



BUREAU
VERITAS

Test Report No.: FS130516N019

RF EXPOSURE REPORT

Applicant	Axesstel Inc.
Address	6815 Flanders Drive, Suite 210 ,San Diego, CA 92121

Manufacturer or Supplier	Eastern Communications Company Limited
Address:	No.66, Building A, Eastcom City, Eastcom Road, Binjing Hi-tech Industry Development Zone, Hang Zhou 310053 China
Product	CDMA 1x EV-DO rev.B Router
Brand Name	AXESSTEL Inc.
Model	MV640VR
Additional Model & Model Difference	MV640, MV640R, MV640V
Date of tests	May 16, 2013 ~ May 27, 2013

☒ FCC Part 2 (Section 2.1091)

☒ FCC OET Bulletin 65, Supplement C (01-01)

☒ IEEE C95.1

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Reviewed by Glyn He Supervisor / EMC Department	Approved by Sam Tung Manager / EMC Department
	 Date: May 27, 2013

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FS130516N019	Original release	May 27, 2013



Test Report No.: FS130516N019

1. CERTIFICATION

PRODUCT: CDMA 1x EV-DO rev.B Router

BRAND NAME: AXESSTEL Inc.

MODEL NO.: MV640VR

TEST SAMPLE: ENGINEERING SAMPLE

APPLICANT: Axesstel Inc.

TESTED DATE: May 27, 2013

STANDARDS: FCC Part 2 (Section 2.1091)
FCC OET Bulletin 65, Supplement C (01-01)
IEEE C95.1



2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
Chain 0	3.5	PIFA
Chain 1	3.5	PIFA



6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX CONDUCTED POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2412-2462	22.68	3.5	20	0.08255	1.00

DEVICE	FREQUENCY (MHz)	MAX EIRP POWER (dBm)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm ²)
3G Module	824.7	27.81	20	0.12015	0.55

This product can operate within 3G Module which has maximum of 27.81 EIRP output power.

CONCLUSION:

Both of the WLAN and plug-in device (3G) can transmit simultaneously, the formula of calculated the MPE is:

$$CPD_1 / LPD_1 + CPD_2 / LPD_2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

Therefore, the worst-case situation is $0.08255 / 1 + 0.12015 / 0.55 = 0.301$, which is less than "1". This confirmed that the device comply with FCC 1.1310 MPE limit.

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