

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: P135798

Luminaire Tested: **LD6A15D010TE ERM6A15935 6LM121LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P135798  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23357-R2)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6A15D010TE ERM6A15935 6LM121LI  
Description: PORTFOLIO 6 INCH 50 DEGREE CUTOFF RECESSED DOUBLE 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: 1443.2 lumens  
Efficiency: N/A  
Efficacy: 63.9 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.02 / 0.97  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

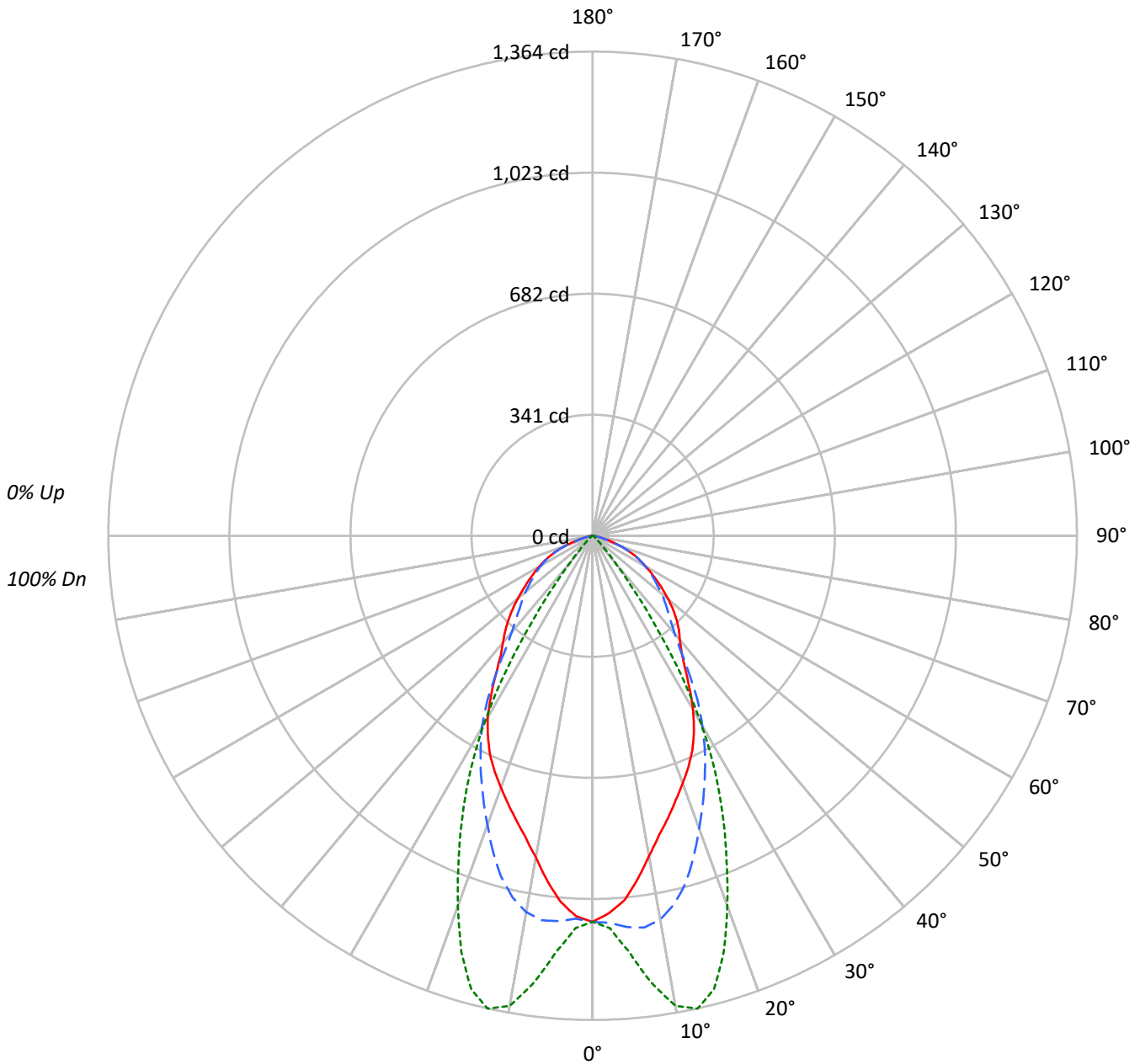
Input Watts (W): 22.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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					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	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90								
2	104	98	93	89	102	96	91	87	93	89	86	90	87	84	87	84	82	80								
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72								
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64								
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58								
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53								
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49								
8	71	59	52	47	69	59	52	47	58	51	47	57	51	47	55	50	47	45								
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42								
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	70949	70949	70949
5°	67468	77049	67789
10°	60649	89076	60974
15°	55493	89277	56026
20°	51481	77016	52376
25°	47899	62411	49108
30°	42601	46179	44469
35°	35983	24411	37719
40°	32508	8167	33427
45°	30825	2833	30927
50°	28196	1208	27891
55°	25194	899	24967
60°	22443	900	22704
65°	19852	911	19991
70°	15279	763	15088
75°	9478	479	8974
80°	4847	376	4471
85°	2171	0	2171



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.5	7.3
10°-20°	288.0	20.0
20°-30°	346.7	24.0
30°-40°	269.4	18.7
40°-50°	180.3	12.5
50°-60°	135.7	9.4
60°-70°	87.1	6.0
70°-80°	27.9	1.9
80°-90°	2.6	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°	740.3	51.3
0°-40°	1009.7	70.0
0°-60°	1325.6	91.9
0°-90°	1443.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1443.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1088	1088	1088	1088	1088	
5°	1030	1106	1176	1090	1035	95
15°	822	1012	1322	995	830	231
25°	665	748	867	744	682	303
35°	452	473	306	473	474	287
45°	334	299	31	292	335	257
55°	222	210	8	205	220	199
65°	129	130	6	126	130	126
75°	38	36	2	34	36	43
85°	3	3	0	3	3	4
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°	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5
2.5°	1063.8	1072.7	1069.7	1083.6	1073.7	1072.7	1079.6	1083.6	1084.6	1091.5	1091.5
5°	1030.2	1040.1	1037.1	1054.9	1051.0	1054.9	1069.7	1080.6	1090.5	1106.3	1116.3
7.5°	974.9	986.7	988.7	1006.5	1008.4	1019.4	1043.0	1064.8	1085.6	1113.2	1137.0
10°	915.5	927.4	930.3	950.1	956.1	970.9	1001.5	1029.2	1058.9	1097.5	1133.0
12.5°	864.1	876.0	879.9	899.7	906.6	923.4	956.1	986.7	1020.3	1062.8	1105.4
15°	821.6	832.5	836.5	854.2	861.1	877.0	907.6	937.3	969.9	1012.4	1053.9
17.5°	780.1	791.0	793.9	809.7	814.6	828.5	856.2	881.9	909.6	947.2	984.7
20°	741.5	751.4	753.4	767.2	770.1	781.0	803.8	824.6	847.3	877.0	907.6
22.5°	704.9	714.8	715.8	727.7	728.7	737.5	756.3	772.2	788.0	811.7	833.4
25°	665.4	675.3	676.3	686.1	687.2	693.1	707.9	719.8	730.6	747.5	762.3
27.5°	617.9	627.8	630.8	637.7	638.7	642.7	655.5	663.4	674.3	685.1	691.1
30°	565.5	574.4	578.4	584.3	585.3	591.2	603.1	609.1	616.0	617.9	619.9
32.5°	507.2	517.0	521.0	526.0	528.9	534.9	545.8	548.7	550.7	549.7	538.8
35°	451.8	460.7	464.6	470.6	472.6	476.5	485.5	484.4	481.5	472.6	452.9
37.5°	410.3	417.2	421.2	425.1	426.1	428.1	433.1	429.1	421.2	406.3	380.6
40°	381.7	388.6	389.6	393.5	392.5	392.5	393.5	386.5	376.7	358.9	329.3
42.5°	359.8	365.8	365.8	369.8	366.8	364.8	364.8	356.9	344.1	325.3	295.6
45°	334.1	339.1	340.1	342.1	339.1	337.2	337.2	329.3	317.4	298.6	268.9
47.5°	307.5	312.4	312.4	315.4	312.4	310.5	310.5	303.6	292.7	275.8	248.1
50°	277.8	282.7	283.8	285.7	283.8	282.7	283.8	276.9	267.9	253.1	228.4
52.5°	249.1	254.1	254.1	256.0	254.1	254.1	255.1	250.1	242.2	230.3	208.6
55°	221.5	225.5	227.4	229.3	226.4	226.4	227.4	224.4	218.5	209.6	190.8
57.5°	195.7	199.7	200.7	202.7	200.7	201.7	202.7	199.7	196.7	189.8	175.0
60°	172.0	176.0	177.0	177.9	177.0	177.0	177.9	177.0	175.0	170.0	157.2
62.5°	150.3	153.3	154.3	156.2	154.3	153.3	155.2	154.3	153.3	150.3	141.4
65°	128.6	130.5	131.5	132.4	130.5	128.6	130.5	130.5	131.5	129.5	122.6
67.5°	104.8	106.7	106.7	106.7	103.8	102.8	104.8	104.8	106.7	105.8	100.8
70°	80.1	81.0	81.0	81.0	77.1	77.1	78.1	78.1	80.1	80.1	77.1
72.5°	57.4	56.4	56.4	55.4	54.3	52.4	52.4	53.4	55.4	55.4	53.4
75°	37.6	36.6	35.6	35.6	34.6	32.6	32.6	33.6	34.6	35.6	34.6
77.5°	22.7	21.7	21.7	20.7	20.7	19.8	19.8	19.8	20.7	20.7	20.7
80°	12.9	11.9	11.9	11.9	10.9	10.9	10.9	10.9	10.9	11.9	10.9
82.5°	6.9	5.9	5.9	5.9	5.9	5.9	5.0	5.9	5.9	5.9	5.9
85°	2.9	2.9	2.9	2.9	1.9	1.9	1.9	1.9	1.9	2.9	2.9
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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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5
2.5°	1088.5	1098.4	1091.5	1113.2	1098.4	1106.3	1117.2	1106.3	1109.3	1116.3	1102.3
5°	1122.1	1139.9	1141.9	1171.6	1159.7	1173.5	1188.4	1176.5	1178.5	1183.5	1165.6
7.5°	1156.8	1188.4	1203.2	1244.7	1241.8	1264.5	1282.3	1270.4	1270.4	1271.4	1244.7
10°	1166.6	1213.1	1240.8	1292.2	1300.1	1332.8	1352.5	1344.6	1342.6	1339.7	1303.0
12.5°	1144.9	1202.3	1237.8	1295.2	1311.0	1349.5	1367.3	1364.4	1361.4	1355.4	1313.0
15°	1094.4	1153.8	1191.3	1247.7	1267.5	1307.0	1321.8	1321.8	1318.9	1313.0	1267.5
17.5°	1020.3	1075.6	1110.3	1159.7	1179.5	1216.1	1225.9	1228.9	1225.9	1220.0	1178.5
20°	936.3	982.7	1010.4	1051.0	1066.8	1098.4	1104.4	1109.3	1107.3	1102.3	1065.8
22.5°	854.2	890.8	911.5	947.2	953.1	979.8	981.8	985.7	984.7	982.7	953.1
25°	779.1	803.8	815.6	842.3	844.4	864.1	863.1	867.0	866.1	866.1	843.4
27.5°	700.0	714.8	717.7	734.6	730.6	745.5	747.5	745.5	746.5	747.5	730.6
30°	620.8	623.9	615.0	617.0	606.0	615.0	606.0	613.0	613.0	616.0	606.0
32.5°	531.0	522.0	498.3	486.5	467.7	467.7	462.7	462.7	462.7	467.7	465.7
35°	435.0	413.3	376.7	351.0	324.3	317.4	316.4	306.5	308.4	315.4	320.3
37.5°	352.9	320.3	271.9	235.3	203.6	189.8	184.8	177.0	180.0	187.9	199.7
40°	294.6	255.1	198.8	156.2	124.6	108.8	100.8	95.9	98.8	108.8	123.6
42.5°	258.1	214.5	154.3	109.8	80.1	65.2	57.4	53.4	56.4	65.2	83.1
45°	231.4	185.9	124.6	81.0	54.3	40.5	33.6	30.7	32.6	40.5	55.4
47.5°	210.6	164.1	103.8	62.3	38.6	26.7	20.7	17.8	19.8	26.7	38.6
50°	191.8	146.3	88.0	49.5	29.7	19.8	13.8	11.9	13.8	18.8	28.6
52.5°	175.0	130.5	75.2	40.5	22.7	15.8	10.9	8.9	9.9	14.8	22.7
55°	160.2	118.6	66.2	34.6	19.8	13.8	9.9	7.9	9.9	12.9	19.8
57.5°	146.3	106.7	58.3	29.7	16.8	11.9	8.9	7.9	8.9	11.9	16.8
60°	132.4	95.0	51.4	25.7	14.8	10.9	7.9	6.9	7.9	9.9	14.8
62.5°	118.6	84.0	44.5	21.7	12.9	8.9	6.9	5.9	6.9	8.9	12.9
65°	102.8	71.2	37.6	18.8	10.9	7.9	5.9	5.9	5.9	7.9	10.9
67.5°	85.0	58.3	29.7	14.8	8.9	6.9	5.0	5.0	5.0	6.9	8.9
70°	65.2	43.5	22.7	11.9	6.9	5.0	4.0	4.0	4.0	5.0	6.9
72.5°	45.5	30.7	15.8	8.9	5.0	4.0	2.9	2.9	2.9	4.0	5.0
75°	28.6	19.8	10.9	5.9	4.0	2.9	1.9	1.9	1.9	2.9	4.0
77.5°	16.8	11.9	6.9	4.0	1.9	1.9	1.0	1.0	1.0	1.9	1.9
80°	8.9	6.9	4.0	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	5.0	2.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	1.9	1.0	1.0	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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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5	1087.5
2.5°	1098.4	1102.3	1101.4	1080.6	1078.7	1079.6	1065.8	1070.8	1075.6	1070.8	1071.8
5°	1151.8	1150.8	1138.9	1109.3	1097.5	1089.5	1066.8	1062.8	1059.9	1049.0	1045.1
7.5°	1222.0	1208.2	1183.5	1138.9	1114.2	1092.5	1058.9	1042.0	1030.2	1011.4	1000.6
10°	1270.4	1242.8	1206.1	1147.8	1110.3	1076.6	1033.2	1007.5	987.7	963.0	947.2
12.5°	1277.3	1238.8	1196.3	1128.0	1084.6	1043.0	995.6	967.0	944.2	917.5	902.7
15°	1232.9	1193.3	1148.9	1080.6	1037.1	994.6	949.1	920.4	897.7	872.0	859.2
17.5°	1148.9	1112.3	1072.7	1009.4	971.8	933.3	892.8	868.0	848.2	828.5	815.6
20°	1042.0	1013.4	980.8	927.4	897.7	866.1	834.4	814.6	799.8	783.0	773.2
22.5°	936.3	914.6	890.8	848.2	826.5	803.8	779.1	765.3	754.4	741.5	734.6
25°	834.4	819.6	804.8	772.2	759.3	743.5	725.7	715.8	708.9	700.0	695.1
27.5°	728.7	723.7	719.8	699.0	694.1	683.2	671.3	665.4	660.4	654.5	650.6
30°	613.9	617.0	632.7	621.9	626.8	623.9	618.9	615.0	613.0	608.0	603.1
32.5°	484.4	505.2	527.9	531.0	545.8	552.7	551.7	552.7	553.6	549.7	545.8
35°	347.0	380.6	416.2	432.0	456.7	472.6	478.6	484.4	488.4	487.4	484.4
37.5°	231.4	276.9	319.3	347.0	379.6	401.4	414.3	424.1	430.1	432.0	432.0
40°	154.3	197.7	254.1	289.7	326.2	352.9	367.8	380.6	389.6	393.5	395.5
42.5°	108.8	155.2	212.6	253.1	290.7	319.3	336.2	350.0	358.9	363.8	365.8
45°	80.1	124.6	183.9	225.5	264.0	291.7	308.4	321.3	330.2	335.2	338.1
47.5°	61.3	104.8	162.2	204.6	243.2	268.9	284.8	296.6	304.5	308.4	310.5
50°	48.4	88.0	144.3	186.9	222.4	246.2	260.0	269.9	276.9	279.8	281.7
52.5°	39.5	76.2	129.5	170.0	203.6	224.4	235.3	243.2	249.1	251.2	253.1
55°	33.6	66.2	116.7	156.2	186.9	204.6	212.6	219.5	222.4	224.4	225.5
57.5°	29.7	58.3	105.8	143.4	171.0	185.9	191.8	196.7	197.7	199.7	200.7
60°	25.7	50.4	93.9	129.5	154.3	167.1	170.0	174.0	174.0	175.0	176.0
62.5°	21.7	43.5	82.1	115.7	137.4	148.3	150.3	151.2	151.2	151.2	152.2
65°	17.8	36.6	69.2	99.8	119.6	126.5	127.6	128.6	126.5	126.5	127.6
67.5°	14.8	28.6	55.4	82.1	97.9	103.8	102.8	102.8	99.8	99.8	100.8
70°	10.9	21.7	41.5	62.3	74.1	78.1	76.2	76.2	73.1	73.1	74.1
72.5°	7.9	15.8	28.6	42.6	51.4	53.4	51.4	51.4	49.5	49.5	50.4
75°	5.9	9.9	18.8	27.7	32.6	33.6	32.6	31.7	30.7	30.7	31.7
77.5°	4.0	6.9	10.9	15.8	18.8	19.8	18.8	18.8	17.8	18.8	18.8
80°	1.9	4.0	5.9	8.9	9.9	10.9	10.9	10.9	9.9	9.9	10.9
82.5°	1.0	1.9	2.9	4.0	5.0	5.9	5.0	5.0	5.0	5.0	5.0
85°	0.0	1.0	1.0	1.9	1.9	2.9	1.9	1.9	1.9	1.9	1.9
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 ERM6A15935 6LM121LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1087.5	1087.5	1087.5	1087.5
2.5°	1069.7	1064.8	1057.9	1072.7
5°	1039.1	1029.2	1021.3	1035.1
7.5°	990.6	976.8	965.9	979.8
10°	935.3	919.4	907.6	920.4
12.5°	<b>886.8</b>	<b>871.0</b>	<b>861.1</b>	<b>871.0</b>
15°	844.4	829.5	820.6	829.5
17.5°	802.8	789.9	782.0	792.0
20°	763.2	752.4	745.5	754.4
22.5°	726.7	716.8	710.8	719.8
25°	688.1	681.2	674.3	682.2
27.5°	645.6	637.7	633.7	638.7
30°	597.2	589.3	586.3	590.3
32.5°	539.8	531.9	528.9	531.9
35°	480.5	473.6	469.6	473.6
37.5°	430.1	424.1	421.2	424.1
40°	394.5	391.5	388.6	392.5
42.5°	366.8	363.8	361.9	364.8
45°	338.1	334.1	332.2	335.2
47.5°	309.5	305.5	303.6	305.5
50°	279.8	274.8	273.9	274.8
52.5°	250.1	246.2	244.2	245.2
55°	223.4	220.5	218.5	219.5
57.5°	199.7	195.7	194.8	195.7
60°	176.0	174.0	173.1	174.0
62.5°	152.2	151.2	152.2	152.2
65°	128.6	128.6	129.5	129.5
67.5°	102.8	104.8	105.8	105.8
70°	76.2	78.1	79.1	79.1
72.5°	51.4	53.4	54.3	55.4
75°	32.6	34.6	35.6	35.6
77.5°	19.8	20.7	20.7	21.7
80°	10.9	11.9	11.9	11.9
82.5°	5.9	5.9	5.9	6.9
85°	2.9	2.9	2.9	2.9
87.5°	0.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)