

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: P250237

Luminaire Tested: **LD8B175D010 ER8B175850 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250237  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B175D010 ER8B175850 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE 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: 18945.0 lumens  
Efficiency: N/A  
Efficacy: 106.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

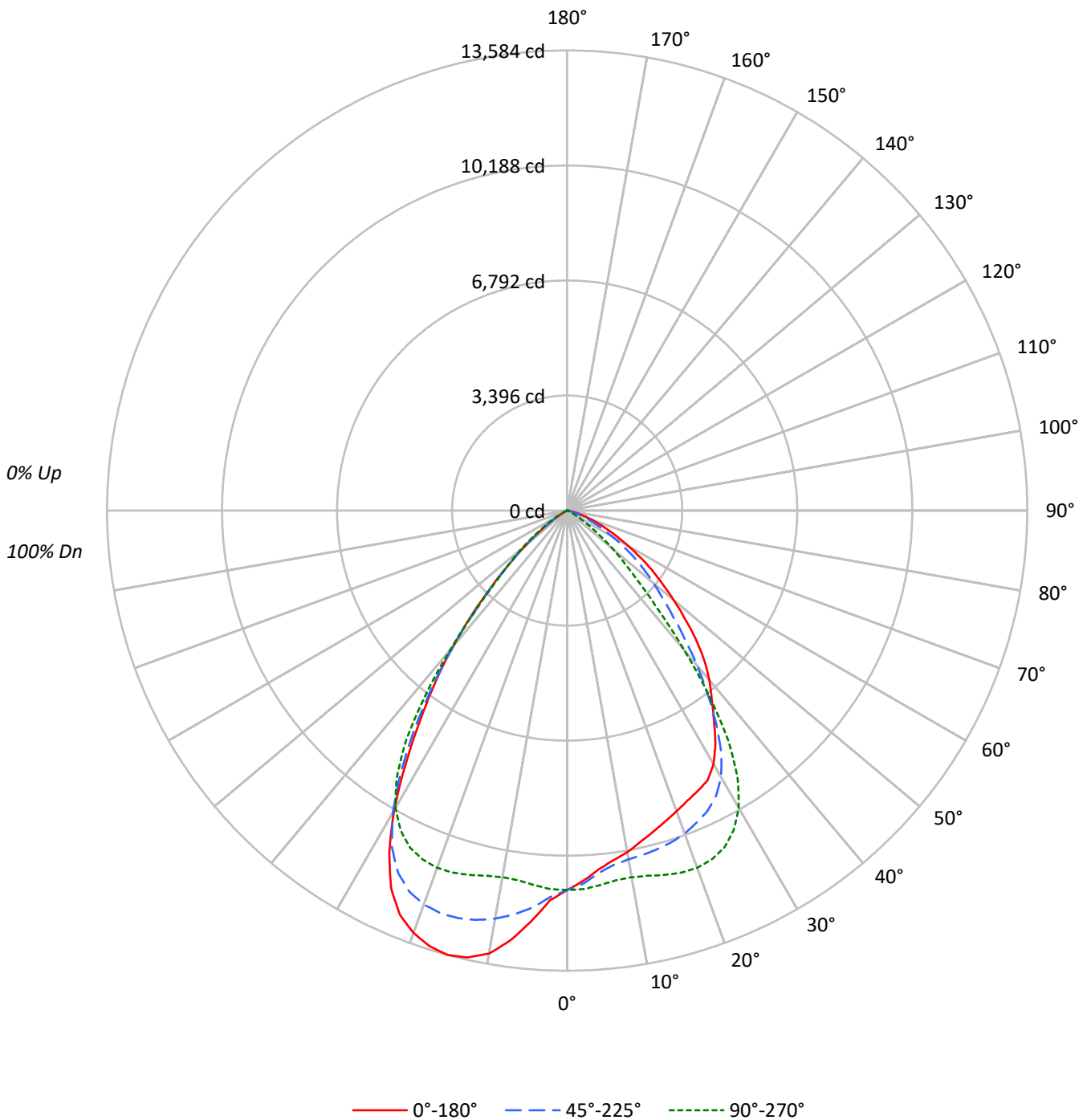
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60					60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42					42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

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

	0°	90°	180°
0°	345435	345435	345435
5°	329095	343513	376575
10°	320607	344044	415673
15°	313338	355446	433657
20°	309888	368290	435282
25°	310613	373493	418371
30°	307731	360667	363836
35°	284357	312134	284744
40°	262766	216409	211144
45°	233985	130579	134909
50°	196880	84130	76344
55°	163795	46149	34902
60°	127847	20013	10978
65°	94344	9938	5348
70°	65600	6140	2353
75°	39913	1263	0
80°	28803	1882	0
85°	18539	1840	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1076.9	5.7
10°-20°	3223.1	17.0
20°-30°	4935.8	26.1
30°-40°	4838.7	25.5
40°-50°	2913.9	15.4
50°-60°	1341.2	7.1
60°-70°	471.1	2.5
70°-80°	123.2	0.7
80°-90°	21.0	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°	9235.8	48.8
0°-40°	14074.6	74.3
0°-60°	18329.6	96.8
0°-90°	18945.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18945.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	11202	11202	11202	11202	11202	
5°	10632	10731	11098	11762	12166	###
15°	9815	10344	11134	12453	13584	2773
25°	9129	9789	10977	11804	12296	4205
35°	7554	7658	8292	7815	7564	4731
45°	5366	4418	2994	3015	3094	4114
55°	3047	2413	858	675	649	2718
65°	1293	895	136	68	73	1317
75°	335	194	11	0	0	406
85°	52	26	5	0	0	72
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°	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2
2.5°	10940.4	10951.0	10951.0	10951.0	10971.9	10977.3	10971.9	10977.3	10987.6	11024.2	11040.0
5°	10631.7	10615.9	10626.5	10621.1	10647.4	10663.1	10652.6	10668.3	10704.9	10731.2	10757.3
7.5°	10411.9	10411.9	10411.9	10422.2	10438.0	10469.4	10464.3	10474.6	10511.2	10547.9	10584.5
10°	10239.1	10233.9	10233.9	10260.0	10280.9	10317.5	10328.1	10359.5	10406.5	10453.7	10495.5
12.5°	10013.9	10019.3	10045.4	10071.7	10118.6	10176.2	10207.6	10249.6	10322.9	10401.3	10448.5
15°	9815.1	9820.2	9841.3	9893.5	9951.2	10019.3	10087.2	10155.3	10244.3	10343.8	10427.6
17.5°	9621.4	9626.5	9642.3	9700.0	9773.3	9862.2	9940.7	10029.7	10144.9	10260.0	10364.7
20°	9443.4	9438.2	9464.3	9516.6	9611.0	9694.6	9773.3	9878.0	10003.6	10144.9	10265.2
22.5°	9270.6	9270.6	9296.9	9349.2	9433.0	9516.6	9600.5	9710.3	9836.0	9972.1	10113.5
25°	9129.2	9124.1	9160.7	9187.0	9249.7	9333.5	9422.5	9511.5	9637.1	9789.0	9924.9
27.5°	8977.5	8972.4	8977.5	9009.0	9066.5	9129.2	9197.3	9276.0	9380.7	9506.3	9637.1
30°	8642.5	8647.7	8647.7	8674.0	8705.4	8773.3	8809.9	8888.6	8982.7	9087.4	9202.7
32.5°	8145.2	8150.4	8150.4	8160.9	8187.0	8218.5	8249.9	8307.5	8380.7	8469.7	8574.4
35°	7553.8	7553.8	7548.4	7553.8	7569.5	7569.5	7595.6	7569.5	7606.1	7658.5	7736.9
37.5°	7009.3	6998.7	6988.4	6977.8	6962.1	6936.0	6899.4	6836.5	6820.7	6799.8	6805.0
40°	6527.7	6522.5	6491.1	6464.8	6412.4	6349.7	6260.8	6150.9	6061.9	5957.2	5868.2
42.5°	5993.8	5988.4	5962.3	5915.1	5857.6	5763.5	5622.1	5475.6	5297.6	5140.6	4978.3
45°	5365.5	5381.2	5344.6	5292.2	5224.2	5135.2	4978.3	4800.1	4622.1	4418.1	4213.8
47.5°	4711.1	4706.0	4679.9	4648.4	4590.9	4501.9	4397.2	4203.5	4015.0	3826.7	3617.2
50°	4104.0	4083.1	4072.5	4041.3	4004.6	3931.4	3821.3	3664.2	3496.8	3318.8	3125.1
52.5°	3528.2	3528.2	3501.9	3481.0	3449.6	3392.1	3297.9	3172.3	3030.9	2863.3	2659.3
55°	3046.7	3036.1	3010.0	2983.8	2952.3	2915.7	2832.1	2727.4	2575.4	2413.2	2235.2
57.5°	2533.6	2528.3	2517.9	2486.5	2470.7	2434.1	2339.9	2235.2	2104.4	1963.1	1816.4
60°	2073.0	2052.1	2031.0	2010.1	1984.0	1947.4	1884.5	1795.5	1685.6	1560.0	1413.4
62.5°	1659.5	1690.8	1628.1	1628.1	1575.7	1544.2	1486.7	1434.3	1319.1	1204.0	1078.4
65°	1293.0	1293.0	1266.7	1245.8	1214.4	1177.7	1120.2	1067.8	984.0	895.0	806.1
67.5°	989.4	984.0	958.0	937.1	910.8	889.9	848.1	785.2	722.5	649.2	575.7
70°	727.6	722.5	717.1	680.4	659.5	633.5	602.0	560.2	513.0	460.7	392.6
72.5°	523.4	523.4	507.9	492.1	471.2	450.1	418.9	392.6	350.8	314.1	267.0
75°	335.0	329.9	329.9	303.6	303.6	272.1	251.2	235.5	214.6	193.7	151.9
77.5°	240.9	235.5	230.3	219.8	209.4	198.9	183.1	162.2	146.5	125.6	109.9
80°	162.2	151.9	146.5	146.5	130.8	125.6	130.8	99.5	94.2	78.4	68.1
82.5°	99.5	99.5	94.2	94.2	89.0	83.8	68.1	68.1	62.9	57.5	47.2
85°	52.4	68.1	47.2	52.4	47.2	52.4	47.2	36.6	31.5	26.1	26.1
87.5°	31.5	20.9	20.9	31.5	26.1	20.9	20.9	20.9	15.7	10.6	10.6
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2
2.5°	11029.6	11066.3	11060.9	11108.1	11123.8	11160.4	11160.4	11186.5	11202.2	11238.8	11270.3
5°	10767.8	10825.4	10841.1	10898.6	10945.8	11003.3	11040.0	11097.5	11149.9	11228.5	11301.8
7.5°	10605.6	10652.6	10684.0	10752.1	10804.5	10867.2	10930.1	11008.5	11081.8	11176.1	11280.9
10°	10527.0	10589.9	10636.8	10704.9	10767.8	10835.9	10898.6	10987.6	11071.4	11191.9	11306.9
12.5°	10506.1	10579.3	10636.8	10731.2	10793.9	10867.2	10940.4	11040.0	11129.0	11254.6	11385.6
15°	10506.1	10605.6	10684.0	10788.7	10862.0	10956.2	11034.8	11134.1	11233.7	11364.5	11490.1
17.5°	10485.2	10605.6	10704.9	10825.4	10919.5	11013.9	11113.2	11207.6	11312.1	11437.9	11579.1
20°	10401.3	10553.2	10673.5	10814.8	10914.4	11019.1	11118.6	11223.1	11333.2	11464.0	11584.5
22.5°	10254.8	10432.8	10569.0	10720.7	10835.9	10940.4	11040.0	11144.7	11265.1	11390.8	11516.4
25°	10061.1	10228.5	10375.3	10532.1	10647.4	10762.5	10856.8	10977.3	11087.2	11207.6	11306.9
27.5°	9767.9	9945.8	10087.2	10249.6	10354.2	10464.3	10542.7	10642.2	10746.9	10846.3	10924.9
30°	9328.3	9490.6	9637.1	9783.6	9888.3	9967.0	10050.6	10129.2	10197.3	10265.2	10333.3
32.5°	8684.3	8831.0	8972.4	9108.3	9192.1	9260.2	9322.9	9370.1	9406.8	9443.4	9448.6
35°	7799.8	7920.0	8009.0	8129.5	8208.1	8270.8	8270.8	8291.7	8286.6	8270.8	8255.1
37.5°	6810.4	6857.4	6894.0	6941.2	6946.4	6946.4	6915.1	6888.8	6847.0	6836.5	6805.0
40°	5779.2	5716.3	5669.1	5606.4	5569.8	5491.1	5423.2	5376.1	5308.0	5297.6	5287.1
42.5°	4800.1	4653.6	4522.8	4412.9	4287.3	4177.2	4077.9	4004.6	3952.3	3946.9	3952.3
45°	4004.6	3837.0	3643.3	3491.6	3350.3	3214.1	3083.3	2994.3	2947.1	2936.6	2947.1
47.5°	3402.6	3208.9	3020.4	2847.6	2695.9	2544.0	2413.2	2292.8	2235.2	2219.5	2214.3
50°	2926.2	2727.4	2528.3	2350.3	2182.9	2031.0	1868.7	1753.7	1680.4	1654.1	1633.2
52.5°	2460.4	2282.4	2078.2	1895.0	1727.4	1549.4	1382.0	1251.0	1177.7	1146.5	1125.4
55°	2052.1	1874.1	1685.6	1507.6	1329.6	1151.7	984.0	858.4	780.0	743.4	717.1
57.5°	1638.4	1471.0	1308.7	1130.8	984.0	811.4	643.8	533.9	465.8	424.0	403.1
60°	1266.7	1135.9	994.6	848.1	706.7	565.4	429.2	324.5	272.1	240.9	214.6
62.5°	958.0	848.1	753.7	628.1	518.2	397.7	293.2	209.4	162.2	136.2	125.6
65°	691.0	607.2	523.4	444.9	366.5	277.5	198.9	136.2	94.2	78.4	73.3
67.5°	492.1	424.0	361.1	308.8	251.2	198.9	141.3	94.2	73.3	62.9	57.5
70°	345.4	293.2	251.2	204.3	167.4	130.8	109.9	68.1	41.8	47.2	36.6
72.5°	230.3	193.7	172.8	141.3	115.1	94.2	68.1	47.2	47.2	36.6	31.5
75°	125.6	115.1	89.0	68.1	57.5	52.4	20.9	10.6	5.2	15.7	5.2
77.5°	89.0	78.4	68.1	57.5	47.2	36.6	20.9	20.9	15.7	20.9	10.6
80°	57.5	47.2	41.8	41.8	26.1	15.7	10.6	10.6	15.7	5.2	5.2
82.5°	36.6	31.5	26.1	26.1	26.1	15.7	15.7	15.7	15.7	10.6	10.6
85°	20.9	15.7	10.6	10.6	5.2	10.6	0.0	5.2	5.2	0.0	0.0
87.5°	10.6	5.2	5.2	5.2	5.2	0.0	0.0	5.2	0.0	5.2	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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2	11202.2
2.5°	11291.2	11312.1	11338.4	11359.3	11406.5	11416.8	11437.9	11458.8	11474.6	11490.1	11495.5
5°	11364.5	11443.1	11516.4	11594.8	11694.3	11762.4	11840.9	11908.9	11977.0	12034.6	12076.4
7.5°	11385.6	11505.8	11615.9	11751.9	11898.4	12024.2	12155.0	12285.8	12422.0	12526.7	12615.7
10°	11427.4	11573.9	11715.2	11877.5	12066.0	12233.4	12395.7	12568.5	12741.3	12887.8	13018.8
12.5°	11500.6	11662.9	11814.8	11992.8	12186.5	12374.8	12552.8	12746.5	12929.8	13092.1	13238.6
15°	11621.1	11772.8	11919.5	12086.9	12280.6	12453.4	12631.4	12819.7	13003.1	13170.5	13306.7
17.5°	11699.5	11840.9	11987.4	12139.3	12301.5	12458.6	12626.0	12793.6	12961.1	13113.0	13238.6
20°	11699.5	11835.7	11945.6	12081.7	12233.4	12369.6	12505.8	12652.3	12798.8	12924.4	13044.9
22.5°	11605.4	11736.1	11820.0	11924.7	12055.5	12170.7	12244.0	12406.2	12516.1	12626.0	12715.0
25°	11385.6	11479.7	11547.8	11621.1	11725.8	11804.2	11867.1	11961.3	12071.2	12113.2	12175.9
27.5°	10987.6	11055.7	11092.3	11108.1	11160.4	11202.2	11212.8	11254.6	11301.8	11312.1	11338.4
30°	10359.5	10364.7	10349.0	10343.8	10317.5	10286.3	10280.9	10275.7	10254.8	10233.9	10239.1
32.5°	9411.9	9385.9	9322.9	9255.1	9187.0	9113.7	9071.7	9019.3	8987.9	8956.6	8920.0
35°	8187.0	8124.3	8035.3	7951.5	7873.1	7815.3	7721.2	7689.7	7658.5	7616.5	7606.1
37.5°	6747.5	6710.9	6627.0	6564.3	6522.5	6496.3	6449.1	6417.8	6417.8	6402.1	6391.5
40°	5260.8	5250.4	5219.0	5234.7	5213.8	5224.2	5219.0	5208.4	5234.7	5234.7	5245.3
42.5°	3946.9	3952.3	3968.0	3978.3	4009.8	4015.0	4041.3	4041.3	4057.0	4072.5	4083.1
45°	2936.6	2957.7	2957.7	2978.6	3010.0	3015.2	3025.6	3030.9	3041.3	3067.6	3077.9
47.5°	2203.8	2208.9	2208.9	2214.3	2224.7	2235.2	2230.1	2235.2	2251.0	2240.4	2251.0
50°	1628.1	1633.2	1617.5	1601.8	1617.5	1617.5	1612.3	1596.6	1612.3	1591.4	1601.8
52.5°	1109.9	1104.5	1088.7	1094.1	1083.6	1078.4	1078.4	1067.8	1067.8	1067.8	1046.9
55°	701.6	701.6	691.0	691.0	685.8	675.3	670.1	664.7	659.5	654.4	654.4
57.5°	392.6	397.7	382.2	376.8	382.2	376.8	366.5	366.5	366.5	350.8	361.1
60°	214.6	209.4	204.3	198.9	193.7	198.9	198.9	188.5	188.5	188.5	193.7
62.5°	115.1	115.1	109.9	109.9	104.7	104.7	115.1	99.5	104.7	99.5	104.7
65°	62.9	78.4	57.5	57.5	73.3	68.1	62.9	62.9	68.1	57.5	62.9
67.5°	68.1	47.2	41.8	47.2	41.8	41.8	41.8	52.4	47.2	36.6	47.2
70°	31.5	36.6	36.6	26.1	41.8	20.9	36.6	20.9	31.5	26.1	31.5
72.5°	31.5	31.5	31.5	20.9	31.5	20.9	26.1	26.1	20.9	20.9	31.5
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	10.6	10.6	5.2	5.2	5.2	5.2	10.6	10.6	10.6	0.0	5.2
80°	10.6	10.6	0.0	5.2	0.0	0.0	5.2	0.0	5.2	0.0	10.6
82.5°	5.2	10.6	5.2	5.2	10.6	10.6	10.6	5.2	5.2	5.2	5.2
85°	0.0	5.2	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	5.2
87.5°	0.0	5.2	0.0	0.0	0.0	0.0	5.2	5.2	0.0	0.0	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





TEST NUMBER: P250237

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	11202.2	11202.2	11202.2	11202.2
2.5°	11500.6	11505.8	11516.4	11511.2
5°	12107.8	12149.8	12170.7	12165.6
7.5°	12678.4	12751.8	12793.6	12793.6
10°	13118.1	13201.9	13264.6	13275.2
12.5°	13353.6	13448.0	13531.8	13510.7
15°	13421.7	13516.1	13599.7	13584.0
17.5°	13343.3	13437.4	13500.4	13489.8
20°	13128.7	13207.1	13270.0	13264.6
22.5°	12793.6	12861.7	12914.1	12908.7
25°	12228.3	12275.4	12317.2	12296.3
27.5°	11359.3	11375.0	11401.1	11369.9
30°	10202.5	10212.8	10223.4	10218.2
32.5°	8904.3	8898.9	8888.6	8878.0
35°	7590.4	7590.4	7595.6	7564.1
37.5°	6396.7	6391.5	6407.3	6391.5
40°	5255.6	5250.4	5271.3	5245.3
42.5°	4098.8	4114.5	4119.7	4119.7
45°	3083.3	3088.5	3093.6	3093.6
47.5°	2251.0	2256.1	2282.4	2251.0
50°	1591.4	1596.6	1601.8	1591.4
52.5°	1052.1	1057.5	1052.1	1036.4
55°	643.8	649.2	649.2	649.2
57.5°	345.4	350.8	350.8	345.4
60°	188.5	183.1	188.5	178.0
62.5°	99.5	109.9	104.7	94.2
65°	62.9	62.9	62.9	73.3
67.5°	52.4	41.8	47.2	36.6
70°	31.5	36.6	36.6	26.1
72.5°	26.1	26.1	26.1	31.5
75°	0.0	0.0	0.0	0.0
77.5°	10.6	10.6	10.6	5.2
80°	5.2	0.0	5.2	0.0
82.5°	5.2	5.2	10.6	5.2
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)