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Nata

LumCAT: 3-1742-N
Luminaire: 92.70.045.00+92.70.061.00
Report No: NT2017122911
Test No: nata-0100
LampCAT: NICHIA NVEWJ048Z-V1
Lamp flux(lm): 3051.0
Number of Lamps: 1
Length(mm): 86
Phm Type: C

Voltage(V): 43.4000
Current(A): 0.5000
Power (W): 21.7000
PF: 0.0000
Ballast type: DC
Width(mm): 86
Height(mm): 0

Photometric Results

Lumens(lm): 2470.01
Efficiency(%): 80.96%
Lumens(lm)/Power(W): 116.42
Central intensity(cd): 9808.779
Maximum intensity(cd): 9808.779
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=23.7
 [C90/270]Total=23.7
Field angle(10%Imax): [C0/180]Total=47.2
 [C90/270]Total=47.2
Maximum s/h(1/2): C0_180=0.40 C90_270=0.40
Maximum s/h(1/4): C0_180=0.41 C90_270=0.41
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 82.80%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 95.743%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2017/12/29
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

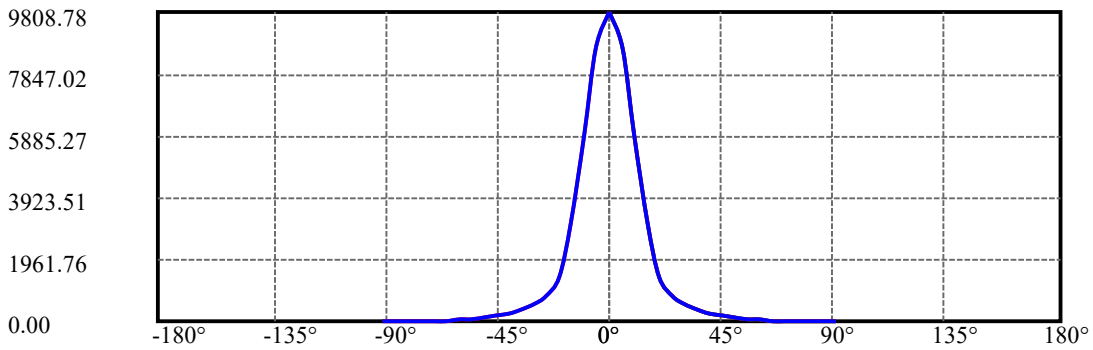
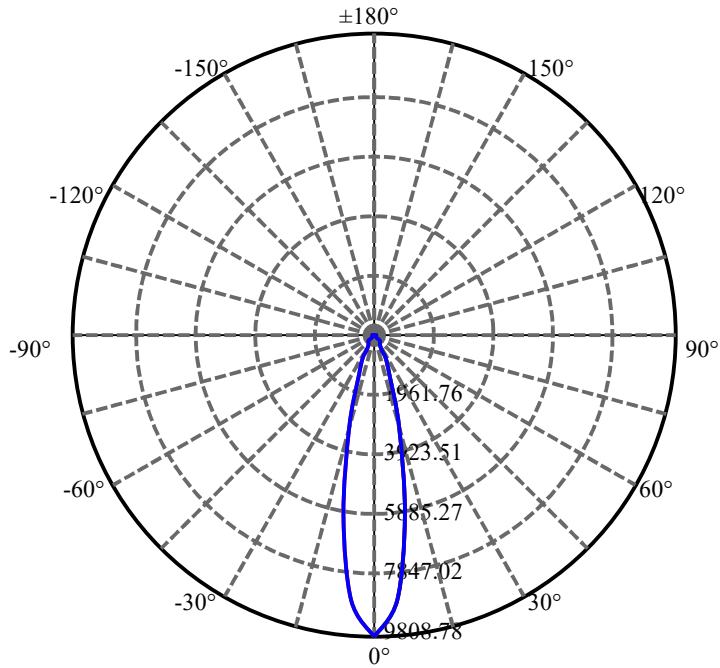
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9808.779	58.658	58.658	1.923%	2.375%
5.0	8627.751	412.176	470.835	13.510%	19.062%
10.0	5933.635	564.781	1035.616	18.511%	41.928%
15.0	3116.674	442.158	1477.774	14.492%	59.829%
20.0	1397.620	262.018	1739.791	8.588%	70.437%
25.0	819.019	189.728	1929.519	6.219%	78.118%
30.0	543.352	148.916	2078.435	4.881%	84.147%
35.0	352.870	110.942	2189.377	3.636%	88.638%
40.0	250.899	88.401	2277.778	2.897%	92.217%
45.0	156.642	60.713	2338.491	1.990%	94.675%
50.0	95.874	40.257	2378.748	1.319%	96.305%
55.0	54.272	24.368	2403.117	.799%	97.292%
60.0	32.999	15.665	2418.782	.513%	97.926%
65.0	23.888	11.867	2430.648	.389%	98.407%
70.0	20.880	10.755	2441.403	.353%	98.842%
75.0	18.465	9.776	2451.18	.320%	99.238%
80.0	15.898	8.582	2459.761	.281%	99.585%
85.0	13.055	7.129	2466.89	.234%	99.874%
90.0	11.376	3.118	2470.008	.102%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2078.44	68.12%	84.15%
0-40	2277.78	74.66%	92.22%
0-60	2418.78	79.28%	97.93%
0-90	2466.89	80.86%	99.87%
0-120	2466.89	80.86%	99.87%
0-180	2470.01	80.96%	100.00%
60-90	63.77	2.09%	2.58%
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%
0-26.56	1976.01	64.77%	80.00%

ZONAL LUMEN SUMMARY

0-10	1035.62
10-20	704.18
20-30	338.64
30-40	199.34
40-50	100.97
50-60	40.03
60-70	22.62
70-80	18.36
80-90	7.13
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: —————

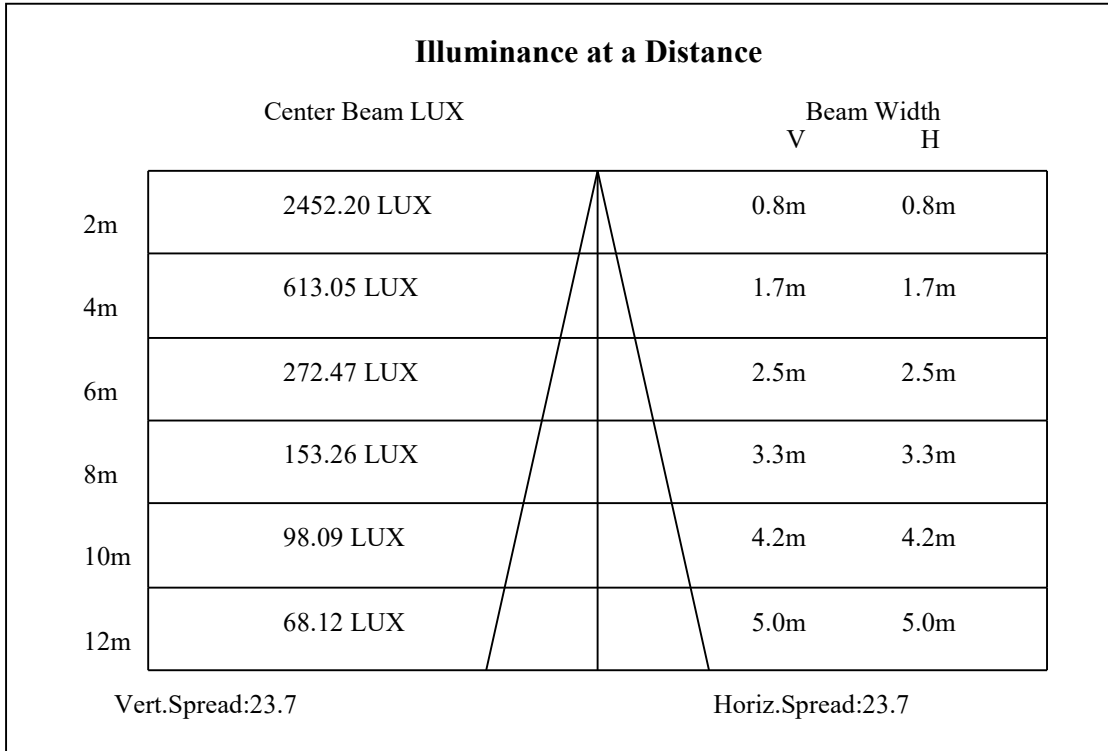
C90/C270: —————

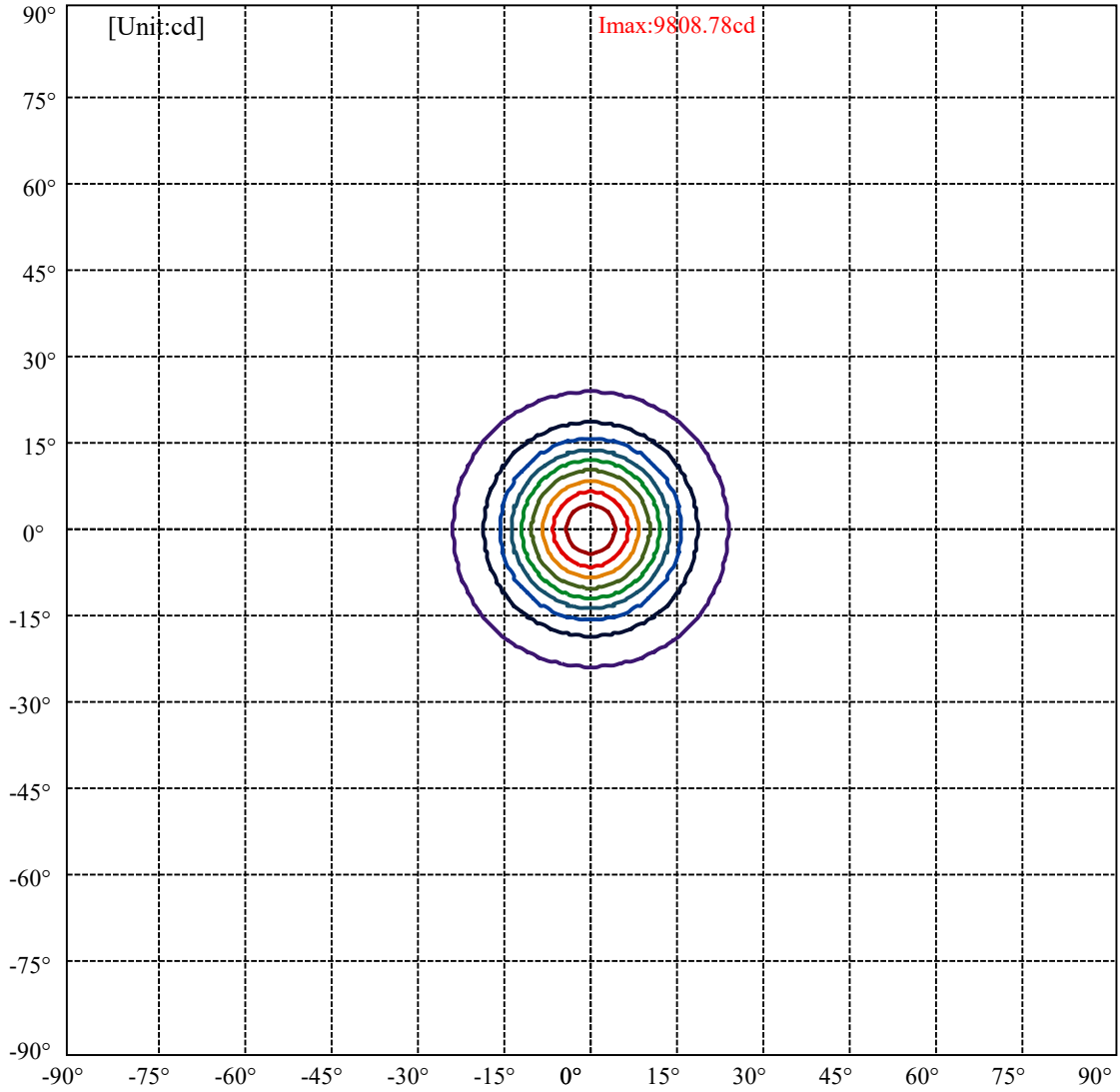
Field angle(10%Imax):C0/180Left:23.6 Right:23.6

:C90/270Left:23.6 Right:23.6

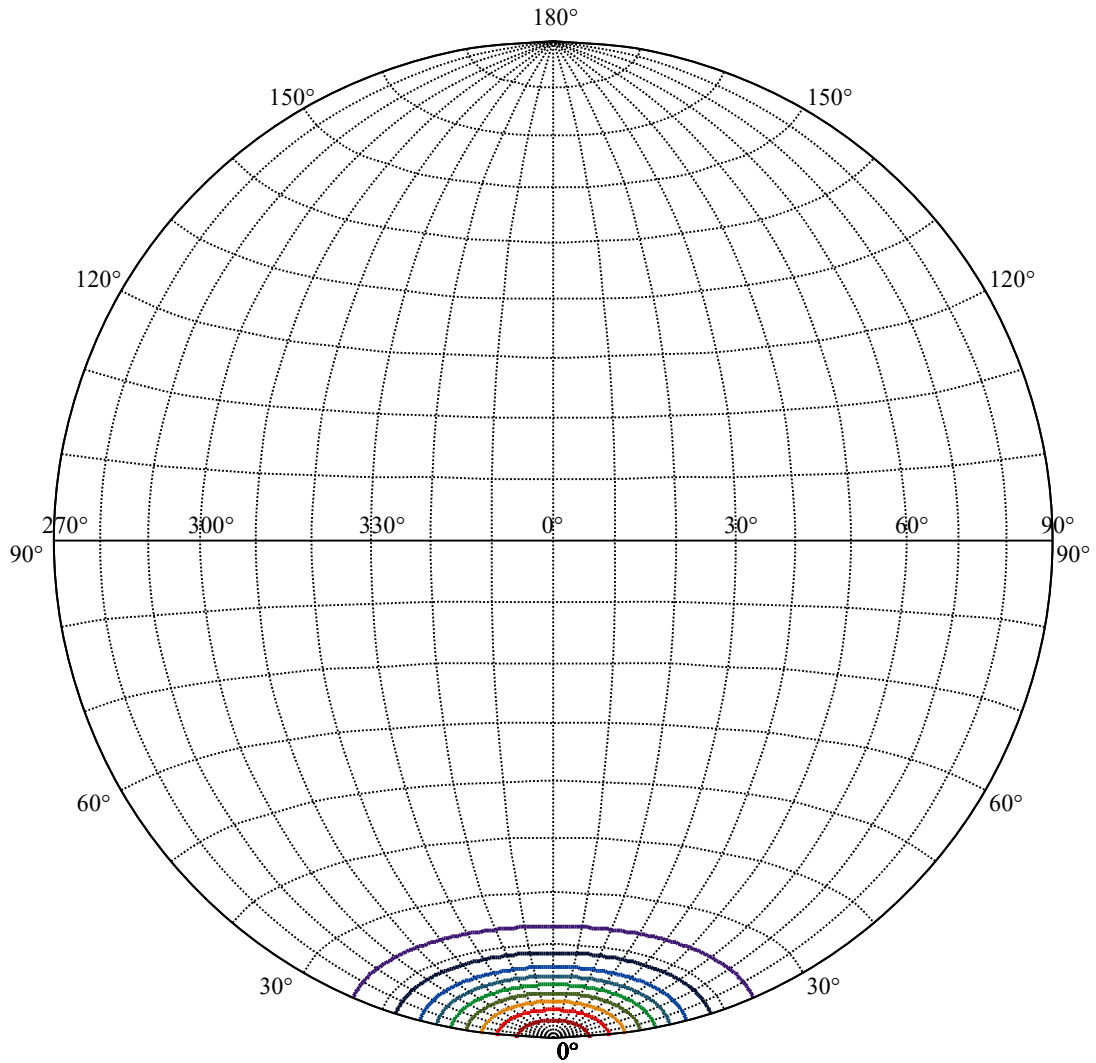
Beam Angle(50%Imax):C0/180Left:11.8 Right:11.8

:C90/270Left:11.8 Right:11.8





(10%Imax) 980.878	—
(20%Imax) 1961.76	—
(30%Imax) 2942.63	—
(40%Imax) 3923.51	—
(50%Imax) 4904.39	—
(60%Imax) 5885.27	—
(70%Imax) 6866.15	—
(80%Imax) 7847.02	—
(90%Imax) 8827.9	—



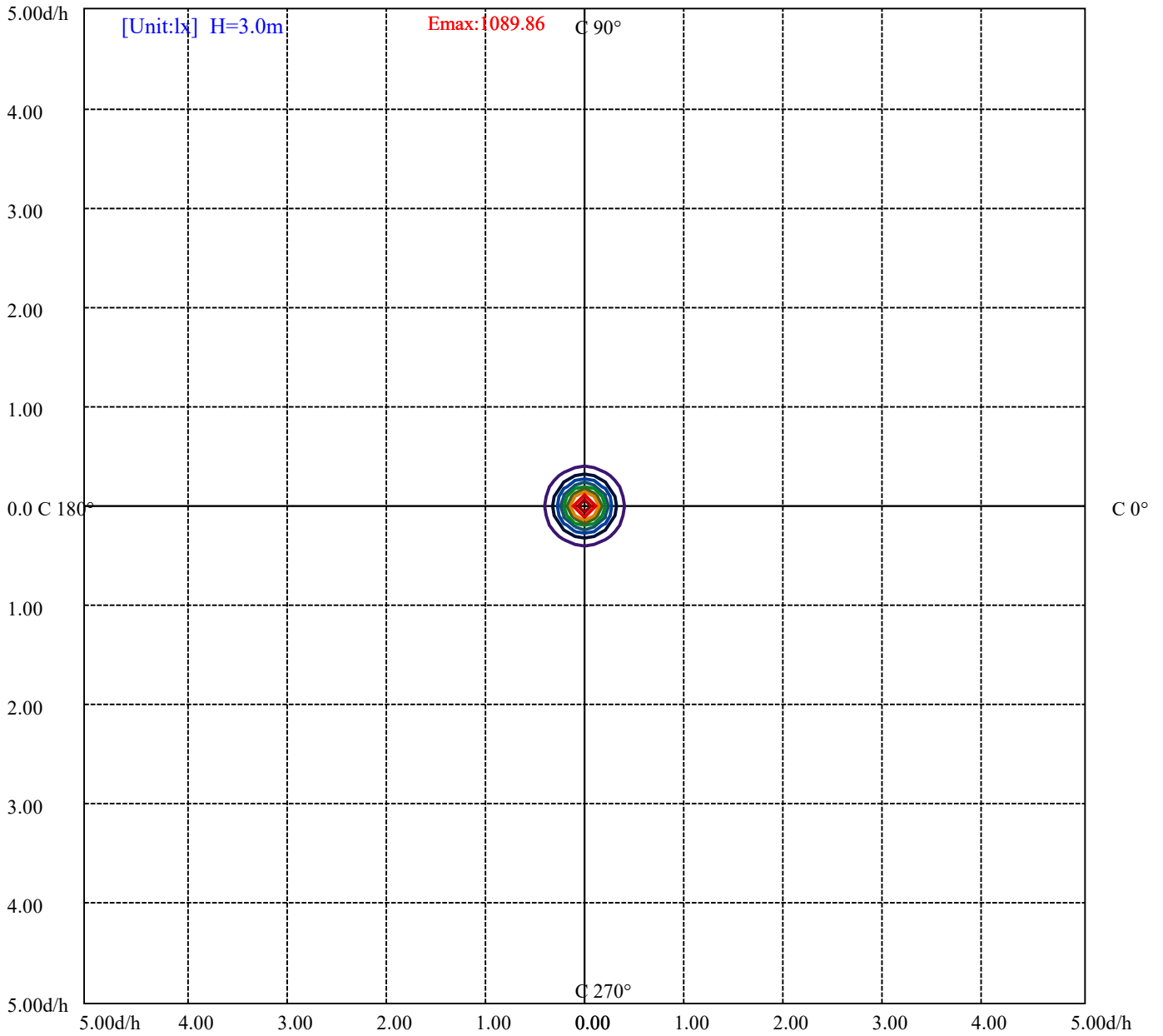
House

[Unit:cd]

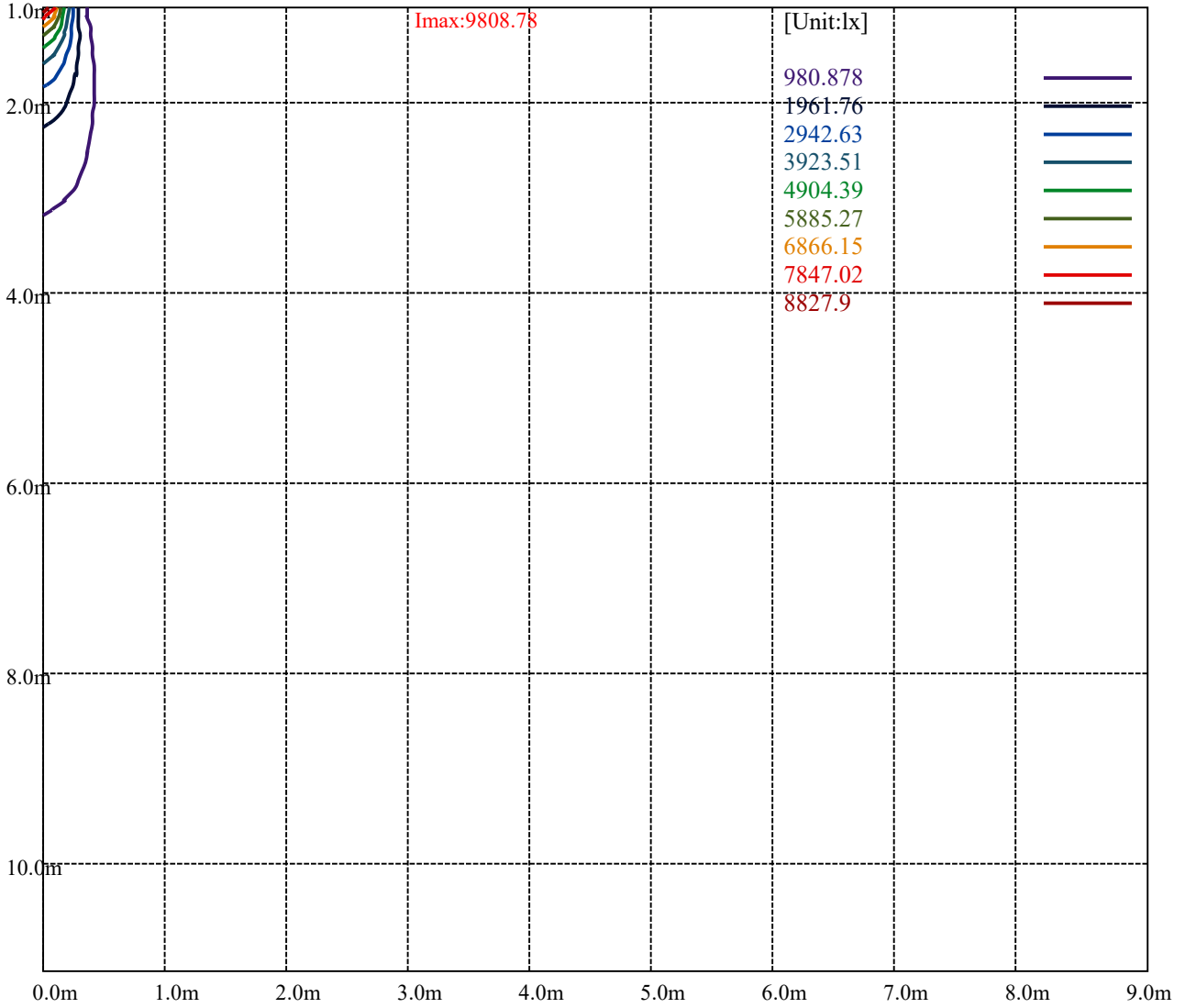
Road

Imax:9808.78

(10%Imax) 980.878	—
(20%Imax) 1961.76	—
(30%Imax) 2942.63	—
(40%Imax) 3923.51	—
(50%Imax) 4904.39	—
(60%Imax) 5885.27	—
(70%Imax) 6866.15	—
(80%Imax) 7847.02	—
(90%Imax) 8827.9	—



- (10%Emax) 108.986
- (20%Emax) 217.9722
- (30%Emax) 326.9578
- (40%Emax) 435.9445
- (50%Emax) 544.93
- (60%Emax) 653.9167
- (70%Emax) 762.9022
- (80%Emax) 871.8889
- (90%Emax) 980.8745



Luminance Table

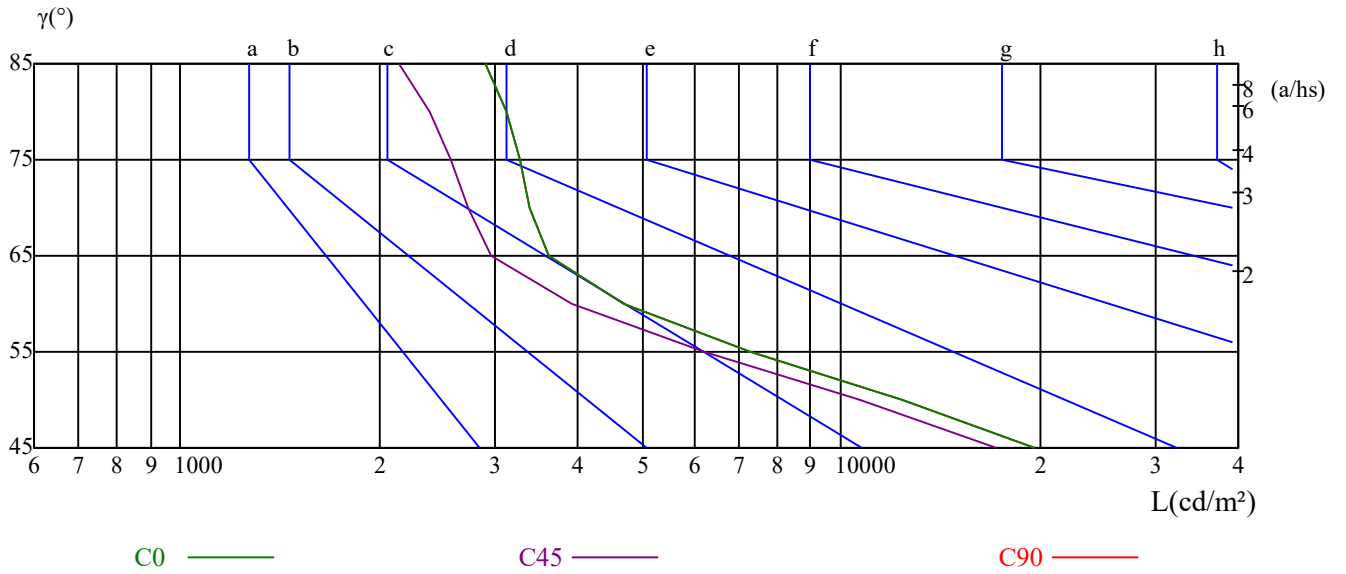
γ	45	50	55	60	65	70	75	80	85
C0	19663	12421	7322	4681	3601	3386	3267	3120	2901
C45	17214	10716	6220	3911	2954	2721	2564	2382	2141
C90	19663	12421	7322	4681	3601	3386	3267	3120	2901

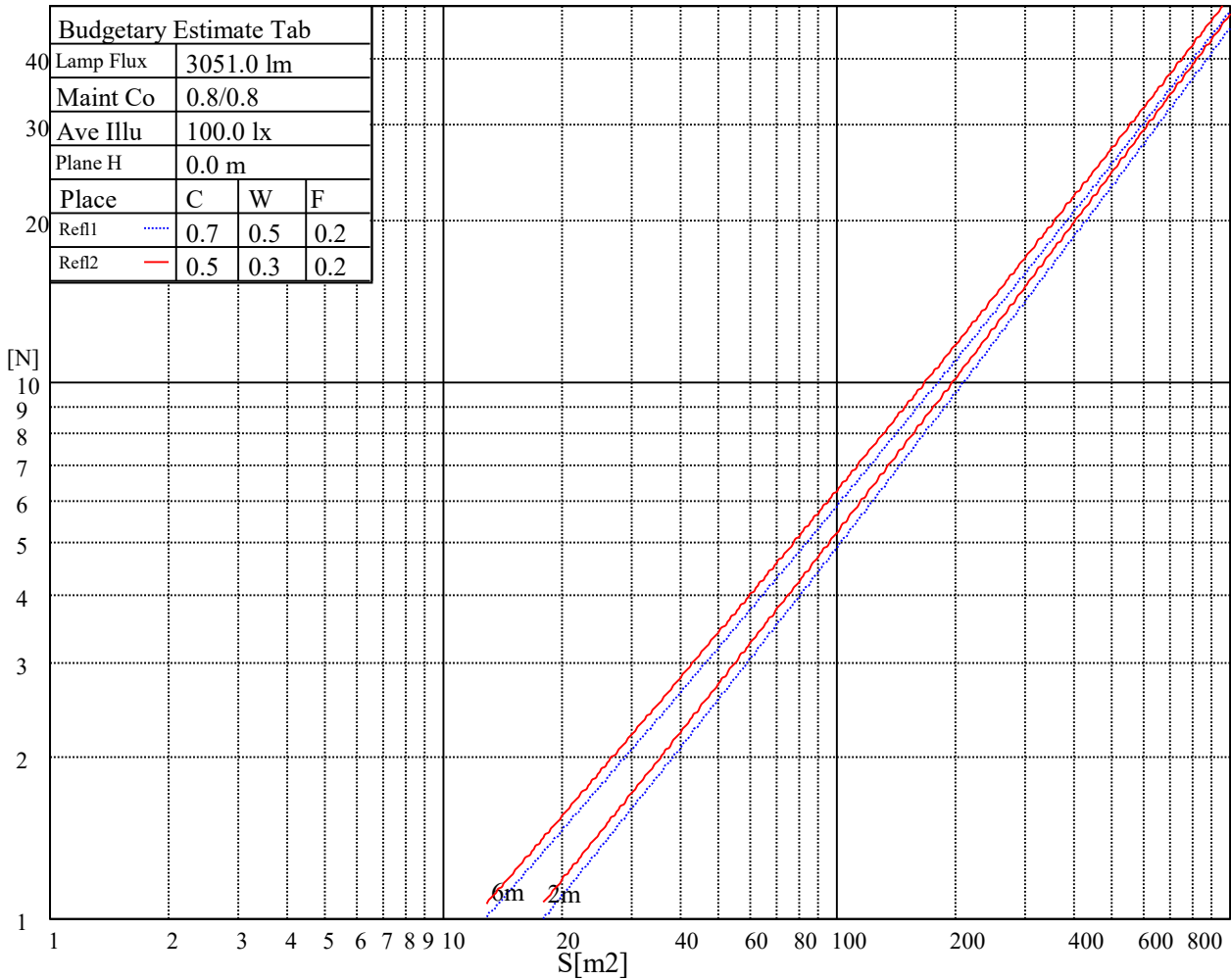
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
7642	7642	7642	9646	9646	9646	20253	20253	20253

Glare Table

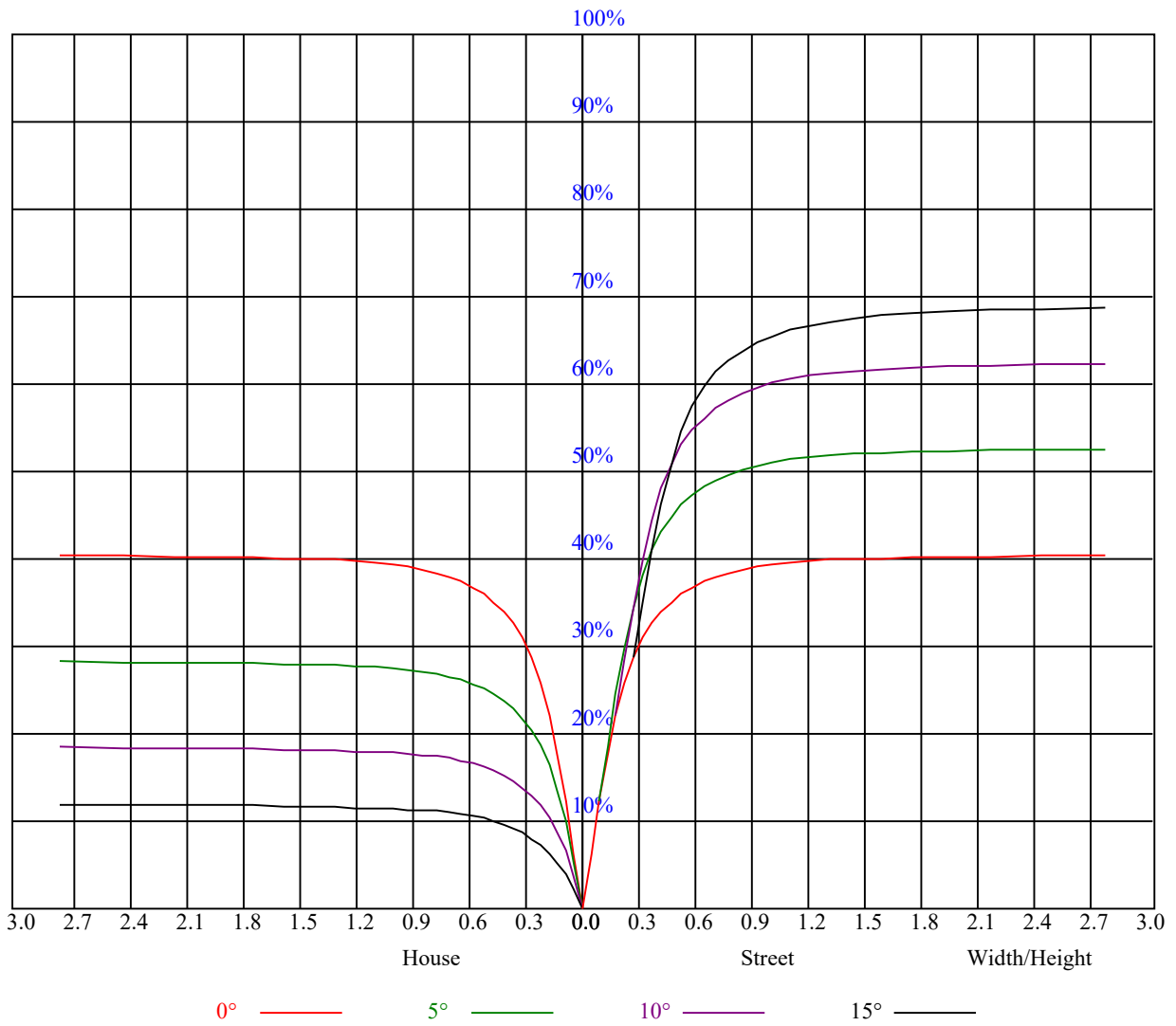
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





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	0.99	0.99	0.99	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.84	0.84	0.84	0.83
1	0.90	0.88	0.86	0.88	0.86	0.84	0.85	0.83	0.82	0.82	0.80	0.79	0.79	0.78	0.77	0.75
2	0.85	0.82	0.79	0.84	0.81	0.78	0.81	0.79	0.76	0.79	0.77	0.75	0.76	0.75	0.73	0.72
3	0.81	0.77	0.74	0.80	0.76	0.74	0.78	0.75	0.72	0.76	0.73	0.71	0.74	0.72	0.70	0.69
4	0.77	0.73	0.70	0.76	0.73	0.70	0.75	0.71	0.69	0.73	0.70	0.68	0.72	0.69	0.67	0.66
5	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.66	0.71	0.68	0.65	0.69	0.67	0.65	0.64
6	0.71	0.67	0.64	0.71	0.67	0.64	0.69	0.66	0.64	0.68	0.65	0.63	0.67	0.65	0.63	0.62
7	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.66	0.63	0.61	0.65	0.63	0.61	0.60
8	0.66	0.62	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.64	0.61	0.59	0.64	0.61	0.59	0.58
9	0.64	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.63	0.60	0.57	0.62	0.59	0.57	0.56
10	0.63	0.59	0.56	0.62	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.61	0.58	0.56	0.55



Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	9785.17	9044.11	6344.15	3577.56	1696.29	888.61	591.31	386.50	281.34
45.0	9793.43	9045.22	6836.35	3688.78	1734.83	910.63	615.53	394.75	283.54
90.0	9849.04	8690.65	5829.92	3151.43	1474.96	830.53	564.93	363.76	244.67
135.0	9815.45	8843.71	6201.00	3309.44	1610.40	863.83	564.33	372.18	279.69
180.0	9785.17	8091.09	5392.22	2685.10	1085.16	744.64	483.17	313.66	218.46
225.0	9793.43	8241.94	5429.66	2664.73	1072.88	736.10	483.12	308.98	215.44
270.0	9849.04	8676.34	5993.44	3117.29	1417.70	808.23	535.70	344.65	252.87
315.0	9799.49	8388.94	5442.33	2739.06	1088.74	769.58	508.72	338.49	231.18
360.0	9785.17	9044.11	6344.15	3577.56	1696.29	888.61	591.31	386.50	281.34

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	173.87	103.67	58.14	35.51	24.61	21.31	18.72	16.35	13.10
45.0	173.59	106.20	59.35	36.17	24.45	21.25	18.72	16.24	13.21
90.0	161.81	98.00	54.84	32.59	23.40	20.48	17.95	15.53	12.83
135.0	160.49	100.81	56.82	33.53	24.00	20.92	18.50	15.97	12.99
180.0	138.80	84.57	49.28	30.45	23.56	20.65	18.28	15.53	12.94
225.0	141.16	86.22	48.06	31.00	23.56	20.70	18.61	15.91	13.16
270.0	155.15	95.74	56.16	33.69	24.06	21.14	18.72	16.13	13.21
315.0	148.27	91.78	51.53	31.05	23.45	20.59	18.22	15.53	12.99
360.0	173.87	103.67	58.14	35.51	24.61	21.31	18.72	16.35	13.10

C/γ(°)	90.0
0.0	11.29
45.0	11.45
90.0	11.34
135.0	11.34
180.0	11.34
225.0	11.56
270.0	11.34
315.0	11.34
360.0	11.29