

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 EC8B70930 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 EC8B70930 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: 6269.8 lumens  
Efficiency: N/A  
Efficacy: 82.6 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

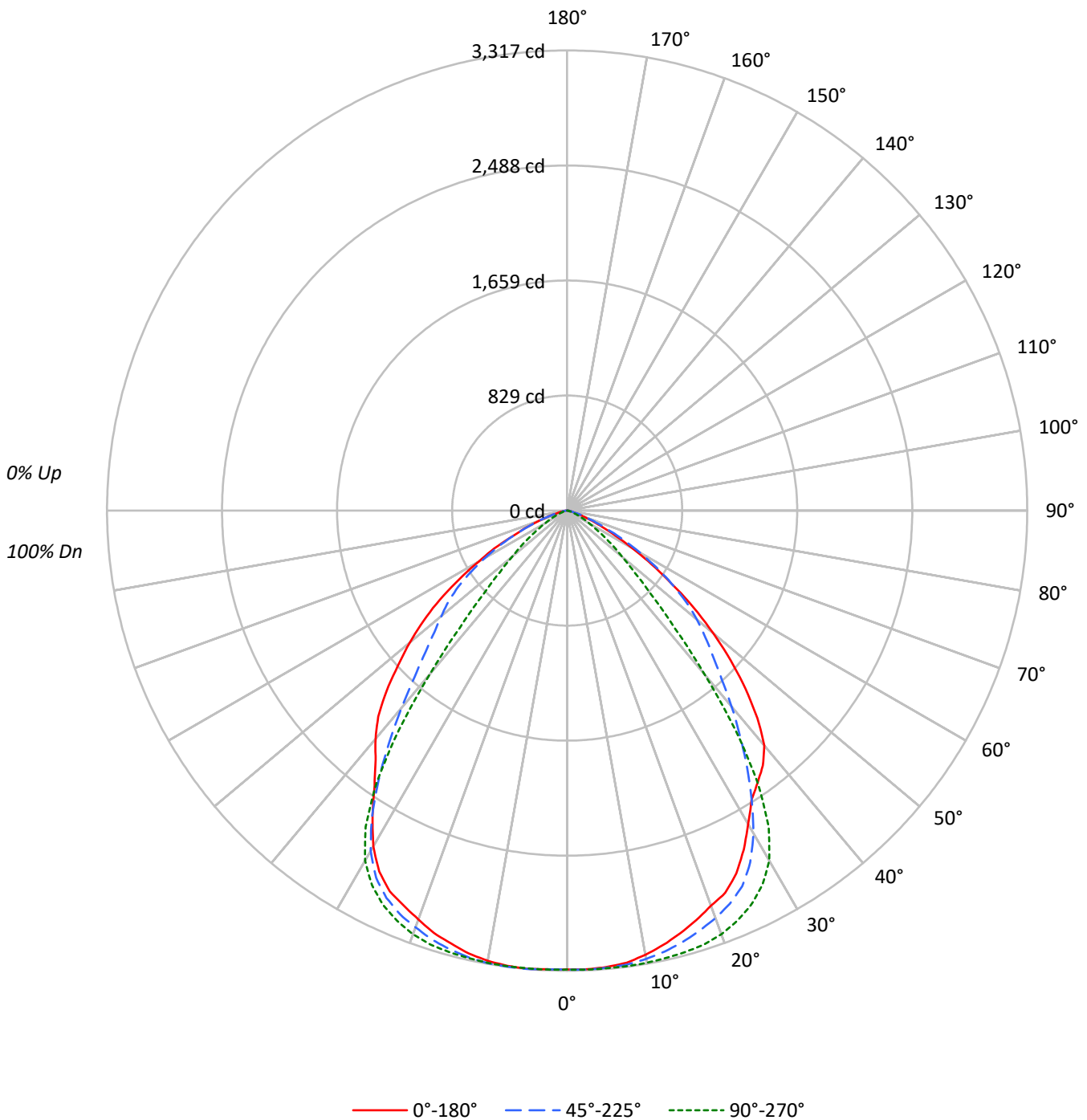
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249290

CATALOG NUMBER: LSR8B70D010 EC8B70930 8LBDW0WMH

### Luminous Intensity Polar Plot





TEST NUMBER: P249290

CATALOG NUMBER: LSR8B70D010 EC8B70930 8LBDW0WMH

**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°			



TEST NUMBER: P249290

CATALOG NUMBER: LSR8B70D010 EC8B70930 8LBDW0WMH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	315.7	5.0
10°-20°	916.9	14.6
20°-30°	1391.6	22.2
30°-40°	1461.6	23.3
40°-50°	1095.8	17.5
50°-60°	703.1	11.2
60°-70°	300.8	4.8
70°-80°	71.1	1.1
80°-90°	13.2	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°	2624.2	41.9
0°-40°	4085.8	65.2
0°-60°	5884.7	93.9
0°-90°	6269.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6269.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3308	3308	3308	3308	3308	
5°	3303	3308	3312	3317	3315	314
15°	3154	3219	3294	3272	3232	889
25°	2886	2987	3138	3081	3028	1318
35°	2394	2260	2395	2367	2420	1502
45°	1818	1486	854	1444	1843	1393
55°	920	920	318	959	1120	834
65°	277	327	101	421	428	296
75°	43	50	14	85	84	62
85°	14	9	7	14	20	15
90°	0	0	0	0	0	



TEST NUMBER: P249290

CATALOG NUMBER: LSR8B70D010 EC8B70930 8LBDW0WMH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1
2.5°	3309.9	3313.3	3311.7	3311.7	3309.9	3311.7	3311.7	3315.1	3315.1	3311.7	3309.9
5°	3302.7	3306.3	3306.3	3302.7	3302.7	3311.7	3306.3	3309.9	3309.9	3308.1	3308.1
7.5°	3286.8	3286.8	3293.8	3288.6	3288.6	3293.8	3292.0	3295.6	3299.2	3301.0	3301.0
10°	3251.2	3254.8	3256.5	3256.5	3258.3	3263.7	3267.2	3274.3	3277.8	3281.4	3283.2
12.5°	3206.8	3212.1	3213.9	3212.1	3217.5	3224.6	3233.5	3242.4	3247.6	3254.8	3260.1
15°	3153.6	3153.6	3157.1	3162.5	3166.0	3176.7	3185.5	3196.2	3210.3	3219.3	3228.1
17.5°	3095.0	3098.6	3103.8	3103.8	3111.0	3128.7	3134.1	3150.0	3166.0	3174.9	3192.6
20°	3031.1	3034.5	3039.9	3043.5	3052.4	3066.6	3077.3	3091.4	3109.2	3125.1	3142.9
22.5°	2981.3	2974.2	2977.7	2981.3	2990.3	3002.6	3015.0	3032.8	3050.6	3066.6	3084.3
25°	2885.5	2887.2	2892.5	2896.1	2906.8	2917.4	2931.6	2952.9	2968.9	2986.7	3006.2
27.5°	2755.9	2757.7	2766.5	2766.5	2775.4	2793.1	2801.9	2819.8	2841.1	2858.8	2881.9
30°	2608.5	2611.9	2611.9	2619.1	2624.4	2633.3	2642.2	2659.9	2670.6	2686.6	2718.5
32.5°	2473.5	2477.1	2475.3	2473.5	2468.2	2466.4	2464.6	2468.2	2471.7	2477.1	2489.4
35°	2393.6	2384.7	2377.6	2365.2	2351.0	2333.2	2317.2	2295.9	2276.4	2260.4	2242.7
37.5°	2317.2	2315.4	2304.8	2287.1	2258.6	2226.6	2189.4	2143.2	2097.1	2047.3	1999.4
40°	2210.7	2205.3	2196.5	2171.6	2139.7	2100.6	2050.9	1994.0	1919.5	1843.1	1765.0
42.5°	2029.6	2031.4	2020.7	2001.1	1970.9	1933.7	1882.2	1820.1	1740.1	1649.6	1548.3
45°	1818.3	1818.3	1814.7	1798.8	1777.5	1747.2	1708.2	1656.7	1578.6	1486.2	1377.9
47.5°	1598.1	1599.9	1594.5	1591.0	1582.1	1562.6	1534.2	1495.1	1440.0	1351.3	1243.0
50°	1374.3	1374.3	1383.2	1381.4	1381.4	1374.3	1361.9	1338.8	1290.9	1219.9	1118.6
52.5°	1150.6	1154.2	1159.6	1166.6	1175.5	1189.7	1175.5	1164.8	1134.7	1079.6	992.6
55°	919.8	923.4	932.2	944.7	955.3	969.6	973.0	973.0	957.1	919.8	854.1
57.5°	722.7	717.3	724.5	735.2	749.4	763.5	774.2	786.6	784.8	760.0	706.7
60°	543.3	545.1	550.4	561.2	571.8	584.2	598.4	609.0	614.4	602.0	568.2
62.5°	395.9	395.9	403.1	413.8	419.0	436.9	445.7	451.0	456.4	454.6	433.3
65°	277.0	280.6	284.1	289.4	294.7	305.4	310.7	321.4	325.0	326.8	310.7
67.5°	195.4	190.0	193.6	197.1	202.5	209.5	220.2	220.2	225.5	225.5	214.9
70°	124.3	124.3	126.1	131.4	135.0	136.8	140.2	143.8	149.2	147.4	147.4
72.5°	83.5	81.7	83.5	85.2	87.0	92.4	92.4	94.1	97.6	99.4	92.4
75°	42.6	44.4	48.0	46.2	51.5	48.0	49.7	55.0	53.2	49.7	49.7
77.5°	35.5	35.5	35.5	33.7	37.3	37.3	35.5	39.0	37.3	37.3	35.5
80°	24.9	26.7	24.9	23.1	24.9	23.1	23.1	23.1	23.1	23.1	21.3
82.5°	19.5	16.0	17.8	16.0	17.8	17.8	16.0	14.2	14.2	16.0	14.2
85°	14.2	10.6	12.4	12.4	10.6	10.6	10.6	10.6	10.6	8.9	8.9
87.5°	8.9	5.4	5.4	5.4	7.1	7.1	7.1	5.4	7.1	7.1	3.6
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 EC8B70930 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1
2.5°	3313.3	3311.7	3315.1	3313.3	3313.3	3311.7	3313.3	3311.7	3315.1	3308.1	3309.9
5°	3313.3	3309.9	3311.7	3313.3	3315.1	3311.7	3311.7	3311.7	3315.1	3311.7	3313.3
7.5°	3306.3	3304.5	3309.9	3313.3	3311.7	3309.9	3313.3	3311.7	3315.1	3313.3	3316.9
10°	3292.0	3293.8	3297.4	3302.7	3304.5	3306.3	3309.9	3309.9	3315.1	3308.1	3311.7
12.5°	3270.7	3277.8	3286.8	3290.2	3297.4	3297.4	3301.0	3302.7	3306.3	3304.5	3309.9
15°	3244.2	3253.0	3263.7	3272.5	3281.4	3286.8	3292.0	3293.8	3299.2	3293.8	3295.6
17.5°	3212.1	3222.8	3238.8	3249.4	3263.7	3268.9	3276.1	3279.6	3285.0	3281.4	3283.2
20°	3167.7	3180.3	3198.0	3213.9	3222.8	3235.2	3244.2	3249.4	3253.0	3249.4	3251.2
22.5°	3105.6	3123.4	3146.4	3158.9	3176.7	3187.3	3189.1	3201.5	3210.3	3201.5	3205.1
25°	3032.8	3050.6	3068.3	3095.0	3111.0	3123.4	3135.8	3137.6	3146.4	3144.6	3142.9
27.5°	2912.0	2935.2	2965.4	2986.7	3008.0	3027.5	3041.7	3045.2	3054.2	3050.6	3052.4
30°	2746.9	2771.8	2800.3	2834.0	2864.2	2883.7	2901.4	2913.8	2922.7	2917.4	2915.6
32.5°	2512.6	2537.4	2567.7	2601.3	2636.8	2665.3	2686.6	2702.5	2713.2	2709.7	2700.8
35°	2244.5	2251.5	2271.0	2297.7	2327.9	2358.0	2377.6	2395.4	2407.8	2411.4	2411.4
37.5°	1969.3	1946.2	1931.9	1931.9	1949.6	1962.1	1979.9	1990.4	2010.1	2017.1	2022.5
40°	1702.8	1649.6	1599.9	1562.6	1537.8	1536.0	1536.0	1541.3	1559.0	1582.1	1603.5
42.5°	1464.9	1379.7	1303.4	1234.1	1184.3	1156.0	1143.5	1145.3	1159.6	1180.9	1216.3
45°	1274.9	1168.4	1072.5	989.1	921.6	877.2	855.9	854.1	864.7	889.6	928.6
47.5°	1127.5	1013.9	905.5	809.7	736.9	689.0	664.1	657.0	664.1	687.2	733.4
50°	1005.0	887.8	776.0	676.5	598.4	548.7	525.6	516.7	525.6	545.1	591.3
52.5°	891.4	770.6	665.9	570.0	486.5	443.9	419.0	413.8	419.0	442.1	479.5
55°	760.0	657.0	554.0	458.2	385.3	342.7	323.2	317.9	323.2	344.5	383.6
57.5°	630.3	541.6	451.0	364.0	301.9	264.6	246.8	239.7	252.1	266.3	312.5
60°	509.6	438.6	362.2	285.9	234.4	200.7	186.4	184.6	188.2	206.0	237.9
62.5°	399.5	340.9	280.6	218.4	175.8	161.5	143.8	142.0	145.6	156.3	181.2
65°	287.6	250.4	204.2	159.9	126.1	106.5	99.4	101.2	104.7	111.9	135.0
67.5°	200.7	174.0	142.0	111.9	87.0	78.1	71.1	69.3	71.1	83.5	95.8
70°	135.0	118.9	95.8	85.2	60.4	48.0	49.7	44.4	51.5	51.5	62.1
72.5°	88.8	78.1	63.9	49.7	42.6	33.7	33.7	31.9	35.5	37.3	46.2
75°	46.2	35.5	35.5	24.9	17.8	8.9	16.0	14.2	12.4	14.2	17.8
77.5°	31.9	26.7	24.9	19.5	17.8	14.2	14.2	14.2	14.2	16.0	17.8
80°	19.5	19.5	14.2	12.4	10.6	8.9	10.6	10.6	10.6	10.6	12.4
82.5°	12.4	10.6	10.6	8.9	8.9	7.1	7.1	7.1	7.1	7.1	10.6
85°	10.6	7.1	7.1	5.4	7.1	12.4	5.4	7.1	7.1	7.1	5.4
87.5°	3.6	5.4	5.4	5.4	3.6	1.8	3.6	5.4	5.4	8.9	7.1
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 EC8B70930 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1	3308.1
2.5°	3313.3	3315.1	3315.1	3313.3	3313.3	3309.9	3316.9	3311.7	3313.3	3320.5	3315.1
5°	3316.9	3318.7	3318.7	3316.9	3316.9	3316.9	3318.7	3318.7	3316.9	3315.1	3318.7
7.5°	3324.0	3322.3	3322.3	3318.7	3318.7	3315.1	3318.7	3313.3	3316.9	3313.3	3318.7
10°	3315.1	3316.9	3315.1	3313.3	3313.3	3311.7	3311.7	3306.3	3308.1	3302.7	3306.3
12.5°	3309.9	3308.1	3308.1	3304.5	3301.0	3297.4	3295.6	3290.2	3290.2	3277.8	3283.2
15°	3295.6	3297.4	3292.0	3285.0	3281.4	3272.5	3268.9	3261.9	3254.8	3246.0	3247.6
17.5°	3283.2	3277.8	3270.7	3263.7	3249.4	3242.4	3235.2	3224.6	3221.0	3210.3	3206.8
20°	3246.0	3242.4	3233.5	3221.0	3212.1	3196.2	3189.1	3178.5	3169.5	3158.9	3153.6
22.5°	3198.0	3194.4	3183.8	3171.3	3157.1	3150.0	3142.9	3123.4	3114.5	3103.8	3102.0
25°	3137.6	3132.3	3121.6	3107.4	3100.2	3080.7	3073.7	3059.4	3056.0	3045.2	3043.5
27.5°	3045.2	3038.1	3025.7	3008.0	2995.5	2983.1	2976.0	2965.4	2961.8	2951.1	2949.4
30°	2906.8	2897.9	2873.0	2865.9	2844.5	2832.2	2832.2	2818.0	2819.8	2812.7	2812.7
32.5°	2688.4	2674.1	2654.6	2640.4	2626.2	2619.1	2619.1	2613.7	2617.3	2617.3	2620.9
35°	2398.9	2379.4	2368.7	2359.8	2359.8	2366.9	2388.3	2393.6	2404.2	2413.1	2420.2
37.5°	2027.8	2026.1	2038.4	2049.1	2075.8	2105.9	2143.2	2175.2	2205.3	2226.6	2247.9
40°	1626.5	1670.9	1706.4	1756.2	1797.0	1855.6	1923.1	1978.1	2029.6	2066.9	2105.9
42.5°	1269.5	1326.4	1401.0	1473.8	1546.6	1626.5	1715.4	1791.7	1859.1	1910.6	1951.4
45°	989.1	1067.2	1157.8	1250.0	1344.2	1443.6	1536.0	1614.1	1685.1	1738.3	1779.3
47.5°	797.3	882.5	985.5	1086.7	1193.2	1298.0	1401.0	1468.5	1527.0	1569.6	1607.0
50°	658.7	749.4	857.7	973.0	1079.6	1184.3	1273.1	1338.8	1386.8	1424.1	1447.1
52.5°	550.4	646.4	761.7	877.2	983.7	1079.6	1159.6	1209.2	1248.2	1274.9	1296.2
55°	454.6	546.9	655.2	763.5	868.3	958.8	1024.5	1061.8	1092.0	1108.0	1120.4
57.5°	371.2	456.4	555.8	655.2	745.8	820.3	871.9	909.1	923.4	935.8	934.0
60°	291.2	371.2	461.6	546.9	625.1	685.4	722.7	744.0	754.7	760.0	756.5
62.5°	229.0	301.9	371.2	445.7	502.5	554.0	589.5	589.5	594.8	596.6	602.0
65°	170.4	225.5	285.9	340.9	387.1	420.8	440.3	445.7	452.8	451.0	447.5
67.5°	126.1	166.9	211.3	252.1	284.1	305.4	319.6	332.0	330.2	326.8	325.0
70°	87.0	113.7	152.7	177.6	200.7	222.0	225.5	227.2	229.0	230.8	227.2
72.5°	60.4	79.9	101.2	122.5	136.8	145.6	154.5	156.3	156.3	156.3	154.5
75°	30.2	40.8	60.4	69.3	81.7	85.2	92.4	92.4	97.6	90.6	88.8
77.5°	26.7	31.9	42.6	49.7	55.0	60.4	62.1	67.5	65.7	62.1	63.9
80°	16.0	19.5	26.7	30.2	37.3	39.0	40.8	42.6	40.8	42.6	42.6
82.5°	12.4	14.2	17.8	17.8	23.1	23.1	24.9	24.9	26.7	26.7	26.7
85°	7.1	12.4	10.6	21.3	14.2	14.2	17.8	21.3	17.8	17.8	21.3
87.5°	7.1	7.1	5.4	7.1	7.1	7.1	8.9	10.6	10.6	12.4	10.6
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 EC8B70930 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3308.1	3308.1	3308.1	3308.1
2.5°	3313.3	3316.9	3311.7	3309.9
5°	3318.7	3318.7	3315.1	3315.1
7.5°	3318.7	3318.7	3313.3	3309.9
10°	3304.5	3304.5	3299.2	3295.6
12.5°	3277.8	3277.8	3276.1	3270.7
15°	3244.2	3244.2	3237.0	3231.7
17.5°	3198.0	3201.5	3192.6	3192.6
20°	3148.2	3146.4	3139.4	3135.8
22.5°	3096.8	3093.2	3091.4	3080.7
25°	3041.7	3038.1	3032.8	3027.5
27.5°	2947.6	2945.9	2940.5	2933.4
30°	2803.7	2801.9	2794.9	2794.9
32.5°	2617.3	2615.5	2608.5	2610.2
35°	2423.7	2430.9	2427.3	2420.2
37.5°	2262.2	2267.6	2271.0	2267.6
40°	2127.2	2143.2	2145.0	2148.5
42.5°	1983.4	2004.7	2011.9	2015.3
45°	1811.2	1830.7	1846.7	1843.1
47.5°	1635.3	1649.6	1663.8	1653.1
50°	1466.7	1475.6	1481.0	1481.0
52.5°	1306.9	1306.9	1305.1	1306.9
55°	1124.0	1124.0	1116.9	1120.4
57.5°	932.2	935.8	930.4	921.6
60°	754.7	745.8	742.2	736.9
62.5°	587.7	587.7	575.3	591.3
65°	440.3	435.1	429.7	427.9
67.5°	319.6	317.9	312.5	310.7
70°	225.5	218.4	216.6	213.1
72.5°	150.9	150.9	147.4	147.4
75°	92.4	83.5	81.7	83.5
77.5°	63.9	62.1	62.1	60.4
80°	42.6	40.8	44.4	39.0
82.5°	26.7	28.4	26.7	28.4
85°	17.8	21.3	19.5	19.5
87.5°	10.6	10.6	10.6	10.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)