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Nata

Client:

LumCAT: 1869-M2

Luminaire: 92.70.125.00+92.70.152.00

Report No: 200915-B011

Voltage(V): 34.9200

Test No: 200914-C011

Current(A): 0.3720

LampCAT: Vesta DW LES9 Gen2 PD

Power (W): 12.9900

Lamp flux(lm): 1286.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1095.97, Efficiency(%): 85.25% , Luminous Efficacy(lm/W): 84.37

Central intensity(cd): 801.380, Maximum intensity(cd): 801.380

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=75.0

[C90/270]Total=75.0

Field angle(10%Imax): [C0/180]Total=105.0

[C90/270]Total=105.0

Maximum s/h(1/2): C0_180=1.06 C90_270=1.06

Maximum s/h(1/4): C0_180=1.09 C90_270=1.09

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 85.25%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.583%

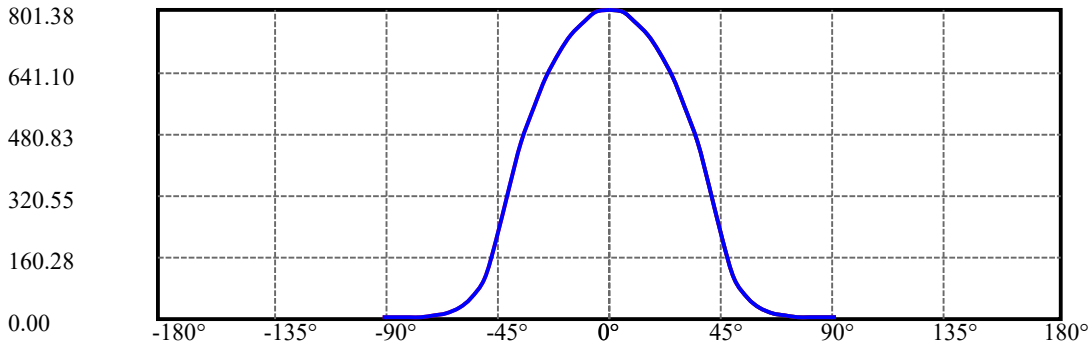
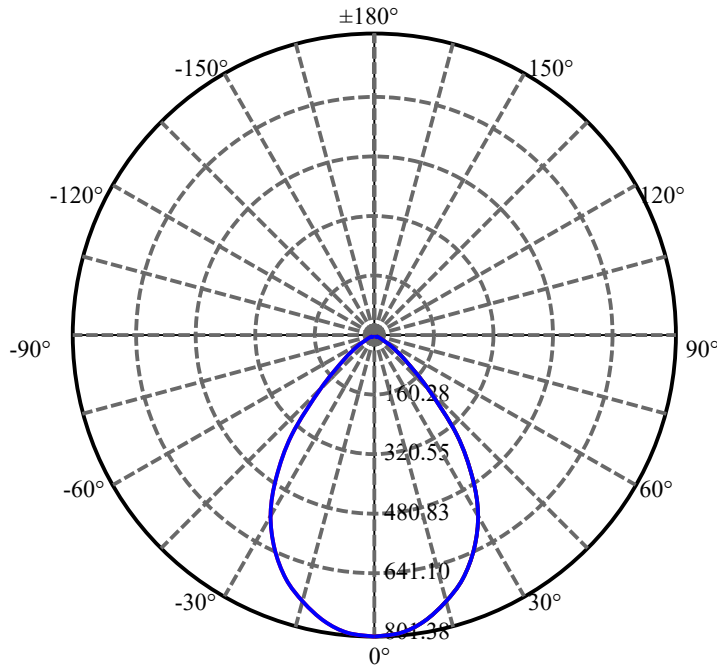
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	801.380	0.000	0	.000%	.000%
5.0	794.848	19.082	19.082	1.484%	1.741%
10.0	772.938	56.085	75.167	4.363%	6.858%
15.0	736.988	89.568	164.735	6.967%	15.031%
20.0	689.393	117.554	282.289	9.144%	25.757%
25.0	626.048	137.966	420.254	10.732%	38.345%
30.0	550.448	148.887	569.141	11.581%	51.930%
35.0	458.163	148.525	717.666	11.553%	65.482%
40.0	343.596	133.767	851.433	10.405%	77.688%
45.0	203.048	101.216	952.649	7.873%	86.923%
50.0	106.228	62.494	1015.143	4.861%	92.625%
55.0	54.851	35.024	1050.167	2.724%	95.821%
60.0	28.688	19.310	1069.477	1.502%	97.583%
65.0	13.352	10.220	1079.697	.795%	98.515%
70.0	7.538	5.289	1084.986	.411%	98.998%
75.0	5.259	3.345	1088.331	.260%	99.303%
80.0	4.669	2.656	1090.987	.207%	99.545%
85.0	4.634	2.528	1093.515	.197%	99.776%
90.0	4.331	2.455	1095.97	.191%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	569.14	44.26%	51.93%
0-40	851.43	66.21%	77.69%
0-60	1069.48	83.16%	97.58%
0-90	1093.52	85.03%	99.78%
0-120	1093.52	85.03%	99.78%
0-180	1095.97	85.22%	100.00%
60-90	43.35	3.37%	3.96%
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%
0-41.25	876.78	68.18%	80.00%

ZONAL LUMEN SUMMARY

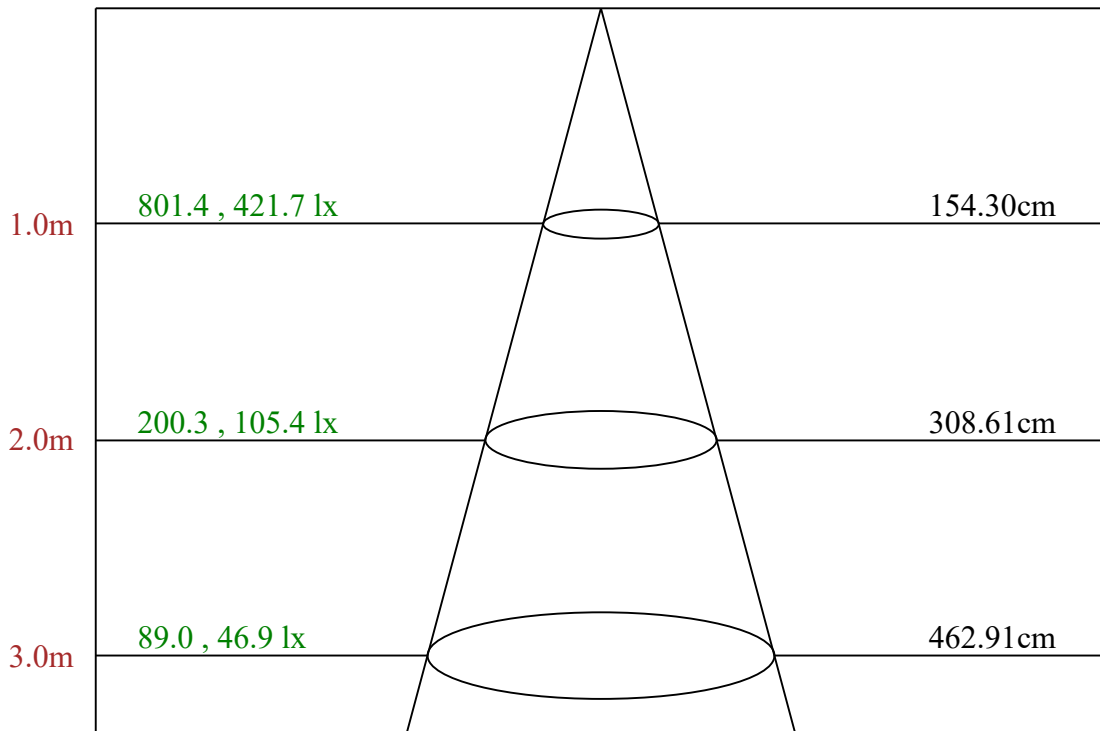
0-10	75.17
10-20	207.12
20-30	286.85
30-40	282.29
40-50	163.71
50-60	54.33
60-70	15.51
70-80	6.00
80-90	2.53
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



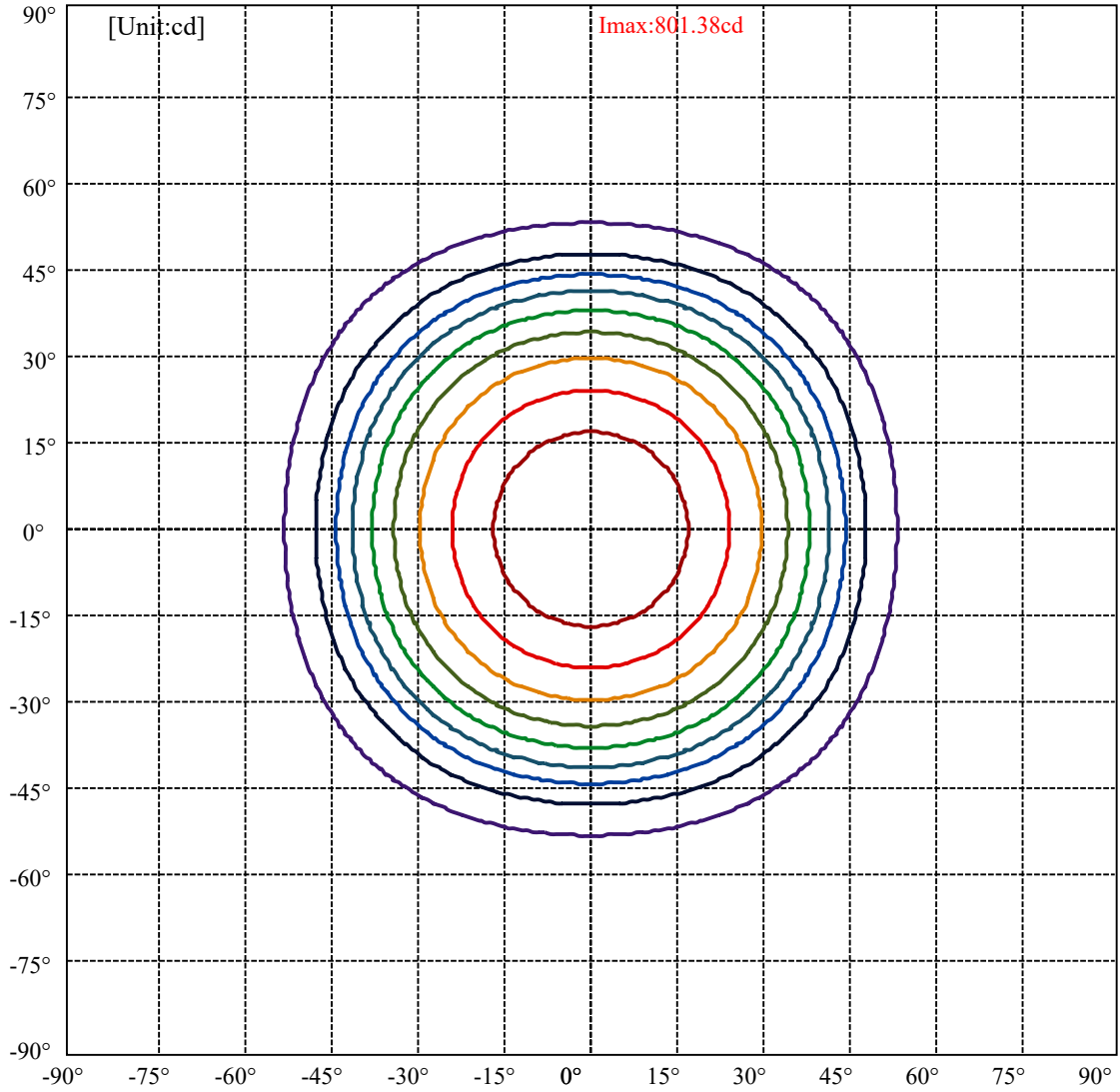
C0(Max): —————
C0/C180: —————
C90/C270: —————

Field angle(10%Imax):C0/180Left:52.5 Right:52.5
:C90/270Left:52.5 Right:52.5

Beam Angle(50%Imax):C0/180Left:37.5 Right:37.5
:C90/270Left:37.5 Right:37.5



Max , Ave Beam angle of C0 plane 75.30

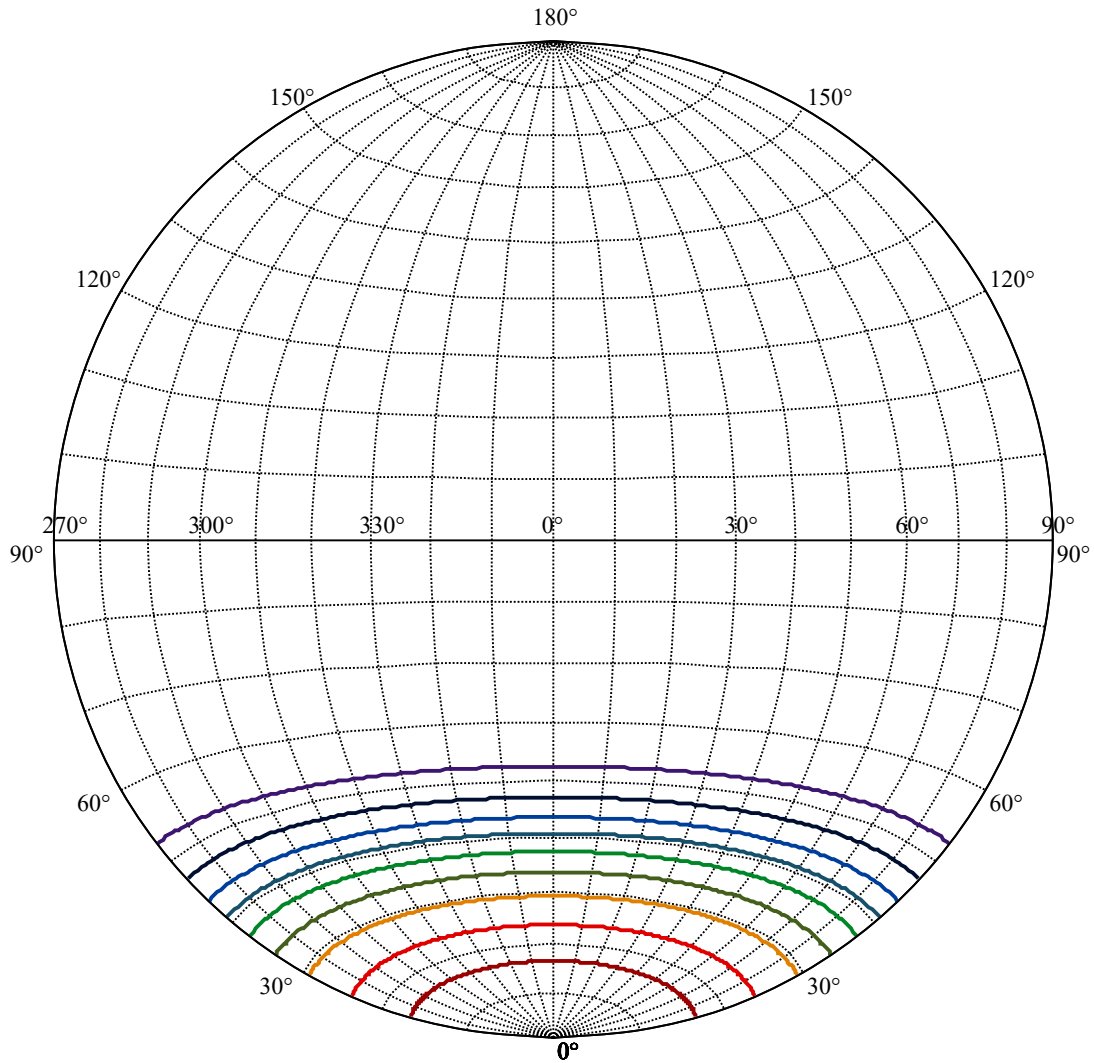


(10%Imax) 80.138	—
(20%Imax) 160.276	—
(30%Imax) 240.414	—
(40%Imax) 320.552	—
(50%Imax) 400.69	—
(60%Imax) 480.828	—
(70%Imax) 560.966	—
(80%Imax) 641.104	—
(90%Imax) 721.242	—

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2020/9/14
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50












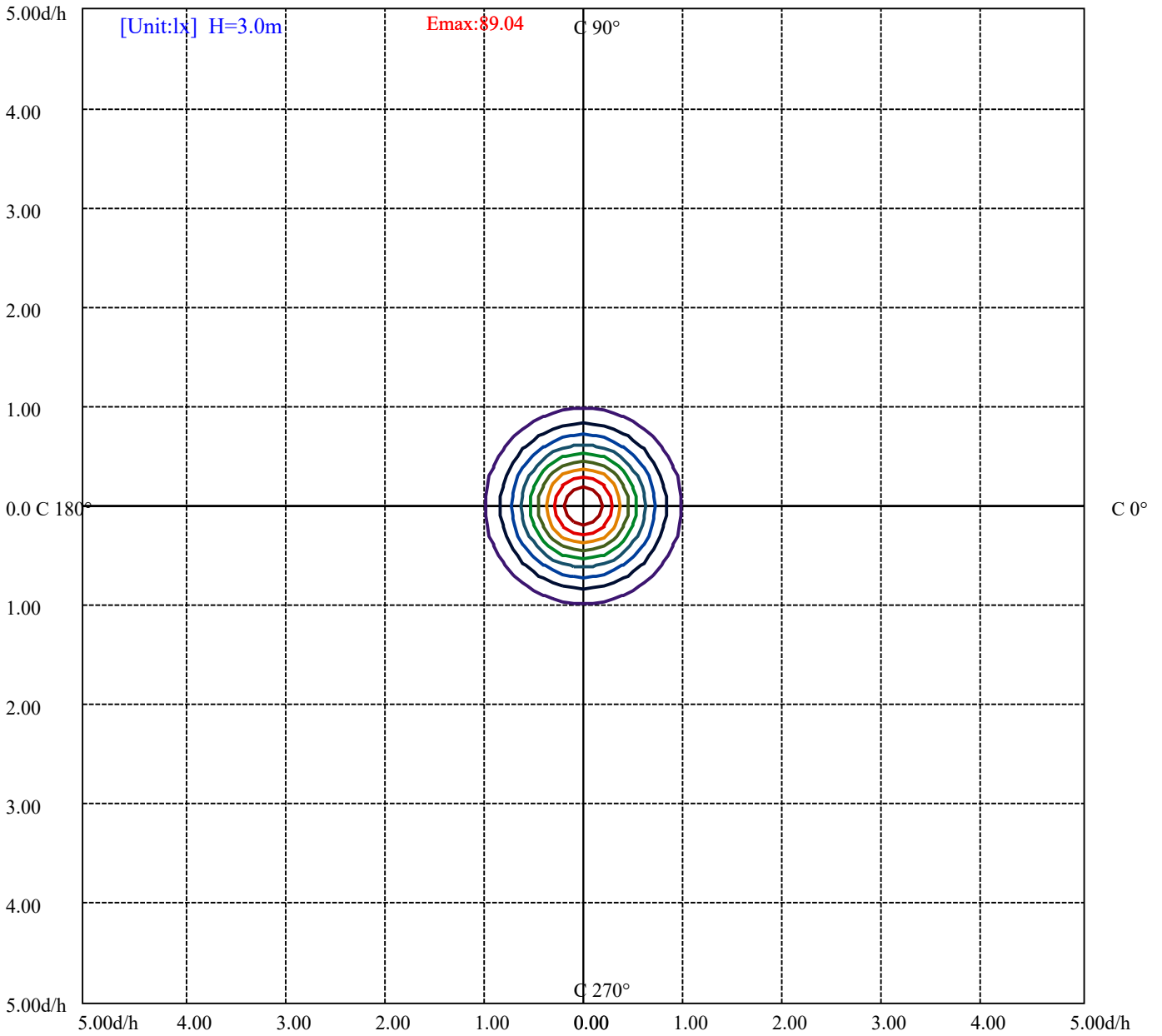
House

[Unit:cd]

Road

I_{max}:801.38

(10%I _{max}) 80.138	
(20%I _{max}) 160.276	
(30%I _{max}) 240.414	
(40%I _{max}) 320.552	
(50%I _{max}) 400.69	
(60%I _{max}) 480.828	
(70%I _{max}) 560.966	
(80%I _{max}) 641.104	
(90%I _{max}) 721.242	



- (10%Emax) 8.904222
- (20%Emax) 17.80844
- (30%Emax) 26.71267
- (40%Emax) 35.61689
- (50%Emax) 44.52111
- (60%Emax) 53.42533
- (70%Emax) 62.32956
- (80%Emax) 71.23378
- (90%Emax) 80.138

Luminance Table

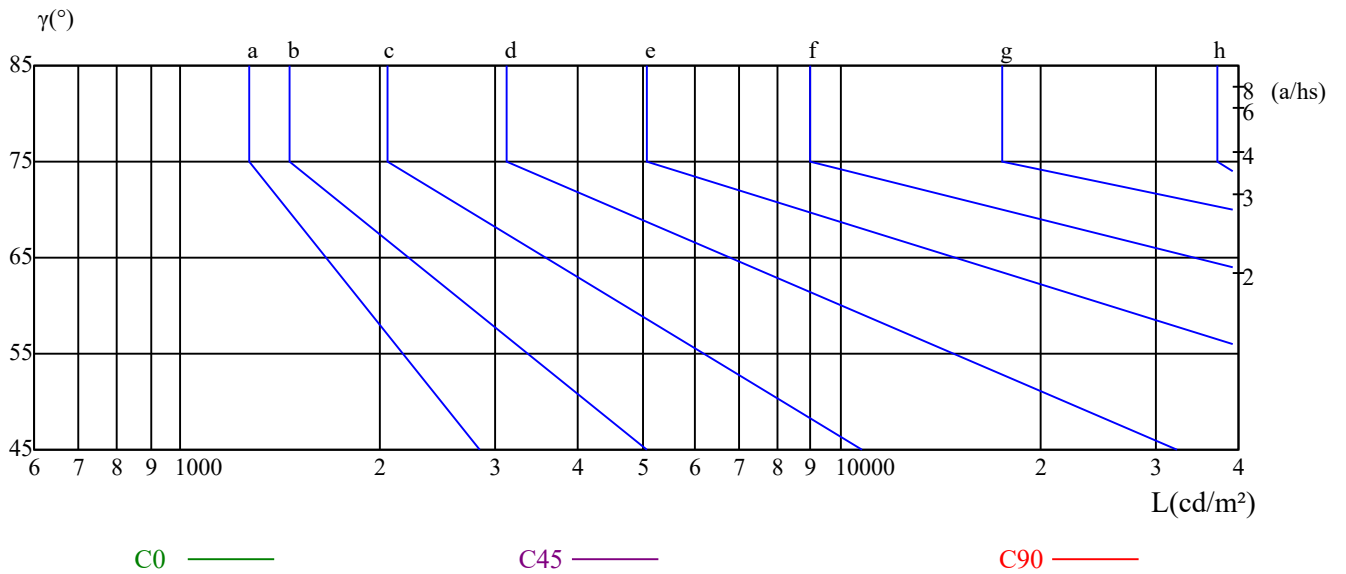
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

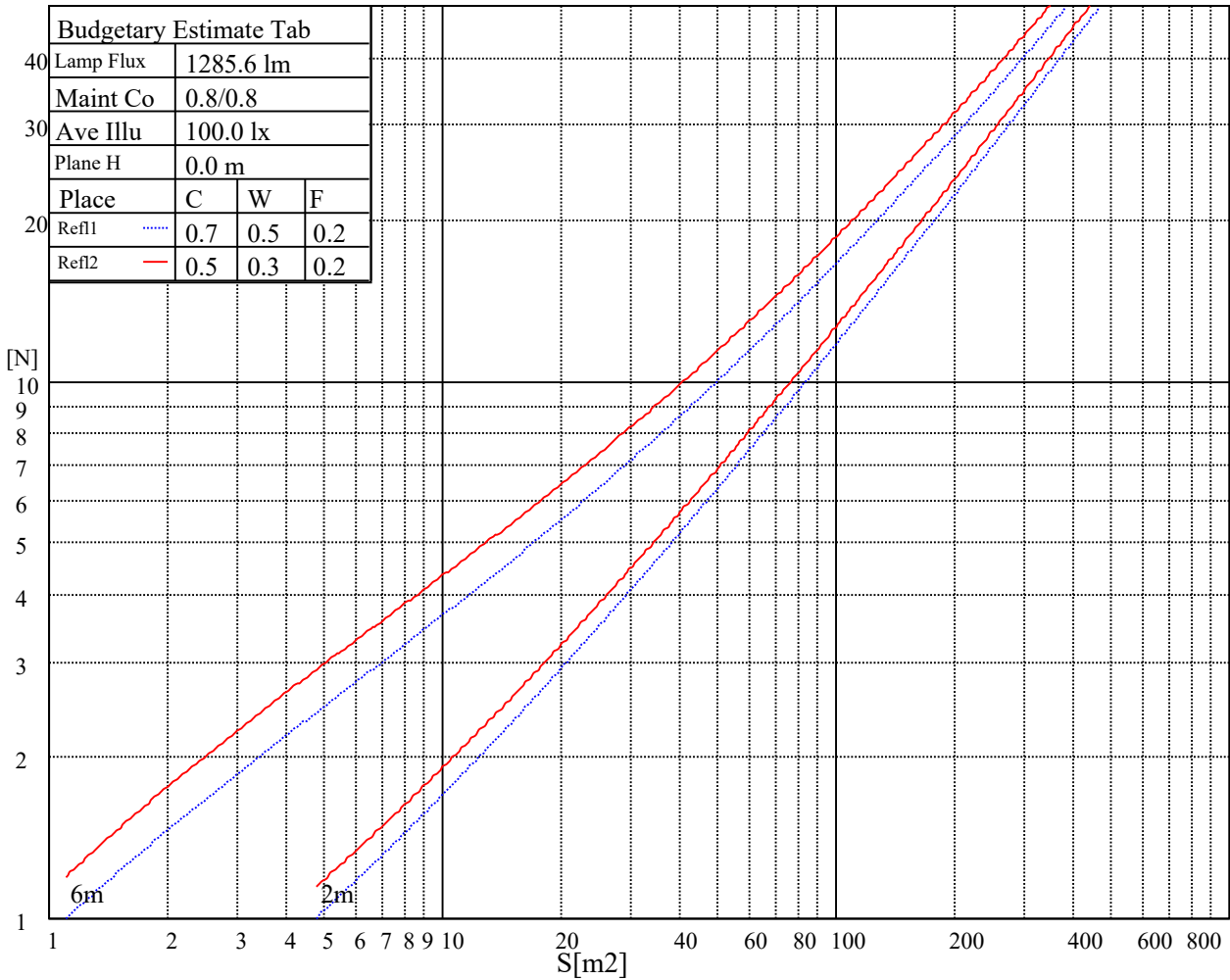
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

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	1.01	1.01	1.01	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.85
1	0.93	0.91	0.88	0.91	0.89	0.87	0.88	0.86	0.84	0.84	0.83	0.82	0.82	0.80	0.79	0.78
2	0.85	0.81	0.78	0.84	0.80	0.77	0.81	0.78	0.75	0.78	0.76	0.74	0.76	0.74	0.72	0.70
3	0.78	0.73	0.69	0.77	0.72	0.69	0.75	0.71	0.67	0.72	0.69	0.66	0.70	0.68	0.65	0.64
4	0.72	0.66	0.62	0.71	0.66	0.62	0.69	0.64	0.61	0.67	0.63	0.60	0.65	0.62	0.59	0.58
5	0.66	0.60	0.56	0.65	0.60	0.56	0.64	0.59	0.55	0.62	0.58	0.55	0.61	0.57	0.54	0.53
6	0.61	0.55	0.51	0.60	0.55	0.51	0.59	0.54	0.50	0.58	0.53	0.50	0.56	0.53	0.50	0.48
7	0.57	0.51	0.46	0.56	0.50	0.46	0.55	0.50	0.46	0.54	0.49	0.46	0.53	0.49	0.46	0.44
8	0.53	0.47	0.43	0.52	0.46	0.43	0.51	0.46	0.42	0.50	0.45	0.42	0.49	0.45	0.42	0.41
9	0.49	0.43	0.39	0.49	0.43	0.39	0.48	0.43	0.39	0.47	0.42	0.39	0.46	0.42	0.39	0.37
10	0.46	0.40	0.36	0.45	0.40	0.36	0.45	0.40	0.36	0.44	0.39	0.36	0.43	0.39	0.36	0.35

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	802.80	794.19	769.73	727.31	674.16	609.86	536.18	443.93	325.35
45.0	799.99	794.31	772.93	737.16	685.97	617.85	537.98	436.33	315.06
90.0	802.35	799.14	776.48	742.33	696.88	621.17	532.18	433.74	307.80
135.0	800.38	800.04	779.51	747.06	695.76	632.19	559.07	465.08	352.86
180.0	802.80	795.60	772.82	736.14	681.98	624.15	552.49	464.34	364.33
225.0	799.99	792.79	774.51	741.04	696.49	636.98	566.89	483.58	371.03
270.0	802.35	794.36	775.13	743.74	708.81	654.64	579.88	497.59	384.41
315.0	800.38	788.34	762.41	721.13	675.11	611.55	538.93	440.72	327.94
360.0	802.80	794.19	769.73	727.31	674.16	609.86	536.18	443.93	325.35
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	198.51	98.49	51.41	26.72	12.77	7.31	5.23	4.84	5.12
45.0	176.91	91.91	48.21	24.41	10.97	6.64	5.06	4.84	5.29
90.0	174.83	91.01	47.48	23.57	10.24	6.47	5.12	4.78	4.56
135.0	214.20	117.51	59.29	30.60	14.46	7.88	5.29	4.61	4.39
180.0	214.03	109.52	54.34	30.77	14.18	7.82	5.23	4.44	4.28
225.0	222.81	118.63	61.26	32.18	15.19	8.27	5.34	4.56	4.44
270.0	236.59	127.18	65.19	34.37	16.31	8.77	5.63	4.78	4.44
315.0	186.53	95.57	51.64	26.89	12.71	7.14	5.18	4.50	4.56
360.0	198.51	98.49	51.41	26.72	12.77	7.31	5.23	4.84	5.12
C/γ(°)	90.0								
0.0	4.28								
45.0	4.44								
90.0	4.33								
135.0	4.28								
180.0	4.28								
225.0	4.44								
270.0	4.33								
315.0	4.28								
360.0	4.28								