

DATA SHEET 6.1-48

Data Sheet 6.2-1 - Conducted Harmonic Emissions (TX Mode: Voice)

| Type Number: VHF-2100 | Serial Number: 18J9V |
|-----------------------------|----------------------------------|
| Date Tested: 11/05/03 | Tested By: Rubicom Systems, Inc. |
| Operating Frequency: 118MHz | NF = Noise Floor of Receiver |

| Spurious Output Frequency (MHz) | Test Antenna Level (dBµV) | Spurious Level (dBµV) | Margin (dB) | Requirement (dBµV) |
|------------------------------------|------------------------------|--------------------------|----------------|--------------------|
| 118 | 149.25 | (0.2 p. 1) | (0.2) | (=====) |
| 236 | и | NF 78.5 | > -20 | 106.25 |
| 354 | u | NF 76.5 | u | u |
| 472 | u | NF 75.0 | u | u |
| 590 | u | NF 75.8 | u | u |
| 708 | u | NF 76.3 | u | u |
| 826 | u | NF 77.5 | u | u |
| 944 | u | NF 77.5 | u | u |
| 1062 | u | NF 76.5 | " | " |
| 1180 | 149.25 | NF 77.0 | > -20 | 106.25 |

Data Sheet 6.2-1 - Conducted Harmonic Emissions (TX Mode: Voice)

| Type Number: VHF-2100 | Serial Number: 18J9V |
|-----------------------------|----------------------------------|
| Date Tested: 11/05/03 | Tested By: Rubicom Systems, Inc. |
| Operating Frequency: 127MHz | NF = Noise Floor of Receiver |

| Spurious Output | Test Antenna Level | Spurious Level | Margin | Requirement |
|-----------------|--------------------|----------------|--------|-------------|
| Frequency (MHz) | (dBµV) | (dBµV) | (dB) | (dBµV) |
| 127 | 145.5 | | | |
| 254 | " | NF 77.6 | > -20 | 102.5 |
| 381 | u | NF 77.0 | " | " |
| 508 | u | NF 75.0 | " | " |
| 635 | u | NF 75.5 | " | " |
| 762 | u | NF 75.6 | " | " |
| 889 | u | NF 77.2 | " | " |
| 1016 | u | NF 76.2 | " | " |
| 1143 | u | NF 76.0 | " | " |
| 1270 | 145.5 | NF 77.7 | > -20 | 102.5 |

Data Sheet 6.2-1 - Conducted Harmonic Emissions (TX Mode: Voice)

| Type Number: VHF-2100 | Serial Number: 18J9V |
|-----------------------------|----------------------------------|
| Date Tested: 11/05/03 | Tested By: Rubicom Systems, Inc. |
| Operating Frequency: 127MHz | NF = Noise Floor of Receiver |

| Spurious Output Frequency (MHz) | Test Antenna Level (dBµV) | Spurious Level (dBµV) | Margin (dB) | Requirement (dBµV) |
|------------------------------------|---------------------------|--------------------------|----------------|--------------------|
| 127 | 146.2 | | | |
| 254 | 33 | NF 77.9 | > -20 | 103.2 |
| 381 | и | NF 76.5 | " | u |
| 508 | и | NF 76.0 | " | u |
| 635 | и | NF 75.9 | " | u |
| 762 | и | NF 76.5 | " | u |
| 889 | и | NF 76.5 | " | и |

| 1016 | и | NF 76.9 | и | и |
|------|-------|---------|-------|-------|
| 1143 | и | NF 77.5 | " | u |
| 1270 | 146.2 | NF 77.5 | > -20 | 103.2 |

Data Sheet 6.2-2 - Conducted Harmonic Emissions (TX Mode 2)

| Type Number: VHF-2100 | Serial Number: 18J9V |
|-----------------------------|----------------------------------|
| Date Tested: 11/05/03 | Tested By: Rubicom Systems, Inc. |
| Operating Frequency: 118MHz | NF = Noise Floor of Receiver |

| Spurious Output | Test Antenna Level | Spurious Level | Margin | Requirement |
|-----------------|--------------------|----------------|--------|-------------|
| Frequency (MHz) | (dBµV) | (dBµV) | (dB) | (dBµV) |
| 118 | 149.75 | | | |
| 236 | ce | NF 77.5 | > -20 | 106.75 |
| 354 | ce | NF 78.0 | u | u u |
| 472 | и | NF 76.5 | u | u u |
| 590 | ce | NF 77.2 | u | u u |
| 708 | ce | NF 77.5 | u | u |
| 826 | ω | NF 77.0 | " | u |
| 944 | ω | NF 78.0 | " | u |
| 1062 | u | NF 77.0 | " | íí. |
| 1180 | 149.75 | NF 77.5 | > -20 | 106.75 |

Data Sheet 6.2-2 - Conducted Harmonic Emissions (TX Mode 2)

| Type Number: VHF-2100 | Serial Number: 18J9V |
|-----------------------------|----------------------------------|
| Date Tested: 11/05/03 | Tested By: Rubicom Systems, Inc. |
| Operating Frequency: 127MHz | NF = Noise Floor of Receiver |

| Spurious Output | Test Antenna Level | Spurious Level | Margin | Requirement |
|-----------------|--------------------|----------------|--------|-------------|
| Frequency (MHz) | (dBµV) | (dBµV) | (dB) | (dBµV) |
| 127 | 146.2 | | | |
| 254 | 33 | NF 77.5 | > -20 | 103.2 |
| 381 | u | NF 76.5 | u | u |
| 508 | u | NF 76.5 | u | u |
| 635 | u | NF 76.0 | u | u |
| 762 | и | NF 76.0 | ű | u |
| 889 | u | NF 77.0 | u | u |
| 1016 | u | NF 77.0 | u | u |
| 1143 | u | NF 77.2 | u | u |
| 1270 | 146.2 | NF 78.0 | > -20 | 103.2 |

Data Sheet 6.2-2 - Conducted Harmonic Emissions (TX Mode 2)

| Type Number: VHF-2100 | Serial Number: 18J9V |
|-----------------------------|----------------------------------|
| Date Tested: 11/05/03 | Tested By: Rubicom Systems, Inc. |
| Operating Frequency: 127MHz | NF = Noise Floor of Receiver |

| Spurious Output | Test Antenna Level | Spurious Level | Margin | Requirement |
|-----------------|--------------------|----------------|--------|-------------|
| Frequency (MHz) | (dBµV) | (dBµV) | (dB) | (dBµV) |
| 127 | 145.5 | | | |
| 254 | 33 | NF 76.7 | > -20 | 102.5 |
| 381 | ce | NF 77.0 | u | u |
| 508 | ce | NF 76.7 | u | u |
| 635 | cc | NF 77.5 | " | ii. |
| 762 | u | NF 76.8 | " | tt. |
| 889 | и | NF 77.5 | " | u |

| 1016 | и | NF 77.0 | и | и |
|------|-------|---------|-------|-------|
| 1143 | и | NF 78.0 | " | " |
| 1270 | 145.5 | NF 77.5 | > -20 | 102.5 |

Data Sheet 6.2-3 - Conducted Harmonic Emissions (TX Mode 3)

| Type Number: VHF-2100 | Serial Number: 18J9V | | |
|-----------------------------|----------------------------------|--|--|
| Date Tested: 11/05/03 | Tested By: Rubicom Systems, Inc. | | |
| Operating Frequency: 118MHz | NF = Noise Floor of Receiver | | |

| Spurious Output | Test Antenna Level | Spurious Level | Margin | Requirement |
|-----------------|--------------------|----------------|--------|-------------|
| Frequency (MHz) | (dBµV) | (dBµV) | (dB) | (dBµV) |
| 118 | 148.3 | | | |
| 236 | ce | NF 78.7 | > -20 | 105.3 |
| 354 | ω | NF 78.0 | " | " |
| 472 | и | NF 77.5 | u | " |
| 590 | ω | NF 77.0 | " | " |
| 708 | ω | NF 76.5 | " | " |
| 826 | ω | NF 77.0 | " | " |
| 944 | ω | NF 77.4 | " | " |
| 1062 | u | NF 77.8 | " | íí |
| 1180 | 148.3 | NF 77.5 | > -20 | 105.3 |

Data Sheet 6.2-3 - Conducted Harmonic Emissions (TX Mode 3)

| Type Number: VHF-2100 | Serial Number: 18J9V | |
|-----------------------------|----------------------------------|--|
| Date Tested: 11/05/03 | Tested By: Rubicom Systems, Inc. | |
| Operating Frequency: 127MHz | NF = Noise Floor of Receiver | |

| Spurious Output | Test Antenna Level | Spurious Level | Margin | Requirement |
|-----------------|--------------------|----------------|--------|-------------|
| Frequency (MHz) | (dBµV) | (dBµV) | (dB) | (dBµV) |
| 127 | 145.8 | | | |
| 254 | " | NF 78.5 | > -20 | 102.8 |
| 381 | и | NF 77.5 | u | u |
| 508 | и | NF 77.0 | u | u |
| 635 | и | NF 77.3 | u | u |
| 762 | и | NF 77.2 | ű | u |
| 889 | и | NF 77.3 | u | u |
| 1016 | и | NF 77.8 | u | u |
| 1143 | и | NF 78.0 | u | u |
| 1270 | 145.8 | NF 77.5 | > -20 | 102.8 |

Data Sheet 6.2-3 - Conducted Harmonic Emissions (TX Mode 3)

| Type Number: VHF-2100 | Serial Number: 18J9V | | |
|-----------------------------|----------------------------------|--|--|
| Date Tested: 11/05/03 | Tested By: Rubicom Systems, Inc. | | |
| Operating Frequency: 127MHz | NF = Noise Floor of Receiver | | |

| Spurious Output | Test Antenna Level | Spurious Level | Margin | Requirement |
|-----------------|--------------------|----------------|--------|-------------|
| Frequency (MHz) | (dBµV) | (dBµV) | (dB) | (dBµV) |
| 127 | 146.5 | | | |
| 254 | 33 | NF 79.0 | > -20 | 103.5 |
| 381 | ce | NF 77.0 | u | " |
| 508 | ce | NF 76.5 | u | " |
| 635 | u | NF 76.5 | " | ii. |
| 762 | u | NF 77.0 | " | " |
| 889 | и | NF 77.7 | " | " |

| 1016 | ш | NF 76.8 | ii. | u |
|------|-------|---------|-------|-------|
| 1143 | cc | NF 78.0 | " | " |
| 1270 | 146.5 | NF 77.5 | > -20 | 103.5 |

APPENDIX A COMPLIANCE LETTER

FEDERAL COMMUNICATIONS COMMISSION

Laboratory Division 7435 Oakland Mills Road Columbia, MD 21046

November 08, 2002

Registration Number: 90911

Rubicom Systems, Inc. 284 West Drive, Suite B Melbourne, FL 32904

Attention:

Joseph Barbee

Re:

Measurement facility located at Melbourne

3 meter site
Date of Renewal: November 08, 2002

Gentlemen:

Your request for renewal of the registration of the subject measurement facility has been received. The information submitted has been placed in your file and the registration has been renewed. The name of your organization will remain on the list of facilities whose measurement data will be accepted in conjunction with applications for Certification under Parts 15 or 18 of the Commission's Rules. Please note that the file must be updated for any changes made to the facility and the registration must be renewed at least every three years.

Measurement facilities that have indicated that they are available to the public to perform measurement services on a fee basis may be found on the FCC website www.fcc.gov under E-Filing, OET Equipment Authorization Electronic Filing, Test Firms.

Phyllis Parrish Information Technician