



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
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Client:

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.02

LampCAT:

Current(A): 0.1330

Lamp flux(lm): -1.0

Power (W): 15.88

Number of Lamps: 1

PF: 0.9925

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1043.55, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 65.71

Central intensity(cd): 366.544, Maximum intensity(cd): 374.310

Angle of maximum intensity: C=292.5 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=109.8

[C90/270]Total=114.8

Field angle(10%Imax): [C0/180]Total=157.3

[C90/270]Total=161.8

Maximum s/h(1/2): C0_180=1.15 C90_270=1.30

Maximum s/h(1/4): C0_180=1.26 C90_270=1.42

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.73%

Down flux rate of LUM(%): 99.27%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 78.344%

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

Date:
Humidity(%): 58%

Operator: Tester

Zonal flux distribution table

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$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	366.544	0.000	0	0.00%	0.00%
5.0	364.946	8.745	8.745	0.00%	0.84%
10.0	360.426	25.949	34.694	0.00%	3.32%
15.0	351.413	42.226	76.919	0.00%	7.37%
20.0	340.279	57.005	133.925	0.00%	12.83%
25.0	325.678	69.847	203.771	0.00%	19.53%
30.0	308.545	80.261	284.033	0.00%	27.22%
35.0	287.931	87.835	371.868	0.00%	35.64%
40.0	265.678	92.365	464.233	0.00%	44.49%
45.0	241.961	93.993	558.227	0.00%	53.49%
50.0	214.836	92.303	650.529	0.00%	62.34%
55.0	187.228	87.422	737.951	0.00%	70.72%
60.0	157.177	79.608	817.56	0.00%	78.34%
65.0	126.482	68.958	886.518	0.00%	84.95%
70.0	95.055	56.095	942.612	0.00%	90.33%
75.0	65.574	41.986	984.598	0.00%	94.35%
80.0	39.181	28.030	1012.628	0.00%	97.04%
85.0	19.824	16.033	1028.661	0.00%	98.57%
90.0	6.891	7.315	1035.976	0.00%	99.27%
95.0	1.185	2.211	1038.187	0.00%	99.49%
100.0	0.819	0.545	1038.732	0.00%	99.54%
105.0	0.746	0.419	1039.151	0.00%	99.58%
110.0	0.775	0.398	1039.548	0.00%	99.62%
115.0	0.819	0.404	1039.952	0.00%	99.66%
120.0	0.804	0.395	1040.346	0.00%	99.69%
125.0	0.892	0.392	1040.739	0.00%	99.73%
130.0	0.965	0.404	1041.142	0.00%	99.77%
135.0	0.965	0.390	1041.533	0.00%	99.81%
140.0	1.038	0.371	1041.904	0.00%	99.84%
145.0	1.068	0.351	1042.255	0.00%	99.88%
150.0	1.112	0.321	1042.576	0.00%	99.91%
155.0	1.199	0.292	1042.868	0.00%	99.94%
160.0	1.156	0.247	1043.115	0.00%	99.96%
165.0	1.141	0.189	1043.305	0.00%	99.98%
170.0	1.112	0.134	1043.438	0.00%	99.99%
175.0	1.097	0.079	1043.517	0.00%	100.00%
180.0	1.294	0.029	1043.546	0.00%	100.00%

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

Date:
Humidity(%): 58%

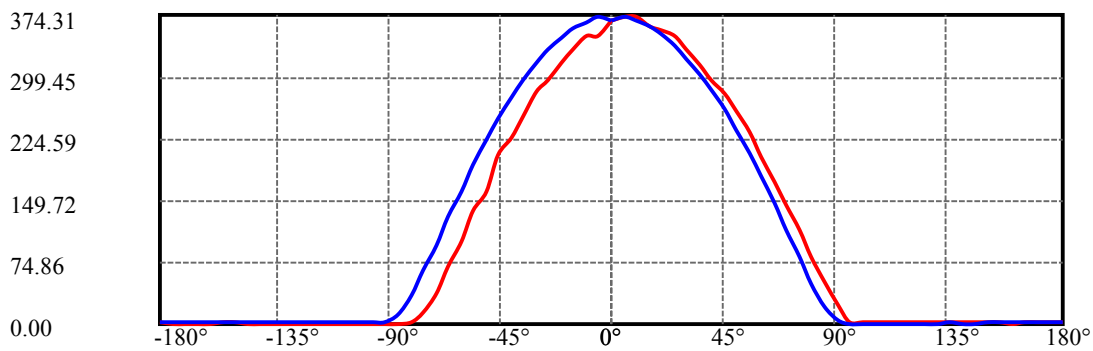
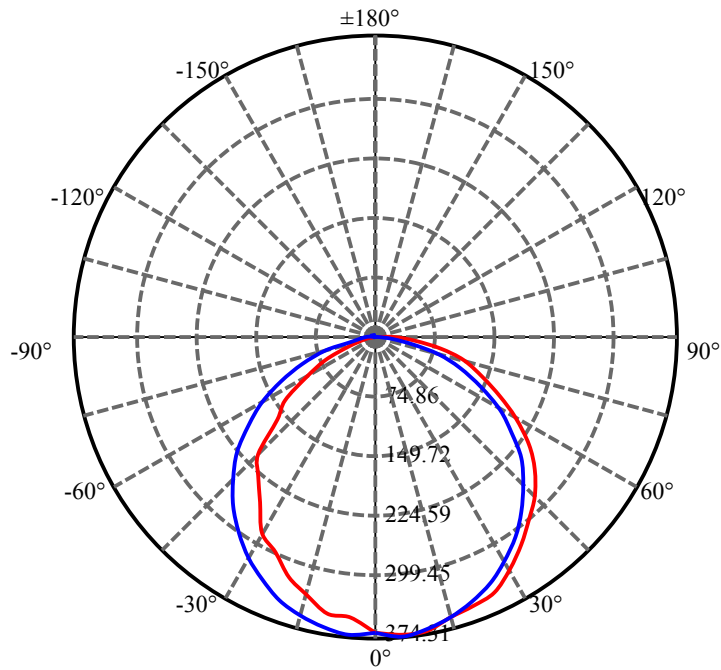
Operator: Tester

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	284.03	N.A.	27.22%
0-40	464.23	N.A.	44.49%
0-60	817.56	N.A.	78.34%
0-90	1035.98	N.A.	99.27%
0-120	1040.35	N.A.	99.69%
0-180	1043.55	N.A.	100.00%
60-90	218.42	N.A.	20.93%
90-120	4.37	N.A.	0.42%
90-130	5.17	N.A.	0.50%
90-150	6.60	N.A.	0.63%
90-180	7.54	N.A.	0.72%
0-61.25	834.84	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	34.69
10-20	99.23
20-30	150.11
30-40	180.20
40-50	186.30
50-60	167.03
60-70	125.05
70-80	70.02
80-90	23.35
90-100	2.76
100-110	0.82
110-120	0.80
120-130	0.80
130-140	0.76
140-150	0.67
150-160	0.54
160-170	0.32
170-180	0.08

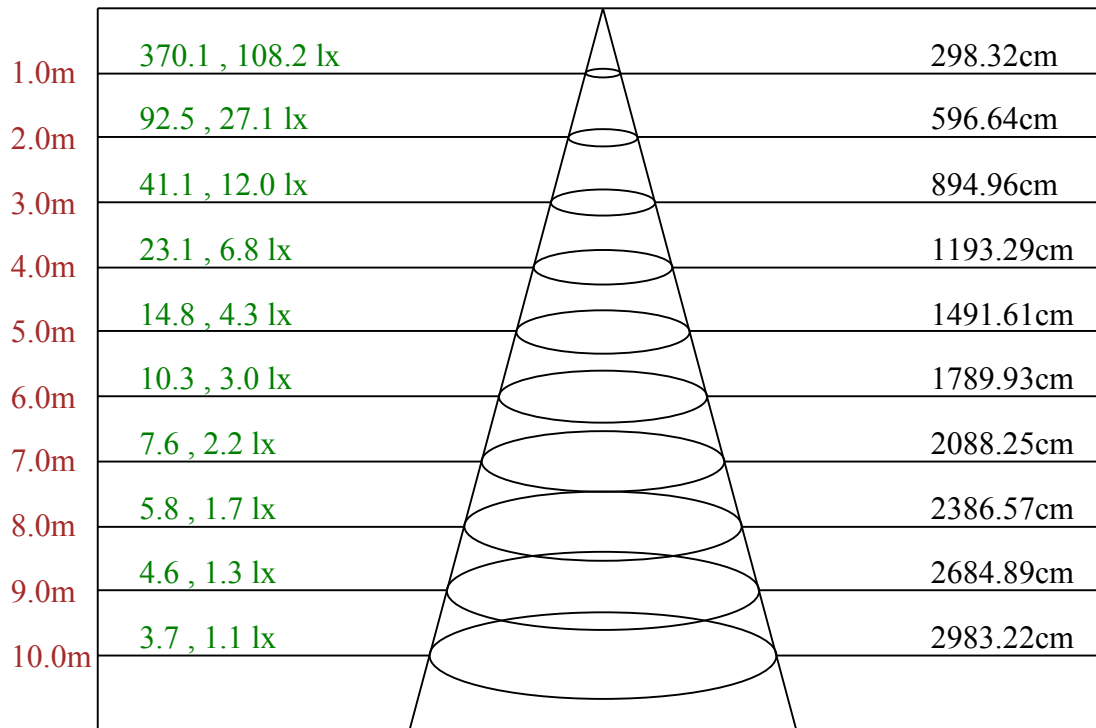


C0/C180: —

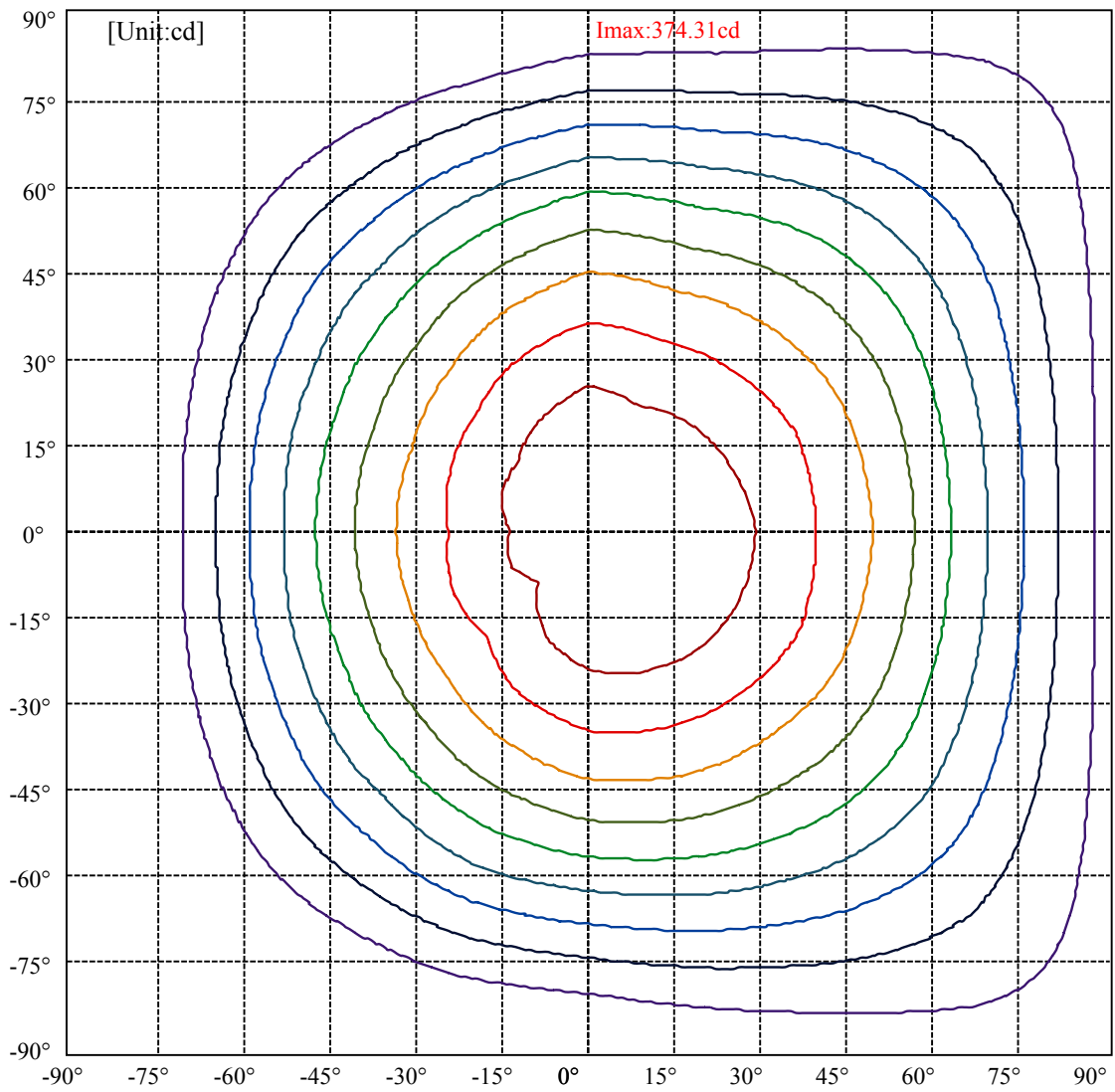
C90/C270: —

Field angle(10%Imax):C0/180Left:69.9 Right:87.4
 :C90/270Left:79.6 Right:82.2

Beam Angle(50%Imax):C0/180Left:47.1 Right:62.7
 :C90/270Left:56.1 Right:58.7



Max , Ave Beam angle of C292.5 plane 112.32

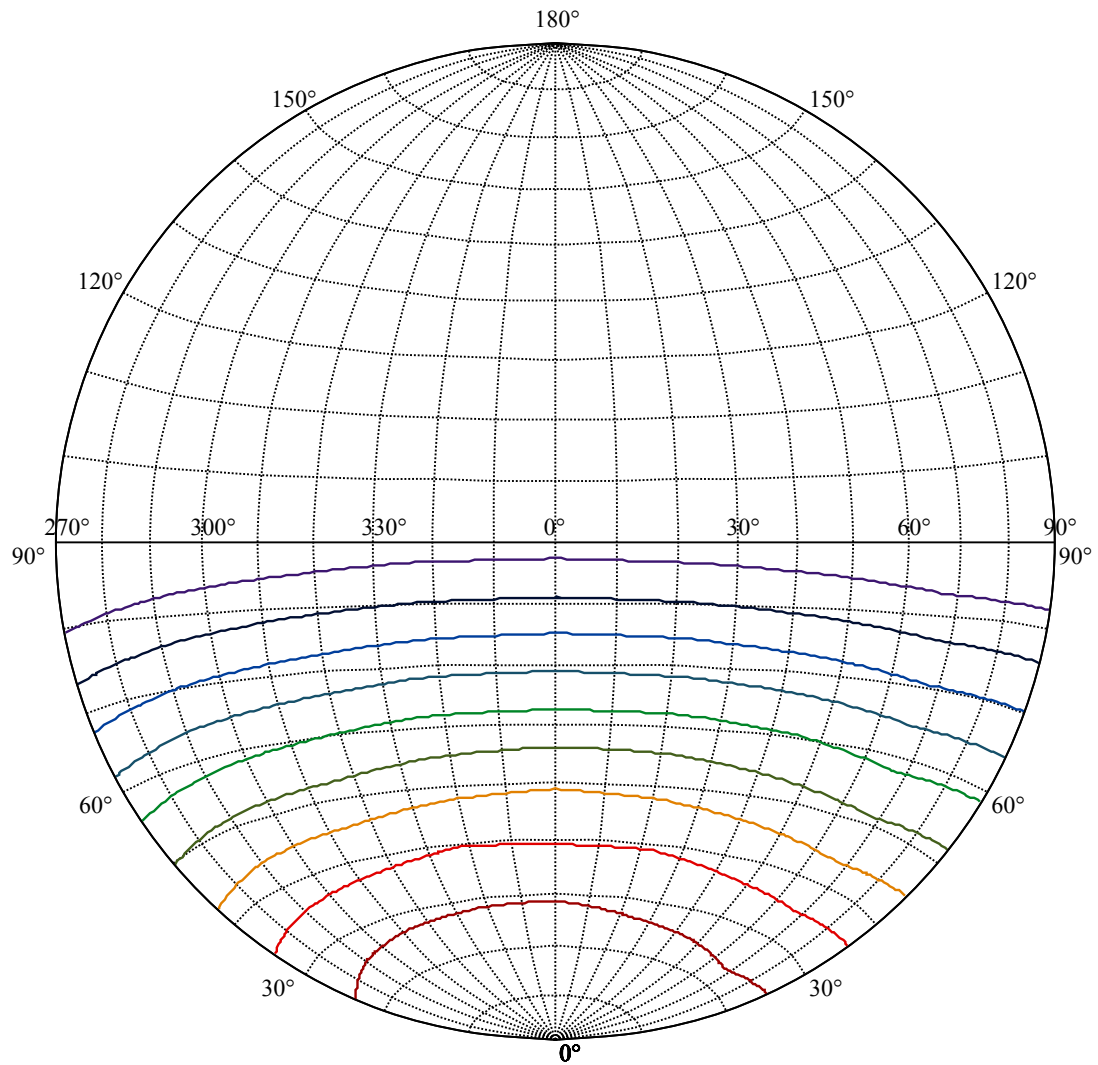


(10%Imax) 37.3987	—
(20%Imax) 74.7974	—
(30%Imax) 112.196	—
(40%Imax) 149.595	—
(50%Imax) 186.994	—
(60%Imax) 224.392	—
(70%Imax) 261.791	—
(80%Imax) 299.19	—
(90%Imax) 336.589	—

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

Date:
Humidity(%): 58%

Operator: Tester



House

[Unit:cd]

Road

I_{max}:374.31	
(10%I _{max}) 37.4248	—
(20%I _{max}) 74.8495	—
(30%I _{max}) 112.274	—
(40%I _{max}) 149.699	—
(50%I _{max}) 187.124	—
(60%I _{max}) 224.549	—
(70%I _{max}) 261.973	—
(80%I _{max}) 299.398	—
(90%I _{max}) 336.823	—

Intensity data(cd)

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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	366.54	371.74	371.03	359.80	355.82	348.56	332.88	314.62	296.36
22.5	366.54	361.67	360.73	356.52	350.43	341.54	328.43	313.45	295.89
45.0	366.54	360.97	360.50	356.75	349.26	337.56	322.58	305.02	286.29
67.5	366.54	366.82	363.54	356.52	345.52	332.17	316.96	299.64	278.57
90.0	366.54	372.44	367.99	360.27	350.20	337.09	321.17	303.38	282.78
112.5	366.54	370.80	363.31	353.24	339.90	324.45	307.59	286.29	262.88
135.0	366.54	362.14	353.01	342.24	328.90	310.64	289.80	266.16	239.71
157.5	366.54	363.31	352.54	340.37	323.75	302.91	278.80	252.12	226.83
180.0	366.54	349.26	349.50	331.47	316.02	295.19	280.21	250.24	224.73
202.5	366.54	354.41	346.92	335.92	321.17	300.57	276.93	251.18	224.96
225.0	366.54	351.84	342.01	329.83	315.55	298.70	280.44	259.61	235.03
247.5	366.54	363.78	357.46	347.62	334.98	319.77	301.51	279.27	255.16
270.0	366.54	371.50	365.88	357.92	347.16	332.64	315.55	296.36	274.59
292.5	366.54	374.31	371.27	363.78	353.01	339.43	323.04	303.38	281.38
315.0	366.54	371.27	370.80	365.65	356.75	344.11	328.43	309.70	287.93
337.5	366.54	372.91	370.33	364.71	356.05	345.52	332.41	316.49	297.76
360.0	366.54	371.74	371.03	359.80	355.82	348.56	332.88	314.62	296.36
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	278.57	257.73	231.52	201.79	172.29	143.26	113.07	81.23	50.10
22.5	274.35	251.88	227.54	199.91	170.42	138.82	109.55	77.25	46.12
45.0	264.52	242.05	216.30	189.85	160.12	129.69	98.32	66.72	38.16
67.5	255.63	230.58	203.66	175.33	147.01	114.94	84.74	53.61	26.45
90.0	260.54	235.03	207.87	178.85	145.60	112.83	81.23	49.63	22.00
112.5	236.20	209.04	179.31	148.18	115.88	84.51	53.14	25.05	4.92
135.0	212.79	183.53	152.86	121.26	90.13	58.76	29.96	7.49	0.94
157.5	199.21	169.95	137.65	106.51	73.97	42.60	16.39	1.64	0.47
180.0	204.13	159.65	137.41	99.25	69.06	36.52	13.11	1.17	0.47
202.5	196.64	168.31	137.88	105.34	73.97	43.54	16.62	1.64	0.47
225.0	209.75	180.72	150.29	119.39	89.19	58.29	29.26	7.49	1.17
247.5	229.64	202.96	175.80	147.01	114.47	81.93	51.73	23.88	4.21
270.0	249.77	222.62	192.89	161.52	129.92	95.74	64.84	34.88	11.94
292.5	259.14	233.62	205.30	175.57	145.37	113.77	82.63	52.20	25.52
315.0	264.76	239.01	214.19	186.57	156.84	126.64	96.21	66.01	37.22
337.5	275.76	250.71	225.20	198.51	169.48	139.05	108.38	77.02	47.05
360.0	278.57	257.73	231.52	201.79	172.29	143.26	113.07	81.23	50.10
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	22.71	3.28	1.41	1.17	1.17	1.41	1.17	1.17	1.17
22.5	19.90	2.58	1.41	0.94	0.94	1.17	0.94	1.17	1.41
45.0	13.58	1.87	1.41	1.17	1.17	1.17	1.17	1.17	1.17
67.5	6.32	1.41	0.94	0.94	0.94	0.94	1.17	1.17	0.94
90.0	3.98	0.47	0.47	0.47	0.70	0.70	0.47	0.47	0.70
112.5	0.47	0.23	0.47	0.47	0.47	0.47	0.47	0.47	0.70
135.0	0.47	0.47	0.23	0.23	0.47	0.47	0.70	0.70	0.70
157.5	0.23	0.47	0.47	0.23	0.47	0.47	0.23	0.70	0.70
180.0	0.47	0.47	0.23	0.47	0.47	0.47	0.70	0.70	0.70
202.5	0.47	0.23	0.23	0.47	0.47	0.23	0.47	0.94	0.70
225.0	0.70	0.47	0.23	0.47	0.47	0.47	0.23	0.47	0.70
247.5	0.70	0.23	0.23	0.47	0.47	0.47	0.70	0.70	0.94
270.0	1.17	1.17	1.17	1.17	1.17	1.17	1.64	1.41	1.64
292.5	5.85	1.17	1.41	0.94	0.94	1.17	0.94	0.94	1.17
315.0	13.34	1.87	1.41	1.17	0.94	1.17	0.94	0.94	0.94
337.5	19.90	2.58	1.41	1.17	1.17	1.17	0.94	1.17	1.17
360.0	22.71	3.28	1.41	1.17	1.17	1.41	1.17	1.17	1.17

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	1.17	1.17	1.17	1.17	1.17	0.94	1.41	1.17	1.17
22.5	1.17	1.17	1.17	1.17	1.17	0.94	1.17	0.94	0.94
45.0	1.17	0.94	1.17	1.17	1.17	1.41	1.17	0.94	0.94
67.5	0.94	1.17	0.94	1.41	1.17	1.17	0.94	0.94	0.94
90.0	1.17	0.94	0.94	1.17	1.17	1.17	1.17	1.17	1.17
112.5	0.70	0.70	0.94	0.70	0.94	1.17	0.94	0.94	1.17
135.0	0.70	0.94	0.70	0.94	1.41	0.94	0.94	1.17	1.17
157.5	0.94	0.94	0.94	1.17	0.94	1.17	1.17	1.17	0.94
180.0	0.70	0.70	0.70	1.17	1.17	0.94	0.94	0.94	0.94
202.5	0.70	0.47	0.70	0.70	1.17	0.94	0.94	1.17	0.94
225.0	0.94	0.94	1.17	0.70	0.94	0.94	0.94	0.94	1.41
247.5	0.47	1.17	0.70	0.70	1.17	1.17	1.17	0.94	0.94
270.0	1.41	1.87	1.87	1.87	1.87	2.11	1.87	1.87	1.64
292.5	1.17	1.17	1.41	1.41	1.41	1.41	1.17	1.17	1.17
315.0	0.94	1.17	1.41	1.41	1.17	0.94	1.17	1.17	0.94
337.5	1.17	1.17	1.17	0.94	1.17	1.17	1.17	1.17	1.17
360.0	1.17	1.17	1.17	1.17	1.17	0.94	1.41	1.17	1.17
C/γ(°)	180.0								
0.0	1.29								
22.5	1.29								
45.0	1.29								
67.5	1.29								
90.0	1.29								
112.5	1.29								
135.0	1.29								
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337.5	1.29								
360.0	1.29								