

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: P249224

Luminaire Tested: **LD8B175D010 ER8B175840 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249224
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 ER8B175840 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 4000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18373.0 lumens
Efficiency: N/A
Efficacy: 103.7 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

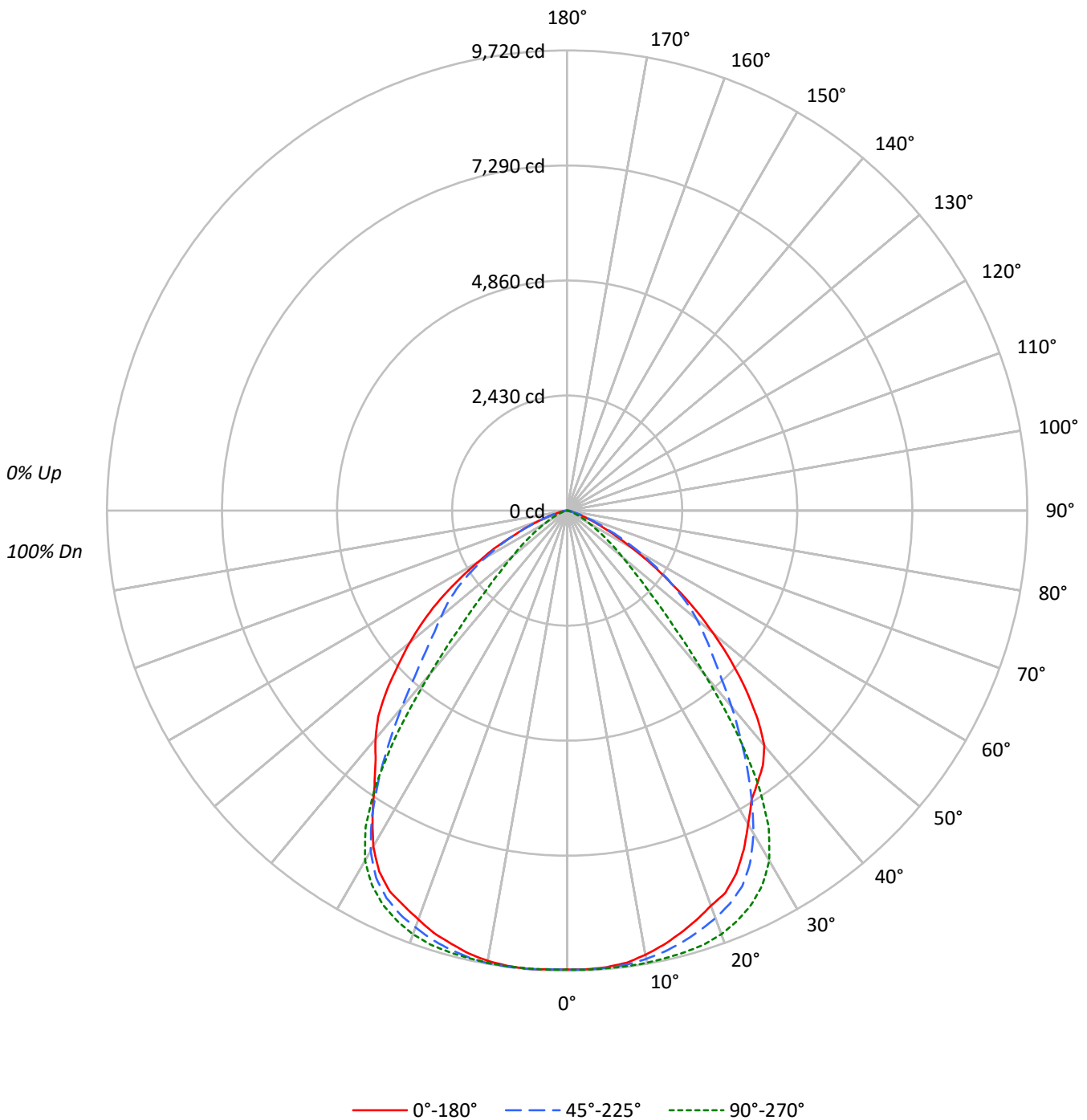
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	298927	298927	298927
5°	299583	300391	300713
10°	298322	303701	302396
15°	295017	308141	302331
20°	291476	312474	301550
25°	287691	312835	301858
30°	272174	304039	291626
35°	264048	264240	266984
40°	260777	181807	253447
45°	232363	109145	235537
50°	193210	72640	208188
55°	144903	50079	176515
60°	98201	33371	133182
65°	59233	21649	91498
70°	32845	11730	56295
75°	14881	4956	29142
80°	12928	5540	20333
85°	14718	7359	20273



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	925.2	5.0
10°-20°	2686.8	14.6
20°-30°	4078.0	22.2
30°-40°	4283.1	23.3
40°-50°	3211.2	17.5
50°-60°	2060.4	11.2
60°-70°	881.4	4.8
70°-80°	208.2	1.1
80°-90°	38.7	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°	7689.9	41.9
0°-40°	11973.0	65.2
0°-60°	17244.6	93.9
0°-90°	18373.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18373.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9694	9694	9694	9694	9694	
5°	9678	9694	9704	9720	9715	919
15°	9241	9434	9652	9590	9470	2607
25°	8456	8752	9194	9028	8872	3863
35°	7014	6624	7019	6936	7092	4402
45°	5328	4355	2503	4230	5401	4081
55°	2695	2695	932	2810	3283	2445
65°	812	957	297	1233	1254	867
75°	125	146	42	250	245	182
85°	42	26	21	42	57	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°	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0
2.5°	9699.2	9709.6	9704.4	9704.4	9699.2	9704.4	9704.4	9714.8	9714.8	9704.4	9699.2
5°	9678.3	9688.7	9688.7	9678.3	9678.3	9704.4	9688.7	9699.2	9699.2	9694.0	9694.0
7.5°	9631.6	9631.6	9652.3	9636.8	9636.8	9652.3	9647.1	9657.5	9668.0	9673.2	9673.2
10°	9527.4	9537.9	9543.1	9543.1	9548.3	9563.8	9574.3	9595.2	9605.5	9615.9	9621.1
12.5°	9397.4	9413.0	9418.2	9413.0	9428.6	9449.4	9475.5	9501.4	9517.1	9537.9	9553.5
15°	9241.2	9241.2	9251.7	9267.3	9277.7	9308.9	9334.9	9366.1	9407.7	9433.8	9459.8
17.5°	9069.6	9080.0	9095.6	9095.6	9116.4	9168.4	9184.0	9230.9	9277.7	9303.7	9355.8
20°	8882.3	8892.6	8908.3	8918.7	8944.7	8986.3	9017.5	9059.1	9111.2	9158.1	9210.0
22.5°	8736.5	8715.8	8726.1	8736.5	8762.6	8799.0	8835.4	8887.4	8939.5	8986.3	9038.4
25°	8455.5	8460.7	8476.4	8486.7	8518.0	8549.2	8590.9	8653.3	8700.1	8752.2	8809.3
27.5°	8075.7	8080.9	8106.9	8106.9	8132.9	8185.0	8210.9	8263.0	8325.5	8377.5	8445.2
30°	7643.9	7654.2	7654.2	7675.1	7690.6	7716.7	7742.7	7794.7	7825.9	7872.8	7966.5
32.5°	7248.4	7258.7	7253.5	7248.4	7232.7	7227.5	7222.3	7232.7	7243.2	7258.7	7295.1
35°	7014.3	6988.2	6967.4	6931.0	6889.4	6837.3	6790.4	6728.1	6670.8	6623.9	6572.0
37.5°	6790.4	6785.2	6754.0	6702.0	6618.7	6525.1	6415.9	6280.5	6145.2	5999.5	5859.1
40°	6478.3	6462.6	6436.6	6363.8	6270.1	6155.6	6010.0	5843.4	5624.8	5401.1	5172.2
42.5°	5947.5	5952.7	5921.5	5864.2	5775.8	5666.5	5515.6	5333.5	5099.4	4833.9	4537.4
45°	5328.3	5328.3	5317.9	5271.0	5208.6	5120.1	5005.7	4854.8	4625.9	4355.2	4037.8
47.5°	4683.1	4688.3	4672.6	4662.3	4636.2	4579.0	4495.8	4381.3	4220.0	3959.8	3642.3
50°	4027.5	4027.5	4053.5	4048.2	4048.2	4027.5	3991.1	3923.3	3782.9	3574.7	3278.2
52.5°	3371.8	3382.2	3397.9	3418.6	3444.6	3486.3	3444.6	3413.4	3324.9	3163.6	2908.7
55°	2695.3	2705.8	2731.8	2768.2	2799.5	2841.1	2851.4	2851.4	2804.6	2695.3	2502.8
57.5°	2117.8	2102.2	2123.0	2154.2	2195.9	2237.5	2268.7	2305.1	2299.9	2227.1	2071.0
60°	1592.3	1597.5	1613.0	1644.3	1675.5	1711.9	1753.6	1784.8	1800.4	1764.0	1665.1
62.5°	1160.4	1160.4	1181.1	1212.3	1228.0	1280.1	1306.0	1321.7	1337.2	1332.0	1269.6
65°	811.8	822.1	832.5	848.2	863.7	894.9	910.6	941.8	952.2	957.4	910.6
67.5°	572.4	556.8	567.2	577.5	593.2	614.1	645.3	645.3	660.8	660.8	629.6
70°	364.3	364.3	369.5	385.0	395.5	400.7	411.1	421.4	437.1	431.9	431.9
72.5°	244.6	239.4	244.6	249.8	255.0	270.6	270.6	275.8	286.2	291.4	270.6
75°	124.9	130.1	140.4	135.3	150.9	140.4	145.7	161.3	156.1	145.7	145.7
77.5°	104.0	104.0	104.0	98.9	109.2	109.2	104.0	114.5	109.2	109.2	104.0
80°	72.8	78.0	72.8	67.6	72.8	67.6	67.6	67.6	67.6	67.6	62.4
82.5°	57.3	46.9	52.1	46.9	52.1	52.1	46.9	41.6	41.6	46.9	41.6
85°	41.6	31.2	36.4	36.4	31.2	31.2	31.2	31.2	31.2	26.0	26.0
87.5°	26.0	15.7	15.7	15.7	20.8	20.8	20.8	15.7	20.8	20.8	10.4
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°	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0
2.5°	9709.6	9704.4	9714.8	9709.6	9709.6	9704.4	9709.6	9704.4	9714.8	9694.0	9699.2
5°	9709.6	9699.2	9704.4	9709.6	9714.8	9704.4	9704.4	9704.4	9714.8	9704.4	9709.6
7.5°	9688.7	9683.5	9699.2	9709.6	9704.4	9699.2	9709.6	9704.4	9714.8	9709.6	9719.9
10°	9647.1	9652.3	9662.8	9678.3	9683.5	9688.7	9699.2	9699.2	9714.8	9694.0	9704.4
12.5°	9584.7	9605.5	9631.6	9641.9	9662.8	9662.8	9673.2	9678.3	9688.7	9683.5	9699.2
15°	9506.7	9532.6	9563.8	9589.9	9615.9	9631.6	9647.1	9652.3	9668.0	9652.3	9657.5
17.5°	9413.0	9444.2	9491.0	9522.2	9563.8	9579.5	9600.3	9610.7	9626.3	9615.9	9621.1
20°	9282.8	9319.4	9371.3	9418.2	9444.2	9480.6	9506.7	9522.2	9532.6	9522.2	9527.4
22.5°	9100.8	9152.8	9220.5	9256.9	9308.9	9340.1	9345.4	9381.8	9407.7	9381.8	9392.2
25°	8887.4	8939.5	8991.5	9069.6	9116.4	9152.8	9189.3	9194.5	9220.5	9215.2	9210.0
27.5°	8533.6	8601.3	8689.7	8752.2	8814.6	8871.9	8913.5	8923.8	8949.9	8939.5	8944.7
30°	8049.6	8122.6	8205.8	8304.6	8393.1	8450.3	8502.4	8538.8	8564.8	8549.2	8544.0
32.5°	7362.9	7435.7	7524.2	7623.0	7727.1	7810.3	7872.8	7919.6	7950.8	7940.4	7914.4
35°	6577.2	6597.9	6655.2	6733.3	6821.6	6910.1	6967.4	7019.4	7055.8	7066.2	7066.2
37.5°	5770.6	5703.0	5661.4	5661.4	5713.3	5749.7	5801.8	5833.0	5890.3	5911.0	5926.7
40°	4990.0	4833.9	4688.3	4579.0	4506.2	4501.0	4501.0	4516.5	4568.6	4636.2	4698.7
42.5°	4292.8	4043.0	3819.3	3616.4	3470.7	3387.5	3351.0	3356.3	3397.9	3460.3	3564.3
45°	3736.1	3423.9	3142.9	2898.3	2700.6	2570.4	2508.1	2502.8	2534.0	2606.9	2721.4
47.5°	3304.2	2971.1	2653.7	2372.7	2159.5	2018.9	1946.1	1925.3	1946.1	2013.7	2149.0
50°	2945.1	2601.8	2273.9	1982.5	1753.6	1607.9	1540.2	1514.2	1540.2	1597.5	1732.7
52.5°	2612.1	2258.3	1951.3	1670.3	1425.7	1300.8	1228.0	1212.3	1228.0	1295.6	1405.0
55°	2227.1	1925.3	1623.4	1342.5	1129.2	1004.3	947.0	931.5	947.0	1009.5	1124.0
57.5°	1847.3	1587.0	1321.7	1066.7	884.6	775.2	723.3	702.4	738.8	780.5	915.8
60°	1493.3	1285.3	1061.5	837.8	686.9	588.0	546.3	541.1	551.5	603.6	697.2
62.5°	1170.8	999.1	822.1	640.0	515.1	473.5	421.4	416.3	426.6	457.8	530.8
65°	843.0	733.7	598.4	468.3	369.5	312.2	291.4	296.7	307.0	327.8	395.5
67.5°	588.0	509.9	416.3	327.8	255.0	228.9	208.2	202.9	208.2	244.6	281.0
70°	395.5	348.6	281.0	249.8	177.0	140.4	145.7	130.1	150.9	150.9	182.1
72.5°	260.1	228.9	187.3	145.7	124.9	98.9	98.9	93.7	104.0	109.2	135.3
75°	135.3	104.0	104.0	72.8	52.1	26.0	46.9	41.6	36.4	41.6	52.1
77.5°	93.7	78.0	72.8	57.3	52.1	41.6	41.6	41.6	41.6	46.9	52.1
80°	57.3	57.3	41.6	36.4	31.2	26.0	31.2	31.2	31.2	31.2	36.4
82.5°	36.4	31.2	31.2	26.0	26.0	20.8	20.8	20.8	20.8	20.8	31.2
85°	31.2	20.8	20.8	15.7	20.8	36.4	15.7	20.8	20.8	20.8	15.7
87.5°	10.4	15.7	15.7	15.7	10.4	5.2	10.4	15.7	15.7	26.0	20.8
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°	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0	9694.0
2.5°	9709.6	9714.8	9714.8	9709.6	9709.6	9699.2	9719.9	9704.4	9709.6	9730.4	9714.8
5°	9719.9	9725.2	9725.2	9719.9	9719.9	9719.9	9725.2	9725.2	9719.9	9714.8	9725.2
7.5°	9740.8	9735.6	9735.6	9725.2	9725.2	9714.8	9725.2	9709.6	9719.9	9709.6	9725.2
10°	9714.8	9719.9	9714.8	9709.6	9709.6	9704.4	9704.4	9688.7	9694.0	9678.3	9688.7
12.5°	9699.2	9694.0	9694.0	9683.5	9673.2	9662.8	9657.5	9641.9	9641.9	9605.5	9621.1
15°	9657.5	9662.8	9647.1	9626.3	9615.9	9589.9	9579.5	9558.6	9537.9	9511.9	9517.1
17.5°	9621.1	9605.5	9584.7	9563.8	9522.2	9501.4	9480.6	9449.4	9438.9	9407.7	9397.4
20°	9511.9	9501.4	9475.5	9438.9	9413.0	9366.1	9345.4	9314.2	9288.1	9256.9	9241.2
22.5°	9371.3	9360.9	9329.7	9293.3	9251.7	9230.9	9210.0	9152.8	9126.8	9095.6	9090.3
25°	9194.5	9178.8	9147.6	9106.0	9085.1	9027.9	9007.1	8965.4	8955.1	8923.8	8918.7
27.5°	8923.8	8903.0	8866.6	8814.6	8778.1	8741.7	8721.0	8689.7	8679.3	8648.0	8642.9
30°	8518.0	8491.9	8419.1	8398.4	8335.8	8299.4	8299.4	8257.8	8263.0	8242.3	8242.3
32.5°	7878.0	7836.4	7779.1	7737.4	7695.8	7675.1	7675.1	7659.4	7669.8	7669.8	7680.3
35°	7029.8	6972.6	6941.3	6915.3	6915.3	6936.1	6998.6	7014.3	7045.5	7071.4	7092.3
37.5°	5942.2	5937.1	5973.6	6004.8	6082.8	6171.3	6280.5	6374.2	6462.6	6525.1	6587.5
40°	4766.3	4896.4	5000.5	5146.2	5265.8	5437.5	5635.3	5796.6	5947.5	6056.8	6171.3
42.5°	3720.4	3886.9	4105.5	4318.8	4532.2	4766.3	5026.6	5250.3	5448.0	5598.9	5718.5
45°	2898.3	3127.2	3392.7	3663.2	3939.0	4230.4	4501.0	4729.9	4938.1	5094.2	5213.8
47.5°	2336.3	2586.1	2887.9	3184.5	3496.7	3803.7	4105.5	4303.3	4474.9	4599.8	4709.2
50°	1930.4	2195.9	2513.3	2851.4	3163.6	3470.7	3730.8	3923.3	4063.9	4173.1	4240.7
52.5°	1613.0	1894.0	2232.3	2570.4	2882.6	3163.6	3397.9	3543.5	3658.0	3736.1	3798.4
55°	1332.0	1602.7	1920.1	2237.5	2544.5	2809.8	3002.3	3111.7	3200.0	3246.9	3283.3
57.5°	1087.6	1337.2	1628.7	1920.1	2185.4	2404.0	2554.9	2664.2	2705.8	2742.2	2737.0
60°	853.4	1087.6	1352.9	1602.7	1831.6	2008.5	2117.8	2180.2	2211.4	2227.1	2216.6
62.5°	671.2	884.6	1087.6	1306.0	1472.6	1623.4	1727.6	1727.6	1743.1	1748.3	1764.0
65°	499.5	660.8	837.8	999.1	1134.3	1233.2	1290.5	1306.0	1326.9	1321.7	1311.3
67.5°	369.5	489.2	619.2	738.8	832.5	894.9	936.6	973.1	967.9	957.4	952.2
70°	255.0	333.1	447.5	520.4	588.0	650.5	660.8	666.0	671.2	676.4	666.0
72.5°	177.0	234.1	296.7	359.0	400.7	426.6	452.7	457.8	457.8	457.8	452.7
75°	88.5	119.7	177.0	202.9	239.4	249.8	270.6	270.6	286.2	265.3	260.1
77.5°	78.0	93.7	124.9	145.7	161.3	177.0	182.1	197.7	192.5	182.1	187.3
80°	46.9	57.3	78.0	88.5	109.2	114.5	119.7	124.9	119.7	124.9	124.9
82.5°	36.4	41.6	52.1	52.1	67.6	67.6	72.8	72.8	78.0	78.0	78.0
85°	20.8	36.4	31.2	62.4	41.6	41.6	52.1	62.4	52.1	52.1	62.4
87.5°	20.8	20.8	15.7	20.8	20.8	20.8	26.0	31.2	31.2	36.4	31.2
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: P249224

CATALOG NUMBER: LD8B175D010 ER8B175840 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9694.0	9694.0	9694.0	9694.0
2.5°	9709.6	9719.9	9704.4	9699.2
5°	9725.2	9725.2	9714.8	9714.8
7.5°	9725.2	9725.2	9709.6	9699.2
10°	9683.5	9683.5	9668.0	9657.5
12.5°	9605.5	9605.5	9600.3	9584.7
15°	9506.7	9506.7	9485.8	9470.3
17.5°	9371.3	9381.8	9355.8	9355.8
20°	9225.7	9220.5	9199.7	9189.3
22.5°	9074.8	9064.4	9059.1	9027.9
25°	8913.5	8903.0	8887.4	8871.9
27.5°	8637.7	8632.5	8616.8	8596.1
30°	8216.2	8210.9	8190.2	8190.2
32.5°	7669.8	7664.6	7643.9	7649.1
35°	7102.6	7123.5	7113.1	7092.3
37.5°	6629.1	6644.8	6655.2	6644.8
40°	6233.7	6280.5	6285.7	6296.2
42.5°	5812.2	5874.6	5895.5	5905.8
45°	5307.4	5364.7	5411.6	5401.1
47.5°	4792.3	4833.9	4875.6	4844.4
50°	4298.0	4324.0	4339.7	4339.7
52.5°	3829.8	3829.8	3824.5	3829.8
55°	3293.7	3293.7	3273.0	3283.3
57.5°	2731.8	2742.2	2726.5	2700.6
60°	2211.4	2185.4	2175.0	2159.5
62.5°	1722.4	1722.4	1686.0	1732.7
65°	1290.5	1274.8	1259.2	1254.0
67.5°	936.6	931.5	915.8	910.6
70°	660.8	640.0	634.8	624.4
72.5°	442.3	442.3	431.9	431.9
75°	270.6	244.6	239.4	244.6
77.5°	187.3	182.1	182.1	177.0
80°	124.9	119.7	130.1	114.5
82.5°	78.0	83.3	78.0	83.3
85°	52.1	62.4	57.3	57.3
87.5°	31.2	31.2	31.2	31.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)