
Nata

LumCAT: 2-1672-M
Luminaire: 92.70.135.00
Report No: NT2017122802
Test No: GC2017122802
LampCAT: NICHIA NVEWJ048Z-V1
Lamp flux(lm): 3051.0
Number of Lamps: 1
Length(mm): 70
Phm Type: C

Voltage(V): 43.4000
Current(A): 0.5000
Power (W): 21.7000
PF: 0.0000
Ballast type: DC
Width(mm): 70
Height(mm): 0

Photometric Results

Lumens(lm): 2896.82
Efficiency(%): 94.95%
Lumens(lm)/Power(W): 133.49
Central intensity(cd): 9260.899
Maximum intensity(cd): 9260.899
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=27.3
 [C90/270]Total=27.3
Field angle(10%Imax): [C0/180]Total=60.9
 [C90/270]Total=60.9
Maximum s/h(1/2): C0_180=0.47 C90_270=0.47
Maximum s/h(1/4): C0_180=0.45 C90_270=0.45
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 94.95%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.584%

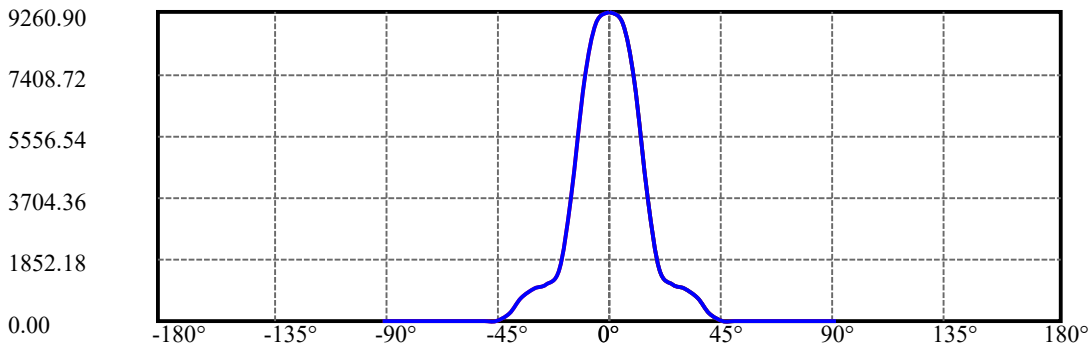
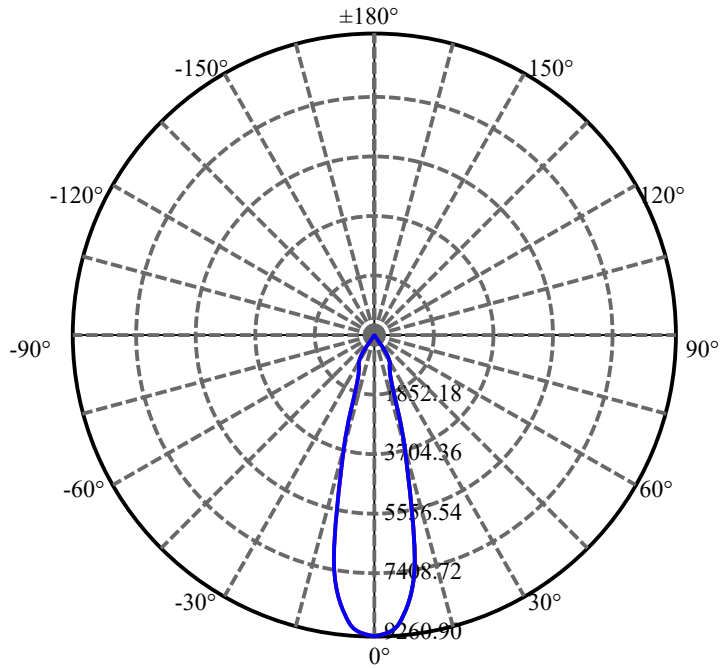
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9260.899	0.000	0	.000%	.000%
5.0	8894.981	217.048	217.048	7.114%	7.493%
10.0	7194.702	575.579	792.627	18.865%	27.362%
15.0	3676.322	644.862	1437.489	21.136%	49.623%
20.0	1566.217	432.059	1869.548	14.161%	64.538%
25.0	1078.135	277.344	2146.891	9.090%	74.112%
30.0	950.631	256.742	2403.633	8.415%	82.975%
35.0	666.575	238.145	2641.778	7.805%	91.196%
40.0	225.594	148.852	2790.63	4.879%	96.334%
45.0	20.811	45.624	2836.254	1.495%	97.909%
50.0	14.576	7.151	2843.404	.234%	98.156%
55.0	13.702	6.149	2849.553	.202%	98.368%
60.0	13.358	6.255	2855.808	.205%	98.584%
65.0	13.186	6.453	2862.261	.212%	98.807%
70.0	13.097	6.655	2868.916	.218%	99.037%
75.0	13.014	6.825	2875.741	.224%	99.272%
80.0	12.973	6.953	2882.694	.228%	99.512%
85.0	12.952	7.044	2889.738	.231%	99.756%
90.0	12.911	7.081	2896.82	.232%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2403.63	78.78%	82.97%
0-40	2790.63	91.47%	96.33%
0-60	2855.81	93.60%	98.58%
0-90	2889.74	94.71%	99.76%
0-120	2889.74	94.71%	99.76%
0-180	2896.82	94.95%	100.00%
60-90	40.19	1.32%	1.39%
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%
0-28.32	2317.46	75.96%	80.00%

ZONAL LUMEN SUMMARY

0-10	792.63
10-20	1076.92
20-30	534.09
30-40	387.00
40-50	52.77
50-60	12.40
60-70	13.11
70-80	13.78
80-90	7.04
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



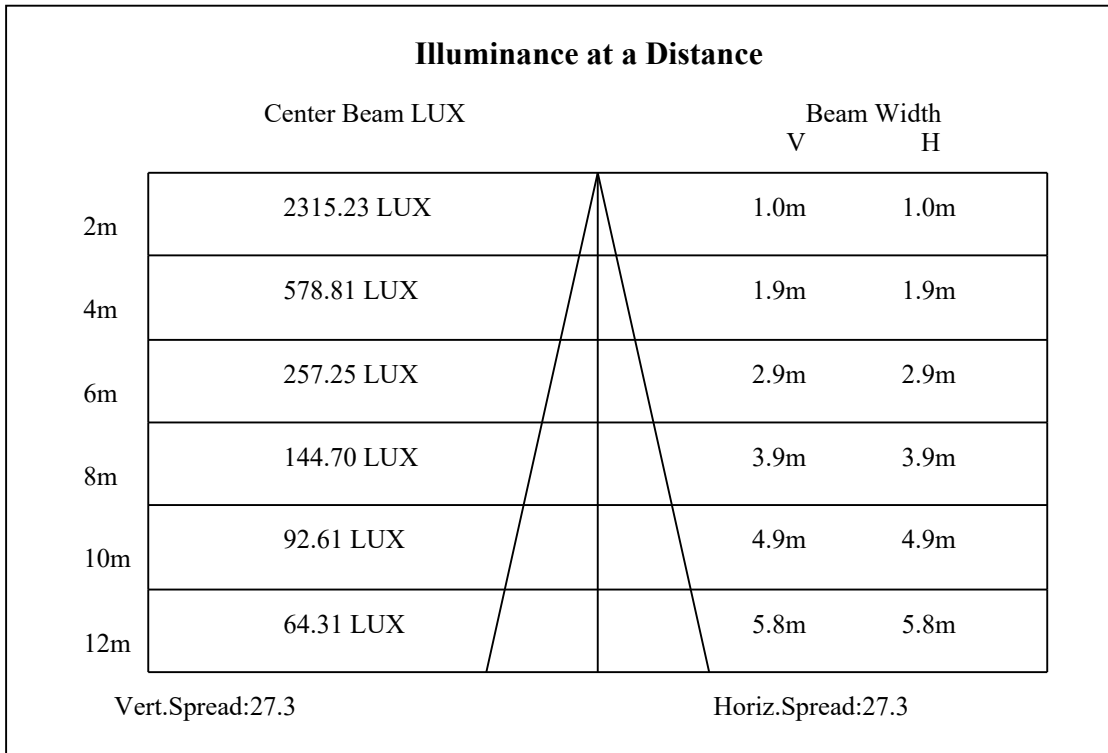
C0(Max): —————

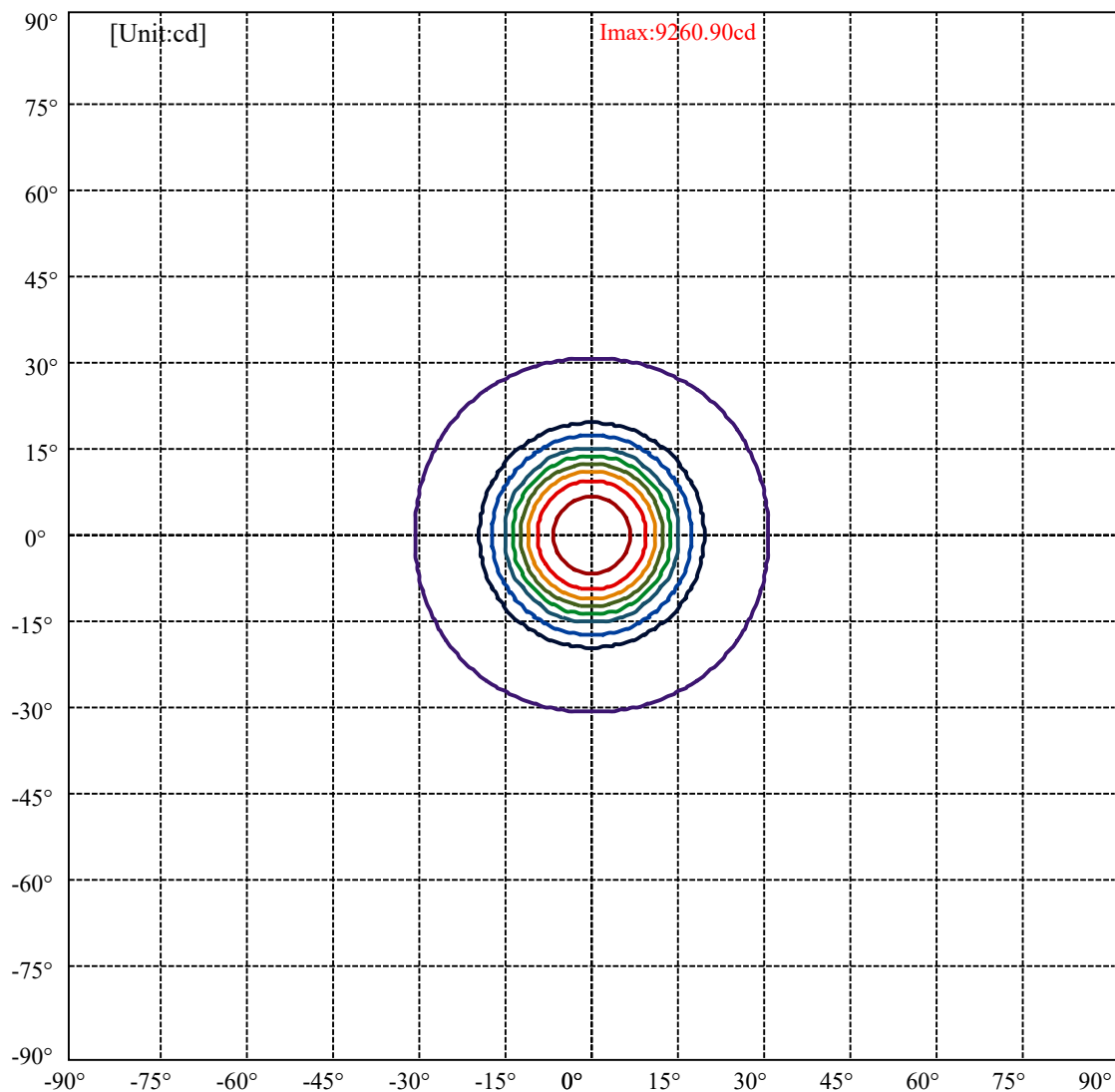
C0/C180: —————

C90/C270: —————

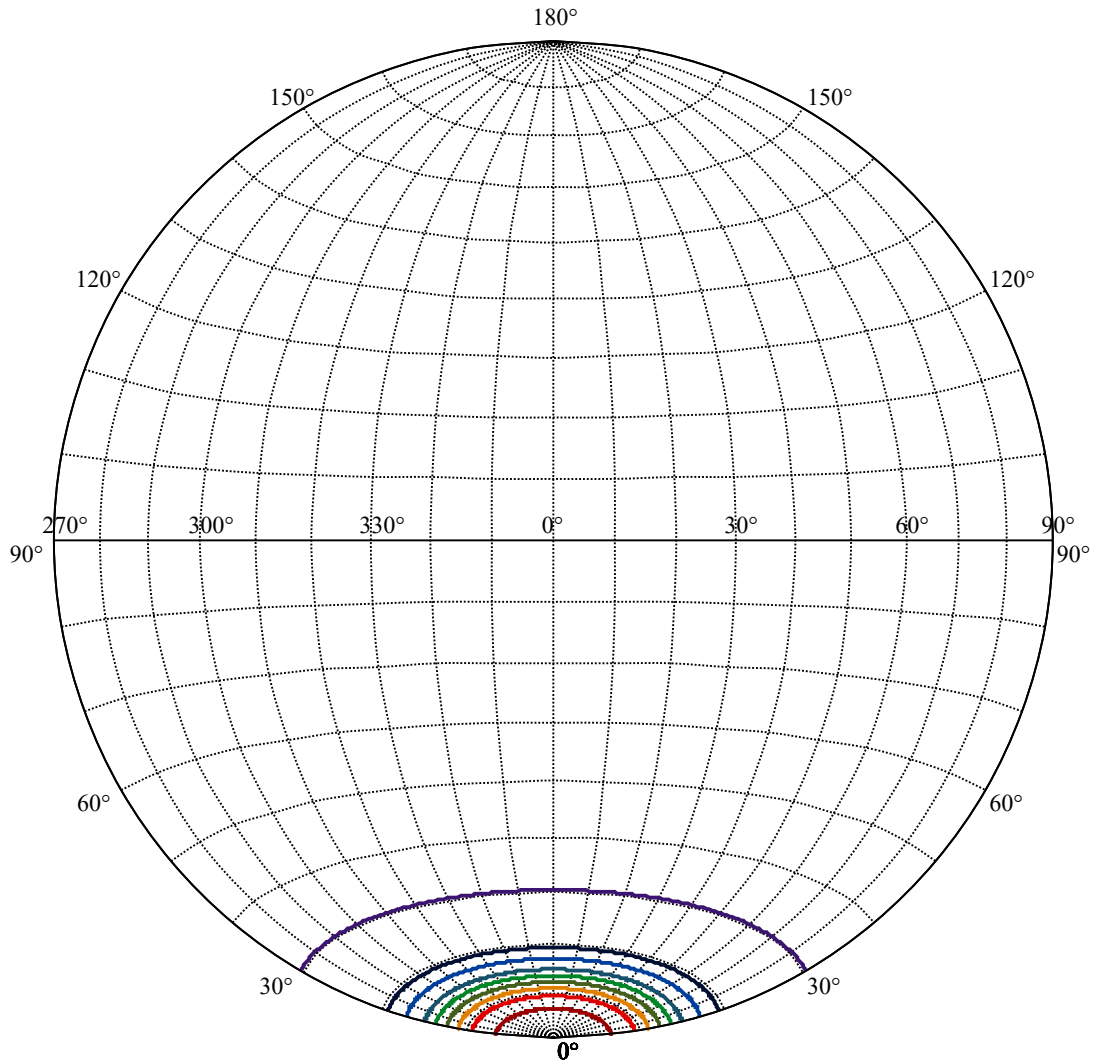
Field angle(10%Imax):C0/180Left:30.4 Right:30.4
:C90/270Left:30.4 Right:30.4

Beam Angle(50%Imax):C0/180Left:13.6 Right:13.6
:C90/270Left:13.6 Right:13.6





(10%Imax) 926.09	—
(20%Imax) 1852.18	—
(30%Imax) 2778.27	—
(40%Imax) 3704.36	—
(50%Imax) 4630.45	—
(60%Imax) 5556.54	—
(70%Imax) 6482.63	—
(80%Imax) 7408.72	—
(90%Imax) 8334.81	—



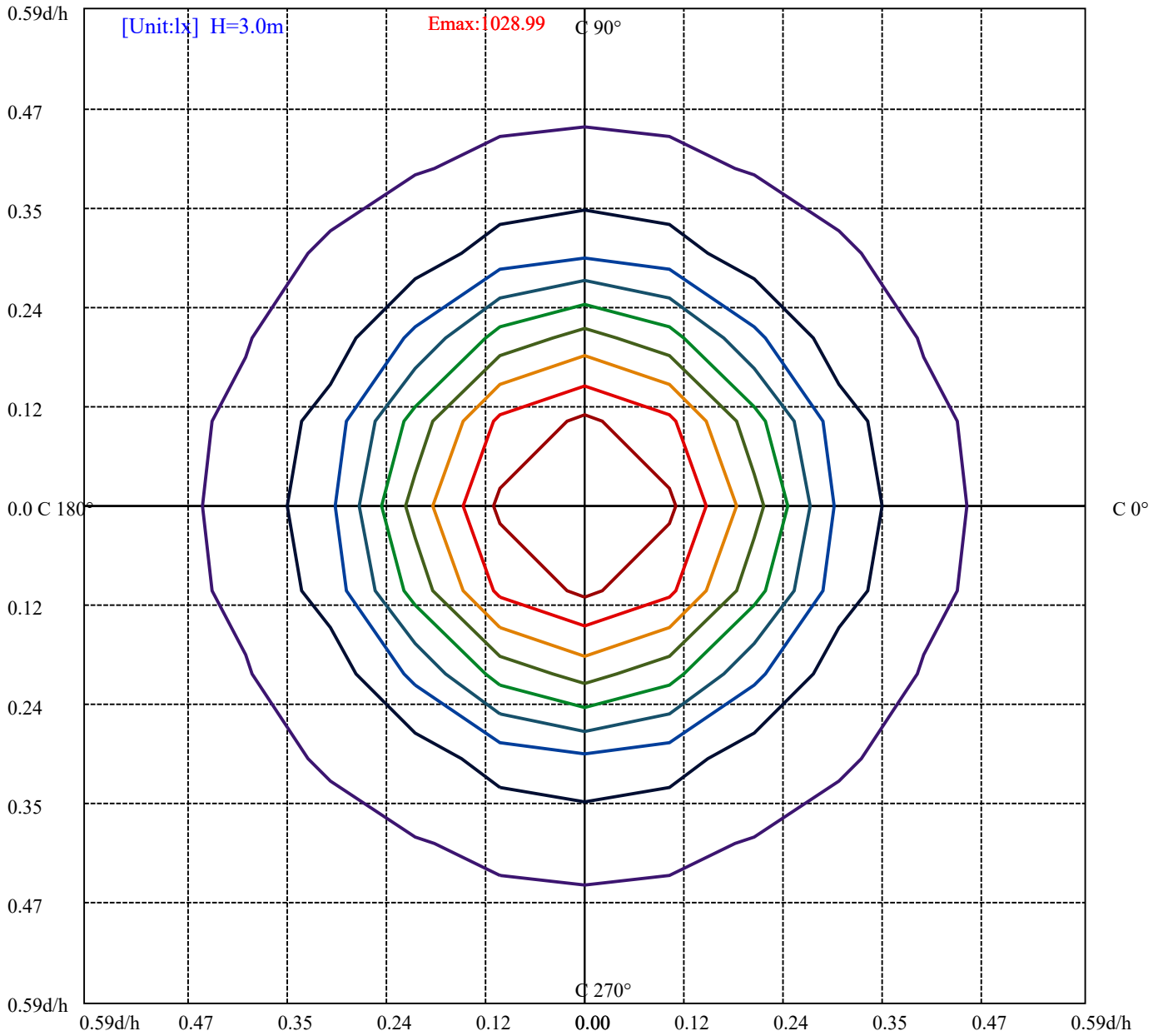
House

[Unit:cd]

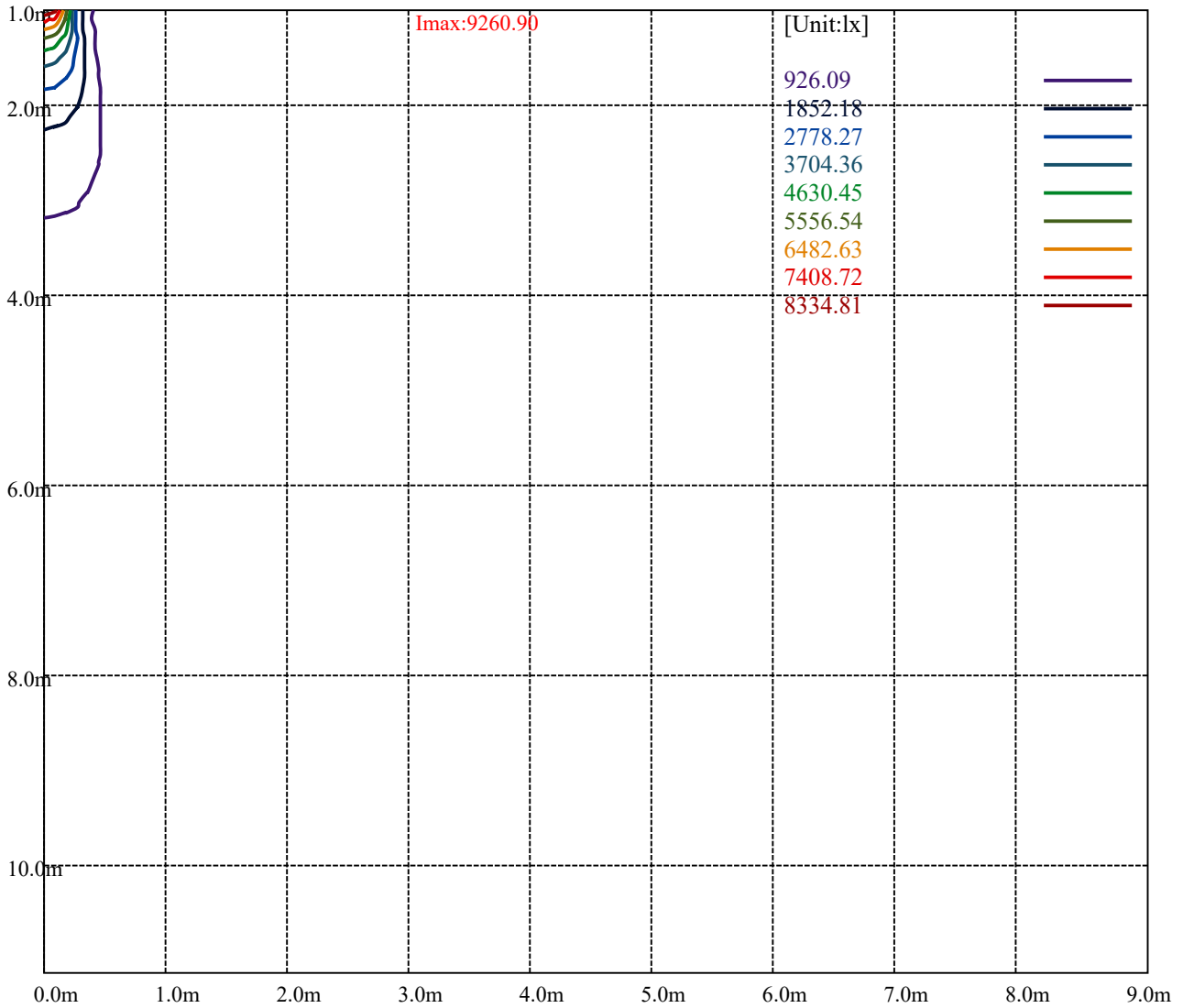
Road

Imax:9260.90

(10%Imax)	926.09	—
(20%Imax)	1852.18	—
(30%Imax)	2778.27	—
(40%Imax)	3704.36	—
(50%Imax)	4630.45	—
(60%Imax)	5556.54	—
(70%Imax)	6482.63	—
(80%Imax)	7408.72	—
(90%Imax)	8334.81	—



- (10%Emax) 102.8988
- (20%Emax) 205.7978
- (30%Emax) 308.6967
- (40%Emax) 411.5956
- (50%Emax) 514.4933
- (60%Emax) 617.3922
- (70%Emax) 720.2911
- (80%Emax) 823.19
- (90%Emax) 926.0889



Luminance Table

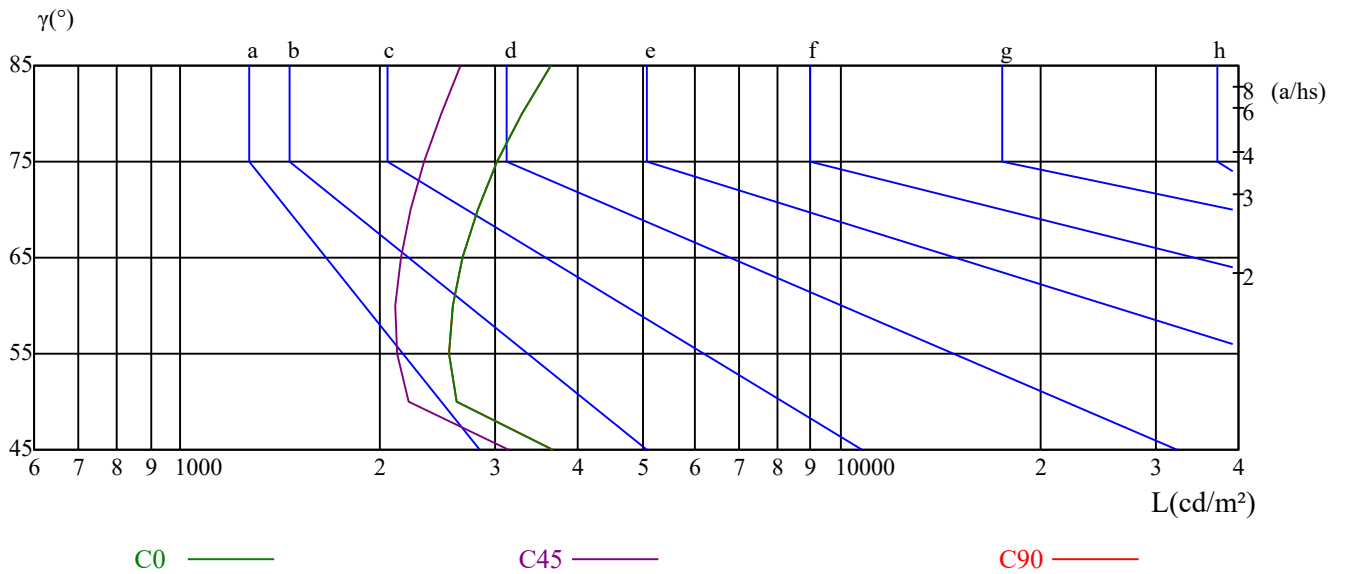
γ	45	50	55	60	65	70	75	80	85
C0	3656	2620	2542	2580	2677	2825	3019	3282	3633
C45	3146	2221	2121	2118	2159	2234	2336	2477	2662
C90	3656	2620	2542	2580	2677	2825	3019	3282	3633

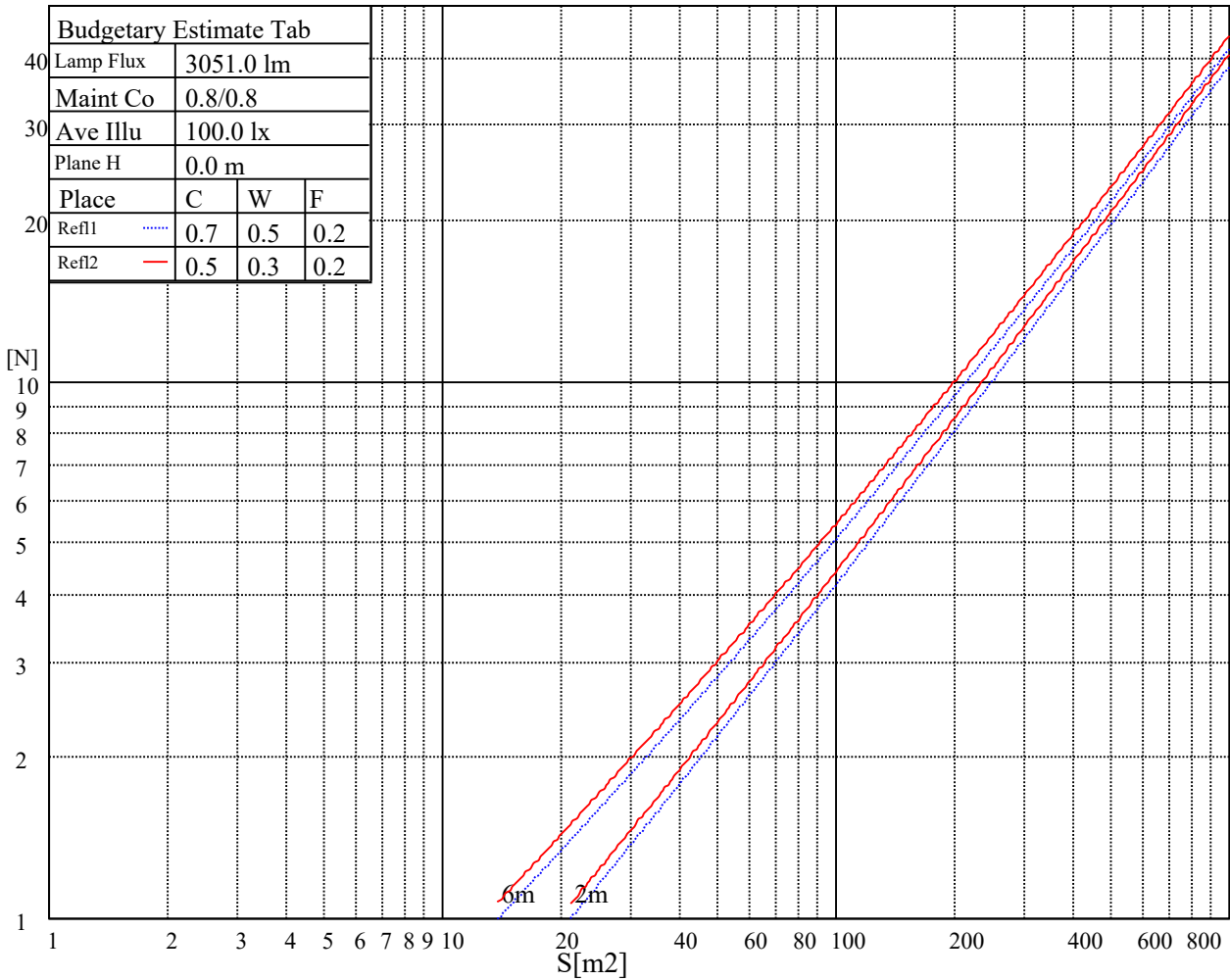
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6368	6368	6368	10262	10262	10262	30328	30328	30328

Glare Table

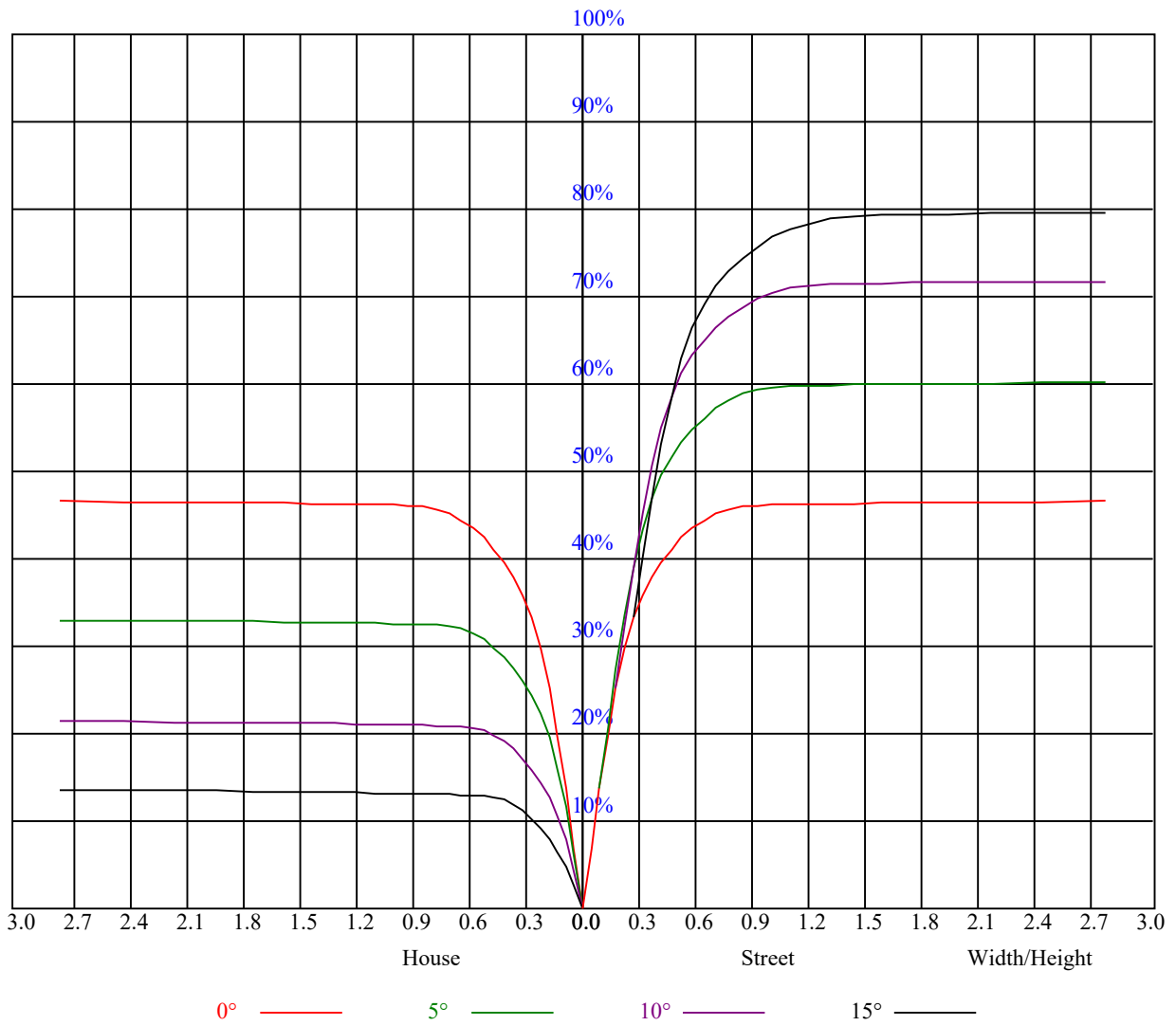
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.13	1.13	1.13	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	0.97	0.97	0.97	0.95
1	1.06	1.04	1.02	1.04	1.02	1.00	1.00	0.99	0.97	0.97	0.96	0.94	0.93	0.93	0.92	0.90
2	1.00	0.97	0.94	0.99	0.96	0.93	0.96	0.93	0.91	0.93	0.91	0.89	0.90	0.89	0.87	0.86
3	0.95	0.91	0.88	0.94	0.90	0.87	0.91	0.88	0.86	0.89	0.86	0.84	0.87	0.85	0.83	0.82
4	0.90	0.86	0.83	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.83	0.80	0.84	0.81	0.79	0.78
5	0.86	0.82	0.78	0.85	0.81	0.78	0.84	0.80	0.77	0.82	0.79	0.77	0.81	0.78	0.76	0.75
6	0.82	0.78	0.74	0.82	0.77	0.74	0.80	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.72
7	0.79	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.69
8	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.71	0.68	0.74	0.70	0.67	0.73	0.70	0.67	0.66
9	0.73	0.68	0.65	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.64
10	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.61



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	9239.01	9094.77	7926.47	4631.34	1931.38	1144.62	979.45	812.63	335.29
45.0	9262.14	9115.69	7925.37	4889.01	1964.96	1113.79	966.79	736.10	286.84
90.0	9270.40	8803.52	6987.76	3387.07	1413.85	1045.14	932.16	622.52	178.55
135.0	9272.05	8929.60	7012.53	3274.20	1398.98	1060.94	948.07	670.04	290.15
180.0	9239.01	8668.63	6293.50	2688.95	1310.89	1024.82	914.76	537.19	88.59
225.0	9262.14	8774.34	6789.00	3142.07	1415.50	1056.04	937.06	533.61	103.01
270.0	9270.40	8945.56	7617.60	3916.16	1613.15	1107.73	973.40	714.08	300.06
315.0	9272.05	8827.74	7005.38	3481.77	1481.02	1072.00	953.36	706.43	222.26
360.0	9239.01	9094.77	7926.47	4631.34	1931.38	1144.62	979.45	812.63	335.29

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	26.37	16.30	13.87	13.43	13.21	13.10	13.05	12.99	12.94
45.0	23.01	14.59	13.87	13.49	13.27	13.16	13.05	13.05	12.99
90.0	19.27	14.31	13.71	13.43	13.21	13.10	13.05	12.94	12.88
135.0	21.03	14.65	13.87	13.43	13.21	13.16	12.99	12.99	12.94
180.0	15.36	14.04	13.60	13.38	13.27	13.16	13.05	12.99	13.05
225.0	17.12	14.09	13.65	13.27	13.16	13.10	12.99	12.99	12.99
270.0	23.07	14.48	13.54	13.27	13.10	12.99	12.99	12.94	12.88
315.0	21.25	14.15	13.49	13.16	13.05	12.99	12.94	12.88	12.94
360.0	26.37	16.30	13.87	13.43	13.21	13.10	13.05	12.99	12.94

C/γ(°)	90.0
0.0	12.94
45.0	12.94
90.0	12.88
135.0	12.88
180.0	12.94
225.0	12.94
270.0	12.88
315.0	12.88
360.0	12.94