

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: P248572

Luminaire Tested: **LD8B90D010 ER8B90840 8LBSW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248572  
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 8LBSW0H  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9366.0 lumens  
Efficiency: N/A  
Efficacy: 108.8 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

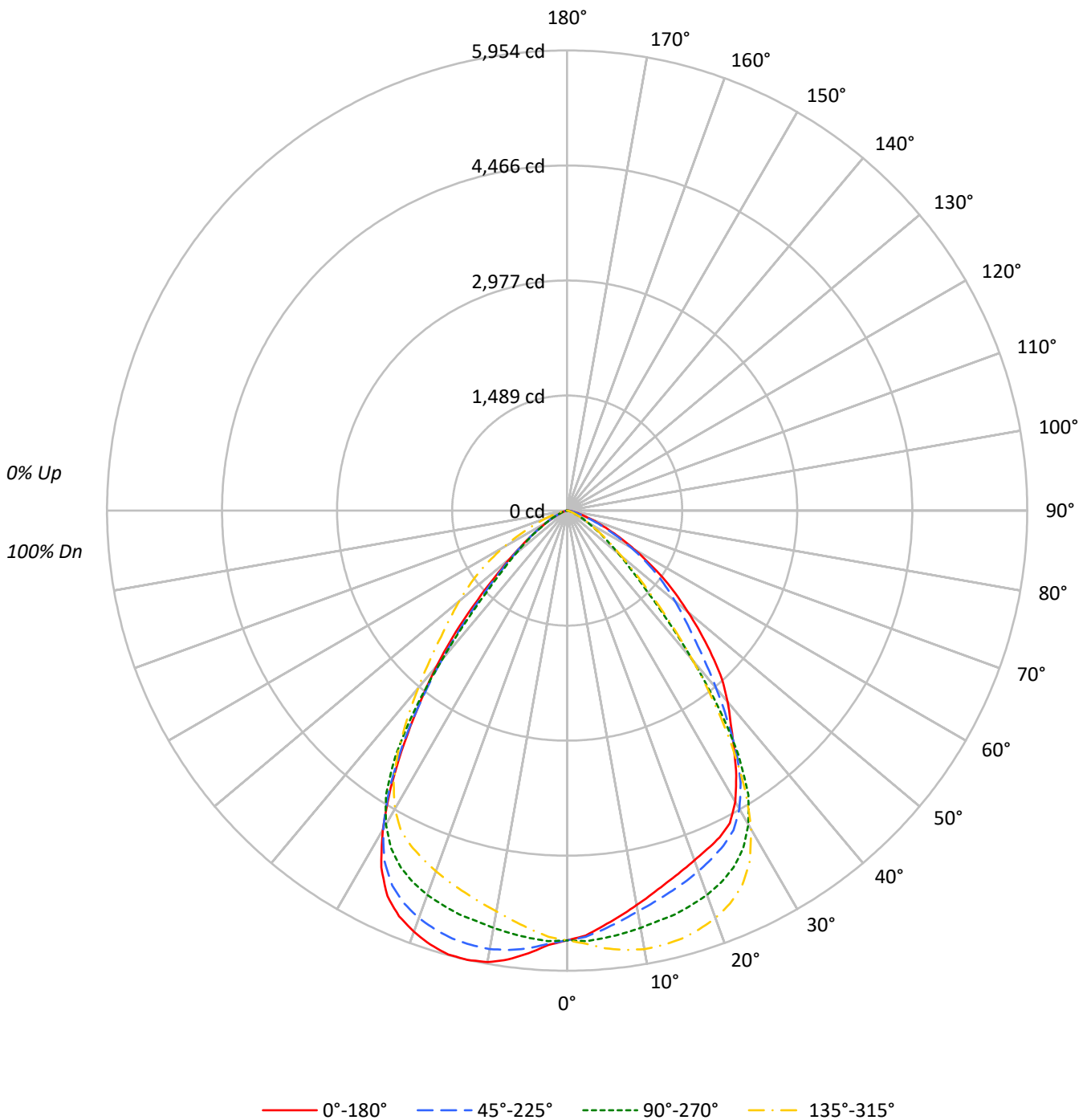
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	171459	171459	171459	171459
5°	166905	171860	177998	171860
10°	162287	171637	185749	171637
15°	159046	172655	189814	172655
20°	157963	173642	190303	173642
25°	158794	173295	187245	173295
30°	154868	166949	169951	166949
35°	141655	145638	138181	145638
40°	130052	101311	105795	101311
45°	115555	61803	71510	61803
50°	97812	41285	45848	41285
55°	81013	28171	29773	28171
60°	61790	18755	18921	18755
65°	43779	11682	10697	11682
70°	31574	7826	7105	7826
75°	20052	3884	3241	3884
80°	13993	2895	2397	2895
85°	12489	0	955	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	529.2	5.7
10°-20°	1532.6	16.4
20°-30°	2320.6	24.8
30°-40°	2325.8	24.8
40°-50°	1460.5	15.6
50°-60°	778.3	8.3
60°-70°	320.1	3.4
70°-80°	84.6	0.9
80°-90°	14.3	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°	4382.4	46.8
0°-40°	6708.3	71.6
0°-60°	8947.1	95.5
0°-90°	9366.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9366.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	5560	5560	5560	5560	5560	
5°	5392	5552	5750	5552	5392	508
15°	4982	5408	5946	5408	4982	1409
25°	4667	5093	5503	5093	4667	2141
35°	3763	3869	3671	3869	3763	2357
45°	2650	1417	1640	1417	2650	2038
55°	1507	524	554	524	1507	1343
65°	600	160	147	160	600	622
75°	168	33	27	33	168	191
85°	35	0	3	0	35	39
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°	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3
2.5°	5503.3	5497.8	5495.1	5500.6	5503.3	5514.1	5511.5	5516.8	5516.8	5519.6	5525.0
5°	5392.0	5389.2	5392.0	5392.0	5402.8	5413.7	5411.0	5419.2	5424.5	5438.2	5443.5
7.5°	5288.9	5288.9	5286.1	5296.9	5302.4	5318.7	5315.9	5329.5	5337.7	5351.2	5370.2
10°	5182.9	5182.9	5185.6	5193.8	5196.5	5220.9	5220.9	5239.9	5250.7	5264.4	5288.9
12.5°	5079.8	5079.8	5096.1	5090.6	5101.4	5120.4	5128.6	5147.6	5163.9	5191.1	5215.5
15°	4982.0	4982.0	4987.5	5001.0	5009.1	5033.6	5047.1	5068.9	5087.9	5115.1	5150.4
17.5°	4897.8	4895.2	4897.8	4914.2	4930.5	4952.1	4963.0	4990.1	5009.1	5044.5	5077.1
20°	4813.7	4819.2	4819.2	4832.7	4843.5	4870.7	4881.5	4911.5	4933.1	4965.7	5003.8
22.5°	4740.4	4737.7	4737.7	4756.7	4764.9	4789.2	4800.1	4827.2	4851.7	4878.8	4914.2
25°	4667.1	4661.6	4672.5	4675.2	4680.6	4707.7	4715.9	4734.9	4759.4	4783.8	4819.2
27.5°	4558.4	4553.1	4555.8	4566.6	4574.8	4596.4	4601.9	4620.9	4639.9	4661.6	4691.5
30°	4349.4	4344.0	4341.3	4360.3	4368.5	4384.7	4392.8	4425.5	4430.8	4455.3	4477.0
32.5°	4072.4	4069.8	4075.2	4091.4	4099.6	4121.4	4132.2	4151.2	4164.7	4178.4	4200.1
35°	3763.0	3757.5	3763.0	3779.3	3779.3	3798.3	3806.5	3814.5	3811.8	3814.5	3809.2
37.5°	3475.2	3472.4	3475.2	3483.3	3475.2	3483.3	3475.2	3458.9	3429.1	3396.5	3363.8
40°	3230.8	3233.5	3217.3	3228.2	3198.2	3192.8	3163.0	3122.2	3062.5	2997.4	2905.1
42.5°	2970.2	2962.1	2951.2	2956.6	2932.2	2913.1	2864.3	2812.8	2736.7	2628.2	2516.8
45°	2649.8	2647.2	2641.7	2639.0	2622.7	2603.7	2562.9	2503.2	2419.1	2307.8	2174.7
47.5°	2337.6	2329.5	2329.5	2332.1	2313.1	2310.5	2277.8	2226.3	2153.0	2044.4	1905.9
50°	2038.9	2036.2	2041.7	2052.5	2038.9	2033.5	2011.9	1976.5	1911.4	1819.1	1688.7
52.5°	1770.1	1767.5	1772.9	1786.5	1781.0	1786.5	1764.8	1737.6	1694.1	1604.5	1490.5
55°	1506.9	1506.9	1506.9	1523.1	1523.1	1523.1	1512.2	1496.0	1455.2	1390.1	1284.2
57.5°	1232.6	1235.3	1251.6	1254.3	1251.6	1257.1	1254.3	1238.0	1210.9	1164.8	1083.3
60°	1001.9	1001.9	1010.0	1018.2	1015.4	1018.2	1018.2	1010.0	982.9	944.9	879.7
62.5°	792.8	800.9	795.4	800.9	811.8	800.9	795.4	790.1	771.1	746.6	692.3
65°	600.0	605.5	605.5	608.2	602.7	605.5	594.6	586.5	575.6	548.5	513.2
67.5°	456.2	456.2	456.2	456.2	453.4	450.7	448.0	439.9	420.9	410.0	371.9
70°	350.2	333.9	333.9	333.9	333.9	336.7	328.5	317.7	312.2	293.2	266.1
72.5°	233.4	238.9	233.4	233.4	228.1	230.8	219.9	214.5	209.1	198.2	181.9
75°	168.3	154.8	160.1	162.9	154.8	160.1	149.3	138.5	138.5	130.3	122.1
77.5°	108.6	105.9	108.6	111.3	108.6	105.9	100.5	95.0	95.0	92.3	84.1
80°	78.8	76.0	76.0	76.0	73.3	76.0	70.6	70.6	65.2	62.5	57.0
82.5°	51.6	51.6	48.8	51.6	48.8	51.6	43.5	43.5	43.5	40.7	35.3
85°	35.3	29.8	29.8	32.6	27.2	32.6	29.8	27.2	24.5	24.5	21.7
87.5°	16.3	19.0	16.3	19.0	16.3	16.3	19.0	16.3	16.3	10.8	10.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3
2.5°	5533.1	5535.8	5535.8	5546.8	5552.1	5554.8	5554.8	5576.6	5568.5	5573.9	5579.3
5°	5454.5	5470.7	5476.1	5476.1	5506.0	5516.8	5527.7	5552.1	5554.8	5571.1	5590.1
7.5°	5378.4	5397.4	5408.3	5432.7	5451.7	5470.7	5503.3	5519.6	5535.8	5557.6	5582.0
10°	5305.1	5326.8	5348.5	5367.5	5397.4	5421.8	5443.5	5481.5	5500.6	5530.5	5563.0
12.5°	5234.5	5264.4	5283.4	5315.9	5348.5	5370.2	5402.8	5438.2	5468.0	5497.8	5535.8
15°	5172.1	5207.4	5229.1	5264.4	5299.7	5329.5	5364.8	5408.3	5430.0	5465.3	5500.6
17.5°	5104.1	5142.2	5169.4	5201.9	5245.4	5277.9	5307.9	5351.2	5378.4	5416.4	5457.2
20°	5033.6	5071.6	5104.1	5136.8	5180.2	5212.8	5248.1	5291.5	5321.4	5359.4	5392.0
22.5°	4949.5	4984.8	5020.0	5058.0	5101.4	5128.6	5169.4	5207.4	5239.9	5275.2	5307.9
25°	4840.8	4884.3	4911.5	4946.7	4982.0	5011.8	5055.3	5093.3	5120.4	5153.1	5182.9
27.5°	4713.2	4745.9	4767.5	4797.4	4832.7	4859.8	4892.4	4930.5	4957.6	4987.5	5009.1
30°	4496.0	4525.9	4544.9	4566.6	4601.9	4626.4	4653.5	4688.7	4707.7	4729.5	4748.5
32.5°	4210.9	4235.4	4246.2	4262.5	4287.0	4311.4	4333.2	4363.0	4371.2	4384.7	4384.7
35°	3798.3	3803.7	3801.0	3806.5	3817.3	3830.8	3849.8	3868.8	3879.7	3879.7	3871.6
37.5°	3315.0	3282.5	3247.2	3220.0	3211.8	3206.4	3217.3	3225.4	3236.3	3241.7	3228.2
40°	2812.8	2739.5	2660.7	2590.1	2541.2	2519.5	2511.4	2516.8	2516.8	2535.7	2535.7
42.5°	2381.1	2267.0	2150.3	2044.4	1973.8	1919.6	1895.1	1895.1	1897.8	1911.4	1919.6
45°	2022.7	1878.8	1743.0	1626.3	1528.5	1457.9	1425.4	1417.2	1414.5	1419.9	1438.9
47.5°	1748.5	1599.2	1457.9	1314.1	1210.9	1140.3	1110.5	1099.5	1088.7	1099.5	1102.3
50°	1534.0	1379.2	1229.9	1086.0	977.4	914.9	876.9	860.6	857.9	857.9	863.4
52.5°	1338.4	1194.6	1045.3	898.7	784.6	724.9	689.6	681.5	670.6	681.5	681.5
55°	1153.8	1010.0	863.4	724.9	629.8	567.5	534.8	524.0	518.5	526.7	526.7
57.5°	953.0	830.8	695.1	570.2	475.2	431.7	407.2	393.7	390.9	396.4	390.9
60°	781.9	678.8	562.0	448.0	374.7	328.5	309.6	304.1	298.6	304.1	304.1
62.5°	619.0	532.2	437.1	350.2	287.8	255.2	233.4	233.4	230.8	230.8	233.4
65°	458.9	390.9	323.1	249.8	200.9	176.5	160.1	160.1	157.5	160.1	157.5
67.5°	333.9	287.8	233.4	181.9	143.9	130.3	119.5	111.3	116.8	111.3	108.6
70°	244.4	206.3	168.3	138.5	111.3	97.8	89.6	86.8	81.5	81.5	81.5
72.5°	162.9	138.5	114.0	89.6	73.3	59.7	57.0	51.6	46.2	48.8	54.3
75°	108.6	92.3	81.5	65.2	48.8	48.8	32.6	32.6	27.2	32.6	24.5
77.5°	76.0	62.5	48.8	40.7	32.6	29.8	21.7	21.7	19.0	19.0	19.0
80°	54.3	46.2	35.3	29.8	21.7	21.7	19.0	16.3	13.5	13.5	16.3
82.5°	32.6	24.5	24.5	21.7	13.5	10.8	8.2	10.8	5.5	5.5	5.5
85°	19.0	16.3	13.5	8.2	5.5	5.5	2.7	0.0	2.7	2.7	0.0
87.5°	10.8	5.5	5.5	2.7	0.0	2.7	2.7	0.0	0.0	0.0	5.5
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°	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3
2.5°	5592.9	5590.1	5595.6	5595.6	5611.9	5609.1	5617.3	5617.3	5611.9	5614.6	5625.4
5°	5611.9	5620.1	5636.3	5649.9	5674.3	5685.2	5698.8	5712.4	5715.1	5723.2	5731.4
7.5°	5611.9	5639.1	5658.1	5682.4	5715.1	5734.1	5763.9	5788.4	5799.2	5812.7	5829.1
10°	5601.0	5628.1	5663.4	5690.6	5731.4	5761.2	5791.1	5829.1	5845.4	5867.1	5888.8
12.5°	5579.3	5609.1	5647.1	5682.4	5728.6	5755.8	5793.7	5829.1	5853.5	5883.4	5907.8
15°	5546.8	5582.0	5617.3	5652.6	5701.4	5734.1	5769.4	5810.1	5834.5	5867.1	5888.8
17.5°	5495.1	5533.1	5565.8	5598.3	5644.4	5682.4	5715.1	5753.1	5777.5	5804.7	5834.5
20°	5432.7	5468.0	5503.3	5530.5	5576.6	5609.1	5644.4	5679.8	5698.8	5704.2	5750.4
22.5°	5354.0	5378.4	5405.5	5449.0	5476.1	5506.0	5538.6	5571.1	5590.1	5620.1	5636.3
25°	5223.6	5248.1	5277.9	5296.9	5329.5	5354.0	5386.5	5421.8	5432.7	5454.5	5470.7
27.5°	5041.8	5055.3	5068.9	5085.1	5104.1	5117.8	5136.8	5153.1	5163.9	5174.8	5185.6
30°	4753.9	4753.9	4753.9	4743.1	4751.2	4759.4	4762.1	4759.4	4759.4	4756.7	4756.7
32.5°	4373.8	4352.2	4327.7	4306.0	4297.8	4287.0	4281.5	4273.4	4259.8	4251.7	4254.4
35°	3860.7	3811.8	3782.0	3754.8	3733.2	3716.8	3708.7	3700.5	3697.9	3687.0	3676.1
37.5°	3220.0	3184.7	3163.0	3146.7	3127.7	3111.4	3114.1	3116.9	3124.9	3119.5	3122.2
40°	2541.2	2533.1	2541.2	2522.2	2516.8	2522.2	2535.7	2554.9	2565.7	2576.5	2595.5
42.5°	1933.1	1946.6	1965.7	1965.7	1973.8	1984.7	2000.9	2030.9	2047.1	2066.1	2087.8
45°	1455.2	1471.5	1496.0	1504.1	1509.5	1523.1	1542.2	1566.5	1577.4	1593.7	1612.7
47.5°	1121.3	1132.2	1145.7	1159.3	1172.8	1178.3	1197.3	1197.3	1210.9	1221.8	1227.1
50°	874.2	885.1	895.9	904.1	909.5	917.7	923.1	931.2	933.9	939.4	942.1
52.5°	684.1	697.8	697.8	703.1	711.3	719.5	716.8	719.5	722.1	722.1	730.3
55°	534.8	534.8	543.0	543.0	548.5	545.7	548.5	548.5	548.5	548.5	551.2
57.5°	399.1	401.9	410.0	404.5	401.9	407.2	401.9	407.2	404.5	410.0	401.9
60°	306.8	306.8	309.6	309.6	312.2	312.2	312.2	309.6	309.6	306.8	306.8
62.5°	230.8	233.4	236.2	233.4	233.4	233.4	230.8	230.8	228.1	225.3	225.3
65°	154.8	152.1	157.5	152.1	154.8	154.8	152.1	154.8	146.6	149.3	146.6
67.5°	111.3	108.6	105.9	108.6	105.9	103.1	103.1	105.9	108.6	100.5	100.5
70°	73.3	76.0	73.3	76.0	78.8	78.8	76.0	73.3	76.0	70.6	73.3
72.5°	46.2	46.2	46.2	46.2	46.2	48.8	48.8	48.8	43.5	43.5	40.7
75°	21.7	29.8	24.5	21.7	29.8	29.8	27.2	27.2	24.5	24.5	24.5
77.5°	21.7	16.3	16.3	16.3	16.3	16.3	16.3	16.3	13.5	16.3	13.5
80°	10.8	10.8	10.8	8.2	10.8	10.8	13.5	10.8	10.8	8.2	13.5
82.5°	5.5	5.5	5.5	0.0	2.7	5.5	5.5	2.7	5.5	5.5	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: P248572

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSWOH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3
2.5°	5622.8	5620.1	5622.8	5625.4	5622.8	5620.1	5622.8	5625.4	5614.6	5611.9	5617.3
5°	5742.2	5742.2	5747.6	5750.4	5747.6	5742.2	5742.2	5731.4	5723.2	5715.1	5712.4
7.5°	5845.4	5850.9	5856.2	5858.9	5856.2	5850.9	5845.4	5829.1	5812.7	5799.2	5788.4
10°	5907.8	5916.0	5926.8	5932.2	5926.8	5916.0	5907.8	5888.8	5867.1	5845.4	5829.1
12.5°	5935.0	5943.2	5956.7	5954.0	5956.7	5943.2	5935.0	5907.8	5883.4	5853.5	5829.1
15°	5916.0	5926.8	5940.4	5945.8	5940.4	5926.8	5916.0	5888.8	5867.1	5834.5	5810.1
17.5°	5856.2	5872.5	5880.7	5888.8	5880.7	5872.5	5856.2	5834.5	5804.7	5777.5	5753.1
20°	5774.7	5785.7	5796.5	5799.2	5796.5	5785.7	5774.7	5750.4	5704.2	5698.8	5679.8
22.5°	5658.1	5666.2	5690.6	5682.4	5690.6	5666.2	5658.1	5636.3	5620.1	5590.1	5571.1
25°	5489.7	5497.8	5500.6	5503.3	5500.6	5497.8	5489.7	5470.7	5454.5	5432.7	5421.8
27.5°	5199.2	5199.2	5204.6	5207.4	5204.6	5199.2	5199.2	5185.6	5174.8	5163.9	5153.1
30°	4759.4	4759.4	4759.4	4773.0	4759.4	4759.4	4759.4	4756.7	4756.7	4759.4	4759.4
32.5°	4251.7	4246.2	4240.9	4246.2	4240.9	4246.2	4251.7	4254.4	4251.7	4259.8	4273.4
35°	3676.1	3673.4	3681.5	3670.7	3681.5	3673.4	3676.1	3676.1	3687.0	3697.9	3700.5
37.5°	3124.9	3119.5	3130.4	3119.5	3130.4	3119.5	3124.9	3122.2	3119.5	3124.9	3116.9
40°	2601.0	2606.4	2606.4	2628.2	2606.4	2606.4	2601.0	2595.5	2576.5	2565.7	2554.9
42.5°	2098.7	2115.0	2109.5	2125.8	2109.5	2115.0	2098.7	2087.8	2066.1	2047.1	2030.9
45°	1623.5	1634.5	1634.5	1639.8	1634.5	1634.5	1623.5	1612.7	1593.7	1577.4	1566.5
47.5°	1246.1	1246.1	1246.1	1248.9	1246.1	1246.1	1246.1	1227.1	1221.8	1210.9	1197.3
50°	947.5	950.2	953.0	955.7	953.0	950.2	947.5	942.1	939.4	933.9	931.2
52.5°	727.6	730.3	724.9	730.3	724.9	730.3	727.6	730.3	722.1	722.1	719.5
55°	551.2	548.5	551.2	553.8	551.2	548.5	551.2	551.2	548.5	548.5	548.5
57.5°	404.5	399.1	399.1	399.1	399.1	399.1	404.5	401.9	410.0	404.5	407.2
60°	301.4	304.1	304.1	306.8	304.1	304.1	301.4	306.8	306.8	309.6	309.6
62.5°	222.6	230.8	225.3	230.8	225.3	230.8	222.6	225.3	225.3	228.1	230.8
65°	143.9	143.9	143.9	146.6	143.9	143.9	143.9	146.6	149.3	146.6	154.8
67.5°	97.8	100.5	105.9	103.1	105.9	100.5	97.8	100.5	100.5	108.6	105.9
70°	78.8	70.6	70.6	78.8	70.6	70.6	78.8	73.3	70.6	76.0	73.3
72.5°	46.2	40.7	46.2	46.2	46.2	40.7	46.2	40.7	43.5	43.5	48.8
75°	24.5	21.7	19.0	27.2	19.0	21.7	24.5	24.5	24.5	24.5	27.2
77.5°	16.3	13.5	19.0	19.0	19.0	13.5	16.3	13.5	16.3	13.5	16.3
80°	8.2	10.8	8.2	13.5	8.2	10.8	8.2	13.5	8.2	10.8	10.8
82.5°	2.7	5.5	5.5	5.5	5.5	5.5	2.7	2.7	5.5	5.5	2.7
85°	0.0	5.5	2.7	2.7	2.7	5.5	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: P248572

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSWOH

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3
2.5°	5617.3	5609.1	5611.9	5595.6	5595.6	5590.1	5592.9	5579.3	5573.9	5568.5	5576.6
5°	5698.8	5685.2	5674.3	5649.9	5636.3	5620.1	5611.9	5590.1	5571.1	5554.8	5552.1
7.5°	5763.9	5734.1	5715.1	5682.4	5658.1	5639.1	5611.9	5582.0	5557.6	5535.8	5519.6
10°	5791.1	5761.2	5731.4	5690.6	5663.4	5628.1	5601.0	5563.0	5530.5	5500.6	5481.5
12.5°	5793.7	5755.8	5728.6	5682.4	5647.1	5609.1	5579.3	5535.8	5497.8	5468.0	5438.2
15°	5769.4	5734.1	5701.4	5652.6	5617.3	5582.0	5546.8	5500.6	5465.3	5430.0	5408.3
17.5°	5715.1	5682.4	5644.4	5598.3	5565.8	5533.1	5495.1	5457.2	5416.4	5378.4	5351.2
20°	5644.4	5609.1	5576.6	5530.5	5503.3	5468.0	5432.7	5392.0	5359.4	5321.4	5291.5
22.5°	5538.6	5506.0	5476.1	5449.0	5405.5	5378.4	5354.0	5307.9	5275.2	5239.9	5207.4
25°	5386.5	5354.0	5329.5	5296.9	5277.9	5248.1	5223.6	5182.9	5153.1	5120.4	5093.3
27.5°	5136.8	5117.8	5104.1	5085.1	5068.9	5055.3	5041.8	5009.1	4987.5	4957.6	4930.5
30°	4762.1	4759.4	4751.2	4743.1	4753.9	4753.9	4753.9	4748.5	4729.5	4707.7	4688.7
32.5°	4281.5	4287.0	4297.8	4306.0	4327.7	4352.2	4373.8	4384.7	4384.7	4371.2	4363.0
35°	3708.7	3716.8	3733.2	3754.8	3782.0	3811.8	3860.7	3871.6	3879.7	3879.7	3868.8
37.5°	3114.1	3111.4	3127.7	3146.7	3163.0	3184.7	3220.0	3228.2	3241.7	3236.3	3225.4
40°	2535.7	2522.2	2516.8	2522.2	2541.2	2533.1	2541.2	2535.7	2535.7	2516.8	2516.8
42.5°	2000.9	1984.7	1973.8	1965.7	1965.7	1946.6	1933.1	1919.6	1911.4	1897.8	1895.1
45°	1542.2	1523.1	1509.5	1504.1	1496.0	1471.5	1455.2	1438.9	1419.9	1414.5	1417.2
47.5°	1197.3	1178.3	1172.8	1159.3	1145.7	1132.2	1121.3	1102.3	1099.5	1088.7	1099.5
50°	923.1	917.7	909.5	904.1	895.9	885.1	874.2	863.4	857.9	857.9	860.6
52.5°	716.8	719.5	711.3	703.1	697.8	697.8	684.1	681.5	681.5	670.6	681.5
55°	548.5	545.7	548.5	543.0	543.0	534.8	534.8	526.7	526.7	518.5	524.0
57.5°	401.9	407.2	401.9	404.5	410.0	401.9	399.1	390.9	396.4	390.9	393.7
60°	312.2	312.2	312.2	309.6	309.6	306.8	306.8	304.1	304.1	298.6	304.1
62.5°	230.8	233.4	233.4	233.4	236.2	233.4	230.8	233.4	230.8	230.8	233.4
65°	152.1	154.8	154.8	152.1	157.5	152.1	154.8	157.5	160.1	157.5	160.1
67.5°	103.1	103.1	105.9	108.6	105.9	108.6	111.3	108.6	111.3	116.8	111.3
70°	76.0	78.8	78.8	76.0	73.3	76.0	73.3	81.5	81.5	81.5	86.8
72.5°	48.8	48.8	46.2	46.2	46.2	46.2	46.2	54.3	48.8	46.2	51.6
75°	27.2	29.8	29.8	21.7	24.5	29.8	21.7	24.5	32.6	27.2	32.6
77.5°	16.3	16.3	16.3	16.3	16.3	16.3	21.7	19.0	19.0	19.0	21.7
80°	13.5	10.8	10.8	8.2	10.8	10.8	10.8	16.3	13.5	13.5	16.3
82.5°	5.5	5.5	2.7	0.0	5.5	5.5	5.5	5.5	5.5	5.5	10.8
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	5.5	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: P248572

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSWOH

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3
2.5°	5554.8	5554.8	5552.1	5546.8	5535.8	5535.8	5533.1	5525.0	5519.6	5516.8	5516.8
5°	5527.7	5516.8	5506.0	5476.1	5476.1	5470.7	5454.5	5443.5	5438.2	5424.5	5419.2
7.5°	5503.3	5470.7	5451.7	5432.7	5408.3	5397.4	5378.4	5370.2	5351.2	5337.7	5329.5
10°	5443.5	5421.8	5397.4	5367.5	5348.5	5326.8	5305.1	5288.9	5264.4	5250.7	5239.9
12.5°	5402.8	5370.2	5348.5	5315.9	5283.4	5264.4	5234.5	5215.5	5191.1	5163.9	5147.6
15°	5364.8	5329.5	5299.7	5264.4	5229.1	5207.4	5172.1	5150.4	5115.1	5087.9	5068.9
17.5°	5307.9	5277.9	5245.4	5201.9	5169.4	5142.2	5104.1	5077.1	5044.5	5009.1	4990.1
20°	5248.1	5212.8	5180.2	5136.8	5104.1	5071.6	5033.6	5003.8	4965.7	4933.1	4911.5
22.5°	5169.4	5128.6	5101.4	5058.0	5020.0	4984.8	4949.5	4914.2	4878.8	4851.7	4827.2
25°	5055.3	5011.8	4982.0	4946.7	4911.5	4884.3	4840.8	4819.2	4783.8	4759.4	4734.9
27.5°	4892.4	4859.8	4832.7	4797.4	4767.5	4745.9	4713.2	4691.5	4661.6	4639.9	4620.9
30°	4653.5	4626.4	4601.9	4566.6	4544.9	4525.9	4496.0	4477.0	4455.3	4430.8	4425.5
32.5°	4333.2	4311.4	4287.0	4262.5	4246.2	4235.4	4210.9	4200.1	4178.4	4164.7	4151.2
35°	3849.8	3830.8	3817.3	3806.5	3801.0	3803.7	3798.3	3809.2	3814.5	3811.8	3814.5
37.5°	3217.3	3206.4	3211.8	3220.0	3247.2	3282.5	3315.0	3363.8	3396.5	3429.1	3458.9
40°	2511.4	2519.5	2541.2	2590.1	2660.7	2739.5	2812.8	2905.1	2997.4	3062.5	3122.2
42.5°	1895.1	1919.6	1973.8	2044.4	2150.3	2267.0	2381.1	2516.8	2628.2	2736.7	2812.8
45°	1425.4	1457.9	1528.5	1626.3	1743.0	1878.8	2022.7	2174.7	2307.8	2419.1	2503.2
47.5°	1110.5	1140.3	1210.9	1314.1	1457.9	1599.2	1748.5	1905.9	2044.4	2153.0	2226.3
50°	876.9	914.9	977.4	1086.0	1229.9	1379.2	1534.0	1688.7	1819.1	1911.4	1976.5
52.5°	689.6	724.9	784.6	898.7	1045.3	1194.6	1338.4	1490.5	1604.5	1694.1	1737.6
55°	534.8	567.5	629.8	724.9	863.4	1010.0	1153.8	1284.2	1390.1	1455.2	1496.0
57.5°	407.2	431.7	475.2	570.2	695.1	830.8	953.0	1083.3	1164.8	1210.9	1238.0
60°	309.6	328.5	374.7	448.0	562.0	678.8	781.9	879.7	944.9	982.9	1010.0
62.5°	233.4	255.2	287.8	350.2	437.1	532.2	619.0	692.3	746.6	771.1	790.1
65°	160.1	176.5	200.9	249.8	323.1	390.9	458.9	513.2	548.5	575.6	586.5
67.5°	119.5	130.3	143.9	181.9	233.4	287.8	333.9	371.9	410.0	420.9	439.9
70°	89.6	97.8	111.3	138.5	168.3	206.3	244.4	266.1	293.2	312.2	317.7
72.5°	57.0	59.7	73.3	89.6	114.0	138.5	162.9	181.9	198.2	209.1	214.5
75°	32.6	48.8	48.8	65.2	81.5	92.3	108.6	122.1	130.3	138.5	138.5
77.5°	21.7	29.8	32.6	40.7	48.8	62.5	76.0	84.1	92.3	95.0	95.0
80°	19.0	21.7	21.7	29.8	35.3	46.2	54.3	57.0	62.5	65.2	70.6
82.5°	8.2	10.8	13.5	21.7	24.5	24.5	32.6	35.3	40.7	43.5	43.5
85°	2.7	5.5	5.5	8.2	13.5	16.3	19.0	21.7	24.5	24.5	27.2
87.5°	2.7	2.7	0.0	2.7	5.5	5.5	10.8	10.8	10.8	16.3	16.3
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: P248572

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0H

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3	5560.3
2.5°	5511.5	5514.1	5503.3	5500.6	5495.1	5497.8	5503.3
5°	5411.0	5413.7	5402.8	5392.0	5392.0	5389.2	5392.0
7.5°	5315.9	5318.7	5302.4	5296.9	5286.1	5288.9	5288.9
10°	5220.9	5220.9	5196.5	5193.8	5185.6	5182.9	5182.9
12.5°	5128.6	5120.4	5101.4	5090.6	5096.1	5079.8	5079.8
15°	5047.1	5033.6	5009.1	5001.0	4987.5	4982.0	4982.0
17.5°	4963.0	4952.1	4930.5	4914.2	4897.8	4895.2	4897.8
20°	4881.5	4870.7	4843.5	4832.7	4819.2	4819.2	4813.7
22.5°	4800.1	4789.2	4764.9	4756.7	4737.7	4737.7	4740.4
25°	4715.9	4707.7	4680.6	4675.2	4672.5	4661.6	4667.1
27.5°	4601.9	4596.4	4574.8	4566.6	4555.8	4553.1	4558.4
30°	4392.8	4384.7	4368.5	4360.3	4341.3	4344.0	4349.4
32.5°	4132.2	4121.4	4099.6	4091.4	4075.2	4069.8	4072.4
35°	3806.5	3798.3	3779.3	3779.3	3763.0	3757.5	3763.0
37.5°	3475.2	3483.3	3475.2	3483.3	3475.2	3472.4	3475.2
40°	3163.0	3192.8	3198.2	3228.2	3217.3	3233.5	3230.8
42.5°	2864.3	2913.1	2932.2	2956.6	2951.2	2962.1	2970.2
45°	2562.9	2603.7	2622.7	2639.0	2641.7	2647.2	2649.8
47.5°	2277.8	2310.5	2313.1	2332.1	2329.5	2329.5	2337.6
50°	2011.9	2033.5	2038.9	2052.5	2041.7	2036.2	2038.9
52.5°	1764.8	1786.5	1781.0	1786.5	1772.9	1767.5	1770.1
55°	1512.2	1523.1	1523.1	1523.1	1506.9	1506.9	1506.9
57.5°	1254.3	1257.1	1251.6	1254.3	1251.6	1235.3	1232.6
60°	1018.2	1018.2	1015.4	1018.2	1010.0	1001.9	1001.9
62.5°	795.4	800.9	811.8	800.9	795.4	800.9	792.8
65°	594.6	605.5	602.7	608.2	605.5	605.5	600.0
67.5°	448.0	450.7	453.4	456.2	456.2	456.2	456.2
70°	328.5	336.7	333.9	333.9	333.9	333.9	350.2
72.5°	219.9	230.8	228.1	233.4	233.4	238.9	233.4
75°	149.3	160.1	154.8	162.9	160.1	154.8	168.3
77.5°	100.5	105.9	108.6	111.3	108.6	105.9	108.6
80°	70.6	76.0	73.3	76.0	76.0	76.0	78.8
82.5°	43.5	51.6	48.8	51.6	48.8	51.6	51.6
85°	29.8	32.6	27.2	32.6	29.8	29.8	35.3
87.5°	19.0	16.3	16.3	19.0	16.3	19.0	16.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)