

3.0 TESTS PERFORMED

3.1 FCC Part 15 Subpart B Radiated Emissions

3.1.1 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
Rhode and Schwartz ESV Test Receiver	521	979531/031	1/02
Hewlett Packard 8447D Pre Amp	633	2805A03022	1/02
EMCO 3120 Tuned Dipole Antenna B1	477	56	1/02
EMCO 3121 Tuned Dipole Antenna B2	478	176	1/02
EMCO 3121 Tuned Dipole Antenna B3	479	728	1/02
EMCO 3109 Biconical Antenna	119	2414	1/02
EMCO 3146 Log Periodic Antenna	377	3380	1/02
Eaton 94626-1 Horn Antenna	334	145	1/02
EMCO 3115 Microwave Horn Antenna	376	2796	1/02
EMCO 3105 Microwave Horn Antenna	78	2118	1/02

3.1.2 Test Conditions

The test procedure of ANSI C63.4 was used for this test Radiated 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 configured to operate in the receive mode of operation to maximize the emissions. The OpenSky ISM Radio was set up and powered by 120V 60Hz for radiated emission tests. The worst case signals detected were recorded.

3.1.3 Test Method

The test method of ANSI C63.4 was followed. For the radiated emission measurements, 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.

3.1.4 Results

The M/A-Com OpenSky ISM Radio meets the FCC Part 15 Subpart B Class B requirements.

3.1.5 Test Data

RADIATED E FIELD EMISSION MEASUREMENTS

CUSTOMER: M/A-COM

DATE: JUNE 5, 2001

EQUIPMENT: OPENSky ISM RADIO

TEST NUMBER: 1

TESTED BY: ROBERT FOSTER

OPERATING MODE: RECEIVE MODE

TEST SPEC: FCC PART 15 SUBPART B CLASS B

**BANDWIDTH: 100 KHz (PEAK)/120 KHz (QP) AND
1MHz PEAK**

PROCEDURE: ANSI C63.4

FREQUENCY RANGE: 30MHz – 25 GHz

ANTENNA DISTANCE: 3 METERS

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)
239	70	-	1	114	V	-4.8	33.8	46
253	83	-	1.2	0	V	-4.3	24	46
276	75	-	1.2	90	V	-3.5	28.5	46
282	77	-	1	145	V	-3.5	27	46
288	67	-	1	300	V	-1.7	38.3	46
294	74	-	1	145	V	-2.9	30.1	46
300	66	-	1	145	V	-2.8	38.2	46
348	79	-	1	90	V	-1.4	26.6	46
400	85	-	1	180	V	0.1	22	46
406	85	-	1	180	V	0.1	22	46
420	70	-	1	180	V	0.5	37.5	46
430	69	-	1	0	V	0.5	38	46
440	67	-	1	0	V	0.5	40.5	46
445	69	-	1	0	V	0.9	39.9	46

★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 "

NOTES: * = Noise floor of equipment.

M/A-Com OpenSky ISM Radio

Document #: TR3072.01

Date: September 10, 2001

RADIATED E FIELD EMISSION MEASUREMENTS

CUSTOMER: M/A-COM

EQUIPMENT: OPENSky ISM RADIO

TESTED BY: ROBERT FOSTER

OPERATING MODE: RECEIVE MODE

**BANDWIDTH: 100 kHz (PEAK)/120 kHz (QP) AND
1MHz PEAK**

FREQUENCY RANGE: 30MHz – 25 GHz

DATE: JUNE 5, 2001

TEST NUMBER: 1

TEST SPEC: FCC PART 15 SUBPART B CLASS B

PROCEDURE: ANSI C63.4

ANTENNA DISTANCE: 3 METERS

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)
460	70	-	1.5	0	V	0.9	38	46
470	70	-	1.5	0	V	0.9	38	46
480	70	-	1.5	0	V	1.3	38	46
490	77	-	1.5	0	V	1.3	31	46
500	70	-	1.5	0	V	1.7	38.7	46
510	70	-	1.7	180	V	1.7	38.7	46
530	70	-	1.7	180	V	1.7	38.7	46
550	70	-	1.5	270	V	2.8	39.8	46
563	77	-	1	0	V	2.8	32.8	46
580	77	-	1	0	V	3.3	33.3	46
600	77	-	1	0	V	3.8	33.8	46
630	75	-	1	0	V	4.0	34	46
650	77	-	1	0	V	4.2	34.2	46
660	75	-	1.2	90	V	4.5	34.5	46

★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 "

NOTES: * = Noise floor of equipment.

FORM CTS-DS-001R

M/A-Com OpenSky ISM Radio

Document #: TR3072.01

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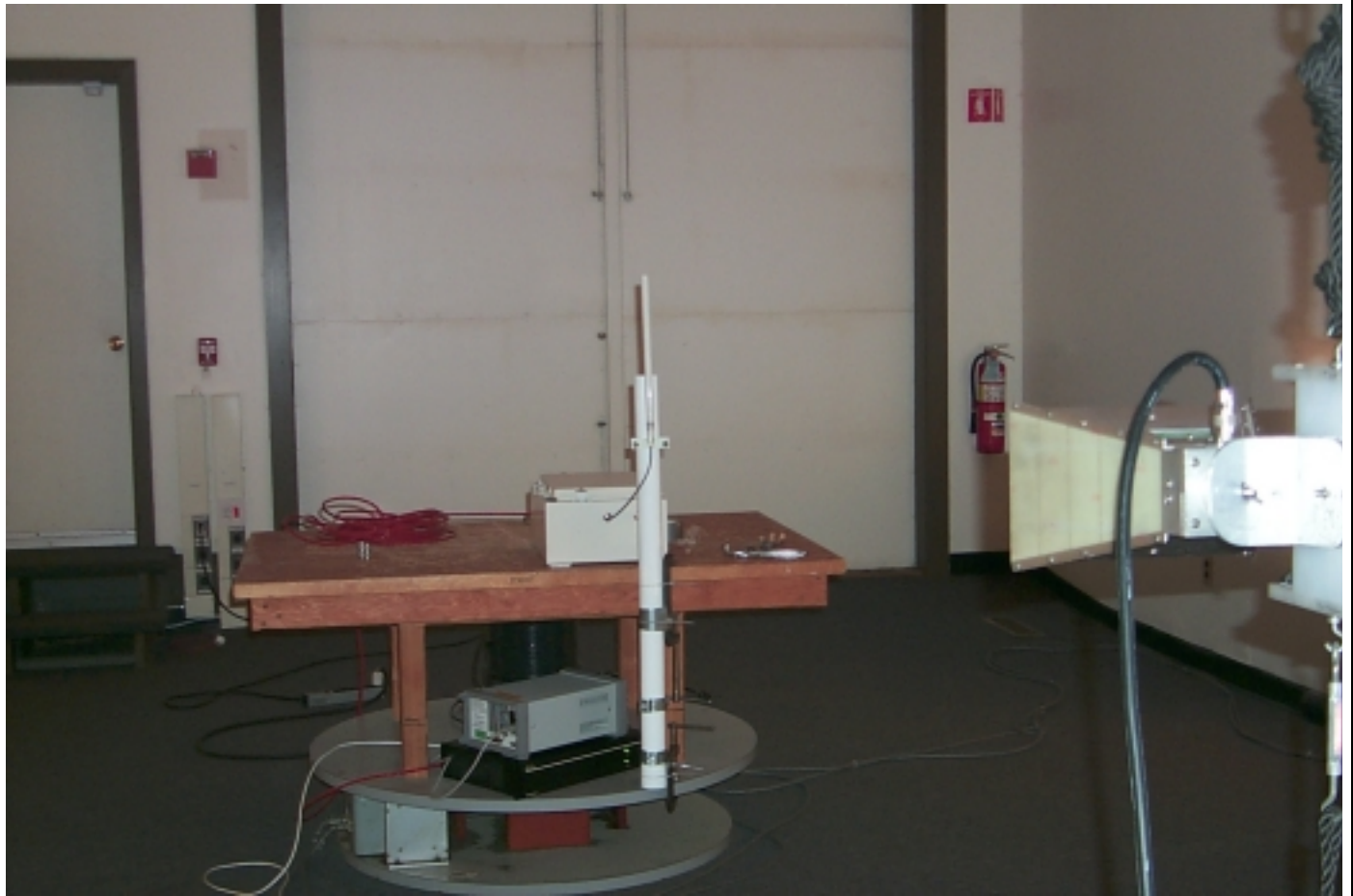
RADIATED E FIELD EMISSION MEASUREMENTS

ANTENNA DISTANCE: 3 METERS

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FORM CTS-DS-001R

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3.1.6 Photographic Documentation**CUSTOMER: M/A-COM****EQUIPMENT: OPENSky ISM RADIO****TESTED BY: ROBERT FOSTER****DATE: 06/05/01****TEST NUMBER: 1**Photograph Description: Radiated set-up**FORM CTS-PHOTO**