

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: P244108

Luminaire Tested: **LSR8B40D010 EC8B40840 8LBSWOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244108  
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: LSR8B40D010 EC8B40840 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4621.0 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

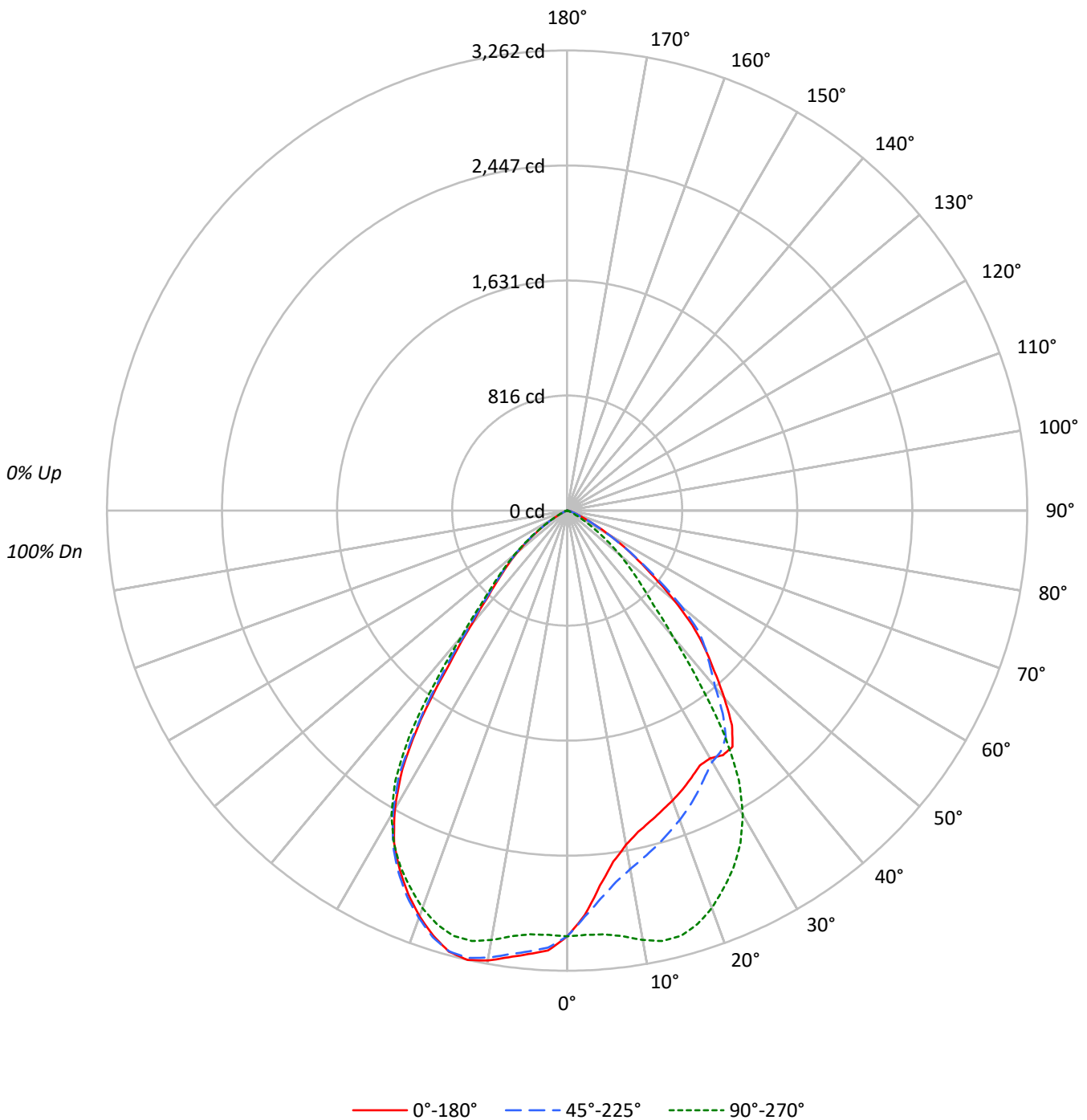
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	93089	93089	93089
5°	82592	93320	97691
10°	75302	96785	101404
15°	72774	99613	103335
20°	71734	98387	100418
25°	71029	94995	95587
30°	72185	88654	87016
35°	76945	73361	68046
40°	69732	46968	42528
45°	60185	32136	29920
50°	47488	23440	22067
55°	32961	14413	13559
60°	20987	7290	6506
65°	10478	2897	2196
70°	5788	1434	784
75°	4158	1037	381
80°	3374	710	142
85°	3644	566	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	281.4	6.1
10°-20°	812.7	17.6
20°-30°	1179.5	25.5
30°-40°	1161.7	25.1
40°-50°	728.2	15.8
50°-60°	351.4	7.6
60°-70°	85.0	1.8
70°-80°	17.2	0.4
80°-90°	4.0	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°	2273.5	49.2
0°-40°	3435.2	74.3
0°-60°	4514.8	97.7
0°-90°	4621.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4621.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3019	3019	3019	3019	3019	
5°	2668	2759	3015	3137	3156	247
15°	2280	2459	3120	3234	3237	644
25°	2088	2196	2792	2830	2809	966
35°	2044	1961	1949	1838	1808	1237
45°	1380	1390	737	706	686	1055
55°	613	633	268	265	252	564
65°	144	142	40	34	30	164
75°	35	30	9	4	3	39
85°	10	8	2	0	0	11
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°	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8
2.5°	2869.7	2851.4	2817.3	2858.6	2858.6	2835.6	2881.6	2853.8	2876.0	2910.9	2880.0
5°	2668.2	2653.2	2624.6	2668.2	2673.8	2652.4	2707.9	2687.3	2719.8	2762.6	2758.6
7.5°	2508.8	2489.8	2463.6	2508.8	2517.5	2503.2	2556.4	2546.9	2589.7	2645.2	2654.7
10°	2404.9	2385.1	2362.1	2403.3	2409.7	2400.1	2454.1	2448.5	2490.6	2554.8	2580.2
12.5°	2331.1	2314.5	2289.1	2332.7	2339.9	2326.4	2377.1	2374.8	2418.4	2485.8	2517.5
15°	2279.6	2259.7	2236.7	2274.0	2283.5	2268.5	2316.8	2312.1	2356.5	2423.1	2458.8
17.5°	2231.2	2212.9	2189.1	2224.0	2233.6	2217.7	2265.3	2257.4	2295.4	2358.9	2395.4
20°	2186.0	2166.1	2144.7	2180.4	2186.0	2167.7	2215.3	2205.0	2239.1	2297.8	2333.5
22.5°	2139.2	2118.6	2096.3	2131.2	2136.8	2118.6	2162.2	2150.3	2182.0	2235.2	2267.7
25°	2087.6	2068.6	2046.4	2078.9	2083.7	2063.8	2109.8	2094.8	2122.5	2169.3	2196.3
27.5°	2036.1	2017.8	1993.2	2026.5	2028.9	2009.9	2051.9	2031.3	2054.3	2097.1	2120.1
30°	2027.3	2006.7	1981.3	2008.3	2009.1	1984.5	2024.2	1999.6	2012.3	2044.0	2057.5
32.5°	2055.1	2034.5	2008.3	2030.5	2028.1	2001.2	2039.2	2009.1	2013.1	2029.7	2026.5
35°	2044.0	2019.4	1988.5	2012.3	2012.3	1979.8	2017.8	1982.1	1978.2	1980.5	1960.7
37.5°	1917.9	1898.8	1869.5	1892.5	1890.1	1865.5	1894.9	1865.5	1852.1	1846.5	1810.8
40°	1732.3	1709.3	1687.1	1711.7	1714.0	1687.9	1725.9	1692.6	1688.7	1672.8	1630.8
42.5°	1544.3	1536.4	1515.0	1535.6	1546.7	1524.5	1556.2	1540.3	1542.7	1538.8	1499.1
45°	1380.1	1366.6	1350.8	1374.6	1381.7	1370.6	1402.3	1392.8	1402.3	1422.2	1389.6
47.5°	1203.2	1189.8	1172.3	1197.7	1210.4	1189.8	1216.7	1213.6	1227.8	1261.9	1258.8
50°	989.9	980.4	977.2	980.4	988.3	978.8	997.8	998.6	1008.1	1054.9	1058.1
52.5°	783.7	781.3	770.2	780.5	780.5	765.4	784.4	775.7	785.2	817.0	837.6
55°	613.1	610.7	603.6	613.1	602.8	597.3	602.8	594.1	586.9	611.5	632.9
57.5°	477.5	469.6	460.8	464.8	464.0	452.1	458.5	448.1	442.6	451.3	470.3
60°	340.3	337.9	330.0	333.9	337.1	328.4	334.7	330.0	320.4	327.6	328.4
62.5°	226.1	227.6	222.9	223.7	221.3	219.7	223.7	226.1	223.7	220.5	221.3
65°	143.6	142.8	142.0	142.8	144.4	141.2	143.6	145.2	142.8	142.8	142.0
67.5°	95.2	92.8	90.4	92.0	93.6	91.2	93.6	92.8	93.6	92.8	90.4
70°	64.2	63.5	62.7	63.5	63.5	61.9	63.5	62.7	63.5	62.7	60.3
72.5°	46.8	46.8	46.0	46.8	46.8	45.2	46.0	44.4	45.2	44.4	42.8
75°	34.9	34.9	34.1	34.9	34.1	33.3	34.1	33.3	31.7	31.7	30.1
77.5°	25.4	25.4	25.4	25.4	25.4	24.6	24.6	23.8	23.0	22.2	22.2
80°	19.0	18.2	18.2	18.2	18.2	17.4	18.2	17.4	16.7	15.9	15.1
82.5°	13.5	14.3	13.5	13.5	13.5	12.7	13.5	12.7	12.7	11.9	10.3
85°	10.3	10.3	10.3	10.3	10.3	9.5	9.5	9.5	8.7	8.7	7.9
87.5°	5.6	5.6	5.6	6.3	5.6	5.6	5.6	4.8	4.8	4.0	4.0
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°	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8
2.5°	2921.2	2925.2	2916.5	2930.0	2982.3	2940.3	2957.7	2963.3	3002.9	3010.1	3005.3
5°	2810.2	2827.7	2838.8	2868.9	2926.8	2896.7	2927.6	2947.4	2998.2	3014.8	3018.8
7.5°	2723.0	2759.4	2786.4	2835.6	2903.8	2880.8	2927.6	2960.1	3022.0	3043.4	3053.7
10°	2657.9	2713.4	2760.2	2827.7	2904.6	2889.5	2950.6	2996.6	3065.6	3091.0	3103.7
12.5°	2608.7	2676.2	2738.8	2824.5	2907.8	2900.6	2974.4	3026.7	3099.7	3125.1	3140.2
15°	2554.8	2632.5	2705.5	2801.5	2891.1	2889.5	2968.8	3024.4	3098.9	3120.3	3134.6
17.5°	2490.6	2573.8	2653.9	2757.9	2846.7	2848.3	2928.4	2983.1	3056.1	3073.5	3083.1
20°	2425.5	2508.0	2588.1	2695.2	2782.4	2784.8	2863.3	2914.1	2983.9	2998.2	3000.6
22.5°	2356.5	2433.4	2513.6	2619.8	2703.9	2705.5	2783.2	2830.8	2890.3	2897.5	2903.8
25°	2278.0	2353.3	2428.7	2534.2	2614.3	2619.0	2689.6	2731.7	2786.4	2792.0	2794.3
27.5°	2196.3	2258.2	2330.3	2420.8	2501.7	2498.5	2565.1	2612.7	2661.9	2658.7	2657.9
30°	2113.8	2165.4	2209.8	2297.0	2356.5	2358.9	2421.5	2444.6	2496.1	2489.8	2489.0
32.5°	2055.9	2069.4	2081.3	2125.7	2182.0	2162.2	2205.0	2233.6	2269.3	2266.9	2267.7
35°	1949.6	1925.0	1889.3	1895.7	1929.8	1898.8	1921.9	1921.1	1957.5	1948.8	1959.1
37.5°	1768.0	1698.2	1618.9	1573.6	1580.0	1541.1	1533.2	1552.2	1564.9	1540.3	1549.1
40°	1574.4	1471.3	1347.6	1244.5	1238.9	1190.5	1181.8	1162.8	1187.4	1166.8	1173.1
42.5°	1431.7	1295.2	1132.6	1007.3	980.4	939.9	916.1	912.9	920.1	905.8	901.8
45°	1322.2	1177.1	990.7	847.1	817.0	773.3	749.5	740.8	741.6	736.9	732.9
47.5°	1193.7	1047.8	859.0	712.3	678.2	636.9	613.1	607.6	610.7	604.4	599.6
50°	1016.1	885.2	713.1	579.0	548.9	518.7	499.7	494.1	493.4	488.6	485.4
52.5°	824.9	716.2	567.1	455.3	428.3	399.0	385.5	378.3	379.1	374.4	369.6
55°	638.5	571.1	439.4	344.2	319.6	296.6	284.0	275.2	272.9	268.1	265.7
57.5°	475.1	429.9	329.2	248.3	234.0	211.8	199.1	188.8	187.2	184.8	184.0
60°	333.1	300.6	231.6	176.9	160.2	146.7	134.0	123.7	119.0	118.2	115.8
62.5°	215.7	195.9	152.3	118.2	105.5	96.0	83.3	76.1	73.0	69.8	70.6
65°	134.0	119.0	95.2	76.1	69.0	61.9	52.3	46.0	42.8	39.7	40.5
67.5°	83.3	74.6	60.3	49.2	44.4	38.9	31.7	27.0	24.6	22.2	20.6
70°	56.3	48.4	41.2	34.9	31.7	27.8	23.0	19.0	17.4	15.9	14.3
72.5°	39.7	35.7	30.1	26.2	23.8	20.6	17.4	15.1	13.5	11.9	10.3
75°	28.6	25.4	22.2	19.0	17.4	15.9	13.5	11.9	10.3	8.7	7.1
77.5°	20.6	18.2	15.9	14.3	13.5	11.1	9.5	8.7	7.9	6.3	4.8
80°	14.3	12.7	10.3	9.5	9.5	7.9	7.1	6.3	5.6	4.0	3.2
82.5°	9.5	8.7	7.9	7.1	6.3	5.6	5.6	4.0	3.2	2.4	1.6
85°	7.1	6.3	5.6	4.8	4.8	4.0	3.2	2.4	2.4	1.6	0.8
87.5°	4.0	4.0	3.2	2.4	2.4	1.6	1.6	0.8	0.8	0.8	0.8
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8
2.5°	3045.8	3048.2	3061.6	3051.3	3077.5	3096.5	3087.0	3108.4	3101.3	3099.7	3124.3
5°	3066.4	3071.9	3090.2	3080.7	3109.2	3129.8	3120.3	3144.1	3137.0	3135.4	3160.8
7.5°	3106.1	3111.6	3127.5	3119.5	3149.7	3167.9	3156.0	3182.2	3172.7	3171.9	3196.5
10°	3156.0	3164.0	3177.4	3169.5	3197.3	3213.1	3201.2	3226.6	3217.9	3213.9	3240.9
12.5°	3193.3	3198.9	3212.3	3206.0	3233.0	3244.9	3234.5	3259.1	3248.0	3244.9	3268.7
15°	3184.6	3190.1	3201.2	3195.7	3221.1	3232.2	3218.7	3245.7	3234.5	3228.2	3249.6
17.5°	3129.1	3132.2	3140.2	3134.6	3161.6	3168.7	3153.6	3180.6	3170.3	3159.2	3179.8
20°	3047.4	3045.8	3050.5	3048.2	3070.4	3074.3	3064.8	3084.6	3072.7	3066.4	3078.3
22.5°	2945.8	2944.2	2947.4	2941.1	2963.3	2965.7	2951.4	2975.2	2963.3	2951.4	2971.2
25°	2833.2	2824.5	2822.9	2825.3	2840.3	2842.7	2827.7	2845.1	2830.0	2820.5	2839.5
27.5°	2694.4	2683.3	2680.9	2683.3	2698.4	2687.3	2674.6	2687.3	2672.2	2663.5	2675.4
30°	2523.1	2507.2	2500.1	2495.3	2511.2	2507.2	2477.9	2492.1	2468.3	2455.7	2464.4
32.5°	2292.3	2283.5	2264.5	2253.4	2268.5	2238.3	2220.1	2220.1	2210.6	2189.1	2193.9
35°	1971.8	1958.3	1940.9	1931.4	1933.7	1893.3	1863.2	1869.5	1837.8	1832.2	1834.6
37.5°	1566.5	1544.3	1538.0	1518.1	1522.9	1487.2	1445.9	1446.7	1430.1	1412.6	1407.1
40°	1177.1	1173.1	1166.8	1150.1	1156.4	1117.6	1101.7	1102.5	1091.4	1078.7	1085.1
42.5°	909.8	897.1	893.1	887.6	889.1	882.8	862.2	864.6	855.0	851.9	848.7
45°	739.2	725.8	716.2	721.0	721.0	713.9	705.9	710.7	705.9	699.6	702.7
47.5°	609.2	596.5	591.7	590.9	596.5	591.7	583.8	585.4	584.6	582.2	580.6
50°	486.2	483.0	479.1	476.7	479.1	477.5	470.3	474.3	476.7	468.8	471.1
52.5°	370.4	370.4	369.6	364.1	368.8	364.1	363.3	364.9	362.5	359.3	358.5
55°	271.3	268.9	264.9	264.1	265.7	264.1	262.5	263.3	264.9	257.0	257.0
57.5°	185.6	184.0	181.6	181.6	184.8	180.8	178.5	181.6	178.5	175.3	175.3
60°	119.0	118.2	115.8	115.8	115.8	115.0	112.6	113.4	115.0	110.3	111.0
62.5°	71.4	69.0	68.2	67.4	68.2	67.4	67.4	66.6	65.8	65.8	63.5
65°	38.9	37.3	35.7	36.5	36.5	35.7	35.7	35.7	34.1	33.3	32.5
67.5°	19.8	18.2	18.2	17.4	17.4	17.4	17.4	16.7	16.7	16.7	15.9
70°	12.7	11.9	11.1	11.1	11.1	10.3	10.3	10.3	10.3	10.3	9.5
72.5°	8.7	7.9	7.1	7.1	7.1	6.3	6.3	6.3	6.3	5.6	5.6
75°	6.3	5.6	4.8	4.8	4.8	4.0	4.0	4.0	4.0	4.0	4.0
77.5°	4.0	3.2	3.2	3.2	3.2	2.4	2.4	2.4	2.4	2.4	1.6
80°	2.4	2.4	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8
82.5°	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0
87.5°	0.8	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: P244108

CATALOG NUMBER: LSR8B40D010 EC8B40840 8LBSWOLI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8	3018.8
2.5°	3115.6	3109.2	3113.2	3142.5	3129.8	3125.9	3092.6	3121.9
5°	3152.9	3148.1	3148.1	3181.4	3166.3	3163.2	3130.6	3156.0
7.5°	3187.8	3183.0	3183.8	3217.9	3206.0	3201.2	3168.7	3194.1
10°	3233.0	3229.8	3230.6	3263.1	3250.4	3245.7	3212.3	3238.5
12.5°	3259.9	3255.2	3255.2	3290.1	3275.8	3268.7	3236.9	3262.3
15°	3239.3	3232.2	3232.2	3267.1	3251.2	3240.9	3213.1	3236.9
17.5°	3168.7	3161.6	3161.6	3191.7	3179.8	3164.7	3136.2	3158.4
20°	3070.4	3061.6	3059.3	3094.2	3077.5	3064.0	3038.6	3060.1
22.5°	2959.3	2955.4	2948.2	2983.1	2968.0	2953.8	2926.8	2943.5
25°	2826.1	2819.7	2812.6	2846.7	2831.6	2817.3	2795.9	2809.4
27.5°	2660.3	2661.1	2657.1	2684.1	2669.0	2661.1	2634.9	2657.1
30°	2459.6	2450.9	2447.7	2479.4	2465.2	2454.9	2422.3	2443.8
32.5°	2197.9	2185.2	2168.5	2204.2	2179.6	2170.9	2143.1	2174.1
35°	1817.2	1813.2	1798.1	1828.3	1814.8	1798.9	1781.5	1807.6
37.5°	1404.7	1407.9	1406.3	1414.2	1406.3	1396.0	1376.9	1367.4
40°	1072.4	1064.4	1058.1	1072.4	1055.7	1055.7	1044.6	1056.5
42.5°	840.8	837.6	845.5	848.7	839.2	837.6	836.0	835.2
45°	694.0	694.0	695.6	698.8	695.6	694.0	689.3	686.1
47.5°	571.9	575.0	571.9	582.2	576.6	575.0	565.5	569.5
50°	463.2	459.2	463.2	466.4	467.2	462.4	457.7	460.0
52.5°	359.3	353.0	351.4	356.1	353.0	353.0	349.8	349.0
55°	253.0	255.4	251.4	255.4	253.8	251.4	249.1	252.2
57.5°	171.3	172.1	170.5	172.9	168.9	169.7	168.9	168.2
60°	111.0	107.9	107.9	110.3	106.3	106.3	105.5	105.5
62.5°	63.5	62.7	62.7	61.9	61.1	61.1	61.1	59.5
65°	32.5	31.7	30.9	30.9	30.9	30.9	30.1	30.1
67.5°	15.9	15.1	15.1	15.9	15.1	15.1	15.1	15.1
70°	9.5	9.5	8.7	9.5	8.7	8.7	8.7	8.7
72.5°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
75°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
77.5°	2.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)