

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: P249058

Luminaire Tested: **LD8B90D010 ER8B90950 8LBSW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249058  
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 8LBSW0MW  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
90 CRI 5000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8602.0 lumens  
Efficiency: N/A  
Efficacy: 99.9 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

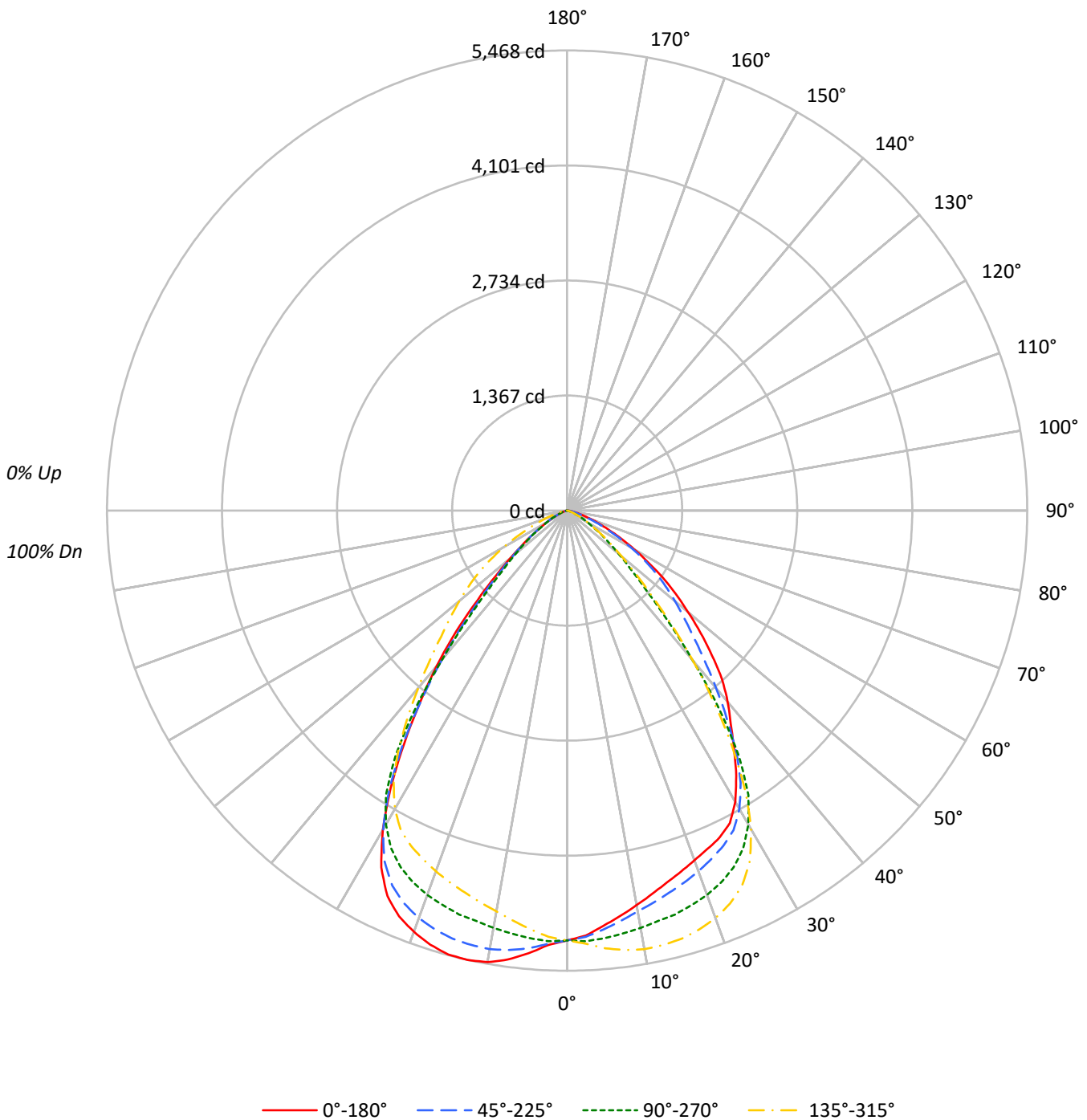
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	157472	157472	157472	157472
5°	153291	157841	163478	157841
10°	149048	157637	170597	157637
15°	146072	158573	174331	158573
20°	145077	159479	174781	159479
25°	145841	159158	171971	159158
30°	142235	153333	156089	153333
35°	130098	133757	126910	133757
40°	119446	93047	97165	93047
45°	106132	56762	65680	56762
50°	89834	37918	42106	37918
55°	74401	25875	27348	25875
60°	56745	17225	17373	17225
65°	40211	10733	9828	10733
70°	29004	7186	6528	7186
75°	18419	3574	2967	3574
80°	12857	2664	2202	2664
85°	11463	0	885	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	486.1	5.7
10°-20°	1407.6	16.4
20°-30°	2131.3	24.8
30°-40°	2136.1	24.8
40°-50°	1341.4	15.6
50°-60°	714.8	8.3
60°-70°	293.9	3.4
70°-80°	77.7	0.9
80°-90°	13.1	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°	4025.0	46.8
0°-40°	6161.1	71.6
0°-60°	8217.3	95.5
0°-90°	8602.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8602.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	5107	5107	5107	5107	5107	
5°	4952	5099	5281	5099	4952	467
15°	4576	4967	5461	4967	4576	1294
25°	4286	4678	5054	4678	4286	1966
35°	3456	3553	3371	3553	3456	2165
45°	2434	1302	1506	1302	2434	1872
55°	1384	481	509	481	1384	1234
65°	551	147	135	147	551	572
75°	155	30	25	30	155	175
85°	32	0	2	0	32	36
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°	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7
2.5°	5054.4	5049.4	5046.9	5051.9	5054.4	5064.3	5061.9	5066.8	5066.8	5069.4	5074.3
5°	4952.2	4949.6	4952.2	4952.2	4962.1	4972.1	4969.6	4977.1	4982.0	4994.6	4999.5
7.5°	4857.4	4857.4	4854.9	4864.8	4869.9	4884.8	4882.3	4894.8	4902.3	4914.7	4932.2
10°	4760.1	4760.1	4762.6	4770.1	4772.7	4795.0	4795.0	4812.5	4822.4	4835.0	4857.4
12.5°	4665.4	4665.4	4680.4	4675.4	4685.3	4702.8	4710.3	4727.7	4742.7	4767.6	4790.1
15°	4575.6	4575.6	4580.6	4593.0	4600.5	4623.0	4635.4	4655.4	4672.9	4697.8	4730.3
17.5°	4498.3	4495.8	4498.3	4513.3	4528.3	4548.2	4558.1	4583.1	4600.5	4633.0	4662.9
20°	4421.0	4426.1	4426.1	4438.5	4448.4	4473.4	4483.3	4510.8	4530.7	4560.6	4595.6
22.5°	4353.7	4351.2	4351.2	4368.7	4376.2	4398.5	4408.5	4433.4	4455.9	4480.9	4513.3
25°	4286.4	4281.3	4291.4	4293.9	4298.8	4323.7	4331.2	4348.7	4371.1	4393.6	4426.1
27.5°	4186.6	4181.7	4184.1	4194.1	4201.6	4221.5	4226.5	4244.0	4261.4	4281.3	4308.8
30°	3994.6	3989.6	3987.2	4004.6	4012.1	4027.0	4034.5	4064.5	4069.4	4091.9	4111.8
32.5°	3740.2	3737.8	3742.8	3757.7	3765.2	3785.2	3795.2	3812.6	3825.0	3837.5	3857.5
35°	3456.0	3451.0	3456.0	3471.0	3471.0	3488.5	3496.0	3503.4	3500.9	3503.4	3498.4
37.5°	3191.8	3189.2	3191.8	3199.2	3191.8	3199.2	3191.8	3176.8	3149.4	3119.4	3089.4
40°	2967.3	2969.8	2954.9	2964.8	2937.3	2932.4	2905.0	2867.5	2812.7	2752.9	2668.1
42.5°	2728.0	2720.5	2710.5	2715.4	2693.1	2675.5	2630.7	2583.3	2513.4	2413.8	2311.5
45°	2433.7	2431.2	2426.2	2423.7	2408.8	2391.3	2353.8	2299.0	2221.8	2119.5	1997.3
47.5°	2146.9	2139.4	2139.4	2141.9	2124.5	2122.0	2092.0	2044.7	1977.4	1877.6	1750.4
50°	1872.6	1870.1	1875.2	1885.1	1872.6	1867.7	1847.7	1815.3	1755.5	1670.7	1550.9
52.5°	1625.7	1623.3	1628.3	1640.7	1635.7	1640.7	1620.8	1595.9	1556.0	1473.6	1369.0
55°	1383.9	1383.9	1383.9	1398.8	1398.8	1398.8	1388.9	1374.0	1336.5	1276.7	1179.5
57.5°	1132.1	1134.5	1149.5	1152.0	1149.5	1154.5	1152.0	1137.0	1112.2	1069.8	994.9
60°	920.1	920.1	927.6	935.1	932.5	935.1	935.1	927.6	902.7	867.8	807.9
62.5°	728.1	735.6	730.6	735.6	745.5	735.6	730.6	725.6	708.2	685.7	635.8
65°	551.1	556.1	556.1	558.5	553.5	556.1	546.1	538.6	528.7	503.7	471.3
67.5°	419.0	419.0	419.0	419.0	416.4	413.9	411.5	404.0	386.5	376.6	341.6
70°	321.7	306.7	306.7	306.7	306.7	309.2	301.7	291.8	286.8	269.3	244.4
72.5°	214.4	219.4	214.4	214.4	209.5	211.9	202.0	197.0	192.0	182.1	167.1
75°	154.6	142.2	147.1	149.6	142.2	147.1	137.1	127.2	127.2	119.7	112.2
77.5°	99.8	97.3	99.8	102.2	99.8	97.3	92.3	87.2	87.2	84.8	77.3
80°	72.4	69.8	69.8	69.8	67.3	69.8	64.9	64.9	59.8	57.4	52.3
82.5°	47.4	47.4	44.9	47.4	44.9	47.4	39.9	39.9	39.9	37.4	32.4
85°	32.4	27.4	27.4	30.0	24.9	30.0	27.4	24.9	22.5	22.5	19.9
87.5°	15.0	17.4	15.0	17.4	15.0	15.0	17.4	15.0	15.0	10.0	10.0
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°	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7
2.5°	5081.8	5084.3	5084.3	5094.3	5099.2	5101.7	5101.7	5121.7	5114.2	5119.3	5124.2
5°	5009.5	5024.4	5029.5	5029.5	5056.9	5066.8	5076.8	5099.2	5101.7	5116.7	5134.1
7.5°	4939.6	4957.1	4967.2	4989.5	5007.0	5024.4	5054.4	5069.4	5084.3	5104.3	5126.6
10°	4872.3	4892.3	4912.2	4929.7	4957.1	4979.6	4999.5	5034.4	5051.9	5079.3	5109.2
12.5°	4807.6	4835.0	4852.4	4882.3	4912.2	4932.2	4962.1	4994.6	5022.0	5049.4	5084.3
15°	4750.2	4782.6	4802.5	4835.0	4867.4	4894.8	4927.2	4967.2	4987.1	5019.5	5051.9
17.5°	4687.8	4722.8	4747.7	4777.6	4817.5	4847.4	4874.9	4914.7	4939.6	4974.5	5012.0
20°	4623.0	4657.9	4687.8	4717.7	4757.7	4787.5	4820.0	4859.9	4887.3	4922.2	4952.2
22.5°	4545.7	4578.2	4610.5	4645.4	4685.3	4710.3	4747.7	4782.6	4812.5	4844.9	4874.9
25°	4446.0	4485.9	4510.8	4543.2	4575.6	4603.0	4642.9	4677.8	4702.8	4732.7	4760.1
27.5°	4328.8	4358.7	4378.6	4406.0	4438.5	4463.4	4493.3	4528.3	4553.2	4580.6	4600.5
30°	4129.2	4156.7	4174.2	4194.1	4226.5	4249.0	4274.0	4306.3	4323.7	4343.7	4361.2
32.5°	3867.4	3889.9	3899.8	3914.8	3937.3	3959.7	3979.7	4007.1	4014.6	4027.0	4027.0
35°	3488.5	3493.4	3490.9	3496.0	3505.9	3518.3	3535.8	3553.2	3563.2	3563.2	3555.8
37.5°	3044.6	3014.7	2982.3	2957.3	2949.8	2944.8	2954.9	2962.3	2972.3	2977.3	2964.8
40°	2583.3	2516.0	2443.7	2378.8	2333.9	2314.0	2306.5	2311.5	2311.5	2328.9	2328.9
42.5°	2186.9	2082.1	1974.9	1877.6	1812.7	1763.0	1740.5	1740.5	1743.0	1755.5	1763.0
45°	1857.7	1725.5	1600.8	1493.7	1403.8	1339.0	1309.1	1301.6	1299.2	1304.1	1321.5
47.5°	1605.8	1468.7	1339.0	1206.9	1112.2	1047.3	1019.9	1009.8	999.9	1009.8	1012.4
50°	1408.9	1266.7	1129.6	997.4	897.7	840.3	805.4	790.4	787.9	787.9	793.0
52.5°	1229.3	1097.2	960.1	825.4	720.6	665.8	633.4	625.9	615.9	625.9	625.9
55°	1059.7	927.6	793.0	665.8	578.5	521.2	491.2	481.3	476.2	483.7	483.7
57.5°	875.3	763.0	638.4	523.6	436.4	396.5	374.0	361.6	359.0	364.0	359.0
60°	718.1	623.4	516.2	411.5	344.1	301.7	284.3	279.3	274.2	279.3	279.3
62.5°	568.5	488.8	401.4	321.7	264.3	234.4	214.4	214.4	211.9	211.9	214.4
65°	421.4	359.0	296.7	229.4	184.5	162.1	147.1	147.1	144.6	147.1	144.6
67.5°	306.7	264.3	214.4	167.1	132.2	119.7	109.7	102.2	107.3	102.2	99.8
70°	224.5	189.5	154.6	127.2	102.2	89.8	82.3	79.7	74.8	74.8	74.8
72.5°	149.6	127.2	104.7	82.3	67.3	54.8	52.3	47.4	42.4	44.9	49.9
75°	99.8	84.8	74.8	59.8	44.9	44.9	30.0	30.0	24.9	30.0	22.5
77.5°	69.8	57.4	44.9	37.4	30.0	27.4	19.9	19.9	17.4	17.4	17.4
80°	49.9	42.4	32.4	27.4	19.9	19.9	17.4	15.0	12.4	12.4	15.0
82.5°	30.0	22.5	22.5	19.9	12.4	10.0	7.5	10.0	5.0	5.0	5.0
85°	17.4	15.0	12.4	7.5	5.0	5.0	2.5	0.0	2.5	2.5	0.0
87.5°	10.0	5.0	5.0	2.5	0.0	2.5	2.5	0.0	0.0	0.0	5.0
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7
2.5°	5136.7	5134.1	5139.2	5139.2	5154.2	5151.6	5159.1	5159.1	5154.2	5156.6	5166.6
5°	5154.2	5161.6	5176.5	5189.0	5211.4	5221.5	5233.9	5246.4	5248.9	5256.4	5263.9
7.5°	5154.2	5179.1	5196.5	5218.9	5248.9	5266.3	5293.7	5316.2	5326.2	5338.6	5353.6
10°	5144.1	5169.0	5201.5	5226.4	5263.9	5291.3	5318.7	5353.6	5368.6	5388.5	5408.5
12.5°	5124.2	5151.6	5186.5	5218.9	5261.3	5286.2	5321.1	5353.6	5376.1	5403.5	5425.9
15°	5094.3	5126.6	5159.1	5191.5	5236.4	5266.3	5298.8	5336.1	5358.6	5388.5	5408.5
17.5°	5046.9	5081.8	5111.8	5141.6	5184.0	5218.9	5248.9	5283.8	5306.3	5331.2	5358.6
20°	4989.5	5022.0	5054.4	5079.3	5121.7	5151.6	5184.0	5216.5	5233.9	5238.9	5281.3
22.5°	4917.3	4939.6	4964.6	5004.5	5029.5	5056.9	5086.8	5116.7	5134.1	5161.6	5176.5
25°	4797.5	4820.0	4847.4	4864.8	4894.8	4917.3	4947.1	4979.6	4989.5	5009.5	5024.4
27.5°	4630.5	4642.9	4655.4	4670.3	4687.8	4700.3	4717.7	4732.7	4742.7	4752.6	4762.6
30°	4366.1	4366.1	4366.1	4356.2	4363.7	4371.1	4373.6	4371.1	4371.1	4368.7	4368.7
32.5°	4017.1	3997.1	3974.7	3954.8	3947.3	3937.3	3932.3	3924.8	3912.4	3904.9	3907.3
35°	3545.8	3500.9	3473.5	3448.6	3428.6	3413.7	3406.2	3398.7	3396.2	3386.3	3376.2
37.5°	2957.3	2924.9	2905.0	2890.0	2872.6	2857.6	2860.0	2862.6	2870.0	2865.1	2867.5
40°	2333.9	2326.4	2333.9	2316.5	2311.5	2316.5	2328.9	2346.5	2356.4	2366.4	2383.8
42.5°	1775.4	1787.8	1805.4	1805.4	1812.7	1822.8	1837.7	1865.2	1880.1	1897.5	1917.5
45°	1336.5	1351.5	1374.0	1381.4	1386.4	1398.8	1416.4	1438.7	1448.7	1463.7	1481.1
47.5°	1029.8	1039.8	1052.2	1064.7	1077.2	1082.2	1099.6	1099.6	1112.2	1122.1	1127.0
50°	802.9	812.9	822.8	830.3	835.4	842.8	847.8	855.3	857.7	862.8	865.2
52.5°	628.3	640.9	640.9	645.8	653.3	660.8	658.3	660.8	663.2	663.2	670.7
55°	491.2	491.2	498.7	498.7	503.7	501.2	503.7	503.7	503.7	503.7	506.2
57.5°	366.5	369.1	376.6	371.5	369.1	374.0	369.1	374.0	371.5	376.6	369.1
60°	281.7	281.7	284.3	284.3	286.8	286.8	286.8	284.3	284.3	281.7	281.7
62.5°	211.9	214.4	217.0	214.4	214.4	214.4	211.9	211.9	209.5	206.9	206.9
65°	142.2	139.7	144.6	139.7	142.2	142.2	139.7	142.2	134.7	137.1	134.7
67.5°	102.2	99.8	97.3	99.8	97.3	94.7	94.7	97.3	99.8	92.3	92.3
70°	67.3	69.8	67.3	69.8	72.4	72.4	69.8	67.3	69.8	64.9	67.3
72.5°	42.4	42.4	42.4	42.4	42.4	44.9	44.9	44.9	39.9	39.9	37.4
75°	19.9	27.4	22.5	19.9	27.4	27.4	24.9	24.9	22.5	22.5	22.5
77.5°	19.9	15.0	15.0	15.0	15.0	15.0	15.0	15.0	12.4	15.0	12.4
80°	10.0	10.0	10.0	7.5	10.0	10.0	12.4	10.0	10.0	7.5	12.4
82.5°	5.0	5.0	5.0	0.0	2.5	5.0	5.0	2.5	5.0	5.0	2.5
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: P249058

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7
2.5°	5164.1	5161.6	5164.1	5166.6	5164.1	5161.6	5164.1	5166.6	5156.6	5154.2	5159.1
5°	5273.8	5273.8	5278.8	5281.3	5278.8	5273.8	5273.8	5263.9	5256.4	5248.9	5246.4
7.5°	5368.6	5373.6	5378.5	5381.0	5378.5	5373.6	5368.6	5353.6	5338.6	5326.2	5316.2
10°	5425.9	5433.4	5443.4	5448.3	5443.4	5433.4	5425.9	5408.5	5388.5	5368.6	5353.6
12.5°	5450.9	5458.4	5470.8	5468.3	5470.8	5458.4	5450.9	5425.9	5403.5	5376.1	5353.6
15°	5433.4	5443.4	5455.8	5460.8	5455.8	5443.4	5433.4	5408.5	5388.5	5358.6	5336.1
17.5°	5378.5	5393.5	5401.0	5408.5	5401.0	5393.5	5378.5	5358.6	5331.2	5306.3	5283.8
20°	5303.7	5313.8	5323.7	5326.2	5323.7	5313.8	5303.7	5281.3	5238.9	5233.9	5216.5
22.5°	5196.5	5204.0	5226.4	5218.9	5226.4	5204.0	5196.5	5176.5	5161.6	5134.1	5116.7
25°	5041.9	5049.4	5051.9	5054.4	5051.9	5049.4	5041.9	5024.4	5009.5	4989.5	4979.6
27.5°	4775.1	4775.1	4780.0	4782.6	4780.0	4775.1	4775.1	4762.6	4752.6	4742.7	4732.7
30°	4371.1	4371.1	4371.1	4383.7	4371.1	4371.1	4371.1	4368.7	4368.7	4371.1	4371.1
32.5°	3904.9	3899.8	3894.9	3899.8	3894.9	3899.8	3904.9	3907.3	3904.9	3912.4	3924.8
35°	3376.2	3373.7	3381.2	3371.3	3381.2	3373.7	3376.2	3376.2	3386.3	3396.2	3398.7
37.5°	2870.0	2865.1	2875.0	2865.1	2875.0	2865.1	2870.0	2867.5	2865.1	2870.0	2862.6
40°	2388.8	2393.8	2393.8	2413.8	2393.8	2393.8	2388.8	2383.8	2366.4	2356.4	2346.5
42.5°	1927.5	1942.5	1937.5	1952.4	1937.5	1942.5	1927.5	1917.5	1897.5	1880.1	1865.2
45°	1491.1	1501.1	1501.1	1506.1	1501.1	1501.1	1491.1	1481.1	1463.7	1448.7	1438.7
47.5°	1144.5	1144.5	1144.5	1147.1	1144.5	1144.5	1144.5	1127.0	1122.1	1112.2	1099.6
50°	870.2	872.7	875.3	877.7	875.3	872.7	870.2	865.2	862.8	857.7	855.3
52.5°	668.3	670.7	665.8	670.7	665.8	670.7	668.3	670.7	663.2	663.2	660.8
55°	506.2	503.7	506.2	508.7	506.2	503.7	506.2	506.2	503.7	503.7	503.7
57.5°	371.5	366.5	366.5	366.5	366.5	366.5	371.5	369.1	376.6	371.5	374.0
60°	276.8	279.3	279.3	281.7	279.3	279.3	276.8	281.7	281.7	284.3	284.3
62.5°	204.5	211.9	206.9	211.9	206.9	211.9	204.5	206.9	206.9	209.5	211.9
65°	132.2	132.2	132.2	134.7	132.2	132.2	132.2	134.7	137.1	134.7	142.2
67.5°	89.8	92.3	97.3	94.7	97.3	92.3	89.8	92.3	92.3	99.8	97.3
70°	72.4	64.9	64.9	72.4	64.9	64.9	72.4	67.3	64.9	69.8	67.3
72.5°	42.4	37.4	42.4	42.4	42.4	37.4	42.4	37.4	39.9	39.9	44.9
75°	22.5	19.9	17.4	24.9	17.4	19.9	22.5	22.5	22.5	22.5	24.9
77.5°	15.0	12.4	17.4	17.4	17.4	12.4	15.0	12.4	15.0	12.4	15.0
80°	7.5	10.0	7.5	12.4	7.5	10.0	7.5	12.4	7.5	10.0	10.0
82.5°	2.5	5.0	5.0	5.0	5.0	5.0	2.5	2.5	5.0	5.0	2.5
85°	0.0	5.0	2.5	2.5	2.5	5.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	0.0	0.0	2.5	0.0	0.0	2.5	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: P249058

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7
2.5°	5159.1	5151.6	5154.2	5139.2	5139.2	5134.1	5136.7	5124.2	5119.3	5114.2	5121.7
5°	5233.9	5221.5	5211.4	5189.0	5176.5	5161.6	5154.2	5134.1	5116.7	5101.7	5099.2
7.5°	5293.7	5266.3	5248.9	5218.9	5196.5	5179.1	5154.2	5126.6	5104.3	5084.3	5069.4
10°	5318.7	5291.3	5263.9	5226.4	5201.5	5169.0	5144.1	5109.2	5079.3	5051.9	5034.4
12.5°	5321.1	5286.2	5261.3	5218.9	5186.5	5151.6	5124.2	5084.3	5049.4	5022.0	4994.6
15°	5298.8	5266.3	5236.4	5191.5	5159.1	5126.6	5094.3	5051.9	5019.5	4987.1	4967.2
17.5°	5248.9	5218.9	5184.0	5141.6	5111.8	5081.8	5046.9	5012.0	4974.5	4939.6	4914.7
20°	5184.0	5151.6	5121.7	5079.3	5054.4	5022.0	4989.5	4952.2	4922.2	4887.3	4859.9
22.5°	5086.8	5056.9	5029.5	5004.5	4964.6	4939.6	4917.3	4874.9	4844.9	4812.5	4782.6
25°	4947.1	4917.3	4894.8	4864.8	4847.4	4820.0	4797.5	4760.1	4732.7	4702.8	4677.8
27.5°	4717.7	4700.3	4687.8	4670.3	4655.4	4642.9	4630.5	4600.5	4580.6	4553.2	4528.3
30°	4373.6	4371.1	4363.7	4356.2	4366.1	4366.1	4366.1	4361.2	4343.7	4323.7	4306.3
32.5°	3932.3	3937.3	3947.3	3954.8	3974.7	3997.1	4017.1	4027.0	4027.0	4014.6	4007.1
35°	3406.2	3413.7	3428.6	3448.6	3473.5	3500.9	3545.8	3555.8	3563.2	3563.2	3553.2
37.5°	2860.0	2857.6	2872.6	2890.0	2905.0	2924.9	2957.3	2964.8	2977.3	2972.3	2962.3
40°	2328.9	2316.5	2311.5	2316.5	2333.9	2326.4	2333.9	2328.9	2328.9	2311.5	2311.5
42.5°	1837.7	1822.8	1812.7	1805.4	1805.4	1787.8	1775.4	1763.0	1755.5	1743.0	1740.5
45°	1416.4	1398.8	1386.4	1381.4	1374.0	1351.5	1336.5	1321.5	1304.1	1299.2	1301.6
47.5°	1099.6	1082.2	1077.2	1064.7	1052.2	1039.8	1029.8	1012.4	1009.8	999.9	1009.8
50°	847.8	842.8	835.4	830.3	822.8	812.9	802.9	793.0	787.9	787.9	790.4
52.5°	658.3	660.8	653.3	645.8	640.9	640.9	628.3	625.9	625.9	615.9	625.9
55°	503.7	501.2	503.7	498.7	498.7	491.2	491.2	483.7	483.7	476.2	481.3
57.5°	369.1	374.0	369.1	371.5	376.6	369.1	366.5	359.0	364.0	359.0	361.6
60°	286.8	286.8	286.8	284.3	284.3	281.7	281.7	279.3	279.3	274.2	279.3
62.5°	211.9	214.4	214.4	214.4	217.0	214.4	211.9	214.4	211.9	211.9	214.4
65°	139.7	142.2	142.2	139.7	144.6	139.7	142.2	144.6	147.1	144.6	147.1
67.5°	94.7	94.7	97.3	99.8	97.3	99.8	102.2	99.8	102.2	107.3	102.2
70°	69.8	72.4	72.4	69.8	67.3	69.8	67.3	74.8	74.8	74.8	79.7
72.5°	44.9	44.9	42.4	42.4	42.4	42.4	42.4	49.9	44.9	42.4	47.4
75°	24.9	27.4	27.4	19.9	22.5	27.4	19.9	22.5	30.0	24.9	30.0
77.5°	15.0	15.0	15.0	15.0	15.0	15.0	19.9	17.4	17.4	17.4	19.9
80°	12.4	10.0	10.0	7.5	10.0	10.0	10.0	15.0	12.4	12.4	15.0
82.5°	5.0	5.0	2.5	0.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	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: P249058

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7
2.5°	5101.7	5101.7	5099.2	5094.3	5084.3	5084.3	5081.8	5074.3	5069.4	5066.8	5066.8
5°	5076.8	5066.8	5056.9	5029.5	5029.5	5024.4	5009.5	4999.5	4994.6	4982.0	4977.1
7.5°	5054.4	5024.4	5007.0	4989.5	4967.2	4957.1	4939.6	4932.2	4914.7	4902.3	4894.8
10°	4999.5	4979.6	4957.1	4929.7	4912.2	4892.3	4872.3	4857.4	4835.0	4822.4	4812.5
12.5°	4962.1	4932.2	4912.2	4882.3	4852.4	4835.0	4807.6	4790.1	4767.6	4742.7	4727.7
15°	4927.2	4894.8	4867.4	4835.0	4802.5	4782.6	4750.2	4730.3	4697.8	4672.9	4655.4
17.5°	4874.9	4847.4	4817.5	4777.6	4747.7	4722.8	4687.8	4662.9	4633.0	4600.5	4583.1
20°	4820.0	4787.5	4757.7	4717.7	4687.8	4657.9	4623.0	4595.6	4560.6	4530.7	4510.8
22.5°	4747.7	4710.3	4685.3	4645.4	4610.5	4578.2	4545.7	4513.3	4480.9	4455.9	4433.4
25°	4642.9	4603.0	4575.6	4543.2	4510.8	4485.9	4446.0	4426.1	4393.6	4371.1	4348.7
27.5°	4493.3	4463.4	4438.5	4406.0	4378.6	4358.7	4328.8	4308.8	4281.3	4261.4	4244.0
30°	4274.0	4249.0	4226.5	4194.1	4174.2	4156.7	4129.2	4111.8	4091.9	4069.4	4064.5
32.5°	3979.7	3959.7	3937.3	3914.8	3899.8	3889.9	3867.4	3857.5	3837.5	3825.0	3812.6
35°	3535.8	3518.3	3505.9	3496.0	3490.9	3493.4	3488.5	3498.4	3503.4	3500.9	3503.4
37.5°	2954.9	2944.8	2949.8	2957.3	2982.3	3014.7	3044.6	3089.4	3119.4	3149.4	3176.8
40°	2306.5	2314.0	2333.9	2378.8	2443.7	2516.0	2583.3	2668.1	2752.9	2812.7	2867.5
42.5°	1740.5	1763.0	1812.7	1877.6	1974.9	2082.1	2186.9	2311.5	2413.8	2513.4	2583.3
45°	1309.1	1339.0	1403.8	1493.7	1600.8	1725.5	1857.7	1997.3	2119.5	2221.8	2299.0
47.5°	1019.9	1047.3	1112.2	1206.9	1339.0	1468.7	1605.8	1750.4	1877.6	1977.4	2044.7
50°	805.4	840.3	897.7	997.4	1129.6	1266.7	1408.9	1550.9	1670.7	1755.5	1815.3
52.5°	633.4	665.8	720.6	825.4	960.1	1097.2	1229.3	1369.0	1473.6	1556.0	1595.9
55°	491.2	521.2	578.5	665.8	793.0	927.6	1059.7	1179.5	1276.7	1336.5	1374.0
57.5°	374.0	396.5	436.4	523.6	638.4	763.0	875.3	994.9	1069.8	1112.2	1137.0
60°	284.3	301.7	344.1	411.5	516.2	623.4	718.1	807.9	867.8	902.7	927.6
62.5°	214.4	234.4	264.3	321.7	401.4	488.8	568.5	635.8	685.7	708.2	725.6
65°	147.1	162.1	184.5	229.4	296.7	359.0	421.4	471.3	503.7	528.7	538.6
67.5°	109.7	119.7	132.2	167.1	214.4	264.3	306.7	341.6	376.6	386.5	404.0
70°	82.3	89.8	102.2	127.2	154.6	189.5	224.5	244.4	269.3	286.8	291.8
72.5°	52.3	54.8	67.3	82.3	104.7	127.2	149.6	167.1	182.1	192.0	197.0
75°	30.0	44.9	44.9	59.8	74.8	84.8	99.8	112.2	119.7	127.2	127.2
77.5°	19.9	27.4	30.0	37.4	44.9	57.4	69.8	77.3	84.8	87.2	87.2
80°	17.4	19.9	19.9	27.4	32.4	42.4	49.9	52.3	57.4	59.8	64.9
82.5°	7.5	10.0	12.4	19.9	22.5	22.5	30.0	32.4	37.4	39.9	39.9
85°	2.5	5.0	5.0	7.5	12.4	15.0	17.4	19.9	22.5	22.5	24.9
87.5°	2.5	2.5	0.0	2.5	5.0	5.0	10.0	10.0	10.0	15.0	15.0
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: P249058

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBSW0MW

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7	5106.7
2.5°	5061.9	5064.3	5054.4	5051.9	5046.9	5049.4	5054.4
5°	4969.6	4972.1	4962.1	4952.2	4952.2	4949.6	4952.2
7.5°	4882.3	4884.8	4869.9	4864.8	4854.9	4857.4	4857.4
10°	4795.0	4795.0	4772.7	4770.1	4762.6	4760.1	4760.1
12.5°	4710.3	4702.8	4685.3	4675.4	4680.4	4665.4	4665.4
15°	4635.4	4623.0	4600.5	4593.0	4580.6	4575.6	4575.6
17.5°	4558.1	4548.2	4528.3	4513.3	4498.3	4495.8	4498.3
20°	4483.3	4473.4	4448.4	4438.5	4426.1	4426.1	4421.0
22.5°	4408.5	4398.5	4376.2	4368.7	4351.2	4351.2	4353.7
25°	4331.2	4323.7	4298.8	4293.9	4291.4	4281.3	4286.4
27.5°	4226.5	4221.5	4201.6	4194.1	4184.1	4181.7	4186.6
30°	4034.5	4027.0	4012.1	4004.6	3987.2	3989.6	3994.6
32.5°	3795.2	3785.2	3765.2	3757.7	3742.8	3737.8	3740.2
35°	3496.0	3488.5	3471.0	3471.0	3456.0	3451.0	3456.0
37.5°	3191.8	3199.2	3191.8	3199.2	3191.8	3189.2	3191.8
40°	2905.0	2932.4	2937.3	2964.8	2954.9	2969.8	2967.3
42.5°	2630.7	2675.5	2693.1	2715.4	2710.5	2720.5	2728.0
45°	2353.8	2391.3	2408.8	2423.7	2426.2	2431.2	2433.7
47.5°	2092.0	2122.0	2124.5	2141.9	2139.4	2139.4	2146.9
50°	1847.7	1867.7	1872.6	1885.1	1875.2	1870.1	1872.6
52.5°	1620.8	1640.7	1635.7	1640.7	1628.3	1623.3	1625.7
55°	1388.9	1398.8	1398.8	1398.8	1383.9	1383.9	1383.9
57.5°	1152.0	1154.5	1149.5	1152.0	1149.5	1134.5	1132.1
60°	935.1	935.1	932.5	935.1	927.6	920.1	920.1
62.5°	730.6	735.6	745.5	735.6	730.6	735.6	728.1
65°	546.1	556.1	553.5	558.5	556.1	556.1	551.1
67.5°	411.5	413.9	416.4	419.0	419.0	419.0	419.0
70°	301.7	309.2	306.7	306.7	306.7	306.7	321.7
72.5°	202.0	211.9	209.5	214.4	214.4	219.4	214.4
75°	137.1	147.1	142.2	149.6	147.1	142.2	154.6
77.5°	92.3	97.3	99.8	102.2	99.8	97.3	99.8
80°	64.9	69.8	67.3	69.8	69.8	69.8	72.4
82.5°	39.9	47.4	44.9	47.4	44.9	47.4	47.4
85°	27.4	30.0	24.9	30.0	27.4	27.4	32.4
87.5°	17.4	15.0	15.0	17.4	15.0	17.4	15.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)