

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: P249377

Luminaire Tested: **LD8B175D010 ER8B175940 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249377  
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 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
90 CRI 4000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16185.0 lumens  
Efficiency: N/A  
Efficacy: 91.3 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

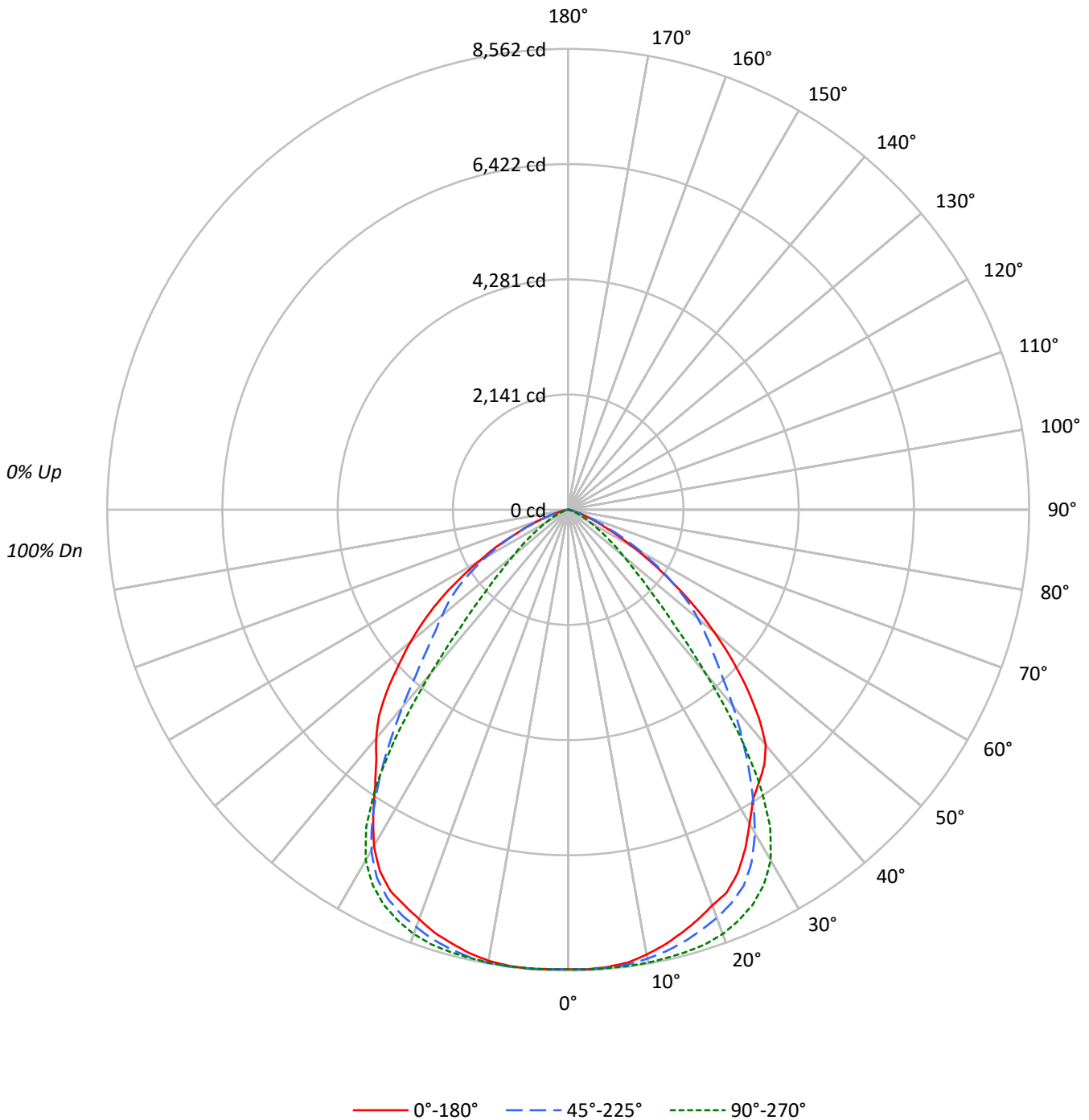
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	263327	263327	263327
5°	263905	264617	264902
10°	262795	267533	266384
15°	259885	271444	266327
20°	256763	275261	265637
25°	253432	275578	265909
30°	239761	267830	256895
35°	232603	232769	235190
40°	229721	160158	223265
45°	204693	96149	207488
50°	170203	63991	183395
55°	127651	44111	155494
60°	86502	29399	117320
65°	52177	19066	80597
70°	28932	10332	49588
75°	13106	4373	25675
80°	11401	4883	17900
85°	12985	6475	17867



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	815.0	5.0
10°-20°	2366.8	14.6
20°-30°	3592.4	22.2
30°-40°	3773.1	23.3
40°-50°	2828.8	17.5
50°-60°	1815.0	11.2
60°-70°	776.4	4.8
70°-80°	183.4	1.1
80°-90°	34.1	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°	6774.1	41.9
0°-40°	10547.2	65.2
0°-60°	15191.0	93.9
0°-90°	16185.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16185.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	8540	8540	8540	8540	8540	
5°	8526	8540	8549	8562	8558	810
15°	8141	8310	8503	8448	8342	2296
25°	7449	7710	8100	7953	7815	3403
35°	6179	5835	6183	6110	6248	3878
45°	4694	3837	2205	3727	4758	3595
55°	2374	2374	820	2475	2892	2154
65°	715	843	261	1086	1105	763
75°	110	128	37	220	216	160
85°	37	23	18	37	50	39
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°	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5
2.5°	8544.1	8553.3	8548.7	8548.7	8544.1	8548.7	8548.7	8557.9	8557.9	8548.7	8544.1
5°	8525.7	8534.9	8534.9	8525.7	8525.7	8548.7	8534.9	8544.1	8544.1	8539.5	8539.5
7.5°	8484.6	8484.6	8502.8	8489.2	8489.2	8502.8	8498.3	8507.4	8516.6	8521.2	8521.2
10°	8392.8	8402.0	8406.6	8406.6	8411.2	8424.9	8434.1	8452.5	8461.6	8470.8	8475.4
12.5°	8278.3	8292.0	8296.6	8292.0	8305.8	8324.1	8347.1	8369.9	8383.7	8402.0	8415.8
15°	8140.7	8140.7	8149.9	8163.7	8172.9	8200.4	8223.2	8250.7	8287.4	8310.4	8333.3
17.5°	7989.5	7998.7	8012.4	8012.4	8030.8	8076.5	8090.3	8131.6	8172.9	8195.8	8241.6
20°	7824.5	7833.6	7847.4	7856.6	7879.5	7916.2	7943.6	7980.3	8026.2	8067.5	8113.2
22.5°	7696.1	7677.8	7686.9	7696.1	7719.1	7751.2	7783.2	7829.0	7874.9	7916.2	7962.0
25°	7448.6	7453.2	7467.0	7476.1	7503.6	7531.1	7567.8	7622.8	7664.0	7709.9	7760.3
27.5°	7114.0	7118.6	7141.5	7141.5	7164.4	7210.2	7233.1	7279.0	7334.1	7379.8	7439.5
30°	6733.6	6742.7	6742.7	6761.0	6774.7	6797.7	6820.6	6866.5	6894.0	6935.2	7017.8
32.5°	6385.2	6394.3	6389.7	6385.2	6371.4	6366.8	6362.2	6371.4	6380.6	6394.3	6426.4
35°	6179.0	6156.0	6137.7	6105.6	6068.9	6023.1	5981.8	5926.8	5876.4	5835.1	5789.3
37.5°	5981.8	5977.2	5949.7	5903.8	5830.5	5748.0	5651.8	5532.6	5413.4	5285.1	5161.4
40°	5706.8	5693.0	5670.1	5605.9	5523.4	5422.6	5294.3	5147.6	4955.0	4757.9	4556.3
42.5°	5239.2	5243.8	5216.3	5165.8	5088.0	4991.7	4858.8	4698.4	4492.1	4258.3	3997.1
45°	4693.8	4693.8	4684.6	4643.3	4588.3	4510.4	4409.6	4276.7	4075.0	3836.6	3557.0
47.5°	4125.4	4130.0	4116.2	4107.1	4084.1	4033.7	3960.4	3859.5	3717.4	3488.2	3208.6
50°	3547.9	3547.9	3570.7	3566.1	3566.1	3547.9	3515.8	3456.1	3332.4	3149.0	2887.8
52.5°	2970.3	2979.5	2993.2	3011.5	3034.4	3071.1	3034.4	3006.9	2929.0	2786.9	2562.3
55°	2374.4	2383.6	2406.4	2438.5	2466.1	2502.8	2511.9	2511.9	2470.6	2374.4	2204.8
57.5°	1865.6	1851.8	1870.2	1897.7	1934.4	1971.0	1998.5	2030.6	2026.0	1961.9	1824.3
60°	1402.6	1407.2	1420.9	1448.5	1476.0	1508.1	1544.7	1572.2	1586.0	1553.9	1466.8
62.5°	1022.2	1022.2	1040.5	1068.0	1081.8	1127.6	1150.5	1164.3	1178.0	1173.4	1118.4
65°	715.1	724.2	733.4	747.2	760.9	788.4	802.1	829.6	838.8	843.4	802.1
67.5°	504.3	490.5	499.7	508.7	522.5	540.9	568.4	568.4	582.1	582.1	554.6
70°	320.9	320.9	325.5	339.2	348.4	353.0	362.2	371.2	385.0	380.4	380.4
72.5°	215.5	210.9	215.5	220.1	224.6	238.3	238.3	242.9	252.1	256.7	238.3
75°	110.0	114.6	123.7	119.2	132.9	123.7	128.3	142.1	137.5	128.3	128.3
77.5°	91.6	91.6	91.6	87.1	96.2	96.2	91.6	100.8	96.2	96.2	91.6
80°	64.2	68.8	64.2	59.6	64.2	59.6	59.6	59.6	59.6	59.6	55.0
82.5°	50.5	41.3	45.9	41.3	45.9	45.9	41.3	36.7	36.7	41.3	36.7
85°	36.7	27.5	32.1	32.1	27.5	27.5	27.5	27.5	27.5	22.9	22.9
87.5°	22.9	13.8	13.8	13.8	18.3	18.3	18.3	13.8	18.3	18.3	9.2
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5
2.5°	8553.3	8548.7	8557.9	8553.3	8553.3	8548.7	8553.3	8548.7	8557.9	8539.5	8544.1
5°	8553.3	8544.1	8548.7	8553.3	8557.9	8548.7	8548.7	8548.7	8557.9	8548.7	8553.3
7.5°	8534.9	8530.3	8544.1	8553.3	8548.7	8544.1	8553.3	8548.7	8557.9	8553.3	8562.4
10°	8498.3	8502.8	8512.0	8525.7	8530.3	8534.9	8544.1	8544.1	8557.9	8539.5	8548.7
12.5°	8443.3	8461.6	8484.6	8493.7	8512.0	8512.0	8521.2	8525.7	8534.9	8530.3	8544.1
15°	8374.5	8397.4	8424.9	8447.9	8470.8	8484.6	8498.3	8502.8	8516.6	8502.8	8507.4
17.5°	8292.0	8319.5	8360.7	8388.2	8424.9	8438.7	8457.0	8466.2	8480.0	8470.8	8475.4
20°	8177.4	8209.6	8255.3	8296.6	8319.5	8351.6	8374.5	8388.2	8397.4	8388.2	8392.8
22.5°	8017.0	8062.9	8122.4	8154.5	8200.4	8227.8	8232.4	8264.5	8287.4	8264.5	8273.7
25°	7829.0	7874.9	7920.8	7989.5	8030.8	8062.9	8094.9	8099.5	8122.4	8117.8	8113.2
27.5°	7517.3	7577.0	7654.8	7709.9	7764.9	7815.3	7852.0	7861.1	7884.1	7874.9	7879.5
30°	7091.0	7155.3	7228.6	7315.7	7393.6	7444.0	7489.8	7521.9	7544.8	7531.1	7526.5
32.5°	6486.0	6550.2	6628.1	6715.2	6806.9	6880.2	6935.2	6976.5	7004.0	6994.8	6971.9
35°	5793.9	5812.2	5862.7	5931.4	6009.3	6087.2	6137.7	6183.4	6215.5	6224.7	6224.7
37.5°	5083.4	5023.8	4987.2	4987.2	5032.9	5065.0	5110.9	5138.4	5188.8	5207.1	5220.9
40°	4395.8	4258.3	4130.0	4033.7	3969.6	3965.0	3965.0	3978.7	4024.5	4084.1	4139.2
42.5°	3781.6	3561.5	3364.5	3185.7	3057.4	2984.0	2952.0	2956.6	2993.2	3048.2	3139.8
45°	3291.1	3016.1	2768.6	2553.1	2379.0	2264.3	2209.4	2204.8	2232.3	2296.4	2397.4
47.5°	2910.7	2617.3	2337.7	2090.2	1902.3	1778.5	1714.3	1696.0	1714.3	1773.9	1893.1
50°	2594.4	2291.9	2003.1	1746.4	1544.7	1416.4	1356.8	1333.9	1356.8	1407.2	1526.3
52.5°	2301.0	1989.3	1718.9	1471.4	1255.9	1145.9	1081.8	1068.0	1081.8	1141.3	1237.7
55°	1961.9	1696.0	1430.1	1182.6	994.7	884.7	834.2	820.5	834.2	889.3	990.1
57.5°	1627.3	1398.0	1164.3	939.7	779.3	682.9	637.2	618.8	650.8	687.5	806.7
60°	1315.5	1132.2	935.1	738.0	605.1	517.9	481.3	476.7	485.9	531.7	614.2
62.5°	1031.4	880.1	724.2	563.8	453.8	417.1	371.2	366.8	375.8	403.3	467.6
65°	742.6	646.4	527.1	412.5	325.5	275.0	256.7	261.3	270.4	288.8	348.4
67.5°	517.9	449.2	366.8	288.8	224.6	201.7	183.4	178.8	183.4	215.5	247.5
70°	348.4	307.1	247.5	220.1	155.9	123.7	128.3	114.6	132.9	132.9	160.4
72.5°	229.1	201.7	165.0	128.3	110.0	87.1	87.1	82.5	91.6	96.2	119.2
75°	119.2	91.6	91.6	64.2	45.9	22.9	41.3	36.7	32.1	36.7	45.9
77.5°	82.5	68.8	64.2	50.5	45.9	36.7	36.7	36.7	36.7	41.3	45.9
80°	50.5	50.5	36.7	32.1	27.5	22.9	27.5	27.5	27.5	27.5	32.1
82.5°	32.1	27.5	27.5	22.9	22.9	18.3	18.3	18.3	18.3	18.3	27.5
85°	27.5	18.3	18.3	13.8	18.3	32.1	13.8	18.3	18.3	18.3	13.8
87.5°	9.2	13.8	13.8	13.8	9.2	4.6	9.2	13.8	13.8	22.9	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



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5	8539.5
2.5°	8553.3	8557.9	8557.9	8553.3	8553.3	8544.1	8562.4	8548.7	8553.3	8571.6	8557.9
5°	8562.4	8567.0	8567.0	8562.4	8562.4	8562.4	8567.0	8567.0	8562.4	8557.9	8567.0
7.5°	8580.8	8576.2	8576.2	8567.0	8567.0	8557.9	8567.0	8553.3	8562.4	8553.3	8567.0
10°	8557.9	8562.4	8557.9	8553.3	8553.3	8548.7	8548.7	8534.9	8539.5	8525.7	8534.9
12.5°	8544.1	8539.5	8539.5	8530.3	8521.2	8512.0	8507.4	8493.7	8493.7	8461.6	8475.4
15°	8507.4	8512.0	8498.3	8480.0	8470.8	8447.9	8438.7	8420.3	8402.0	8379.1	8383.7
17.5°	8475.4	8461.6	8443.3	8424.9	8388.2	8369.9	8351.6	8324.1	8314.9	8287.4	8278.3
20°	8379.1	8369.9	8347.1	8314.9	8292.0	8250.7	8232.4	8205.0	8182.0	8154.5	8140.7
22.5°	8255.3	8246.1	8218.6	8186.6	8149.9	8131.6	8113.2	8062.9	8039.9	8012.4	8007.8
25°	8099.5	8085.7	8058.3	8021.6	8003.2	7952.8	7934.4	7897.8	7888.7	7861.1	7856.6
27.5°	7861.1	7842.8	7810.7	7764.9	7732.8	7700.7	7682.4	7654.8	7645.7	7618.2	7613.7
30°	7503.6	7480.7	7416.5	7398.2	7343.1	7311.1	7311.1	7274.4	7279.0	7260.7	7260.7
32.5°	6939.8	6903.2	6852.7	6816.0	6779.3	6761.0	6761.0	6747.3	6756.5	6756.5	6765.6
35°	6192.6	6142.3	6114.7	6091.8	6091.8	6110.1	6165.2	6179.0	6206.4	6229.3	6247.7
37.5°	5234.6	5230.1	5262.2	5289.7	5358.4	5436.4	5532.6	5615.1	5693.0	5748.0	5803.0
40°	4198.7	4313.3	4405.0	4533.4	4638.7	4790.0	4964.2	5106.3	5239.2	5335.5	5436.4
42.5°	3277.3	3424.0	3616.6	3804.5	3992.5	4198.7	4428.0	4625.0	4799.2	4932.1	5037.5
45°	2553.1	2754.8	2988.6	3227.0	3469.9	3726.6	3965.0	4166.6	4350.0	4487.5	4592.9
47.5°	2058.1	2278.1	2543.9	2805.3	3080.3	3350.7	3616.6	3790.8	3942.0	4052.0	4148.3
50°	1700.5	1934.4	2214.0	2511.9	2786.9	3057.4	3286.5	3456.1	3579.9	3676.2	3735.7
52.5°	1420.9	1668.4	1966.4	2264.3	2539.3	2786.9	2993.2	3121.6	3222.4	3291.1	3346.1
55°	1173.4	1411.8	1691.4	1971.0	2241.5	2475.2	2644.8	2741.1	2819.0	2860.2	2892.3
57.5°	958.0	1178.0	1434.7	1691.4	1925.2	2117.7	2250.7	2346.9	2383.6	2415.6	2411.0
60°	751.8	958.0	1191.8	1411.8	1613.5	1769.3	1865.6	1920.6	1948.1	1961.9	1952.7
62.5°	591.3	779.3	958.0	1150.5	1297.2	1430.1	1521.9	1521.9	1535.5	1540.1	1553.9
65°	440.0	582.1	738.0	880.1	999.2	1086.4	1136.8	1150.5	1168.9	1164.3	1155.1
67.5°	325.5	430.9	545.4	650.8	733.4	788.4	825.0	857.2	852.6	843.4	838.8
70°	224.6	293.4	394.2	458.4	517.9	573.0	582.1	586.7	591.3	595.9	586.7
72.5°	155.9	206.3	261.3	316.3	353.0	375.8	398.8	403.3	403.3	403.3	398.8
75°	77.9	105.4	155.9	178.8	210.9	220.1	238.3	238.3	252.1	233.7	229.1
77.5°	68.8	82.5	110.0	128.3	142.1	155.9	160.4	174.2	169.6	160.4	165.0
80°	41.3	50.5	68.8	77.9	96.2	100.8	105.4	110.0	105.4	110.0	110.0
82.5°	32.1	36.7	45.9	45.9	59.6	59.6	64.2	64.2	68.8	68.8	68.8
85°	18.3	32.1	27.5	55.0	36.7	36.7	45.9	55.0	45.9	45.9	55.0
87.5°	18.3	18.3	13.8	18.3	18.3	18.3	22.9	27.5	27.5	32.1	27.5
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: P249377

CATALOG NUMBER: LD8B175D010 ER8B175940 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	8539.5	8539.5	8539.5	8539.5
2.5°	8553.3	8562.4	8548.7	8544.1
5°	8567.0	8567.0	8557.9	8557.9
7.5°	8567.0	8567.0	8553.3	8544.1
10°	8530.3	8530.3	8516.6	8507.4
12.5°	8461.6	8461.6	8457.0	8443.3
15°	8374.5	8374.5	8356.1	8342.5
17.5°	8255.3	8264.5	8241.6	8241.6
20°	8127.0	8122.4	8104.1	8094.9
22.5°	7994.1	7984.9	7980.3	7952.8
25°	7852.0	7842.8	7829.0	7815.3
27.5°	7609.1	7604.5	7590.7	7572.4
30°	7237.7	7233.1	7214.8	7214.8
32.5°	6756.5	6751.9	6733.6	6738.2
35°	6256.8	6275.2	6266.0	6247.7
37.5°	5839.7	5853.5	5862.7	5853.5
40°	5491.3	5532.6	5537.2	5546.4
42.5°	5120.1	5175.0	5193.4	5202.5
45°	4675.4	4725.8	4767.1	4757.9
47.5°	4221.6	4258.3	4294.9	4267.5
50°	3786.2	3809.1	3822.9	3822.9
52.5°	3373.7	3373.7	3369.1	3373.7
55°	2901.5	2901.5	2883.2	2892.3
57.5°	2406.4	2415.6	2401.8	2379.0
60°	1948.1	1925.2	1916.0	1902.3
62.5°	1517.3	1517.3	1485.2	1526.3
65°	1136.8	1123.0	1109.2	1104.6
67.5°	825.0	820.5	806.7	802.1
70°	582.1	563.8	559.2	550.0
72.5°	389.6	389.6	380.4	380.4
75°	238.3	215.5	210.9	215.5
77.5°	165.0	160.4	160.4	155.9
80°	110.0	105.4	114.6	100.8
82.5°	68.8	73.4	68.8	73.4
85°	45.9	55.0	50.5	50.5
87.5°	27.5	27.5	27.5	27.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)