

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: P249229

Luminaire Tested: **LD8B90D010 ER8B90850 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249229  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B90D010 ER8B90850 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 5000 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9633.0 lumens  
Efficiency: N/A  
Efficacy: 111.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

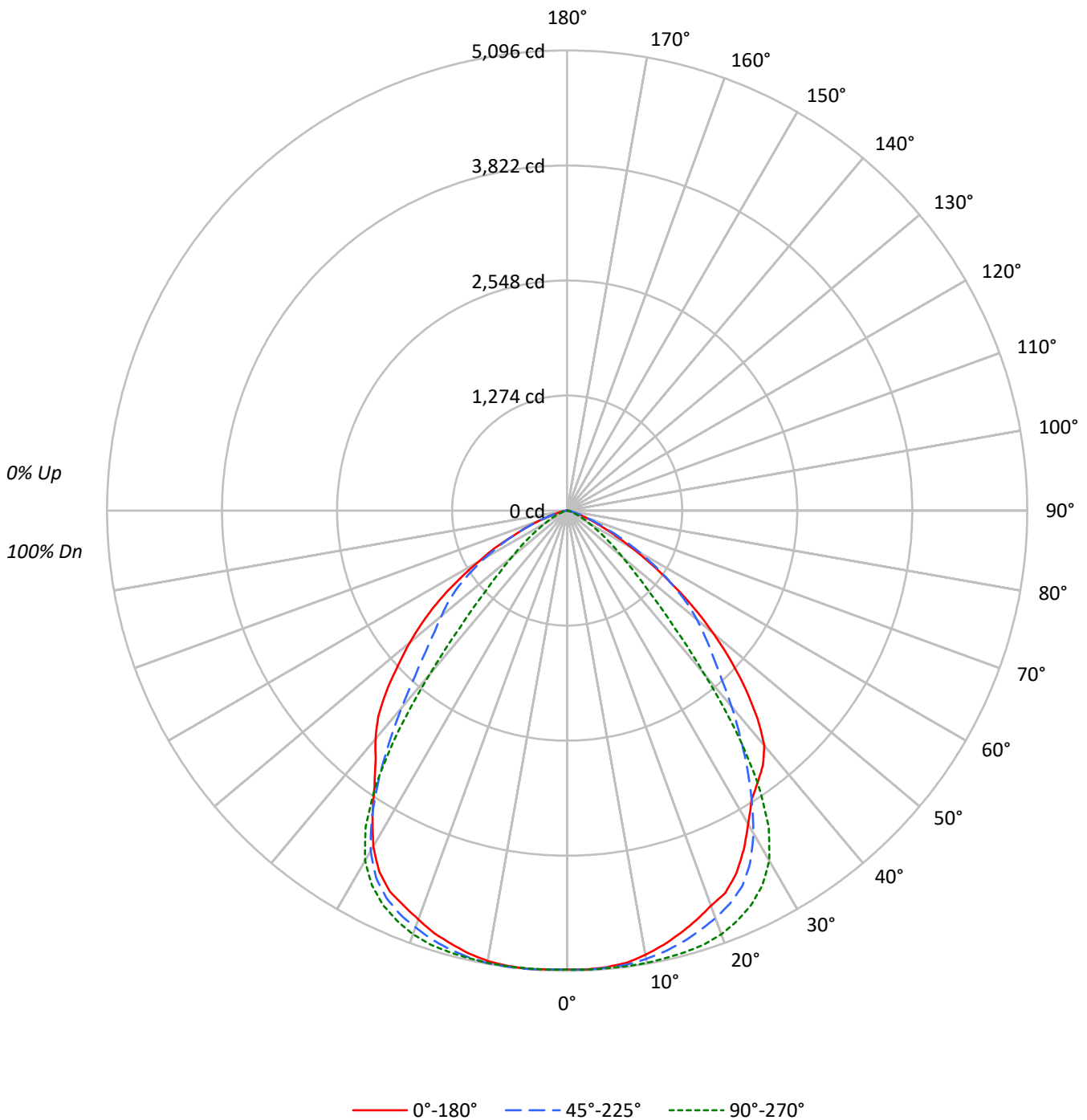
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249229

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBDW0WMH

### Luminous Intensity Polar Plot





TEST NUMBER: P249229

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBDW0WMH

**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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	156729	156729	156729
5°	157074	157494	157665
10°	156410	159231	158548
15°	154679	161558	158513
20°	152821	163830	158101
25°	150836	164020	158263
30°	142701	159408	152899
35°	138440	138542	139980
40°	136727	95321	132882
45°	121826	57224	123492
50°	101299	38086	109152
55°	75976	26257	92545
60°	51484	17497	69826
65°	31054	11346	47974
70°	17220	6149	29518
75°	7804	2597	15274
80°	6784	2912	10655
85°	7713	3856	10614



TEST NUMBER: P249229

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBDW0WMH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	485.1	5.0
10°-20°	1408.7	14.6
20°-30°	2138.1	22.2
30°-40°	2245.6	23.3
40°-50°	1683.6	17.5
50°-60°	1080.3	11.2
60°-70°	462.1	4.8
70°-80°	109.2	1.1
80°-90°	20.3	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°	4031.8	41.9
0°-40°	6277.5	65.2
0°-60°	9041.4	93.9
0°-90°	9633.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9633.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5083	5083	5083	5083	5083	
5°	5074	5083	5088	5096	5094	482
15°	4845	4946	5061	5028	4965	1367
25°	4433	4589	4821	4733	4652	2025
35°	3678	3473	3680	3637	3718	2308
45°	2794	2283	1312	2218	2832	2139
55°	1413	1413	488	1473	1721	1282
65°	426	502	156	647	658	454
75°	66	76	22	131	128	95
85°	22	14	11	22	30	23
90°	0	0	0	0	0	



TEST NUMBER: P249229

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBDW0WMH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6
2.5°	5085.3	5090.8	5088.0	5088.0	5085.3	5088.0	5088.0	5093.5	5093.5	5088.0	5085.3
5°	5074.4	5079.8	5079.8	5074.4	5074.4	5088.0	5079.8	5085.3	5085.3	5082.6	5082.6
7.5°	5049.8	5049.8	5060.7	5052.6	5052.6	5060.7	5058.0	5063.5	5068.9	5071.7	5071.7
10°	4995.2	5000.7	5003.5	5003.5	5006.2	5014.3	5019.8	5030.8	5036.2	5041.6	5044.4
12.5°	4927.1	4935.2	4938.0	4935.2	4943.4	4954.3	4968.0	4981.6	4989.8	5000.7	5008.9
15°	4845.2	4845.2	4850.7	4858.9	4864.3	4880.7	4894.3	4910.7	4932.5	4946.2	4959.8
17.5°	4755.2	4760.7	4768.8	4768.8	4779.8	4807.0	4815.2	4839.8	4864.3	4878.0	4905.3
20°	4657.0	4662.4	4670.6	4676.1	4689.7	4711.5	4727.9	4749.7	4777.0	4801.6	4828.8
22.5°	4580.6	4569.7	4575.1	4580.6	4594.3	4613.3	4632.4	4659.7	4687.0	4711.5	4738.8
25°	4433.2	4436.0	4444.2	4449.6	4466.0	4482.4	4504.2	4536.9	4561.5	4588.8	4618.8
27.5°	4234.1	4236.9	4250.5	4250.5	4264.1	4291.4	4305.0	4332.3	4365.1	4392.3	4427.8
30°	4007.7	4013.1	4013.1	4024.0	4032.2	4045.9	4059.5	4086.8	4103.2	4127.7	4176.8
32.5°	3800.4	3805.8	3803.0	3800.4	3792.1	3789.4	3786.7	3792.1	3797.6	3805.8	3824.9
35°	3677.6	3663.9	3653.0	3633.9	3612.1	3584.8	3560.2	3527.5	3497.5	3472.9	3445.7
37.5°	3560.2	3557.5	3541.2	3513.8	3470.2	3421.1	3363.9	3292.9	3221.9	3145.6	3071.9
40°	3396.6	3388.4	3374.7	3336.5	3287.4	3227.4	3151.0	3063.7	2949.1	2831.8	2711.8
42.5°	3118.3	3121.0	3104.6	3074.6	3028.3	2970.9	2891.8	2796.4	2673.6	2534.4	2379.0
45°	2793.6	2793.6	2788.2	2763.6	2730.9	2684.5	2624.5	2545.4	2425.4	2283.4	2117.0
47.5°	2455.3	2458.1	2449.9	2444.5	2430.8	2400.8	2357.1	2297.1	2212.6	2076.1	1909.7
50°	2111.6	2111.6	2125.2	2122.5	2122.5	2111.6	2092.5	2057.0	1983.4	1874.2	1718.8
52.5°	1767.8	1773.3	1781.5	1792.4	1806.0	1827.9	1806.0	1789.7	1743.3	1658.7	1525.1
55°	1413.2	1418.6	1432.3	1451.4	1467.8	1489.6	1495.0	1495.0	1470.5	1413.2	1312.2
57.5°	1110.4	1102.2	1113.1	1129.5	1151.3	1173.1	1189.5	1208.6	1205.8	1167.7	1085.8
60°	834.8	837.6	845.7	862.1	878.5	897.6	919.4	935.8	944.0	924.9	873.0
62.5°	608.4	608.4	619.3	635.6	643.8	671.1	684.8	693.0	701.1	698.4	665.7
65°	425.6	431.0	436.5	444.7	452.9	469.2	477.4	493.8	499.3	502.0	477.4
67.5°	300.1	291.9	297.4	302.8	311.0	322.0	338.3	338.3	346.5	346.5	330.1
70°	191.0	191.0	193.7	201.9	207.3	210.1	215.5	221.0	229.2	226.4	226.4
72.5°	128.2	125.5	128.2	131.0	133.7	141.9	141.9	144.6	150.1	152.8	141.9
75°	65.5	68.2	73.6	71.0	79.1	73.6	76.4	84.6	81.8	76.4	76.4
77.5°	54.5	54.5	54.5	51.9	57.3	57.3	54.5	60.0	57.3	57.3	54.5
80°	38.2	40.9	38.2	35.4	38.2	35.4	35.4	35.4	35.4	35.4	32.7
82.5°	30.0	24.6	27.3	24.6	27.3	27.3	24.6	21.8	21.8	24.6	21.8
85°	21.8	16.4	19.1	19.1	16.4	16.4	16.4	16.4	16.4	13.6	13.6
87.5°	13.6	8.2	8.2	8.2	10.9	10.9	10.9	8.2	10.9	10.9	5.5
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: P249229

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6
2.5°	5090.8	5088.0	5093.5	5090.8	5090.8	5088.0	5090.8	5088.0	5093.5	5082.6	5085.3
5°	5090.8	5085.3	5088.0	5090.8	5093.5	5088.0	5088.0	5088.0	5093.5	5088.0	5090.8
7.5°	5079.8	5077.1	5085.3	5090.8	5088.0	5085.3	5090.8	5088.0	5093.5	5090.8	5096.2
10°	5058.0	5060.7	5066.2	5074.4	5077.1	5079.8	5085.3	5085.3	5093.5	5082.6	5088.0
12.5°	5025.3	5036.2	5049.8	5055.3	5066.2	5066.2	5071.7	5074.4	5079.8	5077.1	5085.3
15°	4984.4	4998.0	5014.3	5028.0	5041.6	5049.8	5058.0	5060.7	5068.9	5060.7	5063.5
17.5°	4935.2	4951.6	4976.2	4992.5	5014.3	5022.5	5033.4	5038.9	5047.1	5041.6	5044.4
20°	4867.0	4886.2	4913.4	4938.0	4951.6	4970.7	4984.4	4992.5	4998.0	4992.5	4995.2
22.5°	4771.6	4798.9	4834.3	4853.4	4880.7	4897.1	4899.8	4918.9	4932.5	4918.9	4924.4
25°	4659.7	4687.0	4714.3	4755.2	4779.8	4798.9	4817.9	4820.7	4834.3	4831.6	4828.8
27.5°	4474.2	4509.7	4556.0	4588.8	4621.5	4651.5	4673.4	4678.8	4692.5	4687.0	4689.7
30°	4220.4	4258.7	4302.3	4354.1	4400.5	4430.5	4457.8	4476.9	4490.5	4482.4	4479.6
32.5°	3860.4	3898.5	3944.9	3996.7	4051.3	4094.9	4127.7	4152.3	4168.6	4163.2	4149.5
35°	3448.4	3459.3	3489.3	3530.3	3576.6	3623.0	3653.0	3680.3	3699.4	3704.8	3704.8
37.5°	3025.5	2990.1	2968.3	2968.3	2995.5	3014.6	3041.9	3058.3	3088.3	3099.2	3107.4
40°	2616.3	2534.4	2458.1	2400.8	2362.6	2359.9	2359.9	2368.0	2395.3	2430.8	2463.5
42.5°	2250.7	2119.8	2002.5	1896.1	1819.7	1776.0	1757.0	1759.7	1781.5	1814.2	1868.8
45°	1958.8	1795.1	1647.8	1519.6	1415.9	1347.7	1315.0	1312.2	1328.6	1366.8	1426.9
47.5°	1732.4	1557.8	1391.3	1244.0	1132.2	1058.5	1020.3	1009.4	1020.3	1055.8	1126.7
50°	1544.1	1364.1	1192.2	1039.4	919.4	843.0	807.5	793.9	807.5	837.6	908.5
52.5°	1369.5	1184.0	1023.1	875.7	747.5	682.0	643.8	635.6	643.8	679.3	736.6
55°	1167.7	1009.4	851.2	703.9	592.0	526.6	496.5	488.4	496.5	529.3	589.3
57.5°	968.5	832.1	693.0	559.3	463.8	406.5	379.2	368.3	387.4	409.2	480.2
60°	783.0	673.9	556.5	439.2	360.1	308.3	286.4	283.7	289.2	316.5	365.5
62.5°	613.9	523.8	431.0	335.6	270.1	248.3	221.0	218.3	223.7	240.0	278.3
65°	442.0	384.7	313.7	245.5	193.7	163.7	152.8	155.5	160.9	171.9	207.3
67.5°	308.3	267.3	218.3	171.9	133.7	120.0	109.1	106.4	109.1	128.2	147.3
70°	207.3	182.8	147.3	131.0	92.8	73.6	76.4	68.2	79.1	79.1	95.5
72.5°	136.4	120.0	98.2	76.4	65.5	51.9	51.9	49.1	54.5	57.3	71.0
75°	71.0	54.5	54.5	38.2	27.3	13.6	24.6	21.8	19.1	21.8	27.3
77.5°	49.1	40.9	38.2	30.0	27.3	21.8	21.8	21.8	21.8	24.6	27.3
80°	30.0	30.0	21.8	19.1	16.4	13.6	16.4	16.4	16.4	16.4	19.1
82.5°	19.1	16.4	16.4	13.6	13.6	10.9	10.9	10.9	10.9	10.9	16.4
85°	16.4	10.9	10.9	8.2	10.9	19.1	8.2	10.9	10.9	10.9	8.2
87.5°	5.5	8.2	8.2	8.2	5.5	2.7	5.5	8.2	8.2	13.6	10.9
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: P249229

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6	5082.6
2.5°	5090.8	5093.5	5093.5	5090.8	5090.8	5085.3	5096.2	5088.0	5090.8	5101.7	5093.5
5°	5096.2	5098.9	5098.9	5096.2	5096.2	5096.2	5098.9	5098.9	5096.2	5093.5	5098.9
7.5°	5107.1	5104.4	5104.4	5098.9	5098.9	5093.5	5098.9	5090.8	5096.2	5090.8	5098.9
10°	5093.5	5096.2	5093.5	5090.8	5090.8	5088.0	5088.0	5079.8	5082.6	5074.4	5079.8
12.5°	5085.3	5082.6	5082.6	5077.1	5071.7	5066.2	5063.5	5055.3	5055.3	5036.2	5044.4
15°	5063.5	5066.2	5058.0	5047.1	5041.6	5028.0	5022.5	5011.6	5000.7	4987.1	4989.8
17.5°	5044.4	5036.2	5025.3	5014.3	4992.5	4981.6	4970.7	4954.3	4948.9	4932.5	4927.1
20°	4987.1	4981.6	4968.0	4948.9	4935.2	4910.7	4899.8	4883.4	4869.8	4853.4	4845.2
22.5°	4913.4	4907.9	4891.6	4872.5	4850.7	4839.8	4828.8	4798.9	4785.2	4768.8	4766.1
25°	4820.7	4812.5	4796.1	4774.3	4763.3	4733.4	4722.4	4700.6	4695.2	4678.8	4676.1
27.5°	4678.8	4667.9	4648.8	4621.5	4602.4	4583.3	4572.4	4556.0	4550.6	4534.2	4531.5
30°	4466.0	4452.3	4414.2	4403.3	4370.5	4351.4	4351.4	4329.6	4332.3	4321.4	4321.4
32.5°	4130.5	4108.6	4078.6	4056.8	4034.9	4024.0	4024.0	4015.8	4021.3	4021.3	4026.8
35°	3685.7	3655.8	3639.3	3625.7	3625.7	3636.6	3669.4	3677.6	3693.9	3707.6	3718.5
37.5°	3115.5	3112.9	3131.9	3148.3	3189.2	3235.6	3292.9	3342.0	3388.4	3421.1	3453.8
40°	2499.0	2567.2	2621.8	2698.2	2760.9	2850.9	2954.6	3039.2	3118.3	3175.6	3235.6
42.5°	1950.6	2037.9	2152.5	2264.4	2376.2	2499.0	2635.4	2752.7	2856.4	2935.5	2998.2
45°	1519.6	1639.6	1778.8	1920.6	2065.2	2218.0	2359.9	2479.9	2589.0	2670.9	2733.6
47.5°	1224.9	1355.9	1514.1	1669.6	1833.3	1994.3	2152.5	2256.2	2346.2	2411.7	2469.0
50°	1012.1	1151.3	1317.7	1495.0	1658.7	1819.7	1956.1	2057.0	2130.7	2188.0	2223.4
52.5°	845.7	993.0	1170.4	1347.7	1511.4	1658.7	1781.5	1857.9	1917.9	1958.8	1991.5
55°	698.4	840.3	1006.7	1173.1	1334.1	1473.2	1574.1	1631.5	1677.8	1702.4	1721.4
57.5°	570.2	701.1	853.9	1006.7	1145.8	1260.4	1339.5	1396.8	1418.6	1437.7	1435.0
60°	447.4	570.2	709.3	840.3	960.3	1053.0	1110.4	1143.1	1159.4	1167.7	1162.2
62.5°	351.9	463.8	570.2	684.8	772.1	851.2	905.8	905.8	913.9	916.7	924.9
65°	261.9	346.5	439.2	523.8	594.7	646.6	676.6	684.8	695.7	693.0	687.5
67.5°	193.7	256.5	324.6	387.4	436.5	469.2	491.0	510.2	507.5	502.0	499.3
70°	133.7	174.6	234.6	272.8	308.3	341.0	346.5	349.2	351.9	354.7	349.2
72.5°	92.8	122.8	155.5	188.2	210.1	223.7	237.4	240.0	240.0	240.0	237.4
75°	46.4	62.7	92.8	106.4	125.5	131.0	141.9	141.9	150.1	139.1	136.4
77.5°	40.9	49.1	65.5	76.4	84.6	92.8	95.5	103.7	100.9	95.5	98.2
80°	24.6	30.0	40.9	46.4	57.3	60.0	62.7	65.5	62.7	65.5	65.5
82.5°	19.1	21.8	27.3	27.3	35.4	35.4	38.2	38.2	40.9	40.9	40.9
85°	10.9	19.1	16.4	32.7	21.8	21.8	27.3	32.7	27.3	27.3	32.7
87.5°	10.9	10.9	8.2	10.9	10.9	10.9	13.6	16.4	16.4	19.1	16.4
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: P249229

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5082.6	5082.6	5082.6	5082.6
2.5°	5090.8	5096.2	5088.0	5085.3
5°	5098.9	5098.9	5093.5	5093.5
7.5°	5098.9	5098.9	5090.8	5085.3
10°	5077.1	5077.1	5068.9	5063.5
12.5°	5036.2	5036.2	5033.4	5025.3
15°	4984.4	4984.4	4973.4	4965.3
17.5°	4913.4	4918.9	4905.3	4905.3
20°	4837.0	4834.3	4823.4	4817.9
22.5°	4757.9	4752.5	4749.7	4733.4
25°	4673.4	4667.9	4659.7	4651.5
27.5°	4528.8	4526.0	4517.8	4506.9
30°	4307.8	4305.0	4294.1	4294.1
32.5°	4021.3	4018.6	4007.7	4010.4
35°	3723.9	3734.9	3729.4	3718.5
37.5°	3475.7	3483.9	3489.3	3483.9
40°	3268.3	3292.9	3295.6	3301.1
42.5°	3047.4	3080.1	3091.0	3096.4
45°	2782.7	2812.7	2837.3	2831.8
47.5°	2512.6	2534.4	2556.3	2539.9
50°	2253.5	2267.1	2275.3	2275.3
52.5°	2008.0	2008.0	2005.2	2008.0
55°	1726.9	1726.9	1716.0	1721.4
57.5°	1432.3	1437.7	1429.5	1415.9
60°	1159.4	1145.8	1140.4	1132.2
62.5°	903.0	903.0	884.0	908.5
65°	676.6	668.4	660.2	657.5
67.5°	491.0	488.4	480.2	477.4
70°	346.5	335.6	332.8	327.4
72.5°	231.9	231.9	226.4	226.4
75°	141.9	128.2	125.5	128.2
77.5°	98.2	95.5	95.5	92.8
80°	65.5	62.7	68.2	60.0
82.5°	40.9	43.7	40.9	43.7
85°	27.3	32.7	30.0	30.0
87.5°	16.4	16.4	16.4	16.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)