

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: P246233

Luminaire Tested: **LSR8B50D010 EC8B50950 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246233
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 EC8B50950 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5089.0 lumens
Efficiency: N/A
Efficacy: 96.0 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

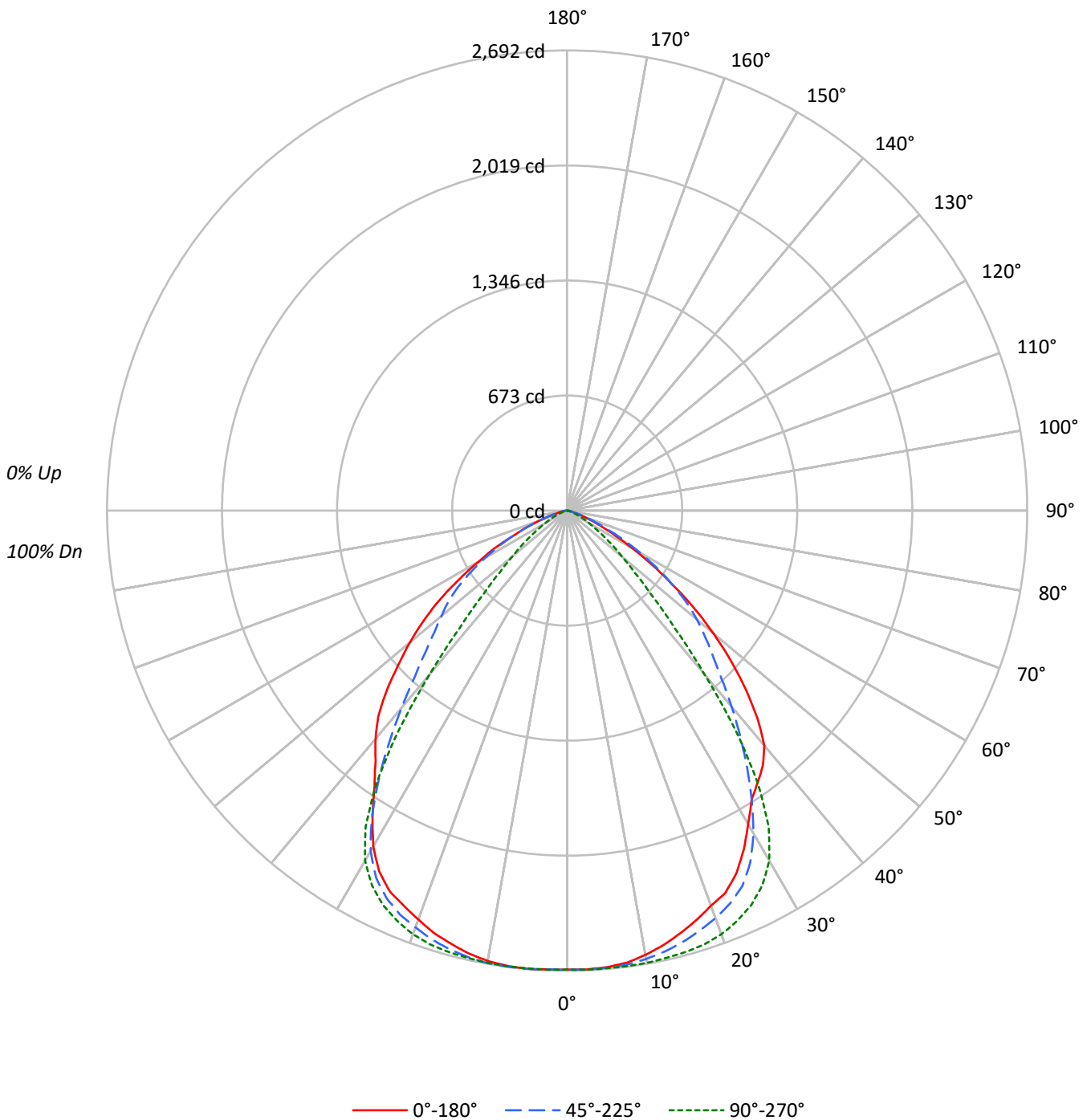
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	52	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°	82799	82799	82799
5°	82979	83202	83291
10°	82629	84120	83760
15°	81716	85349	83740
20°	80732	86550	83525
25°	79684	86649	83607
30°	75387	84213	80774
35°	73135	73188	73948
40°	72232	50358	70199
45°	64358	30230	65239
50°	53514	20120	57663
55°	40138	13870	48891
60°	27198	9245	36886
65°	16410	5998	25341
70°	9097	3246	15589
75°	4122	1370	8066
80°	3587	1527	5629
85°	4069	2017	5626



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.3	5.0
10°-20°	744.2	14.6
20°-30°	1129.5	22.2
30°-40°	1186.3	23.3
40°-50°	889.4	17.5
50°-60°	570.7	11.2
60°-70°	244.1	4.8
70°-80°	57.7	1.1
80°-90°	10.7	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°	2130.0	41.9
0°-40°	3316.3	65.2
0°-60°	4776.5	93.9
0°-90°	5089.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5089.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2685	2685	2685	2685	2685	
5°	2681	2685	2688	2692	2691	255
15°	2560	2613	2674	2656	2623	722
25°	2342	2424	2547	2501	2457	1070
35°	1943	1835	1944	1921	1964	1219
45°	1476	1206	693	1172	1496	1130
55°	747	747	258	778	909	677
65°	225	265	82	342	347	240
75°	35	40	12	69	68	50
85°	12	7	6	12	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°	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1
2.5°	2686.5	2689.4	2687.9	2687.9	2686.5	2687.9	2687.9	2690.8	2690.8	2687.9	2686.5
5°	2680.7	2683.6	2683.6	2680.7	2680.7	2687.9	2683.6	2686.5	2686.5	2685.1	2685.1
7.5°	2667.8	2667.8	2673.5	2669.2	2669.2	2673.5	2672.1	2675.0	2677.9	2679.3	2679.3
10°	2638.9	2641.8	2643.3	2643.3	2644.7	2649.0	2651.9	2657.7	2660.5	2663.4	2664.9
12.5°	2602.9	2607.2	2608.7	2607.2	2611.6	2617.3	2624.5	2631.7	2636.1	2641.8	2646.2
15°	2559.7	2559.7	2562.5	2566.9	2569.8	2578.4	2585.6	2594.2	2605.8	2613.0	2620.2
17.5°	2512.1	2515.0	2519.3	2519.3	2525.1	2539.5	2543.8	2556.8	2569.8	2577.0	2591.4
20°	2460.2	2463.1	2467.4	2470.3	2477.5	2489.1	2497.7	2509.2	2523.6	2536.6	2551.0
22.5°	2419.9	2414.1	2417.0	2419.9	2427.1	2437.2	2447.3	2461.7	2476.1	2489.1	2503.5
25°	2342.0	2343.5	2347.8	2350.7	2359.3	2368.0	2379.5	2396.8	2409.8	2424.2	2440.0
27.5°	2236.8	2238.3	2245.5	2245.5	2252.7	2267.1	2274.3	2288.7	2306.0	2320.4	2339.2
30°	2117.2	2120.1	2120.1	2125.9	2130.2	2137.4	2144.6	2159.0	2167.6	2180.6	2206.6
32.5°	2007.7	2010.5	2009.1	2007.7	2003.3	2001.9	2000.5	2003.3	2006.2	2010.5	2020.6
35°	1942.8	1935.6	1929.9	1919.8	1908.2	1893.8	1880.8	1863.6	1847.7	1834.7	1820.3
37.5°	1880.8	1879.4	1870.7	1856.3	1833.3	1807.3	1777.1	1739.6	1702.1	1661.8	1622.9
40°	1794.4	1790.0	1782.8	1762.7	1736.7	1705.0	1664.7	1618.5	1558.0	1496.0	1432.6
42.5°	1647.3	1648.8	1640.1	1624.3	1599.8	1569.5	1527.7	1477.3	1412.4	1338.9	1256.8
45°	1475.8	1475.8	1473.0	1460.0	1442.7	1418.2	1386.5	1344.7	1281.3	1206.3	1118.4
47.5°	1297.1	1298.6	1294.2	1291.4	1284.1	1268.3	1245.2	1213.5	1168.9	1096.8	1008.9
50°	1115.5	1115.5	1122.7	1121.3	1121.3	1115.5	1105.5	1086.7	1047.8	990.1	908.0
52.5°	933.9	936.8	941.2	946.9	954.1	965.6	954.1	945.5	921.0	876.3	805.7
55°	746.6	749.5	756.7	766.7	775.4	786.9	789.8	789.8	776.8	746.6	693.2
57.5°	586.6	582.3	588.0	596.7	608.2	619.7	628.4	638.5	637.0	616.9	573.6
60°	441.0	442.5	446.8	455.4	464.1	474.2	485.7	494.3	498.7	488.6	461.2
62.5°	321.4	321.4	327.2	335.8	340.1	354.6	361.8	366.1	370.4	368.9	351.7
65°	224.9	227.7	230.6	234.9	239.2	247.9	252.2	260.9	263.7	265.2	252.2
67.5°	158.6	154.2	157.1	160.0	164.3	170.1	178.7	178.7	183.0	183.0	174.4
70°	100.9	100.9	102.3	106.6	109.5	111.0	113.9	116.7	121.1	119.6	119.6
72.5°	67.7	66.3	67.7	69.2	70.6	74.9	74.9	76.4	79.3	80.7	74.9
75°	34.6	36.0	38.9	37.5	41.8	38.9	40.3	44.7	43.2	40.3	40.3
77.5°	28.8	28.8	28.8	27.4	30.3	30.3	28.8	31.7	30.3	30.3	28.8
80°	20.2	21.6	20.2	18.7	20.2	18.7	18.7	18.7	18.7	18.7	17.3
82.5°	15.9	13.0	14.4	13.0	14.4	14.4	13.0	11.5	11.5	13.0	11.5
85°	11.5	8.6	10.1	10.1	8.6	8.6	8.6	8.6	8.6	7.2	7.2
87.5°	7.2	4.3	4.3	4.3	5.7	5.7	5.7	4.3	5.7	5.7	2.9
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°	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1
2.5°	2689.4	2687.9	2690.8	2689.4	2689.4	2687.9	2689.4	2687.9	2690.8	2685.1	2686.5
5°	2689.4	2686.5	2687.9	2689.4	2690.8	2687.9	2687.9	2687.9	2690.8	2687.9	2689.4
7.5°	2683.6	2682.2	2686.5	2689.4	2687.9	2686.5	2689.4	2687.9	2690.8	2689.4	2692.3
10°	2672.1	2673.5	2676.4	2680.7	2682.2	2683.6	2686.5	2686.5	2690.8	2685.1	2687.9
12.5°	2654.8	2660.5	2667.8	2670.6	2676.4	2676.4	2679.3	2680.7	2683.6	2682.2	2686.5
15°	2633.2	2640.4	2649.0	2656.2	2663.4	2667.8	2672.1	2673.5	2677.9	2673.5	2675.0
17.5°	2607.2	2615.9	2628.8	2637.5	2649.0	2653.4	2659.1	2662.0	2666.3	2663.4	2664.9
20°	2571.2	2581.3	2595.7	2608.7	2615.9	2626.0	2633.2	2637.5	2640.4	2637.5	2638.9
22.5°	2520.8	2535.2	2553.9	2564.0	2578.4	2587.1	2588.5	2598.6	2605.8	2598.6	2601.5
25°	2461.7	2476.1	2490.5	2512.1	2525.1	2535.2	2545.3	2546.7	2553.9	2552.5	2551.0
27.5°	2363.6	2382.4	2406.9	2424.2	2441.5	2457.3	2468.9	2471.7	2479.0	2476.1	2477.5
30°	2229.6	2249.8	2272.9	2300.2	2324.8	2340.6	2355.0	2365.1	2372.3	2368.0	2366.5
32.5°	2039.4	2059.6	2084.1	2111.4	2140.3	2163.3	2180.6	2193.6	2202.2	2199.3	2192.2
35°	1821.8	1827.5	1843.4	1865.0	1889.5	1914.0	1929.9	1944.2	1954.3	1957.2	1957.2
37.5°	1598.4	1579.6	1568.1	1568.1	1582.5	1592.6	1607.0	1615.6	1631.5	1637.3	1641.6
40°	1382.1	1338.9	1298.6	1268.3	1248.1	1246.7	1246.7	1251.0	1265.4	1284.1	1301.5
42.5°	1189.0	1119.8	1057.9	1001.7	961.3	938.3	928.2	929.6	941.2	958.4	987.2
45°	1034.8	948.4	870.5	802.8	748.0	712.0	694.7	693.2	701.9	722.1	753.8
47.5°	915.2	822.9	735.0	657.2	598.1	559.2	539.0	533.3	539.0	557.8	595.2
50°	815.8	720.6	629.8	549.1	485.7	445.4	426.6	419.4	426.6	442.5	479.9
52.5°	723.5	625.5	540.5	462.6	394.9	360.3	340.1	335.8	340.1	358.9	389.2
55°	616.9	533.3	449.7	371.8	312.8	278.2	262.3	258.0	262.3	279.6	311.3
57.5°	511.7	439.6	366.1	295.5	245.0	214.7	200.3	194.6	204.6	216.2	253.7
60°	413.6	356.0	294.0	232.0	190.3	162.9	151.3	149.9	152.8	167.2	193.1
62.5°	324.3	276.7	227.7	177.3	142.7	131.2	116.7	115.3	118.2	126.8	147.0
65°	233.5	203.2	165.7	129.7	102.3	86.5	80.7	82.2	85.0	90.8	109.5
67.5°	162.9	141.2	115.3	90.8	70.6	63.4	57.7	56.2	57.7	67.7	77.8
70°	109.5	96.6	77.8	69.2	49.0	38.9	40.3	36.0	41.8	41.8	50.4
72.5°	72.0	63.4	51.9	40.3	34.6	27.4	27.4	26.0	28.8	30.3	37.5
75°	37.5	28.8	28.8	20.2	14.4	7.2	13.0	11.5	10.1	11.5	14.4
77.5°	26.0	21.6	20.2	15.9	14.4	11.5	11.5	11.5	11.5	13.0	14.4
80°	15.9	15.9	11.5	10.1	8.6	7.2	8.6	8.6	8.6	8.6	10.1
82.5°	10.1	8.6	8.6	7.2	7.2	5.7	5.7	5.7	5.7	5.7	8.6
85°	8.6	5.7	5.7	4.3	5.7	10.1	4.3	5.7	5.7	5.7	4.3
87.5°	2.9	4.3	4.3	4.3	2.9	1.4	2.9	4.3	4.3	7.2	5.7
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1
2.5°	2689.4	2690.8	2690.8	2689.4	2689.4	2686.5	2692.3	2687.9	2689.4	2695.1	2690.8
5°	2692.3	2693.7	2693.7	2692.3	2692.3	2692.3	2693.7	2693.7	2692.3	2690.8	2693.7
7.5°	2698.0	2696.6	2696.6	2693.7	2693.7	2690.8	2693.7	2689.4	2692.3	2689.4	2693.7
10°	2690.8	2692.3	2690.8	2689.4	2689.4	2687.9	2687.9	2683.6	2685.1	2680.7	2683.6
12.5°	2686.5	2685.1	2685.1	2682.2	2679.3	2676.4	2675.0	2670.6	2670.6	2660.5	2664.9
15°	2675.0	2676.4	2672.1	2666.3	2663.4	2656.2	2653.4	2647.6	2641.8	2634.6	2636.1
17.5°	2664.9	2660.5	2654.8	2649.0	2637.5	2631.7	2626.0	2617.3	2614.4	2605.8	2602.9
20°	2634.6	2631.7	2624.5	2614.4	2607.2	2594.2	2588.5	2579.9	2572.6	2564.0	2559.7
22.5°	2595.7	2592.8	2584.2	2574.1	2562.5	2556.8	2551.0	2535.2	2528.0	2519.3	2517.9
25°	2546.7	2542.4	2533.7	2522.2	2516.4	2500.6	2494.8	2483.3	2480.4	2471.7	2470.3
27.5°	2471.7	2466.0	2455.9	2441.5	2431.4	2421.3	2415.6	2406.9	2404.0	2395.4	2393.9
30°	2359.3	2352.1	2331.9	2326.2	2308.9	2298.8	2298.8	2287.3	2288.7	2283.0	2283.0
32.5°	2182.1	2170.5	2154.7	2143.1	2131.6	2125.9	2125.9	2121.5	2124.4	2124.4	2127.3
35°	1947.1	1931.3	1922.6	1915.4	1915.4	1921.2	1938.5	1942.8	1951.5	1958.7	1964.4
37.5°	1645.9	1644.5	1654.6	1663.2	1684.8	1709.3	1739.6	1765.6	1790.0	1807.3	1824.6
40°	1320.2	1356.2	1385.0	1425.4	1458.5	1506.1	1560.9	1605.6	1647.3	1677.6	1709.3
42.5°	1030.5	1076.6	1137.2	1196.2	1255.3	1320.2	1392.3	1454.2	1509.0	1550.8	1583.9
45°	802.8	866.2	939.7	1014.6	1091.0	1171.8	1246.7	1310.1	1367.8	1411.0	1444.1
47.5°	647.1	716.3	799.9	882.1	968.5	1053.5	1137.2	1191.9	1239.5	1274.1	1304.4
50°	534.7	608.2	696.1	789.8	876.3	961.3	1033.4	1086.7	1125.6	1155.9	1174.6
52.5°	446.8	524.6	618.3	712.0	798.4	876.3	941.2	981.5	1013.2	1034.8	1052.1
55°	368.9	443.9	531.8	619.7	704.8	778.3	831.6	861.9	886.4	899.3	909.4
57.5°	301.2	370.4	451.1	531.8	605.3	665.9	707.7	737.9	749.5	759.5	758.1
60°	236.4	301.2	374.7	443.9	507.3	556.3	586.6	603.9	612.5	616.9	614.0
62.5°	185.9	245.0	301.2	361.8	407.9	449.7	478.5	478.5	482.8	484.3	488.6
65°	138.3	183.0	232.0	276.7	314.2	341.6	357.4	361.8	367.5	366.1	363.2
67.5°	102.3	135.5	171.5	204.6	230.6	247.9	259.4	269.5	268.1	265.2	263.7
70°	70.6	92.3	124.0	144.1	162.9	180.2	183.0	184.5	185.9	187.4	184.5
72.5°	49.0	64.9	82.2	99.4	111.0	118.2	125.4	126.8	126.8	126.8	125.4
75°	24.5	33.1	49.0	56.2	66.3	69.2	74.9	74.9	79.3	73.5	72.0
77.5°	21.6	26.0	34.6	40.3	44.7	49.0	50.4	54.8	53.3	50.4	51.9
80°	13.0	15.9	21.6	24.5	30.3	31.7	33.1	34.6	33.1	34.6	34.6
82.5°	10.1	11.5	14.4	14.4	18.7	18.7	20.2	20.2	21.6	21.6	21.6
85°	5.7	10.1	8.6	17.3	11.5	11.5	14.4	17.3	14.4	14.4	17.3
87.5°	5.7	5.7	4.3	5.7	5.7	5.7	7.2	8.6	8.6	10.1	8.6
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: P246233

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2685.1	2685.1	2685.1	2685.1
2.5°	2689.4	2692.3	2687.9	2686.5
5°	2693.7	2693.7	2690.8	2690.8
7.5°	2693.7	2693.7	2689.4	2686.5
10°	2682.2	2682.2	2677.9	2675.0
12.5°	2660.5	2660.5	2659.1	2654.8
15°	2633.2	2633.2	2627.4	2623.1
17.5°	2595.7	2598.6	2591.4	2591.4
20°	2555.4	2553.9	2548.2	2545.3
22.5°	2513.6	2510.7	2509.2	2500.6
25°	2468.9	2466.0	2461.7	2457.3
27.5°	2392.5	2391.1	2386.7	2381.0
30°	2275.7	2274.3	2268.5	2268.5
32.5°	2124.4	2123.0	2117.2	2118.7
35°	1967.3	1973.1	1970.2	1964.4
37.5°	1836.2	1840.5	1843.4	1840.5
40°	1726.6	1739.6	1741.0	1743.9
42.5°	1609.9	1627.2	1633.0	1635.8
45°	1470.1	1485.9	1498.9	1496.0
47.5°	1327.4	1338.9	1350.4	1341.8
50°	1190.5	1197.7	1202.0	1202.0
52.5°	1060.8	1060.8	1059.3	1060.8
55°	912.3	912.3	906.6	909.4
57.5°	756.7	759.5	755.2	748.0
60°	612.5	605.3	602.4	598.1
62.5°	477.1	477.1	467.0	479.9
65°	357.4	353.1	348.8	347.3
67.5°	259.4	258.0	253.7	252.2
70°	183.0	177.3	175.8	172.9
72.5°	122.5	122.5	119.6	119.6
75°	74.9	67.7	66.3	67.7
77.5°	51.9	50.4	50.4	49.0
80°	34.6	33.1	36.0	31.7
82.5°	21.6	23.1	21.6	23.1
85°	14.4	17.3	15.9	15.9
87.5°	8.6	8.6	8.6	8.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)