

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: P249233

Luminaire Tested: **LD8B175D010 ER8B175850 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249233
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 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 5000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18732.0 lumens
Efficiency: N/A
Efficacy: 105.7 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

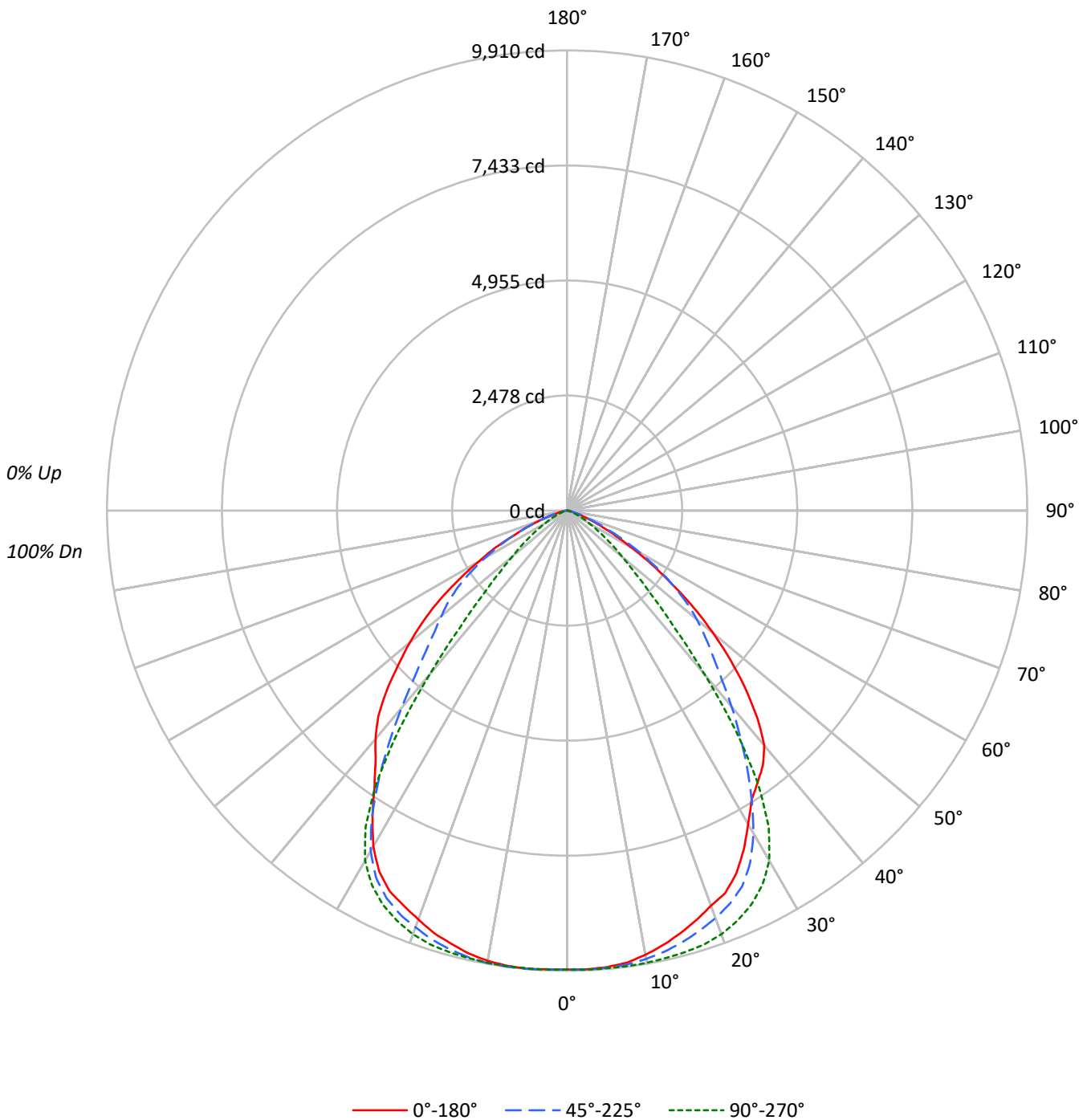
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	304768	304768	304768
5°	305437	306260	306591
10°	304152	309635	308304
15°	300783	314162	308237
20°	297169	318581	307440
25°	293312	318945	307755
30°	277490	309978	297323
35°	269205	269401	272201
40°	265869	185361	258398
45°	236902	111277	240142
50°	196986	74060	212256
55°	147737	51057	179967
60°	100119	34025	135785
65°	60386	22065	93286
70°	33485	11964	57395
75°	15167	5052	29714
80°	13194	5647	20723
85°	15001	7501	20662



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	943.2	5.0
10°-20°	2739.3	14.6
20°-30°	4157.7	22.2
30°-40°	4366.8	23.3
40°-50°	3273.9	17.5
50°-60°	2100.6	11.2
60°-70°	898.6	4.8
70°-80°	212.3	1.1
80°-90°	39.5	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°	7840.2	41.9
0°-40°	12207.0	65.2
0°-60°	17581.6	93.9
0°-90°	18732.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18732.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9883	9883	9883	9883	9883	
5°	9867	9883	9894	9910	9905	937
15°	9422	9618	9841	9777	9655	2657
25°	8621	8923	9374	9204	9045	3938
35°	7151	6753	7156	7072	7231	4488
45°	5432	4440	2552	4313	5507	4160
55°	2748	2748	950	2865	3348	2493
65°	828	976	302	1257	1278	883
75°	127	148	42	255	249	185
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°	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4
2.5°	9888.7	9899.3	9894.0	9894.0	9888.7	9894.0	9894.0	9904.7	9904.7	9894.0	9888.7
5°	9867.4	9878.1	9878.1	9867.4	9867.4	9894.0	9878.1	9888.7	9888.7	9883.4	9883.4
7.5°	9819.8	9819.8	9840.9	9825.1	9825.1	9840.9	9835.6	9846.2	9856.9	9862.2	9862.2
10°	9713.6	9724.2	9729.5	9729.5	9734.9	9750.7	9761.4	9782.6	9793.2	9803.8	9809.1
12.5°	9581.0	9596.9	9602.2	9596.9	9612.9	9634.0	9660.6	9687.1	9703.1	9724.2	9740.2
15°	9421.8	9421.8	9432.4	9448.4	9459.0	9490.8	9517.3	9549.1	9591.6	9618.2	9644.7
17.5°	9246.8	9257.4	9273.3	9273.3	9294.6	9347.5	9363.5	9411.3	9459.0	9485.5	9538.6
20°	9055.8	9066.4	9082.3	9093.0	9119.5	9161.9	9193.7	9236.2	9289.2	9337.0	9390.0
22.5°	8907.2	8886.1	8896.6	8907.2	8933.8	8971.0	9008.1	9061.0	9114.1	9161.9	9215.0
25°	8620.7	8626.1	8642.0	8652.5	8684.5	8716.3	8758.7	8822.3	8870.1	8923.2	8981.5
27.5°	8233.5	8238.8	8265.3	8265.3	8291.8	8344.9	8371.4	8424.5	8488.2	8541.2	8610.2
30°	7793.2	7803.7	7803.7	7825.0	7840.9	7867.5	7894.0	7947.0	7978.8	8026.6	8122.1
32.5°	7390.0	7400.6	7395.2	7390.0	7374.1	7368.8	7363.4	7374.1	7384.7	7400.6	7437.7
35°	7151.3	7124.7	7103.6	7066.4	7024.0	6970.9	6923.1	6859.5	6801.1	6753.3	6700.4
37.5°	6923.1	6917.8	6886.0	6832.9	6748.0	6652.6	6541.2	6403.2	6265.3	6116.8	5973.6
40°	6604.8	6588.9	6562.4	6488.1	6392.6	6275.9	6127.4	5957.6	5734.7	5506.7	5273.3
42.5°	6063.7	6069.0	6037.2	5978.8	5888.7	5777.2	5623.4	5437.7	5199.0	4928.4	4626.1
45°	5432.4	5432.4	5421.8	5374.0	5310.4	5220.2	5103.5	4949.7	4716.3	4440.3	4116.7
47.5°	4774.6	4779.9	4763.9	4753.4	4726.8	4668.5	4583.6	4466.9	4302.5	4037.1	3713.5
50°	4106.2	4106.2	4132.7	4127.3	4127.3	4106.2	4069.1	4000.0	3856.8	3644.6	3342.3
52.5°	3437.7	3448.3	3464.3	3485.4	3511.9	3554.4	3511.9	3480.1	3389.9	3225.4	2965.6
55°	2748.0	2758.7	2785.1	2822.3	2854.2	2896.6	2907.2	2907.2	2859.4	2748.0	2551.7
57.5°	2159.2	2143.2	2164.5	2196.3	2238.8	2281.2	2313.0	2350.2	2344.8	2270.6	2111.4
60°	1623.4	1628.7	1644.5	1676.5	1708.3	1745.4	1787.8	1819.6	1835.6	1798.5	1697.6
62.5°	1183.1	1183.1	1204.2	1236.0	1252.0	1305.1	1331.6	1347.5	1363.4	1358.0	1294.4
65°	827.6	838.2	848.8	864.8	880.6	912.4	928.4	960.2	970.8	976.1	928.4
67.5°	583.6	567.6	578.3	588.8	604.8	626.1	657.9	657.9	673.7	673.7	641.9
70°	371.4	371.4	376.7	392.5	403.2	408.5	419.1	429.7	445.6	440.3	440.3
72.5°	249.4	244.0	249.4	254.7	260.0	275.8	275.8	281.2	291.8	297.1	275.8
75°	127.3	132.7	143.2	138.0	153.8	143.2	148.5	164.5	159.1	148.5	148.5
77.5°	106.1	106.1	106.1	100.9	111.4	111.4	106.1	116.7	111.4	111.4	106.1
80°	74.3	79.6	74.3	68.9	74.3	68.9	68.9	68.9	68.9	68.9	63.6
82.5°	58.4	47.8	53.1	47.8	53.1	53.1	47.8	42.4	42.4	47.8	42.4
85°	42.4	31.8	37.1	37.1	31.8	31.8	31.8	31.8	31.8	26.5	26.5
87.5°	26.5	16.0	16.0	16.0	21.2	21.2	21.2	16.0	21.2	21.2	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°	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4
2.5°	9899.3	9894.0	9904.7	9899.3	9899.3	9894.0	9899.3	9894.0	9904.7	9883.4	9888.7
5°	9899.3	9888.7	9894.0	9899.3	9904.7	9894.0	9894.0	9894.0	9904.7	9894.0	9899.3
7.5°	9878.1	9872.7	9888.7	9899.3	9894.0	9888.7	9899.3	9894.0	9904.7	9899.3	9909.9
10°	9835.6	9840.9	9851.6	9867.4	9872.7	9878.1	9888.7	9888.7	9904.7	9883.4	9894.0
12.5°	9772.0	9793.2	9819.8	9830.3	9851.6	9851.6	9862.2	9867.4	9878.1	9872.7	9888.7
15°	9692.4	9718.9	9750.7	9777.3	9803.8	9819.8	9835.6	9840.9	9856.9	9840.9	9846.2
17.5°	9596.9	9628.7	9676.5	9708.3	9750.7	9766.7	9787.8	9798.5	9814.4	9803.8	9809.1
20°	9464.2	9501.5	9554.4	9602.2	9628.7	9665.8	9692.4	9708.3	9718.9	9708.3	9713.6
22.5°	9278.6	9331.7	9400.6	9437.7	9490.8	9522.6	9528.0	9565.1	9591.6	9565.1	9575.7
25°	9061.0	9114.1	9167.2	9246.8	9294.6	9331.7	9368.8	9374.1	9400.6	9395.3	9390.0
27.5°	8700.3	8769.4	8859.5	8923.2	8986.8	9045.2	9087.7	9098.2	9124.8	9114.1	9119.5
30°	8206.9	8281.3	8366.2	8466.9	8557.1	8615.4	8668.5	8705.6	8732.1	8716.3	8711.0
32.5°	7506.7	7581.0	7671.2	7771.9	7878.1	7962.9	8026.6	8074.4	8106.2	8095.5	8069.1
35°	6705.7	6726.9	6785.3	6864.8	6954.9	7045.1	7103.6	7156.5	7193.6	7204.3	7204.3
37.5°	5883.4	5814.4	5772.0	5772.0	5825.0	5862.1	5915.2	5947.0	6005.4	6026.5	6042.5
40°	5087.5	4928.4	4779.9	4668.5	4594.3	4588.9	4588.9	4604.8	4657.9	4726.8	4790.5
42.5°	4376.7	4122.0	3893.9	3687.0	3538.5	3453.6	3416.5	3421.8	3464.3	3527.9	3633.9
45°	3809.1	3490.8	3204.3	2954.9	2753.3	2620.7	2557.1	2551.7	2583.5	2657.8	2774.6
47.5°	3368.7	3029.2	2705.6	2419.1	2201.7	2058.4	1984.1	1962.9	1984.1	2053.0	2191.0
50°	3002.7	2652.6	2318.4	2021.2	1787.8	1639.3	1570.3	1543.8	1570.3	1628.7	1766.5
52.5°	2663.1	2302.4	1989.4	1702.9	1453.6	1326.2	1252.0	1236.0	1252.0	1320.9	1432.4
55°	2270.6	1962.9	1655.2	1368.7	1151.3	1023.9	965.5	949.7	965.5	1029.2	1145.9
57.5°	1883.4	1618.0	1347.5	1087.5	901.9	790.4	737.4	716.1	753.3	795.7	933.7
60°	1522.5	1310.4	1082.2	854.1	700.3	599.4	557.0	551.7	562.3	615.4	710.8
62.5°	1193.7	1018.6	838.2	652.5	525.2	482.8	429.7	424.5	435.0	466.8	541.2
65°	859.5	748.1	610.1	477.4	376.7	318.3	297.1	302.4	313.0	334.3	403.2
67.5°	599.4	519.9	424.5	334.3	260.0	233.4	212.2	206.9	212.2	249.4	286.5
70°	403.2	355.4	286.5	254.7	180.4	143.2	148.5	132.7	153.8	153.8	185.6
72.5°	265.2	233.4	190.9	148.5	127.3	100.9	100.9	95.5	106.1	111.4	138.0
75°	138.0	106.1	106.1	74.3	53.1	26.5	47.8	42.4	37.1	42.4	53.1
77.5°	95.5	79.6	74.3	58.4	53.1	42.4	42.4	42.4	42.4	47.8	53.1
80°	58.4	58.4	42.4	37.1	31.8	26.5	31.8	31.8	31.8	31.8	37.1
82.5°	37.1	31.8	31.8	26.5	26.5	21.2	21.2	21.2	21.2	21.2	31.8
85°	31.8	21.2	21.2	16.0	21.2	37.1	16.0	21.2	21.2	21.2	16.0
87.5°	10.6	16.0	16.0	16.0	10.6	5.3	10.6	16.0	16.0	26.5	21.2
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°	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4	9883.4
2.5°	9899.3	9904.7	9904.7	9899.3	9899.3	9888.7	9909.9	9894.0	9899.3	9920.5	9904.7
5°	9909.9	9915.2	9915.2	9909.9	9909.9	9909.9	9915.2	9915.2	9909.9	9904.7	9915.2
7.5°	9931.1	9925.8	9925.8	9915.2	9915.2	9904.7	9915.2	9899.3	9909.9	9899.3	9915.2
10°	9904.7	9909.9	9904.7	9899.3	9899.3	9894.0	9894.0	9878.1	9883.4	9867.4	9878.1
12.5°	9888.7	9883.4	9883.4	9872.7	9862.2	9851.6	9846.2	9830.3	9830.3	9793.2	9809.1
15°	9846.2	9851.6	9835.6	9814.4	9803.8	9777.3	9766.7	9745.4	9724.2	9697.7	9703.1
17.5°	9809.1	9793.2	9772.0	9750.7	9708.3	9687.1	9665.8	9634.0	9623.4	9591.6	9581.0
20°	9697.7	9687.1	9660.6	9623.4	9596.9	9549.1	9528.0	9496.2	9469.5	9437.7	9421.8
22.5°	9554.4	9543.8	9512.0	9474.9	9432.4	9411.3	9390.0	9331.7	9305.1	9273.3	9268.0
25°	9374.1	9358.2	9326.4	9283.9	9262.6	9204.4	9183.1	9140.6	9130.1	9098.2	9093.0
27.5°	9098.2	9077.0	9039.9	8986.8	8949.7	8912.5	8891.4	8859.5	8848.9	8817.0	8811.8
30°	8684.5	8657.9	8583.6	8562.5	8498.7	8461.6	8461.6	8419.2	8424.5	8403.3	8403.3
32.5°	8031.9	7989.5	7931.1	7888.6	7846.2	7825.0	7825.0	7809.1	7819.7	7819.7	7830.3
35°	7167.2	7108.9	7076.9	7050.5	7050.5	7071.6	7135.4	7151.3	7183.1	7209.6	7230.9
37.5°	6058.4	6053.2	6090.3	6122.1	6201.7	6291.9	6403.2	6498.8	6588.9	6652.6	6716.2
40°	4859.5	4992.1	5098.2	5246.8	5368.7	5543.8	5745.4	5909.9	6063.7	6175.2	6291.9
42.5°	3793.1	3962.9	4185.8	4403.2	4620.7	4859.5	5124.8	5352.8	5554.4	5708.3	5830.3
45°	2954.9	3188.3	3459.0	3734.8	4016.0	4313.1	4588.9	4822.3	5034.6	5193.7	5315.7
47.5°	2382.0	2636.6	2944.3	3246.7	3565.0	3878.0	4185.8	4387.3	4562.3	4689.7	4801.2
50°	1968.1	2238.8	2562.4	2907.2	3225.4	3538.5	3803.7	4000.0	4143.3	4254.7	4323.6
52.5°	1644.5	1931.0	2275.9	2620.7	2939.0	3225.4	3464.3	3612.8	3729.5	3809.1	3872.7
55°	1358.0	1634.0	1957.6	2281.2	2594.2	2864.7	3061.0	3172.5	3262.6	3310.3	3347.5
57.5°	1108.8	1363.4	1660.5	1957.6	2228.1	2451.0	2604.8	2716.2	2758.7	2795.8	2790.5
60°	870.1	1108.8	1379.3	1634.0	1867.4	2047.7	2159.2	2222.8	2254.6	2270.6	2259.9
62.5°	684.3	901.9	1108.8	1331.6	1501.3	1655.2	1761.3	1761.3	1777.2	1782.5	1798.5
65°	509.2	673.7	854.1	1018.6	1156.5	1257.3	1315.7	1331.6	1352.8	1347.5	1336.9
67.5°	376.7	498.7	631.3	753.3	848.8	912.4	954.9	992.1	986.8	976.1	970.8
70°	260.0	339.6	456.3	530.5	599.4	663.2	673.7	679.0	684.3	689.7	679.0
72.5°	180.4	238.7	302.4	366.1	408.5	435.0	461.6	466.8	466.8	466.8	461.6
75°	90.2	122.0	180.4	206.9	244.0	254.7	275.8	275.8	291.8	270.5	265.2
77.5°	79.6	95.5	127.3	148.5	164.5	180.4	185.6	201.6	196.3	185.6	190.9
80°	47.8	58.4	79.6	90.2	111.4	116.7	122.0	127.3	122.0	127.3	127.3
82.5°	37.1	42.4	53.1	53.1	68.9	68.9	74.3	74.3	79.6	79.6	79.6
85°	21.2	37.1	31.8	63.6	42.4	42.4	53.1	63.6	53.1	53.1	63.6
87.5°	21.2	21.2	16.0	21.2	21.2	21.2	26.5	31.8	31.8	37.1	31.8
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: P249233

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9883.4	9883.4	9883.4	9883.4
2.5°	9899.3	9909.9	9894.0	9888.7
5°	9915.2	9915.2	9904.7	9904.7
7.5°	9915.2	9915.2	9899.3	9888.7
10°	9872.7	9872.7	9856.9	9846.2
12.5°	9793.2	9793.2	9787.8	9772.0
15°	9692.4	9692.4	9671.1	9655.3
17.5°	9554.4	9565.1	9538.6	9538.6
20°	9405.9	9400.6	9379.5	9368.8
22.5°	9252.1	9241.5	9236.2	9204.4
25°	9087.7	9077.0	9061.0	9045.2
27.5°	8806.5	8801.2	8785.2	8764.0
30°	8376.7	8371.4	8350.2	8350.2
32.5°	7819.7	7814.4	7793.2	7798.5
35°	7241.4	7262.7	7252.1	7230.9
37.5°	6758.7	6774.6	6785.3	6774.6
40°	6355.5	6403.2	6408.6	6419.2
42.5°	5925.8	5989.4	6010.7	6021.2
45°	5411.1	5469.5	5517.3	5506.7
47.5°	4885.9	4928.4	4970.8	4939.0
50°	4382.0	4408.5	4424.5	4424.5
52.5°	3904.6	3904.6	3899.3	3904.6
55°	3358.1	3358.1	3336.9	3347.5
57.5°	2785.1	2795.8	2779.8	2753.3
60°	2254.6	2228.1	2217.5	2201.7
62.5°	1756.0	1756.0	1718.9	1766.5
65°	1315.7	1299.8	1283.8	1278.5
67.5°	954.9	949.7	933.7	928.4
70°	673.7	652.5	647.2	636.6
72.5°	450.9	450.9	440.3	440.3
75°	275.8	249.4	244.0	249.4
77.5°	190.9	185.6	185.6	180.4
80°	127.3	122.0	132.7	116.7
82.5°	79.6	84.9	79.6	84.9
85°	53.1	63.6	58.4	58.4
87.5°	31.8	31.8	31.8	31.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)