EXHIBIT 3

Supporting Documentation

2.815 Power Output
2.201 Modulation Characteristics
2.202 Occupied Bandwidth
2.1051 Emissions at Antenna Port
2.1053 Field Strength Spurious Radiation
2.1055 Frequency Stability

2.983. MDR-8000 FCC Type Acceptance

A. Name of Manufacturer
Alcatel USA
3400 W. Plano Parkway
Plano, TX 75075

B. The equipment for which Type Acceptance is requested is referred to as the MDR-8X02. MDR is an abbreviation for Microwave Digital Radio. The 8 refers to an Alcatel product numbering scheme that implies the eighth generation of microwave products. The X can either be a 5 or a 7 referring to the modulation scheme implemented. The 5 implies a 32 Trellis Coded Modulation (TCM) scheme while the 7 implies 128 TCM. The last two digits imply the frequency band of the radio. In this case 2 GHz.

C. The MDR-8X02 is planned to be a fully supported microwave product with sales exceeding the quantity of one.

D. Technical Description

1.

FCC ID	Emission Designator
JF6-8702-16	5M00D7W
JF6-8702-12	3M75D7W
JF6-8702-8	2M50D7W
JF6-8702-4	1M25D7W
JF6-8702-2	800KD7W
JF6-8502-8	3M75D7W
JF6-8502-4	2M50D7W
JF6-8502-2	1M25D7W

2. 2305 to 2360 MHz

3. One transmit power option of +33 dBm is provided for the MDR-8X02 WCS radio. The power is measured at the top of the waveguide stack. For operation in the C and D blocks of the WCS band it was necessary to reduce the transmit power by 1 dB due to the increase insertion loss of the 6 MHz narrow band filter.

4. The maximum rated RF power as submitted in FCC Form 731 is 2 Watts

MDR-8702-2 Private/Common Carrier Digital Radio

Radio Characteristics

FCC Identification	JF6-8702-2
Frequency Range	2.305-2317.6 GHz and 2347.5-2.360 GHz
RF Channel Bandwidth	5.00 MHz
Occupied Bandwidth	.588 MHz
Emission Designation	0M80D7W
Modulation Type	128 TCM
Data Range	3.09 Mb/s
Baud Rate	.535 Mbaud/s
Data Efficiency	5.78 bits/Hz
Transmit Power	+33 dBm (2 Watts)
Transmit Frequency Stability	0.005 % (-20 to +50 Degrees C.)
Primary Voltage Range	24 – 48 Vdc (positive or negative)
Operating Temperature Range	0 to 50 Degrees C

Attached Support Documents

Equipment Photograph
FCCID Label
Drawing Defining location of FCCID label
2.815 RF Power Output
2.201 Modulation Characteristics
2.202 Occupied Bandwidth
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2.815 RF POWER OUTPUT

Power output is measured and set at the RF antenna port of the transmitter using an HP 436A Power Meter with an HP 8481 B High Power sensor.

The transmit power is set at the desired level by adjusting the Power Amplifier GAIN ADJ at the front of this module. The Power Amplifier has the following characteristics:

Alcatel Part Number:	3EM 09037 ADAA
Type Design:	Solid State
DC Power Requirement:	+10.5 VDC @ 7.3A -12 VDC @ 100 mA -5 VDC @ 100 mA
Gain:	25 dB typical
Output Power:	+33 dBm transmit power at the RF antenna

2.201 MODULATION CHARACTERISTICS

The modulation employed in this equipment is 128 and 32 TCM (Trellis Coded Modulation). This modulation was selected to achieve good BER (bit error rate) performance while maintaining a high spectral efficiency.

The TCM signal is similar to a QAM signal, but has been digitally encoded to allow the receiver to correct small noise perturbations. It is generated by direct modulation of the RF carrier and its quadrature frequency component using the I and Q baseband signals. The I and Q baseband signals are fed a modulator IC on the RF Board. The output of the transmit local oscillator is also fed to the modulator IC through a transformer splitter. Each baseband signal (I and Q) is applied to a mixer inside the Modulator IC where it is translated to RF using the In-phase and quadrature components also within the IC. The translated I and Q spectrums are then combined within the same IC to form the suppressed carrier RF spectrum which is subsequently fed into the linear solid state power amplifier.

Overhead data is added to the traffic data to carry framing and service channel information. The service channels are used to carry alarm reporting and voice orderwire data. They also provide a channel for microprocessor communication between radio transmitters and receivers. The receiver processor must be able to communicate with the transmit processor for ATPC (automatic transmit power control used to reduce transmit power when not needed) and for indicating possible transmit failure due to total loss of receive signal.

Figure 1 shows the typical transmit spectrum characteristics of the modulated signal.

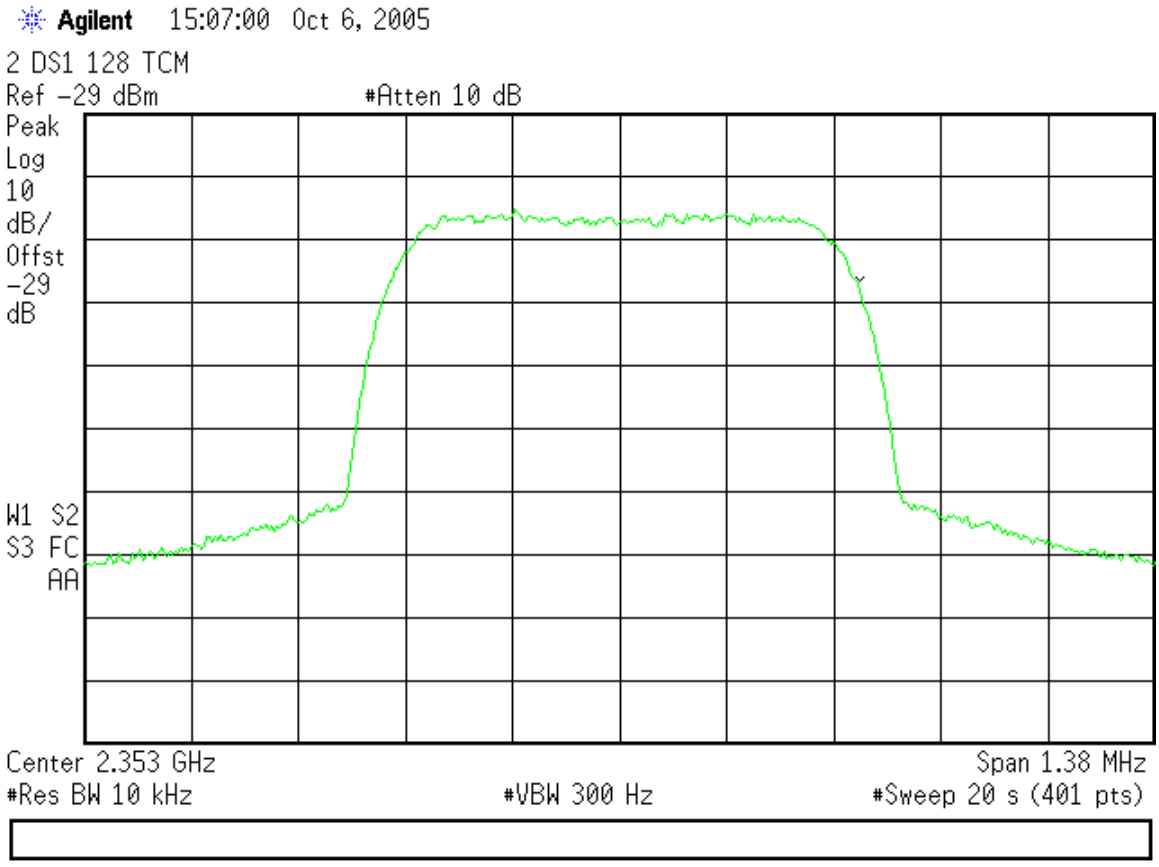

FIGURE 1. Typical Spectrum

2.202 OCCUPIED BANDWIDTH

Occupied bandwidth was measured at the RF antenna port of the transmitter using an Agilent 4407B spectrum analyzer. This analyzer is equipped to directly measure the 99% power bandwidth of signal.

2 DS1 128 TCM