

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: P248977

Luminaire Tested: **LSR8B90D010 EC8B90827 8LBSW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248977  
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 EC8B90827 8LBSW0MW  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8752.0 lumens  
Efficiency: N/A  
Efficacy: 101.6 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

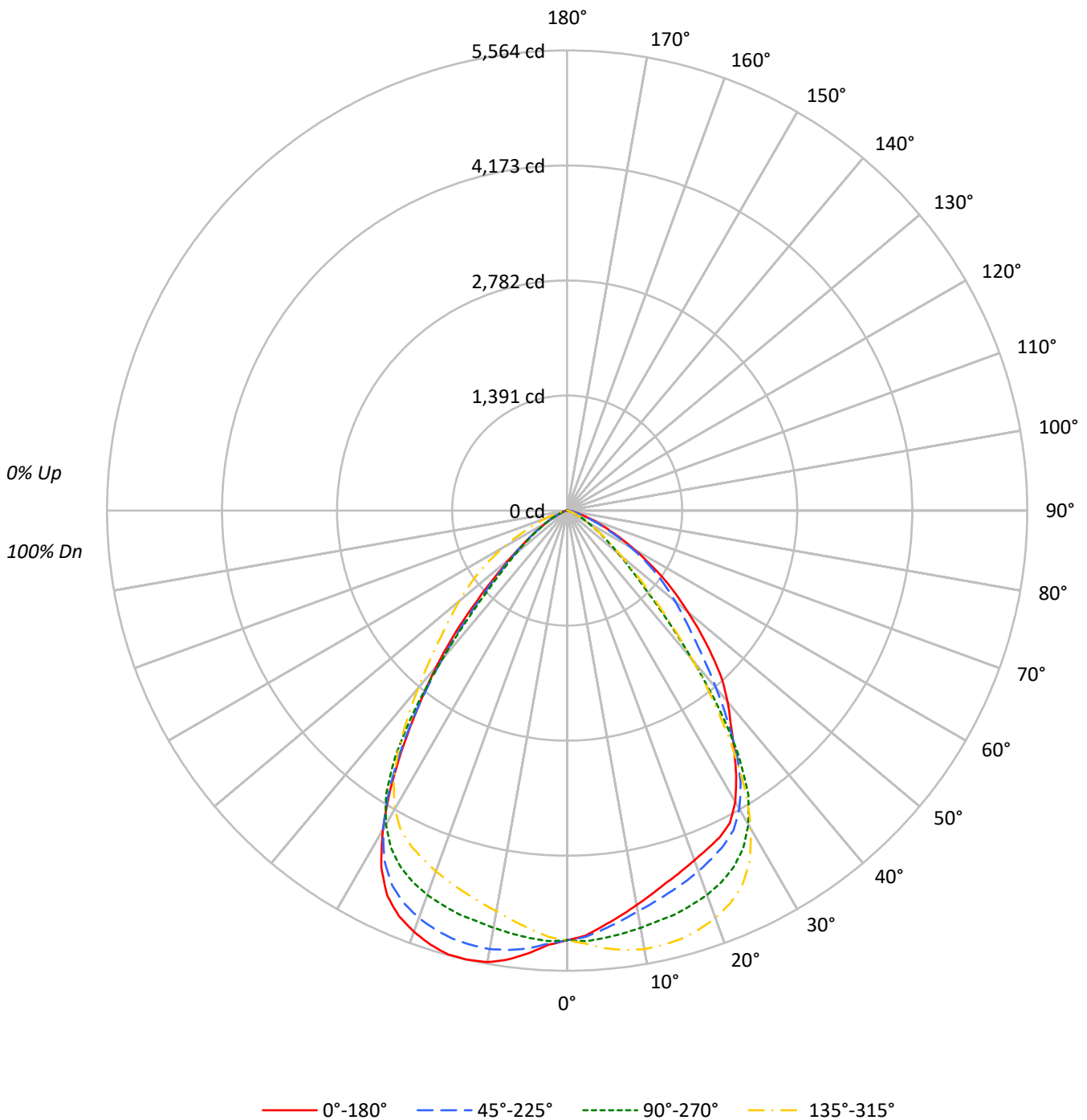
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	160219	160219	160219	160219
5°	155962	160596	166329	160596
10°	151647	160386	173572	160386
15°	148619	161338	177374	161338
20°	147607	162259	177826	162259
25°	148383	161934	174969	161934
30°	144713	156007	158809	156007
35°	132368	136091	129123	136091
40°	121527	94669	98860	94669
45°	107981	57752	66822	57752
50°	91398	38580	42840	38580
55°	75702	26327	27822	26327
60°	57738	17521	17675	17521
65°	40911	10916	9996	10916
70°	29509	7312	6636	7312
75°	18741	3634	3026	3634
80°	13070	2699	2237	2699
85°	11676	0	885	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	494.5	5.7
10°-20°	1432.1	16.4
20°-30°	2168.5	24.8
30°-40°	2173.4	24.8
40°-50°	1364.8	15.6
50°-60°	727.3	8.3
60°-70°	299.1	3.4
70°-80°	79.0	0.9
80°-90°	13.4	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°	4095.1	46.8
0°-40°	6268.5	71.6
0°-60°	8360.5	95.5
0°-90°	8752.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8752.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	5196	5196	5196	5196	5196	
5°	5038	5188	5373	5188	5038	475
15°	4655	5054	5556	5054	4655	1317
25°	4361	4759	5142	4759	4361	2000
35°	3516	3615	3430	3615	3516	2203
45°	2476	1324	1532	1324	2476	1904
55°	1408	490	518	490	1408	1255
65°	561	150	137	150	561	582
75°	157	30	25	30	157	178
85°	33	0	2	0	33	36
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°	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8
2.5°	5142.5	5137.4	5134.9	5140.0	5142.5	5152.7	5150.2	5155.2	5155.2	5157.8	5162.8
5°	5038.5	5035.9	5038.5	5038.5	5048.6	5058.8	5056.3	5063.9	5068.9	5081.6	5086.7
7.5°	4942.1	4942.1	4939.5	4949.7	4954.8	4970.0	4967.4	4980.1	4987.8	5000.4	5018.2
10°	4843.1	4843.1	4845.6	4853.3	4855.9	4878.6	4878.6	4896.4	4906.5	4919.3	4942.1
12.5°	4746.8	4746.8	4762.0	4756.9	4767.0	4784.8	4792.4	4810.1	4825.4	4850.8	4873.6
15°	4655.4	4655.4	4660.5	4673.1	4680.8	4703.6	4716.3	4736.6	4754.4	4779.8	4812.8
17.5°	4576.8	4574.2	4576.8	4592.0	4607.2	4627.5	4637.6	4663.0	4680.8	4713.8	4744.3
20°	4498.1	4503.2	4503.2	4515.9	4526.0	4551.4	4561.5	4589.5	4609.8	4640.1	4675.7
22.5°	4429.6	4427.1	4427.1	4444.9	4452.5	4475.3	4485.4	4510.8	4533.6	4559.0	4592.0
25°	4361.1	4356.0	4366.2	4368.7	4373.7	4399.1	4406.7	4424.5	4447.4	4470.2	4503.2
27.5°	4259.6	4254.6	4257.1	4267.2	4274.9	4295.1	4300.2	4318.0	4335.7	4356.0	4384.0
30°	4064.2	4059.2	4056.7	4074.5	4082.1	4097.2	4104.9	4135.3	4140.4	4163.2	4183.5
32.5°	3805.5	3803.0	3808.1	3823.2	3830.8	3851.2	3861.3	3879.1	3891.7	3904.5	3924.7
35°	3516.3	3511.2	3516.3	3531.6	3531.6	3549.3	3556.9	3564.5	3561.9	3564.5	3559.4
37.5°	3247.4	3244.8	3247.4	3254.9	3247.4	3254.9	3247.4	3232.2	3204.3	3173.8	3143.3
40°	3019.0	3021.5	3006.4	3016.5	2988.5	2983.5	2955.7	2917.5	2861.8	2800.9	2714.6
42.5°	2775.5	2767.9	2757.8	2762.8	2740.0	2722.2	2676.5	2628.4	2557.3	2455.9	2351.8
45°	2476.1	2473.6	2468.5	2466.0	2450.8	2433.0	2394.9	2339.1	2260.5	2156.5	2032.1
47.5°	2184.4	2176.7	2176.7	2179.3	2161.5	2159.0	2128.5	2080.4	2011.9	1910.4	1781.0
50°	1905.2	1902.7	1907.9	1918.0	1905.2	1900.2	1880.0	1847.0	1786.1	1699.8	1578.0
52.5°	1654.1	1651.6	1656.7	1669.3	1664.2	1669.3	1649.1	1623.7	1583.1	1499.3	1392.8
55°	1408.1	1408.1	1408.1	1423.2	1423.2	1423.2	1413.1	1397.9	1359.8	1298.9	1200.1
57.5°	1151.8	1154.3	1169.6	1172.1	1169.6	1174.7	1172.1	1156.8	1131.6	1088.4	1012.3
60°	936.2	936.2	943.8	951.4	948.8	951.4	951.4	943.8	918.4	882.9	822.0
62.5°	740.8	748.4	743.3	748.4	758.5	748.4	743.3	738.3	720.5	697.7	646.9
65°	560.7	565.8	565.8	568.3	563.2	565.8	555.6	548.0	537.9	512.5	479.5
67.5°	426.3	426.3	426.3	426.3	423.7	421.1	418.6	411.0	393.3	383.1	347.5
70°	327.3	312.0	312.0	312.0	312.0	314.6	307.0	296.9	291.8	274.0	248.6
72.5°	218.1	223.3	218.1	218.1	213.1	215.6	205.5	200.4	195.4	185.3	170.0
75°	157.3	144.6	149.6	152.3	144.6	149.6	139.5	129.4	129.4	121.8	114.1
77.5°	101.5	99.0	101.5	104.0	101.5	99.0	93.9	88.8	88.8	86.3	78.6
80°	73.6	71.0	71.0	71.0	68.5	71.0	66.0	66.0	60.9	58.4	53.3
82.5°	48.2	48.2	45.6	48.2	45.6	48.2	40.6	40.6	40.6	38.0	33.0
85°	33.0	27.9	27.9	30.5	25.4	30.5	27.9	25.4	22.9	22.9	20.3
87.5°	15.2	17.8	15.2	17.8	15.2	15.2	17.8	15.2	15.2	10.1	10.1
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°	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8
2.5°	5170.4	5172.9	5172.9	5183.1	5188.2	5190.7	5190.7	5211.0	5203.4	5208.5	5213.5
5°	5096.9	5112.0	5117.2	5117.2	5145.0	5155.2	5165.3	5188.2	5190.7	5205.9	5223.7
7.5°	5025.8	5043.5	5053.8	5076.5	5094.3	5112.0	5142.5	5157.8	5172.9	5193.3	5216.0
10°	4957.3	4977.6	4997.9	5015.7	5043.5	5066.4	5086.7	5122.2	5140.0	5167.9	5198.3
12.5°	4891.4	4919.3	4937.0	4967.4	4997.9	5018.2	5048.6	5081.6	5109.5	5137.4	5172.9
15°	4833.0	4866.0	4886.3	4919.3	4952.3	4980.1	5013.1	5053.8	5074.0	5107.0	5140.0
17.5°	4769.5	4805.1	4830.5	4860.9	4901.5	4931.9	4959.9	5000.4	5025.8	5061.3	5099.4
20°	4703.6	4739.1	4769.5	4800.0	4840.6	4871.0	4904.0	4944.6	4972.5	5008.0	5038.5
22.5°	4625.0	4658.0	4690.9	4726.4	4767.0	4792.4	4830.5	4866.0	4896.4	4929.4	4959.9
25°	4523.5	4564.1	4589.5	4622.4	4655.4	4683.3	4723.9	4759.4	4784.8	4815.3	4843.1
27.5°	4404.2	4434.7	4455.0	4482.9	4515.9	4541.2	4571.6	4607.2	4632.6	4660.5	4680.8
30°	4201.2	4229.2	4247.0	4267.2	4300.2	4323.1	4348.5	4381.4	4399.1	4419.5	4437.2
32.5°	3934.8	3957.7	3967.8	3983.1	4006.0	4028.7	4049.1	4077.0	4084.6	4097.2	4097.2
35°	3549.3	3554.3	3551.8	3556.9	3567.1	3579.7	3597.5	3615.2	3625.3	3625.3	3617.8
37.5°	3097.7	3067.3	3034.3	3008.9	3001.3	2996.2	3006.4	3013.9	3024.2	3029.2	3016.5
40°	2628.4	2559.9	2486.3	2420.3	2374.6	2354.4	2346.7	2351.8	2351.8	2369.5	2369.5
42.5°	2225.0	2118.4	2009.4	1910.4	1844.4	1793.7	1770.8	1770.8	1773.4	1786.1	1793.7
45°	1890.1	1755.6	1628.7	1519.7	1428.3	1362.3	1331.9	1324.3	1321.8	1326.8	1344.6
47.5°	1633.8	1494.3	1362.3	1227.9	1131.6	1065.6	1037.7	1027.4	1017.3	1027.4	1030.1
50°	1433.4	1288.8	1149.3	1014.8	913.3	854.9	819.4	804.2	801.7	801.7	806.8
52.5°	1250.7	1116.3	976.8	839.8	733.2	677.4	644.4	636.8	626.7	636.8	636.8
55°	1078.2	943.8	806.8	677.4	588.5	530.3	499.8	489.7	484.5	492.2	492.2
57.5°	890.5	776.3	649.5	532.8	444.0	403.4	380.5	367.9	365.3	370.4	365.3
60°	730.7	634.3	525.2	418.6	350.1	307.0	289.3	284.1	279.0	284.1	284.1
62.5°	578.4	497.3	408.4	327.3	268.9	238.5	218.1	218.1	215.6	215.6	218.1
65°	428.8	365.3	301.9	233.4	187.8	164.9	149.6	149.6	147.1	149.6	147.1
67.5°	312.0	268.9	218.1	170.0	134.5	121.8	111.6	104.0	109.1	104.0	101.5
70°	228.4	192.8	157.3	129.4	104.0	91.4	83.7	81.1	76.1	76.1	76.1
72.5°	152.3	129.4	106.5	83.7	68.5	55.8	53.3	48.2	43.1	45.6	50.8
75°	101.5	86.3	76.1	60.9	45.6	45.6	30.5	30.5	25.4	30.5	22.9
77.5°	71.0	58.4	45.6	38.0	30.5	27.9	20.3	20.3	17.8	17.8	17.8
80°	50.8	43.1	33.0	27.9	20.3	20.3	17.8	15.2	12.6	12.6	15.2
82.5°	30.5	22.9	22.9	20.3	12.6	10.1	7.6	10.1	5.1	5.1	5.1
85°	17.8	15.2	12.6	7.6	5.1	5.1	2.5	0.0	2.5	2.5	0.0
87.5°	10.1	5.1	5.1	2.5	0.0	2.5	2.5	0.0	0.0	0.0	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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8
2.5°	5226.3	5223.7	5228.8	5228.8	5244.0	5241.4	5249.0	5249.0	5244.0	5246.5	5256.7
5°	5244.0	5251.7	5266.8	5279.5	5302.3	5312.5	5325.2	5337.9	5340.4	5348.0	5355.7
7.5°	5244.0	5269.4	5287.2	5309.9	5340.4	5358.2	5386.0	5408.9	5419.0	5431.7	5446.9
10°	5233.8	5259.2	5292.2	5317.5	5355.7	5383.5	5411.4	5446.9	5462.2	5482.4	5502.8
12.5°	5213.5	5241.4	5276.9	5309.9	5353.0	5378.4	5413.9	5446.9	5469.8	5497.7	5520.5
15°	5183.1	5216.0	5249.0	5282.0	5327.7	5358.2	5391.2	5429.2	5452.0	5482.4	5502.8
17.5°	5134.9	5170.4	5200.9	5231.3	5274.4	5309.9	5340.4	5375.9	5398.8	5424.2	5452.0
20°	5076.5	5109.5	5142.5	5167.9	5211.0	5241.4	5274.4	5307.4	5325.2	5330.3	5373.4
22.5°	5003.0	5025.8	5051.2	5091.8	5117.2	5145.0	5175.5	5205.9	5223.7	5251.7	5266.8
25°	4881.2	4904.0	4931.9	4949.7	4980.1	5003.0	5033.4	5066.4	5076.5	5096.9	5112.0
27.5°	4711.3	4723.9	4736.6	4751.8	4769.5	4782.3	4800.0	4815.3	4825.4	4835.5	4845.6
30°	4442.3	4442.3	4442.3	4432.1	4439.7	4447.4	4449.9	4447.4	4447.4	4444.9	4444.9
32.5°	4087.1	4066.8	4044.0	4023.7	4016.1	4006.0	4000.8	3993.2	3980.6	3973.0	3975.5
35°	3607.6	3561.9	3534.1	3508.7	3488.4	3473.2	3465.6	3457.9	3455.4	3445.3	3435.1
37.5°	3008.9	2975.9	2955.7	2940.4	2922.7	2907.4	2909.9	2912.5	2920.0	2915.0	2917.5
40°	2374.6	2367.0	2374.6	2356.9	2351.8	2356.9	2369.5	2387.4	2397.5	2407.6	2425.4
42.5°	1806.3	1819.0	1836.8	1836.8	1844.4	1854.6	1869.7	1897.7	1912.9	1930.6	1951.0
45°	1359.8	1375.1	1397.9	1405.5	1410.6	1423.2	1441.1	1463.8	1474.0	1489.2	1507.0
47.5°	1047.8	1057.9	1070.6	1083.3	1095.9	1101.1	1118.8	1118.8	1131.6	1141.7	1146.7
50°	816.9	827.0	837.2	844.8	849.9	857.5	862.6	870.2	872.7	877.8	880.3
52.5°	639.3	652.0	652.0	657.0	664.7	672.3	669.8	672.3	674.8	674.8	682.4
55°	499.8	499.8	507.4	507.4	512.5	509.9	512.5	512.5	512.5	512.5	515.0
57.5°	372.9	375.5	383.1	378.0	375.5	380.5	375.5	380.5	378.0	383.1	375.5
60°	286.6	286.6	289.3	289.3	291.8	291.8	291.8	289.3	289.3	286.6	286.6
62.5°	215.6	218.1	220.8	218.1	218.1	218.1	215.6	215.6	213.1	210.5	210.5
65°	144.6	142.1	147.1	142.1	144.6	144.6	142.1	144.6	137.0	139.5	137.0
67.5°	104.0	101.5	99.0	101.5	99.0	96.4	96.4	99.0	101.5	93.9	93.9
70°	68.5	71.0	68.5	71.0	73.6	73.6	71.0	68.5	71.0	66.0	68.5
72.5°	43.1	43.1	43.1	43.1	43.1	45.6	45.6	45.6	40.6	40.6	38.0
75°	20.3	27.9	22.9	20.3	27.9	27.9	25.4	25.4	22.9	22.9	22.9
77.5°	20.3	15.2	15.2	15.2	15.2	15.2	15.2	15.2	12.6	15.2	12.6
80°	10.1	10.1	10.1	7.6	10.1	10.1	12.6	10.1	10.1	7.6	12.6
82.5°	5.1	5.1	5.1	0.0	2.5	5.1	5.1	2.5	5.1	5.1	2.5
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: P248977

CATALOG NUMBER: LSR8B90D010 EC8B90827 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8
2.5°	5254.2	5251.7	5254.2	5256.7	5254.2	5251.7	5254.2	5256.7	5246.5	5244.0	5249.0
5°	5365.8	5365.8	5370.8	5373.4	5370.8	5365.8	5365.8	5355.7	5348.0	5340.4	5337.9
7.5°	5462.2	5467.3	5472.3	5474.8	5472.3	5467.3	5462.2	5446.9	5431.7	5419.0	5408.9
10°	5520.5	5528.2	5538.3	5543.3	5538.3	5528.2	5520.5	5502.8	5482.4	5462.2	5446.9
12.5°	5545.9	5553.5	5566.2	5563.7	5566.2	5553.5	5545.9	5520.5	5497.7	5469.8	5446.9
15°	5528.2	5538.3	5550.9	5556.1	5550.9	5538.3	5528.2	5502.8	5482.4	5452.0	5429.2
17.5°	5472.3	5487.5	5495.2	5502.8	5495.2	5487.5	5472.3	5452.0	5424.2	5398.8	5375.9
20°	5396.2	5406.4	5416.5	5419.0	5416.5	5406.4	5396.2	5373.4	5330.3	5325.2	5307.4
22.5°	5287.2	5294.8	5317.5	5309.9	5317.5	5294.8	5287.2	5266.8	5251.7	5223.7	5205.9
25°	5129.8	5137.4	5140.0	5142.5	5140.0	5137.4	5129.8	5112.0	5096.9	5076.5	5066.4
27.5°	4858.4	4858.4	4863.4	4866.0	4863.4	4858.4	4858.4	4845.6	4835.5	4825.4	4815.3
30°	4447.4	4447.4	4447.4	4460.1	4447.4	4447.4	4447.4	4444.9	4444.9	4447.4	4447.4
32.5°	3973.0	3967.8	3962.8	3967.8	3962.8	3967.8	3973.0	3975.5	3973.0	3980.6	3993.2
35°	3435.1	3432.6	3440.2	3430.1	3440.2	3432.6	3435.1	3435.1	3445.3	3455.4	3457.9
37.5°	2920.0	2915.0	2925.2	2915.0	2925.2	2915.0	2920.0	2917.5	2915.0	2920.0	2912.5
40°	2430.5	2435.5	2435.5	2455.9	2435.5	2435.5	2430.5	2425.4	2407.6	2397.5	2387.4
42.5°	1961.1	1976.4	1971.2	1986.5	1971.2	1976.4	1961.1	1951.0	1930.6	1912.9	1897.7
45°	1517.1	1527.3	1527.3	1532.3	1527.3	1527.3	1517.1	1507.0	1489.2	1474.0	1463.8
47.5°	1164.4	1164.4	1164.4	1167.1	1164.4	1164.4	1164.4	1146.7	1141.7	1131.6	1118.8
50°	885.4	887.9	890.5	893.0	890.5	887.9	885.4	880.3	877.8	872.7	870.2
52.5°	679.9	682.4	677.4	682.4	677.4	682.4	679.9	682.4	674.8	674.8	672.3
55°	515.0	512.5	515.0	517.5	515.0	512.5	515.0	515.0	512.5	512.5	512.5
57.5°	378.0	372.9	372.9	372.9	372.9	372.9	378.0	375.5	383.1	378.0	380.5
60°	281.6	284.1	284.1	286.6	284.1	284.1	281.6	286.6	286.6	289.3	289.3
62.5°	208.0	215.6	210.5	215.6	210.5	215.6	208.0	210.5	210.5	213.1	215.6
65°	134.5	134.5	134.5	137.0	134.5	134.5	134.5	137.0	139.5	137.0	144.6
67.5°	91.4	93.9	99.0	96.4	99.0	93.9	91.4	93.9	93.9	101.5	99.0
70°	73.6	66.0	66.0	73.6	66.0	66.0	73.6	68.5	66.0	71.0	68.5
72.5°	43.1	38.0	43.1	43.1	43.1	38.0	43.1	38.0	40.6	40.6	45.6
75°	22.9	20.3	17.8	25.4	17.8	20.3	22.9	22.9	22.9	22.9	25.4
77.5°	15.2	12.6	17.8	17.8	17.8	12.6	15.2	12.6	15.2	12.6	15.2
80°	7.6	10.1	7.6	12.6	7.6	10.1	7.6	12.6	7.6	10.1	10.1
82.5°	2.5	5.1	5.1	5.1	5.1	5.1	2.5	2.5	5.1	5.1	2.5
85°	0.0	5.1	2.5	2.5	2.5	5.1	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	0.0	0.0	2.5	0.0	0.0	2.5	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: P248977

CATALOG NUMBER: LSR8B90D010 EC8B90827 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8
2.5°	5249.0	5241.4	5244.0	5228.8	5228.8	5223.7	5226.3	5213.5	5208.5	5203.4	5211.0
5°	5325.2	5312.5	5302.3	5279.5	5266.8	5251.7	5244.0	5223.7	5205.9	5190.7	5188.2
7.5°	5386.0	5358.2	5340.4	5309.9	5287.2	5269.4	5244.0	5216.0	5193.3	5172.9	5157.8
10°	5411.4	5383.5	5355.7	5317.5	5292.2	5259.2	5233.8	5198.3	5167.9	5140.0	5122.2
12.5°	5413.9	5378.4	5353.0	5309.9	5276.9	5241.4	5213.5	5172.9	5137.4	5109.5	5081.6
15°	5391.2	5358.2	5327.7	5282.0	5249.0	5216.0	5183.1	5140.0	5107.0	5074.0	5053.8
17.5°	5340.4	5309.9	5274.4	5231.3	5200.9	5170.4	5134.9	5099.4	5061.3	5025.8	5000.4
20°	5274.4	5241.4	5211.0	5167.9	5142.5	5109.5	5076.5	5038.5	5008.0	4972.5	4944.6
22.5°	5175.5	5145.0	5117.2	5091.8	5051.2	5025.8	5003.0	4959.9	4929.4	4896.4	4866.0
25°	5033.4	5003.0	4980.1	4949.7	4931.9	4904.0	4881.2	4843.1	4815.3	4784.8	4759.4
27.5°	4800.0	4782.3	4769.5	4751.8	4736.6	4723.9	4711.3	4680.8	4660.5	4632.6	4607.2
30°	4449.9	4447.4	4439.7	4432.1	4442.3	4442.3	4442.3	4437.2	4419.5	4399.1	4381.4
32.5°	4000.8	4006.0	4016.1	4023.7	4044.0	4066.8	4087.1	4097.2	4097.2	4084.6	4077.0
35°	3465.6	3473.2	3488.4	3508.7	3534.1	3561.9	3607.6	3617.8	3625.3	3625.3	3615.2
37.5°	2909.9	2907.4	2922.7	2940.4	2955.7	2975.9	3008.9	3016.5	3029.2	3024.2	3013.9
40°	2369.5	2356.9	2351.8	2356.9	2374.6	2367.0	2374.6	2369.5	2369.5	2351.8	2351.8
42.5°	1869.7	1854.6	1844.4	1836.8	1836.8	1819.0	1806.3	1793.7	1786.1	1773.4	1770.8
45°	1441.1	1423.2	1410.6	1405.5	1397.9	1375.1	1359.8	1344.6	1326.8	1321.8	1324.3
47.5°	1118.8	1101.1	1095.9	1083.3	1070.6	1057.9	1047.8	1030.1	1027.4	1017.3	1027.4
50°	862.6	857.5	849.9	844.8	837.2	827.0	816.9	806.8	801.7	801.7	804.2
52.5°	669.8	672.3	664.7	657.0	652.0	652.0	639.3	636.8	636.8	626.7	636.8
55°	512.5	509.9	512.5	507.4	507.4	499.8	499.8	492.2	492.2	484.5	489.7
57.5°	375.5	380.5	375.5	378.0	383.1	375.5	372.9	365.3	370.4	365.3	367.9
60°	291.8	291.8	291.8	289.3	289.3	286.6	286.6	284.1	284.1	279.0	284.1
62.5°	215.6	218.1	218.1	218.1	220.8	218.1	215.6	218.1	215.6	215.6	218.1
65°	142.1	144.6	144.6	142.1	147.1	142.1	144.6	147.1	149.6	147.1	149.6
67.5°	96.4	96.4	99.0	101.5	99.0	101.5	104.0	101.5	104.0	109.1	104.0
70°	71.0	73.6	73.6	71.0	68.5	71.0	68.5	76.1	76.1	76.1	81.1
72.5°	45.6	45.6	43.1	43.1	43.1	43.1	43.1	50.8	45.6	43.1	48.2
75°	25.4	27.9	27.9	20.3	22.9	27.9	20.3	22.9	30.5	25.4	30.5
77.5°	15.2	15.2	15.2	15.2	15.2	15.2	20.3	17.8	17.8	17.8	20.3
80°	12.6	10.1	10.1	7.6	10.1	10.1	10.1	15.2	12.6	12.6	15.2
82.5°	5.1	5.1	2.5	0.0	5.1	5.1	5.1	5.1	5.1	5.1	10.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	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: P248977

CATALOG NUMBER: LSR8B90D010 EC8B90827 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8
2.5°	5190.7	5190.7	5188.2	5183.1	5172.9	5172.9	5170.4	5162.8	5157.8	5155.2	5155.2
5°	5165.3	5155.2	5145.0	5117.2	5117.2	5112.0	5096.9	5086.7	5081.6	5068.9	5063.9
7.5°	5142.5	5112.0	5094.3	5076.5	5053.8	5043.5	5025.8	5018.2	5000.4	4987.8	4980.1
10°	5086.7	5066.4	5043.5	5015.7	4997.9	4977.6	4957.3	4942.1	4919.3	4906.5	4896.4
12.5°	5048.6	5018.2	4997.9	4967.4	4937.0	4919.3	4891.4	4873.6	4850.8	4825.4	4810.1
15°	5013.1	4980.1	4952.3	4919.3	4886.3	4866.0	4833.0	4812.8	4779.8	4754.4	4736.6
17.5°	4959.9	4931.9	4901.5	4860.9	4830.5	4805.1	4769.5	4744.3	4713.8	4680.8	4663.0
20°	4904.0	4871.0	4840.6	4800.0	4769.5	4739.1	4703.6	4675.7	4640.1	4609.8	4589.5
22.5°	4830.5	4792.4	4767.0	4726.4	4690.9	4658.0	4625.0	4592.0	4559.0	4533.6	4510.8
25°	4723.9	4683.3	4655.4	4622.4	4589.5	4564.1	4523.5	4503.2	4470.2	4447.4	4424.5
27.5°	4571.6	4541.2	4515.9	4482.9	4455.0	4434.7	4404.2	4384.0	4356.0	4335.7	4318.0
30°	4348.5	4323.1	4300.2	4267.2	4247.0	4229.2	4201.2	4183.5	4163.2	4140.4	4135.3
32.5°	4049.1	4028.7	4006.0	3983.1	3967.8	3957.7	3934.8	3924.7	3904.5	3891.7	3879.1
35°	3597.5	3579.7	3567.1	3556.9	3551.8	3554.3	3549.3	3559.4	3564.5	3561.9	3564.5
37.5°	3006.4	2996.2	3001.3	3008.9	3034.3	3067.3	3097.7	3143.3	3173.8	3204.3	3232.2
40°	2346.7	2354.4	2374.6	2420.3	2486.3	2559.9	2628.4	2714.6	2800.9	2861.8	2917.5
42.5°	1770.8	1793.7	1844.4	1910.4	2009.4	2118.4	2225.0	2351.8	2455.9	2557.3	2628.4
45°	1331.9	1362.3	1428.3	1519.7	1628.7	1755.6	1890.1	2032.1	2156.5	2260.5	2339.1
47.5°	1037.7	1065.6	1131.6	1227.9	1362.3	1494.3	1633.8	1781.0	1910.4	2011.9	2080.4
50°	819.4	854.9	913.3	1014.8	1149.3	1288.8	1433.4	1578.0	1699.8	1786.1	1847.0
52.5°	644.4	677.4	733.2	839.8	976.8	1116.3	1250.7	1392.8	1499.3	1583.1	1623.7
55°	499.8	530.3	588.5	677.4	806.8	943.8	1078.2	1200.1	1298.9	1359.8	1397.9
57.5°	380.5	403.4	444.0	532.8	649.5	776.3	890.5	1012.3	1088.4	1131.6	1156.8
60°	289.3	307.0	350.1	418.6	525.2	634.3	730.7	822.0	882.9	918.4	943.8
62.5°	218.1	238.5	268.9	327.3	408.4	497.3	578.4	646.9	697.7	720.5	738.3
65°	149.6	164.9	187.8	233.4	301.9	365.3	428.8	479.5	512.5	537.9	548.0
67.5°	111.6	121.8	134.5	170.0	218.1	268.9	312.0	347.5	383.1	393.3	411.0
70°	83.7	91.4	104.0	129.4	157.3	192.8	228.4	248.6	274.0	291.8	296.9
72.5°	53.3	55.8	68.5	83.7	106.5	129.4	152.3	170.0	185.3	195.4	200.4
75°	30.5	45.6	45.6	60.9	76.1	86.3	101.5	114.1	121.8	129.4	129.4
77.5°	20.3	27.9	30.5	38.0	45.6	58.4	71.0	78.6	86.3	88.8	88.8
80°	17.8	20.3	20.3	27.9	33.0	43.1	50.8	53.3	58.4	60.9	66.0
82.5°	7.6	10.1	12.6	20.3	22.9	22.9	30.5	33.0	38.0	40.6	40.6
85°	2.5	5.1	5.1	7.6	12.6	15.2	17.8	20.3	22.9	22.9	25.4
87.5°	2.5	2.5	0.0	2.5	5.1	5.1	10.1	10.1	10.1	15.2	15.2
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: P248977

CATALOG NUMBER: LSR8B90D010 EC8B90827 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8	5195.8
2.5°	5150.2	5152.7	5142.5	5140.0	5134.9	5137.4	5142.5
5°	5056.3	5058.8	5048.6	5038.5	5038.5	5035.9	5038.5
7.5°	4967.4	4970.0	4954.8	4949.7	4939.5	4942.1	4942.1
10°	4878.6	4878.6	4855.9	4853.3	4845.6	4843.1	4843.1
12.5°	4792.4	4784.8	4767.0	4756.9	4762.0	4746.8	4746.8
15°	4716.3	4703.6	4680.8	4673.1	4660.5	4655.4	4655.4
17.5°	4637.6	4627.5	4607.2	4592.0	4576.8	4574.2	4576.8
20°	4561.5	4551.4	4526.0	4515.9	4503.2	4503.2	4498.1
22.5°	4485.4	4475.3	4452.5	4444.9	4427.1	4427.1	4429.6
25°	4406.7	4399.1	4373.7	4368.7	4366.2	4356.0	4361.1
27.5°	4300.2	4295.1	4274.9	4267.2	4257.1	4254.6	4259.6
30°	4104.9	4097.2	4082.1	4074.5	4056.7	4059.2	4064.2
32.5°	3861.3	3851.2	3830.8	3823.2	3808.1	3803.0	3805.5
35°	3556.9	3549.3	3531.6	3531.6	3516.3	3511.2	3516.3
37.5°	3247.4	3254.9	3247.4	3254.9	3247.4	3244.8	3247.4
40°	2955.7	2983.5	2988.5	3016.5	3006.4	3021.5	3019.0
42.5°	2676.5	2722.2	2740.0	2762.8	2757.8	2767.9	2775.5
45°	2394.9	2433.0	2450.8	2466.0	2468.5	2473.6	2476.1
47.5°	2128.5	2159.0	2161.5	2179.3	2176.7	2176.7	2184.4
50°	1880.0	1900.2	1905.2	1918.0	1907.9	1902.7	1905.2
52.5°	1649.1	1669.3	1664.2	1669.3	1656.7	1651.6	1654.1
55°	1413.1	1423.2	1423.2	1423.2	1408.1	1408.1	1408.1
57.5°	1172.1	1174.7	1169.6	1172.1	1169.6	1154.3	1151.8
60°	951.4	951.4	948.8	951.4	943.8	936.2	936.2
62.5°	743.3	748.4	758.5	748.4	743.3	748.4	740.8
65°	555.6	565.8	563.2	568.3	565.8	565.8	560.7
67.5°	418.6	421.1	423.7	426.3	426.3	426.3	426.3
70°	307.0	314.6	312.0	312.0	312.0	312.0	327.3
72.5°	205.5	215.6	213.1	218.1	218.1	223.3	218.1
75°	139.5	149.6	144.6	152.3	149.6	144.6	157.3
77.5°	93.9	99.0	101.5	104.0	101.5	99.0	101.5
80°	66.0	71.0	68.5	71.0	71.0	71.0	73.6
82.5°	40.6	48.2	45.6	48.2	45.6	48.2	48.2
85°	27.9	30.5	25.4	30.5	27.9	27.9	33.0
87.5°	17.8	15.2	15.2	17.8	15.2	17.8	15.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)