

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: P249113

Luminaire Tested: **LD8B100D010 ER8B100840 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249113  
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: LD8B100D010 ER8B100840 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10957.0 lumens  
Efficiency: N/A  
Efficacy: 103.1 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

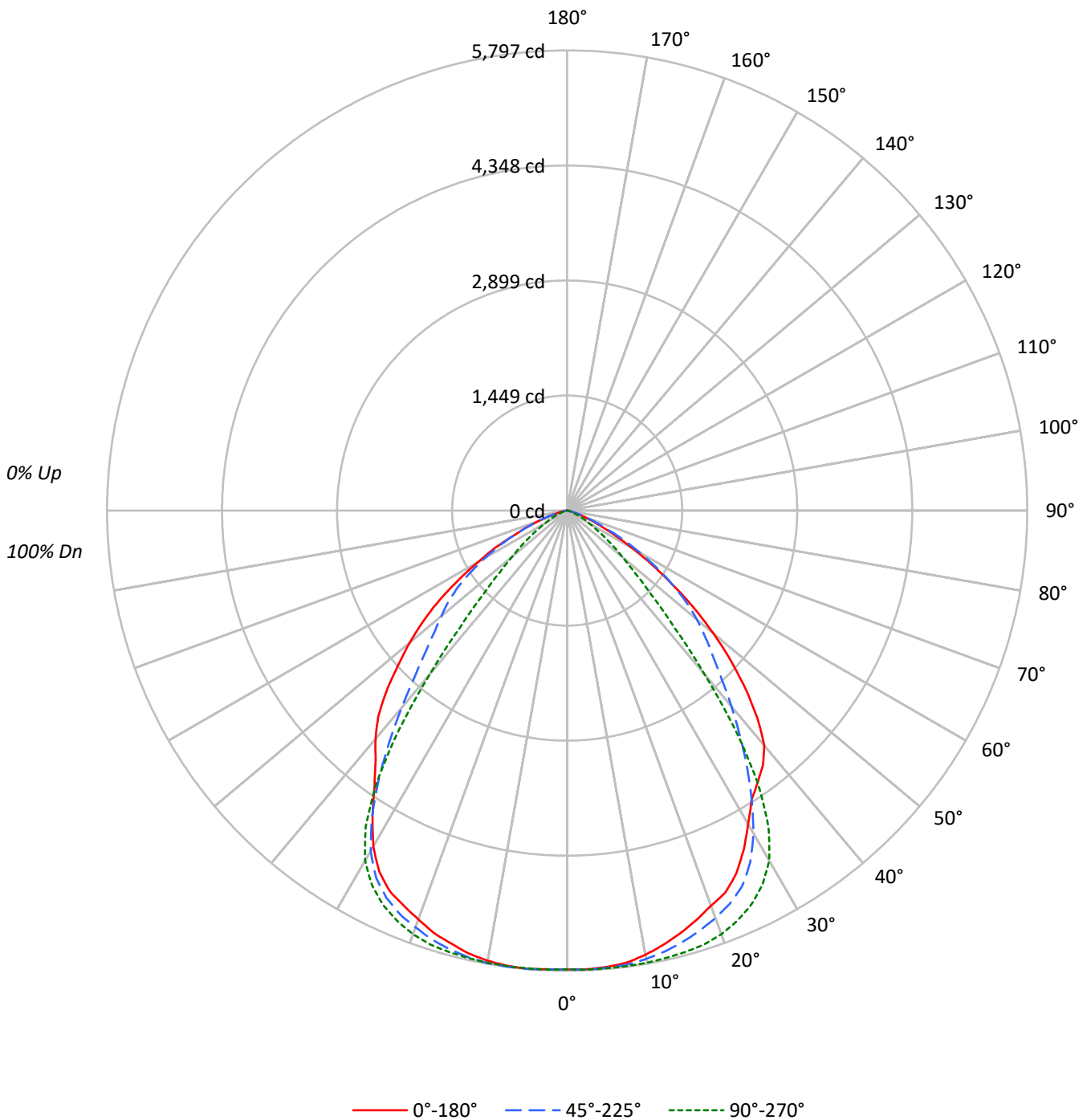
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249113

CATALOG NUMBER: LD8B100D010 ER8B100840 8LBDW0H

### Luminous Intensity Polar Plot





TEST NUMBER: P249113

CATALOG NUMBER: LD8B100D010 ER8B100840 8LBDW0H

**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°	178268	178268	178268
5°	178661	179144	179336
10°	177909	181115	180338
15°	175937	183765	180298
20°	173826	186348	179831
25°	171570	186564	180018
30°	162313	181316	173914
35°	157469	157582	159220
40°	155517	108424	151146
45°	138572	65091	140465
50°	115221	43319	124154
55°	86416	29864	105265
60°	58564	19902	79422
65°	35322	12907	54563
70°	19583	6996	33575
75°	8876	2955	17383
80°	7707	3303	12129
85°	8774	4387	12100



TEST NUMBER: P249113

CATALOG NUMBER: LD8B100D010 ER8B100840 8LBDW0H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	551.7	5.0
10°-20°	1602.3	14.6
20°-30°	2432.0	22.2
30°-40°	2554.3	23.3
40°-50°	1915.0	17.5
50°-60°	1228.7	11.2
60°-70°	525.6	4.8
70°-80°	124.2	1.1
80°-90°	23.1	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°	4586.0	41.9
0°-40°	7140.3	65.2
0°-60°	10284.1	93.9
0°-90°	10957.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10957.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5781	5781	5781	5781	5781	
5°	5772	5781	5787	5797	5794	548
15°	5511	5626	5756	5719	5648	1554
25°	5043	5220	5483	5384	5291	2304
35°	4183	3950	4186	4136	4230	2625
45°	3178	2597	1493	2523	3221	2434
55°	1607	1607	556	1676	1958	1458
65°	484	571	177	735	748	517
75°	74	87	25	149	146	108
85°	25	16	12	25	34	26
90°	0	0	0	0	0	



TEST NUMBER: P249113

CATALOG NUMBER: LD8B100D010 ER8B100840 8LBDW0H

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1
2.5°	5784.2	5790.5	5787.4	5787.4	5784.2	5787.4	5787.4	5793.6	5793.6	5787.4	5784.2
5°	5771.8	5778.0	5778.0	5771.8	5771.8	5787.4	5778.0	5784.2	5784.2	5781.1	5781.1
7.5°	5743.9	5743.9	5756.3	5747.0	5747.0	5756.3	5753.2	5759.4	5765.6	5768.8	5768.8
10°	5681.8	5688.0	5691.2	5691.2	5694.3	5703.5	5709.8	5722.2	5728.4	5734.6	5737.7
12.5°	5604.3	5613.6	5616.7	5613.6	5622.9	5635.3	5650.8	5666.3	5675.7	5688.0	5697.4
15°	5511.1	5511.1	5517.4	5526.7	5532.9	5551.5	5567.0	5585.6	5610.4	5626.0	5641.5
17.5°	5408.8	5415.0	5424.3	5424.3	5436.7	5467.7	5477.0	5505.0	5532.9	5548.4	5579.5
20°	5297.1	5303.2	5312.6	5318.8	5334.3	5359.1	5377.7	5402.5	5433.6	5461.5	5492.5
22.5°	5210.1	5197.8	5203.9	5210.1	5225.7	5247.4	5269.1	5300.1	5331.2	5359.1	5390.2
25°	5042.6	5045.7	5055.0	5061.2	5079.9	5098.5	5123.3	5160.5	5188.4	5219.5	5253.6
27.5°	4816.1	4819.2	4834.7	4834.7	4850.2	4881.2	4896.7	4927.8	4965.0	4996.0	5036.4
30°	4558.5	4564.7	4564.7	4577.1	4586.4	4602.0	4617.4	4648.5	4667.1	4695.0	4750.9
32.5°	4322.7	4328.8	4325.7	4322.7	4313.4	4310.2	4307.1	4313.4	4319.6	4328.8	4350.6
35°	4183.1	4167.5	4155.1	4133.4	4108.6	4077.5	4049.6	4012.4	3978.2	3950.3	3919.3
37.5°	4049.6	4046.5	4027.9	3996.8	3947.2	3891.3	3826.2	3745.5	3664.8	3577.9	3494.2
40°	3863.4	3854.1	3838.6	3795.1	3739.3	3671.0	3584.1	3484.8	3354.5	3221.0	3084.5
42.5°	3546.9	3550.0	3531.4	3497.2	3444.5	3379.3	3289.3	3180.7	3041.1	2882.8	2705.9
45°	3177.6	3177.6	3171.4	3143.4	3106.2	3053.5	2985.2	2895.2	2758.7	2597.3	2408.0
47.5°	2792.8	2795.9	2786.6	2780.4	2764.9	2730.8	2681.1	2612.9	2516.7	2361.5	2172.2
50°	2401.8	2401.8	2417.3	2414.2	2414.2	2401.8	2380.1	2339.7	2256.0	2131.8	1955.0
52.5°	2010.8	2017.0	2026.4	2038.8	2054.2	2079.1	2054.2	2035.6	1982.9	1886.7	1734.7
55°	1607.4	1613.6	1629.1	1650.8	1669.5	1694.3	1700.5	1700.5	1672.6	1607.4	1492.6
57.5°	1263.0	1253.7	1266.1	1284.7	1309.5	1334.4	1353.0	1374.7	1371.6	1328.1	1235.1
60°	949.6	952.7	961.9	980.6	999.2	1020.9	1045.8	1064.4	1073.7	1052.0	993.0
62.5°	692.0	692.0	704.4	723.0	732.3	763.4	778.9	788.2	797.5	794.4	757.2
65°	484.1	490.3	496.5	505.8	515.1	533.7	543.0	561.6	567.9	571.0	543.0
67.5°	341.4	332.0	338.3	344.4	353.8	366.2	384.8	384.8	394.1	394.1	375.5
70°	217.2	217.2	220.3	229.6	235.8	238.9	245.2	251.3	260.7	257.6	257.6
72.5°	145.9	142.7	145.9	149.0	152.1	161.3	161.3	164.5	170.7	173.8	161.3
75°	74.5	77.6	83.8	80.7	90.0	83.8	86.9	96.2	93.1	86.9	86.9
77.5°	62.0	62.0	62.0	59.0	65.1	65.1	62.0	68.3	65.1	65.1	62.0
80°	43.4	46.5	43.4	40.3	43.4	40.3	40.3	40.3	40.3	40.3	37.2
82.5°	34.2	27.9	31.1	27.9	31.1	31.1	27.9	24.8	24.8	27.9	24.8
85°	24.8	18.6	21.7	21.7	18.6	18.6	18.6	18.6	18.6	15.5	15.5
87.5°	15.5	9.3	9.3	9.3	12.4	12.4	12.4	9.3	12.4	12.4	6.2
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: P249113

CATALOG NUMBER: LD8B100D010 ER8B100840 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1
2.5°	5790.5	5787.4	5793.6	5790.5	5790.5	5787.4	5790.5	5787.4	5793.6	5781.1	5784.2
5°	5790.5	5784.2	5787.4	5790.5	5793.6	5787.4	5787.4	5787.4	5793.6	5787.4	5790.5
7.5°	5778.0	5774.9	5784.2	5790.5	5787.4	5784.2	5790.5	5787.4	5793.6	5790.5	5796.6
10°	5753.2	5756.3	5762.5	5771.8	5774.9	5778.0	5784.2	5784.2	5793.6	5781.1	5787.4
12.5°	5716.0	5728.4	5743.9	5750.1	5762.5	5762.5	5768.8	5771.8	5778.0	5774.9	5784.2
15°	5669.4	5684.9	5703.5	5719.1	5734.6	5743.9	5753.2	5756.3	5765.6	5756.3	5759.4
17.5°	5613.6	5632.2	5660.1	5678.7	5703.5	5712.9	5725.2	5731.5	5740.8	5734.6	5737.7
20°	5536.0	5557.7	5588.7	5616.7	5632.2	5653.9	5669.4	5678.7	5684.9	5678.7	5681.8
22.5°	5427.4	5458.4	5498.8	5520.5	5551.5	5570.1	5573.2	5595.0	5610.4	5595.0	5601.2
25°	5300.1	5331.2	5362.2	5408.8	5436.7	5458.4	5480.1	5483.3	5498.8	5495.6	5492.5
27.5°	5089.1	5129.5	5182.2	5219.5	5256.7	5290.9	5315.7	5321.8	5337.4	5331.2	5334.3
30°	4800.5	4844.0	4893.7	4952.6	5005.4	5039.5	5070.5	5092.2	5107.7	5098.5	5095.3
32.5°	4391.0	4434.4	4487.2	4546.1	4608.2	4657.8	4695.0	4723.0	4741.6	4735.4	4719.9
35°	3922.4	3934.8	3968.9	4015.5	4068.2	4120.9	4155.1	4186.1	4207.8	4214.0	4214.0
37.5°	3441.4	3401.1	3376.2	3376.2	3407.2	3428.9	3460.0	3478.6	3512.8	3525.1	3534.5
40°	2975.9	2882.8	2795.9	2730.8	2687.3	2684.2	2684.2	2693.5	2724.5	2764.9	2802.1
42.5°	2560.1	2411.1	2277.7	2156.7	2069.8	2020.2	1998.4	2001.6	2026.4	2063.6	2125.6
45°	2228.0	2041.9	1874.3	1728.4	1610.5	1532.9	1495.7	1492.6	1511.2	1554.6	1623.0
47.5°	1970.5	1771.9	1582.6	1415.0	1287.8	1204.0	1160.6	1148.2	1160.6	1200.9	1281.6
50°	1756.4	1551.6	1356.1	1182.3	1045.8	958.9	918.5	903.0	918.5	952.7	1033.3
52.5°	1557.8	1346.7	1163.7	996.1	850.2	775.8	732.3	723.0	732.3	772.7	837.9
55°	1328.1	1148.2	968.2	800.6	673.4	598.9	564.8	555.5	564.8	602.0	670.3
57.5°	1101.6	946.5	788.2	636.1	527.6	462.3	431.3	418.9	440.6	465.4	546.2
60°	890.6	766.5	633.0	499.6	409.6	350.6	325.8	322.7	328.9	360.0	415.8
62.5°	698.2	595.8	490.3	381.7	307.2	282.4	251.3	248.3	254.4	273.0	316.5
65°	502.7	437.6	356.9	279.3	220.3	186.2	173.8	176.9	183.1	195.5	235.8
67.5°	350.6	304.1	248.3	195.5	152.1	136.5	124.1	121.0	124.1	145.9	167.6
70°	235.8	207.9	167.6	149.0	105.5	83.8	86.9	77.6	90.0	90.0	108.6
72.5°	155.1	136.5	111.7	86.9	74.5	59.0	59.0	55.9	62.0	65.1	80.7
75°	80.7	62.0	62.0	43.4	31.1	15.5	27.9	24.8	21.7	24.8	31.1
77.5°	55.9	46.5	43.4	34.2	31.1	24.8	24.8	24.8	24.8	27.9	31.1
80°	34.2	34.2	24.8	21.7	18.6	15.5	18.6	18.6	18.6	18.6	21.7
82.5°	21.7	18.6	18.6	15.5	15.5	12.4	12.4	12.4	12.4	12.4	18.6
85°	18.6	12.4	12.4	9.3	12.4	21.7	9.3	12.4	12.4	12.4	9.3
87.5°	6.2	9.3	9.3	9.3	6.2	3.1	6.2	9.3	9.3	15.5	12.4
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: P249113

CATALOG NUMBER: LD8B100D010 ER8B100840 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1	5781.1
2.5°	5790.5	5793.6	5793.6	5790.5	5790.5	5784.2	5796.6	5787.4	5790.5	5802.8	5793.6
5°	5796.6	5799.7	5799.7	5796.6	5796.6	5796.6	5799.7	5799.7	5796.6	5793.6	5799.7
7.5°	5809.1	5806.0	5806.0	5799.7	5799.7	5793.6	5799.7	5790.5	5796.6	5790.5	5799.7
10°	5793.6	5796.6	5793.6	5790.5	5790.5	5787.4	5787.4	5778.0	5781.1	5771.8	5778.0
12.5°	5784.2	5781.1	5781.1	5774.9	5768.8	5762.5	5759.4	5750.1	5750.1	5728.4	5737.7
15°	5759.4	5762.5	5753.2	5740.8	5734.6	5719.1	5712.9	5700.4	5688.0	5672.5	5675.7
17.5°	5737.7	5728.4	5716.0	5703.5	5678.7	5666.3	5653.9	5635.3	5629.0	5610.4	5604.3
20°	5672.5	5666.3	5650.8	5629.0	5613.6	5585.6	5573.2	5554.6	5539.1	5520.5	5511.1
22.5°	5588.7	5582.5	5563.9	5542.2	5517.4	5505.0	5492.5	5458.4	5442.9	5424.3	5421.2
25°	5483.3	5473.9	5455.3	5430.5	5418.0	5383.9	5371.5	5346.7	5340.5	5321.8	5318.8
27.5°	5321.8	5309.5	5287.7	5256.7	5235.0	5213.3	5200.9	5182.2	5176.1	5157.4	5154.3
30°	5079.9	5064.3	5020.9	5008.5	4971.2	4949.5	4949.5	4924.7	4927.8	4915.4	4915.4
32.5°	4698.2	4673.3	4639.2	4614.3	4589.5	4577.1	4577.1	4567.8	4574.0	4574.0	4580.2
35°	4192.3	4158.2	4139.6	4124.1	4124.1	4136.4	4173.7	4183.1	4201.7	4217.2	4229.6
37.5°	3543.7	3540.7	3562.4	3581.0	3627.6	3680.3	3745.5	3801.4	3854.1	3891.3	3928.5
40°	2842.5	2920.1	2982.1	3069.0	3140.3	3242.8	3360.7	3456.9	3546.9	3612.1	3680.3
42.5°	2218.7	2318.0	2448.4	2575.6	2702.8	2842.5	2997.7	3131.1	3249.0	3339.0	3410.3
45°	1728.4	1865.0	2023.3	2184.6	2349.1	2522.9	2684.2	2820.7	2944.9	3038.0	3109.4
47.5°	1393.3	1542.3	1722.2	1899.1	2085.3	2268.4	2448.4	2566.3	2668.7	2743.1	2808.4
50°	1151.2	1309.5	1498.8	1700.5	1886.7	2069.8	2224.9	2339.7	2423.6	2488.7	2529.0
52.5°	961.9	1129.5	1331.3	1532.9	1719.1	1886.7	2026.4	2113.2	2181.5	2228.0	2265.3
55°	794.4	955.8	1145.1	1334.4	1517.4	1675.7	1790.5	1855.7	1908.4	1936.3	1958.0
57.5°	648.6	797.5	971.3	1145.1	1303.3	1433.7	1523.7	1588.8	1613.6	1635.4	1632.2
60°	508.9	648.6	806.8	955.8	1092.3	1197.8	1263.0	1300.2	1318.8	1328.1	1321.9
62.5°	400.3	527.6	648.6	778.9	878.2	968.2	1030.3	1030.3	1039.5	1042.7	1052.0
65°	297.9	394.1	499.6	595.8	676.4	735.4	769.6	778.9	791.3	788.2	782.0
67.5°	220.3	291.7	369.2	440.6	496.5	533.7	558.5	580.3	577.2	571.0	567.9
70°	152.1	198.6	266.9	310.3	350.6	387.9	394.1	397.2	400.3	403.4	397.2
72.5°	105.5	139.6	176.9	214.1	238.9	254.4	270.0	273.0	273.0	273.0	270.0
75°	52.8	71.4	105.5	121.0	142.7	149.0	161.3	161.3	170.7	158.2	155.1
77.5°	46.5	55.9	74.5	86.9	96.2	105.5	108.6	117.9	114.8	108.6	111.7
80°	27.9	34.2	46.5	52.8	65.1	68.3	71.4	74.5	71.4	74.5	74.5
82.5°	21.7	24.8	31.1	31.1	40.3	40.3	43.4	43.4	46.5	46.5	46.5
85°	12.4	21.7	18.6	37.2	24.8	24.8	31.1	37.2	31.1	31.1	37.2
87.5°	12.4	12.4	9.3	12.4	12.4	12.4	15.5	18.6	18.6	21.7	18.6
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: P249113

CATALOG NUMBER: LD8B100D010 ER8B100840 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5781.1	5781.1	5781.1	5781.1
2.5°	5790.5	5796.6	5787.4	5784.2
5°	5799.7	5799.7	5793.6	5793.6
7.5°	5799.7	5799.7	5790.5	5784.2
10°	5774.9	5774.9	5765.6	5759.4
12.5°	5728.4	5728.4	5725.2	5716.0
15°	5669.4	5669.4	5657.0	5647.7
17.5°	5588.7	5595.0	5579.5	5579.5
20°	5501.9	5498.8	5486.4	5480.1
22.5°	5411.9	5405.7	5402.5	5383.9
25°	5315.7	5309.5	5300.1	5290.9
27.5°	5151.2	5148.1	5138.8	5126.4
30°	4899.8	4896.7	4884.3	4884.3
32.5°	4574.0	4570.9	4558.5	4561.6
35°	4235.8	4248.2	4242.0	4229.6
37.5°	3953.4	3962.7	3968.9	3962.7
40°	3717.5	3745.5	3748.6	3754.8
42.5°	3466.2	3503.4	3515.9	3522.0
45°	3165.2	3199.3	3227.3	3221.0
47.5°	2858.0	2882.8	2907.6	2889.0
50°	2563.2	2578.7	2588.0	2588.0
52.5°	2283.9	2283.9	2280.8	2283.9
55°	1964.3	1964.3	1951.9	1958.0
57.5°	1629.1	1635.4	1626.0	1610.5
60°	1318.8	1303.3	1297.1	1287.8
62.5°	1027.2	1027.2	1005.4	1033.3
65°	769.6	760.3	750.9	747.8
67.5°	558.5	555.5	546.2	543.0
70°	394.1	381.7	378.6	372.4
72.5°	263.8	263.8	257.6	257.6
75°	161.3	145.9	142.7	145.9
77.5°	111.7	108.6	108.6	105.5
80°	74.5	71.4	77.6	68.3
82.5°	46.5	49.7	46.5	49.7
85°	31.1	37.2	34.2	34.2
87.5°	18.6	18.6	18.6	18.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)