

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: P252603

Luminaire Tested: **LE_6B40D010 EC6B30509030 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252603
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B40D010 EC6B30509030 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4445.0 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

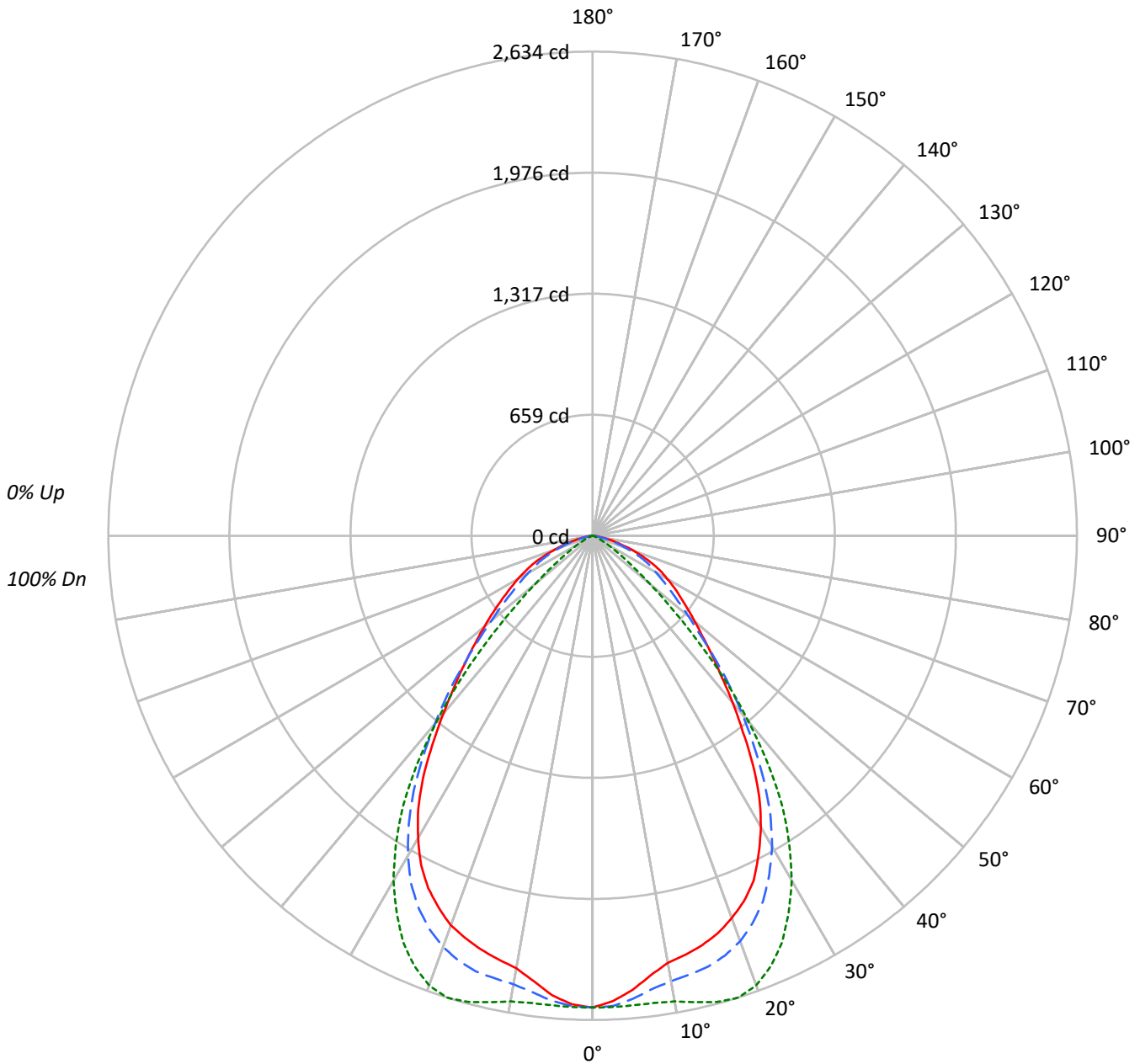
Input Watts (W): 43
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	167434	167434	167434
5°	162428	167877	164379
10°	156250	170401	158211
15°	155698	177338	157508
20°	153657	180644	156545
25°	149074	175557	152277
30°	137898	163157	143043
35°	120979	143431	128068
40°	100819	112436	107385
45°	84865	74180	90603
50°	73473	40649	77990
55°	66483	21600	68155
60°	61170	11221	61170
65°	55420	5959	54046
70°	44712	3395	41317
75°	30652	2243	28434
80°	20063	1127	17846
85°	13324	2246	11153



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.3	5.4
10°-20°	692.0	15.6
20°-30°	1022.4	23.0
30°-40°	1032.7	23.2
40°-50°	711.8	16.0
50°-60°	408.8	9.2
60°-70°	237.9	5.4
70°-80°	86.8	2.0
80°-90°	13.3	0.3
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°	1953.7	44.0
0°-40°	2986.4	67.2
0°-60°	4107.0	92.4
0°-90°	4445.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4445.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2566	2566	2566	2566	2566	
5°	2480	2528	2563	2540	2510	233
15°	2305	2427	2626	2454	2332	649
25°	2071	2192	2439	2237	2115	944
35°	1519	1623	1801	1697	1608	943
45°	920	932	804	991	982	715
55°	584	513	190	534	599	526
65°	359	303	39	300	350	352
75°	122	98	9	95	113	137
85°	18	9	3	12	15	23
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°	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4
2.5°	2533.6	2536.6	2539.6	2536.6	2539.6	2551.5	2542.6	2548.5	2548.5	2551.5	2560.4
5°	2480.2	2480.2	2486.2	2483.2	2492.1	2504.0	2495.1	2504.0	2507.0	2512.9	2527.8
7.5°	2412.0	2412.0	2415.0	2415.0	2426.9	2438.8	2432.8	2444.6	2456.5	2468.4	2486.2
10°	2358.6	2364.6	2364.6	2367.5	2379.4	2394.2	2391.2	2406.1	2418.0	2435.8	2459.5
12.5°	2334.9	2337.9	2337.9	2343.8	2355.6	2370.5	2367.5	2382.4	2400.1	2421.0	2444.6
15°	2305.2	2311.1	2308.2	2314.1	2326.0	2340.9	2337.9	2352.8	2373.5	2394.2	2426.9
17.5°	2266.6	2269.6	2272.6	2272.6	2284.5	2296.4	2296.4	2311.1	2334.9	2358.6	2394.2
20°	2213.2	2219.2	2219.2	2222.1	2231.1	2248.9	2245.9	2260.8	2284.5	2308.2	2346.8
22.5°	2151.0	2153.9	2153.9	2156.9	2171.8	2180.6	2183.6	2195.5	2216.2	2242.9	2278.5
25°	2070.9	2073.9	2070.9	2079.8	2085.8	2103.5	2097.5	2112.4	2136.1	2156.9	2192.5
27.5°	1955.1	1961.1	1961.1	1964.0	1978.9	1993.8	1993.8	2008.5	2029.4	2044.1	2079.8
30°	1830.5	1839.5	1830.5	1845.4	1851.2	1863.1	1872.1	1881.0	1898.8	1919.5	1952.1
32.5°	1688.1	1685.1	1688.1	1694.1	1711.9	1720.8	1726.8	1735.6	1753.4	1771.2	1797.9
35°	1519.0	1525.0	1527.9	1539.8	1539.8	1554.6	1557.6	1563.5	1590.2	1602.1	1622.9
37.5°	1341.0	1347.0	1349.9	1355.9	1367.8	1373.6	1382.5	1391.5	1409.2	1430.0	1441.9
40°	1183.8	1183.8	1186.8	1192.6	1201.6	1204.5	1213.5	1225.2	1237.1	1255.0	1266.9
42.5°	1035.4	1038.4	1035.4	1041.4	1050.2	1062.1	1059.1	1074.0	1077.0	1088.9	1097.8
45°	919.8	919.8	913.8	919.8	919.8	931.6	928.6	934.5	931.6	937.5	931.6
47.5°	810.0	812.9	810.0	812.9	812.9	812.9	815.9	810.0	812.9	804.0	786.2
50°	723.9	726.9	721.0	723.9	721.0	718.0	721.0	712.0	709.1	697.2	679.4
52.5°	649.8	646.8	643.8	643.8	643.8	640.9	637.9	629.0	620.1	608.2	587.4
55°	584.5	581.5	578.5	578.5	572.6	569.6	569.6	560.8	551.9	537.0	513.2
57.5°	525.1	522.1	519.2	519.2	516.2	510.2	510.2	501.4	489.5	471.8	451.0
60°	468.8	468.8	468.8	465.8	465.8	459.9	459.9	451.0	439.1	421.2	397.5
62.5°	418.4	415.4	415.4	415.4	415.4	412.4	409.4	403.5	391.6	373.9	353.0
65°	359.0	359.0	359.0	359.0	356.0	356.0	356.0	347.1	341.1	323.4	302.6
67.5°	293.8	293.8	293.8	293.8	290.8	293.8	293.8	287.8	281.9	264.0	246.2
70°	234.4	231.4	228.5	231.4	228.5	228.5	231.4	225.5	222.5	207.6	189.9
72.5°	172.1	175.0	172.1	172.1	172.1	169.1	172.1	169.1	163.1	151.2	139.5
75°	121.6	124.6	124.6	121.6	121.6	121.6	118.6	118.6	112.8	103.9	97.9
77.5°	83.1	83.1	83.1	83.1	80.1	80.1	80.1	77.1	74.1	68.2	62.2
80°	53.4	53.4	53.4	53.4	50.4	50.4	50.4	47.5	47.5	41.5	35.6
82.5°	32.6	32.6	32.6	32.6	32.6	32.6	29.6	29.6	26.8	23.8	20.8
85°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	14.9	14.9	11.9	8.9
87.5°	5.9	5.9	8.9	8.9	8.9	8.9	8.9	8.9	5.9	5.9	5.9
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°	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4
2.5°	2554.5	2557.4	2557.4	2557.4	2566.4	2569.2	2560.4	2551.5	2569.2	2566.4	2572.2
5°	2524.8	2533.6	2539.6	2542.6	2551.5	2557.4	2548.5	2545.5	2560.4	2563.4	2566.4
7.5°	2489.1	2504.0	2518.9	2524.8	2536.6	2542.6	2539.6	2539.6	2557.4	2563.4	2563.4
10°	2465.5	2486.2	2504.0	2518.9	2533.6	2542.6	2542.6	2545.5	2566.4	2572.2	2578.1
12.5°	2459.5	2486.2	2510.0	2530.8	2542.6	2557.4	2560.4	2569.2	2590.0	2599.0	2599.0
15°	2444.6	2480.2	2510.0	2536.6	2554.5	2572.2	2578.1	2596.0	2619.8	2625.6	2631.6
17.5°	2418.0	2453.6	2489.1	2521.9	2545.5	2560.4	2578.1	2596.0	2625.6	2634.5	2637.5
20°	2370.5	2412.0	2447.6	2480.2	2504.0	2524.8	2542.6	2563.4	2590.0	2601.9	2604.9
22.5°	2299.2	2340.9	2376.5	2412.0	2435.8	2453.6	2471.4	2495.1	2521.9	2533.6	2533.6
25°	2213.2	2251.9	2290.4	2317.1	2340.9	2361.6	2370.5	2397.2	2423.9	2438.8	2438.8
27.5°	2103.5	2139.1	2174.8	2204.4	2219.2	2237.0	2251.9	2275.6	2296.4	2308.2	2320.1
30°	1964.0	1999.6	2032.2	2062.0	2079.8	2097.5	2112.4	2130.2	2151.0	2165.8	2168.8
32.5°	1812.8	1842.4	1875.0	1904.8	1922.5	1928.5	1943.2	1961.1	1978.9	1990.8	1993.8
35°	1646.6	1667.4	1688.1	1714.9	1732.6	1732.6	1747.5	1759.4	1774.1	1800.9	1795.0
37.5°	1450.8	1480.5	1495.2	1504.2	1516.0	1527.9	1530.9	1545.8	1563.5	1569.5	1578.4
40°	1266.9	1275.8	1284.6	1284.6	1296.5	1296.5	1296.5	1299.5	1317.2	1320.2	1332.1
42.5°	1082.9	1082.9	1074.0	1065.1	1068.1	1065.1	1050.2	1050.2	1059.1	1071.0	1071.0
45°	910.9	890.0	863.4	842.6	827.8	821.9	804.0	804.0	801.0	804.0	815.9
47.5°	765.5	729.9	685.4	643.8	629.0	617.1	590.4	578.5	572.6	575.6	581.5
50°	643.8	605.2	554.8	504.4	477.6	462.9	430.2	409.4	406.5	400.5	412.4
52.5°	554.8	507.4	453.9	394.6	367.9	344.1	308.5	290.8	278.9	278.9	281.9
55°	477.6	427.2	367.9	308.5	281.9	264.0	228.5	204.8	192.9	189.9	198.8
57.5°	412.4	364.9	305.6	246.2	219.5	198.8	163.1	142.4	133.5	127.6	130.5
60°	362.0	314.5	255.1	198.8	175.0	151.2	121.6	97.9	86.0	86.0	89.0
62.5°	314.5	270.0	216.6	163.1	142.4	121.6	89.0	68.2	59.4	56.4	59.4
65°	267.0	225.5	181.0	136.5	115.8	97.9	71.2	53.4	41.5	38.6	41.5
67.5°	216.6	184.0	145.4	109.8	92.0	77.1	53.4	38.6	29.6	26.8	29.6
70°	169.1	139.5	109.8	80.1	68.2	56.4	38.6	29.6	20.8	17.8	20.8
72.5°	121.6	100.9	77.1	56.4	47.5	38.6	26.8	20.8	14.9	11.9	14.9
75°	83.1	68.2	50.4	35.6	29.6	26.8	17.8	11.9	8.9	8.9	8.9
77.5°	53.4	41.5	32.6	23.8	17.8	14.9	8.9	5.9	5.9	5.9	5.9
80°	29.6	23.8	17.8	11.9	8.9	8.9	5.9	5.9	3.0	3.0	3.0
82.5°	17.8	11.9	8.9	5.9	5.9	3.0	3.0	3.0	3.0	3.0	3.0
85°	8.9	5.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
87.5°	3.0	3.0	3.0	3.0	0.0	0.0	0.0	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°	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4
2.5°	2560.4	2563.4	2554.5	2566.4	2557.4	2569.2	2569.2	2557.4	2560.4	2554.5	2566.4
5°	2554.5	2554.5	2548.5	2557.4	2545.5	2557.4	2554.5	2533.6	2539.6	2527.8	2539.6
7.5°	2554.5	2548.5	2539.6	2548.5	2533.6	2542.6	2530.8	2510.0	2504.0	2489.1	2489.1
10°	2563.4	2554.5	2542.6	2545.5	2530.8	2533.6	2515.9	2486.2	2477.4	2459.5	2453.6
12.5°	2584.1	2575.2	2557.4	2563.4	2542.6	2542.6	2518.9	2483.2	2465.5	2441.8	2435.8
15°	2613.8	2599.0	2578.1	2581.1	2560.4	2548.5	2518.9	2477.4	2453.6	2421.0	2412.0
17.5°	2619.8	2604.9	2578.1	2578.1	2551.5	2536.6	2501.0	2453.6	2423.9	2391.2	2373.5
20°	2587.1	2572.2	2542.6	2539.6	2515.9	2495.1	2456.5	2409.1	2379.4	2343.8	2329.0
22.5°	2518.9	2501.0	2474.4	2471.4	2447.6	2435.8	2394.2	2346.8	2317.1	2281.5	2269.6
25°	2418.0	2409.1	2382.4	2379.4	2358.6	2343.8	2308.2	2263.8	2237.0	2201.4	2189.5
27.5°	2299.2	2290.4	2263.8	2263.8	2240.0	2231.1	2198.4	2156.9	2136.1	2103.5	2088.6
30°	2156.9	2145.0	2130.2	2127.2	2106.5	2097.5	2067.9	2029.4	2008.5	1981.9	1975.9
32.5°	1987.8	1978.9	1970.0	1967.0	1946.2	1937.4	1916.6	1878.0	1860.2	1836.5	1827.6
35°	1792.0	1786.0	1777.1	1774.1	1765.2	1756.4	1735.6	1705.9	1697.0	1679.2	1670.4
37.5°	1566.5	1572.4	1566.5	1566.5	1557.6	1560.5	1542.8	1525.0	1516.0	1504.2	1498.2
40°	1323.2	1335.1	1344.0	1344.0	1341.0	1352.9	1349.9	1335.1	1332.1	1326.1	1323.2
42.5°	1077.0	1082.9	1100.8	1112.6	1109.6	1139.2	1142.2	1154.1	1163.0	1157.1	1160.0
45°	818.9	836.6	860.4	872.2	887.1	925.6	946.4	970.1	990.9	1002.8	999.9
47.5°	590.4	611.1	637.9	655.6	682.4	729.9	783.2	812.9	842.6	857.4	872.2
50°	427.2	448.0	480.6	507.4	525.1	590.4	646.8	685.4	718.0	738.8	753.6
52.5°	299.6	323.4	359.0	382.8	409.4	471.8	537.0	581.5	617.1	643.8	658.6
55°	207.6	234.4	267.0	290.8	320.4	385.8	448.0	495.5	534.0	557.8	575.6
57.5°	145.4	169.1	201.8	222.5	252.1	314.5	376.8	424.2	462.9	486.5	507.4
60°	97.9	121.6	154.2	175.0	198.8	261.1	317.5	367.9	403.5	427.2	448.0
62.5°	68.2	89.0	121.6	142.4	163.1	216.6	270.0	314.5	350.1	376.8	394.6
65°	53.4	71.2	97.9	115.8	136.5	181.0	225.5	264.0	299.6	326.4	338.2
67.5°	38.6	56.4	77.1	92.0	106.8	145.4	184.0	213.6	246.2	267.0	281.9
70°	26.8	38.6	56.4	68.2	80.1	109.8	139.5	166.1	189.9	204.8	216.6
72.5°	20.8	26.8	38.6	47.5	56.4	77.1	100.9	121.6	139.5	151.2	163.1
75°	11.9	17.8	26.8	32.6	38.6	53.4	68.2	83.1	95.0	103.9	109.8
77.5°	5.9	8.9	14.9	17.8	23.8	32.6	44.5	53.4	62.2	68.2	74.1
80°	5.9	5.9	8.9	8.9	11.9	17.8	23.8	29.6	35.6	41.5	44.5
82.5°	3.0	3.0	5.9	5.9	5.9	8.9	11.9	17.8	20.8	23.8	26.8
85°	3.0	3.0	3.0	3.0	3.0	5.9	5.9	8.9	11.9	14.9	14.9
87.5°	0.0	0.0	3.0	3.0	3.0	3.0	3.0	5.9	5.9	5.9	8.9
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: P252603

CATALOG NUMBER: LE_6B40D010 EC6B30509030 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4	2566.4
2.5°	2557.4	2563.4	2560.4	2566.4	2557.4	2554.5	2560.4	2551.5
5°	2524.8	2527.8	2524.8	2524.8	2518.9	2512.9	2518.9	2510.0
7.5°	2474.4	2474.4	2465.5	2465.5	2453.6	2447.6	2447.6	2444.6
10°	2432.8	2423.9	2415.0	2418.0	2400.1	2394.2	2391.2	2388.2
12.5°	2412.0	2406.1	2391.2	2391.2	2373.5	2367.5	2364.6	2361.6
15°	2388.2	2376.5	2364.6	2361.6	2346.8	2340.9	2337.9	2332.0
17.5°	2346.8	2337.9	2323.0	2323.0	2308.2	2305.2	2299.2	2296.4
20°	2302.2	2290.4	2278.5	2278.5	2260.8	2260.8	2251.9	2254.8
22.5°	2240.0	2231.1	2219.2	2219.2	2204.4	2201.4	2192.5	2189.5
25°	2165.8	2153.9	2145.0	2142.0	2130.2	2124.2	2121.2	2115.4
27.5°	2067.9	2059.0	2050.1	2044.1	2029.4	2026.4	2017.5	2020.4
30°	1946.2	1940.4	1937.4	1931.4	1913.6	1907.6	1907.6	1898.8
32.5°	1812.8	1803.9	1797.9	1789.0	1774.1	1771.2	1762.2	1765.2
35°	1649.6	1637.8	1628.8	1631.8	1614.0	1611.0	1605.1	1608.0
37.5°	1480.5	1468.6	1456.8	1453.8	1438.9	1438.9	1430.0	1430.0
40°	1305.4	1293.5	1287.6	1287.6	1269.8	1272.8	1263.9	1260.9
42.5°	1148.1	1136.2	1133.4	1130.4	1121.5	1118.5	1109.6	1112.6
45°	999.9	996.9	996.9	990.9	982.0	979.0	982.0	982.0
47.5°	869.2	872.2	869.2	869.2	863.4	869.2	863.4	866.4
50°	759.5	765.5	765.5	765.5	762.5	765.5	765.5	768.4
52.5°	667.5	676.5	673.5	676.5	673.5	679.4	676.5	679.4
55°	587.4	593.4	596.4	599.2	599.2	599.2	599.2	599.2
57.5°	513.2	522.1	525.1	528.1	528.1	534.0	528.1	528.1
60°	453.9	462.9	465.8	468.8	468.8	471.8	465.8	468.8
62.5°	400.5	409.4	409.4	412.4	412.4	412.4	406.5	409.4
65°	347.1	350.1	353.0	353.0	350.1	350.1	347.1	350.1
67.5°	287.8	290.8	287.8	287.8	284.9	284.9	278.9	281.9
70°	222.5	222.5	225.5	222.5	219.5	222.5	219.5	216.6
72.5°	166.1	166.1	166.1	163.1	163.1	160.2	163.1	163.1
75°	112.8	112.8	115.8	115.8	115.8	115.8	112.8	112.8
77.5°	74.1	74.1	74.1	74.1	77.1	74.1	74.1	74.1
80°	47.5	47.5	50.4	50.4	47.5	47.5	47.5	47.5
82.5°	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
85°	17.8	17.8	17.8	17.8	14.9	14.9	14.9	14.9
87.5°	8.9	8.9	8.9	8.9	8.9	8.9	5.9	5.9
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)