

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: P249772

Luminaire Tested: **LSR8B100D010 EC8B100927 8LBSWOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249772  
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 EC8B100927 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9006.8 lumens  
Efficiency: N/A  
Efficacy: 84.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

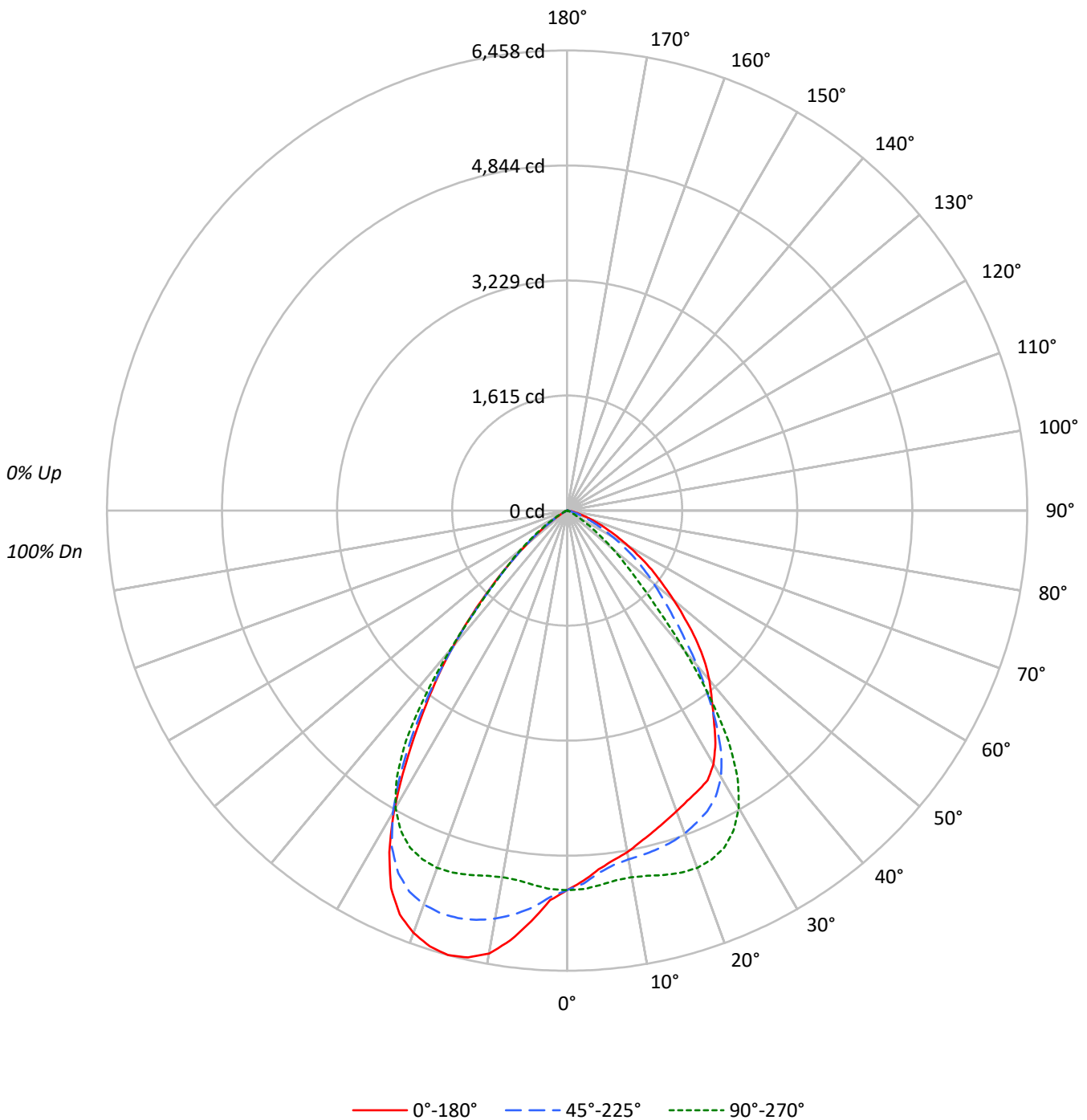
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91	91	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82	82	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73	73	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66	66	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60	60	60
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54	54	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49	49	49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45	45	45
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42	42	42
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38	38	38

**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°	512.0	5.7
10°-20°	1532.3	17.0
20°-30°	2346.6	26.1
30°-40°	2300.4	25.5
40°-50°	1385.3	15.4
50°-60°	637.6	7.1
60°-70°	224.0	2.5
70°-80°	58.6	0.7
80°-90°	10.0	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°	4390.8	48.8
0°-40°	6691.3	74.3
0°-60°	8714.2	96.8
0°-90°	9006.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9006.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5326	5326	5326	5326	5326	
5°	5054	5102	5276	5592	5784	477
15°	4666	4918	5293	5920	6458	1318
25°	4340	4654	5219	5612	5846	1999
35°	3591	3641	3942	3716	3596	2249
45°	2551	2100	1424	1434	1471	1956
55°	1448	1147	408	321	309	1292
65°	615	426	65	32	35	626
75°	159	92	5	0	0	193
85°	25	12	2	0	0	34
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°	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8
2.5°	5201.2	5206.3	5206.3	5206.3	5216.2	5218.8	5216.2	5218.8	5223.7	5241.2	5248.6
5°	5054.5	5047.0	5052.0	5049.4	5061.9	5069.4	5064.4	5071.8	5089.3	5101.8	5114.1
7.5°	4950.0	4950.0	4950.0	4955.0	4962.4	4977.3	4974.9	4979.8	4997.2	5014.6	5032.0
10°	4867.9	4865.4	4865.4	4877.8	4887.7	4905.1	4910.2	4925.1	4947.4	4969.8	4989.7
12.5°	4760.8	4763.4	4775.7	4788.2	4810.6	4838.0	4852.9	4872.8	4907.7	4944.9	4967.4
15°	4666.3	4668.6	4678.8	4703.5	4731.0	4763.4	4795.7	4827.9	4870.2	4917.6	4957.4
17.5°	4574.1	4576.6	4584.0	4611.5	4646.4	4688.7	4725.9	4768.3	4823.1	4877.8	4927.5
20°	4489.5	4487.1	4499.4	4524.4	4569.2	4609.0	4646.4	4696.1	4755.8	4823.1	4880.2
22.5°	4407.4	4407.4	4419.9	4444.8	4484.6	4524.4	4564.2	4616.4	4676.2	4740.9	4808.1
25°	4340.1	4337.8	4355.1	4367.6	4397.4	4437.3	4479.6	4521.9	4581.7	4653.8	4718.5
27.5°	4268.0	4265.7	4268.0	4283.0	4310.3	4340.1	4372.5	4409.9	4459.7	4519.5	4581.7
30°	4108.7	4111.2	4111.2	4123.7	4138.7	4170.9	4188.4	4225.7	4270.5	4320.3	4375.1
32.5°	3872.4	3874.8	3874.8	3879.8	3892.3	3907.2	3922.1	3949.5	3984.3	4026.6	4076.4
35°	3591.2	3591.2	3588.6	3591.2	3598.6	3598.6	3611.0	3598.6	3616.1	3641.0	3678.3
37.5°	3332.4	3327.3	3322.4	3317.4	3309.9	3297.5	3280.0	3250.1	3242.7	3232.8	3235.2
40°	3103.4	3101.0	3086.0	3073.5	3048.5	3018.7	2976.4	2924.2	2881.9	2832.1	2789.8
42.5°	2849.5	2847.0	2834.5	2812.2	2784.8	2740.0	2672.9	2603.1	2518.5	2444.0	2366.8
45°	2550.8	2558.4	2540.9	2516.1	2483.7	2441.4	2366.8	2282.1	2197.5	2100.5	2003.3
47.5°	2239.8	2237.3	2224.9	2210.0	2182.6	2140.3	2090.5	1998.4	1908.8	1819.2	1719.7
50°	1951.1	1941.2	1936.1	1921.3	1903.8	1869.1	1816.6	1742.1	1662.4	1577.8	1485.7
52.5°	1677.4	1677.4	1664.9	1655.0	1640.0	1612.7	1567.9	1508.2	1441.0	1361.2	1264.3
55°	1448.4	1443.4	1431.0	1418.5	1403.6	1386.1	1346.4	1296.7	1224.4	1147.3	1062.7
57.5°	1204.5	1202.0	1197.1	1182.1	1174.6	1157.2	1112.4	1062.7	1000.5	933.3	863.6
60°	985.5	975.6	965.6	955.6	943.2	925.8	896.0	853.5	801.3	741.6	672.0
62.5°	789.0	803.8	774.0	774.0	749.1	734.2	706.8	681.9	627.1	572.4	512.7
65°	614.7	614.7	602.2	592.3	577.4	559.9	532.6	507.7	467.8	425.5	383.2
67.5°	470.4	467.8	455.4	445.5	433.0	423.1	403.2	373.3	343.5	308.6	273.7
70°	345.9	343.5	340.9	323.4	313.5	301.2	286.2	266.3	243.9	219.0	186.6
72.5°	248.8	248.8	241.4	234.0	224.0	214.0	199.1	186.6	166.7	149.4	126.9
75°	159.3	156.8	156.8	144.3	144.3	129.4	119.5	111.9	102.0	92.1	72.2
77.5°	114.5	111.9	109.5	104.5	99.6	94.5	87.1	77.2	69.6	59.7	52.2
80°	77.2	72.2	69.6	69.6	62.2	59.7	62.2	47.4	44.8	37.2	32.4
82.5°	47.4	47.4	44.8	44.8	42.3	39.8	32.4	32.4	29.9	27.3	22.4
85°	24.9	32.4	22.4	24.9	22.4	24.9	22.4	17.4	15.0	12.4	12.4
87.5°	15.0	9.9	9.9	15.0	12.4	9.9	9.9	9.9	7.4	5.1	5.1
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°	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8
2.5°	5243.6	5261.1	5258.5	5281.0	5288.4	5305.8	5305.8	5318.2	5325.8	5343.1	5358.0
5°	5119.2	5146.5	5154.1	5181.4	5203.8	5231.1	5248.6	5275.9	5300.8	5338.2	5373.0
7.5°	5042.0	5064.4	5079.4	5111.8	5136.6	5166.4	5196.4	5233.6	5268.5	5313.3	5363.1
10°	5004.7	5034.6	5056.9	5089.3	5119.2	5151.6	5181.4	5223.7	5263.5	5320.8	5375.5
12.5°	4994.8	5029.5	5056.9	5101.8	5131.6	5166.4	5201.2	5248.6	5290.9	5350.6	5412.9
15°	4994.8	5042.0	5079.4	5129.1	5164.0	5208.8	5246.1	5293.3	5340.7	5402.8	5462.6
17.5°	4984.8	5042.0	5089.3	5146.5	5191.3	5236.2	5283.4	5328.2	5378.0	5437.8	5504.8
20°	4944.9	5017.2	5074.3	5141.6	5188.8	5238.7	5285.9	5335.7	5388.0	5450.2	5507.4
22.5°	4875.3	4959.9	5024.7	5096.8	5151.6	5201.2	5248.6	5298.4	5355.7	5415.3	5475.0
25°	4783.2	4862.8	4932.6	5007.2	5061.9	5116.6	5161.5	5218.8	5271.0	5328.2	5375.5
27.5°	4643.8	4728.4	4795.7	4872.8	4922.6	4974.9	5012.1	5059.5	5109.3	5156.4	5193.9
30°	4434.9	4511.9	4581.7	4651.3	4701.0	4738.5	4778.2	4815.6	4848.0	4880.2	4912.5
32.5°	4128.6	4198.4	4265.7	4330.2	4370.1	4402.5	4432.3	4454.7	4472.1	4489.5	4492.0
35°	3708.1	3765.3	3807.7	3864.9	3902.3	3932.1	3932.1	3942.0	3939.5	3932.1	3924.6
37.5°	3237.8	3260.1	3277.5	3300.0	3302.4	3302.4	3287.6	3275.1	3255.2	3250.1	3235.2
40°	2747.5	2717.7	2695.2	2665.4	2647.9	2610.6	2578.3	2555.9	2523.5	2518.5	2513.6
42.5°	2282.1	2212.4	2150.2	2098.0	2038.3	1986.0	1938.7	1903.8	1879.0	1876.4	1879.0
45°	1903.8	1824.2	1732.0	1659.9	1592.8	1528.0	1465.9	1423.6	1401.1	1396.1	1401.1
47.5°	1617.6	1525.6	1436.0	1353.8	1281.7	1209.5	1147.3	1090.0	1062.7	1055.1	1052.8
50°	1391.2	1296.7	1202.0	1117.4	1037.8	965.6	888.4	833.7	798.9	786.4	776.5
52.5°	1169.7	1085.1	988.0	900.9	821.2	736.6	657.0	594.8	559.9	545.1	535.1
55°	975.6	891.0	801.3	716.7	632.1	547.5	467.8	408.2	370.8	353.4	340.9
57.5°	778.9	699.3	622.2	537.5	467.8	385.8	306.1	253.8	221.5	201.6	191.7
60°	602.2	540.0	472.8	403.2	336.0	268.8	204.1	154.2	129.4	114.5	102.0
62.5°	455.4	403.2	358.3	298.6	246.4	189.1	139.4	99.6	77.2	64.7	59.7
65°	328.5	288.7	248.8	211.5	174.3	132.0	94.5	64.7	44.8	37.2	34.9
67.5°	234.0	201.6	171.7	146.8	119.5	94.5	67.2	44.8	34.9	29.9	27.3
70°	164.2	139.4	119.5	97.1	79.5	62.2	52.2	32.4	19.9	22.4	17.4
72.5°	109.5	92.1	82.1	67.2	54.7	44.8	32.4	22.4	22.4	17.4	15.0
75°	59.7	54.7	42.3	32.4	27.3	24.9	9.9	5.1	2.5	7.4	2.5
77.5°	42.3	37.2	32.4	27.3	22.4	17.4	9.9	9.9	7.4	9.9	5.1
80°	27.3	22.4	19.9	19.9	12.4	7.4	5.1	5.1	7.4	2.5	2.5
82.5°	17.4	15.0	12.4	12.4	12.4	7.4	7.4	7.4	7.4	5.1	5.1
85°	9.9	7.4	5.1	5.1	2.5	5.1	0.0	2.5	2.5	0.0	0.0
87.5°	5.1	2.5	2.5	2.5	2.5	0.0	0.0	2.5	0.0	2.5	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°	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8	5325.8
2.5°	5368.0	5378.0	5390.4	5400.3	5422.8	5427.8	5437.8	5447.7	5455.2	5462.6	5465.1
5°	5402.8	5440.3	5475.0	5512.4	5559.6	5592.0	5629.3	5661.7	5694.1	5721.4	5741.3
7.5°	5412.9	5470.1	5522.4	5587.0	5656.7	5716.5	5778.7	5840.9	5905.6	5955.4	5997.7
10°	5432.7	5502.4	5569.7	5646.7	5736.4	5815.9	5893.1	5975.2	6057.4	6127.1	6189.3
12.5°	5467.6	5544.7	5616.9	5701.5	5793.6	5883.2	5967.8	6059.8	6147.0	6224.2	6293.8
15°	5524.9	5597.0	5666.7	5746.3	5838.4	5920.5	6005.1	6094.7	6181.9	6261.4	6326.2
17.5°	5562.1	5629.3	5699.0	5771.2	5848.3	5923.0	6002.6	6082.3	6161.8	6234.1	6293.8
20°	5562.1	5626.9	5679.1	5743.8	5815.9	5880.7	5945.4	6015.2	6084.8	6144.5	6201.8
22.5°	5517.3	5579.6	5619.4	5669.2	5731.3	5786.2	5821.0	5898.2	5950.3	6002.6	6045.0
25°	5412.9	5457.6	5490.0	5524.9	5574.6	5612.0	5641.9	5686.5	5738.8	5758.8	5788.6
27.5°	5223.7	5256.0	5273.4	5281.0	5305.8	5325.8	5330.7	5350.6	5373.0	5378.0	5390.4
30°	4925.1	4927.5	4920.1	4917.6	4905.1	4890.3	4887.7	4885.2	4875.3	4865.4	4867.9
32.5°	4474.6	4462.2	4432.3	4400.0	4367.6	4332.8	4312.8	4287.9	4273.0	4258.1	4240.7
35°	3892.3	3862.5	3820.2	3780.2	3743.0	3715.5	3670.8	3655.8	3641.0	3621.0	3616.1
37.5°	3207.8	3190.5	3150.6	3120.8	3101.0	3088.5	3066.0	3051.1	3051.1	3043.7	3038.6
40°	2501.1	2496.2	2481.2	2488.6	2478.7	2483.7	2481.2	2476.1	2488.6	2488.6	2493.7
42.5°	1876.4	1879.0	1886.4	1891.4	1906.3	1908.8	1921.3	1921.3	1928.7	1936.1	1941.2
45°	1396.1	1406.1	1406.1	1416.0	1431.0	1433.5	1438.4	1441.0	1445.9	1458.3	1463.3
47.5°	1047.7	1050.2	1050.2	1052.8	1057.6	1062.7	1060.2	1062.7	1070.1	1065.1	1070.1
50°	774.0	776.5	768.9	761.5	768.9	768.9	766.6	759.0	766.6	756.6	761.5
52.5°	527.6	525.0	517.6	520.2	515.1	512.7	512.7	507.7	507.7	507.7	497.7
55°	333.6	333.6	328.5	328.5	326.0	321.1	318.6	316.0	313.5	311.1	311.1
57.5°	186.6	189.1	181.7	179.2	181.7	179.2	174.3	174.3	174.3	166.7	171.7
60°	102.0	99.6	97.1	94.5	92.1	94.5	94.5	89.7	89.7	89.7	92.1
62.5°	54.7	54.7	52.2	52.2	49.8	49.8	54.7	47.4	49.8	47.4	49.8
65°	29.9	37.2	27.3	27.3	34.9	32.4	29.9	29.9	32.4	27.3	29.9
67.5°	32.4	22.4	19.9	22.4	19.9	19.9	19.9	24.9	22.4	17.4	22.4
70°	15.0	17.4	17.4	12.4	19.9	9.9	17.4	9.9	15.0	12.4	15.0
72.5°	15.0	15.0	15.0	9.9	15.0	9.9	12.4	12.4	9.9	9.9	15.0
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°	5.1	5.1	2.5	2.5	2.5	2.5	5.1	5.1	5.1	0.0	2.5
80°	5.1	5.1	0.0	2.5	0.0	0.0	2.5	0.0	2.5	0.0	5.1
82.5°	2.5	5.1	2.5	2.5	5.1	5.1	5.1	2.5	2.5	2.5	2.5
85°	0.0	2.5	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0	2.5
87.5°	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	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: P249772

CATALOG NUMBER: LSR8B100D010 EC8B100927 8LBSWOLI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5325.8	5325.8	5325.8	5325.8
2.5°	5467.6	5470.1	5475.0	5472.6
5°	5756.3	5776.2	5786.2	5783.7
7.5°	6027.5	6062.4	6082.3	6082.3
10°	6236.6	6276.4	6306.2	6311.2
12.5°	6348.5	6393.4	6433.2	6423.2
15°	6380.9	6425.8	6465.5	6458.1
17.5°	6343.7	6388.4	6418.2	6413.3
20°	6241.6	6278.8	6308.8	6306.2
22.5°	6082.3	6114.7	6139.6	6137.0
25°	5813.6	5835.9	5855.8	5845.8
27.5°	5400.3	5407.9	5420.2	5405.4
30°	4850.4	4855.3	4860.3	4857.9
32.5°	4233.3	4230.7	4225.7	4220.8
35°	3608.6	3608.6	3611.0	3596.1
37.5°	3041.1	3038.6	3046.2	3038.6
40°	2498.6	2496.2	2506.0	2493.7
42.5°	1948.6	1956.2	1958.5	1958.5
45°	1465.9	1468.4	1470.7	1470.7
47.5°	1070.1	1072.6	1085.1	1070.1
50°	756.6	759.0	761.5	756.6
52.5°	500.2	502.8	500.2	492.8
55°	306.1	308.6	308.6	308.6
57.5°	164.2	166.7	166.7	164.2
60°	89.7	87.1	89.7	84.6
62.5°	47.4	52.2	49.8	44.8
65°	29.9	29.9	29.9	34.9
67.5°	24.9	19.9	22.4	17.4
70°	15.0	17.4	17.4	12.4
72.5°	12.4	12.4	12.4	15.0
75°	0.0	0.0	0.0	0.0
77.5°	5.1	5.1	5.1	2.5
80°	2.5	0.0	2.5	0.0
82.5°	2.5	2.5	5.1	2.5
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)