

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: P249584

Luminaire Tested: **LD8B175D010 ER8B175935 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249584
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 ER8B175935 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 3500 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15675.0 lumens
Efficiency: N/A
Efficacy: 88.5 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

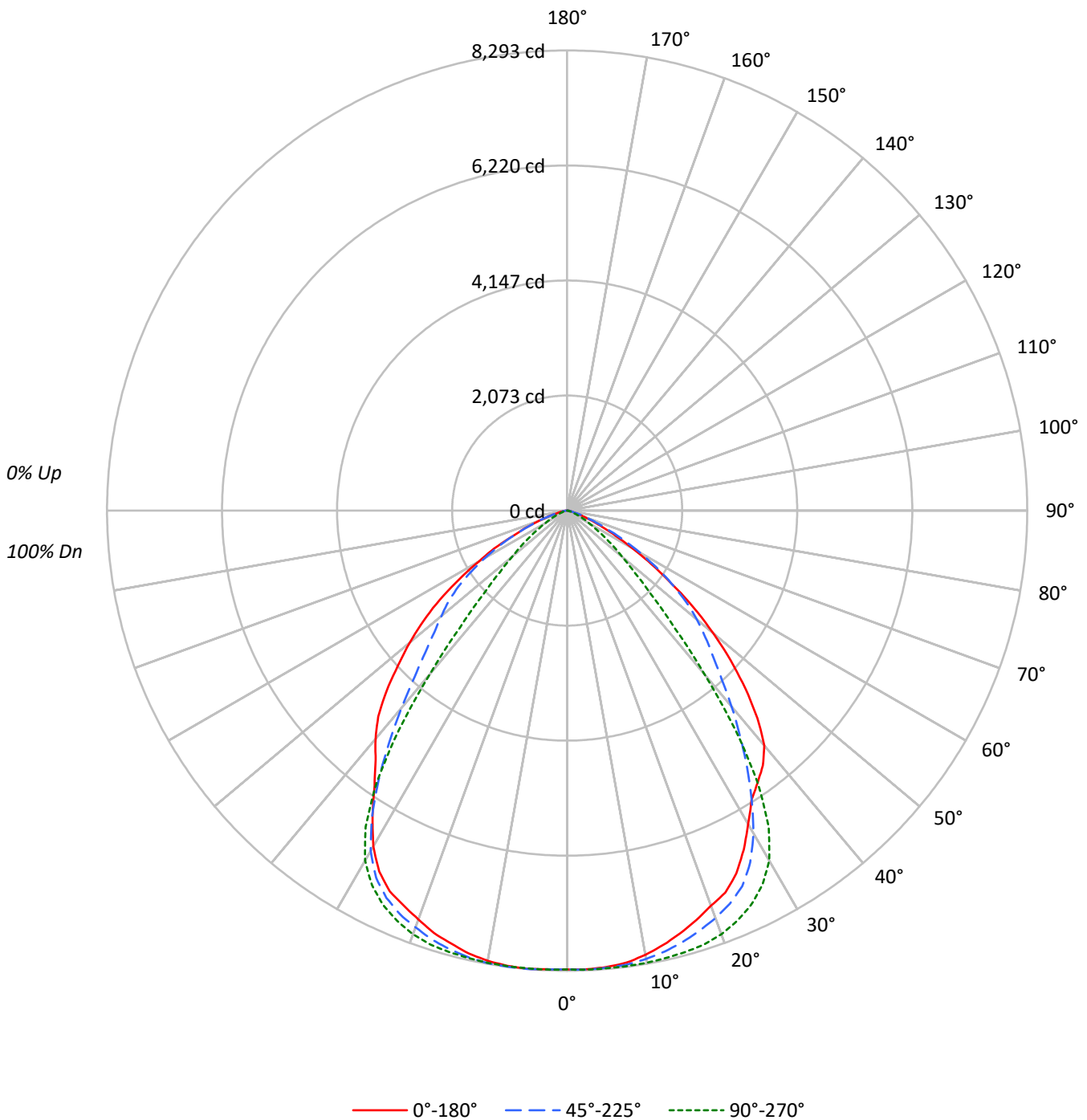
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	255029	255029	255029
5°	255591	256278	256554
10°	254517	259104	257992
15°	251696	262892	257934
20°	248674	266588	257269
25°	245447	266895	257532
30°	232206	259391	248802
35°	225270	225436	227777
40°	222480	155111	216228
45°	198243	93119	200951
50°	164839	61976	177614
55°	123625	42724	150597
60°	83776	28468	113626
65°	50536	18467	78058
70°	28022	10008	48028
75°	12701	4230	24865
80°	11028	4724	17349
85°	12560	6262	17301



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	789.3	5.0
10°-20°	2292.2	14.6
20°-30°	3479.2	22.2
30°-40°	3654.2	23.3
40°-50°	2739.7	17.5
50°-60°	1757.8	11.2
60°-70°	752.0	4.8
70°-80°	177.7	1.1
80°-90°	33.1	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°	6560.7	41.9
0°-40°	10214.9	65.2
0°-60°	14712.3	93.9
0°-90°	15675.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15675.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8270	8270	8270	8270	8270	
5°	8257	8270	8279	8293	8288	784
15°	7884	8048	8235	8182	8080	2224
25°	7214	7467	7844	7702	7569	3296
35°	5984	5651	5989	5918	6051	3756
45°	4546	3716	2135	3609	4608	3481
55°	2300	2300	795	2397	2801	2086
65°	693	817	253	1052	1070	739
75°	107	124	36	213	209	155
85°	36	22	18	36	49	37
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°	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4
2.5°	8274.9	8283.8	8279.3	8279.3	8274.9	8279.3	8279.3	8288.2	8288.2	8279.3	8274.9
5°	8257.1	8266.0	8266.0	8257.1	8257.1	8279.3	8266.0	8274.9	8274.9	8270.4	8270.4
7.5°	8217.2	8217.2	8234.9	8221.7	8221.7	8234.9	8230.5	8239.4	8248.3	8252.7	8252.7
10°	8128.4	8137.3	8141.7	8141.7	8146.2	8159.4	8168.3	8186.1	8194.9	8203.9	8208.3
12.5°	8017.5	8030.7	8035.2	8030.7	8044.1	8061.8	8084.0	8106.2	8119.6	8137.3	8150.6
15°	7884.2	7884.2	7893.1	7906.4	7915.3	7942.0	7964.1	7990.7	8026.3	8048.5	8070.7
17.5°	7737.8	7746.7	7759.9	7759.9	7777.7	7822.0	7835.4	7875.4	7915.3	7937.5	7981.9
20°	7578.0	7586.8	7600.1	7609.0	7631.2	7666.7	7693.3	7728.8	7773.3	7813.2	7857.6
22.5°	7453.6	7435.9	7444.7	7453.6	7475.9	7506.9	7538.0	7582.3	7626.7	7666.7	7711.1
25°	7213.9	7218.3	7231.7	7240.5	7267.2	7293.8	7329.3	7382.6	7422.5	7467.0	7515.7
27.5°	6889.8	6894.3	6916.5	6916.5	6938.6	6983.0	7005.2	7049.6	7103.0	7147.3	7205.1
30°	6521.4	6530.2	6530.2	6548.0	6561.3	6583.5	6605.7	6650.1	6676.7	6716.7	6796.6
32.5°	6184.0	6192.8	6188.4	6184.0	6170.6	6166.2	6161.7	6170.6	6179.6	6192.8	6223.9
35°	5984.2	5962.0	5944.3	5913.2	5877.7	5833.3	5793.3	5740.1	5691.2	5651.2	5606.9
37.5°	5793.3	5788.8	5762.2	5717.8	5646.8	5566.9	5473.7	5358.3	5242.8	5118.5	4998.7
40°	5526.9	5513.6	5491.4	5429.3	5349.4	5251.7	5127.4	4985.4	4798.9	4608.0	4412.7
42.5°	5074.1	5078.6	5051.9	5003.1	4927.7	4834.4	4705.7	4550.3	4350.6	4124.1	3871.1
45°	4545.9	4545.9	4537.0	4497.0	4443.8	4368.3	4270.6	4141.9	3946.6	3715.7	3444.9
47.5°	3995.4	3999.8	3986.5	3977.7	3955.4	3906.6	3835.6	3737.9	3600.3	3378.3	3107.5
50°	3436.1	3436.1	3458.2	3453.8	3453.8	3436.1	3405.0	3347.2	3227.4	3049.8	2796.8
52.5°	2876.7	2885.6	2898.9	2916.6	2938.8	2974.3	2938.8	2912.2	2836.7	2699.1	2481.6
55°	2299.5	2308.5	2330.6	2361.7	2388.4	2423.9	2432.7	2432.7	2392.7	2299.5	2135.3
57.5°	1806.8	1793.5	1811.3	1837.9	1873.4	1908.9	1935.6	1966.6	1962.2	1900.0	1766.9
60°	1358.4	1362.9	1376.1	1402.9	1429.5	1460.5	1496.1	1522.7	1536.0	1505.0	1420.6
62.5°	990.0	990.0	1007.7	1034.3	1047.7	1092.1	1114.3	1127.6	1140.9	1136.4	1083.2
65°	692.6	701.4	710.3	723.6	736.9	763.5	776.9	803.5	812.4	816.8	776.9
67.5°	488.4	475.0	483.9	492.7	506.1	523.9	550.5	550.5	563.8	563.8	537.1
70°	310.8	310.8	315.2	328.5	337.4	341.8	350.7	359.5	372.9	368.4	368.4
72.5°	208.7	204.2	208.7	213.1	217.6	230.8	230.8	235.3	244.2	248.6	230.8
75°	106.6	111.0	119.8	115.5	128.7	119.8	124.3	137.6	133.2	124.3	124.3
77.5°	88.7	88.7	88.7	84.4	93.2	93.2	88.7	97.7	93.2	93.2	88.7
80°	62.1	66.6	62.1	57.7	62.1	57.7	57.7	57.7	57.7	57.7	53.2
82.5°	48.9	40.0	44.4	40.0	44.4	44.4	40.0	35.5	35.5	40.0	35.5
85°	35.5	26.6	31.1	31.1	26.6	26.6	26.6	26.6	26.6	22.2	22.2
87.5°	22.2	13.4	13.4	13.4	17.7	17.7	17.7	13.4	17.7	17.7	8.9
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°	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4
2.5°	8283.8	8279.3	8288.2	8283.8	8283.8	8279.3	8283.8	8279.3	8288.2	8270.4	8274.9
5°	8283.8	8274.9	8279.3	8283.8	8288.2	8279.3	8279.3	8279.3	8288.2	8279.3	8283.8
7.5°	8266.0	8261.5	8274.9	8283.8	8279.3	8274.9	8283.8	8279.3	8288.2	8283.8	8292.6
10°	8230.5	8234.9	8243.8	8257.1	8261.5	8266.0	8274.9	8274.9	8288.2	8270.4	8279.3
12.5°	8177.2	8194.9	8217.2	8226.0	8243.8	8243.8	8252.7	8257.1	8266.0	8261.5	8274.9
15°	8110.7	8132.8	8159.4	8181.7	8203.9	8217.2	8230.5	8234.9	8248.3	8234.9	8239.4
17.5°	8030.7	8057.3	8097.3	8123.9	8159.4	8172.8	8190.5	8199.4	8212.8	8203.9	8208.3
20°	7919.7	7950.9	7995.2	8035.2	8057.3	8088.4	8110.7	8123.9	8132.8	8123.9	8128.4
22.5°	7764.4	7808.8	7866.5	7897.5	7942.0	7968.6	7973.0	8004.1	8026.3	8004.1	8013.0
25°	7582.3	7626.7	7671.2	7737.8	7777.7	7808.8	7839.9	7844.3	7866.5	7862.0	7857.6
27.5°	7280.5	7338.2	7413.6	7467.0	7520.2	7569.1	7604.6	7613.4	7635.6	7626.7	7631.2
30°	6867.6	6929.8	7000.9	7085.1	7160.6	7209.4	7253.8	7284.9	7307.1	7293.8	7289.4
32.5°	6281.7	6343.8	6419.3	6503.6	6592.4	6663.4	6716.7	6756.7	6783.3	6774.4	6752.2
35°	5611.3	5629.1	5677.9	5744.5	5819.9	5895.4	5944.3	5988.6	6019.7	6028.6	6028.6
37.5°	4923.2	4865.5	4830.0	4830.0	4874.3	4905.4	4949.8	4976.5	5025.3	5043.0	5056.4
40°	4257.3	4124.1	3999.8	3906.6	3844.5	3840.0	3840.0	3853.3	3897.7	3955.4	4008.7
42.5°	3662.4	3449.3	3258.5	3085.3	2961.1	2890.0	2859.0	2863.4	2898.9	2952.2	3040.9
45°	3187.4	2921.1	2681.4	2472.7	2304.0	2193.0	2139.8	2135.3	2161.9	2224.1	2321.8
47.5°	2819.0	2534.8	2264.0	2024.3	1842.4	1722.4	1660.3	1642.6	1660.3	1718.0	1833.4
50°	2512.7	2219.7	1940.0	1691.4	1496.1	1371.8	1314.0	1291.9	1314.0	1362.9	1478.3
52.5°	2228.5	1926.6	1664.8	1425.0	1216.4	1109.8	1047.7	1034.3	1047.7	1105.3	1198.7
55°	1900.0	1642.6	1385.1	1145.3	963.4	856.8	807.9	794.7	807.9	861.3	958.9
57.5°	1576.0	1354.0	1127.6	910.0	754.7	661.4	617.1	599.3	630.3	665.9	781.3
60°	1274.0	1096.5	905.6	714.7	586.0	501.6	466.1	461.6	470.6	515.0	594.8
62.5°	998.9	852.4	701.4	546.0	439.5	404.0	359.5	355.2	364.0	390.6	452.8
65°	719.2	626.0	510.5	399.5	315.2	266.3	248.6	253.1	261.9	279.7	337.4
67.5°	501.6	435.0	355.2	279.7	217.6	195.3	177.6	173.1	177.6	208.7	239.7
70°	337.4	297.4	239.7	213.1	151.0	119.8	124.3	111.0	128.7	128.7	155.3
72.5°	221.9	195.3	159.8	124.3	106.6	84.4	84.4	79.9	88.7	93.2	115.5
75°	115.5	88.7	88.7	62.1	44.4	22.2	40.0	35.5	31.1	35.5	44.4
77.5°	79.9	66.6	62.1	48.9	44.4	35.5	35.5	35.5	35.5	40.0	44.4
80°	48.9	48.9	35.5	31.1	26.6	22.2	26.6	26.6	26.6	26.6	31.1
82.5°	31.1	26.6	26.6	22.2	22.2	17.7	17.7	17.7	17.7	17.7	26.6
85°	26.6	17.7	17.7	13.4	17.7	31.1	13.4	17.7	17.7	17.7	13.4
87.5°	8.9	13.4	13.4	13.4	8.9	4.5	8.9	13.4	13.4	22.2	17.7
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°	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4	8270.4
2.5°	8283.8	8288.2	8288.2	8283.8	8283.8	8274.9	8292.6	8279.3	8283.8	8301.5	8288.2
5°	8292.6	8297.1	8297.1	8292.6	8292.6	8292.6	8297.1	8297.1	8292.6	8288.2	8297.1
7.5°	8310.4	8306.0	8306.0	8297.1	8297.1	8288.2	8297.1	8283.8	8292.6	8283.8	8297.1
10°	8288.2	8292.6	8288.2	8283.8	8283.8	8279.3	8279.3	8266.0	8270.4	8257.1	8266.0
12.5°	8274.9	8270.4	8270.4	8261.5	8252.7	8243.8	8239.4	8226.0	8226.0	8194.9	8208.3
15°	8239.4	8243.8	8230.5	8212.8	8203.9	8181.7	8172.8	8155.0	8137.3	8115.1	8119.6
17.5°	8208.3	8194.9	8177.2	8159.4	8123.9	8106.2	8088.4	8061.8	8052.9	8026.3	8017.5
20°	8115.1	8106.2	8084.0	8052.9	8030.7	7990.7	7973.0	7946.4	7924.1	7897.5	7884.2
22.5°	7995.2	7986.3	7959.7	7928.6	7893.1	7875.4	7857.6	7808.8	7786.5	7759.9	7755.5
25°	7844.3	7831.0	7804.3	7768.8	7751.0	7702.2	7684.4	7648.9	7640.1	7613.4	7609.0
27.5°	7613.4	7595.7	7564.6	7520.2	7489.1	7458.0	7440.3	7413.6	7404.8	7378.1	7373.8
30°	7267.2	7244.9	7182.8	7165.1	7111.8	7080.7	7080.7	7045.2	7049.6	7031.9	7031.9
32.5°	6721.1	6685.6	6636.8	6601.2	6565.7	6548.0	6548.0	6534.6	6543.6	6543.6	6552.5
35°	5997.5	5948.7	5922.0	5899.9	5899.9	5917.6	5970.9	5984.2	6010.9	6033.0	6050.8
37.5°	5069.6	5065.3	5096.4	5123.0	5189.6	5265.1	5358.3	5438.2	5513.6	5566.9	5620.1
40°	4066.4	4177.4	4266.2	4390.5	4492.5	4639.1	4807.8	4945.4	5074.1	5167.4	5265.1
42.5°	3174.1	3316.1	3502.7	3684.6	3866.6	4066.4	4288.4	4479.3	4648.0	4776.7	4878.8
45°	2472.7	2668.0	2894.5	3125.3	3360.6	3609.2	3840.0	4035.3	4212.9	4346.1	4448.2
47.5°	1993.2	2206.3	2463.8	2716.9	2983.2	3245.1	3502.7	3671.3	3817.8	3924.3	4017.6
50°	1646.9	1873.4	2144.2	2432.7	2699.1	2961.1	3183.0	3347.2	3467.1	3560.3	3618.0
52.5°	1376.1	1615.9	1904.5	2193.0	2459.3	2699.1	2898.9	3023.2	3120.8	3187.4	3240.7
55°	1136.4	1367.3	1638.1	1908.9	2170.8	2397.2	2561.4	2654.7	2730.1	2770.1	2801.2
57.5°	927.9	1140.9	1389.5	1638.1	1864.5	2051.0	2179.7	2272.9	2308.5	2339.5	2335.1
60°	728.1	927.9	1154.2	1367.3	1562.6	1713.5	1806.8	1860.1	1886.7	1900.0	1891.1
62.5°	572.7	754.7	927.9	1114.3	1256.3	1385.1	1473.9	1473.9	1487.2	1491.6	1505.0
65°	426.1	563.8	714.7	852.4	967.7	1052.1	1101.0	1114.3	1132.1	1127.6	1118.7
67.5°	315.2	417.3	528.2	630.3	710.3	763.5	799.0	830.2	825.7	816.8	812.4
70°	217.6	284.2	381.8	443.9	501.6	555.0	563.8	568.2	572.7	577.1	568.2
72.5°	151.0	199.8	253.1	306.3	341.8	364.0	386.3	390.6	390.6	390.6	386.3
75°	75.5	102.1	151.0	173.1	204.2	213.1	230.8	230.8	244.2	226.4	221.9
77.5°	66.6	79.9	106.6	124.3	137.6	151.0	155.3	168.7	164.2	155.3	159.8
80°	40.0	48.9	66.6	75.5	93.2	97.7	102.1	106.6	102.1	106.6	106.6
82.5°	31.1	35.5	44.4	44.4	57.7	57.7	62.1	62.1	66.6	66.6	66.6
85°	17.7	31.1	26.6	53.2	35.5	35.5	44.4	53.2	44.4	44.4	53.2
87.5°	17.7	17.7	13.4	17.7	17.7	17.7	22.2	26.6	26.6	31.1	26.6
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: P249584

CATALOG NUMBER: LD8B175D010 ER8B175935 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8270.4	8270.4	8270.4	8270.4
2.5°	8283.8	8292.6	8279.3	8274.9
5°	8297.1	8297.1	8288.2	8288.2
7.5°	8297.1	8297.1	8283.8	8274.9
10°	8261.5	8261.5	8248.3	8239.4
12.5°	8194.9	8194.9	8190.5	8177.2
15°	8110.7	8110.7	8092.8	8079.6
17.5°	7995.2	8004.1	7981.9	7981.9
20°	7870.9	7866.5	7848.8	7839.9
22.5°	7742.2	7733.3	7728.8	7702.2
25°	7604.6	7595.7	7582.3	7569.1
27.5°	7369.3	7364.8	7351.5	7333.8
30°	7009.7	7005.2	6987.5	6987.5
32.5°	6543.6	6539.1	6521.4	6525.8
35°	6059.6	6077.4	6068.5	6050.8
37.5°	5655.7	5669.0	5677.9	5669.0
40°	5318.3	5358.3	5362.7	5371.6
42.5°	4958.7	5012.0	5029.8	5038.6
45°	4528.1	4576.9	4616.9	4608.0
47.5°	4088.6	4124.1	4159.6	4133.0
50°	3666.9	3689.1	3702.4	3702.4
52.5°	3267.4	3267.4	3262.9	3267.4
55°	2810.1	2810.1	2792.4	2801.2
57.5°	2330.6	2339.5	2326.2	2304.0
60°	1886.7	1864.5	1855.6	1842.4
62.5°	1469.4	1469.4	1438.4	1478.3
65°	1101.0	1087.6	1074.3	1069.8
67.5°	799.0	794.7	781.3	776.9
70°	563.8	546.0	541.6	532.7
72.5°	377.4	377.4	368.4	368.4
75°	230.8	208.7	204.2	208.7
77.5°	159.8	155.3	155.3	151.0
80°	106.6	102.1	111.0	97.7
82.5°	66.6	71.0	66.6	71.0
85°	44.4	53.2	48.9	48.9
87.5°	26.6	26.6	26.6	26.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)