

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: P676205

Luminaire Tested: **CCW-SA-2D-840-U-T1**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676205
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2D-840-U-T1
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @800mA w/
T1 distribution lens
Light Source: (32) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

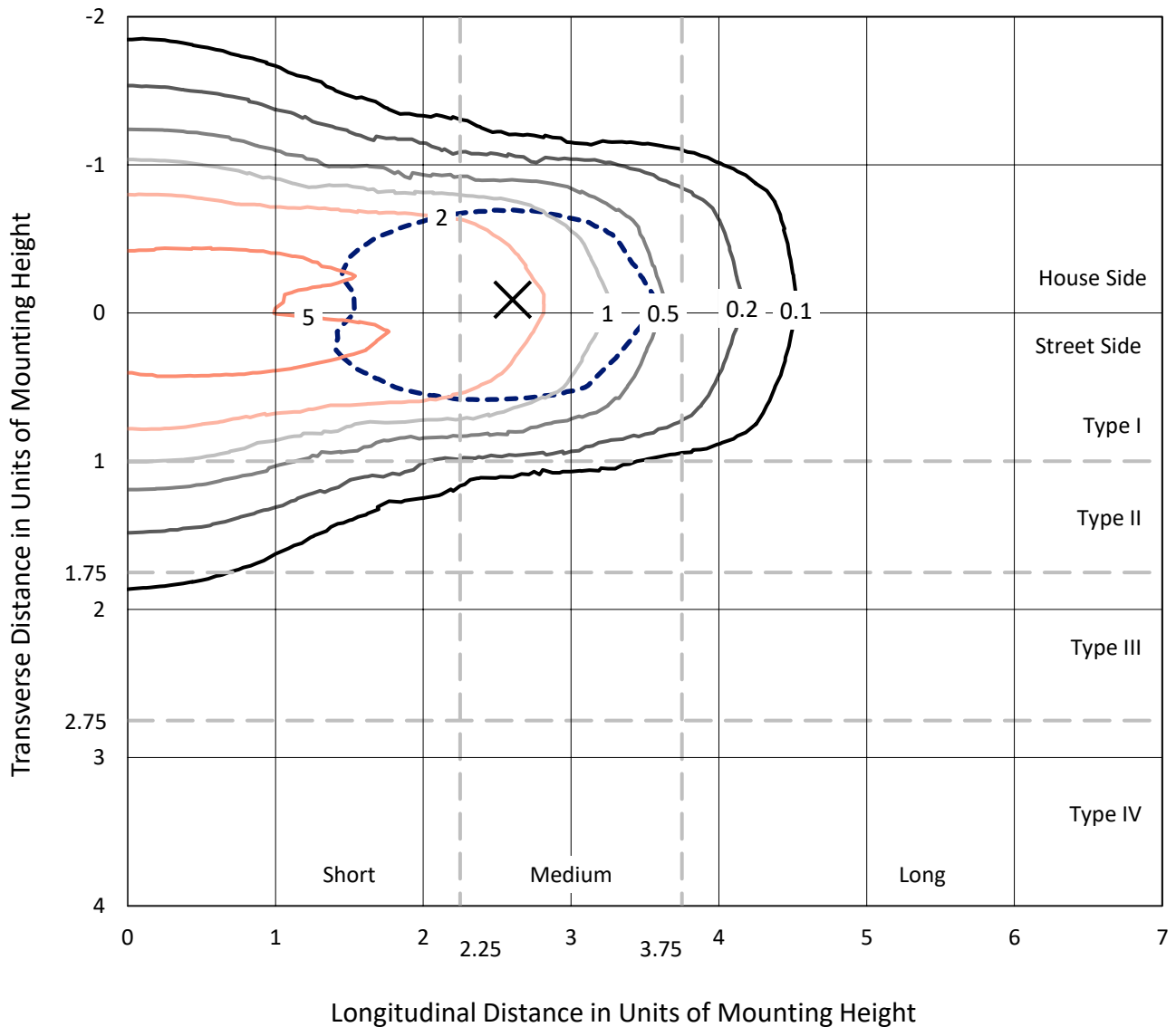
Lumens per Lamp: N/A
Luminaire Lumens: 9259.5 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 80.8
Input Voltage (V): 120
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

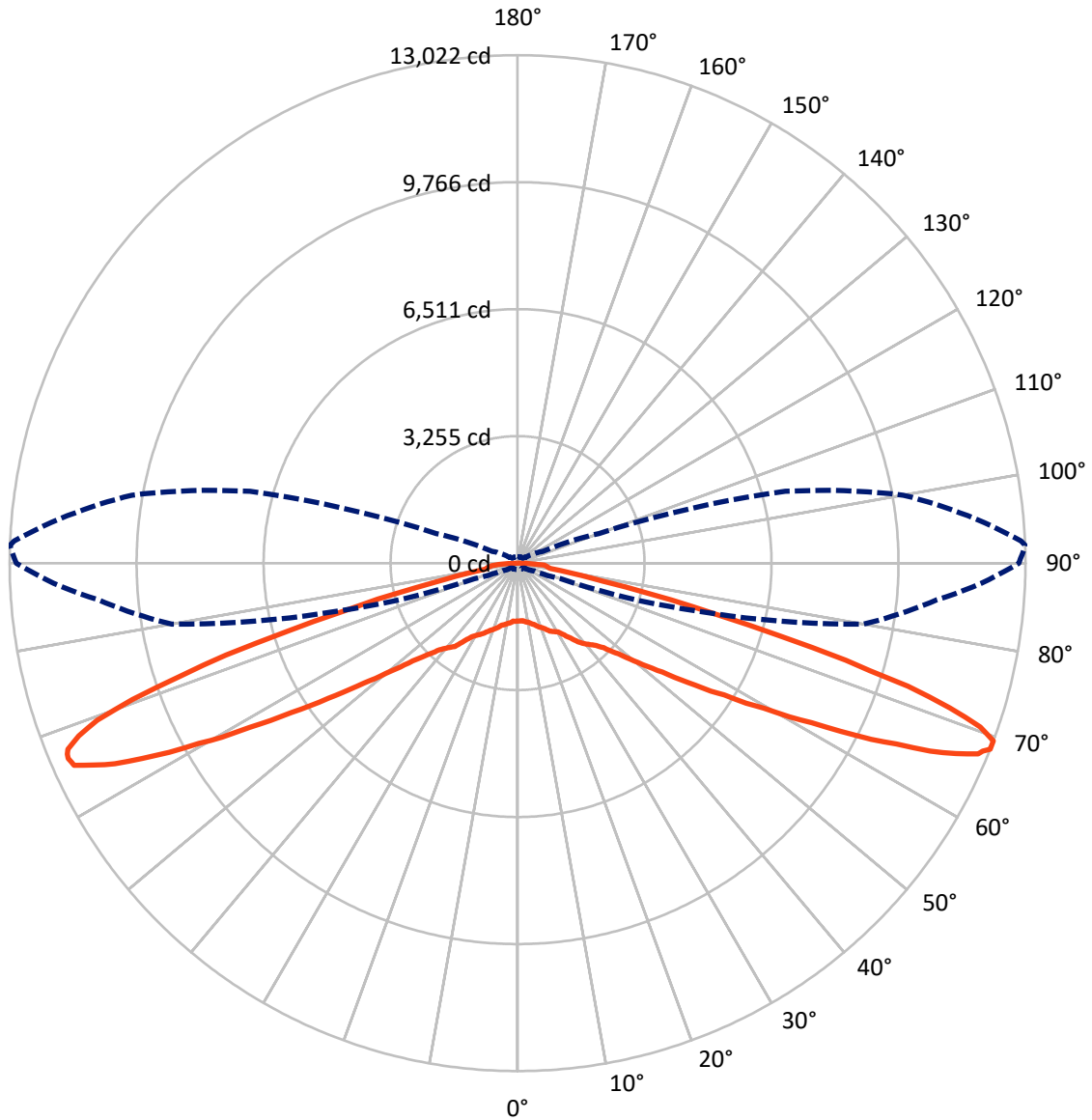
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 7.2 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 92-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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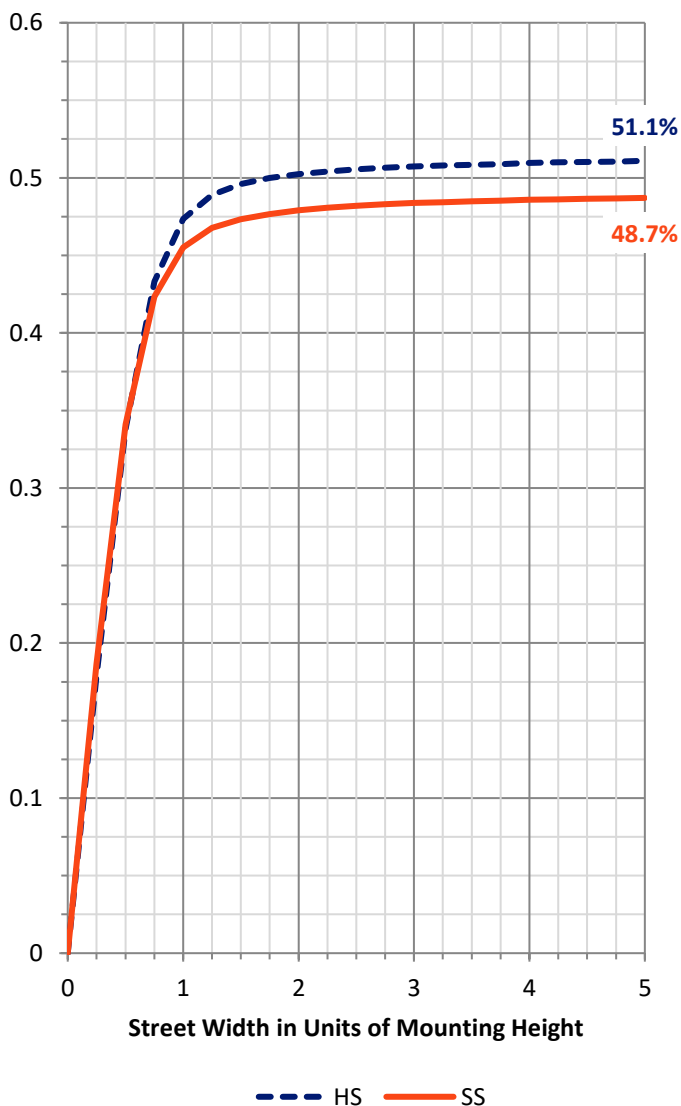
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4768.5	0.0	4768.5
	% Fixture	51.5	0.0	51.5
Street Side	Lumens	4491.0	0.0	4491.0
	% Fixture	48.5	0.0	48.5
Total	Lumens	9259.5	0.0	9259.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.3	1.6
10°-20°	480.3	5.2
20°-30°	819.7	8.9
30°-40°	1144.6	12.4
40°-50°	1456.0	15.7
50°-60°	1840.9	19.9
60°-70°	2270.3	24.5
70°-80°	991.8	10.7
80°-90°	107.6	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°	9259.5	100.0
0°-180°	9259.5	100.0



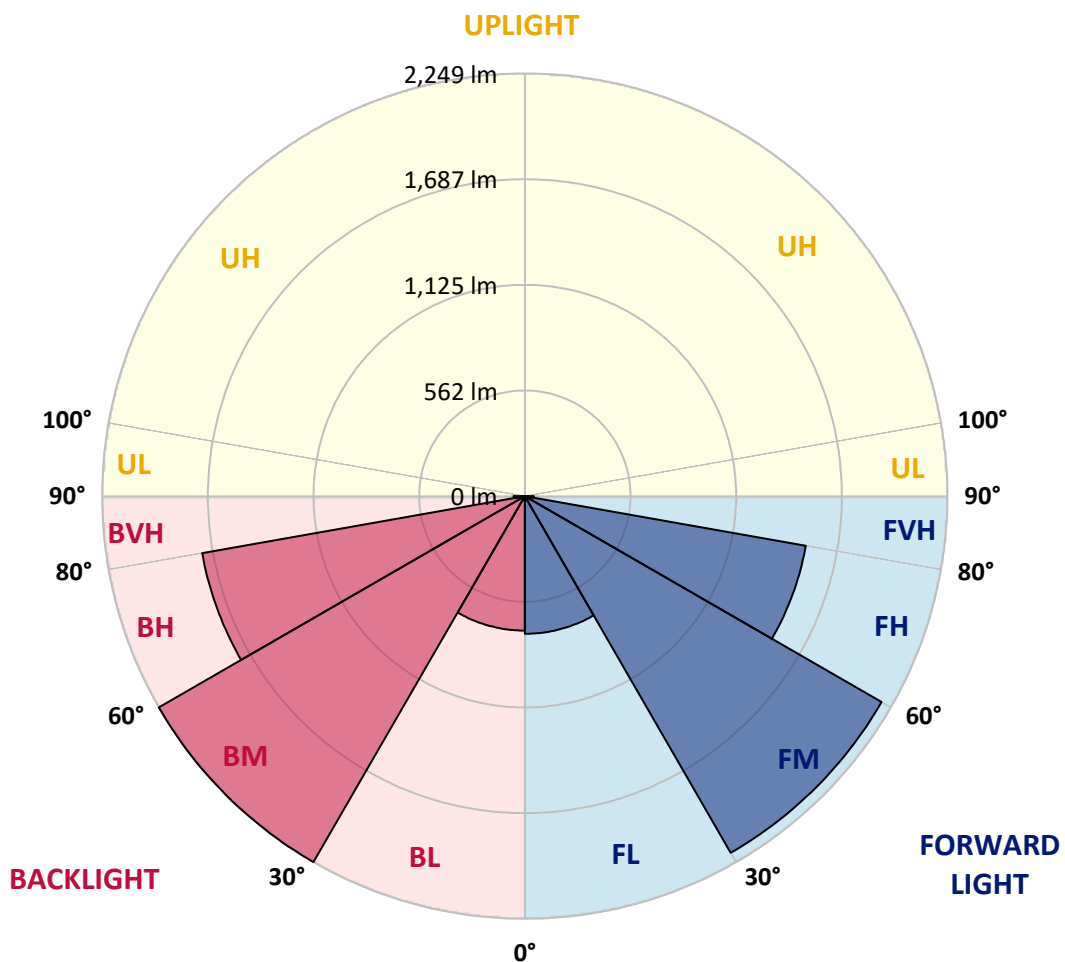
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	732.8	7.9			
FM (30°-60°)	2192.1	23.7			
FH (60°-80°)	1518.4	16.4			G1/1800
FVH (80°-90°)	47.7	0.5			G1/100
BL (0°-30°)	715.6	7.7	B2/1000		
BM (30°-60°)	2249.3	24.3	B2/2500		
BH (60°-80°)	1743.7	18.8	B3/2500		G3/2500
BVH (80°-90°)	59.9	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°	70°	75°	80°
0°	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7
2.5°	1512.0	1510.2	1515.4	1518.9	1503.3	1508.5	1505.0	1501.5	1489.4	1484.2	1473.7
5°	1553.7	1558.9	1576.3	1560.6	1567.6	1558.9	1531.1	1539.8	1524.1	1520.6	1510.2
7.5°	1626.7	1616.2	1640.6	1623.2	1628.4	1611.0	1598.9	1583.2	1579.7	1555.4	1557.1
10°	1642.3	1663.2	1673.6	1670.1	1673.6	1682.3	1659.7	1635.3	1602.3	1595.4	1571.0
12.5°	1631.9	1651.0	1678.8	1701.4	1717.0	1720.5	1711.8	1706.6	1692.7	1652.7	1651.0
15°	1621.4	1607.5	1624.9	1703.1	1755.3	1790.0	1802.2	1772.6	1776.1	1724.0	1703.1
17.5°	1551.9	1531.1	1598.9	1675.3	1739.6	1816.1	1875.2	1866.5	1866.5	1824.8	1795.2
20°	1459.8	1494.6	1529.3	1626.7	1744.8	1859.5	1972.5	1967.3	1946.4	1934.3	1870.0
22.5°	1381.6	1397.3	1461.6	1564.1	1711.8	1871.7	2005.5	2101.1	2052.4	2003.8	1965.5
25°	1327.7	1313.8	1395.5	1501.5	1680.5	1850.8	2068.1	2167.1	2193.2	2156.7	2083.7
27.5°	1251.3	1251.3	1315.6	1416.4	1579.7	1840.4	2128.9	2280.1	2318.3	2264.5	2158.4
30°	1164.4	1174.8	1230.4	1345.1	1505.0	1763.9	2153.2	2410.4	2441.7	2394.8	2285.3
32.5°	1096.6	1096.6	1159.2	1280.8	1452.9	1729.2	2137.6	2539.0	2598.1	2563.4	2450.4
35°	1023.6	1018.4	1063.6	1197.4	1369.4	1661.4	2132.4	2641.6	2773.7	2775.4	2657.2
37.5°	919.3	940.2	997.5	1103.6	1303.4	1595.4	2116.7	2765.0	3001.3	3041.3	2959.6
40°	849.8	858.5	910.6	1027.1	1200.9	1517.2	2094.1	2865.8	3152.5	3289.8	3176.8
42.5°	749.0	761.2	801.2	945.4	1101.8	1405.9	1995.1	2937.0	3368.0	3524.4	3428.8
45°	643.0	650.0	709.1	827.2	995.8	1273.9	1889.1	3051.7	3576.6	3896.3	3840.7
47.5°	516.2	519.6	570.0	693.4	868.9	1141.8	1725.7	3046.5	3745.1	4268.2	4424.6
50°	403.2	411.9	450.1	550.9	716.0	980.2	1536.3	3004.8	3957.2	4692.3	4999.9
52.5°	321.5	323.2	347.6	427.5	552.6	818.5	1333.0	2872.7	4157.0	5107.6	5705.5
55°	265.9	265.9	279.8	328.5	424.0	622.2	1094.9	2653.7	4181.3	5566.4	6475.3
56°	255.5	252.0	264.2	305.9	382.3	561.3	983.6	2506.0	4216.1	5778.5	6861.2
57°	241.6	243.3	250.3	279.8	344.1	497.0	860.3	2361.8	4191.8	5952.2	7146.2
58°	234.6	231.1	245.0	264.2	304.1	441.4	775.1	2191.5	4153.5	6094.7	7561.5
59°	224.2	222.4	231.1	248.5	283.3	392.8	670.8	2007.3	4078.8	6279.0	7870.9
60°	220.7	219.0	222.4	236.4	260.7	344.1	590.9	1791.8	3878.9	6468.4	8254.9
61°	210.3	212.0	219.0	227.7	246.8	309.3	531.8	1571.0	3748.6	6628.3	8679.0
62°	212.0	208.5	212.0	219.0	232.9	285.0	465.8	1353.8	3515.7	6809.0	8997.0
63°	201.6	199.9	205.1	213.8	220.7	257.2	406.7	1169.6	3251.6	6850.7	9266.4
64°	198.1	196.4	198.1	210.3	212.0	241.6	359.7	999.3	2869.2	6922.0	9612.2
65°	189.4	189.4	192.9	198.1	205.1	227.7	321.5	867.2	2488.6	6734.3	9718.2
66°	182.5	184.2	184.2	192.9	198.1	212.0	295.4	736.9	2123.7	6435.4	9820.8
67°	177.3	177.3	179.0	186.0	191.2	199.9	265.9	637.8	1791.8	6079.1	9662.6
67.5°	173.8	175.5	175.5	182.5	187.7	199.9	253.7	604.8	1602.3	5688.1	9544.4
68°	168.6	170.3	170.3	177.3	182.5	192.9	245.0	552.6	1477.2	5434.4	9325.5
69°	165.1	163.4	163.4	170.3	177.3	184.2	227.7	483.1	1174.8	4725.3	9005.7
70°	154.7	154.7	158.1	163.4	168.6	175.5	210.3	425.8	994.1	3912.0	8181.9
71°	149.5	147.7	149.5	154.7	159.9	168.6	192.9	377.1	813.3	3248.1	7372.1
72°	139.0	142.5	142.5	147.7	152.9	158.1	180.7	328.5	683.0	2596.4	6480.6
72.5°	137.3	137.3	139.0	144.2	147.7	156.4	173.8	314.6	623.9	2288.8	6106.9
73°	132.1	132.1	133.8	139.0	142.5	151.2	168.6	283.3	568.3	2036.8	5408.3
74°	126.9	125.1	125.1	132.1	133.8	142.5	158.1	250.3	476.2	1534.5	4341.2
75°	118.2	118.2	119.9	123.4	125.1	132.1	146.0	222.4	401.5	1190.4	3395.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	97.3	99.1	100.8	104.3	104.3	109.5	119.9	154.7	245.0	603.0	1558.9
80°	71.3	74.7	79.9	85.2	83.4	83.4	93.8	111.2	146.0	271.1	597.8
82.5°	57.4	60.8	55.6	62.6	62.6	59.1	67.8	81.7	99.1	133.8	213.8
85°	38.2	40.0	33.0	38.2	36.5	36.5	45.2	48.7	60.8	74.7	106.0
87.5°	17.4	17.4	13.9	15.6	15.6	15.6	22.6	17.4	26.1	36.5	62.6
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):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
0°	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7
2.5°	1484.2	1491.1	1491.1	1484.2	1478.9	1484.2	1480.7	1472.0	1480.7	1484.2	1485.9
5°	1505.0	1491.1	1498.1	1482.4	1492.8	1491.1	1487.6	1496.3	1498.1	1498.1	1510.2
7.5°	1527.6	1545.0	1522.4	1524.1	1529.3	1508.5	1515.4	1518.9	1512.0	1525.9	1536.3
10°	1567.6	1574.5	1567.6	1541.5	1558.9	1545.0	1539.8	1555.4	1551.9	1555.4	1571.0
12.5°	1604.1	1616.2	1597.1	1595.4	1586.7	1574.5	1581.5	1579.7	1604.1	1607.5	1626.7
15°	1678.8	1647.5	1640.6	1638.8	1635.3	1630.1	1633.6	1635.3	1666.6	1671.8	1717.0
17.5°	1743.1	1737.9	1699.6	1713.6	1713.6	1692.7	1684.0	1713.6	1737.9	1763.9	1795.2
20°	1809.1	1803.9	1762.2	1763.9	1748.3	1767.4	1757.0	1784.8	1826.5	1835.2	1863.0
22.5°	1887.3	1864.7	1835.2	1838.7	1843.9	1830.0	1823.0	1861.3	1903.0	1927.3	1929.0
25°	2010.7	1953.4	1929.0	1932.5	1925.6	1915.1	1920.4	1969.0	1989.9	2042.0	2031.6
27.5°	2076.8	2043.7	2026.4	1986.4	1988.1	1972.5	1993.3	2066.3	2108.0	2148.0	2068.1
30°	2156.7	2135.9	2059.4	2045.5	2043.7	2036.8	2075.0	2168.9	2231.4	2254.0	2139.3
32.5°	2313.1	2229.7	2210.6	2198.4	2170.6	2179.3	2198.4	2321.8	2420.9	2415.7	2205.4
35°	2492.1	2434.8	2380.9	2370.5	2367.0	2342.7	2375.7	2519.9	2596.4	2573.8	2229.7
37.5°	2778.9	2692.0	2619.0	2579.0	2572.1	2554.7	2632.9	2747.6	2846.6	2758.0	2248.8
40°	2919.6	2822.3	2754.5	2730.2	2735.4	2759.8	2836.2	3011.7	3055.2	2891.8	2264.5
42.5°	3121.2	3015.2	2881.4	2869.2	2853.6	2865.8	3013.5	3249.8	3286.3	3072.6	2205.4
45°	3479.2	3319.4	3164.7	3095.2	3098.6	3131.7	3361.1	3620.0	3552.2	3197.7	2111.5
47.5°	3931.1	3696.5	3571.3	3477.5	3522.7	3486.2	3851.1	4058.0	3826.8	3355.8	1996.8
50°	4610.6	4282.1	4111.8	3998.9	4018.0	4049.3	4419.4	4595.0	4130.9	3432.3	1821.3
52.5°	5467.4	5045.1	4794.8	4643.6	4657.5	4725.3	5203.2	5149.3	4478.5	3496.6	1586.7
55°	6492.7	6058.3	5573.4	5510.8	5495.2	5656.8	6183.4	5729.8	4791.3	3394.1	1343.4
56°	7034.9	6572.7	6068.7	5940.1	5901.8	6014.8	6633.5	6020.0	4899.1	3279.4	1226.9
57°	7495.5	7054.1	6501.4	6282.4	6331.1	6543.1	7080.1	6292.9	4998.1	3161.2	1117.5
58°	8128.1	7624.1	7040.2	6873.3	6829.9	6998.4	7561.5	6567.5	5031.2	3039.6	1016.7
59°	8758.9	8154.1	7627.6	7323.4	7335.6	7643.2	8036.0	6894.2	5081.6	2884.9	888.1
60°	9238.6	8934.4	8230.6	8002.9	7971.7	8416.6	8508.7	7113.1	5135.4	2676.3	797.7
61°	9918.1	9521.8	8866.7	8573.0	8658.1	9014.4	9019.6	7387.7	5055.5	2412.2	686.5
62°	10406.4	10302.2	9614.0	9334.2	9308.1	9780.8	9551.4	7629.3	4986.0	2161.9	606.5
63°	10978.2	10978.2	10350.8	10131.8	10144.0	10517.7	9782.5	7870.9	4906.0	1885.6	533.5
64°	11275.4	11649.0	11070.3	10762.7	10842.6	11165.9	10194.4	8029.0	4659.3	1605.8	469.2
65°	11532.6	12093.9	11772.4	11629.9	11508.2	11699.4	10550.7	8176.7	4282.1	1366.0	417.1
66°	11749.8	12512.7	12406.7	12253.8	12241.6	12198.2	10620.2	8171.5	3892.9	1154.0	365.0
67°	11640.3	12521.4	12714.3	12778.6	12759.5	12300.7	10498.5	7985.6	3394.1	975.0	325.0
67.5°	11541.3	12450.2	12898.5	12862.1	12942.0	12387.6	10519.4	7757.9	3039.6	882.8	305.9
68°	11454.4	12354.6	12973.3	13020.2	12980.2	12398.0	10404.7	7577.2	2798.0	829.0	288.5
69°	10795.7	11901.0	12853.4	13021.9	12919.4	12000.1	10039.7	7106.2	2222.7	707.3	265.9
70°	10135.3	11313.6	12271.2	12580.5	12453.7	11230.2	9579.2	6357.2	1833.5	604.8	239.8
71°	9221.2	10222.2	11496.1	11682.0	11529.1	10354.3	8626.8	5566.4	1426.8	512.7	213.8
72°	7980.3	8830.2	10046.7	10496.8	10270.9	9094.3	7664.1	4600.2	1155.7	431.0	194.6
72.5°	7365.1	8235.8	9408.9	9445.4	9488.8	8546.9	7255.7	4040.6	1008.0	399.7	189.4
73°	6781.2	7634.5	8649.4	8778.0	8593.8	7624.1	6645.7	3613.1	921.1	365.0	182.5
74°	5495.2	5981.8	6822.9	6948.0	6786.4	6216.4	5430.9	2770.2	733.4	314.6	166.8
75°	4323.8	4591.5	5352.7	5276.2	5034.6	4834.8	4210.9	2116.7	594.4	276.3	154.7



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CANDELA DISTRIBUTION (continued):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	1943.0	2104.6	2231.4	2231.4	2245.3	2142.8	1941.2	971.5	366.7	199.9	126.9
80°	740.3	829.0	856.8	858.5	870.7	902.0	839.4	477.9	217.2	142.5	102.5
82.5°	537.0	750.8	808.1	766.4	769.9	695.2	321.5	212.0	137.3	99.1	74.7
85°	486.6	653.4	691.7	686.5	688.2	643.0	189.4	104.3	79.9	62.6	52.1
87.5°	236.4	231.1	245.0	276.3	269.4	349.3	159.9	52.1	34.8	26.1	26.1
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):

	135°	145°	155°	165°	175°	180°
0°	1480.7	1480.7	1480.7	1480.7	1480.7	1480.7
2.5°	1472.0	1470.2	1494.6	1470.2	1484.2	1473.7
5°	1489.4	1496.3	1501.5	1512.0	1487.6	1512.0
7.5°	1541.5	1548.5	1550.2	1558.9	1548.5	1546.7
10°	1581.5	1598.9	1609.3	1574.5	1595.4	1593.6
12.5°	1659.7	1642.3	1640.6	1633.6	1614.5	1607.5
15°	1715.3	1689.2	1673.6	1645.8	1623.2	1614.5
17.5°	1793.5	1743.1	1678.8	1621.4	1581.5	1550.2
20°	1842.2	1751.8	1623.2	1555.4	1494.6	1508.5
22.5°	1873.4	1743.1	1572.8	1485.9	1425.1	1442.4
25°	1883.9	1699.6	1538.0	1430.3	1371.2	1359.0
27.5°	1854.3	1649.2	1470.2	1348.6	1296.5	1306.9
30°	1840.4	1576.3	1407.7	1287.8	1218.3	1228.7
32.5°	1803.9	1501.5	1324.3	1202.6	1152.2	1134.8
35°	1751.8	1439.0	1244.3	1129.6	1068.8	1054.9
37.5°	1687.5	1360.8	1174.8	1035.8	981.9	971.5
40°	1591.9	1266.9	1074.0	954.1	891.5	889.8
42.5°	1508.5	1176.5	980.2	856.8	794.2	797.7
45°	1402.5	1054.9	872.4	766.4	703.8	707.3
47.5°	1266.9	941.9	769.9	651.7	599.6	596.1
50°	1107.0	813.3	644.8	544.0	500.5	491.8
52.5°	954.1	683.0	528.3	437.9	401.5	398.0
55°	761.2	531.8	411.9	344.1	316.3	318.0
56°	691.7	490.1	375.4	314.6	293.7	293.7
57°	625.6	434.5	340.6	290.2	271.1	271.1
58°	552.6	382.3	309.3	262.4	253.7	246.8
59°	502.2	347.6	279.8	248.5	234.6	232.9
60°	443.2	312.8	260.7	232.9	222.4	220.7
61°	392.8	281.5	239.8	217.2	213.8	213.8
62°	351.1	260.7	222.4	210.3	208.5	203.3
63°	314.6	239.8	213.8	199.9	194.6	199.9
64°	281.5	220.7	206.8	196.4	189.4	192.9
65°	255.5	212.0	198.1	191.2	184.2	186.0
66°	238.1	198.1	191.2	182.5	179.0	180.7
67°	215.5	191.2	184.2	175.5	173.8	175.5
67.5°	208.5	186.0	180.7	172.1	170.3	172.1
68°	203.3	182.5	179.0	170.3	168.6	166.8
69°	189.4	175.5	170.3	166.8	163.4	161.6
70°	177.3	168.6	165.1	159.9	156.4	154.7
71°	170.3	159.9	158.1	152.9	149.5	147.7
72°	161.6	154.7	151.2	144.2	142.5	144.2
72.5°	159.9	151.2	149.5	142.5	140.8	140.8
73°	154.7	144.2	146.0	139.0	135.6	139.0
74°	144.2	140.8	137.3	132.1	130.3	130.3
75°	135.6	132.1	128.6	125.1	125.1	125.1



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	135°	145°	155°	165°	175°	180°
77.5°	114.7	113.0	114.7	107.7	106.0	104.3
80°	92.1	92.1	93.8	88.6	85.2	83.4
82.5°	69.5	71.3	74.7	69.5	66.0	62.6
85°	45.2	46.9	46.9	41.7	48.7	45.2
87.5°	22.6	24.3	22.6	20.9	24.3	24.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)