

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: P676184

Luminaire Tested: **CCW-SA-2E-830-U-T1**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676184
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2E-830-U-T1
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @1050mA w/
T1 distribution lens
Light Source: (32) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

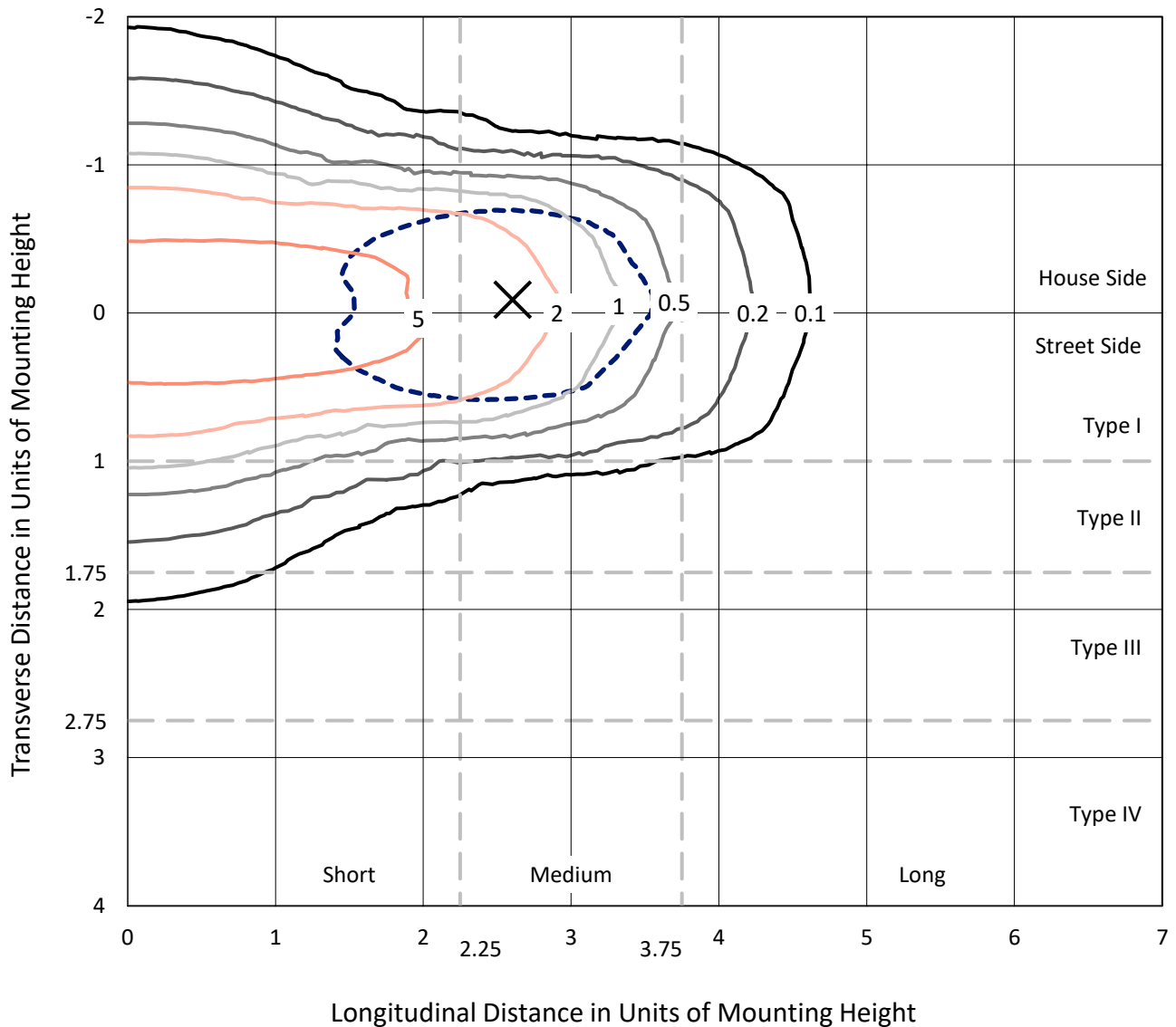
Lumens per Lamp: N/A
Luminaire Lumens: 10579.7 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 106.6
Input Voltage (V): 120
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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Iso-Footcandle Lines of Horizontal Illumination

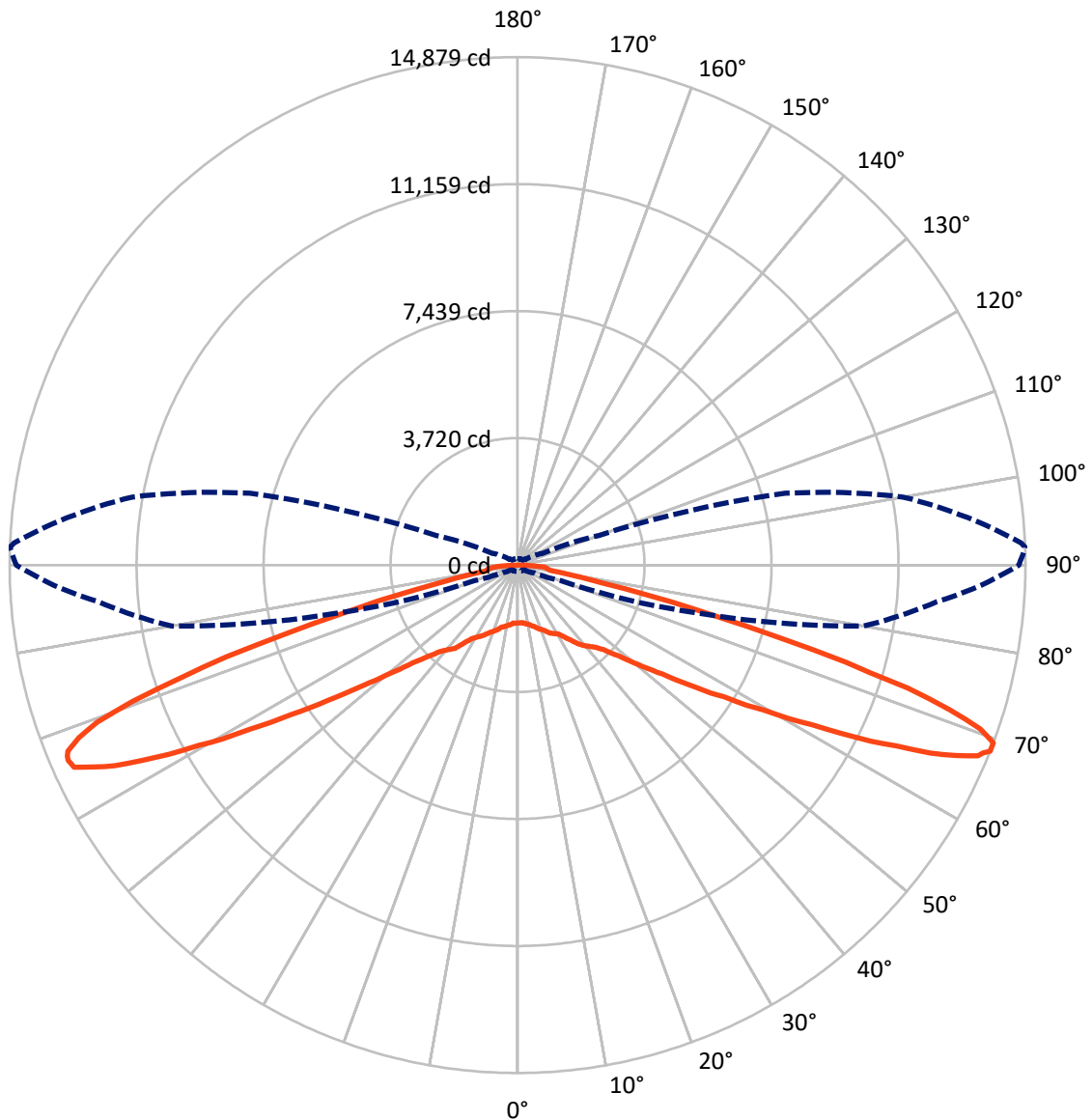
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 8.2 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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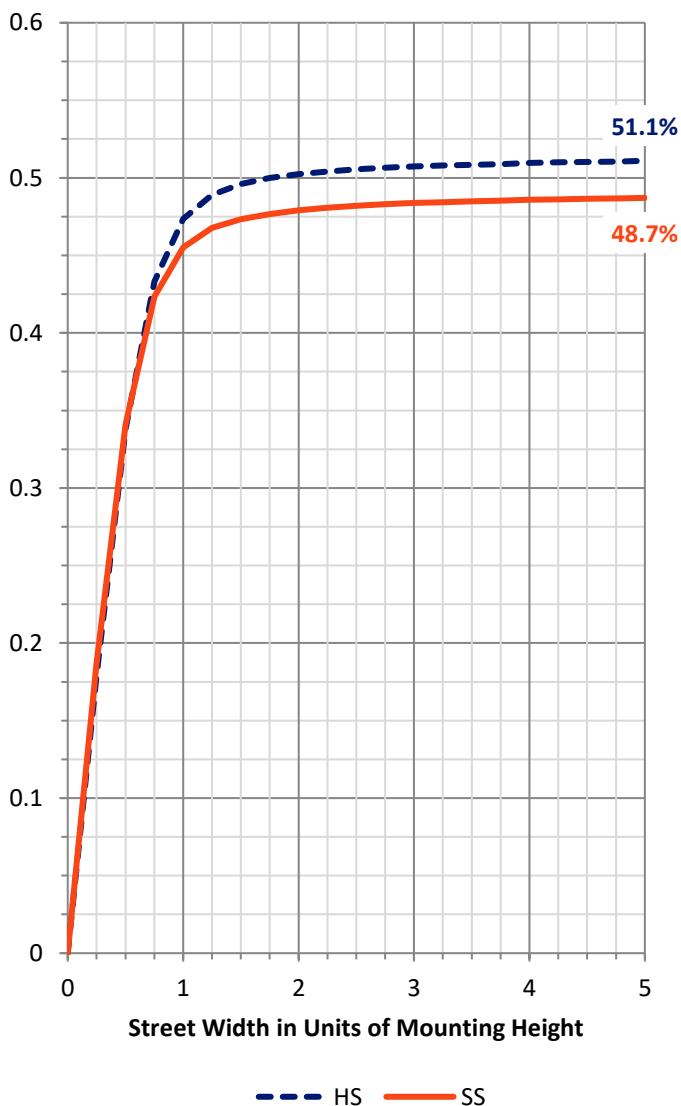
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5448.4	0.0	5448.4
	% Fixture	51.5	0.0	51.5
Street Side	Lumens	5131.3	0.0	5131.3
	% Fixture	48.5	0.0	48.5
Total	Lumens	10579.7	0.0	10579.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	1.6
10°-20°	548.8	5.2
20°-30°	936.6	8.9
30°-40°	1307.8	12.4
40°-50°	1663.5	15.7
50°-60°	2103.4	19.9
60°-70°	2594.0	24.5
70°-80°	1133.2	10.7
80°-90°	122.9	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°	10579.7	100.0
0°-180°	10579.7	100.0



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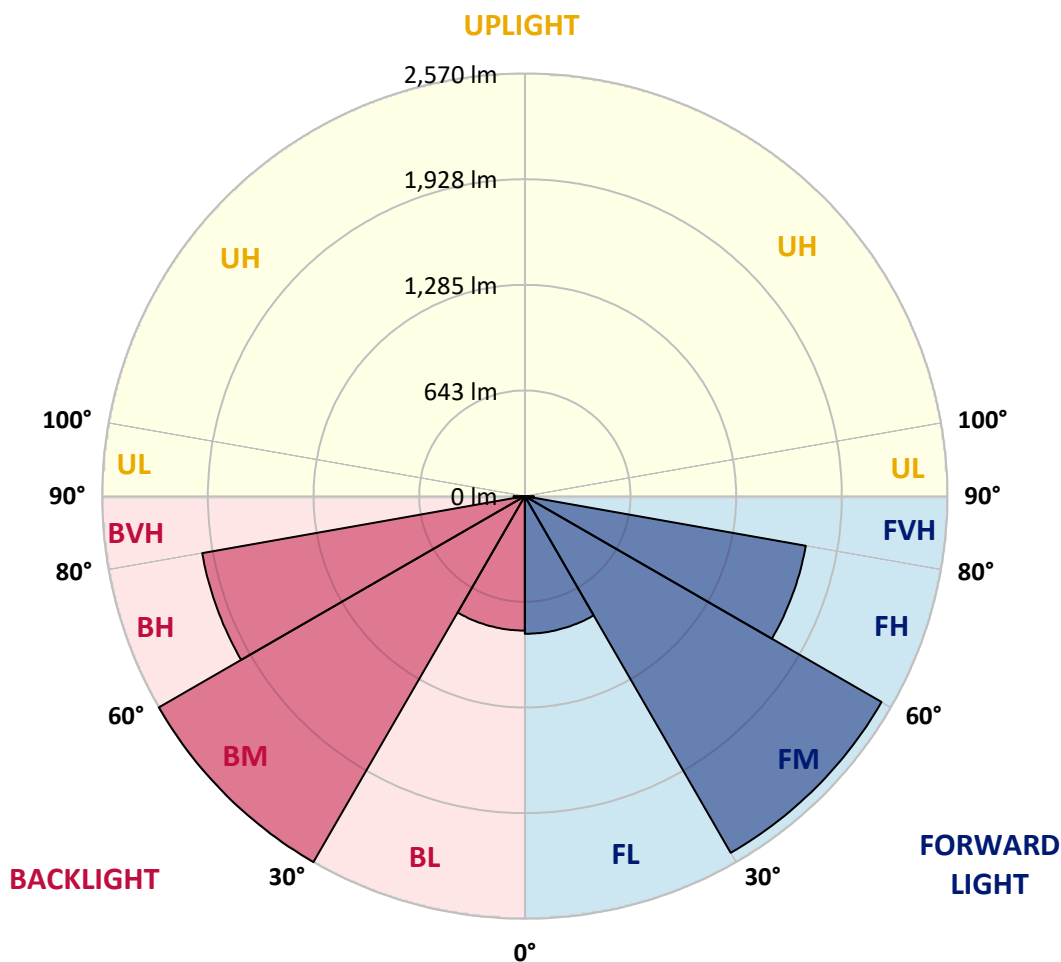
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	837.3	7.9			
FM (30°-60°)	2504.7	23.7			
FH (60°-80°)	1734.9	16.4			G1/1800
FVH (80°-90°)	54.5	0.5			G1/100
BL (0°-30°)	817.6	7.7	B2/1000		
BM (30°-60°)	2570.0	24.3	B3/5000		
BH (60°-80°)	1992.3	18.8	B3/2500		G3/2500
BVH (80°-90°)	68.4	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°	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8
2.5°	1727.5	1725.5	1731.5	1735.5	1717.6	1723.6	1719.6	1715.6	1701.7	1695.8	1683.8
5°	1775.2	1781.1	1801.0	1783.1	1791.1	1781.1	1749.4	1759.3	1741.4	1737.5	1725.5
7.5°	1858.6	1846.7	1874.5	1854.6	1860.6	1840.7	1826.8	1808.9	1805.0	1777.2	1779.2
10°	1876.5	1900.3	1912.2	1908.2	1912.2	1922.1	1896.3	1868.5	1830.8	1822.8	1795.0
12.5°	1864.5	1886.4	1918.2	1944.0	1961.8	1965.8	1955.9	1949.9	1934.0	1888.4	1886.4
15°	1852.6	1836.7	1856.6	1946.0	2005.5	2045.2	2059.1	2025.4	2029.3	1969.8	1946.0
17.5°	1773.2	1749.4	1826.8	1914.2	1987.6	2075.0	2142.5	2132.6	2132.6	2084.9	2051.2
20°	1668.0	1707.7	1747.4	1858.6	1993.6	2124.7	2253.7	2247.8	2223.9	2210.0	2136.6
22.5°	1578.6	1596.5	1669.9	1787.1	1955.9	2138.6	2291.5	2400.7	2345.1	2289.5	2245.8
25°	1517.0	1501.2	1594.5	1715.6	1920.1	2114.7	2362.9	2476.1	2505.9	2464.2	2380.8
27.5°	1429.7	1429.7	1503.1	1618.3	1805.0	2102.8	2432.4	2605.2	2648.9	2587.3	2466.2
30°	1330.4	1342.3	1405.8	1536.9	1719.6	2015.4	2460.2	2754.1	2789.9	2736.2	2611.1
32.5°	1253.0	1253.0	1324.4	1463.4	1660.0	1975.7	2442.4	2901.1	2968.6	2928.9	2799.8
35°	1169.6	1163.6	1215.2	1368.1	1564.7	1898.3	2436.4	3018.2	3169.1	3171.1	3036.1
37.5°	1050.4	1074.2	1139.8	1260.9	1489.2	1822.8	2418.5	3159.2	3429.2	3474.9	3381.6
40°	971.0	980.9	1040.5	1173.5	1372.1	1733.5	2392.7	3274.4	3602.0	3758.9	3629.8
42.5°	855.8	869.7	915.4	1080.2	1258.9	1606.4	2279.5	3355.8	3848.2	4026.9	3917.7
45°	734.7	742.6	810.2	945.2	1137.8	1455.5	2158.4	3486.8	4086.5	4451.9	4388.3
47.5°	589.7	593.7	651.3	792.3	992.8	1304.6	1971.8	3480.9	4279.1	4876.8	5055.5
50°	460.7	470.6	514.3	629.5	818.1	1119.9	1755.3	3433.2	4521.4	5361.3	5712.8
52.5°	367.3	369.3	397.1	488.5	631.4	935.2	1523.0	3282.3	4749.7	5835.9	6518.9
55°	303.8	303.8	319.7	375.3	484.5	710.9	1251.0	3032.1	4777.5	6360.1	7398.6
56°	291.9	287.9	301.8	349.5	436.8	641.4	1123.9	2863.3	4817.2	6602.3	7839.4
57°	276.0	278.0	285.9	319.7	393.2	567.9	982.9	2698.5	4789.4	6800.9	8165.0
58°	268.1	264.1	280.0	301.8	347.5	504.4	885.6	2503.9	4745.7	6963.7	8639.6
59°	256.2	254.2	264.1	283.9	323.7	448.8	766.5	2293.4	4660.4	7174.2	8993.1
60°	252.2	250.2	254.2	270.1	297.8	393.2	675.1	2047.2	4432.0	7390.6	9431.9
61°	240.3	242.3	250.2	260.1	282.0	353.4	607.6	1795.0	4283.1	7573.3	9916.4
62°	242.3	238.3	242.3	250.2	266.1	325.6	532.2	1546.8	4017.0	7779.8	10279.8
63°	230.3	228.4	234.3	244.2	252.2	293.9	464.6	1336.4	3715.2	7827.5	10587.6
64°	226.4	224.4	226.4	240.3	242.3	276.0	411.0	1141.8	3278.3	7908.9	10982.7
65°	216.4	216.4	220.4	226.4	234.3	260.1	367.3	990.8	2843.5	7694.4	11103.8
66°	208.5	210.5	210.5	220.4	226.4	242.3	337.6	841.9	2426.5	7352.9	11221.0
67°	202.5	202.5	204.5	212.5	218.4	228.4	303.8	728.7	2047.2	6945.9	11040.3
67.5°	198.6	200.6	200.6	208.5	214.5	228.4	289.9	691.0	1830.8	6499.1	10905.3
68°	192.6	194.6	194.6	202.5	208.5	220.4	280.0	631.4	1687.8	6209.2	10655.1
69°	188.6	186.7	186.7	194.6	202.5	210.5	260.1	552.0	1342.3	5399.0	10289.7
70°	176.7	176.7	180.7	186.7	192.6	200.6	240.3	486.5	1135.8	4469.7	9348.5
71°	170.8	168.8	170.8	176.7	182.7	192.6	220.4	430.9	929.3	3711.2	8423.2
72°	158.9	162.8	162.8	168.8	174.7	180.7	206.5	375.3	780.4	2966.6	7404.5
72.5°	156.9	156.9	158.9	164.8	168.8	178.7	198.6	359.4	712.9	2615.1	6977.6
73°	150.9	150.9	152.9	158.9	162.8	172.8	192.6	323.7	649.3	2327.2	6179.4
74°	145.0	143.0	143.0	150.9	152.9	162.8	180.7	285.9	544.1	1753.3	4960.2
75°	135.0	135.0	137.0	141.0	143.0	150.9	166.8	254.2	458.7	1360.2	3880.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	111.2	113.2	115.2	119.1	119.1	125.1	137.0	176.7	280.0	689.0	1781.1
80°	81.4	85.4	91.3	97.3	95.3	95.3	107.2	127.1	166.8	309.8	683.1
82.5°	65.5	69.5	63.5	71.5	71.5	67.5	77.4	93.3	113.2	152.9	244.2
85°	43.7	45.7	37.7	43.7	41.7	41.7	51.6	55.6	69.5	85.4	121.1
87.5°	19.9	19.9	15.9	17.9	17.9	17.9	25.8	19.9	29.8	41.7	71.5
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):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
0°	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8
2.5°	1695.8	1703.7	1703.7	1695.8	1689.8	1695.8	1691.8	1681.9	1691.8	1695.8	1697.7
5°	1719.6	1703.7	1711.6	1693.8	1705.7	1703.7	1699.7	1709.7	1711.6	1711.6	1725.5
7.5°	1745.4	1765.3	1739.4	1741.4	1747.4	1723.6	1731.5	1735.5	1727.5	1743.4	1755.3
10°	1791.1	1799.0	1791.1	1761.3	1781.1	1765.3	1759.3	1777.2	1773.2	1777.2	1795.0
12.5°	1832.8	1846.7	1824.8	1822.8	1812.9	1799.0	1807.0	1805.0	1832.8	1836.7	1858.6
15°	1918.2	1882.4	1874.5	1872.5	1868.5	1862.6	1866.5	1868.5	1904.3	1910.2	1961.8
17.5°	1991.6	1985.7	1942.0	1957.9	1957.9	1934.0	1924.1	1957.9	1985.7	2015.4	2051.2
20°	2067.1	2061.1	2013.5	2015.4	1997.6	2019.4	2007.5	2039.3	2086.9	2096.9	2128.6
22.5°	2156.4	2130.6	2096.9	2100.8	2106.8	2090.9	2083.0	2126.6	2174.3	2202.1	2204.1
25°	2297.4	2231.9	2204.1	2208.1	2200.1	2188.2	2194.2	2249.8	2273.6	2333.2	2321.2
27.5°	2372.9	2335.1	2315.3	2269.6	2271.6	2253.7	2277.6	2361.0	2408.6	2454.3	2362.9
30°	2464.2	2440.4	2353.0	2337.1	2335.1	2327.2	2370.9	2478.1	2549.6	2575.4	2444.4
32.5°	2642.9	2547.6	2525.8	2511.9	2480.1	2490.0	2511.9	2652.8	2766.0	2760.1	2519.8
35°	2847.4	2781.9	2720.4	2708.4	2704.5	2676.7	2714.4	2879.2	2966.6	2940.8	2547.6
37.5°	3175.1	3075.8	2992.4	2946.7	2938.8	2918.9	3008.3	3139.3	3252.5	3151.2	2569.4
40°	3335.9	3224.7	3147.3	3119.5	3125.4	3153.2	3240.6	3441.2	3490.8	3304.1	2587.3
42.5°	3566.3	3445.1	3292.2	3278.3	3260.5	3274.4	3443.1	3713.2	3754.9	3510.7	2519.8
45°	3975.3	3792.6	3615.9	3536.5	3540.4	3578.2	3840.3	4136.1	4058.7	3653.6	2412.6
47.5°	4491.6	4223.5	4080.5	3973.3	4024.9	3983.2	4400.2	4636.5	4372.4	3834.3	2281.5
50°	5268.0	4892.7	4698.1	4569.0	4590.9	4626.6	5049.5	5250.1	4719.9	3921.7	2081.0
52.5°	6246.9	5764.4	5478.4	5305.7	5321.6	5399.0	5945.1	5883.5	5117.1	3995.2	1812.9
55°	7418.4	6922.0	6368.0	6296.5	6278.7	6463.3	7065.0	6546.7	5474.5	3878.0	1534.9
56°	8038.0	7509.8	6933.9	6787.0	6743.3	6872.4	7579.3	6878.3	5597.6	3746.9	1401.9
57°	8564.2	8059.8	7428.4	7178.2	7233.8	7476.0	8089.6	7190.1	5710.8	3611.9	1276.8
58°	9286.9	8711.1	8043.9	7853.3	7803.7	7996.3	8639.6	7503.8	5748.5	3472.9	1161.6
59°	10007.7	9316.7	8715.1	8367.6	8381.5	8732.9	9181.7	7877.1	5806.1	3296.2	1014.7
60°	10555.8	10208.3	9404.1	9144.0	9108.2	9616.6	9721.8	8127.3	5867.6	3057.9	911.4
61°	11332.2	10879.5	10130.9	9795.3	9892.6	10299.6	10305.6	8441.1	5776.3	2756.1	784.3
62°	11890.2	11771.0	10984.7	10665.0	10635.2	11175.3	10913.2	8717.1	5696.9	2470.2	693.0
63°	12543.4	12543.4	11826.6	11576.4	11590.3	12017.2	11177.3	8993.1	5605.5	2154.4	609.6
64°	12883.0	13309.9	12648.7	12297.2	12388.6	12757.9	11647.9	9173.8	5323.6	1834.8	536.1
65°	13176.9	13818.2	13450.9	13288.1	13149.1	13367.5	12055.0	9342.5	4892.7	1560.7	476.6
66°	13425.1	14296.8	14175.7	14000.9	13987.0	13937.4	12134.4	9336.6	4447.9	1318.5	417.0
67°	13300.0	14306.7	14527.1	14600.6	14578.7	14054.5	11995.4	9124.1	3878.0	1114.0	371.3
67.5°	13186.8	14225.3	14737.6	14695.9	14787.2	14153.8	12019.2	8864.0	3472.9	1008.7	349.5
68°	13087.5	14116.1	14823.0	14876.6	14830.9	14165.7	11888.2	8657.5	3196.9	947.2	329.6
69°	12334.9	13597.8	14686.0	14878.6	14761.4	13711.0	11471.2	8119.4	2539.7	808.2	303.8
70°	11580.4	12926.7	14020.8	14374.2	14229.3	12831.4	10945.0	7263.6	2094.9	691.0	274.0
71°	10535.9	11679.7	13135.2	13347.6	13172.9	11830.6	9856.8	6360.1	1630.2	585.8	244.2
72°	9118.2	10089.2	11479.1	11993.4	11735.3	10391.0	8756.8	5256.1	1320.5	492.4	222.4
72.5°	8415.2	9410.1	10750.4	10792.1	10841.7	9765.5	8290.1	4616.7	1151.7	456.7	216.4
73°	7748.1	8723.0	9882.6	10029.6	9819.1	8711.1	7593.2	4128.2	1052.4	417.0	208.5
74°	6278.7	6834.7	7795.7	7938.7	7754.0	7102.7	6205.2	3165.1	838.0	359.4	190.6
75°	4940.3	5246.1	6115.8	6028.5	5752.5	5524.1	4811.3	2418.5	679.1	315.7	176.7



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CANDELA DISTRIBUTION (continued):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	2220.0	2404.6	2549.6	2549.6	2565.5	2448.3	2218.0	1110.0	419.0	228.4	145.0
80°	845.9	947.2	978.9	980.9	994.8	1030.6	959.1	546.1	248.2	162.8	117.2
82.5°	613.6	857.8	923.3	875.7	879.6	794.3	367.3	242.3	156.9	113.2	85.4
85°	556.0	746.6	790.3	784.3	786.3	734.7	216.4	119.1	91.3	71.5	59.6
87.5°	270.1	264.1	280.0	315.7	307.8	399.1	182.7	59.6	39.7	29.8	29.8
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):

	135°	145°	155°	165°	175°	180°
0°	1691.8	1691.8	1691.8	1691.8	1691.8	1691.8
2.5°	1681.9	1679.9	1707.7	1679.9	1695.8	1683.8
5°	1701.7	1709.7	1715.6	1727.5	1699.7	1727.5
7.5°	1761.3	1769.2	1771.2	1781.1	1769.2	1767.2
10°	1807.0	1826.8	1838.7	1799.0	1822.8	1820.9
12.5°	1896.3	1876.5	1874.5	1866.5	1844.7	1836.7
15°	1959.8	1930.1	1912.2	1880.4	1854.6	1844.7
17.5°	2049.2	1991.6	1918.2	1852.6	1807.0	1771.2
20°	2104.8	2001.5	1854.6	1777.2	1707.7	1723.6
22.5°	2140.5	1991.6	1797.0	1697.7	1628.2	1648.1
25°	2152.5	1942.0	1757.3	1634.2	1566.7	1552.8
27.5°	2118.7	1884.4	1679.9	1540.9	1481.3	1493.2
30°	2102.8	1801.0	1608.4	1471.4	1392.0	1403.9
32.5°	2061.1	1715.6	1513.1	1374.1	1316.5	1296.6
35°	2001.5	1644.1	1421.7	1290.7	1221.2	1205.3
37.5°	1928.1	1554.8	1342.3	1183.5	1121.9	1110.0
40°	1818.9	1447.5	1227.1	1090.1	1018.6	1016.7
42.5°	1723.6	1344.3	1119.9	978.9	907.4	911.4
45°	1602.4	1205.3	996.8	875.7	804.2	808.2
47.5°	1447.5	1076.2	879.6	744.6	685.1	681.1
50°	1264.9	929.3	736.7	621.5	571.9	561.9
52.5°	1090.1	780.4	603.6	500.4	458.7	454.7
55°	869.7	607.6	470.6	393.2	361.4	363.4
56°	790.3	560.0	428.9	359.4	335.6	335.6
57°	714.8	496.4	389.2	331.6	309.8	309.8
58°	631.4	436.8	353.4	299.8	289.9	282.0
59°	573.9	397.1	319.7	283.9	268.1	266.1
60°	506.3	357.4	297.8	266.1	254.2	252.2
61°	448.8	321.7	274.0	248.2	244.2	244.2
62°	401.1	297.8	254.2	240.3	238.3	232.3
63°	359.4	274.0	244.2	228.4	222.4	228.4
64°	321.7	252.2	236.3	224.4	216.4	220.4
65°	291.9	242.3	226.4	218.4	210.5	212.5
66°	272.0	226.4	218.4	208.5	204.5	206.5
67°	246.2	218.4	210.5	200.6	198.6	200.6
67.5°	238.3	212.5	206.5	196.6	194.6	196.6
68°	232.3	208.5	204.5	194.6	192.6	190.6
69°	216.4	200.6	194.6	190.6	186.7	184.7
70°	202.5	192.6	188.6	182.7	178.7	176.7
71°	194.6	182.7	180.7	174.7	170.8	168.8
72°	184.7	176.7	172.8	164.8	162.8	164.8
72.5°	182.7	172.8	170.8	162.8	160.8	160.8
73°	176.7	164.8	166.8	158.9	154.9	158.9
74°	164.8	160.8	156.9	150.9	148.9	148.9
75°	154.9	150.9	146.9	143.0	143.0	143.0



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77.5°	131.1	129.1	131.1	123.1	121.1	119.1
80°	105.2	105.2	107.2	101.3	97.3	95.3
82.5°	79.4	81.4	85.4	79.4	75.5	71.5
85°	51.6	53.6	53.6	47.7	55.6	51.6
87.5°	25.8	27.8	25.8	23.8	27.8	27.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)