

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: P249004

Luminaire Tested: **LD8B90D010 ER8B90840 8LBSW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249004  
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: LD8B90D010 ER8B90840 8LBSW0MW  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 4000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9268.0 lumens  
Efficiency: N/A  
Efficacy: 107.6 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

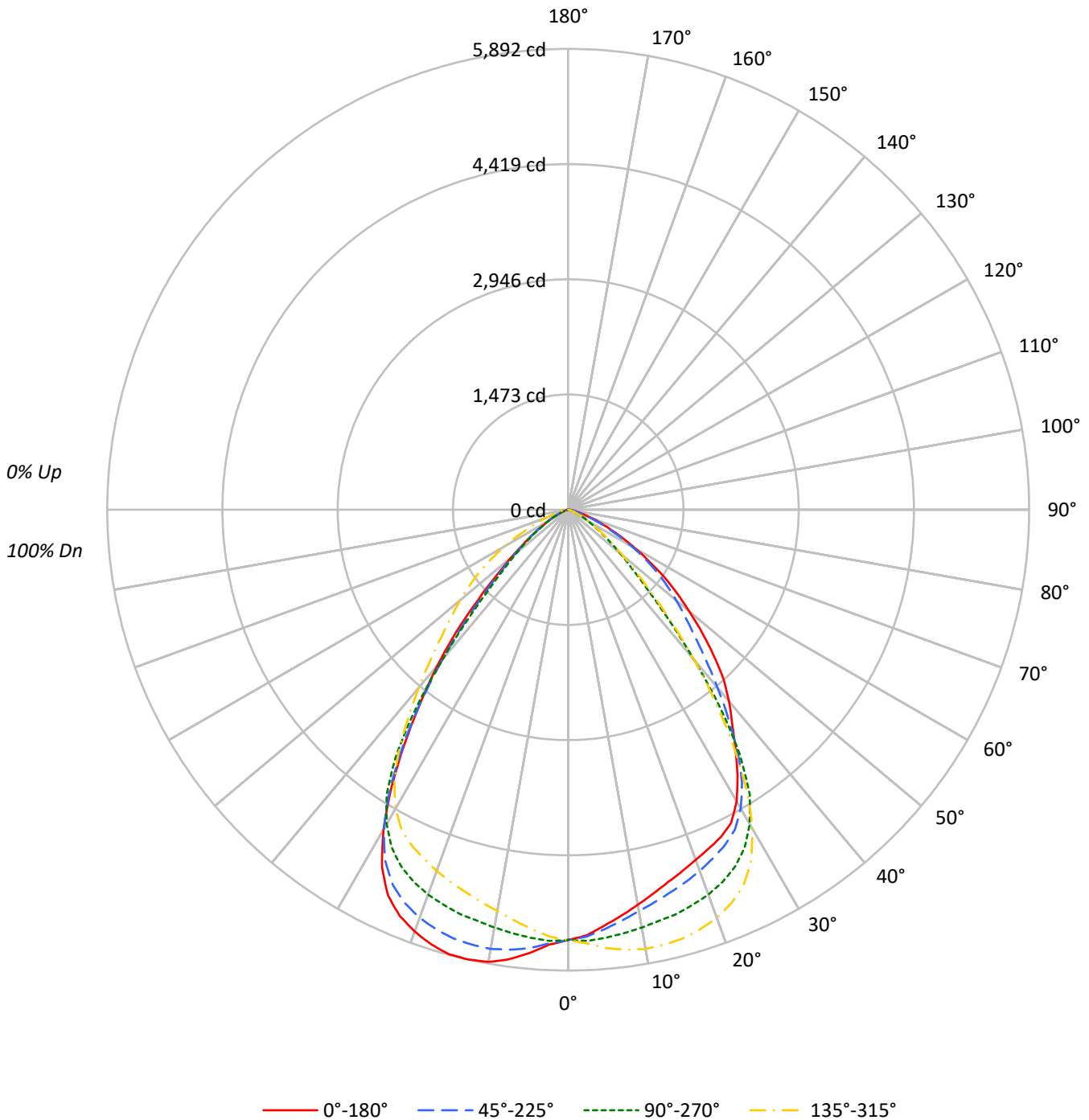
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249004

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0MW

### Luminous Intensity Polar Plot





TEST NUMBER: P249004

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0MW

**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°	169664	169664	169664	169664
5°	165159	170062	176135	170062
10°	160590	169843	183805	169843
15°	157383	170848	187829	170848
20°	156309	171828	188311	171828
25°	157130	171482	185285	171482
30°	153248	165204	168174	165204
35°	140172	144113	136735	144113
40°	128692	100248	104688	100248
45°	114348	61157	70765	61157
50°	96790	40854	45368	40854
55°	80164	27875	29461	27875
60°	61142	18557	18718	18557
65°	43319	11565	10587	11565
70°	31249	7745	7032	7745
75°	19837	3848	3205	3848
80°	13851	2859	2380	2859
85°	12348	0	955	0



TEST NUMBER: P249004

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	523.7	5.7
10°-20°	1516.5	16.4
20°-30°	2296.4	24.8
30°-40°	2301.5	24.8
40°-50°	1445.2	15.6
50°-60°	770.2	8.3
60°-70°	316.7	3.4
70°-80°	83.7	0.9
80°-90°	14.1	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°	4336.6	46.8
0°-40°	6638.1	71.6
0°-60°	8853.5	95.5
0°-90°	9268.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9268.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	5502	5502	5502	5502	5502	
5°	5336	5494	5690	5494	5336	503
15°	4930	5352	5884	5352	4930	1394
25°	4618	5040	5446	5040	4618	2118
35°	3724	3828	3632	3828	3724	2333
45°	2622	1402	1623	1402	2622	2017
55°	1491	518	548	518	1491	1329
65°	594	158	145	158	594	616
75°	166	32	27	32	166	189
85°	35	0	3	0	35	38
90°	0	0	0	0	0	



TEST NUMBER: P249004

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0MW

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1
2.5°	5445.7	5440.3	5437.6	5443.1	5445.7	5456.4	5453.8	5459.1	5459.1	5461.9	5467.2
5°	5335.6	5332.8	5335.6	5335.6	5346.3	5357.0	5354.4	5362.5	5367.8	5381.3	5386.6
7.5°	5233.5	5233.5	5230.7	5241.5	5246.9	5263.0	5260.3	5273.8	5281.8	5295.2	5314.0
10°	5128.7	5128.7	5131.3	5139.4	5142.2	5166.3	5166.3	5185.1	5195.8	5209.3	5233.5
12.5°	5026.6	5026.6	5042.8	5037.3	5048.1	5066.9	5074.9	5093.7	5109.9	5136.8	5161.0
15°	4929.9	4929.9	4935.3	4948.7	4956.7	4980.9	4994.3	5015.9	5034.7	5061.6	5096.5
17.5°	4846.6	4843.9	4846.6	4862.7	4878.9	4900.3	4911.1	4937.9	4956.7	4991.7	5024.0
20°	4763.3	4768.7	4768.7	4782.1	4792.8	4819.7	4830.4	4860.1	4881.5	4913.7	4951.4
22.5°	4690.8	4688.1	4688.1	4706.9	4715.0	4739.1	4749.8	4776.7	4800.9	4827.8	4862.7
25°	4618.2	4612.8	4623.7	4626.3	4631.6	4658.5	4666.6	4685.4	4709.6	4733.8	4768.7
27.5°	4510.8	4505.4	4508.1	4518.8	4526.9	4548.3	4553.8	4572.6	4591.4	4612.8	4642.5
30°	4303.9	4298.5	4295.9	4314.7	4322.8	4338.8	4346.9	4379.2	4384.5	4408.7	4430.1
32.5°	4029.8	4027.2	4032.6	4048.6	4056.7	4078.3	4089.0	4107.8	4121.2	4134.7	4156.1
35°	3723.6	3718.2	3723.6	3739.8	3739.8	3758.6	3766.6	3774.6	3772.0	3774.6	3769.3
37.5°	3438.9	3436.1	3438.9	3446.8	3438.9	3446.8	3438.9	3422.7	3393.2	3360.9	3328.6
40°	3197.0	3199.7	3183.7	3194.4	3164.7	3159.4	3129.9	3089.6	3030.5	2966.0	2874.7
42.5°	2939.2	2931.1	2920.4	2925.7	2901.6	2882.7	2834.3	2783.3	2708.0	2600.7	2490.4
45°	2622.1	2619.5	2614.0	2611.4	2595.2	2576.5	2536.1	2477.0	2393.8	2283.6	2151.9
47.5°	2313.2	2305.1	2305.1	2307.7	2288.9	2286.3	2254.0	2203.0	2130.5	2023.0	1886.0
50°	2017.6	2014.9	2020.3	2031.1	2017.6	2012.3	1990.8	1955.9	1891.4	1800.1	1671.0
52.5°	1751.6	1749.0	1754.4	1767.8	1762.3	1767.8	1746.3	1719.4	1676.4	1587.7	1474.9
55°	1491.1	1491.1	1491.1	1507.1	1507.1	1507.1	1496.4	1480.4	1440.0	1375.5	1270.8
57.5°	1219.7	1222.4	1238.5	1241.2	1238.5	1243.9	1241.2	1225.0	1198.3	1152.6	1072.0
60°	991.4	991.4	999.4	1007.5	1004.7	1007.5	1007.5	999.4	972.6	935.0	870.5
62.5°	784.5	792.5	787.1	792.5	803.3	792.5	787.1	781.8	763.0	738.8	685.1
65°	593.7	599.1	599.1	601.8	596.4	599.1	588.4	580.3	569.6	542.7	507.8
67.5°	451.4	451.4	451.4	451.4	448.6	446.0	443.3	435.3	416.5	405.7	368.0
70°	346.6	330.4	330.4	330.4	330.4	333.2	325.1	314.4	309.0	290.2	263.3
72.5°	231.0	236.4	231.0	231.0	225.7	228.4	217.6	212.2	206.9	196.2	180.0
75°	166.5	153.2	158.5	161.2	153.2	158.5	147.7	137.0	137.0	128.9	120.9
77.5°	107.5	104.8	107.5	110.1	107.5	104.8	99.4	94.0	94.0	91.3	83.3
80°	78.0	75.2	75.2	75.2	72.5	75.2	69.9	69.9	64.5	61.8	56.4
82.5°	51.1	51.1	48.3	51.1	48.3	51.1	43.0	43.0	43.0	40.3	34.9
85°	34.9	29.5	29.5	32.3	26.9	32.3	29.5	26.9	24.2	24.2	21.5
87.5°	16.1	18.8	16.1	18.8	16.1	16.1	18.8	16.1	16.1	10.7	10.7
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: P249004

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1
2.5°	5475.2	5477.9	5477.9	5488.7	5494.0	5496.7	5496.7	5518.3	5510.2	5515.6	5520.9
5°	5397.4	5413.4	5418.8	5418.8	5448.4	5459.1	5469.8	5494.0	5496.7	5512.8	5531.6
7.5°	5322.1	5340.9	5351.7	5375.8	5394.6	5413.4	5445.7	5461.9	5477.9	5499.5	5523.6
10°	5249.5	5271.1	5292.6	5311.4	5340.9	5365.1	5386.6	5424.2	5443.1	5472.6	5504.8
12.5°	5179.8	5209.3	5228.1	5260.3	5292.6	5314.0	5346.3	5381.3	5410.8	5440.3	5477.9
15°	5118.0	5152.9	5174.4	5209.3	5244.2	5273.8	5308.7	5351.7	5373.2	5408.1	5443.1
17.5°	5050.7	5088.4	5115.3	5147.5	5190.5	5222.7	5252.3	5295.2	5322.1	5359.7	5400.1
20°	4980.9	5018.5	5050.7	5083.0	5126.0	5158.2	5193.2	5236.2	5265.7	5303.3	5335.6
22.5°	4897.7	4932.6	4967.5	5005.1	5048.1	5074.9	5115.3	5152.9	5185.1	5220.0	5252.3
25°	4790.2	4833.2	4860.1	4894.9	4929.9	4959.4	5002.4	5040.0	5066.9	5099.2	5128.7
27.5°	4663.9	4696.2	4717.6	4747.2	4782.1	4809.0	4841.2	4878.9	4905.7	4935.3	4956.7
30°	4448.9	4478.6	4497.4	4518.8	4553.8	4578.0	4604.9	4639.7	4658.5	4680.1	4698.9
32.5°	4166.8	4191.1	4201.8	4217.9	4242.1	4266.3	4287.8	4317.3	4325.4	4338.8	4338.8
35°	3758.6	3763.9	3761.2	3766.6	3777.4	3790.8	3809.5	3828.3	3839.1	3839.1	3831.1
37.5°	3280.3	3248.1	3213.2	3186.3	3178.2	3172.8	3183.7	3191.6	3202.5	3207.8	3194.4
40°	2783.3	2710.8	2632.8	2563.0	2514.6	2493.2	2485.1	2490.4	2490.4	2509.2	2509.2
42.5°	2356.2	2243.3	2127.8	2023.0	1953.1	1899.5	1875.2	1875.2	1877.9	1891.4	1899.5
45°	2001.5	1859.1	1724.7	1609.3	1512.5	1442.7	1410.5	1402.4	1399.7	1405.1	1423.9
47.5°	1730.2	1582.4	1442.7	1300.3	1198.3	1128.4	1098.9	1088.0	1077.3	1088.0	1090.8
50°	1518.0	1364.8	1217.1	1074.6	967.2	905.3	867.7	851.6	848.9	848.9	854.4
52.5°	1324.4	1182.1	1034.4	889.3	776.4	717.3	682.4	674.3	663.6	674.3	674.3
55°	1141.8	999.4	854.4	717.3	623.2	561.5	529.2	518.5	513.1	521.2	521.2
57.5°	943.0	822.1	687.8	564.2	470.2	427.2	403.0	389.6	386.8	392.2	386.8
60°	773.7	671.7	556.1	443.3	370.8	325.1	306.3	300.9	295.5	300.9	300.9
62.5°	612.5	526.6	432.5	346.6	284.7	252.6	231.0	231.0	228.4	228.4	231.0
65°	454.0	386.8	319.7	247.2	198.8	174.6	158.5	158.5	155.8	158.5	155.8
67.5°	330.4	284.7	231.0	180.0	142.4	128.9	118.2	110.1	115.6	110.1	107.5
70°	241.8	204.1	166.5	137.0	110.1	96.8	88.7	85.9	80.6	80.6	80.6
72.5°	161.2	137.0	112.8	88.7	72.5	59.1	56.4	51.1	45.7	48.3	53.7
75°	107.5	91.3	80.6	64.5	48.3	48.3	32.3	32.3	26.9	32.3	24.2
77.5°	75.2	61.8	48.3	40.3	32.3	29.5	21.5	21.5	18.8	18.8	18.8
80°	53.7	45.7	34.9	29.5	21.5	21.5	18.8	16.1	13.4	13.4	16.1
82.5°	32.3	24.2	24.2	21.5	13.4	10.7	8.1	10.7	5.4	5.4	5.4
85°	18.8	16.1	13.4	8.1	5.4	5.4	2.7	0.0	2.7	2.7	0.0
87.5°	10.7	5.4	5.4	2.7	0.0	2.7	2.7	0.0	0.0	0.0	5.4
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: P249004

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1
2.5°	5534.4	5531.6	5537.1	5537.1	5553.2	5550.4	5558.5	5558.5	5553.2	5555.9	5566.6
5°	5553.2	5561.3	5577.3	5590.8	5614.9	5625.7	5639.1	5652.6	5655.3	5663.3	5671.4
7.5°	5553.2	5580.1	5598.9	5623.0	5655.3	5674.1	5703.6	5727.8	5738.5	5751.9	5768.1
10°	5542.4	5569.2	5604.2	5631.1	5671.4	5700.9	5730.5	5768.1	5784.2	5805.7	5827.2
12.5°	5520.9	5550.4	5588.0	5623.0	5668.7	5695.5	5733.1	5768.1	5792.3	5821.8	5846.0
15°	5488.7	5523.6	5558.5	5593.5	5641.8	5674.1	5709.0	5749.3	5773.5	5805.7	5827.2
17.5°	5437.6	5475.2	5507.5	5539.7	5585.4	5623.0	5655.3	5692.9	5717.1	5744.0	5773.5
20°	5375.8	5410.8	5445.7	5472.6	5518.3	5550.4	5585.4	5620.3	5639.1	5644.5	5690.2
22.5°	5298.0	5322.1	5349.0	5392.0	5418.8	5448.4	5480.7	5512.8	5531.6	5561.3	5577.3
25°	5168.9	5193.2	5222.7	5241.5	5273.8	5298.0	5330.2	5365.1	5375.8	5397.4	5413.4
27.5°	4989.0	5002.4	5015.9	5031.9	5050.7	5064.2	5083.0	5099.2	5109.9	5120.6	5131.3
30°	4704.2	4704.2	4704.2	4693.4	4701.5	4709.6	4712.2	4709.6	4709.6	4706.9	4706.9
32.5°	4328.1	4306.6	4282.4	4260.9	4252.9	4242.1	4236.7	4228.7	4215.3	4207.2	4209.9
35°	3820.3	3772.0	3742.4	3715.6	3694.1	3678.0	3669.9	3661.8	3659.2	3648.4	3637.6
37.5°	3186.3	3151.4	3129.9	3113.8	3095.0	3078.8	3081.5	3084.2	3092.2	3086.9	3089.6
40°	2514.6	2506.6	2514.6	2495.8	2490.4	2495.8	2509.2	2528.1	2538.9	2549.6	2568.4
42.5°	1912.8	1926.2	1945.1	1945.1	1953.1	1963.9	1980.0	2009.6	2025.6	2044.4	2066.0
45°	1440.0	1456.1	1480.4	1488.3	1493.7	1507.1	1526.0	1550.1	1560.9	1577.0	1595.8
47.5°	1109.6	1120.3	1133.7	1147.2	1160.6	1166.0	1184.8	1184.8	1198.3	1209.0	1214.3
50°	865.1	875.8	886.5	894.6	900.0	908.1	913.4	921.5	924.1	929.6	932.2
52.5°	677.0	690.5	690.5	695.8	703.9	711.9	709.3	711.9	714.6	714.6	722.7
55°	529.2	529.2	537.3	537.3	542.7	540.0	542.7	542.7	542.7	542.7	545.4
57.5°	394.9	397.7	405.7	400.3	397.7	403.0	397.7	403.0	400.3	405.7	397.7
60°	303.5	303.5	306.3	306.3	309.0	309.0	309.0	306.3	306.3	303.5	303.5
62.5°	228.4	231.0	233.8	231.0	231.0	231.0	228.4	228.4	225.7	222.9	222.9
65°	153.2	150.5	155.8	150.5	153.2	153.2	150.5	153.2	145.1	147.7	145.1
67.5°	110.1	107.5	104.8	107.5	104.8	102.1	102.1	104.8	107.5	99.4	99.4
70°	72.5	75.2	72.5	75.2	78.0	78.0	75.2	72.5	75.2	69.9	72.5
72.5°	45.7	45.7	45.7	45.7	45.7	48.3	48.3	48.3	43.0	43.0	40.3
75°	21.5	29.5	24.2	21.5	29.5	29.5	26.9	26.9	24.2	24.2	24.2
77.5°	21.5	16.1	16.1	16.1	16.1	16.1	16.1	16.1	13.4	16.1	13.4
80°	10.7	10.7	10.7	8.1	10.7	10.7	13.4	10.7	10.7	8.1	13.4
82.5°	5.4	5.4	5.4	0.0	2.7	5.4	5.4	2.7	5.4	5.4	2.7
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: P249004

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1
2.5°	5563.9	5561.3	5563.9	5566.6	5563.9	5561.3	5563.9	5566.6	5555.9	5553.2	5558.5
5°	5682.1	5682.1	5687.5	5690.2	5687.5	5682.1	5682.1	5671.4	5663.3	5655.3	5652.6
7.5°	5784.2	5789.6	5794.9	5797.6	5794.9	5789.6	5784.2	5768.1	5751.9	5738.5	5727.8
10°	5846.0	5854.1	5864.8	5870.1	5864.8	5854.1	5846.0	5827.2	5805.7	5784.2	5768.1
12.5°	5872.9	5881.0	5894.4	5891.7	5894.4	5881.0	5872.9	5846.0	5821.8	5792.3	5768.1
15°	5854.1	5864.8	5878.2	5883.6	5878.2	5864.8	5854.1	5827.2	5805.7	5773.5	5749.3
17.5°	5794.9	5811.1	5819.2	5827.2	5819.2	5811.1	5794.9	5773.5	5744.0	5717.1	5692.9
20°	5714.3	5725.2	5735.9	5738.5	5735.9	5725.2	5714.3	5690.2	5644.5	5639.1	5620.3
22.5°	5598.9	5606.9	5631.1	5623.0	5631.1	5606.9	5598.9	5577.3	5561.3	5531.6	5512.8
25°	5432.2	5440.3	5443.1	5445.7	5443.1	5440.3	5432.2	5413.4	5397.4	5375.8	5365.1
27.5°	5144.8	5144.8	5150.1	5152.9	5150.1	5144.8	5144.8	5131.3	5120.6	5109.9	5099.2
30°	4709.6	4709.6	4709.6	4723.1	4709.6	4709.6	4709.6	4706.9	4706.9	4709.6	4709.6
32.5°	4207.2	4201.8	4196.5	4201.8	4196.5	4201.8	4207.2	4209.9	4207.2	4215.3	4228.7
35°	3637.6	3634.9	3643.0	3632.3	3643.0	3634.9	3637.6	3637.6	3648.4	3659.2	3661.8
37.5°	3092.2	3086.9	3097.6	3086.9	3097.6	3086.9	3092.2	3089.6	3086.9	3092.2	3084.2
40°	2573.8	2579.1	2579.1	2600.7	2579.1	2579.1	2573.8	2568.4	2549.6	2538.9	2528.1
42.5°	2076.7	2092.9	2087.5	2103.6	2087.5	2092.9	2076.7	2066.0	2044.4	2025.6	2009.6
45°	1606.5	1617.4	1617.4	1622.7	1617.4	1617.4	1606.5	1595.8	1577.0	1560.9	1550.1
47.5°	1233.1	1233.1	1233.1	1235.9	1233.1	1233.1	1233.1	1214.3	1209.0	1198.3	1184.8
50°	937.6	940.3	943.0	945.7	943.0	940.3	937.6	932.2	929.6	924.1	921.5
52.5°	720.0	722.7	717.3	722.7	717.3	722.7	720.0	722.7	714.6	714.6	711.9
55°	545.4	542.7	545.4	548.0	545.4	542.7	545.4	545.4	542.7	542.7	542.7
57.5°	400.3	394.9	394.9	394.9	394.9	394.9	400.3	397.7	405.7	400.3	403.0
60°	298.2	300.9	300.9	303.5	300.9	300.9	298.2	303.5	303.5	306.3	306.3
62.5°	220.3	228.4	222.9	228.4	222.9	228.4	220.3	222.9	222.9	225.7	228.4
65°	142.4	142.4	142.4	145.1	142.4	142.4	142.4	145.1	147.7	145.1	153.2
67.5°	96.8	99.4	104.8	102.1	104.8	99.4	96.8	99.4	99.4	107.5	104.8
70°	78.0	69.9	69.9	78.0	69.9	69.9	78.0	72.5	69.9	75.2	72.5
72.5°	45.7	40.3	45.7	45.7	45.7	40.3	45.7	40.3	43.0	43.0	48.3
75°	24.2	21.5	18.8	26.9	18.8	21.5	24.2	24.2	24.2	24.2	26.9
77.5°	16.1	13.4	18.8	18.8	18.8	13.4	16.1	13.4	16.1	13.4	16.1
80°	8.1	10.7	8.1	13.4	8.1	10.7	8.1	13.4	8.1	10.7	10.7
82.5°	2.7	5.4	5.4	5.4	5.4	5.4	2.7	2.7	5.4	5.4	2.7
85°	0.0	5.4	2.7	2.7	2.7	5.4	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	0.0	0.0	2.7	0.0	0.0	2.7	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: P249004

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1
2.5°	5558.5	5550.4	5553.2	5537.1	5537.1	5531.6	5534.4	5520.9	5515.6	5510.2	5518.3
5°	5639.1	5625.7	5614.9	5590.8	5577.3	5561.3	5553.2	5531.6	5512.8	5496.7	5494.0
7.5°	5703.6	5674.1	5655.3	5623.0	5598.9	5580.1	5553.2	5523.6	5499.5	5477.9	5461.9
10°	5730.5	5700.9	5671.4	5631.1	5604.2	5569.2	5542.4	5504.8	5472.6	5443.1	5424.2
12.5°	5733.1	5695.5	5668.7	5623.0	5588.0	5550.4	5520.9	5477.9	5440.3	5410.8	5381.3
15°	5709.0	5674.1	5641.8	5593.5	5558.5	5523.6	5488.7	5443.1	5408.1	5373.2	5351.7
17.5°	5655.3	5623.0	5585.4	5539.7	5507.5	5475.2	5437.6	5400.1	5359.7	5322.1	5295.2
20°	5585.4	5550.4	5518.3	5472.6	5445.7	5410.8	5375.8	5335.6	5303.3	5265.7	5236.2
22.5°	5480.7	5448.4	5418.8	5392.0	5349.0	5322.1	5298.0	5252.3	5220.0	5185.1	5152.9
25°	5330.2	5298.0	5273.8	5241.5	5222.7	5193.2	5168.9	5128.7	5099.2	5066.9	5040.0
27.5°	5083.0	5064.2	5050.7	5031.9	5015.9	5002.4	4989.0	4956.7	4935.3	4905.7	4878.9
30°	4712.2	4709.6	4701.5	4693.4	4704.2	4704.2	4704.2	4698.9	4680.1	4658.5	4639.7
32.5°	4236.7	4242.1	4252.9	4260.9	4282.4	4306.6	4328.1	4338.8	4338.8	4325.4	4317.3
35°	3669.9	3678.0	3694.1	3715.6	3742.4	3772.0	3820.3	3831.1	3839.1	3839.1	3828.3
37.5°	3081.5	3078.8	3095.0	3113.8	3129.9	3151.4	3186.3	3194.4	3207.8	3202.5	3191.6
40°	2509.2	2495.8	2490.4	2495.8	2514.6	2506.6	2514.6	2509.2	2509.2	2490.4	2490.4
42.5°	1980.0	1963.9	1953.1	1945.1	1945.1	1926.2	1912.8	1899.5	1891.4	1877.9	1875.2
45°	1526.0	1507.1	1493.7	1488.3	1480.4	1456.1	1440.0	1423.9	1405.1	1399.7	1402.4
47.5°	1184.8	1166.0	1160.6	1147.2	1133.7	1120.3	1109.6	1090.8	1088.0	1077.3	1088.0
50°	913.4	908.1	900.0	894.6	886.5	875.8	865.1	854.4	848.9	848.9	851.6
52.5°	709.3	711.9	703.9	695.8	690.5	690.5	677.0	674.3	674.3	663.6	674.3
55°	542.7	540.0	542.7	537.3	537.3	529.2	529.2	521.2	521.2	513.1	518.5
57.5°	397.7	403.0	397.7	400.3	405.7	397.7	394.9	386.8	392.2	386.8	389.6
60°	309.0	309.0	309.0	306.3	306.3	303.5	303.5	300.9	300.9	295.5	300.9
62.5°	228.4	231.0	231.0	231.0	233.8	231.0	228.4	231.0	228.4	228.4	231.0
65°	150.5	153.2	153.2	150.5	155.8	150.5	153.2	155.8	158.5	155.8	158.5
67.5°	102.1	102.1	104.8	107.5	104.8	107.5	110.1	107.5	110.1	115.6	110.1
70°	75.2	78.0	78.0	75.2	72.5	75.2	72.5	80.6	80.6	80.6	85.9
72.5°	48.3	48.3	45.7	45.7	45.7	45.7	45.7	53.7	48.3	45.7	51.1
75°	26.9	29.5	29.5	21.5	24.2	29.5	21.5	24.2	32.3	26.9	32.3
77.5°	16.1	16.1	16.1	16.1	16.1	16.1	21.5	18.8	18.8	18.8	21.5
80°	13.4	10.7	10.7	8.1	10.7	10.7	10.7	16.1	13.4	13.4	16.1
82.5°	5.4	5.4	2.7	0.0	5.4	5.4	5.4	5.4	5.4	5.4	10.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.7	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	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: P249004

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1
2.5°	5496.7	5496.7	5494.0	5488.7	5477.9	5477.9	5475.2	5467.2	5461.9	5459.1	5459.1
5°	5469.8	5459.1	5448.4	5418.8	5418.8	5413.4	5397.4	5386.6	5381.3	5367.8	5362.5
7.5°	5445.7	5413.4	5394.6	5375.8	5351.7	5340.9	5322.1	5314.0	5295.2	5281.8	5273.8
10°	5386.6	5365.1	5340.9	5311.4	5292.6	5271.1	5249.5	5233.5	5209.3	5195.8	5185.1
12.5°	5346.3	5314.0	5292.6	5260.3	5228.1	5209.3	5179.8	5161.0	5136.8	5109.9	5093.7
15°	5308.7	5273.8	5244.2	5209.3	5174.4	5152.9	5118.0	5096.5	5061.6	5034.7	5015.9
17.5°	5252.3	5222.7	5190.5	5147.5	5115.3	5088.4	5050.7	5024.0	4991.7	4956.7	4937.9
20°	5193.2	5158.2	5126.0	5083.0	5050.7	5018.5	4980.9	4951.4	4913.7	4881.5	4860.1
22.5°	5115.3	5074.9	5048.1	5005.1	4967.5	4932.6	4897.7	4862.7	4827.8	4800.9	4776.7
25°	5002.4	4959.4	4929.9	4894.9	4860.1	4833.2	4790.2	4768.7	4733.8	4709.6	4685.4
27.5°	4841.2	4809.0	4782.1	4747.2	4717.6	4696.2	4663.9	4642.5	4612.8	4591.4	4572.6
30°	4604.9	4578.0	4553.8	4518.8	4497.4	4478.6	4448.9	4430.1	4408.7	4384.5	4379.2
32.5°	4287.8	4266.3	4242.1	4217.9	4201.8	4191.1	4166.8	4156.1	4134.7	4121.2	4107.8
35°	3809.5	3790.8	3777.4	3766.6	3761.2	3763.9	3758.6	3769.3	3774.6	3772.0	3774.6
37.5°	3183.7	3172.8	3178.2	3186.3	3213.2	3248.1	3280.3	3328.6	3360.9	3393.2	3422.7
40°	2485.1	2493.2	2514.6	2563.0	2632.8	2710.8	2783.3	2874.7	2966.0	3030.5	3089.6
42.5°	1875.2	1899.5	1953.1	2023.0	2127.8	2243.3	2356.2	2490.4	2600.7	2708.0	2783.3
45°	1410.5	1442.7	1512.5	1609.3	1724.7	1859.1	2001.5	2151.9	2283.6	2393.8	2477.0
47.5°	1098.9	1128.4	1198.3	1300.3	1442.7	1582.4	1730.2	1886.0	2023.0	2130.5	2203.0
50°	867.7	905.3	967.2	1074.6	1217.1	1364.8	1518.0	1671.0	1800.1	1891.4	1955.9
52.5°	682.4	717.3	776.4	889.3	1034.4	1182.1	1324.4	1474.9	1587.7	1676.4	1719.4
55°	529.2	561.5	623.2	717.3	854.4	999.4	1141.8	1270.8	1375.5	1440.0	1480.4
57.5°	403.0	427.2	470.2	564.2	687.8	822.1	943.0	1072.0	1152.6	1198.3	1225.0
60°	306.3	325.1	370.8	443.3	556.1	671.7	773.7	870.5	935.0	972.6	999.4
62.5°	231.0	252.6	284.7	346.6	432.5	526.6	612.5	685.1	738.8	763.0	781.8
65°	158.5	174.6	198.8	247.2	319.7	386.8	454.0	507.8	542.7	569.6	580.3
67.5°	118.2	128.9	142.4	180.0	231.0	284.7	330.4	368.0	405.7	416.5	435.3
70°	88.7	96.8	110.1	137.0	166.5	204.1	241.8	263.3	290.2	309.0	314.4
72.5°	56.4	59.1	72.5	88.7	112.8	137.0	161.2	180.0	196.2	206.9	212.2
75°	32.3	48.3	48.3	64.5	80.6	91.3	107.5	120.9	128.9	137.0	137.0
77.5°	21.5	29.5	32.3	40.3	48.3	61.8	75.2	83.3	91.3	94.0	94.0
80°	18.8	21.5	21.5	29.5	34.9	45.7	53.7	56.4	61.8	64.5	69.9
82.5°	8.1	10.7	13.4	21.5	24.2	24.2	32.3	34.9	40.3	43.0	43.0
85°	2.7	5.4	5.4	8.1	13.4	16.1	18.8	21.5	24.2	24.2	26.9
87.5°	2.7	2.7	0.0	2.7	5.4	5.4	10.7	10.7	10.7	16.1	16.1
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: P249004

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1	5502.1
2.5°	5453.8	5456.4	5445.7	5443.1	5437.6	5440.3	5445.7
5°	5354.4	5357.0	5346.3	5335.6	5335.6	5332.8	5335.6
7.5°	5260.3	5263.0	5246.9	5241.5	5230.7	5233.5	5233.5
10°	5166.3	5166.3	5142.2	5139.4	5131.3	5128.7	5128.7
12.5°	5074.9	5066.9	5048.1	5037.3	5042.8	5026.6	5026.6
15°	4994.3	4980.9	4956.7	4948.7	4935.3	4929.9	4929.9
17.5°	4911.1	4900.3	4878.9	4862.7	4846.6	4843.9	4846.6
20°	4830.4	4819.7	4792.8	4782.1	4768.7	4768.7	4763.3
22.5°	4749.8	4739.1	4715.0	4706.9	4688.1	4688.1	4690.8
25°	4666.6	4658.5	4631.6	4626.3	4623.7	4612.8	4618.2
27.5°	4553.8	4548.3	4526.9	4518.8	4508.1	4505.4	4510.8
30°	4346.9	4338.8	4322.8	4314.7	4295.9	4298.5	4303.9
32.5°	4089.0	4078.3	4056.7	4048.6	4032.6	4027.2	4029.8
35°	3766.6	3758.6	3739.8	3739.8	3723.6	3718.2	3723.6
37.5°	3438.9	3446.8	3438.9	3446.8	3438.9	3436.1	3438.9
40°	3129.9	3159.4	3164.7	3194.4	3183.7	3199.7	3197.0
42.5°	2834.3	2882.7	2901.6	2925.7	2920.4	2931.1	2939.2
45°	2536.1	2576.5	2595.2	2611.4	2614.0	2619.5	2622.1
47.5°	2254.0	2286.3	2288.9	2307.7	2305.1	2305.1	2313.2
50°	1990.8	2012.3	2017.6	2031.1	2020.3	2014.9	2017.6
52.5°	1746.3	1767.8	1762.3	1767.8	1754.4	1749.0	1751.6
55°	1496.4	1507.1	1507.1	1507.1	1491.1	1491.1	1491.1
57.5°	1241.2	1243.9	1238.5	1241.2	1238.5	1222.4	1219.7
60°	1007.5	1007.5	1004.7	1007.5	999.4	991.4	991.4
62.5°	787.1	792.5	803.3	792.5	787.1	792.5	784.5
65°	588.4	599.1	596.4	601.8	599.1	599.1	593.7
67.5°	443.3	446.0	448.6	451.4	451.4	451.4	451.4
70°	325.1	333.2	330.4	330.4	330.4	330.4	346.6
72.5°	217.6	228.4	225.7	231.0	231.0	236.4	231.0
75°	147.7	158.5	153.2	161.2	158.5	153.2	166.5
77.5°	99.4	104.8	107.5	110.1	107.5	104.8	107.5
80°	69.9	75.2	72.5	75.2	75.2	75.2	78.0
82.5°	43.0	51.1	48.3	51.1	48.3	51.1	51.1
85°	29.5	32.3	26.9	32.3	29.5	29.5	34.9
87.5°	18.8	16.1	16.1	18.8	16.1	18.8	16.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)