

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: P249040

Luminaire Tested: **LD8B90D010 ER8B90935 8LBSW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249040
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 ER8B90935 8LBSW0MW
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 3500 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7955.0 lumens
Efficiency: N/A
Efficacy: 92.4 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

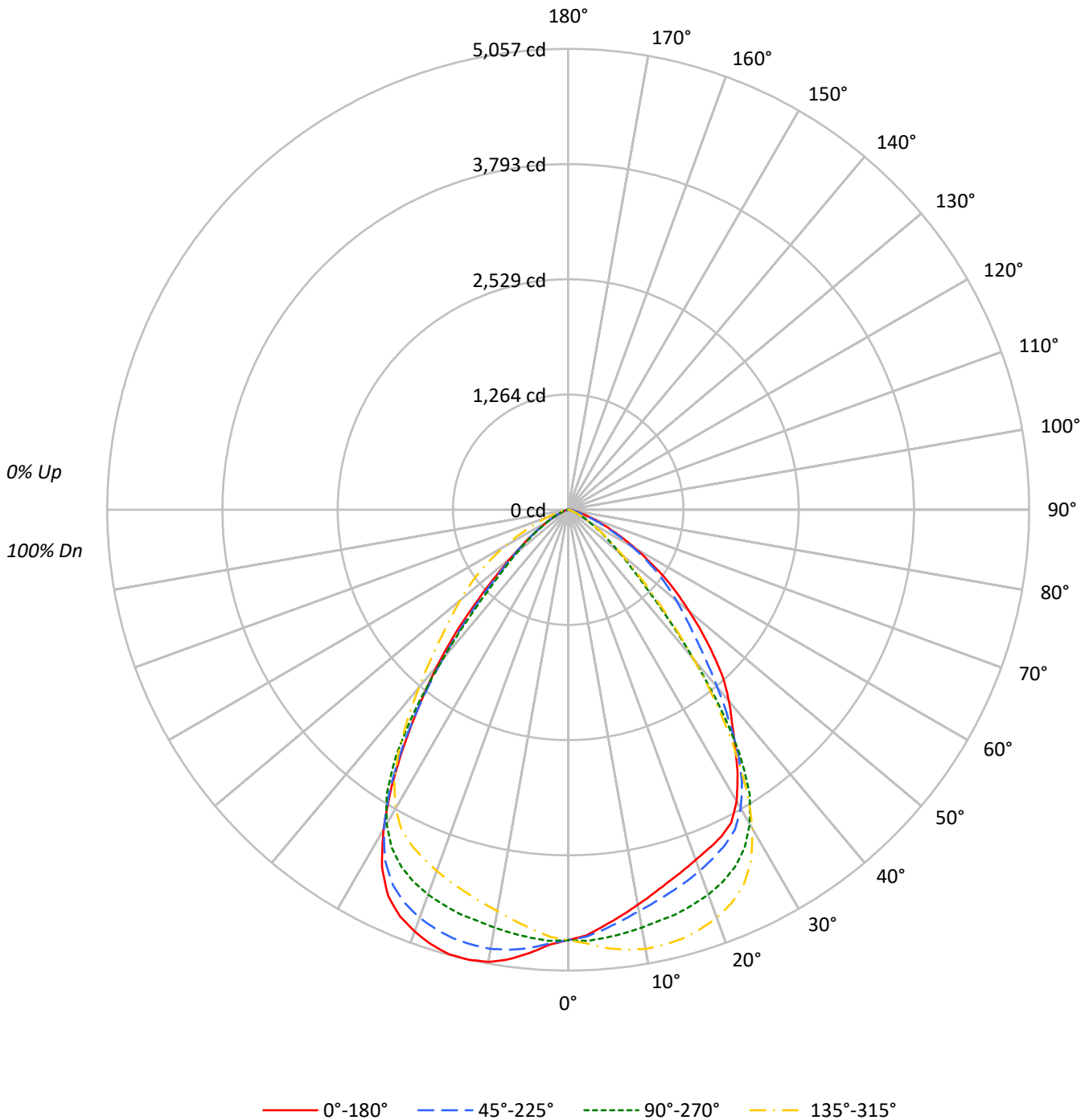
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249040

CATALOG NUMBER: LD8B90D010 ER8B90935 8LBSW0MW

Luminous Intensity Polar Plot





TEST NUMBER: P249040

CATALOG NUMBER: LD8B90D010 ER8B90935 8LBSW0MW

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°	145628	145628	145628	145628
5°	141761	145970	151183	145970
10°	137839	145779	157766	145779
15°	135084	146643	161220	146643
20°	134165	147485	161635	147485
25°	134872	147188	159035	147188
30°	131535	141800	144346	141800
35°	120315	123699	117363	123699
40°	110461	86047	89855	86047
45°	98147	52492	60739	52492
50°	83074	35063	38940	35063
55°	68804	23929	25289	23929
60°	52477	15930	16066	15930
65°	37183	9923	9084	9923
70°	26822	6645	6032	6645
75°	17025	3300	2752	3300
80°	11880	2468	2042	2468
85°	10614	0	814	0



TEST NUMBER: P249040

CATALOG NUMBER: LD8B90D010 ER8B90935 8LBSW0MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	449.5	5.7
10°-20°	1301.7	16.4
20°-30°	1971.0	24.8
30°-40°	1975.5	24.8
40°-50°	1240.5	15.6
50°-60°	661.0	8.3
60°-70°	271.8	3.4
70°-80°	71.8	0.9
80°-90°	12.2	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°	3722.2	46.8
0°-40°	5697.7	71.6
0°-60°	7599.2	95.5
0°-90°	7955.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7955.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4723	4723	4723	4723	4723	
5°	4580	4716	4884	4716	4580	432
15°	4231	4594	5050	4594	4231	1197
25°	3964	4326	4674	4326	3964	1818
35°	3196	3286	3118	3286	3196	2002
45°	2251	1204	1393	1204	2251	1731
55°	1280	445	470	445	1280	1141
65°	510	136	124	136	510	529
75°	143	28	23	28	143	162
85°	30	0	2	0	30	33
90°	0	0	0	0	0	



TEST NUMBER: P249040

CATALOG NUMBER: LD8B90D010 ER8B90935 8LBSW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6
2.5°	4674.2	4669.6	4667.3	4671.9	4674.2	4683.4	4681.2	4685.7	4685.7	4688.1	4692.6
5°	4579.7	4577.3	4579.7	4579.7	4588.9	4598.1	4595.8	4602.8	4607.3	4618.9	4623.4
7.5°	4492.1	4492.1	4489.7	4498.9	4503.6	4517.4	4515.1	4526.6	4533.6	4545.0	4561.2
10°	4402.1	4402.1	4404.4	4411.3	4413.7	4434.4	4434.4	4450.5	4459.7	4471.3	4492.1
12.5°	4314.5	4314.5	4328.4	4323.7	4332.9	4349.0	4356.0	4372.1	4386.0	4409.0	4429.8
15°	4231.4	4231.4	4236.1	4247.6	4254.5	4275.3	4286.8	4305.3	4321.4	4344.5	4374.5
17.5°	4160.0	4157.7	4160.0	4173.8	4187.7	4206.1	4215.3	4238.4	4254.5	4284.5	4312.2
20°	4088.5	4093.1	4093.1	4104.6	4113.8	4136.9	4146.1	4171.6	4190.0	4217.6	4250.0
22.5°	4026.2	4024.0	4024.0	4040.1	4047.0	4067.7	4076.9	4100.0	4120.8	4143.8	4173.8
25°	3964.0	3959.3	3968.6	3970.9	3975.5	3998.5	4005.4	4021.6	4042.4	4063.2	4093.1
27.5°	3871.7	3867.2	3869.4	3878.6	3885.6	3904.0	3908.6	3924.8	3940.9	3959.3	3984.8
30°	3694.1	3689.6	3687.3	3703.4	3710.4	3724.1	3731.0	3758.8	3763.3	3784.1	3802.5
32.5°	3458.9	3456.6	3461.3	3475.1	3482.0	3500.5	3509.7	3525.8	3537.3	3548.9	3567.3
35°	3196.1	3191.4	3196.1	3210.0	3210.0	3226.1	3233.0	3239.9	3237.6	3239.9	3235.3
37.5°	2951.7	2949.3	2951.7	2958.5	2951.7	2958.5	2951.7	2937.8	2912.5	2884.8	2857.1
40°	2744.1	2746.4	2732.6	2741.8	2716.4	2711.8	2686.5	2651.9	2601.2	2545.8	2467.4
42.5°	2522.8	2515.8	2506.6	2511.2	2490.5	2474.3	2432.8	2389.0	2324.4	2232.2	2137.6
45°	2250.6	2248.4	2243.7	2241.4	2227.6	2211.4	2176.8	2126.1	2054.6	1960.1	1847.1
47.5°	1985.4	1978.5	1978.5	1980.8	1964.7	1962.4	1934.7	1890.9	1828.6	1736.4	1618.8
50°	1731.7	1729.5	1734.1	1743.3	1731.7	1727.2	1708.8	1678.8	1623.4	1545.0	1434.3
52.5°	1503.5	1501.2	1505.8	1517.3	1512.7	1517.3	1498.9	1475.8	1438.9	1362.8	1266.0
55°	1279.8	1279.8	1279.8	1293.6	1293.6	1293.6	1284.4	1270.6	1236.0	1180.7	1090.8
57.5°	1046.9	1049.2	1063.1	1065.3	1063.1	1067.7	1065.3	1051.5	1028.5	989.3	920.1
60°	850.9	850.9	857.8	864.8	862.4	864.8	864.8	857.8	834.8	802.5	747.2
62.5°	673.3	680.3	675.6	680.3	689.5	680.3	675.6	671.1	654.9	634.1	588.0
65°	509.6	514.3	514.3	516.5	511.9	514.3	505.0	498.1	488.9	465.8	435.9
67.5°	387.4	387.4	387.4	387.4	385.1	382.8	380.5	373.6	357.5	348.2	315.9
70°	297.5	283.6	283.6	283.6	283.6	286.0	279.1	269.8	265.2	249.1	226.0
72.5°	198.3	202.9	198.3	198.3	193.7	196.0	186.8	182.1	177.6	168.4	154.5
75°	142.9	131.5	136.0	138.4	131.5	136.0	126.8	117.6	117.6	110.7	103.7
77.5°	92.3	90.0	92.3	94.5	92.3	90.0	85.3	80.7	80.7	78.4	71.5
80°	66.9	64.5	64.5	64.5	62.3	64.5	60.0	60.0	55.3	53.1	48.4
82.5°	43.9	43.9	41.5	43.9	41.5	43.9	36.9	36.9	36.9	34.5	30.0
85°	30.0	25.3	25.3	27.7	23.1	27.7	25.3	23.1	20.8	20.8	18.4
87.5°	13.9	16.1	13.9	16.1	13.9	13.9	16.1	13.9	13.9	9.2	9.2
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: P249040

CATALOG NUMBER: LD8B90D010 ER8B90935 8LBSW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6
2.5°	4699.6	4701.8	4701.8	4711.1	4715.7	4718.0	4718.0	4736.5	4729.6	4734.2	4738.8
5°	4632.7	4646.5	4651.2	4651.2	4676.5	4685.7	4694.9	4715.7	4718.0	4731.8	4748.0
7.5°	4568.1	4584.2	4593.5	4614.2	4630.4	4646.5	4674.2	4688.1	4701.8	4720.4	4741.0
10°	4505.8	4524.4	4542.8	4558.9	4584.2	4605.0	4623.4	4655.7	4671.9	4697.3	4724.9
12.5°	4446.0	4471.3	4487.4	4515.1	4542.8	4561.2	4588.9	4618.9	4644.2	4669.6	4701.8
15°	4392.9	4422.9	4441.3	4471.3	4501.3	4526.6	4556.6	4593.5	4612.0	4642.0	4671.9
17.5°	4335.2	4367.6	4390.6	4418.2	4455.2	4482.8	4508.2	4545.0	4568.1	4600.4	4635.0
20°	4275.3	4307.6	4335.2	4362.9	4399.8	4427.4	4457.4	4494.4	4519.7	4552.0	4579.7
22.5°	4203.8	4233.8	4263.7	4296.0	4332.9	4356.0	4390.6	4422.9	4450.5	4480.5	4508.2
25°	4111.6	4148.5	4171.6	4201.4	4231.4	4256.8	4293.7	4326.0	4349.0	4376.8	4402.1
27.5°	4003.2	4030.9	4049.3	4074.6	4104.6	4127.7	4155.3	4187.7	4210.8	4236.1	4254.5
30°	3818.7	3844.1	3860.2	3878.6	3908.6	3929.4	3952.5	3982.4	3998.5	4017.0	4033.2
32.5°	3576.5	3597.3	3606.5	3620.4	3641.2	3661.9	3680.4	3705.7	3712.6	3724.1	3724.1
35°	3226.1	3230.6	3228.4	3233.0	3242.2	3253.7	3269.9	3286.0	3295.2	3295.2	3288.4
37.5°	2815.6	2788.0	2758.0	2734.9	2728.0	2723.3	2732.6	2739.5	2748.8	2753.3	2741.8
40°	2389.0	2326.8	2259.9	2199.9	2158.4	2140.0	2133.0	2137.6	2137.6	2153.7	2153.7
42.5°	2022.4	1925.5	1826.4	1736.4	1676.4	1630.4	1609.6	1609.6	1611.9	1623.4	1630.4
45°	1718.0	1595.7	1480.4	1381.3	1298.3	1238.3	1210.7	1203.7	1201.4	1206.0	1222.1
47.5°	1485.1	1358.2	1238.3	1116.1	1028.5	968.5	943.2	933.9	924.7	933.9	936.2
50°	1302.9	1171.5	1044.6	922.4	830.1	777.1	744.8	730.9	728.7	728.7	733.3
52.5°	1136.8	1014.7	887.8	763.3	666.4	615.7	585.7	578.8	569.6	578.8	578.8
55°	980.0	857.8	733.3	615.7	534.9	482.0	454.3	445.1	440.4	447.3	447.3
57.5°	809.4	705.6	590.4	484.3	403.6	366.7	345.9	334.4	332.0	336.7	332.0
60°	664.1	576.5	477.3	380.5	318.3	279.1	262.9	258.3	253.6	258.3	258.3
62.5°	525.7	452.0	371.2	297.5	244.4	216.8	198.3	198.3	196.0	196.0	198.3
65°	389.7	332.0	274.4	212.1	170.7	149.9	136.0	136.0	133.7	136.0	133.7
67.5°	283.6	244.4	198.3	154.5	122.3	110.7	101.5	94.5	99.2	94.5	92.3
70°	207.6	175.2	142.9	117.6	94.5	83.1	76.1	73.7	69.2	69.2	69.2
72.5°	138.4	117.6	96.8	76.1	62.3	50.7	48.4	43.9	39.2	41.5	46.1
75°	92.3	78.4	69.2	55.3	41.5	41.5	27.7	27.7	23.1	27.7	20.8
77.5°	64.5	53.1	41.5	34.5	27.7	25.3	18.4	18.4	16.1	16.1	16.1
80°	46.1	39.2	30.0	25.3	18.4	18.4	16.1	13.9	11.5	11.5	13.9
82.5°	27.7	20.8	20.8	18.4	11.5	9.2	6.9	9.2	4.7	4.7	4.7
85°	16.1	13.9	11.5	6.9	4.7	4.7	2.3	0.0	2.3	2.3	0.0
87.5°	9.2	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



TEST NUMBER: P249040

CATALOG NUMBER: LD8B90D010 ER8B90935 8LBSW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6
2.5°	4750.3	4748.0	4752.6	4752.6	4766.5	4764.1	4771.0	4771.0	4766.5	4768.8	4778.0
5°	4766.5	4773.4	4787.2	4798.8	4819.4	4828.7	4840.2	4851.8	4854.1	4861.0	4867.9
7.5°	4766.5	4789.5	4805.7	4826.4	4854.1	4870.2	4895.6	4916.4	4925.6	4937.0	4950.9
10°	4757.2	4780.2	4810.2	4833.3	4867.9	4893.3	4918.6	4950.9	4964.8	4983.2	5001.7
12.5°	4738.8	4764.1	4796.4	4826.4	4865.6	4888.6	4920.9	4950.9	4971.7	4997.0	5017.8
15°	4711.1	4741.0	4771.0	4801.0	4842.5	4870.2	4900.2	4934.8	4955.6	4983.2	5001.7
17.5°	4667.3	4699.6	4727.3	4754.9	4794.1	4826.4	4854.1	4886.4	4907.1	4930.2	4955.6
20°	4614.2	4644.2	4674.2	4697.3	4736.5	4764.1	4794.1	4824.1	4840.2	4844.9	4884.1
22.5°	4547.4	4568.1	4591.2	4628.1	4651.2	4676.5	4704.2	4731.8	4748.0	4773.4	4787.2
25°	4436.7	4457.4	4482.8	4498.9	4526.6	4547.4	4575.0	4605.0	4614.2	4632.7	4646.5
27.5°	4282.2	4293.7	4305.3	4319.0	4335.2	4346.8	4362.9	4376.8	4386.0	4395.2	4404.4
30°	4037.7	4037.7	4037.7	4028.5	4035.4	4042.4	4044.6	4042.4	4042.4	4040.1	4040.1
32.5°	3714.9	3696.5	3675.7	3657.3	3650.4	3641.2	3636.5	3629.6	3618.1	3611.2	3613.4
35°	3279.1	3237.6	3212.2	3189.2	3170.8	3156.9	3150.0	3143.0	3140.8	3131.6	3122.3
37.5°	2734.9	2704.9	2686.5	2672.6	2656.5	2642.6	2644.9	2647.3	2654.1	2649.6	2651.9
40°	2158.4	2151.5	2158.4	2142.3	2137.6	2142.3	2153.7	2170.0	2179.2	2188.4	2204.5
42.5°	1641.9	1653.3	1669.6	1669.6	1676.4	1685.7	1699.5	1724.9	1738.7	1754.8	1773.3
45°	1236.0	1249.9	1270.6	1277.5	1282.1	1293.6	1309.8	1330.5	1339.7	1353.6	1369.7
47.5°	952.4	961.6	973.1	984.7	996.1	1000.8	1016.9	1016.9	1028.5	1037.7	1042.3
50°	742.5	751.7	760.9	767.9	772.5	779.4	784.0	790.9	793.2	797.9	800.1
52.5°	581.1	592.7	592.7	597.2	604.1	611.1	608.8	611.1	613.3	613.3	620.3
55°	454.3	454.3	461.2	461.2	465.8	463.5	465.8	465.8	465.8	465.8	468.1
57.5°	338.9	341.3	348.2	343.6	341.3	345.9	341.3	345.9	343.6	348.2	341.3
60°	260.5	260.5	262.9	262.9	265.2	265.2	265.2	262.9	262.9	260.5	260.5
62.5°	196.0	198.3	200.7	198.3	198.3	198.3	196.0	196.0	193.7	191.4	191.4
65°	131.5	129.2	133.7	129.2	131.5	131.5	129.2	131.5	124.5	126.8	124.5
67.5°	94.5	92.3	90.0	92.3	90.0	87.6	87.6	90.0	92.3	85.3	85.3
70°	62.3	64.5	62.3	64.5	66.9	66.9	64.5	62.3	64.5	60.0	62.3
72.5°	39.2	39.2	39.2	39.2	39.2	41.5	41.5	41.5	36.9	36.9	34.5
75°	18.4	25.3	20.8	18.4	25.3	25.3	23.1	23.1	20.8	20.8	20.8
77.5°	18.4	13.9	13.9	13.9	13.9	13.9	13.9	13.9	11.5	13.9	11.5
80°	9.2	9.2	9.2	6.9	9.2	9.2	11.5	9.2	9.2	6.9	11.5
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: P249040

CATALOG NUMBER: LD8B90D010 ER8B90935 8LBSW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6
2.5°	4775.7	4773.4	4775.7	4778.0	4775.7	4773.4	4775.7	4778.0	4768.8	4766.5	4771.0
5°	4877.2	4877.2	4881.7	4884.1	4881.7	4877.2	4877.2	4867.9	4861.0	4854.1	4851.8
7.5°	4964.8	4969.4	4974.0	4976.2	4974.0	4969.4	4964.8	4950.9	4937.0	4925.6	4916.4
10°	5017.8	5024.7	5034.0	5038.5	5034.0	5024.7	5017.8	5001.7	4983.2	4964.8	4950.9
12.5°	5040.9	5047.8	5059.3	5057.0	5059.3	5047.8	5040.9	5017.8	4997.0	4971.7	4950.9
15°	5024.7	5034.0	5045.4	5050.1	5045.4	5034.0	5024.7	5001.7	4983.2	4955.6	4934.8
17.5°	4974.0	4987.8	4994.8	5001.7	4994.8	4987.8	4974.0	4955.6	4930.2	4907.1	4886.4
20°	4904.8	4914.1	4923.3	4925.6	4923.3	4914.1	4904.8	4884.1	4844.9	4840.2	4824.1
22.5°	4805.7	4812.6	4833.3	4826.4	4833.3	4812.6	4805.7	4787.2	4773.4	4748.0	4731.8
25°	4662.6	4669.6	4671.9	4674.2	4671.9	4669.6	4662.6	4646.5	4632.7	4614.2	4605.0
27.5°	4416.0	4416.0	4420.5	4422.9	4420.5	4416.0	4416.0	4404.4	4395.2	4386.0	4376.8
30°	4042.4	4042.4	4042.4	4053.9	4042.4	4042.4	4042.4	4040.1	4040.1	4042.4	4042.4
32.5°	3611.2	3606.5	3602.0	3606.5	3602.0	3606.5	3611.2	3613.4	3611.2	3618.1	3629.6
35°	3122.3	3120.0	3126.9	3117.7	3126.9	3120.0	3122.3	3122.3	3131.6	3140.8	3143.0
37.5°	2654.1	2649.6	2658.8	2649.6	2658.8	2649.6	2654.1	2651.9	2649.6	2654.1	2647.3
40°	2209.2	2213.7	2213.7	2232.2	2213.7	2213.7	2209.2	2204.5	2188.4	2179.2	2170.0
42.5°	1782.5	1796.4	1791.7	1805.6	1791.7	1796.4	1782.5	1773.3	1754.8	1738.7	1724.9
45°	1378.9	1388.2	1388.2	1392.8	1388.2	1388.2	1378.9	1369.7	1353.6	1339.7	1330.5
47.5°	1058.4	1058.4	1058.4	1060.8	1058.4	1058.4	1058.4	1042.3	1037.7	1028.5	1016.9
50°	804.8	807.1	809.4	811.7	809.4	807.1	804.8	800.1	797.9	793.2	790.9
52.5°	618.0	620.3	615.7	620.3	615.7	620.3	618.0	620.3	613.3	613.3	611.1
55°	468.1	465.8	468.1	470.4	468.1	465.8	468.1	468.1	465.8	465.8	465.8
57.5°	343.6	338.9	338.9	338.9	338.9	338.9	343.6	341.3	348.2	343.6	345.9
60°	256.0	258.3	258.3	260.5	258.3	258.3	256.0	260.5	260.5	262.9	262.9
62.5°	189.1	196.0	191.4	196.0	191.4	196.0	189.1	191.4	191.4	193.7	196.0
65°	122.3	122.3	122.3	124.5	122.3	122.3	122.3	124.5	126.8	124.5	131.5
67.5°	83.1	85.3	90.0	87.6	90.0	85.3	83.1	85.3	85.3	92.3	90.0
70°	66.9	60.0	60.0	66.9	60.0	60.0	66.9	62.3	60.0	64.5	62.3
72.5°	39.2	34.5	39.2	39.2	39.2	34.5	39.2	34.5	36.9	36.9	41.5
75°	20.8	18.4	16.1	23.1	16.1	18.4	20.8	20.8	20.8	20.8	23.1
77.5°	13.9	11.5	16.1	16.1	16.1	11.5	13.9	11.5	13.9	11.5	13.9
80°	6.9	9.2	6.9	11.5	6.9	9.2	6.9	11.5	6.9	9.2	9.2
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: P249040

CATALOG NUMBER: LD8B90D010 ER8B90935 8LBSW0MW

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6
2.5°	4771.0	4764.1	4766.5	4752.6	4752.6	4748.0	4750.3	4738.8	4734.2	4729.6	4736.5
5°	4840.2	4828.7	4819.4	4798.8	4787.2	4773.4	4766.5	4748.0	4731.8	4718.0	4715.7
7.5°	4895.6	4870.2	4854.1	4826.4	4805.7	4789.5	4766.5	4741.0	4720.4	4701.8	4688.1
10°	4918.6	4893.3	4867.9	4833.3	4810.2	4780.2	4757.2	4724.9	4697.3	4671.9	4655.7
12.5°	4920.9	4888.6	4865.6	4826.4	4796.4	4764.1	4738.8	4701.8	4669.6	4644.2	4618.9
15°	4900.2	4870.2	4842.5	4801.0	4771.0	4741.0	4711.1	4671.9	4642.0	4612.0	4593.5
17.5°	4854.1	4826.4	4794.1	4754.9	4727.3	4699.6	4667.3	4635.0	4600.4	4568.1	4545.0
20°	4794.1	4764.1	4736.5	4697.3	4674.2	4644.2	4614.2	4579.7	4552.0	4519.7	4494.4
22.5°	4704.2	4676.5	4651.2	4628.1	4591.2	4568.1	4547.4	4508.2	4480.5	4450.5	4422.9
25°	4575.0	4547.4	4526.6	4498.9	4482.8	4457.4	4436.7	4402.1	4376.8	4349.0	4326.0
27.5°	4362.9	4346.8	4335.2	4319.0	4305.3	4293.7	4282.2	4254.5	4236.1	4210.8	4187.7
30°	4044.6	4042.4	4035.4	4028.5	4037.7	4037.7	4037.7	4033.2	4017.0	3998.5	3982.4
32.5°	3636.5	3641.2	3650.4	3657.3	3675.7	3696.5	3714.9	3724.1	3724.1	3712.6	3705.7
35°	3150.0	3156.9	3170.8	3189.2	3212.2	3237.6	3279.1	3288.4	3295.2	3295.2	3286.0
37.5°	2644.9	2642.6	2656.5	2672.6	2686.5	2704.9	2734.9	2741.8	2753.3	2748.8	2739.5
40°	2153.7	2142.3	2137.6	2142.3	2158.4	2151.5	2158.4	2153.7	2153.7	2137.6	2137.6
42.5°	1699.5	1685.7	1676.4	1669.6	1669.6	1653.3	1641.9	1630.4	1623.4	1611.9	1609.6
45°	1309.8	1293.6	1282.1	1277.5	1270.6	1249.9	1236.0	1222.1	1206.0	1201.4	1203.7
47.5°	1016.9	1000.8	996.1	984.7	973.1	961.6	952.4	936.2	933.9	924.7	933.9
50°	784.0	779.4	772.5	767.9	760.9	751.7	742.5	733.3	728.7	728.7	730.9
52.5°	608.8	611.1	604.1	597.2	592.7	592.7	581.1	578.8	578.8	569.6	578.8
55°	465.8	463.5	465.8	461.2	461.2	454.3	454.3	447.3	447.3	440.4	445.1
57.5°	341.3	345.9	341.3	343.6	348.2	341.3	338.9	332.0	336.7	332.0	334.4
60°	265.2	265.2	265.2	262.9	262.9	260.5	260.5	258.3	258.3	253.6	258.3
62.5°	196.0	198.3	198.3	198.3	200.7	198.3	196.0	198.3	196.0	196.0	198.3
65°	129.2	131.5	131.5	129.2	133.7	129.2	131.5	133.7	136.0	133.7	136.0
67.5°	87.6	87.6	90.0	92.3	90.0	92.3	94.5	92.3	94.5	99.2	94.5
70°	64.5	66.9	66.9	64.5	62.3	64.5	62.3	69.2	69.2	69.2	73.7
72.5°	41.5	41.5	39.2	39.2	39.2	39.2	39.2	46.1	41.5	39.2	43.9
75°	23.1	25.3	25.3	18.4	20.8	25.3	18.4	20.8	27.7	23.1	27.7
77.5°	13.9	13.9	13.9	13.9	13.9	13.9	18.4	16.1	16.1	16.1	18.4
80°	11.5	9.2	9.2	6.9	9.2	9.2	9.2	13.9	11.5	11.5	13.9
82.5°	4.7	4.7	2.3	0.0	4.7	4.7	4.7	4.7	4.7	4.7	9.2
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: P249040

CATALOG NUMBER: LD8B90D010 ER8B90935 8LBSW0MW

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6
2.5°	4718.0	4718.0	4715.7	4711.1	4701.8	4701.8	4699.6	4692.6	4688.1	4685.7	4685.7
5°	4694.9	4685.7	4676.5	4651.2	4651.2	4646.5	4632.7	4623.4	4618.9	4607.3	4602.8
7.5°	4674.2	4646.5	4630.4	4614.2	4593.5	4584.2	4568.1	4561.2	4545.0	4533.6	4526.6
10°	4623.4	4605.0	4584.2	4558.9	4542.8	4524.4	4505.8	4492.1	4471.3	4459.7	4450.5
12.5°	4588.9	4561.2	4542.8	4515.1	4487.4	4471.3	4446.0	4429.8	4409.0	4386.0	4372.1
15°	4556.6	4526.6	4501.3	4471.3	4441.3	4422.9	4392.9	4374.5	4344.5	4321.4	4305.3
17.5°	4508.2	4482.8	4455.2	4418.2	4390.6	4367.6	4335.2	4312.2	4284.5	4254.5	4238.4
20°	4457.4	4427.4	4399.8	4362.9	4335.2	4307.6	4275.3	4250.0	4217.6	4190.0	4171.6
22.5°	4390.6	4356.0	4332.9	4296.0	4263.7	4233.8	4203.8	4173.8	4143.8	4120.8	4100.0
25°	4293.7	4256.8	4231.4	4201.4	4171.6	4148.5	4111.6	4093.1	4063.2	4042.4	4021.6
27.5°	4155.3	4127.7	4104.6	4074.6	4049.3	4030.9	4003.2	3984.8	3959.3	3940.9	3924.8
30°	3952.5	3929.4	3908.6	3878.6	3860.2	3844.1	3818.7	3802.5	3784.1	3763.3	3758.8
32.5°	3680.4	3661.9	3641.2	3620.4	3606.5	3597.3	3576.5	3567.3	3548.9	3537.3	3525.8
35°	3269.9	3253.7	3242.2	3233.0	3228.4	3230.6	3226.1	3235.3	3239.9	3237.6	3239.9
37.5°	2732.6	2723.3	2728.0	2734.9	2758.0	2788.0	2815.6	2857.1	2884.8	2912.5	2937.8
40°	2133.0	2140.0	2158.4	2199.9	2259.9	2326.8	2389.0	2467.4	2545.8	2601.2	2651.9
42.5°	1609.6	1630.4	1676.4	1736.4	1826.4	1925.5	2022.4	2137.6	2232.2	2324.4	2389.0
45°	1210.7	1238.3	1298.3	1381.3	1480.4	1595.7	1718.0	1847.1	1960.1	2054.6	2126.1
47.5°	943.2	968.5	1028.5	1116.1	1238.3	1358.2	1485.1	1618.8	1736.4	1828.6	1890.9
50°	744.8	777.1	830.1	922.4	1044.6	1171.5	1302.9	1434.3	1545.0	1623.4	1678.8
52.5°	585.7	615.7	666.4	763.3	887.8	1014.7	1136.8	1266.0	1362.8	1438.9	1475.8
55°	454.3	482.0	534.9	615.7	733.3	857.8	980.0	1090.8	1180.7	1236.0	1270.6
57.5°	345.9	366.7	403.6	484.3	590.4	705.6	809.4	920.1	989.3	1028.5	1051.5
60°	262.9	279.1	318.3	380.5	477.3	576.5	664.1	747.2	802.5	834.8	857.8
62.5°	198.3	216.8	244.4	297.5	371.2	452.0	525.7	588.0	634.1	654.9	671.1
65°	136.0	149.9	170.7	212.1	274.4	332.0	389.7	435.9	465.8	488.9	498.1
67.5°	101.5	110.7	122.3	154.5	198.3	244.4	283.6	315.9	348.2	357.5	373.6
70°	76.1	83.1	94.5	117.6	142.9	175.2	207.6	226.0	249.1	265.2	269.8
72.5°	48.4	50.7	62.3	76.1	96.8	117.6	138.4	154.5	168.4	177.6	182.1
75°	27.7	41.5	41.5	55.3	69.2	78.4	92.3	103.7	110.7	117.6	117.6
77.5°	18.4	25.3	27.7	34.5	41.5	53.1	64.5	71.5	78.4	80.7	80.7
80°	16.1	18.4	18.4	25.3	30.0	39.2	46.1	48.4	53.1	55.3	60.0
82.5°	6.9	9.2	11.5	18.4	20.8	20.8	27.7	30.0	34.5	36.9	36.9
85°	2.3	4.7	4.7	6.9	11.5	13.9	16.1	18.4	20.8	20.8	23.1
87.5°	2.3	2.3	0.0	2.3	4.7	4.7	9.2	9.2	9.2	13.9	13.9
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: P249040

CATALOG NUMBER: LD8B90D010 ER8B90935 8LBSW0MW

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6	4722.6
2.5°	4681.2	4683.4	4674.2	4671.9	4667.3	4669.6	4674.2
5°	4595.8	4598.1	4588.9	4579.7	4579.7	4577.3	4579.7
7.5°	4515.1	4517.4	4503.6	4498.9	4489.7	4492.1	4492.1
10°	4434.4	4434.4	4413.7	4411.3	4404.4	4402.1	4402.1
12.5°	4356.0	4349.0	4332.9	4323.7	4328.4	4314.5	4314.5
15°	4286.8	4275.3	4254.5	4247.6	4236.1	4231.4	4231.4
17.5°	4215.3	4206.1	4187.7	4173.8	4160.0	4157.7	4160.0
20°	4146.1	4136.9	4113.8	4104.6	4093.1	4093.1	4088.5
22.5°	4076.9	4067.7	4047.0	4040.1	4024.0	4024.0	4026.2
25°	4005.4	3998.5	3975.5	3970.9	3968.6	3959.3	3964.0
27.5°	3908.6	3904.0	3885.6	3878.6	3869.4	3867.2	3871.7
30°	3731.0	3724.1	3710.4	3703.4	3687.3	3689.6	3694.1
32.5°	3509.7	3500.5	3482.0	3475.1	3461.3	3456.6	3458.9
35°	3233.0	3226.1	3210.0	3210.0	3196.1	3191.4	3196.1
37.5°	2951.7	2958.5	2951.7	2958.5	2951.7	2949.3	2951.7
40°	2686.5	2711.8	2716.4	2741.8	2732.6	2746.4	2744.1
42.5°	2432.8	2474.3	2490.5	2511.2	2506.6	2515.8	2522.8
45°	2176.8	2211.4	2227.6	2241.4	2243.7	2248.4	2250.6
47.5°	1934.7	1962.4	1964.7	1980.8	1978.5	1978.5	1985.4
50°	1708.8	1727.2	1731.7	1743.3	1734.1	1729.5	1731.7
52.5°	1498.9	1517.3	1512.7	1517.3	1505.8	1501.2	1503.5
55°	1284.4	1293.6	1293.6	1293.6	1279.8	1279.8	1279.8
57.5°	1065.3	1067.7	1063.1	1065.3	1063.1	1049.2	1046.9
60°	864.8	864.8	862.4	864.8	857.8	850.9	850.9
62.5°	675.6	680.3	689.5	680.3	675.6	680.3	673.3
65°	505.0	514.3	511.9	516.5	514.3	514.3	509.6
67.5°	380.5	382.8	385.1	387.4	387.4	387.4	387.4
70°	279.1	286.0	283.6	283.6	283.6	283.6	297.5
72.5°	186.8	196.0	193.7	198.3	198.3	202.9	198.3
75°	126.8	136.0	131.5	138.4	136.0	131.5	142.9
77.5°	85.3	90.0	92.3	94.5	92.3	90.0	92.3
80°	60.0	64.5	62.3	64.5	64.5	64.5	66.9
82.5°	36.9	43.9	41.5	43.9	41.5	43.9	43.9
85°	25.3	27.7	23.1	27.7	25.3	25.3	30.0
87.5°	16.1	13.9	13.9	16.1	13.9	16.1	13.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)