
Nata

LumCAT: 1408-N
Luminaire: 92.70.046.00
Report No: NT2018040909
Test No: nata-0100
LampCAT: BRIDGELUX V10
Lamp flux(lm): 925.0
Number of Lamps: 1
Length(mm): 39
Phm Type: C

Voltage(V): 26.4000
Current(A): 0.3500
Power (W): 9.2400
PF: 0.0000
Ballast type: DC
Width(mm): 39
Height(mm): 0

Photometric Results

Lumens(lm): 752.24
Efficiency(%): 81.32%
Lumens(lm)/Power(W): 81.41
Central intensity(cd): 730.860
Maximum intensity(cd): 730.860
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=57.0
 [C90/270]Total=57.0
Field angle(10%Imax): [C0/180]Total=97.9
 [C90/270]Total=97.9
Maximum s/h(1/2): C0_180=0.84 C90_270=0.84
Maximum s/h(1/4): C0_180=0.89 C90_270=0.89
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 81.72%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 94.459%

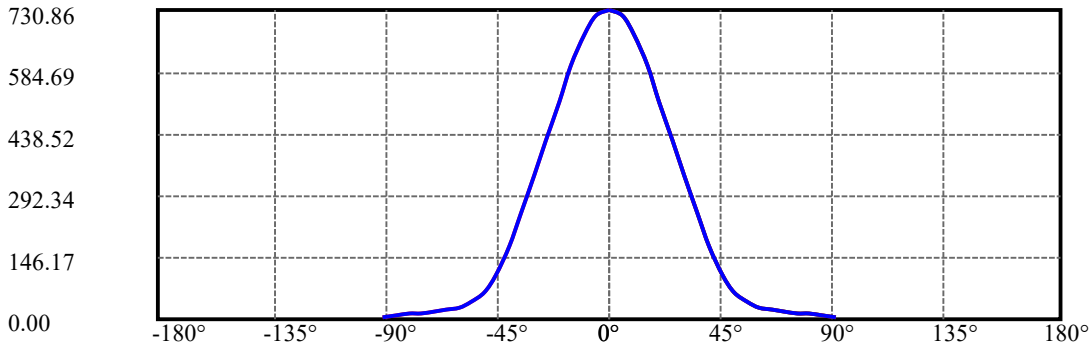
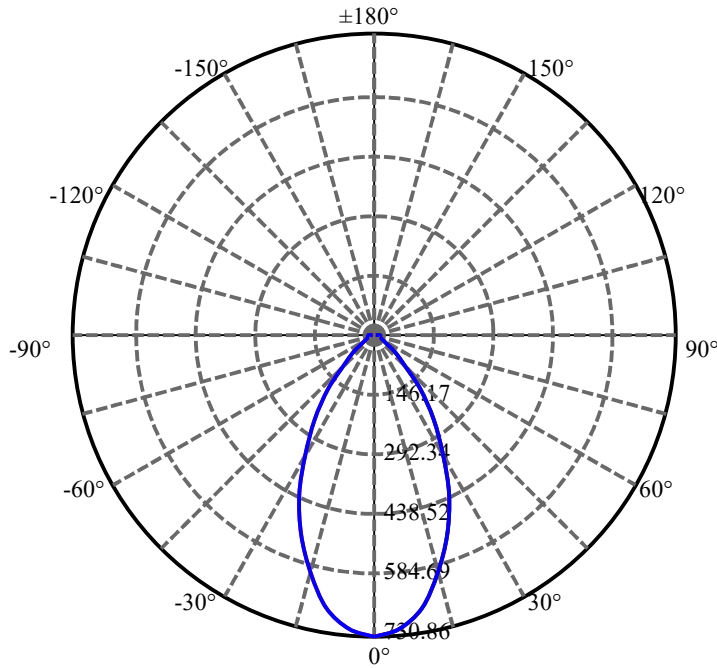
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	730.860	4.371	4.371	.473%	.581%
5.0	715.602	34.187	38.557	3.696%	5.126%
10.0	671.103	63.878	102.435	6.906%	13.617%
15.0	599.103	84.994	187.429	9.189%	24.916%
20.0	514.165	96.393	283.821	10.421%	37.730%
25.0	424.375	98.308	382.129	10.628%	50.799%
30.0	339.705	93.102	475.231	10.065%	63.175%
35.0	249.729	78.514	553.746	8.488%	73.613%
40.0	170.806	60.181	613.927	6.506%	81.613%
45.0	105.185	40.769	654.696	4.407%	87.032%
50.0	64.691	27.164	681.86	2.937%	90.644%
55.0	40.948	18.386	700.246	1.988%	93.088%
60.0	29.008	13.770	714.016	1.489%	94.918%
65.0	21.217	10.540	724.556	1.140%	96.319%
70.0	16.448	8.472	733.028	.916%	97.446%
75.0	15.134	8.013	741.041	.866%	98.511%
80.0	12.291	6.635	747.676	.717%	99.393%
85.0	6.834	3.732	751.407	.403%	99.889%
90.0	3.049	0.836	752.243	.090%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	475.23	51.38%	63.18%
0-40	613.93	66.37%	81.61%
0-60	714.02	77.19%	94.92%
0-90	751.41	81.23%	99.89%
0-120	751.41	81.23%	99.89%
0-180	752.24	81.32%	100.00%
60-90	51.16	5.53%	6.80%
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%
0-38.99	601.79	65.06%	80.00%

ZONAL LUMEN SUMMARY

0-10	102.44
10-20	181.39
20-30	191.41
30-40	138.70
40-50	67.93
50-60	32.16
60-70	19.01
70-80	14.65
80-90	3.73
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: —————

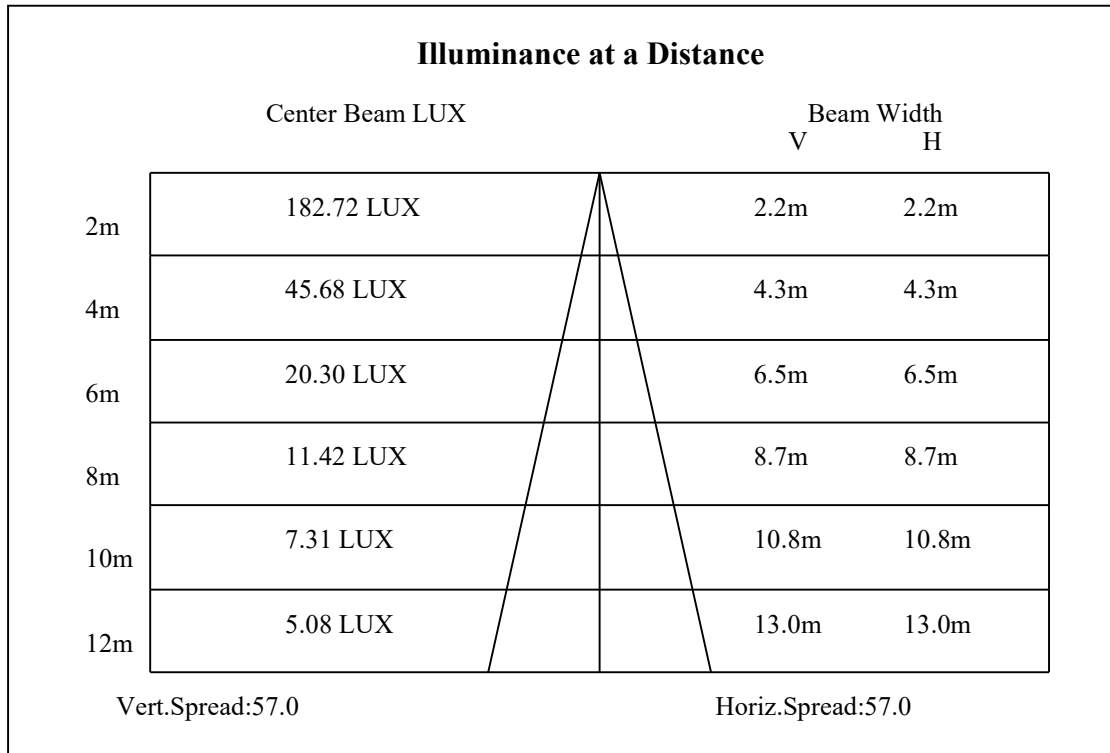
C90/C270: —————

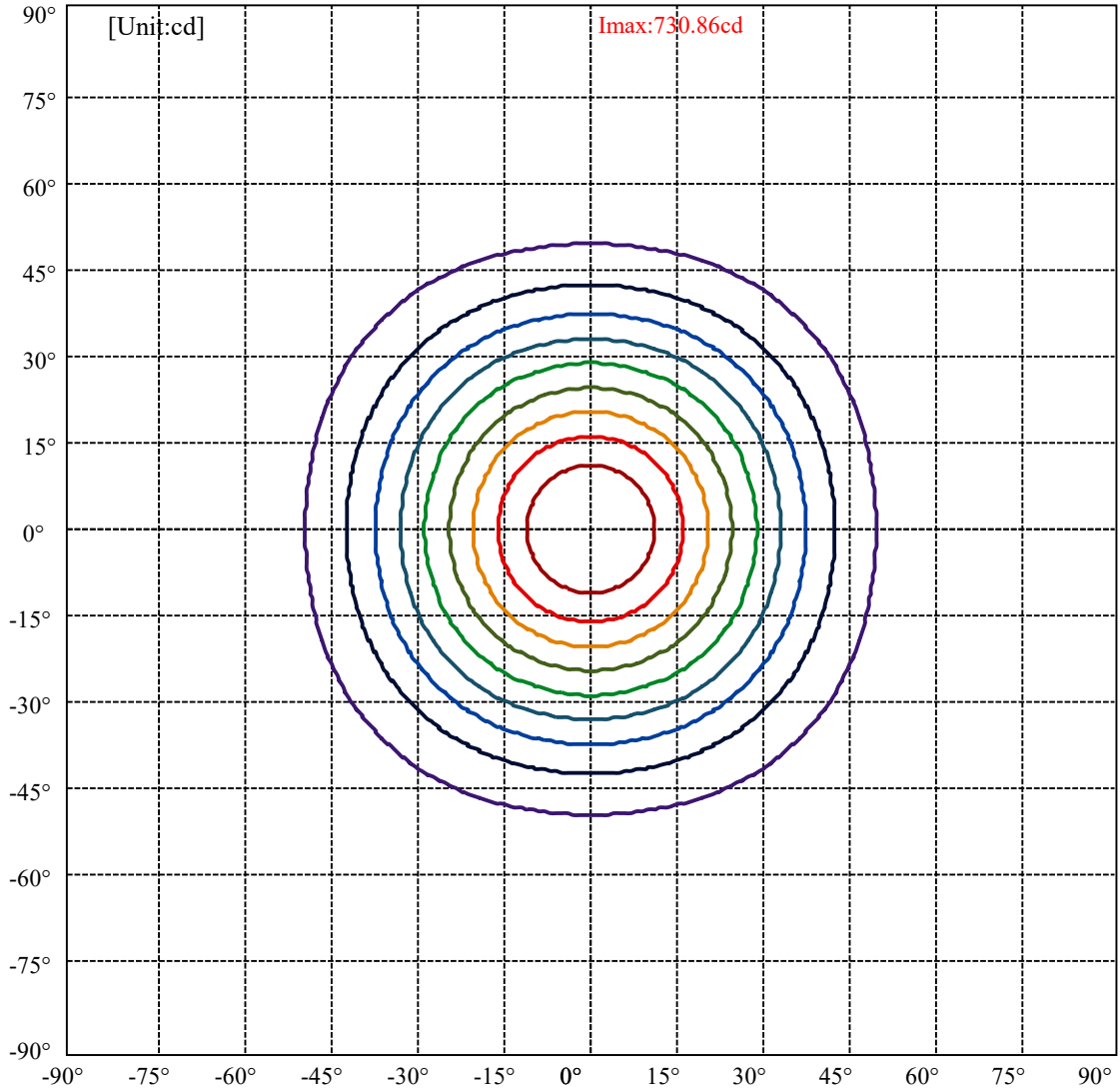
Field angle(10%Imax):C0/180Left:49.0 Right:49.0

:C90/270Left:49.0 Right:49.0

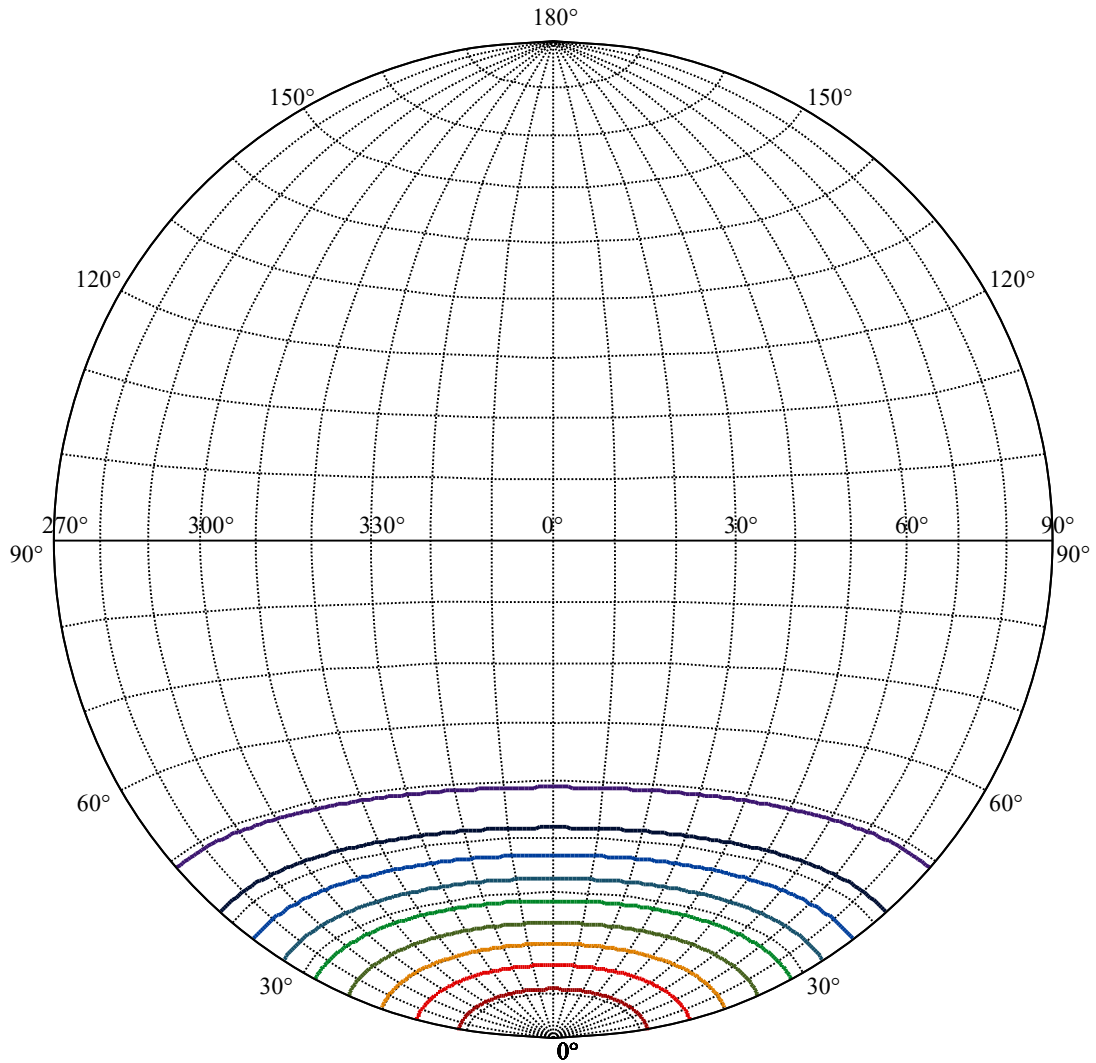
Beam Angle(50%Imax):C0/180Left:28.5 Right:28.5

:C90/270Left:28.5 Right:28.5





(10%Imax) 73.086	—
(20%Imax) 146.172	—
(30%Imax) 219.258	—
(40%Imax) 292.344	—
(50%Imax) 365.43	—
(60%Imax) 438.516	—
(70%Imax) 511.602	—
(80%Imax) 584.688	—
(90%Imax) 657.774	—



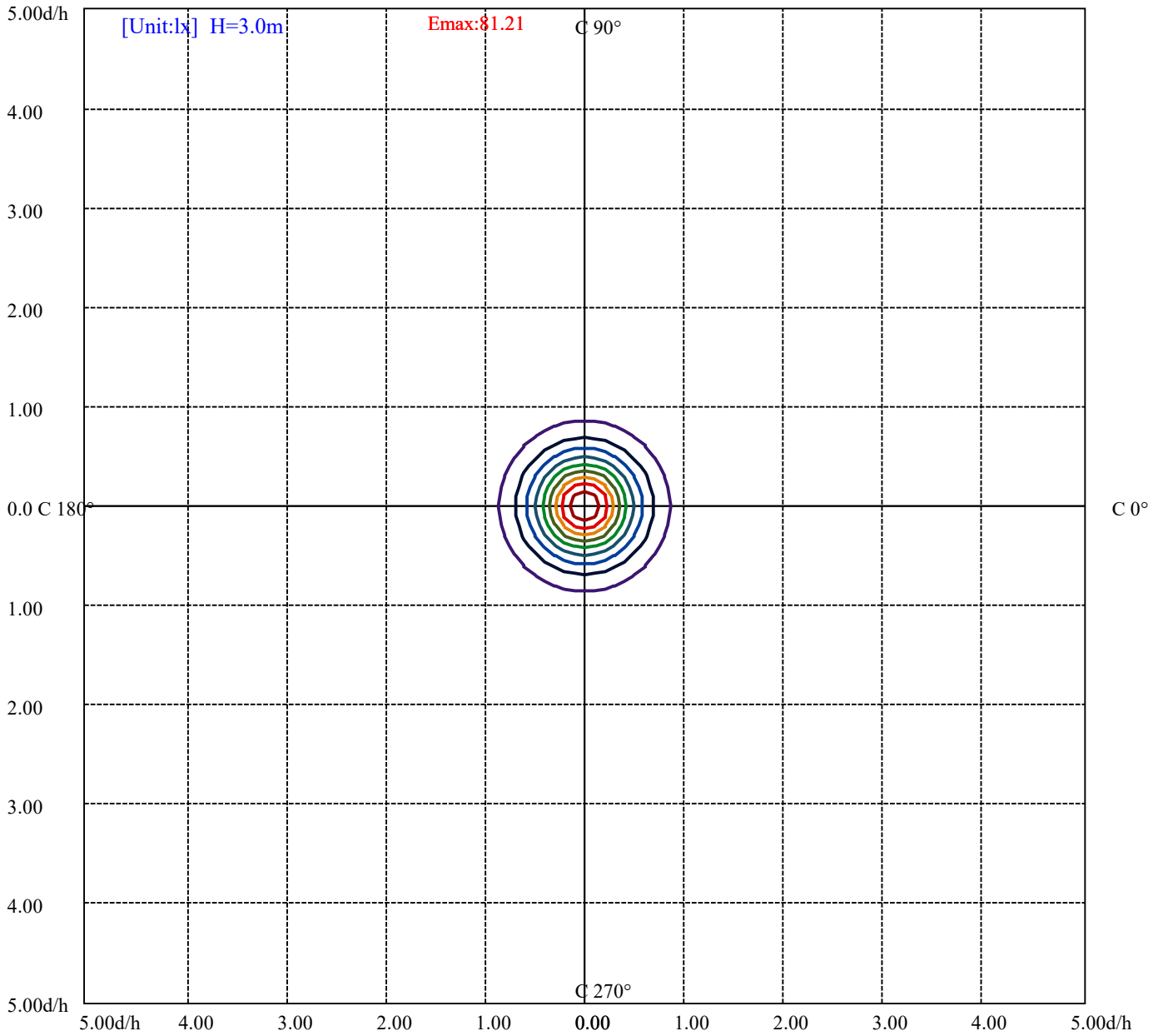
House

[Unit:cd]

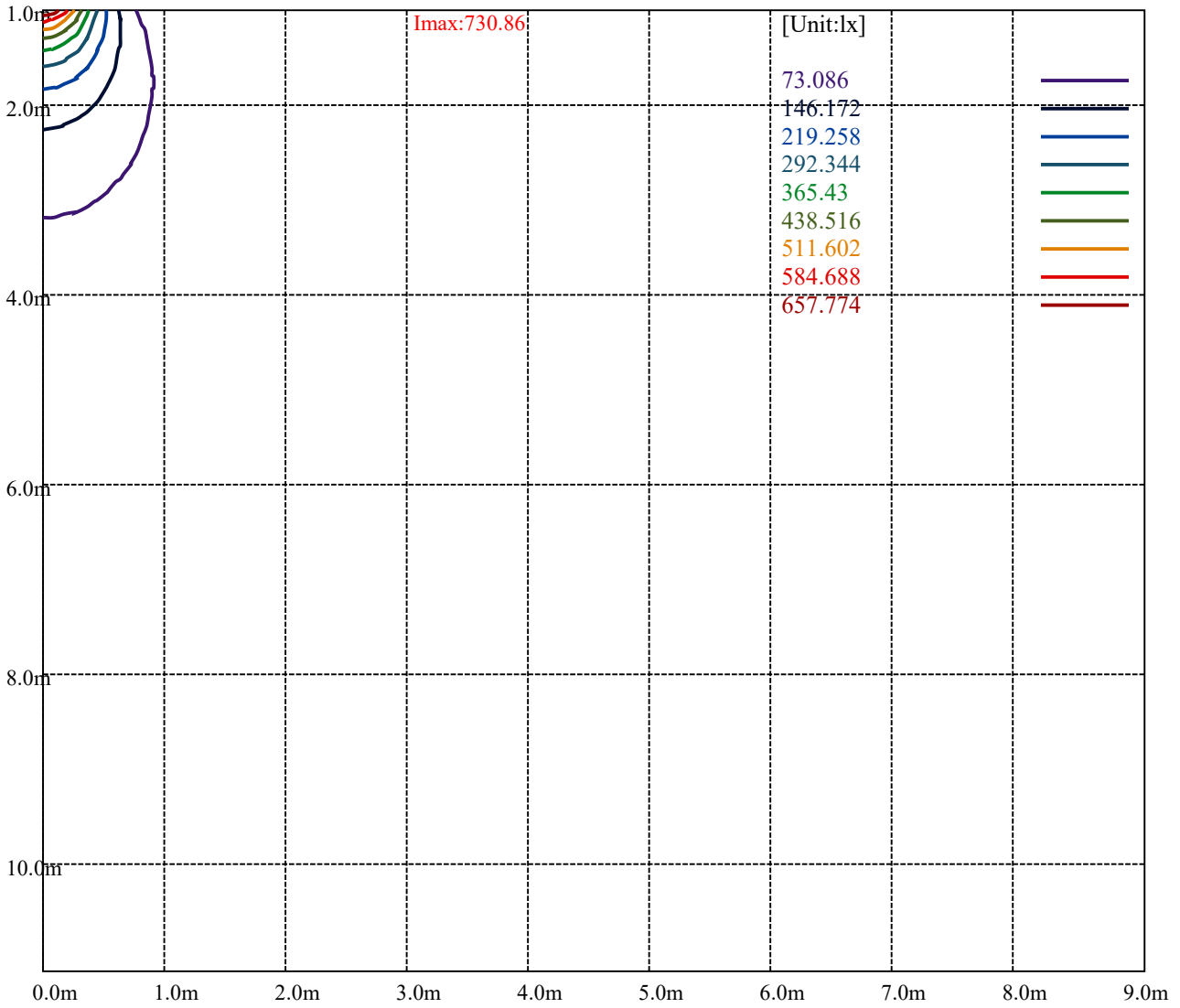
Road

I_{max}:730.86

(10%I _{max}) 73.086	—
(20%I _{max}) 146.172	—
(30%I _{max}) 219.258	—
(40%I _{max}) 292.344	—
(50%I _{max}) 365.43	—
(60%I _{max}) 438.516	—
(70%I _{max}) 511.602	—
(80%I _{max}) 584.688	—
(90%I _{max}) 657.774	—



- (10%Emax) 8.120655
- (20%Emax) 16.24133
- (30%Emax) 24.362
- (40%Emax) 32.48267
- (50%Emax) 40.60333
- (60%Emax) 48.724
- (70%Emax) 56.84467
- (80%Emax) 64.96533
- (90%Emax) 73.08589



Luminance Table

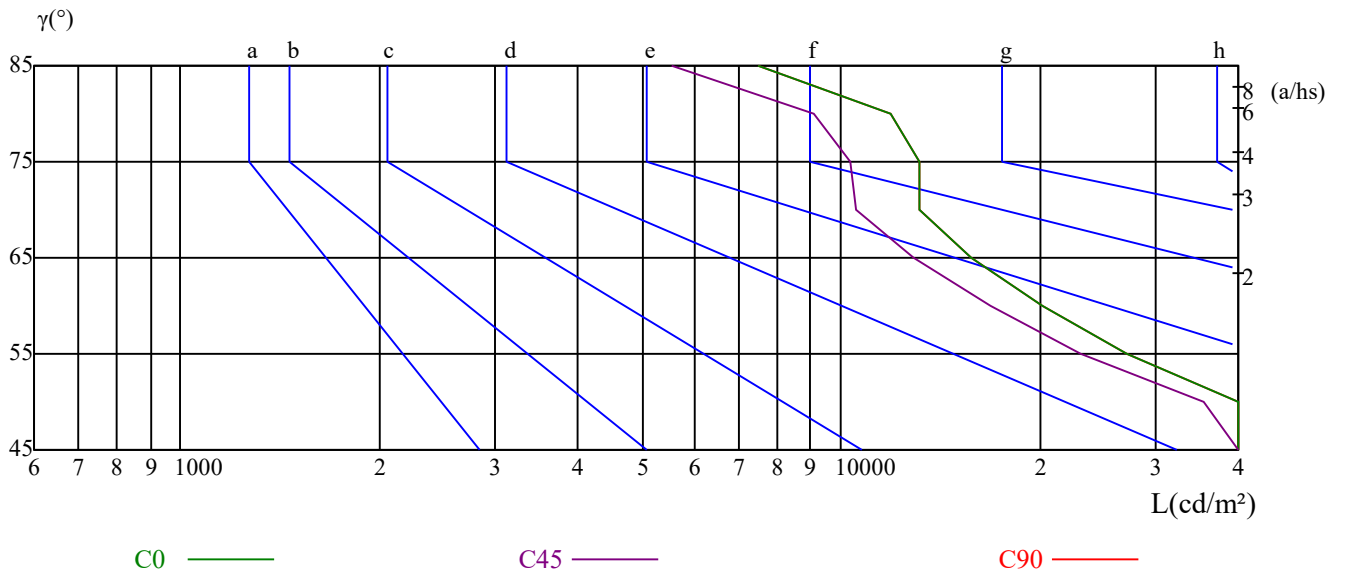
γ	45	50	55	60	65	70	75	80	85
C0	64648	41069	27094	20200	15720	13125	13193	11907	7513
C45	56688	35492	23056	16906	12917	10566	10371	9102	5549
C90	64648	41069	27094	20200	15720	13125	13193	11907	7513

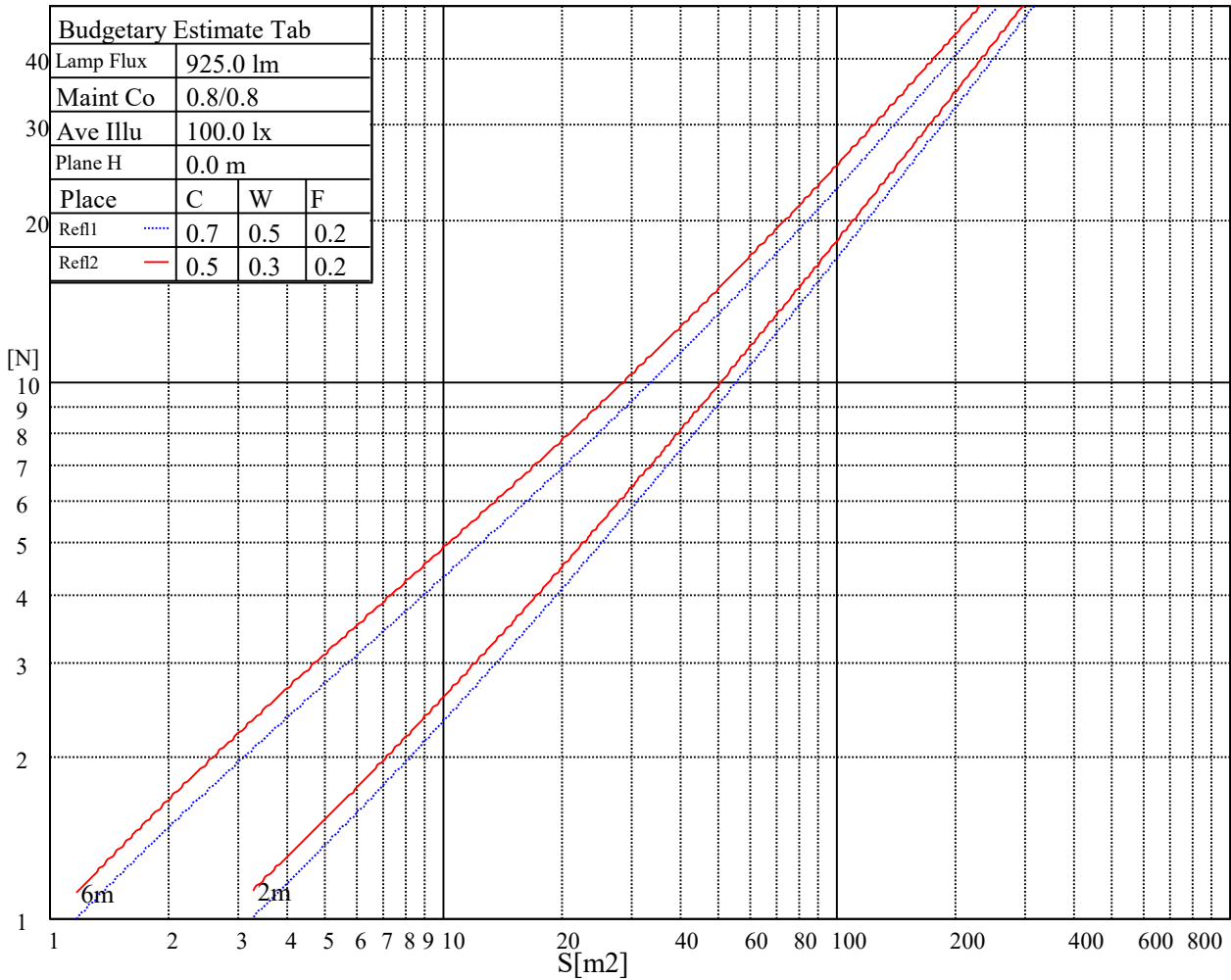
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
33008	33008	33008	38443	38443	38443	51552	51552	51552

Glare Table

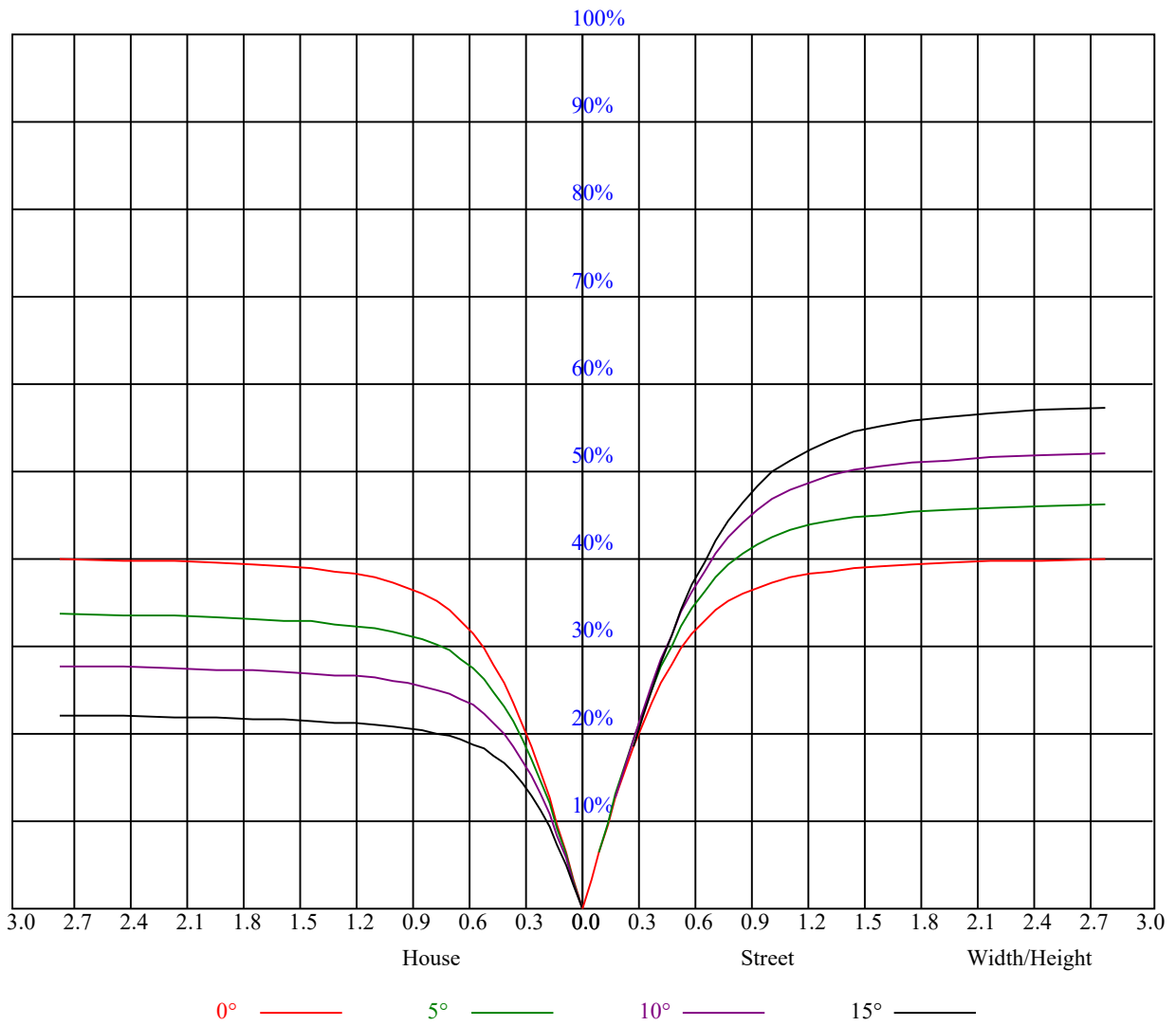
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.97	0.97	0.97	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.83	0.83	0.83	0.82
1	0.89	0.86	0.84	0.87	0.85	0.83	0.84	0.82	0.80	0.81	0.79	0.78	0.78	0.77	0.76	0.74
2	0.82	0.78	0.75	0.80	0.77	0.74	0.78	0.75	0.72	0.75	0.73	0.71	0.73	0.71	0.69	0.68
3	0.76	0.71	0.67	0.74	0.70	0.67	0.72	0.69	0.66	0.70	0.67	0.64	0.68	0.66	0.63	0.62
4	0.70	0.65	0.61	0.69	0.64	0.61	0.67	0.63	0.60	0.66	0.62	0.59	0.64	0.61	0.59	0.57
5	0.65	0.60	0.56	0.65	0.60	0.56	0.63	0.59	0.55	0.62	0.58	0.55	0.60	0.57	0.54	0.53
6	0.61	0.56	0.52	0.60	0.55	0.52	0.59	0.55	0.51	0.58	0.54	0.51	0.57	0.53	0.51	0.49
7	0.57	0.52	0.48	0.57	0.52	0.48	0.56	0.51	0.48	0.55	0.51	0.48	0.54	0.50	0.47	0.46
8	0.54	0.49	0.45	0.54	0.49	0.45	0.53	0.48	0.45	0.52	0.48	0.45	0.51	0.47	0.45	0.43
9	0.51	0.46	0.42	0.51	0.46	0.42	0.50	0.45	0.42	0.49	0.45	0.42	0.48	0.45	0.42	0.41
10	0.48	0.43	0.40	0.48	0.43	0.40	0.47	0.43	0.40	0.47	0.43	0.40	0.46	0.42	0.40	0.38



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	732.25	723.50	687.43	618.50	535.09	447.11	359.35	270.33	188.79
45.0	729.28	718.10	677.25	614.65	526.39	433.84	347.41	263.55	182.73
90.0	729.77	712.32	661.89	585.58	494.85	412.32	325.60	235.81	160.16
135.0	732.14	714.52	670.75	595.88	509.60	416.89	336.50	244.51	162.80
180.0	732.25	709.62	657.10	577.21	489.40	398.17	318.39	229.64	151.02
225.0	729.28	711.27	660.24	583.87	504.26	411.22	323.95	227.77	158.01
270.0	729.77	718.38	677.91	613.27	533.00	443.15	362.16	273.30	189.50
315.0	732.14	717.11	676.26	603.86	520.72	432.30	344.27	252.93	173.43
360.0	732.25	723.50	687.43	618.50	535.09	447.11	359.35	270.33	188.79
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	122.61	76.86	49.44	35.13	25.00	19.66	19.32	18.22	7.98
45.0	113.36	72.23	45.64	31.88	23.62	17.73	15.97	13.32	7.27
90.0	94.48	57.20	36.83	26.92	19.88	15.42	14.98	11.18	6.88
135.0	98.00	58.58	37.38	27.09	20.04	15.58	13.60	11.01	6.77
180.0	91.01	55.17	34.91	25.49	18.88	14.48	12.94	7.98	6.17
225.0	94.42	56.76	36.45	25.60	18.83	14.26	10.85	7.05	4.73
270.0	117.38	72.34	43.60	29.40	21.31	16.08	15.03	13.65	6.99
315.0	110.22	68.38	43.33	30.56	22.19	18.39	18.39	15.91	7.87
360.0	122.61	76.86	49.44	35.13	25.00	19.66	19.32	18.22	7.98
C/γ(°)	90.0								
0.0	3.19								
45.0	3.08								
90.0	3.08								
135.0	3.03								
180.0	2.97								
225.0	2.97								
270.0	3.03								
315.0	3.03								
360.0	3.19								