

h	Test Report Serial No.:	091015AMW-T1334E80	Test Report Issue Date:	16 Oct 2015	
	Measurement Date(s):	1-7, Oct 2015	Test Report Revision No.:	Rev. 1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §80	Industry Canada RSS-182.		
	Test Site Registration(s):	FCC Accredited Site	Industry Canada Test Site Registration No. 38		

DECLARATION OF C	OMPLIAN	ICE	FCC PART 80	IC R	SS-182		
Tost Lab Information	Name	CELLTE	CH LABS INCORPORATED				
Test Lab mornation	Address	21-364 L	21-364 Lougheed Road, Kelowna, British Columbia V1X 7R8 Canada				
Test Site Periotration No.(a)	FCC	Accredite	Accredited Site (ISO 17025:2005 - A2LA Test Lab Certificate No. 2470.01)				
	IC	3874A-1	3874A-1				
Applicant Information	Name	UNIDEN	AMERICA CORPORATION				
Applicant information	Address	3001 Ga	teway Drive, Suite 130, Irving TX, 7	5063, USA.			
	FCC	47 CFR	Part 2; Part 80				
Standard(s) & Procedure(s)	IC	RSS-182	2, RSS GEN				
	ANSI	TIA/EIA-	603-D-2010	C63.4-2009			
Device Classification(s)	FCC	Licensed	Non-Broadcast Transmitter Held to	Face (TNF)			
Device Classification(s)	IC	Maritime	Radio Transceiver				
Application Type(s)	FCC/IC	New Cer	tification				
Device Identifier(s)	FCC ID:	AMWUT	653				
Device Identifier (3)	IC:	513C-UT	r653				
Device Under Test (DUT)	Portable Pu	ush-To-Ta	lk (PTT) VHF Marine Radio Transce	iver, WX			
Device Model(s)	ATLANTIS	150					
Test Sample Serial No.(s)	None (Iden	tical Proto	type)				
Transmit Frequency Range(s)	VHF: 156.0	50 - 157.4	125 MHz				
Authorized Bandwidth	20kHz (US	), 16kHz (	Can)				
Manuf. Rated Output Power	VHF: 2.5W / 1W						
Modulation Type(s)	FM						
Emission Designator(s)	VHF: 16K0F3E						
Power Source(s) Tested	Lithium-ion	, 4.8 V					
This wireless device has demonstrated compliance with the applicable technical standards as indicated in the measurement report and							

was tested in accordance with the measurement procedures specified in FCC 47 CFR Rule Part 2 and Part 80; Industry Canada RSS-182 and RSS-Gen,; ANSI TIA/EIA-603-D-2010 and ANSI C63.4-2009.

I attest to the accuracy of data. All measurements were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

The results and statements contained in this report pertain only to the device(s) evaluated.

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**Test Report Approved By** 

Jule Vers

Art Voss

Sr. Engr

Celltech Labs Inc.

Applicant:	Unide	en America Corporation	FCC ID:	AMWUT653	IC:	513C-UT653	llaidaa	
DUT Type:	Portable PTT Marine Radio Transceiver			Freq.:	VHF			
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	Test Site Registration(s):	FCC Accredited Site	Industry Canada Test Site F	Registration No. 3874A-1

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Applicant:	Unide	Uniden America Corporation FCC II		AMWUT653	IC:	513C-UT653	llpidop	
DUT Type:	e: Portable PTT Marine Radio Transceiver			Freq.:	VHF			
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Section	Description of Test	Procedure Reference	Result
6	Modulation Limiting	ANSI/TIA/EIA-603-D	Pass
7	Audio Frequency Response	ANSI/TIA/EIA-603-D	Pass
8 RF Output Power		ANSI/TIA/EIA-603-D	Pass
9	Spurious Emissions at the antenna terminals (Conducted)	ANSI/TIA/EIA-603-D	Pass
10 Occupied Bandwidth and Emission Mask		ANSI/TIA/EIA-603-D	Pass
11 Radiated TX Spurious Emissions		ANSI/TIA/EIA-603-D	Pass
12 Frequency Stability		ANSI/TIA/EIA-603-D	Pass

Applicant:	plicant: Uniden America Corporation FCC ID:		AMWUT653	IC:	513C-UT653	llpidop*	
DUT Type:	Type: Portable PTT Marine Radio Transceiver			Freq.:	VHF		
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#### **REVISION LOG**

Revision	Description	Implemented By	Release Date
1.0	1st Release.	Art Voss	9 Oct 2015
1.1	2nd Release Corrected Address	Art Voss	16 Oct 2015

#### **TEST REPORT SIGN-OFF**

Test Report Prepared By	Date	QA Review By	Date
Art Voss	9 Oct 2015	Art Voss	9 Oct 2015

Applicant:	Uniden America Corporation		FCC ID:	AMWUT653	IC:	513C-UT653	llpidop
DUT Type:	Portable PTT Marine Radio Transceiver			Freq.:	VHF		
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#### 1.0 <u>SCOPE</u>

This report outlines the results collected during RF radiated and conducted measurements of the Uniden America Corporation Atlantis Marine Radio. The measurement results were applied against the applicable requirements and limits outlined in the technical rules and regulations set forth in the Federal Communication's Commission Code of Federal Regulations Title 47 Part 2; Part 80 and Industry Canada Radio Standards Specification RSS-182; and RSS-210.

2.0 <u>REFERENCES</u>	
2.1 Normative References	
ANSI/ISO 17025:2005	General Requirements for competence of testing and calibration laboratories
IEEE/ANSI C63.4:2009	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
ANSI/TIA/EIA-603-C:2004	Land Mobile FM or PM Communication Equipment Measurement and Performance Standards
CFR Title 47 Part 2	Code of Federal RegulationsTitle 47:TelecommunicationPart 2:Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
CFR Title 47 Part 80	Code of Federal RegulationsTitle 47:TelecommunicationPart 80:Station in the Maritime Services
IC Spectrum Management & Telecommunications Policy	Radio Standards Specification RSS-182 Issue 5 - Maritime Radio Transmitters and Receivers in the Band 156-162.5 MHz RSS-Gen Issue 4 - General Requirements and Information for the Certification of Radiocommunication Equipment

#### 3.0 PASS/FAIL CRITERIA

Unless otherwise noted in the Appendices, the pass/fail criteria are the limit set forth in the reference standards. The DUT is considered to have passed the requirements if the data collected during the described measurement procedure is no greater than the specified limits as defined. The pass/fail statements made in this report only apply to the unit tested.

#### 4.0 FACILITIES AND ACCREDITATIONS

The facilities used in collecting the test results outlined in this report are located at 21-364 Lougheed Road, Kelowna, British Columbia, Canada V1X 7R8. The radiated emissions site conforms to the requirements set forth in ANSI C63.4 and is filed and listed with the FCC as an accredited test facility and Industry Canada under File Number IC 3874A-1.

Applicant:	Unide	n America Corporation	FCC ID:	AMWUT653	IC:	513C-UT653	llpidop°
DUT Type:	Portable PTT Marine Radio Transceiver			Freq.:	VHF		
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rvices Lab	Test Site Registration(s):	FCC Accredited Site	Industry Canada Test Site Registration No. 3874A-1		

### 5.0 MODE(S) OF OPERATION AND FUNCTIONAL DETAIL

VHF Marine Radio Transceiver with WX.

Transmitter Frequency Range(s)	VHF: 156.050 - 157.425 MHz
Transmitter Power	VHF: 2.5W / 1W
Emission Designator(s)	VHF: 16K0F3E
FCC ID: IC ID:	AMWUT653 513C-UT653
Model Numbers:	ATLANTIS150
Modulation Type(s)	FM

Emission Designator(s):

#### 16K0F3E: VHF

 $\begin{array}{l} Bn = 2M + 2DK \\ M = 3000 \\ D = 4.6KHz \\ K = 1 \\ Bn = 2(3000) + 2(4.6)(1) = 16K0 \end{array}$ 

Modification(s):

Test software was provided for continuous transmit.

Applicant:	Uniden America Corporation FCC ID:		AMWUT653	IC:	513C-UT653	Upidop
DUT Type:	Portable PTT Marine Radio Transceiver			Freq.:	VHF	
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ces Lab	Test Site Registration(s):	FCC Accredited Site	Industry Canada Test Site R	Registration No. 3874A-1

# 6.0 MODULATION CHARACTERISTICS (MODULATION LIMITING)

REFERENCES	
Normative Reference Standard	FCC CFR 47 §2.1047,
Procedure Reference	ANSI TIA-603-C

LIMITS	
§2.1047(b), RSS 182, 7.3	±5 KHz deviation

ENVIRONMENTAL CONDITIONS			
Temperature	25 +/- 5 °C		
Humidity	40 +/- 10 %		
Barometric Pressure	101 +/- 3 kPa		

EQUIPMENT LIST								
ASSET NUMBER	MANUFACTURER	MODEL	DESCRIPTION	LAST CAL - CAL DUE				
00028	HP	8901A	Modulation Analyzer	22-Dec-14 / 22-Dec-16				
00027	HP	8903B	Audio Generator/Analyzer	22-Dec-14 / 22-Dec-16				



Applicant:	Unide	en America Corporation	FCC ID:	AMWUT653	IC:	513C-UT653	llpidop°
DUT Type:		Portable PTT Marine Radio Transceiver			Freq.:	VHF	
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Applicant:	Uniden America Corporation		FCC ID:	AMWUT653	IC:	513C-UT653	llpidop*
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## 7.0 MODULATION CHARACTERISTICS (AFR, ALPF)

REFERENCES	
Normative Reference Standard	FCC CFR 47 §2.1047, §80.213; IC RSS-182, 7.8
Procedure Reference	ANSI TIA-603-C

LIMITS	
§2.1047(a) §80.213(a)(2), (a)(3)(d) RSS 182 7.8	a) Voice modulated communication equipment. A curve or equivalent data showing the frequency response of the audio modulating circuit over a range of 100 to 5000 Hz shall be submitted.

ENVIRONMENTAL CONDITIONS				
Temperature	25 +/- 5 °C			
Humidity	40 +/- 10 %			
Barometric Pressure	101 +/- 3 kPa			

EQUIPMENT LIST							
ASSET NUMBER	MANUFACTURER	MODEL	DESCRIPTION	LAST CAL - CAL DUE			
00028	HP	8901A	Modulation Analyzer	22-Dec-14 / 22-Dec-16			
00027	HP	8903B	Audio Generator/Analyzer	22-Dec-14 / 22-Dec-16			



Applicant:	licant: Uniden America Corporation		FCC ID:	AMWUT653	IC:	513C-UT653	llpidop°
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Applicant:	Unide	len America Corporation FCC ID: AMWUT653		IC:	513C-UT653	Upidop	
DUT Type:		Portable PTT Marine Radio Transceiver			Freq.:	VHF	
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Test Site Registration(s):	FCC Accredited Site	Industry Canada Test Site F	Registration No. 3874A-1
	Test Report Serial No.: Measurement Date(s): Rule Part(s) Applied: Test Site Registration(s):	Test Report Serial No.:091015AMW-T1334E80Measurement Date(s):1-7, Oct 2015Rule Part(s) Applied:FCC 47 CFR §2, §80Test Site Registration(s):FCC Accredited Site	Test Report Serial No.:091015AMW-T1334E80Test Report Issue Date:Measurement Date(s):1-7, Oct 2015Test Report Revision No.:Rule Part(s) Applied:FCC 47 CFR §2, §80Industry Canada RSS-182.Test Site Registration(s):FCC Accredited SiteIndustry Canada Test Site Registration

# 8.0 RF OUTPUT POWER MEASUREMENT

REFERENCES	
Normative Reference Standard	FCC CFR 47 §2.1046, §80.215 IC RSS-182
Procedure Reference	The RF output power measurements were performed in accordance with ANSI TIA/EIA Standard 603.

LIMITS				
FCC CFR 47 §80.215	10W			
RSS-182 7.5	5W Typical			

ENVIRONMENTAL CONDITIONS		
Temperature	25 +/- 5 °C	
Humidity	40 +/- 10 %	
Barometric Pressure	101 +/- 3 kPa	

ASSET NUMBER	MANUFACTURER	MODEL	DESCRIPTION	LAST CAL - CAL DUE
00110	Gigatronics	8652A	Power Meter	17-Feb-14 /17-Feb-16
00248	Gigatronics	80334A	Power Sensor	17-Feb-14 /17-Feb-16



Applicant:	Unide	Uniden America Corporation FCC ID:		AMWUT653	IC:	513C-UT653	llpidop*
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#### **Conducted Power Measurement**

#### Method of Measurement:

The RF power is measured with a 50 ohm resistive watt-meter connected at the EUT's RF output connection. A fully charged battery with a nominal battery terminal voltage of 4.8VDC is installed.

Channel	Low I	Power	High	Power
&	Measured	Rated	Measured	Rated
Frequency	(dBm)	(dBm)	(dBm)	(dBm)
Ch 01: 156.050MHz	29.75		33.60	
Ch 19: 156.950MHz	29.48	30.0 (1.0W)	33.93	34.0 (2.5W)
Ch 88: 157.425MHz	30.00		33.66	
	30.00 dBm			
	31.00 dBm			
	40mA			
Transmit Current @ 4.8VDC Nominal Battery Voltage:				1020mA
FCC CFF	g			
	4.70W			
	Complies			

Applicant:	Uniden America Corporation		Uniden America Corporation FCC ID: AMWUT653		IC:	513C-UT653	llpidop
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# 9.0 SPURIOUS EMISSIONS AT THE ANTENNA TERMINAL

REFERENCES	
Normative Reference Standard	FCC CFR 47 §2.1051, §80.211; IC RSS-182
Procedure Reference	The spurious emissions measurements at the antenna terminal were performed in accordance with ANSI TIA/EIA Standard 603.
	performance has been presented.

LIMITS			
FCC CFR 47 §80.211	$43 \pm 10 \log (T_{\rm P})$		
RSS182, Para. 7.9	43 + 10 Log (1p)		

ENVIRONMENTAL CONDITIONS			
Temperature	25 +/- 5 °C		
Humidity	40 +/- 10 %		
Barometric Pressure	101 +/- 3 kPa		

ASSET NUMBER	MANUFACTURER	MODEL	DESCRIPTION	CAL DUE
00065	Pasternack	PE7015-30	30dB attenuator	COU
00027	HP	8903B	Audio Generator/Analyzer	22-Dec-14 / 22-Dec-16
00241	R&S	FSP 40	Spectrum Analyzer	23-Apr-15 / 23-Apr-17



Applicant:	Unide	en America Corporation	FCC ID:	AMWUT653	IC:	513C-UT653	llpidop°
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### **Conducted Spurious Emissions.**

Emission	Level	Limit	Margin
(MHz)	(dBm)	(dBm)	(dB)
Pa	rt 80; VHF	, RSS-18	2
313.9	-36.68	-13	-23.68
470.9	-46.55	-13	-33.55
627.8	-47.00	-13	-34.00
>627.8	-47.88	-13	-34.00

NOTE: No Emissions within 20dB of the limit were observed.



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# 10.0 OCCUPIED BANDWIDTH, EMISSION MASK

REFERENCES	
Normative Reference Standard	FCC CFR 47 §2.1049, §80.211;RSS-182
Procedure Reference / Description	Occupied bandwidth was performed by connecting the output of the DUT to the input of a spectrum analyzer.

LIMITS	
§80.211	The nominal authorized channel bandwidth for voice is 16 kHz, for data an authorized bandwidth of 20 KHz
RSS-182, 7.9	is permitted.

ENVIRONMENTAL CONDITIONS				
Temperature	25 +/- 5 °C			
Humidity	40 +/- 10 %			
Barometric Pressure	101 +/- 3 kPa			

EQUIPMENT LIST						
ASSET NUMBER	MANUFACTURER	MODEL	DESCRIPTION	CAL DUE		
00065	Pasternack	PE7015-30	30dB attenuator	COU		
00027	HP	8903B	Audio Generator/Analyzer	22-Dec-14 / 22-Dec-16		
00241	R&S	FSP 40	Spectrum Analyzer	23-Apr-15 / 23-Apr-17		



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	Test Report Serial No .:	091015AMW-T1334E80	Test Report Issue Date:	16 Oct 2015
2	Measurement Date(s):	1-7, Oct 2015	Test Report Revision No.:	Rev. 1.1
	Rule Part(s) Applied:	FCC 47 CFR §2, §80	Industry Canada RSS-182.	
ib	Test Site Registration(s):	FCC Accredited Site	Industry Canada Test Site F	Registration No. 3874A-1



Applicant:	Unide	en America Corporation	FCC ID:	AMWUT653	IC:	513C-UT653	Upidop
DUT Type:		Portable PTT Marine Radio Transceiver			Freq.:	VHF	
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lesting and Engineering Services Lab
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Applicant:	Unide	en America Corporation	FCC ID:	AMWUT653	IC:	513C-UT653	llpidop
DUT Type:		Portable PTT Marine Radio Transceiver				VHF	
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ab	Test Site Registration(s):	FCC Accredited Site	Industry Canada Test Site Registration No. 38	



Applicant:	Unide	iden America Corporation FCC ID:		AMWUT653	IC:	513C-UT653	llpidop°
DUT Type:		Portable PTT Marine Radio Transceiver			Freq.:	VHF	
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	Test Report Serial No.: Measurement Date(s): Rule Part(s) Applied: Test Site Registration(s):	Test Report Serial No.:091015AMW-T1334E80Measurement Date(s):1-7, Oct 2015Rule Part(s) Applied:FCC 47 CFR §2, §80Test Site Registration(s):FCC Accredited Site	Test Report Serial No.:091015AMW-T1334E80Test Report Issue Date:Measurement Date(s):1-7, Oct 2015Test Report Revision No.:Rule Part(s) Applied:FCC 47 CFR §2, §80Industry Canada RSS-182.Test Site Registration(s):FCC Accredited SiteIndustry Canada Test Site Registration

# 11.0 RADIATED SPURIOUS EMISSIONS - TX

REFERENCES	
Normative Reference Standard	FCC CFR 47 §2.1053; IC RSS-182
Procedure Reference	The transmitter spurious emissions were measured in accordance with TIA/EIA Standard 603 using the substitution method on a 3-meter open area test site (OATS).

LIMITS	
§80.211, RSS-182 7.9	Emissions must be at least $43 + 10 \log_{10} (P) dB$ below the mean power output of the transmitter.

ENVIRONMENTAL CONDITIONS				
Temperature	25 +/- 5 °C			
Humidity	40 +/- 10 %			
Barometric Pressure	101 +/- 3 kPa			

Equipment List				
Asset number	Manufacturer	Model	Description	Last cal / Cal due
00072	EMCO	2075	Mini-mast	CNR
00073	EMCO	2080	Turn Table	CNR
00071	EMCO	2090	Multi-Device Controller	CNR
00241	R&S	FSU40	Spectrum Analyzer	23-Apr-15 / 23-Apr-17
00050	Chase	CBL-6111A	Bilog Antenna	25-Ap-2014 / 25-Ap-2016
00054	EMCO	3121C	Dipole Antenna	(first cal cycle) / 30-Ap-16
00034	EMCO	3115	Horn Antenna	6-Dec-12 - 6 Dec-15
00051	HP	8566B	Spectrum Analyzer RF Section	30-Ap-14 / 30-Ap-16
00049	HP	85650A	Quasi-peak Adapter	30-Ap-14 / 30-Ap-16
00047	HP	85685A	RF Preselector	30-Ap-14 / 30-Ap-16
00006	R & S	SMR 20	Signal Generator (10MHz-40GHz)	08-May-14 / 08-May-16
00239	Mini-Ccts	ZFL-1000VH	Amplifier 10MHz-1GHz	Cal on use
00110	Gigatronics	8652A	Power Meter	17-Feb-14 / 17-Feb-16
00248	Gigatronics	80701A	Power Sensor	18-Feb-14 / 18-Feb-16

Applicant:	Unide	Iniden America Corporation FCC ID:		AMWUT653	IC:	513C-UT653	llpidop*
DUT Type:		Portable PTT Marine Radio Transceiver			Freq.:	VHF	
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rices Lab	Test Site Registration(s):	FCC Accredited Site	Industry Canada Test Site F	Registration No. 3874A-1

MEASUREMENT	EQUIPMENT	SETUP
-------------	-----------	-------

MEASUREMENT EQUIPMENT	For the field strength measurements, the measurement equipment was connected as shown in Fig 11.0. A number of antennas were used to cover the applicable frequency range tested. The ranges in which each antenna was used are as follows. For the final substitutions, the DUT was replaced with the appropriate antenna and fed from a CW signal source sufficient to replicate the received field strength of he emission being investigated. Worst case performance is presented.					
CONNECTIONS	Frequency Range	RX Antenna	TX Antenna			
	30 MHz - 1GHz	Bilog	Dipole			
	1 GHz - 18 GHz	ETS 3115 Horn	ETS 3115 Horn			
	Measurement Settings.					
MEASUREMENT	RBW	VBW	Detector			
SETTINGS	MHz	MHz				
	10 kHz < 1GHz 1 MHz >1 GHz	300 kHz < 1 GHz 3 MHz> 1 GHz	Peak			

**SETUP DRAWING** 



Applicant: Uniden America Corporation			FCC ID:	AMWUT653	IC:	513C-UT653	llpidop°
DUT Type:	UT Type: Portable PTT Mari			nsceiver	Freq.:	VHF	
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		Ra	adiated Sp	ourious	Emissions	(Tx) Channel	14		
Freqency	Antenna	Emission Level @ 3m	Antenna Factor	Cable Loss	Corrected Emission @ 3m	Substitution Method Correction	Corrected Emission Level	Limit	Margin
(MHz)		(dBuV)	(dB)	(dB)	(dBuV/m)	(dB)	(dBm)	(dBm)	(dB)
313.4	Н	60.3	13.6	2.8	76.7	-0.2	-20.9	-13.0	7.9
470.1	Н	46.7	17.5	3.4	67.6	-1.5	-31.3	-13.0	18.3
626.8	Н	52.2	20.5	4.2	76.9	-0.3	-20.8	-13.0	7.8
783.5	Н	46.7	22.4	4.9	74.0	0.2	-23.2	-13.0	10.2
940.2	Н	34.4	24.6	5.3	64.3	-0.2	-33.3	-13.0	20.3
313.4	V	59.3	13.6	2.8	75.7	0.8	-20.9	-13.0	7.9
470.1	V	41.3	17.5	3.4	62.2	0.4	-34.8	-13.0	21.8
626.8	V	53.5	20.5	4.2	78.2	1.1	-18.1	-13.0	5.1
783.5	V	40.2	22.4	4.9	67.5	-0.8	-30.7	-13.0	17.7
940.2	V	32.0	24.6	5.3	61.9	-0.1	-35.6	-13.0	22.6

Result:

Complies

### Notes

Worst-case emissions shown

The device was searched to the 10th harmonic of the fundamental (156.7 MHz)

Data presented may use a peak detector and compared to quasi-peak limit

All detected emissions have been reported

Applicant:	Uniden America Corporation		FCC ID:	AMWUT653	IC:	513C-UT653	llpidop*
DUT Type:	T Type: Portable PTT Marine Radio			isceiver	Freq.:	VHF	
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es Lab	Test Site Registration(s):	FCC Accredited Site	Industry Canada Test Site F	Registration No. 3874A-1

Result:

Complies

	Radiated Spurious Emissions (Rx)								
Freqency	Antenna	Emission Level @ 3m	Antenna Factor	Cable Loss	Corrected Emission @ 3m	Substitution Method Correction	Emission Level @ 3m	Limit @ 3m	Margin
(MHz)	Foldrization	(dBuV/m)	(dB)	(dB)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
157	Η*	9.6	11.6	1.9	23.1	n/a	23.1	43.5	20.4
313	Η*	8.2	10.2	2.9	21.3	n/a	21.3	46.0	24.7
627	Η*	8.5	20.5	4.2	33.2	n/a	33.2	46.0	12.8
940	Η*	6.2	24.6	5.3	36.1	n/a	36.1	46.0	9.9
157	V*	10.8	11.6	1.9	24.3	n/a	24.3	43.5	19.2
313	V*	10.3	10.2	2.9	23.4	n/a	23.4	46.0	22.6
627	V*	9.5	20.5	4.2	34.2	n/a	34.2	46.0	11.8
940	V*	7.1	24.6	5.3	37.0	n/a	37.0	46.0	9.0

\*No emissions found, noise floor measurement

Notes

Worst-case emissions shown

The device was searched to the 10th harmonic of the fundamental (156.7 MHz)

Data presented may use a peak detector and compared to quasi-peak limit

All detected emissions have been reported

Applicant:	nt: Uniden America Corporation		Uniden America Corporation FCC ID: AMWUT653		IC:	513C-UT653	llpidop*
DUT Type:		Portable PTT Marin	ne Radio Trar	nsceiver	Freq.:	VHF	
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vices Lab	Test Site Registration(s):	FCC Accredited Site	Industry Canada Test Site Registration No. 3874A-	

## 12.0 FREQUENCY STABILITY

REFERENCES	
Normative Reference Standard	FCC CFR 47 §2.1055, §80.209; IC RSS-182.
Procedure Reference / Description	<ul> <li>§2.1055(a)(2) The frequency stability shall be measured with variation of ambient temperature as follows:</li> <li>(1) From -20° to +50° centigrade for equipment to be licensed for use in the Maritime Services under part 80</li> </ul>

LIMITS	
§80.209 & RSS-182	10 ppm

ENVIRONMENTAL CONDITIONS		
Temperature	25 +/- 5 °C	
Humidity	40 +/- 10 %	
Barometric Pressure	101 +/- 3 kPa	

EQUIPMENT LIST								
ASSET NUMBER	MANUFACTURER	MODEL	DESCRIPTION	LAST CAL - CAL DUE				
na	ESPEC	ECT-2	Heater/Refrigerator	na				
00003	HP	53181A	Frequency Counter	28-Apr-14 - 28-Apr-16				
00207	VWR	na	Temperature Humidity Monitor	8-May-14 - 8-May-16				



Applicant:	Unide	n America Corporation	FCC ID:	AMWUT653	IC:	513C-UT653	llpidop*
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ab	FCC Accredited Site		Industry Canada Test Site Registration No. 3874A-1		

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