

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: P245398

Luminaire Tested: **LSR8B40D010 EC8B40835 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245398
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 EC8B40835 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4486.0 lumens
Efficiency: N/A
Efficacy: 109.7 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

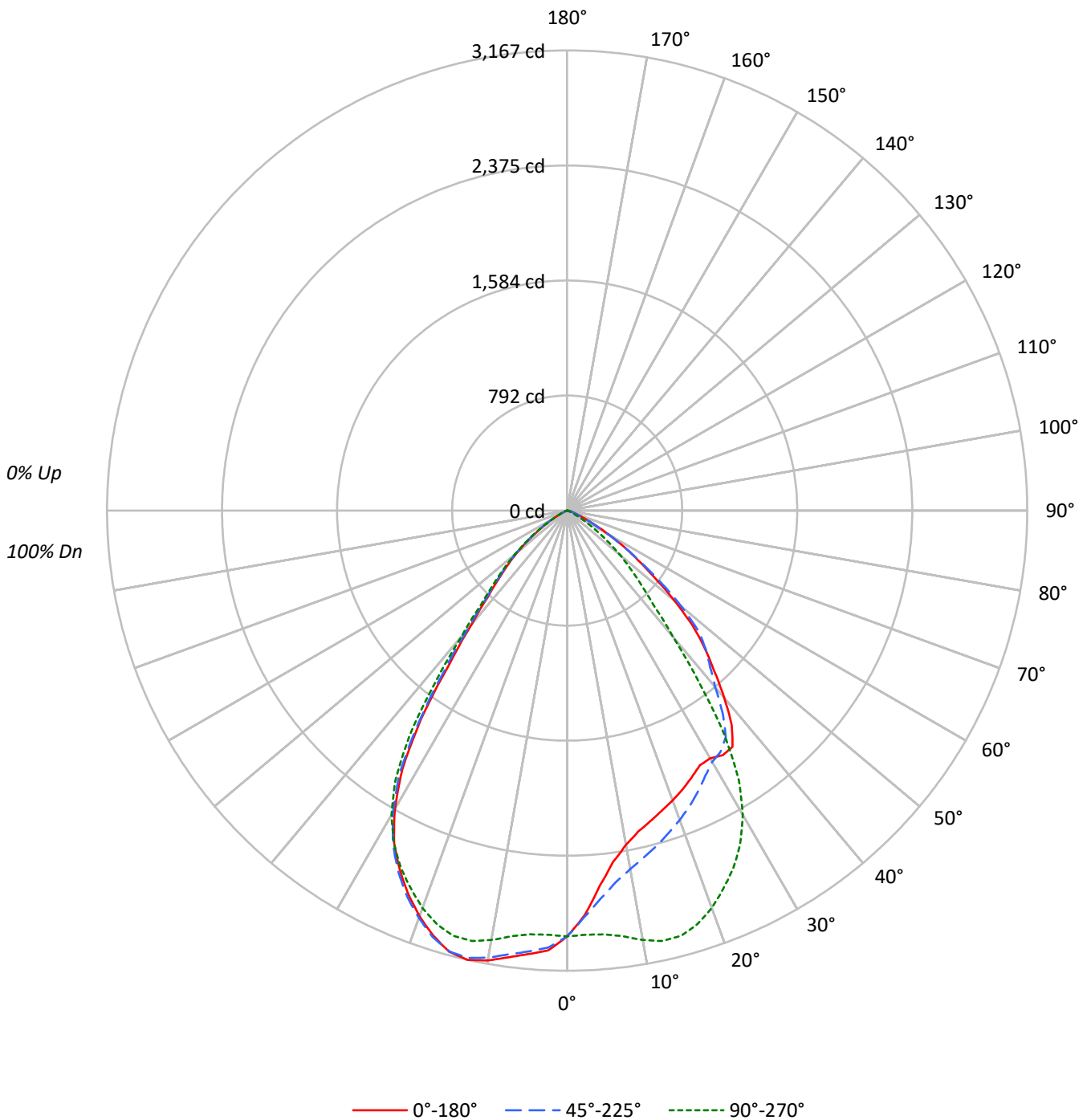
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	90369	90369	90369
5°	80180	90596	94837
10°	73101	93958	98442
15°	70648	96704	100318
20°	69637	95512	97484
25°	68953	92219	92794
30°	70078	86061	84473
35°	74697	71219	66058
40°	67695	45596	41284
45°	58428	31194	29044
50°	46102	22753	21425
55°	31999	13994	13166
60°	20370	7074	6315
65°	10171	2809	2138
70°	5626	1388	766
75°	4039	1013	369
80°	3285	675	142
85°	3538	531	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.1	6.1
10°-20°	788.9	17.6
20°-30°	1145.1	25.5
30°-40°	1127.8	25.1
40°-50°	706.9	15.8
50°-60°	341.1	7.6
60°-70°	82.5	1.8
70°-80°	16.7	0.4
80°-90°	3.8	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°	2207.1	49.2
0°-40°	3334.9	74.3
0°-60°	4382.9	97.7
0°-90°	4486.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4486.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2931	2931	2931	2931	2931	
5°	2590	2678	2927	3045	3064	240
15°	2213	2387	3029	3140	3142	626
25°	2027	2132	2710	2747	2727	938
35°	1984	1903	1892	1784	1755	1201
45°	1340	1349	715	685	666	1024
55°	595	614	260	257	245	548
65°	139	138	38	33	29	159
75°	34	29	8	4	3	38
85°	10	8	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°	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6
2.5°	2785.9	2768.1	2735.0	2775.1	2775.1	2752.7	2797.4	2770.5	2792.0	2825.9	2795.9
5°	2590.3	2575.6	2547.9	2590.3	2595.7	2574.9	2628.8	2608.8	2640.3	2681.9	2678.1
7.5°	2435.5	2417.0	2391.6	2435.5	2444.0	2430.1	2481.7	2472.5	2514.0	2567.9	2577.2
10°	2334.6	2315.4	2293.1	2333.1	2339.3	2330.0	2382.4	2377.0	2417.8	2480.2	2504.8
12.5°	2263.0	2246.9	2222.2	2264.6	2271.5	2258.4	2307.7	2305.4	2347.7	2413.2	2444.0
15°	2213.0	2193.7	2171.4	2207.6	2216.8	2202.2	2249.2	2244.5	2287.7	2352.3	2387.0
17.5°	2166.0	2148.3	2125.2	2159.1	2168.3	2152.9	2199.1	2191.4	2228.4	2290.0	2325.4
20°	2122.1	2102.9	2082.1	2116.7	2122.1	2104.4	2150.6	2140.6	2173.7	2230.7	2265.3
22.5°	2076.7	2056.7	2035.1	2069.0	2074.4	2056.7	2099.0	2087.5	2118.3	2169.9	2201.4
25°	2026.6	2008.2	1986.6	2018.2	2022.8	2003.5	2048.2	2033.6	2060.5	2105.9	2132.1
27.5°	1976.6	1958.9	1935.0	1967.3	1969.7	1951.2	1992.0	1972.0	1994.3	2035.9	2058.2
30°	1968.1	1948.1	1923.5	1949.6	1950.4	1926.5	1965.0	1941.2	1953.5	1984.3	1997.4
32.5°	1995.1	1975.0	1949.6	1971.2	1968.9	1942.7	1979.7	1950.4	1954.3	1970.4	1967.3
35°	1984.3	1960.4	1930.4	1953.5	1953.5	1921.9	1958.9	1924.2	1920.4	1922.7	1903.4
37.5°	1861.9	1843.4	1814.9	1837.2	1834.9	1811.0	1839.5	1811.0	1797.9	1792.6	1757.9
40°	1681.7	1659.3	1637.8	1661.7	1664.0	1638.6	1675.5	1643.2	1639.3	1623.9	1583.1
42.5°	1499.2	1491.5	1470.7	1490.7	1501.5	1479.9	1510.7	1495.3	1497.6	1493.8	1455.3
45°	1339.8	1326.7	1311.3	1334.4	1341.3	1330.6	1361.4	1352.1	1361.4	1380.6	1349.0
47.5°	1168.1	1155.0	1138.1	1162.7	1175.0	1155.0	1181.2	1178.1	1192.0	1225.1	1222.0
50°	961.0	951.7	948.6	951.7	959.4	950.2	968.7	969.4	978.7	1024.1	1027.2
52.5°	760.8	758.4	747.7	757.7	757.7	743.0	761.5	753.1	762.3	793.1	813.1
55°	595.2	592.9	586.0	595.2	585.2	579.8	585.2	576.7	569.8	593.7	614.5
57.5°	463.5	455.8	447.4	451.2	450.4	438.9	445.1	435.0	429.7	438.1	456.6
60°	330.3	328.0	320.3	324.2	327.2	318.8	324.9	320.3	311.1	318.0	318.8
62.5°	219.4	221.0	216.4	217.1	214.8	213.3	217.1	219.4	217.1	214.1	214.8
65°	139.4	138.6	137.8	138.6	140.1	137.1	139.4	140.9	138.6	138.6	137.8
67.5°	92.4	90.1	87.8	89.3	90.9	88.5	90.9	90.1	90.9	90.1	87.8
70°	62.4	61.6	60.8	61.6	61.6	60.1	61.6	60.8	61.6	60.8	58.5
72.5°	45.4	45.4	44.7	45.4	45.4	43.9	44.7	43.1	43.9	43.1	41.6
75°	33.9	33.9	33.1	33.9	33.1	32.3	33.1	32.3	30.8	30.8	29.3
77.5°	24.6	24.6	24.6	24.6	24.6	23.9	23.9	23.1	22.3	21.6	21.6
80°	18.5	17.7	17.7	17.7	17.7	16.9	17.7	16.9	16.2	15.4	14.6
82.5°	13.1	13.9	13.1	13.1	13.1	12.3	13.1	12.3	12.3	11.5	10.0
85°	10.0	10.0	10.0	10.0	10.0	9.2	9.2	9.2	8.5	8.5	7.7
87.5°	5.4	5.4	5.4	6.2	5.4	5.4	5.4	4.6	4.6	3.8	3.8
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6
2.5°	2835.9	2839.8	2831.3	2844.4	2895.2	2854.4	2871.3	2876.7	2915.2	2922.1	2917.5
5°	2728.1	2745.0	2755.8	2785.1	2841.3	2812.0	2842.1	2861.3	2910.6	2926.8	2930.6
7.5°	2643.4	2678.8	2705.0	2752.7	2819.0	2796.6	2842.1	2873.6	2933.7	2954.5	2964.5
10°	2580.3	2634.2	2679.6	2745.0	2819.7	2805.1	2864.4	2909.1	2976.0	3000.7	3013.0
12.5°	2532.5	2598.0	2658.8	2742.0	2822.8	2815.9	2887.5	2938.3	3009.2	3033.8	3048.4
15°	2480.2	2555.6	2626.5	2719.6	2806.6	2805.1	2882.1	2936.0	3008.4	3029.2	3043.0
17.5°	2417.8	2498.6	2576.4	2677.3	2763.5	2765.1	2842.8	2896.0	2966.8	2983.7	2993.0
20°	2354.7	2434.7	2512.5	2616.5	2701.2	2703.5	2779.7	2829.0	2896.7	2910.6	2912.9
22.5°	2287.7	2362.4	2440.1	2543.3	2624.9	2626.5	2701.9	2748.1	2805.9	2812.8	2819.0
25°	2211.4	2284.6	2357.7	2460.1	2537.9	2542.5	2611.1	2651.9	2705.0	2710.4	2712.7
27.5°	2132.1	2192.2	2262.3	2350.0	2428.6	2425.5	2490.2	2536.4	2584.1	2581.0	2580.3
30°	2052.0	2102.1	2145.2	2229.9	2287.7	2290.0	2350.8	2373.1	2423.2	2417.0	2416.3
32.5°	1995.8	2008.9	2020.5	2063.6	2118.3	2099.0	2140.6	2168.3	2203.0	2200.7	2201.4
35°	1892.7	1868.8	1834.1	1840.3	1873.4	1843.4	1865.7	1864.9	1900.4	1891.9	1901.9
37.5°	1716.3	1648.6	1571.6	1527.7	1533.8	1496.1	1488.4	1506.9	1519.2	1495.3	1503.8
40°	1528.4	1428.3	1308.2	1208.1	1202.7	1155.8	1147.3	1128.8	1152.7	1132.7	1138.8
42.5°	1389.8	1257.4	1099.6	977.9	951.7	912.4	889.3	886.3	893.2	879.3	875.5
45°	1283.6	1142.7	961.7	822.4	793.1	750.7	727.6	719.2	719.9	715.3	711.5
47.5°	1158.8	1017.2	833.9	691.5	658.3	618.3	595.2	589.8	592.9	586.7	582.1
50°	986.4	859.3	692.2	562.1	532.8	503.6	485.1	479.7	478.9	474.3	471.2
52.5°	800.8	695.3	550.5	442.0	415.8	387.3	374.2	367.3	368.1	363.4	358.8
55°	619.8	554.4	426.6	334.2	310.3	288.0	275.7	267.2	264.9	260.3	257.9
57.5°	461.2	417.3	319.5	241.0	227.1	205.6	193.3	183.3	181.7	179.4	178.6
60°	323.4	291.8	224.8	171.7	155.5	142.4	130.1	120.1	115.5	114.7	112.4
62.5°	209.4	190.2	147.8	114.7	102.4	93.2	80.8	73.9	70.8	67.8	68.5
65°	130.1	115.5	92.4	73.9	67.0	60.1	50.8	44.7	41.6	38.5	39.3
67.5°	80.8	72.4	58.5	47.7	43.1	37.7	30.8	26.2	23.9	21.6	20.0
70°	54.7	47.0	40.0	33.9	30.8	26.9	22.3	18.5	16.9	15.4	13.9
72.5°	38.5	34.6	29.3	25.4	23.1	20.0	16.9	14.6	13.1	11.5	10.0
75°	27.7	24.6	21.6	18.5	16.9	15.4	13.1	11.5	10.0	8.5	6.9
77.5°	20.0	17.7	15.4	13.9	13.1	10.8	9.2	8.5	7.7	6.2	4.6
80°	13.9	12.3	10.0	9.2	9.2	7.7	6.9	6.2	5.4	3.8	3.1
82.5°	9.2	8.5	7.7	6.9	6.2	5.4	5.4	3.8	3.1	2.3	1.5
85°	6.9	6.2	5.4	4.6	4.6	3.8	3.1	2.3	2.3	1.5	0.8
87.5°	3.8	3.8	3.1	2.3	2.3	1.5	1.5	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°	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6
2.5°	2956.8	2959.1	2972.2	2962.2	2987.6	3006.1	2996.8	3017.6	3010.7	3009.2	3033.0
5°	2976.8	2982.2	2999.9	2990.7	3018.4	3038.4	3029.2	3052.3	3045.3	3043.8	3068.4
7.5°	3015.3	3020.7	3036.1	3028.4	3057.7	3075.4	3063.8	3089.2	3080.0	3079.2	3103.1
10°	3063.8	3071.5	3084.6	3076.9	3103.9	3119.3	3107.7	3132.4	3123.9	3120.0	3146.2
12.5°	3100.0	3105.4	3118.5	3112.3	3138.5	3150.1	3140.1	3163.9	3153.1	3150.1	3173.2
15°	3091.5	3096.9	3107.7	3102.3	3127.0	3137.7	3124.7	3150.8	3140.1	3133.9	3154.7
17.5°	3037.6	3040.7	3048.4	3043.0	3069.2	3076.1	3061.5	3087.7	3077.7	3066.9	3086.9
20°	2958.3	2956.8	2961.4	2959.1	2980.7	2984.5	2975.3	2994.5	2983.0	2976.8	2988.4
22.5°	2859.8	2858.2	2861.3	2855.2	2876.7	2879.0	2865.2	2888.3	2876.7	2865.2	2884.4
25°	2750.4	2742.0	2740.4	2742.7	2757.4	2759.7	2745.0	2762.0	2747.4	2738.1	2756.6
27.5°	2615.7	2604.9	2602.6	2604.9	2619.5	2608.8	2596.4	2608.8	2594.1	2585.7	2597.2
30°	2449.4	2434.0	2427.0	2422.4	2437.8	2434.0	2405.5	2419.3	2396.2	2383.9	2392.4
32.5°	2225.3	2216.8	2198.3	2187.6	2202.2	2172.9	2155.2	2155.2	2146.0	2125.2	2129.8
35°	1914.2	1901.1	1884.2	1874.9	1877.3	1838.0	1808.7	1814.9	1784.1	1778.7	1781.0
37.5°	1520.7	1499.2	1493.0	1473.8	1478.4	1443.7	1403.7	1404.5	1388.3	1371.4	1366.0
40°	1142.7	1138.8	1132.7	1116.5	1122.7	1084.9	1069.5	1070.3	1059.5	1047.2	1053.4
42.5°	883.2	870.9	867.0	861.6	863.2	857.0	837.0	839.3	830.1	827.0	823.9
45°	717.6	704.5	695.3	699.9	699.9	693.0	685.3	689.9	685.3	679.1	682.2
47.5°	591.4	579.0	574.4	573.6	579.0	574.4	566.7	568.3	567.5	565.2	563.6
50°	472.0	468.9	465.1	462.8	465.1	463.5	456.6	460.5	462.8	455.1	457.4
52.5°	359.6	359.6	358.8	353.4	358.0	353.4	352.7	354.2	351.9	348.8	348.0
55°	263.3	261.0	257.2	256.4	257.9	256.4	254.9	255.6	257.2	249.5	249.5
57.5°	180.2	178.6	176.3	176.3	179.4	175.6	173.2	176.3	173.2	170.2	170.2
60°	115.5	114.7	112.4	112.4	112.4	111.6	109.3	110.1	111.6	107.0	107.8
62.5°	69.3	67.0	66.2	65.4	66.2	65.4	65.4	64.7	63.9	63.9	61.6
65°	37.7	36.2	34.6	35.4	35.4	34.6	34.6	34.6	33.1	32.3	31.6
67.5°	19.2	17.7	17.7	16.9	16.9	16.9	16.9	16.2	16.2	16.2	15.4
70°	12.3	11.5	10.8	10.8	10.8	10.0	10.0	10.0	10.0	10.0	9.2
72.5°	8.5	7.7	6.9	6.9	6.9	6.2	6.2	6.2	6.2	5.4	5.4
75°	6.2	5.4	4.6	4.6	4.6	3.8	3.8	3.8	3.8	3.8	3.8
77.5°	3.8	3.1	3.1	3.1	3.1	2.3	2.3	2.3	2.3	2.3	1.5
80°	2.3	2.3	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8	0.8
82.5°	1.5	1.5	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: P245398

CATALOG NUMBER: LSR8B40D010 EC8B40835 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6	2930.6
2.5°	3024.6	3018.4	3022.2	3050.7	3038.4	3034.6	3002.2	3030.7
5°	3060.7	3056.1	3056.1	3088.5	3073.8	3070.8	3039.2	3063.8
7.5°	3094.6	3090.0	3090.8	3123.9	3112.3	3107.7	3076.1	3100.8
10°	3138.5	3135.4	3136.2	3167.8	3155.5	3150.8	3118.5	3143.9
12.5°	3164.7	3160.1	3160.1	3194.0	3180.1	3173.2	3142.4	3167.0
15°	3144.7	3137.7	3137.7	3171.6	3156.2	3146.2	3119.3	3142.4
17.5°	3076.1	3069.2	3069.2	3098.5	3086.9	3072.3	3044.6	3066.1
20°	2980.7	2972.2	2969.9	3003.8	2987.6	2974.5	2949.9	2970.7
22.5°	2872.9	2869.0	2862.1	2896.0	2881.3	2867.5	2841.3	2857.5
25°	2743.5	2737.3	2730.4	2763.5	2748.9	2735.0	2714.2	2727.3
27.5°	2582.6	2583.3	2579.5	2605.7	2591.0	2583.3	2557.9	2579.5
30°	2387.8	2379.3	2376.2	2407.0	2393.2	2383.1	2351.6	2372.4
32.5°	2133.7	2121.3	2105.2	2139.8	2116.0	2107.5	2080.5	2110.6
35°	1764.1	1760.2	1745.6	1774.8	1761.8	1746.4	1729.4	1754.8
37.5°	1363.7	1366.7	1365.2	1372.9	1365.2	1355.2	1336.7	1327.5
40°	1041.0	1033.3	1027.2	1041.0	1024.9	1024.9	1014.1	1025.6
42.5°	816.2	813.1	820.8	823.9	814.7	813.1	811.6	810.8
45°	673.7	673.7	675.3	678.4	675.3	673.7	669.1	666.0
47.5°	555.2	558.2	555.2	565.2	559.8	558.2	549.0	552.9
50°	449.7	445.8	449.7	452.8	453.5	448.9	444.3	446.6
52.5°	348.8	342.6	341.1	345.7	342.6	342.6	339.6	338.8
55°	245.6	247.9	244.1	247.9	246.4	244.1	241.8	244.9
57.5°	166.3	167.1	165.5	167.9	164.0	164.8	164.0	163.2
60°	107.8	104.7	104.7	107.0	103.2	103.2	102.4	102.4
62.5°	61.6	60.8	60.8	60.1	59.3	59.3	59.3	57.7
65°	31.6	30.8	30.0	30.0	30.0	30.0	29.3	29.3
67.5°	15.4	14.6	14.6	15.4	14.6	14.6	14.6	14.6
70°	9.2	9.2	8.5	9.2	8.5	8.5	8.5	8.5
72.5°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
75°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
77.5°	2.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)