

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: P249212

Luminaire Tested: **LSR8B100D010 EC8B100835 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249212
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 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: 10972.0 lumens
Efficiency: N/A
Efficacy: 103.2 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

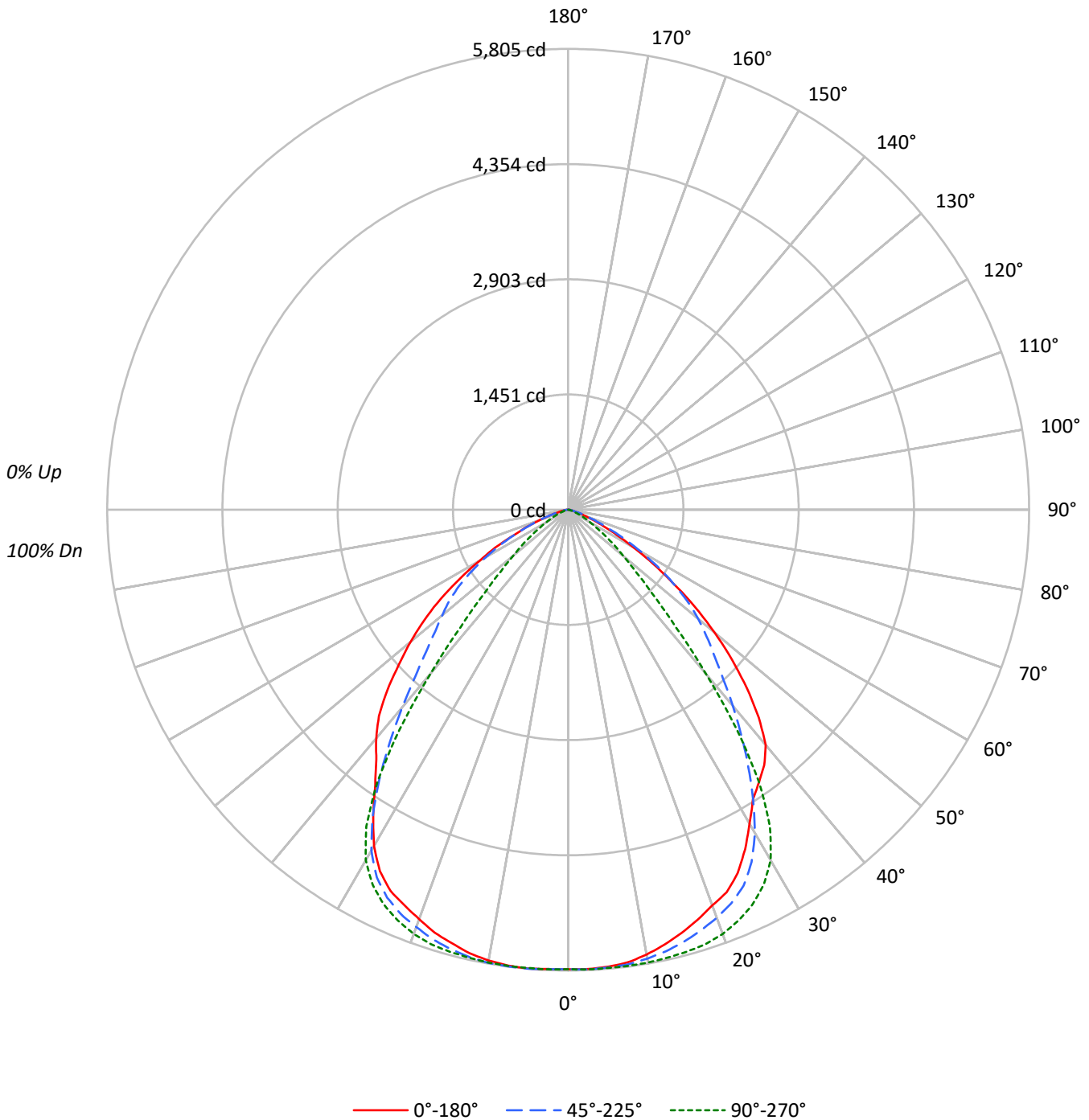
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	178511	178511	178511
5°	178905	179388	179580
10°	178153	181365	180586
15°	176180	184017	180547
20°	174062	186604	180077
25°	171805	186820	180263
30°	162538	181566	174152
35°	157684	157797	159438
40°	155730	108573	151355
45°	138764	65178	140661
50°	115379	43382	124326
55°	86534	29908	105410
60°	58645	19926	79533
65°	35373	12929	54636
70°	19610	7005	33620
75°	8888	2967	17407
80°	7725	3303	12146
85°	8810	4387	12100



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	552.5	5.0
10°-20°	1604.5	14.6
20°-30°	2435.3	22.2
30°-40°	2557.8	23.3
40°-50°	1917.7	17.5
50°-60°	1230.4	11.2
60°-70°	526.4	4.8
70°-80°	124.4	1.1
80°-90°	23.1	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°	4592.3	41.9
0°-40°	7150.1	65.2
0°-60°	10298.2	93.9
0°-90°	10972.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10972.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5789	5789	5789	5789	5789	
5°	5780	5789	5795	5805	5802	549
15°	5519	5634	5764	5727	5656	1557
25°	5050	5227	5491	5391	5298	2307
35°	4189	3956	4192	4142	4235	2629
45°	3182	2601	1495	2526	3226	2437
55°	1610	1610	556	1678	1961	1460
65°	485	572	177	736	749	517
75°	75	87	25	149	146	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°	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0
2.5°	5792.2	5798.4	5795.3	5795.3	5792.2	5795.3	5795.3	5801.5	5801.5	5795.3	5792.2
5°	5779.7	5785.9	5785.9	5779.7	5779.7	5795.3	5785.9	5792.2	5792.2	5789.0	5789.0
7.5°	5751.8	5751.8	5764.2	5754.9	5754.9	5764.2	5761.1	5767.3	5773.5	5776.6	5776.6
10°	5689.6	5695.8	5698.9	5698.9	5702.1	5711.3	5717.6	5730.0	5736.2	5742.4	5745.6
12.5°	5612.0	5621.2	5624.4	5621.2	5630.6	5643.0	5658.6	5674.1	5683.4	5695.8	5705.2
15°	5518.7	5518.7	5524.9	5534.3	5540.5	5559.1	5574.6	5593.3	5618.1	5633.7	5649.2
17.5°	5416.2	5422.4	5431.7	5431.7	5444.2	5475.2	5484.5	5512.5	5540.5	5556.0	5587.1
20°	5304.3	5310.5	5319.8	5326.1	5341.6	5366.5	5385.1	5409.9	5441.0	5469.0	5500.0
22.5°	5217.3	5204.9	5211.0	5217.3	5232.9	5254.6	5276.4	5307.4	5338.5	5366.5	5397.5
25°	5049.5	5052.6	5061.9	5068.1	5086.8	5105.4	5130.3	5167.6	5195.5	5226.6	5260.8
27.5°	4822.7	4825.8	4841.3	4841.3	4856.8	4887.9	4903.4	4934.5	4971.8	5002.9	5043.3
30°	4564.8	4570.9	4570.9	4583.4	4592.7	4608.3	4623.8	4654.9	4673.5	4701.5	4757.4
32.5°	4328.6	4334.8	4331.7	4328.6	4319.3	4316.1	4313.0	4319.3	4325.5	4334.8	4356.5
35°	4188.8	4173.2	4160.8	4139.1	4114.2	4083.1	4055.1	4017.9	3983.7	3955.7	3924.6
37.5°	4055.1	4052.0	4033.4	4002.3	3952.6	3896.7	3831.4	3750.6	3669.8	3582.8	3498.9
40°	3868.7	3859.3	3843.8	3800.3	3744.4	3676.0	3589.0	3489.6	3359.0	3225.5	3088.7
42.5°	3551.7	3554.8	3536.2	3502.0	3449.2	3383.9	3293.8	3185.1	3045.3	2886.7	2709.6
45°	3182.0	3182.0	3175.7	3147.7	3110.5	3057.6	2989.3	2899.2	2762.5	2600.8	2411.3
47.5°	2796.6	2799.7	2790.4	2784.2	2768.7	2734.5	2684.8	2616.4	2520.1	2364.7	2175.1
50°	2405.1	2405.1	2420.6	2417.5	2417.5	2405.1	2383.4	2342.9	2259.1	2134.8	1957.7
52.5°	2013.6	2019.8	2029.2	2041.6	2057.1	2081.9	2057.1	2038.4	1985.6	1889.3	1737.0
55°	1609.6	1615.8	1631.4	1653.1	1671.8	1696.7	1702.8	1702.8	1674.8	1609.6	1494.6
57.5°	1264.7	1255.4	1267.8	1286.5	1311.3	1336.2	1354.8	1376.6	1373.5	1330.0	1236.7
60°	950.9	954.0	963.3	982.0	1000.6	1022.3	1047.2	1065.8	1075.2	1053.4	994.4
62.5°	693.0	693.0	705.4	724.0	733.3	764.4	779.9	789.3	798.6	795.5	758.2
65°	484.8	490.9	497.2	506.5	515.8	534.4	543.8	562.4	568.6	571.8	543.8
67.5°	341.8	332.5	338.7	344.9	354.2	366.7	385.3	385.3	394.6	394.6	376.0
70°	217.5	217.5	220.6	229.9	236.2	239.3	245.5	251.7	261.0	257.9	257.9
72.5°	146.1	142.9	146.1	149.2	152.3	161.6	161.6	164.7	170.9	174.0	161.6
75°	74.6	77.7	83.9	80.8	90.1	83.9	87.0	96.3	93.2	87.0	87.0
77.5°	62.1	62.1	62.1	59.1	65.2	65.2	62.1	68.4	65.2	65.2	62.1
80°	43.5	46.6	43.5	40.4	43.5	40.4	40.4	40.4	40.4	40.4	37.3
82.5°	34.2	28.0	31.1	28.0	31.1	31.1	28.0	24.9	24.9	28.0	24.9
85°	24.9	18.6	21.7	21.7	18.6	18.6	18.6	18.6	18.6	15.5	15.5
87.5°	15.5	9.4	9.4	9.4	12.4	12.4	12.4	9.4	12.4	12.4	6.2
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°	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0
2.5°	5798.4	5795.3	5801.5	5798.4	5798.4	5795.3	5798.4	5795.3	5801.5	5789.0	5792.2
5°	5798.4	5792.2	5795.3	5798.4	5801.5	5795.3	5795.3	5795.3	5801.5	5795.3	5798.4
7.5°	5785.9	5782.8	5792.2	5798.4	5795.3	5792.2	5798.4	5795.3	5801.5	5798.4	5804.6
10°	5761.1	5764.2	5770.4	5779.7	5782.8	5785.9	5792.2	5792.2	5801.5	5789.0	5795.3
12.5°	5723.8	5736.2	5751.8	5757.9	5770.4	5770.4	5776.6	5779.7	5785.9	5782.8	5792.2
15°	5677.2	5692.7	5711.3	5726.9	5742.4	5751.8	5761.1	5764.2	5773.5	5764.2	5767.3
17.5°	5621.2	5639.9	5667.8	5686.5	5711.3	5720.7	5733.1	5739.3	5748.7	5742.4	5745.6
20°	5543.5	5565.4	5596.4	5624.4	5639.9	5661.6	5677.2	5686.5	5692.7	5686.5	5689.6
22.5°	5434.8	5465.9	5506.3	5528.0	5559.1	5577.7	5580.9	5602.6	5618.1	5602.6	5608.8
25°	5307.4	5338.5	5369.6	5416.2	5444.2	5465.9	5487.6	5490.8	5506.3	5503.2	5500.0
27.5°	5096.1	5136.5	5189.3	5226.6	5263.9	5298.1	5323.0	5329.1	5344.7	5338.5	5341.6
30°	4807.1	4850.6	4900.4	4959.4	5012.2	5046.4	5077.5	5099.2	5114.7	5105.4	5102.3
32.5°	4397.0	4440.5	4493.3	4552.3	4614.5	4664.1	4701.5	4729.5	4748.1	4741.8	4726.3
35°	3927.8	3940.2	3974.4	4021.0	4073.7	4126.6	4160.8	4191.8	4213.6	4219.8	4219.8
37.5°	3446.1	3405.7	3380.9	3380.9	3411.9	3433.6	3464.7	3483.4	3517.6	3530.0	3539.3
40°	2979.9	2886.7	2799.7	2734.5	2691.0	2687.9	2687.9	2697.2	2728.3	2768.7	2806.0
42.5°	2563.6	2414.4	2280.8	2159.6	2072.6	2022.9	2001.2	2004.3	2029.2	2066.4	2128.5
45°	2231.1	2044.7	1876.9	1730.8	1612.7	1535.0	1497.8	1494.6	1513.3	1556.8	1625.2
47.5°	1973.2	1774.3	1584.7	1416.9	1289.6	1205.6	1162.2	1149.8	1162.2	1202.5	1283.4
50°	1758.8	1553.7	1357.9	1183.9	1047.2	960.2	919.8	904.3	919.8	954.0	1034.7
52.5°	1559.9	1348.6	1165.3	997.5	851.4	776.8	733.3	724.0	733.3	773.7	839.0
55°	1330.0	1149.8	969.5	801.7	674.3	599.7	565.5	556.3	565.5	602.9	671.2
57.5°	1103.2	947.7	789.3	637.0	528.3	463.0	431.9	419.5	441.2	466.1	546.9
60°	891.8	767.5	633.9	500.3	410.2	351.1	326.3	323.1	329.4	360.5	416.4
62.5°	699.2	596.6	490.9	382.2	307.6	282.8	251.7	248.6	254.8	273.4	317.0
65°	503.4	438.2	357.4	279.6	220.6	186.4	174.0	177.2	183.3	195.8	236.2
67.5°	351.1	304.5	248.6	195.8	152.3	136.7	124.3	121.2	124.3	146.1	167.8
70°	236.2	208.2	167.8	149.2	105.7	83.9	87.0	77.7	90.1	90.1	108.7
72.5°	155.3	136.7	111.8	87.0	74.6	59.1	59.1	56.0	62.1	65.2	80.8
75°	80.8	62.1	62.1	43.5	31.1	15.5	28.0	24.9	21.7	24.9	31.1
77.5°	56.0	46.6	43.5	34.2	31.1	24.9	24.9	24.9	24.9	28.0	31.1
80°	34.2	34.2	24.9	21.7	18.6	15.5	18.6	18.6	18.6	18.6	21.7
82.5°	21.7	18.6	18.6	15.5	15.5	12.4	12.4	12.4	12.4	12.4	18.6
85°	18.6	12.4	12.4	9.4	12.4	21.7	9.4	12.4	12.4	12.4	9.4
87.5°	6.2	9.4	9.4	9.4	6.2	3.1	6.2	9.4	9.4	15.5	12.4
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°	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0	5789.0
2.5°	5798.4	5801.5	5801.5	5798.4	5798.4	5792.2	5804.6	5795.3	5798.4	5810.8	5801.5
5°	5804.6	5807.7	5807.7	5804.6	5804.6	5804.6	5807.7	5807.7	5804.6	5801.5	5807.7
7.5°	5817.0	5813.9	5813.9	5807.7	5807.7	5801.5	5807.7	5798.4	5804.6	5798.4	5807.7
10°	5801.5	5804.6	5801.5	5798.4	5798.4	5795.3	5795.3	5785.9	5789.0	5779.7	5785.9
12.5°	5792.2	5789.0	5789.0	5782.8	5776.6	5770.4	5767.3	5757.9	5757.9	5736.2	5745.6
15°	5767.3	5770.4	5761.1	5748.7	5742.4	5726.9	5720.7	5708.2	5695.8	5680.3	5683.4
17.5°	5745.6	5736.2	5723.8	5711.3	5686.5	5674.1	5661.6	5643.0	5636.8	5618.1	5612.0
20°	5680.3	5674.1	5658.6	5636.8	5621.2	5593.3	5580.9	5562.2	5546.7	5528.0	5518.7
22.5°	5596.4	5590.1	5571.5	5549.8	5524.9	5512.5	5500.0	5465.9	5450.3	5431.7	5428.6
25°	5490.8	5481.4	5462.8	5437.9	5425.5	5391.3	5378.8	5354.0	5347.8	5329.1	5326.1
27.5°	5329.1	5316.7	5295.0	5263.9	5242.1	5220.4	5208.0	5189.3	5183.1	5164.4	5161.4
30°	5086.8	5071.2	5027.7	5015.3	4978.0	4956.3	4956.3	4931.4	4934.5	4922.1	4922.1
32.5°	4704.6	4679.7	4645.5	4620.7	4595.8	4583.4	4583.4	4574.0	4580.3	4580.3	4586.5
35°	4198.1	4163.9	4145.2	4129.7	4129.7	4142.1	4179.4	4188.8	4207.4	4222.9	4235.4
37.5°	3548.6	3545.5	3567.3	3585.9	3632.5	3685.4	3750.6	3806.6	3859.3	3896.7	3933.9
40°	2846.4	2924.1	2986.2	3073.2	3144.6	3247.2	3365.3	3461.6	3551.7	3617.0	3685.4
42.5°	2221.7	2321.2	2451.7	2579.1	2706.5	2846.4	3001.8	3135.4	3253.4	3343.5	3415.0
45°	1730.8	1867.5	2026.0	2187.6	2352.3	2526.3	2687.9	2824.6	2948.9	3042.1	3113.6
47.5°	1395.2	1544.4	1724.6	1901.7	2088.2	2271.5	2451.7	2569.8	2672.3	2746.9	2812.2
50°	1152.8	1311.3	1500.9	1702.8	1889.3	2072.6	2228.0	2342.9	2426.9	2492.1	2532.5
52.5°	963.3	1131.1	1333.1	1535.0	1721.5	1889.3	2029.2	2116.1	2184.5	2231.1	2268.4
55°	795.5	957.1	1146.6	1336.2	1519.5	1678.0	1792.9	1858.2	1911.0	1939.0	1960.7
57.5°	649.5	798.6	972.6	1146.6	1305.1	1435.6	1525.7	1591.0	1615.8	1637.6	1634.5
60°	509.6	649.5	807.9	957.1	1093.8	1199.4	1264.7	1302.0	1320.6	1330.0	1323.7
62.5°	400.8	528.3	649.5	779.9	879.4	969.5	1031.7	1031.7	1041.0	1044.1	1053.4
65°	298.3	394.6	500.3	596.6	677.4	736.5	770.7	779.9	792.4	789.3	783.1
67.5°	220.6	292.1	369.7	441.2	497.2	534.4	559.3	581.1	578.0	571.8	568.6
70°	152.3	198.9	267.3	310.7	351.1	388.4	394.6	397.7	400.8	404.0	397.7
72.5°	105.7	139.8	177.2	214.4	239.3	254.8	270.4	273.4	273.4	273.4	270.4
75°	52.8	71.5	105.7	121.2	142.9	149.2	161.6	161.6	170.9	158.5	155.3
77.5°	46.6	56.0	74.6	87.0	96.3	105.7	108.7	118.1	115.0	108.7	111.8
80°	28.0	34.2	46.6	52.8	65.2	68.4	71.5	74.6	71.5	74.6	74.6
82.5°	21.7	24.9	31.1	31.1	40.4	40.4	43.5	43.5	46.6	46.6	46.6
85°	12.4	21.7	18.6	37.3	24.9	24.9	31.1	37.3	31.1	31.1	37.3
87.5°	12.4	12.4	9.4	12.4	12.4	12.4	15.5	18.6	18.6	21.7	18.6
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: P249212

CATALOG NUMBER: LSR8B100D010 EC8B100835 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5789.0	5789.0	5789.0	5789.0
2.5°	5798.4	5804.6	5795.3	5792.2
5°	5807.7	5807.7	5801.5	5801.5
7.5°	5807.7	5807.7	5798.4	5792.2
10°	5782.8	5782.8	5773.5	5767.3
12.5°	5736.2	5736.2	5733.1	5723.8
15°	5677.2	5677.2	5664.7	5655.5
17.5°	5596.4	5602.6	5587.1	5587.1
20°	5509.4	5506.3	5493.9	5487.6
22.5°	5419.3	5413.1	5409.9	5391.3
25°	5323.0	5316.7	5307.4	5298.1
27.5°	5158.3	5155.2	5145.8	5133.4
30°	4906.5	4903.4	4891.0	4891.0
32.5°	4580.3	4577.2	4564.8	4567.9
35°	4241.6	4254.0	4247.8	4235.4
37.5°	3958.8	3968.1	3974.4	3968.1
40°	3722.6	3750.6	3753.7	3760.0
42.5°	3471.0	3508.2	3520.7	3526.8
45°	3169.5	3203.7	3231.7	3225.5
47.5°	2861.9	2886.7	2911.6	2893.0
50°	2566.7	2582.2	2591.6	2591.6
52.5°	2287.1	2287.1	2283.9	2287.1
55°	1967.0	1967.0	1954.6	1960.7
57.5°	1631.4	1637.6	1628.2	1612.7
60°	1320.6	1305.1	1298.9	1289.6
62.5°	1028.6	1028.6	1006.8	1034.7
65°	770.7	761.3	752.0	748.8
67.5°	559.3	556.3	546.9	543.8
70°	394.6	382.2	379.1	372.9
72.5°	264.1	264.1	257.9	257.9
75°	161.6	146.1	142.9	146.1
77.5°	111.8	108.7	108.7	105.7
80°	74.6	71.5	77.7	68.4
82.5°	46.6	49.7	46.6	49.7
85°	31.1	37.3	34.2	34.2
87.5°	18.6	18.6	18.6	18.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)