

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: P136274

Luminaire Tested: **LD6A15D010TE ERW6A15835 6LW111LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136274
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 ERW6A15835 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 3500K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1601.0 lumens
Efficiency: N/A
Efficacy: 70.8 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

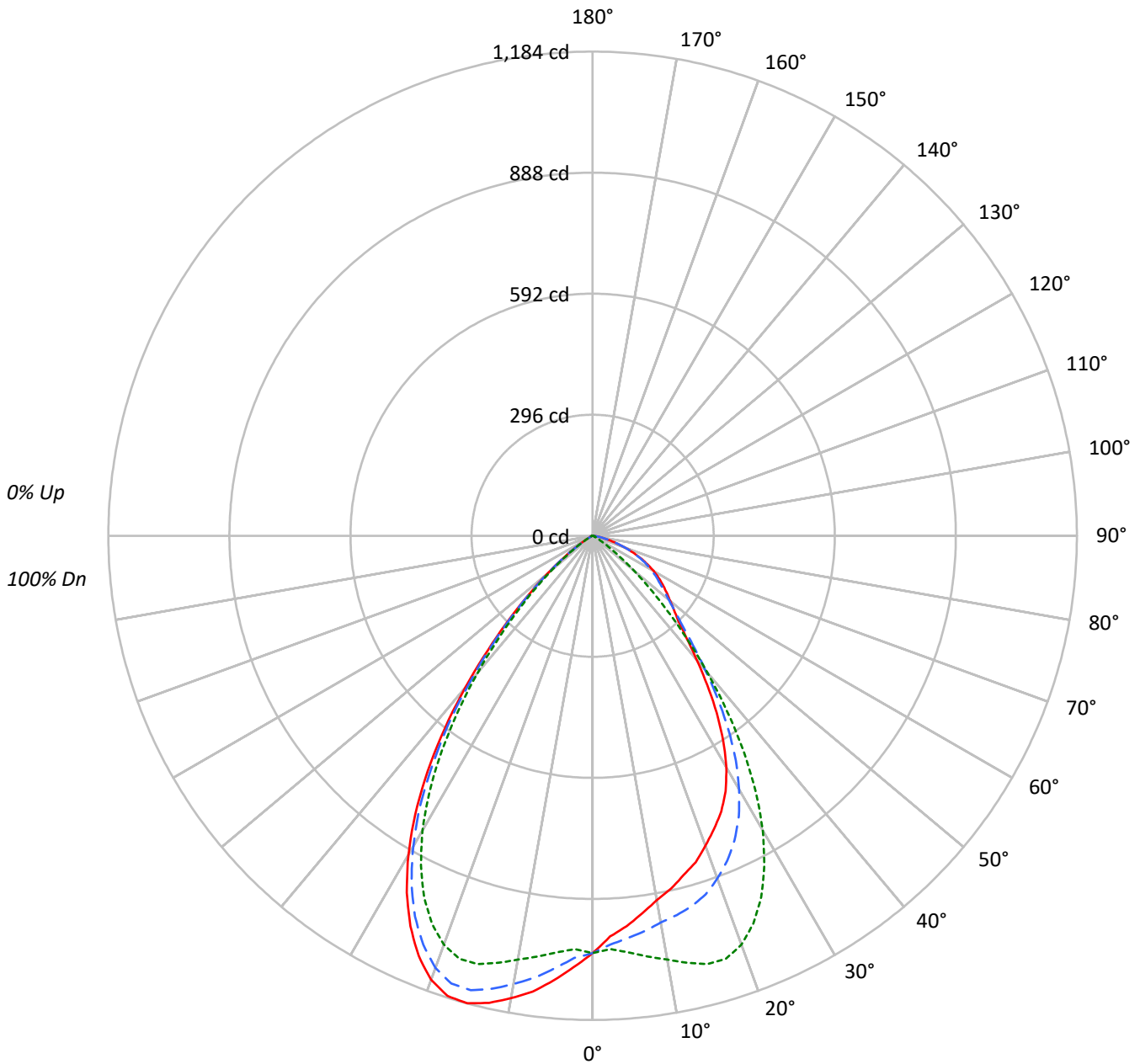
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	66585	66585	66585
5°	62739	66990	71469
10°	59920	69725	76065
15°	58012	73243	79936
20°	55993	73864	80196
25°	53542	70193	75851
30°	49261	62647	67875
35°	42092	51259	55974
40°	33666	37158	41135
45°	27430	23546	26378
50°	25090	12951	14687
55°	23841	5312	6222
60°	22443	1931	1931
65°	20053	1050	880
70°	16080	877	649
75°	10612	580	580
80°	5560	413	413
85°	2545	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	6.2
10°-20°	295.2	18.4
20°-30°	424.7	26.5
30°-40°	390.2	24.4
40°-50°	224.0	14.0
50°-60°	99.0	6.2
60°-70°	48.6	3.0
70°-80°	18.7	1.2
80°-90°	2.1	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°	818.4	51.1
0°-40°	1208.6	75.5
0°-60°	1531.6	95.7
0°-90°	1601.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1601.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1021	1021	1021	1021	1021	
5°	958	988	1023	1062	1091	90
15°	859	938	1084	1150	1184	242
25°	744	821	975	1028	1054	340
35°	528	579	644	680	703	328
45°	297	310	255	279	286	236
55°	210	199	47	51	55	187
65°	130	125	7	5	6	127
75°	42	44	2	2	2	47
85°	3	3	0	0	0	5
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°	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6
2.5°	980.8	986.5	980.8	988.8	993.3	995.6	993.3	987.6	995.6	1000.1	999.0
5°	958.0	962.6	958.0	966.0	971.7	977.4	975.1	971.7	980.8	987.6	988.8
7.5°	930.7	936.4	932.9	940.9	947.7	954.6	954.6	953.4	964.8	975.1	978.5
10°	904.5	909.0	906.7	914.7	922.7	930.7	932.9	934.1	946.6	960.3	968.2
12.5°	884.0	886.2	884.0	893.1	901.0	910.2	914.7	917.0	932.9	950.0	960.3
15°	858.9	864.6	862.3	871.4	880.5	890.8	896.5	901.0	918.1	937.5	952.3
17.5°	837.2	839.5	837.2	847.5	855.5	866.9	873.7	879.4	897.6	919.3	935.2
20°	806.5	811.0	809.9	819.0	828.1	838.4	845.2	850.9	870.3	891.9	910.2
22.5°	775.7	780.3	780.3	789.4	796.2	807.6	813.3	819.0	837.2	860.0	876.0
25°	743.8	747.3	746.1	754.1	762.1	773.5	778.0	783.7	800.8	821.3	836.1
27.5°	704.0	706.3	708.5	715.4	721.1	731.3	734.7	740.4	754.1	773.5	787.1
30°	653.9	656.1	659.5	665.2	669.8	680.1	682.3	686.9	700.6	716.5	729.0
32.5°	594.6	595.8	601.5	606.0	611.7	618.5	624.2	625.4	635.6	651.6	660.7
35°	528.5	529.7	535.4	538.8	544.5	551.3	555.9	557.0	566.1	578.7	584.4
37.5°	460.2	467.0	465.9	469.3	475.0	480.7	485.3	485.3	492.1	502.3	504.6
40°	395.3	398.7	402.1	404.4	408.9	413.5	416.9	416.9	421.5	428.3	428.3
42.5°	339.5	345.2	345.2	347.4	350.8	355.4	357.7	356.5	358.8	362.2	360.0
45°	297.3	299.6	300.7	304.1	305.3	309.8	311.0	308.7	309.8	309.8	303.0
47.5°	270.0	270.0	270.0	272.2	273.4	276.8	276.8	273.4	272.2	271.1	262.0
50°	247.2	247.2	248.3	250.6	251.7	252.9	252.9	248.3	247.2	242.6	230.1
52.5°	227.8	229.0	229.0	231.2	232.4	233.5	232.4	227.8	224.4	219.8	205.0
55°	209.6	210.7	211.9	214.2	214.2	214.2	213.0	208.5	205.0	199.3	184.5
57.5°	191.4	192.5	192.5	194.8	195.9	195.9	194.8	190.2	186.8	182.3	166.3
60°	172.0	172.0	173.1	175.4	175.4	176.6	175.4	172.0	168.6	162.9	149.2
62.5°	150.4	151.5	152.6	154.9	156.1	156.1	156.1	152.6	150.4	145.8	132.1
65°	129.9	129.9	131.0	133.3	133.3	136.7	134.4	132.1	129.9	125.3	113.9
67.5°	105.9	107.1	107.1	109.4	110.5	111.6	111.6	109.4	108.2	104.8	94.5
70°	84.3	84.3	85.4	86.6	87.7	88.9	88.9	87.7	86.6	83.2	75.2
72.5°	61.5	62.7	62.7	63.8	66.1	67.2	67.2	67.2	64.9	62.7	57.0
75°	42.1	43.3	43.3	44.4	45.6	46.7	46.7	46.7	45.6	44.4	39.9
77.5°	26.2	26.2	27.3	27.3	28.5	29.6	30.8	30.8	29.6	28.5	26.2
80°	14.8	14.8	15.9	15.9	15.9	17.1	18.2	18.2	18.2	17.1	14.8
82.5°	8.0	8.0	8.0	8.0	8.0	9.1	9.1	9.1	9.1	9.1	8.0
85°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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°	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6
2.5°	999.0	1007.0	1012.7	1003.6	1011.5	1019.5	1028.6	1011.5	1027.5	1018.4	1021.8
5°	993.3	1002.4	1010.4	1004.7	1015.0	1025.2	1037.7	1022.9	1041.2	1034.3	1040.0
7.5°	985.3	997.9	1009.3	1007.0	1020.6	1034.3	1050.3	1037.7	1057.1	1053.7	1060.5
10°	978.5	995.6	1010.4	1010.4	1028.6	1044.6	1061.7	1052.5	1075.3	1071.9	1081.0
12.5°	973.9	995.6	1015.0	1018.4	1040.0	1058.2	1078.7	1069.6	1094.7	1091.3	1101.5
15°	969.4	994.4	1017.2	1024.1	1048.0	1069.6	1091.3	1084.4	1110.6	1107.2	1117.5
17.5°	954.6	984.2	1009.3	1018.4	1044.6	1067.3	1090.1	1084.4	1110.6	1107.2	1117.5
20°	929.5	959.1	986.5	996.7	1022.9	1046.8	1068.5	1063.9	1090.1	1086.7	1095.8
22.5°	897.6	926.1	952.3	962.6	987.6	1009.3	1030.9	1026.3	1051.4	1045.7	1056.0
25°	853.2	882.8	907.9	915.8	938.6	960.3	979.6	975.1	999.0	992.2	1002.4
27.5°	807.6	829.3	849.8	856.6	877.1	895.3	913.6	909.0	931.8	923.8	934.1
30°	746.1	763.2	781.4	784.8	804.2	819.0	835.0	831.6	850.9	844.1	853.2
32.5°	674.4	689.2	701.7	702.8	718.8	731.3	745.0	742.7	759.8	754.1	760.9
35°	595.8	604.9	612.8	611.7	624.2	633.3	645.9	643.6	659.5	653.9	660.7
37.5°	512.6	517.2	519.4	514.9	524.0	530.8	539.9	538.8	552.5	547.9	554.7
40°	431.7	431.7	428.3	420.3	426.0	429.4	436.3	436.3	446.5	442.0	447.7
42.5°	357.7	353.1	345.2	333.8	334.9	339.5	339.5	339.5	347.4	342.9	353.1
45°	297.3	287.1	274.5	259.7	255.2	257.4	255.2	255.2	260.9	257.4	265.4
47.5°	250.6	238.1	216.4	198.2	190.2	189.1	185.7	185.7	189.1	189.1	192.5
50°	215.3	197.1	170.9	149.2	137.8	134.4	129.9	127.6	131.0	129.9	132.1
52.5°	186.8	164.0	133.3	108.2	96.8	88.9	85.4	80.9	82.0	82.0	83.2
55°	162.9	136.7	103.7	77.5	64.9	55.8	51.3	46.7	46.7	45.6	46.7
57.5°	144.7	117.3	84.3	58.1	44.4	35.3	30.8	26.2	25.1	25.1	25.1
60°	128.7	102.5	69.5	45.6	31.9	22.8	18.2	14.8	13.7	12.5	12.5
62.5°	112.8	88.9	59.2	37.6	23.9	17.1	12.5	9.1	8.0	6.8	6.8
65°	96.8	76.3	51.3	31.9	20.5	13.7	9.1	6.8	5.7	4.6	4.6
67.5°	79.7	62.7	43.3	26.2	17.1	11.4	8.0	5.7	4.6	3.4	3.4
70°	63.8	50.1	34.2	21.6	13.7	9.1	5.7	4.6	3.4	3.4	3.4
72.5°	47.8	37.6	26.2	15.9	10.3	6.8	4.6	3.4	2.3	2.3	2.3
75°	34.2	27.3	18.2	11.4	6.8	4.6	3.4	2.3	2.3	2.3	2.3
77.5°	21.6	17.1	11.4	6.8	4.6	2.3	2.3	1.1	1.1	1.1	1.1
80°	12.5	10.3	6.8	4.6	2.3	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	6.8	4.6	3.4	2.3	1.1	1.1	1.1	0.0	0.0	0.0	0.0
85°	2.3	2.3	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	1.1	1.1	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°	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6
2.5°	1030.9	1028.6	1036.6	1040.0	1037.7	1033.2	1048.0	1051.4	1041.2	1045.7	1045.7
5°	1051.4	1051.4	1061.7	1066.2	1066.2	1061.7	1078.7	1084.4	1074.2	1078.7	1079.9
7.5°	1074.2	1074.2	1086.7	1092.4	1093.5	1090.1	1107.2	1111.8	1104.9	1109.5	1110.6
10°	1094.7	1094.7	1109.5	1115.2	1116.3	1112.9	1130.0	1135.7	1127.7	1132.3	1133.4
12.5°	1116.3	1117.5	1132.3	1138.0	1138.0	1134.6	1151.6	1157.3	1148.2	1153.9	1152.8
15°	1132.3	1133.4	1148.2	1153.9	1155.1	1150.5	1166.5	1173.3	1164.2	1167.6	1167.6
17.5°	1131.1	1132.3	1145.9	1151.6	1151.6	1148.2	1161.9	1169.9	1160.8	1164.2	1163.0
20°	1108.4	1109.5	1124.3	1128.9	1128.9	1124.3	1136.8	1144.8	1135.7	1138.0	1136.8
22.5°	1067.3	1068.5	1082.2	1086.7	1087.9	1082.2	1094.7	1103.8	1093.5	1094.7	1093.5
25°	1013.8	1013.8	1028.6	1028.6	1034.3	1027.5	1036.6	1049.1	1038.9	1038.9	1035.5
27.5°	944.3	944.3	959.1	959.1	966.0	959.1	973.9	979.6	970.5	969.4	969.4
30°	863.4	863.4	877.1	877.1	882.8	877.1	891.9	897.6	888.5	887.4	888.5
32.5°	771.2	771.2	784.8	783.7	790.5	786.0	799.7	804.2	797.4	794.0	796.2
35°	669.8	675.5	683.5	682.3	689.2	680.1	697.1	700.6	694.9	696.0	692.6
37.5°	562.7	568.4	574.1	574.1	579.8	577.5	587.8	591.2	586.6	587.8	584.4
40°	455.6	461.3	465.9	465.9	471.6	464.8	478.4	481.8	477.3	472.7	475.0
42.5°	354.3	360.0	364.5	363.4	369.1	367.9	375.9	378.2	374.8	373.6	371.4
45°	266.6	267.7	275.7	279.1	279.1	279.1	284.8	285.9	282.5	282.5	281.4
47.5°	192.5	194.8	200.5	202.8	203.9	202.8	205.0	209.6	206.2	206.2	207.3
50°	133.3	134.4	139.0	141.3	141.3	141.3	142.4	145.8	143.5	143.5	141.3
52.5°	85.4	85.4	88.9	90.0	90.0	90.0	91.1	93.4	91.1	92.3	93.4
55°	47.8	47.8	50.1	51.3	51.3	51.3	52.4	53.5	52.4	53.5	53.5
57.5°	25.1	25.1	26.2	26.2	27.3	27.3	27.3	28.5	28.5	28.5	28.5
60°	12.5	12.5	12.5	13.7	13.7	13.7	13.7	14.8	14.8	14.8	14.8
62.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	8.0	8.0	8.0	8.0
65°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
67.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	4.6	4.6	4.6
70°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	3.4	3.4	3.4	2.3	2.3
75°	1.1	2.3	2.3	1.1	1.1	2.3	2.3	2.3	2.3	2.3	2.3
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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 ERW6A15835 6LW111LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1020.6	1020.6	1020.6	1020.6
2.5°	1036.6	1037.7	1057.1	1056.0
5°	1070.8	1071.9	1091.3	1091.3
7.5°	1101.5	1102.7	1123.2	1124.3
10°	1124.3	1126.6	1145.9	1148.2
12.5°	1145.9	1145.9	1165.3	1169.9
15°	1159.6	1159.6	1177.8	1183.5
17.5°	1155.1	1155.1	1173.3	1180.1
20°	1130.0	1128.9	1145.9	1155.1
22.5°	1086.7	1087.9	1101.5	1111.8
25°	1032.0	1029.8	1044.6	1053.7
27.5°	963.7	964.8	973.9	984.2
30°	881.7	884.0	890.8	901.0
32.5°	789.4	792.8	797.4	807.6
35°	688.0	691.4	693.7	702.8
37.5°	578.7	583.2	584.4	593.5
40°	470.5	475.0	475.0	483.0
42.5°	369.1	372.5	371.4	378.2
45°	279.1	281.4	280.2	285.9
47.5°	203.9	206.2	203.9	208.5
50°	141.3	143.5	141.3	144.7
52.5°	91.1	92.3	90.0	93.4
55°	52.4	53.5	52.4	54.7
57.5°	29.6	28.5	27.3	29.6
60°	14.8	14.8	14.8	14.8
62.5°	8.0	8.0	8.0	8.0
65°	4.6	4.6	4.6	5.7
67.5°	4.6	4.6	4.6	4.6
70°	3.4	3.4	3.4	3.4
72.5°	2.3	2.3	2.3	2.3
75°	2.3	2.3	2.3	2.3
77.5°	1.1	1.1	1.1	1.1
80°	0.0	0.0	0.0	1.1
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)