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Nata

LumCAT: 1-0938-N	
Luminaire: 92.70.361.000	
Report No: 220518-B015	Voltage(V): 37.7100
Test No: 220518-C015	Current(A): 0.3600
LampCAT: CREE CXA1512	Power (W): 13.5750
Lamp flux(lm): 1623.7	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 43	Width(mm): 43
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1332.63
Efficiency(%): 82.07%
Lumens(lm)/Power(W): 98.17
Central intensity(cd): 2742.210
Maximum intensity(cd): 2742.210
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=41.5
 [C90/270]Total=41.5
Field angle(10%Imax): [C0/180]Total=62.2
 [C90/270]Total=62.2
Maximum s/h(1/2): C0_180=0.68 C90_270=0.68
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(%): 82.07%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.989%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2022/5/18
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

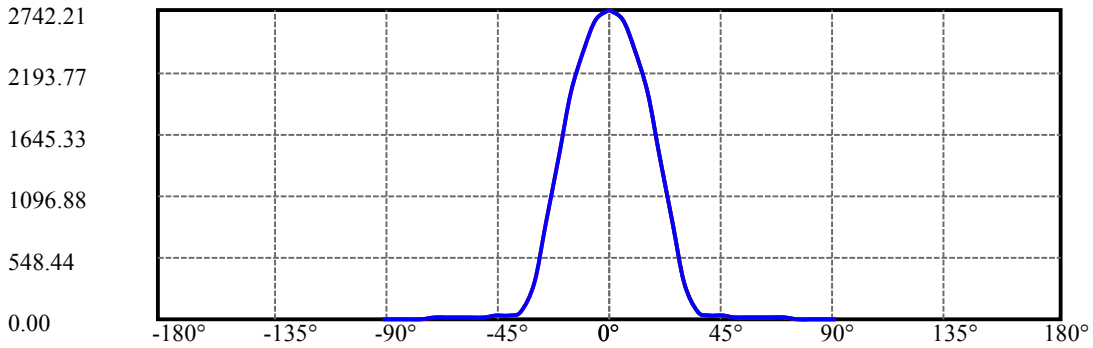
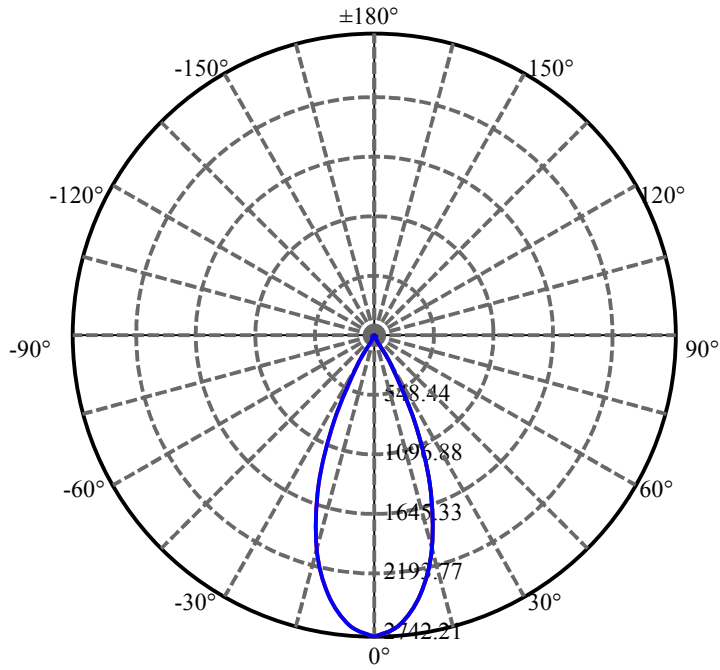
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2742.210	0.000	0	.000%	.000%
5.0	2654.747	64.519	64.519	3.974%	4.841%
10.0	2402.664	180.920	245.439	11.142%	18.418%
15.0	2014.868	262.045	507.484	16.138%	38.081%
20.0	1458.456	286.251	793.734	17.629%	59.562%
25.0	859.628	243.124	1036.859	14.973%	77.806%
30.0	331.487	150.737	1187.595	9.283%	89.117%
35.0	75.266	59.897	1247.492	3.689%	93.611%
40.0	39.519	19.151	1266.643	1.179%	95.049%
45.0	28.554	12.604	1279.248	.776%	95.994%
50.0	22.564	10.329	1289.577	.636%	96.769%
55.0	17.881	8.794	1298.371	.542%	97.429%
60.0	14.371	7.455	1305.826	.459%	97.989%
65.0	11.428	6.272	1312.098	.386%	98.459%
70.0	9.419	5.278	1317.376	.325%	98.856%
75.0	7.858	4.516	1321.892	.278%	99.194%
80.0	6.924	3.955	1325.847	.244%	99.491%
85.0	6.147	3.552	1329.398	.219%	99.758%
90.0	5.647	3.229	1332.628	.199%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1187.60	73.14%	89.12%
0-40	1266.64	78.01%	95.05%
0-60	1305.83	80.42%	97.99%
0-90	1329.40	81.87%	99.76%
0-120	1329.40	81.87%	99.76%
0-180	1332.63	82.07%	100.00%
60-90	31.03	1.91%	2.33%
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%
0-25.97	1066.10	65.66%	80.00%

ZONAL LUMEN SUMMARY

0-10	245.44
10-20	548.30
20-30	393.86
30-40	79.05
40-50	22.93
50-60	16.25
60-70	11.55
70-80	8.47
80-90	3.55
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: ———

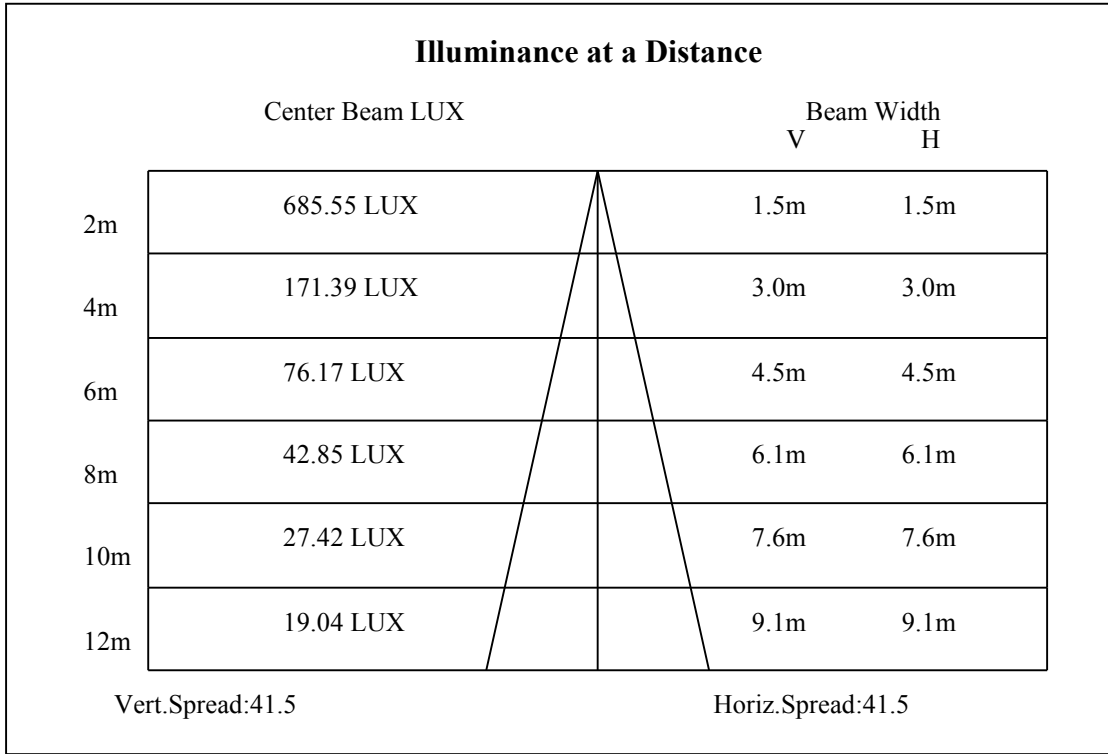
C90/C270: ———

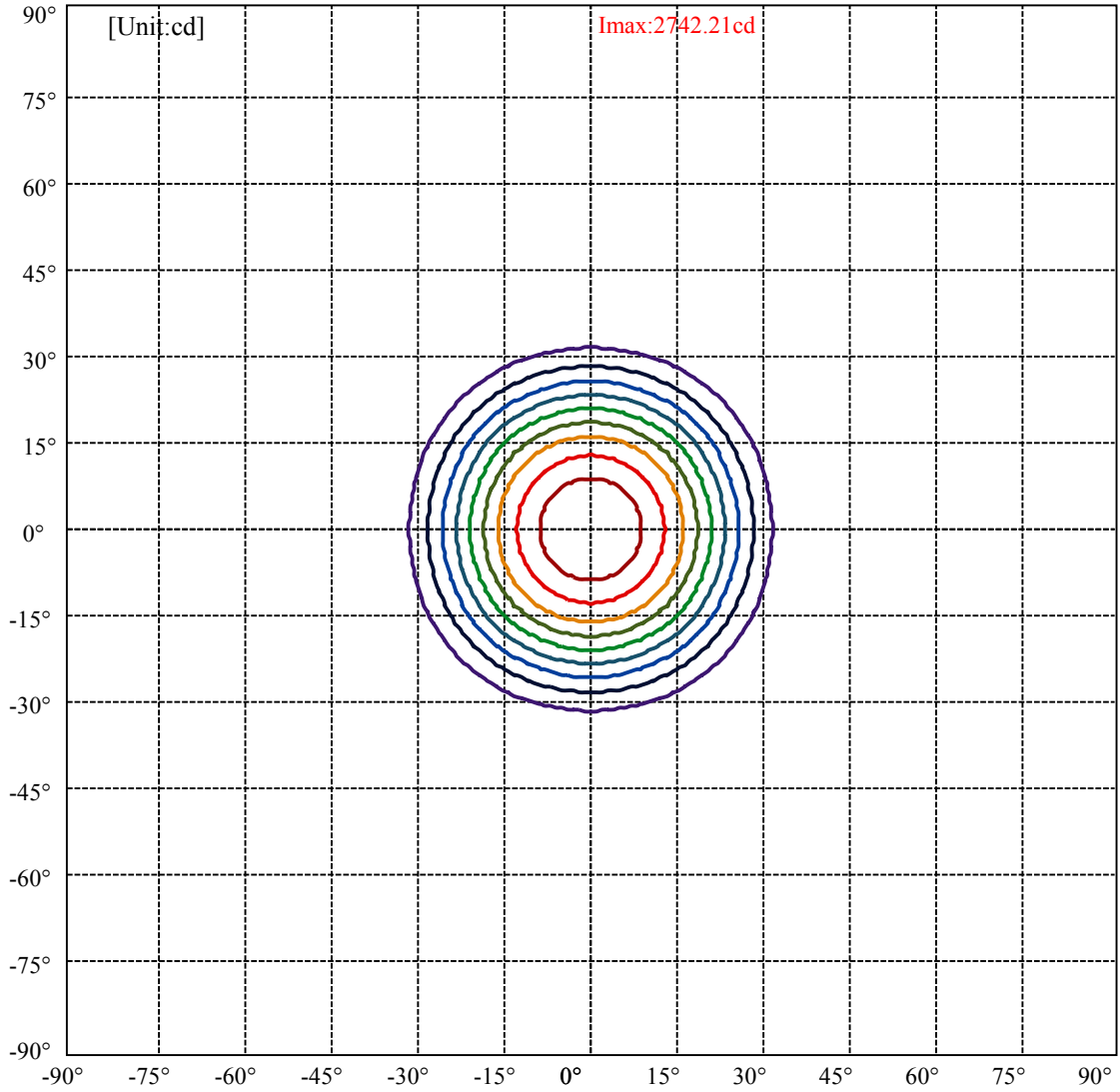
Field angle(10%Imax):C0/180Left:31.1 Right:31.1

:C90/270Left:31.1 Right:31.1

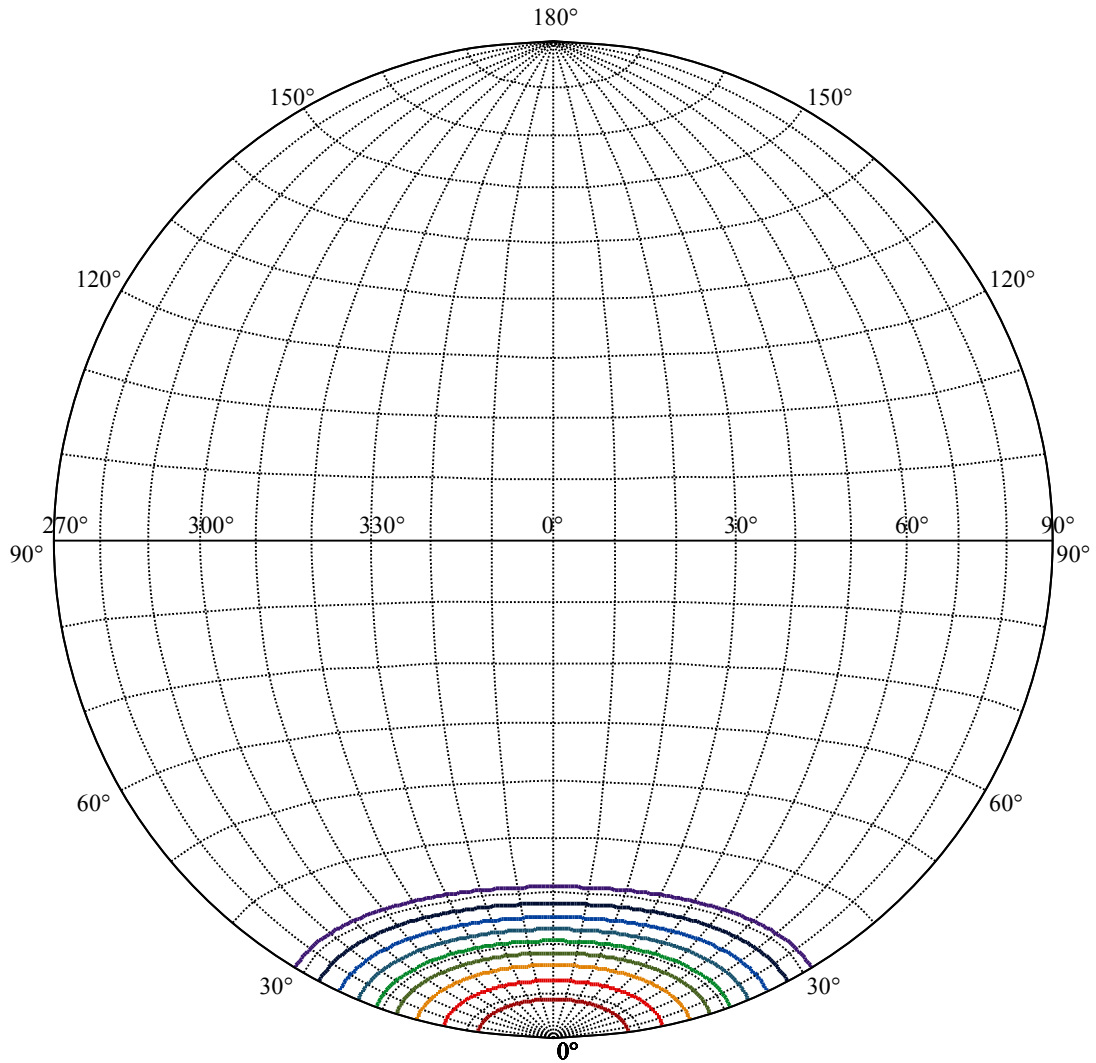
Beam Angle(50%Imax):C0/180Left:20.7 Right:20.7

:C90/270Left:20.7 Right:20.7





(10%Imax) 274.221	—
(20%Imax) 548.442	—
(30%Imax) 822.663	—
(40%Imax) 1096.88	—
(50%Imax) 1371.11	—
(60%Imax) 1645.33	—
(70%Imax) 1919.55	—
(80%Imax) 2193.77	—
(90%Imax) 2467.99	—



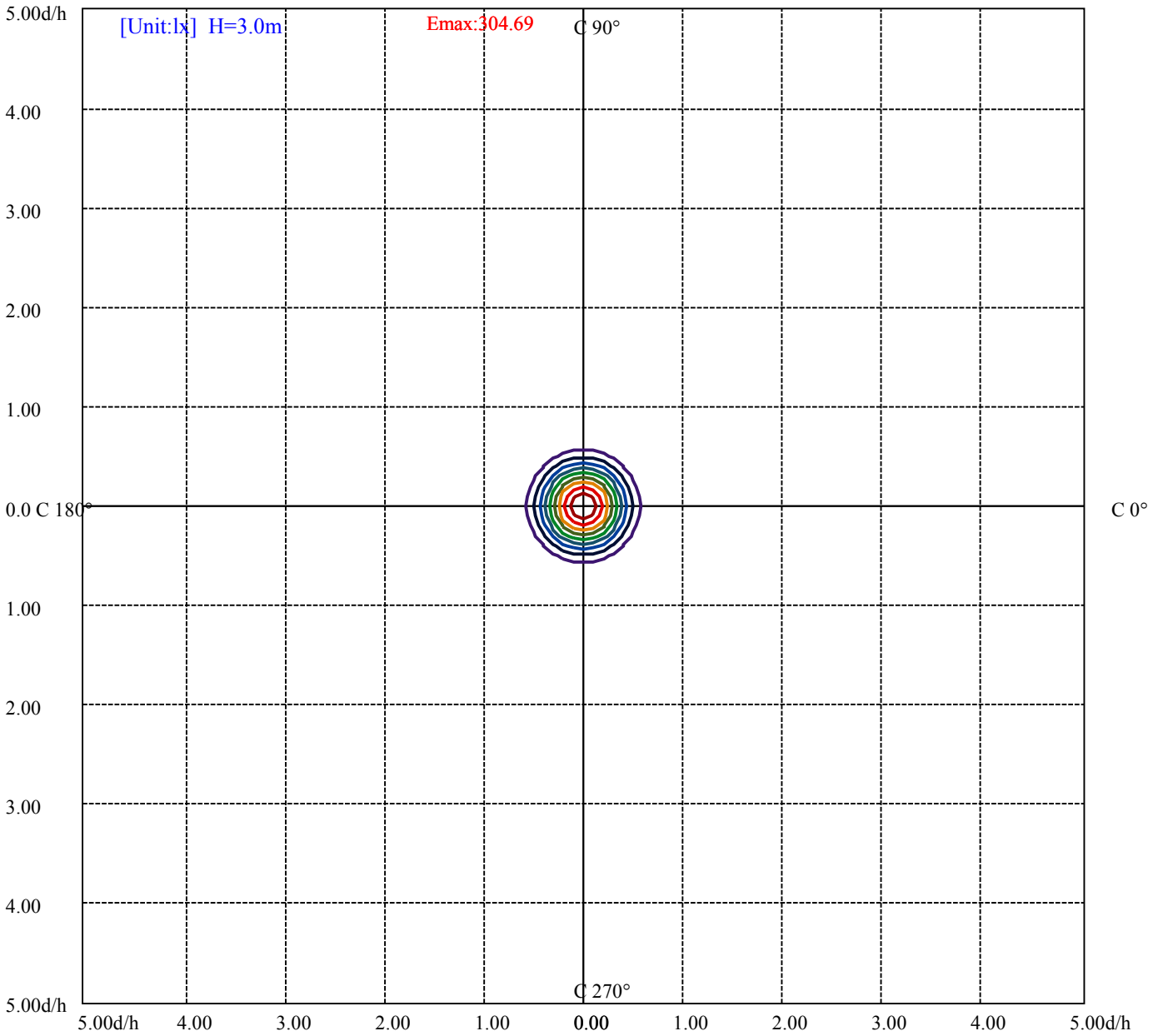
House

[Unit:cd]

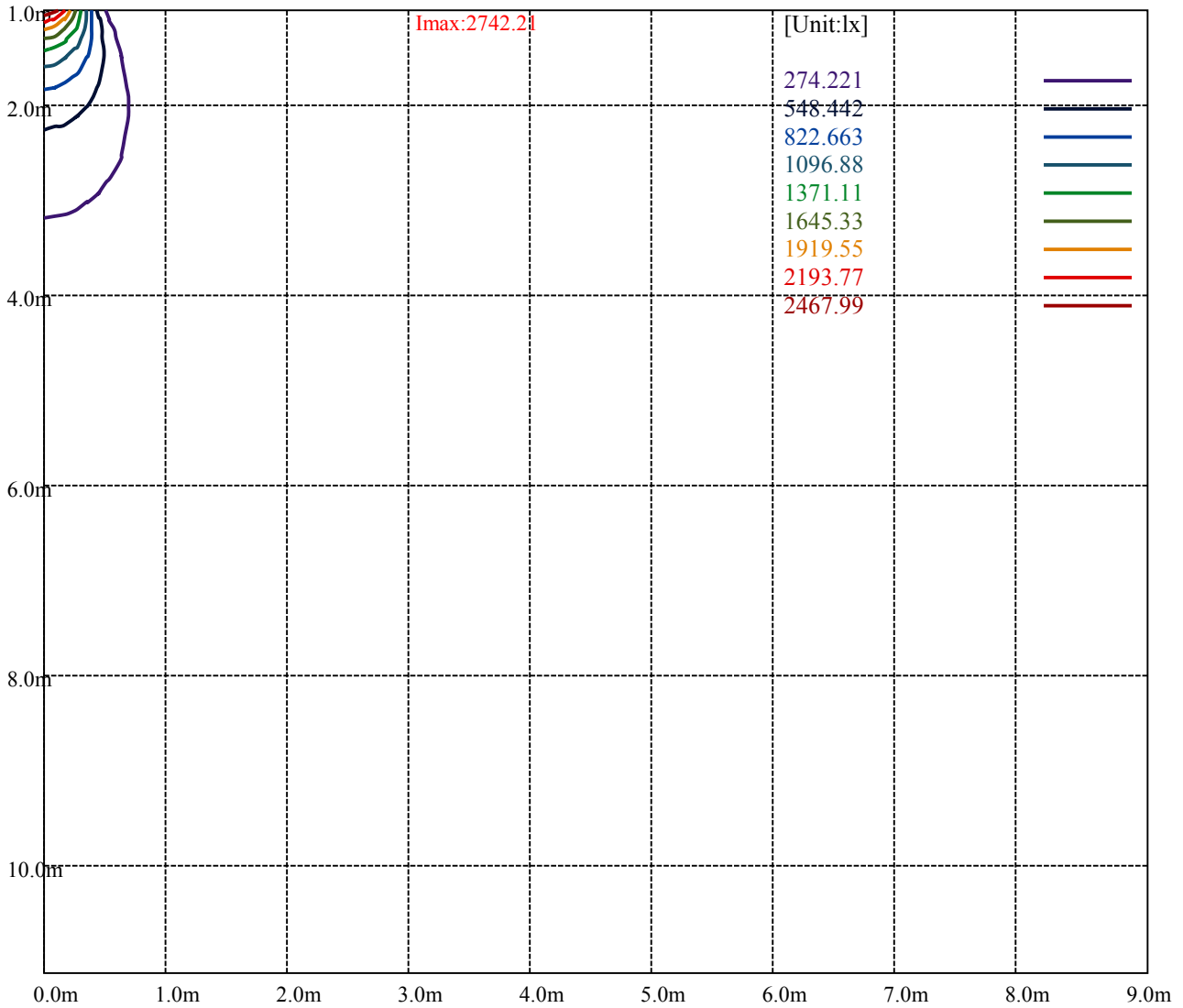
Road

Imax:2742.21

(10%Imax)	274.221	—
(20%Imax)	548.442	—
(30%Imax)	822.663	—
(40%Imax)	1096.88	—
(50%Imax)	1371.11	—
(60%Imax)	1645.33	—
(70%Imax)	1919.55	—
(80%Imax)	2193.77	—
(90%Imax)	2467.99	—



- (10%Emax) 30.469
- (20%Emax) 60.938
- (30%Emax) 91.40689
- (40%Emax) 121.8756
- (50%Emax) 152.3444
- (60%Emax) 182.8133
- (70%Emax) 213.2833
- (80%Emax) 243.7522
- (90%Emax) 274.2211



Luminance Table

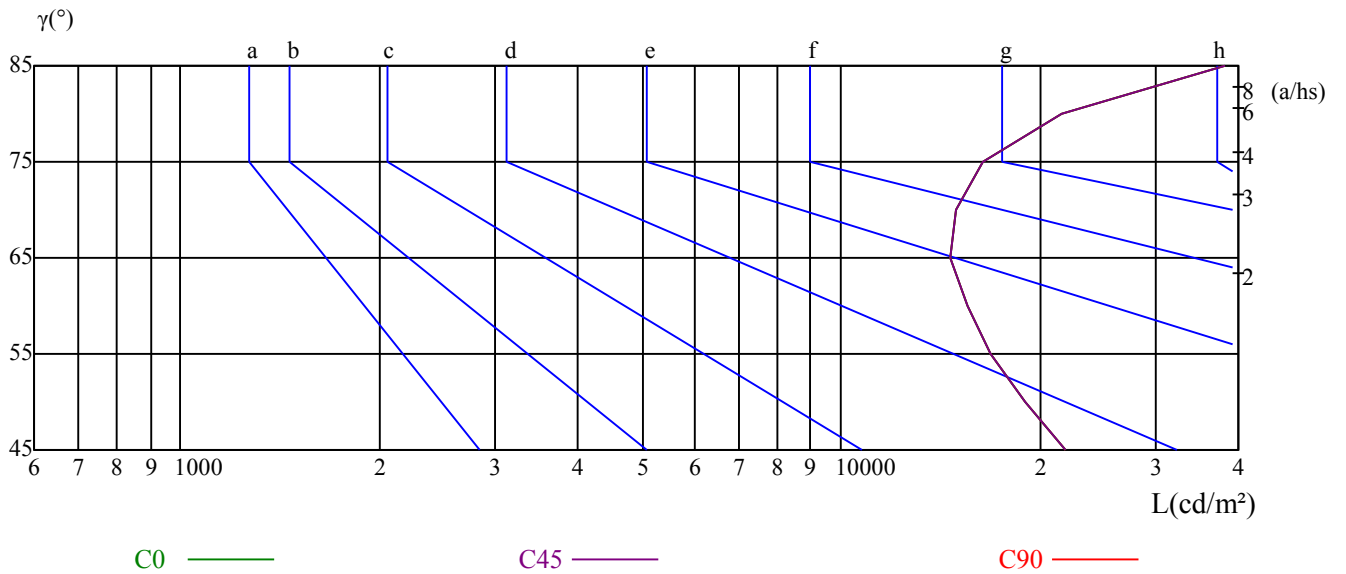
γ	45	50	55	60	65	70	75	80	85
C0	21840	18985	16860	15544	14624	14893	16419	21565	38145
C45	21840	18985	16860	15544	14624	14893	16419	21565	38145
C90	21840	18985	16860	15544	14624	14893	16419	21565	38145

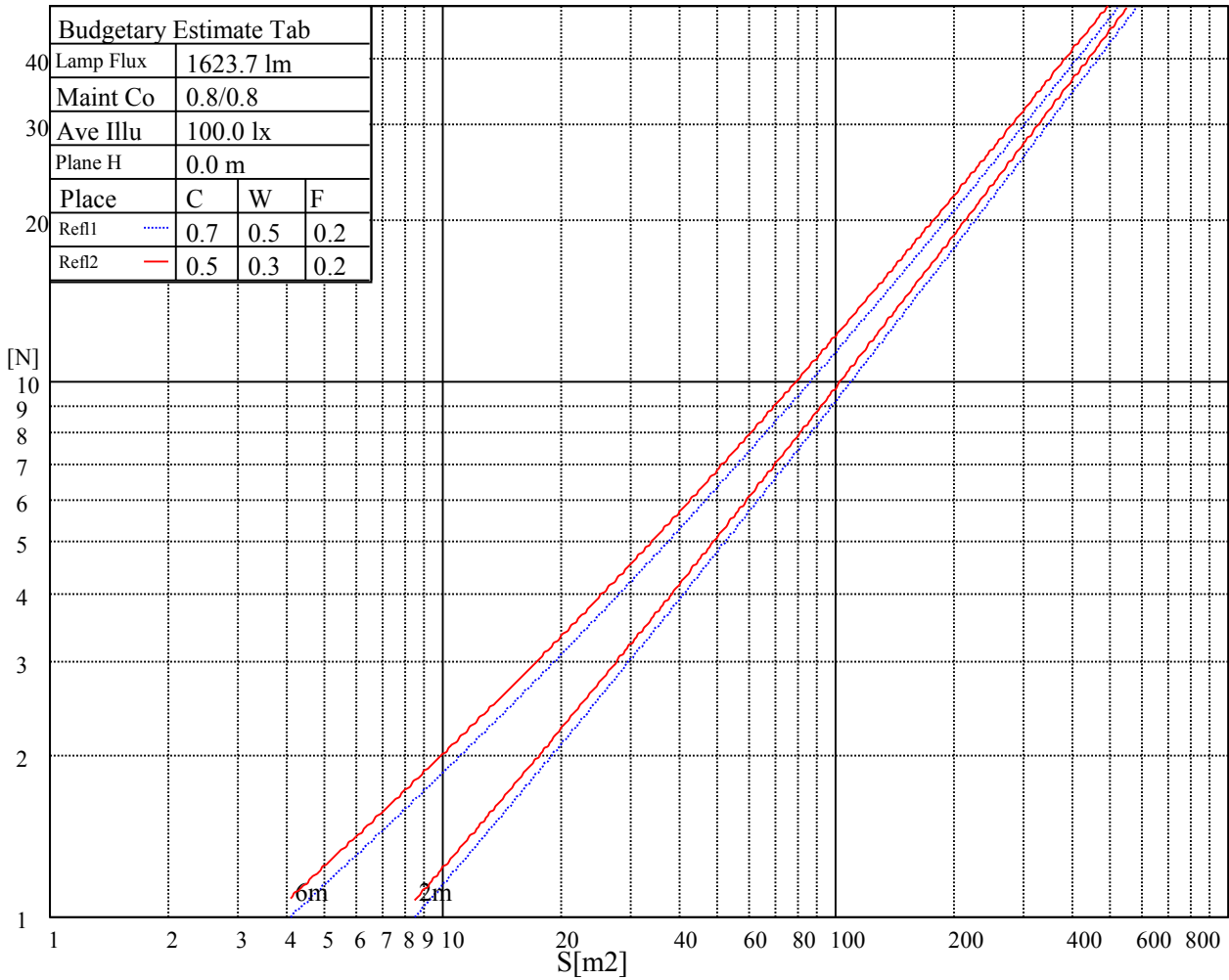
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
14624	14624	14624	16419	16419	16419	38145	38145	38145

Glare Table

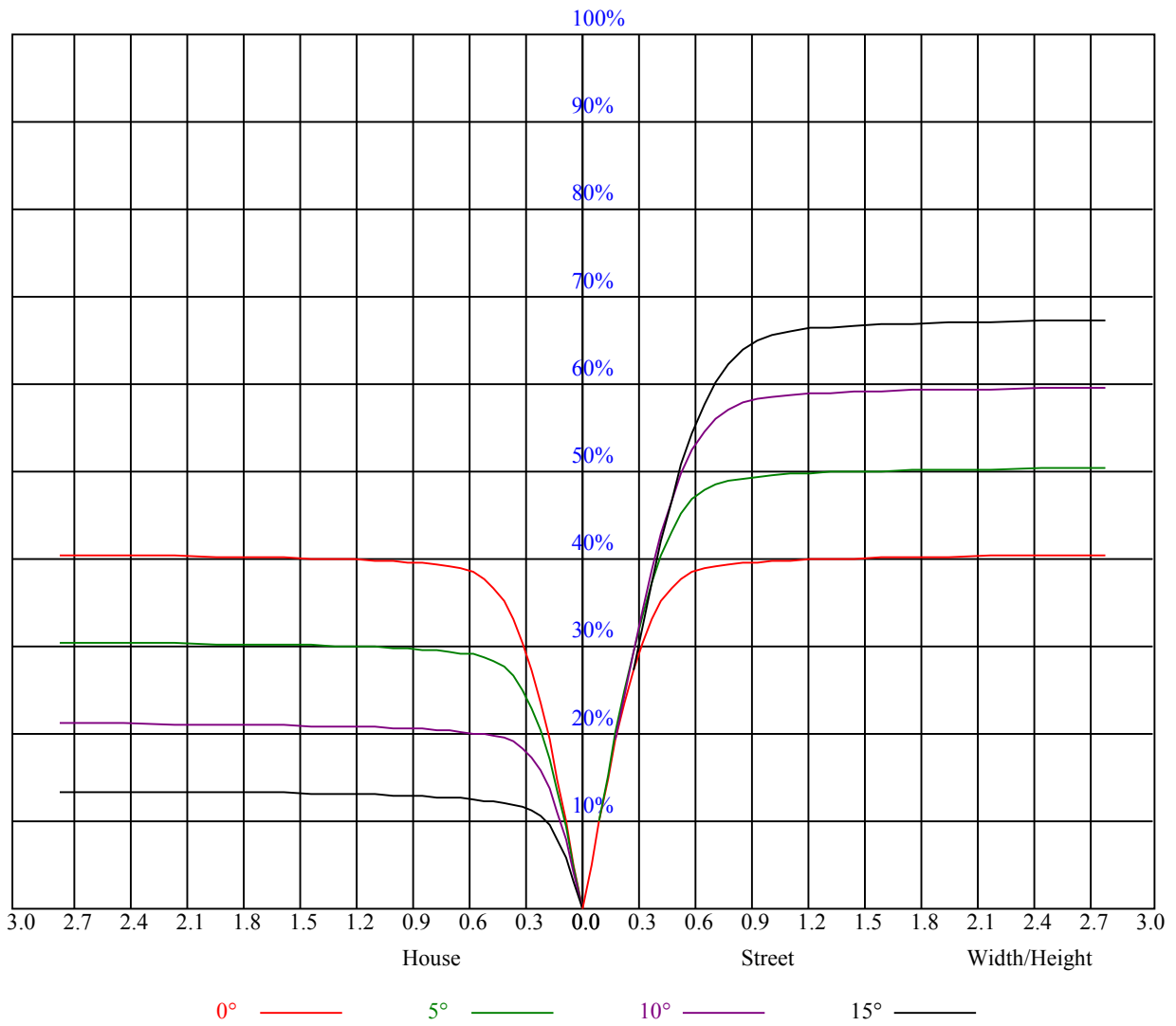
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.98	0.98	0.98	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.84	0.84	0.84	0.82
1	0.91	0.89	0.88	0.90	0.88	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.80	0.79	0.77
2	0.86	0.83	0.80	0.85	0.82	0.80	0.82	0.80	0.78	0.80	0.78	0.76	0.77	0.76	0.75	0.73
3	0.81	0.78	0.75	0.80	0.77	0.74	0.78	0.75	0.73	0.76	0.74	0.72	0.74	0.72	0.71	0.70
4	0.77	0.73	0.70	0.76	0.72	0.70	0.74	0.71	0.69	0.73	0.70	0.68	0.71	0.69	0.67	0.66
5	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	0.66	0.64	0.63
6	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.66	0.63	0.61	0.60
7	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.59	0.63	0.61	0.58	0.57
8	0.64	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.55
9	0.61	0.57	0.54	0.61	0.57	0.54	0.60	0.56	0.54	0.59	0.56	0.54	0.59	0.56	0.54	0.53
10	0.59	0.55	0.52	0.58	0.54	0.52	0.58	0.54	0.52	0.57	0.54	0.52	0.57	0.54	0.51	0.51



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	2736.09	2717.56	2510.82	2174.41	1698.18	1089.30	507.90	113.23	47.15
45.0	2745.65	2658.41	2410.43	2040.56	1459.17	863.43	316.69	63.16	37.05
90.0	2740.27	2613.59	2311.84	1872.06	1178.98	666.24	164.92	47.15	31.97
135.0	2746.84	2642.27	2357.25	1964.68	1375.51	740.94	322.07	50.79	33.70
180.0	2736.09	2572.36	2291.52	1838.00	1177.97	634.04	154.16	47.09	33.46
225.0	2745.65	2654.82	2402.07	2028.01	1483.07	829.07	321.41	70.81	39.38
270.0	2740.27	2700.83	2488.71	2131.98	1708.34	1074.95	470.85	111.50	47.86
315.0	2746.84	2678.12	2448.67	2069.24	1586.44	979.05	393.89	98.41	45.59
360.0	2736.09	2717.56	2510.82	2174.41	1698.18	1089.30	507.90	113.23	47.15
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	32.21	24.74	19.42	15.89	12.37	10.10	8.31	7.17	6.33
45.0	27.37	21.69	17.45	13.98	11.17	9.26	7.83	6.81	6.09
90.0	24.74	20.32	16.25	13.09	10.64	8.84	7.47	6.87	6.04
135.0	25.93	21.21	16.91	13.50	10.93	9.08	7.59	6.81	6.04
180.0	25.63	20.55	16.25	13.15	10.52	8.66	7.41	6.63	5.98
225.0	29.22	22.95	18.11	14.58	11.59	9.44	7.83	6.81	6.09
270.0	32.27	25.10	19.60	15.60	12.25	10.10	8.31	7.29	6.39
315.0	31.07	23.96	19.06	15.18	11.95	9.86	8.13	6.99	6.21
360.0	32.21	24.74	19.42	15.89	12.37	10.10	8.31	7.17	6.33
C/ γ (°)	90.0								
0.0	5.74								
45.0	5.62								
90.0	5.62								
135.0	5.62								
180.0	5.62								
225.0	5.62								
270.0	5.68								
315.0	5.68								
360.0	5.74								