

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: P248680

Luminaire Tested: **LD8B90D010 ER8B90840 8LBSW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248680
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 8LBSW0WMH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 4000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9284.0 lumens
Efficiency: N/A
Efficacy: 107.8 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

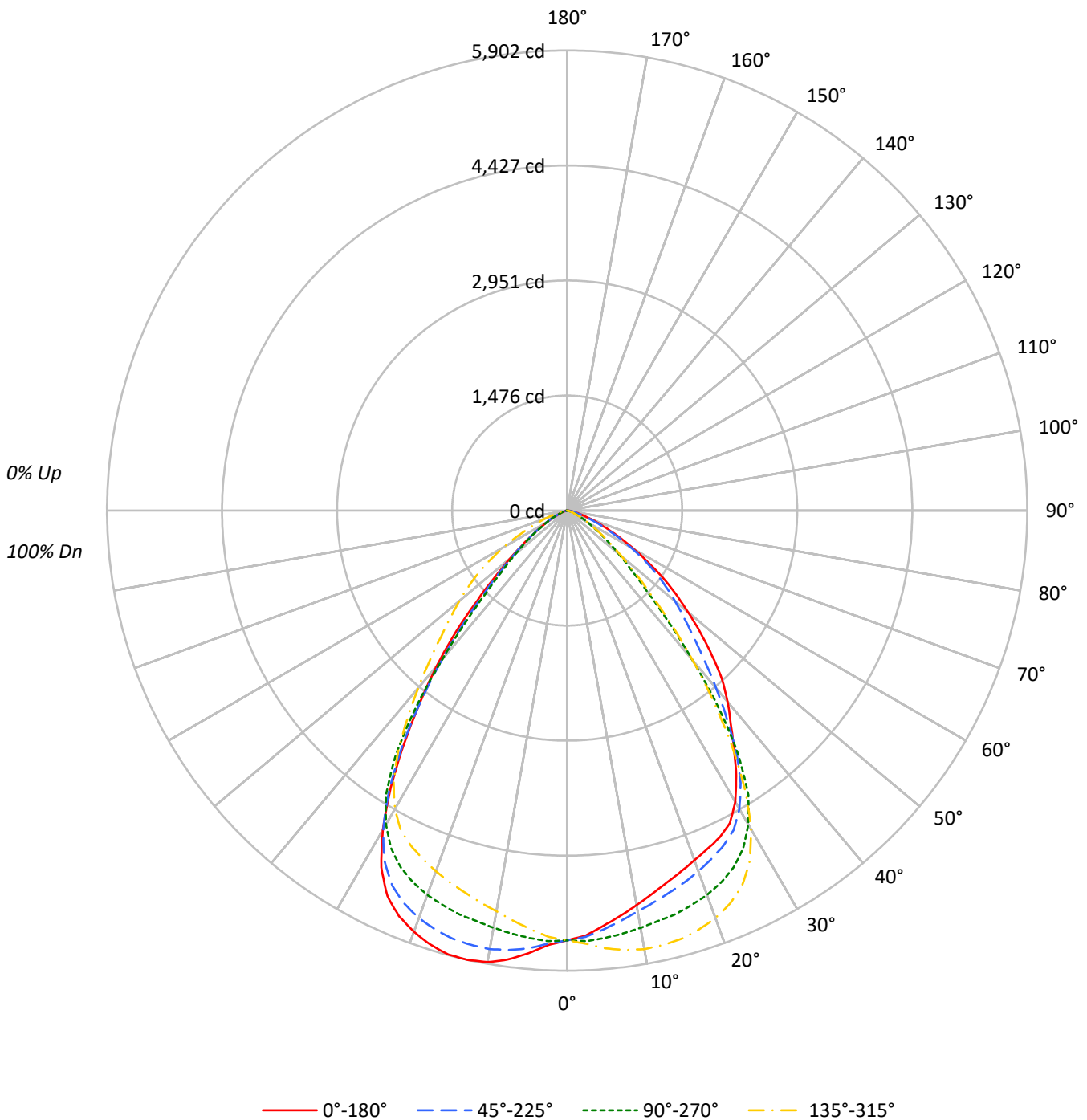
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	169957	169957	169957	169957
5°	165443	170356	176438	170356
10°	160865	170134	184124	170134
15°	157654	171145	188154	171145
20°	156578	172123	188636	172123
25°	157402	171778	185605	171778
30°	153511	165489	168462	165489
35°	140417	144365	136972	144365
40°	128917	100422	104870	100422
45°	114544	61262	70887	61262
50°	96958	40926	45445	40926
55°	80304	27924	29515	27924
60°	61247	18588	18755	18588
65°	43392	11580	10602	11580
70°	31303	7763	7041	7763
75°	19873	3848	3205	3848
80°	13869	2877	2380	2877
85°	12383	0	955	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	524.6	5.7
10°-20°	1519.1	16.4
20°-30°	2300.3	24.8
30°-40°	2305.5	24.8
40°-50°	1447.7	15.6
50°-60°	771.5	8.3
60°-70°	317.3	3.4
70°-80°	83.8	0.9
80°-90°	14.2	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°	4344.1	46.8
0°-40°	6649.5	71.6
0°-60°	8868.8	95.5
0°-90°	9284.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9284.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5512	5512	5512	5512	5512	
5°	5345	5504	5700	5504	5345	504
15°	4938	5361	5894	5361	4938	1397
25°	4626	5049	5455	5049	4626	2122
35°	3730	3835	3639	3835	3730	2337
45°	2627	1405	1626	1405	2627	2020
55°	1494	519	549	519	1494	1332
65°	595	159	145	159	595	617
75°	167	32	27	32	167	189
85°	35	0	3	0	35	38
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°	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6
2.5°	5455.1	5449.7	5447.0	5452.5	5455.1	5465.9	5463.2	5468.5	5468.5	5471.3	5476.6
5°	5344.8	5342.0	5344.8	5344.8	5355.5	5366.3	5363.6	5371.7	5377.0	5390.5	5395.9
7.5°	5242.5	5242.5	5239.8	5250.5	5256.0	5272.1	5269.4	5282.9	5291.0	5304.4	5323.2
10°	5137.5	5137.5	5140.2	5148.3	5151.1	5175.2	5175.2	5194.0	5204.8	5218.3	5242.5
12.5°	5035.3	5035.3	5051.5	5046.0	5056.8	5075.6	5083.7	5102.5	5118.7	5145.6	5169.9
15°	4938.4	4938.4	4943.8	4957.2	4965.3	4989.5	5002.9	5024.5	5043.4	5070.3	5105.3
17.5°	4855.0	4852.3	4855.0	4871.1	4887.3	4908.8	4919.5	4946.5	4965.3	5000.3	5032.6
20°	4771.5	4777.0	4777.0	4790.4	4801.1	4828.0	4838.8	4868.5	4890.0	4922.2	4960.0
22.5°	4698.9	4696.2	4696.2	4715.0	4723.1	4747.3	4758.0	4784.9	4809.2	4836.1	4871.1
25°	4626.2	4620.8	4631.6	4634.3	4639.6	4666.5	4674.6	4693.4	4717.7	4742.0	4777.0
27.5°	4518.5	4513.2	4515.9	4526.6	4534.7	4556.2	4561.6	4580.5	4599.3	4620.8	4650.5
30°	4311.3	4306.0	4303.3	4322.1	4330.2	4346.3	4354.4	4386.7	4392.0	4416.3	4437.8
32.5°	4036.8	4034.1	4039.6	4055.6	4063.7	4085.3	4096.0	4114.9	4128.3	4141.8	4163.3
35°	3730.1	3724.6	3730.1	3746.2	3746.2	3765.1	3773.1	3781.1	3778.5	3781.1	3775.8
37.5°	3444.8	3442.0	3444.8	3452.8	3444.8	3452.8	3444.8	3428.6	3399.1	3366.7	3334.4
40°	3202.6	3205.2	3189.2	3199.9	3170.2	3164.9	3135.3	3094.9	3035.7	2971.2	2879.7
42.5°	2944.2	2936.1	2925.4	2930.7	2906.6	2887.6	2839.2	2788.2	2712.7	2605.2	2494.7
45°	2626.6	2624.0	2618.6	2615.9	2599.7	2580.9	2540.5	2481.3	2397.9	2287.6	2155.6
47.5°	2317.1	2309.1	2309.1	2311.7	2292.9	2290.2	2257.9	2206.8	2134.2	2026.5	1889.2
50°	2021.1	2018.4	2023.8	2034.6	2021.1	2015.7	1994.2	1959.2	1894.7	1803.2	1673.9
52.5°	1754.6	1752.0	1757.4	1770.8	1765.4	1770.8	1749.3	1722.4	1679.3	1590.5	1477.5
55°	1493.7	1493.7	1493.7	1509.7	1509.7	1509.7	1499.0	1482.9	1442.5	1377.9	1273.0
57.5°	1221.8	1224.5	1240.7	1243.3	1240.7	1246.1	1243.3	1227.1	1200.3	1154.6	1073.8
60°	993.1	993.1	1001.2	1009.3	1006.5	1009.3	1009.3	1001.2	974.2	936.6	872.0
62.5°	785.8	793.9	788.5	793.9	804.7	793.9	788.5	783.2	764.3	740.1	686.2
65°	594.7	600.2	600.2	602.8	597.4	600.2	589.4	581.3	570.6	543.7	508.7
67.5°	452.2	452.2	452.2	452.2	449.4	446.7	444.1	436.0	417.2	406.4	368.7
70°	347.2	331.0	331.0	331.0	331.0	333.8	325.7	314.9	309.5	290.7	263.8
72.5°	231.4	236.8	231.4	231.4	226.1	228.7	218.0	212.6	207.3	196.5	180.3
75°	166.8	153.4	158.7	161.5	153.4	158.7	148.0	137.2	137.2	129.2	121.1
77.5°	107.7	105.0	107.7	110.3	107.7	105.0	99.6	94.2	94.2	91.5	83.4
80°	78.1	75.3	75.3	75.3	72.7	75.3	70.0	70.0	64.6	61.9	56.5
82.5°	51.2	51.2	48.4	51.2	48.4	51.2	43.1	43.1	43.1	40.3	35.0
85°	35.0	29.6	29.6	32.3	26.9	32.3	29.6	26.9	24.3	24.3	21.5
87.5°	16.2	18.8	16.2	18.8	16.2	16.2	18.8	16.2	16.2	10.7	10.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6
2.5°	5484.7	5487.4	5487.4	5498.2	5503.5	5506.2	5506.2	5527.8	5519.7	5525.1	5530.4
5°	5406.7	5422.8	5428.2	5428.2	5457.8	5468.5	5479.3	5503.5	5506.2	5522.4	5541.2
7.5°	5331.3	5350.1	5361.0	5385.1	5403.9	5422.8	5455.1	5471.3	5487.4	5509.0	5533.1
10°	5258.6	5280.2	5301.7	5320.5	5350.1	5374.4	5395.9	5433.5	5452.5	5482.0	5514.3
12.5°	5188.7	5218.3	5237.1	5269.4	5301.7	5323.2	5355.5	5390.5	5420.1	5449.7	5487.4
15°	5126.8	5161.8	5183.3	5218.3	5253.3	5282.9	5317.9	5361.0	5382.5	5417.5	5452.5
17.5°	5059.4	5097.2	5124.1	5156.4	5199.5	5231.7	5261.4	5304.4	5331.3	5368.9	5409.4
20°	4989.5	5027.2	5059.4	5091.8	5134.9	5167.1	5202.1	5245.2	5274.8	5312.4	5344.8
22.5°	4906.1	4941.1	4976.0	5013.7	5056.8	5083.7	5124.1	5161.8	5194.0	5229.0	5261.4
25°	4798.5	4841.6	4868.5	4903.4	4938.4	4967.9	5011.0	5048.7	5075.6	5108.0	5137.5
27.5°	4672.0	4704.3	4725.8	4755.4	4790.4	4817.3	4849.5	4887.3	4914.2	4943.8	4965.3
30°	4456.6	4486.3	4505.1	4526.6	4561.6	4585.9	4612.8	4647.7	4666.5	4688.1	4707.0
32.5°	4174.0	4198.3	4209.0	4225.2	4249.5	4273.6	4295.2	4324.8	4332.9	4346.3	4346.3
35°	3765.1	3770.4	3767.7	3773.1	3783.9	3797.3	3816.1	3835.0	3845.7	3845.7	3837.7
37.5°	3286.0	3253.7	3218.7	3191.8	3183.7	3178.3	3189.2	3197.1	3208.0	3213.3	3199.9
40°	2788.2	2715.5	2637.4	2567.4	2519.0	2497.5	2489.4	2494.7	2494.7	2513.5	2513.5
42.5°	2360.2	2247.1	2131.5	2026.5	1956.5	1902.7	1878.5	1878.5	1881.1	1894.7	1902.7
45°	2005.0	1862.3	1727.7	1612.1	1515.2	1445.1	1412.9	1404.8	1402.2	1407.5	1426.3
47.5°	1733.2	1585.2	1445.1	1302.6	1200.3	1130.3	1100.8	1089.9	1079.1	1089.9	1092.7
50°	1520.6	1367.2	1219.2	1076.5	968.8	906.9	869.2	853.1	850.4	850.4	855.8
52.5°	1326.7	1184.2	1036.2	890.8	777.7	718.6	683.6	675.5	664.7	675.5	675.5
55°	1143.7	1001.2	855.8	718.6	624.3	562.5	530.2	519.4	514.0	522.1	522.1
57.5°	944.7	823.5	689.0	565.2	471.0	427.9	403.7	390.3	387.5	392.9	387.5
60°	775.1	672.8	557.1	444.1	371.4	325.7	306.8	301.4	296.0	301.4	301.4
62.5°	613.6	527.5	433.2	347.2	285.2	253.0	231.4	231.4	228.7	228.7	231.4
65°	454.8	387.5	320.2	247.6	199.2	174.9	158.7	158.7	156.1	158.7	156.1
67.5°	331.0	285.2	231.4	180.3	142.7	129.2	118.4	110.3	115.8	110.3	107.7
70°	242.3	204.5	166.8	137.2	110.3	96.9	88.8	86.1	80.8	80.8	80.8
72.5°	161.5	137.2	113.0	88.8	72.7	59.2	56.5	51.2	45.7	48.4	53.8
75°	107.7	91.5	80.8	64.6	48.4	48.4	32.3	32.3	26.9	32.3	24.3
77.5°	75.3	61.9	48.4	40.3	32.3	29.6	21.5	21.5	18.8	18.8	18.8
80°	53.8	45.7	35.0	29.6	21.5	21.5	18.8	16.2	13.4	13.4	16.2
82.5°	32.3	24.3	24.3	21.5	13.4	10.7	8.1	10.7	5.4	5.4	5.4
85°	18.8	16.2	13.4	8.1	5.4	5.4	2.7	0.0	2.7	2.7	0.0
87.5°	10.7	5.4	5.4	2.7	0.0	2.7	2.7	0.0	0.0	0.0	5.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6
2.5°	5544.0	5541.2	5546.6	5546.6	5562.8	5560.0	5568.1	5568.1	5562.8	5565.5	5576.2
5°	5562.8	5570.9	5586.9	5600.5	5624.6	5635.5	5648.9	5662.4	5665.0	5673.1	5681.2
7.5°	5562.8	5589.7	5608.5	5632.7	5665.0	5683.9	5713.4	5737.7	5748.4	5761.9	5778.0
10°	5551.9	5578.9	5613.9	5640.8	5681.2	5710.8	5740.4	5778.0	5794.2	5815.7	5837.3
12.5°	5530.4	5560.0	5597.7	5632.7	5678.4	5705.4	5743.0	5778.0	5802.3	5831.9	5856.1
15°	5498.2	5533.1	5568.1	5603.1	5651.5	5683.9	5718.9	5759.2	5783.5	5815.7	5837.3
17.5°	5447.0	5484.7	5517.0	5549.3	5595.0	5632.7	5665.0	5702.7	5727.0	5753.9	5783.5
20°	5385.1	5420.1	5455.1	5482.0	5527.8	5560.0	5595.0	5630.0	5648.9	5654.3	5700.0
22.5°	5307.1	5331.3	5358.2	5401.3	5428.2	5457.8	5490.1	5522.4	5541.2	5570.9	5586.9
25°	5177.9	5202.1	5231.7	5250.5	5282.9	5307.1	5339.4	5374.4	5385.1	5406.7	5422.8
27.5°	4997.6	5011.0	5024.5	5040.6	5059.4	5073.0	5091.8	5108.0	5118.7	5129.5	5140.2
30°	4712.3	4712.3	4712.3	4701.5	4709.6	4717.7	4720.4	4717.7	4717.7	4715.0	4715.0
32.5°	4335.5	4314.1	4289.8	4268.3	4260.2	4249.5	4244.0	4236.0	4222.6	4214.5	4217.1
35°	3826.9	3778.5	3748.9	3722.0	3700.5	3684.3	3676.2	3668.1	3665.5	3654.7	3643.9
37.5°	3191.8	3156.8	3135.3	3119.1	3100.3	3084.1	3086.8	3089.6	3097.5	3092.2	3094.9
40°	2519.0	2510.9	2519.0	2500.1	2494.7	2500.1	2513.5	2532.5	2543.2	2554.0	2572.8
42.5°	1916.1	1929.6	1948.5	1948.5	1956.5	1967.3	1983.4	2013.1	2029.1	2048.0	2069.6
45°	1442.5	1458.7	1482.9	1490.9	1496.3	1509.7	1528.7	1552.8	1563.6	1579.7	1598.6
47.5°	1111.5	1122.2	1135.6	1149.2	1162.6	1168.0	1186.8	1186.8	1200.3	1211.1	1216.4
50°	866.6	877.3	888.1	896.2	901.6	909.7	915.0	923.1	925.7	931.2	933.8
52.5°	678.2	691.7	691.7	697.0	705.1	713.2	710.5	713.2	715.8	715.8	723.9
55°	530.2	530.2	538.2	538.2	543.7	540.9	543.7	543.7	543.7	543.7	546.3
57.5°	395.6	398.3	406.4	401.0	398.3	403.7	398.3	403.7	401.0	406.4	398.3
60°	304.1	304.1	306.8	306.8	309.5	309.5	309.5	306.8	306.8	304.1	304.1
62.5°	228.7	231.4	234.2	231.4	231.4	231.4	228.7	228.7	226.1	223.3	223.3
65°	153.4	150.8	156.1	150.8	153.4	153.4	150.8	153.4	145.3	148.0	145.3
67.5°	110.3	107.7	105.0	107.7	105.0	102.2	102.2	105.0	107.7	99.6	99.6
70°	72.7	75.3	72.7	75.3	78.1	78.1	75.3	72.7	75.3	70.0	72.7
72.5°	45.7	45.7	45.7	45.7	45.7	48.4	48.4	48.4	43.1	43.1	40.3
75°	21.5	29.6	24.3	21.5	29.6	29.6	26.9	26.9	24.3	24.3	24.3
77.5°	21.5	16.2	16.2	16.2	16.2	16.2	16.2	16.2	13.4	16.2	13.4
80°	10.7	10.7	10.7	8.1	10.7	10.7	13.4	10.7	10.7	8.1	13.4
82.5°	5.4	5.4	5.4	0.0	2.7	5.4	5.4	2.7	5.4	5.4	2.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P248680

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6
2.5°	5573.5	5570.9	5573.5	5576.2	5573.5	5570.9	5573.5	5576.2	5565.5	5562.8	5568.1
5°	5692.0	5692.0	5697.3	5700.0	5697.3	5692.0	5692.0	5681.2	5673.1	5665.0	5662.4
7.5°	5794.2	5799.6	5804.9	5807.6	5804.9	5799.6	5794.2	5778.0	5761.9	5748.4	5737.7
10°	5856.1	5864.2	5875.0	5880.3	5875.0	5864.2	5856.1	5837.3	5815.7	5794.2	5778.0
12.5°	5883.0	5891.1	5904.5	5901.9	5904.5	5891.1	5883.0	5856.1	5831.9	5802.3	5778.0
15°	5864.2	5875.0	5888.4	5893.8	5888.4	5875.0	5864.2	5837.3	5815.7	5783.5	5759.2
17.5°	5804.9	5821.1	5829.2	5837.3	5829.2	5821.1	5804.9	5783.5	5753.9	5727.0	5702.7
20°	5724.2	5735.0	5745.8	5748.4	5745.8	5735.0	5724.2	5700.0	5654.3	5648.9	5630.0
22.5°	5608.5	5616.6	5640.8	5632.7	5640.8	5616.6	5608.5	5586.9	5570.9	5541.2	5522.4
25°	5441.6	5449.7	5452.5	5455.1	5452.5	5449.7	5441.6	5422.8	5406.7	5385.1	5374.4
27.5°	5153.7	5153.7	5159.0	5161.8	5159.0	5153.7	5153.7	5140.2	5129.5	5118.7	5108.0
30°	4717.7	4717.7	4717.7	4731.2	4717.7	4717.7	4717.7	4715.0	4715.0	4717.7	4717.7
32.5°	4214.5	4209.0	4203.7	4209.0	4203.7	4209.0	4214.5	4217.1	4214.5	4222.6	4236.0
35°	3643.9	3641.2	3649.3	3638.6	3649.3	3641.2	3643.9	3643.9	3654.7	3665.5	3668.1
37.5°	3097.5	3092.2	3103.0	3092.2	3103.0	3092.2	3097.5	3094.9	3092.2	3097.5	3089.6
40°	2578.2	2583.6	2583.6	2605.2	2583.6	2583.6	2578.2	2572.8	2554.0	2543.2	2532.5
42.5°	2080.3	2096.5	2091.1	2107.2	2091.1	2096.5	2080.3	2069.6	2048.0	2029.1	2013.1
45°	1609.3	1620.2	1620.2	1625.5	1620.2	1620.2	1609.3	1598.6	1579.7	1563.6	1552.8
47.5°	1235.2	1235.2	1235.2	1238.0	1235.2	1235.2	1235.2	1216.4	1211.1	1200.3	1186.8
50°	939.2	941.9	944.7	947.3	944.7	941.9	939.2	933.8	931.2	925.7	923.1
52.5°	721.2	723.9	718.6	723.9	718.6	723.9	721.2	723.9	715.8	715.8	713.2
55°	546.3	543.7	546.3	549.0	546.3	543.7	546.3	546.3	543.7	543.7	543.7
57.5°	401.0	395.6	395.6	395.6	395.6	395.6	401.0	398.3	406.4	401.0	403.7
60°	298.8	301.4	301.4	304.1	301.4	301.4	298.8	304.1	304.1	306.8	306.8
62.5°	220.7	228.7	223.3	228.7	223.3	228.7	220.7	223.3	223.3	226.1	228.7
65°	142.7	142.7	142.7	145.3	142.7	142.7	142.7	145.3	148.0	145.3	153.4
67.5°	96.9	99.6	105.0	102.2	105.0	99.6	96.9	99.6	99.6	107.7	105.0
70°	78.1	70.0	70.0	78.1	70.0	70.0	78.1	72.7	70.0	75.3	72.7
72.5°	45.7	40.3	45.7	45.7	45.7	40.3	45.7	40.3	43.1	43.1	48.4
75°	24.3	21.5	18.8	26.9	18.8	21.5	24.3	24.3	24.3	24.3	26.9
77.5°	16.2	13.4	18.8	18.8	18.8	13.4	16.2	13.4	16.2	13.4	16.2
80°	8.1	10.7	8.1	13.4	8.1	10.7	8.1	13.4	8.1	10.7	10.7
82.5°	2.7	5.4	5.4	5.4	5.4	5.4	2.7	2.7	5.4	5.4	2.7
85°	0.0	5.4	2.7	2.7	2.7	5.4	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	0.0	0.0	2.7	0.0	0.0	2.7	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P248680

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6
2.5°	5568.1	5560.0	5562.8	5546.6	5546.6	5541.2	5544.0	5530.4	5525.1	5519.7	5527.8
5°	5648.9	5635.5	5624.6	5600.5	5586.9	5570.9	5562.8	5541.2	5522.4	5506.2	5503.5
7.5°	5713.4	5683.9	5665.0	5632.7	5608.5	5589.7	5562.8	5533.1	5509.0	5487.4	5471.3
10°	5740.4	5710.8	5681.2	5640.8	5613.9	5578.9	5551.9	5514.3	5482.0	5452.5	5433.5
12.5°	5743.0	5705.4	5678.4	5632.7	5597.7	5560.0	5530.4	5487.4	5449.7	5420.1	5390.5
15°	5718.9	5683.9	5651.5	5603.1	5568.1	5533.1	5498.2	5452.5	5417.5	5382.5	5361.0
17.5°	5665.0	5632.7	5595.0	5549.3	5517.0	5484.7	5447.0	5409.4	5368.9	5331.3	5304.4
20°	5595.0	5560.0	5527.8	5482.0	5455.1	5420.1	5385.1	5344.8	5312.4	5274.8	5245.2
22.5°	5490.1	5457.8	5428.2	5401.3	5358.2	5331.3	5307.1	5261.4	5229.0	5194.0	5161.8
25°	5339.4	5307.1	5282.9	5250.5	5231.7	5202.1	5177.9	5137.5	5108.0	5075.6	5048.7
27.5°	5091.8	5073.0	5059.4	5040.6	5024.5	5011.0	4997.6	4965.3	4943.8	4914.2	4887.3
30°	4720.4	4717.7	4709.6	4701.5	4712.3	4712.3	4712.3	4707.0	4688.1	4666.5	4647.7
32.5°	4244.0	4249.5	4260.2	4268.3	4289.8	4314.1	4335.5	4346.3	4346.3	4332.9	4324.8
35°	3676.2	3684.3	3700.5	3722.0	3748.9	3778.5	3826.9	3837.7	3845.7	3845.7	3835.0
37.5°	3086.8	3084.1	3100.3	3119.1	3135.3	3156.8	3191.8	3199.9	3213.3	3208.0	3197.1
40°	2513.5	2500.1	2494.7	2500.1	2519.0	2510.9	2519.0	2513.5	2513.5	2494.7	2494.7
42.5°	1983.4	1967.3	1956.5	1948.5	1948.5	1929.6	1916.1	1902.7	1894.7	1881.1	1878.5
45°	1528.7	1509.7	1496.3	1490.9	1482.9	1458.7	1442.5	1426.3	1407.5	1402.2	1404.8
47.5°	1186.8	1168.0	1162.6	1149.2	1135.6	1122.2	1111.5	1092.7	1089.9	1079.1	1089.9
50°	915.0	909.7	901.6	896.2	888.1	877.3	866.6	855.8	850.4	850.4	853.1
52.5°	710.5	713.2	705.1	697.0	691.7	691.7	678.2	675.5	675.5	664.7	675.5
55°	543.7	540.9	543.7	538.2	538.2	530.2	530.2	522.1	522.1	514.0	519.4
57.5°	398.3	403.7	398.3	401.0	406.4	398.3	395.6	387.5	392.9	387.5	390.3
60°	309.5	309.5	309.5	306.8	306.8	304.1	304.1	301.4	301.4	296.0	301.4
62.5°	228.7	231.4	231.4	231.4	234.2	231.4	228.7	231.4	228.7	228.7	231.4
65°	150.8	153.4	153.4	150.8	156.1	150.8	153.4	156.1	158.7	156.1	158.7
67.5°	102.2	102.2	105.0	107.7	105.0	107.7	110.3	107.7	110.3	115.8	110.3
70°	75.3	78.1	78.1	75.3	72.7	75.3	72.7	80.8	80.8	80.8	86.1
72.5°	48.4	48.4	45.7	45.7	45.7	45.7	45.7	53.8	48.4	45.7	51.2
75°	26.9	29.6	29.6	21.5	24.3	29.6	21.5	24.3	32.3	26.9	32.3
77.5°	16.2	16.2	16.2	16.2	16.2	16.2	21.5	18.8	18.8	18.8	21.5
80°	13.4	10.7	10.7	8.1	10.7	10.7	10.7	16.2	13.4	13.4	16.2
82.5°	5.4	5.4	2.7	0.0	5.4	5.4	5.4	5.4	5.4	5.4	10.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.7	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P248680

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6
2.5°	5506.2	5506.2	5503.5	5498.2	5487.4	5487.4	5484.7	5476.6	5471.3	5468.5	5468.5
5°	5479.3	5468.5	5457.8	5428.2	5428.2	5422.8	5406.7	5395.9	5390.5	5377.0	5371.7
7.5°	5455.1	5422.8	5403.9	5385.1	5361.0	5350.1	5331.3	5323.2	5304.4	5291.0	5282.9
10°	5395.9	5374.4	5350.1	5320.5	5301.7	5280.2	5258.6	5242.5	5218.3	5204.8	5194.0
12.5°	5355.5	5323.2	5301.7	5269.4	5237.1	5218.3	5188.7	5169.9	5145.6	5118.7	5102.5
15°	5317.9	5282.9	5253.3	5218.3	5183.3	5161.8	5126.8	5105.3	5070.3	5043.4	5024.5
17.5°	5261.4	5231.7	5199.5	5156.4	5124.1	5097.2	5059.4	5032.6	5000.3	4965.3	4946.5
20°	5202.1	5167.1	5134.9	5091.8	5059.4	5027.2	4989.5	4960.0	4922.2	4890.0	4868.5
22.5°	5124.1	5083.7	5056.8	5013.7	4976.0	4941.1	4906.1	4871.1	4836.1	4809.2	4784.9
25°	5011.0	4967.9	4938.4	4903.4	4868.5	4841.6	4798.5	4777.0	4742.0	4717.7	4693.4
27.5°	4849.5	4817.3	4790.4	4755.4	4725.8	4704.3	4672.0	4650.5	4620.8	4599.3	4580.5
30°	4612.8	4585.9	4561.6	4526.6	4505.1	4486.3	4456.6	4437.8	4416.3	4392.0	4386.7
32.5°	4295.2	4273.6	4249.5	4225.2	4209.0	4198.3	4174.0	4163.3	4141.8	4128.3	4114.9
35°	3816.1	3797.3	3783.9	3773.1	3767.7	3770.4	3765.1	3775.8	3781.1	3778.5	3781.1
37.5°	3189.2	3178.3	3183.7	3191.8	3218.7	3253.7	3286.0	3334.4	3366.7	3399.1	3428.6
40°	2489.4	2497.5	2519.0	2567.4	2637.4	2715.5	2788.2	2879.7	2971.2	3035.7	3094.9
42.5°	1878.5	1902.7	1956.5	2026.5	2131.5	2247.1	2360.2	2494.7	2605.2	2712.7	2788.2
45°	1412.9	1445.1	1515.2	1612.1	1727.7	1862.3	2005.0	2155.6	2287.6	2397.9	2481.3
47.5°	1100.8	1130.3	1200.3	1302.6	1445.1	1585.2	1733.2	1889.2	2026.5	2134.2	2206.8
50°	869.2	906.9	968.8	1076.5	1219.2	1367.2	1520.6	1673.9	1803.2	1894.7	1959.2
52.5°	683.6	718.6	777.7	890.8	1036.2	1184.2	1326.7	1477.5	1590.5	1679.3	1722.4
55°	530.2	562.5	624.3	718.6	855.8	1001.2	1143.7	1273.0	1377.9	1442.5	1482.9
57.5°	403.7	427.9	471.0	565.2	689.0	823.5	944.7	1073.8	1154.6	1200.3	1227.1
60°	306.8	325.7	371.4	444.1	557.1	672.8	775.1	872.0	936.6	974.2	1001.2
62.5°	231.4	253.0	285.2	347.2	433.2	527.5	613.6	686.2	740.1	764.3	783.2
65°	158.7	174.9	199.2	247.6	320.2	387.5	454.8	508.7	543.7	570.6	581.3
67.5°	118.4	129.2	142.7	180.3	231.4	285.2	331.0	368.7	406.4	417.2	436.0
70°	88.8	96.9	110.3	137.2	166.8	204.5	242.3	263.8	290.7	309.5	314.9
72.5°	56.5	59.2	72.7	88.8	113.0	137.2	161.5	180.3	196.5	207.3	212.6
75°	32.3	48.4	48.4	64.6	80.8	91.5	107.7	121.1	129.2	137.2	137.2
77.5°	21.5	29.6	32.3	40.3	48.4	61.9	75.3	83.4	91.5	94.2	94.2
80°	18.8	21.5	21.5	29.6	35.0	45.7	53.8	56.5	61.9	64.6	70.0
82.5°	8.1	10.7	13.4	21.5	24.3	24.3	32.3	35.0	40.3	43.1	43.1
85°	2.7	5.4	5.4	8.1	13.4	16.2	18.8	21.5	24.3	24.3	26.9
87.5°	2.7	2.7	0.0	2.7	5.4	5.4	10.7	10.7	10.7	16.2	16.2
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: P248680

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6	5511.6
2.5°	5463.2	5465.9	5455.1	5452.5	5447.0	5449.7	5455.1
5°	5363.6	5366.3	5355.5	5344.8	5344.8	5342.0	5344.8
7.5°	5269.4	5272.1	5256.0	5250.5	5239.8	5242.5	5242.5
10°	5175.2	5175.2	5151.1	5148.3	5140.2	5137.5	5137.5
12.5°	5083.7	5075.6	5056.8	5046.0	5051.5	5035.3	5035.3
15°	5002.9	4989.5	4965.3	4957.2	4943.8	4938.4	4938.4
17.5°	4919.5	4908.8	4887.3	4871.1	4855.0	4852.3	4855.0
20°	4838.8	4828.0	4801.1	4790.4	4777.0	4777.0	4771.5
22.5°	4758.0	4747.3	4723.1	4715.0	4696.2	4696.2	4698.9
25°	4674.6	4666.5	4639.6	4634.3	4631.6	4620.8	4626.2
27.5°	4561.6	4556.2	4534.7	4526.6	4515.9	4513.2	4518.5
30°	4354.4	4346.3	4330.2	4322.1	4303.3	4306.0	4311.3
32.5°	4096.0	4085.3	4063.7	4055.6	4039.6	4034.1	4036.8
35°	3773.1	3765.1	3746.2	3746.2	3730.1	3724.6	3730.1
37.5°	3444.8	3452.8	3444.8	3452.8	3444.8	3442.0	3444.8
40°	3135.3	3164.9	3170.2	3199.9	3189.2	3205.2	3202.6
42.5°	2839.2	2887.6	2906.6	2930.7	2925.4	2936.1	2944.2
45°	2540.5	2580.9	2599.7	2615.9	2618.6	2624.0	2626.6
47.5°	2257.9	2290.2	2292.9	2311.7	2309.1	2309.1	2317.1
50°	1994.2	2015.7	2021.1	2034.6	2023.8	2018.4	2021.1
52.5°	1749.3	1770.8	1765.4	1770.8	1757.4	1752.0	1754.6
55°	1499.0	1509.7	1509.7	1509.7	1493.7	1493.7	1493.7
57.5°	1243.3	1246.1	1240.7	1243.3	1240.7	1224.5	1221.8
60°	1009.3	1009.3	1006.5	1009.3	1001.2	993.1	993.1
62.5°	788.5	793.9	804.7	793.9	788.5	793.9	785.8
65°	589.4	600.2	597.4	602.8	600.2	600.2	594.7
67.5°	444.1	446.7	449.4	452.2	452.2	452.2	452.2
70°	325.7	333.8	331.0	331.0	331.0	331.0	347.2
72.5°	218.0	228.7	226.1	231.4	231.4	236.8	231.4
75°	148.0	158.7	153.4	161.5	158.7	153.4	166.8
77.5°	99.6	105.0	107.7	110.3	107.7	105.0	107.7
80°	70.0	75.3	72.7	75.3	75.3	75.3	78.1
82.5°	43.1	51.2	48.4	51.2	48.4	51.2	51.2
85°	29.6	32.3	26.9	32.3	29.6	29.6	35.0
87.5°	18.8	16.2	16.2	18.8	16.2	18.8	16.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)