

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: P248513

Luminaire Tested: **LD8B175D010 ER8B175940 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248513  
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 ER8B175940 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
90 CRI 4000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16687.0 lumens  
Efficiency: N/A  
Efficacy: 94.2 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

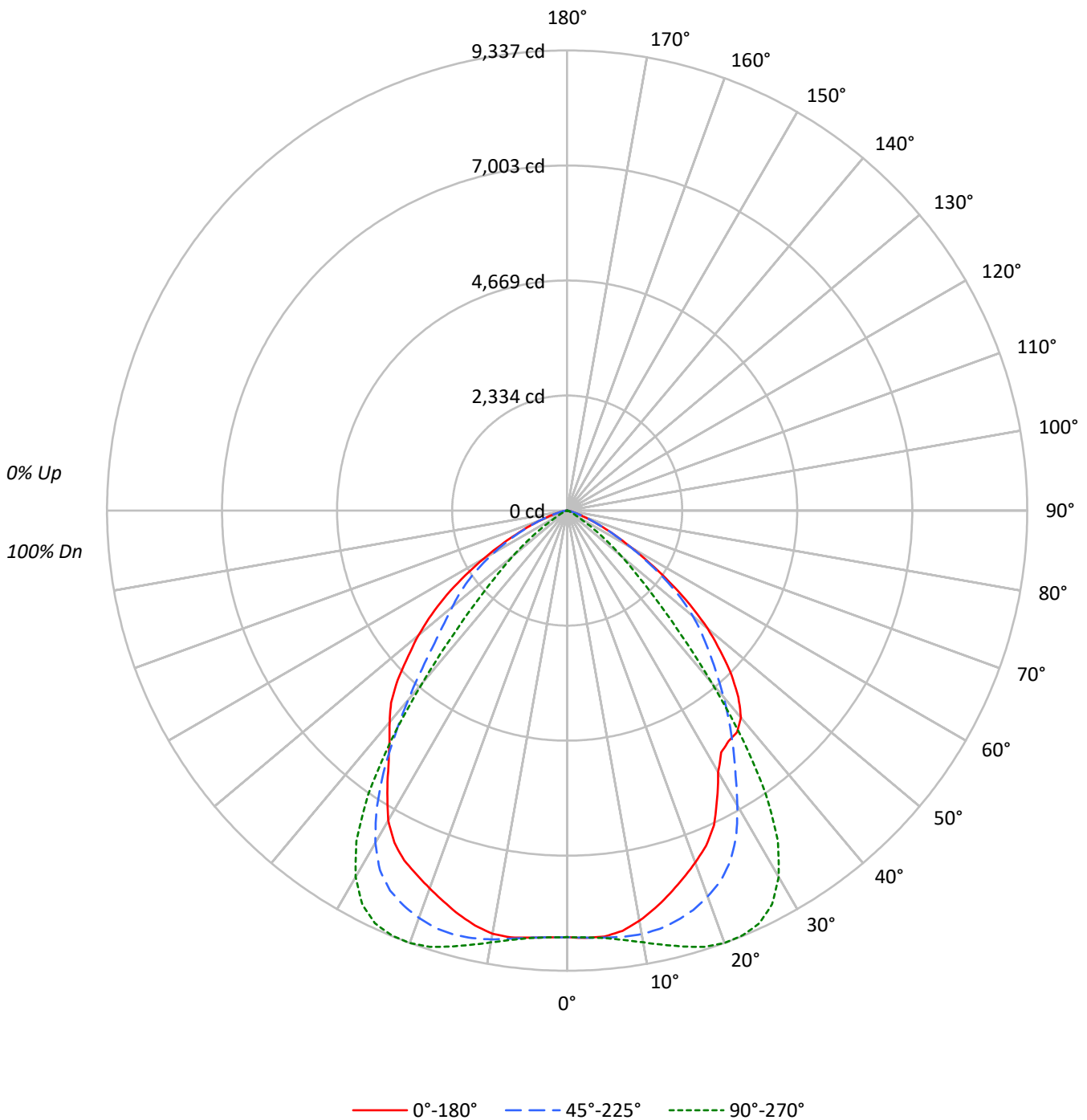
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	266938	266938	266938
5°	268530	269524	269239
10°	264583	278539	273072
15°	256849	292345	270927
20°	249393	306387	267638
25°	239819	314233	266395
30°	218251	305620	258498
35°	214997	264816	237832
40°	220845	183667	225466
45°	205587	111007	212001
50°	178324	68553	188907
55°	136850	35816	160317
60°	93231	14450	121002
65°	58000	7377	83479
70°	31484	4562	50958
75°	16418	2180	30107
80°	7352	2451	16320
85°	4883	1628	14648



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	832.5	5.0
10°-20°	2466.2	14.8
20°-30°	3762.4	22.5
30°-40°	3926.1	23.5
40°-50°	2949.0	17.7
50°-60°	1814.5	10.9
60°-70°	738.4	4.4
70°-80°	174.0	1.0
80°-90°	23.9	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°	7061.0	42.3
0°-40°	10987.2	65.8
0°-60°	15750.6	94.4
0°-90°	16687.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16687.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	8657	8657	8657	8657	8657	
5°	8675	8698	8707	8698	8698	821
15°	8046	8611	9158	8905	8487	2266
25°	7048	7839	9236	8505	7830	3204
35°	5711	5872	7035	6502	6318	3606
45°	4714	4080	2546	3800	4861	3597
55°	2546	2417	666	2417	2982	2288
65°	795	804	101	1080	1144	829
75°	138	138	18	244	253	166
85°	14	14	5	32	41	19
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°	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6
2.5°	8679.7	8665.8	8679.7	8679.7	8684.3	8675.1	8679.7	8684.3	8675.1	8675.1	8675.1
5°	8675.1	8665.8	8675.1	8670.5	8679.7	8679.7	8688.9	8688.9	8698.0	8698.0	8711.8
7.5°	8601.5	8583.2	8601.5	8615.4	8624.5	8642.9	8665.8	8684.3	8702.6	8721.0	8744.0
10°	8449.9	8449.9	8463.7	8491.2	8518.8	8550.9	8592.3	8638.3	8684.3	8725.5	8766.9
12.5°	8261.6	8247.7	8275.3	8312.0	8353.4	8404.0	8468.3	8537.2	8610.8	8693.4	8757.8
15°	8045.6	8031.8	8063.9	8100.7	8151.3	8224.8	8302.9	8394.8	8500.5	8610.8	8716.4
17.5°	7825.0	7820.4	7852.5	7903.1	7944.5	8022.5	8123.7	8233.9	8353.4	8500.5	8638.3
20°	7599.9	7595.3	7627.5	7668.8	7723.9	7797.4	7898.5	8027.1	8169.6	8335.1	8495.9
22.5°	7365.5	7370.1	7397.7	7443.6	7489.6	7567.6	7673.3	7802.1	7958.2	8137.4	8316.6
25°	7048.5	7025.5	7062.3	7108.3	7186.3	7250.6	7351.8	7489.6	7650.4	7838.8	8050.2
27.5°	6589.0	6584.4	6616.6	6657.9	6726.8	6804.9	6915.2	7057.7	7227.7	7434.4	7641.2
30°	6129.5	6138.7	6152.5	6193.9	6239.8	6317.9	6428.2	6547.7	6708.5	6906.0	7126.6
32.5°	5817.0	5817.0	5835.5	5863.0	5895.2	5936.5	6014.7	6101.9	6226.0	6363.9	6524.7
35°	5711.3	5693.0	5711.3	5716.0	5720.6	5729.8	5743.5	5771.2	5812.4	5872.2	5931.9
37.5°	5665.5	5651.6	5651.6	5633.3	5610.3	5582.7	5546.0	5504.6	5458.7	5398.9	5353.0
40°	5486.3	5477.0	5467.8	5449.5	5398.9	5343.8	5284.0	5187.5	5081.9	4934.8	4787.9
42.5°	5141.7	5132.5	5127.8	5091.1	5045.1	4980.8	4911.9	4810.8	4677.6	4489.1	4277.8
45°	4714.3	4695.9	4682.2	4650.0	4617.8	4562.7	4498.4	4406.4	4273.2	4080.2	3827.5
47.5°	4218.1	4208.9	4204.2	4190.5	4158.4	4126.1	4084.8	4011.3	3891.8	3708.0	3446.1
50°	3717.2	3698.9	3708.0	3703.5	3689.7	3666.7	3639.1	3588.6	3496.6	3331.2	3092.3
52.5°	3142.8	3142.8	3138.3	3152.0	3156.6	3152.0	3156.6	3101.6	3023.4	2899.3	2697.2
55°	2545.5	2545.5	2559.3	2577.7	2596.1	2600.7	2596.1	2573.1	2517.9	2416.9	2237.7
57.5°	1984.9	1975.8	2003.4	2030.9	2049.3	2067.7	2053.8	2035.5	2003.4	1920.6	1782.8
60°	1511.7	1511.7	1530.0	1548.5	1566.8	1585.2	1580.6	1576.0	1548.5	1493.3	1383.1
62.5°	1111.9	1116.5	1116.5	1130.4	1148.7	1167.1	1180.8	1167.1	1153.3	1116.5	1043.0
65°	794.9	790.3	794.9	808.7	822.5	840.8	850.1	845.5	831.6	804.1	749.0
67.5°	533.0	528.4	546.7	551.3	560.6	579.0	574.4	579.0	574.4	551.3	505.5
70°	349.2	340.0	349.2	344.6	358.4	363.0	372.1	376.7	372.1	358.4	344.6
72.5°	216.0	211.4	216.0	220.6	225.2	229.7	238.9	238.9	234.3	225.2	206.8
75°	137.8	124.0	128.6	119.5	128.6	128.6	137.8	142.4	137.8	137.8	128.6
77.5°	82.7	82.7	82.7	82.7	82.7	82.7	82.7	87.4	91.9	82.7	78.1
80°	41.4	41.4	46.0	46.0	46.0	50.6	46.0	46.0	46.0	50.6	36.8
82.5°	32.2	27.5	27.5	27.5	32.2	27.5	27.5	27.5	27.5	27.5	27.5
85°	13.8	18.3	13.8	9.2	13.8	13.8	18.3	13.8	13.8	13.8	18.3
87.5°	4.6	4.6	0.0	0.0	0.0	4.6	0.0	4.6	4.6	9.2	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°	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6
2.5°	8679.7	8670.5	8670.5	8665.8	8675.1	8665.8	8670.5	8665.8	8665.8	8675.1	8665.8
5°	8711.8	8716.4	8707.2	8702.6	8716.4	8716.4	8716.4	8707.2	8707.2	8711.8	8707.2
7.5°	8757.8	8766.9	8771.5	8776.1	8785.4	8790.0	8790.0	8785.4	8780.7	8794.6	8776.1
10°	8808.3	8822.1	8849.7	8863.5	8886.4	8886.4	8895.6	8895.6	8886.4	8895.6	8891.0
12.5°	8790.0	8872.6	8918.6	8950.7	8982.9	9010.4	9019.7	9024.3	9019.7	9038.1	9019.7
15°	8822.1	8891.0	8964.6	9019.7	9079.4	9111.5	9120.7	9157.5	9166.7	9171.3	9143.8
17.5°	8771.5	8895.6	8973.7	9056.4	9143.8	9203.5	9258.6	9281.6	9286.2	9295.3	9258.6
20°	8656.6	8794.6	8914.0	9033.5	9134.6	9226.4	9272.4	9336.7	9318.4	9355.1	9304.5
22.5°	8500.5	8656.6	8808.3	8964.6	9070.2	9180.5	9277.0	9322.9	9345.9	9345.9	9290.7
25°	8252.3	8436.2	8601.5	8762.3	8923.2	9056.4	9166.7	9235.6	9249.5	9244.8	9180.5
27.5°	7866.4	8063.9	8256.9	8440.8	8638.3	8794.6	8923.2	9005.8	9028.9	9028.9	8960.0
30°	7333.3	7544.7	7733.1	7953.6	8155.9	8330.5	8509.7	8583.2	8624.5	8624.5	8546.4
32.5°	6699.3	6878.5	7053.1	7269.0	7489.6	7687.2	7857.2	7958.2	8008.8	8004.2	7935.3
35°	6010.1	6097.3	6230.6	6391.4	6589.0	6772.8	6938.2	7034.7	7122.0	7117.4	7053.1
37.5°	5320.8	5297.8	5311.7	5371.4	5495.4	5624.1	5752.7	5844.7	5918.1	5950.4	5936.5
40°	4645.4	4525.9	4411.0	4369.7	4378.9	4424.8	4493.8	4562.7	4645.4	4686.8	4705.1
42.5°	4038.9	3836.7	3634.5	3482.9	3395.6	3368.0	3400.2	3423.1	3473.7	3533.4	3593.2
45°	3551.8	3280.8	3014.2	2779.9	2632.8	2545.5	2527.2	2545.5	2573.1	2632.8	2711.0
47.5°	3152.0	2835.0	2536.4	2274.4	2058.4	1943.7	1911.5	1902.3	1929.8	1984.9	2090.6
50°	2798.2	2481.2	2150.4	1847.1	1622.0	1493.3	1447.4	1429.0	1461.1	1502.5	1599.0
52.5°	2412.3	2099.8	1759.8	1465.7	1231.4	1098.2	1047.6	1020.1	1038.4	1093.6	1190.1
55°	1994.1	1704.6	1396.8	1093.6	868.4	744.4	684.6	666.2	684.6	744.4	840.8
57.5°	1576.0	1332.5	1075.2	790.3	588.1	464.1	404.3	386.0	436.6	459.5	560.6
60°	1231.4	1033.9	813.3	579.0	404.3	307.8	248.1	234.3	257.3	298.6	381.4
62.5°	923.6	799.5	624.9	413.5	298.6	197.5	165.4	151.7	165.4	197.5	262.0
65°	670.9	574.4	436.6	303.2	202.1	147.1	110.3	101.1	114.9	137.8	193.0
67.5°	459.5	386.0	303.2	211.4	137.8	91.9	78.1	78.1	82.7	101.1	142.4
70°	298.6	252.7	193.0	137.8	91.9	68.9	59.7	50.6	59.7	73.5	96.5
72.5°	188.4	160.8	124.0	96.5	68.9	50.6	41.4	36.8	46.0	55.1	73.5
75°	114.9	87.4	64.3	50.6	36.8	36.8	36.8	18.3	22.9	36.8	46.0
77.5°	68.9	59.7	50.6	41.4	32.2	18.3	18.3	18.3	22.9	27.5	41.4
80°	36.8	32.2	22.9	22.9	18.3	13.8	18.3	13.8	9.2	22.9	27.5
82.5°	22.9	18.3	18.3	18.3	22.9	9.2	13.8	9.2	13.8	18.3	13.8
85°	13.8	13.8	13.8	9.2	22.9	9.2	9.2	4.6	4.6	9.2	9.2
87.5°	0.0	4.6	4.6	0.0	4.6	0.0	4.6	4.6	4.6	4.6	4.6
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6	8656.6
2.5°	8670.5	8665.8	8670.5	8665.8	8665.8	8665.8	8670.5	8670.5	8665.8	8665.8	8675.1
5°	8707.2	8707.2	8707.2	8702.6	8698.0	8698.0	8707.2	8707.2	8693.4	8707.2	8707.2
7.5°	8785.4	8771.5	8785.4	8766.9	8757.8	8762.3	8766.9	8757.8	8748.6	8753.2	8753.2
10°	8886.4	8872.6	8872.6	8858.9	8845.1	8835.8	8826.7	8803.7	8780.7	8776.1	8757.8
12.5°	9005.8	8982.9	8969.2	8941.5	8918.6	8886.4	8858.9	8822.1	8776.1	8744.0	8711.8
15°	9125.3	9088.6	9056.4	9010.4	8960.0	8904.8	8845.1	8785.4	8711.8	8647.5	8592.3
17.5°	9221.8	9171.3	9111.5	9038.1	8964.6	8881.8	8794.6	8707.2	8601.5	8518.8	8454.5
20°	9254.0	9180.5	9102.4	9005.8	8909.4	8794.6	8684.3	8569.4	8449.9	8362.6	8289.1
22.5°	9212.7	9125.3	9028.9	8927.8	8799.1	8675.1	8546.4	8413.1	8307.4	8188.0	8119.1
25°	9097.8	8992.1	8886.4	8766.9	8642.9	8505.1	8367.2	8229.4	8100.7	8036.4	7949.1
27.5°	8863.5	8748.6	8633.7	8509.7	8367.2	8229.4	8087.0	7953.6	7843.4	7756.1	7705.6
30°	8449.9	8316.6	8183.4	8050.2	7926.1	7783.6	7650.4	7540.1	7429.8	7360.9	7310.4
32.5°	7815.8	7696.4	7563.1	7434.4	7319.6	7200.1	7089.8	6993.4	6915.2	6869.2	6832.5
35°	6961.2	6841.7	6740.6	6648.8	6552.2	6501.7	6432.8	6377.6	6345.4	6327.1	6322.5
37.5°	5885.9	5817.0	5784.9	5766.5	5748.1	5734.4	5743.5	5766.5	5784.9	5817.0	5853.8
40°	4737.3	4797.0	4815.4	4879.7	4939.4	5017.6	5104.9	5206.0	5288.6	5394.3	5467.8
42.5°	3689.7	3800.0	3928.6	4066.4	4213.5	4355.9	4530.5	4691.3	4838.3	4971.6	5086.5
45°	2835.0	3005.0	3198.0	3395.6	3593.2	3800.0	4011.3	4208.9	4383.5	4525.9	4645.4
47.5°	2210.1	2398.5	2646.7	2890.2	3129.1	3372.6	3606.9	3813.7	3960.7	4098.6	4204.2
50°	1750.6	1966.6	2237.7	2517.9	2779.9	3037.1	3285.3	3478.3	3625.4	3735.6	3813.7
52.5°	1355.4	1612.8	1888.5	2182.6	2462.8	2743.1	2972.8	3152.0	3271.5	3368.0	3427.7
55°	1010.8	1263.6	1557.7	1860.9	2145.8	2416.9	2632.8	2789.1	2894.8	2949.9	2982.0
57.5°	730.6	960.4	1254.4	1557.7	1814.9	2072.3	2246.9	2389.3	2449.0	2481.2	2495.0
60°	533.0	744.4	1006.2	1268.2	1511.7	1718.5	1870.1	1966.6	2012.6	2030.9	2026.3
62.5°	390.6	574.4	799.5	1020.1	1217.6	1387.6	1507.1	1571.4	1594.5	1603.6	1589.8
65°	298.6	441.1	634.1	804.1	955.8	1079.8	1167.1	1208.5	1222.2	1217.6	1208.5
67.5°	220.6	330.9	473.3	601.9	712.2	808.7	854.7	891.4	900.6	886.8	873.0
70°	156.3	243.5	344.6	431.9	514.6	569.8	620.3	624.9	624.9	620.3	611.2
72.5°	110.3	170.0	234.3	294.1	344.6	386.0	404.3	418.1	413.5	408.9	399.8
75°	73.5	105.7	170.0	183.8	229.7	243.5	262.0	262.0	266.5	252.7	252.7
77.5°	46.0	73.5	101.1	119.5	137.8	156.3	165.4	165.4	170.0	165.4	165.4
80°	27.5	46.0	55.1	82.7	82.7	96.5	101.1	105.7	96.5	110.3	96.5
82.5°	18.3	27.5	41.4	41.4	50.6	59.7	59.7	64.3	64.3	59.7	59.7
85°	13.8	18.3	22.9	27.5	27.5	32.2	27.5	27.5	32.2	36.8	32.2
87.5°	4.6	9.2	4.6	9.2	9.2	18.3	13.8	13.8	13.8	18.3	18.3
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: P248513

CATALOG NUMBER: LD8B175D010 ER8B175940 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	8656.6	8656.6	8656.6	8656.6
2.5°	8665.8	8670.5	8665.8	8665.8
5°	8707.2	8702.6	8707.2	8698.0
7.5°	8739.4	8739.4	8734.8	8734.8
10°	8739.4	8721.0	8721.0	8721.0
12.5°	8670.5	8647.5	8633.7	8624.5
15°	8550.9	8509.7	8491.2	8486.6
17.5°	8394.8	8358.0	8335.1	8321.3
20°	8215.6	8178.8	8151.3	8155.9
22.5°	8059.3	8018.0	7999.6	7990.4
25°	7903.1	7852.5	7838.8	7829.6
27.5°	7650.4	7622.8	7609.0	7595.3
30°	7264.4	7250.6	7227.7	7259.8
32.5°	6818.8	6795.7	6777.4	6791.2
35°	6327.1	6313.3	6327.1	6317.9
37.5°	5876.8	5890.6	5909.0	5918.1
40°	5523.0	5573.5	5591.9	5601.1
42.5°	5169.2	5228.9	5265.7	5288.6
45°	4732.7	4792.4	4833.7	4861.4
47.5°	4282.4	4333.0	4374.2	4369.7
50°	3873.5	3901.0	3919.4	3937.8
52.5°	3459.9	3459.9	3464.5	3464.5
55°	2991.3	2982.0	2977.4	2982.0
57.5°	2476.6	2467.5	2462.8	2449.0
60°	2008.0	1980.4	1962.0	1962.0
62.5°	1571.4	1539.3	1525.5	1520.9
65°	1180.8	1176.2	1148.7	1144.1
67.5°	854.7	836.2	817.9	822.5
70°	601.9	574.4	574.4	565.2
72.5°	390.6	376.7	372.1	372.1
75°	243.5	243.5	234.3	252.7
77.5°	160.8	160.8	156.3	160.8
80°	96.5	96.5	96.5	91.9
82.5°	59.7	64.3	59.7	59.7
85°	32.2	36.8	27.5	41.4
87.5°	18.3	22.9	18.3	22.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)