

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: P252284

Luminaire Tested: **LE_6B40D010 EC6B30508027 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252284
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B40D010 EC6B30508027 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4617.5 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

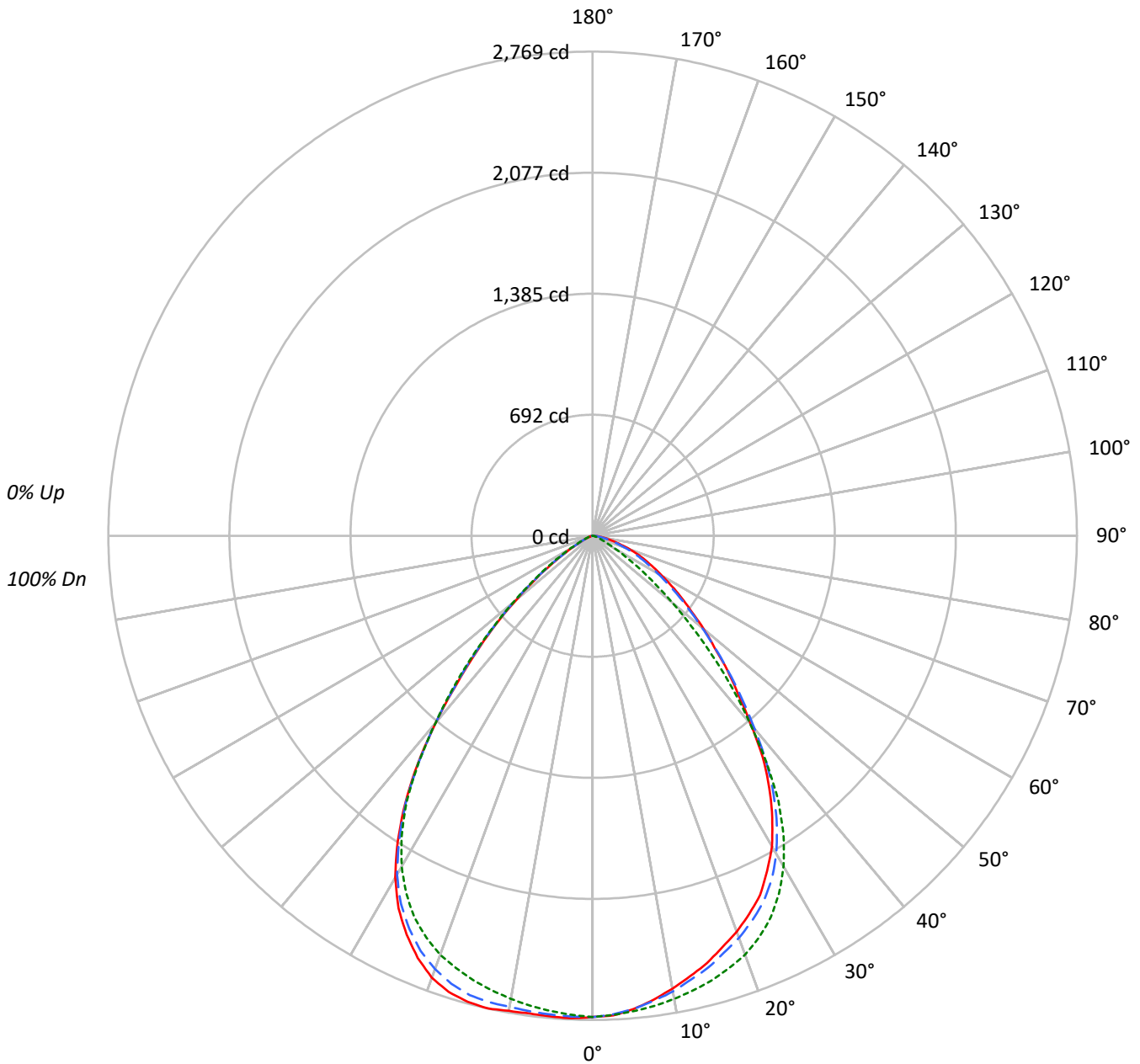
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	179568	179568	179568
5°	177857	178722	180686
10°	174190	178145	182776
15°	170854	177811	186349
20°	167314	177006	186698
25°	163190	173477	181129
30°	154509	164521	170027
35°	140317	147461	148783
40°	119751	119181	118619
45°	100586	89238	86488
50°	84019	60390	57356
55°	70703	37058	33657
60°	59865	19520	16910
65°	51838	10266	8197
70°	43110	6333	4425
75°	31862	4184	2521
80°	24984	2480	1277
85°	19911	2545	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.4	5.6
10°-20°	742.7	16.1
20°-30°	1096.7	23.8
30°-40°	1130.3	24.5
40°-50°	780.7	16.9
50°-60°	384.8	8.3
60°-70°	155.9	3.4
70°-80°	55.6	1.2
80°-90°	11.5	0.2
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°	2098.8	45.5
0°-40°	3229.1	69.9
0°-60°	4394.5	95.2
0°-90°	4617.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4617.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2752	2752	2752	2752	2752	
5°	2716	2716	2729	2749	2759	256
15°	2530	2556	2633	2719	2759	712
25°	2267	2310	2410	2480	2516	1036
35°	1762	1805	1852	1862	1868	1092
45°	1090	1097	967	954	937	843
55°	622	598	326	306	296	562
65°	336	302	66	53	53	333
75°	126	106	17	10	10	142
85°	27	20	3	0	0	33
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°	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4
2.5°	2745.6	2735.8	2742.4	2729.0	2745.6	2729.0	2732.4	2735.8	2732.4	2735.8	2739.0
5°	2715.8	2705.8	2715.8	2699.1	2715.8	2705.8	2705.8	2709.1	2709.1	2712.4	2715.8
7.5°	2675.9	2665.9	2675.9	2659.2	2679.1	2669.2	2669.2	2675.9	2672.5	2675.9	2682.5
10°	2629.4	2616.0	2626.0	2616.0	2636.0	2622.6	2629.4	2629.4	2629.4	2639.2	2646.0
12.5°	2579.5	2566.1	2579.5	2562.9	2582.8	2572.9	2576.1	2586.1	2589.4	2596.1	2599.4
15°	2529.6	2513.0	2519.6	2509.6	2529.6	2519.6	2523.0	2536.2	2536.2	2546.2	2556.2
17.5°	2466.5	2453.1	2466.5	2453.1	2469.8	2463.1	2469.8	2479.8	2479.8	2489.8	2499.6
20°	2409.9	2396.6	2406.6	2396.6	2416.6	2406.6	2409.9	2423.2	2426.5	2436.5	2446.5
22.5°	2340.1	2330.1	2336.8	2326.9	2346.8	2340.1	2343.5	2356.8	2360.1	2366.8	2383.4
25°	2267.0	2247.0	2257.0	2250.4	2270.4	2260.4	2267.0	2280.2	2287.0	2296.9	2310.2
27.5°	2160.6	2150.6	2157.2	2157.2	2173.9	2164.0	2167.2	2180.6	2190.5	2200.5	2217.1
30°	2051.0	2034.4	2041.0	2044.2	2057.6	2051.0	2057.6	2070.9	2074.2	2087.5	2100.8
32.5°	1911.4	1904.6	1918.0	1911.4	1918.0	1918.0	1921.2	1931.2	1937.9	1944.6	1961.2
35°	1761.8	1748.5	1761.8	1755.1	1771.8	1761.8	1771.8	1781.8	1781.8	1795.0	1805.0
37.5°	1598.9	1582.2	1588.9	1588.9	1595.5	1592.2	1592.2	1608.9	1612.1	1622.1	1632.1
40°	1406.1	1399.4	1412.8	1409.4	1412.8	1412.8	1416.0	1426.0	1432.6	1436.0	1439.4
42.5°	1233.2	1236.5	1239.9	1239.9	1239.9	1239.9	1239.9	1253.1	1249.9	1259.9	1263.1
45°	1090.2	1077.0	1083.6	1080.4	1090.2	1080.4	1090.2	1100.2	1093.6	1103.6	1096.9
47.5°	944.0	944.0	944.0	940.8	947.4	944.0	950.6	954.0	954.0	954.0	950.6
50°	827.8	817.8	821.0	821.0	824.4	821.0	827.8	831.0	831.0	824.4	811.1
52.5°	714.6	711.4	711.4	718.0	718.0	714.6	714.6	714.6	714.6	704.8	698.0
55°	621.6	615.0	618.2	618.2	618.2	618.2	621.6	618.2	618.2	608.2	598.4
57.5°	538.5	531.9	531.9	531.9	535.1	531.9	531.9	531.9	528.5	518.5	505.2
60°	458.8	455.4	458.8	458.8	462.0	458.8	458.8	458.8	452.1	442.1	428.8
62.5°	392.2	392.2	392.2	395.5	395.5	392.2	392.2	388.9	385.6	372.2	359.0
65°	335.8	332.4	335.8	335.8	339.0	339.0	335.8	332.4	329.1	315.8	302.5
67.5°	279.2	275.9	279.2	279.2	282.5	279.2	279.2	279.2	269.2	262.6	249.2
70°	226.0	222.8	222.8	222.8	226.0	219.4	222.8	222.8	216.1	206.1	192.8
72.5°	172.9	172.9	172.9	172.9	172.9	172.9	169.5	169.5	162.9	152.9	146.2
75°	126.4	126.4	129.6	129.6	126.4	126.4	126.4	123.0	119.6	113.0	106.4
77.5°	93.1	93.1	93.1	93.1	89.8	89.8	89.8	86.4	83.1	79.8	73.1
80°	66.5	66.5	66.5	63.1	66.5	63.1	63.1	63.1	56.5	53.1	49.9
82.5°	46.5	43.2	43.2	43.2	43.2	43.2	43.2	39.9	39.9	36.6	33.2
85°	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	23.2	20.0	20.0
87.5°	13.2	16.6	16.6	16.6	16.6	16.6	16.6	13.2	13.2	13.2	10.0
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°	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4
2.5°	2739.0	2739.0	2745.6	2735.8	2752.4	2742.4	2739.0	2755.6	2745.6	2742.4	2749.0
5°	2715.8	2719.1	2722.4	2715.8	2732.4	2722.4	2722.4	2739.0	2732.4	2729.0	2739.0
7.5°	2685.9	2689.1	2695.8	2692.5	2705.8	2699.1	2702.5	2719.1	2712.4	2712.4	2722.4
10°	2649.2	2655.9	2662.6	2662.6	2679.1	2672.5	2672.5	2692.5	2685.9	2689.1	2702.5
12.5°	2606.0	2616.0	2626.0	2629.4	2646.0	2636.0	2639.2	2662.6	2659.2	2662.6	2675.9
15°	2559.5	2572.9	2582.8	2582.8	2602.8	2592.8	2602.8	2626.0	2619.4	2632.6	2649.2
17.5°	2506.4	2519.6	2532.9	2536.2	2556.2	2549.5	2562.9	2586.1	2586.1	2592.8	2612.8
20°	2456.5	2473.1	2479.8	2489.8	2509.6	2506.4	2513.0	2539.6	2539.6	2549.5	2569.5
22.5°	2390.0	2406.6	2419.9	2429.9	2446.5	2446.5	2456.5	2479.8	2479.8	2486.4	2506.4
25°	2316.9	2336.8	2346.8	2356.8	2373.4	2370.0	2380.0	2400.0	2403.2	2409.9	2429.9
27.5°	2223.8	2240.4	2253.8	2260.4	2283.6	2270.4	2280.2	2303.6	2300.2	2306.9	2323.5
30°	2107.5	2124.1	2137.4	2137.4	2157.2	2157.2	2167.2	2177.2	2177.2	2183.9	2197.2
32.5°	1971.1	1991.1	1991.1	2001.1	2014.4	2001.1	2014.4	2027.6	2021.0	2031.0	2041.0
35°	1814.9	1824.9	1828.2	1828.2	1838.2	1834.9	1831.5	1841.5	1834.9	1851.5	1861.5
37.5°	1625.5	1638.8	1632.1	1638.8	1635.4	1625.5	1625.5	1642.1	1628.8	1632.1	1642.1
40°	1442.6	1442.6	1439.4	1422.8	1426.0	1416.0	1412.8	1416.0	1402.8	1399.4	1412.8
42.5°	1253.1	1249.9	1239.9	1216.6	1219.9	1203.2	1190.0	1190.0	1183.4	1180.0	1183.4
45°	1083.6	1073.6	1057.0	1030.5	1023.8	1010.5	983.9	977.2	967.2	967.2	970.6
47.5°	927.4	914.1	887.5	857.6	841.0	824.4	797.8	787.8	771.1	764.5	771.1
50°	797.8	774.5	741.2	698.0	681.4	661.5	634.9	618.2	601.6	595.0	591.6
52.5°	678.1	644.9	611.6	558.5	545.1	525.2	488.6	472.0	455.4	442.1	442.1
55°	575.0	545.1	498.6	448.8	428.8	408.9	372.2	349.0	332.4	325.8	319.1
57.5°	482.0	448.8	405.5	352.4	332.4	312.5	275.9	252.6	236.0	226.0	219.4
60°	405.5	369.0	325.8	279.2	256.0	236.0	199.5	176.1	159.5	149.6	142.9
62.5°	332.4	302.5	259.2	216.1	196.1	176.1	146.2	123.0	106.4	99.8	89.8
65°	279.2	249.2	209.4	172.9	156.2	136.2	109.8	89.8	76.5	66.5	59.9
67.5°	226.0	202.8	169.5	136.2	119.6	106.4	83.1	66.5	53.1	46.5	43.2
70°	179.5	156.2	129.6	103.0	93.1	79.8	63.1	46.5	39.9	33.2	29.9
72.5°	133.0	116.4	96.4	76.5	66.5	59.9	43.2	36.6	26.6	23.2	20.0
75°	96.4	83.1	69.8	53.1	46.5	43.2	33.2	23.2	20.0	16.6	13.2
77.5°	66.5	59.9	46.5	36.6	33.2	29.9	23.2	16.6	13.2	10.0	10.0
80°	43.2	36.6	29.9	23.2	23.2	20.0	13.2	10.0	10.0	6.6	6.6
82.5°	26.6	23.2	20.0	16.6	13.2	13.2	10.0	6.6	6.6	3.4	3.4
85°	16.6	13.2	10.0	10.0	6.6	6.6	6.6	3.4	3.4	3.4	3.4
87.5°	6.6	6.6	6.6	3.4	3.4	3.4	3.4	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4
2.5°	2749.0	2749.0	2755.6	2745.6	2752.4	2752.4	2759.0	2745.6	2752.4	2755.6	2762.2
5°	2735.8	2739.0	2745.6	2742.4	2745.6	2745.6	2752.4	2735.8	2749.0	2749.0	2759.0
7.5°	2722.4	2722.4	2729.0	2725.8	2732.4	2735.8	2742.4	2729.0	2742.4	2742.4	2752.4
10°	2705.8	2705.8	2715.8	2712.4	2722.4	2725.8	2735.8	2722.4	2735.8	2739.0	2749.0
12.5°	2682.5	2685.9	2695.8	2695.8	2705.8	2712.4	2722.4	2715.8	2732.4	2735.8	2749.0
15°	2655.9	2662.6	2675.9	2672.5	2682.5	2692.5	2705.8	2695.8	2719.1	2725.8	2739.0
17.5°	2622.6	2629.4	2639.2	2639.2	2649.2	2655.9	2672.5	2665.9	2685.9	2689.1	2705.8
20°	2572.9	2582.8	2596.1	2592.8	2602.8	2609.4	2622.6	2616.0	2636.0	2642.6	2659.2
22.5°	2513.0	2519.6	2529.6	2529.6	2539.6	2546.2	2559.5	2549.5	2569.5	2572.9	2586.1
25°	2433.2	2439.9	2446.5	2449.9	2459.8	2463.1	2469.8	2463.1	2479.8	2483.1	2499.6
27.5°	2330.1	2333.5	2343.5	2343.5	2350.1	2353.4	2363.4	2350.1	2373.4	2373.4	2383.4
30°	2207.1	2203.9	2217.1	2210.5	2217.1	2217.1	2227.1	2220.5	2237.1	2230.5	2240.4
32.5°	2044.2	2051.0	2051.0	2044.2	2057.6	2054.2	2054.2	2047.6	2057.6	2060.9	2067.5
35°	1854.9	1864.8	1864.8	1868.1	1871.5	1861.5	1864.8	1844.9	1861.5	1864.8	1868.1
37.5°	1648.8	1638.8	1645.4	1635.4	1652.0	1632.1	1632.1	1618.9	1632.1	1632.1	1635.4
40°	1412.8	1409.4	1416.0	1409.4	1406.1	1402.8	1396.1	1386.1	1399.4	1392.8	1402.8
42.5°	1190.0	1186.6	1186.6	1180.0	1176.8	1176.8	1170.1	1163.4	1160.1	1160.1	1176.8
45°	960.6	967.2	960.6	957.4	964.0	957.4	960.6	947.4	954.0	947.4	954.0
47.5°	767.9	771.1	764.5	757.9	767.9	757.9	757.9	747.9	761.2	761.2	754.5
50°	595.0	591.6	585.0	591.6	588.4	588.4	588.4	578.4	585.0	575.0	581.8
52.5°	438.8	435.5	435.5	432.1	435.5	432.1	432.1	428.8	428.8	425.5	428.8
55°	319.1	315.8	309.1	309.1	309.1	312.5	309.1	305.9	305.9	302.5	305.9
57.5°	216.1	209.4	209.4	209.4	209.4	206.1	206.1	202.8	206.1	202.8	206.1
60°	139.6	139.6	133.0	133.0	133.0	133.0	133.0	129.6	133.0	133.0	133.0
62.5°	86.4	86.4	83.1	79.8	83.1	79.8	79.8	79.8	83.1	79.8	83.1
65°	56.5	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
67.5°	39.9	36.6	36.6	36.6	36.6	36.6	36.6	33.2	36.6	36.6	36.6
70°	26.6	26.6	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
72.5°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
75°	13.2	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
77.5°	10.0	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
80°	6.6	6.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
82.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
85°	3.4	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	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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: P252284

CATALOG NUMBER: LE_6B40D010 EC6B30508027 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4	2752.4
2.5°	2752.4	2755.6	2749.0	2752.4	2745.6	2752.4	2755.6	2762.2
5°	2745.6	2749.0	2742.4	2749.0	2742.4	2749.0	2752.4	2759.0
7.5°	2739.0	2745.6	2739.0	2745.6	2739.0	2745.6	2749.0	2755.6
10°	2739.0	2749.0	2742.4	2752.4	2742.4	2749.0	2755.6	2759.0
12.5°	2739.0	2749.0	2745.6	2752.4	2749.0	2755.6	2762.2	2768.9
15°	2732.4	2742.4	2735.8	2745.6	2742.4	2745.6	2759.0	2759.0
17.5°	2695.8	2705.8	2705.8	2712.4	2712.4	2722.4	2729.0	2735.8
20°	2649.2	2659.2	2655.9	2665.9	2665.9	2675.9	2682.5	2689.1
22.5°	2579.5	2592.8	2589.4	2599.4	2596.1	2602.8	2616.0	2612.8
25°	2489.8	2506.4	2503.0	2509.6	2506.4	2506.4	2513.0	2516.2
27.5°	2380.0	2390.0	2386.6	2393.4	2386.6	2393.4	2400.0	2403.2
30°	2237.1	2243.8	2240.4	2243.8	2240.4	2247.0	2250.4	2257.0
32.5°	2064.2	2074.2	2064.2	2070.9	2067.5	2067.5	2080.9	2074.2
35°	1858.1	1861.5	1864.8	1864.8	1858.1	1861.5	1868.1	1868.1
37.5°	1628.8	1645.4	1625.5	1635.4	1632.1	1632.1	1632.1	1642.1
40°	1389.5	1392.8	1386.1	1386.1	1386.1	1382.8	1396.1	1392.8
42.5°	1163.4	1166.8	1163.4	1153.5	1156.8	1156.8	1166.8	1153.5
45°	944.0	950.6	947.4	947.4	940.8	940.8	944.0	937.4
47.5°	747.9	754.5	744.6	747.9	741.2	747.9	744.6	751.2
50°	568.4	575.0	571.8	575.0	575.0	568.4	578.4	565.1
52.5°	425.5	428.8	425.5	422.1	418.9	418.9	425.5	422.1
55°	302.5	299.1	299.1	299.1	302.5	302.5	299.1	295.9
57.5°	202.8	202.8	199.5	199.5	202.8	196.1	199.5	196.1
60°	129.6	129.6	129.6	129.6	126.4	129.6	129.6	129.6
62.5°	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
65°	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
67.5°	33.2	36.6	36.6	36.6	33.2	33.2	33.2	33.2
70°	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
72.5°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
75°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
77.5°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
80°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
82.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	3.4	3.4	3.4	3.4	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)