

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: P250891

Luminaire Tested: **LSR8B70D010 EC8B70830 8LBSWOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250891  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B70D010 EC8B70830 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7653.0 lumens  
Efficiency: N/A  
Efficacy: 100.8 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

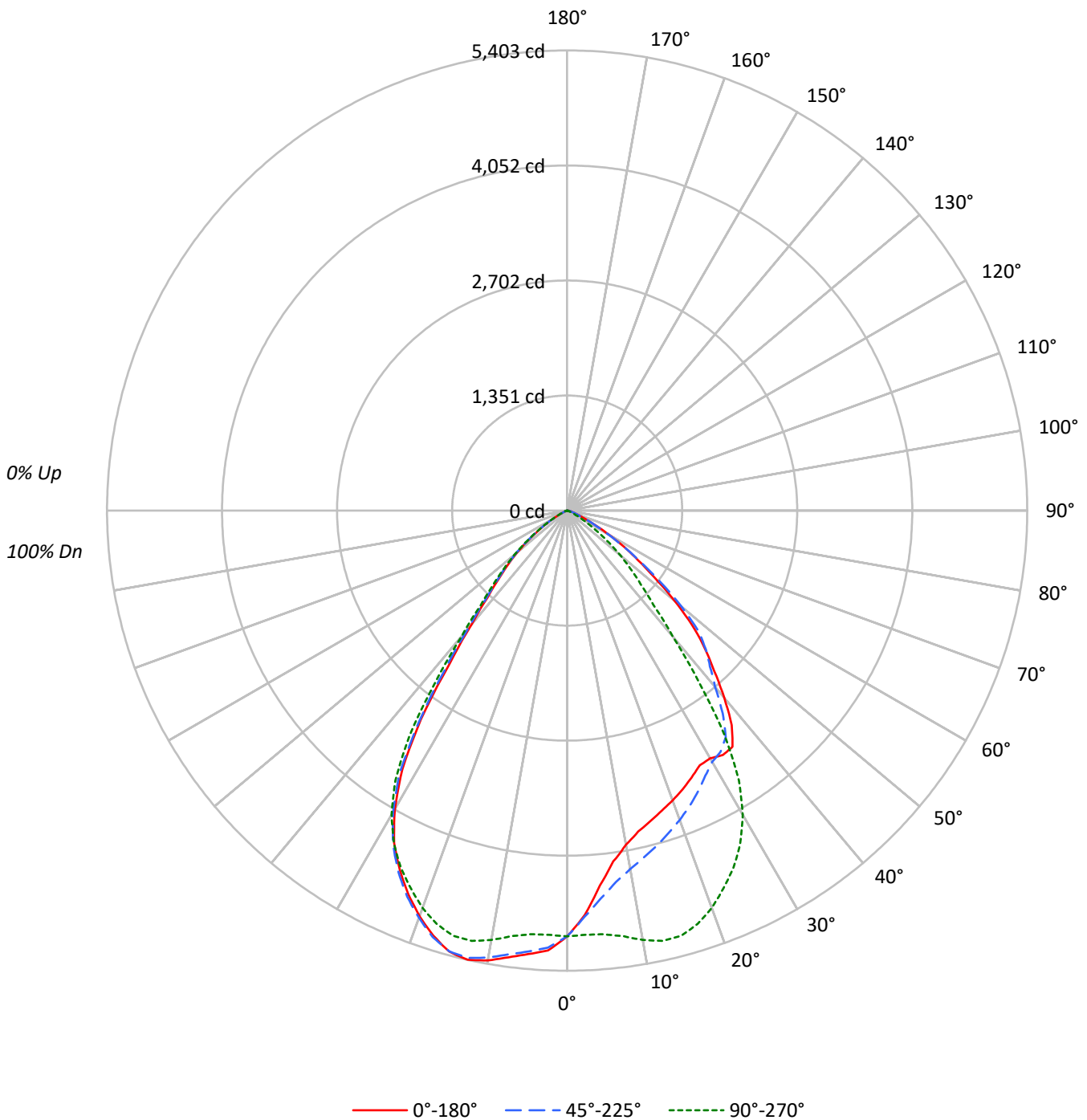
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82					82			
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67					67			
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39					39			

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

	0°	90°	180°
0°	154166	154166	154166
5°	136783	154554	161791
10°	124709	160289	167939
15°	120523	164974	171139
20°	118801	162941	166305
25°	117635	157324	158307
30°	119553	146821	144107
35°	127429	121497	112695
40°	115485	77783	70432
45°	99677	53216	49553
50°	78647	38820	36550
55°	54589	23870	22456
60°	34753	12069	10774
65°	17351	4794	3641
70°	9593	2371	1298
75°	6886	1716	631
80°	5594	1172	231
85°	6050	920	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	466.0	6.1
10°-20°	1345.9	17.6
20°-30°	1953.4	25.5
30°-40°	1923.9	25.1
40°-50°	1206.0	15.8
50°-60°	582.0	7.6
60°-70°	140.8	1.8
70°-80°	28.5	0.4
80°-90°	6.5	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°	3765.3	49.2
0°-40°	5689.2	74.3
0°-60°	7477.2	97.7
0°-90°	7653.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7653.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5000	5000	5000	5000	5000	
5°	4419	4569	4993	5195	5227	409
15°	3775	4072	5168	5357	5361	1067
25°	3457	3637	4624	4687	4653	1600
35°	3385	3247	3228	3044	2994	2048
45°	2286	2301	1220	1169	1136	1747
55°	1015	1048	444	439	418	934
65°	238	235	66	56	50	271
75°	58	50	14	7	5	65
85°	17	13	3	0	0	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5
2.5°	4752.6	4722.4	4665.9	4734.2	4734.2	4696.1	4772.3	4726.3	4763.1	4820.9	4769.7
5°	4418.9	4394.0	4346.7	4418.9	4428.1	4392.7	4484.6	4450.5	4504.3	4575.3	4568.7
7.5°	4154.9	4123.4	4080.0	4154.9	4169.4	4145.7	4233.7	4218.0	4288.9	4380.8	4396.6
10°	3982.8	3950.0	3911.9	3980.2	3990.7	3974.9	4064.3	4055.1	4124.7	4231.1	4273.1
12.5°	3860.7	3833.1	3791.0	3863.3	3875.1	3852.8	3936.8	3932.9	4005.2	4116.8	4169.4
15°	3775.3	3742.4	3704.3	3766.1	3781.8	3756.9	3837.0	3829.1	3902.7	4013.0	4072.2
17.5°	3695.1	3664.9	3625.5	3683.3	3699.1	3672.8	3751.6	3738.5	3801.5	3906.6	3967.1
20°	3620.3	3587.4	3552.0	3611.1	3620.3	3590.1	3668.9	3651.8	3708.3	3805.5	3864.6
22.5°	3542.8	3508.6	3471.8	3529.6	3538.8	3508.6	3580.9	3561.2	3613.7	3701.7	3755.6
25°	3457.4	3425.9	3389.1	3442.9	3450.8	3418.0	3494.2	3469.2	3515.2	3592.7	3637.3
27.5°	3372.0	3341.8	3301.1	3356.2	3360.2	3328.7	3398.3	3364.1	3402.2	3473.2	3511.2
30°	3357.6	3323.4	3281.4	3326.0	3327.3	3286.6	3352.3	3311.6	3332.6	3385.1	3407.5
32.5°	3403.5	3369.4	3326.0	3362.8	3358.9	3314.2	3377.3	3327.3	3333.9	3361.5	3356.2
35°	3385.1	3344.4	3293.2	3332.6	3332.6	3278.7	3341.8	3282.7	3276.1	3280.1	3247.2
37.5°	3176.3	3144.8	3096.1	3134.2	3130.3	3089.6	3138.2	3089.6	3067.2	3058.1	2998.9
40°	2868.9	2830.8	2794.0	2834.7	2838.7	2795.3	2858.4	2803.2	2796.6	2770.4	2700.8
42.5°	2557.6	2544.4	2509.0	2543.1	2561.5	2524.7	2577.3	2551.0	2554.9	2548.4	2482.7
45°	2285.7	2263.3	2237.1	2276.5	2288.3	2269.9	2322.4	2306.7	2322.4	2355.3	2301.4
47.5°	1992.7	1970.4	1941.5	1983.5	2004.5	1970.4	2015.1	2009.8	2033.4	2089.9	2084.7
50°	1639.4	1623.6	1618.4	1623.6	1636.7	1621.0	1652.5	1653.8	1669.6	1747.1	1752.3
52.5°	1297.8	1293.9	1275.5	1292.6	1292.6	1267.6	1299.1	1284.7	1300.5	1353.0	1387.2
55°	1015.4	1011.5	999.6	1015.4	998.3	989.1	998.3	983.9	972.1	1012.8	1048.3
57.5°	790.8	777.6	763.2	769.8	768.5	748.8	759.3	742.2	733.0	747.4	779.0
60°	563.5	559.6	546.5	553.0	558.3	543.8	554.3	546.5	530.7	542.5	543.8
62.5°	374.4	377.0	369.1	370.4	366.5	363.9	370.4	374.4	370.4	365.2	366.5
65°	237.8	236.4	235.1	236.4	239.1	233.8	237.8	240.4	236.4	236.4	235.1
67.5°	157.6	153.7	149.8	152.4	155.0	151.1	155.0	153.7	155.0	153.7	149.8
70°	106.4	105.1	103.8	105.1	105.1	102.5	105.1	103.8	105.1	103.8	99.8
72.5°	77.5	77.5	76.2	77.5	77.5	74.9	76.2	73.6	74.9	73.6	70.9
75°	57.8	57.8	56.5	57.8	56.5	55.2	56.5	55.2	52.5	52.5	49.9
77.5°	42.0	42.0	42.0	42.0	42.0	40.7	40.7	39.4	38.1	36.8	36.8
80°	31.5	30.2	30.2	30.2	30.2	28.9	30.2	28.9	27.6	26.3	25.0
82.5°	22.3	23.6	22.3	22.3	22.3	21.0	22.3	21.0	21.0	19.7	17.1
85°	17.1	17.1	17.1	17.1	17.1	15.8	15.8	15.8	14.4	14.4	13.1
87.5°	9.2	9.2	9.2	10.5	9.2	9.2	9.2	7.9	7.9	6.6	6.6
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5
2.5°	4838.0	4844.5	4830.1	4852.4	4939.1	4869.5	4898.4	4907.6	4973.3	4985.1	4977.2
5°	4654.1	4683.0	4701.4	4751.3	4847.2	4797.3	4848.5	4881.3	4965.4	4993.0	4999.5
7.5°	4509.6	4570.0	4614.7	4696.1	4809.1	4771.0	4848.5	4902.3	5004.8	5040.3	5057.3
10°	4401.9	4493.8	4571.3	4683.0	4810.4	4785.4	4886.6	4962.8	5077.1	5119.1	5140.1
12.5°	4320.4	4432.1	4535.8	4677.7	4815.6	4803.8	4926.0	5012.7	5133.5	5175.6	5200.5
15°	4231.1	4359.8	4480.7	4639.6	4788.1	4785.4	4916.8	5008.7	5132.2	5167.7	5191.3
17.5°	4124.7	4262.6	4395.3	4567.4	4714.5	4717.1	4849.8	4940.4	5061.3	5090.2	5106.0
20°	4017.0	4153.6	4286.3	4463.6	4608.1	4612.0	4742.1	4826.2	4941.8	4965.4	4969.3
22.5°	3902.7	4030.1	4162.8	4338.8	4478.1	4480.7	4609.4	4688.2	4786.7	4798.6	4809.1
25°	3772.7	3897.4	4022.2	4196.9	4329.6	4337.5	4454.4	4524.0	4614.7	4623.9	4627.8
27.5°	3637.3	3739.8	3859.3	4009.1	4143.1	4137.8	4248.2	4327.0	4408.4	4403.2	4401.9
30°	3500.7	3586.1	3659.7	3804.2	3902.7	3906.6	4010.4	4048.5	4133.9	4123.4	4122.1
32.5°	3404.8	3427.2	3446.9	3520.4	3613.7	3580.9	3651.8	3699.1	3758.2	3754.3	3755.6
35°	3228.8	3188.1	3129.0	3139.5	3196.0	3144.8	3182.8	3181.5	3242.0	3227.5	3244.6
37.5°	2928.0	2812.4	2681.1	2606.2	2616.7	2552.3	2539.2	2570.7	2591.7	2551.0	2565.5
40°	2607.5	2436.7	2231.8	2061.0	2051.8	1971.7	1957.3	1925.7	1966.5	1932.3	1942.8
42.5°	2371.0	2145.1	1875.8	1668.3	1623.6	1556.6	1517.2	1511.9	1523.8	1500.1	1493.6
45°	2189.8	1949.4	1640.7	1402.9	1353.0	1280.8	1241.3	1226.9	1228.2	1220.3	1213.8
47.5°	1977.0	1735.3	1422.6	1179.6	1123.1	1054.8	1015.4	1006.2	1011.5	1001.0	993.1
50°	1682.7	1466.0	1180.9	958.9	909.0	859.1	827.6	818.4	817.1	809.2	803.9
52.5°	1366.1	1186.2	939.2	754.0	709.3	660.7	638.4	626.6	627.9	620.0	612.1
55°	1057.4	945.8	727.7	570.1	529.4	491.3	470.3	455.8	451.9	444.0	440.1
57.5°	786.8	712.0	545.1	411.2	387.5	350.7	329.7	312.6	310.0	306.1	304.8
60°	551.7	497.9	383.6	292.9	265.3	243.0	222.0	204.9	197.0	195.7	191.8
62.5°	357.3	324.5	252.2	195.7	174.7	158.9	137.9	126.1	120.9	115.6	116.9
65°	222.0	197.0	157.6	126.1	114.3	102.5	86.7	76.2	70.9	65.7	67.0
67.5°	137.9	123.5	99.8	81.4	73.6	64.4	52.5	44.7	40.7	36.8	34.2
70°	93.3	80.1	68.3	57.8	52.5	46.0	38.1	31.5	28.9	26.3	23.6
72.5°	65.7	59.1	49.9	43.3	39.4	34.2	28.9	25.0	22.3	19.7	17.1
75°	47.3	42.0	36.8	31.5	28.9	26.3	22.3	19.7	17.1	14.4	11.8
77.5°	34.2	30.2	26.3	23.6	22.3	18.4	15.8	14.4	13.1	10.5	7.9
80°	23.6	21.0	17.1	15.8	15.8	13.1	11.8	10.5	9.2	6.6	5.3
82.5°	15.8	14.4	13.1	11.8	10.5	9.2	9.2	6.6	5.3	3.9	2.6
85°	11.8	10.5	9.2	7.9	7.9	6.6	5.3	3.9	3.9	2.6	1.3
87.5°	6.6	6.6	5.3	3.9	3.9	2.6	2.6	1.3	1.3	1.3	1.3
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5
2.5°	5044.2	5048.2	5070.5	5053.4	5096.8	5128.3	5112.5	5148.0	5136.2	5133.5	5174.3
5°	5078.4	5087.6	5117.8	5102.0	5149.3	5183.5	5167.7	5207.1	5195.3	5192.6	5234.7
7.5°	5144.0	5153.2	5179.5	5166.4	5216.3	5246.5	5226.8	5270.2	5254.4	5253.1	5293.8
10°	5226.8	5239.9	5262.3	5249.1	5295.1	5321.4	5301.7	5343.7	5329.3	5322.7	5367.4
12.5°	5288.5	5297.7	5320.1	5309.6	5354.2	5373.9	5356.8	5397.6	5379.2	5373.9	5413.3
15°	5274.1	5283.3	5301.7	5292.5	5334.5	5352.9	5330.6	5375.2	5356.8	5346.3	5381.8
17.5°	5182.1	5187.4	5200.5	5191.3	5236.0	5247.8	5222.9	5267.5	5250.4	5232.1	5266.2
20°	5046.8	5044.2	5052.1	5048.2	5084.9	5091.5	5075.7	5108.6	5088.9	5078.4	5098.1
22.5°	4878.7	4876.1	4881.3	4870.8	4907.6	4911.5	4887.9	4927.3	4907.6	4887.9	4920.7
25°	4692.2	4677.7	4675.1	4679.0	4704.0	4707.9	4683.0	4711.9	4686.9	4671.2	4702.7
27.5°	4462.3	4443.9	4440.0	4443.9	4468.9	4450.5	4429.4	4450.5	4425.5	4411.1	4430.8
30°	4178.6	4152.3	4140.5	4132.6	4158.8	4152.3	4103.7	4127.3	4087.9	4066.9	4081.3
32.5°	3796.3	3781.8	3750.3	3731.9	3756.9	3707.0	3676.8	3676.8	3661.0	3625.5	3633.4
35°	3265.6	3243.3	3214.4	3198.6	3202.5	3135.6	3085.6	3096.1	3043.6	3034.4	3038.3
37.5°	2594.4	2557.6	2547.1	2514.2	2522.1	2463.0	2394.7	2396.0	2368.4	2339.5	2330.3
40°	1949.4	1942.8	1932.3	1904.7	1915.2	1850.9	1824.6	1825.9	1807.5	1786.5	1797.0
42.5°	1506.7	1485.7	1479.1	1469.9	1472.5	1462.0	1427.9	1431.8	1416.1	1410.8	1405.5
45°	1224.3	1201.9	1186.2	1194.1	1194.1	1182.2	1169.1	1177.0	1169.1	1158.6	1163.8
47.5°	1008.8	987.8	979.9	978.6	987.8	979.9	966.8	969.4	968.1	964.2	961.6
50°	805.2	800.0	793.4	789.5	793.4	790.8	779.0	785.5	789.5	776.3	780.3
52.5°	613.4	613.4	612.1	602.9	610.8	602.9	601.6	604.3	600.3	595.1	593.7
55°	449.3	445.3	438.7	437.4	440.1	437.4	434.8	436.1	438.7	425.6	425.6
57.5°	307.4	304.8	300.8	300.8	306.1	299.5	295.6	300.8	295.6	290.3	290.3
60°	197.0	195.7	191.8	191.8	191.8	190.5	186.5	187.8	190.5	182.6	183.9
62.5°	118.2	114.3	113.0	111.7	113.0	111.7	111.7	110.3	109.0	109.0	105.1
65°	64.4	61.7	59.1	60.4	60.4	59.1	59.1	59.1	56.5	55.2	53.9
67.5°	32.8	30.2	30.2	28.9	28.9	28.9	28.9	27.6	27.6	27.6	26.3
70°	21.0	19.7	18.4	18.4	18.4	17.1	17.1	17.1	17.1	17.1	15.8
72.5°	14.4	13.1	11.8	11.8	11.8	10.5	10.5	10.5	10.5	9.2	9.2
75°	10.5	9.2	7.9	7.9	7.9	6.6	6.6	6.6	6.6	6.6	6.6
77.5°	6.6	5.3	5.3	5.3	5.3	3.9	3.9	3.9	3.9	3.9	2.6
80°	3.9	3.9	2.6	2.6	2.6	2.6	1.3	1.3	1.3	1.3	1.3
82.5°	2.6	2.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	0.0	0.0	0.0
87.5°	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: P250891

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5	4999.5
2.5°	5159.8	5149.3	5155.9	5204.5	5183.5	5176.9	5121.7	5170.3
5°	5221.5	5213.7	5213.7	5268.8	5243.9	5238.6	5184.8	5226.8
7.5°	5279.3	5271.5	5272.8	5329.3	5309.6	5301.7	5247.8	5289.9
10°	5354.2	5349.0	5350.3	5404.1	5383.1	5375.2	5320.1	5363.4
12.5°	5398.9	5391.0	5391.0	5448.8	5425.2	5413.3	5360.8	5402.8
15°	5364.7	5352.9	5352.9	5410.7	5384.4	5367.4	5321.4	5360.8
17.5°	5247.8	5236.0	5236.0	5285.9	5266.2	5241.3	5194.0	5230.7
20°	5084.9	5070.5	5066.5	5124.3	5096.8	5074.4	5032.4	5067.9
22.5°	4901.0	4894.5	4882.6	4940.4	4915.5	4891.8	4847.2	4874.8
25°	4680.3	4669.8	4658.0	4714.5	4689.5	4665.9	4630.4	4652.8
27.5°	4405.8	4407.1	4400.5	4445.2	4420.3	4407.1	4363.8	4400.5
30°	4073.5	4059.0	4053.8	4106.3	4082.7	4065.6	4011.7	4047.2
32.5°	3640.0	3619.0	3591.4	3650.5	3609.8	3595.3	3549.3	3600.6
35°	3009.5	3002.9	2977.9	3027.8	3005.5	2979.2	2950.3	2993.7
37.5°	2326.4	2331.6	2329.0	2342.1	2329.0	2311.9	2280.4	2264.6
40°	1776.0	1762.8	1752.3	1776.0	1748.4	1748.4	1730.0	1749.7
42.5°	1392.4	1387.2	1400.3	1405.5	1389.8	1387.2	1384.5	1383.2
45°	1149.4	1149.4	1152.0	1157.3	1152.0	1149.4	1141.5	1136.3
47.5°	947.1	952.4	947.1	964.2	955.0	952.4	936.6	943.2
50°	767.1	760.6	767.1	772.4	773.7	765.8	757.9	761.9
52.5°	595.1	584.6	581.9	589.8	584.6	584.6	579.3	578.0
55°	419.0	423.0	416.4	423.0	420.4	416.4	412.5	417.7
57.5°	283.7	285.1	282.4	286.4	279.8	281.1	279.8	278.5
60°	183.9	178.6	178.6	182.6	176.0	176.0	174.7	174.7
62.5°	105.1	103.8	103.8	102.5	101.1	101.1	101.1	98.5
65°	53.9	52.5	51.2	51.2	51.2	51.2	49.9	49.9
67.5°	26.3	25.0	25.0	26.3	25.0	25.0	25.0	25.0
70°	15.8	15.8	14.4	15.8	14.4	14.4	14.4	14.4
72.5°	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
75°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
77.5°	3.9	2.6	2.6	2.6	2.6	2.6	2.6	2.6
80°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)