

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: P249320

Luminaire Tested: **LSR8B100D010 EC8B100835 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249320
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 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10782.0 lumens
Efficiency: N/A
Efficacy: 101.4 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

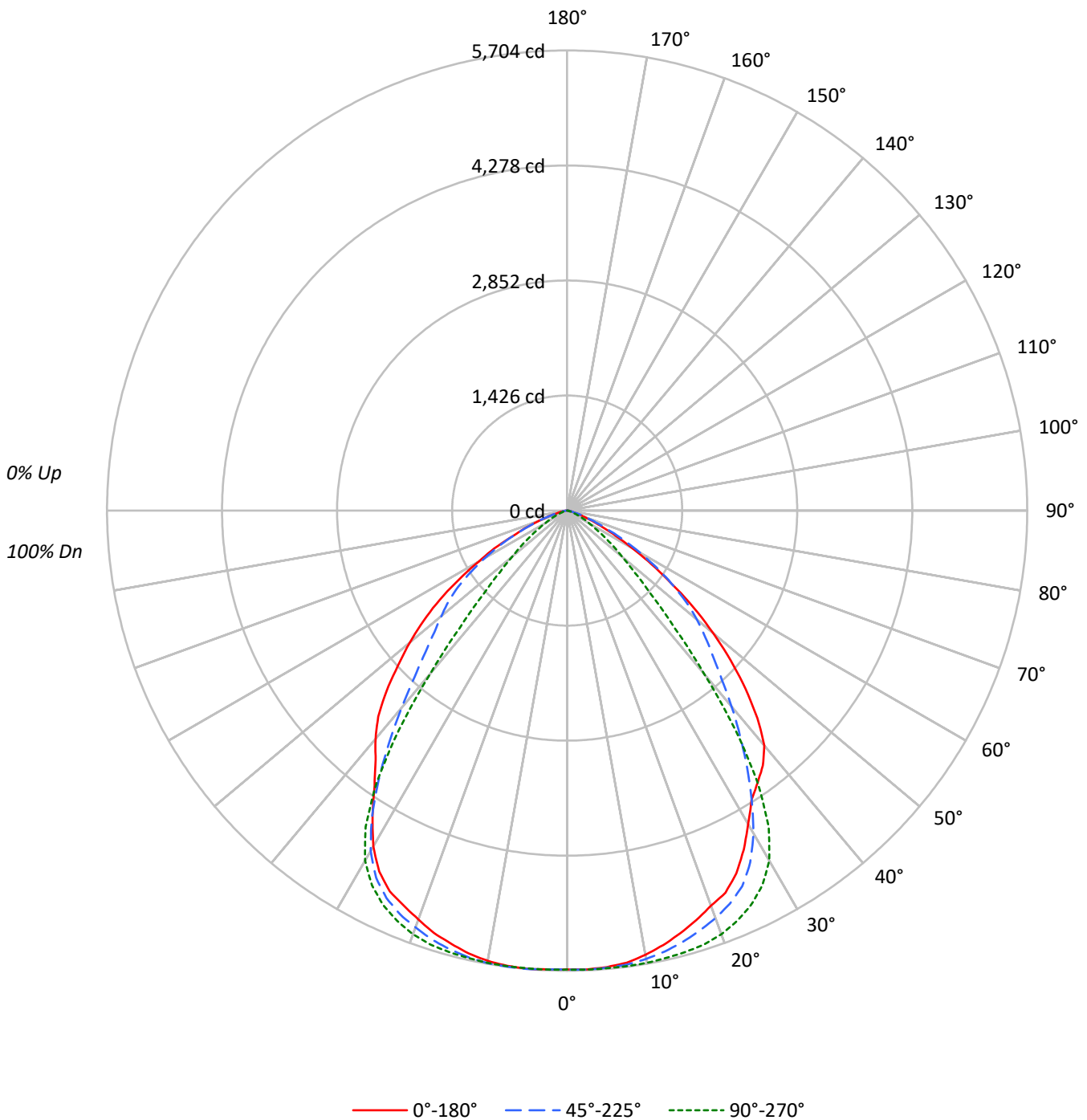
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	175422	175422	175422
5°	175807	176281	176469
10°	175069	178225	177458
15°	173128	180831	177418
20°	171050	183372	176960
25°	168828	183584	177143
30°	159721	178422	171137
35°	154951	155064	156675
40°	153033	106693	148730
45°	136361	64053	138224
50°	113384	42629	122172
55°	85035	29386	103588
60°	57627	19581	78158
65°	34760	12703	53695
70°	19276	6888	33034
75°	8733	2907	17097
80°	7583	3250	11933
85°	8633	4316	11888



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	542.9	5.0
10°-20°	1576.7	14.6
20°-30°	2393.1	22.2
30°-40°	2513.5	23.3
40°-50°	1884.5	17.5
50°-60°	1209.1	11.2
60°-70°	517.2	4.8
70°-80°	122.2	1.1
80°-90°	22.7	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°	4512.8	41.9
0°-40°	7026.3	65.2
0°-60°	10119.8	93.9
0°-90°	10782.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10782.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5689	5689	5689	5689	5689	
5°	5680	5689	5695	5704	5701	539
15°	5423	5536	5664	5628	5558	1530
25°	4962	5136	5396	5298	5206	2267
35°	4116	3887	4119	4070	4162	2583
45°	3127	2556	1469	2483	3170	2395
55°	1582	1582	547	1649	1927	1435
65°	476	562	174	724	736	509
75°	73	86	24	147	144	107
85°	24	15	12	24	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°	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8
2.5°	5691.9	5698.0	5694.9	5694.9	5691.9	5694.9	5694.9	5701.0	5701.0	5694.9	5691.9
5°	5679.6	5685.7	5685.7	5679.6	5679.6	5694.9	5685.7	5691.9	5691.9	5688.8	5688.8
7.5°	5652.2	5652.2	5664.4	5655.2	5655.2	5664.4	5661.3	5667.4	5673.6	5676.6	5676.6
10°	5591.1	5597.2	5600.3	5600.3	5603.3	5612.4	5618.6	5630.8	5636.9	5643.0	5646.1
12.5°	5514.8	5523.9	5527.0	5523.9	5533.1	5545.3	5560.6	5575.8	5585.0	5597.2	5606.4
15°	5423.1	5423.1	5429.2	5438.4	5444.5	5462.9	5478.1	5496.4	5520.8	5536.1	5551.4
17.5°	5322.4	5328.5	5337.6	5337.6	5349.9	5380.4	5389.6	5417.1	5444.5	5459.8	5490.3
20°	5212.5	5218.5	5227.7	5233.8	5249.1	5273.5	5291.8	5316.3	5346.8	5374.3	5404.8
22.5°	5126.9	5114.8	5120.8	5126.9	5142.2	5163.6	5185.0	5215.5	5246.0	5273.5	5304.1
25°	4962.0	4965.1	4974.3	4980.3	4998.7	5017.0	5041.5	5078.1	5105.6	5136.1	5169.7
27.5°	4739.2	4742.2	4757.5	4757.5	4772.7	4803.3	4818.5	4849.1	4885.7	4916.2	4956.0
30°	4485.7	4491.8	4491.8	4504.0	4513.1	4528.5	4543.7	4574.3	4592.6	4620.1	4675.0
32.5°	4253.7	4259.7	4256.6	4253.7	4244.5	4241.4	4238.3	4244.5	4250.6	4259.7	4281.1
35°	4116.2	4100.9	4088.8	4067.4	4043.0	4012.4	3984.9	3948.3	3914.7	3887.2	3856.7
37.5°	3984.9	3981.8	3963.5	3933.0	3884.1	3829.2	3765.1	3685.7	3606.2	3520.8	3438.4
40°	3801.7	3792.5	3777.3	3734.5	3679.5	3612.4	3526.9	3429.2	3300.9	3169.6	3035.3
42.5°	3490.2	3493.3	3475.0	3441.3	3389.5	3325.3	3236.8	3129.9	2992.5	2836.7	2662.7
45°	3126.9	3126.9	3120.7	3093.2	3056.6	3004.7	2937.5	2849.0	2714.7	2555.8	2369.5
47.5°	2748.2	2751.3	2742.1	2736.0	2720.7	2687.2	2638.3	2571.1	2476.5	2323.7	2137.5
50°	2363.5	2363.5	2378.7	2375.7	2375.7	2363.5	2342.1	2302.4	2220.0	2097.8	1923.8
52.5°	1978.7	1984.8	1994.0	2006.2	2021.4	2045.9	2021.4	2003.1	1951.2	1856.5	1707.0
55°	1581.7	1587.9	1603.1	1624.5	1642.9	1667.3	1673.3	1673.3	1645.8	1581.7	1468.8
57.5°	1242.8	1233.6	1245.9	1264.2	1288.6	1313.1	1331.4	1352.7	1349.7	1306.9	1215.3
60°	934.4	937.5	946.6	965.0	983.3	1004.6	1029.1	1047.4	1056.6	1035.2	977.1
62.5°	681.0	681.0	693.1	711.4	720.6	751.2	766.4	775.6	784.7	781.7	745.1
65°	476.4	482.4	488.6	497.8	506.9	525.2	534.4	552.7	558.8	561.9	534.4
67.5°	335.9	326.7	332.9	338.9	348.1	360.4	378.7	378.7	387.8	387.8	369.5
70°	213.8	213.8	216.8	225.9	232.1	235.1	241.3	247.3	256.5	253.4	253.4
72.5°	143.5	140.5	143.5	146.6	149.7	158.8	158.8	161.8	168.0	171.0	158.8
75°	73.3	76.4	82.4	79.4	88.5	82.4	85.5	94.7	91.6	85.5	85.5
77.5°	61.0	61.0	61.0	58.1	64.1	64.1	61.0	67.2	64.1	64.1	61.0
80°	42.7	45.8	42.7	39.7	42.7	39.7	39.7	39.7	39.7	39.7	36.6
82.5°	33.6	27.5	30.6	27.5	30.6	30.6	27.5	24.4	24.4	27.5	24.4
85°	24.4	18.3	21.4	21.4	18.3	18.3	18.3	18.3	18.3	15.2	15.2
87.5°	15.2	9.2	9.2	9.2	12.2	12.2	12.2	9.2	12.2	12.2	6.1
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°	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8
2.5°	5698.0	5694.9	5701.0	5698.0	5698.0	5694.9	5698.0	5694.9	5701.0	5688.8	5691.9
5°	5698.0	5691.9	5694.9	5698.0	5701.0	5694.9	5694.9	5694.9	5701.0	5694.9	5698.0
7.5°	5685.7	5682.7	5691.9	5698.0	5694.9	5691.9	5698.0	5694.9	5701.0	5698.0	5704.0
10°	5661.3	5664.4	5670.5	5679.6	5682.7	5685.7	5691.9	5691.9	5701.0	5688.8	5694.9
12.5°	5624.7	5636.9	5652.2	5658.2	5670.5	5670.5	5676.6	5679.6	5685.7	5682.7	5691.9
15°	5578.9	5594.1	5612.4	5627.8	5643.0	5652.2	5661.3	5664.4	5673.6	5664.4	5667.4
17.5°	5523.9	5542.2	5569.7	5588.0	5612.4	5621.6	5633.8	5639.9	5649.1	5643.0	5646.1
20°	5447.5	5469.0	5499.5	5527.0	5542.2	5563.6	5578.9	5588.0	5594.1	5588.0	5591.1
22.5°	5340.7	5371.3	5410.9	5432.3	5462.9	5481.2	5484.2	5505.6	5520.8	5505.6	5511.7
25°	5215.5	5246.0	5276.6	5322.4	5349.9	5371.3	5392.6	5395.7	5410.9	5407.9	5404.8
27.5°	5007.8	5047.6	5099.4	5136.1	5172.7	5206.4	5230.8	5236.8	5252.2	5246.0	5249.1
30°	4723.8	4766.6	4815.5	4873.5	4925.4	4959.0	4989.5	5010.9	5026.1	5017.0	5014.0
32.5°	4320.8	4363.6	4415.5	4473.5	4534.6	4583.4	4620.1	4647.6	4665.9	4659.7	4644.5
35°	3859.7	3871.9	3905.5	3951.3	4003.2	4055.1	4088.8	4119.2	4140.6	4146.7	4146.7
37.5°	3386.4	3346.7	3322.3	3322.3	3352.8	3374.2	3404.7	3423.0	3456.7	3468.8	3478.0
40°	2928.3	2836.7	2751.3	2687.2	2644.4	2641.4	2641.4	2650.5	2681.0	2720.7	2757.4
42.5°	2519.2	2372.6	2241.3	2122.2	2036.8	1987.9	1966.5	1969.6	1994.0	2030.6	2091.7
45°	2192.5	2009.3	1844.4	1700.8	1584.8	1508.4	1471.8	1468.8	1487.1	1529.8	1597.1
47.5°	1939.0	1743.6	1557.3	1392.4	1267.3	1184.8	1142.0	1129.9	1142.0	1181.7	1261.1
50°	1728.3	1526.8	1334.4	1163.4	1029.1	943.6	903.8	888.6	903.8	937.5	1016.8
52.5°	1532.9	1325.2	1145.1	980.2	836.7	763.4	720.6	711.4	720.6	760.3	824.5
55°	1306.9	1129.9	952.7	787.8	662.7	589.4	555.7	546.6	555.7	592.4	659.6
57.5°	1084.1	931.3	775.6	626.0	519.1	454.9	424.5	412.2	433.6	458.0	537.4
60°	876.3	754.3	622.9	491.6	403.1	345.0	320.6	317.5	323.7	354.2	409.1
62.5°	687.1	586.3	482.4	375.6	302.3	277.9	247.3	244.3	250.4	268.7	311.5
65°	494.7	430.6	351.2	274.8	216.8	183.2	171.0	174.1	180.1	192.4	232.1
67.5°	345.0	299.2	244.3	192.4	149.7	134.3	122.2	119.1	122.2	143.5	164.9
70°	232.1	204.6	164.9	146.6	103.9	82.4	85.5	76.4	88.5	88.5	106.8
72.5°	152.6	134.3	109.9	85.5	73.3	58.1	58.1	55.0	61.0	64.1	79.4
75°	79.4	61.0	61.0	42.7	30.6	15.2	27.5	24.4	21.4	24.4	30.6
77.5°	55.0	45.8	42.7	33.6	30.6	24.4	24.4	24.4	24.4	27.5	30.6
80°	33.6	33.6	24.4	21.4	18.3	15.2	18.3	18.3	18.3	18.3	21.4
82.5°	21.4	18.3	18.3	15.2	15.2	12.2	12.2	12.2	12.2	12.2	18.3
85°	18.3	12.2	12.2	9.2	12.2	21.4	9.2	12.2	12.2	12.2	9.2
87.5°	6.1	9.2	9.2	9.2	6.1	3.1	6.1	9.2	9.2	15.2	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8	5688.8
2.5°	5698.0	5701.0	5701.0	5698.0	5698.0	5691.9	5704.0	5694.9	5698.0	5710.2	5701.0
5°	5704.0	5707.1	5707.1	5704.0	5704.0	5704.0	5707.1	5707.1	5704.0	5701.0	5707.1
7.5°	5716.3	5713.2	5713.2	5707.1	5707.1	5701.0	5707.1	5698.0	5704.0	5698.0	5707.1
10°	5701.0	5704.0	5701.0	5698.0	5698.0	5694.9	5694.9	5685.7	5688.8	5679.6	5685.7
12.5°	5691.9	5688.8	5688.8	5682.7	5676.6	5670.5	5667.4	5658.2	5658.2	5636.9	5646.1
15°	5667.4	5670.5	5661.3	5649.1	5643.0	5627.8	5621.6	5609.4	5597.2	5582.0	5585.0
17.5°	5646.1	5636.9	5624.7	5612.4	5588.0	5575.8	5563.6	5545.3	5539.1	5520.8	5514.8
20°	5582.0	5575.8	5560.6	5539.1	5523.9	5496.4	5484.2	5465.9	5450.6	5432.3	5423.1
22.5°	5499.5	5493.3	5475.0	5453.7	5429.2	5417.1	5404.8	5371.3	5355.9	5337.6	5334.6
25°	5395.7	5386.5	5368.2	5343.8	5331.5	5298.0	5285.7	5261.3	5255.2	5236.8	5233.8
27.5°	5236.8	5224.7	5203.3	5172.7	5151.4	5130.0	5117.8	5099.4	5093.4	5075.0	5072.0
30°	4998.7	4983.4	4940.7	4928.5	4891.8	4870.4	4870.4	4846.0	4849.1	4836.9	4836.9
32.5°	4623.1	4598.7	4565.1	4540.6	4516.2	4504.0	4504.0	4494.8	4501.0	4501.0	4507.1
35°	4125.4	4091.8	4073.4	4058.2	4058.2	4070.4	4107.1	4116.2	4134.6	4149.8	4162.0
37.5°	3487.1	3484.2	3505.5	3523.8	3569.6	3621.6	3685.7	3740.7	3792.5	3829.2	3865.8
40°	2797.1	2873.4	2934.5	3020.0	3090.2	3191.0	3307.0	3401.7	3490.2	3554.4	3621.6
42.5°	2183.3	2281.0	2409.3	2534.4	2659.7	2797.1	2949.8	3081.1	3197.1	3285.6	3355.9
45°	1700.8	1835.2	1991.0	2149.7	2311.6	2482.6	2641.4	2775.7	2897.9	2989.5	3059.7
47.5°	1371.0	1517.6	1694.7	1868.8	2052.0	2232.1	2409.3	2525.3	2626.0	2699.3	2763.5
50°	1132.8	1288.6	1474.9	1673.3	1856.5	2036.8	2189.4	2302.4	2384.9	2449.0	2488.6
52.5°	946.6	1111.5	1310.0	1508.4	1691.6	1856.5	1994.0	2079.5	2146.7	2192.5	2229.1
55°	781.7	940.5	1126.8	1313.1	1493.2	1648.9	1761.9	1826.1	1877.9	1905.4	1926.8
57.5°	638.2	784.7	955.8	1126.8	1282.5	1410.8	1499.3	1563.4	1587.9	1609.2	1606.2
60°	500.8	638.2	793.9	940.5	1074.9	1178.6	1242.8	1279.4	1297.7	1306.9	1300.8
62.5°	393.9	519.1	638.2	766.4	864.2	952.7	1013.8	1013.8	1022.9	1026.0	1035.2
65°	293.1	387.8	491.6	586.3	665.6	723.7	757.3	766.4	778.7	775.6	769.5
67.5°	216.8	287.1	363.3	433.6	488.6	525.2	549.6	571.1	568.0	561.9	558.8
70°	149.7	195.5	262.6	305.4	345.0	381.7	387.8	390.8	393.9	397.0	390.8
72.5°	103.9	137.4	174.1	210.7	235.1	250.4	265.7	268.7	268.7	268.7	265.7
75°	51.9	70.2	103.9	119.1	140.5	146.6	158.8	158.8	168.0	155.7	152.6
77.5°	45.8	55.0	73.3	85.5	94.7	103.9	106.8	116.0	113.0	106.8	109.9
80°	27.5	33.6	45.8	51.9	64.1	67.2	70.2	73.3	70.2	73.3	73.3
82.5°	21.4	24.4	30.6	30.6	39.7	39.7	42.7	42.7	45.8	45.8	45.8
85°	12.2	21.4	18.3	36.6	24.4	24.4	30.6	36.6	30.6	30.6	36.6
87.5°	12.2	12.2	9.2	12.2	12.2	12.2	15.2	18.3	18.3	21.4	18.3
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: P249320

CATALOG NUMBER: LSR8B100D010 EC8B100835 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5688.8	5688.8	5688.8	5688.8
2.5°	5698.0	5704.0	5694.9	5691.9
5°	5707.1	5707.1	5701.0	5701.0
7.5°	5707.1	5707.1	5698.0	5691.9
10°	5682.7	5682.7	5673.6	5667.4
12.5°	5636.9	5636.9	5633.8	5624.7
15°	5578.9	5578.9	5566.6	5557.5
17.5°	5499.5	5505.6	5490.3	5490.3
20°	5414.0	5410.9	5398.7	5392.6
22.5°	5325.5	5319.3	5316.3	5298.0
25°	5230.8	5224.7	5215.5	5206.4
27.5°	5069.0	5065.9	5056.7	5044.5
30°	4821.6	4818.5	4806.3	4806.3
32.5°	4501.0	4497.9	4485.7	4488.8
35°	4168.1	4180.4	4174.2	4162.0
37.5°	3890.2	3899.4	3905.5	3899.4
40°	3658.2	3685.7	3688.7	3694.8
42.5°	3410.9	3447.5	3459.7	3465.8
45°	3114.6	3148.2	3175.7	3169.6
47.5°	2812.3	2836.7	2861.2	2842.9
50°	2522.3	2537.5	2546.7	2546.7
52.5°	2247.5	2247.5	2244.4	2247.5
55°	1932.9	1932.9	1920.7	1926.8
57.5°	1603.1	1609.2	1600.0	1584.8
60°	1297.7	1282.5	1276.4	1267.3
62.5°	1010.8	1010.8	989.4	1016.8
65°	757.3	748.1	738.9	735.9
67.5°	549.6	546.6	537.4	534.4
70°	387.8	375.6	372.5	366.4
72.5°	259.6	259.6	253.4	253.4
75°	158.8	143.5	140.5	143.5
77.5°	109.9	106.8	106.8	103.9
80°	73.3	70.2	76.4	67.2
82.5°	45.8	48.9	45.8	48.9
85°	30.6	36.6	33.6	33.6
87.5°	18.3	18.3	18.3	18.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)