

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: P249104

Luminaire Tested: **LSR8B100D010 EC8B100835 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249104  
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: LSR8B100D010 EC8B100835 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11030.0 lumens  
Efficiency: N/A  
Efficacy: 103.8 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

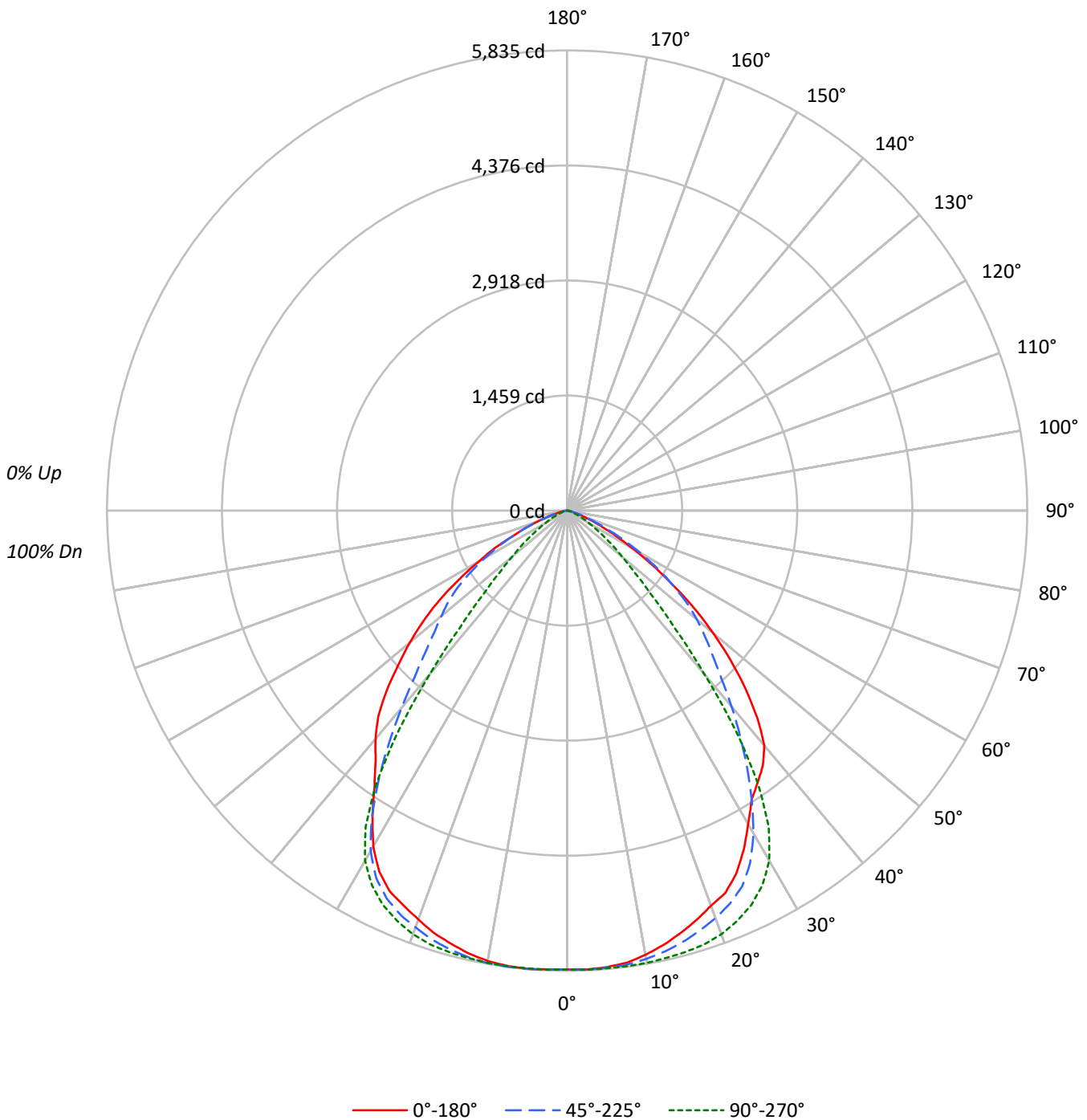
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	179455	179455	179455
5°	179850	180336	180531
10°	179095	182324	181541
15°	177109	184991	181498
20°	174984	187589	181032
25°	172713	187806	181216
30°	163396	182527	175075
35°	158516	158633	160281
40°	156552	109145	152152
45°	139497	65523	141403
50°	115993	43607	124984
55°	86991	30063	105969
60°	58953	20031	79952
65°	35556	12995	54928
70°	19718	7041	33792
75°	8936	2979	17490
80°	7760	3321	12200
85°	8845	4423	12171



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	555.4	5.0
10°-20°	1613.0	14.6
20°-30°	2448.2	22.2
30°-40°	2571.3	23.3
40°-50°	1927.8	17.5
50°-60°	1236.9	11.2
60°-70°	529.1	4.8
70°-80°	125.0	1.1
80°-90°	23.3	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°	4616.5	41.9
0°-40°	7187.9	65.2
0°-60°	10352.6	93.9
0°-90°	11030.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11030.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5820	5820	5820	5820	5820	
5°	5810	5820	5826	5835	5832	552
15°	5548	5664	5795	5757	5685	1565
25°	5076	5254	5520	5420	5326	2319
35°	4211	3977	4214	4164	4258	2643
45°	3199	2615	1502	2540	3242	2450
55°	1618	1618	559	1687	1971	1468
65°	487	575	178	740	753	520
75°	75	87	25	150	147	109
85°	25	16	12	25	34	26
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°	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6
2.5°	5822.8	5829.0	5825.9	5825.9	5822.8	5825.9	5825.9	5832.2	5832.2	5825.9	5822.8
5°	5810.2	5816.5	5816.5	5810.2	5810.2	5825.9	5816.5	5822.8	5822.8	5819.6	5819.6
7.5°	5782.2	5782.2	5794.7	5785.3	5785.3	5794.7	5791.5	5797.8	5804.1	5807.2	5807.2
10°	5719.7	5725.9	5729.1	5729.1	5732.2	5741.5	5747.8	5760.3	5766.5	5772.8	5775.9
12.5°	5641.6	5651.0	5654.1	5651.0	5660.4	5672.8	5688.5	5704.1	5713.5	5725.9	5735.3
15°	5547.8	5547.8	5554.1	5563.5	5569.8	5588.5	5604.1	5622.8	5647.8	5663.5	5679.1
17.5°	5444.8	5451.1	5460.4	5460.4	5472.9	5504.1	5513.5	5541.7	5569.8	5585.4	5616.6
20°	5332.4	5338.6	5348.0	5354.2	5369.8	5394.8	5413.5	5438.5	5469.8	5497.9	5529.1
22.5°	5244.9	5232.4	5238.6	5244.9	5260.5	5282.4	5304.2	5335.4	5366.7	5394.8	5426.1
25°	5076.2	5079.3	5088.7	5094.9	5113.7	5132.4	5157.4	5194.9	5223.0	5254.3	5288.6
27.5°	4848.2	4851.3	4866.9	4866.9	4882.5	4913.7	4929.3	4960.6	4998.1	5029.3	5070.0
30°	4588.9	4595.1	4595.1	4607.6	4617.0	4632.6	4648.2	4679.5	4698.2	4726.3	4782.6
32.5°	4351.5	4357.7	4354.6	4351.5	4342.1	4339.0	4335.8	4342.1	4348.4	4357.7	4379.5
35°	4210.9	4195.3	4182.8	4160.9	4135.9	4104.7	4076.6	4039.1	4004.7	3976.6	3945.4
37.5°	4076.6	4073.4	4054.7	4023.4	3973.4	3917.3	3851.7	3770.4	3689.2	3601.7	3517.4
40°	3889.1	3879.7	3864.1	3820.4	3764.2	3695.5	3608.0	3508.0	3376.8	3242.5	3105.1
42.5°	3570.5	3573.6	3554.9	3520.5	3467.4	3401.8	3311.2	3201.9	3061.4	2902.0	2724.0
45°	3198.8	3198.8	3192.5	3164.4	3126.9	3073.8	3005.1	2914.5	2777.1	2614.6	2424.0
47.5°	2811.4	2814.5	2805.1	2799.0	2783.3	2749.0	2699.0	2630.3	2533.4	2377.2	2186.6
50°	2417.9	2417.9	2433.4	2430.3	2430.3	2417.9	2396.0	2355.3	2271.0	2146.1	1968.0
52.5°	2024.2	2030.5	2039.9	2052.3	2067.9	2092.9	2067.9	2049.2	1996.1	1899.2	1746.2
55°	1618.1	1624.4	1640.0	1661.8	1680.6	1705.6	1711.8	1711.8	1683.7	1618.1	1502.5
57.5°	1271.4	1262.0	1274.5	1293.3	1318.3	1343.3	1362.0	1383.8	1380.7	1337.0	1243.3
60°	955.9	959.0	968.3	987.1	1005.9	1027.7	1052.7	1071.5	1080.9	1059.0	999.6
62.5°	696.6	696.6	709.1	727.8	737.2	768.5	784.1	793.5	802.8	799.7	762.2
65°	487.3	493.5	499.8	509.2	518.5	537.3	546.7	565.4	571.7	574.8	546.7
67.5°	343.6	334.2	340.5	346.7	356.1	368.6	387.4	387.4	396.7	396.7	378.0
70°	218.7	218.7	221.8	231.1	237.4	240.5	246.8	253.0	262.4	259.3	259.3
72.5°	146.8	143.7	146.8	150.0	153.1	162.4	162.4	165.6	171.8	175.0	162.4
75°	75.0	78.1	84.3	81.2	90.6	84.3	87.4	96.8	93.7	87.4	87.4
77.5°	62.4	62.4	62.4	59.4	65.6	65.6	62.4	68.7	65.6	65.6	62.4
80°	43.7	46.9	43.7	40.6	43.7	40.6	40.6	40.6	40.6	40.6	37.5
82.5°	34.4	28.1	31.3	28.1	31.3	31.3	28.1	25.0	25.0	28.1	25.0
85°	25.0	18.7	21.9	21.9	18.7	18.7	18.7	18.7	18.7	15.6	15.6
87.5°	15.6	9.4	9.4	9.4	12.5	12.5	12.5	9.4	12.5	12.5	6.3
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°	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6
2.5°	5829.0	5825.9	5832.2	5829.0	5829.0	5825.9	5829.0	5825.9	5832.2	5819.6	5822.8
5°	5829.0	5822.8	5825.9	5829.0	5832.2	5825.9	5825.9	5825.9	5832.2	5825.9	5829.0
7.5°	5816.5	5813.4	5822.8	5829.0	5825.9	5822.8	5829.0	5825.9	5832.2	5829.0	5835.2
10°	5791.5	5794.7	5800.9	5810.2	5813.4	5816.5	5822.8	5822.8	5832.2	5819.6	5825.9
12.5°	5754.1	5766.5	5782.2	5788.4	5800.9	5800.9	5807.2	5810.2	5816.5	5813.4	5822.8
15°	5707.2	5722.8	5741.5	5757.2	5772.8	5782.2	5791.5	5794.7	5804.1	5794.7	5797.8
17.5°	5651.0	5669.7	5697.8	5716.5	5741.5	5750.9	5763.4	5769.7	5779.1	5772.8	5775.9
20°	5572.8	5594.8	5626.0	5654.1	5669.7	5691.5	5707.2	5716.5	5722.8	5716.5	5719.7
22.5°	5463.5	5494.8	5535.4	5557.2	5588.5	5607.2	5610.4	5632.2	5647.8	5632.2	5638.5
25°	5335.4	5366.7	5398.0	5444.8	5472.9	5494.8	5516.7	5519.8	5535.4	5532.3	5529.1
27.5°	5123.0	5163.7	5216.7	5254.3	5291.7	5326.1	5351.1	5357.3	5373.0	5366.7	5369.8
30°	4832.5	4876.3	4926.3	4985.6	5038.7	5073.0	5104.3	5126.2	5141.7	5132.4	5129.3
32.5°	4420.2	4463.9	4517.0	4576.4	4638.9	4688.8	4726.3	4754.5	4773.2	4766.9	4751.3
35°	3948.5	3961.0	3995.4	4042.2	4095.3	4148.4	4182.8	4214.0	4235.8	4242.1	4242.1
37.5°	3464.3	3423.7	3398.7	3398.7	3429.9	3451.8	3483.0	3501.8	3536.2	3548.6	3558.0
40°	2995.7	2902.0	2814.5	2749.0	2705.2	2702.1	2702.1	2711.4	2742.7	2783.3	2820.8
42.5°	2577.1	2427.2	2292.9	2171.0	2083.6	2033.6	2011.8	2014.9	2039.9	2077.3	2139.8
45°	2242.9	2055.5	1886.8	1740.0	1621.3	1543.1	1505.7	1502.5	1521.3	1565.0	1633.8
47.5°	1983.6	1783.7	1593.1	1424.4	1296.4	1212.0	1168.3	1155.8	1168.3	1208.9	1290.1
50°	1768.1	1561.9	1365.1	1190.2	1052.7	965.3	924.6	909.0	924.6	959.0	1040.2
52.5°	1568.1	1355.7	1171.4	1002.7	855.9	780.9	737.2	727.8	737.2	777.8	843.5
55°	1337.0	1155.8	974.6	805.9	677.9	602.9	568.5	559.2	568.5	606.0	674.8
57.5°	1109.0	952.8	793.5	640.4	531.1	465.4	434.2	421.7	443.6	468.5	549.8
60°	896.5	771.6	637.2	502.9	412.4	353.0	328.0	324.8	331.1	362.4	418.6
62.5°	702.9	599.8	493.5	384.2	309.3	284.3	253.0	249.9	256.1	274.9	318.7
65°	506.1	440.5	359.2	281.1	221.8	187.4	175.0	178.1	184.3	196.8	237.4
67.5°	353.0	306.1	249.9	196.8	153.1	137.4	125.0	121.8	125.0	146.8	168.7
70°	237.4	209.3	168.7	150.0	106.2	84.3	87.4	78.1	90.6	90.6	109.3
72.5°	156.2	137.4	112.4	87.4	75.0	59.4	59.4	56.3	62.4	65.6	81.2
75°	81.2	62.4	62.4	43.7	31.3	15.6	28.1	25.0	21.9	25.0	31.3
77.5°	56.3	46.9	43.7	34.4	31.3	25.0	25.0	25.0	25.0	28.1	31.3
80°	34.4	34.4	25.0	21.9	18.7	15.6	18.7	18.7	18.7	18.7	21.9
82.5°	21.9	18.7	18.7	15.6	15.6	12.5	12.5	12.5	12.5	12.5	18.7
85°	18.7	12.5	12.5	9.4	12.5	21.9	9.4	12.5	12.5	12.5	9.4
87.5°	6.3	9.4	9.4	9.4	6.3	3.1	6.3	9.4	9.4	15.6	12.5
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°	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6	5819.6
2.5°	5829.0	5832.2	5832.2	5829.0	5829.0	5822.8	5835.2	5825.9	5829.0	5841.5	5832.2
5°	5835.2	5838.4	5838.4	5835.2	5835.2	5835.2	5838.4	5838.4	5835.2	5832.2	5838.4
7.5°	5847.8	5844.6	5844.6	5838.4	5838.4	5832.2	5838.4	5829.0	5835.2	5829.0	5838.4
10°	5832.2	5835.2	5832.2	5829.0	5829.0	5825.9	5825.9	5816.5	5819.6	5810.2	5816.5
12.5°	5822.8	5819.6	5819.6	5813.4	5807.2	5800.9	5797.8	5788.4	5788.4	5766.5	5775.9
15°	5797.8	5800.9	5791.5	5779.1	5772.8	5757.2	5750.9	5738.4	5725.9	5710.3	5713.5
17.5°	5775.9	5766.5	5754.1	5741.5	5716.5	5704.1	5691.5	5672.8	5666.5	5647.8	5641.6
20°	5710.3	5704.1	5688.5	5666.5	5651.0	5622.8	5610.4	5591.6	5576.0	5557.2	5547.8
22.5°	5626.0	5619.7	5601.0	5579.1	5554.1	5541.7	5529.1	5494.8	5479.1	5460.4	5457.3
25°	5519.8	5510.4	5491.7	5466.7	5454.1	5419.8	5407.3	5382.3	5376.1	5357.3	5354.2
27.5°	5357.3	5344.8	5323.0	5291.7	5269.9	5248.0	5235.5	5216.7	5210.5	5191.7	5188.7
30°	5113.7	5098.0	5054.3	5041.8	5004.3	4982.5	4982.5	4957.5	4960.6	4948.1	4948.1
32.5°	4729.5	4704.5	4670.1	4645.1	4620.1	4607.6	4607.6	4598.2	4604.5	4604.5	4610.8
35°	4220.3	4185.9	4167.1	4151.5	4151.5	4164.0	4201.5	4210.9	4229.7	4245.2	4257.8
37.5°	3567.4	3564.3	3586.2	3604.9	3651.7	3704.9	3770.4	3826.7	3879.7	3917.3	3954.7
40°	2861.4	2939.5	3002.0	3089.5	3161.3	3264.4	3383.1	3479.9	3570.5	3636.1	3704.9
42.5°	2233.5	2333.5	2464.7	2592.7	2720.8	2861.4	3017.6	3151.9	3270.6	3361.2	3433.1
45°	1740.0	1877.4	2036.7	2199.2	2364.7	2539.7	2702.1	2839.5	2964.5	3058.2	3130.1
47.5°	1402.6	1552.5	1733.7	1911.8	2099.2	2283.5	2464.7	2583.4	2686.4	2761.4	2827.1
50°	1158.9	1318.3	1508.8	1711.8	1899.2	2083.6	2239.8	2355.3	2439.7	2505.3	2545.9
52.5°	968.3	1137.0	1340.1	1543.1	1730.6	1899.2	2039.9	2127.3	2196.0	2242.9	2280.3
55°	799.7	962.2	1152.7	1343.3	1527.5	1686.8	1802.4	1868.1	1921.1	1949.2	1971.1
57.5°	652.9	802.8	977.7	1152.7	1312.0	1443.2	1533.8	1599.4	1624.4	1646.2	1643.1
60°	512.3	652.9	812.2	962.2	1099.6	1205.8	1271.4	1308.9	1327.6	1337.0	1330.7
62.5°	403.0	531.1	652.9	784.1	884.0	974.6	1037.1	1037.1	1046.5	1049.6	1059.0
65°	299.9	396.7	502.9	599.8	681.0	740.3	774.7	784.1	796.6	793.5	787.2
67.5°	221.8	293.7	371.7	443.6	499.8	537.3	562.3	584.2	581.1	574.8	571.7
70°	153.1	200.0	268.7	312.4	353.0	390.5	396.7	399.8	403.0	406.1	399.8
72.5°	106.2	140.6	178.1	215.5	240.5	256.1	271.8	274.9	274.9	274.9	271.8
75°	53.1	71.8	106.2	121.8	143.7	150.0	162.4	162.4	171.8	159.3	156.2
77.5°	46.9	56.3	75.0	87.4	96.8	106.2	109.3	118.7	115.6	109.3	112.4
80°	28.1	34.4	46.9	53.1	65.6	68.7	71.8	75.0	71.8	75.0	75.0
82.5°	21.9	25.0	31.3	31.3	40.6	40.6	43.7	43.7	46.9	46.9	46.9
85°	12.5	21.9	18.7	37.5	25.0	25.0	31.3	37.5	31.3	31.3	37.5
87.5°	12.5	12.5	9.4	12.5	12.5	12.5	15.6	18.7	18.7	21.9	18.7
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: P249104

CATALOG NUMBER: LSR8B100D010 EC8B100835 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5819.6	5819.6	5819.6	5819.6
2.5°	5829.0	5835.2	5825.9	5822.8
5°	5838.4	5838.4	5832.2	5832.2
7.5°	5838.4	5838.4	5829.0	5822.8
10°	5813.4	5813.4	5804.1	5797.8
12.5°	5766.5	5766.5	5763.4	5754.1
15°	5707.2	5707.2	5694.7	5685.3
17.5°	5626.0	5632.2	5616.6	5616.6
20°	5538.5	5535.4	5522.9	5516.7
22.5°	5447.9	5441.7	5438.5	5419.8
25°	5351.1	5344.8	5335.4	5326.1
27.5°	5185.5	5182.4	5173.0	5160.5
30°	4932.5	4929.3	4916.9	4916.9
32.5°	4604.5	4601.4	4588.9	4592.0
35°	4264.0	4276.5	4270.2	4257.8
37.5°	3979.7	3989.1	3995.4	3989.1
40°	3742.3	3770.4	3773.6	3779.8
42.5°	3489.3	3526.8	3539.3	3545.5
45°	3186.2	3220.6	3248.8	3242.5
47.5°	2877.0	2902.0	2927.0	2908.3
50°	2580.3	2595.9	2605.3	2605.3
52.5°	2299.1	2299.1	2296.0	2299.1
55°	1977.4	1977.4	1964.9	1971.1
57.5°	1640.0	1646.2	1636.8	1621.3
60°	1327.6	1312.0	1305.7	1296.4
62.5°	1034.0	1034.0	1012.1	1040.2
65°	774.7	765.3	755.9	752.8
67.5°	562.3	559.2	549.8	546.7
70°	396.7	384.2	381.1	374.8
72.5°	265.5	265.5	259.3	259.3
75°	162.4	146.8	143.7	146.8
77.5°	112.4	109.3	109.3	106.2
80°	75.0	71.8	78.1	68.7
82.5°	46.9	50.0	46.9	50.0
85°	31.3	37.5	34.4	34.4
87.5°	18.7	18.7	18.7	18.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)