

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: P244229

Luminaire Tested: **LSR8B50D010 EC8B509730 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244229  
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 EC8B509730 8LBDW0LI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4261.0 lumens  
Efficiency: N/A  
Efficacy: 80.4 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

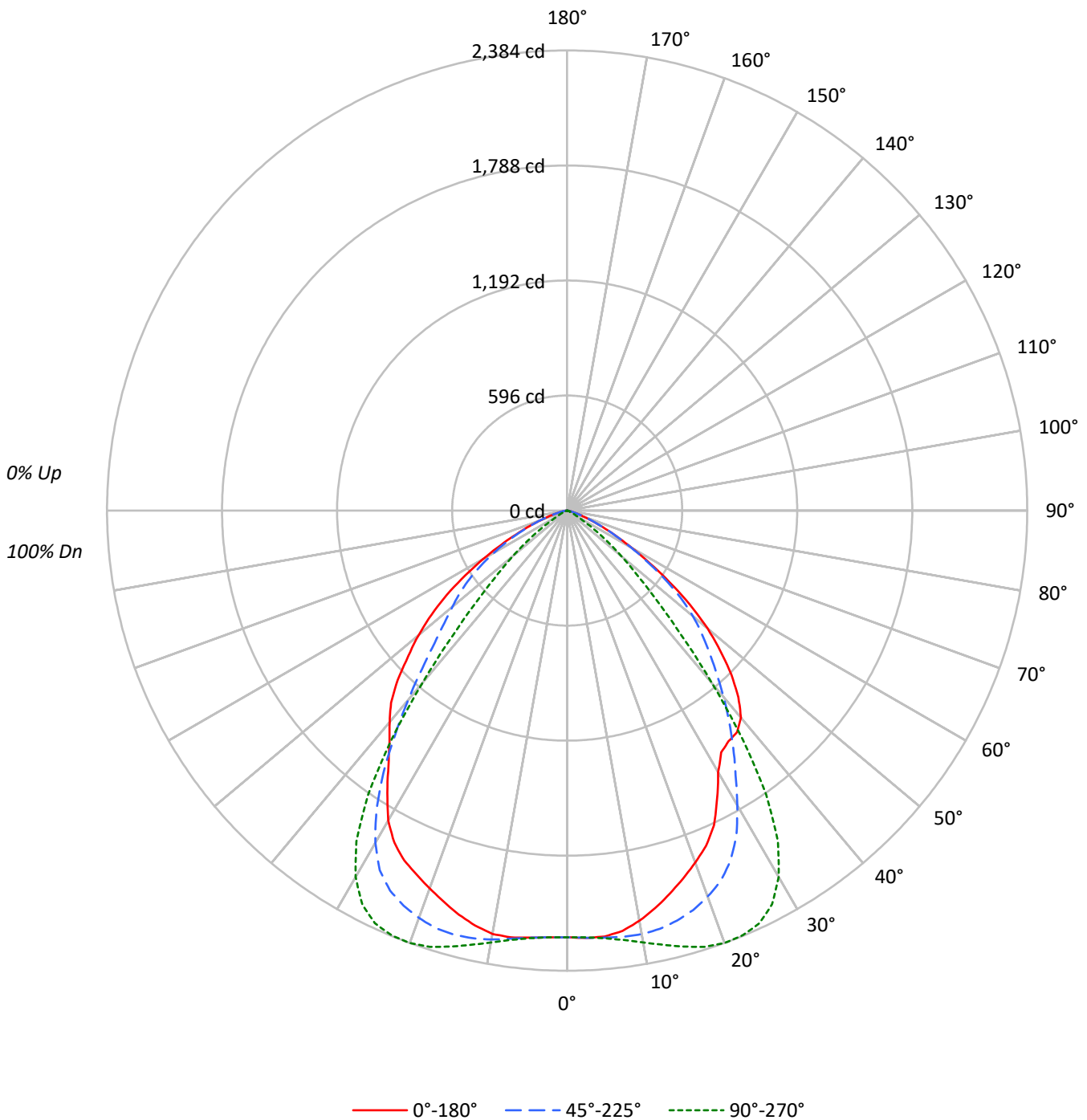
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	212.6	5.0
10°-20°	629.7	14.8
20°-30°	960.7	22.5
30°-40°	1002.5	23.5
40°-50°	753.0	17.7
50°-60°	463.3	10.9
60°-70°	188.6	4.4
70°-80°	44.4	1.0
80°-90°	6.1	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°	1803.0	42.3
0°-40°	2805.6	65.8
0°-60°	4021.9	94.4
0°-90°	4261.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4261.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2210	2210	2210	2210	2210	
5°	2215	2221	2223	2221	2221	210
15°	2054	2199	2338	2274	2167	579
25°	1800	2002	2358	2172	1999	818
35°	1458	1500	1796	1660	1613	921
45°	1204	1042	650	970	1241	918
55°	650	617	170	617	762	584
65°	203	205	26	276	292	212
75°	35	35	5	62	64	42
85°	4	4	1	8	11	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°	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5
2.5°	2216.3	2212.8	2216.3	2216.3	2217.5	2215.2	2216.3	2217.5	2215.2	2215.2	2215.2
5°	2215.2	2212.8	2215.2	2214.0	2216.3	2216.3	2218.7	2218.7	2221.0	2221.0	2224.6
7.5°	2196.4	2191.7	2196.4	2199.9	2202.2	2207.0	2212.8	2217.5	2222.2	2226.9	2232.8
10°	2157.7	2157.7	2161.2	2168.2	2175.3	2183.5	2194.0	2205.8	2217.5	2228.1	2238.6
12.5°	2109.6	2106.0	2113.1	2122.5	2133.0	2145.9	2162.4	2180.0	2198.7	2219.8	2236.3
15°	2054.4	2050.9	2059.1	2068.5	2081.4	2100.2	2120.1	2143.6	2170.6	2198.7	2225.7
17.5°	1998.1	1996.9	2005.1	2018.1	2028.6	2048.5	2074.4	2102.5	2133.0	2170.6	2205.8
20°	1940.6	1939.4	1947.7	1958.2	1972.3	1991.1	2016.9	2049.7	2086.1	2128.3	2169.4
22.5°	1880.8	1881.9	1889.0	1900.7	1912.5	1932.4	1959.4	1992.2	2032.1	2077.9	2123.6
25°	1799.8	1794.0	1803.3	1815.1	1835.0	1851.4	1877.3	1912.5	1953.5	2001.6	2055.6
27.5°	1682.5	1681.3	1689.5	1700.1	1717.7	1737.6	1765.8	1802.2	1845.6	1898.4	1951.2
30°	1565.2	1567.5	1571.0	1581.6	1593.3	1613.3	1641.4	1671.9	1713.0	1763.4	1819.8
32.5°	1485.4	1485.4	1490.1	1497.1	1505.3	1515.9	1535.8	1558.1	1589.8	1625.0	1666.1
35°	1458.4	1453.7	1458.4	1459.6	1460.7	1463.1	1466.6	1473.7	1484.2	1499.5	1514.7
37.5°	1446.7	1443.1	1443.1	1438.5	1432.6	1425.5	1416.2	1405.6	1393.9	1378.6	1366.9
40°	1400.9	1398.6	1396.2	1391.5	1378.6	1364.5	1349.3	1324.6	1297.6	1260.1	1222.6
42.5°	1312.9	1310.6	1309.4	1300.0	1288.3	1271.8	1254.2	1228.4	1194.4	1146.3	1092.3
45°	1203.8	1199.1	1195.6	1187.4	1179.1	1165.1	1148.6	1125.2	1091.1	1041.9	977.3
47.5°	1077.1	1074.7	1073.5	1070.0	1061.8	1053.6	1043.1	1024.3	993.8	946.8	880.0
50°	949.2	944.5	946.8	945.7	942.2	936.3	929.2	916.3	892.9	850.6	789.6
52.5°	802.5	802.5	801.4	804.9	806.0	804.9	806.0	792.0	772.0	740.3	688.7
55°	650.0	650.0	653.5	658.2	662.9	664.1	662.9	657.0	643.0	617.1	571.4
57.5°	506.8	504.5	511.6	518.6	523.3	528.0	524.4	519.8	511.6	490.4	455.2
60°	386.0	386.0	390.7	395.4	400.1	404.8	403.6	402.4	395.4	381.3	353.2
62.5°	283.9	285.1	285.1	288.6	293.3	298.0	301.5	298.0	294.5	285.1	266.3
65°	203.0	201.8	203.0	206.5	210.0	214.7	217.1	215.9	212.4	205.3	191.3
67.5°	136.1	134.9	139.6	140.8	143.1	147.8	146.7	147.8	146.7	140.8	129.1
70°	89.2	86.8	89.2	88.0	91.5	92.7	95.0	96.2	95.0	91.5	88.0
72.5°	55.1	54.0	55.1	56.3	57.5	58.7	61.0	61.0	59.8	57.5	52.8
75°	35.2	31.7	32.8	30.5	32.8	32.8	35.2	36.4	35.2	35.2	32.8
77.5°	21.1	21.1	21.1	21.1	21.1	21.1	21.1	22.3	23.5	21.1	20.0
80°	10.6	10.6	11.7	11.7	11.7	12.9	11.7	11.7	11.7	12.9	9.4
82.5°	8.2	7.0	7.0	7.0	8.2	7.0	7.0	7.0	7.0	7.0	7.0
85°	3.5	4.7	3.5	2.4	3.5	3.5	4.7	3.5	3.5	3.5	4.7
87.5°	1.2	1.2	0.0	0.0	0.0	1.2	0.0	1.2	1.2	2.4	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°	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5
2.5°	2216.3	2214.0	2214.0	2212.8	2215.2	2212.8	2214.0	2212.8	2212.8	2215.2	2212.8
5°	2224.6	2225.7	2223.4	2222.2	2225.7	2225.7	2225.7	2223.4	2223.4	2224.6	2223.4
7.5°	2236.3	2238.6	2239.8	2241.0	2243.3	2244.5	2244.5	2243.3	2242.2	2245.7	2241.0
10°	2249.2	2252.7	2259.7	2263.3	2269.1	2269.1	2271.5	2271.5	2269.1	2271.5	2270.3
12.5°	2244.5	2265.6	2277.3	2285.6	2293.8	2300.8	2303.2	2304.3	2303.2	2307.9	2303.2
15°	2252.7	2270.3	2289.1	2303.2	2318.4	2326.6	2329.0	2338.4	2340.7	2341.9	2334.8
17.5°	2239.8	2271.5	2291.4	2312.5	2334.8	2350.1	2364.2	2370.0	2371.2	2373.5	2364.2
20°	2210.5	2245.7	2276.2	2306.7	2332.5	2356.0	2367.7	2384.1	2379.4	2388.8	2375.9
22.5°	2170.6	2210.5	2249.2	2289.1	2316.1	2344.2	2368.9	2380.6	2386.5	2386.5	2372.4
25°	2107.2	2154.2	2196.4	2237.4	2278.5	2312.5	2340.7	2358.3	2361.8	2360.7	2344.2
27.5°	2008.7	2059.1	2108.4	2155.3	2205.8	2245.7	2278.5	2299.6	2305.5	2305.5	2287.9
30°	1872.6	1926.5	1974.6	2030.9	2082.6	2127.2	2172.9	2191.7	2202.2	2202.2	2182.3
32.5°	1710.6	1756.4	1801.0	1856.1	1912.5	1962.9	2006.3	2032.1	2045.0	2043.9	2026.3
35°	1534.7	1556.9	1591.0	1632.0	1682.5	1729.4	1771.6	1796.3	1818.6	1817.4	1801.0
37.5°	1358.7	1352.8	1356.3	1371.6	1403.2	1436.1	1468.9	1492.4	1511.2	1519.4	1515.9
40°	1186.2	1155.7	1126.3	1115.8	1118.1	1129.9	1147.5	1165.1	1186.2	1196.8	1201.4
42.5°	1031.3	979.7	928.1	889.4	867.0	860.0	868.2	874.1	887.0	902.2	917.5
45°	907.0	837.7	769.7	709.8	672.3	650.0	645.3	650.0	657.0	672.3	692.2
47.5°	804.9	723.9	647.7	580.8	525.6	496.3	488.1	485.7	492.8	506.8	533.8
50°	714.5	633.6	549.1	471.6	414.2	381.3	369.6	364.9	373.1	383.7	408.3
52.5°	616.0	536.2	449.4	374.3	314.4	280.4	267.5	260.5	265.2	279.2	303.9
55°	509.2	435.3	356.7	279.2	221.7	190.1	174.8	170.1	174.8	190.1	214.7
57.5°	402.4	340.3	274.5	201.8	150.2	118.5	103.2	98.6	111.5	117.3	143.1
60°	314.4	264.0	207.7	147.8	103.2	78.6	63.4	59.8	65.7	76.3	97.4
62.5°	235.8	204.1	159.6	105.6	76.3	50.4	42.2	38.7	42.2	50.4	66.9
65°	171.3	146.7	111.5	77.4	51.6	37.6	28.2	25.8	29.3	35.2	49.3
67.5°	117.3	98.6	77.4	54.0	35.2	23.5	20.0	20.0	21.1	25.8	36.4
70°	76.3	64.5	49.3	35.2	23.5	17.6	15.2	12.9	15.2	18.8	24.6
72.5°	48.1	41.1	31.7	24.6	17.6	12.9	10.6	9.4	11.7	14.1	18.8
75°	29.3	22.3	16.4	12.9	9.4	9.4	9.4	4.7	5.9	9.4	11.7
77.5°	17.6	15.2	12.9	10.6	8.2	4.7	4.7	4.7	5.9	7.0	10.6
80°	9.4	8.2	5.9	5.9	4.7	3.5	4.7	3.5	2.4	5.9	7.0
82.5°	5.9	4.7	4.7	4.7	5.9	2.4	3.5	2.4	3.5	4.7	3.5
85°	3.5	3.5	3.5	2.4	5.9	2.4	2.4	1.2	1.2	2.4	2.4
87.5°	0.0	1.2	1.2	0.0	1.2	0.0	1.2	1.2	1.2	1.2	1.2
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5	2210.5
2.5°	2214.0	2212.8	2214.0	2212.8	2212.8	2212.8	2214.0	2214.0	2212.8	2212.8	2215.2
5°	2223.4	2223.4	2223.4	2222.2	2221.0	2221.0	2223.4	2223.4	2219.8	2223.4	2223.4
7.5°	2243.3	2239.8	2243.3	2238.6	2236.3	2237.4	2238.6	2236.3	2233.9	2235.1	2235.1
10°	2269.1	2265.6	2265.6	2262.1	2258.6	2256.2	2253.9	2248.0	2242.2	2241.0	2236.3
12.5°	2299.6	2293.8	2290.3	2283.2	2277.3	2269.1	2262.1	2252.7	2241.0	2232.8	2224.6
15°	2330.1	2320.8	2312.5	2300.8	2287.9	2273.8	2258.6	2243.3	2224.6	2208.1	2194.0
17.5°	2354.8	2341.9	2326.6	2307.9	2289.1	2268.0	2245.7	2223.4	2196.4	2175.3	2158.8
20°	2363.0	2344.2	2324.3	2299.6	2275.0	2245.7	2217.5	2188.2	2157.7	2135.4	2116.6
22.5°	2352.4	2330.1	2305.5	2279.7	2246.8	2215.2	2182.3	2148.3	2121.3	2090.8	2073.2
25°	2323.1	2296.1	2269.1	2238.6	2207.0	2171.8	2136.6	2101.4	2068.5	2052.1	2029.8
27.5°	2263.3	2233.9	2204.6	2172.9	2136.6	2101.4	2065.0	2030.9	2002.8	1980.5	1967.6
30°	2157.7	2123.6	2089.6	2055.6	2023.9	1987.5	1953.5	1925.4	1897.2	1879.6	1866.7
32.5°	1995.7	1965.3	1931.2	1898.4	1869.1	1838.5	1810.4	1785.7	1765.8	1754.1	1744.7
35°	1777.5	1747.0	1721.2	1697.8	1673.1	1660.2	1642.6	1628.5	1620.3	1615.6	1614.4
37.5°	1503.0	1485.4	1477.2	1472.5	1467.8	1464.3	1466.6	1472.5	1477.2	1485.4	1494.8
40°	1209.7	1224.9	1229.6	1246.0	1261.3	1281.2	1303.5	1329.3	1350.4	1377.4	1396.2
42.5°	942.2	970.3	1003.2	1038.4	1075.9	1112.3	1156.9	1197.9	1235.5	1269.5	1298.8
45°	723.9	767.3	816.6	867.0	917.5	970.3	1024.3	1074.7	1119.3	1155.7	1186.2
47.5°	564.3	612.5	675.8	738.0	799.0	861.2	921.0	973.8	1011.4	1046.6	1073.5
50°	447.0	502.2	571.4	643.0	709.8	775.5	838.9	888.2	925.7	953.9	973.8
52.5°	346.1	411.8	482.2	557.3	628.9	700.5	759.1	804.9	835.4	860.0	875.3
55°	258.1	322.7	397.8	475.2	547.9	617.1	672.3	712.2	739.2	753.2	761.5
57.5°	186.5	245.2	320.3	397.8	463.4	529.2	573.7	610.1	625.4	633.6	637.1
60°	136.1	190.1	256.9	323.8	386.0	438.8	477.5	502.2	513.9	518.6	517.4
62.5°	99.7	146.7	204.1	260.5	310.9	354.3	384.8	401.3	407.1	409.5	406.0
65°	76.3	112.6	161.9	205.3	244.0	275.7	298.0	308.6	312.1	310.9	308.6
67.5°	56.3	84.5	120.9	153.7	181.9	206.5	218.2	227.6	230.0	226.5	222.9
70°	39.9	62.2	88.0	110.3	131.4	145.5	158.4	159.6	159.6	158.4	156.1
72.5°	28.2	43.4	59.8	75.1	88.0	98.6	103.2	106.8	105.6	104.4	102.1
75°	18.8	27.0	43.4	46.9	58.7	62.2	66.9	66.9	68.0	64.5	64.5
77.5°	11.7	18.8	25.8	30.5	35.2	39.9	42.2	42.2	43.4	42.2	42.2
80°	7.0	11.7	14.1	21.1	21.1	24.6	25.8	27.0	24.6	28.2	24.6
82.5°	4.7	7.0	10.6	10.6	12.9	15.2	15.2	16.4	16.4	15.2	15.2
85°	3.5	4.7	5.9	7.0	7.0	8.2	7.0	7.0	8.2	9.4	8.2
87.5°	1.2	2.4	1.2	2.4	2.4	4.7	3.5	3.5	3.5	4.7	4.7
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: P244229

CATALOG NUMBER: LSR8B50D010 EC8B509730 8LBDW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2210.5	2210.5	2210.5	2210.5
2.5°	2212.8	2214.0	2212.8	2212.8
5°	2223.4	2222.2	2223.4	2221.0
7.5°	2231.6	2231.6	2230.4	2230.4
10°	2231.6	2226.9	2226.9	2226.9
12.5°	2214.0	2208.1	2204.6	2202.2
15°	2183.5	2172.9	2168.2	2167.0
17.5°	2143.6	2134.2	2128.3	2124.8
20°	2097.8	2088.4	2081.4	2082.6
22.5°	2057.9	2047.4	2042.7	2040.3
25°	2018.1	2005.1	2001.6	1999.3
27.5°	1953.5	1946.5	1943.0	1939.4
30°	1855.0	1851.4	1845.6	1853.8
32.5°	1741.2	1735.3	1730.6	1734.1
35°	1615.6	1612.1	1615.6	1613.3
37.5°	1500.6	1504.1	1508.9	1511.2
40°	1410.3	1423.2	1427.9	1430.2
42.5°	1320.0	1335.2	1344.6	1350.4
45°	1208.5	1223.7	1234.3	1241.3
47.5°	1093.5	1106.4	1117.0	1115.8
50°	989.1	996.1	1000.8	1005.5
52.5°	883.5	883.5	884.6	884.6
55°	763.8	761.5	760.3	761.5
57.5°	632.4	630.1	628.9	625.4
60°	512.7	505.7	501.0	501.0
62.5°	401.3	393.0	389.5	388.4
65°	301.5	300.3	293.3	292.1
67.5°	218.2	213.5	208.9	210.0
70°	153.7	146.7	146.7	144.3
72.5°	99.7	96.2	95.0	95.0
75°	62.2	62.2	59.8	64.5
77.5°	41.1	41.1	39.9	41.1
80°	24.6	24.6	24.6	23.5
82.5°	15.2	16.4	15.2	15.2
85°	8.2	9.4	7.0	10.6
87.5°	4.7	5.9	4.7	5.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)