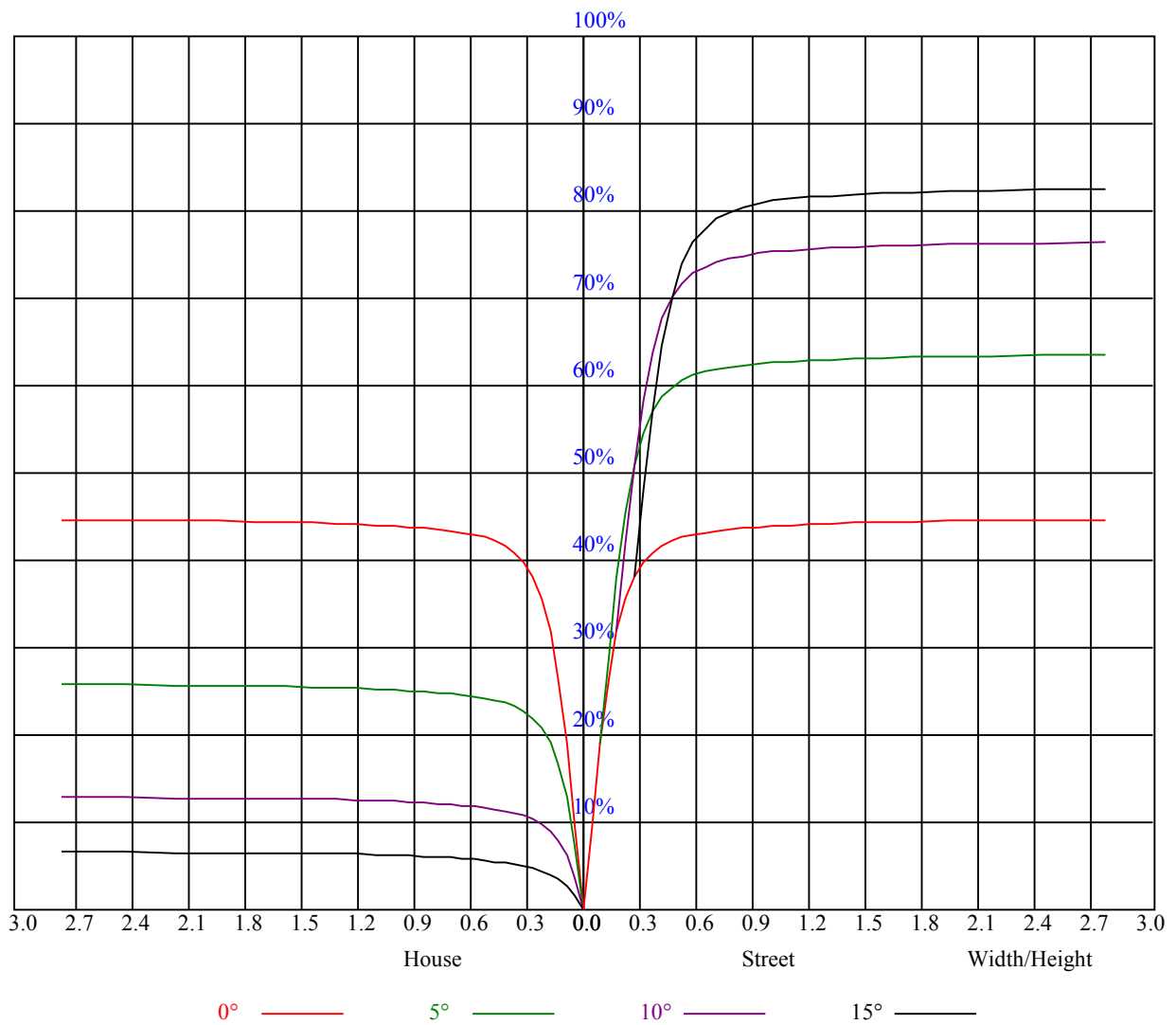
Glare	Quality	Service Values Illuminance(lx)							
		a	b	c	d	e	f	g	h
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

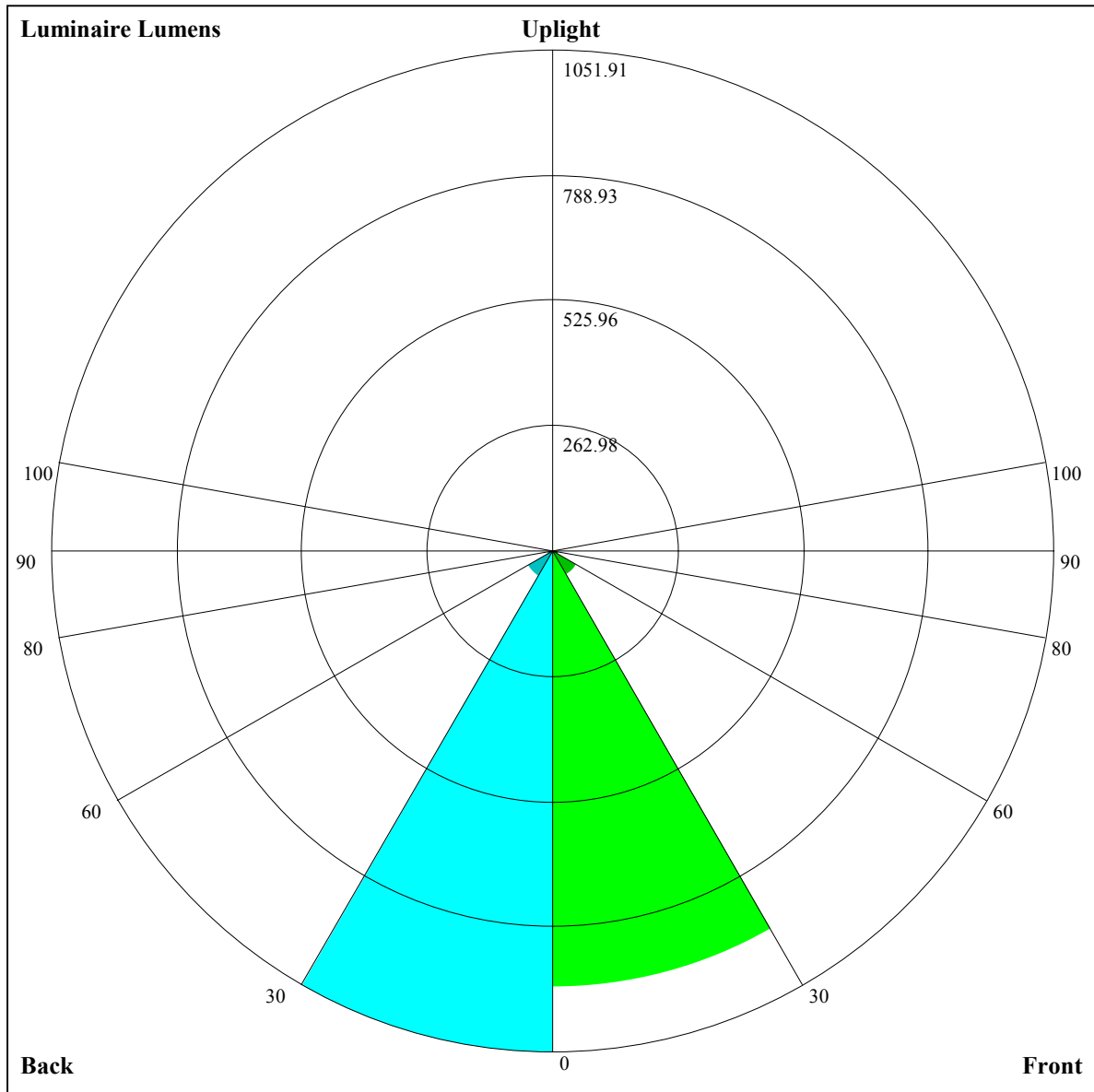
Luminance Limiting Curve





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	1.07	1.07	1.07	1.04	1.04	1.04	1.00	1.00	1.00	0.95	0.95	0.95	0.92	0.92	0.92	0.90
1	1.01	1.00	0.98	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
2	0.97	0.94	0.92	0.95	0.93	0.91	0.93	0.91	0.89	0.90	0.88	0.87	0.88	0.86	0.85	0.84
3	0.93	0.90	0.87	0.92	0.89	0.87	0.90	0.87	0.85	0.88	0.86	0.84	0.86	0.84	0.83	0.82
4	0.90	0.86	0.84	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.84	0.82	0.80	0.79
5	0.87	0.83	0.81	0.86	0.83	0.80	0.85	0.82	0.80	0.83	0.81	0.79	0.82	0.80	0.78	0.77
6	0.84	0.81	0.78	0.84	0.80	0.78	0.82	0.80	0.78	0.81	0.79	0.77	0.80	0.78	0.77	0.76
7	0.82	0.79	0.76	0.82	0.78	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.79	0.77	0.75	0.74
8	0.80	0.77	0.74	0.80	0.76	0.74	0.79	0.76	0.74	0.78	0.75	0.74	0.77	0.75	0.73	0.72
9	0.78	0.75	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.76	0.74	0.72	0.76	0.74	0.72	0.71
10	0.76	0.73	0.71	0.76	0.73	0.71	0.76	0.73	0.71	0.75	0.72	0.71	0.75	0.72	0.70	0.70





Luminaire Lumens:

FL=918.02,FM=58.25,FH=13.76,FVH=0.98

BL=1051.91,BM=62.4,BH=14.6,BVH=1.17

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	15763.87	15438.81	14868.60	14037.28	12950.16	9949.40	9949.40	8506.31	7656.87
45.0	15907.76	15859.80	15662.62	15246.96	14580.84	13674.91	12539.83	11223.57	9806.05
90.0	15881.11	15699.93	15294.92	14666.10	13834.78	12752.99	9793.26	9793.26	8932.10
135.0	15891.77	15897.10	15838.48	15417.49	15108.41	14431.62	13499.05	12369.30	11058.37
180.0	15763.87	15918.42	15902.43	15710.58	15316.24	14698.07	14197.15	12699.70	11420.74
225.0	15907.76	15795.85	15476.11	14921.89	14484.91	13067.40	10384.78	9810.32	9520.42
270.0	15881.11	15902.43	15758.55	15406.83	14831.30	13999.98	12875.56	11575.28	10733.30
315.0	15891.77	15561.37	15289.59	14644.78	13738.85	12113.51	10089.02	9801.26	8378.95
360.0	15763.87	15438.81	14868.60	14037.28	12950.16	9949.40	9949.40	8506.31	7656.87
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5799.18	5087.22	4059.79	3250.32	2609.77	2097.12	1690.52	1260.47	1005.37
45.0	8340.58	6928.39	5622.79	4487.71	3549.81	2819.73	2819.73	2226.62	1519.99
90.0	6958.24	5632.91	4922.56	3902.05	3077.12	2428.05	1921.80	1533.85	1030.52
135.0	9646.18	8234.00	6853.79	5585.48	4471.72	3533.82	2803.75	2803.75	2207.96
180.0	10605.40	8612.36	7759.72	6395.49	5169.82	4120.01	3267.37	2846.38	2846.38
225.0	8076.79	6681.66	5397.37	4286.81	3399.00	2702.50	2154.67	1728.89	1273.26
270.0	8729.59	7306.75	6496.74	5255.09	4183.96	3336.65	2910.33	2910.33	1745.94
315.0	6991.81	5717.64	4603.88	3683.56	2962.02	2498.93	1949.51	1663.87	1248.74
360.0	5799.18	5087.22	4059.79	3250.32	2609.77	2097.12	1690.52	1260.47	1005.37
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	969.35	814.38	689.52	581.39	492.03	420.51	357.20	312.92	258.94
45.0	1236.49	1016.40	844.27	705.72	591.15	498.95	419.02	355.60	302.31
90.0	1030.52	852.59	708.86	598.98	523.15	426.75	364.82	318.94	269.75
135.0	1393.69	1236.49	1025.99	860.79	727.04	614.59	524.53	445.66	379.05
180.0	1682.53	1372.38	1127.78	934.87	785.65	685.47	560.24	475.51	416.89
225.0	1006.22	1006.22	838.89	706.57	590.88	498.69	420.94	354.38	301.89
270.0	1429.93	1184.80	985.49	826.69	696.66	586.88	496.82	433.41	366.80
315.0	1045.28	977.02	822.96	698.05	590.56	500.45	426.37	361.41	308.28
360.0	969.35	814.38	689.52	581.39	492.03	420.51	357.20	312.92	258.94
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	229.95	196.53	168.34	147.13	128.16	112.12	99.33	88.46	79.08
45.0	272.47	272.47	186.46	165.84	143.94	125.23	110.68	97.52	87.13
90.0	232.13	197.17	168.88	146.60	127.31	110.42	97.79	86.97	77.75
135.0	324.70	276.73	276.73	203.62	175.70	152.30	132.59	119.32	102.80
180.0	342.81	303.38	276.73	276.73	190.14	163.28	141.64	124.01	108.29
225.0	254.41	217.37	185.61	160.03	138.07	120.44	105.78	93.52	83.29
270.0	309.77	281.53	281.53	191.52	163.97	141.70	123.05	107.75	95.12
315.0	262.45	238.85	204.90	166.26	152.52	132.53	116.23	102.37	90.81
360.0	229.95	196.53	168.34	147.13	128.16	112.12	99.33	88.46	79.08
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	71.68	65.07	59.52	54.89	50.95	47.69	44.76	42.47	40.34
45.0	78.18	70.82	64.59	58.94	54.46	50.68	47.43	44.87	42.53
90.0	70.08	63.68	58.57	54.25	50.63	47.48	44.71	42.47	41.19
135.0	91.45	83.61	75.30	68.32	62.51	57.50	53.18	49.56	46.36
180.0	95.92	85.21	76.63	69.54	65.65	60.11	53.77	51.48	48.07
225.0	77.80	68.05	64.11	58.57	54.20	50.63	47.27	44.60	42.31
270.0	84.57	75.88	68.74	62.62	59.47	53.29	51.11	47.91	44.07
315.0	81.21	73.11	66.51	60.80	56.06	52.01	48.60	45.83	43.22
360.0	71.68	65.07	59.52	54.89	50.95	47.69	44.76	42.47	40.34

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	38.58	37.68	35.81	34.75	34.11	33.31	32.51	31.81	31.07
45.0	40.29	38.48	36.82	35.92	34.32	33.04	32.40	31.49	30.64
90.0	38.58	37.62	36.08	34.32	33.73	32.67	31.76	30.91	30.16
135.0	43.64	41.35	39.33	37.62	36.13	34.85	33.68	32.72	31.87
180.0	45.14	42.63	40.50	38.58	37.04	35.70	34.48	33.47	32.61
225.0	40.34	38.64	37.14	35.70	34.43	33.36	32.45	31.44	30.64
270.0	42.58	40.61	38.64	37.04	35.76	34.59	33.52	32.67	31.87
315.0	41.09	39.33	37.84	36.50	35.38	34.64	33.63	32.99	32.24
360.0	38.58	37.68	35.81	34.75	34.11	33.31	32.51	31.81	31.07
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	30.48	29.68	28.78	27.98	26.96	25.90	24.73	23.55	22.33
45.0	29.79	28.94	28.24	27.34	26.38	25.42	24.51	23.45	22.49
90.0	29.47	28.78	28.03	27.28	26.33	25.42	24.57	23.55	22.54
135.0	31.12	30.64	29.58	28.83	28.35	27.50	26.65	25.69	24.67
180.0	31.81	31.07	30.38	29.68	28.88	28.19	27.23	26.27	25.47
225.0	29.95	28.99	28.19	27.44	26.38	25.63	24.57	23.61	22.44
270.0	31.17	30.54	29.95	29.20	28.46	27.50	26.54	25.69	24.41
315.0	31.55	30.75	29.90	28.99	28.03	27.02	25.85	24.78	23.50
360.0	30.48	29.68	28.78	27.98	26.96	25.90	24.73	23.55	22.33
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	21.00	19.61	18.28	16.36	15.08	12.90	12.04	11.46	10.66
45.0	21.42	20.30	19.08	17.85	16.52	14.87	13.43	12.84	11.56
90.0	21.32	20.14	18.92	17.53	16.36	14.39	12.68	12.15	11.35
135.0	23.61	22.54	21.37	20.09	18.76	17.21	15.24	13.70	12.79
180.0	24.25	23.34	22.17	20.89	19.61	18.28	16.47	14.39	13.00
225.0	21.32	20.20	18.97	17.75	16.47	14.71	13.11	12.15	11.35
270.0	23.23	22.28	20.78	19.72	18.33	16.84	14.76	12.95	12.04
315.0	22.28	20.94	19.66	18.17	16.20	14.18	13.11	12.26	11.78
360.0	21.00	19.61	18.28	16.36	15.08	12.90	12.04	11.46	10.66
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	9.81	8.95	8.15	7.35	6.61	5.81	5.01	4.32	3.62
45.0	11.08	10.23	9.43	8.63	7.78	7.03	6.23	5.44	4.69
90.0	10.50	9.65	8.79	8.05	7.30	6.50	5.65	4.90	4.16
135.0	11.94	11.14	10.23	9.38	8.95	8.10	7.30	6.55	5.76
180.0	12.10	11.30	10.44	9.59	8.74	7.94	7.19	6.39	5.60
225.0	10.50	9.65	8.90	8.10	7.25	6.39	5.97	4.96	4.48
270.0	11.19	10.34	9.59	8.74	7.94	7.14	6.39	5.70	4.90
315.0	10.55	9.81	9.27	8.53	7.67	6.87	6.08	5.33	4.64
360.0	9.81	8.95	8.15	7.35	6.61	5.81	5.01	4.32	3.62
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	3.09	2.56	1.92	1.39	0.96	0.59	0.43	0.43	0.37
45.0	4.00	3.41	2.66	2.03	1.49	0.96	0.53	0.37	0.43
90.0	3.57	2.98	2.34	1.76	1.28	0.85	0.53	0.43	0.43
135.0	4.96	4.05	3.52	2.82	2.34	1.81	1.28	0.80	0.64
180.0	4.85	4.21	3.52	2.98	2.24	1.76	1.17	0.75	0.48
225.0	3.62	3.09	2.61	2.08	1.60	1.01	0.64	0.37	0.32
270.0	4.16	3.46	2.88	2.29	1.81	1.28	0.96	0.59	0.43
315.0	4.00	3.25	2.72	2.18	1.65	1.12	0.75	0.64	0.64
360.0	3.09	2.56	1.92	1.39	0.96	0.59	0.43	0.43	0.37

Intensity data(cd)

C/γ(°)	90.0
0.0	0.32
45.0	0.32
90.0	0.37
135.0	0.53
180.0	0.43
225.0	0.32
270.0	0.43
315.0	0.53
360.0	0.32