

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: P245525

Luminaire Tested: **LSR8B50D010 EC8B509730 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245525  
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 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4144.0 lumens  
Efficiency: N/A  
Efficacy: 78.2 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

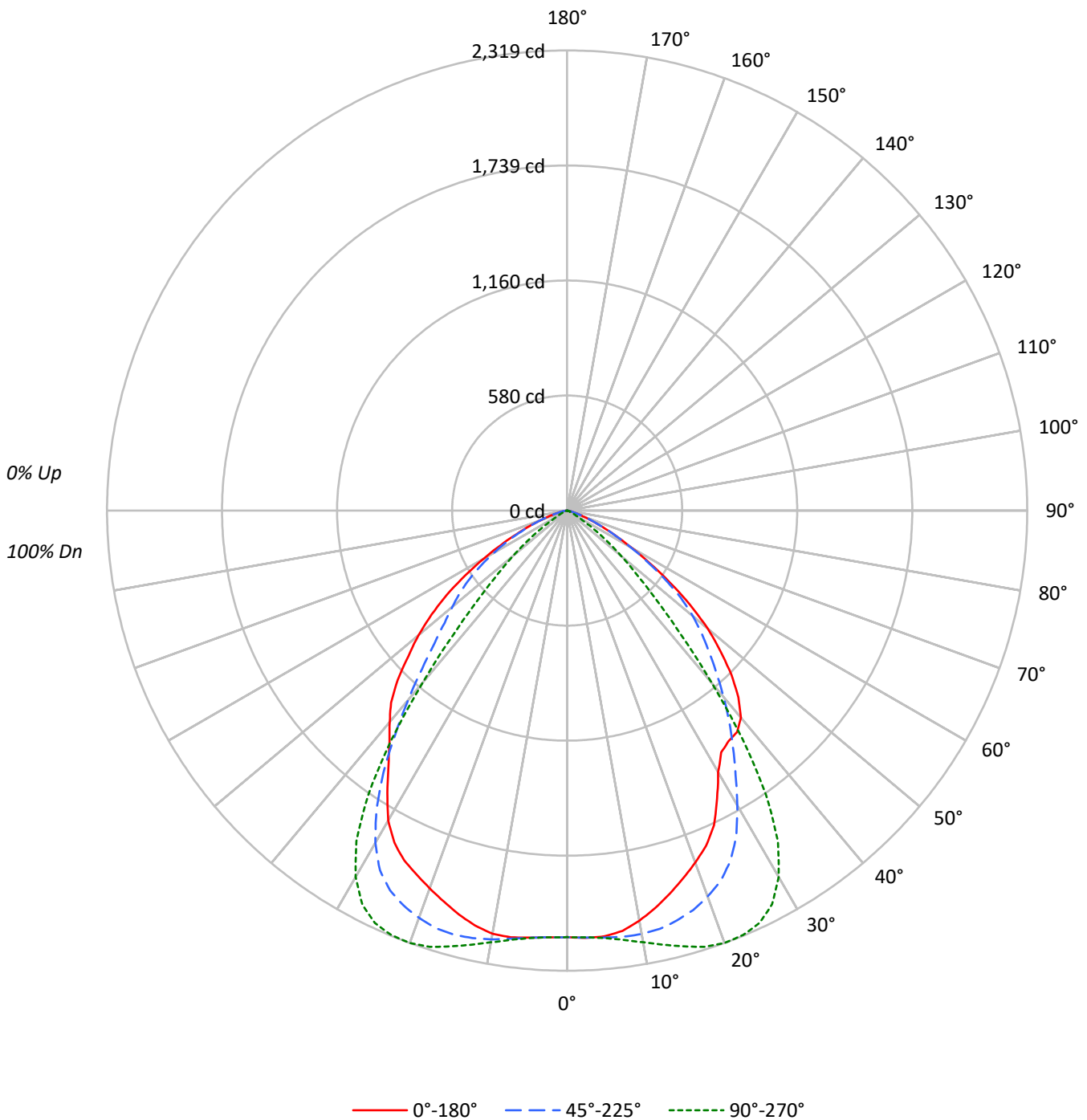
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P245525

CATALOG NUMBER: LSR8B50D010 EC8B509730 8LBDW0WH

### Luminous Intensity Polar Plot





TEST NUMBER: P24525

CATALOG NUMBER: LSR8B50D010 EC8B509730 8LBDW0WH

**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°	206.7	5.0
10°-20°	612.4	14.8
20°-30°	934.3	22.5
30°-40°	975.0	23.5
40°-50°	732.3	17.7
50°-60°	450.6	10.9
60°-70°	183.4	4.4
70°-80°	43.2	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°	1753.5	42.3
0°-40°	2728.5	65.8
0°-60°	3911.5	94.4
0°-90°	4144.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4144.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2150	2150	2150	2150	2150	
5°	2154	2160	2162	2160	2160	204
15°	1998	2138	2274	2211	2108	563
25°	1750	1947	2294	2112	1944	796
35°	1418	1458	1747	1615	1569	896
45°	1171	1013	632	944	1207	893
55°	632	600	166	600	741	568
65°	197	200	25	268	284	206
75°	34	34	5	60	63	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°	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8
2.5°	2155.5	2152.1	2155.5	2155.5	2156.6	2154.3	2155.5	2156.6	2154.3	2154.3	2154.3
5°	2154.3	2152.1	2154.3	2153.2	2155.5	2155.5	2157.8	2157.8	2160.0	2160.0	2163.5
7.5°	2136.1	2131.5	2136.1	2139.5	2141.8	2146.4	2152.1	2156.6	2161.2	2165.8	2171.5
10°	2098.4	2098.4	2101.8	2108.7	2115.5	2123.5	2133.8	2145.2	2156.6	2166.9	2177.2
12.5°	2051.6	2048.2	2055.1	2064.2	2074.5	2087.0	2103.0	2120.1	2138.4	2158.9	2174.9
15°	1998.0	1994.6	2002.6	2011.7	2024.3	2042.5	2061.9	2084.7	2111.0	2138.4	2164.6
17.5°	1943.2	1942.1	1950.1	1962.6	1972.9	1992.3	2017.4	2044.8	2074.5	2111.0	2145.2
20°	1887.3	1886.2	1894.2	1904.5	1918.1	1936.4	1961.5	1993.4	2028.8	2069.9	2109.8
22.5°	1829.1	1830.3	1837.1	1848.5	1860.0	1879.3	1905.6	1937.5	1976.3	2020.8	2065.3
25°	1750.4	1744.7	1753.8	1765.2	1784.6	1800.6	1825.7	1860.0	1899.9	1946.7	1999.2
27.5°	1636.3	1635.1	1643.2	1653.4	1670.5	1689.9	1717.3	1752.7	1794.9	1846.2	1897.6
30°	1522.2	1524.5	1527.9	1538.2	1549.6	1569.0	1596.4	1626.0	1666.0	1715.0	1769.8
32.5°	1444.6	1444.6	1449.2	1456.0	1464.0	1474.3	1493.7	1515.3	1546.2	1580.4	1620.3
35°	1418.3	1413.8	1418.3	1419.5	1420.6	1422.9	1426.3	1433.2	1443.4	1458.3	1473.1
37.5°	1406.9	1403.5	1403.5	1399.0	1393.2	1386.4	1377.3	1367.0	1355.6	1340.7	1329.4
40°	1362.4	1360.2	1357.9	1353.3	1340.7	1327.1	1312.2	1288.3	1262.0	1225.5	1189.0
42.5°	1276.9	1274.6	1273.4	1264.3	1252.9	1236.9	1219.8	1194.7	1161.6	1114.8	1062.3
45°	1170.7	1166.2	1162.8	1154.8	1146.8	1133.1	1117.1	1094.3	1061.2	1013.3	950.5
47.5°	1047.5	1045.2	1044.1	1040.7	1032.7	1024.7	1014.4	996.2	966.5	920.8	855.8
50°	923.1	918.6	920.8	919.7	916.3	910.6	903.7	891.2	868.3	827.3	767.9
52.5°	780.5	780.5	779.4	782.8	783.9	782.8	783.9	770.2	750.8	720.0	669.8
55°	632.1	632.1	635.6	640.2	644.7	645.8	644.7	639.0	625.3	600.2	555.7
57.5°	492.9	490.7	497.5	504.3	508.9	513.5	510.0	505.5	497.5	477.0	442.7
60°	375.4	375.4	380.0	384.5	389.1	393.7	392.5	391.4	384.5	370.8	343.5
62.5°	276.1	277.3	277.3	280.7	285.3	289.8	293.2	289.8	286.4	277.3	259.0
65°	197.4	196.3	197.4	200.8	204.3	208.8	211.1	210.0	206.5	199.7	186.0
67.5°	132.4	131.2	135.8	136.9	139.2	143.8	142.6	143.8	142.6	136.9	125.5
70°	86.7	84.4	86.7	85.6	89.0	90.2	92.4	93.6	92.4	89.0	85.6
72.5°	53.6	52.5	53.6	54.8	55.9	57.0	59.3	59.3	58.2	55.9	51.3
75°	34.2	30.8	31.9	29.7	31.9	31.9	34.2	35.4	34.2	34.2	31.9
77.5°	20.5	20.5	20.5	20.5	20.5	20.5	20.5	21.7	22.8	20.5	19.4
80°	10.3	10.3	11.4	11.4	11.4	12.6	11.4	11.4	11.4	12.6	9.1
82.5°	8.0	6.8	6.8	6.8	8.0	6.8	6.8	6.8	6.8	6.8	6.8
85°	3.4	4.6	3.4	2.3	3.4	3.4	4.6	3.4	3.4	3.4	4.6
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°	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8
2.5°	2155.5	2153.2	2153.2	2152.1	2154.3	2152.1	2153.2	2152.1	2152.1	2154.3	2152.1
5°	2163.5	2164.6	2162.3	2161.2	2164.6	2164.6	2164.6	2162.3	2162.3	2163.5	2162.3
7.5°	2174.9	2177.2	2178.3	2179.4	2181.7	2182.9	2182.9	2181.7	2180.6	2184.0	2179.4
10°	2187.4	2190.9	2197.7	2201.1	2206.8	2206.8	2209.1	2209.1	2206.8	2209.1	2208.0
12.5°	2182.9	2203.4	2214.8	2222.8	2230.8	2237.6	2239.9	2241.1	2239.9	2244.5	2239.9
15°	2190.9	2208.0	2226.2	2239.9	2254.7	2262.7	2265.0	2274.1	2276.4	2277.6	2270.7
17.5°	2178.3	2209.1	2228.5	2249.0	2270.7	2285.6	2299.2	2305.0	2306.1	2308.4	2299.2
20°	2149.8	2184.0	2213.7	2243.3	2268.4	2291.3	2302.7	2318.6	2314.1	2323.2	2310.7
22.5°	2111.0	2149.8	2187.4	2226.2	2252.5	2279.9	2303.8	2315.2	2320.9	2320.9	2307.2
25°	2049.4	2095.0	2136.1	2176.0	2216.0	2249.0	2276.4	2293.5	2297.0	2295.8	2279.9
27.5°	1953.5	2002.6	2050.5	2096.2	2145.2	2184.0	2216.0	2236.5	2242.2	2242.2	2225.1
30°	1821.1	1873.6	1920.4	1975.2	2025.4	2068.8	2113.3	2131.5	2141.8	2141.8	2122.4
32.5°	1663.7	1708.2	1751.5	1805.2	1860.0	1909.0	1951.2	1976.3	1988.9	1987.7	1970.6
35°	1492.5	1514.2	1547.3	1587.2	1636.3	1681.9	1723.0	1747.0	1768.7	1767.5	1751.5
37.5°	1321.3	1315.6	1319.1	1333.9	1364.7	1396.7	1428.6	1451.5	1469.7	1477.7	1474.3
40°	1153.6	1123.9	1095.4	1085.2	1087.4	1098.8	1116.0	1133.1	1153.6	1163.9	1168.5
42.5°	1003.0	952.8	902.6	864.9	843.2	836.4	844.4	850.1	862.6	877.5	892.3
45°	882.1	814.7	748.5	690.4	653.8	632.1	627.6	632.1	639.0	653.8	673.2
47.5°	782.8	704.0	629.9	564.8	511.2	482.7	474.7	472.4	479.2	492.9	519.2
50°	694.9	616.2	534.0	458.7	402.8	370.8	359.4	354.9	362.8	373.1	397.1
52.5°	599.1	521.5	437.0	364.0	305.8	272.7	260.2	253.3	257.9	271.6	295.5
55°	495.2	423.3	346.9	271.6	215.7	184.9	170.0	165.5	170.0	184.9	208.8
57.5°	391.4	330.9	267.0	196.3	146.1	115.3	100.4	95.8	108.4	114.1	139.2
60°	305.8	256.8	202.0	143.8	100.4	76.4	61.6	58.2	63.9	74.2	94.7
62.5°	229.4	198.5	155.2	102.7	74.2	49.1	41.1	37.7	41.1	49.1	65.1
65°	166.6	142.6	108.4	75.3	50.2	36.5	27.4	25.1	28.5	34.2	47.9
67.5°	114.1	95.8	75.3	52.5	34.2	22.8	19.4	19.4	20.5	25.1	35.4
70°	74.2	62.8	47.9	34.2	22.8	17.1	14.8	12.6	14.8	18.3	24.0
72.5°	46.8	39.9	30.8	24.0	17.1	12.6	10.3	9.1	11.4	13.7	18.3
75°	28.5	21.7	16.0	12.6	9.1	9.1	9.1	4.6	5.7	9.1	11.4
77.5°	17.1	14.8	12.6	10.3	8.0	4.6	4.6	4.6	5.7	6.8	10.3
80°	9.1	8.0	5.7	5.7	4.6	3.4	4.6	3.4	2.3	5.7	6.8
82.5°	5.7	4.6	4.6	4.6	5.7	2.3	3.4	2.3	3.4	4.6	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°	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8
2.5°	2153.2	2152.1	2153.2	2152.1	2152.1	2152.1	2153.2	2153.2	2152.1	2152.1	2154.3
5°	2162.3	2162.3	2162.3	2161.2	2160.0	2160.0	2162.3	2162.3	2158.9	2162.3	2162.3
7.5°	2181.7	2178.3	2181.7	2177.2	2174.9	2176.0	2177.2	2174.9	2172.6	2173.7	2173.7
10°	2206.8	2203.4	2203.4	2200.0	2196.6	2194.3	2192.0	2186.3	2180.6	2179.4	2174.9
12.5°	2236.5	2230.8	2227.4	2220.5	2214.8	2206.8	2200.0	2190.9	2179.4	2171.5	2163.5
15°	2266.2	2257.0	2249.0	2237.6	2225.1	2211.4	2196.6	2181.7	2163.5	2147.5	2133.8
17.5°	2290.1	2277.6	2262.7	2244.5	2226.2	2205.7	2184.0	2162.3	2136.1	2115.5	2099.6
20°	2298.1	2279.9	2260.5	2236.5	2212.5	2184.0	2156.6	2128.1	2098.4	2076.7	2058.5
22.5°	2287.9	2266.2	2242.2	2217.1	2185.1	2154.3	2122.4	2089.3	2063.0	2033.4	2016.3
25°	2259.3	2233.1	2206.8	2177.2	2146.4	2112.1	2077.9	2043.7	2011.7	1995.7	1974.1
27.5°	2201.1	2172.6	2144.1	2113.3	2077.9	2043.7	2008.3	1975.2	1947.8	1926.1	1913.6
30°	2098.4	2065.3	2032.2	1999.2	1968.3	1933.0	1899.9	1872.5	1845.1	1828.0	1815.4
32.5°	1940.9	1911.3	1878.2	1846.2	1817.7	1788.1	1760.7	1736.7	1717.3	1705.9	1696.8
35°	1728.7	1699.0	1673.9	1651.1	1627.2	1614.6	1597.5	1583.8	1575.8	1571.3	1570.1
37.5°	1461.7	1444.6	1436.6	1432.0	1427.5	1424.1	1426.3	1432.0	1436.6	1444.6	1453.7
40°	1176.4	1191.3	1195.8	1211.8	1226.6	1246.0	1267.7	1292.8	1313.4	1339.6	1357.9
42.5°	916.3	943.7	975.6	1009.8	1046.4	1081.7	1125.1	1165.0	1201.5	1234.6	1263.2
45°	704.0	746.2	794.2	843.2	892.3	943.7	996.2	1045.2	1088.6	1123.9	1153.6
47.5°	548.9	595.6	657.3	717.7	777.1	837.5	895.7	947.1	983.6	1017.8	1044.1
50°	434.7	488.4	555.7	625.3	690.4	754.2	815.9	863.8	900.3	927.7	947.1
52.5°	336.6	400.5	469.0	542.0	611.6	681.2	738.3	782.8	812.4	836.4	851.2
55°	251.0	313.8	386.8	462.1	532.9	600.2	653.8	692.6	718.9	732.6	740.6
57.5°	181.4	238.5	311.5	386.8	450.7	514.6	558.0	593.4	608.2	616.2	619.6
60°	132.4	184.9	249.9	314.9	375.4	426.8	464.4	488.4	499.8	504.3	503.2
62.5°	97.0	142.6	198.5	253.3	302.4	344.6	374.3	390.2	396.0	398.2	394.8
65°	74.2	109.5	157.5	199.7	237.3	268.1	289.8	300.1	303.5	302.4	300.1
67.5°	54.8	82.2	117.5	149.5	176.9	200.8	212.2	221.4	223.6	220.2	216.8
70°	38.8	60.5	85.6	107.3	127.8	141.5	154.0	155.2	155.2	154.0	151.8
72.5°	27.4	42.2	58.2	73.0	85.6	95.8	100.4	103.8	102.7	101.5	99.3
75°	18.3	26.2	42.2	45.6	57.0	60.5	65.1	65.1	66.2	62.8	62.8
77.5°	11.4	18.3	25.1	29.7	34.2	38.8	41.1	41.1	42.2	41.1	41.1
80°	6.8	11.4	13.7	20.5	20.5	24.0	25.1	26.2	24.0	27.4	24.0
82.5°	4.6	6.8	10.3	10.3	12.6	14.8	14.8	16.0	16.0	14.8	14.8
85°	3.4	4.6	5.7	6.8	6.8	8.0	6.8	6.8	8.0	9.1	8.0
87.5°	1.1	2.3	1.1	2.3	2.3	4.6	3.4	3.4	3.4	4.6	4.6
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: P245525

CATALOG NUMBER: LSR8B50D010 EC8B509730 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2149.8	2149.8	2149.8	2149.8
2.5°	2152.1	2153.2	2152.1	2152.1
5°	2162.3	2161.2	2162.3	2160.0
7.5°	2170.3	2170.3	2169.2	2169.2
10°	2170.3	2165.8	2165.8	2165.8
12.5°	2153.2	2147.5	2144.1	2141.8
15°	2123.5	2113.3	2108.7	2107.5
17.5°	2084.7	2075.6	2069.9	2066.5
20°	2040.2	2031.1	2024.3	2025.4
22.5°	2001.4	1991.2	1986.6	1984.3
25°	1962.6	1950.1	1946.7	1944.4
27.5°	1899.9	1893.0	1889.6	1886.2
30°	1804.0	1800.6	1794.9	1802.9
32.5°	1693.4	1687.6	1683.1	1686.5
35°	1571.3	1567.8	1571.3	1569.0
37.5°	1459.4	1462.8	1467.4	1469.7
40°	1371.6	1384.1	1388.7	1390.9
42.5°	1283.7	1298.5	1307.7	1313.4
45°	1175.3	1190.1	1200.4	1207.3
47.5°	1063.5	1076.0	1086.3	1085.2
50°	961.9	968.8	973.3	977.9
52.5°	859.2	859.2	860.4	860.4
55°	742.8	740.6	739.4	740.6
57.5°	615.0	612.8	611.6	608.2
60°	498.7	491.8	487.2	487.2
62.5°	390.2	382.3	378.8	377.7
65°	293.2	292.1	285.3	284.1
67.5°	212.2	207.7	203.1	204.3
70°	149.5	142.6	142.6	140.4
72.5°	97.0	93.6	92.4	92.4
75°	60.5	60.5	58.2	62.8
77.5°	39.9	39.9	38.8	39.9
80°	24.0	24.0	24.0	22.8
82.5°	14.8	16.0	14.8	14.8
85°	8.0	9.1	6.8	10.3
87.5°	4.6	5.7	4.6	5.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)