

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: P250255

Luminaire Tested: **LSR8B100D010 EC8B100935 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250255  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B100D010 EC8B100935 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 3500 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9455.0 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

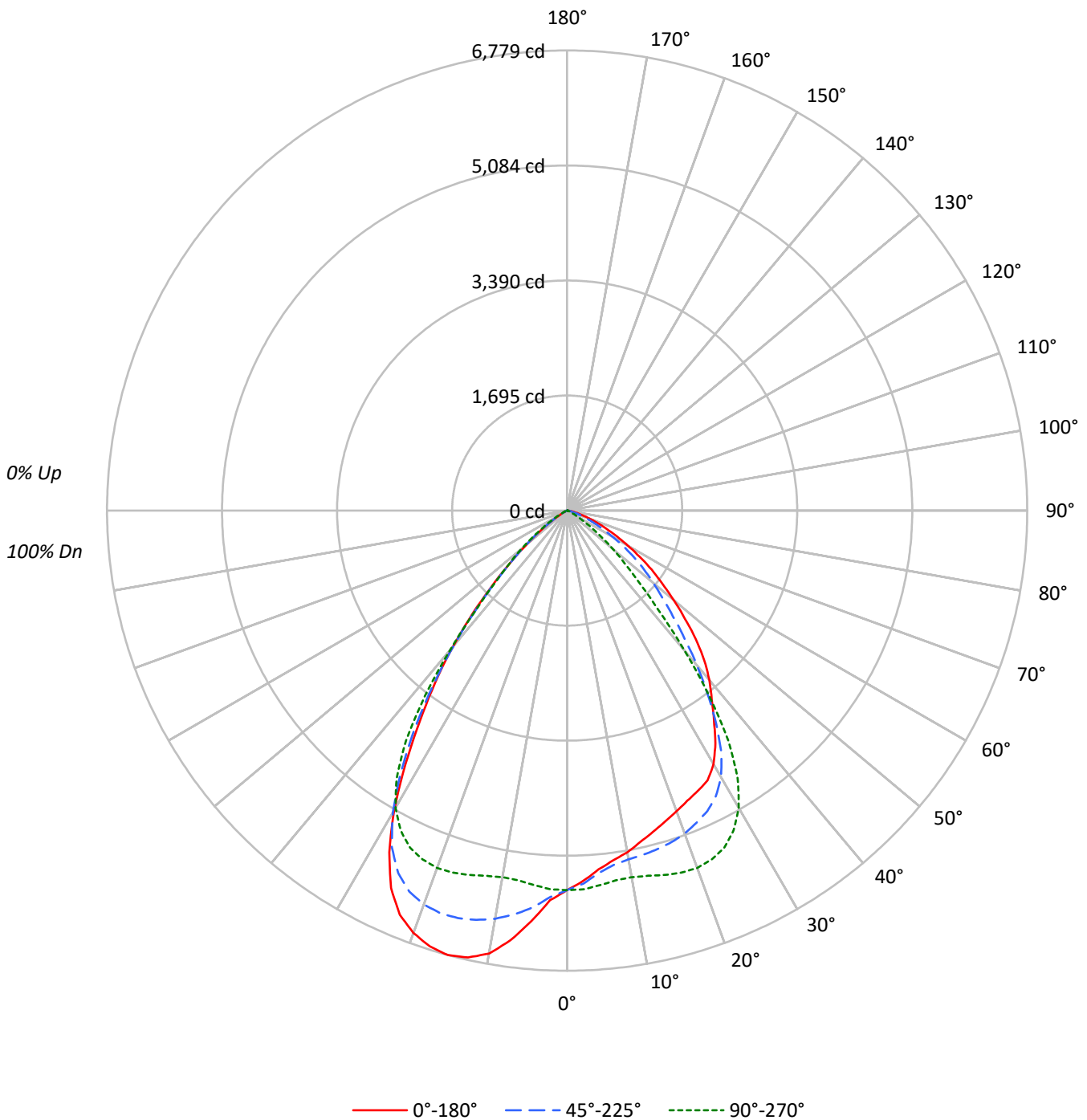
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60					60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42					42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

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

	0°	90°	180°
0°	172400	172400	172400
5°	164242	171439	187938
10°	160008	171706	207451
15°	156380	177396	216426
20°	154659	183805	217241
25°	155021	186401	208799
30°	153582	179999	181584
35°	141915	155779	142111
40°	131139	108005	105377
45°	116777	65169	67333
50°	98258	41986	38100
55°	81744	23031	17419
60°	63807	9985	5477
65°	47084	4962	2671
70°	32737	3065	1172
75°	19921	631	0
80°	14384	941	0
85°	9234	920	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	537.5	5.7
10°-20°	1608.6	17.0
20°-30°	2463.3	26.1
30°-40°	2414.9	25.5
40°-50°	1454.3	15.4
50°-60°	669.4	7.1
60°-70°	235.1	2.5
70°-80°	61.5	0.7
80°-90°	10.5	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°	4609.4	48.8
0°-40°	7024.3	74.3
0°-60°	9147.9	96.8
0°-90°	9455.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9455.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5591	5591	5591	5591	5591	
5°	5306	5356	5538	5870	6072	501
15°	4898	5162	5557	6215	6779	1384
25°	4556	4886	5478	5891	6137	2098
35°	3770	3822	4138	3900	3775	2361
45°	2678	2205	1494	1505	1544	2053
55°	1520	1204	428	337	324	1357
65°	645	447	68	34	37	657
75°	167	97	5	0	0	203
85°	26	13	3	0	0	36
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°	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8
2.5°	5460.1	5465.4	5465.4	5465.4	5475.8	5478.5	5475.8	5478.5	5483.7	5501.9	5509.8
5°	5306.0	5298.2	5303.4	5300.7	5313.9	5321.7	5316.4	5324.3	5342.6	5355.7	5368.7
7.5°	5196.3	5196.3	5196.3	5201.5	5209.3	5225.0	5222.5	5227.6	5245.9	5264.2	5282.5
10°	5110.1	5107.5	5107.5	5120.5	5130.9	5149.2	5154.5	5170.2	5193.6	5217.2	5238.1
12.5°	4997.7	5000.4	5013.4	5026.5	5050.0	5078.7	5094.4	5115.4	5151.9	5191.1	5214.6
15°	4898.5	4901.0	4911.6	4937.6	4966.4	5000.4	5034.3	5068.3	5112.7	5162.3	5204.2
17.5°	4801.8	4804.4	4812.2	4841.0	4877.6	4922.0	4961.2	5005.6	5063.1	5120.5	5172.8
20°	4713.0	4710.4	4723.4	4749.5	4796.6	4838.4	4877.6	4929.9	4992.6	5063.1	5123.1
22.5°	4626.7	4626.7	4639.8	4666.0	4707.8	4749.5	4791.4	4846.2	4908.9	4976.9	5047.4
25°	4556.2	4553.6	4571.9	4585.0	4616.3	4658.1	4702.5	4746.9	4809.6	4885.5	4953.3
27.5°	4480.5	4477.9	4480.5	4496.2	4524.9	4556.2	4590.2	4629.4	4681.7	4744.4	4809.6
30°	4313.3	4315.8	4315.8	4329.0	4344.7	4378.5	4396.8	4436.1	4483.1	4535.3	4592.9
32.5°	4065.1	4067.7	4067.7	4072.9	4085.9	4101.6	4117.3	4146.1	4182.6	4227.0	4279.3
35°	3769.9	3769.9	3767.2	3769.9	3777.8	3777.8	3790.8	3777.8	3796.0	3822.2	3861.3
37.5°	3498.2	3492.9	3487.7	3482.5	3474.6	3461.6	3443.3	3411.9	3404.1	3393.6	3396.2
40°	3257.8	3255.2	3239.5	3226.4	3200.3	3169.0	3124.6	3069.8	3025.3	2973.1	2928.7
42.5°	2991.4	2988.7	2975.7	2952.1	2923.4	2876.4	2805.9	2732.7	2643.9	2565.5	2484.6
45°	2677.8	2685.6	2667.4	2641.2	2607.3	2562.8	2484.6	2395.6	2306.8	2205.0	2103.0
47.5°	2351.2	2348.6	2335.6	2319.9	2291.2	2246.8	2194.5	2097.9	2003.8	1909.8	1805.3
50°	2048.2	2037.8	2032.5	2016.9	1998.6	1962.1	1907.1	1828.7	1745.2	1656.3	1559.7
52.5°	1760.9	1760.9	1747.7	1737.3	1721.6	1692.9	1645.9	1583.2	1512.7	1429.0	1327.2
55°	1520.5	1515.3	1502.2	1489.1	1473.4	1455.1	1413.4	1361.2	1285.3	1204.4	1115.6
57.5°	1264.5	1261.8	1256.6	1240.9	1233.1	1214.8	1167.8	1115.6	1050.3	979.7	906.5
60°	1034.6	1024.1	1013.6	1003.2	990.2	971.9	940.5	896.1	841.2	778.5	705.4
62.5°	828.2	843.8	812.5	812.5	786.4	770.7	742.0	715.8	658.3	600.9	538.2
65°	645.3	645.3	632.2	621.8	606.1	587.8	559.1	532.9	491.1	446.7	402.3
67.5°	493.8	491.1	478.1	467.7	454.5	444.1	423.3	391.9	360.6	324.0	287.3
70°	363.1	360.6	357.9	339.6	329.2	316.1	300.4	279.6	256.0	229.9	195.9
72.5°	261.2	261.2	253.5	245.6	235.2	224.6	209.0	195.9	175.1	156.8	133.2
75°	167.2	164.6	164.6	151.5	151.5	135.8	125.4	117.5	107.1	96.7	75.8
77.5°	120.2	117.5	115.0	109.7	104.5	99.3	91.4	81.0	73.1	62.7	54.8
80°	81.0	75.8	73.1	73.1	65.3	62.7	65.3	49.7	47.0	39.1	34.0
82.5°	49.7	49.7	47.0	47.0	44.4	41.8	34.0	34.0	31.4	28.7	23.5
85°	26.1	34.0	23.5	26.1	23.5	26.1	23.5	18.3	15.7	13.0	13.0
87.5°	15.7	10.4	10.4	15.7	13.0	10.4	10.4	10.4	7.8	5.3	5.3
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°	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8
2.5°	5504.6	5522.9	5520.2	5543.8	5551.6	5569.9	5569.9	5582.9	5590.8	5609.0	5624.7
5°	5374.0	5402.7	5410.5	5439.2	5462.8	5491.5	5509.8	5538.5	5564.6	5603.9	5640.4
7.5°	5293.0	5316.4	5332.1	5366.1	5392.3	5423.5	5454.9	5494.1	5530.7	5577.8	5630.0
10°	5253.8	5285.2	5308.6	5342.6	5374.0	5408.0	5439.2	5483.7	5525.5	5585.6	5643.0
12.5°	5243.3	5279.9	5308.6	5355.7	5387.0	5423.5	5460.1	5509.8	5554.2	5616.9	5682.3
15°	5243.3	5293.0	5332.1	5384.4	5421.0	5468.0	5507.2	5556.8	5606.5	5671.7	5734.4
17.5°	5232.9	5293.0	5342.6	5402.7	5449.7	5496.8	5546.4	5593.4	5645.6	5708.4	5778.8
20°	5191.1	5266.9	5326.9	5397.4	5447.1	5499.4	5549.0	5601.2	5656.1	5721.4	5781.5
22.5°	5117.9	5206.8	5274.7	5350.4	5408.0	5460.1	5509.8	5562.1	5622.2	5684.9	5747.5
25°	5021.3	5104.8	5178.0	5256.3	5313.9	5371.3	5418.4	5478.5	5533.3	5593.4	5643.0
27.5°	4874.9	4963.7	5034.3	5115.4	5167.5	5222.5	5261.6	5311.3	5363.5	5413.1	5452.4
30°	4655.5	4736.5	4809.6	4882.8	4935.0	4974.3	5016.0	5055.2	5089.2	5123.1	5157.1
32.5°	4334.1	4407.4	4477.9	4545.8	4587.6	4621.6	4652.9	4676.4	4694.7	4713.0	4715.5
35°	3892.7	3952.7	3997.1	4057.2	4096.5	4127.8	4127.8	4138.2	4135.6	4127.8	4119.9
37.5°	3398.9	3422.4	3440.6	3464.2	3466.8	3466.8	3451.2	3438.1	3417.2	3411.9	3396.2
40°	2884.3	2852.9	2829.3	2798.0	2779.7	2740.5	2706.6	2683.1	2649.1	2643.9	2638.7
42.5°	2395.6	2322.5	2257.2	2202.4	2139.7	2084.7	2035.2	1998.6	1972.5	1969.8	1972.5
45°	1998.6	1915.0	1818.3	1742.6	1672.0	1604.1	1538.8	1494.4	1470.8	1465.6	1470.8
47.5°	1698.2	1601.5	1507.4	1421.2	1345.5	1269.6	1204.4	1144.3	1115.6	1107.7	1105.1
50°	1460.4	1361.2	1261.8	1173.0	1089.4	1013.6	932.6	875.2	838.7	825.5	815.1
52.5°	1227.9	1139.1	1037.2	945.8	862.1	773.3	689.7	624.3	587.8	572.2	561.6
55°	1024.1	935.3	841.2	752.4	663.6	574.8	491.1	428.4	389.3	371.0	357.9
57.5°	817.7	734.1	653.2	564.3	491.1	405.0	321.3	266.5	232.5	211.6	201.2
60°	632.2	566.9	496.4	423.3	352.7	282.2	214.2	161.9	135.8	120.2	107.1
62.5°	478.1	423.3	376.2	313.5	258.6	198.5	146.4	104.5	81.0	68.0	62.7
65°	344.9	303.0	261.2	222.1	182.9	138.5	99.3	68.0	47.0	39.1	36.6
67.5°	245.6	211.6	180.2	154.1	125.4	99.3	70.5	47.0	36.6	31.4	28.7
70°	172.4	146.4	125.4	101.9	83.6	65.3	54.8	34.0	20.9	23.5	18.3
72.5°	115.0	96.7	86.2	70.5	57.4	47.0	34.0	23.5	23.5	18.3	15.7
75°	62.7	57.4	44.4	34.0	28.7	26.1	10.4	5.3	2.6	7.8	2.6
77.5°	44.4	39.1	34.0	28.7	23.5	18.3	10.4	10.4	7.8	10.4	5.3
80°	28.7	23.5	20.9	20.9	13.0	7.8	5.3	5.3	7.8	2.6	2.6
82.5°	18.3	15.7	13.0	13.0	13.0	7.8	7.8	7.8	7.8	5.3	5.3
85°	10.4	7.8	5.3	5.3	2.6	5.3	0.0	2.6	2.6	0.0	0.0
87.5°	5.3	2.6	2.6	2.6	2.6	0.0	0.0	2.6	0.0	2.6	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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8	5590.8
2.5°	5635.2	5645.6	5658.7	5669.2	5692.7	5697.9	5708.4	5718.8	5726.7	5734.4	5737.1
5°	5671.7	5711.0	5747.5	5786.7	5836.4	5870.3	5909.5	5943.5	5977.5	6006.2	6027.0
7.5°	5682.3	5742.3	5797.2	5865.1	5938.2	6001.0	6066.3	6131.5	6199.5	6251.8	6296.2
10°	5703.1	5776.3	5846.8	5927.8	6021.9	6105.4	6186.4	6272.6	6358.9	6432.0	6497.4
12.5°	5739.7	5820.7	5896.5	5985.3	6082.0	6176.0	6264.8	6361.5	6453.0	6533.9	6607.1
15°	5799.8	5875.5	5948.7	6032.3	6129.0	6215.2	6304.0	6398.0	6489.5	6573.1	6641.0
17.5°	5838.9	5909.5	5982.6	6058.4	6139.4	6217.8	6301.3	6385.0	6468.6	6544.4	6607.1
20°	5838.9	5906.9	5961.8	6029.7	6105.4	6173.4	6241.3	6314.5	6387.6	6450.3	6510.4
22.5°	5792.0	5857.2	5899.1	5951.3	6016.6	6074.1	6110.7	6191.7	6246.5	6301.3	6345.8
25°	5682.3	5729.3	5763.2	5799.8	5852.1	5891.2	5922.6	5969.6	6024.4	6045.4	6076.7
27.5°	5483.7	5517.6	5535.9	5543.8	5569.9	5590.8	5596.0	5616.9	5640.4	5645.6	5658.7
30°	5170.2	5172.8	5164.9	5162.3	5149.2	5133.6	5130.9	5128.4	5117.9	5107.5	5110.1
32.5°	4697.3	4684.3	4652.9	4619.0	4585.0	4548.4	4527.5	4501.3	4485.6	4470.0	4451.8
35°	4085.9	4054.6	4010.2	3968.4	3929.3	3900.4	3853.5	3837.8	3822.2	3801.2	3796.0
37.5°	3367.5	3349.2	3307.4	3276.1	3255.2	3242.1	3218.6	3203.0	3203.0	3195.1	3189.9
40°	2625.5	2620.4	2604.7	2612.5	2602.1	2607.3	2604.7	2599.4	2612.5	2612.5	2617.8
42.5°	1969.8	1972.5	1980.3	1985.5	2001.2	2003.8	2016.9	2016.9	2024.7	2032.5	2037.8
45°	1465.6	1476.1	1476.1	1486.5	1502.2	1504.8	1510.0	1512.7	1517.8	1531.0	1536.1
47.5°	1099.9	1102.4	1102.4	1105.1	1110.3	1115.6	1113.0	1115.6	1123.4	1118.1	1123.4
50°	812.5	815.1	807.3	799.4	807.3	807.3	804.7	796.8	804.7	794.2	799.4
52.5°	553.9	551.2	543.4	546.1	540.8	538.2	538.2	532.9	532.9	532.9	522.5
55°	350.1	350.1	344.9	344.9	342.3	337.0	334.4	331.7	329.2	326.6	326.6
57.5°	195.9	198.5	190.8	188.1	190.8	188.1	182.9	182.9	182.9	175.1	180.2
60°	107.1	104.5	101.9	99.3	96.7	99.3	99.3	94.1	94.1	94.1	96.7
62.5°	57.4	57.4	54.8	54.8	52.3	52.3	57.4	49.7	52.3	49.7	52.3
65°	31.4	39.1	28.7	28.7	36.6	34.0	31.4	31.4	34.0	28.7	31.4
67.5°	34.0	23.5	20.9	23.5	20.9	20.9	20.9	26.1	23.5	18.3	23.5
70°	15.7	18.3	18.3	13.0	20.9	10.4	18.3	10.4	15.7	13.0	15.7
72.5°	15.7	15.7	15.7	10.4	15.7	10.4	13.0	13.0	10.4	10.4	15.7
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	5.3	5.3	2.6	2.6	2.6	2.6	5.3	5.3	5.3	0.0	2.6
80°	5.3	5.3	0.0	2.6	0.0	0.0	2.6	0.0	2.6	0.0	5.3
82.5°	2.6	5.3	2.6	2.6	5.3	5.3	5.3	2.6	2.6	2.6	2.6
85°	0.0	2.6	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.0	2.6
87.5°	0.0	2.6	0.0	0.0	0.0	0.0	2.6	2.6	0.0	0.0	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





TEST NUMBER: P250255

CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5590.8	5590.8	5590.8	5590.8
2.5°	5739.7	5742.3	5747.5	5745.0
5°	6042.7	6063.7	6074.1	6071.5
7.5°	6327.5	6364.1	6385.0	6385.0
10°	6546.9	6588.8	6620.1	6625.3
12.5°	6664.5	6711.6	6753.4	6742.9
15°	6698.5	6745.6	6787.3	6779.4
17.5°	6659.3	6706.3	6737.7	6732.4
20°	6552.2	6591.4	6622.8	6620.1
22.5°	6385.0	6419.0	6445.1	6442.4
25°	6102.8	6126.4	6147.2	6136.8
27.5°	5669.2	5677.0	5690.0	5674.4
30°	5091.8	5097.0	5102.2	5099.7
32.5°	4443.9	4441.2	4436.1	4430.8
35°	3788.2	3788.2	3790.8	3775.1
37.5°	3192.4	3189.9	3197.7	3189.9
40°	2623.0	2620.4	2630.8	2617.8
42.5°	2045.6	2053.5	2056.0	2056.0
45°	1538.8	1541.4	1544.0	1544.0
47.5°	1123.4	1126.0	1139.1	1123.4
50°	794.2	796.8	799.4	794.2
52.5°	525.1	527.8	525.1	517.2
55°	321.3	324.0	324.0	324.0
57.5°	172.4	175.1	175.1	172.4
60°	94.1	91.4	94.1	88.8
62.5°	49.7	54.8	52.3	47.0
65°	31.4	31.4	31.4	36.6
67.5°	26.1	20.9	23.5	18.3
70°	15.7	18.3	18.3	13.0
72.5°	13.0	13.0	13.0	15.7
75°	0.0	0.0	0.0	0.0
77.5°	5.3	5.3	5.3	2.6
80°	2.6	0.0	2.6	0.0
82.5°	2.6	2.6	5.3	2.6
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)