
Nata

LumCAT: 3-1945-M
Luminaire: BJB 47.319.2011
Report No: GC2017060703
Test No: NT-0010
LampCAT: LUMILEDS LUXEON CoB 1208
Lamp flux(lm): 3235.0
Number of Lamps: 1
Length(mm): 86
Phm Type: C

Voltage(V): 219.4000
Current(A): 0.1350
Power (W): 28.0000
PF: 0.9420
Ballast type: DC
Width(mm): 86
Height(mm): 0

Photometric Results

Lumens(lm): 2910.35
Efficiency(%): 89.96%
Lumens(lm)/Power(W): 103.94
Central intensity(cd): 3572.334
Maximum intensity(cd): 3572.334
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=57.8
 [C90/270]Total=57.8
Field angle(10%Imax): [C0/180]Total=75.7
 [C90/270]Total=75.7
Maximum s/h(1/2): C0_180=0.94 C90_270=0.94
Maximum s/h(1/4): C0_180=0.85 C90_270=0.85
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 89.96%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.550%

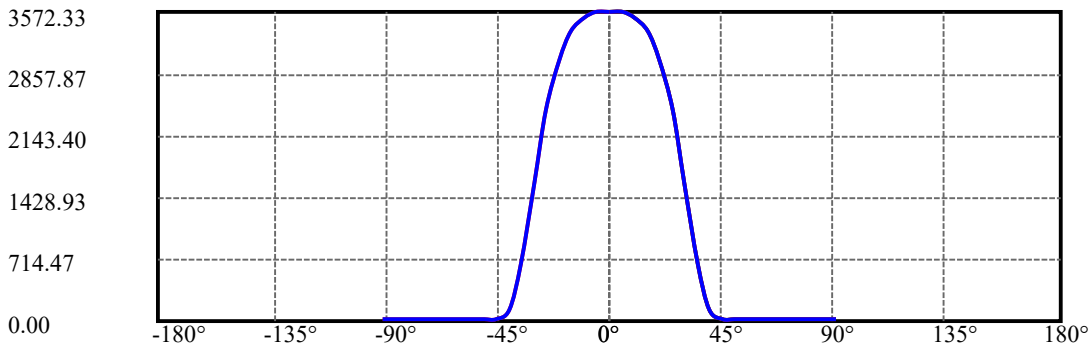
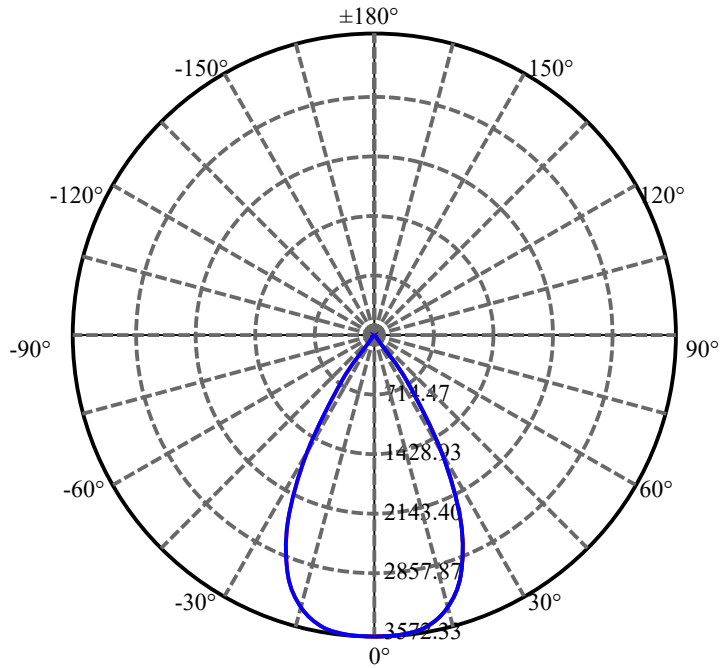
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3572.335	0.000	0	.000%	.000%
5.0	3571.853	85.407	85.407	2.640%	2.935%
10.0	3507.368	253.246	338.653	7.828%	11.636%
15.0	3346.534	406.569	745.222	12.568%	25.606%
20.0	3016.058	524.367	1269.589	16.209%	43.623%
25.0	2436.177	571.839	1841.428	17.677%	63.272%
30.0	1604.405	511.339	2352.767	15.806%	80.841%
35.0	668.316	334.674	2687.441	10.345%	92.341%
40.0	122.865	132.003	2819.443	4.080%	96.876%
45.0	23.771	27.151	2846.594	.839%	97.809%
50.0	16.689	8.175	2854.77	.253%	98.090%
55.0	14.673	6.819	2861.589	.211%	98.325%
60.0	13.654	6.548	2868.136	.202%	98.549%
65.0	13.048	6.491	2874.628	.201%	98.773%
70.0	12.697	6.519	2881.147	.202%	98.997%
75.0	14.032	6.987	2888.133	.216%	99.237%
80.0	15.684	7.951	2896.085	.246%	99.510%
85.0	12.353	7.618	2903.703	.236%	99.772%
90.0	11.927	6.648	2910.351	.206%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2352.77	72.73%	80.84%
0-40	2819.44	87.15%	96.88%
0-60	2868.14	88.66%	98.55%
0-90	2903.70	89.76%	99.77%
0-120	2903.70	89.76%	99.77%
0-180	2910.35	89.96%	100.00%
60-90	42.11	1.30%	1.45%
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%
0-29.76	2328.28	71.97%	80.00%

ZONAL LUMEN SUMMARY

0-10	338.65
10-20	930.94
20-30	1083.18
30-40	466.68
40-50	35.33
50-60	13.37
60-70	13.01
70-80	14.94
80-90	7.62
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



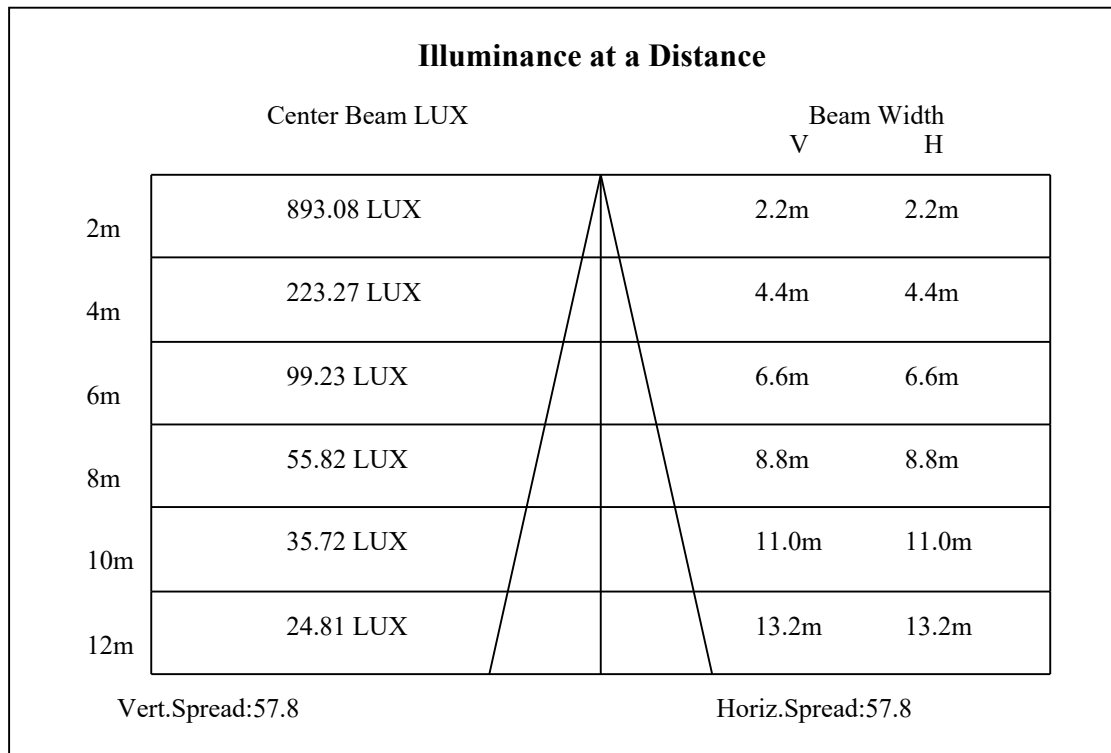
C0(Max): —————

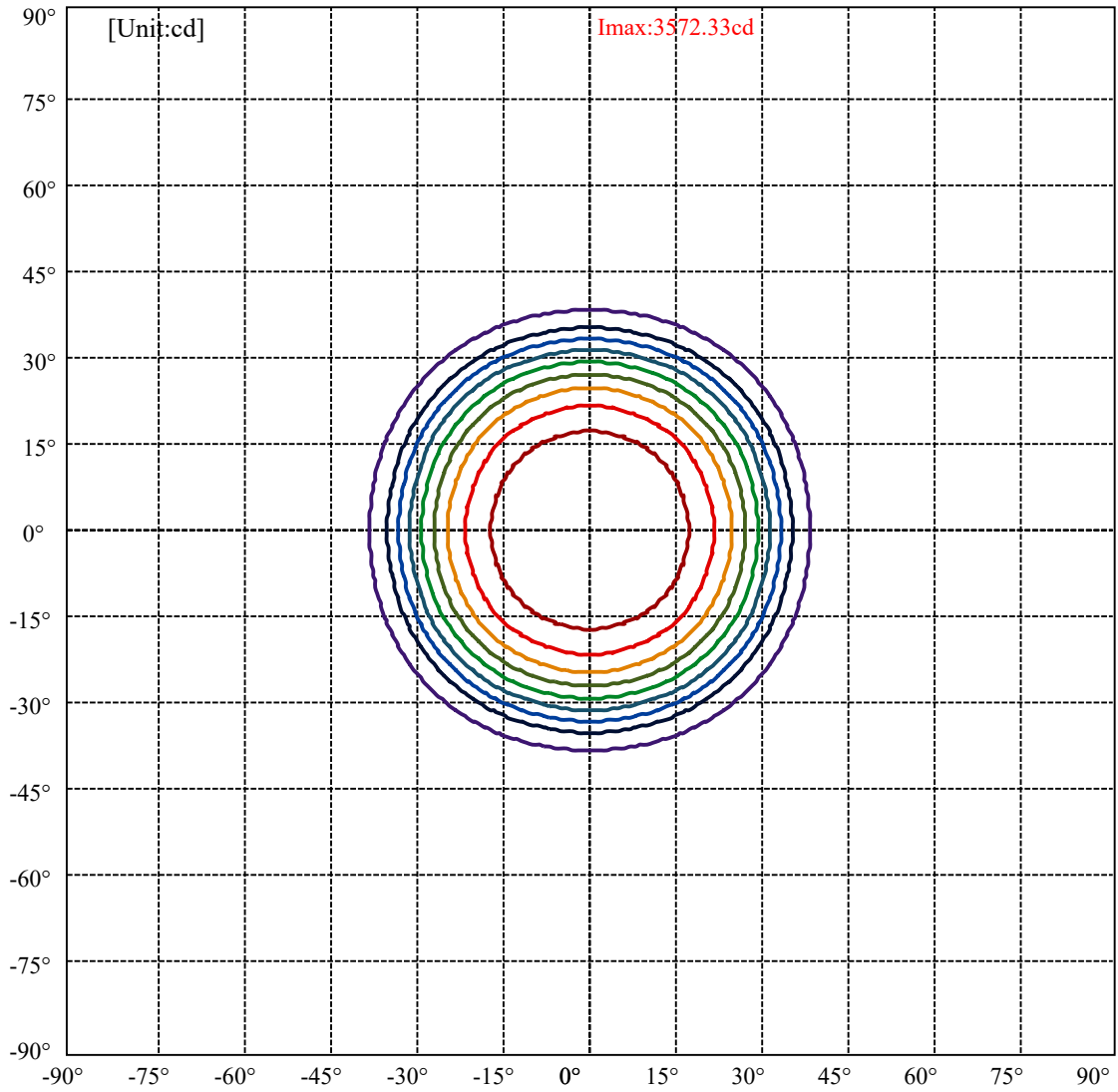
C0/C180: —————

C90/C270: —————

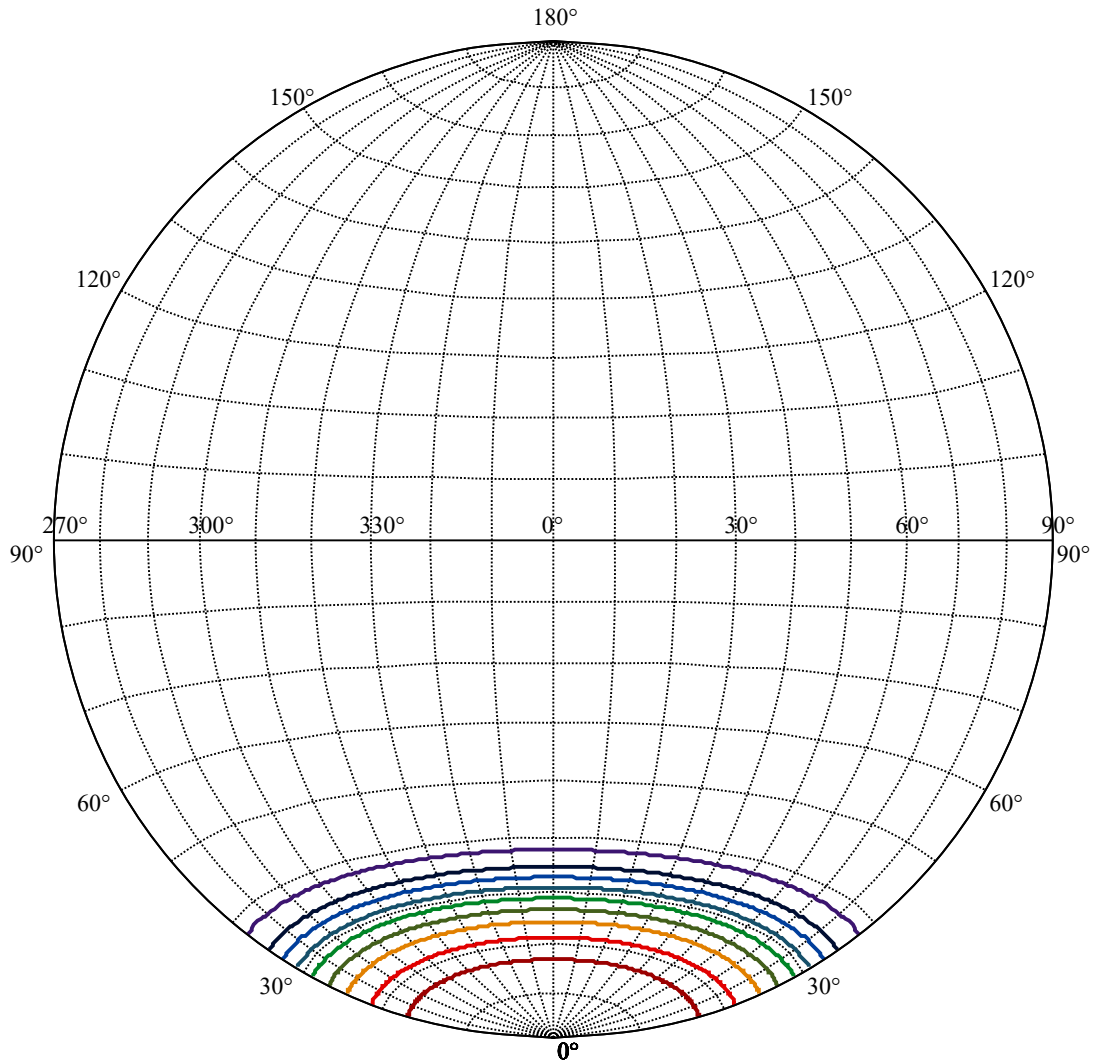
Field angle(10%Imax):C0/180Left:37.9 Right:37.9
:C90/270Left:37.9 Right:37.9

Beam Angle(50%Imax):C0/180Left:28.9 Right:28.9
:C90/270Left:28.9 Right:28.9





(10%Imax) 357.233	—
(20%Imax) 714.467	—
(30%Imax) 1071.7	—
(40%Imax) 1428.93	—
(50%Imax) 1786.17	—
(60%Imax) 2143.4	—
(70%Imax) 2500.63	—
(80%Imax) 2857.87	—
(90%Imax) 3215.1	—



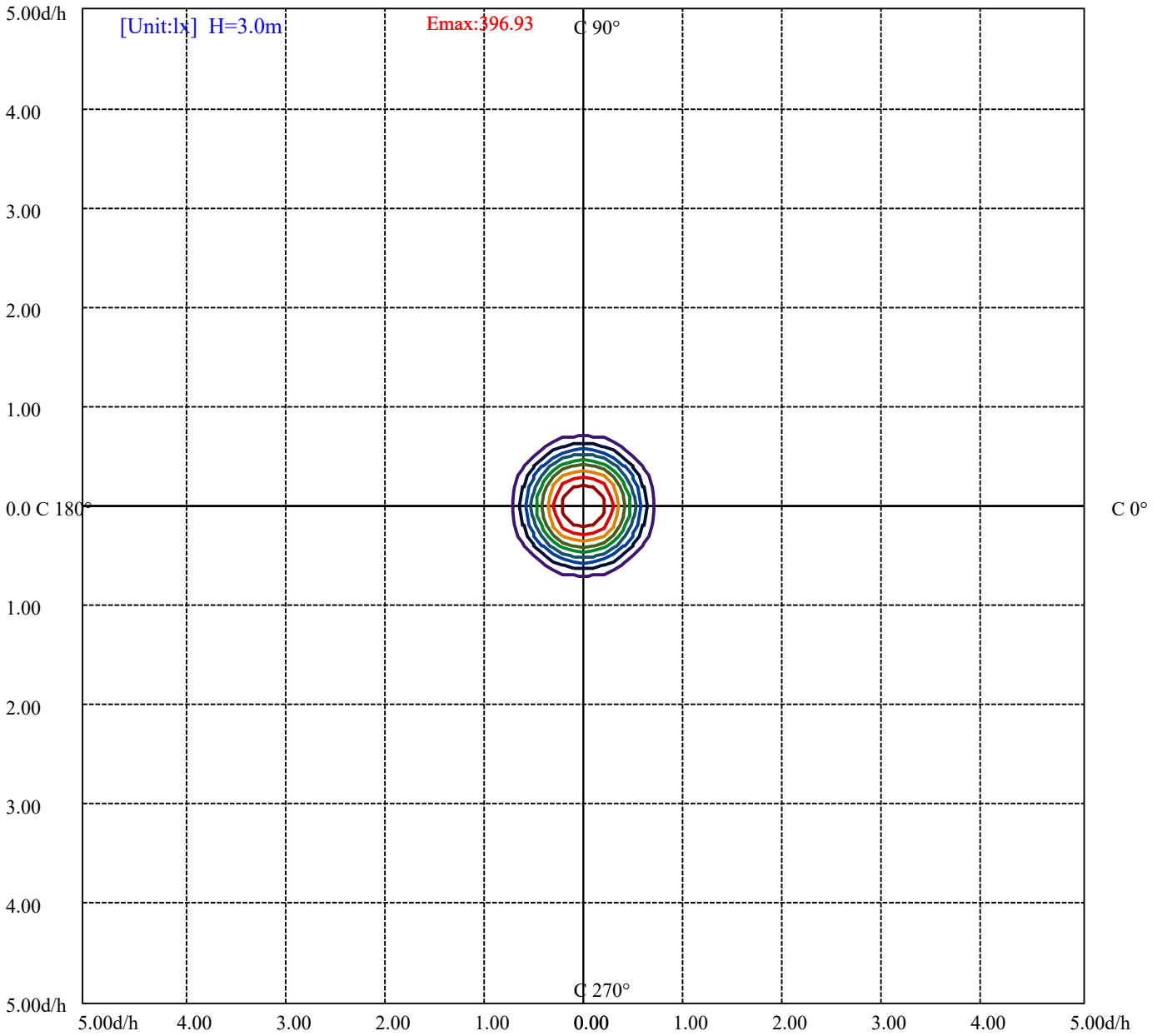
House

[Unit:cd]

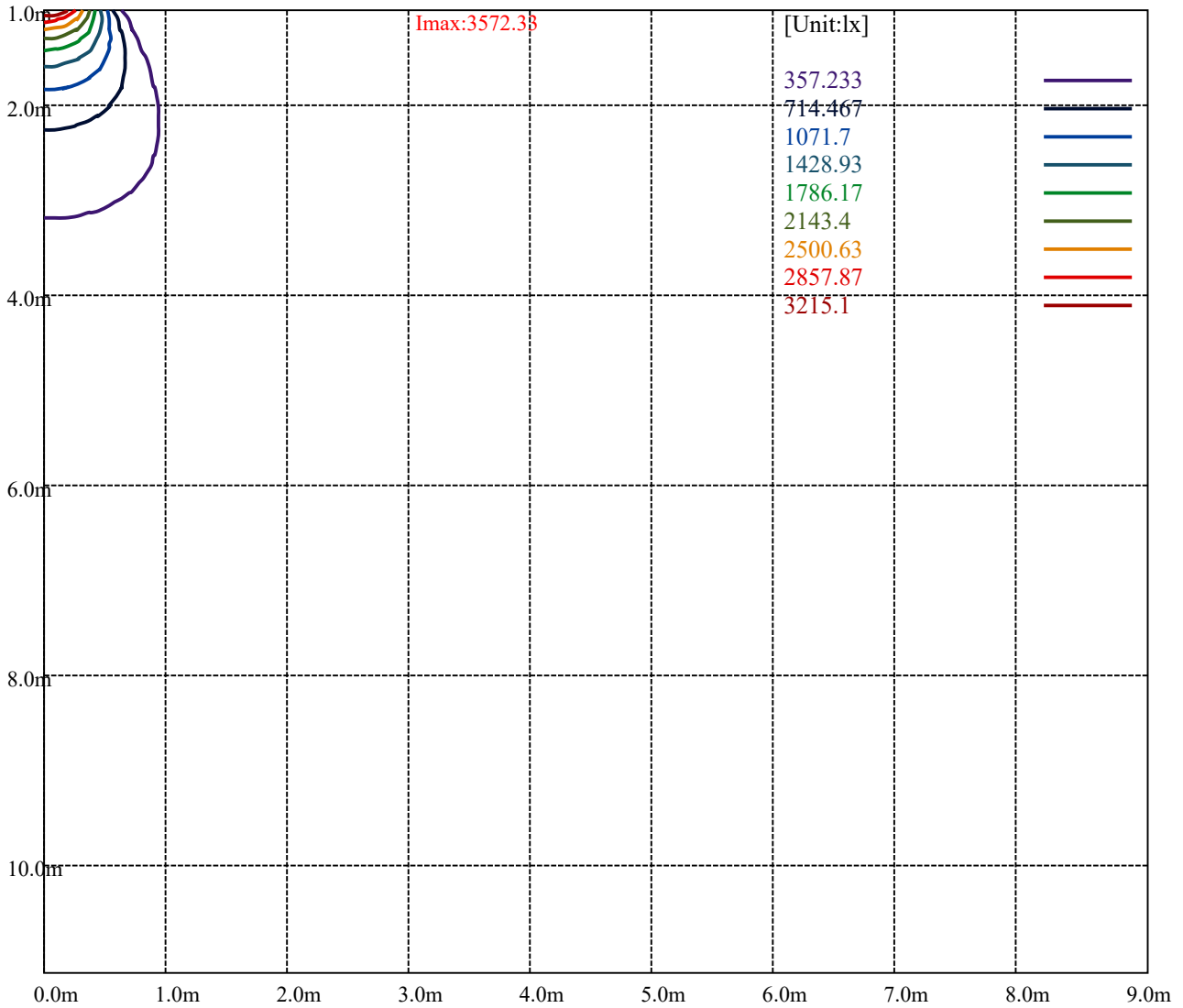
Road

Imax:3572.33

(10%Imax)	357.233	—
(20%Imax)	714.467	—
(30%Imax)	1071.7	—
(40%Imax)	1428.93	—
(50%Imax)	1786.17	—
(60%Imax)	2143.4	—
(70%Imax)	2500.63	—
(80%Imax)	2857.87	—
(90%Imax)	3215.1	—



- (10%Emax) 39.69255
- (20%Emax) 79.38522
- (30%Emax) 119.0778
- (40%Emax) 158.77
- (50%Emax) 198.4633
- (60%Emax) 238.1555
- (70%Emax) 277.8478
- (80%Emax) 317.5411
- (90%Emax) 357.2333



Luminance Table

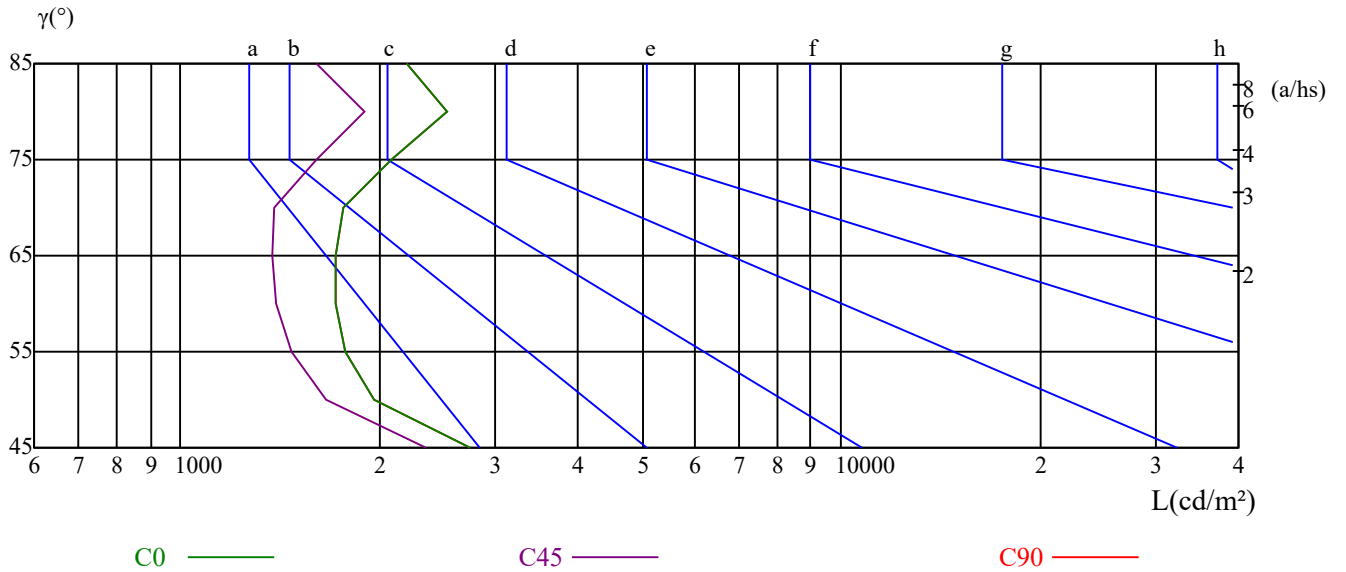
γ	45	50	55	60	65	70	75	80	85
C0	2746	1967	1778	1716	1717	1768	2090	2532	2196
C45	2348	1656	1474	1400	1376	1390	1609	1904	1605
C90	2746	1967	1778	1716	1717	1768	2090	2532	2196

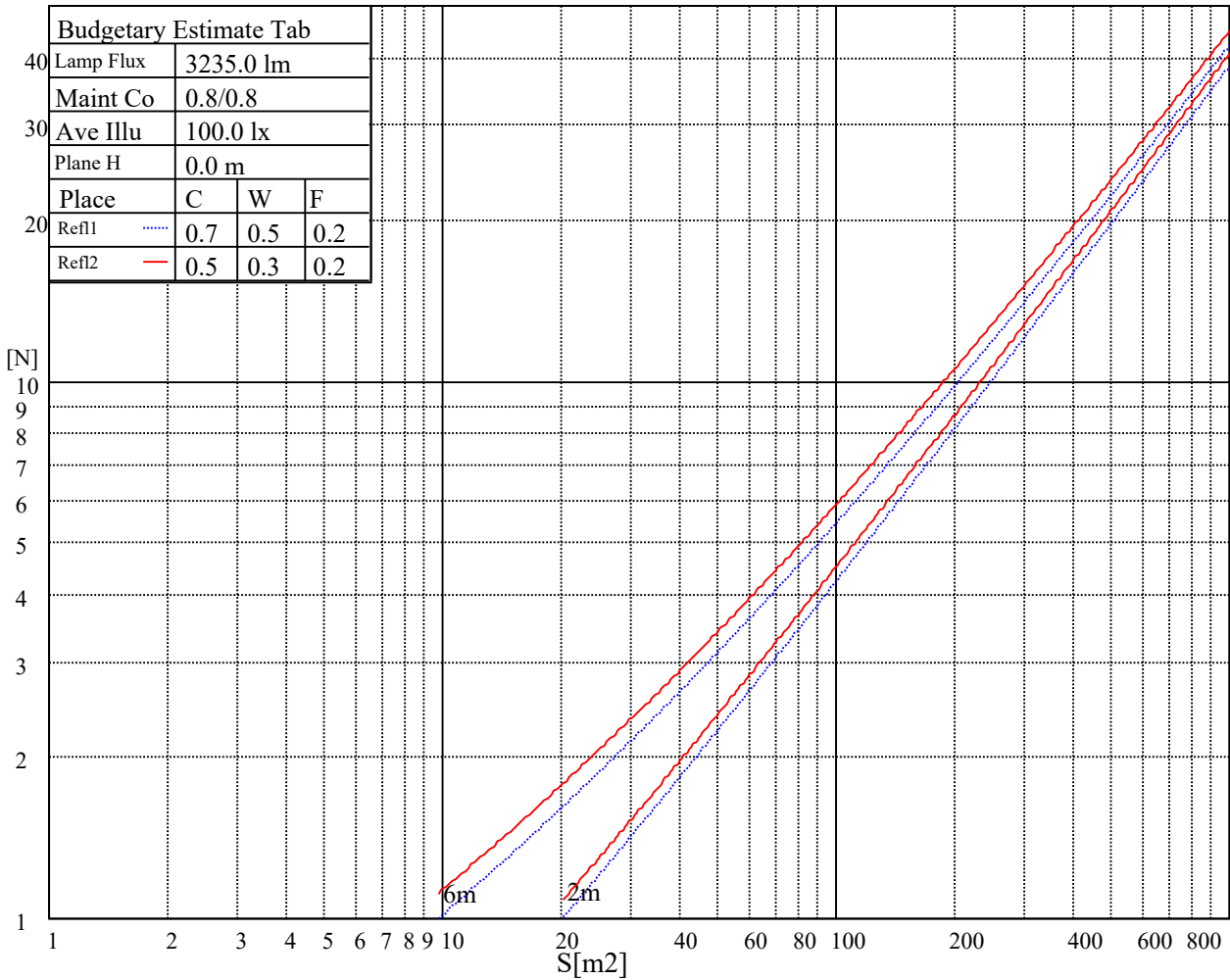
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4273	4273	4273	7504	7504	7504	19618	19618	19618

Glare Table

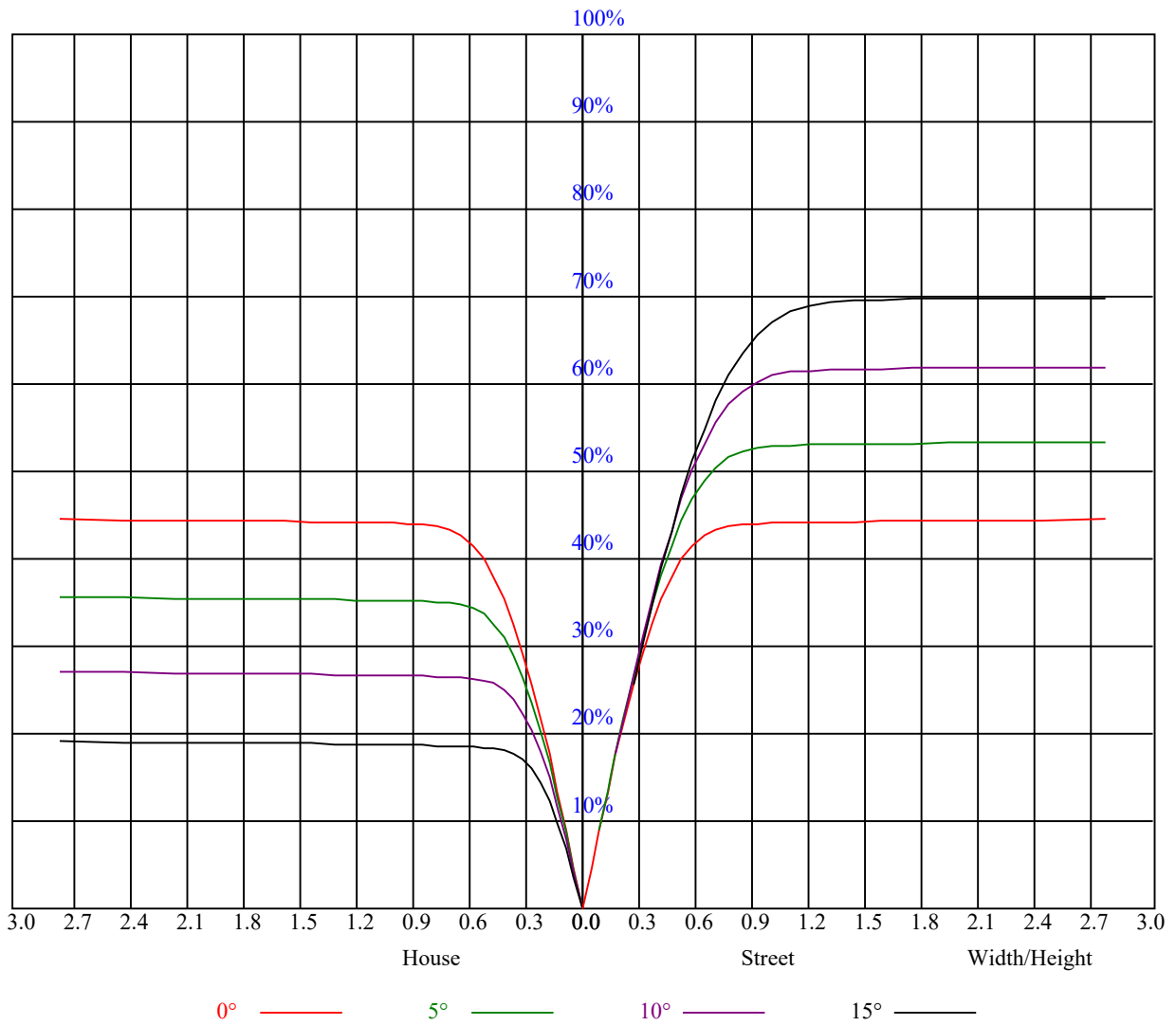
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.07	1.07	1.07	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.00	0.98	0.96	0.98	0.96	0.94	0.94	0.93	0.91	0.91	0.90	0.88	0.88	0.87	0.86	0.84
2	0.93	0.90	0.87	0.92	0.88	0.86	0.89	0.86	0.84	0.86	0.84	0.82	0.84	0.82	0.80	0.79
3	0.87	0.83	0.80	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.80	0.77	0.75	0.74
4	0.82	0.77	0.74	0.81	0.77	0.73	0.79	0.76	0.73	0.77	0.74	0.72	0.76	0.73	0.71	0.70
5	0.77	0.72	0.69	0.77	0.72	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.72	0.69	0.67	0.65
6	0.73	0.68	0.64	0.72	0.68	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.65	0.63	0.62
7	0.69	0.64	0.60	0.69	0.64	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.59	0.58
8	0.65	0.60	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.56	0.62	0.59	0.56	0.55
9	0.62	0.57	0.54	0.62	0.57	0.54	0.61	0.56	0.53	0.60	0.56	0.53	0.59	0.56	0.53	0.52
10	0.59	0.54	0.51	0.59	0.54	0.51	0.58	0.54	0.51	0.57	0.53	0.50	0.57	0.53	0.50	0.49



Nata 3-1945-M

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	3581.97	3573.71	3488.92	3343.02	3037.46	2431.29	1576.26	605.62	57.37
45.0	3570.96	3591.33	3593.53	3508.74	3286.32	2827.70	2200.60	1155.63	289.05
90.0	3572.06	3618.31	3607.30	3497.18	3180.06	2605.27	1848.24	819.95	103.45
135.0	3564.35	3601.79	3603.99	3473.51	3148.12	2628.39	1888.99	926.05	305.56
180.0	3581.97	3601.79	3537.37	3365.05	3020.94	2463.22	1702.34	754.44	87.10
225.0	3570.96	3539.58	3409.64	3145.92	2682.35	2037.64	1064.08	192.42	37.77
270.0	3572.06	3534.07	3419.00	3227.41	2898.17	2270.53	1485.97	481.19	56.16
315.0	3564.35	3514.25	3399.18	3211.44	2875.05	2225.38	1068.75	411.22	46.47
360.0	3581.97	3573.71	3488.92	3343.02	3037.46	2431.29	1576.26	605.62	57.37

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	21.53	16.41	14.53	13.43	12.77	12.33	12.28	12.22	12.17
45.0	33.25	17.84	15.09	13.87	13.05	12.50	12.11	12.06	12.06
90.0	24.78	17.01	14.98	13.98	13.71	13.27	17.78	18.83	12.61
135.0	27.97	17.89	15.53	14.53	14.20	14.31	21.36	33.75	13.21
180.0	24.50	17.29	14.98	13.93	13.10	12.66	12.50	12.39	12.39
225.0	18.55	15.31	13.87	13.05	12.39	12.06	12.00	12.00	12.17
270.0	20.48	16.02	14.26	13.27	12.55	12.06	12.00	11.95	12.11
315.0	19.10	15.75	14.15	13.16	12.61	12.39	12.22	12.28	12.11
360.0	21.53	16.41	14.53	13.43	12.77	12.33	12.28	12.22	12.17

C/γ(°)	90.0
0.0	12.00
45.0	12.00
90.0	11.95
135.0	11.95
180.0	11.89
225.0	11.84
270.0	11.89
315.0	11.89
360.0	12.00