

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: P249341

Luminaire Tested: **LD8B175D010 ER8B175850 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249341
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 ER8B175850 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18407.0 lumens
Efficiency: N/A
Efficacy: 103.9 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

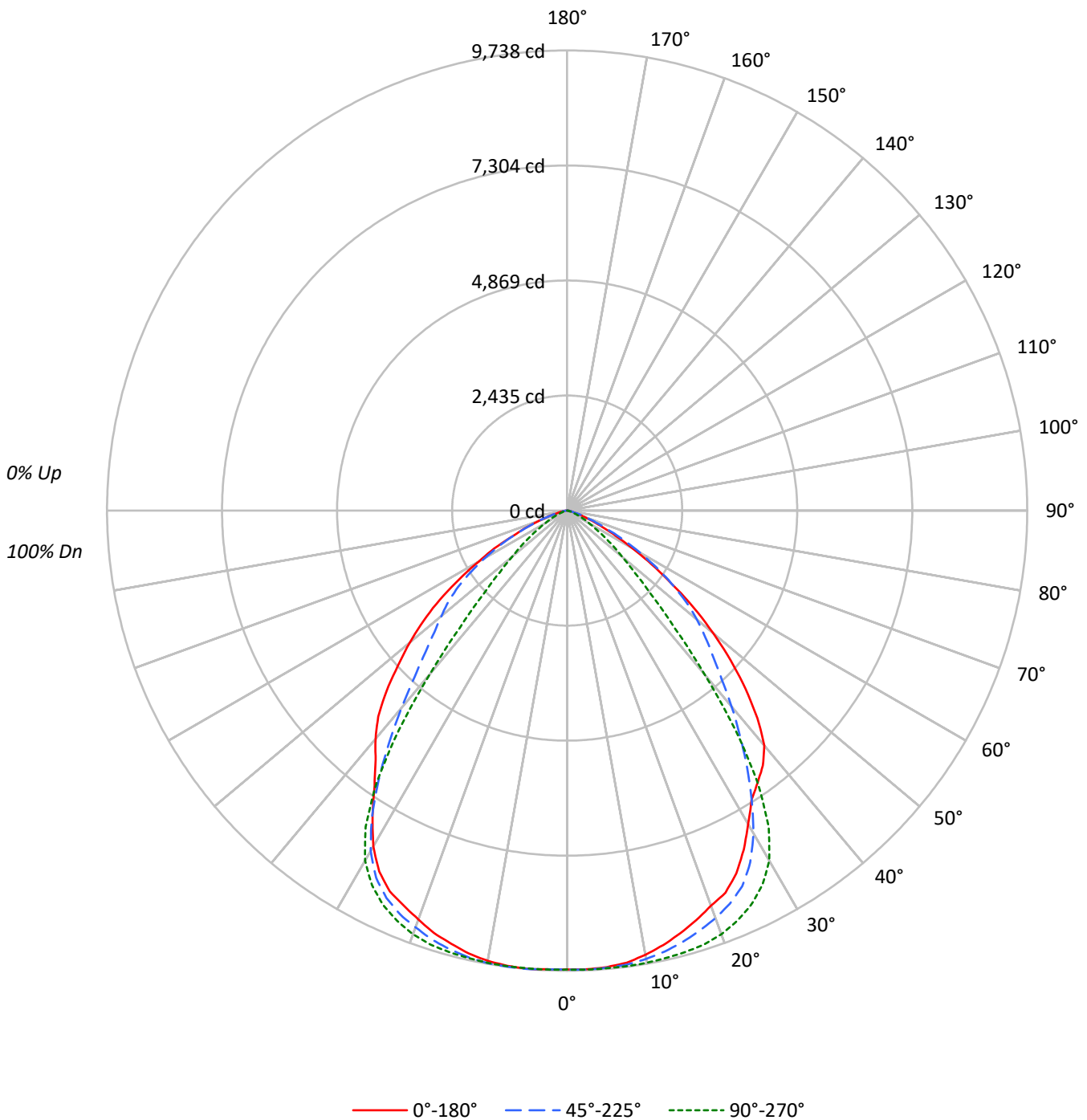
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	299479	299479	299479
5°	300137	300948	301270
10°	298876	304262	302956
15°	295563	308712	302889
20°	292014	313052	302108
25°	288225	313413	302416
30°	272676	304601	292164
35°	264533	264729	267477
40°	261256	182145	253914
45°	232794	109350	235973
50°	193565	72775	208571
55°	145172	50170	176843
60°	98380	33433	133429
65°	59342	21685	91666
70°	32899	11757	56395
75°	14905	4968	29190
80°	12963	5558	20368
85°	14754	7359	20309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	926.9	5.0
10°-20°	2691.7	14.6
20°-30°	4085.6	22.2
30°-40°	4291.1	23.3
40°-50°	3217.1	17.5
50°-60°	2064.2	11.2
60°-70°	883.0	4.8
70°-80°	208.6	1.1
80°-90°	38.8	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°	7704.2	41.9
0°-40°	11995.2	65.2
0°-60°	17276.5	93.9
0°-90°	18407.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18407.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9712	9712	9712	9712	9712	
5°	9696	9712	9722	9738	9733	921
15°	9258	9451	9670	9608	9488	2611
25°	8471	8768	9212	9045	8888	3870
35°	7027	6636	7032	6949	7105	4410
45°	5338	4363	2508	4238	5411	4088
55°	2700	2700	933	2815	3289	2449
65°	813	959	297	1236	1256	868
75°	125	146	42	250	245	182
85°	42	26	21	42	57	44
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°	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9
2.5°	9717.1	9727.6	9722.4	9722.4	9717.1	9722.4	9722.4	9732.8	9732.8	9722.4	9717.1
5°	9696.2	9706.7	9706.7	9696.2	9696.2	9722.4	9706.7	9717.1	9717.1	9711.9	9711.9
7.5°	9649.4	9649.4	9670.2	9654.6	9654.6	9670.2	9665.0	9675.4	9685.9	9691.1	9691.1
10°	9545.1	9555.5	9560.7	9560.7	9566.0	9581.5	9592.0	9612.9	9623.2	9633.7	9638.9
12.5°	9414.8	9430.4	9435.6	9430.4	9446.1	9466.9	9493.0	9519.0	9534.7	9555.5	9571.2
15°	9258.3	9258.3	9268.8	9284.5	9294.9	9326.2	9352.2	9383.4	9425.2	9451.3	9477.3
17.5°	9086.4	9096.8	9112.4	9112.4	9133.3	9185.4	9201.0	9248.0	9294.9	9320.9	9373.1
20°	8898.7	8909.1	8924.8	8935.2	8961.2	9002.9	9034.2	9075.9	9128.1	9175.0	9227.1
22.5°	8752.7	8731.9	8742.2	8752.7	8778.8	8815.3	8851.8	8903.8	8956.0	9002.9	9055.1
25°	8471.2	8476.4	8492.1	8502.4	8533.8	8565.0	8606.8	8669.3	8716.2	8768.4	8825.6
27.5°	8090.7	8095.9	8121.9	8121.9	8147.9	8200.1	8226.1	8278.3	8340.9	8393.0	8460.8
30°	7658.0	7668.3	7668.3	7689.3	7704.8	7731.0	7757.0	7809.2	7840.4	7887.4	7981.2
32.5°	7261.8	7272.2	7266.9	7261.8	7246.1	7240.9	7235.7	7246.1	7256.6	7272.2	7308.6
35°	7027.2	7001.1	6980.3	6943.8	6902.1	6849.9	6803.0	6740.5	6683.1	6636.2	6584.1
37.5°	6803.0	6797.8	6766.5	6714.4	6630.9	6537.2	6427.7	6292.2	6156.6	6010.6	5869.9
40°	6490.2	6474.6	6448.5	6375.6	6281.7	6167.0	6021.1	5854.3	5635.2	5411.1	5181.8
42.5°	5958.5	5963.7	5932.4	5875.0	5786.5	5677.0	5525.8	5343.4	5108.8	4842.9	4545.8
45°	5338.2	5338.2	5327.7	5280.8	5218.3	5129.6	5014.9	4863.8	4634.4	4363.3	4045.3
47.5°	4691.7	4697.0	4681.3	4670.9	4644.8	4587.5	4504.1	4389.4	4227.8	3967.1	3649.1
50°	4034.9	4034.9	4061.0	4055.7	4055.7	4034.9	3998.5	3930.6	3789.9	3581.4	3284.3
52.5°	3378.0	3388.5	3404.2	3425.0	3451.0	3492.7	3451.0	3419.7	3331.1	3169.5	2914.1
55°	2700.3	2710.8	2736.8	2773.3	2804.7	2846.4	2856.7	2856.7	2809.8	2700.3	2507.5
57.5°	2121.7	2106.1	2127.0	2158.2	2199.9	2241.6	2272.9	2309.4	2304.2	2231.2	2074.8
60°	1595.2	1600.4	1616.0	1647.4	1678.6	1715.1	1756.8	1788.1	1803.8	1767.3	1668.2
62.5°	1162.5	1162.5	1183.3	1214.6	1230.3	1282.4	1308.5	1324.1	1339.7	1334.5	1272.0
65°	813.3	823.6	834.1	849.8	865.3	896.6	912.3	943.5	954.0	959.2	912.3
67.5°	573.5	557.8	568.3	578.6	594.3	615.2	646.4	646.4	662.0	662.0	630.8
70°	364.9	364.9	370.2	385.7	396.2	401.4	411.9	422.2	437.9	432.7	432.7
72.5°	245.0	239.8	245.0	250.3	255.5	271.1	271.1	276.3	286.7	292.0	271.1
75°	125.1	130.4	140.7	135.6	151.2	140.7	145.9	161.6	156.4	145.9	145.9
77.5°	104.2	104.2	104.2	99.1	109.4	109.4	104.2	114.7	109.4	109.4	104.2
80°	73.0	78.2	73.0	67.7	73.0	67.7	67.7	67.7	67.7	67.7	62.5
82.5°	57.4	46.9	52.2	46.9	52.2	52.2	46.9	41.7	41.7	46.9	41.7
85°	41.7	31.3	36.5	36.5	31.3	31.3	31.3	31.3	31.3	26.0	26.0
87.5°	26.0	15.7	15.7	15.7	20.8	20.8	20.8	15.7	20.8	20.8	10.5
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9
2.5°	9727.6	9722.4	9732.8	9727.6	9727.6	9722.4	9727.6	9722.4	9732.8	9711.9	9717.1
5°	9727.6	9717.1	9722.4	9727.6	9732.8	9722.4	9722.4	9722.4	9732.8	9722.4	9727.6
7.5°	9706.7	9701.4	9717.1	9727.6	9722.4	9717.1	9727.6	9722.4	9732.8	9727.6	9737.9
10°	9665.0	9670.2	9680.6	9696.2	9701.4	9706.7	9717.1	9717.1	9732.8	9711.9	9722.4
12.5°	9602.5	9623.2	9649.4	9659.7	9680.6	9680.6	9691.1	9696.2	9706.7	9701.4	9717.1
15°	9524.3	9550.3	9581.5	9607.7	9633.7	9649.4	9665.0	9670.2	9685.9	9670.2	9675.4
17.5°	9430.4	9461.6	9508.6	9539.8	9581.5	9597.2	9618.0	9628.5	9644.2	9633.7	9638.9
20°	9300.0	9336.6	9388.7	9435.6	9461.6	9498.1	9524.3	9539.8	9550.3	9539.8	9545.1
22.5°	9117.6	9169.8	9237.5	9274.0	9326.2	9357.4	9362.6	9399.1	9425.2	9399.1	9409.6
25°	8903.8	8956.0	9008.2	9086.4	9133.3	9169.8	9206.3	9211.5	9237.5	9232.3	9227.1
27.5°	8549.4	8617.2	8705.7	8768.4	8830.9	8888.3	8930.0	8940.3	8966.5	8956.0	8961.2
30°	8064.5	8137.6	8221.0	8320.0	8408.7	8465.9	8518.1	8554.6	8580.6	8565.0	8559.8
32.5°	7376.5	7449.5	7538.1	7637.1	7741.4	7824.7	7887.4	7934.3	7965.5	7955.1	7929.1
35°	6589.4	6610.1	6667.5	6745.7	6834.3	6922.9	6980.3	7032.4	7068.8	7079.3	7079.3
37.5°	5781.3	5713.6	5671.8	5671.8	5723.9	5760.4	5812.5	5843.8	5901.2	5922.0	5937.7
40°	4999.3	4842.9	4697.0	4587.5	4514.5	4509.3	4509.3	4524.9	4577.0	4644.8	4707.4
42.5°	4300.8	4050.5	3826.4	3623.1	3477.1	3393.7	3357.2	3362.5	3404.2	3466.7	3570.9
45°	3743.0	3430.2	3148.7	2903.7	2705.6	2575.2	2512.7	2507.5	2538.7	2611.7	2726.5
47.5°	3310.3	2976.6	2658.6	2377.1	2163.5	2022.6	1949.7	1928.9	1949.7	2017.4	2153.0
50°	2950.6	2606.6	2278.1	1986.2	1756.8	1610.9	1543.0	1517.0	1543.0	1600.4	1735.9
52.5°	2616.9	2262.4	1954.9	1673.4	1428.4	1303.2	1230.3	1214.6	1230.3	1298.0	1407.6
55°	2231.2	1928.9	1626.5	1344.9	1131.3	1006.2	948.8	933.2	948.8	1011.4	1126.1
57.5°	1850.7	1590.0	1324.1	1068.7	886.2	776.7	724.6	703.7	740.2	781.9	917.5
60°	1496.1	1287.7	1063.4	839.3	688.2	589.0	547.3	542.1	552.6	604.7	698.5
62.5°	1173.0	1000.9	823.6	641.2	516.1	474.4	422.2	417.1	427.4	458.7	531.8
65°	844.5	735.1	599.5	469.1	370.2	312.8	292.0	297.2	307.5	328.5	396.2
67.5°	589.0	510.9	417.1	328.5	255.5	229.3	208.6	203.3	208.6	245.0	281.5
70°	396.2	349.2	281.5	250.3	177.3	140.7	145.9	130.4	151.2	151.2	182.4
72.5°	260.6	229.3	187.6	145.9	125.1	99.1	99.1	93.9	104.2	109.4	135.6
75°	135.6	104.2	104.2	73.0	52.2	26.0	46.9	41.7	36.5	41.7	52.2
77.5°	93.9	78.2	73.0	57.4	52.2	41.7	41.7	41.7	41.7	46.9	52.2
80°	57.4	57.4	41.7	36.5	31.3	26.0	31.3	31.3	31.3	31.3	36.5
82.5°	36.5	31.3	31.3	26.0	26.0	20.8	20.8	20.8	20.8	20.8	31.3
85°	31.3	20.8	20.8	15.7	20.8	36.5	15.7	20.8	20.8	20.8	15.7
87.5°	10.5	15.7	15.7	15.7	10.5	5.2	10.5	15.7	15.7	26.0	20.8
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9	9711.9
2.5°	9727.6	9732.8	9732.8	9727.6	9727.6	9717.1	9737.9	9722.4	9727.6	9748.4	9732.8
5°	9737.9	9743.1	9743.1	9737.9	9737.9	9737.9	9743.1	9743.1	9737.9	9732.8	9743.1
7.5°	9758.8	9753.6	9753.6	9743.1	9743.1	9732.8	9743.1	9727.6	9737.9	9727.6	9743.1
10°	9732.8	9737.9	9732.8	9727.6	9727.6	9722.4	9722.4	9706.7	9711.9	9696.2	9706.7
12.5°	9717.1	9711.9	9711.9	9701.4	9691.1	9680.6	9675.4	9659.7	9659.7	9623.2	9638.9
15°	9675.4	9680.6	9665.0	9644.2	9633.7	9607.7	9597.2	9576.3	9555.5	9529.5	9534.7
17.5°	9638.9	9623.2	9602.5	9581.5	9539.8	9519.0	9498.1	9466.9	9456.4	9425.2	9414.8
20°	9529.5	9519.0	9493.0	9456.4	9430.4	9383.4	9362.6	9331.4	9305.3	9274.0	9258.3
22.5°	9388.7	9378.2	9347.0	9310.5	9268.8	9248.0	9227.1	9169.8	9143.6	9112.4	9107.2
25°	9211.5	9195.8	9164.6	9122.8	9101.9	9044.7	9023.7	8982.0	8971.7	8940.3	8935.2
27.5°	8940.3	8919.5	8883.0	8830.9	8794.4	8757.9	8737.1	8705.7	8695.4	8664.0	8658.9
30°	8533.8	8507.7	8434.7	8413.9	8351.3	8314.8	8314.8	8273.1	8278.3	8257.5	8257.5
32.5°	7892.6	7850.9	7793.5	7751.8	7710.1	7689.3	7689.3	7673.6	7684.0	7684.0	7694.5
35°	7042.8	6985.5	6954.2	6928.1	6928.1	6948.9	7011.6	7027.2	7058.5	7084.5	7105.4
37.5°	5953.2	5948.1	5984.6	6015.9	6094.1	6182.7	6292.2	6386.0	6474.6	6537.2	6599.7
40°	4775.1	4905.5	5009.7	5155.8	5275.5	5447.6	5645.7	5807.3	5958.5	6068.0	6182.7
42.5°	3727.3	3894.1	4113.1	4326.8	4540.6	4775.1	5035.9	5260.0	5458.1	5609.2	5729.1
45°	2903.7	3133.0	3399.0	3670.0	3946.3	4238.3	4509.3	4738.7	4947.2	5103.6	5223.5
47.5°	2340.6	2590.9	2893.2	3190.4	3503.2	3810.7	4113.1	4311.2	4483.2	4608.3	4717.9
50°	1934.0	2199.9	2517.9	2856.7	3169.5	3477.1	3737.7	3930.6	4071.4	4180.9	4248.6
52.5°	1616.0	1897.5	2236.4	2575.2	2888.0	3169.5	3404.2	3550.1	3664.8	3743.0	3805.5
55°	1334.5	1605.7	1923.7	2241.6	2549.2	2815.0	3007.9	3117.4	3206.0	3252.9	3289.4
57.5°	1089.6	1339.7	1631.7	1923.7	2189.5	2408.5	2559.6	2669.1	2710.8	2747.3	2742.0
60°	855.0	1089.6	1355.4	1605.7	1835.0	2012.2	2121.7	2184.2	2215.5	2231.2	2220.7
62.5°	672.5	886.2	1089.6	1308.5	1475.3	1626.5	1730.8	1730.8	1746.4	1751.6	1767.3
65°	500.4	662.0	839.3	1000.9	1136.4	1235.5	1292.9	1308.5	1329.4	1324.1	1313.7
67.5°	370.2	490.1	620.3	740.2	834.1	896.6	938.3	974.9	969.7	959.2	954.0
70°	255.5	333.7	448.4	521.3	589.0	651.7	662.0	667.2	672.5	677.7	667.2
72.5°	177.3	234.6	297.2	359.7	401.4	427.4	453.6	458.7	458.7	458.7	453.6
75°	88.6	119.9	177.3	203.3	239.8	250.3	271.1	271.1	286.7	265.8	260.6
77.5°	78.2	93.9	125.1	145.9	161.6	177.3	182.4	198.1	192.9	182.4	187.6
80°	46.9	57.4	78.2	88.6	109.4	114.7	119.9	125.1	119.9	125.1	125.1
82.5°	36.5	41.7	52.2	52.2	67.7	67.7	73.0	73.0	78.2	78.2	78.2
85°	20.8	36.5	31.3	62.5	41.7	41.7	52.2	62.5	52.2	52.2	62.5
87.5°	20.8	20.8	15.7	20.8	20.8	20.8	26.0	31.3	31.3	36.5	31.3
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: P249341

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9711.9	9711.9	9711.9	9711.9
2.5°	9727.6	9737.9	9722.4	9717.1
5°	9743.1	9743.1	9732.8	9732.8
7.5°	9743.1	9743.1	9727.6	9717.1
10°	9701.4	9701.4	9685.9	9675.4
12.5°	9623.2	9623.2	9618.0	9602.5
15°	9524.3	9524.3	9503.3	9487.8
17.5°	9388.7	9399.1	9373.1	9373.1
20°	9242.7	9237.5	9216.7	9206.3
22.5°	9091.6	9081.1	9075.9	9044.7
25°	8930.0	8919.5	8903.8	8888.3
27.5°	8653.7	8648.5	8632.8	8612.0
30°	8231.4	8226.1	8205.3	8205.3
32.5°	7684.0	7678.8	7658.0	7663.2
35°	7115.8	7136.7	7126.2	7105.4
37.5°	6641.4	6657.1	6667.5	6657.1
40°	6245.2	6292.2	6297.4	6307.8
42.5°	5823.0	5885.5	5906.4	5916.8
45°	5317.3	5374.6	5421.6	5411.1
47.5°	4801.2	4842.9	4884.6	4853.3
50°	4306.0	4332.0	4347.7	4347.7
52.5°	3836.8	3836.8	3831.6	3836.8
55°	3299.8	3299.8	3279.0	3289.4
57.5°	2736.8	2747.3	2731.6	2705.6
60°	2215.5	2189.5	2179.0	2163.5
62.5°	1725.6	1725.6	1689.1	1735.9
65°	1292.9	1277.2	1261.5	1256.3
67.5°	938.3	933.2	917.5	912.3
70°	662.0	641.2	636.0	625.5
72.5°	443.1	443.1	432.7	432.7
75°	271.1	245.0	239.8	245.0
77.5°	187.6	182.4	182.4	177.3
80°	125.1	119.9	130.4	114.7
82.5°	78.2	83.4	78.2	83.4
85°	52.2	62.5	57.4	57.4
87.5°	31.3	31.3	31.3	31.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)