

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: P252707

Luminaire Tested: **LE_6B40D010 EC6B30509030 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252707
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B40D010 EC6B30509030 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4163.8 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

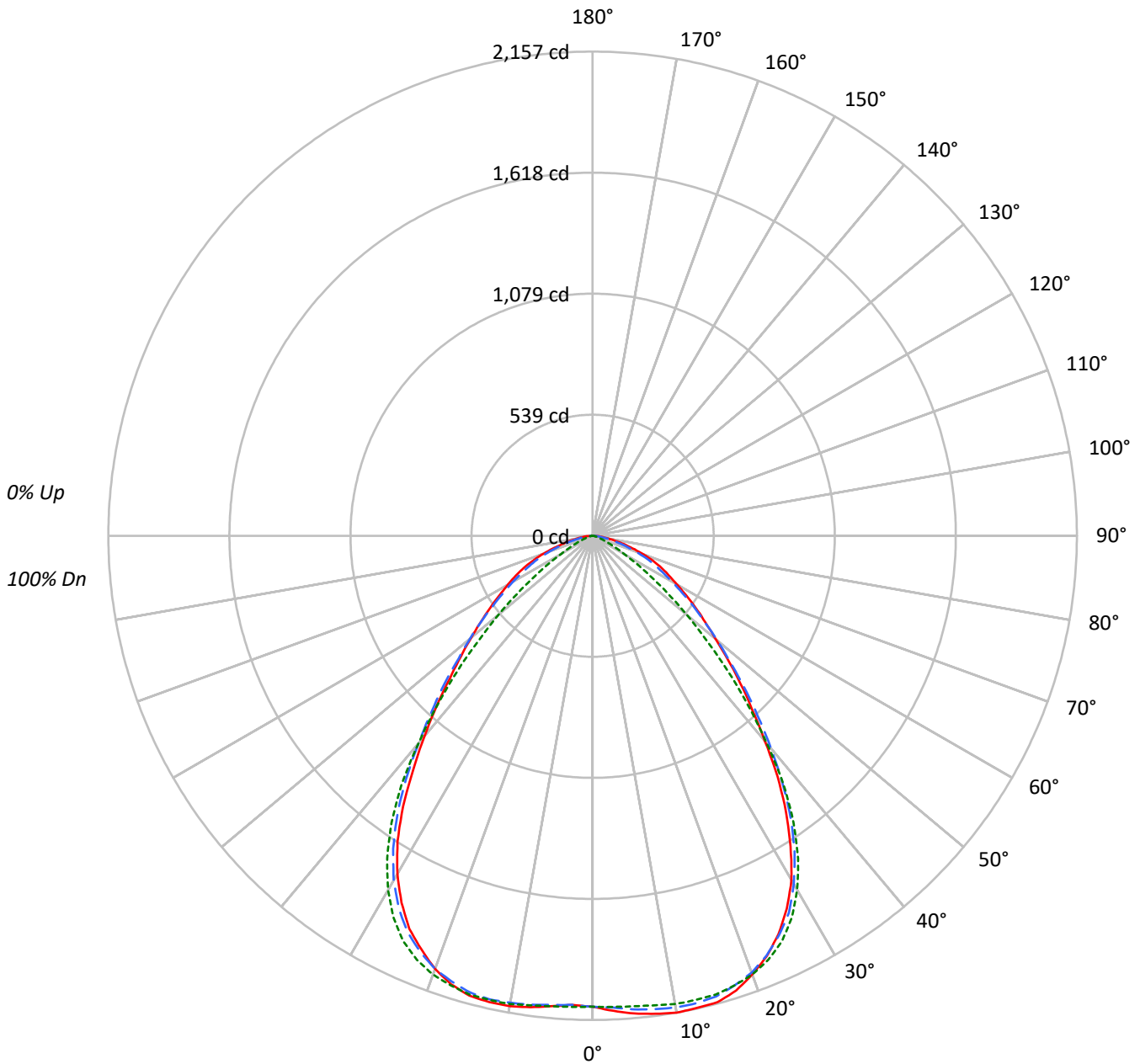
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40																			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	136862	136862	136862
5°	139912	137778	137778
10°	142902	140344	140941
15°	145296	142892	143290
20°	144409	144409	142549
25°	140976	143531	139046
30°	133446	137250	130990
35°	119578	124309	117220
40°	101586	102846	99056
45°	85972	78572	82945
50°	72580	55417	71667
55°	63787	35772	63116
60°	56524	21295	56903
65°	52209	12828	52209
70°	45284	7363	44159
75°	35895	4487	33651
80°	26750	3344	25623
85°	24403	2246	22157



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.0	4.9
10°-20°	597.7	14.4
20°-30°	899.0	21.6
30°-40°	945.2	22.7
40°-50°	706.1	17.0
50°-60°	439.6	10.6
60°-70°	250.0	6.0
70°-80°	103.0	2.5
80°-90°	21.3	0.5
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°	1698.7	40.8
0°-40°	2643.9	63.5
0°-60°	3789.5	91.0
0°-90°	4163.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4163.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2098	2098	2098	2098	2098	
5°	2136	2118	2104	2098	2104	204
15°	2151	2124	2116	2107	2122	605
25°	1958	1964	1994	1949	1932	896
35°	1501	1540	1561	1516	1472	932
45°	932	952	852	935	899	722
55°	561	549	314	540	555	504
65°	338	303	83	303	338	333
75°	142	113	18	110	134	155
85°	33	21	3	18	30	36
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°	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8
2.5°	2118.5	2115.6	2118.5	2112.6	2109.6	2109.6	2112.6	2106.8	2103.8	2106.8	2103.8
5°	2136.4	2130.4	2133.4	2130.4	2124.5	2124.5	2127.5	2118.5	2118.5	2121.5	2118.5
7.5°	2148.2	2148.2	2148.2	2142.2	2139.4	2136.4	2142.2	2133.4	2130.4	2130.4	2127.5
10°	2157.1	2154.1	2157.1	2151.2	2145.2	2142.2	2148.2	2142.2	2136.4	2142.2	2133.4
12.5°	2154.1	2154.1	2154.1	2151.2	2145.2	2142.2	2148.2	2139.4	2136.4	2139.4	2133.4
15°	2151.2	2142.2	2145.2	2142.2	2133.4	2133.4	2136.4	2127.5	2121.5	2130.4	2124.5
17.5°	2124.5	2118.5	2121.5	2115.6	2109.6	2106.8	2109.6	2106.8	2100.8	2106.8	2100.8
20°	2080.0	2080.0	2083.0	2077.0	2071.1	2068.1	2074.0	2068.1	2062.1	2071.1	2071.1
22.5°	2026.6	2026.6	2026.6	2023.6	2020.6	2020.6	2020.6	2017.6	2014.8	2020.6	2023.6
25°	1958.4	1955.4	1958.4	1961.2	1958.4	1955.4	1958.4	1958.4	1952.4	1964.2	1964.2
27.5°	1872.2	1872.2	1878.2	1875.2	1875.2	1872.2	1878.2	1878.2	1875.2	1884.1	1893.0
30°	1771.4	1765.5	1771.4	1771.4	1774.4	1774.4	1777.4	1777.4	1777.4	1786.2	1792.1
32.5°	1640.9	1643.8	1652.8	1649.8	1646.8	1655.6	1655.6	1661.6	1664.6	1670.5	1673.5
35°	1501.4	1504.4	1504.4	1507.4	1513.2	1507.4	1522.1	1519.2	1522.1	1534.0	1540.0
37.5°	1353.0	1344.1	1359.0	1353.0	1356.0	1356.0	1361.9	1364.9	1373.8	1388.6	1388.6
40°	1192.8	1195.8	1201.8	1204.6	1207.6	1207.6	1207.6	1216.5	1219.5	1237.2	1234.4
42.5°	1053.4	1053.4	1059.2	1062.2	1062.2	1062.2	1062.2	1071.1	1077.1	1083.0	1089.0
45°	931.8	922.8	928.8	928.8	934.6	931.8	937.6	943.5	946.5	955.4	952.5
47.5°	816.0	813.0	816.0	819.0	816.0	819.0	821.9	824.9	827.9	827.9	827.9
50°	715.1	715.1	718.0	721.0	721.0	721.0	721.0	724.0	724.0	729.9	724.0
52.5°	632.0	635.0	635.0	632.0	635.0	635.0	638.0	638.0	635.0	635.0	626.1
55°	560.8	557.9	560.8	557.9	560.8	560.8	557.9	557.9	554.9	551.9	548.9
57.5°	492.5	492.5	492.5	492.5	489.6	492.5	489.6	486.6	486.6	480.6	471.8
60°	433.2	433.2	433.2	433.2	433.2	430.2	433.2	430.2	424.2	418.4	406.5
62.5°	382.8	379.8	382.8	379.8	379.8	376.9	376.9	373.9	367.9	362.0	350.1
65°	338.2	341.2	338.2	338.2	335.2	332.4	332.4	329.4	320.5	314.5	302.6
67.5°	290.8	287.9	287.9	287.9	284.9	284.9	284.9	278.9	273.0	264.1	252.2
70°	237.4	237.4	237.4	234.4	234.4	231.5	231.5	228.5	222.5	216.6	201.8
72.5°	186.9	186.9	186.9	181.0	184.0	181.0	181.0	175.1	172.1	163.2	154.2
75°	142.4	142.4	139.5	139.5	136.5	133.5	133.5	130.5	127.6	121.6	112.8
77.5°	103.9	103.9	103.9	100.9	97.9	95.0	95.0	92.0	89.0	86.0	80.1
80°	71.2	71.2	71.2	71.2	68.2	65.2	65.2	62.2	62.2	59.4	53.4
82.5°	47.5	47.5	47.5	47.5	44.5	44.5	44.5	41.5	38.6	38.6	32.6
85°	32.6	32.6	29.6	29.6	29.6	29.6	26.8	26.8	23.8	20.8	20.8
87.5°	17.8	17.8	17.8	17.8	14.9	14.9	14.9	14.9	11.9	11.9	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8
2.5°	2112.6	2112.6	2109.6	2100.8	2103.8	2100.8	2103.8	2100.8	2091.9	2100.8	2091.9
5°	2124.5	2127.5	2121.5	2109.6	2112.6	2109.6	2109.6	2106.8	2097.8	2103.8	2097.8
7.5°	2136.4	2133.4	2130.4	2118.5	2121.5	2118.5	2118.5	2112.6	2103.8	2109.6	2100.8
10°	2142.2	2142.2	2136.4	2124.5	2124.5	2121.5	2124.5	2121.5	2109.6	2118.5	2112.6
12.5°	2142.2	2139.4	2139.4	2124.5	2127.5	2124.5	2127.5	2121.5	2112.6	2118.5	2115.6
15°	2133.4	2133.4	2130.4	2115.6	2118.5	2118.5	2121.5	2115.6	2106.8	2115.6	2109.6
17.5°	2115.6	2115.6	2112.6	2100.8	2106.8	2106.8	2109.6	2103.8	2094.9	2100.8	2100.8
20°	2080.0	2083.0	2083.0	2074.0	2080.0	2080.0	2083.0	2080.0	2077.0	2080.0	2074.0
22.5°	2038.5	2044.4	2044.4	2035.5	2041.4	2041.4	2050.2	2047.4	2041.4	2044.4	2041.4
25°	1976.1	1982.1	1988.0	1982.1	1988.0	1988.0	1996.9	1993.9	1988.0	1993.9	1985.0
27.5°	1904.9	1907.9	1913.9	1907.9	1916.8	1913.9	1922.8	1919.8	1910.9	1919.8	1916.8
30°	1804.0	1815.9	1824.8	1815.9	1824.8	1824.8	1830.8	1827.8	1824.8	1821.9	1821.9
32.5°	1691.2	1703.1	1703.1	1700.1	1706.1	1706.1	1709.1	1703.1	1700.1	1703.1	1706.1
35°	1551.9	1557.8	1563.8	1560.8	1563.8	1566.6	1563.8	1566.6	1557.8	1560.8	1560.8
37.5°	1400.5	1406.4	1406.4	1397.5	1403.5	1403.5	1397.5	1397.5	1391.6	1397.5	1385.6
40°	1240.2	1234.4	1237.2	1231.4	1225.5	1225.5	1222.5	1210.6	1204.6	1207.6	1210.6
42.5°	1083.0	1083.0	1074.1	1059.2	1044.5	1044.5	1035.5	1029.6	1017.8	1023.6	1020.8
45°	949.5	934.6	922.8	899.0	890.1	884.2	869.4	854.5	848.6	851.6	848.6
47.5°	821.9	810.0	780.4	747.8	738.9	729.9	712.1	694.4	688.4	682.5	682.5
50°	715.1	694.4	661.6	626.1	611.2	596.4	572.6	554.9	543.0	546.0	546.0
52.5°	617.1	593.4	554.9	510.4	492.5	474.8	454.0	433.2	424.2	421.4	421.4
55°	531.1	504.4	465.9	415.4	400.6	379.8	353.1	329.4	317.5	314.5	320.5
57.5°	454.0	430.2	385.8	335.2	317.5	296.8	270.0	249.2	234.4	231.5	234.4
60°	391.6	359.0	320.5	273.0	249.2	231.5	201.8	184.0	169.1	163.2	166.1
62.5°	329.4	299.6	261.1	213.6	195.9	178.0	151.4	130.5	118.6	115.8	118.6
65°	281.9	252.2	216.6	175.1	157.2	139.5	115.8	95.0	86.0	83.1	86.0
67.5°	234.4	207.8	178.0	139.5	124.6	109.8	86.0	71.2	59.4	56.4	59.4
70°	189.9	166.1	136.5	109.8	95.0	83.1	65.2	50.5	41.5	38.6	41.5
72.5°	142.4	124.6	103.9	80.1	71.2	62.2	47.5	35.6	29.6	26.8	29.6
75°	103.9	89.0	74.1	56.4	50.5	44.5	32.6	23.8	20.8	17.8	20.8
77.5°	71.2	62.2	50.5	38.6	32.6	29.6	20.8	17.8	14.9	11.9	11.9
80°	47.5	41.5	32.6	26.8	23.8	20.8	14.9	11.9	8.9	8.9	8.9
82.5°	29.6	23.8	20.8	14.9	11.9	11.9	8.9	5.9	5.9	5.9	5.9
85°	17.8	14.9	11.9	8.9	5.9	5.9	3.0	3.0	3.0	3.0	3.0
87.5°	8.9	5.9	5.9	3.0	3.0	3.0	3.0	3.0	0.0	0.0	3.0
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°	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8
2.5°	2097.8	2091.9	2091.9	2094.9	2097.8	2100.8	2094.9	2091.9	2091.9	2100.8	2094.9
5°	2097.8	2094.9	2094.9	2094.9	2100.8	2103.8	2097.8	2094.9	2097.8	2106.8	2103.8
7.5°	2106.8	2100.8	2103.8	2103.8	2106.8	2112.6	2106.8	2103.8	2106.8	2115.6	2109.6
10°	2112.6	2106.8	2109.6	2106.8	2115.6	2118.5	2112.6	2109.6	2112.6	2124.5	2121.5
12.5°	2115.6	2112.6	2112.6	2109.6	2118.5	2121.5	2115.6	2112.6	2115.6	2124.5	2121.5
15°	2109.6	2106.8	2106.8	2106.8	2112.6	2118.5	2109.6	2106.8	2106.8	2115.6	2112.6
17.5°	2097.8	2091.9	2091.9	2091.9	2094.9	2097.8	2088.9	2085.9	2083.0	2091.9	2088.9
20°	2077.0	2071.1	2065.1	2065.1	2068.1	2068.1	2062.1	2053.2	2053.2	2056.2	2050.2
22.5°	2038.5	2035.5	2029.5	2026.6	2032.5	2029.5	2017.6	2008.8	2005.8	2008.8	2002.9
25°	1985.0	1979.1	1976.1	1973.1	1976.1	1973.1	1961.2	1949.4	1949.4	1949.4	1940.5
27.5°	1910.9	1904.9	1902.0	1902.0	1904.9	1899.0	1887.1	1875.2	1869.4	1869.4	1860.4
30°	1815.9	1815.9	1813.0	1810.0	1807.0	1807.0	1789.2	1777.4	1771.4	1774.4	1768.4
32.5°	1700.1	1697.2	1694.2	1685.4	1688.4	1685.4	1670.5	1661.6	1652.8	1646.8	1643.8
35°	1551.9	1551.9	1548.9	1548.9	1548.9	1545.9	1531.0	1522.1	1516.2	1513.2	1504.4
37.5°	1388.6	1385.6	1382.8	1382.8	1382.8	1382.8	1373.8	1364.9	1364.9	1361.9	1356.0
40°	1204.6	1207.6	1210.6	1207.6	1216.5	1225.5	1213.6	1207.6	1204.6	1213.6	1201.8
42.5°	1026.6	1023.6	1038.5	1041.5	1041.5	1056.2	1059.2	1062.2	1059.2	1065.2	1065.2
45°	854.5	851.6	866.4	872.4	887.1	905.0	913.9	928.8	934.6	940.6	934.6
47.5°	691.4	703.2	715.1	729.9	741.8	771.5	789.2	804.1	810.0	819.0	819.0
50°	554.9	566.8	587.5	599.4	614.2	649.8	679.5	700.2	712.1	721.0	718.0
52.5°	427.2	448.0	474.8	486.6	507.4	548.9	581.6	605.2	620.1	629.0	632.0
55°	329.4	347.1	373.9	391.6	412.4	457.0	498.5	525.2	540.0	551.9	557.9
57.5°	243.2	264.1	293.8	308.6	332.4	382.8	418.4	451.0	468.8	483.6	486.6
60°	178.0	198.8	225.5	243.2	267.0	317.5	359.0	388.8	409.5	421.4	427.2
62.5°	127.6	148.4	175.1	192.9	213.6	258.1	299.6	329.4	350.1	365.0	373.9
65°	92.0	112.8	139.5	154.2	172.1	213.6	252.2	281.9	302.6	320.5	326.4
67.5°	68.2	83.1	106.9	121.6	139.5	172.1	204.8	231.5	252.2	267.0	273.0
70°	50.5	62.2	83.1	92.0	103.9	133.5	160.2	184.0	201.8	213.6	219.6
72.5°	35.6	44.5	59.4	68.2	77.1	100.9	121.6	139.5	151.4	163.2	169.1
75°	23.8	29.6	41.5	47.5	53.4	71.2	86.0	100.9	109.8	118.6	121.6
77.5°	14.9	20.8	29.6	32.6	38.6	47.5	59.4	68.2	74.1	80.1	86.0
80°	8.9	11.9	17.8	20.8	23.8	32.6	38.6	44.5	50.5	56.4	59.4
82.5°	5.9	8.9	11.9	11.9	14.9	17.8	23.8	29.6	32.6	35.6	38.6
85°	3.0	3.0	5.9	5.9	8.9	8.9	11.9	14.9	17.8	20.8	23.8
87.5°	3.0	3.0	3.0	3.0	5.9	5.9	8.9	8.9	8.9	11.9	11.9
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: P252707

CATALOG NUMBER: LE_6B40D010 EC6B30509030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8	2097.8
2.5°	2088.9	2097.8	2088.9	2094.9	2091.9	2091.9	2088.9	2091.9
5°	2097.8	2109.6	2097.8	2106.8	2100.8	2100.8	2100.8	2103.8
7.5°	2106.8	2118.5	2109.6	2118.5	2115.6	2112.6	2112.6	2118.5
10°	2115.6	2124.5	2118.5	2127.5	2124.5	2121.5	2121.5	2127.5
12.5°	2115.6	2127.5	2121.5	2130.4	2127.5	2124.5	2124.5	2127.5
15°	2106.8	2121.5	2112.6	2121.5	2118.5	2115.6	2115.6	2121.5
17.5°	2080.0	2091.9	2085.9	2091.9	2091.9	2088.9	2091.9	2094.9
20°	2044.4	2053.2	2047.4	2053.2	2053.2	2047.4	2050.2	2053.2
22.5°	1993.9	2002.9	1996.9	2002.9	1999.9	1996.9	1996.9	1993.9
25°	1931.6	1943.5	1934.6	1940.5	1934.6	1928.6	1928.6	1931.6
27.5°	1854.5	1863.4	1851.5	1857.5	1851.5	1845.6	1845.6	1842.6
30°	1753.6	1756.5	1747.6	1753.6	1747.6	1744.8	1738.8	1738.8
32.5°	1632.0	1634.9	1626.0	1626.0	1620.1	1620.1	1608.2	1617.1
35°	1489.5	1492.5	1489.5	1486.5	1477.6	1474.6	1471.8	1471.8
37.5°	1341.1	1341.1	1332.2	1329.2	1323.4	1317.4	1320.4	1311.5
40°	1189.9	1186.9	1178.0	1180.9	1178.0	1169.1	1166.1	1163.1
42.5°	1047.4	1047.4	1038.5	1041.5	1035.5	1032.6	1023.6	1026.6
45°	922.8	922.8	913.9	913.9	910.9	902.0	905.0	899.0
47.5°	810.0	810.0	807.1	807.1	798.1	795.2	795.2	795.2
50°	712.1	712.1	712.1	712.1	709.1	706.1	703.2	706.1
52.5°	629.0	635.0	632.0	632.0	629.0	626.1	623.1	623.1
55°	554.9	557.9	557.9	560.8	557.9	554.9	557.9	554.9
57.5°	489.6	495.5	495.5	495.5	495.5	495.5	492.5	489.6
60°	433.2	436.1	436.1	439.1	439.1	439.1	436.1	436.1
62.5°	376.9	382.8	385.8	385.8	388.8	385.8	385.8	385.8
65°	332.4	338.2	341.2	338.2	341.2	341.2	338.2	338.2
67.5°	278.9	284.9	284.9	284.9	284.9	287.9	284.9	284.9
70°	225.5	231.5	228.5	231.5	231.5	231.5	231.5	231.5
72.5°	172.1	175.1	178.0	178.0	181.0	178.0	178.0	178.0
75°	124.6	130.5	130.5	130.5	130.5	133.5	133.5	133.5
77.5°	89.0	92.0	92.0	95.0	95.0	95.0	95.0	97.9
80°	62.2	62.2	65.2	65.2	68.2	68.2	68.2	68.2
82.5°	41.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
85°	23.8	26.8	26.8	26.8	26.8	29.6	29.6	29.6
87.5°	14.9	14.9	14.9	14.9	14.9	14.9	11.9	11.9
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)