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Nata

Client:

LumCAT: 2-2185-M

Luminaire: BJB 47.360.5080

Report No: nt0100

Test No: GC2020031327

LampCAT: LUMILEDS LUXEON 1208

Lamp flux(lm): 1783.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 220.4000

Current(A): 0.1110

Power (W): 23.4500

PF: 0.9590

Ballast type: AC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 1306.91, Efficiency(%): 73.30% , Luminous Efficacy(lm/W): 55.73

Central intensity(cd): 4421.125, Maximum intensity(cd): 4421.125

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=32.4

[C90/270]Total=32.4

Field angle(10%Imax): [C0/180]Total=49.6

[C90/270]Total=49.6

Maximum s/h(1/2): C0_180=0.54 C90_270=0.54

Maximum s/h(1/4): C0_180=0.50 C90_270=0.50

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 73.30%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.695%

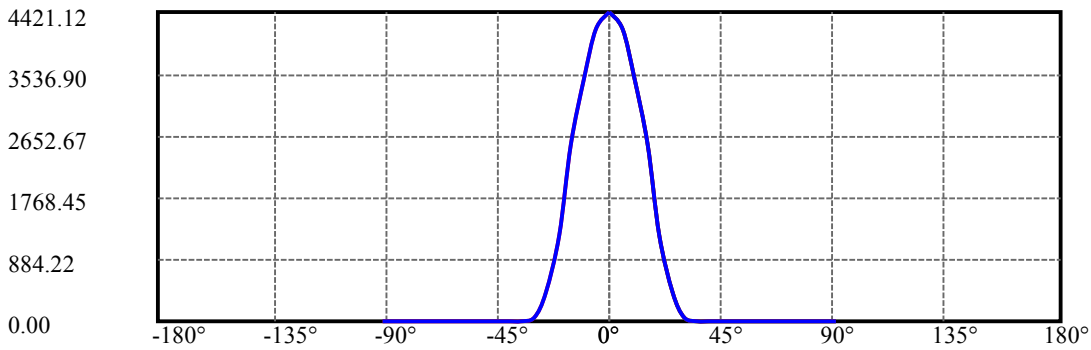
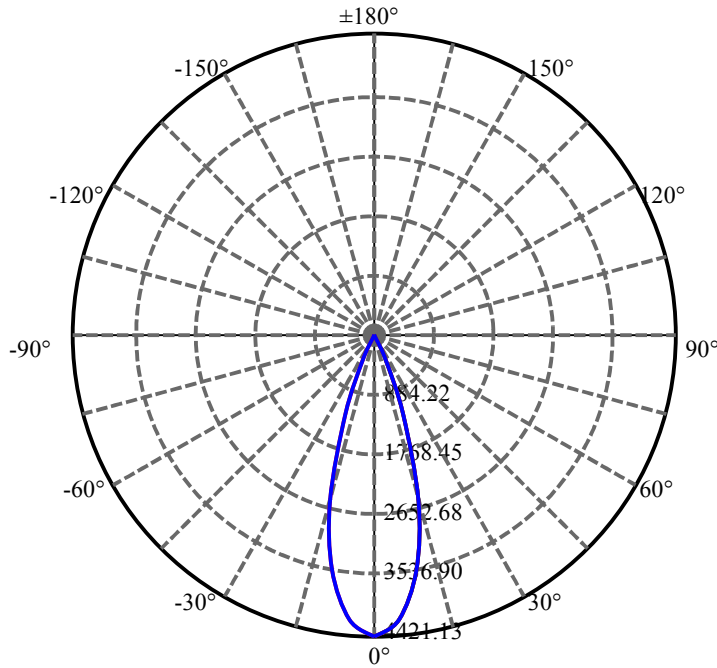
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4421.125	0.000	0	.000%	.000%
5.0	4174.259	102.755	102.755	5.763%	7.862%
10.0	3489.636	274.162	376.917	15.376%	28.840%
15.0	2516.384	356.273	733.19	19.982%	56.101%
20.0	1226.237	308.445	1041.634	17.299%	79.702%
25.0	402.996	170.876	1212.511	9.584%	92.777%
30.0	52.511	57.645	1270.156	3.233%	97.188%
35.0	7.164	8.788	1278.943	.493%	97.860%
40.0	6.102	2.213	1281.156	.124%	98.029%
45.0	5.545	2.157	1283.313	.121%	98.194%
50.0	5.145	2.160	1285.473	.121%	98.360%
55.0	4.907	2.186	1287.659	.123%	98.527%
60.0	4.617	2.202	1289.86	.123%	98.695%
65.0	5.139	2.372	1292.232	.133%	98.877%
70.0	7.604	3.227	1295.459	.181%	99.124%
75.0	9.176	4.386	1299.845	.246%	99.459%
80.0	5.406	3.902	1303.747	.219%	99.758%
85.0	1.966	2.003	1305.75	.112%	99.911%
90.0	2.274	1.161	1306.911	.065%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1270.16	71.24%	97.19%
0-40	1281.16	71.85%	98.03%
0-60	1289.86	72.34%	98.70%
0-90	1305.75	73.23%	99.91%
0-120	1305.75	73.23%	99.91%
0-180	1306.91	73.30%	100.00%
60-90	18.09	1.01%	1.38%
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%
0-20.11	1045.53	58.64%	80.00%

ZONAL LUMEN SUMMARY

0-10	376.92
10-20	664.72
20-30	228.52
30-40	11.00
40-50	4.32
50-60	4.39
60-70	5.60
70-80	8.29
80-90	2.00
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: ———

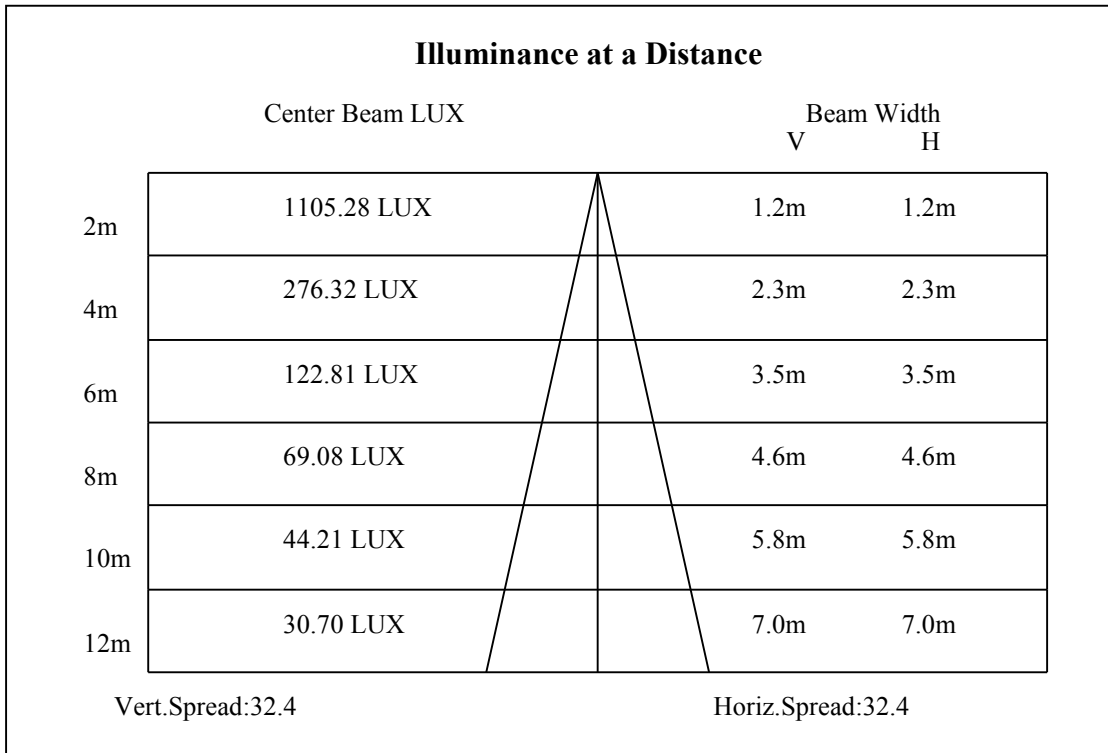
C90/C270: ———

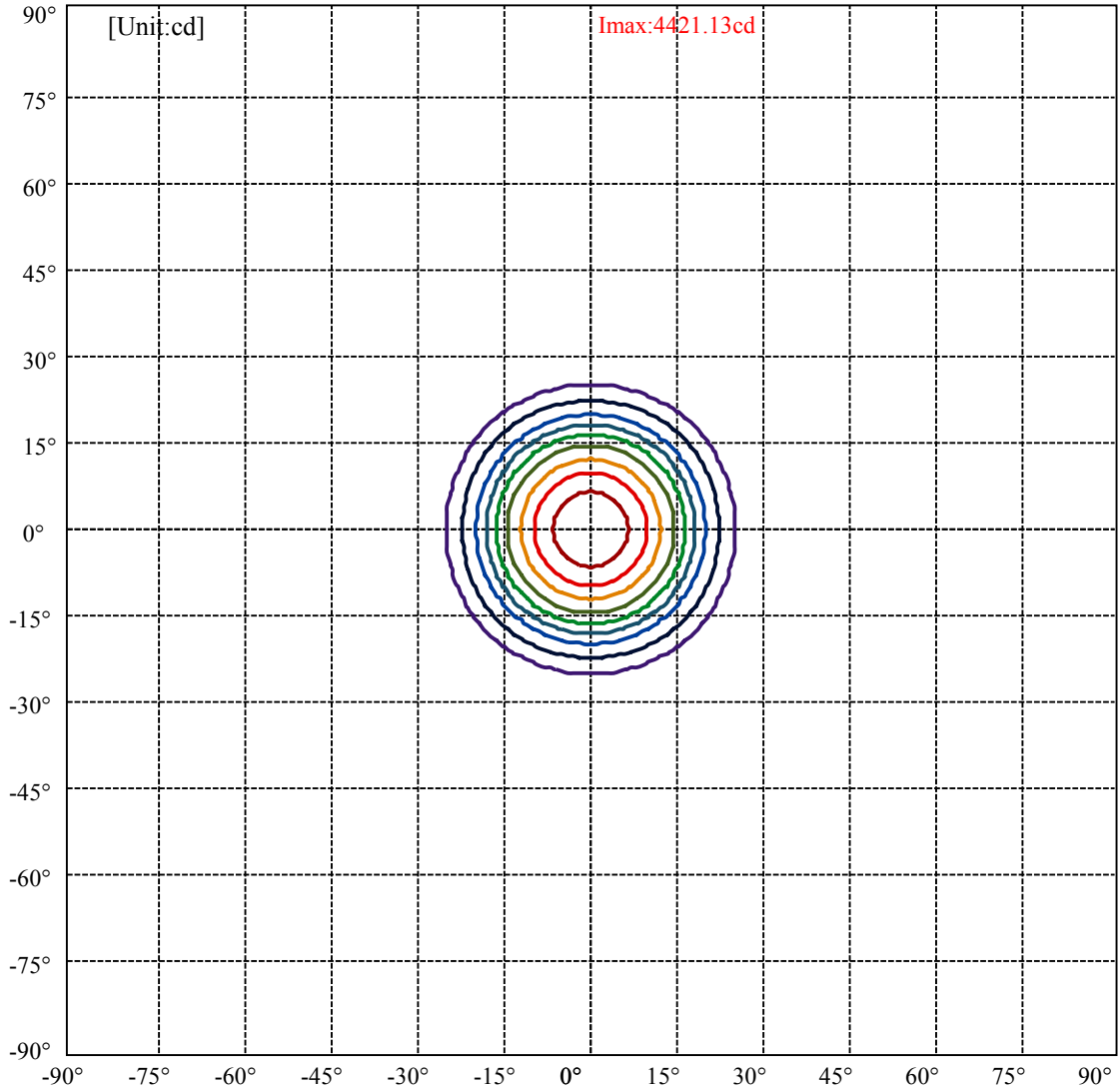
Field angle(10%Imax):C0/180Left:24.8 Right:24.8

:C90/270Left:24.8 Right:24.8

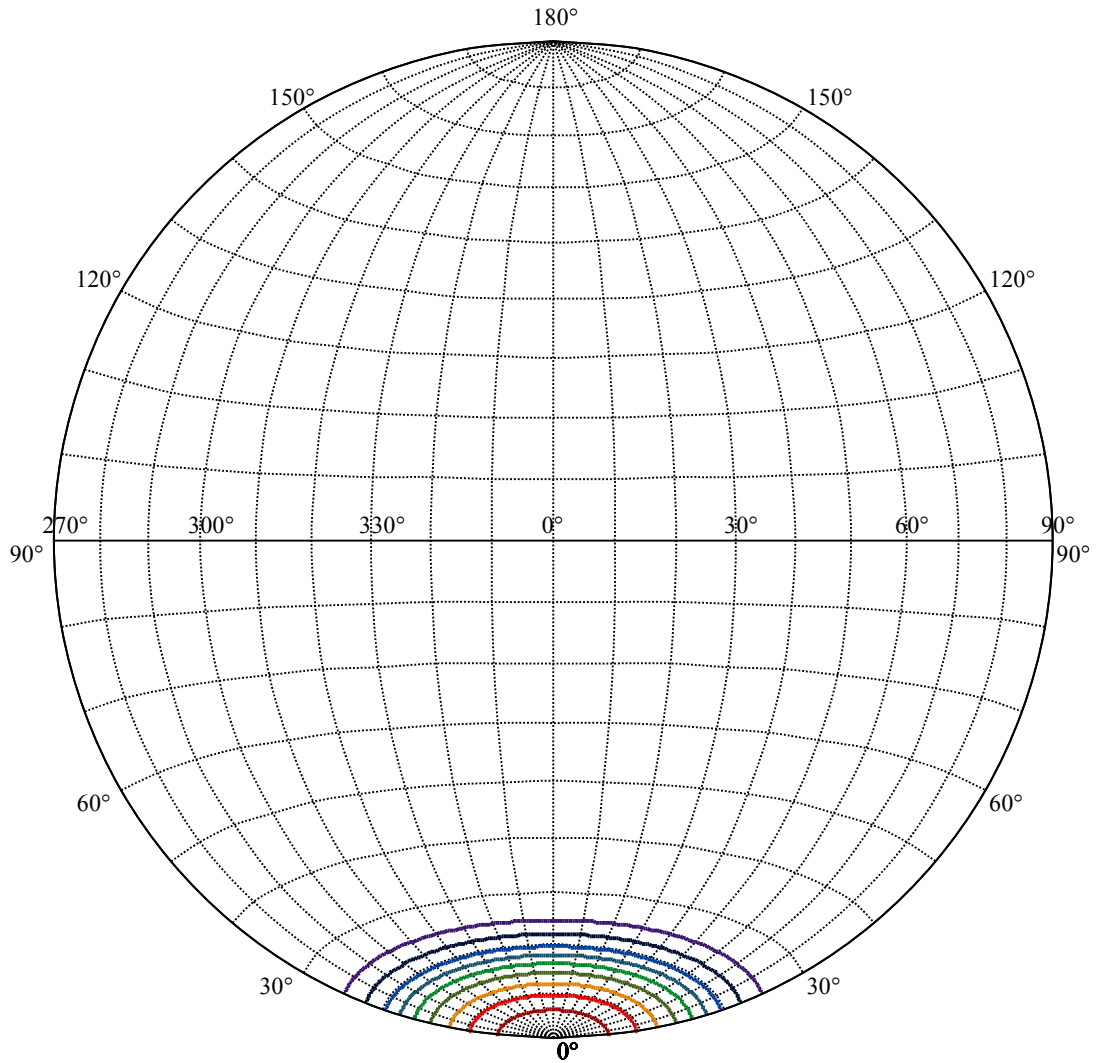
Beam Angle(50%Imax):C0/180Left:16.2 Right:16.2

:C90/270Left:16.2 Right:16.2





(10%Imax) 442.112	—
(20%Imax) 884.225	—
(30%Imax) 1326.34	—
(40%Imax) 1768.45	—
(50%Imax) 2210.56	—
(60%Imax) 2652.67	—
(70%Imax) 3094.79	—
(80%Imax) 3536.9	—
(90%Imax) 3979.01	—



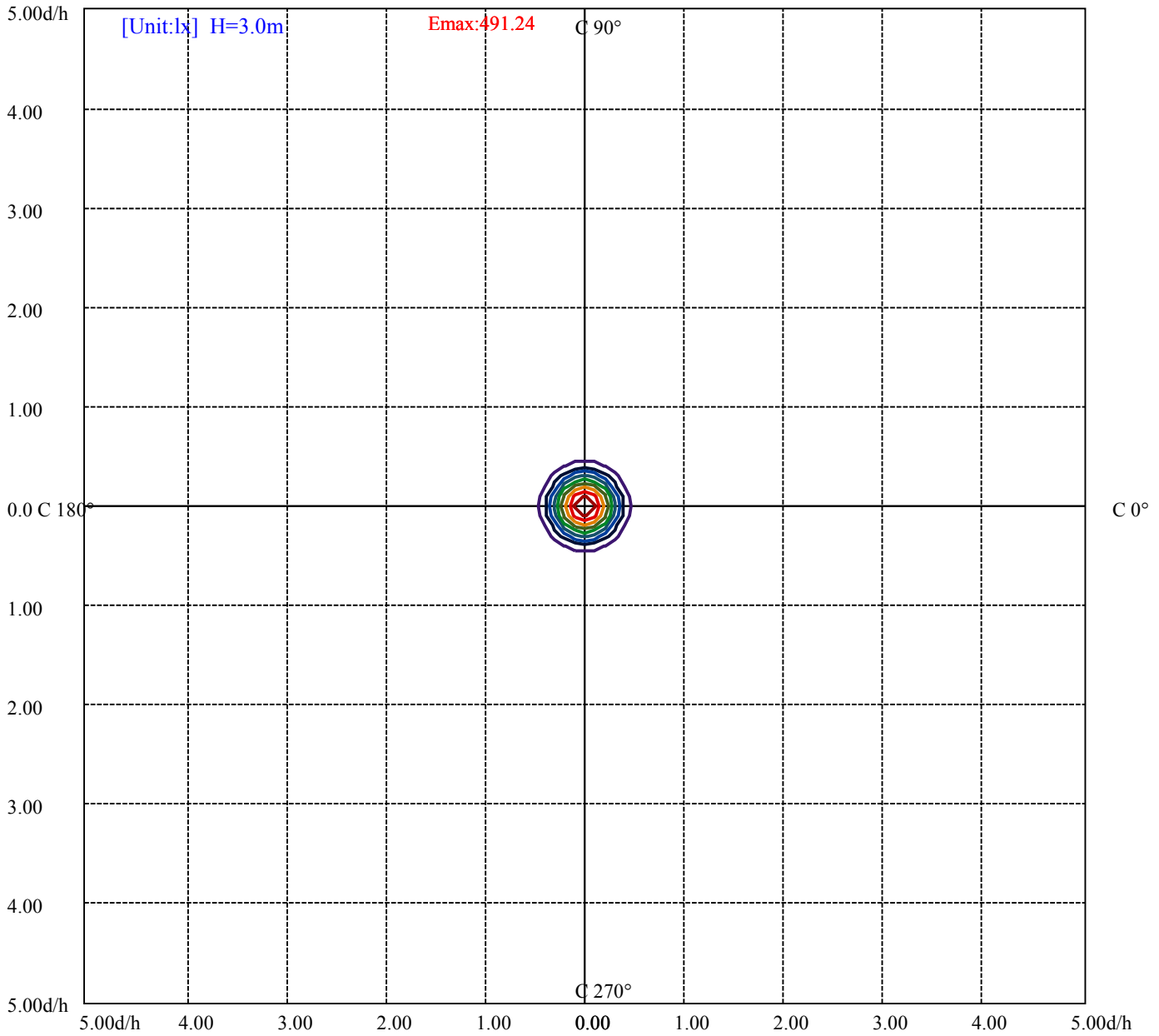
House

[Unit:cd]

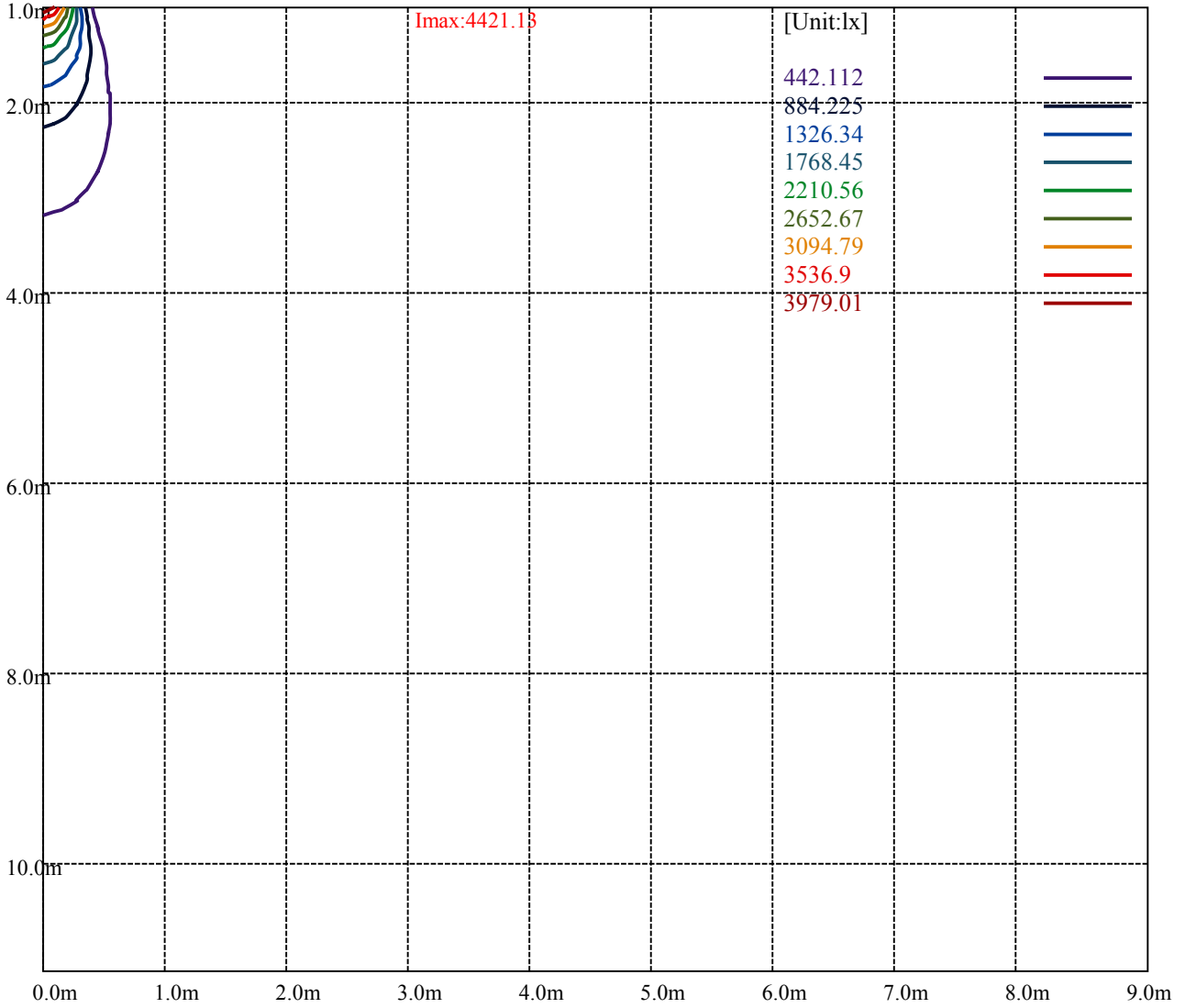
Road

Imax:4421.13

(10%Imax)	442.112	—
(20%Imax)	884.225	—
(30%Imax)	1326.34	—
(40%Imax)	1768.45	—
(50%Imax)	2210.56	—
(60%Imax)	2652.67	—
(70%Imax)	3094.79	—
(80%Imax)	3536.9	—
(90%Imax)	3979.01	—



- (10%Emax) 49.12355
- (20%Emax) 98.247
- (30%Emax) 147.3711
- (40%Emax) 196.4944
- (50%Emax) 245.6178
- (60%Emax) 294.7411
- (70%Emax) 343.8644
- (80%Emax) 392.9878
- (90%Emax) 442.1122



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

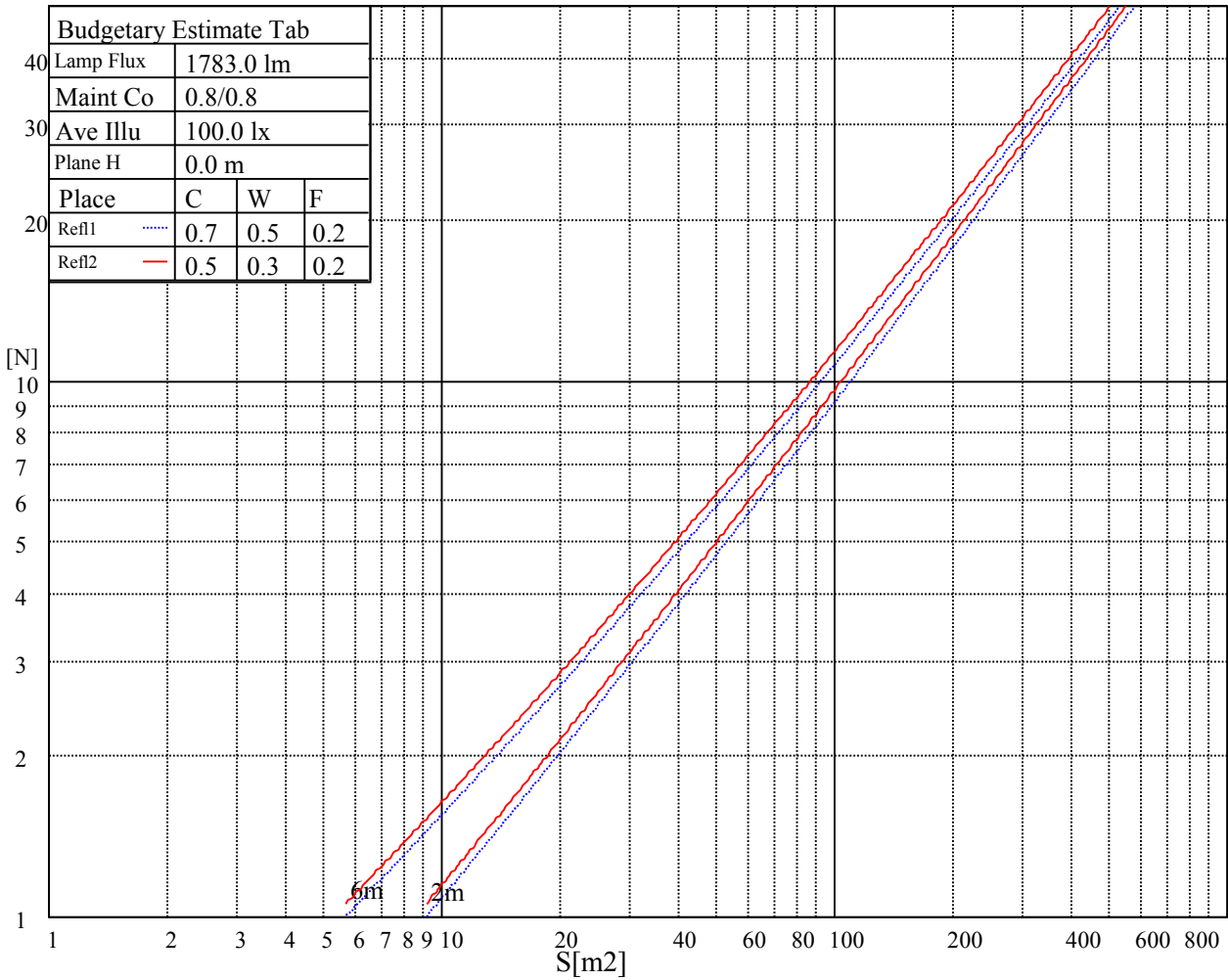
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

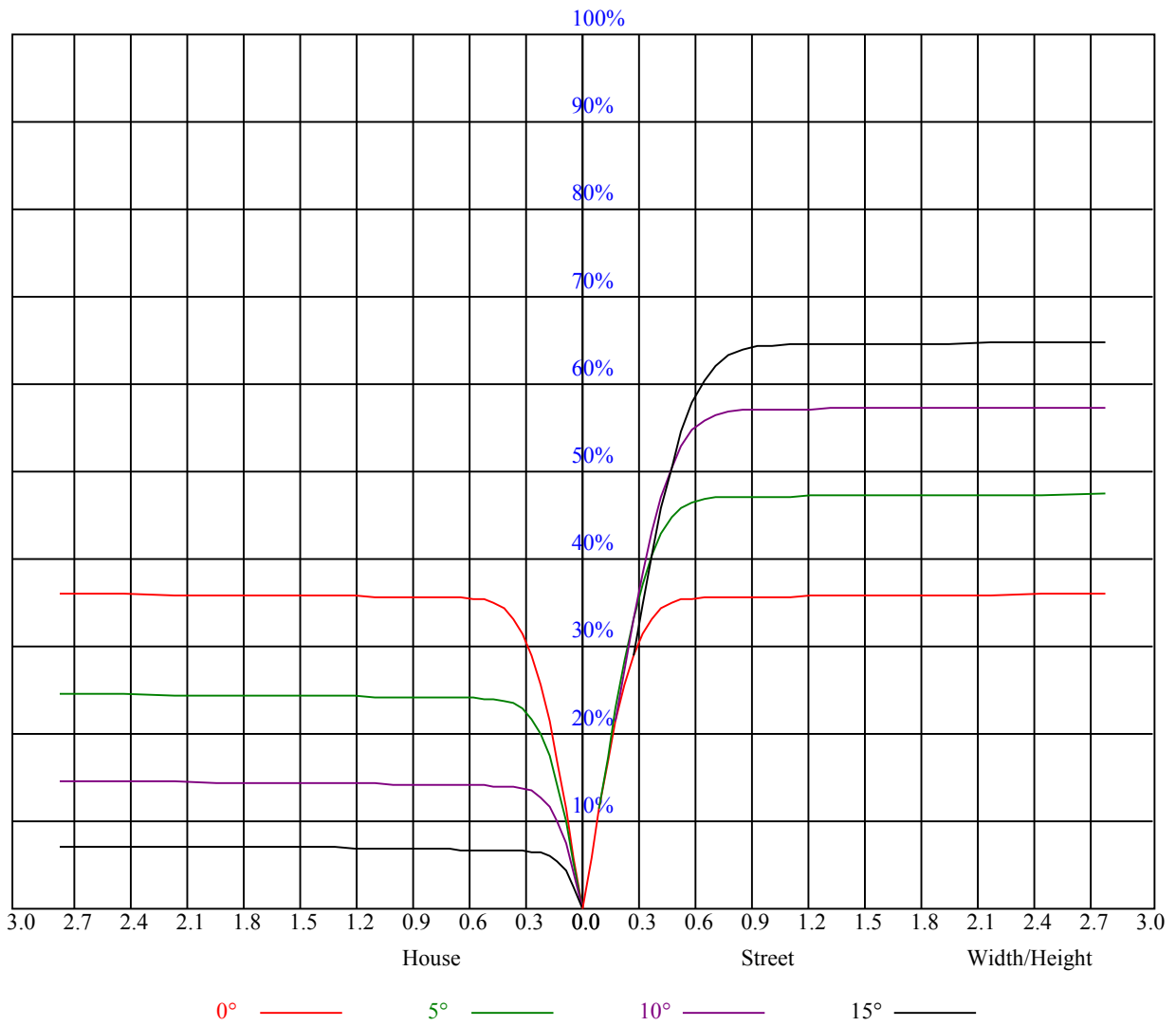
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

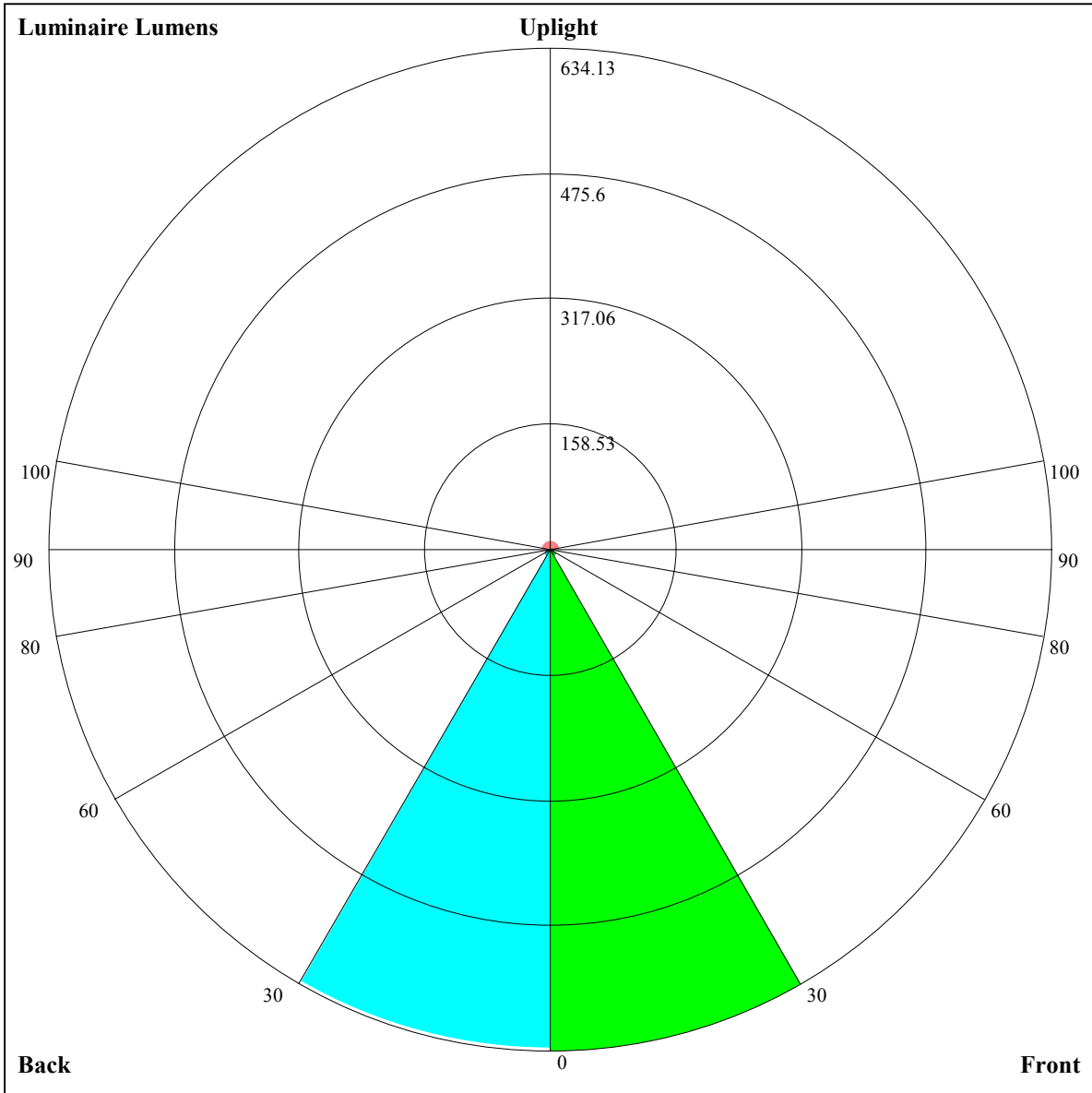
Luminance Limiting Curve





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	0.87	0.87	0.87	0.85	0.85	0.85	0.81	0.81	0.81	0.78	0.78	0.78	0.75	0.75	0.75	0.73
1	0.82	0.81	0.80	0.81	0.80	0.78	0.78	0.77	0.76	0.75	0.74	0.74	0.73	0.72	0.72	0.70
2	0.78	0.76	0.74	0.77	0.75	0.73	0.75	0.73	0.72	0.73	0.71	0.70	0.71	0.70	0.69	0.68
3	0.75	0.72	0.70	0.74	0.71	0.69	0.72	0.70	0.68	0.70	0.69	0.67	0.69	0.67	0.66	0.65
4	0.72	0.69	0.67	0.71	0.68	0.66	0.70	0.67	0.65	0.68	0.66	0.65	0.67	0.65	0.64	0.63
5	0.69	0.66	0.64	0.68	0.66	0.63	0.67	0.65	0.63	0.66	0.64	0.62	0.65	0.63	0.62	0.61
6	0.67	0.63	0.61	0.66	0.63	0.61	0.65	0.63	0.61	0.64	0.62	0.60	0.63	0.61	0.60	0.59
7	0.64	0.61	0.59	0.64	0.61	0.59	0.63	0.61	0.59	0.62	0.60	0.58	0.62	0.60	0.58	0.57
8	0.62	0.59	0.57	0.62	0.59	0.57	0.61	0.59	0.57	0.61	0.58	0.56	0.60	0.58	0.56	0.56
9	0.60	0.57	0.55	0.60	0.57	0.55	0.59	0.57	0.55	0.59	0.57	0.55	0.58	0.56	0.55	0.54
10	0.59	0.56	0.54	0.58	0.55	0.53	0.58	0.55	0.53	0.57	0.55	0.53	0.57	0.55	0.53	0.52





Luminaire Lumens:

FL=634.13,FM=11.05,FH=6.22,FVH=1.44

BL=629.87,BM=11.08,BH=7.07,BVH=1.6

UL=2.48,UH=11.81

BUG Rating:B2-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	4432.96	4156.86	3377.28	2387.50	781.29	292.85	8.96	6.31	5.52
45.0	4423.68	4245.95	3673.80	2609.31	1553.17	513.73	69.09	6.08	5.15
90.0	4385.63	3848.28	3010.70	1826.48	905.75	67.66	8.21	6.73	6.03
135.0	4442.24	4151.75	3524.38	2416.27	1346.21	245.52	14.01	8.12	7.10
180.0	4432.96	4263.59	3530.88	2707.22	1566.16	431.60	18.84	8.31	7.10
225.0	4423.68	4084.00	3354.08	2402.81	793.59	253.18	9.84	6.77	5.61
270.0	4385.63	4389.34	3913.24	3174.04	1961.52	910.48	279.39	7.93	6.26
315.0	4442.24	4254.30	3532.73	2607.45	902.22	508.95	11.74	7.05	6.03
360.0	4432.96	4156.86	3377.28	2387.50	781.29	292.85	8.96	6.31	5.52
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	5.01	4.59	4.32	4.04	4.27	6.17	9.74	5.06	1.81
45.0	4.64	4.22	3.94	3.67	3.34	3.11	2.78	2.41	1.62
90.0	5.57	5.15	4.97	4.64	5.43	7.05	7.70	2.74	1.48
135.0	6.64	6.40	6.26	5.89	8.45	13.36	15.45	8.07	1.95
180.0	6.40	5.99	5.66	5.43	5.80	11.37	13.83	5.61	2.92
225.0	5.20	4.83	4.55	4.18	3.85	3.62	3.43	2.41	1.95
270.0	5.48	4.92	4.55	4.32	4.04	4.08	5.29	5.61	2.18
315.0	5.43	5.06	5.01	4.78	5.94	12.06	15.17	11.32	1.81
360.0	5.01	4.59	4.32	4.04	4.27	6.17	9.74	5.06	1.81
C/ γ (°)	90.0								
0.0	1.81								
45.0	1.67								
90.0	1.48								
135.0	3.06								
180.0	4.04								
225.0	3.06								
270.0	1.53								
315.0	1.53								
360.0	1.81								