

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: P252511

Luminaire Tested: **LE\_6B50D010R EC6B30509027 6LBLWW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252511  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-6)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B50D010R EC6B30509027 6LBLWW1H  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4660.0 lumens  
Efficiency: N/A  
Efficacy: 79.3 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.02 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

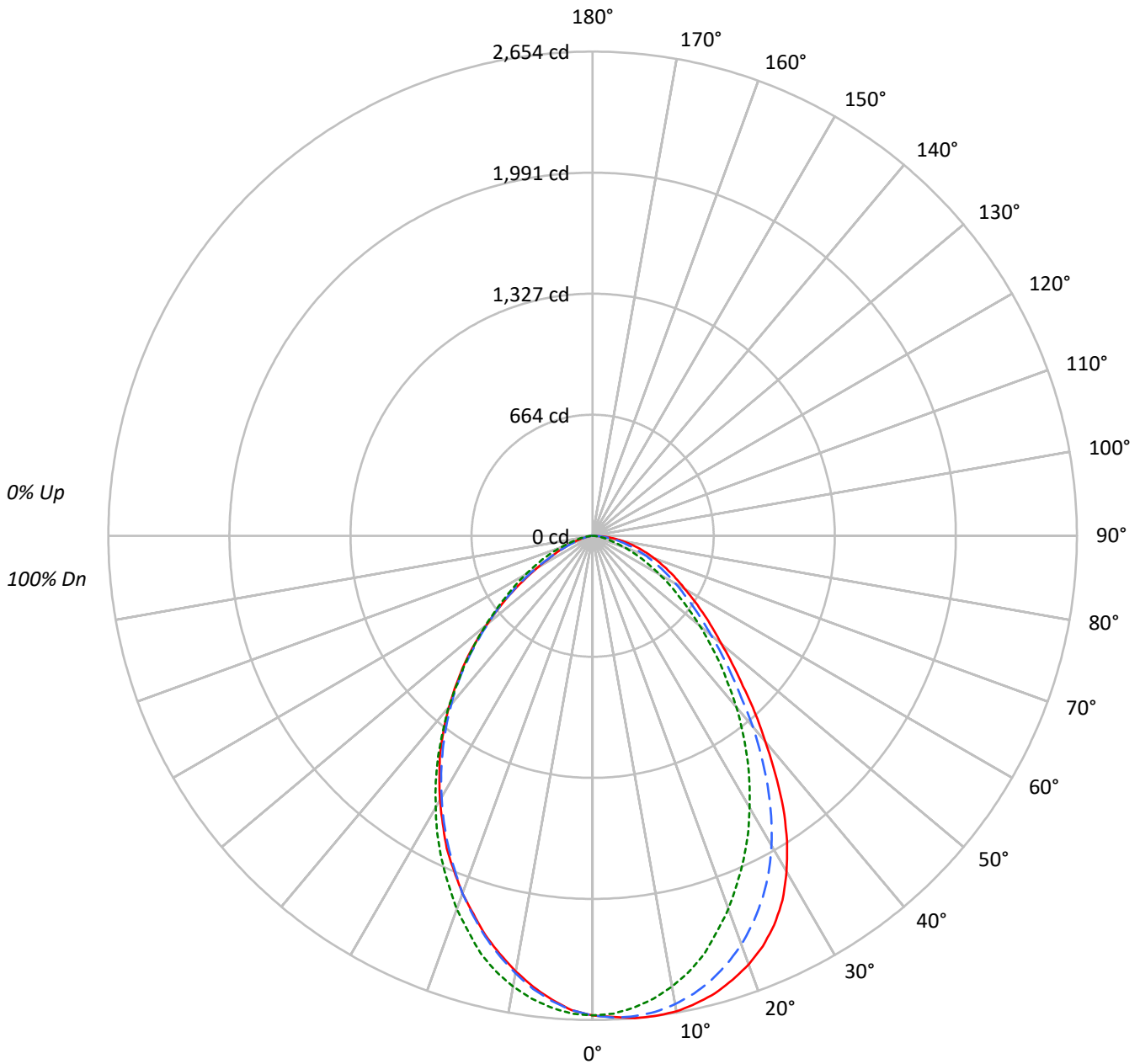
Input Watts (W): 58.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	111	107	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88				88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				77
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67				67
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59				59
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53				53
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47				47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43				43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				39
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35				35
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33				33

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

	0°	90°	180°
0°	171511	171511	171511
5°	173843	170018	167143
10°	175363	166174	160616
15°	175346	160061	153152
20°	173645	151081	144750
25°	169532	140882	136153
30°	160083	129558	125972
35°	145112	117483	116033
40°	125321	104490	104166
45°	107469	90963	91628
50°	93387	77827	76721
55°	83886	65619	61467
60°	76227	55259	45264
65°	71598	45663	33252
70°	68270	35518	24378
75°	65337	25762	16586
80°	61691	17846	10971
85°	54644	10929	5390



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	245.9	5.3
10°-20°	673.5	14.5
20°-30°	935.0	20.1
30°-40°	968.5	20.8
40°-50°	795.9	17.1
50°-60°	547.0	11.7
60°-70°	314.4	6.7
70°-80°	144.6	3.1
80°-90°	35.2	0.8
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°	1854.4	39.8
0°-40°	2822.9	60.6
0°-60°	4165.8	89.4
0°-90°	4660.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4660.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2629	2629	2629	2629	2629	
5°	2654	2644	2596	2560	2552	253
15°	2596	2519	2370	2275	2268	731
25°	2355	2198	1957	1873	1891	1078
35°	1822	1672	1475	1431	1457	1130
45°	1165	1077	986	975	993	907
55°	738	668	577	544	540	664
65°	464	405	296	208	215	462
75°	259	204	102	66	66	274
85°	73	51	15	7	7	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°	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9
2.5°	2639.9	2661.8	2647.1	2643.5	2650.9	2650.9	2650.9	2639.9	2647.1	2636.2	2643.5
5°	2654.5	2672.8	2658.1	2650.9	2658.1	2661.8	2650.9	2643.5	2654.5	2639.9	2643.5
7.5°	2654.5	2672.8	2658.1	2654.5	2658.1	2658.1	2654.5	2639.9	2647.1	2632.6	2632.6
10°	2647.1	2661.8	2647.1	2639.9	2643.5	2639.9	2639.9	2621.6	2625.2	2607.0	2607.0
12.5°	2625.2	2643.5	2625.2	2618.0	2618.0	2618.0	2607.0	2592.4	2596.1	2574.1	2570.5
15°	2596.1	2610.6	2592.4	2585.1	2585.1	2581.5	2574.1	2552.2	2552.2	2530.4	2519.4
17.5°	2552.2	2566.9	2552.2	2541.2	2537.6	2530.4	2523.0	2501.1	2493.9	2468.2	2457.4
20°	2501.1	2512.1	2497.5	2486.5	2479.2	2471.9	2457.4	2435.4	2428.1	2402.5	2384.2
22.5°	2435.4	2450.0	2428.1	2417.1	2409.9	2398.9	2384.2	2362.4	2351.4	2318.6	2296.6
25°	2355.1	2362.4	2344.1	2333.1	2318.6	2311.2	2300.4	2271.1	2260.1	2223.6	2198.1
27.5°	2252.9	2260.1	2238.2	2231.0	2212.6	2205.4	2190.8	2165.2	2150.6	2114.1	2088.5
30°	2125.0	2132.4	2117.8	2106.8	2092.2	2077.6	2066.6	2041.1	2019.1	1982.6	1960.8
32.5°	1982.6	1993.6	1979.0	1964.4	1938.9	1942.5	1924.2	1898.6	1880.4	1847.5	1822.0
35°	1822.0	1829.2	1811.0	1807.4	1792.8	1778.1	1759.9	1741.6	1730.8	1694.2	1672.2
37.5°	1643.1	1661.4	1643.1	1628.5	1621.1	1610.2	1599.2	1573.8	1566.4	1544.5	1515.2
40°	1471.5	1482.4	1471.5	1456.9	1445.9	1445.9	1431.2	1416.8	1398.5	1376.5	1365.6
42.5°	1318.1	1310.9	1307.1	1299.9	1285.2	1281.6	1278.0	1259.8	1248.8	1226.9	1208.6
45°	1164.8	1168.4	1161.1	1157.5	1146.5	1139.2	1131.9	1117.2	1113.6	1091.8	1077.1
47.5°	1037.0	1033.4	1026.0	1026.0	1018.8	1011.4	1004.1	993.1	989.5	971.2	956.6
50°	920.1	923.8	920.1	916.5	905.5	901.9	894.6	887.2	880.0	861.8	847.1
52.5°	825.2	821.5	817.9	817.9	806.9	803.2	796.0	788.6	781.4	763.1	752.1
55°	737.5	737.5	733.9	730.2	719.2	715.6	712.0	704.8	693.8	679.1	668.1
57.5°	657.2	657.2	653.6	649.9	642.6	642.6	635.4	628.0	620.8	606.1	591.5
60°	584.2	587.9	584.2	580.5	573.2	573.2	569.6	558.6	555.0	536.8	525.8
62.5°	522.1	522.1	522.1	518.5	514.9	507.5	507.5	496.6	489.2	478.4	463.8
65°	463.8	463.8	463.8	460.1	452.8	449.1	445.5	438.1	430.9	419.9	405.2
67.5°	409.0	409.0	409.0	405.2	398.0	394.4	390.8	387.0	376.1	365.1	350.5
70°	357.9	357.9	354.1	350.5	346.9	343.2	339.6	332.2	325.0	310.4	299.4
72.5°	306.8	306.8	306.8	299.4	295.8	295.8	288.5	284.8	277.5	262.9	252.0
75°	259.2	255.6	255.6	252.0	248.2	244.6	241.0	237.4	226.4	219.1	204.5
77.5°	211.8	211.8	208.1	204.5	204.5	200.9	197.1	189.9	186.2	175.2	164.2
80°	164.2	164.2	164.2	164.2	160.6	157.0	157.0	149.8	146.0	135.1	127.8
82.5°	124.1	120.5	120.5	120.5	116.9	113.2	113.2	109.5	105.9	98.6	91.2
85°	73.0	69.4	69.4	69.4	65.8	65.8	62.1	62.1	58.4	51.1	51.1
87.5°	21.9	21.9	25.5	25.5	21.9	21.9	21.9	21.9	21.9	18.2	18.2
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°	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9
2.5°	2636.2	2647.1	2632.6	2628.9	2643.5	2636.2	2632.6	2625.2	2628.9	2621.6	2610.6
5°	2632.6	2647.1	2628.9	2618.0	2636.2	2625.2	2618.0	2610.6	2610.6	2596.1	2588.8
7.5°	2621.6	2628.9	2610.6	2599.8	2610.6	2599.8	2592.4	2581.5	2577.8	2559.5	2548.6
10°	2592.4	2599.8	2577.8	2563.2	2574.1	2559.5	2548.6	2537.6	2530.4	2508.4	2493.9
12.5°	2552.2	2555.9	2530.4	2512.1	2519.4	2508.4	2490.1	2475.6	2468.2	2446.4	2428.1
15°	2497.5	2501.1	2471.9	2446.4	2453.6	2439.1	2417.1	2402.5	2391.6	2369.8	2344.1
17.5°	2431.8	2428.1	2395.2	2369.8	2373.4	2355.1	2333.1	2311.2	2296.6	2271.1	2252.9
20°	2358.8	2347.8	2311.2	2282.0	2285.8	2263.8	2238.2	2216.4	2198.1	2176.1	2150.6
22.5°	2267.5	2252.9	2220.0	2183.5	2187.1	2168.9	2132.4	2114.1	2095.9	2066.6	2044.8
25°	2168.9	2147.0	2114.1	2077.6	2077.6	2055.6	2026.5	2004.5	1986.2	1957.1	1931.5
27.5°	2052.0	2041.1	1997.2	1968.0	1964.4	1942.5	1916.9	1891.4	1869.5	1843.9	1818.4
30°	1924.2	1906.0	1873.1	1840.2	1833.0	1814.8	1789.1	1759.9	1745.4	1719.8	1697.9
32.5°	1789.1	1770.9	1734.4	1701.5	1697.9	1683.2	1661.4	1632.1	1617.5	1599.2	1584.6
35°	1635.8	1628.5	1592.0	1566.4	1566.4	1551.8	1529.9	1504.4	1493.4	1475.1	1456.9
37.5°	1489.8	1478.8	1445.9	1424.0	1424.0	1405.8	1383.9	1372.9	1361.9	1347.4	1336.4
40°	1336.4	1329.1	1303.5	1281.6	1285.2	1270.6	1256.0	1241.5	1234.1	1226.9	1215.9
42.5°	1194.0	1186.6	1168.4	1150.1	1150.1	1139.2	1124.6	1113.6	1106.4	1095.4	1091.8
45°	1066.1	1055.2	1040.6	1022.4	1022.4	1011.4	1004.1	996.8	993.1	985.9	974.9
47.5°	942.0	934.8	920.1	901.9	901.9	901.9	887.2	876.2	876.2	869.0	865.4
50°	836.1	825.2	814.2	799.6	799.6	792.4	781.4	770.4	770.4	766.8	759.5
52.5°	737.5	730.2	715.6	701.0	701.0	693.8	682.8	679.1	675.5	664.5	660.9
55°	653.6	646.2	635.4	617.1	613.4	609.8	598.8	591.5	587.9	576.9	576.9
57.5°	576.9	569.6	551.4	540.4	536.8	529.4	518.5	511.1	507.5	500.2	492.9
60°	511.1	500.2	485.6	471.0	467.4	460.1	449.1	441.8	438.1	423.5	416.2
62.5°	449.1	438.1	423.5	409.0	405.2	398.0	383.4	376.1	368.8	354.1	346.9
65°	390.8	379.8	365.1	350.5	343.2	339.6	325.0	314.0	306.8	295.8	281.1
67.5°	335.9	325.0	310.4	292.1	292.1	281.1	270.2	259.2	248.2	237.4	226.4
70°	284.8	273.9	259.2	244.6	241.0	233.6	222.8	208.1	200.9	186.2	175.2
72.5°	237.4	226.4	211.8	197.1	193.5	186.2	175.2	160.6	149.8	138.8	127.8
75°	193.5	182.6	168.0	157.0	153.4	146.0	135.1	120.5	109.5	102.2	91.2
77.5°	153.4	142.4	131.5	120.5	116.9	109.5	98.6	91.2	80.4	73.0	62.1
80°	116.9	109.5	98.6	91.2	87.6	80.4	73.0	62.1	54.8	47.5	43.9
82.5°	84.0	76.6	69.4	58.4	58.4	51.1	47.5	40.1	32.9	29.2	25.5
85°	47.5	40.1	36.5	32.9	29.2	29.2	25.5	21.9	18.2	14.6	14.6
87.5°	14.6	14.6	11.0	11.0	11.0	11.0	7.2	7.2	7.2	7.2	7.2
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9
2.5°	2610.6	2614.4	2607.0	2614.4	2607.0	2610.6	2603.4	2610.6	2603.4	2610.6	2596.1
5°	2585.1	2585.1	2574.1	2581.5	2574.1	2577.8	2563.2	2566.9	2559.5	2566.9	2552.2
7.5°	2541.2	2545.0	2526.8	2534.0	2523.0	2523.0	2512.1	2515.8	2504.8	2508.4	2497.5
10°	2490.1	2486.5	2468.2	2475.6	2461.0	2461.0	2450.0	2450.0	2435.4	2439.1	2424.5
12.5°	2417.1	2413.5	2391.6	2398.9	2384.2	2384.2	2373.4	2373.4	2358.8	2366.0	2351.4
15°	2333.1	2329.5	2307.6	2311.2	2296.6	2296.6	2282.0	2285.8	2274.8	2282.0	2267.5
17.5°	2238.2	2234.6	2212.6	2216.4	2198.1	2201.8	2190.8	2187.1	2179.9	2183.5	2172.5
20°	2139.6	2132.4	2110.5	2114.1	2106.8	2095.9	2088.5	2092.2	2084.9	2092.2	2081.2
22.5°	2037.4	2022.9	2004.5	2004.5	1997.2	1997.2	1986.2	1993.6	1979.0	1990.0	1982.6
25°	1920.6	1909.6	1895.0	1902.4	1887.8	1887.8	1876.8	1880.4	1873.1	1880.4	1873.1
27.5°	1807.4	1800.1	1778.1	1785.5	1774.5	1778.1	1767.2	1770.9	1767.2	1774.5	1767.2
30°	1686.9	1683.2	1668.6	1668.6	1665.0	1661.4	1657.6	1657.6	1654.0	1665.0	1657.6
32.5°	1573.8	1562.8	1548.1	1559.1	1540.9	1551.8	1544.5	1551.8	1544.5	1551.8	1548.1
35°	1456.9	1453.2	1435.0	1438.6	1435.0	1435.0	1431.2	1431.2	1431.2	1442.2	1442.2
37.5°	1332.8	1329.1	1318.1	1321.8	1314.5	1310.9	1310.9	1318.1	1318.1	1325.4	1325.4
40°	1212.2	1215.9	1204.9	1204.9	1201.2	1201.2	1201.2	1208.6	1204.9	1212.2	1208.6
42.5°	1091.8	1091.8	1080.8	1084.4	1080.8	1084.4	1084.4	1091.8	1091.8	1095.4	1091.8
45°	978.5	978.5	974.9	978.5	971.2	974.9	971.2	978.5	974.9	978.5	978.5
47.5°	865.4	865.4	865.4	861.8	861.8	861.8	861.8	861.8	858.0	865.4	861.8
50°	759.5	763.1	759.5	759.5	755.9	759.5	755.9	755.9	748.5	752.1	752.1
52.5°	664.5	664.5	657.2	657.2	657.2	653.6	653.6	653.6	649.9	649.9	642.6
55°	573.2	573.2	566.0	566.0	562.2	558.6	555.0	555.0	544.0	544.0	533.1
57.5°	489.2	485.6	474.6	474.6	467.4	463.8	460.1	456.4	449.1	441.8	438.1
60°	412.6	405.2	398.0	394.4	387.0	379.8	372.4	365.1	357.9	354.1	350.5
62.5°	339.6	328.6	321.4	317.6	310.4	299.4	292.1	284.8	277.5	273.9	266.5
65°	273.9	262.9	252.0	248.2	241.0	233.6	222.8	215.4	208.1	204.5	204.5
67.5°	215.4	204.5	189.9	189.9	182.6	175.2	168.0	160.6	157.0	160.6	160.6
70°	160.6	153.4	142.4	138.8	131.5	124.1	120.5	120.5	120.5	124.1	120.5
72.5°	120.5	109.5	102.2	98.6	94.9	91.2	91.2	91.2	87.6	91.2	91.2
75°	84.0	76.6	69.4	69.4	65.8	65.8	65.8	65.8	65.8	65.8	65.8
77.5°	58.4	51.1	47.5	47.5	47.5	43.9	43.9	43.9	43.9	43.9	43.9
80°	36.5	36.5	32.9	32.9	29.2	29.2	29.2	29.2	29.2	29.2	29.2
82.5°	21.9	21.9	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
85°	11.0	11.0	11.0	11.0	11.0	7.2	7.2	7.2	7.2	7.2	7.2
87.5°	3.6	3.6	3.6	3.6	3.6	7.2	7.2	7.2	7.2	7.2	7.2
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: P252511

CATALOG NUMBER: LE\_6B50D010R EC6B30509027 6LBLWW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9	2628.9
2.5°	2596.1	2607.0	2592.4	2603.4	2599.8	2596.1	2588.8	2603.4
5°	2552.2	2555.9	2541.2	2555.9	2552.2	2545.0	2537.6	2552.2
7.5°	2490.1	2501.1	2482.9	2497.5	2493.9	2486.5	2479.2	2493.9
10°	2420.8	2431.8	2417.1	2428.1	2428.1	2420.8	2409.9	2424.5
12.5°	2344.1	2351.4	2336.9	2351.4	2347.8	2340.5	2336.9	2347.8
15°	2260.1	2271.1	2256.5	2267.5	2263.8	2260.1	2256.5	2267.5
17.5°	2168.9	2179.9	2168.9	2179.9	2179.9	2168.9	2165.2	2172.5
20°	2077.6	2084.9	2073.9	2084.9	2081.2	2081.2	2073.9	2084.9
22.5°	1975.4	1986.2	1979.0	1986.2	1982.6	1982.6	1979.0	1986.2
25°	1873.1	1884.1	1873.1	1884.1	1880.4	1880.4	1873.1	1891.4
27.5°	1770.9	1778.1	1767.2	1781.9	1778.1	1770.9	1774.5	1778.1
30°	1661.4	1668.6	1661.4	1672.2	1672.2	1672.2	1665.0	1672.2
32.5°	1551.8	1562.8	1551.8	1562.8	1559.1	1559.1	1555.5	1562.8
35°	1442.2	1445.9	1438.6	1449.6	1449.6	1453.2	1445.9	1456.9
37.5°	1329.1	1332.8	1329.1	1332.8	1340.0	1329.1	1336.4	1340.0
40°	1212.2	1219.5	1215.9	1219.5	1219.5	1223.1	1219.5	1223.1
42.5°	1095.4	1102.8	1095.4	1106.4	1102.8	1102.8	1106.4	1106.4
45°	974.9	985.9	978.5	985.9	989.5	985.9	985.9	993.1
47.5°	861.8	869.0	865.4	869.0	869.0	869.0	869.0	876.2
50°	748.5	752.1	752.1	755.9	755.9	759.5	752.1	755.9
52.5°	635.4	642.6	642.6	642.6	639.0	642.6	642.6	642.6
55°	533.1	536.8	529.4	536.8	536.8	533.1	533.1	540.4
57.5°	434.5	434.5	434.5	434.5	434.5	430.9	434.5	434.5
60°	343.2	346.9	343.2	343.2	343.2	343.2	339.6	346.9
62.5°	266.5	266.5	262.9	266.5	266.5	266.5	270.2	270.2
65°	208.1	211.8	208.1	211.8	211.8	211.8	211.8	215.4
67.5°	164.2	164.2	164.2	164.2	164.2	164.2	164.2	164.2
70°	124.1	124.1	124.1	127.8	124.1	124.1	124.1	127.8
72.5°	91.2	91.2	91.2	91.2	91.2	91.2	94.9	94.9
75°	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
77.5°	43.9	43.9	43.9	47.5	43.9	47.5	43.9	43.9
80°	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
82.5°	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
85°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
87.5°	7.2	7.2	7.2	7.2	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



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















(END OF REPORT)