

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: P249521

Luminaire Tested: **LD8B175D010 ER8B175827 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249521
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17244.0 lumens
Efficiency: N/A
Efficacy: 97.3 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

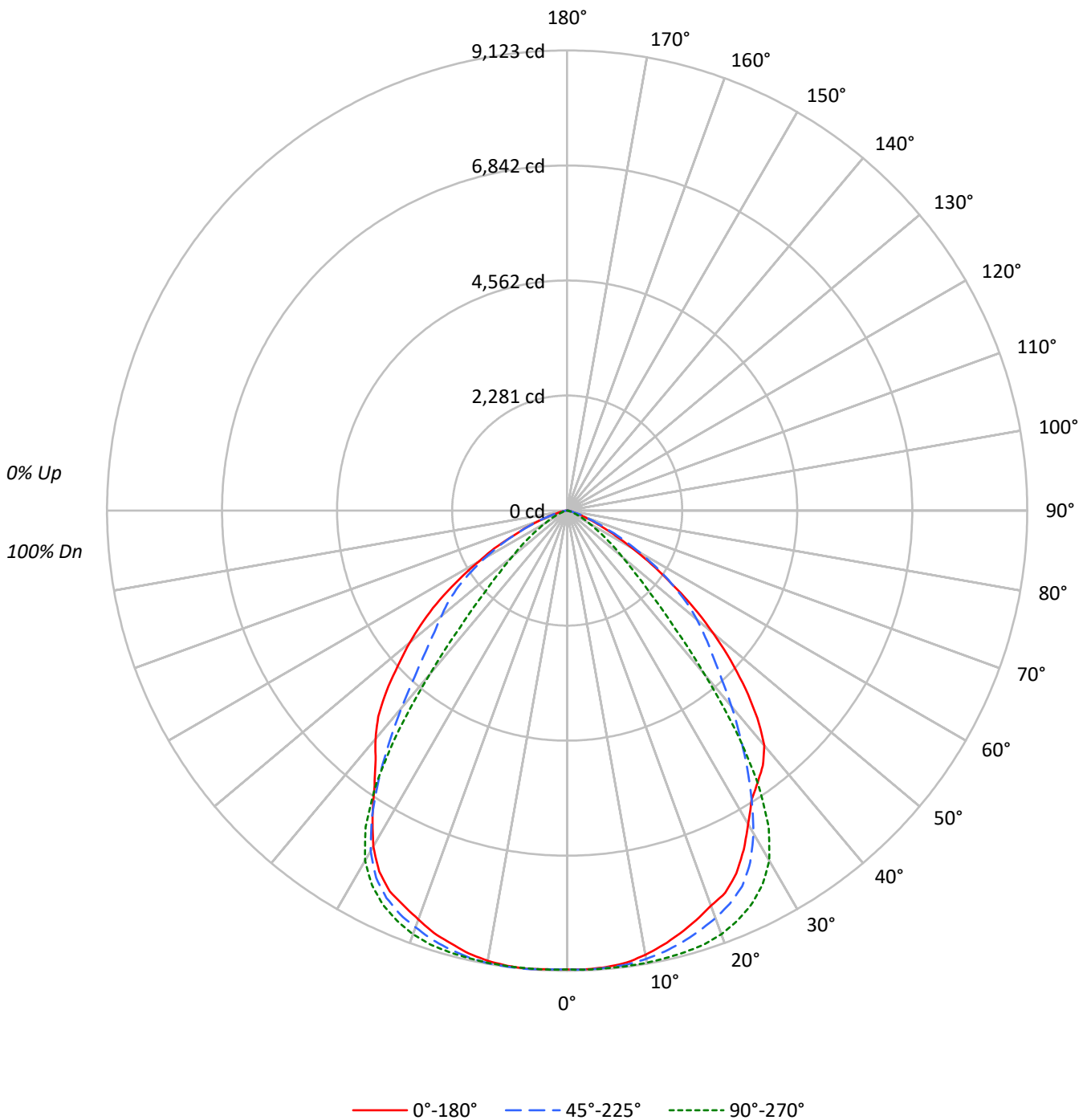
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	280558	280558	280558
5°	281175	281933	282236
10°	279992	285040	283815
15°	276887	289207	283751
20°	273565	293274	283019
25°	270012	293611	283309
30°	255450	285356	273705
35°	247819	248000	250579
40°	244752	170636	237873
45°	218085	102438	221063
50°	181337	68179	195393
55°	136000	46998	165671
60°	92164	31324	124998
65°	55592	20313	85872
70°	30825	11008	52833
75°	13963	4658	27355
80°	12146	5203	19072
85°	13834	6899	19035



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	868.3	5.0
10°-20°	2521.7	14.6
20°-30°	3827.4	22.2
30°-40°	4019.9	23.3
40°-50°	3013.9	17.5
50°-60°	1933.8	11.2
60°-70°	827.2	4.8
70°-80°	195.4	1.1
80°-90°	36.4	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°	7217.4	41.9
0°-40°	11237.3	65.2
0°-60°	16185.0	93.9
0°-90°	17244.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17244.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9098	9098	9098	9098	9098	
5°	9084	9098	9108	9123	9118	863
15°	8673	8854	9059	9001	8888	2446
25°	7936	8214	8630	8473	8327	3625
35°	6583	6217	6588	6510	6656	4132
45°	5001	4088	2349	3970	5069	3830
55°	2530	2530	874	2637	3082	2295
65°	762	899	278	1157	1177	813
75°	117	137	39	234	230	171
85°	39	24	20	39	54	41
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°	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3
2.5°	9103.2	9113.0	9108.1	9108.1	9103.2	9108.1	9108.1	9117.9	9117.9	9108.1	9103.2
5°	9083.6	9093.4	9093.4	9083.6	9083.6	9108.1	9093.4	9103.2	9103.2	9098.3	9098.3
7.5°	9039.7	9039.7	9059.2	9044.6	9044.6	9059.2	9054.3	9064.1	9073.9	9078.8	9078.8
10°	8942.0	8951.8	8956.7	8956.7	8961.6	8976.2	8985.9	9005.5	9015.2	9025.0	9029.9
12.5°	8820.0	8834.5	8839.4	8834.5	8849.2	8868.7	8893.2	8917.6	8932.3	8951.8	8966.5
15°	8673.3	8673.3	8683.1	8697.8	8707.6	8736.9	8761.3	8790.6	8829.6	8854.1	8878.5
17.5°	8512.3	8522.1	8536.6	8536.6	8556.2	8605.0	8619.7	8663.7	8707.6	8732.0	8780.9
20°	8336.5	8346.2	8360.9	8370.7	8395.0	8434.1	8463.4	8502.5	8551.3	8595.3	8644.1
22.5°	8199.7	8180.2	8189.9	8199.7	8224.2	8258.3	8292.5	8341.3	8390.1	8434.1	8483.0
25°	7935.9	7940.8	7955.5	7965.2	7994.6	8023.9	8063.0	8121.5	8165.5	8214.4	8268.0
27.5°	7579.5	7584.4	7608.8	7608.8	7633.1	7682.0	7706.4	7755.3	7813.9	7862.7	7926.3
30°	7174.2	7183.8	7183.8	7203.4	7218.0	7242.5	7266.9	7315.8	7345.0	7389.0	7477.0
32.5°	6803.0	6812.7	6807.8	6803.0	6788.3	6783.4	6778.5	6788.3	6798.1	6812.7	6846.9
35°	6583.2	6558.8	6539.3	6505.1	6466.0	6417.2	6373.2	6314.6	6260.9	6216.9	6168.1
37.5°	6373.2	6368.3	6339.0	6290.1	6212.0	6124.1	6021.6	5894.6	5767.6	5630.9	5499.1
40°	6080.2	6065.5	6041.1	5972.7	5884.8	5777.4	5640.7	5484.4	5279.2	5069.2	4854.4
42.5°	5582.0	5586.9	5557.6	5503.8	5420.9	5318.3	5176.7	5005.8	4786.0	4536.9	4258.6
45°	5000.9	5000.9	4991.1	4947.1	4888.6	4805.5	4698.1	4556.5	4341.6	4087.6	3789.7
47.5°	4395.3	4400.2	4385.5	4375.8	4351.3	4297.7	4219.5	4112.1	3960.7	3716.4	3418.5
50°	3780.0	3780.0	3804.4	3799.5	3799.5	3780.0	3745.8	3682.3	3550.5	3355.1	3076.8
52.5°	3164.6	3174.4	3189.1	3208.6	3233.0	3272.0	3233.0	3203.7	3120.6	2969.2	2730.0
55°	2529.7	2539.5	2563.9	2598.1	2627.5	2666.5	2676.2	2676.2	2632.3	2529.7	2349.0
57.5°	1987.7	1973.0	1992.6	2021.9	2060.9	2100.0	2129.3	2163.5	2158.6	2090.2	1943.7
60°	1494.4	1499.3	1513.9	1543.3	1572.6	1606.7	1645.8	1675.1	1689.8	1655.6	1562.8
62.5°	1089.1	1089.1	1108.6	1137.8	1152.5	1201.4	1225.8	1240.5	1255.1	1250.2	1191.6
65°	761.9	771.6	781.4	796.1	810.7	839.9	854.6	883.9	893.7	898.6	854.6
67.5°	537.2	522.6	532.4	542.0	556.7	576.3	605.6	605.6	620.2	620.2	590.9
70°	341.9	341.9	346.8	361.4	371.2	376.1	385.8	395.5	410.2	405.3	405.3
72.5°	229.6	224.7	229.6	234.4	239.3	253.9	253.9	258.8	268.6	273.5	253.9
75°	117.2	122.1	131.8	127.0	141.6	131.8	136.7	151.4	146.5	136.7	136.7
77.5°	97.6	97.6	97.6	92.8	102.5	102.5	97.6	107.4	102.5	102.5	97.6
80°	68.4	73.3	68.4	63.5	68.4	63.5	63.5	63.5	63.5	63.5	58.6
82.5°	53.8	44.0	48.9	44.0	48.9	48.9	44.0	39.1	39.1	44.0	39.1
85°	39.1	29.3	34.2	34.2	29.3	29.3	29.3	29.3	29.3	24.4	24.4
87.5°	24.4	14.7	14.7	14.7	19.5	19.5	19.5	14.7	19.5	19.5	9.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3
2.5°	9113.0	9108.1	9117.9	9113.0	9113.0	9108.1	9113.0	9108.1	9117.9	9098.3	9103.2
5°	9113.0	9103.2	9108.1	9113.0	9117.9	9108.1	9108.1	9108.1	9117.9	9108.1	9113.0
7.5°	9093.4	9088.5	9103.2	9113.0	9108.1	9103.2	9113.0	9108.1	9117.9	9113.0	9122.7
10°	9054.3	9059.2	9069.0	9083.6	9088.5	9093.4	9103.2	9103.2	9117.9	9098.3	9108.1
12.5°	8995.7	9015.2	9039.7	9049.4	9069.0	9069.0	9078.8	9083.6	9093.4	9088.5	9103.2
15°	8922.5	8946.9	8976.2	9000.6	9025.0	9039.7	9054.3	9059.2	9073.9	9059.2	9064.1
17.5°	8834.5	8863.8	8907.8	8937.1	8976.2	8990.8	9010.3	9020.1	9034.8	9025.0	9029.9
20°	8712.4	8746.7	8795.5	8839.4	8863.8	8898.0	8922.5	8937.1	8946.9	8937.1	8942.0
22.5°	8541.5	8590.4	8653.9	8688.0	8736.9	8766.2	8771.1	8805.3	8829.6	8805.3	8815.1
25°	8341.3	8390.1	8439.0	8512.3	8556.2	8590.4	8624.6	8629.5	8653.9	8649.0	8644.1
27.5°	8009.2	8072.8	8155.7	8214.4	8272.9	8326.7	8365.8	8375.4	8399.9	8390.1	8395.0
30°	7555.0	7623.5	7701.6	7794.3	7877.4	7931.0	7979.9	8014.1	8038.5	8023.9	8019.0
32.5°	6910.4	6978.8	7061.8	7154.6	7252.3	7330.3	7389.0	7433.0	7462.3	7452.5	7428.1
35°	6173.0	6192.5	6246.3	6319.5	6402.5	6485.5	6539.3	6588.0	6622.2	6632.0	6632.0
37.5°	5416.0	5352.6	5313.5	5313.5	5362.2	5396.4	5445.3	5474.6	5528.3	5547.8	5562.5
40°	4683.4	4536.9	4400.2	4297.7	4229.3	4224.4	4224.4	4239.0	4287.9	4351.3	4410.0
42.5°	4029.0	3794.6	3584.6	3394.2	3257.4	3179.3	3145.1	3150.0	3189.1	3247.7	3345.3
45°	3506.5	3213.5	2949.7	2720.2	2534.6	2412.5	2353.9	2349.0	2378.3	2446.7	2554.2
47.5°	3101.1	2788.5	2490.6	2226.9	2026.8	1894.8	1826.5	1807.0	1826.5	1889.9	2017.0
50°	2764.2	2441.9	2134.2	1860.7	1645.8	1509.1	1445.5	1421.2	1445.5	1499.3	1626.2
52.5°	2451.6	2119.5	1831.4	1567.7	1338.1	1220.9	1152.5	1137.8	1152.5	1216.0	1318.6
55°	2090.2	1807.0	1523.7	1260.0	1059.8	942.6	888.8	874.2	888.8	947.5	1054.9
57.5°	1733.8	1489.5	1240.5	1001.1	830.3	727.6	678.9	659.3	693.4	732.5	859.5
60°	1401.6	1206.3	996.2	786.3	644.7	551.8	512.8	507.9	517.7	566.5	654.4
62.5°	1098.9	937.7	771.6	600.7	483.5	444.4	395.5	390.7	400.4	429.7	498.2
65°	791.2	688.7	561.6	439.5	346.8	293.0	273.5	278.4	288.1	307.7	371.2
67.5°	551.8	478.6	390.7	307.7	239.3	214.9	195.4	190.5	195.4	229.6	263.7
70°	371.2	327.2	263.7	234.4	166.1	131.8	136.7	122.1	141.6	141.6	170.9
72.5°	244.1	214.9	175.8	136.7	117.2	92.8	92.8	87.9	97.6	102.5	127.0
75°	127.0	97.6	97.6	68.4	48.9	24.4	44.0	39.1	34.2	39.1	48.9
77.5°	87.9	73.3	68.4	53.8	48.9	39.1	39.1	39.1	39.1	44.0	48.9
80°	53.8	53.8	39.1	34.2	29.3	24.4	29.3	29.3	29.3	29.3	34.2
82.5°	34.2	29.3	29.3	24.4	24.4	19.5	19.5	19.5	19.5	19.5	29.3
85°	29.3	19.5	19.5	14.7	19.5	34.2	14.7	19.5	19.5	19.5	14.7
87.5°	9.8	14.7	14.7	14.7	9.8	4.9	9.8	14.7	14.7	24.4	19.5
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°	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3	9098.3
2.5°	9113.0	9117.9	9117.9	9113.0	9113.0	9103.2	9122.7	9108.1	9113.0	9132.4	9117.9
5°	9122.7	9127.6	9127.6	9122.7	9122.7	9122.7	9127.6	9127.6	9122.7	9117.9	9127.6
7.5°	9142.2	9137.3	9137.3	9127.6	9127.6	9117.9	9127.6	9113.0	9122.7	9113.0	9127.6
10°	9117.9	9122.7	9117.9	9113.0	9113.0	9108.1	9108.1	9093.4	9098.3	9083.6	9093.4
12.5°	9103.2	9098.3	9098.3	9088.5	9078.8	9069.0	9064.1	9049.4	9049.4	9015.2	9029.9
15°	9064.1	9069.0	9054.3	9034.8	9025.0	9000.6	8990.8	8971.3	8951.8	8927.4	8932.3
17.5°	9029.9	9015.2	8995.7	8976.2	8937.1	8917.6	8898.0	8868.7	8858.9	8829.6	8820.0
20°	8927.4	8917.6	8893.2	8858.9	8834.5	8790.6	8771.1	8741.8	8717.3	8688.0	8673.3
22.5°	8795.5	8785.7	8756.4	8722.2	8683.1	8663.7	8644.1	8590.4	8565.9	8536.6	8531.7
25°	8629.5	8614.8	8585.5	8546.4	8526.8	8473.2	8453.6	8414.5	8404.8	8375.4	8370.7
27.5°	8375.4	8356.0	8321.8	8272.9	8238.7	8204.6	8185.1	8155.7	8146.0	8116.6	8111.8
30°	7994.6	7970.1	7901.8	7882.3	7823.6	7789.4	7789.4	7750.4	7755.3	7735.8	7735.8
32.5°	7393.9	7354.8	7301.1	7262.0	7222.9	7203.4	7203.4	7188.7	7198.5	7198.5	7208.3
35°	6597.8	6544.2	6514.8	6490.4	6490.4	6509.9	6568.6	6583.2	6612.5	6636.9	6656.5
37.5°	5577.1	5572.3	5606.5	5635.8	5709.0	5792.1	5894.6	5982.5	6065.5	6124.1	6182.7
40°	4473.4	4595.6	4693.2	4830.0	4942.2	5103.4	5289.0	5440.4	5582.0	5684.6	5792.1
42.5°	3491.8	3648.1	3853.3	4053.4	4253.7	4473.4	4717.7	4927.6	5113.2	5254.8	5367.1
45°	2720.2	2935.1	3184.2	3438.1	3697.0	3970.5	4224.4	4439.3	4634.6	4781.1	4893.5
47.5°	2192.7	2427.2	2710.4	2988.8	3281.8	3569.9	3853.3	4038.8	4199.9	4317.1	4419.8
50°	1811.8	2060.9	2358.8	2676.2	2969.2	3257.4	3501.6	3682.3	3814.2	3916.7	3980.2
52.5°	1513.9	1777.6	2095.1	2412.5	2705.5	2969.2	3189.1	3325.8	3433.2	3506.5	3565.0
55°	1250.2	1504.2	1802.1	2100.0	2388.1	2637.1	2817.8	2920.5	3003.4	3047.4	3081.6
57.5°	1020.7	1255.1	1528.6	1802.1	2051.1	2256.3	2397.9	2500.4	2539.5	2573.7	2568.8
60°	801.0	1020.7	1269.8	1504.2	1719.1	1885.0	1987.7	2046.2	2075.5	2090.2	2080.4
62.5°	630.0	830.3	1020.7	1225.8	1382.1	1523.7	1621.4	1621.4	1636.0	1640.9	1655.6
65°	468.8	620.2	786.3	937.7	1064.6	1157.4	1211.2	1225.8	1245.4	1240.5	1230.7
67.5°	346.8	459.1	581.1	693.4	781.4	839.9	879.0	913.3	908.4	898.6	893.7
70°	239.3	312.6	420.0	488.4	551.8	610.5	620.2	625.1	630.0	634.9	625.1
72.5°	166.1	219.8	278.4	337.0	376.1	400.4	424.9	429.7	429.7	429.7	424.9
75°	83.0	112.3	166.1	190.5	224.7	234.4	253.9	253.9	268.6	249.0	244.1
77.5°	73.3	87.9	117.2	136.7	151.4	166.1	170.9	185.6	180.7	170.9	175.8
80°	44.0	53.8	73.3	83.0	102.5	107.4	112.3	117.2	112.3	117.2	117.2
82.5°	34.2	39.1	48.9	48.9	63.5	63.5	68.4	68.4	73.3	73.3	73.3
85°	19.5	34.2	29.3	58.6	39.1	39.1	48.9	58.6	48.9	48.9	58.6
87.5°	19.5	19.5	14.7	19.5	19.5	19.5	24.4	29.3	29.3	34.2	29.3
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: P249521

CATALOG NUMBER: LD8B175D010 ER8B175827 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9098.3	9098.3	9098.3	9098.3
2.5°	9113.0	9122.7	9108.1	9103.2
5°	9127.6	9127.6	9117.9	9117.9
7.5°	9127.6	9127.6	9113.0	9103.2
10°	9088.5	9088.5	9073.9	9064.1
12.5°	9015.2	9015.2	9010.3	8995.7
15°	8922.5	8922.5	8902.9	8888.3
17.5°	8795.5	8805.3	8780.9	8780.9
20°	8658.8	8653.9	8634.4	8624.6
22.5°	8517.2	8507.4	8502.5	8473.2
25°	8365.8	8356.0	8341.3	8326.7
27.5°	8106.9	8102.0	8087.3	8067.9
30°	7711.3	7706.4	7686.9	7686.9
32.5°	7198.5	7193.6	7174.2	7179.1
35°	6666.2	6685.8	6676.0	6656.5
37.5°	6221.8	6236.5	6246.3	6236.5
40°	5850.6	5894.6	5899.5	5909.3
42.5°	5455.1	5513.6	5533.2	5542.9
45°	4981.3	5035.1	5079.0	5069.2
47.5°	4497.8	4536.9	4576.0	4546.7
50°	4033.9	4058.3	4073.0	4073.0
52.5°	3594.4	3594.4	3589.5	3594.4
55°	3091.4	3091.4	3071.9	3081.6
57.5°	2563.9	2573.7	2559.0	2534.6
60°	2075.5	2051.1	2041.3	2026.8
62.5°	1616.5	1616.5	1582.4	1626.2
65°	1211.2	1196.5	1181.8	1176.9
67.5°	879.0	874.2	859.5	854.6
70°	620.2	600.7	595.8	586.0
72.5°	415.1	415.1	405.3	405.3
75°	253.9	229.6	224.7	229.6
77.5°	175.8	170.9	170.9	166.1
80°	117.2	112.3	122.1	107.4
82.5°	73.3	78.1	73.3	78.1
85°	48.9	58.6	53.8	53.8
87.5°	29.3	29.3	29.3	29.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)