

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: P249413

Luminaire Tested: **LD8B175D010 ER8B175827 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249413
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 ER8B175827 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15434.0 lumens
Efficiency: N/A
Efficacy: 87.1 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

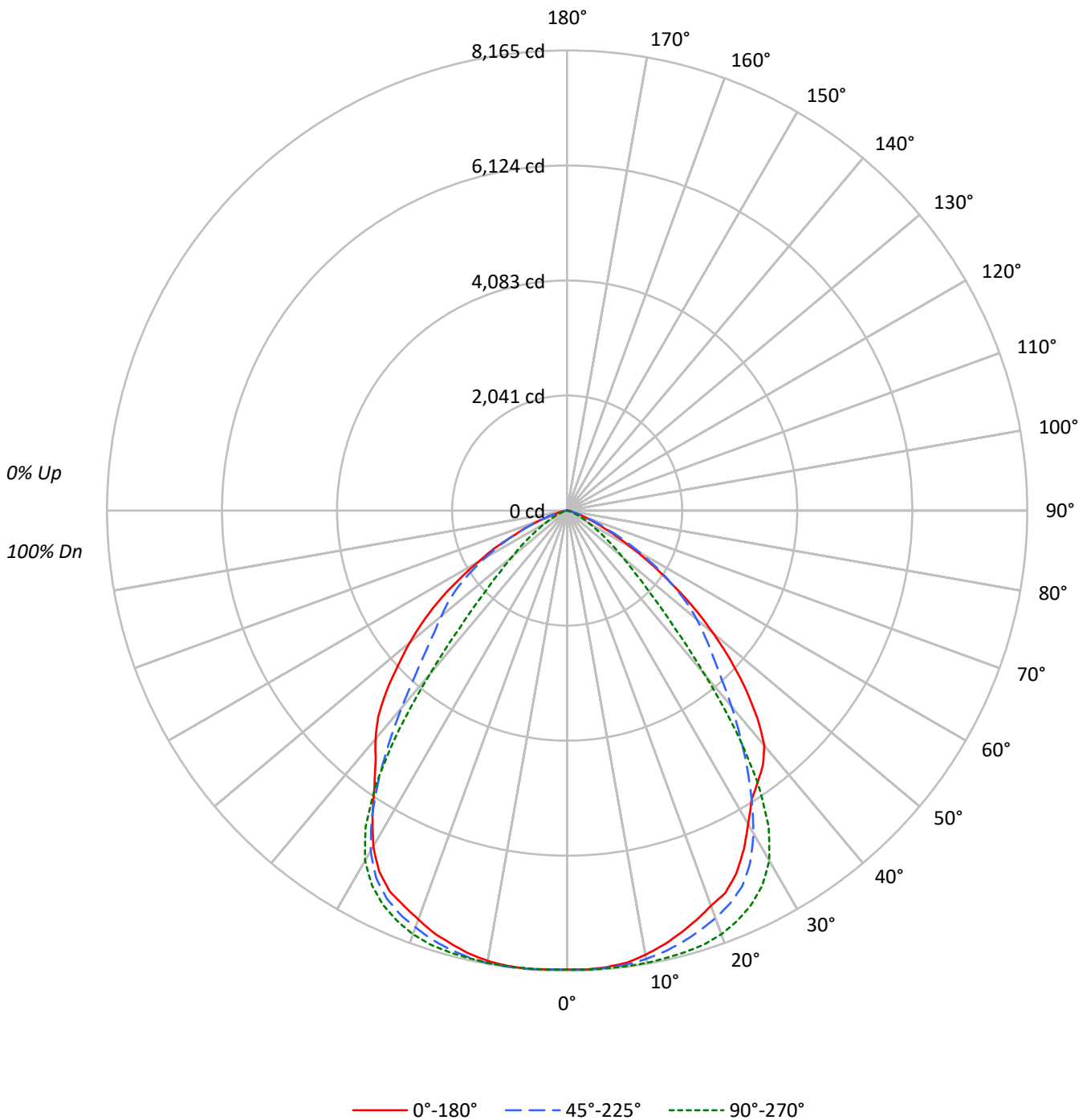
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	251109	251109	251109
5°	251660	252341	252610
10°	250603	255121	254025
15°	247827	258850	253969
20°	244852	262490	253311
25°	241673	262792	253571
30°	228634	255403	244978
35°	221807	221969	224277
40°	219062	152723	212903
45°	195194	91688	197863
50°	162302	61021	174885
55°	121727	42068	148280
60°	82493	28036	111874
65°	49755	18183	76861
70°	27589	9854	47289
75°	12498	4170	24484
80°	10868	4653	17083
85°	12383	6156	17018



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	777.2	5.0
10°-20°	2257.0	14.6
20°-30°	3425.7	22.2
30°-40°	3598.0	23.3
40°-50°	2697.5	17.5
50°-60°	1730.8	11.2
60°-70°	740.4	4.8
70°-80°	174.9	1.1
80°-90°	32.5	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°	6459.8	41.9
0°-40°	10057.8	65.2
0°-60°	14486.1	93.9
0°-90°	15434.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15434.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8143	8143	8143	8143	8143	
5°	8130	8143	8152	8165	8161	772
15°	7763	7925	8108	8056	7955	2190
25°	7103	7352	7724	7584	7453	3245
35°	5892	5564	5896	5827	5958	3698
45°	4476	3658	2102	3554	4537	3428
55°	2264	2264	782	2360	2758	2054
65°	682	804	249	1036	1053	728
75°	105	122	35	210	206	153
85°	35	22	17	35	48	37
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°	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3
2.5°	8147.7	8156.4	8152.1	8152.1	8147.7	8152.1	8152.1	8160.8	8160.8	8152.1	8147.7
5°	8130.1	8138.9	8138.9	8130.1	8130.1	8152.1	8138.9	8147.7	8147.7	8143.3	8143.3
7.5°	8090.9	8090.9	8108.3	8095.3	8095.3	8108.3	8103.9	8112.7	8121.5	8125.8	8125.8
10°	8003.4	8012.2	8016.5	8016.5	8020.9	8034.0	8042.7	8060.3	8069.0	8077.7	8082.1
12.5°	7894.2	7907.2	7911.6	7907.2	7920.4	7937.8	7959.7	7981.6	7994.7	8012.2	8025.3
15°	7763.0	7763.0	7771.7	7784.9	7793.7	7819.9	7841.7	7867.9	7902.9	7924.8	7946.6
17.5°	7618.8	7627.6	7640.6	7640.6	7658.1	7701.8	7714.9	7754.3	7793.7	7815.5	7859.2
20°	7461.5	7470.1	7483.3	7492.0	7513.9	7548.8	7575.0	7610.0	7653.8	7693.1	7736.8
22.5°	7339.0	7321.6	7330.2	7339.0	7360.9	7391.5	7422.1	7465.7	7509.5	7548.8	7592.6
25°	7103.0	7107.3	7120.5	7129.2	7155.5	7181.7	7216.6	7269.1	7308.4	7352.2	7400.2
27.5°	6783.9	6788.3	6810.1	6810.1	6831.9	6875.7	6897.5	6941.2	6993.8	7037.4	7094.3
30°	6421.1	6429.8	6429.8	6447.3	6460.4	6482.3	6504.1	6547.9	6574.1	6613.4	6692.1
32.5°	6088.9	6097.6	6093.2	6088.9	6075.8	6071.4	6067.0	6075.8	6084.5	6097.6	6128.2
35°	5892.2	5870.3	5852.9	5822.3	5787.3	5743.6	5704.2	5651.8	5603.7	5564.3	5520.7
37.5°	5704.2	5699.8	5673.6	5629.9	5559.9	5481.3	5389.6	5275.9	5162.2	5039.8	4921.9
40°	5442.0	5428.8	5407.0	5345.8	5267.1	5171.0	5048.6	4908.7	4725.1	4537.2	4344.9
42.5°	4996.1	5000.5	4974.3	4926.1	4851.9	4760.0	4633.3	4480.4	4283.7	4060.7	3811.6
45°	4476.0	4476.0	4467.2	4427.8	4375.4	4301.1	4205.0	4078.2	3885.9	3658.5	3391.9
47.5°	3933.9	3938.3	3925.2	3916.5	3894.6	3846.6	3776.6	3680.5	3545.0	3326.3	3059.7
50°	3383.2	3383.2	3405.1	3400.7	3400.7	3383.2	3352.6	3295.8	3177.8	3002.9	2753.8
52.5°	2832.4	2841.2	2854.4	2871.8	2893.6	2928.6	2893.6	2867.4	2793.1	2657.6	2443.4
55°	2264.2	2273.0	2294.8	2325.4	2351.7	2386.7	2395.3	2395.3	2356.0	2264.2	2102.5
57.5°	1779.1	1765.9	1783.4	1809.6	1844.6	1879.6	1905.8	1936.4	1932.0	1870.8	1739.7
60°	1337.6	1341.9	1355.0	1381.3	1407.5	1438.1	1473.1	1499.3	1512.4	1481.8	1398.7
62.5°	974.8	974.8	992.2	1018.4	1031.6	1075.3	1097.1	1110.3	1123.3	1118.9	1066.5
65°	681.9	690.6	699.4	712.5	725.6	751.8	764.9	791.1	799.9	804.3	764.9
67.5°	480.9	467.7	476.5	485.1	498.3	515.8	542.0	542.0	555.1	555.1	528.9
70°	306.0	306.0	310.4	323.4	332.2	336.6	345.3	354.0	367.2	362.8	362.8
72.5°	205.5	201.1	205.5	209.8	214.2	227.3	227.3	231.7	240.4	244.8	227.3
75°	104.9	109.3	118.0	113.7	126.7	118.0	122.4	135.5	131.1	122.4	122.4
77.5°	87.4	87.4	87.4	83.1	91.8	91.8	87.4	96.2	91.8	91.8	87.4
80°	61.2	65.6	61.2	56.8	61.2	56.8	56.8	56.8	56.8	56.8	52.4
82.5°	48.1	39.4	43.7	39.4	43.7	43.7	39.4	35.0	35.0	39.4	35.0
85°	35.0	26.2	30.6	30.6	26.2	26.2	26.2	26.2	26.2	21.8	21.8
87.5°	21.8	13.2	13.2	13.2	17.4	17.4	17.4	13.2	17.4	17.4	8.8
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°	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3
2.5°	8156.4	8152.1	8160.8	8156.4	8156.4	8152.1	8156.4	8152.1	8160.8	8143.3	8147.7
5°	8156.4	8147.7	8152.1	8156.4	8160.8	8152.1	8152.1	8152.1	8160.8	8152.1	8156.4
7.5°	8138.9	8134.5	8147.7	8156.4	8152.1	8147.7	8156.4	8152.1	8160.8	8156.4	8165.1
10°	8103.9	8108.3	8117.1	8130.1	8134.5	8138.9	8147.7	8147.7	8160.8	8143.3	8152.1
12.5°	8051.5	8069.0	8090.9	8099.5	8117.1	8117.1	8125.8	8130.1	8138.9	8134.5	8147.7
15°	7986.0	8007.8	8034.0	8055.9	8077.7	8090.9	8103.9	8108.3	8121.5	8108.3	8112.7
17.5°	7907.2	7933.4	7972.8	7999.0	8034.0	8047.1	8064.6	8073.3	8086.5	8077.7	8082.1
20°	7797.9	7828.6	7872.3	7911.6	7933.4	7964.0	7986.0	7999.0	8007.8	7999.0	8003.4
22.5°	7645.0	7688.7	7745.5	7776.1	7819.9	7846.1	7850.4	7881.0	7902.9	7881.0	7889.8
25°	7465.7	7509.5	7553.2	7618.8	7658.1	7688.7	7719.3	7723.7	7745.5	7741.1	7736.8
27.5°	7168.5	7225.4	7299.6	7352.2	7404.6	7452.7	7487.7	7496.3	7518.2	7509.5	7513.9
30°	6762.0	6823.3	6893.2	6976.2	7050.5	7098.6	7142.3	7172.9	7194.7	7181.7	7177.3
32.5°	6185.1	6246.3	6320.6	6403.6	6491.1	6560.9	6613.4	6652.8	6679.0	6670.2	6648.4
35°	5525.1	5542.5	5590.6	5656.2	5730.4	5804.8	5852.9	5896.5	5927.1	5935.9	5935.9
37.5°	4847.5	4790.7	4755.8	4755.8	4799.4	4830.0	4873.7	4899.9	4948.1	4965.5	4978.7
40°	4191.8	4060.7	3938.3	3846.6	3785.4	3781.0	3781.0	3794.0	3837.8	3894.6	3947.1
42.5°	3606.1	3396.3	3208.4	3037.9	2915.5	2845.6	2815.0	2819.4	2854.4	2906.8	2994.1
45°	3138.4	2876.2	2640.1	2434.7	2268.6	2159.3	2106.9	2102.5	2128.7	2189.9	2286.1
47.5°	2775.6	2495.9	2229.2	1993.2	1814.0	1696.0	1634.8	1617.3	1634.8	1691.6	1805.3
50°	2474.0	2185.6	1910.2	1665.4	1473.1	1350.7	1293.8	1272.0	1293.8	1341.9	1455.5
52.5°	2194.2	1897.0	1639.2	1403.1	1197.7	1092.7	1031.6	1018.4	1031.6	1088.4	1180.2
55°	1870.8	1617.3	1363.8	1127.7	948.6	843.6	795.5	782.5	795.5	848.0	944.2
57.5°	1551.8	1333.2	1110.3	896.1	743.1	651.2	607.6	590.1	620.6	655.6	769.3
60°	1254.5	1079.7	891.7	703.7	577.0	493.9	458.9	454.6	463.3	507.1	585.7
62.5°	983.5	839.3	690.6	537.7	432.7	397.8	354.0	349.7	358.4	384.6	445.9
65°	708.1	616.4	502.7	393.4	310.4	262.2	244.8	249.2	257.9	275.4	332.2
67.5°	493.9	428.3	349.7	275.4	214.2	192.3	174.9	170.5	174.9	205.5	236.0
70°	332.2	292.8	236.0	209.8	148.7	118.0	122.4	109.3	126.7	126.7	152.9
72.5°	218.5	192.3	157.3	122.4	104.9	83.1	83.1	78.7	87.4	91.8	113.7
75°	113.7	87.4	87.4	61.2	43.7	21.8	39.4	35.0	30.6	35.0	43.7
77.5°	78.7	65.6	61.2	48.1	43.7	35.0	35.0	35.0	35.0	39.4	43.7
80°	48.1	48.1	35.0	30.6	26.2	21.8	26.2	26.2	26.2	26.2	30.6
82.5°	30.6	26.2	26.2	21.8	21.8	17.4	17.4	17.4	17.4	17.4	26.2
85°	26.2	17.4	17.4	13.2	17.4	30.6	13.2	17.4	17.4	17.4	13.2
87.5°	8.8	13.2	13.2	13.2	8.8	4.4	8.8	13.2	13.2	21.8	17.4
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°	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3	8143.3
2.5°	8156.4	8160.8	8160.8	8156.4	8156.4	8147.7	8165.1	8152.1	8156.4	8173.9	8160.8
5°	8165.1	8169.5	8169.5	8165.1	8165.1	8165.1	8169.5	8169.5	8165.1	8160.8	8169.5
7.5°	8182.6	8178.3	8178.3	8169.5	8169.5	8160.8	8169.5	8156.4	8165.1	8156.4	8169.5
10°	8160.8	8165.1	8160.8	8156.4	8156.4	8152.1	8152.1	8138.9	8143.3	8130.1	8138.9
12.5°	8147.7	8143.3	8143.3	8134.5	8125.8	8117.1	8112.7	8099.5	8099.5	8069.0	8082.1
15°	8112.7	8117.1	8103.9	8086.5	8077.7	8055.9	8047.1	8029.6	8012.2	7990.3	7994.7
17.5°	8082.1	8069.0	8051.5	8034.0	7999.0	7981.6	7964.0	7937.8	7929.1	7902.9	7894.2
20°	7990.3	7981.6	7959.7	7929.1	7907.2	7867.9	7850.4	7824.2	7802.3	7776.1	7763.0
22.5°	7872.3	7863.5	7837.3	7806.7	7771.7	7754.3	7736.8	7688.7	7666.8	7640.6	7636.2
25°	7723.7	7710.6	7684.3	7649.4	7631.8	7583.8	7566.3	7531.3	7522.6	7496.3	7492.0
27.5°	7496.3	7478.9	7448.3	7404.6	7374.0	7343.4	7325.9	7299.6	7291.0	7264.7	7260.4
30°	7155.5	7133.5	7072.4	7054.9	7002.4	6971.8	6971.8	6936.9	6941.2	6923.8	6923.8
32.5°	6617.8	6582.8	6534.7	6499.7	6464.8	6447.3	6447.3	6434.2	6442.9	6442.9	6451.7
35°	5905.3	5857.3	5831.0	5809.1	5809.1	5826.6	5879.1	5892.2	5918.4	5940.3	5957.8
37.5°	4991.7	4987.4	5018.0	5044.2	5109.8	5184.1	5275.9	5354.6	5428.8	5481.3	5533.7
40°	4003.9	4113.2	4200.6	4323.0	4423.5	4567.7	4733.8	4869.3	4996.1	5088.0	5184.1
42.5°	3125.3	3265.2	3448.8	3627.9	3807.2	4003.9	4222.5	4410.4	4576.5	4703.3	4803.8
45°	2434.7	2627.0	2850.0	3077.2	3308.9	3553.7	3781.0	3973.3	4148.2	4279.3	4379.8
47.5°	1962.6	2172.4	2425.9	2675.1	2937.4	3195.2	3448.8	3614.9	3759.1	3864.0	3955.9
50°	1621.6	1844.6	2111.2	2395.3	2657.6	2915.5	3134.0	3295.8	3413.8	3505.6	3562.4
52.5°	1355.0	1591.0	1875.2	2159.3	2421.5	2657.6	2854.4	2976.7	3072.9	3138.4	3190.8
55°	1118.9	1346.3	1613.0	1879.6	2137.5	2360.3	2522.1	2613.9	2688.2	2727.5	2758.1
57.5°	913.6	1123.3	1368.1	1613.0	1835.8	2019.5	2146.2	2238.0	2273.0	2303.6	2299.2
60°	716.9	913.6	1136.5	1346.3	1538.6	1687.2	1779.1	1831.5	1857.7	1870.8	1862.0
62.5°	563.9	743.1	913.6	1097.1	1237.0	1363.8	1451.2	1451.2	1464.3	1468.7	1481.8
65°	419.6	555.1	703.7	839.3	952.8	1035.9	1084.1	1097.1	1114.7	1110.3	1101.5
67.5°	310.4	410.9	520.1	620.6	699.4	751.8	786.7	817.4	813.1	804.3	799.9
70°	214.2	279.8	375.9	437.1	493.9	546.4	555.1	559.5	563.9	568.2	559.5
72.5°	148.7	196.7	249.2	301.6	336.6	358.4	380.3	384.6	384.6	384.6	380.3
75°	74.3	100.5	148.7	170.5	201.1	209.8	227.3	227.3	240.4	222.9	218.5
77.5°	65.6	78.7	104.9	122.4	135.5	148.7	152.9	166.1	161.7	152.9	157.3
80°	39.4	48.1	65.6	74.3	91.8	96.2	100.5	104.9	100.5	104.9	104.9
82.5°	30.6	35.0	43.7	43.7	56.8	56.8	61.2	61.2	65.6	65.6	65.6
85°	17.4	30.6	26.2	52.4	35.0	35.0	43.7	52.4	43.7	43.7	52.4
87.5°	17.4	17.4	13.2	17.4	17.4	17.4	21.8	26.2	26.2	30.6	26.2
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: P249413

CATALOG NUMBER: LD8B175D010 ER8B175827 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8143.3	8143.3	8143.3	8143.3
2.5°	8156.4	8165.1	8152.1	8147.7
5°	8169.5	8169.5	8160.8	8160.8
7.5°	8169.5	8169.5	8156.4	8147.7
10°	8134.5	8134.5	8121.5	8112.7
12.5°	8069.0	8069.0	8064.6	8051.5
15°	7986.0	7986.0	7968.4	7955.4
17.5°	7872.3	7881.0	7859.2	7859.2
20°	7749.9	7745.5	7728.1	7719.3
22.5°	7623.2	7614.4	7610.0	7583.8
25°	7487.7	7478.9	7465.7	7452.7
27.5°	7256.0	7251.6	7238.5	7221.0
30°	6901.9	6897.5	6880.1	6880.1
32.5°	6442.9	6438.6	6421.1	6425.5
35°	5966.5	5984.0	5975.2	5957.8
37.5°	5568.7	5581.9	5590.6	5581.9
40°	5236.5	5275.9	5280.3	5289.0
42.5°	4882.5	4934.9	4952.4	4961.1
45°	4458.4	4506.6	4545.9	4537.2
47.5°	4025.7	4060.7	4095.7	4069.4
50°	3610.5	3632.3	3645.5	3645.5
52.5°	3217.1	3217.1	3212.8	3217.1
55°	2766.9	2766.9	2749.4	2758.1
57.5°	2294.8	2303.6	2290.4	2268.6
60°	1857.7	1835.8	1827.1	1814.0
62.5°	1446.9	1446.9	1416.3	1455.5
65°	1084.1	1070.9	1057.8	1053.4
67.5°	786.7	782.5	769.3	764.9
70°	555.1	537.7	533.3	524.5
72.5°	371.6	371.6	362.8	362.8
75°	227.3	205.5	201.1	205.5
77.5°	157.3	152.9	152.9	148.7
80°	104.9	100.5	109.3	96.2
82.5°	65.6	69.9	65.6	69.9
85°	43.7	52.4	48.1	48.1
87.5°	26.2	26.2	26.2	26.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)