

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: P249013

Luminaire Tested: **LD8B90D010 ER8B90850 8LBSW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249013
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 ER8B90850 8LBSW0MW
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9449.0 lumens
Efficiency: N/A
Efficacy: 109.7 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

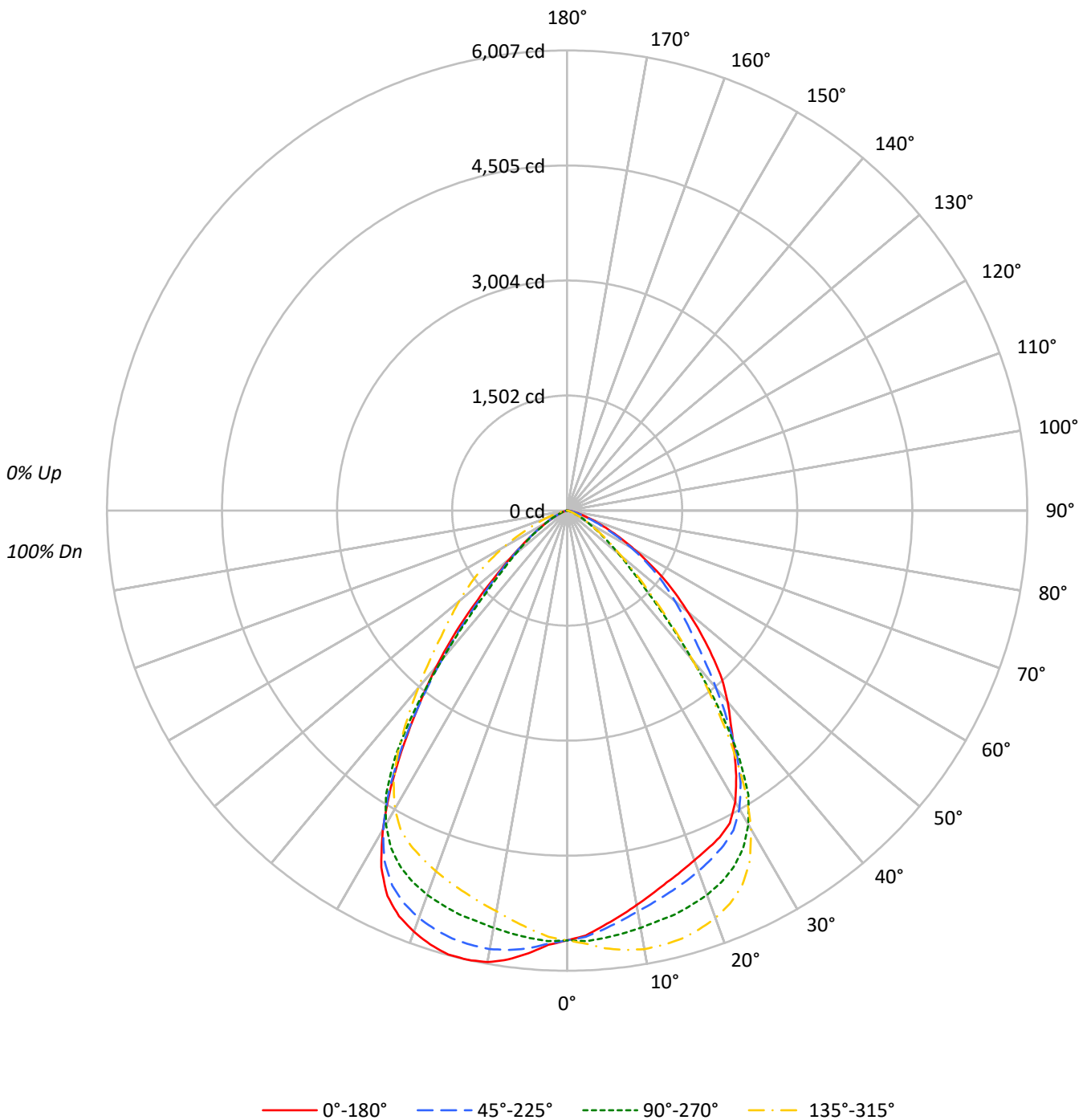
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	172979	172979	172979	172979
5°	168384	173383	179574	173383
10°	163724	173159	187396	173159
15°	160454	174184	191497	174184
20°	159361	175181	191989	175181
25°	160199	174829	188905	174829
30°	156239	168430	171457	168430
35°	142909	146929	139404	146929
40°	131208	102209	106733	102209
45°	116580	62352	72147	62352
50°	98680	41650	46255	41650
55°	81728	28418	30037	28418
60°	62333	18921	19088	18921
65°	44166	11791	10792	11791
70°	31853	7898	7168	7898
75°	20230	3920	3265	3920
80°	14118	2930	2415	2930
85°	12596	0	955	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	533.9	5.7
10°-20°	1546.1	16.4
20°-30°	2341.2	24.8
30°-40°	2346.5	24.8
40°-50°	1473.5	15.6
50°-60°	785.2	8.3
60°-70°	322.9	3.4
70°-80°	85.3	0.9
80°-90°	14.4	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°	4421.3	46.8
0°-40°	6767.7	71.6
0°-60°	9026.4	95.5
0°-90°	9449.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9449.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5610	5610	5610	5610	5610	
5°	5440	5601	5801	5601	5440	513
15°	5026	5456	5998	5456	5026	1422
25°	4708	5138	5552	5138	4708	2159
35°	3796	3903	3703	3903	3796	2378
45°	2673	1430	1654	1430	2673	2056
55°	1520	529	559	529	1520	1355
65°	605	162	148	162	605	628
75°	170	33	27	33	170	192
85°	36	0	3	0	36	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°	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6
2.5°	5552.1	5546.5	5543.8	5549.4	5552.1	5563.0	5560.3	5565.7	5565.7	5568.5	5573.9
5°	5439.8	5437.0	5439.8	5439.8	5450.7	5461.7	5458.9	5467.2	5472.6	5486.3	5491.8
7.5°	5335.7	5335.7	5332.9	5343.8	5349.4	5365.8	5363.0	5376.8	5385.0	5398.6	5417.8
10°	5228.8	5228.8	5231.5	5239.8	5242.6	5267.2	5267.2	5286.3	5297.3	5311.0	5335.7
12.5°	5124.8	5124.8	5141.2	5135.7	5146.7	5165.8	5174.1	5193.2	5209.7	5237.1	5261.8
15°	5026.1	5026.1	5031.7	5045.3	5053.5	5078.2	5091.9	5113.8	5133.0	5160.4	5196.0
17.5°	4941.2	4938.5	4941.2	4957.7	4974.2	4996.0	5007.0	5034.4	5053.5	5089.2	5122.1
20°	4856.3	4861.9	4861.9	4875.5	4886.4	4913.8	4924.8	4955.0	4976.9	5009.7	5048.1
22.5°	4782.4	4779.7	4779.7	4798.8	4807.1	4831.7	4842.6	4870.0	4894.7	4922.1	4957.7
25°	4708.4	4702.9	4714.0	4716.7	4722.1	4749.5	4757.7	4776.9	4801.6	4826.2	4861.9
27.5°	4598.8	4593.4	4596.1	4607.1	4615.3	4637.2	4642.7	4661.9	4681.0	4702.9	4733.1
30°	4387.9	4382.5	4379.8	4399.0	4407.2	4423.5	4431.8	4464.7	4470.1	4494.8	4516.7
32.5°	4108.5	4105.8	4111.3	4127.7	4135.9	4157.9	4168.8	4188.0	4201.7	4215.4	4237.3
35°	3796.3	3790.8	3796.3	3812.8	3812.8	3832.0	3840.2	3848.3	3845.6	3848.3	3842.9
37.5°	3506.0	3503.2	3506.0	3514.2	3506.0	3514.2	3506.0	3489.6	3459.5	3426.6	3393.6
40°	3259.5	3262.2	3245.8	3256.8	3226.6	3221.1	3191.0	3149.9	3089.7	3024.0	2930.8
42.5°	2996.6	2988.3	2977.4	2982.8	2958.2	2938.9	2889.7	2837.7	2760.9	2651.5	2539.1
45°	2673.3	2670.6	2665.1	2662.4	2645.9	2626.8	2585.6	2525.4	2440.5	2328.2	2194.0
47.5°	2358.3	2350.1	2350.1	2352.8	2333.6	2330.9	2298.0	2246.0	2172.1	2062.5	1922.8
50°	2057.0	2054.3	2059.8	2070.7	2057.0	2051.6	2029.7	1994.1	1928.3	1835.2	1703.6
52.5°	1785.8	1783.1	1788.6	1802.3	1796.8	1802.3	1780.4	1753.0	1709.2	1618.7	1503.7
55°	1520.2	1520.2	1520.2	1536.6	1536.6	1536.6	1525.6	1509.3	1468.1	1402.4	1295.6
57.5°	1243.5	1246.2	1262.7	1265.4	1262.7	1268.2	1265.4	1249.0	1221.7	1175.1	1092.9
60°	1010.7	1010.7	1019.0	1027.2	1024.4	1027.2	1027.2	1019.0	991.6	953.2	887.5
62.5°	799.8	808.0	802.5	808.0	819.0	808.0	802.5	797.1	777.9	753.2	698.4
65°	605.3	610.8	610.8	613.5	608.0	610.8	599.9	591.7	580.7	553.3	517.7
67.5°	460.2	460.2	460.2	460.2	457.4	454.7	452.0	443.8	424.6	413.6	375.2
70°	353.3	336.9	336.9	336.9	336.9	339.7	331.5	320.5	315.0	295.8	268.4
72.5°	235.5	241.0	235.5	235.5	230.1	232.8	221.9	216.4	210.9	200.0	183.5
75°	169.8	156.1	161.6	164.4	156.1	161.6	150.6	139.7	139.7	131.5	123.2
77.5°	109.6	106.9	109.6	112.3	109.6	106.9	101.4	95.8	95.8	93.1	84.9
80°	79.5	76.7	76.7	76.7	74.0	76.7	71.3	71.3	65.7	63.0	57.5
82.5°	52.1	52.1	49.3	52.1	49.3	52.1	43.9	43.9	43.9	41.0	35.6
85°	35.6	30.1	30.1	32.9	27.4	32.9	30.1	27.4	24.7	24.7	21.9
87.5°	16.5	19.2	16.5	19.2	16.5	16.5	19.2	16.5	16.5	10.9	10.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6
2.5°	5582.2	5584.9	5584.9	5595.9	5601.3	5604.0	5604.0	5626.0	5617.8	5623.3	5628.7
5°	5502.8	5519.2	5524.7	5524.7	5554.8	5565.7	5576.7	5601.3	5604.0	5620.5	5639.7
7.5°	5426.0	5445.2	5456.2	5480.8	5500.0	5519.2	5552.1	5568.5	5584.9	5606.9	5631.4
10°	5352.1	5374.1	5395.9	5415.1	5445.2	5469.9	5491.8	5530.1	5549.4	5579.5	5612.3
12.5°	5280.9	5311.0	5330.2	5363.0	5395.9	5417.8	5450.7	5486.3	5516.4	5546.5	5584.9
15°	5217.9	5253.5	5275.4	5311.0	5346.7	5376.8	5412.4	5456.2	5478.1	5513.7	5549.4
17.5°	5149.4	5187.8	5215.2	5248.0	5291.9	5324.7	5354.9	5398.6	5426.0	5464.4	5505.5
20°	5078.2	5116.6	5149.4	5182.3	5226.1	5258.9	5294.6	5338.4	5368.5	5406.9	5439.8
22.5°	4993.3	5029.0	5064.5	5102.8	5146.7	5174.1	5215.2	5253.5	5286.3	5322.0	5354.9
25°	4883.7	4927.6	4955.0	4990.5	5026.1	5056.2	5100.1	5138.4	5165.8	5198.7	5228.8
27.5°	4755.0	4787.9	4809.8	4839.9	4875.5	4902.9	4935.7	4974.2	5001.6	5031.7	5053.5
30°	4535.8	4566.0	4585.2	4607.1	4642.7	4667.4	4694.8	4730.3	4749.5	4771.5	4790.6
32.5°	4248.2	4272.9	4283.8	4300.3	4325.0	4349.6	4371.6	4401.7	4409.9	4423.5	4423.5
35°	3832.0	3837.4	3834.7	3840.2	3851.1	3864.8	3883.9	3903.1	3914.1	3914.1	3905.9
37.5°	3344.4	3311.6	3275.9	3248.5	3240.3	3234.8	3245.8	3253.9	3265.0	3270.4	3256.8
40°	2837.7	2763.7	2684.3	2613.0	2563.7	2541.9	2533.6	2539.1	2539.1	2558.2	2558.2
42.5°	2402.2	2287.1	2169.4	2062.5	1991.2	1936.6	1911.9	1911.9	1914.6	1928.3	1936.6
45°	2040.6	1895.4	1758.4	1640.7	1542.1	1470.8	1438.0	1429.8	1427.1	1432.5	1451.7
47.5°	1764.0	1613.3	1470.8	1325.7	1221.7	1150.4	1120.3	1109.3	1098.3	1109.3	1112.1
50°	1547.6	1391.5	1240.8	1095.6	986.0	923.0	884.7	868.2	865.5	865.5	871.0
52.5°	1350.3	1205.2	1054.6	906.7	791.6	731.4	695.7	687.5	676.6	687.5	687.5
55°	1164.1	1019.0	871.0	731.4	635.4	572.5	539.6	528.6	523.1	531.4	531.4
57.5°	961.5	838.1	701.3	575.2	479.4	435.5	410.8	397.2	394.4	399.9	394.4
60°	788.9	684.8	567.0	452.0	378.0	331.5	312.3	306.8	301.2	306.8	306.8
62.5°	624.5	536.9	440.9	353.3	290.3	257.5	235.5	235.5	232.8	232.8	235.5
65°	462.9	394.4	325.9	252.0	202.7	178.0	161.6	161.6	158.9	161.6	158.9
67.5°	336.9	290.3	235.5	183.5	145.2	131.5	120.5	112.3	117.8	112.3	109.6
70°	246.6	208.1	169.8	139.7	112.3	98.6	90.4	87.6	82.2	82.2	82.2
72.5°	164.4	139.7	115.0	90.4	74.0	60.2	57.5	52.1	46.6	49.3	54.8
75°	109.6	93.1	82.2	65.7	49.3	49.3	32.9	32.9	27.4	32.9	24.7
77.5°	76.7	63.0	49.3	41.0	32.9	30.1	21.9	21.9	19.2	19.2	19.2
80°	54.8	46.6	35.6	30.1	21.9	21.9	19.2	16.5	13.6	13.6	16.5
82.5°	32.9	24.7	24.7	21.9	13.6	10.9	8.2	10.9	5.5	5.5	5.5
85°	19.2	16.5	13.6	8.2	5.5	5.5	2.7	0.0	2.7	2.7	0.0
87.5°	10.9	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°	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6
2.5°	5642.5	5639.7	5645.2	5645.2	5661.7	5658.8	5667.1	5667.1	5661.7	5664.4	5675.3
5°	5661.7	5669.9	5686.2	5700.0	5724.6	5735.6	5749.3	5763.0	5765.7	5773.9	5782.2
7.5°	5661.7	5689.1	5708.2	5732.8	5765.7	5784.9	5815.0	5839.7	5850.6	5864.3	5880.7
10°	5650.6	5678.0	5713.6	5741.0	5782.2	5812.3	5842.4	5880.7	5897.2	5919.0	5941.0
12.5°	5628.7	5658.8	5697.2	5732.8	5779.4	5806.8	5845.1	5880.7	5905.4	5935.5	5960.2
15°	5595.9	5631.4	5667.1	5702.7	5752.0	5784.9	5820.5	5861.5	5886.2	5919.0	5941.0
17.5°	5543.8	5582.2	5615.1	5647.9	5694.5	5732.8	5765.7	5804.1	5828.7	5856.1	5886.2
20°	5480.8	5516.4	5552.1	5579.5	5626.0	5658.8	5694.5	5730.1	5749.3	5754.8	5801.3
22.5°	5401.5	5426.0	5453.4	5497.3	5524.7	5554.8	5587.7	5620.5	5639.7	5669.9	5686.2
25°	5269.9	5294.6	5324.7	5343.8	5376.8	5401.5	5434.3	5469.9	5480.8	5502.8	5519.2
27.5°	5086.5	5100.1	5113.8	5130.2	5149.4	5163.1	5182.3	5198.7	5209.7	5220.6	5231.5
30°	4796.0	4796.0	4796.0	4785.1	4793.3	4801.6	4804.3	4801.6	4801.6	4798.8	4798.8
32.5°	4412.6	4390.7	4366.0	4344.2	4335.9	4325.0	4319.5	4311.2	4297.6	4289.4	4292.1
35°	3894.9	3845.6	3815.5	3788.1	3766.2	3749.8	3741.6	3733.3	3730.6	3719.7	3708.6
37.5°	3248.5	3212.9	3191.0	3174.6	3155.4	3139.0	3141.7	3144.5	3152.6	3147.2	3149.9
40°	2563.7	2555.5	2563.7	2544.6	2539.1	2544.6	2558.2	2577.5	2588.4	2599.4	2618.5
42.5°	1950.2	1963.8	1983.1	1983.1	1991.2	2002.3	2018.6	2048.9	2065.2	2084.4	2106.4
45°	1468.1	1484.6	1509.3	1517.4	1522.9	1536.6	1555.8	1580.4	1591.3	1607.8	1627.0
47.5°	1131.2	1142.2	1155.8	1169.6	1183.2	1188.7	1207.9	1207.9	1221.7	1232.6	1238.0
50°	882.0	892.9	903.8	912.1	917.6	925.8	931.2	939.5	942.2	947.7	950.4
52.5°	690.2	704.0	704.0	709.4	717.6	725.8	723.1	725.8	728.5	728.5	736.8
55°	539.6	539.6	547.8	547.8	553.3	550.5	553.3	553.3	553.3	553.3	556.0
57.5°	402.6	405.4	413.6	408.1	405.4	410.8	405.4	410.8	408.1	413.6	405.4
60°	309.5	309.5	312.3	312.3	315.0	315.0	315.0	312.3	312.3	309.5	309.5
62.5°	232.8	235.5	238.3	235.5	235.5	235.5	232.8	232.8	230.1	227.3	227.3
65°	156.1	153.4	158.9	153.4	156.1	156.1	153.4	156.1	147.9	150.6	147.9
67.5°	112.3	109.6	106.9	109.6	106.9	104.1	104.1	106.9	109.6	101.4	101.4
70°	74.0	76.7	74.0	76.7	79.5	79.5	76.7	74.0	76.7	71.3	74.0
72.5°	46.6	46.6	46.6	46.6	46.6	49.3	49.3	49.3	43.9	43.9	41.0
75°	21.9	30.1	24.7	21.9	30.1	30.1	27.4	27.4	24.7	24.7	24.7
77.5°	21.9	16.5	16.5	16.5	16.5	16.5	16.5	16.5	13.6	16.5	13.6
80°	10.9	10.9	10.9	8.2	10.9	10.9	13.6	10.9	10.9	8.2	13.6
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: P249013

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBSW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6
2.5°	5672.6	5669.9	5672.6	5675.3	5672.6	5669.9	5672.6	5675.3	5664.4	5661.7	5667.1
5°	5793.1	5793.1	5798.5	5801.3	5798.5	5793.1	5793.1	5782.2	5773.9	5765.7	5763.0
7.5°	5897.2	5902.7	5908.1	5910.8	5908.1	5902.7	5897.2	5880.7	5864.3	5850.6	5839.7
10°	5960.2	5968.4	5979.4	5984.8	5979.4	5968.4	5960.2	5941.0	5919.0	5897.2	5880.7
12.5°	5987.6	5995.8	6009.5	6006.8	6009.5	5995.8	5987.6	5960.2	5935.5	5905.4	5880.7
15°	5968.4	5979.4	5993.0	5998.5	5993.0	5979.4	5968.4	5941.0	5919.0	5886.2	5861.5
17.5°	5908.1	5924.6	5932.8	5941.0	5932.8	5924.6	5908.1	5886.2	5856.1	5828.7	5804.1
20°	5825.9	5837.0	5847.9	5850.6	5847.9	5837.0	5825.9	5801.3	5754.8	5749.3	5730.1
22.5°	5708.2	5716.5	5741.0	5732.8	5741.0	5716.5	5708.2	5686.2	5669.9	5639.7	5620.5
25°	5538.3	5546.5	5549.4	5552.1	5549.4	5546.5	5538.3	5519.2	5502.8	5480.8	5469.9
27.5°	5245.3	5245.3	5250.7	5253.5	5250.7	5245.3	5245.3	5231.5	5220.6	5209.7	5198.7
30°	4801.6	4801.6	4801.6	4815.3	4801.6	4801.6	4801.6	4798.8	4798.8	4801.6	4801.6
32.5°	4289.4	4283.8	4278.4	4283.8	4278.4	4283.8	4289.4	4292.1	4289.4	4297.6	4311.2
35°	3708.6	3705.9	3714.2	3703.2	3714.2	3705.9	3708.6	3708.6	3719.7	3730.6	3733.3
37.5°	3152.6	3147.2	3158.1	3147.2	3158.1	3147.2	3152.6	3149.9	3147.2	3152.6	3144.5
40°	2624.1	2629.5	2629.5	2651.5	2629.5	2629.5	2624.1	2618.5	2599.4	2588.4	2577.5
42.5°	2117.3	2133.7	2128.2	2144.7	2128.2	2133.7	2117.3	2106.4	2084.4	2065.2	2048.9
45°	1637.9	1649.0	1649.0	1654.4	1649.0	1649.0	1637.9	1627.0	1607.8	1591.3	1580.4
47.5°	1257.2	1257.2	1257.2	1260.0	1257.2	1257.2	1257.2	1238.0	1232.6	1221.7	1207.9
50°	955.9	958.6	961.5	964.2	961.5	958.6	955.9	950.4	947.7	942.2	939.5
52.5°	734.1	736.8	731.4	736.8	731.4	736.8	734.1	736.8	728.5	728.5	725.8
55°	556.0	553.3	556.0	558.7	556.0	553.3	556.0	556.0	553.3	553.3	553.3
57.5°	408.1	402.6	402.6	402.6	402.6	402.6	408.1	405.4	413.6	408.1	410.8
60°	304.1	306.8	306.8	309.5	306.8	306.8	304.1	309.5	309.5	312.3	312.3
62.5°	224.6	232.8	227.3	232.8	227.3	232.8	224.6	227.3	227.3	230.1	232.8
65°	145.2	145.2	145.2	147.9	145.2	145.2	145.2	147.9	150.6	147.9	156.1
67.5°	98.6	101.4	106.9	104.1	106.9	101.4	98.6	101.4	101.4	109.6	106.9
70°	79.5	71.3	71.3	79.5	71.3	71.3	79.5	74.0	71.3	76.7	74.0
72.5°	46.6	41.0	46.6	46.6	46.6	41.0	46.6	41.0	43.9	43.9	49.3
75°	24.7	21.9	19.2	27.4	19.2	21.9	24.7	24.7	24.7	24.7	27.4
77.5°	16.5	13.6	19.2	19.2	19.2	13.6	16.5	13.6	16.5	13.6	16.5
80°	8.2	10.9	8.2	13.6	8.2	10.9	8.2	13.6	8.2	10.9	10.9
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: P249013

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBSW0MW

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6
2.5°	5667.1	5658.8	5661.7	5645.2	5645.2	5639.7	5642.5	5628.7	5623.3	5617.8	5626.0
5°	5749.3	5735.6	5724.6	5700.0	5686.2	5669.9	5661.7	5639.7	5620.5	5604.0	5601.3
7.5°	5815.0	5784.9	5765.7	5732.8	5708.2	5689.1	5661.7	5631.4	5606.9	5584.9	5568.5
10°	5842.4	5812.3	5782.2	5741.0	5713.6	5678.0	5650.6	5612.3	5579.5	5549.4	5530.1
12.5°	5845.1	5806.8	5779.4	5732.8	5697.2	5658.8	5628.7	5584.9	5546.5	5516.4	5486.3
15°	5820.5	5784.9	5752.0	5702.7	5667.1	5631.4	5595.9	5549.4	5513.7	5478.1	5456.2
17.5°	5765.7	5732.8	5694.5	5647.9	5615.1	5582.2	5543.8	5505.5	5464.4	5426.0	5398.6
20°	5694.5	5658.8	5626.0	5579.5	5552.1	5516.4	5480.8	5439.8	5406.9	5368.5	5338.4
22.5°	5587.7	5554.8	5524.7	5497.3	5453.4	5426.0	5401.5	5354.9	5322.0	5286.3	5253.5
25°	5434.3	5401.5	5376.8	5343.8	5324.7	5294.6	5269.9	5228.8	5198.7	5165.8	5138.4
27.5°	5182.3	5163.1	5149.4	5130.2	5113.8	5100.1	5086.5	5053.5	5031.7	5001.6	4974.2
30°	4804.3	4801.6	4793.3	4785.1	4796.0	4796.0	4796.0	4790.6	4771.5	4749.5	4730.3
32.5°	4319.5	4325.0	4335.9	4344.2	4366.0	4390.7	4412.6	4423.5	4423.5	4409.9	4401.7
35°	3741.6	3749.8	3766.2	3788.1	3815.5	3845.6	3894.9	3905.9	3914.1	3914.1	3903.1
37.5°	3141.7	3139.0	3155.4	3174.6	3191.0	3212.9	3248.5	3256.8	3270.4	3265.0	3253.9
40°	2558.2	2544.6	2539.1	2544.6	2563.7	2555.5	2563.7	2558.2	2558.2	2539.1	2539.1
42.5°	2018.6	2002.3	1991.2	1983.1	1983.1	1963.8	1950.2	1936.6	1928.3	1914.6	1911.9
45°	1555.8	1536.6	1522.9	1517.4	1509.3	1484.6	1468.1	1451.7	1432.5	1427.1	1429.8
47.5°	1207.9	1188.7	1183.2	1169.6	1155.8	1142.2	1131.2	1112.1	1109.3	1098.3	1109.3
50°	931.2	925.8	917.6	912.1	903.8	892.9	882.0	871.0	865.5	865.5	868.2
52.5°	723.1	725.8	717.6	709.4	704.0	704.0	690.2	687.5	687.5	676.6	687.5
55°	553.3	550.5	553.3	547.8	547.8	539.6	539.6	531.4	531.4	523.1	528.6
57.5°	405.4	410.8	405.4	408.1	413.6	405.4	402.6	394.4	399.9	394.4	397.2
60°	315.0	315.0	315.0	312.3	312.3	309.5	309.5	306.8	306.8	301.2	306.8
62.5°	232.8	235.5	235.5	235.5	238.3	235.5	232.8	235.5	232.8	232.8	235.5
65°	153.4	156.1	156.1	153.4	158.9	153.4	156.1	158.9	161.6	158.9	161.6
67.5°	104.1	104.1	106.9	109.6	106.9	109.6	112.3	109.6	112.3	117.8	112.3
70°	76.7	79.5	79.5	76.7	74.0	76.7	74.0	82.2	82.2	82.2	87.6
72.5°	49.3	49.3	46.6	46.6	46.6	46.6	46.6	54.8	49.3	46.6	52.1
75°	27.4	30.1	30.1	21.9	24.7	30.1	21.9	24.7	32.9	27.4	32.9
77.5°	16.5	16.5	16.5	16.5	16.5	16.5	21.9	19.2	19.2	19.2	21.9
80°	13.6	10.9	10.9	8.2	10.9	10.9	10.9	16.5	13.6	13.6	16.5
82.5°	5.5	5.5	2.7	0.0	5.5	5.5	5.5	5.5	5.5	5.5	10.9
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: P249013

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBSW0MW

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6
2.5°	5604.0	5604.0	5601.3	5595.9	5584.9	5584.9	5582.2	5573.9	5568.5	5565.7	5565.7
5°	5576.7	5565.7	5554.8	5524.7	5524.7	5519.2	5502.8	5491.8	5486.3	5472.6	5467.2
7.5°	5552.1	5519.2	5500.0	5480.8	5456.2	5445.2	5426.0	5417.8	5398.6	5385.0	5376.8
10°	5491.8	5469.9	5445.2	5415.1	5395.9	5374.1	5352.1	5335.7	5311.0	5297.3	5286.3
12.5°	5450.7	5417.8	5395.9	5363.0	5330.2	5311.0	5280.9	5261.8	5237.1	5209.7	5193.2
15°	5412.4	5376.8	5346.7	5311.0	5275.4	5253.5	5217.9	5196.0	5160.4	5133.0	5113.8
17.5°	5354.9	5324.7	5291.9	5248.0	5215.2	5187.8	5149.4	5122.1	5089.2	5053.5	5034.4
20°	5294.6	5258.9	5226.1	5182.3	5149.4	5116.6	5078.2	5048.1	5009.7	4976.9	4955.0
22.5°	5215.2	5174.1	5146.7	5102.8	5064.5	5029.0	4993.3	4957.7	4922.1	4894.7	4870.0
25°	5100.1	5056.2	5026.1	4990.5	4955.0	4927.6	4883.7	4861.9	4826.2	4801.6	4776.9
27.5°	4935.7	4902.9	4875.5	4839.9	4809.8	4787.9	4755.0	4733.1	4702.9	4681.0	4661.9
30°	4694.8	4667.4	4642.7	4607.1	4585.2	4566.0	4535.8	4516.7	4494.8	4470.1	4464.7
32.5°	4371.6	4349.6	4325.0	4300.3	4283.8	4272.9	4248.2	4237.3	4215.4	4201.7	4188.0
35°	3883.9	3864.8	3851.1	3840.2	3834.7	3837.4	3832.0	3842.9	3848.3	3845.6	3848.3
37.5°	3245.8	3234.8	3240.3	3248.5	3275.9	3311.6	3344.4	3393.6	3426.6	3459.5	3489.6
40°	2533.6	2541.9	2563.7	2613.0	2684.3	2763.7	2837.7	2930.8	3024.0	3089.7	3149.9
42.5°	1911.9	1936.6	1991.2	2062.5	2169.4	2287.1	2402.2	2539.1	2651.5	2760.9	2837.7
45°	1438.0	1470.8	1542.1	1640.7	1758.4	1895.4	2040.6	2194.0	2328.2	2440.5	2525.4
47.5°	1120.3	1150.4	1221.7	1325.7	1470.8	1613.3	1764.0	1922.8	2062.5	2172.1	2246.0
50°	884.7	923.0	986.0	1095.6	1240.8	1391.5	1547.6	1703.6	1835.2	1928.3	1994.1
52.5°	695.7	731.4	791.6	906.7	1054.6	1205.2	1350.3	1503.7	1618.7	1709.2	1753.0
55°	539.6	572.5	635.4	731.4	871.0	1019.0	1164.1	1295.6	1402.4	1468.1	1509.3
57.5°	410.8	435.5	479.4	575.2	701.3	838.1	961.5	1092.9	1175.1	1221.7	1249.0
60°	312.3	331.5	378.0	452.0	567.0	684.8	788.9	887.5	953.2	991.6	1019.0
62.5°	235.5	257.5	290.3	353.3	440.9	536.9	624.5	698.4	753.2	777.9	797.1
65°	161.6	178.0	202.7	252.0	325.9	394.4	462.9	517.7	553.3	580.7	591.7
67.5°	120.5	131.5	145.2	183.5	235.5	290.3	336.9	375.2	413.6	424.6	443.8
70°	90.4	98.6	112.3	139.7	169.8	208.1	246.6	268.4	295.8	315.0	320.5
72.5°	57.5	60.2	74.0	90.4	115.0	139.7	164.4	183.5	200.0	210.9	216.4
75°	32.9	49.3	49.3	65.7	82.2	93.1	109.6	123.2	131.5	139.7	139.7
77.5°	21.9	30.1	32.9	41.0	49.3	63.0	76.7	84.9	93.1	95.8	95.8
80°	19.2	21.9	21.9	30.1	35.6	46.6	54.8	57.5	63.0	65.7	71.3
82.5°	8.2	10.9	13.6	21.9	24.7	24.7	32.9	35.6	41.0	43.9	43.9
85°	2.7	5.5	5.5	8.2	13.6	16.5	19.2	21.9	24.7	24.7	27.4
87.5°	2.7	2.7	0.0	2.7	5.5	5.5	10.9	10.9	10.9	16.5	16.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P249013

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBSW0MW

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6	5609.6
2.5°	5560.3	5563.0	5552.1	5549.4	5543.8	5546.5	5552.1
5°	5458.9	5461.7	5450.7	5439.8	5439.8	5437.0	5439.8
7.5°	5363.0	5365.8	5349.4	5343.8	5332.9	5335.7	5335.7
10°	5267.2	5267.2	5242.6	5239.8	5231.5	5228.8	5228.8
12.5°	5174.1	5165.8	5146.7	5135.7	5141.2	5124.8	5124.8
15°	5091.9	5078.2	5053.5	5045.3	5031.7	5026.1	5026.1
17.5°	5007.0	4996.0	4974.2	4957.7	4941.2	4938.5	4941.2
20°	4924.8	4913.8	4886.4	4875.5	4861.9	4861.9	4856.3
22.5°	4842.6	4831.7	4807.1	4798.8	4779.7	4779.7	4782.4
25°	4757.7	4749.5	4722.1	4716.7	4714.0	4702.9	4708.4
27.5°	4642.7	4637.2	4615.3	4607.1	4596.1	4593.4	4598.8
30°	4431.8	4423.5	4407.2	4399.0	4379.8	4382.5	4387.9
32.5°	4168.8	4157.9	4135.9	4127.7	4111.3	4105.8	4108.5
35°	3840.2	3832.0	3812.8	3812.8	3796.3	3790.8	3796.3
37.5°	3506.0	3514.2	3506.0	3514.2	3506.0	3503.2	3506.0
40°	3191.0	3221.1	3226.6	3256.8	3245.8	3262.2	3259.5
42.5°	2889.7	2938.9	2958.2	2982.8	2977.4	2988.3	2996.6
45°	2585.6	2626.8	2645.9	2662.4	2665.1	2670.6	2673.3
47.5°	2298.0	2330.9	2333.6	2352.8	2350.1	2350.1	2358.3
50°	2029.7	2051.6	2057.0	2070.7	2059.8	2054.3	2057.0
52.5°	1780.4	1802.3	1796.8	1802.3	1788.6	1783.1	1785.8
55°	1525.6	1536.6	1536.6	1536.6	1520.2	1520.2	1520.2
57.5°	1265.4	1268.2	1262.7	1265.4	1262.7	1246.2	1243.5
60°	1027.2	1027.2	1024.4	1027.2	1019.0	1010.7	1010.7
62.5°	802.5	808.0	819.0	808.0	802.5	808.0	799.8
65°	599.9	610.8	608.0	613.5	610.8	610.8	605.3
67.5°	452.0	454.7	457.4	460.2	460.2	460.2	460.2
70°	331.5	339.7	336.9	336.9	336.9	336.9	353.3
72.5°	221.9	232.8	230.1	235.5	235.5	241.0	235.5
75°	150.6	161.6	156.1	164.4	161.6	156.1	169.8
77.5°	101.4	106.9	109.6	112.3	109.6	106.9	109.6
80°	71.3	76.7	74.0	76.7	76.7	76.7	79.5
82.5°	43.9	52.1	49.3	52.1	49.3	52.1	52.1
85°	30.1	32.9	27.4	32.9	30.1	30.1	35.6
87.5°	19.2	16.5	16.5	19.2	16.5	19.2	16.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)