

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: P249209

Luminaire Tested: **LSR8B70D010 EC8B70835 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249209  
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 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7593.0 lumens  
Efficiency: N/A  
Efficacy: 100.0 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

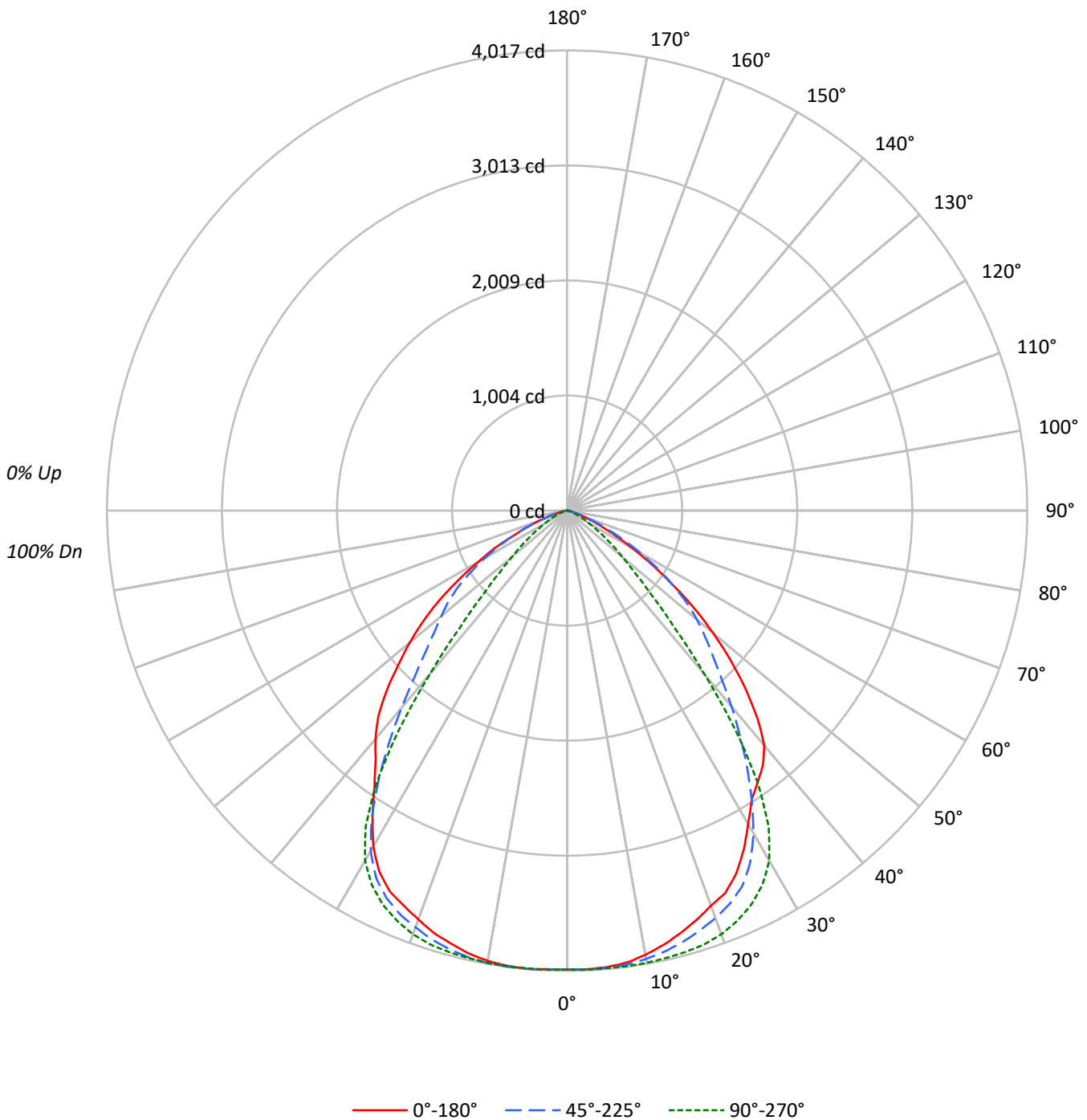
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	123536	123536	123536
5°	123807	124141	124275
10°	123288	125511	124973
15°	121921	127345	124945
20°	120458	129135	124619
25°	118894	129285	124749
30°	112482	125649	120522
35°	109123	109202	110335
40°	107772	75134	104741
45°	96027	45105	97340
50°	79846	30021	86039
55°	59885	20693	72949
60°	40581	13790	55037
65°	24480	8946	37810
70°	13569	4851	23261
75°	6148	2049	12045
80°	5345	2291	8399
85°	6085	3043	8385



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	382.3	5.0
10°-20°	1110.4	14.6
20°-30°	1685.3	22.2
30°-40°	1770.1	23.3
40°-50°	1327.1	17.5
50°-60°	851.5	11.2
60°-70°	364.3	4.8
70°-80°	86.1	1.1
80°-90°	16.0	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°	3178.0	41.9
0°-40°	4948.1	65.2
0°-60°	7126.7	93.9
0°-90°	7593.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7593.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4006	4006	4006	4006	4006	
5°	4000	4006	4010	4017	4015	380
15°	3819	3899	3989	3963	3914	1077
25°	3494	3617	3800	3731	3666	1596
35°	2899	2738	2901	2866	2931	1819
45°	2202	1800	1034	1748	2232	1686
55°	1114	1114	385	1161	1357	1010
65°	336	396	123	510	518	358
75°	52	60	17	103	101	75
85°	17	11	9	17	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°	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2
2.5°	4008.4	4012.7	4010.5	4010.5	4008.4	4010.5	4010.5	4014.8	4014.8	4010.5	4008.4
5°	3999.7	4004.1	4004.1	3999.7	3999.7	4010.5	4004.1	4008.4	4008.4	4006.2	4006.2
7.5°	3980.4	3980.4	3989.0	3982.6	3982.6	3989.0	3986.9	3991.2	3995.5	3997.6	3997.6
10°	3937.4	3941.7	3943.9	3943.9	3946.0	3952.4	3956.8	3965.4	3969.6	3974.0	3976.1
12.5°	3883.7	3890.1	3892.2	3890.1	3896.6	3905.1	3915.9	3926.7	3933.1	3941.7	3948.2
15°	3819.1	3819.1	3823.4	3829.9	3834.2	3847.1	3857.8	3870.7	3887.9	3898.7	3909.5
17.5°	3748.2	3752.5	3758.9	3758.9	3767.5	3789.0	3795.5	3814.8	3834.2	3844.9	3866.5
20°	3670.8	3675.0	3681.5	3685.8	3696.6	3713.8	3726.7	3743.9	3765.4	3784.7	3806.2
22.5°	3610.5	3602.0	3606.2	3610.5	3621.3	3636.4	3651.4	3672.9	3694.4	3713.8	3735.3
25°	3494.4	3496.6	3503.0	3507.3	3520.2	3533.1	3550.3	3576.1	3595.5	3617.0	3640.6
27.5°	3337.5	3339.6	3350.3	3350.3	3361.1	3382.6	3393.3	3414.9	3440.7	3462.2	3490.1
30°	3159.0	3163.2	3163.2	3171.9	3178.3	3189.1	3199.8	3221.3	3234.2	3253.6	3292.3
32.5°	2995.5	2999.8	2997.7	2995.5	2989.1	2986.9	2984.8	2989.1	2993.4	2999.8	3014.9
35°	2898.8	2888.0	2879.4	2864.4	2847.2	2825.6	2806.3	2780.5	2756.8	2737.5	2716.0
37.5°	2806.3	2804.1	2791.2	2769.7	2735.3	2696.6	2651.5	2595.6	2539.6	2479.4	2421.4
40°	2677.3	2670.8	2660.1	2630.0	2591.2	2543.9	2483.7	2414.9	2324.6	2232.1	2137.5
42.5°	2457.9	2460.1	2447.2	2423.5	2387.0	2341.8	2279.4	2204.2	2107.4	1997.7	1875.2
45°	2202.0	2202.0	2197.7	2178.4	2152.6	2116.0	2068.7	2006.3	1911.7	1799.9	1668.7
47.5°	1935.4	1937.5	1931.0	1926.8	1916.0	1892.4	1858.0	1810.7	1744.0	1636.4	1505.3
50°	1664.4	1664.4	1675.2	1673.0	1673.0	1664.4	1649.4	1621.4	1563.4	1477.3	1354.8
52.5°	1393.5	1397.8	1404.2	1412.8	1423.6	1440.8	1423.6	1410.7	1374.1	1307.4	1202.1
55°	1113.9	1118.2	1129.0	1144.0	1156.9	1174.2	1178.4	1178.4	1159.1	1113.9	1034.3
57.5°	875.2	868.8	877.4	890.3	907.5	924.7	937.6	952.6	950.5	920.4	855.9
60°	658.0	660.2	666.6	679.5	692.4	707.5	724.7	737.6	744.1	729.0	688.1
62.5°	479.6	479.6	488.1	501.0	507.5	529.0	539.7	546.2	552.6	550.5	524.7
65°	335.5	339.7	344.1	350.5	357.0	369.8	376.3	389.2	393.5	395.7	376.3
67.5°	236.6	230.1	234.4	238.7	245.1	253.8	266.7	266.7	273.1	273.1	260.2
70°	150.5	150.5	152.7	159.1	163.4	165.6	169.9	174.2	180.6	178.5	178.5
72.5°	101.1	98.9	101.1	103.2	105.4	111.8	111.8	114.0	118.3	120.4	111.8
75°	51.6	53.8	58.0	55.9	62.4	58.0	60.2	66.7	64.5	60.2	60.2
77.5°	43.0	43.0	43.0	40.9	45.1	45.1	43.0	47.3	45.1	45.1	43.0
80°	30.1	32.3	30.1	27.9	30.1	27.9	27.9	27.9	27.9	27.9	25.8
82.5°	23.7	19.4	21.5	19.4	21.5	21.5	19.4	17.2	17.2	19.4	17.2
85°	17.2	12.9	15.0	15.0	12.9	12.9	12.9	12.9	12.9	10.7	10.7
87.5°	10.7	6.5	6.5	6.5	8.6	8.6	8.6	6.5	8.6	8.6	4.3
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2
2.5°	4012.7	4010.5	4014.8	4012.7	4012.7	4010.5	4012.7	4010.5	4014.8	4006.2	4008.4
5°	4012.7	4008.4	4010.5	4012.7	4014.8	4010.5	4010.5	4010.5	4014.8	4010.5	4012.7
7.5°	4004.1	4001.9	4008.4	4012.7	4010.5	4008.4	4012.7	4010.5	4014.8	4012.7	4017.0
10°	3986.9	3989.0	3993.3	3999.7	4001.9	4004.1	4008.4	4008.4	4014.8	4006.2	4010.5
12.5°	3961.1	3969.6	3980.4	3984.7	3993.3	3993.3	3997.6	3999.7	4004.1	4001.9	4008.4
15°	3928.8	3939.6	3952.4	3963.2	3974.0	3980.4	3986.9	3989.0	3995.5	3989.0	3991.2
17.5°	3890.1	3903.0	3922.3	3935.2	3952.4	3958.9	3967.5	3971.8	3978.3	3974.0	3976.1
20°	3836.3	3851.4	3872.9	3892.2	3903.0	3918.0	3928.8	3935.2	3939.6	3935.2	3937.4
22.5°	3761.1	3782.6	3810.5	3825.6	3847.1	3860.0	3862.1	3877.2	3887.9	3877.2	3881.5
25°	3672.9	3694.4	3715.9	3748.2	3767.5	3782.6	3797.6	3799.8	3810.5	3808.4	3806.2
27.5°	3526.7	3554.7	3591.2	3617.0	3642.8	3666.5	3683.7	3687.9	3698.7	3694.4	3696.6
30°	3326.7	3356.8	3391.2	3432.1	3468.6	3492.3	3513.8	3528.8	3539.6	3533.1	3531.0
32.5°	3042.8	3072.9	3109.5	3150.3	3193.4	3227.7	3253.6	3272.9	3285.8	3281.5	3270.8
35°	2718.1	2726.7	2750.4	2782.7	2819.2	2855.7	2879.4	2900.9	2915.9	2920.3	2920.3
37.5°	2384.8	2356.9	2339.7	2339.7	2361.1	2376.2	2397.7	2410.6	2434.3	2442.9	2449.3
40°	2062.2	1997.7	1937.5	1892.4	1862.3	1860.1	1860.1	1866.5	1888.1	1916.0	1941.8
42.5°	1774.1	1670.9	1578.4	1494.5	1434.3	1399.9	1384.9	1387.0	1404.2	1430.0	1473.0
45°	1544.0	1415.0	1298.9	1197.8	1116.1	1062.3	1036.5	1034.3	1047.2	1077.3	1124.7
47.5°	1365.5	1227.9	1096.7	980.6	892.4	834.4	804.3	795.7	804.3	832.2	888.1
50°	1217.1	1075.2	939.7	819.3	724.7	664.5	636.5	625.8	636.5	660.2	716.1
52.5°	1079.5	933.3	806.4	690.3	589.2	537.6	507.5	501.0	507.5	535.4	580.6
55°	920.4	795.7	670.9	554.8	466.7	415.0	391.4	384.9	391.4	417.2	464.5
57.5°	763.4	655.9	546.2	440.8	365.6	320.4	298.9	290.3	305.3	322.5	378.5
60°	617.1	531.2	438.7	346.2	283.9	243.0	225.8	223.6	227.9	249.5	288.1
62.5°	483.9	412.9	339.7	264.5	212.9	195.7	174.2	172.1	176.3	189.2	219.4
65°	348.4	303.2	247.3	193.5	152.7	129.0	120.4	122.6	126.9	135.5	163.4
67.5°	243.0	210.7	172.1	135.5	105.4	94.6	86.0	83.9	86.0	101.1	116.1
70°	163.4	144.1	116.1	103.2	73.1	58.0	60.2	53.8	62.4	62.4	75.2
72.5°	107.5	94.6	77.4	60.2	51.6	40.9	40.9	38.7	43.0	45.1	55.9
75°	55.9	43.0	43.0	30.1	21.5	10.7	19.4	17.2	15.0	17.2	21.5
77.5°	38.7	32.3	30.1	23.7	21.5	17.2	17.2	17.2	17.2	19.4	21.5
80°	23.7	23.7	17.2	15.0	12.9	10.7	12.9	12.9	12.9	12.9	15.0
82.5°	15.0	12.9	12.9	10.7	10.7	8.6	8.6	8.6	8.6	8.6	12.9
85°	12.9	8.6	8.6	6.5	8.6	15.0	6.5	8.6	8.6	8.6	6.5
87.5°	4.3	6.5	6.5	6.5	4.3	2.2	4.3	6.5	6.5	10.7	8.6
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°	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2	4006.2
2.5°	4012.7	4014.8	4014.8	4012.7	4012.7	4008.4	4017.0	4010.5	4012.7	4021.3	4014.8
5°	4017.0	4019.1	4019.1	4017.0	4017.0	4017.0	4019.1	4019.1	4017.0	4014.8	4019.1
7.5°	4025.6	4023.4	4023.4	4019.1	4019.1	4014.8	4019.1	4012.7	4017.0	4012.7	4019.1
10°	4014.8	4017.0	4014.8	4012.7	4012.7	4010.5	4010.5	4004.1	4006.2	3999.7	4004.1
12.5°	4008.4	4006.2	4006.2	4001.9	3997.6	3993.3	3991.2	3984.7	3984.7	3969.6	3976.1
15°	3991.2	3993.3	3986.9	3978.3	3974.0	3963.2	3958.9	3950.3	3941.7	3931.0	3933.1
17.5°	3976.1	3969.6	3961.1	3952.4	3935.2	3926.7	3918.0	3905.1	3900.8	3887.9	3883.7
20°	3931.0	3926.7	3915.9	3900.8	3890.1	3870.7	3862.1	3849.3	3838.5	3825.6	3819.1
22.5°	3872.9	3868.6	3855.7	3840.6	3823.4	3814.8	3806.2	3782.6	3771.8	3758.9	3756.8
25°	3799.8	3793.3	3780.4	3763.2	3754.6	3731.0	3722.3	3705.1	3700.9	3687.9	3685.8
27.5°	3687.9	3679.4	3664.3	3642.8	3627.7	3612.7	3604.1	3591.2	3586.9	3574.0	3571.9
30°	3520.2	3509.5	3479.4	3470.8	3444.9	3429.9	3429.9	3412.7	3414.9	3406.3	3406.3
32.5°	3255.7	3238.5	3214.9	3197.6	3180.4	3171.9	3171.9	3165.4	3169.7	3169.7	3174.0
35°	2905.2	2881.6	2868.6	2857.9	2857.9	2866.5	2892.3	2898.8	2911.7	2922.4	2931.0
37.5°	2455.7	2453.6	2468.7	2481.6	2513.8	2550.4	2595.6	2634.3	2670.8	2696.6	2722.4
40°	1969.8	2023.5	2066.5	2126.8	2176.2	2247.2	2328.9	2395.6	2457.9	2503.1	2550.4
42.5°	1537.5	1606.3	1696.7	1784.8	1873.0	1969.8	2077.3	2169.8	2251.5	2313.8	2363.3
45°	1197.8	1292.4	1402.1	1513.9	1627.9	1748.3	1860.1	1954.7	2040.8	2105.3	2154.7
47.5°	965.5	1068.8	1193.5	1316.1	1445.1	1571.9	1696.7	1778.4	1849.3	1901.0	1946.1
50°	797.8	907.5	1038.7	1178.4	1307.4	1434.3	1541.8	1621.4	1679.5	1724.6	1752.6
52.5°	666.6	782.7	922.5	1062.3	1191.3	1307.4	1404.2	1464.4	1511.7	1544.0	1569.8
55°	550.5	662.3	793.5	924.7	1051.6	1161.2	1240.8	1286.0	1322.5	1341.8	1356.9
57.5°	449.5	552.6	673.1	793.5	903.2	993.5	1055.9	1101.0	1118.2	1133.3	1131.1
60°	352.7	449.5	559.1	662.3	756.9	830.0	875.2	901.0	913.9	920.4	916.1
62.5°	277.4	365.6	449.5	539.7	608.6	670.9	714.0	714.0	720.4	722.5	729.0
65°	206.4	273.1	346.2	412.9	468.8	509.6	533.3	539.7	548.4	546.2	541.9
67.5°	152.7	202.2	255.9	305.3	344.1	369.8	387.1	402.2	400.0	395.7	393.5
70°	105.4	137.6	184.9	215.0	243.0	268.8	273.1	275.2	277.4	279.6	275.2
72.5°	73.1	96.8	122.6	148.4	165.6	176.3	187.1	189.2	189.2	189.2	187.1
75°	36.6	49.5	73.1	83.9	98.9	103.2	111.8	111.8	118.3	109.7	107.5
77.5°	32.3	38.7	51.6	60.2	66.7	73.1	75.2	81.7	79.6	75.2	77.4
80°	19.4	23.7	32.3	36.6	45.1	47.3	49.5	51.6	49.5	51.6	51.6
82.5°	15.0	17.2	21.5	21.5	27.9	27.9	30.1	30.1	32.3	32.3	32.3
85°	8.6	15.0	12.9	25.8	17.2	17.2	21.5	25.8	21.5	21.5	25.8
87.5°	8.6	8.6	6.5	8.6	8.6	8.6	10.7	12.9	12.9	15.0	12.9
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: P249209

CATALOG NUMBER: LSR8B70D010 EC8B70835 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4006.2	4006.2	4006.2	4006.2
2.5°	4012.7	4017.0	4010.5	4008.4
5°	4019.1	4019.1	4014.8	4014.8
7.5°	4019.1	4019.1	4012.7	4008.4
10°	4001.9	4001.9	3995.5	3991.2
12.5°	3969.6	3969.6	3967.5	3961.1
15°	3928.8	3928.8	3920.2	3913.8
17.5°	3872.9	3877.2	3866.5	3866.5
20°	3812.7	3810.5	3802.0	3797.6
22.5°	3750.3	3746.0	3743.9	3731.0
25°	3683.7	3679.4	3672.9	3666.5
27.5°	3569.7	3567.5	3561.1	3552.5
30°	3395.5	3393.3	3384.8	3384.8
32.5°	3169.7	3167.6	3159.0	3161.1
35°	2935.3	2943.9	2939.6	2931.0
37.5°	2739.6	2746.1	2750.4	2746.1
40°	2576.2	2595.6	2597.7	2602.0
42.5°	2402.0	2427.8	2436.4	2440.7
45°	2193.4	2217.1	2236.4	2232.1
47.5°	1980.5	1997.7	2014.9	2002.0
50°	1776.2	1787.0	1793.5	1793.5
52.5°	1582.7	1582.7	1580.6	1582.7
55°	1361.2	1361.2	1352.6	1356.9
57.5°	1129.0	1133.3	1126.8	1116.1
60°	913.9	903.2	898.9	892.4
62.5°	711.8	711.8	696.8	716.1
65°	533.3	526.9	520.4	518.2
67.5°	387.1	384.9	378.5	376.3
70°	273.1	264.5	262.3	258.0
72.5°	182.8	182.8	178.5	178.5
75°	111.8	101.1	98.9	101.1
77.5°	77.4	75.2	75.2	73.1
80°	51.6	49.5	53.8	47.3
82.5°	32.3	34.4	32.3	34.4
85°	21.5	25.8	23.7	23.7
87.5°	12.9	12.9	12.9	12.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)