

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: P249107

Luminaire Tested: **LD8B175D010 ER8B175835 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249107  
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: LD8B175D010 ER8B175835 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18590.0 lumens  
Efficiency: N/A  
Efficacy: 104.9 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

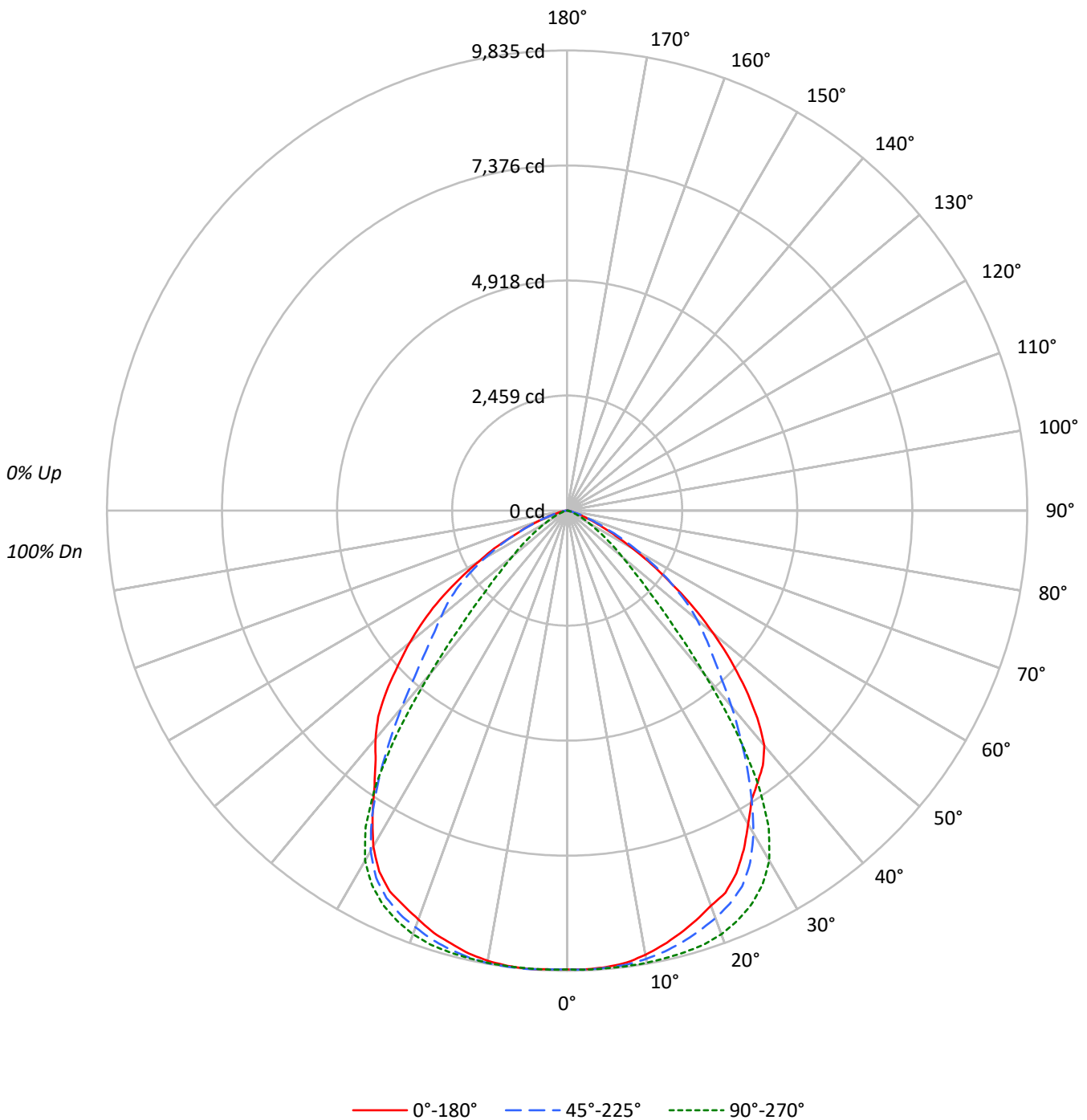
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	302455	302455	302455
5°	303121	303938	304266
10°	301848	307287	305968
15°	298503	311780	305900
20°	294918	316166	305110
25°	291090	316530	305421
30°	275386	307628	295069
35°	267165	267360	270138
40°	263857	183957	256438
45°	235106	110436	238320
50°	195494	73499	210644
55°	146618	50670	178601
60°	99361	33766	134755
65°	59933	21904	92578
70°	33233	11874	56954
75°	15060	5016	29488
80°	13088	5612	20564
85°	14895	7430	20521



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	936.1	5.0
10°-20°	2718.5	14.6
20°-30°	4126.2	22.2
30°-40°	4333.7	23.3
40°-50°	3249.1	17.5
50°-60°	2084.7	11.2
60°-70°	891.8	4.8
70°-80°	210.7	1.1
80°-90°	39.2	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°	7780.8	41.9
0°-40°	12114.5	65.2
0°-60°	17448.3	93.9
0°-90°	18590.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18590.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	9808	9808	9808	9808	9808	
5°	9793	9808	9819	9835	9830	930
15°	9350	9545	9766	9703	9582	2637
25°	8555	8856	9303	9135	8977	3908
35°	7097	6702	7102	7018	7176	4454
45°	5391	4407	2532	4280	5465	4129
55°	2727	2727	942	2843	3322	2474
65°	821	969	300	1248	1269	877
75°	126	147	42	253	248	184
85°	42	26	21	42	58	44
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°	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4
2.5°	9813.7	9824.3	9819.0	9819.0	9813.7	9819.0	9819.0	9829.6	9829.6	9819.0	9813.7
5°	9792.6	9803.2	9803.2	9792.6	9792.6	9819.0	9803.2	9813.7	9813.7	9808.4	9808.4
7.5°	9745.3	9745.3	9766.3	9750.6	9750.6	9766.3	9761.0	9771.6	9782.2	9787.4	9787.4
10°	9640.0	9650.5	9655.8	9655.8	9661.1	9676.8	9687.4	9708.5	9718.9	9729.5	9734.8
12.5°	9508.4	9524.1	9529.4	9524.1	9540.0	9561.0	9587.4	9613.7	9629.5	9650.5	9666.4
15°	9350.4	9350.4	9360.9	9376.8	9387.3	9418.9	9445.2	9476.7	9518.9	9545.3	9571.5
17.5°	9176.7	9187.3	9203.0	9203.0	9224.1	9276.7	9292.5	9339.9	9387.3	9413.6	9466.3
20°	8987.2	8997.6	9013.5	9024.0	9050.3	9092.5	9124.0	9166.1	9218.8	9266.2	9318.8
22.5°	8839.7	8818.7	8829.1	8839.7	8866.1	8903.0	8939.8	8992.4	9045.0	9092.5	9145.1
25°	8555.4	8560.7	8576.5	8587.0	8618.6	8650.2	8692.3	8755.5	8802.9	8855.5	8913.4
27.5°	8171.1	8176.4	8202.7	8202.7	8229.0	8281.6	8307.9	8360.6	8423.9	8476.4	8545.0
30°	7734.1	7744.6	7744.6	7765.7	7781.4	7807.8	7834.1	7886.8	7918.4	7965.8	8060.6
32.5°	7334.0	7344.5	7339.2	7334.0	7318.2	7312.9	7307.6	7318.2	7328.7	7344.5	7381.3
35°	7097.1	7070.7	7049.7	7012.9	6970.7	6918.0	6870.6	6807.5	6749.5	6702.1	6649.6
37.5°	6870.6	6865.4	6833.8	6781.1	6696.9	6602.2	6491.6	6354.7	6217.8	6070.4	5928.3
40°	6554.8	6538.9	6512.6	6439.0	6344.1	6228.3	6081.0	5912.5	5691.3	5464.9	5233.3
42.5°	6017.7	6023.0	5991.4	5933.5	5844.1	5733.4	5580.7	5396.5	5159.6	4891.0	4591.0
45°	5391.2	5391.2	5380.7	5333.3	5270.1	5180.6	5064.8	4912.1	4680.5	4406.6	4085.5
47.5°	4738.4	4743.6	4727.8	4717.4	4691.0	4633.1	4548.9	4433.1	4269.8	4006.5	3685.4
50°	4075.1	4075.1	4101.3	4096.1	4096.1	4075.1	4038.2	3969.7	3827.6	3617.0	3316.9
52.5°	3411.6	3422.2	3438.0	3459.0	3485.3	3527.4	3485.3	3453.7	3364.2	3201.0	2943.1
55°	2727.2	2737.7	2764.0	2800.9	2832.6	2874.7	2885.1	2885.1	2837.7	2727.2	2532.4
57.5°	2142.8	2127.0	2148.1	2179.7	2221.8	2263.9	2295.5	2332.3	2327.1	2253.4	2095.4
60°	1611.1	1616.3	1632.1	1663.7	1695.3	1732.2	1774.3	1805.8	1821.7	1784.8	1684.7
62.5°	1174.1	1174.1	1195.1	1226.7	1242.5	1295.2	1321.5	1337.3	1353.0	1347.7	1284.6
65°	821.4	831.8	842.4	858.2	873.9	905.5	921.3	952.9	963.5	968.7	921.3
67.5°	579.2	563.3	573.9	584.3	600.2	621.3	652.9	652.9	668.6	668.6	637.0
70°	368.6	368.6	373.8	389.6	400.1	405.4	416.0	426.4	442.2	437.0	437.0
72.5°	247.5	242.2	247.5	252.7	258.0	273.7	273.7	279.0	289.6	294.9	273.7
75°	126.4	131.7	142.1	136.9	152.7	142.1	147.4	163.2	157.9	147.4	147.4
77.5°	105.3	105.3	105.3	100.1	110.5	110.5	105.3	115.8	110.5	110.5	105.3
80°	73.7	79.0	73.7	68.4	73.7	68.4	68.4	68.4	68.4	68.4	63.1
82.5°	58.0	47.4	52.7	47.4	52.7	52.7	47.4	42.1	42.1	47.4	42.1
85°	42.1	31.6	36.8	36.8	31.6	31.6	31.6	31.6	31.6	26.3	26.3
87.5°	26.3	15.8	15.8	15.8	21.0	21.0	21.0	15.8	21.0	21.0	10.6
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°	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4
2.5°	9824.3	9819.0	9829.6	9824.3	9824.3	9819.0	9824.3	9819.0	9829.6	9808.4	9813.7
5°	9824.3	9813.7	9819.0	9824.3	9829.6	9819.0	9819.0	9819.0	9829.6	9819.0	9824.3
7.5°	9803.2	9797.9	9813.7	9824.3	9819.0	9813.7	9824.3	9819.0	9829.6	9824.3	9834.7
10°	9761.0	9766.3	9776.9	9792.6	9797.9	9803.2	9813.7	9813.7	9829.6	9808.4	9819.0
12.5°	9697.9	9718.9	9745.3	9755.8	9776.9	9776.9	9787.4	9792.6	9803.2	9797.9	9813.7
15°	9618.9	9645.2	9676.8	9703.2	9729.5	9745.3	9761.0	9766.3	9782.2	9766.3	9771.6
17.5°	9524.1	9555.7	9603.1	9634.7	9676.8	9692.6	9713.6	9724.2	9740.0	9729.5	9734.8
20°	9392.5	9429.4	9482.0	9529.4	9555.7	9592.5	9618.9	9634.7	9645.2	9634.7	9640.0
22.5°	9208.3	9261.0	9329.4	9366.2	9418.9	9450.5	9455.7	9492.6	9518.9	9492.6	9503.1
25°	8992.4	9045.0	9097.7	9176.7	9224.1	9261.0	9297.8	9303.1	9329.4	9324.1	9318.8
27.5°	8634.4	8702.9	8792.3	8855.5	8918.7	8976.6	9018.8	9029.2	9055.6	9045.0	9050.3
30°	8144.7	8218.5	8302.8	8402.7	8492.3	8550.1	8602.8	8639.6	8665.9	8650.2	8644.9
32.5°	7449.8	7523.5	7613.0	7713.0	7818.4	7902.5	7965.8	8013.2	8044.7	8034.2	8007.9
35°	6654.9	6675.9	6733.8	6812.8	6902.2	6991.7	7049.7	7102.3	7139.1	7149.7	7149.7
37.5°	5838.8	5770.4	5728.2	5728.2	5780.8	5817.6	5870.3	5901.9	5959.9	5980.9	5996.7
40°	5049.0	4891.0	4743.6	4633.1	4559.4	4554.1	4554.1	4569.9	4622.6	4691.0	4754.2
42.5°	4343.5	4090.8	3864.4	3659.1	3511.7	3427.5	3390.6	3395.9	3438.0	3501.1	3606.4
45°	3780.2	3464.3	3180.0	2932.5	2732.5	2600.8	2537.7	2532.4	2564.0	2637.7	2753.6
47.5°	3343.2	3006.2	2685.1	2400.7	2185.0	2042.7	1969.1	1948.1	1969.1	2037.5	2174.4
50°	2979.9	2632.5	2300.8	2005.9	1774.3	1626.9	1558.4	1532.1	1558.4	1616.3	1753.2
52.5°	2642.9	2284.9	1974.3	1690.0	1442.6	1316.2	1242.5	1226.7	1242.5	1310.9	1421.6
55°	2253.4	1948.1	1642.6	1358.3	1142.5	1016.2	958.2	942.5	958.2	1021.4	1137.2
57.5°	1869.1	1605.8	1337.3	1079.3	895.1	784.4	731.8	710.7	747.6	789.7	926.6
60°	1511.0	1300.5	1074.0	847.7	695.0	594.9	552.8	547.5	558.1	610.7	705.4
62.5°	1184.7	1010.9	831.8	647.6	521.2	479.1	426.4	421.2	431.7	463.3	537.1
65°	852.9	742.4	605.5	473.8	373.8	315.9	294.9	300.2	310.6	331.7	400.1
67.5°	594.9	515.9	421.2	331.7	258.0	231.6	210.6	205.3	210.6	247.5	284.3
70°	400.1	352.7	284.3	252.7	179.1	142.1	147.4	131.7	152.7	152.7	184.2
72.5°	263.2	231.6	189.5	147.4	126.4	100.1	100.1	94.8	105.3	110.5	136.9
75°	136.9	105.3	105.3	73.7	52.7	26.3	47.4	42.1	36.8	42.1	52.7
77.5°	94.8	79.0	73.7	58.0	52.7	42.1	42.1	42.1	42.1	47.4	52.7
80°	58.0	58.0	42.1	36.8	31.6	26.3	31.6	31.6	31.6	31.6	36.8
82.5°	36.8	31.6	31.6	26.3	26.3	21.0	21.0	21.0	21.0	21.0	31.6
85°	31.6	21.0	21.0	15.8	21.0	36.8	15.8	21.0	21.0	21.0	15.8
87.5°	10.6	15.8	15.8	15.8	10.6	5.3	10.6	15.8	15.8	26.3	21.0
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°	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4	9808.4
2.5°	9824.3	9829.6	9829.6	9824.3	9824.3	9813.7	9834.7	9819.0	9824.3	9845.3	9829.6
5°	9834.7	9840.0	9840.0	9834.7	9834.7	9834.7	9840.0	9840.0	9834.7	9829.6	9840.0
7.5°	9855.9	9850.6	9850.6	9840.0	9840.0	9829.6	9840.0	9824.3	9834.7	9824.3	9840.0
10°	9829.6	9834.7	9829.6	9824.3	9824.3	9819.0	9819.0	9803.2	9808.4	9792.6	9803.2
12.5°	9813.7	9808.4	9808.4	9797.9	9787.4	9776.9	9771.6	9755.8	9755.8	9718.9	9734.8
15°	9771.6	9776.9	9761.0	9740.0	9729.5	9703.2	9692.6	9671.5	9650.5	9624.2	9629.5
17.5°	9734.8	9718.9	9697.9	9676.8	9634.7	9613.7	9592.5	9561.0	9550.4	9518.9	9508.4
20°	9624.2	9613.7	9587.4	9550.4	9524.1	9476.7	9455.7	9424.2	9397.8	9366.2	9350.4
22.5°	9482.0	9471.5	9439.9	9403.0	9360.9	9339.9	9318.8	9261.0	9234.5	9203.0	9197.7
25°	9303.1	9287.2	9255.7	9213.5	9192.4	9134.6	9113.5	9071.3	9060.9	9029.2	9024.0
27.5°	9029.2	9008.2	8971.4	8918.7	8881.8	8845.0	8824.0	8792.3	8781.9	8750.2	8745.0
30°	8618.6	8592.2	8518.5	8497.5	8434.3	8397.5	8397.5	8355.3	8360.6	8339.6	8339.6
32.5°	7971.0	7928.9	7871.0	7828.8	7786.7	7765.7	7765.7	7749.9	7760.4	7760.4	7771.0
35°	7112.8	7055.0	7023.3	6997.0	6997.0	7018.0	7081.3	7097.1	7128.7	7155.0	7176.1
37.5°	6012.4	6007.3	6044.1	6075.7	6154.6	6244.2	6354.7	6449.5	6538.9	6602.2	6665.3
40°	4822.6	4954.3	5059.5	5207.0	5328.0	5501.8	5701.8	5865.1	6017.7	6128.4	6244.2
42.5°	3764.3	3932.8	4154.0	4369.8	4585.7	4822.6	5085.9	5312.3	5512.3	5665.0	5786.1
45°	2932.5	3164.2	3432.7	3706.5	3985.5	4280.4	4554.1	4785.8	4996.4	5154.3	5275.4
47.5°	2363.9	2616.7	2922.0	3222.1	3538.0	3848.6	4154.0	4354.1	4527.7	4654.1	4764.8
50°	1953.2	2221.8	2543.0	2885.1	3201.0	3511.7	3774.9	3969.7	4111.9	4222.4	4290.8
52.5°	1632.1	1916.4	2258.7	2600.8	2916.7	3201.0	3438.0	3585.4	3701.2	3780.2	3843.3
55°	1347.7	1621.6	1942.8	2263.9	2574.5	2843.0	3037.8	3148.4	3237.8	3285.2	3322.1
57.5°	1100.4	1353.0	1647.9	1942.8	2211.2	2432.4	2585.1	2695.6	2737.7	2774.6	2769.3
60°	863.5	1100.4	1368.9	1621.6	1853.2	2032.2	2142.8	2206.0	2237.5	2253.4	2242.8
62.5°	679.2	895.1	1100.4	1321.5	1490.0	1642.6	1748.0	1748.0	1763.7	1769.0	1784.8
65°	505.4	668.6	847.7	1010.9	1147.7	1247.8	1305.7	1321.5	1342.6	1337.3	1326.7
67.5°	373.8	494.9	626.5	747.6	842.4	905.5	947.6	984.6	979.3	968.7	963.5
70°	258.0	337.0	452.8	526.5	594.9	658.2	668.6	673.9	679.2	684.4	673.9
72.5°	179.1	236.9	300.2	363.3	405.4	431.7	458.1	463.3	463.3	463.3	458.1
75°	89.5	121.1	179.1	205.3	242.2	252.7	273.7	273.7	289.6	268.5	263.2
77.5°	79.0	94.8	126.4	147.4	163.2	179.1	184.2	200.1	194.8	184.2	189.5
80°	47.4	58.0	79.0	89.5	110.5	115.8	121.1	126.4	121.1	126.4	126.4
82.5°	36.8	42.1	52.7	52.7	68.4	68.4	73.7	73.7	79.0	79.0	79.0
85°	21.0	36.8	31.6	63.1	42.1	42.1	52.7	63.1	52.7	52.7	63.1
87.5°	21.0	21.0	15.8	21.0	21.0	21.0	26.3	31.6	31.6	36.8	31.6
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: P249107

CATALOG NUMBER: LD8B175D010 ER8B175835 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	9808.4	9808.4	9808.4	9808.4
2.5°	9824.3	9834.7	9819.0	9813.7
5°	9840.0	9840.0	9829.6	9829.6
7.5°	9840.0	9840.0	9824.3	9813.7
10°	9797.9	9797.9	9782.2	9771.6
12.5°	9718.9	9718.9	9713.6	9697.9
15°	9618.9	9618.9	9597.8	9582.1
17.5°	9482.0	9492.6	9466.3	9466.3
20°	9334.6	9329.4	9308.4	9297.8
22.5°	9182.0	9171.4	9166.1	9134.6
25°	9018.8	9008.2	8992.4	8976.6
27.5°	8739.7	8734.5	8718.6	8697.6
30°	8313.2	8307.9	8286.9	8286.9
32.5°	7760.4	7755.1	7734.1	7739.4
35°	7186.5	7207.6	7197.1	7176.1
37.5°	6707.4	6723.3	6733.8	6723.3
40°	6307.3	6354.7	6360.0	6370.5
42.5°	5880.9	5944.0	5965.1	5975.6
45°	5370.1	5428.1	5475.5	5464.9
47.5°	4848.9	4891.0	4933.1	4901.6
50°	4348.8	4375.1	4390.9	4390.9
52.5°	3875.0	3875.0	3869.7	3875.0
55°	3332.7	3332.7	3311.6	3322.1
57.5°	2764.0	2774.6	2758.7	2732.5
60°	2237.5	2211.2	2200.7	2185.0
62.5°	1742.7	1742.7	1705.9	1753.2
65°	1305.7	1289.9	1274.1	1268.8
67.5°	947.6	942.5	926.6	921.3
70°	668.6	647.6	642.3	631.7
72.5°	447.5	447.5	437.0	437.0
75°	273.7	247.5	242.2	247.5
77.5°	189.5	184.2	184.2	179.1
80°	126.4	121.1	131.7	115.8
82.5°	79.0	84.2	79.0	84.2
85°	52.7	63.1	58.0	58.0
87.5°	31.6	31.6	31.6	31.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)