

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: P249726

Luminaire Tested: **LD8B175D010 ER8B175840 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249726
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 ER8B175840 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19269.0 lumens
Efficiency: N/A
Efficacy: 108.7 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

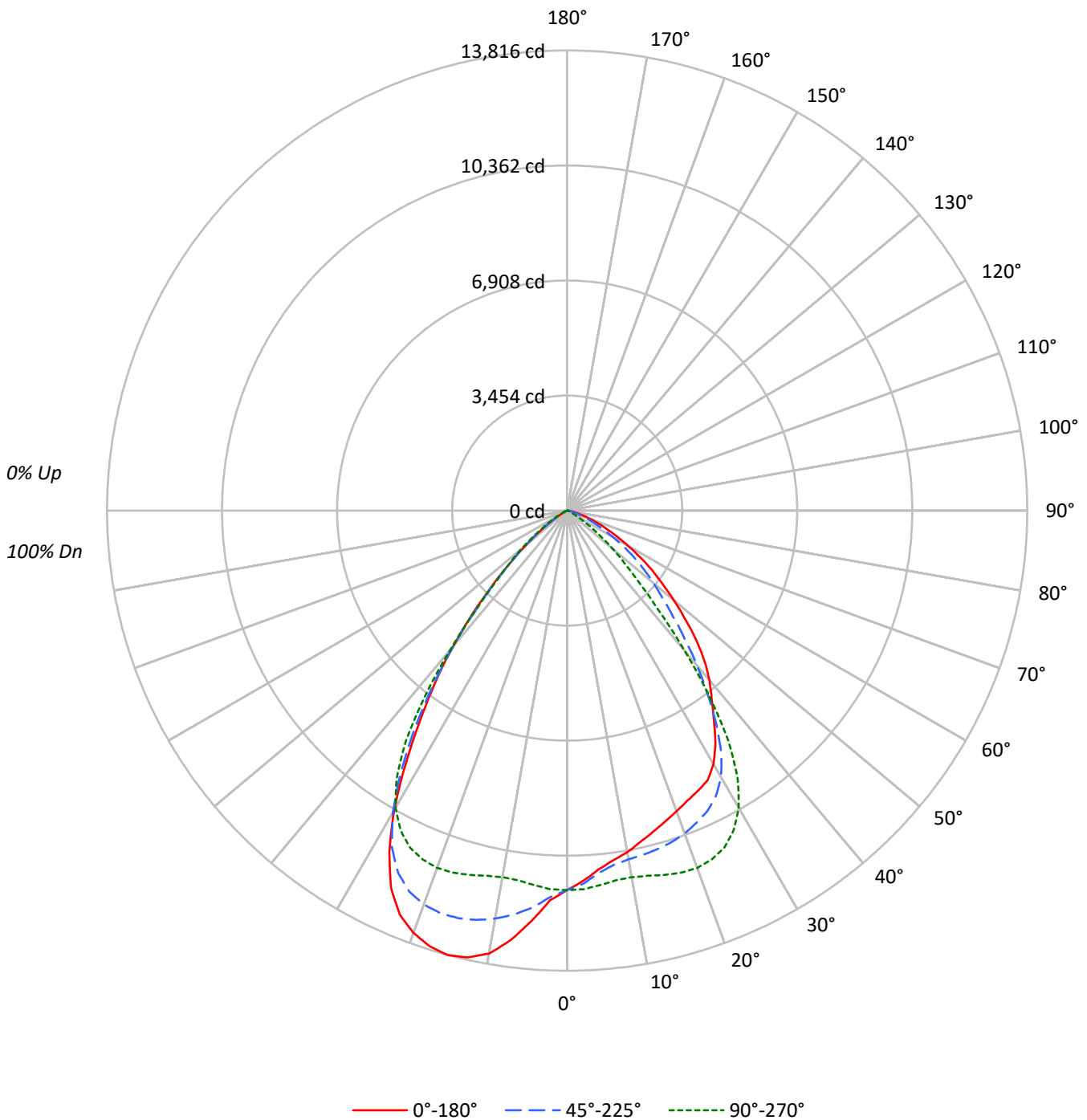
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	351343	351343	351343
5°	334722	349388	383014
10°	326090	349927	422781
15°	318695	361524	441073
20°	315188	374590	442728
25°	315927	379879	425526
30°	312994	366835	370057
35°	289217	317472	289616
40°	267262	220109	214755
45°	237988	132812	137216
50°	200243	85569	77649
55°	166596	46939	35499
60°	130031	20352	11163
65°	95956	10106	5436
70°	66727	6248	2389
75°	40604	1275	0
80°	29301	1900	0
85°	18858	1875	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1095.3	5.7
10°-20°	3278.2	17.0
20°-30°	5020.2	26.1
30°-40°	4921.5	25.5
40°-50°	2963.7	15.4
50°-60°	1364.1	7.1
60°-70°	479.2	2.5
70°-80°	125.3	0.7
80°-90°	21.4	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°	9393.8	48.8
0°-40°	14315.3	74.3
0°-60°	18643.1	96.8
0°-90°	19269.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19269.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11394	11394	11394	11394	11394	
5°	10814	10915	11287	11964	12374	###
15°	9983	10521	11324	12666	13816	2820
25°	9285	9956	11165	12006	12507	4277
35°	7683	7789	8434	7949	7694	4812
45°	5457	4494	3046	3067	3146	4185
55°	3099	2454	873	687	660	2765
65°	1315	910	138	69	74	1340
75°	341	197	11	0	0	413
85°	53	26	5	0	0	73
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°	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8
2.5°	11127.5	11138.3	11138.3	11138.3	11159.5	11165.0	11159.5	11165.0	11175.5	11212.8	11228.8
5°	10813.5	10797.5	10808.2	10802.8	10829.5	10845.5	10834.8	10850.7	10888.0	10914.7	10941.3
7.5°	10590.0	10590.0	10590.0	10600.5	10616.5	10648.5	10643.2	10653.7	10691.0	10728.2	10765.5
10°	10414.2	10408.9	10408.9	10435.5	10456.7	10494.0	10504.7	10536.7	10584.5	10632.5	10675.0
12.5°	10185.2	10190.7	10217.2	10243.9	10291.7	10350.2	10382.2	10424.9	10499.5	10579.2	10627.2
15°	9982.9	9988.2	10009.7	10062.7	10121.4	10190.7	10259.7	10329.0	10419.5	10520.7	10606.0
17.5°	9785.9	9791.2	9807.2	9865.9	9940.4	10030.9	10110.7	10201.2	10318.4	10435.5	10542.0
20°	9604.9	9599.6	9626.1	9679.4	9775.4	9860.4	9940.4	10046.9	10174.7	10318.4	10440.7
22.5°	9429.1	9429.1	9455.9	9509.1	9594.4	9679.4	9764.6	9876.4	10004.2	10142.7	10286.4
25°	9285.4	9280.1	9317.4	9344.1	9407.9	9493.1	9583.6	9674.1	9801.9	9956.4	10094.7
27.5°	9131.1	9125.8	9131.1	9163.1	9221.6	9285.4	9354.6	9434.6	9541.1	9668.9	9801.9
30°	8790.3	8795.6	8795.6	8822.3	8854.3	8923.3	8960.6	9040.6	9136.3	9242.8	9360.1
32.5°	8284.5	8289.8	8289.8	8300.5	8327.0	8359.0	8391.0	8449.5	8524.0	8614.5	8721.1
35°	7682.9	7682.9	7677.5	7682.9	7698.9	7698.9	7725.5	7698.9	7736.2	7789.4	7869.2
37.5°	7129.2	7118.4	7107.9	7097.2	7081.2	7054.6	7017.4	6953.4	6937.4	6916.1	6921.4
40°	6639.4	6634.1	6602.1	6575.4	6522.1	6458.3	6367.8	6256.1	6165.6	6059.0	5968.5
42.5°	6096.3	6090.8	6064.3	6016.3	5957.8	5862.0	5718.3	5569.2	5388.2	5228.5	5063.4
45°	5457.3	5473.3	5436.0	5382.7	5313.5	5223.0	5063.4	4882.2	4701.2	4493.7	4285.9
47.5°	4791.7	4786.4	4759.9	4727.9	4669.4	4578.9	4472.4	4275.4	4083.6	3892.1	3679.1
50°	4174.1	4152.9	4142.1	4110.4	4073.1	3998.6	3886.6	3726.9	3556.6	3375.6	3178.5
52.5°	3588.6	3588.6	3561.8	3540.6	3508.6	3450.1	3354.3	3226.5	3082.8	2912.3	2704.7
55°	3098.8	3088.0	3061.5	3034.8	3002.8	2965.5	2880.5	2774.0	2619.5	2454.5	2273.5
57.5°	2577.0	2571.5	2561.0	2529.0	2513.0	2475.7	2380.0	2273.5	2140.4	1996.7	1847.4
60°	2108.4	2087.2	2065.7	2044.4	2017.9	1980.7	1916.7	1826.2	1714.4	1586.6	1437.6
62.5°	1687.9	1719.7	1655.9	1655.9	1602.6	1570.6	1512.1	1458.9	1341.6	1224.6	1096.8
65°	1315.1	1315.1	1288.4	1267.1	1235.1	1197.9	1139.4	1086.1	1000.9	910.3	819.8
67.5°	1006.3	1000.9	974.3	953.1	926.3	905.1	862.6	798.6	734.8	660.3	585.6
70°	740.1	734.8	729.3	692.1	670.8	644.3	612.3	569.8	521.8	468.5	399.3
72.5°	532.3	532.3	516.5	500.5	479.3	457.8	426.0	399.3	356.8	319.5	271.5
75°	340.8	335.5	335.5	308.8	308.8	276.8	255.5	239.5	218.3	197.0	154.5
77.5°	245.0	239.5	234.3	223.5	213.0	202.3	186.3	165.0	149.0	127.8	111.8
80°	165.0	154.5	149.0	149.0	133.0	127.8	133.0	101.2	95.8	79.8	69.3
82.5°	101.2	101.2	95.8	95.8	90.5	85.2	69.3	69.3	64.0	58.5	48.0
85°	53.3	69.3	48.0	53.3	48.0	53.3	48.0	37.3	32.0	26.5	26.5
87.5°	32.0	21.3	21.3	32.0	26.5	21.3	21.3	21.3	16.0	10.7	10.7
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°	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8
2.5°	11218.3	11255.5	11250.0	11298.0	11314.0	11351.3	11351.3	11377.8	11393.8	11431.1	11463.1
5°	10952.0	11010.5	11026.5	11085.0	11133.0	11191.5	11228.8	11287.3	11340.5	11420.5	11495.0
7.5°	10787.0	10834.8	10866.7	10936.0	10989.3	11053.0	11117.0	11196.8	11271.3	11367.3	11473.8
10°	10707.0	10771.0	10818.8	10888.0	10952.0	11021.2	11085.0	11175.5	11260.8	11383.3	11500.3
12.5°	10685.7	10760.2	10818.8	10914.7	10978.5	11053.0	11127.5	11228.8	11319.3	11447.1	11580.3
15°	10685.7	10787.0	10866.7	10973.3	11047.8	11143.5	11223.5	11324.5	11425.8	11558.8	11686.6
17.5°	10664.5	10787.0	10888.0	11010.5	11106.3	11202.3	11303.3	11399.3	11505.6	11633.6	11777.1
20°	10579.2	10733.7	10856.0	10999.8	11101.0	11207.5	11308.8	11415.1	11527.0	11660.1	11782.6
22.5°	10430.2	10611.2	10749.7	10904.0	11021.2	11127.5	11228.8	11335.3	11457.8	11585.6	11713.3
25°	10233.2	10403.5	10552.7	10712.2	10829.5	10946.5	11042.5	11165.0	11276.8	11399.3	11500.3
27.5°	9934.9	10115.9	10259.7	10424.9	10531.2	10643.2	10723.0	10824.2	10930.7	11031.8	11111.8
30°	9487.9	9652.9	9801.9	9950.9	10057.4	10137.4	10222.4	10302.4	10371.7	10440.7	10510.0
32.5°	8832.8	8982.1	9125.8	9264.1	9349.4	9418.6	9482.4	9530.4	9567.6	9604.9	9610.1
35°	7933.2	8055.5	8146.0	8268.5	8348.5	8412.3	8412.3	8433.5	8428.3	8412.3	8396.3
37.5°	6926.9	6974.7	7011.9	7059.9	7065.2	7065.2	7033.4	7006.6	6964.1	6953.4	6921.4
40°	5878.0	5814.0	5766.0	5702.3	5665.0	5585.0	5516.0	5468.0	5398.7	5388.2	5377.5
42.5°	4882.2	4733.2	4600.2	4488.4	4360.6	4248.7	4147.6	4073.1	4019.9	4014.4	4019.9
45°	4073.1	3902.6	3705.6	3551.3	3407.6	3269.1	3136.0	3045.5	2997.5	2986.8	2997.5
47.5°	3460.8	3263.8	3072.0	2896.3	2742.0	2587.5	2454.5	2332.0	2273.5	2257.5	2252.2
50°	2976.3	2774.0	2571.5	2390.5	2220.2	2065.7	1900.7	1783.7	1709.1	1682.4	1661.2
52.5°	2502.5	2321.5	2113.7	1927.4	1756.9	1575.9	1405.6	1272.4	1197.9	1166.1	1144.6
55°	2087.2	1906.2	1714.4	1533.4	1352.4	1171.4	1000.9	873.1	793.3	756.1	729.3
57.5°	1666.4	1496.1	1331.1	1150.1	1000.9	825.3	654.8	543.1	473.8	431.3	410.0
60°	1288.4	1155.4	1011.6	862.6	718.8	575.0	436.5	330.0	276.8	245.0	218.3
62.5°	974.3	862.6	766.6	638.8	527.1	404.5	298.3	213.0	165.0	138.5	127.8
65°	702.8	617.6	532.3	452.5	372.8	282.3	202.3	138.5	95.8	79.8	74.5
67.5°	500.5	431.3	367.3	314.0	255.5	202.3	143.8	95.8	74.5	64.0	58.5
70°	351.3	298.3	255.5	207.8	170.3	133.0	111.8	69.3	42.5	48.0	37.3
72.5°	234.3	197.0	175.8	143.8	117.0	95.8	69.3	48.0	48.0	37.3	32.0
75°	127.8	117.0	90.5	69.3	58.5	53.3	21.3	10.7	5.3	16.0	5.3
77.5°	90.5	79.8	69.3	58.5	48.0	37.3	21.3	21.3	16.0	21.3	10.7
80°	58.5	48.0	42.5	42.5	26.5	16.0	10.7	10.7	16.0	5.3	5.3
82.5°	37.3	32.0	26.5	26.5	26.5	16.0	16.0	16.0	16.0	10.7	10.7
85°	21.3	16.0	10.7	10.7	5.3	10.7	0.0	5.3	5.3	0.0	0.0
87.5°	10.7	5.3	5.3	5.3	5.3	0.0	0.0	5.3	0.0	5.3	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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8	11393.8
2.5°	11484.3	11505.6	11532.3	11553.6	11601.6	11612.1	11633.6	11654.8	11670.8	11686.6	11692.1
5°	11558.8	11638.8	11713.3	11793.1	11894.3	11963.6	12043.4	12112.6	12181.9	12240.4	12282.9
7.5°	11580.3	11702.6	11814.6	11952.9	12101.9	12229.9	12362.9	12495.9	12634.4	12740.9	12831.4
10°	11622.8	11771.8	11915.6	12080.6	12272.4	12442.6	12607.7	12783.4	12959.2	13108.2	13241.4
12.5°	11697.3	11862.3	12016.8	12197.9	12394.9	12586.4	12767.4	12964.4	13150.9	13316.0	13465.0
15°	11819.8	11974.1	12123.3	12293.6	12490.6	12666.4	12847.4	13039.0	13225.5	13395.7	13534.2
17.5°	11899.6	12043.4	12192.4	12346.9	12511.9	12671.7	12841.9	13012.4	13182.7	13337.2	13465.0
20°	11899.6	12038.1	12149.9	12288.4	12442.6	12581.2	12719.7	12868.7	13017.7	13145.5	13268.0
22.5°	11803.8	11936.9	12022.1	12128.6	12261.6	12378.9	12453.4	12618.4	12730.2	12841.9	12932.4
25°	11580.3	11676.1	11745.3	11819.8	11926.3	12006.1	12070.1	12165.9	12277.6	12320.4	12384.1
27.5°	11175.5	11244.8	11282.0	11298.0	11351.3	11393.8	11404.5	11447.1	11495.0	11505.6	11532.3
30°	10536.7	10542.0	10526.0	10520.7	10494.0	10462.2	10456.7	10451.5	10430.2	10408.9	10414.2
32.5°	9572.9	9546.4	9482.4	9413.3	9344.1	9269.6	9226.9	9173.6	9141.6	9109.8	9072.6
35°	8327.0	8263.3	8172.7	8087.5	8007.7	7949.0	7853.2	7821.2	7789.4	7746.7	7736.2
37.5°	6862.9	6825.6	6740.4	6676.6	6634.1	6607.4	6559.4	6527.6	6527.6	6511.6	6500.9
40°	5350.8	5340.2	5308.2	5324.2	5303.0	5313.5	5308.2	5297.5	5324.2	5324.2	5335.0
42.5°	4014.4	4019.9	4035.9	4046.4	4078.4	4083.6	4110.4	4110.4	4126.4	4142.1	4152.9
45°	2986.8	3008.3	3008.3	3029.5	3061.5	3066.8	3077.3	3082.8	3093.3	3120.0	3130.6
47.5°	2241.5	2246.7	2246.7	2252.2	2262.7	2273.5	2268.2	2273.5	2289.5	2278.7	2289.5
50°	1655.9	1661.2	1645.2	1629.2	1645.2	1645.2	1639.9	1623.9	1639.9	1618.6	1629.2
52.5°	1128.8	1123.4	1107.4	1112.8	1102.1	1096.8	1096.8	1086.1	1086.1	1086.1	1064.8
55°	713.6	713.6	702.8	702.8	697.6	686.8	681.6	676.1	670.8	665.6	665.6
57.5°	399.3	404.5	388.8	383.3	388.8	383.3	372.8	372.8	372.8	356.8	367.3
60°	218.3	213.0	207.8	202.3	197.0	202.3	202.3	191.8	191.8	191.8	197.0
62.5°	117.0	117.0	111.8	111.8	106.5	106.5	117.0	101.2	106.5	101.2	106.5
65°	64.0	79.8	58.5	58.5	74.5	69.3	64.0	64.0	69.3	58.5	64.0
67.5°	69.3	48.0	42.5	48.0	42.5	42.5	42.5	53.3	48.0	37.3	48.0
70°	32.0	37.3	37.3	26.5	42.5	21.3	37.3	21.3	32.0	26.5	32.0
72.5°	32.0	32.0	32.0	21.3	32.0	21.3	26.5	26.5	21.3	21.3	32.0
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°	10.7	10.7	5.3	5.3	5.3	5.3	10.7	10.7	10.7	0.0	5.3
80°	10.7	10.7	0.0	5.3	0.0	0.0	5.3	0.0	5.3	0.0	10.7
82.5°	5.3	10.7	5.3	5.3	10.7	10.7	10.7	5.3	5.3	5.3	5.3
85°	0.0	5.3	0.0	0.0	0.0	0.0	10.7	0.0	0.0	0.0	5.3
87.5°	0.0	5.3	0.0	0.0	0.0	0.0	5.3	5.3	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: P249726

CATALOG NUMBER: LD8B175D010 ER8B175840 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	11393.8	11393.8	<i>11393.8</i>	11393.8
2.5°	11697.3	11702.6	<i>11713.3</i>	11708.1
5°	12314.9	12357.6	<i>12378.9</i>	12373.6
7.5°	12895.2	12969.9	<i>13012.4</i>	13012.4
10°	13342.5	13427.7	<i>13491.5</i>	13502.2
12.5°	13582.0	13678.0	<i>13763.2</i>	13741.8
15°	<i>13651.3</i>	<i>13747.2</i>	<i>13832.3</i>	<i>13816.3</i>
17.5°	13571.5	13667.3	<i>13731.2</i>	13720.5
20°	13353.2	13433.0	<i>13497.0</i>	13491.5
22.5°	13012.4	13081.7	<i>13134.9</i>	13129.5
25°	12437.4	12485.4	<i>12527.9</i>	12506.6
27.5°	11553.6	11569.6	<i>11596.1</i>	11564.3
30°	10376.9	10387.5	<i>10398.2</i>	10392.9
32.5°	9056.6	9051.1	<i>9040.6</i>	9029.8
35°	7720.2	7720.2	<i>7725.5</i>	7693.5
37.5°	6506.1	6500.9	<i>6516.8</i>	6500.9
40°	5345.5	5340.2	<i>5361.5</i>	5335.0
42.5°	4168.9	4184.9	<i>4190.1</i>	4190.1
45°	3136.0	3141.3	<i>3146.5</i>	3146.5
47.5°	2289.5	2294.7	<i>2321.5</i>	2289.5
50°	1618.6	1623.9	<i>1629.2</i>	1618.6
52.5°	1070.1	1075.6	<i>1070.1</i>	1054.1
55°	654.8	660.3	<i>660.3</i>	660.3
57.5°	351.3	356.8	<i>356.8</i>	351.3
60°	191.8	186.3	<i>191.8</i>	181.0
62.5°	101.2	111.8	<i>106.5</i>	95.8
65°	64.0	64.0	<i>64.0</i>	74.5
67.5°	53.3	42.5	<i>48.0</i>	37.3
70°	32.0	37.3	<i>37.3</i>	26.5
72.5°	26.5	26.5	<i>26.5</i>	32.0
75°	0.0	0.0	<i>0.0</i>	0.0
77.5°	10.7	10.7	<i>10.7</i>	5.3
80°	5.3	0.0	<i>5.3</i>	0.0
82.5°	5.3	5.3	<i>10.7</i>	5.3
85°	0.0	0.0	<i>0.0</i>	0.0
87.5°	0.0	0.0	<i>0.0</i>	0.0
90°	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)