
PQL 91324

LumCAT: /

Luminaire: /

Report No:

Test No:

LampCAT: 2' 9WT8/40K/FR/V5/1350Lm

Lamp flux(lm): -1.0

Number of Lamps: 1

Length(mm): 600

Phm Type: C

Voltage(V):

Current(A):

Power (W): 12.2400

PF:

Ballast type:

Width(mm): 28

Height(mm): 28

Photometric Results

Lumens(lm): 1346.73

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 110.03

Central intensity(cd): 261.508

Maximum intensity(cd): 262.021

Angle of maximum intensity: C=180.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=191.4

[C90/270]Total=107.6

Field angle(10%Imax): [C0/180]Total=317.6

[C90/270]Total=162.8

Maximum s/h(1/2): C0_180=1.44 C90_270=1.23

Maximum s/h(1/4): C0_180=1.61 C90_270=1.35

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 23.86%

Down flux rate of LUM(%): 76.14%

CIE Type : Semidirect lighting

Output flux ratio in π solid angle : 48.530%

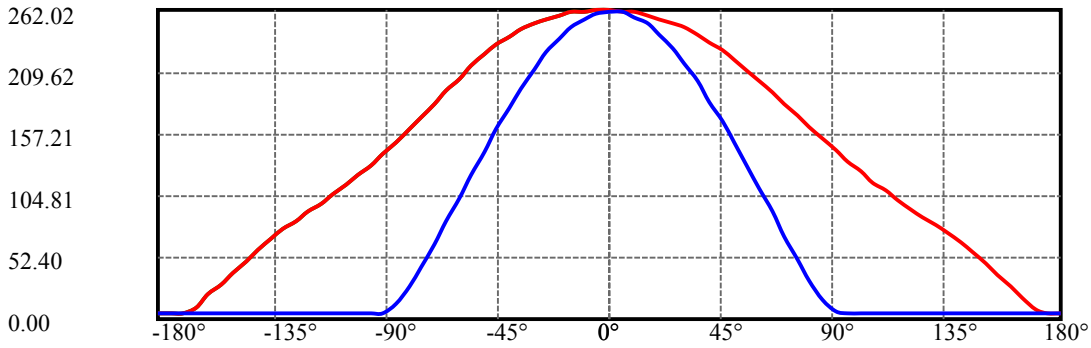
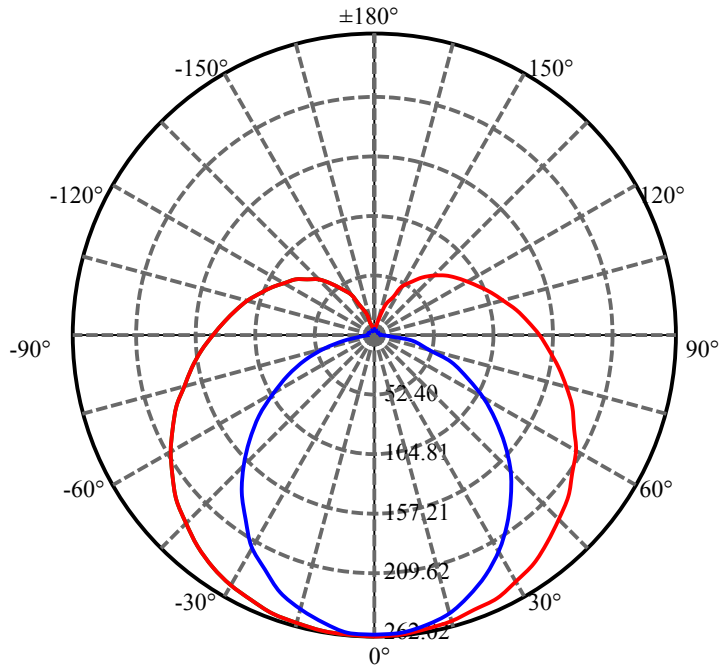
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	261.300	0.000	0	.000%	.000%
5.0	260.371	6.236	6.236	.000%	.463%
10.0	257.871	18.539	24.776	.000%	1.840%
15.0	253.873	30.356	55.132	.000%	4.094%
20.0	247.904	41.353	96.485	.000%	7.164%
25.0	240.757	51.252	147.737	.000%	10.970%
30.0	231.904	59.816	207.553	.000%	15.412%
35.0	221.841	66.817	274.37	.000%	20.373%
40.0	210.344	72.107	346.477	.000%	25.727%
45.0	198.230	75.651	422.127	.000%	31.345%
50.0	185.283	77.494	499.622	.000%	37.099%
55.0	171.847	77.652	577.274	.000%	42.865%
60.0	158.211	76.292	653.566	.000%	48.530%
65.0	144.479	73.584	727.15	.000%	53.994%
70.0	131.066	69.770	796.92	.000%	59.174%
75.0	117.863	65.066	861.986	.000%	64.006%
80.0	105.637	59.802	921.788	.000%	68.446%
85.0	94.428	54.362	976.151	.000%	72.483%
90.0	85.223	49.190	1025.341	.000%	76.136%
95.0	78.741	44.894	1070.235	.000%	79.469%
100.0	73.045	41.244	1111.479	.000%	82.532%
105.0	67.877	37.707	1149.185	.000%	85.332%
110.0	63.110	34.238	1183.423	.000%	87.874%
115.0	58.198	30.716	1214.139	.000%	90.155%
120.0	54.024	27.281	1241.42	.000%	92.180%
125.0	49.650	23.964	1265.384	.000%	93.960%
130.0	44.498	20.471	1285.855	.000%	95.480%
135.0	39.186	16.910	1302.765	.000%	96.735%
140.0	34.315	13.609	1316.374	.000%	97.746%
145.0	29.468	10.642	1327.016	.000%	98.536%
150.0	24.300	7.918	1334.933	.000%	99.124%
155.0	18.732	5.446	1340.379	.000%	99.528%
160.0	13.236	3.353	1343.732	.000%	99.777%
165.0	8.060	1.755	1345.487	.000%	99.908%
170.0	5.168	0.785	1346.272	.000%	99.966%
175.0	4.567	0.348	1346.62	.000%	99.992%
180.0	4.567	0.109	1346.729	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	207.55	N.A.	15.41%
0-40	346.48	N.A.	25.73%
0-60	653.57	N.A.	48.53%
0-90	1025.34	N.A.	76.14%
0-120	1241.42	N.A.	92.18%
0-180	1346.73	N.A.	100.00%
60-90	448.07	N.A.	33.27%
90-120	265.27	N.A.	19.70%
90-130	309.70	N.A.	23.00%
90-150	358.78	N.A.	26.64%
90-180	370.47	N.A.	27.51%
0-95.87	1077.38	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	24.78
10-20	71.71
20-30	111.07
30-40	138.92
40-50	153.15
50-60	153.94
60-70	143.35
70-80	124.87
80-90	103.55
90-100	86.14
100-110	71.94
110-120	58.00
120-130	44.43
130-140	30.52
140-150	18.56
150-160	8.80
160-170	2.54
170-180	0.35



C180(Max): ———

C0/C180: ———

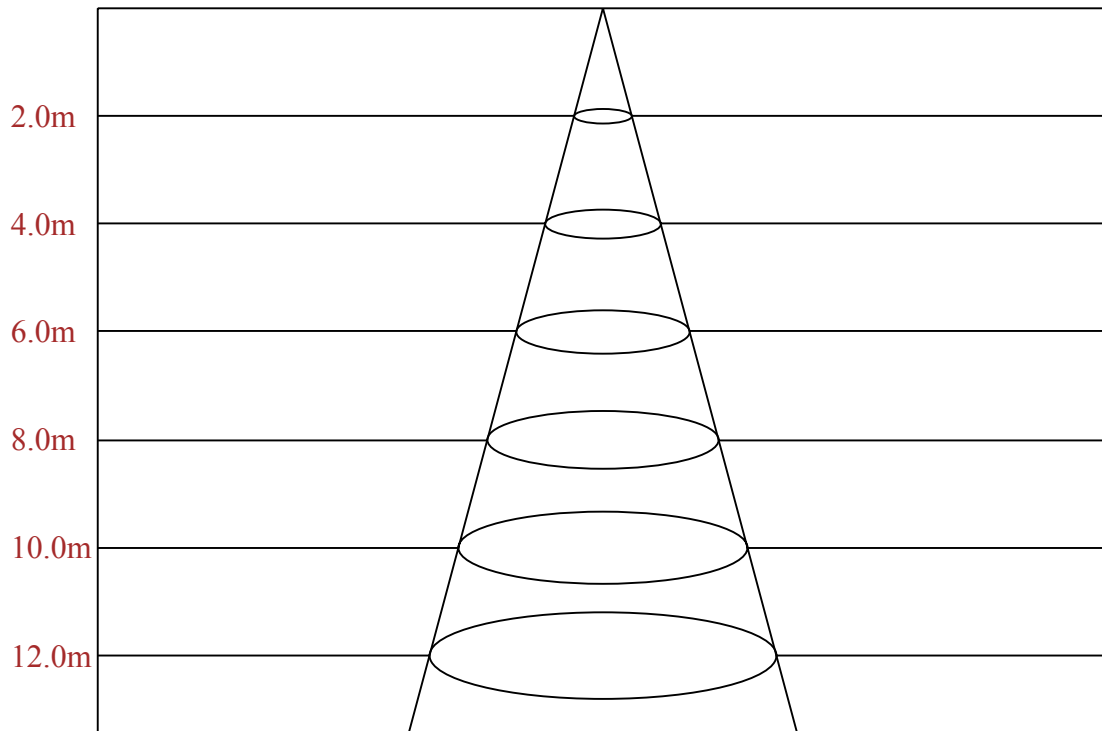
C90/C270: ———

Field angle(10%Imax):C0/180Left:151.9 Right:165.7

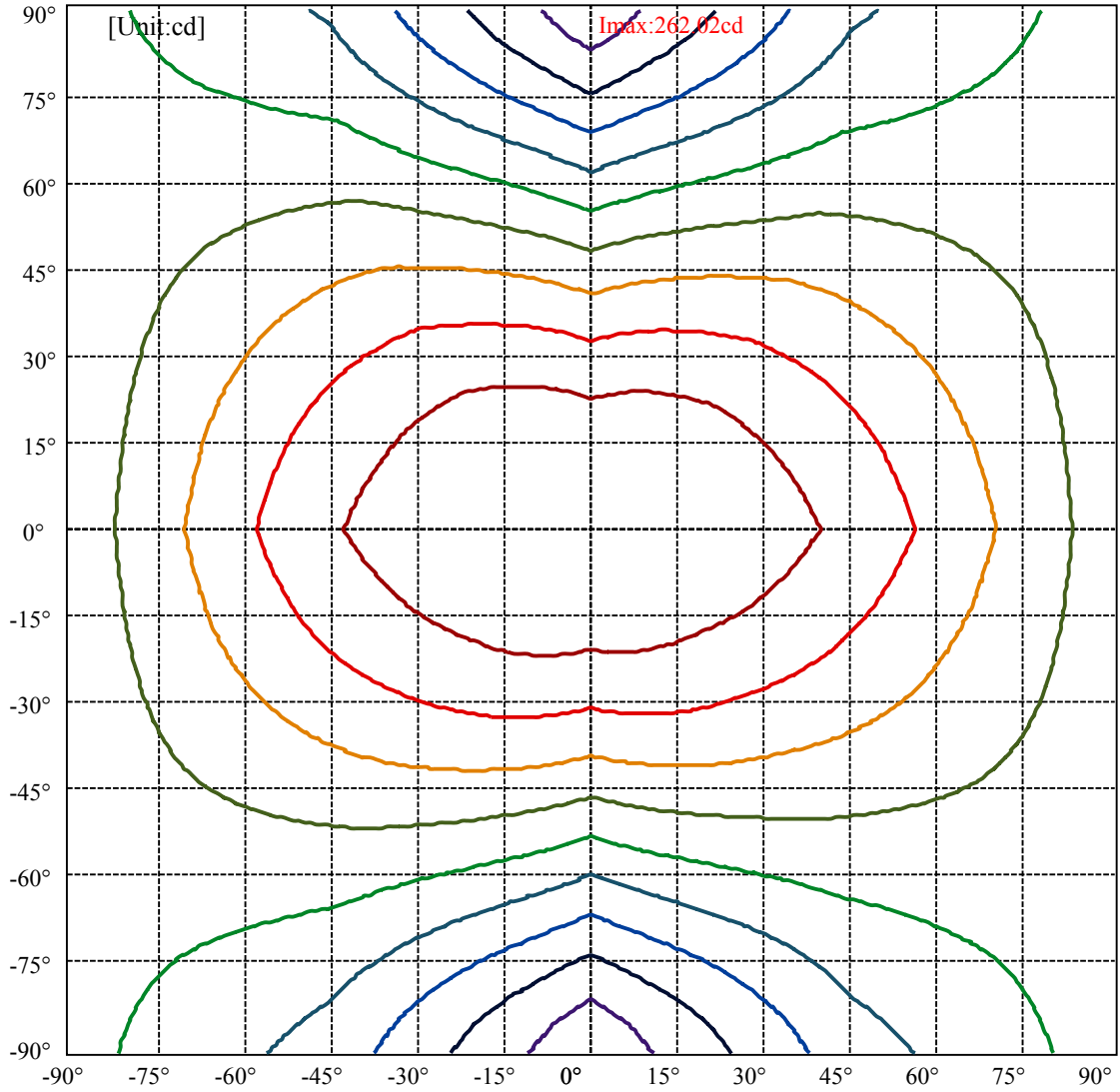
:C90/270Left:80.6 Right:82.2










Beam Angle(50%Imax):C0/180Left:90.0 Right:101.4

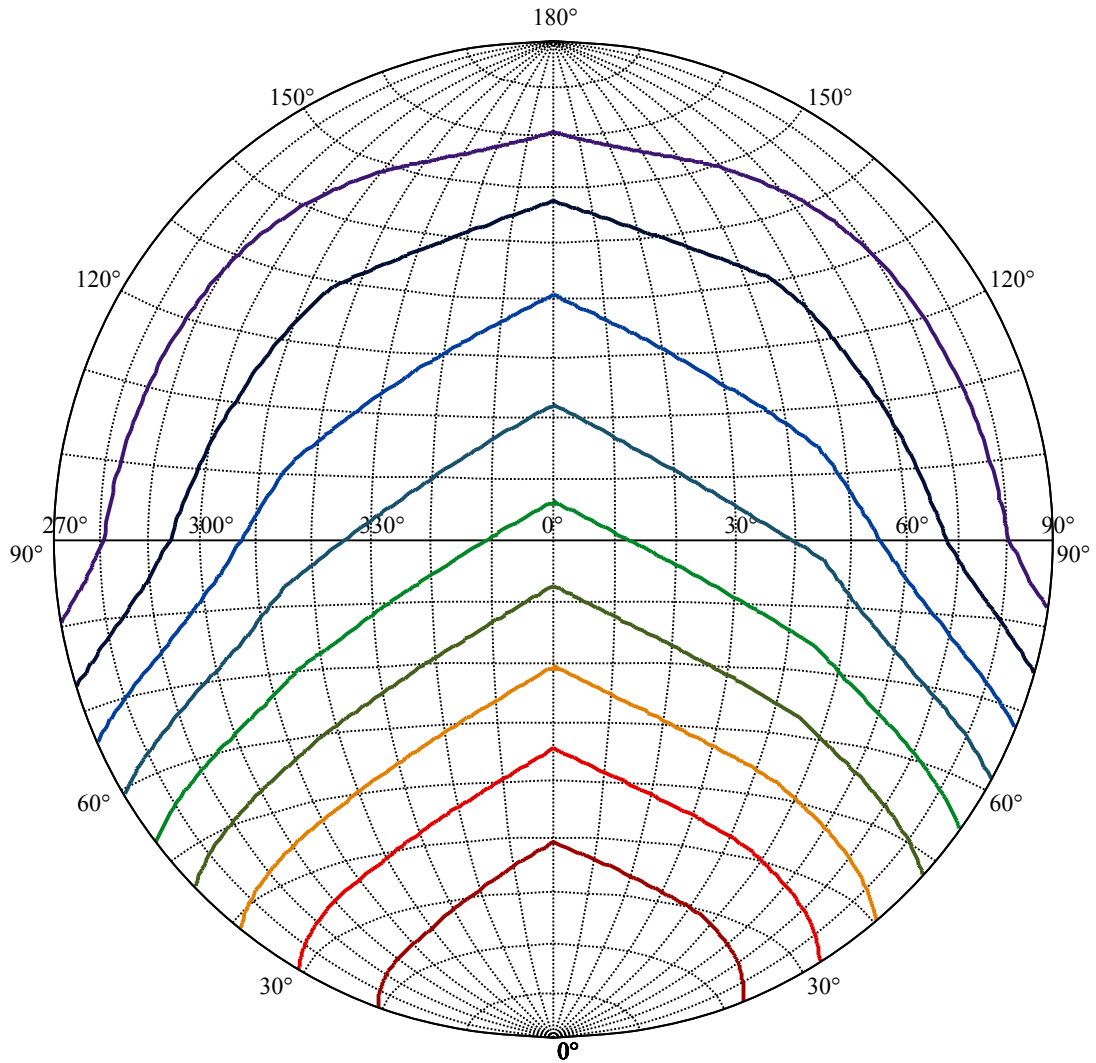
:C90/270Left:52.9 Right:54.7



Max , Ave Beam angle of C180 plane 192.10



(10%Imax)	26.2021	
(20%Imax)	52.4042	
(30%Imax)	78.6063	
(40%Imax)	104.808	
(50%Imax)	131.01	
(60%Imax)	157.213	
(70%Imax)	183.415	
(80%Imax)	209.617	
(90%Imax)	235.819	



House

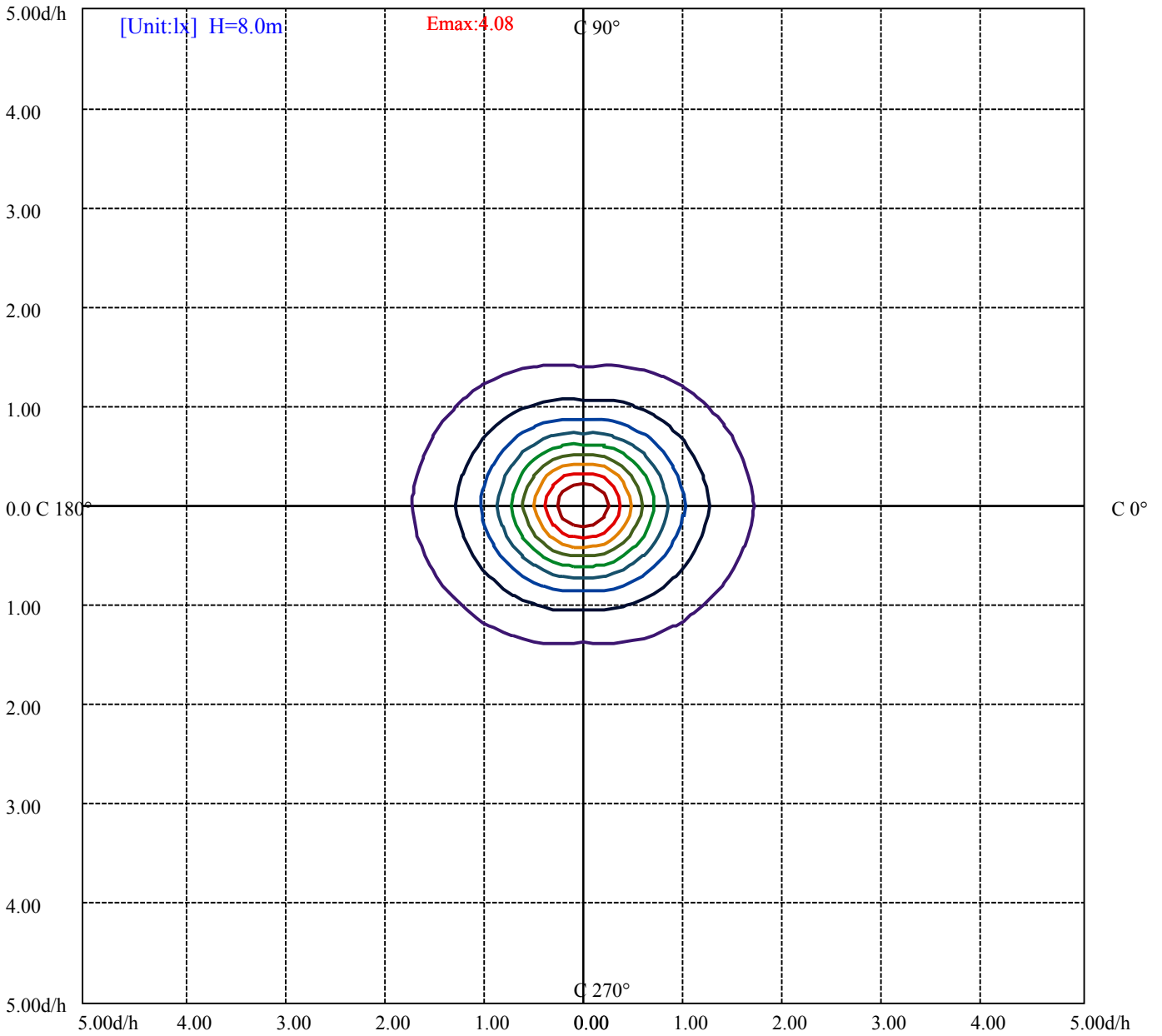
[Unit:cd]

Road

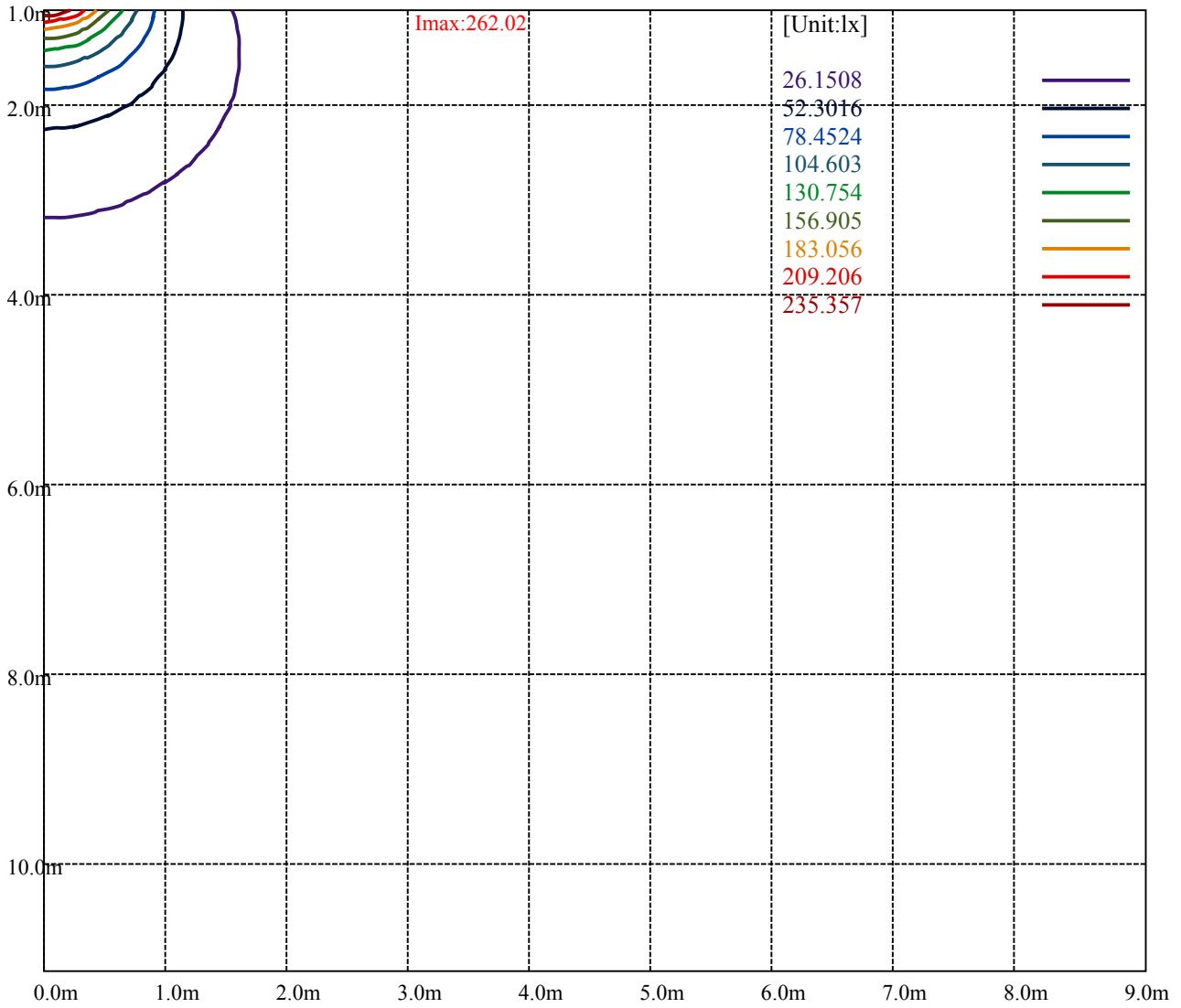
I_{max}:262.02

- (10%I_{max}) 26.2021
- (20%I_{max}) 52.4042
- (30%I_{max}) 78.6063
- (40%I_{max}) 104.808
- (50%I_{max}) 131.01
- (60%I_{max}) 157.213
- (70%I_{max}) 183.415
- (80%I_{max}) 209.617
- (90%I_{max}) 235.819





- (10%Emax) 0.4083062 ———
- (20%Emax) 0.8166125 ———
- (30%Emax) 1.224919 ———
- (40%Emax) 1.633219 ———
- (50%Emax) 2.041531 ———
- (60%Emax) 2.449844 ———
- (70%Emax) 2.858141 ———
- (80%Emax) 3.266453 ———
- (90%Emax) 3.67475 ———



Luminance Table

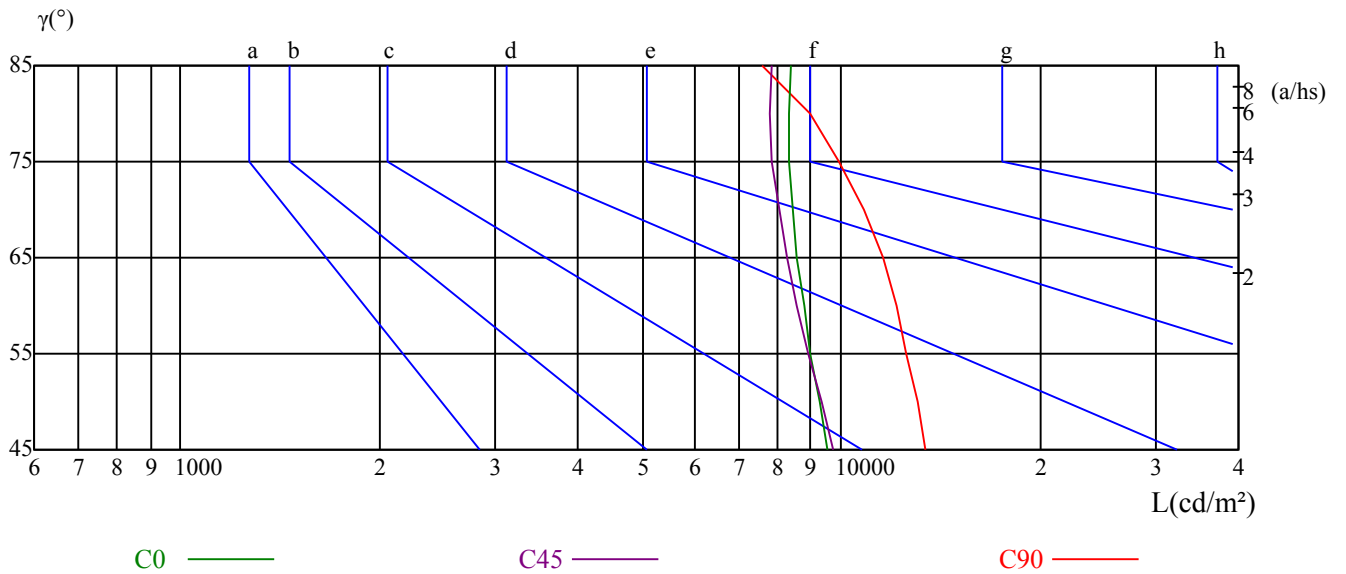
γ	45	50	55	60	65	70	75	80	85
C0	9572	9267	9004	8784	8590	8474	8364	8335	8374
C45	9764	9326	8941	8570	8287	8050	7872	7804	7858
C90	13444	13084	12572	12114	11595	10856	9930	8982	7593

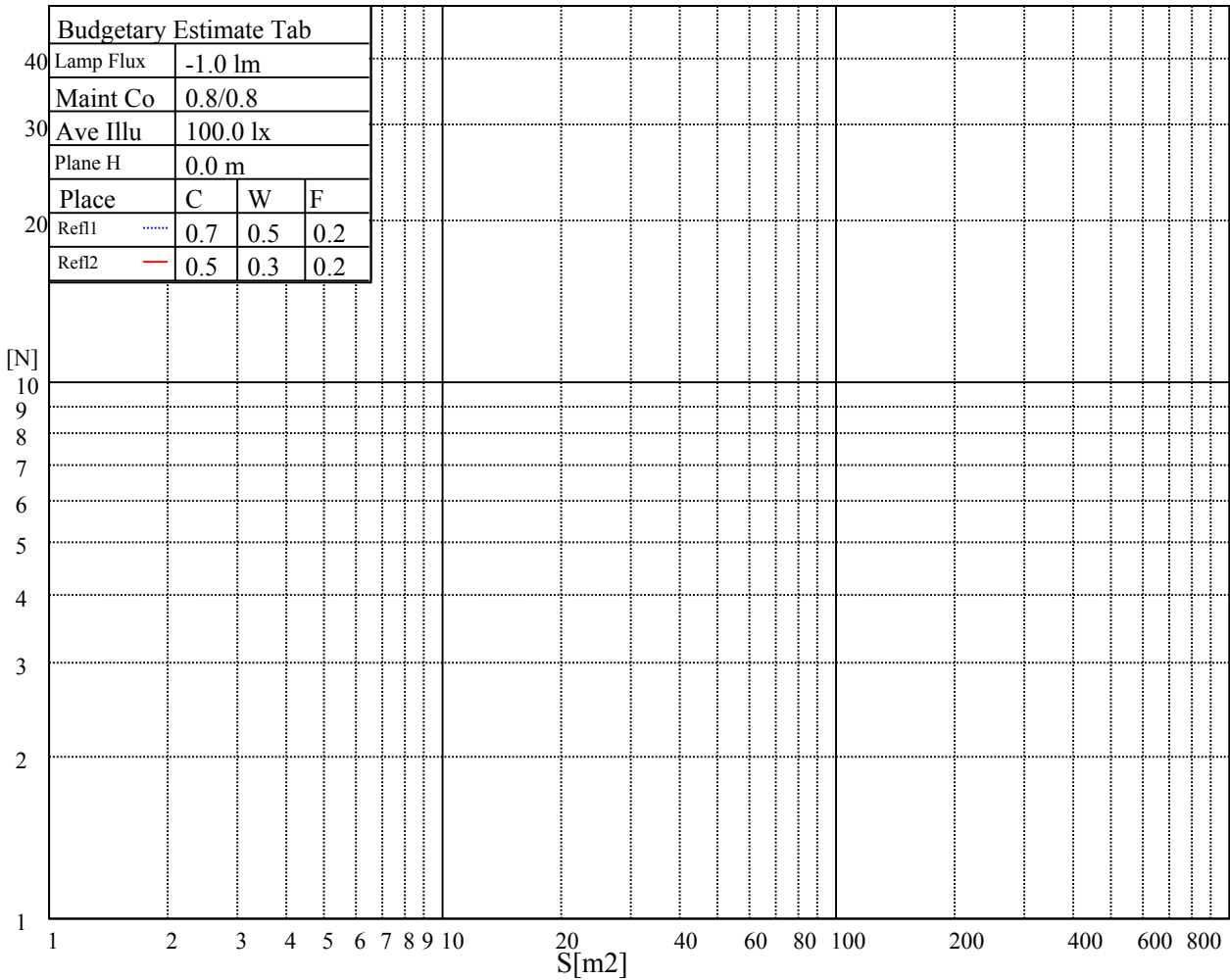
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
27150	12205	21021	39520	10952	28977	103329	10374	72129

Glare Table

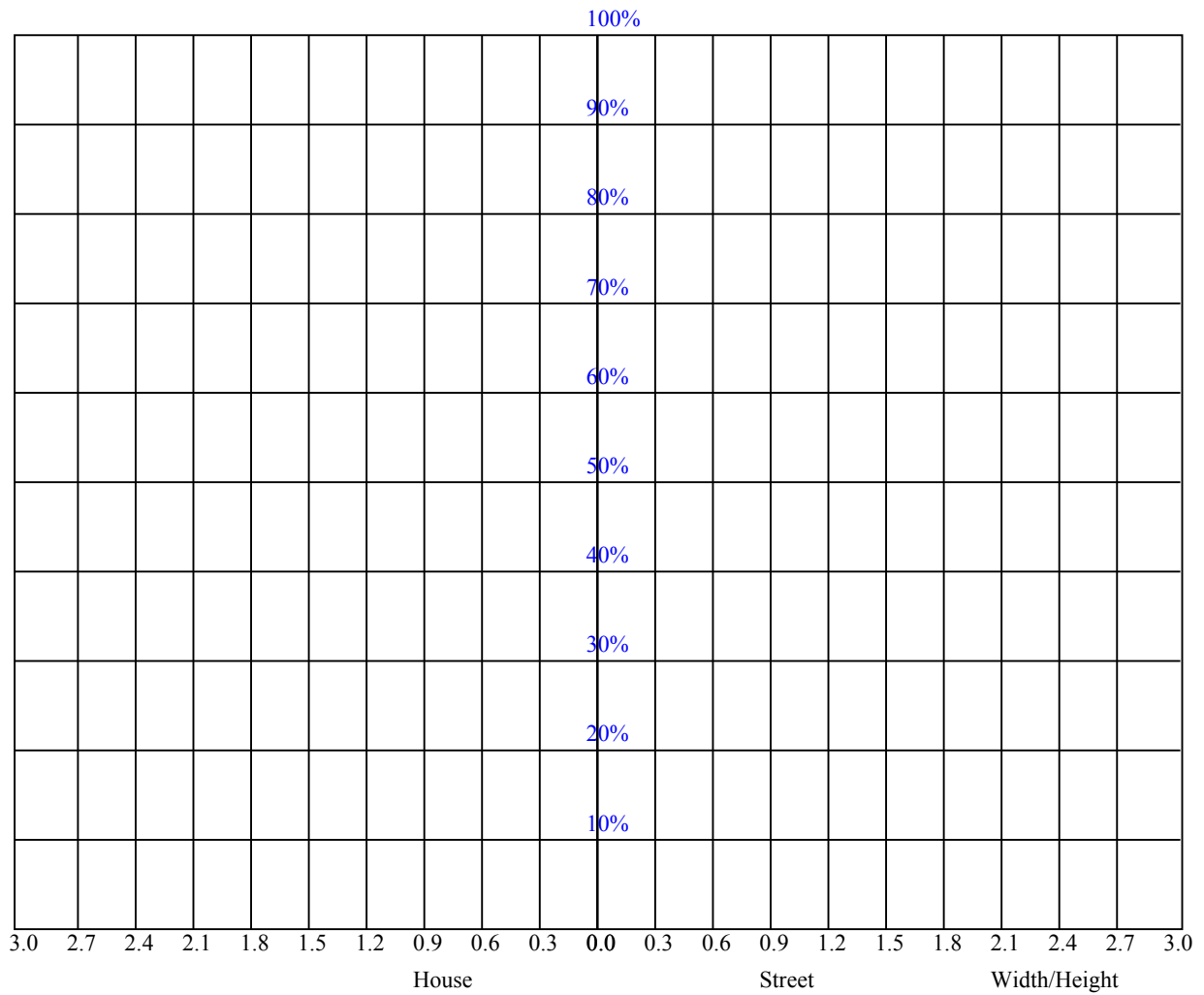
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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 RHOF=20 CU															
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



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	261.51	260.74	259.65	257.47	254.52	251.38	246.89	241.58	234.97
45.0	261.32	260.42	258.50	254.97	249.52	242.86	234.40	224.40	213.44
90.0	260.93	259.78	256.25	250.10	240.81	230.04	216.32	201.58	184.59
135.0	261.44	261.70	260.23	257.53	252.54	246.45	238.63	229.40	218.50
180.0	261.51	262.02	260.74	259.78	257.66	254.65	250.80	245.61	239.08
225.0	261.32	259.78	257.02	252.66	246.77	239.40	229.78	219.97	208.50
270.0	260.93	258.95	254.46	247.28	237.22	225.55	211.96	196.07	179.47
315.0	261.44	259.59	256.12	251.19	244.20	235.74	226.45	216.13	204.21
360.0	261.51	260.74	259.65	257.47	254.52	251.38	246.89	241.58	234.97

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	227.41	219.33	210.68	201.58	191.77	182.48	172.10	162.23	152.42
45.0	201.84	189.53	177.22	164.28	152.23	140.30	128.77	118.32	108.83
90.0	167.16	149.15	129.22	109.99	90.57	70.38	50.70	33.14	17.05
135.0	207.48	195.11	182.54	169.92	156.59	144.21	132.42	120.69	110.37
180.0	232.09	223.82	214.21	204.21	193.76	182.54	171.58	160.50	150.18
225.0	196.64	184.21	171.33	158.57	145.62	133.77	122.61	111.97	102.10
270.0	160.88	141.52	122.42	102.23	82.75	63.71	44.55	27.69	13.33
315.0	192.35	179.60	167.16	154.92	142.55	131.14	120.18	110.56	101.14
360.0	227.41	219.33	210.68	201.58	191.77	182.48	172.10	162.23	152.42

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	142.87	133.45	124.67	116.01	108.26	100.37	93.39	86.53	79.54
45.0	99.41	91.08	84.16	77.62	72.36	67.11	62.62	58.33	53.33
90.0	6.47	5.00	4.81	4.74	4.74	4.62	4.62	4.55	4.55
135.0	100.69	92.49	84.80	78.00	72.43	67.24	61.98	55.70	46.15
180.0	140.18	131.01	121.91	113.64	105.44	98.07	90.70	83.13	75.76
225.0	93.90	86.53	79.93	74.35	68.07	58.90	53.97	48.07	40.64
270.0	5.00	4.62	4.49	4.42	4.36	4.36	4.29	4.29	4.36
315.0	93.26	85.76	79.61	74.22	69.22	64.93	60.63	56.60	51.66
360.0	142.87	133.45	124.67	116.01	108.26	100.37	93.39	86.53	79.54

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	73.00	65.83	57.30	47.30	37.62	27.63	18.01	8.08	4.29
45.0	47.49	41.28	34.48	28.01	21.22	14.23	7.63	4.81	4.55
90.0	4.55	4.55	4.55	4.62	4.68	4.81	4.81	4.87	4.81
135.0	36.86	29.48	25.38	21.34	15.96	10.45	6.22	4.74	4.68
180.0	67.69	59.29	49.61	39.74	29.74	20.38	10.51	4.68	4.23
225.0	33.52	29.93	26.47	21.86	15.90	10.32	5.83	4.81	4.68
270.0	4.36	4.42	4.49	4.55	4.62	4.68	4.74	4.81	4.81
315.0	46.02	39.74	33.46	26.98	20.13	13.40	6.73	4.55	4.49
360.0	73.00	65.83	57.30	47.30	37.62	27.63	18.01	8.08	4.29

C/γ(°)	180.0
0.0	4.29
45.0	4.55
90.0	4.87
135.0	4.55
180.0	4.29
225.0	4.55
270.0	4.87
315.0	4.55
360.0	4.29