

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: P248405

Luminaire Tested: **LD8B175D010 ER8B175940 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248405
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B175D010 ER8B175940 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17159.0 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

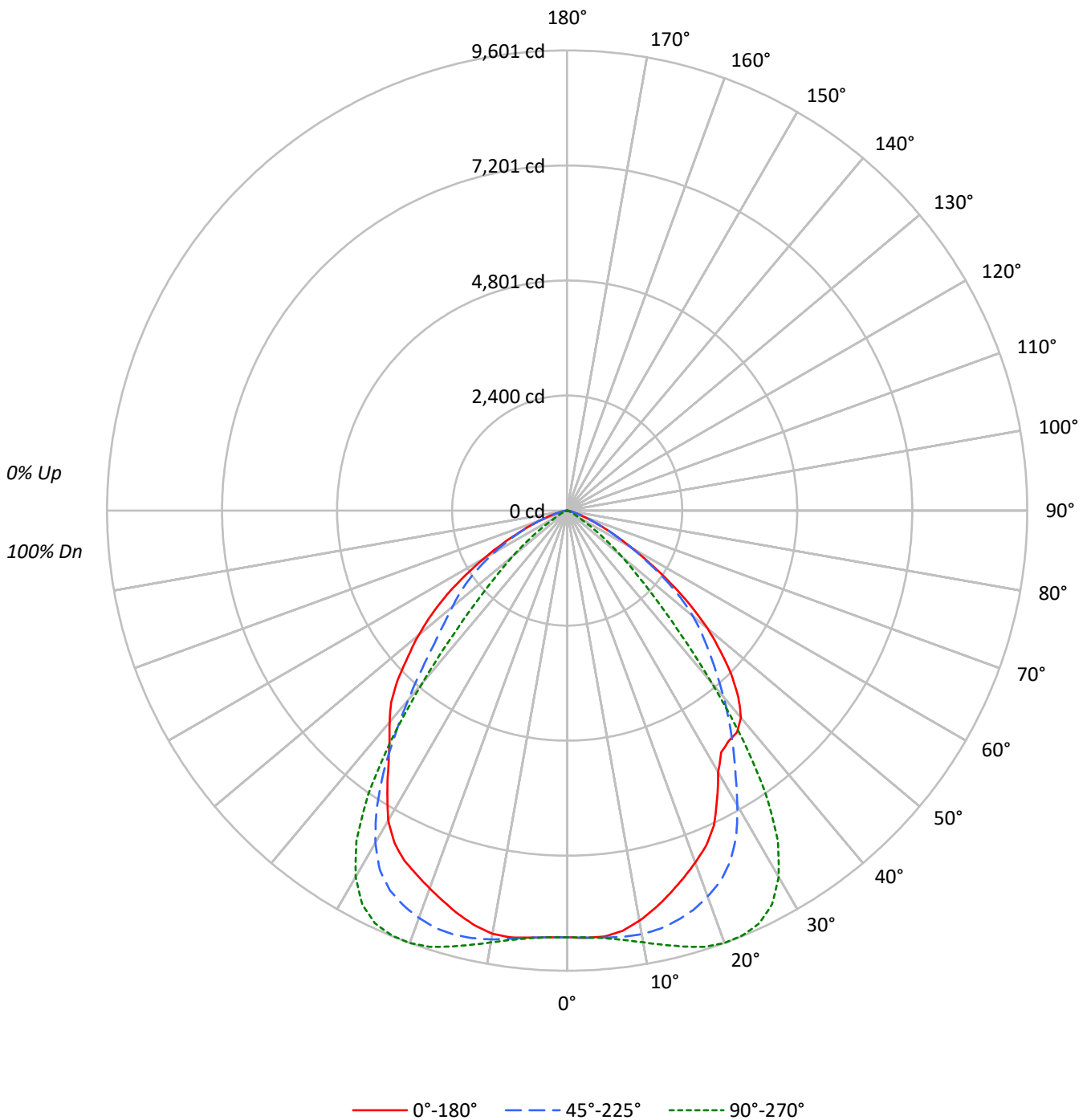
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	274489	274489	274489
5°	276123	277148	276854
10°	272067	286420	280797
15°	264114	300613	278592
20°	256448	315053	275209
25°	246600	323124	273931
30°	224422	314265	265811
35°	221081	272307	244559
40°	227089	188859	231843
45°	211404	114147	217998
50°	183371	70491	194251
55°	140721	36832	164854
60°	95870	14857	124425
65°	59642	7581	85836
70°	32376	4688	52401
75°	16882	2240	30965
80°	7547	2522	16781
85°	5024	1663	15037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	856.0	5.0
10°-20°	2535.9	14.8
20°-30°	3868.8	22.5
30°-40°	4037.2	23.5
40°-50°	3032.4	17.7
50°-60°	1865.8	10.9
60°-70°	759.3	4.4
70°-80°	178.9	1.0
80°-90°	24.6	0.1
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°	7260.8	42.3
0°-40°	11297.9	65.8
0°-60°	16196.2	94.4
0°-90°	17159.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17159.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8902	8902	8902	8902	8902	
5°	8920	8944	8954	8944	8944	844
15°	8273	8854	9416	9157	8727	2331
25°	7248	8060	9497	8746	8051	3295
35°	5873	6038	7234	6686	6497	3708
45°	4848	4196	2618	3907	4999	3699
55°	2618	2485	685	2485	3066	2353
65°	817	827	104	1110	1176	852
75°	142	142	19	250	260	171
85°	14	14	5	33	42	20
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°	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5
2.5°	8925.2	8911.0	8925.2	8925.2	8929.9	8920.4	8925.2	8929.9	8920.4	8920.4	8920.4
5°	8920.4	8911.0	8920.4	8915.7	8925.2	8925.2	8934.7	8934.7	8944.0	8944.0	8958.2
7.5°	8844.8	8826.0	8844.8	8859.1	8868.4	8887.4	8911.0	8929.9	8948.8	8967.7	8991.3
10°	8688.9	8688.9	8703.1	8731.4	8759.7	8792.8	8835.4	8882.6	8929.9	8972.4	9014.9
12.5°	8495.2	8481.0	8509.3	8547.1	8589.7	8641.7	8707.8	8778.7	8854.3	8939.3	9005.5
15°	8273.2	8258.9	8292.0	8329.8	8381.8	8457.4	8537.8	8632.2	8740.9	8854.3	8963.0
17.5°	8046.3	8041.6	8074.7	8126.7	8169.2	8249.5	8353.5	8466.8	8589.7	8740.9	8882.6
20°	7814.9	7810.1	7843.2	7885.7	7942.4	8018.0	8121.9	8254.2	8400.7	8570.8	8736.2
22.5°	7573.8	7578.6	7606.9	7654.2	7701.5	7781.7	7890.4	8022.7	8183.3	8367.6	8551.9
25°	7247.8	7224.2	7262.0	7309.3	7389.6	7455.7	7559.7	7701.5	7866.8	8060.5	8277.9
27.5°	6775.3	6770.6	6803.8	6846.2	6917.1	6997.4	7110.8	7257.3	7432.1	7644.7	7857.3
30°	6302.8	6312.3	6326.5	6369.1	6416.3	6496.6	6610.0	6732.9	6898.2	7101.3	7328.2
32.5°	5981.6	5981.6	6000.5	6028.9	6061.9	6104.5	6184.8	6274.5	6402.1	6543.9	6709.2
35°	5872.9	5854.1	5872.9	5877.6	5882.4	5891.9	5906.0	5934.4	5976.8	6038.3	6099.7
37.5°	5825.7	5811.5	5811.5	5792.7	5769.0	5740.6	5702.8	5660.3	5613.1	5551.6	5504.4
40°	5641.4	5632.0	5622.5	5603.6	5551.6	5495.0	5433.5	5334.3	5225.6	5074.4	4923.3
42.5°	5287.1	5277.6	5272.9	5235.1	5187.8	5121.7	5050.8	4946.9	4809.9	4616.1	4398.8
45°	4847.7	4828.7	4814.6	4781.6	4748.4	4691.7	4625.6	4531.0	4394.0	4195.7	3935.8
47.5°	4337.4	4327.9	4323.2	4309.1	4276.0	4242.8	4200.4	4124.8	4001.9	3812.9	3543.6
50°	3822.4	3803.5	3812.9	3808.2	3794.0	3770.4	3742.0	3690.1	3595.5	3425.5	3179.8
52.5°	3231.7	3231.7	3227.1	3241.2	3245.9	3241.2	3245.9	3189.3	3108.9	2981.3	2773.4
55°	2617.5	2617.5	2631.7	2650.7	2669.5	2674.2	2669.5	2645.9	2589.2	2485.2	2301.0
57.5°	2041.1	2031.7	2060.0	2088.3	2107.3	2126.2	2111.9	2093.1	2060.0	1974.9	1833.2
60°	1554.5	1554.5	1573.3	1592.3	1611.1	1630.1	1625.3	1620.6	1592.3	1535.5	1422.2
62.5°	1143.4	1148.1	1148.1	1162.3	1181.2	1200.1	1214.2	1200.1	1185.9	1148.1	1072.5
65°	817.4	812.6	817.4	831.6	845.8	864.6	874.1	869.4	855.2	826.8	770.2
67.5°	548.1	543.4	562.2	566.9	576.4	595.4	590.6	595.4	590.6	566.9	519.8
70°	359.1	349.6	359.1	354.3	368.6	373.3	382.7	387.4	382.7	368.6	354.3
72.5°	222.1	217.3	222.1	226.8	231.6	236.2	245.7	245.7	240.9	231.6	212.6
75°	141.7	127.5	132.3	122.9	132.3	132.3	141.7	146.5	141.7	141.7	132.3
77.5°	85.1	85.1	85.1	85.1	85.1	85.1	85.1	89.8	94.5	85.1	80.3
80°	42.5	42.5	47.3	47.3	47.3	52.0	47.3	47.3	47.3	52.0	37.8
82.5°	33.1	28.3	28.3	28.3	33.1	28.3	28.3	28.3	28.3	28.3	28.3
85°	14.2	18.8	14.2	9.5	14.2	14.2	18.8	14.2	14.2	14.2	18.8
87.5°	4.7	4.7	0.0	0.0	0.0	4.7	0.0	4.7	4.7	9.5	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5
2.5°	8925.2	8915.7	8915.7	8911.0	8920.4	8911.0	8915.7	8911.0	8911.0	8920.4	8911.0
5°	8958.2	8963.0	8953.5	8948.8	8963.0	8963.0	8963.0	8953.5	8953.5	8958.2	8953.5
7.5°	9005.5	9014.9	9019.6	9024.4	9033.9	9038.6	9038.6	9033.9	9029.1	9043.3	9024.4
10°	9057.4	9071.7	9100.0	9114.2	9137.8	9137.8	9147.3	9147.3	9137.8	9147.3	9142.5
12.5°	9038.6	9123.6	9170.8	9203.9	9237.0	9265.3	9274.8	9279.5	9274.8	9293.7	9274.8
15°	9071.7	9142.5	9218.1	9274.8	9336.2	9369.2	9378.7	9416.5	9426.0	9430.7	9402.4
17.5°	9019.6	9147.3	9227.5	9312.6	9402.4	9463.8	9520.5	9544.1	9548.9	9558.3	9520.5
20°	8901.5	9043.3	9166.1	9289.0	9392.9	9487.4	9534.7	9600.8	9582.0	9619.8	9567.7
22.5°	8740.9	8901.5	9057.4	9218.1	9326.8	9440.2	9539.4	9586.6	9610.3	9610.3	9553.5
25°	8485.8	8674.8	8844.8	9010.2	9175.6	9312.6	9426.0	9496.9	9511.1	9506.3	9440.2
27.5°	8088.9	8292.0	8490.5	8679.5	8882.6	9043.3	9175.6	9260.6	9284.3	9284.3	9213.4
30°	7540.8	7758.1	7951.9	8178.6	8386.6	8566.1	8750.4	8826.0	8868.4	8868.4	8788.2
32.5°	6888.7	7073.0	7252.6	7474.6	7701.5	7904.6	8079.4	8183.3	8235.3	8230.6	8159.7
35°	6180.1	6269.8	6406.9	6572.2	6775.3	6964.4	7134.4	7233.7	7323.4	7318.7	7252.6
37.5°	5471.3	5447.7	5461.9	5523.3	5650.8	5783.2	5915.4	6010.0	6085.5	6118.7	6104.5
40°	4776.8	4653.9	4535.8	4493.3	4502.7	4550.0	4620.9	4691.7	4776.8	4819.4	4838.2
42.5°	4153.1	3945.2	3737.3	3581.4	3491.6	3463.3	3496.3	3519.9	3571.9	3633.3	3694.8
45°	3652.3	3373.6	3099.5	2858.5	2707.3	2617.5	2598.6	2617.5	2645.9	2707.3	2787.7
47.5°	3241.2	2915.2	2608.1	2338.8	2116.7	1998.6	1965.6	1956.1	1984.4	2041.1	2149.7
50°	2877.4	2551.4	2211.2	1899.3	1667.9	1535.5	1488.3	1469.4	1502.4	1545.0	1644.2
52.5°	2480.5	2159.2	1809.6	1507.2	1266.3	1129.3	1077.2	1048.9	1067.8	1124.5	1223.7
55°	2050.5	1752.9	1436.3	1124.5	893.0	765.4	703.9	685.1	703.9	765.4	864.6
57.5°	1620.6	1370.2	1105.6	812.6	604.7	477.2	415.7	396.9	448.9	472.5	576.4
60°	1266.3	1063.1	836.3	595.4	415.7	316.5	255.1	240.9	264.6	307.1	392.1
62.5°	949.7	822.1	642.6	425.2	307.1	203.1	170.1	156.0	170.1	203.1	269.4
65°	689.8	590.6	448.9	311.8	207.9	151.2	113.4	103.9	118.2	141.7	198.5
67.5°	472.5	396.9	311.8	217.3	141.7	94.5	80.3	80.3	85.1	103.9	146.5
70°	307.1	259.9	198.5	141.7	94.5	70.9	61.4	52.0	61.4	75.6	99.2
72.5°	193.8	165.3	127.5	99.2	70.9	52.0	42.5	37.8	47.3	56.7	75.6
75°	118.2	89.8	66.1	52.0	37.8	37.8	37.8	18.8	23.6	37.8	47.3
77.5°	70.9	61.4	52.0	42.5	33.1	18.8	18.8	18.8	23.6	28.3	42.5
80°	37.8	33.1	23.6	23.6	18.8	14.2	18.8	14.2	9.5	23.6	28.3
82.5°	23.6	18.8	18.8	18.8	23.6	9.5	14.2	9.5	14.2	18.8	14.2
85°	14.2	14.2	14.2	9.5	23.6	9.5	9.5	4.7	4.7	9.5	9.5
87.5°	0.0	4.7	4.7	0.0	4.7	0.0	4.7	4.7	4.7	4.7	4.7
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°	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5	8901.5
2.5°	8915.7	8911.0	8915.7	8911.0	8911.0	8911.0	8915.7	8915.7	8911.0	8911.0	8920.4
5°	8953.5	8953.5	8953.5	8948.8	8944.0	8944.0	8953.5	8953.5	8939.3	8953.5	8953.5
7.5°	9033.9	9019.6	9033.9	9014.9	9005.5	9010.2	9014.9	9005.5	8996.0	9000.8	9000.8
10°	9137.8	9123.6	9123.6	9109.5	9095.2	9085.8	9076.4	9052.7	9029.1	9024.4	9005.5
12.5°	9260.6	9237.0	9222.9	9194.4	9170.8	9137.8	9109.5	9071.7	9024.4	8991.3	8958.2
15°	9383.5	9345.6	9312.6	9265.3	9213.4	9156.6	9095.2	9033.9	8958.2	8892.1	8835.4
17.5°	9482.6	9430.7	9369.2	9293.7	9218.1	9133.0	9043.3	8953.5	8844.8	8759.7	8693.6
20°	9515.7	9440.2	9359.9	9260.6	9161.4	9043.3	8929.9	8811.8	8688.9	8599.2	8523.6
22.5°	9473.3	9383.5	9284.3	9180.3	9048.0	8920.4	8788.2	8651.1	8542.4	8419.6	8348.8
25°	9355.1	9246.5	9137.8	9014.9	8887.4	8745.6	8603.9	8462.2	8329.8	8263.7	8174.0
27.5°	9114.2	8996.0	8877.9	8750.4	8603.9	8462.2	8315.7	8178.6	8065.3	7975.5	7923.6
30°	8688.9	8551.9	8414.9	8277.9	8150.3	8003.8	7866.8	7753.4	7640.0	7569.1	7517.2
32.5°	8036.9	7914.1	7777.1	7644.7	7526.7	7403.8	7290.4	7191.2	7110.8	7063.5	7025.7
35°	7158.1	7035.2	6931.3	6836.8	6737.5	6685.6	6614.8	6558.0	6524.9	6506.1	6501.3
37.5°	6052.4	5981.6	5948.5	5929.7	5910.7	5896.6	5906.0	5929.7	5948.5	5981.6	6019.4
40°	4871.3	4932.7	4951.6	5017.7	5079.1	5159.5	5249.3	5353.2	5438.2	5546.9	5622.5
42.5°	3794.0	3907.4	4039.7	4181.4	4332.6	4479.1	4658.7	4824.0	4975.2	5112.2	5230.3
45°	2915.2	3090.0	3288.5	3491.6	3694.8	3907.4	4124.8	4327.9	4507.4	4653.9	4776.8
47.5°	2272.6	2466.4	2721.5	2971.9	3217.6	3468.0	3708.9	3921.5	4072.8	4214.5	4323.2
50°	1800.1	2022.2	2301.0	2589.2	2858.5	3123.0	3378.2	3576.7	3727.9	3841.3	3921.5
52.5°	1393.8	1658.4	1941.9	2244.3	2532.5	2820.7	3056.9	3241.2	3364.1	3463.3	3524.7
55°	1039.4	1299.3	1601.7	1913.5	2206.5	2485.2	2707.3	2868.0	2976.7	3033.3	3066.4
57.5°	751.2	987.5	1289.8	1601.7	1866.3	2130.9	2310.4	2456.9	2518.3	2551.4	2565.6
60°	548.1	765.4	1034.7	1304.1	1554.5	1767.1	1923.0	2022.2	2069.5	2088.3	2083.6
62.5°	401.6	590.6	822.1	1048.9	1252.0	1426.8	1549.7	1615.9	1639.6	1648.9	1634.8
65°	307.1	453.5	652.0	826.8	982.8	1110.3	1200.1	1242.7	1256.8	1252.0	1242.7
67.5°	226.8	340.2	486.7	619.0	732.4	831.6	878.9	916.7	926.0	911.9	897.7
70°	160.7	250.4	354.3	444.2	529.1	585.9	637.8	642.6	642.6	637.8	628.4
72.5°	113.4	174.8	240.9	302.4	354.3	396.9	415.7	429.9	425.2	420.5	411.1
75°	75.6	108.7	174.8	189.0	236.2	250.4	269.4	269.4	274.0	259.9	259.9
77.5°	47.3	75.6	103.9	122.9	141.7	160.7	170.1	170.1	174.8	170.1	170.1
80°	28.3	47.3	56.7	85.1	85.1	99.2	103.9	108.7	99.2	113.4	99.2
82.5°	18.8	28.3	42.5	42.5	52.0	61.4	61.4	66.1	66.1	61.4	61.4
85°	14.2	18.8	23.6	28.3	28.3	33.1	28.3	28.3	33.1	37.8	33.1
87.5°	4.7	9.5	4.7	9.5	9.5	18.8	14.2	14.2	14.2	18.8	18.8
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: P248405

CATALOG NUMBER: LD8B175D010 ER8B175940 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8901.5	8901.5	8901.5	8901.5
2.5°	8911.0	8915.7	8911.0	8911.0
5°	8953.5	8948.8	8953.5	8944.0
7.5°	8986.6	8986.6	8981.8	8981.8
10°	8986.6	8967.7	8967.7	8967.7
12.5°	8915.7	8892.1	8877.9	8868.4
15°	8792.8	8750.4	8731.4	8726.7
17.5°	8632.2	8594.4	8570.8	8556.6
20°	8448.0	8410.1	8381.8	8386.6
22.5°	8287.3	8244.8	8225.9	8216.4
25°	8126.7	8074.7	8060.5	8051.1
27.5°	7866.8	7838.5	7824.2	7810.1
30°	7469.9	7455.7	7432.1	7465.2
32.5°	7011.6	6987.9	6969.1	6983.3
35°	6506.1	6491.9	6506.1	6496.6
37.5°	6043.1	6057.2	6076.1	6085.5
40°	5679.2	5731.2	5750.1	5759.5
42.5°	5315.4	5376.8	5414.6	5438.2
45°	4866.5	4927.9	4970.5	4998.9
47.5°	4403.5	4455.5	4498.0	4493.3
50°	3983.0	4011.4	4030.2	4049.2
52.5°	3557.7	3557.7	3562.5	3562.5
55°	3075.9	3066.4	3061.7	3066.4
57.5°	2546.6	2537.3	2532.5	2518.3
60°	2064.8	2036.4	2017.5	2017.5
62.5°	1615.9	1582.8	1568.7	1563.9
65°	1214.2	1209.5	1181.2	1176.4
67.5°	878.9	859.9	841.0	845.8
70°	619.0	590.6	590.6	581.2
72.5°	401.6	387.4	382.7	382.7
75°	250.4	250.4	240.9	259.9
77.5°	165.3	165.3	160.7	165.3
80°	99.2	99.2	99.2	94.5
82.5°	61.4	66.1	61.4	61.4
85°	33.1	37.8	28.3	42.5
87.5°	18.8	23.6	18.8	23.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)