

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: P251217

Luminaire Tested: **LSR8B70D010 EC8B70927 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P251217  
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: LSR8B70D010 EC8B70927 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6012.0 lumens  
Efficiency: N/A  
Efficacy: 79.2 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

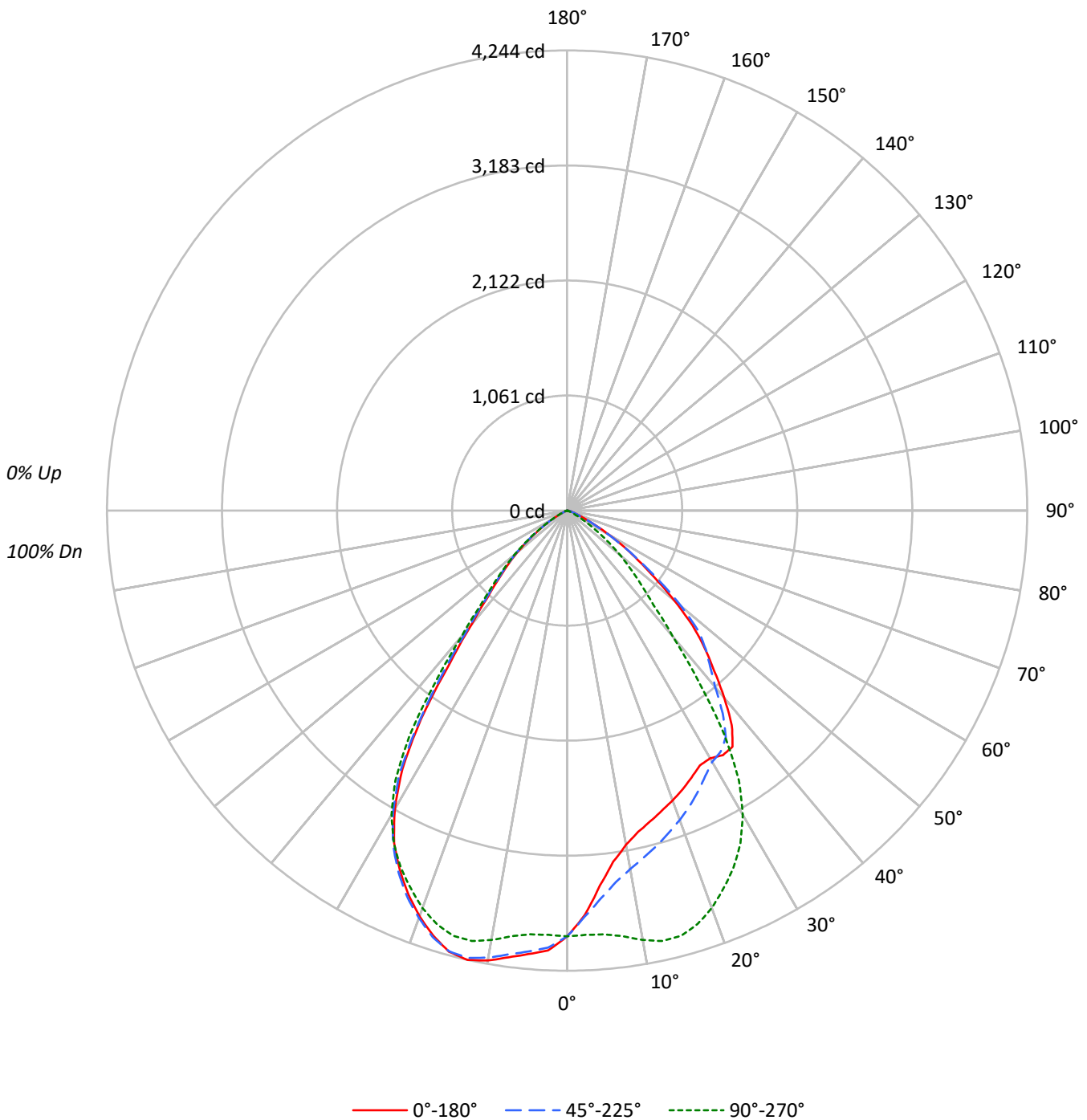
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	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°	366.1	6.1
10°-20°	1057.3	17.6
20°-30°	1534.6	25.5
30°-40°	1511.4	25.1
40°-50°	947.4	15.8
50°-60°	457.2	7.6
60°-70°	110.6	1.8
70°-80°	22.4	0.4
80°-90°	5.1	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°	2957.9	49.2
0°-40°	4469.3	74.3
0°-60°	5873.9	97.7
0°-90°	6012.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6012.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3928	3928	3928	3928	3928	
5°	3471	3589	3922	4081	4106	321
15°	2966	3199	4060	4208	4211	838
25°	2716	2857	3632	3682	3655	1257
35°	2659	2551	2535	2391	2352	1609
45°	1796	1808	959	918	893	1373
55°	798	824	349	345	328	734
65°	187	185	52	44	39	213
75°	45	39	11	5	4	51
85°	13	10	2	0	0	14
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°	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5
2.5°	3733.5	3709.8	3665.4	3719.0	3719.0	3689.1	3749.0	3712.8	3741.8	3787.2	3746.9
5°	3471.4	3451.8	3414.6	3471.4	3478.6	3450.7	3523.0	3496.2	3538.5	3594.2	3589.1
7.5°	3264.0	3239.2	3205.1	3264.0	3275.3	3256.8	3326.0	3313.6	3369.3	3441.5	3453.9
10°	3128.8	3103.0	3073.0	3126.7	3135.0	3122.7	3192.8	3185.5	3240.2	3323.8	3356.9
12.5°	3032.9	3011.2	2978.1	3034.9	3044.1	3026.7	3092.7	3089.6	3146.4	3234.0	3275.3
15°	2965.7	2940.0	2910.0	2958.5	2970.9	2951.3	3014.2	3008.0	3065.8	3152.6	3198.9
17.5°	2902.8	2879.1	2848.2	2893.5	2905.9	2885.3	2947.2	2936.8	2986.4	3069.0	3116.5
20°	2844.0	2818.2	2790.3	2836.8	2844.0	2820.3	2882.1	2868.8	2913.2	2989.5	3035.9
22.5°	2783.1	2756.2	2727.3	2772.8	2780.0	2756.2	2813.1	2797.5	2838.8	2908.0	2950.3
25°	2716.1	2691.2	2662.4	2704.7	2710.9	2685.0	2744.9	2725.3	2761.4	2822.3	2857.4
27.5°	2648.9	2625.2	2593.2	2636.5	2639.7	2615.0	2669.6	2642.7	2672.7	2728.5	2758.4
30°	2637.6	2610.8	2577.7	2612.8	2613.8	2581.9	2633.5	2601.5	2618.0	2659.3	2676.8
32.5°	2673.7	2646.9	2612.8	2641.7	2638.7	2603.6	2653.1	2613.8	2619.0	2640.7	2636.5
35°	2659.3	2627.3	2587.0	2618.0	2618.0	2575.7	2625.2	2578.8	2573.7	2576.7	2550.9
37.5°	2495.2	2470.4	2432.2	2462.2	2459.1	2427.1	2465.3	2427.1	2409.5	2402.3	2355.9
40°	2253.7	2223.8	2194.9	2226.9	2230.0	2195.9	2245.5	2202.2	2197.0	2176.3	2121.6
42.5°	2009.1	1998.9	1971.0	1997.8	2012.3	1983.4	2024.7	2004.0	2007.1	2001.9	1950.3
45°	1795.5	1778.1	1757.4	1788.3	1797.6	1783.1	1824.4	1812.0	1824.4	1850.3	1808.0
47.5°	1565.4	1547.9	1525.2	1558.2	1574.8	1547.9	1583.0	1578.8	1597.4	1641.8	1637.7
50°	1287.9	1275.4	1271.4	1275.4	1285.8	1273.4	1298.1	1299.1	1311.5	1372.5	1376.6
52.5°	1019.6	1016.4	1002.0	1015.4	1015.4	995.8	1020.6	1009.2	1021.6	1062.9	1089.7
55°	797.6	794.6	785.2	797.6	784.2	777.0	784.2	772.9	763.6	795.6	823.5
57.5°	621.2	610.9	599.5	604.7	603.7	588.2	596.5	583.1	575.8	587.1	611.9
60°	442.7	439.6	429.3	434.5	438.5	427.2	435.5	429.3	416.9	426.2	427.2
62.5°	294.1	296.2	290.0	291.0	287.9	285.9	291.0	294.1	291.0	286.9	287.9
65°	186.8	185.7	184.7	185.7	187.8	183.7	186.8	188.9	185.7	185.7	184.7
67.5°	123.9	120.7	117.7	119.7	121.7	118.7	121.7	120.7	121.7	120.7	117.7
70°	83.6	82.6	81.6	82.6	82.6	80.4	82.6	81.6	82.6	81.6	78.4
72.5°	60.9	60.9	59.8	60.9	60.9	58.8	59.8	57.8	58.8	57.8	55.7
75°	45.4	45.4	44.3	45.4	44.3	43.3	44.3	43.3	41.3	41.3	39.3
77.5°	33.1	33.1	33.1	33.1	33.1	32.0	32.0	30.9	29.9	28.9	28.9
80°	24.8	23.7	23.7	23.7	23.7	22.7	23.7	22.7	21.7	20.6	19.6
82.5°	17.6	18.6	17.6	17.6	17.6	16.5	17.6	16.5	16.5	15.5	13.4
85°	13.4	13.4	13.4	13.4	13.4	12.4	12.4	12.4	11.4	11.4	10.4
87.5°	7.2	7.2	7.2	8.2	7.2	7.2	7.2	6.2	6.2	5.2	5.2
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5
2.5°	3800.6	3805.8	3794.4	3812.0	3880.0	3825.3	3848.1	3855.3	3906.9	3916.1	3909.9
5°	3656.1	3678.9	3693.3	3732.5	3807.8	3768.6	3808.8	3834.7	3900.7	3922.3	3927.5
7.5°	3542.6	3590.1	3625.2	3689.1	3777.9	3747.9	3808.8	3851.1	3931.6	3959.6	3972.9
10°	3458.0	3530.2	3591.1	3678.9	3778.9	3759.3	3838.7	3898.6	3988.4	4021.4	4038.0
12.5°	3394.0	3481.8	3563.2	3674.7	3783.0	3773.8	3869.8	3937.8	4032.8	4065.8	4085.4
15°	3323.8	3425.0	3519.9	3644.8	3761.3	3759.3	3862.5	3934.7	4031.8	4059.6	4078.1
17.5°	3240.2	3348.6	3452.8	3588.0	3703.6	3705.6	3809.9	3881.0	3976.0	3998.7	4011.1
20°	3155.6	3263.0	3367.1	3506.5	3620.0	3623.1	3725.2	3791.2	3882.2	3900.7	3903.8
22.5°	3065.8	3166.0	3270.2	3408.4	3517.9	3519.9	3621.0	3682.9	3760.3	3769.6	3777.9
25°	2963.7	3061.7	3159.8	3297.0	3401.2	3407.4	3499.3	3554.0	3625.2	3632.4	3635.4
27.5°	2857.4	2937.9	3031.8	3149.4	3254.7	3250.6	3337.2	3399.2	3463.2	3459.0	3458.0
30°	2750.1	2817.1	2874.9	2988.5	3065.8	3069.0	3150.5	3180.4	3247.4	3239.2	3238.2
32.5°	2674.8	2692.4	2707.8	2765.6	2838.8	2813.1	2868.8	2905.9	2952.3	2949.3	2950.3
35°	2536.4	2504.5	2458.0	2466.3	2510.7	2470.4	2500.3	2499.3	2546.8	2535.4	2548.9
37.5°	2300.2	2209.4	2106.1	2047.4	2055.6	2005.1	1994.7	2019.5	2036.0	2004.0	2015.3
40°	2048.4	1914.2	1753.2	1619.1	1611.9	1548.9	1537.5	1512.8	1544.9	1518.0	1526.2
42.5°	1862.7	1685.1	1473.6	1310.5	1275.4	1222.9	1191.8	1187.8	1197.0	1178.4	1173.3
45°	1720.2	1531.4	1288.9	1102.0	1062.9	1006.1	975.2	963.8	964.8	958.6	953.6
47.5°	1553.1	1363.2	1117.6	926.7	882.3	828.7	797.6	790.4	794.6	786.4	780.2
50°	1321.9	1151.7	927.7	753.3	714.2	674.9	650.1	642.9	641.8	635.6	631.6
52.5°	1073.2	931.8	737.8	592.3	557.2	519.1	501.5	492.2	493.3	487.1	480.8
55°	830.7	742.9	571.7	447.9	415.9	386.0	369.4	358.1	354.9	348.8	345.7
57.5°	618.1	559.4	428.3	323.0	304.4	275.5	259.0	245.6	243.6	240.4	239.4
60°	433.5	391.0	301.3	230.2	208.5	190.9	174.4	161.0	154.8	153.8	150.6
62.5°	280.7	254.9	198.1	153.8	137.2	124.9	108.3	99.1	95.0	90.8	91.8
65°	174.4	154.8	123.9	99.1	89.8	80.4	68.1	59.8	55.7	51.6	52.6
67.5°	108.3	97.0	78.4	64.0	57.8	50.5	41.3	35.1	32.0	28.9	26.8
70°	73.2	63.0	53.7	45.4	41.3	36.1	29.9	24.8	22.7	20.6	18.6
72.5°	51.6	46.5	39.3	34.1	30.9	26.8	22.7	19.6	17.6	15.5	13.4
75°	37.1	33.1	28.9	24.8	22.7	20.6	17.6	15.5	13.4	11.4	9.3
77.5°	26.8	23.7	20.6	18.6	17.6	14.4	12.4	11.4	10.4	8.2	6.2
80°	18.6	16.5	13.4	12.4	12.4	10.4	9.3	8.2	7.2	5.2	4.2
82.5°	12.4	11.4	10.4	9.3	8.2	7.2	7.2	5.2	4.2	3.2	2.0
85°	9.3	8.2	7.2	6.2	6.2	5.2	4.2	3.2	3.2	2.0	1.0
87.5°	5.2	5.2	4.2	3.2	3.2	2.0	2.0	1.0	1.0	1.0	1.0
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5
2.5°	3962.6	3965.7	3983.3	3969.8	4003.9	4028.6	4016.2	4044.2	4034.8	4032.8	4064.7
5°	3989.5	3996.7	4020.4	4008.0	4045.2	4071.9	4059.6	4090.6	4081.3	4079.2	4112.2
7.5°	4041.0	4048.2	4068.9	4058.6	4097.8	4121.6	4106.0	4140.1	4127.7	4126.7	4158.7
10°	4106.0	4116.4	4133.9	4123.6	4159.7	4180.4	4164.9	4197.9	4186.6	4181.4	4216.5
12.5°	4154.5	4161.7	4179.3	4171.0	4206.2	4221.6	4208.2	4240.2	4225.7	4221.6	4252.6
15°	4143.2	4150.5	4164.9	4157.7	4190.6	4205.1	4187.6	4222.7	4208.2	4200.0	4227.9
17.5°	4070.9	4075.1	4085.4	4078.1	4113.2	4122.6	4103.0	4138.0	4124.6	4110.2	4137.0
20°	3964.6	3962.6	3968.8	3965.7	3994.5	3999.7	3987.3	4013.2	3997.7	3989.5	4004.9
22.5°	3832.5	3830.5	3834.7	3826.4	3855.3	3858.4	3839.8	3870.8	3855.3	3839.8	3865.6
25°	3686.1	3674.7	3672.7	3675.7	3695.3	3698.4	3678.9	3701.5	3681.9	3669.5	3694.3
27.5°	3505.5	3491.0	3488.0	3491.0	3510.7	3496.2	3479.6	3496.2	3476.6	3465.2	3480.6
30°	3282.5	3261.9	3252.6	3246.4	3267.1	3261.9	3223.7	3242.4	3211.3	3194.9	3206.2
32.5°	2982.3	2970.9	2946.2	2931.8	2951.3	2912.1	2888.3	2888.3	2876.0	2848.2	2854.4
35°	2565.3	2547.8	2525.2	2512.8	2515.8	2463.2	2424.0	2432.2	2391.0	2383.8	2386.8
37.5°	2038.0	2009.1	2000.9	1975.2	1981.4	1934.9	1881.2	1882.2	1860.5	1837.9	1830.6
40°	1531.4	1526.2	1518.0	1496.2	1504.6	1454.0	1433.4	1434.4	1420.0	1403.4	1411.6
42.5°	1183.6	1167.1	1161.9	1154.7	1156.8	1148.5	1121.7	1124.8	1112.4	1108.2	1104.2
45°	961.8	944.2	931.8	938.0	938.0	928.7	918.4	924.6	918.4	910.1	914.3
47.5°	792.6	776.0	769.8	768.8	776.0	769.8	759.5	761.5	760.5	757.5	755.3
50°	632.6	628.4	623.2	620.2	623.2	621.2	611.9	617.1	620.2	609.9	613.0
52.5°	482.0	482.0	480.8	473.6	479.8	473.6	472.6	474.6	471.6	467.4	466.4
55°	352.9	349.9	344.7	343.7	345.7	343.7	341.6	342.6	344.7	334.3	334.3
57.5°	241.4	239.4	236.4	236.4	240.4	235.2	232.2	236.4	232.2	228.0	228.0
60°	154.8	153.8	150.6	150.6	150.6	149.6	146.6	147.6	149.6	143.4	144.5
62.5°	92.9	89.8	88.8	87.8	88.8	87.8	87.8	86.7	85.6	85.6	82.6
65°	50.5	48.5	46.5	47.5	47.5	46.5	46.5	46.5	44.3	43.3	42.3
67.5°	25.8	23.7	23.7	22.7	22.7	22.7	22.7	21.7	21.7	21.7	20.6
70°	16.5	15.5	14.4	14.4	14.4	13.4	13.4	13.4	13.4	13.4	12.4
72.5°	11.4	10.4	9.3	9.3	9.3	8.2	8.2	8.2	8.2	7.2	7.2
75°	8.2	7.2	6.2	6.2	6.2	5.2	5.2	5.2	5.2	5.2	5.2
77.5°	5.2	4.2	4.2	4.2	4.2	3.2	3.2	3.2	3.2	3.2	2.0
80°	3.2	3.2	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
82.5°	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
87.5°	1.0	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: P251217

CATALOG NUMBER: LSR8B70D010 EC8B70927 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5	3927.5
2.5°	4053.4	4045.2	4050.3	4088.5	4071.9	4066.9	4023.4	4061.7
5°	4101.9	4095.7	4095.7	4139.1	4119.4	4115.4	4073.1	4106.0
7.5°	4147.3	4141.1	4142.1	4186.6	4171.0	4164.9	4122.6	4155.5
10°	4206.2	4202.0	4203.0	4245.3	4228.9	4222.7	4179.3	4213.3
12.5°	4241.2	4235.1	4235.1	4280.4	4261.8	4252.6	4211.3	4244.3
15°	4214.4	4205.1	4205.1	4250.5	4229.9	4216.5	4180.4	4211.3
17.5°	4122.6	4113.2	4113.2	4152.5	4137.0	4117.4	4080.3	4109.2
20°	3994.5	3983.3	3980.1	4025.6	4003.9	3986.3	3953.4	3981.2
22.5°	3850.1	3844.9	3835.7	3881.0	3861.4	3842.9	3807.8	3829.5
25°	3676.7	3668.5	3659.2	3703.6	3684.0	3665.4	3637.6	3655.1
27.5°	3461.1	3462.1	3457.0	3492.0	3472.4	3462.1	3428.1	3457.0
30°	3200.1	3188.7	3184.5	3225.8	3207.3	3193.8	3151.5	3179.4
32.5°	2859.5	2843.0	2821.3	2867.7	2835.8	2824.4	2788.3	2828.5
35°	2364.2	2359.0	2339.3	2378.6	2361.0	2340.5	2317.7	2351.8
37.5°	1827.6	1831.7	1829.6	1839.9	1829.6	1816.2	1791.4	1779.1
40°	1395.1	1384.9	1376.6	1395.1	1373.5	1373.5	1359.0	1374.5
42.5°	1093.8	1089.7	1100.0	1104.2	1091.8	1089.7	1087.6	1086.6
45°	902.9	902.9	905.0	909.1	905.0	902.9	896.7	892.6
47.5°	744.1	748.1	744.1	757.5	750.3	748.1	735.8	740.9
50°	602.7	597.5	602.7	606.8	607.8	601.6	595.5	598.5
52.5°	467.4	459.2	457.2	463.4	459.2	459.2	455.1	454.0
55°	329.2	332.3	327.2	332.3	330.2	327.2	324.0	328.2
57.5°	222.9	223.9	221.8	225.0	219.8	220.8	219.8	218.8
60°	144.5	140.3	140.3	143.4	138.3	138.3	137.2	137.2
62.5°	82.6	81.6	81.6	80.4	79.4	79.4	79.4	77.4
65°	42.3	41.3	40.3	40.3	40.3	40.3	39.3	39.3
67.5°	20.6	19.6	19.6	20.6	19.6	19.6	19.6	19.6
70°	12.4	12.4	11.4	12.4	11.4	11.4	11.4	11.4
72.5°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
75°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
77.5°	3.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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)