

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: P252413

Luminaire Tested: **LE_6B50D010R EC6B30509730 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252413
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B50D010R EC6B30509730 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4510.0 lumens
Efficiency: N/A
Efficacy: 76.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

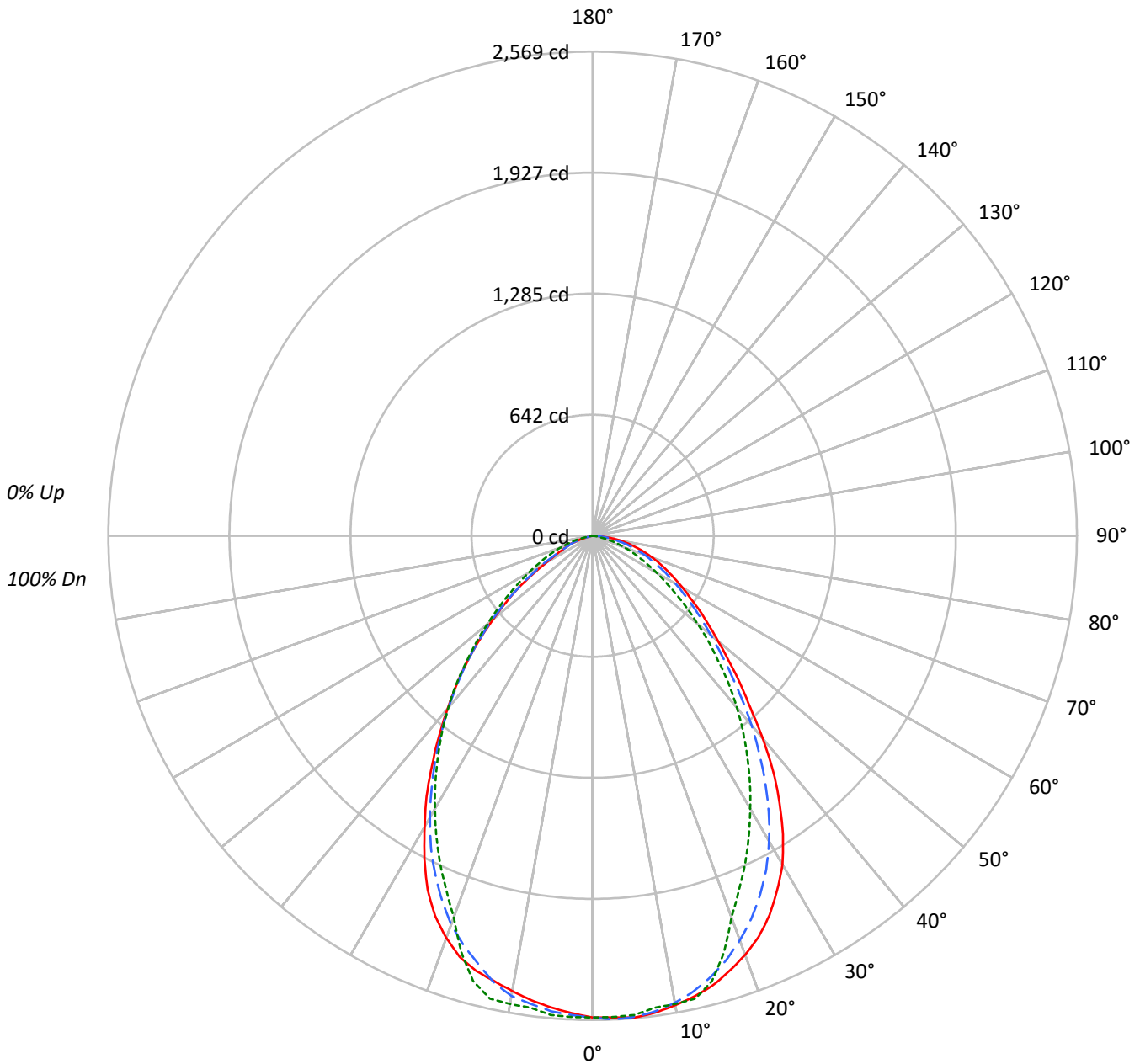
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77				77
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68				68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60				60
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54				54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48				48
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44				44
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40				40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36				36
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33				33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	166716	166716	166716
5°	168008	167137	164524
10°	167532	167088	162471
15°	166768	165201	161392
20°	164280	149540	157601
25°	159821	137844	149074
30°	151759	126003	134252
35°	137705	113923	118152
40°	119564	101466	101756
45°	101961	87273	86350
50°	88251	73768	69728
55°	78893	61535	53983
60°	71882	51096	36378
65°	67121	42005	27154
70°	63940	34183	22795
75°	60245	24249	7537
80°	57333	12436	2480
85°	47159	7486	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.3	5.4
10°-20°	674.9	15.0
20°-30°	931.6	20.7
30°-40°	948.0	21.0
40°-50°	761.9	16.9
50°-60°	506.6	11.2
60°-70°	288.7	6.4
70°-80°	129.7	2.9
80°-90°	27.3	0.6
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°	1847.8	41.0
0°-40°	2795.9	62.0
0°-60°	4064.3	90.1
0°-90°	4510.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4510.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2555	2555	2555	2555	2555	
5°	2565	2562	2552	2532	2512	244
15°	2469	2423	2446	2350	2390	695
25°	2220	2101	1915	1978	2071	1017
35°	1729	1596	1430	1457	1484	1075
45°	1105	1039	946	936	936	857
55°	694	647	541	481	475	623
65°	435	388	272	176	176	433
75°	239	199	96	40	30	255
85°	63	43	10	3	0	75
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°	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4
2.5°	2558.8	2572.0	2568.6	2565.4	2568.6	2565.4	2558.8	2558.8	2552.1	2552.1	2568.6
5°	2565.4	2572.0	2568.6	2565.4	2565.4	2568.6	2555.4	2555.4	2548.8	2545.5	2562.0
7.5°	2552.1	2562.0	2555.4	2555.4	2552.1	2555.4	2542.1	2542.1	2532.1	2528.9	2545.5
10°	2528.9	2542.1	2535.5	2535.5	2535.5	2528.9	2522.2	2518.9	2509.0	2505.6	2515.6
12.5°	2502.2	2512.2	2509.0	2502.2	2502.2	2502.2	2489.0	2485.8	2472.4	2465.8	2475.8
15°	2469.1	2475.8	2472.4	2469.1	2462.5	2462.5	2449.2	2442.6	2429.2	2416.0	2422.6
17.5°	2419.4	2429.2	2422.6	2419.4	2409.4	2409.4	2396.1	2389.5	2369.5	2356.2	2359.6
20°	2366.2	2369.5	2366.2	2359.6	2349.6	2346.4	2333.0	2319.8	2303.1	2286.6	2283.2
22.5°	2303.1	2306.5	2296.5	2289.9	2280.0	2276.6	2260.0	2250.1	2223.5	2203.6	2200.2
25°	2220.2	2223.5	2223.5	2207.0	2200.2	2193.6	2177.1	2160.5	2137.2	2110.8	2100.8
27.5°	2120.6	2130.6	2124.0	2107.4	2094.1	2090.8	2074.2	2060.9	2031.0	2007.9	1994.5
30°	2014.5	2011.1	2007.9	1997.9	1978.0	1974.6	1958.0	1941.5	1918.2	1888.4	1871.8
32.5°	1878.4	1878.4	1875.1	1865.1	1845.2	1838.6	1825.2	1805.4	1778.9	1755.6	1739.0
35°	1729.0	1732.4	1729.0	1709.1	1695.9	1689.2	1682.6	1659.4	1636.1	1609.6	1596.2
37.5°	1573.1	1563.1	1566.4	1549.9	1533.2	1539.9	1520.0	1510.0	1483.5	1463.5	1450.2
40°	1403.9	1410.5	1397.1	1390.5	1380.6	1370.6	1370.6	1354.0	1340.8	1317.5	1310.9
42.5°	1237.9	1247.9	1244.5	1237.9	1224.6	1227.9	1211.4	1204.8	1188.1	1178.1	1168.1
45°	1105.1	1105.1	1105.1	1098.5	1095.1	1088.5	1078.6	1068.6	1058.6	1045.4	1038.8
47.5°	975.8	975.8	979.0	972.4	965.8	962.4	955.8	955.8	939.2	925.9	919.2
50°	869.5	869.5	869.5	862.9	856.2	856.2	849.6	843.0	833.0	823.0	816.4
52.5°	773.2	773.2	773.2	766.6	763.2	760.0	756.6	753.4	740.1	733.4	726.8
55°	693.6	690.2	690.2	687.0	680.4	680.4	677.0	670.4	660.4	650.5	647.1
57.5°	614.0	617.2	614.0	614.0	607.4	607.4	600.6	597.4	587.4	580.8	574.1
60°	550.9	550.9	550.9	547.6	541.0	544.2	537.6	534.2	524.4	514.4	507.8
62.5°	487.9	491.1	491.1	487.9	481.2	481.2	477.9	474.6	464.6	454.6	444.8
65°	434.8	434.8	434.8	431.4	428.1	428.1	424.8	421.5	411.5	398.2	388.2
67.5°	385.0	381.6	381.6	381.6	378.4	375.0	371.8	368.4	358.4	348.5	335.2
70°	335.2	335.2	335.2	331.9	325.2	328.5	325.2	321.9	312.0	302.0	292.0
72.5°	288.8	288.8	285.4	282.1	282.1	278.8	278.8	275.5	265.5	252.2	242.2
75°	239.0	239.0	239.0	239.0	232.2	235.6	229.0	225.6	219.0	209.1	199.1
77.5°	195.8	195.8	195.8	192.5	189.1	189.1	185.9	182.5	172.6	165.9	152.6
80°	152.6	152.6	152.6	152.6	149.4	146.0	142.8	139.4	132.8	122.8	112.9
82.5°	112.9	112.9	109.5	109.5	109.5	106.2	102.9	99.5	92.9	86.2	79.6
85°	63.0	66.4	66.4	59.8	63.0	59.8	59.8	53.1	53.1	46.5	43.1
87.5°	23.2	19.9	19.9	19.9	19.9	19.9	19.9	16.6	16.6	16.6	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4
2.5°	2555.4	2552.1	2565.4	2565.4	2545.5	2555.4	2558.8	2552.1	2552.1	2555.4	2545.5
5°	2548.8	2542.1	2555.4	2558.8	2538.8	2548.8	2552.1	2545.5	2548.8	2552.1	2538.8
7.5°	2525.5	2525.5	2535.5	2538.8	2518.9	2528.9	2528.9	2522.2	2525.5	2525.5	2515.6
10°	2502.2	2492.4	2502.2	2502.2	2485.8	2489.0	2495.6	2492.4	2505.6	2522.2	2522.2
12.5°	2459.1	2449.2	2465.8	2465.8	2455.9	2469.1	2485.8	2495.6	2509.0	2515.6	2495.6
15°	2406.0	2409.4	2439.2	2462.5	2452.5	2472.4	2489.0	2482.4	2465.8	2445.9	2416.0
17.5°	2336.4	2326.4	2353.0	2366.2	2353.0	2359.6	2372.9	2359.6	2333.0	2316.5	2276.6
20°	2256.8	2230.1	2230.1	2223.5	2200.2	2200.2	2197.0	2173.8	2163.8	2153.9	2137.2
22.5°	2167.1	2137.2	2127.2	2107.4	2087.5	2084.1	2074.2	2051.0	2037.6	2031.0	2011.1
25°	2064.2	2037.6	2021.1	2001.1	1971.2	1964.6	1954.8	1931.5	1924.9	1914.9	1898.2
27.5°	1958.0	1924.9	1901.6	1881.8	1855.1	1851.9	1831.9	1815.4	1802.0	1795.4	1782.1
30°	1835.2	1798.8	1782.1	1755.6	1735.6	1729.0	1712.5	1689.2	1679.2	1672.6	1662.6
32.5°	1699.1	1669.2	1652.8	1629.5	1602.9	1606.2	1586.4	1566.4	1559.8	1553.1	1543.2
35°	1566.4	1536.5	1516.6	1496.8	1480.1	1473.5	1460.2	1443.6	1433.6	1430.4	1423.8
37.5°	1420.4	1397.1	1380.6	1360.6	1347.4	1340.8	1334.1	1317.5	1310.9	1310.9	1297.6
40°	1277.8	1257.8	1244.5	1234.5	1218.0	1214.6	1208.0	1198.0	1194.8	1191.4	1181.5
42.5°	1148.2	1121.8	1111.8	1105.1	1095.1	1088.5	1085.2	1078.6	1075.2	1072.0	1062.0
45°	1025.5	1002.2	992.2	985.6	975.8	972.4	969.0	959.1	952.5	945.9	942.5
47.5°	906.0	889.4	886.1	869.5	862.9	856.2	849.6	843.0	839.6	836.4	823.0
50°	803.1	793.1	776.6	766.6	760.0	756.6	743.4	733.4	730.1	726.8	716.9
52.5°	710.2	696.9	687.0	670.4	667.0	660.4	653.8	640.5	633.9	630.5	620.6
55°	627.2	617.2	604.0	590.8	580.8	577.5	567.5	554.2	547.6	541.0	534.2
57.5°	557.5	541.0	527.6	514.4	507.8	497.8	487.9	481.2	471.2	461.2	451.4
60°	491.1	477.9	461.2	448.0	441.4	434.8	421.5	411.5	401.6	391.6	381.6
62.5°	428.1	414.9	398.2	385.0	378.4	371.8	358.4	348.5	338.5	328.5	315.2
65°	371.8	358.4	345.1	331.9	325.2	318.6	305.4	292.0	282.1	272.1	258.9
67.5°	325.2	308.6	295.4	282.1	275.5	268.9	255.5	245.6	232.2	222.4	209.1
70°	275.5	262.1	252.2	239.0	232.2	225.6	212.4	199.1	189.1	179.2	165.9
72.5°	232.2	215.8	205.8	192.5	185.9	182.5	169.2	159.2	149.4	136.1	126.1
75°	185.9	172.6	159.2	149.4	142.8	139.4	126.1	116.1	106.2	96.2	86.2
77.5°	142.8	132.8	119.5	109.5	102.9	99.5	86.2	76.4	66.4	59.8	49.8
80°	106.2	92.9	86.2	76.4	73.0	66.4	59.8	49.8	43.1	33.1	26.5
82.5°	73.0	63.0	56.4	49.8	46.5	43.1	36.5	29.9	23.2	19.9	16.6
85°	39.9	33.1	29.9	26.5	23.2	23.2	19.9	16.6	13.2	10.0	6.6
87.5°	13.2	10.0	10.0	10.0	10.0	6.6	6.6	6.6	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4
2.5°	2552.1	2552.1	2552.1	2548.8	2548.8	2548.8	2545.5	2558.8	2545.5	2542.1	2552.1
5°	2548.8	2542.1	2542.1	2542.1	2542.1	2538.8	2535.5	2542.1	2532.1	2528.9	2528.9
7.5°	2528.9	2525.5	2525.5	2522.2	2518.9	2515.6	2512.2	2515.6	2505.6	2502.2	2502.2
10°	2532.1	2525.5	2525.5	2515.6	2509.0	2499.0	2489.0	2492.4	2479.1	2469.1	2469.1
12.5°	2492.4	2475.8	2465.8	2455.9	2449.2	2445.9	2432.6	2439.2	2426.0	2422.6	2422.6
15°	2402.8	2382.9	2366.2	2359.6	2359.6	2353.0	2343.0	2356.2	2349.6	2353.0	2369.5
17.5°	2263.4	2253.4	2243.5	2240.1	2243.5	2250.1	2256.8	2276.6	2276.6	2286.6	2303.1
20°	2140.6	2133.9	2140.6	2140.6	2143.9	2157.1	2170.4	2187.0	2193.6	2203.6	2226.9
22.5°	2021.1	2021.1	2027.8	2037.6	2034.4	2057.6	2060.9	2090.8	2090.8	2110.8	2130.6
25°	1904.9	1904.9	1911.6	1914.9	1921.5	1934.8	1948.1	1971.2	1978.0	1997.9	2014.5
27.5°	1792.1	1788.8	1788.8	1792.1	1798.8	1815.4	1822.0	1848.5	1858.5	1871.8	1888.4
30°	1666.0	1662.6	1669.2	1676.0	1672.6	1689.2	1699.1	1719.1	1725.8	1739.0	1752.2
32.5°	1546.5	1546.5	1546.5	1553.1	1553.1	1566.4	1566.4	1589.6	1589.6	1599.6	1612.9
35°	1423.8	1423.8	1427.0	1430.4	1433.6	1437.0	1440.4	1453.6	1456.9	1460.2	1466.9
37.5°	1307.6	1304.2	1307.6	1307.6	1300.9	1314.2	1314.2	1327.5	1317.5	1327.5	1330.8
40°	1188.1	1188.1	1184.8	1184.8	1184.8	1191.4	1184.8	1194.8	1188.1	1194.8	1191.4
42.5°	1065.2	1065.2	1058.6	1065.2	1062.0	1062.0	1062.0	1068.6	1058.6	1065.2	1068.6
45°	942.5	939.2	939.2	935.9	935.9	935.9	939.2	939.2	935.9	942.5	942.5
47.5°	823.0	819.8	819.8	819.8	819.8	823.0	813.1	819.8	813.1	813.1	813.1
50°	720.1	716.9	713.5	710.2	706.9	706.9	703.6	703.6	696.9	693.6	690.2
52.5°	620.6	617.2	610.6	610.6	607.4	604.0	594.0	594.0	584.1	580.8	580.8
55°	531.0	521.0	517.8	511.1	511.1	504.5	497.8	491.1	481.2	474.6	474.6
57.5°	448.0	438.1	431.4	428.1	424.8	418.1	404.9	401.6	388.2	385.0	381.6
60°	375.0	365.0	355.1	348.5	345.1	335.2	321.9	315.2	308.6	298.6	288.8
62.5°	305.4	295.4	282.1	278.8	272.1	262.1	252.2	242.2	235.6	225.6	219.0
65°	245.6	235.6	225.6	219.0	212.4	202.5	192.5	182.5	175.9	172.6	169.2
67.5°	199.1	185.9	175.9	172.6	165.9	159.2	149.4	146.0	139.4	139.4	139.4
70°	156.0	146.0	136.1	132.8	129.4	122.8	116.1	116.1	116.1	116.1	116.1
72.5°	116.1	109.5	99.5	96.2	92.9	89.6	83.0	86.2	83.0	83.0	83.0
75°	73.0	66.4	59.8	56.4	53.1	49.8	46.5	43.1	39.9	36.5	36.5
77.5°	39.9	33.1	29.9	26.5	26.5	23.2	19.9	19.9	16.6	16.6	16.6
80°	23.2	19.9	16.6	13.2	13.2	10.0	10.0	10.0	10.0	6.6	6.6
82.5°	13.2	10.0	6.6	6.6	6.6	6.6	3.4	3.4	3.4	3.4	3.4
85°	6.6	6.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	0.0
87.5°	3.4	3.4	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: P252413

CATALOG NUMBER: LE_6B50D010R EC6B30509730 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4	2555.4
2.5°	2535.5	2545.5	2535.5	2545.5	2545.5	2545.5	2545.5	2535.5
5°	2518.9	2525.5	2515.6	2522.2	2525.5	2522.2	2522.2	2512.2
7.5°	2489.0	2495.6	2485.8	2495.6	2499.0	2495.6	2492.4	2485.8
10°	2459.1	2462.5	2452.5	2459.1	2465.8	2465.8	2462.5	2452.5
12.5°	2412.8	2422.6	2412.8	2419.4	2426.0	2429.2	2429.2	2419.4
15°	2359.6	2376.2	2369.5	2379.5	2389.5	2392.8	2392.8	2389.5
17.5°	2306.5	2323.1	2313.1	2329.8	2339.8	2346.4	2349.6	2343.0
20°	2230.1	2250.1	2243.5	2256.8	2270.0	2280.0	2280.0	2270.0
22.5°	2130.6	2157.1	2153.9	2163.8	2180.4	2183.8	2190.4	2183.8
25°	2021.1	2041.0	2037.6	2047.6	2067.5	2067.5	2070.9	2070.9
27.5°	1895.0	1914.9	1911.6	1918.2	1931.5	1934.8	1938.1	1931.5
30°	1758.9	1768.9	1768.9	1778.9	1788.8	1792.1	1792.1	1782.1
32.5°	1609.6	1622.9	1629.5	1626.1	1636.1	1642.8	1639.5	1639.5
35°	1473.5	1476.9	1480.1	1483.5	1486.8	1493.4	1486.8	1483.5
37.5°	1327.5	1337.5	1330.8	1337.5	1344.1	1340.8	1337.5	1337.5
40°	1194.8	1198.0	1191.4	1198.0	1201.4	1201.4	1201.4	1194.8
42.5°	1062.0	1068.6	1062.0	1068.6	1068.6	1068.6	1068.6	1065.2
45°	929.2	935.9	935.9	939.2	939.2	935.9	935.9	935.9
47.5°	806.5	813.1	806.5	813.1	816.4	809.8	809.8	809.8
50°	690.2	687.0	687.0	690.2	690.2	690.2	690.2	687.0
52.5°	570.9	574.1	574.1	574.1	577.5	574.1	577.5	577.5
55°	468.0	468.0	468.0	471.2	468.0	468.0	471.2	474.6
57.5°	375.0	371.8	368.4	368.4	371.8	368.4	368.4	368.4
60°	288.8	285.4	282.1	282.1	282.1	282.1	282.1	278.8
62.5°	215.8	215.8	215.8	219.0	219.0	219.0	219.0	222.4
65°	172.6	172.6	172.6	172.6	172.6	172.6	172.6	175.9
67.5°	139.4	139.4	139.4	142.8	142.8	142.8	142.8	142.8
70°	116.1	116.1	119.5	116.1	119.5	119.5	119.5	119.5
72.5°	79.6	79.6	79.6	79.6	79.6	76.4	79.6	76.4
75°	33.1	33.1	33.1	33.1	33.1	33.1	33.1	29.9
77.5°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
80°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
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)