



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
www.bellingtest.com

Tel:0755-29351191 Fax:0755-29351120

Address:1 F,No.1 building,Meibaoh industrial park,Dalang street,Longhua district,Shenzhen,China

LumCAT: LL4RBX-41K

Luminaire:

Report No:

Voltage(V): 120.05

Test No:

Current(A): 0.0901

LampCAT:

Power (W): 10.5550

Lamp flux(lm): 653.4

PF: 0.9752

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 653.39

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 61.90

Central intensity(cd): 233.746

Maximum intensity(cd): 240.410

Angle of maximum intensity: C=180.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=108.7

[C90/270]Total=107.7

Field angle(10%Imax): [C0/180]Total=158.2

[C90/270]Total=158.0

Maximum s/h(1/2): C0_180=1.36 C90_270=1.12

Maximum s/h(1/4): C0_180=1.46 C90_270=1.24

Up flux rate of lamp(%): 0.47%

Down flux rate of lamp(%): 98.46%

Up flux rate of LUM(%): -0.61%

Down flux rate of LUM(%): 99.53%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.733%

Equipment: GMS-3000
Temperature(°C): 25

Date:
Humidity(%): 58%

Operator: Sam

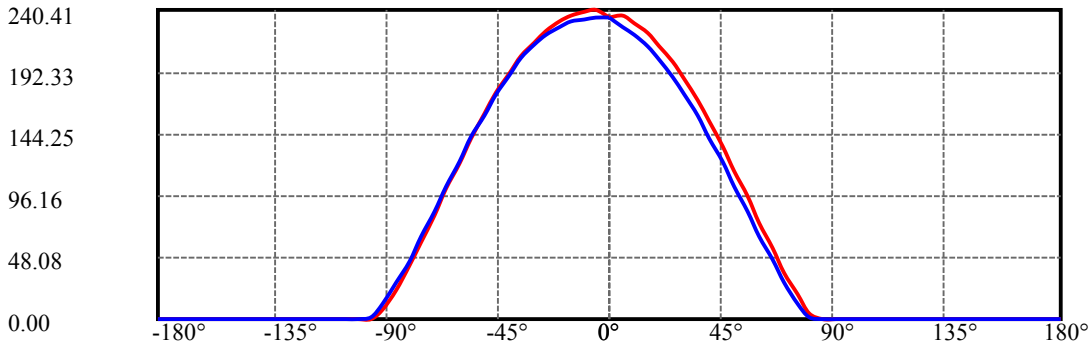
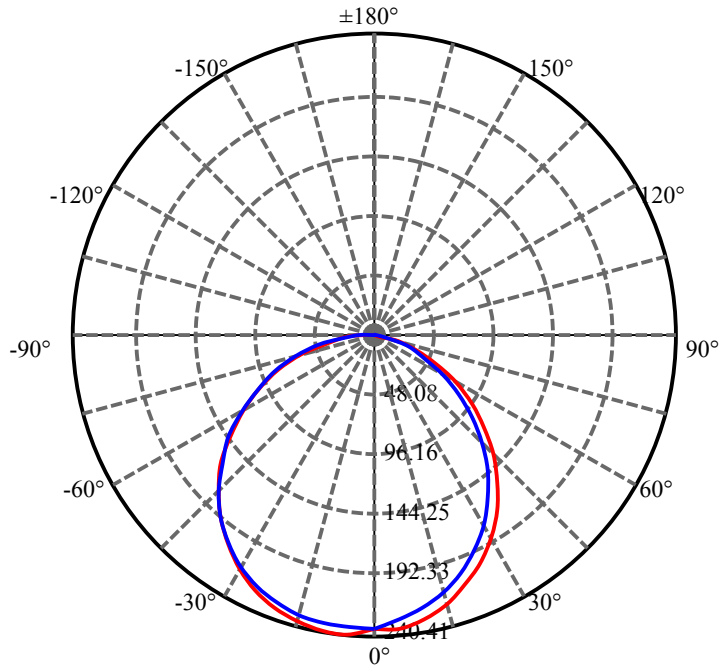
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	233.746	0.000	0	.000%	.000%
5.0	232.378	5.574	5.574	.853%	.853%
10.0	229.130	16.526	22.1	2.529%	3.382%
15.0	223.776	26.910	49.01	4.119%	7.501%
20.0	216.402	36.361	85.371	5.565%	13.066%
25.0	206.892	44.535	129.905	6.816%	19.882%
30.0	195.480	51.131	181.036	7.825%	27.707%
35.0	182.049	55.882	236.918	8.553%	36.260%
40.0	166.965	58.599	295.517	8.968%	45.228%
45.0	150.271	59.197	354.714	9.060%	54.288%
50.0	132.393	57.666	412.38	8.826%	63.114%
55.0	113.768	54.141	466.52	8.286%	71.400%
60.0	94.602	48.827	515.347	7.473%	78.873%
65.0	75.597	42.080	557.427	6.440%	85.313%
70.0	56.825	34.256	591.683	5.243%	90.556%
75.0	38.932	25.735	617.418	3.939%	94.495%
80.0	23.321	17.305	634.723	2.649%	97.143%
85.0	12.890	10.338	645.061	1.582%	98.725%
90.0	5.223	5.218	650.279	.799%	99.524%
95.0	0.614	1.664	651.944	.255%	99.779%
100.0	0.234	0.231	652.174	.035%	99.814%
105.0	0.234	0.125	652.299	.019%	99.833%
110.0	0.234	0.122	652.422	.019%	99.852%
115.0	0.234	0.119	652.54	.018%	99.870%
120.0	0.234	0.114	652.654	.017%	99.887%
125.0	0.234	0.108	652.762	.017%	99.904%
130.0	0.234	0.102	652.864	.016%	99.920%
135.0	0.234	0.095	652.959	.014%	99.934%
140.0	0.234	0.087	653.045	.013%	99.947%
145.0	0.234	0.078	653.123	.012%	99.959%
150.0	0.234	0.069	653.192	.011%	99.970%
155.0	0.234	0.059	653.251	.009%	99.979%
160.0	0.234	0.049	653.301	.008%	99.986%
165.0	0.234	0.039	653.339	.006%	99.992%
170.0	0.234	0.028	653.367	.004%	99.996%
175.0	0.249	0.017	653.384	.003%	99.999%
180.0	0.234	0.006	653.39	.001%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	181.04	27.71%	27.71%
0-40	295.52	45.23%	45.23%
0-60	515.35	78.87%	78.87%
0-90	650.28	99.52%	99.52%
0-120	652.65	99.89%	99.89%
0-180	653.39	100.00%	100.00%
60-90	183.76	28.12%	28.12%
90-120	7.59	1.16%	1.16%
90-130	7.80	1.19%	1.19%
90-150	8.13	1.24%	1.24%
90-180	8.32	1.27%	1.27%
0-60.88	522.71	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	22.10
10-20	63.27
20-30	95.67
30-40	114.48
40-50	116.86
50-60	102.97
60-70	76.34
70-80	43.04
80-90	15.56
90-100	1.89
100-110	0.25
110-120	0.23
120-130	0.21
130-140	0.18
140-150	0.15
150-160	0.11
160-170	0.07
170-180	0.02

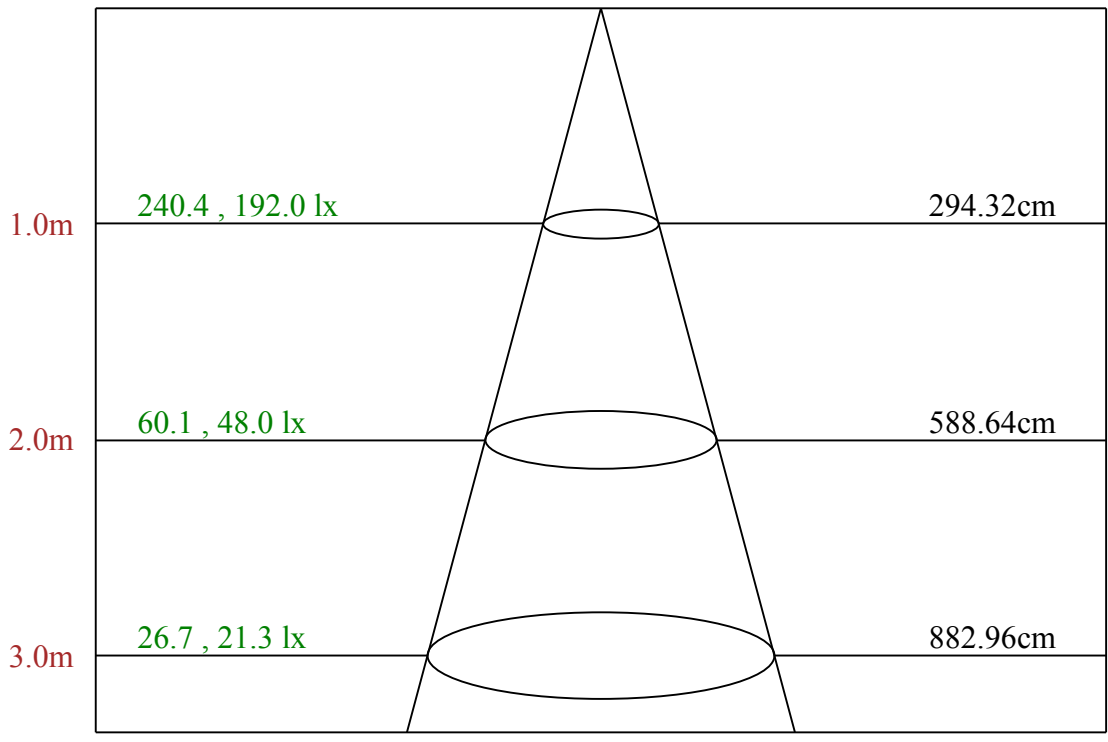


C0/C180: —

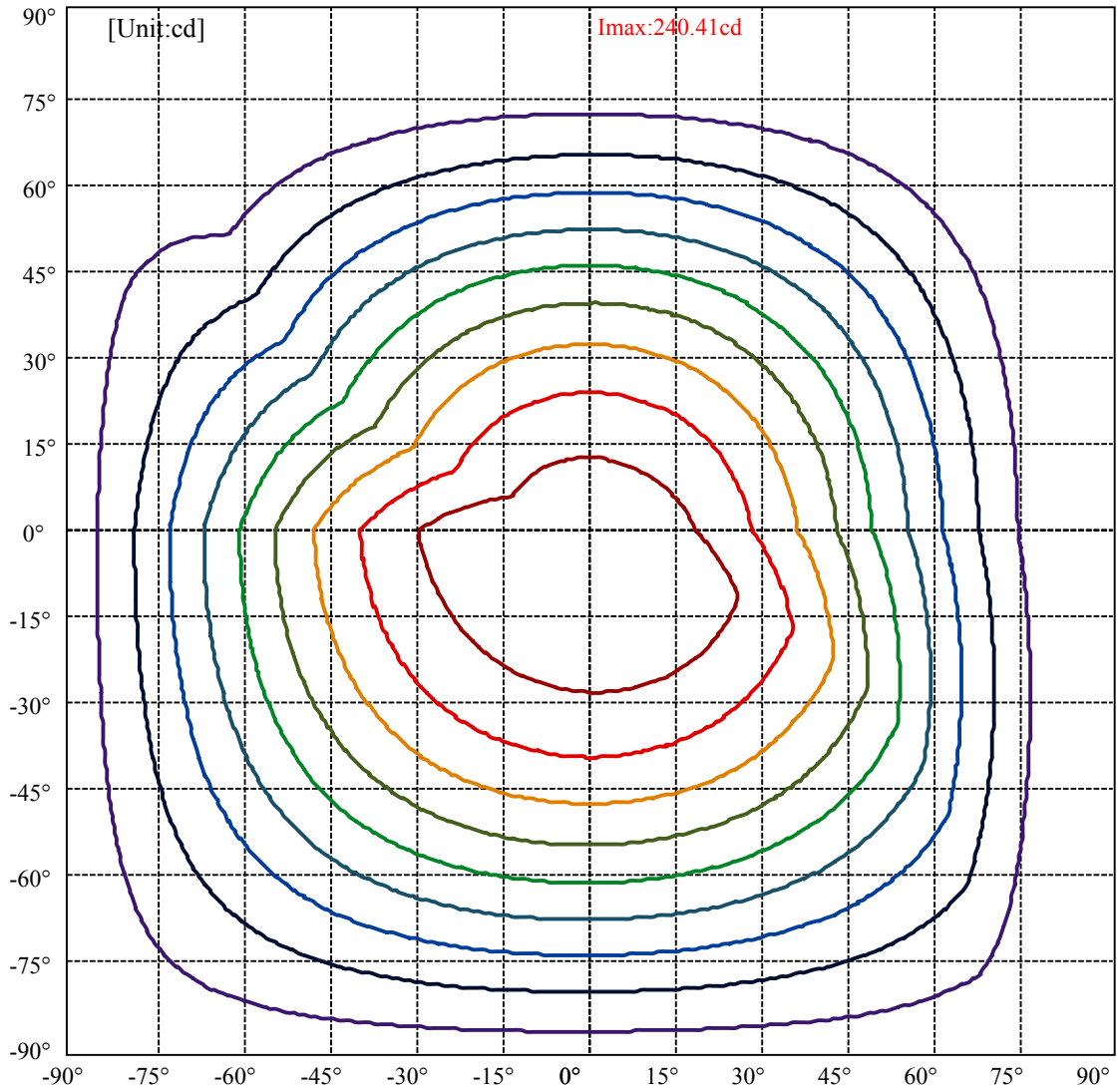
C90/C270: —

Field angle(10%Imax):C0/180Left:79.6 Right:78.6
:C90/270Left:81.4 Right:76.6

Beam Angle(50%Imax):C0/180Left:55.2 Right:53.5
:C90/270Left:56.5 Right:51.2



Max , Ave Beam angle of C180 plane 109.90

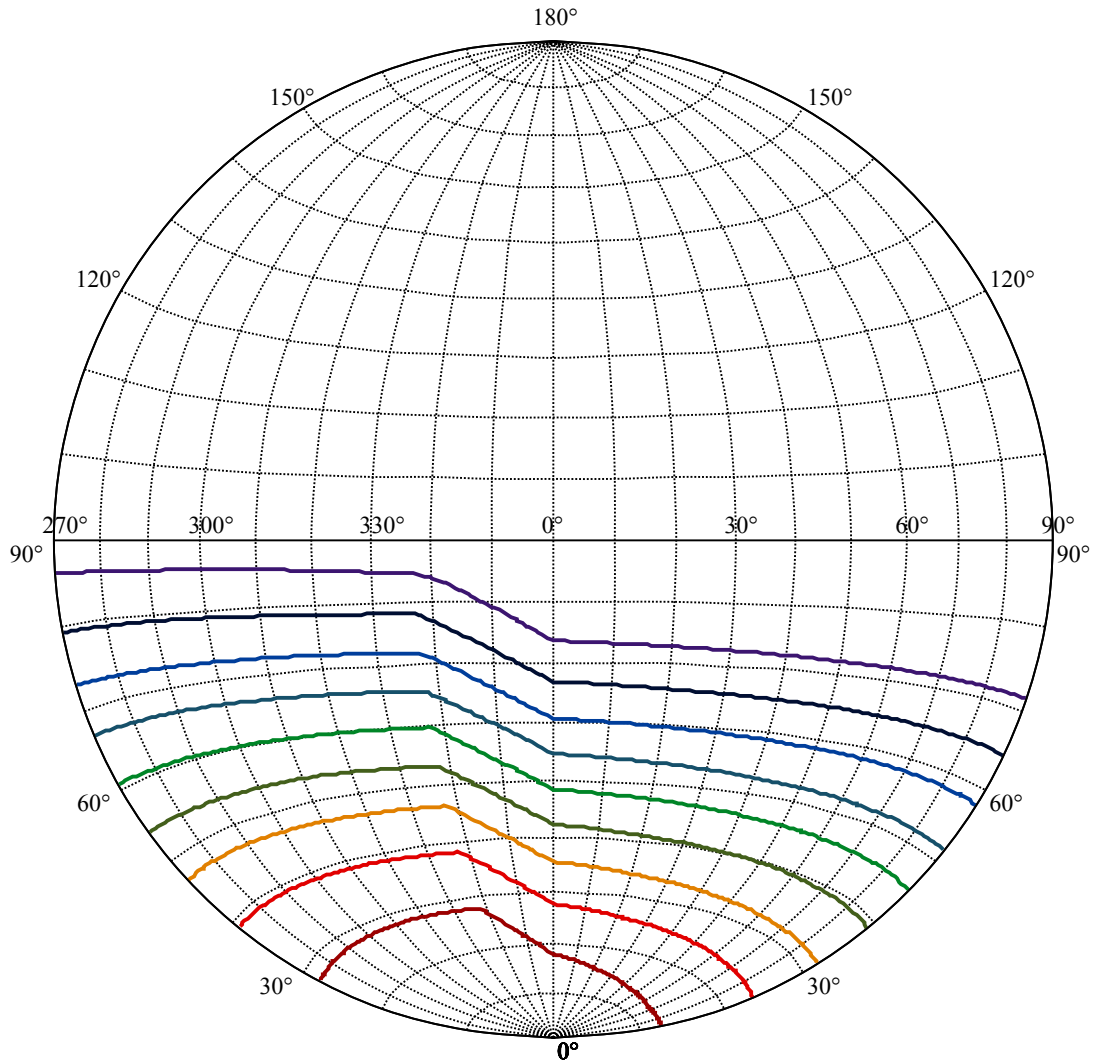


- (10%Imax) 24.041
- (20%Imax) 48.082
- (30%Imax) 72.123
- (40%Imax) 96.164
- (50%Imax) 120.205
- (60%Imax) 144.246
- (70%Imax) 168.287
- (80%Imax) 192.328
- (90%Imax) 216.369

Equipment: GMS-3000
Temperature(°C): 25

Date:
Humidity(%): 58%

Operator: Sam



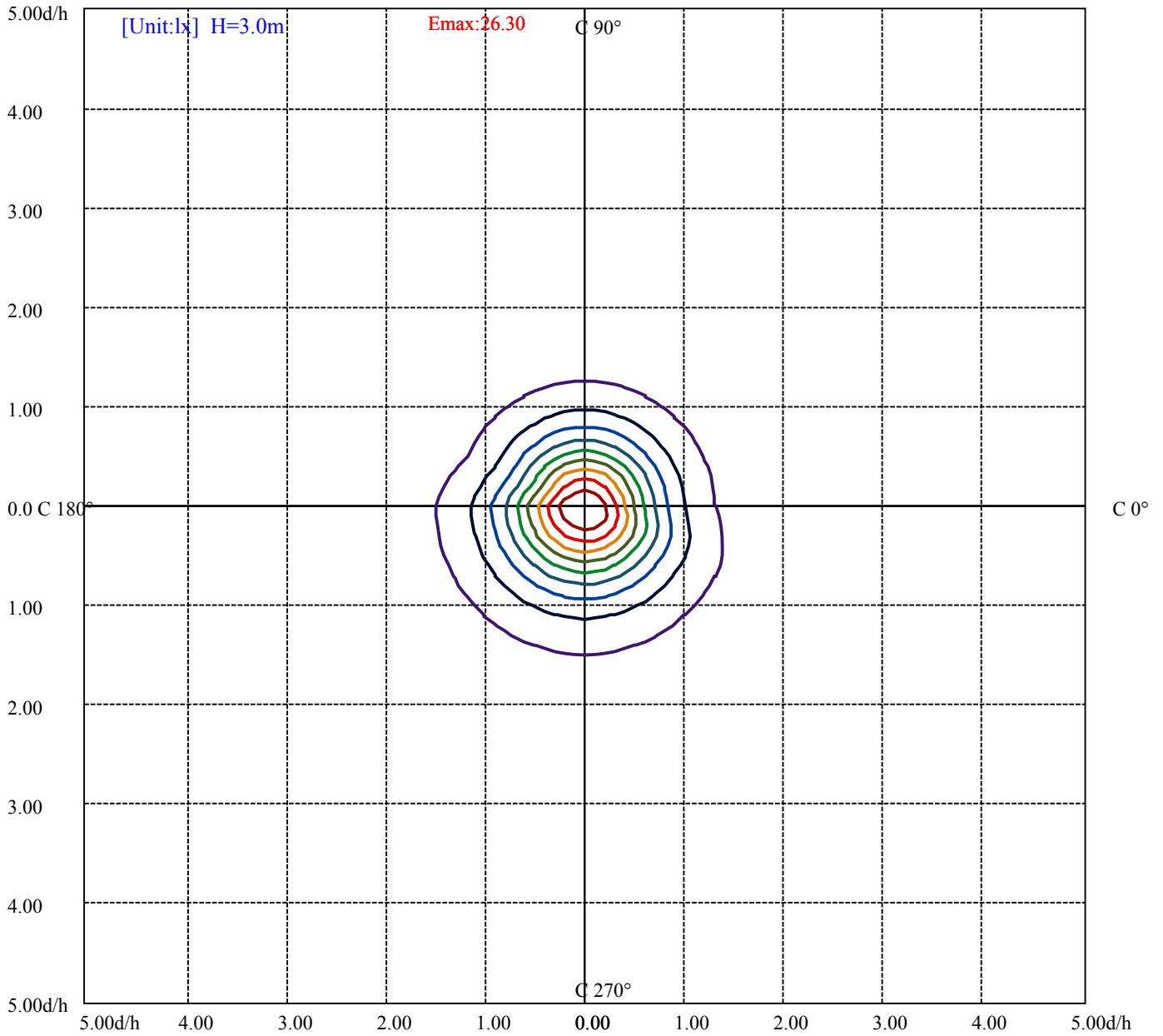
House

[Unit:cd]

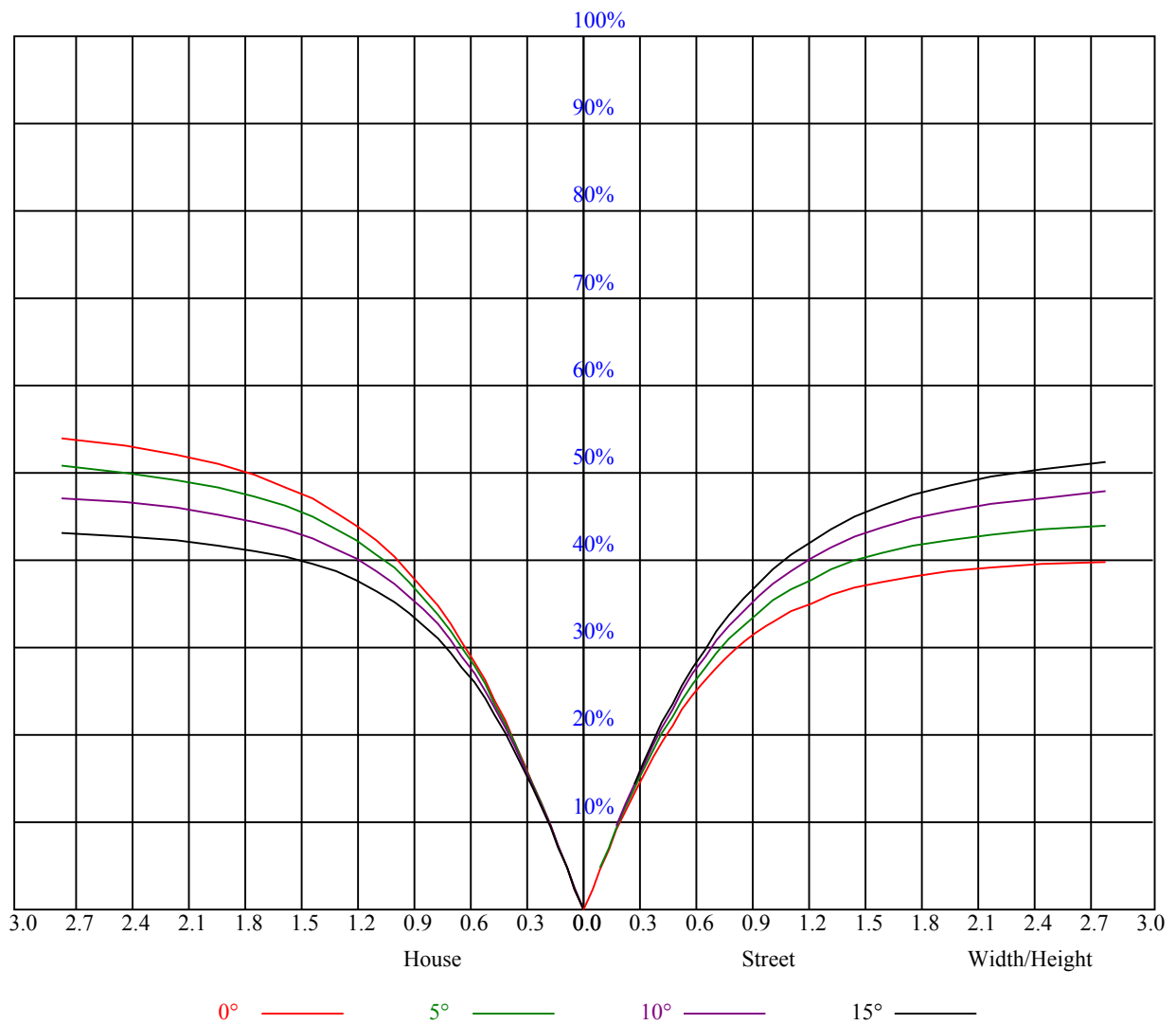
Road

Imax:240.41

(10%Imax) 24.041	
(20%Imax) 48.082	
(30%Imax) 72.123	
(40%Imax) 96.164	
(50%Imax) 120.205	
(60%Imax) 144.246	
(70%Imax) 168.287	
(80%Imax) 192.328	
(90%Imax) 216.369	



(10%Emax) 2.630178	—
(20%Emax) 5.260355	—
(30%Emax) 7.890522	—
(40%Emax) 10.5207	—
(50%Emax) 13.15089	—
(60%Emax) 15.781	—
(70%Emax) 18.41122	—
(80%Emax) 21.04144	—
(90%Emax) 23.67156	—



LL4RBX-41K

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	233.75	235.50	229.88	222.39	212.55	200.38	186.10	170.65	153.56
22.5	233.75	230.81	225.20	217.24	207.40	195.00	180.95	165.03	147.48
45.0	233.75	228.47	222.39	213.96	204.13	191.72	177.44	161.29	144.20
67.5	233.75	226.83	220.28	212.32	202.02	189.38	174.87	159.18	141.62
90.0	233.75	227.07	220.75	212.09	201.32	188.68	174.40	158.25	140.69
112.5	233.75	228.24	221.22	212.55	202.25	189.38	175.10	158.71	141.16
135.0	233.75	228.71	222.85	214.19	203.19	190.78	176.50	160.35	142.56
157.5	233.75	229.88	223.79	215.60	205.30	192.66	178.14	162.22	145.37
180.0	233.75	240.41	239.47	236.43	231.05	224.26	215.36	204.13	190.78
202.5	233.75	235.96	235.03	232.22	228.00	221.22	212.79	202.02	189.15
225.0	233.75	233.39	233.15	231.05	226.37	220.28	211.85	201.32	189.38
247.5	233.75	232.92	233.15	230.58	226.60	220.28	212.32	201.79	189.38
270.0	233.75	233.86	233.62	231.52	227.30	220.75	213.02	202.49	189.85
292.5	233.75	234.56	234.56	232.22	228.00	221.92	213.02	202.25	189.61
315.0	233.75	235.50	235.03	232.92	228.71	221.92	213.26	202.02	188.91
337.5	233.75	235.96	235.73	233.15	228.24	221.68	212.55	201.08	187.74
360.0	233.75	235.50	229.88	222.39	212.55	200.38	186.10	170.65	153.56
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	134.13	114.24	95.04	74.68	54.78	36.05	19.20	4.92	0.23
22.5	129.22	110.02	90.36	70.46	51.03	33.48	16.62	3.51	0.23
45.0	125.00	106.04	86.38	67.18	48.93	30.90	14.75	2.58	0.23
67.5	122.90	103.23	84.51	65.55	47.05	29.26	13.58	2.11	0.23
90.0	121.73	102.30	83.10	64.38	46.12	28.56	12.64	1.87	0.23
112.5	122.66	103.00	84.04	64.84	46.12	29.50	13.58	2.34	0.23
135.0	124.54	105.58	85.91	66.48	48.22	30.67	14.98	2.34	0.23
157.5	126.88	107.68	88.25	68.82	50.56	32.30	17.09	4.92	0.23
180.0	176.04	159.42	140.69	120.79	101.36	81.23	60.40	41.20	22.71
202.5	174.63	158.48	140.69	121.49	101.60	81.93	62.27	42.84	24.81
225.0	175.10	158.71	140.92	122.43	103.47	83.10	63.44	44.48	26.22
247.5	174.87	158.95	141.16	122.43	104.40	84.04	64.61	45.65	27.39
270.0	174.87	158.48	141.16	122.66	103.47	84.27	64.84	45.41	27.86
292.5	174.87	158.25	140.45	121.73	102.77	83.10	63.20	44.95	26.92
315.0	173.93	157.78	139.99	120.56	100.89	81.46	62.03	42.84	25.52
337.5	172.99	156.14	137.65	119.15	98.79	79.36	59.69	41.20	22.94
360.0	134.13	114.24	95.04	74.68	54.78	36.05	19.20	4.92	0.23
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
22.5	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
45.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
67.5	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
90.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
112.5	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
135.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
157.5	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
180.0	7.96	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
202.5	9.60	0.94	0.23	0.23	0.23	0.23	0.23	0.23	0.23
225.0	10.77	1.17	0.23	0.23	0.23	0.23	0.23	0.23	0.23
247.5	11.71	1.41	0.23	0.23	0.23	0.23	0.23	0.23	0.23
270.0	11.71	1.64	0.23	0.23	0.23	0.23	0.23	0.23	0.23
292.5	11.24	1.17	0.23	0.23	0.23	0.23	0.23	0.23	0.23
315.0	10.07	0.94	0.23	0.23	0.23	0.23	0.23	0.23	0.23
337.5	8.66	0.47	0.23	0.23	0.23	0.23	0.23	0.23	0.23
360.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23

LL4RBX-41K

Intensity data(cd)

Appendix Page: 11 Total:11

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
22.5	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
45.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.47
67.5	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
90.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
112.5	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
135.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
157.5	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
180.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
202.5	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
225.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
247.5	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
270.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
292.5	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
315.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
337.5	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
360.0	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
C/γ(°)	180.0								
0.0	0.23								
22.5	0.23								
45.0	0.23								
67.5	0.23								
90.0	0.23								
112.5	0.23								
135.0	0.23								
157.5	0.23								
180.0	0.23								
202.5	0.23								
225.0	0.23								
247.5	0.23								
270.0	0.23								
292.5	0.23								
315.0	0.23								
337.5	0.23								
360.0	0.23								