

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: P136513

Luminaire Tested: **LD6A15D010TE ERW6A15830 6LW121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136513
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23360)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A15D010TE ERW6A15830 6LW121LI
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE
SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 3000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1695.0 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.24 / 1.14
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

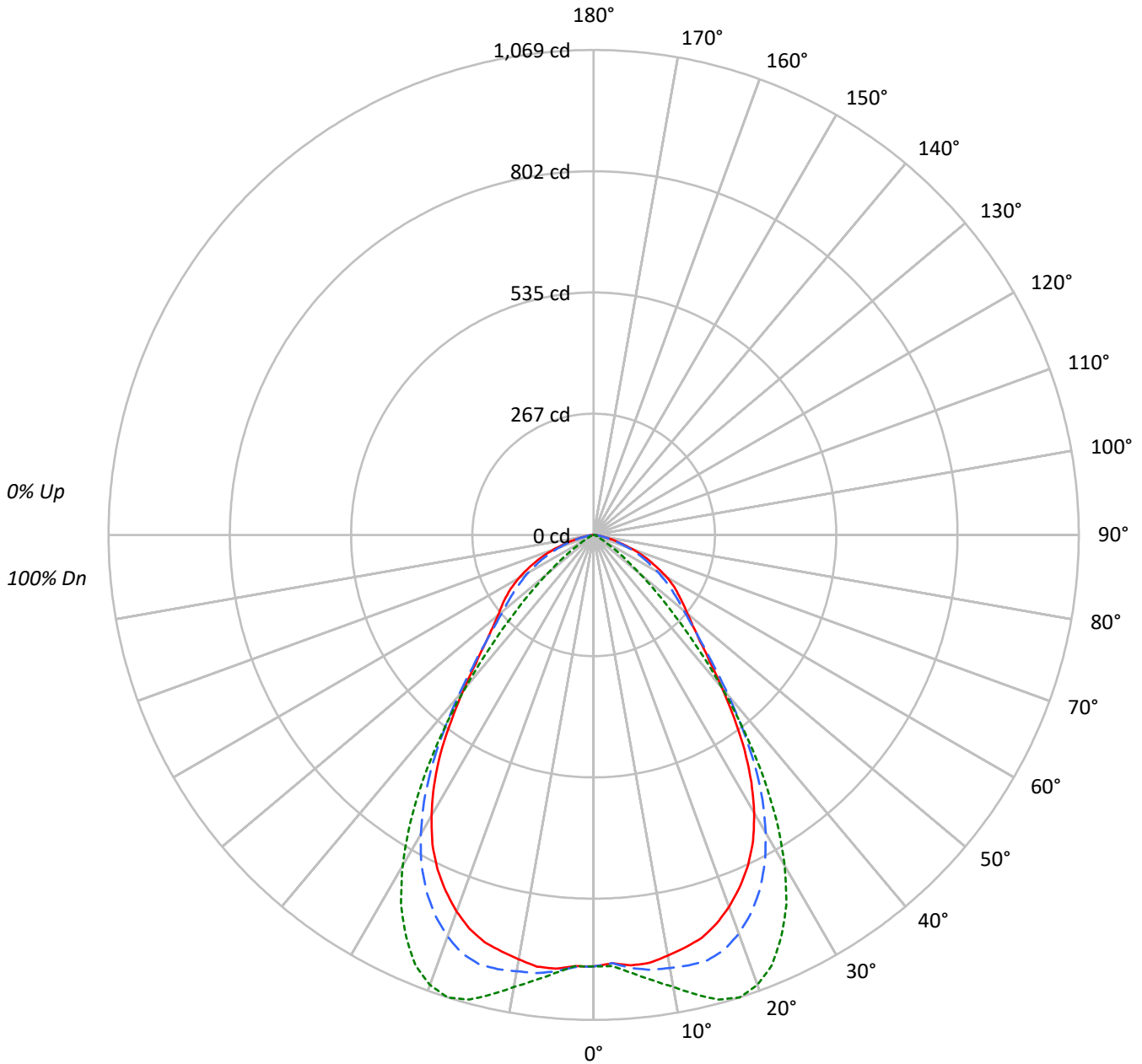
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P136513

CATALOG NUMBER: LD6A15D010TE ERW6A15830 6LW121LI

Luminous Intensity Polar Plot





TEST NUMBER: P136513

CATALOG NUMBER: LD6A15D010TE ERW6A15830 6LW121LI

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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89								
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79								
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70								
4	90	80	73	67	88	79	72	67	77	71	66	74	69	65	72	68	65	63								
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56								
6	78	67	60	54	77	66	59	54	65	58	54	63	57	53	62	57	53	51								
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46								
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42								
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39								
10	61	49	42	38	60	49	42	38	48	42	38	47	42	37	46	41	37	36								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	62057	62057	62057
5°	62373	63486	62851
10°	62372	67029	62935
15°	62112	71622	62767
20°	60562	73281	61318
25°	57905	70394	58603
30°	53283	63431	53833
35°	46186	51984	46863
40°	37405	37405	37924
45°	30558	23730	31121
50°	27333	13550	27830
55°	25808	6904	26639
60°	24217	3014	24857
65°	21164	1683	21905
70°	17129	1392	17816
75°	11923	907	12225
80°	7289	451	7289
85°	3668	898	3668



TEST NUMBER: P136513

CATALOG NUMBER: LD6A15D010TE ERW6A15830 6LW121LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.5	5.5
10°-20°	277.3	16.4
20°-30°	403.4	23.8
30°-40°	383.3	22.6
40°-50°	248.3	14.7
50°-60°	155.8	9.2
60°-70°	93.2	5.5
70°-80°	36.3	2.1
80°-90°	5.0	0.3
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°	773.1	45.6
0°-40°	1156.4	68.2
0°-60°	1560.5	92.1
0°-90°	1695.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1695.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	951	951	951	951	951	
5°	952	958	969	966	960	91
15°	920	971	1060	979	929	258
25°	804	865	978	870	814	368
35°	580	619	653	621	588	359
45°	331	336	257	337	337	262
55°	227	209	61	211	234	204
65°	137	120	11	122	142	136
75°	47	41	4	42	48	53
85°	5	5	1	5	5	7
90°	0	0	0	0	0	



TEST NUMBER: P136513

CATALOG NUMBER: LD6A15D010TE ERW6A15830 6LW121LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	951.2	951.2	951.2	951.2	951.2	951.2	951.2	951.2	951.2	951.2	951.2
2.5°	945.1	939.0	956.0	946.3	947.5	959.7	950.0	946.3	958.4	945.1	951.2
5°	952.4	947.5	964.5	956.0	957.2	969.4	960.9	957.2	970.6	958.4	964.5
7.5°	951.2	947.5	963.3	956.0	957.2	971.8	963.3	962.1	977.9	966.9	975.4
10°	941.5	936.6	953.6	947.5	950.0	965.7	958.4	958.4	976.6	969.4	981.5
12.5°	931.8	926.9	943.9	939.0	941.5	958.4	953.6	956.0	976.6	971.8	987.6
15°	919.6	914.8	933.0	928.1	930.5	948.7	946.3	948.7	971.8	970.6	988.8
17.5°	899.0	896.6	912.3	909.9	912.3	930.5	929.3	933.0	958.4	958.4	981.5
20°	872.3	868.7	885.7	883.2	884.4	902.6	902.6	906.3	933.0	935.4	958.4
22.5°	840.8	838.3	855.3	851.7	854.1	871.1	871.1	874.7	900.2	903.9	928.1
25°	804.4	801.9	817.7	816.5	817.7	834.7	833.5	838.3	862.6	865.0	888.1
27.5°	760.7	757.1	772.8	772.8	774.0	789.8	789.8	792.2	814.1	816.5	838.3
30°	707.3	703.7	718.2	719.4	719.4	735.2	735.2	736.4	757.1	758.3	777.7
32.5°	646.6	646.6	657.6	658.8	658.8	673.3	674.6	674.6	692.8	692.8	708.5
35°	579.9	581.1	589.6	590.8	592.1	605.4	605.4	604.2	620.0	618.7	632.1
37.5°	508.3	508.3	516.8	518.0	518.0	530.2	530.2	529.0	542.3	538.7	548.4
40°	439.2	439.2	446.5	448.9	447.7	457.4	457.4	456.2	465.9	461.0	465.9
42.5°	378.5	381.0	385.8	387.0	385.8	394.3	393.1	391.9	399.2	391.9	393.1
45°	331.2	333.6	337.3	338.5	337.3	343.3	342.1	339.7	343.3	336.1	332.4
47.5°	296.0	297.2	303.3	302.1	300.9	305.7	305.7	300.9	302.1	292.4	285.1
50°	269.3	270.5	275.4	275.4	273.0	277.8	275.4	270.5	269.3	258.4	247.5
52.5°	247.5	248.7	253.6	253.6	251.1	254.8	252.4	245.1	243.9	232.9	219.6
55°	226.9	228.1	232.9	232.9	230.5	232.9	229.3	223.2	220.8	208.7	194.1
57.5°	208.7	207.5	211.1	211.1	208.7	209.9	207.5	201.4	196.5	185.6	171.1
60°	185.6	184.4	186.8	186.8	184.4	185.6	183.2	175.9	173.5	162.6	148.0
62.5°	160.1	160.1	162.6	162.6	160.1	160.1	158.9	151.7	149.2	139.5	127.4
65°	137.1	137.1	139.5	139.5	137.1	138.3	135.9	131.0	128.6	120.1	109.2
67.5°	114.0	114.0	115.3	115.3	114.0	114.0	112.8	109.2	105.6	99.5	89.8
70°	89.8	89.8	91.0	91.0	89.8	89.8	89.8	86.1	84.9	78.9	71.6
72.5°	66.7	66.7	67.9	67.9	67.9	69.2	67.9	65.5	63.1	59.4	53.4
75°	47.3	47.3	47.3	48.5	47.3	47.3	48.5	46.1	44.9	41.2	37.6
77.5°	31.5	31.5	31.5	31.5	31.5	32.8	31.5	31.5	30.3	27.9	25.5
80°	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	18.2	18.2	15.8
82.5°	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	9.7	8.5
85°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	3.6
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



TEST NUMBER: P136513

CATALOG NUMBER: LD6A15D010TE ERW6A15830 6LW121LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	951.2	951.2	951.2	951.2	951.2	951.2	951.2	951.2	951.2	951.2	951.2
2.5°	950.0	951.2	951.2	954.8	958.4	948.7	953.6	951.2	948.7	958.4	952.4
5°	965.7	966.9	966.9	971.8	976.6	965.7	970.6	969.4	966.9	975.4	969.4
7.5°	977.9	981.5	983.9	990.0	996.1	986.4	992.4	990.0	988.8	997.3	988.8
10°	986.4	993.6	997.3	1007.0	1015.5	1005.8	1014.3	1011.8	1010.6	1017.9	1008.2
12.5°	996.1	1005.8	1015.5	1026.4	1038.5	1030.0	1040.9	1037.3	1037.3	1043.4	1031.2
15°	1002.1	1014.3	1027.6	1043.4	1057.9	1051.9	1064.0	1060.4	1060.4	1065.2	1051.9
17.5°	996.1	1011.8	1027.6	1045.8	1062.8	1059.1	1072.5	1068.9	1067.6	1072.5	1056.7
20°	975.4	993.6	1011.8	1030.0	1049.4	1047.0	1061.6	1055.5	1056.7	1059.1	1043.4
22.5°	942.7	962.1	980.3	999.7	1017.9	1016.7	1030.0	1026.4	1025.2	1028.8	1011.8
25°	903.9	920.8	937.8	954.8	973.0	970.6	983.9	977.9	979.1	980.3	965.7
27.5°	851.7	867.5	880.8	895.4	912.3	908.7	922.1	919.6	916.0	917.2	905.1
30°	787.4	800.7	810.4	822.6	835.9	832.3	844.4	842.0	839.6	839.6	832.3
32.5°	714.6	724.3	730.4	738.9	748.6	744.9	754.6	752.2	749.8	749.8	744.9
35°	633.3	639.4	639.4	644.2	651.5	645.4	653.9	652.7	649.1	650.3	649.1
37.5°	544.7	547.2	542.3	542.3	547.2	538.7	546.0	546.0	542.3	543.5	543.5
40°	458.6	457.4	447.7	442.8	442.8	434.3	440.4	439.2	436.8	438.0	440.4
42.5°	382.2	374.9	361.5	351.8	349.4	339.7	343.3	342.1	339.7	342.1	345.8
45°	317.9	304.5	286.3	273.0	266.9	257.2	258.4	257.2	256.0	258.4	264.5
47.5°	266.9	248.7	225.7	208.7	200.2	189.3	189.3	188.0	188.0	194.1	197.8
50°	226.9	205.0	178.3	158.9	146.8	137.1	134.7	133.5	134.7	139.5	146.8
52.5°	196.5	169.9	140.7	120.1	106.8	95.8	93.4	92.2	93.4	98.3	105.6
55°	169.9	141.9	111.6	88.6	74.0	64.3	60.7	60.7	60.7	66.7	74.0
57.5°	145.6	117.7	87.4	64.3	51.0	41.2	37.6	36.4	38.8	42.5	49.7
60°	125.0	98.3	69.2	48.5	35.2	26.7	23.1	23.1	23.1	27.9	35.2
62.5°	106.8	82.5	55.8	36.4	25.5	18.2	14.6	14.6	15.8	18.2	25.5
65°	91.0	70.4	47.3	31.5	20.6	14.6	12.1	10.9	12.1	14.6	20.6
67.5°	75.2	58.2	40.0	26.7	18.2	12.1	10.9	9.7	9.7	13.3	17.0
70°	59.4	46.1	32.8	21.8	14.6	9.7	8.5	7.3	8.5	10.9	14.6
72.5°	44.9	35.2	24.3	17.0	10.9	8.5	6.1	6.1	6.1	8.5	10.9
75°	31.5	25.5	18.2	12.1	7.3	4.9	4.9	3.6	4.9	6.1	7.3
77.5°	20.6	17.0	12.1	7.3	4.9	3.6	2.4	2.4	2.4	3.6	4.9
80°	13.3	10.9	7.3	4.9	3.6	2.4	1.2	1.2	1.2	2.4	2.4
82.5°	7.3	6.1	3.6	2.4	2.4	1.2	1.2	1.2	1.2	1.2	1.2
85°	3.6	2.4	2.4	1.2	1.2	1.2	0.0	1.2	1.2	1.2	1.2
87.5°	1.2	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



TEST NUMBER: P136513

CATALOG NUMBER: LD6A15D010TE ERW6A15830 6LW121LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	951.2	951.2	951.2	951.2	951.2	951.2	951.2	951.2	951.2	951.2	951.2
2.5°	953.6	950.0	954.8	958.4	957.2	953.6	959.7	950.0	953.6	950.0	943.9
5°	970.6	966.9	970.6	973.0	971.8	965.7	970.6	962.1	964.5	959.7	953.6
7.5°	988.8	983.9	985.1	986.4	982.7	974.2	977.9	966.9	968.2	962.1	954.8
10°	1005.8	998.5	997.3	994.8	987.6	976.6	977.9	964.5	963.3	954.8	946.3
12.5°	1027.6	1015.5	1010.6	1005.8	994.8	980.3	977.9	962.1	959.7	950.0	940.2
15°	1043.4	1030.0	1021.5	1011.8	997.3	979.1	974.2	956.0	951.2	940.2	930.5
17.5°	1047.0	1030.0	1017.9	1005.8	988.8	966.9	959.7	940.2	934.2	922.1	912.3
20°	1031.2	1013.0	999.7	983.9	966.9	941.5	934.2	913.6	906.3	895.4	885.7
22.5°	1000.9	980.3	966.9	951.2	934.2	909.9	901.4	882.0	874.7	863.8	854.1
25°	957.2	937.8	924.5	909.9	894.1	869.9	862.6	844.4	838.3	827.4	817.7
27.5°	896.6	878.4	871.1	856.5	842.0	821.4	814.1	798.3	792.2	785.0	774.0
30°	823.8	808.0	804.4	791.0	780.1	761.9	755.8	742.5	736.4	730.4	720.7
32.5°	740.1	727.9	727.9	717.0	709.7	695.2	690.3	679.4	674.6	669.7	661.2
35°	645.4	636.9	641.8	634.5	630.9	621.2	617.5	609.0	605.4	601.8	593.3
37.5°	544.7	538.7	548.4	549.6	549.6	541.1	538.7	533.8	531.4	527.8	520.5
40°	445.3	444.0	458.6	461.0	468.3	463.5	464.7	461.0	458.6	456.2	451.3
42.5°	353.0	357.9	376.1	387.0	394.3	394.3	397.9	396.7	395.5	393.1	389.4
45°	274.2	283.9	305.7	319.1	333.6	337.3	343.3	343.3	344.6	343.3	339.7
47.5°	209.9	224.4	249.9	270.5	286.3	293.6	302.1	304.5	305.7	305.7	303.3
50°	158.9	177.1	206.2	229.3	251.1	260.8	270.5	274.2	279.0	277.8	275.4
52.5°	120.1	140.7	172.3	200.2	223.2	234.2	245.1	249.9	254.8	254.8	253.6
55°	88.6	110.4	144.4	173.5	197.8	211.1	222.0	226.9	232.9	234.2	232.9
57.5°	64.3	86.1	118.9	150.4	173.5	188.0	199.0	203.8	209.9	211.1	211.1
60°	47.3	69.2	100.7	129.8	151.7	166.2	174.7	180.8	185.6	188.0	188.0
62.5°	36.4	55.8	84.9	111.6	131.0	143.2	151.7	156.5	161.4	162.6	163.8
65°	30.3	47.3	71.6	94.6	111.6	122.5	129.8	134.7	138.3	139.5	139.5
67.5°	25.5	40.0	59.4	77.6	92.2	100.7	106.8	110.4	114.0	115.3	115.3
70°	20.6	31.5	47.3	61.9	72.8	80.1	84.9	88.6	91.0	91.0	91.0
72.5°	15.8	24.3	35.2	46.1	54.6	60.7	64.3	65.5	67.9	67.9	67.9
75°	10.9	17.0	25.5	32.8	37.6	42.5	44.9	46.1	47.3	48.5	47.3
77.5°	7.3	10.9	15.8	20.6	25.5	27.9	29.1	30.3	31.5	31.5	31.5
80°	4.9	7.3	9.7	13.3	15.8	17.0	18.2	18.2	19.4	19.4	19.4
82.5°	2.4	3.6	6.1	7.3	8.5	9.7	9.7	9.7	10.9	10.9	9.7
85°	1.2	1.2	2.4	3.6	3.6	4.9	4.9	4.9	4.9	4.9	4.9
87.5°	0.0	0.0	0.0	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



TEST NUMBER: P136513

CATALOG NUMBER: LD6A15D010TE ERW6A15830 6LW121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	951.2	951.2	951.2	951.2
2.5°	946.3	948.7	939.0	951.2
5°	954.8	957.2	947.5	959.7
7.5°	956.0	957.2	947.5	959.7
10°	947.5	947.5	937.8	950.0
12.5°	940.2	939.0	928.1	940.2
15°	929.3	928.1	917.2	929.3
17.5°	911.1	909.9	899.0	909.9
20°	883.2	882.0	872.3	883.2
22.5°	852.9	850.5	840.8	850.5
25°	817.7	815.3	805.6	814.1
27.5°	772.8	770.4	760.7	769.2
30°	719.4	715.8	708.5	714.6
32.5°	658.8	656.4	647.9	655.1
35°	592.1	588.4	582.3	588.4
37.5°	519.3	516.8	510.8	514.4
40°	448.9	447.7	442.8	445.3
42.5°	388.2	385.8	382.2	384.6
45°	339.7	338.5	334.8	337.3
47.5°	303.3	302.1	298.5	300.9
50°	276.6	275.4	273.0	274.2
52.5°	254.8	253.6	251.1	254.8
55°	235.4	234.2	230.5	234.2
57.5°	213.5	212.3	208.7	213.5
60°	189.3	189.3	185.6	190.5
62.5°	165.0	165.0	162.6	166.2
65°	141.9	140.7	139.5	141.9
67.5°	116.5	115.3	115.3	117.7
70°	92.2	91.0	91.0	93.4
72.5°	69.2	67.9	67.9	69.2
75°	48.5	47.3	47.3	48.5
77.5°	31.5	31.5	31.5	31.5
80°	19.4	19.4	19.4	19.4
82.5°	10.9	10.9	9.7	10.9
85°	4.9	4.9	4.9	4.9
87.5°	1.2	1.2	1.2	1.2
90°	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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













(END OF REPORT)