

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: P244661

Luminaire Tested: **LSR8B50D010 EC8B509730 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244661
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B50D010 EC8B509730 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4112.0 lumens
Efficiency: N/A
Efficacy: 77.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

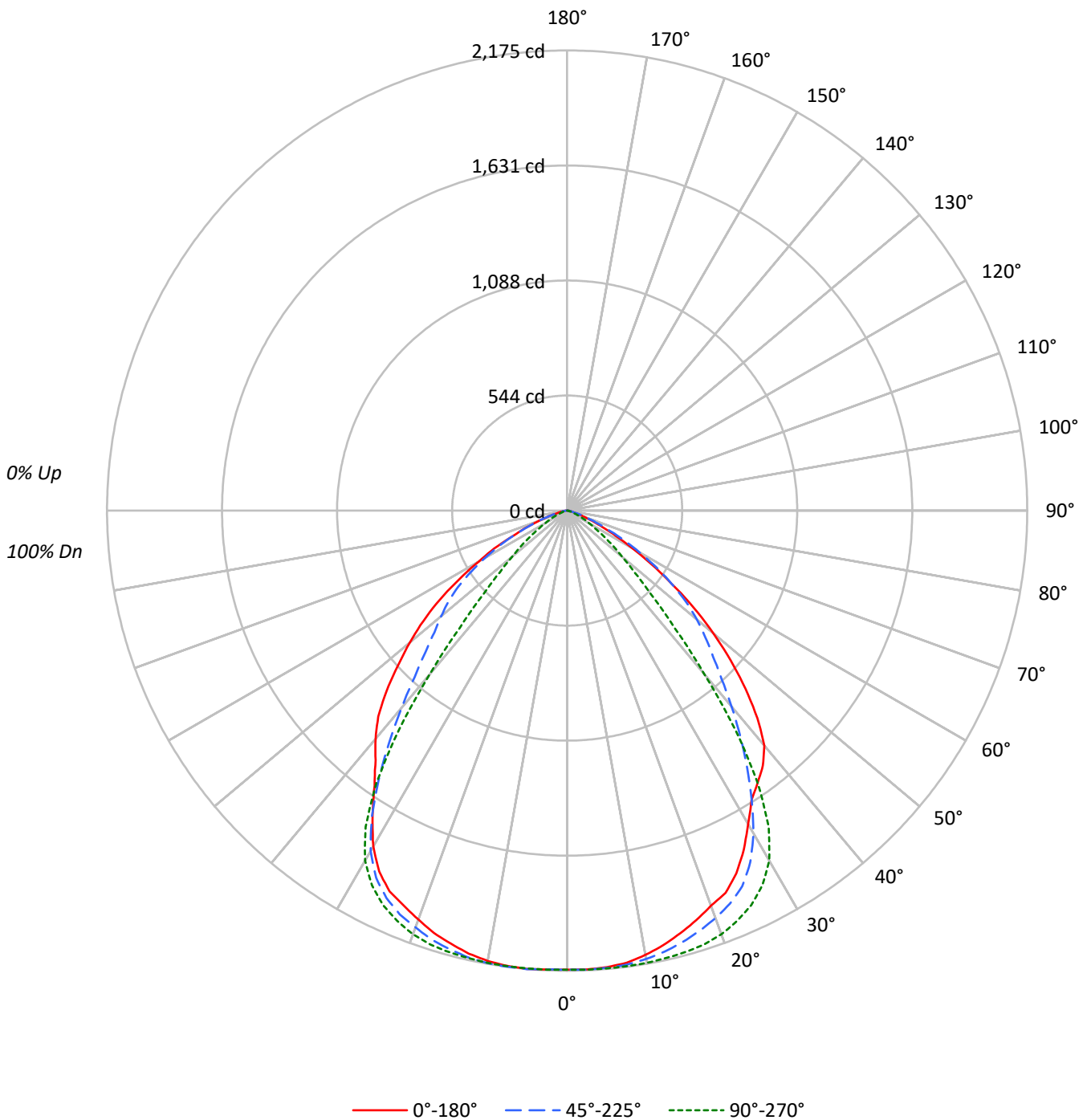
Input Watts (W): 53
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	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°	207.1	5.0
10°-20°	601.3	14.6
20°-30°	912.7	22.2
30°-40°	958.6	23.3
40°-50°	718.7	17.5
50°-60°	461.1	11.2
60°-70°	197.3	4.8
70°-80°	46.6	1.1
80°-90°	8.7	0.2
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°	1721.1	41.9
0°-40°	2679.7	65.2
0°-60°	3859.5	93.9
0°-90°	4112.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4112.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2170	2170	2170	2170	2170	
5°	2166	2170	2172	2175	2174	206
15°	2068	2111	2160	2146	2120	583
25°	1892	1959	2058	2020	1986	865
35°	1570	1482	1571	1552	1587	985
45°	1192	975	560	947	1209	913
55°	603	603	208	629	735	547
65°	182	214	66	276	281	194
75°	28	33	9	56	55	41
85°	9	6	5	9	13	10
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°	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6
2.5°	2170.7	2173.1	2171.9	2171.9	2170.7	2171.9	2171.9	2174.2	2174.2	2171.9	2170.7
5°	2166.1	2168.4	2168.4	2166.1	2166.1	2171.9	2168.4	2170.7	2170.7	2169.6	2169.6
7.5°	2155.6	2155.6	2160.3	2156.8	2156.8	2160.3	2159.1	2161.4	2163.8	2164.9	2164.9
10°	2132.3	2134.6	2135.8	2135.8	2137.0	2140.5	2142.8	2147.5	2149.8	2152.1	2153.3
12.5°	2103.2	2106.7	2107.9	2106.7	2110.2	2114.8	2120.7	2126.5	2130.0	2134.6	2138.1
15°	2068.2	2068.2	2070.6	2074.1	2076.4	2083.4	2089.2	2096.2	2105.5	2111.4	2117.2
17.5°	2029.8	2032.2	2035.6	2035.6	2040.3	2051.9	2055.4	2065.9	2076.4	2082.2	2093.9
20°	1987.9	1990.2	1993.7	1996.1	2001.9	2011.2	2018.2	2027.5	2039.2	2049.6	2061.3
22.5°	1955.3	1950.6	1953.0	1955.3	1961.1	1969.3	1977.4	1989.1	2000.7	2011.2	2022.9
25°	1892.4	1893.6	1897.1	1899.4	1906.4	1913.4	1922.7	1936.7	1947.1	1958.8	1971.6
27.5°	1807.4	1808.6	1814.4	1814.4	1820.2	1831.9	1837.7	1849.3	1863.3	1874.9	1890.1
30°	1710.7	1713.1	1713.1	1717.7	1721.2	1727.0	1732.9	1744.5	1751.5	1762.0	1783.0
32.5°	1622.2	1624.6	1623.4	1622.2	1618.7	1617.6	1616.4	1618.7	1621.1	1624.6	1632.7
35°	1569.8	1564.0	1559.4	1551.2	1541.9	1530.2	1519.7	1505.8	1493.0	1482.5	1470.8
37.5°	1519.7	1518.6	1511.6	1499.9	1481.3	1460.4	1435.9	1405.6	1375.3	1342.7	1311.3
40°	1449.9	1446.4	1440.6	1424.3	1403.3	1377.7	1345.1	1307.8	1258.9	1208.8	1157.6
42.5°	1331.1	1332.3	1325.3	1312.4	1292.7	1268.2	1234.4	1193.7	1141.3	1081.9	1015.5
45°	1192.5	1192.5	1190.2	1179.7	1165.7	1145.9	1120.3	1086.5	1035.3	974.7	903.7
47.5°	1048.1	1049.3	1045.8	1043.5	1037.6	1024.8	1006.2	980.6	944.5	886.2	815.2
50°	901.4	901.4	907.2	906.0	906.0	901.4	893.2	878.1	846.6	800.1	733.7
52.5°	754.6	757.0	760.5	765.1	770.9	780.2	770.9	763.9	744.1	708.0	651.0
55°	603.2	605.6	611.4	619.5	626.5	635.9	638.2	638.2	627.7	603.2	560.2
57.5°	474.0	470.5	475.2	482.1	491.5	500.8	507.8	515.9	514.7	498.4	463.5
60°	356.4	357.5	361.0	368.0	375.0	383.1	392.5	399.4	402.9	394.8	372.7
62.5°	259.7	259.7	264.3	271.3	274.8	286.5	292.3	295.8	299.3	298.1	284.2
65°	181.7	184.0	186.3	189.8	193.3	200.3	203.8	210.8	213.1	214.3	203.8
67.5°	128.1	124.6	126.9	129.3	132.8	137.4	144.4	144.4	147.9	147.9	140.9
70°	81.5	81.5	82.7	86.2	88.5	89.7	92.0	94.3	97.8	96.7	96.7
72.5°	54.7	53.6	54.7	55.9	57.1	60.6	60.6	61.7	64.1	65.2	60.6
75°	28.0	29.1	31.4	30.3	33.8	31.4	32.6	36.1	34.9	32.6	32.6
77.5°	23.3	23.3	23.3	22.1	24.4	24.4	23.3	25.6	24.4	24.4	23.3
80°	16.3	17.5	16.3	15.1	16.3	15.1	15.1	15.1	15.1	15.1	14.0
82.5°	12.8	10.5	11.7	10.5	11.7	11.7	10.5	9.3	9.3	10.5	9.3
85°	9.3	7.0	8.1	8.1	7.0	7.0	7.0	7.0	7.0	5.8	5.8
87.5°	5.8	3.5	3.5	3.5	4.6	4.6	4.6	3.5	4.6	4.6	2.3
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°	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6
2.5°	2173.1	2171.9	2174.2	2173.1	2173.1	2171.9	2173.1	2171.9	2174.2	2169.6	2170.7
5°	2173.1	2170.7	2171.9	2173.1	2174.2	2171.9	2171.9	2171.9	2174.2	2171.9	2173.1
7.5°	2168.4	2167.2	2170.7	2173.1	2171.9	2170.7	2173.1	2171.9	2174.2	2173.1	2175.4
10°	2159.1	2160.3	2162.6	2166.1	2167.2	2168.4	2170.7	2170.7	2174.2	2169.6	2171.9
12.5°	2145.1	2149.8	2155.6	2157.9	2162.6	2162.6	2164.9	2166.1	2168.4	2167.2	2170.7
15°	2127.7	2133.5	2140.5	2146.3	2152.1	2155.6	2159.1	2160.3	2163.8	2160.3	2161.4
17.5°	2106.7	2113.7	2124.2	2131.1	2140.5	2144.0	2148.6	2150.9	2154.4	2152.1	2153.3
20°	2077.6	2085.7	2097.4	2107.9	2113.7	2121.8	2127.7	2131.1	2133.5	2131.1	2132.3
22.5°	2036.8	2048.5	2063.6	2071.7	2083.4	2090.4	2091.6	2099.7	2105.5	2099.7	2102.0
25°	1989.1	2000.7	2012.4	2029.8	2040.3	2048.5	2056.6	2057.8	2063.6	2062.4	2061.3
27.5°	1909.9	1925.0	1944.8	1958.8	1972.8	1985.6	1994.9	1997.2	2003.0	2000.7	2001.9
30°	1801.6	1817.9	1836.5	1858.6	1878.4	1891.2	1902.9	1911.0	1916.9	1913.4	1912.2
32.5°	1647.9	1664.2	1684.0	1706.1	1729.4	1748.0	1762.0	1772.5	1779.4	1777.1	1771.3
35°	1472.0	1476.7	1489.5	1507.0	1526.7	1546.5	1559.4	1571.0	1579.1	1581.5	1581.5
37.5°	1291.5	1276.4	1267.1	1267.1	1278.7	1286.8	1298.5	1305.5	1318.3	1322.9	1326.4
40°	1116.8	1081.9	1049.3	1024.8	1008.5	1007.4	1007.4	1010.8	1022.5	1037.6	1051.6
42.5°	960.8	904.9	854.8	809.4	776.8	758.1	750.0	751.2	760.5	774.4	797.7
45°	836.2	766.3	703.4	648.7	604.4	575.3	561.3	560.2	567.1	583.4	609.1
47.5°	739.5	665.0	593.9	531.0	483.3	451.8	435.5	430.9	435.5	450.7	481.0
50°	659.1	582.3	508.9	443.7	392.5	359.9	344.7	338.9	344.7	357.5	387.8
52.5°	584.6	505.4	436.7	373.8	319.1	291.1	274.8	271.3	274.8	290.0	314.4
55°	498.4	430.9	363.3	300.5	252.7	224.8	211.9	208.5	211.9	225.9	251.6
57.5°	413.4	355.2	295.8	238.7	198.0	173.5	161.9	157.2	165.4	174.7	205.0
60°	334.2	287.7	237.6	187.5	153.7	131.6	122.3	121.1	123.4	135.1	156.0
62.5°	262.0	223.6	184.0	143.2	115.3	106.0	94.3	93.2	95.5	102.5	118.8
65°	188.7	164.2	133.9	104.8	82.7	69.9	65.2	66.4	68.7	73.4	88.5
67.5°	131.6	114.1	93.2	73.4	57.1	51.2	46.6	45.4	46.6	54.7	62.9
70°	88.5	78.0	62.9	55.9	39.6	31.4	32.6	29.1	33.8	33.8	40.7
72.5°	58.2	51.2	41.9	32.6	28.0	22.1	22.1	21.0	23.3	24.4	30.3
75°	30.3	23.3	23.3	16.3	11.7	5.8	10.5	9.3	8.1	9.3	11.7
77.5°	21.0	17.5	16.3	12.8	11.7	9.3	9.3	9.3	9.3	10.5	11.7
80°	12.8	12.8	9.3	8.1	7.0	5.8	7.0	7.0	7.0	7.0	8.1
82.5°	8.1	7.0	7.0	5.8	5.8	4.6	4.6	4.6	4.6	4.6	7.0
85°	7.0	4.6	4.6	3.5	4.6	8.1	3.5	4.6	4.6	4.6	3.5
87.5°	2.3	3.5	3.5	3.5	2.3	1.2	2.3	3.5	3.5	5.8	4.6
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°	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6	2169.6
2.5°	2173.1	2174.2	2174.2	2173.1	2173.1	2170.7	2175.4	2171.9	2173.1	2177.7	2174.2
5°	2175.4	2176.6	2176.6	2175.4	2175.4	2175.4	2176.6	2176.6	2175.4	2174.2	2176.6
7.5°	2180.1	2178.9	2178.9	2176.6	2176.6	2174.2	2176.6	2173.1	2175.4	2173.1	2176.6
10°	2174.2	2175.4	2174.2	2173.1	2173.1	2171.9	2171.9	2168.4	2169.6	2166.1	2168.4
12.5°	2170.7	2169.6	2169.6	2167.2	2164.9	2162.6	2161.4	2157.9	2157.9	2149.8	2153.3
15°	2161.4	2162.6	2159.1	2154.4	2152.1	2146.3	2144.0	2139.3	2134.6	2128.8	2130.0
17.5°	2153.3	2149.8	2145.1	2140.5	2131.1	2126.5	2121.8	2114.8	2112.5	2105.5	2103.2
20°	2128.8	2126.5	2120.7	2112.5	2106.7	2096.2	2091.6	2084.6	2078.7	2071.7	2068.2
22.5°	2097.4	2095.0	2088.0	2079.9	2070.6	2065.9	2061.3	2048.5	2042.6	2035.6	2034.5
25°	2057.8	2054.3	2047.3	2038.0	2033.3	2020.5	2015.8	2006.5	2004.2	1997.2	1996.1
27.5°	1997.2	1992.6	1984.4	1972.8	1964.6	1956.5	1951.8	1944.8	1942.5	1935.5	1934.3
30°	1906.4	1900.6	1884.3	1879.6	1865.6	1857.5	1857.5	1848.2	1849.3	1844.7	1844.7
32.5°	1763.1	1753.8	1741.0	1731.7	1722.4	1717.7	1717.7	1714.2	1716.6	1716.6	1718.9
35°	1573.3	1560.5	1553.5	1547.7	1547.7	1552.3	1566.3	1569.8	1576.8	1582.6	1587.3
37.5°	1329.9	1328.8	1336.9	1343.9	1361.4	1381.2	1405.6	1426.6	1446.4	1460.4	1474.3
40°	1066.7	1095.9	1119.1	1151.8	1178.5	1217.0	1261.2	1297.3	1331.1	1355.6	1381.2
42.5°	832.6	869.9	918.8	966.6	1014.3	1066.7	1125.0	1175.0	1219.3	1253.1	1279.8
45°	648.7	699.9	759.3	819.9	881.6	946.8	1007.4	1058.6	1105.2	1140.1	1166.9
47.5°	522.9	578.8	646.3	712.7	782.6	851.3	918.8	963.1	1001.5	1029.5	1053.9
50°	432.0	491.5	562.5	638.2	708.0	776.8	835.0	878.1	909.5	934.0	949.1
52.5°	361.0	423.9	499.6	575.3	645.2	708.0	760.5	793.1	818.7	836.2	850.1
55°	298.1	358.7	429.7	500.8	569.5	628.9	671.9	696.4	716.2	726.7	734.8
57.5°	243.4	299.3	364.5	429.7	489.1	538.0	571.8	596.3	605.6	613.7	612.6
60°	191.0	243.4	302.8	358.7	409.9	449.5	474.0	487.9	494.9	498.4	496.1
62.5°	150.2	198.0	243.4	292.3	329.6	363.3	386.6	386.6	390.1	391.3	394.8
65°	111.8	147.9	187.5	223.6	253.9	276.0	288.8	292.3	297.0	295.8	293.5
67.5°	82.7	109.5	138.6	165.4	186.3	200.3	209.6	217.8	216.6	214.3	213.1
70°	57.1	74.5	100.2	116.5	131.6	145.6	147.9	149.1	150.2	151.4	149.1
72.5°	39.6	52.4	66.4	80.4	89.7	95.5	101.3	102.5	102.5	102.5	101.3
75°	19.8	26.8	39.6	45.4	53.6	55.9	60.6	60.6	64.1	59.4	58.2
77.5°	17.5	21.0	28.0	32.6	36.1	39.6	40.7	44.3	43.1	40.7	41.9
80°	10.5	12.8	17.5	19.8	24.4	25.6	26.8	28.0	26.8	28.0	28.0
82.5°	8.1	9.3	11.7	11.7	15.1	15.1	16.3	16.3	17.5	17.5	17.5
85°	4.6	8.1	7.0	14.0	9.3	9.3	11.7	14.0	11.7	11.7	14.0
87.5°	4.6	4.6	3.5	4.6	4.6	4.6	5.8	7.0	7.0	8.1	7.0
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: P244661

CATALOG NUMBER: LSR8B50D010 EC8B509730 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2169.6	2169.6	2169.6	2169.6
2.5°	2173.1	2175.4	2171.9	2170.7
5°	2176.6	2176.6	2174.2	2174.2
7.5°	2176.6	2176.6	2173.1	2170.7
10°	2167.2	2167.2	2163.8	2161.4
12.5°	2149.8	2149.8	2148.6	2145.1
15°	2127.7	2127.7	2123.0	2119.5
17.5°	2097.4	2099.7	2093.9	2093.9
20°	2064.8	2063.6	2059.0	2056.6
22.5°	2031.0	2028.7	2027.5	2020.5
25°	1994.9	1992.6	1989.1	1985.6
27.5°	1933.2	1932.0	1928.5	1923.9
30°	1838.8	1837.7	1833.0	1833.0
32.5°	1716.6	1715.4	1710.7	1711.9
35°	1589.6	1594.3	1592.0	1587.3
37.5°	1483.6	1487.1	1489.5	1487.1
40°	1395.1	1405.6	1406.8	1409.1
42.5°	1300.8	1314.8	1319.5	1321.8
45°	1187.8	1200.7	1211.1	1208.8
47.5°	1072.5	1081.9	1091.2	1084.2
50°	961.9	967.7	971.2	971.2
52.5°	857.1	857.1	856.0	857.1
55°	737.2	737.2	732.5	734.8
57.5°	611.4	613.7	610.2	604.4
60°	494.9	489.1	486.8	483.3
62.5°	385.5	385.5	377.3	387.8
65°	288.8	285.3	281.8	280.6
67.5°	209.6	208.5	205.0	203.8
70°	147.9	143.2	142.1	139.7
72.5°	99.0	99.0	96.7	96.7
75°	60.6	54.7	53.6	54.7
77.5°	41.9	40.7	40.7	39.6
80°	28.0	26.8	29.1	25.6
82.5°	17.5	18.6	17.5	18.6
85°	11.7	14.0	12.8	12.8
87.5°	7.0	7.0	7.0	7.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)