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**FCC PART 90  
AND IC RSS-119, RSS-GEN  
CLASS II PERMISSIVE CHANGE  
TEST REPORT**

<b>APPLICANT</b>	VERTEX STANDARD CO., LTD. 4-8-8 NAKAMEGURO, MEGURO-KU TOKYO 153-8644 JAPAN
<b>FCC ID</b>	K6610614630
<b>IC CERTIFICATION</b>	511B-10614630
<b>MODEL NUMBER</b>	VX-2100-G6-25
<b>PRODUCT DESCRIPTION</b>	MOBILE RADIO
<b>DATE SAMPLE RECEIVED</b>	12/28/2011
<b>DATE TESTED</b>	1/2/2012
<b>TESTED BY</b>	Nam Nguyen
<b>APPROVED BY</b>	Mario de Aranzeta
<b>TIMCO REPORT NO.</b>	3092UT11TestReport.doc
<b>TEST RESULTS</b>	<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.**



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:** January 3, 2012

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## **TEST PROCEDURES**

**Radiation Interference:** The test procedure used was ANSI/TIA 603-C:2004 using an Agilent spectrum receiver with pre-selector. The bandwidth (RBW) of the spectrum 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 micro volt at the output of the antenna.

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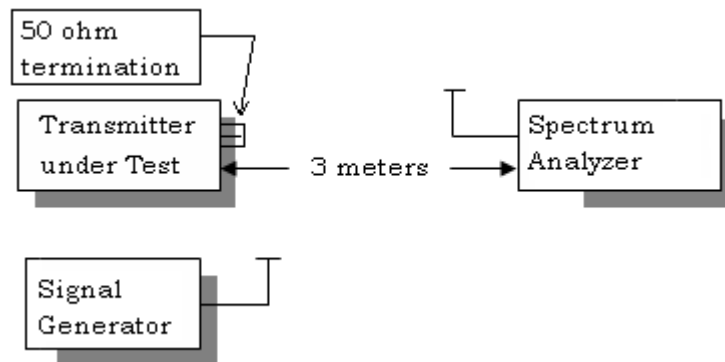
## FIELD STRENGTH OF SPURIOUS EMISSIONS

**Rule Parts. No.:** FCC Part 2.1053, RSS-GEN 4.9

**Requirements:** 12.5kHz Channel Spacing = 64dBc (for 25 Watts)  
12.5kHz Channel Spacing = 50dBc (for 1 Watts)

**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 ANSI/TIA 603-C:2004 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:



**Test Data:**

**High Power**

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
406.10	0	0
812.20	H	90.6
1218.30	H	101.0
1624.40	H	97.2
2030.50	V	97.0
2436.60	H	91.3
2842.70	H	96.7
3248.80	H	98.7
3654.90	H	98.9
4061.00	H	98.8

**Low Power**

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
406.10	0	0
812.20	H	78.9
1218.30	H	86.2
1624.40	H	81.3
2030.50	V	87.5
2436.60	V	80.9
2842.70	H	81.9
3248.80	V	84.6
3654.90	H	84.8
4061.00	H	82.3

**High Power**

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
435.00	0	0
870.00	H	96.3
1305.00	H	100.6
1740.00	H	97.4
2175.00	H	94.9
2610.00	V	94.2
3045.00	H	98.3
3480.00	V	95.4
3915.00	V	93.9
4350.00	H	96.1

**Low Power**

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
435.00	0	0
870.00	H	81.2
1305.00	H	87.1
1740.00	H	83.3
2175.00	V	84.9
2610.00	V	80.2
3045.00	V	80.4
3480.00	H	84.6
3915.00	V	83.3
4350.00	H	81.8

**HIGH POWER**

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
470.00	0	0
940.00	H	98.8
1410.00	H	100.3
1880.00	H	95.3
2350.00	H	84.3
2820.00	H	101.7
3290.00	V	97.9
3760.00	V	96.5
4230.00	V	95.7
4700.00	H	96.8

**LOW POWER**

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
470.00	0	0
940.00	H	87.8
1410.00	H	86.3
1880.00	H	81.4
2350.00	H	76.1
2820.00	H	90.0
3290.00	V	81.0
3760.00	V	80.7
4230.00	V	82.7
4700.00	H	82.0

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## EMC EQUIPMENT LIST

Device	Manufacturer	Model	Serial Number	Cal/Char Date	Due Date
Analyzer Tan Tower Spectrum Analyzer	HP	8566B Opt 462	3138A07786 3144A20661	11/24/09	10/28/13
Analyzer Tan Tower Preamplifier	HP	8449B-H02	3008A00372	11/21/09	10/28/13
Antenna: Biconnical	Electro-Metrics	94455-1BIA-25	1096	05/04/2011	05/04/2013
Antenna: Biconnical	Eaton	94455-1	1096	05/04/11	05/04/13
Antenna: Log-Periodic	Electro-Metrics	LPA-25	1122	05/04/11	05/04/13
Frequency Counter	HP	5352B	2632A00165	06/22/11	06/22/13
Frequency Counter	HP	5385A	2730A03025	08/17/11	08/17/13
Signal Generator	HP	8648C	3623A02898	09/9/11	09/9/13
Hygro-Thermometer	Extech	445703	0602	06/15/11	06/15/13
Digital Multimeter	Fluke	77	35053830	09/09/11	09/09/13
Analyzer Tan Tower RF Preselector	HP	85685A	3221A01400	11/21/09	10/28/13
Antenna: Passive Loop	EMC Test Systems	EMCO 6512	9706-1211	06/02/09	06/02/12
Modulation Analyzer	HP	8901A	3435A06868	07/18/11	07/18/13
Analyzer Tan Tower Quasi-Peak Adapter	HP	85650A	3303A01690	11/22/09	10/28/13
Temperature Chamber	Tenney Engineering	TTRC	11717-7	06/18/10	06/18/12
Frequency Counter	HP	5385A	3242A07460	06/22/11	06/22/13
3-Meter OATS	TEI	N/A	N/A	02/05/09	02/05/12
3-Meter Semi-Anechoic Chamber	Panashield	N/A	N/A	05/10/10	05/10/12

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