

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: P252495

Luminaire Tested: **LE_6B40D010 EC6B30508040 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252495
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_6B40D010 EC6B30508040 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4592.5 lumens
Efficiency: N/A
Efficacy: 106.8 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

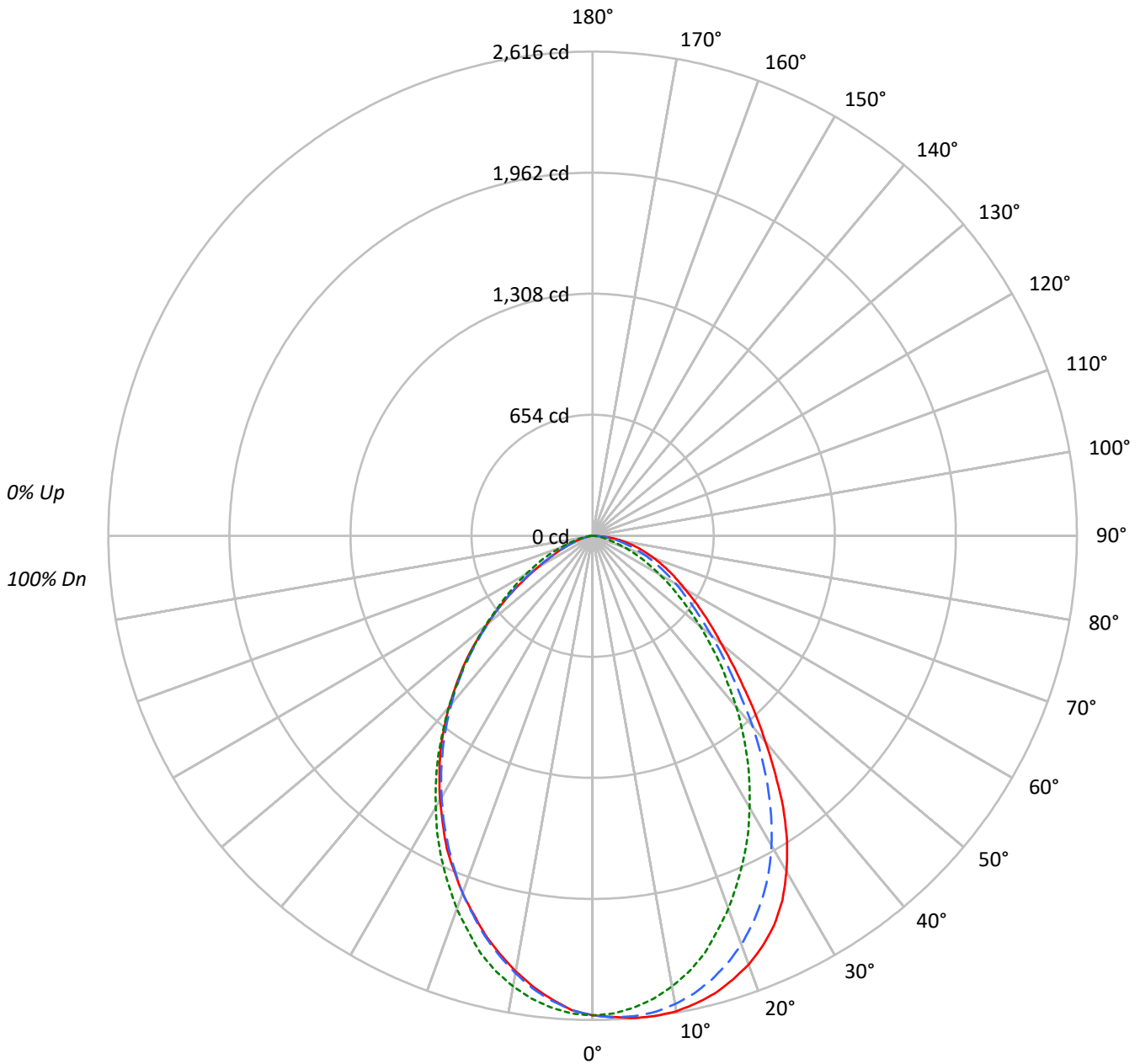
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	100	100
1	111	107	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88	88	88	88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77	77	77	77
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67	67	67	67
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59	59	59	59
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53	53	53	53
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47	47	47	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43	43	43	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39	39	39	39
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35	35	35	35
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33	33	33	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	169032	169032	169032
5°	171321	167556	164720
10°	172832	163769	158291
15°	172806	157738	150930
20°	171132	148894	142660
25°	167077	138845	134180
30°	157763	127683	124157
35°	143009	115787	114353
40°	123499	102974	102667
45°	105910	89644	90308
50°	92037	76691	75605
55°	82680	64663	60580
60°	75131	54463	44612
65°	70548	45000	32758
70°	67259	35003	24035
75°	64404	25409	16334
80°	60827	17583	10820
85°	53896	10779	5390



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.3	5.3
10°-20°	663.8	14.5
20°-30°	921.5	20.1
30°-40°	954.5	20.8
40°-50°	784.3	17.1
50°-60°	539.1	11.7
60°-70°	309.9	6.7
70°-80°	142.5	3.1
80°-90°	34.7	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°	1827.6	39.8
0°-40°	2782.1	60.6
0°-60°	4105.5	89.4
0°-90°	4592.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4592.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2591	2591	2591	2591	2591	
5°	2616	2605	2558	2522	2515	249
15°	2558	2483	2335	2242	2235	721
25°	2321	2166	1929	1846	1864	1062
35°	1796	1648	1454	1411	1436	1113
45°	1148	1062	972	961	979	894
55°	727	658	568	536	533	654
65°	457	399	292	205	212	455
75°	256	202	101	65	65	270
85°	72	50	14	7	7	81
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°	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9
2.5°	2601.6	2623.2	2608.9	2605.2	2612.5	2612.5	2612.5	2601.6	2608.9	2598.0	2605.2
5°	2616.0	2634.0	2619.6	2612.5	2619.6	2623.2	2612.5	2605.2	2616.0	2601.6	2605.2
7.5°	2616.0	2634.0	2619.6	2616.0	2619.6	2619.6	2616.0	2601.6	2608.9	2594.5	2594.5
10°	2608.9	2623.2	2608.9	2601.6	2605.2	2601.6	2601.6	2583.6	2587.2	2569.2	2569.2
12.5°	2587.2	2605.2	2587.2	2580.0	2580.0	2580.0	2569.2	2554.9	2558.5	2536.9	2533.2
15°	2558.5	2572.9	2554.9	2547.6	2547.6	2544.1	2536.9	2515.2	2515.2	2493.8	2482.9
17.5°	2515.2	2529.6	2515.2	2504.5	2500.9	2493.8	2486.5	2464.9	2457.8	2432.5	2421.8
20°	2464.9	2475.8	2461.2	2450.5	2443.4	2436.1	2421.8	2400.1	2393.0	2367.8	2349.8
22.5°	2400.1	2414.5	2393.0	2382.1	2375.0	2364.1	2349.8	2328.1	2317.4	2285.0	2263.4
25°	2321.0	2328.1	2310.1	2299.4	2285.0	2277.8	2267.0	2238.2	2227.4	2191.4	2166.2
27.5°	2220.2	2227.4	2205.9	2198.6	2180.6	2173.4	2159.0	2133.9	2119.5	2083.5	2058.2
30°	2094.2	2101.5	2087.1	2076.2	2061.9	2047.5	2036.8	2011.5	1989.9	1953.9	1932.4
32.5°	1953.9	1964.8	1950.4	1936.0	1910.8	1914.4	1896.4	1871.1	1853.1	1820.8	1795.6
35°	1795.6	1802.8	1784.8	1781.2	1766.9	1752.4	1734.4	1716.5	1705.6	1669.6	1648.1
37.5°	1619.2	1637.2	1619.2	1604.9	1597.8	1586.9	1576.1	1550.9	1543.8	1522.1	1493.4
40°	1450.1	1461.0	1450.1	1435.8	1425.0	1425.0	1410.6	1396.1	1378.2	1356.6	1345.8
42.5°	1299.0	1291.9	1288.2	1281.0	1266.6	1263.0	1259.5	1241.5	1230.6	1209.1	1191.1
45°	1147.9	1151.5	1144.2	1140.8	1129.9	1122.8	1115.5	1101.1	1097.5	1075.9	1061.5
47.5°	1022.0	1018.4	1011.1	1011.1	1004.0	996.8	989.5	978.8	975.1	957.1	942.8
50°	906.8	910.4	906.8	903.2	892.4	888.8	881.6	874.4	867.2	849.2	834.9
52.5°	813.2	809.6	806.0	806.0	795.2	791.6	784.5	777.2	770.0	752.1	741.2
55°	726.9	726.9	723.2	719.6	708.9	705.2	701.8	694.5	683.8	669.2	658.5
57.5°	647.8	647.8	644.1	640.5	633.4	633.4	626.1	618.9	611.8	597.4	583.0
60°	575.8	579.4	575.8	572.1	565.0	565.0	561.4	550.5	547.0	529.0	518.1
62.5°	514.6	514.6	514.6	511.0	507.4	500.1	500.1	489.4	482.1	471.4	457.0
65°	457.0	457.0	457.0	453.4	446.2	442.6	439.0	431.8	424.6	413.9	399.4
67.5°	403.0	403.0	403.0	399.4	392.2	388.6	385.0	381.4	370.6	359.9	345.5
70°	352.6	352.6	349.0	345.5	341.9	338.2	334.6	327.5	320.2	305.9	295.1
72.5°	302.2	302.2	302.2	295.1	291.5	291.5	284.2	280.6	273.5	259.1	248.2
75°	255.5	251.9	251.9	248.2	244.8	241.1	237.5	233.9	223.1	215.9	201.5
77.5°	208.8	208.8	205.1	201.5	201.5	197.9	194.4	187.1	183.5	172.8	161.9
80°	161.9	161.9	161.9	161.9	158.4	154.8	154.8	147.5	143.9	133.1	126.0
82.5°	122.4	118.8	118.8	118.8	115.1	111.5	111.5	108.0	104.4	97.1	90.0
85°	72.0	68.4	68.4	68.4	64.8	64.8	61.1	61.1	57.6	50.4	50.4
87.5°	21.6	21.6	25.2	25.2	21.6	21.6	21.6	21.6	21.6	18.0	18.0
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°	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9
2.5°	2598.0	2608.9	2594.5	2590.9	2605.2	2598.0	2594.5	2587.2	2590.9	2583.6	2572.9
5°	2594.5	2608.9	2590.9	2580.0	2598.0	2587.2	2580.0	2572.9	2572.9	2558.5	2551.2
7.5°	2583.6	2590.9	2572.9	2562.1	2572.9	2562.1	2554.9	2544.1	2540.5	2522.5	2511.6
10°	2554.9	2562.1	2540.5	2526.1	2536.9	2522.5	2511.6	2500.9	2493.8	2472.1	2457.8
12.5°	2515.2	2518.9	2493.8	2475.8	2482.9	2472.1	2454.1	2439.8	2432.5	2410.9	2393.0
15°	2461.2	2464.9	2436.1	2410.9	2418.1	2403.8	2382.1	2367.8	2357.0	2335.4	2310.1
17.5°	2396.5	2393.0	2360.5	2335.4	2339.0	2321.0	2299.4	2277.8	2263.4	2238.2	2220.2
20°	2324.6	2313.8	2277.8	2249.0	2252.6	2231.0	2205.9	2184.2	2166.2	2144.6	2119.5
22.5°	2234.6	2220.2	2187.9	2151.9	2155.5	2137.5	2101.5	2083.5	2065.5	2036.8	2015.1
25°	2137.5	2115.9	2083.5	2047.5	2047.5	2025.9	1997.1	1975.5	1957.5	1928.8	1903.5
27.5°	2022.2	2011.5	1968.4	1939.5	1936.0	1914.4	1889.1	1864.0	1842.4	1817.2	1792.0
30°	1896.4	1878.4	1846.0	1813.6	1806.4	1788.4	1763.2	1734.4	1720.0	1694.9	1673.2
32.5°	1763.2	1745.2	1709.2	1676.9	1673.2	1658.9	1637.2	1608.5	1594.1	1576.1	1561.8
35°	1612.1	1604.9	1568.9	1543.8	1543.8	1529.4	1507.8	1482.5	1471.8	1453.8	1435.8
37.5°	1468.1	1457.4	1425.0	1403.4	1403.4	1385.4	1363.8	1353.0	1342.2	1327.8	1317.0
40°	1317.0	1309.9	1284.6	1263.0	1266.6	1252.2	1237.9	1223.5	1216.2	1209.1	1198.2
42.5°	1176.6	1169.5	1151.5	1133.5	1133.5	1122.8	1108.2	1097.5	1090.4	1079.5	1075.9
45°	1050.8	1040.0	1025.5	1007.5	1007.5	996.8	989.5	982.4	978.8	971.6	960.8
47.5°	928.4	921.2	906.8	888.8	888.8	888.8	874.4	863.6	863.6	856.4	852.9
50°	824.0	813.2	802.5	788.0	788.0	780.9	770.0	759.2	759.2	755.6	748.5
52.5°	726.9	719.6	705.2	690.9	690.9	683.8	672.9	669.2	665.8	654.9	651.2
55°	644.1	636.9	626.1	608.1	604.5	600.9	590.1	583.0	579.4	568.5	568.5
57.5°	568.5	561.4	543.4	532.6	529.0	521.8	511.0	503.8	500.1	493.0	485.8
60°	503.8	493.0	478.6	464.2	460.6	453.4	442.6	435.4	431.8	417.4	410.2
62.5°	442.6	431.8	417.4	403.0	399.4	392.2	377.9	370.6	363.5	349.0	341.9
65°	385.0	374.2	359.9	345.5	338.2	334.6	320.2	309.5	302.2	291.5	277.1
67.5°	331.0	320.2	305.9	287.9	287.9	277.1	266.2	255.5	244.8	233.9	223.1
70°	280.6	269.9	255.5	241.1	237.5	230.2	219.5	205.1	197.9	183.5	172.8
72.5°	233.9	223.1	208.8	194.4	190.8	183.5	172.8	158.4	147.5	136.8	126.0
75°	190.8	179.9	165.5	154.8	151.1	143.9	133.1	118.8	108.0	100.8	90.0
77.5°	151.1	140.4	129.5	118.8	115.1	108.0	97.1	90.0	79.1	72.0	61.1
80°	115.1	108.0	97.1	90.0	86.4	79.1	72.0	61.1	54.0	46.8	43.1
82.5°	82.8	75.6	68.4	57.6	57.6	50.4	46.8	39.6	32.4	28.8	25.2
85°	46.8	39.6	36.0	32.4	28.8	28.8	25.2	21.6	18.0	14.4	14.4
87.5°	14.4	14.4	10.8	10.8	10.8	10.8	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°	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9
2.5°	2572.9	2576.5	2569.2	2576.5	2569.2	2572.9	2565.6	2572.9	2565.6	2572.9	2558.5
5°	2547.6	2547.6	2536.9	2544.1	2536.9	2540.5	2526.1	2529.6	2522.5	2529.6	2515.2
7.5°	2504.5	2508.1	2490.1	2497.2	2486.5	2486.5	2475.8	2479.2	2468.5	2472.1	2461.2
10°	2454.1	2450.5	2432.5	2439.8	2425.4	2425.4	2414.5	2414.5	2400.1	2403.8	2389.4
12.5°	2382.1	2378.5	2357.0	2364.1	2349.8	2349.8	2339.0	2339.0	2324.6	2331.8	2317.4
15°	2299.4	2295.8	2274.2	2277.8	2263.4	2263.4	2249.0	2252.6	2241.8	2249.0	2234.6
17.5°	2205.9	2202.2	2180.6	2184.2	2166.2	2169.9	2159.0	2155.5	2148.2	2151.9	2141.0
20°	2108.6	2101.5	2079.9	2083.5	2076.2	2065.5	2058.2	2061.9	2054.8	2061.9	2051.1
22.5°	2007.9	1993.5	1975.5	1975.5	1968.4	1968.4	1957.5	1964.8	1950.4	1961.1	1953.9
25°	1892.8	1882.0	1867.6	1874.8	1860.4	1860.4	1849.6	1853.1	1846.0	1853.1	1846.0
27.5°	1781.2	1774.0	1752.4	1759.6	1748.9	1752.4	1741.6	1745.2	1741.6	1748.9	1741.6
30°	1662.5	1658.9	1644.5	1644.5	1640.9	1637.2	1633.6	1633.6	1630.1	1640.9	1633.6
32.5°	1550.9	1540.1	1525.8	1536.5	1518.5	1529.4	1522.1	1529.4	1522.1	1529.4	1525.8
35°	1435.8	1432.1	1414.1	1417.8	1414.1	1414.1	1410.6	1410.6	1410.6	1421.4	1421.4
37.5°	1313.4	1309.9	1299.0	1302.6	1295.4	1291.9	1291.9	1299.0	1299.0	1306.2	1306.2
40°	1194.6	1198.2	1187.5	1187.5	1183.9	1183.9	1183.9	1191.1	1187.5	1194.6	1191.1
42.5°	1075.9	1075.9	1065.1	1068.8	1065.1	1068.8	1068.8	1075.9	1075.9	1079.5	1075.9
45°	964.4	964.4	960.8	964.4	957.1	960.8	957.1	964.4	960.8	964.4	964.4
47.5°	852.9	852.9	852.9	849.2	849.2	849.2	849.2	849.2	845.6	852.9	849.2
50°	748.5	752.1	748.5	748.5	744.9	748.5	744.9	744.9	737.6	741.2	741.2
52.5°	654.9	654.9	647.8	647.8	647.8	644.1	644.1	644.1	640.5	640.5	633.4
55°	565.0	565.0	557.8	557.8	554.1	550.5	547.0	547.0	536.1	536.1	525.4
57.5°	482.1	478.6	467.8	467.8	460.6	457.0	453.4	449.8	442.6	435.4	431.8
60°	406.6	399.4	392.2	388.6	381.4	374.2	367.0	359.9	352.6	349.0	345.5
62.5°	334.6	323.9	316.6	313.0	305.9	295.1	287.9	280.6	273.5	269.9	262.6
65°	269.9	259.1	248.2	244.8	237.5	230.2	219.5	212.2	205.1	201.5	201.5
67.5°	212.2	201.5	187.1	187.1	179.9	172.8	165.5	158.4	154.8	158.4	158.4
70°	158.4	151.1	140.4	136.8	129.5	122.4	118.8	118.8	118.8	122.4	118.8
72.5°	118.8	108.0	100.8	97.1	93.5	90.0	90.0	90.0	86.4	90.0	90.0
75°	82.8	75.6	68.4	68.4	64.8	64.8	64.8	64.8	64.8	64.8	64.8
77.5°	57.6	50.4	46.8	46.8	46.8	43.1	43.1	43.1	43.1	43.1	43.1
80°	36.0	36.0	32.4	32.4	28.8	28.8	28.8	28.8	28.8	28.8	28.8
82.5°	21.6	21.6	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
85°	10.8	10.8	10.8	10.8	10.8	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: P252495

CATALOG NUMBER: LE_6B40D010 EC6B30508040 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9	2590.9
2.5°	2558.5	2569.2	2554.9	2565.6	2562.1	2558.5	2551.2	2565.6
5°	2515.2	2518.9	2504.5	2518.9	2515.2	2508.1	2500.9	2515.2
7.5°	2454.1	2464.9	2446.9	2461.2	2457.8	2450.5	2443.4	2457.8
10°	2385.8	2396.5	2382.1	2393.0	2393.0	2385.8	2375.0	2389.4
12.5°	2310.1	2317.4	2303.0	2317.4	2313.8	2306.6	2303.0	2313.8
15°	2227.4	2238.2	2223.9	2234.6	2231.0	2227.4	2223.9	2234.6
17.5°	2137.5	2148.2	2137.5	2148.2	2148.2	2137.5	2133.9	2141.0
20°	2047.5	2054.8	2043.9	2054.8	2051.1	2051.1	2043.9	2054.8
22.5°	1946.8	1957.5	1950.4	1957.5	1953.9	1953.9	1950.4	1957.5
25°	1846.0	1856.8	1846.0	1856.8	1853.1	1853.1	1846.0	1864.0
27.5°	1745.2	1752.4	1741.6	1756.0	1752.4	1745.2	1748.9	1752.4
30°	1637.2	1644.5	1637.2	1648.1	1648.1	1648.1	1640.9	1648.1
32.5°	1529.4	1540.1	1529.4	1540.1	1536.5	1536.5	1532.9	1540.1
35°	1421.4	1425.0	1417.8	1428.6	1428.6	1432.1	1425.0	1435.8
37.5°	1309.9	1313.4	1309.9	1313.4	1320.6	1309.9	1317.0	1320.6
40°	1194.6	1201.9	1198.2	1201.9	1201.9	1205.5	1201.9	1205.5
42.5°	1079.5	1086.8	1079.5	1090.4	1086.8	1086.8	1090.4	1090.4
45°	960.8	971.6	964.4	971.6	975.1	971.6	971.6	978.8
47.5°	849.2	856.4	852.9	856.4	856.4	856.4	856.4	863.6
50°	737.6	741.2	741.2	744.9	744.9	748.5	741.2	744.9
52.5°	626.1	633.4	633.4	633.4	629.8	633.4	633.4	633.4
55°	525.4	529.0	521.8	529.0	529.0	525.4	525.4	532.6
57.5°	428.2	428.2	428.2	428.2	428.2	424.6	428.2	428.2
60°	338.2	341.9	338.2	338.2	338.2	338.2	334.6	341.9
62.5°	262.6	262.6	259.1	262.6	262.6	262.6	266.2	266.2
65°	205.1	208.8	205.1	208.8	208.8	208.8	208.8	212.2
67.5°	161.9	161.9	161.9	161.9	161.9	161.9	161.9	161.9
70°	122.4	122.4	122.4	126.0	122.4	122.4	122.4	126.0
72.5°	90.0	90.0	90.0	90.0	90.0	90.0	93.5	93.5
75°	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8
77.5°	43.1	43.1	43.1	46.8	43.1	46.8	43.1	43.1
80°	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
82.5°	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
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)