



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NATA

LumCAT: 1658-S	
Luminaire: 92.70.124.00	
Report No: NATA0100	Voltage(V): 33.9400
Test No: GC2019032308	Current(A): 0.3000
LampCAT: BRIDGELUX V10	Power (W): 10.1820
Lamp flux(lm): 1503.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 47	Width(mm): 47
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1308.43
Efficiency(%): 87.05%
Lumens(lm)/Power(W): 128.50
Central intensity(cd): 2977.734
Maximum intensity(cd): 2977.734
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=35.1
 [C90/270]Total=35.1
Field angle(10%Imax): [C0/180]Total=67.1
 [C90/270]Total=67.1
Maximum s/h(1/2): C0_180=0.57 C90_270=0.57
Maximum s/h(1/4): C0_180=0.61 C90_270=0.61
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 87.05%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.552%

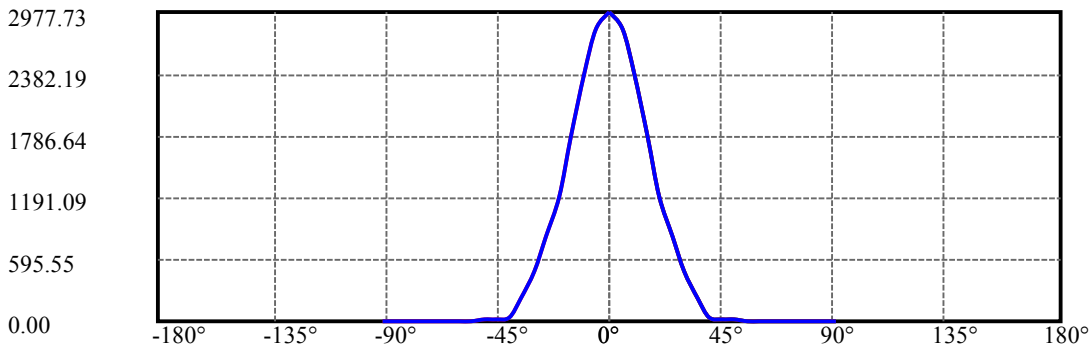
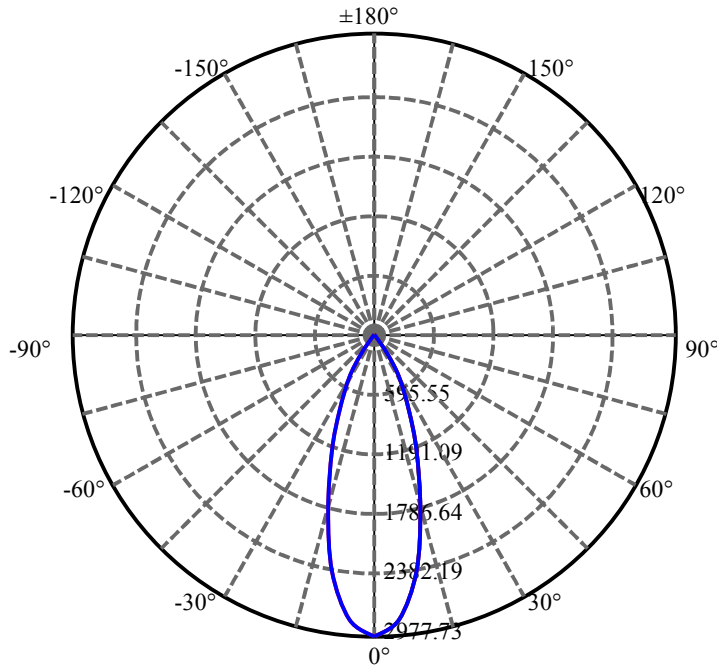
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2977.734	0.000	0	.000%	.000%
5.0	2811.516	69.209	69.209	4.605%	5.289%
10.0	2378.320	185.657	254.866	12.352%	19.479%
15.0	1782.141	246.796	501.661	16.420%	38.341%
20.0	1204.938	246.177	747.839	16.379%	57.155%
25.0	811.913	211.530	959.369	14.074%	73.322%
30.0	481.430	163.674	1123.043	10.890%	85.831%
35.0	223.840	103.856	1226.898	6.910%	93.769%
40.0	29.088	42.199	1269.098	2.808%	96.994%
45.0	12.811	7.758	1276.856	.516%	97.587%
50.0	10.336	4.677	1281.533	.311%	97.944%
55.0	8.733	4.146	1285.679	.276%	98.261%
60.0	7.706	3.800	1289.479	.253%	98.552%
65.0	6.919	3.555	1293.034	.237%	98.823%
70.0	6.307	3.349	1296.383	.223%	99.079%
75.0	5.885	3.187	1299.57	.212%	99.323%
80.0	5.625	3.080	1302.65	.205%	99.558%
85.0	5.273	2.961	1305.611	.197%	99.785%
90.0	5.020	2.819	1308.43	.188%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1123.04	74.72%	85.83%
0-40	1269.10	84.44%	96.99%
0-60	1289.48	85.79%	98.55%
0-90	1305.61	86.87%	99.78%
0-120	1305.61	86.87%	99.78%
0-180	1308.43	87.05%	100.00%
60-90	19.93	1.33%	1.52%
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%
0-27.67	1046.74	69.64%	80.00%

ZONAL LUMEN SUMMARY

0-10	254.87
10-20	492.97
20-30	375.20
30-40	146.06
40-50	12.44
50-60	7.95
60-70	6.90
70-80	6.27
80-90	2.96
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: —————

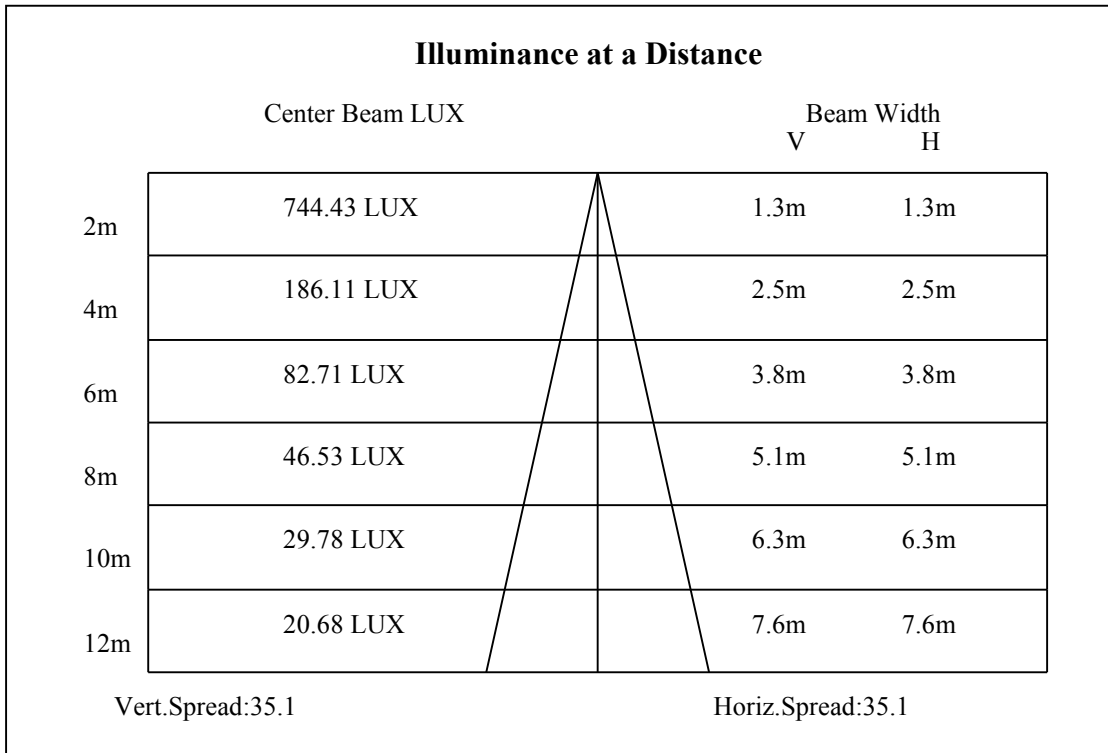
C90/C270: —————

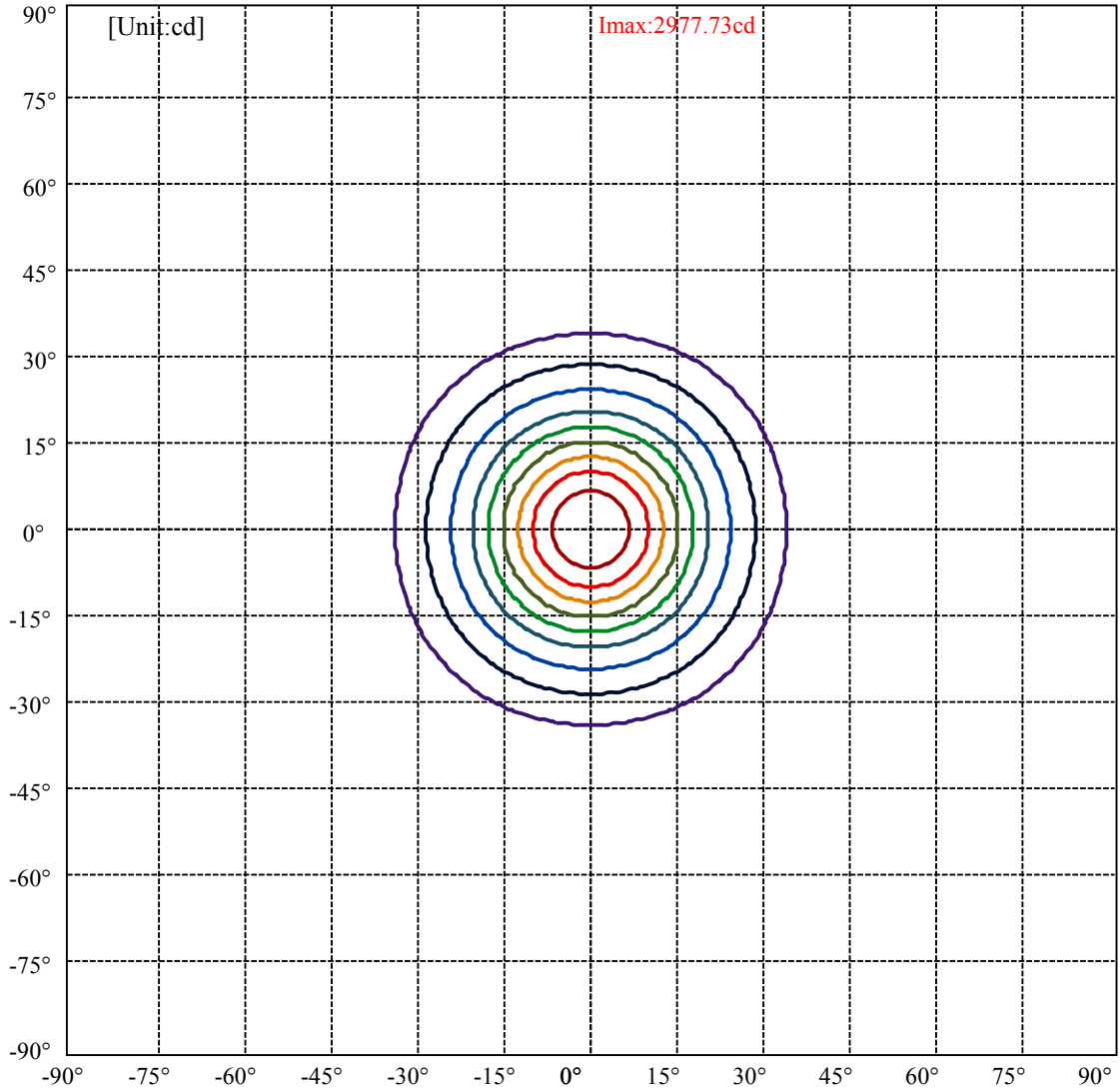
Field angle(10%Imax):C0/180Left:33.6 Right:33.6

:C90/270Left:33.6 Right:33.6

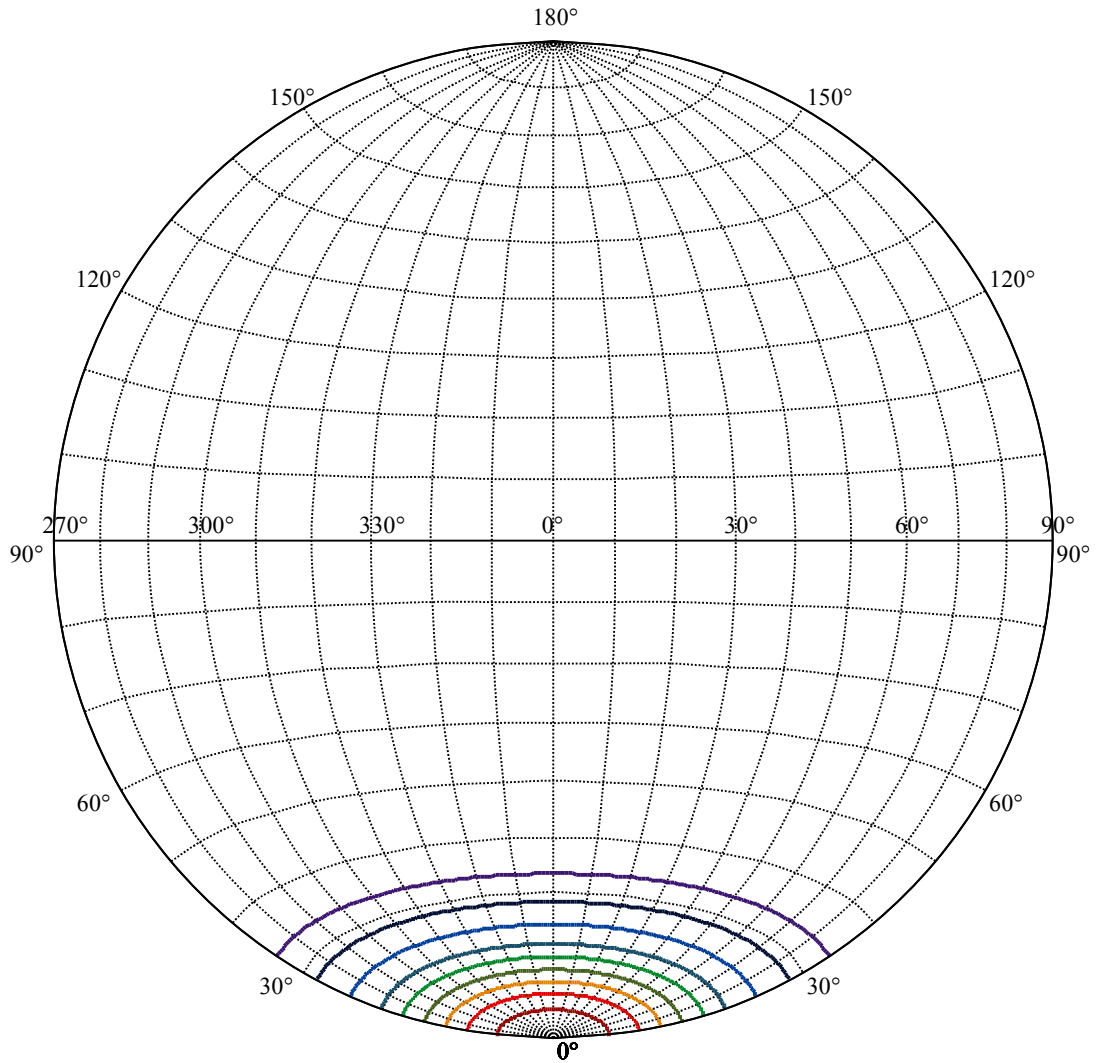
Beam Angle(50%Imax):C0/180Left:17.5 Right:17.5

:C90/270Left:17.5 Right:17.5





(10%Imax) 297.773	—
(20%Imax) 595.547	—
(30%Imax) 893.32	—
(40%Imax) 1191.09	—
(50%Imax) 1488.87	—
(60%Imax) 1786.64	—
(70%Imax) 2084.41	—
(80%Imax) 2382.19	—
(90%Imax) 2679.96	—



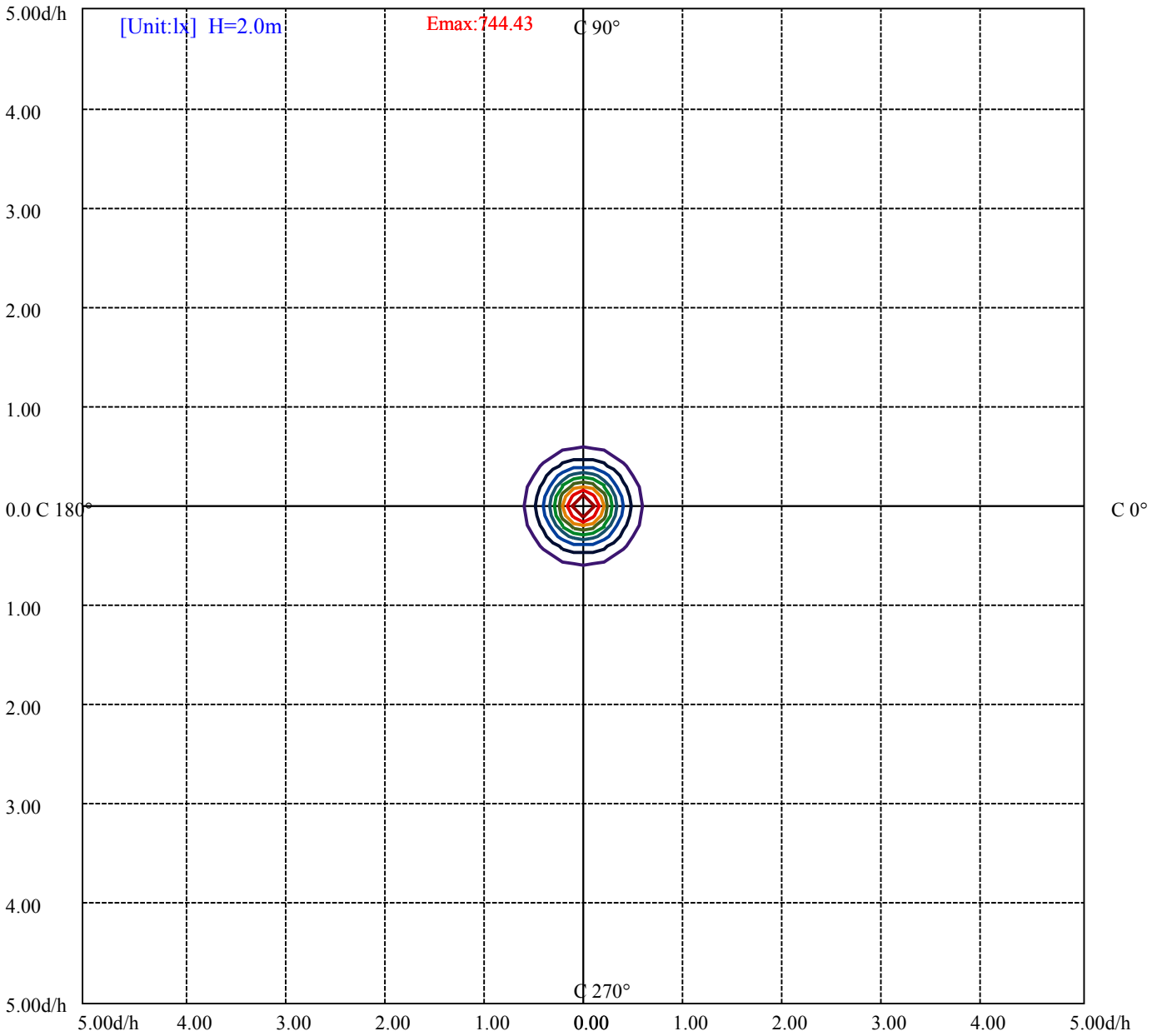
House

[Unit:cd]

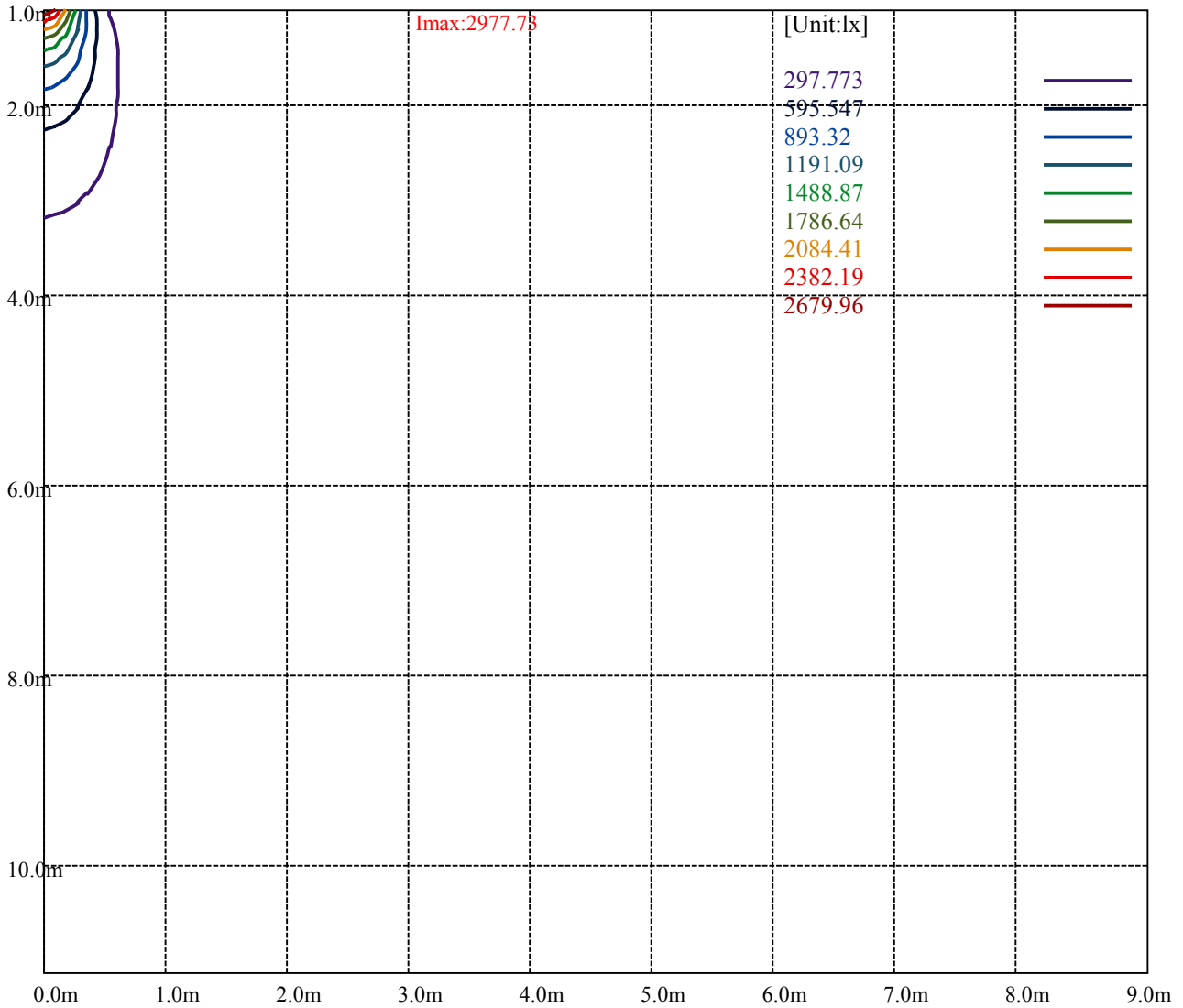
Road

Imax:2977.73

(10%Imax)	297.773	—
(20%Imax)	595.547	—
(30%Imax)	893.32	—
(40%Imax)	1191.09	—
(50%Imax)	1488.87	—
(60%Imax)	1786.64	—
(70%Imax)	2084.41	—
(80%Imax)	2382.19	—
(90%Imax)	2679.96	—



(10%Emax) 74.44325	—
(20%Emax) 148.8865	—
(30%Emax) 223.3297	—
(40%Emax) 297.7725	—
(50%Emax) 372.215	—
(60%Emax) 446.66	—
(70%Emax) 521.1025	—
(80%Emax) 595.545	—
(90%Emax) 669.99	—



Luminance Table

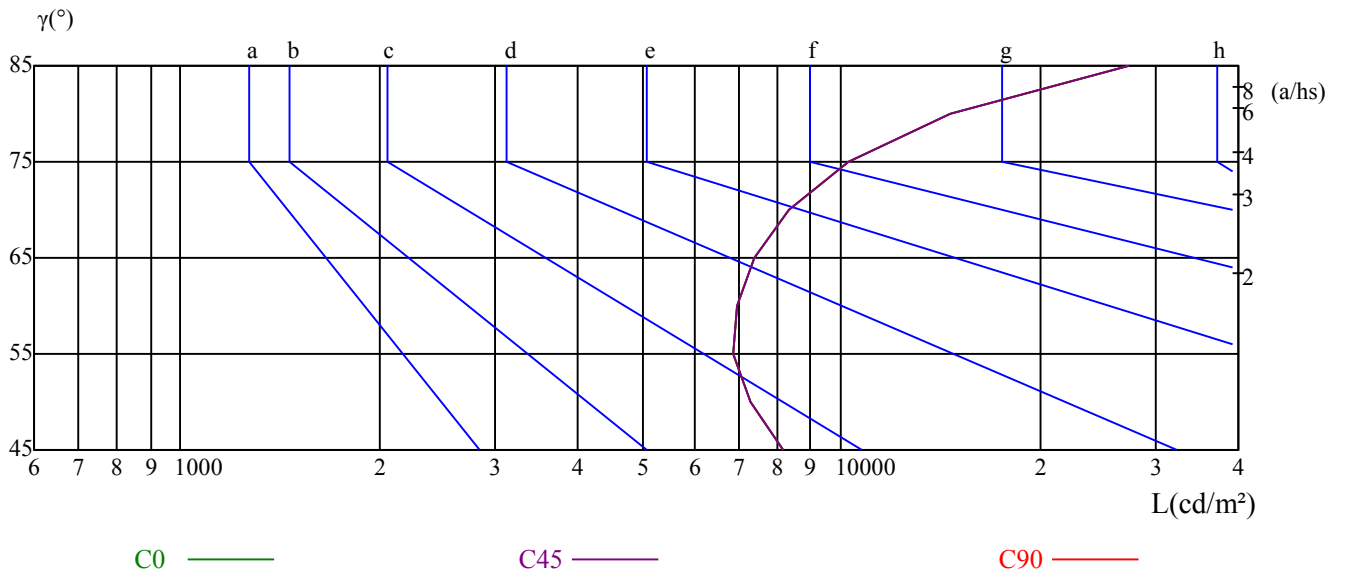
γ	45	50	55	60	65	70	75	80	85
C0	8202	7279	6892	6977	7411	8348	10294	14664	27391
C45	8202	7279	6892	6977	7411	8348	10294	14664	27391
C90	8202	7279	6892	6977	7411	8348	10294	14664	27391

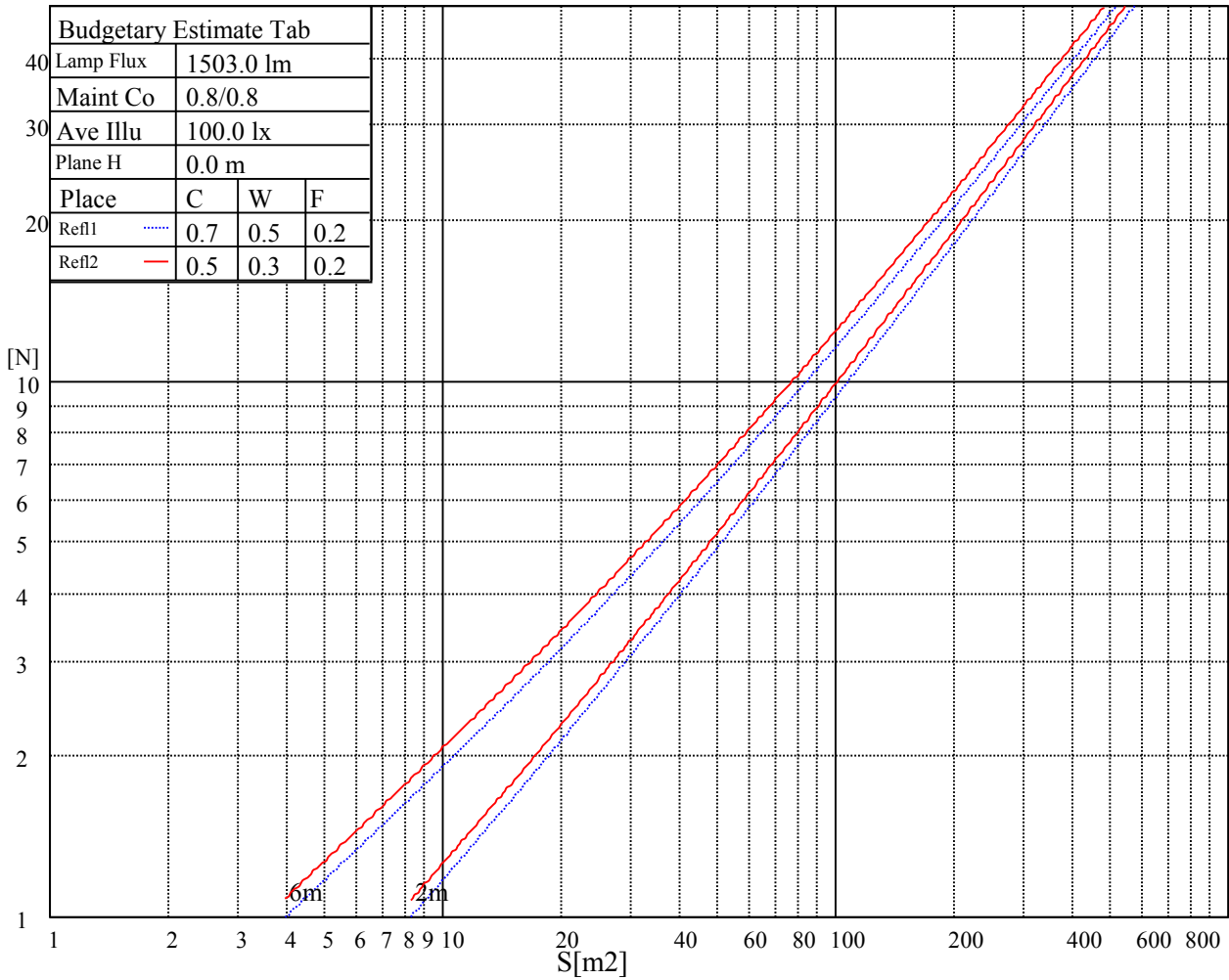
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
7411	7411	7411	10294	10294	10294	27391	27391	27391

Glare Table

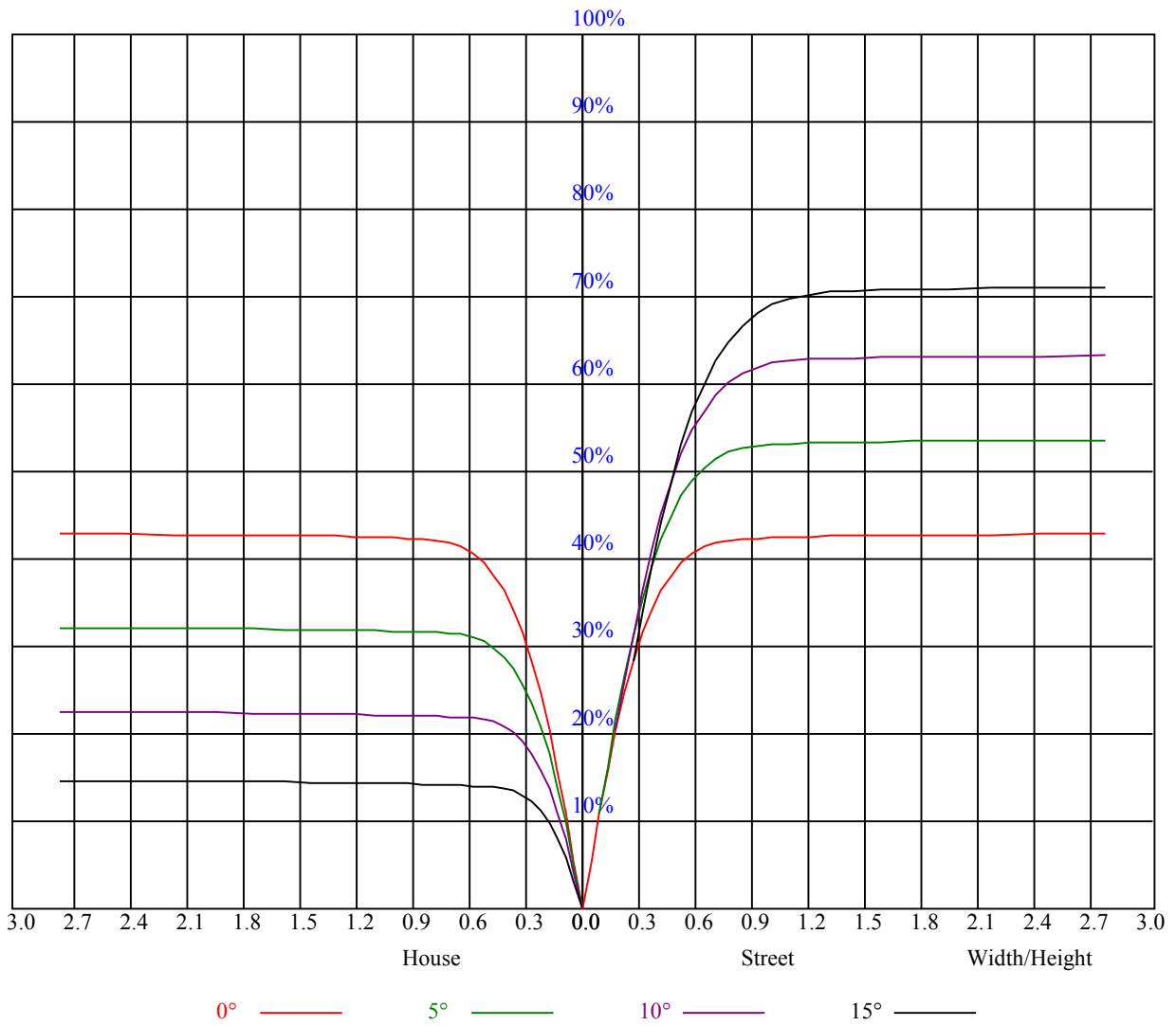
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.04	1.04	1.04	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.87
1	0.97	0.95	0.93	0.95	0.93	0.92	0.92	0.90	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.82
2	0.91	0.88	0.85	0.90	0.87	0.85	0.87	0.85	0.83	0.84	0.83	0.81	0.82	0.81	0.79	0.78
3	0.86	0.82	0.79	0.85	0.82	0.79	0.83	0.80	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.74
4	0.82	0.77	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.76	0.73	0.71	0.70
5	0.78	0.73	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
6	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.64
7	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.62	0.61
8	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.64	0.61	0.59	0.58
9	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.57	0.56
10	0.62	0.58	0.55	0.62	0.57	0.55	0.61	0.57	0.54	0.60	0.57	0.54	0.60	0.57	0.54	0.53



NATA 1658-S

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	2977.88	2861.44	2471.63	1867.50	1317.38	875.81	529.88	297.56	31.11
45.0	2975.63	2833.88	2407.50	1796.63	1285.31	839.81	495.00	289.69	28.24
90.0	2972.81	2747.25	2243.81	1636.88	1105.71	719.04	390.09	111.26	26.27
135.0	2984.63	2786.06	2370.38	1770.19	1244.81	811.69	505.69	293.06	28.74
180.0	2977.88	2763.56	2278.13	1721.81	1115.55	771.92	465.13	156.43	26.27
225.0	2975.63	2785.50	2347.31	1743.75	1106.33	797.46	453.66	180.11	27.84
270.0	2972.81	2882.81	2502.56	1932.75	1357.88	861.19	532.13	295.88	38.31
315.0	2984.63	2831.63	2405.25	1787.63	1106.55	818.38	479.87	166.73	25.93
360.0	2977.88	2861.44	2471.63	1867.50	1317.38	875.81	529.88	297.56	31.11
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	11.98	9.68	8.21	7.26	6.58	6.19	5.74	5.46	5.29
45.0	11.70	9.68	8.10	7.14	6.53	6.08	5.74	5.51	5.23
90.0	14.34	11.42	9.51	8.38	7.43	6.64	6.19	5.79	5.29
135.0	13.28	10.58	8.78	7.76	7.09	6.36	5.85	5.74	5.23
180.0	12.94	10.41	8.49	7.31	6.53	6.02	5.63	5.34	5.29
225.0	12.38	10.01	8.27	7.20	6.53	6.02	5.68	5.46	5.23
270.0	14.18	11.48	10.29	9.06	7.71	6.86	6.36	5.96	5.40
315.0	11.70	9.45	8.21	7.54	6.98	6.30	5.91	5.74	5.23
360.0	11.98	9.68	8.21	7.26	6.58	6.19	5.74	5.46	5.29
C/ γ (°)	90.0								
0.0	5.01								
45.0	5.01								
90.0	4.95								
135.0	5.06								
180.0	5.06								
225.0	5.06								
270.0	5.01								
315.0	5.01								
360.0	5.01								