

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: P249503

Luminaire Tested: **LD8B175D010 ER8B175927 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249503
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 ER8B175927 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
97 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12886.9 lumens
Efficiency: N/A
Efficacy: 72.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

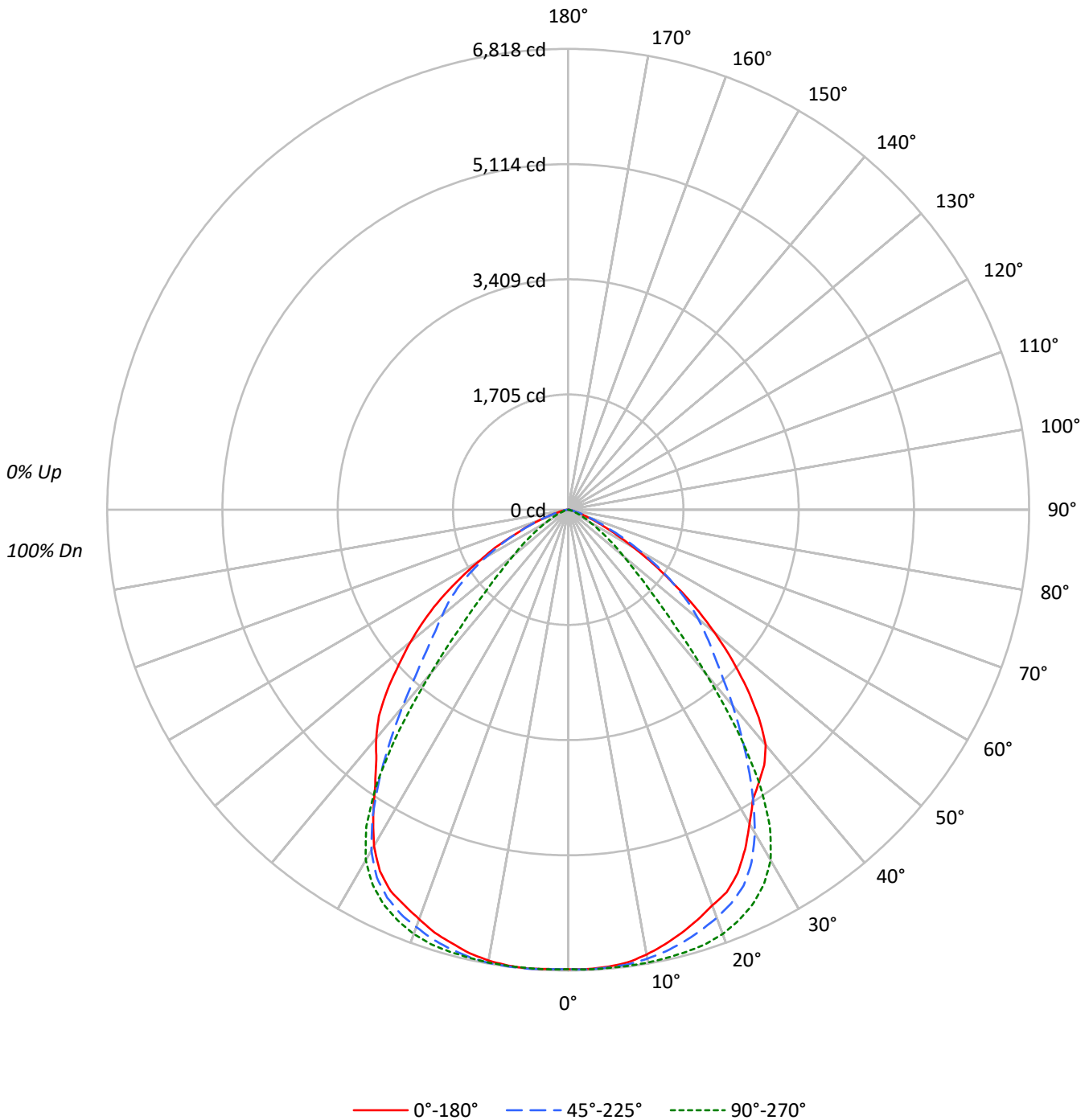
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	648.9	5.0
10°-20°	1884.5	14.6
20°-30°	2860.3	22.2
30°-40°	3004.2	23.3
40°-50°	2252.3	17.5
50°-60°	1445.2	11.2
60°-70°	618.2	4.8
70°-80°	146.1	1.1
80°-90°	27.2	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°	5393.7	41.9
0°-40°	8397.9	65.2
0°-60°	12095.4	93.9
0°-90°	12886.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12886.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6799	6799	6799	6799	6799	
5°	6788	6799	6807	6818	6814	645
15°	6482	6617	6770	6726	6642	1828
25°	5931	6139	6449	6332	6223	2709
35°	4920	4646	4923	4865	4974	3088
45°	3737	3055	1755	2967	3788	2862
55°	1891	1891	653	1971	2303	1715
65°	569	672	208	865	880	608
75°	88	102	29	175	172	128
85°	29	18	14	29	40	31
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°	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4
2.5°	6803.0	6810.3	6806.7	6806.7	6803.0	6806.7	6806.7	6814.0	6814.0	6806.7	6803.0
5°	6788.4	6795.7	6795.7	6788.4	6788.4	6806.7	6795.7	6803.0	6803.0	6799.4	6799.4
7.5°	6755.6	6755.6	6770.1	6759.2	6759.2	6770.1	6766.5	6773.8	6781.2	6784.8	6784.8
10°	6682.6	6689.9	6693.5	6693.5	6697.2	6708.2	6715.5	6730.1	6737.3	6744.6	6748.3
12.5°	6591.4	6602.3	6605.9	6602.3	6613.3	6627.8	6646.2	6664.4	6675.3	6689.9	6700.8
15°	6481.8	6481.8	6489.1	6500.1	6507.4	6529.3	6547.5	6569.4	6598.6	6616.9	6635.1
17.5°	6361.4	6368.7	6379.7	6379.7	6394.3	6430.7	6441.8	6474.6	6507.4	6525.7	6562.1
20°	6230.0	6237.3	6248.2	6255.6	6273.8	6303.0	6324.9	6354.1	6390.7	6423.5	6460.0
22.5°	6127.8	6113.2	6120.4	6127.8	6146.1	6171.6	6197.2	6233.6	6270.2	6303.0	6339.6
25°	5930.8	5934.4	5945.4	5952.6	5974.5	5996.5	6025.6	6069.4	6102.2	6138.8	6179.0
27.5°	5664.4	5668.0	5686.2	5686.2	5704.4	5741.0	5759.2	5795.7	5839.5	5876.0	5923.5
30°	5361.4	5368.6	5368.6	5383.3	5394.2	5412.5	5430.7	5467.3	5489.1	5522.0	5587.8
32.5°	5084.1	5091.3	5087.6	5084.1	5073.1	5069.4	5065.8	5073.1	5080.4	5091.3	5116.8
35°	4919.8	4901.5	4887.0	4861.5	4832.2	4795.7	4762.8	4719.0	4678.9	4646.0	4609.6
37.5°	4762.8	4759.2	4737.3	4700.8	4642.4	4576.7	4500.1	4405.2	4310.2	4208.1	4109.6
40°	4543.9	4532.8	4514.6	4463.6	4397.8	4317.5	4215.4	4098.6	3945.3	3788.3	3627.8
42.5°	4171.6	4175.2	4153.4	4113.1	4051.2	3974.5	3868.6	3741.0	3576.7	3390.5	3182.5
45°	3737.2	3737.2	3729.9	3697.1	3653.3	3591.3	3511.0	3405.2	3244.6	3054.7	2832.1
47.5°	3284.7	3288.4	3277.4	3270.2	3251.8	3211.8	3153.4	3073.0	2959.9	2777.4	2554.8
50°	2824.9	2824.9	2843.1	2839.5	2839.5	2824.9	2799.3	2751.9	2653.3	2507.3	2299.4
52.5°	2365.0	2372.3	2383.3	2397.8	2416.0	2445.3	2416.0	2394.2	2332.1	2219.0	2040.2
55°	1890.6	1897.9	1916.1	1941.6	1963.6	1992.8	2000.0	2000.0	1967.2	1890.6	1755.4
57.5°	1485.4	1474.4	1489.2	1511.0	1540.2	1569.4	1591.3	1616.9	1613.1	1562.1	1452.6
60°	1116.8	1120.5	1131.4	1153.4	1175.2	1200.7	1230.0	1251.8	1262.8	1237.3	1167.9
62.5°	813.9	813.9	828.4	850.4	861.3	897.9	916.1	927.0	937.9	934.3	890.6
65°	569.4	576.7	584.0	594.9	605.8	627.8	638.7	660.6	667.9	671.5	638.7
67.5°	401.5	390.5	397.8	405.1	416.0	430.6	452.6	452.6	463.5	463.5	441.6
70°	255.5	255.5	259.2	270.0	277.4	281.0	288.3	295.5	306.6	303.0	303.0
72.5°	171.6	167.8	171.6	175.2	178.9	189.8	189.8	193.4	200.7	204.4	189.8
75°	87.6	91.2	98.6	95.0	105.9	98.6	102.1	113.2	109.5	102.1	102.1
77.5°	73.0	73.0	73.0	69.4	76.6	76.6	73.0	80.3	76.6	76.6	73.0
80°	51.1	54.8	51.1	47.5	51.1	47.5	47.5	47.5	47.5	47.5	43.8
82.5°	40.2	32.8	36.6	32.8	36.6	36.6	32.8	29.2	29.2	32.8	29.2
85°	29.2	21.8	25.5	25.5	21.8	21.8	21.8	21.8	21.8	18.2	18.2
87.5°	18.2	11.0	11.0	11.0	14.5	14.5	14.5	11.0	14.5	14.5	7.3
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°	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4
2.5°	6810.3	6806.7	6814.0	6810.3	6810.3	6806.7	6810.3	6806.7	6814.0	6799.4	6803.0
5°	6810.3	6803.0	6806.7	6810.3	6814.0	6806.7	6806.7	6806.7	6814.0	6806.7	6810.3
7.5°	6795.7	6792.1	6803.0	6810.3	6806.7	6803.0	6810.3	6806.7	6814.0	6810.3	6817.6
10°	6766.5	6770.1	6777.4	6788.4	6792.1	6795.7	6803.0	6803.0	6814.0	6799.4	6806.7
12.5°	6722.8	6737.3	6755.6	6762.8	6777.4	6777.4	6784.8	6788.4	6795.7	6792.1	6803.0
15°	6668.0	6686.2	6708.2	6726.4	6744.6	6755.6	6766.5	6770.1	6781.2	6770.1	6773.8
17.5°	6602.3	6624.1	6657.1	6678.9	6708.2	6719.1	6733.7	6741.0	6751.9	6744.6	6748.3
20°	6511.0	6536.6	6573.0	6605.9	6624.1	6649.6	6668.0	6678.9	6686.2	6678.9	6682.6
22.5°	6383.4	6419.8	6467.3	6492.8	6529.3	6551.2	6554.8	6580.4	6598.6	6580.4	6587.8
25°	6233.6	6270.2	6306.6	6361.4	6394.3	6419.8	6445.3	6449.1	6467.3	6463.6	6460.0
27.5°	5985.4	6032.9	6094.9	6138.8	6182.6	6222.7	6252.0	6259.2	6277.5	6270.2	6273.8
30°	5646.0	5697.2	5755.6	5824.9	5887.0	5927.1	5963.6	5989.2	6007.4	5996.5	5992.8
32.5°	5164.3	5215.4	5277.5	5346.8	5419.8	5478.2	5522.0	5554.8	5576.7	5569.4	5551.2
35°	4613.3	4627.8	4668.0	4722.8	4784.7	4846.7	4887.0	4923.4	4949.0	4956.3	4956.3
37.5°	4047.5	4000.0	3970.9	3970.9	4007.4	4032.9	4069.4	4091.3	4131.4	4146.1	4157.0
40°	3500.0	3390.5	3288.4	3211.8	3160.7	3157.0	3157.0	3167.9	3204.5	3251.8	3295.7
42.5°	3011.0	2835.8	2678.8	2536.5	2434.4	2376.0	2350.5	2354.1	2383.3	2427.1	2500.0
45°	2620.5	2401.5	2204.4	2032.9	1894.2	1802.9	1759.2	1755.4	1777.4	1828.5	1908.8
47.5°	2317.6	2084.0	1861.3	1664.2	1514.7	1416.0	1365.0	1350.4	1365.0	1412.4	1507.3
50°	2065.7	1824.9	1594.9	1390.5	1230.0	1127.8	1080.3	1062.1	1080.3	1120.5	1215.3
52.5°	1832.2	1584.0	1368.7	1171.6	1000.0	912.4	861.3	850.4	861.3	908.8	985.5
55°	1562.1	1350.4	1138.7	941.6	792.0	704.4	664.2	653.3	664.2	708.1	788.4
57.5°	1295.7	1113.2	927.0	748.1	620.4	543.7	507.4	492.6	518.2	547.4	642.4
60°	1047.4	901.5	744.5	587.6	481.8	412.4	383.2	379.6	386.9	423.3	489.0
62.5°	821.2	700.8	576.7	448.9	361.3	332.1	295.5	292.0	299.2	321.2	372.3
65°	591.3	514.7	419.7	328.5	259.2	218.9	204.4	208.1	215.3	230.0	277.4
67.5°	412.4	357.6	292.0	230.0	178.9	160.5	146.0	142.3	146.0	171.6	197.1
70°	277.4	244.5	197.1	175.2	124.1	98.6	102.1	91.2	105.9	105.9	127.7
72.5°	182.5	160.5	131.4	102.1	87.6	69.4	69.4	65.7	73.0	76.6	95.0
75°	95.0	73.0	73.0	51.1	36.6	18.2	32.8	29.2	25.5	29.2	36.6
77.5°	65.7	54.8	51.1	40.2	36.6	29.2	29.2	29.2	29.2	32.8	36.6
80°	40.2	40.2	29.2	25.5	21.8	18.2	21.8	21.8	21.8	21.8	25.5
82.5°	25.5	21.8	21.8	18.2	18.2	14.5	14.5	14.5	14.5	14.5	21.8
85°	21.8	14.5	14.5	11.0	14.5	25.5	11.0	14.5	14.5	14.5	11.0
87.5°	7.3	11.0	11.0	11.0	7.3	3.7	7.3	11.0	11.0	18.2	14.5
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°	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4	6799.4
2.5°	6810.3	6814.0	6814.0	6810.3	6810.3	6803.0	6817.6	6806.7	6810.3	6824.9	6814.0
5°	6817.6	6821.2	6821.2	6817.6	6817.6	6817.6	6821.2	6821.2	6817.6	6814.0	6821.2
7.5°	6832.2	6828.5	6828.5	6821.2	6821.2	6814.0	6821.2	6810.3	6817.6	6810.3	6821.2
10°	6814.0	6817.6	6814.0	6810.3	6810.3	6806.7	6806.7	6795.7	6799.4	6788.4	6795.7
12.5°	6803.0	6799.4	6799.4	6792.1	6784.8	6777.4	6773.8	6762.8	6762.8	6737.3	6748.3
15°	6773.8	6777.4	6766.5	6751.9	6744.6	6726.4	6719.1	6704.4	6689.9	6671.7	6675.3
17.5°	6748.3	6737.3	6722.8	6708.2	6678.9	6664.4	6649.6	6627.8	6620.5	6598.6	6591.4
20°	6671.7	6664.4	6646.2	6620.5	6602.3	6569.4	6554.8	6533.0	6514.7	6492.8	6481.8
22.5°	6573.0	6565.7	6543.9	6518.4	6489.1	6474.6	6460.0	6419.8	6401.5	6379.7	6375.9
25°	6449.1	6438.0	6416.2	6387.0	6372.3	6332.2	6317.6	6288.4	6281.1	6259.2	6255.6
27.5°	6259.2	6244.7	6219.1	6182.6	6157.0	6131.5	6117.0	6094.9	6087.7	6065.8	6062.2
30°	5974.5	5956.3	5905.2	5890.6	5846.7	5821.2	5821.2	5792.1	5795.7	5781.2	5781.2
32.5°	5525.7	5496.4	5456.2	5427.1	5397.9	5383.3	5383.3	5372.3	5379.6	5379.6	5387.0
35°	4930.8	4890.6	4868.7	4850.4	4850.4	4865.0	4908.8	4919.8	4941.7	4959.9	4974.5
37.5°	4167.9	4164.3	4189.8	4211.8	4266.4	4328.6	4405.2	4470.9	4532.8	4576.7	4620.5
40°	3343.2	3434.4	3507.3	3609.6	3693.5	3813.9	3952.6	4065.8	4171.6	4248.2	4328.6
42.5°	2609.5	2726.3	2879.7	3029.2	3178.9	3343.2	3525.6	3682.6	3821.3	3927.0	4011.0
45°	2032.9	2193.4	2379.6	2569.4	2762.8	2967.2	3157.0	3317.6	3463.5	3573.1	3657.0
47.5°	1638.7	1814.0	2025.6	2233.6	2452.6	2667.9	2879.7	3018.3	3138.8	3226.3	3303.0
50°	1354.0	1540.2	1762.9	2000.0	2219.0	2434.4	2616.9	2751.9	2850.4	2927.0	2974.5
52.5°	1131.4	1328.5	1565.8	1802.9	2021.8	2219.0	2383.3	2485.5	2565.8	2620.5	2664.2
55°	934.3	1124.1	1346.7	1569.4	1784.7	1970.8	2105.9	2182.5	2244.5	2277.3	2302.9
57.5°	762.9	937.9	1142.3	1346.7	1532.9	1686.2	1792.0	1868.6	1897.9	1923.4	1919.7
60°	598.6	762.9	948.9	1124.1	1284.8	1408.7	1485.4	1529.2	1551.0	1562.1	1554.8
62.5°	470.8	620.4	762.9	916.1	1032.9	1138.7	1211.7	1211.7	1222.6	1226.2	1237.3
65°	350.3	463.5	587.6	700.8	795.6	865.0	905.2	916.1	930.7	927.0	919.7
67.5°	259.2	343.1	434.2	518.2	584.0	627.8	656.9	682.5	678.8	671.5	667.9
70°	178.9	233.7	313.9	365.0	412.4	456.2	463.5	467.1	470.8	474.4	467.1
72.5°	124.1	164.2	208.1	251.9	281.0	299.2	317.6	321.2	321.2	321.2	317.6
75°	62.1	83.9	124.1	142.3	167.8	175.2	189.8	189.8	200.7	186.1	182.5
77.5°	54.8	65.7	87.6	102.1	113.2	124.1	127.7	138.7	135.0	127.7	131.4
80°	32.8	40.2	54.8	62.1	76.6	80.3	83.9	87.6	83.9	87.6	87.6
82.5°	25.5	29.2	36.6	36.6	47.5	47.5	51.1	51.1	54.8	54.8	54.8
85°	14.5	25.5	21.8	43.8	29.2	29.2	36.6	43.8	36.6	36.6	43.8
87.5°	14.5	14.5	11.0	14.5	14.5	14.5	18.2	21.8	21.8	25.5	21.8
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: P249503

CATALOG NUMBER: LD8B175D010 ER8B175927 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6799.4	6799.4	6799.4	6799.4
2.5°	6810.3	6817.6	6806.7	6803.0
5°	6821.2	6821.2	6814.0	6814.0
7.5°	6821.2	6821.2	6810.3	6803.0
10°	6792.1	6792.1	6781.2	6773.8
12.5°	6737.3	6737.3	6733.7	6722.8
15°	6668.0	6668.0	6653.4	6642.4
17.5°	6573.0	6580.4	6562.1	6562.1
20°	6470.9	6467.3	6452.7	6445.3
22.5°	6365.1	6357.8	6354.1	6332.2
25°	6252.0	6244.7	6233.6	6222.7
27.5°	6058.5	6054.9	6043.8	6029.3
30°	5762.8	5759.2	5744.6	5744.6
32.5°	5379.6	5376.0	5361.4	5365.1
35°	4981.8	4996.5	4989.2	4974.5
37.5°	4649.7	4660.7	4668.0	4660.7
40°	4372.3	4405.2	4408.9	4416.2
42.5°	4076.8	4120.5	4135.2	4142.4
45°	3722.6	3762.8	3795.6	3788.3
47.5°	3361.3	3390.5	3419.8	3397.8
50°	3014.7	3032.9	3043.9	3043.9
52.5°	2686.2	2686.2	2682.6	2686.2
55°	2310.3	2310.3	2295.7	2302.9
57.5°	1916.1	1923.4	1912.4	1894.2
60°	1551.0	1532.9	1525.5	1514.7
62.5°	1208.0	1208.0	1182.5	1215.3
65°	905.2	894.2	883.2	879.5
67.5°	656.9	653.3	642.4	638.7
70°	463.5	448.9	445.3	438.0
72.5°	310.3	310.3	303.0	303.0
75°	189.8	171.6	167.8	171.6
77.5°	131.4	127.7	127.7	124.1
80°	87.6	83.9	91.2	80.3
82.5°	54.8	58.4	54.8	58.4
85°	36.6	43.8	40.2	40.2
87.5°	21.8	21.8	21.8	21.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)