

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: P248528

Luminaire Tested: **LSR8B100D010 EC8B100927 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248528  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B100D010 EC8B100927 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8707.5 lumens  
Efficiency: N/A  
Efficacy: 81.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

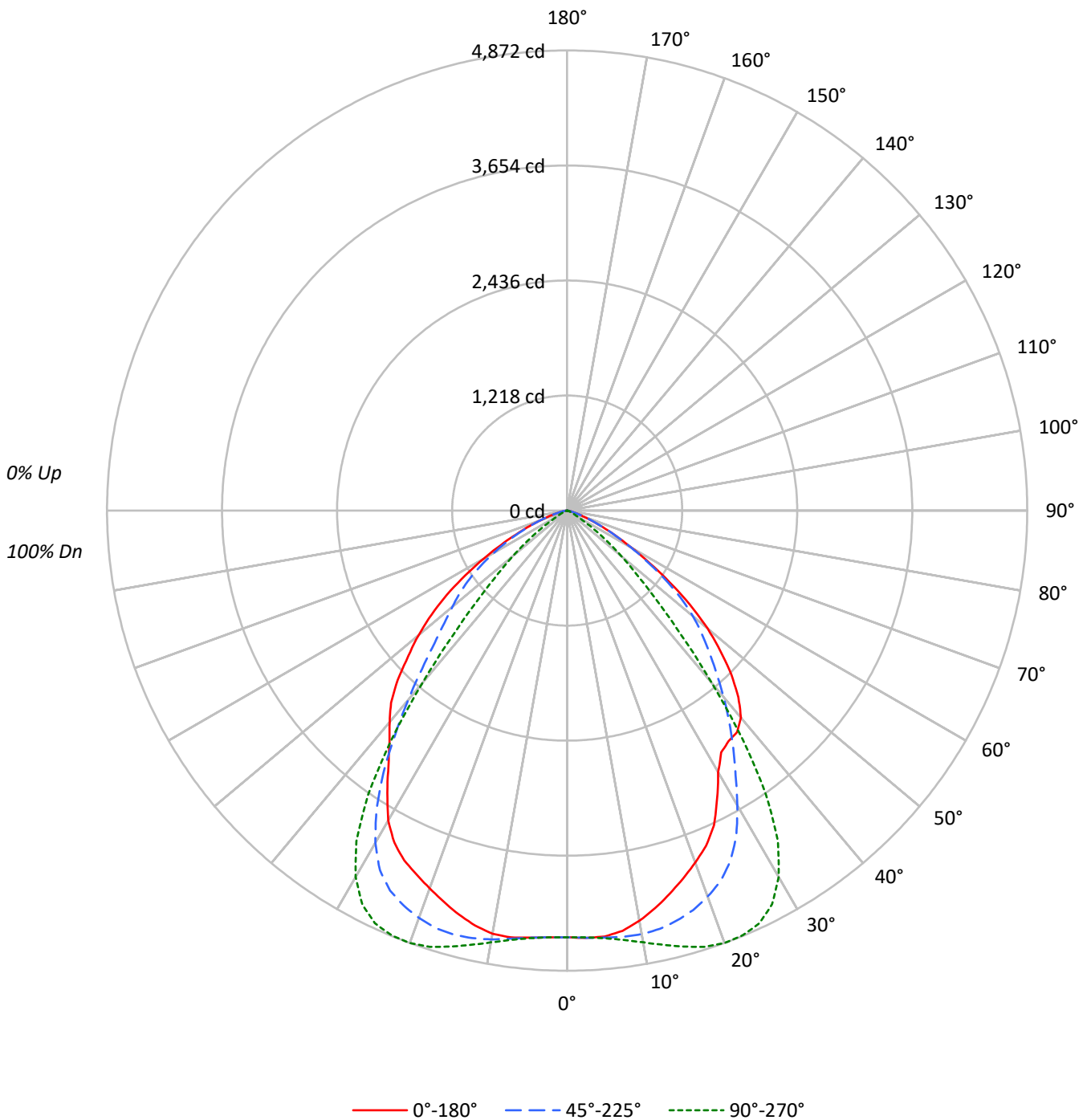
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	434.4	5.0
10°-20°	1286.9	14.8
20°-30°	1963.3	22.5
30°-40°	2048.7	23.5
40°-50°	1538.8	17.7
50°-60°	946.8	10.9
60°-70°	385.3	4.4
70°-80°	90.8	1.0
80°-90°	12.5	0.1
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°	3684.5	42.3
0°-40°	5733.2	65.8
0°-60°	8218.9	94.4
0°-90°	8707.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8707.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4517	4517	4517	4517	4517	
5°	4527	4539	4544	4539	4539	428
15°	4198	4493	4779	4647	4428	1183
25°	3678	4090	4819	4438	4086	1672
35°	2980	3064	3671	3393	3297	1882
45°	2460	2129	1328	1983	2537	1877
55°	1328	1261	348	1261	1556	1194
65°	415	420	53	563	597	433
75°	72	72	10	127	132	87
85°	7	7	2	17	22	10
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°	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1
2.5°	4529.1	4521.9	4529.1	4529.1	4531.6	4526.8	4529.1	4531.6	4526.8	4526.8	4526.8
5°	4526.8	4521.9	4526.8	4524.4	4529.1	4529.1	4534.0	4534.0	4538.7	4538.7	4545.9
7.5°	4488.4	4478.8	4488.4	4495.6	4500.3	4510.0	4521.9	4531.6	4541.2	4550.7	4562.8
10°	4409.2	4409.2	4416.5	4430.8	4445.2	4462.0	4483.6	4507.5	4531.6	4553.1	4574.7
12.5°	4311.0	4303.8	4318.2	4337.3	4358.9	4385.4	4418.9	4454.9	4493.2	4536.3	4570.0
15°	4198.3	4191.1	4207.8	4227.1	4253.4	4291.8	4332.6	4380.5	4435.7	4493.2	4548.4
17.5°	4083.2	4080.8	4097.6	4123.9	4145.5	4186.2	4239.1	4296.6	4358.9	4435.7	4507.5
20°	3965.7	3963.4	3980.1	4001.7	4030.4	4068.8	4121.6	4188.7	4263.0	4349.4	4433.3
22.5°	3843.4	3845.8	3860.2	3884.2	3908.1	3948.9	4004.1	4071.3	4152.7	4246.2	4339.7
25°	3678.0	3666.0	3685.2	3709.2	3749.8	3783.5	3836.2	3908.1	3992.1	4090.4	4200.8
27.5°	3438.2	3435.8	3452.6	3474.2	3510.1	3551.0	3608.4	3682.8	3771.4	3879.3	3987.2
30°	3198.5	3203.2	3210.4	3232.0	3256.0	3296.8	3354.3	3416.6	3500.6	3603.6	3718.8
32.5°	3035.4	3035.4	3045.0	3059.4	3076.2	3097.8	3138.5	3184.1	3248.9	3320.8	3404.7
35°	2980.2	2970.7	2980.2	2982.7	2985.1	2989.9	2997.0	3011.5	3033.0	3064.2	3095.3
37.5°	2956.3	2949.1	2949.1	2939.5	2927.5	2913.2	2894.0	2872.4	2848.4	2817.2	2793.3
40°	2862.8	2858.0	2853.2	2843.7	2817.2	2788.4	2757.3	2707.0	2651.7	2575.0	2498.4
42.5°	2683.0	2678.2	2675.8	2656.6	2632.6	2599.1	2563.1	2510.3	2440.8	2342.5	2232.2
45°	2460.0	2450.4	2443.3	2426.4	2409.6	2380.8	2347.3	2299.3	2229.8	2129.2	1997.2
47.5°	2201.1	2196.2	2193.9	2186.7	2169.9	2153.0	2131.5	2093.2	2030.8	1934.9	1798.2
50°	1939.7	1930.2	1934.9	1932.5	1925.3	1913.4	1898.9	1872.6	1824.6	1738.2	1613.6
52.5°	1639.9	1639.9	1637.7	1644.8	1647.2	1644.8	1647.2	1618.4	1577.7	1512.9	1407.4
55°	1328.3	1328.3	1335.5	1345.0	1354.6	1357.1	1354.6	1342.7	1313.9	1261.1	1167.6
57.5°	1035.8	1031.0	1045.4	1059.8	1069.4	1079.0	1071.7	1062.1	1045.4	1002.2	930.3
60°	788.8	788.8	798.4	808.0	817.5	827.2	824.7	822.4	808.0	779.2	721.7
62.5°	580.2	582.6	582.6	589.8	599.4	609.0	616.2	609.0	601.8	582.6	544.3
65°	414.8	412.3	414.8	422.0	429.2	438.8	443.6	441.2	433.9	419.6	390.8
67.5°	278.1	275.7	285.3	287.7	292.5	302.2	299.7	302.2	299.7	287.7	263.8
70°	182.2	177.4	182.2	179.8	187.0	189.5	194.2	196.5	194.2	187.0	179.8
72.5°	112.7	110.2	112.7	115.1	117.6	119.8	124.6	124.6	122.3	117.6	107.9
75°	71.9	64.7	67.2	62.3	67.2	67.2	71.9	74.4	71.9	71.9	67.2
77.5°	43.2	43.2	43.2	43.2	43.2	43.2	43.2	45.6	47.9	43.2	40.7
80°	21.6	21.6	24.0	24.0	24.0	26.4	24.0	24.0	24.0	26.4	19.2
82.5°	16.8	14.4	14.4	14.4	16.8	14.4	14.4	14.4	14.4	14.4	14.4
85°	7.2	9.6	7.2	4.8	7.2	7.2	9.6	7.2	7.2	7.2	9.6
87.5°	2.4	2.4	0.0	0.0	0.0	2.4	0.0	2.4	2.4	4.8	0.0
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°	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1
2.5°	4529.1	4524.4	4524.4	4521.9	4526.8	4521.9	4524.4	4521.9	4521.9	4526.8	4521.9
5°	4545.9	4548.4	4543.5	4541.2	4548.4	4548.4	4548.4	4543.5	4543.5	4545.9	4543.5
7.5°	4570.0	4574.7	4577.1	4579.5	4584.3	4586.7	4586.7	4584.3	4581.9	4589.1	4579.5
10°	4596.3	4603.5	4617.9	4625.1	4637.0	4637.0	4641.9	4641.9	4637.0	4641.9	4639.5
12.5°	4586.7	4629.8	4653.8	4670.7	4687.4	4701.7	4706.6	4709.0	4706.6	4716.2	4706.6
15°	4603.5	4639.5	4677.9	4706.6	4737.7	4754.5	4759.3	4778.6	4783.3	4785.8	4771.3
17.5°	4577.1	4641.9	4682.6	4725.8	4771.3	4802.5	4831.2	4843.2	4845.7	4850.4	4831.2
20°	4517.1	4589.1	4651.4	4713.8	4766.5	4814.4	4838.5	4872.0	4862.5	4881.6	4855.3
22.5°	4435.7	4517.1	4596.3	4677.9	4733.0	4790.5	4840.9	4864.8	4876.9	4876.9	4848.1
25°	4306.2	4402.1	4488.4	4572.3	4656.3	4725.8	4783.3	4819.3	4826.5	4824.1	4790.5
27.5°	4104.8	4207.8	4308.6	4404.5	4507.5	4589.1	4656.3	4699.3	4711.4	4711.4	4675.4
30°	3826.7	3936.9	4035.3	4150.3	4255.9	4347.0	4440.5	4478.8	4500.3	4500.3	4459.6
32.5°	3495.7	3589.3	3680.4	3793.0	3908.1	4011.3	4100.0	4152.7	4179.2	4176.7	4140.8
35°	3136.2	3181.6	3251.2	3335.2	3438.2	3534.1	3620.5	3670.9	3716.3	3714.0	3680.4
37.5°	2776.5	2764.5	2771.7	2802.8	2867.5	2934.8	3001.8	3049.9	3088.1	3105.0	3097.8
40°	2424.0	2361.7	2301.8	2280.2	2285.0	2309.0	2345.0	2380.8	2424.0	2445.6	2455.2
42.5°	2107.6	2002.0	1896.5	1817.4	1771.9	1757.5	1774.2	1786.3	1812.6	1843.8	1874.9
45°	1853.4	1711.9	1572.9	1450.6	1373.9	1328.3	1318.7	1328.3	1342.7	1373.9	1414.6
47.5°	1644.8	1479.4	1323.6	1186.9	1074.1	1014.2	997.4	992.6	1007.0	1035.8	1090.9
50°	1460.1	1294.8	1122.1	963.8	846.3	779.2	755.3	745.6	762.4	784.0	834.3
52.5°	1258.8	1095.8	918.3	764.9	642.6	573.1	546.6	532.2	541.8	570.6	621.0
55°	1040.5	889.5	728.9	570.6	453.2	388.5	357.2	347.6	357.2	388.5	438.8
57.5°	822.4	695.4	561.0	412.3	306.9	242.2	210.9	201.4	227.8	239.7	292.5
60°	642.6	539.6	424.4	302.2	210.9	160.6	129.5	122.3	134.3	155.8	199.0
62.5°	482.0	417.2	326.0	215.8	155.8	103.0	86.3	79.1	86.3	103.0	136.7
65°	350.1	299.7	227.8	158.2	105.5	76.7	57.6	52.8	60.0	71.9	100.7
67.5°	239.7	201.4	158.2	110.2	71.9	47.9	40.7	40.7	43.2	52.8	74.4
70°	155.8	131.8	100.7	71.9	47.9	36.0	31.2	26.4	31.2	38.4	50.3
72.5°	98.3	83.9	64.7	50.3	36.0	26.4	21.6	19.2	24.0	28.8	38.4
75°	60.0	45.6	33.5	26.4	19.2	19.2	19.2	9.6	11.9	19.2	24.0
77.5°	36.0	31.2	26.4	21.6	16.8	9.6	9.6	9.6	11.9	14.4	21.6
80°	19.2	16.8	11.9	11.9	9.6	7.2	9.6	7.2	4.8	11.9	14.4
82.5°	11.9	9.6	9.6	9.6	11.9	4.8	7.2	4.8	7.2	9.6	7.2
85°	7.2	7.2	7.2	4.8	11.9	4.8	4.8	2.4	2.4	4.8	4.8
87.5°	0.0	2.4	2.4	0.0	2.4	0.0	2.4	2.4	2.4	2.4	2.4
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°	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1	4517.1
2.5°	4524.4	4521.9	4524.4	4521.9	4521.9	4521.9	4524.4	4524.4	4521.9	4521.9	4526.8
5°	4543.5	4543.5	4543.5	4541.2	4538.7	4538.7	4543.5	4543.5	4536.3	4543.5	4543.5
7.5°	4584.3	4577.1	4584.3	4574.7	4570.0	4572.3	4574.7	4570.0	4565.1	4567.5	4567.5
10°	4637.0	4629.8	4629.8	4622.7	4615.4	4610.7	4605.9	4593.8	4581.9	4579.5	4570.0
12.5°	4699.3	4687.4	4680.2	4665.8	4653.8	4637.0	4622.7	4603.5	4579.5	4562.8	4545.9
15°	4761.7	4742.6	4725.8	4701.7	4675.4	4646.6	4615.4	4584.3	4545.9	4512.4	4483.6
17.5°	4812.1	4785.8	4754.5	4716.2	4677.9	4634.7	4589.1	4543.5	4488.4	4445.2	4411.7
20°	4828.8	4790.5	4749.8	4699.3	4649.1	4589.1	4531.6	4471.7	4409.2	4363.8	4325.4
22.5°	4807.3	4761.7	4711.4	4658.6	4591.5	4526.8	4459.6	4390.1	4335.0	4272.6	4236.6
25°	4747.4	4692.2	4637.0	4574.7	4510.0	4438.0	4366.1	4294.2	4227.1	4193.4	4148.0
27.5°	4625.1	4565.1	4505.2	4440.5	4366.1	4294.2	4219.9	4150.3	4092.9	4047.2	4020.9
30°	4409.2	4339.7	4270.2	4200.8	4136.0	4061.6	3992.1	3934.6	3877.0	3841.0	3814.6
32.5°	4078.4	4016.0	3946.5	3879.3	3819.5	3757.2	3699.6	3649.3	3608.4	3584.5	3565.2
35°	3632.4	3570.1	3517.3	3469.4	3419.0	3392.7	3356.8	3327.9	3311.1	3301.5	3299.2
37.5°	3071.4	3035.4	3018.6	3009.0	2999.5	2992.3	2997.0	3009.0	3018.6	3035.4	3054.6
40°	2472.0	2503.1	2512.7	2546.3	2577.5	2618.2	2663.8	2716.5	2759.6	2814.9	2853.2
42.5°	1925.3	1982.8	2050.0	2121.9	2198.6	2273.0	2364.1	2448.0	2524.7	2594.2	2654.2
45°	1479.4	1568.0	1668.7	1771.9	1874.9	1982.8	2093.2	2196.2	2287.4	2361.7	2424.0
47.5°	1153.2	1251.6	1381.0	1508.2	1632.8	1759.8	1882.1	1990.0	2066.7	2138.7	2193.9
50°	913.5	1026.2	1167.6	1313.9	1450.6	1584.8	1714.3	1815.1	1891.8	1949.3	1990.0
52.5°	707.3	841.6	985.4	1138.8	1285.2	1431.4	1551.3	1644.8	1707.2	1757.5	1788.6
55°	527.5	659.4	812.8	971.1	1119.7	1261.1	1373.9	1455.4	1510.5	1539.3	1556.1
57.5°	381.3	501.1	654.5	812.8	947.0	1081.4	1172.5	1246.7	1277.9	1294.8	1302.0
60°	278.1	388.5	525.0	661.7	788.8	896.7	975.8	1026.2	1050.2	1059.8	1057.4
62.5°	203.8	299.7	417.2	532.2	635.4	724.1	786.4	820.0	832.0	836.8	829.6
65°	155.8	230.2	330.9	419.6	498.7	563.4	609.0	630.6	637.8	635.4	630.6
67.5°	115.1	172.7	246.9	314.1	371.7	422.0	446.0	465.2	469.9	462.7	455.5
70°	81.6	127.1	179.8	225.4	268.5	297.3	323.7	326.0	326.0	323.7	318.9
72.5°	57.6	88.6	122.3	153.5	179.8	201.4	210.9	218.1	215.8	213.4	208.6
75°	38.4	55.1	88.6	96.0	119.8	127.1	136.7	136.7	139.0	131.8	131.8
77.5°	24.0	38.4	52.8	62.3	71.9	81.6	86.3	86.3	88.6	86.3	86.3
80°	14.4	24.0	28.8	43.2	43.2	50.3	52.8	55.1	50.3	57.6	50.3
82.5°	9.6	14.4	21.6	21.6	26.4	31.2	31.2	33.5	33.5	31.2	31.2
85°	7.2	9.6	11.9	14.4	14.4	16.8	14.4	14.4	16.8	19.2	16.8
87.5°	2.4	4.8	2.4	4.8	4.8	9.6	7.2	7.2	7.2	9.6	9.6
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: P248528

CATALOG NUMBER: LSR8B100D010 EC8B100927 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4517.1	4517.1	4517.1	4517.1
2.5°	4521.9	4524.4	4521.9	4521.9
5°	4543.5	4541.2	4543.5	4538.7
7.5°	4560.3	4560.3	4557.9	4557.9
10°	4560.3	4550.7	4550.7	4550.7
12.5°	4524.4	4512.4	4505.2	4500.3
15°	4462.0	4440.5	4430.8	4428.4
17.5°	4380.5	4361.3	4349.4	4342.2
20°	4287.0	4267.8	4253.4	4255.9
22.5°	4205.5	4183.9	4174.3	4169.5
25°	4123.9	4097.6	4090.4	4085.6
27.5°	3992.1	3977.7	3970.5	3963.4
30°	3790.7	3783.5	3771.4	3788.3
32.5°	3558.2	3546.1	3536.6	3543.8
35°	3301.5	3294.3	3301.5	3296.8
37.5°	3066.6	3073.7	3083.4	3088.1
40°	2882.0	2908.4	2917.9	2922.8
42.5°	2697.4	2728.6	2747.7	2759.6
45°	2469.6	2500.8	2522.4	2536.8
47.5°	2234.6	2261.0	2282.5	2280.2
50°	2021.3	2035.6	2045.1	2054.8
52.5°	1805.4	1805.4	1807.8	1807.8
55°	1560.8	1556.1	1553.6	1556.1
57.5°	1292.3	1287.6	1285.2	1277.9
60°	1047.8	1033.4	1023.8	1023.8
62.5°	820.0	803.2	796.1	793.7
65°	616.2	613.8	599.4	597.0
67.5°	446.0	436.4	426.8	429.2
70°	314.1	299.7	299.7	294.9
72.5°	203.8	196.5	194.2	194.2
75°	127.1	127.1	122.3	131.8
77.5°	83.9	83.9	81.6	83.9
80°	50.3	50.3	50.3	47.9
82.5°	31.2	33.5	31.2	31.2
85°	16.8	19.2	14.4	21.6
87.5°	9.6	11.9	9.6	11.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)