

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: P248477

Luminaire Tested: **LD8B175D010 ER8B175850 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248477
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 ER8B175850 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 5000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18977.0 lumens
Efficiency: N/A
Efficacy: 107.1 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

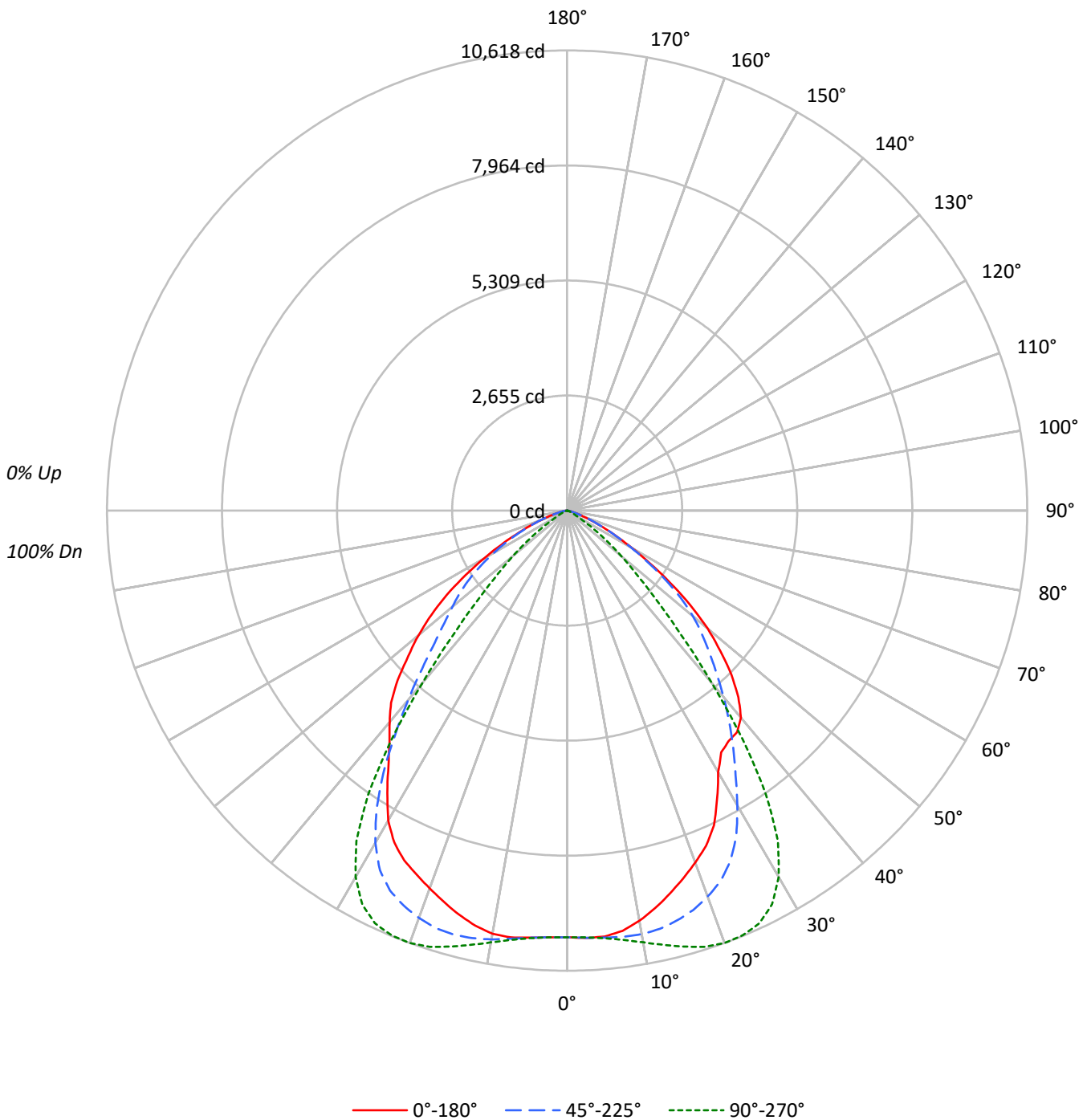
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	303571	303571	303571
5°	305381	306511	306186
10°	300893	316765	310549
15°	292096	332464	308109
20°	283620	348433	304365
25°	272727	357359	302954
30°	248200	347561	293973
35°	244503	301157	270470
40°	251152	208870	256406
45°	233802	126240	241093
50°	202795	77961	214832
55°	155629	40735	182321
60°	106028	16436	137604
65°	65960	8384	94935
70°	35802	5184	57945
75°	18682	2478	34242
80°	8364	2788	18557
85°	5555	1840	16664



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	946.7	5.0
10°-20°	2804.6	14.8
20°-30°	4278.7	22.5
30°-40°	4464.9	23.5
40°-50°	3353.7	17.7
50°-60°	2063.5	10.9
60°-70°	839.8	4.4
70°-80°	197.8	1.0
80°-90°	27.2	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°	8030.1	42.3
0°-40°	12495.0	65.8
0°-60°	17912.1	94.4
0°-90°	18977.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18977.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9845	9845	9845	9845	9845	
5°	9866	9892	9902	9892	9892	933
15°	9150	9792	10414	10127	9651	2577
25°	8016	8915	10503	9672	8904	3644
35°	6495	6678	8000	7394	7185	4101
45°	5361	4640	2895	4321	5528	4090
55°	2895	2748	758	2748	3391	2602
65°	904	914	115	1228	1301	943
75°	157	157	21	277	287	189
85°	16	16	5	37	47	22
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°	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6
2.5°	9870.8	9855.1	9870.8	9870.8	9876.0	9865.6	9870.8	9876.0	9865.6	9865.6	9865.6
5°	9865.6	9855.1	9865.6	9860.3	9870.8	9870.8	9881.3	9881.3	9891.6	9891.6	9907.4
7.5°	9781.9	9761.1	9781.9	9797.7	9808.0	9829.0	9855.1	9876.0	9896.9	9917.9	9943.9
10°	9609.5	9609.5	9625.2	9656.5	9687.8	9724.4	9771.5	9823.8	9876.0	9923.0	9970.0
12.5°	9395.3	9379.6	9410.9	9452.7	9499.8	9557.3	9630.4	9708.8	9792.4	9886.4	9959.7
15°	9149.7	9134.0	9170.5	9212.3	9269.9	9353.5	9442.4	9546.8	9667.0	9792.4	9912.6
17.5°	8898.8	8893.6	8930.2	8987.7	9034.7	9123.5	9238.6	9363.9	9499.8	9667.0	9823.8
20°	8642.9	8637.6	8674.2	8721.2	8783.9	8867.5	8982.5	9128.7	9290.7	9478.9	9661.8
22.5°	8376.3	8381.5	8412.9	8465.1	8517.4	8606.2	8726.4	8872.8	9050.4	9254.2	9458.0
25°	8015.7	7989.6	8031.5	8083.7	8172.5	8245.6	8360.7	8517.4	8700.3	8914.6	9154.9
27.5°	7493.2	7487.9	7524.6	7571.6	7649.9	7738.8	7864.2	8026.2	8219.5	8454.7	8689.8
30°	6970.6	6981.1	6996.8	7043.9	7096.1	7184.9	7310.3	7446.3	7629.1	7853.7	8104.6
32.5°	6615.3	6615.3	6636.3	6667.6	6704.2	6751.2	6840.1	6939.3	7080.5	7237.2	7420.0
35°	6495.1	6474.3	6495.1	6500.4	6505.6	6516.1	6531.7	6563.1	6610.1	6678.1	6746.0
37.5°	6443.0	6427.2	6427.2	6406.4	6380.2	6348.9	6307.1	6260.0	6207.8	6139.8	6087.6
40°	6239.2	6228.7	6218.2	6197.3	6139.8	6077.2	6009.1	5899.4	5779.3	5612.0	5444.9
42.5°	5847.3	5836.8	5831.6	5789.7	5737.5	5664.3	5585.9	5471.0	5319.5	5105.2	4864.8
45°	5361.3	5340.3	5324.7	5288.2	5251.5	5188.8	5115.7	5011.1	4859.6	4640.2	4352.8
47.5°	4796.9	4786.5	4781.2	4765.6	4729.0	4692.4	4645.4	4561.8	4425.9	4216.9	3919.1
50°	4227.3	4206.5	4216.9	4211.7	4196.0	4169.9	4138.5	4081.1	3976.5	3788.4	3516.7
52.5°	3574.1	3574.1	3569.0	3584.6	3589.8	3584.6	3589.8	3527.2	3438.3	3297.2	3067.3
55°	2894.8	2894.8	2910.5	2931.5	2952.3	2957.6	2952.3	2926.3	2863.5	2748.5	2544.7
57.5°	2257.3	2247.0	2278.3	2309.6	2330.6	2351.4	2335.7	2314.8	2278.3	2184.2	2027.4
60°	1719.2	1719.2	1740.0	1761.0	1781.8	1802.8	1797.5	1792.3	1761.0	1698.2	1572.9
62.5°	1264.5	1269.7	1269.7	1285.5	1306.3	1327.3	1342.9	1327.3	1311.6	1269.7	1186.1
65°	904.0	898.7	904.0	919.7	935.4	956.2	966.7	961.5	945.8	914.4	851.8
67.5°	606.2	600.9	621.8	627.0	637.5	658.5	653.2	658.5	653.2	627.0	574.8
70°	397.1	386.6	397.1	391.9	407.6	412.8	423.2	428.5	423.2	407.6	391.9
72.5°	245.6	240.4	245.6	250.9	256.1	261.2	271.7	271.7	266.5	256.1	235.1
75°	156.8	141.0	146.3	135.9	146.3	146.3	156.8	162.0	156.8	156.8	146.3
77.5°	94.1	94.1	94.1	94.1	94.1	94.1	94.1	99.3	104.5	94.1	88.9
80°	47.1	47.1	52.3	52.3	52.3	57.5	52.3	52.3	52.3	57.5	41.8
82.5°	36.6	31.3	31.3	31.3	36.6	31.3	31.3	31.3	31.3	31.3	31.3
85°	15.7	20.8	15.7	10.5	15.7	15.7	20.8	15.7	15.7	15.7	20.8
87.5°	5.2	5.2	0.0	0.0	0.0	5.2	0.0	5.2	5.2	10.5	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°	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6
2.5°	9870.8	9860.3	9860.3	9855.1	9865.6	9855.1	9860.3	9855.1	9855.1	9865.6	9855.1
5°	9907.4	9912.6	9902.1	9896.9	9912.6	9912.6	9912.6	9902.1	9902.1	9907.4	9902.1
7.5°	9959.7	9970.0	9975.3	9980.5	9991.0	9996.2	9996.2	9991.0	9985.8	10001.5	9980.5
10°	10017.1	10032.8	10064.1	10079.9	10105.9	10105.9	10116.4	10116.4	10105.9	10116.4	10111.2
12.5°	9996.2	10090.2	10142.5	10179.1	10215.6	10247.0	10257.4	10262.7	10257.4	10278.4	10257.4
15°	10032.8	10111.2	10194.8	10257.4	10325.3	10361.9	10372.4	10414.2	10424.7	10429.9	10398.6
17.5°	9975.3	10116.4	10205.2	10299.3	10398.6	10466.5	10529.1	10555.4	10560.6	10571.0	10529.1
20°	9844.6	10001.5	10137.3	10273.2	10388.1	10492.6	10544.9	10618.0	10597.2	10639.0	10581.4
22.5°	9667.0	9844.6	10017.1	10194.8	10315.0	10440.4	10550.1	10602.3	10628.5	10628.5	10565.7
25°	9384.8	9593.9	9781.9	9964.8	10147.7	10299.3	10424.7	10503.1	10518.8	10513.5	10440.4
27.5°	8945.9	9170.5	9390.1	9599.1	9823.8	10001.5	10147.7	10241.7	10267.9	10267.9	10189.6
30°	8339.7	8580.1	8794.4	9045.1	9275.1	9473.7	9677.5	9761.1	9808.0	9808.0	9719.3
32.5°	7618.6	7822.4	8021.0	8266.6	8517.4	8742.1	8935.4	9050.4	9107.9	9102.6	9024.3
35°	6834.8	6934.1	7085.7	7268.5	7493.2	7702.2	7890.3	8000.1	8099.4	8094.1	8021.0
37.5°	6051.0	6024.9	6040.6	6108.5	6249.5	6395.9	6542.2	6646.8	6730.3	6767.0	6751.2
40°	5282.9	5147.0	5016.3	4969.4	4979.8	5032.1	5110.4	5188.8	5282.9	5330.0	5350.8
42.5°	4593.1	4363.2	4133.2	3960.9	3861.5	3830.2	3866.8	3892.9	3950.4	4018.3	4086.3
45°	4039.3	3731.0	3427.8	3161.4	2994.2	2894.8	2874.0	2894.8	2926.3	2994.2	3083.0
47.5°	3584.6	3224.0	2884.4	2586.5	2340.9	2210.4	2173.8	2163.3	2194.7	2257.3	2377.5
50°	3182.2	2821.7	2445.5	2100.6	1844.6	1698.2	1646.0	1625.1	1661.6	1708.7	1818.4
52.5°	2743.3	2388.0	2001.3	1666.9	1400.4	1248.9	1191.4	1160.0	1180.9	1243.7	1353.4
55°	2267.8	1938.6	1588.5	1243.7	987.6	846.5	778.5	757.7	778.5	846.5	956.2
57.5°	1792.3	1515.4	1222.7	898.7	668.8	527.8	459.8	438.9	496.5	522.6	637.5
60°	1400.4	1175.8	924.9	658.5	459.8	350.1	282.2	266.5	292.7	339.6	433.7
62.5°	1050.3	909.2	710.6	470.3	339.6	224.6	188.1	172.5	188.1	224.6	297.9
65°	762.9	653.2	496.5	344.8	229.9	167.2	125.4	114.9	130.7	156.8	219.5
67.5°	522.6	438.9	344.8	240.4	156.8	104.5	88.9	88.9	94.1	114.9	162.0
70°	339.6	287.4	219.5	156.8	104.5	78.4	67.9	57.5	67.9	83.6	109.7
72.5°	214.3	182.8	141.0	109.7	78.4	57.5	47.1	41.8	52.3	62.7	83.6
75°	130.7	99.3	73.1	57.5	41.8	41.8	41.8	20.8	26.1	41.8	52.3
77.5°	78.4	67.9	57.5	47.1	36.6	20.8	20.8	20.8	26.1	31.3	47.1
80°	41.8	36.6	26.1	26.1	20.8	15.7	20.8	15.7	10.5	26.1	31.3
82.5°	26.1	20.8	20.8	20.8	26.1	10.5	15.7	10.5	15.7	20.8	15.7
85°	15.7	15.7	15.7	10.5	26.1	10.5	10.5	5.2	5.2	10.5	10.5
87.5°	0.0	5.2	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2	5.2
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°	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6	9844.6
2.5°	9860.3	9855.1	9860.3	9855.1	9855.1	9855.1	9860.3	9860.3	9855.1	9855.1	9865.6
5°	9902.1	9902.1	9902.1	9896.9	9891.6	9891.6	9902.1	9902.1	9886.4	9902.1	9902.1
7.5°	9991.0	9975.3	9991.0	9970.0	9959.7	9964.8	9970.0	9959.7	9949.2	9954.4	9954.4
10°	10105.9	10090.2	10090.2	10074.6	10058.9	10048.4	10038.0	10011.8	9985.8	9980.5	9959.7
12.5°	10241.7	10215.6	10200.0	10168.6	10142.5	10105.9	10074.6	10032.8	9980.5	9943.9	9907.4
15°	10377.6	10335.8	10299.3	10247.0	10189.6	10126.8	10058.9	9991.0	9907.4	9834.2	9771.5
17.5°	10487.3	10429.9	10361.9	10278.4	10194.8	10100.7	10001.5	9902.1	9781.9	9687.8	9614.7
20°	10523.9	10440.4	10351.5	10241.7	10132.0	10001.5	9876.0	9745.4	9609.5	9510.2	9426.6
22.5°	10477.0	10377.6	10267.9	10153.0	10006.6	9865.6	9719.3	9567.7	9447.5	9311.7	9233.3
25°	10346.3	10226.1	10105.9	9970.0	9829.0	9672.2	9515.5	9358.7	9212.3	9139.2	9040.0
27.5°	10079.9	9949.2	9818.5	9677.5	9515.5	9358.7	9196.7	9045.1	8919.8	8820.5	8763.1
30°	9609.5	9458.0	9306.4	9154.9	9013.8	8851.8	8700.3	8574.9	8449.4	8371.0	8313.6
32.5°	8888.4	8752.6	8601.1	8454.7	8324.1	8188.2	8062.8	7953.1	7864.2	7811.9	7770.1
35°	7916.5	7780.6	7665.7	7561.2	7451.4	7394.0	7315.6	7252.8	7216.2	7195.4	7190.2
37.5°	6693.7	6615.3	6578.7	6557.9	6536.9	6521.3	6531.7	6557.9	6578.7	6615.3	6657.1
40°	5387.4	5455.3	5476.2	5549.4	5617.3	5706.1	5805.5	5920.4	6014.4	6134.6	6218.2
42.5°	4196.0	4321.4	4467.7	4624.5	4791.7	4953.7	5152.2	5335.1	5502.3	5653.8	5784.5
45°	3224.0	3417.4	3636.9	3861.5	4086.3	4321.4	4561.8	4786.5	4985.0	5147.0	5282.9
47.5°	2513.4	2727.7	3009.9	3286.8	3558.5	3835.5	4101.9	4337.0	4504.3	4661.0	4781.2
50°	1990.9	2236.5	2544.7	2863.5	3161.4	3453.9	3736.1	3955.6	4122.9	4248.3	4337.0
52.5°	1541.4	1834.1	2147.6	2482.1	2800.8	3119.6	3380.8	3584.6	3720.5	3830.2	3898.1
55°	1149.6	1437.0	1771.5	2116.3	2440.3	2748.5	2994.2	3171.9	3292.1	3354.7	3391.3
57.5°	830.8	1092.2	1426.5	1771.5	2064.0	2356.7	2555.2	2717.2	2785.1	2821.7	2837.4
60°	606.2	846.5	1144.3	1442.2	1719.2	1954.3	2126.8	2236.5	2288.8	2309.6	2304.4
62.5°	444.2	653.2	909.2	1160.0	1384.7	1578.0	1713.9	1787.1	1813.3	1823.6	1808.0
65°	339.6	501.6	721.1	914.4	1086.9	1227.9	1327.3	1374.3	1389.9	1384.7	1374.3
67.5°	250.9	376.3	538.3	684.5	810.0	919.7	972.0	1013.8	1024.1	1008.5	992.8
70°	177.7	276.9	391.9	491.2	585.2	648.0	705.4	710.6	710.6	705.4	695.0
72.5°	125.4	193.3	266.5	334.5	391.9	438.9	459.8	475.5	470.3	465.0	454.7
75°	83.6	120.2	193.3	209.0	261.2	276.9	297.9	297.9	303.0	287.4	287.4
77.5°	52.3	83.6	114.9	135.9	156.8	177.7	188.1	188.1	193.3	188.1	188.1
80°	31.3	52.3	62.7	94.1	94.1	109.7	114.9	120.2	109.7	125.4	109.7
82.5°	20.8	31.3	47.1	47.1	57.5	67.9	67.9	73.1	73.1	67.9	67.9
85°	15.7	20.8	26.1	31.3	31.3	36.6	31.3	31.3	36.6	41.8	36.6
87.5°	5.2	10.5	5.2	10.5	10.5	20.8	15.7	15.7	15.7	20.8	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



TEST NUMBER: P248477

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9844.6	9844.6	9844.6	9844.6
2.5°	9855.1	9860.3	9855.1	9855.1
5°	9902.1	9896.9	9902.1	9891.6
7.5°	9938.7	9938.7	9933.5	9933.5
10°	9938.7	9917.9	9917.9	9917.9
12.5°	9860.3	9834.2	9818.5	9808.0
15°	9724.4	9677.5	9656.5	9651.3
17.5°	9546.8	9505.0	9478.9	9463.2
20°	9343.0	9301.2	9269.9	9275.1
22.5°	9165.3	9118.4	9097.4	9086.9
25°	8987.7	8930.2	8914.6	8904.1
27.5°	8700.3	8669.0	8653.2	8637.6
30°	8261.3	8245.6	8219.5	8256.1
32.5°	7754.5	7728.3	7707.5	7723.2
35°	7195.4	7179.7	7195.4	7184.9
37.5°	6683.3	6698.9	6719.9	6730.3
40°	6281.0	6338.4	6359.3	6369.7
42.5°	5878.6	5946.5	5988.3	6014.4
45°	5382.1	5450.0	5497.1	5528.5
47.5°	4870.1	4927.6	4974.5	4969.4
50°	4405.1	4436.4	4457.2	4478.2
52.5°	3934.7	3934.7	3939.9	3939.9
55°	3401.8	3391.3	3386.0	3391.3
57.5°	2816.4	2806.1	2800.8	2785.1
60°	2283.5	2252.2	2231.2	2231.2
62.5°	1787.1	1750.5	1734.9	1729.6
65°	1342.9	1337.6	1306.3	1301.1
67.5°	972.0	951.0	930.2	935.4
70°	684.5	653.2	653.2	642.7
72.5°	444.2	428.5	423.2	423.2
75°	276.9	276.9	266.5	287.4
77.5°	182.8	182.8	177.7	182.8
80°	109.7	109.7	109.7	104.5
82.5°	67.9	73.1	67.9	67.9
85°	36.6	41.8	31.3	47.1
87.5°	20.8	26.1	20.8	26.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)