

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P244223

Luminaire Tested: **LSR8B50D010 EC8B509727 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244223
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B50D010 EC8B509727 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4027.0 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

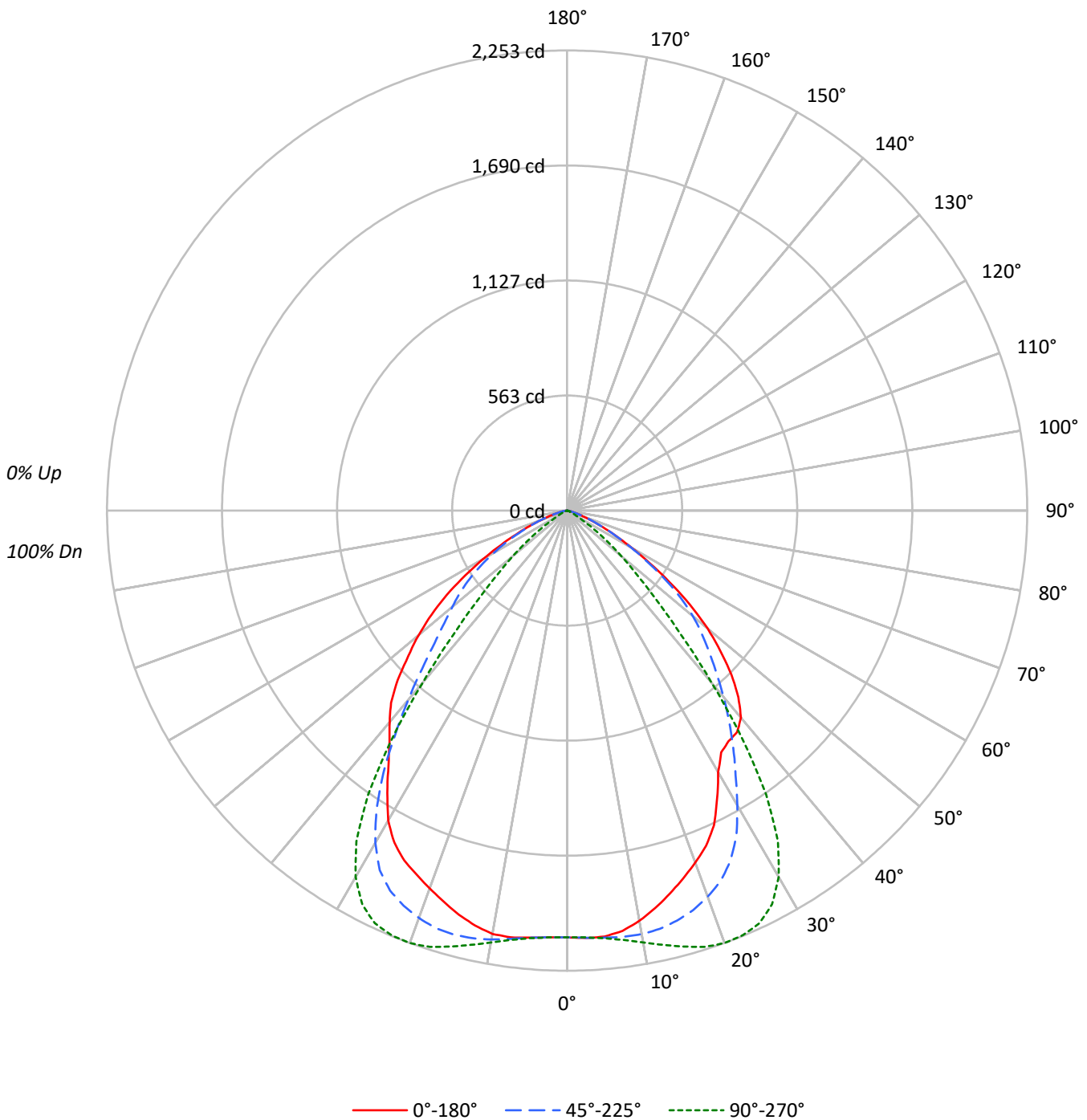
Input Watts (W): 53
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.9	5.0
10°-20°	595.2	14.8
20°-30°	908.0	22.5
30°-40°	947.5	23.5
40°-50°	711.7	17.7
50°-60°	437.9	10.9
60°-70°	178.2	4.4
70°-80°	42.0	1.0
80°-90°	5.8	0.1
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°	1704.0	42.3
0°-40°	2651.5	65.8
0°-60°	3801.0	94.4
0°-90°	4027.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4027.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2089	2089	2089	2089	2089	
5°	2094	2099	2101	2099	2099	198
15°	1942	2078	2210	2149	2048	547
25°	1701	1892	2229	2052	1890	773
35°	1378	1417	1698	1569	1525	870
45°	1138	985	614	917	1173	868
55°	614	583	161	583	720	552
65°	192	194	24	261	276	200
75°	33	33	4	59	61	40
85°	3	3	1	8	10	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1
2.5°	2094.6	2091.3	2094.6	2094.6	2095.7	2093.5	2094.6	2095.7	2093.5	2093.5	2093.5
5°	2093.5	2091.3	2093.5	2092.4	2094.6	2094.6	2096.9	2096.9	2099.1	2099.1	2102.4
7.5°	2075.8	2071.3	2075.8	2079.1	2081.3	2085.8	2091.3	2095.7	2100.2	2104.6	2110.1
10°	2039.2	2039.2	2042.5	2049.2	2055.8	2063.6	2073.5	2084.6	2095.7	2105.7	2115.7
12.5°	1993.7	1990.4	1997.0	2005.9	2015.9	2028.1	2043.6	2060.3	2078.0	2097.9	2113.5
15°	1941.6	1938.3	1946.0	1954.9	1967.1	1984.9	2003.7	2025.9	2051.4	2078.0	2103.5
17.5°	1888.4	1887.3	1895.0	1907.2	1917.2	1936.0	1960.5	1987.1	2015.9	2051.4	2084.6
20°	1834.1	1832.9	1840.7	1850.7	1864.0	1881.7	1906.1	1937.2	1971.5	2011.5	2050.3
22.5°	1777.5	1778.6	1785.2	1796.3	1807.4	1826.3	1851.8	1882.8	1920.5	1963.8	2007.0
25°	1701.0	1695.4	1704.3	1715.4	1734.2	1749.8	1774.2	1807.4	1846.2	1891.7	1942.7
27.5°	1590.1	1589.0	1596.8	1606.7	1623.3	1642.2	1668.8	1703.2	1744.2	1794.1	1844.0
30°	1479.2	1481.4	1484.8	1494.7	1505.8	1524.7	1551.3	1580.1	1618.9	1666.6	1719.8
32.5°	1403.8	1403.8	1408.2	1414.9	1422.7	1432.6	1451.5	1472.6	1502.5	1535.8	1574.6
35°	1378.3	1373.9	1378.3	1379.4	1380.5	1382.7	1386.1	1392.7	1402.7	1417.1	1431.5
37.5°	1367.2	1363.9	1363.9	1359.5	1353.9	1347.3	1338.4	1328.4	1317.3	1302.9	1291.8
40°	1324.0	1321.8	1319.5	1315.1	1302.9	1289.6	1275.2	1251.9	1226.4	1190.9	1155.4
42.5°	1240.8	1238.6	1237.5	1228.6	1217.5	1202.0	1185.4	1161.0	1128.8	1083.3	1032.3
45°	1137.7	1133.2	1129.9	1122.2	1114.4	1101.1	1085.6	1063.4	1031.2	984.7	923.7
47.5°	1017.9	1015.7	1014.6	1011.3	1003.5	995.7	985.8	968.0	939.2	894.8	831.6
50°	897.1	892.6	894.8	893.7	890.4	884.9	878.2	866.0	843.8	803.9	746.3
52.5°	758.4	758.4	757.4	760.7	761.8	760.7	761.8	748.5	729.6	699.7	650.9
55°	614.3	614.3	617.6	622.1	626.5	627.6	626.5	621.0	607.6	583.3	540.0
57.5°	479.0	476.8	483.5	490.1	494.6	499.0	495.6	491.2	483.5	463.5	430.2
60°	364.8	364.8	369.2	373.7	378.1	382.6	381.4	380.3	373.7	360.4	333.8
62.5°	268.3	269.4	269.4	272.8	277.2	281.7	285.0	281.7	278.3	269.4	251.7
65°	191.8	190.7	191.8	195.2	198.5	202.9	205.1	204.0	200.7	194.0	180.8
67.5°	128.6	127.5	131.9	133.1	135.3	139.7	138.6	139.7	138.6	133.1	122.0
70°	84.3	82.0	84.3	83.2	86.5	87.6	89.8	90.9	89.8	86.5	83.2
72.5°	52.1	51.0	52.1	53.2	54.3	55.4	57.7	57.7	56.5	54.3	49.9
75°	33.3	29.9	31.0	28.8	31.0	31.0	33.3	34.4	33.3	33.3	31.0
77.5°	20.0	20.0	20.0	20.0	20.0	20.0	20.0	21.1	22.2	20.0	18.9
80°	10.0	10.0	11.1	11.1	11.1	12.2	11.1	11.1	11.1	12.2	8.9
82.5°	7.8	6.6	6.6	6.6	7.8	6.6	6.6	6.6	6.6	6.6	6.6
85°	3.3	4.4	3.3	2.2	3.3	3.3	4.4	3.3	3.3	3.3	4.4
87.5°	1.1	1.1	0.0	0.0	0.0	1.1	0.0	1.1	1.1	2.2	0.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1
2.5°	2094.6	2092.4	2092.4	2091.3	2093.5	2091.3	2092.4	2091.3	2091.3	2093.5	2091.3
5°	2102.4	2103.5	2101.3	2100.2	2103.5	2103.5	2103.5	2101.3	2101.3	2102.4	2101.3
7.5°	2113.5	2115.7	2116.8	2117.9	2120.1	2121.2	2121.2	2120.1	2119.0	2122.4	2117.9
10°	2125.7	2129.0	2135.7	2139.0	2144.5	2144.5	2146.7	2146.7	2144.5	2146.7	2145.6
12.5°	2121.2	2141.2	2152.3	2160.0	2167.8	2174.4	2176.7	2177.8	2176.7	2181.1	2176.7
15°	2129.0	2145.6	2163.4	2176.7	2191.1	2198.8	2201.1	2209.9	2212.2	2213.3	2206.6
17.5°	2116.8	2146.7	2165.6	2185.5	2206.6	2221.0	2234.3	2239.9	2241.0	2243.2	2234.3
20°	2089.1	2122.4	2151.2	2180.0	2204.4	2226.6	2237.7	2253.2	2248.8	2257.6	2245.4
22.5°	2051.4	2089.1	2125.7	2163.4	2188.9	2215.5	2238.8	2249.8	2255.4	2255.4	2242.1
25°	1991.5	2035.9	2075.8	2114.6	2153.4	2185.5	2212.2	2228.8	2232.1	2231.0	2215.5
27.5°	1898.4	1946.0	1992.6	2037.0	2084.6	2122.4	2153.4	2173.3	2178.9	2178.9	2162.3
30°	1769.7	1820.7	1866.2	1919.4	1968.2	2010.4	2053.6	2071.3	2081.3	2081.3	2062.5
32.5°	1616.7	1659.9	1702.1	1754.2	1807.4	1855.1	1896.1	1920.5	1932.7	1931.6	1915.0
35°	1450.4	1471.4	1503.6	1542.4	1590.1	1634.4	1674.4	1697.7	1718.7	1717.6	1702.1
37.5°	1284.0	1278.5	1281.8	1296.2	1326.2	1357.2	1388.3	1410.5	1428.2	1436.0	1432.6
40°	1121.1	1092.2	1064.5	1054.5	1056.7	1067.8	1084.5	1101.1	1121.1	1131.0	1135.5
42.5°	974.7	925.9	877.1	840.5	819.4	812.8	820.5	826.1	838.3	852.7	867.1
45°	857.1	791.7	727.4	670.9	635.4	614.3	609.9	614.3	621.0	635.4	654.2
47.5°	760.7	684.2	612.1	548.9	496.8	469.1	461.3	459.1	465.7	479.0	504.5
50°	675.3	598.8	518.9	445.7	391.4	360.4	349.3	344.8	352.6	362.6	385.9
52.5°	582.1	506.7	424.7	353.7	297.2	265.0	252.8	246.2	250.6	263.9	287.2
55°	481.2	411.4	337.1	263.9	209.6	179.6	165.2	160.8	165.2	179.6	202.9
57.5°	380.3	321.6	259.5	190.7	141.9	112.0	97.6	93.1	105.4	110.9	135.3
60°	297.2	249.5	196.3	139.7	97.6	74.3	59.9	56.5	62.1	72.1	92.0
62.5°	222.9	192.9	150.8	99.8	72.1	47.7	39.9	36.6	39.9	47.7	63.2
65°	161.9	138.6	105.4	73.2	48.8	35.5	26.6	24.4	27.7	33.3	46.6
67.5°	110.9	93.1	73.2	51.0	33.3	22.2	18.9	18.9	20.0	24.4	34.4
70°	72.1	61.0	46.6	33.3	22.2	16.6	14.4	12.2	14.4	17.7	23.3
72.5°	45.5	38.8	29.9	23.3	16.6	12.2	10.0	8.9	11.1	13.3	17.7
75°	27.7	21.1	15.5	12.2	8.9	8.9	8.9	4.4	5.5	8.9	11.1
77.5°	16.6	14.4	12.2	10.0	7.8	4.4	4.4	4.4	5.5	6.6	10.0
80°	8.9	7.8	5.5	5.5	4.4	3.3	4.4	3.3	2.2	5.5	6.6
82.5°	5.5	4.4	4.4	4.4	5.5	2.2	3.3	2.2	3.3	4.4	3.3
85°	3.3	3.3	3.3	2.2	5.5	2.2	2.2	1.1	1.1	2.2	2.2
87.5°	0.0	1.1	1.1	0.0	1.1	0.0	1.1	1.1	1.1	1.1	1.1
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1
2.5°	2092.4	2091.3	2092.4	2091.3	2091.3	2091.3	2092.4	2092.4	2091.3	2091.3	2093.5
5°	2101.3	2101.3	2101.3	2100.2	2099.1	2099.1	2101.3	2101.3	2097.9	2101.3	2101.3
7.5°	2120.1	2116.8	2120.1	2115.7	2113.5	2114.6	2115.7	2113.5	2111.3	2112.4	2112.4
10°	2144.5	2141.2	2141.2	2137.9	2134.5	2132.3	2130.1	2124.6	2119.0	2117.9	2113.5
12.5°	2173.3	2167.8	2164.5	2157.8	2152.3	2144.5	2137.9	2129.0	2117.9	2110.1	2102.4
15°	2202.2	2193.3	2185.5	2174.4	2162.3	2148.9	2134.5	2120.1	2102.4	2086.9	2073.5
17.5°	2225.5	2213.3	2198.8	2181.1	2163.4	2143.4	2122.4	2101.3	2075.8	2055.8	2040.3
20°	2233.2	2215.5	2196.6	2173.3	2150.1	2122.4	2095.7	2068.0	2039.2	2018.1	2000.4
22.5°	2223.3	2202.2	2178.9	2154.5	2123.4	2093.5	2062.5	2030.3	2004.8	1976.0	1959.3
25°	2195.5	2170.0	2144.5	2115.7	2085.8	2052.5	2019.2	1986.0	1954.9	1939.4	1918.3
27.5°	2139.0	2111.3	2083.5	2053.6	2019.2	1986.0	1951.6	1919.4	1892.8	1871.7	1859.6
30°	2039.2	2007.0	1974.9	1942.7	1912.8	1878.4	1846.2	1819.6	1793.0	1776.4	1764.2
32.5°	1886.1	1857.3	1825.2	1794.1	1766.4	1737.6	1711.0	1687.7	1668.8	1657.7	1648.9
35°	1679.9	1651.1	1626.7	1604.5	1581.2	1569.0	1552.4	1539.1	1531.3	1526.9	1525.8
37.5°	1420.4	1403.8	1396.0	1391.6	1387.2	1383.9	1386.1	1391.6	1396.0	1403.8	1412.7
40°	1143.2	1157.6	1162.1	1177.6	1192.0	1210.9	1231.9	1256.3	1276.3	1301.8	1319.5
42.5°	890.4	917.0	948.1	981.3	1016.8	1051.2	1093.3	1132.1	1167.6	1199.8	1227.5
45°	684.2	725.2	771.8	819.4	867.1	917.0	968.0	1015.7	1057.8	1092.2	1121.1
47.5°	533.4	578.8	638.7	697.5	755.1	813.9	870.4	920.3	955.8	989.1	1014.6
50°	422.5	474.6	540.0	607.6	670.9	732.9	792.8	839.4	874.9	901.5	920.3
52.5°	327.1	389.2	455.7	526.7	594.3	662.0	717.4	760.7	789.5	812.8	827.2
55°	243.9	304.9	375.9	449.1	517.8	583.3	635.4	673.1	698.6	711.9	719.6
57.5°	176.3	231.8	302.7	375.9	438.0	500.1	542.2	576.6	591.0	598.8	602.1
60°	128.6	179.6	242.8	306.0	364.8	414.7	451.3	474.6	485.7	490.1	489.0
62.5°	94.3	138.6	192.9	246.2	293.8	334.9	363.7	379.2	384.8	387.0	383.7
65°	72.1	106.4	153.0	194.0	230.6	260.6	281.7	291.6	294.9	293.8	291.6
67.5°	53.2	79.8	114.2	145.3	171.9	195.2	206.3	215.1	217.3	214.0	210.7
70°	37.7	58.8	83.2	104.2	124.2	137.5	149.7	150.8	150.8	149.7	147.5
72.5°	26.6	41.0	56.5	71.0	83.2	93.1	97.6	100.9	99.8	98.7	96.5
75°	17.7	25.5	41.0	44.4	55.4	58.8	63.2	63.2	64.3	61.0	61.0
77.5°	11.1	17.7	24.4	28.8	33.3	37.7	39.9	39.9	41.0	39.9	39.9
80°	6.6	11.1	13.3	20.0	20.0	23.3	24.4	25.5	23.3	26.6	23.3
82.5°	4.4	6.6	10.0	10.0	12.2	14.4	14.4	15.5	15.5	14.4	14.4
85°	3.3	4.4	5.5	6.6	6.6	7.8	6.6	6.6	7.8	8.9	7.8
87.5°	1.1	2.2	1.1	2.2	2.2	4.4	3.3	3.3	3.3	4.4	4.4
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: P244223

CATALOG NUMBER: LSR8B50D010 EC8B509727 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2089.1	2089.1	2089.1	2089.1
2.5°	2091.3	2092.4	2091.3	2091.3
5°	2101.3	2100.2	2101.3	2099.1
7.5°	2109.0	2109.0	2107.9	2107.9
10°	2109.0	2104.6	2104.6	2104.6
12.5°	2092.4	2086.9	2083.5	2081.3
15°	2063.6	2053.6	2049.2	2048.0
17.5°	2025.9	2017.0	2011.5	2008.1
20°	1982.6	1973.8	1967.1	1968.2
22.5°	1944.9	1935.0	1930.5	1928.3
25°	1907.2	1895.0	1891.7	1889.5
27.5°	1846.2	1839.6	1836.3	1832.9
30°	1753.1	1749.8	1744.2	1752.0
32.5°	1645.5	1640.0	1635.6	1638.9
35°	1526.9	1523.6	1526.9	1524.7
37.5°	1418.2	1421.5	1426.0	1428.2
40°	1332.8	1345.0	1349.5	1351.7
42.5°	1247.5	1261.9	1270.7	1276.3
45°	1142.1	1156.5	1166.5	1173.2
47.5°	1033.4	1045.7	1055.6	1054.5
50°	934.8	941.4	945.8	950.3
52.5°	835.0	835.0	836.1	836.1
55°	721.9	719.6	718.5	719.6
57.5°	597.7	595.5	594.3	591.0
60°	484.6	477.9	473.5	473.5
62.5°	379.2	371.5	368.2	367.0
65°	285.0	283.9	277.2	276.1
67.5°	206.3	201.8	197.4	198.5
70°	145.3	138.6	138.6	136.4
72.5°	94.3	90.9	89.8	89.8
75°	58.8	58.8	56.5	61.0
77.5°	38.8	38.8	37.7	38.8
80°	23.3	23.3	23.3	22.2
82.5°	14.4	15.5	14.4	14.4
85°	7.8	8.9	6.6	10.0
87.5°	4.4	5.5	4.4	5.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)