

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: P246101

Luminaire Tested: **LSR8B50D010 EC8B50930 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246101  
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 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4505.3 lumens  
Efficiency: N/A  
Efficacy: 85.0 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

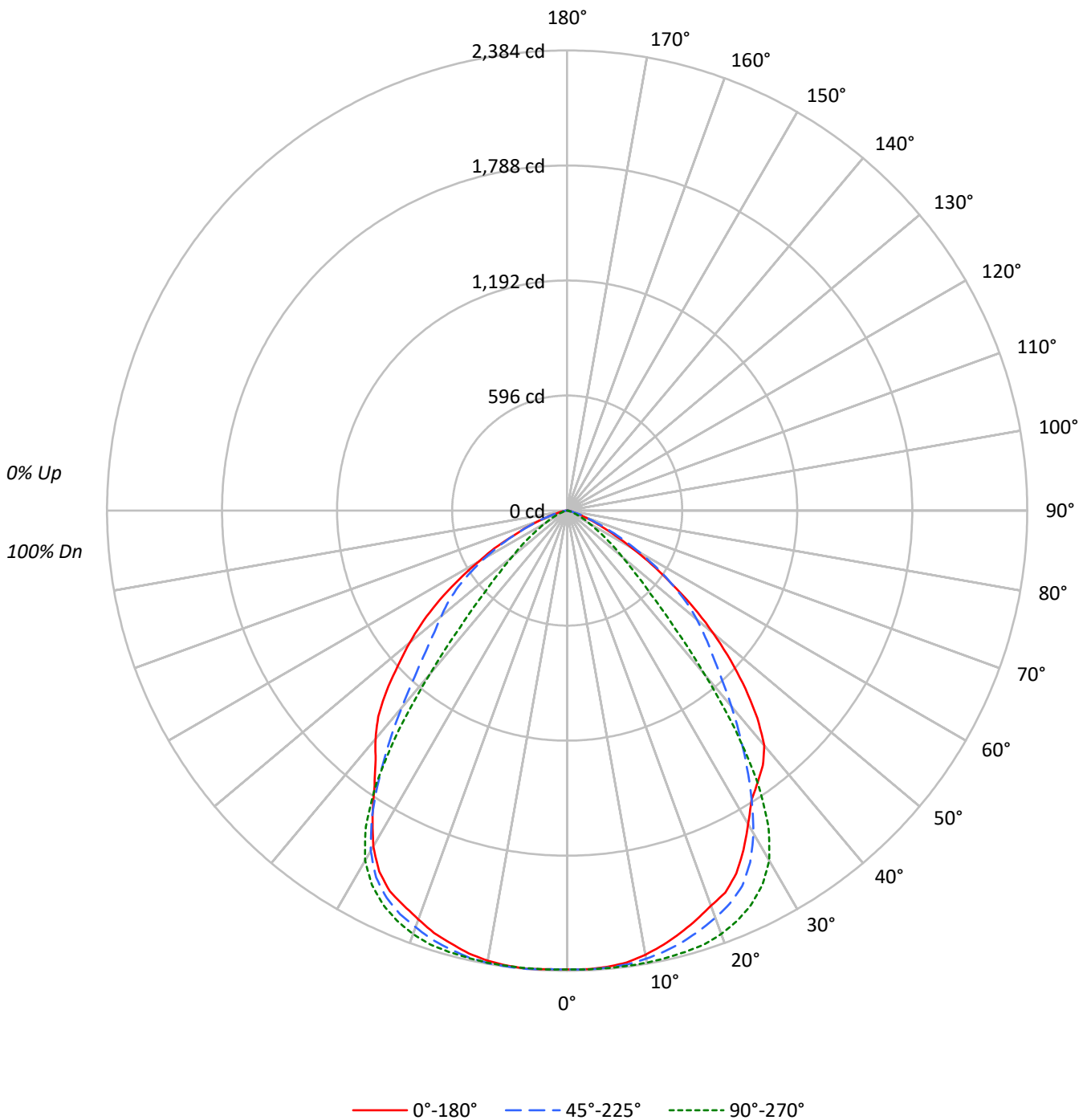
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	226.9	5.0
10°-20°	658.8	14.6
20°-30°	1000.0	22.2
30°-40°	1050.3	23.3
40°-50°	787.4	17.5
50°-60°	505.2	11.2
60°-70°	216.1	4.8
70°-80°	51.1	1.1
80°-90°	9.5	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°	1885.7	41.9
0°-40°	2935.9	65.2
0°-60°	4228.6	93.9
0°-90°	4505.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4505.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2377	2377	2377	2377	2377	
5°	2373	2377	2380	2384	2382	225
15°	2266	2313	2367	2352	2322	639
25°	2073	2146	2255	2214	2176	947
35°	1720	1624	1721	1701	1739	1080
45°	1306	1068	614	1037	1324	1001
55°	661	661	228	689	805	600
65°	199	235	73	302	308	212
75°	31	36	10	61	60	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°	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1
2.5°	2378.3	2380.9	2379.7	2379.7	2378.3	2379.7	2379.7	2382.2	2382.2	2379.7	2378.3
5°	2373.3	2375.8	2375.8	2373.3	2373.3	2379.7	2375.8	2378.3	2378.3	2377.1	2377.1
7.5°	2361.8	2361.8	2366.9	2363.1	2363.1	2366.9	2365.6	2368.1	2370.7	2372.0	2372.0
10°	2336.3	2338.9	2340.1	2340.1	2341.3	2345.1	2347.7	2352.9	2355.3	2357.9	2359.3
12.5°	2304.3	2308.1	2309.5	2308.1	2312.1	2317.1	2323.5	2329.9	2333.7	2338.9	2342.7
15°	2266.1	2266.1	2268.7	2272.5	2275.1	2282.7	2289.1	2296.7	2306.9	2313.3	2319.7
17.5°	2224.0	2226.5	2230.3	2230.3	2235.5	2248.2	2252.1	2263.5	2275.1	2281.3	2294.1
20°	2178.1	2180.6	2184.4	2187.0	2193.3	2203.5	2211.2	2221.4	2234.2	2245.7	2258.4
22.5°	2142.3	2137.2	2139.8	2142.3	2148.7	2157.6	2166.6	2179.3	2192.1	2203.5	2216.3
25°	2073.4	2074.6	2078.6	2081.0	2088.8	2096.4	2106.6	2121.9	2133.4	2146.2	2160.2
27.5°	1980.2	1981.6	1987.9	1987.9	1994.3	2007.0	2013.4	2026.2	2041.6	2054.2	2070.8
30°	1874.4	1876.9	1876.9	1882.0	1885.9	1892.2	1898.6	1911.4	1919.0	1930.5	1953.5
32.5°	1777.5	1779.9	1778.7	1777.5	1773.5	1772.3	1771.0	1773.5	1776.1	1779.9	1788.9
35°	1720.0	1713.6	1708.5	1699.5	1689.3	1676.6	1665.1	1649.8	1635.8	1624.2	1611.5
37.5°	1665.1	1663.8	1656.2	1643.4	1623.0	1600.0	1573.2	1540.0	1506.8	1471.2	1436.7
40°	1588.6	1584.8	1578.4	1560.4	1537.6	1509.4	1473.8	1432.9	1379.3	1324.5	1268.3
42.5°	1458.4	1459.7	1452.0	1438.0	1416.3	1389.5	1352.5	1307.9	1250.5	1185.3	1112.6
45°	1306.5	1306.5	1304.1	1292.5	1277.3	1255.5	1227.5	1190.5	1134.3	1068.0	990.1
47.5°	1148.4	1149.6	1145.8	1143.3	1136.8	1122.8	1102.4	1074.4	1034.8	971.0	893.1
50°	987.6	987.6	994.0	992.6	992.6	987.6	978.6	962.0	927.6	876.6	803.9
52.5°	826.8	829.3	833.2	838.3	844.7	854.9	844.7	837.1	815.3	775.7	713.3
55°	660.9	663.5	669.9	678.8	686.5	696.7	699.2	699.2	687.7	660.9	613.7
57.5°	519.4	515.4	520.6	528.2	538.4	548.6	556.4	565.2	564.0	546.2	507.8
60°	390.4	391.7	395.5	403.2	410.8	419.8	430.0	437.6	441.4	432.6	408.3
62.5°	284.5	284.5	289.7	297.3	301.1	313.9	320.3	324.1	327.9	326.7	311.3
65°	199.1	201.6	204.1	207.9	211.8	219.5	223.3	230.9	233.5	234.7	223.3
67.5°	140.3	136.5	139.1	141.6	145.5	150.6	158.2	158.2	162.0	162.0	154.4
70°	89.3	89.3	90.6	94.4	97.0	98.2	100.8	103.4	107.2	105.9	105.9
72.5°	60.0	58.7	60.0	61.2	62.6	66.4	66.4	67.6	70.2	71.4	66.4
75°	30.6	31.9	34.4	33.2	37.0	34.4	35.8	39.6	38.2	35.8	35.8
77.5°	25.6	25.6	25.6	24.2	26.8	26.8	25.6	28.0	26.8	26.8	25.6
80°	17.8	19.2	17.8	16.6	17.8	16.6	16.6	16.6	16.6	16.6	15.2
82.5°	14.0	11.4	12.8	11.4	12.8	12.8	11.4	10.2	10.2	11.4	10.2
85°	10.2	7.6	9.0	9.0	7.6	7.6	7.6	7.6	7.6	6.4	6.4
87.5°	6.4	3.8	3.8	3.8	5.0	5.0	5.0	3.8	5.0	5.0	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°	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1
2.5°	2380.9	2379.7	2382.2	2380.9	2380.9	2379.7	2380.9	2379.7	2382.2	2377.1	2378.3
5°	2380.9	2378.3	2379.7	2380.9	2382.2	2379.7	2379.7	2379.7	2382.2	2379.7	2380.9
7.5°	2375.8	2374.5	2378.3	2380.9	2379.7	2378.3	2380.9	2379.7	2382.2	2380.9	2383.5
10°	2365.6	2366.9	2369.5	2373.3	2374.5	2375.8	2378.3	2378.3	2382.2	2377.1	2379.7
12.5°	2350.3	2355.3	2361.8	2364.3	2369.5	2369.5	2372.0	2373.3	2375.8	2374.5	2378.3
15°	2331.1	2337.5	2345.1	2351.5	2357.9	2361.8	2365.6	2366.9	2370.7	2366.9	2368.1
17.5°	2308.1	2315.9	2327.3	2334.9	2345.1	2349.1	2354.1	2356.7	2360.5	2357.9	2359.3
20°	2276.3	2285.3	2297.9	2309.5	2315.9	2324.7	2331.1	2334.9	2337.5	2334.9	2336.3
22.5°	2231.6	2244.4	2260.9	2269.9	2282.7	2290.3	2291.5	2300.5	2306.9	2300.5	2303.1
25°	2179.3	2192.1	2204.9	2224.0	2235.5	2244.4	2253.3	2254.6	2260.9	2259.7	2258.4
27.5°	2092.6	2109.2	2130.8	2146.2	2161.4	2175.5	2185.7	2188.2	2194.6	2192.1	2193.3
30°	1973.9	1991.8	2012.2	2036.4	2058.2	2072.2	2084.9	2093.8	2100.2	2096.4	2095.1
32.5°	1805.5	1823.3	1845.1	1869.3	1894.8	1915.2	1930.5	1942.0	1949.6	1947.1	1940.7
35°	1612.8	1617.9	1632.0	1651.1	1672.8	1694.5	1708.5	1721.3	1730.2	1732.7	1732.7
37.5°	1415.0	1398.4	1388.2	1388.2	1401.0	1409.9	1422.7	1430.3	1444.4	1449.5	1453.3
40°	1223.6	1185.3	1149.6	1122.8	1105.0	1103.7	1103.7	1107.5	1120.3	1136.8	1152.2
42.5°	1052.6	991.4	936.6	886.8	851.1	830.7	821.7	823.0	833.2	848.5	874.0
45°	916.1	839.6	770.7	710.7	662.2	630.3	615.0	613.7	621.4	639.2	667.3
47.5°	810.3	728.5	650.7	581.8	529.6	495.0	477.2	472.2	477.2	493.8	527.0
50°	722.1	638.0	557.6	486.2	430.0	394.3	377.7	371.3	377.7	391.7	424.9
52.5°	640.5	553.8	478.4	409.6	349.6	318.9	301.1	297.3	301.1	317.7	344.5
55°	546.2	472.2	398.1	329.2	276.9	246.3	232.3	228.5	232.3	247.5	275.7
57.5°	453.0	389.2	324.1	261.5	216.9	190.1	177.3	172.3	181.2	191.4	224.5
60°	366.2	315.1	260.3	205.5	168.5	144.2	134.0	132.7	135.2	148.0	171.0
62.5°	287.1	244.9	201.6	156.9	126.3	116.1	103.4	102.1	104.6	112.3	130.1
65°	206.7	179.9	146.7	114.8	90.6	76.6	71.4	72.8	75.2	80.4	97.0
67.5°	144.2	125.0	102.1	80.4	62.6	56.2	51.0	49.8	51.0	60.0	68.9
70°	97.0	85.5	68.9	61.2	43.4	34.4	35.8	31.9	37.0	37.0	44.6
72.5°	63.8	56.2	46.0	35.8	30.6	24.2	24.2	23.0	25.6	26.8	33.2
75°	33.2	25.6	25.6	17.8	12.8	6.4	11.4	10.2	9.0	10.2	12.8
77.5°	23.0	19.2	17.8	14.0	12.8	10.2	10.2	10.2	10.2	11.4	12.8
80°	14.0	14.0	10.2	9.0	7.6	6.4	7.6	7.6	7.6	7.6	9.0
82.5°	9.0	7.6	7.6	6.4	6.4	5.0	5.0	5.0	5.0	5.0	7.6
85°	7.6	5.0	5.0	3.8	5.0	9.0	3.8	5.0	5.0	5.0	3.8
87.5°	2.6	3.8	3.8	3.8	2.6	1.2	2.6	3.8	3.8	6.4	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



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1	2377.1
2.5°	2380.9	2382.2	2382.2	2380.9	2380.9	2378.3	2383.5	2379.7	2380.9	2386.0	2382.2
5°	2383.5	2384.7	2384.7	2383.5	2383.5	2383.5	2384.7	2384.7	2383.5	2382.2	2384.7
7.5°	2388.6	2387.3	2387.3	2384.7	2384.7	2382.2	2384.7	2380.9	2383.5	2380.9	2384.7
10°	2382.2	2383.5	2382.2	2380.9	2380.9	2379.7	2379.7	2375.8	2377.1	2373.3	2375.8
12.5°	2378.3	2377.1	2377.1	2374.5	2372.0	2369.5	2368.1	2364.3	2364.3	2355.3	2359.3
15°	2368.1	2369.5	2365.6	2360.5	2357.9	2351.5	2349.1	2343.9	2338.9	2332.5	2333.7
17.5°	2359.3	2355.3	2350.3	2345.1	2334.9	2329.9	2324.7	2317.1	2314.5	2306.9	2304.3
20°	2332.5	2329.9	2323.5	2314.5	2308.1	2296.7	2291.5	2283.9	2277.5	2269.9	2266.1
22.5°	2297.9	2295.4	2287.7	2278.9	2268.7	2263.5	2258.4	2244.4	2238.0	2230.3	2229.1
25°	2254.6	2250.7	2243.1	2232.9	2227.8	2213.8	2208.7	2198.4	2195.9	2188.2	2187.0
27.5°	2188.2	2183.1	2174.2	2161.4	2152.5	2143.6	2138.5	2130.8	2128.3	2120.6	2119.4
30°	2088.8	2082.4	2064.4	2059.4	2044.0	2035.2	2035.2	2025.0	2026.2	2021.2	2021.2
32.5°	1931.8	1921.6	1907.5	1897.3	1887.1	1882.0	1882.0	1878.2	1880.7	1880.7	1883.3
35°	1723.8	1709.7	1702.1	1695.7	1695.7	1700.8	1716.1	1720.0	1727.7	1734.0	1739.1
37.5°	1457.1	1455.8	1464.8	1472.4	1491.6	1513.2	1540.0	1563.0	1584.8	1600.0	1615.4
40°	1168.8	1200.7	1226.1	1261.9	1291.3	1333.3	1381.9	1421.4	1458.4	1485.2	1513.2
42.5°	912.3	953.1	1006.8	1059.0	1111.4	1168.8	1232.5	1287.5	1335.9	1372.9	1402.3
45°	710.7	766.9	831.9	898.3	965.9	1037.4	1103.7	1159.8	1210.9	1249.1	1278.5
47.5°	572.9	634.1	708.1	780.9	857.5	932.7	1006.8	1055.2	1097.3	1128.0	1154.7
50°	473.4	538.4	616.3	699.2	775.7	851.1	914.8	962.0	996.6	1023.4	1039.8
52.5°	395.5	464.4	547.4	630.3	706.9	775.7	833.2	868.9	897.0	916.1	931.4
55°	326.7	393.0	470.8	548.6	623.9	689.0	736.2	763.1	784.7	796.1	805.1
57.5°	266.7	327.9	399.4	470.8	536.0	589.5	626.5	653.3	663.5	672.4	671.1
60°	209.3	266.7	331.7	393.0	449.2	492.5	519.4	534.6	542.2	546.2	543.6
62.5°	164.6	216.9	266.7	320.3	361.1	398.1	423.6	423.6	427.4	428.7	432.6
65°	122.5	162.0	205.5	244.9	278.1	302.4	316.5	320.3	325.4	324.1	321.5
67.5°	90.6	119.9	151.8	181.2	204.1	219.5	229.7	238.7	237.3	234.7	233.5
70°	62.6	81.7	109.7	127.6	144.2	159.5	162.0	163.3	164.6	165.9	163.3
72.5°	43.4	57.4	72.8	88.0	98.2	104.6	111.0	112.3	112.3	112.3	111.0
75°	21.7	29.4	43.4	49.8	58.7	61.2	66.4	66.4	70.2	65.0	63.8
77.5°	19.2	23.0	30.6	35.8	39.6	43.4	44.6	48.5	47.2	44.6	46.0
80°	11.4	14.0	19.2	21.7	26.8	28.0	29.4	30.6	29.4	30.6	30.6
82.5°	9.0	10.2	12.8	12.8	16.6	16.6	17.8	17.8	19.2	19.2	19.2
85°	5.0	9.0	7.6	15.2	10.2	10.2	12.8	15.2	12.8	12.8	15.2
87.5°	5.0	5.0	3.8	5.0	5.0	5.0	6.4	7.6	7.6	9.0	7.6
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: P246101

CATALOG NUMBER: LSR8B50D010 EC8B50930 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2377.1	2377.1	2377.1	2377.1
2.5°	2380.9	2383.5	2379.7	2378.3
5°	2384.7	2384.7	2382.2	2382.2
7.5°	2384.7	2384.7	2380.9	2378.3
10°	2374.5	2374.5	2370.7	2368.1
12.5°	2355.3	2355.3	2354.1	2350.3
15°	2331.1	2331.1	2326.1	2322.3
17.5°	2297.9	2300.5	2294.1	2294.1
20°	2262.3	2260.9	2255.9	2253.3
22.5°	2225.3	2222.7	2221.4	2213.8
25°	2185.7	2183.1	2179.3	2175.5
27.5°	2118.1	2116.8	2113.0	2107.8
30°	2014.7	2013.4	2008.4	2008.4
32.5°	1880.7	1879.5	1874.4	1875.7
35°	1741.7	1746.7	1744.2	1739.1
37.5°	1625.6	1629.4	1632.0	1629.4
40°	1528.6	1540.0	1541.4	1544.0
42.5°	1425.2	1440.5	1445.6	1448.2
45°	1301.5	1315.5	1327.0	1324.5
47.5°	1175.1	1185.3	1195.5	1187.9
50°	1054.0	1060.4	1064.2	1064.2
52.5°	939.1	939.1	937.8	939.1
55°	807.7	807.7	802.6	805.1
57.5°	669.9	672.4	668.6	662.2
60°	542.2	536.0	533.4	529.6
62.5°	422.4	422.4	413.4	424.9
65°	316.5	312.6	308.7	307.5
67.5°	229.7	228.5	224.5	223.3
70°	162.0	156.9	155.7	153.1
72.5°	108.5	108.5	105.9	105.9
75°	66.4	60.0	58.7	60.0
77.5°	46.0	44.6	44.6	43.4
80°	30.6	29.4	31.9	28.0
82.5°	19.2	20.4	19.2	20.4
85°	12.8	15.2	14.0	14.0
87.5°	7.6	7.6	7.6	7.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)