

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: P252404

Luminaire Tested: **LE\_6B50D010R EC6B30508040 6LBLWW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252404  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B50D010R EC6B30508040 6LBLWW1LI  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6258.7 lumens  
Efficiency: N/A  
Efficacy: 106.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

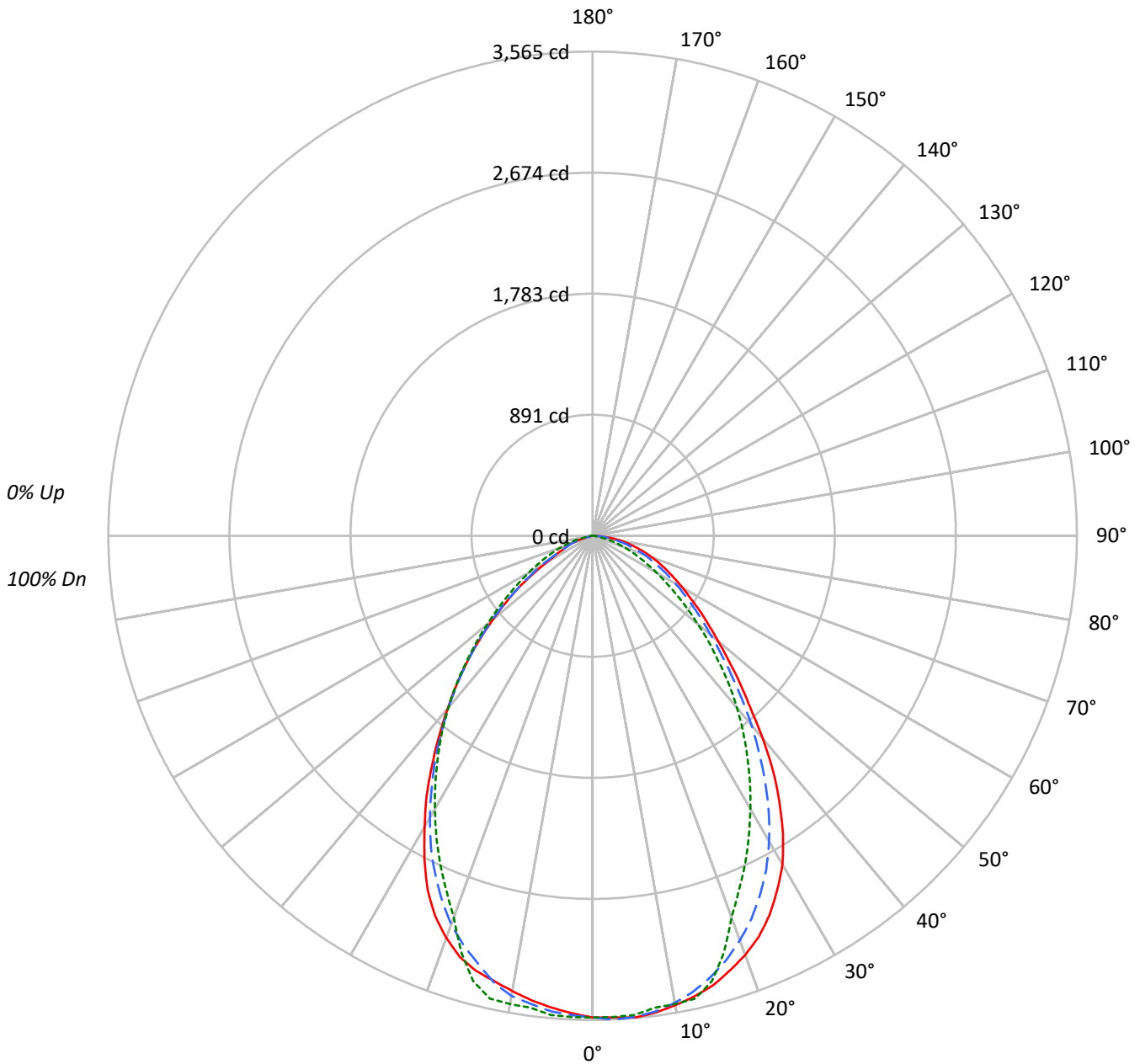
Input Watts (W): 58.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77			
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60			
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36			
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33			

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

	0°	90°	180°
0°	231356	231356	231356
5°	233150	231939	228324
10°	232487	231878	225472
15°	231433	229251	223969
20°	227986	207519	218704
25°	221793	191293	206878
30°	210594	174864	186307
35°	191106	158094	163955
40°	165911	140813	141205
45°	141496	121106	119833
50°	122466	102369	96767
55°	109478	85399	74912
60°	99753	70917	50483
65°	93148	58291	37682
70°	88718	47459	31626
75°	83587	33651	10461
80°	79612	17282	3456
85°	65498	10405	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	334.9	5.4
10°-20°	936.6	15.0
20°-30°	1292.8	20.7
30°-40°	1315.6	21.0
40°-50°	1057.3	16.9
50°-60°	703.0	11.2
60°-70°	400.6	6.4
70°-80°	179.9	2.9
80°-90°	37.9	0.6
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°	2564.3	41.0
0°-40°	3879.9	62.0
0°-60°	5640.3	90.1
0°-90°	6258.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6258.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3546	3546	3546	3546	3546	
5°	3560	3556	3542	3514	3486	338
15°	3426	3362	3394	3261	3316	964
25°	3081	2915	2657	2745	2874	1412
35°	2400	2215	1985	2022	2059	1491
45°	1534	1442	1313	1299	1299	1189
55°	962	898	751	668	659	865
65°	603	539	378	244	244	601
75°	332	276	134	55	42	354
85°	88	60	14	5	0	104
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°	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2
2.5°	3550.9	3569.2	3564.6	3560.1	3564.6	3560.1	3550.9	3550.9	3541.6	3541.6	3564.6
5°	3560.1	3569.2	3564.6	3560.1	3560.1	3564.6	3546.2	3546.2	3537.0	3532.5	3555.5
7.5°	3541.6	3555.5	3546.2	3546.2	3541.6	3546.2	3527.9	3527.9	3514.0	3509.4	3532.5
10°	3509.4	3527.9	3518.6	3518.6	3518.6	3509.4	3500.2	3495.6	3481.8	3477.1	3491.0
12.5°	3472.6	3486.4	3481.8	3472.6	3472.6	3472.6	3454.1	3449.5	3431.1	3421.9	3435.8
15°	3426.5	3435.8	3431.1	3426.5	3417.2	3417.2	3398.9	3389.6	3371.2	3352.9	3362.0
17.5°	3357.4	3371.2	3362.0	3357.4	3343.6	3343.6	3325.2	3316.0	3288.4	3269.9	3274.5
20°	3283.8	3288.4	3283.8	3274.5	3260.8	3256.1	3237.8	3219.2	3196.2	3173.2	3168.6
22.5°	3196.2	3200.9	3187.0	3177.9	3164.0	3159.4	3136.4	3122.5	3085.8	3058.1	3053.5
25°	3081.1	3085.8	3085.8	3062.6	3053.5	3044.2	3021.2	2998.2	2966.0	2929.1	2915.2
27.5°	2942.9	2956.8	2947.5	2924.5	2906.1	2901.5	2878.5	2860.0	2818.6	2786.4	2767.9
30°	2795.5	2791.0	2786.4	2772.5	2744.9	2740.2	2717.2	2694.2	2662.0	2620.5	2597.5
32.5°	2606.8	2606.8	2602.1	2588.2	2560.6	2551.5	2533.0	2505.4	2468.6	2436.4	2413.2
35°	2399.5	2404.1	2399.5	2371.9	2353.4	2344.2	2335.0	2302.8	2270.5	2233.6	2215.2
37.5°	2183.0	2169.2	2173.8	2150.8	2127.8	2137.0	2109.4	2095.5	2058.6	2031.0	2012.6
40°	1948.1	1957.4	1938.9	1929.8	1915.9	1902.1	1902.1	1879.0	1860.6	1828.4	1819.1
42.5°	1717.9	1731.6	1727.1	1717.9	1699.5	1704.0	1681.0	1671.8	1648.8	1635.0	1621.1
45°	1533.6	1533.6	1533.6	1524.4	1519.9	1510.6	1496.8	1483.0	1469.1	1450.8	1441.5
47.5°	1354.0	1354.0	1358.6	1349.4	1340.2	1335.6	1326.4	1326.4	1303.4	1285.0	1275.8
50°	1206.6	1206.6	1206.6	1197.5	1188.2	1188.2	1179.0	1169.8	1156.0	1142.1	1133.0
52.5°	1073.1	1073.1	1073.1	1063.9	1059.2	1054.6	1050.0	1045.5	1027.0	1017.9	1008.6
55°	962.5	958.0	958.0	953.4	944.1	944.1	939.5	930.4	916.5	902.6	898.1
57.5°	852.0	856.6	852.0	852.0	842.8	842.8	833.6	829.0	815.1	806.0	796.8
60°	764.5	764.5	764.5	759.9	750.8	755.2	746.1	741.5	727.6	713.9	704.6
62.5°	677.0	681.6	681.6	677.0	667.8	667.8	663.2	658.6	644.8	631.0	617.1
65°	603.4	603.4	603.4	598.8	594.1	594.1	589.5	584.9	571.1	552.6	538.9
67.5°	534.2	529.6	529.6	529.6	525.0	520.4	515.9	511.2	497.4	483.6	465.1
70°	465.1	465.1	465.1	460.5	451.4	456.0	451.4	446.8	432.9	419.1	405.2
72.5°	400.6	400.6	396.1	391.5	391.5	386.9	386.9	382.2	368.5	350.0	336.2
75°	331.6	331.6	331.6	331.6	322.4	327.0	317.8	313.1	304.0	290.1	276.4
77.5°	271.8	271.8	271.8	267.1	262.5	262.5	257.9	253.2	239.5	230.2	211.9
80°	211.9	211.9	211.9	211.9	207.2	202.6	198.0	193.4	184.2	170.4	156.6
82.5°	156.6	156.6	152.0	152.0	152.0	147.4	142.8	138.1	129.0	119.8	110.5
85°	87.5	92.1	92.1	82.9	87.5	82.9	82.9	73.8	73.8	64.5	59.9
87.5°	32.2	27.6	27.6	27.6	27.6	27.6	27.6	23.0	23.0	23.0	18.4
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°	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2
2.5°	3546.2	3541.6	3560.1	3560.1	3532.5	3546.2	3550.9	3541.6	3541.6	3546.2	3532.5
5°	3537.0	3527.9	3546.2	3550.9	3523.2	3537.0	3541.6	3532.5	3537.0	3541.6	3523.2
7.5°	3504.8	3504.8	3518.6	3523.2	3495.6	3509.4	3509.4	3500.2	3504.8	3504.8	3491.0
10°	3472.6	3458.8	3472.6	3472.6	3449.5	3454.1	3463.4	3458.8	3477.1	3500.2	3500.2
12.5°	3412.8	3398.9	3421.9	3421.9	3408.1	3426.5	3449.5	3463.4	3481.8	3491.0	3463.4
15°	3339.0	3343.6	3385.1	3417.2	3403.5	3431.1	3454.1	3445.0	3421.9	3394.2	3352.9
17.5°	3242.2	3228.5	3265.4	3283.8	3265.4	3274.5	3293.0	3274.5	3237.8	3214.6	3159.4
20°	3131.8	3094.9	3094.9	3085.8	3053.5	3053.5	3048.9	3016.6	3002.8	2989.0	2966.0
22.5°	3007.4	2966.0	2952.1	2924.5	2896.9	2892.2	2878.5	2846.2	2827.8	2818.6	2791.0
25°	2864.6	2827.8	2804.8	2777.1	2735.6	2726.5	2712.6	2680.4	2671.2	2657.4	2634.4
27.5°	2717.2	2671.2	2639.0	2611.4	2574.5	2569.9	2542.2	2519.2	2500.8	2491.6	2473.1
30°	2546.9	2496.2	2473.1	2436.4	2408.8	2399.5	2376.5	2344.2	2330.4	2321.2	2307.4
32.5°	2358.0	2316.6	2293.5	2261.4	2224.5	2229.1	2201.5	2173.8	2164.6	2155.4	2141.6
35°	2173.8	2132.4	2104.8	2077.1	2054.1	2044.9	2026.4	2003.4	1989.6	1985.0	1975.8
37.5°	1971.1	1938.9	1915.9	1888.2	1869.9	1860.6	1851.4	1828.4	1819.1	1819.1	1800.8
40°	1773.1	1745.5	1727.1	1713.2	1690.2	1685.6	1676.4	1662.6	1658.0	1653.4	1639.6
42.5°	1593.5	1556.6	1542.9	1533.6	1519.9	1510.6	1506.0	1496.8	1492.2	1487.6	1473.8
45°	1423.1	1390.9	1377.0	1367.9	1354.0	1349.4	1344.9	1331.0	1321.8	1312.6	1308.0
47.5°	1257.2	1234.2	1229.6	1206.6	1197.5	1188.2	1179.0	1169.8	1165.2	1160.6	1142.1
50°	1114.5	1100.8	1077.8	1063.9	1054.6	1050.0	1031.6	1017.9	1013.2	1008.6	994.8
52.5°	985.6	967.1	953.4	930.4	925.8	916.5	907.2	888.9	879.6	875.0	861.2
55°	870.5	856.6	838.2	819.8	806.0	801.4	787.5	769.1	759.9	750.8	741.5
57.5°	773.8	750.8	732.2	713.9	704.6	690.9	677.0	667.8	654.0	640.1	626.4
60°	681.6	663.2	640.1	621.8	612.5	603.4	584.9	571.1	557.2	543.5	529.6
62.5°	594.1	575.8	552.6	534.2	525.0	515.9	497.4	483.6	469.8	456.0	437.5
65°	515.9	497.4	479.0	460.5	451.4	442.1	423.8	405.2	391.5	377.6	359.2
67.5°	451.4	428.4	409.9	391.5	382.2	373.0	354.6	340.8	322.4	308.6	290.1
70°	382.2	363.9	350.0	331.6	322.4	313.1	294.8	276.4	262.5	248.8	230.2
72.5°	322.4	299.4	285.5	267.1	257.9	253.2	234.9	221.1	207.2	188.9	175.0
75°	257.9	239.5	221.1	207.2	198.0	193.4	175.0	161.2	147.4	133.5	119.8
77.5°	198.0	184.2	165.8	152.0	142.8	138.1	119.8	105.9	92.1	82.9	69.1
80°	147.4	129.0	119.8	105.9	101.4	92.1	82.9	69.1	59.9	46.0	36.9
82.5°	101.4	87.5	78.2	69.1	64.5	59.9	50.6	41.5	32.2	27.6	23.0
85°	55.2	46.0	41.5	36.9	32.2	32.2	27.6	23.0	18.4	13.9	9.2
87.5°	18.4	13.9	13.9	13.9	13.9	9.2	9.2	9.2	4.6	4.6	4.6
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°	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2
2.5°	3541.6	3541.6	3541.6	3537.0	3537.0	3537.0	3532.5	3550.9	3532.5	3527.9	3541.6
5°	3537.0	3527.9	3527.9	3527.9	3527.9	3523.2	3518.6	3527.9	3514.0	3509.4	3509.4
7.5°	3509.4	3504.8	3504.8	3500.2	3495.6	3491.0	3486.4	3491.0	3477.1	3472.6	3472.6
10°	3514.0	3504.8	3504.8	3491.0	3481.8	3468.0	3454.1	3458.8	3440.4	3426.5	3426.5
12.5°	3458.8	3435.8	3421.9	3408.1	3398.9	3394.2	3375.9	3385.1	3366.6	3362.0	3362.0
15°	3334.4	3306.8	3283.8	3274.5	3274.5	3265.4	3251.5	3269.9	3260.8	3265.4	3288.4
17.5°	3141.0	3127.1	3113.4	3108.8	3113.4	3122.5	3131.8	3159.4	3159.4	3173.2	3196.2
20°	2970.6	2961.4	2970.6	2970.6	2975.1	2993.6	3012.0	3035.0	3044.2	3058.1	3090.2
22.5°	2804.8	2804.8	2814.0	2827.8	2823.2	2855.4	2860.0	2901.5	2901.5	2929.1	2956.8
25°	2643.6	2643.6	2652.8	2657.4	2666.6	2685.0	2703.5	2735.6	2744.9	2772.5	2795.5
27.5°	2487.0	2482.4	2482.4	2487.0	2496.2	2519.2	2528.4	2565.2	2579.1	2597.5	2620.5
30°	2312.0	2307.4	2316.6	2325.8	2321.2	2344.2	2358.0	2385.6	2394.9	2413.2	2431.8
32.5°	2146.1	2146.1	2146.1	2155.4	2155.4	2173.8	2173.8	2206.0	2206.0	2219.9	2238.2
35°	1975.8	1975.8	1980.4	1985.0	1989.6	1994.2	1998.8	2017.2	2021.9	2026.4	2035.6
37.5°	1814.6	1810.0	1814.6	1814.6	1805.4	1823.8	1823.8	1842.2	1828.4	1842.2	1846.9
40°	1648.8	1648.8	1644.1	1644.1	1644.1	1653.4	1644.1	1658.0	1648.8	1658.0	1653.4
42.5°	1478.4	1478.4	1469.1	1478.4	1473.8	1473.8	1473.8	1483.0	1469.1	1478.4	1483.0
45°	1308.0	1303.4	1303.4	1298.8	1298.8	1298.8	1303.4	1303.4	1298.8	1308.0	1308.0
47.5°	1142.1	1137.6	1137.6	1137.6	1137.6	1142.1	1128.4	1137.6	1128.4	1128.4	1128.4
50°	999.4	994.8	990.2	985.6	981.0	981.0	976.4	976.4	967.1	962.5	958.0
52.5°	861.2	856.6	847.4	847.4	842.8	838.2	824.4	824.4	810.6	806.0	806.0
55°	736.9	723.1	718.5	709.2	709.2	700.0	690.9	681.6	667.8	658.6	658.6
57.5°	621.8	607.9	598.8	594.1	589.5	580.2	561.9	557.2	538.9	534.2	529.6
60°	520.4	506.6	492.8	483.6	479.0	465.1	446.8	437.5	428.4	414.5	400.6
62.5°	423.8	409.9	391.5	386.9	377.6	363.9	350.0	336.2	327.0	313.1	304.0
65°	340.8	327.0	313.1	304.0	294.8	280.9	267.1	253.2	244.1	239.5	234.9
67.5°	276.4	257.9	244.1	239.5	230.2	221.1	207.2	202.6	193.4	193.4	193.4
70°	216.5	202.6	188.9	184.2	179.6	170.4	161.2	161.2	161.2	161.2	161.2
72.5°	161.2	152.0	138.1	133.5	129.0	124.4	115.1	119.8	115.1	115.1	115.1
75°	101.4	92.1	82.9	78.2	73.8	69.1	64.5	59.9	55.2	50.6	50.6
77.5°	55.2	46.0	41.5	36.9	36.9	32.2	27.6	27.6	23.0	23.0	23.0
80°	32.2	27.6	23.0	18.4	18.4	13.9	13.9	13.9	13.9	9.2	9.2
82.5°	18.4	13.9	9.2	9.2	9.2	9.2	4.6	4.6	4.6	4.6	4.6
85°	9.2	9.2	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0.0
87.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
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: P252404

CATALOG NUMBER: LE\_6B50D010R EC6B30508040 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2
2.5°	3518.6	3532.5	3518.6	3532.5	3532.5	3532.5	3532.5	3518.6
5°	3495.6	3504.8	3491.0	3500.2	3504.8	3500.2	3500.2	3486.4
7.5°	3454.1	3463.4	3449.5	3463.4	3468.0	3463.4	3458.8	3449.5
10°	3412.8	3417.2	3403.5	3412.8	3421.9	3421.9	3417.2	3403.5
12.5°	3348.2	3362.0	3348.2	3357.4	3366.6	3371.2	3371.2	3357.4
15°	3274.5	3297.5	3288.4	3302.1	3316.0	3320.6	3320.6	3316.0
17.5°	3200.9	3223.9	3210.0	3233.1	3246.9	3256.1	3260.8	3251.5
20°	3094.9	3122.5	3113.4	3131.8	3150.1	3164.0	3164.0	3150.1
22.5°	2956.8	2993.6	2989.0	3002.8	3025.9	3030.5	3039.6	3030.5
25°	2804.8	2832.4	2827.8	2841.6	2869.2	2869.2	2873.9	2873.9
27.5°	2629.8	2657.4	2652.8	2662.0	2680.4	2685.0	2689.6	2680.4
30°	2440.9	2454.8	2454.8	2468.6	2482.4	2487.0	2487.0	2473.1
32.5°	2233.6	2252.1	2261.4	2256.8	2270.5	2279.8	2275.1	2275.1
35°	2044.9	2049.5	2054.1	2058.6	2063.2	2072.5	2063.2	2058.6
37.5°	1842.2	1856.0	1846.9	1856.0	1865.2	1860.6	1856.0	1856.0
40°	1658.0	1662.6	1653.4	1662.6	1667.2	1667.2	1667.2	1658.0
42.5°	1473.8	1483.0	1473.8	1483.0	1483.0	1483.0	1483.0	1478.4
45°	1289.5	1298.8	1298.8	1303.4	1303.4	1298.8	1298.8	1298.8
47.5°	1119.1	1128.4	1119.1	1128.4	1133.0	1123.8	1123.8	1123.8
50°	958.0	953.4	953.4	958.0	958.0	958.0	958.0	953.4
52.5°	792.1	796.8	796.8	796.8	801.4	796.8	801.4	801.4
55°	649.4	649.4	649.4	654.0	649.4	649.4	654.0	658.6
57.5°	520.4	515.9	511.2	511.2	515.9	511.2	511.2	511.2
60°	400.6	396.1	391.5	391.5	391.5	391.5	391.5	386.9
62.5°	299.4	299.4	299.4	304.0	304.0	304.0	304.0	308.6
65°	239.5	239.5	239.5	239.5	239.5	239.5	239.5	244.1
67.5°	193.4	193.4	193.4	198.0	198.0	198.0	198.0	198.0
70°	161.2	161.2	165.8	161.2	165.8	165.8	165.8	165.8
72.5°	110.5	110.5	110.5	110.5	110.5	105.9	110.5	105.9
75°	46.0	46.0	46.0	46.0	46.0	46.0	46.0	41.5
77.5°	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
80°	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
82.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.6	4.6	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



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















(END OF REPORT)