



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86 571 85021543 Fax:+86 571 87977635
Address:Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

Client: NT

LumCAT: 62-0096-1

Luminaire: 92.70.412.00

Report No: 20261006-B004

Ballast type: DC

Test No: 20261006-C004

LampCAT: CITIZEN CLU038

Lamp flux(lm): 2335.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.690

Current(A): 0.521

Power (W): 18.070

PF: 0.000

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 2069.49, Efficiency(%): 88.63% , Luminous Efficacy(lm/W): 114.53

Central intensity(cd): 9577.101, Maximum intensity(cd): 9583.872

Angle of maximum intensity: C=135.0 γ =2.0

Beam Angle(50%Imax): [C0/180]Total=24.5

[C90/270]Total=24.0

Field angle(10%Imax): [C0/180]Total=43.5

[C90/270]Total=42.5

Maximum s/h(1/2): C0_180=0.43 C90_270=0.42

Maximum s/h(1/4): C0_180=0.43 C90_270=0.42

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 88.63%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.066%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9520.603	0.000	0	0.00%	0.00%
1.0	9484.526	9.094	9.094	0.39%	0.44%
2.0	9362.856	27.052	36.145	1.16%	1.75%
3.0	9175.272	44.337	80.482	1.90%	3.89%
4.0	8900.721	60.506	140.988	2.59%	6.81%
5.0	8566.182	75.142	216.13	3.22%	10.44%
6.0	8123.514	87.709	303.839	3.76%	14.68%
7.0	7649.107	97.900	401.739	4.19%	19.41%
8.0	7141.479	105.853	507.593	4.53%	24.53%
9.0	6583.595	111.234	618.827	4.76%	29.90%
10.0	6025.077	114.104	732.931	4.89%	35.42%
11.0	5475.235	114.912	847.843	4.92%	40.97%
12.0	4884.871	113.251	961.093	4.85%	46.44%
13.0	4322.015	109.263	1070.356	4.68%	51.72%
14.0	3782.540	103.738	1174.093	4.44%	56.73%
15.0	3227.006	96.230	1270.324	4.12%	61.38%
16.0	2755.984	87.668	1357.991	3.75%	65.62%
17.0	2290.401	78.586	1436.577	3.37%	69.42%
18.0	1923.349	69.476	1506.053	2.98%	72.77%
19.0	1654.098	62.240	1568.293	2.67%	75.78%
20.0	1355.795	55.089	1623.382	2.36%	78.44%
21.0	1100.701	47.170	1670.552	2.02%	80.72%
22.0	886.657	39.937	1710.489	1.71%	82.65%
23.0	712.859	33.562	1744.051	1.44%	84.27%
24.0	572.653	28.106	1772.157	1.20%	85.63%
25.0	467.297	23.646	1795.803	1.01%	86.78%
26.0	398.485	20.437	1816.24	0.88%	87.76%
27.0	331.694	17.864	1834.104	0.77%	88.63%
28.0	277.905	15.434	1849.538	0.66%	89.37%
29.0	205.104	12.637	1862.174	0.54%	89.98%
30.0	171.967	10.181	1872.355	0.44%	90.47%
31.0	146.057	8.850	1881.205	0.38%	90.90%
32.0	126.008	7.794	1889	0.33%	91.28%
33.0	110.593	6.970	1895.97	0.30%	91.62%
34.0	99.166	6.348	1902.318	0.27%	91.92%
35.0	89.666	5.864	1908.182	0.25%	92.21%
36.0	82.683	5.488	1913.67	0.24%	92.47%
37.0	76.800	5.201	1918.871	0.22%	92.72%

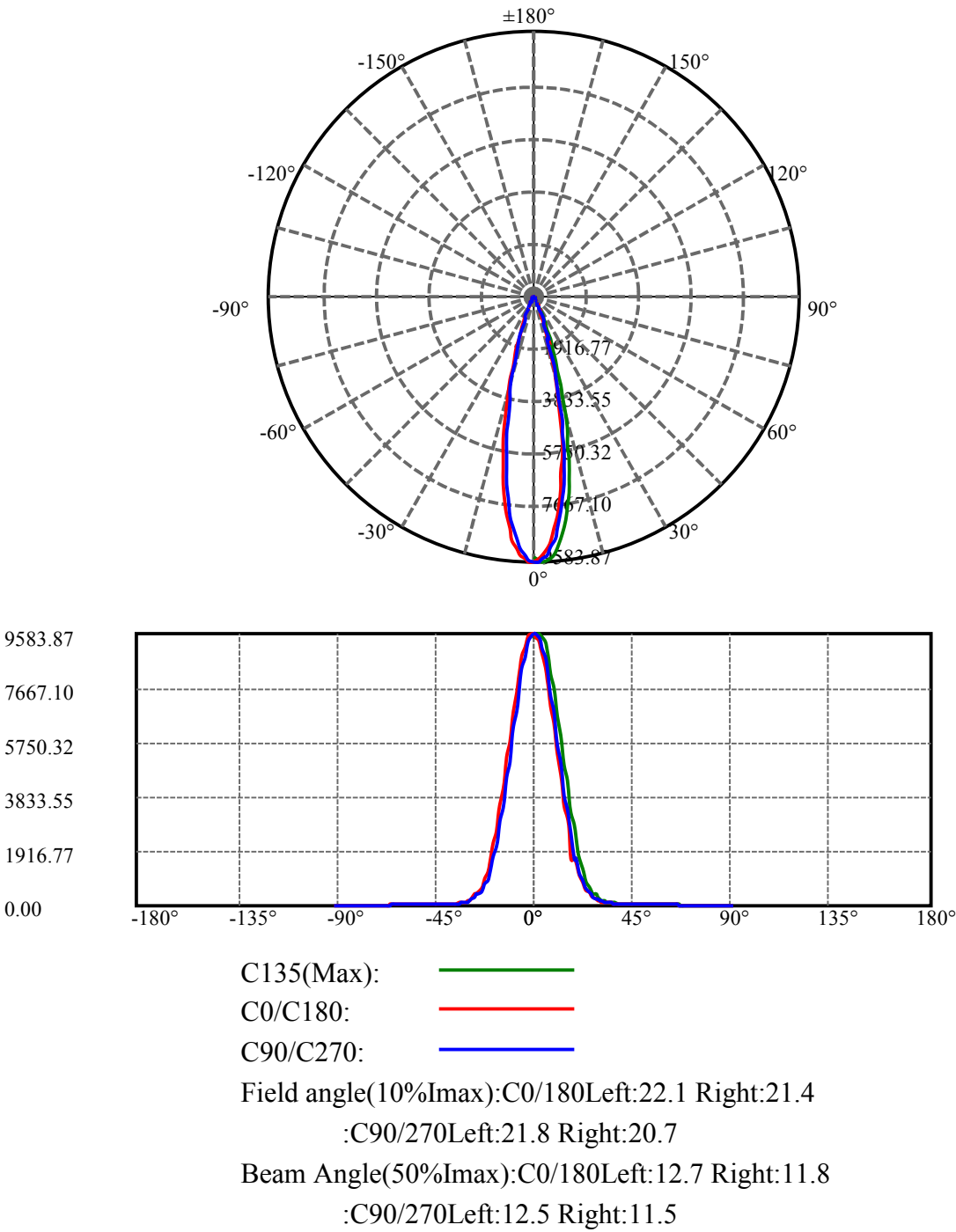
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	71.986	4.966	1923.838	0.21%	92.96%
39.0	67.765	4.770	1928.608	0.20%	93.19%
40.0	64.263	4.605	1933.213	0.20%	93.42%
41.0	61.142	4.466	1937.678	0.19%	93.63%
42.0	58.127	4.333	1942.011	0.19%	93.84%
43.0	55.767	4.219	1946.23	0.18%	94.04%
44.0	53.387	4.120	1950.35	0.18%	94.24%
45.0	51.260	4.022	1954.372	0.17%	94.44%
46.0	49.451	3.939	1958.31	0.17%	94.63%
47.0	47.790	3.868	1962.178	0.17%	94.81%
48.0	46.256	3.802	1965.98	0.16%	95.00%
49.0	44.923	3.744	1969.724	0.16%	95.18%
50.0	43.791	3.699	1973.423	0.16%	95.36%
51.0	42.764	3.662	1977.085	0.16%	95.53%
52.0	41.865	3.632	1980.716	0.16%	95.71%
53.0	41.029	3.606	1984.322	0.15%	95.88%
54.0	40.267	3.583	1987.905	0.15%	96.06%
55.0	39.537	3.562	1991.468	0.15%	96.23%
56.0	38.712	3.536	1995.004	0.15%	96.40%
57.0	37.950	3.505	1998.509	0.15%	96.57%
58.0	37.072	3.469	2001.978	0.15%	96.74%
59.0	36.237	3.427	2005.405	0.15%	96.90%
60.0	35.305	3.380	2008.785	0.14%	97.07%
61.0	34.353	3.324	2012.11	0.14%	97.23%
62.0	33.359	3.263	2015.372	0.14%	97.39%
63.0	32.311	3.194	2018.566	0.14%	97.54%
64.0	31.158	3.114	2021.681	0.13%	97.69%
65.0	30.047	3.029	2024.71	0.13%	97.84%
66.0	28.799	2.936	2027.646	0.13%	97.98%
67.0	27.540	2.833	2030.478	0.12%	98.12%
68.0	26.111	2.718	2033.196	0.12%	98.25%
69.0	24.673	2.591	2035.787	0.11%	98.37%
70.0	23.128	2.455	2038.242	0.11%	98.49%
71.0	21.721	2.318	2040.56	0.10%	98.60%
72.0	20.187	2.179	2042.739	0.09%	98.71%
73.0	18.663	2.032	2044.771	0.09%	98.81%
74.0	17.753	1.914	2046.685	0.08%	98.90%
75.0	17.817	1.879	2048.565	0.08%	98.99%

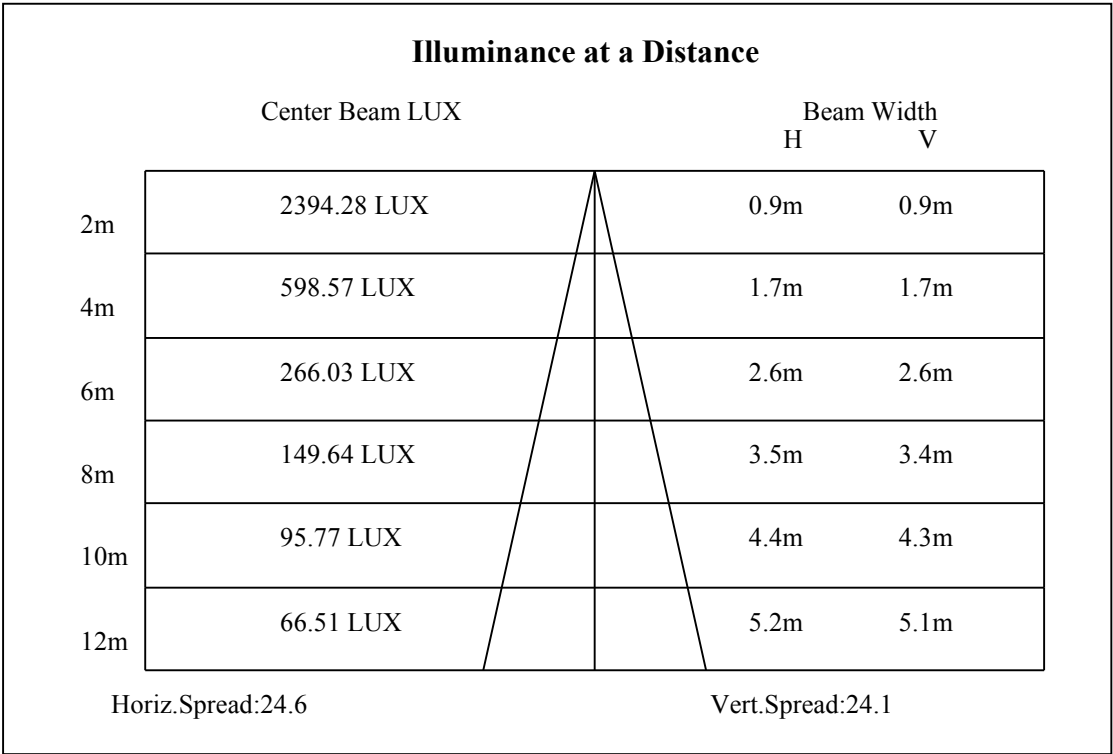
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	18.462	1.926	2050.49	0.08%	99.08%
77.0	19.319	2.014	2052.505	0.09%	99.18%
78.0	19.393	2.072	2054.577	0.09%	99.28%
79.0	17.690	1.992	2056.569	0.09%	99.38%
80.0	15.711	1.801	2058.37	0.08%	99.46%
81.0	14.061	1.610	2059.98	0.07%	99.54%
82.0	12.379	1.434	2061.414	0.06%	99.61%
83.0	11.532	1.300	2062.714	0.06%	99.67%
84.0	10.633	1.208	2063.921	0.05%	99.73%
85.0	9.712	1.110	2065.032	0.05%	99.78%
86.0	8.781	1.011	2066.043	0.04%	99.83%
87.0	8.168	0.928	2066.97	0.04%	99.88%
88.0	7.745	0.872	2067.842	0.04%	99.92%
89.0	7.469	0.834	2068.676	0.04%	99.96%
90.0	7.343	0.812	2069.488	0.03%	100.00%

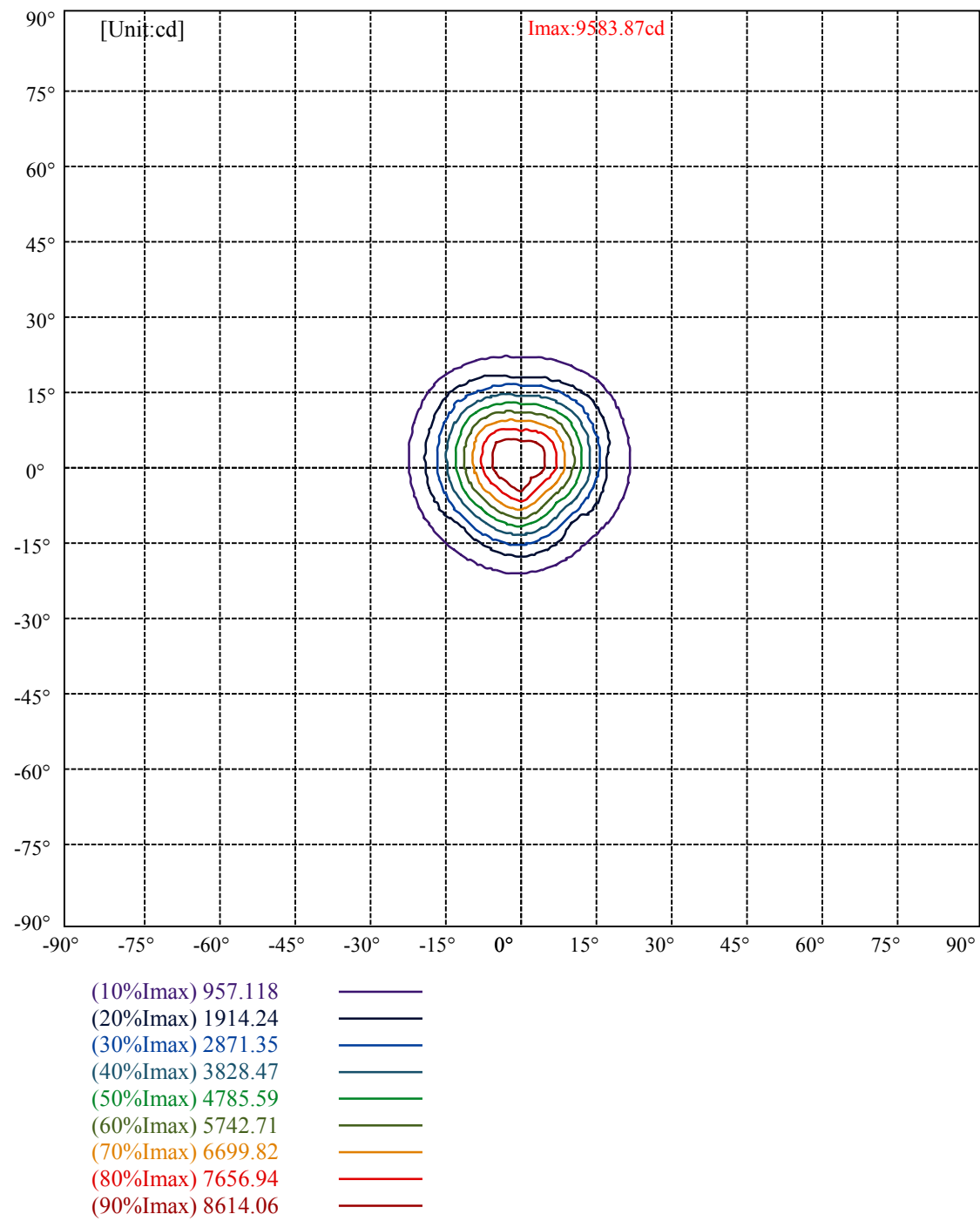
ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	1872.36	80.19%	90.47%
0-40	1933.21	82.79%	93.42%
0-60	2008.79	86.03%	97.07%
0-90	2068.68	88.59%	99.96%
0-120	2068.68	88.59%	99.96%
0-180	2069.49	88.63%	100.00%
60-90	59.89	2.56%	2.89%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-20.68	1655.59	70.90%	80.00%

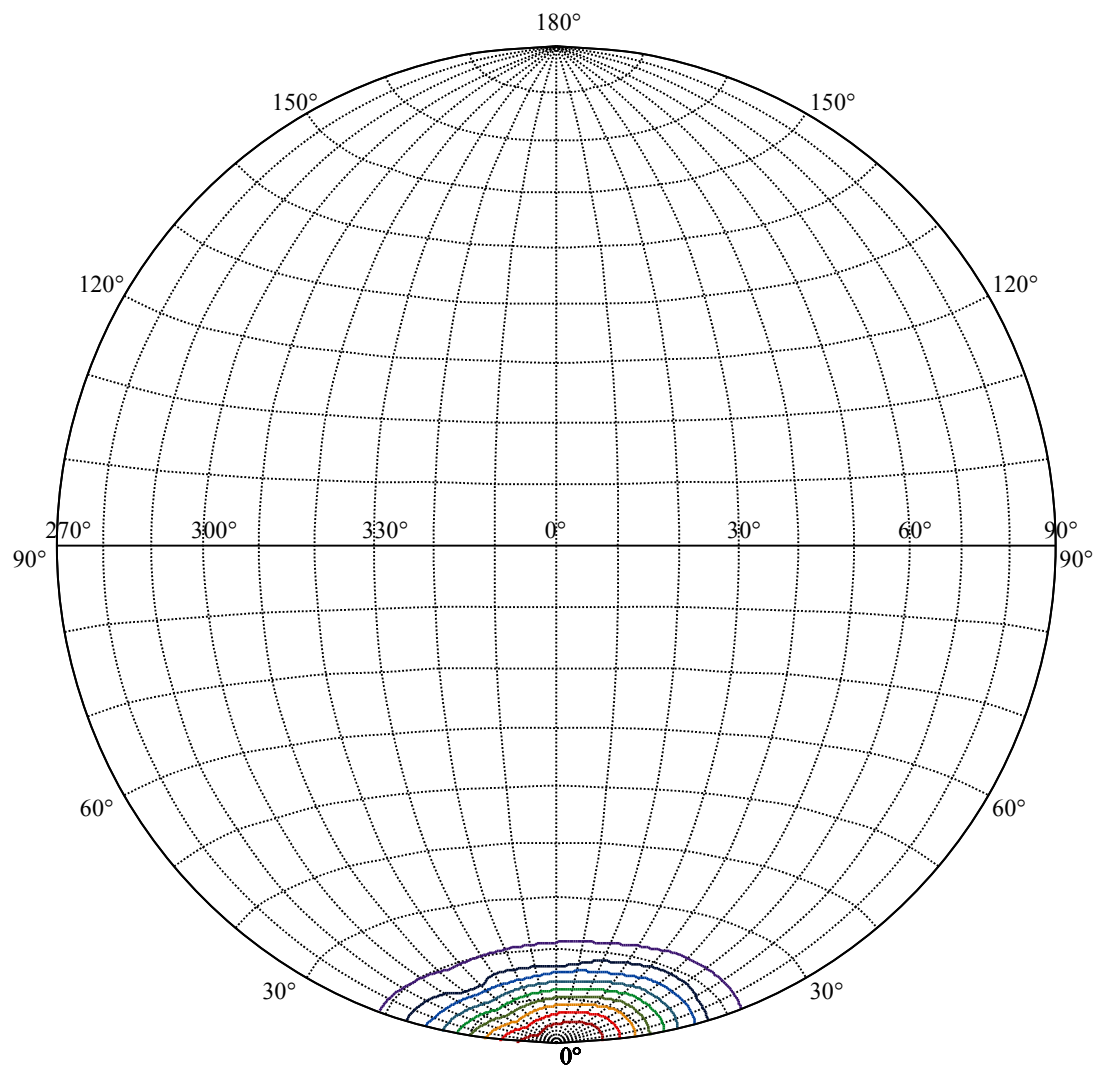
ZONAL LUMEN SUMMARY

0-10	732.93
10-20	890.45
20-30	248.97
30-40	60.86
40-50	40.21
50-60	35.36
60-70	29.46
70-80	20.13
80-90	10.31
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







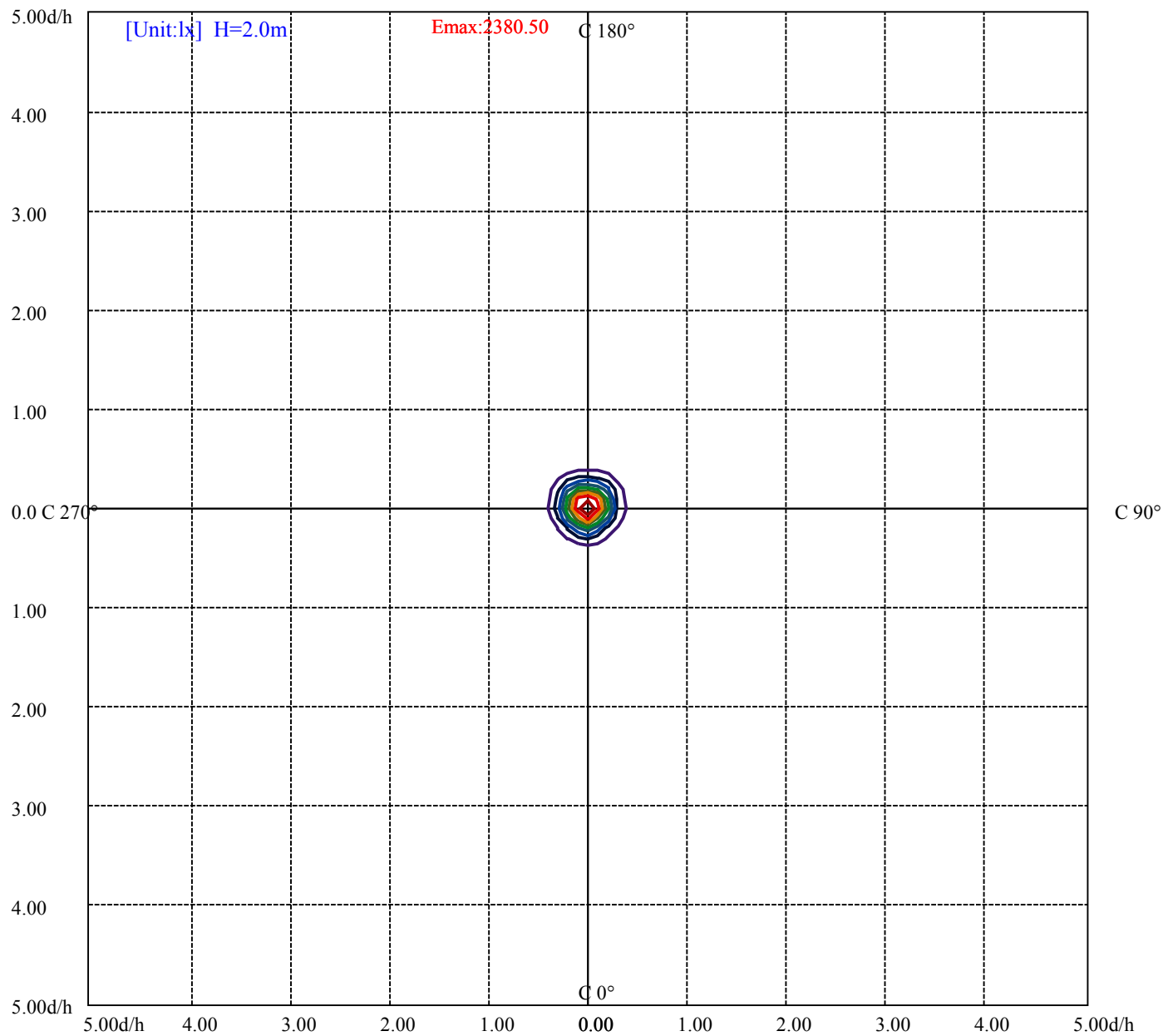


House

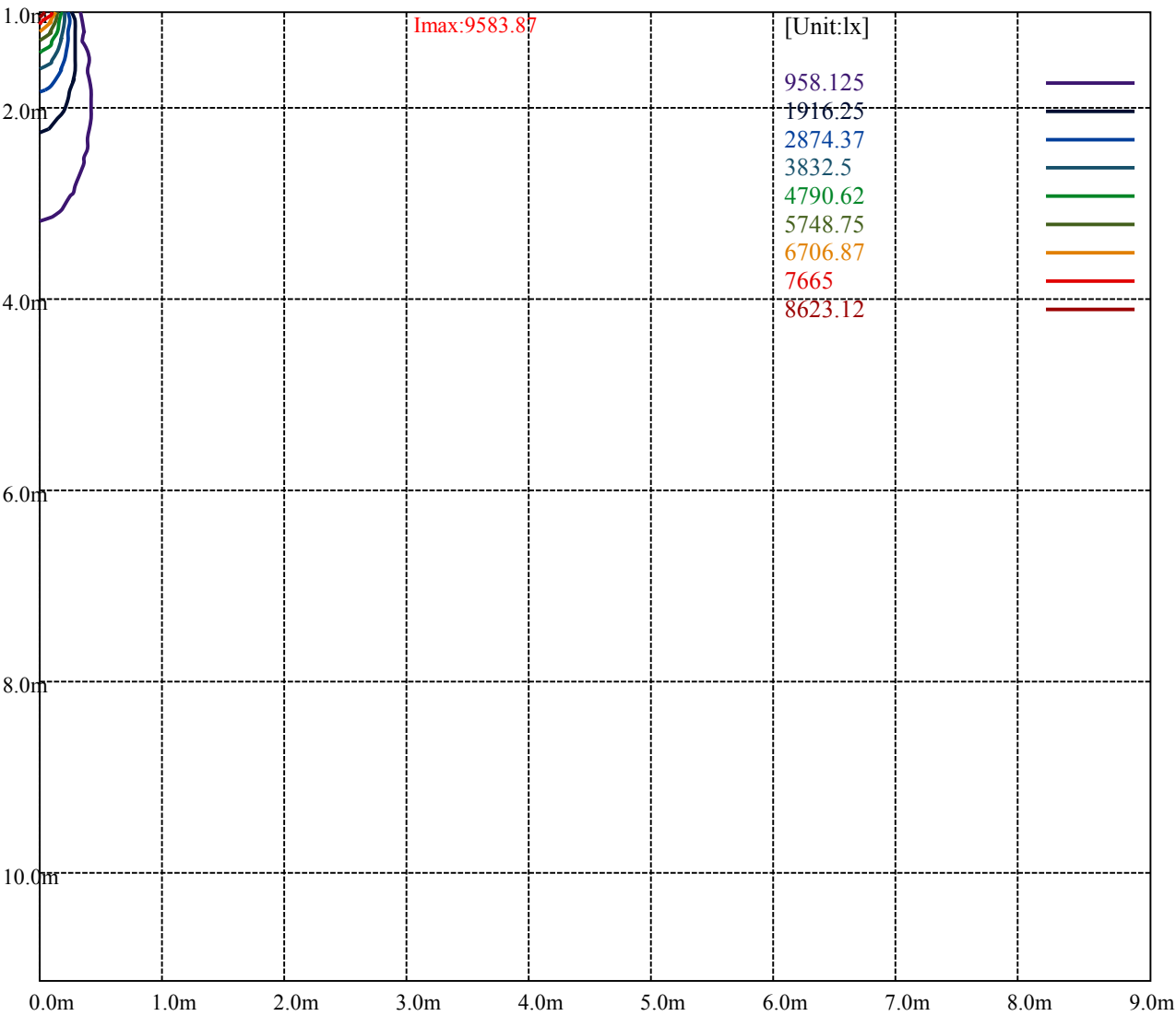
[Unit:cd]

Road

Imax:9583.87	
(10%Imax) 958.125	_____
(20%Imax) 1916.25	_____
(30%Imax) 2874.37	_____
(40%Imax) 3832.5	_____
(50%Imax) 4790.62	_____
(60%Imax) 5748.75	_____
(70%Imax) 6706.87	_____
(80%Imax) 7665	_____
(90%Imax) 8623.12	_____



(10%Emax) 238.0502	—
(20%Emax) 476.1	—
(30%Emax) 714.15	—
(40%Emax) 952.2	—
(50%Emax) 1190.25	—
(60%Emax) 1428.302	—
(70%Emax) 1666.353	—
(80%Emax) 1904.402	—
(90%Emax) 2142.452	—



Luminance Table

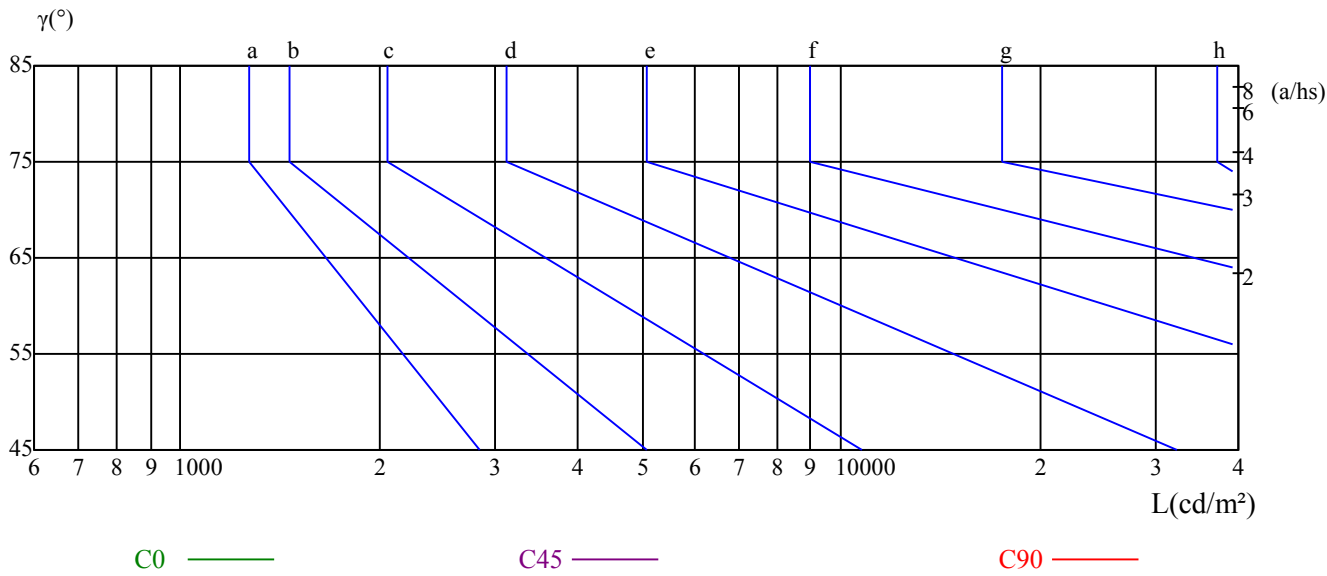
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

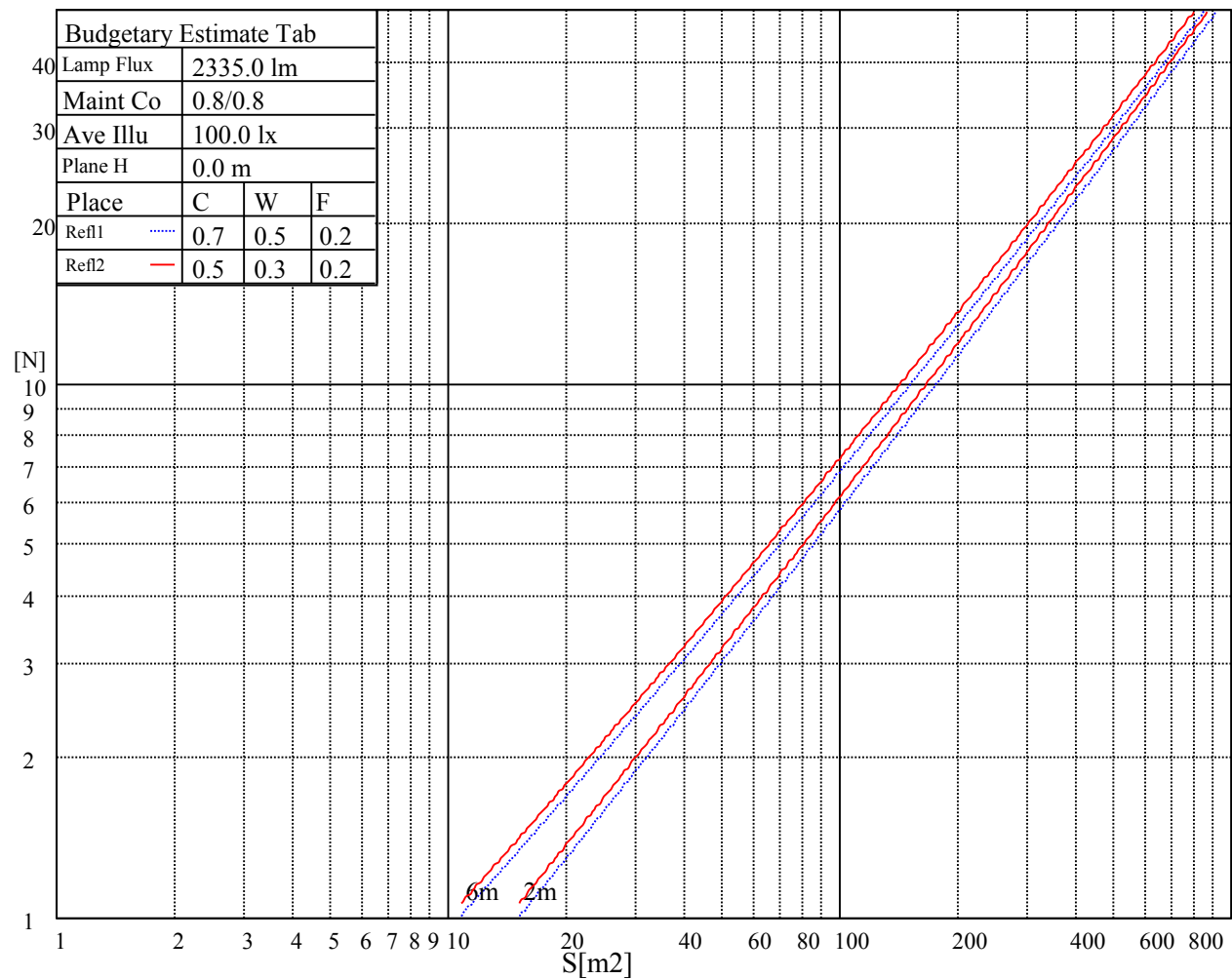
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

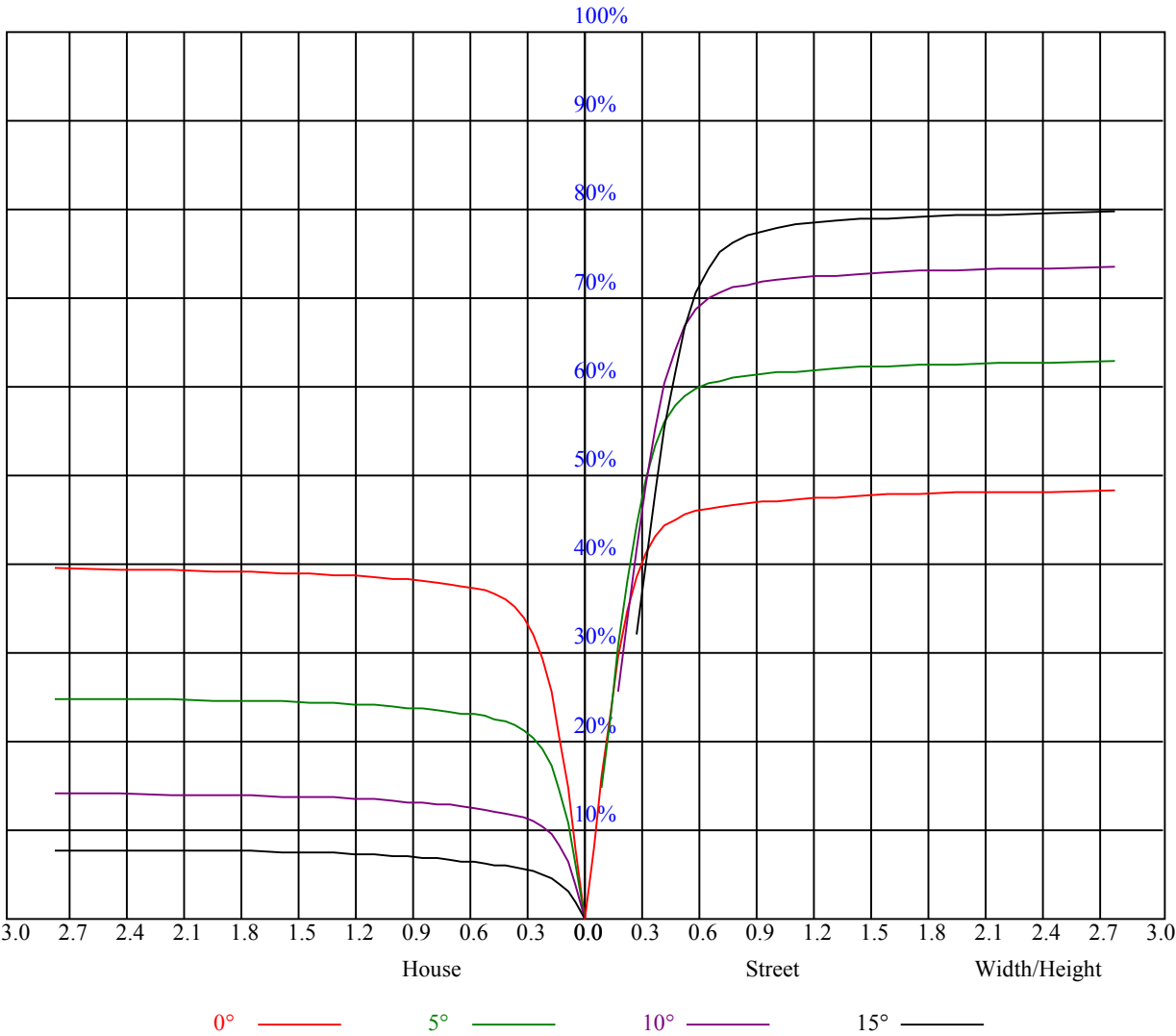


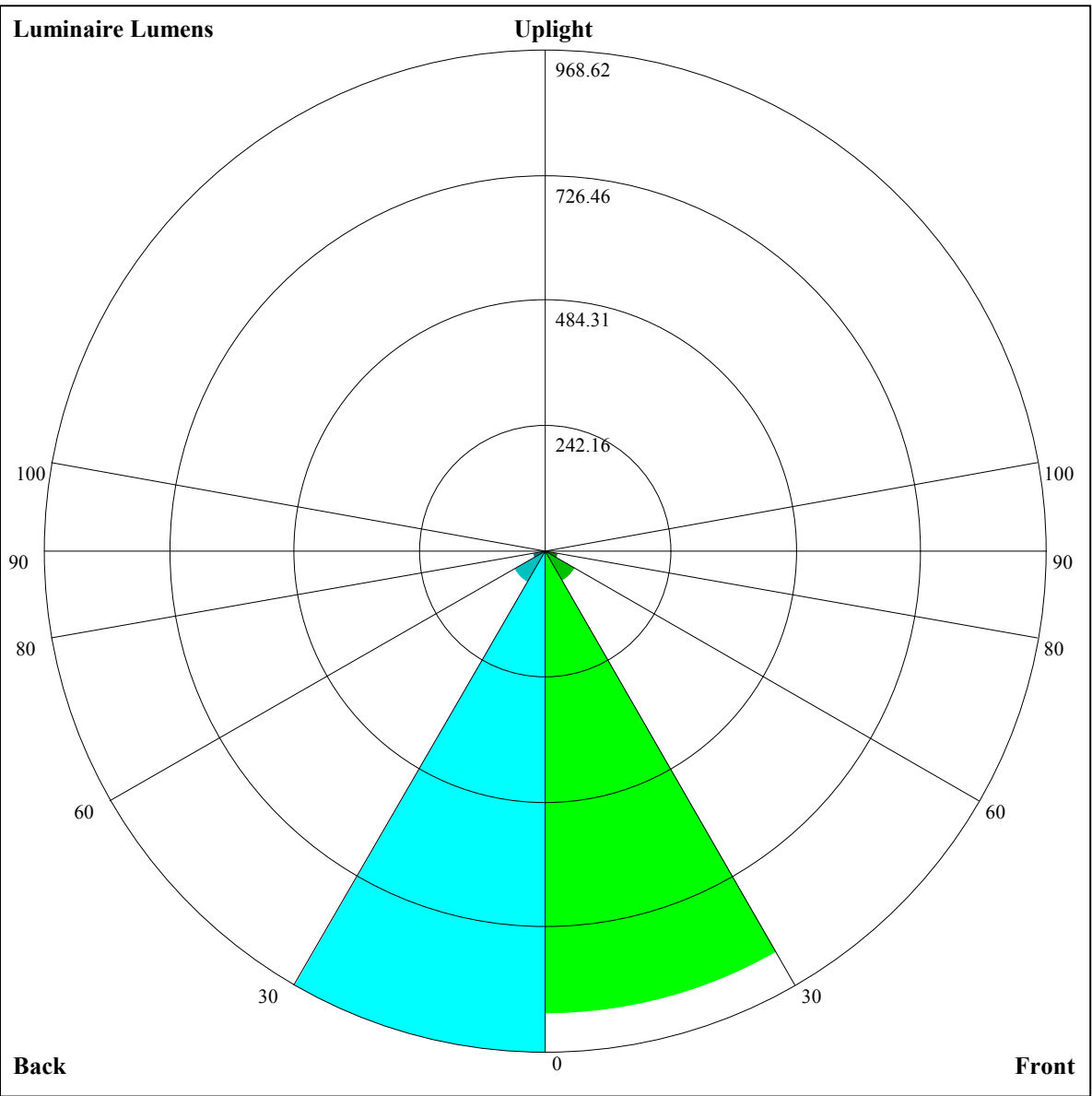
Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.06	1.06	1.06	1.03	1.03	1.03	0.98	0.98	0.98	0.94	0.94	0.94	0.90	0.90	0.90	0.89
1	0.99	0.97	0.96	0.97	0.96	0.94	0.94	0.92	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.84
2	0.94	0.91	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.87	0.86	0.84	0.85	0.83	0.82	0.81
3	0.90	0.86	0.83	0.89	0.85	0.83	0.86	0.84	0.81	0.84	0.82	0.80	0.82	0.81	0.79	0.78
4	0.86	0.82	0.79	0.85	0.81	0.79	0.83	0.80	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.75
5	0.83	0.79	0.76	0.82	0.78	0.76	0.80	0.77	0.75	0.79	0.76	0.74	0.78	0.75	0.74	0.73
6	0.80	0.76	0.73	0.79	0.75	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.70
7	0.77	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.70	0.74	0.71	0.69	0.68
8	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.68	0.73	0.70	0.68	0.72	0.69	0.67	0.66
9	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.71	0.68	0.66	0.70	0.67	0.66	0.65
10	0.71	0.67	0.64	0.70	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.68	0.66	0.64	0.63





Luminaire Lumens:

FL=895.58,FM=67.3,FH=24.05,FVH=5.5

BL=968.62,BM=69.41,BH=25.14,BVH=5.7

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	9577.10	9481.46	9351.11	9133.59	8857.66	8410.76	7990.95	7547.43	7048.90
45.0	9519.55	9566.10	9539.01	9441.68	9196.22	8948.23	8600.36	8218.63	7672.70
90.0	9561.02	9571.18	9479.76	9330.80	9061.64	8758.63	8383.68	7838.60	7358.69
135.0	9424.75	9545.78	9583.87	9541.55	9448.45	9278.32	8971.92	8639.29	8145.84
180.0	9577.10	9555.94	9497.54	9371.43	9111.58	8828.88	8387.06	7963.86	7491.57
225.0	9519.55	9417.13	9191.14	8933.84	8612.20	8221.17	7652.39	7153.01	6630.78
270.0	9561.02	9495.00	9351.96	9082.80	8777.25	8409.92	7968.94	7334.99	6826.30
315.0	9424.75	9243.62	8908.44	8566.50	8140.76	7673.55	7032.82	6497.05	5957.05
360.0	9577.10	9481.46	9351.11	9133.59	8857.66	8410.76	7990.95	7547.43	7048.90
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	6401.41	5871.56	5338.33	4666.29	4150.83	3525.34	3077.60	2653.55	1686.71
45.0	7193.64	6676.49	6157.64	5484.76	4950.68	4423.37	3790.26	3312.89	2854.15
90.0	6841.54	6172.03	5626.11	5079.33	4542.71	3896.91	3416.16	2959.95	2531.67
135.0	7693.01	7214.80	6686.64	6039.15	5488.14	4940.52	4411.52	3773.34	3290.89
180.0	6866.08	6339.62	5798.77	5252.00	4586.73	4086.50	3595.59	3132.61	2601.07
225.0	6099.24	5434.82	4903.28	4397.13	3783.49	3317.97	2879.54	2088.15	1677.23
270.0	6297.30	5750.53	5065.79	4535.94	3906.22	3429.70	2979.41	2461.42	2089.85
315.0	5276.54	4740.77	4225.31	3624.37	3167.31	2640.01	1665.97	1665.97	1591.66
360.0	6401.41	5871.56	5338.33	4666.29	4150.83	3525.34	3077.60	2653.55	1686.71
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1686.71	1544.00	1283.82	1058.08	826.68	677.20	553.88	454.77	358.96
45.0	2344.61	1980.66	1659.03	1306.93	1069.09	871.88	676.36	551.09	450.37
90.0	1644.22	1644.22	1423.73	1106.33	898.88	729.60	568.36	467.97	388.50
135.0	2836.37	2426.71	1972.20	1646.33	1292.54	1053.85	856.64	657.74	535.01
180.0	2207.50	1854.55	1469.44	1202.82	971.75	742.38	600.18	463.07	439.37
225.0	1677.23	1321.15	1083.98	888.97	730.36	576.91	480.33	400.52	334.16
270.0	1745.36	1443.20	1124.95	916.74	746.61	612.03	480.84	439.37	439.37
315.0	1244.80	1018.30	829.22	679.41	557.35	439.03	364.63	303.86	242.16
360.0	1686.71	1544.00	1283.82	1058.08	826.68	677.20	553.88	454.77	358.96
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	297.85	237.92	201.78	173.00	145.75	128.91	115.96	103.26	95.30
45.0	427.52	427.52	231.66	191.88	161.41	133.14	115.79	101.99	89.63
90.0	310.04	257.73	216.59	184.18	152.94	133.48	118.16	105.97	94.20
135.0	437.67	437.67	281.68	235.21	198.65	163.19	141.69	124.34	110.88
180.0	439.37	250.62	196.96	165.05	140.50	121.46	103.35	92.60	84.39
225.0	266.36	223.53	188.75	155.23	135.51	120.10	105.55	96.57	87.94
270.0	271.78	216.59	181.72	147.95	127.47	111.64	96.15	86.76	79.56
315.0	202.97	171.65	141.69	123.24	106.22	96.15	88.11	81.85	75.41
360.0	297.85	237.92	201.78	173.00	145.75	128.91	115.96	103.26	95.30
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	88.96	83.46	77.36	73.04	69.40	66.10	62.38	59.67	57.22
45.0	82.10	74.74	69.74	65.77	62.46	58.82	56.29	54.08	52.05
90.0	87.09	81.51	75.58	71.69	67.12	63.99	61.11	58.49	55.61
135.0	97.84	89.80	83.46	76.77	72.45	68.64	64.41	61.45	58.66
180.0	77.78	71.18	67.03	62.72	59.76	56.88	54.00	51.97	50.02
225.0	82.44	77.61	73.55	69.91	65.85	62.97	60.09	57.56	54.51
270.0	73.89	68.47	64.83	61.70	59.08	56.03	53.75	51.80	49.68
315.0	71.35	67.63	64.33	60.52	57.98	55.69	52.98	51.12	49.35
360.0	88.96	83.46	77.36	73.04	69.40	66.10	62.38	59.67	57.22

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	54.51	52.48	50.11	48.50	47.06	45.79	44.44	43.50	42.57
45.0	49.85	48.24	46.81	45.28	44.18	43.17	42.15	41.47	40.80
90.0	53.41	51.55	49.68	47.65	46.30	44.94	43.59	42.57	41.64
135.0	55.69	53.41	51.46	49.51	47.48	45.96	44.69	43.59	42.32
180.0	48.50	46.55	45.37	44.10	43.08	41.98	41.30	40.54	39.87
225.0	52.56	50.78	48.75	47.14	45.45	44.35	43.25	42.07	41.30
270.0	48.08	46.47	45.20	44.18	43.00	42.24	41.47	40.80	40.12
315.0	47.48	46.13	44.94	43.67	42.83	41.90	41.22	40.37	39.61
360.0	54.51	52.48	50.11	48.50	47.06	45.79	44.44	43.50	42.57
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	41.73	40.80	39.95	39.19	38.09	37.24	36.40	35.29	34.28
45.0	40.12	39.53	38.93	38.34	37.50	36.82	36.06	35.21	34.19
90.0	40.71	39.95	39.02	38.26	37.41	36.56	35.55	34.62	33.77
135.0	41.39	40.54	39.53	38.77	37.92	37.16	36.31	35.55	34.45
180.0	39.27	38.77	38.09	37.50	36.65	35.89	35.13	34.19	33.26
225.0	40.46	39.70	38.77	37.92	36.99	36.06	34.96	34.03	33.09
270.0	39.53	38.85	38.17	37.24	36.48	35.72	34.53	33.69	32.67
315.0	38.93	38.17	37.24	36.40	35.55	34.45	33.52	32.25	31.15
360.0	41.73	40.80	39.95	39.19	38.09	37.24	36.40	35.29	34.28
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	33.35	31.91	30.72	29.45	28.19	26.49	25.05	23.45	21.92
45.0	33.18	32.16	30.98	29.96	28.52	27.25	25.90	24.12	22.77
90.0	32.76	31.49	30.39	29.37	28.27	26.66	25.31	23.78	22.43
135.0	33.60	32.67	31.74	30.47	29.45	28.35	26.83	25.56	24.29
180.0	32.33	31.32	30.22	29.20	27.93	26.58	25.22	23.53	22.09
225.0	31.74	30.72	29.62	28.10	26.83	25.48	23.78	22.51	21.08
270.0	31.49	30.30	29.29	27.76	26.41	25.05	23.70	21.92	20.48
315.0	30.05	28.69	27.42	26.07	24.71	23.02	21.58	20.14	18.71
360.0	33.35	31.91	30.72	29.45	28.19	26.49	25.05	23.45	21.92
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	20.14	18.62	17.27	19.38	22.77	25.98	26.83	23.95	19.47
45.0	21.24	19.81	17.86	16.42	15.57	14.98	14.22	13.63	12.95
90.0	21.08	19.30	17.86	16.76	17.35	19.04	20.06	19.55	18.03
135.0	22.60	21.24	19.47	18.11	16.67	15.91	15.07	14.56	14.13
180.0	20.57	18.79	17.27	15.74	15.07	14.47	13.88	13.12	12.61
225.0	19.64	17.94	21.08	26.32	31.57	36.82	38.93	31.57	24.29
270.0	19.04	17.61	15.91	15.24	14.64	13.88	13.20	12.61	12.27
315.0	17.18	16.00	15.32	14.56	14.05	13.46	12.95	12.53	11.93
360.0	20.14	18.62	17.27	19.38	22.77	25.98	26.83	23.95	19.47
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	16.59	13.71	12.87	11.76	10.75	8.97	8.38	7.96	7.79
45.0	12.44	11.93	11.00	10.33	9.73	9.06	8.29	7.70	7.28
90.0	16.50	14.30	12.87	12.02	11.09	9.31	8.72	8.21	7.79
135.0	13.80	13.54	12.95	11.85	11.09	10.33	9.23	8.55	7.96
180.0	12.19	11.43	10.58	9.90	9.14	8.38	7.96	7.36	7.11
225.0	18.20	12.95	12.36	11.09	9.14	8.63	8.13	7.87	7.79
270.0	11.68	10.75	9.99	9.40	8.63	7.87	7.28	7.03	6.86
315.0	11.09	10.41	9.65	8.72	8.13	7.70	7.36	7.28	7.19
360.0	16.59	13.71	12.87	11.76	10.75	8.97	8.38	7.96	7.79

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	7.87
45.0	7.03
90.0	7.62
135.0	7.53
180.0	6.94
225.0	7.79
270.0	6.77
315.0	7.19
360.0	7.87