6.4 TEST TYPE: Spurious Emissions at Antenna Terminals

6.4.1 TECHNICAL SPECIFICATION: 2.991; 24.238(a)

6.4.2 TEST DATE(S): 20 Aug 1999

6.4.3 MEASUREMENT PROCEDURES:

As required by §2.991 of CFR 47, *spurious emissions at antenna terminal measurements* were made at the RF output terminals using a 50 Ω attenuator and spectrum analyzer set for a 30 kHz bandwidth. This test was performed with Digitally modulated carrier signals. The Digital signal generator was adjusted for continuous transmit on frequencies in both the uplink and down-link frequency bands. The frequency spectrum was investigated from 9.0 KHz to 20.0 GHz. For measuring emissions above 2 GHz, a high-pass filter was used to eliminate the fundamental transmit frequency to prevent possible saturation effects on the front end of the spectrum analyzer.

6.5.4 RESULTS:

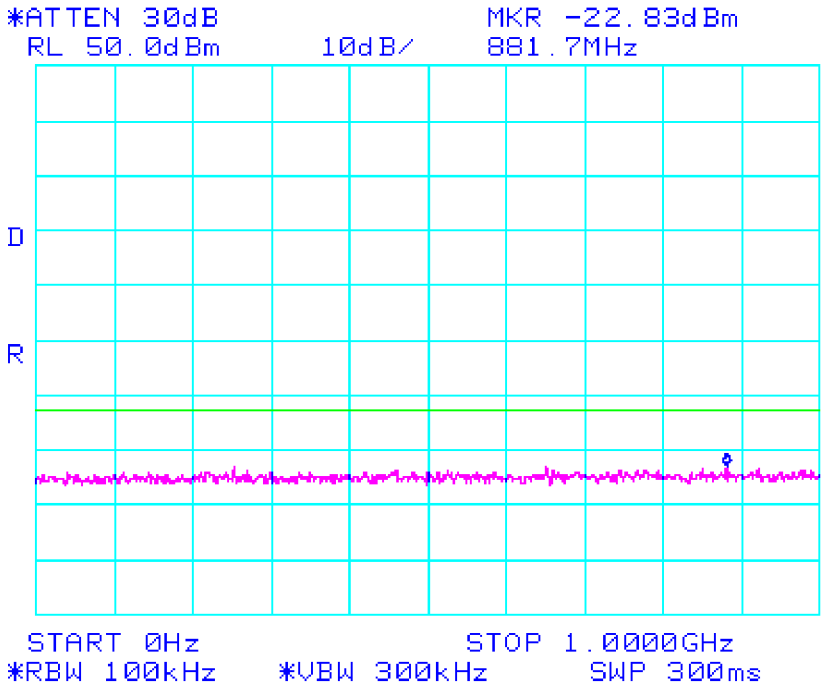
Equipment complies with Section 2.991and 24.238(a)

SUMMARY OF SPURIOUS EMISSIONS AT ANTENNA TERMINALS - DownLink (Base)

Frequency Range	Emission Frequency	Emission Level (dBm)	Limit (dBm)
0 - 1 GHz	881.7 MHz	-22.83	-13.1
1 - 2 GHz	1.401 GHz	-14.00	-13.1
2 - 2.90 GHz	2.063 GHz	-22.83	-13.1
2.90 - 5 GHz	3.919 GHz	-41.00	-13.1
5 - 9 GHz	5.893 GHz	-30.17	-13.1
9 - 20.0 GHz	19.74 GHz	-27.17	-13.1

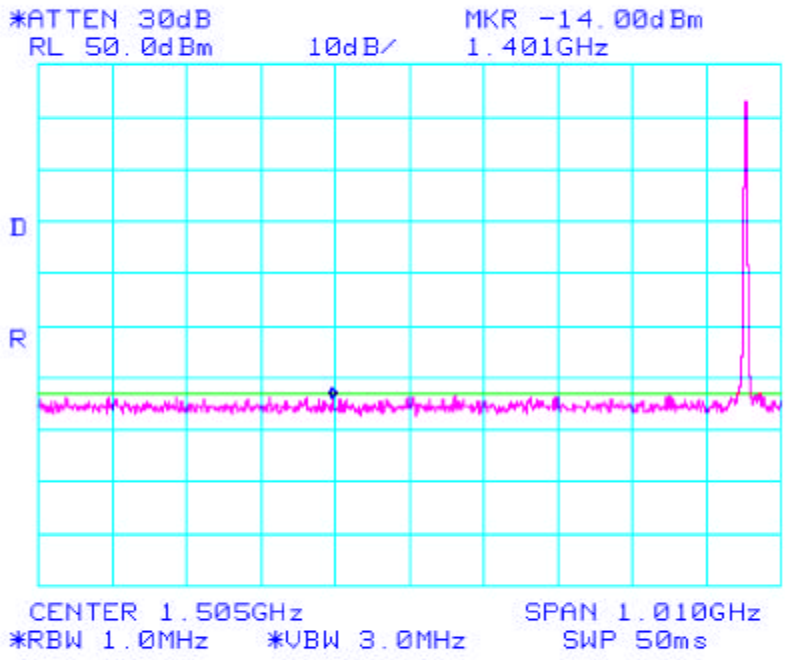
Plots on the following pages illustrate compliance to the required rule parts.

Conducted spurious emissions as measured at Antenna Terminals
EMI1249 **plot #0**

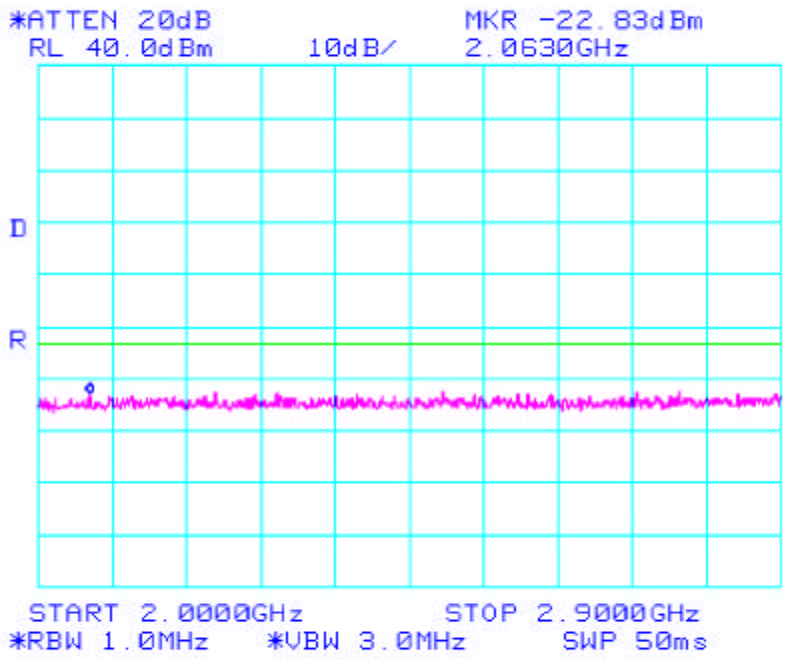


- 13 dBm

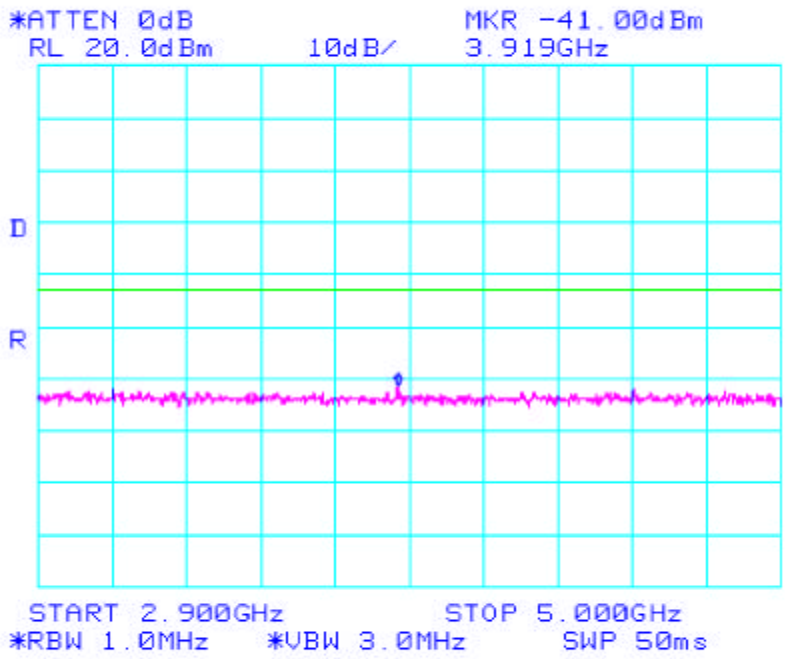
Conducted Spur emissions measured at Antenna Terminal
emi1249



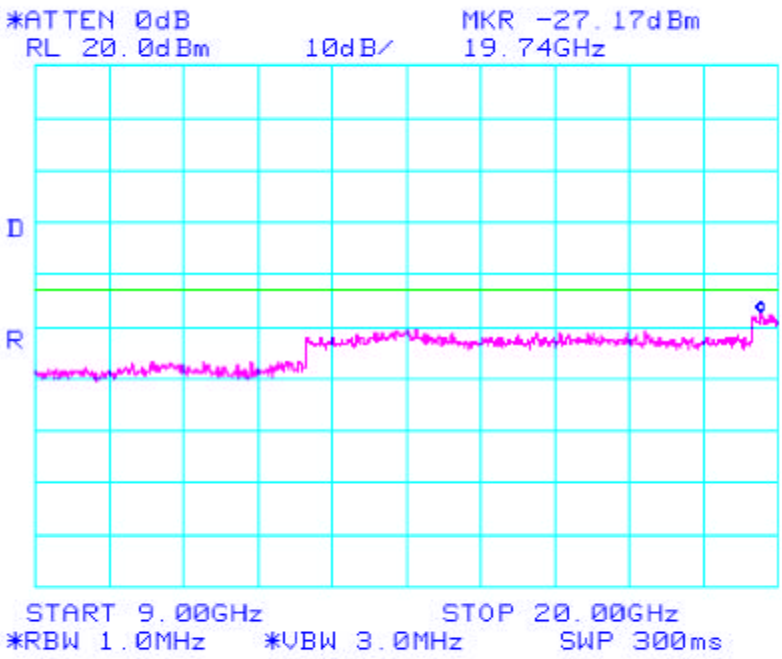
Conducted Spur emissions at Antenna Terminal
emi1249



Conducted Spur emissions at Antenna Terminal
emi1249



Conducted Spur emissions at Antenna Terminal
emi1249



-

6.6 TEST TYPE: Spurious Emissions at Antenna Terminals @ Frequency Block Edge +/- 1MHz

6.6.1 TECHNICAL SPECIFICATION: 47CFR2.991;24.238(b)

6.6.2 TEST DATE(S): 16 Aug 1999