

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: P249593

Luminaire Tested: **LD8B175D010 ER8B175940 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249593
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 ER8B175940 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 4000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16372.0 lumens
Efficiency: N/A
Efficacy: 92.4 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

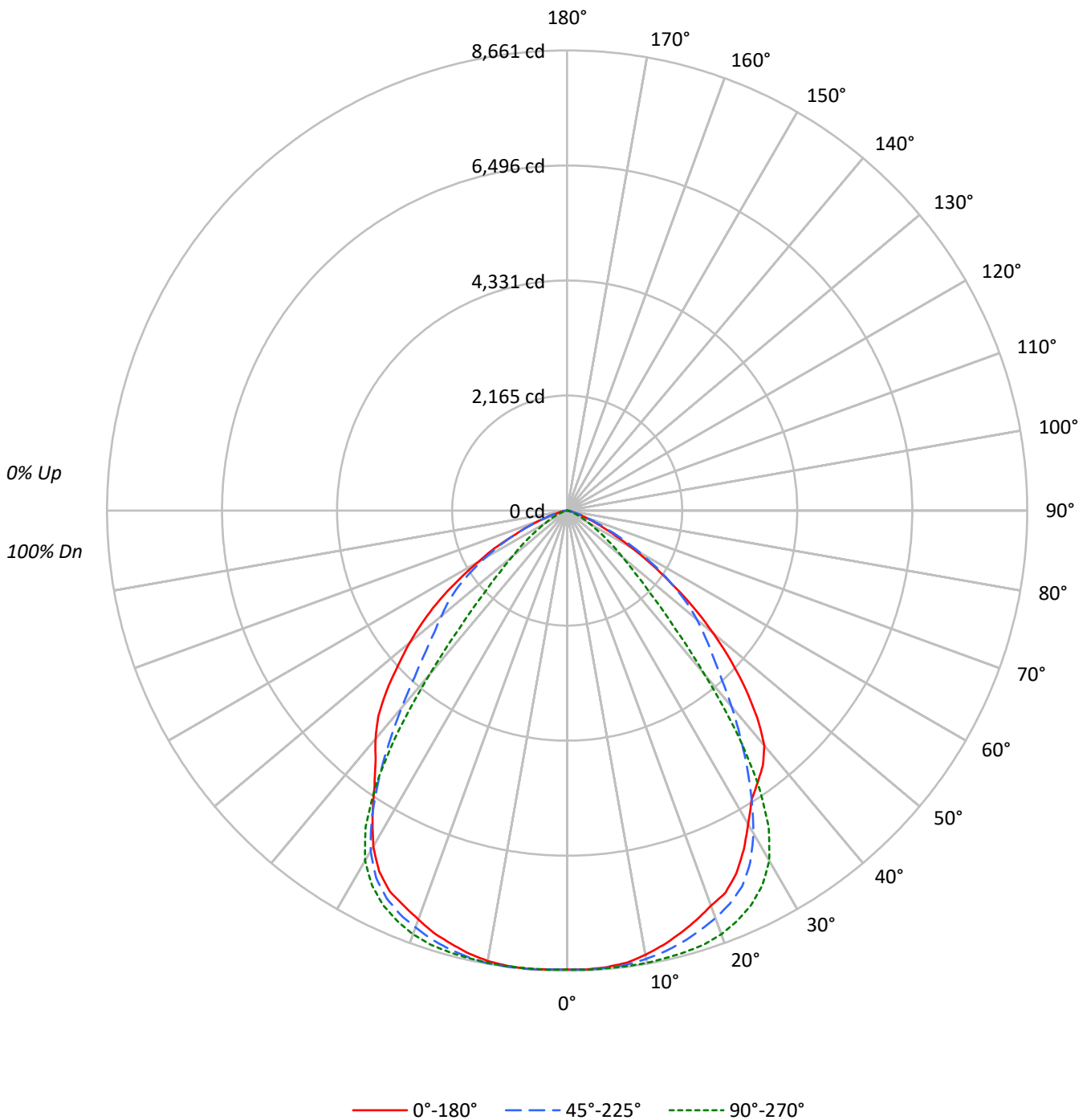
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	266370	266370	266370
5°	266954	267676	267963
10°	265833	270623	269462
15°	262889	274582	269404
20°	259730	278441	268708
25°	256358	278763	268981
30°	242532	270924	259865
35°	235287	235461	237908
40°	232374	162006	225845
45°	207056	97261	209886
50°	172170	64730	185511
55°	129124	44622	157290
60°	87501	29739	118677
65°	52783	19285	81531
70°	29266	10449	50165
75°	13261	4420	25961
80°	11525	4937	18113
85°	13126	6545	18080



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	824.4	5.0
10°-20°	2394.1	14.6
20°-30°	3633.9	22.2
30°-40°	3816.7	23.3
40°-50°	2861.5	17.5
50°-60°	1836.0	11.2
60°-70°	785.4	4.8
70°-80°	185.5	1.1
80°-90°	34.5	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°	6852.4	41.9
0°-40°	10669.1	65.2
0°-60°	15366.5	93.9
0°-90°	16372.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16372.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8638	8638	8638	8638	8638	
5°	8624	8638	8648	8661	8657	819
15°	8235	8406	8601	8546	8439	2323
25°	7535	7799	8193	8045	7906	3442
35°	6250	5902	6255	6181	6320	3923
45°	4748	3881	2230	3770	4813	3636
55°	2402	2402	830	2504	2926	2179
65°	723	853	264	1099	1117	772
75°	111	130	37	223	218	162
85°	37	23	18	37	51	39
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°	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2
2.5°	8642.8	8652.1	8647.5	8647.5	8642.8	8647.5	8647.5	8656.8	8656.8	8647.5	8642.8
5°	8624.2	8633.5	8633.5	8624.2	8624.2	8647.5	8633.5	8642.8	8642.8	8638.2	8638.2
7.5°	8582.6	8582.6	8601.1	8587.2	8587.2	8601.1	8596.4	8605.7	8615.0	8619.7	8619.7
10°	8489.8	8499.1	8503.7	8503.7	8508.4	8522.2	8531.5	8550.1	8559.3	8568.6	8573.3
12.5°	8374.0	8387.8	8392.5	8387.8	8401.8	8420.2	8443.5	8466.6	8480.6	8499.1	8513.0
15°	8234.8	8234.8	8244.1	8258.0	8267.3	8295.1	8318.3	8346.0	8383.1	8406.4	8429.5
17.5°	8081.8	8091.1	8105.0	8105.0	8123.6	8169.9	8183.8	8225.6	8267.3	8290.5	8336.9
20°	7914.9	7924.1	7938.1	7947.4	7970.5	8007.6	8035.4	8072.5	8118.9	8160.7	8207.0
22.5°	7785.0	7766.5	7775.7	7785.0	7808.3	7840.7	7873.2	7919.5	7965.9	8007.6	8054.0
25°	7534.6	7539.3	7553.2	7562.4	7590.3	7618.1	7655.2	7710.8	7752.6	7799.0	7849.9
27.5°	7196.2	7200.9	7224.0	7224.0	7247.1	7293.5	7316.7	7363.1	7418.8	7465.1	7525.4
30°	6811.4	6820.6	6820.6	6839.2	6853.0	6876.3	6899.4	6945.8	6973.6	7015.4	7098.9
32.5°	6459.0	6468.2	6463.5	6459.0	6445.0	6440.4	6435.7	6445.0	6454.3	6468.2	6500.6
35°	6250.3	6227.1	6208.6	6176.1	6139.0	6092.6	6050.9	5995.3	5944.3	5902.5	5856.2
37.5°	6050.9	6046.2	6018.4	5972.0	5897.9	5814.5	5717.1	5596.5	5475.9	5346.1	5221.0
40°	5772.7	5758.8	5735.6	5670.7	5587.2	5485.2	5355.4	5207.0	5012.2	4812.9	4608.9
42.5°	5299.7	5304.4	5276.6	5225.5	5146.8	5049.3	4914.9	4752.7	4544.0	4307.5	4043.2
45°	4748.0	4748.0	4738.7	4697.0	4641.4	4562.5	4460.5	4326.1	4122.1	3880.9	3598.0
47.5°	4173.0	4177.7	4163.7	4154.5	4131.3	4080.3	4006.1	3904.1	3760.4	3528.5	3245.7
50°	3588.9	3588.9	3612.0	3607.3	3607.3	3588.9	3556.4	3496.1	3370.9	3185.4	2921.2
52.5°	3004.6	3013.9	3027.8	3046.3	3069.5	3106.6	3069.5	3041.7	2962.8	2819.1	2591.9
55°	2401.8	2411.1	2434.2	2466.7	2494.6	2531.7	2540.9	2540.9	2499.1	2401.8	2230.3
57.5°	1887.2	1873.2	1891.8	1919.6	1956.7	1993.8	2021.6	2054.1	2049.4	1984.5	1845.4
60°	1418.8	1423.5	1437.3	1465.2	1493.0	1525.5	1562.6	1590.4	1604.3	1571.9	1483.7
62.5°	1034.0	1034.0	1052.5	1080.3	1094.3	1140.7	1163.8	1177.8	1191.6	1186.9	1131.4
65°	723.4	732.6	741.9	755.8	769.7	797.5	811.4	839.2	848.5	853.2	811.4
67.5°	510.1	496.1	505.4	514.6	528.6	547.2	575.0	575.0	588.8	588.8	561.0
70°	324.6	324.6	329.2	343.1	352.4	357.0	366.3	375.5	389.5	384.8	384.8
72.5°	217.9	213.3	217.9	222.6	227.2	241.1	241.1	245.7	255.0	259.7	241.1
75°	111.3	115.9	125.1	120.6	134.4	125.1	129.8	143.7	139.1	129.8	129.8
77.5°	92.7	92.7	92.7	88.2	97.3	97.3	92.7	102.0	97.3	97.3	92.7
80°	64.9	69.5	64.9	60.2	64.9	60.2	60.2	60.2	60.2	60.2	55.6
82.5°	51.1	41.7	46.4	41.7	46.4	46.4	41.7	37.1	37.1	41.7	37.1
85°	37.1	27.8	32.4	32.4	27.8	27.8	27.8	27.8	27.8	23.1	23.1
87.5°	23.1	14.0	14.0	14.0	18.5	18.5	18.5	14.0	18.5	18.5	9.3
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°	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2
2.5°	8652.1	8647.5	8656.8	8652.1	8652.1	8647.5	8652.1	8647.5	8656.8	8638.2	8642.8
5°	8652.1	8642.8	8647.5	8652.1	8656.8	8647.5	8647.5	8647.5	8656.8	8647.5	8652.1
7.5°	8633.5	8628.9	8642.8	8652.1	8647.5	8642.8	8652.1	8647.5	8656.8	8652.1	8661.3
10°	8596.4	8601.1	8610.4	8624.2	8628.9	8633.5	8642.8	8642.8	8656.8	8638.2	8647.5
12.5°	8540.8	8559.3	8582.6	8591.8	8610.4	8610.4	8619.7	8624.2	8633.5	8628.9	8642.8
15°	8471.3	8494.4	8522.2	8545.5	8568.6	8582.6	8596.4	8601.1	8615.0	8601.1	8605.7
17.5°	8387.8	8415.6	8457.3	8485.1	8522.2	8536.2	8554.7	8564.0	8577.9	8568.6	8573.3
20°	8271.9	8304.4	8350.7	8392.5	8415.6	8448.0	8471.3	8485.1	8494.4	8485.1	8489.8
22.5°	8109.6	8156.0	8216.3	8248.7	8295.1	8322.9	8327.6	8360.0	8383.1	8360.0	8369.3
25°	7919.5	7965.9	8012.3	8081.8	8123.6	8156.0	8188.5	8193.1	8216.3	8211.6	8207.0
27.5°	7604.2	7664.5	7743.3	7799.0	7854.6	7905.6	7942.7	7951.9	7975.2	7965.9	7970.5
30°	7172.9	7238.0	7312.1	7400.2	7479.0	7530.0	7576.4	7608.8	7632.0	7618.1	7613.5
32.5°	6561.0	6625.9	6704.7	6792.8	6885.6	6959.7	7015.4	7057.1	7084.9	7075.6	7052.5
35°	5860.9	5879.4	5930.4	6000.0	6078.7	6157.5	6208.6	6254.9	6287.3	6296.6	6296.6
37.5°	5142.1	5081.9	5044.8	5044.8	5091.1	5123.5	5169.9	5197.7	5248.8	5267.3	5281.2
40°	4446.6	4307.5	4177.7	4080.3	4015.4	4010.8	4010.8	4024.6	4071.0	4131.3	4187.0
42.5°	3825.3	3602.7	3403.4	3222.5	3092.7	3018.5	2986.1	2990.7	3027.8	3083.4	3176.1
45°	3329.2	3051.0	2800.6	2582.6	2406.4	2290.5	2234.9	2230.3	2258.1	2322.9	2425.1
47.5°	2944.3	2647.5	2364.7	2114.3	1924.3	1799.0	1734.1	1715.6	1734.1	1794.4	1915.0
50°	2624.4	2318.4	2026.3	1766.6	1562.6	1432.8	1372.4	1349.3	1372.4	1423.5	1544.0
52.5°	2327.6	2012.3	1738.8	1488.4	1270.4	1159.1	1094.3	1080.3	1094.3	1154.5	1252.0
55°	1984.5	1715.6	1446.6	1196.2	1006.2	894.9	843.9	830.0	843.9	899.6	1001.6
57.5°	1646.1	1414.2	1177.8	950.5	788.3	690.8	644.5	625.9	658.4	695.5	816.1
60°	1330.7	1145.3	945.9	746.5	612.1	523.9	486.8	482.2	491.5	537.9	621.3
62.5°	1043.3	890.3	732.6	570.3	459.0	421.9	375.5	371.0	380.2	408.0	473.0
65°	751.2	653.8	533.2	417.3	329.2	278.2	259.7	264.3	273.5	292.1	352.4
67.5°	523.9	454.4	371.0	292.1	227.2	204.0	185.5	180.8	185.5	217.9	250.4
70°	352.4	310.6	250.4	222.6	157.7	125.1	129.8	115.9	134.4	134.4	162.2
72.5°	231.8	204.0	166.9	129.8	111.3	88.2	88.2	83.5	92.7	97.3	120.6
75°	120.6	92.7	92.7	64.9	46.4	23.1	41.7	37.1	32.4	37.1	46.4
77.5°	83.5	69.5	64.9	51.1	46.4	37.1	37.1	37.1	37.1	41.7	46.4
80°	51.1	51.1	37.1	32.4	27.8	23.1	27.8	27.8	27.8	27.8	32.4
82.5°	32.4	27.8	27.8	23.1	23.1	18.5	18.5	18.5	18.5	18.5	27.8
85°	27.8	18.5	18.5	14.0	18.5	32.4	14.0	18.5	18.5	18.5	14.0
87.5°	9.3	14.0	14.0	14.0	9.3	4.7	9.3	14.0	14.0	23.1	18.5
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2	8638.2
2.5°	8652.1	8656.8	8656.8	8652.1	8652.1	8642.8	8661.3	8647.5	8652.1	8670.6	8656.8
5°	8661.3	8666.0	8666.0	8661.3	8661.3	8661.3	8666.0	8666.0	8661.3	8656.8	8666.0
7.5°	8679.9	8675.3	8675.3	8666.0	8666.0	8656.8	8666.0	8652.1	8661.3	8652.1	8666.0
10°	8656.8	8661.3	8656.8	8652.1	8652.1	8647.5	8647.5	8633.5	8638.2	8624.2	8633.5
12.5°	8642.8	8638.2	8638.2	8628.9	8619.7	8610.4	8605.7	8591.8	8591.8	8559.3	8573.3
15°	8605.7	8610.4	8596.4	8577.9	8568.6	8545.5	8536.2	8517.6	8499.1	8475.9	8480.6
17.5°	8573.3	8559.3	8540.8	8522.2	8485.1	8466.6	8448.0	8420.2	8410.9	8383.1	8374.0
20°	8475.9	8466.6	8443.5	8410.9	8387.8	8346.0	8327.6	8299.8	8276.5	8248.7	8234.8
22.5°	8350.7	8341.4	8313.6	8281.2	8244.1	8225.6	8207.0	8156.0	8132.8	8105.0	8100.3
25°	8193.1	8179.2	8151.4	8114.3	8095.7	8044.7	8026.1	7989.0	7979.8	7951.9	7947.4
27.5°	7951.9	7933.4	7901.0	7854.6	7822.1	7789.7	7771.2	7743.3	7734.1	7706.2	7701.6
30°	7590.3	7567.1	7502.2	7483.7	7428.0	7395.5	7395.5	7358.4	7363.1	7344.6	7344.6
32.5°	7020.0	6982.9	6931.9	6894.8	6857.7	6839.2	6839.2	6825.2	6834.5	6834.5	6843.8
35°	6264.2	6213.2	6185.3	6162.2	6162.2	6180.7	6236.4	6250.3	6278.1	6301.3	6319.9
37.5°	5295.1	5290.5	5323.0	5350.8	5420.3	5499.2	5596.5	5680.0	5758.8	5814.5	5870.1
40°	4247.2	4363.2	4455.9	4585.8	4692.3	4845.3	5021.5	5165.3	5299.7	5397.2	5499.2
42.5°	3315.2	3463.6	3658.4	3848.4	4038.6	4247.2	4479.1	4678.5	4854.6	4989.1	5095.7
45°	2582.6	2786.6	3023.2	3264.3	3510.0	3769.7	4010.8	4214.8	4400.3	4539.4	4646.0
47.5°	2081.9	2304.5	2573.3	2837.7	3115.9	3389.4	3658.4	3834.6	3987.5	4098.8	4196.3
50°	1720.2	1956.7	2239.6	2540.9	2819.1	3092.7	3324.5	3496.1	3621.3	3718.6	3778.9
52.5°	1437.3	1687.7	1989.2	2290.5	2568.7	2819.1	3027.8	3157.6	3259.6	3329.2	3384.8
55°	1186.9	1428.1	1711.0	1993.8	2267.4	2503.8	2675.3	2772.8	2851.5	2893.3	2925.7
57.5°	969.1	1191.6	1451.3	1711.0	1947.4	2142.2	2276.7	2374.0	2411.1	2443.5	2438.9
60°	760.5	969.1	1205.6	1428.1	1632.1	1789.7	1887.2	1942.8	1970.6	1984.5	1975.2
62.5°	598.1	788.3	969.1	1163.8	1312.2	1446.6	1539.4	1539.4	1553.3	1557.9	1571.9
65°	445.1	588.8	746.5	890.3	1010.8	1098.9	1150.0	1163.8	1182.4	1177.8	1168.5
67.5°	329.2	435.9	551.7	658.4	741.9	797.5	834.6	867.1	862.5	853.2	848.5
70°	227.2	296.8	398.8	463.7	523.9	579.6	588.8	593.5	598.1	602.8	593.5
72.5°	157.7	208.6	264.3	319.9	357.0	380.2	403.4	408.0	408.0	408.0	403.4
75°	78.8	106.6	157.7	180.8	213.3	222.6	241.1	241.1	255.0	236.4	231.8
77.5°	69.5	83.5	111.3	129.8	143.7	157.7	162.2	176.2	171.5	162.2	166.9
80°	41.7	51.1	69.5	78.8	97.3	102.0	106.6	111.3	106.6	111.3	111.3
82.5°	32.4	37.1	46.4	46.4	60.2	60.2	64.9	64.9	69.5	69.5	69.5
85°	18.5	32.4	27.8	55.6	37.1	37.1	46.4	55.6	46.4	46.4	55.6
87.5°	18.5	18.5	14.0	18.5	18.5	18.5	23.1	27.8	27.8	32.4	27.8
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: P249593

CATALOG NUMBER: LD8B175D010 ER8B175940 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8638.2	8638.2	8638.2	8638.2
2.5°	8652.1	8661.3	8647.5	8642.8
5°	8666.0	8666.0	8656.8	8656.8
7.5°	8666.0	8666.0	8652.1	8642.8
10°	8628.9	8628.9	8615.0	8605.7
12.5°	8559.3	8559.3	8554.7	8540.8
15°	8471.3	8471.3	8452.7	8438.9
17.5°	8350.7	8360.0	8336.9	8336.9
20°	8220.9	8216.3	8197.8	8188.5
22.5°	8086.5	8077.2	8072.5	8044.7
25°	7942.7	7933.4	7919.5	7905.6
27.5°	7697.0	7692.3	7678.4	7659.9
30°	7321.3	7316.7	7298.2	7298.2
32.5°	6834.5	6829.9	6811.4	6816.0
35°	6329.1	6347.7	6338.4	6319.9
37.5°	5907.2	5921.1	5930.4	5921.1
40°	5554.8	5596.5	5601.2	5610.5
42.5°	5179.2	5234.8	5253.4	5262.6
45°	4729.4	4780.5	4822.2	4812.9
47.5°	4270.4	4307.5	4344.6	4316.8
50°	3829.9	3853.1	3867.0	3867.0
52.5°	3412.7	3412.7	3408.0	3412.7
55°	2935.0	2935.0	2916.5	2925.7
57.5°	2434.2	2443.5	2429.6	2406.4
60°	1970.6	1947.4	1938.1	1924.3
62.5°	1534.8	1534.8	1502.3	1544.0
65°	1150.0	1136.0	1122.1	1117.4
67.5°	834.6	830.0	816.1	811.4
70°	588.8	570.3	565.7	556.4
72.5°	394.1	394.1	384.8	384.8
75°	241.1	217.9	213.3	217.9
77.5°	166.9	162.2	162.2	157.7
80°	111.3	106.6	115.9	102.0
82.5°	69.5	74.2	69.5	74.2
85°	46.4	55.6	51.1	51.1
87.5°	27.8	27.8	27.8	27.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)