

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: P244157

Luminaire Tested: **LSR8B50D010 EC8B509730 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244157
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B50D010 EC8B509730 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4287.0 lumens
Efficiency: N/A
Efficacy: 80.9 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

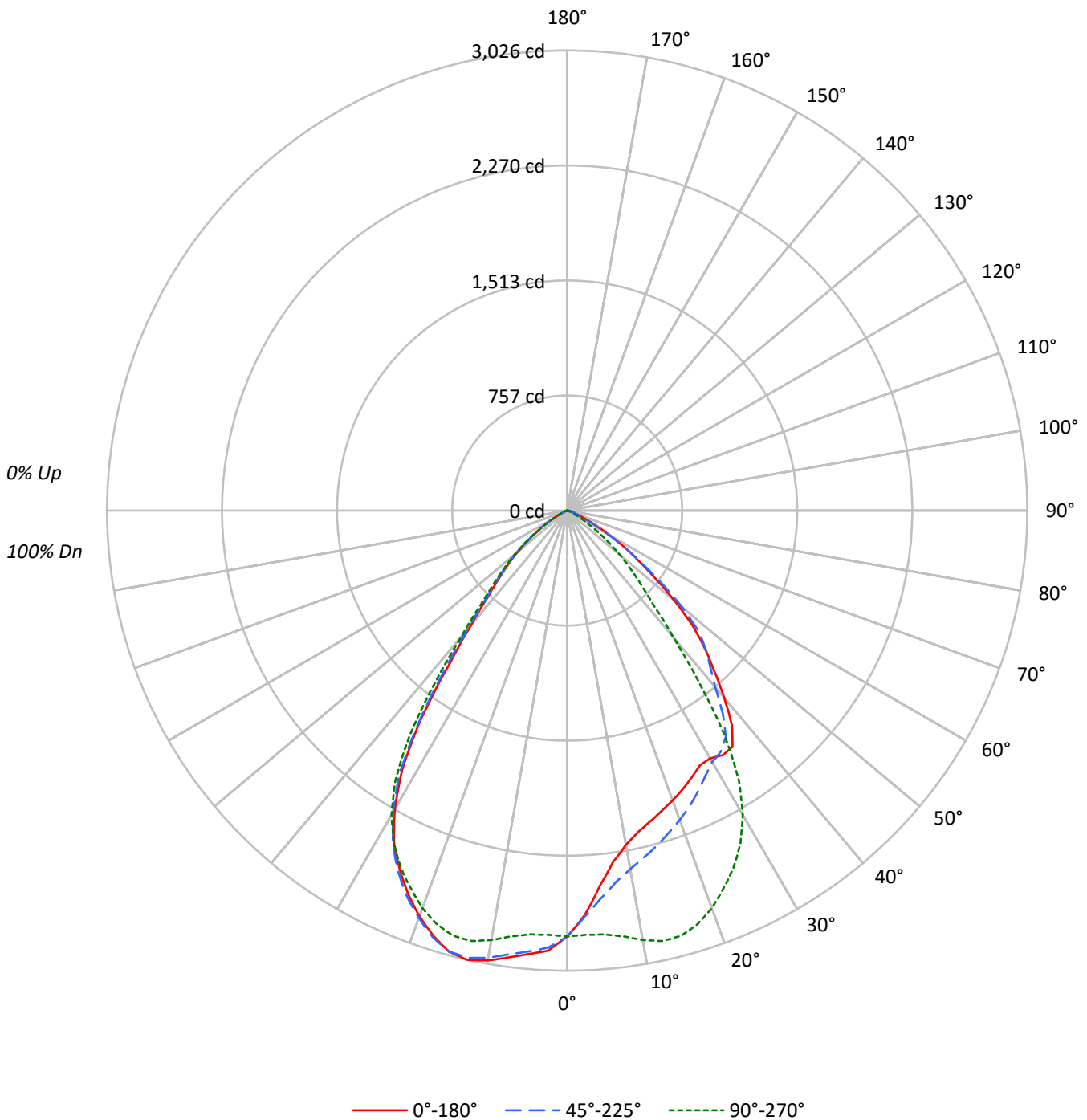
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99		99	97	96		96	94	93	91
2	105	99	95	91	103	98	93	90	94	91	88		91	88	86		88	86	84	82
3	99	91	85	80	96	89	84	79	87	82	78		84	80	77		82	78	76	74
4	92	83	76	71	90	82	76	71	80	74	70		77	73	69		76	72	68	67
5	86	76	69	64	84	75	69	64	73	68	63		72	66	63		70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57		66	61	57		65	60	56	55
7	76	65	58	53	74	64	57	52	63	57	52		61	56	52		60	55	52	50
8	71	60	53	48	70	59	53	48	58	52	48		57	52	48		56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44		53	48	44		52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41		50	44	40		49	44	40	39

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°	261.0	6.1
10°-20°	753.9	17.6
20°-30°	1094.3	25.5
30°-40°	1077.7	25.1
40°-50°	675.6	15.8
50°-60°	326.0	7.6
60°-70°	78.9	1.8
70°-80°	15.9	0.4
80°-90°	3.7	0.1
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°	2109.2	49.2
0°-40°	3186.9	74.3
0°-60°	4188.5	97.7
0°-90°	4287.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4287.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2801	2801	2801	2801	2801	
5°	2475	2559	2797	2910	2928	229
15°	2115	2281	2895	3001	3003	598
25°	1937	2038	2590	2626	2606	896
35°	1896	1819	1808	1705	1677	1147
45°	1280	1289	684	655	636	979
55°	569	587	249	246	234	523
65°	133	132	37	32	28	152
75°	32	28	8	4	3	36
85°	10	7	2	0	0	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6
2.5°	2662.3	2645.3	2613.7	2652.0	2652.0	2630.6	2673.3	2647.6	2668.2	2700.5	2671.8
5°	2475.4	2461.4	2434.9	2475.4	2480.5	2460.7	2512.2	2493.0	2523.2	2562.9	2559.3
7.5°	2327.5	2309.8	2285.5	2327.5	2335.6	2322.3	2371.6	2362.8	2402.5	2454.0	2462.9
10°	2231.1	2212.7	2191.3	2229.6	2235.5	2226.7	2276.7	2271.5	2310.5	2370.1	2393.7
12.5°	2162.6	2147.2	2123.6	2164.1	2170.7	2158.2	2205.3	2203.1	2243.6	2306.1	2335.6
15°	2114.8	2096.4	2075.1	2109.7	2118.5	2104.5	2149.4	2145.0	2186.2	2248.0	2281.1
17.5°	2069.9	2053.0	2030.9	2063.3	2072.1	2057.4	2101.6	2094.2	2129.5	2188.4	2222.2
20°	2028.0	2009.6	1989.7	2022.8	2028.0	2011.1	2055.2	2045.6	2077.3	2131.7	2164.8
22.5°	1984.6	1965.4	1944.8	1977.2	1982.4	1965.4	2005.9	1994.9	2024.3	2073.6	2103.8
25°	1936.7	1919.1	1898.5	1928.6	1933.1	1914.7	1957.3	1943.4	1969.1	2012.5	2037.5
27.5°	1888.9	1872.0	1849.2	1880.1	1882.3	1864.6	1903.6	1884.5	1905.8	1945.6	1966.9
30°	1880.8	1861.7	1838.1	1863.1	1863.9	1841.1	1877.9	1855.1	1866.8	1896.3	1908.8
32.5°	1906.6	1887.4	1863.1	1883.8	1881.5	1856.5	1891.8	1863.9	1867.6	1883.0	1880.1
35°	1896.3	1873.5	1844.8	1866.8	1866.8	1836.7	1872.0	1838.9	1835.2	1837.4	1819.0
37.5°	1779.3	1761.6	1734.4	1755.7	1753.5	1730.7	1757.9	1730.7	1718.2	1713.0	1679.9
40°	1607.1	1585.7	1565.1	1587.9	1590.2	1565.9	1601.2	1570.3	1566.6	1551.9	1512.9
42.5°	1432.7	1425.3	1405.5	1424.6	1434.9	1414.3	1443.7	1429.0	1431.2	1427.5	1390.7
45°	1280.4	1267.9	1253.1	1275.2	1281.8	1271.5	1301.0	1292.1	1301.0	1319.4	1289.2
47.5°	1116.3	1103.8	1087.6	1111.1	1122.9	1103.8	1128.8	1125.8	1139.1	1170.7	1167.8
50°	918.3	909.5	906.6	909.5	916.9	908.0	925.7	926.4	935.3	978.7	981.6
52.5°	727.0	724.8	714.5	724.1	724.1	710.1	727.7	719.7	728.5	757.9	777.0
55°	568.8	566.6	560.0	568.8	559.2	554.1	559.2	551.1	544.5	567.3	587.2
57.5°	443.0	435.6	427.5	431.2	430.5	419.4	425.3	415.8	410.6	418.7	436.4
60°	315.7	313.5	306.1	309.8	312.7	304.6	310.5	306.1	297.3	303.9	304.6
62.5°	209.7	211.2	206.8	207.5	205.3	203.8	207.5	209.7	207.5	204.6	205.3
65°	133.2	132.5	131.7	132.5	133.9	131.0	133.2	134.7	132.5	132.5	131.7
67.5°	88.3	86.1	83.9	85.4	86.8	84.6	86.8	86.1	86.8	86.1	83.9
70°	59.6	58.9	58.1	58.9	58.9	57.4	58.9	58.1	58.9	58.1	55.9
72.5°	43.4	43.4	42.7	43.4	43.4	41.9	42.7	41.2	41.9	41.2	39.7
75°	32.4	32.4	31.6	32.4	31.6	30.9	31.6	30.9	29.4	29.4	28.0
77.5°	23.5	23.5	23.5	23.5	23.5	22.8	22.8	22.1	21.3	20.6	20.6
80°	17.7	16.9	16.9	16.9	16.9	16.2	16.9	16.2	15.5	14.7	14.0
82.5°	12.5	13.2	12.5	12.5	12.5	11.8	12.5	11.8	11.8	11.0	9.6
85°	9.6	9.6	9.6	9.6	9.6	8.8	8.8	8.8	8.1	8.1	7.4
87.5°	5.2	5.2	5.2	5.9	5.2	5.2	5.2	4.4	4.4	3.7	3.7
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6
2.5°	2710.1	2713.8	2705.7	2718.2	2766.8	2727.8	2744.0	2749.1	2785.9	2792.5	2788.1
5°	2607.1	2623.3	2633.6	2661.5	2715.3	2687.3	2716.0	2734.4	2781.5	2796.9	2800.6
7.5°	2526.1	2560.0	2585.0	2630.6	2693.9	2672.6	2716.0	2746.2	2803.6	2823.4	2833.0
10°	2465.8	2517.3	2560.7	2623.3	2694.6	2680.7	2737.3	2780.0	2844.0	2867.6	2879.3
12.5°	2420.2	2482.7	2540.9	2620.3	2697.6	2691.0	2759.4	2808.0	2875.7	2899.2	2913.2
15°	2370.1	2442.3	2510.0	2599.0	2682.1	2680.7	2754.3	2805.8	2874.9	2894.8	2908.0
17.5°	2310.5	2387.8	2462.1	2558.5	2640.9	2642.4	2716.7	2767.5	2835.2	2851.4	2860.2
20°	2250.2	2326.7	2401.0	2500.4	2581.3	2583.5	2656.4	2703.5	2768.2	2781.5	2783.7
22.5°	2186.2	2257.6	2331.9	2430.5	2508.5	2510.0	2582.1	2626.2	2681.4	2688.0	2693.9
25°	2113.3	2183.2	2253.1	2351.0	2425.3	2429.7	2495.2	2534.2	2585.0	2590.2	2592.4
27.5°	2037.5	2094.9	2161.9	2245.8	2320.8	2317.9	2379.7	2423.9	2469.5	2466.5	2465.8
30°	1961.0	2008.8	2050.1	2131.0	2186.2	2188.4	2246.5	2267.9	2315.7	2309.8	2309.1
32.5°	1907.3	1919.8	1930.8	1972.1	2024.3	2005.9	2045.6	2072.1	2105.2	2103.0	2103.8
35°	1808.7	1785.9	1752.8	1758.7	1790.3	1761.6	1782.9	1782.2	1816.1	1808.0	1817.5
37.5°	1640.2	1575.4	1501.9	1459.9	1465.8	1429.7	1422.4	1440.0	1451.8	1429.0	1437.1
40°	1460.6	1365.0	1250.2	1154.5	1149.4	1104.5	1096.4	1078.7	1101.6	1082.4	1088.3
42.5°	1328.2	1201.6	1050.8	934.5	909.5	872.0	849.9	847.0	853.6	840.3	836.7
45°	1226.6	1092.0	919.1	785.9	757.9	717.4	695.4	687.3	688.0	683.6	679.9
47.5°	1107.4	972.0	796.9	660.8	629.1	590.9	568.8	563.7	566.6	560.7	556.3
50°	942.6	821.2	661.5	537.2	509.2	481.2	463.6	458.4	457.7	453.3	450.3
52.5°	765.3	664.5	526.1	422.4	397.4	370.1	357.6	351.0	351.7	347.3	342.9
55°	592.4	529.8	407.7	319.4	296.5	275.2	263.4	255.3	253.1	248.7	246.5
57.5°	440.8	398.8	305.4	230.3	217.1	196.5	184.7	175.1	173.7	171.5	170.7
60°	309.1	278.9	214.9	164.1	148.6	136.1	124.4	114.8	110.4	109.6	107.4
62.5°	200.1	181.8	141.3	109.6	97.9	89.0	77.3	70.6	67.7	64.8	65.5
65°	124.4	110.4	88.3	70.6	64.0	57.4	48.6	42.7	39.7	36.8	37.5
67.5°	77.3	69.2	55.9	45.6	41.2	36.1	29.4	25.0	22.8	20.6	19.1
70°	52.2	44.9	38.3	32.4	29.4	25.8	21.3	17.7	16.2	14.7	13.2
72.5°	36.8	33.1	28.0	24.3	22.1	19.1	16.2	14.0	12.5	11.0	9.6
75°	26.5	23.5	20.6	17.7	16.2	14.7	12.5	11.0	9.6	8.1	6.6
77.5°	19.1	16.9	14.7	13.2	12.5	10.3	8.8	8.1	7.4	5.9	4.4
80°	13.2	11.8	9.6	8.8	8.8	7.4	6.6	5.9	5.2	3.7	2.9
82.5°	8.8	8.1	7.4	6.6	5.9	5.2	5.2	3.7	2.9	2.2	1.5
85°	6.6	5.9	5.2	4.4	4.4	3.7	2.9	2.2	2.2	1.5	0.7
87.5°	3.7	3.7	2.9	2.2	2.2	1.5	1.5	0.7	0.7	0.7	0.7
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6
2.5°	2825.6	2827.8	2840.3	2830.8	2855.1	2872.7	2863.9	2883.8	2877.1	2875.7	2898.5
5°	2844.8	2849.9	2866.8	2858.0	2884.5	2903.6	2894.8	2916.9	2910.3	2908.8	2932.3
7.5°	2881.6	2886.7	2901.4	2894.1	2922.0	2938.9	2927.9	2952.2	2943.4	2942.6	2965.4
10°	2927.9	2935.3	2947.8	2940.4	2966.2	2980.9	2969.9	2993.4	2985.3	2981.6	3006.6
12.5°	2962.5	2967.6	2980.2	2974.3	2999.3	3010.3	3000.8	3023.6	3013.3	3010.3	3032.4
15°	2954.4	2959.6	2969.9	2964.7	2988.2	2998.6	2986.0	3011.1	3000.8	2994.9	3014.7
17.5°	2902.9	2905.8	2913.2	2908.0	2933.1	2939.7	2925.7	2950.7	2941.2	2930.9	2950.0
20°	2827.1	2825.6	2830.0	2827.8	2848.4	2852.1	2843.3	2861.7	2850.6	2844.8	2855.8
22.5°	2732.9	2731.4	2734.4	2728.5	2749.1	2751.3	2738.1	2760.1	2749.1	2738.1	2756.5
25°	2628.4	2620.3	2618.9	2621.1	2635.0	2637.3	2623.3	2639.5	2625.5	2616.6	2634.3
27.5°	2499.7	2489.3	2487.1	2489.3	2503.3	2493.0	2481.3	2493.0	2479.0	2471.0	2482.0
30°	2340.7	2326.0	2319.4	2315.0	2329.7	2326.0	2298.8	2312.0	2289.9	2278.2	2286.3
32.5°	2126.6	2118.5	2100.8	2090.5	2104.5	2076.5	2059.6	2059.6	2050.8	2030.9	2035.3
35°	1829.3	1816.8	1800.6	1791.8	1794.0	1756.5	1728.5	1734.4	1704.9	1699.8	1702.0
37.5°	1453.3	1432.7	1426.8	1408.4	1412.8	1379.7	1341.4	1342.2	1326.7	1310.5	1305.4
40°	1092.0	1088.3	1082.4	1067.0	1072.9	1036.8	1022.1	1022.8	1012.5	1000.7	1006.6
42.5°	844.0	832.2	828.6	823.4	824.9	819.0	799.9	802.1	793.2	790.3	787.3
45°	685.8	673.3	664.5	668.9	668.9	662.3	654.9	659.3	654.9	649.0	652.0
47.5°	565.1	553.4	548.9	548.2	553.4	548.9	541.6	543.1	542.3	540.1	538.6
50°	451.1	448.1	444.4	442.2	444.4	443.0	436.4	440.0	442.2	434.9	437.1
52.5°	343.6	343.6	342.9	337.8	342.2	337.8	337.0	338.5	336.3	333.3	332.6
55°	251.7	249.5	245.8	245.0	246.5	245.0	243.6	244.3	245.8	238.4	238.4
57.5°	172.2	170.7	168.5	168.5	171.5	167.8	165.6	168.5	165.6	162.6	162.6
60°	110.4	109.6	107.4	107.4	107.4	106.7	104.5	105.2	106.7	102.3	103.0
62.5°	66.2	64.0	63.3	62.5	63.3	62.5	62.5	61.8	61.1	61.1	58.9
65°	36.1	34.6	33.1	33.8	33.8	33.1	33.1	33.1	31.6	30.9	30.2
67.5°	18.4	16.9	16.9	16.2	16.2	16.2	16.2	15.5	15.5	15.5	14.7
70°	11.8	11.0	10.3	10.3	10.3	9.6	9.6	9.6	9.6	9.6	8.8
72.5°	8.1	7.4	6.6	6.6	6.6	5.9	5.9	5.9	5.9	5.2	5.2
75°	5.9	5.2	4.4	4.4	4.4	3.7	3.7	3.7	3.7	3.7	3.7
77.5°	3.7	2.9	2.9	2.9	2.9	2.2	2.2	2.2	2.2	2.2	1.5
80°	2.2	2.2	1.5	1.5	1.5	1.5	0.7	0.7	0.7	0.7	0.7
82.5°	1.5	1.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0
87.5°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P244157

CATALOG NUMBER: LSR8B50D010 EC8B509730 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6	2800.6
2.5°	2890.4	2884.5	2888.2	2915.4	2903.6	2899.9	2869.0	2896.3
5°	2925.0	2920.6	2920.6	2951.5	2937.5	2934.5	2904.4	2927.9
7.5°	2957.3	2952.9	2953.7	2985.3	2974.3	2969.9	2939.7	2963.2
10°	2999.3	2996.3	2997.1	3027.2	3015.5	3011.1	2980.2	3004.4
12.5°	3024.3	3019.9	3019.9	3052.3	3039.0	3032.4	3003.0	3026.5
15°	3005.2	2998.6	2998.6	3030.9	3016.2	3006.6	2980.9	3003.0
17.5°	2939.7	2933.1	2933.1	2961.0	2950.0	2936.0	2909.5	2930.1
20°	2848.4	2840.3	2838.1	2870.5	2855.1	2842.6	2819.0	2838.9
22.5°	2745.4	2741.7	2735.1	2767.5	2753.5	2740.3	2715.3	2730.7
25°	2621.8	2615.9	2609.3	2640.9	2627.0	2613.7	2593.8	2606.3
27.5°	2468.0	2468.7	2465.1	2490.1	2476.1	2468.7	2444.5	2465.1
30°	2281.8	2273.7	2270.8	2300.2	2287.0	2277.4	2247.3	2267.1
32.5°	2039.0	2027.2	2011.8	2044.9	2022.1	2014.0	1988.2	2016.9
35°	1685.8	1682.1	1668.2	1696.1	1683.6	1668.9	1652.7	1677.0
37.5°	1303.2	1306.1	1304.6	1312.0	1304.6	1295.1	1277.4	1268.6
40°	994.9	987.5	981.6	994.9	979.4	979.4	969.1	980.1
42.5°	780.0	777.0	784.4	787.3	778.5	777.0	775.6	774.8
45°	643.9	643.9	645.3	648.3	645.3	643.9	639.4	636.5
47.5°	530.5	533.5	530.5	540.1	535.0	533.5	524.7	528.3
50°	429.7	426.1	429.7	432.7	433.4	429.0	424.6	426.8
52.5°	333.3	327.4	326.0	330.4	327.4	327.4	324.5	323.8
55°	234.7	236.9	233.3	236.9	235.5	233.3	231.1	234.0
57.5°	158.9	159.7	158.2	160.4	156.7	157.5	156.7	156.0
60°	103.0	100.1	100.1	102.3	98.6	98.6	97.9	97.9
62.5°	58.9	58.1	58.1	57.4	56.7	56.7	56.7	55.2
65°	30.2	29.4	28.7	28.7	28.7	28.7	28.0	28.0
67.5°	14.7	14.0	14.0	14.7	14.0	14.0	14.0	14.0
70°	8.8	8.8	8.1	8.8	8.1	8.1	8.1	8.1
72.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
75°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	2.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)