

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: P249282

Luminaire Tested: **LSR8B80D010 EC8B809727 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249282
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: LSR8B80D010 EC8B809727 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5879.0 lumens
Efficiency: N/A
Efficacy: 79.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

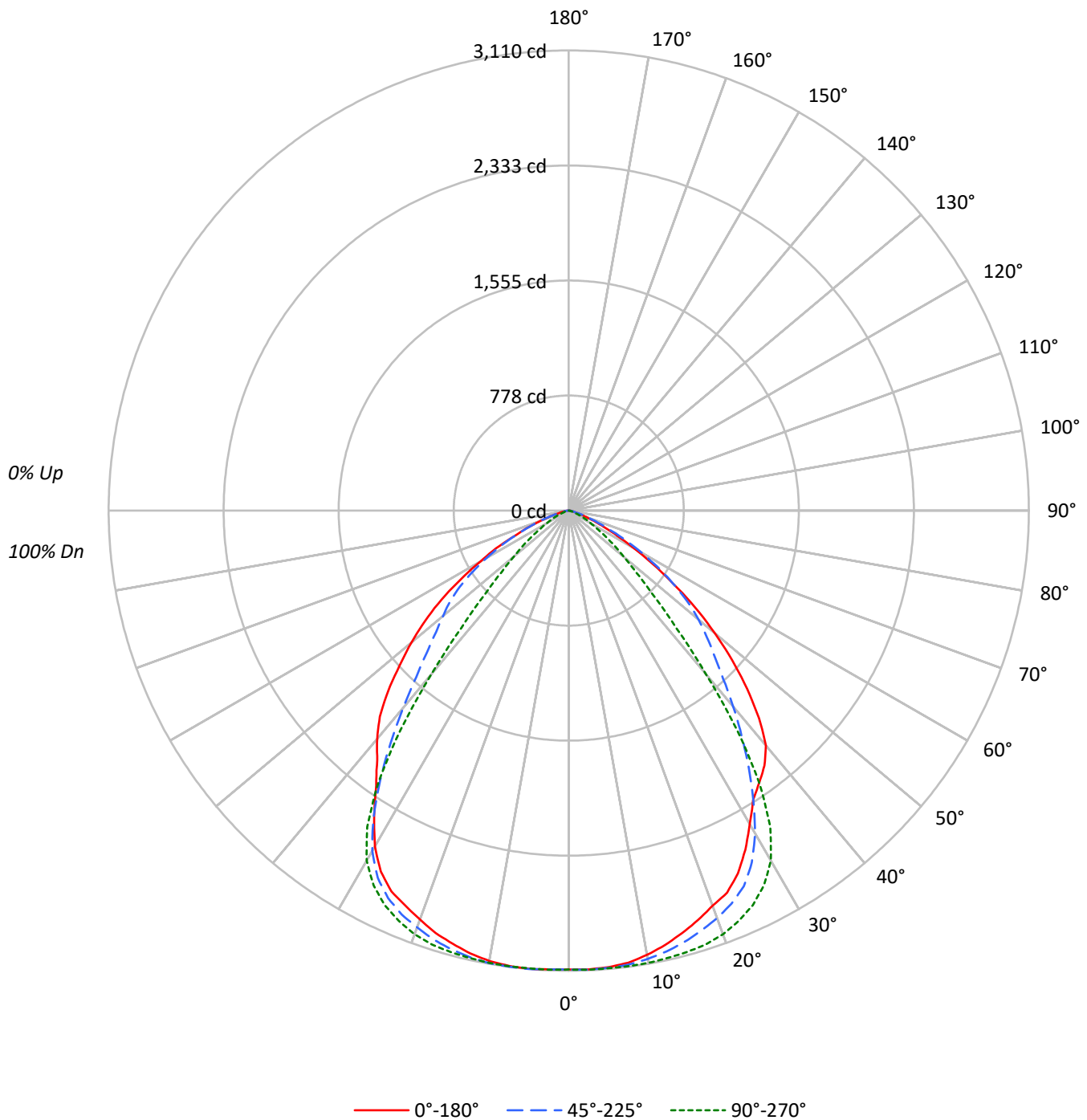
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34			

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°	296.0	5.0
10°-20°	859.7	14.6
20°-30°	1304.9	22.2
30°-40°	1370.5	23.3
40°-50°	1027.5	17.5
50°-60°	659.3	11.2
60°-70°	282.0	4.8
70°-80°	66.6	1.1
80°-90°	12.4	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°	2460.6	41.9
0°-40°	3831.1	65.2
0°-60°	5517.9	93.9
0°-90°	5879.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5879.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3102	3102	3102	3102	3102	
5°	3097	3102	3105	3110	3109	294
15°	2957	3019	3089	3069	3030	834
25°	2706	2800	2942	2889	2839	1236
35°	2244	2120	2246	2219	2269	1409
45°	1705	1394	801	1354	1728	1306
55°	862	862	298	899	1051	782
65°	260	306	95	395	401	277
75°	40	47	13	80	78	58
85°	13	8	7	13	18	14
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°	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9
2.5°	3103.5	3106.9	3105.2	3105.2	3103.5	3105.2	3105.2	3108.6	3108.6	3105.2	3103.5
5°	3096.9	3100.2	3100.2	3096.9	3096.9	3105.2	3100.2	3103.5	3103.5	3101.9	3101.9
7.5°	3081.9	3081.9	3088.6	3083.6	3083.6	3088.6	3086.9	3090.2	3093.6	3095.2	3095.2
10°	3048.6	3051.9	3053.6	3053.6	3055.3	3060.2	3063.6	3070.3	3073.6	3076.9	3078.6
12.5°	3007.0	3012.0	3013.6	3012.0	3017.0	3023.6	3032.0	3040.3	3045.3	3051.9	3056.9
15°	2957.0	2957.0	2960.3	2965.4	2968.7	2978.7	2987.0	2997.0	3010.3	3018.6	3027.0
17.5°	2902.1	2905.4	2910.4	2910.4	2917.1	2933.7	2938.7	2953.7	2968.7	2977.0	2993.7
20°	2842.2	2845.5	2850.5	2853.8	2862.1	2875.4	2885.4	2898.7	2915.4	2930.4	2947.0
22.5°	2795.5	2788.9	2792.2	2795.5	2803.9	2815.5	2827.2	2843.8	2860.5	2875.4	2892.1
25°	2705.6	2707.3	2712.3	2715.6	2725.6	2735.6	2748.9	2768.9	2783.9	2800.5	2818.8
27.5°	2584.1	2585.7	2594.1	2594.1	2602.4	2619.0	2627.3	2644.0	2664.0	2680.6	2702.3
30°	2445.9	2449.2	2449.2	2455.9	2460.8	2469.2	2477.5	2494.2	2504.1	2519.1	2549.1
32.5°	2319.3	2322.6	2321.0	2319.3	2314.3	2312.7	2311.0	2314.3	2317.7	2322.6	2334.3
35°	2244.4	2236.1	2229.4	2217.8	2204.5	2187.8	2172.8	2152.8	2134.5	2119.5	2102.9
37.5°	2172.8	2171.1	2161.2	2144.5	2117.9	2087.9	2053.0	2009.6	1966.3	1919.7	1874.8
40°	2072.9	2067.9	2059.6	2036.3	2006.3	1969.7	1923.1	1869.8	1799.8	1728.3	1655.0
42.5°	1903.1	1904.7	1894.8	1876.4	1848.2	1813.2	1764.9	1706.6	1631.7	1546.8	1451.9
45°	1705.0	1705.0	1701.6	1686.6	1666.7	1638.3	1601.7	1553.4	1480.2	1393.6	1292.0
47.5°	1498.5	1500.2	1495.1	1491.8	1483.5	1465.2	1438.6	1401.9	1350.3	1267.0	1165.5
50°	1288.7	1288.7	1297.0	1295.4	1295.4	1288.7	1277.1	1255.4	1210.5	1143.8	1049.0
52.5°	1078.9	1082.2	1087.3	1093.9	1102.2	1115.5	1102.2	1092.2	1063.9	1012.3	930.7
55°	862.5	865.8	874.1	885.8	895.8	909.1	912.4	912.4	897.4	862.5	800.9
57.5°	677.7	672.7	679.3	689.3	702.6	716.0	725.9	737.6	735.9	712.6	662.7
60°	509.5	511.2	516.1	526.2	536.1	547.8	561.1	571.1	576.1	564.4	532.8
62.5°	371.3	371.3	377.9	387.9	392.9	409.6	417.9	422.9	427.9	426.2	406.3
65°	259.8	263.1	266.4	271.4	276.4	286.4	291.4	301.4	304.7	306.4	291.4
67.5°	183.2	178.2	181.5	184.8	189.8	196.5	206.5	206.5	211.4	211.4	201.5
70°	116.6	116.6	118.2	123.2	126.5	128.2	131.5	134.8	139.9	138.2	138.2
72.5°	78.3	76.6	78.3	79.9	81.6	86.6	86.6	88.2	91.6	93.3	86.6
75°	40.0	41.6	44.9	43.3	48.3	44.9	46.6	51.6	49.9	46.6	46.6
77.5°	33.3	33.3	33.3	31.7	35.0	35.0	33.3	36.6	35.0	35.0	33.3
80°	23.3	25.0	23.3	21.6	23.3	21.6	21.6	21.6	21.6	21.6	20.0
82.5°	18.3	15.0	16.7	15.0	16.7	16.7	15.0	13.3	13.3	15.0	13.3
85°	13.3	10.0	11.7	11.7	10.0	10.0	10.0	10.0	10.0	8.3	8.3
87.5°	8.3	5.0	5.0	5.0	6.6	6.6	6.6	5.0	6.6	6.6	3.3
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°	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9
2.5°	3106.9	3105.2	3108.6	3106.9	3106.9	3105.2	3106.9	3105.2	3108.6	3101.9	3103.5
5°	3106.9	3103.5	3105.2	3106.9	3108.6	3105.2	3105.2	3105.2	3108.6	3105.2	3106.9
7.5°	3100.2	3098.5	3103.5	3106.9	3105.2	3103.5	3106.9	3105.2	3108.6	3106.9	3110.2
10°	3086.9	3088.6	3091.9	3096.9	3098.5	3100.2	3103.5	3103.5	3108.6	3101.9	3105.2
12.5°	3066.9	3073.6	3081.9	3085.2	3091.9	3091.9	3095.2	3096.9	3100.2	3098.5	3103.5
15°	3041.9	3050.3	3060.2	3068.6	3076.9	3081.9	3086.9	3088.6	3093.6	3088.6	3090.2
17.5°	3012.0	3021.9	3036.9	3046.9	3060.2	3065.3	3071.9	3075.2	3080.2	3076.9	3078.6
20°	2970.3	2982.0	2998.6	3013.6	3021.9	3033.6	3041.9	3046.9	3050.3	3046.9	3048.6
22.5°	2912.1	2928.7	2950.4	2962.0	2978.7	2988.7	2990.3	3002.0	3010.3	3002.0	3005.3
25°	2843.8	2860.5	2877.1	2902.1	2917.1	2928.7	2940.4	2942.1	2950.4	2948.7	2947.0
27.5°	2730.6	2752.2	2780.5	2800.5	2820.5	2838.8	2852.1	2855.4	2863.8	2860.5	2862.1
30°	2575.7	2599.1	2625.7	2657.3	2685.6	2703.9	2720.6	2732.2	2740.6	2735.6	2733.9
32.5°	2356.0	2379.3	2407.6	2439.2	2472.5	2499.1	2519.1	2534.1	2544.1	2540.8	2532.5
35°	2104.6	2111.2	2129.5	2154.5	2182.8	2211.1	2229.4	2246.1	2257.7	2261.1	2261.1
37.5°	1846.5	1824.9	1811.5	1811.5	1828.2	1839.8	1856.5	1866.4	1884.8	1891.4	1896.4
40°	1596.7	1546.8	1500.2	1465.2	1441.9	1440.2	1440.2	1445.2	1461.9	1483.5	1503.5
42.5°	1373.6	1293.7	1222.1	1157.2	1110.6	1083.9	1072.3	1073.9	1087.3	1107.2	1140.5
45°	1195.5	1095.6	1005.7	927.4	864.1	822.5	802.5	800.9	810.8	834.1	870.8
47.5°	1057.3	950.7	849.1	759.2	691.0	646.0	622.7	616.1	622.7	644.3	687.6
50°	942.4	832.5	727.6	634.4	561.1	514.5	492.8	484.5	492.8	511.2	554.4
52.5°	835.8	722.6	624.4	534.5	456.2	416.2	392.9	387.9	392.9	414.6	449.6
55°	712.6	616.1	519.5	429.6	361.3	321.4	303.0	298.1	303.0	323.0	359.6
57.5°	591.1	507.8	422.9	341.3	283.1	248.1	231.4	224.8	236.4	249.7	293.0
60°	477.8	411.3	339.6	268.1	219.8	188.1	174.8	173.1	176.5	193.1	223.1
62.5°	374.6	319.7	263.1	204.8	164.8	151.5	134.8	133.2	136.5	146.5	169.8
65°	269.7	234.8	191.5	149.8	118.2	99.9	93.3	94.9	98.2	104.9	126.5
67.5°	188.1	163.2	133.2	104.9	81.6	73.3	66.6	64.9	66.6	78.3	89.9
70°	126.5	111.5	89.9	79.9	56.6	44.9	46.6	41.6	48.3	48.3	58.3
72.5°	83.2	73.3	59.9	46.6	40.0	31.7	31.7	30.0	33.3	35.0	43.3
75°	43.3	33.3	33.3	23.3	16.7	8.3	15.0	13.3	11.7	13.3	16.7
77.5°	30.0	25.0	23.3	18.3	16.7	13.3	13.3	13.3	13.3	15.0	16.7
80°	18.3	18.3	13.3	11.7	10.0	8.3	10.0	10.0	10.0	10.0	11.7
82.5°	11.7	10.0	10.0	8.3	8.3	6.6	6.6	6.6	6.6	6.6	10.0
85°	10.0	6.6	6.6	5.0	6.6	11.7	5.0	6.6	6.6	6.6	5.0
87.5°	3.3	5.0	5.0	5.0	3.3	1.7	3.3	5.0	5.0	8.3	6.6
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°	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9
2.5°	3106.9	3108.6	3108.6	3106.9	3106.9	3103.5	3110.2	3105.2	3106.9	3113.5	3108.6
5°	3110.2	3111.9	3111.9	3110.2	3110.2	3110.2	3111.9	3111.9	3110.2	3108.6	3111.9
7.5°	3116.9	3115.2	3115.2	3111.9	3111.9	3108.6	3111.9	3106.9	3110.2	3106.9	3111.9
10°	3108.6	3110.2	3108.6	3106.9	3106.9	3105.2	3105.2	3100.2	3101.9	3096.9	3100.2
12.5°	3103.5	3101.9	3101.9	3098.5	3095.2	3091.9	3090.2	3085.2	3085.2	3073.6	3078.6
15°	3090.2	3091.9	3086.9	3080.2	3076.9	3068.6	3065.3	3058.6	3051.9	3043.6	3045.3
17.5°	3078.6	3073.6	3066.9	3060.2	3046.9	3040.3	3033.6	3023.6	3020.3	3010.3	3007.0
20°	3043.6	3040.3	3032.0	3020.3	3012.0	2997.0	2990.3	2980.3	2972.0	2962.0	2957.0
22.5°	2998.6	2995.3	2985.3	2973.7	2960.3	2953.7	2947.0	2928.7	2920.4	2910.4	2908.7
25°	2942.1	2937.0	2927.1	2913.7	2907.1	2888.8	2882.1	2868.8	2865.5	2855.4	2853.8
27.5°	2855.4	2848.8	2837.1	2820.5	2808.8	2797.2	2790.5	2780.5	2777.2	2767.2	2765.6
30°	2725.6	2717.3	2694.0	2687.3	2667.3	2655.7	2655.7	2642.3	2644.0	2637.4	2637.4
32.5°	2520.8	2507.5	2489.2	2475.8	2462.5	2455.9	2455.9	2450.9	2454.2	2454.2	2457.5
35°	2249.4	2231.1	2221.1	2212.8	2212.8	2219.4	2239.4	2244.4	2254.4	2262.7	2269.4
37.5°	1901.4	1899.8	1911.4	1921.4	1946.4	1974.7	2009.6	2039.6	2067.9	2087.9	2107.9
40°	1525.1	1566.8	1600.0	1646.7	1685.0	1739.9	1803.2	1854.8	1903.1	1938.1	1974.7
42.5°	1190.5	1243.7	1313.7	1381.9	1450.2	1525.1	1608.4	1680.0	1743.2	1791.5	1829.8
45°	927.4	1000.6	1085.6	1172.2	1260.4	1353.7	1440.2	1513.5	1580.1	1630.0	1668.3
47.5°	747.6	827.5	924.1	1019.0	1118.9	1217.1	1313.7	1377.0	1431.9	1471.8	1506.8
50°	617.7	702.6	804.2	912.4	1012.3	1110.6	1193.8	1255.4	1300.4	1335.3	1357.0
52.5°	516.1	606.0	714.3	822.5	922.4	1012.3	1087.3	1133.9	1170.5	1195.5	1215.4
55°	426.2	512.8	614.4	716.0	814.2	899.1	960.7	995.7	1024.0	1038.9	1050.6
57.5°	348.0	427.9	521.1	614.4	699.3	769.2	817.5	852.5	865.8	877.5	875.8
60°	273.1	348.0	432.9	512.8	586.1	642.7	677.7	697.6	707.6	712.6	709.3
62.5°	214.8	283.1	348.0	417.9	471.2	519.5	552.8	552.8	557.8	559.4	564.4
65°	159.8	211.4	268.1	319.7	363.0	394.6	412.9	417.9	424.6	422.9	419.6
67.5°	118.2	156.5	198.1	236.4	266.4	286.4	299.7	311.4	309.7	306.4	304.7
70°	81.6	106.6	143.2	166.5	188.1	208.1	211.4	213.1	214.8	216.4	213.1
72.5°	56.6	74.9	94.9	114.9	128.2	136.5	144.9	146.5	146.5	146.5	144.9
75°	28.3	38.3	56.6	64.9	76.6	79.9	86.6	86.6	91.6	84.9	83.2
77.5°	25.0	30.0	40.0	46.6	51.6	56.6	58.3	63.3	61.6	58.3	59.9
80°	15.0	18.3	25.0	28.3	35.0	36.6	38.3	40.0	38.3	40.0	40.0
82.5°	11.7	13.3	16.7	16.7	21.6	21.6	23.3	23.3	25.0	25.0	25.0
85°	6.6	11.7	10.0	20.0	13.3	13.3	16.7	20.0	16.7	16.7	20.0
87.5°	6.6	6.6	5.0	6.6	6.6	6.6	8.3	10.0	10.0	11.7	10.0
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: P249282

CATALOG NUMBER: LSR8B80D010 EC8B809727 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3101.9	3101.9	3101.9	3101.9
2.5°	3106.9	3110.2	3105.2	3103.5
5°	3111.9	3111.9	3108.6	3108.6
7.5°	3111.9	3111.9	3106.9	3103.5
10°	3098.5	3098.5	3093.6	3090.2
12.5°	3073.6	3073.6	3071.9	3066.9
15°	3041.9	3041.9	3035.3	3030.3
17.5°	2998.6	3002.0	2993.7	2993.7
20°	2952.0	2950.4	2943.7	2940.4
22.5°	2903.8	2900.4	2898.7	2888.8
25°	2852.1	2848.8	2843.8	2838.8
27.5°	2763.9	2762.2	2757.2	2750.6
30°	2629.0	2627.3	2620.7	2620.7
32.5°	2454.2	2452.5	2445.9	2447.6
35°	2272.7	2279.4	2276.0	2269.4
37.5°	2121.2	2126.2	2129.5	2126.2
40°	1994.7	2009.6	2011.3	2014.7
42.5°	1859.8	1879.8	1886.4	1889.7
45°	1698.3	1716.6	1731.6	1728.3
47.5°	1533.4	1546.8	1560.1	1550.1
50°	1375.3	1383.6	1388.6	1388.6
52.5°	1225.4	1225.4	1223.8	1225.4
55°	1053.9	1053.9	1047.3	1050.6
57.5°	874.1	877.5	872.4	864.1
60°	707.6	699.3	696.0	691.0
62.5°	551.1	551.1	539.5	554.4
65°	412.9	407.9	402.9	401.2
67.5°	299.7	298.1	293.0	291.4
70°	211.4	204.8	203.1	199.8
72.5°	141.5	141.5	138.2	138.2
75°	86.6	78.3	76.6	78.3
77.5°	59.9	58.3	58.3	56.6
80°	40.0	38.3	41.6	36.6
82.5°	25.0	26.6	25.0	26.6
85°	16.7	20.0	18.3	18.3
87.5°	10.0	10.0	10.0	10.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)