

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: P249049

Luminaire Tested: **LSR8B90D010 EC8B90940 8LBSW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249049  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13958)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B90D010 EC8B90940 8LBSW0MW  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8309.0 lumens  
Efficiency: N/A  
Efficacy: 96.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.23 / 1.15  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

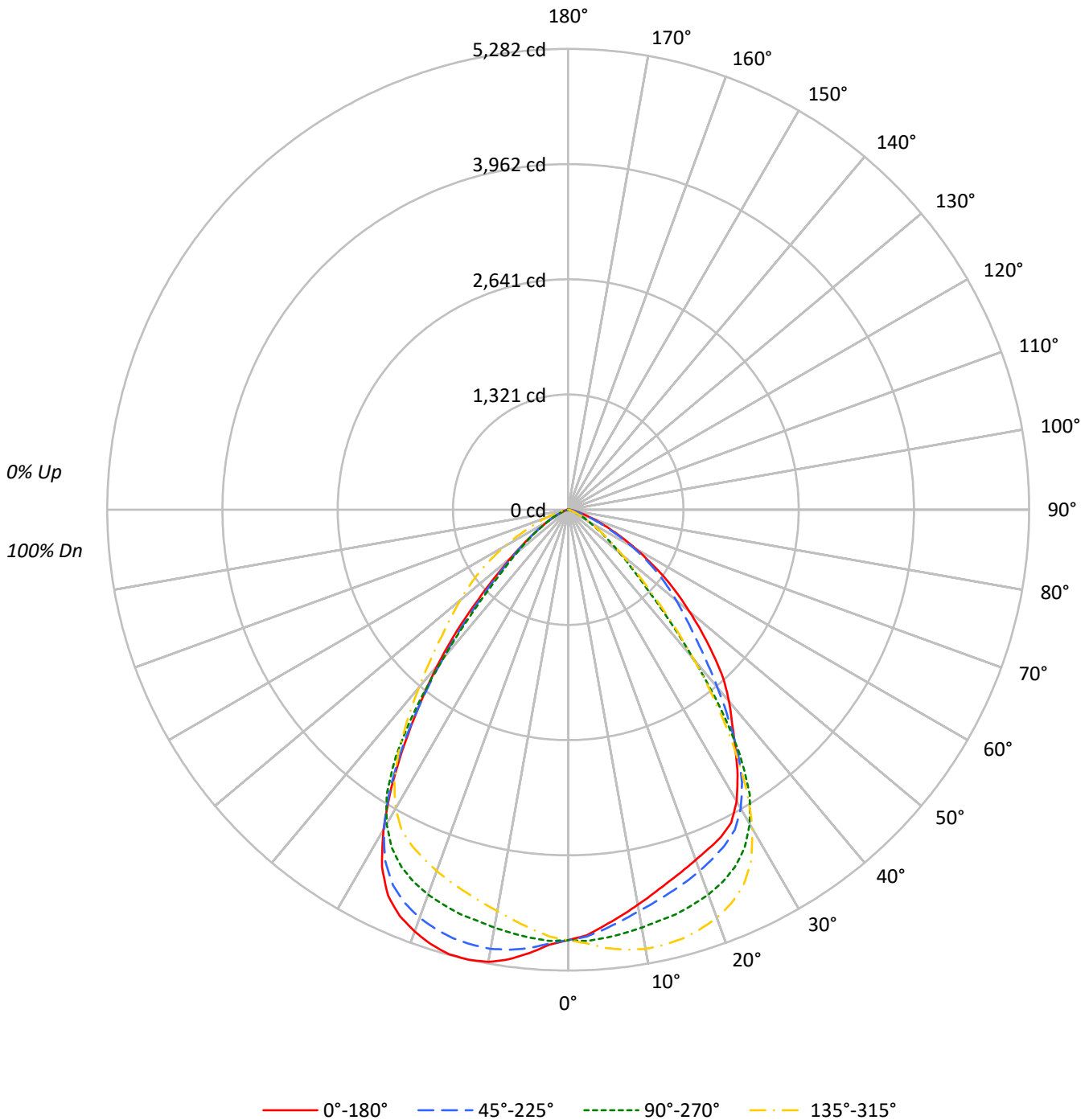
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	109	106	104	101	102	100	98	99	97	95	95	94	92	90					90			
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81					81			
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65					65			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	55	49	46	44					44			
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37					37			

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

	0°	90°	180°	270°
0°	152109	152109	152109	152109
5°	148069	152468	157909	152468
10°	143973	152267	164786	152267
15°	141095	153172	168393	153172
20°	140135	154048	168828	154048
25°	140873	153738	166113	153738
30°	137388	148110	150773	148110
35°	125668	129202	122585	129202
40°	115376	89875	93856	89875
45°	102516	54830	63443	54830
50°	86773	36627	40671	36627
55°	71868	24994	26413	24994
60°	54815	16639	16781	16639
65°	38839	10368	9493	10368
70°	28013	6942	6302	6942
75°	17788	3443	2871	3443
80°	12413	2575	2131	2575
85°	11074	0	849	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	469.5	5.7
10°-20°	1359.6	16.4
20°-30°	2058.7	24.8
30°-40°	2063.4	24.8
40°-50°	1295.7	15.6
50°-60°	690.5	8.3
60°-70°	283.9	3.4
70°-80°	75.0	0.9
80°-90°	12.7	0.2
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°	3887.9	46.8
0°-40°	5951.2	71.6
0°-60°	7937.4	95.5
0°-90°	8309.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8309.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	4933	4933	4933	4933	4933	
5°	4784	4926	5101	4926	4784	451
15°	4420	4798	5275	4798	4420	1250
25°	4140	4518	4882	4518	4140	1899
35°	3338	3432	3256	3432	3338	2091
45°	2351	1257	1455	1257	2351	1808
55°	1337	465	491	465	1337	1192
65°	532	142	130	142	532	552
75°	149	29	24	29	149	169
85°	31	0	2	0	31	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°	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8
2.5°	4882.2	4877.4	4875.0	4879.8	4882.2	4891.8	4889.5	4894.2	4894.2	4896.7	4901.5
5°	4783.5	4781.0	4783.5	4783.5	4793.1	4802.7	4800.3	4807.6	4812.3	4824.4	4829.2
7.5°	4692.0	4692.0	4689.5	4699.1	4704.0	4718.5	4716.0	4728.1	4735.3	4747.3	4764.2
10°	4598.0	4598.0	4600.4	4607.6	4610.1	4631.7	4631.7	4648.6	4658.2	4670.3	4692.0
12.5°	4506.5	4506.5	4521.0	4516.1	4525.7	4542.6	4549.8	4566.7	4581.1	4605.2	4626.9
15°	4419.7	4419.7	4424.6	4436.6	4443.8	4465.5	4477.5	4496.9	4513.7	4537.8	4569.1
17.5°	4345.1	4342.7	4345.1	4359.6	4374.0	4393.3	4402.9	4427.0	4443.8	4475.2	4504.1
20°	4270.4	4275.3	4275.3	4287.3	4296.9	4321.0	4330.6	4357.2	4376.4	4405.3	4439.1
22.5°	4205.4	4203.0	4203.0	4219.9	4227.1	4248.7	4258.3	4282.4	4304.1	4328.2	4359.6
25°	4140.4	4135.5	4145.2	4147.6	4152.4	4176.5	4183.7	4200.5	4222.3	4244.0	4275.3
27.5°	4044.0	4039.2	4041.6	4051.2	4058.5	4077.7	4082.6	4099.4	4116.3	4135.5	4162.1
30°	3858.5	3853.8	3851.4	3868.2	3875.5	3889.8	3897.1	3926.0	3930.8	3952.5	3971.7
32.5°	3612.8	3610.5	3615.3	3629.7	3636.9	3656.3	3665.9	3682.7	3694.7	3706.8	3726.1
35°	3338.3	3333.5	3338.3	3352.8	3352.8	3369.7	3376.9	3384.0	3381.7	3384.0	3379.3
37.5°	3083.0	3080.6	3083.0	3090.2	3083.0	3090.2	3083.0	3068.6	3042.1	3013.2	2984.2
40°	2866.2	2868.6	2854.2	2863.8	2837.3	2832.5	2806.0	2769.9	2716.9	2659.1	2577.2
42.5°	2635.0	2627.8	2618.2	2622.9	2601.3	2584.4	2541.0	2495.3	2427.8	2331.6	2232.7
45°	2350.8	2348.4	2343.6	2341.2	2326.7	2309.9	2273.7	2220.7	2146.1	2047.3	1929.3
47.5°	2073.8	2066.6	2066.6	2068.9	2052.1	2049.7	2020.8	1975.1	1910.0	1813.7	1690.8
50°	1808.8	1806.4	1811.3	1820.9	1808.8	1804.0	1784.8	1753.5	1695.7	1613.8	1498.1
52.5°	1570.4	1568.0	1572.8	1584.8	1580.0	1584.8	1565.6	1541.5	1503.0	1423.4	1322.3
55°	1336.8	1336.8	1336.8	1351.2	1351.2	1351.2	1341.6	1327.2	1291.0	1233.2	1139.3
57.5°	1093.5	1095.9	1110.4	1112.7	1110.4	1115.2	1112.7	1098.3	1074.3	1033.3	961.1
60°	888.8	888.8	896.0	903.3	900.8	903.3	903.3	896.0	871.9	838.2	780.4
62.5°	703.3	710.5	705.7	710.5	720.2	710.5	705.7	700.9	684.1	662.4	614.2
65°	532.3	537.1	537.1	539.5	534.7	537.1	527.5	520.3	510.7	486.6	455.2
67.5°	404.7	404.7	404.7	404.7	402.2	399.8	397.5	390.2	373.4	363.7	329.9
70°	310.7	296.2	296.2	296.2	296.2	298.7	291.5	281.9	277.0	260.1	236.1
72.5°	207.1	212.0	207.1	207.1	202.3	204.7	195.1	190.2	185.5	175.9	161.4
75°	149.3	137.3	142.1	144.5	137.3	142.1	132.5	122.8	122.8	115.6	108.4
77.5°	96.4	94.0	96.4	98.7	96.4	94.0	89.1	84.3	84.3	81.9	74.7
80°	69.9	67.4	67.4	67.4	65.0	67.4	62.7	62.7	57.8	55.4	50.6
82.5°	45.8	45.8	43.3	45.8	43.3	45.8	38.6	38.6	38.6	36.1	31.3
85°	31.3	26.5	26.5	28.9	24.1	28.9	26.5	24.1	21.7	21.7	19.2
87.5°	14.5	16.9	14.5	16.9	14.5	14.5	16.9	14.5	14.5	9.6	9.6
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8
2.5°	4908.7	4911.1	4911.1	4920.8	4925.6	4927.9	4927.9	4947.3	4940.0	4944.9	4949.6
5°	4838.9	4853.3	4858.1	4858.1	4884.6	4894.2	4903.8	4925.6	4927.9	4942.4	4959.3
7.5°	4771.4	4788.2	4798.0	4819.6	4836.4	4853.3	4882.2	4896.7	4911.1	4930.4	4952.0
10°	4706.4	4725.7	4744.9	4761.8	4788.2	4810.0	4829.2	4862.9	4879.8	4906.3	4935.2
12.5°	4643.8	4670.3	4687.1	4716.0	4744.9	4764.2	4793.1	4824.4	4850.9	4877.4	4911.1
15°	4588.4	4619.7	4638.9	4670.3	4701.6	4728.1	4759.4	4798.0	4817.2	4848.5	4879.8
17.5°	4528.1	4561.9	4586.0	4614.8	4653.4	4682.3	4708.8	4747.3	4771.4	4805.1	4841.3
20°	4465.5	4499.3	4528.1	4557.1	4595.6	4624.5	4655.8	4694.4	4720.8	4754.5	4783.5
22.5°	4390.9	4422.2	4453.5	4487.2	4525.7	4549.8	4586.0	4619.7	4648.6	4679.9	4708.8
25°	4294.5	4333.1	4357.2	4388.4	4419.7	4446.2	4484.8	4518.5	4542.6	4571.5	4598.0
27.5°	4181.3	4210.3	4229.5	4256.0	4287.3	4311.4	4340.2	4374.0	4398.1	4424.6	4443.8
30°	3988.6	4015.2	4032.0	4051.2	4082.6	4104.3	4128.4	4159.6	4176.5	4195.8	4212.6
32.5°	3735.7	3757.4	3767.0	3781.5	3803.2	3824.8	3844.1	3870.6	3877.8	3889.8	3889.8
35°	3369.7	3374.4	3372.0	3376.9	3386.5	3398.5	3415.4	3432.2	3441.8	3441.8	3434.7
37.5°	2940.9	2912.0	2880.7	2856.6	2849.4	2844.5	2854.2	2861.4	2871.1	2875.8	2863.8
40°	2495.3	2430.3	2360.4	2297.8	2254.4	2235.2	2228.0	2232.7	2232.7	2249.6	2249.6
42.5°	2112.4	2011.1	1907.6	1813.7	1751.0	1702.9	1681.2	1681.2	1683.6	1695.7	1702.9
45°	1794.4	1666.7	1546.3	1442.8	1356.0	1293.4	1264.5	1257.3	1254.9	1259.7	1276.5
47.5°	1551.1	1418.7	1293.4	1165.8	1074.3	1011.6	985.2	975.4	965.8	975.4	977.9
50°	1360.9	1223.6	1091.1	963.4	867.1	811.7	777.9	763.5	761.1	761.1	766.0
52.5°	1187.4	1059.8	927.4	797.3	696.1	643.1	611.8	604.6	594.9	604.6	604.6
55°	1023.6	896.0	766.0	643.1	558.8	503.4	474.5	464.9	460.0	467.2	467.2
57.5°	845.5	737.0	616.6	505.8	421.5	383.0	361.3	349.3	346.8	351.6	346.8
60°	693.7	602.2	498.6	397.5	332.4	291.5	274.6	269.8	264.9	269.8	269.8
62.5°	549.1	472.1	387.7	310.7	255.3	226.4	207.1	207.1	204.7	204.7	207.1
65°	407.1	346.8	286.6	221.6	178.3	156.5	142.1	142.1	139.7	142.1	139.7
67.5°	296.2	255.3	207.1	161.4	127.7	115.6	106.0	98.7	103.6	98.7	96.4
70°	216.8	183.0	149.3	122.8	98.7	86.7	79.5	77.0	72.3	72.3	72.3
72.5°	144.5	122.8	101.1	79.5	65.0	52.9	50.6	45.8	40.9	43.3	48.2
75°	96.4	81.9	72.3	57.8	43.3	43.3	28.9	28.9	24.1	28.9	21.7
77.5°	67.4	55.4	43.3	36.1	28.9	26.5	19.2	19.2	16.9	16.9	16.9
80°	48.2	40.9	31.3	26.5	19.2	19.2	16.9	14.5	12.0	12.0	14.5
82.5°	28.9	21.7	21.7	19.2	12.0	9.6	7.2	9.6	4.9	4.9	4.9
85°	16.9	14.5	12.0	7.2	4.9	4.9	2.4	0.0	2.4	2.4	0.0
87.5°	9.6	4.9	4.9	2.4	0.0	2.4	2.4	0.0	0.0	0.0	4.9
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°	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8
2.5°	4961.7	4959.3	4964.1	4964.1	4978.6	4976.1	4983.4	4983.4	4978.6	4981.0	4990.6
5°	4978.6	4985.8	5000.2	5012.3	5033.9	5043.6	5055.6	5067.7	5070.1	5077.3	5084.6
7.5°	4978.6	5002.7	5019.5	5041.1	5070.1	5087.0	5113.4	5135.1	5144.8	5156.7	5171.2
10°	4968.9	4993.0	5024.3	5048.4	5084.6	5111.0	5137.5	5171.2	5185.7	5204.9	5224.3
12.5°	4949.6	4976.1	5009.8	5041.1	5082.1	5106.2	5139.9	5171.2	5192.9	5219.4	5241.1
15°	4920.8	4952.0	4983.4	5014.7	5058.0	5087.0	5118.3	5154.4	5176.1	5204.9	5224.3
17.5°	4875.0	4908.7	4937.6	4966.5	5007.4	5041.1	5070.1	5103.8	5125.5	5149.6	5176.1
20°	4819.6	4850.9	4882.2	4906.3	4947.3	4976.1	5007.4	5038.8	5055.6	5060.5	5101.4
22.5°	4749.8	4771.4	4795.5	4834.0	4858.1	4884.6	4913.6	4942.4	4959.3	4985.8	5000.2
25°	4634.1	4655.8	4682.3	4699.1	4728.1	4749.8	4778.6	4810.0	4819.6	4838.9	4853.3
27.5°	4472.8	4484.8	4496.9	4511.2	4528.1	4540.2	4557.1	4571.5	4581.1	4590.8	4600.4
30°	4217.4	4217.4	4217.4	4207.8	4215.0	4222.3	4224.6	4222.3	4222.3	4219.9	4219.9
32.5°	3880.2	3861.0	3839.3	3820.0	3812.8	3803.2	3798.3	3791.1	3779.1	3771.9	3774.2
35°	3425.0	3381.7	3355.2	3331.1	3311.9	3297.4	3290.1	3282.9	3280.5	3270.9	3261.2
37.5°	2856.6	2825.3	2806.0	2791.6	2774.7	2760.2	2762.6	2765.1	2772.2	2767.5	2769.9
40°	2254.4	2247.2	2254.4	2237.6	2232.7	2237.6	2249.6	2266.5	2276.1	2285.8	2302.6
42.5°	1714.9	1726.9	1743.9	1743.9	1751.0	1760.7	1775.1	1801.7	1816.0	1832.9	1852.2
45°	1291.0	1305.5	1327.2	1334.3	1339.2	1351.2	1368.1	1389.7	1399.4	1413.8	1430.7
47.5°	994.8	1004.4	1016.4	1028.5	1040.5	1045.3	1062.2	1062.2	1074.3	1083.9	1088.7
50°	775.6	785.2	794.8	802.0	806.9	814.1	818.9	826.1	828.5	833.4	835.7
52.5°	606.9	619.0	619.0	623.8	631.0	638.3	635.9	638.3	640.6	640.6	647.9
55°	474.5	474.5	481.7	481.7	486.6	484.1	486.6	486.6	486.6	486.6	489.0
57.5°	354.0	356.5	363.7	358.9	356.5	361.3	356.5	361.3	358.9	363.7	356.5
60°	272.1	272.1	274.6	274.6	277.0	277.0	277.0	274.6	274.6	272.1	272.1
62.5°	204.7	207.1	209.6	207.1	207.1	207.1	204.7	204.7	202.3	199.9	199.9
65°	137.3	134.9	139.7	134.9	137.3	137.3	134.9	137.3	130.1	132.5	130.1
67.5°	98.7	96.4	94.0	96.4	94.0	91.5	91.5	94.0	96.4	89.1	89.1
70°	65.0	67.4	65.0	67.4	69.9	69.9	67.4	65.0	67.4	62.7	65.0
72.5°	40.9	40.9	40.9	40.9	40.9	43.3	43.3	43.3	38.6	38.6	36.1
75°	19.2	26.5	21.7	19.2	26.5	26.5	24.1	24.1	21.7	21.7	21.7
77.5°	19.2	14.5	14.5	14.5	14.5	14.5	14.5	14.5	12.0	14.5	12.0
80°	9.6	9.6	9.6	7.2	9.6	9.6	12.0	9.6	9.6	7.2	12.0
82.5°	4.9	4.9	4.9	0.0	2.4	4.9	4.9	2.4	4.9	4.9	2.4
85°	0.0	0.0	0.0	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	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: P249049

CATALOG NUMBER: LSR8B90D010 EC8B90940 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8
2.5°	4988.2	4985.8	4988.2	4990.6	4988.2	4985.8	4988.2	4990.6	4981.0	4978.6	4983.4
5°	5094.2	5094.2	5098.9	5101.4	5098.9	5094.2	5094.2	5084.6	5077.3	5070.1	5067.7
7.5°	5185.7	5190.6	5195.3	5197.7	5195.3	5190.6	5185.7	5171.2	5156.7	5144.8	5135.1
10°	5241.1	5248.4	5258.0	5262.7	5258.0	5248.4	5241.1	5224.3	5204.9	5185.7	5171.2
12.5°	5265.2	5272.4	5284.4	5282.1	5284.4	5272.4	5265.2	5241.1	5219.4	5192.9	5171.2
15°	5248.4	5258.0	5270.0	5274.8	5270.0	5258.0	5248.4	5224.3	5204.9	5176.1	5154.4
17.5°	5195.3	5209.8	5217.0	5224.3	5217.0	5209.8	5195.3	5176.1	5149.6	5125.5	5103.8
20°	5123.0	5132.8	5142.4	5144.8	5142.4	5132.8	5123.0	5101.4	5060.5	5055.6	5038.8
22.5°	5019.5	5026.8	5048.4	5041.1	5048.4	5026.8	5019.5	5000.2	4985.8	4959.3	4942.4
25°	4870.1	4877.4	4879.8	4882.2	4879.8	4877.4	4870.1	4853.3	4838.9	4819.6	4810.0
27.5°	4612.5	4612.5	4617.2	4619.7	4617.2	4612.5	4612.5	4600.4	4590.8	4581.1	4571.5
30°	4222.3	4222.3	4222.3	4234.4	4222.3	4222.3	4222.3	4219.9	4219.9	4222.3	4222.3
32.5°	3771.9	3767.0	3762.2	3767.0	3762.2	3767.0	3771.9	3774.2	3771.9	3779.1	3791.1
35°	3261.2	3258.8	3266.1	3256.4	3266.1	3258.8	3261.2	3261.2	3270.9	3280.5	3282.9
37.5°	2772.2	2767.5	2777.1	2767.5	2777.1	2767.5	2772.2	2769.9	2767.5	2772.2	2765.1
40°	2307.5	2312.2	2312.2	2331.6	2312.2	2312.2	2307.5	2302.6	2285.8	2276.1	2266.5
42.5°	1861.8	1876.3	1871.5	1885.9	1871.5	1876.3	1861.8	1852.2	1832.9	1816.0	1801.7
45°	1440.3	1450.0	1450.0	1454.8	1450.0	1450.0	1440.3	1430.7	1413.8	1399.4	1389.7
47.5°	1105.5	1105.5	1105.5	1108.0	1105.5	1105.5	1105.5	1088.7	1083.9	1074.3	1062.2
50°	840.6	843.0	845.5	847.8	845.5	843.0	840.6	835.7	833.4	828.5	826.1
52.5°	645.5	647.9	643.1	647.9	643.1	647.9	645.5	647.9	640.6	640.6	638.3
55°	489.0	486.6	489.0	491.3	489.0	486.6	489.0	489.0	486.6	486.6	486.6
57.5°	358.9	354.0	354.0	354.0	354.0	354.0	358.9	356.5	363.7	358.9	361.3
60°	267.4	269.8	269.8	272.1	269.8	269.8	267.4	272.1	272.1	274.6	274.6
62.5°	197.5	204.7	199.9	204.7	199.9	204.7	197.5	199.9	199.9	202.3	204.7
65°	127.7	127.7	127.7	130.1	127.7	127.7	127.7	130.1	132.5	130.1	137.3
67.5°	86.7	89.1	94.0	91.5	94.0	89.1	86.7	89.1	89.1	96.4	94.0
70°	69.9	62.7	62.7	69.9	62.7	62.7	69.9	65.0	62.7	67.4	65.0
72.5°	40.9	36.1	40.9	40.9	40.9	36.1	40.9	36.1	38.6	38.6	43.3
75°	21.7	19.2	16.9	24.1	16.9	19.2	21.7	21.7	21.7	21.7	24.1
77.5°	14.5	12.0	16.9	16.9	16.9	12.0	14.5	12.0	14.5	12.0	14.5
80°	7.2	9.6	7.2	12.0	7.2	9.6	7.2	12.0	7.2	9.6	9.6
82.5°	2.4	4.9	4.9	4.9	4.9	4.9	2.4	2.4	4.9	4.9	2.4
85°	0.0	4.9	2.4	2.4	2.4	4.9	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	0.0	0.0	2.4	0.0	0.0	2.4	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: P249049

CATALOG NUMBER: LSR8B90D010 EC8B90940 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8
2.5°	4983.4	4976.1	4978.6	4964.1	4964.1	4959.3	4961.7	4949.6	4944.9	4940.0	4947.3
5°	5055.6	5043.6	5033.9	5012.3	5000.2	4985.8	4978.6	4959.3	4942.4	4927.9	4925.6
7.5°	5113.4	5087.0	5070.1	5041.1	5019.5	5002.7	4978.6	4952.0	4930.4	4911.1	4896.7
10°	5137.5	5111.0	5084.6	5048.4	5024.3	4993.0	4968.9	4935.2	4906.3	4879.8	4862.9
12.5°	5139.9	5106.2	5082.1	5041.1	5009.8	4976.1	4949.6	4911.1	4877.4	4850.9	4824.4
15°	5118.3	5087.0	5058.0	5014.7	4983.4	4952.0	4920.8	4879.8	4848.5	4817.2	4798.0
17.5°	5070.1	5041.1	5007.4	4966.5	4937.6	4908.7	4875.0	4841.3	4805.1	4771.4	4747.3
20°	5007.4	4976.1	4947.3	4906.3	4882.2	4850.9	4819.6	4783.5	4754.5	4720.8	4694.4
22.5°	4913.6	4884.6	4858.1	4834.0	4795.5	4771.4	4749.8	4708.8	4679.9	4648.6	4619.7
25°	4778.6	4749.8	4728.1	4699.1	4682.3	4655.8	4634.1	4598.0	4571.5	4542.6	4518.5
27.5°	4557.1	4540.2	4528.1	4511.2	4496.9	4484.8	4472.8	4443.8	4424.6	4398.1	4374.0
30°	4224.6	4222.3	4215.0	4207.8	4217.4	4217.4	4217.4	4212.6	4195.8	4176.5	4159.6
32.5°	3798.3	3803.2	3812.8	3820.0	3839.3	3861.0	3880.2	3889.8	3889.8	3877.8	3870.6
35°	3290.1	3297.4	3311.9	3331.1	3355.2	3381.7	3425.0	3434.7	3441.8	3441.8	3432.2
37.5°	2762.6	2760.2	2774.7	2791.6	2806.0	2825.3	2856.6	2863.8	2875.8	2871.1	2861.4
40°	2249.6	2237.6	2232.7	2237.6	2254.4	2247.2	2254.4	2249.6	2249.6	2232.7	2232.7
42.5°	1775.1	1760.7	1751.0	1743.9	1743.9	1726.9	1714.9	1702.9	1695.7	1683.6	1681.2
45°	1368.1	1351.2	1339.2	1334.3	1327.2	1305.5	1291.0	1276.5	1259.7	1254.9	1257.3
47.5°	1062.2	1045.3	1040.5	1028.5	1016.4	1004.4	994.8	977.9	975.4	965.8	975.4
50°	818.9	814.1	806.9	802.0	794.8	785.2	775.6	766.0	761.1	761.1	763.5
52.5°	635.9	638.3	631.0	623.8	619.0	619.0	606.9	604.6	604.6	594.9	604.6
55°	486.6	484.1	486.6	481.7	481.7	474.5	474.5	467.2	467.2	460.0	464.9
57.5°	356.5	361.3	356.5	358.9	363.7	356.5	354.0	346.8	351.6	346.8	349.3
60°	277.0	277.0	277.0	274.6	274.6	272.1	272.1	269.8	269.8	264.9	269.8
62.5°	204.7	207.1	207.1	207.1	209.6	207.1	204.7	207.1	204.7	204.7	207.1
65°	134.9	137.3	137.3	134.9	139.7	134.9	137.3	139.7	142.1	139.7	142.1
67.5°	91.5	91.5	94.0	96.4	94.0	96.4	98.7	96.4	98.7	103.6	98.7
70°	67.4	69.9	69.9	67.4	65.0	67.4	65.0	72.3	72.3	72.3	77.0
72.5°	43.3	43.3	40.9	40.9	40.9	40.9	40.9	48.2	43.3	40.9	45.8
75°	24.1	26.5	26.5	19.2	21.7	26.5	19.2	21.7	28.9	24.1	28.9
77.5°	14.5	14.5	14.5	14.5	14.5	14.5	19.2	16.9	16.9	16.9	19.2
80°	12.0	9.6	9.6	7.2	9.6	9.6	9.6	14.5	12.0	12.0	14.5
82.5°	4.9	4.9	2.4	0.0	4.9	4.9	4.9	4.9	4.9	4.9	9.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.4	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	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: P249049

CATALOG NUMBER: LSR8B90D010 EC8B90940 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8
2.5°	4927.9	4927.9	4925.6	4920.8	4911.1	4911.1	4908.7	4901.5	4896.7	4894.2	4894.2
5°	4903.8	4894.2	4884.6	4858.1	4858.1	4853.3	4838.9	4829.2	4824.4	4812.3	4807.6
7.5°	4882.2	4853.3	4836.4	4819.6	4798.0	4788.2	4771.4	4764.2	4747.3	4735.3	4728.1
10°	4829.2	4810.0	4788.2	4761.8	4744.9	4725.7	4706.4	4692.0	4670.3	4658.2	4648.6
12.5°	4793.1	4764.2	4744.9	4716.0	4687.1	4670.3	4643.8	4626.9	4605.2	4581.1	4566.7
15°	4759.4	4728.1	4701.6	4670.3	4638.9	4619.7	4588.4	4569.1	4537.8	4513.7	4496.9
17.5°	4708.8	4682.3	4653.4	4614.8	4586.0	4561.9	4528.1	4504.1	4475.2	4443.8	4427.0
20°	4655.8	4624.5	4595.6	4557.1	4528.1	4499.3	4465.5	4439.1	4405.3	4376.4	4357.2
22.5°	4586.0	4549.8	4525.7	4487.2	4453.5	4422.2	4390.9	4359.6	4328.2	4304.1	4282.4
25°	4484.8	4446.2	4419.7	4388.4	4357.2	4333.1	4294.5	4275.3	4244.0	4222.3	4200.5
27.5°	4340.2	4311.4	4287.3	4256.0	4229.5	4210.3	4181.3	4162.1	4135.5	4116.3	4099.4
30°	4128.4	4104.3	4082.6	4051.2	4032.0	4015.2	3988.6	3971.7	3952.5	3930.8	3926.0
32.5°	3844.1	3824.8	3803.2	3781.5	3767.0	3757.4	3735.7	3726.1	3706.8	3694.7	3682.7
35°	3415.4	3398.5	3386.5	3376.9	3372.0	3374.4	3369.7	3379.3	3384.0	3381.7	3384.0
37.5°	2854.2	2844.5	2849.4	2856.6	2880.7	2912.0	2940.9	2984.2	3013.2	3042.1	3068.6
40°	2228.0	2235.2	2254.4	2297.8	2360.4	2430.3	2495.3	2577.2	2659.1	2716.9	2769.9
42.5°	1681.2	1702.9	1751.0	1813.7	1907.6	2011.1	2112.4	2232.7	2331.6	2427.8	2495.3
45°	1264.5	1293.4	1356.0	1442.8	1546.3	1666.7	1794.4	1929.3	2047.3	2146.1	2220.7
47.5°	985.2	1011.6	1074.3	1165.8	1293.4	1418.7	1551.1	1690.8	1813.7	1910.0	1975.1
50°	777.9	811.7	867.1	963.4	1091.1	1223.6	1360.9	1498.1	1613.8	1695.7	1753.5
52.5°	611.8	643.1	696.1	797.3	927.4	1059.8	1187.4	1322.3	1423.4	1503.0	1541.5
55°	474.5	503.4	558.8	643.1	766.0	896.0	1023.6	1139.3	1233.2	1291.0	1327.2
57.5°	361.3	383.0	421.5	505.8	616.6	737.0	845.5	961.1	1033.3	1074.3	1098.3
60°	274.6	291.5	332.4	397.5	498.6	602.2	693.7	780.4	838.2	871.9	896.0
62.5°	207.1	226.4	255.3	310.7	387.7	472.1	549.1	614.2	662.4	684.1	700.9
65°	142.1	156.5	178.3	221.6	286.6	346.8	407.1	455.2	486.6	510.7	520.3
67.5°	106.0	115.6	127.7	161.4	207.1	255.3	296.2	329.9	363.7	373.4	390.2
70°	79.5	86.7	98.7	122.8	149.3	183.0	216.8	236.1	260.1	277.0	281.9
72.5°	50.6	52.9	65.0	79.5	101.1	122.8	144.5	161.4	175.9	185.5	190.2
75°	28.9	43.3	43.3	57.8	72.3	81.9	96.4	108.4	115.6	122.8	122.8
77.5°	19.2	26.5	28.9	36.1	43.3	55.4	67.4	74.7	81.9	84.3	84.3
80°	16.9	19.2	19.2	26.5	31.3	40.9	48.2	50.6	55.4	57.8	62.7
82.5°	7.2	9.6	12.0	19.2	21.7	21.7	28.9	31.3	36.1	38.6	38.6
85°	2.4	4.9	4.9	7.2	12.0	14.5	16.9	19.2	21.7	21.7	24.1
87.5°	2.4	2.4	0.0	2.4	4.9	4.9	9.6	9.6	9.6	14.5	14.5
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: P249049

CATALOG NUMBER: LSR8B90D010 EC8B90940 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8	4932.8
2.5°	4889.5	4891.8	4882.2	4879.8	4875.0	4877.4	4882.2
5°	4800.3	4802.7	4793.1	4783.5	4783.5	4781.0	4783.5
7.5°	4716.0	4718.5	4704.0	4699.1	4689.5	4692.0	4692.0
10°	4631.7	4631.7	4610.1	4607.6	4600.4	4598.0	4598.0
12.5°	4549.8	4542.6	4525.7	4516.1	4521.0	4506.5	4506.5
15°	4477.5	4465.5	4443.8	4436.6	4424.6	4419.7	4419.7
17.5°	4402.9	4393.3	4374.0	4359.6	4345.1	4342.7	4345.1
20°	4330.6	4321.0	4296.9	4287.3	4275.3	4275.3	4270.4
22.5°	4258.3	4248.7	4227.1	4219.9	4203.0	4203.0	4205.4
25°	4183.7	4176.5	4152.4	4147.6	4145.2	4135.5	4140.4
27.5°	4082.6	4077.7	4058.5	4051.2	4041.6	4039.2	4044.0
30°	3897.1	3889.8	3875.5	3868.2	3851.4	3853.8	3858.5
32.5°	3665.9	3656.3	3636.9	3629.7	3615.3	3610.5	3612.8
35°	3376.9	3369.7	3352.8	3352.8	3338.3	3333.5	3338.3
37.5°	3083.0	3090.2	3083.0	3090.2	3083.0	3080.6	3083.0
40°	2806.0	2832.5	2837.3	2863.8	2854.2	2868.6	2866.2
42.5°	2541.0	2584.4	2601.3	2622.9	2618.2	2627.8	2635.0
45°	2273.7	2309.9	2326.7	2341.2	2343.6	2348.4	2350.8
47.5°	2020.8	2049.7	2052.1	2068.9	2066.6	2066.6	2073.8
50°	1784.8	1804.0	1808.8	1820.9	1811.3	1806.4	1808.8
52.5°	1565.6	1584.8	1580.0	1584.8	1572.8	1568.0	1570.4
55°	1341.6	1351.2	1351.2	1351.2	1336.8	1336.8	1336.8
57.5°	1112.7	1115.2	1110.4	1112.7	1110.4	1095.9	1093.5
60°	903.3	903.3	900.8	903.3	896.0	888.8	888.8
62.5°	705.7	710.5	720.2	710.5	705.7	710.5	703.3
65°	527.5	537.1	534.7	539.5	537.1	537.1	532.3
67.5°	397.5	399.8	402.2	404.7	404.7	404.7	404.7
70°	291.5	298.7	296.2	296.2	296.2	296.2	310.7
72.5°	195.1	204.7	202.3	207.1	207.1	212.0	207.1
75°	132.5	142.1	137.3	144.5	142.1	137.3	149.3
77.5°	89.1	94.0	96.4	98.7	96.4	94.0	96.4
80°	62.7	67.4	65.0	67.4	67.4	67.4	69.9
82.5°	38.6	45.8	43.3	45.8	43.3	45.8	45.8
85°	26.5	28.9	24.1	28.9	26.5	26.5	31.3
87.5°	16.9	14.5	14.5	16.9	14.5	16.9	14.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)