



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
www.bellingtest.com
Email:assitant@bellingtest.com
Tel:0755-29351191 Fax:0755-29351120
Address:1 F,No.1 building,Meibaohe industrial park,Dalang street,Longhua district,Shenzhen,China

LumCAT:

Luminaire:

Report No: N/A

Test No: N/A

LampCAT:

Lamp flux(lm): 6954.2

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 120.05

Current(A): 0.4459

Power (W): 53.1610

PF: 0.9923

Ballast type:

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 6954.21

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 130.81

Central intensity(cd): 2091.189

Maximum intensity(cd): 2921.121

Angle of maximum intensity: C=90.0 γ =50.0

Beam Angle(50%Imax): [C0/180]Total=89.2

[C90/270]Total=131.4

Field angle(10%Imax): [C0/180]Total=157.5

[C90/270]Total=196.1

Maximum s/h(1/2): C0_180=1.22 C90_270=2.28

Maximum s/h(1/4): C0_180=1.74 C90_270=2.18

Up flux rate of lamp(%): 10.91%

Down flux rate of lamp(%): 89.09%

Up flux rate of LUM(%): 10.91%

Down flux rate of LUM(%): 89.09%

CIE Type : Semidirect lighting

Output flux ratio in π solid angle : 56.507%

Equipment: GMS-3000
Temperature($^{\circ}$ C): 25.2

Date:
Humidity(%): 60%

Operator: Sam

Zonal flux distribution table

Page: 2 Total:11

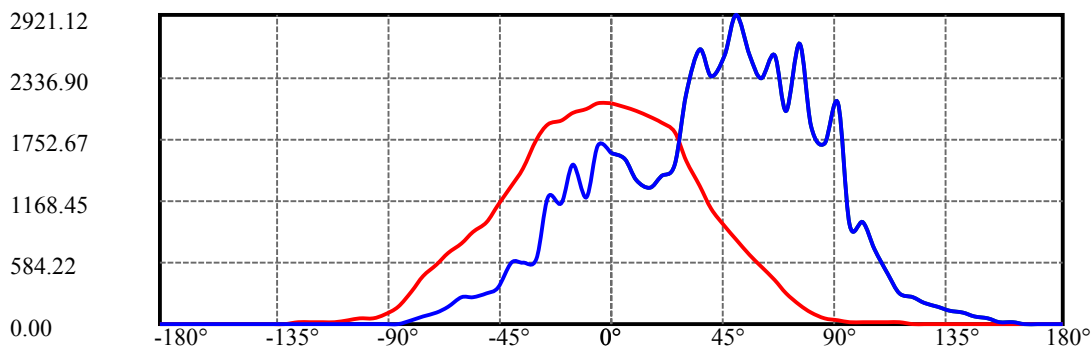
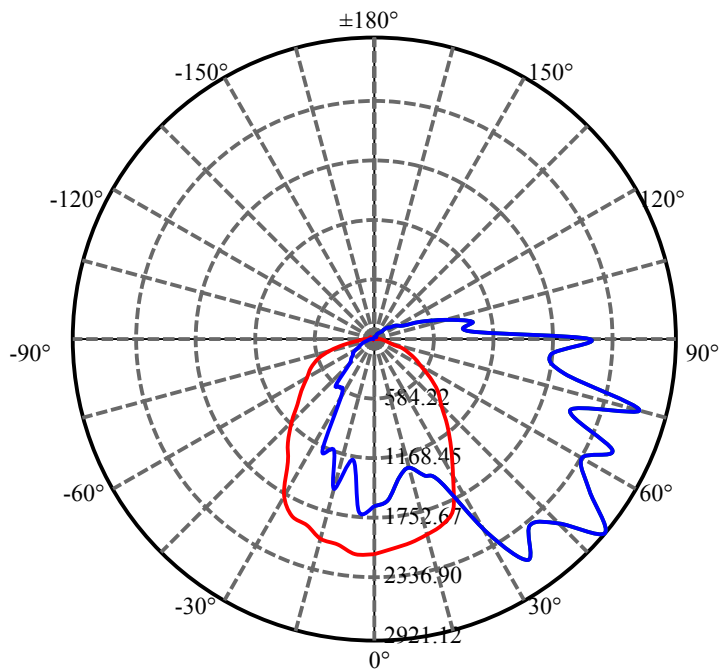
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1774.251	.000	.000	.000%	.000%
5.0	1740.122	42.013	42.013	.604%	.604%
10.0	1542.712	117.437	159.451	1.689%	2.293%
15.0	1437.467	176.782	336.233	2.542%	4.835%
20.0	1421.530	235.622	571.854	3.388%	8.223%
25.0	1339.138	289.543	861.397	4.164%	12.387%
30.0	1303.655	334.448	1195.845	4.809%	17.196%
35.0	1349.362	390.675	1586.520	5.618%	22.814%
40.0	1260.956	435.512	2022.032	6.263%	29.076%
45.0	1191.043	454.008	2476.040	6.529%	35.605%
50.0	1204.424	484.039	2960.079	6.960%	42.565%
55.0	1091.361	499.180	3459.259	7.178%	49.743%
60.0	943.417	470.333	3929.592	6.763%	56.507%
65.0	927.029	454.709	4384.301	6.539%	63.045%
70.0	774.123	430.742	4815.043	6.194%	69.239%
75.0	818.927	416.398	5231.441	5.988%	75.227%
80.0	581.975	374.842	5606.283	5.390%	80.617%
85.0	508.409	296.284	5902.567	4.260%	84.878%
90.0	561.091	292.838	6195.404	4.211%	89.089%
95.0	307.902	237.937	6433.341	3.421%	92.510%
100.0	283.996	160.833	6594.174	2.313%	94.823%
105.0	194.192	127.950	6722.124	1.840%	96.663%
110.0	92.210	74.861	6796.985	1.076%	97.739%
115.0	79.430	43.460	6840.445	.625%	98.364%
120.0	60.486	34.014	6874.459	.489%	98.853%
125.0	46.052	24.626	6899.085	.354%	99.207%
130.0	38.249	18.330	6917.415	.264%	99.471%
135.0	31.483	14.090	6931.505	.203%	99.674%
140.0	23.019	10.091	6941.597	.145%	99.819%
145.0	15.757	6.469	6948.066	.093%	99.912%
150.0	9.547	3.726	6951.792	.054%	99.965%
155.0	4.135	1.731	6953.523	.025%	99.990%
160.0	1.338	.574	6954.098	.008%	99.998%
165.0	.000	.110	6954.208	.002%	100.000%
170.0	.000	.000	6954.208	.000%	100.000%
175.0	.000	.000	6954.208	.000%	100.000%
180.0	.000	.000	6954.208	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1195.85	17.20%	17.20%
0-40	2022.03	29.08%	29.08%
0-60	3929.59	56.51%	56.51%
0-90	6195.40	89.09%	89.09%
0-120	6874.46	98.85%	98.85%
0-180	6954.21	100.00%	100.00%
60-90	2736.15	39.35%	39.35%
90-120	971.89	13.98%	13.98%
90-130	1014.85	14.59%	14.59%
90-150	1049.23	15.09%	15.09%
90-180	1051.64	15.12%	15.12%
0-79.43	5563.37	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	159.45
10-20	412.40
20-30	623.99
30-40	826.19
40-50	938.05
50-60	969.51
60-70	885.45
70-80	791.24
80-90	589.12
90-100	398.77
100-110	202.81
110-120	77.47
120-130	42.96
130-140	24.18
140-150	10.20
150-160	2.31
160-170	0.11
170-180	0.00



C90(Max):

C0/C180:

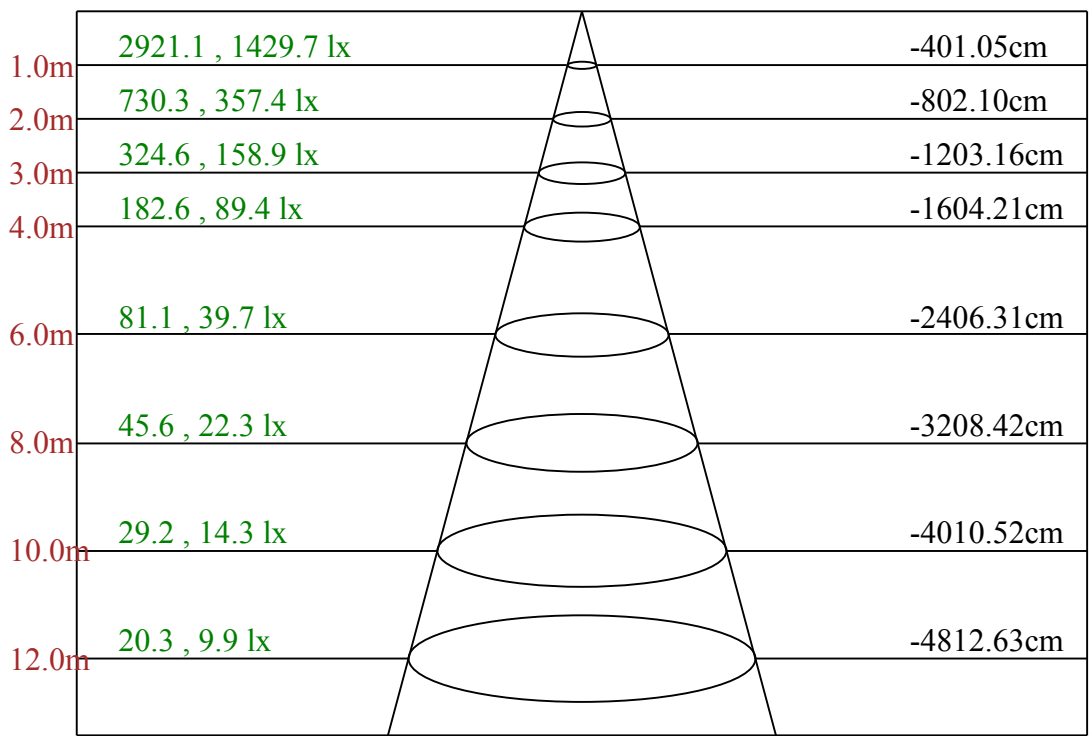
C90/C270:

Field angle(10%Imax):C0/180Left:83.6 Right:73.8

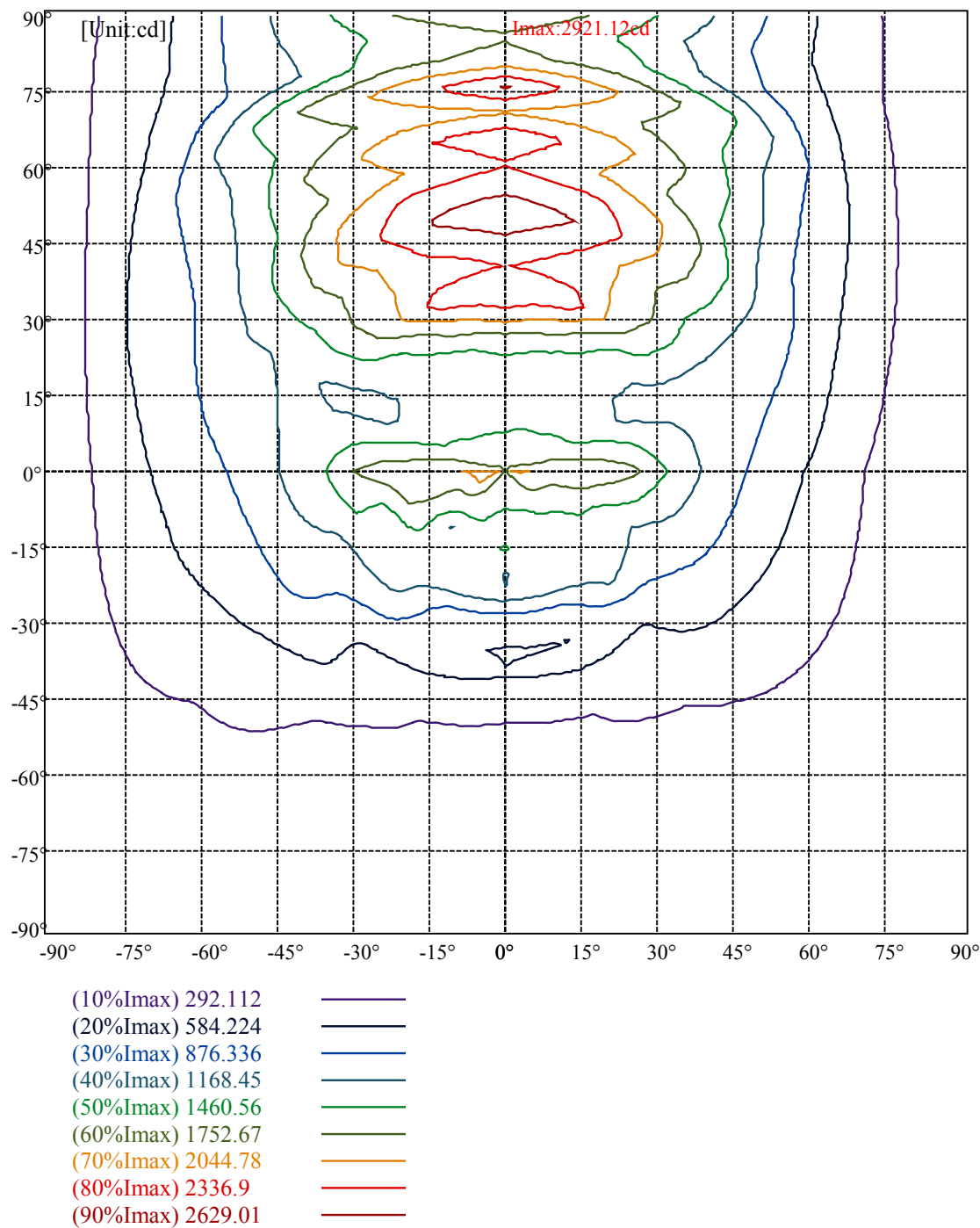
:C90/270Left:65.7 Right:130.4

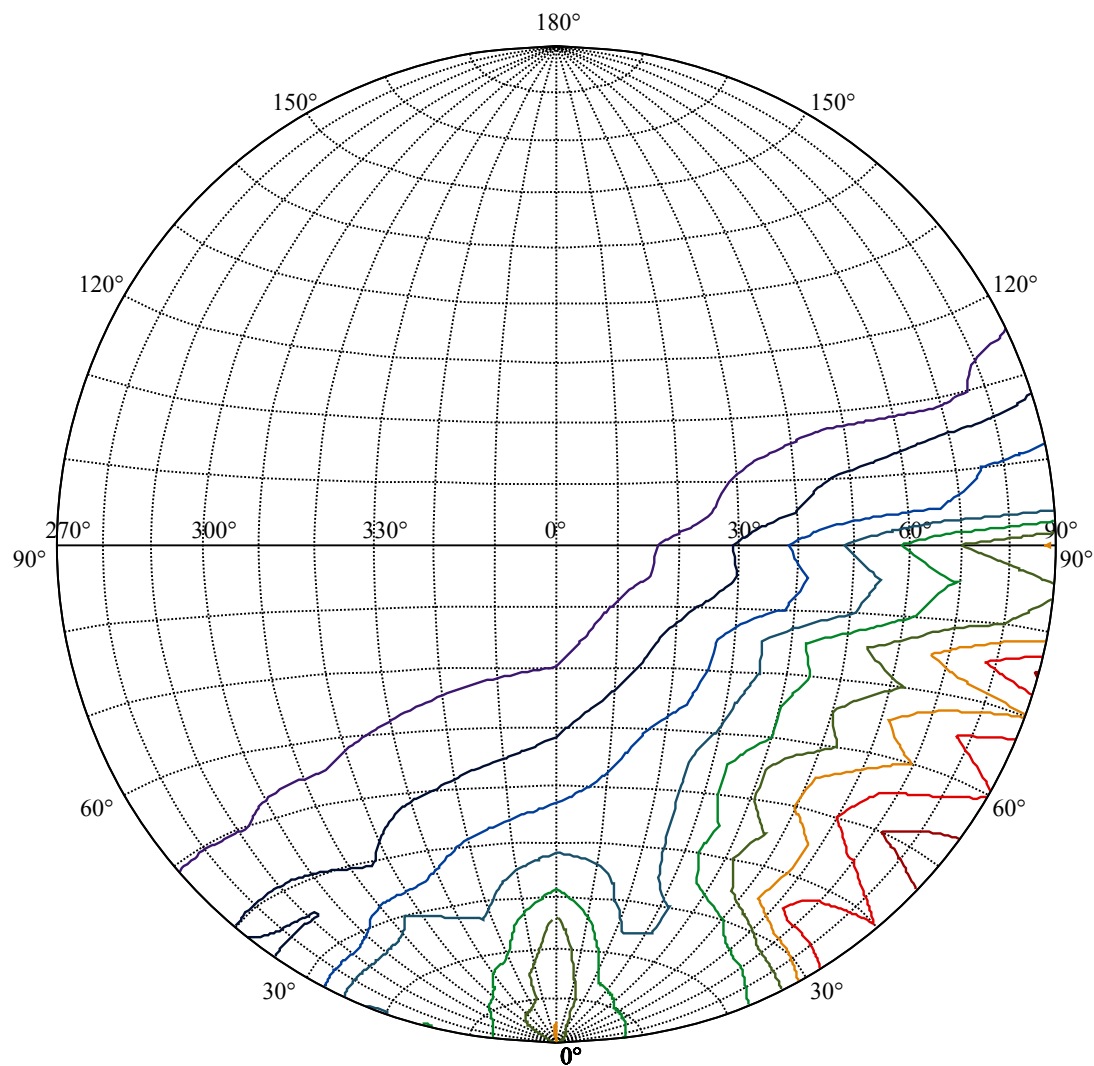
Beam Angle(50%Imax):C0/180Left:47.7 Right:41.5

:C90/270Left:28.3 Right:103.0



Max , Ave Beam angle of C90plane130.47



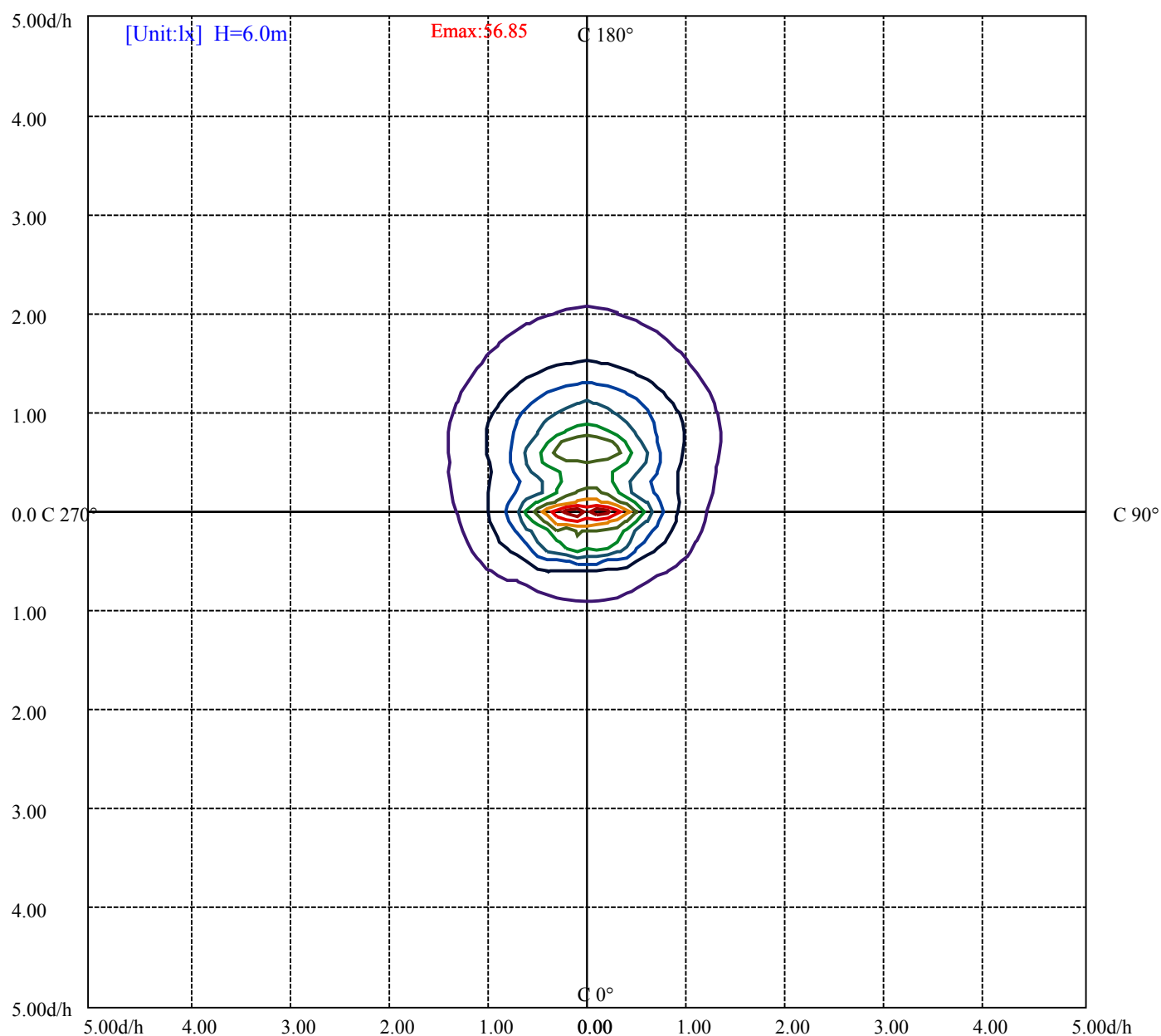


House

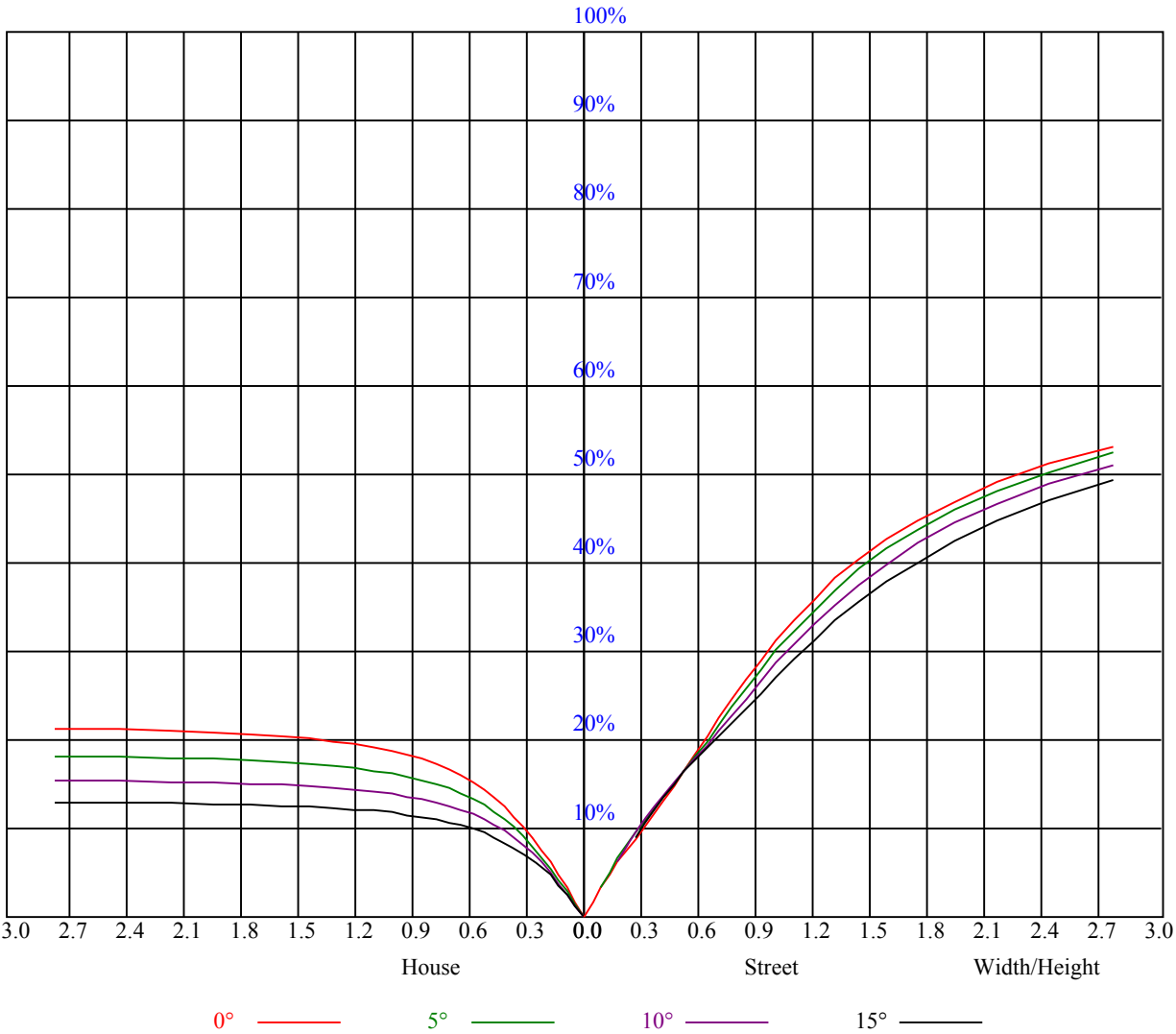
[Unit:cd]

Road

Imax:2921.12	
(10%Imax) 292.112	
(20%Imax) 584.224	
(30%Imax) 876.336	
(40%Imax) 1168.45	
(50%Imax) 1460.56	
(60%Imax) 1752.67	
(70%Imax) 2044.78	
(80%Imax) 2336.9	
(90%Imax) 2629.01	



(10%Emax)	5.685278	
(20%Emax)	11.37053	
(30%Emax)	17.05581	
(40%Emax)	22.74105	
(50%Emax)	28.42639	
(60%Emax)	34.11167	
(70%Emax)	39.79694	
(80%Emax)	45.48222	
(90%Emax)	51.1675	



Intensity data(cd)

Page: 10 Total:11

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	2091.19	2043.08	2009.40	1961.29	1913.18	1819.36	1537.90	1299.75	1095.27
22.5	1908.36	1607.66	1583.61	1429.65	1292.53	1128.95	1035.13	1064.00	1088.05
45.0	1735.16	1626.91	1463.33	1335.83	1220.36	1222.77	1333.43	1701.48	1853.04
67.5	1641.34	1614.88	1417.62	1306.96	1391.16	1453.71	1896.34	2500.14	2211.47
90.0	1619.69	1569.17	1369.51	1290.12	1403.19	1513.85	2177.79	2601.18	2346.18
112.5	1595.64	1559.55	1381.54	1268.47	1369.51	1453.71	1915.58	2488.11	2180.20
135.0	1730.35	1593.23	1427.24	1299.75	1237.20	1249.23	1400.78	1795.30	1922.80
157.5	1872.28	1552.33	1549.93	1393.57	1249.23	1107.30	1056.78	1080.84	1172.25
180.0	2091.19	2086.38	2023.83	1997.37	1915.58	1884.31	1742.38	1463.33	1299.75
202.5	1908.36	2098.41	1708.70	1727.94	1711.10	1184.28	1306.96	1090.46	1047.16
225.0	1735.16	1752.00	1598.04	1143.38	1242.01	1297.34	1239.61	996.64	618.96
247.5	1641.34	1713.51	1475.36	1249.23	1480.17	1215.55	703.16	597.31	683.91
270.0	1619.69	1684.64	1196.31	1497.01	1148.19	1189.09	621.37	578.07	587.69
292.5	1595.64	1660.59	1328.61	1210.74	1439.27	1193.90	652.64	580.47	626.18
315.0	1730.35	1701.48	1537.90	1278.10	1367.10	1292.53	1167.44	736.84	556.42
337.5	1872.28	1978.13	1612.47	1610.07	1364.70	1220.36	1071.21	1015.89	885.98
360.0	2091.19	2043.08	2009.40	1961.29	1913.18	1819.36	1537.90	1299.75	1095.27
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	931.69	792.16	652.64	546.79	424.11	294.21	183.55	104.16	48.83
22.5	1112.11	1080.84	1064.00	989.42	842.68	765.70	703.16	573.26	402.46
45.0	1720.73	1908.36	1917.99	1598.04	1622.10	1480.17	1547.52	1008.67	953.34
67.5	2312.50	2562.69	2360.62	2014.21	2194.63	1826.57	2069.54	1610.07	1434.46
90.0	2536.23	2921.12	2548.25	2314.91	2545.85	2016.62	2654.10	1877.09	1711.10
112.5	2370.24	2596.37	2403.92	2045.48	2257.18	1867.47	2160.95	1675.02	1533.09
135.0	1833.79	2026.24	1970.91	1679.83	1735.16	1557.15	1699.08	1044.75	1150.60
157.5	1222.77	1181.87	1201.12	1121.73	948.53	924.47	905.23	681.51	546.79
180.0	1133.76	970.18	861.93	760.89	669.48	566.04	450.57	308.64	171.52
202.5	970.18	780.14	626.18	508.30	421.70	277.37	188.36	118.60	80.11
225.0	556.42	537.17	337.51	260.53	183.55	128.22	87.32	53.65	22.37
247.5	395.24	301.42	241.28	202.79	185.95	121.00	80.11	44.02	3.13
270.0	337.51	282.18	253.31	246.09	169.11	116.19	75.30	34.40	0.00
292.5	373.59	286.99	234.07	205.20	176.33	113.79	80.11	39.21	3.13
315.0	489.06	438.54	296.61	226.85	166.71	118.60	75.30	46.43	17.56
337.5	760.89	604.53	491.46	373.59	289.39	212.42	142.65	92.14	56.05
360.0	931.69	792.16	652.64	546.79	424.11	294.21	183.55	104.16	48.83
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	34.40	27.18	19.97	17.56	15.16	10.34	7.94	3.13	0.00
22.5	385.62	226.85	188.36	128.22	80.11	51.24	34.40	24.78	17.56
45.0	1076.03	688.72	566.04	359.16	197.98	142.65	99.35	68.08	53.65
67.5	1711.10	885.98	828.25	575.66	173.93	234.07	183.55	147.46	130.62
90.0	2083.97	941.31	965.37	710.37	477.03	299.02	246.09	190.76	164.30
112.5	1795.30	919.66	917.26	633.40	135.44	255.72	195.58	161.90	142.65
135.0	1203.52	789.76	688.72	424.11	226.85	169.11	123.41	84.92	68.08
157.5	498.68	311.04	270.15	183.55	116.19	68.08	48.83	36.81	27.18
180.0	96.95	63.27	48.83	36.81	27.18	24.78	19.97	15.16	7.94
202.5	48.83	41.62	31.99	22.37	15.16	10.34	5.53	3.13	0.00
225.0	7.94	5.53	0.72	0.72	0.00	0.00	0.00	0.00	0.00
247.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
315.0	5.53	0.72	0.72	0.00	0.00	0.00	0.00	0.00	0.00
337.5	29.59	24.78	17.56	15.16	10.34	5.53	3.13	0.72	0.00
360.0	34.40	27.18	19.97	17.56	15.16	10.34	7.94	3.13	0.00

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.5	12.75	5.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.0	51.24	41.62	27.18	15.16	5.53	0.00	0.00	0.00	0.00
67.5	106.57	80.11	58.46	34.40	15.16	5.53	0.00	0.00	0.00
90.0	135.44	101.76	72.89	46.43	22.37	10.34	0.00	0.00	0.00
112.5	118.60	87.32	60.86	39.21	17.56	5.53	0.00	0.00	0.00
135.0	58.46	44.02	29.59	17.56	5.53	0.00	0.00	0.00	0.00
157.5	17.56	7.94	3.13	0.00	0.00	0.00	0.00	0.00	0.00
180.0	3.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C/γ(°)	180.0
0.0	0.00
22.5	0.00
45.0	0.00
67.5	0.00
90.0	0.00
112.5	0.00
135.0	0.00
157.5	0.00
180.0	0.00
202.5	0.00
225.0	0.00
247.5	0.00
270.0	0.00
292.5	0.00
315.0	0.00
337.5	0.00
360.0	0.00