

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: P248788

Luminaire Tested: **LD8B90D010 ER8B90840 8LBSW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248788  
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 8LBSW0GPH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 4000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8668.0 lumens  
Efficiency: N/A  
Efficacy: 100.7 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

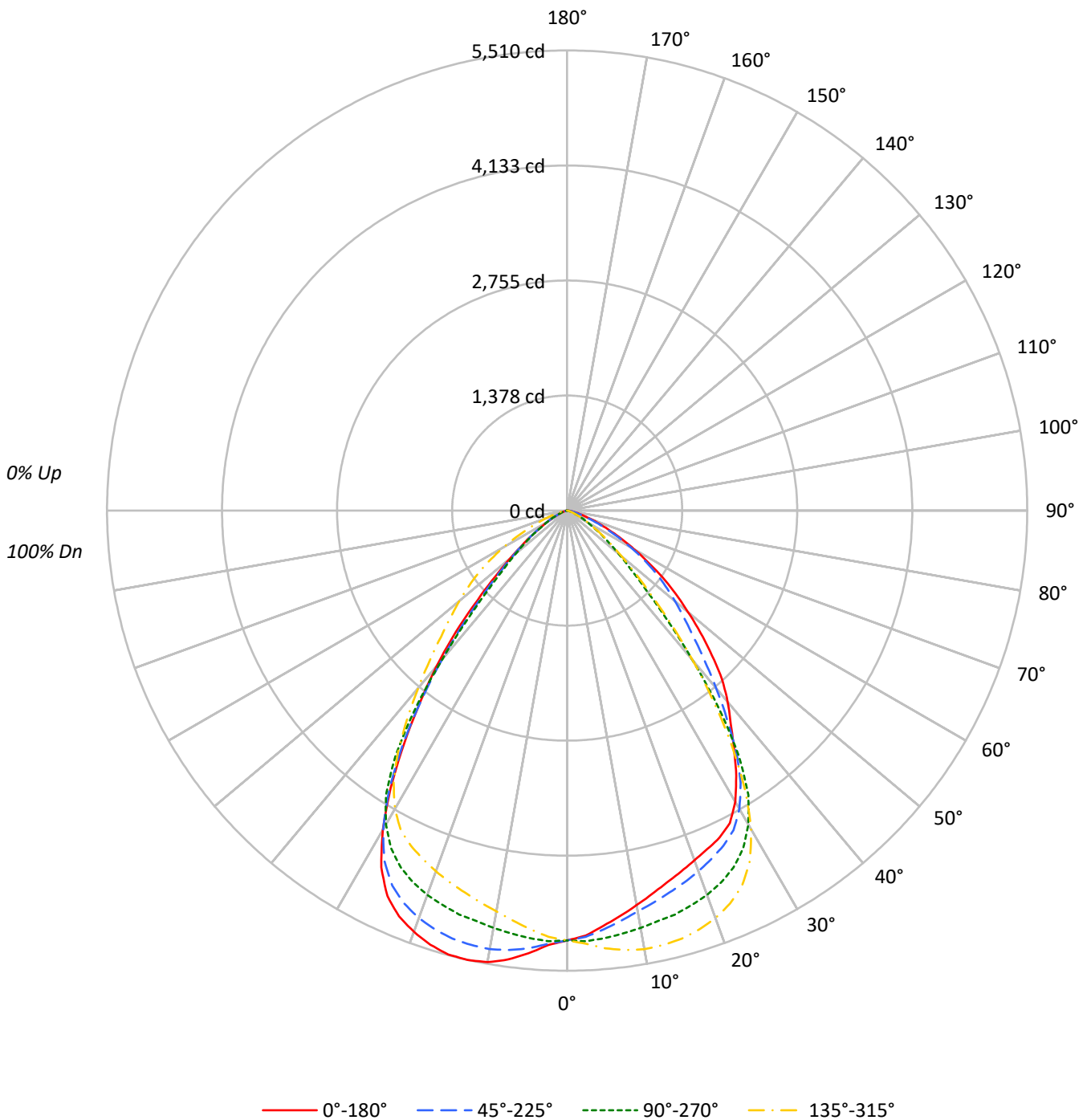
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	109	106	104	101	102	100	98	99	97	95	95	94	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	55	49	46	44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37

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

	0°	90°	180°	270°
0°	158681	158681	158681	158681
5°	154467	159055	164732	159055
10°	150194	158846	171906	158846
15°	147192	159790	175669	159790
20°	146189	160703	176120	160703
25°	146960	160379	173292	160379
30°	143324	154508	157286	154508
35°	131100	134785	127881	134785
40°	120363	93759	97910	93759
45°	106947	57198	66181	57198
50°	90525	38210	42432	38210
55°	74976	26074	27558	26074
60°	57183	17355	17509	17355
65°	40517	10813	9901	10813
70°	29221	7249	6573	7249
75°	18562	3598	2990	3598
80°	12946	2681	2220	2681
85°	11569	0	885	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	489.8	5.7
10°-20°	1418.4	16.4
20°-30°	2147.7	24.8
30°-40°	2152.5	24.8
40°-50°	1351.7	15.6
50°-60°	720.3	8.3
60°-70°	296.2	3.4
70°-80°	78.2	0.9
80°-90°	13.2	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°	4055.8	46.8
0°-40°	6208.3	71.6
0°-60°	8280.3	95.5
0°-90°	8668.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8668.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	5146	5146	5146	5146	5146	
5°	4990	5138	5322	5138	4990	471
15°	4611	5005	5503	5005	4611	1304
25°	4319	4714	5093	4714	4319	1981
35°	3483	3580	3397	3580	3483	2182
45°	2452	1312	1518	1312	2452	1886
55°	1395	485	513	485	1395	1243
65°	555	148	136	148	555	576
75°	156	30	25	30	156	176
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°	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9
2.5°	5093.2	5088.1	5085.6	5090.7	5093.2	5103.2	5100.7	5105.7	5105.7	5108.3	5113.2
5°	4990.2	4987.6	4990.2	4990.2	5000.2	5010.2	5007.7	5015.3	5020.3	5032.9	5037.8
7.5°	4894.7	4894.7	4892.1	4902.1	4907.2	4922.3	4919.7	4932.3	4939.9	4952.4	4970.0
10°	4796.7	4796.7	4799.1	4806.7	4809.3	4831.8	4831.8	4849.4	4859.4	4872.1	4894.7
12.5°	4701.2	4701.2	4716.3	4711.2	4721.3	4738.8	4746.4	4764.0	4779.1	4804.2	4826.9
15°	4610.7	4610.7	4615.8	4628.3	4635.8	4658.5	4671.0	4691.2	4708.7	4733.9	4766.6
17.5°	4532.8	4530.3	4532.8	4547.9	4563.0	4583.1	4593.1	4618.3	4635.8	4668.5	4698.7
20°	4454.9	4460.0	4460.0	4472.5	4482.6	4507.7	4517.7	4545.4	4565.5	4595.6	4630.9
22.5°	4387.1	4384.6	4384.6	4402.2	4409.8	4432.3	4442.3	4467.5	4490.1	4515.2	4547.9
25°	4319.3	4314.2	4324.3	4326.8	4331.8	4356.9	4364.5	4382.0	4404.7	4427.3	4460.0
27.5°	4218.7	4213.8	4216.2	4226.3	4233.8	4253.9	4259.0	4276.5	4294.1	4314.2	4341.9
30°	4025.2	4020.3	4017.8	4035.4	4042.9	4057.9	4065.5	4095.7	4100.6	4123.3	4143.3
32.5°	3768.9	3766.5	3771.5	3786.5	3794.1	3814.2	3824.3	3841.9	3854.4	3867.0	3887.1
35°	3482.6	3477.5	3482.6	3497.7	3497.7	3515.2	3522.8	3530.2	3527.8	3530.2	3525.3
37.5°	3216.2	3213.7	3216.2	3223.7	3216.2	3223.7	3216.2	3201.2	3173.5	3143.3	3113.1
40°	2990.1	2992.5	2977.5	2987.6	2959.9	2954.9	2927.3	2889.5	2834.3	2774.0	2688.6
42.5°	2748.9	2741.3	2731.3	2736.3	2713.7	2696.0	2650.8	2603.2	2532.7	2432.3	2329.2
45°	2452.4	2449.9	2444.8	2442.3	2427.2	2409.7	2371.9	2316.7	2238.8	2135.8	2012.6
47.5°	2163.4	2155.9	2155.9	2158.3	2140.8	2138.3	2108.1	2060.4	1992.5	1892.0	1763.9
50°	1887.0	1884.5	1889.5	1899.6	1887.0	1882.0	1861.9	1829.2	1768.9	1683.5	1562.8
52.5°	1638.2	1635.7	1640.8	1653.3	1648.3	1653.3	1633.3	1608.1	1567.9	1484.9	1379.5
55°	1394.6	1394.6	1394.6	1409.6	1409.6	1409.6	1399.5	1384.5	1346.8	1286.5	1188.5
57.5°	1140.8	1143.2	1158.3	1160.8	1158.3	1163.4	1160.8	1145.7	1120.7	1078.0	1002.6
60°	927.2	927.2	934.7	942.3	939.7	942.3	942.3	934.7	909.6	874.4	814.1
62.5°	733.7	741.2	736.2	741.2	751.3	741.2	736.2	731.2	713.6	691.0	640.7
65°	555.3	560.3	560.3	562.8	557.8	560.3	550.3	542.8	532.7	507.6	474.9
67.5°	422.2	422.2	422.2	422.2	419.6	417.1	414.6	407.1	389.5	379.5	344.2
70°	324.1	309.0	309.0	309.0	309.0	311.6	304.1	294.0	289.0	271.4	246.3
72.5°	216.1	221.1	216.1	216.1	211.1	213.6	203.5	198.5	193.5	183.5	168.4
75°	155.8	143.2	148.2	150.8	143.2	148.2	138.2	128.1	128.1	120.6	113.0
77.5°	100.5	98.0	100.5	103.0	100.5	98.0	93.0	87.9	87.9	85.4	77.9
80°	72.9	70.3	70.3	70.3	67.8	70.3	65.4	65.4	60.3	57.8	52.7
82.5°	47.8	47.8	45.2	47.8	45.2	47.8	40.2	40.2	40.2	37.6	32.7
85°	32.7	27.6	27.6	30.2	25.1	30.2	27.6	25.1	22.6	22.6	20.1
87.5°	15.1	17.6	15.1	17.6	15.1	15.1	17.6	15.1	15.1	10.0	10.0
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°	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9
2.5°	5120.8	5123.3	5123.3	5133.4	5138.4	5140.8	5140.8	5161.0	5153.5	5158.5	5163.5
5°	5048.0	5063.0	5068.0	5068.0	5095.7	5105.7	5115.7	5138.4	5140.8	5155.9	5173.5
7.5°	4977.5	4995.1	5005.3	5027.8	5045.4	5063.0	5093.2	5108.3	5123.3	5143.4	5166.0
10°	4909.7	4929.9	4949.9	4967.5	4995.1	5017.8	5037.8	5073.0	5090.7	5118.3	5148.4
12.5°	4844.4	4872.1	4889.6	4919.7	4949.9	4970.0	5000.2	5032.9	5060.5	5088.1	5123.3
15°	4786.6	4819.3	4839.4	4872.1	4904.7	4932.3	4965.0	5005.3	5025.3	5058.0	5090.7
17.5°	4723.7	4759.0	4784.1	4814.2	4854.5	4884.6	4912.3	4952.4	4977.5	5012.7	5050.5
20°	4658.5	4693.6	4723.7	4753.9	4794.2	4824.3	4857.0	4897.2	4924.8	4960.0	4990.2
22.5°	4580.6	4613.3	4645.9	4681.0	4721.3	4746.4	4784.1	4819.3	4849.4	4882.1	4912.3
25°	4480.1	4520.3	4545.4	4578.0	4610.7	4638.3	4678.5	4713.7	4738.8	4769.0	4796.7
27.5°	4362.0	4392.2	4412.2	4439.8	4472.5	4497.7	4527.8	4563.0	4588.2	4615.8	4635.8
30°	4160.9	4188.6	4206.2	4226.3	4259.0	4281.6	4306.7	4339.3	4356.9	4377.1	4394.7
32.5°	3897.1	3919.7	3929.8	3944.9	3967.5	3990.1	4010.2	4037.8	4045.4	4057.9	4057.9
35°	3515.2	3520.2	3517.7	3522.8	3532.8	3545.3	3562.9	3580.5	3590.5	3590.5	3583.1
37.5°	3067.9	3037.8	3005.2	2980.0	2972.5	2967.4	2977.5	2985.0	2995.1	3000.1	2987.6
40°	2603.2	2535.3	2462.4	2397.0	2351.8	2331.8	2324.2	2329.2	2329.2	2346.8	2346.8
42.5°	2203.6	2098.0	1990.1	1892.0	1826.7	1776.5	1753.8	1753.8	1756.3	1768.9	1776.5
45°	1872.0	1738.7	1613.1	1505.1	1414.6	1349.3	1319.2	1311.6	1309.1	1314.1	1331.7
47.5°	1618.2	1480.0	1349.3	1216.2	1120.7	1055.3	1027.7	1017.6	1007.5	1017.6	1020.2
50°	1419.7	1276.4	1138.3	1005.1	904.5	846.7	811.6	796.5	794.0	794.0	799.0
52.5°	1238.7	1105.6	967.4	831.7	726.1	670.9	638.2	630.7	620.6	630.7	630.7
55°	1067.8	934.7	799.0	670.9	582.9	525.2	495.0	485.0	479.9	487.4	487.4
57.5°	882.0	768.8	643.3	527.7	439.8	399.5	376.9	364.4	361.8	366.8	361.8
60°	723.7	628.2	520.1	414.6	346.8	304.1	286.5	281.4	276.3	281.4	281.4
62.5°	572.9	492.5	404.5	324.1	266.3	236.2	216.1	216.1	213.6	213.6	216.1
65°	424.7	361.8	299.0	231.2	186.0	163.3	148.2	148.2	145.7	148.2	145.7
67.5°	309.0	266.3	216.1	168.4	133.2	120.6	110.6	103.0	108.1	103.0	100.5
70°	226.2	190.9	155.8	128.1	103.0	90.5	82.9	80.4	75.4	75.4	75.4
72.5°	150.8	128.1	105.5	82.9	67.8	55.2	52.7	47.8	42.7	45.2	50.3
75°	100.5	85.4	75.4	60.3	45.2	45.2	30.2	30.2	25.1	30.2	22.6
77.5°	70.3	57.8	45.2	37.6	30.2	27.6	20.1	20.1	17.6	17.6	17.6
80°	50.3	42.7	32.7	27.6	20.1	20.1	17.6	15.1	12.5	12.5	15.1
82.5°	30.2	22.6	22.6	20.1	12.5	10.0	7.5	10.0	5.1	5.1	5.1
85°	17.6	15.1	12.5	7.5	5.1	5.1	2.5	0.0	2.5	2.5	0.0
87.5°	10.0	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°	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9
2.5°	5176.1	5173.5	5178.6	5178.6	5193.7	5191.1	5198.7	5198.7	5193.7	5196.2	5206.2
5°	5193.7	5201.2	5216.2	5228.9	5251.4	5261.5	5274.1	5286.7	5289.2	5296.7	5304.3
7.5°	5193.7	5218.8	5236.4	5259.0	5289.2	5306.7	5334.4	5357.0	5367.0	5379.5	5394.6
10°	5183.6	5208.7	5241.4	5266.5	5304.3	5331.9	5359.5	5394.6	5409.7	5429.8	5450.0
12.5°	5163.5	5191.1	5226.3	5259.0	5301.7	5326.8	5362.0	5394.6	5417.3	5444.9	5467.6
15°	5133.4	5166.0	5198.7	5231.3	5276.5	5306.7	5339.4	5377.1	5399.7	5429.8	5450.0
17.5°	5085.6	5120.8	5151.0	5181.1	5223.8	5259.0	5289.2	5324.3	5347.0	5372.1	5399.7
20°	5027.8	5060.5	5093.2	5118.3	5161.0	5191.1	5223.8	5256.5	5274.1	5279.1	5321.8
22.5°	4955.0	4977.5	5002.7	5042.9	5068.0	5095.7	5125.9	5155.9	5173.5	5201.2	5216.2
25°	4834.3	4857.0	4884.6	4902.1	4932.3	4955.0	4985.1	5017.8	5027.8	5048.0	5063.0
27.5°	4666.0	4678.5	4691.2	4706.2	4723.7	4736.4	4753.9	4769.0	4779.1	4789.1	4799.1
30°	4399.6	4399.6	4399.6	4389.6	4397.1	4404.7	4407.2	4404.7	4404.7	4402.2	4402.2
32.5°	4047.9	4027.8	4005.2	3985.1	3977.5	3967.5	3962.4	3954.9	3942.4	3934.8	3937.3
35°	3573.0	3527.8	3500.1	3475.0	3455.0	3439.9	3432.3	3424.8	3422.3	3412.2	3402.1
37.5°	2980.0	2947.3	2927.3	2912.2	2894.6	2879.5	2882.0	2884.6	2892.0	2887.1	2889.5
40°	2351.8	2344.3	2351.8	2334.3	2329.2	2334.3	2346.8	2364.5	2374.5	2384.5	2402.1
42.5°	1789.0	1801.5	1819.2	1819.2	1826.7	1836.8	1851.8	1879.5	1894.5	1912.1	1932.3
45°	1346.8	1361.9	1384.5	1392.0	1397.0	1409.6	1427.2	1449.8	1459.8	1474.9	1492.5
47.5°	1037.7	1047.8	1060.3	1072.9	1085.4	1090.5	1108.1	1108.1	1120.7	1130.7	1135.7
50°	809.1	819.1	829.1	836.7	841.8	849.3	854.3	861.8	864.3	869.4	871.9
52.5°	633.2	645.8	645.8	650.7	658.3	665.8	663.4	665.8	668.3	668.3	675.9
55°	495.0	495.0	502.5	502.5	507.6	505.0	507.6	507.6	507.6	507.6	510.1
57.5°	369.3	371.9	379.5	374.4	371.9	376.9	371.9	376.9	374.4	379.5	371.9
60°	283.9	283.9	286.5	286.5	289.0	289.0	289.0	286.5	286.5	283.9	283.9
62.5°	213.6	216.1	218.6	216.1	216.1	216.1	213.6	213.6	211.1	208.5	208.5
65°	143.2	140.8	145.7	140.8	143.2	143.2	140.8	143.2	135.7	138.2	135.7
67.5°	103.0	100.5	98.0	100.5	98.0	95.5	95.5	98.0	100.5	93.0	93.0
70°	67.8	70.3	67.8	70.3	72.9	72.9	70.3	67.8	70.3	65.4	67.8
72.5°	42.7	42.7	42.7	42.7	42.7	45.2	45.2	45.2	40.2	40.2	37.6
75°	20.1	27.6	22.6	20.1	27.6	27.6	25.1	25.1	22.6	22.6	22.6
77.5°	20.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	12.5	15.1	12.5
80°	10.0	10.0	10.0	7.5	10.0	10.0	12.5	10.0	10.0	7.5	12.5
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: P248788

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9
2.5°	5203.7	5201.2	5203.7	5206.2	5203.7	5201.2	5203.7	5206.2	5196.2	5193.7	5198.7
5°	5314.3	5314.3	5319.3	5321.8	5319.3	5314.3	5314.3	5304.3	5296.7	5289.2	5286.7
7.5°	5409.7	5414.8	5419.8	5422.3	5419.8	5414.8	5409.7	5394.6	5379.5	5367.0	5357.0
10°	5467.6	5475.1	5485.1	5490.1	5485.1	5475.1	5467.6	5450.0	5429.8	5409.7	5394.6
12.5°	5492.7	5500.2	5512.8	5510.3	5512.8	5500.2	5492.7	5467.6	5444.9	5417.3	5394.6
15°	5475.1	5485.1	5497.7	5502.7	5497.7	5485.1	5475.1	5450.0	5429.8	5399.7	5377.1
17.5°	5419.8	5434.9	5442.4	5450.0	5442.4	5434.9	5419.8	5399.7	5372.1	5347.0	5324.3
20°	5344.4	5354.5	5364.6	5367.0	5364.6	5354.5	5344.4	5321.8	5279.1	5274.1	5256.5
22.5°	5236.4	5244.0	5266.5	5259.0	5266.5	5244.0	5236.4	5216.2	5201.2	5173.5	5155.9
25°	5080.6	5088.1	5090.7	5093.2	5090.7	5088.1	5080.6	5063.0	5048.0	5027.8	5017.8
27.5°	4811.8	4811.8	4816.7	4819.3	4816.7	4811.8	4811.8	4799.1	4789.1	4779.1	4769.0
30°	4404.7	4404.7	4404.7	4417.3	4404.7	4404.7	4404.7	4402.2	4402.2	4404.7	4404.7
32.5°	3934.8	3929.8	3924.8	3929.8	3924.8	3929.8	3934.8	3937.3	3934.8	3942.4	3954.9
35°	3402.1	3399.6	3407.2	3397.1	3407.2	3399.6	3402.1	3402.1	3412.2	3422.3	3424.8
37.5°	2892.0	2887.1	2897.1	2887.1	2897.1	2887.1	2892.0	2889.5	2887.1	2892.0	2884.6
40°	2407.2	2412.1	2412.1	2432.3	2412.1	2412.1	2407.2	2402.1	2384.5	2374.5	2364.5
42.5°	1942.3	1957.4	1952.3	1967.4	1952.3	1957.4	1942.3	1932.3	1912.1	1894.5	1879.5
45°	1502.5	1512.7	1512.7	1517.6	1512.7	1512.7	1502.5	1492.5	1474.9	1459.8	1449.8
47.5°	1153.3	1153.3	1153.3	1155.9	1153.3	1153.3	1153.3	1135.7	1130.7	1120.7	1108.1
50°	876.9	879.4	882.0	884.5	882.0	879.4	876.9	871.9	869.4	864.3	861.8
52.5°	673.4	675.9	670.9	675.9	670.9	675.9	673.4	675.9	668.3	668.3	665.8
55°	510.1	507.6	510.1	512.6	510.1	507.6	510.1	510.1	507.6	507.6	507.6
57.5°	374.4	369.3	369.3	369.3	369.3	369.3	374.4	371.9	379.5	374.4	376.9
60°	278.9	281.4	281.4	283.9	281.4	281.4	278.9	283.9	283.9	286.5	286.5
62.5°	206.0	213.6	208.5	213.6	208.5	213.6	206.0	208.5	208.5	211.1	213.6
65°	133.2	133.2	133.2	135.7	133.2	133.2	133.2	135.7	138.2	135.7	143.2
67.5°	90.5	93.0	98.0	95.5	98.0	93.0	90.5	93.0	93.0	100.5	98.0
70°	72.9	65.4	65.4	72.9	65.4	65.4	72.9	67.8	65.4	70.3	67.8
72.5°	42.7	37.6	42.7	42.7	42.7	37.6	42.7	37.6	40.2	40.2	45.2
75°	22.6	20.1	17.6	25.1	17.6	20.1	22.6	22.6	22.6	22.6	25.1
77.5°	15.1	12.5	17.6	17.6	17.6	12.5	15.1	12.5	15.1	12.5	15.1
80°	7.5	10.0	7.5	12.5	7.5	10.0	7.5	12.5	7.5	10.0	10.0
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: P248788

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9
2.5°	5198.7	5191.1	5193.7	5178.6	5178.6	5173.5	5176.1	5163.5	5158.5	5153.5	5161.0
5°	5274.1	5261.5	5251.4	5228.9	5216.2	5201.2	5193.7	5173.5	5155.9	5140.8	5138.4
7.5°	5334.4	5306.7	5289.2	5259.0	5236.4	5218.8	5193.7	5166.0	5143.4	5123.3	5108.3
10°	5359.5	5331.9	5304.3	5266.5	5241.4	5208.7	5183.6	5148.4	5118.3	5090.7	5073.0
12.5°	5362.0	5326.8	5301.7	5259.0	5226.3	5191.1	5163.5	5123.3	5088.1	5060.5	5032.9
15°	5339.4	5306.7	5276.5	5231.3	5198.7	5166.0	5133.4	5090.7	5058.0	5025.3	5005.3
17.5°	5289.2	5259.0	5223.8	5181.1	5151.0	5120.8	5085.6	5050.5	5012.7	4977.5	4952.4
20°	5223.8	5191.1	5161.0	5118.3	5093.2	5060.5	5027.8	4990.2	4960.0	4924.8	4897.2
22.5°	5125.9	5095.7	5068.0	5042.9	5002.7	4977.5	4955.0	4912.3	4882.1	4849.4	4819.3
25°	4985.1	4955.0	4932.3	4902.1	4884.6	4857.0	4834.3	4796.7	4769.0	4738.8	4713.7
27.5°	4753.9	4736.4	4723.7	4706.2	4691.2	4678.5	4666.0	4635.8	4615.8	4588.2	4563.0
30°	4407.2	4404.7	4397.1	4389.6	4399.6	4399.6	4399.6	4394.7	4377.1	4356.9	4339.3
32.5°	3962.4	3967.5	3977.5	3985.1	4005.2	4027.8	4047.9	4057.9	4057.9	4045.4	4037.8
35°	3432.3	3439.9	3455.0	3475.0	3500.1	3527.8	3573.0	3583.1	3590.5	3590.5	3580.5
37.5°	2882.0	2879.5	2894.6	2912.2	2927.3	2947.3	2980.0	2987.6	3000.1	2995.1	2985.0
40°	2346.8	2334.3	2329.2	2334.3	2351.8	2344.3	2351.8	2346.8	2346.8	2329.2	2329.2
42.5°	1851.8	1836.8	1826.7	1819.2	1819.2	1801.5	1789.0	1776.5	1768.9	1756.3	1753.8
45°	1427.2	1409.6	1397.0	1392.0	1384.5	1361.9	1346.8	1331.7	1314.1	1309.1	1311.6
47.5°	1108.1	1090.5	1085.4	1072.9	1060.3	1047.8	1037.7	1020.2	1017.6	1007.5	1017.6
50°	854.3	849.3	841.8	836.7	829.1	819.1	809.1	799.0	794.0	794.0	796.5
52.5°	663.4	665.8	658.3	650.7	645.8	645.8	633.2	630.7	630.7	620.6	630.7
55°	507.6	505.0	507.6	502.5	502.5	495.0	495.0	487.4	487.4	479.9	485.0
57.5°	371.9	376.9	371.9	374.4	379.5	371.9	369.3	361.8	366.8	361.8	364.4
60°	289.0	289.0	289.0	286.5	286.5	283.9	283.9	281.4	281.4	276.3	281.4
62.5°	213.6	216.1	216.1	216.1	218.6	216.1	213.6	216.1	213.6	213.6	216.1
65°	140.8	143.2	143.2	140.8	145.7	140.8	143.2	145.7	148.2	145.7	148.2
67.5°	95.5	95.5	98.0	100.5	98.0	100.5	103.0	100.5	103.0	108.1	103.0
70°	70.3	72.9	72.9	70.3	67.8	70.3	67.8	75.4	75.4	75.4	80.4
72.5°	45.2	45.2	42.7	42.7	42.7	42.7	42.7	50.3	45.2	42.7	47.8
75°	25.1	27.6	27.6	20.1	22.6	27.6	20.1	22.6	30.2	25.1	30.2
77.5°	15.1	15.1	15.1	15.1	15.1	15.1	20.1	17.6	17.6	17.6	20.1
80°	12.5	10.0	10.0	7.5	10.0	10.0	10.0	15.1	12.5	12.5	15.1
82.5°	5.1	5.1	2.5	0.0	5.1	5.1	5.1	5.1	5.1	5.1	10.0
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: P248788

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9
2.5°	5140.8	5140.8	5138.4	5133.4	5123.3	5123.3	5120.8	5113.2	5108.3	5105.7	5105.7
5°	5115.7	5105.7	5095.7	5068.0	5068.0	5063.0	5048.0	5037.8	5032.9	5020.3	5015.3
7.5°	5093.2	5063.0	5045.4	5027.8	5005.3	4995.1	4977.5	4970.0	4952.4	4939.9	4932.3
10°	5037.8	5017.8	4995.1	4967.5	4949.9	4929.9	4909.7	4894.7	4872.1	4859.4	4849.4
12.5°	5000.2	4970.0	4949.9	4919.7	4889.6	4872.1	4844.4	4826.9	4804.2	4779.1	4764.0
15°	4965.0	4932.3	4904.7	4872.1	4839.4	4819.3	4786.6	4766.6	4733.9	4708.7	4691.2
17.5°	4912.3	4884.6	4854.5	4814.2	4784.1	4759.0	4723.7	4698.7	4668.5	4635.8	4618.3
20°	4857.0	4824.3	4794.2	4753.9	4723.7	4693.6	4658.5	4630.9	4595.6	4565.5	4545.4
22.5°	4784.1	4746.4	4721.3	4681.0	4645.9	4613.3	4580.6	4547.9	4515.2	4490.1	4467.5
25°	4678.5	4638.3	4610.7	4578.0	4545.4	4520.3	4480.1	4460.0	4427.3	4404.7	4382.0
27.5°	4527.8	4497.7	4472.5	4439.8	4412.2	4392.2	4362.0	4341.9	4314.2	4294.1	4276.5
30°	4306.7	4281.6	4259.0	4226.3	4206.2	4188.6	4160.9	4143.3	4123.3	4100.6	4095.7
32.5°	4010.2	3990.1	3967.5	3944.9	3929.8	3919.7	3897.1	3887.1	3867.0	3854.4	3841.9
35°	3562.9	3545.3	3532.8	3522.8	3517.7	3520.2	3515.2	3525.3	3530.2	3527.8	3530.2
37.5°	2977.5	2967.4	2972.5	2980.0	3005.2	3037.8	3067.9	3113.1	3143.3	3173.5	3201.2
40°	2324.2	2331.8	2351.8	2397.0	2462.4	2535.3	2603.2	2688.6	2774.0	2834.3	2889.5
42.5°	1753.8	1776.5	1826.7	1892.0	1990.1	2098.0	2203.6	2329.2	2432.3	2532.7	2603.2
45°	1319.2	1349.3	1414.6	1505.1	1613.1	1738.7	1872.0	2012.6	2135.8	2238.8	2316.7
47.5°	1027.7	1055.3	1120.7	1216.2	1349.3	1480.0	1618.2	1763.9	1892.0	1992.5	2060.4
50°	811.6	846.7	904.5	1005.1	1138.3	1276.4	1419.7	1562.8	1683.5	1768.9	1829.2
52.5°	638.2	670.9	726.1	831.7	967.4	1105.6	1238.7	1379.5	1484.9	1567.9	1608.1
55°	495.0	525.2	582.9	670.9	799.0	934.7	1067.8	1188.5	1286.5	1346.8	1384.5
57.5°	376.9	399.5	439.8	527.7	643.3	768.8	882.0	1002.6	1078.0	1120.7	1145.7
60°	286.5	304.1	346.8	414.6	520.1	628.2	723.7	814.1	874.4	909.6	934.7
62.5°	216.1	236.2	266.3	324.1	404.5	492.5	572.9	640.7	691.0	713.6	731.2
65°	148.2	163.3	186.0	231.2	299.0	361.8	424.7	474.9	507.6	532.7	542.8
67.5°	110.6	120.6	133.2	168.4	216.1	266.3	309.0	344.2	379.5	389.5	407.1
70°	82.9	90.5	103.0	128.1	155.8	190.9	226.2	246.3	271.4	289.0	294.0
72.5°	52.7	55.2	67.8	82.9	105.5	128.1	150.8	168.4	183.5	193.5	198.5
75°	30.2	45.2	45.2	60.3	75.4	85.4	100.5	113.0	120.6	128.1	128.1
77.5°	20.1	27.6	30.2	37.6	45.2	57.8	70.3	77.9	85.4	87.9	87.9
80°	17.6	20.1	20.1	27.6	32.7	42.7	50.3	52.7	57.8	60.3	65.4
82.5°	7.5	10.0	12.5	20.1	22.6	22.6	30.2	32.7	37.6	40.2	40.2
85°	2.5	5.1	5.1	7.5	12.5	15.1	17.6	20.1	22.6	22.6	25.1
87.5°	2.5	2.5	0.0	2.5	5.1	5.1	10.0	10.0	10.0	15.1	15.1
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: P248788

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9	5145.9
2.5°	5100.7	5103.2	5093.2	5090.7	5085.6	5088.1	5093.2
5°	5007.7	5010.2	5000.2	4990.2	4990.2	4987.6	4990.2
7.5°	4919.7	4922.3	4907.2	4902.1	4892.1	4894.7	4894.7
10°	4831.8	4831.8	4809.3	4806.7	4799.1	4796.7	4796.7
12.5°	4746.4	4738.8	4721.3	4711.2	4716.3	4701.2	4701.2
15°	4671.0	4658.5	4635.8	4628.3	4615.8	4610.7	4610.7
17.5°	4593.1	4583.1	4563.0	4547.9	4532.8	4530.3	4532.8
20°	4517.7	4507.7	4482.6	4472.5	4460.0	4460.0	4454.9
22.5°	4442.3	4432.3	4409.8	4402.2	4384.6	4384.6	4387.1
25°	4364.5	4356.9	4331.8	4326.8	4324.3	4314.2	4319.3
27.5°	4259.0	4253.9	4233.8	4226.3	4216.2	4213.8	4218.7
30°	4065.5	4057.9	4042.9	4035.4	4017.8	4020.3	4025.2
32.5°	3824.3	3814.2	3794.1	3786.5	3771.5	3766.5	3768.9
35°	3522.8	3515.2	3497.7	3497.7	3482.6	3477.5	3482.6
37.5°	3216.2	3223.7	3216.2	3223.7	3216.2	3213.7	3216.2
40°	2927.3	2954.9	2959.9	2987.6	2977.5	2992.5	2990.1
42.5°	2650.8	2696.0	2713.7	2736.3	2731.3	2741.3	2748.9
45°	2371.9	2409.7	2427.2	2442.3	2444.8	2449.9	2452.4
47.5°	2108.1	2138.3	2140.8	2158.3	2155.9	2155.9	2163.4
50°	1861.9	1882.0	1887.0	1899.6	1889.5	1884.5	1887.0
52.5°	1633.3	1653.3	1648.3	1653.3	1640.8	1635.7	1638.2
55°	1399.5	1409.6	1409.6	1409.6	1394.6	1394.6	1394.6
57.5°	1160.8	1163.4	1158.3	1160.8	1158.3	1143.2	1140.8
60°	942.3	942.3	939.7	942.3	934.7	927.2	927.2
62.5°	736.2	741.2	751.3	741.2	736.2	741.2	733.7
65°	550.3	560.3	557.8	562.8	560.3	560.3	555.3
67.5°	414.6	417.1	419.6	422.2	422.2	422.2	422.2
70°	304.1	311.6	309.0	309.0	309.0	309.0	324.1
72.5°	203.5	213.6	211.1	216.1	216.1	221.1	216.1
75°	138.2	148.2	143.2	150.8	148.2	143.2	155.8
77.5°	93.0	98.0	100.5	103.0	100.5	98.0	100.5
80°	65.4	70.3	67.8	70.3	70.3	70.3	72.9
82.5°	40.2	47.8	45.2	47.8	45.2	47.8	47.8
85°	27.6	30.2	25.1	30.2	27.6	27.6	32.7
87.5°	17.6	15.1	15.1	17.6	15.1	17.6	15.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)