

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P136428

Luminaire Tested: **LD6A20D010TE ERW6A20927 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136428
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23375)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A20D010TE ERW6A20927 6LW111H
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED SINGLE WALL WASH LUMINAIRE
SEMI-SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 2700K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2020.1 lumens
Efficiency: N/A
Efficacy: 61.6 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

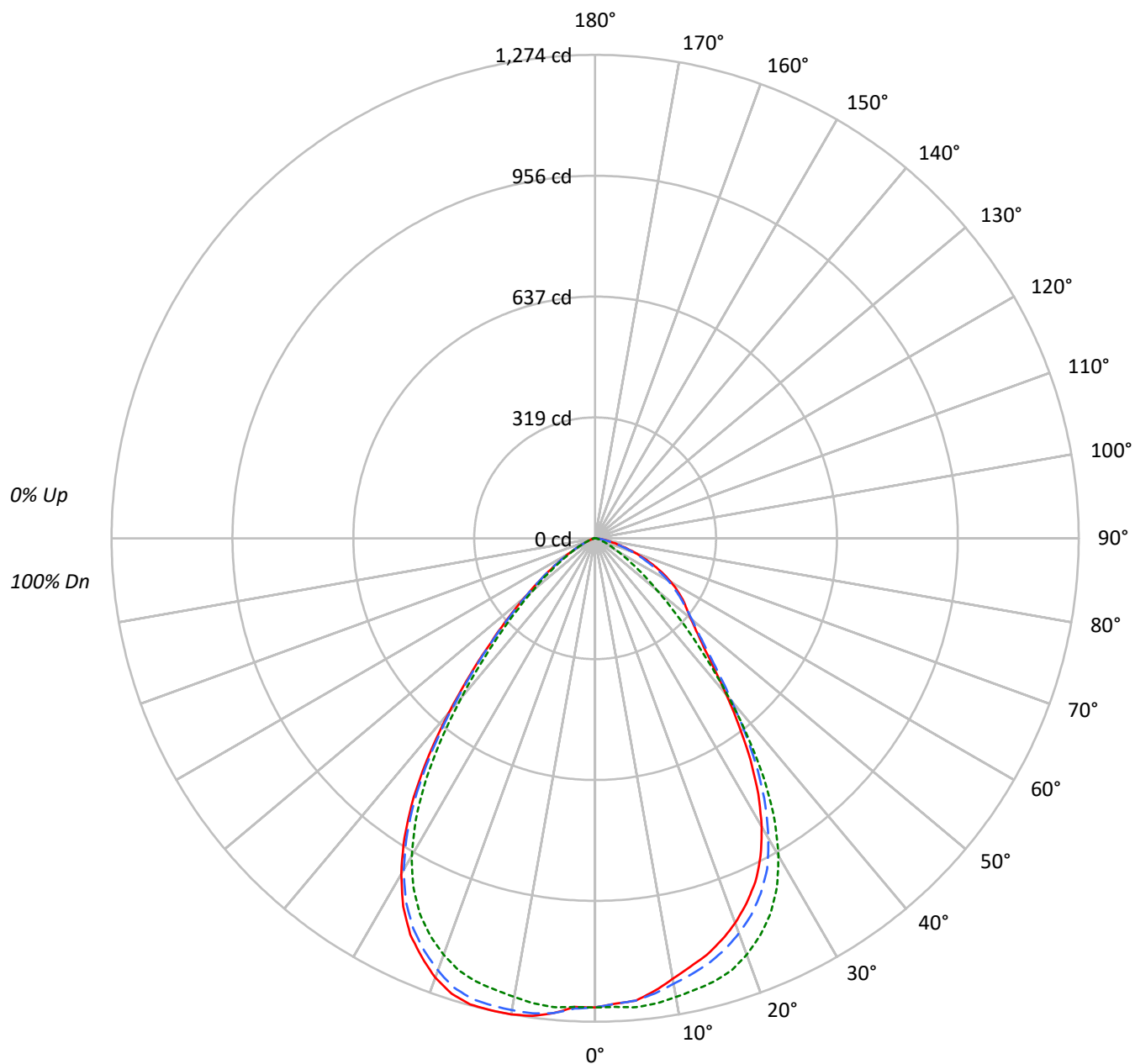
Input Watts (W): 32.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	108	105	102	109	106	103	101		102	100	98		98	96	95		95	93	92
2	104	98	93	89	102	96	92	88		93	89	86		90	87	84		87	84	82
3	97	89	83	78	95	88	82	77		85	80	76		82	78	75		80	76	73
4	91	81	74	69	89	80	74	69		78	72	68		76	71	67		74	69	66
5	85	74	67	62	83	73	67	61		71	65	61		70	64	60		68	63	60
6	79	68	61	56	78	68	61	55		66	60	55		64	59	55		63	58	54
7	74	63	56	51	73	62	55	50		61	55	50		60	54	50		58	53	49
8	70	58	51	46	69	58	51	46		57	50	46		55	50	46		54	49	45
9	66	54	47	42	65	54	47	42		53	46	42		52	46	42		51	46	42
10	62	51	44	39	61	50	43	39		49	43	39		48	43	39		48	42	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	80657	80657	80657
5°	80094	81253	82268
10°	78085	81318	84392
15°	76762	81706	85893
20°	74912	81064	85528
25°	71935	78629	82934
30°	66098	72772	76946
35°	56818	61939	66344
40°	45657	46603	50946
45°	37201	32302	35771
50°	33281	21588	24511
55°	32007	14116	16129
60°	30063	8964	10112
65°	26676	5465	5820
70°	21555	3376	3376
75°	15074	2243	2243
80°	9994	1653	1653
85°	4940	1647	1647



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.7	5.8
10°-20°	339.4	16.8
20°-30°	494.2	24.5
30°-40°	479.4	23.7
40°-50°	303.0	15.0
50°-60°	168.7	8.4
60°-70°	83.6	4.1
70°-80°	29.5	1.5
80°-90°	4.6	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	951.3	47.1
0°-40°	1430.7	70.8
0°-60°	1902.4	94.2
0°-90°	2020.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2020.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1236	1236	1236	1236	1236	
5°	1223	1223	1241	1256	1256	115
15°	1136	1159	1210	1256	1272	320
25°	999	1032	1092	1134	1152	456
35°	713	747	778	820	833	442
45°	403	414	350	383	388	319
55°	281	275	124	142	142	251
65°	173	160	35	38	38	170
75°	60	55	9	9	9	67
85°	7	7	2	2	2	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3
2.5°	1227.5	1216.4	1220.8	1218.6	1220.8	1218.6	1225.2	1218.6	1223.0	1227.5	1218.6
5°	1223.0	1211.9	1214.1	1214.1	1214.1	1214.1	1220.8	1214.1	1218.6	1223.0	1216.4
7.5°	1203.0	1194.2	1196.4	1196.4	1196.4	1196.4	1203.0	1198.6	1203.0	1209.7	1203.0
10°	1178.7	1169.8	1174.3	1174.3	1174.3	1174.3	1183.1	1178.7	1183.1	1192.0	1185.3
12.5°	1156.6	1149.9	1154.3	1154.3	1154.3	1156.6	1163.2	1161.0	1165.4	1176.5	1169.8
15°	1136.5	1129.9	1134.3	1134.3	1134.3	1136.5	1143.3	1145.5	1149.9	1158.8	1154.3
17.5°	1110.0	1103.4	1110.0	1110.0	1107.8	1112.2	1121.1	1121.1	1125.5	1136.5	1134.3
20°	1079.0	1072.4	1079.0	1079.0	1076.8	1081.2	1090.1	1092.3	1096.7	1107.8	1105.6
22.5°	1041.3	1039.1	1041.3	1045.7	1043.5	1045.7	1054.6	1056.8	1061.2	1074.6	1072.4
25°	999.3	997.1	1001.5	1003.7	1001.5	1003.7	1012.5	1014.8	1019.2	1032.5	1032.5
27.5°	943.9	941.6	948.3	948.3	948.3	952.7	959.3	963.8	966.0	981.5	979.3
30°	877.4	875.2	879.6	881.8	881.8	881.8	890.7	897.3	899.5	912.8	912.8
32.5°	799.8	799.8	802.0	806.5	804.3	808.7	815.3	819.8	824.2	835.2	835.2
35°	713.4	715.7	717.9	722.3	720.1	722.3	728.9	733.4	735.6	746.6	744.4
37.5°	622.5	624.7	627.1	629.3	629.3	631.5	638.1	640.3	642.5	651.4	647.0
40°	536.1	536.1	538.4	542.8	540.6	545.0	549.4	551.6	551.6	558.4	553.9
42.5°	460.8	463.0	465.2	467.5	467.5	469.7	474.1	476.3	476.3	478.6	471.9
45°	403.2	405.5	405.5	409.9	409.9	412.1	414.3	416.6	414.3	414.3	407.7
47.5°	361.1	363.4	365.6	367.8	367.8	370.0	372.2	372.2	370.0	367.8	358.9
50°	327.9	332.4	332.4	334.6	336.8	339.0	339.0	339.0	334.6	332.4	319.0
52.5°	303.5	305.7	307.9	310.2	310.2	312.4	314.6	312.4	307.9	301.3	288.0
55°	281.4	283.6	285.8	288.0	288.0	288.0	288.0	285.8	281.4	274.8	261.5
57.5°	257.0	259.3	261.5	263.7	263.7	263.7	263.7	261.5	257.0	248.1	232.6
60°	230.4	232.6	234.8	237.0	237.0	237.0	234.8	232.6	228.2	221.6	206.1
62.5°	201.6	203.9	206.1	206.1	206.1	203.9	203.9	201.6	197.2	190.6	175.0
65°	172.8	172.8	175.0	175.0	175.0	175.0	172.8	170.6	166.1	159.5	148.4
67.5°	141.8	144.0	144.0	144.0	144.0	144.0	141.8	141.8	137.4	130.7	121.9
70°	113.0	113.0	115.2	115.2	115.2	115.2	113.0	113.0	108.5	104.1	95.2
72.5°	84.2	84.2	84.2	86.4	86.4	86.4	84.2	84.2	82.0	77.5	70.9
75°	59.8	59.8	59.8	62.1	62.1	62.1	62.1	59.8	57.6	55.4	51.0
77.5°	39.9	42.1	39.9	39.9	39.9	42.1	39.9	39.9	39.9	37.7	33.2
80°	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	24.3	24.3	22.1
82.5°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	13.3	13.3
85°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
87.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3
2.5°	1225.2	1229.7	1234.1	1229.7	1223.0	1236.3	1234.1	1236.3	1234.1	1229.7	1242.9
5°	1223.0	1227.5	1234.1	1229.7	1225.2	1238.5	1236.3	1240.7	1240.7	1236.3	1249.6
7.5°	1209.7	1214.1	1225.2	1220.8	1216.4	1229.7	1231.9	1236.3	1238.5	1234.1	1249.6
10°	1194.2	1198.6	1209.7	1207.5	1205.2	1220.8	1223.0	1227.5	1229.7	1227.5	1242.9
12.5°	1178.7	1185.3	1196.4	1194.2	1194.2	1209.7	1211.9	1218.6	1223.0	1220.8	1238.5
15°	1163.2	1172.0	1185.3	1183.1	1183.1	1200.8	1203.0	1209.7	1214.1	1214.1	1231.9
17.5°	1143.3	1152.1	1165.4	1163.2	1167.6	1180.9	1185.3	1194.2	1198.6	1196.4	1216.4
20°	1114.4	1125.5	1138.8	1136.5	1138.8	1156.6	1161.0	1167.6	1172.0	1172.0	1189.7
22.5°	1081.2	1092.3	1105.6	1103.4	1107.8	1121.1	1125.5	1134.3	1138.8	1136.5	1154.3
25°	1041.3	1052.4	1063.4	1063.4	1065.6	1081.2	1085.7	1092.3	1098.9	1096.7	1112.2
27.5°	988.1	999.3	1010.3	1008.1	1010.3	1025.8	1030.2	1036.9	1043.5	1041.3	1056.8
30°	919.4	930.6	939.4	937.2	939.4	954.9	957.1	966.0	972.6	972.6	985.9
32.5°	839.7	850.8	855.2	850.8	855.2	866.3	870.7	879.6	884.0	886.2	899.5
35°	748.8	755.5	757.7	753.3	753.3	764.3	768.8	777.7	782.1	784.3	795.4
37.5°	649.2	653.6	649.2	642.5	644.8	649.2	655.8	662.5	669.1	671.3	682.4
40°	551.6	549.4	542.8	531.7	529.5	536.1	540.6	547.2	551.6	556.2	562.8
42.5°	465.2	460.8	447.5	434.3	432.0	432.0	434.3	440.9	445.3	447.5	456.4
45°	396.6	387.7	367.8	352.3	343.4	345.7	345.7	350.1	352.3	356.7	363.4
47.5°	343.4	327.9	303.5	283.6	274.8	272.5	272.5	274.8	277.0	281.4	285.8
50°	301.3	281.4	252.5	230.4	219.3	214.9	214.9	212.7	217.1	219.3	223.8
52.5°	268.1	243.7	210.5	186.2	172.8	168.4	166.1	166.1	166.1	168.4	172.8
55°	237.0	210.5	175.0	150.7	135.2	130.7	126.3	124.1	126.3	128.5	130.7
57.5°	210.5	181.6	146.2	119.7	106.3	99.7	95.2	93.0	93.0	95.2	97.5
60°	183.8	155.1	119.7	95.2	82.0	75.3	70.9	68.7	68.7	70.9	70.9
62.5°	155.1	128.5	97.5	75.3	62.1	55.4	51.0	51.0	48.8	48.8	51.0
65°	130.7	106.3	79.8	59.8	46.6	42.1	37.7	35.4	35.4	33.2	35.4
67.5°	106.3	86.4	64.3	46.6	35.4	31.0	26.6	26.6	24.3	24.3	24.3
70°	84.2	68.7	51.0	35.4	28.8	22.1	19.9	17.7	17.7	17.7	17.7
72.5°	62.1	51.0	37.7	26.6	19.9	17.7	15.5	13.3	11.1	11.1	11.1
75°	44.3	35.4	26.6	19.9	15.5	13.3	11.1	8.9	8.9	8.9	8.9
77.5°	31.0	24.3	19.9	13.3	11.1	8.9	6.6	6.6	6.6	6.6	4.4
80°	19.9	15.5	13.3	8.9	6.6	6.6	4.4	4.4	4.4	4.4	4.4
82.5°	11.1	8.9	6.6	6.6	4.4	4.4	2.2	2.2	2.2	2.2	2.2
85°	4.4	4.4	4.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
87.5°	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3	1236.3
2.5°	1229.7	1238.5	1238.5	1242.9	1236.3	1240.7	1247.4	1245.2	1238.5	1240.7	1242.9
5°	1238.5	1247.4	1249.6	1256.2	1249.6	1256.2	1265.1	1262.9	1256.2	1260.7	1262.9
7.5°	1238.5	1249.6	1254.0	1260.7	1256.2	1262.9	1273.9	1271.7	1265.1	1269.5	1273.9
10°	1234.1	1245.2	1251.8	1258.4	1254.0	1262.9	1271.7	1271.7	1267.3	1271.7	1278.4
12.5°	1229.7	1240.7	1247.4	1254.0	1249.6	1260.7	1271.7	1269.5	1267.3	1271.7	1278.4
15°	1223.0	1234.1	1240.7	1247.4	1245.2	1256.2	1267.3	1267.3	1262.9	1269.5	1276.1
17.5°	1207.5	1218.6	1227.5	1231.9	1229.7	1240.7	1251.8	1251.8	1247.4	1254.0	1260.7
20°	1180.9	1192.0	1200.8	1205.2	1203.0	1211.9	1223.0	1225.2	1220.8	1227.5	1234.1
22.5°	1147.7	1156.6	1165.4	1169.8	1167.6	1176.5	1187.5	1189.7	1185.3	1192.0	1196.4
25°	1107.8	1114.4	1123.3	1127.7	1125.5	1134.3	1145.5	1145.5	1143.3	1147.7	1152.1
27.5°	1052.4	1061.2	1068.0	1072.4	1072.4	1079.0	1087.9	1090.1	1087.9	1092.3	1098.9
30°	983.7	988.1	997.1	999.3	1001.5	1008.1	1017.0	1017.0	1014.8	1019.2	1025.8
32.5°	897.3	903.9	910.6	912.8	915.0	921.7	928.4	930.6	928.4	932.8	939.4
35°	795.4	802.0	808.7	810.9	813.1	819.8	826.4	828.6	826.4	830.8	837.5
37.5°	682.4	686.8	693.4	695.6	700.2	704.6	709.0	713.4	711.2	715.7	720.1
40°	567.2	569.4	576.1	578.3	582.7	587.1	591.6	593.8	593.8	596.0	598.2
42.5°	458.6	463.0	467.5	469.7	474.1	476.3	480.8	483.0	483.0	485.2	487.5
45°	365.6	370.0	374.4	376.6	381.1	383.3	385.5	387.7	385.5	385.5	389.9
47.5°	288.0	292.5	296.9	299.1	301.3	303.5	305.7	305.7	305.7	307.9	307.9
50°	226.0	228.2	232.6	232.6	237.0	237.0	239.3	239.3	239.3	239.3	241.5
52.5°	175.0	177.2	181.6	181.6	183.8	186.2	186.2	186.2	186.2	188.4	186.2
55°	133.0	135.2	137.4	137.4	141.8	141.8	141.8	141.8	141.8	141.8	141.8
57.5°	99.7	101.9	104.1	104.1	104.1	106.3	104.1	106.3	106.3	106.3	106.3
60°	73.1	75.3	75.3	75.3	77.5	77.5	77.5	77.5	77.5	77.5	77.5
62.5°	51.0	51.0	53.2	53.2	53.2	55.4	53.2	53.2	55.4	55.4	53.2
65°	35.4	35.4	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7
67.5°	24.3	24.3	24.3	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
70°	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7
72.5°	11.1	11.1	11.1	11.1	13.3	13.3	13.3	13.3	13.3	13.3	13.3
75°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
77.5°	4.4	4.4	6.6	6.6	6.6	4.4	4.4	4.4	6.6	6.6	4.4
80°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
82.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
85°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.0	2.2	2.2	2.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P136428

CATALOG NUMBER: LD6A20D010TE ERW6A20927 6LW111H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1236.3	1236.3	1236.3	1236.3
2.5°	1242.9	1240.7	1242.9	1236.3
5°	1262.9	1260.7	1265.1	1256.2
7.5°	1276.1	1273.9	1278.4	1269.5
10°	1278.4	1278.4	1282.8	1273.9
12.5°	1278.4	1278.4	1282.8	1273.9
15°	1278.4	1276.1	1280.6	1271.7
17.5°	1262.9	1262.9	1267.3	1258.4
20°	1234.1	1234.1	1238.5	1231.9
22.5°	1198.6	1198.6	1200.8	1194.2
25°	1154.3	1152.1	1156.6	1152.1
27.5°	1098.9	1096.7	1098.9	1094.5
30°	1023.6	1021.4	1025.8	1021.4
32.5°	939.4	935.0	939.4	935.0
35°	835.2	830.8	835.2	833.0
37.5°	720.1	715.7	720.1	717.9
40°	598.2	596.0	600.4	598.2
42.5°	487.5	483.0	487.5	485.2
45°	389.9	385.5	389.9	387.7
47.5°	307.9	305.7	310.2	307.9
50°	241.5	239.3	241.5	241.5
52.5°	186.2	183.8	186.2	186.2
55°	141.8	139.6	141.8	141.8
57.5°	106.3	104.1	106.3	106.3
60°	77.5	77.5	77.5	77.5
62.5°	55.4	53.2	55.4	55.4
65°	37.7	37.7	37.7	37.7
67.5°	26.6	26.6	26.6	26.6
70°	17.7	17.7	17.7	17.7
72.5°	13.3	13.3	13.3	11.1
75°	8.9	8.9	8.9	8.9
77.5°	6.6	4.4	6.6	6.6
80°	4.4	4.4	4.4	4.4
82.5°	2.2	2.2	2.2	2.2
85°	2.2	2.2	2.2	2.2
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)