

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: P248896

Luminaire Tested: **LD8B90D010 ER8B90840 8LBSW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248896  
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 ER8B90840 8LBSW0B  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 4000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7156.0 lumens  
Efficiency: N/A  
Efficacy: 83.1 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

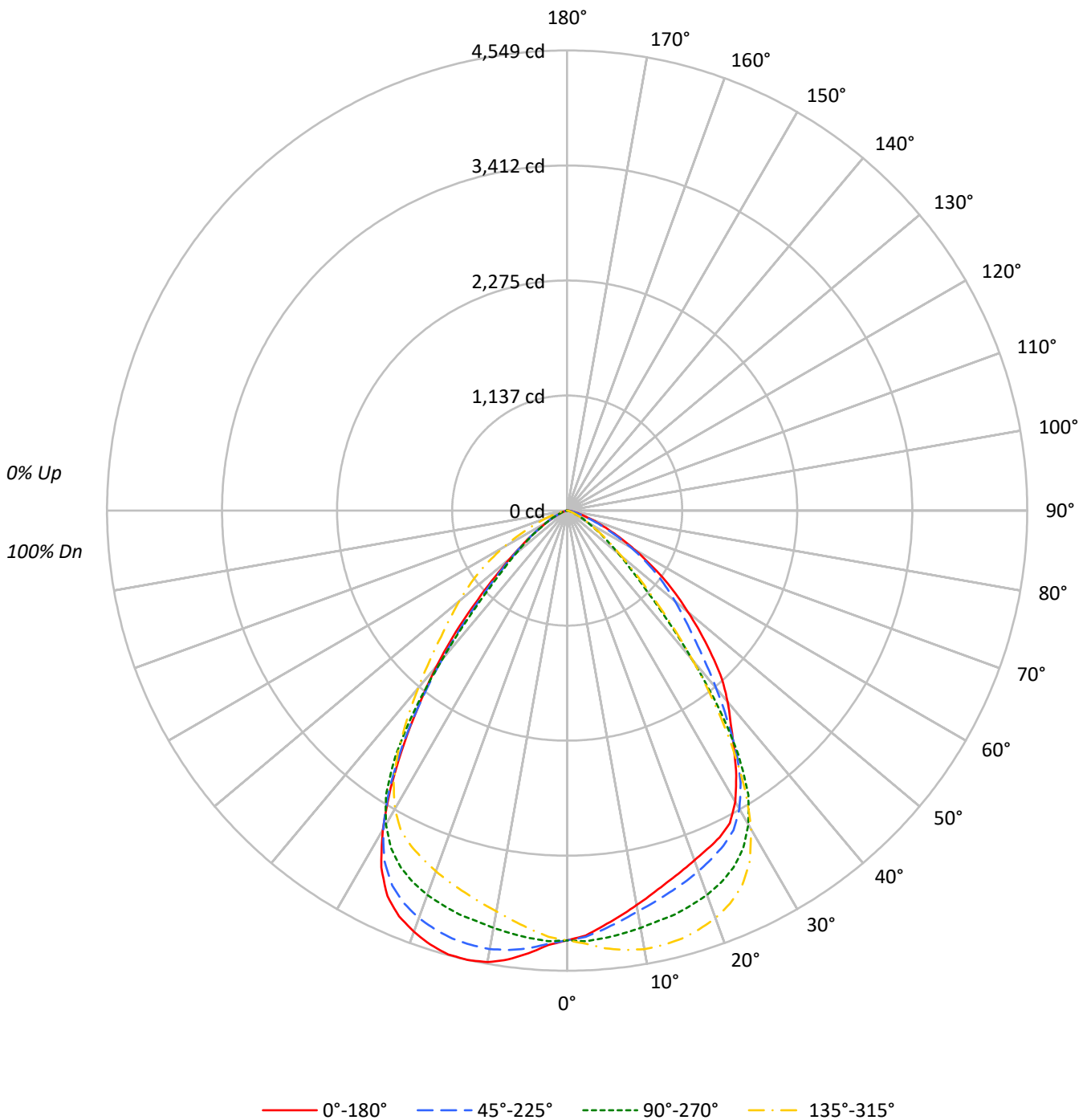
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	131002	131002	131002	131002
5°	127522	131310	135997	131310
10°	123996	131138	141919	131138
15°	121516	131917	145028	131917
20°	120691	132669	145398	132669
25°	121323	132405	143061	132405
30°	118325	127557	129851	127557
35°	108231	111272	105577	111272
40°	99367	77404	80830	77404
45°	88291	47220	54638	47220
50°	74732	31542	35030	31542
55°	61896	21526	22752	21526
60°	47210	14327	14456	14327
65°	33447	8931	8172	8931
70°	24127	5978	5428	5978
75°	15322	2967	2466	2967
80°	10690	2220	1829	2220
85°	9553	0	708	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	404.4	5.7
10°-20°	1170.9	16.4
20°-30°	1773.1	24.8
30°-40°	1777.0	24.8
40°-50°	1115.9	15.6
50°-60°	594.7	8.3
60°-70°	244.5	3.4
70°-80°	64.6	0.9
80°-90°	10.9	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°	3348.4	46.8
0°-40°	5125.4	71.6
0°-60°	6835.9	95.5
0°-90°	7156.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7156.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	4248	4248	4248	4248	4248	
5°	4120	4242	4394	4242	4120	389
15°	3806	4132	4543	4132	3806	1077
25°	3566	3892	4205	3892	3566	1635
35°	2875	2956	2805	2956	2875	1801
45°	2025	1083	1253	1083	2025	1557
55°	1151	400	423	400	1151	1026
65°	458	122	112	122	458	476
75°	129	25	21	25	129	146
85°	27	0	2	0	27	30
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°	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3
2.5°	4204.7	4200.6	4198.5	4202.7	4204.7	4213.0	4211.0	4215.1	4215.1	4217.2	4221.3
5°	4119.7	4117.6	4119.7	4119.7	4128.0	4136.3	4134.2	4140.5	4144.6	4155.0	4159.1
7.5°	4040.9	4040.9	4038.8	4047.0	4051.2	4063.7	4061.6	4072.0	4078.2	4088.5	4103.1
10°	3960.0	3960.0	3962.0	3968.2	3970.4	3989.0	3989.0	4003.5	4011.8	4022.2	4040.9
12.5°	3881.1	3881.1	3893.6	3889.4	3897.7	3912.2	3918.5	3933.0	3945.4	3966.2	3984.9
15°	3806.4	3806.4	3810.6	3821.0	3827.2	3845.9	3856.2	3872.9	3887.4	3908.1	3935.1
17.5°	3742.1	3740.1	3742.1	3754.6	3767.1	3783.6	3791.9	3812.7	3827.2	3854.2	3879.1
20°	3677.9	3682.0	3682.0	3692.4	3700.6	3721.4	3729.7	3752.6	3769.1	3794.0	3823.1
22.5°	3621.8	3619.8	3619.8	3634.3	3640.5	3659.2	3667.4	3688.2	3706.9	3727.6	3754.6
25°	3565.8	3561.6	3570.0	3572.1	3576.2	3596.9	3603.1	3617.7	3636.4	3655.1	3682.0
27.5°	3482.8	3478.7	3480.8	3489.1	3495.3	3511.9	3516.1	3530.6	3545.1	3561.6	3584.5
30°	3323.1	3319.0	3316.9	3331.5	3337.7	3350.1	3356.3	3381.2	3385.3	3404.0	3420.6
32.5°	3111.5	3109.5	3113.6	3126.0	3132.3	3148.9	3157.2	3171.7	3182.0	3192.5	3209.0
35°	2875.1	2870.9	2875.1	2887.6	2887.6	2902.1	2908.3	2914.4	2912.4	2914.4	2910.3
37.5°	2655.2	2653.1	2655.2	2661.4	2655.2	2661.4	2655.2	2642.8	2620.0	2595.0	2570.1
40°	2468.5	2470.5	2458.2	2466.4	2443.6	2439.5	2416.7	2385.5	2339.9	2290.1	2219.6
42.5°	2269.4	2263.1	2254.9	2259.0	2240.4	2225.8	2188.4	2149.1	2090.9	2008.0	1922.9
45°	2024.6	2022.5	2018.4	2016.3	2003.8	1989.3	1958.2	1912.6	1848.3	1763.2	1661.5
47.5°	1786.0	1779.8	1779.8	1781.8	1767.3	1765.3	1740.4	1701.0	1645.0	1562.0	1456.2
50°	1557.8	1555.8	1559.9	1568.2	1557.8	1553.7	1537.1	1510.2	1460.4	1389.9	1290.2
52.5°	1352.5	1350.4	1354.6	1364.9	1360.7	1364.9	1348.4	1327.6	1294.4	1225.9	1138.8
55°	1151.3	1151.3	1151.3	1163.7	1163.7	1163.7	1155.4	1143.0	1111.9	1062.1	981.2
57.5°	941.8	943.8	956.3	958.3	956.3	960.5	958.3	945.9	925.2	889.9	827.7
60°	765.5	765.5	771.7	777.9	775.8	777.9	777.9	771.7	750.9	721.9	672.1
62.5°	605.7	611.9	607.8	611.9	620.2	611.9	607.8	603.7	589.1	570.4	528.9
65°	458.4	462.6	462.6	464.7	460.5	462.6	454.3	448.1	439.8	419.1	392.1
67.5°	348.5	348.5	348.5	348.5	346.4	344.3	342.3	336.1	321.6	313.3	284.2
70°	267.6	255.1	255.1	255.1	255.1	257.3	251.0	242.7	238.6	224.0	203.3
72.5°	178.4	182.5	178.4	178.4	174.3	176.3	168.0	163.8	159.8	151.5	139.0
75°	128.6	118.3	122.4	124.5	118.3	122.4	114.1	105.8	105.8	99.6	93.3
77.5°	83.0	80.9	83.0	85.0	83.0	80.9	76.8	72.6	72.6	70.5	64.3
80°	60.2	58.1	58.1	58.1	56.0	58.1	54.0	54.0	49.8	47.7	43.5
82.5°	39.4	39.4	37.3	39.4	37.3	39.4	33.2	33.2	33.2	31.1	27.0
85°	27.0	22.8	22.8	24.9	20.7	24.9	22.8	20.7	18.7	18.7	16.6
87.5°	12.5	14.5	12.5	14.5	12.5	12.5	14.5	12.5	12.5	8.3	8.3
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°	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3
2.5°	4227.5	4229.6	4229.6	4238.0	4242.1	4244.1	4244.1	4260.8	4254.5	4258.7	4262.8
5°	4167.4	4179.8	4184.0	4184.0	4206.8	4215.1	4223.4	4242.1	4244.1	4256.6	4271.1
7.5°	4109.3	4123.8	4132.2	4150.8	4165.3	4179.8	4204.7	4217.2	4229.6	4246.2	4264.9
10°	4053.3	4069.9	4086.5	4101.0	4123.8	4142.5	4159.1	4188.1	4202.7	4225.5	4250.3
12.5°	3999.4	4022.2	4036.7	4061.6	4086.5	4103.1	4128.0	4155.0	4177.8	4200.6	4229.6
15°	3951.7	3978.7	3995.2	4022.2	4049.2	4072.0	4099.0	4132.2	4148.7	4175.7	4202.7
17.5°	3899.8	3928.9	3949.6	3974.5	4007.7	4032.5	4055.4	4088.5	4109.3	4138.3	4169.5
20°	3845.9	3874.9	3899.8	3924.7	3957.9	3982.8	4009.7	4042.9	4065.7	4094.8	4119.7
22.5°	3781.6	3808.6	3835.5	3864.5	3897.7	3918.5	3949.6	3978.7	4003.5	4030.5	4055.4
25°	3698.6	3731.8	3752.6	3779.5	3806.4	3829.2	3862.4	3891.5	3912.2	3937.2	3960.0
27.5°	3601.1	3626.0	3642.6	3665.4	3692.4	3713.1	3738.0	3767.1	3787.8	3810.6	3827.2
30°	3435.1	3458.0	3472.5	3489.1	3516.1	3534.7	3555.5	3582.4	3596.9	3613.6	3628.1
32.5°	3217.3	3236.0	3244.3	3256.7	3275.4	3294.1	3310.7	3333.5	3339.7	3350.1	3350.1
35°	2902.1	2906.2	2904.1	2908.3	2916.6	2926.9	2941.4	2955.9	2964.2	2964.2	2958.1
37.5°	2532.8	2507.9	2481.0	2460.2	2454.0	2449.8	2458.2	2464.3	2472.7	2476.8	2466.4
40°	2149.1	2093.1	2032.9	1978.9	1941.6	1925.0	1918.8	1922.9	1922.9	1937.4	1937.4
42.5°	1819.2	1732.1	1642.9	1562.0	1508.0	1466.6	1447.9	1447.9	1450.0	1460.4	1466.6
45°	1545.4	1435.5	1331.7	1242.6	1167.9	1113.9	1089.1	1082.8	1080.8	1084.9	1099.4
47.5°	1335.9	1221.8	1113.9	1004.0	925.2	871.2	848.4	840.1	831.8	840.1	842.2
50°	1172.0	1053.8	939.7	829.7	746.8	699.0	670.0	657.5	655.5	655.5	659.7
52.5°	1022.6	912.7	798.7	686.6	599.5	553.9	526.9	520.7	512.4	520.7	520.7
55°	881.6	771.7	659.7	553.9	481.2	433.6	408.6	400.4	396.2	402.4	402.4
57.5°	728.1	634.7	531.1	435.6	363.0	329.8	311.1	300.8	298.7	302.9	298.7
60°	597.4	518.6	429.4	342.3	286.3	251.0	236.5	232.3	228.1	232.3	232.3
62.5°	472.9	406.6	333.9	267.6	219.9	195.0	178.4	178.4	176.3	176.3	178.4
65°	350.6	298.7	246.8	190.8	153.5	134.8	122.4	122.4	120.3	122.4	120.3
67.5°	255.1	219.9	178.4	139.0	110.0	99.6	91.3	85.0	89.2	85.0	83.0
70°	186.7	157.6	128.6	105.8	85.0	74.7	68.5	66.3	62.2	62.2	62.2
72.5°	124.5	105.8	87.1	68.5	56.0	45.6	43.5	39.4	35.3	37.3	41.5
75°	83.0	70.5	62.2	49.8	37.3	37.3	24.9	24.9	20.7	24.9	18.7
77.5°	58.1	47.7	37.3	31.1	24.9	22.8	16.6	16.6	14.5	14.5	14.5
80°	41.5	35.3	27.0	22.8	16.6	16.6	14.5	12.5	10.3	10.3	12.5
82.5°	24.9	18.7	18.7	16.6	10.3	8.3	6.2	8.3	4.2	4.2	4.2
85°	14.5	12.5	10.3	6.2	4.2	4.2	2.0	0.0	2.0	2.0	0.0
87.5°	8.3	4.2	4.2	2.0	0.0	2.0	2.0	0.0	0.0	0.0	4.2
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°	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3
2.5°	4273.2	4271.1	4275.3	4275.3	4287.7	4285.6	4291.8	4291.8	4287.7	4289.8	4298.1
5°	4287.7	4294.0	4306.4	4316.8	4335.4	4343.7	4354.1	4364.5	4366.5	4372.8	4379.0
7.5°	4287.7	4308.5	4323.0	4341.6	4366.5	4381.1	4403.9	4422.6	4430.8	4441.2	4453.6
10°	4279.4	4300.1	4327.1	4347.8	4379.0	4401.8	4424.6	4453.6	4466.1	4482.7	4499.3
12.5°	4262.8	4285.6	4314.6	4341.6	4376.9	4397.6	4426.7	4453.6	4472.3	4495.1	4513.8
15°	4238.0	4264.9	4291.8	4318.8	4356.1	4381.1	4408.0	4439.1	4457.8	4482.7	4499.3
17.5°	4198.5	4227.5	4252.5	4277.3	4312.6	4341.6	4366.5	4395.6	4414.3	4435.0	4457.8
20°	4150.8	4177.8	4204.7	4225.5	4260.8	4285.6	4312.6	4339.6	4354.1	4358.3	4393.5
22.5°	4090.7	4109.3	4130.0	4163.2	4184.0	4206.8	4231.7	4256.6	4271.1	4294.0	4306.4
25°	3991.0	4009.7	4032.5	4047.0	4072.0	4090.7	4115.5	4142.5	4150.8	4167.4	4179.8
27.5°	3852.1	3862.4	3872.9	3885.2	3899.8	3910.2	3924.7	3937.2	3945.4	3953.7	3962.0
30°	3632.2	3632.2	3632.2	3623.9	3630.1	3636.4	3638.4	3636.4	3636.4	3634.3	3634.3
32.5°	3341.8	3325.2	3306.5	3290.0	3283.7	3275.4	3271.3	3265.0	3254.7	3248.5	3250.5
35°	2949.7	2912.4	2889.6	2868.9	2852.3	2839.8	2833.6	2827.4	2825.3	2817.0	2808.7
37.5°	2460.2	2433.2	2416.7	2404.2	2389.7	2377.2	2379.3	2381.4	2387.6	2383.5	2385.5
40°	1941.6	1935.4	1941.6	1927.1	1922.9	1927.1	1937.4	1952.0	1960.3	1968.6	1983.1
42.5°	1476.9	1487.3	1501.9	1501.9	1508.0	1516.4	1528.8	1551.7	1564.0	1578.6	1595.2
45°	1111.9	1124.3	1143.0	1149.2	1153.3	1163.7	1178.3	1196.9	1205.2	1217.6	1232.2
47.5°	856.7	865.0	875.3	885.8	896.1	900.3	914.8	914.8	925.2	933.5	937.6
50°	667.9	676.2	684.5	690.7	694.9	701.2	705.3	711.5	713.5	717.7	719.8
52.5°	522.7	533.1	533.1	537.2	543.5	549.7	547.6	549.7	551.7	551.7	558.0
55°	408.6	408.6	414.9	414.9	419.1	416.9	419.1	419.1	419.1	419.1	421.1
57.5°	304.9	307.0	313.3	309.1	307.0	311.1	307.0	311.1	309.1	313.3	307.0
60°	234.4	234.4	236.5	236.5	238.6	238.6	238.6	236.5	236.5	234.4	234.4
62.5°	176.3	178.4	180.5	178.4	178.4	178.4	176.3	176.3	174.3	172.1	172.1
65°	118.3	116.2	120.3	116.2	118.3	118.3	116.2	118.3	112.0	114.1	112.0
67.5°	85.0	83.0	80.9	83.0	80.9	78.8	78.8	80.9	83.0	76.8	76.8
70°	56.0	58.1	56.0	58.1	60.2	60.2	58.1	56.0	58.1	54.0	56.0
72.5°	35.3	35.3	35.3	35.3	35.3	37.3	37.3	37.3	33.2	33.2	31.1
75°	16.6	22.8	18.7	16.6	22.8	22.8	20.7	20.7	18.7	18.7	18.7
77.5°	16.6	12.5	12.5	12.5	12.5	12.5	12.5	12.5	10.3	12.5	10.3
80°	8.3	8.3	8.3	6.2	8.3	8.3	10.3	8.3	8.3	6.2	10.3
82.5°	4.2	4.2	4.2	0.0	2.0	4.2	4.2	2.0	4.2	4.2	2.0
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: P248896

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3
2.5°	4296.0	4294.0	4296.0	4298.1	4296.0	4294.0	4296.0	4298.1	4289.8	4287.7	4291.8
5°	4387.3	4387.3	4391.4	4393.5	4391.4	4387.3	4387.3	4379.0	4372.8	4366.5	4364.5
7.5°	4466.1	4470.3	4474.4	4476.4	4474.4	4470.3	4466.1	4453.6	4441.2	4430.8	4422.6
10°	4513.8	4520.1	4528.3	4532.4	4528.3	4520.1	4513.8	4499.3	4482.7	4466.1	4453.6
12.5°	4534.6	4540.8	4551.1	4549.1	4551.1	4540.8	4534.6	4513.8	4495.1	4472.3	4453.6
15°	4520.1	4528.3	4538.7	4542.9	4538.7	4528.3	4520.1	4499.3	4482.7	4457.8	4439.1
17.5°	4474.4	4486.8	4493.1	4499.3	4493.1	4486.8	4474.4	4457.8	4435.0	4414.3	4395.6
20°	4412.1	4420.5	4428.8	4430.8	4428.8	4420.5	4412.1	4393.5	4358.3	4354.1	4339.6
22.5°	4323.0	4329.2	4347.8	4341.6	4347.8	4329.2	4323.0	4306.4	4294.0	4271.1	4256.6
25°	4194.3	4200.6	4202.7	4204.7	4202.7	4200.6	4194.3	4179.8	4167.4	4150.8	4142.5
27.5°	3972.4	3972.4	3976.5	3978.7	3976.5	3972.4	3972.4	3962.0	3953.7	3945.4	3937.2
30°	3636.4	3636.4	3636.4	3646.8	3636.4	3636.4	3636.4	3634.3	3634.3	3636.4	3636.4
32.5°	3248.5	3244.3	3240.2	3244.3	3240.2	3244.3	3248.5	3250.5	3248.5	3254.7	3265.0
35°	2808.7	2806.6	2812.8	2804.6	2812.8	2806.6	2808.7	2808.7	2817.0	2825.3	2827.4
37.5°	2387.6	2383.5	2391.7	2383.5	2391.7	2383.5	2387.6	2385.5	2383.5	2387.6	2381.4
40°	1987.3	1991.4	1991.4	2008.0	1991.4	1991.4	1987.3	1983.1	1968.6	1960.3	1952.0
42.5°	1603.5	1615.9	1611.8	1624.2	1611.8	1615.9	1603.5	1595.2	1578.6	1564.0	1551.7
45°	1240.4	1248.8	1248.8	1252.9	1248.8	1248.8	1240.4	1232.2	1217.6	1205.2	1196.9
47.5°	952.1	952.1	952.1	954.2	952.1	952.1	952.1	937.6	933.5	925.2	914.8
50°	724.0	726.0	728.1	730.2	728.1	726.0	724.0	719.8	717.7	713.5	711.5
52.5°	555.9	558.0	553.9	558.0	553.9	558.0	555.9	558.0	551.7	551.7	549.7
55°	421.1	419.1	421.1	423.2	421.1	419.1	421.1	421.1	419.1	419.1	419.1
57.5°	309.1	304.9	304.9	304.9	304.9	304.9	309.1	307.0	313.3	309.1	311.1
60°	230.3	232.3	232.3	234.4	232.3	232.3	230.3	234.4	234.4	236.5	236.5
62.5°	170.1	176.3	172.1	176.3	172.1	176.3	170.1	172.1	172.1	174.3	176.3
65°	110.0	110.0	110.0	112.0	110.0	110.0	110.0	112.0	114.1	112.0	118.3
67.5°	74.7	76.8	80.9	78.8	80.9	76.8	74.7	76.8	76.8	83.0	80.9
70°	60.2	54.0	54.0	60.2	54.0	54.0	60.2	56.0	54.0	58.1	56.0
72.5°	35.3	31.1	35.3	35.3	35.3	31.1	35.3	31.1	33.2	33.2	37.3
75°	18.7	16.6	14.5	20.7	14.5	16.6	18.7	18.7	18.7	18.7	20.7
77.5°	12.5	10.3	14.5	14.5	14.5	10.3	12.5	10.3	12.5	10.3	12.5
80°	6.2	8.3	6.2	10.3	6.2	8.3	6.2	10.3	6.2	8.3	8.3
82.5°	2.0	4.2	4.2	4.2	4.2	4.2	2.0	2.0	4.2	4.2	2.0
85°	0.0	4.2	2.0	2.0	2.0	4.2	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	0.0	0.0	2.0	0.0	0.0	2.0	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: P248896

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0B

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3
2.5°	4291.8	4285.6	4287.7	4275.3	4275.3	4271.1	4273.2	4262.8	4258.7	4254.5	4260.8
5°	4354.1	4343.7	4335.4	4316.8	4306.4	4294.0	4287.7	4271.1	4256.6	4244.1	4242.1
7.5°	4403.9	4381.1	4366.5	4341.6	4323.0	4308.5	4287.7	4264.9	4246.2	4229.6	4217.2
10°	4424.6	4401.8	4379.0	4347.8	4327.1	4300.1	4279.4	4250.3	4225.5	4202.7	4188.1
12.5°	4426.7	4397.6	4376.9	4341.6	4314.6	4285.6	4262.8	4229.6	4200.6	4177.8	4155.0
15°	4408.0	4381.1	4356.1	4318.8	4291.8	4264.9	4238.0	4202.7	4175.7	4148.7	4132.2
17.5°	4366.5	4341.6	4312.6	4277.3	4252.5	4227.5	4198.5	4169.5	4138.3	4109.3	4088.5
20°	4312.6	4285.6	4260.8	4225.5	4204.7	4177.8	4150.8	4119.7	4094.8	4065.7	4042.9
22.5°	4231.7	4206.8	4184.0	4163.2	4130.0	4109.3	4090.7	4055.4	4030.5	4003.5	3978.7
25°	4115.5	4090.7	4072.0	4047.0	4032.5	4009.7	3991.0	3960.0	3937.2	3912.2	3891.5
27.5°	3924.7	3910.2	3899.8	3885.2	3872.9	3862.4	3852.1	3827.2	3810.6	3787.8	3767.1
30°	3638.4	3636.4	3630.1	3623.9	3632.2	3632.2	3632.2	3628.1	3613.6	3596.9	3582.4
32.5°	3271.3	3275.4	3283.7	3290.0	3306.5	3325.2	3341.8	3350.1	3350.1	3339.7	3333.5
35°	2833.6	2839.8	2852.3	2868.9	2889.6	2912.4	2949.7	2958.1	2964.2	2964.2	2955.9
37.5°	2379.3	2377.2	2389.7	2404.2	2416.7	2433.2	2460.2	2466.4	2476.8	2472.7	2464.3
40°	1937.4	1927.1	1922.9	1927.1	1941.6	1935.4	1941.6	1937.4	1937.4	1922.9	1922.9
42.5°	1528.8	1516.4	1508.0	1501.9	1501.9	1487.3	1476.9	1466.6	1460.4	1450.0	1447.9
45°	1178.3	1163.7	1153.3	1149.2	1143.0	1124.3	1111.9	1099.4	1084.9	1080.8	1082.8
47.5°	914.8	900.3	896.1	885.8	875.3	865.0	856.7	842.2	840.1	831.8	840.1
50°	705.3	701.2	694.9	690.7	684.5	676.2	667.9	659.7	655.5	655.5	657.5
52.5°	547.6	549.7	543.5	537.2	533.1	533.1	522.7	520.7	520.7	512.4	520.7
55°	419.1	416.9	419.1	414.9	414.9	408.6	408.6	402.4	402.4	396.2	400.4
57.5°	307.0	311.1	307.0	309.1	313.3	307.0	304.9	298.7	302.9	298.7	300.8
60°	238.6	238.6	238.6	236.5	236.5	234.4	234.4	232.3	232.3	228.1	232.3
62.5°	176.3	178.4	178.4	178.4	180.5	178.4	176.3	178.4	176.3	176.3	178.4
65°	116.2	118.3	118.3	116.2	120.3	116.2	118.3	120.3	122.4	120.3	122.4
67.5°	78.8	78.8	80.9	83.0	80.9	83.0	85.0	83.0	85.0	89.2	85.0
70°	58.1	60.2	60.2	58.1	56.0	58.1	56.0	62.2	62.2	62.2	66.3
72.5°	37.3	37.3	35.3	35.3	35.3	35.3	35.3	41.5	37.3	35.3	39.4
75°	20.7	22.8	22.8	16.6	18.7	22.8	16.6	18.7	24.9	20.7	24.9
77.5°	12.5	12.5	12.5	12.5	12.5	12.5	16.6	14.5	14.5	14.5	16.6
80°	10.3	8.3	8.3	6.2	8.3	8.3	8.3	12.5	10.3	10.3	12.5
82.5°	4.2	4.2	2.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	8.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	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: P248896

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0B

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3
2.5°	4244.1	4244.1	4242.1	4238.0	4229.6	4229.6	4227.5	4221.3	4217.2	4215.1	4215.1
5°	4223.4	4215.1	4206.8	4184.0	4184.0	4179.8	4167.4	4159.1	4155.0	4144.6	4140.5
7.5°	4204.7	4179.8	4165.3	4150.8	4132.2	4123.8	4109.3	4103.1	4088.5	4078.2	4072.0
10°	4159.1	4142.5	4123.8	4101.0	4086.5	4069.9	4053.3	4040.9	4022.2	4011.8	4003.5
12.5°	4128.0	4103.1	4086.5	4061.6	4036.7	4022.2	3999.4	3984.9	3966.2	3945.4	3933.0
15°	4099.0	4072.0	4049.2	4022.2	3995.2	3978.7	3951.7	3935.1	3908.1	3887.4	3872.9
17.5°	4055.4	4032.5	4007.7	3974.5	3949.6	3928.9	3899.8	3879.1	3854.2	3827.2	3812.7
20°	4009.7	3982.8	3957.9	3924.7	3899.8	3874.9	3845.9	3823.1	3794.0	3769.1	3752.6
22.5°	3949.6	3918.5	3897.7	3864.5	3835.5	3808.6	3781.6	3754.6	3727.6	3706.9	3688.2
25°	3862.4	3829.2	3806.4	3779.5	3752.6	3731.8	3698.6	3682.0	3655.1	3636.4	3617.7
27.5°	3738.0	3713.1	3692.4	3665.4	3642.6	3626.0	3601.1	3584.5	3561.6	3545.1	3530.6
30°	3555.5	3534.7	3516.1	3489.1	3472.5	3458.0	3435.1	3420.6	3404.0	3385.3	3381.2
32.5°	3310.7	3294.1	3275.4	3256.7	3244.3	3236.0	3217.3	3209.0	3192.5	3182.0	3171.7
35°	2941.4	2926.9	2916.6	2908.3	2904.1	2906.2	2902.1	2910.3	2914.4	2912.4	2914.4
37.5°	2458.2	2449.8	2454.0	2460.2	2481.0	2507.9	2532.8	2570.1	2595.0	2620.0	2642.8
40°	1918.8	1925.0	1941.6	1978.9	2032.9	2093.1	2149.1	2219.6	2290.1	2339.9	2385.5
42.5°	1447.9	1466.6	1508.0	1562.0	1642.9	1732.1	1819.2	1922.9	2008.0	2090.9	2149.1
45°	1089.1	1113.9	1167.9	1242.6	1331.7	1435.5	1545.4	1661.5	1763.2	1848.3	1912.6
47.5°	848.4	871.2	925.2	1004.0	1113.9	1221.8	1335.9	1456.2	1562.0	1645.0	1701.0
50°	670.0	699.0	746.8	829.7	939.7	1053.8	1172.0	1290.2	1389.9	1460.4	1510.2
52.5°	526.9	553.9	599.5	686.6	798.7	912.7	1022.6	1138.8	1225.9	1294.4	1327.6
55°	408.6	433.6	481.2	553.9	659.7	771.7	881.6	981.2	1062.1	1111.9	1143.0
57.5°	311.1	329.8	363.0	435.6	531.1	634.7	728.1	827.7	889.9	925.2	945.9
60°	236.5	251.0	286.3	342.3	429.4	518.6	597.4	672.1	721.9	750.9	771.7
62.5°	178.4	195.0	219.9	267.6	333.9	406.6	472.9	528.9	570.4	589.1	603.7
65°	122.4	134.8	153.5	190.8	246.8	298.7	350.6	392.1	419.1	439.8	448.1
67.5°	91.3	99.6	110.0	139.0	178.4	219.9	255.1	284.2	313.3	321.6	336.1
70°	68.5	74.7	85.0	105.8	128.6	157.6	186.7	203.3	224.0	238.6	242.7
72.5°	43.5	45.6	56.0	68.5	87.1	105.8	124.5	139.0	151.5	159.8	163.8
75°	24.9	37.3	37.3	49.8	62.2	70.5	83.0	93.3	99.6	105.8	105.8
77.5°	16.6	22.8	24.9	31.1	37.3	47.7	58.1	64.3	70.5	72.6	72.6
80°	14.5	16.6	16.6	22.8	27.0	35.3	41.5	43.5	47.7	49.8	54.0
82.5°	6.2	8.3	10.3	16.6	18.7	18.7	24.9	27.0	31.1	33.2	33.2
85°	2.0	4.2	4.2	6.2	10.3	12.5	14.5	16.6	18.7	18.7	20.7
87.5°	2.0	2.0	0.0	2.0	4.2	4.2	8.3	8.3	8.3	12.5	12.5
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: P248896

CATALOG NUMBER: LD8B90D010 ER8B90840 8LBSW0B

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3	4248.3
2.5°	4211.0	4213.0	4204.7	4202.7	4198.5	4200.6	4204.7
5°	4134.2	4136.3	4128.0	4119.7	4119.7	4117.6	4119.7
7.5°	4061.6	4063.7	4051.2	4047.0	4038.8	4040.9	4040.9
10°	3989.0	3989.0	3970.4	3968.2	3962.0	3960.0	3960.0
12.5°	3918.5	3912.2	3897.7	3889.4	3893.6	3881.1	3881.1
15°	3856.2	3845.9	3827.2	3821.0	3810.6	3806.4	3806.4
17.5°	3791.9	3783.6	3767.1	3754.6	3742.1	3740.1	3742.1
20°	3729.7	3721.4	3700.6	3692.4	3682.0	3682.0	3677.9
22.5°	3667.4	3659.2	3640.5	3634.3	3619.8	3619.8	3621.8
25°	3603.1	3596.9	3576.2	3572.1	3570.0	3561.6	3565.8
27.5°	3516.1	3511.9	3495.3	3489.1	3480.8	3478.7	3482.8
30°	3356.3	3350.1	3337.7	3331.5	3316.9	3319.0	3323.1
32.5°	3157.2	3148.9	3132.3	3126.0	3113.6	3109.5	3111.5
35°	2908.3	2902.1	2887.6	2887.6	2875.1	2870.9	2875.1
37.5°	2655.2	2661.4	2655.2	2661.4	2655.2	2653.1	2655.2
40°	2416.7	2439.5	2443.6	2466.4	2458.2	2470.5	2468.5
42.5°	2188.4	2225.8	2240.4	2259.0	2254.9	2263.1	2269.4
45°	1958.2	1989.3	2003.8	2016.3	2018.4	2022.5	2024.6
47.5°	1740.4	1765.3	1767.3	1781.8	1779.8	1779.8	1786.0
50°	1537.1	1553.7	1557.8	1568.2	1559.9	1555.8	1557.8
52.5°	1348.4	1364.9	1360.7	1364.9	1354.6	1350.4	1352.5
55°	1155.4	1163.7	1163.7	1163.7	1151.3	1151.3	1151.3
57.5°	958.3	960.5	956.3	958.3	956.3	943.8	941.8
60°	777.9	777.9	775.8	777.9	771.7	765.5	765.5
62.5°	607.8	611.9	620.2	611.9	607.8	611.9	605.7
65°	454.3	462.6	460.5	464.7	462.6	462.6	458.4
67.5°	342.3	344.3	346.4	348.5	348.5	348.5	348.5
70°	251.0	257.3	255.1	255.1	255.1	255.1	267.6
72.5°	168.0	176.3	174.3	178.4	178.4	182.5	178.4
75°	114.1	122.4	118.3	124.5	122.4	118.3	128.6
77.5°	76.8	80.9	83.0	85.0	83.0	80.9	83.0
80°	54.0	58.1	56.0	58.1	58.1	58.1	60.2
82.5°	33.2	39.4	37.3	39.4	37.3	39.4	39.4
85°	22.8	24.9	20.7	24.9	22.8	22.8	27.0
87.5°	14.5	12.5	12.5	14.5	12.5	14.5	12.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)