

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: P248459

Luminaire Tested: **LD8B175D010 ER8B175835 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248459  
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 ER8B175835 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 3500 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18735.0 lumens  
Efficiency: N/A  
Efficacy: 105.7 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

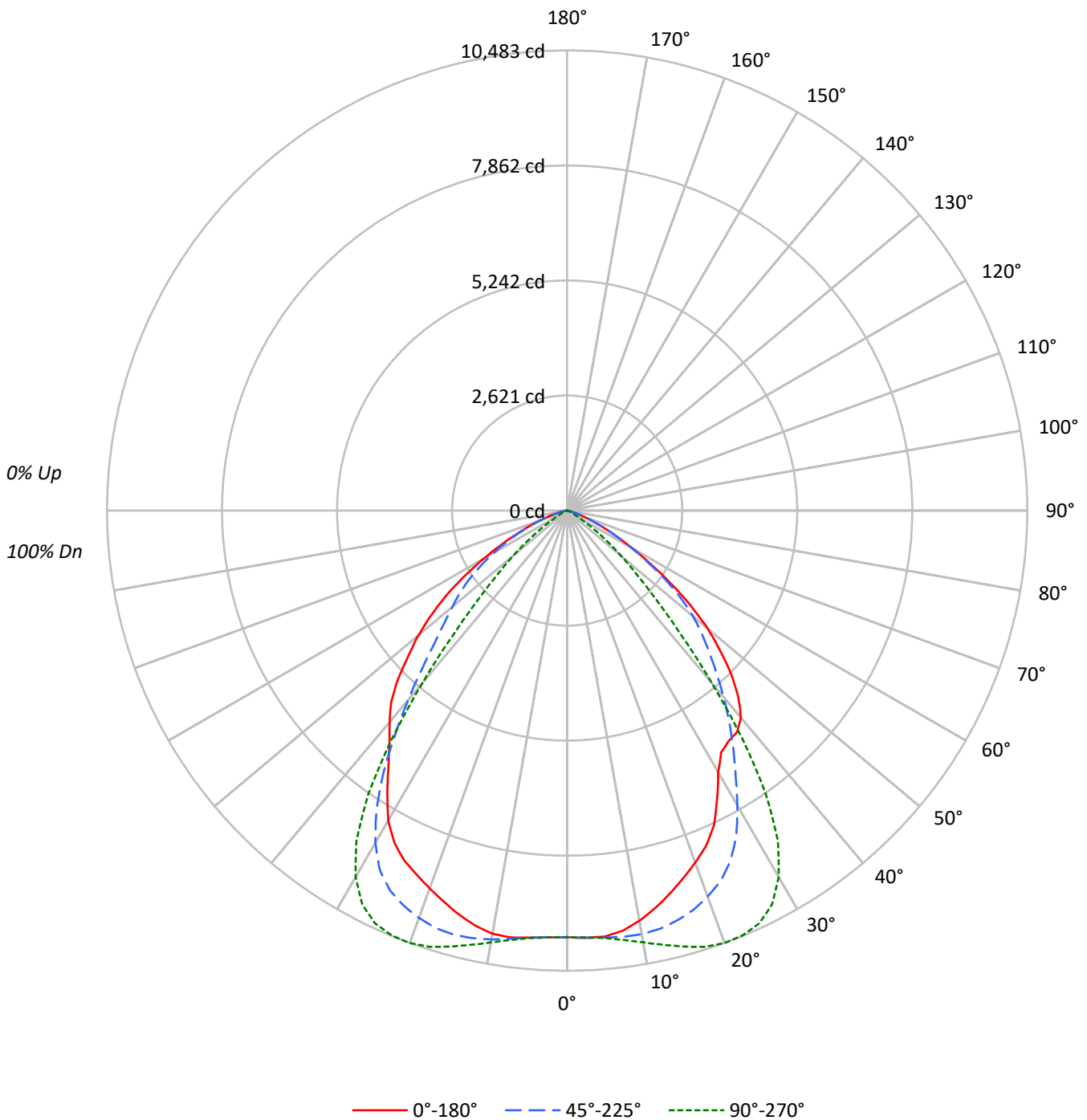
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	299701	299701	299701
5°	301487	302604	302282
10°	297054	312726	306588
15°	288370	328224	304179
20°	280003	343990	300483
25°	269250	352799	299089
30°	245035	343128	290223
35°	241386	297318	267022
40°	247948	206205	253137
45°	230819	124631	238019
50°	200210	76963	212092
55°	153645	40214	179993
60°	104671	16226	135852
65°	65114	8282	93723
70°	35351	5121	57206
75°	18443	2454	33813
80°	8257	2752	18308
85°	5484	1840	16452



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	934.7	5.0
10°-20°	2768.8	14.8
20°-30°	4224.1	22.5
30°-40°	4408.0	23.5
40°-50°	3311.0	17.7
50°-60°	2037.2	10.9
60°-70°	829.1	4.4
70°-80°	195.3	1.0
80°-90°	26.9	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°	7927.7	42.3
0°-40°	12335.6	65.8
0°-60°	17683.7	94.4
0°-90°	18735.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18735.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	9719	9719	9719	9719	9719	
5°	9740	9766	9776	9766	9766	921
15°	9033	9668	10281	9998	9528	2545
25°	7914	8801	10369	9549	8790	3598
35°	6412	6593	7898	7300	7093	4049
45°	5293	4581	2858	4266	5458	4038
55°	2858	2714	748	2714	3348	2569
65°	892	903	114	1212	1284	931
75°	155	155	21	273	284	186
85°	16	16	5	36	46	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°	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1
2.5°	9744.9	9729.4	9744.9	9744.9	9750.1	9739.8	9744.9	9750.1	9739.8	9739.8	9739.8
5°	9739.8	9729.4	9739.8	9734.6	9744.9	9744.9	9755.3	9755.3	9765.5	9765.5	9781.0
7.5°	9657.2	9636.6	9657.2	9672.7	9683.0	9703.7	9729.4	9750.1	9770.7	9791.4	9817.1
10°	9486.9	9486.9	9502.5	9533.4	9564.3	9600.4	9646.9	9698.5	9750.1	9796.4	9842.9
12.5°	9275.5	9260.0	9290.9	9332.2	9378.6	9435.4	9507.6	9585.0	9667.6	9760.3	9832.7
15°	9033.0	9017.5	9053.6	9094.9	9151.7	9234.2	9321.9	9425.1	9543.7	9667.6	9786.2
17.5°	8785.4	8780.2	8816.3	8873.1	8919.5	9007.1	9120.7	9244.4	9378.6	9543.7	9698.5
20°	8532.7	8527.5	8563.6	8610.0	8671.9	8754.4	8867.9	9012.3	9172.2	9358.0	9538.6
22.5°	8269.5	8274.6	8305.6	8357.2	8408.8	8496.4	8615.1	8759.6	8934.9	9136.1	9337.3
25°	7913.5	7887.8	7929.0	7980.7	8068.3	8140.5	8254.1	8408.8	8589.3	8800.9	9038.2
27.5°	7397.6	7392.5	7428.7	7475.0	7552.4	7640.1	7763.9	7923.9	8114.7	8346.8	8579.0
30°	6881.7	6892.1	6907.6	6954.1	7005.6	7093.3	7217.1	7351.3	7531.8	7753.6	8001.2
32.5°	6531.0	6531.0	6551.7	6582.6	6618.7	6665.1	6752.9	6850.8	6990.2	7144.9	7325.4
35°	6412.3	6391.7	6412.3	6417.5	6422.7	6433.0	6448.4	6479.5	6525.8	6592.9	6660.0
37.5°	6360.8	6345.3	6345.3	6324.7	6298.8	6267.9	6226.6	6180.2	6128.7	6061.5	6010.0
40°	6159.6	6149.2	6138.9	6118.3	6061.5	5999.7	5932.5	5824.2	5705.6	5540.5	5375.5
42.5°	5772.7	5762.4	5757.2	5715.9	5664.3	5592.1	5514.7	5401.2	5251.6	5040.1	4802.8
45°	5292.9	5272.2	5256.8	5220.7	5184.5	5122.6	5050.4	4947.2	4797.6	4581.0	4297.3
47.5°	4735.8	4725.4	4720.2	4704.8	4668.7	4632.5	4586.2	4503.6	4369.5	4163.1	3869.1
50°	4173.4	4152.8	4163.1	4158.0	4142.5	4116.7	4085.7	4029.0	3925.8	3740.1	3471.9
52.5°	3528.5	3528.5	3523.5	3538.9	3544.1	3538.9	3544.1	3482.2	3394.5	3255.1	3028.2
55°	2857.9	2857.9	2873.4	2894.1	2914.7	2919.9	2914.7	2888.9	2827.0	2713.5	2512.3
57.5°	2228.5	2218.3	2249.2	2280.2	2300.9	2321.4	2305.9	2285.3	2249.2	2156.3	2001.6
60°	1697.2	1697.2	1717.8	1738.5	1759.1	1779.8	1774.6	1769.4	1738.5	1676.5	1552.8
62.5°	1248.4	1253.6	1253.6	1269.1	1289.7	1310.4	1325.8	1310.4	1294.8	1253.6	1171.0
65°	892.4	887.2	892.4	907.9	923.5	944.0	954.4	949.2	933.7	902.8	840.9
67.5°	598.4	593.3	613.8	619.0	629.4	650.1	644.9	650.1	644.9	619.0	567.5
70°	392.1	381.7	392.1	386.9	402.4	407.6	417.8	423.0	417.8	402.4	386.9
72.5°	242.5	237.3	242.5	247.7	252.8	257.9	268.2	268.2	263.1	252.8	232.1
75°	154.8	139.2	144.4	134.2	144.4	144.4	154.8	159.9	154.8	154.8	144.4
77.5°	92.9	92.9	92.9	92.9	92.9	92.9	92.9	98.1	103.1	92.9	87.7
80°	46.5	46.5	51.6	51.6	51.6	56.8	51.6	51.6	51.6	56.8	41.3
82.5°	36.1	30.9	30.9	30.9	36.1	30.9	30.9	30.9	30.9	30.9	30.9
85°	15.5	20.6	15.5	10.3	15.5	15.5	20.6	15.5	15.5	15.5	20.6
87.5°	5.2	5.2	0.0	0.0	0.0	5.2	0.0	5.2	5.2	10.3	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°	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1
2.5°	9744.9	9734.6	9734.6	9729.4	9739.8	9729.4	9734.6	9729.4	9729.4	9739.8	9729.4
5°	9781.0	9786.2	9775.9	9770.7	9786.2	9786.2	9786.2	9775.9	9775.9	9781.0	9775.9
7.5°	9832.7	9842.9	9848.1	9853.2	9863.6	9868.8	9868.8	9863.6	9858.4	9873.9	9853.2
10°	9889.3	9904.9	9935.8	9951.3	9977.1	9977.1	9987.4	9987.4	9977.1	9987.4	9982.2
12.5°	9868.8	9961.5	10013.2	10049.3	10085.4	10116.3	10126.6	10131.8	10126.6	10147.3	10126.6
15°	9904.9	9982.2	10064.8	10126.6	10193.7	10229.8	10240.1	10281.4	10291.7	10296.9	10266.0
17.5°	9848.1	9987.4	10075.0	10167.9	10266.0	10333.0	10394.9	10420.7	10425.9	10436.1	10394.9
20°	9719.1	9873.9	10008.0	10142.2	10255.6	10358.8	10410.4	10482.6	10462.0	10503.3	10446.5
22.5°	9543.7	9719.1	9889.3	10064.8	10183.4	10307.3	10415.6	10467.1	10492.9	10492.9	10431.0
25°	9265.1	9471.5	9657.2	9837.7	10018.3	10167.9	10291.7	10369.1	10384.6	10379.5	10307.3
27.5°	8831.8	9053.6	9270.3	9476.7	9698.5	9873.9	10018.3	10111.1	10137.0	10137.0	10059.6
30°	8233.4	8470.7	8682.2	8929.8	9156.8	9352.9	9554.1	9636.6	9683.0	9683.0	9595.4
32.5°	7521.5	7722.7	7918.7	8161.2	8408.8	8630.6	8821.5	8934.9	8991.7	8986.6	8909.2
35°	6747.7	6845.6	6995.3	7175.8	7397.6	7604.0	7789.7	7898.1	7996.1	7990.9	7918.7
37.5°	5973.8	5948.0	5963.6	6030.6	6169.8	6314.3	6458.8	6562.0	6644.4	6680.7	6665.1
40°	5215.5	5081.4	4952.4	4906.0	4916.3	4967.9	5045.3	5122.6	5215.5	5262.0	5282.6
42.5°	4534.6	4307.6	4080.5	3910.4	3812.3	3781.4	3817.5	3843.2	3900.0	3967.0	4034.2
45°	3987.7	3683.4	3384.1	3121.1	2956.0	2857.9	2837.3	2857.9	2888.9	2956.0	3043.7
47.5°	3538.9	3182.9	2847.7	2553.6	2311.1	2182.2	2146.1	2135.7	2166.7	2228.5	2347.2
50°	3141.7	2785.7	2414.3	2073.8	1821.1	1676.5	1625.0	1604.3	1640.4	1686.9	1795.2
52.5°	2708.3	2357.5	1975.8	1645.6	1382.6	1233.0	1176.2	1145.3	1165.8	1227.8	1336.1
55°	2238.9	1913.8	1568.2	1227.8	975.0	835.7	768.6	748.0	768.6	835.7	944.0
57.5°	1769.4	1496.0	1207.1	887.2	660.3	521.1	453.9	433.3	490.1	515.9	629.4
60°	1382.6	1160.8	913.1	650.1	453.9	345.6	278.6	263.1	288.9	335.3	428.2
62.5°	1036.9	897.6	701.6	464.3	335.3	221.8	185.7	170.3	185.7	221.8	294.1
65°	753.2	644.9	490.1	340.4	227.0	165.1	123.8	113.5	129.0	154.8	216.7
67.5°	515.9	433.3	340.4	237.3	154.8	103.1	87.7	87.7	92.9	113.5	159.9
70°	335.3	283.8	216.7	154.8	103.1	77.4	67.0	56.8	67.0	82.6	108.3
72.5°	211.6	180.5	139.2	108.3	77.4	56.8	46.5	41.3	51.6	61.9	82.6
75°	129.0	98.1	72.2	56.8	41.3	41.3	41.3	20.6	25.8	41.3	51.6
77.5°	77.4	67.0	56.8	46.5	36.1	20.6	20.6	20.6	25.8	30.9	46.5
80°	41.3	36.1	25.8	25.8	20.6	15.5	20.6	15.5	10.3	25.8	30.9
82.5°	25.8	20.6	20.6	20.6	25.8	10.3	15.5	10.3	15.5	20.6	15.5
85°	15.5	15.5	15.5	10.3	25.8	10.3	10.3	5.2	5.2	10.3	10.3
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°	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1	9719.1
2.5°	9734.6	9729.4	9734.6	9729.4	9729.4	9729.4	9734.6	9734.6	9729.4	9729.4	9739.8
5°	9775.9	9775.9	9775.9	9770.7	9765.5	9765.5	9775.9	9775.9	9760.3	9775.9	9775.9
7.5°	9863.6	9848.1	9863.6	9842.9	9832.7	9837.7	9842.9	9832.7	9822.3	9827.5	9827.5
10°	9977.1	9961.5	9961.5	9946.1	9930.6	9920.3	9910.0	9884.2	9858.4	9853.2	9832.7
12.5°	10111.1	10085.4	10070.0	10038.9	10013.2	9977.1	9946.1	9904.9	9853.2	9817.1	9781.0
15°	10245.3	10204.0	10167.9	10116.3	10059.6	9997.6	9930.6	9863.6	9781.0	9708.8	9646.9
17.5°	10353.6	10296.9	10229.8	10147.3	10064.8	9971.9	9873.9	9775.9	9657.2	9564.3	9492.1
20°	10389.7	10307.3	10219.5	10111.1	10002.8	9873.9	9750.1	9621.1	9486.9	9389.0	9306.4
22.5°	10343.4	10245.3	10137.0	10023.5	9879.0	9739.8	9595.4	9445.7	9327.0	9192.9	9115.6
25°	10214.4	10095.7	9977.1	9842.9	9703.7	9548.9	9394.1	9239.4	9094.9	9022.7	8924.7
27.5°	9951.3	9822.3	9693.3	9554.1	9394.1	9239.4	9079.5	8929.8	8806.1	8708.0	8651.3
30°	9486.9	9337.3	9187.8	9038.2	8898.8	8738.9	8589.3	8465.5	8341.7	8264.3	8207.6
32.5°	8775.0	8641.0	8491.4	8346.8	8218.0	8083.8	7960.0	7851.7	7763.9	7712.3	7671.0
35°	7815.6	7681.4	7567.9	7464.8	7356.4	7299.7	7222.3	7160.3	7124.2	7103.6	7098.5
37.5°	6608.3	6531.0	6494.9	6474.3	6453.6	6438.2	6448.4	6474.3	6494.9	6531.0	6572.2
40°	5318.7	5385.7	5406.4	5478.6	5545.6	5633.4	5731.4	5844.9	5937.7	6056.3	6138.9
42.5°	4142.5	4266.3	4410.7	4565.5	4730.6	4890.5	5086.5	5267.1	5432.2	5581.7	5710.7
45°	3182.9	3373.8	3590.5	3812.3	4034.2	4266.3	4503.6	4725.4	4921.4	5081.4	5215.5
47.5°	2481.4	2692.9	2971.5	3244.9	3513.1	3786.5	4049.6	4281.7	4446.8	4601.6	4720.2
50°	1965.5	2208.0	2512.3	2827.0	3121.1	3409.9	3688.5	3905.2	4070.3	4194.1	4281.7
52.5°	1521.8	1810.7	2120.2	2450.4	2765.1	3079.8	3337.7	3538.9	3673.1	3781.4	3848.4
55°	1134.9	1418.7	1748.9	2089.3	2409.2	2713.5	2956.0	3131.4	3250.1	3311.9	3348.0
57.5°	820.2	1078.2	1408.3	1748.9	2037.7	2326.6	2522.6	2682.6	2749.6	2785.7	2801.2
60°	598.4	835.7	1129.7	1423.8	1697.2	1929.4	2099.6	2208.0	2259.6	2280.2	2275.0
62.5°	438.5	644.9	897.6	1145.3	1367.0	1557.9	1692.1	1764.3	1790.1	1800.4	1785.0
65°	335.3	495.2	711.9	902.8	1073.0	1212.3	1310.4	1356.8	1372.2	1367.0	1356.8
67.5°	247.7	371.5	531.4	675.8	799.6	907.9	959.6	1000.8	1011.1	995.7	980.1
70°	175.5	273.4	386.9	485.0	577.7	639.7	696.4	701.6	701.6	696.4	686.2
72.5°	123.8	190.9	263.1	330.2	386.9	433.3	453.9	469.4	464.3	459.1	448.9
75°	82.6	118.7	190.9	206.4	257.9	273.4	294.1	294.1	299.2	283.8	283.8
77.5°	51.6	82.6	113.5	134.2	154.8	175.5	185.7	185.7	190.9	185.7	185.7
80°	30.9	51.6	61.9	92.9	92.9	108.3	113.5	118.7	108.3	123.8	108.3
82.5°	20.6	30.9	46.5	46.5	56.8	67.0	67.0	72.2	72.2	67.0	67.0
85°	15.5	20.6	25.8	30.9	30.9	36.1	30.9	30.9	36.1	41.3	36.1
87.5°	5.2	10.3	5.2	10.3	10.3	20.6	15.5	15.5	15.5	20.6	20.6
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: P248459

CATALOG NUMBER: LD8B175D010 ER8B175835 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	9719.1	9719.1	9719.1	9719.1
2.5°	9729.4	9734.6	9729.4	9729.4
5°	9775.9	9770.7	9775.9	9765.5
7.5°	9812.0	9812.0	9806.8	9806.8
10°	9812.0	9791.4	9791.4	9791.4
12.5°	9734.6	9708.8	9693.3	9683.0
15°	9600.4	9554.1	9533.4	9528.2
17.5°	9425.1	9383.8	9358.0	9342.5
20°	9223.9	9182.6	9151.7	9156.8
22.5°	9048.4	9002.1	8981.4	8971.0
25°	8873.1	8816.3	8800.9	8790.5
27.5°	8589.3	8558.4	8542.9	8527.5
30°	8156.0	8140.5	8114.7	8150.8
32.5°	7655.6	7629.8	7609.2	7624.7
35°	7103.6	7088.1	7103.6	7093.3
37.5°	6598.1	6613.5	6634.2	6644.4
40°	6200.9	6257.6	6278.2	6288.5
42.5°	5803.6	5870.7	5911.9	5937.7
45°	5313.5	5380.5	5427.0	5458.0
47.5°	4808.0	4864.8	4911.1	4906.0
50°	4348.9	4379.8	4400.4	4421.1
52.5°	3884.5	3884.5	3889.7	3889.7
55°	3358.4	3348.0	3342.9	3348.0
57.5°	2780.5	2770.3	2765.1	2749.6
60°	2254.4	2223.5	2202.8	2202.8
62.5°	1764.3	1728.2	1712.8	1707.6
65°	1325.8	1320.6	1289.7	1284.5
67.5°	959.6	938.9	918.3	923.5
70°	675.8	644.9	644.9	634.5
72.5°	438.5	423.0	417.8	417.8
75°	273.4	273.4	263.1	283.8
77.5°	180.5	180.5	175.5	180.5
80°	108.3	108.3	108.3	103.1
82.5°	67.0	72.2	67.0	67.0
85°	36.1	41.3	30.9	46.5
87.5°	20.6	25.8	20.6	25.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)