



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: LN01D05060DA-N

Luminaire: 97.70.234.00

Report No: 210107-B012

Test No: 210107-C012

LampCAT: XICATO XOB LES 9.8MM

Lamp flux(lm): 1260.0

Number of Lamps: 1

Length(mm): 92

Phm Type: C

Voltage(V): 34.7200

Current(A): 0.3810

Power (W): 13.2280

PF: 0.0000

Ballast type: DC

Width(mm): 92

Height(mm): 50

Photometric Results

Lumens(lm): 1117.60

Efficiency(%): 88.70%

Lumens(lm)/Power(W): 84.49

Central intensity(cd): 1143.422

Maximum intensity(cd): 1143.422

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=58.6

[C90/270]Total=58.6

Field angle(10%Imax): [C0/180]Total=89.9

[C90/270]Total=89.9

Maximum s/h(1/2): C0_180=0.88 C90_270=0.88

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(%): 88.70%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.391%

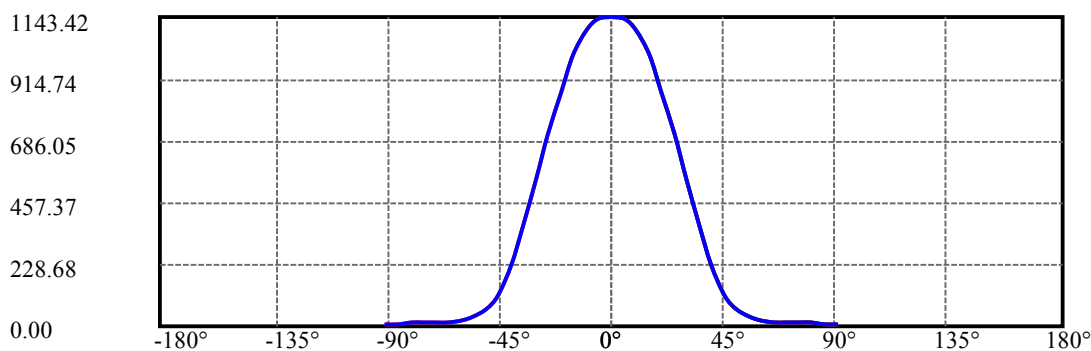
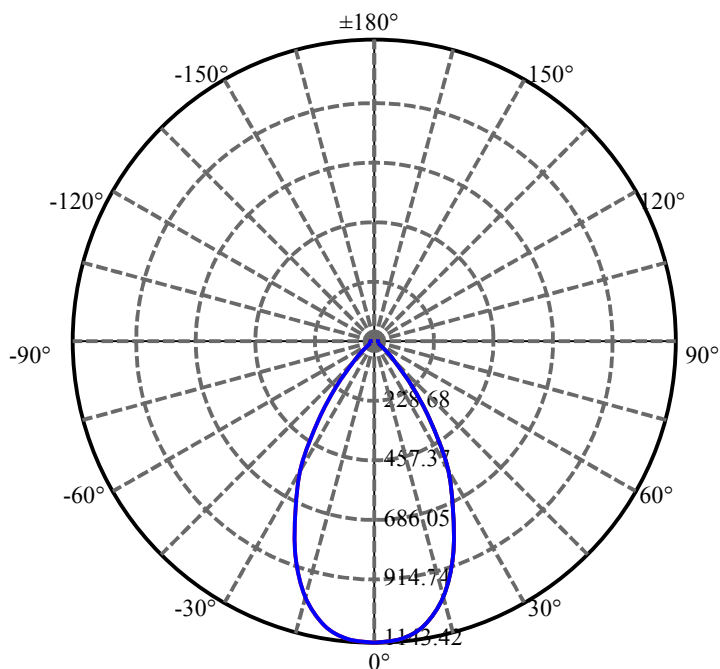
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1143.422	0.000	0	.000%	.000%
5.0	1135.624	27.245	27.245	2.162%	2.438%
10.0	1094.801	79.789	107.035	6.332%	9.577%
15.0	1003.922	124.495	231.529	9.881%	20.717%
20.0	867.839	154.259	385.789	12.243%	34.520%
25.0	708.666	165.346	551.135	13.123%	49.314%
30.0	548.529	159.099	710.234	12.627%	63.550%
35.0	367.172	134.843	845.078	10.702%	75.616%
40.0	223.924	98.620	943.697	7.827%	84.440%
45.0	113.161	62.414	1006.111	4.953%	90.025%
50.0	63.127	35.621	1041.733	2.827%	93.212%
55.0	36.401	21.641	1063.374	1.718%	95.148%
60.0	23.674	13.886	1077.26	1.102%	96.391%
65.0	16.594	9.789	1087.049	.777%	97.267%
70.0	13.838	7.705	1094.754	.612%	97.956%
75.0	14.541	7.418	1102.172	.589%	98.620%
80.0	12.635	7.271	1109.443	.577%	99.271%
85.0	6.230	5.126	1114.569	.407%	99.729%
90.0	4.823	3.026	1117.596	.240%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	710.23	56.37%	63.55%
0-40	943.70	74.90%	84.44%
0-60	1077.26	85.50%	96.39%
0-90	1114.57	88.46%	99.73%
0-120	1114.57	88.46%	99.73%
0-180	1117.60	88.70%	100.00%
60-90	51.20	4.06%	4.58%
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%
0-37.48	894.08	70.96%	80.00%

ZONAL LUMEN SUMMARY

0-10	107.03
10-20	278.75
20-30	324.45
30-40	233.46
40-50	98.04
50-60	35.53
60-70	17.49
70-80	14.69
80-90	5.13
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: —————

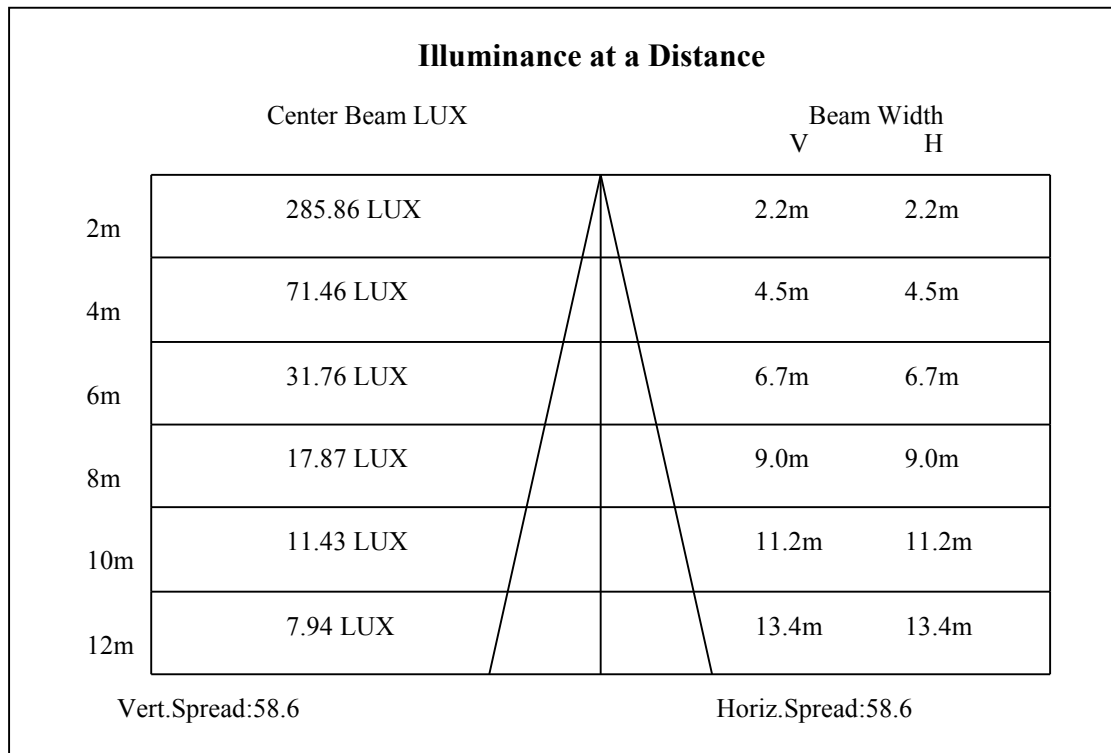
C90/C270: —————

Field angle(10%Imax):C0/180Left:44.9 Right:44.9

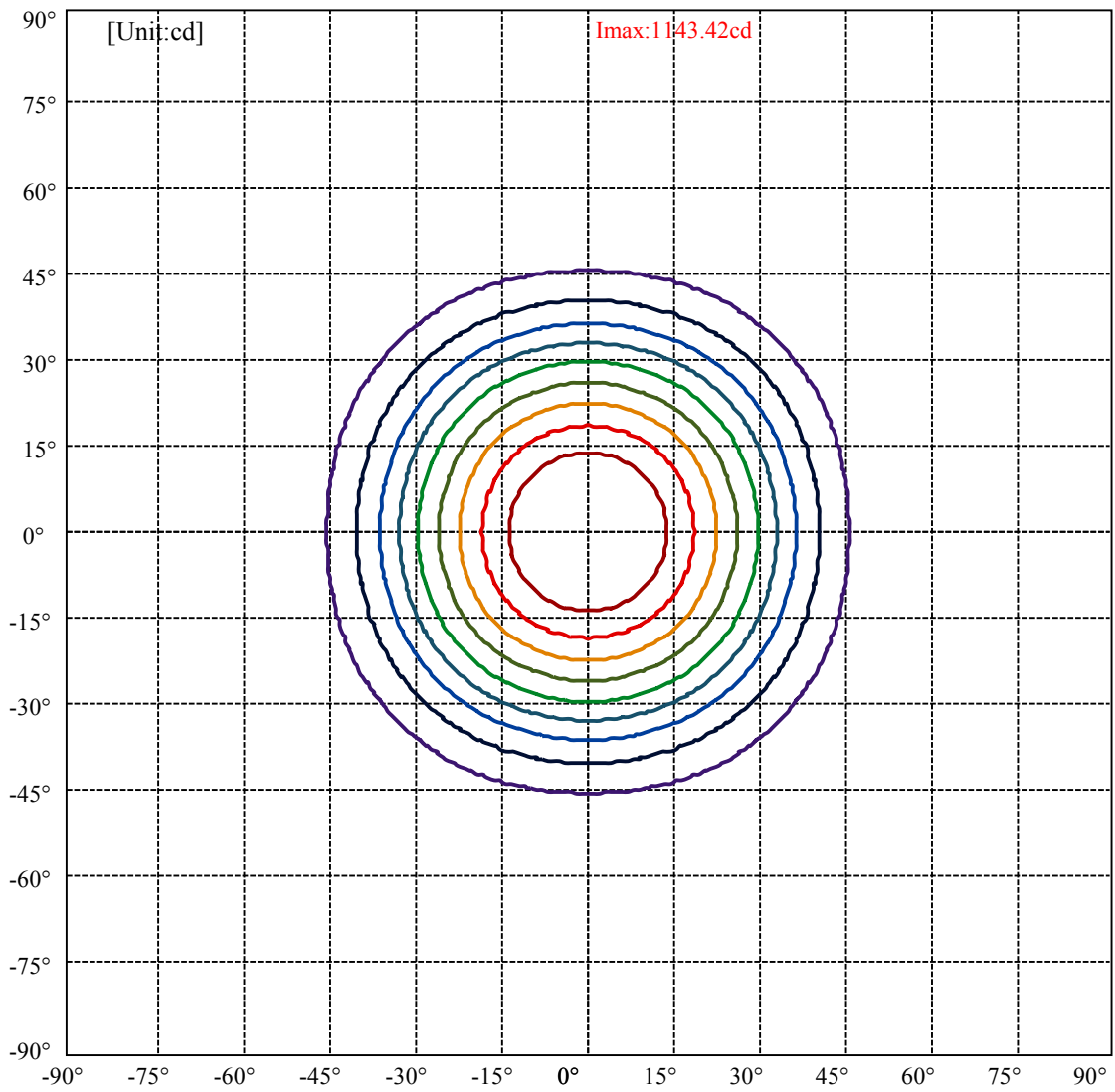
:C90/270Left:44.9 Right:44.9

Beam Angle(50%Imax):C0/180Left:29.3 Right:29.3

:C90/270Left:29.3 Right:29.3



ISO-Intensity(V-H)

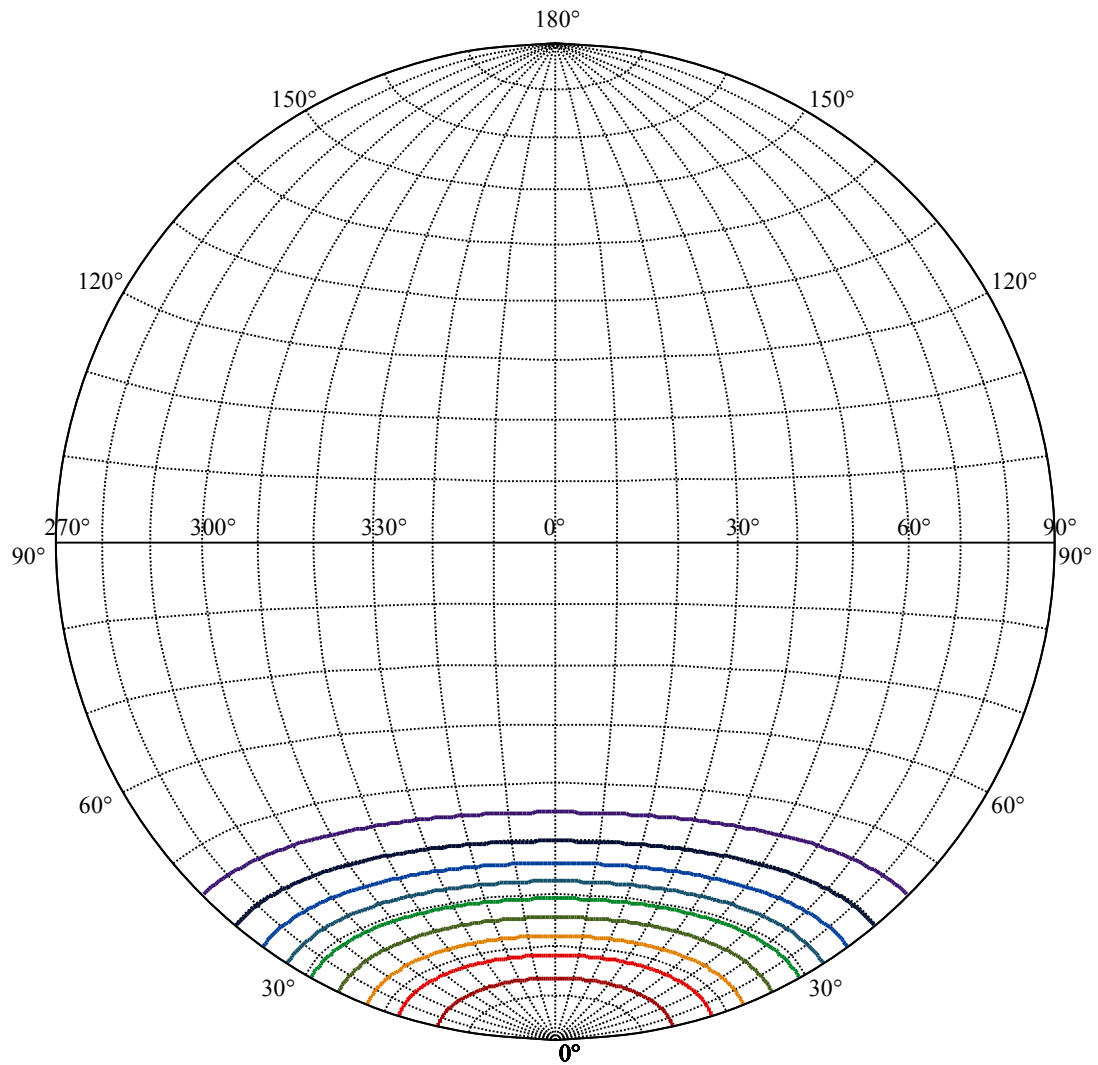


(10%Imax) 114.342	—
(20%Imax) 228.684	—
(30%Imax) 343.027	—
(40%Imax) 457.369	—
(50%Imax) 571.711	—
(60%Imax) 686.053	—
(70%Imax) 800.395	—
(80%Imax) 914.737	—
(90%Imax) 1029.08	—

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/01/07
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50












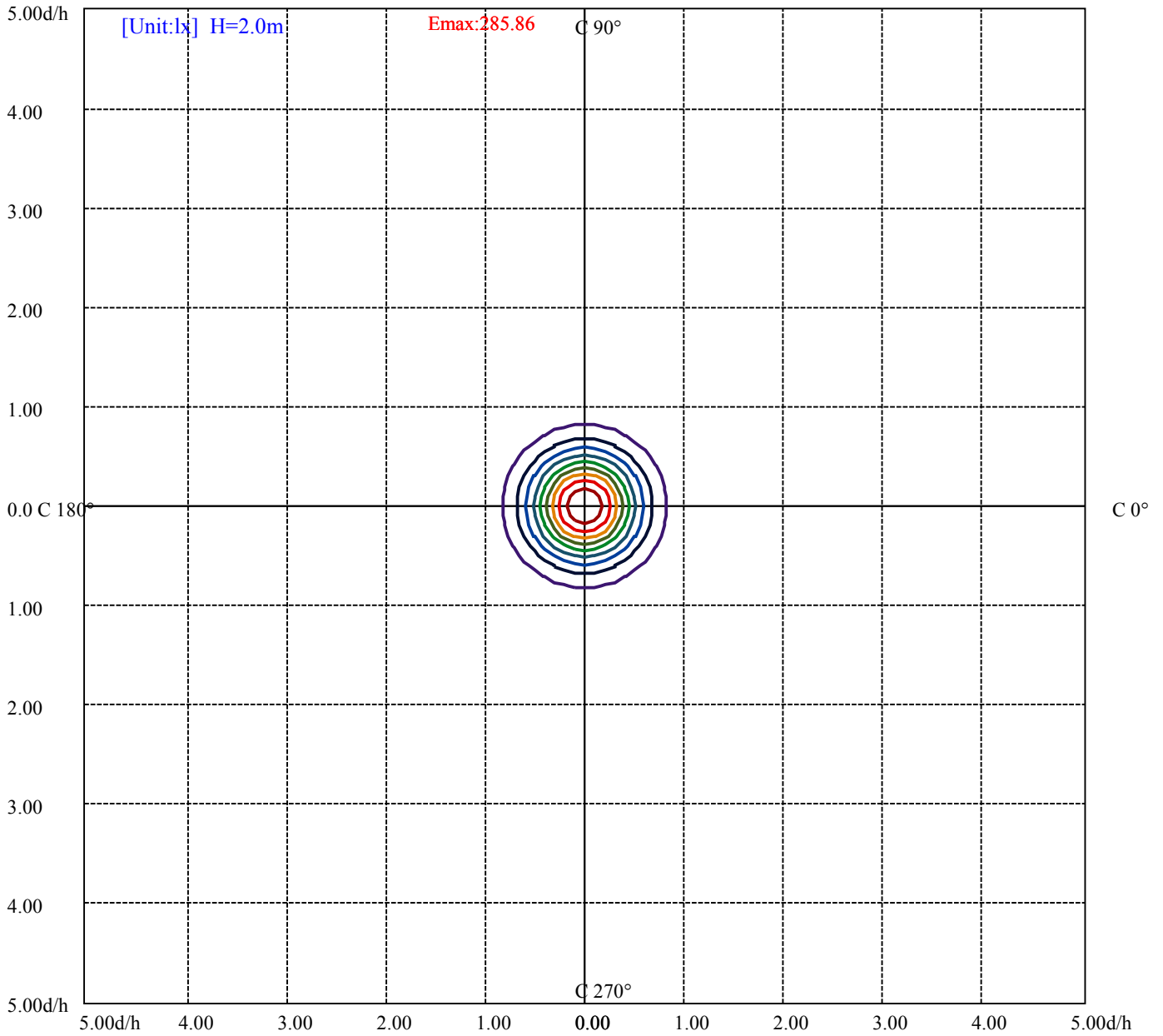
House

[Unit:cd]

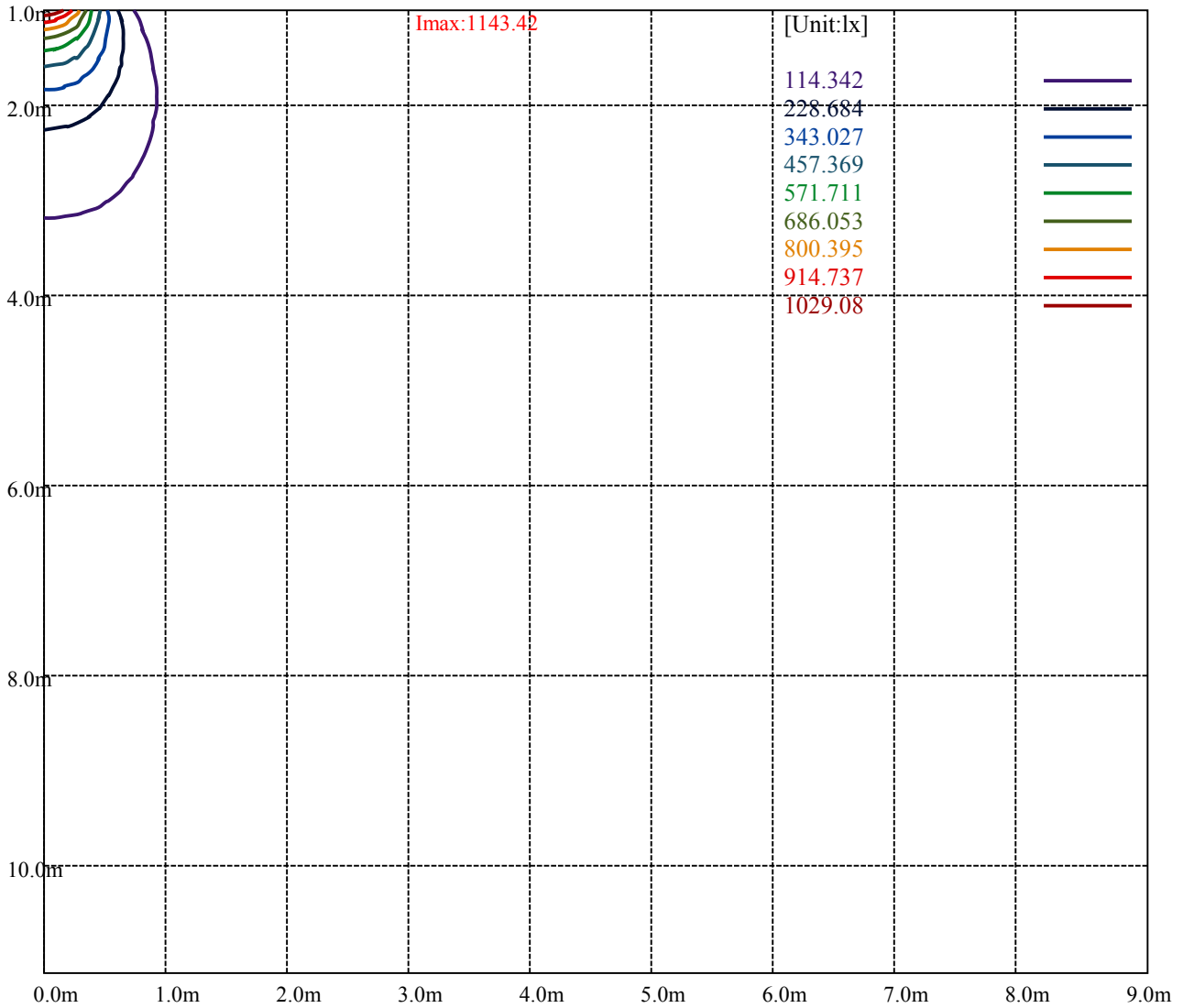
Road

Imax:1143.42

(10%Imax)	114.342	
(20%Imax)	228.684	
(30%Imax)	343.027	
(40%Imax)	457.369	
(50%Imax)	571.711	
(60%Imax)	686.053	
(70%Imax)	800.395	
(80%Imax)	914.737	
(90%Imax)	1029.08	



(10%Emax) 28.5855	—
(20%Emax) 57.171	—
(30%Emax) 85.7565	—
(40%Emax) 114.3422	—
(50%Emax) 142.9277	—
(60%Emax) 171.5132	—
(70%Emax) 200.0988	—
(80%Emax) 228.6842	—
(90%Emax) 257.27	—



Luminance Table

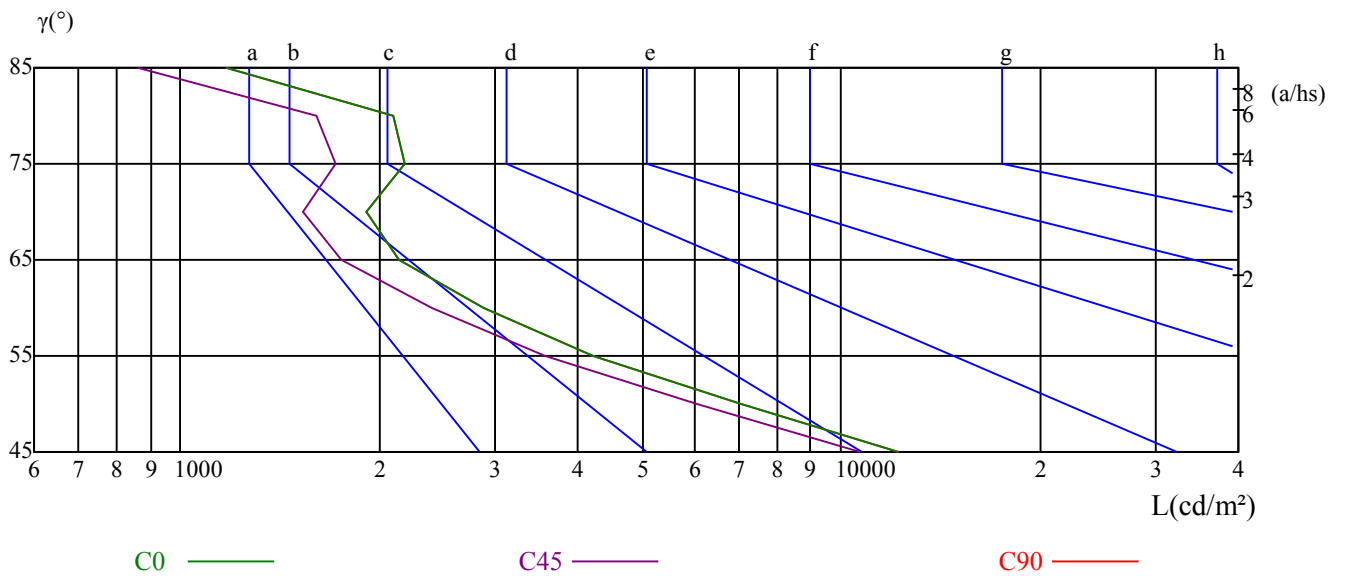
γ	45	50	55	60	65	70	75	80	85
C0	12250	7042	4221	2882	2142	1917	2192	2106	1171
C45	10691	6056	3574	2400	1752	1536	1716	1604	863
C90	12250	7042	4221	2882	2142	1917	2192	2106	1171

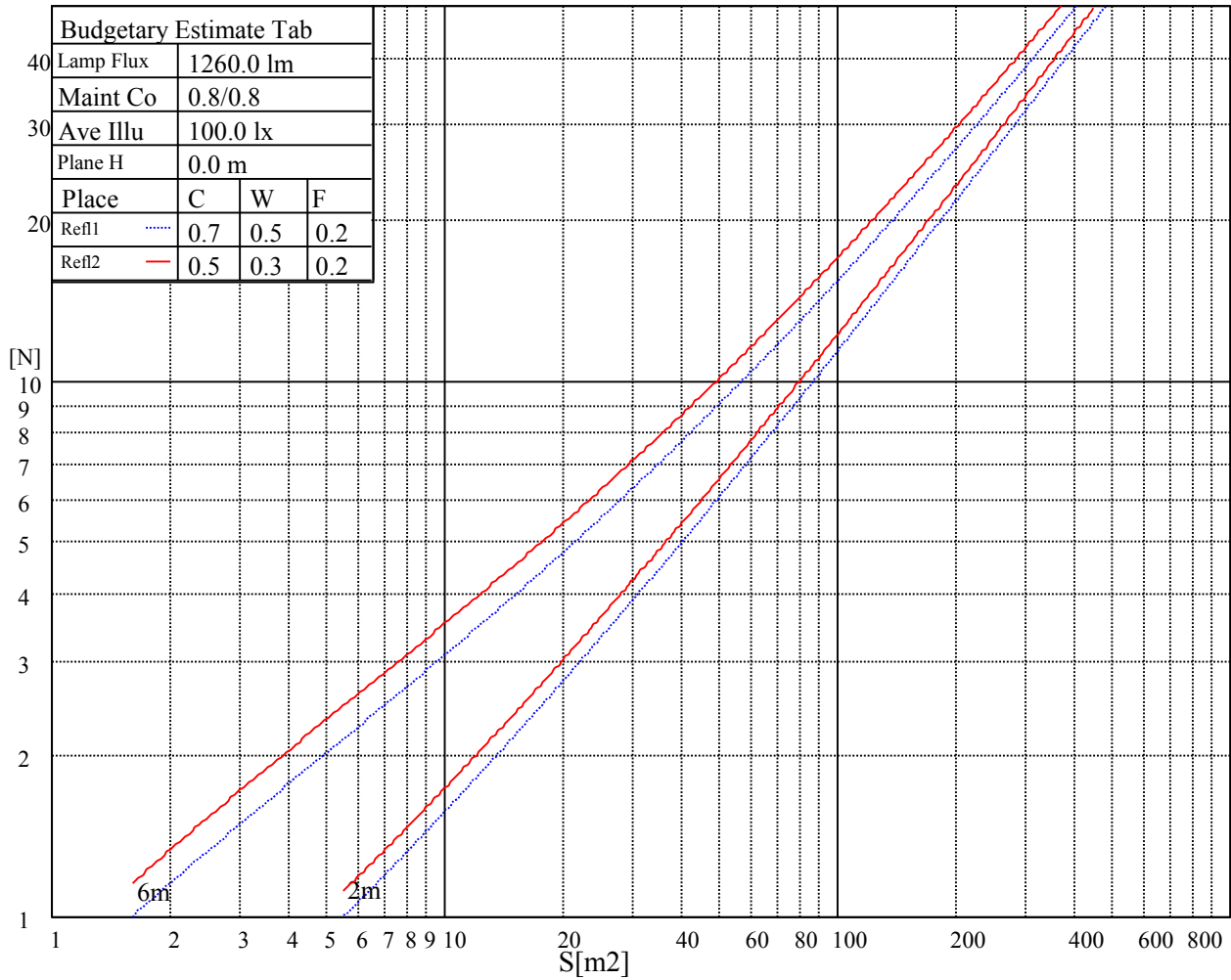
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4639	4639	4639	6638	6638	6638	8445	8445	8445

Glare Table

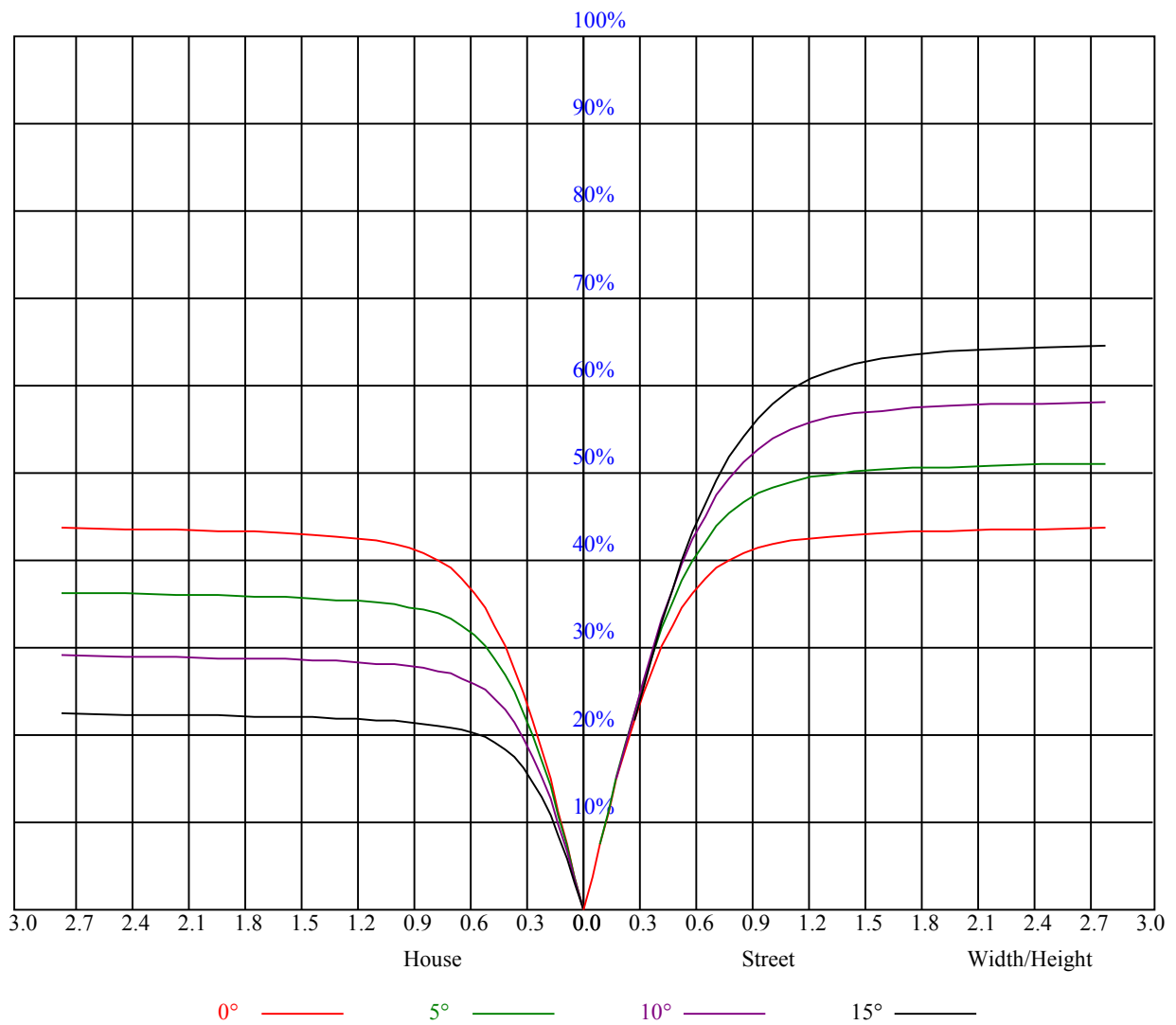
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.06	1.06	1.06	1.03	1.03	1.03	0.99	0.99	0.99	0.94	0.94	0.94	0.91	0.91	0.91	0.89
1	0.97	0.95	0.92	0.95	0.93	0.91	0.92	0.90	0.88	0.88	0.87	0.85	0.85	0.84	0.83	0.81
2	0.90	0.86	0.82	0.88	0.84	0.81	0.85	0.82	0.79	0.82	0.80	0.78	0.80	0.78	0.76	0.75
3	0.83	0.78	0.74	0.82	0.77	0.73	0.79	0.75	0.72	0.77	0.74	0.71	0.75	0.72	0.70	0.69
4	0.77	0.71	0.67	0.76	0.71	0.67	0.74	0.70	0.66	0.72	0.68	0.65	0.70	0.67	0.65	0.63
5	0.72	0.66	0.62	0.71	0.65	0.61	0.69	0.64	0.61	0.68	0.63	0.60	0.66	0.63	0.60	0.58
6	0.67	0.61	0.57	0.66	0.61	0.57	0.65	0.60	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.54
7	0.63	0.57	0.53	0.62	0.56	0.53	0.61	0.56	0.52	0.60	0.55	0.52	0.59	0.55	0.52	0.50
8	0.59	0.53	0.49	0.58	0.53	0.49	0.57	0.52	0.49	0.56	0.52	0.49	0.55	0.51	0.48	0.47
9	0.55	0.50	0.46	0.55	0.49	0.46	0.54	0.49	0.46	0.53	0.49	0.45	0.52	0.48	0.45	0.44
10	0.52	0.47	0.43	0.52	0.46	0.43	0.51	0.46	0.43	0.50	0.46	0.43	0.50	0.45	0.43	0.41



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	1146.94	1126.69	1091.81	1010.81	888.75	748.69	591.19	426.94	293.63
45.0	1144.13	1123.31	1072.13	979.31	838.13	691.88	544.50	371.81	245.93
90.0	1140.75	1115.55	1054.52	929.64	800.89	647.33	492.30	319.11	177.64
135.0	1141.88	1143.00	1101.38	1017.00	866.25	694.13	530.44	330.75	179.94
180.0	1146.94	1152.56	1113.02	1016.55	861.24	686.03	500.06	301.05	164.31
225.0	1144.13	1157.63	1120.61	1041.64	899.16	722.19	557.27	358.54	198.34
270.0	1140.75	1144.13	1120.50	1040.06	918.56	757.69	598.50	428.06	288.56
315.0	1141.88	1122.13	1084.44	996.36	869.74	721.41	573.98	401.12	243.06
360.0	1146.94	1126.69	1091.81	1010.81	888.75	748.69	591.19	426.94	293.63

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	139.67	76.05	42.02	26.89	18.17	13.95	15.58	17.33	7.03
45.0	114.81	64.35	37.80	24.41	16.88	13.22	10.13	7.93	6.24
90.0	94.28	55.52	32.51	21.66	15.36	11.98	9.17	7.26	5.68
135.0	100.74	54.84	32.18	21.99	15.69	16.43	23.01	17.44	5.51
180.0	89.33	50.74	30.15	20.81	14.96	13.28	16.31	11.14	5.23
225.0	108.28	60.24	34.88	22.28	16.26	12.43	9.62	7.65	6.02
270.0	130.78	73.97	41.68	26.21	18.11	13.56	10.41	8.16	6.41
315.0	127.41	69.30	39.99	25.14	17.33	15.86	22.11	24.19	7.71
360.0	139.67	76.05	42.02	26.89	18.17	13.95	15.58	17.33	7.03

C/γ(°)	90.0
0.0	4.84
45.0	4.78
90.0	4.89
135.0	4.67
180.0	4.61
225.0	4.89
270.0	5.01
315.0	4.89
360.0	4.84