

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: P249323

Luminaire Tested: **LD8B175D010 ER8B175835 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249323  
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 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 3500 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18172.0 lumens  
Efficiency: N/A  
Efficacy: 102.6 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

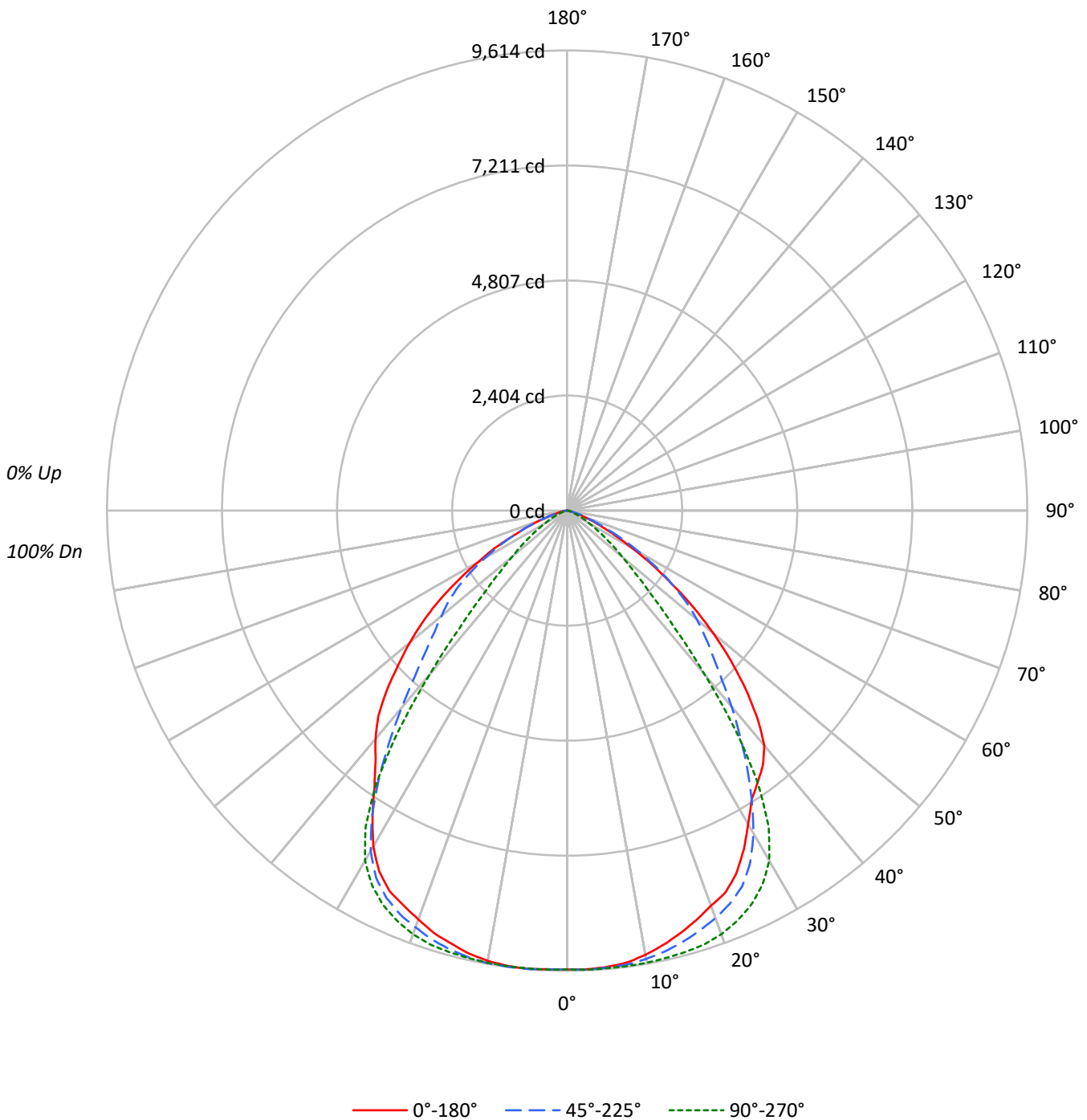
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249323

CATALOG NUMBER: LD8B175D010 ER8B175835 8LBDW0GPH

### Luminous Intensity Polar Plot





TEST NUMBER: P249323

CATALOG NUMBER: LD8B175D010 ER8B175835 8LBDW0GPH

**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°	295655	295655	295655
5°	296305	297104	297426
10°	295059	300379	299089
15°	291789	304770	299023
20°	288286	309055	298249
25°	284544	309412	298555
30°	269194	300713	288436
35°	261157	261349	264063
40°	257923	179818	250673
45°	229820	107954	232960
50°	191095	71844	205909
55°	143323	49530	174585
60°	97122	33007	131720
65°	58584	21408	90498
70°	32484	11604	55673
75°	14714	4909	28821
80°	12786	5487	20102
85°	14577	7253	20061



TEST NUMBER: P249323

CATALOG NUMBER: LD8B175D010 ER8B175835 8LBDW0GPH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	915.0	5.0
10°-20°	2657.4	14.6
20°-30°	4033.4	22.2
30°-40°	4236.3	23.3
40°-50°	3176.1	17.5
50°-60°	2037.8	11.2
60°-70°	871.8	4.8
70°-80°	206.0	1.1
80°-90°	38.3	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°	7605.8	41.9
0°-40°	11842.1	65.2
0°-60°	17056.0	93.9
0°-90°	18172.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18172.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	9588	9588	9588	9588	9588	
5°	9572	9588	9598	9614	9609	909
15°	9140	9331	9547	9485	9367	2578
25°	8363	8656	9094	8929	8775	3821
35°	6938	6551	6943	6860	7015	4354
45°	5270	4308	2476	4184	5342	4036
55°	2666	2666	921	2779	3247	2418
65°	803	947	293	1220	1240	857
75°	124	144	41	247	242	180
85°	41	26	20	41	57	43
90°	0	0	0	0	0	



TEST NUMBER: P249323

CATALOG NUMBER: LD8B175D010 ER8B175835 8LBDW0GPH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9
2.5°	9593.1	9603.4	9598.2	9598.2	9593.1	9598.2	9598.2	9608.6	9608.6	9598.2	9593.1
5°	9572.4	9582.7	9582.7	9572.4	9572.4	9598.2	9582.7	9593.1	9593.1	9587.9	9587.9
7.5°	9526.2	9526.2	9546.7	9531.4	9531.4	9546.7	9541.6	9551.9	9562.2	9567.4	9567.4
10°	9423.2	9433.5	9438.7	9438.7	9443.8	9459.2	9469.5	9490.2	9500.4	9510.7	9515.9
12.5°	9294.6	9310.0	9315.1	9310.0	9325.5	9346.0	9371.8	9397.5	9413.0	9433.5	9449.0
15°	9140.1	9140.1	9150.4	9165.9	9176.2	9207.1	9232.8	9263.6	9304.8	9330.6	9356.3
17.5°	8970.4	8980.7	8996.1	8996.1	9016.7	9068.1	9083.6	9129.9	9176.2	9201.9	9253.4
20°	8785.1	8795.3	8810.8	8821.1	8846.8	8888.0	8918.9	8960.0	9011.5	9057.9	9109.3
22.5°	8640.9	8620.4	8630.6	8640.9	8666.8	8702.8	8738.8	8790.2	8841.7	8888.0	8939.5
25°	8363.0	8368.2	8383.7	8393.9	8424.8	8455.7	8496.9	8558.6	8604.9	8656.4	8713.0
27.5°	7987.4	7992.5	8018.2	8018.2	8043.9	8095.4	8121.1	8172.6	8234.4	8285.8	8352.8
30°	7560.2	7570.4	7570.4	7591.1	7606.5	7632.3	7658.0	7709.5	7740.3	7786.7	7879.3
32.5°	7169.1	7179.3	7174.2	7169.1	7153.6	7148.5	7143.3	7153.6	7163.9	7179.3	7215.3
35°	6937.5	6911.7	6891.2	6855.2	6814.0	6762.5	6716.2	6654.4	6597.8	6551.4	6500.1
37.5°	6716.2	6711.0	6680.1	6628.6	6546.3	6453.7	6345.7	6211.8	6078.0	5933.9	5795.0
40°	6407.4	6391.9	6366.2	6294.2	6201.5	6088.3	5944.2	5779.5	5563.3	5342.0	5115.6
42.5°	5882.4	5887.6	5856.7	5800.0	5712.6	5604.5	5455.3	5275.2	5043.6	4781.0	4487.8
45°	5270.0	5270.0	5259.7	5213.4	5151.6	5064.1	4950.9	4801.7	4575.3	4307.6	3993.6
47.5°	4631.8	4637.0	4621.5	4611.3	4585.5	4528.9	4446.6	4333.4	4173.8	3916.4	3602.5
50°	3983.4	3983.4	4009.1	4004.0	4004.0	3983.4	3947.4	3880.4	3741.5	3535.6	3242.3
52.5°	3334.9	3345.2	3360.7	3381.2	3406.9	3448.1	3406.9	3376.1	3288.6	3129.0	2876.9
55°	2665.9	2676.2	2701.9	2737.9	2768.9	2810.0	2820.2	2820.2	2773.9	2665.9	2475.5
57.5°	2094.7	2079.2	2099.8	2130.7	2171.8	2213.0	2243.9	2279.9	2274.7	2202.7	2048.3
60°	1574.8	1580.0	1595.4	1626.3	1657.2	1693.2	1734.4	1765.2	1780.7	1744.7	1646.9
62.5°	1147.7	1147.7	1168.2	1199.1	1214.6	1266.1	1291.8	1307.2	1322.6	1317.4	1255.7
65°	802.9	813.1	823.4	838.9	854.3	885.1	900.6	931.5	941.8	947.0	900.6
67.5°	566.2	550.7	561.0	571.2	586.7	607.3	638.2	638.2	653.6	653.6	622.7
70°	360.3	360.3	365.4	380.8	391.1	396.3	406.6	416.8	432.3	427.1	427.1
72.5°	241.9	236.7	241.9	247.1	252.2	267.6	267.6	272.8	283.1	288.2	267.6
75°	123.5	128.7	138.9	133.9	149.2	138.9	144.1	159.5	154.4	144.1	144.1
77.5°	102.9	102.9	102.9	97.8	108.0	108.0	102.9	113.2	108.0	108.0	102.9
80°	72.0	77.2	72.0	66.9	72.0	66.9	66.9	66.9	66.9	66.9	61.7
82.5°	56.7	46.3	51.5	46.3	51.5	51.5	46.3	41.2	41.2	46.3	41.2
85°	41.2	30.9	36.0	36.0	30.9	30.9	30.9	30.9	30.9	25.7	25.7
87.5°	25.7	15.5	15.5	15.5	20.5	20.5	20.5	15.5	20.5	20.5	10.3
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: P249323

CATALOG NUMBER: LD8B175D010 ER8B175835 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9
2.5°	9603.4	9598.2	9608.6	9603.4	9603.4	9598.2	9603.4	9598.2	9608.6	9587.9	9593.1
5°	9603.4	9593.1	9598.2	9603.4	9608.6	9598.2	9598.2	9598.2	9608.6	9598.2	9603.4
7.5°	9582.7	9577.6	9593.1	9603.4	9598.2	9593.1	9603.4	9598.2	9608.6	9603.4	9613.6
10°	9541.6	9546.7	9557.1	9572.4	9577.6	9582.7	9593.1	9593.1	9608.6	9587.9	9598.2
12.5°	9479.9	9500.4	9526.2	9536.4	9557.1	9557.1	9567.4	9572.4	9582.7	9577.6	9593.1
15°	9402.7	9428.4	9459.2	9485.0	9510.7	9526.2	9541.6	9546.7	9562.2	9546.7	9551.9
17.5°	9310.0	9340.8	9387.2	9418.0	9459.2	9474.7	9495.2	9505.5	9521.0	9510.7	9515.9
20°	9181.3	9217.4	9268.8	9315.1	9340.8	9376.9	9402.7	9418.0	9428.4	9418.0	9423.2
22.5°	9001.2	9052.7	9119.6	9155.6	9207.1	9238.0	9243.1	9279.1	9304.8	9279.1	9289.5
25°	8790.2	8841.7	8893.2	8970.4	9016.7	9052.7	9088.7	9093.9	9119.6	9114.4	9109.3
27.5°	8440.2	8507.2	8594.6	8656.4	8718.1	8774.8	8816.0	8826.2	8852.0	8841.7	8846.8
30°	7961.6	8033.7	8116.1	8213.8	8301.3	8357.9	8409.4	8445.4	8471.1	8455.7	8450.5
32.5°	7282.3	7354.3	7441.9	7539.6	7642.6	7724.8	7786.7	7833.0	7863.8	7853.5	7827.8
35°	6505.2	6525.8	6582.4	6659.6	6747.0	6834.5	6891.2	6942.6	6978.6	6988.9	6988.9
37.5°	5707.5	5640.6	5599.4	5599.4	5650.8	5686.8	5738.3	5769.2	5825.9	5846.4	5861.9
40°	4935.4	4781.0	4637.0	4528.9	4456.9	4451.7	4451.7	4467.1	4518.6	4585.5	4647.3
42.5°	4245.9	3998.8	3777.5	3576.8	3432.7	3350.4	3314.4	3319.5	3360.7	3422.4	3525.3
45°	3695.2	3386.4	3108.5	2866.6	2671.0	2542.3	2480.6	2475.5	2506.3	2578.3	2691.7
47.5°	3268.0	2938.6	2624.7	2346.8	2135.8	1996.8	1924.8	1904.3	1924.8	1991.7	2125.5
50°	2912.9	2573.3	2249.0	1960.8	1734.4	1590.3	1523.3	1497.6	1523.3	1580.0	1713.7
52.5°	2583.5	2233.6	1929.9	1652.0	1410.1	1286.6	1214.6	1199.1	1214.6	1281.4	1389.6
55°	2202.7	1904.3	1605.7	1327.8	1116.8	993.3	936.6	921.3	936.6	998.5	1111.7
57.5°	1827.1	1569.7	1307.2	1055.0	874.9	766.8	715.4	694.7	730.8	771.9	905.8
60°	1477.0	1271.2	1049.8	828.6	679.4	581.5	540.4	535.2	545.5	597.0	689.6
62.5°	1158.0	988.1	813.1	633.0	509.5	468.3	416.8	411.8	422.0	452.8	525.0
65°	833.8	725.7	591.9	463.2	365.4	308.8	288.2	293.4	303.6	324.3	391.1
67.5°	581.5	504.3	411.8	324.3	252.2	226.4	205.9	200.7	205.9	241.9	277.9
70°	391.1	344.8	277.9	247.1	175.0	138.9	144.1	128.7	149.2	149.2	180.1
72.5°	257.3	226.4	185.2	144.1	123.5	97.8	97.8	92.7	102.9	108.0	133.9
75°	133.9	102.9	102.9	72.0	51.5	25.7	46.3	41.2	36.0	41.2	51.5
77.5°	92.7	77.2	72.0	56.7	51.5	41.2	41.2	41.2	41.2	46.3	51.5
80°	56.7	56.7	41.2	36.0	30.9	25.7	30.9	30.9	30.9	30.9	36.0
82.5°	36.0	30.9	30.9	25.7	25.7	20.5	20.5	20.5	20.5	20.5	30.9
85°	30.9	20.5	20.5	15.5	20.5	36.0	15.5	20.5	20.5	20.5	15.5
87.5°	10.3	15.5	15.5	15.5	10.3	5.2	10.3	15.5	15.5	25.7	20.5
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: P249323

CATALOG NUMBER: LD8B175D010 ER8B175835 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9	9587.9
2.5°	9603.4	9608.6	9608.6	9603.4	9603.4	9593.1	9613.6	9598.2	9603.4	9623.9	9608.6
5°	9613.6	9618.8	9618.8	9613.6	9613.6	9613.6	9618.8	9618.8	9613.6	9608.6	9618.8
7.5°	9634.2	9629.1	9629.1	9618.8	9618.8	9608.6	9618.8	9603.4	9613.6	9603.4	9618.8
10°	9608.6	9613.6	9608.6	9603.4	9603.4	9598.2	9598.2	9582.7	9587.9	9572.4	9582.7
12.5°	9593.1	9587.9	9587.9	9577.6	9567.4	9557.1	9551.9	9536.4	9536.4	9500.4	9515.9
15°	9551.9	9557.1	9541.6	9521.0	9510.7	9485.0	9474.7	9454.0	9433.5	9407.8	9413.0
17.5°	9515.9	9500.4	9479.9	9459.2	9418.0	9397.5	9376.9	9346.0	9335.7	9304.8	9294.6
20°	9407.8	9397.5	9371.8	9335.7	9310.0	9263.6	9243.1	9212.3	9186.5	9155.6	9140.1
22.5°	9268.8	9258.5	9227.6	9191.6	9150.4	9129.9	9109.3	9052.7	9026.9	8996.1	8990.9
25°	9093.9	9078.4	9047.6	9006.4	8985.7	8929.2	8908.5	8867.4	8857.2	8826.2	8821.1
27.5°	8826.2	8805.6	8769.6	8718.1	8682.1	8646.1	8625.6	8594.6	8584.4	8553.4	8548.4
30°	8424.8	8399.0	8327.0	8306.5	8244.6	8208.6	8208.6	8167.5	8172.6	8152.1	8152.1
32.5°	7791.8	7750.6	7694.0	7652.8	7611.6	7591.1	7591.1	7575.6	7585.9	7585.9	7596.3
35°	6952.9	6896.4	6865.4	6839.7	6839.7	6860.2	6922.0	6937.5	6968.4	6994.1	7014.7
37.5°	5877.2	5872.2	5908.2	5939.1	6016.3	6103.8	6211.8	6304.5	6391.9	6453.7	6515.4
40°	4714.2	4842.9	4945.8	5089.9	5208.2	5378.1	5573.6	5733.2	5882.4	5990.6	6103.8
42.5°	3679.7	3844.4	4060.6	4271.5	4482.6	4714.2	4971.6	5192.8	5388.4	5537.6	5656.0
45°	2866.6	3093.0	3355.6	3623.2	3895.9	4184.2	4451.7	4678.2	4884.1	5038.4	5156.8
47.5°	2310.7	2557.8	2856.3	3149.7	3458.4	3762.1	4060.6	4256.2	4425.9	4549.5	4657.6
50°	1909.3	2171.8	2485.8	2820.2	3129.0	3432.7	3690.0	3880.4	4019.4	4127.5	4194.4
52.5°	1595.4	1873.3	2207.9	2542.3	2851.1	3129.0	3360.7	3504.8	3618.0	3695.2	3756.9
55°	1317.4	1585.2	1899.1	2213.0	2516.6	2779.1	2969.5	3077.6	3165.0	3211.4	3247.4
57.5°	1075.7	1322.6	1610.8	1899.1	2161.5	2377.7	2527.0	2635.0	2676.2	2712.2	2707.0
60°	844.1	1075.7	1338.1	1585.2	1811.6	1986.5	2094.7	2156.4	2187.2	2202.7	2192.4
62.5°	663.9	874.9	1075.7	1291.8	1456.5	1605.7	1708.7	1708.7	1724.1	1729.2	1744.7
65°	494.0	653.6	828.6	988.1	1121.9	1219.7	1276.4	1291.8	1312.4	1307.2	1296.9
67.5°	365.4	483.8	612.4	730.8	823.4	885.1	926.3	962.5	957.3	947.0	941.8
70°	252.2	329.4	442.6	514.7	581.5	643.4	653.6	658.7	663.9	669.0	658.7
72.5°	175.0	231.6	293.4	355.1	396.3	422.0	447.8	452.8	452.8	452.8	447.8
75°	87.5	118.4	175.0	200.7	236.7	247.1	267.6	267.6	283.1	262.4	257.3
77.5°	77.2	92.7	123.5	144.1	159.5	175.0	180.1	195.6	190.4	180.1	185.2
80°	46.3	56.7	77.2	87.5	108.0	113.2	118.4	123.5	118.4	123.5	123.5
82.5°	36.0	41.2	51.5	51.5	66.9	66.9	72.0	72.0	77.2	77.2	77.2
85°	20.5	36.0	30.9	61.7	41.2	41.2	51.5	61.7	51.5	51.5	61.7
87.5°	20.5	20.5	15.5	20.5	20.5	20.5	25.7	30.9	30.9	36.0	30.9
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: P249323

CATALOG NUMBER: LD8B175D010 ER8B175835 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	9587.9	9587.9	9587.9	9587.9
2.5°	9603.4	9613.6	9598.2	9593.1
5°	9618.8	9618.8	9608.6	9608.6
7.5°	9618.8	9618.8	9603.4	9593.1
10°	9577.6	9577.6	9562.2	9551.9
12.5°	9500.4	9500.4	9495.2	9479.9
15°	9402.7	9402.7	9382.0	9366.7
17.5°	9268.8	9279.1	9253.4	9253.4
20°	9124.7	9119.6	9099.1	9088.7
22.5°	8975.5	8965.2	8960.0	8929.2
25°	8816.0	8805.6	8790.2	8774.8
27.5°	8543.2	8538.1	8522.6	8502.0
30°	8126.3	8121.1	8100.6	8100.6
32.5°	7585.9	7580.8	7560.2	7565.4
35°	7024.9	7045.6	7035.3	7014.7
37.5°	6556.6	6572.1	6582.4	6572.1
40°	6165.5	6211.8	6217.0	6227.3
42.5°	5748.7	5810.4	5831.0	5841.2
45°	5249.4	5306.0	5352.4	5342.0
47.5°	4739.9	4781.0	4822.2	4791.4
50°	4251.0	4276.7	4292.2	4292.2
52.5°	3787.9	3787.9	3782.7	3787.9
55°	3257.7	3257.7	3237.2	3247.4
57.5°	2701.9	2712.2	2696.7	2671.0
60°	2187.2	2161.5	2151.2	2135.8
62.5°	1703.5	1703.5	1667.5	1713.7
65°	1276.4	1260.9	1245.4	1240.3
67.5°	926.3	921.3	905.8	900.6
70°	653.6	633.0	627.9	617.5
72.5°	437.5	437.5	427.1	427.1
75°	267.6	241.9	236.7	241.9
77.5°	185.2	180.1	180.1	175.0
80°	123.5	118.4	128.7	113.2
82.5°	77.2	82.4	77.2	82.4
85°	51.5	61.7	56.7	56.7
87.5°	30.9	30.9	30.9	30.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)