

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: P244210

Luminaire Tested: **LSR8B40D010 EC8B40940 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244210  
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: LSR8B40D010 EC8B40940 8LBDW0LI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4118.0 lumens  
Efficiency: N/A  
Efficacy: 100.7 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

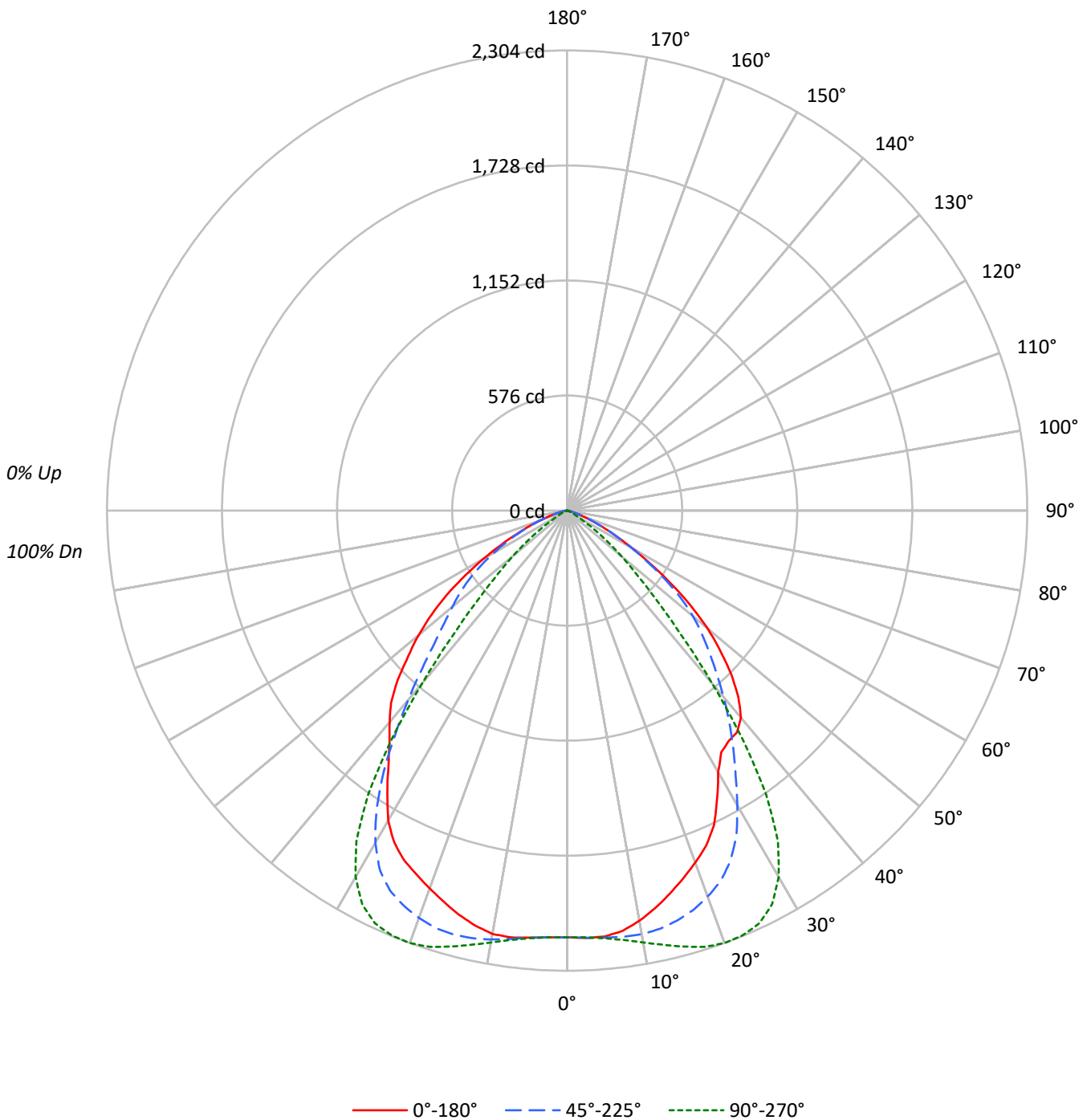
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	65876	65876	65876
5°	66267	66514	66443
10°	65295	68739	67390
15°	63385	72145	66859
20°	61545	75610	66047
25°	59182	77548	65741
30°	53859	75422	63793
35°	53056	65350	58691
40°	54500	45326	55639
45°	50735	27395	52318
50°	44005	16915	46620
55°	33773	8838	39563
60°	23010	3565	29862
65°	14316	1817	20598
70°	7772	1127	12577
75°	4051	536	7434
80°	1811	604	4031
85°	1203	389	3609



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.4	5.0
10°-20°	608.6	14.8
20°-30°	928.5	22.5
30°-40°	968.9	23.5
40°-50°	727.8	17.7
50°-60°	447.8	10.9
60°-70°	182.2	4.4
70°-80°	42.9	1.0
80°-90°	5.9	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°	1742.5	42.3
0°-40°	2711.4	65.8
0°-60°	3886.9	94.4
0°-90°	4118.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4118.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2136	2136	2136	2136	2136	
5°	2141	2146	2149	2146	2146	203
15°	1986	2125	2260	2198	2094	559
25°	1739	1934	2279	2099	1932	791
35°	1409	1449	1736	1604	1559	890
45°	1163	1007	628	938	1200	888
55°	628	596	164	596	736	565
65°	196	198	25	266	282	205
75°	34	34	4	60	62	41
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°	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3
2.5°	2142.0	2138.5	2142.0	2142.0	2143.1	2140.8	2142.0	2143.1	2140.8	2140.8	2140.8
5°	2140.8	2138.5	2140.8	2139.7	2142.0	2142.0	2144.2	2144.2	2146.5	2146.5	2149.9
7.5°	2122.7	2118.2	2122.7	2126.1	2128.3	2132.9	2138.5	2143.1	2147.6	2152.2	2157.8
10°	2085.3	2085.3	2088.7	2095.5	2102.3	2110.2	2120.4	2131.8	2143.1	2153.3	2163.5
12.5°	2038.8	2035.4	2042.2	2051.2	2061.4	2073.9	2089.8	2106.8	2125.0	2145.3	2161.2
15°	1985.5	1982.1	1990.0	1999.1	2011.6	2029.7	2049.0	2071.7	2097.7	2125.0	2151.0
17.5°	1931.0	1929.9	1937.8	1950.3	1960.5	1979.8	2004.8	2032.0	2061.4	2097.7	2131.8
20°	1875.5	1874.4	1882.3	1892.5	1906.1	1924.2	1949.2	1980.9	2016.1	2056.9	2096.6
22.5°	1817.7	1818.8	1825.6	1836.9	1848.3	1867.5	1893.6	1925.4	1963.9	2008.1	2052.4
25°	1739.4	1733.7	1742.8	1754.2	1773.4	1789.3	1814.3	1848.3	1888.0	1934.5	1986.6
27.5°	1626.0	1624.9	1632.8	1643.0	1660.0	1679.3	1706.5	1741.7	1783.6	1834.7	1885.7
30°	1512.6	1514.9	1518.3	1528.5	1539.8	1559.1	1586.3	1615.8	1655.5	1704.3	1758.7
32.5°	1435.5	1435.5	1440.1	1446.9	1454.8	1465.0	1484.3	1505.8	1536.5	1570.5	1610.1
35°	1409.4	1404.9	1409.4	1410.6	1411.7	1414.0	1417.4	1424.2	1434.4	1449.1	1463.9
37.5°	1398.1	1394.7	1394.7	1390.2	1384.5	1377.7	1368.6	1358.4	1347.1	1332.3	1321.0
40°	1353.9	1351.6	1349.3	1344.8	1332.3	1318.7	1304.0	1280.2	1254.1	1217.8	1181.5
42.5°	1268.9	1266.6	1265.4	1256.4	1245.0	1229.2	1212.1	1187.2	1154.3	1107.8	1055.7
45°	1163.4	1158.8	1155.5	1147.5	1139.6	1126.0	1110.1	1087.4	1054.5	1006.9	944.5
47.5°	1040.9	1038.7	1037.5	1034.1	1026.2	1018.2	1008.1	989.9	960.4	915.1	850.4
50°	917.3	912.8	915.1	913.9	910.5	904.9	898.0	885.6	862.9	822.1	763.1
52.5°	775.6	775.6	774.5	777.9	779.0	777.9	779.0	765.4	746.1	715.5	665.6
55°	628.2	628.2	631.6	636.1	640.7	641.8	640.7	635.0	621.4	596.4	552.2
57.5°	489.8	487.6	494.4	501.2	505.7	510.3	506.8	502.3	494.4	474.0	440.0
60°	373.1	373.1	377.6	382.1	386.7	391.2	390.1	388.9	382.1	368.5	341.3
62.5°	274.4	275.5	275.5	278.9	283.5	288.0	291.4	288.0	284.6	275.5	257.4
65°	196.2	195.0	196.2	199.6	203.0	207.5	209.8	208.6	205.2	198.4	184.8
67.5°	131.5	130.4	134.9	136.1	138.3	142.9	141.7	142.9	141.7	136.1	124.7
70°	86.2	83.9	86.2	85.0	88.5	89.6	91.8	93.0	91.8	88.5	85.0
72.5°	53.3	52.2	53.3	54.4	55.6	56.7	59.0	59.0	57.8	55.6	51.0
75°	34.0	30.6	31.7	29.5	31.7	31.7	34.0	35.2	34.0	34.0	31.7
77.5°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	21.6	22.7	20.4	19.3
80°	10.2	10.2	11.3	11.3	11.3	12.5	11.3	11.3	11.3	12.5	9.1
82.5°	7.9	6.8	6.8	6.8	7.9	6.8	6.8	6.8	6.8	6.8	6.8
85°	3.4	4.5	3.4	2.3	3.4	3.4	4.5	3.4	3.4	3.4	4.5
87.5°	1.1	1.1	0.0	0.0	0.0	1.1	0.0	1.1	1.1	2.3	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°	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3
2.5°	2142.0	2139.7	2139.7	2138.5	2140.8	2138.5	2139.7	2138.5	2138.5	2140.8	2138.5
5°	2149.9	2151.0	2148.8	2147.6	2151.0	2151.0	2151.0	2148.8	2148.8	2149.9	2148.8
7.5°	2161.2	2163.5	2164.6	2165.8	2168.0	2169.2	2169.2	2168.0	2166.9	2170.3	2165.8
10°	2173.7	2177.1	2183.9	2187.3	2193.0	2193.0	2195.3	2195.3	2193.0	2195.3	2194.1
12.5°	2169.2	2189.6	2200.9	2208.9	2216.8	2223.6	2225.9	2227.0	2225.9	2230.4	2225.9
15°	2177.1	2194.1	2212.3	2225.9	2240.6	2248.5	2250.8	2259.9	2262.2	2263.3	2256.5
17.5°	2164.6	2195.3	2214.5	2234.9	2256.5	2271.2	2284.8	2290.5	2291.6	2293.9	2284.8
20°	2136.3	2170.3	2199.8	2229.3	2254.2	2276.9	2288.2	2304.1	2299.6	2308.7	2296.2
22.5°	2097.7	2136.3	2173.7	2212.3	2238.3	2265.6	2289.4	2300.7	2306.4	2306.4	2292.8
25°	2036.5	2081.9	2122.7	2162.4	2202.1	2234.9	2262.2	2279.2	2282.6	2281.4	2265.6
27.5°	1941.3	1990.0	2037.6	2083.0	2131.8	2170.3	2202.1	2222.4	2228.1	2228.1	2211.1
30°	1809.7	1861.9	1908.4	1962.8	2012.7	2055.8	2100.0	2118.2	2128.3	2128.3	2109.1
32.5°	1653.2	1697.5	1740.5	1793.8	1848.3	1897.0	1939.0	1963.9	1976.4	1975.3	1958.3
35°	1483.2	1504.7	1537.6	1577.3	1626.0	1671.4	1712.2	1736.0	1757.6	1756.4	1740.5
37.5°	1313.1	1307.4	1310.8	1325.5	1356.1	1387.9	1419.7	1442.3	1460.5	1468.4	1465.0
40°	1146.4	1116.9	1088.5	1078.4	1080.6	1092.0	1109.0	1126.0	1146.4	1156.6	1161.1
42.5°	996.7	946.8	896.9	859.5	838.0	831.2	839.1	844.7	857.2	872.0	886.7
45°	876.5	809.6	743.8	686.0	649.7	628.2	623.6	628.2	635.0	649.7	669.0
47.5°	777.9	699.6	625.9	561.3	508.0	479.7	471.7	469.4	476.2	489.8	515.9
50°	690.5	612.3	530.7	455.8	400.3	368.5	357.2	352.6	360.6	370.8	394.6
52.5°	595.3	518.2	434.3	361.7	303.9	271.0	258.5	251.7	256.3	269.9	293.7
55°	492.1	420.7	344.7	269.9	214.3	183.7	168.9	164.4	168.9	183.7	207.5
57.5°	388.9	328.8	265.3	195.0	145.1	114.5	99.8	95.2	107.7	113.4	138.3
60°	303.9	255.1	200.7	142.9	99.8	76.0	61.2	57.8	63.5	73.7	94.1
62.5°	227.9	197.3	154.2	102.0	73.7	48.7	40.8	37.4	40.8	48.7	64.6
65°	165.6	141.7	107.7	74.8	49.9	36.3	27.2	24.9	28.4	34.0	47.6
67.5°	113.4	95.2	74.8	52.2	34.0	22.7	19.3	19.3	20.4	24.9	35.2
70°	73.7	62.4	47.6	34.0	22.7	17.0	14.7	12.5	14.7	18.1	23.8
72.5°	46.5	39.7	30.6	23.8	17.0	12.5	10.2	9.1	11.3	13.6	18.1
75°	28.4	21.6	15.9	12.5	9.1	9.1	9.1	4.5	5.7	9.1	11.3
77.5°	17.0	14.7	12.5	10.2	7.9	4.5	4.5	4.5	5.7	6.8	10.2
80°	9.1	7.9	5.7	5.7	4.5	3.4	4.5	3.4	2.3	5.7	6.8
82.5°	5.7	4.5	4.5	4.5	5.7	2.3	3.4	2.3	3.4	4.5	3.4
85°	3.4	3.4	3.4	2.3	5.7	2.3	2.3	1.1	1.1	2.3	2.3
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°	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3	2136.3
2.5°	2139.7	2138.5	2139.7	2138.5	2138.5	2138.5	2139.7	2139.7	2138.5	2138.5	2140.8
5°	2148.8	2148.8	2148.8	2147.6	2146.5	2146.5	2148.8	2148.8	2145.3	2148.8	2148.8
7.5°	2168.0	2164.6	2168.0	2163.5	2161.2	2162.4	2163.5	2161.2	2159.0	2160.1	2160.1
10°	2193.0	2189.6	2189.6	2186.2	2182.8	2180.5	2178.3	2172.6	2166.9	2165.8	2161.2
12.5°	2222.4	2216.8	2213.4	2206.6	2200.9	2193.0	2186.2	2177.1	2165.8	2157.8	2149.9
15°	2251.9	2242.9	2234.9	2223.6	2211.1	2197.5	2182.8	2168.0	2149.9	2134.0	2120.4
17.5°	2275.7	2263.3	2248.5	2230.4	2212.3	2191.8	2170.3	2148.8	2122.7	2102.3	2086.4
20°	2283.7	2265.6	2246.3	2222.4	2198.6	2170.3	2143.1	2114.7	2085.3	2063.7	2045.6
22.5°	2273.5	2251.9	2228.1	2203.2	2171.4	2140.8	2109.1	2076.2	2050.1	2020.6	2003.6
25°	2245.1	2219.1	2193.0	2163.5	2132.9	2098.9	2064.9	2030.8	1999.1	1983.2	1961.7
27.5°	2187.3	2159.0	2130.6	2100.0	2064.9	2030.8	1995.7	1962.8	1935.6	1914.0	1901.6
30°	2085.3	2052.4	2019.5	1986.6	1956.0	1920.8	1888.0	1860.7	1833.5	1816.5	1804.1
32.5°	1928.8	1899.3	1866.4	1834.7	1806.3	1776.8	1749.6	1725.8	1706.5	1695.2	1686.1
35°	1717.9	1688.4	1663.4	1640.8	1616.9	1604.5	1587.5	1573.9	1565.9	1561.4	1560.3
37.5°	1452.5	1435.5	1427.6	1423.1	1418.5	1415.1	1417.4	1423.1	1427.6	1435.5	1444.6
40°	1169.1	1183.8	1188.3	1204.2	1218.9	1238.2	1259.8	1284.7	1305.1	1331.2	1349.3
42.5°	910.5	937.7	969.5	1003.5	1039.8	1074.9	1118.0	1157.7	1194.0	1226.9	1255.2
45°	699.6	741.6	789.2	838.0	886.7	937.7	989.9	1038.7	1081.7	1116.9	1146.4
47.5°	545.4	591.9	653.1	713.2	772.2	832.3	890.1	941.1	977.4	1011.4	1037.5
50°	432.0	485.3	552.2	621.4	686.0	749.5	810.7	858.4	894.7	921.9	941.1
52.5°	334.5	398.0	466.0	538.6	607.8	676.9	733.6	777.9	807.3	831.2	845.9
55°	249.5	311.8	384.4	459.2	529.5	596.4	649.7	688.3	714.4	728.0	735.9
57.5°	180.3	237.0	309.6	384.4	447.9	511.4	554.5	589.6	604.4	612.3	615.7
60°	131.5	183.7	248.3	313.0	373.1	424.1	461.5	485.3	496.7	501.2	500.0
62.5°	96.4	141.7	197.3	251.7	300.5	342.4	371.9	387.8	393.5	395.7	392.3
65°	73.7	108.8	156.5	198.4	235.9	266.5	288.0	298.2	301.6	300.5	298.2
67.5°	54.4	81.7	116.8	148.5	175.8	199.6	210.9	220.0	222.2	218.9	215.4
70°	38.6	60.1	85.0	106.6	127.0	140.6	153.1	154.2	154.2	153.1	150.8
72.5°	27.2	42.0	57.8	72.6	85.0	95.2	99.8	103.2	102.0	100.9	98.7
75°	18.1	26.1	42.0	45.4	56.7	60.1	64.6	64.6	65.8	62.4	62.4
77.5°	11.3	18.1	24.9	29.5	34.0	38.6	40.8	40.8	42.0	40.8	40.8
80°	6.8	11.3	13.6	20.4	20.4	23.8	24.9	26.1	23.8	27.2	23.8
82.5°	4.5	6.8	10.2	10.2	12.5	14.7	14.7	15.9	15.9	14.7	14.7
85°	3.4	4.5	5.7	6.8	6.8	7.9	6.8	6.8	7.9	9.1	7.9
87.5°	1.1	2.3	1.1	2.3	2.3	4.5	3.4	3.4	3.4	4.5	4.5
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: P244210

CATALOG NUMBER: LSR8B40D010 EC8B40940 8LBDW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2136.3	2136.3	2136.3	2136.3
2.5°	2138.5	2139.7	2138.5	2138.5
5°	2148.8	2147.6	2148.8	2146.5
7.5°	2156.7	2156.7	2155.6	2155.6
10°	2156.7	2152.2	2152.2	2152.2
12.5°	2139.7	2134.0	2130.6	2128.3
15°	2110.2	2100.0	2095.5	2094.3
17.5°	2071.7	2062.6	2056.9	2053.5
20°	2027.4	2018.4	2011.6	2012.7
22.5°	1988.9	1978.7	1974.1	1971.9
25°	1950.3	1937.8	1934.5	1932.2
27.5°	1888.0	1881.2	1877.7	1874.4
30°	1792.7	1789.3	1783.6	1791.6
32.5°	1682.7	1677.0	1672.5	1675.9
35°	1561.4	1558.0	1561.4	1559.1
37.5°	1450.3	1453.7	1458.2	1460.5
40°	1363.0	1375.4	1380.0	1382.2
42.5°	1275.7	1290.4	1299.5	1305.1
45°	1167.9	1182.7	1192.9	1199.7
47.5°	1056.8	1069.3	1079.5	1078.4
50°	955.9	962.7	967.2	971.8
52.5°	853.8	853.8	855.0	855.0
55°	738.2	735.9	734.8	735.9
57.5°	611.2	608.9	607.8	604.4
60°	495.5	488.7	484.2	484.2
62.5°	387.8	379.9	376.5	375.3
65°	291.4	290.3	283.5	282.3
67.5°	210.9	206.4	201.8	203.0
70°	148.5	141.7	141.7	139.5
72.5°	96.4	93.0	91.8	91.8
75°	60.1	60.1	57.8	62.4
77.5°	39.7	39.7	38.6	39.7
80°	23.8	23.8	23.8	22.7
82.5°	14.7	15.9	14.7	14.7
85°	7.9	9.1	6.8	10.2
87.5°	4.5	5.7	4.5	5.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)