

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: P249485

Luminaire Tested: **LD8B175D010 ER8B175940 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249485  
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 ER8B175940 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
90 CRI 4000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14653.0 lumens  
Efficiency: N/A  
Efficacy: 82.7 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

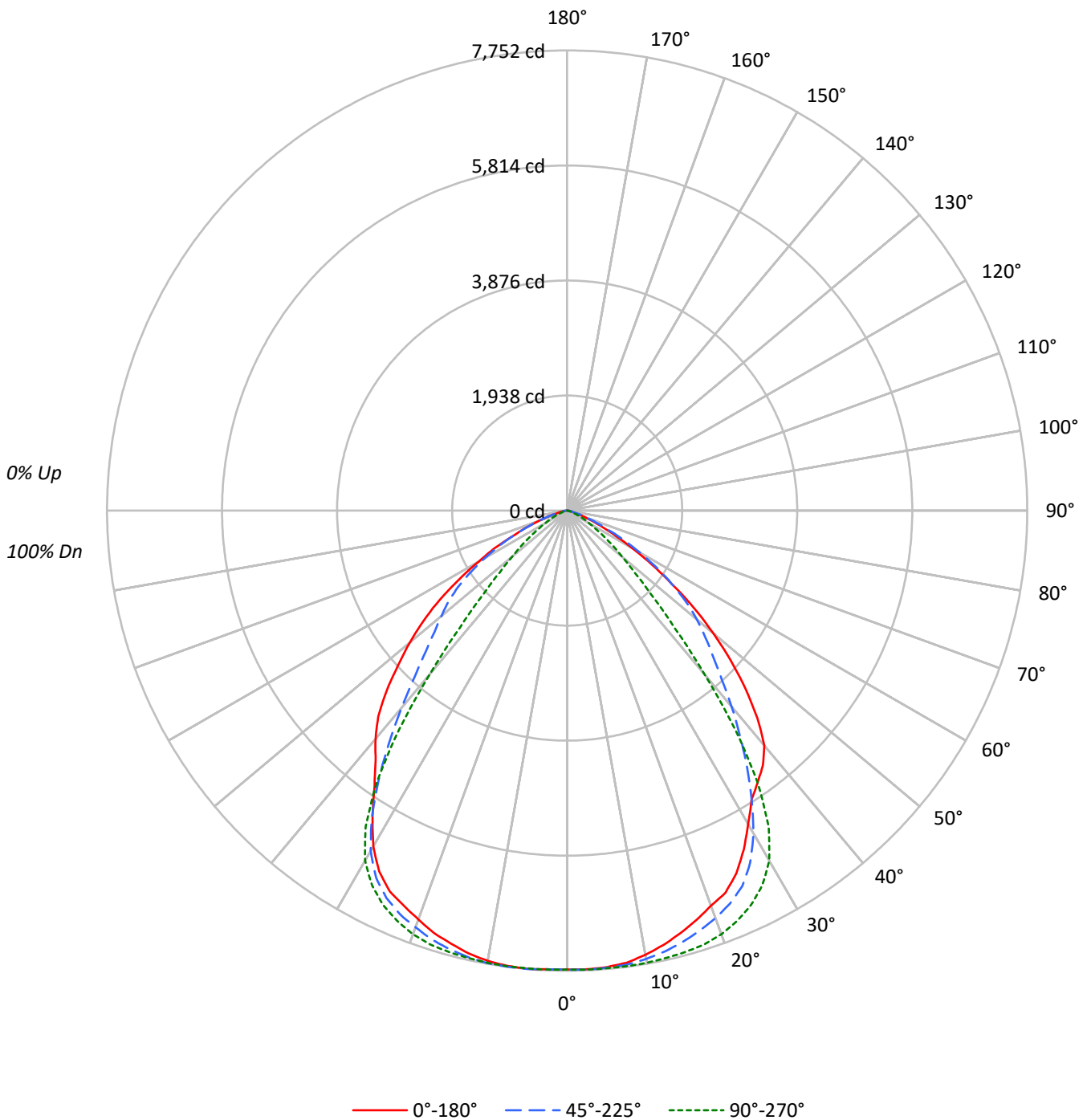
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	238402	238402	238402
5°	238925	239569	239829
10°	237921	242211	241171
15°	235284	245752	241116
20°	232460	249206	240494
25°	229442	249495	240741
30°	217066	242478	232579
35°	210585	210736	212927
40°	207976	144999	202131
45°	185317	87048	187851
50°	154089	57932	166034
55°	115566	39939	140774
60°	78318	26612	106213
65°	47237	17264	72972
70°	26191	9359	44899
75°	11867	3956	23245
80°	10317	4422	16213
85°	11746	5873	16169



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	737.8	5.0
10°-20°	2142.8	14.6
20°-30°	3252.3	22.2
30°-40°	3415.9	23.3
40°-50°	2561.0	17.5
50°-60°	1643.2	11.2
60°-70°	702.9	4.8
70°-80°	166.1	1.1
80°-90°	30.9	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°	6132.9	41.9
0°-40°	9548.9	65.2
0°-60°	13753.1	93.9
0°-90°	14653.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14653.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7731	7731	7731	7731	7731	
5°	7719	7731	7740	7752	7748	733
15°	7370	7524	7698	7648	7553	2079
25°	6744	6980	7333	7200	7076	3081
35°	5594	5283	5598	5532	5656	3511
45°	4250	3473	1996	3374	4308	3254
55°	2150	2150	743	2241	2618	1950
65°	647	764	237	984	1000	691
75°	100	116	33	199	195	145
85°	33	21	17	33	46	35
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°	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2
2.5°	7735.4	7743.7	7739.5	7739.5	7735.4	7739.5	7739.5	7747.9	7747.9	7739.5	7735.4
5°	7718.7	7727.0	7727.0	7718.7	7718.7	7739.5	7727.0	7735.4	7735.4	7731.2	7731.2
7.5°	7681.5	7681.5	7698.0	7685.6	7685.6	7698.0	7693.8	7702.2	7710.5	7714.7	7714.7
10°	7598.4	7606.7	7610.9	7610.9	7615.0	7627.4	7635.8	7652.4	7660.6	7669.0	7673.1
12.5°	7494.7	7507.1	7511.3	7507.1	7519.6	7536.2	7557.0	7577.7	7590.2	7606.7	7619.2
15°	7370.1	7370.1	7378.5	7390.9	7399.3	7424.2	7444.9	7469.7	7502.9	7523.8	7544.5
17.5°	7233.3	7241.6	7254.0	7254.0	7270.6	7312.1	7324.5	7361.9	7399.3	7420.0	7461.5
20°	7083.9	7092.1	7104.6	7112.9	7133.6	7166.8	7191.7	7224.9	7266.5	7303.8	7345.3
22.5°	6967.6	6951.1	6959.3	6967.6	6988.4	7017.5	7046.5	7088.0	7129.5	7166.8	7208.4
25°	6743.5	6747.7	6760.2	6768.4	6793.4	6818.3	6851.5	6901.2	6938.6	6980.1	7025.7
27.5°	6440.6	6444.8	6465.5	6465.5	6486.2	6527.8	6548.5	6590.0	6639.8	6681.3	6735.3
30°	6096.2	6104.4	6104.4	6121.1	6133.5	6154.3	6175.0	6216.5	6241.4	6278.8	6353.5
32.5°	5780.8	5789.0	5784.9	5780.8	5768.3	5764.2	5760.0	5768.3	5776.7	5789.0	5818.1
35°	5594.1	5573.3	5556.7	5527.7	5494.5	5452.9	5415.6	5365.8	5320.1	5282.8	5241.3
37.5°	5415.6	5411.4	5386.5	5345.0	5278.6	5204.0	5116.8	5008.9	4901.0	4784.8	4672.8
40°	5166.6	5154.1	5133.4	5075.3	5000.6	4909.3	4793.1	4660.3	4486.0	4307.6	4125.0
42.5°	4743.3	4747.4	4722.6	4676.9	4606.4	4519.2	4398.8	4253.6	4066.9	3855.2	3618.7
45°	4249.5	4249.5	4241.2	4203.8	4154.0	4083.5	3992.2	3871.8	3689.3	3473.4	3220.3
47.5°	3734.9	3739.0	3726.5	3718.3	3697.5	3651.9	3585.5	3494.2	3365.6	3158.0	2904.9
50°	3212.0	3212.0	3232.8	3228.6	3228.6	3212.0	3183.0	3129.0	3017.0	2851.0	2614.5
52.5°	2689.1	2697.4	2709.9	2726.5	2747.2	2780.4	2747.2	2722.3	2651.7	2523.1	2319.8
55°	2149.6	2157.9	2178.7	2207.7	2232.7	2265.9	2274.1	2274.1	2236.7	2149.6	1996.1
57.5°	1689.0	1676.5	1693.2	1718.1	1751.3	1784.5	1809.4	1838.4	1834.2	1776.2	1651.7
60°	1269.9	1274.0	1286.4	1311.4	1336.3	1365.3	1398.5	1423.4	1435.9	1406.8	1328.0
62.5°	925.4	925.4	942.0	966.9	979.4	1020.9	1041.6	1054.1	1066.5	1062.3	1012.6
65°	647.4	655.7	664.0	676.5	688.9	713.7	726.2	751.1	759.4	763.6	726.2
67.5°	456.5	444.0	452.4	460.6	473.1	489.7	514.6	514.6	527.0	527.0	502.1
70°	290.5	290.5	294.7	307.1	315.4	319.5	327.9	336.1	348.6	344.4	344.4
72.5°	195.1	190.9	195.1	199.2	203.4	215.8	215.8	219.9	228.3	232.4	215.8
75°	99.6	103.8	112.0	107.9	120.3	112.0	116.2	128.7	124.5	116.2	116.2
77.5°	83.0	83.0	83.0	78.9	87.1	87.1	83.0	91.3	87.1	87.1	83.0
80°	58.1	62.2	58.1	53.9	58.1	53.9	53.9	53.9	53.9	53.9	49.8
82.5°	45.7	37.4	41.5	37.4	41.5	41.5	37.4	33.2	33.2	37.4	33.2
85°	33.2	24.9	29.0	29.0	24.9	24.9	24.9	24.9	24.9	20.7	20.7
87.5°	20.7	12.5	12.5	12.5	16.6	16.6	16.6	12.5	16.6	16.6	8.3
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°	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2
2.5°	7743.7	7739.5	7747.9	7743.7	7743.7	7739.5	7743.7	7739.5	7747.9	7731.2	7735.4
5°	7743.7	7735.4	7739.5	7743.7	7747.9	7739.5	7739.5	7739.5	7747.9	7739.5	7743.7
7.5°	7727.0	7722.9	7735.4	7743.7	7739.5	7735.4	7743.7	7739.5	7747.9	7743.7	7751.9
10°	7693.8	7698.0	7706.3	7718.7	7722.9	7727.0	7735.4	7735.4	7747.9	7731.2	7739.5
12.5°	7644.1	7660.6	7681.5	7689.7	7706.3	7706.3	7714.7	7718.7	7727.0	7722.9	7735.4
15°	7581.8	7602.6	7627.4	7648.3	7669.0	7681.5	7693.8	7698.0	7710.5	7698.0	7702.2
17.5°	7507.1	7532.0	7569.4	7594.2	7627.4	7639.9	7656.5	7664.8	7677.3	7669.0	7673.1
20°	7403.3	7432.5	7473.9	7511.3	7532.0	7561.0	7581.8	7594.2	7602.6	7594.2	7598.4
22.5°	7258.1	7299.7	7353.6	7382.6	7424.2	7449.0	7453.2	7482.2	7502.9	7482.2	7490.6
25°	7088.0	7129.5	7171.0	7233.3	7270.6	7299.7	7328.7	7332.9	7353.6	7349.4	7345.3
27.5°	6805.8	6859.8	6930.3	6980.1	7029.9	7075.6	7108.8	7117.0	7137.8	7129.5	7133.6
30°	6419.8	6478.0	6544.4	6623.2	6693.8	6739.4	6780.9	6809.9	6830.6	6818.3	6814.1
32.5°	5872.1	5930.2	6000.8	6079.5	6162.6	6228.9	6278.8	6316.1	6341.0	6332.7	6312.0
35°	5245.5	5262.0	5307.7	5370.0	5440.5	5511.0	5556.7	5598.1	5627.2	5635.5	5635.5
37.5°	4602.2	4548.3	4515.1	4515.1	4556.5	4585.6	4627.1	4652.0	4697.7	4714.2	4726.7
40°	3979.7	3855.2	3739.0	3651.9	3593.8	3589.7	3589.7	3602.1	3643.6	3697.5	3747.4
42.5°	3423.6	3224.4	3046.0	2884.2	2768.0	2701.6	2672.6	2676.7	2709.9	2759.7	2842.6
45°	2979.6	2730.6	2506.5	2311.5	2153.8	2050.0	2000.3	1996.1	2021.0	2079.0	2170.4
47.5°	2635.2	2369.6	2116.4	1892.3	1722.2	1610.1	1552.1	1535.5	1552.1	1606.0	1713.9
50°	2348.8	2075.0	1813.5	1581.1	1398.5	1282.4	1228.3	1207.6	1228.3	1274.0	1381.9
52.5°	2083.2	1801.0	1556.2	1332.1	1137.1	1037.4	979.4	966.9	979.4	1033.3	1120.5
55°	1776.2	1535.5	1294.7	1070.6	900.6	801.0	755.3	742.9	755.3	805.1	896.4
57.5°	1473.3	1265.7	1054.1	850.7	705.5	618.3	576.9	560.2	589.2	622.4	730.4
60°	1191.0	1025.1	846.5	668.1	547.8	468.9	435.7	431.5	439.9	481.4	556.0
62.5°	933.8	796.8	655.7	510.4	410.8	377.6	336.1	332.0	340.3	365.1	423.3
65°	672.3	585.2	477.2	373.5	294.7	249.0	232.4	236.6	244.8	261.5	315.4
67.5°	468.9	406.7	332.0	261.5	203.4	182.6	166.0	161.9	166.0	195.1	224.1
70°	315.4	278.0	224.1	199.2	141.1	112.0	116.2	103.8	120.3	120.3	145.2
72.5°	207.4	182.6	149.4	116.2	99.6	78.9	78.9	74.7	83.0	87.1	107.9
75°	107.9	83.0	83.0	58.1	41.5	20.7	37.4	33.2	29.0	33.2	41.5
77.5°	74.7	62.2	58.1	45.7	41.5	33.2	33.2	33.2	33.2	37.4	41.5
80°	45.7	45.7	33.2	29.0	24.9	20.7	24.9	24.9	24.9	24.9	29.0
82.5°	29.0	24.9	24.9	20.7	20.7	16.6	16.6	16.6	16.6	16.6	24.9
85°	24.9	16.6	16.6	12.5	16.6	29.0	12.5	16.6	16.6	16.6	12.5
87.5°	8.3	12.5	12.5	12.5	8.3	4.2	8.3	12.5	12.5	20.7	16.6
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°	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2	7731.2
2.5°	7743.7	7747.9	7747.9	7743.7	7743.7	7735.4	7751.9	7739.5	7743.7	7760.3	7747.9
5°	7751.9	7756.1	7756.1	7751.9	7751.9	7751.9	7756.1	7756.1	7751.9	7747.9	7756.1
7.5°	7768.6	7764.4	7764.4	7756.1	7756.1	7747.9	7756.1	7743.7	7751.9	7743.7	7756.1
10°	7747.9	7751.9	7747.9	7743.7	7743.7	7739.5	7739.5	7727.0	7731.2	7718.7	7727.0
12.5°	7735.4	7731.2	7731.2	7722.9	7714.7	7706.3	7702.2	7689.7	7689.7	7660.6	7673.1
15°	7702.2	7706.3	7693.8	7677.3	7669.0	7648.3	7639.9	7623.3	7606.7	7586.0	7590.2
17.5°	7673.1	7660.6	7644.1	7627.4	7594.2	7577.7	7561.0	7536.2	7527.8	7502.9	7494.7
20°	7586.0	7577.7	7557.0	7527.8	7507.1	7469.7	7453.2	7428.3	7407.5	7382.6	7370.1
22.5°	7473.9	7465.6	7440.7	7411.7	7378.5	7361.9	7345.3	7299.7	7278.8	7254.0	7249.8
25°	7332.9	7320.4	7295.5	7262.3	7245.6	7200.1	7183.4	7150.2	7142.0	7117.0	7112.9
27.5°	7117.0	7100.4	7071.4	7029.9	7000.8	6971.8	6955.2	6930.3	6922.0	6897.1	6893.0
30°	6793.4	6772.6	6714.5	6697.9	6648.1	6619.0	6619.0	6585.8	6590.0	6573.4	6573.4
32.5°	6282.9	6249.7	6204.0	6170.8	6137.6	6121.1	6121.1	6108.6	6116.9	6116.9	6125.2
35°	5606.5	5560.9	5535.9	5515.2	5515.2	5531.7	5581.6	5594.1	5619.0	5639.7	5656.3
37.5°	4739.1	4735.0	4764.1	4789.0	4851.2	4921.8	5008.9	5083.6	5154.1	5204.0	5253.7
40°	3801.3	3905.1	3988.0	4104.3	4199.6	4336.6	4494.3	4622.9	4743.3	4830.5	4921.8
42.5°	2967.1	3099.9	3274.3	3444.4	3614.5	3801.3	4008.8	4187.2	4344.9	4465.3	4560.7
45°	2311.5	2494.0	2705.8	2921.5	3141.5	3373.9	3589.7	3772.2	3938.3	4062.7	4158.2
47.5°	1863.3	2062.5	2303.1	2539.7	2788.7	3033.5	3274.3	3432.0	3568.9	3668.5	3755.7
50°	1539.6	1751.3	2004.4	2274.1	2523.1	2768.0	2975.4	3129.0	3241.1	3328.2	3382.1
52.5°	1286.4	1510.5	1780.3	2050.0	2299.0	2523.1	2709.9	2826.1	2917.4	2979.6	3029.4
55°	1062.3	1278.2	1531.3	1784.5	2029.3	2240.9	2394.4	2481.7	2552.1	2589.5	2618.5
57.5°	867.4	1066.5	1298.9	1531.3	1742.9	1917.3	2037.6	2124.7	2157.9	2187.0	2182.8
60°	680.6	867.4	1079.0	1278.2	1460.8	1601.8	1689.0	1738.8	1763.7	1776.2	1767.8
62.5°	535.3	705.5	867.4	1041.6	1174.4	1294.7	1377.8	1377.8	1390.2	1394.4	1406.8
65°	398.3	527.0	668.1	796.8	904.6	983.5	1029.2	1041.6	1058.3	1054.1	1045.8
67.5°	294.7	390.1	493.8	589.2	664.0	713.7	746.9	776.1	771.9	763.6	759.4
70°	203.4	265.6	356.9	415.0	468.9	518.8	527.0	531.2	535.3	539.5	531.2
72.5°	141.1	186.7	236.6	286.3	319.5	340.3	361.1	365.1	365.1	365.1	361.1
75°	70.6	95.4	141.1	161.9	190.9	199.2	215.8	215.8	228.3	211.6	207.4
77.5°	62.2	74.7	99.6	116.2	128.7	141.1	145.2	157.7	153.5	145.2	149.4
80°	37.4	45.7	62.2	70.6	87.1	91.3	95.4	99.6	95.4	99.6	99.6
82.5°	29.0	33.2	41.5	41.5	53.9	53.9	58.1	58.1	62.2	62.2	62.2
85°	16.6	29.0	24.9	49.8	33.2	33.2	41.5	49.8	41.5	41.5	49.8
87.5°	16.6	16.6	12.5	16.6	16.6	16.6	20.7	24.9	24.9	29.0	24.9
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: P249485

CATALOG NUMBER: LD8B175D010 ER8B175940 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	7731.2	7731.2	7731.2	7731.2
2.5°	7743.7	7751.9	7739.5	7735.4
5°	7756.1	7756.1	7747.9	7747.9
7.5°	7756.1	7756.1	7743.7	7735.4
10°	7722.9	7722.9	7710.5	7702.2
12.5°	7660.6	7660.6	7656.5	7644.1
15°	7581.8	7581.8	7565.2	7552.8
17.5°	7473.9	7482.2	7461.5	7461.5
20°	7357.7	7353.6	7337.0	7328.7
22.5°	7237.4	7229.1	7224.9	7200.1
25°	7108.8	7100.4	7088.0	7075.6
27.5°	6888.8	6884.7	6872.2	6855.6
30°	6552.6	6548.5	6531.9	6531.9
32.5°	6116.9	6112.8	6096.2	6100.4
35°	5664.6	5681.2	5672.9	5656.3
37.5°	5286.9	5299.4	5307.7	5299.4
40°	4971.5	5008.9	5013.1	5021.4
42.5°	4635.4	4685.2	4701.8	4710.1
45°	4232.8	4278.5	4315.9	4307.6
47.5°	3822.0	3855.2	3888.4	3863.5
50°	3427.8	3448.5	3461.0	3461.0
52.5°	3054.3	3054.3	3050.2	3054.3
55°	2626.9	2626.9	2610.3	2618.5
57.5°	2178.7	2187.0	2174.5	2153.8
60°	1763.7	1742.9	1734.6	1722.2
62.5°	1373.6	1373.6	1344.6	1381.9
65°	1029.2	1016.7	1004.2	1000.1
67.5°	746.9	742.9	730.4	726.2
70°	527.0	510.4	506.3	498.0
72.5°	352.8	352.8	344.4	344.4
75°	215.8	195.1	190.9	195.1
77.5°	149.4	145.2	145.2	141.1
80°	99.6	95.4	103.8	91.3
82.5°	62.2	66.4	62.2	66.4
85°	41.5	49.8	45.7	45.7
87.5°	24.9	24.9	24.9	24.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)