



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

NATA

Client:

LumCAT: LN01D06324BF

Luminaire: 92.70.131.00

Report No:

Voltage(V): 220.4000

Test No: GC2019082943

Current(A): 0.0690

LampCAT: TRIDONIC SLE G7 15MM

Power (W): 14.0400

Lamp flux(lm): 1584.0

PF: 0.9160

Number of Lamps: 1

Ballast type: AC

Length(mm): 63

Width(mm): 63

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1497.85, Efficiency(%): 94.56% , Luminous Efficacy(lm/W): 106.68

Central intensity(cd): 5598.725, Maximum intensity(cd): 5598.725

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=26.6

[C90/270]Total=26.6

Field angle(10%Imax): [C0/180]Total=46.4

[C90/270]Total=46.4

Maximum s/h(1/2): C0_180=0.45 C90_270=0.45

Maximum s/h(1/4): C0_180=0.42 C90_270=0.42

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 94.56%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.923%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5598.726	0.000	0	.000%	.000%
1.0	5584.167	5.351	5.351	.338%	.357%
2.0	5543.796	15.972	21.323	1.008%	1.424%
3.0	5465.258	26.330	47.653	1.662%	3.181%
4.0	5354.586	36.217	83.87	2.286%	5.599%
5.0	5220.887	45.495	129.365	2.872%	8.637%
6.0	5037.129	53.909	183.274	3.403%	12.236%
7.0	4826.052	61.221	244.495	3.865%	16.323%
8.0	4601.692	67.473	311.967	4.260%	20.828%
9.0	4321.010	72.314	384.281	4.565%	25.656%
10.0	4022.288	75.504	459.784	4.767%	30.696%
11.0	3705.353	77.215	536.999	4.875%	35.851%
12.0	3325.774	76.860	613.86	4.852%	40.983%
13.0	2891.497	73.783	687.643	4.658%	45.909%
14.0	2528.159	69.371	757.014	4.379%	50.540%
15.0	2155.656	64.301	821.316	4.059%	54.833%
16.0	1790.693	57.825	879.141	3.651%	58.694%
17.0	1479.675	50.928	930.069	3.215%	62.094%
18.0	1213.743	44.409	974.478	2.804%	65.058%
19.0	1043.930	39.279	1013.757	2.480%	67.681%
20.0	899.755	35.575	1049.332	2.246%	70.056%
21.0	765.632	31.979	1081.31	2.019%	72.191%
22.0	657.396	28.596	1109.907	1.805%	74.100%
23.0	571.179	25.779	1135.685	1.627%	75.821%
24.0	504.770	23.524	1159.21	1.485%	77.392%
25.0	447.253	21.647	1180.856	1.367%	78.837%
26.0	396.076	19.907	1200.763	1.257%	80.166%
27.0	357.126	18.427	1219.191	1.163%	81.396%
28.0	317.428	17.078	1236.269	1.078%	82.536%
29.0	285.201	15.766	1252.035	.995%	83.589%
30.0	251.541	14.492	1266.527	.915%	84.556%
31.0	227.173	13.322	1279.849	.841%	85.446%
32.0	212.208	12.588	1292.437	.795%	86.286%
33.0	190.294	11.858	1304.295	.749%	87.078%
34.0	163.137	10.696	1314.991	.675%	87.792%
35.0	148.009	9.663	1324.654	.610%	88.437%
36.0	134.819	9.005	1333.659	.569%	89.038%
37.0	123.236	8.416	1342.075	.531%	89.600%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	112.789	7.878	1349.954	.497%	90.126%
39.0	103.590	7.386	1357.339	.466%	90.619%
40.0	95.585	6.947	1364.286	.439%	91.083%
41.0	88.613	6.559	1370.845	.414%	91.521%
42.0	82.563	6.219	1377.064	.393%	91.936%
43.0	77.459	5.928	1382.992	.374%	92.332%
44.0	72.505	5.660	1388.652	.357%	92.710%
45.0	67.569	5.383	1394.035	.340%	93.069%
46.0	63.172	5.113	1399.148	.323%	93.410%
47.0	59.095	4.863	1404.011	.307%	93.735%
48.0	55.214	4.621	1408.632	.292%	94.044%
49.0	51.879	4.398	1413.03	.278%	94.337%
50.0	49.321	4.219	1417.249	.266%	94.619%
51.0	46.450	4.052	1421.301	.256%	94.889%
52.0	44.043	3.883	1425.184	.245%	95.149%
53.0	42.041	3.745	1428.929	.236%	95.399%
54.0	39.976	3.615	1432.544	.228%	95.640%
55.0	38.260	3.492	1436.036	.220%	95.873%
56.0	36.537	3.380	1439.416	.213%	96.099%
57.0	34.890	3.266	1442.682	.206%	96.317%
58.0	33.289	3.153	1445.834	.199%	96.527%
59.0	31.606	3.034	1448.868	.192%	96.730%
60.0	29.594	2.891	1451.76	.183%	96.923%
61.0	27.471	2.723	1454.483	.172%	97.105%
62.0	25.655	2.560	1457.043	.162%	97.276%
63.0	24.066	2.418	1459.461	.153%	97.437%
64.0	22.622	2.291	1461.752	.145%	97.590%
65.0	21.322	2.175	1463.927	.137%	97.735%
66.0	20.267	2.075	1466.002	.131%	97.874%
67.0	19.298	1.989	1467.991	.126%	98.007%
68.0	18.503	1.915	1469.906	.121%	98.134%
69.0	17.761	1.850	1471.756	.117%	98.258%
70.0	17.152	1.793	1473.549	.113%	98.378%
71.0	16.630	1.746	1475.295	.110%	98.494%
72.0	15.945	1.694	1476.989	.107%	98.607%
73.0	15.400	1.639	1478.628	.103%	98.717%
74.0	14.849	1.590	1480.218	.100%	98.823%
75.0	14.217	1.536	1481.754	.097%	98.925%

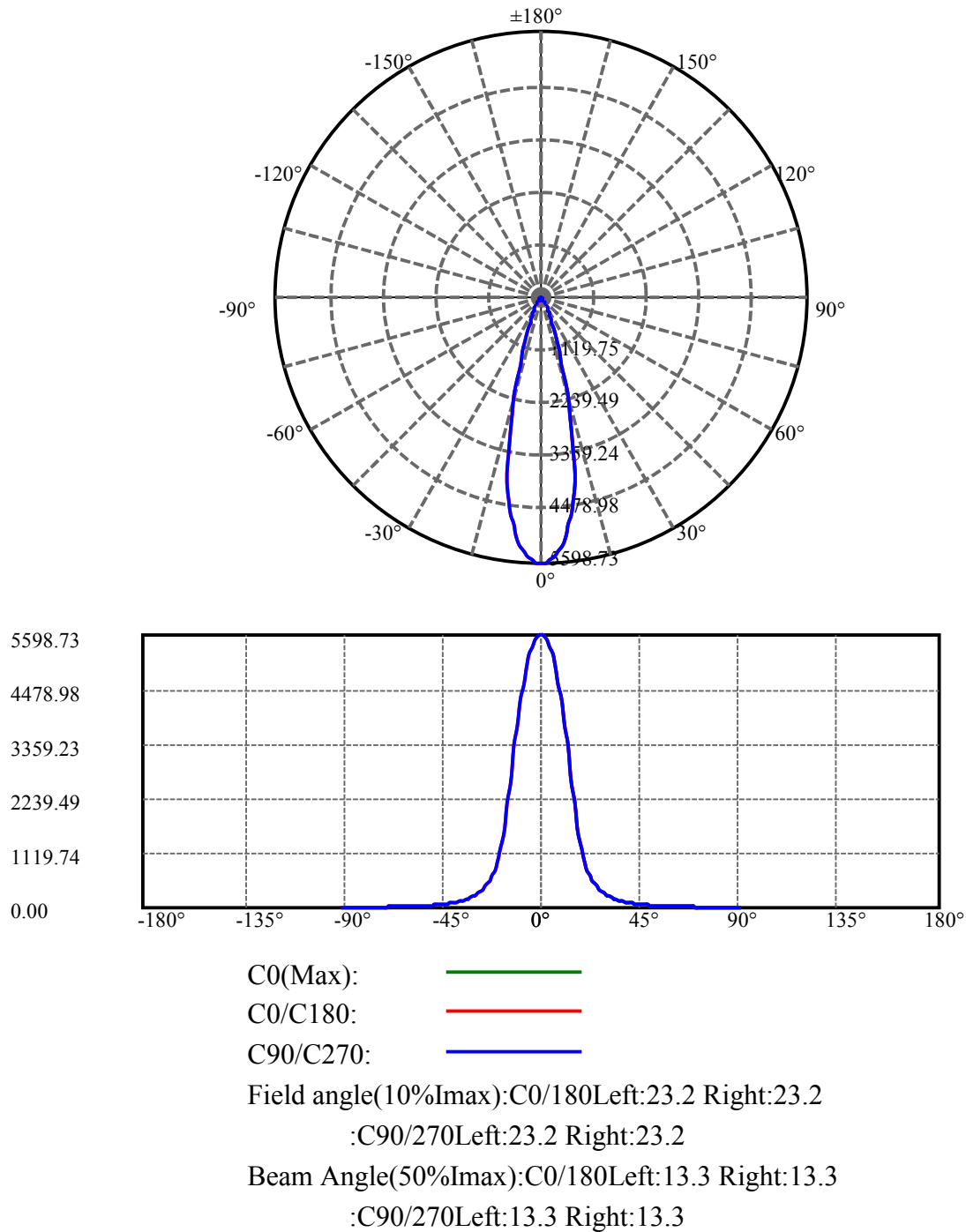
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	13.643	1.479	1483.233	.093%	99.024%
77.0	13.039	1.423	1484.655	.090%	99.119%
78.0	12.448	1.364	1486.02	.086%	99.210%
79.0	11.897	1.308	1487.328	.083%	99.298%
80.0	11.340	1.253	1488.581	.079%	99.381%
81.0	10.789	1.197	1489.777	.076%	99.461%
82.0	10.203	1.138	1490.916	.072%	99.537%
83.0	9.634	1.078	1491.994	.068%	99.609%
84.0	9.060	1.018	1493.012	.064%	99.677%
85.0	8.515	0.959	1493.972	.061%	99.741%
86.0	7.912	0.898	1494.87	.057%	99.801%
87.0	7.233	0.829	1495.698	.052%	99.856%
88.0	6.665	0.761	1496.46	.048%	99.907%
89.0	6.282	0.710	1497.169	.045%	99.955%
90.0	6.114	0.680	1497.849	.043%	100.000%

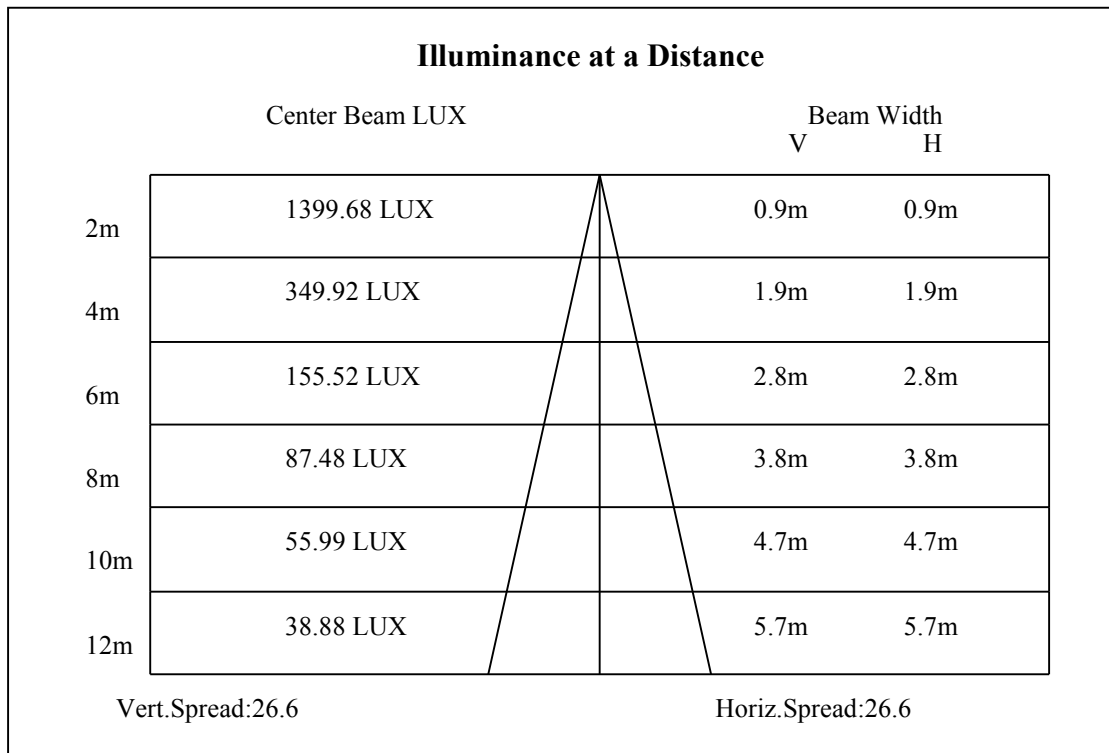
ZONAL LUMEN SUMMARY

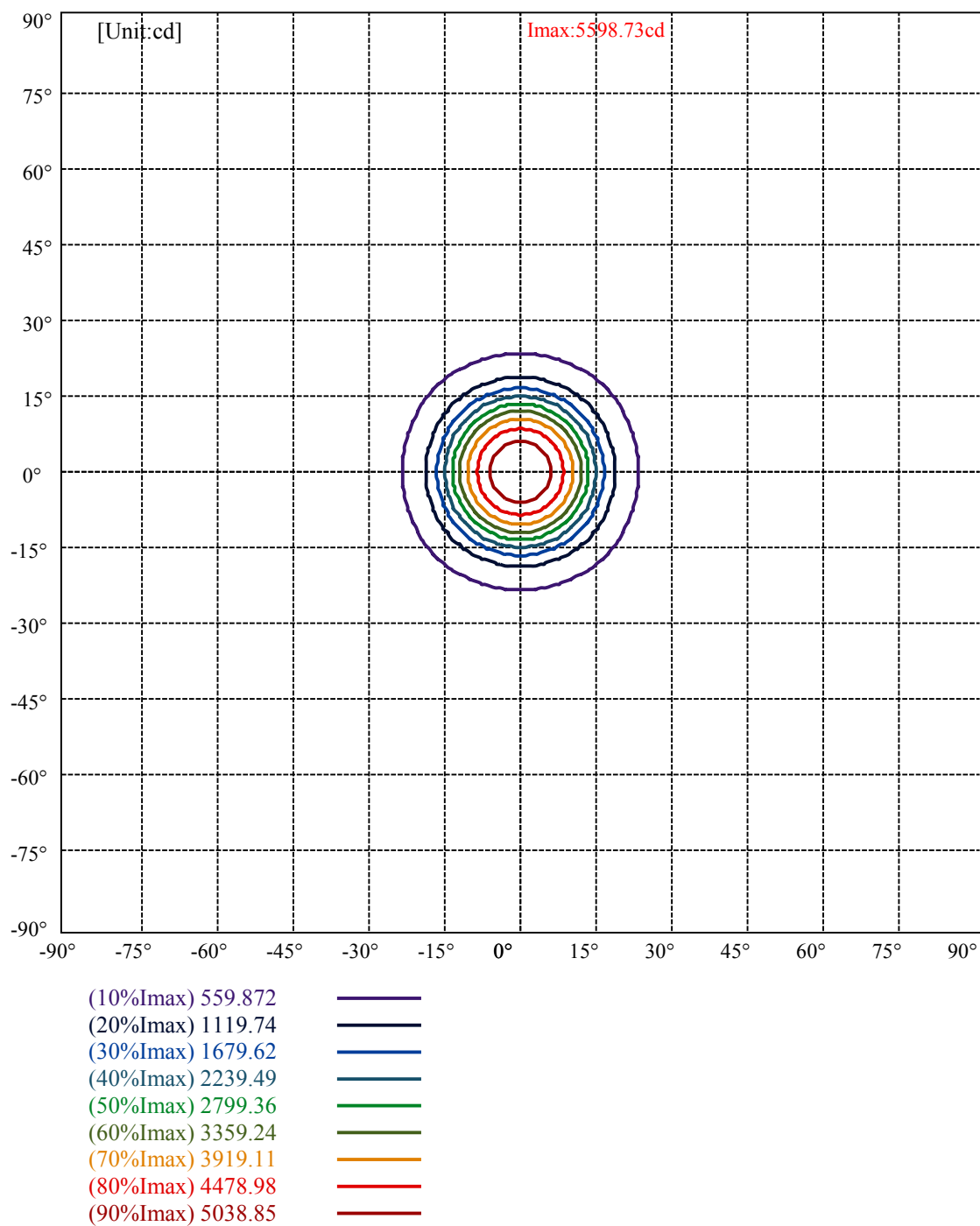
Zone	Lumens	%Lamp	%Fixt
0-30	1266.53	79.96%	84.56%
0-40	1364.29	86.13%	91.08%
0-60	1451.76	91.65%	96.92%
0-90	1497.17	94.52%	99.95%
0-120	1497.17	94.52%	99.95%
0-180	1497.85	94.56%	100.00%
60-90	48.30	3.05%	3.22%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.88	1198.28	75.65%	80.00%

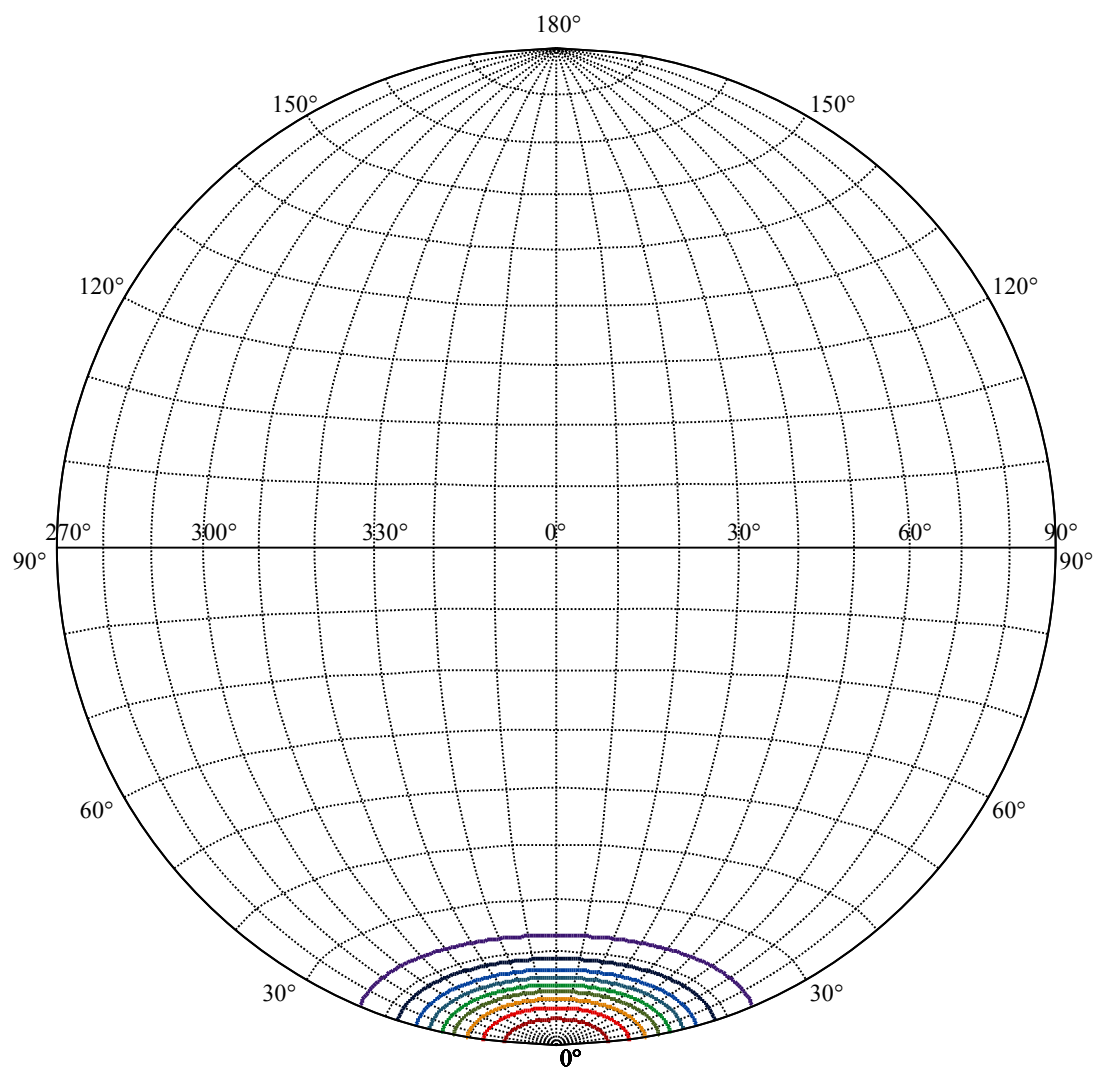
ZONAL LUMEN SUMMARY

0-10	459.78
10-20	589.55
20-30	217.20
30-40	97.76
40-50	52.96
50-60	34.51
60-70	21.79
70-80	15.03
80-90	8.59
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









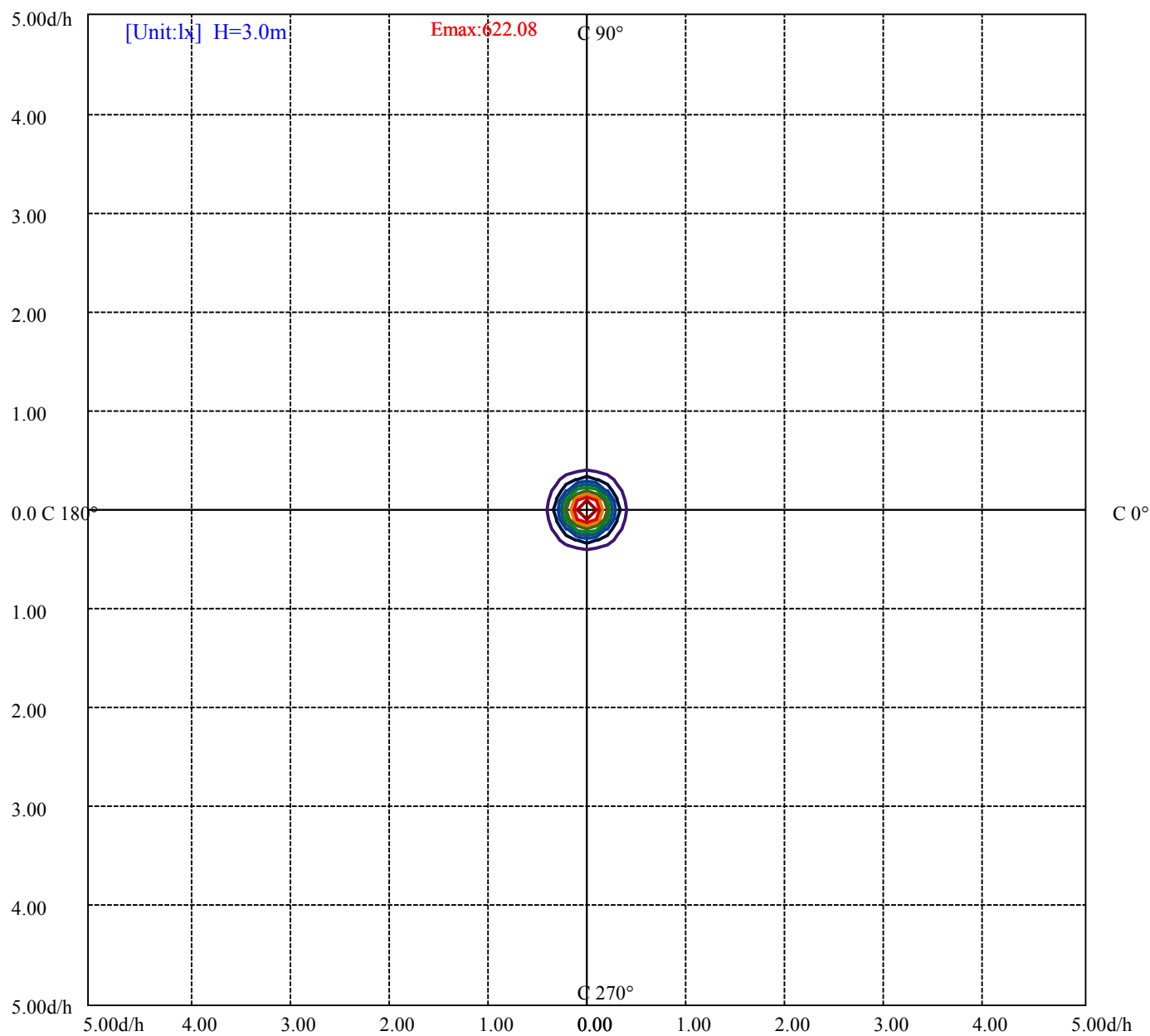
House

[Unit:cd]

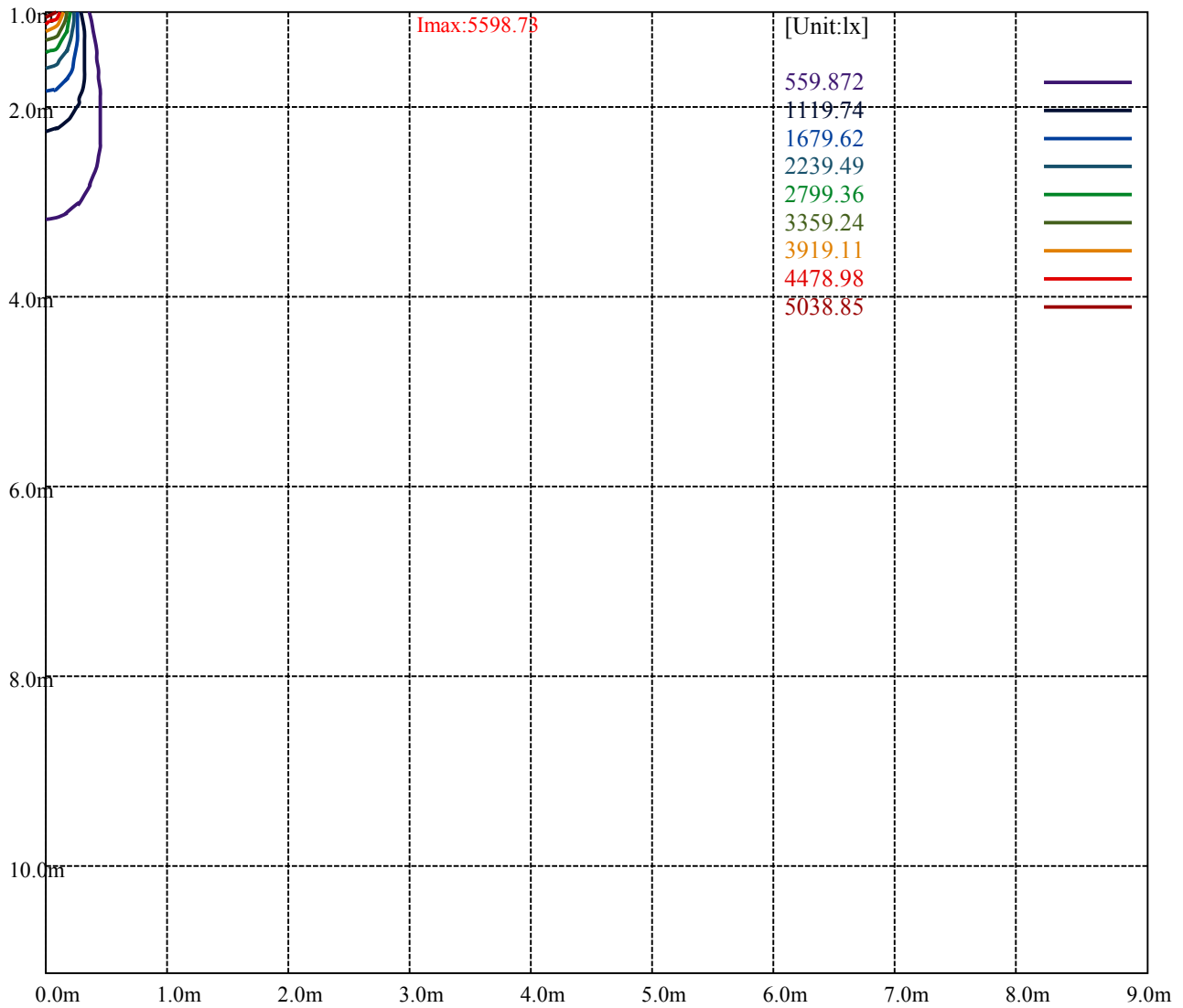
Road

Imax:5598.73

(10%Imax)	559.872	—
(20%Imax)	1119.74	—
(30%Imax)	1679.62	—
(40%Imax)	2239.49	—
(50%Imax)	2799.36	—
(60%Imax)	3359.24	—
(70%Imax)	3919.11	—
(80%Imax)	4478.98	—
(90%Imax)	5038.85	—



(10%E _{max}) 62.208	—
(20%E _{max}) 124.4156	—
(30%E _{max}) 186.6245	—
(40%E _{max}) 248.8322	—
(50%E _{max}) 311.04	—
(60%E _{max}) 373.2478	—
(70%E _{max}) 435.4567	—
(80%E _{max}) 497.6644	—
(90%E _{max}) 559.8723	—



Luminance Table

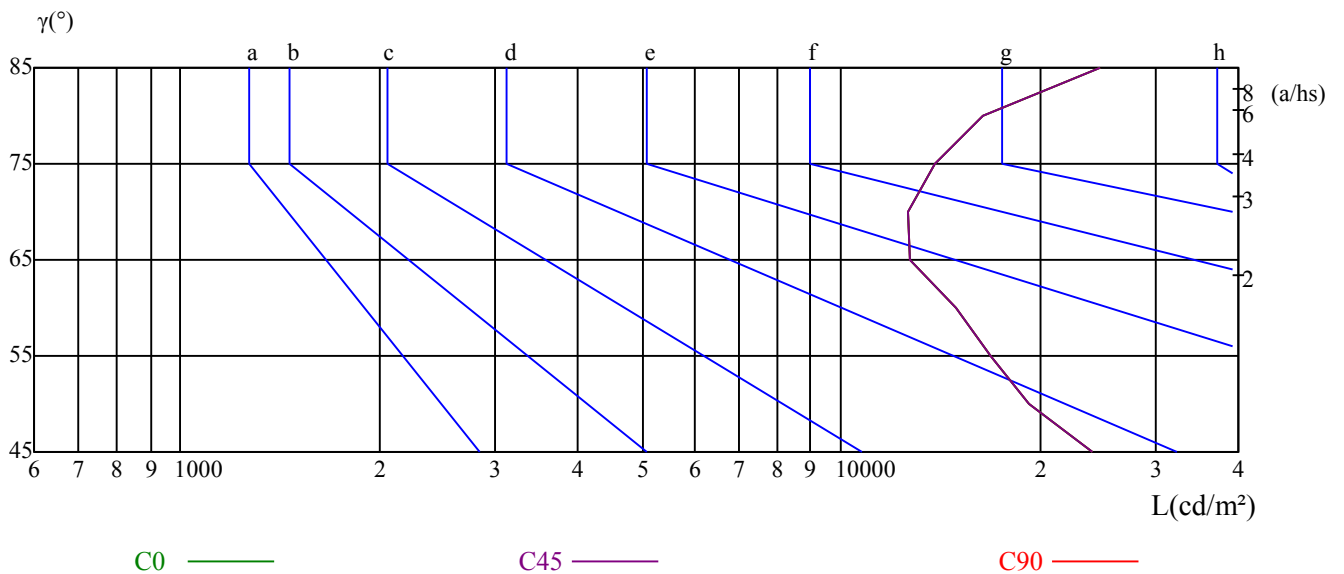
γ	45	50	55	60	65	70	75	80	85
C0	24076	19332	16806	14912	12712	12635	13840	16453	24615
C45	24076	19332	16806	14912	12712	12635	13840	16453	24615
C90	24076	19332	16806	14912	12712	12635	13840	16453	24615

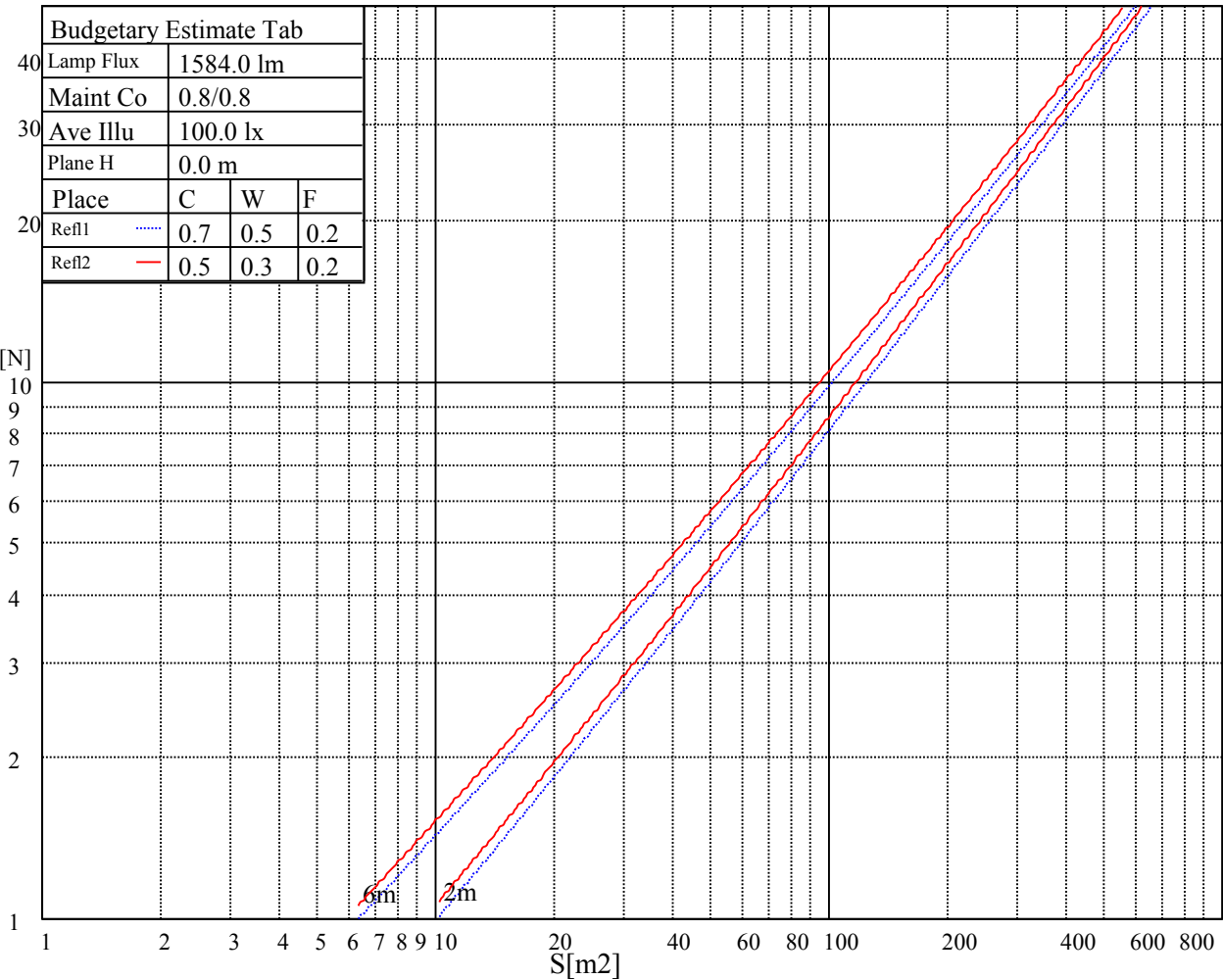
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
12712	12712	12712	13840	13840	13840	24615	24615	24615

Glare Table

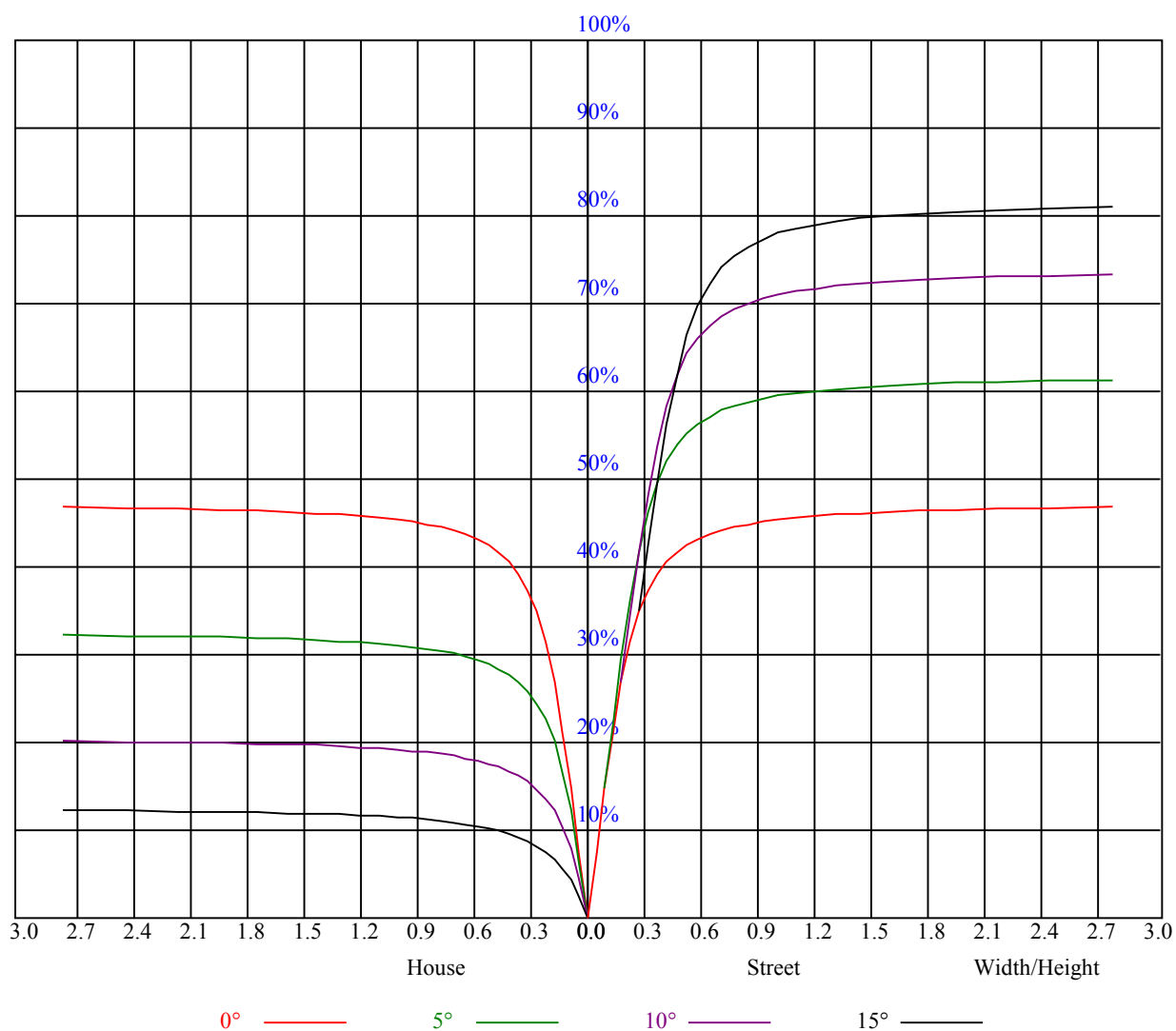
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

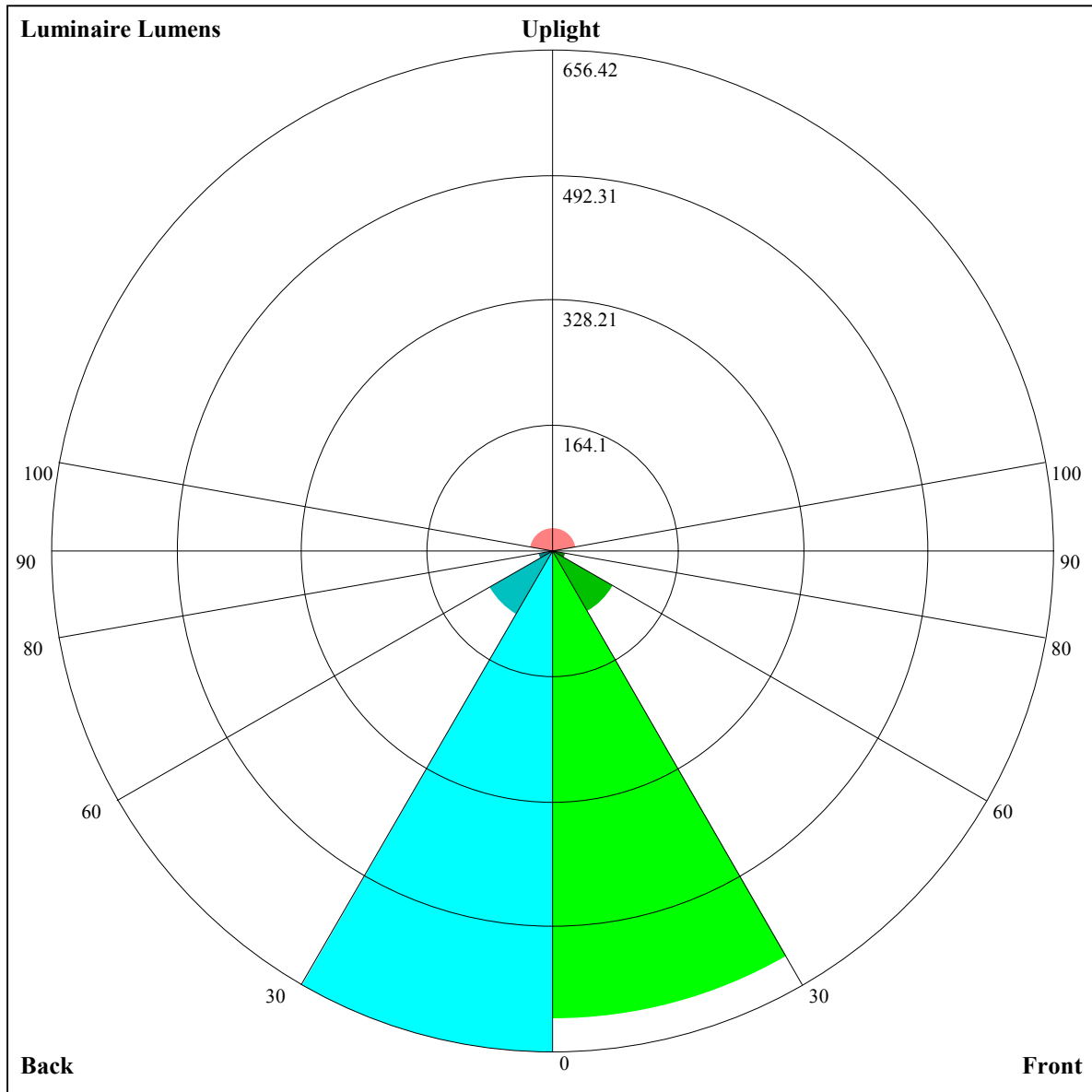
Luminance Limiting Curve





RHOC	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	1.13	1.13	1.13	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	0.96	0.96	0.96	0.95
1	1.05	1.03	1.01	1.03	1.01	1.00	1.00	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.89
2	0.99	0.96	0.93	0.98	0.95	0.92	0.95	0.92	0.90	0.92	0.90	0.88	0.89	0.88	0.86	0.85
3	0.94	0.90	0.87	0.93	0.89	0.86	0.91	0.87	0.85	0.88	0.86	0.84	0.86	0.84	0.82	0.81
4	0.90	0.85	0.82	0.89	0.85	0.81	0.87	0.83	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.77
5	0.86	0.81	0.78	0.85	0.81	0.77	0.83	0.80	0.77	0.82	0.79	0.76	0.80	0.78	0.76	0.74
6	0.82	0.78	0.74	0.82	0.77	0.74	0.80	0.76	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.72
7	0.79	0.75	0.71	0.79	0.74	0.71	0.77	0.74	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.69
8	0.76	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.68	0.67
9	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.66	0.65
10	0.71	0.67	0.64	0.71	0.67	0.64	0.70	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.63





Luminaire Lumens:

FL=613.62,FM=91.5,FH=18.04,FVH=4.52

BL=656.42,BM=96.43,BH=18.88,BVH=4.76

UL=6.67,UH=31.74

BUG Rating:B2-U2-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	5595.83	5562.88	5506.73	5395.83	5258.01	5090.49	4872.40	4632.49	4354.54
45.0	5593.51	5610.21	5608.35	5574.94	5498.84	5400.93	5258.01	5041.31	4864.97
90.0	5617.64	5610.21	5572.62	5504.41	5401.86	5251.05	5073.79	4852.44	4592.59
135.0	5587.94	5611.14	5611.14	5566.13	5493.74	5399.08	5253.83	5081.21	4882.61
180.0	5595.83	5603.71	5574.94	5510.44	5423.21	5302.56	5156.39	4991.65	4785.16
225.0	5593.51	5549.42	5475.64	5354.53	5218.10	5046.87	4854.76	4631.10	4365.67
270.0	5617.64	5592.11	5557.31	5480.75	5359.17	5276.11	5036.67	4832.95	4701.63
315.0	5587.94	5533.65	5443.62	5335.04	5183.76	5000.01	4791.19	4545.25	4266.37
360.0	5595.83	5562.88	5506.73	5395.83	5258.01	5090.49	4872.40	4632.49	4354.54
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4052.91	3696.54	3370.32	2846.89	2414.41	2092.37	1743.88	1455.72	1219.53
45.0	4561.96	4270.55	4003.73	3629.25	3223.69	2798.63	2378.22	1994.93	1667.78
90.0	4303.49	3983.77	3623.68	3382.39	2787.03	2531.81	2129.03	1653.40	1485.88
135.0	4636.20	4367.07	4061.27	3713.24	3490.97	2923.46	2674.27	2267.78	1899.34
180.0	4645.49	4281.68	4110.45	3786.56	3254.31	3003.27	2579.61	2176.36	1821.38
225.0	4076.12	3739.69	3357.79	2942.02	2512.32	2264.07	1883.56	1564.77	1306.76
270.0	4329.94	4164.75	3849.20	3477.51	3050.60	2608.38	2193.07	1826.48	1518.83
315.0	3961.96	3674.26	3266.38	2828.33	2398.64	2003.28	1663.61	1386.11	917.90
360.0	4052.91	3696.54	3370.32	2846.89	2414.41	2092.37	1743.88	1455.72	1219.53
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	872.61	872.61	746.54	648.86	567.61	498.84	439.21	387.33	342.50
45.0	1395.39	1174.98	988.90	834.84	712.34	618.14	544.82	486.82	438.56
90.0	1250.15	870.06	870.06	734.52	628.90	551.50	493.13	445.47	403.20
135.0	1593.07	1338.32	1126.26	943.43	790.30	668.25	576.84	505.38	448.77
180.0	1520.22	1276.14	1075.21	904.91	764.77	654.80	567.10	496.10	439.02
225.0	921.94	921.94	779.25	671.18	585.89	516.75	458.79	408.63	363.90
270.0	1269.64	1068.25	900.27	768.02	665.47	581.94	514.20	458.05	407.47
315.0	886.91	829.13	711.55	619.30	543.89	479.21	444.08	390.25	325.19
360.0	872.61	872.61	746.54	648.86	567.61	498.84	439.21	387.33	342.50
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	301.58	278.70	244.36	203.06	188.44	167.56	150.53	136.24	123.66
45.0	413.04	355.50	318.37	295.64	261.76	243.20	243.20	183.39	164.78
90.0	363.85	326.35	305.10	258.23	229.70	214.01	191.92	173.18	157.77
135.0	401.90	360.14	320.69	283.11	262.69	236.24	236.24	176.70	158.70
180.0	388.91	343.43	303.06	280.32	245.52	245.52	185.47	165.98	149.93
225.0	323.66	286.63	260.88	226.96	207.75	187.61	170.53	155.87	142.92
270.0	362.46	323.01	294.24	256.66	234.85	234.85	191.37	174.38	159.49
315.0	301.62	265.66	234.89	208.35	186.68	168.68	153.08	139.35	126.82
360.0	301.58	278.70	244.36	203.06	188.44	167.56	150.53	136.24	123.66
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	112.48	102.83	94.52	87.66	81.99	76.66	71.69	67.38	63.53
45.0	148.77	135.03	122.69	111.92	102.37	94.57	87.70	82.04	77.86
90.0	144.31	131.92	120.46	110.35	101.72	93.69	87.15	82.51	76.80
135.0	143.90	131.55	120.05	110.02	101.02	93.50	86.87	81.07	76.06
180.0	136.80	125.52	114.99	105.52	97.73	90.86	84.50	78.61	73.60
225.0	130.76	119.67	110.21	101.53	93.87	87.38	81.99	76.70	71.46
270.0	145.57	133.13	121.72	111.37	102.09	94.06	87.61	82.09	76.66
315.0	115.96	106.22	97.68	90.35	83.90	78.19	72.99	69.28	64.08
360.0	112.48	102.83	94.52	87.66	81.99	76.66	71.69	67.38	63.53

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	59.67	55.96	52.85	49.84	47.15	45.06	42.27	40.56	38.61
45.0	72.71	66.31	61.48	57.31	53.55	50.30	47.56	45.06	42.92
90.0	69.84	63.94	59.21	55.50	52.34	50.49	46.59	44.13	42.88
135.0	71.74	67.75	63.20	60.60	55.36	51.97	50.30	47.47	44.92
180.0	69.23	65.06	62.69	57.31	53.87	51.88	48.77	45.80	42.97
225.0	66.31	61.67	57.54	53.87	50.58	48.77	45.34	43.16	41.95
270.0	70.90	67.70	62.83	56.84	54.62	51.09	47.98	45.57	43.43
315.0	60.14	56.98	52.95	50.44	47.56	45.01	42.78	40.60	38.65
360.0	59.67	55.96	52.85	49.84	47.15	45.06	42.27	40.56	38.61
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	36.75	35.13	33.50	31.88	30.21	28.54	26.91	25.20	23.76
45.0	41.21	39.49	37.82	36.29	34.71	32.81	30.53	27.98	26.13
90.0	41.16	39.54	37.96	36.47	35.41	34.11	31.79	28.86	26.36
135.0	42.55	40.28	38.28	36.57	34.94	33.27	31.60	29.93	28.26
180.0	40.56	38.61	36.80	34.94	33.32	31.83	30.16	28.35	26.73
225.0	39.35	38.38	36.66	34.94	33.32	31.28	28.58	26.59	24.96
270.0	41.39	39.63	37.96	36.38	34.52	32.85	30.72	28.03	25.80
315.0	36.84	35.03	33.32	31.65	29.88	28.17	26.45	24.83	23.25
360.0	36.75	35.13	33.50	31.88	30.21	28.54	26.91	25.20	23.76
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	22.55	21.30	20.14	19.16	18.47	17.73	17.03	16.47	16.06
45.0	24.59	23.06	21.67	20.84	19.26	18.75	17.91	17.26	16.71
90.0	24.45	22.83	21.44	20.32	19.35	18.47	17.77	17.22	16.61
135.0	26.31	24.69	23.20	21.86	20.60	19.63	19.07	18.00	17.31
180.0	25.29	23.85	22.55	21.44	20.42	19.81	18.70	18.14	17.77
225.0	23.43	22.04	20.84	19.81	18.89	18.10	17.45	16.84	16.47
270.0	24.04	22.55	21.25	20.09	19.26	18.38	17.59	17.08	16.52
315.0	21.86	20.65	19.49	18.61	18.14	17.17	16.57	16.19	15.59
360.0	22.55	21.30	20.14	19.16	18.47	17.73	17.03	16.47	16.06
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	15.22	14.90	14.29	13.41	13.09	12.48	11.83	11.28	10.77
45.0	16.10	15.50	14.94	14.34	13.74	13.13	12.62	12.11	11.55
90.0	15.92	15.31	14.80	14.29	13.60	12.99	12.39	11.88	11.32
135.0	16.94	16.33	15.73	15.13	14.48	13.87	13.27	12.67	12.11
180.0	16.98	16.66	16.01	15.41	14.80	14.20	13.55	12.90	12.39
225.0	15.59	14.94	14.62	13.97	13.41	12.81	12.20	11.60	11.04
270.0	15.87	15.22	14.66	14.06	13.46	12.85	12.25	11.79	11.18
315.0	14.94	14.34	13.74	13.13	12.58	11.97	11.46	10.95	10.35
360.0	15.22	14.90	14.29	13.41	13.09	12.48	11.83	11.28	10.77
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.16	9.47	9.00	8.45	7.84	7.24	6.59	6.22	5.94
45.0	11.00	10.53	9.84	9.37	8.86	8.31	7.52	6.87	6.50
90.0	10.77	10.21	9.70	9.19	8.58	8.12	7.33	6.68	6.26
135.0	11.55	11.04	10.35	9.65	9.28	8.58	7.98	7.29	6.64
180.0	11.83	11.04	10.49	9.84	9.28	8.63	7.98	7.29	6.68
225.0	10.58	9.84	9.37	8.77	8.31	7.70	6.91	6.40	6.13
270.0	10.58	10.07	9.56	8.91	8.31	7.70	7.05	6.45	6.17
315.0	9.84	9.42	8.77	8.31	7.66	7.01	6.50	6.13	5.94
360.0	10.16	9.47	9.00	8.45	7.84	7.24	6.59	6.22	5.94

Intensity data(cd)

Appendix Page: 19 Total:19

C/ γ (°)	90.0
0.0	5.94
45.0	6.26
90.0	6.22
135.0	6.26
180.0	6.22
225.0	6.03
270.0	5.99
315.0	5.99
360.0	5.94