

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: P252197

Luminaire Tested: **LE\_6B50D010R EC6B30508050 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252197  
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 EC6B30508050 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8805.0 lumens  
Efficiency: N/A  
Efficacy: 149.7 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

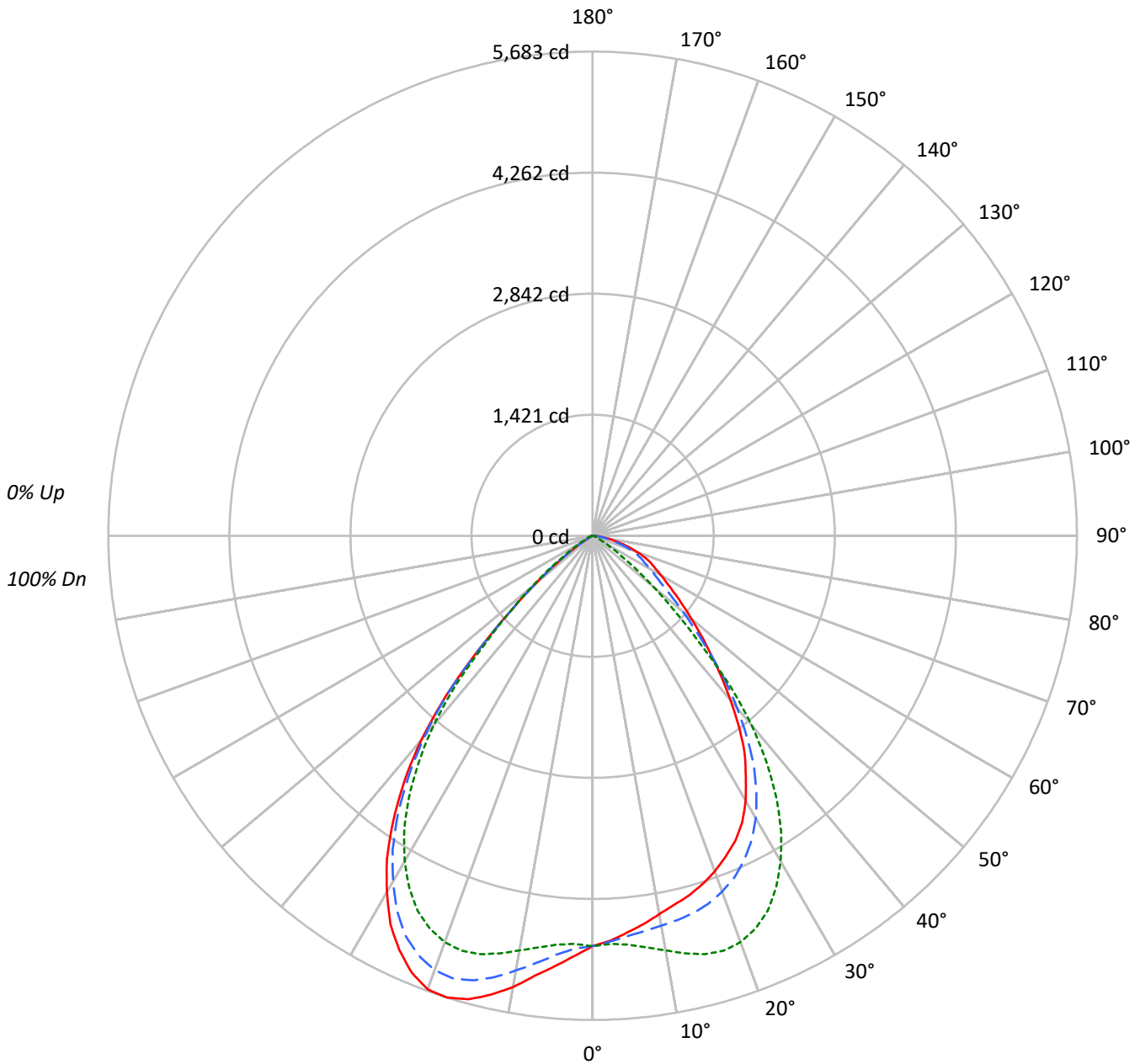
Input Watts (W): 58.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				20				
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°	314264	314264	314264
5°	306113	315465	332060
10°	298675	327353	356336
15°	295186	343391	380404
20°	290957	352338	393266
25°	284766	349739	386200
30°	270598	332356	363574
35°	247574	299661	324597
40°	214140	247483	266304
45°	180579	162302	174204
50°	153310	93945	88342
55°	133057	45042	34055
60°	120173	21021	8416
65°	116582	12072	2840
70°	104531	9652	2651
75°	85906	6957	1160
80°	64020	3456	0
85°	55093	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	465.3	5.3
10°-20°	1418.0	16.1
20°-30°	2166.6	24.6
30°-40°	2266.1	25.7
40°-50°	1470.0	16.7
50°-60°	583.7	6.6
60°-70°	276.9	3.1
70°-80°	131.7	1.5
80°-90°	26.9	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°	4049.9	46.0
0°-40°	6315.9	71.7
0°-60°	8369.6	95.1
0°-90°	8805.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8805.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4817	4817	4817	4817	4817	
5°	4674	4716	4817	4937	5070	441
15°	4370	4582	5084	5402	5632	1232
25°	3956	4204	4858	5186	5365	1811
35°	3108	3297	3762	3984	4076	1922
45°	1957	1939	1759	1865	1888	1523
55°	1170	995	396	308	299	1060
65°	755	626	78	18	18	738
75°	341	276	28	9	5	368
85°	74	46	0	0	0	86
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°	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0
2.5°	4757.1	4766.4	4715.8	4701.9	4738.8	4752.5	4757.1	4743.4	4748.0	4766.4	4766.4
5°	4674.2	4683.5	4637.4	4623.6	4660.5	4669.6	4683.5	4678.9	4692.8	4720.4	4715.8
7.5°	4596.0	4609.8	4559.1	4540.8	4586.8	4609.8	4619.0	4619.0	4637.4	4674.2	4678.9
10°	4508.5	4526.9	4480.9	4471.6	4522.2	4545.4	4549.9	4559.1	4586.8	4637.4	4646.6
12.5°	4434.8	4453.2	4421.0	4407.1	4462.4	4485.5	4494.6	4513.1	4545.4	4609.8	4619.0
15°	4370.4	4384.1	4347.2	4338.1	4393.4	4421.0	4425.6	4453.2	4494.6	4568.4	4582.1
17.5°	4287.4	4296.6	4269.0	4259.8	4315.1	4342.8	4347.2	4379.5	4430.2	4503.9	4526.9
20°	4190.8	4199.9	4172.2	4163.1	4218.4	4250.6	4255.2	4282.9	4342.8	4421.0	4444.0
22.5°	4075.6	4094.0	4061.8	4052.6	4107.9	4135.5	4149.2	4172.2	4232.1	4310.5	4342.8
25°	3955.9	3955.9	3932.9	3928.2	3978.9	4011.1	4006.5	4038.8	4098.6	4176.9	4204.5
27.5°	3799.2	3794.6	3771.6	3767.0	3822.2	3850.0	3840.8	3873.0	3928.2	4006.5	4034.1
30°	3592.0	3601.2	3569.0	3559.9	3605.9	3651.9	3647.2	3679.5	3734.8	3808.5	3826.9
32.5°	3343.4	3352.6	3348.0	3334.1	3375.6	3398.6	3412.5	3435.5	3481.5	3559.9	3578.2
35°	3108.5	3094.8	3076.2	3076.2	3117.8	3154.5	3140.8	3168.4	3214.4	3292.8	3297.4
37.5°	2818.4	2813.8	2804.5	2795.4	2841.4	2850.6	2855.2	2873.6	2915.1	2979.5	2970.4
40°	2514.4	2519.0	2514.4	2496.0	2523.6	2560.5	2555.9	2565.1	2601.9	2648.0	2634.1
42.5°	2228.9	2228.9	2228.9	2210.5	2242.8	2261.1	2270.4	2265.8	2275.0	2316.4	2298.0
45°	1957.2	1961.8	1957.2	1952.6	1957.2	1966.4	1957.2	1952.6	1952.6	1966.4	1938.8
47.5°	1722.4	1722.4	1708.5	1694.8	1708.5	1713.1	1699.4	1685.5	1680.9	1676.2	1630.2
50°	1510.5	1505.9	1501.2	1478.2	1492.1	1496.6	1478.2	1469.0	1450.6	1427.6	1372.4
52.5°	1326.2	1321.8	1317.1	1294.0	1303.2	1307.9	1289.5	1271.0	1248.0	1229.6	1160.5
55°	1169.8	1165.1	1165.1	1151.2	1142.1	1151.2	1132.9	1119.0	1086.9	1063.8	994.8
57.5°	1036.1	1036.1	1027.0	1013.1	1017.8	1017.8	999.4	980.9	953.2	925.6	870.4
60°	921.0	921.0	921.0	907.2	907.2	907.2	898.0	879.6	856.6	828.9	773.6
62.5°	828.9	828.9	824.4	810.5	815.1	815.1	805.9	787.5	764.5	746.0	690.8
65°	755.2	755.2	755.2	741.4	741.4	746.0	736.9	718.4	700.0	677.0	626.2
67.5°	663.1	658.5	658.5	649.4	653.9	658.5	649.4	635.5	612.5	598.6	552.6
70°	548.0	552.6	557.2	543.4	548.0	548.0	543.4	529.6	515.8	502.0	460.5
72.5°	446.8	446.8	442.1	437.5	437.5	442.1	432.9	419.1	409.9	400.6	368.4
75°	340.8	336.1	340.8	331.6	331.6	331.6	322.4	317.8	313.1	299.4	276.2
77.5°	248.6	244.1	244.1	234.9	239.5	239.5	234.9	225.6	216.5	211.9	193.4
80°	170.4	170.4	170.4	165.8	165.8	161.1	161.1	156.6	147.4	142.8	133.5
82.5°	115.1	115.1	115.1	110.5	110.5	110.5	105.9	101.4	96.8	92.1	82.9
85°	73.6	73.6	73.6	69.1	69.1	69.1	64.5	64.5	59.9	55.2	46.0
87.5°	41.5	41.5	41.5	36.9	36.9	36.9	36.9	36.9	32.2	27.6	23.0
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0
2.5°	4798.6	4734.1	4775.6	4775.6	4761.8	4798.6	4821.6	4840.0	4835.5	4794.0	4789.4
5°	4761.8	4706.5	4752.5	4757.1	4743.4	4794.0	4826.2	4849.2	4853.9	4817.0	4821.6
7.5°	4734.1	4688.1	4748.0	4766.4	4761.8	4807.9	4844.6	4881.5	4899.9	4872.2	4876.9
10°	4720.4	4683.5	4748.0	4775.6	4780.2	4830.9	4886.1	4936.8	4959.8	4941.4	4955.1
12.5°	4701.9	4678.9	4752.5	4794.0	4812.4	4863.1	4932.1	4992.0	5028.9	5019.6	5047.2
15°	4683.5	4665.0	4752.5	4812.4	4835.5	4881.5	4959.8	5047.2	5088.8	5084.1	5121.0
17.5°	4637.4	4632.9	4724.9	4789.4	4821.6	4876.9	4950.6	5056.5	5098.0	5107.1	5153.2
20°	4563.8	4563.8	4665.0	4734.1	4771.0	4821.6	4913.8	5015.0	5065.8	5074.9	5125.6
22.5°	4462.4	4471.6	4568.4	4637.4	4692.8	4729.5	4826.2	4932.1	4978.2	4992.0	5047.2
25°	4328.9	4338.1	4430.2	4499.2	4559.1	4600.6	4692.8	4789.4	4844.6	4858.5	4899.9
27.5°	4153.9	4172.2	4259.8	4328.9	4379.5	4407.1	4503.9	4605.2	4646.6	4660.5	4701.9
30°	3951.2	3955.9	4043.4	4103.2	4153.9	4176.9	4259.8	4365.8	4398.0	4411.8	4471.6
32.5°	3702.6	3698.0	3780.9	3836.1	3877.6	3905.2	3992.8	4061.8	4094.0	4117.0	4149.2
35°	3403.2	3398.6	3458.5	3523.0	3555.2	3564.4	3651.9	3725.6	3744.0	3762.5	3803.9
37.5°	3067.0	3067.0	3117.8	3150.0	3186.8	3200.6	3242.0	3325.0	3357.1	3352.6	3384.9
40°	2712.5	2694.0	2730.9	2763.1	2772.4	2776.9	2818.4	2882.9	2905.9	2905.9	2928.9
42.5°	2339.4	2311.8	2316.4	2334.9	2344.0	2311.8	2339.4	2380.9	2367.1	2385.5	2390.1
45°	1943.4	1902.0	1883.5	1842.1	1851.2	1819.0	1800.6	1809.9	1805.2	1759.1	1768.4
47.5°	1621.0	1547.4	1515.1	1455.2	1441.4	1404.6	1381.5	1340.1	1303.2	1303.2	1280.2
50°	1349.4	1275.6	1211.1	1142.1	1119.0	1086.9	1036.1	980.9	953.2	925.6	902.6
52.5°	1132.9	1054.6	976.2	902.6	870.4	828.9	759.9	704.6	653.9	626.2	598.6
55°	957.9	870.4	787.5	709.2	667.8	626.2	557.2	492.8	432.9	396.0	373.0
57.5°	824.4	741.4	653.9	571.0	534.2	488.1	414.5	345.4	290.1	248.6	225.6
60°	727.6	644.8	566.5	479.0	442.1	396.0	317.8	253.2	198.0	161.1	133.5
62.5°	644.8	571.0	488.1	409.9	373.0	327.0	253.2	188.9	138.1	101.4	78.2
65°	584.9	511.1	442.1	363.8	331.6	285.5	216.5	156.6	110.5	78.2	55.2
67.5°	515.8	451.2	382.2	317.8	285.5	248.6	184.2	133.5	92.1	64.5	46.0
70°	432.9	382.2	322.4	262.5	239.5	207.2	152.0	110.5	73.6	50.6	36.9
72.5°	345.4	304.0	257.9	211.9	193.4	161.1	124.4	87.5	55.2	36.9	27.6
75°	262.5	230.2	193.4	161.1	142.8	124.4	92.1	64.5	41.5	27.6	18.4
77.5°	179.6	165.8	138.1	110.5	101.4	87.5	59.9	41.5	27.6	18.4	9.2
80°	124.4	110.5	92.1	73.6	64.5	55.2	36.9	27.6	13.9	9.2	4.6
82.5°	78.2	64.5	55.2	46.0	41.5	32.2	23.0	13.9	9.2	4.6	4.6
85°	41.5	36.9	32.2	23.0	23.0	18.4	13.9	9.2	4.6	0.0	0.0
87.5°	23.0	18.4	13.9	9.2	9.2	4.6	4.6	4.6	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°	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0
2.5°	4844.6	4844.6	4840.0	4895.4	4830.9	4895.4	4863.1	4895.4	4849.2	4844.6	4849.2
5°	4881.5	4895.4	4899.9	4950.6	4890.8	4969.0	4941.4	4969.0	4936.8	4946.0	4959.8
7.5°	4955.1	4978.2	4973.6	5038.1	4978.2	5065.8	5047.2	5088.8	5056.5	5065.8	5084.1
10°	5038.1	5065.8	5070.4	5134.8	5079.5	5185.5	5162.4	5208.5	5180.9	5194.6	5217.6
12.5°	5134.8	5167.0	5171.6	5245.4	5185.5	5296.0	5282.1	5328.2	5305.1	5319.0	5346.6
15°	5208.5	5254.5	5263.8	5337.4	5273.0	5388.1	5378.9	5438.8	5401.9	5424.9	5448.0
17.5°	5245.4	5286.8	5305.1	5374.2	5319.0	5434.1	5424.9	5475.6	5448.0	5471.0	5498.6
20°	5222.2	5273.0	5286.8	5355.9	5300.6	5415.8	5401.9	5452.5	5424.9	5443.4	5471.0
22.5°	5139.4	5190.0	5208.5	5273.0	5222.2	5328.2	5323.6	5369.6	5332.8	5355.9	5378.9
25°	4992.0	5047.2	5056.5	5116.4	5061.1	5171.6	5162.4	5213.1	5185.5	5199.2	5231.5
27.5°	4780.2	4844.6	4858.5	4909.1	4867.6	4959.8	4959.8	5001.2	4969.0	4969.0	5001.2
30°	4526.9	4591.4	4600.6	4642.0	4605.2	4688.1	4692.8	4734.1	4683.5	4711.1	4715.8
32.5°	4218.4	4259.8	4287.4	4324.2	4269.0	4374.9	4361.1	4393.4	4365.8	4365.8	4388.8
35°	3845.4	3896.0	3909.8	3955.9	3909.8	3992.8	3992.8	4011.1	3983.5	3983.5	4020.4
37.5°	3440.1	3476.9	3481.5	3527.6	3490.8	3559.9	3555.2	3569.0	3541.4	3559.9	3559.9
40°	2965.8	2993.4	3002.6	3025.6	3021.0	3071.6	3067.0	3076.2	3062.5	3067.0	3076.2
42.5°	2413.1	2450.0	2468.4	2486.8	2459.1	2528.2	2514.4	2528.2	2523.6	2528.2	2542.1
45°	1777.6	1805.2	1819.0	1823.6	1814.5	1855.9	1888.1	1860.5	1865.1	1855.9	1874.4
47.5°	1284.9	1289.5	1280.2	1307.9	1284.9	1303.2	1312.5	1317.1	1289.5	1284.9	1303.2
50°	879.6	902.6	870.4	884.2	879.6	898.0	888.8	893.4	865.8	879.6	870.4
52.5°	584.9	580.2	571.0	575.6	566.5	566.5	566.5	575.6	557.2	548.0	538.8
55°	354.6	345.4	327.0	322.4	322.4	327.0	317.8	308.5	308.5	304.0	304.0
57.5°	207.2	193.4	184.2	179.6	170.4	165.8	161.1	161.1	152.0	152.0	152.0
60°	115.1	101.4	92.1	82.9	82.9	78.2	73.6	69.1	69.1	69.1	64.5
62.5°	59.9	50.6	41.5	36.9	36.9	32.2	27.6	27.6	27.6	27.6	23.0
65°	41.5	32.2	27.6	23.0	23.0	18.4	18.4	18.4	18.4	18.4	18.4
67.5°	32.2	27.6	23.0	18.4	18.4	18.4	13.9	13.9	13.9	13.9	13.9
70°	27.6	18.4	18.4	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
72.5°	18.4	18.4	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
75°	13.9	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
77.5°	4.6	4.6	4.6	4.6	4.6	4.6	0.0	0.0	0.0	0.0	0.0
80°	4.6	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: P252197

CATALOG NUMBER: LE\_6B50D010R EC6B30508050 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0	4817.0
2.5°	4890.8	4886.1	4890.8	4899.9	4881.5	4936.8	4909.1	4936.8
5°	4996.6	5001.2	5005.9	5019.6	4996.6	5065.8	5028.9	5070.4
7.5°	5134.8	5139.4	5144.0	5157.9	5144.0	5213.1	5171.6	5208.5
10°	5277.5	5286.8	5286.8	5309.8	5296.0	5360.5	5332.8	5378.9
12.5°	5411.1	5420.2	5429.5	5443.4	5434.1	5503.2	5480.1	5517.0
15°	5517.0	5535.5	5540.0	5558.5	5549.2	5623.0	5595.2	5632.1
17.5°	5567.6	5586.1	5586.1	5609.1	5599.9	5678.2	5641.4	5682.8
20°	5540.0	5553.9	5558.5	5581.5	5572.2	5650.6	5613.8	5664.4
22.5°	5452.5	5457.1	5461.8	5484.8	5480.1	5549.2	5517.0	5549.2
25°	5291.4	5305.1	5300.6	5319.0	5319.0	5374.2	5337.4	5365.0
27.5°	5061.1	5074.9	5074.9	5098.0	5079.5	5134.8	5098.0	5139.4
30°	4780.2	4794.0	4784.8	4803.2	4784.8	4840.0	4812.4	4826.2
32.5°	4444.0	4444.0	4448.6	4453.2	4444.0	4494.6	4467.0	4494.6
35°	4043.4	4052.6	4057.1	4061.8	4052.6	4089.4	4057.1	4075.6
37.5°	3592.0	3615.1	3610.5	3615.1	3601.2	3647.2	3619.6	3628.9
40°	3108.5	3108.5	3103.9	3113.1	3099.2	3136.1	3117.8	3126.9
42.5°	2546.6	2560.5	2542.1	2565.1	2528.2	2578.9	2560.5	2546.6
45°	1911.1	1892.8	1888.1	1892.8	1878.9	1883.5	1897.4	1888.1
47.5°	1303.2	1303.2	1294.0	1280.2	1298.6	1303.2	1284.9	1284.9
50°	875.0	875.0	865.8	861.1	870.4	865.8	856.6	870.4
52.5°	557.2	538.8	538.8	548.0	538.8	529.6	543.4	534.2
55°	304.0	294.8	294.8	304.0	294.8	294.8	290.1	299.4
57.5°	147.4	152.0	147.4	147.4	147.4	147.4	142.8	147.4
60°	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
62.5°	27.6	27.6	23.0	23.0	23.0	23.0	23.0	23.0
65°	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
67.5°	13.9	13.9	13.9	13.9	13.9	18.4	13.9	13.9
70°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
72.5°	13.9	13.9	18.4	18.4	18.4	18.4	18.4	18.4
75°	9.2	9.2	9.2	4.6	4.6	4.6	4.6	4.6
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



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















(END OF REPORT)