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Exhibit 10: Measurements Demonstrating Conformance to 97.307 and 97.317

External Radio Frequency
Linear Amplifier
Model 1.3K-FA





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Measurements Demonstrating Conformance to 97.307 and 97.317

Amplifier under test operated at frequency f1 with CW (A1A) excitation. Spectrum Analyzer with a 60 dB input attenuator was used to observe all frequencies, from f1 through at least 10f1 for harmonic and spurious emissions.

97.317(a)(1)(2)(3) & 97.317(b). Spurious Emission per 97.307(c)(d)(e) and Gain versus frequency.

| Power Gain per 97.317 (a), (2). | | | | Spurious emission per 97.307 (d), (e). | | | | | |
|---------------------------------|----------------------|-----------------------|-----------------------|--|---------|---------|---------|---------------------------------|--|
| Frequency f1 MHz | Input Power, W | Output Power, W | Amplifier Gain, dB | 2f1 dBc | 3f1 dBc | 4f1 dBc | 5f1 dBc | 6-10 f1 dBc worst case | |
| 1.900 | 44.5 | 1300 | 14.6 | -59.9 | -54.6 | > -70 | -51.9 | > -60 | |
| 3.750 | 43.5 | 1300 | 14.7 | -57.6 | -54.7 | > -70 | -54.4 | > -60 | |
| 7.150 | 45.4 | 1300 | 14.2 | -59.4 | -60.7 | > -70 | -47.8 | > -60 | |
| 10.125 | 45.4 | 1300 | 14.2 | > -70 | -63.8 | > -70 | -47.3 | > -60 | |
| 14.175 | 44.0 | 1300 | 14.7 | -53.7 | -60.5 | > -70 | -60.0 | > -60 | |
| 18.100 | 43.7 | 1300 | 14.7 | -64.0 | > -70 | > -70 | -60.9 | > -70 | |
| 21.225 | 44.4 | 1300 | 14.6 | -66.5 | -55.7 | > -70 | > -70 | > -70 | |
| 24.930 | 44.5 | 1300 | 14.6 | -48.5 | > -70 | > -70 | > -70 | > -70 | |
| 28.500 | 43.7 | 1300 | 14.7 | 55.0 | > -70 | > -70 | -61.6 | > -65 | |
| 50.250 | 46.0 | 1300 | 14.5 | > -70 | > -70 | > -70 | > -70 | > -70 | |

The amplifier conforms per 97.317 (a), (1). See Spurious emission per 97.307 (d), (e). The Power Gain was less than 15 dB. See Power Gain per 97.317 (a), (2).

Amplifier was not capable of operation on any frequency outside the radio amateur band, 26-28 MHz included, for the look-up table in its software per 97.317 (a), (3). Conformance to 97.317 (b), (1), (2).

To meet the requirements of 97. 317(a)(3), and (b) the equipment employs an internal software lock-up table, it ensures that the only frequencies permitted are in the radio amateur bands with the exclusion of the 26-28 MHz segment.





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Spurious Emission per 97.307(a)(b).

| Intermodulation in dB per 97.307 (a),(b) | | | | | | | | | | | |
|--|-----------------|-------|-------|------------|---------|-------------------|--|--|--|--|--|
| Freq. (MHz) | Output Power | D3 | D5 | D 7 | D9 | D11 and higher | | | | | |
| (=====) | W Pep | dB | dB | dB | dB | dB | | | | | |
| 1.800 | 1000 | -30.8 | -43.5 | -43.5 | >-51.3 | > -60 | | | | | |
| 3.750 | 1000 | -34.9 | -49.8 | -48.0 | -51.9 | > -60 | | | | | |
| 7.150 | 1000 | -33.6 | -44.2 | -51.2 | -55.4 | > -60 | | | | | |
| 10.125 | 1000 | -32.3 | -43.7 | -51.2 | -55.4 | > -60 | | | | | |
| 14.175 | 1000 | -32.2 | -47.2 | -51.5 | -52.7 | > -60 | | | | | |
| 18.100 | 1000 | -31.3 | -43.1 | -59.4 | -55.9 | > -60 | | | | | |
| 21.225 | 1000 | -31.4 | -43.8 | -57.7 | -55.8 | > -60 | | | | | |
| 24.930 | 1000 | -30.2 | -47.2 | -53.7 | -53.6 | > -60 | | | | | |
| 28.500 | 1000 | -30.8 | -49.8 | -51.9 | -52.6 | > -60 | | | | | |
| 50.250 | 1000 | -31.1 | -45.4 | -54.7 | > -55.3 | > -60 | | | | | |

Linear EXPERT 1.3K-FA conforms:

97.317(a)(1): Meets the spurious emission standards 97.307(d)(e) when the amplifier is operated at the its full output power and when the amplifier in the "standby" or "off" positions while connected to the transmitter.

97.317(a)(2): The Power Gain does not exceed 15 dB.

97.317(a)(3): Amplifier is not capable of operation on any frequency outside the radio amateur band, 26-28 MHz included, for the look-up table in its software.

97.317(b)(1)(2): The amplifier possesses none of the prohibited characteristics listed in this section.

97.317: The amplifier meets the spurious emission standards per 97.307(a)(b)(d)(e).