

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: P248689

Luminaire Tested: **LD8B90D010 ER8B90850 8LBSW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248689
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 8LBSW0WMH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 5000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9466.0 lumens
Efficiency: N/A
Efficacy: 109.9 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

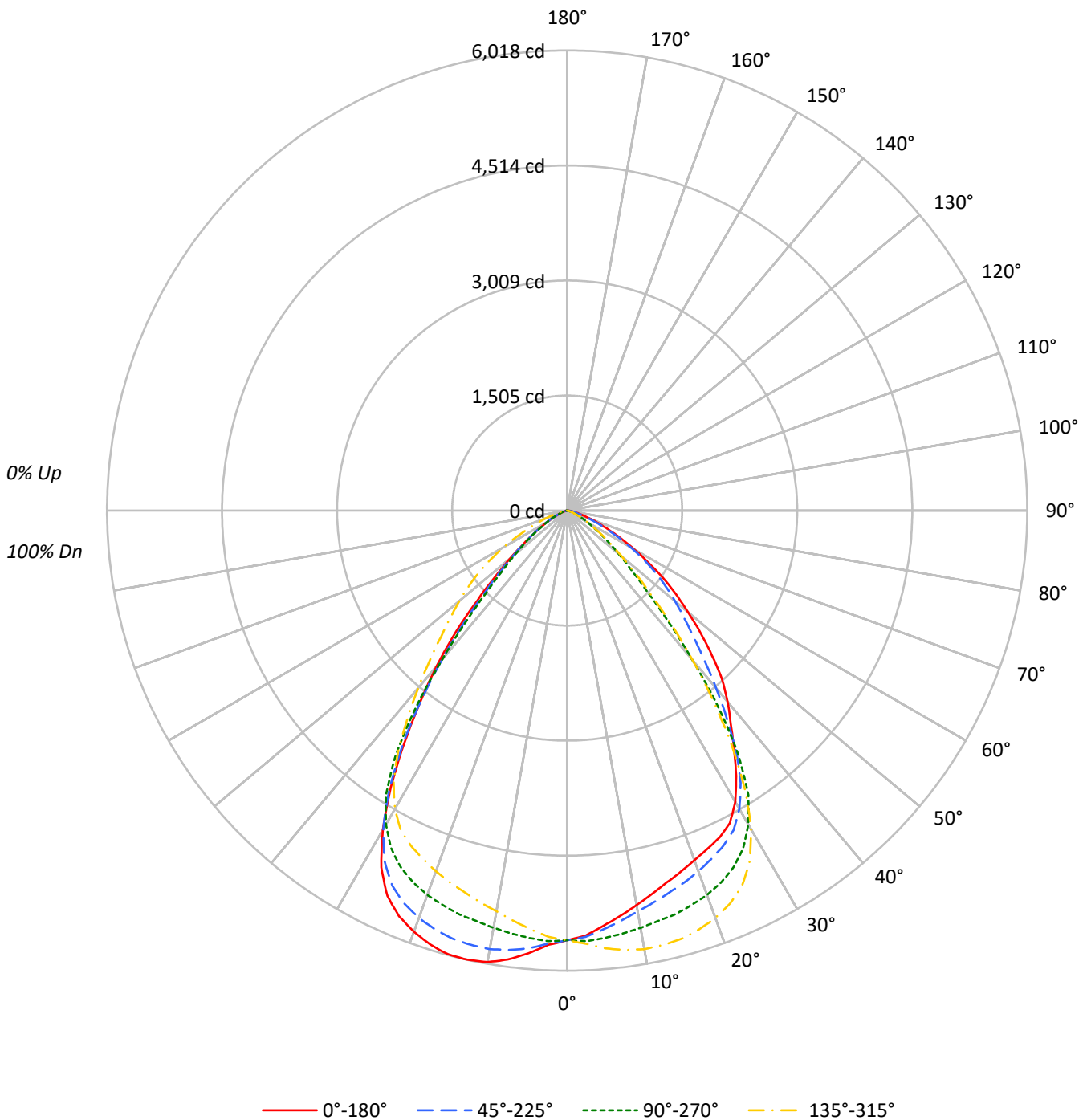
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	173291	173291	173291	173291
5°	168687	173696	179899	173696
10°	164022	173469	187731	173469
15°	160744	174500	191842	174500
20°	159650	175496	192334	175496
25°	160488	175146	189245	175146
30°	156520	168733	171767	168733
35°	143168	147193	139656	147193
40°	131441	102390	106923	102390
45°	116790	62466	72273	62466
50°	98858	41727	46337	41727
55°	81873	28472	30096	28472
60°	62444	18952	19119	18952
65°	44246	11806	10813	11806
70°	31916	7916	7177	7916
75°	20266	3932	3265	3932
80°	14135	2930	2433	2930
85°	12631	0	955	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	534.9	5.7
10°-20°	1548.9	16.4
20°-30°	2345.4	24.8
30°-40°	2350.7	24.8
40°-50°	1476.1	15.6
50°-60°	786.6	8.3
60°-70°	323.5	3.4
70°-80°	85.5	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°	4429.2	46.8
0°-40°	6779.9	71.6
0°-60°	9042.6	95.5
0°-90°	9466.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9466.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5620	5620	5620	5620	5620	
5°	5450	5611	5812	5611	5450	514
15°	5035	5466	6009	5466	5035	1424
25°	4717	5148	5562	5148	4717	2163
35°	3803	3910	3710	3910	3803	2383
45°	2678	1432	1657	1432	2678	2060
55°	1523	530	560	530	1523	1358
65°	606	162	148	162	606	629
75°	170	33	27	33	170	193
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°	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7
2.5°	5562.1	5556.5	5553.8	5559.4	5562.1	5573.0	5570.3	5575.7	5575.7	5578.6	5584.0
5°	5449.6	5446.7	5449.6	5449.6	5460.5	5471.5	5468.8	5477.0	5482.4	5496.2	5501.6
7.5°	5345.3	5345.3	5342.5	5353.5	5359.0	5375.5	5372.7	5386.4	5394.7	5408.3	5427.5
10°	5238.3	5238.3	5241.0	5249.2	5252.0	5276.7	5276.7	5295.9	5306.8	5320.6	5345.3
12.5°	5134.0	5134.0	5150.5	5145.0	5155.9	5175.1	5183.4	5202.6	5219.1	5246.5	5271.2
15°	5035.2	5035.2	5040.7	5054.4	5062.6	5087.4	5101.0	5123.0	5142.2	5169.7	5205.4
17.5°	4950.1	4947.4	4950.1	4966.6	4983.1	5005.0	5016.0	5043.4	5062.6	5098.3	5131.3
20°	4865.1	4870.6	4870.6	4884.3	4895.2	4922.7	4933.6	4963.9	4985.8	5018.7	5057.2
22.5°	4791.0	4788.3	4788.3	4807.5	4815.7	4840.3	4851.3	4878.7	4903.5	4930.9	4966.6
25°	4716.9	4711.4	4722.4	4725.1	4730.6	4758.0	4766.3	4785.5	4810.2	4834.9	4870.6
27.5°	4607.1	4601.7	4604.4	4615.4	4623.6	4645.5	4651.1	4670.3	4689.5	4711.4	4741.6
30°	4395.8	4390.4	4387.7	4406.9	4415.1	4431.5	4439.7	4472.7	4478.1	4502.9	4524.8
32.5°	4115.9	4113.2	4118.7	4135.1	4143.4	4165.4	4176.3	4195.5	4209.2	4223.0	4244.9
35°	3803.2	3797.6	3803.2	3819.7	3819.7	3838.9	3847.1	3855.2	3852.5	3855.2	3849.8
37.5°	3512.3	3509.5	3512.3	3520.5	3512.3	3520.5	3512.3	3495.9	3465.7	3432.7	3399.7
40°	3265.3	3268.0	3251.7	3262.6	3232.4	3226.9	3196.8	3155.6	3095.2	3029.4	2936.1
42.5°	3002.0	2993.7	2982.8	2988.2	2963.5	2944.2	2894.9	2842.8	2765.9	2656.2	2543.6
45°	2678.1	2675.4	2669.9	2667.2	2650.7	2631.5	2590.3	2530.0	2444.9	2332.4	2197.9
47.5°	2362.6	2354.3	2354.3	2357.0	2337.8	2335.1	2302.1	2250.1	2176.0	2066.2	1926.3
50°	2060.7	2058.0	2063.5	2074.5	2060.7	2055.3	2033.3	1997.6	1931.8	1838.5	1706.7
52.5°	1789.0	1786.3	1791.9	1805.5	1800.0	1805.5	1783.6	1756.2	1712.2	1621.7	1506.5
55°	1522.9	1522.9	1522.9	1539.3	1539.3	1539.3	1528.4	1512.0	1470.8	1404.9	1298.0
57.5°	1245.8	1248.5	1265.0	1267.7	1265.0	1270.5	1267.7	1251.2	1223.9	1177.2	1094.9
60°	1012.5	1012.5	1020.8	1029.0	1026.2	1029.0	1029.0	1020.8	993.3	954.9	889.1
62.5°	801.2	809.5	803.9	809.5	820.4	809.5	803.9	798.5	779.3	754.6	699.7
65°	606.4	611.9	611.9	614.6	609.1	611.9	601.0	592.7	581.8	554.3	518.6
67.5°	461.0	461.0	461.0	461.0	458.2	455.5	452.8	444.5	425.3	414.4	375.9
70°	354.0	337.5	337.5	337.5	337.5	340.3	332.1	321.1	315.6	296.4	268.9
72.5°	235.9	241.5	235.9	235.9	230.5	233.2	222.3	216.7	211.3	200.4	183.9
75°	170.1	156.4	161.8	164.7	156.4	161.8	150.9	139.9	139.9	131.7	123.4
77.5°	109.8	107.1	109.8	112.5	109.8	107.1	101.5	96.0	96.0	93.3	85.0
80°	79.6	76.8	76.8	76.8	74.1	76.8	71.4	71.4	65.8	63.1	57.6
82.5°	52.2	52.2	49.4	52.2	49.4	52.2	43.9	43.9	43.9	41.1	35.7
85°	35.7	30.2	30.2	33.0	27.4	33.0	30.2	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	11.0	11.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7
2.5°	5592.2	5594.9	5594.9	5606.0	5611.4	5614.1	5614.1	5636.2	5627.9	5633.4	5638.9
5°	5512.7	5529.1	5534.6	5534.6	5564.8	5575.7	5586.7	5611.4	5614.1	5630.6	5649.8
7.5°	5435.8	5455.0	5466.1	5490.7	5509.9	5529.1	5562.1	5578.6	5594.9	5617.0	5641.6
10°	5361.7	5383.7	5405.6	5424.8	5455.0	5479.7	5501.6	5540.0	5559.4	5589.5	5622.4
12.5°	5290.4	5320.6	5339.8	5372.7	5405.6	5427.5	5460.5	5496.2	5526.4	5556.5	5594.9
15°	5227.3	5263.0	5284.9	5320.6	5356.3	5386.4	5422.1	5466.1	5488.0	5523.7	5559.4
17.5°	5158.6	5197.1	5224.6	5257.5	5301.4	5334.3	5364.5	5408.3	5435.8	5474.2	5515.4
20°	5087.4	5125.8	5158.6	5191.6	5235.5	5268.4	5304.1	5348.0	5378.2	5416.6	5449.6
22.5°	5002.3	5038.0	5073.6	5112.0	5155.9	5183.4	5224.6	5263.0	5295.9	5331.5	5364.5
25°	4892.5	4936.5	4963.9	4999.5	5035.2	5065.3	5109.3	5147.7	5175.1	5208.1	5238.3
27.5°	4763.5	4796.5	4818.4	4848.6	4884.3	4911.7	4944.6	4983.1	5010.6	5040.7	5062.6
30°	4544.0	4574.3	4593.5	4615.4	4651.1	4675.8	4703.2	4738.8	4758.0	4780.0	4799.2
32.5°	4255.9	4280.6	4291.6	4308.0	4332.8	4357.4	4379.4	4409.6	4417.8	4431.5	4431.5
35°	3838.9	3844.3	3841.6	3847.1	3858.1	3871.7	3890.9	3910.1	3921.1	3921.1	3913.0
37.5°	3350.4	3317.5	3281.8	3254.4	3246.1	3240.6	3251.7	3259.8	3270.9	3276.3	3262.6
40°	2842.8	2768.7	2689.1	2617.7	2568.4	2546.4	2538.2	2543.6	2543.6	2562.8	2562.8
42.5°	2406.5	2291.2	2173.3	2066.2	1994.8	1940.0	1915.3	1915.3	1918.0	1931.8	1940.0
45°	2044.3	1898.8	1761.6	1643.7	1544.9	1473.5	1440.6	1432.4	1429.7	1435.1	1454.3
47.5°	1767.1	1616.2	1473.5	1328.1	1223.9	1152.5	1122.3	1111.3	1100.3	1111.3	1114.1
50°	1550.4	1394.0	1243.1	1097.6	987.8	924.7	886.3	869.8	867.1	867.1	872.6
52.5°	1352.7	1207.4	1056.5	908.3	793.0	732.7	697.0	688.7	677.8	688.7	688.7
55°	1166.2	1020.8	872.6	732.7	636.6	573.5	540.6	529.6	524.1	532.3	532.3
57.5°	963.2	839.6	702.5	576.2	480.2	436.3	411.6	397.9	395.1	400.6	395.1
60°	790.3	686.0	568.0	452.8	378.7	332.1	312.9	307.3	301.8	307.3	307.3
62.5°	625.6	537.8	441.7	354.0	290.8	258.0	235.9	235.9	233.2	233.2	235.9
65°	463.7	395.1	326.5	252.4	203.1	178.3	161.8	161.8	159.1	161.8	159.1
67.5°	337.5	290.8	235.9	183.9	145.5	131.7	120.7	112.5	118.0	112.5	109.8
70°	247.0	208.5	170.1	139.9	112.5	98.8	90.6	87.8	82.3	82.3	82.3
72.5°	164.7	139.9	115.2	90.6	74.1	60.3	57.6	52.2	46.6	49.4	54.9
75°	109.8	93.3	82.3	65.8	49.4	49.4	33.0	33.0	27.4	33.0	24.7
77.5°	76.8	63.1	49.4	41.1	33.0	30.2	21.9	21.9	19.2	19.2	19.2
80°	54.9	46.6	35.7	30.2	21.9	21.9	19.2	16.5	13.7	13.7	16.5
82.5°	33.0	24.7	24.7	21.9	13.7	11.0	8.2	11.0	5.5	5.5	5.5
85°	19.2	16.5	13.7	8.2	5.5	5.5	2.7	0.0	2.7	2.7	0.0
87.5°	11.0	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°	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7
2.5°	5652.6	5649.8	5655.4	5655.4	5671.8	5669.0	5677.3	5677.3	5671.8	5674.6	5685.5
5°	5671.8	5680.1	5696.5	5710.2	5734.9	5745.9	5759.6	5773.4	5776.1	5784.3	5792.6
7.5°	5671.8	5699.3	5718.5	5743.1	5776.1	5795.3	5825.4	5850.2	5861.1	5874.8	5891.3
10°	5660.8	5688.2	5723.9	5751.4	5792.6	5822.7	5852.9	5891.3	5907.8	5929.7	5951.7
12.5°	5638.9	5669.0	5707.4	5743.1	5789.8	5817.2	5855.6	5891.3	5916.0	5946.2	5970.9
15°	5606.0	5641.6	5677.3	5713.0	5762.3	5795.3	5831.0	5872.1	5896.8	5929.7	5951.7
17.5°	5553.8	5592.2	5625.2	5658.1	5704.7	5743.1	5776.1	5814.5	5839.2	5866.7	5896.8
20°	5490.7	5526.4	5562.1	5589.5	5636.2	5669.0	5704.7	5740.4	5759.6	5765.1	5811.8
22.5°	5411.2	5435.8	5463.2	5507.2	5534.6	5564.8	5597.8	5630.6	5649.8	5680.1	5696.5
25°	5279.4	5304.1	5334.3	5353.5	5386.4	5411.2	5444.0	5479.7	5490.7	5512.7	5529.1
27.5°	5095.6	5109.3	5123.0	5139.4	5158.6	5172.4	5191.6	5208.1	5219.1	5230.0	5241.0
30°	4804.7	4804.7	4804.7	4793.7	4801.9	4810.2	4812.9	4810.2	4810.2	4807.5	4807.5
32.5°	4420.5	4398.6	4373.9	4352.0	4343.7	4332.8	4327.2	4319.0	4305.3	4297.1	4299.8
35°	3901.9	3852.5	3822.4	3794.9	3773.0	3756.5	3748.3	3740.0	3737.3	3726.4	3715.3
37.5°	3254.4	3218.7	3196.8	3180.3	3161.1	3144.6	3147.3	3150.1	3158.3	3152.8	3155.6
40°	2568.4	2560.1	2568.4	2549.2	2543.6	2549.2	2562.8	2582.1	2593.1	2604.0	2623.2
42.5°	1953.7	1967.4	1986.7	1986.7	1994.8	2005.9	2022.3	2052.5	2068.9	2088.1	2110.1
45°	1470.8	1487.3	1512.0	1520.1	1525.7	1539.3	1558.6	1583.3	1594.2	1610.7	1629.9
47.5°	1133.3	1144.2	1157.9	1171.7	1185.4	1190.9	1210.1	1210.1	1223.9	1234.8	1240.2
50°	883.6	894.5	905.5	913.7	919.3	927.5	932.9	941.2	943.9	949.4	952.1
52.5°	691.4	705.2	705.2	710.6	718.9	727.1	724.4	727.1	729.8	729.8	738.1
55°	540.6	540.6	548.8	548.8	554.3	551.5	554.3	554.3	554.3	554.3	557.0
57.5°	403.3	406.1	414.4	408.9	406.1	411.6	406.1	411.6	408.9	414.4	406.1
60°	310.0	310.0	312.9	312.9	315.6	315.6	315.6	312.9	312.9	310.0	310.0
62.5°	233.2	235.9	238.8	235.9	235.9	235.9	233.2	233.2	230.5	227.7	227.7
65°	156.4	153.7	159.1	153.7	156.4	156.4	153.7	156.4	148.2	150.9	148.2
67.5°	112.5	109.8	107.1	109.8	107.1	104.2	104.2	107.1	109.8	101.5	101.5
70°	74.1	76.8	74.1	76.8	79.6	79.6	76.8	74.1	76.8	71.4	74.1
72.5°	46.6	46.6	46.6	46.6	46.6	49.4	49.4	49.4	43.9	43.9	41.1
75°	21.9	30.2	24.7	21.9	30.2	30.2	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	13.7	16.5	13.7
80°	11.0	11.0	11.0	8.2	11.0	11.0	13.7	11.0	11.0	8.2	13.7
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: P248689

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7
2.5°	5682.8	5680.1	5682.8	5685.5	5682.8	5680.1	5682.8	5685.5	5674.6	5671.8	5677.3
5°	5803.5	5803.5	5809.0	5811.8	5809.0	5803.5	5803.5	5792.6	5784.3	5776.1	5773.4
7.5°	5907.8	5913.3	5918.7	5921.5	5918.7	5913.3	5907.8	5891.3	5874.8	5861.1	5850.2
10°	5970.9	5979.2	5990.1	5995.5	5990.1	5979.2	5970.9	5951.7	5929.7	5907.8	5891.3
12.5°	5998.4	6006.6	6020.3	6017.6	6020.3	6006.6	5998.4	5970.9	5946.2	5916.0	5891.3
15°	5979.2	5990.1	6003.8	6009.3	6003.8	5990.1	5979.2	5951.7	5929.7	5896.8	5872.1
17.5°	5918.7	5935.2	5943.5	5951.7	5943.5	5935.2	5918.7	5896.8	5866.7	5839.2	5814.5
20°	5836.4	5847.5	5858.4	5861.1	5858.4	5847.5	5836.4	5811.8	5765.1	5759.6	5740.4
22.5°	5718.5	5726.7	5751.4	5743.1	5751.4	5726.7	5718.5	5696.5	5680.1	5649.8	5630.6
25°	5548.3	5556.5	5559.4	5562.1	5559.4	5556.5	5548.3	5529.1	5512.7	5490.7	5479.7
27.5°	5254.7	5254.7	5260.2	5263.0	5260.2	5254.7	5254.7	5241.0	5230.0	5219.1	5208.1
30°	4810.2	4810.2	4810.2	4824.0	4810.2	4810.2	4810.2	4807.5	4807.5	4810.2	4810.2
32.5°	4297.1	4291.6	4286.1	4291.6	4286.1	4291.6	4297.1	4299.8	4297.1	4305.3	4319.0
35°	3715.3	3712.6	3720.8	3709.9	3720.8	3712.6	3715.3	3715.3	3726.4	3737.3	3740.0
37.5°	3158.3	3152.8	3163.8	3152.8	3163.8	3152.8	3158.3	3155.6	3152.8	3158.3	3150.1
40°	2628.8	2634.2	2634.2	2656.2	2634.2	2634.2	2628.8	2623.2	2604.0	2593.1	2582.1
42.5°	2121.1	2137.6	2132.1	2148.5	2132.1	2137.6	2121.1	2110.1	2088.1	2068.9	2052.5
45°	1640.9	1651.9	1651.9	1657.3	1651.9	1651.9	1640.9	1629.9	1610.7	1594.2	1583.3
47.5°	1259.4	1259.4	1259.4	1262.3	1259.4	1259.4	1259.4	1240.2	1234.8	1223.9	1210.1
50°	957.7	960.4	963.2	965.9	963.2	960.4	957.7	952.1	949.4	943.9	941.2
52.5°	735.4	738.1	732.7	738.1	732.7	738.1	735.4	738.1	729.8	729.8	727.1
55°	557.0	554.3	557.0	559.8	557.0	554.3	557.0	557.0	554.3	554.3	554.3
57.5°	408.9	403.3	403.3	403.3	403.3	403.3	408.9	406.1	414.4	408.9	411.6
60°	304.6	307.3	307.3	310.0	307.3	307.3	304.6	310.0	310.0	312.9	312.9
62.5°	225.0	233.2	227.7	233.2	227.7	233.2	225.0	227.7	227.7	230.5	233.2
65°	145.5	145.5	145.5	148.2	145.5	145.5	145.5	148.2	150.9	148.2	156.4
67.5°	98.8	101.5	107.1	104.2	107.1	101.5	98.8	101.5	101.5	109.8	107.1
70°	79.6	71.4	71.4	79.6	71.4	71.4	79.6	74.1	71.4	76.8	74.1
72.5°	46.6	41.1	46.6	46.6	46.6	41.1	46.6	41.1	43.9	43.9	49.4
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	13.7	19.2	19.2	19.2	13.7	16.5	13.7	16.5	13.7	16.5
80°	8.2	11.0	8.2	13.7	8.2	11.0	8.2	13.7	8.2	11.0	11.0
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: P248689

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7
2.5°	5677.3	5669.0	5671.8	5655.4	5655.4	5649.8	5652.6	5638.9	5633.4	5627.9	5636.2
5°	5759.6	5745.9	5734.9	5710.2	5696.5	5680.1	5671.8	5649.8	5630.6	5614.1	5611.4
7.5°	5825.4	5795.3	5776.1	5743.1	5718.5	5699.3	5671.8	5641.6	5617.0	5594.9	5578.6
10°	5852.9	5822.7	5792.6	5751.4	5723.9	5688.2	5660.8	5622.4	5589.5	5559.4	5540.0
12.5°	5855.6	5817.2	5789.8	5743.1	5707.4	5669.0	5638.9	5594.9	5556.5	5526.4	5496.2
15°	5831.0	5795.3	5762.3	5713.0	5677.3	5641.6	5606.0	5559.4	5523.7	5488.0	5466.1
17.5°	5776.1	5743.1	5704.7	5658.1	5625.2	5592.2	5553.8	5515.4	5474.2	5435.8	5408.3
20°	5704.7	5669.0	5636.2	5589.5	5562.1	5526.4	5490.7	5449.6	5416.6	5378.2	5348.0
22.5°	5597.8	5564.8	5534.6	5507.2	5463.2	5435.8	5411.2	5364.5	5331.5	5295.9	5263.0
25°	5444.0	5411.2	5386.4	5353.5	5334.3	5304.1	5279.4	5238.3	5208.1	5175.1	5147.7
27.5°	5191.6	5172.4	5158.6	5139.4	5123.0	5109.3	5095.6	5062.6	5040.7	5010.6	4983.1
30°	4812.9	4810.2	4801.9	4793.7	4804.7	4804.7	4804.7	4799.2	4780.0	4758.0	4738.8
32.5°	4327.2	4332.8	4343.7	4352.0	4373.9	4398.6	4420.5	4431.5	4431.5	4417.8	4409.6
35°	3748.3	3756.5	3773.0	3794.9	3822.4	3852.5	3901.9	3913.0	3921.1	3921.1	3910.1
37.5°	3147.3	3144.6	3161.1	3180.3	3196.8	3218.7	3254.4	3262.6	3276.3	3270.9	3259.8
40°	2562.8	2549.2	2543.6	2549.2	2568.4	2560.1	2568.4	2562.8	2562.8	2543.6	2543.6
42.5°	2022.3	2005.9	1994.8	1986.7	1986.7	1967.4	1953.7	1940.0	1931.8	1918.0	1915.3
45°	1558.6	1539.3	1525.7	1520.1	1512.0	1487.3	1470.8	1454.3	1435.1	1429.7	1432.4
47.5°	1210.1	1190.9	1185.4	1171.7	1157.9	1144.2	1133.3	1114.1	1111.3	1100.3	1111.3
50°	932.9	927.5	919.3	913.7	905.5	894.5	883.6	872.6	867.1	867.1	869.8
52.5°	724.4	727.1	718.9	710.6	705.2	705.2	691.4	688.7	688.7	677.8	688.7
55°	554.3	551.5	554.3	548.8	548.8	540.6	540.6	532.3	532.3	524.1	529.6
57.5°	406.1	411.6	406.1	408.9	414.4	406.1	403.3	395.1	400.6	395.1	397.9
60°	315.6	315.6	315.6	312.9	312.9	310.0	310.0	307.3	307.3	301.8	307.3
62.5°	233.2	235.9	235.9	235.9	238.8	235.9	233.2	235.9	233.2	233.2	235.9
65°	153.7	156.4	156.4	153.7	159.1	153.7	156.4	159.1	161.8	159.1	161.8
67.5°	104.2	104.2	107.1	109.8	107.1	109.8	112.5	109.8	112.5	118.0	112.5
70°	76.8	79.6	79.6	76.8	74.1	76.8	74.1	82.3	82.3	82.3	87.8
72.5°	49.4	49.4	46.6	46.6	46.6	46.6	46.6	54.9	49.4	46.6	52.2
75°	27.4	30.2	30.2	21.9	24.7	30.2	21.9	24.7	33.0	27.4	33.0
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°	13.7	11.0	11.0	8.2	11.0	11.0	11.0	16.5	13.7	13.7	16.5
82.5°	5.5	5.5	2.7	0.0	5.5	5.5	5.5	5.5	5.5	5.5	11.0
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: P248689

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7
2.5°	5614.1	5614.1	5611.4	5606.0	5594.9	5594.9	5592.2	5584.0	5578.6	5575.7	5575.7
5°	5586.7	5575.7	5564.8	5534.6	5534.6	5529.1	5512.7	5501.6	5496.2	5482.4	5477.0
7.5°	5562.1	5529.1	5509.9	5490.7	5466.1	5455.0	5435.8	5427.5	5408.3	5394.7	5386.4
10°	5501.6	5479.7	5455.0	5424.8	5405.6	5383.7	5361.7	5345.3	5320.6	5306.8	5295.9
12.5°	5460.5	5427.5	5405.6	5372.7	5339.8	5320.6	5290.4	5271.2	5246.5	5219.1	5202.6
15°	5422.1	5386.4	5356.3	5320.6	5284.9	5263.0	5227.3	5205.4	5169.7	5142.2	5123.0
17.5°	5364.5	5334.3	5301.4	5257.5	5224.6	5197.1	5158.6	5131.3	5098.3	5062.6	5043.4
20°	5304.1	5268.4	5235.5	5191.6	5158.6	5125.8	5087.4	5057.2	5018.7	4985.8	4963.9
22.5°	5224.6	5183.4	5155.9	5112.0	5073.6	5038.0	5002.3	4966.6	4930.9	4903.5	4878.7
25°	5109.3	5065.3	5035.2	4999.5	4963.9	4936.5	4892.5	4870.6	4834.9	4810.2	4785.5
27.5°	4944.6	4911.7	4884.3	4848.6	4818.4	4796.5	4763.5	4741.6	4711.4	4689.5	4670.3
30°	4703.2	4675.8	4651.1	4615.4	4593.5	4574.3	4544.0	4524.8	4502.9	4478.1	4472.7
32.5°	4379.4	4357.4	4332.8	4308.0	4291.6	4280.6	4255.9	4244.9	4223.0	4209.2	4195.5
35°	3890.9	3871.7	3858.1	3847.1	3841.6	3844.3	3838.9	3849.8	3855.2	3852.5	3855.2
37.5°	3251.7	3240.6	3246.1	3254.4	3281.8	3317.5	3350.4	3399.7	3432.7	3465.7	3495.9
40°	2538.2	2546.4	2568.4	2617.7	2689.1	2768.7	2842.8	2936.1	3029.4	3095.2	3155.6
42.5°	1915.3	1940.0	1994.8	2066.2	2173.3	2291.2	2406.5	2543.6	2656.2	2765.9	2842.8
45°	1440.6	1473.5	1544.9	1643.7	1761.6	1898.8	2044.3	2197.9	2332.4	2444.9	2530.0
47.5°	1122.3	1152.5	1223.9	1328.1	1473.5	1616.2	1767.1	1926.3	2066.2	2176.0	2250.1
50°	886.3	924.7	987.8	1097.6	1243.1	1394.0	1550.4	1706.7	1838.5	1931.8	1997.6
52.5°	697.0	732.7	793.0	908.3	1056.5	1207.4	1352.7	1506.5	1621.7	1712.2	1756.2
55°	540.6	573.5	636.6	732.7	872.6	1020.8	1166.2	1298.0	1404.9	1470.8	1512.0
57.5°	411.6	436.3	480.2	576.2	702.5	839.6	963.2	1094.9	1177.2	1223.9	1251.2
60°	312.9	332.1	378.7	452.8	568.0	686.0	790.3	889.1	954.9	993.3	1020.8
62.5°	235.9	258.0	290.8	354.0	441.7	537.8	625.6	699.7	754.6	779.3	798.5
65°	161.8	178.3	203.1	252.4	326.5	395.1	463.7	518.6	554.3	581.8	592.7
67.5°	120.7	131.7	145.5	183.9	235.9	290.8	337.5	375.9	414.4	425.3	444.5
70°	90.6	98.8	112.5	139.9	170.1	208.5	247.0	268.9	296.4	315.6	321.1
72.5°	57.6	60.3	74.1	90.6	115.2	139.9	164.7	183.9	200.4	211.3	216.7
75°	33.0	49.4	49.4	65.8	82.3	93.3	109.8	123.4	131.7	139.9	139.9
77.5°	21.9	30.2	33.0	41.1	49.4	63.1	76.8	85.0	93.3	96.0	96.0
80°	19.2	21.9	21.9	30.2	35.7	46.6	54.9	57.6	63.1	65.8	71.4
82.5°	8.2	11.0	13.7	21.9	24.7	24.7	33.0	35.7	41.1	43.9	43.9
85°	2.7	5.5	5.5	8.2	13.7	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	11.0	11.0	11.0	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: P248689

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7	5619.7
2.5°	5570.3	5573.0	5562.1	5559.4	5553.8	5556.5	5562.1
5°	5468.8	5471.5	5460.5	5449.6	5449.6	5446.7	5449.6
7.5°	5372.7	5375.5	5359.0	5353.5	5342.5	5345.3	5345.3
10°	5276.7	5276.7	5252.0	5249.2	5241.0	5238.3	5238.3
12.5°	5183.4	5175.1	5155.9	5145.0	5150.5	5134.0	5134.0
15°	5101.0	5087.4	5062.6	5054.4	5040.7	5035.2	5035.2
17.5°	5016.0	5005.0	4983.1	4966.6	4950.1	4947.4	4950.1
20°	4933.6	4922.7	4895.2	4884.3	4870.6	4870.6	4865.1
22.5°	4851.3	4840.3	4815.7	4807.5	4788.3	4788.3	4791.0
25°	4766.3	4758.0	4730.6	4725.1	4722.4	4711.4	4716.9
27.5°	4651.1	4645.5	4623.6	4615.4	4604.4	4601.7	4607.1
30°	4439.7	4431.5	4415.1	4406.9	4387.7	4390.4	4395.8
32.5°	4176.3	4165.4	4143.4	4135.1	4118.7	4113.2	4115.9
35°	3847.1	3838.9	3819.7	3819.7	3803.2	3797.6	3803.2
37.5°	3512.3	3520.5	3512.3	3520.5	3512.3	3509.5	3512.3
40°	3196.8	3226.9	3232.4	3262.6	3251.7	3268.0	3265.3
42.5°	2894.9	2944.2	2963.5	2988.2	2982.8	2993.7	3002.0
45°	2590.3	2631.5	2650.7	2667.2	2669.9	2675.4	2678.1
47.5°	2302.1	2335.1	2337.8	2357.0	2354.3	2354.3	2362.6
50°	2033.3	2055.3	2060.7	2074.5	2063.5	2058.0	2060.7
52.5°	1783.6	1805.5	1800.0	1805.5	1791.9	1786.3	1789.0
55°	1528.4	1539.3	1539.3	1539.3	1522.9	1522.9	1522.9
57.5°	1267.7	1270.5	1265.0	1267.7	1265.0	1248.5	1245.8
60°	1029.0	1029.0	1026.2	1029.0	1020.8	1012.5	1012.5
62.5°	803.9	809.5	820.4	809.5	803.9	809.5	801.2
65°	601.0	611.9	609.1	614.6	611.9	611.9	606.4
67.5°	452.8	455.5	458.2	461.0	461.0	461.0	461.0
70°	332.1	340.3	337.5	337.5	337.5	337.5	354.0
72.5°	222.3	233.2	230.5	235.9	235.9	241.5	235.9
75°	150.9	161.8	156.4	164.7	161.8	156.4	170.1
77.5°	101.5	107.1	109.8	112.5	109.8	107.1	109.8
80°	71.4	76.8	74.1	76.8	76.8	76.8	79.6
82.5°	43.9	52.2	49.4	52.2	49.4	52.2	52.2
85°	30.2	33.0	27.4	33.0	30.2	30.2	35.7
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)