

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: P252700

Luminaire Tested: **LE\_6B40D010 EC6B30508027 6LBDW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252700  
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 EC6B30508027 6LBDW1H  
Description: PORTFOLIO 6 INCH DOUBLE 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: 4663.7 lumens  
Efficiency: N/A  
Efficacy: 108.5 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

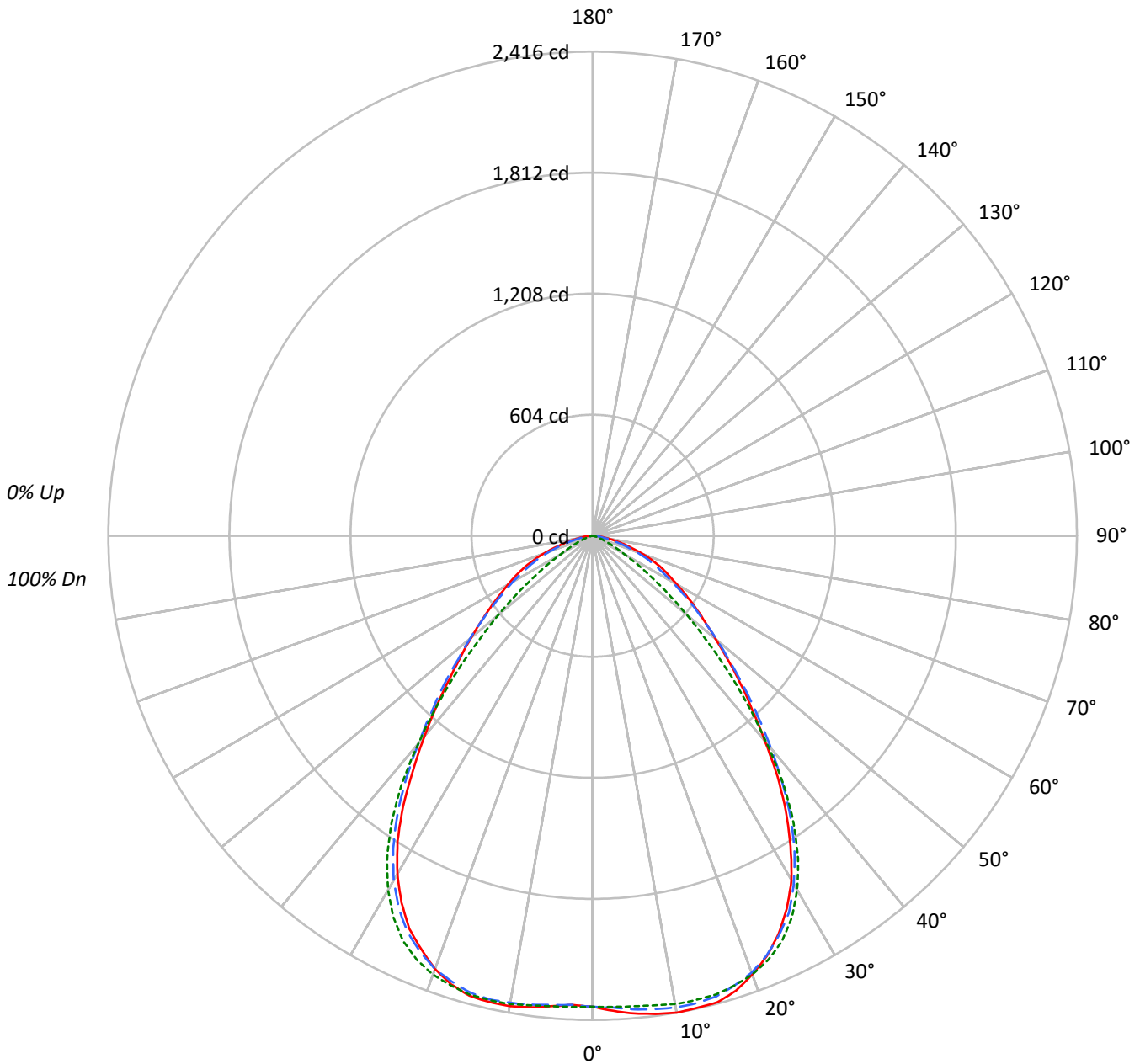
Input Watts (W): 43  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					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								
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°	153302	153302	153302
5°	156711	154320	154320
10°	160060	157204	157860
15°	162743	160048	160493
20°	161752	161752	159677
25°	157899	160771	155747
30°	149469	153725	146712
35°	133930	139226	131293
40°	113781	115195	110954
45°	96287	88011	92910
50°	81299	62065	80284
55°	71442	40060	70692
60°	63310	23852	63740
65°	58492	14357	58492
70°	50721	8240	49443
75°	40205	5041	37685
80°	29981	3757	28741
85°	27322	2545	24852



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	226.2	4.9
10°-20°	669.5	14.4
20°-30°	1006.9	21.6
30°-40°	1058.7	22.7
40°-50°	790.9	17.0
50°-60°	492.4	10.6
60°-70°	280.0	6.0
70°-80°	115.3	2.5
80°-90°	23.8	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°	1902.7	40.8
0°-40°	2961.4	63.5
0°-60°	4244.6	91.0
0°-90°	4663.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4663.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2350	2350	2350	2350	2350	
5°	2393	2373	2356	2350	2356	229
15°	2410	2380	2370	2360	2376	677
25°	2194	2200	2233	2184	2164	1004
35°	1682	1725	1748	1698	1648	1044
45°	1044	1067	954	1047	1007	809
55°	628	615	352	605	622	565
65°	379	339	93	339	379	373
75°	160	126	20	123	150	173
85°	36	23	3	20	33	41
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°	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8
2.5°	2373.0	2369.6	2373.0	2366.4	2363.0	2363.0	2366.4	2359.6	2356.4	2359.6	2356.4
5°	2392.9	2386.2	2389.6	2386.2	2379.6	2379.6	2382.9	2373.0	2373.0	2376.2	2373.0
7.5°	2406.2	2406.2	2406.2	2399.5	2396.2	2392.9	2399.5	2389.6	2386.2	2386.2	2382.9
10°	2416.1	2412.9	2416.1	2409.5	2402.9	2399.5	2406.2	2399.5	2392.9	2399.5	2389.6
12.5°	2412.9	2412.9	2412.9	2409.5	2402.9	2399.5	2406.2	2396.2	2392.9	2396.2	2389.6
15°	2409.5	2399.5	2402.9	2399.5	2389.6	2389.6	2392.9	2382.9	2376.2	2386.2	2379.6
17.5°	2379.6	2373.0	2376.2	2369.6	2363.0	2359.6	2363.0	2359.6	2353.0	2359.6	2353.0
20°	2329.8	2329.8	2333.1	2326.4	2319.8	2316.5	2323.1	2316.5	2309.9	2319.8	2319.8
22.5°	2269.9	2269.9	2269.9	2266.6	2263.2	2263.2	2263.2	2260.0	2256.6	2263.2	2266.6
25°	2193.5	2190.1	2193.5	2196.9	2193.5	2190.1	2193.5	2193.5	2186.9	2200.1	2200.1
27.5°	2097.1	2097.1	2103.8	2100.4	2100.4	2097.1	2103.8	2103.8	2100.4	2110.4	2120.4
30°	1984.1	1977.5	1984.1	1984.1	1987.5	1987.5	1990.8	1990.8	1990.8	2000.8	2007.4
32.5°	1837.9	1841.2	1851.1	1847.9	1844.5	1854.5	1854.5	1861.1	1864.5	1871.1	1874.5
35°	1681.6	1685.0	1685.0	1688.4	1695.0	1688.4	1705.0	1701.6	1705.0	1718.2	1724.9
37.5°	1515.5	1505.5	1522.1	1515.5	1518.9	1518.9	1525.5	1528.8	1538.8	1555.4	1555.4
40°	1336.0	1339.4	1346.0	1349.4	1352.6	1352.6	1352.6	1362.6	1366.0	1385.9	1382.6
42.5°	1179.9	1179.9	1186.5	1189.8	1189.8	1189.8	1189.8	1199.8	1206.4	1213.1	1219.8
45°	1043.6	1033.6	1040.2	1040.2	1046.9	1043.6	1050.2	1056.9	1060.2	1070.1	1066.9
47.5°	914.0	910.6	914.0	917.2	914.0	917.2	920.6	923.9	927.2	927.2	927.2
50°	801.0	801.0	804.2	807.6	807.6	807.6	807.6	810.9	810.9	817.6	810.9
52.5°	707.9	711.2	711.2	707.9	711.2	711.2	714.5	714.5	711.2	711.2	701.2
55°	628.1	624.9	628.1	624.9	628.1	628.1	624.9	624.9	621.5	618.1	614.9
57.5°	551.8	551.8	551.8	551.8	548.4	551.8	548.4	545.0	545.0	538.4	528.4
60°	485.2	485.2	485.2	485.2	485.2	481.9	485.2	481.9	475.2	468.6	455.4
62.5°	428.8	425.4	428.8	425.4	425.4	422.1	422.1	418.8	412.1	405.5	392.1
65°	378.9	382.2	378.9	378.9	375.5	372.2	372.2	368.9	358.9	352.2	339.0
67.5°	325.8	322.4	322.4	322.4	319.0	319.0	319.0	312.4	305.8	295.8	282.5
70°	265.9	265.9	265.9	262.5	262.5	259.2	259.2	255.9	249.2	242.6	226.0
72.5°	209.4	209.4	209.4	202.8	206.0	202.8	202.8	196.1	192.8	182.8	172.9
75°	159.5	159.5	156.2	156.2	152.9	149.5	149.5	146.2	142.9	136.2	126.2
77.5°	116.4	116.4	116.4	113.0	109.6	106.4	106.4	103.0	99.8	96.4	89.8
80°	79.8	79.8	79.8	79.8	76.5	73.1	73.1	69.8	69.8	66.5	59.9
82.5°	53.1	53.1	53.1	53.1	49.9	49.9	49.9	46.5	43.2	43.2	36.5
85°	36.5	36.5	33.2	33.2	33.2	33.2	29.9	29.9	26.6	23.2	23.2
87.5°	20.0	20.0	20.0	20.0	16.6	16.6	16.6	16.6	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°	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8
2.5°	2366.4	2366.4	2363.0	2353.0	2356.4	2353.0	2356.4	2353.0	2343.0	2353.0	2343.0
5°	2379.6	2382.9	2376.2	2363.0	2366.4	2363.0	2363.0	2359.6	2349.8	2356.4	2349.8
7.5°	2392.9	2389.6	2386.2	2373.0	2376.2	2373.0	2373.0	2366.4	2356.4	2363.0	2353.0
10°	2399.5	2399.5	2392.9	2379.6	2379.6	2376.2	2379.6	2376.2	2363.0	2373.0	2366.4
12.5°	2399.5	2396.2	2396.2	2379.6	2382.9	2379.6	2382.9	2376.2	2366.4	2373.0	2369.6
15°	2389.6	2389.6	2386.2	2369.6	2373.0	2373.0	2376.2	2369.6	2359.6	2369.6	2363.0
17.5°	2369.6	2369.6	2366.4	2353.0	2359.6	2359.6	2363.0	2356.4	2346.4	2353.0	2353.0
20°	2329.8	2333.1	2333.1	2323.1	2329.8	2329.8	2333.1	2329.8	2326.4	2329.8	2323.1
22.5°	2283.2	2289.9	2289.9	2279.9	2286.5	2286.5	2296.5	2293.2	2286.5	2289.9	2286.5
25°	2213.4	2220.1	2226.8	2220.1	2226.8	2226.8	2236.8	2233.4	2226.8	2233.4	2223.4
27.5°	2133.6	2137.0	2143.6	2137.0	2147.0	2143.6	2153.6	2150.2	2140.4	2150.2	2147.0
30°	2020.6	2034.0	2043.9	2034.0	2043.9	2043.9	2050.6	2047.2	2043.9	2040.6	2040.6
32.5°	1894.4	1907.6	1907.6	1904.4	1911.0	1911.0	1914.4	1907.6	1904.4	1907.6	1911.0
35°	1738.1	1744.9	1751.5	1748.1	1751.5	1754.8	1751.5	1754.8	1744.9	1748.1	1748.1
37.5°	1568.6	1575.4	1575.4	1565.4	1572.0	1572.0	1565.4	1565.4	1558.8	1565.4	1552.1
40°	1389.2	1382.6	1385.9	1379.2	1372.6	1372.6	1369.2	1356.0	1349.4	1352.6	1356.0
42.5°	1213.1	1213.1	1203.1	1186.5	1169.9	1169.9	1159.9	1153.2	1140.0	1146.6	1143.2
45°	1063.5	1046.9	1033.6	1007.0	997.0	990.4	973.8	957.1	950.5	953.9	950.5
47.5°	920.6	907.2	874.1	837.5	827.5	817.6	797.6	777.8	771.0	764.4	764.4
50°	801.0	777.8	741.1	701.2	684.6	668.0	641.4	621.5	608.2	611.5	611.5
52.5°	691.2	664.8	621.5	571.6	551.8	531.8	508.5	485.2	475.2	471.9	471.9
55°	594.9	565.0	521.8	465.2	448.6	425.4	395.5	368.9	355.6	352.2	358.9
57.5°	508.5	481.9	432.0	375.5	355.6	332.4	302.4	279.1	262.5	259.2	262.5
60°	438.8	402.1	358.9	305.8	279.1	259.2	226.0	206.0	189.5	182.8	186.1
62.5°	368.9	335.6	292.5	239.2	219.4	199.4	169.5	146.2	133.0	129.6	133.0
65°	315.8	282.5	242.6	196.1	176.1	156.2	129.6	106.4	96.4	93.0	96.4
67.5°	262.5	232.6	199.4	156.2	139.6	123.0	96.4	79.8	66.5	63.1	66.5
70°	212.8	186.1	152.9	123.0	106.4	93.0	73.1	56.5	46.5	43.2	46.5
72.5°	159.5	139.6	116.4	89.8	79.8	69.8	53.1	39.9	33.2	29.9	33.2
75°	116.4	99.8	83.1	63.1	56.5	49.9	36.5	26.6	23.2	20.0	23.2
77.5°	79.8	69.8	56.5	43.2	36.5	33.2	23.2	20.0	16.6	13.2	13.2
80°	53.1	46.5	36.5	29.9	26.6	23.2	16.6	13.2	10.0	10.0	10.0
82.5°	33.2	26.6	23.2	16.6	13.2	13.2	10.0	6.6	6.6	6.6	6.6
85°	20.0	16.6	13.2	10.0	6.6	6.6	3.4	3.4	3.4	3.4	3.4
87.5°	10.0	6.6	6.6	3.4	3.4	3.4	3.4	3.4	0.0	0.0	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



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**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8
2.5°	2349.8	2343.0	2343.0	2346.4	2349.8	2353.0	2346.4	2343.0	2343.0	2353.0	2346.4
5°	2349.8	2346.4	2346.4	2346.4	2353.0	2356.4	2349.8	2346.4	2349.8	2359.6	2356.4
7.5°	2359.6	2353.0	2356.4	2356.4	2359.6	2366.4	2359.6	2356.4	2359.6	2369.6	2363.0
10°	2366.4	2359.6	2363.0	2359.6	2369.6	2373.0	2366.4	2363.0	2366.4	2379.6	2376.2
12.5°	2369.6	2366.4	2366.4	2363.0	2373.0	2376.2	2369.6	2366.4	2369.6	2379.6	2376.2
15°	2363.0	2359.6	2359.6	2359.6	2366.4	2373.0	2363.0	2359.6	2359.6	2369.6	2366.4
17.5°	2349.8	2343.0	2343.0	2343.0	2346.4	2349.8	2339.8	2336.4	2333.1	2343.0	2339.8
20°	2326.4	2319.8	2313.1	2313.1	2316.5	2316.5	2309.9	2299.9	2299.9	2303.1	2296.5
22.5°	2283.2	2279.9	2273.2	2269.9	2276.6	2273.2	2260.0	2250.0	2246.6	2250.0	2243.4
25°	2223.4	2216.8	2213.4	2210.1	2213.4	2210.1	2196.9	2183.5	2183.5	2183.5	2173.5
27.5°	2140.4	2133.6	2130.4	2130.4	2133.6	2127.0	2113.8	2100.4	2093.8	2093.8	2083.9
30°	2034.0	2034.0	2030.6	2027.4	2024.0	2024.0	2004.0	1990.8	1984.1	1987.5	1980.8
32.5°	1904.4	1901.0	1897.8	1887.8	1891.0	1887.8	1871.1	1861.1	1851.1	1844.5	1841.2
35°	1738.1	1738.1	1734.9	1734.9	1734.9	1731.5	1714.9	1705.0	1698.2	1695.0	1685.0
37.5°	1555.4	1552.1	1548.8	1548.8	1548.8	1548.8	1538.8	1528.8	1528.8	1525.5	1518.9
40°	1349.4	1352.6	1356.0	1352.6	1362.6	1372.6	1359.2	1352.6	1349.4	1359.2	1346.0
42.5°	1149.9	1146.6	1163.2	1166.5	1166.5	1183.1	1186.5	1189.8	1186.5	1193.1	1193.1
45°	957.1	953.9	970.5	977.1	993.8	1013.6	1023.6	1040.2	1046.9	1053.5	1046.9
47.5°	774.4	787.6	801.0	817.6	830.9	864.1	884.0	900.6	907.2	917.2	917.2
50°	621.5	634.8	658.0	671.4	688.0	727.9	761.1	784.4	797.6	807.6	804.2
52.5°	478.6	501.9	531.8	545.0	568.4	614.9	651.4	678.0	694.6	704.6	707.9
55°	368.9	388.9	418.8	438.8	462.0	511.9	558.4	588.2	604.9	618.1	624.9
57.5°	272.5	295.8	329.0	345.6	372.2	428.8	468.6	505.1	525.1	541.8	545.0
60°	199.4	222.6	252.6	272.5	299.1	355.6	402.1	435.4	458.6	471.9	478.6
62.5°	142.9	166.1	196.1	216.0	239.2	289.1	335.6	368.9	392.1	408.8	418.8
65°	103.0	126.2	156.2	172.9	192.8	239.2	282.5	315.8	339.0	358.9	365.6
67.5°	76.5	93.0	119.6	136.2	156.2	192.8	229.4	259.2	282.5	299.1	305.8
70°	56.5	69.8	93.0	103.0	116.4	149.5	179.5	206.0	226.0	239.2	245.9
72.5°	39.9	49.9	66.5	76.5	86.4	113.0	136.2	156.2	169.5	182.8	189.5
75°	26.6	33.2	46.5	53.1	59.9	79.8	96.4	113.0	123.0	133.0	136.2
77.5°	16.6	23.2	33.2	36.5	43.2	53.1	66.5	76.5	83.1	89.8	96.4
80°	10.0	13.2	20.0	23.2	26.6	36.5	43.2	49.9	56.5	63.1	66.5
82.5°	6.6	10.0	13.2	13.2	16.6	20.0	26.6	33.2	36.5	39.9	43.2
85°	3.4	3.4	6.6	6.6	10.0	10.0	13.2	16.6	20.0	23.2	26.6
87.5°	3.4	3.4	3.4	3.4	6.6	6.6	10.0	10.0	10.0	13.2	13.2
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: P252700

CATALOG NUMBER: LE\_6B40D010 EC6B30508027 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8	2349.8
2.5°	2339.8	2349.8	2339.8	2346.4	2343.0	2343.0	2339.8	2343.0
5°	2349.8	2363.0	2349.8	2359.6	2353.0	2353.0	2353.0	2356.4
7.5°	2359.6	2373.0	2363.0	2373.0	2369.6	2366.4	2366.4	2373.0
10°	2369.6	2379.6	2373.0	2382.9	2379.6	2376.2	2376.2	2382.9
12.5°	2369.6	2382.9	2376.2	2386.2	2382.9	2379.6	2379.6	2382.9
15°	2359.6	2376.2	2366.4	2376.2	2373.0	2369.6	2369.6	2376.2
17.5°	2329.8	2343.0	2336.4	2343.0	2343.0	2339.8	2343.0	2346.4
20°	2289.9	2299.9	2293.2	2299.9	2299.9	2293.2	2296.5	2299.9
22.5°	2233.4	2243.4	2236.8	2243.4	2240.0	2236.8	2236.8	2233.4
25°	2163.6	2176.9	2166.9	2173.5	2166.9	2160.2	2160.2	2163.6
27.5°	2077.1	2087.1	2073.9	2080.5	2073.9	2067.2	2067.2	2063.9
30°	1964.1	1967.5	1957.5	1964.1	1957.5	1954.2	1947.5	1947.5
32.5°	1827.9	1831.2	1821.2	1821.2	1814.6	1814.6	1801.4	1811.2
35°	1668.4	1671.8	1668.4	1665.0	1655.1	1651.8	1648.5	1648.5
37.5°	1502.2	1502.2	1492.2	1488.9	1482.2	1475.6	1479.0	1469.0
40°	1332.8	1329.4	1319.4	1322.8	1319.4	1309.5	1306.1	1302.8
42.5°	1173.1	1173.1	1163.2	1166.5	1159.9	1156.6	1146.6	1149.9
45°	1033.6	1033.6	1023.6	1023.6	1020.2	1010.4	1013.6	1007.0
47.5°	907.2	907.2	904.0	904.0	894.0	890.8	890.8	890.8
50°	797.6	797.6	797.6	797.6	794.2	791.0	787.6	791.0
52.5°	704.6	711.2	707.9	707.9	704.6	701.2	697.9	697.9
55°	621.5	624.9	624.9	628.1	624.9	621.5	624.9	621.5
57.5°	548.4	555.0	555.0	555.0	555.0	555.0	551.8	548.4
60°	485.2	488.5	488.5	491.9	491.9	491.9	488.5	488.5
62.5°	422.1	428.8	432.0	432.0	435.4	432.0	432.0	432.0
65°	372.2	378.9	382.2	378.9	382.2	382.2	378.9	378.9
67.5°	312.4	319.0	319.0	319.0	319.0	322.4	319.0	319.0
70°	252.6	259.2	255.9	259.2	259.2	259.2	259.2	259.2
72.5°	192.8	196.1	199.4	199.4	202.8	199.4	199.4	199.4
75°	139.6	146.2	146.2	146.2	146.2	149.5	149.5	149.5
77.5°	99.8	103.0	103.0	106.4	106.4	106.4	106.4	109.6
80°	69.8	69.8	73.1	73.1	76.5	76.5	76.5	76.5
82.5°	46.5	49.9	49.9	49.9	49.9	49.9	49.9	49.9
85°	26.6	29.9	29.9	29.9	29.9	33.2	33.2	33.2
87.5°	16.6	16.6	16.6	16.6	16.6	16.6	13.2	13.2
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)