

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: P249253

Luminaire Tested: **LSR8B60D010 EC8B60935 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249253
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: LSR8B60D010 EC8B60935 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5364.0 lumens
Efficiency: N/A
Efficacy: 90.2 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

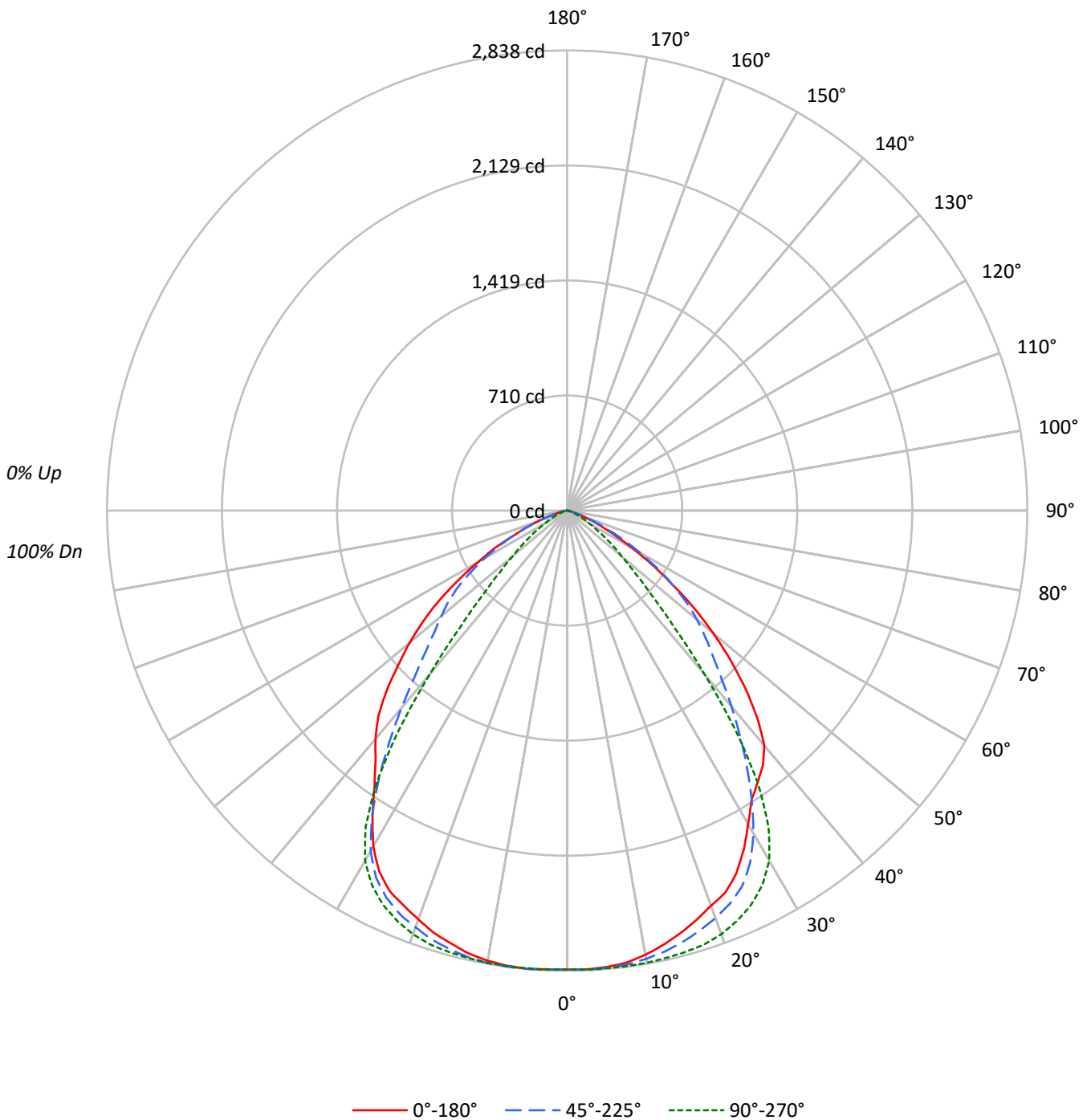
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249253

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0WMH

Luminous Intensity Polar Plot





TEST NUMBER: P249253

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0WMH

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°	87273	87273	87273
5°	87464	87699	87792
10°	87094	88666	88284
15°	86131	89962	88264
20°	85097	91227	88037
25°	83992	91331	88126
30°	79460	88764	85139
35°	77088	77144	77946
40°	76132	53079	73995
45°	67838	31865	68767
50°	56406	21209	60782
55°	42305	14618	51536
60°	28672	9744	38885
65°	17293	6319	26712
70°	9584	3426	16436
75°	4349	1454	8507
80°	3782	1616	5931
85°	4316	2158	5909



TEST NUMBER: P249253

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.1	5.0
10°-20°	784.4	14.6
20°-30°	1190.6	22.2
30°-40°	1250.5	23.3
40°-50°	937.5	17.5
50°-60°	601.5	11.2
60°-70°	257.3	4.8
70°-80°	60.8	1.1
80°-90°	11.3	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°	2245.1	41.9
0°-40°	3495.5	65.2
0°-60°	5034.6	93.9
0°-90°	5364.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5364.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2830	2830	2830	2830	2830	
5°	2826	2830	2833	2838	2836	268
15°	2698	2754	2818	2800	2765	761
25°	2469	2555	2684	2636	2590	1128
35°	2048	1934	2049	2025	2071	1285
45°	1556	1272	731	1235	1577	1191
55°	787	787	272	820	959	714
65°	237	280	87	360	366	253
75°	36	42	12	73	71	53
85°	12	8	6	12	17	13
90°	0	0	0	0	0	



TEST NUMBER: P249253

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2
2.5°	2831.7	2834.7	2833.2	2833.2	2831.7	2833.2	2833.2	2836.2	2836.2	2833.2	2831.7
5°	2825.6	2828.6	2828.6	2825.6	2825.6	2833.2	2828.6	2831.7	2831.7	2830.2	2830.2
7.5°	2811.9	2811.9	2818.0	2813.5	2813.5	2818.0	2816.5	2819.5	2822.6	2824.1	2824.1
10°	2781.5	2784.6	2786.1	2786.1	2787.6	2792.2	2795.2	2801.3	2804.3	2807.4	2808.9
12.5°	2743.6	2748.1	2749.6	2748.1	2752.7	2758.7	2766.4	2773.9	2778.5	2784.6	2789.2
15°	2698.0	2698.0	2701.0	2705.6	2708.6	2717.7	2725.3	2734.4	2746.6	2754.2	2761.8
17.5°	2647.9	2650.9	2655.4	2655.4	2661.5	2676.7	2681.3	2695.0	2708.6	2716.2	2731.4
20°	2593.2	2596.2	2600.8	2603.8	2611.4	2623.6	2632.7	2644.8	2660.0	2673.7	2688.9
22.5°	2550.6	2544.6	2547.6	2550.6	2558.2	2568.9	2579.5	2594.7	2609.9	2623.6	2638.8
25°	2468.6	2470.1	2474.7	2477.7	2486.8	2495.9	2508.1	2526.3	2540.0	2555.2	2571.9
27.5°	2357.7	2359.2	2366.8	2366.8	2374.4	2389.6	2397.2	2412.4	2430.6	2445.8	2465.6
30°	2231.6	2234.6	2234.6	2240.7	2245.3	2252.9	2260.5	2275.7	2284.8	2298.5	2325.8
32.5°	2116.2	2119.2	2117.7	2116.2	2111.6	2110.1	2108.6	2111.6	2114.6	2119.2	2129.8
35°	2047.8	2040.2	2034.1	2023.5	2011.4	1996.1	1982.5	1964.3	1947.5	1933.9	1918.7
37.5°	1982.5	1980.9	1971.8	1956.6	1932.3	1905.0	1873.1	1833.6	1794.1	1751.6	1710.6
40°	1891.3	1886.8	1879.2	1857.9	1830.6	1797.1	1754.6	1706.0	1642.2	1576.9	1510.0
42.5°	1736.4	1737.9	1728.8	1712.1	1686.3	1654.3	1610.3	1557.1	1488.8	1411.3	1324.7
45°	1555.6	1555.6	1552.6	1538.9	1520.7	1494.8	1461.4	1417.4	1350.5	1271.5	1178.8
47.5°	1367.2	1368.7	1364.2	1361.2	1353.5	1336.8	1312.5	1279.1	1232.0	1156.1	1063.4
50°	1175.8	1175.8	1183.4	1181.9	1181.9	1175.8	1165.2	1145.4	1104.4	1043.6	957.1
52.5°	984.4	987.4	992.0	998.1	1005.7	1017.8	1005.7	996.6	970.7	923.6	849.2
55°	786.9	790.0	797.5	808.2	817.3	829.5	832.5	832.5	818.8	786.9	730.7
57.5°	618.3	613.7	619.8	628.9	641.1	653.2	662.3	673.0	671.5	650.2	604.6
60°	464.9	466.4	470.9	480.1	489.2	499.8	512.0	521.1	525.6	515.0	486.1
62.5°	338.8	338.8	344.8	353.9	358.5	373.7	381.3	385.9	390.4	388.9	370.7
65°	237.0	240.0	243.1	247.6	252.2	261.3	265.8	275.0	278.0	279.5	265.8
67.5°	167.1	162.5	165.6	168.6	173.2	179.3	188.4	188.4	192.9	192.9	183.8
70°	106.3	106.3	107.9	112.4	115.5	117.0	120.0	123.0	127.6	126.1	126.1
72.5°	71.4	69.9	71.4	72.9	74.5	79.0	79.0	80.5	83.6	85.1	79.0
75°	36.5	38.0	41.0	39.5	44.0	41.0	42.5	47.1	45.6	42.5	42.5
77.5°	30.4	30.4	30.4	28.9	31.9	31.9	30.4	33.4	31.9	31.9	30.4
80°	21.3	22.8	21.3	19.7	21.3	19.7	19.7	19.7	19.7	19.7	18.2
82.5°	16.7	13.7	15.2	13.7	15.2	15.2	13.7	12.2	12.2	13.7	12.2
85°	12.2	9.1	10.6	10.6	9.1	9.1	9.1	9.1	9.1	7.6	7.6
87.5°	7.6	4.6	4.6	4.6	6.1	6.1	6.1	4.6	6.1	6.1	3.0
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: P249253

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2
2.5°	2834.7	2833.2	2836.2	2834.7	2834.7	2833.2	2834.7	2833.2	2836.2	2830.2	2831.7
5°	2834.7	2831.7	2833.2	2834.7	2836.2	2833.2	2833.2	2833.2	2836.2	2833.2	2834.7
7.5°	2828.6	2827.1	2831.7	2834.7	2833.2	2831.7	2834.7	2833.2	2836.2	2834.7	2837.7
10°	2816.5	2818.0	2821.0	2825.6	2827.1	2828.6	2831.7	2831.7	2836.2	2830.2	2833.2
12.5°	2798.3	2804.3	2811.9	2814.9	2821.0	2821.0	2824.1	2825.6	2828.6	2827.1	2831.7
15°	2775.5	2783.1	2792.2	2799.8	2807.4	2811.9	2816.5	2818.0	2822.6	2818.0	2819.5
17.5°	2748.1	2757.2	2770.9	2780.0	2792.2	2796.7	2802.8	2805.8	2810.4	2807.4	2808.9
20°	2710.1	2720.8	2736.0	2749.6	2757.2	2767.9	2775.5	2780.0	2783.1	2780.0	2781.5
22.5°	2657.0	2672.2	2691.9	2702.5	2717.7	2726.9	2728.4	2739.0	2746.6	2739.0	2742.1
25°	2594.7	2609.9	2625.1	2647.9	2661.5	2672.2	2682.8	2684.3	2691.9	2690.4	2688.9
27.5°	2491.4	2511.2	2536.9	2555.2	2573.4	2590.1	2602.3	2605.3	2612.9	2609.9	2611.4
30°	2350.1	2371.4	2395.7	2424.5	2450.4	2467.1	2482.3	2492.9	2500.5	2495.9	2494.4
32.5°	2149.6	2170.9	2196.7	2225.5	2255.9	2280.2	2298.5	2312.1	2321.2	2318.2	2310.6
35°	1920.2	1926.3	1943.0	1965.8	1991.6	2017.4	2034.1	2049.3	2059.9	2063.0	2063.0
37.5°	1684.7	1665.0	1652.8	1652.8	1668.0	1678.6	1693.8	1702.9	1719.7	1725.7	1730.3
40°	1456.8	1411.3	1368.7	1336.8	1315.6	1314.1	1314.1	1318.6	1333.8	1353.5	1371.8
42.5°	1253.3	1180.4	1115.1	1055.8	1013.3	989.0	978.3	979.9	992.0	1010.2	1040.6
45°	1090.7	999.6	917.6	846.2	788.4	750.4	732.2	730.7	739.8	761.1	794.5
47.5°	964.7	867.4	774.8	692.7	630.5	589.4	568.2	562.1	568.2	587.9	627.4
50°	859.8	759.6	663.9	578.8	512.0	469.4	449.7	442.1	449.7	466.4	505.9
52.5°	762.6	659.3	569.7	487.6	416.2	379.8	358.5	353.9	358.5	378.3	410.2
55°	650.2	562.1	474.0	391.9	329.7	293.2	276.5	271.9	276.5	294.7	328.1
57.5°	539.3	463.3	385.9	311.4	258.3	226.3	211.2	205.1	215.7	227.9	267.4
60°	436.0	375.2	309.9	244.6	200.5	171.7	159.5	158.0	161.0	176.2	203.5
62.5°	341.8	291.7	240.0	186.9	150.4	138.2	123.0	121.5	124.6	133.7	155.0
65°	246.1	214.2	174.7	136.7	107.9	91.1	85.1	86.6	89.6	95.7	115.5
67.5°	171.7	148.9	121.5	95.7	74.5	66.8	60.8	59.3	60.8	71.4	82.0
70°	115.5	101.8	82.0	72.9	51.7	41.0	42.5	38.0	44.0	44.0	53.2
72.5°	75.9	66.8	54.7	42.5	36.5	28.9	28.9	27.4	30.4	31.9	39.5
75°	39.5	30.4	30.4	21.3	15.2	7.6	13.7	12.2	10.6	12.2	15.2
77.5°	27.4	22.8	21.3	16.7	15.2	12.2	12.2	12.2	12.2	13.7	15.2
80°	16.7	16.7	12.2	10.6	9.1	7.6	9.1	9.1	9.1	9.1	10.6
82.5°	10.6	9.1	9.1	7.6	7.6	6.1	6.1	6.1	6.1	6.1	9.1
85°	9.1	6.1	6.1	4.6	6.1	10.6	4.6	6.1	6.1	6.1	4.6
87.5°	3.0	4.6	4.6	4.6	3.0	1.5	3.0	4.6	4.6	7.6	6.1
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: P249253

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2
2.5°	2834.7	2836.2	2836.2	2834.7	2834.7	2831.7	2837.7	2833.2	2834.7	2840.8	2836.2
5°	2837.7	2839.3	2839.3	2837.7	2837.7	2837.7	2839.3	2839.3	2837.7	2836.2	2839.3
7.5°	2843.8	2842.3	2842.3	2839.3	2839.3	2836.2	2839.3	2834.7	2837.7	2834.7	2839.3
10°	2836.2	2837.7	2836.2	2834.7	2834.7	2833.2	2833.2	2828.6	2830.2	2825.6	2828.6
12.5°	2831.7	2830.2	2830.2	2827.1	2824.1	2821.0	2819.5	2814.9	2814.9	2804.3	2808.9
15°	2819.5	2821.0	2816.5	2810.4	2807.4	2799.8	2796.7	2790.6	2784.6	2777.0	2778.5
17.5°	2808.9	2804.3	2798.3	2792.2	2780.0	2773.9	2767.9	2758.7	2755.7	2746.6	2743.6
20°	2777.0	2773.9	2766.4	2755.7	2748.1	2734.4	2728.4	2719.3	2711.7	2702.5	2698.0
22.5°	2736.0	2732.9	2723.8	2713.2	2701.0	2695.0	2688.9	2672.2	2664.6	2655.4	2653.9
25°	2684.3	2679.8	2670.7	2658.5	2652.4	2635.7	2629.6	2617.5	2614.4	2605.3	2603.8
27.5°	2605.3	2599.2	2588.6	2573.4	2562.8	2552.2	2546.1	2536.9	2533.9	2524.8	2523.3
30°	2486.8	2479.2	2458.0	2451.9	2433.7	2423.0	2423.0	2410.9	2412.4	2406.3	2406.3
32.5°	2300.0	2287.8	2271.1	2258.9	2246.8	2240.7	2240.7	2236.2	2239.2	2239.2	2242.3
35°	2052.4	2035.7	2026.5	2018.9	2018.9	2025.0	2043.2	2047.8	2056.9	2064.5	2070.6
37.5°	1734.8	1733.4	1744.0	1753.1	1775.9	1801.7	1833.6	1861.0	1886.8	1905.0	1923.2
40°	1391.5	1429.5	1459.9	1502.4	1537.4	1587.5	1645.2	1692.3	1736.4	1768.3	1801.7
42.5°	1086.2	1134.8	1198.6	1260.9	1323.2	1391.5	1467.5	1532.8	1590.5	1634.6	1669.5
45°	846.2	913.0	990.5	1069.5	1150.0	1235.1	1314.1	1380.9	1441.7	1487.2	1522.2
47.5°	682.1	755.0	843.1	929.7	1020.9	1110.5	1198.6	1256.3	1306.4	1342.9	1374.8
50°	563.6	641.1	733.8	832.5	923.6	1013.3	1089.2	1145.4	1186.5	1218.3	1238.1
52.5°	470.9	553.0	651.7	750.4	841.6	923.6	992.0	1034.5	1068.0	1090.7	1109.0
55°	388.9	467.9	560.6	653.2	742.9	820.3	876.5	908.5	934.3	947.9	958.6
57.5°	317.5	390.4	475.5	560.6	638.0	701.9	745.9	777.8	790.0	800.6	799.1
60°	249.2	317.5	395.0	467.9	534.7	586.4	618.3	636.5	645.6	650.2	647.1
62.5°	196.0	258.3	317.5	381.3	429.9	474.0	504.4	504.4	508.9	510.4	515.0
65°	145.8	192.9	244.6	291.7	331.2	360.0	376.8	381.3	387.4	385.9	382.8
67.5°	107.9	142.8	180.8	215.7	243.1	261.3	273.4	284.1	282.6	279.5	278.0
70°	74.5	97.2	130.7	151.9	171.7	189.9	192.9	194.4	196.0	197.5	194.4
72.5°	51.7	68.4	86.6	104.8	117.0	124.6	132.2	133.7	133.7	133.7	132.2
75°	25.8	34.9	51.7	59.3	69.9	72.9	79.0	79.0	83.6	77.5	75.9
77.5°	22.8	27.4	36.5	42.5	47.1	51.7	53.2	57.7	56.2	53.2	54.7
80°	13.7	16.7	22.8	25.8	31.9	33.4	34.9	36.5	34.9	36.5	36.5
82.5°	10.6	12.2	15.2	15.2	19.7	19.7	21.3	21.3	22.8	22.8	22.8
85°	6.1	10.6	9.1	18.2	12.2	12.2	15.2	18.2	15.2	15.2	18.2
87.5°	6.1	6.1	4.6	6.1	6.1	6.1	7.6	9.1	9.1	10.6	9.1
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: P249253

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2830.2	2830.2	2830.2	2830.2
2.5°	2834.7	2837.7	2833.2	2831.7
5°	2839.3	2839.3	2836.2	2836.2
7.5°	2839.3	2839.3	2834.7	2831.7
10°	2827.1	2827.1	2822.6	2819.5
12.5°	2804.3	2804.3	2802.8	2798.3
15°	2775.5	2775.5	2769.4	2764.8
17.5°	2736.0	2739.0	2731.4	2731.4
20°	2693.4	2691.9	2685.9	2682.8
22.5°	2649.4	2646.3	2644.8	2635.7
25°	2602.3	2599.2	2594.7	2590.1
27.5°	2521.8	2520.3	2515.7	2509.6
30°	2398.7	2397.2	2391.1	2391.1
32.5°	2239.2	2237.7	2231.6	2233.1
35°	2073.6	2079.7	2076.7	2070.6
37.5°	1935.4	1939.9	1943.0	1939.9
40°	1819.9	1833.6	1835.1	1838.2
42.5°	1696.9	1715.1	1721.2	1724.2
45°	1549.5	1566.2	1579.9	1576.9
47.5°	1399.1	1411.3	1423.4	1414.3
50°	1254.8	1262.4	1267.0	1267.0
52.5°	1118.1	1118.1	1116.6	1118.1
55°	961.6	961.6	955.6	958.6
57.5°	797.5	800.6	796.0	788.4
60°	645.6	638.0	635.0	630.5
62.5°	502.8	502.8	492.2	505.9
65°	376.8	372.2	367.6	366.1
67.5°	273.4	271.9	267.4	265.8
70°	192.9	186.9	185.3	182.3
72.5°	129.1	129.1	126.1	126.1
75°	79.0	71.4	69.9	71.4
77.5°	54.7	53.2	53.2	51.7
80°	36.5	34.9	38.0	33.4
82.5°	22.8	24.3	22.8	24.3
85°	15.2	18.2	16.7	16.7
87.5°	9.1	9.1	9.1	9.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)