
Client:

LumCAT: 1451-E

Luminaire:

Report No: nata-0100

Test No:

LampCAT: XICATO LES 9

Lamp flux(lm): 1366.3

Number of Lamps: 1

Length(mm): 44

Phm Type: C

Voltage(V):

Current(A):

Power (W): 27.2600

PF:

Ballast type:

Width(mm): 44

Height(mm): 0

Photometric Results

Lumens(lm): 1280.64, Efficiency(%): 93.73% , Luminous Efficacy(lm/W): 46.98

Central intensity(cd): 2285.293, Maximum intensity(cd): 2285.293

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=38.0

[C90/270]Total=38.0

Field angle(10%Imax): [C0/180]Total=80.6

[C90/270]Total=80.6

Maximum s/h(1/2): C0_180=0.61 C90_270=0.61

Maximum s/h(1/4): C0_180=0.66 C90_270=0.66

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 94.64%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.647%

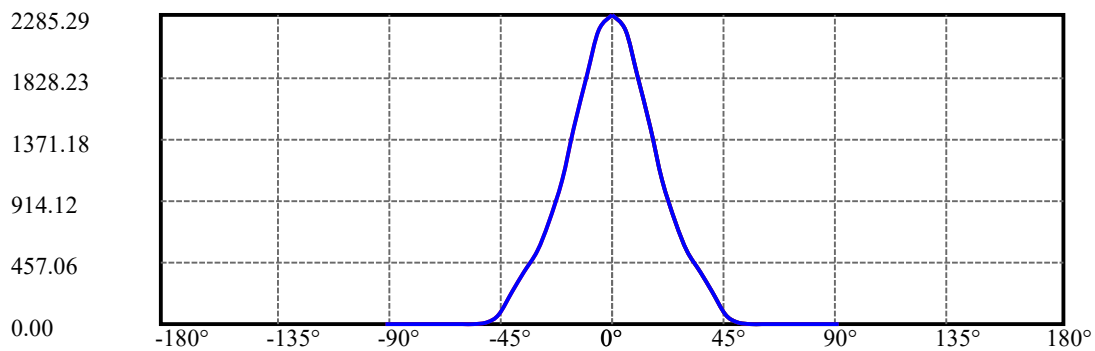
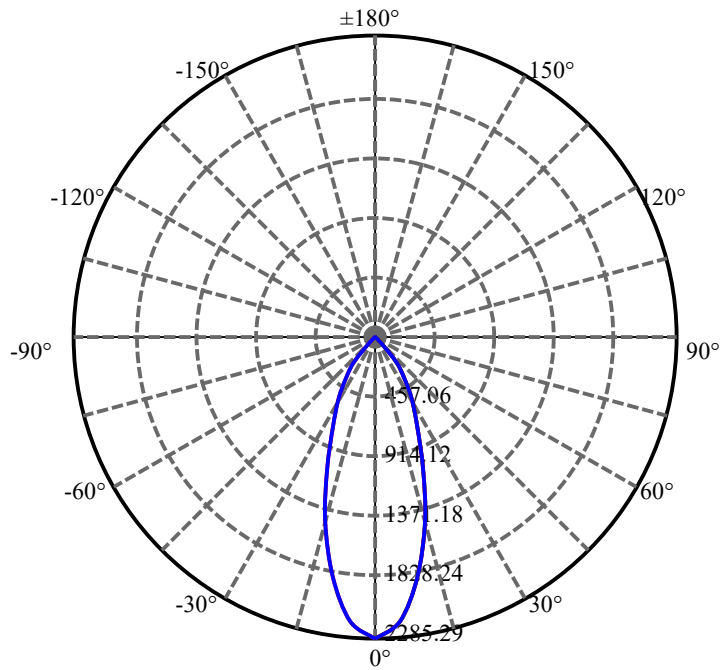
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2285.294	13.667	13.667	1.000%	1.067%
5.0	2169.141	103.627	117.294	7.584%	9.159%
10.0	1852.350	176.312	293.606	12.904%	22.927%
15.0	1452.641	206.084	499.69	15.083%	39.019%
20.0	1069.156	200.439	700.129	14.670%	54.670%
25.0	755.890	175.104	875.233	12.816%	68.344%
30.0	540.425	148.114	1023.346	10.840%	79.909%
35.0	380.631	119.670	1143.016	8.759%	89.254%
40.0	240.083	84.590	1227.606	6.191%	95.859%
45.0	65.014	25.199	1252.805	1.844%	97.827%
50.0	9.064	3.806	1256.611	.279%	98.124%
55.0	6.658	2.989	1259.6	.219%	98.357%
60.0	6.434	3.054	1262.655	.224%	98.596%
65.0	6.322	3.141	1265.795	.230%	98.841%
70.0	6.210	3.199	1268.994	.234%	99.091%
75.0	6.210	3.288	1272.282	.241%	99.348%
80.0	6.155	3.323	1275.605	.243%	99.607%
85.0	6.155	3.361	1278.965	.246%	99.869%
90.0	6.099	1.672	1280.637	.122%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1023.35	74.90%	79.91%
0-40	1227.61	89.85%	95.86%
0-60	1262.65	92.41%	98.60%
0-90	1278.97	93.61%	99.87%
0-120	1278.97	93.61%	99.87%
0-180	1280.64	93.73%	100.00%
60-90	19.36	1.42%	1.51%
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%
0-30.05	1024.51	74.98%	80.00%

ZONAL LUMEN SUMMARY

0-10	293.61
10-20	406.52
20-30	323.22
30-40	204.26
40-50	29.00
50-60	6.04
60-70	6.34
70-80	6.61
80-90	3.36
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: —————

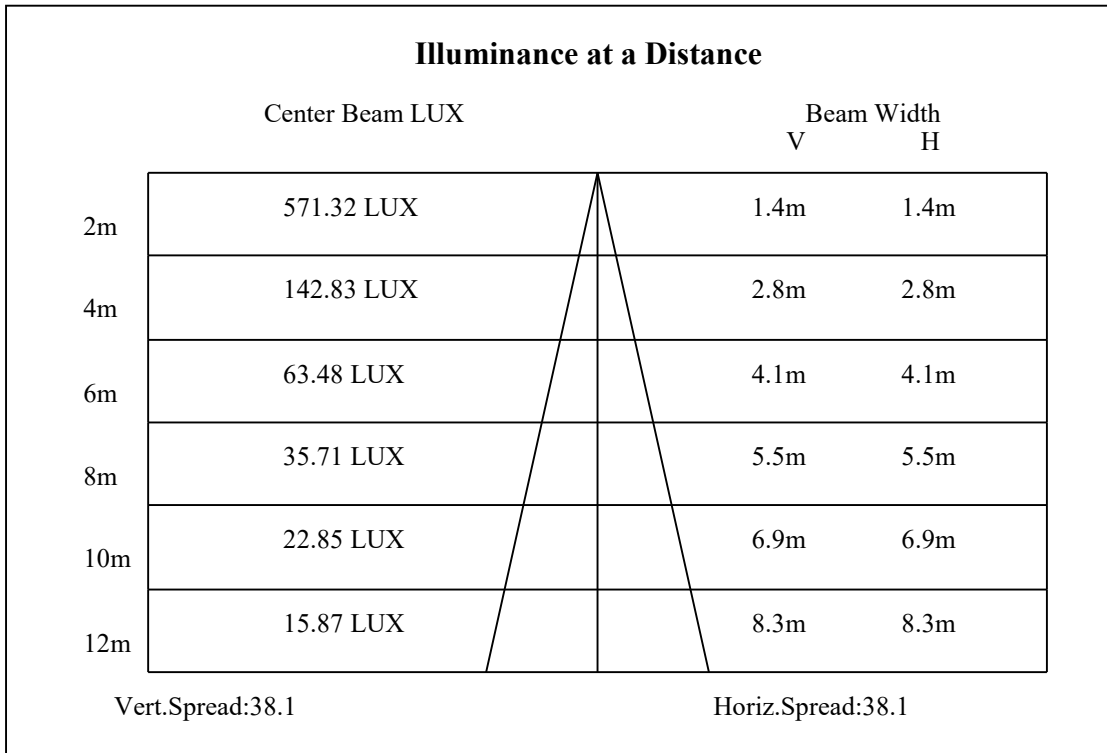
C90/C270: —————

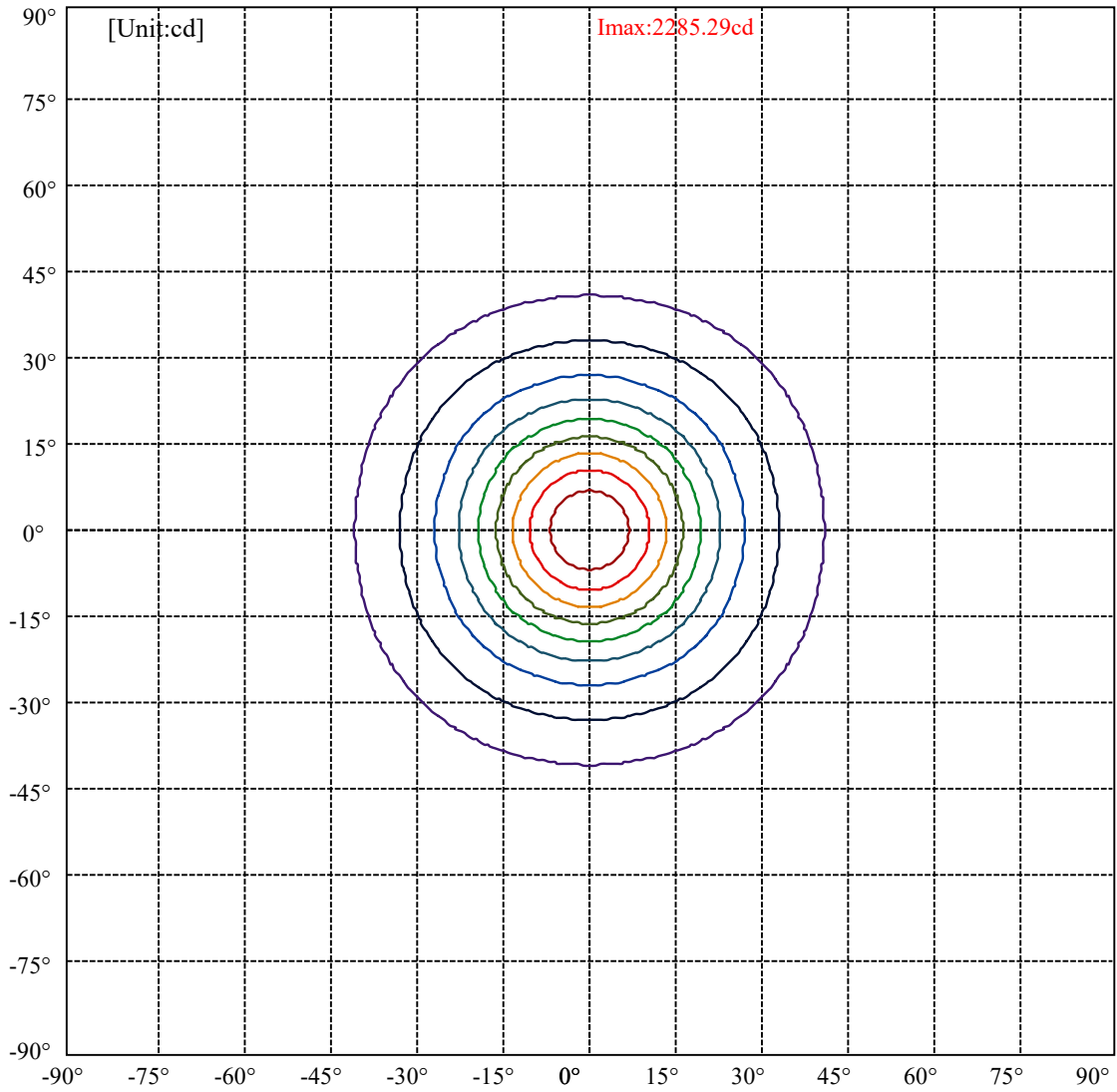
Field angle(10%Imax):C0/180Left:40.3 Right:40.3

:C90/270Left:40.3 Right:40.3

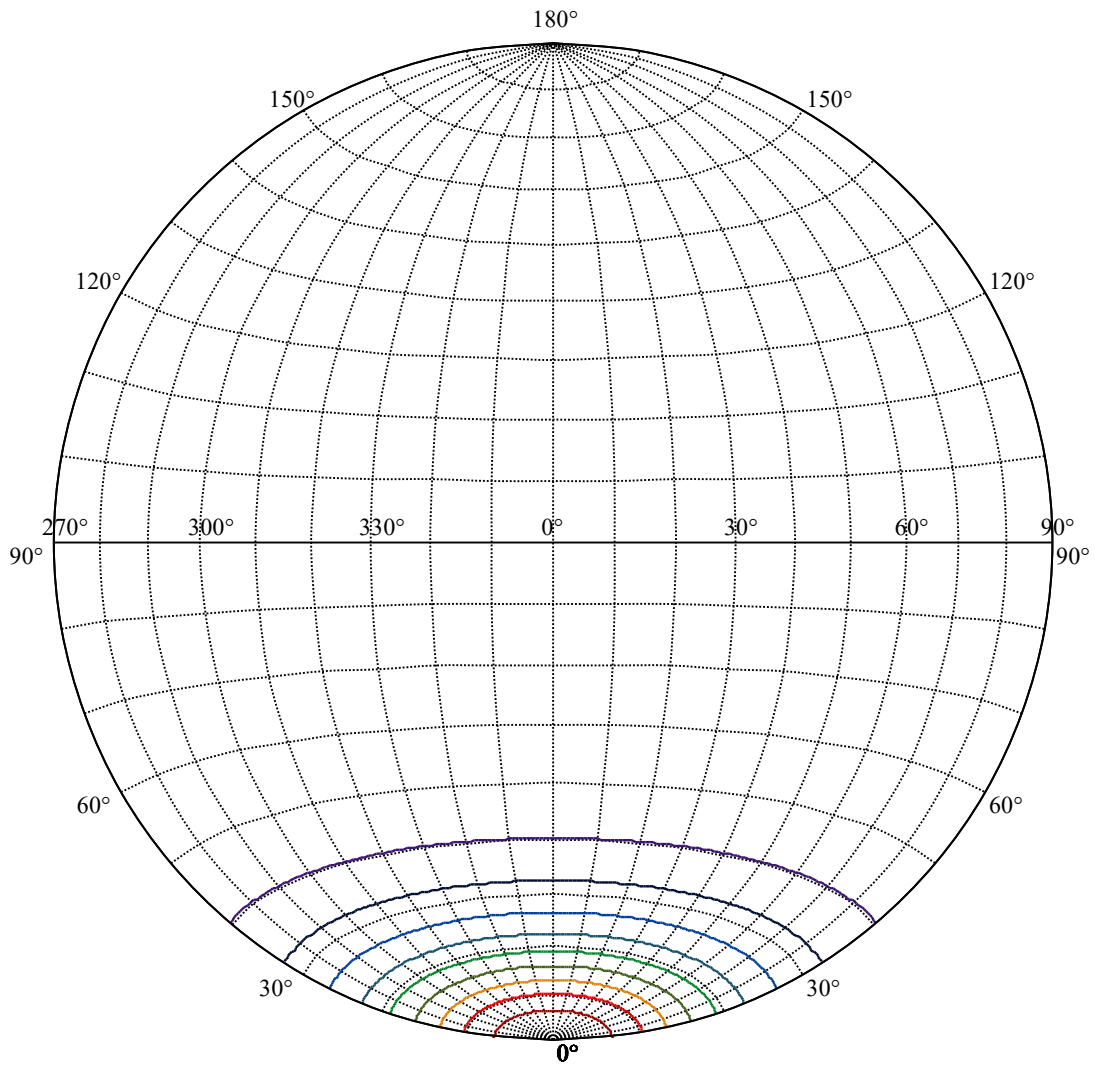
Beam Angle(50%Imax):C0/180Left:19.0 Right:19.0

:C90/270Left:19.0 Right:19.0





(10%Imax) 228.529	—
(20%Imax) 457.059	—
(30%Imax) 685.588	—
(40%Imax) 914.117	—
(50%Imax) 1142.65	—
(60%Imax) 1371.18	—
(70%Imax) 1599.71	—
(80%Imax) 1828.23	—
(90%Imax) 2056.76	—



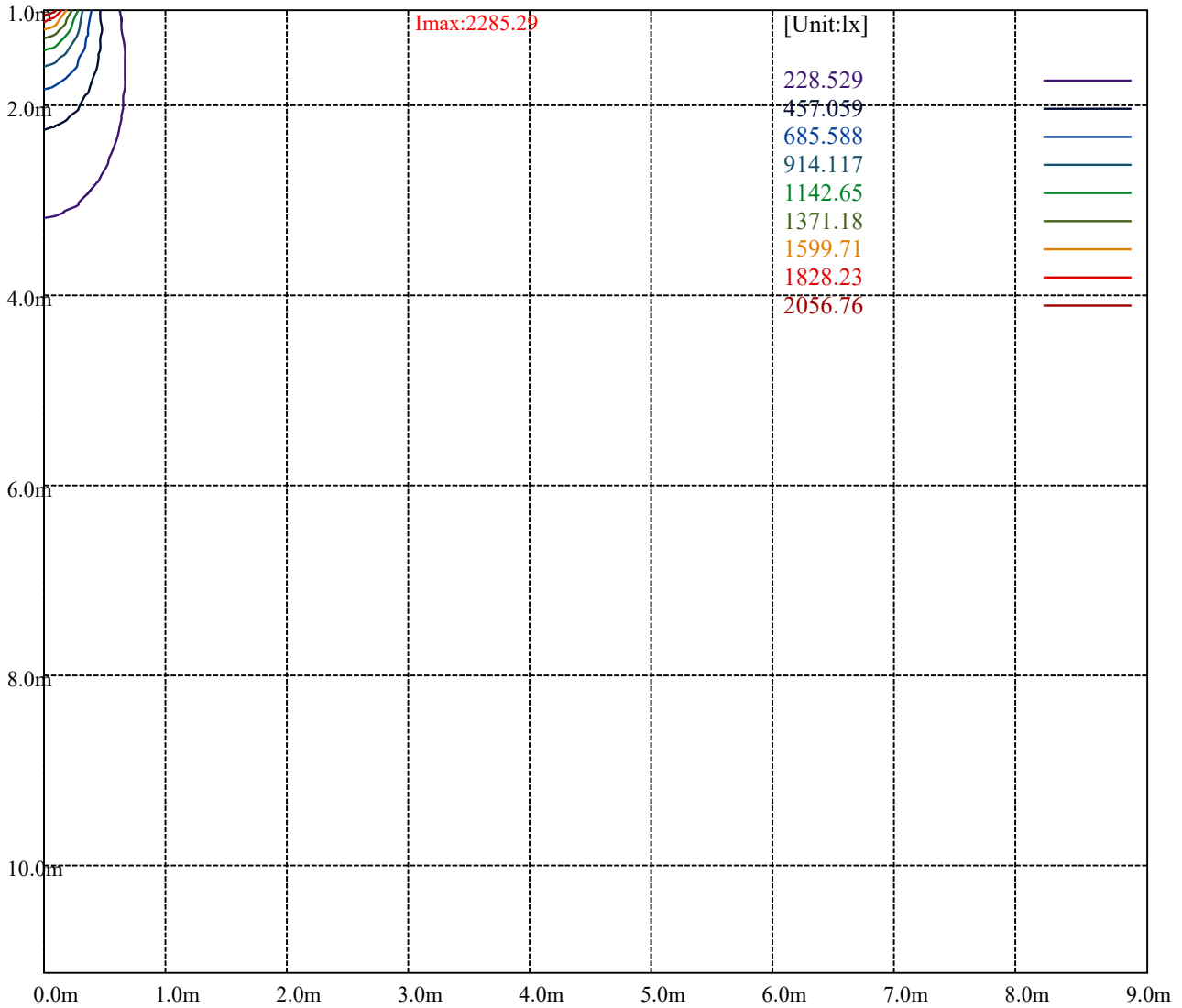
House

[Unit:cd]

Road

I_{max}:2285.29

(10%I _{max}) 228.529	—
(20%I _{max}) 457.059	—
(30%I _{max}) 685.588	—
(40%I _{max}) 914.117	—
(50%I _{max}) 1142.65	—
(60%I _{max}) 1371.18	—
(70%I _{max}) 1599.71	—
(80%I _{max}) 1828.23	—
(90%I _{max}) 2056.76	—



Luminance Table

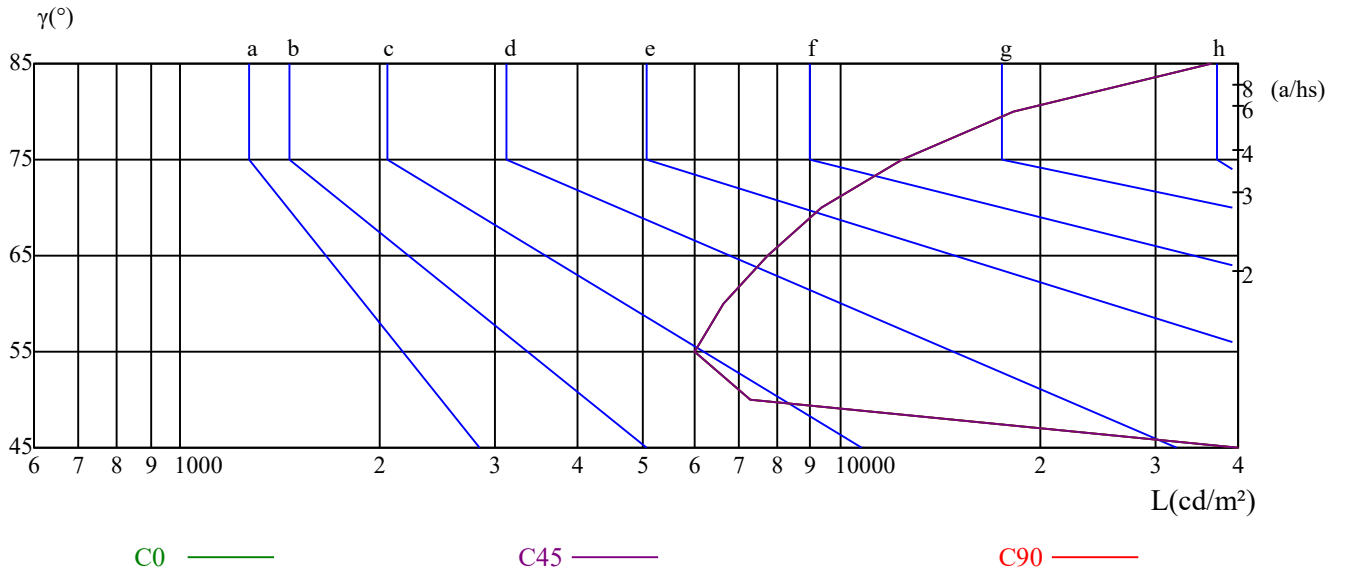
γ	45	50	55	60	65	70	75	80	85
C0	47492	7284	5996	6647	7727	9379	12393	18308	36478
C45	47492	7284	5996	6647	7727	9379	12393	18308	36478
C90	47492	7284	5996	6647	7727	9379	12393	18308	36478

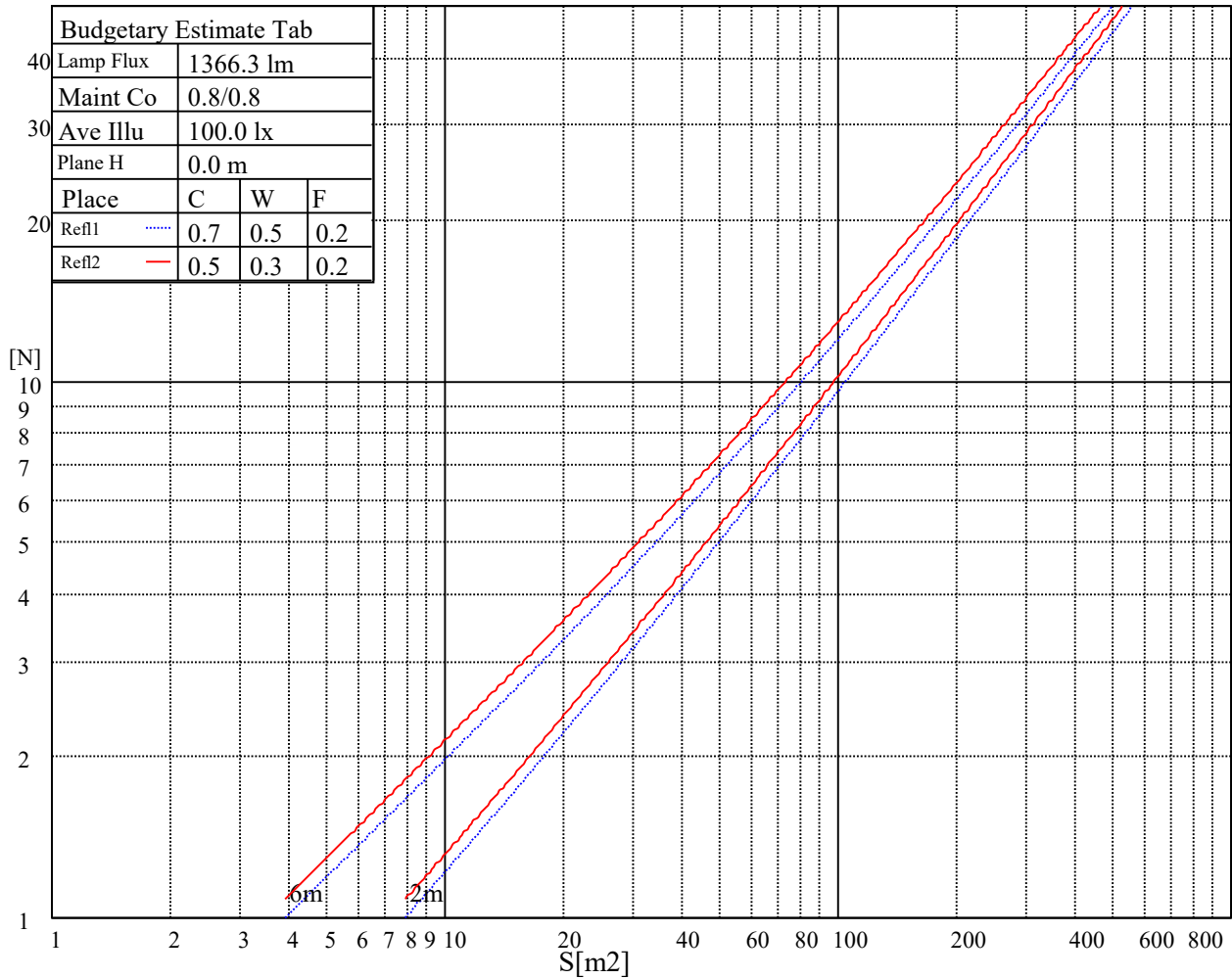
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
7727	7727	7727	12393	12393	12393	36478	36478	36478

Glare Table

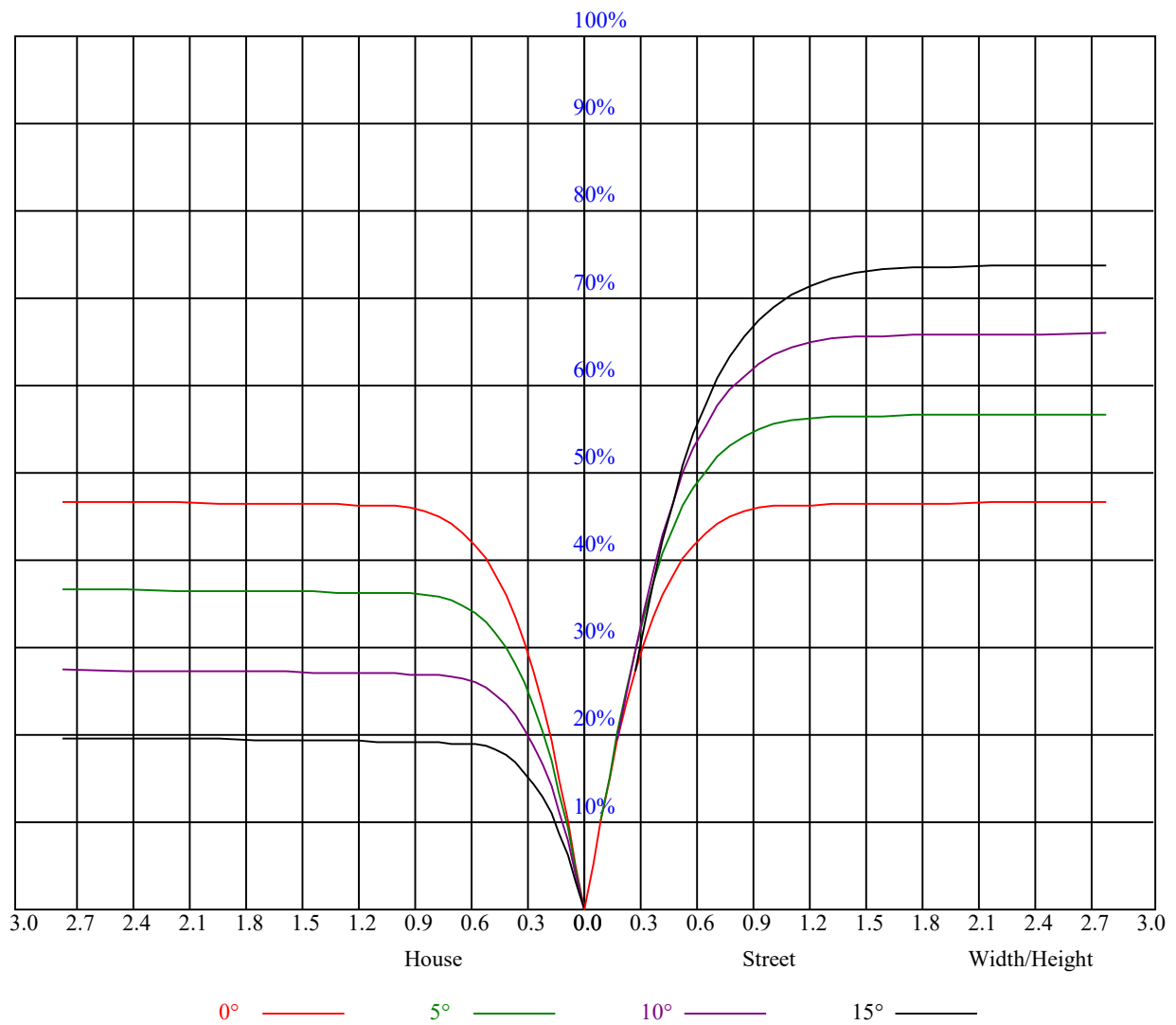
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

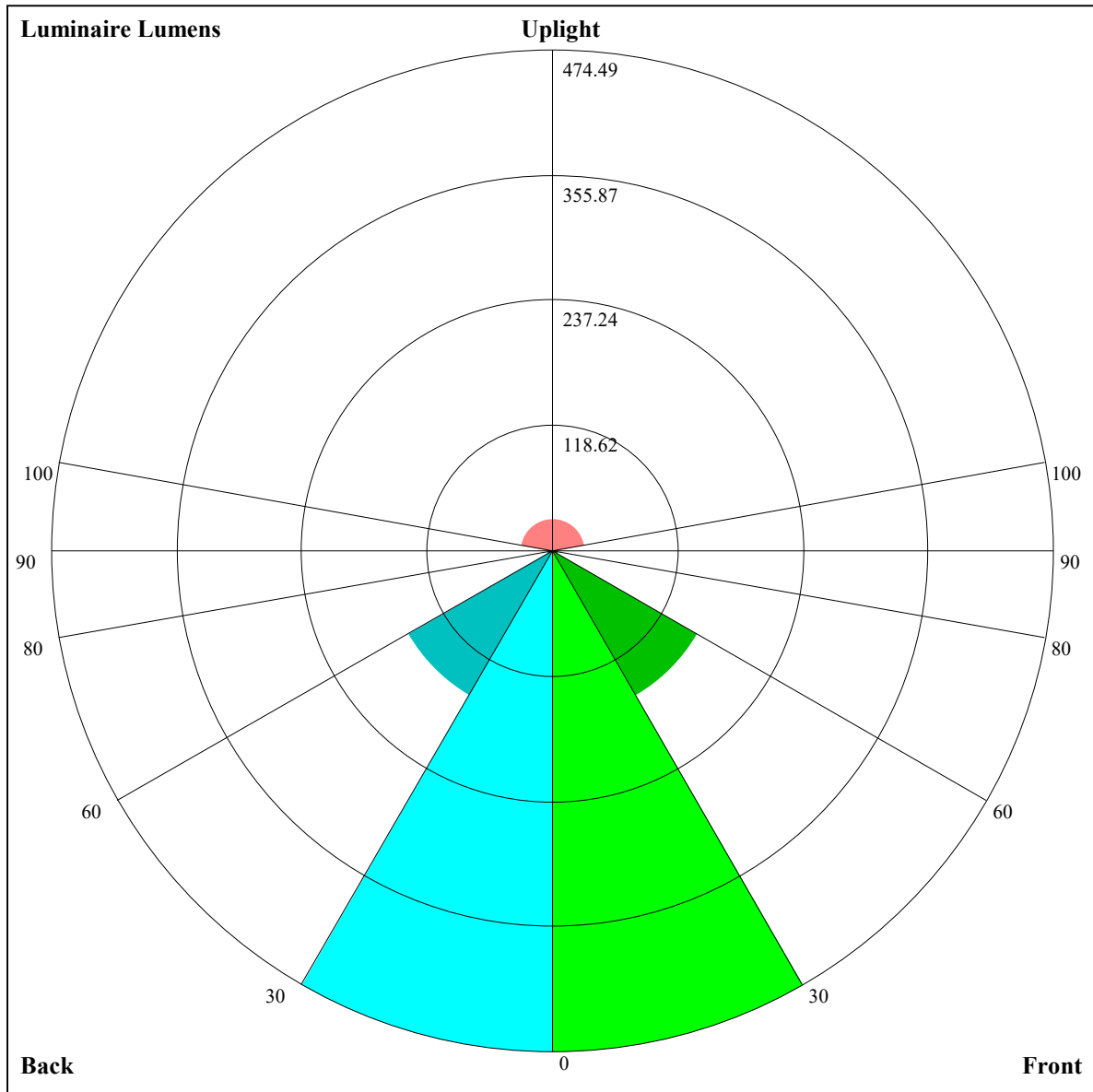
Luminance Limiting Curve





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	1.13	1.13	1.13	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	0.97	0.97	0.97	0.95
1	1.04	1.02	0.99	1.02	1.00	0.98	0.98	0.96	0.95	0.95	0.93	0.92	0.91	0.90	0.89	0.87
2	0.98	0.94	0.91	0.96	0.93	0.90	0.93	0.90	0.88	0.90	0.88	0.86	0.88	0.86	0.84	0.83
3	0.92	0.88	0.84	0.91	0.87	0.83	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.82	0.80	0.78
4	0.87	0.82	0.79	0.86	0.82	0.78	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.78	0.75	0.74
5	0.83	0.78	0.74	0.82	0.77	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.72	0.70
6	0.78	0.73	0.70	0.78	0.73	0.69	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.67
7	0.75	0.70	0.66	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.67	0.65	0.64
8	0.71	0.66	0.63	0.71	0.66	0.63	0.70	0.66	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.61
9	0.68	0.63	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.59	0.65	0.62	0.59	0.58
10	0.65	0.61	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.56





Luminaire Lumens:

FL=474.49,FM=157.62,FH=6.41,FVH=3.35

BL=474.49,BM=157.62,BH=6.41,BVH=3.35

UL=6.65,UH=31.67

BUG Rating:B1-U2-G0

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	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
22.5	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
45.0	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
67.5	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
90.0	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
112.5	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
135.0	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
157.5	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
180.0	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
202.5	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
225.0	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
247.5	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
270.0	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
292.5	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
315.0	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
337.5	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08
360.0	2285.29	2169.14	1852.35	1452.64	1069.16	755.89	540.43	380.63	240.08

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
22.5	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
45.0	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
67.5	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
90.0	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
112.5	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
135.0	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
157.5	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
180.0	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
202.5	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
225.0	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
247.5	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
270.0	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
292.5	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
315.0	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
337.5	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16
360.0	65.01	9.06	6.66	6.43	6.32	6.21	6.21	6.16	6.16

C/γ(°)	90.0
0.0	6.10
22.5	6.10
45.0	6.10
67.5	6.10
90.0	6.10
112.5	6.10
135.0	6.10
157.5	6.10
180.0	6.10
202.5	6.10
225.0	6.10
247.5	6.10
270.0	6.10
292.5	6.10
315.0	6.10
337.5	6.10
360.0	6.10