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**FCC PART 95 SUBPART D
CLASS II PERMISSIVE CHANGE TEST REPORT
FOR CB TRANSCEIVERS**

APPLICANT	UNIDEN AMERICA CORPORATION
	4700 AMON CARTER BLVD. FORT WORTH TEXAS 76155 USA
FCC ID	AMW-UT232K
MODEL	PC78XL
PRODUCT DESCRIPTION	MOBILE CB TRANSCEIVER
DATE SAMPLE RECEIVED	10/23/2009
DATE TESTED	10/27/2009
TESTED BY	Richard Block
APPROVED BY	Mario de Aranzeta
TIMCO REPORT NO.	2559AUT9TestReport.doc
TEST RESULTS	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL

**THE ATTACHED REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL OF TIMCO ENGINEERING, INC.**



Testing Certificate # 0955-01



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GENERAL REMARKS

The attached report shall not be reproduced except in full without the written permission of Timco Engineering Inc.

The test results relate only to the items tested.

Summary

The device under test does:

- ☒ fulfill the general approval requirements as identified in this test report
☐ not fulfill the general approval requirements as identified in this test report

Attestations

This equipment has been tested in accordance with the standards identified in this test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report.

All instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025:2005 requirements.



Testing Certificate # 0955-01

I attest that the necessary measurements were made, under my supervision, at:

Timco Engineering Inc.
849 NW State Road 45
Newberry, Fl 32669



Authorized Signatory Name:

Mario de Aranzeta C.E.T.
Compliance Engineer/ Lab. Supervisor

Date: 11/3/2009

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GENERAL INFORMATION
DUT Specification

DUT Description	MOBILE CB TRANSCEIVER
FCC ID	AMW-UT232K
Model	PC78XL
Serial Number	N/A
Operating Frequency	26.965-27.405 MHz
No. of Channels	40
Type of Emission	6K00A3E Bn = 2M M = 3000 Bn = 6000
Modulation	AM
DUT Power Source	<input type="checkbox"/> 110-120Vac/50- 60Hz
	<input checked="" type="checkbox"/> DC Power
	<input type="checkbox"/> Battery Operated Exclusively
Test Item	<input type="checkbox"/> Prototype
	<input checked="" type="checkbox"/> Pre-Production
	<input type="checkbox"/> Production
Type of Equipment	<input type="checkbox"/> Fixed
	<input checked="" type="checkbox"/> Mobile
	<input type="checkbox"/> Portable

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TEST ENVIRONMENT

Test Facility	Timco Engineering, Inc. 849 NW State Road 45 Newberry, FL 32669 USA.
Test Condition in the laboratory	Temperature: 26°C Relative humidity: 50%

TEST SETUP SUMMARY

Test Setup Diagram/Description	The DUT was placed on the turntable per setup per ANSI C63.4: 2003. A test set up photo is provided for clarification.
Deviation from the standard/procedure	No deviation
Modification of DUT	No modification
Applicable Standards	EIA/TIA-382-A, FCC CFR 47 PART 95

PURPOSE OF PERMISSIVE CHANGE:

The PLL IC has been changed due to having to change the IC supplier. The new PLL has the same block diagram and construction of the original PLL. No other changes have been made to the DUT.

Testing has been completed and the device continues to meet the FCC requirements for this class of equipment.

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EQUIPMENT LIST

Device	Manufacturer	Model	Serial Number	Cal/Char Date	Due Date
3-Meter OATS	TEI	N/A	N/A	Listed 2/5/09	2/5/12
3-Meter Semi-Anechoic Chamber	Panashield	N/A	N/A	Listed 5/11/07	5/10/10
Analyzer Tan Tower Preamplifier	HP	8449B-H02	3008A00372	CAL 11/30/07	11/30/09
Analyzer Tan Tower Quasi-Peak Adapter	HP	85650A	3303A01690	CAL 11/30/07	11/30/09
Analyzer Tan Tower RF Preselector	HP	85685A	3221A01400	CAL 11/30/07	11/30/09
Analyzer Tan Tower Spectrum Analyzer	HP	8566B Opt 462	3138A07786 3144A20661	CAL 11/30/07	11/30/09
Antenna: BiconiLog	EMCO	3143	9409-1043		No Cal Required
Antenna: Biconnical	Eaton	94455-1	1057	CAL 1/15/08	1/15/10
Antenna: Biconnical	Electro-Metrics	BIA-25	1171	CAL 10/1/09	10/1/11
Antenna: Log-Periodic	Eaton	96005	1243	CAL 12/13/07	12/13/09
LISN	Electro-Metrics	ANS-25/2	2604	CAL 10/16/09	10/16/11
LISN	Electro-Metrics	EM-7820	2682	CAL 9/24/09	9/24/11
Signal Generator	HP	8640B	2308A21464	CAL 8/4/09	8/4/11

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TEST PROCEDURE

Power Line Conducted Interference: The procedure used was EIA/TIA-382-A using a 50uH LISN. Both lines were observed with the UUT transmitting. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

Bandwidth 20 dB: The measurements were made with the spectrum analyzer's resolution bandwidth (RBW) = 1 MHz and the video bandwidth (VBW) = 3 MHz and the span set as shown on plot.

Power Output: The RF power output was measured at the antenna feed point using a peak power meter.

Antenna Conducted Emissions: The RBW = 100 kHz, VBW = 300 kHz and the span set to 10.0 MHz and the spectrum was scanned from 30 MHz to the 10th Harmonic of the fundamental. Above 1 GHz the resolution bandwidth was 1 MHz and the VBW = 3 MHz and the span to 50 MHz.

Radiation Interference: The test procedure used was EIA/TIA-382-A using an Agilent spectrum receiver with pre-selector. The bandwidth (RBW) of the spectrum EIA/TIA-382-A receiver was 100 kHz up to 1 GHz and 1 MHz above 1 GHz with an appropriate sweep speed. The VBW above 1 GHz was 3 MHz. The analyzer was calibrated in dB above a microvolt at the output of the antenna.

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SPURIOUS EMISSIONS AT ANTENNA TERMINALS (CONDUCTED)

Rule Part No.: Part 2.1051(a)

Requirements: $53 + 10 \log (TP) = 59$. dB. Any emissions above 54 MHz must be 60 dBc.

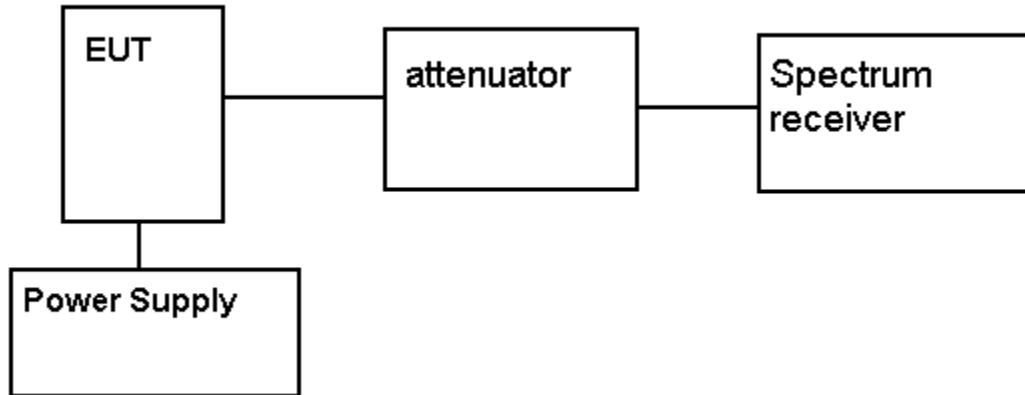
Method of Measurement: The carrier was modulated 100% using a 2500 Hz tone. The spectrum was scanned from 0.4 to at least the 10th harmonic of the fundamental. The measurements were made in accordance with standard EIA/TIA-382-A.

Test Data:

MHz	dBc		MHz	dBc		MHz	dBc
26.965	0.0		27.185	0.0		27.405	0.0
53.930	70.3		54.370	67.0		54.810	64.3
80.895	66.2		81.555	65.4		82.215	64.6
107.860	69.0		108.740	68.5		109.620	69.2
134.825	72.9		135.925	75.1		137.025	70.1
161.790	74.6		163.110	73.0		164.430	67.7
188.755	70.3		190.295	70.2		191.835	70.0
215.720	80.5		217.480	78.6		219.240	77.0
242.685	72.6		244.665	74.0		246.645	75.3
269.650	73.5		271.850	73.8		274.050	72.9

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Method of Measuring Conducted Spurious Emissions



METHOD OF MEASUREMENT: The procedure used was EIA/TIA-382-A.

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FIELD STRENGTH OF SPURIOUS EMISSIONS

Rule Parts. No.: Part 2.1053, 95.635(b)(8)(9)

Requirements: Emissions must be attenuated by at least the following below the output of the transmitter.

$53 + 10\log(4.00) = 59.0 \text{ dB}$ or
FCC Limit for: 8kHz Authorized BW

At least $53 + 10\log(T)$ dB on any frequency removed from the center of the authorized bandwidth by more than 250%. At least 60dB on any frequency twice or greater than twice the fundamental.

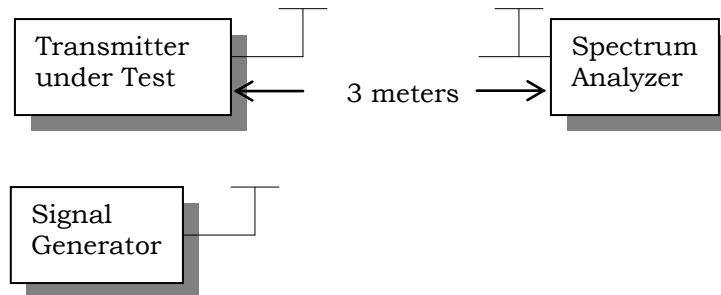
Test Data:

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)	Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)	Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
26.965	0	0	27.185	0	0	27.405	0	0
53.930	V	85.96	54.370	V	88.16	54.810	V	87.86
80.895	H	83.76	81.555	V	79.96	82.215	V	79.46
107.860	V	74.96	108.740	V	76.06	109.620	V	75.46
134.825	H	76.22	135.925	H	77.52	137.025	H	78.02
161.790	H	83.11	163.110	H	81.31	164.430	H	79.11
188.755	H	65.81	190.295	H	67.11	191.835	V	67.41
215.720	H	63.48	217.480	H	62.28	219.240	V	63.08
242.685	H	68.12	244.665	V	70.22	246.645	H	70.62
269.650	H	64.62	271.850	H	66.92	274.050	H	67.82

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METHOD OF MEASUREMENT: The tabulated data shows the results of the radiated field strength emissions test. The spectrum was scanned from 30 MHz to at least the tenth harmonic of the fundamental. This test was conducted per EIA/TIA-382-A using the substitution method. Measurements were made at the test site of TIMCO ENGINEERING, INC. located at 849 NW State Road 45, Newberry, FL 32669.

Test Setup Diagram:



RADIATED EMISSIONS TEST SETUP PHOTO



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