

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: INVUE

Report Number: P148805

Luminaire Tested: **VWM-F03-LED-E1-RW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P148805
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33677)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VWM-F03-LED-E1-RW
Description: VISION WALL MEDIUM LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7736.7 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 78.3
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

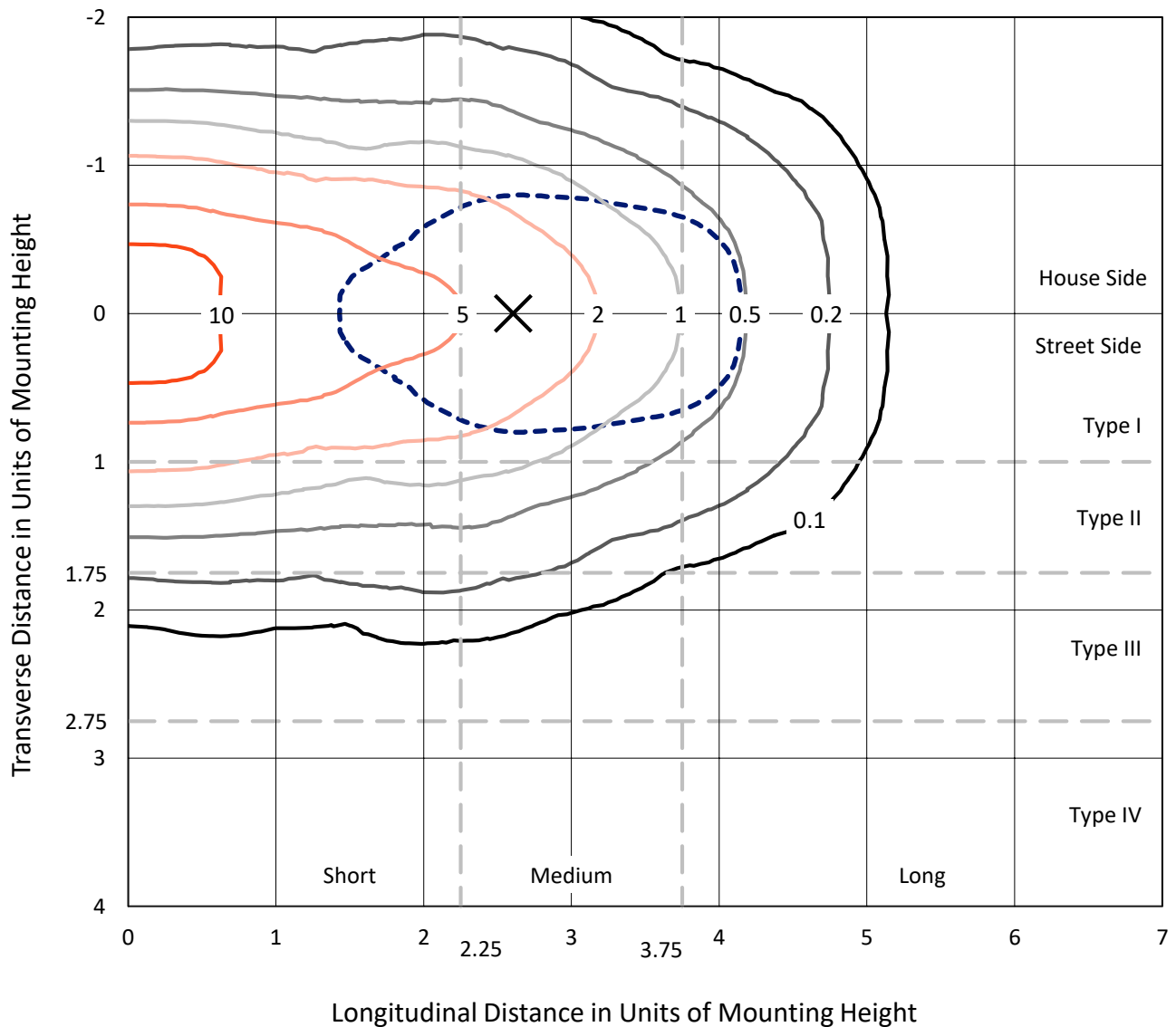


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Iso-Footcandle Lines of Horizontal Illumination

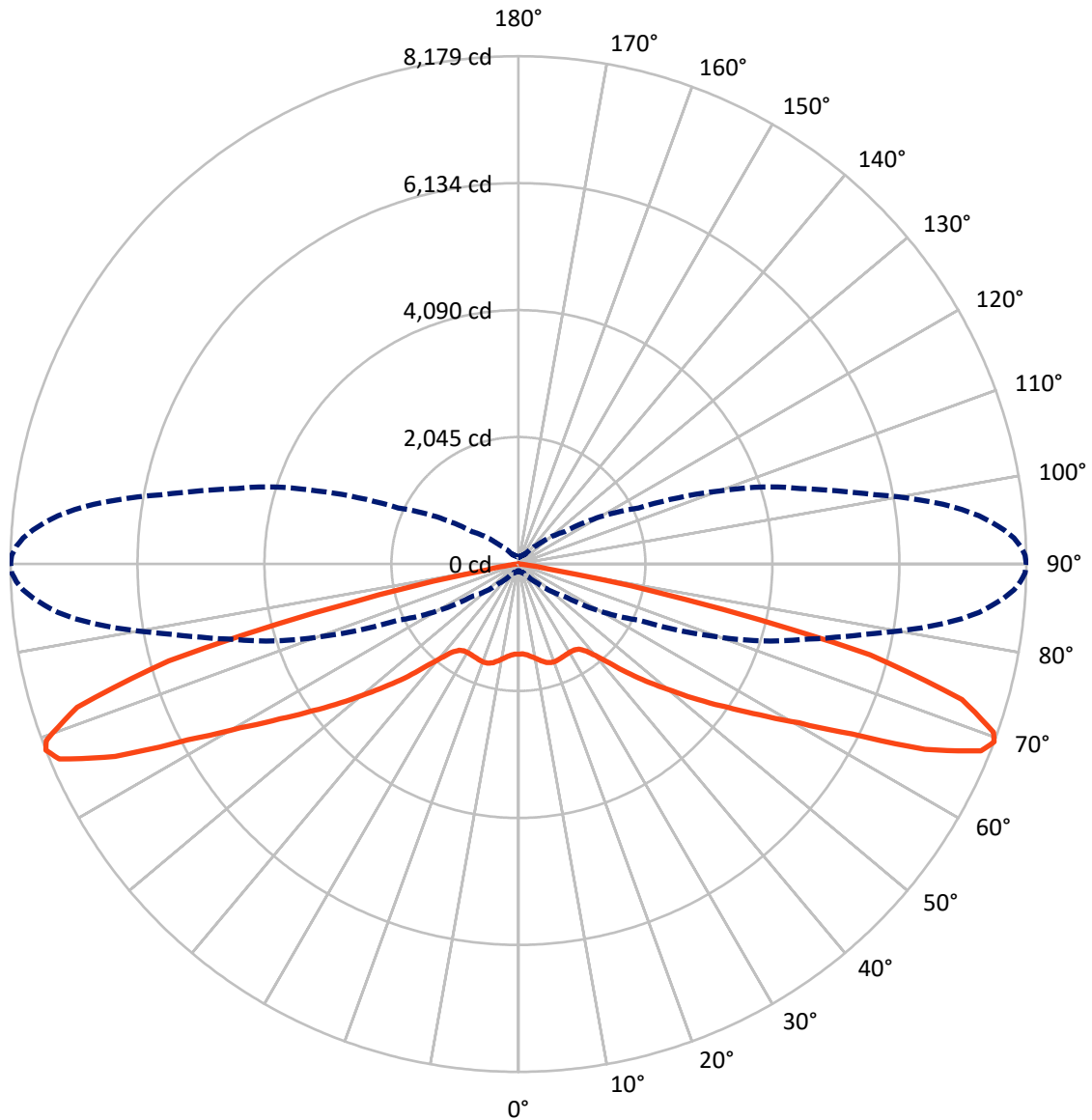
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.8 fc
 Type I - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3868.3	0.0	3868.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3868.3	0.0	3868.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	7736.7	0.0	7736.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.2	1.8
10°-20°	448.6	5.8
20°-30°	726.7	9.4
30°-40°	905.7	11.7
40°-50°	1131.7	14.6
50°-60°	1397.5	18.1
60°-70°	1736.4	22.4
70°-80°	1152.7	14.9
80°-90°	95.2	1.2
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°-90°	7736.7	100.0
0°-180°	7736.7	100.0

Coefficient of Utilization



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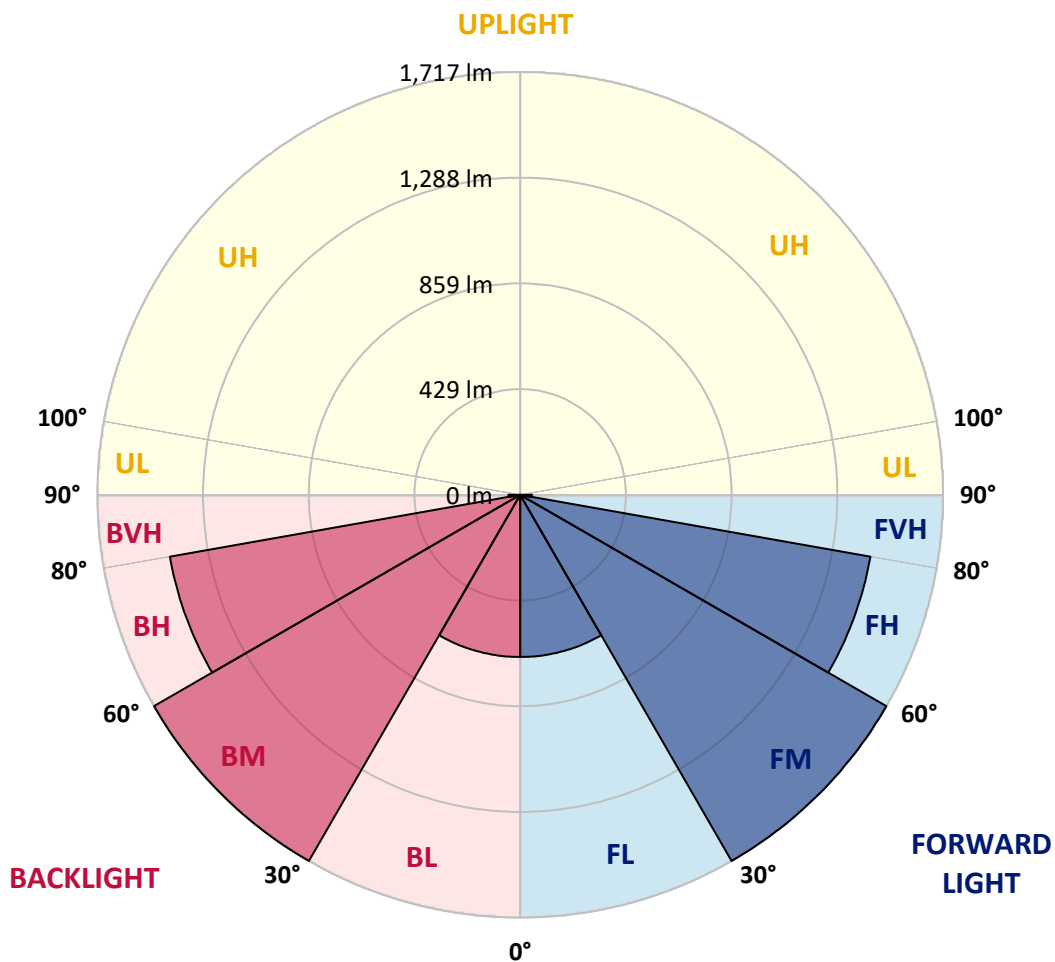
CATALOG NUMBER: VWM-F03-LED-E1-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	658.7	8.5			
FM (30°-60°)	1717.4	22.2			
FH (60°-80°)	1444.6	18.7			G1/1800
FVH (80°-90°)	47.6	0.6			G1/100
BL (0°-30°)	658.7	8.5	B2/1000		
BM (30°-60°)	1717.4	22.2	B2/2500		
BH (60°-80°)	1444.6	18.7	B3/2500		G3/2500
BVH (80°-90°)	47.6	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6
2.5°	1456.2	1457.4	1456.6	1458.2	1457.8	1457.9	1457.1	1455.4	1455.2	1455.0	1454.8
5°	1470.2	1468.6	1471.0	1473.6	1472.8	1473.1	1472.8	1472.8	1472.6	1472.4	1472.2
7.5°	1485.1	1484.7	1486.4	1493.0	1493.8	1496.2	1499.1	1501.2	1501.3	1501.4	1501.5
10°	1497.9	1498.3	1502.5	1512.0	1516.9	1524.8	1532.6	1538.8	1539.2	1539.7	1540.1
12.5°	1508.2	1508.6	1514.8	1529.7	1541.6	1556.5	1573.4	1583.0	1583.8	1584.6	1585.4
15°	1509.0	1510.3	1521.0	1545.4	1569.3	1593.7	1613.9	1626.7	1627.4	1628.0	1628.7
17.5°	1498.3	1499.2	1517.4	1553.2	1593.2	1631.2	1652.3	1658.0	1658.3	1658.6	1658.8
20°	1470.2	1472.3	1497.9	1551.2	1612.2	1661.8	1683.6	1675.8	1675.1	1674.3	1673.5
22.5°	1424.8	1424.4	1457.8	1529.7	1615.9	1685.8	1705.1	1684.4	1682.0	1679.6	1677.2
25°	1351.4	1356.4	1395.6	1481.4	1594.9	1691.0	1720.4	1689.0	1685.5	1682.0	1678.5
27.5°	1271.8	1274.6	1316.3	1408.4	1545.8	1672.5	1727.8	1698.1	1694.2	1690.3	1686.4
30°	1178.8	1182.6	1227.2	1323.4	1467.0	1624.6	1725.8	1718.8	1714.2	1709.6	1705.0
32.5°	1088.1	1092.2	1132.2	1237.5	1383.9	1559.0	1713.4	1748.0	1743.3	1738.6	1733.9
35°	993.9	1000.1	1048.8	1155.4	1304.0	1486.0	1694.4	1785.6	1783.0	1780.4	1777.8
37.5°	916.0	917.2	964.2	1076.1	1229.6	1416.2	1669.2	1833.1	1835.0	1836.9	1838.8
40°	828.8	836.6	883.8	1001.8	1162.4	1357.2	1645.3	1897.4	1907.3	1917.2	1927.1
42.5°	750.8	751.6	799.5	921.3	1089.3	1309.7	1632.1	1975.0	1996.1	2017.2	2038.3
45°	668.7	671.9	715.4	833.0	1005.0	1253.6	1631.6	2064.6	2098.3	2132.0	2165.7
47.5°	591.0	592.3	638.2	747.5	908.5	1175.2	1628.8	2160.8	2206.7	2252.5	2298.4
50°	516.8	515.6	560.5	665.8	813.2	1072.4	1603.6	2269.8	2327.7	2385.6	2443.5
52.5°	431.8	437.6	484.2	584.9	726.4	967.9	1530.1	2389.0	2458.3	2527.6	2596.8
55°	348.4	350.8	400.8	494.9	638.6	870.5	1402.2	2498.8	2580.5	2662.1	2743.8
57.5°	256.7	264.2	307.9	400.8	549.4	788.4	1239.6	2555.8	2655.2	2754.5	2853.9
60°	181.2	187.0	225.8	303.8	451.6	702.1	1099.6	2524.0	2653.2	2782.3	2911.4
62.5°	141.2	145.7	176.6	227.4	352.0	615.8	999.2	2421.3	2597.0	2772.6	2948.3
65°	123.8	128.0	156.0	182.0	262.9	528.0	944.4	2312.8	2545.0	2777.2	3009.4
67.5°	111.8	116.8	141.2	159.3	214.2	460.6	930.0	2244.1	2507.2	2770.2	3033.2
69°	106.5	111.4	133.3	148.6	199.0	436.8	905.2	2136.5	2398.0	2659.5	2920.9
70°	103.2	107.3	127.6	143.2	194.0	420.2	863.9	2001.9	2258.7	2515.5	2772.2
72.5°	95.8	97.8	115.6	130.8	180.0	339.7	664.5	1486.8	1709.4	1932.0	2154.6
75°	84.6	87.1	103.6	118.4	140.4	211.0	420.6	919.6	1085.8	1252.0	1418.2
77.5°	73.0	75.2	89.6	113.1	109.0	131.6	251.4	511.8	608.2	704.6	801.0
80°	58.6	61.0	73.8	112.3	90.0	102.4	180.8	357.8	383.9	409.9	435.9
82.5°	42.9	45.0	57.8	90.8	68.9	77.2	137.9	303.4	312.4	321.4	330.5
85°	21.9	22.3	36.8	55.3	43.8	40.0	77.6	207.6	213.4	219.2	225.0
87.5°	3.7	3.7	8.2	9.5	10.8	6.6	9.9	35.5	36.6	37.7	38.9
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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CATALOG NUMBER: VWM-F03-LED-E1-RW

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6
2.5°	1454.6	1454.4	1453.7	1453.8	1454.3	1454.0	1454.6	1454.6	1455.1	1453.6	1453.3
5°	1472.1	1471.9	1471.8	1471.8	1472.1	1472.0	1472.4	1473.0	1472.8	1471.8	1471.7
7.5°	1501.6	1501.6	1502.1	1501.6	1502.4	1502.0	1501.2	1502.6	1503.4	1503.6	1504.4
10°	1540.6	1541.1	1542.5	1542.3	1543.7	1543.5	1543.8	1545.1	1546.1	1546.3	1547.3
12.5°	1586.2	1587.1	1587.8	1588.6	1590.2	1589.3	1591.2	1592.0	1593.3	1595.8	1594.5
15°	1629.3	1630.0	1632.2	1632.4	1633.8	1634.4	1636.1	1636.9	1637.2	1639.2	1639.6
17.5°	1659.1	1659.3	1660.2	1659.7	1661.0	1660.5	1661.8	1662.4	1663.5	1664.6	1666.5
20°	1672.7	1671.9	1671.5	1671.0	1670.1	1668.9	1669.2	1669.8	1670.0	1671.0	1672.4
22.5°	1674.8	1672.3	1669.8	1668.1	1665.6	1663.5	1661.4	1661.6	1661.7	1661.4	1662.4
25°	1675.0	1671.5	1667.5	1662.8	1659.3	1654.6	1650.6	1650.3	1649.2	1649.2	1649.7
27.5°	1682.4	1678.5	1673.0	1667.5	1660.0	1653.7	1647.3	1645.1	1642.9	1641.5	1640.9
30°	1700.4	1695.8	1689.2	1682.3	1674.1	1664.2	1655.2	1652.4	1649.1	1646.3	1643.9
32.5°	1729.2	1724.5	1717.2	1710.0	1699.0	1689.3	1680.4	1675.8	1671.3	1666.3	1661.8
35°	1775.2	1772.6	1766.2	1759.8	1751.8	1744.1	1736.0	1730.9	1723.4	1719.5	1714.0
37.5°	1840.7	1842.6	1842.6	1843.4	1840.9	1837.2	1831.4	1826.0	1823.6	1813.2	1806.6
40°	1936.9	1946.8	1955.8	1962.8	1969.0	1975.1	1980.4	1977.3	1978.3	1975.5	1971.6
42.5°	2059.4	2080.5	2099.8	2119.1	2133.0	2154.8	2169.9	2174.7	2186.9	2191.7	2200.6
45°	2199.4	2233.0	2265.4	2295.3	2323.1	2354.2	2384.5	2407.0	2431.7	2459.6	2487.5
47.5°	2344.3	2390.1	2437.8	2476.8	2517.0	2563.1	2603.3	2637.2	2681.5	2722.4	2767.5
50°	2501.4	2559.4	2613.6	2661.7	2713.5	2766.6	2821.6	2871.5	2931.3	2996.8	3067.7
52.5°	2666.1	2735.4	2798.2	2858.5	2919.3	2980.1	3038.8	3109.1	3182.9	3269.4	3358.0
55°	2825.4	2907.0	2978.3	3045.4	3115.0	3182.9	3243.5	3337.7	3428.2	3531.4	3647.1
57.5°	2953.2	3052.6	3134.7	3214.4	3292.9	3365.2	3439.6	3545.8	3661.1	3781.8	3928.5
60°	3040.5	3169.6	3274.5	3370.4	3466.6	3557.5	3643.0	3781.8	3919.1	4069.0	4251.7
62.5°	3124.0	3299.6	3436.5	3567.2	3697.1	3813.7	3920.0	4094.7	4273.9	4459.3	4676.5
65°	3241.6	3473.8	3675.4	3857.6	4037.3	4208.8	4367.8	4589.2	4815.4	5059.5	5318.8
67.5°	3296.2	3559.2	3821.8	4067.3	4295.6	4512.7	4717.0	4984.6	5250.9	5533.7	5847.1
69°	3182.4	3443.9	3724.5	3992.8	4244.9	4475.2	4696.4	4969.5	5246.4	5535.3	5851.4
70°	3029.0	3285.8	3569.1	3849.5	4090.7	4330.6	4559.8	4830.8	5111.3	5401.0	5731.8
72.5°	2377.2	2599.8	2876.0	3148.2	3390.2	3630.9	3853.6	4131.0	4413.3	4717.5	5030.8
75°	1584.4	1750.6	1956.4	2208.8	2430.7	2643.5	2859.2	3093.8	3369.3	3620.0	3906.6
77.5°	897.3	993.7	1113.3	1277.4	1436.7	1564.1	1718.0	1828.3	1988.2	2126.2	2272.1
80°	461.9	487.9	523.6	563.0	585.4	581.8	604.7	582.1	587.1	568.6	548.9
82.5°	339.5	348.6	364.7	372.6	371.8	345.8	318.2	279.9	246.2	210.7	178.2
85°	230.8	236.5	240.6	246.7	244.9	233.7	208.9	175.6	143.2	114.8	91.9
87.5°	40.0	41.1	40.8	44.2	44.3	41.1	33.8	28.9	24.3	18.2	12.8
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):

	80°	81°	82°	83°	84°	85°	86°	87°	88°	89°	90°
0°	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6	1449.6
2.5°	1452.9	1452.9	1453.8	1452.9	1452.9	1452.9	1452.5	1453.3	1452.9	1451.7	1450.4
5°	1472.0	1470.7	1470.3	1471.1	1471.9	1470.2	1471.5	1472.8	1470.7	1471.1	1470.3
7.5°	1503.7	1503.2	1502.8	1503.7	1503.7	1503.3	1503.7	1502.4	1501.6	1502.8	1504.1
10°	1546.2	1545.8	1546.6	1546.6	1548.3	1547.4	1547.0	1548.2	1547.4	1546.6	1547.0
12.5°	1596.2	1594.9	1597.0	1597.0	1598.2	1598.2	1597.8	1598.2	1597.8	1596.6	1595.7
15°	1640.8	1639.1	1639.5	1642.8	1642.4	1643.2	1643.2	1642.4	1642.0	1641.6	1642.0
17.5°	1667.6	1666.8	1666.8	1668.4	1669.6	1669.2	1669.2	1669.2	1668.8	1669.2	1670.0
20°	1672.6	1672.5	1673.0	1674.6	1676.6	1675.4	1675.4	1676.2	1675.4	1676.2	1676.6
22.5°	1663.0	1663.8	1664.7	1666.8	1667.2	1667.2	1667.2	1667.6	1668.4	1668.4	1669.2
25°	1649.8	1650.6	1651.8	1653.5	1655.2	1655.2	1655.2	1656.0	1656.0	1656.4	1656.8
27.5°	1639.9	1640.7	1642.0	1643.6	1645.7	1645.7	1645.6	1646.6	1646.5	1646.9	1647.7
30°	1641.2	1639.5	1640.7	1641.6	1642.8	1642.8	1642.4	1642.8	1643.2	1643.2	1643.6
32.5°	1658.9	1655.2	1654.0	1653.5	1654.0	1652.7	1652.3	1651.4	1650.6	1650.6	1650.2
35°	1706.0	1700.2	1699.8	1696.4	1693.2	1689.8	1690.2	1687.8	1688.6	1686.6	1684.9
37.5°	1802.6	1795.9	1800.0	1793.0	1788.5	1785.2	1781.5	1776.6	1773.6	1777.4	1777.4
40°	1975.4	1970.9	1969.7	1971.0	1966.8	1968.8	1959.8	1957.4	1952.0	1955.6	1960.6
42.5°	2214.5	2211.6	2227.2	2230.2	2231.8	2234.3	2236.0	2222.3	2221.9	2219.0	2210.8
45°	2509.6	2526.9	2526.1	2545.0	2545.9	2540.2	2542.6	2536.4	2534.0	2524.9	2536.0
47.5°	2813.0	2846.0	2858.4	2862.5	2878.2	2881.9	2867.0	2862.0	2870.8	2855.9	2858.0
50°	3138.6	3174.2	3203.0	3222.4	3233.6	3234.4	3223.2	3220.8	3228.6	3200.6	3213.8
52.5°	3459.0	3512.6	3567.1	3596.0	3616.6	3618.2	3627.0	3616.6	3620.8	3614.2	3627.4
55°	3774.7	3867.6	3931.6	3988.1	4024.0	4055.0	4057.9	4069.0	4069.8	4083.5	4069.8
57.5°	4083.4	4184.6	4296.0	4396.4	4452.0	4487.2	4520.2	4565.2	4575.1	4569.7	4578.4
60°	4447.9	4604.4	4755.8	4871.4	4967.6	5059.6	5109.2	5179.8	5190.9	5221.5	5195.0
62.5°	4908.6	5135.5	5341.2	5496.8	5642.8	5786.1	5894.2	5948.8	5981.8	6045.8	6024.7
65°	5615.2	5887.6	6159.6	6382.6	6587.2	6757.7	6922.0	7000.4	7087.1	7178.0	7194.4
67.5°	6197.2	6534.5	6841.2	7112.7	7360.8	7550.2	7721.2	7857.0	7962.6	8029.5	8034.8
69°	6223.6	6574.1	6907.2	7198.6	7457.4	7658.8	7838.8	7989.8	8092.6	8161.2	8179.3
70°	6097.4	6456.0	6811.0	7105.3	7370.3	7576.2	7767.0	7911.0	8025.8	8095.6	8119.9
72.5°	5387.0	5770.0	6149.4	6407.3	6678.0	6923.3	7076.0	7222.9	7384.8	7405.8	7472.7
75°	4246.5	4568.5	4862.8	5060.0	5286.2	5506.2	5656.1	5694.8	5779.5	5886.0	5848.0
77.5°	2460.9	2560.0	2749.8	2798.6	2757.2	2853.0	2884.8	2817.1	2813.8	2876.1	2752.3
80°	545.3	514.3	553.1	524.2	525.0	525.8	517.2	513.8	520.0	513.9	505.2
82.5°	151.0	146.1	147.0	145.3	148.2	146.1	144.9	148.2	147.8	147.4	150.2
85°	72.6	71.8	70.6	70.2	68.5	66.4	63.2	63.2	64.8	62.4	63.6
87.5°	9.5	9.1	9.1	10.7	9.5	7.8	7.8	7.8	7.5	7.5	7.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)