

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: P252407

Luminaire Tested: **LE_6B50D010R EC6B30509027 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252407
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 EC6B30509027 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4962.5 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

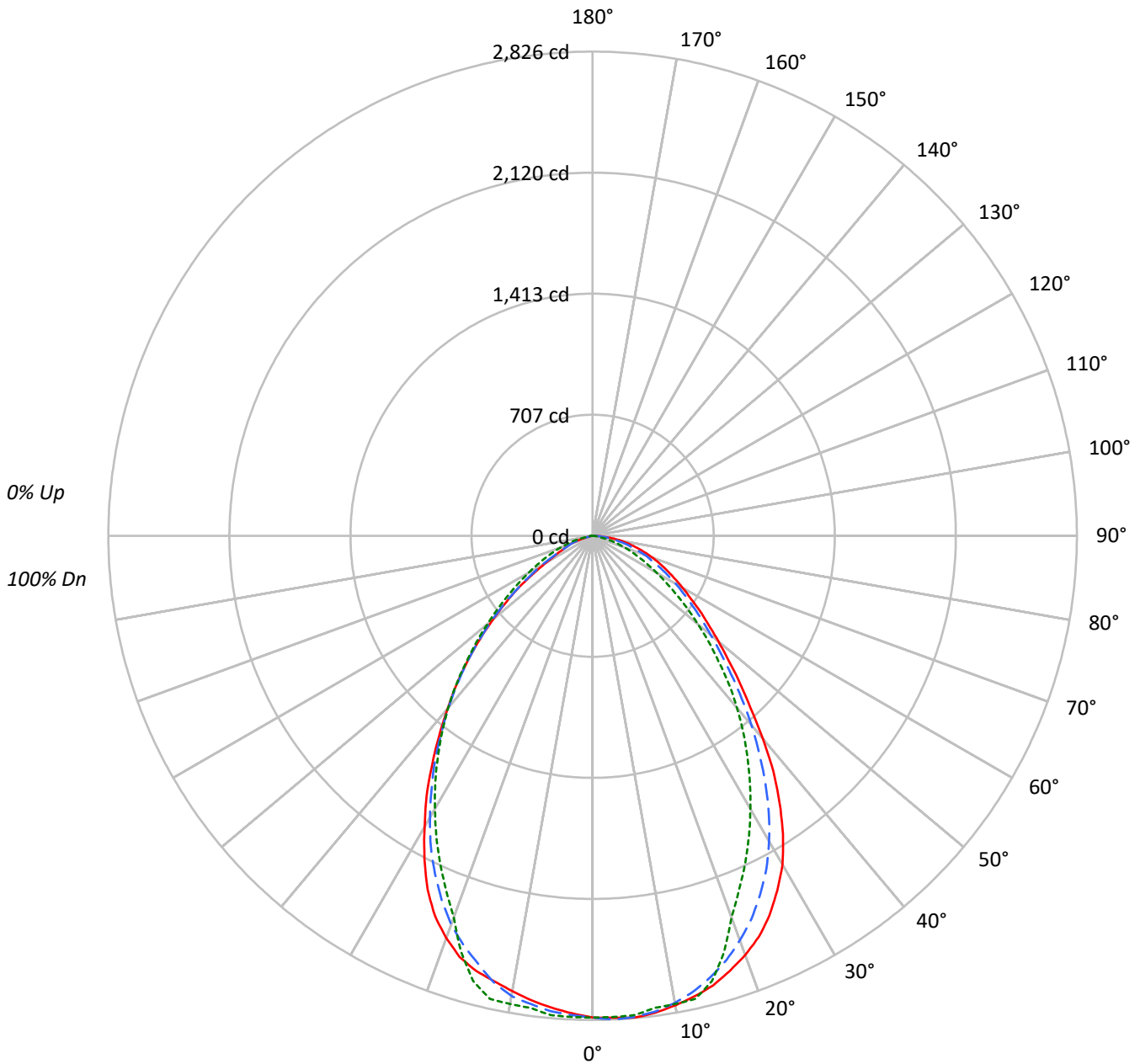
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	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°	183444	183444	183444
5°	184865	183902	181040
10°	184339	183849	178774
15°	183505	181769	177582
20°	180762	164543	173416
25°	175860	151673	164025
30°	166984	138651	147729
35°	151523	125352	129995
40°	131547	111652	111959
45°	112193	96029	95014
50°	97112	81177	76721
55°	86809	67700	59397
60°	79085	56224	40032
65°	73852	46235	29871
70°	70368	37616	25084
75°	66269	26694	8293
80°	63119	13713	2705
85°	51950	8234	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.5	5.4
10°-20°	742.6	15.0
20°-30°	1025.1	20.7
30°-40°	1043.1	21.0
40°-50°	838.3	16.9
50°-60°	557.4	11.2
60°-70°	317.6	6.4
70°-80°	142.7	2.9
80°-90°	30.0	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°	2033.2	41.0
0°-40°	3076.4	62.0
0°-60°	4472.1	90.1
0°-90°	4962.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4962.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2812	2812	2812	2812	2812	
5°	2823	2819	2808	2786	2764	268
15°	2717	2666	2691	2585	2629	765
25°	2443	2312	2107	2176	2279	1120
35°	1902	1756	1574	1603	1632	1182
45°	1216	1143	1041	1030	1030	943
55°	763	712	595	530	522	686
65°	478	427	300	194	194	477
75°	263	219	106	44	33	281
85°	69	48	11	4	0	82
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°	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8
2.5°	2815.5	2830.0	2826.4	2822.8	2826.4	2822.8	2815.5	2815.5	2808.1	2808.1	2826.4
5°	2822.8	2830.0	2826.4	2822.8	2822.8	2826.4	2811.8	2811.8	2804.5	2800.9	2819.1
7.5°	2808.1	2819.1	2811.8	2811.8	2808.1	2811.8	2797.1	2797.1	2786.2	2782.6	2800.9
10°	2782.6	2797.1	2789.9	2789.9	2789.9	2782.6	2775.2	2771.6	2760.6	2757.0	2768.0
12.5°	2753.4	2764.4	2760.6	2753.4	2753.4	2753.4	2738.8	2735.1	2720.5	2713.2	2724.1
15°	2716.9	2724.1	2720.5	2716.9	2709.5	2709.5	2695.0	2687.6	2673.0	2658.4	2665.8
17.5°	2662.1	2673.0	2665.8	2662.1	2651.1	2651.1	2636.5	2629.2	2607.2	2592.8	2596.4
20°	2603.6	2607.2	2603.6	2596.4	2585.4	2581.8	2567.1	2552.5	2534.2	2516.0	2512.4
22.5°	2534.2	2537.9	2527.0	2519.6	2508.8	2505.0	2486.8	2475.9	2446.6	2424.8	2421.1
25°	2443.0	2446.6	2446.6	2428.4	2421.1	2413.8	2395.5	2377.2	2351.6	2322.5	2311.5
27.5°	2333.4	2344.4	2337.1	2318.9	2304.2	2300.5	2282.2	2267.8	2234.9	2209.2	2194.6
30°	2216.6	2212.9	2209.2	2198.2	2176.4	2172.8	2154.5	2136.2	2110.6	2077.8	2059.5
32.5°	2066.9	2066.9	2063.2	2052.2	2030.4	2023.0	2008.4	1986.5	1957.2	1931.8	1913.5
35°	1902.5	1906.1	1902.5	1880.6	1866.0	1858.8	1851.4	1825.9	1800.2	1771.1	1756.5
37.5°	1730.9	1720.0	1723.6	1705.4	1687.1	1694.4	1672.5	1661.5	1632.2	1610.4	1595.8
40°	1544.6	1552.0	1537.4	1530.0	1519.1	1508.1	1508.1	1489.9	1475.2	1449.8	1442.4
42.5°	1362.1	1373.0	1369.4	1362.1	1347.5	1351.1	1332.9	1325.5	1307.2	1296.4	1285.4
45°	1216.0	1216.0	1216.0	1208.8	1205.0	1197.8	1186.8	1175.9	1164.9	1150.2	1143.0
47.5°	1073.6	1073.6	1077.2	1070.0	1062.6	1059.0	1051.6	1051.6	1033.4	1018.9	1011.5
50°	956.8	956.8	956.8	949.4	942.1	942.1	934.9	927.5	916.6	905.6	898.4
52.5°	850.9	850.9	850.9	843.5	839.9	836.2	832.6	828.9	814.4	807.0	799.8
55°	763.2	759.5	759.5	755.9	748.6	748.6	745.0	737.6	726.6	715.8	712.1
57.5°	675.5	679.2	675.5	675.5	668.2	668.2	661.0	657.2	646.4	639.0	631.8
60°	606.1	606.1	606.1	602.5	595.2	598.9	591.6	587.9	577.0	566.0	558.8
62.5°	536.8	540.5	540.5	536.8	529.5	529.5	525.9	522.2	511.2	500.2	489.4
65°	478.4	478.4	478.4	474.8	471.1	471.1	467.4	463.8	452.8	438.2	427.2
67.5°	423.6	420.0	420.0	420.0	416.2	412.6	409.0	405.4	394.4	383.4	368.9
70°	368.9	368.9	368.9	365.1	357.9	361.5	357.9	354.2	343.2	332.2	321.4
72.5°	317.8	317.8	314.0	310.4	310.4	306.8	306.8	303.1	292.1	277.5	266.6
75°	262.9	262.9	262.9	262.9	255.6	259.2	252.0	248.4	241.0	230.0	219.1
77.5°	215.5	215.5	215.5	211.8	208.1	208.1	204.5	200.9	189.9	182.6	168.0
80°	168.0	168.0	168.0	168.0	164.4	160.6	157.0	153.4	146.1	135.1	124.1
82.5°	124.1	124.1	120.5	120.5	120.5	116.9	113.2	109.5	102.2	95.0	87.6
85°	69.4	73.0	73.0	65.8	69.4	65.8	65.8	58.4	58.4	51.1	47.5
87.5°	25.5	21.9	21.9	21.9	21.9	21.9	21.9	18.2	18.2	18.2	14.6
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8
2.5°	2811.8	2808.1	2822.8	2822.8	2800.9	2811.8	2815.5	2808.1	2808.1	2811.8	2800.9
5°	2804.5	2797.1	2811.8	2815.5	2793.5	2804.5	2808.1	2800.9	2804.5	2808.1	2793.5
7.5°	2778.9	2778.9	2789.9	2793.5	2771.6	2782.6	2782.6	2775.2	2778.9	2778.9	2768.0
10°	2753.4	2742.4	2753.4	2753.4	2735.1	2738.8	2746.1	2742.4	2757.0	2775.2	2775.2
12.5°	2705.9	2695.0	2713.2	2713.2	2702.2	2716.9	2735.1	2746.1	2760.6	2768.0	2746.1
15°	2647.5	2651.1	2684.0	2709.5	2698.6	2720.5	2738.8	2731.5	2713.2	2691.2	2658.4
17.5°	2570.8	2559.9	2589.0	2603.6	2589.0	2596.4	2611.0	2596.4	2567.1	2548.9	2505.0
20°	2483.1	2453.9	2453.9	2446.6	2421.1	2421.1	2417.4	2391.9	2380.9	2370.0	2351.6
22.5°	2384.5	2351.6	2340.8	2318.9	2296.9	2293.2	2282.2	2256.8	2242.1	2234.9	2212.9
25°	2271.4	2242.1	2223.9	2202.0	2169.1	2161.8	2150.9	2125.2	2118.0	2107.0	2088.8
27.5°	2154.5	2118.0	2092.4	2070.5	2041.2	2037.6	2015.8	1997.5	1982.9	1975.5	1961.0
30°	2019.4	1979.2	1961.0	1931.8	1909.9	1902.5	1884.2	1858.8	1847.8	1840.5	1829.5
32.5°	1869.6	1836.8	1818.5	1793.0	1763.8	1767.4	1745.5	1723.6	1716.2	1709.0	1698.0
35°	1723.6	1690.8	1668.9	1646.9	1628.6	1621.4	1606.8	1588.5	1577.5	1573.9	1566.6
37.5°	1562.9	1537.4	1519.1	1497.2	1482.6	1475.2	1468.0	1449.8	1442.4	1442.4	1427.8
40°	1405.9	1384.0	1369.4	1358.4	1340.1	1336.5	1329.2	1318.2	1314.6	1311.0	1300.0
42.5°	1263.5	1234.2	1223.4	1216.0	1205.0	1197.8	1194.1	1186.8	1183.1	1179.5	1168.5
45°	1128.4	1102.8	1091.9	1084.5	1073.6	1070.0	1066.2	1055.4	1048.0	1040.8	1037.1
47.5°	996.9	978.6	975.0	956.8	949.4	942.1	934.9	927.5	923.9	920.2	905.6
50°	883.8	872.8	854.5	843.5	836.2	832.6	818.0	807.0	803.4	799.8	788.8
52.5°	781.5	766.9	755.9	737.6	734.0	726.6	719.4	704.8	697.5	693.9	682.9
55°	690.1	679.2	664.6	650.0	639.0	635.4	624.4	609.9	602.5	595.2	587.9
57.5°	613.5	595.2	580.6	566.0	558.8	547.8	536.8	529.5	518.5	507.6	496.6
60°	540.5	525.9	507.6	493.0	485.6	478.4	463.8	452.8	441.9	430.9	420.0
62.5°	471.1	456.5	438.2	423.6	416.2	409.0	394.4	383.4	372.5	361.5	346.9
65°	409.0	394.4	379.8	365.1	357.9	350.5	336.0	321.4	310.4	299.5	284.9
67.5°	357.9	339.6	325.0	310.4	303.1	295.8	281.1	270.2	255.6	244.6	230.0
70°	303.1	288.5	277.5	262.9	255.6	248.4	233.8	219.1	208.1	197.2	182.6
72.5°	255.6	237.4	226.4	211.8	204.5	200.9	186.2	175.2	164.4	149.8	138.8
75°	204.5	189.9	175.2	164.4	157.0	153.4	138.8	127.8	116.9	105.9	95.0
77.5°	157.0	146.1	131.5	120.5	113.2	109.5	95.0	84.0	73.0	65.8	54.8
80°	116.9	102.2	95.0	84.0	80.4	73.0	65.8	54.8	47.5	36.5	29.2
82.5°	80.4	69.4	62.1	54.8	51.1	47.5	40.1	32.9	25.5	21.9	18.2
85°	43.9	36.5	32.9	29.2	25.5	25.5	21.9	18.2	14.6	11.0	7.2
87.5°	14.6	11.0	11.0	11.0	11.0	7.2	7.2	7.2	3.6	3.6	3.6
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°	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8
2.5°	2808.1	2808.1	2808.1	2804.5	2804.5	2804.5	2800.9	2815.5	2800.9	2797.1	2808.1
5°	2804.5	2797.1	2797.1	2797.1	2797.1	2793.5	2789.9	2797.1	2786.2	2782.6	2782.6
7.5°	2782.6	2778.9	2778.9	2775.2	2771.6	2768.0	2764.4	2768.0	2757.0	2753.4	2753.4
10°	2786.2	2778.9	2778.9	2768.0	2760.6	2749.8	2738.8	2742.4	2727.8	2716.9	2716.9
12.5°	2742.4	2724.1	2713.2	2702.2	2695.0	2691.2	2676.6	2684.0	2669.4	2665.8	2665.8
15°	2643.9	2621.9	2603.6	2596.4	2596.4	2589.0	2578.1	2592.8	2585.4	2589.0	2607.2
17.5°	2490.5	2479.5	2468.5	2464.9	2468.5	2475.9	2483.1	2505.0	2505.0	2516.0	2534.2
20°	2355.4	2348.0	2355.4	2355.4	2359.0	2373.6	2388.2	2406.5	2413.8	2424.8	2450.2
22.5°	2223.9	2223.9	2231.1	2242.1	2238.5	2264.0	2267.8	2300.5	2300.5	2322.5	2344.4
25°	2096.1	2096.1	2103.4	2107.0	2114.4	2128.9	2143.5	2169.1	2176.4	2198.2	2216.6
27.5°	1971.9	1968.2	1968.2	1971.9	1979.2	1997.5	2004.8	2034.0	2045.0	2059.5	2077.8
30°	1833.1	1829.5	1836.8	1844.1	1840.5	1858.8	1869.6	1891.6	1898.9	1913.5	1928.1
32.5°	1701.6	1701.6	1701.6	1709.0	1709.0	1723.6	1723.6	1749.1	1749.1	1760.1	1774.8
35°	1566.6	1566.6	1570.2	1573.9	1577.5	1581.1	1584.9	1599.4	1603.1	1606.8	1614.0
37.5°	1438.8	1435.1	1438.8	1438.8	1431.5	1446.1	1446.1	1460.6	1449.8	1460.6	1464.4
40°	1307.2	1307.2	1303.6	1303.6	1303.6	1311.0	1303.6	1314.6	1307.2	1314.6	1311.0
42.5°	1172.2	1172.2	1164.9	1172.2	1168.5	1168.5	1168.5	1175.9	1164.9	1172.2	1175.9
45°	1037.1	1033.4	1033.4	1029.8	1029.8	1029.8	1033.4	1033.4	1029.8	1037.1	1037.1
47.5°	905.6	902.0	902.0	902.0	902.0	905.6	894.6	902.0	894.6	894.6	894.6
50°	792.4	788.8	785.1	781.5	777.8	777.8	774.1	774.1	766.9	763.2	759.5
52.5°	682.9	679.2	671.9	671.9	668.2	664.6	653.6	653.6	642.8	639.0	639.0
55°	584.2	573.4	569.6	562.4	562.4	555.0	547.8	540.5	529.5	522.2	522.2
57.5°	493.0	482.0	474.8	471.1	467.4	460.1	445.5	441.9	427.2	423.6	420.0
60°	412.6	401.6	390.8	383.4	379.8	368.9	354.2	346.9	339.6	328.6	317.8
62.5°	336.0	325.0	310.4	306.8	299.5	288.5	277.5	266.6	259.2	248.4	241.0
65°	270.2	259.2	248.4	241.0	233.8	222.8	211.8	200.9	193.5	189.9	186.2
67.5°	219.1	204.5	193.5	189.9	182.6	175.2	164.4	160.6	153.4	153.4	153.4
70°	171.6	160.6	149.8	146.1	142.4	135.1	127.8	127.8	127.8	127.8	127.8
72.5°	127.8	120.5	109.5	105.9	102.2	98.6	91.2	95.0	91.2	91.2	91.2
75°	80.4	73.0	65.8	62.1	58.4	54.8	51.1	47.5	43.9	40.1	40.1
77.5°	43.9	36.5	32.9	29.2	29.2	25.5	21.9	21.9	18.2	18.2	18.2
80°	25.5	21.9	18.2	14.6	14.6	11.0	11.0	11.0	11.0	7.2	7.2
82.5°	14.6	11.0	7.2	7.2	7.2	7.2	3.6	3.6	3.6	3.6	3.6
85°	7.2	7.2	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	0.0
87.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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: P252407

CATALOG NUMBER: LE_6B50D010R EC6B30509027 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8	2811.8
2.5°	2789.9	2800.9	2789.9	2800.9	2800.9	2800.9	2800.9	2789.9
5°	2771.6	2778.9	2768.0	2775.2	2778.9	2775.2	2775.2	2764.4
7.5°	2738.8	2746.1	2735.1	2746.1	2749.8	2746.1	2742.4	2735.1
10°	2705.9	2709.5	2698.6	2705.9	2713.2	2713.2	2709.5	2698.6
12.5°	2654.8	2665.8	2654.8	2662.1	2669.4	2673.0	2673.0	2662.1
15°	2596.4	2614.6	2607.2	2618.2	2629.2	2632.9	2632.9	2629.2
17.5°	2537.9	2556.1	2545.2	2563.5	2574.4	2581.8	2585.4	2578.1
20°	2453.9	2475.9	2468.5	2483.1	2497.8	2508.8	2508.8	2497.8
22.5°	2344.4	2373.6	2370.0	2380.9	2399.1	2402.8	2410.1	2402.8
25°	2223.9	2245.8	2242.1	2253.1	2275.0	2275.0	2278.6	2278.6
27.5°	2085.1	2107.0	2103.4	2110.6	2125.2	2128.9	2132.6	2125.2
30°	1935.4	1946.4	1946.4	1957.2	1968.2	1971.9	1971.9	1961.0
32.5°	1771.1	1785.6	1793.0	1789.4	1800.2	1807.6	1803.9	1803.9
35°	1621.4	1625.0	1628.6	1632.2	1636.0	1643.2	1636.0	1632.2
37.5°	1460.6	1471.6	1464.4	1471.6	1478.9	1475.2	1471.6	1471.6
40°	1314.6	1318.2	1311.0	1318.2	1321.9	1321.9	1321.9	1314.6
42.5°	1168.5	1175.9	1168.5	1175.9	1175.9	1175.9	1175.9	1172.2
45°	1022.5	1029.8	1029.8	1033.4	1033.4	1029.8	1029.8	1029.8
47.5°	887.4	894.6	887.4	894.6	898.4	891.0	891.0	891.0
50°	759.5	755.9	755.9	759.5	759.5	759.5	759.5	755.9
52.5°	628.1	631.8	631.8	631.8	635.4	631.8	635.4	635.4
55°	514.9	514.9	514.9	518.5	514.9	514.9	518.5	522.2
57.5°	412.6	409.0	405.4	405.4	409.0	405.4	405.4	405.4
60°	317.8	314.0	310.4	310.4	310.4	310.4	310.4	306.8
62.5°	237.4	237.4	237.4	241.0	241.0	241.0	241.0	244.6
65°	189.9	189.9	189.9	189.9	189.9	189.9	189.9	193.5
67.5°	153.4	153.4	153.4	157.0	157.0	157.0	157.0	157.0
70°	127.8	127.8	131.5	127.8	131.5	131.5	131.5	131.5
72.5°	87.6	87.6	87.6	87.6	87.6	84.0	87.6	84.0
75°	36.5	36.5	36.5	36.5	36.5	36.5	36.5	32.9
77.5°	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
80°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
82.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	3.6	3.6	3.6	3.6	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)