

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: P246239

Luminaire Tested: **LSR8B50D010 EC8B50927 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246239  
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 EC8B50927 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4322.2 lumens  
Efficiency: N/A  
Efficacy: 81.6 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

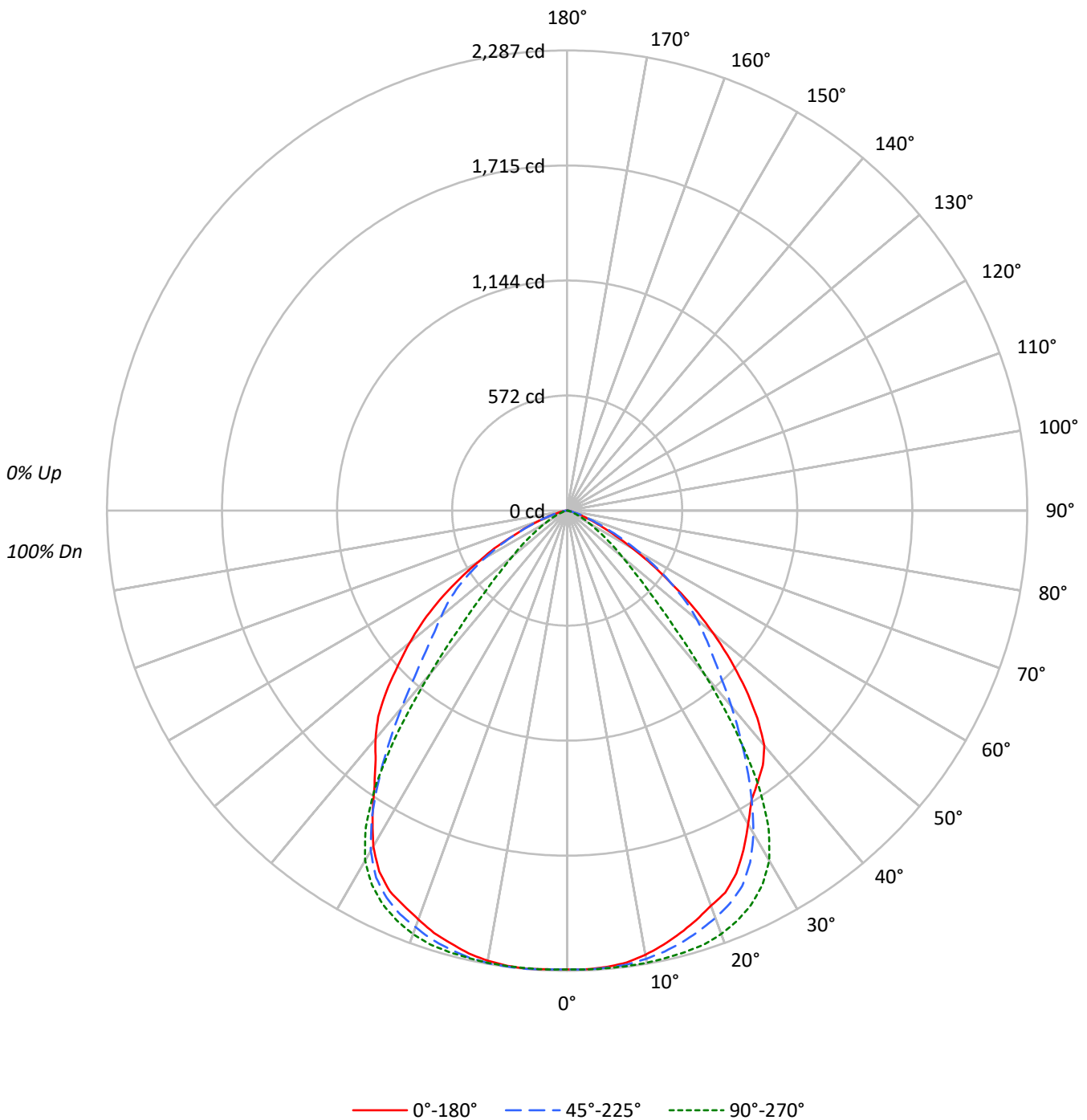
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	52	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°	217.6	5.0
10°-20°	632.1	14.6
20°-30°	959.4	22.2
30°-40°	1007.6	23.3
40°-50°	755.4	17.5
50°-60°	484.7	11.2
60°-70°	207.4	4.8
70°-80°	49.0	1.1
80°-90°	9.1	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°	1809.1	41.9
0°-40°	2816.7	65.2
0°-60°	4056.8	93.9
0°-90°	4322.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4322.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2280	2280	2280	2280	2280	
5°	2277	2280	2283	2287	2285	216
15°	2174	2219	2271	2256	2228	613
25°	1989	2059	2163	2124	2087	909
35°	1650	1558	1651	1632	1668	1036
45°	1254	1024	589	995	1271	960
55°	634	634	219	661	772	575
65°	191	225	70	290	295	204
75°	29	34	10	59	58	43
85°	10	6	5	10	14	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°	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5
2.5°	2281.7	2284.2	2283.0	2283.0	2281.7	2283.0	2283.0	2285.4	2285.4	2283.0	2281.7
5°	2276.8	2279.2	2279.2	2276.8	2276.8	2283.0	2279.2	2281.7	2281.7	2280.5	2280.5
7.5°	2265.9	2265.9	2270.7	2267.1	2267.1	2270.7	2269.5	2271.9	2274.4	2275.6	2275.6
10°	2241.3	2243.8	2245.0	2245.0	2246.3	2249.9	2252.4	2257.3	2259.7	2262.2	2263.4
12.5°	2210.7	2214.5	2215.6	2214.5	2218.0	2223.0	2229.1	2235.3	2238.9	2243.8	2247.4
15°	2174.0	2174.0	2176.4	2180.1	2182.6	2189.9	2196.0	2203.4	2213.2	2219.3	2225.5
17.5°	2133.7	2136.0	2139.8	2139.8	2144.6	2156.8	2160.6	2171.6	2182.6	2188.7	2201.0
20°	2089.6	2091.9	2095.6	2098.1	2104.2	2114.0	2121.4	2131.2	2143.5	2154.5	2166.6
22.5°	2055.3	2050.4	2052.8	2055.3	2061.5	2070.0	2078.5	2090.8	2103.0	2114.0	2126.2
25°	1989.1	1990.4	1994.1	1996.5	2003.8	2011.2	2021.0	2035.7	2046.7	2059.0	2072.4
27.5°	1899.8	1901.0	1907.1	1907.1	1913.3	1925.6	1931.6	1943.9	1958.6	1970.8	1986.8
30°	1798.2	1800.7	1800.7	1805.5	1809.2	1815.3	1821.5	1833.8	1841.1	1852.1	1874.1
32.5°	1705.2	1707.6	1706.4	1705.2	1701.4	1700.3	1699.1	1701.4	1703.9	1707.6	1716.2
35°	1650.2	1644.0	1639.1	1630.5	1620.7	1608.5	1597.5	1582.8	1569.3	1558.2	1546.1
37.5°	1597.5	1596.3	1588.8	1576.7	1557.0	1535.1	1509.3	1477.5	1445.6	1411.4	1378.4
40°	1524.0	1520.3	1514.2	1497.0	1475.0	1448.1	1413.9	1374.6	1323.2	1270.6	1216.8
42.5°	1399.2	1400.4	1393.0	1379.6	1358.8	1333.0	1297.6	1254.7	1199.6	1137.1	1067.4
45°	1253.5	1253.5	1251.0	1240.0	1225.4	1204.5	1177.5	1142.1	1088.2	1024.5	949.8
47.5°	1101.7	1103.0	1099.2	1096.8	1090.7	1077.2	1057.6	1030.7	992.7	931.5	856.9
50°	947.5	947.5	953.6	952.3	952.3	947.5	938.9	923.0	889.9	840.9	771.2
52.5°	793.2	795.7	799.3	804.3	810.3	820.1	810.3	803.0	782.2	744.3	684.2
55°	634.1	636.5	642.6	651.3	658.6	668.4	670.8	670.8	659.8	634.1	588.8
57.5°	498.3	494.6	499.5	506.8	516.6	526.4	533.7	542.2	541.0	523.9	487.2
60°	374.6	375.8	379.5	386.8	394.2	402.8	412.5	419.8	423.6	415.0	391.7
62.5°	272.9	272.9	277.9	285.2	288.9	301.2	307.2	311.0	314.6	313.3	298.7
65°	191.0	193.4	195.9	199.6	203.2	210.5	214.2	221.5	224.0	225.2	214.2
67.5°	134.7	131.0	133.4	135.9	139.5	144.5	151.8	151.8	155.5	155.5	148.2
70°	85.7	85.7	87.0	90.6	93.0	94.3	96.8	99.1	102.8	101.6	101.6
72.5°	57.5	56.4	57.5	58.7	60.0	63.7	63.7	64.9	67.4	68.5	63.7
75°	29.4	30.6	33.1	31.8	35.4	33.1	34.3	37.9	36.7	34.3	34.3
77.5°	24.5	24.5	24.5	23.3	25.6	25.6	24.5	26.9	25.6	25.6	24.5
80°	17.1	18.3	17.1	15.9	17.1	15.9	15.9	15.9	15.9	15.9	14.6
82.5°	13.5	11.0	12.3	11.0	12.3	12.3	11.0	9.8	9.8	11.0	9.8
85°	9.8	7.3	8.5	8.5	7.3	7.3	7.3	7.3	7.3	6.1	6.1
87.5°	6.1	3.7	3.7	3.7	4.8	4.8	4.8	3.7	4.8	4.8	2.5
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°	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5
2.5°	2284.2	2283.0	2285.4	2284.2	2284.2	2283.0	2284.2	2283.0	2285.4	2280.5	2281.7
5°	2284.2	2281.7	2283.0	2284.2	2285.4	2283.0	2283.0	2283.0	2285.4	2283.0	2284.2
7.5°	2279.2	2278.0	2281.7	2284.2	2283.0	2281.7	2284.2	2283.0	2285.4	2284.2	2286.6
10°	2269.5	2270.7	2273.2	2276.8	2278.0	2279.2	2281.7	2281.7	2285.4	2280.5	2283.0
12.5°	2254.8	2259.7	2265.9	2268.2	2273.2	2273.2	2275.6	2276.8	2279.2	2278.0	2281.7
15°	2236.5	2242.6	2249.9	2256.1	2262.2	2265.9	2269.5	2270.7	2274.4	2270.7	2271.9
17.5°	2214.5	2221.8	2232.8	2240.1	2249.9	2253.6	2258.4	2260.9	2264.6	2262.2	2263.4
20°	2183.7	2192.4	2204.7	2215.6	2221.8	2230.3	2236.5	2240.1	2242.6	2240.1	2241.3
22.5°	2141.0	2153.2	2169.1	2177.7	2189.9	2197.2	2198.5	2207.0	2213.2	2207.0	2209.5
25°	2090.8	2103.0	2115.2	2133.7	2144.6	2153.2	2161.8	2163.0	2169.1	2167.9	2166.6
27.5°	2007.6	2023.4	2044.2	2059.0	2073.6	2087.1	2096.9	2099.4	2105.4	2103.0	2104.2
30°	1893.7	1910.8	1930.4	1953.7	1974.5	1988.0	2000.1	2008.8	2014.9	2011.2	2009.9
32.5°	1732.2	1749.3	1770.1	1793.4	1817.8	1837.4	1852.1	1863.1	1870.4	1868.0	1861.9
35°	1547.3	1552.2	1565.7	1584.0	1604.8	1625.6	1639.1	1651.3	1659.8	1662.3	1662.3
37.5°	1357.5	1341.7	1331.9	1331.9	1344.0	1352.6	1364.9	1372.2	1385.7	1390.6	1394.2
40°	1173.9	1137.1	1103.0	1077.2	1060.1	1058.9	1058.9	1062.6	1074.7	1090.7	1105.4
42.5°	1009.9	951.1	898.5	850.7	816.5	796.9	788.3	789.5	799.3	814.1	838.5
45°	879.0	805.5	739.4	681.9	635.3	604.7	590.1	588.8	596.1	613.2	640.2
47.5°	777.3	699.0	624.3	558.2	508.0	475.0	457.8	452.9	457.8	473.7	505.6
50°	692.9	612.1	534.9	466.4	412.5	378.2	362.4	356.2	362.4	375.8	407.6
52.5°	614.5	531.2	459.0	393.0	335.4	306.0	288.9	285.2	288.9	304.8	330.5
55°	523.9	452.9	381.9	315.8	265.6	236.2	222.8	219.2	222.8	237.5	264.4
57.5°	434.6	373.4	311.0	251.0	208.1	182.4	170.1	165.3	173.8	183.6	215.4
60°	351.3	302.4	249.8	197.1	161.5	138.3	128.5	127.4	129.7	142.0	164.0
62.5°	275.4	235.0	193.4	150.5	121.2	111.4	99.1	98.0	100.4	107.7	124.9
65°	198.3	172.6	140.7	110.1	87.0	73.5	68.5	69.8	72.2	77.2	93.0
67.5°	138.3	119.9	98.0	77.2	60.0	53.9	48.9	47.7	48.9	57.5	66.1
70°	93.0	82.0	66.1	58.7	41.6	33.1	34.3	30.6	35.4	35.4	42.9
72.5°	61.2	53.9	44.1	34.3	29.4	23.3	23.3	22.0	24.5	25.6	31.8
75°	31.8	24.5	24.5	17.1	12.3	6.1	11.0	9.8	8.5	9.8	12.3
77.5°	22.0	18.3	17.1	13.5	12.3	9.8	9.8	9.8	9.8	11.0	12.3
80°	13.5	13.5	9.8	8.5	7.3	6.1	7.3	7.3	7.3	7.3	8.5
82.5°	8.5	7.3	7.3	6.1	6.1	4.8	4.8	4.8	4.8	4.8	7.3
85°	7.3	4.8	4.8	3.7	4.8	8.5	3.7	4.8	4.8	4.8	3.7
87.5°	2.5	3.7	3.7	3.7	2.5	1.2	2.5	3.7	3.7	6.1	4.8
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°	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5	2280.5
2.5°	2284.2	2285.4	2285.4	2284.2	2284.2	2281.7	2286.6	2283.0	2284.2	2289.0	2285.4
5°	2286.6	2287.8	2287.8	2286.6	2286.6	2286.6	2287.8	2287.8	2286.6	2285.4	2287.8
7.5°	2291.5	2290.3	2290.3	2287.8	2287.8	2285.4	2287.8	2284.2	2286.6	2284.2	2287.8
10°	2285.4	2286.6	2285.4	2284.2	2284.2	2283.0	2283.0	2279.2	2280.5	2276.8	2279.2
12.5°	2281.7	2280.5	2280.5	2278.0	2275.6	2273.2	2271.9	2268.2	2268.2	2259.7	2263.4
15°	2271.9	2273.2	2269.5	2264.6	2262.2	2256.1	2253.6	2248.6	2243.8	2237.6	2238.9
17.5°	2263.4	2259.7	2254.8	2249.9	2240.1	2235.3	2230.3	2223.0	2220.5	2213.2	2210.7
20°	2237.6	2235.3	2229.1	2220.5	2214.5	2203.4	2198.5	2191.2	2185.0	2177.7	2174.0
22.5°	2204.7	2202.2	2194.8	2186.2	2176.4	2171.6	2166.6	2153.2	2147.1	2139.8	2138.5
25°	2163.0	2159.3	2152.0	2142.2	2137.3	2123.8	2118.9	2109.2	2106.7	2099.4	2098.1
27.5°	2099.4	2094.4	2085.9	2073.6	2065.0	2056.5	2051.7	2044.2	2041.8	2034.4	2033.2
30°	2003.8	1997.8	1980.6	1975.7	1961.0	1952.4	1952.4	1942.6	1943.9	1938.9	1938.9
32.5°	1853.3	1843.5	1830.0	1820.2	1810.5	1805.5	1805.5	1801.9	1804.3	1804.3	1806.8
35°	1653.8	1640.4	1632.9	1626.9	1626.9	1631.7	1646.4	1650.2	1657.5	1663.5	1668.5
37.5°	1397.9	1396.7	1405.2	1412.7	1431.0	1451.8	1477.5	1499.5	1520.3	1535.1	1549.7
40°	1121.3	1151.9	1176.4	1210.6	1238.7	1279.2	1325.7	1363.6	1399.2	1424.9	1451.8
42.5°	875.2	914.4	965.8	1016.0	1066.2	1121.3	1182.5	1235.1	1281.6	1317.1	1345.3
45°	681.9	735.6	798.1	861.8	926.7	995.2	1058.9	1112.7	1161.7	1198.4	1226.6
47.5°	549.6	608.4	679.4	749.1	822.6	894.8	965.8	1012.4	1052.7	1082.1	1107.8
50°	454.2	516.6	591.3	670.8	744.3	816.5	877.7	923.0	956.0	981.8	997.6
52.5°	379.5	445.6	525.2	604.7	678.2	744.3	799.3	833.6	860.5	879.0	893.6
55°	313.3	377.0	451.7	526.4	598.6	661.1	706.3	732.0	752.8	763.9	772.4
57.5°	255.8	314.6	383.2	451.7	514.1	565.5	601.1	626.7	636.5	645.1	643.8
60°	200.8	255.8	318.3	377.0	430.9	472.5	498.3	512.9	520.2	523.9	521.4
62.5°	158.0	208.1	255.8	307.2	346.4	381.9	406.5	406.5	410.1	411.3	415.0
65°	117.4	155.5	197.1	235.0	266.8	290.1	303.6	307.2	312.2	311.0	308.5
67.5°	87.0	115.1	145.7	173.8	195.9	210.5	220.3	228.9	227.7	225.2	224.0
70°	60.0	78.3	105.3	122.4	138.3	153.0	155.5	156.7	158.0	159.2	156.7
72.5°	41.6	55.1	69.8	84.5	94.3	100.4	106.5	107.7	107.7	107.7	106.5
75°	20.8	28.1	41.6	47.7	56.4	58.7	63.7	63.7	67.4	62.4	61.2
77.5°	18.3	22.0	29.4	34.3	37.9	41.6	42.9	46.5	45.3	42.9	44.1
80°	11.0	13.5	18.3	20.8	25.6	26.9	28.1	29.4	28.1	29.4	29.4
82.5°	8.5	9.8	12.3	12.3	15.9	15.9	17.1	17.1	18.3	18.3	18.3
85°	4.8	8.5	7.3	14.6	9.8	9.8	12.3	14.6	12.3	12.3	14.6
87.5°	4.8	4.8	3.7	4.8	4.8	4.8	6.1	7.3	7.3	8.5	7.3
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: P246239

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2280.5	2280.5	2280.5	2280.5
2.5°	2284.2	2286.6	2283.0	2281.7
5°	2287.8	2287.8	2285.4	2285.4
7.5°	2287.8	2287.8	2284.2	2281.7
10°	2278.0	2278.0	2274.4	2271.9
12.5°	2259.7	2259.7	2258.4	2254.8
15°	2236.5	2236.5	2231.5	2227.8
17.5°	2204.7	2207.0	2201.0	2201.0
20°	2170.4	2169.1	2164.3	2161.8
22.5°	2134.8	2132.4	2131.2	2123.8
25°	2096.9	2094.4	2090.8	2087.1
27.5°	2032.0	2030.8	2027.1	2022.2
30°	1932.9	1931.6	1926.8	1926.8
32.5°	1804.3	1803.2	1798.2	1799.4
35°	1670.8	1675.8	1673.3	1668.5
37.5°	1559.5	1563.2	1565.7	1563.2
40°	1466.4	1477.5	1478.7	1481.2
42.5°	1367.3	1382.1	1386.9	1389.4
45°	1248.5	1262.0	1273.0	1270.6
47.5°	1127.4	1137.1	1146.9	1139.6
50°	1011.2	1017.2	1020.9	1020.9
52.5°	900.9	900.9	899.8	900.9
55°	774.9	774.9	769.9	772.4
57.5°	642.6	645.1	641.5	635.3
60°	520.2	514.1	511.6	508.0
62.5°	405.2	405.2	396.7	407.6
65°	303.6	299.9	296.2	295.0
67.5°	220.3	219.2	215.4	214.2
70°	155.5	150.5	149.3	146.9
72.5°	104.1	104.1	101.6	101.6
75°	63.7	57.5	56.4	57.5
77.5°	44.1	42.9	42.9	41.6
80°	29.4	28.1	30.6	26.9
82.5°	18.3	19.6	18.3	19.6
85°	12.3	14.6	13.5	13.5
87.5°	7.3	7.3	7.3	7.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)