

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: P252530

Luminaire Tested: **LE_6B60D010R EC6B60709730 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252530
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_6B60D010R EC6B60709730 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4731.2 lumens
Efficiency: N/A
Efficacy: 75.7 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

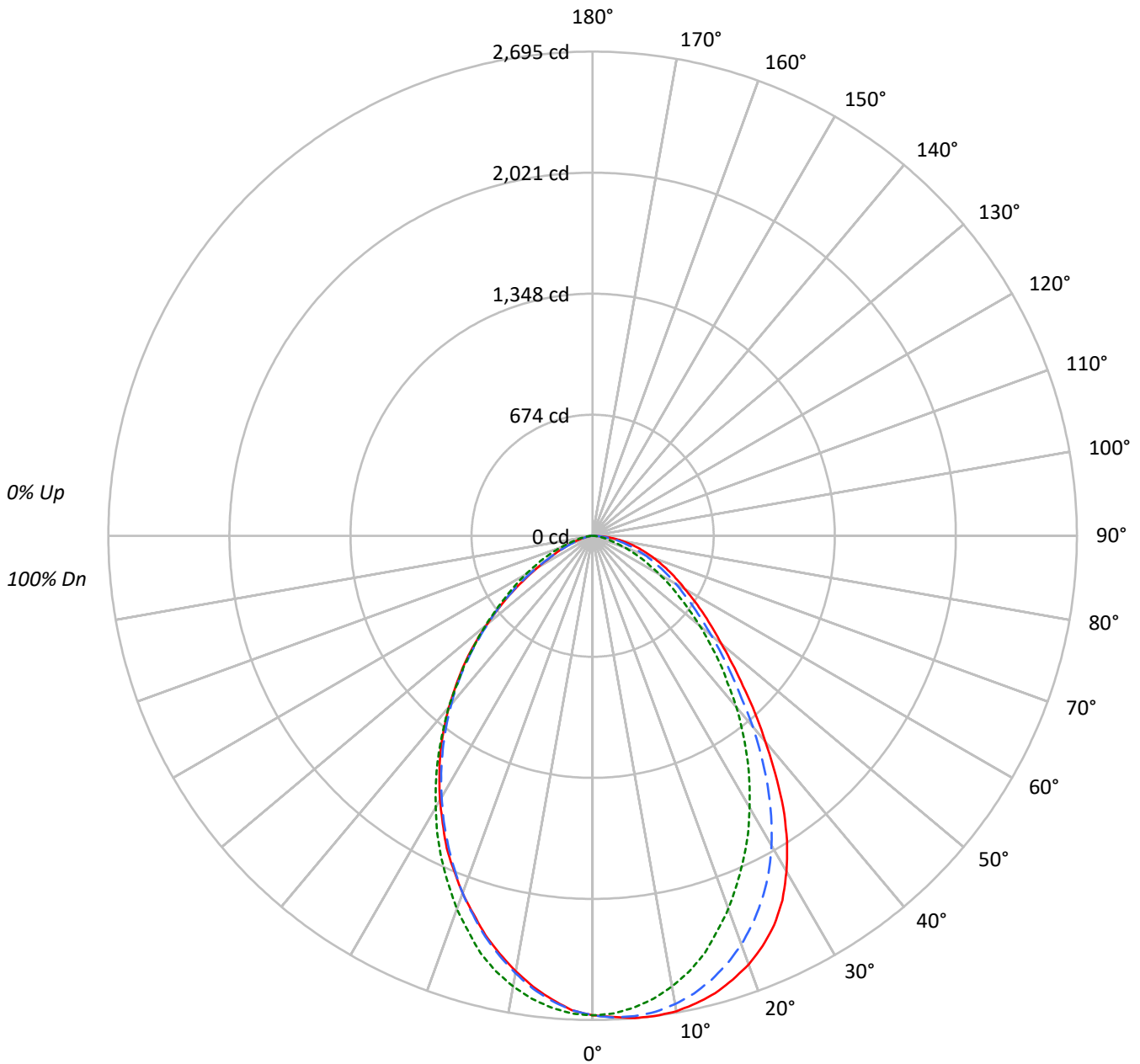
Input Watts (W): 62.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252530

CATALOG NUMBER: LE_6B60D010R EC6B60709730 6LBLWW1H

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°	174134	174134	174134
5°	176502	172618	169697
10°	178046	168718	163067
15°	178027	162499	155489
20°	176305	153400	146964
25°	172123	143034	138226
30°	162532	131532	127909
35°	147334	119275	117802
40°	127237	106082	105767
45°	109112	92347	93039
50°	94818	79015	77888
55°	85183	66631	62400
60°	77388	56107	45942
65°	72679	46343	33777
70°	69281	36071	24759
75°	66345	26165	16838
80°	62705	18109	11121
85°	55468	11153	5539



TEST NUMBER: P252530

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.7	5.3
10°-20°	683.8	14.5
20°-30°	949.3	20.1
30°-40°	983.3	20.8
40°-50°	808.0	17.1
50°-60°	555.4	11.7
60°-70°	319.2	6.7
70°-80°	146.8	3.1
80°-90°	35.7	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°	1882.8	39.8
0°-40°	2866.1	60.6
0°-60°	4229.5	89.4
0°-90°	4731.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4731.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2669	2669	2669	2669	2669	
5°	2695	2684	2636	2599	2591	257
15°	2636	2558	2406	2310	2302	742
25°	2391	2232	1987	1902	1920	1094
35°	1850	1698	1498	1453	1479	1147
45°	1183	1094	1001	990	1008	921
55°	749	678	586	552	549	674
65°	471	412	300	211	219	469
75°	263	208	104	67	67	278
85°	74	52	15	7	7	83
90°	0	0	0	0	0	



TEST NUMBER: P252530

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1
2.5°	2680.2	2702.5	2687.6	2684.0	2691.4	2691.4	2691.4	2680.2	2687.6	2676.5	2684.0
5°	2695.1	2713.6	2698.8	2691.4	2698.8	2702.5	2691.4	2684.0	2695.1	2680.2	2684.0
7.5°	2695.1	2713.6	2698.8	2695.1	2698.8	2698.8	2695.1	2680.2	2687.6	2672.9	2672.9
10°	2687.6	2702.5	2687.6	2680.2	2684.0	2680.2	2680.2	2661.8	2665.4	2646.9	2646.9
12.5°	2665.4	2684.0	2665.4	2658.0	2658.0	2658.0	2646.9	2632.0	2635.8	2613.5	2609.8
15°	2635.8	2650.6	2632.0	2624.6	2624.6	2620.9	2613.5	2591.2	2591.2	2569.0	2557.9
17.5°	2591.2	2606.1	2591.2	2580.1	2576.5	2569.0	2561.6	2539.4	2532.0	2506.0	2494.9
20°	2539.4	2550.5	2535.6	2524.5	2517.1	2509.8	2494.9	2472.6	2465.2	2439.2	2420.8
22.5°	2472.6	2487.5	2465.2	2454.1	2446.8	2435.6	2420.8	2398.5	2387.4	2354.0	2331.8
25°	2391.1	2398.5	2380.0	2368.9	2354.0	2346.6	2335.5	2305.9	2294.8	2257.6	2231.6
27.5°	2287.2	2294.8	2272.5	2265.0	2246.5	2239.1	2224.2	2198.4	2183.5	2146.4	2120.5
30°	2157.5	2165.0	2150.1	2139.0	2124.1	2109.4	2098.2	2072.2	2050.0	2013.0	1990.8
32.5°	2013.0	2024.1	2009.2	1994.4	1968.5	1972.1	1953.6	1927.8	1909.1	1875.8	1849.9
35°	1849.9	1857.2	1838.8	1835.0	1820.2	1805.4	1786.9	1768.2	1757.1	1720.1	1697.9
37.5°	1668.2	1686.8	1668.2	1653.4	1646.0	1634.9	1623.8	1597.8	1590.4	1568.1	1538.5
40°	1494.0	1505.1	1494.0	1479.1	1468.0	1468.0	1453.2	1438.4	1419.9	1397.6	1386.5
42.5°	1338.2	1330.9	1327.1	1319.8	1304.9	1301.2	1297.5	1279.0	1267.9	1245.6	1227.0
45°	1182.6	1186.2	1178.9	1175.1	1164.0	1156.6	1149.2	1134.4	1130.6	1108.4	1093.6
47.5°	1052.9	1049.1	1041.8	1041.8	1034.2	1026.9	1019.5	1008.4	1004.6	986.1	971.2
50°	934.2	937.9	934.2	930.5	919.4	915.6	908.2	900.9	893.4	874.9	860.0
52.5°	837.8	834.1	830.4	830.4	819.2	815.6	808.1	800.8	793.4	774.8	763.6
55°	748.9	748.9	745.1	741.4	730.2	726.6	722.9	715.5	704.4	689.5	678.4
57.5°	667.2	667.2	663.6	659.9	652.5	652.5	645.0	637.6	630.2	615.4	600.5
60°	593.1	596.9	593.1	589.4	582.0	582.0	578.2	567.2	563.5	545.0	533.9
62.5°	530.1	530.1	530.1	526.4	522.8	515.2	515.2	504.1	496.8	485.6	470.8
65°	470.8	470.8	470.8	467.1	459.6	456.0	452.2	444.9	437.5	426.4	411.5
67.5°	415.2	415.2	415.2	411.5	404.1	400.4	396.6	393.0	381.9	370.8	355.9
70°	363.2	363.2	359.6	355.9	352.1	348.5	344.8	337.4	329.9	315.1	304.0
72.5°	311.4	311.4	311.4	304.0	300.2	300.2	292.9	289.1	281.8	266.9	255.8
75°	263.2	259.5	259.5	255.8	252.1	248.4	244.6	241.0	229.9	222.4	207.6
77.5°	215.0	215.0	211.2	207.6	207.6	203.9	200.1	192.8	189.1	178.0	166.9
80°	166.9	166.9	166.9	166.9	163.1	159.4	159.4	152.0	148.2	137.1	129.8
82.5°	126.0	122.4	122.4	122.4	118.6	114.9	114.9	111.2	107.5	100.1	92.6
85°	74.1	70.4	70.4	70.4	66.8	66.8	63.0	63.0	59.4	51.9	51.9
87.5°	22.2	22.2	26.0	26.0	22.2	22.2	22.2	22.2	22.2	18.5	18.5
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: P252530

CATALOG NUMBER: LE_6B60D010R EC6B60709730 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1
2.5°	2676.5	2687.6	2672.9	2669.1	2684.0	2676.5	2672.9	2665.4	2669.1	2661.8	2650.6
5°	2672.9	2687.6	2669.1	2658.0	2676.5	2665.4	2658.0	2650.6	2650.6	2635.8	2628.4
7.5°	2661.8	2669.1	2650.6	2639.5	2650.6	2639.5	2632.0	2620.9	2617.2	2598.8	2587.6
10°	2632.0	2639.5	2617.2	2602.4	2613.5	2598.8	2587.6	2576.5	2569.0	2546.8	2532.0
12.5°	2591.2	2595.0	2569.0	2550.5	2557.9	2546.8	2528.2	2513.4	2506.0	2483.8	2465.2
15°	2535.6	2539.4	2509.8	2483.8	2491.1	2476.4	2454.1	2439.2	2428.1	2405.9	2380.0
17.5°	2469.0	2465.2	2431.9	2405.9	2409.6	2391.1	2368.9	2346.6	2331.8	2305.9	2287.2
20°	2394.8	2383.6	2346.6	2317.0	2320.6	2298.4	2272.5	2250.2	2231.6	2209.5	2183.5
22.5°	2302.1	2287.2	2253.9	2216.9	2220.6	2202.0	2165.0	2146.4	2127.9	2098.2	2076.0
25°	2202.0	2179.8	2146.4	2109.4	2109.4	2087.1	2057.5	2035.2	2016.6	1987.0	1961.1
27.5°	2083.4	2072.2	2027.8	1998.1	1994.4	1972.1	1946.2	1920.2	1898.0	1872.1	1846.1
30°	1953.6	1935.1	1901.8	1868.4	1861.0	1842.5	1816.5	1786.9	1772.0	1746.0	1723.8
32.5°	1816.5	1798.0	1760.9	1727.5	1723.8	1709.0	1686.8	1657.1	1642.2	1623.8	1608.9
35°	1660.8	1653.4	1616.2	1590.4	1590.4	1575.5	1553.2	1527.4	1516.2	1497.6	1479.1
37.5°	1512.5	1501.4	1468.0	1445.8	1445.8	1427.2	1405.0	1393.9	1382.8	1367.9	1356.8
40°	1356.8	1349.4	1323.5	1301.2	1304.9	1290.1	1275.2	1260.4	1253.0	1245.6	1234.5
42.5°	1212.2	1204.9	1186.2	1167.8	1167.8	1156.6	1141.8	1130.6	1123.2	1112.1	1108.4
45°	1082.5	1071.4	1056.5	1038.0	1038.0	1026.9	1019.5	1012.0	1008.4	1000.9	989.8
47.5°	956.4	949.0	934.2	915.6	915.6	915.6	900.9	889.8	889.8	882.2	878.6
50°	848.9	837.8	826.6	811.9	811.9	804.5	793.4	782.2	782.2	778.5	771.1
52.5°	748.9	741.4	726.6	711.8	711.8	704.4	693.2	689.5	685.9	674.8	671.0
55°	663.6	656.1	645.0	626.5	622.8	619.1	608.0	600.5	596.9	585.8	585.8
57.5°	585.8	578.2	559.8	548.6	545.0	537.5	526.4	519.0	515.2	507.9	500.5
60°	519.0	507.9	493.0	478.2	474.5	467.1	456.0	448.5	444.9	430.0	422.6
62.5°	456.0	444.9	430.0	415.2	411.5	404.1	389.2	381.9	374.4	359.6	352.1
65°	396.6	385.5	370.8	355.9	348.5	344.8	329.9	318.8	311.4	300.2	285.5
67.5°	341.0	329.9	315.1	296.6	296.6	285.5	274.4	263.2	252.1	241.0	229.9
70°	289.1	278.0	263.2	248.4	244.6	237.2	226.1	211.2	203.9	189.1	178.0
72.5°	241.0	229.9	215.0	200.1	196.5	189.1	178.0	163.1	152.0	140.9	129.8
75°	196.5	185.4	170.5	159.4	155.8	148.2	137.1	122.4	111.2	103.8	92.6
77.5°	155.8	144.6	133.5	122.4	118.6	111.2	100.1	92.6	81.5	74.1	63.0
80°	118.6	111.2	100.1	92.6	89.0	81.5	74.1	63.0	55.6	48.2	44.5
82.5°	85.2	77.9	70.4	59.4	59.4	51.9	48.2	40.8	33.4	29.6	26.0
85°	48.2	40.8	37.1	33.4	29.6	29.6	26.0	22.2	18.5	14.9	14.9
87.5°	14.9	14.9	11.1	11.1	11.1	11.1	7.4	7.4	7.4	7.4	7.4
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: P252530

CATALOG NUMBER: LE_6B60D010R EC6B60709730 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1
2.5°	2650.6	2654.2	2646.9	2654.2	2646.9	2650.6	2643.1	2650.6	2643.1	2650.6	2635.8
5°	2624.6	2624.6	2613.5	2620.9	2613.5	2617.2	2602.4	2606.1	2598.8	2606.1	2591.2
7.5°	2580.1	2583.9	2565.4	2572.8	2561.6	2561.6	2550.5	2554.2	2543.1	2546.8	2535.6
10°	2528.2	2524.5	2506.0	2513.4	2498.6	2498.6	2487.5	2487.5	2472.6	2476.4	2461.5
12.5°	2454.1	2450.4	2428.1	2435.6	2420.8	2420.8	2409.6	2409.6	2394.8	2402.2	2387.4
15°	2368.9	2365.1	2342.9	2346.6	2331.8	2331.8	2317.0	2320.6	2309.5	2317.0	2302.1
17.5°	2272.5	2268.8	2246.5	2250.2	2231.6	2235.4	2224.2	2220.6	2213.1	2216.9	2205.8
20°	2172.4	2165.0	2142.8	2146.4	2139.0	2127.9	2120.5	2124.1	2116.8	2124.1	2113.0
22.5°	2068.6	2053.8	2035.2	2035.2	2027.8	2027.8	2016.6	2024.1	2009.2	2020.4	2013.0
25°	1950.0	1938.9	1924.0	1931.4	1916.6	1916.6	1905.5	1909.1	1901.8	1909.1	1901.8
27.5°	1835.0	1827.6	1805.4	1812.8	1801.6	1805.4	1794.2	1798.0	1794.2	1801.6	1794.2
30°	1712.8	1709.0	1694.1	1694.1	1690.5	1686.8	1683.0	1683.0	1679.4	1690.5	1683.0
32.5°	1597.8	1586.6	1571.9	1583.0	1564.4	1575.5	1568.1	1575.5	1568.1	1575.5	1571.9
35°	1479.1	1475.4	1456.9	1460.6	1456.9	1456.9	1453.2	1453.2	1453.2	1464.2	1464.2
37.5°	1353.1	1349.4	1338.2	1342.0	1334.6	1330.9	1330.9	1338.2	1338.2	1345.6	1345.6
40°	1230.8	1234.5	1223.4	1223.4	1219.6	1219.6	1219.6	1227.0	1223.4	1230.8	1227.0
42.5°	1108.4	1108.4	1097.2	1101.0	1097.2	1101.0	1101.0	1108.4	1108.4	1112.1	1108.4
45°	993.5	993.5	989.8	993.5	986.1	989.8	986.1	993.5	989.8	993.5	993.5
47.5°	878.6	878.6	878.6	874.9	874.9	874.9	874.9	874.9	871.1	878.6	874.9
50°	771.1	774.8	771.1	771.1	767.4	771.1	767.4	767.4	760.0	763.6	763.6
52.5°	674.8	674.8	667.2	667.2	667.2	663.6	663.6	663.6	659.9	659.9	652.5
55°	582.0	582.0	574.6	574.6	570.9	567.2	563.5	563.5	552.4	552.4	541.2
57.5°	496.8	493.0	481.9	481.9	474.5	470.8	467.1	463.4	456.0	448.5	444.9
60°	418.9	411.5	404.1	400.4	393.0	385.5	378.1	370.8	363.2	359.6	355.9
62.5°	344.8	333.6	326.2	322.5	315.1	304.0	296.6	289.1	281.8	278.0	270.6
65°	278.0	266.9	255.8	252.1	244.6	237.2	226.1	218.8	211.2	207.6	207.6
67.5°	218.8	207.6	192.8	192.8	185.4	178.0	170.5	163.1	159.4	163.1	163.1
70°	163.1	155.8	144.6	140.9	133.5	126.0	122.4	122.4	122.4	126.0	122.4
72.5°	122.4	111.2	103.8	100.1	96.4	92.6	92.6	92.6	89.0	92.6	92.6
75°	85.2	77.9	70.4	70.4	66.8	66.8	66.8	66.8	66.8	66.8	66.8
77.5°	59.4	51.9	48.2	48.2	48.2	44.5	44.5	44.5	44.5	44.5	44.5
80°	37.1	37.1	33.4	33.4	29.6	29.6	29.6	29.6	29.6	29.6	29.6
82.5°	22.2	22.2	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
85°	11.1	11.1	11.1	11.1	11.1	7.4	7.4	7.4	7.4	7.4	7.4
87.5°	3.8	3.8	3.8	3.8	3.8	7.4	7.4	7.4	7.4	7.4	7.4
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: P252530

CATALOG NUMBER: LE_6B60D010R EC6B60709730 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1
2.5°	2635.8	2646.9	2632.0	2643.1	2639.5	2635.8	2628.4	2643.1
5°	2591.2	2595.0	2580.1	2595.0	2591.2	2583.9	2576.5	2591.2
7.5°	2528.2	2539.4	2520.9	2535.6	2532.0	2524.5	2517.1	2532.0
10°	2457.9	2469.0	2454.1	2465.2	2465.2	2457.9	2446.8	2461.5
12.5°	2380.0	2387.4	2372.5	2387.4	2383.6	2376.2	2372.5	2383.6
15°	2294.8	2305.9	2291.0	2302.1	2298.4	2294.8	2291.0	2302.1
17.5°	2202.0	2213.1	2202.0	2213.1	2213.1	2202.0	2198.4	2205.8
20°	2109.4	2116.8	2105.6	2116.8	2113.0	2113.0	2105.6	2116.8
22.5°	2005.5	2016.6	2009.2	2016.6	2013.0	2013.0	2009.2	2016.6
25°	1901.8	1912.9	1901.8	1912.9	1909.1	1909.1	1901.8	1920.2
27.5°	1798.0	1805.4	1794.2	1809.1	1805.4	1798.0	1801.6	1805.4
30°	1686.8	1694.1	1686.8	1697.9	1697.9	1697.9	1690.5	1697.9
32.5°	1575.5	1586.6	1575.5	1586.6	1583.0	1583.0	1579.2	1586.6
35°	1464.2	1468.0	1460.6	1471.8	1471.8	1475.4	1468.0	1479.1
37.5°	1349.4	1353.1	1349.4	1353.1	1360.5	1349.4	1356.8	1360.5
40°	1230.8	1238.1	1234.5	1238.1	1238.1	1241.9	1238.1	1241.9
42.5°	1112.1	1119.5	1112.1	1123.2	1119.5	1119.5	1123.2	1123.2
45°	989.8	1000.9	993.5	1000.9	1004.6	1000.9	1000.9	1008.4
47.5°	874.9	882.2	878.6	882.2	882.2	882.2	882.2	889.8
50°	760.0	763.6	763.6	767.4	767.4	771.1	763.6	767.4
52.5°	645.0	652.5	652.5	652.5	648.8	652.5	652.5	652.5
55°	541.2	545.0	537.5	545.0	545.0	541.2	541.2	548.6
57.5°	441.1	441.1	441.1	441.1	441.1	437.5	441.1	441.1
60°	348.5	352.1	348.5	348.5	348.5	348.5	344.8	352.1
62.5°	270.6	270.6	266.9	270.6	270.6	270.6	274.4	274.4
65°	211.2	215.0	211.2	215.0	215.0	215.0	215.0	218.8
67.5°	166.9	166.9	166.9	166.9	166.9	166.9	166.9	166.9
70°	126.0	126.0	126.0	129.8	126.0	126.0	126.0	129.8
72.5°	92.6	92.6	92.6	92.6	92.6	92.6	96.4	96.4
75°	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8
77.5°	44.5	44.5	44.5	48.2	44.5	48.2	44.5	44.5
80°	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
82.5°	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
85°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
87.5°	7.4	7.4	7.4	7.4	3.8	3.8	3.8	3.8
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)