

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: P244637

Luminaire Tested: **LSR8B50D010 EC8B50935 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244637
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 EC8B50935 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4760.0 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

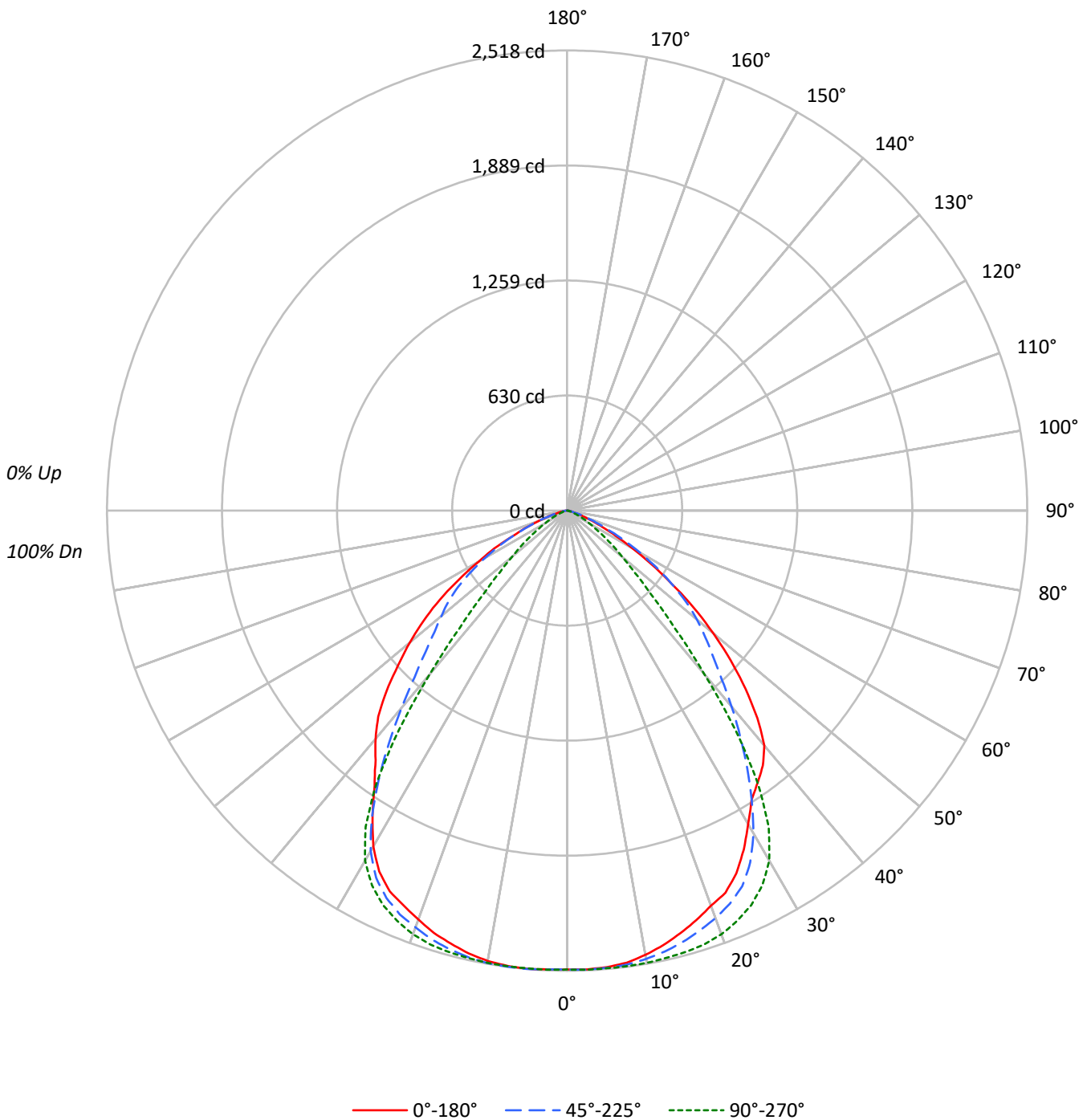
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	77445	77445	77445
5°	77614	77825	77908
10°	77287	78681	78343
15°	76433	79833	78326
20°	75515	80955	78123
25°	74533	81049	78204
30°	70512	78769	75554
35°	68407	68456	69167
40°	67562	47101	65662
45°	60198	28276	61022
50°	50055	18820	53936
55°	37542	12973	45730
60°	25440	8647	34506
65°	15345	5611	23706
70°	8511	3038	14588
75°	3860	1287	7554
80°	3356	1438	5274
85°	3821	1911	5236



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.7	5.0
10°-20°	696.1	14.6
20°-30°	1056.5	22.2
30°-40°	1109.7	23.3
40°-50°	831.9	17.5
50°-60°	533.8	11.2
60°-70°	228.3	4.8
70°-80°	53.9	1.1
80°-90°	10.0	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°	1992.3	41.9
0°-40°	3101.9	65.2
0°-60°	4467.7	93.9
0°-90°	4760.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4760.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2512	2512	2512	2512	2512	
5°	2507	2512	2514	2518	2517	238
15°	2394	2444	2501	2484	2454	675
25°	2191	2268	2382	2339	2298	1001
35°	1817	1716	1818	1797	1837	1141
45°	1380	1128	648	1096	1399	1057
55°	698	698	241	728	851	633
65°	210	248	77	320	325	224
75°	32	38	11	65	63	47
85°	11	7	5	11	15	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°	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5
2.5°	2512.8	2515.5	2514.2	2514.2	2512.8	2514.2	2514.2	2516.9	2516.9	2514.2	2512.8
5°	2507.4	2510.1	2510.1	2507.4	2507.4	2514.2	2510.1	2512.8	2512.8	2511.5	2511.5
7.5°	2495.3	2495.3	2500.7	2496.7	2496.7	2500.7	2499.3	2502.0	2504.7	2506.1	2506.1
10°	2468.3	2471.0	2472.4	2472.4	2473.7	2477.8	2480.5	2485.9	2488.5	2491.2	2492.6
12.5°	2434.6	2438.7	2440.0	2438.7	2442.7	2448.1	2454.9	2461.6	2465.7	2471.0	2475.1
15°	2394.2	2394.2	2396.9	2400.9	2403.6	2411.7	2418.5	2426.5	2437.3	2444.1	2450.8
17.5°	2349.7	2352.4	2356.4	2356.4	2361.8	2375.3	2379.4	2391.5	2403.6	2410.4	2423.9
20°	2301.2	2303.9	2307.9	2310.6	2317.4	2328.1	2336.2	2347.0	2360.5	2372.6	2386.1
22.5°	2263.4	2258.0	2260.7	2263.4	2270.2	2279.6	2289.0	2302.5	2316.0	2328.1	2341.6
25°	2190.6	2192.0	2196.0	2198.7	2206.8	2214.9	2225.7	2241.8	2254.0	2267.5	2282.3
27.5°	2092.2	2093.6	2100.3	2100.3	2107.0	2120.5	2127.3	2140.7	2156.9	2170.4	2187.9
30°	1980.3	1983.0	1983.0	1988.4	1992.4	1999.2	2005.9	2019.4	2027.5	2039.6	2063.9
32.5°	1877.9	1880.6	1879.2	1877.9	1873.8	1872.5	1871.1	1873.8	1876.5	1880.6	1890.0
35°	1817.2	1810.5	1805.1	1795.7	1784.9	1771.4	1759.2	1743.1	1728.2	1716.1	1702.6
37.5°	1759.2	1757.9	1749.8	1736.3	1714.7	1690.5	1662.2	1627.1	1592.1	1554.3	1518.0
40°	1678.4	1674.3	1667.6	1648.7	1624.4	1594.8	1557.0	1513.9	1457.3	1399.3	1340.0
42.5°	1540.8	1542.2	1534.1	1519.3	1496.4	1468.0	1429.0	1381.8	1321.1	1252.4	1175.5
45°	1380.4	1380.4	1377.7	1365.6	1349.4	1326.5	1296.9	1257.8	1198.5	1128.3	1046.1
47.5°	1213.3	1214.6	1210.6	1207.9	1201.1	1186.3	1164.7	1135.1	1093.3	1025.9	943.6
50°	1043.4	1043.4	1050.2	1048.8	1048.8	1043.4	1034.0	1016.4	980.1	926.1	849.3
52.5°	873.6	876.3	880.3	885.7	892.4	903.2	892.4	884.3	861.4	819.6	753.6
55°	698.3	701.0	707.7	717.2	725.3	736.1	738.7	738.7	726.6	698.3	648.4
57.5°	548.7	544.6	550.0	558.1	568.9	579.7	587.8	597.2	595.8	577.0	536.5
60°	412.5	413.9	417.9	426.0	434.1	443.5	454.3	462.4	466.4	457.0	431.4
62.5°	300.6	300.6	306.0	314.1	318.1	331.6	338.4	342.4	346.4	345.1	328.9
65°	210.3	213.0	215.7	219.7	223.8	231.9	235.9	244.0	246.7	248.0	235.9
67.5°	148.3	144.2	146.9	149.6	153.7	159.1	167.2	167.2	171.2	171.2	163.1
70°	94.4	94.4	95.7	99.7	102.5	103.8	106.5	109.2	113.2	111.9	111.9
72.5°	63.4	62.0	63.4	64.7	66.1	70.1	70.1	71.4	74.2	75.5	70.1
75°	32.4	33.7	36.4	35.1	39.1	36.4	37.7	41.8	40.4	37.7	37.7
77.5°	26.9	26.9	26.9	25.6	28.3	28.3	26.9	29.7	28.3	28.3	26.9
80°	18.9	20.2	18.9	17.5	18.9	17.5	17.5	17.5	17.5	17.5	16.2
82.5°	14.8	12.1	13.5	12.1	13.5	13.5	12.1	10.8	10.8	12.1	10.8
85°	10.8	8.1	9.4	9.4	8.1	8.1	8.1	8.1	8.1	6.7	6.7
87.5°	6.7	4.1	4.1	4.1	5.4	5.4	5.4	4.1	5.4	5.4	2.7
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°	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5
2.5°	2515.5	2514.2	2516.9	2515.5	2515.5	2514.2	2515.5	2514.2	2516.9	2511.5	2512.8
5°	2515.5	2512.8	2514.2	2515.5	2516.9	2514.2	2514.2	2514.2	2516.9	2514.2	2515.5
7.5°	2510.1	2508.8	2512.8	2515.5	2514.2	2512.8	2515.5	2514.2	2516.9	2515.5	2518.2
10°	2499.3	2500.7	2503.4	2507.4	2508.8	2510.1	2512.8	2512.8	2516.9	2511.5	2514.2
12.5°	2483.2	2488.5	2495.3	2498.0	2503.4	2503.4	2506.1	2507.4	2510.1	2508.8	2512.8
15°	2462.9	2469.7	2477.8	2484.5	2491.2	2495.3	2499.3	2500.7	2504.7	2500.7	2502.0
17.5°	2438.7	2446.8	2458.9	2467.0	2477.8	2481.8	2487.2	2489.9	2494.0	2491.2	2492.6
20°	2405.0	2414.4	2427.9	2440.0	2446.8	2456.2	2462.9	2467.0	2469.7	2467.0	2468.3
22.5°	2357.8	2371.3	2388.8	2398.2	2411.7	2419.8	2421.2	2430.6	2437.3	2430.6	2433.3
25°	2302.5	2316.0	2329.5	2349.7	2361.8	2371.3	2380.7	2382.1	2388.8	2387.4	2386.1
27.5°	2210.8	2228.4	2251.3	2267.5	2283.6	2298.5	2309.3	2311.9	2318.7	2316.0	2317.4
30°	2085.5	2104.4	2125.9	2151.5	2174.5	2189.3	2202.8	2212.2	2218.9	2214.9	2213.5
32.5°	1907.5	1926.4	1949.3	1974.9	2001.9	2023.5	2039.6	2051.8	2059.9	2057.2	2050.4
35°	1704.0	1709.4	1724.2	1744.4	1767.3	1790.2	1805.1	1818.5	1828.0	1830.7	1830.7
37.5°	1495.0	1477.5	1466.7	1466.7	1480.2	1489.6	1503.1	1511.2	1526.0	1531.4	1535.5
40°	1292.8	1252.4	1214.6	1186.3	1167.4	1166.1	1166.1	1170.1	1183.6	1201.1	1217.3
42.5°	1112.2	1047.4	989.5	936.9	899.2	877.6	868.2	869.5	880.3	896.5	923.4
45°	967.9	887.0	814.2	750.9	699.7	665.9	649.8	648.4	656.5	675.4	705.1
47.5°	856.0	769.7	687.5	614.7	559.5	523.0	504.2	498.8	504.2	521.7	556.8
50°	763.0	674.1	589.1	513.6	454.3	416.6	399.0	392.3	399.0	413.9	448.9
52.5°	676.7	585.1	505.5	432.7	369.4	337.0	318.1	314.1	318.1	335.7	364.0
55°	577.0	498.8	420.6	347.8	292.5	260.2	245.3	241.3	245.3	261.5	291.2
57.5°	478.6	411.2	342.4	276.4	229.2	200.8	187.4	182.0	191.4	202.2	237.3
60°	386.9	333.0	275.0	217.0	178.0	152.3	141.5	140.2	142.9	156.4	180.6
62.5°	303.3	258.8	213.0	165.8	133.5	122.7	109.2	107.9	110.5	118.6	137.5
65°	218.4	190.1	155.0	121.3	95.7	80.9	75.5	76.9	79.5	84.9	102.5
67.5°	152.3	132.1	107.9	84.9	66.1	59.3	53.9	52.6	53.9	63.4	72.8
70°	102.5	90.3	72.8	64.7	45.8	36.4	37.7	33.7	39.1	39.1	47.2
72.5°	67.4	59.3	48.5	37.7	32.4	25.6	25.6	24.3	26.9	28.3	35.1
75°	35.1	26.9	26.9	18.9	13.5	6.7	12.1	10.8	9.4	10.8	13.5
77.5°	24.3	20.2	18.9	14.8	13.5	10.8	10.8	10.8	10.8	12.1	13.5
80°	14.8	14.8	10.8	9.4	8.1	6.7	8.1	8.1	8.1	8.1	9.4
82.5°	9.4	8.1	8.1	6.7	6.7	5.4	5.4	5.4	5.4	5.4	8.1
85°	8.1	5.4	5.4	4.1	5.4	9.4	4.1	5.4	5.4	5.4	4.1
87.5°	2.7	4.1	4.1	4.1	2.7	1.4	2.7	4.1	4.1	6.7	5.4
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°	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5	2511.5
2.5°	2515.5	2516.9	2516.9	2515.5	2515.5	2512.8	2518.2	2514.2	2515.5	2520.9	2516.9
5°	2518.2	2519.6	2519.6	2518.2	2518.2	2518.2	2519.6	2519.6	2518.2	2516.9	2519.6
7.5°	2523.6	2522.3	2522.3	2519.6	2519.6	2516.9	2519.6	2515.5	2518.2	2515.5	2519.6
10°	2516.9	2518.2	2516.9	2515.5	2515.5	2514.2	2514.2	2510.1	2511.5	2507.4	2510.1
12.5°	2512.8	2511.5	2511.5	2508.8	2506.1	2503.4	2502.0	2498.0	2498.0	2488.5	2492.6
15°	2502.0	2503.4	2499.3	2494.0	2491.2	2484.5	2481.8	2476.4	2471.0	2464.3	2465.7
17.5°	2492.6	2488.5	2483.2	2477.8	2467.0	2461.6	2456.2	2448.1	2445.4	2437.3	2434.6
20°	2464.3	2461.6	2454.9	2445.4	2438.7	2426.5	2421.2	2413.1	2406.3	2398.2	2394.2
22.5°	2427.9	2425.2	2417.1	2407.7	2396.9	2391.5	2386.1	2371.3	2364.5	2356.4	2355.1
25°	2382.1	2378.0	2369.9	2359.1	2353.7	2338.9	2333.5	2322.7	2320.1	2311.9	2310.6
27.5°	2311.9	2306.6	2297.1	2283.6	2274.2	2264.8	2259.4	2251.3	2248.6	2240.5	2239.2
30°	2206.8	2200.1	2181.2	2175.8	2159.6	2150.2	2150.2	2139.4	2140.7	2135.4	2135.4
32.5°	2041.0	2030.2	2015.4	2004.6	1993.8	1988.4	1988.4	1984.4	1987.1	1987.1	1989.8
35°	1821.3	1806.4	1798.3	1791.6	1791.6	1797.0	1813.2	1817.2	1825.3	1832.0	1837.4
37.5°	1539.5	1538.2	1547.6	1555.7	1575.9	1598.8	1627.1	1651.4	1674.3	1690.5	1706.7
40°	1234.8	1268.5	1295.5	1333.3	1364.2	1408.7	1460.0	1501.8	1540.8	1569.2	1598.8
42.5°	963.9	1007.0	1063.6	1118.9	1174.2	1234.8	1302.3	1360.2	1411.4	1450.5	1481.5
45°	750.9	810.2	879.0	949.1	1020.5	1096.0	1166.1	1225.4	1279.3	1319.8	1350.8
47.5°	605.3	670.0	748.2	825.0	905.9	985.4	1063.6	1114.9	1159.3	1191.7	1220.0
50°	500.1	568.9	651.1	738.7	819.6	899.2	966.6	1016.4	1052.9	1081.2	1098.7
52.5°	417.9	490.7	578.3	665.9	746.8	819.6	880.3	918.0	947.7	967.9	984.1
55°	345.1	415.2	497.5	579.7	659.2	728.0	777.8	806.2	829.1	841.2	850.6
57.5°	281.8	346.4	421.9	497.5	566.2	622.8	661.9	690.2	701.0	710.4	709.1
60°	221.1	281.8	350.5	415.2	474.5	520.3	548.7	564.8	572.9	577.0	574.3
62.5°	173.9	229.2	281.8	338.4	381.5	420.6	447.6	447.6	451.6	453.0	457.0
65°	129.4	171.2	217.0	258.8	293.9	319.5	334.3	338.4	343.8	342.4	339.7
67.5°	95.7	126.7	160.4	191.4	215.7	231.9	242.6	252.1	250.8	248.0	246.7
70°	66.1	86.3	115.9	134.8	152.3	168.5	171.2	172.5	173.9	175.3	172.5
72.5°	45.8	60.7	76.9	93.0	103.8	110.5	117.3	118.6	118.6	118.6	117.3
75°	22.9	31.0	45.8	52.6	62.0	64.7	70.1	70.1	74.2	68.7	67.4
77.5°	20.2	24.3	32.4	37.7	41.8	45.8	47.2	51.2	49.9	47.2	48.5
80°	12.1	14.8	20.2	22.9	28.3	29.7	31.0	32.4	31.0	32.4	32.4
82.5°	9.4	10.8	13.5	13.5	17.5	17.5	18.9	18.9	20.2	20.2	20.2
85°	5.4	9.4	8.1	16.2	10.8	10.8	13.5	16.2	13.5	13.5	16.2
87.5°	5.4	5.4	4.1	5.4	5.4	5.4	6.7	8.1	8.1	9.4	8.1
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: P244637

CATALOG NUMBER: LSR8B50D010 EC8B50935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2511.5	2511.5	2511.5	2511.5
2.5°	2515.5	2518.2	2514.2	2512.8
5°	2519.6	2519.6	2516.9	2516.9
7.5°	2519.6	2519.6	2515.5	2512.8
10°	2508.8	2508.8	2504.7	2502.0
12.5°	2488.5	2488.5	2487.2	2483.2
15°	2462.9	2462.9	2457.5	2453.5
17.5°	2427.9	2430.6	2423.9	2423.9
20°	2390.1	2388.8	2383.4	2380.7
22.5°	2351.1	2348.4	2347.0	2338.9
25°	2309.3	2306.6	2302.5	2298.5
27.5°	2237.8	2236.5	2232.4	2227.0
30°	2128.6	2127.3	2121.9	2121.9
32.5°	1987.1	1985.7	1980.3	1981.7
35°	1840.1	1845.5	1842.8	1837.4
37.5°	1717.4	1721.5	1724.2	1721.5
40°	1615.0	1627.1	1628.5	1631.2
42.5°	1505.8	1522.0	1527.4	1530.1
45°	1375.0	1389.9	1402.0	1399.3
47.5°	1241.6	1252.4	1263.1	1255.1
50°	1113.5	1120.2	1124.3	1124.3
52.5°	992.2	992.2	990.8	992.2
55°	853.3	853.3	848.0	850.6
57.5°	707.7	710.4	706.4	699.7
60°	572.9	566.2	563.5	559.5
62.5°	446.2	446.2	436.8	448.9
65°	334.3	330.3	326.2	324.9
67.5°	242.6	241.3	237.3	235.9
70°	171.2	165.8	164.5	161.8
72.5°	114.6	114.6	111.9	111.9
75°	70.1	63.4	62.0	63.4
77.5°	48.5	47.2	47.2	45.8
80°	32.4	31.0	33.7	29.7
82.5°	20.2	21.6	20.2	21.6
85°	13.5	16.2	14.8	14.8
87.5°	8.1	8.1	8.1	8.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)