
Nata

LumCAT: 2-1795-N
Luminaire: 92.70.135.00
Report No: NT2017122931
Test No: nata-0100
LampCAT: NICHIA NVEWJ048Z-V1
Lamp flux(lm): 3200.0
Number of Lamps: 1
Length(mm): 69
Phm Type: C

Voltage(V): 43.4000
Current(A): 0.5000
Power (W): 21.7000
PF: 0.0000
Ballast type: DC
Width(mm): 69
Height(mm): 0

Photometric Results

Lumens(lm): 2638.32
Efficiency(%): 82.45%
Lumens(lm)/Power(W): 121.58
Central intensity(cd): 5505.915
Maximum intensity(cd): 5505.915
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=41.0
 [C90/270]Total=41.0
Field angle(10%Imax): [C0/180]Total=64.2
 [C90/270]Total=64.2
Maximum s/h(1/2): C0_180=0.67 C90_270=0.67
Maximum s/h(1/4): C0_180=0.65 C90_270=0.65
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 83.40%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.311%

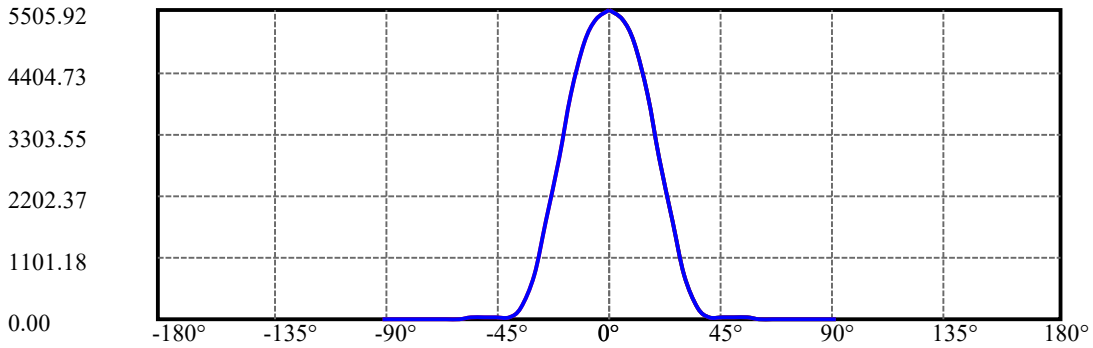
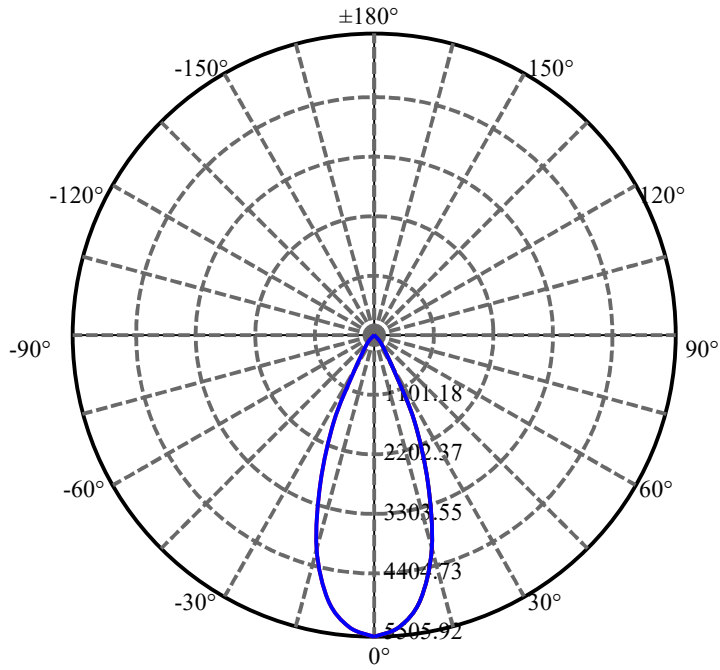
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5505.915	32.926	32.926	1.029%	1.248%
5.0	5342.893	255.248	288.174	7.976%	10.923%
10.0	4918.463	468.154	756.329	14.630%	28.667%
15.0	4017.796	569.998	1326.327	17.812%	50.272%
20.0	2866.732	537.438	1863.765	16.795%	70.642%
25.0	1731.028	400.998	2264.762	12.531%	85.841%
30.0	792.482	217.194	2481.957	6.787%	94.073%
35.0	216.757	68.148	2550.105	2.130%	96.656%
40.0	40.577	14.297	2564.401	.447%	97.198%
45.0	22.903	8.877	2573.279	.277%	97.535%
50.0	19.380	8.138	2581.416	.254%	97.843%
55.0	17.398	7.812	2589.228	.244%	98.139%
60.0	16.297	7.736	2596.964	.242%	98.433%
65.0	15.416	7.658	2604.622	.239%	98.723%
70.0	14.810	7.628	2612.251	.238%	99.012%
75.0	14.425	7.637	2619.888	.239%	99.301%
80.0	14.039	7.579	2627.467	.237%	99.589%
85.0	13.489	7.366	2634.832	.230%	99.868%
90.0	12.718	3.486	2638.318	.109%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2481.96	77.56%	94.07%
0-40	2564.40	80.14%	97.20%
0-60	2596.96	81.16%	98.43%
0-90	2634.83	82.34%	99.87%
0-120	2634.83	82.34%	99.87%
0-180	2638.32	82.45%	100.00%
60-90	45.60	1.43%	1.73%
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%
0-23.08	2110.65	65.96%	80.00%

ZONAL LUMEN SUMMARY

0-10	756.33
10-20	1107.44
20-30	618.19
30-40	82.44
40-50	17.01
50-60	15.55
60-70	15.29
70-80	15.22
80-90	7.37
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



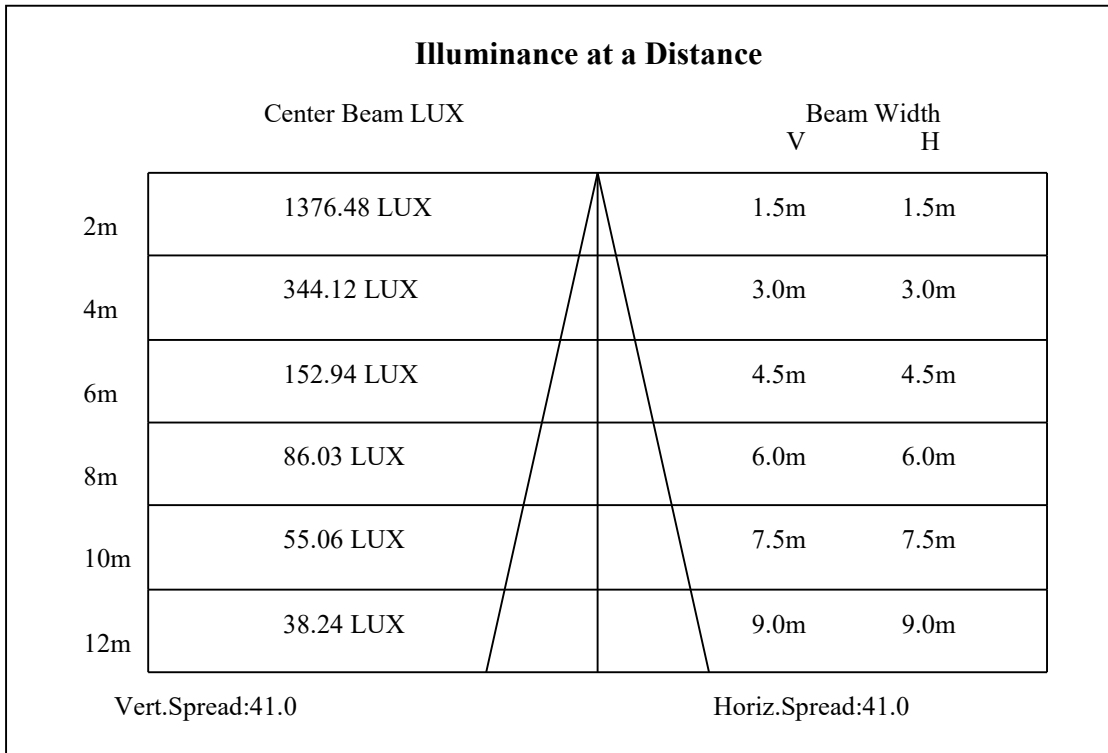
C0(Max): —————

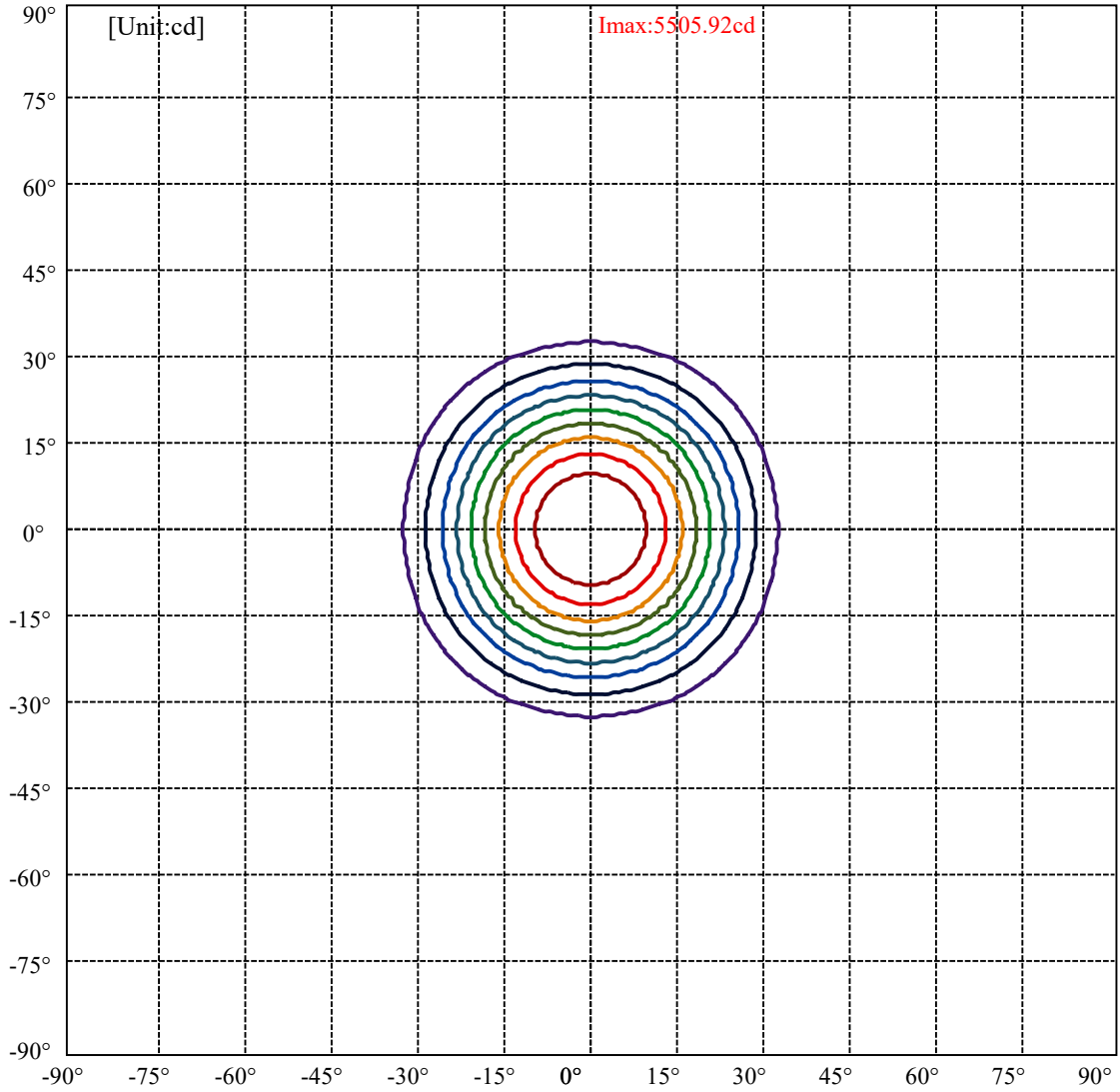
C0/C180: —————

C90/C270: —————

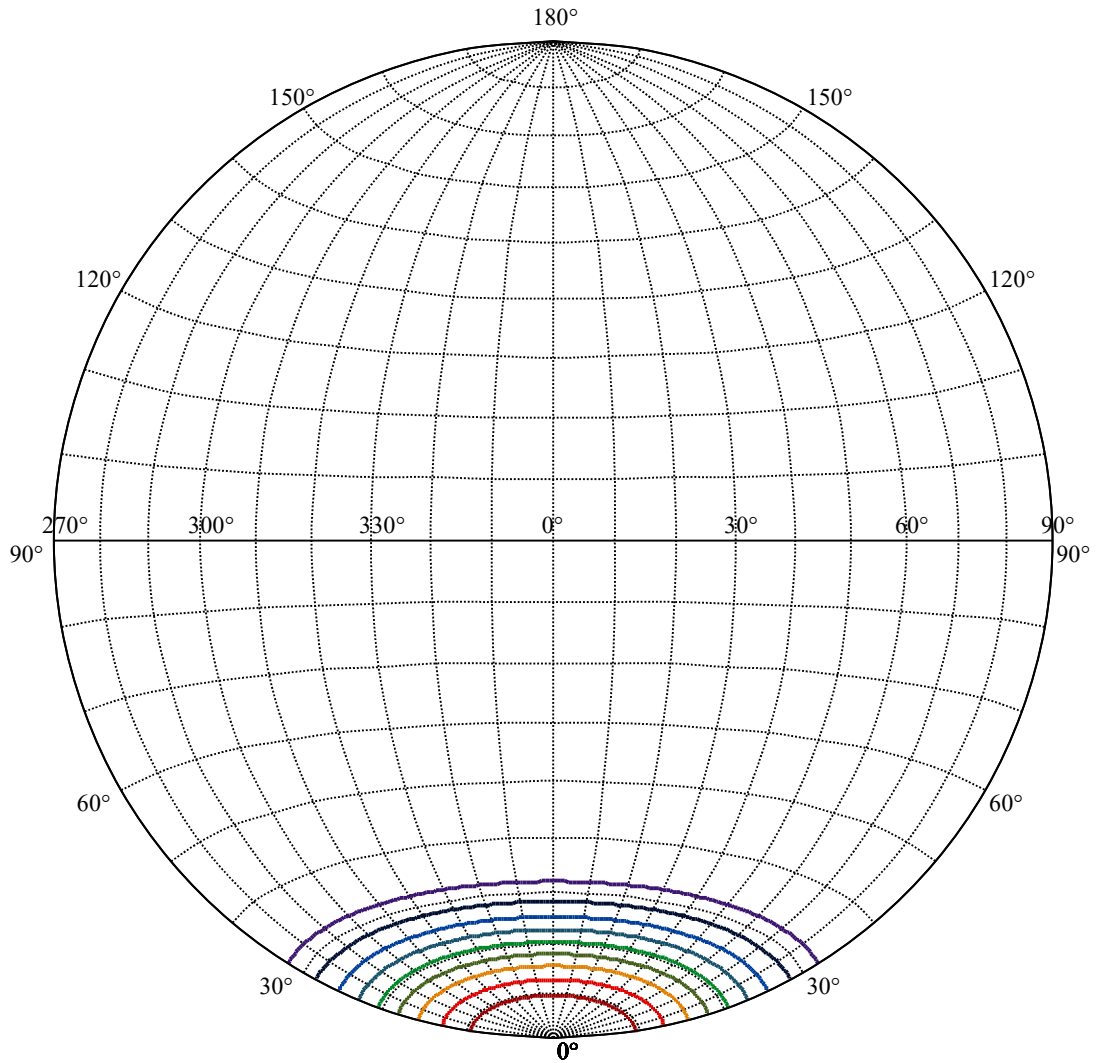
Field angle(10%Imax):C0/180Left:32.1 Right:32.1
:C90/270Left:32.1 Right:32.1

Beam Angle(50%Imax):C0/180Left:20.5 Right:20.5
:C90/270Left:20.5 Right:20.5





(10%Imax) 550.591	—
(20%Imax) 1101.18	—
(30%Imax) 1651.77	—
(40%Imax) 2202.37	—
(50%Imax) 2752.96	—
(60%Imax) 3303.55	—
(70%Imax) 3854.14	—
(80%Imax) 4404.73	—
(90%Imax) 4955.32	—



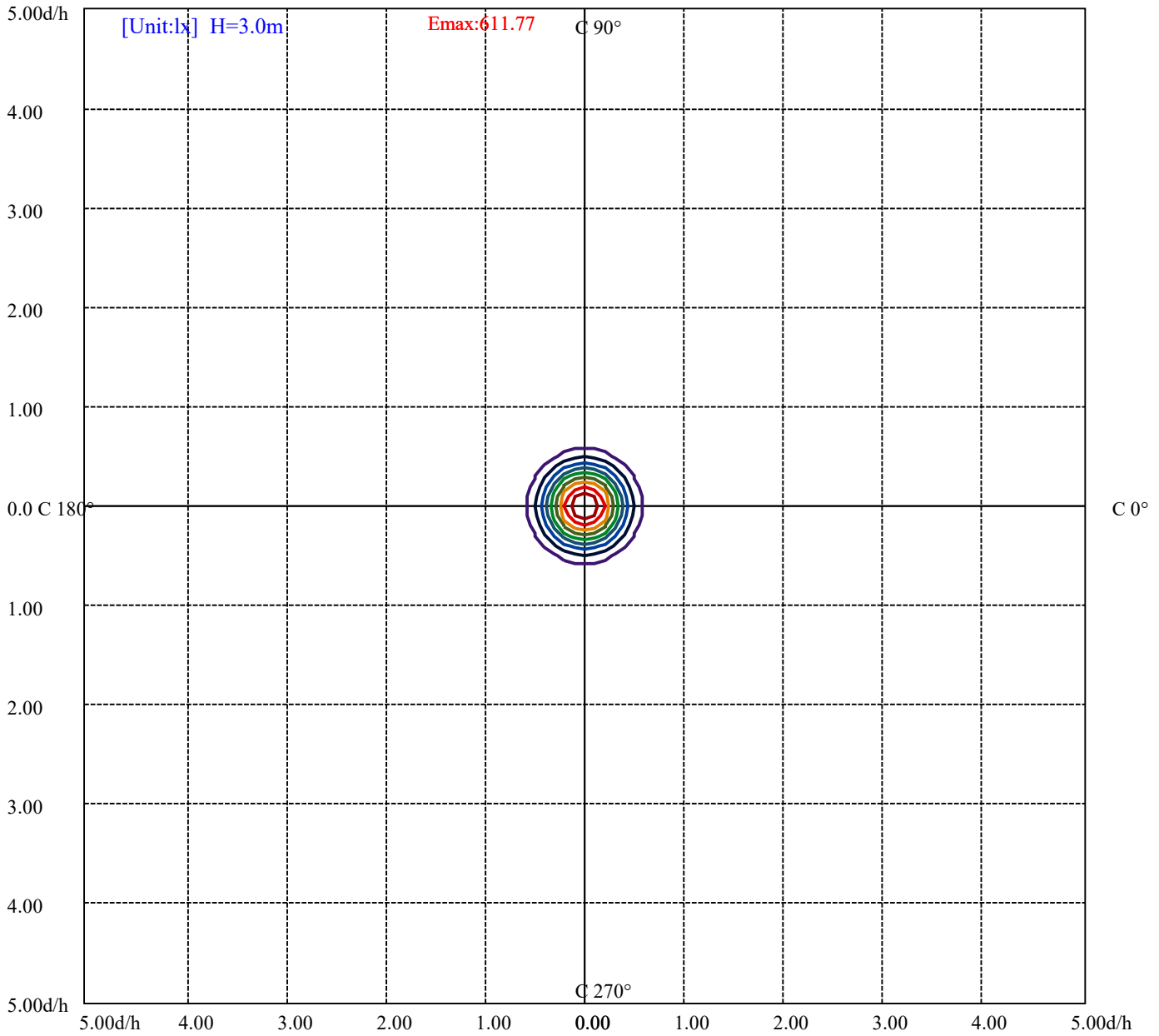
House

[Unit:cd]

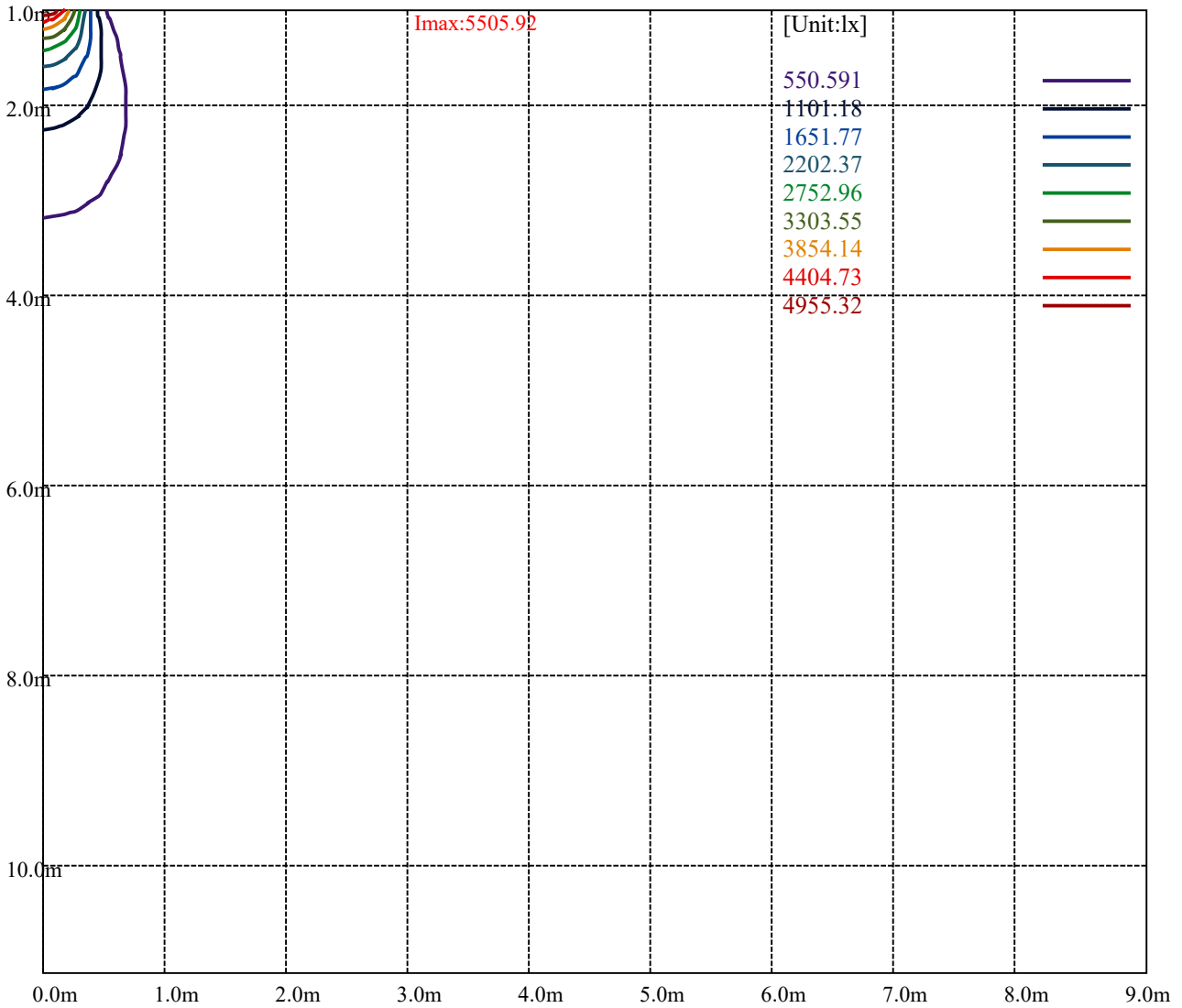
Road

Imax:5505.92

(10%Imax) 550.591	—
(20%Imax) 1101.18	—
(30%Imax) 1651.77	—
(40%Imax) 2202.37	—
(50%Imax) 2752.96	—
(60%Imax) 3303.55	—
(70%Imax) 3854.14	—
(80%Imax) 4404.73	—
(90%Imax) 4955.32	—



(10%Emax) 61.17678	—
(20%Emax) 122.3533	—
(30%Emax) 183.53	—
(40%Emax) 244.7067	—
(50%Emax) 305.8844	—
(60%Emax) 367.0611	—
(70%Emax) 428.2378	—
(80%Emax) 489.4144	—
(90%Emax) 550.5911	—



Luminance Table

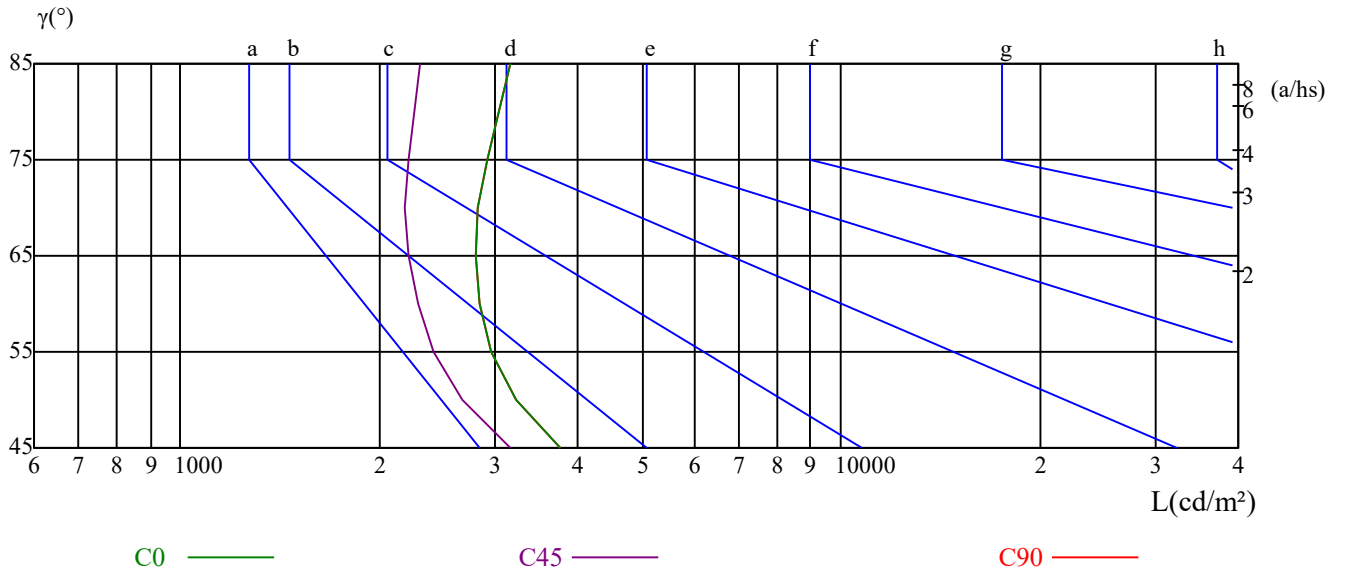
γ	45	50	55	60	65	70	75	80	85
C0	3755	3219	2951	2846	2796	2816	2906	3031	3163
C45	3168	2674	2414	2291	2213	2190	2216	2261	2302
C90	3755	3219	2951	2846	2796	2816	2906	3031	3163

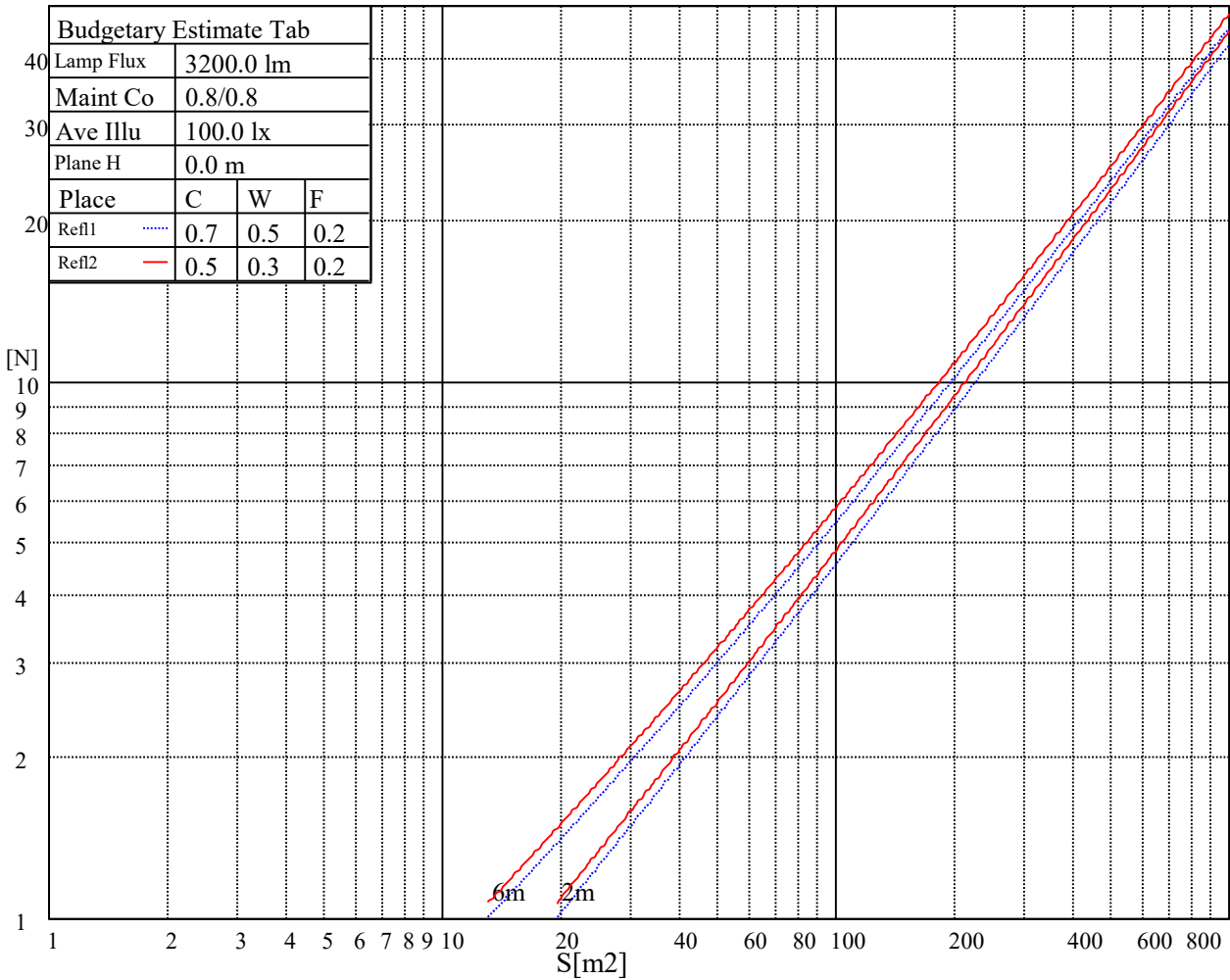
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
7662	7662	7662	11706	11706	11706	32507	32507	32507

Glare Table

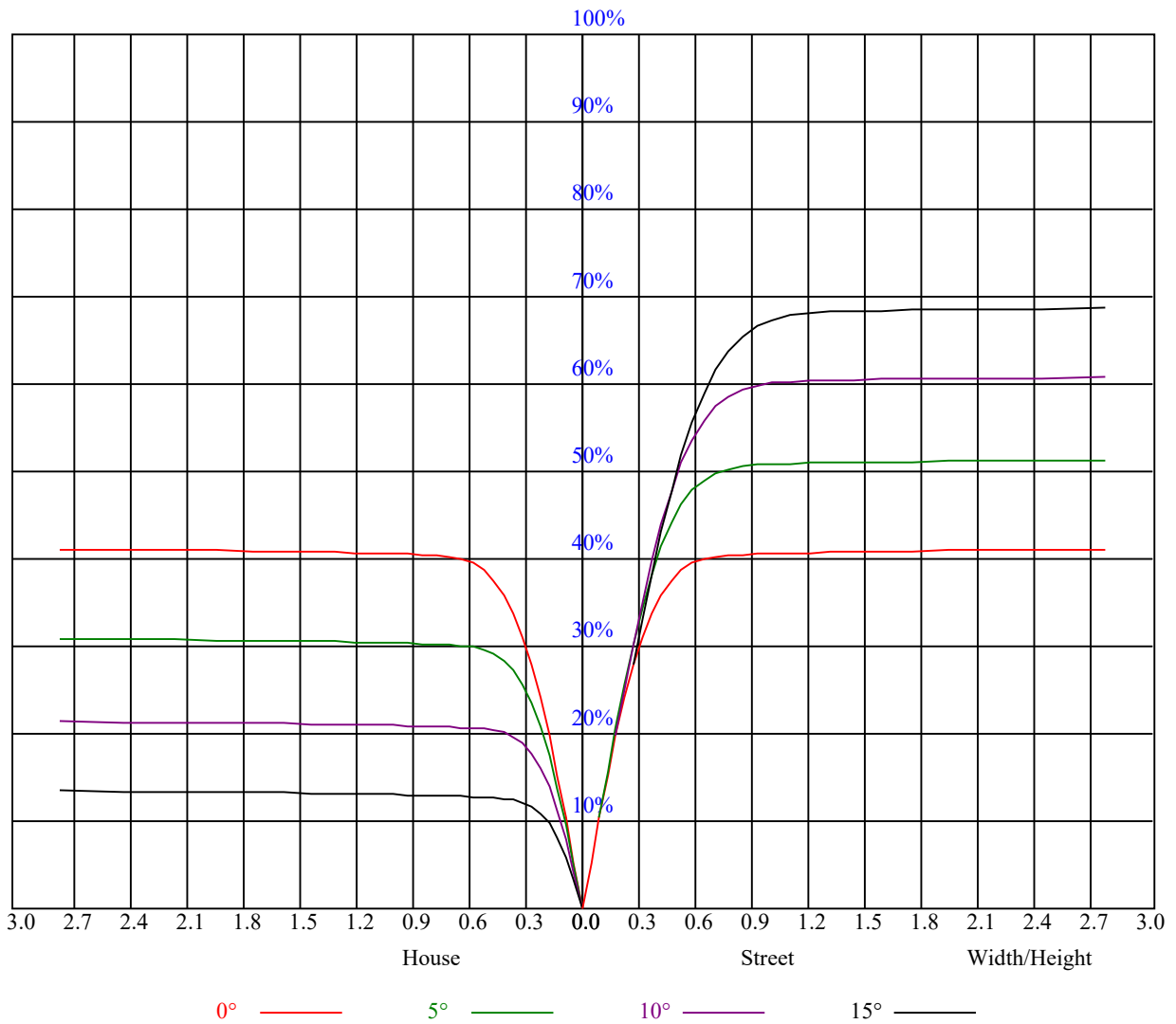
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.85	0.85	0.85	0.83
1	0.92	0.90	0.88	0.90	0.88	0.87	0.87	0.85	0.84	0.84	0.83	0.82	0.81	0.80	0.79	0.78
2	0.87	0.84	0.82	0.86	0.83	0.81	0.83	0.81	0.79	0.81	0.79	0.77	0.78	0.77	0.76	0.74
3	0.83	0.79	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.78	0.76	0.74	0.76	0.74	0.73	0.71
4	0.79	0.75	0.73	0.78	0.75	0.72	0.77	0.74	0.71	0.75	0.73	0.70	0.74	0.71	0.70	0.69
5	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.71	0.69	0.67	0.66
6	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.69	0.67	0.65	0.64
7	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.67	0.64	0.62	0.61
8	0.68	0.64	0.61	0.67	0.64	0.61	0.66	0.63	0.61	0.66	0.63	0.60	0.65	0.62	0.60	0.59
9	0.65	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.64	0.61	0.58	0.63	0.60	0.58	0.57
10	0.63	0.59	0.57	0.63	0.59	0.57	0.62	0.59	0.57	0.62	0.59	0.57	0.61	0.58	0.56	0.56



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	5505.92	5342.89	4918.46	4017.80	2866.73	1731.03	792.48	216.76	40.58
45.0	5505.92	5342.89	4918.46	4017.80	2866.73	1731.03	792.48	216.76	40.58
90.0	5505.92	5342.89	4918.46	4017.80	2866.73	1731.03	792.48	216.76	40.58
135.0	5505.92	5342.89	4918.46	4017.80	2866.73	1731.03	792.48	216.76	40.58
180.0	5505.92	5342.89	4918.46	4017.80	2866.73	1731.03	792.48	216.76	40.58
225.0	5505.92	5342.89	4918.46	4017.80	2866.73	1731.03	792.48	216.76	40.58
270.0	5505.92	5342.89	4918.46	4017.80	2866.73	1731.03	792.48	216.76	40.58
315.0	5505.92	5342.89	4918.46	4017.80	2866.73	1731.03	792.48	216.76	40.58
360.0	5505.92	5342.89	4918.46	4017.80	2866.73	1731.03	792.48	216.76	40.58

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	22.90	19.38	17.40	16.30	15.42	14.81	14.42	14.04	13.49
45.0	22.90	19.38	17.40	16.30	15.42	14.81	14.42	14.04	13.49
90.0	22.90	19.38	17.40	16.30	15.42	14.81	14.42	14.04	13.49
135.0	22.90	19.38	17.40	16.30	15.42	14.81	14.42	14.04	13.49
180.0	22.90	19.38	17.40	16.30	15.42	14.81	14.42	14.04	13.49
225.0	22.90	19.38	17.40	16.30	15.42	14.81	14.42	14.04	13.49
270.0	22.90	19.38	17.40	16.30	15.42	14.81	14.42	14.04	13.49
315.0	22.90	19.38	17.40	16.30	15.42	14.81	14.42	14.04	13.49
360.0	22.90	19.38	17.40	16.30	15.42	14.81	14.42	14.04	13.49

C/γ(°)	90.0
0.0	12.72
45.0	12.72
90.0	12.72
135.0	12.72
180.0	12.72
225.0	12.72
270.0	12.72
315.0	12.72
360.0	12.72