

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: P252193

Luminaire Tested: **LE\_6B50D010R EC6B30508027 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252193  
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 EC6B30508027 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8135.0 lumens  
Efficiency: N/A  
Efficacy: 138.4 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

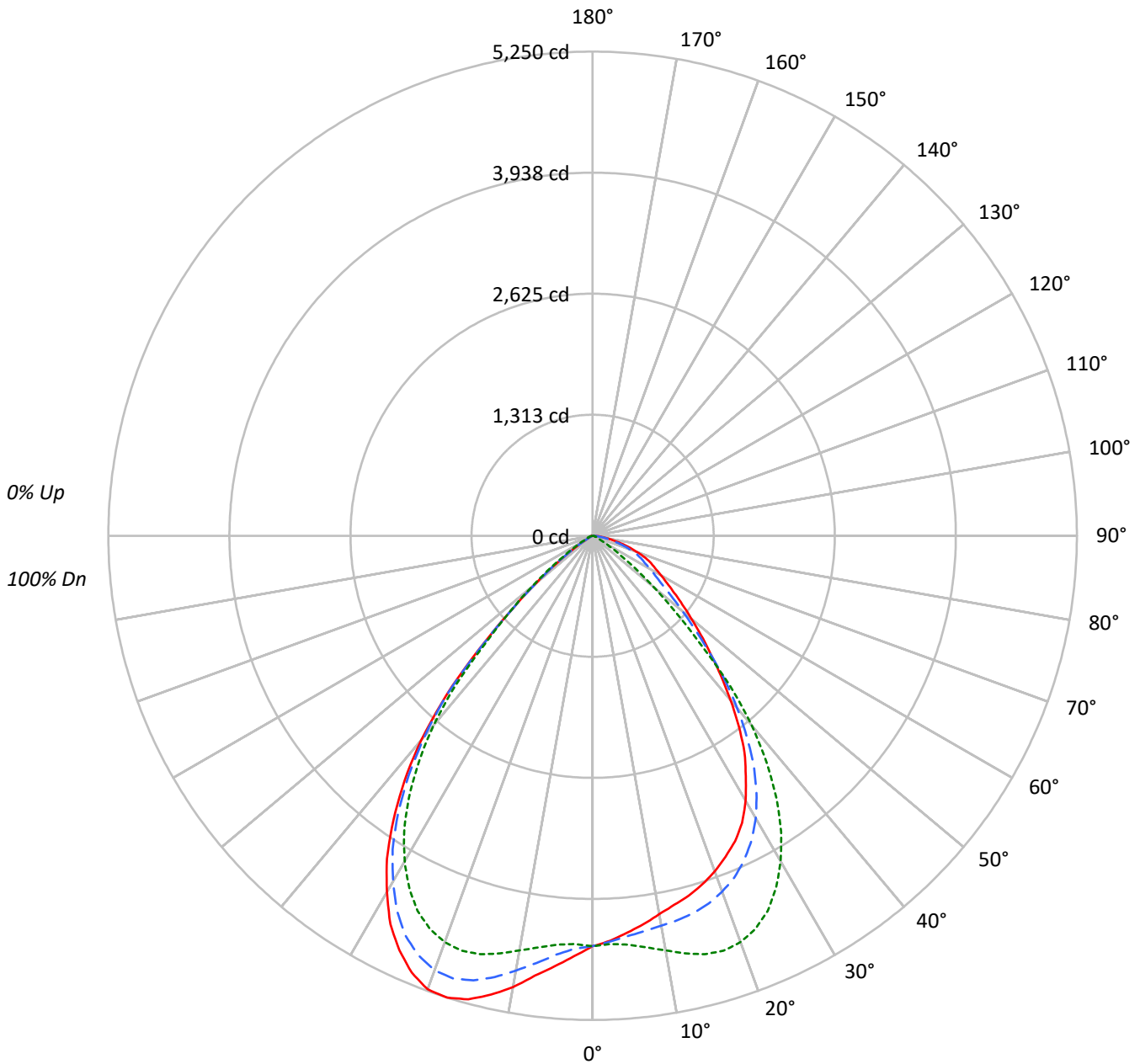
Input Watts (W): 58.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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	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°	290353	290353	290353
5°	282824	291463	306787
10°	275946	302444	329221
15°	272721	317259	351462
20°	268817	325532	363343
25°	263098	323127	356816
30°	250016	307066	335912
35°	228738	276851	299900
40°	197848	228653	246043
45°	166832	149966	160955
50°	141648	86800	81613
55°	122934	41619	31450
60°	111040	19429	7777
65°	107721	11177	2624
70°	96596	8927	2442
75°	79377	6428	1059
80°	59136	3193	0
85°	50976	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	429.9	5.3
10°-20°	1310.1	16.1
20°-30°	2001.7	24.6
30°-40°	2093.6	25.7
40°-50°	1358.1	16.7
50°-60°	539.3	6.6
60°-70°	255.8	3.1
70°-80°	121.7	1.5
80°-90°	24.8	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°	3741.7	46.0
0°-40°	5835.3	71.7
0°-60°	7732.7	95.1
0°-90°	8135.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8135.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4450	4450	4450	4450	4450	
5°	4319	4357	4450	4561	4684	408
15°	4038	4234	4697	4991	5204	1138
25°	3655	3885	4489	4791	4957	1674
35°	2872	3046	3476	3680	3766	1776
45°	1808	1791	1625	1723	1744	1407
55°	1081	919	366	285	276	979
65°	698	579	72	17	17	682
75°	315	255	26	8	4	340
85°	68	42	0	0	0	79
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°	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5
2.5°	4395.1	4403.6	4356.9	4344.1	4378.1	4390.9	4395.1	4382.4	4386.6	4403.6	4403.6
5°	4318.6	4327.1	4284.5	4271.8	4305.9	4314.4	4327.1	4322.9	4335.6	4361.1	4356.9
7.5°	4246.2	4259.0	4212.2	4195.2	4237.8	4259.0	4267.5	4267.5	4284.5	4318.6	4322.9
10°	4165.4	4182.4	4139.9	4131.4	4178.1	4199.5	4203.8	4212.2	4237.8	4284.5	4293.0
12.5°	4097.4	4114.4	4084.6	4071.9	4122.9	4144.1	4152.6	4169.6	4199.5	4259.0	4267.5
15°	4037.8	4050.5	4016.5	4008.0	4059.0	4084.6	4088.9	4114.4	4152.6	4220.8	4233.5
17.5°	3961.2	3969.8	3944.1	3935.6	3986.8	4012.2	4016.5	4046.2	4093.1	4161.1	4182.4
20°	3871.9	3880.4	3854.9	3846.2	3897.4	3927.1	3931.4	3956.9	4012.2	4084.6	4105.9
22.5°	3765.5	3782.5	3752.8	3744.2	3795.2	3820.8	3833.5	3854.9	3910.1	3982.5	4012.2
25°	3654.9	3654.9	3633.6	3629.4	3676.1	3705.9	3701.6	3731.4	3786.8	3859.1	3884.6
27.5°	3510.1	3505.9	3484.6	3480.4	3531.5	3557.0	3548.5	3578.2	3629.4	3701.6	3727.1
30°	3318.8	3327.2	3297.5	3288.9	3331.5	3374.0	3369.8	3399.5	3450.6	3518.8	3535.8
32.5°	3089.0	3097.5	3093.2	3080.5	3118.8	3140.0	3152.8	3174.0	3216.6	3288.9	3306.0
35°	2872.0	2859.2	2842.1	2842.1	2880.5	2914.5	2901.8	2927.2	2969.9	3042.1	3046.4
37.5°	2603.9	2599.6	2591.1	2582.6	2625.2	2633.8	2638.0	2655.0	2693.2	2752.9	2744.4
40°	2323.1	2327.4	2323.1	2306.1	2331.6	2365.6	2361.4	2369.9	2404.0	2446.5	2433.8
42.5°	2059.2	2059.2	2059.2	2042.2	2072.1	2089.1	2097.6	2093.4	2101.9	2140.1	2123.1
45°	1808.2	1812.5	1808.2	1804.0	1808.2	1816.8	1808.2	1804.0	1804.0	1816.8	1791.2
47.5°	1591.2	1591.2	1578.5	1565.8	1578.5	1582.8	1570.0	1557.2	1553.0	1548.8	1506.2
50°	1395.6	1391.2	1387.0	1365.8	1378.5	1382.8	1365.8	1357.2	1340.2	1319.0	1267.9
52.5°	1225.4	1221.1	1216.9	1195.6	1204.1	1208.4	1191.4	1174.4	1153.0	1136.0	1072.2
55°	1080.8	1076.5	1076.5	1063.8	1055.1	1063.8	1046.6	1033.9	1004.1	982.9	919.0
57.5°	957.4	957.4	948.9	936.0	940.2	940.2	923.2	906.2	880.8	855.2	804.1
60°	851.0	851.0	851.0	838.2	838.2	838.2	829.6	812.6	791.4	765.9	714.8
62.5°	765.9	765.9	761.6	748.9	753.1	753.1	744.6	727.6	706.2	689.2	638.2
65°	697.8	697.8	697.8	685.0	685.0	689.2	680.8	663.8	646.8	625.5	578.6
67.5°	612.6	608.4	608.4	599.9	604.1	608.4	599.9	587.1	565.9	553.1	510.6
70°	506.4	510.6	514.9	502.1	506.4	506.4	502.1	489.2	476.5	463.8	425.5
72.5°	412.8	412.8	408.5	404.2	404.2	408.5	400.0	387.1	378.6	370.1	340.4
75°	314.9	310.6	314.9	306.4	306.4	306.4	297.9	293.6	289.4	276.5	255.2
77.5°	229.8	225.5	225.5	217.0	221.2	221.2	217.0	208.5	200.0	195.8	178.8
80°	157.4	157.4	157.4	153.1	153.1	148.9	148.9	144.6	136.1	131.9	123.4
82.5°	106.4	106.4	106.4	102.1	102.1	102.1	97.9	93.6	89.4	85.1	76.6
85°	68.1	68.1	68.1	63.9	63.9	63.9	59.6	59.6	55.2	51.0	42.5
87.5°	38.2	38.2	38.2	34.0	34.0	34.0	34.0	34.0	29.8	25.5	21.2
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°	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5
2.5°	4433.5	4373.9	4412.2	4412.2	4399.4	4433.5	4454.8	4471.8	4467.5	4429.2	4425.0
5°	4399.4	4348.4	4390.9	4395.1	4382.4	4429.2	4459.0	4480.2	4484.5	4450.5	4454.8
7.5°	4373.9	4331.4	4386.6	4403.6	4399.4	4442.0	4476.0	4510.0	4527.1	4501.5	4505.8
10°	4361.1	4327.1	4386.6	4412.2	4416.5	4463.2	4514.2	4561.1	4582.4	4565.4	4578.1
12.5°	4344.1	4322.9	4390.9	4429.2	4446.2	4493.0	4556.9	4612.1	4646.2	4637.8	4663.2
15°	4327.1	4310.1	4390.9	4446.2	4467.5	4510.0	4582.4	4663.2	4701.5	4697.2	4731.2
17.5°	4284.5	4280.2	4365.4	4425.0	4454.8	4505.8	4573.9	4671.8	4710.0	4718.5	4761.1
20°	4216.5	4216.5	4310.1	4373.9	4408.0	4454.8	4539.9	4633.5	4680.2	4688.8	4735.5
22.5°	4122.9	4131.4	4220.8	4284.5	4335.6	4369.6	4459.0	4556.9	4599.4	4612.1	4663.2
25°	3999.5	4008.0	4093.1	4156.9	4212.2	4250.5	4335.6	4425.0	4476.0	4488.8	4527.1
27.5°	3837.8	3854.9	3935.6	3999.5	4046.2	4071.9	4161.1	4254.8	4293.0	4305.9	4344.1
30°	3650.6	3654.9	3735.6	3791.0	3837.8	3859.1	3935.6	4033.5	4063.2	4076.1	4131.4
32.5°	3420.9	3416.6	3493.1	3544.2	3582.5	3608.0	3688.9	3752.8	3782.5	3803.8	3833.5
35°	3144.2	3140.0	3195.4	3254.9	3284.6	3293.2	3374.0	3442.1	3459.1	3476.1	3514.5
37.5°	2833.6	2833.6	2880.5	2910.2	2944.2	2957.1	2995.4	3072.0	3101.8	3097.5	3127.2
40°	2506.0	2489.0	2523.1	2552.9	2561.4	2565.6	2603.9	2663.5	2684.8	2684.8	2706.0
42.5°	2161.4	2135.9	2140.1	2157.1	2165.6	2135.9	2161.4	2199.8	2187.0	2204.0	2208.2
45°	1795.5	1757.2	1740.2	1701.9	1710.4	1680.6	1663.6	1672.1	1667.9	1625.4	1633.9
47.5°	1497.6	1429.6	1399.9	1344.5	1331.8	1297.8	1276.4	1238.1	1204.1	1204.1	1182.9
50°	1246.6	1178.6	1119.0	1055.1	1033.9	1004.1	957.4	906.2	880.8	855.2	833.9
52.5°	1046.6	974.4	902.0	833.9	804.1	765.9	702.0	651.0	604.1	578.6	553.1
55°	885.0	804.1	727.6	655.2	617.0	578.6	514.9	455.2	400.0	365.9	344.6
57.5°	761.6	685.0	604.1	527.6	493.5	451.0	382.9	319.1	268.0	229.8	208.5
60°	672.2	595.6	523.4	442.5	408.5	365.9	293.6	234.0	183.0	148.9	123.4
62.5°	595.6	527.6	451.0	378.6	344.6	302.1	234.0	174.5	127.6	93.6	72.4
65°	540.4	472.2	408.5	336.1	306.4	263.8	200.0	144.6	102.1	72.4	51.0
67.5°	476.5	417.0	353.1	293.6	263.8	229.8	170.2	123.4	85.1	59.6	42.5
70°	400.0	353.1	297.9	242.5	221.2	191.5	140.4	102.1	68.1	46.8	34.0
72.5°	319.1	280.9	238.2	195.8	178.8	148.9	114.9	80.9	51.0	34.0	25.5
75°	242.5	212.8	178.8	148.9	131.9	114.9	85.1	59.6	38.2	25.5	17.0
77.5°	165.9	153.1	127.6	102.1	93.6	80.9	55.2	38.2	25.5	17.0	8.5
80°	114.9	102.1	85.1	68.1	59.6	51.0	34.0	25.5	12.8	8.5	4.2
82.5°	72.4	59.6	51.0	42.5	38.2	29.8	21.2	12.8	8.5	4.2	4.2
85°	38.2	34.0	29.8	21.2	21.2	17.0	12.8	8.5	4.2	0.0	0.0
87.5°	21.2	17.0	12.8	8.5	8.5	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°	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5
2.5°	4476.0	4476.0	4471.8	4522.9	4463.2	4522.9	4493.0	4522.9	4480.2	4476.0	4480.2
5°	4510.0	4522.9	4527.1	4573.9	4518.6	4590.9	4565.4	4590.9	4561.1	4569.6	4582.4
7.5°	4578.1	4599.4	4595.1	4654.8	4599.4	4680.2	4663.2	4701.5	4671.8	4680.2	4697.2
10°	4654.8	4680.2	4684.5	4744.1	4693.0	4790.9	4769.6	4812.1	4786.6	4799.4	4820.6
12.5°	4744.1	4773.9	4778.1	4846.1	4790.9	4893.0	4880.2	4922.8	4901.5	4914.2	4939.8
15°	4812.1	4854.8	4863.2	4931.2	4871.8	4978.1	4969.6	5024.9	4990.9	5012.1	5033.4
17.5°	4846.1	4884.5	4901.5	4965.4	4914.2	5020.6	5012.1	5058.9	5033.4	5054.6	5080.2
20°	4824.9	4871.8	4884.5	4948.2	4897.2	5003.6	4990.9	5037.6	5012.1	5029.1	5054.6
22.5°	4748.4	4795.1	4812.1	4871.8	4824.9	4922.8	4918.5	4961.0	4927.0	4948.2	4969.6
25°	4612.1	4663.2	4671.8	4727.0	4676.0	4778.1	4769.6	4816.4	4790.9	4803.6	4833.4
27.5°	4416.5	4476.0	4488.8	4535.6	4497.2	4582.4	4582.4	4620.6	4590.9	4590.9	4620.6
30°	4182.4	4242.0	4250.5	4288.8	4254.8	4331.4	4335.6	4373.9	4327.1	4352.6	4356.9
32.5°	3897.4	3935.6	3961.2	3995.2	3944.1	4042.0	4029.2	4059.0	4033.5	4033.5	4054.8
35°	3552.8	3599.5	3612.2	3654.9	3612.2	3688.9	3688.9	3705.9	3680.4	3680.4	3714.4
37.5°	3178.2	3212.4	3216.6	3259.1	3225.1	3288.9	3284.6	3297.5	3271.9	3288.9	3288.9
40°	2740.1	2765.6	2774.1	2795.4	2791.1	2837.9	2833.6	2842.1	2829.4	2833.6	2842.1
42.5°	2229.5	2263.5	2280.5	2297.6	2272.0	2335.9	2323.1	2335.9	2331.6	2335.9	2348.6
45°	1642.4	1667.9	1680.6	1684.9	1676.4	1714.6	1744.5	1718.9	1723.1	1714.6	1731.8
47.5°	1187.1	1191.4	1182.9	1208.4	1187.1	1204.1	1212.6	1216.9	1191.4	1187.1	1204.1
50°	812.6	833.9	804.1	816.9	812.6	829.6	821.1	825.4	799.9	812.6	804.1
52.5°	540.4	536.1	527.6	531.9	523.4	523.4	523.4	531.9	514.9	506.4	497.8
55°	327.6	319.1	302.1	297.9	297.9	302.1	293.6	285.1	285.1	280.9	280.9
57.5°	191.5	178.8	170.2	165.9	157.4	153.1	148.9	148.9	140.4	140.4	140.4
60°	106.4	93.6	85.1	76.6	76.6	72.4	68.1	63.9	63.9	63.9	59.6
62.5°	55.2	46.8	38.2	34.0	34.0	29.8	25.5	25.5	25.5	25.5	21.2
65°	38.2	29.8	25.5	21.2	21.2	17.0	17.0	17.0	17.0	17.0	17.0
67.5°	29.8	25.5	21.2	17.0	17.0	17.0	12.8	12.8	12.8	12.8	12.8
70°	25.5	17.0	17.0	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
72.5°	17.0	17.0	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
75°	12.8	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
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: P252193

CATALOG NUMBER: LE\_6B50D010R EC6B30508027 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5	4450.5
2.5°	4518.6	4514.2	4518.6	4527.1	4510.0	4561.1	4535.6	4561.1
5°	4616.4	4620.6	4624.9	4637.8	4616.4	4680.2	4646.2	4684.5
7.5°	4744.1	4748.4	4752.6	4765.4	4752.6	4816.4	4778.1	4812.1
10°	4876.0	4884.5	4884.5	4905.8	4893.0	4952.5	4927.0	4969.6
12.5°	4999.4	5007.9	5016.4	5029.1	5020.6	5084.5	5063.1	5097.2
15°	5097.2	5114.2	5118.5	5135.5	5127.0	5195.1	5169.5	5203.6
17.5°	5144.0	5161.0	5161.0	5182.2	5173.8	5246.1	5212.1	5250.4
20°	5118.5	5131.2	5135.5	5156.8	5148.2	5220.6	5186.5	5233.4
22.5°	5037.6	5041.9	5046.1	5067.4	5063.1	5127.0	5097.2	5127.0
25°	4888.8	4901.5	4897.2	4914.2	4914.2	4965.4	4931.2	4956.8
27.5°	4676.0	4688.8	4688.8	4710.0	4693.0	4744.1	4710.0	4748.4
30°	4416.5	4429.2	4420.8	4437.8	4420.8	4471.8	4446.2	4459.0
32.5°	4105.9	4105.9	4110.1	4114.4	4105.9	4152.6	4127.1	4152.6
35°	3735.6	3744.2	3748.5	3752.8	3744.2	3778.2	3748.5	3765.5
37.5°	3318.8	3340.0	3335.8	3340.0	3327.2	3369.8	3344.2	3352.8
40°	2872.0	2872.0	2867.8	2876.2	2863.5	2897.5	2880.5	2889.0
42.5°	2352.9	2365.6	2348.6	2369.9	2335.9	2382.6	2365.6	2352.9
45°	1765.8	1748.8	1744.5	1748.8	1736.0	1740.2	1753.0	1744.5
47.5°	1204.1	1204.1	1195.6	1182.9	1199.9	1204.1	1187.1	1187.1
50°	808.4	808.4	799.9	795.6	804.1	799.9	791.4	804.1
52.5°	514.9	497.8	497.8	506.4	497.8	489.2	502.1	493.5
55°	280.9	272.2	272.2	280.9	272.2	272.2	268.0	276.5
57.5°	136.1	140.4	136.1	136.1	136.1	136.1	131.9	136.1
60°	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
62.5°	25.5	25.5	21.2	21.2	21.2	21.2	21.2	21.2
65°	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
67.5°	12.8	12.8	12.8	12.8	12.8	17.0	12.8	12.8
70°	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
72.5°	12.8	12.8	17.0	17.0	17.0	17.0	17.0	17.0
75°	8.5	8.5	8.5	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)