

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: P249290

Luminaire Tested: **LSR8B70D010 EC8B709730 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249290  
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: LSR8B70D010 EC8B709730 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5593.0 lumens  
Efficiency: N/A  
Efficacy: 73.7 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

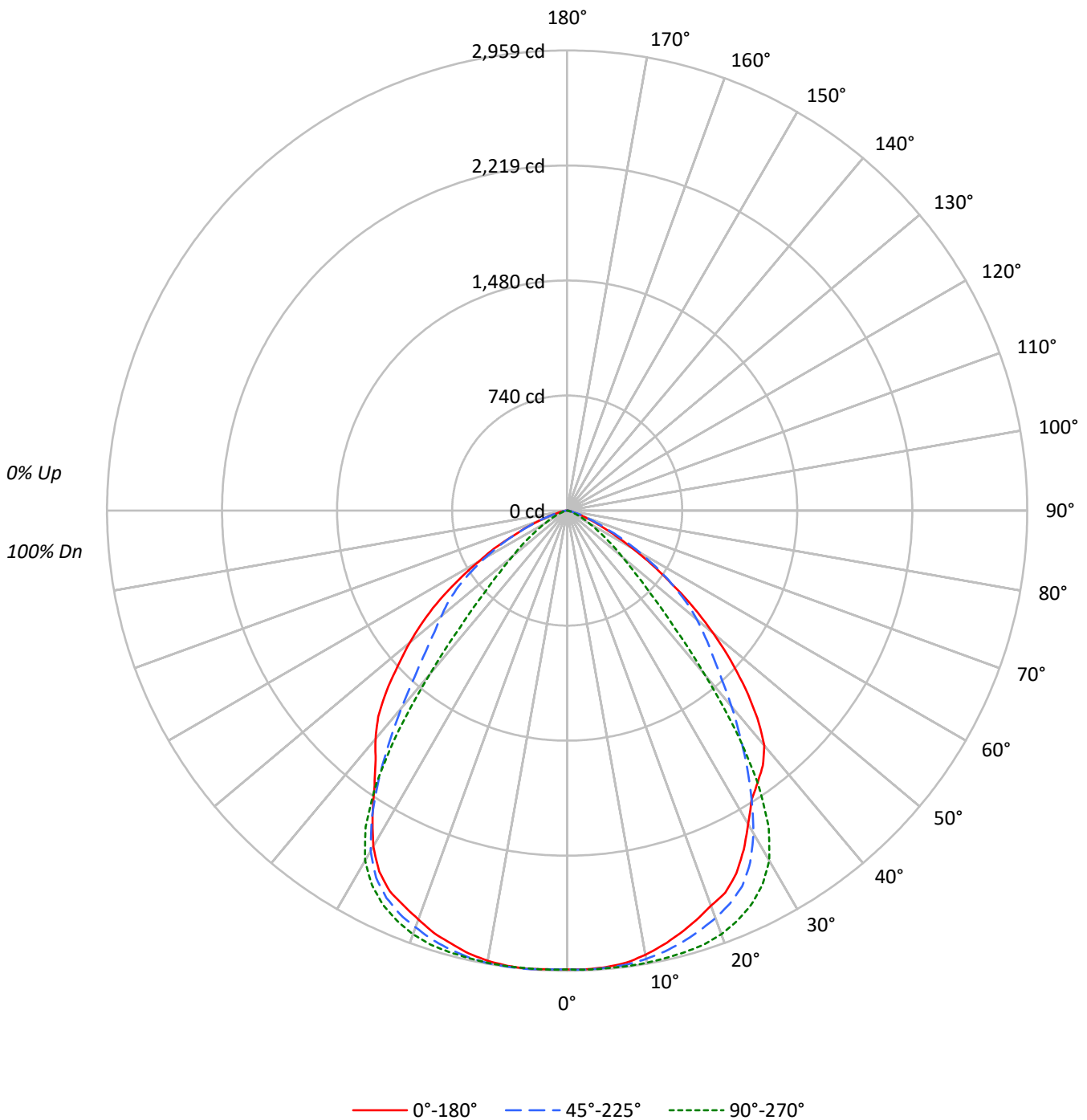
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	281.6	5.0
10°-20°	817.9	14.6
20°-30°	1241.4	22.2
30°-40°	1303.8	23.3
40°-50°	977.5	17.5
50°-60°	627.2	11.2
60°-70°	268.3	4.8
70°-80°	63.4	1.1
80°-90°	11.8	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°	2340.9	41.9
0°-40°	3644.8	65.2
0°-60°	5249.5	93.9
0°-90°	5593.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5593.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2951	2951	2951	2951	2951	
5°	2946	2951	2954	2959	2957	280
15°	2813	2872	2938	2919	2883	793
25°	2574	2664	2799	2748	2701	1176
35°	2135	2016	2137	2111	2159	1340
45°	1622	1326	762	1288	1644	1242
55°	820	820	284	855	1000	744
65°	247	292	90	375	382	264
75°	38	44	13	76	74	55
85°	13	8	6	13	17	13
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°	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0
2.5°	2952.6	2955.7	2954.2	2954.2	2952.6	2954.2	2954.2	2957.3	2957.3	2954.2	2952.6
5°	2946.2	2949.4	2949.4	2946.2	2946.2	2954.2	2949.4	2952.6	2952.6	2951.0	2951.0
7.5°	2932.0	2932.0	2938.3	2933.6	2933.6	2938.3	2936.7	2939.9	2943.1	2944.7	2944.7
10°	2900.3	2903.5	2905.0	2905.0	2906.6	2911.4	2914.5	2920.9	2924.0	2927.2	2928.8
12.5°	2860.7	2865.4	2867.0	2865.4	2870.2	2876.5	2884.5	2892.4	2897.1	2903.5	2908.2
15°	2813.2	2813.2	2816.3	2821.1	2824.3	2833.8	2841.7	2851.2	2863.8	2871.8	2879.7
17.5°	2760.9	2764.1	2768.8	2768.8	2775.2	2791.0	2795.8	2810.0	2824.3	2832.2	2848.0
20°	2703.9	2707.0	2711.8	2715.0	2722.9	2735.6	2745.1	2757.7	2773.6	2787.8	2803.7
22.5°	2659.5	2653.2	2656.3	2659.5	2667.5	2678.5	2689.6	2705.4	2721.3	2735.6	2751.4
25°	2574.0	2575.6	2580.3	2583.5	2593.0	2602.5	2615.2	2634.2	2648.4	2664.3	2681.7
27.5°	2458.4	2460.0	2467.9	2467.9	2475.8	2491.6	2499.5	2515.4	2534.4	2550.2	2570.8
30°	2326.9	2330.0	2330.0	2336.4	2341.1	2349.1	2357.0	2372.8	2382.3	2396.6	2425.1
32.5°	2206.5	2209.7	2208.1	2206.5	2201.8	2200.2	2198.6	2201.8	2204.9	2209.7	2220.7
35°	2135.2	2127.3	2121.0	2109.9	2097.2	2081.4	2067.1	2048.1	2030.7	2016.4	2000.6
37.5°	2067.1	2065.5	2056.0	2040.2	2014.8	1986.3	1953.1	1911.9	1870.7	1826.3	1783.6
40°	1972.1	1967.3	1959.4	1937.2	1908.7	1873.9	1829.5	1778.8	1712.3	1644.2	1574.5
42.5°	1810.5	1812.1	1802.6	1785.1	1758.2	1725.0	1679.0	1623.6	1552.3	1471.5	1381.2
45°	1622.0	1622.0	1618.8	1604.6	1585.6	1558.6	1523.8	1477.9	1408.2	1325.8	1229.2
47.5°	1425.6	1427.2	1422.4	1419.3	1411.3	1393.9	1368.6	1333.7	1284.6	1205.4	1108.8
50°	1226.0	1226.0	1233.9	1232.3	1232.3	1226.0	1214.9	1194.3	1151.6	1088.2	997.9
52.5°	1026.4	1029.6	1034.4	1040.7	1048.6	1061.3	1048.6	1039.1	1012.2	963.1	885.5
55°	820.5	823.7	831.6	842.7	852.2	864.9	868.0	868.0	853.8	820.5	761.9
57.5°	644.7	639.9	646.3	655.8	668.5	681.1	690.6	701.7	700.1	678.0	630.4
60°	484.7	486.3	491.0	500.6	510.1	521.1	533.8	543.3	548.1	537.0	506.9
62.5°	353.2	353.2	359.6	369.1	373.8	389.7	397.6	402.3	407.1	405.5	386.5
65°	247.1	250.3	253.4	258.2	262.9	272.4	277.2	286.7	289.9	291.5	277.2
67.5°	174.3	169.5	172.7	175.8	180.6	186.9	196.4	196.4	201.2	201.2	191.7
70°	110.9	110.9	112.5	117.2	120.4	122.0	125.1	128.3	133.1	131.5	131.5
72.5°	74.5	72.9	74.5	76.0	77.6	82.4	82.4	83.9	87.1	88.7	82.4
75°	38.0	39.6	42.8	41.2	45.9	42.8	44.3	49.1	47.5	44.3	44.3
77.5°	31.7	31.7	31.7	30.1	33.3	33.3	31.7	34.8	33.3	33.3	31.7
80°	22.2	23.8	22.2	20.6	22.2	20.6	20.6	20.6	20.6	20.6	19.0
82.5°	17.4	14.3	15.9	14.3	15.9	15.9	14.3	12.7	12.7	14.3	12.7
85°	12.7	9.5	11.1	11.1	9.5	9.5	9.5	9.5	9.5	7.9	7.9
87.5°	7.9	4.8	4.8	4.8	6.3	6.3	6.3	4.8	6.3	6.3	3.2
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°	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0
2.5°	2955.7	2954.2	2957.3	2955.7	2955.7	2954.2	2955.7	2954.2	2957.3	2951.0	2952.6
5°	2955.7	2952.6	2954.2	2955.7	2957.3	2954.2	2954.2	2954.2	2957.3	2954.2	2955.7
7.5°	2949.4	2947.8	2952.6	2955.7	2954.2	2952.6	2955.7	2954.2	2957.3	2955.7	2958.9
10°	2936.7	2938.3	2941.5	2946.2	2947.8	2949.4	2952.6	2952.6	2957.3	2951.0	2954.2
12.5°	2917.7	2924.0	2932.0	2935.1	2941.5	2941.5	2944.7	2946.2	2949.4	2947.8	2952.6
15°	2894.0	2901.9	2911.4	2919.3	2927.2	2932.0	2936.7	2938.3	2943.1	2938.3	2939.9
17.5°	2865.4	2874.9	2889.2	2898.7	2911.4	2916.1	2922.5	2925.6	2930.4	2927.2	2928.8
20°	2825.8	2837.0	2852.8	2867.0	2874.9	2886.0	2894.0	2898.7	2901.9	2898.7	2900.3
22.5°	2770.4	2786.3	2806.8	2817.9	2833.8	2843.3	2844.9	2855.9	2863.8	2855.9	2859.1
25°	2705.4	2721.3	2737.1	2760.9	2775.2	2786.3	2797.3	2798.9	2806.8	2805.2	2803.7
27.5°	2597.7	2618.4	2645.3	2664.3	2683.3	2700.7	2713.4	2716.5	2724.5	2721.3	2722.9
30°	2450.4	2472.6	2498.0	2528.1	2555.0	2572.4	2588.2	2599.3	2607.2	2602.5	2600.9
32.5°	2241.4	2263.5	2290.5	2320.5	2352.2	2377.6	2396.6	2410.8	2420.3	2417.2	2409.3
35°	2002.2	2008.5	2025.9	2049.7	2076.6	2103.5	2121.0	2136.8	2147.9	2151.1	2151.1
37.5°	1756.7	1736.1	1723.4	1723.4	1739.2	1750.3	1766.2	1775.6	1793.1	1799.4	1804.2
40°	1519.0	1471.5	1427.2	1393.9	1371.8	1370.2	1370.2	1374.9	1390.7	1411.3	1430.4
42.5°	1306.8	1230.8	1162.7	1100.9	1056.5	1031.2	1020.1	1021.7	1034.4	1053.4	1085.0
45°	1137.3	1042.3	956.7	882.3	822.1	782.5	763.5	761.9	771.4	793.6	828.4
47.5°	1005.8	904.5	807.8	722.3	657.4	614.6	592.4	586.1	592.4	613.0	654.2
50°	896.5	792.0	692.2	603.5	533.8	489.5	468.9	460.9	468.9	486.3	527.5
52.5°	795.2	687.4	594.0	508.5	434.0	396.0	373.8	369.1	373.8	394.4	427.7
55°	678.0	586.1	494.2	408.7	343.7	305.7	288.3	283.6	288.3	307.3	342.2
57.5°	562.3	483.1	402.3	324.7	269.3	236.0	220.2	213.8	224.9	237.6	278.8
60°	454.6	391.3	323.1	255.0	209.1	179.0	166.3	164.7	167.9	183.8	212.2
62.5°	356.4	304.1	250.3	194.8	156.8	144.1	128.3	126.7	129.9	139.4	161.6
65°	256.6	223.4	182.2	142.6	112.5	95.0	88.7	90.3	93.4	99.8	120.4
67.5°	179.0	155.2	126.7	99.8	77.6	69.7	63.4	61.8	63.4	74.5	85.5
70°	120.4	106.1	85.5	76.0	53.9	42.8	44.3	39.6	45.9	45.9	55.4
72.5°	79.2	69.7	57.0	44.3	38.0	30.1	30.1	28.5	31.7	33.3	41.2
75°	41.2	31.7	31.7	22.2	15.9	7.9	14.3	12.7	11.1	12.7	15.9
77.5°	28.5	23.8	22.2	17.4	15.9	12.7	12.7	12.7	12.7	14.3	15.9
80°	17.4	17.4	12.7	11.1	9.5	7.9	9.5	9.5	9.5	9.5	11.1
82.5°	11.1	9.5	9.5	7.9	7.9	6.3	6.3	6.3	6.3	6.3	9.5
85°	9.5	6.3	6.3	4.8	6.3	11.1	4.8	6.3	6.3	6.3	4.8
87.5°	3.2	4.8	4.8	4.8	3.2	1.6	3.2	4.8	4.8	7.9	6.3
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0	2951.0
2.5°	2955.7	2957.3	2957.3	2955.7	2955.7	2952.6	2958.9	2954.2	2955.7	2962.1	2957.3
5°	2958.9	2960.5	2960.5	2958.9	2958.9	2958.9	2960.5	2960.5	2958.9	2957.3	2960.5
7.5°	2965.2	2963.7	2963.7	2960.5	2960.5	2957.3	2960.5	2955.7	2958.9	2955.7	2960.5
10°	2957.3	2958.9	2957.3	2955.7	2955.7	2954.2	2954.2	2949.4	2951.0	2946.2	2949.4
12.5°	2952.6	2951.0	2951.0	2947.8	2944.7	2941.5	2939.9	2935.1	2935.1	2924.0	2928.8
15°	2939.9	2941.5	2936.7	2930.4	2927.2	2919.3	2916.1	2909.8	2903.5	2895.6	2897.1
17.5°	2928.8	2924.0	2917.7	2911.4	2898.7	2892.4	2886.0	2876.5	2873.3	2863.8	2860.7
20°	2895.6	2892.4	2884.5	2873.3	2865.4	2851.2	2844.9	2835.4	2827.4	2817.9	2813.2
22.5°	2852.8	2849.6	2840.1	2829.0	2816.3	2810.0	2803.7	2786.3	2778.3	2768.8	2767.2
25°	2798.9	2794.2	2784.7	2772.0	2765.6	2748.2	2741.9	2729.2	2726.1	2716.5	2715.0
27.5°	2716.5	2710.2	2699.1	2683.3	2672.2	2661.1	2654.8	2645.3	2642.1	2632.6	2631.0
30°	2593.0	2585.1	2562.9	2556.6	2537.5	2526.5	2526.5	2513.8	2515.4	2509.1	2509.1
32.5°	2398.2	2385.5	2368.1	2355.4	2342.7	2336.4	2336.4	2331.6	2334.8	2334.8	2338.0
35°	2140.0	2122.6	2113.0	2105.1	2105.1	2111.4	2130.5	2135.2	2144.7	2152.6	2159.0
37.5°	1808.9	1807.4	1818.4	1827.9	1851.7	1878.6	1911.9	1940.4	1967.3	1986.3	2005.3
40°	1450.9	1490.5	1522.2	1566.6	1603.0	1655.3	1715.5	1764.6	1810.5	1843.8	1878.6
42.5°	1132.5	1183.2	1249.8	1314.7	1379.7	1450.9	1530.2	1598.3	1658.4	1704.4	1740.8
45°	882.3	952.0	1032.8	1115.1	1199.1	1287.8	1370.2	1439.9	1503.2	1550.7	1587.2
47.5°	711.2	787.2	879.1	969.4	1064.4	1157.9	1249.8	1310.0	1362.2	1400.2	1433.5
50°	587.6	668.5	765.1	868.0	963.1	1056.5	1135.7	1194.3	1237.1	1270.4	1290.9
52.5°	491.0	576.6	679.5	782.5	877.5	963.1	1034.4	1078.7	1113.5	1137.3	1156.3
55°	405.5	487.9	584.5	681.1	774.6	855.3	913.9	947.2	974.1	988.4	999.5
57.5°	331.1	407.1	495.8	584.5	665.3	731.8	777.8	811.0	823.7	834.8	833.2
60°	259.8	331.1	411.8	487.9	557.6	611.4	644.7	663.7	673.2	678.0	674.8
62.5°	204.3	269.3	331.1	397.6	448.3	494.2	525.9	525.9	530.6	532.2	537.0
65°	152.0	201.2	255.0	304.1	345.3	375.4	392.8	397.6	403.9	402.3	399.2
67.5°	112.5	148.9	188.5	224.9	253.4	272.4	285.1	296.2	294.6	291.5	289.9
70°	77.6	101.4	136.2	158.4	179.0	198.0	201.2	202.7	204.3	205.9	202.7
72.5°	53.9	71.3	90.3	109.3	122.0	129.9	137.8	139.4	139.4	139.4	137.8
75°	26.9	36.4	53.9	61.8	72.9	76.0	82.4	82.4	87.1	80.8	79.2
77.5°	23.8	28.5	38.0	44.3	49.1	53.9	55.4	60.2	58.6	55.4	57.0
80°	14.3	17.4	23.8	26.9	33.3	34.8	36.4	38.0	36.4	38.0	38.0
82.5°	11.1	12.7	15.9	15.9	20.6	20.6	22.2	22.2	23.8	23.8	23.8
85°	6.3	11.1	9.5	19.0	12.7	12.7	15.9	19.0	15.9	15.9	19.0
87.5°	6.3	6.3	4.8	6.3	6.3	6.3	7.9	9.5	9.5	11.1	9.5
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: P249290

CATALOG NUMBER: LSR8B70D010 EC8B709730 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2951.0	2951.0	2951.0	2951.0
2.5°	2955.7	2958.9	2954.2	2952.6
5°	2960.5	2960.5	2957.3	2957.3
7.5°	2960.5	2960.5	2955.7	2952.6
10°	2947.8	2947.8	2943.1	2939.9
12.5°	2924.0	2924.0	2922.5	2917.7
15°	2894.0	2894.0	2887.6	2882.9
17.5°	2852.8	2855.9	2848.0	2848.0
20°	2808.4	2806.8	2800.5	2797.3
22.5°	2762.5	2759.3	2757.7	2748.2
25°	2713.4	2710.2	2705.4	2700.7
27.5°	2629.4	2627.9	2623.1	2616.8
30°	2501.1	2499.5	2493.2	2493.2
32.5°	2334.8	2333.2	2326.9	2328.5
35°	2162.1	2168.5	2165.3	2159.0
37.5°	2018.0	2022.8	2025.9	2022.8
40°	1897.6	1911.9	1913.5	1916.6
42.5°	1769.3	1788.3	1794.7	1797.8
45°	1615.7	1633.1	1647.4	1644.2
47.5°	1458.8	1471.5	1484.2	1474.7
50°	1308.4	1316.3	1321.1	1321.1
52.5°	1165.8	1165.8	1164.2	1165.8
55°	1002.7	1002.7	996.3	999.5
57.5°	831.6	834.8	830.0	822.1
60°	673.2	665.3	662.1	657.4
62.5°	524.3	524.3	513.2	527.5
65°	392.8	388.1	383.3	381.7
67.5°	285.1	283.6	278.8	277.2
70°	201.2	194.8	193.2	190.1
72.5°	134.6	134.6	131.5	131.5
75°	82.4	74.5	72.9	74.5
77.5°	57.0	55.4	55.4	53.9
80°	38.0	36.4	39.6	34.8
82.5°	23.8	25.3	23.8	25.3
85°	15.9	19.0	17.4	17.4
87.5°	9.5	9.5	9.5	9.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)