
LumCAT: CR01D05024BM(61.0031.03)

Luminaire:

Report No:

Voltage(V): 36.0800

Test No: GC2019051016

Current(A): 0.1560

LampCAT: CREE CXA1507

Power (W): 5.6280

Lamp flux(lm): 460.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 50

Width(mm): 50

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 397.77

Efficiency(%): 86.47%

Lumens(lm)/Power(W): 70.68

Central intensity(cd): 1487.039

Maximum intensity(cd): 1487.039

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=24.0

[C90/270]Total=24.0

Field angle(10%Imax): [C0/180]Total=46.2

[C90/270]Total=46.2

Maximum s/h(1/2): C0_180=0.41 C90_270=0.41

Maximum s/h(1/4): C0_180=0.41 C90_270=0.41

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 86.47%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 91.513%

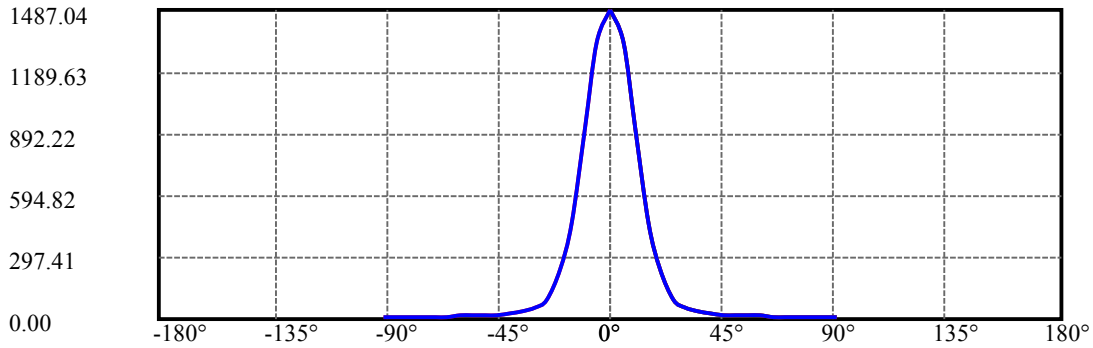
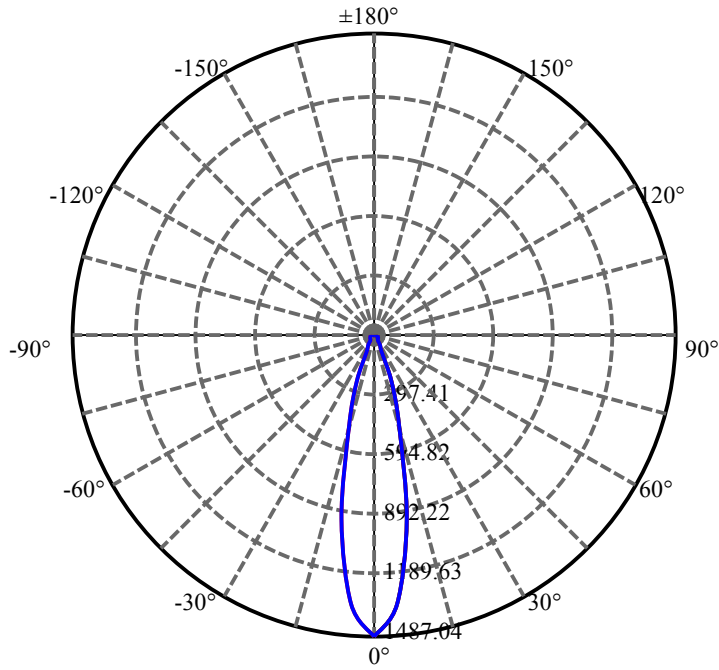
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1487.039	0.000	0	.000%	.000%
5.0	1330.270	33.680	33.68	7.322%	8.467%
10.0	925.706	80.703	114.384	17.544%	28.756%
15.0	465.117	82.503	196.886	17.935%	49.497%
20.0	239.843	58.099	254.985	12.630%	64.103%
25.0	92.510	34.858	289.843	7.578%	72.866%
30.0	53.191	18.439	308.281	4.008%	77.502%
35.0	34.418	12.901	321.182	2.805%	80.745%
40.0	26.557	10.173	331.356	2.212%	83.303%
45.0	22.472	9.078	340.434	1.974%	85.585%
50.0	19.673	8.516	348.95	1.851%	87.726%
55.0	16.643	7.896	356.846	1.717%	89.711%
60.0	14.372	7.169	364.015	1.558%	91.513%
65.0	12.867	6.622	370.637	1.440%	93.178%
70.0	12.094	6.320	376.957	1.374%	94.767%
75.0	12.157	6.339	383.296	1.378%	96.361%
80.0	10.062	5.945	389.241	1.292%	97.855%
85.0	7.917	4.885	394.126	1.062%	99.083%
90.0	5.400	3.646	397.773	.793%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	308.28	67.02%	77.50%
0-40	331.36	72.03%	83.30%
0-60	364.02	79.13%	91.51%
0-90	394.13	85.68%	99.08%
0-120	394.13	85.68%	99.08%
0-180	397.77	86.47%	100.00%
60-90	37.28	8.10%	9.37%
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%
0-33.85	318.22	69.18%	80.00%

ZONAL LUMEN SUMMARY

0-10	114.38
10-20	140.60
20-30	53.30
30-40	23.07
40-50	17.59
50-60	15.07
60-70	12.94
70-80	12.28
80-90	4.89
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



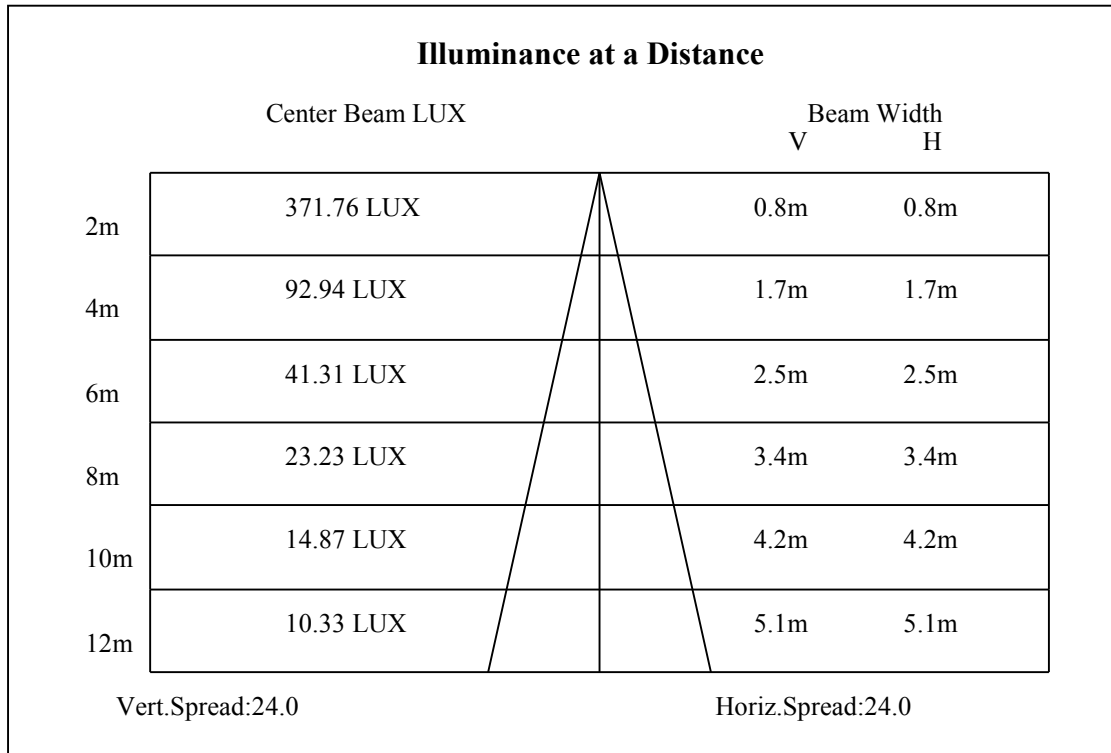
C0(Max): —————

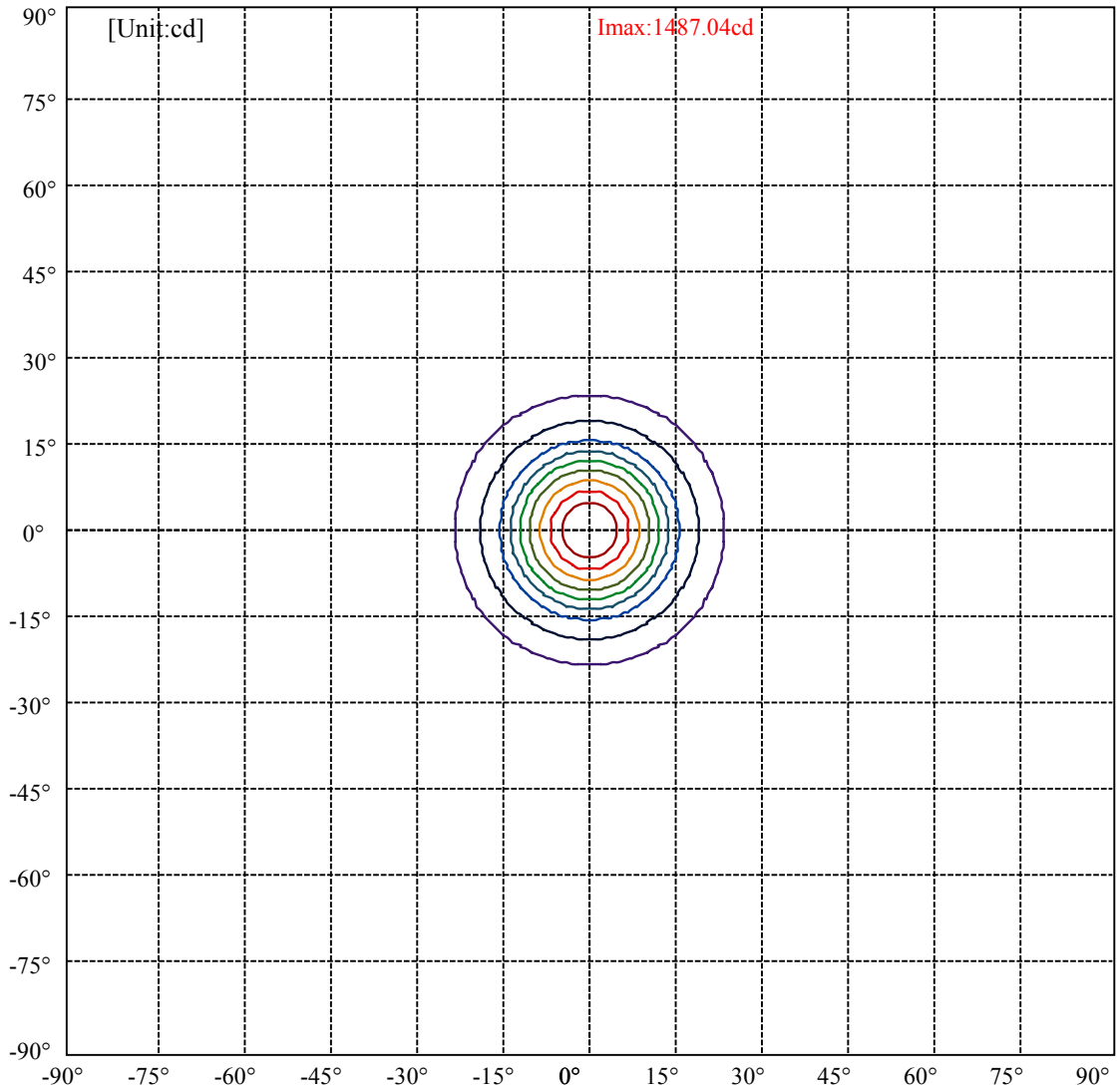
C0/C180: —————

C90/C270: —————

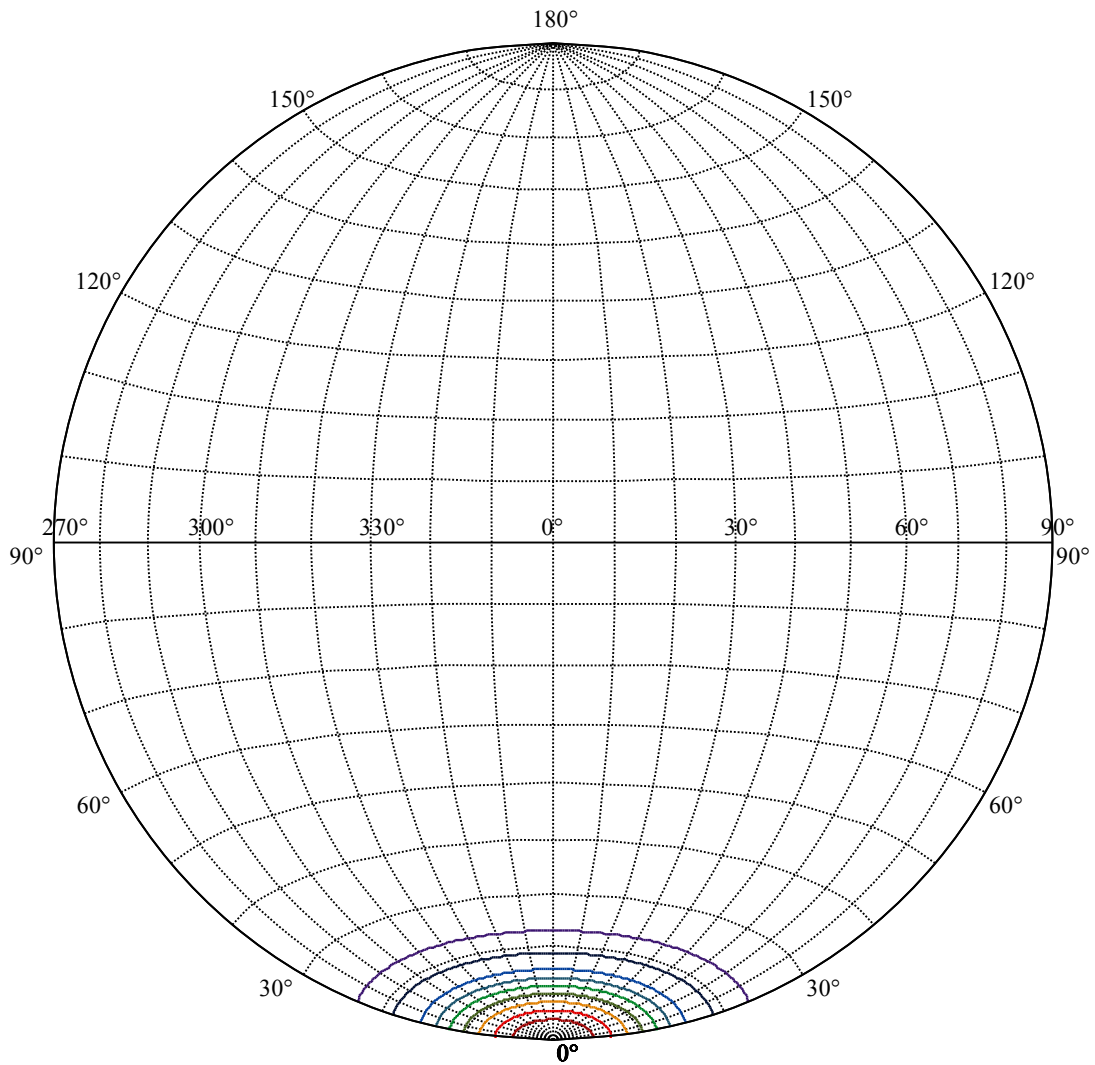
Field angle(10%Imax):C0/180Left:23.1 Right:23.1
:C90/270Left:23.1 Right:23.1

Beam Angle(50%Imax):C0/180Left:12.0 Right:12.0
:C90/270Left:12.0 Right:12.0





(10%I _{max}) 148.704	—
(20%I _{max}) 297.408	—
(30%I _{max}) 446.112	—
(40%I _{max}) 594.816	—
(50%I _{max}) 743.519	—
(60%I _{max}) 892.223	—
(70%I _{max}) 1040.93	—
(80%I _{max}) 1189.63	—
(90%I _{max}) 1338.34	—



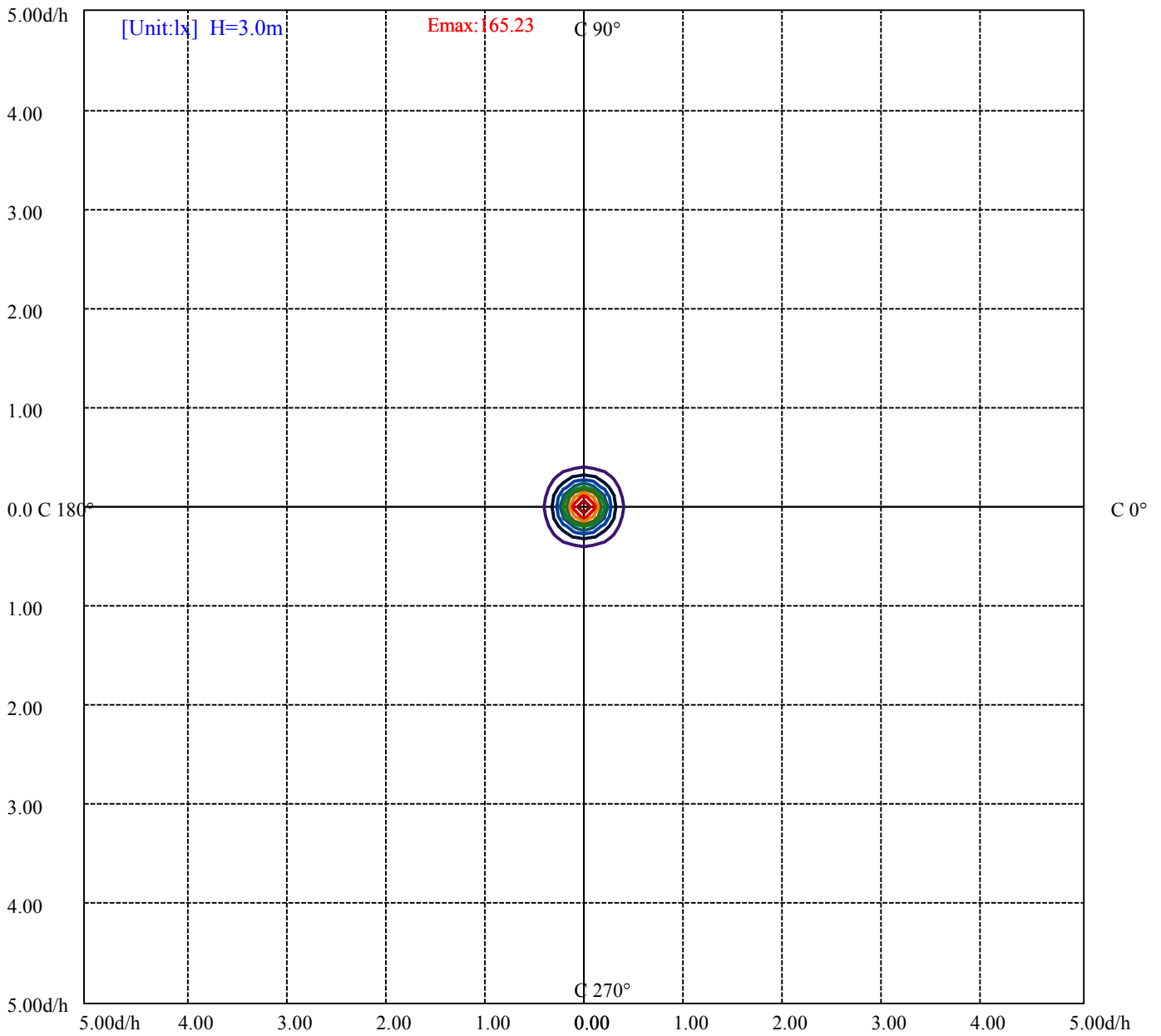
House

[Unit:cd]

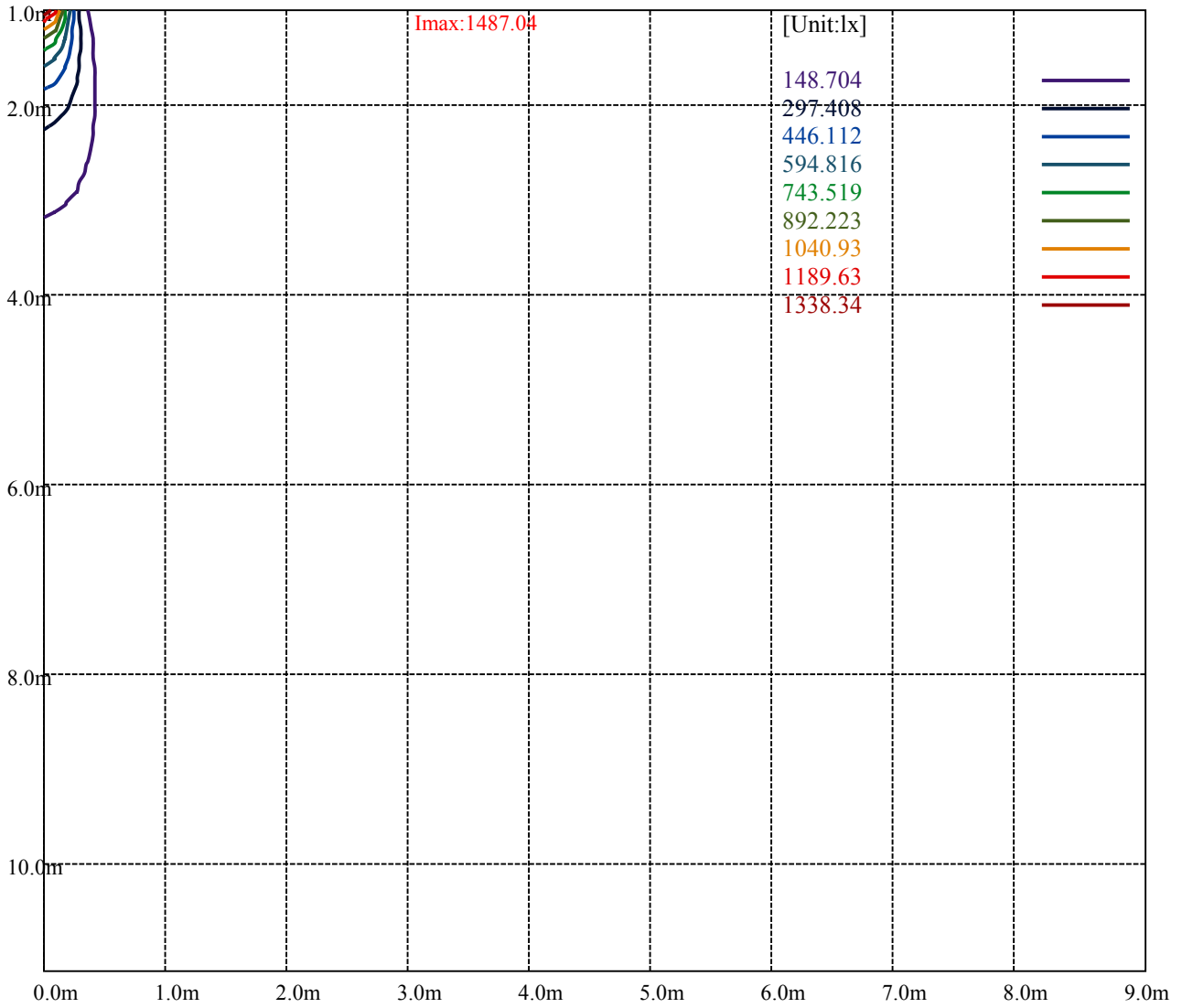
Road

Imax:1487.04

(10%Imax) 148.704	—
(20%Imax) 297.408	—
(30%Imax) 446.112	—
(40%Imax) 594.816	—
(50%Imax) 743.519	—
(60%Imax) 892.223	—
(70%Imax) 1040.93	—
(80%Imax) 1189.63	—
(90%Imax) 1338.34	—



- (10%Emax) 16.52256
- (20%Emax) 33.04522
- (30%Emax) 49.56778
- (40%Emax) 66.09045
- (50%Emax) 82.61301
- (60%Emax) 99.13567
- (70%Emax) 115.6578
- (80%Emax) 132.1811
- (90%Emax) 148.7033



Luminance Table

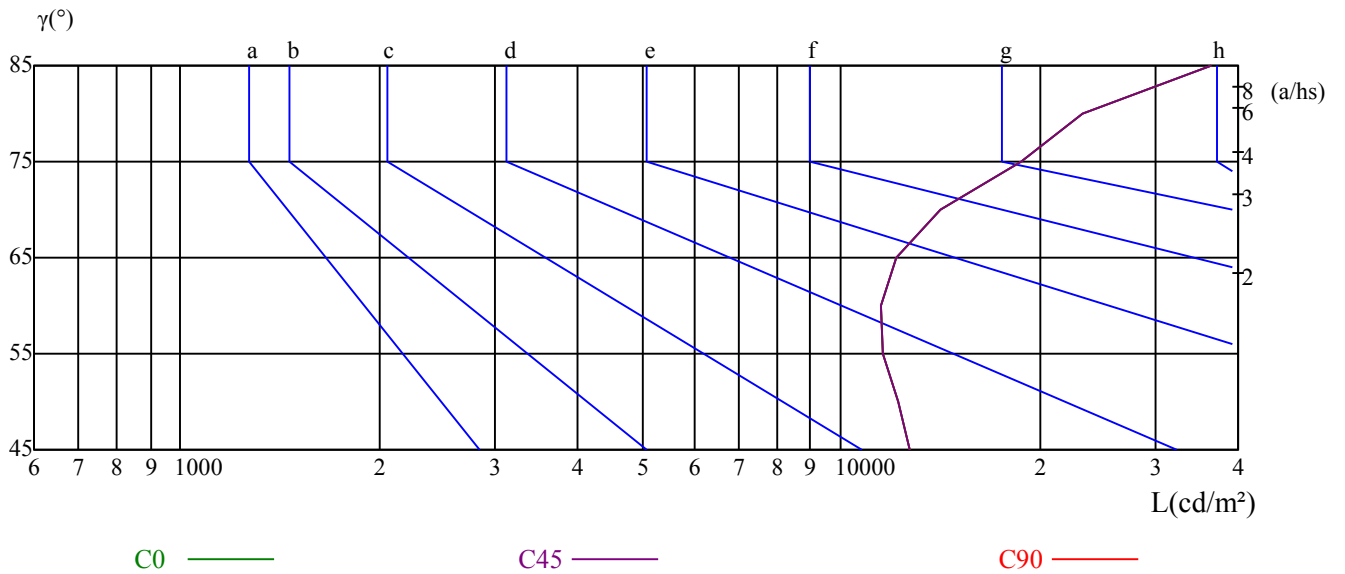
γ	45	50	55	60	65	70	75	80	85
C0	12712	12243	11606	11498	12179	14144	18788	23177	36336
C45	12712	12243	11606	11498	12179	14144	18788	23177	36336
C90	12712	12243	11606	11498	12179	14144	18788	23177	36336

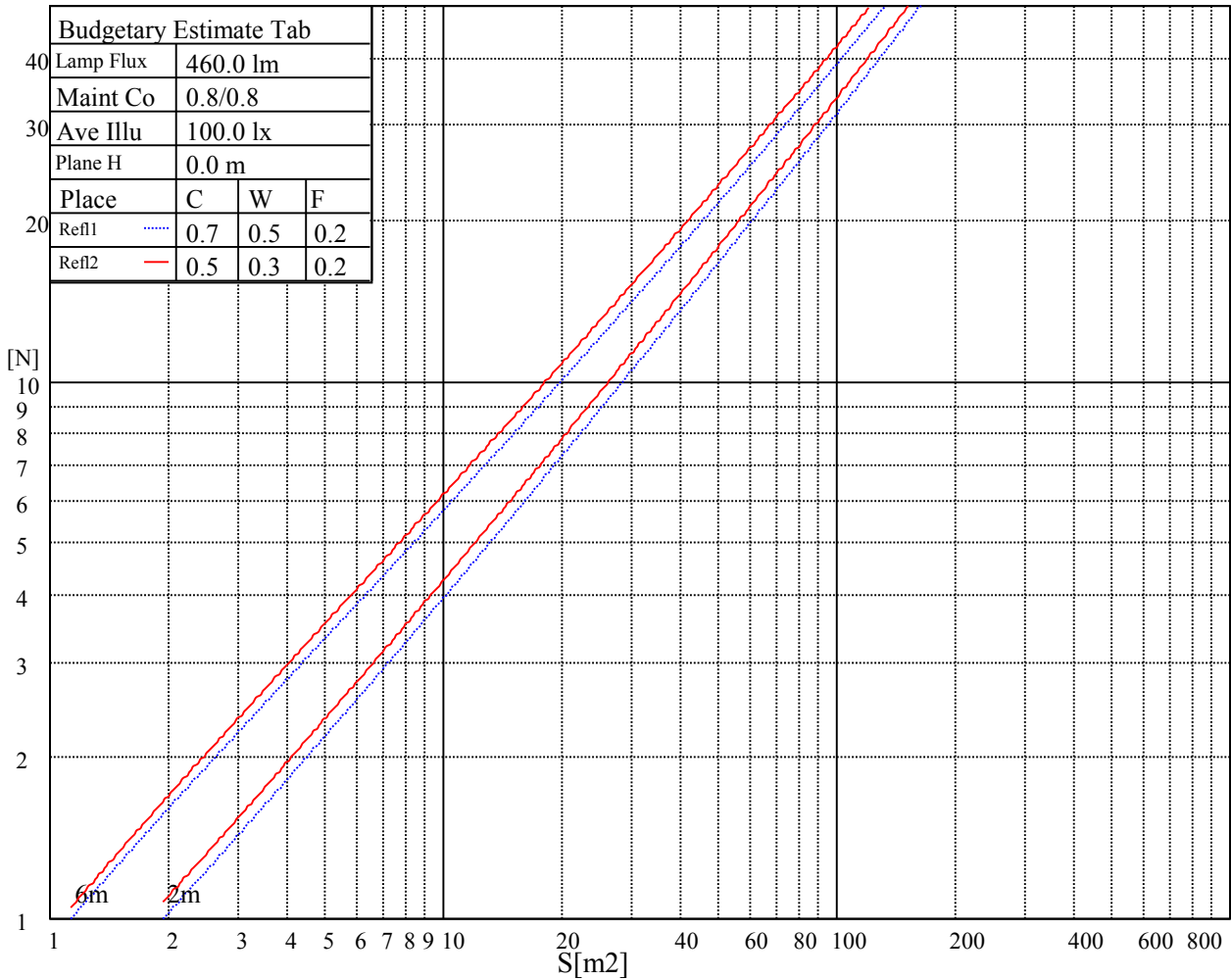
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
12179	12179	12179	18788	18788	18788	36336	36336	36336

Glare Table

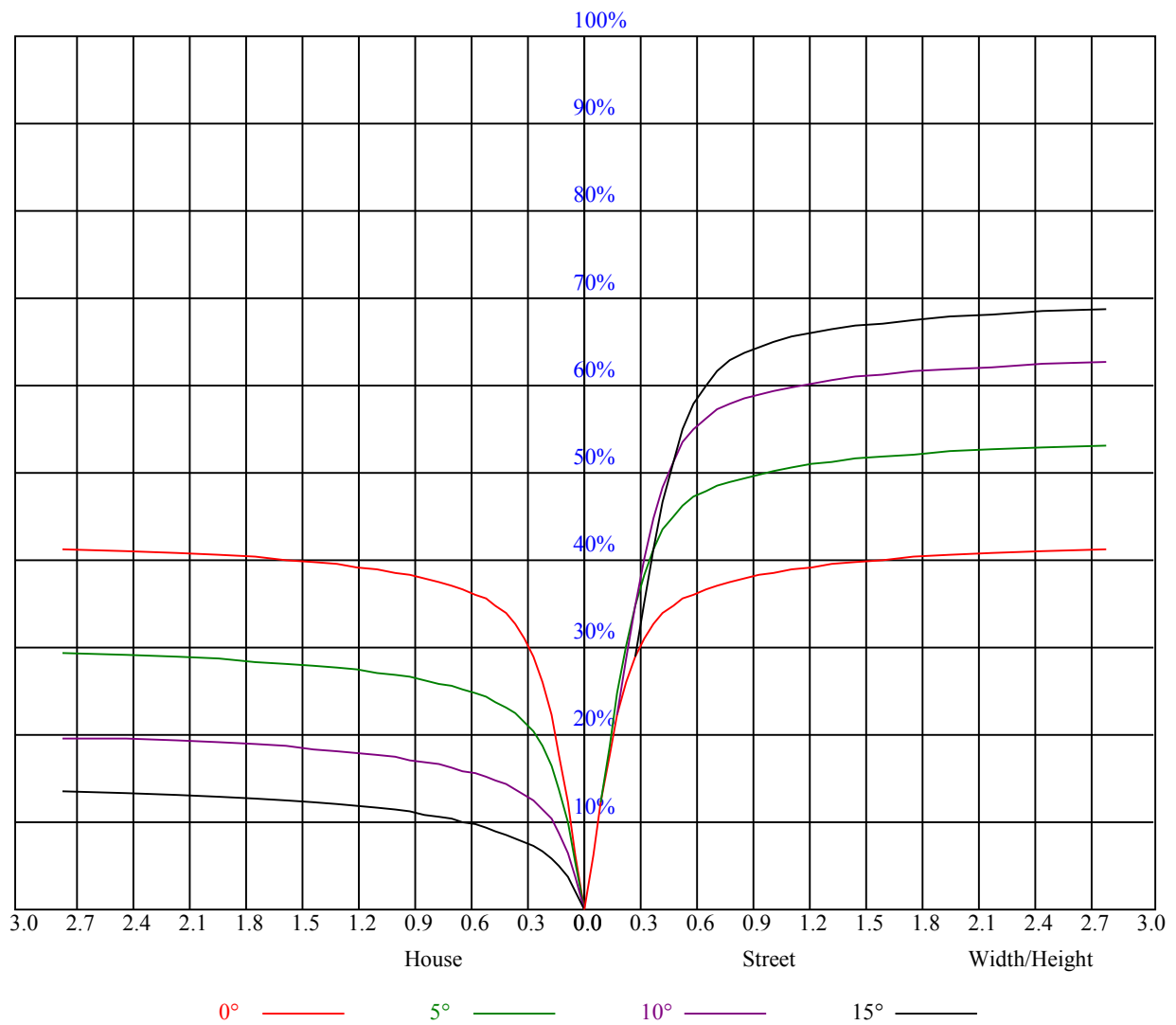
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.03	1.03	1.03	1.01	1.01	1.01	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.86
1	0.95	0.92	0.90	0.93	0.91	0.89	0.89	0.87	0.86	0.86	0.85	0.83	0.83	0.82	0.81	0.79
2	0.88	0.85	0.81	0.87	0.83	0.81	0.84	0.81	0.79	0.81	0.79	0.77	0.79	0.77	0.75	0.74
3	0.83	0.79	0.75	0.82	0.78	0.75	0.79	0.76	0.73	0.77	0.75	0.72	0.75	0.73	0.71	0.70
4	0.78	0.74	0.70	0.78	0.73	0.70	0.76	0.72	0.69	0.74	0.71	0.68	0.72	0.70	0.68	0.66
5	0.75	0.70	0.66	0.74	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.65	0.70	0.67	0.64	0.63
6	0.71	0.67	0.63	0.71	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.61
7	0.68	0.64	0.61	0.68	0.64	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.58
8	0.66	0.61	0.58	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.57	0.56
9	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.55	0.54
10	0.61	0.57	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.60	0.56	0.54	0.59	0.56	0.54	0.53



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	1492.88	1394.44	1004.06	520.31	290.81	99.90	54.56	35.78	27.56
45.0	1481.63	1399.50	1040.63	543.94	292.50	100.18	54.51	35.27	27.11
90.0	1488.38	1375.88	934.54	467.04	211.89	88.43	51.13	32.29	25.03
135.0	1486.69	1392.75	1020.94	521.44	293.06	101.14	56.81	34.71	26.66
180.0	1492.88	1331.44	835.03	415.86	184.44	88.82	53.55	34.37	27.06
225.0	1478.81	1108.35	798.19	363.38	175.11	85.50	50.18	34.43	26.83
270.0	1488.38	1334.25	908.44	468.56	285.75	91.80	55.52	35.21	26.72
315.0	1486.69	1305.56	863.83	420.41	185.18	84.32	49.28	33.30	25.48
360.0	1492.88	1394.44	1004.06	520.31	290.81	99.90	54.56	35.78	27.56
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	23.06	20.08	17.04	14.74	13.33	12.49	11.59	10.24	8.04
45.0	22.39	19.91	16.93	14.51	12.77	11.81	10.97	9.56	7.65
90.0	20.70	18.06	15.53	13.33	11.64	11.08	10.41	9.00	7.03
135.0	22.84	20.31	16.71	14.23	12.49	11.64	10.97	9.84	7.93
180.0	23.18	20.59	16.93	14.79	13.67	13.33	14.34	12.66	9.79
225.0	23.23	20.25	17.04	14.79	13.44	12.71	13.95	10.46	8.10
270.0	21.77	18.51	15.92	13.73	12.26	11.25	12.60	9.11	6.98
315.0	22.61	19.69	17.04	14.85	13.33	12.43	12.43	9.62	7.82
360.0	23.06	20.08	17.04	14.74	13.33	12.49	11.59	10.24	8.04
C/ γ (°)	90.0								
0.0	5.23								
45.0	5.12								
90.0	4.28								
135.0	5.57								
180.0	6.75								
225.0	5.74								
270.0	5.12								
315.0	5.40								
360.0	5.23								