

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: P248563

Luminaire Tested: **LD8B90D010 ER8B90835 8LBSW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248563
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 ER8B90835 8LBSW0H
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9428.0 lumens
Efficiency: N/A
Efficacy: 109.5 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

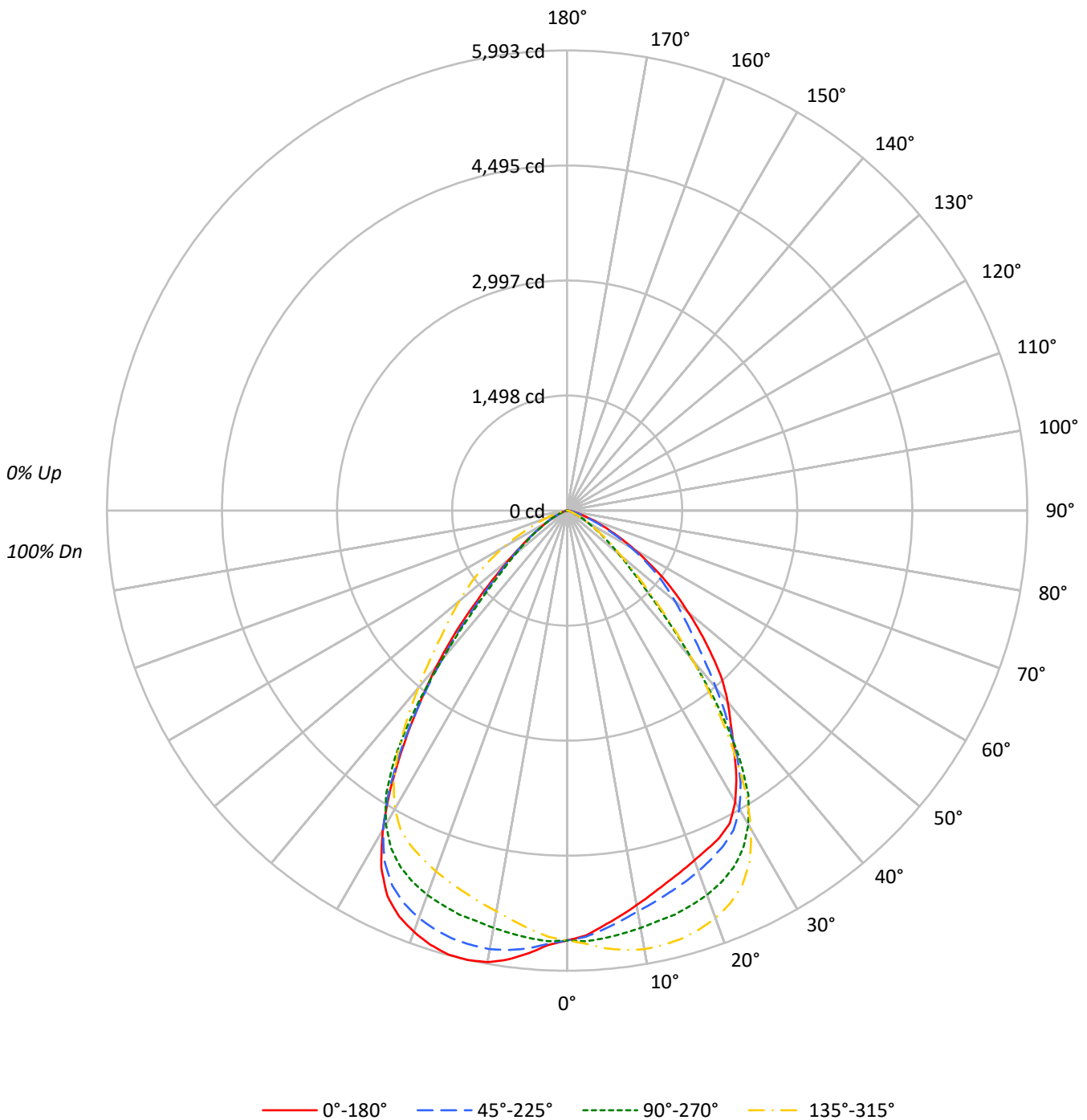
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	172594	172594	172594	172594
5°	168010	172999	179178	172999
10°	163361	172773	186980	172773
15°	160099	173798	191072	173798
20°	159010	174794	191563	174794
25°	159845	174442	188483	174442
30°	155893	168057	171076	168057
35°	142592	146602	139095	146602
40°	130914	101979	106496	101979
45°	116323	62213	71986	62213
50°	98459	41559	46150	41559
55°	81545	28359	29972	28359
60°	62197	18878	19045	18878
65°	44071	11762	10770	11762
70°	31781	7880	7150	7880
75°	20183	3908	3253	3908
80°	14082	2912	2415	2912
85°	12560	0	955	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	532.7	5.7
10°-20°	1542.7	16.4
20°-30°	2336.0	24.8
30°-40°	2341.2	24.8
40°-50°	1470.2	15.6
50°-60°	783.5	8.3
60°-70°	322.2	3.4
70°-80°	85.1	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°	4411.4	46.8
0°-40°	6752.7	71.6
0°-60°	9006.3	95.5
0°-90°	9428.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9428.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5597	5597	5597	5597	5597	
5°	5428	5589	5788	5589	5428	512
15°	5015	5444	5985	5444	5015	1418
25°	4698	5127	5540	5127	4698	2155
35°	3788	3894	3695	3894	3788	2373
45°	2667	1427	1651	1427	2667	2051
55°	1517	528	558	528	1517	1352
65°	604	161	148	161	604	627
75°	169	33	27	33	169	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°	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1
2.5°	5539.7	5534.2	5531.5	5537.0	5539.7	5550.6	5547.9	5553.3	5553.3	5556.2	5561.6
5°	5427.7	5424.9	5427.7	5427.7	5438.6	5449.5	5446.8	5455.0	5460.4	5474.2	5479.6
7.5°	5323.9	5323.9	5321.1	5332.0	5337.5	5353.9	5351.1	5364.8	5373.0	5386.6	5405.8
10°	5217.2	5217.2	5219.9	5228.1	5230.9	5255.5	5255.5	5274.6	5285.5	5299.2	5323.9
12.5°	5113.4	5113.4	5129.8	5124.3	5135.2	5154.3	5162.6	5181.7	5198.1	5225.4	5250.1
15°	5015.0	5015.0	5020.5	5034.1	5042.3	5066.9	5080.5	5102.5	5121.6	5148.9	5184.5
17.5°	4930.3	4927.6	4930.3	4946.7	4963.1	4984.9	4995.8	5023.2	5042.3	5077.8	5110.7
20°	4845.6	4851.1	4851.1	4864.7	4875.6	4902.9	4913.8	4944.0	4965.8	4998.5	5036.9
22.5°	4771.8	4769.1	4769.1	4788.2	4796.4	4820.9	4831.8	4859.2	4883.8	4911.1	4946.7
25°	4698.0	4692.5	4703.5	4706.2	4711.6	4738.9	4747.1	4766.2	4790.9	4815.5	4851.1
27.5°	4588.6	4583.2	4585.9	4596.8	4605.0	4626.9	4632.4	4651.5	4670.6	4692.5	4722.6
30°	4378.2	4372.8	4370.1	4389.2	4397.4	4413.7	4421.9	4454.8	4460.2	4484.8	4506.6
32.5°	4099.4	4096.7	4102.2	4118.5	4126.7	4148.7	4159.6	4178.7	4192.3	4206.0	4227.9
35°	3787.9	3782.4	3787.9	3804.3	3804.3	3823.5	3831.7	3839.8	3837.1	3839.8	3834.4
37.5°	3498.2	3495.4	3498.2	3506.3	3498.2	3506.3	3498.2	3481.8	3451.8	3418.9	3386.1
40°	3252.2	3254.9	3238.6	3249.5	3219.4	3214.0	3183.9	3142.9	3082.8	3017.2	2924.3
42.5°	2989.9	2981.7	2970.8	2976.2	2951.7	2932.4	2883.3	2831.4	2754.8	2645.6	2533.4
45°	2667.4	2664.7	2659.2	2656.5	2640.1	2620.9	2579.9	2519.8	2435.1	2323.1	2189.1
47.5°	2353.1	2344.9	2344.9	2347.6	2328.5	2325.8	2292.9	2241.0	2167.3	2057.9	1918.5
50°	2052.4	2049.7	2055.2	2066.1	2052.4	2047.0	2025.2	1989.6	1924.0	1831.1	1699.9
52.5°	1781.9	1779.2	1784.7	1798.3	1792.8	1798.3	1776.5	1749.1	1705.4	1615.1	1500.4
55°	1516.8	1516.8	1516.8	1533.1	1533.1	1533.1	1522.2	1505.9	1464.9	1399.3	1292.7
57.5°	1240.8	1243.5	1259.9	1262.6	1259.9	1265.4	1262.6	1246.2	1219.0	1172.5	1090.5
60°	1008.5	1008.5	1016.7	1024.9	1022.1	1024.9	1024.9	1016.7	989.4	951.1	885.5
62.5°	798.0	806.2	800.7	806.2	817.1	806.2	800.7	795.3	776.2	751.6	696.9
65°	604.0	609.5	609.5	612.2	606.7	609.5	598.6	590.4	579.4	552.1	516.6
67.5°	459.2	459.2	459.2	459.2	456.4	453.7	451.0	442.8	423.6	412.7	374.4
70°	352.5	336.1	336.1	336.1	336.1	338.9	330.7	319.8	314.3	295.2	267.8
72.5°	235.0	240.5	235.0	235.0	229.6	232.3	221.4	215.9	210.5	199.6	183.1
75°	169.4	155.8	161.2	164.0	155.8	161.2	150.3	139.4	139.4	131.2	123.0
77.5°	109.3	106.6	109.3	112.0	109.3	106.6	101.1	95.6	95.6	92.9	84.7
80°	79.3	76.5	76.5	76.5	73.8	76.5	71.1	71.1	65.6	62.9	57.4
82.5°	52.0	52.0	49.2	52.0	49.2	52.0	43.8	43.8	43.8	40.9	35.5
85°	35.5	30.0	30.0	32.8	27.3	32.8	30.0	27.3	24.6	24.6	21.8
87.5°	16.4	19.1	16.4	19.1	16.4	16.4	19.1	16.4	16.4	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°	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1
2.5°	5569.8	5572.5	5572.5	5583.5	5588.9	5591.6	5591.6	5613.5	5605.3	5610.8	5616.2
5°	5490.6	5506.9	5512.4	5512.4	5542.4	5553.3	5564.3	5588.9	5591.6	5608.0	5627.1
7.5°	5414.0	5433.1	5444.1	5468.6	5487.8	5506.9	5539.7	5556.2	5572.5	5594.4	5618.9
10°	5340.2	5362.1	5383.9	5403.1	5433.1	5457.7	5479.6	5517.8	5537.0	5567.1	5599.8
12.5°	5269.2	5299.2	5318.4	5351.1	5383.9	5405.8	5438.6	5474.2	5504.2	5534.2	5572.5
15°	5206.3	5241.9	5263.7	5299.2	5334.8	5364.8	5400.4	5444.1	5465.9	5501.5	5537.0
17.5°	5137.9	5176.3	5203.6	5236.3	5280.1	5312.8	5343.0	5386.6	5414.0	5452.2	5493.3
20°	5066.9	5105.2	5137.9	5170.8	5214.5	5247.3	5282.8	5326.6	5356.6	5394.8	5427.7
22.5°	4982.2	5017.8	5053.2	5091.5	5135.2	5162.6	5203.6	5241.9	5274.6	5310.1	5343.0
25°	4872.9	4916.6	4944.0	4979.4	5015.0	5045.0	5088.8	5127.0	5154.3	5187.2	5217.2
27.5°	4744.4	4777.3	4799.1	4829.1	4864.7	4892.0	4924.7	4963.1	4990.4	5020.5	5042.3
30°	4525.7	4555.9	4575.0	4596.8	4632.4	4657.0	4684.4	4719.8	4738.9	4760.8	4780.0
32.5°	4238.8	4263.4	4274.3	4290.7	4315.4	4339.9	4361.8	4391.9	4400.1	4413.7	4413.7
35°	3823.5	3828.9	3826.2	3831.7	3842.6	3856.2	3875.3	3894.4	3905.4	3905.4	3897.3
37.5°	3336.9	3304.2	3268.7	3241.3	3233.1	3227.6	3238.6	3246.7	3257.7	3263.1	3249.5
40°	2831.4	2757.6	2678.3	2607.2	2558.0	2536.2	2528.0	2533.4	2533.4	2552.5	2552.5
42.5°	2396.8	2282.0	2164.6	2057.9	1986.8	1932.3	1907.6	1907.6	1910.3	1924.0	1932.3
45°	2036.1	1891.2	1754.5	1637.1	1538.7	1467.6	1434.8	1426.6	1423.9	1429.3	1448.4
47.5°	1760.0	1609.7	1467.6	1322.8	1219.0	1147.9	1117.8	1106.8	1095.9	1106.8	1109.6
50°	1544.2	1388.4	1238.1	1093.2	983.8	921.0	882.7	866.3	863.6	863.6	869.1
52.5°	1347.3	1202.5	1052.2	904.7	789.8	729.7	694.2	686.0	675.1	686.0	686.0
55°	1161.5	1016.7	869.1	729.7	634.0	571.2	538.4	527.5	522.0	530.2	530.2
57.5°	959.3	836.3	699.7	573.9	478.3	434.6	409.9	396.3	393.5	399.0	393.5
60°	787.1	683.3	565.7	451.0	377.2	330.7	311.6	306.1	300.6	306.1	306.1
62.5°	623.1	535.7	440.0	352.5	289.7	256.9	235.0	235.0	232.3	232.3	235.0
65°	461.9	393.5	325.2	251.4	202.3	177.6	161.2	161.2	158.5	161.2	158.5
67.5°	336.1	289.7	235.0	183.1	144.9	131.2	120.3	112.0	117.6	112.0	109.3
70°	246.0	207.7	169.4	139.4	112.0	98.4	90.2	87.4	82.0	82.0	82.0
72.5°	164.0	139.4	114.7	90.2	73.8	60.1	57.4	52.0	46.5	49.2	54.7
75°	109.3	92.9	82.0	65.6	49.2	49.2	32.8	32.8	27.3	32.8	24.6
77.5°	76.5	62.9	49.2	40.9	32.8	30.0	21.8	21.8	19.1	19.1	19.1
80°	54.7	46.5	35.5	30.0	21.8	21.8	19.1	16.4	13.6	13.6	16.4
82.5°	32.8	24.6	24.6	21.8	13.6	10.9	8.2	10.9	5.5	5.5	5.5
85°	19.1	16.4	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°	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1
2.5°	5630.0	5627.1	5632.7	5632.7	5649.1	5646.3	5654.5	5654.5	5649.1	5651.8	5662.7
5°	5649.1	5657.3	5673.6	5687.3	5711.8	5722.9	5736.5	5750.2	5752.9	5761.1	5769.3
7.5°	5649.1	5676.4	5695.5	5720.1	5752.9	5772.0	5802.1	5826.7	5837.6	5851.2	5867.6
10°	5638.1	5665.4	5700.9	5728.3	5769.3	5799.4	5829.4	5867.6	5884.1	5905.9	5927.8
12.5°	5616.2	5646.3	5684.5	5720.1	5766.5	5793.9	5832.1	5867.6	5892.3	5922.3	5947.0
15°	5583.5	5618.9	5654.5	5690.0	5739.2	5772.0	5807.6	5848.5	5873.2	5905.9	5927.8
17.5°	5531.5	5569.8	5602.6	5635.4	5681.8	5720.1	5752.9	5791.2	5815.8	5843.1	5873.2
20°	5468.6	5504.2	5539.7	5567.1	5613.5	5646.3	5681.8	5717.4	5736.5	5742.0	5788.5
22.5°	5389.4	5414.0	5441.3	5485.1	5512.4	5542.4	5575.3	5608.0	5627.1	5657.3	5673.6
25°	5258.2	5282.8	5312.8	5332.0	5364.8	5389.4	5422.2	5457.7	5468.6	5490.6	5506.9
27.5°	5075.1	5088.8	5102.5	5118.8	5137.9	5151.6	5170.8	5187.2	5198.1	5209.0	5219.9
30°	4785.4	4785.4	4785.4	4774.5	4782.7	4790.9	4793.6	4790.9	4790.9	4788.2	4788.2
32.5°	4402.8	4381.0	4356.3	4334.5	4326.3	4315.4	4309.9	4301.7	4288.0	4279.8	4282.5
35°	3886.2	3837.1	3807.0	3779.7	3757.9	3741.5	3733.2	3725.0	3722.3	3711.4	3700.4
37.5°	3241.3	3205.8	3183.9	3167.5	3148.4	3132.0	3134.7	3137.5	3145.6	3140.2	3142.9
40°	2558.0	2549.8	2558.0	2538.9	2533.4	2538.9	2552.5	2571.8	2582.7	2593.6	2612.7
42.5°	1945.9	1959.5	1978.7	1978.7	1986.8	1997.8	2014.2	2044.3	2060.6	2079.7	2101.7
45°	1464.9	1481.3	1505.9	1514.0	1519.5	1533.1	1552.4	1576.9	1587.8	1604.2	1623.4
47.5°	1128.7	1139.6	1153.3	1167.0	1180.6	1186.1	1205.2	1205.2	1219.0	1229.9	1235.3
50°	880.0	890.9	901.8	910.1	915.6	923.8	929.2	937.4	940.1	945.6	948.3
52.5°	688.7	702.4	702.4	707.8	716.0	724.2	721.5	724.2	726.9	726.9	735.1
55°	538.4	538.4	546.6	546.6	552.1	549.3	552.1	552.1	552.1	552.1	554.8
57.5°	401.7	404.5	412.7	407.2	404.5	409.9	404.5	409.9	407.2	412.7	404.5
60°	308.8	308.8	311.6	311.6	314.3	314.3	314.3	311.6	311.6	308.8	308.8
62.5°	232.3	235.0	237.8	235.0	235.0	235.0	232.3	232.3	229.6	226.8	226.8
65°	155.8	153.1	158.5	153.1	155.8	155.8	153.1	155.8	147.6	150.3	147.6
67.5°	112.0	109.3	106.6	109.3	106.6	103.8	103.8	106.6	109.3	101.1	101.1
70°	73.8	76.5	73.8	76.5	79.3	79.3	76.5	73.8	76.5	71.1	73.8
72.5°	46.5	46.5	46.5	46.5	46.5	49.2	49.2	49.2	43.8	43.8	40.9
75°	21.8	30.0	24.6	21.8	30.0	30.0	27.3	27.3	24.6	24.6	24.6
77.5°	21.8	16.4	16.4	16.4	16.4	16.4	16.4	16.4	13.6	16.4	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: P248563

CATALOG NUMBER: LD8B90D010 ER8B90835 8LBSW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1
2.5°	5660.0	5657.3	5660.0	5662.7	5660.0	5657.3	5660.0	5662.7	5651.8	5649.1	5654.5
5°	5780.2	5780.2	5785.6	5788.5	5785.6	5780.2	5780.2	5769.3	5761.1	5752.9	5750.2
7.5°	5884.1	5889.6	5895.0	5897.7	5895.0	5889.6	5884.1	5867.6	5851.2	5837.6	5826.7
10°	5947.0	5955.2	5966.1	5971.5	5966.1	5955.2	5947.0	5927.8	5905.9	5884.1	5867.6
12.5°	5974.3	5982.5	5996.1	5993.4	5996.1	5982.5	5974.3	5947.0	5922.3	5892.3	5867.6
15°	5955.2	5966.1	5979.7	5985.2	5979.7	5966.1	5955.2	5927.8	5905.9	5873.2	5848.5
17.5°	5895.0	5911.4	5919.6	5927.8	5919.6	5911.4	5895.0	5873.2	5843.1	5815.8	5791.2
20°	5813.0	5824.0	5834.9	5837.6	5834.9	5824.0	5813.0	5788.5	5742.0	5736.5	5717.4
22.5°	5695.5	5703.7	5728.3	5720.1	5728.3	5703.7	5695.5	5673.6	5657.3	5627.1	5608.0
25°	5526.0	5534.2	5537.0	5539.7	5537.0	5534.2	5526.0	5506.9	5490.6	5468.6	5457.7
27.5°	5233.6	5233.6	5239.0	5241.9	5239.0	5233.6	5233.6	5219.9	5209.0	5198.1	5187.2
30°	4790.9	4790.9	4790.9	4804.6	4790.9	4790.9	4790.9	4788.2	4788.2	4790.9	4790.9
32.5°	4279.8	4274.3	4268.9	4274.3	4268.9	4274.3	4279.8	4282.5	4279.8	4288.0	4301.7
35°	3700.4	3697.7	3705.9	3695.0	3705.9	3697.7	3700.4	3700.4	3711.4	3722.3	3725.0
37.5°	3145.6	3140.2	3151.1	3140.2	3151.1	3140.2	3145.6	3142.9	3140.2	3145.6	3137.5
40°	2618.2	2623.6	2623.6	2645.6	2623.6	2623.6	2618.2	2612.7	2593.6	2582.7	2571.8
42.5°	2112.6	2129.0	2123.5	2139.9	2123.5	2129.0	2112.6	2101.7	2079.7	2060.6	2044.3
45°	1634.3	1645.3	1645.3	1650.7	1645.3	1645.3	1634.3	1623.4	1604.2	1587.8	1576.9
47.5°	1254.4	1254.4	1254.4	1257.2	1254.4	1254.4	1254.4	1235.3	1229.9	1219.0	1205.2
50°	953.8	956.5	959.3	962.0	959.3	956.5	953.8	948.3	945.6	940.1	937.4
52.5°	732.4	735.1	729.7	735.1	729.7	735.1	732.4	735.1	726.9	726.9	724.2
55°	554.8	552.1	554.8	557.5	554.8	552.1	554.8	554.8	552.1	552.1	552.1
57.5°	407.2	401.7	401.7	401.7	401.7	401.7	407.2	404.5	412.7	407.2	409.9
60°	303.4	306.1	306.1	308.8	306.1	306.1	303.4	308.8	308.8	311.6	311.6
62.5°	224.1	232.3	226.8	232.3	226.8	232.3	224.1	226.8	226.8	229.6	232.3
65°	144.9	144.9	144.9	147.6	144.9	144.9	144.9	147.6	150.3	147.6	155.8
67.5°	98.4	101.1	106.6	103.8	106.6	101.1	98.4	101.1	101.1	109.3	106.6
70°	79.3	71.1	71.1	79.3	71.1	71.1	79.3	73.8	71.1	76.5	73.8
72.5°	46.5	40.9	46.5	46.5	46.5	40.9	46.5	40.9	43.8	43.8	49.2
75°	24.6	21.8	19.1	27.3	19.1	21.8	24.6	24.6	24.6	24.6	27.3
77.5°	16.4	13.6	19.1	19.1	19.1	13.6	16.4	13.6	16.4	13.6	16.4
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: P248563

CATALOG NUMBER: LD8B90D010 ER8B90835 8LBSW0H

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1
2.5°	5654.5	5646.3	5649.1	5632.7	5632.7	5627.1	5630.0	5616.2	5610.8	5605.3	5613.5
5°	5736.5	5722.9	5711.8	5687.3	5673.6	5657.3	5649.1	5627.1	5608.0	5591.6	5588.9
7.5°	5802.1	5772.0	5752.9	5720.1	5695.5	5676.4	5649.1	5618.9	5594.4	5572.5	5556.2
10°	5829.4	5799.4	5769.3	5728.3	5700.9	5665.4	5638.1	5599.8	5567.1	5537.0	5517.8
12.5°	5832.1	5793.9	5766.5	5720.1	5684.5	5646.3	5616.2	5572.5	5534.2	5504.2	5474.2
15°	5807.6	5772.0	5739.2	5690.0	5654.5	5618.9	5583.5	5537.0	5501.5	5465.9	5444.1
17.5°	5752.9	5720.1	5681.8	5635.4	5602.6	5569.8	5531.5	5493.3	5452.2	5414.0	5386.6
20°	5681.8	5646.3	5613.5	5567.1	5539.7	5504.2	5468.6	5427.7	5394.8	5356.6	5326.6
22.5°	5575.3	5542.4	5512.4	5485.1	5441.3	5414.0	5389.4	5343.0	5310.1	5274.6	5241.9
25°	5422.2	5389.4	5364.8	5332.0	5312.8	5282.8	5258.2	5217.2	5187.2	5154.3	5127.0
27.5°	5170.8	5151.6	5137.9	5118.8	5102.5	5088.8	5075.1	5042.3	5020.5	4990.4	4963.1
30°	4793.6	4790.9	4782.7	4774.5	4785.4	4785.4	4785.4	4780.0	4760.8	4738.9	4719.8
32.5°	4309.9	4315.4	4326.3	4334.5	4356.3	4381.0	4402.8	4413.7	4413.7	4400.1	4391.9
35°	3733.2	3741.5	3757.9	3779.7	3807.0	3837.1	3886.2	3897.3	3905.4	3905.4	3894.4
37.5°	3134.7	3132.0	3148.4	3167.5	3183.9	3205.8	3241.3	3249.5	3263.1	3257.7	3246.7
40°	2552.5	2538.9	2533.4	2538.9	2558.0	2549.8	2558.0	2552.5	2552.5	2533.4	2533.4
42.5°	2014.2	1997.8	1986.8	1978.7	1978.7	1959.5	1945.9	1932.3	1924.0	1910.3	1907.6
45°	1552.4	1533.1	1519.5	1514.0	1505.9	1481.3	1464.9	1448.4	1429.3	1423.9	1426.6
47.5°	1205.2	1186.1	1180.6	1167.0	1153.3	1139.6	1128.7	1109.6	1106.8	1095.9	1106.8
50°	929.2	923.8	915.6	910.1	901.8	890.9	880.0	869.1	863.6	863.6	866.3
52.5°	721.5	724.2	716.0	707.8	702.4	702.4	688.7	686.0	686.0	675.1	686.0
55°	552.1	549.3	552.1	546.6	546.6	538.4	538.4	530.2	530.2	522.0	527.5
57.5°	404.5	409.9	404.5	407.2	412.7	404.5	401.7	393.5	399.0	393.5	396.3
60°	314.3	314.3	314.3	311.6	311.6	308.8	308.8	306.1	306.1	300.6	306.1
62.5°	232.3	235.0	235.0	235.0	237.8	235.0	232.3	235.0	232.3	232.3	235.0
65°	153.1	155.8	155.8	153.1	158.5	153.1	155.8	158.5	161.2	158.5	161.2
67.5°	103.8	103.8	106.6	109.3	106.6	109.3	112.0	109.3	112.0	117.6	112.0
70°	76.5	79.3	79.3	76.5	73.8	76.5	73.8	82.0	82.0	82.0	87.4
72.5°	49.2	49.2	46.5	46.5	46.5	46.5	46.5	54.7	49.2	46.5	52.0
75°	27.3	30.0	30.0	21.8	24.6	30.0	21.8	24.6	32.8	27.3	32.8
77.5°	16.4	16.4	16.4	16.4	16.4	16.4	21.8	19.1	19.1	19.1	21.8
80°	13.6	10.9	10.9	8.2	10.9	10.9	10.9	16.4	13.6	13.6	16.4
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: P248563

CATALOG NUMBER: LD8B90D010 ER8B90835 8LBSW0H

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1
2.5°	5591.6	5591.6	5588.9	5583.5	5572.5	5572.5	5569.8	5561.6	5556.2	5553.3	5553.3
5°	5564.3	5553.3	5542.4	5512.4	5512.4	5506.9	5490.6	5479.6	5474.2	5460.4	5455.0
7.5°	5539.7	5506.9	5487.8	5468.6	5444.1	5433.1	5414.0	5405.8	5386.6	5373.0	5364.8
10°	5479.6	5457.7	5433.1	5403.1	5383.9	5362.1	5340.2	5323.9	5299.2	5285.5	5274.6
12.5°	5438.6	5405.8	5383.9	5351.1	5318.4	5299.2	5269.2	5250.1	5225.4	5198.1	5181.7
15°	5400.4	5364.8	5334.8	5299.2	5263.7	5241.9	5206.3	5184.5	5148.9	5121.6	5102.5
17.5°	5343.0	5312.8	5280.1	5236.3	5203.6	5176.3	5137.9	5110.7	5077.8	5042.3	5023.2
20°	5282.8	5247.3	5214.5	5170.8	5137.9	5105.2	5066.9	5036.9	4998.5	4965.8	4944.0
22.5°	5203.6	5162.6	5135.2	5091.5	5053.2	5017.8	4982.2	4946.7	4911.1	4883.8	4859.2
25°	5088.8	5045.0	5015.0	4979.4	4944.0	4916.6	4872.9	4851.1	4815.5	4790.9	4766.2
27.5°	4924.7	4892.0	4864.7	4829.1	4799.1	4777.3	4744.4	4722.6	4692.5	4670.6	4651.5
30°	4684.4	4657.0	4632.4	4596.8	4575.0	4555.9	4525.7	4506.6	4484.8	4460.2	4454.8
32.5°	4361.8	4339.9	4315.4	4290.7	4274.3	4263.4	4238.8	4227.9	4206.0	4192.3	4178.7
35°	3875.3	3856.2	3842.6	3831.7	3826.2	3828.9	3823.5	3834.4	3839.8	3837.1	3839.8
37.5°	3238.6	3227.6	3233.1	3241.3	3268.7	3304.2	3336.9	3386.1	3418.9	3451.8	3481.8
40°	2528.0	2536.2	2558.0	2607.2	2678.3	2757.6	2831.4	2924.3	3017.2	3082.8	3142.9
42.5°	1907.6	1932.3	1986.8	2057.9	2164.6	2282.0	2396.8	2533.4	2645.6	2754.8	2831.4
45°	1434.8	1467.6	1538.7	1637.1	1754.5	1891.2	2036.1	2189.1	2323.1	2435.1	2519.8
47.5°	1117.8	1147.9	1219.0	1322.8	1467.6	1609.7	1760.0	1918.5	2057.9	2167.3	2241.0
50°	882.7	921.0	983.8	1093.2	1238.1	1388.4	1544.2	1699.9	1831.1	1924.0	1989.6
52.5°	694.2	729.7	789.8	904.7	1052.2	1202.5	1347.3	1500.4	1615.1	1705.4	1749.1
55°	538.4	571.2	634.0	729.7	869.1	1016.7	1161.5	1292.7	1399.3	1464.9	1505.9
57.5°	409.9	434.6	478.3	573.9	699.7	836.3	959.3	1090.5	1172.5	1219.0	1246.2
60°	311.6	330.7	377.2	451.0	565.7	683.3	787.1	885.5	951.1	989.4	1016.7
62.5°	235.0	256.9	289.7	352.5	440.0	535.7	623.1	696.9	751.6	776.2	795.3
65°	161.2	177.6	202.3	251.4	325.2	393.5	461.9	516.6	552.1	579.4	590.4
67.5°	120.3	131.2	144.9	183.1	235.0	289.7	336.1	374.4	412.7	423.6	442.8
70°	90.2	98.4	112.0	139.4	169.4	207.7	246.0	267.8	295.2	314.3	319.8
72.5°	57.4	60.1	73.8	90.2	114.7	139.4	164.0	183.1	199.6	210.5	215.9
75°	32.8	49.2	49.2	65.6	82.0	92.9	109.3	123.0	131.2	139.4	139.4
77.5°	21.8	30.0	32.8	40.9	49.2	62.9	76.5	84.7	92.9	95.6	95.6
80°	19.1	21.8	21.8	30.0	35.5	46.5	54.7	57.4	62.9	65.6	71.1
82.5°	8.2	10.9	13.6	21.8	24.6	24.6	32.8	35.5	40.9	43.8	43.8
85°	2.7	5.5	5.5	8.2	13.6	16.4	19.1	21.8	24.6	24.6	27.3
87.5°	2.7	2.7	0.0	2.7	5.5	5.5	10.9	10.9	10.9	16.4	16.4
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: P248563

CATALOG NUMBER: LD8B90D010 ER8B90835 8LBSW0H

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1	5597.1
2.5°	5547.9	5550.6	5539.7	5537.0	5531.5	5534.2	5539.7
5°	5446.8	5449.5	5438.6	5427.7	5427.7	5424.9	5427.7
7.5°	5351.1	5353.9	5337.5	5332.0	5321.1	5323.9	5323.9
10°	5255.5	5255.5	5230.9	5228.1	5219.9	5217.2	5217.2
12.5°	5162.6	5154.3	5135.2	5124.3	5129.8	5113.4	5113.4
15°	5080.5	5066.9	5042.3	5034.1	5020.5	5015.0	5015.0
17.5°	4995.8	4984.9	4963.1	4946.7	4930.3	4927.6	4930.3
20°	4913.8	4902.9	4875.6	4864.7	4851.1	4851.1	4845.6
22.5°	4831.8	4820.9	4796.4	4788.2	4769.1	4769.1	4771.8
25°	4747.1	4738.9	4711.6	4706.2	4703.5	4692.5	4698.0
27.5°	4632.4	4626.9	4605.0	4596.8	4585.9	4583.2	4588.6
30°	4421.9	4413.7	4397.4	4389.2	4370.1	4372.8	4378.2
32.5°	4159.6	4148.7	4126.7	4118.5	4102.2	4096.7	4099.4
35°	3831.7	3823.5	3804.3	3804.3	3787.9	3782.4	3787.9
37.5°	3498.2	3506.3	3498.2	3506.3	3498.2	3495.4	3498.2
40°	3183.9	3214.0	3219.4	3249.5	3238.6	3254.9	3252.2
42.5°	2883.3	2932.4	2951.7	2976.2	2970.8	2981.7	2989.9
45°	2579.9	2620.9	2640.1	2656.5	2659.2	2664.7	2667.4
47.5°	2292.9	2325.8	2328.5	2347.6	2344.9	2344.9	2353.1
50°	2025.2	2047.0	2052.4	2066.1	2055.2	2049.7	2052.4
52.5°	1776.5	1798.3	1792.8	1798.3	1784.7	1779.2	1781.9
55°	1522.2	1533.1	1533.1	1533.1	1516.8	1516.8	1516.8
57.5°	1262.6	1265.4	1259.9	1262.6	1259.9	1243.5	1240.8
60°	1024.9	1024.9	1022.1	1024.9	1016.7	1008.5	1008.5
62.5°	800.7	806.2	817.1	806.2	800.7	806.2	798.0
65°	598.6	609.5	606.7	612.2	609.5	609.5	604.0
67.5°	451.0	453.7	456.4	459.2	459.2	459.2	459.2
70°	330.7	338.9	336.1	336.1	336.1	336.1	352.5
72.5°	221.4	232.3	229.6	235.0	235.0	240.5	235.0
75°	150.3	161.2	155.8	164.0	161.2	155.8	169.4
77.5°	101.1	106.6	109.3	112.0	109.3	106.6	109.3
80°	71.1	76.5	73.8	76.5	76.5	76.5	79.3
82.5°	43.8	52.0	49.2	52.0	49.2	52.0	52.0
85°	30.0	32.8	27.3	32.8	30.0	30.0	35.5
87.5°	19.1	16.4	16.4	19.1	16.4	19.1	16.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)