

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: P249554

Luminaire Tested: **LSR8B100D010 EC8B100850 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249554
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 EC8B100850 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11046.0 lumens
Efficiency: N/A
Efficacy: 103.9 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

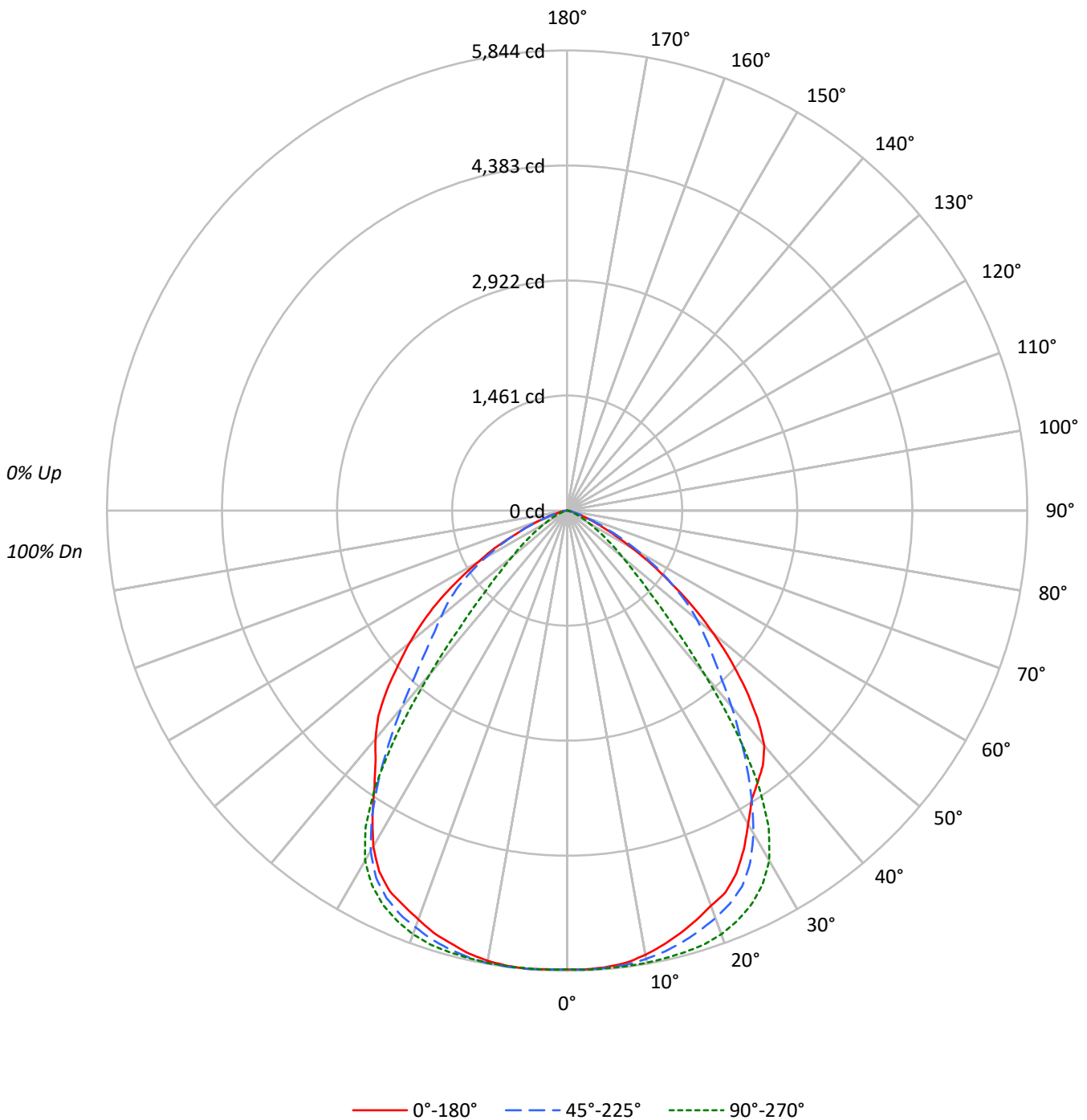
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	179717	179717	179717
5°	180113	180599	180791
10°	179355	182587	181804
15°	177367	185259	181763
20°	175237	187861	181295
25°	172962	188078	181478
30°	163634	182791	175327
35°	158746	158862	160515
40°	156781	109306	152373
45°	139697	65619	141608
50°	116161	43674	125161
55°	87120	30106	106125
60°	59039	20062	80070
65°	35614	13010	55008
70°	19745	7050	33846
75°	8948	2979	17514
80°	7778	3338	12217
85°	8845	4423	12171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	556.2	5.0
10°-20°	1615.3	14.6
20°-30°	2451.7	22.2
30°-40°	2575.1	23.3
40°-50°	1930.6	17.5
50°-60°	1238.7	11.2
60°-70°	529.9	4.8
70°-80°	125.2	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°	4623.2	41.9
0°-40°	7198.3	65.2
0°-60°	10367.6	93.9
0°-90°	11046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11046.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5828	5828	5828	5828	5828	
5°	5819	5828	5834	5844	5841	553
15°	5556	5672	5803	5766	5694	1567
25°	5084	5262	5528	5428	5334	2322
35°	4217	3982	4220	4170	4264	2647
45°	3203	2618	1505	2543	3247	2453
55°	1620	1620	560	1689	1974	1470
65°	488	576	178	741	754	521
75°	75	88	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°	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1
2.5°	5831.2	5837.5	5834.4	5834.4	5831.2	5834.4	5834.4	5840.6	5840.6	5834.4	5831.2
5°	5818.7	5824.9	5824.9	5818.7	5818.7	5834.4	5824.9	5831.2	5831.2	5828.1	5828.1
7.5°	5790.6	5790.6	5803.1	5793.7	5793.7	5803.1	5799.9	5806.2	5812.5	5815.6	5815.6
10°	5728.0	5734.2	5737.4	5737.4	5740.5	5749.9	5756.1	5768.7	5774.9	5781.2	5784.3
12.5°	5649.8	5659.2	5662.3	5659.2	5668.6	5681.0	5696.7	5712.3	5721.8	5734.2	5743.7
15°	5555.9	5555.9	5562.2	5571.6	5577.9	5596.6	5612.2	5631.0	5656.0	5671.7	5687.3
17.5°	5452.7	5459.0	5468.3	5468.3	5480.9	5512.1	5521.5	5549.7	5577.9	5593.5	5624.8
20°	5340.1	5346.3	5355.7	5362.0	5377.6	5402.6	5421.4	5446.4	5477.7	5505.9	5537.1
22.5°	5252.5	5240.0	5246.2	5252.5	5268.2	5290.0	5311.9	5343.2	5374.5	5402.6	5434.0
25°	5083.5	5086.7	5096.1	5102.3	5121.1	5139.9	5164.9	5202.4	5230.6	5261.9	5296.3
27.5°	4855.2	4858.3	4873.9	4873.9	4889.6	4920.9	4936.5	4967.8	5005.4	5036.6	5077.3
30°	4595.6	4601.8	4601.8	4614.3	4623.6	4639.3	4655.0	4686.3	4705.0	4733.2	4789.5
32.5°	4357.8	4364.0	4360.9	4357.8	4348.4	4345.3	4342.1	4348.4	4354.7	4364.0	4385.9
35°	4217.0	4201.3	4188.9	4167.0	4141.9	4110.6	4082.5	4045.0	4010.5	3982.3	3951.1
37.5°	4082.5	4079.3	4060.6	4029.3	3979.2	3922.9	3857.3	3775.9	3694.5	3607.0	3522.5
40°	3894.8	3885.4	3869.8	3826.0	3769.6	3700.8	3613.2	3513.1	3381.7	3247.2	3109.6
42.5°	3575.7	3578.8	3560.0	3525.6	3472.5	3406.7	3316.0	3206.6	3065.8	2906.2	2727.9
45°	3203.4	3203.4	3197.1	3169.0	3131.5	3078.3	3009.5	2918.8	2781.1	2618.4	2427.6
47.5°	2815.5	2818.6	2809.2	2803.0	2787.3	2753.0	2702.9	2634.1	2537.1	2380.6	2189.8
50°	2421.4	2421.4	2437.0	2433.8	2433.8	2421.4	2399.5	2358.7	2274.3	2149.2	1970.9
52.5°	2027.2	2033.4	2042.8	2055.3	2070.9	2096.0	2070.9	2052.2	1999.0	1902.0	1748.8
55°	1620.5	1626.7	1642.4	1664.3	1683.1	1708.1	1714.3	1714.3	1686.1	1620.5	1504.7
57.5°	1273.3	1263.8	1276.4	1295.1	1320.2	1345.2	1364.0	1385.9	1382.7	1338.9	1245.1
60°	957.3	960.4	969.8	988.6	1007.3	1029.2	1054.3	1073.0	1082.4	1060.5	1001.1
62.5°	697.6	697.6	710.1	728.9	738.3	769.6	785.2	794.6	804.0	800.8	763.3
65°	488.1	494.3	500.5	509.9	519.3	538.0	547.5	566.2	572.5	575.6	547.5
67.5°	344.1	334.7	341.0	347.2	356.6	369.2	387.9	387.9	397.3	397.3	378.5
70°	219.0	219.0	222.1	231.5	237.8	240.9	247.2	253.4	262.8	259.6	259.6
72.5°	147.0	143.9	147.0	150.2	153.3	162.7	162.7	165.8	172.1	175.2	162.7
75°	75.1	78.2	84.4	81.4	90.7	84.4	87.6	97.0	93.8	87.6	87.6
77.5°	62.5	62.5	62.5	59.5	65.7	65.7	62.5	68.8	65.7	65.7	62.5
80°	43.8	46.9	43.8	40.6	43.8	40.6	40.6	40.6	40.6	40.6	37.5
82.5°	34.4	28.2	31.3	28.2	31.3	31.3	28.2	25.0	25.0	28.2	25.0
85°	25.0	18.8	21.9	21.9	18.8	18.8	18.8	18.8	18.8	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°	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1
2.5°	5837.5	5834.4	5840.6	5837.5	5837.5	5834.4	5837.5	5834.4	5840.6	5828.1	5831.2
5°	5837.5	5831.2	5834.4	5837.5	5840.6	5834.4	5834.4	5834.4	5840.6	5834.4	5837.5
7.5°	5824.9	5821.8	5831.2	5837.5	5834.4	5831.2	5837.5	5834.4	5840.6	5837.5	5843.7
10°	5799.9	5803.1	5809.3	5818.7	5821.8	5824.9	5831.2	5831.2	5840.6	5828.1	5834.4
12.5°	5762.4	5774.9	5790.6	5796.8	5809.3	5809.3	5815.6	5818.7	5824.9	5821.8	5831.2
15°	5715.5	5731.1	5749.9	5765.5	5781.2	5790.6	5799.9	5803.1	5812.5	5803.1	5806.2
17.5°	5659.2	5677.9	5706.1	5724.8	5749.9	5759.3	5771.8	5778.0	5787.4	5781.2	5784.3
20°	5580.9	5602.9	5634.1	5662.3	5677.9	5699.8	5715.5	5724.8	5731.1	5724.8	5728.0
22.5°	5471.5	5502.8	5543.4	5565.3	5596.6	5615.4	5618.5	5640.4	5656.0	5640.4	5646.7
25°	5343.2	5374.5	5405.8	5452.7	5480.9	5502.8	5524.7	5527.8	5543.4	5540.3	5537.1
27.5°	5130.5	5171.2	5224.3	5261.9	5299.4	5333.8	5358.9	5365.1	5380.8	5374.5	5377.6
30°	4839.5	4883.4	4933.4	4992.8	5046.0	5080.4	5111.7	5133.6	5149.2	5139.9	5136.7
32.5°	4426.6	4470.4	4523.6	4583.0	4645.6	4695.6	4733.2	4761.3	4780.1	4773.8	4758.2
35°	3954.3	3966.7	4001.2	4048.1	4101.2	4154.4	4188.9	4220.1	4242.0	4248.3	4248.3
37.5°	3469.3	3428.7	3403.7	3403.7	3434.9	3456.8	3488.1	3506.8	3541.3	3553.8	3563.2
40°	3000.0	2906.2	2818.6	2753.0	2709.2	2706.0	2706.0	2715.4	2746.7	2787.3	2824.9
42.5°	2580.9	2430.7	2296.2	2174.2	2086.6	2036.6	2014.7	2017.8	2042.8	2080.3	2142.9
45°	2246.1	2058.5	1889.5	1742.5	1623.6	1545.4	1507.9	1504.7	1523.5	1567.3	1636.2
47.5°	1986.5	1786.3	1595.4	1426.5	1298.3	1213.8	1170.0	1157.5	1170.0	1210.6	1292.0
50°	1770.6	1564.2	1367.1	1191.9	1054.3	966.7	926.0	910.4	926.0	960.4	1041.7
52.5°	1570.4	1357.7	1173.1	1004.2	857.2	782.1	738.3	728.9	738.3	778.9	844.7
55°	1338.9	1157.5	976.0	807.1	678.9	603.8	569.3	560.0	569.3	606.9	675.7
57.5°	1110.6	954.1	794.6	641.3	531.8	466.1	434.9	422.3	444.2	469.2	550.6
60°	897.8	772.7	638.2	503.7	413.0	353.5	328.5	325.3	331.6	362.9	419.2
62.5°	703.9	600.7	494.3	384.8	309.7	284.7	253.4	250.3	256.5	275.3	319.1
65°	506.8	441.1	359.8	281.5	222.1	187.7	175.2	178.3	184.6	197.1	237.8
67.5°	353.5	306.6	250.3	197.1	153.3	137.6	125.2	122.0	125.2	147.0	168.9
70°	237.8	209.6	168.9	150.2	106.4	84.4	87.6	78.2	90.7	90.7	109.5
72.5°	156.4	137.6	112.6	87.6	75.1	59.5	59.5	56.3	62.5	65.7	81.4
75°	81.4	62.5	62.5	43.8	31.3	15.6	28.2	25.0	21.9	25.0	31.3
77.5°	56.3	46.9	43.8	34.4	31.3	25.0	25.0	25.0	25.0	28.2	31.3
80°	34.4	34.4	25.0	21.9	18.8	15.6	18.8	18.8	18.8	18.8	21.9
82.5°	21.9	18.8	18.8	15.6	15.6	12.5	12.5	12.5	12.5	12.5	18.8
85°	18.8	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°	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1	5828.1
2.5°	5837.5	5840.6	5840.6	5837.5	5837.5	5831.2	5843.7	5834.4	5837.5	5850.0	5840.6
5°	5843.7	5846.8	5846.8	5843.7	5843.7	5843.7	5846.8	5846.8	5843.7	5840.6	5846.8
7.5°	5856.3	5853.1	5853.1	5846.8	5846.8	5840.6	5846.8	5837.5	5843.7	5837.5	5846.8
10°	5840.6	5843.7	5840.6	5837.5	5837.5	5834.4	5834.4	5824.9	5828.1	5818.7	5824.9
12.5°	5831.2	5828.1	5828.1	5821.8	5815.6	5809.3	5806.2	5796.8	5796.8	5774.9	5784.3
15°	5806.2	5809.3	5799.9	5787.4	5781.2	5765.5	5759.3	5746.7	5734.2	5718.6	5721.8
17.5°	5784.3	5774.9	5762.4	5749.9	5724.8	5712.3	5699.8	5681.0	5674.8	5656.0	5649.8
20°	5718.6	5712.3	5696.7	5674.8	5659.2	5631.0	5618.5	5599.8	5584.1	5565.3	5555.9
22.5°	5634.1	5627.8	5609.1	5587.2	5562.2	5549.7	5537.1	5502.8	5487.1	5468.3	5465.2
25°	5527.8	5518.4	5499.6	5474.6	5462.0	5427.7	5415.1	5390.1	5383.9	5365.1	5362.0
27.5°	5365.1	5352.6	5330.7	5299.4	5277.5	5255.6	5243.1	5224.3	5218.1	5199.3	5196.2
30°	5121.1	5105.4	5061.6	5049.2	5011.6	4989.7	4989.7	4964.7	4967.8	4955.3	4955.3
32.5°	4736.3	4711.3	4676.8	4651.8	4626.8	4614.3	4614.3	4604.9	4611.2	4611.2	4617.4
35°	4226.4	4192.0	4173.2	4157.6	4157.6	4170.0	4207.6	4217.0	4235.8	4251.4	4264.0
37.5°	3572.5	3569.5	3591.4	3610.1	3657.0	3710.2	3775.9	3832.2	3885.4	3922.9	3960.5
40°	2865.6	2943.8	3006.3	3094.0	3165.8	3269.1	3388.0	3485.0	3575.7	3641.4	3710.2
42.5°	2236.7	2336.9	2468.3	2596.5	2724.8	2865.6	3022.0	3156.5	3275.4	3366.1	3438.0
45°	1742.5	1880.1	2039.7	2202.4	2368.2	2543.4	2706.0	2843.7	2968.8	3062.7	3134.6
47.5°	1404.6	1554.8	1736.2	1914.6	2102.2	2286.8	2468.3	2587.2	2690.3	2765.4	2831.2
50°	1160.6	1320.2	1511.0	1714.3	1902.0	2086.6	2243.0	2358.7	2443.3	2508.9	2549.6
52.5°	969.8	1138.7	1342.1	1545.4	1733.1	1902.0	2042.8	2130.4	2199.2	2246.1	2283.7
55°	800.8	963.6	1154.4	1345.2	1529.8	1689.3	1805.0	1870.8	1923.9	1952.1	1974.0
57.5°	653.8	804.0	979.2	1154.4	1313.9	1445.3	1536.0	1601.7	1626.7	1648.6	1645.5
60°	513.1	653.8	813.4	963.6	1101.2	1207.5	1273.3	1310.8	1329.5	1338.9	1332.7
62.5°	403.5	531.8	653.8	785.2	885.3	976.0	1038.6	1038.6	1048.0	1051.1	1060.5
65°	300.3	397.3	503.7	600.7	681.9	741.4	775.9	785.2	797.8	794.6	788.3
67.5°	222.1	294.1	372.2	444.2	500.5	538.0	563.1	585.0	581.9	575.6	572.5
70°	153.3	200.2	269.1	312.8	353.5	391.1	397.3	400.4	403.5	406.7	400.4
72.5°	106.4	140.8	178.3	215.9	240.9	256.5	272.2	275.3	275.3	275.3	272.2
75°	53.2	72.0	106.4	122.0	143.9	150.2	162.7	162.7	172.1	159.5	156.4
77.5°	46.9	56.3	75.1	87.6	97.0	106.4	109.5	118.9	115.7	109.5	112.6
80°	28.2	34.4	46.9	53.2	65.7	68.8	72.0	75.1	72.0	75.1	75.1
82.5°	21.9	25.0	31.3	31.3	40.6	40.6	43.8	43.8	46.9	46.9	46.9
85°	12.5	21.9	18.8	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	18.8	18.8	21.9	18.8
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: P249554

CATALOG NUMBER: LSR8B100D010 EC8B100850 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5828.1	5828.1	5828.1	5828.1
2.5°	5837.5	5843.7	5834.4	5831.2
5°	5846.8	5846.8	5840.6	5840.6
7.5°	5846.8	5846.8	5837.5	5831.2
10°	5821.8	5821.8	5812.5	5806.2
12.5°	5774.9	5774.9	5771.8	5762.4
15°	5715.5	5715.5	5702.9	5693.6
17.5°	5634.1	5640.4	5624.8	5624.8
20°	5546.6	5543.4	5530.9	5524.7
22.5°	5455.8	5449.6	5446.4	5427.7
25°	5358.9	5352.6	5343.2	5333.8
27.5°	5193.1	5189.9	5180.5	5168.0
30°	4939.6	4936.5	4924.0	4924.0
32.5°	4611.2	4608.0	4595.6	4598.7
35°	4270.2	4282.7	4276.4	4264.0
37.5°	3985.5	3994.9	4001.2	3994.9
40°	3747.7	3775.9	3779.0	3785.3
42.5°	3494.4	3531.9	3544.4	3550.6
45°	3190.9	3225.3	3253.5	3247.2
47.5°	2881.2	2906.2	2931.2	2912.5
50°	2584.0	2599.6	2609.0	2609.0
52.5°	2302.5	2302.5	2299.3	2302.5
55°	1980.2	1980.2	1967.8	1974.0
57.5°	1642.4	1648.6	1639.2	1623.6
60°	1329.5	1313.9	1307.6	1298.3
62.5°	1035.5	1035.5	1013.6	1041.7
65°	775.9	766.4	757.0	753.9
67.5°	563.1	560.0	550.6	547.5
70°	397.3	384.8	381.7	375.4
72.5°	265.9	265.9	259.6	259.6
75°	162.7	147.0	143.9	147.0
77.5°	112.6	109.5	109.5	106.4
80°	75.1	72.0	78.2	68.8
82.5°	46.9	50.1	46.9	50.1
85°	31.3	37.5	34.4	34.4
87.5°	18.8	18.8	18.8	18.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)