

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: PORTFOLIO

Report Number: P252215

Luminaire Tested: **LE\_6B60D010R EC6B60709040 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252215  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B60D010R EC6B60709040 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8244.9 lumens  
Efficiency: N/A  
Efficacy: 131.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

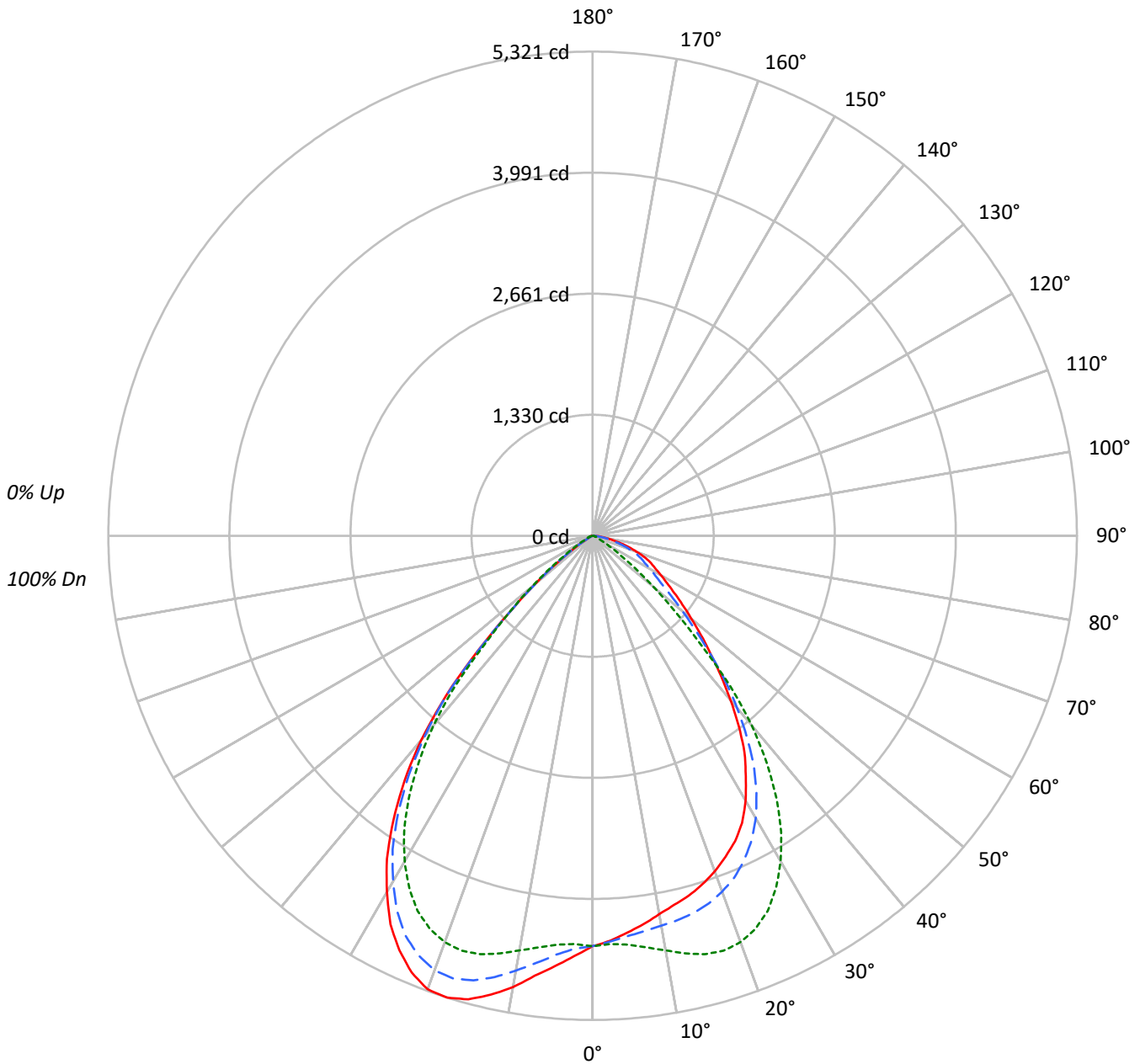
Input Watts (W): 62.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72			
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40			
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37			

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

	0°	90°	180°
0°	294274	294274	294274
5°	286649	295398	310939
10°	279682	306532	333673
15°	276409	321554	356217
20°	272448	329927	368251
25°	266647	327496	361646
30°	253391	311210	340447
35°	231828	280594	303954
40°	200522	231736	249365
45°	169102	151978	163123
50°	143557	87977	82720
55°	124595	42187	31871
60°	112540	19690	7881
65°	109172	11300	2655
70°	97874	9042	2461
75°	80436	6529	1059
80°	59925	3231	0
85°	51650	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	435.7	5.3
10°-20°	1327.8	16.1
20°-30°	2028.8	24.6
30°-40°	2121.9	25.7
40°-50°	1376.5	16.7
50°-60°	546.5	6.6
60°-70°	259.2	3.1
70°-80°	123.3	1.5
80°-90°	25.1	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°	3792.3	46.0
0°-40°	5914.2	71.7
0°-60°	7837.3	95.1
0°-90°	8244.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8244.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4511	4511	4511	4511	4511	
5°	4377	4416	4511	4623	4748	413
15°	4092	4291	4761	5058	5274	1153
25°	3704	3937	4550	4856	5024	1696
35°	2911	3088	3523	3730	3816	1800
45°	1833	1816	1647	1746	1768	1426
55°	1095	932	371	289	280	992
65°	707	586	73	17	17	691
75°	319	259	26	9	4	344
85°	69	43	0	0	0	80
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6
2.5°	4454.6	4463.2	4415.8	4402.9	4437.4	4450.2	4454.6	4441.6	4446.0	4463.2	4463.2
5°	4377.0	4385.6	4342.5	4329.5	4364.0	4372.6	4385.6	4381.2	4394.2	4420.1	4415.8
7.5°	4303.6	4316.6	4269.1	4251.9	4295.0	4316.6	4325.2	4325.2	4342.5	4377.0	4381.2
10°	4221.8	4239.0	4195.9	4187.2	4234.6	4256.2	4260.5	4269.1	4295.0	4342.5	4351.1
12.5°	4152.8	4170.0	4139.8	4126.9	4178.6	4200.1	4208.8	4226.0	4256.2	4316.6	4325.2
15°	4092.4	4105.2	4070.8	4062.1	4113.9	4139.8	4144.1	4170.0	4208.8	4277.8	4290.8
17.5°	4014.8	4023.4	3997.5	3988.9	4040.6	4066.5	4070.8	4101.0	4148.4	4217.4	4239.0
20°	3924.2	3932.9	3907.0	3898.4	3950.1	3980.2	3984.6	4010.5	4066.5	4139.8	4161.4
22.5°	3816.4	3833.6	3803.5	3794.9	3846.6	3872.5	3885.4	3907.0	3963.0	4036.4	4066.5
25°	3704.2	3704.2	3682.8	3678.4	3725.9	3756.0	3751.8	3781.9	3838.0	3911.2	3937.1
27.5°	3557.6	3553.4	3531.8	3527.5	3579.2	3605.1	3596.5	3626.6	3678.4	3751.8	3777.6
30°	3363.6	3372.2	3342.0	3333.4	3376.5	3419.6	3415.4	3445.5	3497.2	3566.2	3583.5
32.5°	3130.8	3139.4	3135.0	3122.1	3160.9	3182.5	3195.4	3217.0	3260.1	3333.4	3350.6
35°	2910.8	2897.9	2880.6	2880.6	2919.4	2953.9	2941.0	2966.9	3010.0	3083.2	3087.6
37.5°	2639.1	2634.9	2626.2	2617.6	2660.8	2669.4	2673.6	2690.9	2729.6	2790.0	2781.4
40°	2354.5	2358.9	2354.5	2337.2	2363.1	2397.6	2393.4	2402.0	2436.5	2479.6	2466.6
42.5°	2087.1	2087.1	2087.1	2069.9	2100.1	2117.4	2126.0	2121.6	2130.2	2169.1	2151.9
45°	1832.8	1837.0	1832.8	1828.4	1832.8	1841.4	1832.8	1828.4	1828.4	1841.4	1815.5
47.5°	1612.8	1612.8	1599.9	1586.9	1599.9	1604.1	1591.2	1578.2	1574.0	1569.6	1526.5
50°	1414.4	1410.1	1405.8	1384.2	1397.1	1401.5	1384.2	1375.6	1358.4	1336.9	1285.1
52.5°	1242.0	1237.6	1233.4	1211.8	1220.4	1224.8	1207.5	1190.2	1168.6	1151.4	1086.8
55°	1095.4	1091.0	1091.0	1078.1	1069.5	1078.1	1060.9	1047.9	1017.8	996.1	931.5
57.5°	970.2	970.2	961.6	948.8	953.0	953.0	935.8	918.5	892.6	866.8	815.0
60°	862.5	862.5	862.5	849.5	849.5	849.5	840.9	823.6	802.1	776.2	724.5
62.5°	776.2	776.2	771.9	759.0	763.2	763.2	754.6	737.4	715.9	698.6	646.9
65°	707.2	707.2	707.2	694.2	694.2	698.6	690.0	672.8	655.5	633.9	586.5
67.5°	621.0	616.6	616.6	608.0	612.4	616.6	608.0	595.1	573.5	560.6	517.5
70°	513.1	517.5	521.8	508.9	513.1	513.1	508.9	495.9	483.0	470.0	431.2
72.5°	418.2	418.2	414.0	409.6	409.6	414.0	405.4	392.4	383.8	375.1	345.0
75°	319.1	314.8	319.1	310.5	310.5	310.5	301.9	297.5	293.2	280.2	258.8
77.5°	232.9	228.5	228.5	219.9	224.2	224.2	219.9	211.2	202.6	198.4	181.1
80°	159.5	159.5	159.5	155.2	155.2	150.9	150.9	146.6	138.0	133.6	125.0
82.5°	107.8	107.8	107.8	103.5	103.5	103.5	99.1	94.9	90.5	86.2	77.6
85°	69.0	69.0	69.0	64.6	64.6	64.6	60.4	60.4	56.0	51.8	43.1
87.5°	38.8	38.8	38.8	34.5	34.5	34.5	34.5	34.5	30.1	25.9	21.5
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6
2.5°	4493.4	4433.0	4471.9	4471.9	4458.9	4493.4	4515.0	4532.2	4527.9	4489.1	4484.8
5°	4458.9	4407.1	4450.2	4454.6	4441.6	4489.1	4519.2	4540.9	4545.1	4510.6	4515.0
7.5°	4433.0	4389.9	4446.0	4463.2	4458.9	4502.0	4536.5	4571.0	4588.2	4562.4	4566.8
10°	4420.1	4385.6	4446.0	4471.9	4476.1	4523.6	4575.4	4622.8	4644.4	4627.1	4640.0
12.5°	4402.9	4381.2	4450.2	4489.1	4506.4	4553.8	4618.5	4674.5	4709.0	4700.4	4726.2
15°	4385.6	4368.4	4450.2	4506.4	4527.9	4571.0	4644.4	4726.2	4765.1	4760.8	4795.2
17.5°	4342.5	4338.1	4424.4	4484.8	4515.0	4566.8	4635.8	4734.9	4773.8	4782.4	4825.5
20°	4273.5	4273.5	4368.4	4433.0	4467.5	4515.0	4601.2	4696.1	4743.5	4752.1	4799.6
22.5°	4178.6	4187.2	4277.8	4342.5	4394.2	4428.8	4519.2	4618.5	4661.6	4674.5	4726.2
25°	4053.5	4062.1	4148.4	4213.1	4269.1	4308.0	4394.2	4484.8	4536.5	4549.5	4588.2
27.5°	3889.8	3907.0	3988.9	4053.5	4101.0	4126.9	4217.4	4312.2	4351.1	4364.0	4402.9
30°	3700.0	3704.2	3786.2	3842.2	3889.8	3911.2	3988.9	4088.0	4118.2	4131.1	4187.2
32.5°	3467.1	3462.8	3540.4	3592.1	3631.0	3656.9	3738.8	3803.5	3833.6	3855.2	3885.4
35°	3186.8	3182.5	3238.5	3298.9	3329.1	3337.8	3419.6	3488.6	3505.9	3523.1	3562.0
37.5°	2872.0	2872.0	2919.4	2949.6	2984.1	2997.0	3035.9	3113.5	3143.6	3139.4	3169.5
40°	2540.0	2522.8	2557.2	2587.4	2596.0	2600.4	2639.1	2699.5	2721.0	2721.0	2742.6
42.5°	2190.6	2164.8	2169.1	2186.4	2195.0	2164.8	2190.6	2229.5	2216.5	2233.8	2238.1
45°	1819.8	1781.0	1763.8	1724.9	1733.5	1703.4	1686.1	1694.8	1690.4	1647.2	1655.9
47.5°	1517.9	1448.9	1418.8	1362.6	1349.8	1315.2	1293.8	1254.9	1220.4	1220.4	1198.9
50°	1263.5	1194.5	1134.1	1069.5	1047.9	1017.8	970.2	918.5	892.6	866.8	845.2
52.5°	1060.9	987.5	914.2	845.2	815.0	776.2	711.5	659.8	612.4	586.5	560.6
55°	897.0	815.0	737.4	664.1	625.2	586.5	521.8	461.4	405.4	370.9	349.2
57.5°	771.9	694.2	612.4	534.8	500.2	457.1	388.1	323.4	271.6	232.9	211.2
60°	681.4	603.8	530.4	448.5	414.0	370.9	297.5	237.1	185.4	150.9	125.0
62.5°	603.8	534.8	457.1	383.8	349.2	306.1	237.1	176.8	129.4	94.9	73.2
65°	547.6	478.6	414.0	340.6	310.5	267.4	202.6	146.6	103.5	73.2	51.8
67.5°	483.0	422.6	357.9	297.5	267.4	232.9	172.5	125.0	86.2	60.4	43.1
70°	405.4	357.9	301.9	245.8	224.2	194.0	142.2	103.5	69.0	47.4	34.5
72.5°	323.4	284.6	241.5	198.4	181.1	150.9	116.4	81.9	51.8	34.5	25.9
75°	245.8	215.6	181.1	150.9	133.6	116.4	86.2	60.4	38.8	25.9	17.2
77.5°	168.1	155.2	129.4	103.5	94.9	81.9	56.0	38.8	25.9	17.2	8.6
80°	116.4	103.5	86.2	69.0	60.4	51.8	34.5	25.9	12.9	8.6	4.2
82.5°	73.2	60.4	51.8	43.1	38.8	30.1	21.5	12.9	8.6	4.2	4.2
85°	38.8	34.5	30.1	21.5	21.5	17.2	12.9	8.6	4.2	0.0	0.0
87.5°	21.5	17.2	12.9	8.6	8.6	4.2	4.2	4.2	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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6
2.5°	4536.5	4536.5	4532.2	4584.0	4523.6	4584.0	4553.8	4584.0	4540.9	4536.5	4540.9
5°	4571.0	4584.0	4588.2	4635.8	4579.6	4653.0	4627.1	4653.0	4622.8	4631.4	4644.4
7.5°	4640.0	4661.6	4657.2	4717.6	4661.6	4743.5	4726.2	4765.1	4734.9	4743.5	4760.8
10°	4717.6	4743.5	4747.9	4808.2	4756.5	4855.6	4834.1	4877.2	4851.4	4864.2	4885.9
12.5°	4808.2	4838.4	4842.8	4911.8	4855.6	4959.1	4946.2	4989.4	4967.8	4980.8	5006.6
15°	4877.2	4920.4	4929.0	4998.0	4937.6	5045.4	5036.8	5092.9	5058.4	5079.9	5101.5
17.5°	4911.8	4950.5	4967.8	5032.5	4980.8	5088.5	5079.9	5127.4	5101.5	5123.0	5148.9
20°	4890.1	4937.6	4950.5	5015.2	4963.5	5071.2	5058.4	5105.8	5079.9	5097.1	5123.0
22.5°	4812.5	4860.0	4877.2	4937.6	4890.1	4989.4	4985.0	5028.1	4993.6	5015.2	5036.8
25°	4674.5	4726.2	4734.9	4791.0	4739.2	4842.8	4834.1	4881.5	4855.6	4868.6	4898.8
27.5°	4476.1	4536.5	4549.5	4596.9	4558.1	4644.4	4644.4	4683.1	4653.0	4653.0	4683.1
30°	4239.0	4299.4	4308.0	4346.8	4312.2	4389.9	4394.2	4433.0	4385.6	4411.5	4415.8
32.5°	3950.1	3988.9	4014.8	4049.2	3997.5	4096.6	4083.8	4113.9	4088.0	4088.0	4109.6
35°	3600.8	3648.2	3661.1	3704.2	3661.1	3738.8	3738.8	3756.0	3730.1	3730.1	3764.6
37.5°	3221.2	3255.8	3260.1	3303.2	3268.8	3333.4	3329.1	3342.0	3316.1	3333.4	3333.4
40°	2777.1	2803.0	2811.6	2833.1	2828.9	2876.2	2872.0	2880.6	2867.6	2872.0	2880.6
42.5°	2259.6	2294.1	2311.4	2328.6	2302.8	2367.5	2354.5	2367.5	2363.1	2367.5	2380.4
45°	1664.5	1690.4	1703.4	1707.6	1699.0	1737.9	1768.0	1742.1	1746.5	1737.9	1755.1
47.5°	1203.1	1207.5	1198.9	1224.8	1203.1	1220.4	1229.0	1233.4	1207.5	1203.1	1220.4
50°	823.6	845.2	815.0	828.0	823.6	840.9	832.2	836.6	810.8	823.6	815.0
52.5°	547.6	543.4	534.8	539.0	530.4	530.4	530.4	539.0	521.8	513.1	504.5
55°	332.0	323.4	306.1	301.9	301.9	306.1	297.5	288.9	288.9	284.6	284.6
57.5°	194.0	181.1	172.5	168.1	159.5	155.2	150.9	150.9	142.2	142.2	142.2
60°	107.8	94.9	86.2	77.6	77.6	73.2	69.0	64.6	64.6	64.6	60.4
62.5°	56.0	47.4	38.8	34.5	34.5	30.1	25.9	25.9	25.9	25.9	21.5
65°	38.8	30.1	25.9	21.5	21.5	17.2	17.2	17.2	17.2	17.2	17.2
67.5°	30.1	25.9	21.5	17.2	17.2	17.2	12.9	12.9	12.9	12.9	12.9
70°	25.9	17.2	17.2	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9
72.5°	17.2	17.2	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9
75°	12.9	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
77.5°	4.2	4.2	4.2	4.2	4.2	4.2	0.0	0.0	0.0	0.0	0.0
80°	4.2	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: P252215

CATALOG NUMBER: LE\_6B60D010R EC6B60709040 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6	4510.6
2.5°	4579.6	4575.4	4579.6	4588.2	4571.0	4622.8	4596.9	4622.8
5°	4678.9	4683.1	4687.5	4700.4	4678.9	4743.5	4709.0	4747.9
7.5°	4808.2	4812.5	4816.9	4829.8	4816.9	4881.5	4842.8	4877.2
10°	4941.9	4950.5	4950.5	4972.1	4959.1	5019.5	4993.6	5036.8
12.5°	5067.0	5075.6	5084.2	5097.1	5088.5	5153.2	5131.6	5166.1
15°	5166.1	5183.4	5187.8	5205.0	5196.4	5265.4	5239.5	5274.0
17.5°	5213.6	5230.9	5230.9	5252.4	5243.8	5317.1	5282.6	5321.4
20°	5187.8	5200.6	5205.0	5226.5	5217.9	5291.2	5256.8	5304.1
22.5°	5105.8	5110.1	5114.4	5136.0	5131.6	5196.4	5166.1	5196.4
25°	4954.9	4967.8	4963.5	4980.8	4980.8	5032.5	4998.0	5023.9
27.5°	4739.2	4752.1	4752.1	4773.8	4756.5	4808.2	4773.8	4812.5
30°	4476.1	4489.1	4480.5	4497.8	4480.5	4532.2	4506.4	4519.2
32.5°	4161.4	4161.4	4165.6	4170.0	4161.4	4208.8	4182.9	4208.8
35°	3786.2	3794.9	3799.1	3803.5	3794.9	3829.4	3799.1	3816.4
37.5°	3363.6	3385.1	3380.9	3385.1	3372.2	3415.4	3389.5	3398.1
40°	2910.8	2910.8	2906.5	2915.1	2902.1	2936.6	2919.4	2928.0
42.5°	2384.8	2397.6	2380.4	2402.0	2367.5	2414.9	2397.6	2384.8
45°	1789.6	1772.4	1768.0	1772.4	1759.4	1763.8	1776.6	1768.0
47.5°	1220.4	1220.4	1211.8	1198.9	1216.1	1220.4	1203.1	1203.1
50°	819.4	819.4	810.8	806.4	815.0	810.8	802.1	815.0
52.5°	521.8	504.5	504.5	513.1	504.5	495.9	508.9	500.2
55°	284.6	276.0	276.0	284.6	276.0	276.0	271.6	280.2
57.5°	138.0	142.2	138.0	138.0	138.0	138.0	133.6	138.0
60°	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4
62.5°	25.9	25.9	21.5	21.5	21.5	21.5	21.5	21.5
65°	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
67.5°	12.9	12.9	12.9	12.9	12.9	17.2	12.9	12.9
70°	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9
72.5°	12.9	12.9	17.2	17.2	17.2	17.2	17.2	17.2
75°	8.6	8.6	8.6	4.2	4.2	4.2	4.2	4.2
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	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
85°	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
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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















(END OF REPORT)