

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: P249506

Luminaire Tested: **LSR8B70D010 EC8B709730 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249506
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: LSR8B70D010 EC8B709730 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4976.0 lumens
Efficiency: N/A
Efficacy: 65.6 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

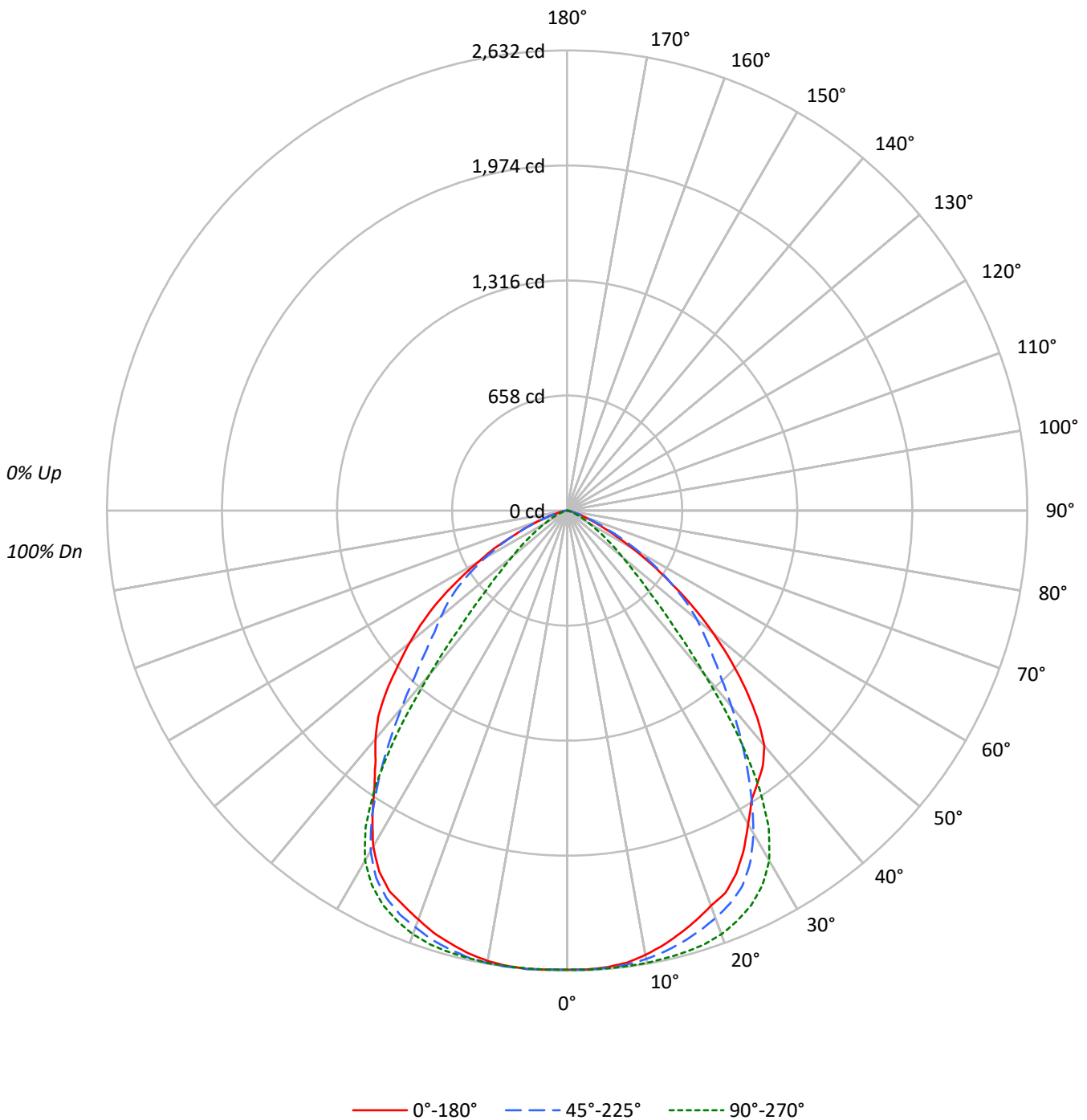
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	250.6	5.0
10°-20°	727.7	14.6
20°-30°	1104.5	22.2
30°-40°	1160.0	23.3
40°-50°	869.7	17.5
50°-60°	558.0	11.2
60°-70°	238.7	4.8
70°-80°	56.4	1.1
80°-90°	10.5	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°	2082.7	41.9
0°-40°	3242.7	65.2
0°-60°	4670.4	93.9
0°-90°	4976.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4976.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2625	2625	2625	2625	2625	
5°	2621	2625	2628	2632	2631	249
15°	2503	2555	2614	2597	2565	706
25°	2290	2370	2490	2445	2403	1046
35°	1900	1794	1901	1878	1921	1192
45°	1443	1180	678	1146	1463	1105
55°	730	730	252	761	889	662
65°	220	259	80	334	340	235
75°	34	39	11	68	66	49
85°	11	7	6	11	16	12
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°	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4
2.5°	2626.8	2629.7	2628.3	2628.3	2626.8	2628.3	2628.3	2631.1	2631.1	2628.3	2626.8
5°	2621.2	2624.0	2624.0	2621.2	2621.2	2628.3	2624.0	2626.8	2626.8	2625.4	2625.4
7.5°	2608.5	2608.5	2614.2	2610.0	2610.0	2614.2	2612.7	2615.6	2618.4	2619.8	2619.8
10°	2580.3	2583.2	2584.6	2584.6	2586.0	2590.2	2593.0	2598.7	2601.5	2604.3	2605.7
12.5°	2545.1	2549.3	2550.7	2549.3	2553.6	2559.2	2566.3	2573.3	2577.5	2583.2	2587.4
15°	2502.8	2502.8	2505.6	2509.9	2512.7	2521.2	2528.2	2536.6	2547.9	2555.0	2562.0
17.5°	2456.3	2459.2	2463.4	2463.4	2469.0	2483.1	2487.3	2500.0	2512.7	2519.7	2533.9
20°	2405.6	2408.4	2412.6	2415.5	2422.5	2433.8	2442.2	2453.5	2467.6	2480.3	2494.4
22.5°	2366.1	2360.5	2363.3	2366.1	2373.2	2383.1	2392.9	2407.0	2421.1	2433.8	2447.9
25°	2290.0	2291.4	2295.7	2298.5	2307.0	2315.4	2326.7	2343.6	2356.3	2370.4	2385.9
27.5°	2187.2	2188.6	2195.6	2195.6	2202.7	2216.8	2223.8	2237.9	2254.8	2268.9	2287.2
30°	2070.2	2073.0	2073.0	2078.7	2082.9	2089.9	2097.0	2111.1	2119.5	2132.2	2157.6
32.5°	1963.1	1965.9	1964.5	1963.1	1958.9	1957.4	1956.0	1958.9	1961.7	1965.9	1975.8
35°	1899.7	1892.6	1887.0	1877.1	1865.9	1851.8	1839.1	1822.2	1806.7	1794.0	1779.9
37.5°	1839.1	1837.7	1829.2	1815.1	1792.6	1767.2	1737.6	1701.0	1664.3	1624.9	1586.8
40°	1754.5	1750.3	1743.2	1723.5	1698.1	1667.1	1627.7	1582.6	1523.4	1462.8	1400.8
42.5°	1610.8	1612.2	1603.7	1588.2	1564.3	1534.7	1493.8	1444.5	1381.1	1309.2	1228.9
45°	1443.1	1443.1	1440.3	1427.6	1410.7	1386.7	1355.7	1314.8	1252.8	1179.5	1093.6
47.5°	1268.3	1269.7	1265.5	1262.7	1255.6	1240.1	1217.6	1186.6	1142.9	1072.4	986.5
50°	1090.8	1090.8	1097.8	1096.4	1096.4	1090.8	1080.9	1062.6	1024.5	968.2	887.8
52.5°	913.2	916.0	920.3	925.9	932.9	944.2	932.9	924.5	900.5	856.8	787.8
55°	730.0	732.8	739.8	749.7	758.2	769.5	772.3	772.3	759.6	730.0	677.8
57.5°	573.6	569.3	575.0	583.4	594.7	606.0	614.4	624.3	622.9	603.2	560.9
60°	431.2	432.6	436.9	445.3	453.8	463.6	474.9	483.4	487.6	477.7	451.0
62.5°	314.3	314.3	319.9	328.3	332.6	346.7	353.7	358.0	362.2	360.8	343.9
65°	219.9	222.7	225.5	229.7	233.9	242.4	246.6	255.1	257.9	259.3	246.6
67.5°	155.0	150.8	153.6	156.4	160.7	166.3	174.8	174.8	179.0	179.0	170.5
70°	98.7	98.7	100.1	104.3	107.1	108.5	111.3	114.1	118.4	117.0	117.0
72.5°	66.2	64.8	66.2	67.7	69.1	73.3	73.3	74.7	77.5	78.9	73.3
75°	33.8	35.2	38.0	36.7	40.9	38.0	39.4	43.7	42.3	39.4	39.4
77.5°	28.2	28.2	28.2	26.8	29.6	29.6	28.2	31.0	29.6	29.6	28.2
80°	19.7	21.1	19.7	18.3	19.7	18.3	18.3	18.3	18.3	18.3	16.9
82.5°	15.5	12.7	14.1	12.7	14.1	14.1	12.7	11.3	11.3	12.7	11.3
85°	11.3	8.4	9.9	9.9	8.4	8.4	8.4	8.4	8.4	7.0	7.0
87.5°	7.0	4.2	4.2	4.2	5.6	5.6	5.6	4.2	5.6	5.6	2.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4
2.5°	2629.7	2628.3	2631.1	2629.7	2629.7	2628.3	2629.7	2628.3	2631.1	2625.4	2626.8
5°	2629.7	2626.8	2628.3	2629.7	2631.1	2628.3	2628.3	2628.3	2631.1	2628.3	2629.7
7.5°	2624.0	2622.6	2626.8	2629.7	2628.3	2626.8	2629.7	2628.3	2631.1	2629.7	2632.5
10°	2612.7	2614.2	2617.0	2621.2	2622.6	2624.0	2626.8	2626.8	2631.1	2625.4	2628.3
12.5°	2595.8	2601.5	2608.5	2611.3	2617.0	2617.0	2619.8	2621.2	2624.0	2622.6	2626.8
15°	2574.7	2581.7	2590.2	2597.3	2604.3	2608.5	2612.7	2614.2	2618.4	2614.2	2615.6
17.5°	2549.3	2557.8	2570.5	2578.9	2590.2	2594.4	2600.1	2602.9	2607.1	2604.3	2605.7
20°	2514.1	2524.0	2538.1	2550.7	2557.8	2567.6	2574.7	2578.9	2581.7	2578.9	2580.3
22.5°	2464.8	2478.9	2497.2	2507.1	2521.2	2529.6	2531.0	2540.9	2547.9	2540.9	2543.7
25°	2407.0	2421.1	2435.2	2456.3	2469.0	2478.9	2488.7	2490.2	2497.2	2495.8	2494.4
27.5°	2311.2	2329.5	2353.4	2370.4	2387.3	2402.8	2414.1	2416.9	2423.9	2421.1	2422.5
30°	2180.1	2199.9	2222.4	2249.2	2273.1	2288.6	2302.7	2312.6	2319.6	2315.4	2314.0
32.5°	1994.1	2013.8	2037.8	2064.5	2092.8	2115.3	2132.2	2144.9	2153.3	2150.5	2143.5
35°	1781.3	1786.9	1802.4	1823.6	1847.5	1871.5	1887.0	1901.1	1910.9	1913.8	1913.8
37.5°	1562.9	1544.6	1533.3	1533.3	1547.4	1557.2	1571.3	1579.8	1595.3	1600.9	1605.1
40°	1351.5	1309.2	1269.7	1240.1	1220.4	1219.0	1219.0	1223.2	1237.3	1255.6	1272.6
42.5°	1162.6	1095.0	1034.4	979.4	940.0	917.4	907.6	909.0	920.3	937.2	965.3
45°	1011.8	927.3	851.2	785.0	731.4	696.2	679.3	677.8	686.3	706.0	737.1
47.5°	894.9	804.7	718.7	642.6	584.9	546.8	527.1	521.4	527.1	545.4	582.0
50°	797.6	704.6	615.9	536.9	474.9	435.5	417.1	410.1	417.1	432.6	469.3
52.5°	707.4	611.6	528.5	452.4	386.1	352.3	332.6	328.3	332.6	350.9	380.5
55°	603.2	521.4	439.7	363.6	305.8	272.0	256.5	252.3	256.5	273.4	304.4
57.5°	500.3	429.8	358.0	288.9	239.6	210.0	195.9	190.2	200.1	211.4	248.0
60°	404.4	348.1	287.5	226.9	186.0	159.2	148.0	146.5	149.4	163.5	188.8
62.5°	317.1	270.6	222.7	173.3	139.5	128.2	114.1	112.8	115.6	124.0	143.8
65°	228.3	198.7	162.1	126.8	100.1	84.6	78.9	80.3	83.1	88.8	107.1
67.5°	159.2	138.1	112.8	88.8	69.1	62.0	56.4	55.0	56.4	66.2	76.1
70°	107.1	94.4	76.1	67.7	47.9	38.0	39.4	35.2	40.9	40.9	49.3
72.5°	70.4	62.0	50.7	39.4	33.8	26.8	26.8	25.4	28.2	29.6	36.7
75°	36.7	28.2	28.2	19.7	14.1	7.0	12.7	11.3	9.9	11.3	14.1
77.5°	25.4	21.1	19.7	15.5	14.1	11.3	11.3	11.3	11.3	12.7	14.1
80°	15.5	15.5	11.3	9.9	8.4	7.0	8.4	8.4	8.4	8.4	9.9
82.5°	9.9	8.4	8.4	7.0	7.0	5.6	5.6	5.6	5.6	5.6	8.4
85°	8.4	5.6	5.6	4.2	5.6	9.9	4.2	5.6	5.6	5.6	4.2
87.5°	2.8	4.2	4.2	4.2	2.8	1.4	2.8	4.2	4.2	7.0	5.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4	2625.4
2.5°	2629.7	2631.1	2631.1	2629.7	2629.7	2626.8	2632.5	2628.3	2629.7	2635.3	2631.1
5°	2632.5	2633.9	2633.9	2632.5	2632.5	2632.5	2633.9	2633.9	2632.5	2631.1	2633.9
7.5°	2638.1	2636.7	2636.7	2633.9	2633.9	2631.1	2633.9	2629.7	2632.5	2629.7	2633.9
10°	2631.1	2632.5	2631.1	2629.7	2629.7	2628.3	2628.3	2624.0	2625.4	2621.2	2624.0
12.5°	2626.8	2625.4	2625.4	2622.6	2619.8	2617.0	2615.6	2611.3	2611.3	2601.5	2605.7
15°	2615.6	2617.0	2612.7	2607.1	2604.3	2597.3	2594.4	2588.8	2583.2	2576.1	2577.5
17.5°	2605.7	2601.5	2595.8	2590.2	2578.9	2573.3	2567.6	2559.2	2556.4	2547.9	2545.1
20°	2576.1	2573.3	2566.3	2556.4	2549.3	2536.6	2531.0	2522.6	2515.5	2507.1	2502.8
22.5°	2538.1	2535.2	2526.8	2516.9	2505.6	2500.0	2494.4	2478.9	2471.8	2463.4	2462.0
25°	2490.2	2485.9	2477.5	2466.2	2460.5	2445.1	2439.4	2428.1	2425.3	2416.9	2415.5
27.5°	2416.9	2411.2	2401.4	2387.3	2377.4	2367.5	2361.9	2353.4	2350.6	2342.2	2340.8
30°	2307.0	2299.9	2280.2	2274.5	2257.6	2247.8	2247.8	2236.5	2237.9	2232.3	2232.3
32.5°	2133.6	2122.3	2106.8	2095.5	2084.3	2078.7	2078.7	2074.4	2077.2	2077.2	2080.1
35°	1903.9	1888.4	1879.9	1872.9	1872.9	1878.5	1895.4	1899.7	1908.1	1915.2	1920.8
37.5°	1609.4	1608.0	1617.8	1626.3	1647.4	1671.4	1701.0	1726.3	1750.3	1767.2	1784.1
40°	1290.9	1326.1	1354.3	1393.8	1426.1	1472.7	1526.2	1569.9	1610.8	1640.4	1671.4
42.5°	1007.6	1052.7	1111.9	1169.7	1227.5	1290.9	1361.4	1421.9	1475.5	1516.4	1548.8
45°	785.0	847.0	918.8	992.1	1066.8	1145.7	1219.0	1281.0	1337.4	1379.7	1412.1
47.5°	632.7	700.4	782.1	862.5	947.0	1030.2	1111.9	1165.5	1211.9	1245.8	1275.4
50°	522.8	594.7	680.7	772.3	856.8	940.0	1010.4	1062.6	1100.6	1130.2	1148.5
52.5°	436.9	513.0	604.6	696.2	780.7	856.8	920.3	959.7	990.7	1011.8	1028.7
55°	360.8	434.1	520.0	606.0	689.1	761.0	813.1	842.7	866.7	879.4	889.2
57.5°	294.5	362.2	441.1	520.0	591.9	651.1	692.0	721.5	732.8	742.7	741.3
60°	231.1	294.5	366.4	434.1	496.1	544.0	573.6	590.5	598.9	603.2	600.3
62.5°	181.8	239.6	294.5	353.7	398.8	439.7	467.9	467.9	472.1	473.5	477.7
65°	135.3	179.0	226.9	270.6	307.2	334.0	349.5	353.7	359.4	358.0	355.1
67.5°	100.1	132.5	167.7	200.1	225.5	242.4	253.7	263.5	262.1	259.3	257.9
70°	69.1	90.2	121.2	140.9	159.2	176.2	179.0	180.4	181.8	183.2	180.4
72.5°	47.9	63.4	80.3	97.2	108.5	115.6	122.6	124.0	124.0	124.0	122.6
75°	24.0	32.4	47.9	55.0	64.8	67.7	73.3	73.3	77.5	71.9	70.4
77.5°	21.1	25.4	33.8	39.4	43.7	47.9	49.3	53.6	52.1	49.3	50.7
80°	12.7	15.5	21.1	24.0	29.6	31.0	32.4	33.8	32.4	33.8	33.8
82.5°	9.9	11.3	14.1	14.1	18.3	18.3	19.7	19.7	21.1	21.1	21.1
85°	5.6	9.9	8.4	16.9	11.3	11.3	14.1	16.9	14.1	14.1	16.9
87.5°	5.6	5.6	4.2	5.6	5.6	5.6	7.0	8.4	8.4	9.9	8.4
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: P249506

CATALOG NUMBER: LSR8B70D010 EC8B709730 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2625.4	2625.4	2625.4	2625.4
2.5°	2629.7	2632.5	2628.3	2626.8
5°	2633.9	2633.9	2631.1	2631.1
7.5°	2633.9	2633.9	2629.7	2626.8
10°	2622.6	2622.6	2618.4	2615.6
12.5°	2601.5	2601.5	2600.1	2595.8
15°	2574.7	2574.7	2569.1	2564.8
17.5°	2538.1	2540.9	2533.9	2533.9
20°	2498.6	2497.2	2491.6	2488.7
22.5°	2457.7	2454.9	2453.5	2445.1
25°	2414.1	2411.2	2407.0	2402.8
27.5°	2339.4	2338.0	2333.7	2328.1
30°	2225.2	2223.8	2218.2	2218.2
32.5°	2077.2	2075.8	2070.2	2071.6
35°	1923.6	1929.3	1926.4	1920.8
37.5°	1795.4	1799.6	1802.4	1799.6
40°	1688.3	1701.0	1702.4	1705.2
42.5°	1574.1	1591.0	1596.7	1599.5
45°	1437.4	1452.9	1465.6	1462.8
47.5°	1297.9	1309.2	1320.5	1312.0
50°	1164.0	1171.1	1175.3	1175.3
52.5°	1037.2	1037.2	1035.8	1037.2
55°	892.1	892.1	886.4	889.2
57.5°	739.8	742.7	738.4	731.4
60°	598.9	591.9	589.1	584.9
62.5°	466.5	466.5	456.6	469.3
65°	349.5	345.3	341.0	339.6
67.5°	253.7	252.3	248.0	246.6
70°	179.0	173.3	171.9	169.1
72.5°	119.8	119.8	117.0	117.0
75°	73.3	66.2	64.8	66.2
77.5°	50.7	49.3	49.3	47.9
80°	33.8	32.4	35.2	31.0
82.5°	21.1	22.6	21.1	22.6
85°	14.1	16.9	15.5	15.5
87.5°	8.4	8.4	8.4	8.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)