# LoCate EMC Testing Antennas
# For FCC Approval

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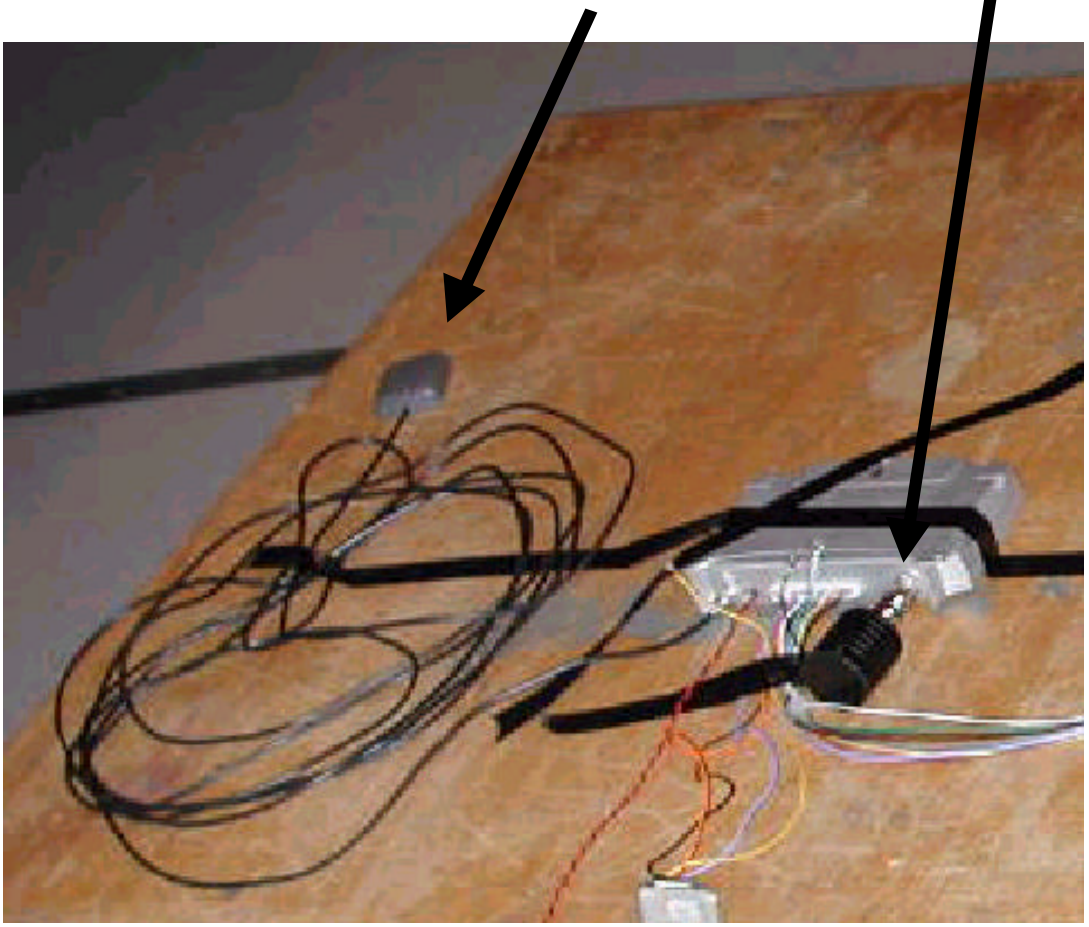
Per the photograph of the EMC testing, the radiated emissions testing was done with:

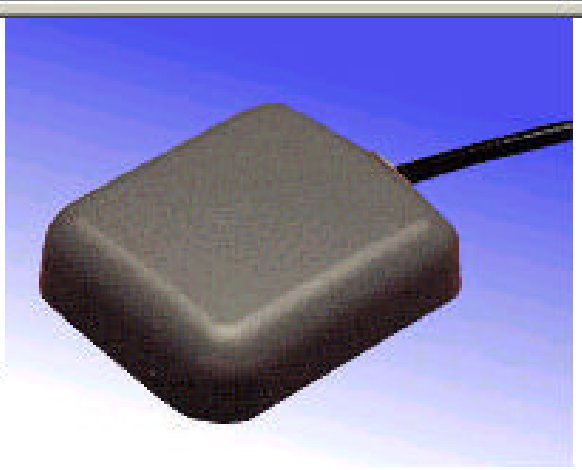
1. Cellular TNC antenna port terminated with a 5 watt 50 ohm RF terminator.
2. GPS SMA antenna port connected to a NaiS GPS antenna: DC3V, CCAF20KG02 Serial Number 001393.



The NaiS antenna specifications are available from the website at http://www.aromat.com/emdwn.htm. Attached is a copy of the specification for the GPS receive antenna used in the testing.

## VIC-1 HS
## Automotive Antenna

- Low Noise Figure 1.0
- Filter/LNA Design
- Low Profile
- Low Power (3V) Available



| Performance Characteristics: | |
|---|---|
| Operating Frequency | L1 1575.42 ± 1.023 MHz (typ) |
| Input Impedance | 50 Ohm |
| VSWR | 1.5 (typ.) |
| Polarization | Right hand circular |
| Azimuth Coverage | 360 degrees |
| Elevation Coverage | 0 degrees to 90 degrees |
| Gain Characteristics of Antenna Element | Gain: 3.0 dBi (typ.)<br>-10 dBi min. at 0 degrees elevation<br>Axial ratio: 3 dB (typ.) |
| Filtering | -40 dB(1670MHz)(typ.)<br>-40 dB(1480MHz)(typ.) |

| | |
|---|---|
| | Axial ratio: 3 dB (typ.) |
| Filtering | -40 dB(1670MHz)(typ.)<br>-40 dB(1480MHz)(typ.) |
| Total Gain | 24 dBi (typ.) w/6m. cable |
| Noise Figure | 1.0 dB (typ.), 1.5 dB (max.) |
| **Electrical Characteristics** | |
| Power Requirements | 5 ± 0.5 VDC (Available for 3 VDC) |
| Power Consumption | 20 mA (typ.) |
| **Physical Characteristics:** | |
| Dimensions | 46L x 39W x 12.5H mm |
| Weight | 35 g. w/o Cable |
| Cable Length | 6000 ± 70 mm |
| Mounting Method | Magnet |
| Connectors | SMA, SMB, BNC, TNC, OSX, GT5 |
| Color | Charcoal gray |
| **Environmental Characteristics:** | |
| Temperature | Operational: -40°C to +100°C<br>Storage:-40°C to +100°C |
| Humidity | 40 to 95% RH (Below Dew Point) |