

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: P249545

Luminaire Tested: **LSR8B100D010 EC8B100840 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249545
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 EC8B100840 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10834.0 lumens
Efficiency: N/A
Efficacy: 101.9 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

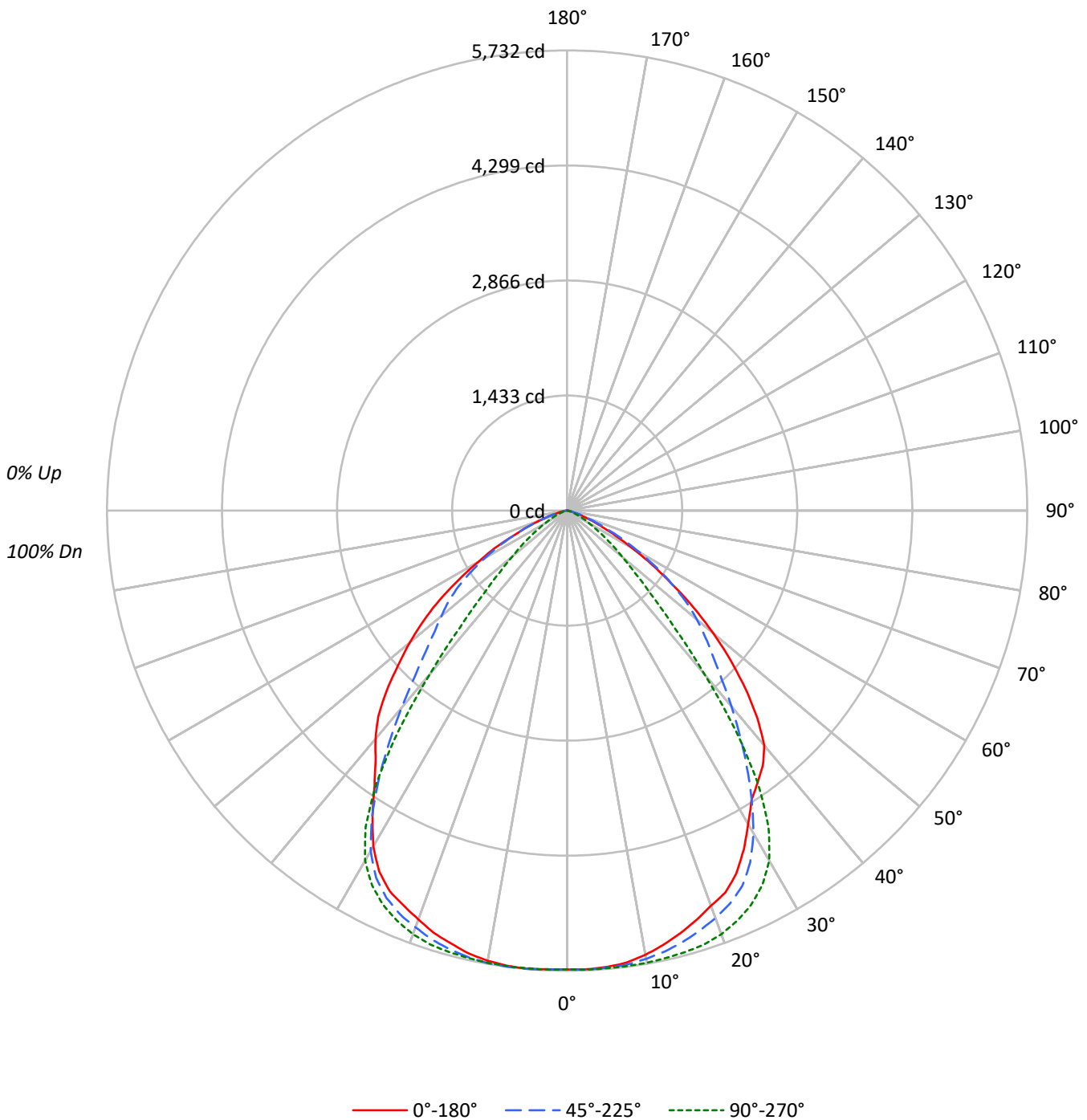
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: LSR8B100D010 EC8B100840 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°	176267	176267	176267
5°	176655	177132	177321
10°	175911	179083	178316
15°	173964	181702	178274
20°	171874	184258	177813
25°	169644	184469	177997
30°	160494	179283	171963
35°	155700	155813	157432
40°	153770	107208	149451
45°	137016	64358	138891
50°	113931	42835	122762
55°	85448	29531	104088
60°	57904	19680	78534
65°	34928	12762	53950
70°	19366	6915	33197
75°	8769	2919	17180
80°	7618	3267	11987
85°	8668	4316	11959



TEST NUMBER: P249545

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	545.5	5.0
10°-20°	1584.3	14.6
20°-30°	2404.7	22.2
30°-40°	2525.6	23.3
40°-50°	1893.5	17.5
50°-60°	1214.9	11.2
60°-70°	519.7	4.8
70°-80°	122.8	1.1
80°-90°	22.8	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°	4534.5	41.9
0°-40°	7060.1	65.2
0°-60°	10168.6	93.9
0°-90°	10834.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10834.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5716	5716	5716	5716	5716	
5°	5707	5716	5722	5732	5728	542
15°	5449	5563	5692	5655	5584	1537
25°	4986	5161	5422	5324	5232	2278
35°	4136	3906	4139	4090	4182	2596
45°	3142	2568	1476	2495	3185	2406
55°	1589	1589	549	1657	1936	1442
65°	479	565	175	727	739	511
75°	74	86	24	147	144	107
85°	24	15	12	24	34	26
90°	0	0	0	0	0	



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CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2
2.5°	5719.3	5725.5	5722.4	5722.4	5719.3	5722.4	5722.4	5728.5	5728.5	5722.4	5719.3
5°	5707.0	5713.2	5713.2	5707.0	5707.0	5722.4	5713.2	5719.3	5719.3	5716.2	5716.2
7.5°	5679.4	5679.4	5691.7	5682.5	5682.5	5691.7	5688.6	5694.8	5700.9	5704.0	5704.0
10°	5618.0	5624.2	5627.3	5627.3	5630.3	5639.5	5645.7	5658.0	5664.1	5670.2	5673.3
12.5°	5541.4	5550.5	5553.6	5550.5	5559.8	5572.0	5587.4	5602.7	5611.9	5624.2	5633.4
15°	5449.3	5449.3	5455.4	5464.7	5470.8	5489.2	5504.5	5522.9	5547.5	5562.8	5578.2
17.5°	5348.1	5354.2	5363.4	5363.4	5375.7	5406.3	5415.6	5443.2	5470.8	5486.1	5516.8
20°	5237.6	5243.7	5252.9	5259.1	5274.4	5299.0	5317.4	5341.9	5372.6	5400.2	5430.9
22.5°	5151.7	5139.4	5145.5	5151.7	5167.0	5188.5	5210.0	5240.6	5271.3	5299.0	5329.7
25°	4986.0	4989.0	4998.3	5004.4	5022.8	5041.2	5065.8	5102.6	5130.2	5160.9	5194.6
27.5°	4762.0	4765.1	4780.4	4780.4	4795.7	4826.4	4841.7	4872.4	4909.3	4939.9	4979.9
30°	4507.4	4513.4	4513.4	4525.7	4534.9	4550.3	4565.6	4596.3	4614.7	4642.3	4697.6
32.5°	4274.2	4280.2	4277.2	4274.2	4264.9	4261.9	4258.8	4264.9	4271.1	4280.2	4301.7
35°	4136.1	4120.7	4108.5	4087.0	4062.5	4031.7	4004.1	3967.3	3933.5	3905.9	3875.3
37.5°	4004.1	4001.0	3982.6	3951.9	3902.8	3847.7	3783.2	3703.4	3623.6	3537.7	3454.9
40°	3820.0	3810.8	3795.5	3752.5	3697.3	3629.8	3543.9	3445.7	3316.8	3184.9	3049.9
42.5°	3507.0	3510.1	3491.7	3457.9	3405.8	3341.3	3252.4	3145.0	3007.0	2850.4	2675.6
45°	3141.9	3141.9	3135.8	3108.2	3071.4	3019.2	2951.7	2862.7	2727.7	2568.1	2381.0
47.5°	2761.5	2764.5	2755.3	2749.2	2733.8	2700.1	2651.0	2583.5	2488.4	2334.9	2147.8
50°	2374.9	2374.9	2390.2	2387.1	2387.1	2374.9	2353.4	2313.5	2230.7	2107.9	1933.1
52.5°	1988.2	1994.4	2003.6	2015.9	2031.2	2055.7	2031.2	2012.8	1960.6	1865.5	1715.2
55°	1589.4	1595.5	1610.8	1632.3	1650.8	1675.3	1681.4	1681.4	1653.8	1589.4	1475.8
57.5°	1248.8	1239.6	1251.9	1270.3	1294.8	1319.4	1337.8	1359.3	1356.2	1313.2	1221.2
60°	938.9	942.0	951.1	969.6	988.0	1009.5	1034.0	1052.4	1061.7	1040.2	981.8
62.5°	684.2	684.2	696.5	714.9	724.1	754.8	770.1	779.4	788.5	785.4	748.7
65°	478.7	484.8	490.9	500.2	509.3	527.7	536.9	555.3	561.5	564.6	536.9
67.5°	337.5	328.3	334.5	340.5	349.8	362.1	380.5	380.5	389.6	389.6	371.3
70°	214.8	214.8	217.9	227.0	233.2	236.3	242.4	248.5	257.7	254.7	254.7
72.5°	144.2	141.1	144.2	147.3	150.4	159.5	159.5	162.6	168.8	171.8	159.5
75°	73.6	76.7	82.8	79.8	89.0	82.8	85.9	95.1	92.0	85.9	85.9
77.5°	61.3	61.3	61.3	58.3	64.4	64.4	61.3	67.5	64.4	64.4	61.3
80°	42.9	46.0	42.9	39.9	42.9	39.9	39.9	39.9	39.9	39.9	36.8
82.5°	33.8	27.6	30.7	27.6	30.7	30.7	27.6	24.5	24.5	27.6	24.5
85°	24.5	18.4	21.5	21.5	18.4	18.4	18.4	18.4	18.4	15.3	15.3
87.5°	15.3	9.2	9.2	9.2	12.2	12.2	12.2	9.2	12.2	12.2	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



TEST NUMBER: P249545

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2
2.5°	5725.5	5722.4	5728.5	5725.5	5725.5	5722.4	5725.5	5722.4	5728.5	5716.2	5719.3
5°	5725.5	5719.3	5722.4	5725.5	5728.5	5722.4	5722.4	5722.4	5728.5	5722.4	5725.5
7.5°	5713.2	5710.1	5719.3	5725.5	5722.4	5719.3	5725.5	5722.4	5728.5	5725.5	5731.5
10°	5688.6	5691.7	5697.8	5707.0	5710.1	5713.2	5719.3	5719.3	5728.5	5716.2	5722.4
12.5°	5651.8	5664.1	5679.4	5685.5	5697.8	5697.8	5704.0	5707.0	5713.2	5710.1	5719.3
15°	5605.8	5621.1	5639.5	5654.9	5670.2	5679.4	5688.6	5691.7	5700.9	5691.7	5694.8
17.5°	5550.5	5568.9	5596.6	5615.0	5639.5	5648.7	5661.0	5667.1	5676.4	5670.2	5673.3
20°	5473.8	5495.4	5526.0	5553.6	5568.9	5590.4	5605.8	5615.0	5621.1	5615.0	5618.0
22.5°	5366.5	5397.2	5437.0	5458.5	5489.2	5507.6	5510.7	5532.1	5547.5	5532.1	5538.3
25°	5240.6	5271.3	5302.0	5348.1	5375.7	5397.2	5418.6	5421.7	5437.0	5433.9	5430.9
27.5°	5032.0	5071.9	5124.0	5160.9	5197.7	5231.5	5256.0	5262.1	5277.5	5271.3	5274.4
30°	4746.6	4789.6	4838.7	4897.0	4949.2	4982.9	5013.6	5035.1	5050.4	5041.2	5038.1
32.5°	4341.7	4384.6	4436.8	4495.0	4556.5	4605.5	4642.3	4670.0	4688.4	4682.2	4666.9
35°	3878.4	3890.6	3924.4	3970.4	4022.5	4074.7	4108.5	4139.1	4160.6	4166.7	4166.7
37.5°	3402.8	3362.9	3338.3	3338.3	3369.0	3390.4	3421.2	3439.5	3473.3	3485.6	3494.8
40°	2942.5	2850.4	2764.5	2700.1	2657.2	2654.1	2654.1	2663.3	2694.0	2733.8	2770.7
42.5°	2531.3	2384.0	2252.1	2132.5	2046.6	1997.5	1976.0	1979.1	2003.6	2040.4	2101.8
45°	2203.0	2019.0	1853.3	1709.0	1592.4	1515.7	1478.9	1475.8	1494.2	1537.2	1604.8
47.5°	1948.4	1752.0	1564.8	1399.1	1273.4	1190.5	1147.5	1135.3	1147.5	1187.4	1267.2
50°	1736.7	1534.2	1340.9	1169.0	1034.0	948.1	908.2	892.9	908.2	942.0	1021.7
52.5°	1540.3	1331.6	1150.6	984.9	840.7	767.1	724.1	714.9	724.1	764.0	828.5
55°	1313.2	1135.3	957.3	791.6	665.8	592.2	558.4	549.3	558.4	595.3	662.8
57.5°	1089.3	935.8	779.4	629.0	521.6	457.1	426.5	414.2	435.7	460.2	540.0
60°	880.6	757.9	625.9	494.0	405.0	346.7	322.2	319.1	325.2	355.9	411.1
62.5°	690.4	589.1	484.8	377.4	303.8	279.2	248.5	245.5	251.6	270.0	313.0
65°	497.1	432.7	352.9	276.1	217.9	184.1	171.8	174.9	181.0	193.3	233.2
67.5°	346.7	300.7	245.5	193.3	150.4	135.0	122.7	119.7	122.7	144.2	165.7
70°	233.2	205.6	165.7	147.3	104.4	82.8	85.9	76.7	89.0	89.0	107.4
72.5°	153.4	135.0	110.4	85.9	73.6	58.3	58.3	55.3	61.3	64.4	79.8
75°	79.8	61.3	61.3	42.9	30.7	15.3	27.6	24.5	21.5	24.5	30.7
77.5°	55.3	46.0	42.9	33.8	30.7	24.5	24.5	24.5	24.5	27.6	30.7
80°	33.8	33.8	24.5	21.5	18.4	15.3	18.4	18.4	18.4	18.4	21.5
82.5°	21.5	18.4	18.4	15.3	15.3	12.2	12.2	12.2	12.2	12.2	18.4
85°	18.4	12.2	12.2	9.2	12.2	21.5	9.2	12.2	12.2	12.2	9.2
87.5°	6.2	9.2	9.2	9.2	6.2	3.1	6.2	9.2	9.2	15.3	12.2
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: P249545

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2	5716.2
2.5°	5725.5	5728.5	5728.5	5725.5	5725.5	5719.3	5731.5	5722.4	5725.5	5737.7	5728.5
5°	5731.5	5734.6	5734.6	5731.5	5731.5	5731.5	5734.6	5734.6	5731.5	5728.5	5734.6
7.5°	5743.9	5740.8	5740.8	5734.6	5734.6	5728.5	5734.6	5725.5	5731.5	5725.5	5734.6
10°	5728.5	5731.5	5728.5	5725.5	5725.5	5722.4	5722.4	5713.2	5716.2	5707.0	5713.2
12.5°	5719.3	5716.2	5716.2	5710.1	5704.0	5697.8	5694.8	5685.5	5685.5	5664.1	5673.3
15°	5694.8	5697.8	5688.6	5676.4	5670.2	5654.9	5648.7	5636.4	5624.2	5608.9	5611.9
17.5°	5673.3	5664.1	5651.8	5639.5	5615.0	5602.7	5590.4	5572.0	5565.9	5547.5	5541.4
20°	5608.9	5602.7	5587.4	5565.9	5550.5	5522.9	5510.7	5492.3	5476.9	5458.5	5449.3
22.5°	5526.0	5519.8	5501.4	5480.0	5455.4	5443.2	5430.9	5397.2	5381.8	5363.4	5360.3
25°	5421.7	5412.5	5394.1	5369.5	5357.2	5323.5	5311.2	5286.6	5280.6	5262.1	5259.1
27.5°	5262.1	5249.9	5228.4	5197.7	5176.2	5154.7	5142.5	5124.0	5117.9	5099.5	5096.5
30°	5022.8	5007.4	4964.5	4952.3	4915.4	4893.9	4893.9	4869.4	4872.4	4860.2	4860.2
32.5°	4645.4	4620.9	4587.1	4562.5	4538.0	4525.7	4525.7	4516.5	4522.7	4522.7	4528.8
35°	4145.3	4111.5	4093.1	4077.8	4077.8	4090.0	4126.9	4136.1	4154.5	4169.8	4182.1
37.5°	3504.0	3501.0	3522.4	3540.8	3586.8	3639.0	3703.4	3758.7	3810.8	3847.7	3884.4
40°	2810.6	2887.3	2948.6	3034.6	3105.1	3206.4	3323.0	3418.1	3507.0	3571.5	3639.0
42.5°	2193.8	2292.0	2420.9	2546.7	2672.5	2810.6	2964.0	3095.9	3212.5	3301.5	3372.1
45°	1709.0	1844.0	2000.6	2160.1	2322.7	2494.6	2654.1	2789.1	2911.8	3003.9	3074.4
47.5°	1377.7	1524.9	1702.9	1877.8	2061.9	2242.9	2420.9	2537.5	2638.7	2712.4	2776.8
50°	1138.3	1294.8	1482.0	1681.4	1865.5	2046.6	2200.0	2313.5	2396.4	2460.8	2500.6
52.5°	951.1	1116.8	1316.3	1515.7	1699.8	1865.5	2003.6	2089.5	2157.0	2203.0	2239.8
55°	785.4	945.1	1132.2	1319.4	1500.4	1656.9	1770.4	1834.9	1887.0	1914.6	1936.1
57.5°	641.3	788.5	960.4	1132.2	1288.7	1417.6	1506.6	1571.0	1595.5	1617.0	1613.9
60°	503.2	641.3	797.8	945.1	1080.0	1184.3	1248.8	1285.6	1304.0	1313.2	1307.1
62.5°	395.8	521.6	641.3	770.1	868.3	957.3	1018.7	1018.7	1027.9	1030.9	1040.2
65°	294.5	389.6	494.0	589.1	668.9	727.2	761.0	770.1	782.4	779.4	773.2
67.5°	217.9	288.4	365.1	435.7	490.9	527.7	552.3	573.8	570.7	564.6	561.5
70°	150.4	196.4	263.9	306.8	346.7	383.6	389.6	392.7	395.8	398.9	392.7
72.5°	104.4	138.1	174.9	211.7	236.3	251.6	267.0	270.0	270.0	270.0	267.0
75°	52.2	70.6	104.4	119.7	141.1	147.3	159.5	159.5	168.8	156.5	153.4
77.5°	46.0	55.3	73.6	85.9	95.1	104.4	107.4	116.6	113.5	107.4	110.4
80°	27.6	33.8	46.0	52.2	64.4	67.5	70.6	73.6	70.6	73.6	73.6
82.5°	21.5	24.5	30.7	30.7	39.9	39.9	42.9	42.9	46.0	46.0	46.0
85°	12.2	21.5	18.4	36.8	24.5	24.5	30.7	36.8	30.7	30.7	36.8
87.5°	12.2	12.2	9.2	12.2	12.2	12.2	15.3	18.4	18.4	21.5	18.4
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: P249545

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5716.2	5716.2	5716.2	5716.2
2.5°	5725.5	5731.5	5722.4	5719.3
5°	5734.6	5734.6	5728.5	5728.5
7.5°	5734.6	5734.6	5725.5	5719.3
10°	5710.1	5710.1	5700.9	5694.8
12.5°	5664.1	5664.1	5661.0	5651.8
15°	5605.8	5605.8	5593.5	5584.3
17.5°	5526.0	5532.1	5516.8	5516.8
20°	5440.1	5437.0	5424.8	5418.6
22.5°	5351.1	5345.0	5341.9	5323.5
25°	5256.0	5249.9	5240.6	5231.5
27.5°	5093.4	5090.3	5081.1	5068.8
30°	4844.8	4841.7	4829.5	4829.5
32.5°	4522.7	4519.6	4507.4	4510.4
35°	4188.2	4200.5	4194.4	4182.1
37.5°	3909.0	3918.2	3924.4	3918.2
40°	3675.8	3703.4	3706.5	3712.7
42.5°	3427.3	3464.1	3476.4	3482.5
45°	3129.6	3163.4	3191.0	3184.9
47.5°	2825.9	2850.4	2875.0	2856.6
50°	2534.4	2549.7	2559.0	2559.0
52.5°	2258.3	2258.3	2255.2	2258.3
55°	1942.2	1942.2	1930.0	1936.1
57.5°	1610.8	1617.0	1607.8	1592.4
60°	1304.0	1288.7	1282.5	1273.4
62.5°	1015.6	1015.6	994.2	1021.7
65°	761.0	751.7	742.5	739.4
67.5°	552.3	549.3	540.0	536.9
70°	389.6	377.4	374.3	368.2
72.5°	260.8	260.8	254.7	254.7
75°	159.5	144.2	141.1	144.2
77.5°	110.4	107.4	107.4	104.4
80°	73.6	70.6	76.7	67.5
82.5°	46.0	49.1	46.0	49.1
85°	30.7	36.8	33.8	33.8
87.5°	18.4	18.4	18.4	18.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)