

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: P252396

Luminaire Tested: **LE_6B40D010 EC6B30509035 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252396
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_6B40D010 EC6B30509035 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4091.2 lumens
Efficiency: N/A
Efficacy: 95.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

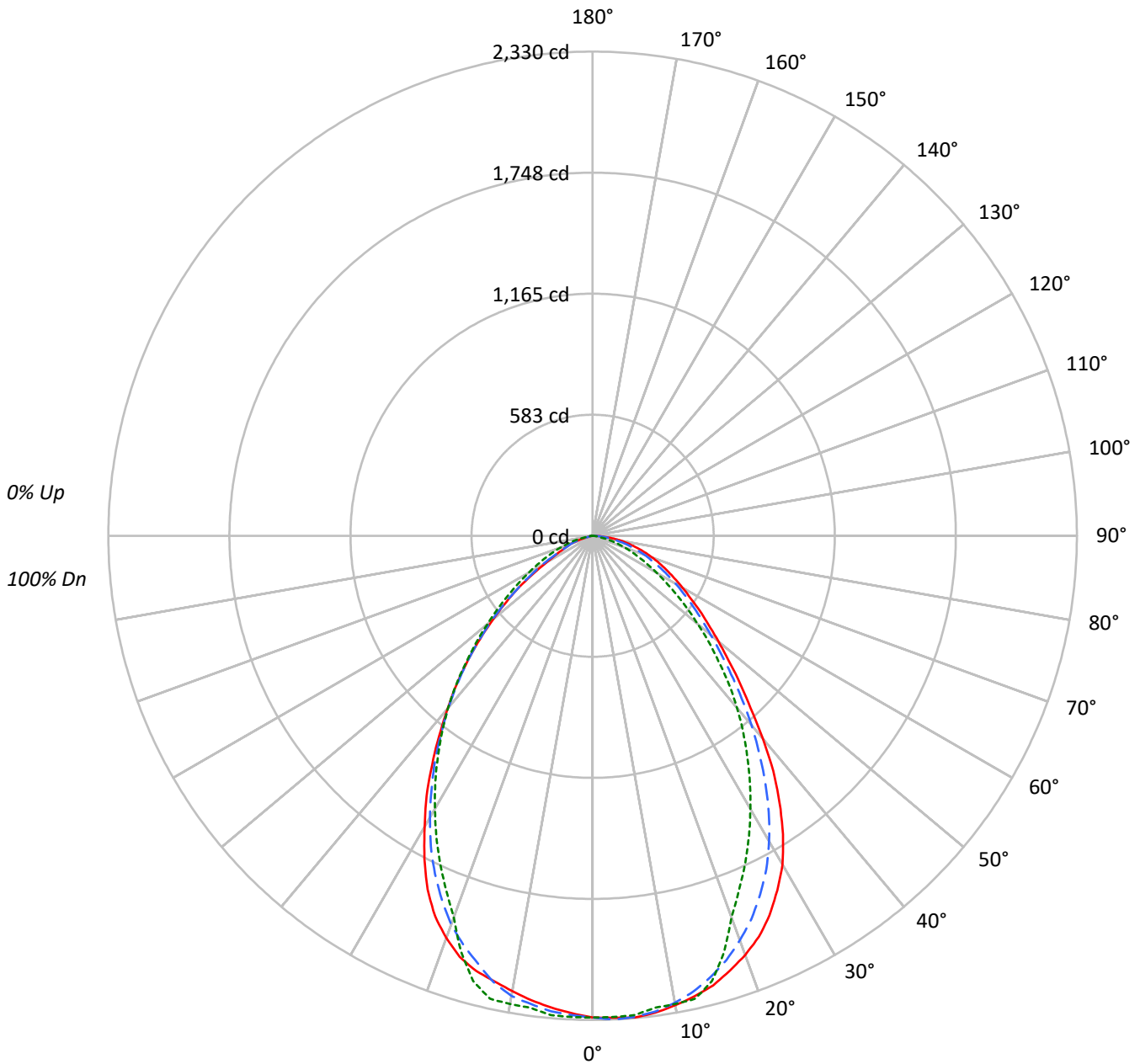
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
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	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77								
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68								
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60								
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54								
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48								
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44								
8	67	55	47	42	66	54	47	42	53	46	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	40	35	45	39	35	44	39	35	33								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	151234	151234	151234
5°	152401	151616	149251
10°	151971	151573	147386
15°	151287	149862	146404
20°	149026	135655	142965
25°	144985	125045	135231
30°	137664	114311	121784
35°	124922	103338	107185
40°	108458	92047	92302
45°	92495	79163	78332
50°	80060	66927	63242
55°	71567	55825	48967
60°	65215	46347	32999
65°	60885	38115	24622
70°	58007	31016	20677
75°	54649	21981	6831
80°	52035	11309	2254
85°	42817	6737	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.9	5.4
10°-20°	612.3	15.0
20°-30°	845.1	20.7
30°-40°	860.0	21.0
40°-50°	691.2	16.9
50°-60°	459.6	11.2
60°-70°	261.9	6.4
70°-80°	117.6	2.9
80°-90°	24.8	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°	1676.3	41.0
0°-40°	2536.3	62.0
0°-60°	3687.0	90.1
0°-90°	4091.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4091.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2318	2318	2318	2318	2318	
5°	2327	2324	2315	2297	2279	221
15°	2240	2198	2219	2132	2168	630
25°	2014	1906	1737	1794	1879	923
35°	1568	1448	1298	1322	1346	975
45°	1002	942	858	849	849	777
55°	629	587	491	436	430	565
65°	394	352	247	160	160	393
75°	217	181	87	36	27	231
85°	57	39	9	3	0	68
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°	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1
2.5°	2321.1	2333.2	2330.1	2327.1	2330.1	2327.1	2321.1	2321.1	2315.1	2315.1	2330.1
5°	2327.1	2333.2	2330.1	2327.1	2327.1	2330.1	2318.1	2318.1	2312.1	2309.1	2324.1
7.5°	2315.1	2324.1	2318.1	2318.1	2315.1	2318.1	2306.1	2306.1	2297.0	2294.0	2309.1
10°	2294.0	2306.1	2300.1	2300.1	2300.1	2294.0	2288.0	2285.0	2276.0	2273.0	2282.0
12.5°	2270.0	2279.0	2276.0	2270.0	2270.0	2270.0	2257.9	2254.9	2242.9	2236.9	2245.9
15°	2239.9	2245.9	2242.9	2239.9	2233.9	2233.9	2221.8	2215.8	2203.8	2191.8	2197.8
17.5°	2194.8	2203.8	2197.8	2194.8	2185.6	2185.6	2173.6	2167.6	2149.5	2137.5	2140.5
20°	2146.5	2149.5	2146.5	2140.5	2131.5	2128.5	2116.4	2104.4	2089.4	2074.2	2071.2
22.5°	2089.4	2092.4	2083.2	2077.2	2068.2	2065.2	2050.2	2041.1	2017.1	1999.0	1996.0
25°	2014.1	2017.1	2017.1	2002.0	1996.0	1990.0	1974.9	1959.9	1938.8	1914.8	1905.8
27.5°	1923.8	1932.8	1926.8	1911.8	1899.6	1896.6	1881.6	1869.5	1842.5	1821.4	1809.4
30°	1827.4	1824.4	1821.4	1812.4	1794.2	1791.2	1776.2	1761.1	1740.1	1713.0	1698.0
32.5°	1704.0	1704.0	1701.0	1692.0	1673.9	1667.9	1655.8	1637.8	1613.6	1592.6	1577.5
35°	1568.5	1571.5	1568.5	1550.5	1538.4	1532.4	1526.4	1505.2	1484.2	1460.1	1448.1
37.5°	1427.0	1418.0	1421.0	1405.9	1390.9	1396.9	1378.9	1369.8	1345.8	1327.6	1315.6
40°	1273.5	1279.5	1267.5	1261.4	1252.4	1243.4	1243.4	1228.2	1216.2	1195.2	1189.1
42.5°	1123.0	1132.0	1129.0	1123.0	1110.9	1113.9	1098.9	1092.9	1077.8	1068.8	1059.8
45°	1002.5	1002.5	1002.5	996.5	993.5	987.5	978.4	969.4	960.4	948.4	942.2
47.5°	885.1	885.1	888.1	882.1	876.1	873.1	867.0	867.0	852.0	840.0	833.9
50°	788.8	788.8	788.8	782.8	776.8	776.8	770.8	764.6	755.6	746.6	740.6
52.5°	701.5	701.5	701.5	695.5	692.4	689.4	686.4	683.4	671.4	665.4	659.4
55°	629.2	626.2	626.2	623.1	617.1	617.1	614.1	608.1	599.1	590.1	587.0
57.5°	557.0	560.0	557.0	557.0	550.9	550.9	544.9	541.9	532.9	526.9	520.9
60°	499.8	499.8	499.8	496.8	490.8	493.8	487.8	484.8	475.6	466.6	460.6
62.5°	442.5	445.6	445.6	442.5	436.5	436.5	433.5	430.5	421.5	412.5	403.4
65°	394.4	394.4	394.4	391.4	388.4	388.4	385.4	382.4	373.2	361.2	352.2
67.5°	349.2	346.2	346.2	346.2	343.2	340.2	337.1	334.1	325.1	316.1	304.1
70°	304.1	304.1	304.1	301.0	295.0	298.0	295.0	292.0	283.0	274.0	264.9
72.5°	261.9	261.9	258.9	255.9	255.9	252.9	252.9	249.9	240.9	228.8	219.8
75°	216.8	216.8	216.8	216.8	210.8	213.8	207.8	204.8	198.8	189.6	180.6
77.5°	177.6	177.6	177.6	174.6	171.6	171.6	168.6	165.6	156.5	150.5	138.5
80°	138.5	138.5	138.5	138.5	135.5	132.5	129.5	126.5	120.4	111.4	102.4
82.5°	102.4	102.4	99.4	99.4	99.4	96.4	93.4	90.4	84.2	78.2	72.2
85°	57.2	60.2	60.2	54.2	57.2	54.2	54.2	48.1	48.1	42.1	39.1
87.5°	21.1	18.1	18.1	18.1	18.1	18.1	18.1	15.0	15.0	15.0	12.0
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°	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1
2.5°	2318.1	2315.1	2327.1	2327.1	2309.1	2318.1	2321.1	2315.1	2315.1	2318.1	2309.1
5°	2312.1	2306.1	2318.1	2321.1	2303.1	2312.1	2315.1	2309.1	2312.1	2315.1	2303.1
7.5°	2291.0	2291.0	2300.1	2303.1	2285.0	2294.0	2294.0	2288.0	2291.0	2291.0	2282.0
10°	2270.0	2260.9	2270.0	2270.0	2254.9	2257.9	2264.0	2260.9	2273.0	2288.0	2288.0
12.5°	2230.9	2221.8	2236.9	2236.9	2227.9	2239.9	2254.9	2264.0	2276.0	2282.0	2264.0
15°	2182.6	2185.6	2212.8	2233.9	2224.8	2242.9	2257.9	2251.9	2236.9	2218.8	2191.8
17.5°	2119.5	2110.4	2134.5	2146.5	2134.5	2140.5	2152.5	2140.5	2116.4	2101.4	2065.2
20°	2047.1	2023.1	2023.1	2017.1	1996.0	1996.0	1993.0	1971.9	1962.9	1953.9	1938.8
22.5°	1965.9	1938.8	1929.8	1911.8	1893.6	1890.6	1881.6	1860.5	1848.5	1842.5	1824.4
25°	1872.6	1848.5	1833.4	1815.4	1788.2	1782.2	1773.2	1752.1	1746.1	1737.1	1722.0
27.5°	1776.2	1746.1	1725.0	1707.0	1682.9	1679.9	1661.9	1646.8	1634.8	1628.8	1616.6
30°	1664.9	1631.8	1616.6	1592.6	1574.5	1568.5	1553.5	1532.4	1523.4	1517.4	1508.2
32.5°	1541.4	1514.4	1499.2	1478.2	1454.1	1457.1	1439.0	1421.0	1415.0	1409.0	1399.9
35°	1421.0	1393.9	1375.9	1357.8	1342.8	1336.8	1324.6	1309.6	1300.6	1297.5	1291.5
37.5°	1288.5	1267.5	1252.4	1234.4	1222.2	1216.2	1210.2	1195.2	1189.1	1189.1	1177.1
40°	1159.1	1141.0	1129.0	1119.9	1104.9	1101.9	1095.9	1086.9	1083.8	1080.8	1071.8
42.5°	1041.6	1017.6	1008.5	1002.5	993.5	987.5	984.5	978.4	975.4	972.4	963.4
45°	930.2	909.2	900.1	894.1	885.1	882.1	879.1	870.0	864.0	858.0	855.0
47.5°	821.9	806.9	803.9	788.8	782.8	776.8	770.8	764.6	761.6	758.6	746.6
50°	728.5	719.5	704.5	695.5	689.4	686.4	674.4	665.4	662.4	659.4	650.2
52.5°	644.2	632.2	623.1	608.1	605.1	599.1	593.1	581.0	575.0	572.0	563.0
55°	569.0	560.0	547.9	535.9	526.9	523.9	514.8	502.8	496.8	490.8	484.8
57.5°	505.8	490.8	478.6	466.6	460.6	451.6	442.5	436.5	427.5	418.5	409.4
60°	445.6	433.5	418.5	406.4	400.4	394.4	382.4	373.2	364.2	355.2	346.2
62.5°	388.4	376.4	361.2	349.2	343.2	337.1	325.1	316.1	307.1	298.0	286.0
65°	337.1	325.1	313.1	301.0	295.0	289.0	277.0	264.9	255.9	246.9	234.9
67.5°	295.0	280.0	268.0	255.9	249.9	243.9	231.9	222.8	210.8	201.8	189.6
70°	249.9	237.9	228.8	216.8	210.8	204.8	192.6	180.6	171.6	162.6	150.5
72.5°	210.8	195.6	186.6	174.6	168.6	165.6	153.5	144.5	135.5	123.4	114.4
75°	168.6	156.5	144.5	135.5	129.5	126.5	114.4	105.4	96.4	87.2	78.2
77.5°	129.5	120.4	108.4	99.4	93.4	90.4	78.2	69.2	60.2	54.2	45.1
80°	96.4	84.2	78.2	69.2	66.2	60.2	54.2	45.1	39.1	30.1	24.1
82.5°	66.2	57.2	51.1	45.1	42.1	39.1	33.1	27.1	21.1	18.1	15.0
85°	36.1	30.1	27.1	24.1	21.1	21.1	18.1	15.0	12.0	9.0	6.0
87.5°	12.0	9.0	9.0	9.0	9.0	6.0	6.0	6.0	3.0	3.0	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°	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1
2.5°	2315.1	2315.1	2315.1	2312.1	2312.1	2312.1	2309.1	2321.1	2309.1	2306.1	2315.1
5°	2312.1	2306.1	2306.1	2306.1	2306.1	2303.1	2300.1	2306.1	2297.0	2294.0	2294.0
7.5°	2294.0	2291.0	2291.0	2288.0	2285.0	2282.0	2279.0	2282.0	2273.0	2270.0	2270.0
10°	2297.0	2291.0	2291.0	2282.0	2276.0	2267.0	2257.9	2260.9	2248.9	2239.9	2239.9
12.5°	2260.9	2245.9	2236.9	2227.9	2221.8	2218.8	2206.8	2212.8	2200.8	2197.8	2197.8
15°	2179.6	2161.6	2146.5	2140.5	2140.5	2134.5	2125.5	2137.5	2131.5	2134.5	2149.5
17.5°	2053.2	2044.1	2035.1	2032.1	2035.1	2041.1	2047.1	2065.2	2065.2	2074.2	2089.4
20°	1941.9	1935.8	1941.9	1941.9	1944.9	1956.9	1968.9	1984.0	1990.0	1999.0	2020.1
22.5°	1833.4	1833.4	1839.5	1848.5	1845.5	1866.5	1869.5	1896.6	1896.6	1914.8	1932.8
25°	1728.1	1728.1	1734.1	1737.1	1743.1	1755.1	1767.2	1788.2	1794.2	1812.4	1827.4
27.5°	1625.8	1622.8	1622.8	1625.8	1631.8	1646.8	1652.8	1676.9	1685.9	1698.0	1713.0
30°	1511.2	1508.2	1514.4	1520.4	1517.4	1532.4	1541.4	1559.5	1565.5	1577.5	1589.6
32.5°	1402.9	1402.9	1402.9	1409.0	1409.0	1421.0	1421.0	1442.0	1442.0	1451.1	1463.1
35°	1291.5	1291.5	1294.5	1297.5	1300.6	1303.6	1306.6	1318.6	1321.6	1324.6	1330.6
37.5°	1186.1	1183.1	1186.1	1186.1	1180.1	1192.1	1192.1	1204.2	1195.2	1204.2	1207.2
40°	1077.8	1077.8	1074.8	1074.8	1074.8	1080.8	1074.8	1083.8	1077.8	1083.8	1080.8
42.5°	966.4	966.4	960.4	966.4	963.4	963.4	963.4	969.4	960.4	966.4	969.4
45°	855.0	852.0	852.0	849.0	849.0	849.0	852.0	852.0	849.0	855.0	855.0
47.5°	746.6	743.6	743.6	743.6	743.6	746.6	737.6	743.6	737.6	737.6	737.6
50°	653.2	650.2	647.2	644.2	641.2	641.2	638.2	638.2	632.2	629.2	626.2
52.5°	563.0	560.0	554.0	554.0	550.9	547.9	538.9	538.9	529.9	526.9	526.9
55°	481.8	472.6	469.6	463.6	463.6	457.6	451.6	445.6	436.5	430.5	430.5
57.5°	406.4	397.4	391.4	388.4	385.4	379.4	367.2	364.2	352.2	349.2	346.2
60°	340.2	331.1	322.1	316.1	313.1	304.1	292.0	286.0	280.0	271.0	261.9
62.5°	277.0	268.0	255.9	252.9	246.9	237.9	228.8	219.8	213.8	204.8	198.8
65°	222.8	213.8	204.8	198.8	192.6	183.6	174.6	165.6	159.5	156.5	153.5
67.5°	180.6	168.6	159.5	156.5	150.5	144.5	135.5	132.5	126.5	126.5	126.5
70°	141.5	132.5	123.4	120.4	117.4	111.4	105.4	105.4	105.4	105.4	105.4
72.5°	105.4	99.4	90.4	87.2	84.2	81.2	75.2	78.2	75.2	75.2	75.2
75°	66.2	60.2	54.2	51.1	48.1	45.1	42.1	39.1	36.1	33.1	33.1
77.5°	36.1	30.1	27.1	24.1	24.1	21.1	18.1	18.1	15.0	15.0	15.0
80°	21.1	18.1	15.0	12.0	12.0	9.0	9.0	9.0	9.0	6.0	6.0
82.5°	12.0	9.0	6.0	6.0	6.0	6.0	3.0	3.0	3.0	3.0	3.0
85°	6.0	6.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0
87.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	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



TEST NUMBER: P252396

CATALOG NUMBER: LE_6B40D010 EC6B30509035 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1	2318.1
2.5°	2300.1	2309.1	2300.1	2309.1	2309.1	2309.1	2309.1	2300.1
5°	2285.0	2291.0	2282.0	2288.0	2291.0	2288.0	2288.0	2279.0
7.5°	2257.9	2264.0	2254.9	2264.0	2267.0	2264.0	2260.9	2254.9
10°	2230.9	2233.9	2224.8	2230.9	2236.9	2236.9	2233.9	2224.8
12.5°	2188.6	2197.8	2188.6	2194.8	2200.8	2203.8	2203.8	2194.8
15°	2140.5	2155.6	2149.5	2158.6	2167.6	2170.6	2170.6	2167.6
17.5°	2092.4	2107.4	2098.4	2113.4	2122.5	2128.5	2131.5	2125.5
20°	2023.1	2041.1	2035.1	2047.1	2059.2	2068.2	2068.2	2059.2
22.5°	1932.8	1956.9	1953.9	1962.9	1978.0	1981.0	1987.0	1981.0
25°	1833.4	1851.5	1848.5	1857.5	1875.6	1875.6	1878.6	1878.6
27.5°	1719.0	1737.1	1734.1	1740.1	1752.1	1755.1	1758.1	1752.1
30°	1595.6	1604.6	1604.6	1613.6	1622.8	1625.8	1625.8	1616.6
32.5°	1460.1	1472.1	1478.2	1475.1	1484.2	1490.2	1487.2	1487.2
35°	1336.8	1339.8	1342.8	1345.8	1348.8	1354.8	1348.8	1345.8
37.5°	1204.2	1213.2	1207.2	1213.2	1219.2	1216.2	1213.2	1213.2
40°	1083.8	1086.9	1080.8	1086.9	1089.9	1089.9	1089.9	1083.8
42.5°	963.4	969.4	963.4	969.4	969.4	969.4	969.4	966.4
45°	843.0	849.0	849.0	852.0	852.0	849.0	849.0	849.0
47.5°	731.6	737.6	731.6	737.6	740.6	734.6	734.6	734.6
50°	626.2	623.1	623.1	626.2	626.2	626.2	626.2	623.1
52.5°	517.9	520.9	520.9	520.9	523.9	520.9	523.9	523.9
55°	424.5	424.5	424.5	427.5	424.5	424.5	427.5	430.5
57.5°	340.2	337.1	334.1	334.1	337.1	334.1	334.1	334.1
60°	261.9	258.9	255.9	255.9	255.9	255.9	255.9	252.9
62.5°	195.6	195.6	195.6	198.8	198.8	198.8	198.8	201.8
65°	156.5	156.5	156.5	156.5	156.5	156.5	156.5	159.5
67.5°	126.5	126.5	126.5	129.5	129.5	129.5	129.5	129.5
70°	105.4	105.4	108.4	105.4	108.4	108.4	108.4	108.4
72.5°	72.2	72.2	72.2	72.2	72.2	69.2	72.2	69.2
75°	30.1	30.1	30.1	30.1	30.1	30.1	30.1	27.1
77.5°	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
80°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
82.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	3.0	3.0	3.0	3.0	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)