

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: P248725

Luminaire Tested: **LD8B90D010 ER8B90940 8LBSW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248725
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 ER8B90940 8LBSW0WMH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 4000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8324.0 lumens
Efficiency: N/A
Efficacy: 96.7 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

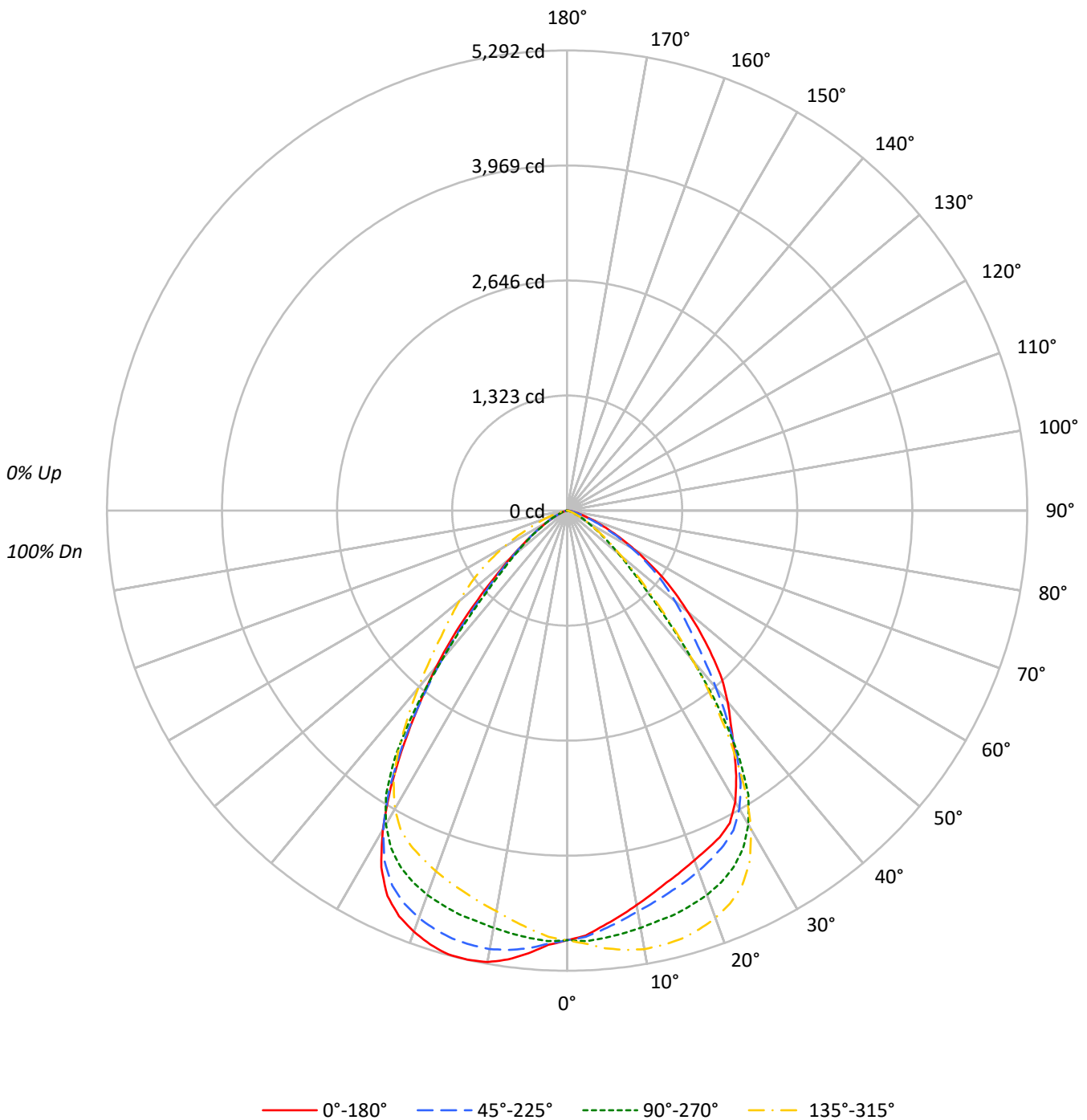
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	152384	152384	152384	152384
5°	148335	152740	158194	152740
10°	144233	152543	165083	152543
15°	141350	153446	168697	153446
20°	140387	154324	169130	154324
25°	141125	154014	166412	154014
30°	137638	148377	151044	148377
35°	125897	129436	122807	129436
40°	115585	90040	94025	90040
45°	102700	54930	63556	54930
50°	86931	36694	40748	36694
55°	71997	25037	26461	25037
60°	54913	16664	16812	16664
65°	38905	10383	9507	10383
70°	28067	6960	6311	6960
75°	17824	3455	2871	3455
80°	12431	2575	2131	2575
85°	11110	0	849	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	470.4	5.7
10°-20°	1362.1	16.4
20°-30°	2062.5	24.8
30°-40°	2067.1	24.8
40°-50°	1298.0	15.6
50°-60°	691.7	8.3
60°-70°	284.4	3.4
70°-80°	75.2	0.9
80°-90°	12.7	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°	3894.9	46.8
0°-40°	5962.0	71.6
0°-60°	7951.7	95.5
0°-90°	8324.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8324.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4942	4942	4942	4942	4942	
5°	4792	4934	5111	4934	4792	452
15°	4428	4807	5284	4807	4428	1252
25°	4148	4527	4891	4527	4148	1902
35°	3344	3438	3262	3438	3344	2095
45°	2355	1260	1457	1260	2355	1811
55°	1339	466	492	466	1339	1194
65°	533	142	130	142	533	553
75°	150	29	24	29	150	169
85°	31	0	2	0	31	34
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°	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7
2.5°	4891.0	4886.2	4883.8	4888.7	4891.0	4900.7	4898.3	4903.1	4903.1	4905.5	4910.3
5°	4792.1	4789.6	4792.1	4792.1	4801.8	4811.4	4809.0	4816.3	4821.0	4833.1	4837.9
7.5°	4700.5	4700.5	4698.0	4707.6	4712.5	4727.0	4724.5	4736.6	4743.9	4755.9	4772.8
10°	4606.3	4606.3	4608.7	4615.9	4618.4	4640.1	4640.1	4656.9	4666.6	4678.7	4700.5
12.5°	4514.6	4514.6	4529.1	4524.3	4533.9	4550.8	4558.0	4574.9	4589.4	4613.5	4635.3
15°	4427.7	4427.7	4432.6	4444.6	4451.9	4473.6	4485.6	4505.0	4521.9	4546.0	4577.4
17.5°	4352.9	4350.6	4352.9	4367.4	4381.9	4401.2	4410.8	4435.0	4451.9	4483.2	4512.2
20°	4278.1	4283.0	4283.0	4295.0	4304.7	4328.8	4338.4	4365.1	4384.3	4413.2	4447.1
22.5°	4213.0	4210.6	4210.6	4227.5	4234.7	4256.4	4266.0	4290.2	4311.9	4336.1	4367.4
25°	4147.8	4143.0	4152.7	4155.1	4159.9	4184.0	4191.2	4208.1	4229.9	4251.6	4283.0
27.5°	4051.3	4046.5	4048.9	4058.6	4065.8	4085.1	4089.9	4106.8	4123.7	4143.0	4169.6
30°	3865.5	3860.7	3858.3	3875.2	3882.5	3896.9	3904.1	3933.1	3937.9	3959.6	3978.9
32.5°	3619.4	3617.0	3621.9	3636.3	3643.5	3662.9	3672.5	3689.4	3701.4	3713.5	3732.8
35°	3344.4	3339.5	3344.4	3358.9	3358.9	3375.7	3383.0	3390.1	3387.8	3390.1	3385.4
37.5°	3088.6	3086.1	3088.6	3095.8	3088.6	3095.8	3088.6	3074.1	3047.6	3018.6	2989.6
40°	2871.4	2873.8	2859.4	2869.0	2842.4	2837.6	2811.1	2774.9	2721.8	2663.9	2581.9
42.5°	2639.8	2632.5	2622.9	2627.7	2606.0	2589.0	2545.6	2499.8	2432.2	2335.8	2236.8
45°	2355.0	2352.7	2347.8	2345.4	2330.9	2314.0	2277.8	2224.7	2149.9	2051.0	1932.7
47.5°	2077.5	2070.3	2070.3	2072.7	2055.8	2053.4	2024.4	1978.6	1913.5	1816.9	1693.9
50°	1812.1	1809.7	1814.6	1824.2	1812.1	1807.3	1788.0	1756.6	1698.7	1616.7	1500.8
52.5°	1573.2	1570.8	1575.7	1587.7	1582.8	1587.7	1568.4	1544.3	1505.7	1426.0	1324.7
55°	1339.2	1339.2	1339.2	1353.6	1353.6	1353.6	1344.0	1329.6	1293.3	1235.4	1141.4
57.5°	1095.5	1097.9	1112.4	1114.8	1112.4	1117.2	1114.8	1100.3	1076.2	1035.2	962.8
60°	890.4	890.4	897.6	904.9	902.4	904.9	904.9	897.6	873.5	839.7	781.8
62.5°	704.6	711.8	706.9	711.8	721.5	711.8	706.9	702.2	685.3	663.5	615.3
65°	533.2	538.1	538.1	540.5	535.6	538.1	528.5	521.2	511.6	487.5	456.1
67.5°	405.4	405.4	405.4	405.4	402.9	400.6	398.2	390.9	374.0	364.4	330.5
70°	311.3	296.8	296.8	296.8	296.8	299.2	292.0	282.4	277.5	260.6	236.5
72.5°	207.5	212.3	207.5	207.5	202.7	205.1	195.5	190.6	185.8	176.2	161.7
75°	149.6	137.6	142.3	144.8	137.6	142.3	132.7	123.1	123.1	115.8	108.6
77.5°	96.5	94.2	96.5	98.9	96.5	94.2	89.3	84.4	84.4	82.0	74.8
80°	70.0	67.5	67.5	67.5	65.2	67.5	62.8	62.8	57.9	55.5	50.7
82.5°	45.9	45.9	43.4	45.9	43.4	45.9	38.6	38.6	38.6	36.2	31.4
85°	31.4	26.5	26.5	29.0	24.1	29.0	26.5	24.1	21.8	21.8	19.3
87.5°	14.5	16.9	14.5	16.9	14.5	14.5	16.9	14.5	14.5	9.6	9.6
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°	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7
2.5°	4917.6	4919.9	4919.9	4929.7	4934.4	4936.8	4936.8	4956.2	4948.9	4953.8	4958.6
5°	4847.6	4862.0	4866.9	4866.9	4893.4	4903.1	4912.7	4934.4	4936.8	4951.3	4968.2
7.5°	4780.0	4796.9	4806.6	4828.3	4845.2	4862.0	4891.0	4905.5	4919.9	4939.3	4961.0
10°	4714.9	4734.2	4753.5	4770.4	4796.9	4818.6	4837.9	4871.7	4888.7	4915.2	4944.1
12.5°	4652.2	4678.7	4695.6	4724.5	4753.5	4772.8	4801.8	4833.1	4859.7	4886.2	4919.9
15°	4596.7	4628.0	4647.3	4678.7	4710.1	4736.6	4768.0	4806.6	4825.9	4857.3	4888.7
17.5°	4536.3	4570.1	4594.3	4623.2	4661.8	4690.7	4717.3	4755.9	4780.0	4813.8	4850.0
20°	4473.6	4507.4	4536.3	4565.3	4603.9	4632.8	4664.2	4702.8	4729.4	4763.1	4792.1
22.5°	4398.8	4430.2	4461.5	4495.3	4533.9	4558.0	4594.3	4628.0	4656.9	4688.3	4717.3
25°	4302.3	4340.9	4365.1	4396.3	4427.7	4454.2	4492.9	4526.6	4550.8	4579.8	4606.3
27.5°	4188.9	4217.9	4237.1	4263.6	4295.0	4319.2	4348.1	4381.9	4406.1	4432.6	4451.9
30°	3995.8	4022.4	4039.3	4058.6	4089.9	4111.7	4135.8	4167.1	4184.0	4203.4	4220.2
32.5°	3742.4	3764.2	3773.8	3788.3	3810.1	3831.7	3851.1	3877.6	3884.8	3896.9	3896.9
35°	3375.7	3380.5	3378.1	3383.0	3392.6	3404.6	3421.5	3438.4	3448.0	3448.0	3440.9
37.5°	2946.2	2917.3	2885.9	2861.8	2854.5	2849.6	2859.4	2866.5	2876.3	2881.0	2869.0
40°	2499.8	2434.7	2364.7	2301.9	2258.5	2239.2	2232.0	2236.8	2236.8	2253.6	2253.6
42.5°	2116.2	2014.8	1911.1	1816.9	1754.2	1706.0	1684.2	1684.2	1686.6	1698.7	1706.0
45°	1797.7	1669.7	1549.1	1445.4	1358.5	1295.7	1266.8	1259.6	1257.2	1261.9	1278.8
47.5°	1553.9	1421.2	1295.7	1167.9	1076.2	1013.4	986.9	977.2	967.6	977.2	979.7
50°	1363.3	1225.8	1093.1	965.2	868.6	813.1	779.4	764.9	762.5	762.5	767.3
52.5°	1189.5	1061.7	929.0	798.7	697.3	644.3	612.9	605.6	596.0	605.6	605.6
55°	1025.5	897.6	767.3	644.3	559.8	504.3	475.3	465.7	460.8	468.1	468.1
57.5°	847.0	738.3	617.8	506.7	422.3	383.7	361.9	349.9	347.4	352.3	347.4
60°	694.9	603.3	499.5	398.2	333.0	292.0	275.1	270.2	265.4	270.2	270.2
62.5°	550.1	473.0	388.4	311.3	255.7	226.8	207.5	207.5	205.1	205.1	207.5
65°	407.8	347.4	287.1	222.0	178.6	156.8	142.3	142.3	139.9	142.3	139.9
67.5°	296.8	255.7	207.5	161.7	127.9	115.8	106.2	98.9	103.8	98.9	96.5
70°	217.2	183.3	149.6	123.1	98.9	86.9	79.7	77.2	72.4	72.4	72.4
72.5°	144.8	123.1	101.3	79.7	65.2	53.0	50.7	45.9	41.0	43.4	48.3
75°	96.5	82.0	72.4	57.9	43.4	43.4	29.0	29.0	24.1	29.0	21.8
77.5°	67.5	55.5	43.4	36.2	29.0	26.5	19.3	19.3	16.9	16.9	16.9
80°	48.3	41.0	31.4	26.5	19.3	19.3	16.9	14.5	12.0	12.0	14.5
82.5°	29.0	21.8	21.8	19.3	12.0	9.6	7.3	9.6	4.9	4.9	4.9
85°	16.9	14.5	12.0	7.3	4.9	4.9	2.4	0.0	2.4	2.4	0.0
87.5°	9.6	4.9	4.9	2.4	0.0	2.4	2.4	0.0	0.0	0.0	4.9
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7
2.5°	4970.7	4968.2	4973.1	4973.1	4987.6	4985.1	4992.3	4992.3	4987.6	4990.0	4999.6
5°	4987.6	4994.8	5009.2	5021.3	5043.0	5052.7	5064.8	5076.9	5079.3	5086.5	5093.8
7.5°	4987.6	5011.7	5028.6	5050.3	5079.3	5096.1	5122.7	5144.4	5154.0	5166.1	5180.6
10°	4977.8	5002.0	5033.4	5057.5	5093.8	5120.3	5146.8	5180.6	5195.1	5214.3	5233.7
12.5°	4958.6	4985.1	5018.9	5050.3	5091.3	5115.4	5149.2	5180.6	5202.3	5228.8	5250.6
15°	4929.7	4961.0	4992.3	5023.7	5067.1	5096.1	5127.5	5163.7	5185.4	5214.3	5233.7
17.5°	4883.8	4917.6	4946.6	4975.5	5016.5	5050.3	5079.3	5113.0	5134.8	5158.9	5185.4
20°	4828.3	4859.7	4891.0	4915.2	4956.2	4985.1	5016.5	5047.9	5064.8	5069.6	5110.6
22.5°	4758.4	4780.0	4804.1	4842.8	4866.9	4893.4	4922.4	4951.3	4968.2	4994.8	5009.2
25°	4642.4	4664.2	4690.7	4707.6	4736.6	4758.4	4787.3	4818.6	4828.3	4847.6	4862.0
27.5°	4480.9	4492.9	4505.0	4519.4	4536.3	4548.4	4565.3	4579.8	4589.4	4599.0	4608.7
30°	4225.0	4225.0	4225.0	4215.4	4222.6	4229.9	4232.3	4229.9	4229.9	4227.5	4227.5
32.5°	3887.2	3868.0	3846.2	3826.9	3819.7	3810.1	3805.2	3797.9	3785.9	3778.7	3781.1
35°	3431.2	3387.8	3361.2	3337.1	3317.8	3303.3	3296.1	3288.8	3286.5	3276.8	3267.1
37.5°	2861.8	2830.4	2811.1	2796.6	2779.7	2765.2	2767.6	2770.1	2777.2	2772.5	2774.9
40°	2258.5	2251.3	2258.5	2241.6	2236.8	2241.6	2253.6	2270.6	2280.3	2289.9	2306.8
42.5°	1718.0	1730.0	1747.0	1747.0	1754.2	1763.9	1778.3	1804.9	1819.3	1836.2	1855.6
45°	1293.3	1307.8	1329.6	1336.7	1341.6	1353.6	1370.6	1392.2	1401.9	1416.4	1433.3
47.5°	996.6	1006.2	1018.2	1030.3	1042.3	1047.2	1064.1	1064.1	1076.2	1085.9	1090.6
50°	777.0	786.6	796.2	803.5	808.4	815.6	820.4	827.6	830.0	834.9	837.3
52.5°	608.0	620.1	620.1	624.9	632.2	639.4	637.0	639.4	641.8	641.8	649.0
55°	475.3	475.3	482.6	482.6	487.5	485.0	487.5	487.5	487.5	487.5	489.8
57.5°	354.7	357.1	364.4	359.5	357.1	361.9	357.1	361.9	359.5	364.4	357.1
60°	272.6	272.6	275.1	275.1	277.5	277.5	277.5	275.1	275.1	272.6	272.6
62.5°	205.1	207.5	210.0	207.5	207.5	207.5	205.1	205.1	202.7	200.2	200.2
65°	137.6	135.2	139.9	135.2	137.6	137.6	135.2	137.6	130.3	132.7	130.3
67.5°	98.9	96.5	94.2	96.5	94.2	91.7	91.7	94.2	96.5	89.3	89.3
70°	65.2	67.5	65.2	67.5	70.0	70.0	67.5	65.2	67.5	62.8	65.2
72.5°	41.0	41.0	41.0	41.0	41.0	43.4	43.4	43.4	38.6	38.6	36.2
75°	19.3	26.5	21.8	19.3	26.5	26.5	24.1	24.1	21.8	21.8	21.8
77.5°	19.3	14.5	14.5	14.5	14.5	14.5	14.5	14.5	12.0	14.5	12.0
80°	9.6	9.6	9.6	7.3	9.6	9.6	12.0	9.6	9.6	7.3	12.0
82.5°	4.9	4.9	4.9	0.0	2.4	4.9	4.9	2.4	4.9	4.9	2.4
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: P248725

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7
2.5°	4997.2	4994.8	4997.2	4999.6	4997.2	4994.8	4997.2	4999.6	4990.0	4987.6	4992.3
5°	5103.4	5103.4	5108.2	5110.6	5108.2	5103.4	5103.4	5093.8	5086.5	5079.3	5076.9
7.5°	5195.1	5199.9	5204.7	5207.1	5204.7	5199.9	5195.1	5180.6	5166.1	5154.0	5144.4
10°	5250.6	5257.8	5267.5	5272.2	5267.5	5257.8	5250.6	5233.7	5214.3	5195.1	5180.6
12.5°	5274.7	5282.0	5294.0	5291.6	5294.0	5282.0	5274.7	5250.6	5228.8	5202.3	5180.6
15°	5257.8	5267.5	5279.5	5284.3	5279.5	5267.5	5257.8	5233.7	5214.3	5185.4	5163.7
17.5°	5204.7	5219.2	5226.4	5233.7	5226.4	5219.2	5204.7	5185.4	5158.9	5134.8	5113.0
20°	5132.3	5142.0	5151.7	5154.0	5151.7	5142.0	5132.3	5110.6	5069.6	5064.8	5047.9
22.5°	5028.6	5035.8	5057.5	5050.3	5057.5	5035.8	5028.6	5009.2	4994.8	4968.2	4951.3
25°	4878.9	4886.2	4888.7	4891.0	4888.7	4886.2	4878.9	4862.0	4847.6	4828.3	4818.6
27.5°	4620.8	4620.8	4625.6	4628.0	4625.6	4620.8	4620.8	4608.7	4599.0	4589.4	4579.8
30°	4229.9	4229.9	4229.9	4242.0	4229.9	4229.9	4229.9	4227.5	4227.5	4229.9	4229.9
32.5°	3778.7	3773.8	3769.0	3773.8	3769.0	3773.8	3778.7	3781.1	3778.7	3785.9	3797.9
35°	3267.1	3264.7	3272.0	3262.3	3272.0	3264.7	3267.1	3267.1	3276.8	3286.5	3288.8
37.5°	2777.2	2772.5	2782.1	2772.5	2782.1	2772.5	2777.2	2774.9	2772.5	2777.2	2770.1
40°	2311.6	2316.4	2316.4	2335.8	2316.4	2316.4	2311.6	2306.8	2289.9	2280.3	2270.6
42.5°	1865.2	1879.7	1874.8	1889.3	1874.8	1879.7	1865.2	1855.6	1836.2	1819.3	1804.9
45°	1442.9	1452.6	1452.6	1457.4	1452.6	1452.6	1442.9	1433.3	1416.4	1401.9	1392.2
47.5°	1107.5	1107.5	1107.5	1110.0	1107.5	1107.5	1107.5	1090.6	1085.9	1076.2	1064.1
50°	842.1	844.5	847.0	849.4	847.0	844.5	842.1	837.3	834.9	830.0	827.6
52.5°	646.7	649.0	644.3	649.0	644.3	649.0	646.7	649.0	641.8	641.8	639.4
55°	489.8	487.5	489.8	492.2	489.8	487.5	489.8	489.8	487.5	487.5	487.5
57.5°	359.5	354.7	354.7	354.7	354.7	354.7	359.5	357.1	364.4	359.5	361.9
60°	267.9	270.2	270.2	272.6	270.2	270.2	267.9	272.6	272.6	275.1	275.1
62.5°	197.8	205.1	200.2	205.1	200.2	205.1	197.8	200.2	200.2	202.7	205.1
65°	127.9	127.9	127.9	130.3	127.9	127.9	127.9	130.3	132.7	130.3	137.6
67.5°	86.9	89.3	94.2	91.7	94.2	89.3	86.9	89.3	89.3	96.5	94.2
70°	70.0	62.8	62.8	70.0	62.8	62.8	70.0	65.2	62.8	67.5	65.2
72.5°	41.0	36.2	41.0	41.0	41.0	36.2	41.0	36.2	38.6	38.6	43.4
75°	21.8	19.3	16.9	24.1	16.9	19.3	21.8	21.8	21.8	21.8	24.1
77.5°	14.5	12.0	16.9	16.9	16.9	12.0	14.5	12.0	14.5	12.0	14.5
80°	7.3	9.6	7.3	12.0	7.3	9.6	7.3	12.0	7.3	9.6	9.6
82.5°	2.4	4.9	4.9	4.9	4.9	4.9	2.4	2.4	4.9	4.9	2.4
85°	0.0	4.9	2.4	2.4	2.4	4.9	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	0.0	0.0	2.4	0.0	0.0	2.4	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: P248725

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7
2.5°	4992.3	4985.1	4987.6	4973.1	4973.1	4968.2	4970.7	4958.6	4953.8	4948.9	4956.2
5°	5064.8	5052.7	5043.0	5021.3	5009.2	4994.8	4987.6	4968.2	4951.3	4936.8	4934.4
7.5°	5122.7	5096.1	5079.3	5050.3	5028.6	5011.7	4987.6	4961.0	4939.3	4919.9	4905.5
10°	5146.8	5120.3	5093.8	5057.5	5033.4	5002.0	4977.8	4944.1	4915.2	4888.7	4871.7
12.5°	5149.2	5115.4	5091.3	5050.3	5018.9	4985.1	4958.6	4919.9	4886.2	4859.7	4833.1
15°	5127.5	5096.1	5067.1	5023.7	4992.3	4961.0	4929.7	4888.7	4857.3	4825.9	4806.6
17.5°	5079.3	5050.3	5016.5	4975.5	4946.6	4917.6	4883.8	4850.0	4813.8	4780.0	4755.9
20°	5016.5	4985.1	4956.2	4915.2	4891.0	4859.7	4828.3	4792.1	4763.1	4729.4	4702.8
22.5°	4922.4	4893.4	4866.9	4842.8	4804.1	4780.0	4758.4	4717.3	4688.3	4656.9	4628.0
25°	4787.3	4758.4	4736.6	4707.6	4690.7	4664.2	4642.4	4606.3	4579.8	4550.8	4526.6
27.5°	4565.3	4548.4	4536.3	4519.4	4505.0	4492.9	4480.9	4451.9	4432.6	4406.1	4381.9
30°	4232.3	4229.9	4222.6	4215.4	4225.0	4225.0	4225.0	4220.2	4203.4	4184.0	4167.1
32.5°	3805.2	3810.1	3819.7	3826.9	3846.2	3868.0	3887.2	3896.9	3896.9	3884.8	3877.6
35°	3296.1	3303.3	3317.8	3337.1	3361.2	3387.8	3431.2	3440.9	3448.0	3448.0	3438.4
37.5°	2767.6	2765.2	2779.7	2796.6	2811.1	2830.4	2861.8	2869.0	2881.0	2876.3	2866.5
40°	2253.6	2241.6	2236.8	2241.6	2258.5	2251.3	2258.5	2253.6	2253.6	2236.8	2236.8
42.5°	1778.3	1763.9	1754.2	1747.0	1747.0	1730.0	1718.0	1706.0	1698.7	1686.6	1684.2
45°	1370.6	1353.6	1341.6	1336.7	1329.6	1307.8	1293.3	1278.8	1261.9	1257.2	1259.6
47.5°	1064.1	1047.2	1042.3	1030.3	1018.2	1006.2	996.6	979.7	977.2	967.6	977.2
50°	820.4	815.6	808.4	803.5	796.2	786.6	777.0	767.3	762.5	762.5	764.9
52.5°	637.0	639.4	632.2	624.9	620.1	620.1	608.0	605.6	605.6	596.0	605.6
55°	487.5	485.0	487.5	482.6	482.6	475.3	475.3	468.1	468.1	460.8	465.7
57.5°	357.1	361.9	357.1	359.5	364.4	357.1	354.7	347.4	352.3	347.4	349.9
60°	277.5	277.5	277.5	275.1	275.1	272.6	272.6	270.2	270.2	265.4	270.2
62.5°	205.1	207.5	207.5	207.5	210.0	207.5	205.1	207.5	205.1	205.1	207.5
65°	135.2	137.6	137.6	135.2	139.9	135.2	137.6	139.9	142.3	139.9	142.3
67.5°	91.7	91.7	94.2	96.5	94.2	96.5	98.9	96.5	98.9	103.8	98.9
70°	67.5	70.0	70.0	67.5	65.2	67.5	65.2	72.4	72.4	72.4	77.2
72.5°	43.4	43.4	41.0	41.0	41.0	41.0	41.0	48.3	43.4	41.0	45.9
75°	24.1	26.5	26.5	19.3	21.8	26.5	19.3	21.8	29.0	24.1	29.0
77.5°	14.5	14.5	14.5	14.5	14.5	14.5	19.3	16.9	16.9	16.9	19.3
80°	12.0	9.6	9.6	7.3	9.6	9.6	9.6	14.5	12.0	12.0	14.5
82.5°	4.9	4.9	2.4	0.0	4.9	4.9	4.9	4.9	4.9	4.9	9.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.4	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	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: P248725

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7
2.5°	4936.8	4936.8	4934.4	4929.7	4919.9	4919.9	4917.6	4910.3	4905.5	4903.1	4903.1
5°	4912.7	4903.1	4893.4	4866.9	4866.9	4862.0	4847.6	4837.9	4833.1	4821.0	4816.3
7.5°	4891.0	4862.0	4845.2	4828.3	4806.6	4796.9	4780.0	4772.8	4755.9	4743.9	4736.6
10°	4837.9	4818.6	4796.9	4770.4	4753.5	4734.2	4714.9	4700.5	4678.7	4666.6	4656.9
12.5°	4801.8	4772.8	4753.5	4724.5	4695.6	4678.7	4652.2	4635.3	4613.5	4589.4	4574.9
15°	4768.0	4736.6	4710.1	4678.7	4647.3	4628.0	4596.7	4577.4	4546.0	4521.9	4505.0
17.5°	4717.3	4690.7	4661.8	4623.2	4594.3	4570.1	4536.3	4512.2	4483.2	4451.9	4435.0
20°	4664.2	4632.8	4603.9	4565.3	4536.3	4507.4	4473.6	4447.1	4413.2	4384.3	4365.1
22.5°	4594.3	4558.0	4533.9	4495.3	4461.5	4430.2	4398.8	4367.4	4336.1	4311.9	4290.2
25°	4492.9	4454.2	4427.7	4396.3	4365.1	4340.9	4302.3	4283.0	4251.6	4229.9	4208.1
27.5°	4348.1	4319.2	4295.0	4263.6	4237.1	4217.9	4188.9	4169.6	4143.0	4123.7	4106.8
30°	4135.8	4111.7	4089.9	4058.6	4039.3	4022.4	3995.8	3978.9	3959.6	3937.9	3933.1
32.5°	3851.1	3831.7	3810.1	3788.3	3773.8	3764.2	3742.4	3732.8	3713.5	3701.4	3689.4
35°	3421.5	3404.6	3392.6	3383.0	3378.1	3380.5	3375.7	3385.4	3390.1	3387.8	3390.1
37.5°	2859.4	2849.6	2854.5	2861.8	2885.9	2917.3	2946.2	2989.6	3018.6	3047.6	3074.1
40°	2232.0	2239.2	2258.5	2301.9	2364.7	2434.7	2499.8	2581.9	2663.9	2721.8	2774.9
42.5°	1684.2	1706.0	1754.2	1816.9	1911.1	2014.8	2116.2	2236.8	2335.8	2432.2	2499.8
45°	1266.8	1295.7	1358.5	1445.4	1549.1	1669.7	1797.7	1932.7	2051.0	2149.9	2224.7
47.5°	986.9	1013.4	1076.2	1167.9	1295.7	1421.2	1553.9	1693.9	1816.9	1913.5	1978.6
50°	779.4	813.1	868.6	965.2	1093.1	1225.8	1363.3	1500.8	1616.7	1698.7	1756.6
52.5°	612.9	644.3	697.3	798.7	929.0	1061.7	1189.5	1324.7	1426.0	1505.7	1544.3
55°	475.3	504.3	559.8	644.3	767.3	897.6	1025.5	1141.4	1235.4	1293.3	1329.6
57.5°	361.9	383.7	422.3	506.7	617.8	738.3	847.0	962.8	1035.2	1076.2	1100.3
60°	275.1	292.0	333.0	398.2	499.5	603.3	694.9	781.8	839.7	873.5	897.6
62.5°	207.5	226.8	255.7	311.3	388.4	473.0	550.1	615.3	663.5	685.3	702.2
65°	142.3	156.8	178.6	222.0	287.1	347.4	407.8	456.1	487.5	511.6	521.2
67.5°	106.2	115.8	127.9	161.7	207.5	255.7	296.8	330.5	364.4	374.0	390.9
70°	79.7	86.9	98.9	123.1	149.6	183.3	217.2	236.5	260.6	277.5	282.4
72.5°	50.7	53.0	65.2	79.7	101.3	123.1	144.8	161.7	176.2	185.8	190.6
75°	29.0	43.4	43.4	57.9	72.4	82.0	96.5	108.6	115.8	123.1	123.1
77.5°	19.3	26.5	29.0	36.2	43.4	55.5	67.5	74.8	82.0	84.4	84.4
80°	16.9	19.3	19.3	26.5	31.4	41.0	48.3	50.7	55.5	57.9	62.8
82.5°	7.3	9.6	12.0	19.3	21.8	21.8	29.0	31.4	36.2	38.6	38.6
85°	2.4	4.9	4.9	7.3	12.0	14.5	16.9	19.3	21.8	21.8	24.1
87.5°	2.4	2.4	0.0	2.4	4.9	4.9	9.6	9.6	9.6	14.5	14.5
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: P248725

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7	4941.7
2.5°	4898.3	4900.7	4891.0	4888.7	4883.8	4886.2	4891.0
5°	4809.0	4811.4	4801.8	4792.1	4792.1	4789.6	4792.1
7.5°	4724.5	4727.0	4712.5	4707.6	4698.0	4700.5	4700.5
10°	4640.1	4640.1	4618.4	4615.9	4608.7	4606.3	4606.3
12.5°	4558.0	4550.8	4533.9	4524.3	4529.1	4514.6	4514.6
15°	4485.6	4473.6	4451.9	4444.6	4432.6	4427.7	4427.7
17.5°	4410.8	4401.2	4381.9	4367.4	4352.9	4350.6	4352.9
20°	4338.4	4328.8	4304.7	4295.0	4283.0	4283.0	4278.1
22.5°	4266.0	4256.4	4234.7	4227.5	4210.6	4210.6	4213.0
25°	4191.2	4184.0	4159.9	4155.1	4152.7	4143.0	4147.8
27.5°	4089.9	4085.1	4065.8	4058.6	4048.9	4046.5	4051.3
30°	3904.1	3896.9	3882.5	3875.2	3858.3	3860.7	3865.5
32.5°	3672.5	3662.9	3643.5	3636.3	3621.9	3617.0	3619.4
35°	3383.0	3375.7	3358.9	3358.9	3344.4	3339.5	3344.4
37.5°	3088.6	3095.8	3088.6	3095.8	3088.6	3086.1	3088.6
40°	2811.1	2837.6	2842.4	2869.0	2859.4	2873.8	2871.4
42.5°	2545.6	2589.0	2606.0	2627.7	2622.9	2632.5	2639.8
45°	2277.8	2314.0	2330.9	2345.4	2347.8	2352.7	2355.0
47.5°	2024.4	2053.4	2055.8	2072.7	2070.3	2070.3	2077.5
50°	1788.0	1807.3	1812.1	1824.2	1814.6	1809.7	1812.1
52.5°	1568.4	1587.7	1582.8	1587.7	1575.7	1570.8	1573.2
55°	1344.0	1353.6	1353.6	1353.6	1339.2	1339.2	1339.2
57.5°	1114.8	1117.2	1112.4	1114.8	1112.4	1097.9	1095.5
60°	904.9	904.9	902.4	904.9	897.6	890.4	890.4
62.5°	706.9	711.8	721.5	711.8	706.9	711.8	704.6
65°	528.5	538.1	535.6	540.5	538.1	538.1	533.2
67.5°	398.2	400.6	402.9	405.4	405.4	405.4	405.4
70°	292.0	299.2	296.8	296.8	296.8	296.8	311.3
72.5°	195.5	205.1	202.7	207.5	207.5	212.3	207.5
75°	132.7	142.3	137.6	144.8	142.3	137.6	149.6
77.5°	89.3	94.2	96.5	98.9	96.5	94.2	96.5
80°	62.8	67.5	65.2	67.5	67.5	67.5	70.0
82.5°	38.6	45.9	43.4	45.9	43.4	45.9	45.9
85°	26.5	29.0	24.1	29.0	26.5	26.5	31.4
87.5°	16.9	14.5	14.5	16.9	14.5	16.9	14.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)