

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: P249557

Luminaire Tested: **LD8B175D010 ER8B175850 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249557
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 ER8B175850 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18618.0 lumens
Efficiency: N/A
Efficacy: 105.1 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

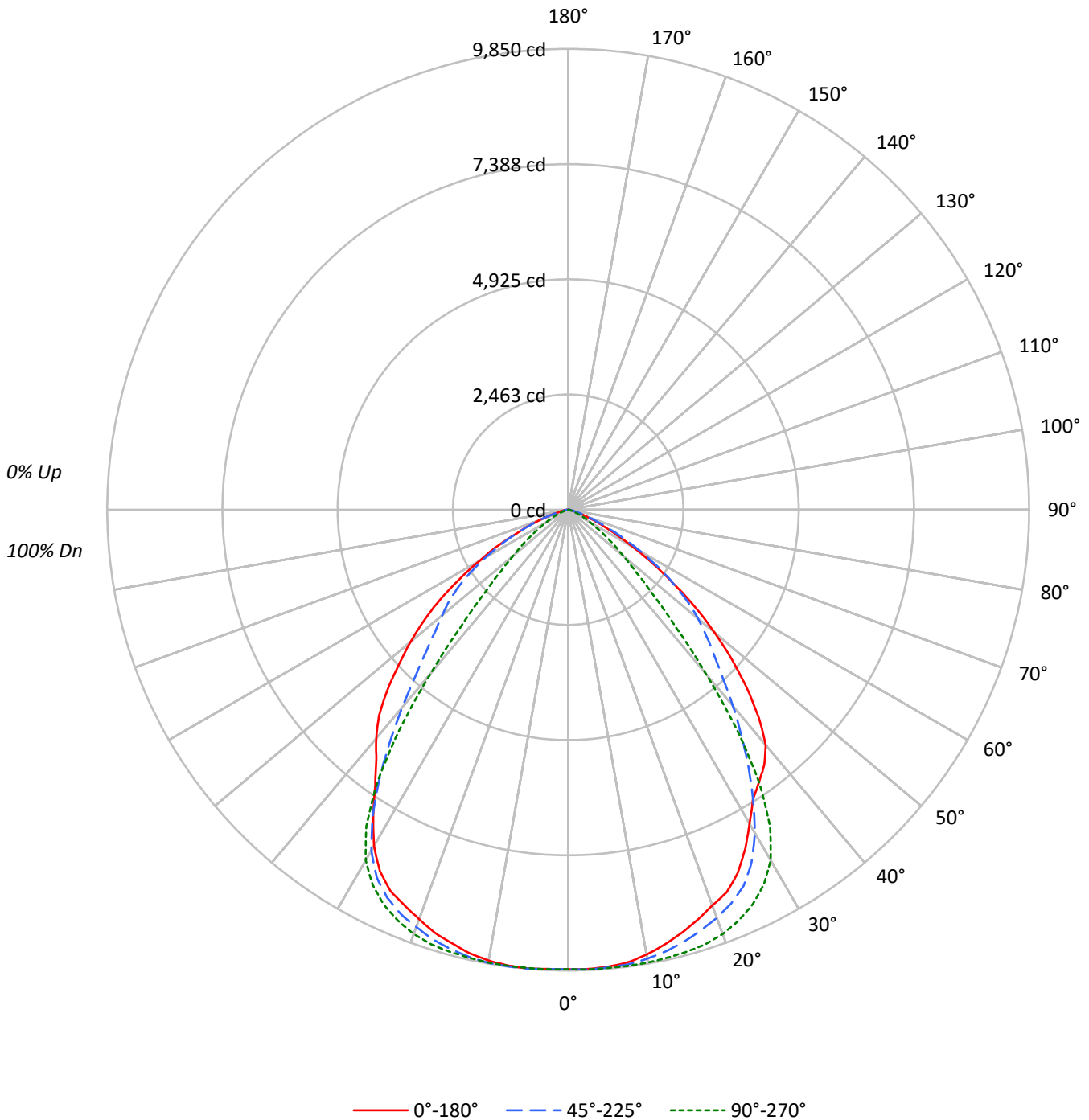
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	302911	302911	302911
5°	303579	304396	304725
10°	302302	307750	306429
15°	298950	312250	306360
20°	295361	316642	305570
25°	291529	317006	305884
30°	275802	308094	295514
35°	267567	267763	270545
40°	264251	184230	256824
45°	235463	110601	238682
50°	195787	73609	210960
55°	146839	50745	178870
60°	99509	33815	134958
65°	60021	21933	92717
70°	33278	11892	57044
75°	15083	5028	29523
80°	13105	5612	20599
85°	14931	7430	20556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	937.5	5.0
10°-20°	2722.6	14.6
20°-30°	4132.4	22.2
30°-40°	4340.2	23.3
40°-50°	3254.0	17.5
50°-60°	2087.9	11.2
60°-70°	893.2	4.8
70°-80°	211.0	1.1
80°-90°	39.3	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°	7792.5	41.9
0°-40°	12132.7	65.2
0°-60°	17474.6	93.9
0°-90°	18618.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18618.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9823	9823	9823	9823	9823	
5°	9807	9823	9834	9850	9844	932
15°	9364	9560	9781	9718	9596	2641
25°	8568	8869	9317	9148	8990	3914
35°	7108	6712	7113	7029	7187	4461
45°	5399	4413	2536	4287	5473	4135
55°	2731	2731	944	2847	3327	2478
65°	823	970	301	1250	1271	878
75°	127	148	42	253	248	184
85°	42	26	21	42	58	45
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°	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2
2.5°	9828.5	9839.1	9833.8	9833.8	9828.5	9833.8	9833.8	9844.4	9844.4	9833.8	9828.5
5°	9807.4	9817.9	9817.9	9807.4	9807.4	9833.8	9817.9	9828.5	9828.5	9823.2	9823.2
7.5°	9760.0	9760.0	9781.0	9765.3	9765.3	9781.0	9775.7	9786.3	9796.9	9802.2	9802.2
10°	9654.5	9665.0	9670.3	9670.3	9675.6	9691.4	9701.9	9723.1	9733.6	9744.1	9749.4
12.5°	9522.7	9538.5	9543.8	9538.5	9554.3	9575.4	9601.8	9628.1	9644.0	9665.0	9680.9
15°	9364.4	9364.4	9375.0	9390.9	9401.5	9433.1	9459.4	9491.0	9533.2	9559.6	9586.0
17.5°	9190.5	9201.1	9216.8	9216.8	9238.0	9290.6	9306.5	9354.0	9401.5	9427.8	9480.6
20°	9000.7	9011.2	9027.1	9037.6	9064.0	9106.1	9137.8	9179.9	9232.7	9280.2	9332.8
22.5°	8853.0	8832.0	8842.4	8853.0	8879.5	8916.4	8953.3	9005.9	9058.7	9106.1	9158.9
25°	8568.3	8573.6	8589.4	8599.9	8631.6	8663.2	8705.4	8768.6	8816.1	8868.9	8926.8
27.5°	8183.4	8188.7	8215.0	8215.0	8241.3	8294.1	8320.4	8373.2	8436.5	8489.2	8557.8
30°	7745.8	7756.2	7756.2	7777.4	7793.1	7819.6	7845.9	7898.7	7930.3	7977.8	8072.7
32.5°	7345.1	7355.5	7350.2	7345.1	7329.2	7323.9	7318.6	7329.2	7339.8	7355.5	7392.4
35°	7107.8	7081.4	7060.3	7023.4	6981.2	6928.5	6881.0	6817.8	6759.7	6712.2	6659.6
37.5°	6881.0	6875.7	6844.1	6791.3	6706.9	6612.1	6501.4	6364.3	6227.1	6079.5	5937.2
40°	6564.6	6548.8	6522.5	6448.7	6353.7	6237.7	6090.1	5921.4	5699.8	5473.2	5241.2
42.5°	6026.8	6032.1	6000.5	5942.4	5852.9	5742.0	5589.1	5404.6	5167.4	4898.4	4597.9
45°	5399.4	5399.4	5388.8	5341.3	5278.1	5188.4	5072.4	4919.5	4687.6	4413.3	4091.6
47.5°	4745.5	4750.8	4734.9	4724.5	4698.0	4640.1	4555.7	4439.7	4276.3	4012.6	3690.9
50°	4081.2	4081.2	4107.5	4102.2	4102.2	4081.2	4044.3	3975.7	3833.4	3622.4	3321.9
52.5°	3416.8	3427.3	3443.2	3464.2	3490.6	3532.7	3490.6	3458.9	3369.3	3205.8	2947.5
55°	2731.3	2741.9	2768.2	2805.1	2836.8	2879.0	2889.5	2889.5	2842.0	2731.3	2536.2
57.5°	2146.1	2130.2	2151.4	2183.0	2225.2	2267.3	2299.0	2335.9	2330.6	2256.8	2098.6
60°	1613.5	1618.8	1634.5	1666.3	1697.9	1734.8	1776.9	1808.6	1824.4	1787.5	1687.3
62.5°	1175.9	1175.9	1196.9	1228.5	1244.4	1297.1	1323.5	1339.3	1355.1	1349.8	1286.6
65°	822.6	833.1	843.6	859.5	875.3	906.9	922.7	954.3	964.9	970.2	922.7
67.5°	580.1	564.2	574.8	585.2	601.1	622.2	653.9	653.9	669.6	669.6	638.0
70°	369.1	369.1	374.4	390.1	400.7	406.0	416.6	427.0	442.9	437.6	437.6
72.5°	247.8	242.6	247.8	253.1	258.4	274.2	274.2	279.5	290.0	295.3	274.2
75°	126.6	131.9	142.3	137.1	152.9	142.3	147.6	163.5	158.2	147.6	147.6
77.5°	105.4	105.4	105.4	100.2	110.7	110.7	105.4	116.0	110.7	110.7	105.4
80°	73.8	79.1	73.8	68.5	73.8	68.5	68.5	68.5	68.5	68.5	63.2
82.5°	58.1	47.5	52.8	47.5	52.8	52.8	47.5	42.2	42.2	47.5	42.2
85°	42.2	31.6	36.9	36.9	31.6	31.6	31.6	31.6	31.6	26.3	26.3
87.5°	26.3	15.9	15.9	15.9	21.0	21.0	21.0	15.9	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°	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2
2.5°	9839.1	9833.8	9844.4	9839.1	9839.1	9833.8	9839.1	9833.8	9844.4	9823.2	9828.5
5°	9839.1	9828.5	9833.8	9839.1	9844.4	9833.8	9833.8	9833.8	9844.4	9833.8	9839.1
7.5°	9817.9	9812.6	9828.5	9839.1	9833.8	9828.5	9839.1	9833.8	9844.4	9839.1	9849.5
10°	9775.7	9781.0	9791.6	9807.4	9812.6	9817.9	9828.5	9828.5	9844.4	9823.2	9833.8
12.5°	9712.5	9733.6	9760.0	9770.5	9791.6	9791.6	9802.2	9807.4	9817.9	9812.6	9828.5
15°	9633.4	9659.8	9691.4	9717.8	9744.1	9760.0	9775.7	9781.0	9796.9	9781.0	9786.3
17.5°	9538.5	9570.1	9617.6	9649.2	9691.4	9707.2	9728.3	9738.8	9754.7	9744.1	9749.4
20°	9406.6	9443.7	9496.3	9543.8	9570.1	9607.0	9633.4	9649.2	9659.8	9649.2	9654.5
22.5°	9222.1	9274.9	9343.4	9380.3	9433.1	9464.7	9470.0	9506.9	9533.2	9506.9	9517.5
25°	9005.9	9058.7	9111.4	9190.5	9238.0	9274.9	9311.8	9317.1	9343.4	9338.1	9332.8
27.5°	8647.4	8716.0	8805.5	8868.9	8932.1	8990.2	9032.3	9042.8	9069.2	9058.7	9064.0
30°	8157.0	8230.9	8315.3	8415.4	8505.1	8563.0	8615.8	8652.7	8679.0	8663.2	8657.9
32.5°	7461.0	7534.8	7624.5	7724.6	7830.2	7914.4	7977.8	8025.2	8056.9	8046.3	8020.0
35°	6664.9	6685.9	6744.0	6823.1	6912.6	7002.3	7060.3	7113.0	7149.9	7160.4	7160.4
37.5°	5847.6	5779.1	5736.9	5736.9	5789.5	5826.4	5879.2	5910.8	5968.8	5989.9	6005.7
40°	5056.6	4898.4	4750.8	4640.1	4566.3	4561.0	4561.0	4576.7	4629.5	4698.0	4761.4
42.5°	4350.1	4096.9	3870.3	3664.6	3517.0	3432.6	3395.7	3401.0	3443.2	3506.4	3611.8
45°	3785.9	3469.5	3184.8	2936.9	2736.6	2604.7	2541.5	2536.2	2567.8	2641.6	2757.7
47.5°	3348.2	3010.7	2689.1	2404.4	2188.3	2045.8	1972.0	1951.0	1972.0	2040.5	2177.7
50°	2984.4	2636.5	2304.2	2008.9	1776.9	1629.4	1560.7	1534.4	1560.7	1618.8	1755.8
52.5°	2646.9	2288.4	1977.3	1692.6	1444.7	1318.2	1244.4	1228.5	1244.4	1312.9	1423.7
55°	2256.8	1951.0	1645.1	1360.4	1144.2	1017.7	959.6	943.9	959.6	1023.0	1139.0
57.5°	1871.9	1608.2	1339.3	1080.9	896.4	785.6	732.9	711.8	748.7	790.9	928.0
60°	1513.2	1302.4	1075.6	848.9	696.0	595.8	553.6	548.3	558.9	611.7	706.5
62.5°	1186.4	1012.4	833.1	648.6	522.0	479.8	427.0	421.9	432.3	463.9	537.9
65°	854.2	743.5	606.4	474.5	374.4	316.4	295.3	300.6	311.1	332.2	400.7
67.5°	595.8	516.7	421.9	332.2	258.4	232.0	210.9	205.7	210.9	247.8	284.7
70°	400.7	353.2	284.7	253.1	179.3	142.3	147.6	131.9	152.9	152.9	184.5
72.5°	263.6	232.0	189.8	147.6	126.6	100.2	100.2	95.0	105.4	110.7	137.1
75°	137.1	105.4	105.4	73.8	52.8	26.3	47.5	42.2	36.9	42.2	52.8
77.5°	95.0	79.1	73.8	58.1	52.8	42.2	42.2	42.2	42.2	47.5	52.8
80°	58.1	58.1	42.2	36.9	31.6	26.3	31.6	31.6	31.6	31.6	36.9
82.5°	36.9	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	15.9	21.0	36.9	15.9	21.0	21.0	21.0	15.9
87.5°	10.6	15.9	15.9	15.9	10.6	5.3	10.6	15.9	15.9	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°	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2	9823.2
2.5°	9839.1	9844.4	9844.4	9839.1	9839.1	9828.5	9849.5	9833.8	9839.1	9860.1	9844.4
5°	9849.5	9854.8	9854.8	9849.5	9849.5	9849.5	9854.8	9854.8	9849.5	9844.4	9854.8
7.5°	9870.7	9865.4	9865.4	9854.8	9854.8	9844.4	9854.8	9839.1	9849.5	9839.1	9854.8
10°	9844.4	9849.5	9844.4	9839.1	9839.1	9833.8	9833.8	9817.9	9823.2	9807.4	9817.9
12.5°	9828.5	9823.2	9823.2	9812.6	9802.2	9791.6	9786.3	9770.5	9770.5	9733.6	9749.4
15°	9786.3	9791.6	9775.7	9754.7	9744.1	9717.8	9707.2	9686.1	9665.0	9638.7	9644.0
17.5°	9749.4	9733.6	9712.5	9691.4	9649.2	9628.1	9607.0	9575.4	9564.8	9533.2	9522.7
20°	9638.7	9628.1	9601.8	9564.8	9538.5	9491.0	9470.0	9438.4	9411.9	9380.3	9364.4
22.5°	9496.3	9485.7	9454.1	9417.2	9375.0	9354.0	9332.8	9274.9	9248.5	9216.8	9211.6
25°	9317.1	9301.2	9269.6	9227.4	9206.3	9148.3	9127.2	9085.0	9074.5	9042.8	9037.6
27.5°	9042.8	9021.8	8984.9	8932.1	8895.2	8858.3	8837.3	8805.5	8795.1	8763.4	8758.2
30°	8631.6	8605.2	8531.4	8510.3	8447.0	8410.1	8410.1	8367.9	8373.2	8352.2	8352.2
32.5°	7983.1	7940.9	7882.8	7840.6	7798.4	7777.4	7777.4	7761.5	7772.1	7772.1	7782.7
35°	7123.5	7065.6	7033.9	7007.6	7007.6	7028.6	7091.9	7107.8	7139.4	7165.7	7186.9
37.5°	6021.5	6016.3	6053.2	6084.8	6163.9	6253.6	6364.3	6459.2	6548.8	6612.1	6675.3
40°	4829.9	4961.7	5067.1	5214.9	5336.0	5510.1	5710.4	5873.9	6026.8	6137.6	6253.6
42.5°	3770.0	3938.8	4160.3	4376.4	4592.6	4829.9	5093.6	5320.3	5520.6	5673.5	5794.8
45°	2936.9	3168.9	3437.9	3712.1	3991.5	4286.8	4561.0	4793.0	5003.9	5162.1	5283.4
47.5°	2367.5	2620.6	2926.4	3227.0	3543.3	3854.4	4160.3	4360.6	4534.6	4661.1	4771.9
50°	1956.2	2225.2	2546.8	2889.5	3205.8	3517.0	3780.6	3975.7	4118.1	4228.8	4297.3
52.5°	1634.5	1919.3	2262.1	2604.7	2921.1	3205.8	3443.2	3590.8	3706.8	3785.9	3849.1
55°	1349.8	1624.1	1945.7	2267.3	2578.4	2847.3	3042.4	3153.2	3242.7	3290.2	3327.1
57.5°	1102.1	1355.1	1650.4	1945.7	2214.6	2436.1	2589.0	2699.7	2741.9	2778.8	2773.5
60°	864.8	1102.1	1370.9	1624.1	1856.0	2035.2	2146.1	2209.3	2240.9	2256.8	2246.2
62.5°	680.2	896.4	1102.1	1323.5	1492.2	1645.1	1750.6	1750.6	1766.4	1771.7	1787.5
65°	506.1	669.6	848.9	1012.4	1149.4	1249.7	1307.7	1323.5	1344.6	1339.3	1328.7
67.5°	374.4	495.7	627.4	748.7	843.6	906.9	949.1	986.1	980.8	970.2	964.9
70°	258.4	337.5	453.5	527.3	595.8	659.1	669.6	674.9	680.2	685.5	674.9
72.5°	179.3	237.3	300.6	363.8	406.0	432.3	458.8	463.9	463.9	463.9	458.8
75°	89.7	121.3	179.3	205.7	242.6	253.1	274.2	274.2	290.0	268.9	263.6
77.5°	79.1	95.0	126.6	147.6	163.5	179.3	184.5	200.4	195.1	184.5	189.8
80°	47.5	58.1	79.1	89.7	110.7	116.0	121.3	126.6	121.3	126.6	126.6
82.5°	36.9	42.2	52.8	52.8	68.5	68.5	73.8	73.8	79.1	79.1	79.1
85°	21.0	36.9	31.6	63.2	42.2	42.2	52.8	63.2	52.8	52.8	63.2
87.5°	21.0	21.0	15.9	21.0	21.0	21.0	26.3	31.6	31.6	36.9	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: P249557

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9823.2	9823.2	9823.2	9823.2
2.5°	9839.1	9849.5	9833.8	9828.5
5°	9854.8	9854.8	9844.4	9844.4
7.5°	9854.8	9854.8	9839.1	9828.5
10°	9812.6	9812.6	9796.9	9786.3
12.5°	9733.6	9733.6	9728.3	9712.5
15°	9633.4	9633.4	9612.3	9596.5
17.5°	9496.3	9506.9	9480.6	9480.6
20°	9348.7	9343.4	9322.4	9311.8
22.5°	9195.8	9185.2	9179.9	9148.3
25°	9032.3	9021.8	9005.9	8990.2
27.5°	8752.9	8747.6	8731.7	8710.7
30°	8325.7	8320.4	8299.4	8299.4
32.5°	7772.1	7766.8	7745.8	7751.1
35°	7197.3	7218.5	7207.9	7186.9
37.5°	6717.5	6733.4	6744.0	6733.4
40°	6316.8	6364.3	6369.6	6380.1
42.5°	5889.8	5953.0	5974.1	5984.6
45°	5378.2	5436.3	5483.7	5473.2
47.5°	4856.2	4898.4	4940.6	4909.0
50°	4355.4	4381.7	4397.5	4397.5
52.5°	3880.8	3880.8	3875.5	3880.8
55°	3337.7	3337.7	3316.6	3327.1
57.5°	2768.2	2778.8	2762.9	2736.6
60°	2240.9	2214.6	2204.0	2188.3
62.5°	1745.3	1745.3	1708.4	1755.8
65°	1307.7	1291.8	1276.0	1270.7
67.5°	949.1	943.9	928.0	922.7
70°	669.6	648.6	643.3	632.7
72.5°	448.2	448.2	437.6	437.6
75°	274.2	247.8	242.6	247.8
77.5°	189.8	184.5	184.5	179.3
80°	126.6	121.3	131.9	116.0
82.5°	79.1	84.4	79.1	84.4
85°	52.8	63.2	58.1	58.1
87.5°	31.6	31.6	31.6	31.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)