

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: P249422

Luminaire Tested: **LD8B175D010 ER8B175830 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249422
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 ER8B175830 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15820.0 lumens
Efficiency: N/A
Efficacy: 89.3 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

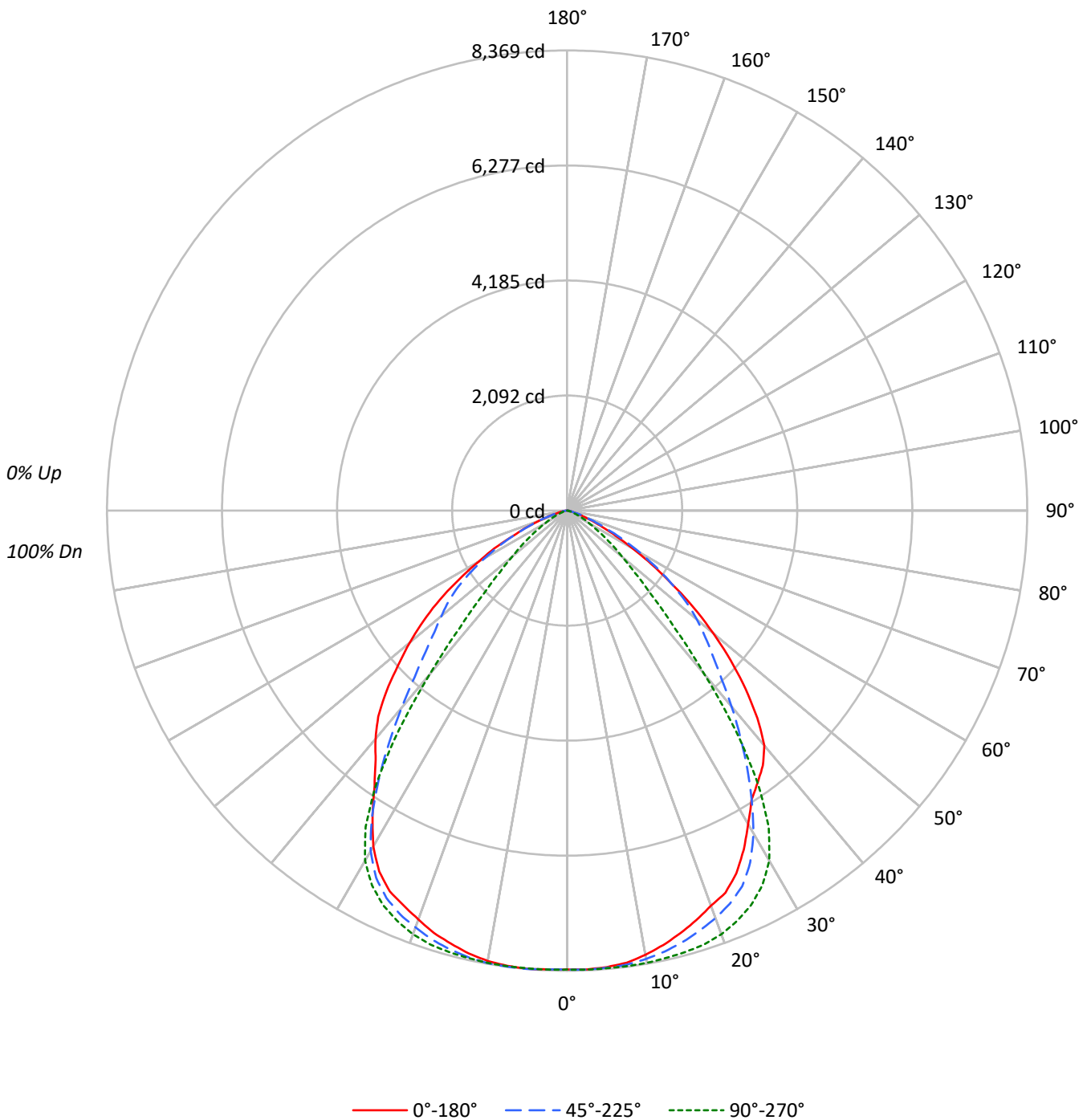
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	257388	257388	257388
5°	257956	258649	258928
10°	256871	261499	260378
15°	254023	265324	260319
20°	250975	269056	259648
25°	247716	269365	259914
30°	234353	261791	251102
35°	227356	227521	229886
40°	224541	156544	218229
45°	200074	93982	202809
50°	166365	62547	179260
55°	124770	43117	151989
60°	84553	28733	114674
65°	51002	18635	78780
70°	28274	10098	48470
75°	12808	4265	25091
80°	11134	4777	17509
85°	12666	6333	17443



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	796.6	5.0
10°-20°	2313.4	14.6
20°-30°	3511.4	22.2
30°-40°	3688.0	23.3
40°-50°	2765.0	17.5
50°-60°	1774.1	11.2
60°-70°	758.9	4.8
70°-80°	179.3	1.1
80°-90°	33.4	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°	6621.4	41.9
0°-40°	10309.3	65.2
0°-60°	14848.4	93.9
0°-90°	15820.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15820.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8347	8347	8347	8347	8347	
5°	8334	8347	8356	8369	8365	792
15°	7957	8123	8311	8257	8154	2244
25°	7281	7536	7917	7774	7639	3326
35°	6040	5704	6044	5972	6107	3791
45°	4588	3750	2155	3643	4651	3514
55°	2321	2321	802	2419	2827	2105
65°	699	824	255	1062	1080	746
75°	108	125	36	215	211	157
85°	36	22	18	36	49	38
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°	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9
2.5°	8351.4	8360.4	8355.9	8355.9	8351.4	8355.9	8355.9	8364.9	8364.9	8355.9	8351.4
5°	8333.5	8342.4	8342.4	8333.5	8333.5	8355.9	8342.4	8351.4	8351.4	8346.9	8346.9
7.5°	8293.2	8293.2	8311.1	8297.7	8297.7	8311.1	8306.6	8315.6	8324.6	8329.1	8329.1
10°	8203.6	8212.5	8217.0	8217.0	8221.5	8234.9	8243.9	8261.9	8270.8	8279.7	8284.2
12.5°	8091.6	8105.0	8109.5	8105.0	8118.5	8136.3	8158.8	8181.2	8194.7	8212.5	8226.0
15°	7957.1	7957.1	7966.1	7979.6	7988.6	8015.4	8037.8	8064.7	8100.5	8123.0	8145.3
17.5°	7809.3	7818.3	7831.7	7831.7	7849.7	7894.4	7907.9	7948.2	7988.6	8010.9	8055.8
20°	7648.1	7656.9	7670.4	7679.4	7701.8	7737.6	7764.5	7800.3	7845.2	7885.5	7930.2
22.5°	7522.5	7504.7	7513.6	7522.5	7545.0	7576.4	7607.7	7652.5	7697.3	7737.6	7782.5
25°	7280.6	7285.1	7298.6	7307.5	7334.4	7361.3	7397.1	7450.8	7491.2	7536.0	7585.3
27.5°	6953.6	6958.1	6980.4	6980.4	7002.8	7047.6	7070.0	7114.8	7168.7	7213.4	7271.7
30°	6581.7	6590.6	6590.6	6608.6	6622.0	6644.4	6666.8	6711.6	6738.5	6778.8	6859.5
32.5°	6241.2	6250.1	6245.6	6241.2	6227.7	6223.2	6218.7	6227.7	6236.7	6250.1	6281.4
35°	6039.6	6017.1	5999.3	5967.9	5932.1	5887.2	5846.9	5793.2	5743.8	5703.5	5658.8
37.5°	5846.9	5842.4	5815.5	5770.7	5699.0	5618.4	5524.4	5407.8	5291.3	5165.9	5045.0
40°	5578.1	5564.6	5542.2	5479.5	5398.8	5300.3	5174.9	5031.5	4843.2	4650.6	4453.5
42.5°	5121.0	5125.5	5098.7	5049.3	4973.3	4879.1	4749.2	4592.4	4390.8	4162.2	3906.9
45°	4587.9	4587.9	4578.9	4538.6	4484.9	4408.7	4310.1	4180.2	3983.1	3750.0	3476.7
47.5°	4032.3	4036.8	4023.3	4014.5	3992.0	3942.8	3871.1	3772.5	3633.6	3409.5	3136.2
50°	3467.9	3467.9	3490.2	3485.7	3485.7	3467.9	3436.5	3378.2	3257.3	3078.0	2822.7
52.5°	2903.3	2912.3	2925.7	2943.6	2966.0	3001.8	2966.0	2939.1	2862.9	2724.0	2504.6
55°	2320.8	2329.8	2352.2	2383.5	2410.5	2446.3	2455.2	2455.2	2414.9	2320.8	2155.1
57.5°	1823.5	1810.1	1828.0	1854.9	1890.7	1926.6	1953.5	1984.8	1980.3	1917.6	1783.2
60°	1371.0	1375.5	1388.9	1415.8	1442.7	1474.1	1509.9	1536.8	1550.2	1518.9	1433.7
62.5°	999.1	999.1	1017.0	1043.9	1057.4	1102.2	1124.6	1138.0	1151.4	1146.9	1093.2
65°	699.0	707.9	716.9	730.3	743.7	770.6	784.1	810.9	819.9	824.4	784.1
67.5°	492.9	479.4	488.4	497.3	510.8	528.7	555.6	555.6	569.0	569.0	542.1
70°	313.6	313.6	318.1	331.5	340.5	345.0	354.0	362.9	376.4	371.9	371.9
72.5°	210.6	206.1	210.6	215.1	219.6	233.0	233.0	237.5	246.4	250.9	233.0
75°	107.5	112.0	120.9	116.5	129.9	120.9	125.4	138.9	134.4	125.4	125.4
77.5°	89.6	89.6	89.6	85.2	94.1	94.1	89.6	98.6	94.1	94.1	89.6
80°	62.7	67.2	62.7	58.2	62.7	58.2	58.2	58.2	58.2	58.2	53.7
82.5°	49.3	40.3	44.8	40.3	44.8	44.8	40.3	35.8	35.8	40.3	35.8
85°	35.8	26.9	31.4	31.4	26.9	26.9	26.9	26.9	26.9	22.4	22.4
87.5°	22.4	13.5	13.5	13.5	17.9	17.9	17.9	13.5	17.9	17.9	9.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9
2.5°	8360.4	8355.9	8364.9	8360.4	8360.4	8355.9	8360.4	8355.9	8364.9	8346.9	8351.4
5°	8360.4	8351.4	8355.9	8360.4	8364.9	8355.9	8355.9	8355.9	8364.9	8355.9	8360.4
7.5°	8342.4	8338.0	8351.4	8360.4	8355.9	8351.4	8360.4	8355.9	8364.9	8360.4	8369.3
10°	8306.6	8311.1	8320.1	8333.5	8338.0	8342.4	8351.4	8351.4	8364.9	8346.9	8355.9
12.5°	8252.9	8270.8	8293.2	8302.1	8320.1	8320.1	8329.1	8333.5	8342.4	8338.0	8351.4
15°	8185.7	8208.0	8234.9	8257.4	8279.7	8293.2	8306.6	8311.1	8324.6	8311.1	8315.6
17.5°	8105.0	8131.9	8172.2	8199.1	8234.9	8248.4	8266.3	8275.2	8288.7	8279.7	8284.2
20°	7993.0	8024.4	8069.1	8109.5	8131.9	8163.2	8185.7	8199.1	8208.0	8199.1	8203.6
22.5°	7836.2	7881.0	7939.2	7970.6	8015.4	8042.3	8046.8	8078.1	8100.5	8078.1	8087.1
25°	7652.5	7697.3	7742.1	7809.3	7849.7	7881.0	7912.4	7916.9	7939.2	7934.7	7930.2
27.5°	7347.8	7406.1	7482.2	7536.0	7589.7	7639.1	7674.9	7683.8	7706.3	7697.3	7701.8
30°	6931.1	6993.9	7065.6	7150.7	7226.9	7276.1	7320.9	7352.3	7374.7	7361.3	7356.8
32.5°	6339.8	6402.5	6478.7	6563.7	6653.4	6725.0	6778.8	6819.2	6846.0	6837.0	6814.7
35°	5663.3	5681.1	5730.5	5797.7	5873.7	5949.9	5999.3	6044.0	6075.3	6084.3	6084.3
37.5°	4968.8	4910.6	4874.7	4874.7	4919.4	4950.8	4995.6	5022.5	5071.8	5089.7	5103.2
40°	4296.6	4162.2	4036.8	3942.8	3880.1	3875.6	3875.6	3888.9	3933.8	3992.0	4045.8
42.5°	3696.3	3481.2	3288.6	3113.9	2988.4	2916.8	2885.4	2889.9	2925.7	2979.5	3069.0
45°	3216.9	2948.1	2706.2	2495.6	2325.3	2213.3	2159.6	2155.1	2181.9	2244.6	2343.3
47.5°	2845.1	2558.3	2285.0	2043.0	1859.4	1738.4	1675.7	1657.8	1675.7	1733.9	1850.4
50°	2535.9	2240.2	1957.9	1707.0	1509.9	1384.5	1326.2	1303.8	1326.2	1375.5	1491.9
52.5°	2249.1	1944.5	1680.2	1438.2	1227.6	1120.1	1057.4	1043.9	1057.4	1115.6	1209.7
55°	1917.6	1657.8	1397.9	1155.9	972.3	864.7	815.4	802.0	815.4	869.2	967.8
57.5°	1590.6	1366.5	1138.0	918.5	761.7	667.5	622.8	604.8	636.2	672.0	788.6
60°	1285.8	1106.7	914.0	721.3	591.4	506.3	470.4	465.9	474.9	519.7	600.3
62.5°	1008.1	860.2	707.9	551.1	443.6	407.7	362.9	358.5	367.4	394.2	457.0
65°	725.8	631.8	515.2	403.2	318.1	268.8	250.9	255.4	264.3	282.3	340.5
67.5°	506.3	439.1	358.5	282.3	219.6	197.1	179.2	174.7	179.2	210.6	241.9
70°	340.5	300.2	241.9	215.1	152.4	120.9	125.4	112.0	129.9	129.9	156.8
72.5°	224.0	197.1	161.3	125.4	107.5	85.2	85.2	80.7	89.6	94.1	116.5
75°	116.5	89.6	89.6	62.7	44.8	22.4	40.3	35.8	31.4	35.8	44.8
77.5°	80.7	67.2	62.7	49.3	44.8	35.8	35.8	35.8	35.8	40.3	44.8
80°	49.3	49.3	35.8	31.4	26.9	22.4	26.9	26.9	26.9	26.9	31.4
82.5°	31.4	26.9	26.9	22.4	22.4	17.9	17.9	17.9	17.9	17.9	26.9
85°	26.9	17.9	17.9	13.5	17.9	31.4	13.5	17.9	17.9	17.9	13.5
87.5°	9.0	13.5	13.5	13.5	9.0	4.5	9.0	13.5	13.5	22.4	17.9
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°	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9	8346.9
2.5°	8360.4	8364.9	8364.9	8360.4	8360.4	8351.4	8369.3	8355.9	8360.4	8378.3	8364.9
5°	8369.3	8373.8	8373.8	8369.3	8369.3	8369.3	8373.8	8373.8	8369.3	8364.9	8373.8
7.5°	8387.3	8382.8	8382.8	8373.8	8373.8	8364.9	8373.8	8360.4	8369.3	8360.4	8373.8
10°	8364.9	8369.3	8364.9	8360.4	8360.4	8355.9	8355.9	8342.4	8346.9	8333.5	8342.4
12.5°	8351.4	8346.9	8346.9	8338.0	8329.1	8320.1	8315.6	8302.1	8302.1	8270.8	8284.2
15°	8315.6	8320.1	8306.6	8288.7	8279.7	8257.4	8248.4	8230.4	8212.5	8190.2	8194.7
17.5°	8284.2	8270.8	8252.9	8234.9	8199.1	8181.2	8163.2	8136.3	8127.4	8100.5	8091.6
20°	8190.2	8181.2	8158.8	8127.4	8105.0	8064.7	8046.8	8019.9	7997.5	7970.6	7957.1
22.5°	8069.1	8060.2	8033.3	8001.9	7966.1	7948.2	7930.2	7881.0	7858.6	7831.7	7827.2
25°	7916.9	7903.4	7876.5	7840.7	7822.7	7773.5	7755.5	7719.7	7710.8	7683.8	7679.4
27.5°	7683.8	7665.9	7634.6	7589.7	7558.4	7527.0	7509.2	7482.2	7473.3	7446.4	7442.0
30°	7334.4	7311.9	7249.2	7231.4	7177.5	7146.2	7146.2	7110.3	7114.8	7097.0	7097.0
32.5°	6783.3	6747.5	6698.1	6662.3	6626.4	6608.6	6608.6	6595.1	6604.1	6604.1	6613.1
35°	6053.0	6003.8	5976.8	5954.4	5954.4	5972.3	6026.1	6039.6	6066.5	6088.8	6106.8
37.5°	5116.5	5112.2	5143.5	5170.4	5237.6	5313.8	5407.8	5488.5	5564.6	5618.4	5672.1
40°	4104.0	4216.1	4305.6	4431.1	4534.1	4682.0	4852.2	4991.1	5121.0	5215.2	5313.8
42.5°	3203.4	3346.8	3535.1	3718.7	3902.4	4104.0	4328.1	4520.7	4691.0	4820.9	4923.9
45°	2495.6	2692.7	2921.2	3154.2	3391.7	3642.6	3875.6	4072.7	4251.9	4386.3	4489.4
47.5°	2011.7	2226.8	2486.6	2742.0	3010.8	3275.1	3535.1	3705.3	3853.1	3960.6	4054.8
50°	1662.2	1890.7	2164.0	2455.2	2724.0	2988.4	3212.4	3378.2	3499.2	3593.3	3651.5
52.5°	1388.9	1630.8	1922.1	2213.3	2482.1	2724.0	2925.7	3051.2	3149.7	3216.9	3270.6
55°	1146.9	1380.0	1653.3	1926.6	2190.9	2419.4	2585.1	2679.3	2755.4	2795.7	2827.1
57.5°	936.4	1151.4	1402.4	1653.3	1881.8	2070.0	2199.9	2294.0	2329.8	2361.2	2356.7
60°	734.8	936.4	1164.9	1380.0	1577.1	1729.4	1823.5	1877.3	1904.1	1917.6	1908.6
62.5°	578.0	761.7	936.4	1124.6	1268.0	1397.9	1487.5	1487.5	1500.9	1505.4	1518.9
65°	430.1	569.0	721.3	860.2	976.7	1061.9	1111.2	1124.6	1142.5	1138.0	1129.1
67.5°	318.1	421.2	533.1	636.2	716.9	770.6	806.4	837.9	833.4	824.4	819.9
70°	219.6	286.8	385.3	448.0	506.3	560.1	569.0	573.5	578.0	582.5	573.5
72.5°	152.4	201.6	255.4	309.1	345.0	367.4	389.8	394.2	394.2	394.2	389.8
75°	76.2	103.0	152.4	174.7	206.1	215.1	233.0	233.0	246.4	228.5	224.0
77.5°	67.2	80.7	107.5	125.4	138.9	152.4	156.8	170.3	165.8	156.8	161.3
80°	40.3	49.3	67.2	76.2	94.1	98.6	103.0	107.5	103.0	107.5	107.5
82.5°	31.4	35.8	44.8	44.8	58.2	58.2	62.7	62.7	67.2	67.2	67.2
85°	17.9	31.4	26.9	53.7	35.8	35.8	44.8	53.7	44.8	44.8	53.7
87.5°	17.9	17.9	13.5	17.9	17.9	17.9	22.4	26.9	26.9	31.4	26.9
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: P249422

CATALOG NUMBER: LD8B175D010 ER8B175830 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8346.9	8346.9	8346.9	8346.9
2.5°	8360.4	8369.3	8355.9	8351.4
5°	8373.8	8373.8	8364.9	8364.9
7.5°	8373.8	8373.8	8360.4	8351.4
10°	8338.0	8338.0	8324.6	8315.6
12.5°	8270.8	8270.8	8266.3	8252.9
15°	8185.7	8185.7	8167.7	8154.3
17.5°	8069.1	8078.1	8055.8	8055.8
20°	7943.7	7939.2	7921.4	7912.4
22.5°	7813.8	7804.8	7800.3	7773.5
25°	7674.9	7665.9	7652.5	7639.1
27.5°	7437.5	7433.0	7419.5	7401.6
30°	7074.5	7070.0	7052.1	7052.1
32.5°	6604.1	6599.6	6581.7	6586.2
35°	6115.7	6133.7	6124.7	6106.8
37.5°	5708.0	5721.5	5730.5	5721.5
40°	5367.5	5407.8	5412.3	5421.3
42.5°	5004.6	5058.3	5076.3	5085.2
45°	4569.9	4619.3	4659.6	4650.6
47.5°	4126.4	4162.2	4198.1	4171.2
50°	3700.8	3723.2	3736.7	3736.7
52.5°	3297.6	3297.6	3293.1	3297.6
55°	2836.1	2836.1	2818.2	2827.1
57.5°	2352.2	2361.2	2347.7	2325.3
60°	1904.1	1881.8	1872.8	1859.4
62.5°	1483.0	1483.0	1451.7	1491.9
65°	1111.2	1097.7	1084.2	1079.7
67.5°	806.4	802.0	788.6	784.1
70°	569.0	551.1	546.6	537.6
72.5°	380.8	380.8	371.9	371.9
75°	233.0	210.6	206.1	210.6
77.5°	161.3	156.8	156.8	152.4
80°	107.5	103.0	112.0	98.6
82.5°	67.2	71.7	67.2	71.7
85°	44.8	53.7	49.3	49.3
87.5°	26.9	26.9	26.9	26.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)