

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: P252195

Luminaire Tested: **LE\_6B50D010R EC6B30508035 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252195  
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\_6B50D010R EC6B30508035 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8722.4 lumens  
Efficiency: N/A  
Efficacy: 148.3 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

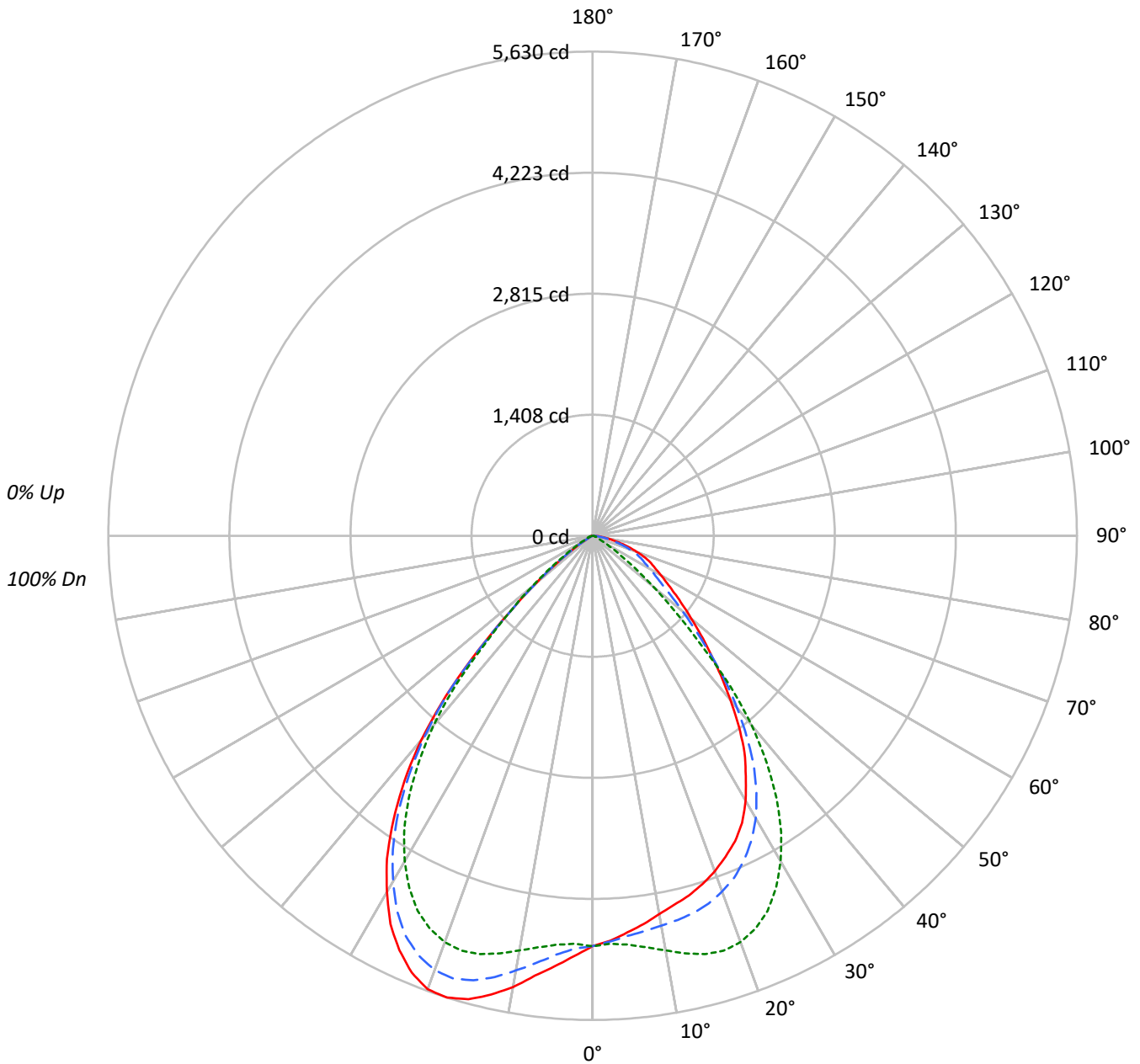
Input Watts (W): 58.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				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				100
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65				65
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58				58
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53				53
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	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	64	54	47	42	53	46	42	52	46	42	51	45	42	40				40
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37				37

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

	0°	90°	180°
0°	311322	311322	311322
5°	303251	312511	328942
10°	295873	324286	352998
15°	292417	340176	376844
20°	288229	349040	389572
25°	282095	346464	382586
30°	268066	329237	360169
35°	245256	296849	321555
40°	212139	245158	263809
45°	178891	160798	172571
50°	151879	93072	87510
55°	131806	44633	33725
60°	119051	20825	8338
65°	115486	11964	2810
70°	103559	9557	2594
75°	85099	6907	1134
80°	63419	3419	0
85°	54644	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	460.9	5.3
10°-20°	1404.7	16.1
20°-30°	2146.3	24.6
30°-40°	2244.8	25.7
40°-50°	1456.2	16.7
50°-60°	578.2	6.6
60°-70°	274.3	3.1
70°-80°	130.4	1.5
80°-90°	26.6	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°	4011.9	46.0
0°-40°	6256.7	71.7
0°-60°	8291.2	95.1
0°-90°	8722.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8722.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4772	4772	4772	4772	4772	
5°	4630	4672	4772	4890	5023	437
15°	4329	4539	5036	5351	5579	1220
25°	3919	4165	4813	5137	5315	1794
35°	3079	3266	3727	3946	4037	1904
45°	1939	1921	1743	1848	1870	1509
55°	1159	985	392	306	296	1050
65°	748	620	78	18	18	731
75°	338	274	27	9	4	364
85°	73	46	0	0	0	85
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°	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9
2.5°	4712.6	4721.8	4671.5	4657.9	4694.4	4708.0	4712.6	4698.9	4703.5	4721.8	4721.8
5°	4630.5	4639.6	4594.0	4580.2	4616.8	4625.9	4639.6	4635.0	4648.8	4676.1	4671.5
7.5°	4552.9	4566.6	4516.4	4498.1	4543.8	4566.6	4575.8	4575.8	4594.0	4630.5	4635.0
10°	4466.2	4484.5	4438.9	4429.8	4479.9	4502.8	4507.2	4516.4	4543.8	4594.0	4603.1
12.5°	4393.2	4411.5	4379.5	4365.9	4420.6	4443.4	4452.5	4470.8	4502.8	4566.6	4575.8
15°	4329.4	4343.1	4306.6	4297.5	4352.2	4379.5	4384.1	4411.5	4452.5	4525.5	4539.2
17.5°	4247.2	4256.4	4229.0	4219.9	4274.6	4302.0	4306.6	4338.5	4388.6	4461.6	4484.5
20°	4151.5	4160.6	4133.2	4124.1	4178.9	4210.8	4215.4	4242.8	4302.0	4379.5	4402.4
22.5°	4037.4	4055.6	4023.8	4014.6	4069.4	4096.8	4110.4	4133.2	4192.5	4270.1	4302.0
25°	3918.8	3918.8	3896.0	3891.4	3941.6	3973.5	3969.0	4000.9	4060.2	4137.8	4165.1
27.5°	3763.6	3759.1	3736.2	3731.8	3786.5	3813.9	3804.8	3836.6	3891.4	3969.0	3996.4
30°	3558.4	3567.5	3535.6	3526.5	3572.1	3617.8	3613.1	3645.1	3699.9	3772.8	3791.0
32.5°	3312.0	3321.1	3316.6	3302.9	3344.0	3366.8	3380.5	3403.2	3448.9	3526.5	3544.8
35°	3079.4	3065.8	3047.5	3047.5	3088.5	3125.0	3111.4	3138.6	3184.2	3261.9	3266.4
37.5°	2792.0	2787.4	2778.2	2769.1	2814.8	2823.9	2828.5	2846.8	2887.8	2951.6	2942.5
40°	2490.9	2495.4	2490.9	2472.6	2500.0	2536.5	2531.9	2541.0	2577.5	2623.1	2609.5
42.5°	2208.0	2208.0	2208.0	2189.8	2221.8	2240.0	2249.1	2244.5	2253.6	2294.8	2276.5
45°	1938.9	1943.4	1938.9	1934.2	1938.9	1948.0	1938.9	1934.2	1934.2	1948.0	1920.6
47.5°	1706.2	1706.2	1692.5	1678.9	1692.5	1697.1	1683.4	1669.8	1665.1	1660.6	1615.0
50°	1496.4	1491.8	1487.2	1464.4	1478.1	1482.6	1464.4	1455.2	1437.0	1414.2	1359.5
52.5°	1313.9	1309.2	1304.8	1281.9	1291.0	1295.6	1277.4	1259.1	1236.4	1218.1	1149.6
55°	1158.8	1154.2	1154.2	1140.5	1131.4	1140.5	1122.2	1108.6	1076.6	1053.9	985.4
57.5°	1026.5	1026.5	1017.4	1003.6	1008.2	1008.2	990.0	971.8	944.4	917.0	862.2
60°	912.4	912.4	912.4	898.8	898.8	898.8	889.6	871.4	848.5	821.1	766.4
62.5°	821.1	821.1	816.6	802.9	807.5	807.5	798.4	780.1	757.2	739.0	684.2
65°	748.1	748.1	748.1	734.5	734.5	739.0	729.9	711.6	693.4	670.6	620.5
67.5°	656.9	652.4	652.4	643.2	647.8	652.4	643.2	629.5	606.8	593.1	547.5
70°	542.9	547.5	552.0	538.4	542.9	542.9	538.4	524.6	511.0	497.2	456.2
72.5°	442.5	442.5	438.0	433.4	433.4	438.0	428.9	415.1	406.0	396.9	365.0
75°	337.6	333.0	337.6	328.5	328.5	328.5	319.4	314.8	310.2	296.5	273.8
77.5°	246.4	241.8	241.8	232.6	237.2	237.2	232.6	223.5	214.4	209.9	191.6
80°	168.8	168.8	168.8	164.2	164.2	159.6	159.6	155.1	146.0	141.4	132.2
82.5°	114.0	114.0	114.0	109.5	109.5	109.5	104.9	100.4	95.8	91.2	82.1
85°	73.0	73.0	73.0	68.4	68.4	68.4	63.9	63.9	59.2	54.8	45.6
87.5°	41.0	41.0	41.0	36.5	36.5	36.5	36.5	36.5	31.9	27.4	22.8
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°	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9
2.5°	4753.6	4689.8	4730.9	4730.9	4717.1	4753.6	4776.5	4794.8	4790.1	4749.1	4744.5
5°	4717.1	4662.4	4708.0	4712.6	4698.9	4749.1	4781.0	4803.9	4808.4	4771.9	4776.5
7.5°	4689.8	4644.1	4703.5	4721.8	4717.1	4762.8	4799.2	4835.8	4854.0	4826.6	4831.2
10°	4676.1	4639.6	4703.5	4730.9	4735.4	4785.6	4840.4	4890.5	4913.4	4895.1	4908.8
12.5°	4657.9	4635.0	4708.0	4749.1	4767.4	4817.5	4886.0	4945.2	4981.8	4972.6	5000.0
15°	4639.6	4621.4	4708.0	4767.4	4790.1	4835.8	4913.4	5000.0	5041.0	5036.5	5073.0
17.5°	4594.0	4589.4	4680.6	4744.5	4776.5	4831.2	4904.2	5009.1	5050.1	5059.2	5104.9
20°	4521.0	4521.0	4621.4	4689.8	4726.2	4776.5	4867.8	4968.1	5018.2	5027.4	5077.5
22.5°	4420.6	4429.8	4525.5	4594.0	4648.8	4685.2	4781.0	4886.0	4931.6	4945.2	5000.0
25°	4288.4	4297.5	4388.6	4457.1	4516.4	4557.5	4648.8	4744.5	4799.2	4813.0	4854.0
27.5°	4115.0	4133.2	4219.9	4288.4	4338.5	4365.9	4461.6	4562.0	4603.1	4616.8	4657.9
30°	3914.2	3918.8	4005.5	4064.8	4115.0	4137.8	4219.9	4324.9	4356.8	4370.4	4429.8
32.5°	3667.9	3663.4	3745.4	3800.1	3841.2	3868.6	3955.2	4023.8	4055.6	4078.5	4110.4
35°	3371.4	3366.8	3426.1	3490.0	3521.9	3531.0	3617.8	3690.8	3709.0	3727.2	3768.2
37.5°	3038.4	3038.4	3088.5	3120.4	3156.9	3170.6	3211.6	3293.8	3325.8	3321.1	3353.1
40°	2687.0	2668.8	2705.2	2737.2	2746.4	2750.9	2792.0	2855.9	2878.6	2878.6	2901.5
42.5°	2317.5	2290.1	2294.8	2313.0	2322.1	2290.1	2317.5	2358.6	2344.9	2363.1	2367.8
45°	1925.1	1884.1	1865.9	1824.9	1834.0	1802.0	1783.8	1792.9	1788.4	1742.8	1751.9
47.5°	1605.9	1532.9	1500.9	1441.6	1427.9	1391.4	1368.6	1327.5	1291.0	1291.0	1268.2
50°	1336.6	1263.6	1199.9	1131.4	1108.6	1076.6	1026.5	971.8	944.4	917.0	894.1
52.5°	1122.2	1044.8	967.1	894.1	862.2	821.1	752.8	698.0	647.8	620.5	593.1
55°	948.9	862.2	780.1	702.5	661.5	620.5	552.0	488.1	428.9	392.4	369.5
57.5°	816.6	734.5	647.8	565.8	529.2	483.6	410.6	342.1	287.4	246.4	223.5
60°	720.8	638.6	561.1	474.5	438.0	392.4	314.8	250.9	196.1	159.6	132.2
62.5°	638.6	565.8	483.6	406.0	369.5	323.9	250.9	187.0	136.9	100.4	77.5
65°	579.4	506.4	438.0	360.4	328.5	282.9	214.4	155.1	109.5	77.5	54.8
67.5°	511.0	447.1	378.6	314.8	282.9	246.4	182.5	132.2	91.2	63.9	45.6
70°	428.9	378.6	319.4	260.0	237.2	205.2	150.5	109.5	73.0	50.1	36.5
72.5°	342.1	301.1	255.5	209.9	191.6	159.6	123.1	86.6	54.8	36.5	27.4
75°	260.0	228.1	191.6	159.6	141.4	123.1	91.2	63.9	41.0	27.4	18.2
77.5°	177.9	164.2	136.9	109.5	100.4	86.6	59.2	41.0	27.4	18.2	9.1
80°	123.1	109.5	91.2	73.0	63.9	54.8	36.5	27.4	13.6	9.1	4.5
82.5°	77.5	63.9	54.8	45.6	41.0	31.9	22.8	13.6	9.1	4.5	4.5
85°	41.0	36.5	31.9	22.8	22.8	18.2	13.6	9.1	4.5	0.0	0.0
87.5°	22.8	18.2	13.6	9.1	9.1	4.5	4.5	4.5	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°	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9
2.5°	4799.2	4799.2	4794.8	4849.5	4785.6	4849.5	4817.5	4849.5	4803.9	4799.2	4803.9
5°	4835.8	4849.5	4854.0	4904.2	4844.9	4922.5	4895.1	4922.5	4890.5	4899.6	4913.4
7.5°	4908.8	4931.6	4927.0	4990.9	4931.6	5018.2	5000.0	5041.0	5009.1	5018.2	5036.5
10°	4990.9	5018.2	5022.8	5086.6	5031.9	5136.9	5114.0	5159.6	5132.2	5146.0	5168.8
12.5°	5086.6	5118.6	5123.1	5196.1	5136.9	5246.4	5232.6	5278.2	5255.5	5269.1	5296.5
15°	5159.6	5205.2	5214.4	5287.4	5223.5	5337.6	5328.5	5387.8	5351.2	5374.1	5396.9
17.5°	5196.1	5237.2	5255.5	5323.9	5269.1	5383.2	5374.1	5424.2	5396.9	5419.8	5447.1
20°	5173.4	5223.5	5237.2	5305.6	5250.9	5365.0	5351.2	5401.5	5374.1	5392.4	5419.8
22.5°	5091.2	5141.4	5159.6	5223.5	5173.4	5278.2	5273.8	5319.4	5282.9	5305.6	5328.5
25°	4945.2	5000.0	5009.1	5068.4	5013.6	5123.1	5114.0	5164.2	5136.9	5150.5	5182.5
27.5°	4735.4	4799.2	4813.0	4863.1	4822.1	4913.4	4913.4	4954.4	4922.5	4922.5	4954.4
30°	4484.5	4548.4	4557.5	4598.5	4562.0	4644.1	4648.8	4689.8	4639.6	4667.0	4671.5
32.5°	4178.9	4219.9	4247.2	4283.8	4229.0	4334.0	4320.2	4352.2	4324.9	4324.9	4347.6
35°	3809.2	3859.5	3873.1	3918.8	3873.1	3955.2	3955.2	3973.5	3946.1	3946.1	3982.6
37.5°	3407.9	3444.4	3448.9	3494.5	3458.0	3526.5	3521.9	3535.6	3508.2	3526.5	3526.5
40°	2938.0	2965.4	2974.5	2997.2	2992.8	3042.9	3038.4	3047.5	3033.8	3038.4	3047.5
42.5°	2390.5	2427.0	2445.2	2463.5	2436.1	2504.5	2490.9	2504.5	2500.0	2504.5	2518.2
45°	1761.0	1788.4	1802.0	1806.6	1797.5	1838.5	1870.4	1843.1	1847.6	1838.5	1856.8
47.5°	1272.8	1277.4	1268.2	1295.6	1272.8	1291.0	1300.1	1304.8	1277.4	1272.8	1291.0
50°	871.4	894.1	862.2	875.9	871.4	889.6	880.5	885.0	857.6	871.4	862.2
52.5°	579.4	574.9	565.8	570.2	561.1	561.1	561.1	570.2	552.0	542.9	533.8
55°	351.2	342.1	323.9	319.4	319.4	323.9	314.8	305.6	305.6	301.1	301.1
57.5°	205.2	191.6	182.5	177.9	168.8	164.2	159.6	159.6	150.5	150.5	150.5
60°	114.0	100.4	91.2	82.1	82.1	77.5	73.0	68.4	68.4	68.4	63.9
62.5°	59.2	50.1	41.0	36.5	36.5	31.9	27.4	27.4	27.4	27.4	22.8
65°	41.0	31.9	27.4	22.8	22.8	18.2	18.2	18.2	18.2	18.2	18.2
67.5°	31.9	27.4	22.8	18.2	18.2	18.2	13.6	13.6	13.6	13.6	13.6
70°	27.4	18.2	18.2	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
72.5°	18.2	18.2	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
75°	13.6	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
77.5°	4.5	4.5	4.5	4.5	4.5	4.5	0.0	0.0	0.0	0.0	0.0
80°	4.5	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: P252195

CATALOG NUMBER: LE\_6B50D010R EC6B30508035 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9	4771.9
2.5°	4844.9	4840.4	4844.9	4854.0	4835.8	4890.5	4863.1	4890.5
5°	4949.9	4954.4	4959.0	4972.6	4949.9	5018.2	4981.8	5022.8
7.5°	5086.6	5091.2	5095.8	5109.5	5095.8	5164.2	5123.1	5159.6
10°	5228.1	5237.2	5237.2	5260.0	5246.4	5310.2	5282.9	5328.5
12.5°	5360.4	5369.5	5378.6	5392.4	5383.2	5451.6	5428.9	5465.4
15°	5465.4	5483.6	5488.1	5506.4	5497.2	5570.2	5542.9	5579.4
17.5°	5515.5	5533.8	5533.8	5556.6	5547.5	5625.0	5588.5	5629.5
20°	5488.1	5501.9	5506.4	5529.2	5520.1	5597.6	5561.1	5611.2
22.5°	5401.5	5406.0	5410.6	5433.4	5428.9	5497.2	5465.4	5497.2
25°	5241.8	5255.5	5250.9	5269.1	5269.1	5323.9	5287.4	5314.8
27.5°	5013.6	5027.4	5027.4	5050.1	5031.9	5086.6	5050.1	5091.2
30°	4735.4	4749.1	4740.0	4758.2	4740.0	4794.8	4767.4	4781.0
32.5°	4402.4	4402.4	4406.9	4411.5	4402.4	4452.5	4425.1	4452.5
35°	4005.5	4014.6	4019.1	4023.8	4014.6	4051.1	4019.1	4037.4
37.5°	3558.4	3581.2	3576.6	3581.2	3567.5	3613.1	3585.8	3594.9
40°	3079.4	3079.4	3074.9	3084.0	3070.2	3106.8	3088.5	3097.6
42.5°	2522.8	2536.5	2518.2	2541.0	2504.5	2554.8	2536.5	2522.8
45°	1893.2	1875.0	1870.4	1875.0	1861.4	1865.9	1879.5	1870.4
47.5°	1291.0	1291.0	1281.9	1268.2	1286.5	1291.0	1272.8	1272.8
50°	866.8	866.8	857.6	853.1	862.2	857.6	848.5	862.2
52.5°	552.0	533.8	533.8	542.9	533.8	524.6	538.4	529.2
55°	301.1	292.0	292.0	301.1	292.0	292.0	287.4	296.5
57.5°	146.0	150.5	146.0	146.0	146.0	146.0	141.4	146.0
60°	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
62.5°	27.4	27.4	22.8	22.8	22.8	22.8	22.8	22.8
65°	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
67.5°	13.6	13.6	13.6	13.6	13.6	18.2	13.6	13.6
70°	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
72.5°	13.6	13.6	18.2	18.2	18.2	18.2	18.2	18.2
75°	9.1	9.1	9.1	4.5	4.5	4.5	4.5	4.5
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)