

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: P249494

Luminaire Tested: **LD8B175D010 ER8B175950 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249494
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 ER8B175950 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15171.0 lumens
Efficiency: N/A
Efficacy: 85.6 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

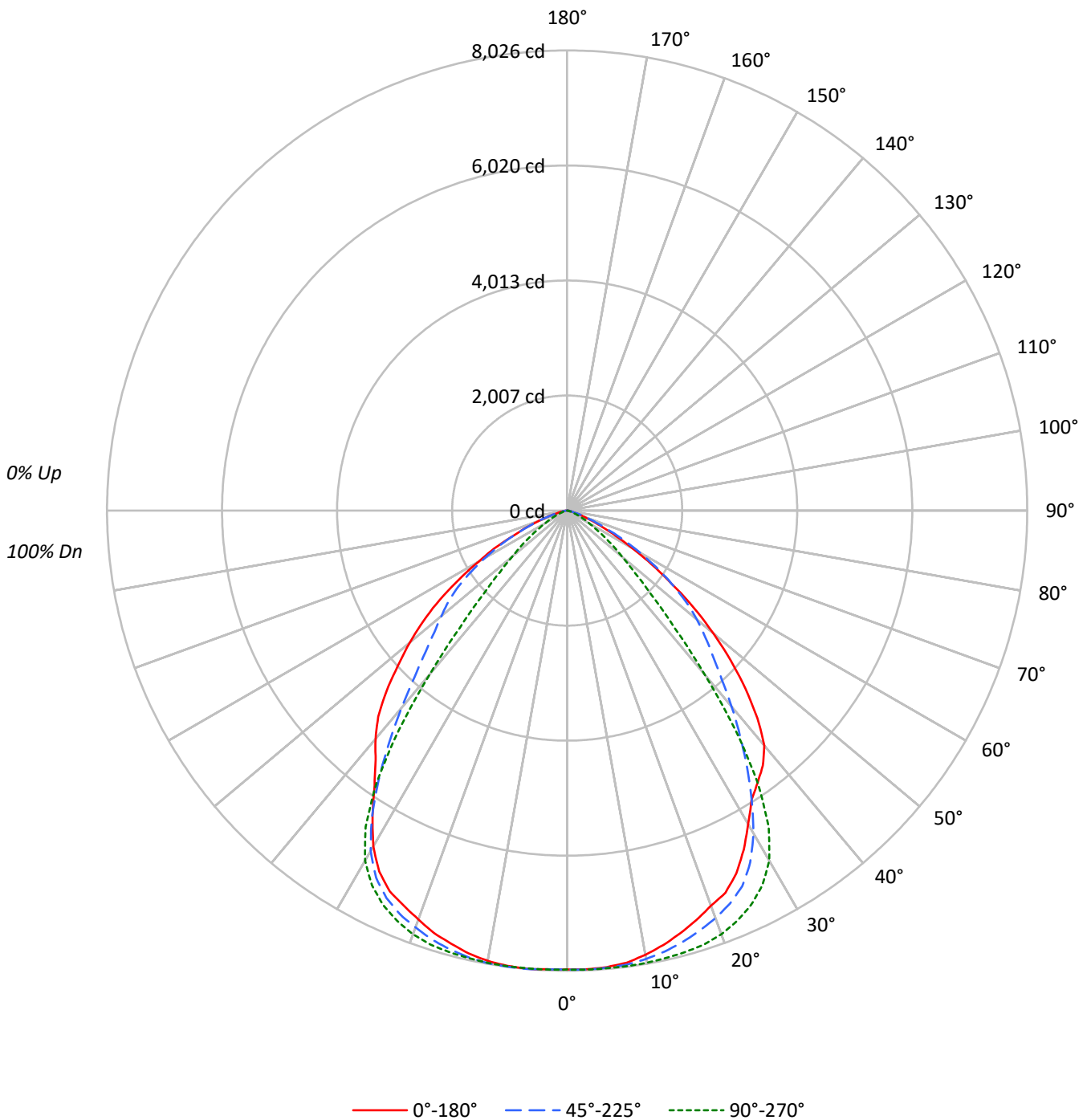
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	246829	246829	246829
5°	247373	248038	248308
10°	246332	250772	249698
15°	243603	254438	249640
20°	240677	258017	248996
25°	237553	258314	249250
30°	224739	251052	240801
35°	218028	218186	220456
40°	215326	150123	209276
45°	191867	90127	194488
50°	159538	59980	171906
55°	119652	41348	145753
60°	81087	27555	109968
65°	48908	17876	75548
70°	27120	9683	46486
75°	12284	4098	24067
80°	10673	4582	16781
85°	12171	6050	16735



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	763.9	5.0
10°-20°	2218.5	14.6
20°-30°	3367.3	22.2
30°-40°	3536.7	23.3
40°-50°	2651.6	17.5
50°-60°	1701.3	11.2
60°-70°	727.8	4.8
70°-80°	171.9	1.1
80°-90°	32.0	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°	6349.7	41.9
0°-40°	9886.4	65.2
0°-60°	14239.3	93.9
0°-90°	15171.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15171.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8004	8004	8004	8004	8004	
5°	7992	8004	8013	8026	8022	759
15°	7631	7790	7970	7919	7820	2152
25°	6982	7227	7592	7455	7326	3190
35°	5792	5470	5796	5727	5856	3635
45°	4400	3596	2067	3493	4460	3369
55°	2226	2226	769	2320	2711	2019
65°	670	791	245	1018	1035	716
75°	103	120	34	206	202	150
85°	34	21	17	34	47	36
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°	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5
2.5°	8008.8	8017.4	8013.1	8013.1	8008.8	8013.1	8013.1	8021.8	8021.8	8013.1	8008.8
5°	7991.6	8000.2	8000.2	7991.6	7991.6	8013.1	8000.2	8008.8	8008.8	8004.5	8004.5
7.5°	7953.0	7953.0	7970.1	7957.3	7957.3	7970.1	7965.8	7974.5	7983.1	7987.4	7987.4
10°	7867.0	7875.6	7879.9	7879.9	7884.2	7897.1	7905.7	7922.9	7931.5	7940.1	7944.4
12.5°	7759.7	7772.5	7776.8	7772.5	7785.4	7802.6	7824.1	7845.6	7858.5	7875.6	7888.6
15°	7630.7	7630.7	7639.3	7652.2	7660.8	7686.6	7708.1	7733.8	7768.2	7789.7	7811.2
17.5°	7489.0	7497.6	7510.4	7510.4	7527.6	7570.5	7583.5	7622.2	7660.8	7682.3	7725.3
20°	7334.3	7342.8	7355.8	7364.4	7385.8	7420.2	7446.0	7480.3	7523.3	7562.0	7604.9
22.5°	7213.9	7196.8	7205.3	7213.9	7235.5	7265.6	7295.6	7338.5	7381.5	7420.2	7463.2
25°	6981.9	6986.2	6999.2	7007.7	7033.5	7059.3	7093.7	7145.2	7183.9	7226.9	7274.1
27.5°	6668.3	6672.6	6694.1	6694.1	6715.5	6758.5	6780.0	6823.0	6874.6	6917.5	6973.4
30°	6311.7	6320.2	6320.2	6337.5	6350.3	6371.8	6393.3	6436.3	6462.0	6500.7	6578.1
32.5°	5985.2	5993.7	5989.4	5985.2	5972.2	5967.9	5963.6	5972.2	5980.9	5993.7	6023.8
35°	5791.8	5770.3	5753.2	5723.1	5688.7	5645.7	5607.0	5555.5	5508.2	5469.5	5426.6
37.5°	5607.0	5602.7	5577.0	5534.0	5465.2	5387.9	5297.7	5186.0	5074.2	4954.0	4838.0
40°	5349.2	5336.3	5314.9	5254.7	5177.4	5082.8	4962.6	4825.1	4644.6	4459.8	4270.8
42.5°	4911.0	4915.3	4889.5	4842.2	4769.2	4678.9	4554.4	4404.0	4210.7	3991.5	3746.6
45°	4399.7	4399.7	4391.1	4352.4	4300.9	4227.8	4133.3	4008.7	3819.7	3596.2	3334.1
47.5°	3866.9	3871.2	3858.3	3849.8	3828.2	3781.0	3712.3	3617.7	3484.5	3269.7	3007.6
50°	3325.6	3325.6	3347.0	3342.7	3342.7	3325.6	3295.5	3239.6	3123.6	2951.7	2706.9
52.5°	2784.2	2792.8	2805.7	2822.9	2844.3	2878.7	2844.3	2818.5	2745.5	2612.3	2401.8
55°	2225.6	2234.2	2255.7	2285.7	2311.6	2346.0	2354.5	2354.5	2315.8	2225.6	2066.7
57.5°	1748.7	1735.8	1753.0	1778.8	1813.2	1847.6	1873.3	1903.4	1899.1	1838.9	1710.0
60°	1314.8	1319.1	1331.9	1357.8	1383.5	1413.6	1448.0	1473.7	1486.6	1456.6	1374.9
62.5°	958.2	958.2	975.3	1001.1	1014.0	1057.0	1078.4	1091.4	1104.2	1099.9	1048.4
65°	670.3	678.8	687.4	700.4	713.2	739.0	751.9	777.7	786.3	790.6	751.9
67.5°	472.7	459.7	468.4	476.9	489.8	507.0	532.8	532.8	545.6	545.6	519.9
70°	300.8	300.8	305.1	317.9	326.5	330.8	339.5	348.0	360.9	356.6	356.6
72.5°	202.0	197.6	202.0	206.3	210.6	223.4	223.4	227.7	236.3	240.6	223.4
75°	103.1	107.4	116.0	111.8	124.6	116.0	120.3	133.2	128.9	120.3	120.3
77.5°	85.9	85.9	85.9	81.7	90.2	90.2	85.9	94.5	90.2	90.2	85.9
80°	60.1	64.4	60.1	55.8	60.1	55.8	55.8	55.8	55.8	55.8	51.5
82.5°	47.3	38.7	43.0	38.7	43.0	43.0	38.7	34.4	34.4	38.7	34.4
85°	34.4	25.8	30.1	30.1	25.8	25.8	25.8	25.8	25.8	21.4	21.4
87.5°	21.4	12.9	12.9	12.9	17.1	17.1	17.1	12.9	17.1	17.1	8.6
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°	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5
2.5°	8017.4	8013.1	8021.8	8017.4	8017.4	8013.1	8017.4	8013.1	8021.8	8004.5	8008.8
5°	8017.4	8008.8	8013.1	8017.4	8021.8	8013.1	8013.1	8013.1	8021.8	8013.1	8017.4
7.5°	8000.2	7995.9	8008.8	8017.4	8013.1	8008.8	8017.4	8013.1	8021.8	8017.4	8026.0
10°	7965.8	7970.1	7978.8	7991.6	7995.9	8000.2	8008.8	8008.8	8021.8	8004.5	8013.1
12.5°	7914.3	7931.5	7953.0	7961.5	7978.8	7978.8	7987.4	7991.6	8000.2	7995.9	8008.8
15°	7849.9	7871.3	7897.1	7918.6	7940.1	7953.0	7965.8	7970.1	7983.1	7970.1	7974.5
17.5°	7772.5	7798.3	7836.9	7862.7	7897.1	7910.0	7927.1	7935.8	7948.7	7940.1	7944.4
20°	7665.1	7695.2	7738.1	7776.8	7798.3	7828.3	7849.9	7862.7	7871.3	7862.7	7867.0
22.5°	7514.7	7557.7	7613.5	7643.6	7686.6	7712.4	7716.7	7746.7	7768.2	7746.7	7755.4
25°	7338.5	7381.5	7424.5	7489.0	7527.6	7557.7	7587.8	7592.1	7613.5	7609.2	7604.9
27.5°	7046.4	7102.3	7175.3	7226.9	7278.4	7325.7	7360.1	7368.6	7390.1	7381.5	7385.8
30°	6646.8	6707.0	6775.8	6857.3	6930.4	6977.6	7020.6	7050.7	7072.1	7059.3	7055.0
32.5°	6079.7	6139.8	6212.9	6294.5	6380.5	6449.1	6500.7	6539.4	6565.2	6556.6	6535.1
35°	5430.9	5448.1	5495.4	5559.8	5632.8	5705.8	5753.2	5796.0	5826.1	5834.7	5834.7
37.5°	4764.9	4709.1	4674.7	4674.7	4717.6	4747.7	4790.7	4816.4	4863.7	4880.9	4893.8
40°	4120.4	3991.5	3871.2	3781.0	3720.9	3716.6	3716.6	3729.4	3772.4	3828.2	3879.8
42.5°	3544.7	3338.4	3153.7	2986.1	2865.9	2797.1	2767.0	2771.3	2805.7	2857.2	2943.1
45°	3084.9	2827.2	2595.1	2393.2	2229.9	2122.5	2071.0	2066.7	2092.4	2152.5	2247.2
47.5°	2728.3	2453.3	2191.2	1959.2	1783.1	1667.1	1606.9	1589.8	1606.9	1662.7	1774.5
50°	2431.9	2148.3	1877.6	1637.0	1448.0	1327.7	1271.8	1250.3	1271.8	1319.1	1430.7
52.5°	2156.9	1864.7	1611.2	1379.2	1177.2	1074.1	1014.0	1001.1	1014.0	1069.8	1160.1
55°	1838.9	1589.8	1340.5	1108.5	932.4	829.3	782.0	769.1	782.0	833.6	928.1
57.5°	1525.3	1310.4	1091.4	880.8	730.4	640.1	597.2	580.0	610.1	644.5	756.2
60°	1233.1	1061.3	876.5	691.8	567.2	485.5	451.1	446.8	455.4	498.4	575.7
62.5°	966.8	825.0	678.8	528.5	425.4	391.0	348.0	343.8	352.3	378.1	438.3
65°	696.1	605.9	494.1	386.7	305.1	257.8	240.6	245.0	253.5	270.7	326.5
67.5°	485.5	421.0	343.8	270.7	210.6	189.0	171.9	167.6	171.9	202.0	232.0
70°	326.5	287.8	232.0	206.3	146.1	116.0	120.3	107.4	124.6	124.6	150.3
72.5°	214.8	189.0	154.6	120.3	103.1	81.7	81.7	77.4	85.9	90.2	111.8
75°	111.8	85.9	85.9	60.1	43.0	21.4	38.7	34.4	30.1	34.4	43.0
77.5°	77.4	64.4	60.1	47.3	43.0	34.4	34.4	34.4	34.4	38.7	43.0
80°	47.3	47.3	34.4	30.1	25.8	21.4	25.8	25.8	25.8	25.8	30.1
82.5°	30.1	25.8	25.8	21.4	21.4	17.1	17.1	17.1	17.1	17.1	25.8
85°	25.8	17.1	17.1	12.9	17.1	30.1	12.9	17.1	17.1	17.1	12.9
87.5°	8.6	12.9	12.9	12.9	8.6	4.3	8.6	12.9	12.9	21.4	17.1
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°	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5	8004.5
2.5°	8017.4	8021.8	8021.8	8017.4	8017.4	8008.8	8026.0	8013.1	8017.4	8034.6	8021.8
5°	8026.0	8030.3	8030.3	8026.0	8026.0	8026.0	8030.3	8030.3	8026.0	8021.8	8030.3
7.5°	8043.2	8038.9	8038.9	8030.3	8030.3	8021.8	8030.3	8017.4	8026.0	8017.4	8030.3
10°	8021.8	8026.0	8021.8	8017.4	8017.4	8013.1	8013.1	8000.2	8004.5	7991.6	8000.2
12.5°	8008.8	8004.5	8004.5	7995.9	7987.4	7978.8	7974.5	7961.5	7961.5	7931.5	7944.4
15°	7974.5	7978.8	7965.8	7948.7	7940.1	7918.6	7910.0	7892.8	7875.6	7854.2	7858.5
17.5°	7944.4	7931.5	7914.3	7897.1	7862.7	7845.6	7828.3	7802.6	7793.9	7768.2	7759.7
20°	7854.2	7845.6	7824.1	7793.9	7772.5	7733.8	7716.7	7690.9	7669.4	7643.6	7630.7
22.5°	7738.1	7729.5	7703.7	7673.7	7639.3	7622.2	7604.9	7557.7	7536.2	7510.4	7506.1
25°	7592.1	7579.2	7553.4	7519.0	7501.8	7454.6	7437.3	7403.0	7394.4	7368.6	7364.4
27.5°	7368.6	7351.4	7321.4	7278.4	7248.3	7218.2	7201.1	7175.3	7166.7	7140.9	7136.7
30°	7033.5	7012.0	6951.8	6934.7	6883.1	6853.0	6853.0	6818.6	6823.0	6805.8	6805.8
32.5°	6505.0	6470.7	6423.4	6389.0	6354.6	6337.5	6337.5	6324.5	6333.2	6333.2	6341.8
35°	5804.7	5757.5	5731.6	5710.2	5710.2	5727.3	5778.9	5791.8	5817.6	5839.0	5856.3
37.5°	4906.6	4902.4	4932.5	4958.3	5022.7	5095.8	5186.0	5263.3	5336.3	5387.9	5439.4
40°	3935.7	4043.1	4129.0	4249.4	4348.1	4489.9	4653.2	4786.4	4911.0	5001.3	5095.8
42.5°	3072.0	3209.5	3390.0	3566.1	3742.3	3935.7	4150.5	4335.3	4498.5	4623.1	4721.9
45°	2393.2	2582.2	2801.4	3024.8	3252.5	3493.2	3716.6	3905.6	4077.5	4206.4	4305.2
47.5°	1929.1	2135.4	2384.6	2629.5	2887.3	3140.8	3390.0	3553.3	3695.0	3798.1	3888.5
50°	1594.0	1813.2	2075.3	2354.5	2612.3	2865.9	3080.6	3239.6	3355.7	3445.9	3501.7
52.5°	1331.9	1563.9	1843.2	2122.5	2380.3	2612.3	2805.7	2926.0	3020.5	3084.9	3136.5
55°	1099.9	1323.4	1585.5	1847.6	2101.0	2320.1	2479.1	2569.4	2642.3	2681.0	2711.1
57.5°	898.0	1104.2	1344.8	1585.5	1804.6	1985.1	2109.6	2199.9	2234.2	2264.3	2260.0
60°	704.7	898.0	1117.1	1323.4	1512.4	1658.4	1748.7	1800.3	1826.0	1838.9	1830.3
62.5°	554.2	730.4	898.0	1078.4	1215.9	1340.5	1426.5	1426.5	1439.3	1443.6	1456.6
65°	412.4	545.6	691.8	825.0	936.6	1018.3	1065.6	1078.4	1095.7	1091.4	1082.7
67.5°	305.1	403.9	511.3	610.1	687.4	739.0	773.3	803.5	799.2	790.6	786.3
70°	210.6	275.0	369.5	429.7	485.5	537.1	545.6	549.9	554.2	558.6	549.9
72.5°	146.1	193.3	245.0	296.5	330.8	352.3	373.8	378.1	378.1	378.1	373.8
75°	73.1	98.8	146.1	167.6	197.6	206.3	223.4	223.4	236.3	219.1	214.8
77.5°	64.4	77.4	103.1	120.3	133.2	146.1	150.3	163.3	159.0	150.3	154.6
80°	38.7	47.3	64.4	73.1	90.2	94.5	98.8	103.1	98.8	103.1	103.1
82.5°	30.1	34.4	43.0	43.0	55.8	55.8	60.1	60.1	64.4	64.4	64.4
85°	17.1	30.1	25.8	51.5	34.4	34.4	43.0	51.5	43.0	43.0	51.5
87.5°	17.1	17.1	12.9	17.1	17.1	17.1	21.4	25.8	25.8	30.1	25.8
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: P249494

CATALOG NUMBER: LD8B175D010 ER8B175950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8004.5	8004.5	8004.5	8004.5
2.5°	8017.4	8026.0	8013.1	8008.8
5°	8030.3	8030.3	8021.8	8021.8
7.5°	8030.3	8030.3	8017.4	8008.8
10°	7995.9	7995.9	7983.1	7974.5
12.5°	7931.5	7931.5	7927.1	7914.3
15°	7849.9	7849.9	7832.6	7819.8
17.5°	7738.1	7746.7	7725.3	7725.3
20°	7617.8	7613.5	7596.4	7587.8
22.5°	7493.3	7484.6	7480.3	7454.6
25°	7360.1	7351.4	7338.5	7325.7
27.5°	7132.4	7128.0	7115.1	7098.0
30°	6784.3	6780.0	6762.8	6762.8
32.5°	6333.2	6328.8	6311.7	6316.0
35°	5864.8	5882.0	5873.4	5856.3
37.5°	5473.8	5486.8	5495.4	5486.8
40°	5147.3	5186.0	5190.3	5198.9
42.5°	4799.3	4850.8	4868.1	4876.6
45°	4382.5	4429.8	4468.5	4459.8
47.5°	3957.1	3991.5	4025.9	4000.1
50°	3549.0	3570.4	3583.4	3583.4
52.5°	3162.3	3162.3	3158.0	3162.3
55°	2719.7	2719.7	2702.6	2711.1
57.5°	2255.7	2264.3	2251.4	2229.9
60°	1826.0	1804.6	1795.9	1783.1
62.5°	1422.2	1422.2	1392.1	1430.7
65°	1065.6	1052.7	1039.7	1035.4
67.5°	773.3	769.1	756.2	751.9
70°	545.6	528.5	524.2	515.6
72.5°	365.2	365.2	356.6	356.6
75°	223.4	202.0	197.6	202.0
77.5°	154.6	150.3	150.3	146.1
80°	103.1	98.8	107.4	94.5
82.5°	64.4	68.8	64.4	68.8
85°	43.0	51.5	47.3	47.3
87.5°	25.8	25.8	25.8	25.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)