

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: P136275

Luminaire Tested: **LD6A15D010TE ERW6A15840 6LW111LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136275
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23359-R2)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A15D010TE ERW6A15840 6LW111LI
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED SINGLE WALL WASH LUMINAIRE
SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 4000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1634.0 lumens
Efficiency: N/A
Efficacy: 72.3 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.1
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

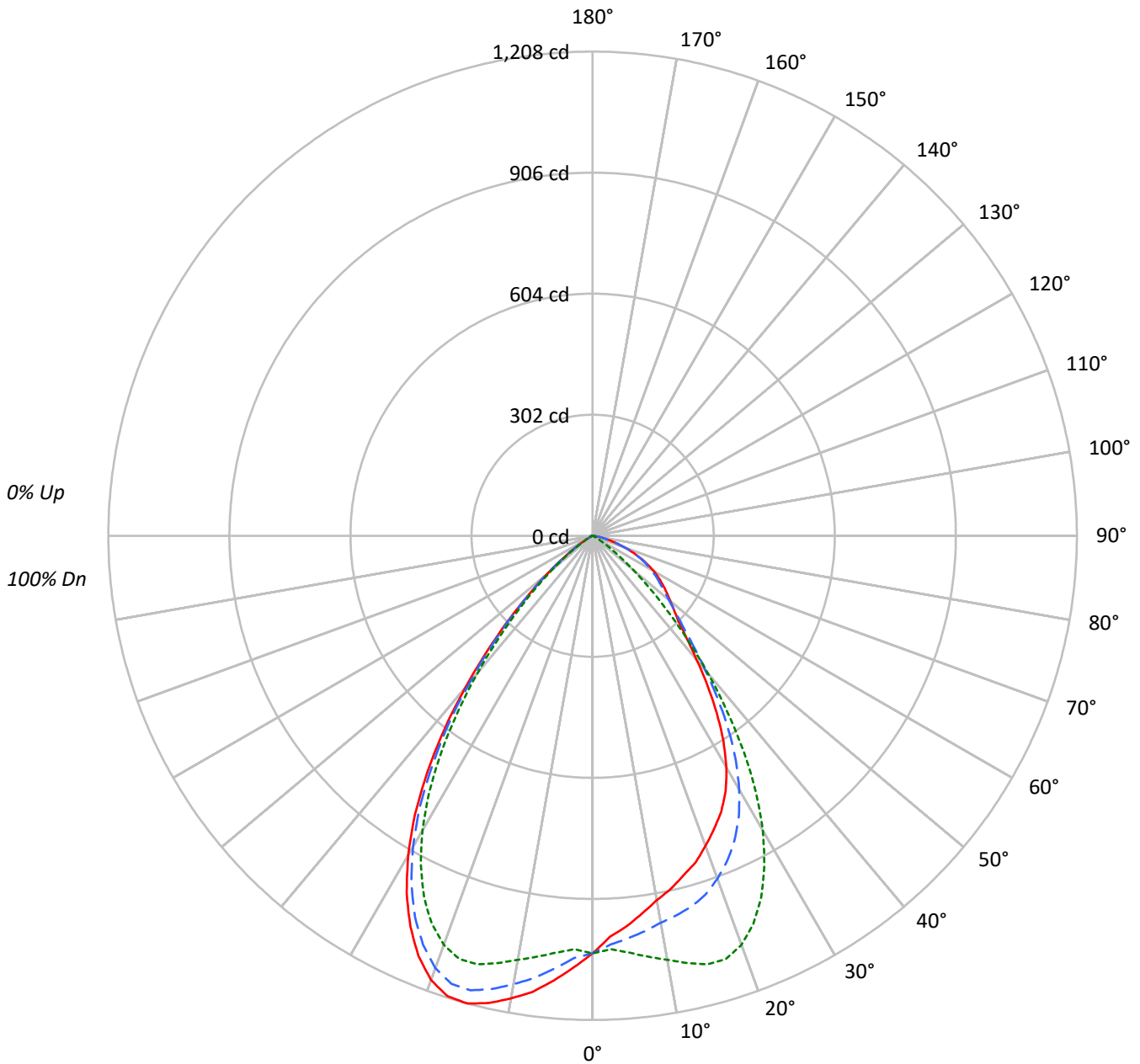
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91																			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82																			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	75	71	68	66																			
5	86	76	69	64	84	75	69	64	73	68	63	72	67	63	70	66	62	60																			
6	81	70	63	58	79	70	63	58	68	62	57	66	61	57	65	60	57	55																			
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	60	56	52	50																			
8	72	60	53	49	70	60	53	48	59	53	48	58	52	48	56	51	48	46																			
9	68	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	43																			
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	67961	67961	67961
5°	64029	68371	72943
10°	61153	71163	77635
15°	59207	74756	81584
20°	57146	75391	81848
25°	54651	71640	77413
30°	50270	63935	69277
35°	42960	52318	57129
40°	34356	37924	41978
45°	27993	24026	26923
50°	25608	13215	14981
55°	24330	5426	6347
60°	22913	1970	1970
65°	20454	1081	895
70°	16405	897	668
75°	10839	580	580
80°	5673	451	451
85°	2620	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	6.2
10°-20°	301.3	18.4
20°-30°	433.5	26.5
30°-40°	398.2	24.4
40°-50°	228.6	14.0
50°-60°	101.0	6.2
60°-70°	49.6	3.0
70°-80°	19.0	1.2
80°-90°	2.2	0.1
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°	835.3	51.1
0°-40°	1233.5	75.5
0°-60°	1563.2	95.7
0°-90°	1634.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1634.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1042	1042	1042	1042	1042	
5°	978	1008	1044	1084	1114	92
15°	877	957	1107	1174	1208	247
25°	759	838	995	1049	1075	347
35°	539	591	657	694	717	335
45°	303	316	260	285	292	241
55°	214	204	48	52	56	191
65°	132	128	7	5	6	130
75°	43	45	2	2	2	48
85°	4	4	0	0	0	6
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°	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7
2.5°	1001.0	1006.8	1001.0	1009.1	1013.8	1016.1	1013.8	1008.0	1016.1	1020.8	1019.6
5°	977.7	982.4	977.7	985.9	991.7	997.5	995.2	991.7	1001.0	1008.0	1009.1
7.5°	949.8	955.7	952.2	960.3	967.3	974.3	974.3	973.1	984.7	995.2	998.7
10°	923.1	927.7	925.4	933.6	941.7	949.8	952.2	953.3	966.1	980.1	988.2
12.5°	902.2	904.5	902.2	911.5	919.6	928.9	933.6	935.9	952.2	969.6	980.1
15°	876.6	882.4	880.1	889.4	898.7	909.1	915.0	919.6	937.1	956.8	971.9
17.5°	854.5	856.8	854.5	865.0	873.1	884.7	891.7	897.5	916.1	938.2	954.5
20°	823.1	827.8	826.6	835.9	845.2	855.7	862.6	868.5	888.2	910.3	928.9
22.5°	791.7	796.4	796.4	805.7	812.7	824.3	830.1	835.9	854.5	877.8	894.0
25°	759.2	762.7	761.5	769.6	777.8	789.4	794.1	799.9	817.3	838.2	853.3
27.5°	718.5	720.8	723.1	730.1	735.9	746.4	749.9	755.7	769.6	789.4	803.4
30°	667.3	669.7	673.1	679.0	683.6	694.1	696.4	701.0	715.0	731.3	744.1
32.5°	606.9	608.0	613.8	618.5	624.3	631.3	637.1	638.3	648.7	665.0	674.3
35°	539.4	540.6	546.4	549.9	555.7	562.7	567.3	568.5	577.8	590.6	596.4
37.5°	469.7	476.7	475.5	479.0	484.8	490.6	495.3	495.3	502.2	512.7	515.0
40°	403.4	406.9	410.4	412.7	417.4	422.0	425.5	425.5	430.2	437.1	437.1
42.5°	346.5	352.3	352.3	354.6	358.1	362.7	365.1	363.9	366.2	369.7	367.4
45°	303.4	305.8	306.9	310.4	311.6	316.2	317.4	315.1	316.2	316.2	309.2
47.5°	275.5	275.5	275.5	277.9	279.0	282.5	282.5	279.0	277.9	276.7	267.4
50°	252.3	252.3	253.4	255.8	256.9	258.1	258.1	253.4	252.3	247.6	234.8
52.5°	232.5	233.7	233.7	236.0	237.2	238.3	237.2	232.5	229.0	224.4	209.3
55°	213.9	215.1	216.2	218.6	218.6	218.6	217.4	212.8	209.3	203.5	188.3
57.5°	195.3	196.5	196.5	198.8	200.0	200.0	198.8	194.2	190.7	186.0	169.7
60°	175.6	175.6	176.7	179.0	179.0	180.2	179.0	175.6	172.1	166.3	152.3
62.5°	153.5	154.6	155.8	158.1	159.3	159.3	159.3	155.8	153.5	148.8	134.9
65°	132.5	132.5	133.7	136.0	136.0	139.5	137.2	134.9	132.5	127.9	116.3
67.5°	108.1	109.3	109.3	111.6	112.8	113.9	113.9	111.6	110.4	107.0	96.5
70°	86.0	86.0	87.2	88.4	89.5	90.7	90.7	89.5	88.4	84.9	76.7
72.5°	62.8	63.9	63.9	65.1	67.4	68.6	68.6	68.6	66.3	63.9	58.1
75°	43.0	44.2	44.2	45.3	46.5	47.7	47.7	47.7	46.5	45.3	40.7
77.5°	26.7	26.7	27.9	27.9	29.1	30.2	31.4	31.4	30.2	29.1	26.7
80°	15.1	15.1	16.3	16.3	16.3	17.4	18.6	18.6	18.6	17.4	15.1
82.5°	8.1	8.1	8.1	8.1	8.1	9.3	9.3	9.3	9.3	9.3	8.1
85°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
87.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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°	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7
2.5°	1019.6	1027.7	1033.5	1024.2	1032.4	1040.5	1049.8	1032.4	1048.7	1039.4	1042.8
5°	1013.8	1023.1	1031.2	1025.4	1035.9	1046.3	1059.1	1044.0	1062.6	1055.6	1061.4
7.5°	1005.6	1018.4	1030.1	1027.7	1041.7	1055.6	1071.9	1059.1	1078.9	1075.4	1082.4
10°	998.7	1016.1	1031.2	1031.2	1049.8	1066.1	1083.5	1074.2	1097.5	1094.0	1103.3
12.5°	994.0	1016.1	1035.9	1039.4	1061.4	1080.0	1101.0	1091.7	1117.3	1113.8	1124.2
15°	989.4	1014.9	1038.2	1045.2	1069.6	1091.7	1113.8	1106.8	1133.5	1130.0	1140.5
17.5°	974.3	1004.5	1030.1	1039.4	1066.1	1089.4	1112.6	1106.8	1133.5	1130.0	1140.5
20°	948.7	978.9	1006.8	1017.3	1044.0	1068.4	1090.5	1085.9	1112.6	1109.1	1118.4
22.5°	916.1	945.2	971.9	982.4	1008.0	1030.1	1052.1	1047.5	1073.1	1067.3	1077.7
25°	870.8	901.0	926.6	934.7	958.0	980.1	999.8	995.2	1019.6	1012.6	1023.1
27.5°	824.3	846.4	867.3	874.3	895.2	913.8	932.4	927.7	951.0	942.9	953.3
30°	761.5	778.9	797.5	801.0	820.8	835.9	852.2	848.7	868.5	861.5	870.8
32.5°	688.3	703.4	716.2	717.3	733.6	746.4	760.3	758.0	775.4	769.6	776.6
35°	608.0	617.3	625.5	624.3	637.1	646.4	659.2	656.9	673.1	667.3	674.3
37.5°	523.2	527.8	530.1	525.5	534.8	541.8	551.1	549.9	563.9	559.2	566.2
40°	440.6	440.6	437.1	429.0	434.8	438.3	445.3	445.3	455.7	451.1	456.9
42.5°	365.1	360.4	352.3	340.6	341.8	346.5	346.5	346.5	354.6	349.9	360.4
45°	303.4	293.0	280.2	265.1	260.4	262.7	260.4	260.4	266.2	262.7	270.9
47.5°	255.8	243.0	220.9	202.3	194.2	193.0	189.5	189.5	193.0	193.0	196.5
50°	219.7	201.1	174.4	152.3	140.7	137.2	132.5	130.2	133.7	132.5	134.9
52.5°	190.7	167.4	136.0	110.4	98.8	90.7	87.2	82.5	83.7	83.7	84.9
55°	166.3	139.5	105.8	79.1	66.3	57.0	52.3	47.7	47.7	46.5	47.7
57.5°	147.6	119.7	86.0	59.3	45.3	36.0	31.4	26.7	25.6	25.6	25.6
60°	131.4	104.6	70.9	46.5	32.6	23.3	18.6	15.1	14.0	12.8	12.8
62.5°	115.1	90.7	60.5	38.4	24.4	17.4	12.8	9.3	8.1	7.0	7.0
65°	98.8	77.9	52.3	32.6	20.9	14.0	9.3	7.0	5.8	4.7	4.7
67.5°	81.4	63.9	44.2	26.7	17.4	11.6	8.1	5.8	4.7	3.5	3.5
70°	65.1	51.2	34.9	22.1	14.0	9.3	5.8	4.7	3.5	3.5	3.5
72.5°	48.8	38.4	26.7	16.3	10.5	7.0	4.7	3.5	2.3	2.3	2.3
75°	34.9	27.9	18.6	11.6	7.0	4.7	3.5	2.3	2.3	2.3	2.3
77.5°	22.1	17.4	11.6	7.0	4.7	2.3	2.3	1.2	1.2	1.2	1.2
80°	12.8	10.5	7.0	4.7	2.3	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	7.0	4.7	3.5	2.3	1.2	1.2	1.2	0.0	0.0	0.0	0.0
85°	2.3	2.3	1.2	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	1.2	1.2	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°	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7	1041.7
2.5°	1052.1	1049.8	1058.0	1061.4	1059.1	1054.5	1069.6	1073.1	1062.6	1067.3	1067.3
5°	1073.1	1073.1	1083.5	1088.2	1088.2	1083.5	1101.0	1106.8	1096.3	1101.0	1102.1
7.5°	1096.3	1096.3	1109.1	1114.9	1116.1	1112.6	1130.0	1134.7	1127.7	1132.4	1133.5
10°	1117.3	1117.3	1132.4	1138.2	1139.3	1135.9	1153.3	1159.1	1151.0	1155.6	1156.8
12.5°	1139.3	1140.5	1155.6	1161.4	1161.4	1157.9	1175.4	1181.2	1171.9	1177.7	1176.5
15°	1155.6	1156.8	1171.9	1177.7	1178.9	1174.2	1190.5	1197.5	1188.2	1191.7	1191.7
17.5°	1154.5	1155.6	1169.6	1175.4	1175.4	1171.9	1185.8	1194.0	1184.7	1188.2	1187.0
20°	1131.2	1132.4	1147.5	1152.1	1152.1	1147.5	1160.3	1168.4	1159.1	1161.4	1160.3
22.5°	1089.4	1090.5	1104.5	1109.1	1110.3	1104.5	1117.3	1126.6	1116.1	1117.3	1116.1
25°	1034.7	1034.7	1049.8	1049.8	1055.6	1048.7	1058.0	1070.7	1060.3	1060.3	1056.8
27.5°	963.8	963.8	978.9	978.9	985.9	978.9	994.0	999.8	990.5	989.4	989.4
30°	881.2	881.2	895.2	895.2	901.0	895.2	910.3	916.1	906.8	905.7	906.8
32.5°	787.1	787.1	801.0	799.9	806.8	802.2	816.1	820.8	813.8	810.3	812.7
35°	683.6	689.4	697.6	696.4	703.4	694.1	711.5	715.0	709.2	710.3	706.9
37.5°	574.3	580.1	585.9	585.9	591.8	589.4	599.9	603.4	598.7	599.9	596.4
40°	465.0	470.9	475.5	475.5	481.3	474.3	488.3	491.8	487.1	482.5	484.8
42.5°	361.6	367.4	372.0	370.9	376.7	375.5	383.7	386.0	382.5	381.3	379.0
45°	272.0	273.2	281.3	284.8	284.8	284.8	290.6	291.8	288.3	288.3	287.2
47.5°	196.5	198.8	204.6	206.9	208.1	206.9	209.3	213.9	210.4	210.4	211.6
50°	136.0	137.2	141.8	144.2	144.2	144.2	145.3	148.8	146.5	146.5	144.2
52.5°	87.2	87.2	90.7	91.8	91.8	91.8	93.0	95.3	93.0	94.2	95.3
55°	48.8	48.8	51.2	52.3	52.3	52.3	53.5	54.6	53.5	54.6	54.6
57.5°	25.6	25.6	26.7	26.7	27.9	27.9	27.9	29.1	29.1	29.1	29.1
60°	12.8	12.8	12.8	14.0	14.0	14.0	14.0	15.1	15.1	15.1	15.1
62.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	8.1	8.1	8.1	8.1
65°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
67.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.7	4.7	4.7
70°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	3.5	3.5	3.5	2.3	2.3
75°	1.2	2.3	2.3	1.2	1.2	2.3	2.3	2.3	2.3	2.3	2.3
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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



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CATALOG NUMBER: LD6A15D010TE ERW6A15840 6LW111LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1041.7	1041.7	1041.7	1041.7
2.5°	1058.0	1059.1	1078.9	1077.7
5°	1092.8	1094.0	1113.8	1113.8
7.5°	1124.2	1125.4	1146.3	1147.5
10°	1147.5	1149.8	1169.6	1171.9
12.5°	1169.6	1169.6	1189.3	1194.0
15°	1183.5	1183.5	1202.1	1207.9
17.5°	1178.9	1178.9	1197.5	1204.4
20°	1153.3	1152.1	1169.6	1178.9
22.5°	1109.1	1110.3	1124.2	1134.7
25°	1053.3	1051.0	1066.1	1075.4
27.5°	983.6	984.7	994.0	1004.5
30°	899.8	902.2	909.1	919.6
32.5°	805.7	809.2	813.8	824.3
35°	702.2	705.7	708.0	717.3
37.5°	590.6	595.2	596.4	605.7
40°	480.2	484.8	484.8	492.9
42.5°	376.7	380.2	379.0	386.0
45°	284.8	287.2	286.0	291.8
47.5°	208.1	210.4	208.1	212.8
50°	144.2	146.5	144.2	147.6
52.5°	93.0	94.2	91.8	95.3
55°	53.5	54.6	53.5	55.8
57.5°	30.2	29.1	27.9	30.2
60°	15.1	15.1	15.1	15.1
62.5°	8.1	8.1	8.1	8.1
65°	4.7	4.7	4.7	5.8
67.5°	4.7	4.7	4.7	4.7
70°	3.5	3.5	3.5	3.5
72.5°	2.3	2.3	2.3	2.3
75°	2.3	2.3	2.3	2.3
77.5°	1.2	1.2	1.2	1.2
80°	0.0	0.0	0.0	1.2
82.5°	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0
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)