

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: P136278

Luminaire Tested: **LD6A15D010TE ERW6A15935 6LW111LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136278
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 ERW6A15935 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: 1474.5 lumens
Efficiency: N/A
Efficacy: 65.2 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

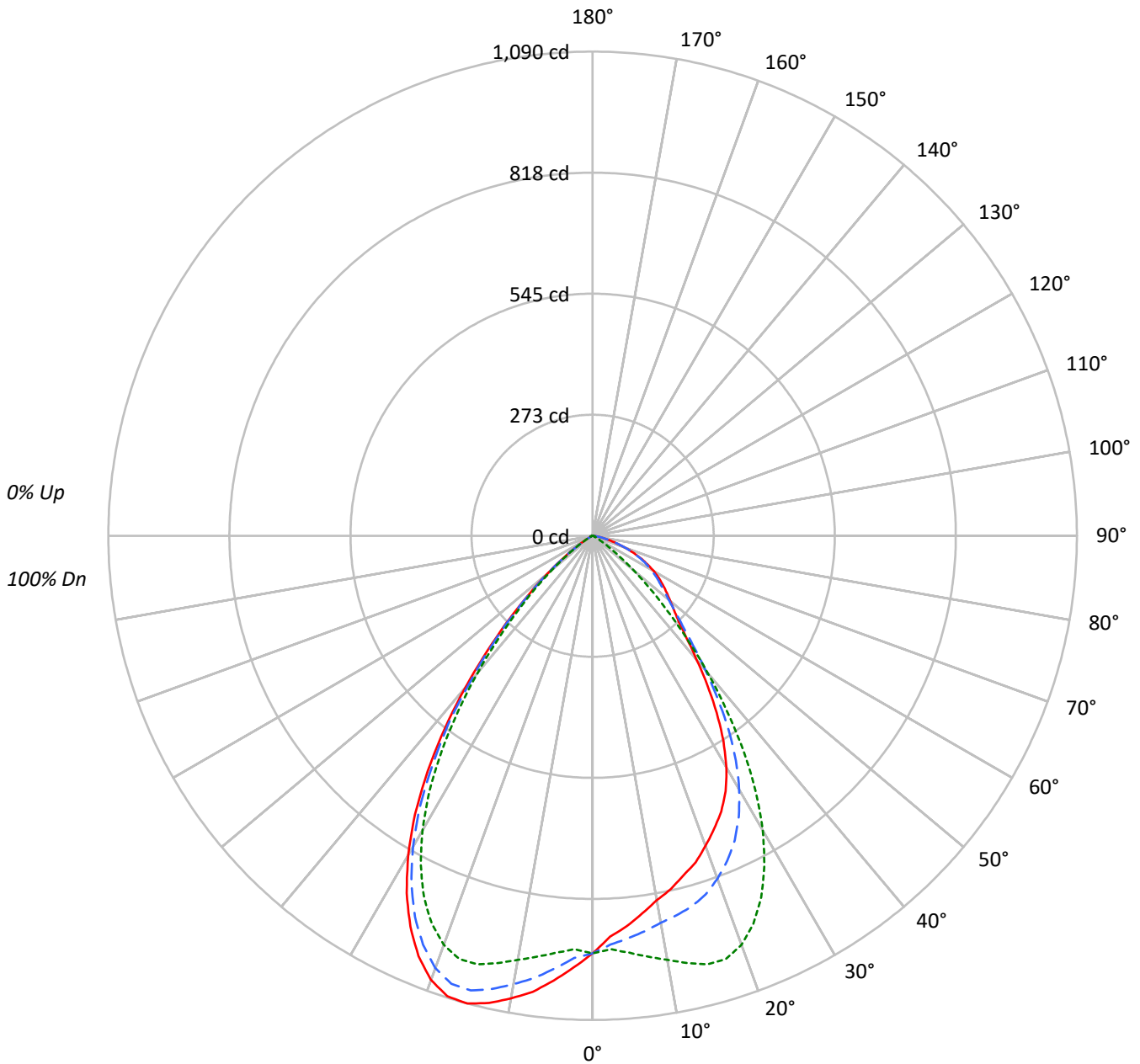
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P136278

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW111LI

Luminous Intensity Polar Plot





TEST NUMBER: P136278

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW111LI

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°	61326	61326	61326
5°	57782	61698	65824
10°	55184	64220	70056
15°	53426	67454	73621
20°	51571	68032	73857
25°	49310	64650	69862
30°	45366	57698	62512
35°	38763	47213	51554
40°	31009	34220	37882
45°	25262	21682	24293
50°	23111	11926	13529
55°	21953	4891	5733
60°	20668	1775	1775
65°	18463	973	803
70°	14802	801	591
75°	9780	529	529
80°	5110	376	376
85°	2321	0	0



TEST NUMBER: P136278

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW111LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.7	6.2
10°-20°	271.9	18.4
20°-30°	391.2	26.5
30°-40°	359.3	24.4
40°-50°	206.3	14.0
50°-60°	91.2	6.2
60°-70°	44.8	3.0
70°-80°	17.2	1.2
80°-90°	1.9	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°	753.8	51.1
0°-40°	1113.1	75.5
0°-60°	1410.6	95.7
0°-90°	1474.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1474.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	940	940	940	940	940	
5°	882	910	942	978	1005	83
15°	791	863	999	1060	1090	223
25°	685	756	898	946	970	313
35°	487	533	593	626	647	302
45°	274	285	235	257	263	218
55°	193	184	43	47	50	173
65°	120	115	6	4	5	117
75°	39	41	2	2	2	43
85°	3	3	0	0	0	5
90°	0	0	0	0	0	



TEST NUMBER: P136278

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW111LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	940.0	940.0	940.0	940.0	940.0	940.0	940.0	940.0	940.0	940.0	940.0
2.5°	903.3	908.6	903.3	910.7	914.8	916.9	914.8	909.6	916.9	921.1	920.1
5°	882.3	886.6	882.3	889.7	894.9	900.2	898.1	894.9	903.3	909.6	910.7
7.5°	857.2	862.4	859.2	866.6	872.8	879.2	879.2	878.1	888.6	898.1	901.2
10°	833.0	837.2	835.1	842.4	849.8	857.2	859.2	860.3	871.8	884.4	891.7
12.5°	814.2	816.2	814.2	822.5	829.8	838.3	842.4	844.6	859.2	875.0	884.4
15°	791.0	796.3	794.2	802.6	810.9	820.4	825.7	829.8	845.6	863.4	877.1
17.5°	771.1	773.2	771.1	780.5	787.9	798.4	804.7	809.9	826.7	846.7	861.3
20°	742.8	746.9	745.9	754.3	762.7	772.2	778.4	783.7	801.5	821.4	838.3
22.5°	714.4	718.7	718.7	727.0	733.3	743.8	749.0	754.3	771.1	792.1	806.8
25°	685.0	688.3	687.2	694.5	701.9	712.4	716.5	721.8	737.5	756.4	770.0
27.5°	648.4	650.5	652.5	658.9	664.1	673.5	676.7	681.9	694.5	712.4	724.9
30°	602.2	604.3	607.4	612.6	616.9	626.4	628.4	632.6	645.3	659.9	671.4
32.5°	547.6	548.7	554.0	558.1	563.4	569.6	574.9	576.0	585.4	600.1	608.5
35°	486.7	487.9	493.1	496.2	501.5	507.7	512.0	513.0	521.4	533.0	538.2
37.5°	423.8	430.1	429.1	432.2	437.5	442.7	447.0	447.0	453.2	462.6	464.7
40°	364.1	367.2	370.3	372.5	376.6	380.8	384.0	384.0	388.2	394.5	394.5
42.5°	312.7	317.9	317.9	320.0	323.1	327.3	329.4	328.3	330.5	333.6	331.6
45°	273.8	275.9	276.9	280.1	281.2	285.3	286.4	284.3	285.3	285.3	279.1
47.5°	248.7	248.7	248.7	250.7	251.8	254.9	254.9	251.8	250.7	249.7	241.3
50°	227.7	227.7	228.7	230.8	231.8	232.9	232.9	228.7	227.7	223.4	211.9
52.5°	209.8	210.9	210.9	212.9	214.0	215.1	214.0	209.8	206.7	202.4	188.8
55°	193.0	194.1	195.2	197.3	197.3	197.3	196.2	192.0	188.8	183.6	169.9
57.5°	176.3	177.3	177.3	179.4	180.4	180.4	179.4	175.2	172.0	167.9	153.2
60°	158.4	158.4	159.4	161.5	161.5	162.6	161.5	158.4	155.3	150.0	137.4
62.5°	138.5	139.5	140.5	142.7	143.8	143.8	143.8	140.5	138.5	134.3	121.7
65°	119.6	119.6	120.7	122.8	122.8	125.9	123.8	121.7	119.6	115.4	104.9
67.5°	97.5	98.6	98.6	100.8	101.8	102.8	102.8	100.8	99.7	96.5	87.0
70°	77.6	77.6	78.7	79.8	80.8	81.9	81.9	80.8	79.8	76.6	69.3
72.5°	56.6	57.7	57.7	58.8	60.9	61.9	61.9	61.9	59.8	57.7	52.5
75°	38.8	39.9	39.9	40.9	42.0	43.0	43.0	43.0	42.0	40.9	36.7
77.5°	24.1	24.1	25.1	25.1	26.2	27.3	28.4	28.4	27.3	26.2	24.1
80°	13.6	13.6	14.6	14.6	14.6	15.7	16.8	16.8	16.8	15.7	13.6
82.5°	7.4	7.4	7.4	7.4	7.4	8.4	8.4	8.4	8.4	8.4	7.4
85°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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: P136278

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW111LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	940.0	940.0	940.0	940.0	940.0	940.0	940.0	940.0	940.0	940.0	940.0
2.5°	920.1	927.4	932.7	924.3	931.6	939.0	947.3	931.6	946.3	937.9	941.1
5°	914.8	923.2	930.6	925.3	934.8	944.2	955.7	942.1	958.9	952.6	957.8
7.5°	907.5	919.1	929.6	927.4	940.0	952.6	967.3	955.7	973.6	970.5	976.7
10°	901.2	916.9	930.6	930.6	947.3	962.1	977.8	969.4	990.4	987.2	995.6
12.5°	897.0	916.9	934.8	937.9	957.8	974.6	993.5	985.1	1008.2	1005.1	1014.5
15°	892.8	915.8	936.8	943.2	965.2	985.1	1005.1	998.7	1022.9	1019.7	1029.2
17.5°	879.2	906.4	929.6	937.9	962.1	983.0	1004.0	998.7	1022.9	1019.7	1029.2
20°	856.1	883.3	908.6	918.0	942.1	964.1	984.1	979.9	1004.0	1000.9	1009.2
22.5°	826.7	852.9	877.1	886.6	909.6	929.6	949.5	945.2	968.3	963.1	972.6
25°	785.8	813.1	836.2	843.5	864.5	884.4	902.2	898.1	920.1	913.8	923.2
27.5°	743.8	763.8	782.7	788.9	807.8	824.6	841.4	837.2	858.2	850.8	860.3
30°	687.2	702.9	719.7	722.8	740.7	754.3	769.0	765.9	783.7	777.4	785.8
32.5°	621.1	634.8	646.3	647.3	662.0	673.5	686.1	684.0	699.8	694.5	700.8
35°	548.7	557.1	564.4	563.4	574.9	583.3	594.9	592.8	607.4	602.2	608.5
37.5°	472.1	476.3	478.4	474.2	482.6	488.9	497.2	496.2	508.9	504.6	510.9
40°	397.6	397.6	394.5	387.1	392.3	395.5	401.8	401.8	411.2	407.1	412.3
42.5°	329.4	325.2	317.9	307.4	308.4	312.7	312.7	312.7	320.0	315.8	325.2
45°	273.8	264.4	252.8	239.2	235.0	237.1	235.0	235.0	240.3	237.1	244.4
47.5°	230.8	219.3	199.3	182.5	175.2	174.2	171.0	171.0	174.2	174.2	177.3
50°	198.3	181.5	157.4	137.4	126.9	123.8	119.6	117.5	120.7	119.6	121.7
52.5°	172.0	151.0	122.8	99.7	89.2	81.9	78.7	74.5	75.5	75.5	76.6
55°	150.0	125.9	95.5	71.4	59.8	51.4	47.2	43.0	43.0	42.0	43.0
57.5°	133.3	108.0	77.6	53.5	40.9	32.5	28.4	24.1	23.1	23.1	23.1
60°	118.5	94.4	64.0	42.0	29.4	21.0	16.8	13.6	12.6	11.5	11.5
62.5°	103.9	81.9	54.5	34.6	22.0	15.7	11.5	8.4	7.4	6.3	6.3
65°	89.2	70.3	47.2	29.4	18.9	12.6	8.4	6.3	5.2	4.2	4.2
67.5°	73.4	57.7	39.9	24.1	15.7	10.5	7.4	5.2	4.2	3.1	3.1
70°	58.8	46.1	31.5	19.9	12.6	8.4	5.2	4.2	3.1	3.1	3.1
72.5°	44.0	34.6	24.1	14.6	9.5	6.3	4.2	3.1	2.1	2.1	2.1
75°	31.5	25.1	16.8	10.5	6.3	4.2	3.1	2.1	2.1	2.1	2.1
77.5°	19.9	15.7	10.5	6.3	4.2	2.1	2.1	1.0	1.0	1.0	1.0
80°	11.5	9.5	6.3	4.2	2.1	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	6.3	4.2	3.1	2.1	1.0	1.0	1.0	0.0	0.0	0.0	0.0
85°	2.1	2.1	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	1.0	1.0	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: P136278

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW111LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	940.0	940.0	940.0	940.0	940.0	940.0	940.0	940.0	940.0	940.0	940.0
2.5°	949.5	947.3	954.7	957.8	955.7	951.6	965.2	968.3	958.9	963.1	963.1
5°	968.3	968.3	977.8	982.0	982.0	977.8	993.5	998.7	989.3	993.5	994.6
7.5°	989.3	989.3	1000.9	1006.1	1007.1	1004.0	1019.7	1024.0	1017.6	1021.8	1022.9
10°	1008.2	1008.2	1021.8	1027.1	1028.1	1025.0	1040.7	1046.0	1038.6	1042.8	1043.9
12.5°	1028.1	1029.2	1042.8	1048.1	1048.1	1045.0	1060.6	1065.9	1057.5	1062.7	1061.7
15°	1042.8	1043.9	1057.5	1062.7	1063.8	1059.6	1074.3	1080.6	1072.2	1075.4	1075.4
17.5°	1041.7	1042.8	1055.4	1060.6	1060.6	1057.5	1070.1	1077.5	1069.1	1072.2	1071.1
20°	1020.8	1021.8	1035.5	1039.7	1039.7	1035.5	1047.0	1054.4	1046.0	1048.1	1047.0
22.5°	983.0	984.1	996.7	1000.9	1002.0	996.7	1008.2	1016.6	1007.1	1008.2	1007.1
25°	933.7	933.7	947.3	947.3	952.6	946.3	954.7	966.2	956.8	956.8	953.7
27.5°	869.7	869.7	883.3	883.3	889.7	883.3	897.0	902.2	893.8	892.8	892.8
30°	795.2	795.2	807.8	807.8	813.1	807.8	821.4	826.7	818.3	817.3	818.3
32.5°	710.3	710.3	722.8	721.8	728.1	723.9	736.5	740.7	734.4	731.3	733.3
35°	616.9	622.1	629.5	628.4	634.8	626.4	642.0	645.3	640.0	641.0	637.9
37.5°	518.2	523.5	528.7	528.7	534.0	531.9	541.4	544.5	540.3	541.4	538.2
40°	419.6	424.9	429.1	429.1	434.3	428.1	440.6	443.7	439.6	435.4	437.5
42.5°	326.3	331.6	335.7	334.7	339.9	338.8	346.2	348.3	345.2	344.1	342.1
45°	245.5	246.6	253.9	257.1	257.1	257.1	262.3	263.3	260.2	260.2	259.2
47.5°	177.3	179.4	184.7	186.8	187.8	186.8	188.8	193.0	189.9	189.9	190.9
50°	122.8	123.8	128.0	130.1	130.1	130.1	131.2	134.3	132.2	132.2	130.1
52.5°	78.7	78.7	81.9	82.9	82.9	82.9	83.9	86.0	83.9	85.0	86.0
55°	44.0	44.0	46.1	47.2	47.2	47.2	48.3	49.3	48.3	49.3	49.3
57.5°	23.1	23.1	24.1	24.1	25.1	25.1	25.1	26.2	26.2	26.2	26.2
60°	11.5	11.5	11.5	12.6	12.6	12.6	12.6	13.6	13.6	13.6	13.6
62.5°	6.3	6.3	6.3	6.3	6.3	6.3	6.3	7.4	7.4	7.4	7.4
65°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
67.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.2	4.2	4.2
70°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
72.5°	2.1	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	2.1	2.1
75°	1.0	2.1	2.1	1.0	1.0	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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



TEST NUMBER: P136278

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW111LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	940.0	940.0	940.0	940.0
2.5°	954.7	955.7	973.6	972.6
5°	986.2	987.2	1005.1	1005.1
7.5°	1014.5	1015.6	1034.5	1035.5
10°	1035.5	1037.6	1055.4	1057.5
12.5°	1055.4	1055.4	1073.2	1077.5
15°	1068.0	1068.0	1084.8	1090.0
17.5°	1063.8	1063.8	1080.6	1086.9
20°	1040.7	1039.7	1055.4	1063.8
22.5°	1000.9	1002.0	1014.5	1024.0
25°	950.5	948.4	962.1	970.5
27.5°	887.6	888.6	897.0	906.4
30°	812.0	814.2	820.4	829.8
32.5°	727.0	730.2	734.4	743.8
35°	633.6	636.8	638.9	647.3
37.5°	533.0	537.1	538.2	546.6
40°	433.3	437.5	437.5	444.8
42.5°	339.9	343.1	342.1	348.3
45°	257.1	259.2	258.1	263.3
47.5°	187.8	189.9	187.8	192.0
50°	130.1	132.2	130.1	133.3
52.5°	83.9	85.0	82.9	86.0
55°	48.3	49.3	48.3	50.4
57.5°	27.3	26.2	25.1	27.3
60°	13.6	13.6	13.6	13.6
62.5°	7.4	7.4	7.4	7.4
65°	4.2	4.2	4.2	5.2
67.5°	4.2	4.2	4.2	4.2
70°	3.1	3.1	3.1	3.1
72.5°	2.1	2.1	2.1	2.1
75°	2.1	2.1	2.1	2.1
77.5°	1.0	1.0	1.0	1.0
80°	0.0	0.0	0.0	1.0
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



Report Generated By E9808895 / USPTCWHP6082093





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













(END OF REPORT)