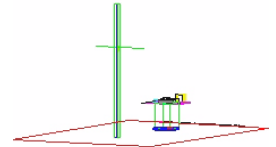


MEASUREMENT REPORT



1.1 Scope

Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission.

General Information

Applicant Name:	UNIDEN ENGINEERING SERVICES
Address:	416 Maetan-3 Dong, Paldal-Ku Suwon City, Kyungki-Do, 441-742, KOREA
Attention:	Mr. Wallace Oh, Engineering Manager Samsung Electronics America (QA Lab)

- FCC ID: **AMWOVP2001610888**
- Quantity: Quantity production is planned
- Emission Designators: 16K0F3E
- Tx Frequency Range: 156.025 ~ 157.425MHz
- Rx Frequency Range: 156.050 ~ 163.275MHz
- Max. Output Power: 5.0 W (HI) / 1.0 W (LOW)
- FCC Classification(s): VHF Hand-held Transmitter - GMDSS (GHH)
- Equipment (EUT) Type: 2-Way Portable VHF Marine Radio Transceiver (GMDSS)
- Modulation(s): FM
- Frequency Tolerance: $\pm 0.0005\%$ (5.0 ppm)
- FCC Rule Part(s): §§§ 80, 2.983, 2.987
- Dates of Tests: May 25-31, 2001
- Place of Tests: PCTEST Lab, Columbia, MD U.S.A.
- Test Report S/N: 80.210510298.AMW

Note: This device complies with the applicable general performance standards under § 80.1101(b), & the specific performance standards under § 80.1101(c)(2) of the FCC's Rules and Regulations.



2.1 INTRODUCTION

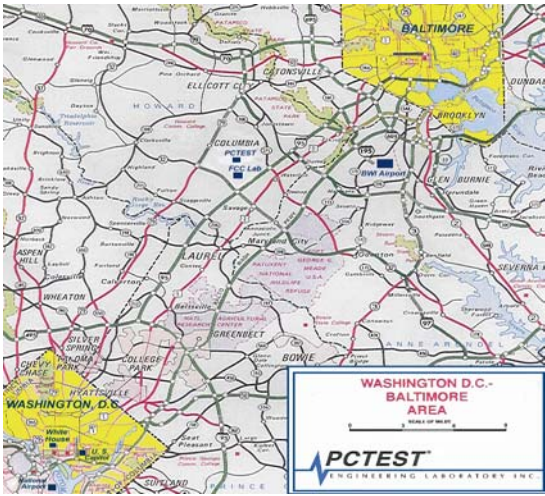


Figure 1. Map of the Greater Baltimore and Metropolitan Washington, D.C. area.

These measurement tests were conducted at **PCTEST Engineering Laboratory, Inc.** facility in New Concept Business Park, Guilford Industrial Park, Columbia, Maryland. The site address is 6660-B Dobbin Road, Columbia, MD 21045. The test site is one of the highest points in the Columbia area with an elevation of 390 feet above mean sea level. The site coordinates are 39° 11'15" N latitude and 76° 49'38" W longitude. The facility is 1.5 miles North of the FCC laboratory, and the ambient signal and ambient signal strength are approximately equal to those of the FCC laboratory. There are no FM or TV transmitters within 15 miles of the site. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4 on October 19, 1992.

Measurement Procedure

The radiated and spurious measurements were made outdoors at a 3-meter test range (see Figure2). The equipment under testing was placed on a wooden turntable, 3-meters from the receive antenna. The receive antenna height and turntable rotations was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This level was recorded.

For readings above 1 GHz, the above procedure would be repeated using horn antennas and the difference between the gain of the horn and an isotropic antenna are taken into consideration.

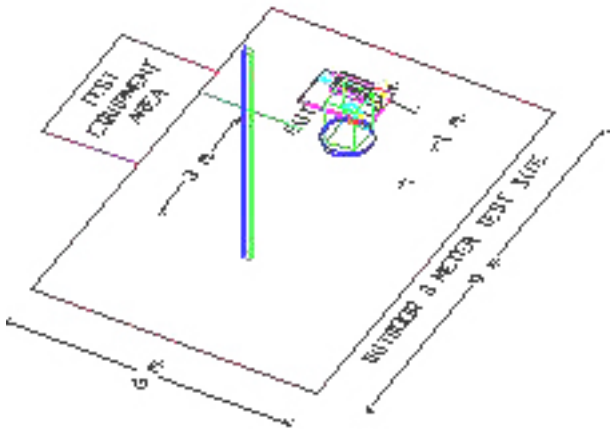


Figure 2. Diagram of 3-meter outdoor test range

Product Specifications

Channels	All US, International, and Canadian
Transmit Power	1 Watt/5 Watt, User Selectable
Weather Resistant	Yes, JIS Level 4,
AA Alkaline & NiMH Capable	Yes, 8 hours of operation based upon the 90/5/5 rule
Drop in Charger	Yes, Included
Cigarette Lighter DC Plug	Yes, Included
Tri-Watch	Yes
Weather	All 10 Weather Channels
Memory Channel Scan	Yes, up to all channels
Backlit LCD & Keys	Yes, selectable
Instant Channel 16	Yes, second press is channel 9
Belt Clip	Yes,
AC Adapter	Yes, Input AC 120V 60Hz/ Output DC 12V 200mA
Flexible Soft Rubber Antenna	Yes
Speaker/Microphone Jacks	Yes, to be compatible with the existing Uniden speaker microphone (model# SPMG or HH9807) Jacks are to keep JIS level 4 spec. Rubber cover required.
Sensitivity	0.25uV for 12 dB SINAD
Squelch Sensitivity	Threshold 0.10 uV
Audio Frequency Response	+ or – 6dB, 500 to 2000Hz
Adjacent Channel Selectivity	70 dB @ +or – 30kHz
Hum & Noise Ratio	40 dB
Audio Output Power	(10% THE) 0.6 W (nominal)
Operating Temperature	-4 F (-20C) to 122F (+50C)
Frequency Stability	+ or – 5ppm nominal
Spurious Emissions	5W –60dBc
Channel Spacing	25KHz Fixed
Antenna Connector	SMA Type
AC/DC Input Jack	Yes, the radio will be able to operate when the

	battery pack is dead based on the incoming charging current.
Speaker	Built in 32mm Dynamic Type, 8 ohm, 1 watt rated
Microphone	Built in Electret type
UV Resistant Plastic	Yes
Stainless Steel Parts	Yes, for all exposed to the elements.
Water/Sun Resistant Rubber	Yes, Rubber that will not fade or decay from water or sun exposure.
Wrist Strap	Yes, connected through a provision in the belt clip