



**ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT
INTENTIONAL RADIATOR CERTIFICATION TO
FCC PART 15 SUBPART C REQUIREMENT**

**TEST REPORT
*FOR***

927MHz RF WIRELESS HANDS-FREE HEADSET

FCC ID: NQ2AM1062

MODEL NO: AM1062

REPORT NO: 01U1111-1

DECEMBER 28, 2001

Prepared for
**ADVANCED MOBILE SOLUTIONS, INC.
375 RHEEM BLVD.,
MORAGA, CA 94556 U.S.A.**

Prepared by
**COMPLIANCE CERTIFICATION SERVICES
561F MONTEREY ROAD
MORGAN HILL, CA 95037, U.S.A.
TEL: (408) 463-0885
FAX: (408) 463-0888**

NVLAP[®]
LAB CODE:200065-0

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1. VERIFICATION OF COMPLIANCE

COMPANY NAME : ADVANCED MOBILE SOLUTIONS, INC.
375 RHEEM BLVD.,
MORAGA, CA 94556, U.S.A.


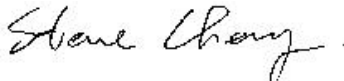
CONTACT PERSON : SEAN KIM / DIRECTOR OF RETAIL SALES

TELEPHONE NO : (925) 377-32400

EUT DESCRIPTION : 927MHz RF WIRELESS HANDS-FREE HEADSET

MODEL NAME : AM1062

DATE TESTED : DECEMBER 28, 2001

LIMITS APPLY TO: FCC PART 15 SECTION 15.249	
TECHNICAL LIMITS	TEST RESULT
Radiated Emission of fundamental Frequency	No non-compliance found
Radiated Emission of Harmonic Frequency	No non-compliance found
Radiated Emission Outside the Band	No non-compliance found
LIMITS APPLY TO: FCC PART 15 SECTION 15.209	
Radiated Emission Digital Device	No non-compliance found
LIMITS APPLY TO: FCC PART 15 SECTION 15.207	
AC Line Conducted Emission	N/A
<p>The above equipment was tested by Compliance Certification Services Inc. for compliance with the requirements set forth in CFR 47 PART 15 SUBPART C. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  <p>Test by: THU CHAN / EMC SENIORE ENGINEER COMPLIANCE CERTIFICATION SERVICES</p> </div> <div style="width: 45%;">  <p>Review by: STEVE CHENG / ENGINEERING MANAGER COMPLIANCE CERTIFICATIONS SERVICES</p> </div> </div> <p>Warning: This document reports conditions under which testing was conducted and results of tests performed. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revision section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document.</p>	

2. DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)

CHASSIS TYPE	PLASTIC
Frequency Range	927 MHz
Antenna Requirement	Permanently Built-in
Power requirement	1.5Vdc AAAA battery

3. TEST LOCATION

All emissions tests were performed at:

Compliance Consulting Services
561F Monterey Road
Morgan Hill, CA 95087

CCS has site descriptions on file with the FCC for 10 and 3 meter site configurations. CCS is a NVLAP accredited facility.

4. EQUIPMENT MODIFICATIONS

To achieve compliance Levels, the following change(s) were made during compliance testing:

No changes were required in order to achieve compliance to class B levels.

5. TEST RESULT SUMMARY

Radiated Emissions (Fundamental Emission Field Strength)

Test Requirement: 15.249(A)(B)

Measurement Equipment Used:

HP Spectrum Analyzer / 8566B (Cal Due: 5/4/02)

HP Spectrum Display / 85662A (Cal Due: 5/4/02)

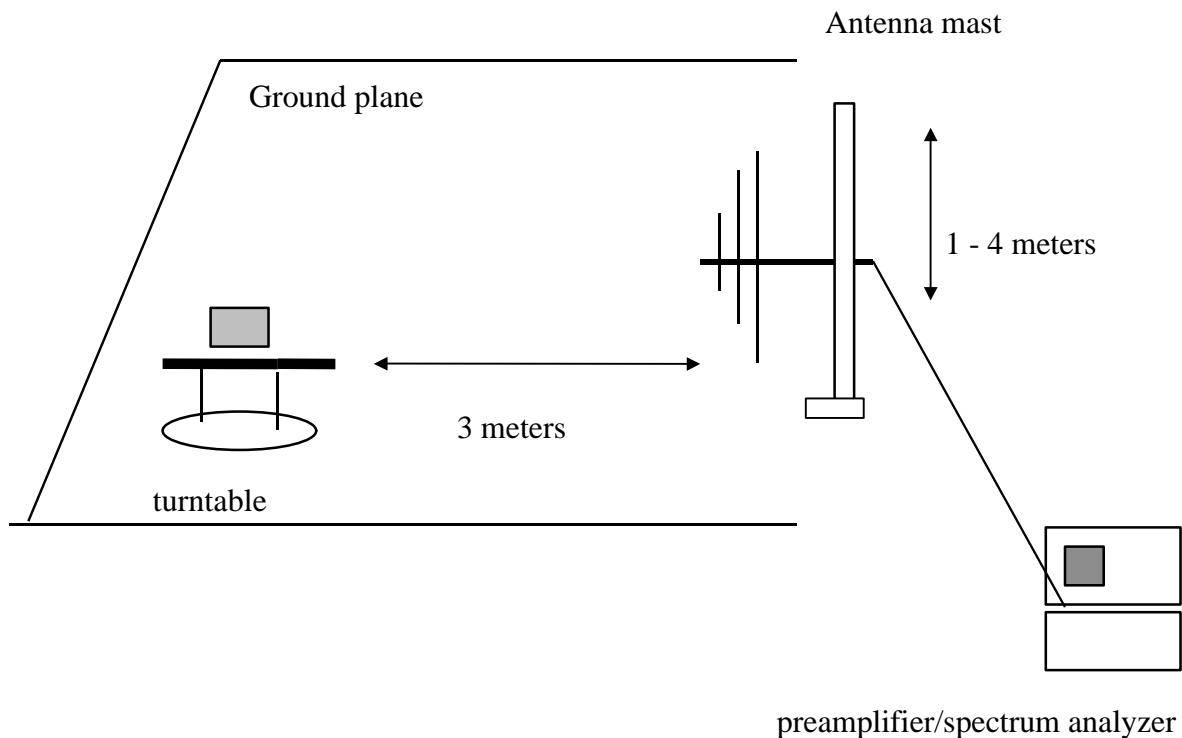
HP Quasi-Peak Detector / 85650A (Cal Due: 5/4/02)

HP Pre-Amp (P5) / 8447D (Cal Due: 8/10/02)

EMCO LP Antenna / 3146 (Cal Due: 8/2/02)

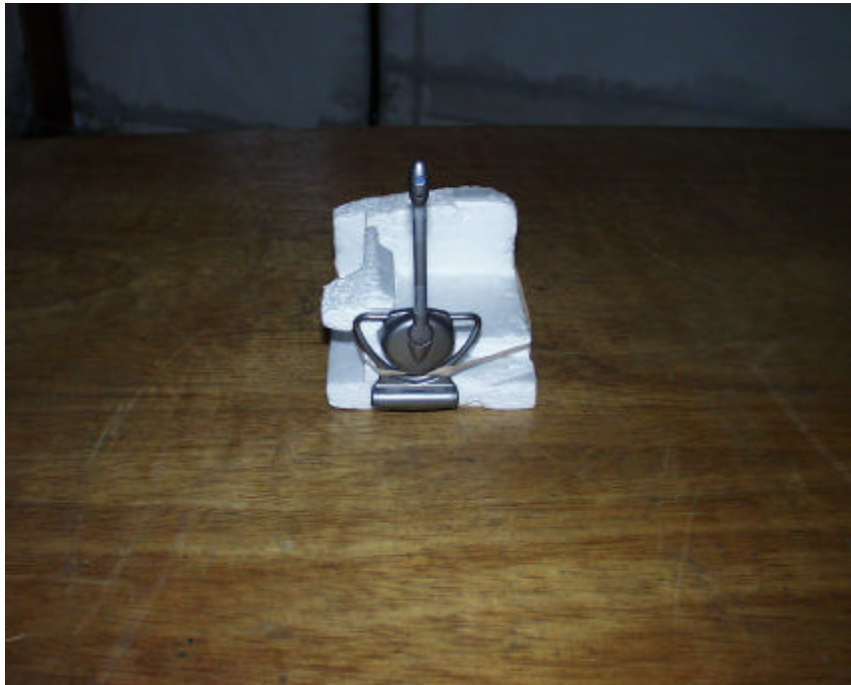
EATON Biconical Antenna / 94455-1 (Cal Due: 8/2/02)

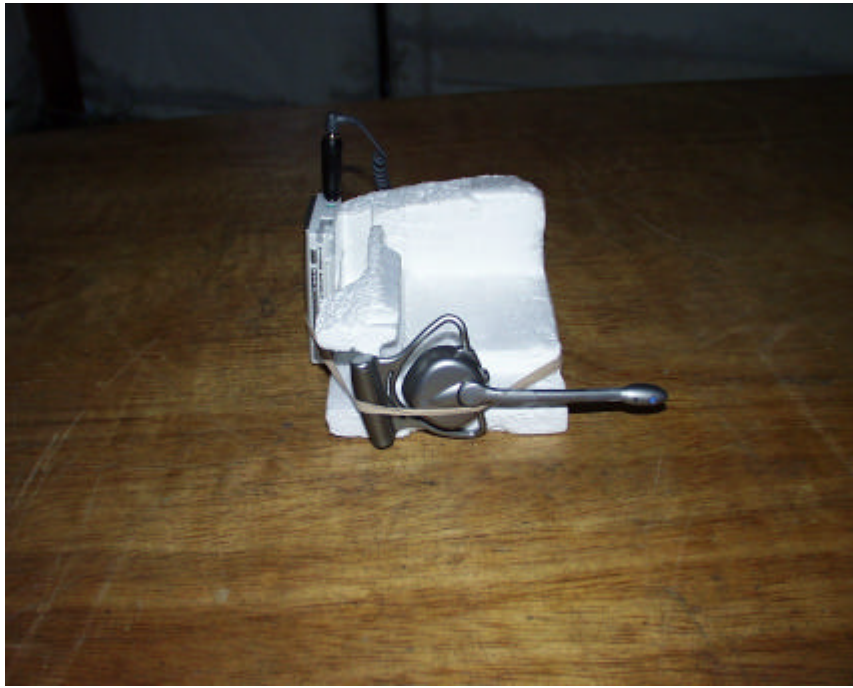
TEST SETUP FOR MEASUREMENT OF FUNDAMENTAL FREQUENCY



Test Procedures

- 1) Place the EUT on the turntable as shown. The EUT was placed as close as possible to the center of the turntable with the axis of rotation going through the EUT antenna when in vertical or horizontal polarization. Activated Eut to transmit.
- 2) The Bilog search antenna was place at a distance of 3 meters. The antenna was raised and lowered and the EUT rotated on the turntable to produce maximum emission levels on the spectrum analyzer.
- 3) The EUT was placed standing-up (x-axis), laying down right side (y-axis) and laying down facing up (z-axis). Step (1) and (2) were repeated for each orientation.

Test Setup Photo & Results:**X-Position**



Y-Position



Z-Position



FCC, VCCI, CISPR, CE, AUSTEL, NZ
UL, CSA, TUV, BSMI, DHHS, NVLAP

561F MONTEREY ROAD, SAN JOSE, CA 95037-9001
PHONE: (408) 463-0885 FAX: (408) 463-0888

Project #: 01U1111-1
Report #: 011219C1
Date & Time: 12/19/01 12:24 PM
Test Engr: Thu Chan

Company: Advanced Mobile Solutions
EUT Description: 903MHz / 927MHz RF Wireless Hands-Free Headset
Test Configuration: EUTs only (Belt-Clip & Headset)
Type of Test: FCC 15.249
Mode of Operation: Continued communication between two units

☐ A-Site

☐ B-Site

☒ C-Site

☐ F-Site

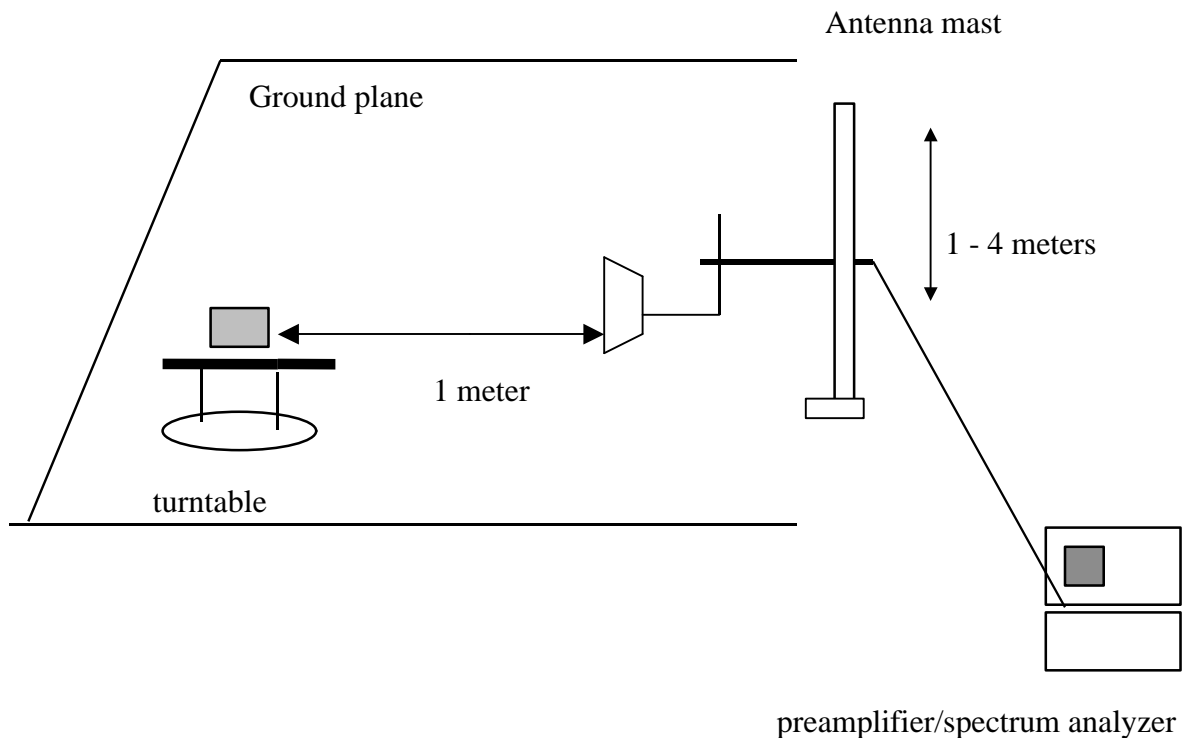
☐ 6 Worst Data

☐ Descending

Freq. (MHz)	Reading (dBuV)	AF (dB)	Cross (dB)	Pre-amp (dB)	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Pol (H/V)	Az (Deg)	Height (Meter)	Mark (P/Q/A)
X-Position Standup:											
903.07	86.20	21.75	4.96	27.52	85.39	93.98	-8.58	3mV	180.00	1.20	P
927.06	80.50	22.05	5.00	27.43	80.12	93.98	-13.85	3mV	180.00	1.00	P
927.06	69.00	22.84	5.00	27.43	69.41	93.98	-24.57	3mH	180.00	1.30	P
903.07	74.20	22.50	4.96	27.52	74.15	93.98	-19.83	3mH	180.00	1.20	P
Y-Position Side Lay down:											
903.07	77.00	22.50	4.96	27.52	76.95	93.98	-17.03	3mH	180.00	1.00	P
927.06	74.50	22.84	5.00	27.43	74.91	93.98	-19.07	3mH	180.00	1.00	P
927.06	66.00	22.05	5.00	27.43	65.62	93.98	-28.36	3mV	180.00	1.00	P
903.07	79.00	21.75	4.96	27.52	78.19	93.98	-15.78	3mV	180.00	1.20	P
Z-Position Back Lay Down:											
903.07	74.00	21.75	4.96	27.52	73.19	93.98	-20.78	3mV	180.00	2.00	P
927.05	66.00	22.05	5.00	27.43	65.62	93.98	-28.36	3mV	180.00	1.00	P
927.05	74.00	22.84	5.00	27.43	74.41	93.98	-19.57	3mH	180.00	1.50	P
903.07	81.50	22.50	4.96	27.52	81.45	93.98	-12.53	3mH	180.00	1.00	P
Total data #. 12 V.2c											

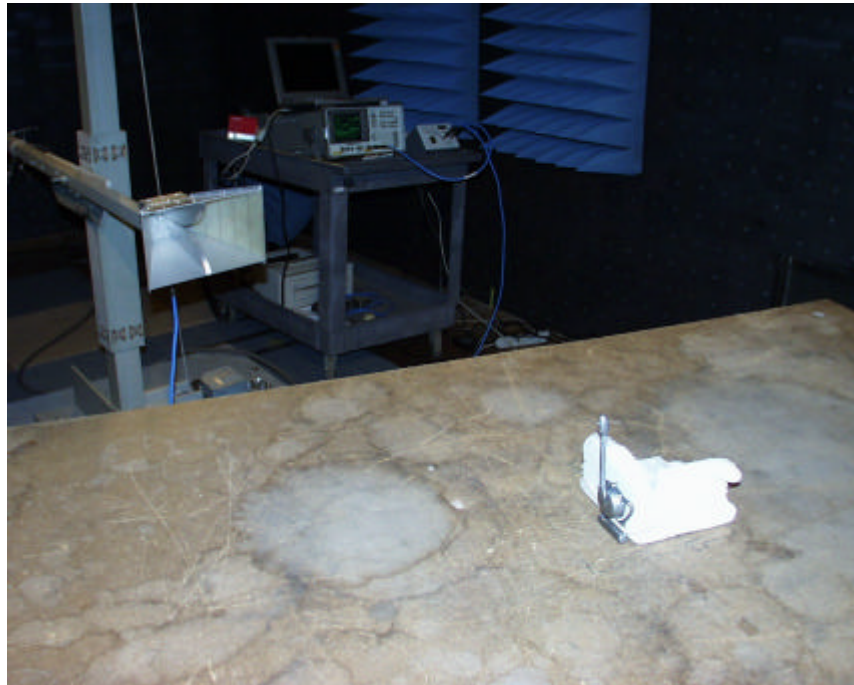
Radiated Emissions (Harmonics and Spurious Emission)**Test Requirement: 15.249(A)(B)(C)****Measurement Equipment Used:****HP EMC Receiver / 8593EM (Cal Due: 6/20/02)****EMCO Horn Antenna / 3115 (Cal Due: 5/4/02)****MITEQ Pre-Amp (1 – 26GHz) / NSP2600-44 (Cal Due: 4/12/02)****FLEXCO SMA cable / 20761; 16ft. Cable (loss: .9dB/ft @ 26GHz)**

**TEST SETUP FOR MEASUREMENT OF FUNDAMENTAL HARMONICS
& OUT-OF-BAND ABOVE 1GHz**



Test Procedures

1. The EUT was placed on a wooden turntable. The search antenna was placed at 1 meter from the EUT.
2. The turntable was slowly rotated to locate the direction of maximum emission. Once maximum direction was determined, the search antenna was raised and lowered in both vertical and horizontal polarizations.
3. The EUT was placed standing-up (x-axis), laying down right side (y-axis) and laying down facing up (z-axis). Step (1) and (2) were repeated for each orientation.

Test Setup Photo & Results:

12/27/01 FCC Measurement
Compliance Certification Services, Morgan Hill Open Field Site

Company: Advanced Mobile Solutions
EUT: 927MHz RF Wireless Hands-Free Headset
M/N: AM1032 (Belt-Clip)

Equipment for 1.265 GHz
HP8593EM EMC Receiver
Miteq NSP2600-44 Preamp
EMCO 3115 Antenna
Cable: 16.0 feet

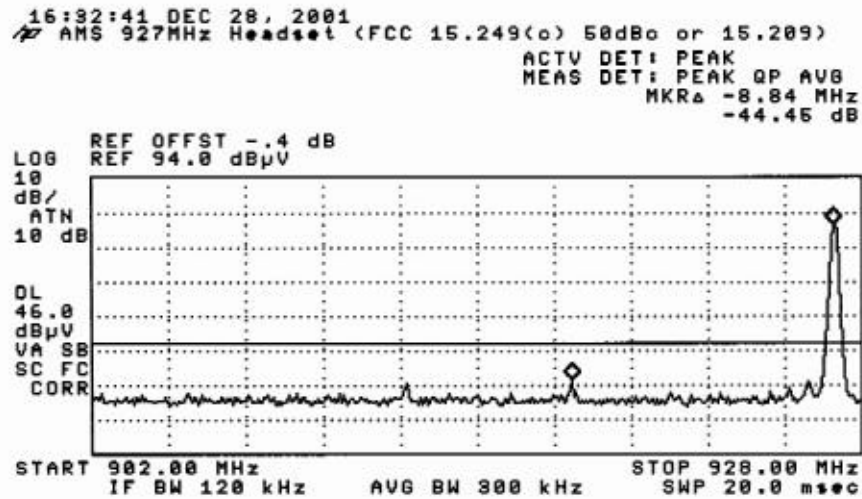
Average Measurements:
1 MHz Resolution Bandwidth
10Hz Video Bandwidth

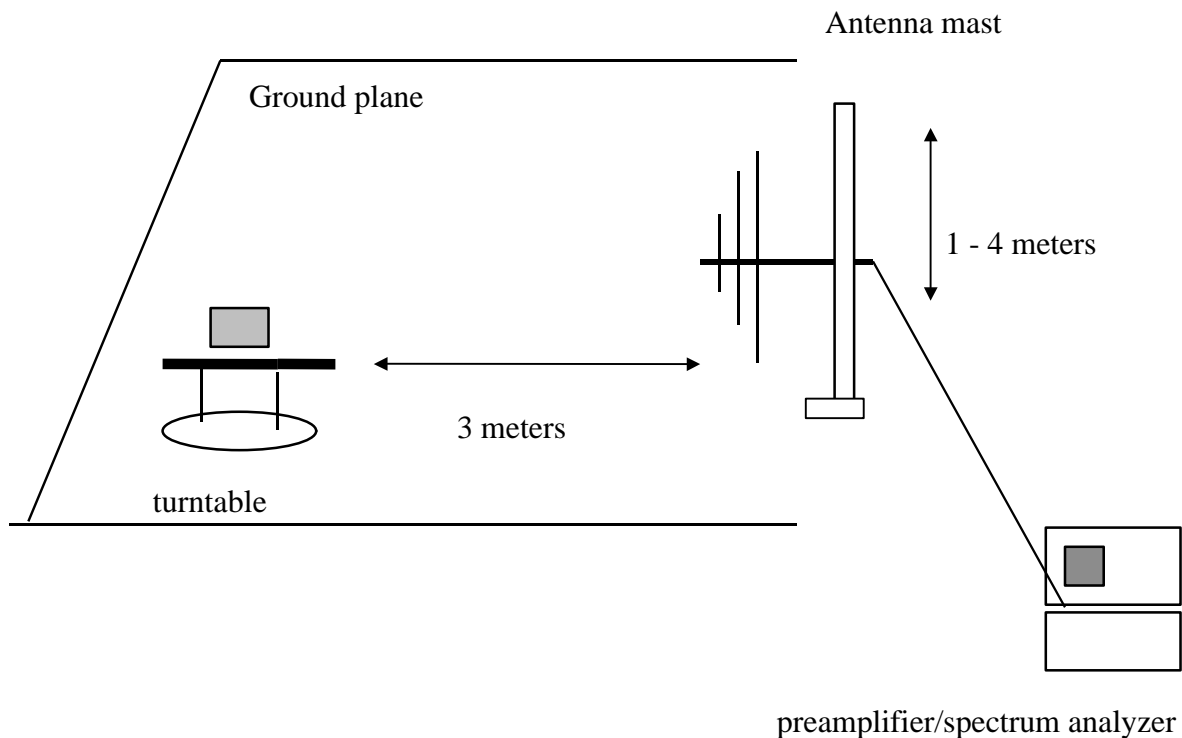
Peak Measurements:
1MHz Resolution Bandwidth
1MHz Video Bandwidth

f	Dist	Read Peak	Read Avg	AF	CL	Amp	D Corr	HPF	Peak	Avg	Peak Lim	Avg Lim	Peak Mar	Avg Mar	Notes
GHz	feet	dBuV	dBuV	dBm	dB	dB	dB		dBuV/m	dBuV/m	dBuV/m	dBuV/m	dB	dB	
1.854	3.2	80.6	80.2	26.4	0.0	-42.6	-9.5	0.0	55.0	54.7	114.0	94.0	-59.0	-29.3	V
1.854	3.3	72.5	72.3	26.4	0.0	-42.6	-9.5	0.0	46.9	46.7	114.0	94.0	-67.1	-47.3	H
2.781	3.3	81.0	80.0	29.2	0.0	-42.2	-9.5	0.0	38.5	37.5	74.0	54.0	-35.5	-16.5	V
2.781	3.2	55.0	53.0	29.2	0.0	-42.2	-9.5	0.0	32.5	30.5	74.0	54.0	-41.5	-23.5	H
3.708	3.3	48.3	42.0	32.0	0.0	-42.0	-9.5	0.0	28.8	22.5	74.0	54.0	-45.2	-31.5	V
3.708	3.3	46.0	38.0	32.0	0.0	-42.0	-9.5	0.0	26.5	18.5	74.0	54.0	-47.5	-35.5	H
4.635	3.2	47.6	41.5	32.2	0.0	-41.8	-9.5	0.0	29.8	22.4	74.0	54.0	-45.4	-31.6	V
4.635	3.3	46.1	38.5	32.2	0.0	-41.8	-9.5	0.0	27.0	19.4	74.0	54.0	-47.0	-34.6	H
5.562	3.3	43.4	32.4	34.2	0.0	-41.7	-9.5	0.0	26.5	15.5	74.0	54.0	-47.5	-38.5	V
5.562	3.3	44.8	34.0	34.2	0.0	-41.7	-9.5	0.0	27.9	17.1	74.0	54.0	-46.1	-36.9	H
6.489	3.3	44.5	34.7	33.9	0.0	-41.5	-9.5	0.0	27.4	17.6	74.0	54.0	-46.6	-36.4	V
6.489	3.3	49.4	45.0	33.9	0.0	-41.5	-9.5	0.0	32.3	27.9	74.0	54.0	-41.7	-26.1	H
7.416	3.3	45.0	34.0	36.9	0.0	-41.0	-9.5	0.0	31.4	20.4	74.0	54.0	-42.6	-33.6	Noise Floor
8.343	3.3	45.3	34.5	37.2	0.0	-40.1	-9.5	0.0	33.0	22.2	74.0	54.0	-41.0	-31.8	Noise Floor
9.270	3.3	45.3	34.7	37.5	0.0	-39.4	-9.5	0.0	33.9	23.3	74.0	54.0	-40.1	-30.7	Noise Floor

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

Headset Harmonic & Spurious Emissions



Radiated Emissions**Test Requirement: 15.209****Measurement Equipment Used:****HP Spectrum Analyzer / 8566B (Cal Due: 5/4/02)****HP Spectrum Display / 85662A (Cal Due: 5/4/02)****HP Quasi-Peak Detector / 85650A (Cal Due: 5/4/02)****HP Pre-Amp (P5) / 8447D (Cal Due: 8/10/02)****EMCO LP Antenna / 3146 (Cal Due: 8/2/02)****EATON Biconical Antenna / 94455-1 (Cal Due: 8/2/02)****TEST SETUP FOR MEASUREMENT OF DIGITAL DEVICE**

Test Procedures

- 1) Place the EUT on the turntable as shown. The EUT was placed as close as possible to the center of the turntable with the axis of rotation going through the EUT antenna when in vertical or horizontal polarization. Activated Eut to transmit.
- 2) The Bilog search antenna was place at a distance of 3 meters. The antenna was raised and lowered and the EUT rotated on the turntable to produce maximum emission levels on the spectrum analyzer.

The EUT (Headset) was placed standing-up (x-axis, worst position).

Test Setup Photo & Results:



FCC, VCCI, CISPR, CE, AUSTEL, NZ
UL, CSA, TUV, BSMI, DHHS, NVLAP

561F MONTEREY ROAD, SAN JOSE, CA 95037-9001
PHONE: (408) 463-0885 FAX: (408) 463-0888

Project #: 01U1111-1
Report #: 011219C1
Date & Time: 12/19/01 12:24 PM
Test Engr: Thu Chan

Company: Advanced Mobile Solutions
EUT Description: 903MHz / 927MHz RF Wireless Hands-Free Headset
Test Configuration: EUT only
Type of Test: FCC Class B
Mode of Operation: Continued communication between two units

☐ A-Site ☐ B-Site ☒ C-Site ☐ F-Site

Freq. (MHz)	Reading (dBuV)	AF (dB)	Closs (dB)	Pre-amp (dB)	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Pol (H/V)	Az (Deg)	Height (Meter)	Mark (P/Q/A)
912.55	44.00	21.87	4.98	27.48	43.36	46.00	-2.64	3mV	180.00	1.00	P
941.55	39.00	22.23	5.03	27.38	38.88	46.00	-7.12	3mV	180.00	1.00	P
912.63	40.00	22.64	4.98	27.48	40.13	46.00	-5.87	3mH	180.00	1.00	QP
36.75	49.00	11.37	0.82	27.55	33.65	40.00	-6.36	3mV	180.00	1.00	P
36.75	42.00	15.33	0.82	27.55	30.61	40.00	-9.39	3mH	180.00	3.20	P
46.78	42.00	14.05	0.88	27.51	29.42	40.00	-10.58	3mH	180.00	3.20	P
No other emission were found within 20dB FCC class B limits up to 1GHz.											
Total data # 6											
V.2c											

AC Line Conducted Emissions

Test Requirement: 15.207

Not applicable. DC battery operating only.