

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: P136363

Luminaire Tested: **LD6A10D010TE ERW6A10840 6LW111H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P136363  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23375)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6A10D010TE ERW6A10840 6LW111H  
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED SINGLE WALL WASH LUMINAIRE  
SEMI-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: 1178.0 lumens  
Efficiency: N/A  
Efficacy: 84.1 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

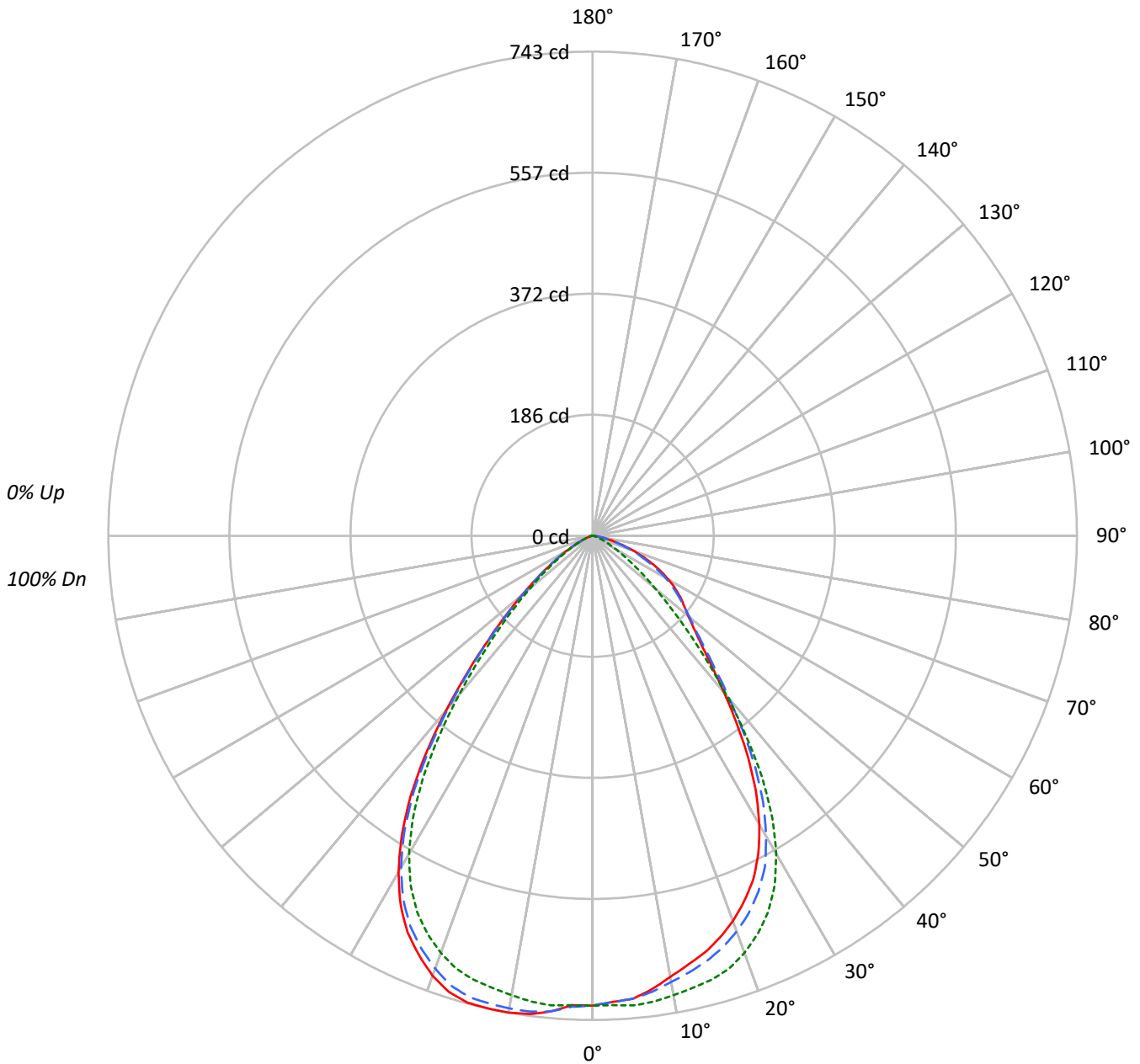
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P136363

CATALOG NUMBER: LD6A10D010TE ERW6A10840 6LW111H

### Luminous Intensity Polar Plot





TEST NUMBER: P136363

CATALOG NUMBER: LD6A10D010TE ERW6A10840 6LW111H

**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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72					72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64					64			
5	85	74	67	62	83	73	67	61	71	65	61	70	64	60	68	63	60	58					58			
6	79	68	61	56	78	68	61	55	66	60	55	64	59	55	63	58	54	52					52			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48					48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44					44			
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	43	39	49	43	39	48	43	39	48	42	39	37					37			

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

	0°	90°	180°
0°	47032	47032	47032
5°	46707	47382	47978
10°	45532	47420	49215
15°	44767	47644	50089
20°	43684	47273	49870
25°	41946	45854	48360
30°	38541	42435	44869
35°	33132	36119	38691
40°	26631	27176	29706
45°	21691	18831	20861
50°	19406	12586	14291
55°	18665	8235	9407
60°	17537	5232	5898
65°	15561	3196	3396
70°	12570	1965	1965
75°	8797	1311	1311
80°	5823	977	977
85°	2919	973	973



TEST NUMBER: P136363

CATALOG NUMBER: LD6A10D010TE ERW6A10840 6LW111H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.6	5.8
10°-20°	197.9	16.8
20°-30°	288.2	24.5
30°-40°	279.6	23.7
40°-50°	176.7	15.0
50°-60°	98.4	8.4
60°-70°	48.7	4.1
70°-80°	17.2	1.5
80°-90°	2.7	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°	554.7	47.1
0°-40°	834.3	70.8
0°-60°	1109.4	94.2
0°-90°	1178.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1178.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	721	721	721	721	721	
5°	713	713	724	733	733	67
15°	663	676	705	733	742	186
25°	583	602	637	662	672	266
35°	416	435	454	478	486	258
45°	235	242	204	224	226	186
55°	164	160	72	83	83	146
65°	101	93	21	22	22	99
75°	35	32	5	5	5	39
85°	4	4	1	1	1	6
90°	0	0	0	0	0	



TEST NUMBER: P136363

CATALOG NUMBER: LD6A10D010TE ERW6A10840 6LW111H

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	720.9	720.9	720.9	720.9	720.9	720.9	720.9	720.9	720.9	720.9	720.9
2.5°	715.8	709.3	711.9	710.6	711.9	710.6	714.5	710.6	713.2	715.8	710.6
5°	713.2	706.7	708.0	708.0	708.0	708.0	711.9	708.0	710.6	713.2	709.3
7.5°	701.5	696.4	697.7	697.7	697.7	697.7	701.5	699.0	701.5	705.4	701.5
10°	687.3	682.2	684.8	684.8	684.8	684.8	689.9	687.3	689.9	695.1	691.2
12.5°	674.4	670.5	673.1	673.1	673.1	674.4	678.3	677.0	679.6	686.0	682.2
15°	662.8	658.9	661.5	661.5	661.5	662.8	666.7	668.0	670.5	675.7	673.1
17.5°	647.3	643.4	647.3	647.3	646.0	648.6	653.7	653.7	656.3	662.8	661.5
20°	629.2	625.3	629.2	629.2	627.9	630.5	635.7	637.0	639.5	646.0	644.7
22.5°	607.2	605.9	607.2	609.8	608.5	609.8	615.0	616.3	618.9	626.6	625.3
25°	582.7	581.4	584.0	585.3	584.0	585.3	590.4	591.7	594.3	602.1	602.1
27.5°	550.4	549.1	553.0	553.0	553.0	555.6	559.4	562.0	563.3	572.4	571.1
30°	511.6	510.3	512.9	514.2	514.2	514.2	519.4	523.3	524.5	532.3	532.3
32.5°	466.4	466.4	467.7	470.3	469.0	471.6	475.5	478.0	480.6	487.1	487.1
35°	416.0	417.3	418.6	421.2	419.9	421.2	425.1	427.6	428.9	435.4	434.1
37.5°	363.0	364.3	365.6	366.9	366.9	368.2	372.1	373.4	374.7	379.8	377.3
40°	312.7	312.7	314.0	316.5	315.2	317.8	320.4	321.7	321.7	325.6	323.0
42.5°	268.7	270.0	271.3	272.6	272.6	273.9	276.5	277.8	277.8	279.1	275.2
45°	235.1	236.4	236.4	239.0	239.0	240.3	241.6	242.9	241.6	241.6	237.7
47.5°	210.6	211.9	213.2	214.5	214.5	215.8	217.1	217.1	215.8	214.5	209.3
50°	191.2	193.8	193.8	195.1	196.4	197.7	197.7	197.7	195.1	193.8	186.0
52.5°	177.0	178.3	179.6	180.9	180.9	182.2	183.5	182.2	179.6	175.7	168.0
55°	164.1	165.4	166.7	168.0	168.0	168.0	168.0	166.7	164.1	160.2	152.5
57.5°	149.9	151.2	152.5	153.7	153.7	153.7	153.7	152.5	149.9	144.7	135.7
60°	134.4	135.7	137.0	138.2	138.2	138.2	137.0	135.7	133.1	129.2	120.2
62.5°	117.6	118.9	120.2	120.2	120.2	118.9	118.9	117.6	115.0	111.1	102.1
65°	100.8	100.8	102.1	102.1	102.1	102.1	100.8	99.5	96.9	93.0	86.6
67.5°	82.7	84.0	84.0	84.0	84.0	84.0	82.7	82.7	80.1	76.2	71.1
70°	65.9	65.9	67.2	67.2	67.2	67.2	65.9	65.9	63.3	60.7	55.6
72.5°	49.1	49.1	49.1	50.4	50.4	50.4	49.1	49.1	47.8	45.2	41.3
75°	34.9	34.9	34.9	36.2	36.2	36.2	36.2	34.9	33.6	32.3	29.7
77.5°	23.3	24.5	23.3	23.3	23.3	24.5	23.3	23.3	23.3	22.0	19.4
80°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	14.2	14.2	12.9
82.5°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	7.8	7.8
85°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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: P136363

CATALOG NUMBER: LD6A10D010TE ERW6A10840 6LW111H

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	720.9	720.9	720.9	720.9	720.9	720.9	720.9	720.9	720.9	720.9	720.9
2.5°	714.5	717.1	719.6	717.1	713.2	720.9	719.6	720.9	719.6	717.1	724.8
5°	713.2	715.8	719.6	717.1	714.5	722.2	720.9	723.5	723.5	720.9	728.7
7.5°	705.4	708.0	714.5	711.9	709.3	717.1	718.3	720.9	722.2	719.6	728.7
10°	696.4	699.0	705.4	704.1	702.8	711.9	713.2	715.8	717.1	715.8	724.8
12.5°	687.3	691.2	697.7	696.4	696.4	705.4	706.7	710.6	713.2	711.9	722.2
15°	678.3	683.5	691.2	689.9	689.9	700.3	701.5	705.4	708.0	708.0	718.3
17.5°	666.7	671.8	679.6	678.3	680.9	688.6	691.2	696.4	699.0	697.7	709.3
20°	649.9	656.3	664.1	662.8	664.1	674.4	677.0	680.9	683.5	683.5	693.8
22.5°	630.5	637.0	644.7	643.4	646.0	653.7	656.3	661.5	664.1	662.8	673.1
25°	607.2	613.7	620.2	620.2	621.4	630.5	633.1	637.0	640.8	639.5	648.6
27.5°	576.2	582.7	589.1	587.9	589.1	598.2	600.8	604.7	608.5	607.2	616.3
30°	536.2	542.6	547.8	546.5	547.8	556.8	558.1	563.3	567.2	567.2	574.9
32.5°	489.7	496.1	498.7	496.1	498.7	505.2	507.8	512.9	515.5	516.8	524.5
35°	436.7	440.6	441.9	439.3	439.3	445.7	448.3	453.5	456.1	457.4	463.8
37.5°	378.6	381.1	378.6	374.7	376.0	378.6	382.4	386.3	390.2	391.5	397.9
40°	321.7	320.4	316.5	310.1	308.8	312.7	315.2	319.1	321.7	324.3	328.2
42.5°	271.3	268.7	261.0	253.2	251.9	251.9	253.2	257.1	259.7	261.0	266.1
45°	231.3	226.1	214.5	205.4	200.3	201.6	201.6	204.1	205.4	208.0	211.9
47.5°	200.3	191.2	177.0	165.4	160.2	158.9	158.9	160.2	161.5	164.1	166.7
50°	175.7	164.1	147.3	134.4	127.9	125.3	125.3	124.0	126.6	127.9	130.5
52.5°	156.3	142.1	122.7	108.5	100.8	98.2	96.9	96.9	96.9	98.2	100.8
55°	138.2	122.7	102.1	87.9	78.8	76.2	73.6	72.4	73.6	74.9	76.2
57.5°	122.7	105.9	85.3	69.8	62.0	58.1	55.6	54.3	54.3	55.6	56.8
60°	107.2	90.4	69.8	55.6	47.8	43.9	41.3	40.1	40.1	41.3	41.3
62.5°	90.4	74.9	56.8	43.9	36.2	32.3	29.7	29.7	28.4	28.4	29.7
65°	76.2	62.0	46.5	34.9	27.1	24.5	22.0	20.7	20.7	19.4	20.7
67.5°	62.0	50.4	37.5	27.1	20.7	18.1	15.5	15.5	14.2	14.2	14.2
70°	49.1	40.1	29.7	20.7	16.8	12.9	11.6	10.3	10.3	10.3	10.3
72.5°	36.2	29.7	22.0	15.5	11.6	10.3	9.0	7.8	6.5	6.5	6.5
75°	25.8	20.7	15.5	11.6	9.0	7.8	6.5	5.2	5.2	5.2	5.2
77.5°	18.1	14.2	11.6	7.8	6.5	5.2	3.9	3.9	3.9	3.9	2.6
80°	11.6	9.0	7.8	5.2	3.9	3.9	2.6	2.6	2.6	2.6	2.6
82.5°	6.5	5.2	3.9	3.9	2.6	2.6	1.3	1.3	1.3	1.3	1.3
85°	2.6	2.6	2.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	1.3	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: P136363

CATALOG NUMBER: LD6A10D010TE ERW6A10840 6LW111H

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	720.9	720.9	720.9	720.9	720.9	720.9	720.9	720.9	720.9	720.9	720.9
2.5°	717.1	722.2	722.2	724.8	720.9	723.5	727.4	726.1	722.2	723.5	724.8
5°	722.2	727.4	728.7	732.6	728.7	732.6	737.7	736.4	732.6	735.1	736.4
7.5°	722.2	728.7	731.3	735.1	732.6	736.4	742.9	741.6	737.7	740.3	742.9
10°	719.6	726.1	730.0	733.8	731.3	736.4	741.6	741.6	739.0	741.6	745.5
12.5°	717.1	723.5	727.4	731.3	728.7	735.1	741.6	740.3	739.0	741.6	745.5
15°	713.2	719.6	723.5	727.4	726.1	732.6	739.0	739.0	736.4	740.3	744.2
17.5°	704.1	710.6	715.8	718.3	717.1	723.5	730.0	730.0	727.4	731.3	735.1
20°	688.6	695.1	700.3	702.8	701.5	706.7	713.2	714.5	711.9	715.8	719.6
22.5°	669.2	674.4	679.6	682.2	680.9	686.0	692.5	693.8	691.2	695.1	697.7
25°	646.0	649.9	655.0	657.6	656.3	661.5	668.0	668.0	666.7	669.2	671.8
27.5°	613.7	618.9	622.7	625.3	625.3	629.2	634.4	635.7	634.4	637.0	640.8
30°	573.6	576.2	581.4	582.7	584.0	587.9	593.0	593.0	591.7	594.3	598.2
32.5°	523.3	527.1	531.0	532.3	533.6	537.5	541.3	542.6	541.3	543.9	547.8
35°	463.8	467.7	471.6	472.9	474.2	478.0	481.9	483.2	481.9	484.5	488.4
37.5°	397.9	400.5	404.4	405.7	408.3	410.9	413.4	416.0	414.7	417.3	419.9
40°	330.7	332.0	335.9	337.2	339.8	342.4	345.0	346.3	346.3	347.5	348.8
42.5°	267.4	270.0	272.6	273.9	276.5	277.8	280.4	281.7	281.7	282.9	284.2
45°	213.2	215.8	218.3	219.6	222.2	223.5	224.8	226.1	224.8	224.8	227.4
47.5°	168.0	170.5	173.1	174.4	175.7	177.0	178.3	178.3	178.3	179.6	179.6
50°	131.8	133.1	135.7	135.7	138.2	138.2	139.5	139.5	139.5	139.5	140.8
52.5°	102.1	103.4	105.9	105.9	107.2	108.5	108.5	108.5	108.5	109.8	108.5
55°	77.5	78.8	80.1	80.1	82.7	82.7	82.7	82.7	82.7	82.7	82.7
57.5°	58.1	59.4	60.7	60.7	60.7	62.0	60.7	62.0	62.0	62.0	62.0
60°	42.6	43.9	43.9	43.9	45.2	45.2	45.2	45.2	45.2	45.2	45.2
62.5°	29.7	29.7	31.0	31.0	31.0	32.3	31.0	31.0	32.3	32.3	31.0
65°	20.7	20.7	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
67.5°	14.2	14.2	14.2	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
70°	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
72.5°	6.5	6.5	6.5	6.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8
75°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
77.5°	2.6	2.6	3.9	3.9	3.9	2.6	2.6	2.6	3.9	3.9	2.6
80°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3
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: P136363

CATALOG NUMBER: LD6A10D010TE ERW6A10840 6LW111H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	720.9	720.9	720.9	720.9
2.5°	724.8	723.5	724.8	720.9
5°	736.4	735.1	737.7	732.6
7.5°	744.2	742.9	745.5	740.3
10°	745.5	745.5	748.1	742.9
12.5°	745.5	745.5	748.1	742.9
15°	745.5	744.2	746.8	741.6
17.5°	736.4	736.4	739.0	733.8
20°	719.6	719.6	722.2	718.3
22.5°	699.0	699.0	700.3	696.4
25°	673.1	671.8	674.4	671.8
27.5°	640.8	639.5	640.8	638.2
30°	596.9	595.6	598.2	595.6
32.5°	547.8	545.2	547.8	545.2
35°	487.1	484.5	487.1	485.8
37.5°	419.9	417.3	419.9	418.6
40°	348.8	347.5	350.1	348.8
42.5°	284.2	281.7	284.2	282.9
45°	227.4	224.8	227.4	226.1
47.5°	179.6	178.3	180.9	179.6
50°	140.8	139.5	140.8	140.8
52.5°	108.5	107.2	108.5	108.5
55°	82.7	81.4	82.7	82.7
57.5°	62.0	60.7	62.0	62.0
60°	45.2	45.2	45.2	45.2
62.5°	32.3	31.0	32.3	32.3
65°	22.0	22.0	22.0	22.0
67.5°	15.5	15.5	15.5	15.5
70°	10.3	10.3	10.3	10.3
72.5°	7.8	7.8	7.8	6.5
75°	5.2	5.2	5.2	5.2
77.5°	3.9	2.6	3.9	3.9
80°	2.6	2.6	2.6	2.6
82.5°	1.3	1.3	1.3	1.3
85°	1.3	1.3	1.3	1.3
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)