

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: P249317

Luminaire Tested: **LSR8B70D010 EC8B70835 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249317  
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 EC8B70835 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7461.0 lumens  
Efficiency: N/A  
Efficacy: 98.3 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

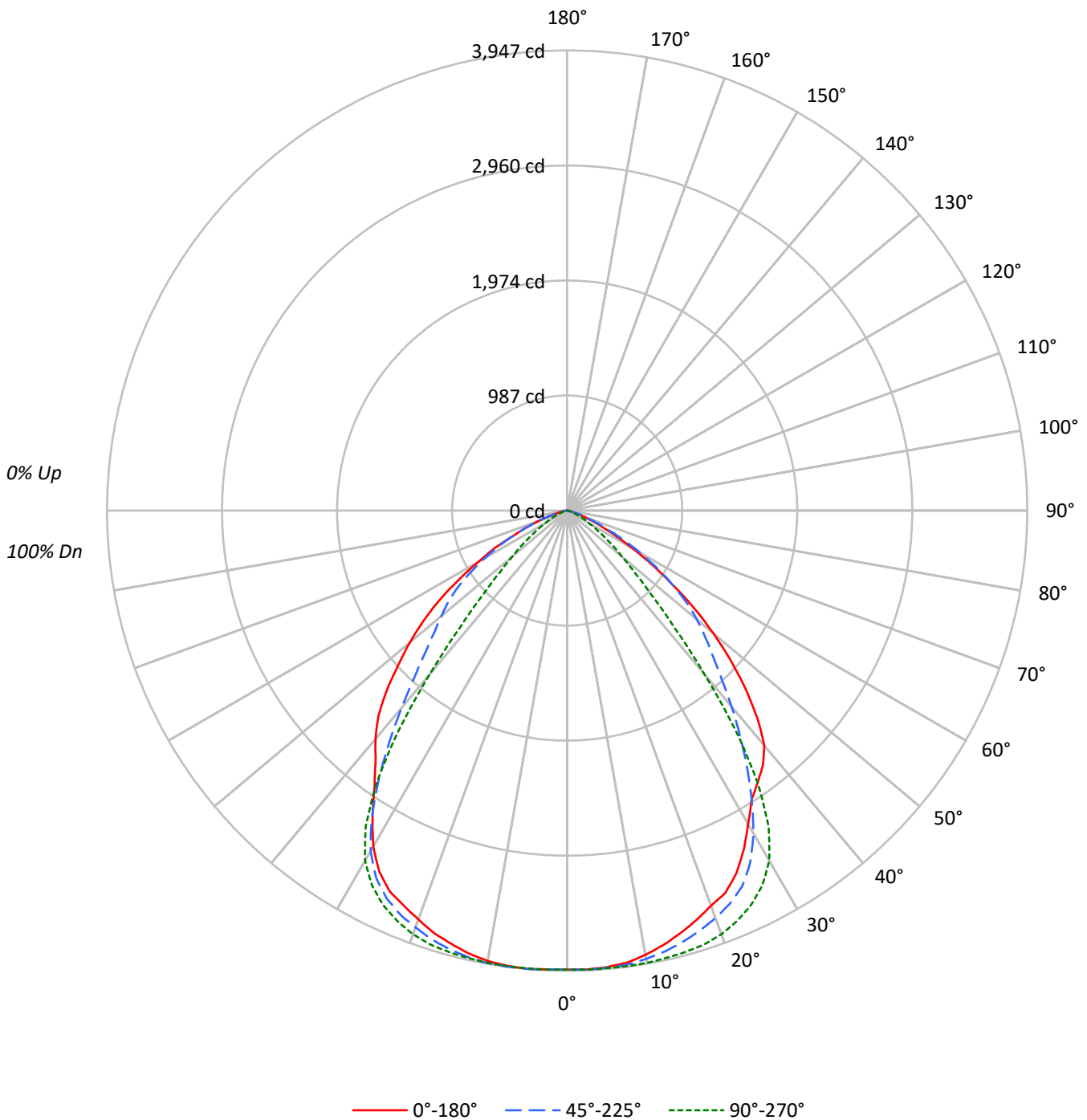
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	121390	121390	121390
5°	121656	121984	122114
10°	121143	123329	122799
15°	119802	125133	122771
20°	118365	126890	122454
25°	116829	127036	122579
30°	110527	123466	118424
35°	107226	107305	108419
40°	105896	73830	102921
45°	94357	44324	95648
50°	78459	29498	84542
55°	58842	20338	71680
60°	39878	13549	54081
65°	24057	8792	37154
70°	13335	4760	22855
75°	6041	2014	11831
80°	5256	2255	8257
85°	5979	2972	8244



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	375.7	5.0
10°-20°	1091.1	14.6
20°-30°	1656.0	22.2
30°-40°	1739.3	23.3
40°-50°	1304.0	17.5
50°-60°	836.7	11.2
60°-70°	357.9	4.8
70°-80°	84.6	1.1
80°-90°	15.7	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°	3122.8	41.9
0°-40°	4862.1	65.2
0°-60°	7002.8	93.9
0°-90°	7461.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7461.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3937	3937	3937	3937	3937	
5°	3930	3937	3941	3947	3945	373
15°	3753	3831	3920	3894	3846	1058
25°	3434	3554	3734	3666	3603	1569
35°	2848	2690	2850	2817	2880	1788
45°	2164	1769	1016	1718	2193	1657
55°	1094	1094	378	1141	1333	993
65°	330	389	120	501	509	352
75°	51	59	17	101	99	74
85°	17	10	8	17	23	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°	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6
2.5°	3938.7	3942.9	3940.8	3940.8	3938.7	3940.8	3940.8	3945.0	3945.0	3940.8	3938.7
5°	3930.2	3934.5	3934.5	3930.2	3930.2	3940.8	3934.5	3938.7	3938.7	3936.6	3936.6
7.5°	3911.2	3911.2	3919.7	3913.4	3913.4	3919.7	3917.5	3921.8	3926.0	3928.1	3928.1
10°	3868.9	3873.2	3875.3	3875.3	3877.4	3883.7	3888.0	3896.4	3900.6	3904.9	3907.0
12.5°	3816.2	3822.5	3824.6	3822.5	3828.8	3837.3	3847.8	3858.4	3864.8	3873.2	3879.5
15°	3752.7	3752.7	3757.0	3763.3	3767.6	3780.2	3790.8	3803.4	3820.3	3830.9	3841.5
17.5°	3683.0	3687.3	3693.6	3693.6	3702.0	3723.1	3729.5	3748.5	3767.6	3778.1	3799.2
20°	3607.0	3611.2	3617.5	3621.8	3632.3	3649.2	3661.9	3678.8	3699.9	3719.0	3740.0
22.5°	3547.8	3539.3	3543.5	3547.8	3558.4	3573.2	3587.9	3609.0	3630.2	3649.2	3670.4
25°	3433.7	3435.8	3442.1	3446.3	3459.0	3471.7	3488.6	3514.0	3533.0	3554.1	3577.3
27.5°	3279.4	3281.6	3292.1	3292.1	3302.6	3323.8	3334.3	3355.5	3380.9	3402.0	3429.5
30°	3104.1	3108.2	3108.2	3116.7	3123.0	3133.6	3144.2	3165.3	3178.0	3197.0	3235.1
32.5°	2943.5	2947.7	2945.5	2943.5	2937.1	2935.0	2932.9	2937.1	2941.3	2947.7	2962.4
35°	2848.4	2837.8	2829.4	2814.6	2797.7	2776.5	2757.5	2732.2	2708.9	2689.9	2668.8
37.5°	2757.5	2755.4	2742.7	2721.6	2687.8	2649.7	2605.4	2550.4	2495.5	2436.3	2379.3
40°	2630.7	2624.4	2613.8	2584.2	2546.2	2499.7	2440.6	2372.9	2284.2	2193.3	2100.4
42.5°	2415.2	2417.3	2404.6	2381.4	2345.5	2301.1	2239.8	2165.9	2070.8	1963.0	1842.6
45°	2163.7	2163.7	2159.5	2140.5	2115.1	2079.2	2032.7	1971.5	1878.5	1768.6	1639.7
47.5°	1901.7	1903.8	1897.5	1893.3	1882.7	1859.5	1825.7	1779.2	1713.7	1608.0	1479.1
50°	1635.5	1635.5	1646.0	1643.9	1643.9	1635.5	1620.7	1593.2	1536.2	1451.6	1331.2
52.5°	1369.2	1373.5	1379.8	1388.3	1398.8	1415.7	1398.8	1386.1	1350.2	1284.7	1181.2
55°	1094.5	1098.8	1109.3	1124.1	1136.8	1153.7	1157.9	1157.9	1138.9	1094.5	1016.4
57.5°	860.0	853.7	862.1	874.8	891.7	908.6	921.3	936.1	934.0	904.4	841.0
60°	646.6	648.7	655.0	667.7	680.4	695.2	712.1	724.8	731.1	716.3	676.2
62.5°	471.2	471.2	479.6	492.3	498.7	519.8	530.4	536.7	543.0	540.9	515.6
65°	329.7	333.8	338.1	344.4	350.7	363.4	369.8	382.4	386.7	388.8	369.8
67.5°	232.5	226.1	230.3	234.5	240.9	249.4	262.0	262.0	268.3	268.3	255.7
70°	147.9	147.9	150.0	156.3	160.6	162.7	166.9	171.1	177.5	175.4	175.4
72.5°	99.3	97.2	99.3	101.4	103.6	109.9	109.9	112.0	116.2	118.3	109.9
75°	50.7	52.8	57.0	55.0	61.3	57.0	59.1	65.5	63.4	59.1	59.1
77.5°	42.2	42.2	42.2	40.2	44.4	44.4	42.2	46.5	44.4	44.4	42.2
80°	29.6	31.7	29.6	27.5	29.6	27.5	27.5	27.5	27.5	27.5	25.3
82.5°	23.3	19.0	21.1	19.0	21.1	21.1	19.0	16.9	16.9	19.0	16.9
85°	16.9	12.7	14.8	14.8	12.7	12.7	12.7	12.7	12.7	10.5	10.5
87.5°	10.5	6.4	6.4	6.4	8.4	8.4	8.4	6.4	8.4	8.4	4.2
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°	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6
2.5°	3942.9	3940.8	3945.0	3942.9	3942.9	3940.8	3942.9	3940.8	3945.0	3936.6	3938.7
5°	3942.9	3938.7	3940.8	3942.9	3945.0	3940.8	3940.8	3940.8	3945.0	3940.8	3942.9
7.5°	3934.5	3932.3	3938.7	3942.9	3940.8	3938.7	3942.9	3940.8	3945.0	3942.9	3947.1
10°	3917.5	3919.7	3923.9	3930.2	3932.3	3934.5	3938.7	3938.7	3945.0	3936.6	3940.8
12.5°	3892.2	3900.6	3911.2	3915.4	3923.9	3923.9	3928.1	3930.2	3934.5	3932.3	3938.7
15°	3860.5	3871.1	3883.7	3894.3	3904.9	3911.2	3917.5	3919.7	3926.0	3919.7	3921.8
17.5°	3822.5	3835.1	3854.2	3866.8	3883.7	3890.1	3898.5	3902.8	3909.1	3904.9	3907.0
20°	3769.6	3784.5	3805.6	3824.6	3835.1	3849.9	3860.5	3866.8	3871.1	3866.8	3868.9
22.5°	3695.7	3716.8	3744.3	3759.1	3780.2	3792.9	3795.0	3809.8	3820.3	3809.8	3814.0
25°	3609.0	3630.2	3651.3	3683.0	3702.0	3716.8	3731.6	3733.7	3744.3	3742.2	3740.0
27.5°	3465.4	3492.9	3528.7	3554.1	3579.5	3602.7	3619.6	3623.8	3634.4	3630.2	3632.3
30°	3268.8	3298.5	3332.3	3372.4	3408.3	3431.5	3452.7	3467.5	3478.0	3471.7	3469.6
32.5°	2990.0	3019.5	3055.5	3095.6	3137.9	3171.6	3197.0	3216.0	3228.7	3224.5	3213.9
35°	2670.9	2679.3	2702.6	2734.3	2770.2	2806.1	2829.4	2850.5	2865.2	2869.5	2869.5
37.5°	2343.4	2315.9	2299.0	2299.0	2320.1	2334.9	2356.0	2368.7	2392.0	2400.4	2406.7
40°	2026.4	1963.0	1903.8	1859.5	1829.9	1827.8	1827.8	1834.1	1855.2	1882.7	1908.1
42.5°	1743.3	1641.8	1551.0	1468.6	1409.4	1375.6	1360.8	1362.9	1379.8	1405.2	1447.4
45°	1517.2	1390.4	1276.3	1177.0	1096.7	1043.8	1018.5	1016.4	1029.0	1058.6	1105.1
47.5°	1341.8	1206.5	1077.6	963.5	876.9	819.8	790.3	781.8	790.3	817.7	872.7
50°	1196.0	1056.5	923.4	805.1	712.1	652.9	625.4	614.9	625.4	648.7	703.6
52.5°	1060.7	917.0	792.4	678.3	579.0	528.2	498.7	492.3	498.7	526.1	570.5
55°	904.4	781.8	659.3	545.2	458.5	407.8	384.6	378.3	384.6	409.9	456.4
57.5°	750.1	644.5	536.7	433.2	359.2	314.8	293.7	285.2	300.0	316.9	371.9
60°	606.4	521.9	431.0	340.2	278.9	238.8	221.9	219.7	224.0	245.1	283.1
62.5°	475.5	405.7	333.8	259.9	209.2	192.3	171.1	169.1	173.3	185.9	215.5
65°	342.3	298.0	243.0	190.2	150.0	126.8	118.3	120.5	124.7	133.1	160.6
67.5°	238.8	207.1	169.1	133.1	103.6	93.0	84.5	82.4	84.5	99.3	114.1
70°	160.6	141.6	114.1	101.4	71.9	57.0	59.1	52.8	61.3	61.3	73.9
72.5°	105.6	93.0	76.1	59.1	50.7	40.2	40.2	38.1	42.2	44.4	55.0
75°	55.0	42.2	42.2	29.6	21.1	10.5	19.0	16.9	14.8	16.9	21.1
77.5°	38.1	31.7	29.6	23.3	21.1	16.9	16.9	16.9	16.9	19.0	21.1
80°	23.3	23.3	16.9	14.8	12.7	10.5	12.7	12.7	12.7	12.7	14.8
82.5°	14.8	12.7	12.7	10.5	10.5	8.4	8.4	8.4	8.4	8.4	12.7
85°	12.7	8.4	8.4	6.4	8.4	14.8	6.4	8.4	8.4	8.4	6.4
87.5°	4.2	6.4	6.4	6.4	4.2	2.1	4.2	6.4	6.4	10.5	8.4
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6	3936.6
2.5°	3942.9	3945.0	3945.0	3942.9	3942.9	3938.7	3947.1	3940.8	3942.9	3951.4	3945.0
5°	3947.1	3949.2	3949.2	3947.1	3947.1	3947.1	3949.2	3949.2	3947.1	3945.0	3949.2
7.5°	3955.6	3953.5	3953.5	3949.2	3949.2	3945.0	3949.2	3942.9	3947.1	3942.9	3949.2
10°	3945.0	3947.1	3945.0	3942.9	3942.9	3940.8	3940.8	3934.5	3936.6	3930.2	3934.5
12.5°	3938.7	3936.6	3936.6	3932.3	3928.1	3923.9	3921.8	3915.4	3915.4	3900.6	3907.0
15°	3921.8	3923.9	3917.5	3909.1	3904.9	3894.3	3890.1	3881.6	3873.2	3862.6	3864.8
17.5°	3907.0	3900.6	3892.2	3883.7	3866.8	3858.4	3849.9	3837.3	3833.0	3820.3	3816.2
20°	3862.6	3858.4	3847.8	3833.0	3822.5	3803.4	3795.0	3782.3	3771.7	3759.1	3752.7
22.5°	3805.6	3801.3	3788.7	3773.9	3757.0	3748.5	3740.0	3716.8	3706.2	3693.6	3691.4
25°	3733.7	3727.4	3714.7	3697.8	3689.3	3666.1	3657.6	3640.7	3636.5	3623.8	3621.8
27.5°	3623.8	3615.4	3600.6	3579.5	3564.7	3549.9	3541.5	3528.7	3524.6	3511.8	3509.8
30°	3459.0	3448.4	3418.9	3410.4	3385.1	3370.3	3370.3	3353.4	3355.5	3347.1	3347.1
32.5°	3199.1	3182.2	3159.0	3142.1	3125.2	3116.7	3116.7	3110.4	3114.6	3114.6	3118.8
35°	2854.7	2831.5	2818.8	2808.2	2808.2	2816.6	2842.0	2848.4	2861.1	2871.6	2880.1
37.5°	2413.1	2411.0	2425.8	2438.4	2470.1	2506.1	2550.4	2588.5	2624.4	2649.7	2675.1
40°	1935.5	1988.4	2030.6	2089.8	2138.4	2208.1	2288.4	2353.9	2415.2	2459.6	2506.1
42.5°	1510.8	1578.4	1667.2	1753.8	1840.5	1935.5	2041.2	2132.1	2212.3	2273.6	2322.2
45°	1177.0	1269.9	1377.7	1487.6	1599.6	1717.9	1827.8	1920.7	2005.3	2068.7	2117.3
47.5°	948.7	1050.2	1172.7	1293.2	1420.0	1544.6	1667.2	1747.5	1817.2	1867.9	1912.3
50°	783.9	891.7	1020.6	1157.9	1284.7	1409.4	1515.0	1593.2	1650.3	1694.7	1722.1
52.5°	655.0	769.1	906.5	1043.8	1170.6	1284.7	1379.8	1439.0	1485.5	1517.2	1542.5
55°	540.9	650.8	779.7	908.6	1033.3	1141.0	1219.2	1263.6	1299.5	1318.5	1333.3
57.5°	441.6	543.0	661.4	779.7	887.5	976.2	1037.5	1081.9	1098.8	1113.6	1111.4
60°	346.6	441.6	549.4	650.8	743.8	815.6	860.0	885.4	898.0	904.4	900.1
62.5°	272.6	359.2	441.6	530.4	598.0	659.3	701.5	701.5	707.9	710.0	716.3
65°	202.8	268.3	340.2	405.7	460.6	500.8	524.1	530.4	538.8	536.7	532.5
67.5°	150.0	198.6	251.4	300.0	338.1	363.4	380.3	395.2	393.0	388.8	386.7
70°	103.6	135.3	181.7	211.3	238.8	264.1	268.3	270.5	272.6	274.7	270.5
72.5°	71.9	95.1	120.5	145.8	162.7	173.3	183.9	185.9	185.9	185.9	183.9
75°	35.9	48.6	71.9	82.4	97.2	101.4	109.9	109.9	116.2	107.7	105.6
77.5°	31.7	38.1	50.7	59.1	65.5	71.9	73.9	80.3	78.2	73.9	76.1
80°	19.0	23.3	31.7	35.9	44.4	46.5	48.6	50.7	48.6	50.7	50.7
82.5°	14.8	16.9	21.1	21.1	27.5	27.5	29.6	29.6	31.7	31.7	31.7
85°	8.4	14.8	12.7	25.3	16.9	16.9	21.1	25.3	21.1	21.1	25.3
87.5°	8.4	8.4	6.4	8.4	8.4	8.4	10.5	12.7	12.7	14.8	12.7
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: P249317

CATALOG NUMBER: LSR8B70D010 EC8B70835 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3936.6	3936.6	3936.6	3936.6
2.5°	3942.9	3947.1	3940.8	3938.7
5°	3949.2	3949.2	3945.0	3945.0
7.5°	3949.2	3949.2	3942.9	3938.7
10°	3932.3	3932.3	3926.0	3921.8
12.5°	3900.6	3900.6	3898.5	3892.2
15°	3860.5	3860.5	3852.0	3845.7
17.5°	3805.6	3809.8	3799.2	3799.2
20°	3746.4	3744.3	3735.9	3731.6
22.5°	3685.1	3680.9	3678.8	3666.1
25°	3619.6	3615.4	3609.0	3602.7
27.5°	3507.6	3505.5	3499.2	3490.7
30°	3336.5	3334.3	3325.9	3325.9
32.5°	3114.6	3112.5	3104.1	3106.2
35°	2884.3	2892.7	2888.5	2880.1
37.5°	2692.0	2698.3	2702.6	2698.3
40°	2531.4	2550.4	2552.5	2556.8
42.5°	2360.3	2385.6	2394.1	2398.3
45°	2155.3	2178.5	2197.6	2193.3
47.5°	1946.1	1963.0	1979.9	1967.2
50°	1745.4	1755.9	1762.3	1762.3
52.5°	1555.2	1555.2	1553.1	1555.2
55°	1337.5	1337.5	1329.1	1333.3
57.5°	1109.3	1113.6	1107.2	1096.7
60°	898.0	887.5	883.2	876.9
62.5°	699.4	699.4	684.6	703.6
65°	524.1	517.7	511.3	509.2
67.5°	380.3	378.3	371.9	369.8
70°	268.3	259.9	257.8	253.5
72.5°	179.6	179.6	175.4	175.4
75°	109.9	99.3	97.2	99.3
77.5°	76.1	73.9	73.9	71.9
80°	50.7	48.6	52.8	46.5
82.5°	31.7	33.8	31.7	33.8
85°	21.1	25.3	23.3	23.3
87.5°	12.7	12.7	12.7	12.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)