

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: P246245

Luminaire Tested: **LSR8B50D010 EC8B50930 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246245  
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 EC8B50930 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4556.9 lumens  
Efficiency: N/A  
Efficacy: 86.0 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

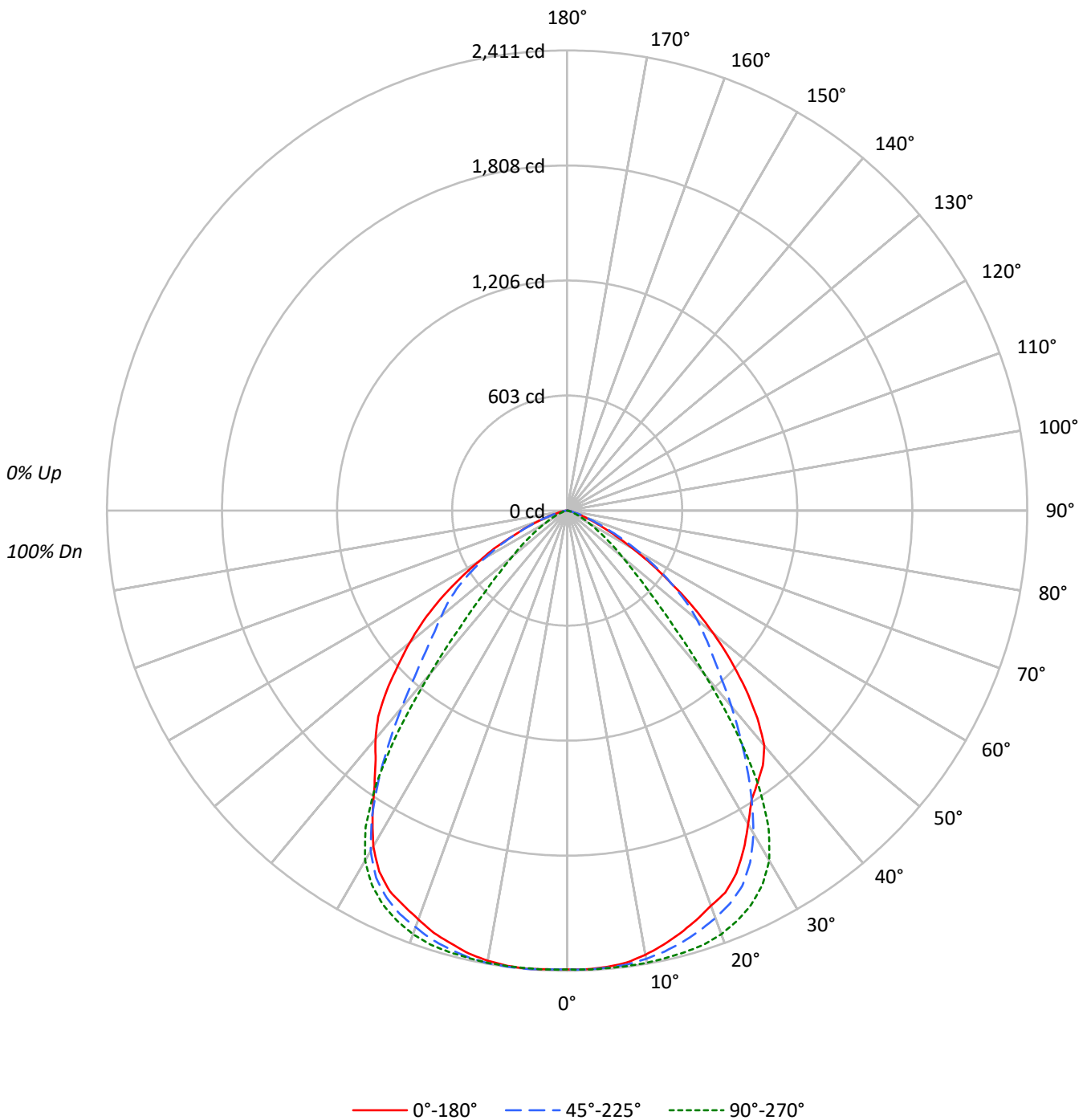
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	229.5	5.0
10°-20°	666.4	14.6
20°-30°	1011.4	22.2
30°-40°	1062.3	23.3
40°-50°	796.4	17.5
50°-60°	511.0	11.2
60°-70°	218.6	4.8
70°-80°	51.6	1.1
80°-90°	9.6	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°	1907.3	41.9
0°-40°	2969.6	65.2
0°-60°	4277.0	93.9
0°-90°	4556.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4556.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2404	2404	2404	2404	2404	
5°	2400	2404	2407	2411	2410	228
15°	2292	2340	2394	2378	2349	646
25°	2097	2171	2280	2239	2200	958
35°	1740	1643	1741	1720	1759	1092
45°	1322	1080	621	1049	1340	1012
55°	668	668	231	697	814	606
65°	201	237	74	306	311	215
75°	31	36	10	62	61	45
85°	10	6	5	10	14	11
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°	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3
2.5°	2405.6	2408.1	2406.9	2406.9	2405.6	2406.9	2406.9	2409.5	2409.5	2406.9	2405.6
5°	2400.4	2403.0	2403.0	2400.4	2400.4	2406.9	2403.0	2405.6	2405.6	2404.3	2404.3
7.5°	2388.9	2388.9	2394.0	2390.1	2390.1	2394.0	2392.7	2395.2	2397.8	2399.2	2399.2
10°	2363.0	2365.5	2366.9	2366.9	2368.1	2372.0	2374.6	2379.8	2382.3	2384.9	2386.3
12.5°	2330.8	2334.6	2335.9	2334.6	2338.5	2343.7	2350.1	2356.6	2360.4	2365.5	2369.5
15°	2292.0	2292.0	2294.6	2298.5	2301.1	2308.8	2315.2	2322.9	2333.2	2339.8	2346.3
17.5°	2249.4	2252.0	2255.9	2255.9	2261.1	2273.9	2277.9	2289.4	2301.1	2307.5	2320.5
20°	2203.0	2205.6	2209.4	2212.1	2218.5	2228.8	2236.5	2246.8	2259.7	2271.4	2284.3
22.5°	2166.8	2161.6	2164.2	2166.8	2173.3	2182.4	2191.3	2204.2	2217.1	2228.8	2241.7
25°	2097.2	2098.4	2102.3	2104.9	2112.6	2120.4	2130.7	2146.2	2157.8	2170.7	2184.9
27.5°	2002.9	2004.2	2010.6	2010.6	2017.1	2030.0	2036.5	2049.4	2064.9	2077.8	2094.6
30°	1895.8	1898.4	1898.4	1903.6	1907.4	1913.9	1920.4	1933.3	1941.0	1952.6	1975.9
32.5°	1797.7	1800.3	1799.0	1797.7	1793.8	1792.6	1791.2	1793.8	1796.4	1800.3	1809.3
35°	1739.7	1733.2	1728.0	1719.1	1708.7	1695.7	1684.2	1668.7	1654.5	1642.8	1629.9
37.5°	1684.2	1682.8	1675.1	1662.2	1641.6	1618.4	1591.3	1557.7	1524.1	1488.0	1453.2
40°	1606.7	1602.8	1596.4	1578.4	1555.1	1526.7	1490.6	1449.3	1395.1	1339.6	1282.8
42.5°	1475.1	1476.4	1468.6	1454.4	1432.5	1405.4	1368.0	1322.8	1264.7	1198.9	1125.4
45°	1321.5	1321.5	1319.0	1307.3	1291.8	1269.9	1241.5	1204.1	1147.3	1080.2	1001.5
47.5°	1161.5	1162.8	1158.9	1156.3	1149.9	1135.7	1115.1	1086.7	1046.7	982.1	903.4
50°	998.9	998.9	1005.3	1004.1	1004.1	998.9	989.8	973.0	938.3	886.6	813.1
52.5°	836.3	838.8	842.8	847.9	854.3	864.6	854.3	846.6	824.6	784.6	721.5
55°	668.5	671.1	677.5	686.6	694.3	704.7	707.2	707.2	695.6	668.5	620.7
57.5°	525.3	521.4	526.5	534.3	544.6	554.9	562.6	571.7	570.4	552.3	513.6
60°	394.9	396.2	400.1	407.8	415.6	424.6	434.9	442.7	446.5	437.5	413.0
62.5°	287.8	287.8	292.9	300.7	304.6	317.5	324.0	327.8	331.7	330.4	314.9
65°	201.3	203.9	206.5	210.4	214.2	222.0	225.9	233.6	236.2	237.4	225.9
67.5°	141.9	138.1	140.7	143.3	147.1	152.3	160.1	160.1	163.9	163.9	156.2
70°	90.4	90.4	91.6	95.5	98.1	99.3	102.0	104.5	108.4	107.2	107.2
72.5°	60.6	59.4	60.6	62.0	63.2	67.1	67.1	68.4	71.0	72.3	67.1
75°	30.9	32.3	34.9	33.5	37.4	34.9	36.1	40.0	38.7	36.1	36.1
77.5°	25.8	25.8	25.8	24.5	27.1	27.1	25.8	28.4	27.1	27.1	25.8
80°	18.0	19.4	18.0	16.8	18.0	16.8	16.8	16.8	16.8	16.8	15.5
82.5°	14.2	11.7	12.9	11.7	12.9	12.9	11.7	10.3	10.3	11.7	10.3
85°	10.3	7.7	9.1	9.1	7.7	7.7	7.7	7.7	7.7	6.4	6.4
87.5°	6.4	3.9	3.9	3.9	5.2	5.2	5.2	3.9	5.2	5.2	2.6
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3
2.5°	2408.1	2406.9	2409.5	2408.1	2408.1	2406.9	2408.1	2406.9	2409.5	2404.3	2405.6
5°	2408.1	2405.6	2406.9	2408.1	2409.5	2406.9	2406.9	2406.9	2409.5	2406.9	2408.1
7.5°	2403.0	2401.7	2405.6	2408.1	2406.9	2405.6	2408.1	2406.9	2409.5	2408.1	2410.7
10°	2392.7	2394.0	2396.6	2400.4	2401.7	2403.0	2405.6	2405.6	2409.5	2404.3	2406.9
12.5°	2377.2	2382.3	2388.9	2391.4	2396.6	2396.6	2399.2	2400.4	2403.0	2401.7	2405.6
15°	2357.8	2364.3	2372.0	2378.5	2384.9	2388.9	2392.7	2394.0	2397.8	2394.0	2395.2
17.5°	2334.6	2342.3	2354.0	2361.7	2372.0	2375.8	2381.0	2383.7	2387.5	2384.9	2386.3
20°	2302.3	2311.4	2324.3	2335.9	2342.3	2351.4	2357.8	2361.7	2364.3	2361.7	2363.0
22.5°	2257.1	2270.1	2286.8	2295.9	2308.8	2316.5	2317.8	2326.9	2333.2	2326.9	2329.4
25°	2204.2	2217.1	2230.1	2249.4	2261.1	2270.1	2279.1	2280.5	2286.8	2285.6	2284.3
27.5°	2116.4	2133.3	2155.2	2170.7	2186.2	2200.4	2210.7	2213.3	2219.8	2217.1	2218.5
30°	1996.5	2014.5	2035.2	2059.7	2081.7	2095.8	2108.7	2117.8	2124.2	2120.4	2119.0
32.5°	1826.1	1844.2	1866.1	1890.7	1916.5	1937.1	1952.6	1964.2	1972.0	1969.4	1963.0
35°	1631.3	1636.4	1650.7	1670.0	1691.9	1713.9	1728.0	1740.9	1750.0	1752.6	1752.6
37.5°	1431.2	1414.5	1404.2	1404.2	1417.1	1426.0	1438.9	1446.7	1460.9	1466.0	1470.0
40°	1237.6	1198.9	1162.8	1135.7	1117.6	1116.3	1116.3	1120.2	1133.1	1149.9	1165.4
42.5°	1064.7	1002.7	947.2	896.9	860.8	840.2	831.1	832.5	842.8	858.2	884.0
45°	926.6	849.2	779.5	718.8	669.8	637.5	622.0	620.7	628.5	646.6	675.0
47.5°	819.5	736.9	658.1	588.5	535.6	500.8	482.7	477.5	482.7	499.4	533.0
50°	730.4	645.2	564.0	491.7	434.9	398.7	382.0	375.5	382.0	396.2	429.8
52.5°	647.8	560.1	483.9	414.3	353.6	322.6	304.6	300.7	304.6	321.4	348.4
55°	552.3	477.5	402.7	332.9	280.0	249.1	234.8	231.0	234.8	250.4	278.8
57.5°	458.2	393.6	327.8	264.6	219.4	192.3	179.4	174.2	183.3	193.6	227.1
60°	370.4	318.8	263.2	207.8	170.4	145.8	135.5	134.2	136.8	149.7	173.0
62.5°	290.3	247.7	203.9	158.7	127.8	117.5	104.5	103.2	105.8	113.6	131.6
65°	209.1	181.9	148.4	116.1	91.6	77.5	72.3	73.5	76.1	81.3	98.1
67.5°	145.8	126.4	103.2	81.3	63.2	56.7	51.7	50.3	51.7	60.6	69.7
70°	98.1	86.4	69.7	62.0	43.9	34.9	36.1	32.3	37.4	37.4	45.2
72.5°	64.6	56.7	46.4	36.1	30.9	24.5	24.5	23.2	25.8	27.1	33.5
75°	33.5	25.8	25.8	18.0	12.9	6.4	11.7	10.3	9.1	10.3	12.9
77.5°	23.2	19.4	18.0	14.2	12.9	10.3	10.3	10.3	10.3	11.7	12.9
80°	14.2	14.2	10.3	9.1	7.7	6.4	7.7	7.7	7.7	7.7	9.1
82.5°	9.1	7.7	7.7	6.4	6.4	5.2	5.2	5.2	5.2	5.2	7.7
85°	7.7	5.2	5.2	3.9	5.2	9.1	3.9	5.2	5.2	5.2	3.9
87.5°	2.6	3.9	3.9	3.9	2.6	1.3	2.6	3.9	3.9	6.4	5.2
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°	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3	2404.3
2.5°	2408.1	2409.5	2409.5	2408.1	2408.1	2405.6	2410.7	2406.9	2408.1	2413.3	2409.5
5°	2410.7	2412.1	2412.1	2410.7	2410.7	2410.7	2412.1	2412.1	2410.7	2409.5	2412.1
7.5°	2415.9	2414.6	2414.6	2412.1	2412.1	2409.5	2412.1	2408.1	2410.7	2408.1	2412.1
10°	2409.5	2410.7	2409.5	2408.1	2408.1	2406.9	2406.9	2403.0	2404.3	2400.4	2403.0
12.5°	2405.6	2404.3	2404.3	2401.7	2399.2	2396.6	2395.2	2391.4	2391.4	2382.3	2386.3
15°	2395.2	2396.6	2392.7	2387.5	2384.9	2378.5	2375.8	2370.7	2365.5	2359.1	2360.4
17.5°	2386.3	2382.3	2377.2	2372.0	2361.7	2356.6	2351.4	2343.7	2341.1	2333.2	2330.8
20°	2359.1	2356.6	2350.1	2341.1	2334.6	2322.9	2317.8	2310.0	2303.7	2295.9	2292.0
22.5°	2324.3	2321.7	2314.0	2304.9	2294.6	2289.4	2284.3	2270.1	2263.6	2255.9	2254.6
25°	2280.5	2276.5	2268.8	2258.5	2253.3	2239.1	2233.9	2223.6	2221.0	2213.3	2212.1
27.5°	2213.3	2208.1	2199.1	2186.2	2177.2	2168.1	2163.0	2155.2	2152.7	2144.9	2143.6
30°	2112.6	2106.1	2088.1	2082.9	2067.5	2058.4	2058.4	2048.1	2049.4	2044.3	2044.3
32.5°	1953.9	1943.6	1929.4	1919.0	1908.7	1903.6	1903.6	1899.6	1902.2	1902.2	1904.8
35°	1743.5	1729.4	1721.6	1715.1	1715.1	1720.3	1735.8	1739.7	1747.4	1753.8	1759.1
37.5°	1473.8	1472.5	1481.5	1489.2	1508.6	1530.6	1557.7	1580.9	1602.8	1618.4	1633.9
40°	1182.1	1214.4	1240.2	1276.4	1306.1	1348.6	1397.7	1437.7	1475.1	1502.3	1530.6
42.5°	922.7	964.1	1018.2	1071.1	1124.0	1182.1	1246.7	1302.2	1351.3	1388.6	1418.3
45°	718.8	775.6	841.4	908.6	977.0	1049.3	1116.3	1173.1	1224.7	1263.5	1293.2
47.5°	579.4	641.4	716.2	789.9	867.2	943.4	1018.2	1067.3	1109.9	1140.8	1168.0
50°	478.8	544.6	623.4	707.2	784.6	860.8	925.3	973.0	1007.9	1035.0	1051.8
52.5°	400.1	469.7	553.7	637.5	715.0	784.6	842.8	878.9	907.2	926.6	942.1
55°	330.4	397.5	476.2	554.9	631.1	696.9	744.7	771.8	793.7	805.3	814.3
57.5°	269.7	331.7	403.9	476.2	542.0	596.3	633.7	660.7	671.1	680.1	678.9
60°	211.6	269.7	335.5	397.5	454.2	498.2	525.3	540.8	548.5	552.3	549.7
62.5°	166.5	219.4	269.7	324.0	365.2	402.7	428.4	428.4	432.4	433.6	437.5
65°	123.9	163.9	207.8	247.7	281.4	305.8	320.0	324.0	329.1	327.8	325.2
67.5°	91.6	121.3	153.6	183.3	206.5	222.0	232.3	241.4	240.0	237.4	236.2
70°	63.2	82.6	111.0	129.0	145.8	161.3	163.9	165.2	166.5	167.8	165.2
72.5°	43.9	58.1	73.5	89.0	99.3	105.8	112.3	113.6	113.6	113.6	112.3
75°	22.0	29.7	43.9	50.3	59.4	62.0	67.1	67.1	71.0	65.8	64.6
77.5°	19.4	23.2	30.9	36.1	40.0	43.9	45.2	49.0	47.8	45.2	46.4
80°	11.7	14.2	19.4	22.0	27.1	28.4	29.7	30.9	29.7	30.9	30.9
82.5°	9.1	10.3	12.9	12.9	16.8	16.8	18.0	18.0	19.4	19.4	19.4
85°	5.2	9.1	7.7	15.5	10.3	10.3	12.9	15.5	12.9	12.9	15.5
87.5°	5.2	5.2	3.9	5.2	5.2	5.2	6.4	7.7	7.7	9.1	7.7
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: P246245

CATALOG NUMBER: LSR8B50D010 EC8B50930 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2404.3	2404.3	2404.3	2404.3
2.5°	2408.1	2410.7	2406.9	2405.6
5°	2412.1	2412.1	2409.5	2409.5
7.5°	2412.1	2412.1	2408.1	2405.6
10°	2401.7	2401.7	2397.8	2395.2
12.5°	2382.3	2382.3	2381.0	2377.2
15°	2357.8	2357.8	2352.6	2348.8
17.5°	2324.3	2326.9	2320.5	2320.5
20°	2288.2	2286.8	2281.7	2279.1
22.5°	2250.7	2248.2	2246.8	2239.1
25°	2210.7	2208.1	2204.2	2200.4
27.5°	2142.3	2141.0	2137.2	2132.0
30°	2037.8	2036.5	2031.4	2031.4
32.5°	1902.2	1901.0	1895.8	1897.1
35°	1761.5	1766.8	1764.2	1759.1
37.5°	1644.2	1648.0	1650.7	1648.0
40°	1546.1	1557.7	1559.0	1561.6
42.5°	1441.6	1457.1	1462.2	1464.8
45°	1316.4	1330.5	1342.2	1339.6
47.5°	1188.6	1198.9	1209.2	1201.5
50°	1066.0	1072.5	1076.3	1076.3
52.5°	949.8	949.8	948.6	949.8
55°	816.9	816.9	811.7	814.3
57.5°	677.5	680.1	676.2	669.8
60°	548.5	542.0	539.4	535.6
62.5°	427.2	427.2	418.1	429.8
65°	320.0	316.2	312.3	311.0
67.5°	232.3	231.0	227.1	225.9
70°	163.9	158.7	157.5	154.8
72.5°	109.7	109.7	107.2	107.2
75°	67.1	60.6	59.4	60.6
77.5°	46.4	45.2	45.2	43.9
80°	30.9	29.7	32.3	28.4
82.5°	19.4	20.6	19.4	20.6
85°	12.9	15.5	14.2	14.2
87.5°	7.7	7.7	7.7	7.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)