

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: P249437

Luminaire Tested: **LSR8B100D010 EC8B100840 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249437  
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 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9697.0 lumens  
Efficiency: N/A  
Efficacy: 91.2 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

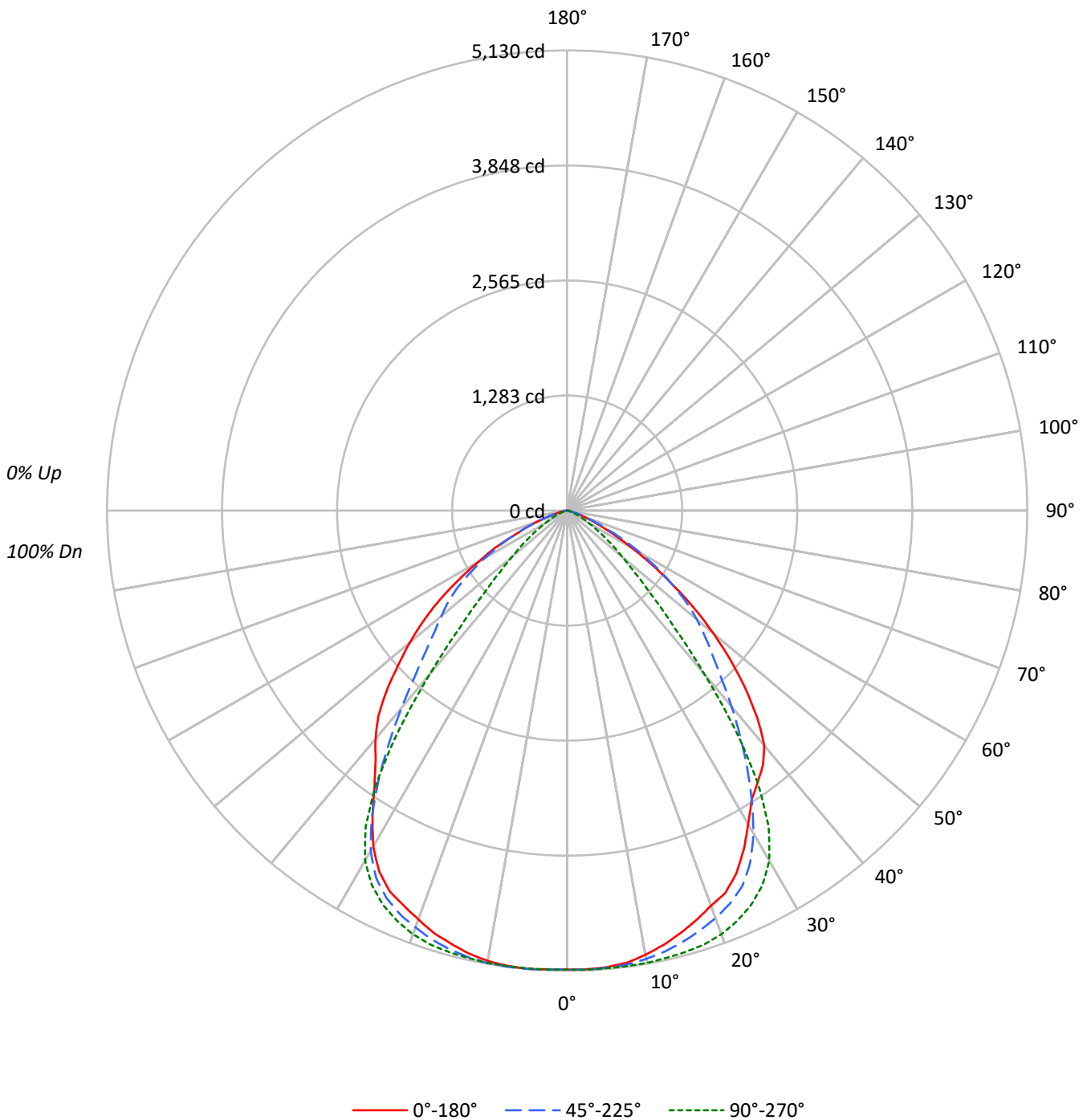
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	157768	157768	157768
5°	158117	158541	158711
10°	157449	160289	159600
15°	155707	162634	159566
20°	153835	164920	159154
25°	151839	165109	159314
30°	143648	160465	153917
35°	139359	139460	140910
40°	137632	95957	133764
45°	122638	57608	124312
50°	101971	38340	109877
55°	76481	26429	93163
60°	51830	17614	70288
65°	31258	11426	48288
70°	17338	6194	29708
75°	7851	2621	15381
80°	6819	2930	10726
85°	7784	3892	10685



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	488.3	5.0
10°-20°	1418.0	14.6
20°-30°	2152.3	22.2
30°-40°	2260.6	23.3
40°-50°	1694.8	17.5
50°-60°	1087.4	11.2
60°-70°	465.2	4.8
70°-80°	109.9	1.1
80°-90°	20.5	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°	4058.6	41.9
0°-40°	6319.2	65.2
0°-60°	9101.5	93.9
0°-90°	9697.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9697.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5116	5116	5116	5116	5116	
5°	5108	5116	5122	5130	5127	485
15°	4877	4979	5094	5061	4998	1376
25°	4463	4619	4853	4765	4682	2039
35°	3702	3496	3705	3661	3743	2323
45°	2812	2299	1321	2233	2851	2154
55°	1423	1423	492	1483	1733	1290
65°	428	505	157	651	662	457
75°	66	77	22	132	129	96
85°	22	14	11	22	30	23
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°	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3
2.5°	5119.1	5124.6	5121.8	5121.8	5119.1	5121.8	5121.8	5127.3	5127.3	5121.8	5119.1
5°	5108.1	5113.6	5113.6	5108.1	5108.1	5121.8	5113.6	5119.1	5119.1	5116.3	5116.3
7.5°	5083.4	5083.4	5094.4	5086.2	5086.2	5094.4	5091.6	5097.1	5102.6	5105.4	5105.4
10°	5028.4	5033.9	5036.7	5036.7	5039.5	5047.7	5053.2	5064.2	5069.6	5075.1	5077.9
12.5°	4959.8	4968.0	4970.8	4968.0	4976.3	4987.2	5001.0	5014.7	5023.0	5033.9	5042.2
15°	4877.4	4877.4	4882.9	4891.1	4896.7	4913.1	4926.8	4943.3	4965.3	4979.0	4992.8
17.5°	4786.8	4792.3	4800.5	4800.5	4811.5	4838.9	4847.2	4871.9	4896.7	4910.4	4937.9
20°	4687.9	4693.4	4701.7	4707.2	4720.9	4742.8	4759.3	4781.3	4808.8	4833.5	4860.9
22.5°	4611.0	4600.1	4605.5	4611.0	4624.8	4644.0	4663.2	4690.6	4718.1	4742.8	4770.3
25°	4462.7	4465.5	4473.7	4479.2	4495.7	4512.2	4534.1	4567.1	4591.8	4619.3	4649.4
27.5°	4262.3	4265.0	4278.7	4278.7	4292.4	4319.9	4333.6	4361.1	4394.1	4421.5	4457.3
30°	4034.3	4039.8	4039.8	4050.8	4059.0	4072.8	4086.5	4113.9	4130.4	4155.1	4204.6
32.5°	3825.6	3831.0	3828.3	3825.6	3817.3	3814.6	3811.8	3817.3	3822.8	3831.0	3850.3
35°	3702.0	3688.3	3677.3	3658.1	3636.1	3608.6	3583.9	3551.0	3520.7	3496.0	3468.6
37.5°	3583.9	3581.1	3564.7	3537.2	3493.2	3443.9	3386.2	3314.8	3243.3	3166.5	3092.3
40°	3419.1	3410.9	3397.2	3358.7	3309.3	3248.9	3172.0	3084.1	2968.7	2850.6	2729.8
42.5°	3139.0	3141.7	3125.3	3095.0	3048.4	2990.7	2911.1	2815.0	2691.4	2551.3	2394.8
45°	2812.2	2812.2	2806.7	2782.0	2749.0	2702.3	2641.9	2562.3	2441.5	2298.6	2131.1
47.5°	2471.6	2474.4	2466.1	2460.7	2446.9	2416.7	2372.8	2312.4	2227.3	2089.9	1922.4
50°	2125.6	2125.6	2139.4	2136.6	2136.6	2125.6	2106.4	2070.7	1996.6	1886.7	1730.2
52.5°	1779.6	1785.1	1793.4	1804.3	1818.0	1840.0	1818.0	1801.6	1754.9	1669.7	1535.2
55°	1422.6	1428.1	1441.8	1461.0	1477.5	1499.5	1504.9	1504.9	1480.2	1422.6	1321.0
57.5°	1117.8	1109.5	1120.5	1137.0	1158.9	1180.9	1197.4	1216.6	1213.9	1175.4	1093.0
60°	840.4	843.1	851.3	867.9	884.3	903.5	925.5	942.0	950.2	931.0	878.8
62.5°	612.4	612.4	623.4	639.9	648.1	675.6	689.3	697.6	705.8	703.0	670.1
65°	428.4	433.9	439.4	447.7	455.9	472.3	480.6	497.1	502.6	505.3	480.6
67.5°	302.1	293.9	299.4	304.8	313.1	324.1	340.6	340.6	348.8	348.8	332.3
70°	192.3	192.3	195.0	203.2	208.7	211.5	217.0	222.4	230.7	227.9	227.9
72.5°	129.1	126.3	129.1	131.8	134.6	142.8	142.8	145.5	151.1	153.8	142.8
75°	65.9	68.7	74.1	71.4	79.6	74.1	76.9	85.1	82.4	76.9	76.9
77.5°	54.9	54.9	54.9	52.2	57.7	57.7	54.9	60.4	57.7	57.7	54.9
80°	38.4	41.2	38.4	35.7	38.4	35.7	35.7	35.7	35.7	35.7	32.9
82.5°	30.2	24.7	27.5	24.7	27.5	27.5	24.7	22.0	22.0	24.7	22.0
85°	22.0	16.5	19.2	19.2	16.5	16.5	16.5	16.5	16.5	13.7	13.7
87.5°	13.7	8.3	8.3	8.3	11.0	11.0	11.0	8.3	11.0	11.0	5.5
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3
2.5°	5124.6	5121.8	5127.3	5124.6	5124.6	5121.8	5124.6	5121.8	5127.3	5116.3	5119.1
5°	5124.6	5119.1	5121.8	5124.6	5127.3	5121.8	5121.8	5121.8	5127.3	5121.8	5124.6
7.5°	5113.6	5110.8	5119.1	5124.6	5121.8	5119.1	5124.6	5121.8	5127.3	5124.6	5130.0
10°	5091.6	5094.4	5099.9	5108.1	5110.8	5113.6	5119.1	5119.1	5127.3	5116.3	5121.8
12.5°	5058.7	5069.6	5083.4	5088.8	5099.9	5099.9	5105.4	5108.1	5113.6	5110.8	5119.1
15°	5017.5	5031.2	5047.7	5061.4	5075.1	5083.4	5091.6	5094.4	5102.6	5094.4	5097.1
17.5°	4968.0	4984.5	5009.2	5025.7	5047.7	5055.9	5066.9	5072.4	5080.6	5075.1	5077.9
20°	4899.3	4918.6	4946.1	4970.8	4984.5	5003.7	5017.5	5025.7	5031.2	5025.7	5028.4
22.5°	4803.3	4830.7	4866.4	4885.6	4913.1	4929.6	4932.3	4951.6	4965.3	4951.6	4957.1
25°	4690.6	4718.1	4745.6	4786.8	4811.5	4830.7	4850.0	4852.7	4866.4	4863.7	4860.9
27.5°	4503.9	4539.6	4586.3	4619.3	4652.2	4682.4	4704.4	4709.9	4723.6	4718.1	4720.9
30°	4248.5	4287.0	4330.9	4383.1	4429.8	4459.9	4487.4	4506.6	4520.4	4512.2	4509.4
32.5°	3886.0	3924.5	3971.2	4023.3	4078.3	4122.1	4155.1	4179.9	4196.3	4190.8	4177.1
35°	3471.3	3482.3	3512.5	3553.7	3600.4	3647.1	3677.3	3704.7	3723.9	3729.4	3729.4
37.5°	3045.6	3010.0	2988.0	2988.0	3015.4	3034.6	3062.1	3078.6	3108.8	3119.8	3128.0
40°	2633.7	2551.3	2474.4	2416.7	2378.3	2375.6	2375.6	2383.8	2411.2	2446.9	2479.9
42.5°	2265.7	2133.8	2015.8	1908.7	1831.8	1787.8	1768.6	1771.4	1793.4	1826.3	1881.2
45°	1971.8	1807.1	1658.8	1529.7	1425.3	1356.6	1323.7	1321.0	1337.4	1375.9	1436.3
47.5°	1743.9	1568.1	1400.6	1252.3	1139.7	1065.5	1027.1	1016.2	1027.1	1062.8	1134.2
50°	1554.4	1373.2	1200.1	1046.3	925.5	848.6	812.9	799.2	812.9	843.1	914.5
52.5°	1378.6	1191.9	1029.9	881.6	752.5	686.6	648.1	639.9	648.1	683.8	741.5
55°	1175.4	1016.2	856.8	708.5	596.0	530.1	499.8	491.6	499.8	532.8	593.2
57.5°	975.0	837.6	697.6	563.0	466.9	409.2	381.7	370.7	389.9	411.9	483.3
60°	788.2	678.4	560.2	442.2	362.5	310.3	288.3	285.6	291.1	318.6	368.0
62.5°	617.9	527.3	433.9	337.8	271.9	249.9	222.4	219.7	225.2	241.6	280.1
65°	444.9	387.3	315.8	247.2	195.0	164.8	153.8	156.6	162.0	173.0	208.7
67.5°	310.3	269.1	219.7	173.0	134.6	120.8	109.9	107.1	109.9	129.1	148.3
70°	208.7	184.0	148.3	131.8	93.4	74.1	76.9	68.7	79.6	79.6	96.1
72.5°	137.3	120.8	98.8	76.9	65.9	52.2	52.2	49.5	54.9	57.7	71.4
75°	71.4	54.9	54.9	38.4	27.5	13.7	24.7	22.0	19.2	22.0	27.5
77.5°	49.5	41.2	38.4	30.2	27.5	22.0	22.0	22.0	22.0	24.7	27.5
80°	30.2	30.2	22.0	19.2	16.5	13.7	16.5	16.5	16.5	16.5	19.2
82.5°	19.2	16.5	16.5	13.7	13.7	11.0	11.0	11.0	11.0	11.0	16.5
85°	16.5	11.0	11.0	8.3	11.0	19.2	8.3	11.0	11.0	11.0	8.3
87.5°	5.5	8.3	8.3	8.3	5.5	2.8	5.5	8.3	8.3	13.7	11.0
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3	5116.3
2.5°	5124.6	5127.3	5127.3	5124.6	5124.6	5119.1	5130.0	5121.8	5124.6	5135.5	5127.3
5°	5130.0	5132.8	5132.8	5130.0	5130.0	5130.0	5132.8	5132.8	5130.0	5127.3	5132.8
7.5°	5141.1	5138.3	5138.3	5132.8	5132.8	5127.3	5132.8	5124.6	5130.0	5124.6	5132.8
10°	5127.3	5130.0	5127.3	5124.6	5124.6	5121.8	5121.8	5113.6	5116.3	5108.1	5113.6
12.5°	5119.1	5116.3	5116.3	5110.8	5105.4	5099.9	5097.1	5088.8	5088.8	5069.6	5077.9
15°	5097.1	5099.9	5091.6	5080.6	5075.1	5061.4	5055.9	5044.9	5033.9	5020.2	5023.0
17.5°	5077.9	5069.6	5058.7	5047.7	5025.7	5014.7	5003.7	4987.2	4981.7	4965.3	4959.8
20°	5020.2	5014.7	5001.0	4981.7	4968.0	4943.3	4932.3	4915.9	4902.1	4885.6	4877.4
22.5°	4946.1	4940.5	4924.1	4904.9	4882.9	4871.9	4860.9	4830.7	4817.0	4800.5	4797.7
25°	4852.7	4844.4	4828.0	4806.0	4795.0	4764.8	4753.8	4731.8	4726.4	4709.9	4707.2
27.5°	4709.9	4698.9	4679.7	4652.2	4633.0	4613.8	4602.8	4586.3	4580.8	4564.3	4561.6
30°	4495.7	4481.9	4443.5	4432.5	4399.5	4380.3	4380.3	4358.3	4361.1	4350.1	4350.1
32.5°	4157.9	4135.9	4105.7	4083.7	4061.7	4050.8	4050.8	4042.5	4048.0	4048.0	4053.5
35°	3710.2	3680.1	3663.5	3649.8	3649.8	3660.8	3693.8	3702.0	3718.5	3732.2	3743.2
37.5°	3136.2	3133.5	3152.8	3169.2	3210.4	3257.1	3314.8	3364.2	3410.9	3443.9	3476.8
40°	2515.6	2584.3	2639.2	2716.1	2779.2	2869.9	2974.2	3059.4	3139.0	3196.7	3257.1
42.5°	1963.6	2051.5	2166.8	2279.4	2392.0	2515.6	2652.9	2771.0	2875.4	2955.0	3018.2
45°	1529.7	1650.5	1790.6	1933.4	2078.9	2232.8	2375.6	2496.4	2606.2	2688.6	2751.8
47.5°	1233.1	1364.9	1524.2	1680.7	1845.5	2007.5	2166.8	2271.2	2361.8	2427.7	2485.4
50°	1018.8	1158.9	1326.5	1504.9	1669.7	1831.8	1969.1	2070.7	2144.9	2202.5	2238.2
52.5°	851.3	999.6	1178.2	1356.6	1521.4	1669.7	1793.4	1870.2	1930.6	1971.8	2004.8
55°	703.0	845.9	1013.4	1180.9	1342.9	1483.0	1584.6	1642.3	1688.9	1713.7	1732.9
57.5°	574.0	705.8	859.6	1013.4	1153.4	1268.8	1348.4	1406.1	1428.1	1447.3	1444.5
60°	450.4	574.0	714.0	845.9	966.7	1060.0	1117.8	1150.7	1167.1	1175.4	1169.9
62.5°	354.3	466.9	574.0	689.3	777.2	856.8	911.8	911.8	920.0	922.8	931.0
65°	263.6	348.8	442.2	527.3	598.7	650.9	681.1	689.3	700.3	697.6	692.1
67.5°	195.0	258.2	326.8	389.9	439.4	472.3	494.3	513.6	510.8	505.3	502.6
70°	134.6	175.8	236.2	274.6	310.3	343.3	348.8	351.5	354.3	357.0	351.5
72.5°	93.4	123.6	156.6	189.5	211.5	225.2	239.0	241.6	241.6	241.6	239.0
75°	46.7	63.2	93.4	107.1	126.3	131.8	142.8	142.8	151.1	140.0	137.3
77.5°	41.2	49.5	65.9	76.9	85.1	93.4	96.1	104.4	101.6	96.1	98.8
80°	24.7	30.2	41.2	46.7	57.7	60.4	63.2	65.9	63.2	65.9	65.9
82.5°	19.2	22.0	27.5	27.5	35.7	35.7	38.4	38.4	41.2	41.2	41.2
85°	11.0	19.2	16.5	32.9	22.0	22.0	27.5	32.9	27.5	27.5	32.9
87.5°	11.0	11.0	8.3	11.0	11.0	11.0	13.7	16.5	16.5	19.2	16.5
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: P249437

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5116.3	5116.3	5116.3	5116.3
2.5°	5124.6	5130.0	5121.8	5119.1
5°	5132.8	5132.8	5127.3	5127.3
7.5°	5132.8	5132.8	5124.6	5119.1
10°	5110.8	5110.8	5102.6	5097.1
12.5°	5069.6	5069.6	5066.9	5058.7
15°	5017.5	5017.5	5006.5	4998.3
17.5°	4946.1	4951.6	4937.9	4937.9
20°	4869.2	4866.4	4855.5	4850.0
22.5°	4789.5	4784.0	4781.3	4764.8
25°	4704.4	4698.9	4690.6	4682.4
27.5°	4558.9	4556.1	4547.8	4536.9
30°	4336.4	4333.6	4322.7	4322.7
32.5°	4048.0	4045.3	4034.3	4037.1
35°	3748.7	3759.7	3754.2	3743.2
37.5°	3498.8	3507.0	3512.5	3507.0
40°	3290.0	3314.8	3317.5	3323.0
42.5°	3067.6	3100.5	3111.6	3117.0
45°	2801.2	2831.4	2856.1	2850.6
47.5°	2529.3	2551.3	2573.3	2556.8
50°	2268.4	2282.2	2290.4	2290.4
52.5°	2021.3	2021.3	2018.5	2021.3
55°	1738.4	1738.4	1727.4	1732.9
57.5°	1441.8	1447.3	1439.0	1425.3
60°	1167.1	1153.4	1147.9	1139.7
62.5°	909.0	909.0	889.8	914.5
65°	681.1	672.8	664.6	661.8
67.5°	494.3	491.6	483.3	480.6
70°	348.8	337.8	335.0	329.5
72.5°	233.4	233.4	227.9	227.9
75°	142.8	129.1	126.3	129.1
77.5°	98.8	96.1	96.1	93.4
80°	65.9	63.2	68.7	60.4
82.5°	41.2	43.9	41.2	43.9
85°	27.5	32.9	30.2	30.2
87.5°	16.5	16.5	16.5	16.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)