

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: P248842

Luminaire Tested: **LD8B90D010 ER8B90950 8LBSW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248842
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 ER8B90950 8LBSW0GPH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8046.0 lumens
Efficiency: N/A
Efficacy: 93.4 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

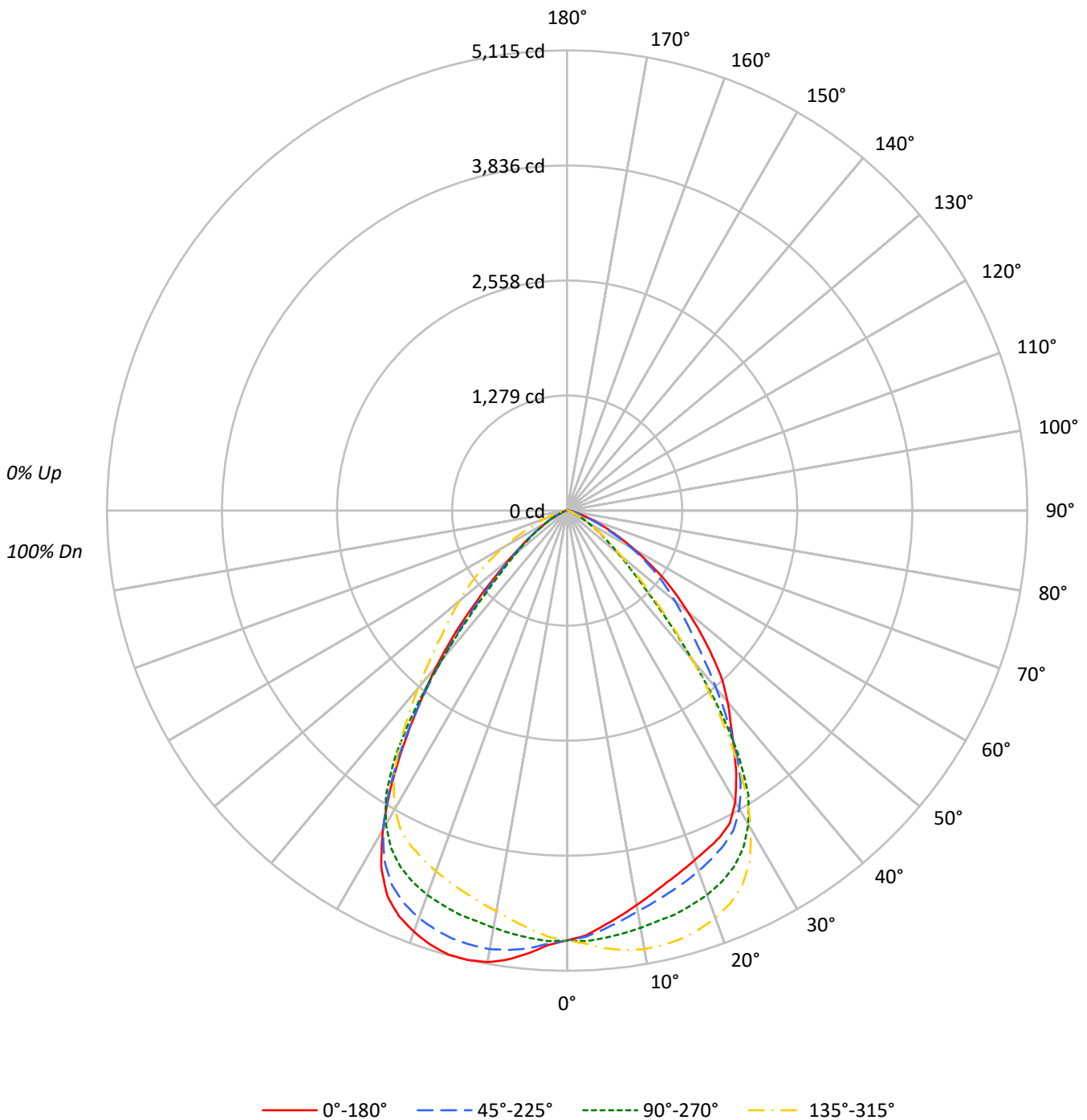
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	147296	147296	147296	147296
5°	143383	147639	152913	147639
10°	139417	147448	159569	147448
15°	136629	148323	163065	148323
20°	135701	149172	163483	149172
25°	136413	148872	160856	148872
30°	133041	143420	145998	143420
35°	121692	125114	118707	125114
40°	111725	87033	90885	87033
45°	99272	53094	61432	53094
50°	84024	35466	39386	35466
55°	69594	24203	25580	24203
60°	53082	16109	16251	16109
65°	37606	10040	9194	10040
70°	27129	6726	6104	6726
75°	17228	3336	2776	3336
80°	12022	2486	2060	2486
85°	10720	0	814	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	454.6	5.7
10°-20°	1316.6	16.4
20°-30°	1993.6	24.8
30°-40°	1998.1	24.8
40°-50°	1254.7	15.6
50°-60°	668.6	8.3
60°-70°	274.9	3.4
70°-80°	72.6	0.9
80°-90°	12.3	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°	3764.8	46.8
0°-40°	5762.8	71.6
0°-60°	7686.1	95.5
0°-90°	8046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8046.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4777	4777	4777	4777	4777	
5°	4632	4770	4940	4770	4632	437
15°	4280	4646	5108	4646	4280	1210
25°	4009	4376	4728	4376	4009	1839
35°	3233	3324	3153	3324	3233	2025
45°	2276	1218	1409	1218	2276	1751
55°	1294	450	476	450	1294	1154
65°	515	138	126	138	515	535
75°	145	28	23	28	145	164
85°	30	0	2	0	30	33
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°	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7
2.5°	4727.7	4723.0	4720.7	4725.4	4727.7	4737.0	4734.7	4739.3	4739.3	4741.7	4746.3
5°	4632.1	4629.7	4632.1	4632.1	4641.4	4650.7	4648.4	4655.4	4660.0	4671.7	4676.3
7.5°	4543.5	4543.5	4541.1	4550.4	4555.1	4569.1	4566.7	4578.4	4585.4	4597.0	4613.4
10°	4452.5	4452.5	4454.8	4461.8	4464.2	4485.1	4485.1	4501.4	4510.7	4522.4	4543.5
12.5°	4363.8	4363.8	4377.9	4373.2	4382.5	4398.8	4405.8	4422.1	4436.1	4459.5	4480.5
15°	4279.8	4279.8	4284.6	4296.2	4303.2	4324.2	4335.8	4354.5	4370.9	4394.2	4424.5
17.5°	4207.6	4205.3	4207.6	4221.6	4235.6	4254.2	4263.5	4286.9	4303.2	4333.5	4361.5
20°	4135.3	4140.0	4140.0	4151.6	4160.9	4184.2	4193.5	4219.3	4237.9	4265.8	4298.6
22.5°	4072.3	4070.0	4070.0	4086.3	4093.3	4114.2	4123.6	4146.9	4167.9	4191.2	4221.6
25°	4009.3	4004.6	4014.0	4016.3	4020.9	4044.3	4051.3	4067.6	4088.6	4109.6	4140.0
27.5°	3916.0	3911.4	3913.7	3923.0	3930.0	3948.6	3953.3	3969.7	3986.0	4004.6	4030.3
30°	3736.4	3731.8	3729.5	3745.8	3752.8	3766.7	3773.7	3801.8	3806.4	3827.4	3846.0
32.5°	3498.5	3496.2	3500.9	3514.8	3521.8	3540.5	3549.9	3566.2	3577.8	3589.5	3608.1
35°	3232.7	3228.0	3232.7	3246.7	3246.7	3263.0	3270.0	3276.9	3274.6	3276.9	3272.3
37.5°	2985.5	2983.1	2985.5	2992.4	2985.5	2992.4	2985.5	2971.4	2945.8	2917.8	2889.7
40°	2775.5	2777.8	2763.9	2773.2	2747.5	2742.9	2717.2	2682.2	2630.9	2575.0	2495.7
42.5°	2551.6	2544.6	2535.3	2539.9	2519.0	2502.6	2460.6	2416.4	2351.0	2257.8	2162.1
45°	2276.4	2274.1	2269.4	2267.1	2253.1	2236.7	2201.7	2150.4	2078.1	1982.5	1868.2
47.5°	2008.2	2001.2	2001.2	2003.5	1987.1	1984.8	1956.8	1912.5	1849.6	1756.3	1637.3
50°	1751.5	1749.2	1753.9	1763.3	1751.5	1746.9	1728.3	1698.0	1642.0	1562.7	1450.7
52.5°	1520.7	1518.4	1523.1	1534.7	1530.0	1534.7	1516.1	1492.7	1455.4	1378.4	1280.5
55°	1294.5	1294.5	1294.5	1308.4	1308.4	1308.4	1299.1	1285.2	1250.1	1194.2	1103.3
57.5°	1058.9	1061.2	1075.2	1077.5	1075.2	1079.9	1077.5	1063.5	1040.3	1000.6	930.6
60°	860.7	860.7	867.7	874.7	872.3	874.7	874.7	867.7	844.3	811.7	755.7
62.5°	681.0	688.0	683.3	688.0	697.4	688.0	683.3	678.7	662.4	641.4	594.7
65°	515.4	520.1	520.1	522.4	517.7	520.1	510.8	503.8	494.5	471.2	440.8
67.5°	391.9	391.9	391.9	391.9	389.5	387.2	384.9	377.9	361.5	352.2	319.5
70°	300.9	286.9	286.9	286.9	286.9	289.3	282.2	272.9	268.2	251.9	228.6
72.5°	200.5	205.3	200.5	200.5	195.9	198.2	188.9	184.2	179.6	170.3	156.3
75°	144.6	133.0	137.6	140.0	133.0	137.6	128.3	118.9	118.9	111.9	104.9
77.5°	93.3	91.0	93.3	95.6	93.3	91.0	86.3	81.6	81.6	79.3	72.3
80°	67.7	65.3	65.3	65.3	63.0	65.3	60.7	60.7	56.0	53.7	49.0
82.5°	44.4	44.4	42.0	44.4	42.0	44.4	37.3	37.3	37.3	34.9	30.3
85°	30.3	25.6	25.6	28.0	23.3	28.0	25.6	23.3	21.0	21.0	18.6
87.5°	14.0	16.3	14.0	16.3	14.0	14.0	16.3	14.0	14.0	9.3	9.3
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°	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7
2.5°	4753.3	4755.6	4755.6	4765.0	4769.6	4772.0	4772.0	4790.7	4783.7	4788.4	4793.0
5°	4685.7	4699.7	4704.4	4704.4	4730.0	4739.3	4748.6	4769.6	4772.0	4786.0	4802.3
7.5°	4620.4	4636.7	4646.1	4667.0	4683.3	4699.7	4727.7	4741.7	4755.6	4774.4	4795.3
10°	4557.4	4576.1	4594.7	4611.1	4636.7	4657.7	4676.3	4709.0	4725.4	4751.0	4779.0
12.5°	4496.8	4522.4	4538.8	4566.7	4594.7	4613.4	4641.4	4671.7	4697.4	4723.0	4755.6
15°	4443.1	4473.5	4492.1	4522.4	4552.8	4578.4	4608.7	4646.1	4664.7	4695.1	4725.4
17.5°	4384.8	4417.5	4440.8	4468.8	4506.1	4534.1	4559.8	4597.0	4620.4	4653.0	4688.0
20°	4324.2	4356.8	4384.8	4412.8	4450.2	4478.1	4508.4	4545.8	4571.4	4604.0	4632.1
22.5°	4251.9	4282.2	4312.5	4345.1	4382.5	4405.8	4440.8	4473.5	4501.4	4531.8	4559.8
25°	4158.6	4195.9	4219.3	4249.5	4279.8	4305.5	4342.8	4375.5	4398.8	4426.8	4452.5
27.5°	4049.0	4077.0	4095.6	4121.3	4151.6	4174.9	4202.9	4235.6	4258.9	4284.6	4303.2
30°	3862.3	3888.1	3904.4	3923.0	3953.3	3974.4	3997.7	4027.9	4044.3	4063.0	4079.3
32.5°	3617.4	3638.5	3647.8	3661.8	3682.8	3703.7	3722.5	3748.1	3755.1	3766.7	3766.7
35°	3263.0	3267.6	3265.3	3270.0	3279.3	3290.9	3307.3	3323.6	3332.9	3332.9	3326.0
37.5°	2847.8	2819.9	2789.5	2766.2	2759.2	2754.5	2763.9	2770.8	2780.2	2784.8	2773.2
40°	2416.4	2353.4	2285.7	2225.0	2183.1	2164.5	2157.4	2162.1	2162.1	2178.4	2178.4
42.5°	2045.5	1947.5	1847.3	1756.3	1695.6	1649.0	1628.0	1628.0	1630.3	1642.0	1649.0
45°	1737.6	1614.0	1497.3	1397.1	1313.1	1252.4	1224.5	1217.5	1215.2	1219.8	1236.1
47.5°	1502.0	1373.8	1252.4	1128.9	1040.3	979.6	954.0	944.6	935.2	944.6	947.0
50°	1317.8	1184.9	1056.6	932.9	839.6	786.0	753.3	739.3	737.0	737.0	741.7
52.5°	1149.8	1026.3	898.0	772.0	674.0	622.8	592.4	585.4	576.1	585.4	585.4
55°	991.2	867.7	741.7	622.8	541.1	487.5	459.5	450.2	445.4	452.5	452.5
57.5°	818.7	713.7	597.1	489.8	408.2	370.9	349.8	338.2	335.8	340.5	335.8
60°	671.7	583.1	482.8	384.9	321.9	282.2	265.9	261.2	256.5	261.2	261.2
62.5°	531.8	457.2	375.5	300.9	247.2	219.3	200.5	200.5	198.2	198.2	200.5
65°	394.2	335.8	277.5	214.6	172.6	151.6	137.6	137.6	135.3	137.6	135.3
67.5°	286.9	247.2	200.5	156.3	123.7	111.9	102.6	95.6	100.3	95.6	93.3
70°	210.0	177.2	144.6	118.9	95.6	84.0	77.0	74.6	70.0	70.0	70.0
72.5°	140.0	118.9	97.9	77.0	63.0	51.3	49.0	44.4	39.6	42.0	46.7
75°	93.3	79.3	70.0	56.0	42.0	42.0	28.0	28.0	23.3	28.0	21.0
77.5°	65.3	53.7	42.0	34.9	28.0	25.6	18.6	18.6	16.3	16.3	16.3
80°	46.7	39.6	30.3	25.6	18.6	18.6	16.3	14.0	11.6	11.6	14.0
82.5°	28.0	21.0	21.0	18.6	11.6	9.3	7.0	9.3	4.7	4.7	4.7
85°	16.3	14.0	11.6	7.0	4.7	4.7	2.3	0.0	2.3	2.3	0.0
87.5°	9.3	4.7	4.7	2.3	0.0	2.3	2.3	0.0	0.0	0.0	4.7
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7
2.5°	4804.7	4802.3	4807.0	4807.0	4821.0	4818.6	4825.6	4825.6	4821.0	4823.3	4832.6
5°	4821.0	4828.0	4841.9	4853.6	4874.6	4884.0	4895.6	4907.3	4909.6	4916.6	4923.6
7.5°	4821.0	4844.3	4860.7	4881.6	4909.6	4925.9	4951.6	4972.6	4981.9	4993.5	5007.5
10°	4811.6	4834.9	4865.3	4888.6	4923.6	4949.3	4974.9	5007.5	5021.6	5040.2	5058.9
12.5°	4793.0	4818.6	4851.2	4881.6	4921.2	4944.6	4977.2	5007.5	5028.6	5054.2	5075.2
15°	4765.0	4795.3	4825.6	4856.0	4897.9	4925.9	4956.3	4991.2	5012.2	5040.2	5058.9
17.5°	4720.7	4753.3	4781.4	4809.3	4848.9	4881.6	4909.6	4942.3	4963.3	4986.6	5012.2
20°	4667.0	4697.4	4727.7	4751.0	4790.7	4818.6	4848.9	4879.3	4895.6	4900.3	4940.0
22.5°	4599.4	4620.4	4643.7	4681.0	4704.4	4730.0	4758.0	4786.0	4802.3	4828.0	4841.9
25°	4487.4	4508.4	4534.1	4550.4	4578.4	4599.4	4627.4	4657.7	4667.0	4685.7	4699.7
27.5°	4331.2	4342.8	4354.5	4368.5	4384.8	4396.5	4412.8	4426.8	4436.1	4445.4	4454.8
30°	4083.9	4083.9	4083.9	4074.6	4081.6	4088.6	4090.9	4088.6	4088.6	4086.3	4086.3
32.5°	3757.4	3738.8	3717.8	3699.1	3692.1	3682.8	3678.1	3671.1	3659.5	3652.5	3654.8
35°	3316.6	3274.6	3249.0	3225.7	3207.0	3193.0	3186.0	3179.0	3176.7	3167.4	3158.0
37.5°	2766.2	2735.9	2717.2	2703.2	2686.9	2672.9	2675.2	2677.6	2684.5	2679.9	2682.2
40°	2183.1	2176.1	2183.1	2166.8	2162.1	2166.8	2178.4	2194.8	2204.1	2213.4	2229.7
42.5°	1660.6	1672.3	1688.7	1688.7	1695.6	1705.0	1718.9	1744.6	1758.6	1774.9	1793.6
45°	1250.1	1264.1	1285.2	1292.1	1296.8	1308.4	1324.8	1345.8	1355.1	1369.1	1385.4
47.5°	963.3	972.6	984.2	995.9	1007.5	1012.2	1028.6	1028.6	1040.3	1049.6	1054.2
50°	751.0	760.3	769.6	776.7	781.4	788.4	793.0	800.0	802.3	807.0	809.3
52.5°	587.7	599.4	599.4	604.0	611.1	618.1	615.8	618.1	620.4	620.4	627.4
55°	459.5	459.5	466.5	466.5	471.2	468.8	471.2	471.2	471.2	471.2	473.5
57.5°	342.8	345.2	352.2	347.5	345.2	349.8	345.2	349.8	347.5	352.2	345.2
60°	263.5	263.5	265.9	265.9	268.2	268.2	268.2	265.9	265.9	263.5	263.5
62.5°	198.2	200.5	202.9	200.5	200.5	200.5	198.2	198.2	195.9	193.5	193.5
65°	133.0	130.7	135.3	130.7	133.0	133.0	130.7	133.0	126.0	128.3	126.0
67.5°	95.6	93.3	91.0	93.3	91.0	88.6	88.6	91.0	93.3	86.3	86.3
70°	63.0	65.3	63.0	65.3	67.7	67.7	65.3	63.0	65.3	60.7	63.0
72.5°	39.6	39.6	39.6	39.6	39.6	42.0	42.0	42.0	37.3	37.3	34.9
75°	18.6	25.6	21.0	18.6	25.6	25.6	23.3	23.3	21.0	21.0	21.0
77.5°	18.6	14.0	14.0	14.0	14.0	14.0	14.0	14.0	11.6	14.0	11.6
80°	9.3	9.3	9.3	7.0	9.3	9.3	11.6	9.3	9.3	7.0	11.6
82.5°	4.7	4.7	4.7	0.0	2.3	4.7	4.7	2.3	4.7	4.7	2.3
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: P248842

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7
2.5°	4830.3	4828.0	4830.3	4832.6	4830.3	4828.0	4830.3	4832.6	4823.3	4821.0	4825.6
5°	4932.9	4932.9	4937.6	4940.0	4937.6	4932.9	4932.9	4923.6	4916.6	4909.6	4907.3
7.5°	5021.6	5026.3	5030.9	5033.2	5030.9	5026.3	5021.6	5007.5	4993.5	4981.9	4972.6
10°	5075.2	5082.2	5091.5	5096.1	5091.5	5082.2	5075.2	5058.9	5040.2	5021.6	5007.5
12.5°	5098.5	5105.6	5117.2	5114.9	5117.2	5105.6	5098.5	5075.2	5054.2	5028.6	5007.5
15°	5082.2	5091.5	5103.2	5107.9	5103.2	5091.5	5082.2	5058.9	5040.2	5012.2	4991.2
17.5°	5030.9	5044.9	5051.9	5058.9	5051.9	5044.9	5030.9	5012.2	4986.6	4963.3	4942.3
20°	4960.9	4970.3	4979.6	4981.9	4979.6	4970.3	4960.9	4940.0	4900.3	4895.6	4879.3
22.5°	4860.7	4867.7	4888.6	4881.6	4888.6	4867.7	4860.7	4841.9	4828.0	4802.3	4786.0
25°	4716.0	4723.0	4725.4	4727.7	4725.4	4723.0	4716.0	4699.7	4685.7	4667.0	4657.7
27.5°	4466.5	4466.5	4471.1	4473.5	4471.1	4466.5	4466.5	4454.8	4445.4	4436.1	4426.8
30°	4088.6	4088.6	4088.6	4100.3	4088.6	4088.6	4088.6	4086.3	4086.3	4088.6	4088.6
32.5°	3652.5	3647.8	3643.2	3647.8	3643.2	3647.8	3652.5	3654.8	3652.5	3659.5	3671.1
35°	3158.0	3155.7	3162.7	3153.4	3162.7	3155.7	3158.0	3158.0	3167.4	3176.7	3179.0
37.5°	2684.5	2679.9	2689.2	2679.9	2689.2	2679.9	2684.5	2682.2	2679.9	2684.5	2677.6
40°	2234.4	2239.0	2239.0	2257.8	2239.0	2239.0	2234.4	2229.7	2213.4	2204.1	2194.8
42.5°	1802.9	1816.9	1812.2	1826.2	1812.2	1816.9	1802.9	1793.6	1774.9	1758.6	1744.6
45°	1394.7	1404.1	1404.1	1408.7	1404.1	1404.1	1394.7	1385.4	1369.1	1355.1	1345.8
47.5°	1070.5	1070.5	1070.5	1072.9	1070.5	1070.5	1070.5	1054.2	1049.6	1040.3	1028.6
50°	814.0	816.3	818.7	821.0	818.7	816.3	814.0	809.3	807.0	802.3	800.0
52.5°	625.1	627.4	622.8	627.4	622.8	627.4	625.1	627.4	620.4	620.4	618.1
55°	473.5	471.2	473.5	475.8	473.5	471.2	473.5	473.5	471.2	471.2	471.2
57.5°	347.5	342.8	342.8	342.8	342.8	342.8	347.5	345.2	352.2	347.5	349.8
60°	258.9	261.2	261.2	263.5	261.2	261.2	258.9	263.5	263.5	265.9	265.9
62.5°	191.2	198.2	193.5	198.2	193.5	198.2	191.2	193.5	193.5	195.9	198.2
65°	123.7	123.7	123.7	126.0	123.7	123.7	123.7	126.0	128.3	126.0	133.0
67.5°	84.0	86.3	91.0	88.6	91.0	86.3	84.0	86.3	86.3	93.3	91.0
70°	67.7	60.7	60.7	67.7	60.7	60.7	67.7	63.0	60.7	65.3	63.0
72.5°	39.6	34.9	39.6	39.6	39.6	34.9	39.6	34.9	37.3	37.3	42.0
75°	21.0	18.6	16.3	23.3	16.3	18.6	21.0	21.0	21.0	21.0	23.3
77.5°	14.0	11.6	16.3	16.3	16.3	11.6	14.0	11.6	14.0	11.6	14.0
80°	7.0	9.3	7.0	11.6	7.0	9.3	7.0	11.6	7.0	9.3	9.3
82.5°	2.3	4.7	4.7	4.7	4.7	4.7	2.3	2.3	4.7	4.7	2.3
85°	0.0	4.7	2.3	2.3	2.3	4.7	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	0.0	0.0	2.3	0.0	0.0	2.3	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: P248842

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7
2.5°	4825.6	4818.6	4821.0	4807.0	4807.0	4802.3	4804.7	4793.0	4788.4	4783.7	4790.7
5°	4895.6	4884.0	4874.6	4853.6	4841.9	4828.0	4821.0	4802.3	4786.0	4772.0	4769.6
7.5°	4951.6	4925.9	4909.6	4881.6	4860.7	4844.3	4821.0	4795.3	4774.4	4755.6	4741.7
10°	4974.9	4949.3	4923.6	4888.6	4865.3	4834.9	4811.6	4779.0	4751.0	4725.4	4709.0
12.5°	4977.2	4944.6	4921.2	4881.6	4851.2	4818.6	4793.0	4755.6	4723.0	4697.4	4671.7
15°	4956.3	4925.9	4897.9	4856.0	4825.6	4795.3	4765.0	4725.4	4695.1	4664.7	4646.1
17.5°	4909.6	4881.6	4848.9	4809.3	4781.4	4753.3	4720.7	4688.0	4653.0	4620.4	4597.0
20°	4848.9	4818.6	4790.7	4751.0	4727.7	4697.4	4667.0	4632.1	4604.0	4571.4	4545.8
22.5°	4758.0	4730.0	4704.4	4681.0	4643.7	4620.4	4599.4	4559.8	4531.8	4501.4	4473.5
25°	4627.4	4599.4	4578.4	4550.4	4534.1	4508.4	4487.4	4452.5	4426.8	4398.8	4375.5
27.5°	4412.8	4396.5	4384.8	4368.5	4354.5	4342.8	4331.2	4303.2	4284.6	4258.9	4235.6
30°	4090.9	4088.6	4081.6	4074.6	4083.9	4083.9	4083.9	4079.3	4063.0	4044.3	4027.9
32.5°	3678.1	3682.8	3692.1	3699.1	3717.8	3738.8	3757.4	3766.7	3766.7	3755.1	3748.1
35°	3186.0	3193.0	3207.0	3225.7	3249.0	3274.6	3316.6	3326.0	3332.9	3332.9	3323.6
37.5°	2675.2	2672.9	2686.9	2703.2	2717.2	2735.9	2766.2	2773.2	2784.8	2780.2	2770.8
40°	2178.4	2166.8	2162.1	2166.8	2183.1	2176.1	2183.1	2178.4	2178.4	2162.1	2162.1
42.5°	1718.9	1705.0	1695.6	1688.7	1688.7	1672.3	1660.6	1649.0	1642.0	1630.3	1628.0
45°	1324.8	1308.4	1296.8	1292.1	1285.2	1264.1	1250.1	1236.1	1219.8	1215.2	1217.5
47.5°	1028.6	1012.2	1007.5	995.9	984.2	972.6	963.3	947.0	944.6	935.2	944.6
50°	793.0	788.4	781.4	776.7	769.6	760.3	751.0	741.7	737.0	737.0	739.3
52.5°	615.8	618.1	611.1	604.0	599.4	599.4	587.7	585.4	585.4	576.1	585.4
55°	471.2	468.8	471.2	466.5	466.5	459.5	459.5	452.5	452.5	445.4	450.2
57.5°	345.2	349.8	345.2	347.5	352.2	345.2	342.8	335.8	340.5	335.8	338.2
60°	268.2	268.2	268.2	265.9	265.9	263.5	263.5	261.2	261.2	256.5	261.2
62.5°	198.2	200.5	200.5	200.5	202.9	200.5	198.2	200.5	198.2	198.2	200.5
65°	130.7	133.0	133.0	130.7	135.3	130.7	133.0	135.3	137.6	135.3	137.6
67.5°	88.6	88.6	91.0	93.3	91.0	93.3	95.6	93.3	95.6	100.3	95.6
70°	65.3	67.7	67.7	65.3	63.0	65.3	63.0	70.0	70.0	70.0	74.6
72.5°	42.0	42.0	39.6	39.6	39.6	39.6	39.6	46.7	42.0	39.6	44.4
75°	23.3	25.6	25.6	18.6	21.0	25.6	18.6	21.0	28.0	23.3	28.0
77.5°	14.0	14.0	14.0	14.0	14.0	14.0	18.6	16.3	16.3	16.3	18.6
80°	11.6	9.3	9.3	7.0	9.3	9.3	9.3	14.0	11.6	11.6	14.0
82.5°	4.7	4.7	2.3	0.0	4.7	4.7	4.7	4.7	4.7	4.7	9.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	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: P248842

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7
2.5°	4772.0	4772.0	4769.6	4765.0	4755.6	4755.6	4753.3	4746.3	4741.7	4739.3	4739.3
5°	4748.6	4739.3	4730.0	4704.4	4704.4	4699.7	4685.7	4676.3	4671.7	4660.0	4655.4
7.5°	4727.7	4699.7	4683.3	4667.0	4646.1	4636.7	4620.4	4613.4	4597.0	4585.4	4578.4
10°	4676.3	4657.7	4636.7	4611.1	4594.7	4576.1	4557.4	4543.5	4522.4	4510.7	4501.4
12.5°	4641.4	4613.4	4594.7	4566.7	4538.8	4522.4	4496.8	4480.5	4459.5	4436.1	4422.1
15°	4608.7	4578.4	4552.8	4522.4	4492.1	4473.5	4443.1	4424.5	4394.2	4370.9	4354.5
17.5°	4559.8	4534.1	4506.1	4468.8	4440.8	4417.5	4384.8	4361.5	4333.5	4303.2	4286.9
20°	4508.4	4478.1	4450.2	4412.8	4384.8	4356.8	4324.2	4298.6	4265.8	4237.9	4219.3
22.5°	4440.8	4405.8	4382.5	4345.1	4312.5	4282.2	4251.9	4221.6	4191.2	4167.9	4146.9
25°	4342.8	4305.5	4279.8	4249.5	4219.3	4195.9	4158.6	4140.0	4109.6	4088.6	4067.6
27.5°	4202.9	4174.9	4151.6	4121.3	4095.6	4077.0	4049.0	4030.3	4004.6	3986.0	3969.7
30°	3997.7	3974.4	3953.3	3923.0	3904.4	3888.1	3862.3	3846.0	3827.4	3806.4	3801.8
32.5°	3722.5	3703.7	3682.8	3661.8	3647.8	3638.5	3617.4	3608.1	3589.5	3577.8	3566.2
35°	3307.3	3290.9	3279.3	3270.0	3265.3	3267.6	3263.0	3272.3	3276.9	3274.6	3276.9
37.5°	2763.9	2754.5	2759.2	2766.2	2789.5	2819.9	2847.8	2889.7	2917.8	2945.8	2971.4
40°	2157.4	2164.5	2183.1	2225.0	2285.7	2353.4	2416.4	2495.7	2575.0	2630.9	2682.2
42.5°	1628.0	1649.0	1695.6	1756.3	1847.3	1947.5	2045.5	2162.1	2257.8	2351.0	2416.4
45°	1224.5	1252.4	1313.1	1397.1	1497.3	1614.0	1737.6	1868.2	1982.5	2078.1	2150.4
47.5°	954.0	979.6	1040.3	1128.9	1252.4	1373.8	1502.0	1637.3	1756.3	1849.6	1912.5
50°	753.3	786.0	839.6	932.9	1056.6	1184.9	1317.8	1450.7	1562.7	1642.0	1698.0
52.5°	592.4	622.8	674.0	772.0	898.0	1026.3	1149.8	1280.5	1378.4	1455.4	1492.7
55°	459.5	487.5	541.1	622.8	741.7	867.7	991.2	1103.3	1194.2	1250.1	1285.2
57.5°	349.8	370.9	408.2	489.8	597.1	713.7	818.7	930.6	1000.6	1040.3	1063.5
60°	265.9	282.2	321.9	384.9	482.8	583.1	671.7	755.7	811.7	844.3	867.7
62.5°	200.5	219.3	247.2	300.9	375.5	457.2	531.8	594.7	641.4	662.4	678.7
65°	137.6	151.6	172.6	214.6	277.5	335.8	394.2	440.8	471.2	494.5	503.8
67.5°	102.6	111.9	123.7	156.3	200.5	247.2	286.9	319.5	352.2	361.5	377.9
70°	77.0	84.0	95.6	118.9	144.6	177.2	210.0	228.6	251.9	268.2	272.9
72.5°	49.0	51.3	63.0	77.0	97.9	118.9	140.0	156.3	170.3	179.6	184.2
75°	28.0	42.0	42.0	56.0	70.0	79.3	93.3	104.9	111.9	118.9	118.9
77.5°	18.6	25.6	28.0	34.9	42.0	53.7	65.3	72.3	79.3	81.6	81.6
80°	16.3	18.6	18.6	25.6	30.3	39.6	46.7	49.0	53.7	56.0	60.7
82.5°	7.0	9.3	11.6	18.6	21.0	21.0	28.0	30.3	34.9	37.3	37.3
85°	2.3	4.7	4.7	7.0	11.6	14.0	16.3	18.6	21.0	21.0	23.3
87.5°	2.3	2.3	0.0	2.3	4.7	4.7	9.3	9.3	9.3	14.0	14.0
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: P248842

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7	4776.7
2.5°	4734.7	4737.0	4727.7	4725.4	4720.7	4723.0	4727.7
5°	4648.4	4650.7	4641.4	4632.1	4632.1	4629.7	4632.1
7.5°	4566.7	4569.1	4555.1	4550.4	4541.1	4543.5	4543.5
10°	4485.1	4485.1	4464.2	4461.8	4454.8	4452.5	4452.5
12.5°	4405.8	4398.8	4382.5	4373.2	4377.9	4363.8	4363.8
15°	4335.8	4324.2	4303.2	4296.2	4284.6	4279.8	4279.8
17.5°	4263.5	4254.2	4235.6	4221.6	4207.6	4205.3	4207.6
20°	4193.5	4184.2	4160.9	4151.6	4140.0	4140.0	4135.3
22.5°	4123.6	4114.2	4093.3	4086.3	4070.0	4070.0	4072.3
25°	4051.3	4044.3	4020.9	4016.3	4014.0	4004.6	4009.3
27.5°	3953.3	3948.6	3930.0	3923.0	3913.7	3911.4	3916.0
30°	3773.7	3766.7	3752.8	3745.8	3729.5	3731.8	3736.4
32.5°	3549.9	3540.5	3521.8	3514.8	3500.9	3496.2	3498.5
35°	3270.0	3263.0	3246.7	3246.7	3232.7	3228.0	3232.7
37.5°	2985.5	2992.4	2985.5	2992.4	2985.5	2983.1	2985.5
40°	2717.2	2742.9	2747.5	2773.2	2763.9	2777.8	2775.5
42.5°	2460.6	2502.6	2519.0	2539.9	2535.3	2544.6	2551.6
45°	2201.7	2236.7	2253.1	2267.1	2269.4	2274.1	2276.4
47.5°	1956.8	1984.8	1987.1	2003.5	2001.2	2001.2	2008.2
50°	1728.3	1746.9	1751.5	1763.3	1753.9	1749.2	1751.5
52.5°	1516.1	1534.7	1530.0	1534.7	1523.1	1518.4	1520.7
55°	1299.1	1308.4	1308.4	1308.4	1294.5	1294.5	1294.5
57.5°	1077.5	1079.9	1075.2	1077.5	1075.2	1061.2	1058.9
60°	874.7	874.7	872.3	874.7	867.7	860.7	860.7
62.5°	683.3	688.0	697.4	688.0	683.3	688.0	681.0
65°	510.8	520.1	517.7	522.4	520.1	520.1	515.4
67.5°	384.9	387.2	389.5	391.9	391.9	391.9	391.9
70°	282.2	289.3	286.9	286.9	286.9	286.9	300.9
72.5°	188.9	198.2	195.9	200.5	200.5	205.3	200.5
75°	128.3	137.6	133.0	140.0	137.6	133.0	144.6
77.5°	86.3	91.0	93.3	95.6	93.3	91.0	93.3
80°	60.7	65.3	63.0	65.3	65.3	65.3	67.7
82.5°	37.3	44.4	42.0	44.4	42.0	44.4	44.4
85°	25.6	28.0	23.3	28.0	25.6	25.6	30.3
87.5°	16.3	14.0	14.0	16.3	14.0	16.3	14.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)