FCC ID: AS5CMP-34

Exhibit 15:

Section 2.1051

Spurious Emissions at Antenna Terminals

Spurious Emissions at the antenna terminals were investigated over the frequency range of 10 MHz to beyond the 10th harmonic of the carrier frequency. The RF output from the transmitter was reduced (to an amplitude usable by the spectrum analyzer) by using a attenuator calibrated over the 10 MHz-20GHz range. The RF power level was measured prior, during and post test via the test setup in Figure 15A. Measurements were made using a Rohde & Schwarz ESMI EMI Test Receiver, a PC based computer test controller and a TILE ™ software program to acquire the test data. This system allows measurement and presentation of the data in an accurate and compact form for FCC review. The volume of collected data is greater than $2x10^6$ data points over the frequency range of 10 MHz to 20 GHz. The required emission limitation specified in Section 24.238 of the Code was applied to these tests. Based upon the criterion given in Section 24.238 of the Code the required emission limitation is equal to -55.04 dBc or -13 dBm. The -13 dBm limit holds for all signals when measured with the specified 1 MHz resolution bandwidth. The measurements of the spurious signals were made using a resolution bandwidth of 30 kHz. Harmonics of the CDMA Carrier must be shown to be lower than -13 dBm –16.2 dB =-29.1 dBm per equation (1) in Exhibit 14. The measurement of narrow-band spurious signals, such as clocks, oscillators and other pure tone types of signals are unchanged by variation of the analyzers resolution bandwidth. The -13 dBm limit is therefore appropriate for all narrowband signals. The carrier signal shown on these plots is the sum of measurements at resolution Bandwidths of 30 kHz, 120 kHz and 1 MHz. This was done so that the carrier plot correctly and accurately depicts the carrier output power in relation to the spurious signals and the defined limit.

The applied signal met the recommended characteristics per ANSI J-STD-008 section 3.1.4 as defined below.

Туре	Number of	Fraction of	Fraction of	Comments
	Channels	Power (Linear)	Power (dB)	
Pilot	1	0.1490	-8.3	Walsh 0
				Walsh 32, always 1/8
Sync	1	0.015/p	-18.3	rate
	1		-12.7	Walsh 1, full rate
Paging	I	0.054	-12.7	only
				Variable Walsh
	6	0.13	-8.8	Assignments, full
Traffic		each	each	rate only

TABLE 15.1 Base Station Test Model, Nominal

Test Results Summary:

Measurements were performed while transmitting at the upper and lower channels in each PCS Block tested. The attached spectral plots document the typical performance and shows that there are no emissions above the applicable limit of –29.1 dBm for Carrier harmonics and –13 dBm for all narrowband spurious. The attached data plots document the results for single, dual and three carrier **ULAM / MCA** test configurations.

Conducted Spurious tests on the Receiver antenna terminal documented compliance with the 2 nW requirement of 47CFR Part 15 section 15.111.

Exhibit 15 continued

