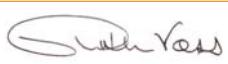


	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

COMPLIANCE TEST REPORT		FCC PART 95D RSS-236		EMC/RF MEASUREMENT REPORT	
Test Lab Information		Name	CELLTECH LABS INCORPORATED		
		Address	21-364 Lougheed Road, Kelowna, British Columbia V1X 7R8 Canada		
Test Lab Accreditation(s)		A2LA	ISO 17025:2005 (A2LA Test Lab Certificate No. 2470.01)		
Test Site Registration No.		FCC	Accredited Site		
		IC	3874A-1		
Applicant Information		Name	UNIDEN AMERICA CORPORATION		
		Address	6225 North State Highway 161, Suite 300 Irving, Texas 75038		
Measurement Standard(s) & Procedure(s) Applied		FCC	47 CFR Part 95 Subpart D		
		IC	RSS-236		
		ANSI	TIA/EIA-382-A	C63.4-2014	
Device Classification(s)		FCC/IC	Licensed Non-Broadcast Station Transmitter (TNB)		
Device RF Exposure Category		FCC	Mobile		
Device Identifier(s)		FCC ID: IC	AMWUT407 513C-UT407		
Application Type		FCC/IC	Certification		
Device Under Test (DUT)		Mobile CB Radio Transceiver			
Device Model		PC78LTD			
Test Sample Serial No.(s)		TA Sample - Identical Prototype			
Transmit Frequency Range(s)		26.965 - 27.405 MHz			
Channels		1-40			
Rated MAX. TX Power		4.0W AM,			
Modulation Type(s)		AM.			
Emission Designator(s)		6K00A3E			
Antenna		External Whip, 0dBi nominal (3dBi maximum).			
Power Source(s) Tested		DC Power Supply (13.8 V)			
<p>This device has demonstrated compliance with the applicable technical standards indicated in the measurement report and was tested in accordance with the measurement procedures specified in FCC 47 CFR Rule Parts 2, Part 15B and Part 95D, RSS-236, RSS-GEN ANSI TIA/EIA-382-A and ANSI C63.4-2014.</p>					
<p>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.</p>					
<p>The results and statements contained in this report pertain only to the device(s) evaluated.</p>					
<p>This test report shall not be reproduced partially, or in full, without the prior written approval of Celltech Labs Inc.</p>					
Test Report Approved By			Art Voss	20 August 2015	Celltech Labs Inc.

Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			
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	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

TABLE OF CONTENTS

1.0 REVISION LOG	4
2.0 SCOPE	5
3.0 REFERENCES	5
4.0 PASS/FAIL CRITERIA	5
5.0 FACILITIES AND ACCREDITATIONS	6
6.0 GENERAL INFORMATION	6
APPENDIX A - RF OUTPUT POWER MEASUREMENT	7
APPENDIX B - MODULATION CHARACTERISTICS (MODULATION LIMITING)	9
APPENDIX C - MODULATION CHARACTERISTICS (AUDIO FREQUENCY)	11
APPENDIX D - OCCUPIED BANDWIDTH AND EMISSION MASK	13
APPENDIX E - SPURIOUS EMISSIONS AT THE ANTENNA TERMINAL	17
APPENDIX F - RADIATED SPURIOUS EMISSIONS	20
APPENDIX G - FREQUENCY STABILITY	24
APPENDIX H - DEVICE PHOTOGRAPHS	26

Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.			Frequency Range:	26.965 - 27.405 MHz	
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	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

TEST SUMMARY

Referenced Standard(s):		FCC CFR Title 47 Parts 2, 95(D), 15(B)			
Appendix	Description of Test	Procedure Reference	Limit Reference	Date of compliance test verification	Result
A	Conducted Power	ANSI/TIA/EIA-382-A	§2.1033, 95 RSS-236	20 July 2015	Pass
B	Modulation	ANSI/TIA/EIA-382-A	§2.1047, 95 RSS-236	21 July 2015	Pass
C	Audio Frequency Response	ANSI/TIA/EIA-382-A	§2.1047, 95 RSS-236	21 July 2015	Pass
D	Occupied Bandwidth and Emission Mask	ANSI/TIA/EIA-382-A	§2.1049, 95 RSS-236	20 July 2015	Pass
E	Conducted TX Spurious Emissions	ANSI/TIA/EIA-382-A	§2.1053, 95 RSS-236	23 July 2015	Pass
F	Radiated TX Spurious Emissions	ANSI/TIA/EIA-382-A	§2.1053, 95 RSS-236	23 July 2015	Pass
	Radiated Spurious Emissions	ANSI C63.4:2003	§15 Subpart B ICES-003	23 July 2015	Pass
G	Frequency Stability	ANSI/TIA/EIA-382-A	§2.1055, 95 RSS-236	28 July 2015	Pass

Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			
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 Celltech <small>Testing and Engineering Services Lab</small>	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 IAC-MRA
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	Test Lab Certificate No. 2470.01

1.0 REVISION LOG

Revision	Description	Implemented By	Implementation Date
1.0	1st Release	Art Voss	10 August 2015
1.1	2nd Release Corrections per TCB dated 18-Aug	Art Voss	20 August 2015

Test Report Prepared By	Date	QA Review By	Date
Art Voss	10 August 2015	Art Voss	10 August 2015

Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.			Frequency Range:	26.965 - 27.405 MHz	
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	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	  Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

2.0 SCOPE

This report outlines the measurements made and results collected during electromagnetic emissions testing of the Uniden America Corporation CB Radio Transceiver FCC/IC: AMWUT407/513C-UT407. The measurement results were applied against the applicable EMC 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 95 Subpart D and RSS-236.

3.0 REFERENCES

3.1 Normative References

ANSI/ISO 17025:2005 General Requirements for competence of testing and calibration laboratories

IEEE/ANSI C63.4:2003 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-382-A Citizens Band Radio Service Amplitude Modulated (AM) Transceivers Operating in the 27 MHz Band

CFR Title 47 Part 2 Code of Federal Regulations
 Title 47: Telecommunication
 Part 2: Frequency Allocations and Radio Treaty Matters;
 General Rules and Regulations

CFR Title 47 Part 95 Code of Federal Regulations
 Title 47: Telecommunication
 Part 95: Personal Radio Services
 Subpart D - Citizens Band (CB) Radio Service

Industry Canada RSS-236, RSS-GEN

4.0 PASS/FAIL CRITERIA

Unless otherwise noted in the Appendices, the pass/fail criteria are the limits 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.

Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			
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	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

5.0 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 Industry Canada under File Number IC 3874A-1. Celltech test site is listed with the FCC as an accredited test facility.

6.0 GENERAL INFORMATION

6.1 DUT Description & Specifications

DEVICE TYPE:	Mobile CB Radio Transceiver	
DEVICE MODEL(S):	PC78LTD	
TEST SAMPLE SERIAL NO.:	T/A Sample - Identical Prototype	
DEVICE IDENTIFIER(S):	FCC ID: IC	AMWUT407 513C-UT407
TRANSMIT FREQUENCY RANGE:	26.965 - 27.405 MHz (Chan. 1-40)	
NO. OF CHANNELS:	40	
MANUF. MAX. RATED OUTPUT POWER:	4.0W AM	
ANTENNA GAIN:	External Whip, 0dBi nominal (3dBi maximum).	
MODULATION:	AM	
EMISSION DESIGNATOR:	6k00A3E Bn = 2M M = 3000 Bn = 6000	
DUT POWER SOURCE:	12 VDC Battery, DC Power Supply (13.8 V)	
TYPE OF EQUIPMENT:	Licensed Non-Broadcast Station Transmitter (TNB)	
DEVIATION(S) FROM STANDARD/PROCEDURE:	None	
MODIFICATION OF DUT:	None	
APPLICABLE STANDARDS:	EIA/TIA-382-A, FCC CFR 47 Part 95, RSS-GEN, RSS-236	

Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			
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 Celltech <small>Testing and Engineering Services Lab</small>	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

APPENDIX A - RF Conducted Output Power Measurement

References

Normative Reference Standard	FCC CFR 47 §2.1046, §95D, RSS-236
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Limits

§95.639 RSS-236, 5.2	4.0W, 36dBm
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Environmental Conditions

Temperature	25 °C
Humidity	45 +/- 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:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.			Frequency Range:	26.965 - 27.405 MHz	
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 Celltech <small>Testing and Engineering Services Lab</small>	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 IAC-MRA  ACREDITED
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

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 connector. Nominal DC power of 13.8VDC is applied.

Measured Output Power (AM - Channel 1):	3.71W (35.69 dBm)
Manufacturer's Rated Output Power (AM):	4.00W (36.02 dBm)
Margin:	-0.29W (-0.33dB)
FCC CFR 47 §2.1033(c)(8): Power to Transmitter:	(13.8VDC)(1.28A) = 17.7W
Result:	Complies

Applicant:	Uniden America Corporation	FCC ID:	AMWUT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	IC:	513C-UT407	Frequency Range:	26.965 - 27.405 MHz	
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	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

APPENDIX B - Modulation Characteristics (Modulation Limiting)

References

Normative Reference Standard	FCC CFR 47 §2.1047, Part 95D, 95.637, RSS-236, 5.3.2
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Limits

FCC §2.1047	Modulation can not exceed 100% - Modulation Limiting.
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Environmental Conditions

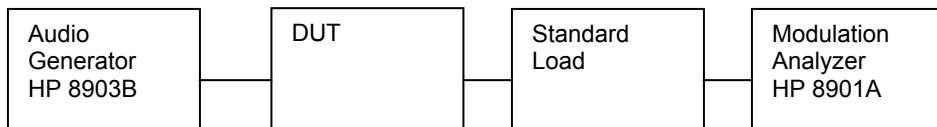
Temperature	25 +/- 5 °C
Humidity	40 +/- 10 %
Barometric Pressure	101 +/- 3 kPa

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

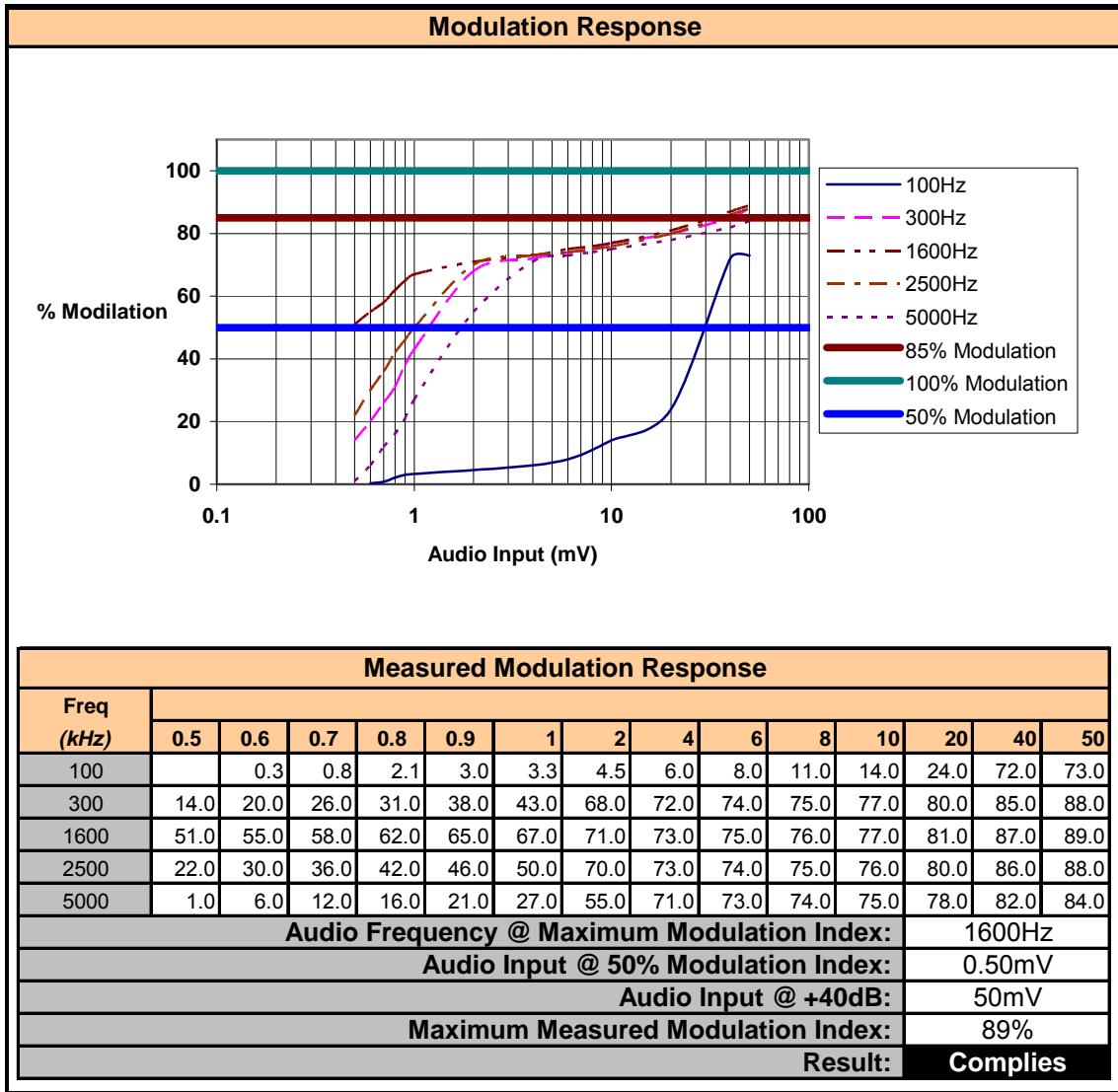
Setup Drawing

Figure 1- Setup Drawing – Modulation Characteristics



Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			

 Celltech <small>Testing and Engineering Services Lab</small>	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	  Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	



Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			
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	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

APPENDIX C - Modulation Characteristics (Audio Frequency)

References

Normative Reference Standard FCC CFR 47 §2.1047, TIA/EIA-382-A, Para 25.

Limits

FCC §2.1047 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 %

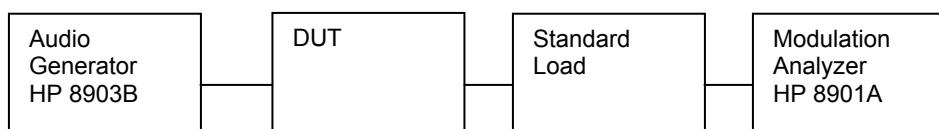
Barometric Pressure 101 +/- 3 kPa

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

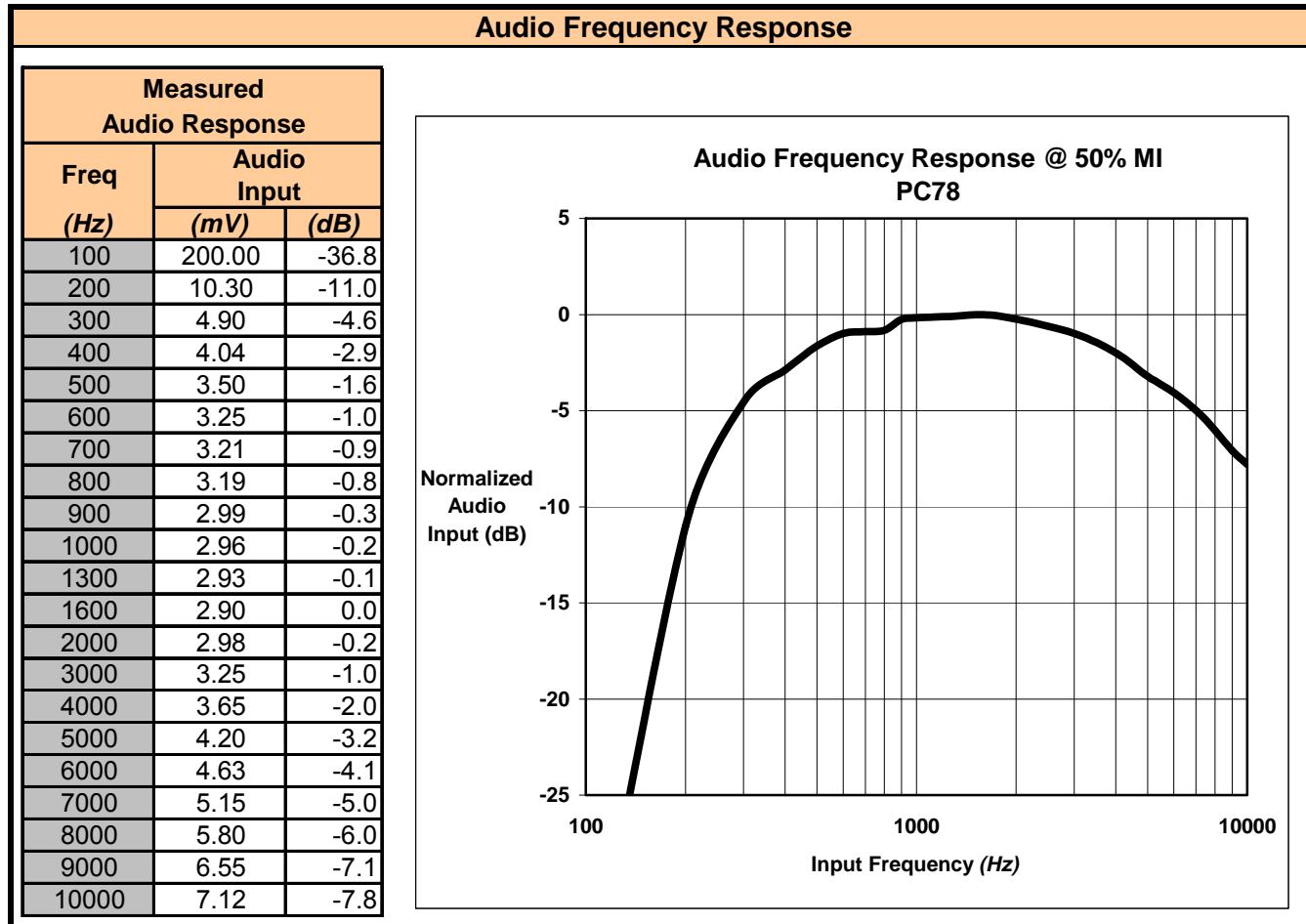
Setup Drawing

Figure 2 - Setup Drawing – Audio Frequency Response



Applicant:	Uniden America Corporation	FCC ID: IC: 513C-UT407	AMWUT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.		Frequency Range:	26.965 - 27.405 MHz		
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	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	



Applicant:	Uniden America Corporation	FCC ID: IC: 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.		Frequency Range:	26.965 - 27.405 MHz	
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	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

APPENDIX D - Occupied Bandwidth and Emission Mask

References

Normative Reference Standard	FCC CFR 47 §2.1049, §95.635, RSS-236, 5.4.4
Procedure Reference / Description	Occupied bandwidth was performed by connecting the output of the DUT to the input of a spectrum analyzer. The unit was supplied a 2500Hz audio signal adjusted to 50% plus 16dB.

Limits

§95.635 RSS-236, 5.4.4 RSS-Gen	At least 25 dB (decibels) on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 100% of the authorized bandwidth.
	At least 35 dB on any frequency removed from the center of the authorized bandwidth by more than 100% up to and including 250% of the authorized bandwidth.
	At least $53 + 10 \log_{10}(T)$ dB on any frequency removed from the center of the authorized bandwidth by more than 250%.
	RSS-Gen - When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth, as calculated or measured.

Environmental Conditions

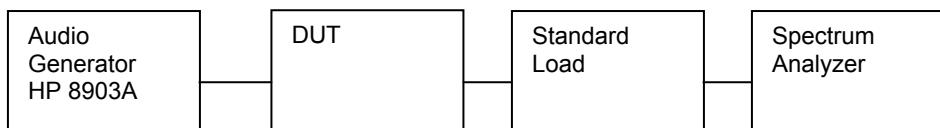
Temperature	25 +/- 5 °C
Humidity	40 +/- 10 %
Barometric Pressure	101 +/- 3 kPa

Equipment List

Asset number	Manufacturer	Model	Description	Last cal / Cal due
00241	R&S	FSP40	Spectrum Analyzer	04/09/2015 (first cal cycle)
00027	HP	8903B	Audio Generator/Analyzer	22-Dec-14 / 22-Dec-16

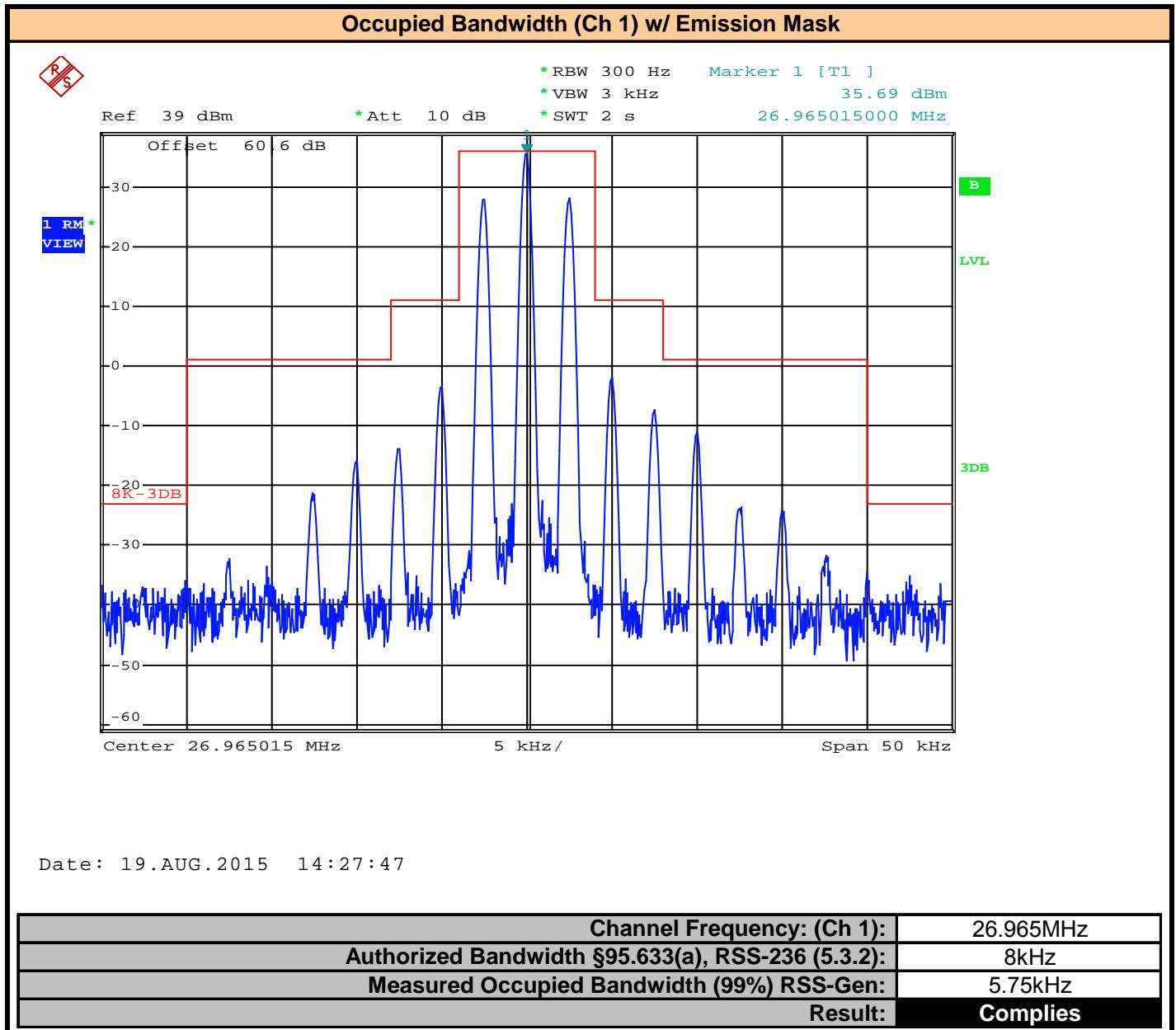
Setup Drawing

Figure 3 - Setup Drawing – Occupied Bandwidth & Emission Mask



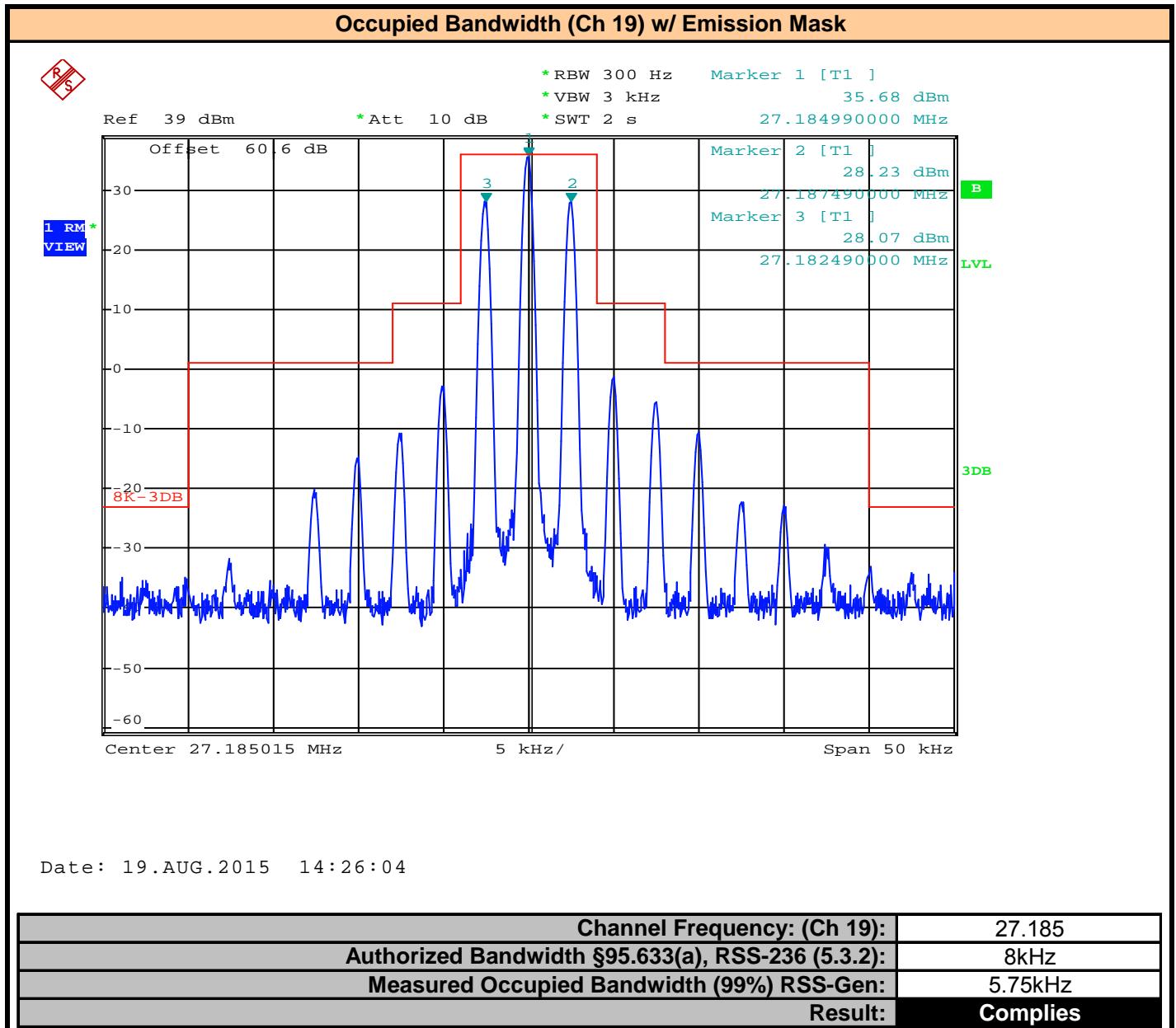
Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			
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	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	



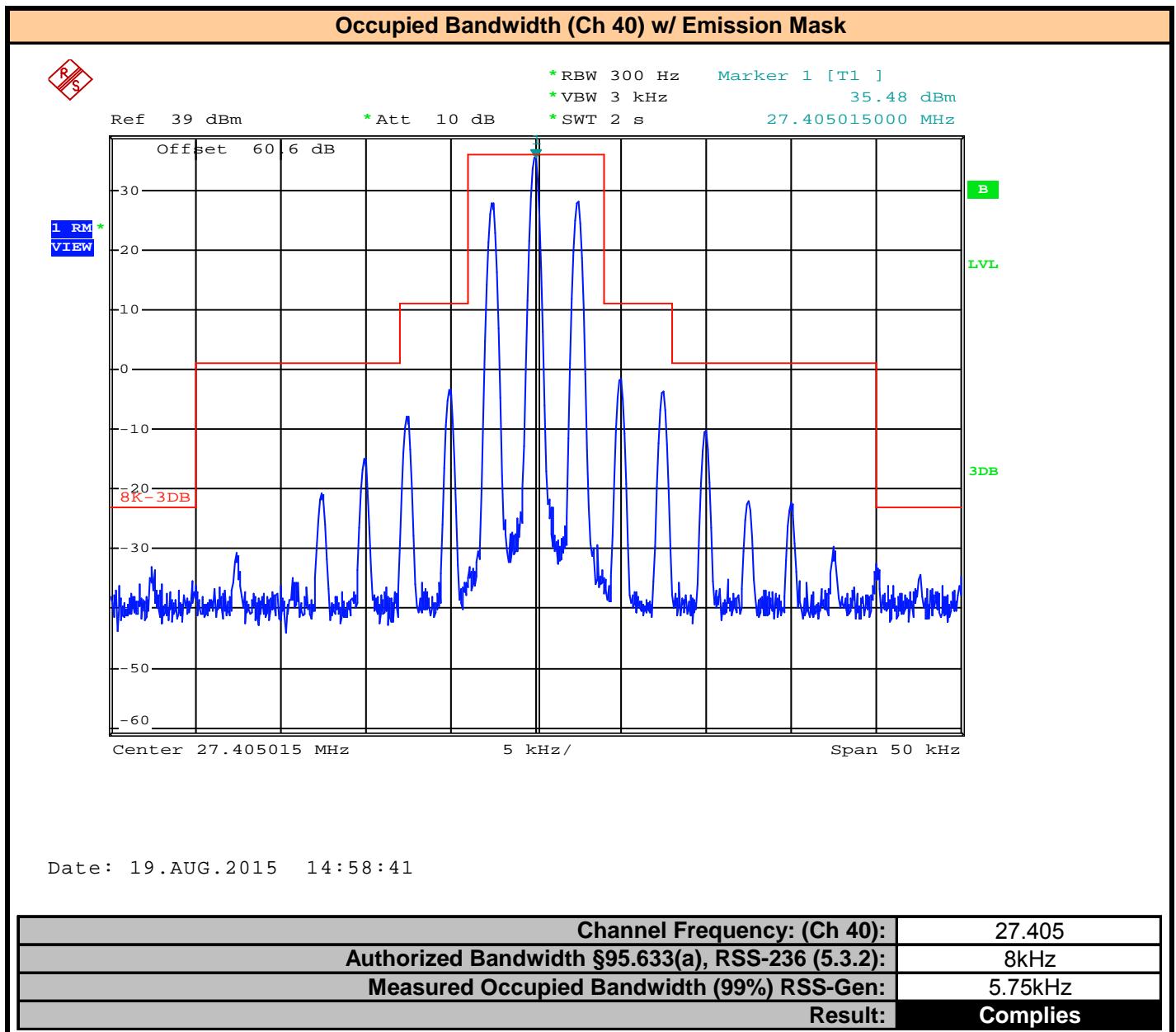
Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			
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 Testing and Engineering Services Lab	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	



Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			
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	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	



Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.			Frequency Range:	26.965 - 27.405 MHz	
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	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

APPENDIX E - Spurious Emissions at the Antenna Terminal

References

Normative Reference Standard	FCC CFR 47 §2.1051, Part 95D, 95.635; RSS-236, 5.4.4, RSS-GEN
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Limits

Part 95D: 95.635 RSS-236: 5.4.4	$53 + 10 \log (P_o) = 59 \text{ dBc}$, $60 \text{ dBc} \geq \text{twice the fundamental frequency.}$
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Environmental Conditions

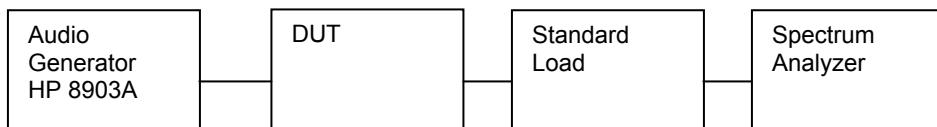
Temperature	25 +/- 5 °C
Humidity	40 +/- 10 %
Barometric Pressure	101 +/- 3 kPa

Equipment List

Asset number	Manufacturer	Model	Description	Last cal / Cal due
00027	HP	8903B	Audio Generator/Analyzer	22-Dec-14 / 22-Dec-16
00099	Mini-Circuits	BHP-50	High Pass Filter	Cal on use
00241	R&S	FSU40	Spectrum Analyzer	04-Sep-15 (first cal cycle)

Setup Drawing

Figure 4 - Setup Drawing – Occupied Bandwidth & Emission Mask



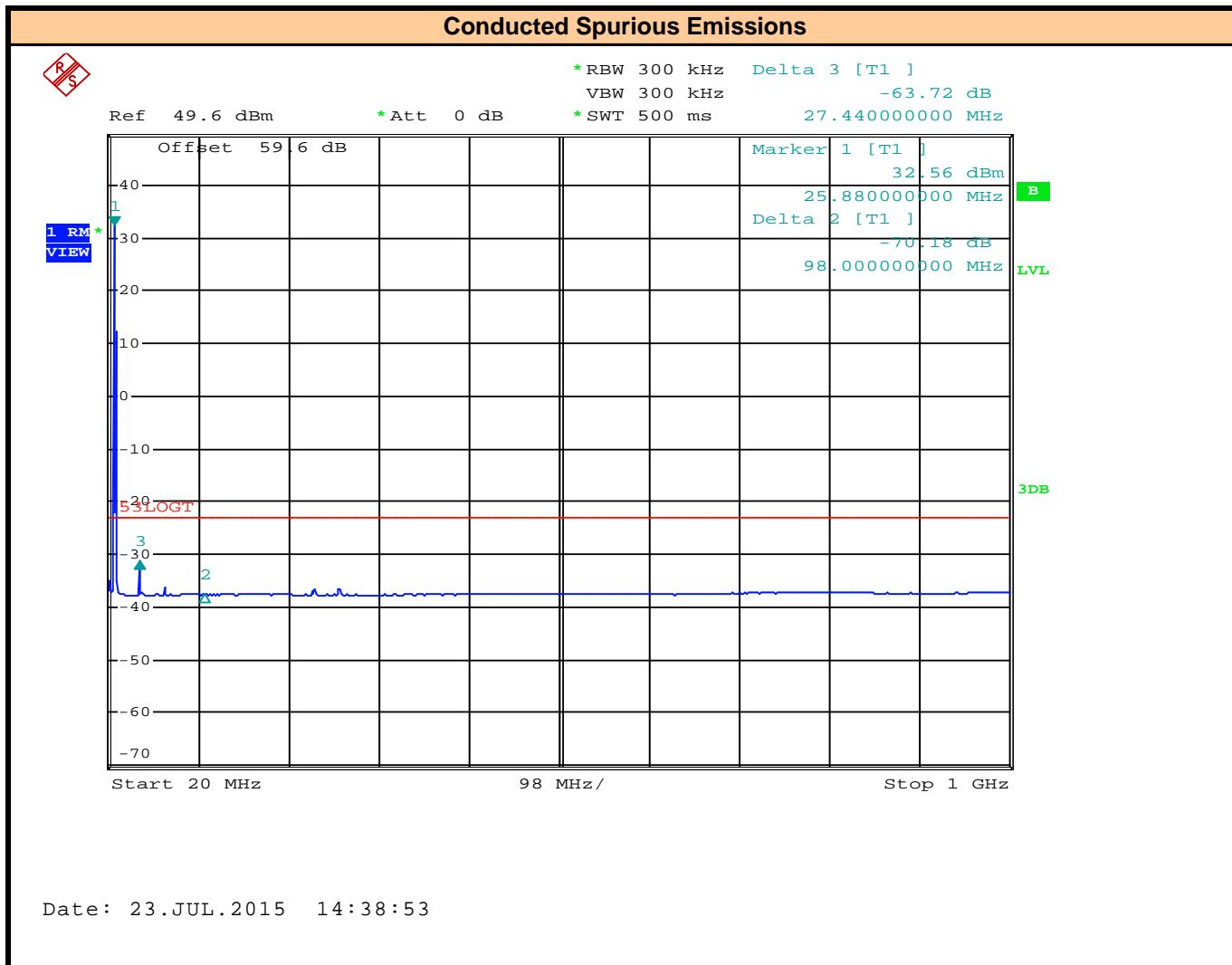
Notes:

The spectrum was searched from 9 kHz to 500 MHz.
All detected emissions have been reported.

Detected Emissions

Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.			Frequency Range:	26.965 - 27.405 MHz	

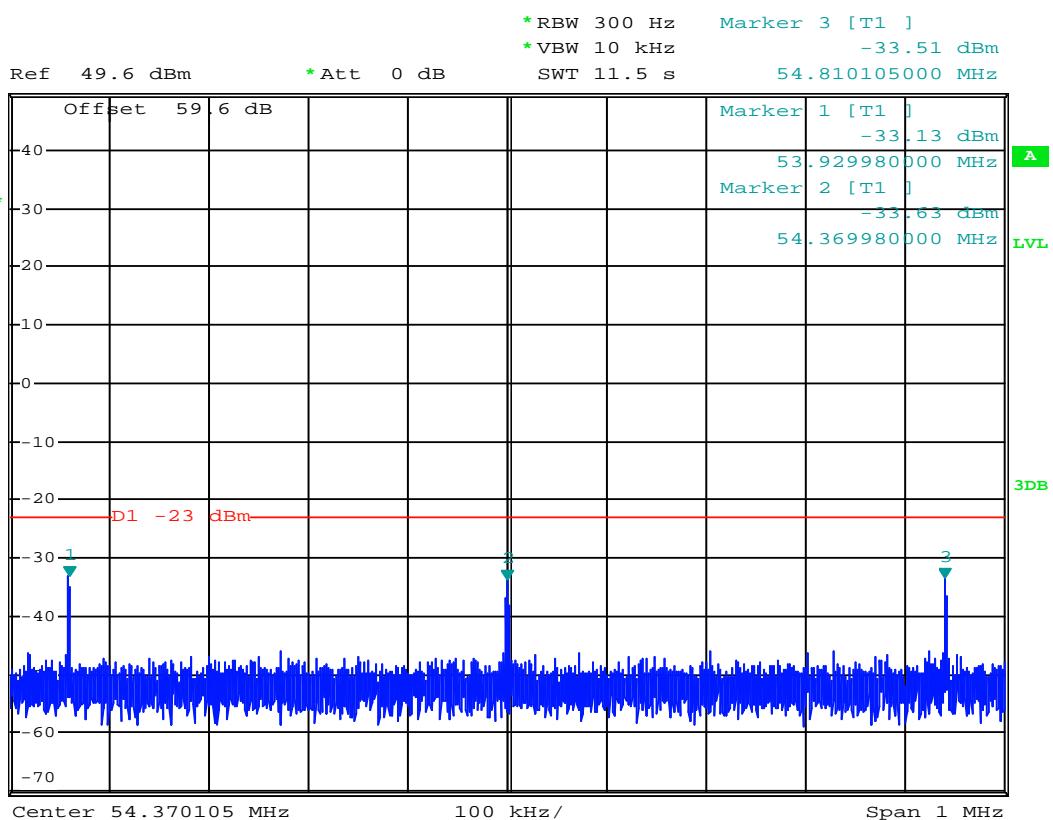
 Testing and Engineering Services Lab	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	



Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			
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 Testing and Engineering Services Lab	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

Conducted Spurious Emissions Channels 1, 19 40

Date: 23.JUL.2015 12:08:22

Harmonic:	2nd
Minimum Attenuation §95.633(a), RSS-236 (5.3.2):	60dB
Minimum Attenuation Measured:	68.82dB
Margin:	8.82dB
Result:	Complies

Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			
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	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

APPENDIX F - Radiated Spurious Emissions

References	
Normative Reference Standard	FCC CFR 47 §2.1053, §95.635, §15B: RSS-236, 5.4, RSS-GEN
Procedure Reference	ANSI/TIA/EIA-382-A, ANSI C63.4

Limits	
FCC §95.635 RSS-236, 5.4	At least $53 + 10 \log_{10}(T)$ dB on any frequency removed from the center, 60 dB twice removed from fundamental.

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	(first cal cycle) / 04-Sep-15
00050	Chase	CBL-6111A	Bilog Antenna	25-Apr-2014 / 25-Apr-2016
00054	EMCO	3121C	Dipole Antenna	(first cal cycle) / 30-Apr-16
00051	HP	8566B	Spectrum Analyzer RF Section	30-Apr-14 / 30-Apr-16
00049	HP	85650A	Quasi-peak Adapter	30-Apr-14 / 30-Apr-16
00047	HP	85685A	RF Preselector	30-Apr-14 / 30-Apr-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

CNR = Calibration Not Required

Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.		Frequency Range:	26.965 - 27.405 MHz		
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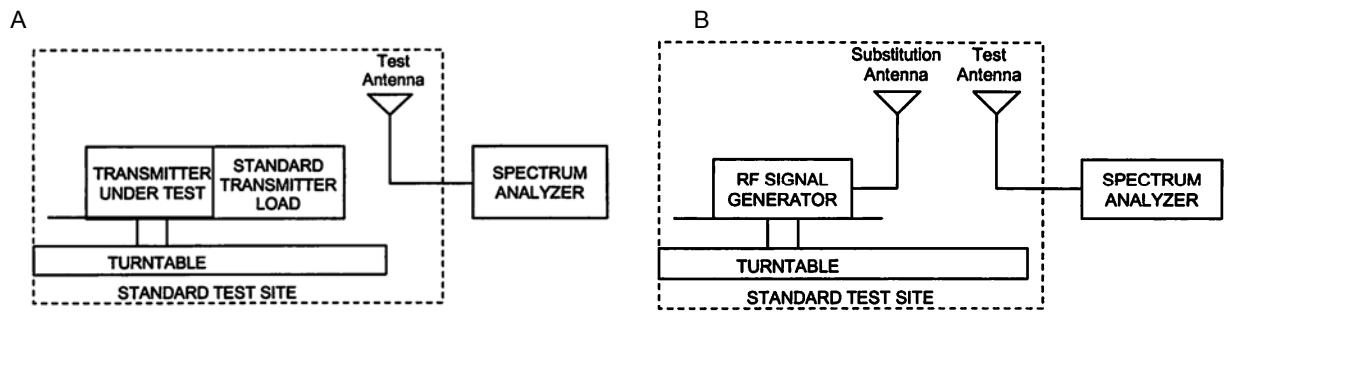
 Celltech <small>Testing and Engineering Services Lab</small>	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

Measurement Equipment Setup

Measurement Equipment Connections	For the field strength measurements, the measurement equipment was connected as shown in F.6. 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 the emission being investigated.		
	Frequency Range	RX Antenna	TX Antenna
	9kHz – 30MHz	6502 Loop Ant	n/a
	30 MHz - 1GHz	Bilog	Dipole
Measurement Equipment Settings	For measuring the radiated field strength of emissions, the spectrum analyzer was set to the following settings:		
	Range	RBW	VBW
		kHz	kHz
	9kHz – 30MHz	10	30
	30 MHz - 1GHz	100	300
	1 GHz - 18 GHz	1000	3000

Setup Drawing

Figure 5 - Setup Drawing – Detected Radiated Spurious Emissions



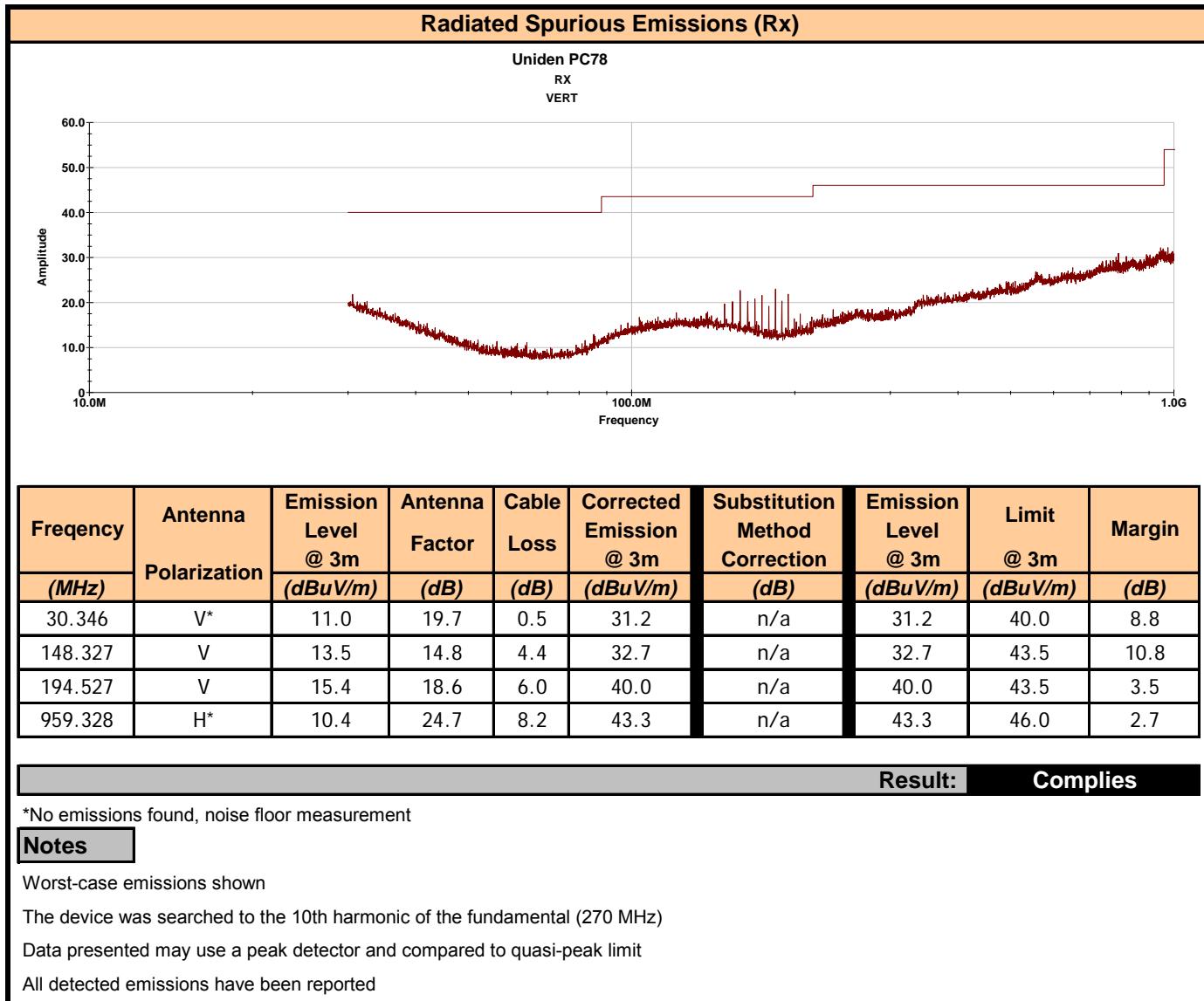
Notes:

The spectrum was searched from the lowest frequency generated in the device to the 10th harmonic of the fundamental.
 All detected emissions have been reported.

The DUT was searched on all axis for worst case performance.
 Worst case emissions are reported.

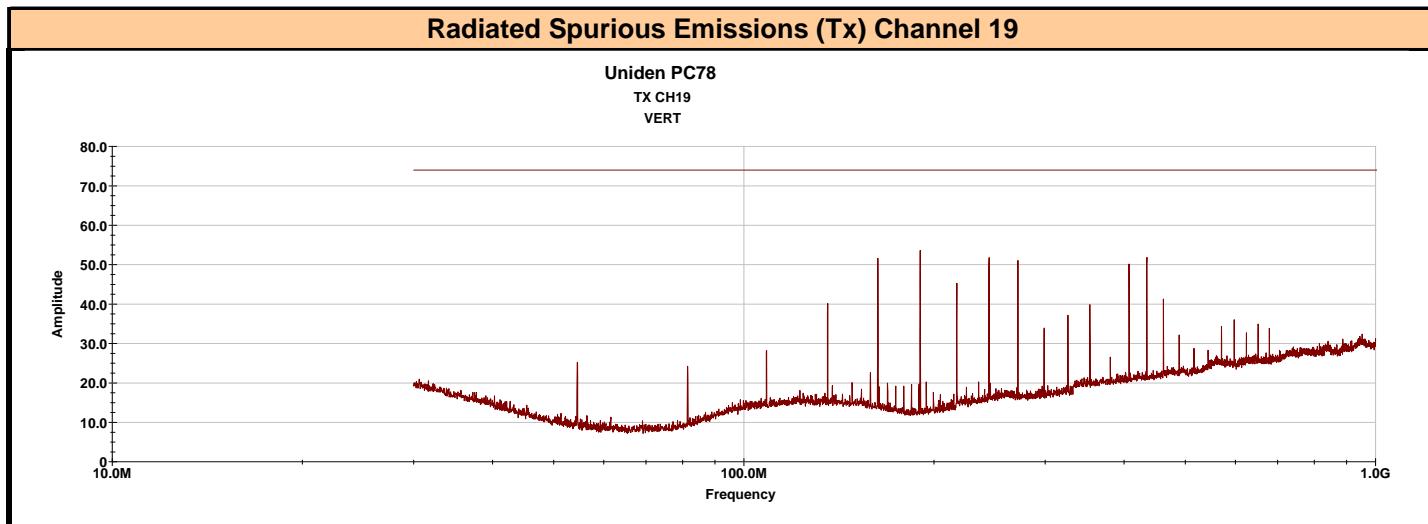
Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			
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 Testing and Engineering Services Lab	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	



Applicant:	Uniden America Corporation	FCC ID: IC: 513C-UT407	Model(s): PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz	
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	Page 22 of 32			

 Testing and Engineering Services Lab	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	



Frequency	Antenna	Emission Level @ 3m	Antenna Factor	Cable Loss	Corrected Emission @ 3m	Substitution Method Correction	Corrected Emission Level	Limit	Margin
(MHz)	Polarization	(dBuV)	(dB)	(dB)	(dBuV/m)	(dB)	(dBm)	(dBm)	(dB)
188.752	H	54.9	9.5	2.1	66.5	1.5	-29.4	-24.0	5.4
215.723	H	52.0	10.2	2.9	65.1	-0.3	-32.6	-24.0	8.6
242.691	H	51.9	12.4	3.0	67.3	0.8	-29.3	-24.0	5.3
431.4312	H	33.0	17.2	5.7	55.9	0.2	-41.3	-24.0	17.3
188.752	V	43.0	9.5	2.1	54.6	1.5	-41.3	-24.0	17.3
215.723	V	49.0	10.2	2.9	62.1	-0.3	-35.6	-24.0	11.6
242.691	V	46.0	12.4	3.0	61.4	0.8	-35.2	-24.0	11.2
431.431	V	28.0	17.2	5.7	50.9	0.2	-46.3	-24.0	22.3

Result: Complies

Notes

Worst-case emissions shown

The device was searched to the 10th harmonic of the fundamental (270 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: IC: 513C-UT407	Model(s): PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz	
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	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

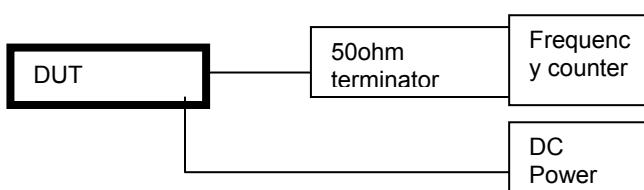
APPENDIX G - Frequency Stability

References	
Normative Reference Standard	FCC CFR 47 §2.1055, §95.625, RSS-GEN
Procedure Reference / Description	The frequency stability shall be measured with variation of ambient temperature as follows: (1) From -30° to +50° centigrade.

Limits	
FCC §95.625	The channel center must be maintained within a frequency tolerance of 0.005%.

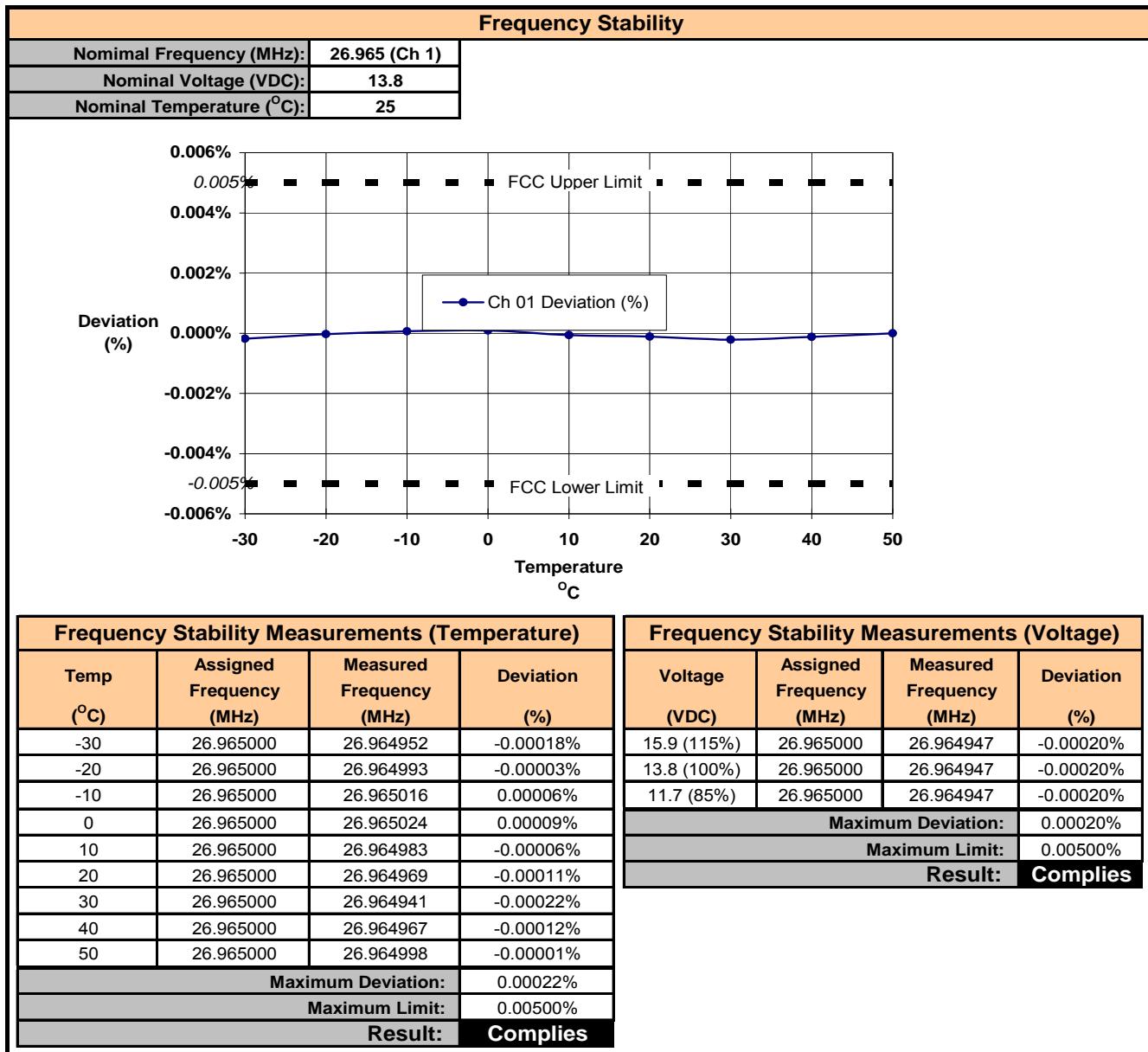
Environmental Conditions	
Temperature	25 +/- 5 °C
Humidity	40 +/- 10 %
Barometric Pressure	101 +/- 3 kPa

Equipment List				
Asset number	Manufacturer	Model	Description	Last cal / Cal due
n/a	ESPEC	ECT-2	Heater/Refrigerator	n/a
00003	HP	53181A	Frequency Counter	28-Apr-14 / 28-Apr-16
n/a	HP	E3611A	DC Power Supply	Cal on use
00234	VWR	61161-378	Temperature Humidity Monitor	New / 08-May-2016

Setup Drawing	
Figure 6 - Setup Drawing – Frequency Stability	
	

Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			
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 Testing and Engineering Services Lab	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	 IAC-MRA ACCREDITED
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	



Applicant:	Uniden America Corporation	FCC ID: IC:	AMWUT407 513C-UT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	Frequency Range:	26.965 - 27.405 MHz			

 Celltech <small>Testing and Engineering Services Lab</small>	Test Report Serial No.:	071515AMW-T1331-E95D	Test Report Issue Date:	20 August 2015	  Test Lab Certificate No. 2470.01
	Measurement Date(s):	July 20-28, 2015	Test Report Revision No.:	1.1	
	Rule Part(s) Applied:	FCC 47 CFR §2, §95D, RSS-236, RSS_GEN	Test Site Registration(s):	FCC Accredited Site	

END OF DOCUMENT

Applicant:	Uniden America Corporation	FCC ID:	AMWUT407	Model(s):	PC78LTD	
DUT Type:	Mobile AM CB Radio Transceiver.	IC:	513C-UT407	Frequency Range:	26.965 - 27.405 MHz	
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