

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: P249393

Luminaire Tested: **LSR8B120D010 EC8B120927 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249393  
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: LSR8B120D010 EC8B120927 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9573.7 lumens  
Efficiency: N/A  
Efficacy: 80.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

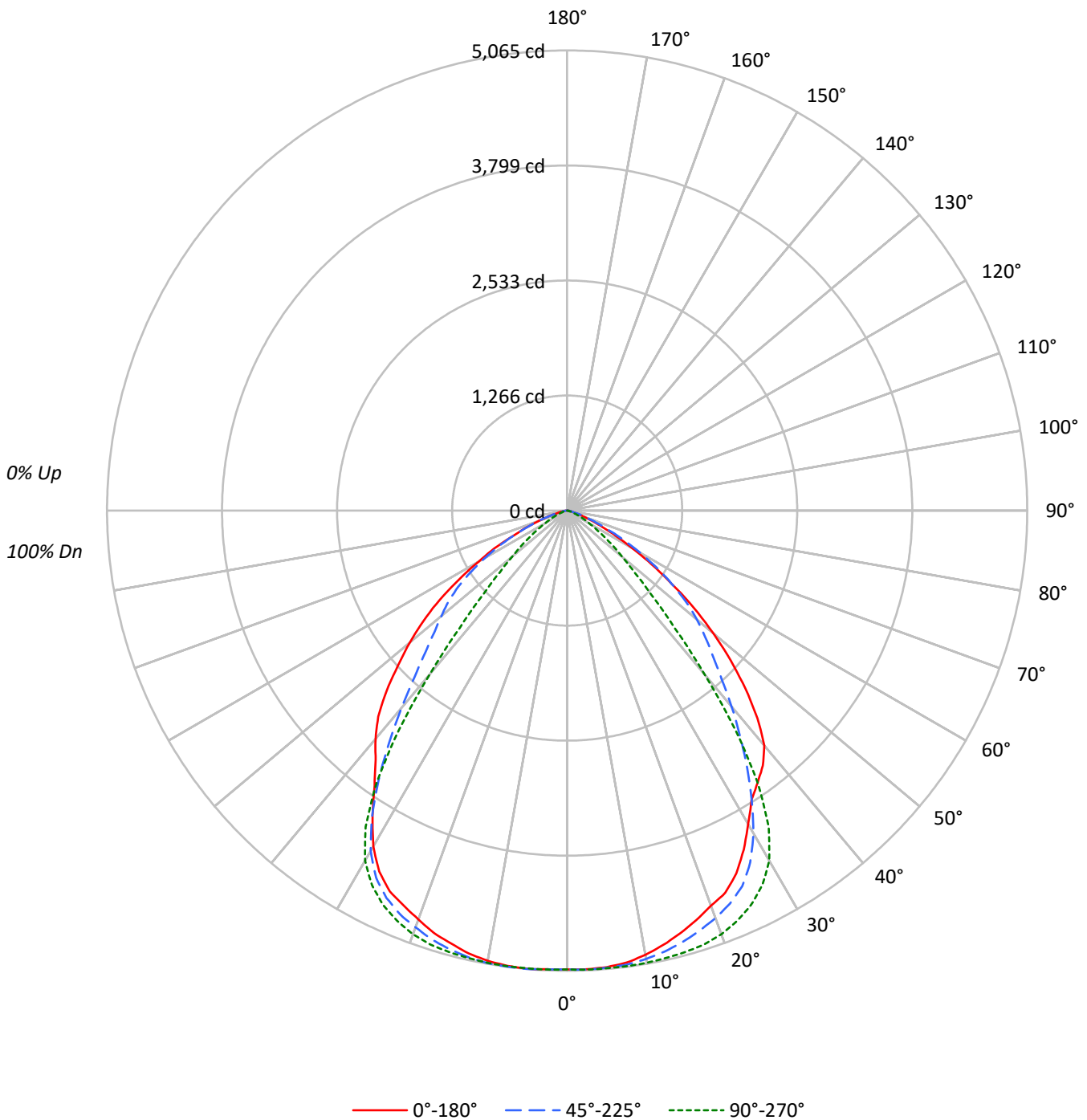
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249393

CATALOG NUMBER: LSR8B120D010 EC8B120927 8LBDW0GPH

### Luminous Intensity Polar Plot





TEST NUMBER: P249393

CATALOG NUMBER: LSR8B120D010 EC8B120927 8LBDW0GPH

**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	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	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°			



TEST NUMBER: P249393

CATALOG NUMBER: LSR8B120D010 EC8B120927 8LBDW0GPH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	482.1	5.0
10°-20°	1400.0	14.6
20°-30°	2125.0	22.2
30°-40°	2231.8	23.3
40°-50°	1673.3	17.5
50°-60°	1073.6	11.2
60°-70°	459.3	4.8
70°-80°	108.5	1.1
80°-90°	20.2	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°	4007.0	41.9
0°-40°	6238.9	65.2
0°-60°	8985.8	93.9
0°-90°	9573.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9573.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5051	5051	5051	5051	5051	
5°	5043	5051	5057	5065	5062	479
15°	4815	4916	5030	4997	4935	1358
25°	4406	4560	4791	4704	4623	2013
35°	3655	3452	3658	3614	3696	2294
45°	2776	2269	1304	2204	2814	2126
55°	1404	1404	485	1464	1711	1274
65°	423	499	155	643	653	452
75°	65	76	22	130	128	95
85°	22	14	11	22	30	23
90°	0	0	0	0	0	



TEST NUMBER: P249393

CATALOG NUMBER: LSR8B120D010 EC8B120927 8LBDW0GPH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2
2.5°	5054.1	5059.5	5056.8	5056.8	5054.1	5056.8	5056.8	5062.2	5062.2	5056.8	5054.1
5°	5043.2	5048.6	5048.6	5043.2	5043.2	5056.8	5048.6	5054.1	5054.1	5051.2	5051.2
7.5°	5018.7	5018.7	5029.7	5021.6	5021.6	5029.7	5026.8	5032.3	5037.8	5040.4	5040.4
10°	4964.5	4969.9	4972.7	4972.7	4975.4	4983.5	4988.9	4999.8	5005.2	5010.6	5013.3
12.5°	4896.8	4904.9	4907.6	4904.9	4913.0	4923.9	4937.4	4951.0	4959.1	4969.9	4978.1
15°	4815.3	4815.3	4820.8	4829.0	4834.5	4850.7	4864.2	4880.5	4902.2	4915.8	4929.3
17.5°	4725.9	4731.4	4739.5	4739.5	4750.3	4777.4	4785.6	4810.0	4834.5	4848.0	4875.1
20°	4628.4	4633.8	4641.9	4647.4	4660.9	4682.6	4698.8	4720.5	4747.6	4772.0	4799.1
22.5°	4552.4	4541.6	4546.9	4552.4	4566.0	4584.9	4604.0	4631.1	4658.2	4682.6	4709.7
25°	4406.0	4408.7	4416.9	4422.3	4438.6	4454.8	4476.5	4509.0	4533.4	4560.5	4590.3
27.5°	4208.1	4210.8	4224.4	4224.4	4237.9	4265.0	4278.5	4305.7	4338.2	4365.3	4400.6
30°	3983.1	3988.5	3988.5	3999.3	4007.4	4021.0	4034.5	4061.7	4077.9	4102.3	4151.1
32.5°	3777.0	3782.4	3779.7	3777.0	3768.9	3766.0	3763.4	3768.9	3774.3	3782.4	3801.4
35°	3655.0	3641.4	3630.6	3611.6	3589.9	3562.8	3538.4	3505.8	3476.0	3451.6	3424.5
37.5°	3538.4	3535.6	3519.3	3492.2	3448.8	3400.1	3343.2	3272.6	3202.1	3126.3	3053.0
40°	3375.7	3367.5	3354.0	3316.0	3267.2	3207.6	3131.7	3044.9	2931.0	2814.4	2695.2
42.5°	3099.0	3101.8	3085.5	3055.7	3009.6	2952.7	2874.0	2779.2	2657.1	2518.9	2364.3
45°	2776.5	2776.5	2771.0	2746.6	2714.1	2667.9	2608.3	2529.7	2410.4	2269.4	2104.0
47.5°	2440.2	2442.9	2434.8	2429.4	2415.8	2386.0	2342.6	2283.0	2198.9	2063.4	1898.0
50°	2098.6	2098.6	2112.2	2109.5	2109.5	2098.6	2079.7	2044.4	1971.2	1862.7	1708.2
52.5°	1756.9	1762.4	1770.5	1781.3	1794.9	1816.6	1794.9	1778.6	1732.5	1648.5	1515.7
55°	1404.4	1410.0	1423.5	1442.5	1458.8	1480.5	1485.8	1485.8	1461.4	1404.4	1304.2
57.5°	1103.5	1095.4	1106.3	1122.5	1144.2	1166.0	1182.1	1201.2	1198.5	1160.4	1079.1
60°	829.7	832.4	840.5	856.8	873.1	892.0	913.7	930.0	938.1	919.2	867.6
62.5°	604.7	604.7	615.5	631.7	639.9	667.0	680.5	688.7	696.8	694.1	661.6
65°	423.0	428.4	433.8	442.0	450.1	466.3	474.5	490.7	496.1	498.9	474.5
67.5°	298.2	290.1	295.5	300.9	309.0	320.0	336.3	336.3	344.4	344.4	328.0
70°	189.8	189.8	192.5	200.6	206.1	208.8	214.2	219.6	227.7	225.0	225.0
72.5°	127.5	124.8	127.5	130.2	132.9	141.0	141.0	143.7	149.2	151.9	141.0
75°	65.1	67.8	73.1	70.5	78.6	73.1	75.9	84.0	81.3	75.9	75.9
77.5°	54.2	54.2	54.2	51.5	56.9	56.9	54.2	59.6	56.9	56.9	54.2
80°	37.9	40.6	37.9	35.2	37.9	35.2	35.2	35.2	35.2	35.2	32.5
82.5°	29.8	24.4	27.1	24.4	27.1	27.1	24.4	21.7	21.7	24.4	21.7
85°	21.7	16.2	19.0	19.0	16.2	16.2	16.2	16.2	16.2	13.5	13.5
87.5°	13.5	8.2	8.2	8.2	10.8	10.8	10.8	8.2	10.8	10.8	5.4
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: P249393

CATALOG NUMBER: LSR8B120D010 EC8B120927 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2
2.5°	5059.5	5056.8	5062.2	5059.5	5059.5	5056.8	5059.5	5056.8	5062.2	5051.2	5054.1
5°	5059.5	5054.1	5056.8	5059.5	5062.2	5056.8	5056.8	5056.8	5062.2	5056.8	5059.5
7.5°	5048.6	5045.8	5054.1	5059.5	5056.8	5054.1	5059.5	5056.8	5062.2	5059.5	5064.9
10°	5026.8	5029.7	5035.0	5043.2	5045.8	5048.6	5054.1	5054.1	5062.2	5051.2	5056.8
12.5°	4994.3	5005.2	5018.7	5024.1	5035.0	5035.0	5040.4	5043.2	5048.6	5045.8	5054.1
15°	4953.7	4967.2	4983.5	4997.1	5010.6	5018.7	5026.8	5029.7	5037.8	5029.7	5032.3
17.5°	4904.9	4921.1	4945.5	4961.8	4983.5	4991.6	5002.4	5007.9	5016.0	5010.6	5013.3
20°	4837.0	4856.1	4883.2	4907.6	4921.1	4940.1	4953.7	4961.8	4967.2	4961.8	4964.5
22.5°	4742.2	4769.3	4804.5	4823.6	4850.7	4867.0	4869.7	4888.6	4902.2	4888.6	4894.1
25°	4631.1	4658.2	4685.3	4725.9	4750.3	4769.3	4788.3	4791.0	4804.5	4801.8	4799.1
27.5°	4446.7	4481.9	4528.0	4560.5	4593.0	4623.0	4644.6	4650.0	4663.6	4658.2	4660.9
30°	4194.4	4232.5	4275.9	4327.3	4373.4	4403.2	4430.4	4449.4	4462.9	4454.8	4452.1
32.5°	3836.6	3874.6	3920.6	3972.2	4026.4	4069.8	4102.3	4126.7	4143.0	4137.5	4124.0
35°	3427.2	3438.0	3467.9	3508.5	3554.6	3600.7	3630.6	3657.6	3676.6	3682.0	3682.0
37.5°	3006.9	2971.7	2950.0	2950.0	2977.1	2996.1	3023.2	3039.4	3069.3	3080.1	3088.2
40°	2600.2	2518.9	2442.9	2386.0	2348.1	2345.4	2345.4	2353.5	2380.6	2415.8	2448.3
42.5°	2236.8	2106.7	1990.1	1884.4	1808.6	1765.1	1746.1	1748.9	1770.5	1803.0	1857.3
45°	1946.8	1784.1	1637.7	1510.2	1407.1	1339.4	1306.9	1304.2	1320.4	1358.3	1418.1
47.5°	1721.7	1548.2	1382.7	1236.4	1125.2	1052.0	1014.1	1003.3	1014.1	1049.3	1119.8
50°	1534.6	1355.7	1184.9	1033.0	913.7	837.9	802.6	789.0	802.6	832.4	902.8
52.5°	1361.1	1176.8	1016.8	870.3	742.9	677.8	639.9	631.7	639.9	675.1	732.2
55°	1160.4	1003.3	845.9	699.5	588.4	523.4	493.4	485.3	493.4	526.1	585.7
57.5°	962.6	827.0	688.7	555.9	460.9	404.0	376.9	366.0	385.0	406.7	477.2
60°	778.2	669.7	553.1	436.5	358.0	306.3	284.6	281.9	287.4	314.6	363.3
62.5°	610.1	520.6	428.4	333.6	268.4	246.7	219.6	216.9	222.3	238.6	276.6
65°	439.3	382.4	311.8	244.0	192.5	162.7	151.9	154.6	160.0	170.9	206.1
67.5°	306.3	265.7	216.9	170.9	132.9	119.2	108.4	105.8	108.4	127.5	146.5
70°	206.1	181.7	146.5	130.2	92.2	73.1	75.9	67.8	78.6	78.6	94.8
72.5°	135.6	119.2	97.5	75.9	65.1	51.5	51.5	48.8	54.2	56.9	70.5
75°	70.5	54.2	54.2	37.9	27.1	13.5	24.4	21.7	19.0	21.7	27.1
77.5°	48.8	40.6	37.9	29.8	27.1	21.7	21.7	21.7	21.7	24.4	27.1
80°	29.8	29.8	21.7	19.0	16.2	13.5	16.2	16.2	16.2	16.2	19.0
82.5°	19.0	16.2	16.2	13.5	13.5	10.8	10.8	10.8	10.8	10.8	16.2
85°	16.2	10.8	10.8	8.2	10.8	19.0	8.2	10.8	10.8	10.8	8.2
87.5°	5.4	8.2	8.2	8.2	5.4	2.7	5.4	8.2	8.2	13.5	10.8
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: P249393

CATALOG NUMBER: LSR8B120D010 EC8B120927 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2	5051.2
2.5°	5059.5	5062.2	5062.2	5059.5	5059.5	5054.1	5064.9	5056.8	5059.5	5070.3	5062.2
5°	5064.9	5067.6	5067.6	5064.9	5064.9	5064.9	5067.6	5067.6	5064.9	5062.2	5067.6
7.5°	5075.7	5073.0	5073.0	5067.6	5067.6	5062.2	5067.6	5059.5	5064.9	5059.5	5067.6
10°	5062.2	5064.9	5062.2	5059.5	5059.5	5056.8	5056.8	5048.6	5051.2	5043.2	5048.6
12.5°	5054.1	5051.2	5051.2	5045.8	5040.4	5035.0	5032.3	5024.1	5024.1	5005.2	5013.3
15°	5032.3	5035.0	5026.8	5016.0	5010.6	4997.1	4991.6	4980.8	4969.9	4956.4	4959.1
17.5°	5013.3	5005.2	4994.3	4983.5	4961.8	4951.0	4940.1	4923.9	4918.4	4902.2	4896.8
20°	4956.4	4951.0	4937.4	4918.4	4904.9	4880.5	4869.7	4853.4	4839.8	4823.6	4815.3
22.5°	4883.2	4877.8	4861.5	4842.6	4820.8	4810.0	4799.1	4769.3	4755.7	4739.5	4736.8
25°	4791.0	4782.8	4766.6	4744.9	4734.0	4704.3	4693.4	4671.7	4666.3	4650.0	4647.4
27.5°	4650.0	4639.2	4620.2	4593.0	4574.1	4555.1	4544.3	4528.0	4522.6	4506.3	4503.6
30°	4438.6	4425.0	4387.0	4376.1	4343.6	4324.6	4324.6	4302.9	4305.7	4294.8	4294.8
32.5°	4105.0	4083.3	4053.5	4031.8	4010.1	3999.3	3999.3	3991.2	3996.6	3996.6	4002.0
35°	3663.1	3633.3	3617.0	3603.4	3603.4	3614.3	3646.8	3655.0	3671.2	3684.7	3695.6
37.5°	3096.3	3093.8	3112.6	3129.0	3169.6	3215.7	3272.6	3321.4	3367.5	3400.1	3432.6
40°	2483.7	2551.4	2605.6	2681.5	2743.9	2833.4	2936.4	3020.5	3099.0	3156.1	3215.7
42.5°	1938.6	2025.3	2139.3	2250.5	2361.6	2483.7	2619.2	2735.8	2838.8	2917.5	2979.8
45°	1510.2	1629.6	1767.8	1908.8	2052.6	2204.4	2345.4	2464.6	2573.1	2654.4	2716.8
47.5°	1217.4	1347.5	1504.8	1659.4	1822.0	1982.0	2139.3	2242.4	2331.8	2396.8	2453.8
50°	1005.9	1144.2	1309.6	1485.8	1648.5	1808.6	1944.0	2044.4	2117.6	2174.5	2209.7
52.5°	840.5	987.0	1163.1	1339.4	1502.1	1648.5	1770.5	1846.5	1906.1	1946.8	1979.3
55°	694.1	835.1	1000.6	1166.0	1325.8	1464.1	1564.4	1621.5	1667.5	1691.9	1710.9
57.5°	566.7	696.8	848.7	1000.6	1138.7	1252.7	1331.3	1388.2	1410.0	1428.9	1426.2
60°	444.7	566.7	704.9	835.1	954.4	1046.6	1103.5	1136.0	1152.3	1160.4	1155.0
62.5°	349.8	460.9	566.7	680.5	767.4	845.9	900.2	900.2	908.3	911.0	919.2
65°	260.2	344.4	436.5	520.6	591.1	642.6	672.4	680.5	691.4	688.7	683.2
67.5°	192.5	254.9	322.7	385.0	433.8	466.3	488.0	507.0	504.3	498.9	496.1
70°	132.9	173.6	233.2	271.1	306.3	339.0	344.4	347.1	349.8	352.5	347.1
72.5°	92.2	122.0	154.6	187.1	208.8	222.3	235.9	238.6	238.6	238.6	235.9
75°	46.1	62.3	92.2	105.8	124.8	130.2	141.0	141.0	149.2	138.3	135.6
77.5°	40.6	48.8	65.1	75.9	84.0	92.2	94.8	103.0	100.4	94.8	97.5
80°	24.4	29.8	40.6	46.1	56.9	59.6	62.3	65.1	62.3	65.1	65.1
82.5°	19.0	21.7	27.1	27.1	35.2	35.2	37.9	37.9	40.6	40.6	40.6
85°	10.8	19.0	16.2	32.5	21.7	21.7	27.1	32.5	27.1	27.1	32.5
87.5°	10.8	10.8	8.2	10.8	10.8	10.8	13.5	16.2	16.2	19.0	16.2
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: P249393

CATALOG NUMBER: LSR8B120D010 EC8B120927 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5051.2	5051.2	5051.2	5051.2
2.5°	5059.5	5064.9	5056.8	5054.1
5°	5067.6	5067.6	5062.2	5062.2
7.5°	5067.6	5067.6	5059.5	5054.1
10°	5045.8	5045.8	5037.8	5032.3
12.5°	5005.2	5005.2	5002.4	4994.3
15°	4953.7	4953.7	4942.8	4934.7
17.5°	4883.2	4888.6	4875.1	4875.1
20°	4807.2	4804.5	4793.7	4788.3
22.5°	4728.7	4723.2	4720.5	4704.3
25°	4644.6	4639.2	4631.1	4623.0
27.5°	4500.9	4498.2	4490.0	4479.2
30°	4281.3	4278.5	4267.7	4267.7
32.5°	3996.6	3993.9	3983.1	3985.8
35°	3701.0	3711.9	3706.4	3695.6
37.5°	3454.3	3462.4	3467.9	3462.4
40°	3248.2	3272.6	3275.3	3280.8
42.5°	3028.6	3061.1	3072.0	3077.4
45°	2765.6	2795.4	2819.8	2814.4
47.5°	2497.2	2518.9	2540.6	2524.3
50°	2239.6	2253.2	2261.2	2261.2
52.5°	1995.6	1995.6	1992.8	1995.6
55°	1716.3	1716.3	1705.5	1710.9
57.5°	1423.5	1428.9	1420.8	1407.1
60°	1152.3	1138.7	1133.3	1125.2
62.5°	897.5	897.5	878.5	902.8
65°	672.4	664.3	656.1	653.4
67.5°	488.0	485.3	477.2	474.5
70°	344.4	333.6	330.8	325.3
72.5°	230.5	230.5	225.0	225.0
75°	141.0	127.5	124.8	127.5
77.5°	97.5	94.8	94.8	92.2
80°	65.1	62.3	67.8	59.6
82.5°	40.6	43.4	40.6	43.4
85°	27.1	32.5	29.8	29.8
87.5°	16.2	16.2	16.2	16.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)