

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: P249527

Luminaire Tested: **LSR8B100D010 EC8B100830 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249527
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 EC8B100830 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10487.0 lumens
Efficiency: N/A
Efficacy: 98.7 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

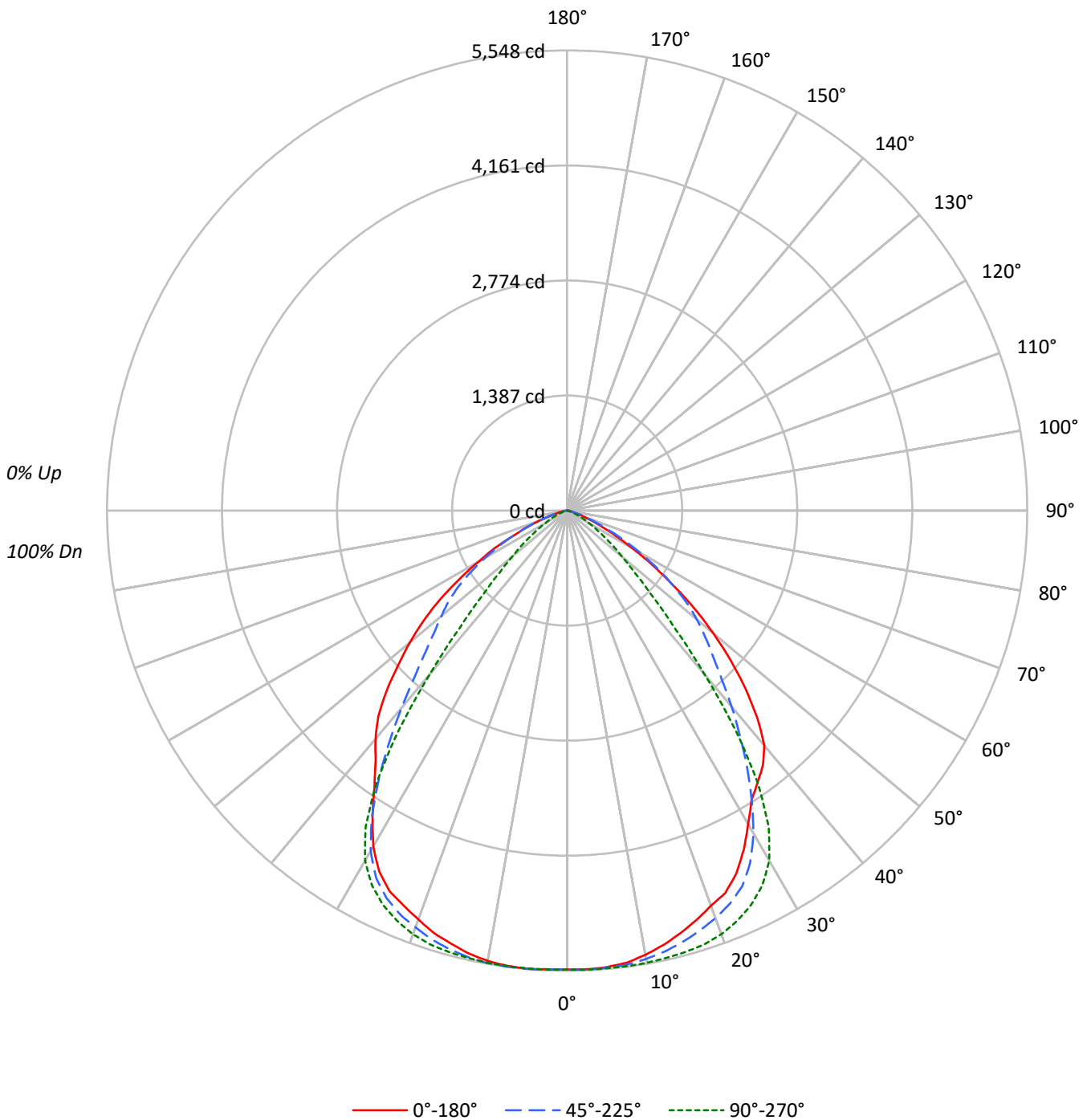
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249527

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0MW

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°	170620	170620	170620
5°	170997	171458	171644
10°	170278	173346	172604
15°	168390	175883	172566
20°	166370	178355	172120
25°	164211	178562	172295
30°	155352	173540	166454
35°	150712	150821	152391
40°	148847	103775	144665
45°	132628	62300	134443
50°	110280	41463	118829
55°	82712	28585	100754
60°	56048	19051	76018
65°	33812	12353	52221
70°	18744	6699	32133
75°	8495	2836	16632
80°	7387	3161	11596
85°	8421	4175	11569



TEST NUMBER: P249527

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	528.1	5.0
10°-20°	1533.6	14.6
20°-30°	2327.7	22.2
30°-40°	2444.7	23.3
40°-50°	1832.9	17.5
50°-60°	1176.0	11.2
60°-70°	503.1	4.8
70°-80°	118.9	1.1
80°-90°	22.1	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°	4389.3	41.9
0°-40°	6834.0	65.2
0°-60°	9843.0	93.9
0°-90°	10487.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10487.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5533	5533	5533	5533	5533	
5°	5524	5533	5539	5548	5545	525
15°	5275	5385	5509	5474	5406	1488
25°	4826	4996	5248	5153	5064	2205
35°	4004	3781	4006	3959	4048	2513
45°	3041	2486	1429	2415	3083	2329
55°	1538	1538	532	1604	1874	1396
65°	463	546	169	704	716	495
75°	71	83	24	143	140	104
85°	24	15	12	24	33	25
90°	0	0	0	0	0	



TEST NUMBER: P249527

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1
2.5°	5536.1	5542.1	5539.1	5539.1	5536.1	5539.1	5539.1	5545.1	5545.1	5539.1	5536.1
5°	5524.2	5530.2	5530.2	5524.2	5524.2	5539.1	5530.2	5536.1	5536.1	5533.1	5533.1
7.5°	5497.5	5497.5	5509.4	5500.5	5500.5	5509.4	5506.4	5512.4	5518.3	5521.3	5521.3
10°	5438.1	5444.1	5447.0	5447.0	5450.0	5458.9	5464.8	5476.8	5482.6	5488.6	5491.6
12.5°	5363.9	5372.8	5375.7	5372.8	5381.7	5393.5	5408.4	5423.3	5432.2	5444.1	5453.0
15°	5274.7	5274.7	5280.7	5289.6	5295.6	5313.4	5328.2	5346.0	5369.8	5384.7	5399.5
17.5°	5176.8	5182.7	5191.6	5191.6	5203.5	5233.2	5242.1	5268.8	5295.6	5310.4	5340.1
20°	5069.9	5075.8	5084.7	5090.6	5105.5	5129.2	5147.0	5170.8	5200.5	5227.3	5256.9
22.5°	4986.7	4974.8	4980.7	4986.7	5001.6	5022.3	5043.1	5072.8	5102.5	5129.2	5159.0
25°	4826.3	4829.3	4838.2	4844.1	4862.0	4879.8	4903.5	4939.1	4965.9	4995.6	5028.2
27.5°	4609.5	4612.5	4627.3	4627.3	4642.1	4671.8	4686.7	4716.4	4752.1	4781.7	4820.4
30°	4363.0	4368.9	4368.9	4380.8	4389.7	4404.6	4419.4	4449.1	4466.9	4493.7	4547.1
32.5°	4137.3	4143.2	4140.2	4137.3	4128.3	4125.4	4122.4	4128.3	4134.3	4143.2	4163.9
35°	4003.6	3988.7	3976.9	3956.1	3932.3	3902.6	3875.9	3840.3	3807.6	3780.8	3751.2
37.5°	3875.9	3872.9	3855.1	3825.4	3777.8	3724.4	3662.1	3584.8	3507.6	3424.4	3344.3
40°	3697.7	3688.7	3673.9	3632.3	3578.9	3513.5	3430.4	3335.3	3210.6	3082.9	2952.2
42.5°	3394.7	3397.7	3379.9	3347.2	3296.7	3234.3	3148.2	3044.3	2910.6	2759.1	2589.9
45°	3041.3	3041.3	3035.4	3008.6	2973.0	2922.5	2857.2	2771.0	2640.4	2485.9	2304.7
47.5°	2673.0	2676.0	2667.1	2661.2	2646.3	2613.6	2566.1	2500.8	2408.7	2260.2	2079.0
50°	2298.8	2298.8	2313.6	2310.7	2310.7	2298.8	2278.0	2239.4	2159.2	2040.4	1871.1
52.5°	1924.6	1930.5	1939.5	1951.3	1966.1	1989.9	1966.1	1948.3	1897.8	1805.7	1660.3
55°	1538.5	1544.4	1559.2	1580.0	1597.9	1621.7	1627.6	1627.6	1600.8	1538.5	1428.6
57.5°	1208.8	1199.9	1211.8	1229.6	1253.4	1277.1	1294.9	1315.7	1312.7	1271.2	1182.1
60°	908.8	911.8	920.7	938.6	956.4	977.1	1000.9	1018.7	1027.6	1006.9	950.4
62.5°	662.3	662.3	674.2	692.0	700.9	730.6	745.5	754.4	763.3	760.3	724.7
65°	463.4	469.2	475.2	484.1	493.0	510.8	519.7	537.6	543.5	546.5	519.7
67.5°	326.7	317.8	323.8	329.6	338.6	350.5	368.3	368.3	377.2	377.2	359.4
70°	207.9	207.9	210.9	219.8	225.7	228.7	234.7	240.5	249.5	246.5	246.5
72.5°	139.6	136.6	139.6	142.6	145.6	154.4	154.4	157.4	163.4	166.3	154.4
75°	71.3	74.3	80.2	77.2	86.1	80.2	83.1	92.1	89.1	83.1	83.1
77.5°	59.4	59.4	59.4	56.5	62.4	62.4	59.4	65.3	62.4	62.4	59.4
80°	41.6	44.5	41.6	38.6	41.6	38.6	38.6	38.6	38.6	38.6	35.6
82.5°	32.7	26.7	29.7	26.7	29.7	29.7	26.7	23.8	23.8	26.7	23.8
85°	23.8	17.8	20.8	20.8	17.8	17.8	17.8	17.8	17.8	14.8	14.8
87.5°	14.8	8.9	8.9	8.9	11.8	11.8	11.8	8.9	11.8	11.8	6.0
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: P249527

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1
2.5°	5542.1	5539.1	5545.1	5542.1	5542.1	5539.1	5542.1	5539.1	5545.1	5533.1	5536.1
5°	5542.1	5536.1	5539.1	5542.1	5545.1	5539.1	5539.1	5539.1	5545.1	5539.1	5542.1
7.5°	5530.2	5527.2	5536.1	5542.1	5539.1	5536.1	5542.1	5539.1	5545.1	5542.1	5548.0
10°	5506.4	5509.4	5515.3	5524.2	5527.2	5530.2	5536.1	5536.1	5545.1	5533.1	5539.1
12.5°	5470.8	5482.6	5497.5	5503.4	5515.3	5515.3	5521.3	5524.2	5530.2	5527.2	5536.1
15°	5426.2	5441.1	5458.9	5473.8	5488.6	5497.5	5506.4	5509.4	5518.3	5509.4	5512.4
17.5°	5372.8	5390.6	5417.3	5435.1	5458.9	5467.8	5479.7	5485.6	5494.6	5488.6	5491.6
20°	5298.5	5319.3	5349.0	5375.7	5390.6	5411.4	5426.2	5435.1	5441.1	5435.1	5438.1
22.5°	5194.6	5224.3	5262.9	5283.7	5313.4	5331.2	5334.2	5355.0	5369.8	5355.0	5360.9
25°	5072.8	5102.5	5132.2	5176.8	5203.5	5224.3	5245.1	5248.1	5262.9	5259.9	5256.9
27.5°	4870.8	4909.5	4959.9	4995.6	5031.2	5063.9	5087.7	5093.6	5108.5	5102.5	5105.5
30°	4594.6	4636.2	4683.8	4740.2	4790.7	4823.3	4853.0	4873.8	4888.6	4879.8	4876.8
32.5°	4202.6	4244.2	4294.7	4351.1	4410.5	4458.0	4493.7	4520.4	4538.2	4532.2	4517.4
35°	3754.1	3766.0	3798.7	3843.2	3893.7	3944.2	3976.9	4006.5	4027.3	4033.3	4033.3
37.5°	3293.8	3255.2	3231.4	3231.4	3261.1	3281.9	3311.6	3329.4	3362.1	3373.9	3382.9
40°	2848.2	2759.1	2676.0	2613.6	2572.1	2569.1	2569.1	2578.0	2607.7	2646.3	2681.9
42.5°	2450.3	2307.7	2180.0	2064.2	1981.0	1933.5	1912.7	1915.7	1939.5	1975.1	2034.4
45°	2132.5	1954.3	1793.9	1654.3	1541.4	1467.2	1431.6	1428.6	1446.4	1488.0	1553.4
47.5°	1886.0	1695.9	1514.7	1354.3	1232.6	1152.4	1110.8	1098.9	1110.8	1149.4	1226.6
50°	1681.0	1485.0	1297.9	1131.6	1000.9	917.8	879.1	864.3	879.1	911.8	989.0
52.5°	1490.9	1289.0	1113.8	953.4	813.8	742.5	700.9	692.0	700.9	739.5	801.9
55°	1271.2	1098.9	926.6	766.3	644.5	573.2	540.5	531.7	540.5	576.2	641.5
57.5°	1054.4	905.9	754.4	608.8	504.9	442.5	412.8	400.9	421.7	445.5	522.7
60°	852.4	733.6	605.9	478.2	392.1	335.6	311.8	308.9	314.8	344.5	398.0
62.5°	668.3	570.3	469.2	365.3	294.0	270.3	240.5	237.6	243.5	261.3	303.0
65°	481.2	418.8	341.6	267.3	210.9	178.2	166.3	169.3	175.2	187.1	225.7
67.5°	335.6	291.1	237.6	187.1	145.6	130.7	118.8	115.8	118.8	139.6	160.4
70°	225.7	199.0	160.4	142.6	101.0	80.2	83.1	74.3	86.1	86.1	103.9
72.5°	148.5	130.7	106.9	83.1	71.3	56.5	56.5	53.5	59.4	62.4	77.2
75°	77.2	59.4	59.4	41.6	29.7	14.8	26.7	23.8	20.8	23.8	29.7
77.5°	53.5	44.5	41.6	32.7	29.7	23.8	23.8	23.8	23.8	26.7	29.7
80°	32.7	32.7	23.8	20.8	17.8	14.8	17.8	17.8	17.8	17.8	20.8
82.5°	20.8	17.8	17.8	14.8	14.8	11.8	11.8	11.8	11.8	11.8	17.8
85°	17.8	11.8	11.8	8.9	11.8	20.8	8.9	11.8	11.8	11.8	8.9
87.5°	6.0	8.9	8.9	8.9	6.0	3.0	6.0	8.9	8.9	14.8	11.8
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: P249527

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1	5533.1
2.5°	5542.1	5545.1	5545.1	5542.1	5542.1	5536.1	5548.0	5539.1	5542.1	5553.9	5545.1
5°	5548.0	5551.0	5551.0	5548.0	5548.0	5548.0	5551.0	5551.0	5548.0	5545.1	5551.0
7.5°	5559.9	5556.9	5556.9	5551.0	5551.0	5545.1	5551.0	5542.1	5548.0	5542.1	5551.0
10°	5545.1	5548.0	5545.1	5542.1	5542.1	5539.1	5539.1	5530.2	5533.1	5524.2	5530.2
12.5°	5536.1	5533.1	5533.1	5527.2	5521.3	5515.3	5512.4	5503.4	5503.4	5482.6	5491.6
15°	5512.4	5515.3	5506.4	5494.6	5488.6	5473.8	5467.8	5455.9	5444.1	5429.2	5432.2
17.5°	5491.6	5482.6	5470.8	5458.9	5435.1	5423.3	5411.4	5393.5	5387.6	5369.8	5363.9
20°	5429.2	5423.3	5408.4	5387.6	5372.8	5346.0	5334.2	5316.4	5301.5	5283.7	5274.7
22.5°	5349.0	5343.0	5325.2	5304.5	5280.7	5268.8	5256.9	5224.3	5209.4	5191.6	5188.6
25°	5248.1	5239.1	5221.3	5197.5	5185.6	5153.0	5141.1	5117.3	5111.4	5093.6	5090.6
27.5°	5093.6	5081.7	5060.9	5031.2	5010.4	4989.6	4977.8	4959.9	4954.0	4936.2	4933.2
30°	4862.0	4847.1	4805.5	4793.6	4758.0	4737.2	4737.2	4713.4	4716.4	4704.5	4704.5
32.5°	4496.6	4472.9	4440.2	4416.4	4392.6	4380.8	4380.8	4371.9	4377.8	4377.8	4383.8
35°	4012.5	3979.9	3962.0	3947.2	3947.2	3959.0	3994.7	4003.6	4021.4	4036.3	4048.2
37.5°	3391.7	3388.8	3409.6	3427.4	3472.0	3522.5	3584.8	3638.3	3688.7	3724.4	3760.0
40°	2720.5	2794.8	2854.2	2937.4	3005.6	3103.7	3216.5	3308.6	3394.7	3457.1	3522.5
42.5°	2123.5	2218.6	2343.4	2465.1	2586.9	2720.5	2869.1	2996.8	3109.6	3195.7	3264.0
45°	1654.3	1785.0	1936.5	2090.9	2248.3	2414.7	2569.1	2699.8	2818.6	2907.7	2976.0
47.5°	1333.5	1476.1	1648.3	1817.7	1995.9	2171.1	2343.4	2456.2	2554.2	2625.5	2687.9
50°	1101.8	1253.4	1434.5	1627.6	1805.7	1981.0	2129.5	2239.4	2319.6	2382.0	2420.5
52.5°	920.7	1081.1	1274.2	1467.2	1645.4	1805.7	1939.5	2022.6	2087.9	2132.5	2168.1
55°	760.3	914.8	1096.0	1277.1	1452.3	1603.8	1713.7	1776.1	1826.5	1853.3	1874.1
57.5°	620.8	763.3	929.6	1096.0	1247.4	1372.2	1458.3	1520.7	1544.4	1565.2	1562.2
60°	487.1	620.8	772.2	914.8	1045.5	1146.4	1208.8	1244.4	1262.2	1271.2	1265.2
62.5°	383.1	504.9	620.8	745.5	840.5	926.6	986.1	986.1	994.9	997.9	1006.9
65°	285.1	377.2	478.2	570.3	647.4	703.9	736.6	745.5	757.4	754.4	748.4
67.5°	210.9	279.2	353.4	421.7	475.2	510.8	534.6	555.4	552.4	546.5	543.5
70°	145.6	190.1	255.4	297.0	335.6	371.3	377.2	380.1	383.1	386.1	380.1
72.5°	101.0	133.6	169.3	204.9	228.7	243.5	258.4	261.3	261.3	261.3	258.4
75°	50.5	68.3	101.0	115.8	136.6	142.6	154.4	154.4	163.4	151.4	148.5
77.5°	44.5	53.5	71.3	83.1	92.1	101.0	103.9	112.9	109.9	103.9	106.9
80°	26.7	32.7	44.5	50.5	62.4	65.3	68.3	71.3	68.3	71.3	71.3
82.5°	20.8	23.8	29.7	29.7	38.6	38.6	41.6	41.6	44.5	44.5	44.5
85°	11.8	20.8	17.8	35.6	23.8	23.8	29.7	35.6	29.7	29.7	35.6
87.5°	11.8	11.8	8.9	11.8	11.8	11.8	14.8	17.8	17.8	20.8	17.8
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: P249527

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5533.1	5533.1	5533.1	5533.1
2.5°	5542.1	5548.0	5539.1	5536.1
5°	5551.0	5551.0	5545.1	5545.1
7.5°	5551.0	5551.0	5542.1	5536.1
10°	5527.2	5527.2	5518.3	5512.4
12.5°	5482.6	5482.6	5479.7	5470.8
15°	5426.2	5426.2	5414.3	5405.5
17.5°	5349.0	5355.0	5340.1	5340.1
20°	5265.9	5262.9	5251.0	5245.1
22.5°	5179.7	5173.8	5170.8	5153.0
25°	5087.7	5081.7	5072.8	5063.9
27.5°	4930.3	4927.3	4918.3	4906.5
30°	4689.6	4686.7	4674.8	4674.8
32.5°	4377.8	4374.8	4363.0	4366.0
35°	4054.1	4066.0	4060.0	4048.2
37.5°	3783.8	3792.7	3798.7	3792.7
40°	3558.1	3584.8	3587.8	3593.8
42.5°	3317.5	3353.1	3365.1	3370.9
45°	3029.4	3062.1	3088.8	3082.9
47.5°	2735.4	2759.1	2782.9	2765.1
50°	2453.2	2468.1	2477.0	2477.0
52.5°	2186.0	2186.0	2183.0	2186.0
55°	1880.0	1880.0	1868.2	1874.1
57.5°	1559.2	1565.2	1556.3	1541.4
60°	1262.2	1247.4	1241.5	1232.6
62.5°	983.1	983.1	962.3	989.0
65°	736.6	727.7	718.7	715.7
67.5°	534.6	531.7	522.7	519.7
70°	377.2	365.3	362.3	356.4
72.5°	252.5	252.5	246.5	246.5
75°	154.4	139.6	136.6	139.6
77.5°	106.9	103.9	103.9	101.0
80°	71.3	68.3	74.3	65.3
82.5°	44.5	47.5	44.5	47.5
85°	29.7	35.6	32.7	32.7
87.5°	17.8	17.8	17.8	17.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)