



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

Tel:0755-21038430

Address:Rm. 108, No.1 Building, Meibaohe industrial park, No.14 Shilongzi Road, Dalang street, Longhua district, Shenzhen, China

Client:

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.06

LampCAT:

Current(A): 0.0940

Lamp flux(lm): -1.0

Power (W): 11.05

Number of Lamps: 0

PF: 0.9750

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 669.64, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 60.60

Central intensity(cd): 232.340, Maximum intensity(cd): 247.302

Angle of maximum intensity: C=90.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=109.6

[C90/270]Total=114.2

Field angle(10%Imax): [C0/180]Total=156.5

[C90/270]Total=161.0

Maximum s/h(1/2): C0_180=1.25 C90_270=1.28

Maximum s/h(1/4): C0_180=1.37 C90_270=1.40

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.69%

Down flux rate of LUM(%): 99.31%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.464%

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

Date:
Humidity(%): 58%

Operator: Tester

Zonal flux distribution table

Appendix Page: 2 Total:9

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	239.314	0.000	0	0.00%	0.00%
5.0	238.085	5.707	5.707	0.00%	0.85%
10.0	234.665	16.912	22.619	0.00%	3.38%
15.0	229.027	27.506	50.125	0.00%	7.49%
20.0	221.399	37.121	87.246	0.00%	13.03%
25.0	211.861	45.441	132.687	0.00%	19.81%
30.0	200.532	52.189	184.876	0.00%	27.61%
35.0	187.628	57.159	242.035	0.00%	36.14%
40.0	173.160	60.195	302.23	0.00%	45.13%
45.0	157.249	61.178	363.408	0.00%	54.27%
50.0	139.989	60.061	423.469	0.00%	63.24%
55.0	121.687	56.897	480.366	0.00%	71.74%
60.0	102.210	51.753	532.119	0.00%	79.46%
65.0	82.011	44.785	576.904	0.00%	86.15%
70.0	60.931	36.194	613.098	0.00%	91.56%
75.0	40.291	26.458	639.555	0.00%	95.51%
80.0	20.760	16.335	655.891	0.00%	97.95%
85.0	5.905	7.245	663.136	0.00%	99.03%
90.0	0.908	1.865	665.002	0.00%	99.31%
95.0	0.614	0.417	665.419	0.00%	99.37%
100.0	0.548	0.316	665.734	0.00%	99.42%
105.0	0.521	0.286	666.02	0.00%	99.46%
110.0	0.601	0.293	666.314	0.00%	99.50%
115.0	0.574	0.298	666.611	0.00%	99.55%
120.0	0.708	0.312	666.923	0.00%	99.59%
125.0	0.708	0.327	667.25	0.00%	99.64%
130.0	0.775	0.322	667.573	0.00%	99.69%
135.0	0.855	0.329	667.902	0.00%	99.74%
140.0	0.908	0.326	668.228	0.00%	99.79%
145.0	0.908	0.303	668.531	0.00%	99.83%
150.0	0.949	0.273	668.805	0.00%	99.88%
155.0	0.989	0.245	669.05	0.00%	99.91%
160.0	0.989	0.207	669.257	0.00%	99.94%
165.0	1.015	0.165	669.423	0.00%	99.97%
170.0	1.015	0.120	669.543	0.00%	99.99%
175.0	1.002	0.072	669.615	0.00%	100.00%
180.0	1.042	0.024	669.64	0.00%	100.00%

Equipment: GMS-3000
Temperature($^{\circ}\text{C}$): 25

Date:
Humidity(%): 58%

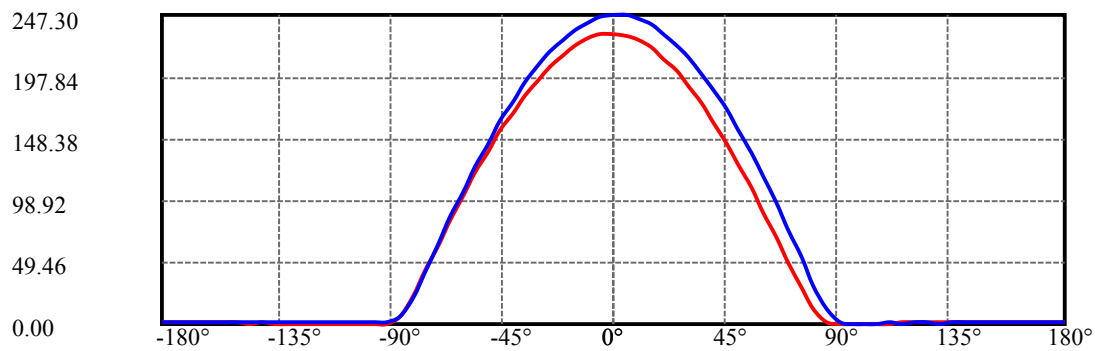
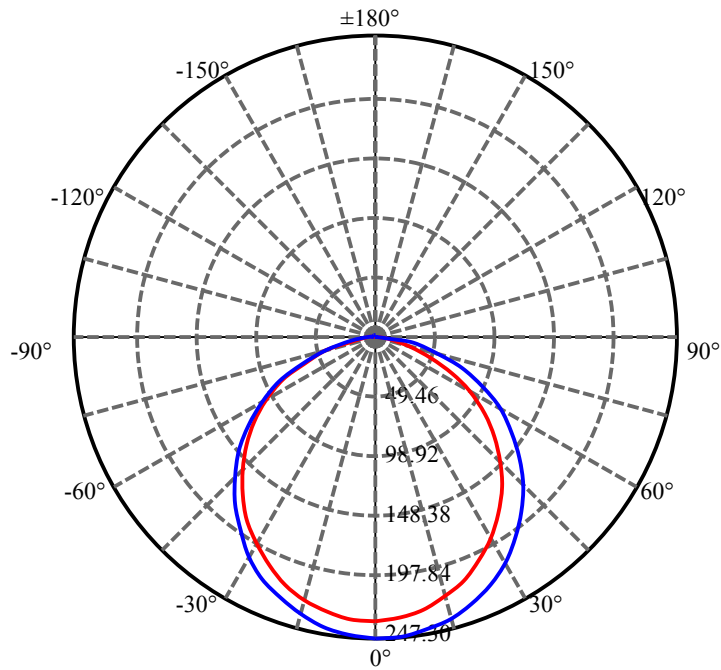
Operator: Tester

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	184.88	N.A.	27.61%
0-40	302.23	N.A.	45.13%
0-60	532.12	N.A.	79.46%
0-90	665.00	N.A.	99.31%
0-120	666.92	N.A.	99.59%
0-180	669.64	N.A.	100.00%
60-90	132.88	N.A.	19.84%
90-120	1.92	N.A.	0.29%
90-130	2.57	N.A.	0.38%
90-150	3.80	N.A.	0.57%
90-180	4.61	N.A.	0.69%
0-60.40	535.71	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	22.62
10-20	64.63
20-30	97.63
30-40	117.35
40-50	121.24
50-60	108.65
60-70	80.98
70-80	42.79
80-90	9.11
90-100	0.73
100-110	0.58
110-120	0.61
120-130	0.65
130-140	0.66
140-150	0.58
150-160	0.45
160-170	0.29
170-180	0.07

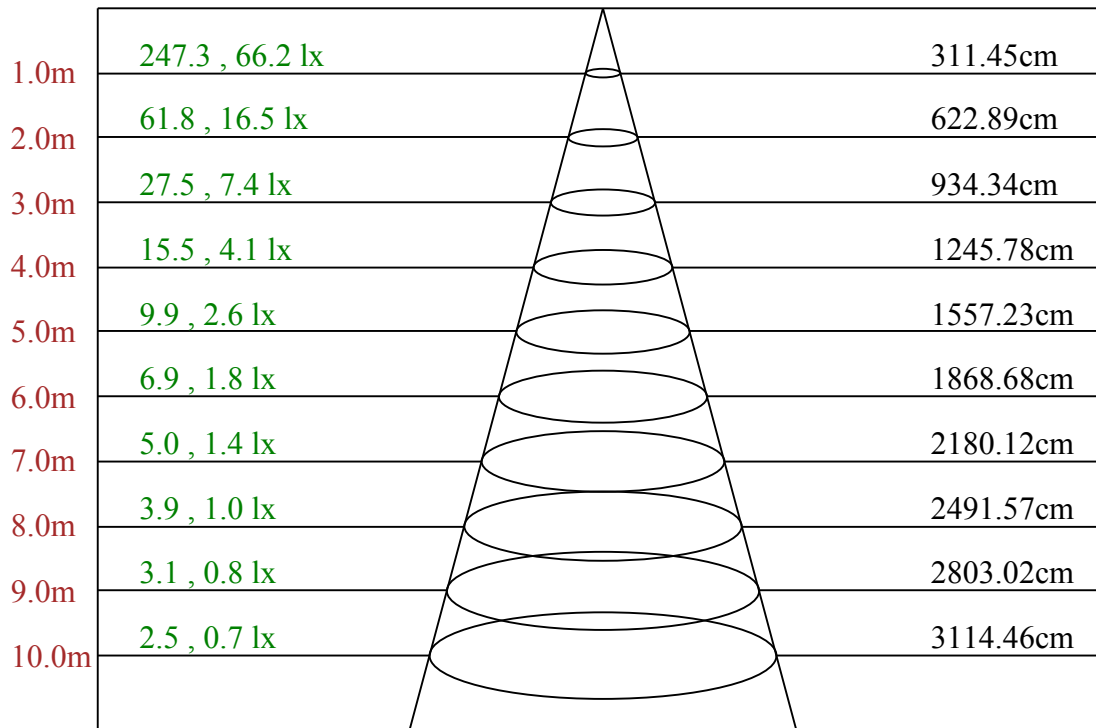


C0/C180: —

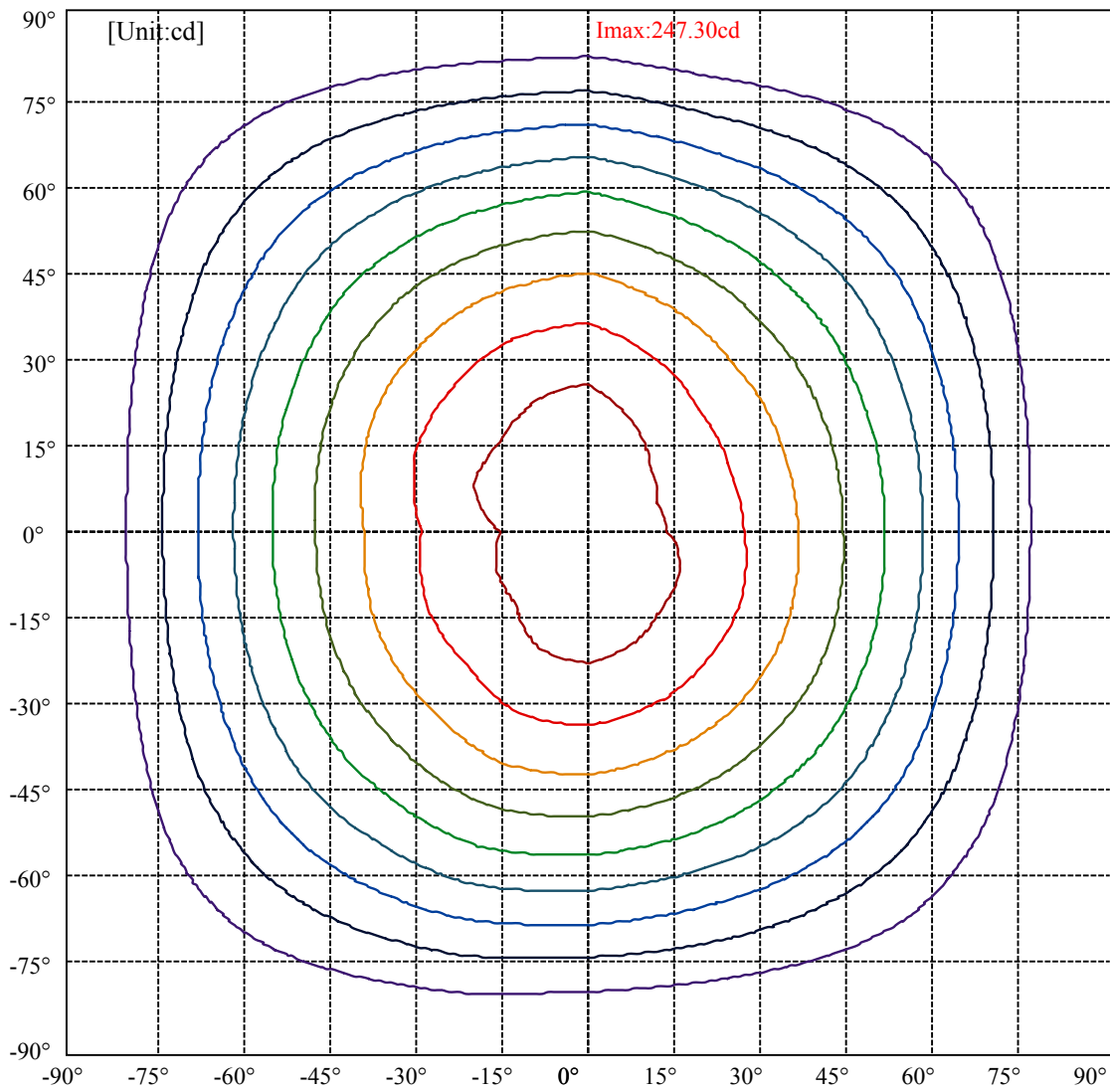
C90/C270: —

Field angle(10%Imax):C0/180Left:79.9 Right:76.6
:C90/270Left:79.2 Right:81.8

Beam Angle(50%Imax):C0/180Left:56.5 Right:53.1
:C90/270Left:55.7 Right:58.5



Max , Ave Beam angle of C90 plane 114.59

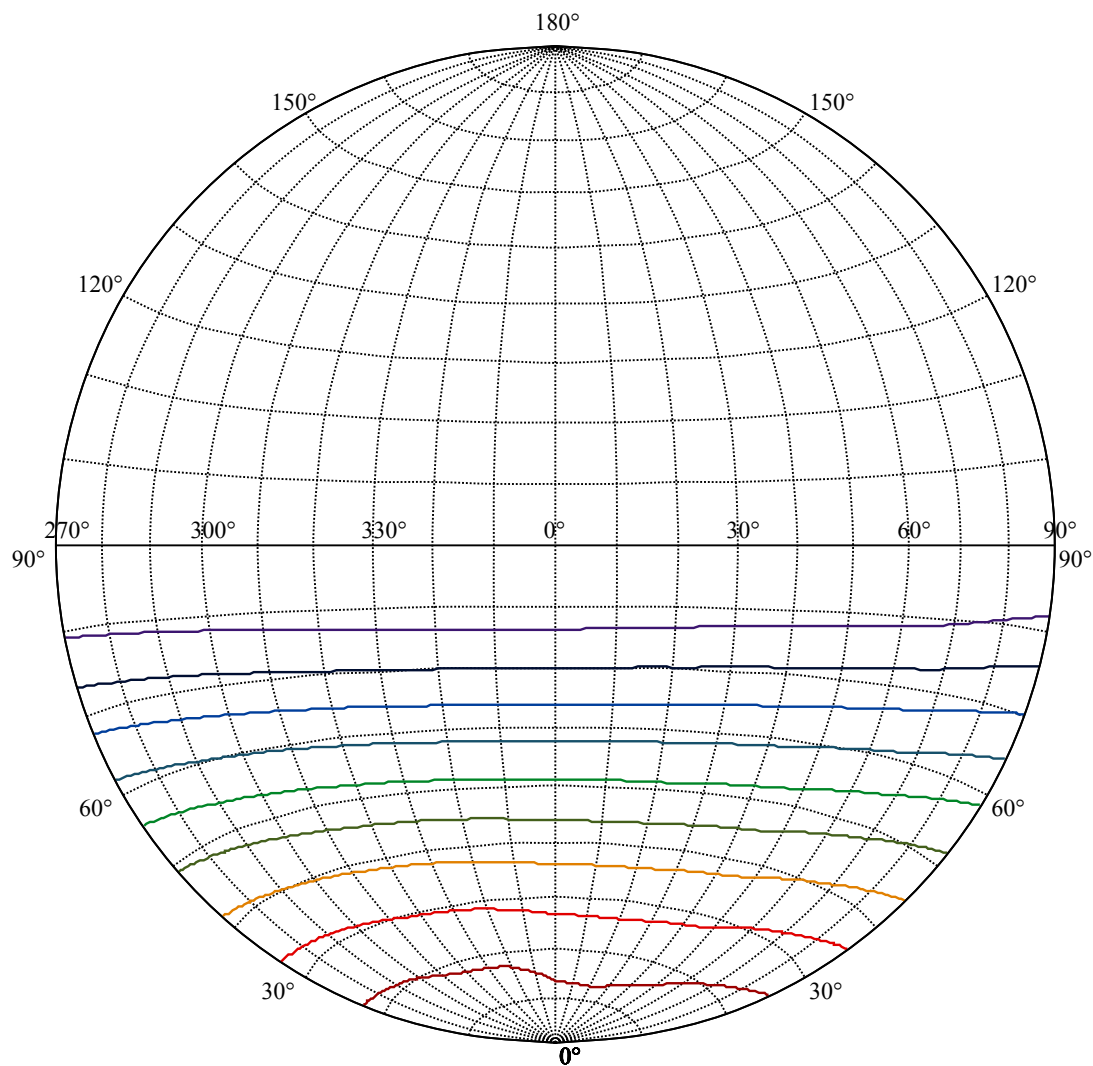


(10%Imax) 24.7302	—
(20%Imax) 49.4604	—
(30%Imax) 74.1906	—
(40%Imax) 98.9208	—
(50%Imax) 123.651	—
(60%Imax) 148.381	—
(70%Imax) 173.111	—
(80%Imax) 197.842	—
(90%Imax) 222.572	—

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

Date:
Humidity(%): 58%

Operator: Tester












House

[Unit:cd]

Road

I_{max}:247.30

(10%I _{max}) 24.7302	
(20%I _{max}) 49.4604	
(30%I _{max}) 74.1906	
(40%I _{max}) 98.9208	
(50%I _{max}) 123.651	
(60%I _{max}) 148.381	
(70%I _{max}) 173.111	
(80%I _{max}) 197.842	
(90%I _{max}) 222.572	

Intensity data(cd)

Appendix Page: 8 Total:9

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	232.34	230.63	226.78	220.80	212.25	202.20	190.23	176.55	160.95
22.5	232.77	230.63	226.14	219.94	211.61	201.35	189.59	176.55	161.81
45.0	235.12	233.20	229.35	223.15	215.03	204.98	192.80	179.76	165.44
67.5	241.53	240.25	236.83	230.63	223.15	213.53	202.42	189.38	175.06
90.0	247.30	246.66	243.88	239.18	232.34	223.36	212.89	200.07	187.03
112.5	244.10	243.88	241.32	236.62	229.99	221.23	211.18	198.78	184.46
135.0	240.68	240.04	237.68	232.34	225.07	216.52	206.26	194.51	180.19
157.5	240.68	240.04	237.26	232.34	225.29	215.88	204.13	191.30	176.98
180.0	232.34	231.91	228.71	222.94	215.45	206.05	194.94	182.75	169.07
202.5	232.77	232.13	229.78	225.50	218.45	209.47	198.57	185.96	171.64
225.0	235.12	234.26	231.06	226.14	219.30	210.11	199.21	186.60	172.71
247.5	241.53	240.89	237.90	232.77	225.93	216.74	205.62	193.65	179.55
270.0	247.30	245.81	241.53	235.55	227.42	218.23	206.69	193.44	178.90
292.5	244.10	242.17	238.54	231.91	224.00	213.96	202.42	188.52	172.92
315.0	240.68	238.54	234.26	227.85	219.30	209.04	197.07	183.82	168.64
337.5	240.68	238.33	233.62	226.78	217.81	207.12	194.51	180.40	165.22
360.0	232.34	230.63	226.78	220.80	212.25	202.20	190.23	176.55	160.95
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	144.92	127.82	109.22	89.56	69.04	48.73	28.86	11.54	0.86
22.5	145.56	128.03	110.51	91.06	71.18	50.87	31.42	13.47	1.71
45.0	149.62	132.52	114.35	95.33	75.45	54.93	35.05	16.46	3.42
67.5	159.67	142.35	123.54	103.88	83.79	62.20	40.83	20.95	5.77
90.0	171.64	154.75	137.22	117.77	97.04	75.02	53.65	31.42	13.04
112.5	168.00	151.12	132.52	113.07	92.55	71.60	50.23	29.07	11.12
135.0	164.58	147.48	128.89	108.80	88.70	67.54	46.17	26.08	9.41
157.5	160.52	143.00	124.19	105.16	84.64	63.91	44.03	23.73	7.05
180.0	154.54	138.29	121.62	103.03	83.57	62.84	42.54	22.87	5.99
202.5	155.82	139.36	121.19	102.17	82.72	61.99	41.47	22.02	6.41
225.0	157.96	140.86	122.48	103.67	84.64	63.70	42.96	23.30	7.27
247.5	164.16	146.63	129.10	109.65	89.35	67.33	46.17	25.44	8.55
270.0	162.87	145.13	126.54	106.45	86.14	64.12	42.11	21.59	6.41
292.5	156.68	139.15	119.91	99.61	78.87	58.35	36.98	17.96	3.85
315.0	151.33	133.38	114.78	94.90	73.96	52.15	32.92	14.32	2.14
337.5	148.13	129.96	110.93	91.27	70.54	49.59	29.28	11.97	1.50
360.0	144.92	127.82	109.22	89.56	69.04	48.73	28.86	11.54	0.86
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.64	0.64	0.64	0.64	0.64	0.86	0.86	0.86	0.86
22.5	0.86	0.64	0.64	0.86	0.64	0.43	0.86	0.86	0.86
45.0	0.86	0.64	0.86	0.43	0.64	0.64	0.86	0.86	0.86
67.5	1.07	0.64	0.64	0.86	0.86	0.86	0.86	0.86	0.86
90.0	1.71	0.64	0.64	0.43	0.86	0.64	0.86	0.86	0.64
112.5	1.07	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.64
135.0	0.64	0.43	0.21	0.21	0.21	0.43	0.43	0.43	0.43
157.5	0.64	0.21	0.43	0.21	0.21	0.21	0.21	0.64	0.64
180.0	0.21	0.43	0.21	0.21	0.43	0.43	0.43	0.43	0.64
202.5	0.64	0.43	0.21	0.43	0.43	0.21	0.43	0.43	0.43
225.0	0.86	0.21	0.21	0.21	0.43	0.21	0.43	0.43	0.64
247.5	0.86	0.43	0.43	0.21	0.21	0.21	0.21	0.21	0.43
270.0	1.28	1.28	1.07	1.07	1.28	1.07	1.50	1.50	1.50
292.5	1.28	0.86	0.86	0.86	0.86	0.86	1.07	0.86	1.07
315.0	1.07	1.07	0.64	0.64	0.86	0.86	0.86	1.07	1.07
337.5	0.86	0.86	0.64	0.64	0.64	0.86	1.07	0.64	0.86
360.0	0.64	0.64	0.64	0.64	0.64	0.86	0.86	0.86	0.86

Equipment: GMS-3000
Temperature(°C): 25Date:
Humidity(%): 58%

Operator: Tester

Intensity data(cd)

Appendix Page: 9 Total:9

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.86	0.86	0.86	1.07	0.86	0.86	1.07	1.07	0.86
22.5	1.07	1.28	1.07	0.86	0.86	0.86	1.07	0.86	1.07
45.0	1.07	0.86	0.86	0.86	0.86	0.86	1.07	0.86	1.07
67.5	0.86	1.07	1.07	0.86	1.07	1.07	1.28	0.86	0.86
90.0	0.86	0.86	1.07	1.07	1.07	1.07	0.86	1.28	1.07
112.5	0.64	0.64	0.86	0.86	0.86	0.86	1.07	0.86	0.86
135.0	0.86	0.64	0.64	0.86	0.86	0.64	1.07	0.86	1.07
157.5	0.43	0.43	0.86	0.64	0.86	1.07	0.86	0.86	1.07
180.0	0.64	0.86	0.64	0.86	0.86	0.86	0.86	0.86	0.86
202.5	0.64	0.64	0.43	1.07	0.86	0.86	0.86	1.28	0.86
225.0	0.86	0.86	0.64	0.64	0.86	0.86	0.86	1.07	1.07
247.5	0.64	0.64	0.64	1.07	0.86	1.07	0.86	1.07	0.86
270.0	1.50	1.71	1.71	1.50	1.71	1.71	1.50	1.71	1.71
292.5	1.07	1.07	1.28	1.28	1.07	1.07	1.07	0.86	1.07
315.0	0.86	1.07	0.86	0.86	1.07	1.07	0.86	1.07	0.86
337.5	0.86	1.07	1.07	0.86	1.28	1.07	1.07	0.86	0.86
360.0	0.86	0.86	0.86	1.07	0.86	0.86	1.07	1.07	0.86
C/γ(°)	180.0								
0.0	1.07								
22.5	1.07								
45.0	1.07								
67.5	0.64								
90.0	1.71								
112.5	1.07								
135.0	0.86								
157.5	0.86								
180.0	1.07								
202.5	1.07								
225.0	1.07								
247.5	0.64								
270.0	1.71								
292.5	1.07								
315.0	0.86								
337.5	0.86								
360.0	1.07								