

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: P249119

Luminaire Tested: **LSR8B70D010 EC8B70850 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249119  
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 EC8B70850 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7731.0 lumens  
Efficiency: N/A  
Efficacy: 101.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

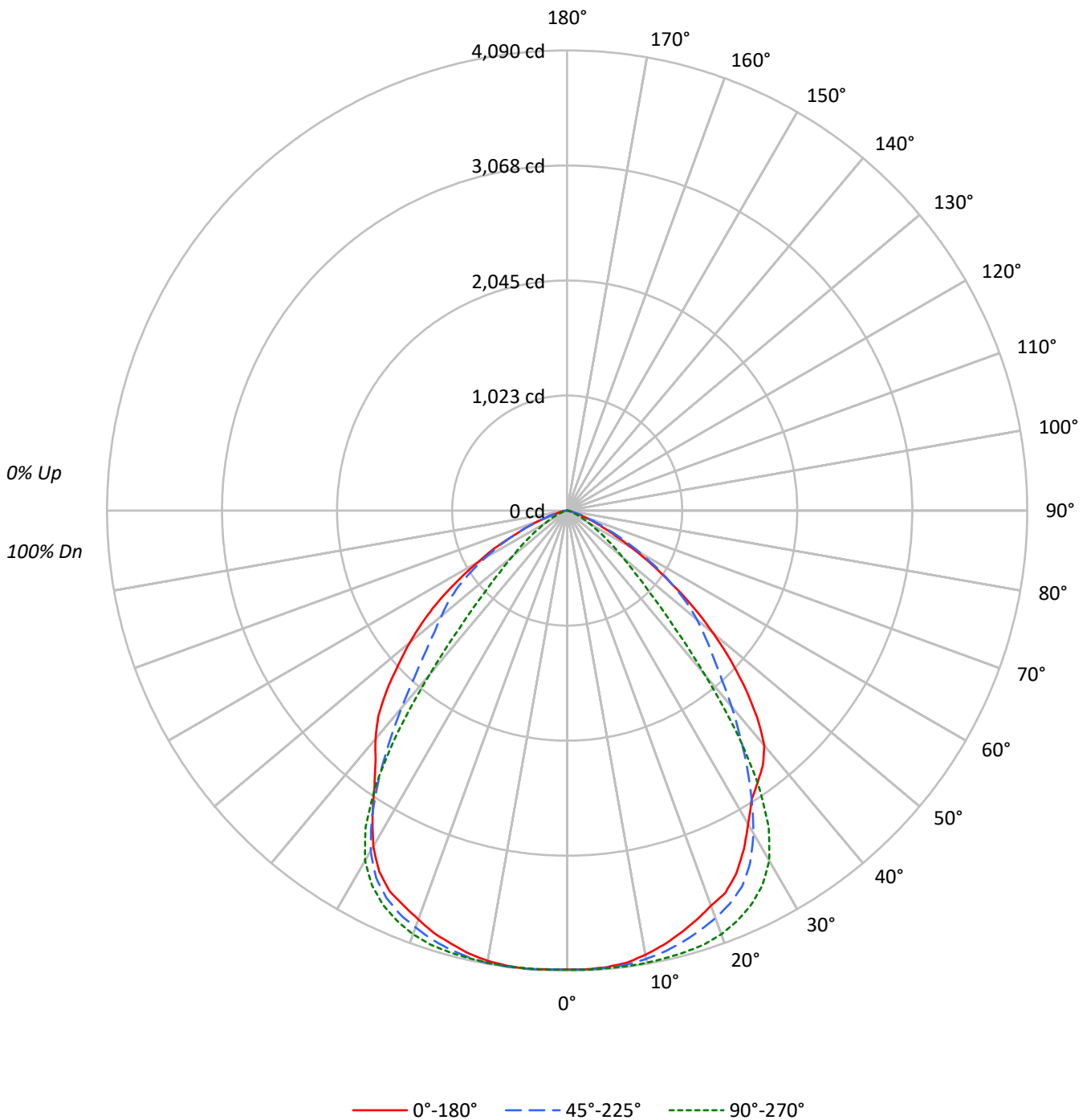
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	125781	125781	125781
5°	126057	126398	126534
10°	125530	127791	127243
15°	124137	129660	127214
20°	122647	131484	126887
25°	121054	131636	127015
30°	114525	127935	122711
35°	111107	111186	112342
40°	109728	76503	106645
45°	97772	45925	99110
50°	81299	30563	87598
55°	60976	21069	74277
60°	41321	14043	56042
65°	24925	9106	38496
70°	13821	4941	23685
75°	6267	2085	12260
80°	5434	2326	8559
85°	6192	3078	8527



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	389.3	5.0
10°-20°	1130.5	14.6
20°-30°	1715.9	22.2
30°-40°	1802.3	23.3
40°-50°	1351.2	17.5
50°-60°	867.0	11.2
60°-70°	370.9	4.8
70°-80°	87.6	1.1
80°-90°	16.3	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°	3235.8	41.9
0°-40°	5038.0	65.2
0°-60°	7256.2	93.9
0°-90°	7731.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7731.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4079	4079	4079	4079	4079	
5°	4072	4079	4083	4090	4088	387
15°	3888	3970	4062	4035	3985	1097
25°	3558	3683	3869	3799	3733	1625
35°	2952	2787	2954	2919	2984	1852
45°	2242	1833	1053	1780	2273	1717
55°	1134	1134	392	1182	1382	1029
65°	342	403	125	519	528	365
75°	53	61	18	105	103	77
85°	18	11	9	18	24	18
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°	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0
2.5°	4081.2	4085.6	4083.4	4083.4	4081.2	4083.4	4083.4	4087.8	4087.8	4083.4	4081.2
5°	4072.4	4076.8	4076.8	4072.4	4072.4	4083.4	4076.8	4081.2	4081.2	4079.0	4079.0
7.5°	4052.8	4052.8	4061.5	4055.0	4055.0	4061.5	4059.3	4063.7	4068.1	4070.3	4070.3
10°	4009.0	4013.3	4015.5	4015.5	4017.7	4024.3	4028.7	4037.5	4041.8	4046.2	4048.4
12.5°	3954.3	3960.8	3963.0	3960.8	3967.4	3976.1	3987.1	3998.0	4004.6	4013.3	4019.9
15°	3888.5	3888.5	3892.9	3899.5	3903.9	3917.0	3928.0	3941.1	3958.6	3969.6	3980.5
17.5°	3816.3	3820.7	3827.2	3827.2	3836.0	3857.9	3864.5	3884.2	3903.9	3914.8	3936.7
20°	3737.5	3741.8	3748.4	3752.8	3763.7	3781.3	3794.4	3811.9	3833.8	3853.5	3875.4
22.5°	3676.2	3667.4	3671.8	3676.2	3687.1	3702.5	3717.8	3739.6	3761.6	3781.3	3803.2
25°	3557.9	3560.1	3566.7	3571.0	3584.2	3597.3	3614.9	3641.1	3660.8	3682.7	3706.8
27.5°	3398.1	3400.3	3411.2	3411.2	3422.2	3444.1	3455.0	3476.9	3503.2	3525.1	3553.6
30°	3216.4	3220.7	3220.7	3229.5	3236.1	3247.0	3258.0	3279.9	3293.0	3312.7	3352.1
32.5°	3050.0	3054.3	3052.1	3050.0	3043.4	3041.2	3039.0	3043.4	3047.8	3054.3	3069.7
35°	2951.5	2940.5	2931.8	2916.4	2898.9	2877.0	2857.3	2831.0	2806.9	2787.2	2765.4
37.5°	2857.3	2855.1	2842.0	2820.1	2785.0	2745.6	2699.7	2642.7	2585.8	2524.5	2465.4
40°	2725.9	2719.3	2708.4	2677.8	2638.3	2590.2	2528.9	2458.8	2366.8	2272.7	2176.4
42.5°	2502.6	2504.8	2491.6	2467.5	2430.4	2384.3	2320.9	2244.2	2145.7	2034.0	1909.2
45°	2242.0	2242.0	2237.7	2217.9	2191.7	2154.5	2106.3	2042.8	1946.5	1832.6	1699.0
47.5°	1970.5	1972.7	1966.1	1961.8	1950.8	1926.8	1891.7	1843.6	1775.7	1666.2	1532.6
50°	1694.7	1694.7	1705.6	1703.4	1703.4	1694.7	1679.4	1650.9	1591.8	1504.2	1379.4
52.5°	1418.8	1423.2	1429.8	1438.5	1449.4	1466.9	1449.4	1436.3	1399.1	1331.2	1223.9
55°	1134.2	1138.5	1149.5	1164.8	1178.0	1195.5	1199.8	1199.8	1180.1	1134.2	1053.1
57.5°	891.1	884.6	893.3	906.5	924.0	941.5	954.6	969.9	967.8	937.1	871.4
60°	670.0	672.2	678.7	691.9	705.0	720.3	737.9	751.0	757.6	742.3	700.6
62.5°	488.3	488.3	497.0	510.1	516.7	538.6	549.6	556.1	562.7	560.5	534.2
65°	341.6	345.9	350.3	356.9	363.4	376.6	383.2	396.3	400.7	402.9	383.2
67.5°	240.9	234.3	238.7	243.0	249.6	258.4	271.5	271.5	278.0	278.0	264.9
70°	153.3	153.3	155.5	162.0	166.4	168.6	173.0	177.3	183.9	181.7	181.7
72.5°	102.9	100.7	102.9	105.1	107.3	113.8	113.8	116.0	120.4	122.6	113.8
75°	52.6	54.8	59.1	56.9	63.5	59.1	61.3	67.9	65.7	61.3	61.3
77.5°	43.8	43.8	43.8	41.6	46.0	46.0	43.8	48.2	46.0	46.0	43.8
80°	30.6	32.8	30.6	28.4	30.6	28.4	28.4	28.4	28.4	28.4	26.3
82.5°	24.1	19.7	21.9	19.7	21.9	21.9	19.7	17.5	17.5	19.7	17.5
85°	17.5	13.1	15.3	15.3	13.1	13.1	13.1	13.1	13.1	10.9	10.9
87.5°	10.9	6.6	6.6	6.6	8.7	8.7	8.7	6.6	8.7	8.7	4.4
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°	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0
2.5°	4085.6	4083.4	4087.8	4085.6	4085.6	4083.4	4085.6	4083.4	4087.8	4079.0	4081.2
5°	4085.6	4081.2	4083.4	4085.6	4087.8	4083.4	4083.4	4083.4	4087.8	4083.4	4085.6
7.5°	4076.8	4074.6	4081.2	4085.6	4083.4	4081.2	4085.6	4083.4	4087.8	4085.6	4090.0
10°	4059.3	4061.5	4065.9	4072.4	4074.6	4076.8	4081.2	4081.2	4087.8	4079.0	4083.4
12.5°	4033.1	4041.8	4052.8	4057.1	4065.9	4065.9	4070.3	4072.4	4076.8	4074.6	4081.2
15°	4000.2	4011.2	4024.3	4035.3	4046.2	4052.8	4059.3	4061.5	4068.1	4061.5	4063.7
17.5°	3960.8	3973.9	3993.6	4006.8	4024.3	4030.9	4039.6	4044.0	4050.6	4046.2	4048.4
20°	3906.0	3921.4	3943.3	3963.0	3973.9	3989.2	4000.2	4006.8	4011.2	4006.8	4009.0
22.5°	3829.4	3851.3	3879.8	3895.1	3917.0	3930.1	3932.3	3947.7	3958.6	3947.7	3952.1
25°	3739.6	3761.6	3783.5	3816.3	3836.0	3851.3	3866.7	3868.9	3879.8	3877.6	3875.4
27.5°	3590.8	3619.3	3656.4	3682.7	3709.0	3733.1	3750.6	3755.0	3765.9	3761.6	3763.7
30°	3387.1	3417.8	3452.9	3494.4	3531.7	3555.7	3577.6	3593.0	3603.9	3597.3	3595.2
32.5°	3098.2	3128.8	3166.0	3207.6	3251.4	3286.4	3312.7	3332.4	3345.6	3341.2	3330.2
35°	2767.5	2776.3	2800.4	2833.2	2870.4	2907.6	2931.8	2953.6	2968.9	2973.3	2973.3
37.5°	2428.2	2399.7	2382.2	2382.2	2404.1	2419.4	2441.3	2454.4	2478.5	2487.3	2493.8
40°	2099.7	2034.0	1972.7	1926.8	1896.1	1893.9	1893.9	1900.5	1922.4	1950.8	1977.1
42.5°	1806.3	1701.2	1607.1	1521.7	1460.4	1425.4	1410.1	1412.2	1429.8	1456.0	1499.8
45°	1572.1	1440.7	1322.5	1219.5	1136.3	1081.6	1055.3	1053.1	1066.3	1096.9	1145.1
47.5°	1390.3	1250.2	1116.6	998.4	908.7	849.5	818.9	810.1	818.9	847.3	904.3
50°	1239.3	1094.8	956.8	834.2	737.9	676.6	648.1	637.1	648.1	672.2	729.1
52.5°	1099.1	950.2	821.1	702.8	599.9	547.4	516.7	510.1	516.7	545.2	591.2
55°	937.1	810.1	683.1	564.9	475.1	422.6	398.5	391.9	398.5	424.8	472.9
57.5°	777.3	667.8	556.1	448.8	372.2	326.2	304.4	295.6	310.9	328.4	385.4
60°	628.4	540.8	446.6	352.5	289.0	247.4	229.9	227.7	232.1	254.0	293.4
62.5°	492.7	420.4	345.9	269.3	216.8	199.2	177.3	175.2	179.5	192.7	223.3
65°	354.7	308.7	251.8	197.0	155.5	131.4	122.6	124.8	129.2	138.0	166.4
67.5°	247.4	214.6	175.2	138.0	107.3	96.3	87.6	85.4	87.6	102.9	118.2
70°	166.4	146.7	118.2	105.1	74.5	59.1	61.3	54.8	63.5	63.5	76.6
72.5°	109.5	96.3	78.8	61.3	52.6	41.6	41.6	39.4	43.8	46.0	56.9
75°	56.9	43.8	43.8	30.6	21.9	10.9	19.7	17.5	15.3	17.5	21.9
77.5°	39.4	32.8	30.6	24.1	21.9	17.5	17.5	17.5	17.5	19.7	21.9
80°	24.1	24.1	17.5	15.3	13.1	10.9	13.1	13.1	13.1	13.1	15.3
82.5°	15.3	13.1	13.1	10.9	10.9	8.7	8.7	8.7	8.7	8.7	13.1
85°	13.1	8.7	8.7	6.6	8.7	15.3	6.6	8.7	8.7	8.7	6.6
87.5°	4.4	6.6	6.6	6.6	4.4	2.2	4.4	6.6	6.6	10.9	8.7
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°	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0
2.5°	4085.6	4087.8	4087.8	4085.6	4085.6	4081.2	4090.0	4083.4	4085.6	4094.3	4087.8
5°	4090.0	4092.2	4092.2	4090.0	4090.0	4090.0	4092.2	4092.2	4090.0	4087.8	4092.2
7.5°	4098.7	4096.5	4096.5	4092.2	4092.2	4087.8	4092.2	4085.6	4090.0	4085.6	4092.2
10°	4087.8	4090.0	4087.8	4085.6	4085.6	4083.4	4083.4	4076.8	4079.0	4072.4	4076.8
12.5°	4081.2	4079.0	4079.0	4074.6	4070.3	4065.9	4063.7	4057.1	4057.1	4041.8	4048.4
15°	4063.7	4065.9	4059.3	4050.6	4046.2	4035.3	4030.9	4022.1	4013.3	4002.4	4004.6
17.5°	4048.4	4041.8	4033.1	4024.3	4006.8	3998.0	3989.2	3976.1	3971.7	3958.6	3954.3
20°	4002.4	3998.0	3987.1	3971.7	3960.8	3941.1	3932.3	3919.2	3908.2	3895.1	3888.5
22.5°	3943.3	3938.9	3925.8	3910.4	3892.9	3884.2	3875.4	3851.3	3840.4	3827.2	3825.0
25°	3868.9	3862.3	3849.1	3831.6	3822.8	3798.8	3790.0	3772.5	3768.1	3755.0	3752.8
27.5°	3755.0	3746.2	3730.9	3709.0	3693.7	3678.4	3669.6	3656.4	3652.1	3638.9	3636.8
30°	3584.2	3573.2	3542.6	3533.9	3507.6	3492.2	3492.2	3474.7	3476.9	3468.2	3468.2
32.5°	3314.9	3297.4	3273.3	3255.8	3238.2	3229.5	3229.5	3222.9	3227.3	3227.3	3231.7
35°	2958.0	2933.9	2920.8	2909.8	2909.8	2918.6	2944.9	2951.5	2964.6	2975.5	2984.3
37.5°	2500.4	2498.2	2513.6	2526.7	2559.5	2596.8	2642.7	2682.2	2719.3	2745.6	2771.9
40°	2005.6	2060.3	2104.1	2165.4	2215.7	2288.0	2371.2	2439.1	2502.6	2548.6	2596.8
42.5°	1565.5	1635.5	1727.5	1817.3	1907.1	2005.6	2115.1	2209.2	2292.4	2355.9	2406.3
45°	1219.5	1315.9	1427.6	1541.4	1657.5	1780.1	1893.9	1990.3	2077.8	2143.5	2193.9
47.5°	983.1	1088.2	1215.2	1340.0	1471.3	1600.5	1727.5	1810.7	1882.9	1935.5	1981.5
50°	812.3	924.0	1057.5	1199.8	1331.2	1460.4	1569.9	1650.9	1710.0	1756.0	1784.4
52.5°	678.7	797.0	939.3	1081.6	1213.0	1331.2	1429.8	1491.1	1539.2	1572.1	1598.3
55°	560.5	674.4	807.9	941.5	1070.7	1182.3	1263.3	1309.3	1346.5	1366.2	1381.6
57.5°	457.6	562.7	685.3	807.9	919.6	1011.6	1075.1	1121.0	1138.5	1153.9	1151.7
60°	359.1	457.6	569.3	674.4	770.7	845.1	891.1	917.4	930.5	937.1	932.7
62.5°	282.4	372.2	457.6	549.6	619.6	683.1	726.9	726.9	733.5	735.7	742.3
65°	210.2	278.0	352.5	420.4	477.3	518.9	543.0	549.6	558.3	556.1	551.8
67.5°	155.5	205.8	260.5	310.9	350.3	376.6	394.1	409.5	407.3	402.9	400.7
70°	107.3	140.1	188.3	219.0	247.4	273.7	278.0	280.2	282.4	284.6	280.2
72.5°	74.5	98.5	124.8	151.1	168.6	179.5	190.5	192.7	192.7	192.7	190.5
75°	37.2	50.4	74.5	85.4	100.7	105.1	113.8	113.8	120.4	111.6	109.5
77.5°	32.8	39.4	52.6	61.3	67.9	74.5	76.6	83.2	81.0	76.6	78.8
80°	19.7	24.1	32.8	37.2	46.0	48.2	50.4	52.6	50.4	52.6	52.6
82.5°	15.3	17.5	21.9	21.9	28.4	28.4	30.6	30.6	32.8	32.8	32.8
85°	8.7	15.3	13.1	26.3	17.5	17.5	21.9	26.3	21.9	21.9	26.3
87.5°	8.7	8.7	6.6	8.7	8.7	8.7	10.9	13.1	13.1	15.3	13.1
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: P249119

CATALOG NUMBER: LSR8B70D010 EC8B70850 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4079.0	4079.0	4079.0	4079.0
2.5°	4085.6	4090.0	4083.4	4081.2
5°	4092.2	4092.2	4087.8	4087.8
7.5°	4092.2	4092.2	4085.6	4081.2
10°	4074.6	4074.6	4068.1	4063.7
12.5°	4041.8	4041.8	4039.6	4033.1
15°	4000.2	4000.2	3991.4	3984.9
17.5°	3943.3	3947.7	3936.7	3936.7
20°	3882.0	3879.8	3871.1	3866.7
22.5°	3818.5	3814.1	3811.9	3798.8
25°	3750.6	3746.2	3739.6	3733.1
27.5°	3634.6	3632.4	3625.8	3617.1
30°	3457.2	3455.0	3446.3	3446.3
32.5°	3227.3	3225.1	3216.4	3218.6
35°	2988.6	2997.4	2993.0	2984.3
37.5°	2789.4	2796.0	2800.4	2796.0
40°	2623.0	2642.7	2644.9	2649.3
42.5°	2445.7	2471.9	2480.7	2485.1
45°	2233.3	2257.4	2277.1	2272.7
47.5°	2016.5	2034.0	2051.5	2038.4
50°	1808.5	1819.5	1826.0	1826.0
52.5°	1611.5	1611.5	1609.3	1611.5
55°	1385.9	1385.9	1377.2	1381.6
57.5°	1149.5	1153.9	1147.3	1136.3
60°	930.5	919.6	915.2	908.7
62.5°	724.7	724.7	709.4	729.1
65°	543.0	536.4	529.8	527.6
67.5°	394.1	391.9	385.4	383.2
70°	278.0	269.3	267.1	262.7
72.5°	186.1	186.1	181.7	181.7
75°	113.8	102.9	100.7	102.9
77.5°	78.8	76.6	76.6	74.5
80°	52.6	50.4	54.8	48.2
82.5°	32.8	35.0	32.8	35.0
85°	21.9	26.3	24.1	24.1
87.5°	13.1	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)