
OET Bulletin 65 (MPE) Test Report

Report No.: AGC02X121201-2F7

FCC ID : RIQAM-580
PRODUCT DESIGNATION : Land Mobile Radio
BRAND NAME : ADI
TEST MODEL : AM-580
CLIENT : Access Device Integrated Communications Corp.
DATE OF ISSUE : Dec.28, 2012
STANDARD(S) : OET Bulletin 65
REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd.

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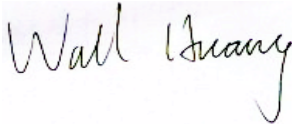


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1. TEST RESULT CERTIFICATION

Applicant Name:	Access Device Integrated Communications Corp.
Address:	No. 193, Sec. 1, Chungching Road, Taya, Taichung City 42862, Taiwan (R.O.C.)
Manufacturer Name:	Access Device Integrated Communications Corp.
Address:	No. 193, Sec. 1, Chungching Road, Taya, Taichung City 42862, Taiwan (R.O.C.)
Product Designation	Land Mobile Radio
Brand Name	ADI
Test Model	AM-580
Hardware Version:	N/A
Software Version:	N/A
Test Standard	OET Bulletin 65
File Number:	AGC02X121201-2F7
Date of Test:	Dec.26, 2012 to Dec.28, 2012

We (AGC), Attestation of Global Compliance (Shenzhen) Co., Ltd. for compliance with the requirements set forth in the FCC Standard OET Bulletin 65 (Edition 97-01) Supplement C (Edition 01-01). The results of testing in this report apply to the product/system which was tested only.


 Tested by _____
 Wall Huang Dec.28, 2012

 Checked By _____
 Forrest Lei Dec.28, 2012

 Authorized By _____
 Solger Zhang Dec.28, 2012

2. TECHNICAL INFORMATION

Note: the following data is based on the information by the applicant.

EUT DESCRIPTION

The EUT is a Land Mobile Radio designed for voice communication. It is designed by way of utilizing the FM modulation achieves the system operating.

A major technical description of EUT is described as following:

Communication Type	Voice / Tone only	
Type of Modulation	F3E	
Emission Bandwidth	7.79KHz for VHF(max) 7.61KHZ for UHF(max)	
Peak Frequency Deviation	1.78 KHz	
Audio Frequency Response	11.03dB	
Maximum Transmitter Power	46.96dBm for VHF(max) 45.42dBm for UHF(max)	
Rating Power	46.99dBm for VHF(max) 45.44dBm for UHF(max) (It was fixed by the manufacturer, any individual can't arbitrarily change it.)	
Antenna Designation	Detachable	
Power Supply	DC 13.8V by DC source	
Limiting Voltage	DC 11.73V	
Operation Frequency Range and Channel	Frequency Range:136MHz to 174MHz & 400MHz to 520MHz Channel Separation: 12.5KHz	
	136MHz to 174MHz: Top Channel: 173.975MHz, Centre Channel: 155.000MHz, Bottom Channel: 136.025MHz	400MHz to 520MHz: Top Channel: 519.975MHz, Centre Channel: 460.000MHz, Bottom Channel: 400.025MHz
Frequency Tolerance	0.471ppm for VHF for VHF(max) 0.502ppm for UHF for UHF(max)	

3. RF EXPOSURE MEASUREMENT

3.1 INTRODUCTION

Human exposure to RF emissions from mobile devices (47 CFR §2.1091) may be evaluated based on the MPE limits adopted by the FCC for electric and magnetic field strength and/or power density, as appropriate, since exposures are assumed to occur at distances of 20 cm or more from persons.

The 1992 ANSI/IEEE standard (See Listed limit table) specifies a minimum separation distance of 20 cm for performing reliable field measurements to determine adherence to MPE limits.

If the minimum separation distance between a transmitter and nearby persons is more than 20 cm under normal operating conditions, compliance with MPE limits may be determined at such distance from the transmitter. When applicable, operation instructions and prominent warning labels may be used to alert the exposed persons to maintain a specified distance from the transmitter or to limit their exposure durations and usage conditions to ensure compliance.

3.2 FCC LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (Minutes)
0.3 -- 1.34	614	1.63	(100)*	30
1.34 -- 30	824/f	2.19/f	(180/f ²)*	30
30 -- 300	27.5	0.073	0.2	30
300 -- 1500	--	--	f/1500	30
1500 -- 100,000	--	--	1.0	30

*Note:

1. f= Frequency in MHz * Plane-wave Equivalent Power Density
2. The averaging time for General Population/Uncontrolled exposure to fixed transmitters is not applicable for mobile and portable transmitters. See 47 CFR §§2.1091 and 2.1093 on source-based time-averaging requirement for mobile and portable transmitters.

4. CLASSIFICATION OF THE ASSESSMENT METHODS

According to user manual, The antenna of the product, under normal use condition is at least 2.0m away from the body of the user. Warning statement to the user for keeping at least 200cm separation distance and the prohibition of operating to a person has been printed on the user's manual. So, this product under normal use is located on electromagnetic far field between the human body.

$$S=PG/4\pi R^2$$

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator R=distance to the center of radiation of the antenna

5. EUT OPERATION CONDITION

Make the EUT to transmit at lowest, middle and highest channel individually.

6. TEST RESULTS

Note: report the worst result in this part.

Antenna Gain=1.5dBi (Numeric 1.413), $\pi=3.141$

VHF TEST RESULTS

Frequency	Output Power	Output Power	Power Density	Power Density Limit	Result
MHz	dBm	mW	mW/cm ²	mW/cm ²	Pass/Fail
155.000	46.96	49659	0.14	0.2	Pass

VHF TEST RESULTS

Frequency	Output Power	Output Power	Power Density	Power Density Limit	Result
MHz	dBm	mW	mW/cm ²	mW/cm ²	Pass/Fail
460.000	45.42	34833	0.10	0.3	Pass

Note: The output power is refer to AGC02X121201-2F2.

According to the user manual, the minimum separate distance which used for MPE calculate is 2.0m.