

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: P248345

Luminaire Tested: **LSR8B70D010 EC8B70835 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248345  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B70D010 EC8B70835 8LBDW0LI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7910.0 lumens  
Efficiency: N/A  
Efficacy: 104.2 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

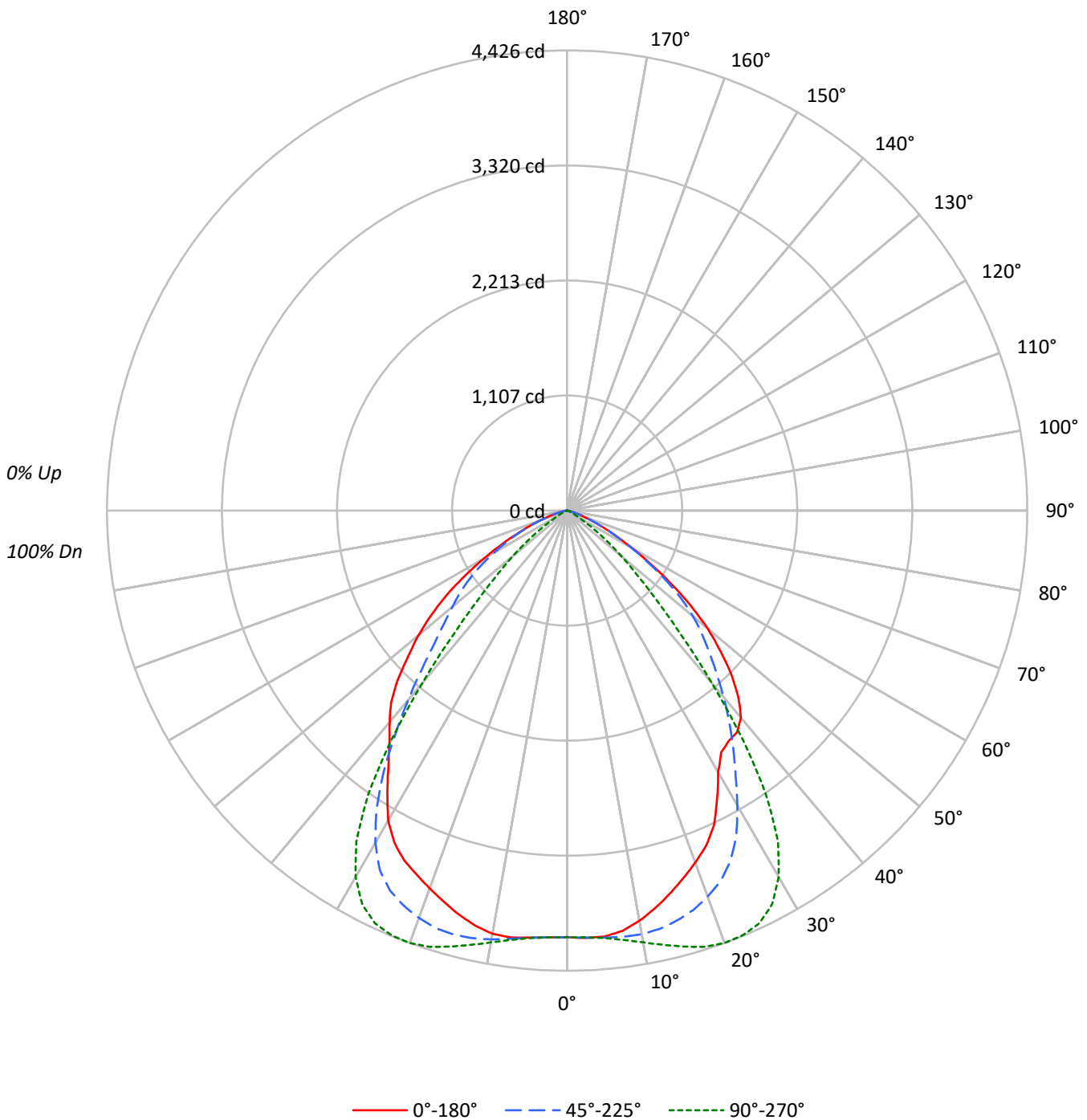
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

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

	0°	90°	180°
0°	126534	126534	126534
5°	127289	127760	127624
10°	125417	132033	129444
15°	121752	138579	128424
20°	118217	145234	126867
25°	113678	148954	126277
30°	103455	144869	122533
35°	101914	125528	112737
40°	104684	87061	106874
45°	97453	52619	100493
50°	84528	32497	89546
55°	64869	16978	75997
60°	44195	6852	57356
65°	27493	3495	39569
70°	14921	2164	24154
75°	7780	1037	14273
80°	3481	1172	7725
85°	2335	778	6935



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	394.6	5.0
10°-20°	1169.0	14.8
20°-30°	1783.5	22.5
30°-40°	1861.1	23.5
40°-50°	1397.9	17.7
50°-60°	860.1	10.9
60°-70°	350.0	4.4
70°-80°	82.5	1.0
80°-90°	11.4	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°	3347.1	42.3
0°-40°	5208.2	65.8
0°-60°	7466.2	94.4
0°-90°	7910.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7910.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4103	4103	4103	4103	4103	
5°	4112	4123	4127	4123	4123	389
15°	3814	4082	4341	4221	4023	1074
25°	3341	3716	4378	4032	3711	1519
35°	2707	2784	3335	3082	2995	1709
45°	2235	1934	1207	1801	2304	1705
55°	1207	1146	316	1146	1414	1085
65°	377	381	48	512	542	393
75°	65	65	9	115	120	79
85°	7	7	2	15	20	9
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°	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4
2.5°	4114.4	4107.8	4114.4	4114.4	4116.5	4112.2	4114.4	4116.5	4112.2	4112.2	4112.2
5°	4112.2	4107.8	4112.2	4110.0	4114.4	4114.4	4118.7	4118.7	4123.0	4123.0	4129.6
7.5°	4077.3	4068.6	4077.3	4083.9	4088.2	4096.9	4107.8	4116.5	4125.2	4134.0	4144.8
10°	4005.4	4005.4	4012.0	4025.0	4038.1	4053.3	4072.9	4094.7	4116.5	4136.1	4155.7
12.5°	3916.2	3909.6	3922.7	3940.1	3959.7	3983.7	4014.2	4046.8	4081.7	4120.9	4151.4
15°	3813.8	3807.2	3822.5	3839.9	3863.9	3898.7	3935.8	3979.3	4029.4	4081.7	4131.8
17.5°	3709.2	3707.0	3722.3	3746.3	3765.9	3802.9	3850.8	3903.0	3959.7	4029.4	4094.7
20°	3602.5	3600.3	3615.6	3635.2	3661.3	3696.2	3744.1	3805.0	3872.6	3951.0	4027.2
22.5°	3491.4	3493.6	3506.7	3528.4	3550.2	3587.2	3637.3	3698.3	3772.4	3857.3	3942.3
25°	3341.1	3330.2	3347.7	3369.5	3406.5	3436.9	3484.9	3550.2	3626.5	3715.8	3816.0
27.5°	3123.3	3121.1	3136.4	3156.0	3188.6	3225.7	3278.0	3345.5	3426.1	3524.1	3622.1
30°	2905.5	2909.9	2916.4	2936.0	2957.8	2994.8	3047.1	3103.8	3180.0	3273.6	3378.2
32.5°	2757.4	2757.4	2766.1	2779.2	2794.4	2814.0	2851.1	2892.4	2951.3	3016.6	3092.8
35°	2707.3	2698.6	2707.3	2709.5	2711.7	2716.0	2722.5	2735.7	2755.2	2783.6	2811.9
37.5°	2685.6	2679.0	2679.0	2670.3	2659.4	2646.3	2628.9	2609.3	2587.6	2559.2	2537.5
40°	2600.6	2596.2	2591.9	2583.2	2559.2	2533.1	2504.7	2459.0	2408.9	2339.2	2269.5
42.5°	2437.3	2432.9	2430.7	2413.3	2391.5	2361.0	2328.3	2280.4	2217.3	2128.0	2027.8
45°	2234.7	2226.0	2219.5	2204.2	2188.9	2162.8	2132.3	2088.7	2025.6	1934.1	1814.3
47.5°	1999.5	1995.1	1992.9	1986.4	1971.2	1955.9	1936.3	1901.5	1844.8	1757.7	1633.5
50°	1762.0	1753.4	1757.7	1755.5	1749.0	1738.1	1725.0	1701.1	1657.5	1579.1	1465.8
52.5°	1489.8	1489.8	1487.6	1494.1	1496.3	1494.1	1496.3	1470.2	1433.2	1374.3	1278.5
55°	1206.6	1206.6	1213.2	1221.9	1230.6	1232.8	1230.6	1219.7	1193.6	1145.6	1060.7
57.5°	940.9	936.6	949.6	962.7	971.4	980.1	973.6	964.9	949.6	910.4	845.1
60°	716.6	716.6	725.3	734.0	742.7	751.4	749.3	747.1	734.0	707.8	655.6
62.5°	527.1	529.3	529.3	535.8	544.5	553.2	559.7	553.2	546.7	529.3	494.4
65°	376.8	374.6	376.8	383.3	389.9	398.6	403.0	400.8	394.2	381.2	355.0
67.5°	252.7	250.5	259.2	261.4	265.7	274.5	272.3	274.5	272.3	261.4	239.6
70°	165.5	161.2	165.5	163.3	169.9	172.1	176.4	178.6	176.4	169.9	163.3
72.5°	102.4	100.2	102.4	104.6	106.7	108.9	113.2	113.2	111.1	106.7	98.0
75°	65.3	58.8	61.0	56.6	61.0	61.0	65.3	67.5	65.3	65.3	61.0
77.5°	39.2	39.2	39.2	39.2	39.2	39.2	39.2	41.4	43.5	39.2	37.0
80°	19.6	19.6	21.8	21.8	21.8	24.0	21.8	21.8	21.8	24.0	17.4
82.5°	15.2	13.1	13.1	13.1	15.2	13.1	13.1	13.1	13.1	13.1	13.1
85°	6.6	8.7	6.6	4.4	6.6	6.6	8.7	6.6	6.6	6.6	8.7
87.5°	2.2	2.2	0.0	0.0	0.0	2.2	0.0	2.2	2.2	4.4	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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4
2.5°	4114.4	4110.0	4110.0	4107.8	4112.2	4107.8	4110.0	4107.8	4107.8	4112.2	4107.8
5°	4129.6	4131.8	4127.4	4125.2	4131.8	4131.8	4131.8	4127.4	4127.4	4129.6	4127.4
7.5°	4151.4	4155.7	4157.9	4160.1	4164.4	4166.6	4166.6	4164.4	4162.3	4168.8	4160.1
10°	4175.3	4181.9	4194.9	4201.5	4212.4	4212.4	4216.7	4216.7	4212.4	4216.7	4214.5
12.5°	4166.6	4205.8	4227.6	4242.8	4258.1	4271.1	4275.5	4277.7	4275.5	4284.3	4275.5
15°	4181.9	4214.5	4249.4	4275.5	4303.8	4319.1	4323.4	4340.9	4345.2	4347.4	4334.3
17.5°	4157.9	4216.7	4253.7	4292.9	4334.3	4362.6	4388.8	4399.7	4401.9	4406.2	4388.8
20°	4103.4	4168.8	4225.4	4282.1	4330.0	4373.5	4395.3	4425.8	4417.1	4434.5	4410.6
22.5°	4029.4	4103.4	4175.3	4249.4	4299.5	4351.8	4397.5	4419.2	4430.2	4430.2	4404.0
25°	3911.8	3998.9	4077.3	4153.5	4229.8	4292.9	4345.2	4377.9	4384.4	4382.3	4351.8
27.5°	3728.8	3822.5	3914.0	4001.1	4094.7	4168.8	4229.8	4269.0	4279.9	4279.9	4247.2
30°	3476.2	3576.4	3665.7	3770.2	3866.1	3948.8	4033.8	4068.6	4088.2	4088.2	4051.2
32.5°	3175.6	3260.5	3343.3	3445.7	3550.2	3643.9	3724.5	3772.4	3796.4	3794.2	3761.5
35°	2848.9	2890.3	2953.5	3029.7	3123.3	3210.4	3288.8	3334.6	3376.0	3373.8	3343.3
37.5°	2522.2	2511.3	2517.8	2546.1	2604.9	2665.9	2726.9	2770.5	2805.3	2820.6	2814.0
40°	2202.0	2145.4	2090.9	2071.4	2075.7	2097.5	2130.1	2162.8	2202.0	2221.6	2230.3
42.5°	1914.5	1818.7	1722.8	1651.0	1609.6	1596.5	1611.8	1622.6	1646.6	1674.9	1703.3
45°	1683.6	1555.2	1428.8	1317.7	1248.0	1206.6	1197.9	1206.6	1219.7	1248.0	1285.1
47.5°	1494.1	1343.8	1202.3	1078.1	975.7	921.3	906.1	901.7	914.8	940.9	991.0
50°	1326.4	1176.1	1019.3	875.6	768.9	707.8	686.1	677.4	692.6	712.2	757.9
52.5°	1143.5	995.4	834.2	694.8	583.7	520.6	496.6	483.5	492.2	518.4	564.1
55°	945.3	808.0	662.1	518.4	411.6	352.9	324.5	315.8	324.5	352.9	398.6
57.5°	747.1	631.6	509.6	374.6	278.8	220.0	191.6	183.0	206.9	217.8	265.7
60°	583.7	490.1	385.5	274.5	191.6	145.9	117.6	111.1	122.0	141.5	180.8
62.5°	437.8	379.0	296.2	196.0	141.5	93.6	78.4	71.9	78.4	93.6	124.2
65°	318.0	272.3	206.9	143.7	95.8	69.7	52.3	47.9	54.5	65.3	91.5
67.5°	217.8	183.0	143.7	100.2	65.3	43.5	37.0	37.0	39.2	47.9	67.5
70°	141.5	119.8	91.5	65.3	43.5	32.7	28.3	24.0	28.3	34.9	45.7
72.5°	89.3	76.2	58.8	45.7	32.7	24.0	19.6	17.4	21.8	26.1	34.9
75°	54.5	41.4	30.5	24.0	17.4	17.4	17.4	8.7	10.9	17.4	21.8
77.5°	32.7	28.3	24.0	19.6	15.2	8.7	8.7	8.7	10.9	13.1	19.6
80°	17.4	15.2	10.9	10.9	8.7	6.6	8.7	6.6	4.4	10.9	13.1
82.5°	10.9	8.7	8.7	8.7	10.9	4.4	6.6	4.4	6.6	8.7	6.6
85°	6.6	6.6	6.6	4.4	10.9	4.4	4.4	2.2	2.2	4.4	4.4
87.5°	0.0	2.2	2.2	0.0	2.2	0.0	2.2	2.2	2.2	2.2	2.2
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4	4103.4
2.5°	4110.0	4107.8	4110.0	4107.8	4107.8	4107.8	4110.0	4110.0	4107.8	4107.8	4112.2
5°	4127.4	4127.4	4127.4	4125.2	4123.0	4123.0	4127.4	4127.4	4120.9	4127.4	4127.4
7.5°	4164.4	4157.9	4164.4	4155.7	4151.4	4153.5	4155.7	4151.4	4147.0	4149.2	4149.2
10°	4212.4	4205.8	4205.8	4199.3	4192.7	4188.4	4184.1	4173.1	4162.3	4160.1	4151.4
12.5°	4269.0	4258.1	4251.6	4238.5	4227.6	4212.4	4199.3	4181.9	4160.1	4144.8	4129.6
15°	4325.6	4308.2	4292.9	4271.1	4247.2	4221.0	4192.7	4164.4	4129.6	4099.1	4072.9
17.5°	4371.3	4347.4	4319.1	4284.3	4249.4	4210.2	4168.8	4127.4	4077.3	4038.1	4007.6
20°	4386.6	4351.8	4314.7	4269.0	4223.2	4168.8	4116.5	4062.1	4005.4	3964.1	3929.2
22.5°	4367.0	4325.6	4279.9	4232.0	4171.0	4112.2	4051.2	3988.0	3937.9	3881.3	3848.6
25°	4312.6	4262.5	4212.4	4155.7	4096.9	4031.6	3966.3	3900.9	3839.9	3809.4	3768.1
27.5°	4201.5	4147.0	4092.6	4033.8	3966.3	3900.9	3833.4	3770.2	3718.0	3676.5	3652.6
30°	4005.4	3942.3	3879.1	3816.0	3757.1	3689.6	3626.5	3574.2	3521.9	3489.2	3465.3
32.5°	3704.8	3648.2	3585.1	3524.1	3469.7	3413.0	3360.7	3315.0	3278.0	3256.2	3238.7
35°	3299.8	3243.1	3195.2	3151.7	3105.9	3082.0	3049.3	3023.1	3007.9	2999.2	2997.0
37.5°	2790.1	2757.4	2742.2	2733.5	2724.7	2718.2	2722.5	2733.5	2742.2	2757.4	2774.8
40°	2245.6	2273.9	2282.6	2313.1	2341.4	2378.4	2419.8	2467.7	2506.9	2557.0	2591.9
42.5°	1749.0	1801.3	1862.2	1927.6	1997.3	2064.8	2147.6	2223.8	2293.5	2356.6	2411.1
45°	1343.8	1424.4	1515.9	1609.6	1703.3	1801.3	1901.5	1995.1	2077.9	2145.4	2202.0
47.5°	1047.6	1137.0	1254.6	1370.0	1483.3	1598.7	1709.8	1807.8	1877.5	1942.8	1992.9
50°	829.8	932.2	1060.7	1193.6	1317.7	1439.7	1557.3	1648.8	1718.5	1770.8	1807.8
52.5°	642.5	764.5	895.2	1034.6	1167.4	1300.3	1409.2	1494.1	1550.8	1596.5	1624.8
55°	479.2	599.0	738.4	882.1	1017.2	1145.6	1248.0	1322.1	1372.2	1398.3	1413.6
57.5°	346.3	455.2	594.6	738.4	860.3	982.3	1065.1	1132.6	1160.9	1176.1	1182.7
60°	252.7	352.9	477.0	601.1	716.6	814.6	886.5	932.2	954.0	962.7	960.5
62.5°	185.1	272.3	379.0	483.5	577.2	657.7	714.4	744.9	755.8	760.1	753.6
65°	141.5	209.1	300.6	381.2	453.0	511.8	553.2	572.8	579.4	577.2	572.8
67.5°	104.6	156.8	224.4	285.3	337.6	383.3	405.1	422.6	426.9	420.4	413.8
70°	74.1	115.4	163.3	204.8	243.9	270.1	294.0	296.2	296.2	294.0	289.7
72.5°	52.3	80.6	111.1	139.4	163.3	183.0	191.6	198.2	196.0	193.8	189.5
75°	34.9	50.1	80.6	87.1	108.9	115.4	124.2	124.2	126.3	119.8	119.8
77.5°	21.8	34.9	47.9	56.6	65.3	74.1	78.4	78.4	80.6	78.4	78.4
80°	13.1	21.8	26.1	39.2	39.2	45.7	47.9	50.1	45.7	52.3	45.7
82.5°	8.7	13.1	19.6	19.6	24.0	28.3	28.3	30.5	30.5	28.3	28.3
85°	6.6	8.7	10.9	13.1	13.1	15.2	13.1	13.1	15.2	17.4	15.2
87.5°	2.2	4.4	2.2	4.4	4.4	8.7	6.6	6.6	6.6	8.7	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





TEST NUMBER: P248345

CATALOG NUMBER: LSR8B70D010 EC8B70835 8LBDW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4103.4	4103.4	4103.4	4103.4
2.5°	4107.8	4110.0	4107.8	4107.8
5°	4127.4	4125.2	4127.4	4123.0
7.5°	4142.7	4142.7	4140.5	4140.5
10°	4142.7	4134.0	4134.0	4134.0
12.5°	4110.0	4099.1	4092.6	4088.2
15°	4053.3	4033.8	4025.0	4022.8
17.5°	3979.3	3961.9	3951.0	3944.5
20°	3894.4	3876.9	3863.9	3866.1
22.5°	3820.3	3800.7	3792.0	3787.6
25°	3746.3	3722.3	3715.8	3711.4
27.5°	3626.5	3613.4	3606.8	3600.3
30°	3443.5	3436.9	3426.1	3441.3
32.5°	3232.2	3221.3	3212.6	3219.2
35°	2999.2	2992.6	2999.2	2994.8
37.5°	2785.7	2792.3	2801.0	2805.3
40°	2618.0	2642.0	2650.7	2655.0
42.5°	2450.3	2478.6	2496.0	2506.9
45°	2243.4	2271.7	2291.3	2304.4
47.5°	2029.9	2053.9	2073.5	2071.4
50°	1836.1	1849.2	1857.9	1866.6
52.5°	1640.1	1640.1	1642.2	1642.2
55°	1417.9	1413.6	1411.4	1413.6
57.5°	1173.9	1169.6	1167.4	1160.9
60°	951.8	938.8	930.0	930.0
62.5°	744.9	729.6	723.1	721.0
65°	559.7	557.6	544.5	542.3
67.5°	405.1	396.4	387.7	389.9
70°	285.3	272.3	272.3	267.9
72.5°	185.1	178.6	176.4	176.4
75°	115.4	115.4	111.1	119.8
77.5°	76.2	76.2	74.1	76.2
80°	45.7	45.7	45.7	43.5
82.5°	28.3	30.5	28.3	28.3
85°	15.2	17.4	13.1	19.6
87.5°	8.7	10.9	8.7	10.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)