3.8 FCC Part 15 Subpart C Field Strength Harmonics

3.8.1 Equipment Used

Equipment Used	Asset #	Serial #	Cal Date
Tektronix 496 Spectrum Analyzer	56	B010206	4/02
Hewlett Packard 8566B Spectrum Analyzer	47	2637A04064	7/01
Hewlett Packard 8566 Display Analyzer Main	46	2648A14289	7/01
Hewlett Packard 85685A RF Preselector	48	2648A00483	7/01
Eaton 94626-1 Horn Antenna	334	145	1/02
EMCO 3115 Microwave Horn Antenna	376	2796	1/02

3.8.2 Test Conditions

Field Strength of harmonics emissions testing were performed with the OpenSky ISM Radio set up on a wooden table above the turntable at a distance of 3 meters from a tuned dipole antenna within Open Area Test Site A. The OpenSky ISM Radio was configured to operate in the continuous mode of operation to maximize the emissions. The OpenSky ISM Radio was set up and powered by 48VDC. The worst case signals detected were recorded.

3.8.3 Test Method

The test method of ANSI C63.4 was followed. A manual scan was performed from 30MHz to 25GHz. During this scan, the antenna, turntable and the EUT's cable positions were manipulated to maximize the emission levels in a given frequency band displayed on the spectrum analyzer.

3.8.4 Results

The M/A-Com OpenSky ISM Radio meets the FCC Part 15 Subpart C Harmonics Field Strength requirements.

3.8.5 Test Data

RADIATED E FIELD EMISSION MEASUREMENTS

CUSTOMER: M/A-COM **DATE: JUNE 19, 2001**
EQUIPMENT: OPENSKY ISM RADIO **TEST NUMBER: 8**
TESTED BY: ROBERT FOSTER **TEST PROCEDURE: ANSI C63.4 & FCC 97-114**
OPERATING MODE: CONTINUOUS TRANSMIT **TEST SPEC: FCC PART 15 SUBPART C**
FREQUENCY RANGE: 30MHZ – 25 GHZ

FREQUENCY MHZ	PEAK MEASURED LEVEL -dBm	QUASI-PEAK MEASURED LEVEL dBuV	ANTENNA HEIGHT (METERS)	TURNTABLE AZIMUTH (DEGREES)	ANTENNA H/V	ANTENNA FAC/CABLE LOSS dB	FIELD LEVEL dBuV/m ✯	LIMIT dBuV/m (QP)
No harmonic emissions were detected								

✯All signals greater than 3dB from the limit are calculate to the nearest whole number.
✯Field Level (dBuV/m) = [107 – Measured level (dBm)] + Antenna Factor/Cable Loss (dB)
Ambient Temperature: 68°F Humidity: 25 % Atmospheric Pressure: 29.8″

FORM CTS-DS-001R