

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: P250232

Luminaire Tested: **LSR8B80D010 EC8B80850 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250232  
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: LSR8B80D010 EC8B80850 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8642.0 lumens  
Efficiency: N/A  
Efficacy: 116.2 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

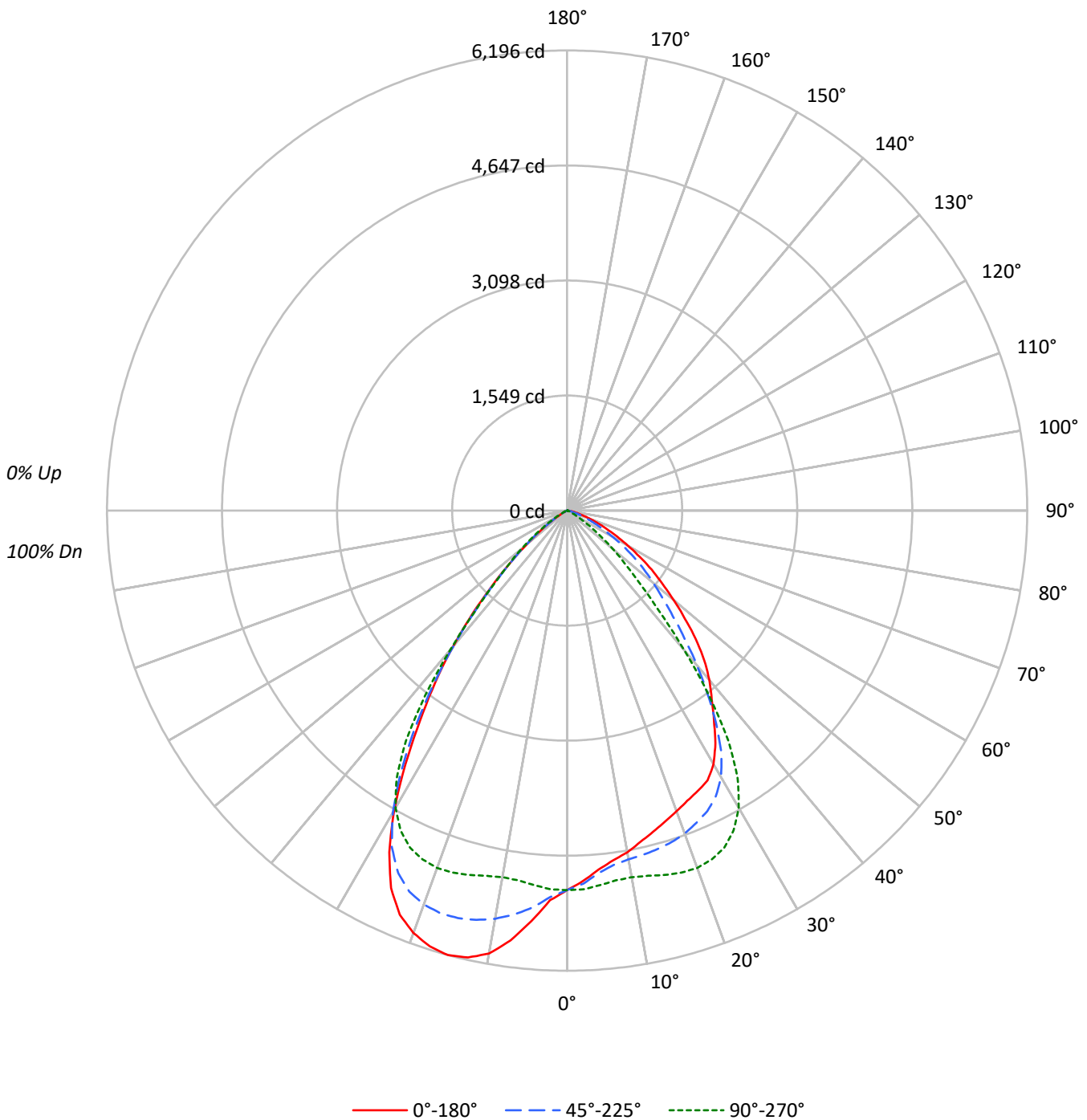
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	157574	157574	157574
5°	150121	156699	171780
10°	146249	156939	189616
15°	142934	162143	197818
20°	141359	168001	198559
25°	141690	170372	190845
30°	140376	164524	165970
35°	129711	142385	129891
40°	119864	98719	96316
45°	106733	59566	61541
50°	89810	38378	34823
55°	74718	21053	15919
60°	58318	9128	5008
65°	43035	4531	2437
70°	29924	2804	1073
75°	18205	572	0
80°	13141	852	0
85°	8456	849	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	491.2	5.7
10°-20°	1470.2	17.0
20°-30°	2251.5	26.1
30°-40°	2207.3	25.5
40°-50°	1329.2	15.4
50°-60°	611.8	7.1
60°-70°	214.9	2.5
70°-80°	56.2	0.7
80°-90°	9.6	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°	4213.0	48.8
0°-40°	6420.3	74.3
0°-60°	8361.3	96.8
0°-90°	8642.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8642.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5110	5110	5110	5110	5110	
5°	4850	4895	5062	5366	5550	458
15°	4477	4718	5079	5681	6196	1265
25°	4164	4465	5007	5385	5609	1918
35°	3446	3494	3782	3565	3450	2158
45°	2448	2015	1366	1375	1411	1877
55°	1390	1101	392	308	296	1240
65°	590	408	62	31	33	601
75°	153	88	5	0	0	185
85°	24	12	2	0	0	33
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°	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0
2.5°	4990.6	4995.4	4995.4	4995.4	5005.0	5007.4	5005.0	5007.4	5012.1	5028.8	5036.0
5°	4849.8	4842.6	4847.4	4845.0	4856.9	4864.1	4859.3	4866.5	4883.2	4895.2	4907.1
7.5°	4749.5	4749.5	4749.5	4754.2	4761.4	4775.8	4773.4	4778.1	4794.8	4811.5	4828.2
10°	4670.7	4668.3	4668.3	4680.2	4689.8	4706.5	4711.3	4725.6	4747.1	4768.6	4787.7
12.5°	4568.0	4570.4	4582.3	4594.3	4615.7	4642.0	4656.3	4675.5	4708.9	4744.7	4766.2
15°	4477.3	4479.6	4489.3	4513.0	4539.4	4570.4	4601.4	4632.5	4673.0	4718.5	4756.7
17.5°	4388.9	4391.3	4398.4	4424.8	4458.2	4498.8	4534.6	4575.2	4627.7	4680.2	4728.0
20°	4307.7	4305.4	4317.3	4341.1	4384.2	4422.3	4458.2	4506.0	4563.3	4627.7	4682.6
22.5°	4228.9	4228.9	4240.9	4264.8	4303.0	4341.1	4379.4	4429.5	4486.8	4548.9	4613.4
25°	4164.4	4162.1	4178.8	4190.8	4219.4	4257.6	4298.2	4338.8	4396.1	4465.4	4527.4
27.5°	4095.2	4092.9	4095.2	4109.6	4135.8	4164.4	4195.5	4231.3	4279.1	4336.4	4396.1
30°	3942.4	3944.7	3944.7	3956.7	3971.1	4002.0	4018.8	4054.6	4097.6	4145.3	4197.9
32.5°	3715.5	3717.9	3717.9	3722.7	3734.6	3749.0	3763.3	3789.5	3823.0	3863.6	3911.3
35°	3445.7	3445.7	3443.3	3445.7	3452.9	3452.9	3464.8	3452.9	3469.6	3493.5	3529.3
37.5°	3197.4	3192.6	3187.8	3183.0	3175.8	3164.0	3147.2	3118.5	3111.4	3101.8	3104.2
40°	2977.7	2975.3	2961.0	2949.0	2925.1	2896.5	2855.9	2805.8	2765.2	2717.4	2676.8
42.5°	2734.1	2731.7	2719.8	2698.3	2672.0	2629.1	2564.6	2497.8	2416.6	2344.9	2270.9
45°	2447.5	2454.7	2438.0	2414.1	2383.1	2342.5	2270.9	2189.6	2108.5	2015.4	1922.2
47.5°	2149.0	2146.7	2134.8	2120.4	2094.2	2053.6	2005.8	1917.5	1831.5	1745.6	1650.0
50°	1872.1	1862.5	1857.7	1843.5	1826.8	1793.3	1743.1	1671.5	1595.1	1513.9	1425.6
52.5°	1609.4	1609.4	1597.5	1587.9	1573.6	1547.3	1504.4	1447.1	1382.6	1306.1	1213.1
55°	1389.8	1385.0	1373.1	1361.1	1346.7	1330.0	1291.9	1244.1	1174.8	1100.8	1019.6
57.5°	1155.8	1153.3	1148.6	1134.2	1127.1	1110.3	1067.4	1019.6	960.0	895.5	828.6
60°	945.6	936.1	926.5	916.9	905.0	888.3	859.6	819.0	768.9	711.6	644.8
62.5°	757.0	771.3	742.7	742.7	718.8	704.4	678.2	654.3	601.7	549.2	491.9
65°	589.8	589.8	577.8	568.3	553.9	537.2	511.0	487.1	448.9	408.3	367.7
67.5°	451.3	448.9	437.0	427.4	415.5	405.9	386.9	358.2	329.6	296.1	262.6
70°	331.9	329.6	327.1	310.4	300.9	289.0	274.6	255.5	234.0	210.1	179.1
72.5°	238.7	238.7	231.7	224.5	215.0	205.3	191.1	179.1	160.0	143.3	121.8
75°	152.8	150.5	150.5	138.5	138.5	124.1	114.6	107.4	97.9	88.4	69.3
77.5°	109.9	107.4	105.1	100.3	95.5	90.7	83.5	74.0	66.8	57.3	50.1
80°	74.0	69.3	66.8	66.8	59.7	57.3	59.7	45.4	43.0	35.8	31.1
82.5°	45.4	45.4	43.0	43.0	40.6	38.2	31.1	31.1	28.7	26.2	21.5
85°	23.9	31.1	21.5	23.9	21.5	23.9	21.5	16.7	14.3	11.9	11.9
87.5°	14.3	9.5	9.5	14.3	11.9	9.5	9.5	9.5	7.2	4.8	4.8
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°	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0
2.5°	5031.3	5048.0	5045.6	5067.1	5074.3	5091.0	5091.0	5102.9	5110.0	5126.7	5141.1
5°	4911.9	4938.1	4945.3	4971.5	4993.1	5019.3	5036.0	5062.3	5086.1	5122.0	5155.4
7.5°	4837.9	4859.3	4873.7	4904.7	4928.6	4957.2	4985.9	5021.7	5055.1	5098.1	5145.9
10°	4802.0	4830.7	4852.1	4883.2	4911.9	4942.9	4971.5	5012.1	5050.4	5105.3	5157.8
12.5°	4792.5	4825.9	4852.1	4895.2	4923.8	4957.2	4990.6	5036.0	5076.6	5133.9	5193.7
15°	4792.5	4837.9	4873.7	4921.4	4954.8	4997.8	5033.7	5079.0	5124.4	5184.0	5241.3
17.5°	4782.9	4837.9	4883.2	4938.1	4981.1	5024.1	5069.4	5112.5	5160.2	5217.6	5281.9
20°	4744.7	4814.0	4868.8	4933.3	4978.7	5026.5	5071.9	5119.6	5169.8	5229.5	5284.4
22.5°	4677.9	4759.1	4821.2	4890.4	4942.9	4990.6	5036.0	5083.8	5138.7	5196.0	5253.3
25°	4589.5	4665.9	4732.8	4804.4	4856.9	4909.4	4952.5	5007.4	5057.5	5112.5	5157.8
27.5°	4455.7	4536.9	4601.4	4675.5	4723.2	4773.4	4809.2	4854.6	4902.4	4947.7	4983.5
30°	4255.2	4329.2	4396.1	4462.9	4510.7	4546.6	4584.7	4620.6	4651.6	4682.6	4713.6
32.5°	3961.5	4028.4	4092.9	4154.9	4193.1	4224.2	4252.8	4274.3	4291.0	4307.7	4310.1
35°	3558.0	3612.8	3653.4	3708.4	3744.2	3772.8	3772.8	3782.4	3780.0	3772.8	3765.7
37.5°	3106.7	3128.1	3144.8	3166.3	3168.7	3168.7	3154.4	3142.4	3123.4	3118.5	3104.2
40°	2636.3	2607.6	2586.0	2557.4	2540.7	2504.8	2473.9	2452.4	2421.3	2416.6	2411.8
42.5°	2189.6	2122.8	2063.1	2013.0	1955.7	1905.5	1860.2	1826.8	1802.9	1800.4	1802.9
45°	1826.8	1750.3	1661.9	1592.7	1528.3	1466.1	1406.5	1365.9	1344.4	1339.6	1344.4
47.5°	1552.1	1463.8	1377.8	1299.0	1229.8	1160.5	1100.8	1045.9	1019.6	1012.5	1010.1
50°	1334.8	1244.1	1153.3	1072.1	995.7	926.5	852.4	800.0	766.5	754.5	745.0
52.5°	1122.3	1041.2	948.0	864.4	788.0	706.8	630.4	570.7	537.2	523.0	513.4
55°	936.1	854.9	768.9	687.7	606.5	525.3	448.9	391.6	355.8	339.1	327.1
57.5°	747.4	671.0	597.0	515.8	448.9	370.1	293.7	243.6	212.5	193.4	183.9
60°	577.8	518.2	453.7	386.9	322.4	257.9	195.8	148.0	124.1	109.9	97.9
62.5°	437.0	386.9	343.8	286.5	236.4	181.4	133.8	95.5	74.0	62.1	57.3
65°	315.2	277.0	238.7	203.0	167.2	126.6	90.7	62.1	43.0	35.8	33.4
67.5°	224.5	193.4	164.7	140.8	114.6	90.7	64.5	43.0	33.4	28.7	26.2
70°	157.6	133.8	114.6	93.2	76.4	59.7	50.1	31.1	19.1	21.5	16.7
72.5°	105.1	88.4	78.8	64.5	52.5	43.0	31.1	21.5	21.5	16.7	14.3
75°	57.3	52.5	40.6	31.1	26.2	23.9	9.5	4.8	2.4	7.2	2.4
77.5°	40.6	35.8	31.1	26.2	21.5	16.7	9.5	9.5	7.2	9.5	4.8
80°	26.2	21.5	19.1	19.1	11.9	7.2	4.8	4.8	7.2	2.4	2.4
82.5°	16.7	14.3	11.9	11.9	11.9	7.2	7.2	7.2	7.2	4.8	4.8
85°	9.5	7.2	4.8	4.8	2.4	4.8	0.0	2.4	2.4	0.0	0.0
87.5°	4.8	2.4	2.4	2.4	2.4	0.0	0.0	2.4	0.0	2.4	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°	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0	5110.0
2.5°	5150.6	5160.2	5172.2	5181.7	5203.2	5207.9	5217.6	5227.1	5234.3	5241.3	5243.8
5°	5184.0	5219.9	5253.3	5289.1	5334.5	5365.6	5401.4	5432.4	5463.5	5489.7	5508.8
7.5°	5193.7	5248.5	5298.7	5360.8	5427.6	5485.0	5544.7	5604.3	5666.4	5714.2	5754.8
10°	5212.7	5279.6	5344.1	5418.1	5504.1	5580.4	5654.4	5733.3	5812.1	5878.9	5938.7
12.5°	5246.2	5320.2	5389.5	5470.6	5559.0	5644.9	5726.1	5814.5	5898.1	5972.1	6038.9
15°	5301.1	5370.3	5437.2	5513.6	5602.0	5680.8	5762.0	5847.9	5931.5	6007.9	6070.0
17.5°	5336.9	5401.4	5468.2	5537.5	5611.5	5683.1	5759.5	5836.0	5912.3	5981.6	6038.9
20°	5336.9	5399.0	5449.1	5511.2	5580.4	5642.6	5704.7	5771.5	5838.3	5895.6	5950.6
22.5°	5293.9	5353.6	5391.8	5439.6	5499.2	5551.8	5585.2	5659.3	5709.4	5759.5	5800.1
25°	5193.7	5236.6	5267.7	5301.1	5348.9	5384.6	5413.3	5456.3	5506.4	5525.6	5554.2
27.5°	5012.1	5043.2	5059.9	5067.1	5091.0	5110.0	5114.8	5133.9	5155.4	5160.2	5172.2
30°	4725.6	4728.0	4720.8	4718.5	4706.5	4692.2	4689.8	4687.4	4677.9	4668.3	4670.7
32.5°	4293.4	4281.5	4252.8	4221.8	4190.8	4157.3	4138.2	4114.3	4099.9	4085.7	4069.0
35°	3734.6	3706.0	3665.4	3627.2	3591.4	3565.1	3522.1	3507.8	3493.5	3474.3	3469.6
37.5°	3078.0	3061.2	3023.0	2994.4	2975.3	2963.3	2941.8	2927.6	2927.6	2920.4	2915.6
40°	2399.8	2395.1	2380.7	2387.9	2378.3	2383.1	2380.7	2375.9	2387.9	2387.9	2392.7
42.5°	1800.4	1802.9	1810.1	1814.8	1829.1	1831.5	1843.5	1843.5	1850.6	1857.7	1862.5
45°	1339.6	1349.2	1349.2	1358.7	1373.1	1375.4	1380.1	1382.6	1387.3	1399.3	1404.0
47.5°	1005.3	1007.6	1007.6	1010.1	1014.8	1019.6	1017.3	1019.6	1026.8	1022.0	1026.8
50°	742.7	745.0	737.8	730.7	737.8	737.8	735.5	728.3	735.5	725.9	730.7
52.5°	506.3	503.8	496.6	499.1	494.3	491.9	491.9	487.1	487.1	487.1	477.6
55°	320.0	320.0	315.2	315.2	312.8	308.0	305.7	303.2	300.9	298.5	298.5
57.5°	179.1	181.4	174.4	171.9	174.4	171.9	167.2	167.2	167.2	160.0	164.7
60°	97.9	95.5	93.2	90.7	88.4	90.7	90.7	86.0	86.0	86.0	88.4
62.5°	52.5	52.5	50.1	50.1	47.8	47.8	52.5	45.4	47.8	45.4	47.8
65°	28.7	35.8	26.2	26.2	33.4	31.1	28.7	28.7	31.1	26.2	28.7
67.5°	31.1	21.5	19.1	21.5	19.1	19.1	19.1	23.9	21.5	16.7	21.5
70°	14.3	16.7	16.7	11.9	19.1	9.5	16.7	9.5	14.3	11.9	14.3
72.5°	14.3	14.3	14.3	9.5	14.3	9.5	11.9	11.9	9.5	9.5	14.3
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°	4.8	4.8	2.4	2.4	2.4	2.4	4.8	4.8	4.8	0.0	2.4
80°	4.8	4.8	0.0	2.4	0.0	0.0	2.4	0.0	2.4	0.0	4.8
82.5°	2.4	4.8	2.4	2.4	4.8	4.8	4.8	2.4	2.4	2.4	2.4
85°	0.0	2.4	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	2.4
87.5°	0.0	2.4	0.0	0.0	0.0	0.0	2.4	2.4	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: P250232

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5110.0	5110.0	5110.0	5110.0
2.5°	5246.2	5248.5	5253.3	5251.0
5°	5523.1	5542.3	5551.8	5549.5
7.5°	5783.4	5816.9	5836.0	5836.0
10°	5984.0	6022.2	6050.8	6055.7
12.5°	6091.4	6134.5	6172.7	6163.1
15°	6122.5	6165.5	6203.7	6196.5
17.5°	6086.7	6129.7	6158.4	6153.5
20°	5988.8	6024.6	6053.3	6050.8
22.5°	5836.0	5867.0	5890.9	5888.5
25°	5578.1	5599.6	5618.7	5609.1
27.5°	5181.7	5188.9	5200.8	5186.5
30°	4654.0	4658.7	4663.5	4661.2
32.5°	4061.8	4059.3	4054.6	4049.8
35°	3462.5	3462.5	3464.8	3450.5
37.5°	2917.9	2915.6	2922.8	2915.6
40°	2397.4	2395.1	2404.6	2392.7
42.5°	1869.7	1876.9	1879.2	1879.2
45°	1406.5	1408.8	1411.2	1411.2
47.5°	1026.8	1029.2	1041.2	1026.8
50°	725.9	728.3	730.7	725.9
52.5°	479.9	482.4	479.9	472.8
55°	293.7	296.1	296.1	296.1
57.5°	157.6	160.0	160.0	157.6
60°	86.0	83.5	86.0	81.2
62.5°	45.4	50.1	47.8	43.0
65°	28.7	28.7	28.7	33.4
67.5°	23.9	19.1	21.5	16.7
70°	14.3	16.7	16.7	11.9
72.5°	11.9	11.9	11.9	14.3
75°	0.0	0.0	0.0	0.0
77.5°	4.8	4.8	4.8	2.4
80°	2.4	0.0	2.4	0.0
82.5°	2.4	2.4	4.8	2.4
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)