

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: P249089

Luminaire Tested: **LD8B175D010 ER8B175827 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249089
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 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17440.0 lumens
Efficiency: N/A
Efficacy: 98.4 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

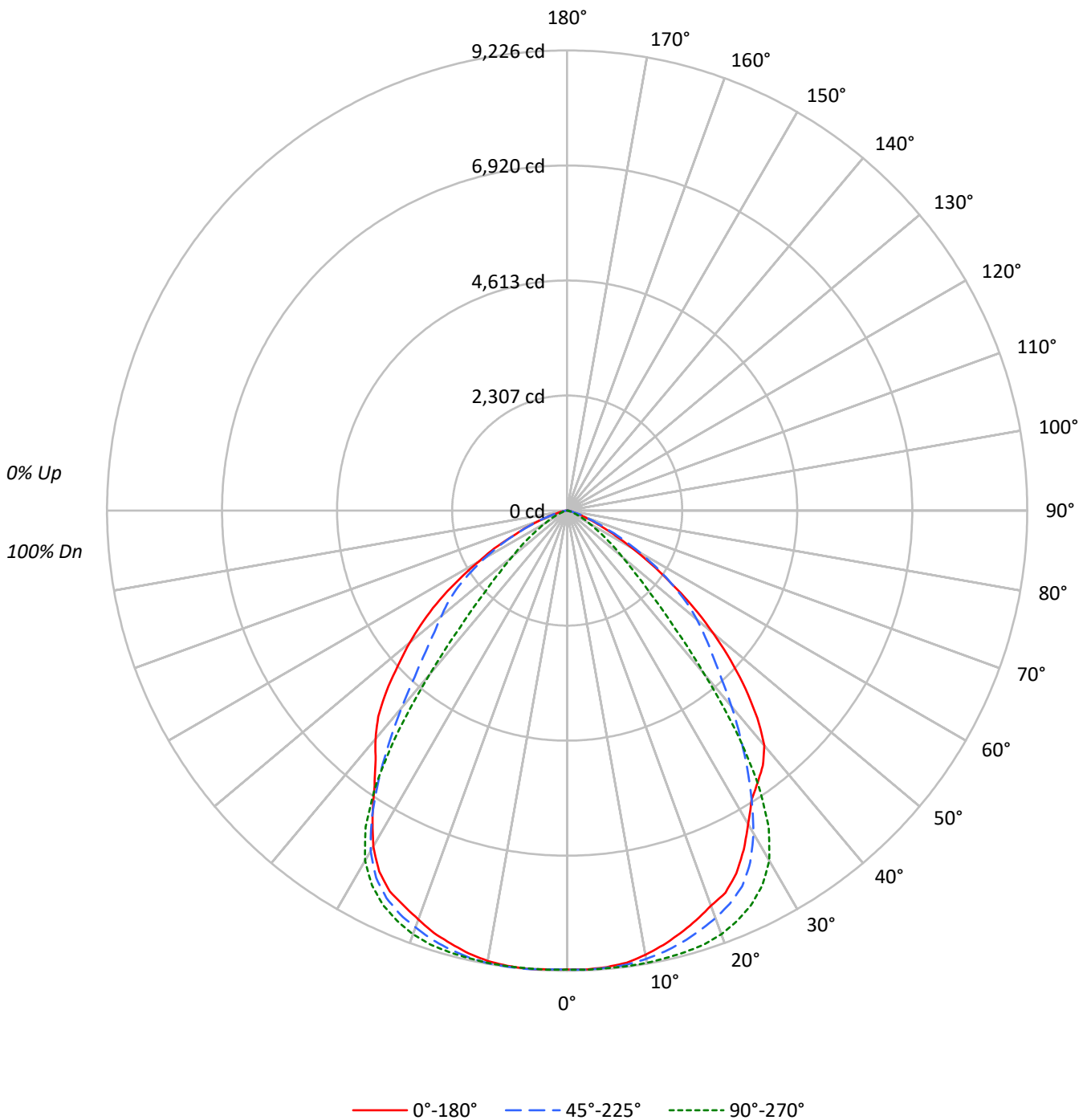
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	283747	283747	283747
5°	284369	285137	285443
10°	283173	288277	287040
15°	280035	292495	286975
20°	276673	296608	286235
25°	273081	296949	286527
30°	258352	288599	276817
35°	250639	250819	253428
40°	247534	172577	240578
45°	220562	103602	223580
50°	183400	68951	197614
55°	137549	47536	167553
60°	93212	31675	126417
65°	56227	20547	86850
70°	31177	11135	53437
75°	14130	4706	27665
80°	12271	5256	19285
85°	13975	6970	19247



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	878.2	5.0
10°-20°	2550.3	14.6
20°-30°	3870.9	22.2
30°-40°	4065.6	23.3
40°-50°	3048.1	17.5
50°-60°	1955.8	11.2
60°-70°	836.6	4.8
70°-80°	197.7	1.1
80°-90°	36.8	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°	7299.4	41.9
0°-40°	11365.1	65.2
0°-60°	16368.9	93.9
0°-90°	17440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17440.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9202	9202	9202	9202	9202	
5°	9187	9202	9212	9226	9222	873
15°	8772	8955	9162	9103	8989	2474
25°	8026	8308	8728	8570	8421	3667
35°	6658	6288	6663	6584	6732	4179
45°	5058	4134	2376	4016	5127	3873
55°	2558	2558	884	2667	3117	2321
65°	771	909	282	1171	1190	823
75°	119	138	40	237	232	173
85°	40	25	20	40	54	42
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°	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7
2.5°	9206.6	9216.6	9211.6	9211.6	9206.6	9211.6	9211.6	9221.5	9221.5	9211.6	9206.6
5°	9186.8	9196.7	9196.7	9186.8	9186.8	9211.6	9196.7	9206.6	9206.6	9201.7	9201.7
7.5°	9142.5	9142.5	9162.2	9147.4	9147.4	9162.2	9157.2	9167.1	9177.0	9182.0	9182.0
10°	9043.6	9053.5	9058.5	9058.5	9063.4	9078.2	9088.1	9107.9	9117.7	9127.6	9132.6
12.5°	8920.2	8935.0	8939.9	8935.0	8949.8	8969.5	8994.3	9019.0	9033.8	9053.5	9068.4
15°	8771.9	8771.9	8781.8	8796.7	8806.6	8836.2	8860.9	8890.5	8930.0	8954.8	8979.4
17.5°	8609.0	8618.9	8633.7	8633.7	8653.5	8702.8	8717.7	8762.1	8806.6	8831.3	8880.7
20°	8431.2	8441.0	8455.9	8465.8	8490.5	8530.0	8559.6	8599.1	8648.5	8693.0	8742.3
22.5°	8292.9	8273.2	8283.0	8292.9	8317.6	8352.2	8386.8	8436.1	8485.5	8530.0	8579.4
25°	8026.1	8031.1	8046.0	8055.8	8085.5	8115.1	8154.6	8213.8	8258.3	8307.7	8362.0
27.5°	7665.6	7670.6	7695.2	7695.2	7719.9	7769.3	7794.0	7843.4	7902.7	7952.1	8016.3
30°	7255.7	7265.5	7265.5	7285.3	7300.1	7324.8	7349.5	7398.9	7428.5	7473.0	7561.9
32.5°	6880.3	6890.1	6885.2	6880.3	6865.5	6860.5	6855.6	6865.5	6875.4	6890.1	6924.7
35°	6658.1	6633.3	6613.6	6579.0	6539.5	6490.1	6445.6	6386.4	6332.0	6287.5	6238.2
37.5°	6445.6	6440.7	6411.1	6361.6	6282.6	6193.8	6090.1	5961.6	5833.1	5694.9	5561.6
40°	6149.3	6134.4	6109.8	6040.6	5951.7	5843.0	5704.8	5546.7	5339.2	5126.9	4909.6
42.5°	5645.4	5650.4	5620.8	5566.4	5482.5	5378.7	5235.5	5062.7	4840.4	4588.5	4307.0
45°	5057.7	5057.7	5047.8	5003.3	4944.1	4860.1	4751.5	4608.3	4391.0	4134.0	3832.8
47.5°	4445.2	4450.2	4435.3	4425.5	4400.8	4346.5	4267.5	4158.8	4005.7	3758.7	3457.4
50°	3823.0	3823.0	3847.6	3842.7	3842.7	3823.0	3788.4	3724.1	3590.8	3393.2	3111.7
52.5°	3200.6	3210.5	3225.3	3245.0	3269.7	3309.2	3269.7	3240.1	3156.1	3003.0	2761.0
55°	2558.5	2568.4	2593.0	2627.6	2657.3	2696.8	2706.6	2706.6	2662.2	2558.5	2375.7
57.5°	2010.3	1995.4	2015.2	2044.8	2084.4	2123.9	2153.5	2188.1	2183.1	2114.0	1965.8
60°	1511.4	1516.4	1531.1	1560.8	1590.4	1625.0	1664.5	1694.1	1709.0	1674.4	1580.5
62.5°	1101.5	1101.5	1121.2	1150.8	1165.6	1215.1	1239.7	1254.6	1269.3	1264.4	1205.2
65°	770.6	780.4	790.3	805.1	819.9	849.5	864.3	894.0	903.9	908.8	864.3
67.5°	543.4	528.5	538.4	548.2	563.1	582.9	612.5	612.5	627.2	627.2	597.6
70°	345.8	345.8	350.7	365.5	375.4	380.3	390.2	400.0	414.9	409.9	409.9
72.5°	232.2	227.2	232.2	237.1	242.1	256.8	256.8	261.8	271.7	276.6	256.8
75°	118.6	123.5	133.3	128.5	143.2	133.3	138.3	153.1	148.2	138.3	138.3
77.5°	98.7	98.7	98.7	93.9	103.7	103.7	98.7	108.6	103.7	103.7	98.7
80°	69.1	74.1	69.1	64.2	69.1	64.2	64.2	64.2	64.2	64.2	59.2
82.5°	54.4	44.5	49.4	44.5	49.4	49.4	44.5	39.5	39.5	44.5	39.5
85°	39.5	29.6	34.6	34.6	29.6	29.6	29.6	29.6	29.6	24.7	24.7
87.5°	24.7	14.9	14.9	14.9	19.7	19.7	19.7	14.9	19.7	19.7	9.9
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7
2.5°	9216.6	9211.6	9221.5	9216.6	9216.6	9211.6	9216.6	9211.6	9221.5	9201.7	9206.6
5°	9216.6	9206.6	9211.6	9216.6	9221.5	9211.6	9211.6	9211.6	9221.5	9211.6	9216.6
7.5°	9196.7	9191.8	9206.6	9216.6	9211.6	9206.6	9216.6	9211.6	9221.5	9216.6	9226.3
10°	9157.2	9162.2	9172.1	9186.8	9191.8	9196.7	9206.6	9206.6	9221.5	9201.7	9211.6
12.5°	9098.0	9117.7	9142.5	9152.3	9172.1	9172.1	9182.0	9186.8	9196.7	9191.8	9206.6
15°	9023.9	9048.6	9078.2	9102.9	9127.6	9142.5	9157.2	9162.2	9177.0	9162.2	9167.1
17.5°	8935.0	8964.6	9009.0	9038.7	9078.2	9093.0	9112.7	9122.6	9137.5	9127.6	9132.6
20°	8811.5	8846.1	8895.4	8939.9	8964.6	8999.1	9023.9	9038.7	9048.6	9038.7	9043.6
22.5°	8638.6	8688.1	8752.2	8786.8	8836.2	8865.8	8870.8	8905.4	8930.0	8905.4	8915.3
25°	8436.1	8485.5	8534.9	8609.0	8653.5	8688.1	8722.6	8727.6	8752.2	8747.3	8742.3
27.5°	8100.2	8164.5	8248.4	8307.7	8367.0	8421.3	8460.9	8470.6	8495.4	8485.5	8490.5
30°	7640.9	7710.1	7789.1	7882.9	7966.9	8021.2	8070.6	8105.2	8129.8	8115.1	8110.1
32.5°	6989.0	7058.1	7142.1	7235.9	7334.7	7413.7	7473.0	7517.5	7547.1	7537.2	7512.5
35°	6243.2	6262.9	6317.3	6391.4	6475.2	6559.2	6613.6	6662.9	6697.5	6707.4	6707.4
37.5°	5477.6	5413.4	5373.9	5373.9	5423.2	5457.8	5507.2	5536.8	5591.2	5610.9	5625.7
40°	4736.6	4588.5	4450.2	4346.5	4277.4	4272.4	4272.4	4287.2	4336.6	4400.8	4460.1
42.5°	4074.8	3837.7	3625.4	3432.7	3294.5	3215.4	3180.9	3185.8	3225.3	3284.6	3383.3
45°	3546.3	3250.0	2983.3	2751.1	2563.4	2439.9	2380.7	2375.7	2405.4	2474.5	2583.2
47.5°	3136.4	2820.2	2519.0	2252.2	2049.8	1916.4	1847.3	1827.5	1847.3	1911.4	2039.9
50°	2795.6	2469.6	2158.4	1881.8	1664.5	1526.3	1462.0	1437.3	1462.0	1516.4	1644.7
52.5°	2479.4	2143.6	1852.2	1585.5	1353.3	1234.8	1165.6	1150.8	1165.6	1229.8	1333.6
55°	2114.0	1827.5	1541.0	1274.3	1071.8	953.3	898.9	884.2	898.9	958.2	1066.9
57.5°	1753.5	1506.4	1254.6	1012.5	839.7	735.9	686.6	666.8	701.3	740.8	869.3
60°	1417.5	1220.0	1007.6	795.2	652.0	558.1	518.6	513.6	523.5	573.0	661.8
62.5°	1111.4	948.3	780.4	607.5	489.0	449.5	400.0	395.2	405.0	434.6	503.8
65°	800.2	696.5	568.0	444.5	350.7	296.3	276.6	281.6	291.4	311.2	375.4
67.5°	558.1	484.0	395.2	311.2	242.1	217.3	197.6	192.6	197.6	232.2	266.7
70°	375.4	330.9	266.7	237.1	168.0	133.3	138.3	123.5	143.2	143.2	172.8
72.5°	246.9	217.3	177.8	138.3	118.6	93.9	93.9	88.9	98.7	103.7	128.5
75°	128.5	98.7	98.7	69.1	49.4	24.7	44.5	39.5	34.6	39.5	49.4
77.5°	88.9	74.1	69.1	54.4	49.4	39.5	39.5	39.5	39.5	44.5	49.4
80°	54.4	54.4	39.5	34.6	29.6	24.7	29.6	29.6	29.6	29.6	34.6
82.5°	34.6	29.6	29.6	24.7	24.7	19.7	19.7	19.7	19.7	19.7	29.6
85°	29.6	19.7	19.7	14.9	19.7	34.6	14.9	19.7	19.7	19.7	14.9
87.5°	9.9	14.9	14.9	14.9	9.9	5.0	9.9	14.9	14.9	24.7	19.7
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7	9201.7
2.5°	9216.6	9221.5	9221.5	9216.6	9216.6	9206.6	9226.3	9211.6	9216.6	9236.3	9221.5
5°	9226.3	9231.3	9231.3	9226.3	9226.3	9226.3	9231.3	9231.3	9226.3	9221.5	9231.3
7.5°	9246.2	9241.2	9241.2	9231.3	9231.3	9221.5	9231.3	9216.6	9226.3	9216.6	9231.3
10°	9221.5	9226.3	9221.5	9216.6	9216.6	9211.6	9211.6	9196.7	9201.7	9186.8	9196.7
12.5°	9206.6	9201.7	9201.7	9191.8	9182.0	9172.1	9167.1	9152.3	9152.3	9117.7	9132.6
15°	9167.1	9172.1	9157.2	9137.5	9127.6	9102.9	9093.0	9073.2	9053.5	9028.9	9033.8
17.5°	9132.6	9117.7	9098.0	9078.2	9038.7	9019.0	8999.1	8969.5	8959.6	8930.0	8920.2
20°	9028.9	9019.0	8994.3	8959.6	8935.0	8890.5	8870.8	8841.2	8816.4	8786.8	8771.9
22.5°	8895.4	8885.5	8855.9	8821.4	8781.8	8762.1	8742.3	8688.1	8663.3	8633.7	8628.7
25°	8727.6	8712.7	8683.1	8643.6	8623.8	8569.5	8549.7	8510.2	8500.4	8470.6	8465.8
27.5°	8470.6	8450.9	8416.4	8367.0	8332.4	8297.8	8278.1	8248.4	8238.6	8208.9	8204.0
30°	8085.5	8060.7	7991.6	7971.9	7912.5	7878.0	7878.0	7838.5	7843.4	7823.7	7823.7
32.5°	7477.9	7438.4	7384.0	7344.5	7305.0	7285.3	7285.3	7270.4	7280.4	7280.4	7290.3
35°	6672.8	6618.6	6588.8	6564.2	6564.2	6583.9	6643.2	6658.1	6687.7	6712.3	6732.2
37.5°	5640.5	5635.7	5670.2	5699.8	5773.9	5857.9	5961.6	6050.5	6134.4	6193.8	6253.0
40°	4524.3	4647.8	4746.5	4884.9	4998.4	5161.4	5349.1	5502.2	5645.4	5749.3	5857.9
42.5°	3531.5	3689.5	3897.0	4099.5	4302.0	4524.3	4771.3	4983.6	5171.3	5314.5	5428.1
45°	2751.1	2968.4	3220.4	3477.2	3739.0	4015.6	4272.4	4489.7	4687.3	4835.5	4949.1
47.5°	2217.7	2454.8	2741.2	3022.8	3319.1	3610.5	3897.0	4084.7	4247.7	4366.2	4470.0
50°	1832.4	2084.4	2385.7	2706.6	3003.0	3294.5	3541.4	3724.1	3857.5	3961.2	4025.4
52.5°	1531.1	1797.8	2118.9	2439.9	2736.3	3003.0	3225.3	3363.6	3472.3	3546.3	3605.6
55°	1264.4	1521.3	1822.6	2123.9	2415.3	2667.1	2849.9	2953.7	3037.5	3082.0	3116.6
57.5°	1032.3	1269.3	1546.0	1822.6	2074.5	2282.0	2425.2	2528.9	2568.4	2602.9	2598.0
60°	810.1	1032.3	1284.2	1521.3	1738.6	1906.5	2010.3	2069.5	2099.1	2114.0	2104.1
62.5°	637.1	839.7	1032.3	1239.7	1397.8	1541.0	1639.9	1639.9	1654.6	1659.6	1674.4
65°	474.1	627.2	795.2	948.3	1076.7	1170.6	1225.0	1239.7	1259.5	1254.6	1244.7
67.5°	350.7	464.3	587.7	701.3	790.3	849.5	889.0	923.7	918.7	908.8	903.9
70°	242.1	316.2	424.8	493.9	558.1	617.4	627.2	632.2	637.1	642.1	632.2
72.5°	168.0	222.3	281.6	340.8	380.3	405.0	429.8	434.6	434.6	434.6	429.8
75°	84.0	113.6	168.0	192.6	227.2	237.1	256.8	256.8	271.7	251.9	246.9
77.5°	74.1	88.9	118.6	138.3	153.1	168.0	172.8	187.7	182.7	172.8	177.8
80°	44.5	54.4	74.1	84.0	103.7	108.6	113.6	118.6	113.6	118.6	118.6
82.5°	34.6	39.5	49.4	49.4	64.2	64.2	69.1	69.1	74.1	74.1	74.1
85°	19.7	34.6	29.6	59.2	39.5	39.5	49.4	59.2	49.4	49.4	59.2
87.5°	19.7	19.7	14.9	19.7	19.7	19.7	24.7	29.6	29.6	34.6	29.6
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: P249089

CATALOG NUMBER: LD8B175D010 ER8B175827 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9201.7	9201.7	9201.7	9201.7
2.5°	9216.6	9226.3	9211.6	9206.6
5°	9231.3	9231.3	9221.5	9221.5
7.5°	9231.3	9231.3	9216.6	9206.6
10°	9191.8	9191.8	9177.0	9167.1
12.5°	9117.7	9117.7	9112.7	9098.0
15°	9023.9	9023.9	9004.1	8989.3
17.5°	8895.4	8905.4	8880.7	8880.7
20°	8757.2	8752.2	8732.5	8722.6
22.5°	8614.0	8604.1	8599.1	8569.5
25°	8460.9	8450.9	8436.1	8421.3
27.5°	8199.1	8194.1	8179.3	8159.6
30°	7798.9	7794.0	7774.3	7774.3
32.5°	7280.4	7275.4	7255.7	7260.7
35°	6742.0	6761.8	6751.9	6732.2
37.5°	6292.5	6307.4	6317.3	6307.4
40°	5917.1	5961.6	5966.6	5976.5
42.5°	5517.1	5576.3	5596.1	5605.9
45°	5037.9	5092.3	5136.8	5126.9
47.5°	4548.9	4588.5	4628.0	4598.4
50°	4079.8	4104.4	4119.3	4119.3
52.5°	3635.3	3635.3	3630.3	3635.3
55°	3126.5	3126.5	3106.8	3116.6
57.5°	2593.0	2602.9	2588.1	2563.4
60°	2099.1	2074.5	2064.5	2049.8
62.5°	1634.9	1634.9	1600.3	1644.7
65°	1225.0	1210.1	1195.2	1190.3
67.5°	889.0	884.2	869.3	864.3
70°	627.2	607.5	602.6	592.7
72.5°	419.8	419.8	409.9	409.9
75°	256.8	232.2	227.2	232.2
77.5°	177.8	172.8	172.8	168.0
80°	118.6	113.6	123.5	108.6
82.5°	74.1	79.0	74.1	79.0
85°	49.4	59.2	54.4	54.4
87.5°	29.6	29.6	29.6	29.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)