

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: P245519

Luminaire Tested: **LSR8B50D010 EC8B50927 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245519  
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 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4405.5 lumens  
Efficiency: N/A  
Efficacy: 83.1 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

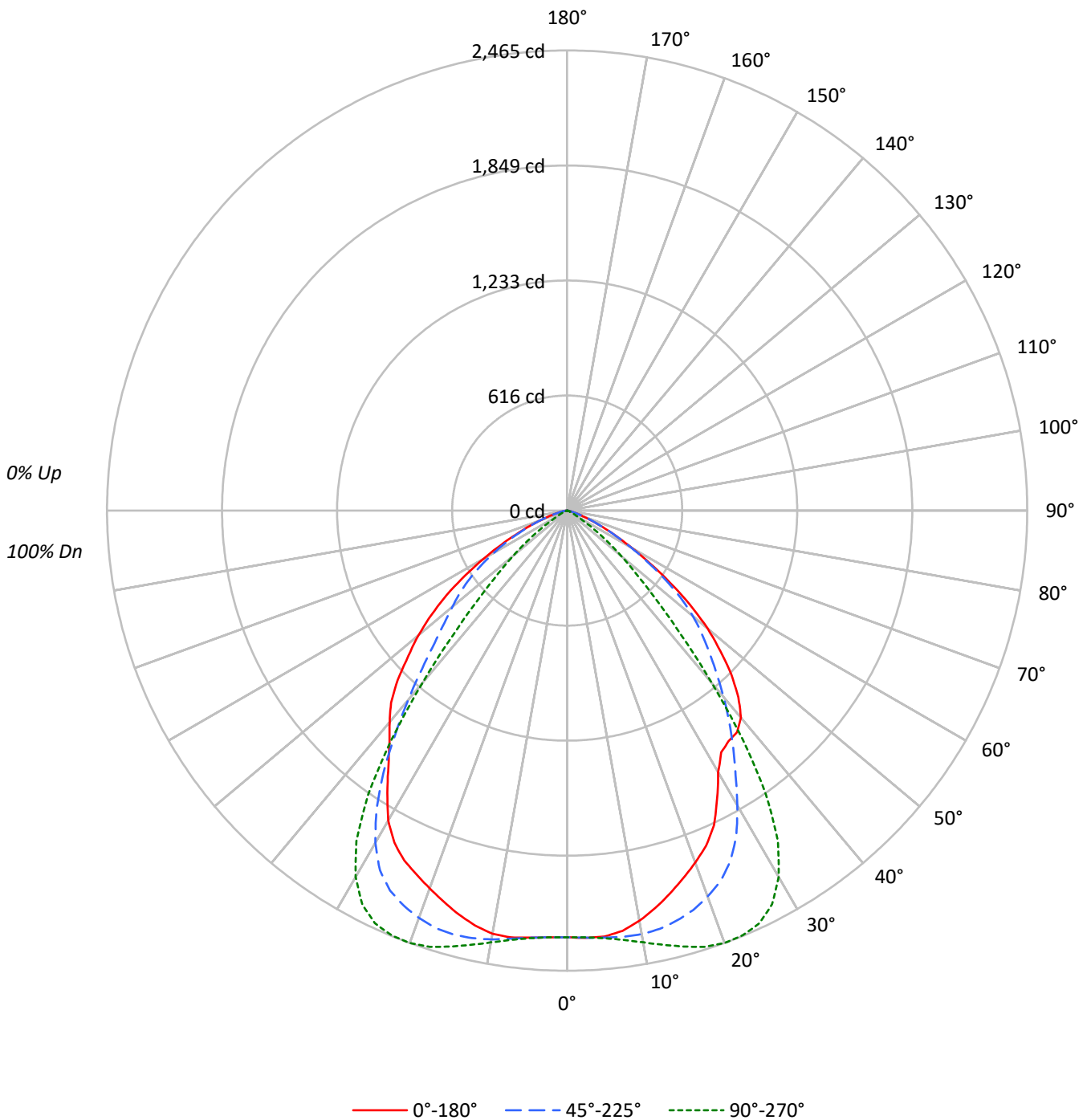
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	219.8	5.0
10°-20°	651.1	14.8
20°-30°	993.3	22.5
30°-40°	1036.5	23.5
40°-50°	778.6	17.7
50°-60°	479.0	10.9
60°-70°	194.9	4.4
70°-80°	45.9	1.0
80°-90°	6.3	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°	1864.2	42.3
0°-40°	2900.7	65.8
0°-60°	4158.3	94.4
0°-90°	4405.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4405.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2285	2285	2285	2285	2285	
5°	2290	2296	2299	2296	2296	217
15°	2124	2273	2418	2351	2240	598
25°	1861	2070	2438	2245	2067	846
35°	1508	1550	1857	1716	1668	952
45°	1245	1077	672	1003	1283	950
55°	672	638	176	638	787	604
65°	210	212	27	285	302	219
75°	36	36	5	64	67	44
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°	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4
2.5°	2291.5	2287.8	2291.5	2291.5	2292.8	2290.3	2291.5	2292.8	2290.3	2290.3	2290.3
5°	2290.3	2287.8	2290.3	2289.0	2291.5	2291.5	2294.0	2294.0	2296.4	2296.4	2300.0
7.5°	2270.9	2266.1	2270.9	2274.5	2276.9	2281.8	2287.8	2292.8	2297.6	2302.4	2308.5
10°	2230.9	2230.9	2234.5	2241.8	2249.0	2257.5	2268.5	2280.6	2292.8	2303.7	2314.6
12.5°	2181.2	2177.4	2184.8	2194.4	2205.3	2218.7	2235.7	2253.9	2273.3	2295.1	2312.1
15°	2124.1	2120.4	2129.0	2138.6	2152.0	2171.4	2192.1	2216.2	2244.2	2273.3	2301.2
17.5°	2065.8	2064.6	2073.2	2086.5	2097.5	2118.0	2144.7	2173.8	2205.3	2244.2	2280.6
20°	2006.4	2005.2	2013.8	2024.7	2039.2	2058.6	2085.3	2119.3	2156.8	2200.5	2243.0
22.5°	1944.6	1945.8	1953.0	1965.2	1977.3	1997.9	2025.8	2059.8	2101.0	2148.3	2195.7
25°	1860.9	1854.8	1864.5	1876.6	1897.2	1914.2	1941.0	1977.3	2019.7	2069.5	2125.4
27.5°	1739.6	1738.4	1746.8	1757.7	1775.9	1796.5	1825.6	1863.3	1908.1	1962.8	2017.4
30°	1618.2	1620.7	1624.3	1635.2	1647.3	1667.9	1697.1	1728.7	1771.1	1823.3	1881.4
32.5°	1535.7	1535.7	1540.6	1547.9	1556.3	1567.2	1587.9	1611.0	1643.7	1680.1	1722.6
35°	1507.8	1503.0	1507.8	1509.1	1510.3	1512.7	1516.3	1523.6	1534.5	1550.4	1566.1
37.5°	1495.7	1492.1	1492.1	1487.2	1481.2	1473.9	1464.2	1453.3	1441.1	1425.4	1413.2
40°	1448.4	1446.0	1443.6	1438.8	1425.4	1410.9	1395.0	1369.6	1341.7	1302.9	1264.0
42.5°	1357.4	1355.1	1353.8	1344.0	1332.0	1315.0	1296.8	1270.1	1234.9	1185.2	1129.4
45°	1244.6	1239.8	1236.1	1227.6	1219.2	1204.5	1187.6	1163.4	1128.1	1077.2	1010.5
47.5°	1113.6	1111.2	1109.9	1106.3	1097.9	1089.3	1078.4	1059.1	1027.5	979.0	909.8
50°	981.3	976.5	979.0	977.7	974.1	968.1	960.8	947.4	923.2	879.5	816.4
52.5°	829.7	829.7	828.6	832.2	833.4	832.2	833.4	818.9	798.2	765.4	712.1
55°	672.1	672.1	675.7	680.5	685.4	686.6	685.4	679.3	664.8	638.1	590.7
57.5°	524.0	521.7	528.9	536.2	541.0	545.8	542.2	537.4	528.9	507.0	470.7
60°	399.2	399.2	404.0	408.8	413.7	418.5	417.3	416.0	408.8	394.2	365.2
62.5°	293.5	294.8	294.8	298.5	303.3	308.1	311.7	308.1	304.4	294.8	275.4
65°	209.8	208.7	209.8	213.5	217.1	222.0	224.4	223.2	219.6	212.3	197.8
67.5°	140.7	139.5	144.3	145.6	148.0	152.9	151.6	152.9	151.6	145.6	133.4
70°	92.1	89.8	92.1	91.0	94.6	95.9	98.2	99.4	98.2	94.6	91.0
72.5°	57.0	55.8	57.0	58.3	59.4	60.6	63.1	63.1	61.9	59.4	54.6
75°	36.3	32.7	34.0	31.5	34.0	34.0	36.3	37.6	36.3	36.3	34.0
77.5°	21.8	21.8	21.8	21.8	21.8	21.8	21.8	23.1	24.3	21.8	20.6
80°	10.9	10.9	12.2	12.2	12.2	13.4	12.2	12.2	12.2	13.4	9.7
82.5°	8.4	7.3	7.3	7.3	8.4	7.3	7.3	7.3	7.3	7.3	7.3
85°	3.6	4.8	3.6	2.5	3.6	3.6	4.8	3.6	3.6	3.6	4.8
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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4
2.5°	2291.5	2289.0	2289.0	2287.8	2290.3	2287.8	2289.0	2287.8	2287.8	2290.3	2287.8
5°	2300.0	2301.2	2298.8	2297.6	2301.2	2301.2	2301.2	2298.8	2298.8	2300.0	2298.8
7.5°	2312.1	2314.6	2315.7	2316.9	2319.4	2320.6	2320.6	2319.4	2318.2	2321.9	2316.9
10°	2325.5	2329.1	2336.4	2340.0	2346.1	2346.1	2348.5	2348.5	2346.1	2348.5	2347.3
12.5°	2320.6	2342.5	2354.6	2363.1	2371.5	2378.8	2381.3	2382.5	2381.3	2386.1	2381.3
15°	2329.1	2347.3	2366.7	2381.3	2397.0	2405.5	2408.0	2417.6	2420.1	2421.3	2414.0
17.5°	2315.7	2348.5	2369.1	2391.0	2414.0	2429.8	2444.3	2450.5	2451.6	2454.1	2444.3
20°	2285.4	2321.9	2353.4	2384.9	2411.5	2435.8	2448.0	2465.0	2460.2	2469.8	2456.4
22.5°	2244.2	2285.4	2325.5	2366.7	2394.6	2423.7	2449.2	2461.3	2467.4	2467.4	2452.8
25°	2178.7	2227.2	2270.9	2313.3	2355.8	2391.0	2420.1	2438.3	2441.9	2440.7	2423.7
27.5°	2076.8	2129.0	2179.9	2228.4	2280.6	2321.9	2355.8	2377.6	2383.6	2383.6	2365.5
30°	1936.0	1991.8	2041.6	2099.8	2153.2	2199.3	2246.6	2266.1	2276.9	2276.9	2256.3
32.5°	1768.6	1816.0	1862.1	1919.1	1977.3	2029.5	2074.4	2101.0	2114.4	2113.2	2095.0
35°	1586.7	1609.8	1645.0	1687.4	1739.6	1788.1	1831.7	1857.3	1880.2	1879.1	1862.1
37.5°	1404.7	1398.7	1402.3	1418.1	1450.8	1484.8	1518.8	1543.0	1562.4	1571.0	1567.2
40°	1226.5	1194.9	1164.5	1153.7	1156.0	1168.2	1186.4	1204.5	1226.5	1237.4	1242.2
42.5°	1066.3	1013.0	959.5	919.5	896.4	889.2	897.6	903.7	917.1	932.8	948.6
45°	937.7	866.1	795.8	733.9	695.1	672.1	667.2	672.1	679.3	695.1	715.7
47.5°	832.2	748.5	669.6	600.4	543.5	513.1	504.7	502.2	509.5	524.0	551.9
50°	738.8	655.1	567.7	487.7	428.2	394.2	382.2	377.2	385.8	396.7	422.1
52.5°	636.9	554.4	464.6	387.0	325.1	289.9	276.5	269.3	274.2	288.7	314.2
55°	526.5	450.0	368.8	288.7	229.3	196.5	180.8	176.0	180.8	196.5	222.0
57.5°	416.0	351.8	283.8	208.7	155.2	122.5	106.8	101.9	115.2	121.3	148.0
60°	325.1	272.9	214.8	152.9	106.8	81.2	65.5	61.9	68.0	78.9	100.7
62.5°	243.8	211.0	164.9	109.1	78.9	52.2	43.6	40.1	43.6	52.2	69.2
65°	177.1	151.6	115.2	80.1	53.3	38.8	29.1	26.7	30.4	36.3	51.0
67.5°	121.3	101.9	80.1	55.8	36.3	24.3	20.6	20.6	21.8	26.7	37.6
70°	78.9	66.7	51.0	36.3	24.3	18.2	15.8	13.4	15.8	19.5	25.4
72.5°	49.7	42.4	32.7	25.4	18.2	13.4	10.9	9.7	12.2	14.5	19.5
75°	30.4	23.1	17.0	13.4	9.7	9.7	9.7	4.8	6.1	9.7	12.2
77.5°	18.2	15.8	13.4	10.9	8.4	4.8	4.8	4.8	6.1	7.3	10.9
80°	9.7	8.4	6.1	6.1	4.8	3.6	4.8	3.6	2.5	6.1	7.3
82.5°	6.1	4.8	4.8	4.8	6.1	2.5	3.6	2.5	3.6	4.8	3.6
85°	3.6	3.6	3.6	2.5	6.1	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



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4	2285.4
2.5°	2289.0	2287.8	2289.0	2287.8	2287.8	2287.8	2289.0	2289.0	2287.8	2287.8	2290.3
5°	2298.8	2298.8	2298.8	2297.6	2296.4	2296.4	2298.8	2298.8	2295.1	2298.8	2298.8
7.5°	2319.4	2315.7	2319.4	2314.6	2312.1	2313.3	2314.6	2312.1	2309.7	2310.9	2310.9
10°	2346.1	2342.5	2342.5	2338.8	2335.2	2332.7	2330.3	2324.2	2318.2	2316.9	2312.1
12.5°	2377.6	2371.5	2367.9	2360.6	2354.6	2346.1	2338.8	2329.1	2316.9	2308.5	2300.0
15°	2409.2	2399.4	2391.0	2378.8	2365.5	2350.9	2335.2	2319.4	2300.0	2283.0	2268.5
17.5°	2434.6	2421.3	2405.5	2386.1	2366.7	2344.8	2321.9	2298.8	2270.9	2249.0	2232.0
20°	2443.2	2423.7	2403.1	2377.6	2352.2	2321.9	2292.8	2262.4	2230.9	2207.8	2188.4
22.5°	2432.2	2409.2	2383.6	2357.0	2323.0	2290.3	2256.3	2221.1	2193.2	2161.7	2143.5
25°	2401.9	2374.0	2346.1	2314.6	2281.8	2245.4	2209.0	2172.6	2138.6	2121.6	2098.6
27.5°	2340.0	2309.7	2279.4	2246.6	2209.0	2172.6	2135.0	2099.8	2070.7	2047.6	2034.3
30°	2230.9	2195.7	2160.5	2125.4	2092.5	2054.9	2019.7	1990.7	1961.6	1943.3	1930.0
32.5°	2063.5	2031.9	1996.8	1962.8	1932.4	1900.9	1871.8	1846.4	1825.6	1813.5	1803.8
35°	1837.8	1806.3	1779.5	1755.3	1729.8	1716.5	1698.3	1683.8	1675.2	1670.4	1669.2
37.5°	1554.0	1535.7	1527.3	1522.5	1517.5	1513.9	1516.3	1522.5	1527.3	1535.7	1545.4
40°	1250.7	1266.4	1271.2	1288.2	1304.1	1324.7	1347.8	1374.4	1396.2	1424.1	1443.6
42.5°	974.1	1003.2	1037.1	1073.6	1112.4	1150.0	1196.1	1238.5	1277.3	1312.5	1342.9
45°	748.5	793.4	844.3	896.4	948.6	1003.2	1059.1	1111.2	1157.3	1194.9	1226.5
47.5°	583.5	633.3	698.7	763.1	826.1	890.4	952.2	1006.9	1045.7	1082.0	1109.9
50°	462.2	519.2	590.7	664.8	733.9	801.8	867.4	918.3	957.2	986.3	1006.9
52.5°	357.9	425.8	498.6	576.2	650.2	724.2	784.8	832.2	863.7	889.2	905.0
55°	266.8	333.6	411.2	491.3	566.6	638.1	695.1	736.3	764.2	778.8	787.3
57.5°	192.8	253.6	331.2	411.2	479.1	547.1	593.2	630.8	646.5	655.1	658.7
60°	140.7	196.5	265.6	334.8	399.2	453.7	493.8	519.2	531.3	536.2	534.9
62.5°	103.2	151.6	211.0	269.3	321.4	366.3	397.9	414.9	421.0	423.3	419.7
65°	78.9	116.4	167.4	212.3	252.3	285.1	308.1	319.0	322.7	321.4	319.0
67.5°	58.3	87.3	125.0	159.0	188.0	213.5	225.7	235.4	237.7	234.1	230.5
70°	41.3	64.2	91.0	114.1	135.9	150.4	163.8	164.9	164.9	163.8	161.3
72.5°	29.1	44.9	61.9	77.6	91.0	101.9	106.8	110.4	109.1	108.0	105.5
75°	19.5	27.9	44.9	48.5	60.6	64.2	69.2	69.2	70.3	66.7	66.7
77.5°	12.2	19.5	26.7	31.5	36.3	41.3	43.6	43.6	44.9	43.6	43.6
80°	7.3	12.2	14.5	21.8	21.8	25.4	26.7	27.9	25.4	29.1	25.4
82.5°	4.8	7.3	10.9	10.9	13.4	15.8	15.8	17.0	17.0	15.8	15.8
85°	3.6	4.8	6.1	7.3	7.3	8.4	7.3	7.3	8.4	9.7	8.4
87.5°	1.2	2.5	1.2	2.5	2.5	4.8	3.6	3.6	3.6	4.8	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





TEST NUMBER: P245519

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2285.4	2285.4	2285.4	2285.4
2.5°	2287.8	2289.0	2287.8	2287.8
5°	2298.8	2297.6	2298.8	2296.4
7.5°	2307.3	2307.3	2306.0	2306.0
10°	2307.3	2302.4	2302.4	2302.4
12.5°	2289.0	2283.0	2279.4	2276.9
15°	2257.5	2246.6	2241.8	2240.5
17.5°	2216.2	2206.6	2200.5	2196.9
20°	2169.0	2159.3	2152.0	2153.2
22.5°	2127.7	2116.8	2112.0	2109.5
25°	2086.5	2073.2	2069.5	2067.1
27.5°	2019.7	2012.5	2008.8	2005.2
30°	1917.9	1914.2	1908.1	1916.7
32.5°	1800.2	1794.2	1789.3	1792.9
35°	1670.4	1666.8	1670.4	1667.9
37.5°	1551.5	1555.2	1560.0	1562.4
40°	1458.1	1471.5	1476.3	1478.7
42.5°	1364.7	1380.5	1390.2	1396.2
45°	1249.4	1265.2	1276.2	1283.4
47.5°	1130.6	1143.9	1154.8	1153.7
50°	1022.6	1029.9	1034.8	1039.6
52.5°	913.4	913.4	914.6	914.6
55°	789.8	787.3	786.0	787.3
57.5°	653.8	651.4	650.2	646.5
60°	530.1	522.9	517.9	517.9
62.5°	414.9	406.3	402.8	401.5
65°	311.7	310.5	303.3	302.1
67.5°	225.7	220.7	215.9	217.1
70°	159.0	151.6	151.6	149.2
72.5°	103.2	99.4	98.2	98.2
75°	64.2	64.2	61.9	66.7
77.5°	42.4	42.4	41.3	42.4
80°	25.4	25.4	25.4	24.3
82.5°	15.8	17.0	15.8	15.8
85°	8.4	9.7	7.3	10.9
87.5°	4.8	6.1	4.8	6.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)