



NATA LIGHTING CO.,LTD
www.nata.cn
Email:info@nata.cn
Tel:0750-377 0000(10 lines) Fax:0750-377 1111
Address:380JinOu Road,Gaoxin Zone,Jiang Men City,Guangdong,China

NATA

LumCAT: 3-2035-M
Luminaire: 92.70.135.00
Report No: NT2017091501
Test No: GC2017091501
LampCAT: LUXEON CoB 1208
Lamp flux(lm): 3097.0
Number of Lamps: 1
Length(mm): 78
Phm Type: C

Voltage(V): 35.3000
Current(A): 0.7000
Power (W): 24.7100
PF: 0.0000
Ballast type: DC
Width(mm): 78
Height(mm): 0

Photometric Results

Lumens(lm): 2773.90
Efficiency(%): 89.57%
Lumens(lm)/Power(W): 112.26
Central intensity(cd): 4893.413
Maximum intensity(cd): 4893.413
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=42.6
 [C90/270]Total=42.6
Field angle(10%Imax): [C0/180]Total=72.9
 [C90/270]Total=72.9
Maximum s/h(1/2): C0_180=0.68 C90_270=0.68
Maximum s/h(1/4): C0_180=0.71 C90_270=0.71
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 89.57%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.699%

Equipment: gms1980
Temperature(°C): 25.0

Date: 2017/6/10
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

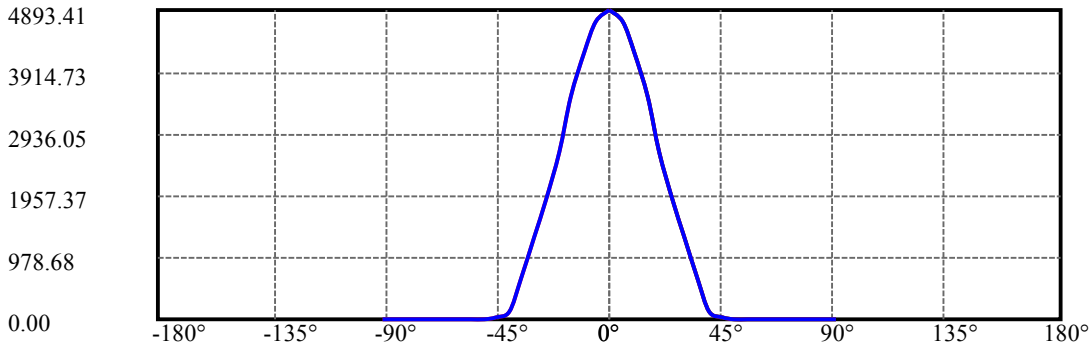
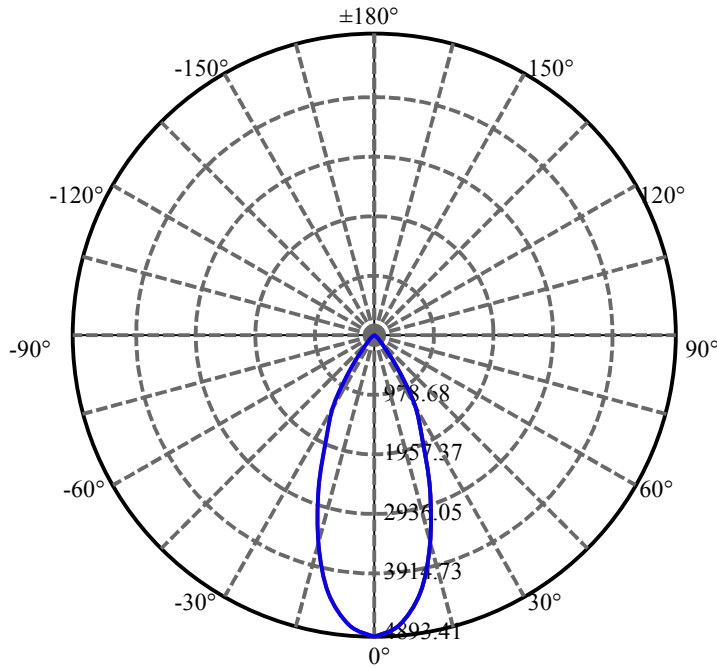
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4893.413	0.000	0	.000%	.000%
5.0	4712.140	114.832	114.832	3.708%	4.140%
10.0	4236.384	320.117	434.948	10.336%	15.680%
15.0	3517.897	459.979	894.927	14.852%	32.262%
20.0	2653.237	508.588	1403.515	16.422%	50.597%
25.0	1873.363	474.757	1878.272	15.330%	67.712%
30.0	1300.838	401.698	2279.97	12.971%	82.194%
35.0	640.512	285.877	2565.847	9.231%	92.500%
40.0	124.379	127.616	2693.464	4.121%	97.100%
45.0	16.833	26.147	2719.611	.844%	98.043%
50.0	14.225	6.276	2725.886	.203%	98.269%
55.0	13.207	5.965	2731.851	.193%	98.484%
60.0	12.539	5.951	2737.802	.192%	98.699%
65.0	11.975	5.959	2743.761	.192%	98.914%
70.0	11.596	5.968	2749.73	.193%	99.129%
75.0	11.328	5.992	2755.722	.193%	99.345%
80.0	11.197	6.027	2761.749	.195%	99.562%
85.0	11.135	6.068	2767.817	.196%	99.781%
90.0	11.073	6.081	2773.898	.196%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2279.97	73.62%	82.19%
0-40	2693.46	86.97%	97.10%
0-60	2737.80	88.40%	98.70%
0-90	2767.82	89.37%	99.78%
0-120	2767.82	89.37%	99.78%
0-180	2773.90	89.57%	100.00%
60-90	35.97	1.16%	1.30%
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%
0-29.24	2219.12	71.65%	80.00%

ZONAL LUMEN SUMMARY

0-10	434.95
10-20	968.57
20-30	876.45
30-40	413.49
40-50	32.42
50-60	11.92
60-70	11.93
70-80	12.02
80-90	6.07
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: —————

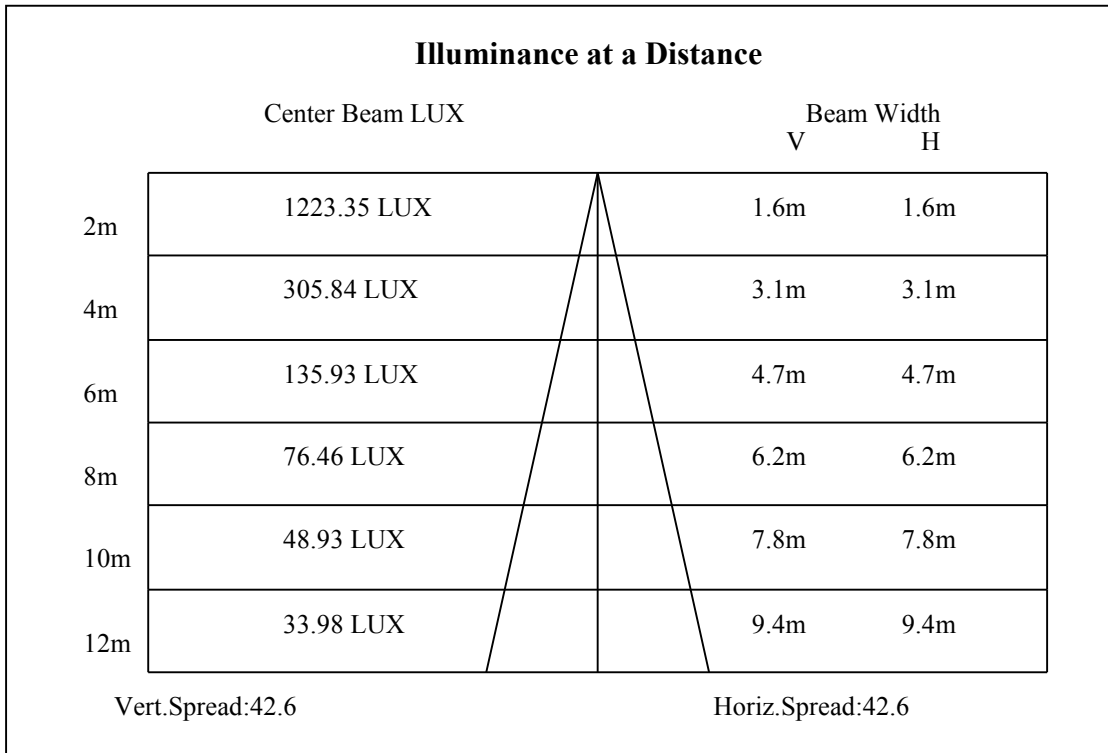
C90/C270: —————

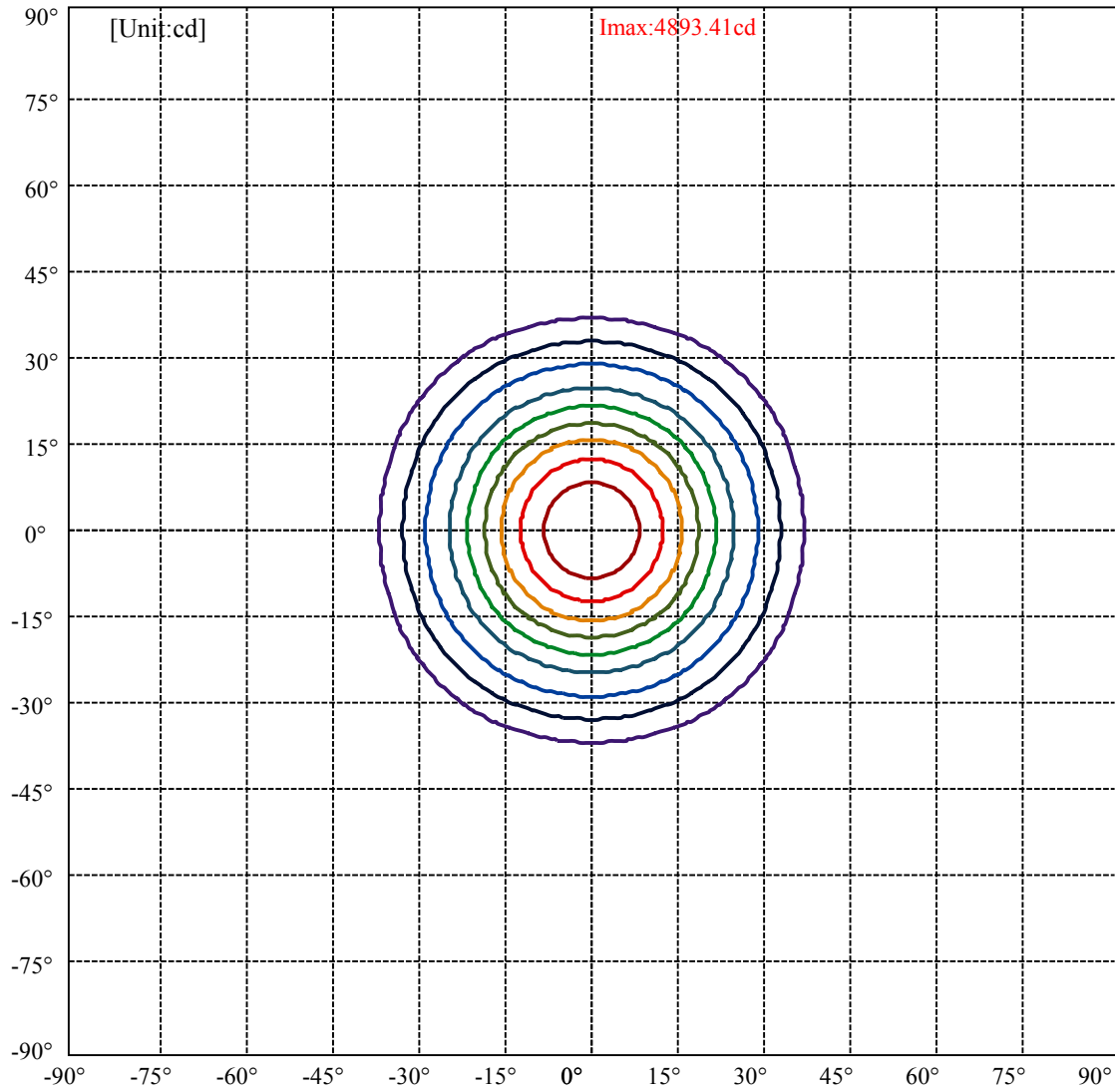
Field angle(10%Imax):C0/180Left:36.5 Right:36.5

:C90/270Left:36.5 Right:36.5

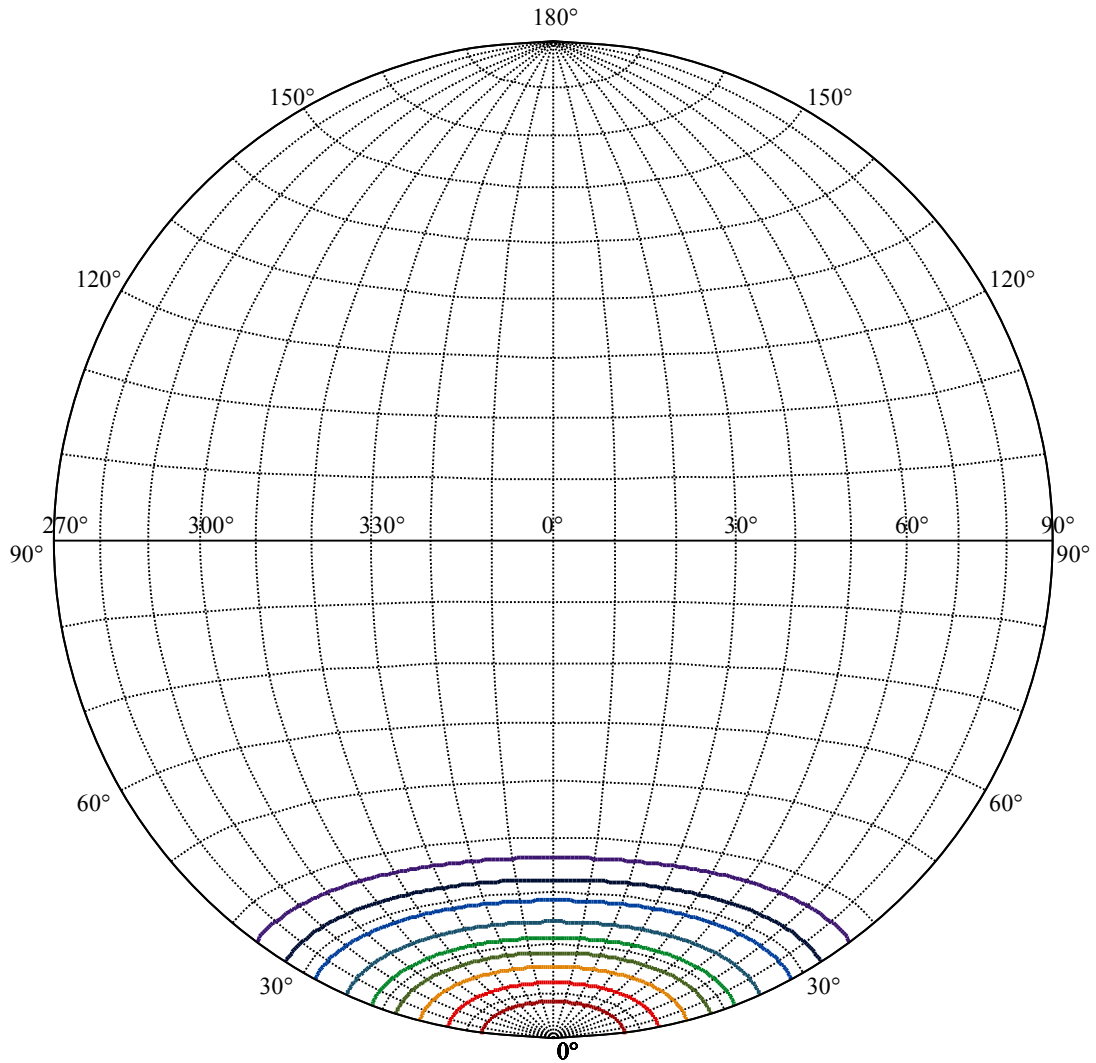
Beam Angle(50%Imax):C0/180Left:21.3 Right:21.3

:C90/270Left:21.3 Right:21.3





(10%Imax) 489.341	—
(20%Imax) 978.683	—
(30%Imax) 1468.02	—
(40%Imax) 1957.37	—
(50%Imax) 2446.71	—
(60%Imax) 2936.05	—
(70%Imax) 3425.39	—
(80%Imax) 3914.73	—
(90%Imax) 4404.07	—



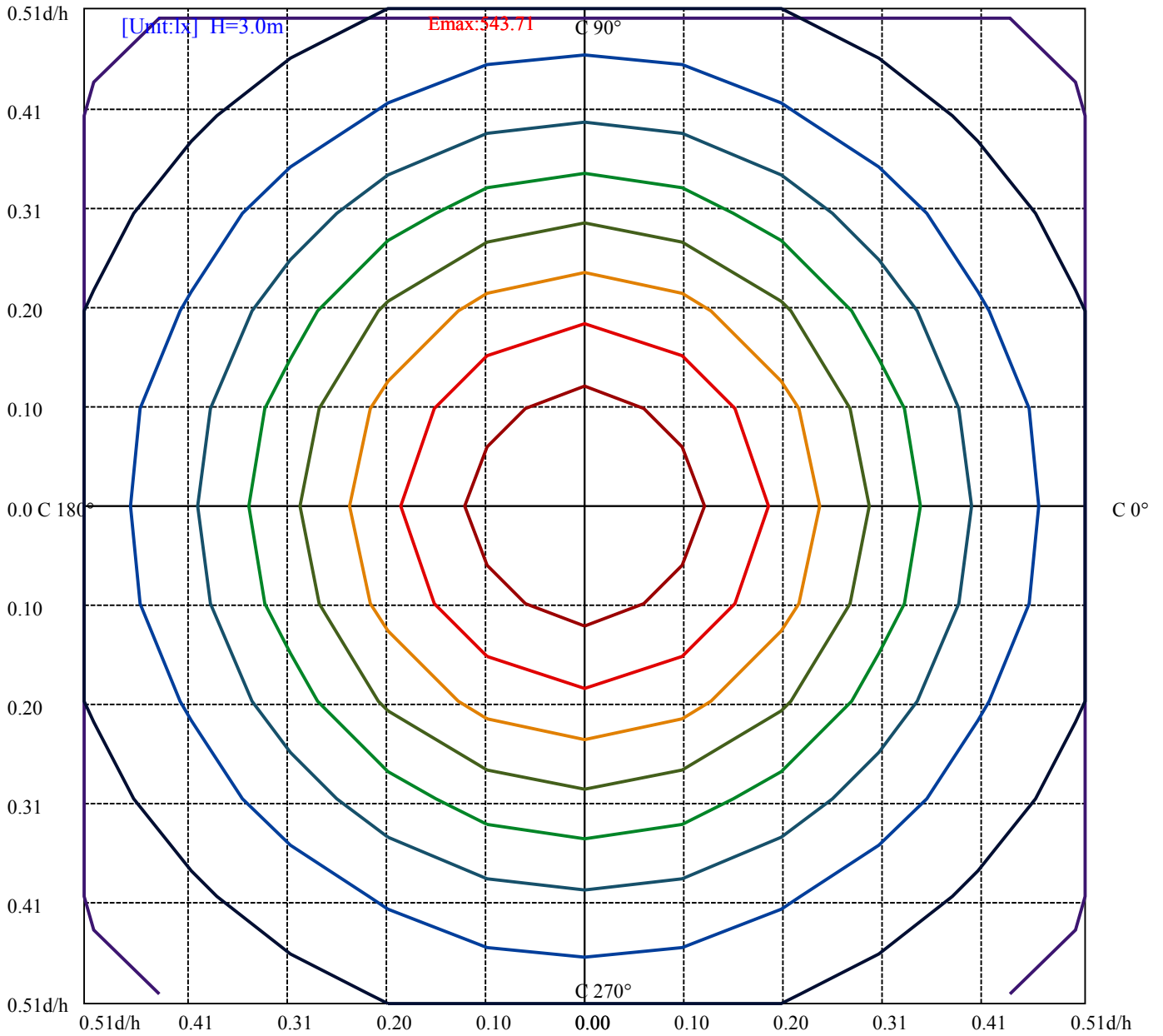
House

[Unit:cd]

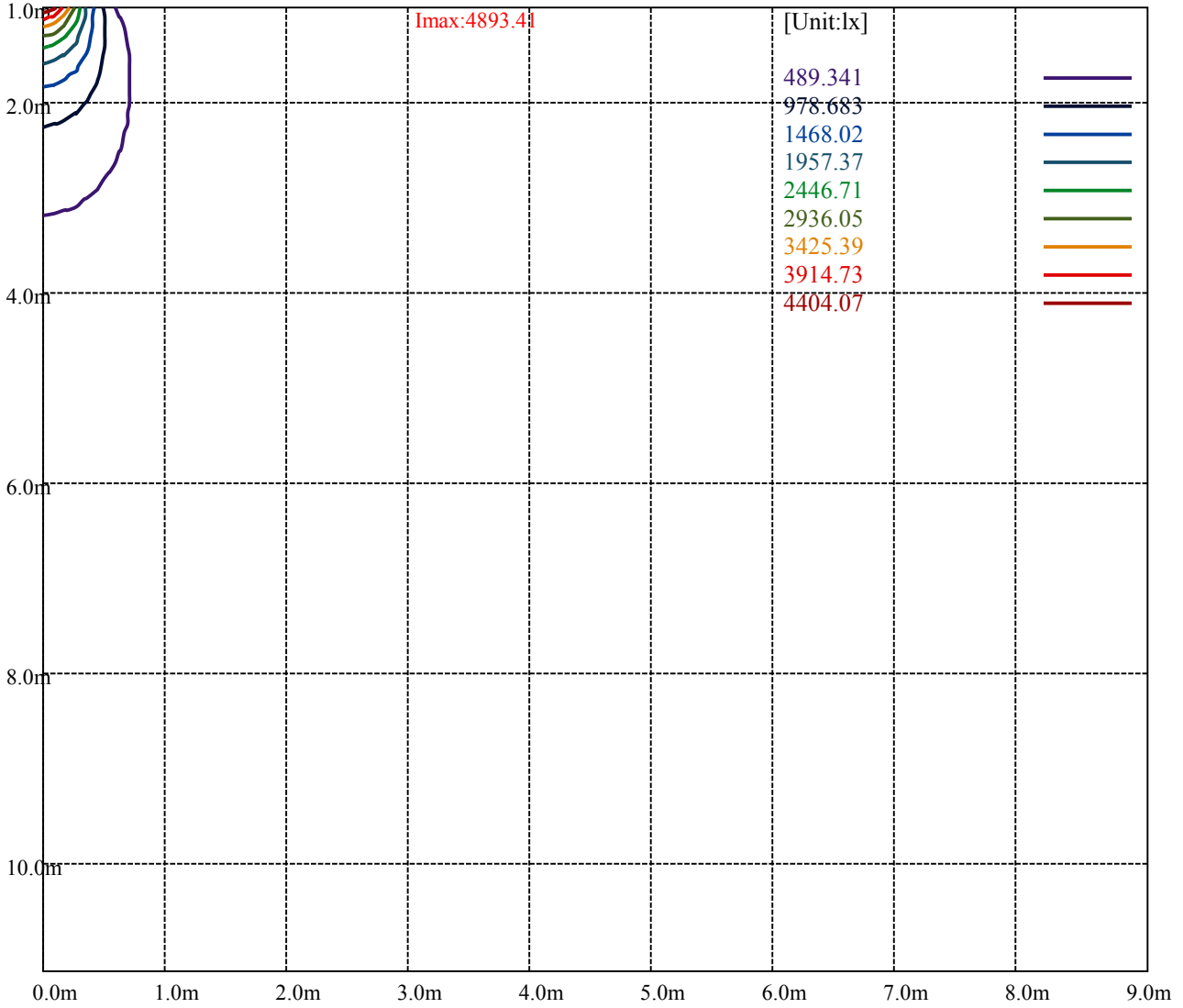
Road

Imax:4893.41

(10%Imax)	489.341	—
(20%Imax)	978.683	—
(30%Imax)	1468.02	—
(40%Imax)	1957.37	—
(50%Imax)	2446.71	—
(60%Imax)	2936.05	—
(70%Imax)	3425.39	—
(80%Imax)	3914.73	—
(90%Imax)	4404.07	—



- (10%Emax) 54.37122
- (20%Emax) 108.7424
- (30%Emax) 163.1133
- (40%Emax) 217.4844
- (50%Emax) 271.8556
- (60%Emax) 326.2267
- (70%Emax) 380.5989
- (80%Emax) 434.97
- (90%Emax) 489.3411



Luminance Table

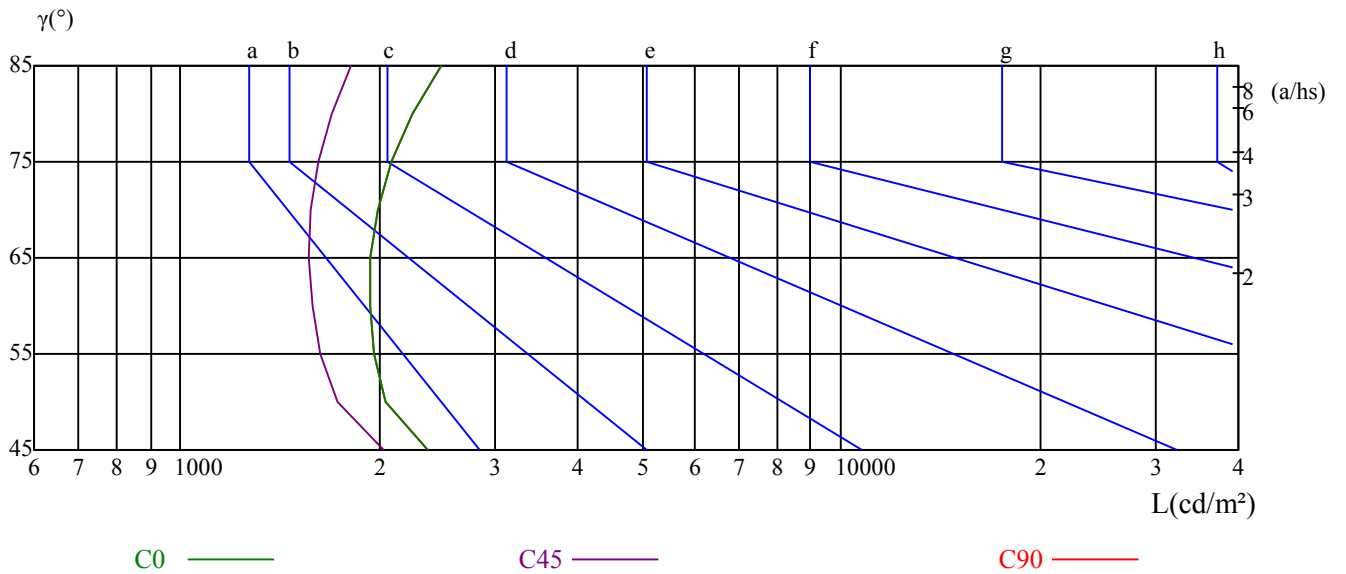
γ	45	50	55	60	65	70	75	80	85
C0	2366	2044	1957	1933	1939	1993	2091	2251	2478
C45	2033	1730	1631	1584	1561	1574	1616	1697	1815
C90	2366	2044	1957	1933	1939	1993	2091	2251	2478

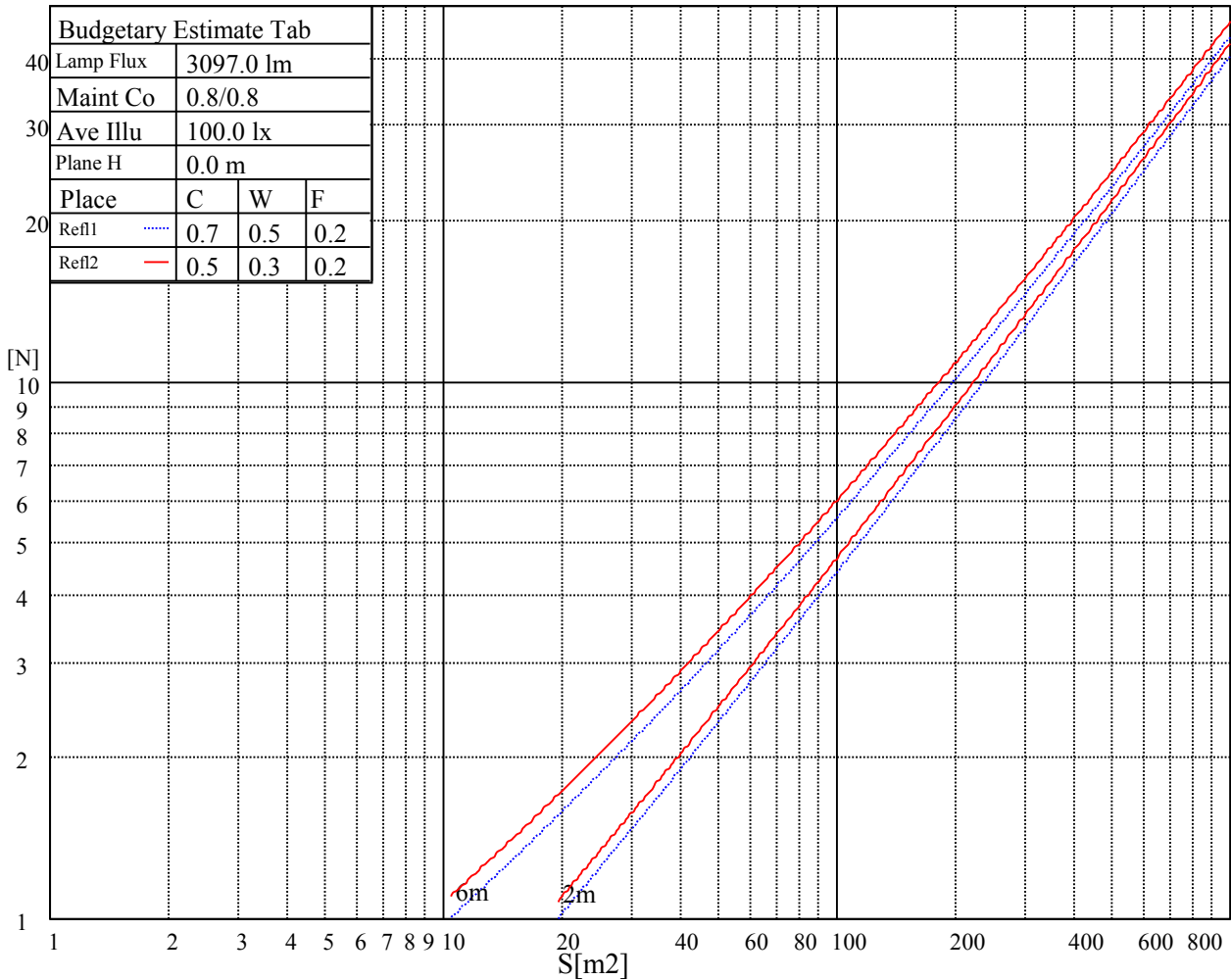
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4657	4657	4657	7194	7194	7194	21000	21000	21000

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
		a	b	c	d	e	f	g	h
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

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	1.04	1.04	1.04	1.00	1.00	1.00	0.95	0.95	0.95	0.91	0.91	0.91	0.90
1	1.00	0.97	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	0.89	0.86	0.89	0.86	0.84	0.86	0.84	0.83	0.84	0.82	0.81	0.79
3	0.88	0.84	0.81	0.87	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.77	0.80	0.78	0.76	0.75
4	0.83	0.78	0.75	0.82	0.78	0.75	0.80	0.76	0.74	0.78	0.75	0.73	0.77	0.74	0.72	0.71
5	0.78	0.74	0.70	0.78	0.73	0.70	0.76	0.72	0.69	0.75	0.71	0.69	0.73	0.70	0.68	0.67
6	0.74	0.70	0.66	0.74	0.69	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.63
7	0.71	0.66	0.62	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.60
8	0.67	0.62	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.58	0.64	0.61	0.58	0.57
9	0.64	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.55	0.54
10	0.61	0.56	0.53	0.61	0.56	0.53	0.60	0.56	0.53	0.59	0.56	0.53	0.59	0.55	0.53	0.52

NATA 3-2035-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	4886.81	4640.70	4091.79	3330.91	2464.88	1740.88	1221.70	496.61	34.96
45.0	4897.82	4757.42	4287.24	3602.34	2746.76	1906.05	1414.95	716.83	285.74
90.0	4901.12	4694.11	4231.08	3510.95	2629.49	1870.82	1266.85	618.78	74.93
135.0	4887.91	4805.32	4434.79	3739.43	2930.10	2064.06	1510.20	865.49	301.16
180.0	4886.81	4794.31	4367.62	3652.99	2873.39	1994.14	1451.29	820.67	155.15
225.0	4897.82	4686.95	4177.68	3439.37	2548.01	1824.02	1097.05	548.20	49.72
270.0	4901.12	4728.79	4253.66	3577.01	2670.79	1903.85	1370.35	647.46	60.95
315.0	4887.91	4589.50	4047.20	3290.17	2362.47	1683.07	1074.32	410.06	32.43
360.0	4886.81	4640.70	4091.79	3330.91	2464.88	1740.88	1221.70	496.61	34.96

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	15.20	13.71	12.88	12.28	11.78	11.51	11.23	11.18	11.07
45.0	17.62	14.48	13.38	12.66	12.11	11.67	11.34	11.18	11.12
90.0	16.52	14.59	13.43	12.77	12.11	11.62	11.34	11.18	11.18
135.0	18.99	14.48	13.43	12.66	12.11	11.73	11.45	11.23	11.12
180.0	18.28	14.15	13.10	12.44	11.89	11.51	11.29	11.12	11.07
225.0	15.97	14.15	13.16	12.44	11.89	11.56	11.29	11.23	11.23
270.0	16.96	14.59	13.43	12.77	12.11	11.73	11.45	11.29	11.23
315.0	15.14	13.65	12.83	12.28	11.78	11.45	11.23	11.18	11.07
360.0	15.20	13.71	12.88	12.28	11.78	11.51	11.23	11.18	11.07

C/γ(°)	90.0
0.0	11.07
45.0	11.12
90.0	11.07
135.0	11.12
180.0	11.01
225.0	11.01
270.0	11.12
315.0	11.07
360.0	11.07