

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: P250895

Luminaire Tested: **LSR8B70D010 EC8B70840 8LBSWOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250895  
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 EC8B70840 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7907.0 lumens  
Efficiency: N/A  
Efficacy: 104.2 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

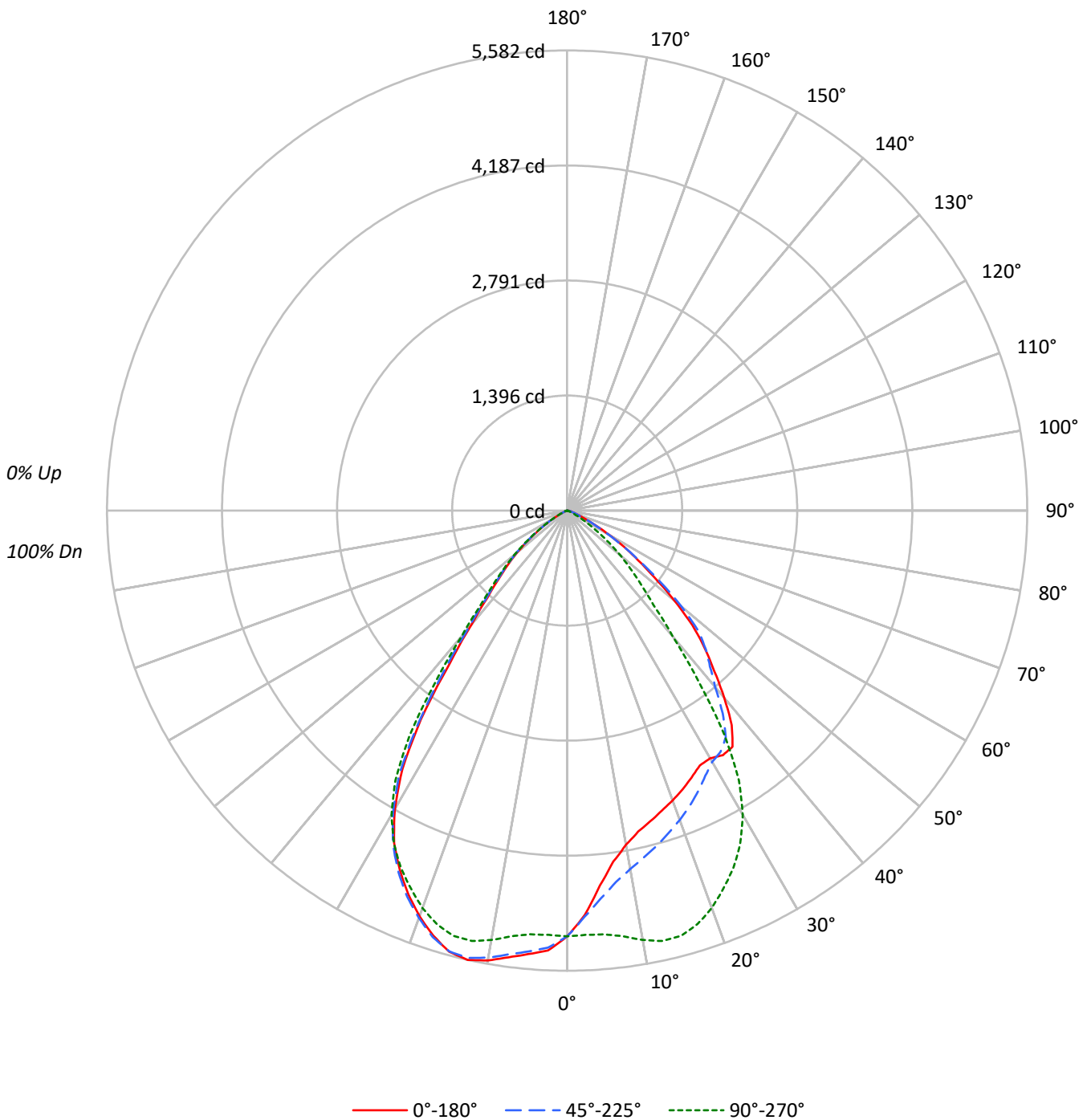
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	159285	159285	159285
5°	141324	159683	167161
10°	128849	165609	173512
15°	124523	170449	176818
20°	122742	168349	171824
25°	121538	162543	163561
30°	123520	151692	148889
35°	131661	125528	116433
40°	119317	80363	72771
45°	102983	54982	51197
50°	81256	40105	37764
55°	56401	24660	23203
60°	35906	12470	11132
65°	17927	4954	3765
70°	9909	2443	1343
75°	7113	1775	643
80°	5789	1208	249
85°	6227	955	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	481.4	6.1
10°-20°	1390.5	17.6
20°-30°	2018.3	25.5
30°-40°	1987.8	25.1
40°-50°	1246.0	15.8
50°-60°	601.3	7.6
60°-70°	145.5	1.8
70°-80°	29.4	0.4
80°-90°	6.8	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°	3890.2	49.2
0°-40°	5878.0	74.3
0°-60°	7725.3	97.7
0°-90°	7907.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7907.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5166	5166	5166	5166	5166	
5°	4566	4720	5159	5368	5400	423
15°	3901	4207	5339	5535	5539	1103
25°	3572	3758	4777	4842	4807	1653
35°	3498	3355	3335	3145	3093	2116
45°	2362	2378	1261	1208	1174	1805
55°	1049	1083	459	453	432	965
65°	246	243	68	58	52	280
75°	60	52	15	7	5	67
85°	18	14	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°	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5
2.5°	4910.3	4879.1	4820.8	4891.3	4891.3	4852.0	4930.7	4883.2	4921.2	4980.9	4928.0
5°	4565.6	4539.8	4491.0	4565.6	4575.1	4538.5	4633.5	4598.2	4653.8	4727.1	4720.3
7.5°	4292.8	4260.2	4215.4	4292.8	4307.7	4283.3	4374.2	4358.0	4431.2	4526.2	4542.5
10°	4115.0	4081.1	4041.7	4112.3	4123.2	4106.9	4199.2	4189.7	4261.6	4371.5	4415.0
12.5°	3988.8	3960.3	3916.9	3991.5	4003.7	3980.7	4067.5	4063.4	4138.1	4253.4	4307.7
15°	3900.6	3866.6	3827.3	3891.1	3907.4	3881.6	3964.4	3956.2	4032.2	4146.2	4207.3
17.5°	3817.8	3786.6	3745.9	3805.6	3821.9	3794.7	3876.1	3862.6	3927.7	4036.3	4098.7
20°	3740.4	3706.5	3669.9	3730.9	3740.4	3709.2	3790.6	3773.0	3831.4	3931.8	3992.9
22.5°	3660.4	3625.1	3587.1	3646.8	3656.3	3625.1	3699.7	3679.4	3733.6	3824.6	3880.2
25°	3572.1	3539.6	3501.6	3557.2	3565.4	3531.4	3610.1	3584.4	3631.9	3711.9	3758.1
27.5°	3483.9	3452.7	3410.6	3467.6	3471.7	3439.1	3511.1	3475.8	3515.1	3588.4	3627.8
30°	3469.0	3433.7	3390.3	3436.4	3437.8	3395.7	3463.6	3421.5	3443.2	3497.5	3520.6
32.5°	3516.5	3481.2	3436.4	3474.4	3470.3	3424.2	3489.3	3437.8	3444.6	3473.1	3467.6
35°	3497.5	3455.4	3402.5	3443.2	3443.2	3387.6	3452.7	3391.6	3384.8	3388.9	3355.0
37.5°	3281.7	3249.1	3198.9	3238.3	3234.2	3192.1	3242.3	3192.1	3169.0	3159.5	3098.5
40°	2964.1	2924.8	2886.8	2928.8	2932.9	2888.1	2953.3	2896.3	2889.5	2862.3	2790.4
42.5°	2642.5	2628.9	2592.2	2627.5	2646.5	2608.5	2662.8	2635.7	2639.7	2633.0	2565.1
45°	2361.5	2338.4	2311.3	2352.0	2364.2	2345.2	2399.5	2383.2	2399.5	2433.4	2377.8
47.5°	2058.9	2035.8	2005.9	2049.4	2071.1	2035.8	2081.9	2076.5	2100.9	2159.3	2153.9
50°	1693.8	1677.5	1672.1	1677.5	1691.1	1674.8	1707.4	1708.7	1725.0	1805.1	1810.5
52.5°	1340.9	1336.8	1317.8	1335.5	1335.5	1309.7	1342.3	1327.3	1343.6	1397.9	1433.2
55°	1049.1	1045.0	1032.8	1049.1	1031.5	1022.0	1031.5	1016.5	1004.3	1046.4	1083.0
57.5°	817.0	803.5	788.5	795.3	794.0	773.6	784.5	766.8	757.3	772.2	804.8
60°	582.2	578.2	564.6	571.4	576.8	561.9	572.7	564.6	548.3	560.5	561.9
62.5°	386.8	389.5	381.4	382.7	378.7	375.9	382.7	386.8	382.7	377.3	378.7
65°	245.7	244.3	242.9	244.3	247.0	241.6	245.7	248.4	244.3	244.3	242.9
67.5°	162.9	158.8	154.7	157.4	160.1	156.1	160.1	158.8	160.1	158.8	154.7
70°	109.9	108.6	107.2	108.6	108.6	105.9	108.6	107.2	108.6	107.2	103.1
72.5°	80.1	80.1	78.7	80.1	80.1	77.4	78.7	76.0	77.4	76.0	73.3
75°	59.7	59.7	58.4	59.7	58.4	57.0	58.4	57.0	54.3	54.3	51.6
77.5°	43.4	43.4	43.4	43.4	43.4	42.1	42.1	40.7	39.4	38.0	38.0
80°	32.6	31.2	31.2	31.2	31.2	29.9	31.2	29.9	28.5	27.1	25.8
82.5°	23.1	24.4	23.1	23.1	23.1	21.7	23.1	21.7	21.7	20.4	17.6
85°	17.6	17.6	17.6	17.6	17.6	16.3	16.3	16.3	14.9	14.9	13.6
87.5°	9.5	9.5	9.5	10.9	9.5	9.5	9.5	8.1	8.1	6.8	6.8
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5
2.5°	4998.5	5005.3	4990.4	5013.5	5103.1	5031.1	5061.0	5070.5	5138.3	5150.6	5142.4
5°	4808.5	4838.4	4857.4	4909.0	5008.0	4956.5	5009.4	5043.3	5130.2	5158.7	5165.5
7.5°	4659.2	4721.7	4767.8	4852.0	4968.7	4929.3	5009.4	5065.1	5170.9	5207.6	5225.2
10°	4548.0	4643.0	4723.0	4838.4	4970.0	4944.3	5048.8	5127.5	5245.6	5289.0	5310.7
12.5°	4463.8	4579.2	4686.4	4833.0	4975.5	4963.3	5089.5	5179.1	5303.9	5347.3	5373.1
15°	4371.5	4504.5	4629.4	4793.6	4947.0	4944.3	5080.0	5175.0	5302.6	5339.2	5363.6
17.5°	4261.6	4404.1	4541.2	4719.0	4871.0	4873.7	5010.8	5104.4	5229.3	5259.1	5275.4
20°	4150.3	4291.4	4428.5	4611.7	4761.0	4765.1	4899.5	4986.3	5105.8	5130.2	5134.3
22.5°	4032.2	4163.9	4300.9	4482.8	4626.7	4629.4	4762.4	4843.8	4945.6	4957.8	4968.7
25°	3897.9	4026.8	4155.7	4336.2	4473.3	4481.5	4602.2	4674.2	4767.8	4777.3	4781.4
27.5°	3758.1	3863.9	3987.4	4142.2	4280.6	4275.2	4389.2	4470.6	4554.7	4549.3	4548.0
30°	3616.9	3705.1	3781.1	3930.4	4032.2	4036.3	4143.5	4182.9	4271.1	4260.2	4258.9
32.5°	3517.8	3540.9	3561.3	3637.3	3733.6	3699.7	3773.0	3821.9	3882.9	3878.9	3880.2
35°	3336.0	3293.9	3232.8	3243.7	3302.1	3249.1	3288.5	3287.1	3349.6	3334.6	3352.3
37.5°	3025.2	2905.8	2770.0	2692.7	2703.5	2637.0	2623.5	2656.0	2677.7	2635.7	2650.6
40°	2694.0	2517.6	2305.9	2129.4	2119.9	2037.1	2022.2	1989.6	2031.7	1996.4	2007.3
42.5°	2449.7	2216.3	1938.1	1723.6	1677.5	1608.3	1567.6	1562.1	1574.3	1549.9	1543.1
45°	2262.4	2014.1	1695.1	1449.5	1397.9	1323.3	1282.5	1267.6	1269.0	1260.8	1254.0
47.5°	2042.6	1792.9	1469.8	1218.8	1160.4	1089.8	1049.1	1039.6	1045.0	1034.2	1026.0
50°	1738.6	1514.6	1220.1	990.8	939.2	887.6	855.0	845.5	844.2	836.0	830.6
52.5°	1411.5	1225.5	970.4	779.0	732.9	682.7	659.6	647.4	648.7	640.6	632.5
55°	1092.5	977.2	751.9	589.0	546.9	507.6	485.9	470.9	466.9	458.7	454.7
57.5°	813.0	735.6	563.2	424.8	400.4	362.4	340.7	323.0	320.3	316.2	314.9
60°	570.0	514.4	396.3	302.7	274.2	251.1	229.4	211.7	203.6	202.2	198.2
62.5°	369.2	335.2	260.6	202.2	180.5	164.2	142.5	130.3	124.9	119.4	120.8
65°	229.4	203.6	162.9	130.3	118.1	105.9	89.6	78.7	73.3	67.9	69.2
67.5°	142.5	127.6	103.1	84.1	76.0	66.5	54.3	46.1	42.1	38.0	35.3
70°	96.4	82.8	70.6	59.7	54.3	47.5	39.4	32.6	29.9	27.1	24.4
72.5°	67.9	61.1	51.6	44.8	40.7	35.3	29.9	25.8	23.1	20.4	17.6
75°	48.9	43.4	38.0	32.6	29.9	27.1	23.1	20.4	17.6	14.9	12.2
77.5°	35.3	31.2	27.1	24.4	23.1	19.0	16.3	14.9	13.6	10.9	8.1
80°	24.4	21.7	17.6	16.3	16.3	13.6	12.2	10.9	9.5	6.8	5.4
82.5°	16.3	14.9	13.6	12.2	10.9	9.5	9.5	6.8	5.4	4.1	2.7
85°	12.2	10.9	9.5	8.1	8.1	6.8	5.4	4.1	4.1	2.7	1.4
87.5°	6.8	6.8	5.4	4.1	4.1	2.7	2.7	1.4	1.4	1.4	1.4
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°	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5
2.5°	5211.6	5215.7	5238.8	5221.1	5265.9	5298.5	5282.2	5318.8	5306.6	5303.9	5346.0
5°	5246.9	5256.4	5287.6	5271.3	5320.2	5355.5	5339.2	5379.9	5367.7	5365.0	5408.4
7.5°	5314.8	5324.3	5351.4	5337.8	5389.4	5420.6	5400.3	5445.1	5428.8	5427.4	5469.5
10°	5400.3	5413.8	5436.9	5423.3	5470.9	5498.0	5477.6	5521.1	5506.1	5499.4	5545.5
12.5°	5464.1	5473.6	5496.6	5485.8	5531.9	5552.3	5534.6	5576.7	5557.7	5552.3	5593.0
15°	5449.1	5458.6	5477.6	5468.1	5511.6	5530.6	5507.5	5553.6	5534.6	5523.8	5560.4
17.5°	5354.1	5359.6	5373.1	5363.6	5409.8	5422.0	5396.2	5442.4	5424.7	5405.7	5441.0
20°	5214.3	5211.6	5219.8	5215.7	5253.7	5260.5	5244.2	5278.1	5257.8	5246.9	5267.3
22.5°	5040.6	5037.9	5043.3	5032.5	5070.5	5074.6	5050.1	5090.8	5070.5	5050.1	5084.1
25°	4847.9	4833.0	4830.3	4834.3	4860.1	4864.2	4838.4	4868.3	4842.5	4826.2	4858.8
27.5°	4610.4	4591.4	4587.3	4591.4	4617.2	4598.2	4576.5	4598.2	4572.4	4557.5	4577.8
30°	4317.2	4290.1	4277.9	4269.7	4296.9	4290.1	4239.9	4264.3	4223.6	4201.9	4216.8
32.5°	3922.3	3907.4	3874.8	3855.8	3881.6	3830.0	3798.8	3798.8	3782.5	3745.9	3754.0
35°	3374.0	3350.9	3321.1	3304.8	3308.8	3239.6	3188.1	3198.9	3144.6	3135.1	3139.2
37.5°	2680.5	2642.5	2631.6	2597.7	2605.8	2544.7	2474.2	2475.5	2447.0	2417.2	2407.7
40°	2014.1	2007.3	1996.4	1967.9	1978.8	1912.3	1885.1	1886.5	1867.5	1845.8	1856.6
42.5°	1556.7	1535.0	1528.2	1518.7	1521.4	1510.6	1475.3	1479.3	1463.1	1457.6	1452.2
45°	1264.9	1241.8	1225.5	1233.7	1233.7	1221.5	1207.9	1216.0	1207.9	1197.0	1202.5
47.5°	1042.3	1020.6	1012.5	1011.1	1020.6	1012.5	998.9	1001.6	1000.3	996.2	993.5
50°	832.0	826.5	819.7	815.7	819.7	817.0	804.8	811.6	815.7	802.1	806.2
52.5°	633.8	633.8	632.5	623.0	631.1	623.0	621.6	624.3	620.2	614.8	613.5
55°	464.2	460.1	453.3	451.9	454.7	451.9	449.2	450.6	453.3	439.7	439.7
57.5°	317.6	314.9	310.8	310.8	316.2	309.4	305.4	310.8	305.4	299.9	299.9
60°	203.6	202.2	198.2	198.2	198.2	196.8	192.7	194.1	196.8	188.7	190.0
62.5°	122.1	118.1	116.7	115.4	116.7	115.4	115.4	114.0	112.6	112.6	108.6
65°	66.5	63.8	61.1	62.4	62.4	61.1	61.1	61.1	58.4	57.0	55.6
67.5°	33.9	31.2	31.2	29.9	29.9	29.9	29.9	28.5	28.5	28.5	27.1
70°	21.7	20.4	19.0	19.0	19.0	17.6	17.6	17.6	17.6	17.6	16.3
72.5°	14.9	13.6	12.2	12.2	12.2	10.9	10.9	10.9	10.9	9.5	9.5
75°	10.9	9.5	8.1	8.1	8.1	6.8	6.8	6.8	6.8	6.8	6.8
77.5°	6.8	5.4	5.4	5.4	5.4	4.1	4.1	4.1	4.1	4.1	2.7
80°	4.1	4.1	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4
82.5°	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0
85°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0
87.5°	1.4	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: P250895

CATALOG NUMBER: LSR8B70D010 EC8B70840 8LBSWOLI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5	5165.5
2.5°	5331.1	5320.2	5327.0	5377.2	5355.5	5348.7	5291.7	5341.9
5°	5394.8	5386.7	5386.7	5443.7	5417.9	5412.5	5356.8	5400.3
7.5°	5454.6	5446.4	5447.8	5506.1	5485.8	5477.6	5422.0	5465.4
10°	5531.9	5526.5	5527.9	5583.5	5561.8	5553.6	5496.6	5541.4
12.5°	5578.1	5569.9	5569.9	5629.6	5605.2	5593.0	5538.7	5582.1
15°	5542.8	5530.6	5530.6	5590.3	5563.1	5545.5	5498.0	5538.7
17.5°	5422.0	5409.8	5409.8	5461.4	5441.0	5415.2	5366.3	5404.3
20°	5253.7	5238.8	5234.7	5294.4	5265.9	5242.8	5199.4	5236.1
22.5°	5063.7	5056.9	5044.7	5104.4	5078.6	5054.2	5008.0	5036.5
25°	4835.7	4824.8	4812.6	4871.0	4845.2	4820.8	4784.1	4807.2
27.5°	4552.0	4553.4	4546.6	4592.7	4567.0	4553.4	4508.6	4546.6
30°	4208.7	4193.7	4188.3	4242.6	4218.2	4200.5	4144.9	4181.5
32.5°	3760.8	3739.1	3710.6	3771.6	3729.6	3714.6	3667.1	3720.1
35°	3109.3	3102.5	3076.8	3128.3	3105.3	3078.1	3048.3	3093.0
37.5°	2403.6	2409.0	2406.3	2419.9	2406.3	2388.7	2356.1	2339.8
40°	1834.9	1821.4	1810.5	1834.9	1806.4	1806.4	1787.4	1807.8
42.5°	1438.6	1433.2	1446.8	1452.2	1435.9	1433.2	1430.5	1429.1
45°	1187.5	1187.5	1190.3	1195.7	1190.3	1187.5	1179.4	1174.0
47.5°	978.5	984.0	978.5	996.2	986.7	984.0	967.7	974.5
50°	792.6	785.8	792.6	798.0	799.4	791.2	783.1	787.2
52.5°	614.8	604.0	601.2	609.4	604.0	604.0	598.5	597.2
55°	432.9	437.0	430.2	437.0	434.3	430.2	426.2	431.6
57.5°	293.2	294.5	291.8	295.9	289.1	290.4	289.1	287.7
60°	190.0	184.6	184.6	188.7	181.9	181.9	180.5	180.5
62.5°	108.6	107.2	107.2	105.9	104.5	104.5	104.5	101.8
65°	55.6	54.3	52.9	52.9	52.9	52.9	51.6	51.6
67.5°	27.1	25.8	25.8	27.1	25.8	25.8	25.8	25.8
70°	16.3	16.3	14.9	16.3	14.9	14.9	14.9	14.9
72.5°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
75°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
77.5°	4.1	2.7	2.7	2.7	2.7	2.7	2.7	2.7
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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)