

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 EC8B50927 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 EC8B50927 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: 4530.3 lumens  
Efficiency: N/A  
Efficacy: 85.5 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

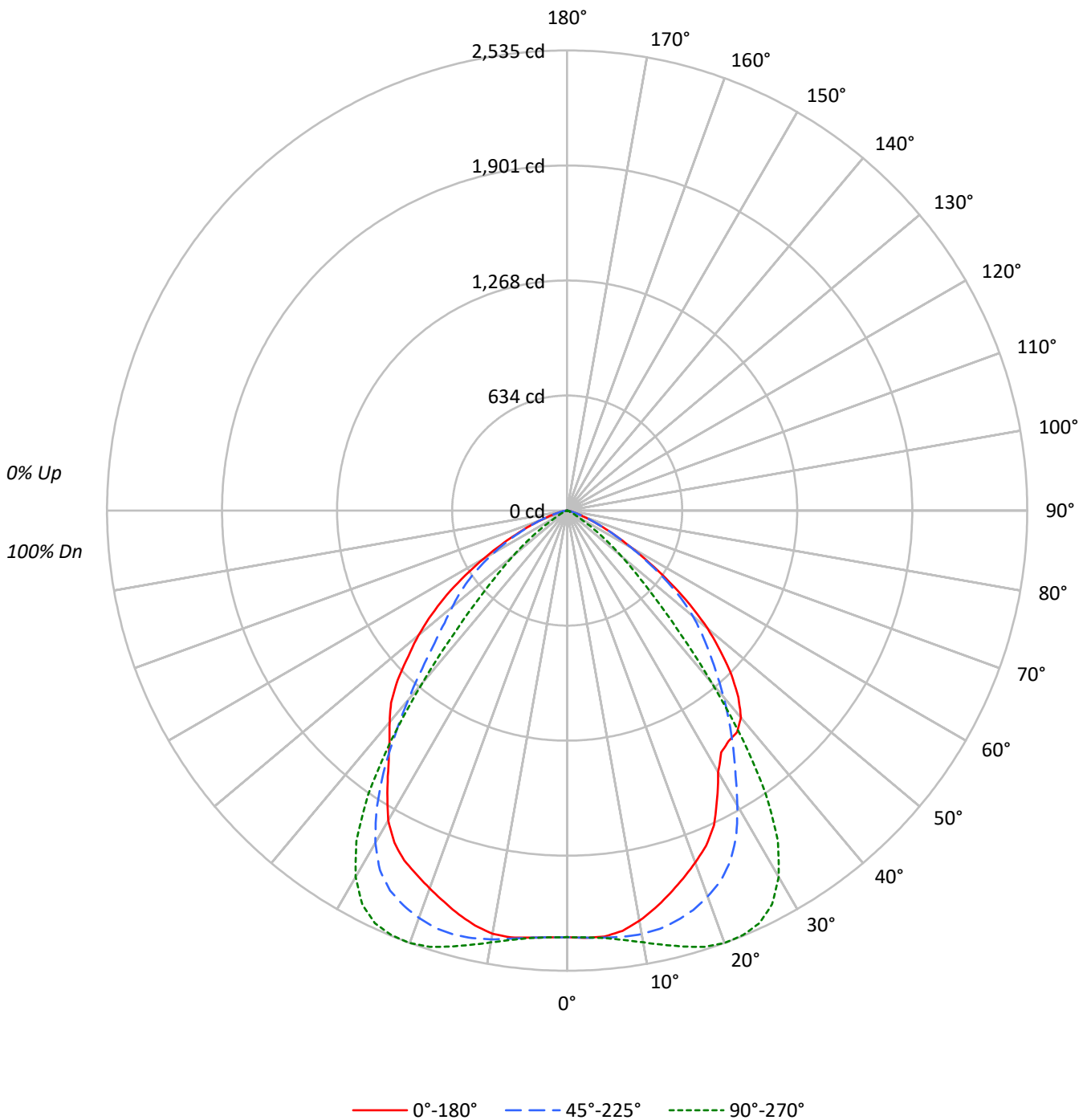
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	226.0	5.0
10°-20°	669.5	14.8
20°-30°	1021.5	22.5
30°-40°	1065.9	23.5
40°-50°	800.6	17.7
50°-60°	492.6	10.9
60°-70°	200.5	4.4
70°-80°	47.2	1.0
80°-90°	6.5	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°	1917.0	42.3
0°-40°	2982.9	65.8
0°-60°	4276.2	94.4
0°-90°	4530.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4530.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2350	2350	2350	2350	2350	
5°	2355	2362	2364	2362	2362	223
15°	2184	2338	2486	2418	2304	615
25°	1914	2128	2507	2309	2126	870
35°	1551	1594	1910	1765	1715	979
45°	1280	1108	691	1032	1320	976
55°	691	656	181	656	810	621
65°	216	218	27	293	311	225
75°	38	38	5	66	69	45
85°	4	4	1	9	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°	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2
2.5°	2356.4	2352.7	2356.4	2356.4	2357.7	2355.2	2356.4	2357.7	2355.2	2355.2	2355.2
5°	2355.2	2352.7	2355.2	2354.0	2356.4	2356.4	2359.0	2359.0	2361.5	2361.5	2365.2
7.5°	2335.3	2330.2	2335.3	2339.0	2341.5	2346.5	2352.7	2357.7	2362.7	2367.7	2373.9
10°	2294.1	2294.1	2297.8	2305.4	2312.8	2321.5	2332.7	2345.2	2357.7	2368.9	2380.2
12.5°	2242.9	2239.2	2246.6	2256.6	2267.9	2281.6	2299.0	2317.8	2337.8	2360.1	2377.7
15°	2184.3	2180.6	2189.2	2199.3	2213.0	2233.0	2254.2	2279.1	2307.8	2337.8	2366.4
17.5°	2124.5	2123.2	2131.9	2145.6	2156.8	2178.0	2205.6	2235.5	2267.9	2307.8	2345.2
20°	2063.4	2062.0	2070.8	2082.0	2097.0	2116.9	2144.4	2179.4	2217.9	2262.9	2306.6
22.5°	1999.7	2000.9	2008.4	2020.8	2033.3	2054.6	2083.3	2118.2	2160.6	2209.3	2257.9
25°	1913.6	1907.3	1917.3	1929.8	1951.0	1968.5	1996.0	2033.3	2077.0	2128.2	2185.5
27.5°	1788.9	1787.6	1796.4	1807.5	1826.2	1847.5	1877.4	1916.1	1962.2	2018.4	2074.5
30°	1664.1	1666.6	1670.4	1681.5	1694.0	1715.3	1745.2	1777.6	1821.3	1874.9	1934.8
32.5°	1579.3	1579.3	1584.2	1591.8	1600.5	1611.7	1632.9	1656.7	1690.3	1727.8	1771.4
35°	1550.6	1545.6	1550.6	1551.8	1553.1	1555.5	1559.4	1566.8	1578.0	1594.2	1610.4
37.5°	1538.1	1534.4	1534.4	1529.4	1523.1	1515.7	1505.7	1494.4	1482.0	1465.8	1453.3
40°	1489.5	1487.0	1484.4	1479.5	1465.8	1450.8	1434.6	1408.4	1379.7	1339.8	1299.8
42.5°	1395.9	1393.4	1392.2	1382.2	1369.7	1352.2	1333.6	1306.1	1269.9	1218.7	1161.3
45°	1279.9	1274.9	1271.1	1262.5	1253.7	1238.7	1221.3	1196.3	1160.1	1107.8	1039.2
47.5°	1145.1	1142.7	1141.4	1137.7	1128.9	1120.2	1109.0	1089.0	1056.6	1006.6	935.6
50°	1009.2	1004.2	1006.6	1005.4	1001.7	995.5	988.0	974.2	949.3	904.4	839.6
52.5°	853.2	853.2	852.1	855.8	857.0	855.8	857.0	842.1	820.8	787.2	732.3
55°	691.1	691.1	694.8	699.9	704.8	706.1	704.8	698.6	683.6	656.2	607.5
57.5°	538.9	536.4	543.9	551.4	556.4	561.4	557.6	552.6	543.9	521.4	484.0
60°	410.4	410.4	415.4	420.4	425.4	430.4	429.1	427.8	420.4	405.4	375.5
62.5°	301.8	303.1	303.1	306.9	311.8	316.9	320.6	316.9	313.1	303.1	283.2
65°	215.8	214.5	215.8	219.6	223.3	228.3	230.7	229.5	225.8	218.2	203.4
67.5°	144.7	143.4	148.4	149.7	152.2	157.2	155.9	157.2	155.9	149.7	137.2
70°	94.8	92.2	94.8	93.6	97.3	98.6	101.0	102.3	101.0	97.3	93.6
72.5°	58.6	57.4	58.6	59.8	61.1	62.3	64.9	64.9	63.6	61.1	56.1
75°	37.5	33.6	34.9	32.4	34.9	34.9	37.5	38.7	37.5	37.5	34.9
77.5°	22.5	22.5	22.5	22.5	22.5	22.5	22.5	23.7	25.0	22.5	21.3
80°	11.2	11.2	12.5	12.5	12.5	13.7	12.5	12.5	12.5	13.7	10.0
82.5°	8.8	7.4	7.4	7.4	8.8	7.4	7.4	7.4	7.4	7.4	7.4
85°	3.7	5.0	3.7	2.5	3.7	3.7	5.0	3.7	3.7	3.7	5.0
87.5°	1.2	1.2	0.0	0.0	0.0	1.2	0.0	1.2	1.2	2.5	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



TEST NUMBER: P244223

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0LI

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2
2.5°	2356.4	2354.0	2354.0	2352.7	2355.2	2352.7	2354.0	2352.7	2352.7	2355.2	2352.7
5°	2365.2	2366.4	2364.0	2362.7	2366.4	2366.4	2366.4	2364.0	2364.0	2365.2	2364.0
7.5°	2377.7	2380.2	2381.4	2382.6	2385.1	2386.4	2386.4	2385.1	2383.9	2387.7	2382.6
10°	2391.4	2395.1	2402.7	2406.4	2412.6	2412.6	2415.0	2415.0	2412.6	2415.0	2413.8
12.5°	2386.4	2408.8	2421.3	2430.0	2438.8	2446.2	2448.8	2450.0	2448.8	2453.7	2448.8
15°	2395.1	2413.8	2433.8	2448.8	2465.0	2473.6	2476.2	2486.1	2488.7	2490.0	2482.4
17.5°	2381.4	2415.0	2436.3	2458.7	2482.4	2498.6	2513.6	2519.9	2521.1	2523.6	2513.6
20°	2350.2	2387.7	2420.1	2452.5	2480.0	2504.9	2517.4	2534.8	2529.9	2539.8	2526.1
22.5°	2307.8	2350.2	2391.4	2433.8	2462.5	2492.4	2518.6	2531.0	2537.3	2537.3	2522.4
25°	2240.4	2290.4	2335.3	2378.9	2422.6	2458.7	2488.7	2507.4	2511.1	2509.9	2492.4
27.5°	2135.7	2189.2	2241.7	2291.6	2345.2	2387.7	2422.6	2445.0	2451.3	2451.3	2432.6
30°	1990.9	2048.3	2099.5	2159.3	2214.2	2261.7	2310.3	2330.2	2341.5	2341.5	2320.3
32.5°	1818.8	1867.4	1914.9	1973.5	2033.3	2087.0	2133.1	2160.6	2174.3	2173.0	2154.4
35°	1631.7	1655.3	1691.6	1735.2	1788.9	1838.7	1883.7	1909.9	1933.5	1932.3	1914.9
37.5°	1444.5	1438.3	1442.0	1458.2	1492.0	1526.9	1561.8	1586.8	1606.7	1615.5	1611.7
40°	1261.2	1228.7	1197.6	1186.3	1188.8	1201.3	1220.1	1238.7	1261.2	1272.4	1277.4
42.5°	1096.5	1041.6	986.7	945.6	921.8	914.4	923.1	929.4	943.1	959.3	975.5
45°	964.2	890.7	818.3	754.8	714.8	691.1	686.1	691.1	698.6	714.8	736.0
47.5°	855.8	769.7	688.6	617.5	558.9	527.7	519.0	516.5	523.9	538.9	567.6
50°	759.7	673.6	583.8	501.4	440.3	405.4	393.0	387.9	396.7	407.9	434.1
52.5°	654.9	570.0	477.8	397.9	334.3	298.1	284.4	277.0	281.9	296.9	323.1
55°	541.4	462.8	379.2	296.9	235.8	202.0	185.8	180.9	185.8	202.0	228.3
57.5°	427.8	361.8	291.9	214.5	159.6	126.0	109.8	104.7	118.6	124.8	152.2
60°	334.3	280.7	220.8	157.2	109.8	83.6	67.4	63.6	69.9	81.1	103.5
62.5°	250.8	217.0	169.6	112.3	81.1	53.7	44.9	41.2	44.9	53.7	71.1
65°	182.1	155.9	118.6	82.4	54.9	39.9	29.9	27.4	31.2	37.5	52.4
67.5°	124.8	104.7	82.4	57.4	37.5	25.0	21.3	21.3	22.5	27.4	38.7
70°	81.1	68.6	52.4	37.5	25.0	18.7	16.2	13.7	16.2	19.9	26.2
72.5°	51.2	43.6	33.6	26.2	18.7	13.7	11.2	10.0	12.5	15.0	19.9
75°	31.2	23.7	17.4	13.7	10.0	10.0	10.0	5.0	6.2	10.0	12.5
77.5°	18.7	16.2	13.7	11.2	8.8	5.0	5.0	5.0	6.2	7.4	11.2
80°	10.0	8.8	6.2	6.2	5.0	3.7	5.0	3.7	2.5	6.2	7.4
82.5°	6.2	5.0	5.0	5.0	6.2	2.5	3.7	2.5	3.7	5.0	3.7
85°	3.7	3.7	3.7	2.5	6.2	2.5	2.5	1.2	1.2	2.5	2.5
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



TEST NUMBER: P244223

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0LI

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2	2350.2
2.5°	2354.0	2352.7	2354.0	2352.7	2352.7	2352.7	2354.0	2354.0	2352.7	2352.7	2355.2
5°	2364.0	2364.0	2364.0	2362.7	2361.5	2361.5	2364.0	2364.0	2360.1	2364.0	2364.0
7.5°	2385.1	2381.4	2385.1	2380.2	2377.7	2378.9	2380.2	2377.7	2375.2	2376.5	2376.5
10°	2412.6	2408.8	2408.8	2405.1	2401.3	2398.8	2396.4	2390.2	2383.9	2382.6	2377.7
12.5°	2445.0	2438.8	2435.1	2427.5	2421.3	2412.6	2405.1	2395.1	2382.6	2373.9	2365.2
15°	2477.5	2467.5	2458.7	2446.2	2432.6	2417.5	2401.3	2385.1	2365.2	2347.8	2332.7
17.5°	2503.7	2490.0	2473.6	2453.7	2433.8	2411.3	2387.7	2364.0	2335.3	2312.8	2295.3
20°	2512.4	2492.4	2471.2	2445.0	2418.9	2387.7	2357.7	2326.5	2294.1	2270.4	2250.5
22.5°	2501.2	2477.5	2451.3	2423.8	2388.8	2355.2	2320.3	2284.1	2255.4	2223.0	2204.2
25°	2469.9	2441.2	2412.6	2380.2	2346.5	2309.1	2271.6	2234.2	2199.3	2181.8	2158.1
27.5°	2406.4	2375.2	2343.9	2310.3	2271.6	2234.2	2195.5	2159.3	2129.4	2105.7	2092.0
30°	2294.1	2257.9	2221.8	2185.5	2151.9	2113.2	2077.0	2047.0	2017.1	1998.4	1984.7
32.5°	2121.9	2089.5	2053.4	2018.4	1987.2	1954.8	1924.9	1898.7	1877.4	1864.9	1855.0
35°	1889.9	1857.5	1830.0	1805.1	1778.8	1765.1	1746.4	1731.5	1722.7	1717.8	1716.5
37.5°	1598.0	1579.3	1570.5	1565.6	1560.6	1556.9	1559.4	1565.6	1570.5	1579.3	1589.3
40°	1286.1	1302.3	1307.4	1324.8	1341.0	1362.3	1385.9	1413.3	1435.8	1464.5	1484.4
42.5°	1001.7	1031.6	1066.6	1104.0	1143.9	1182.6	1230.0	1273.6	1313.6	1349.8	1380.9
45°	769.7	815.8	868.3	921.8	975.5	1031.6	1089.0	1142.7	1190.0	1228.7	1261.2
47.5°	600.1	651.2	718.5	784.7	849.5	915.6	979.2	1035.3	1075.3	1112.7	1141.4
50°	475.3	533.9	607.5	683.6	754.8	824.5	891.9	944.3	984.3	1014.2	1035.3
52.5°	368.0	437.8	512.7	592.5	668.6	744.8	807.1	855.8	888.2	914.4	930.6
55°	274.4	343.0	422.9	505.2	582.5	656.2	714.8	757.2	785.9	800.9	809.6
57.5°	198.3	260.8	340.5	422.9	492.8	562.6	610.0	648.7	664.9	673.6	677.4
60°	144.7	202.0	273.2	344.2	410.4	466.5	507.7	533.9	546.4	551.4	550.1
62.5°	106.1	155.9	217.0	277.0	330.5	376.8	409.2	426.6	432.9	435.4	431.7
65°	81.1	119.7	172.1	218.2	259.4	293.2	316.9	328.0	331.8	330.5	328.0
67.5°	59.8	89.8	128.5	163.5	193.4	219.6	232.1	242.0	244.5	240.8	237.0
70°	42.4	66.1	93.6	117.2	139.7	154.7	168.4	169.6	169.6	168.4	165.9
72.5°	29.9	46.1	63.6	79.9	93.6	104.7	109.8	113.5	112.3	111.0	108.6
75°	19.9	28.7	46.1	49.9	62.3	66.1	71.1	71.1	72.3	68.6	68.6
77.5°	12.5	19.9	27.4	32.4	37.5	42.4	44.9	44.9	46.1	44.9	44.9
80°	7.4	12.5	15.0	22.5	22.5	26.2	27.4	28.7	26.2	29.9	26.2
82.5°	5.0	7.4	11.2	11.2	13.7	16.2	16.2	17.4	17.4	16.2	16.2
85°	3.7	5.0	6.2	7.4	7.4	8.8	7.4	7.4	8.8	10.0	8.8
87.5°	1.2	2.5	1.2	2.5	2.5	5.0	3.7	3.7	3.7	5.0	5.0
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: P244223

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2350.2	2350.2	2350.2	2350.2
2.5°	2352.7	2354.0	2352.7	2352.7
5°	2364.0	2362.7	2364.0	2361.5
7.5°	2372.6	2372.6	2371.4	2371.4
10°	2372.6	2367.7	2367.7	2367.7
12.5°	2354.0	2347.8	2343.9	2341.5
15°	2321.5	2310.3	2305.4	2304.0
17.5°	2279.1	2269.1	2262.9	2259.1
20°	2230.4	2220.5	2213.0	2214.2
22.5°	2188.0	2176.9	2171.8	2169.3
25°	2145.6	2131.9	2128.2	2125.7
27.5°	2077.0	2069.5	2065.8	2062.0
30°	1972.2	1968.5	1962.2	1971.0
32.5°	1851.2	1845.0	1840.0	1843.8
35°	1717.8	1714.0	1717.8	1715.3
37.5°	1595.5	1599.2	1604.2	1606.7
40°	1499.4	1513.1	1518.2	1520.7
42.5°	1403.4	1419.6	1429.5	1435.8
45°	1284.9	1301.1	1312.3	1319.9
47.5°	1162.6	1176.4	1187.6	1186.3
50°	1051.6	1059.1	1064.0	1069.1
52.5°	939.4	939.4	940.6	940.6
55°	812.1	809.6	808.3	809.6
57.5°	672.4	669.9	668.6	664.9
60°	545.2	537.6	532.7	532.7
62.5°	426.6	417.9	414.2	412.9
65°	320.6	319.4	311.8	310.6
67.5°	232.1	227.0	222.1	223.3
70°	163.5	155.9	155.9	153.5
72.5°	106.1	102.3	101.0	101.0
75°	66.1	66.1	63.6	68.6
77.5°	43.6	43.6	42.4	43.6
80°	26.2	26.2	26.2	25.0
82.5°	16.2	17.4	16.2	16.2
85°	8.8	10.0	7.4	11.2
87.5°	5.0	6.2	5.0	6.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)