

# **FCC Radio Test Report** FCC ID: X4YTRNTY3G

This report concerns (check one): ⊠Original Grant □Class II Change

Project No. : 1510C002

Equipment : 3G/4G TRINITY PORTABLE SIM-BASED WI-FI

**HOTSPOT** 

Model Name : ARNPR3G5U1

: NEXXT SOLUTIONS Applicant

Address : 3505 N.W 107TH AVE, MIAMI, FL, 33178

Date of Receipt : Oct. 08, 2015

Date of Test : Oct. 08, 2015 ~ Nov. 02, 2015 | Issued Date : Nov. 03, 2015 | BTL Inc.

**Technical Engineer** 

(Shawn Xiao)

**Authorized Signatory** 

(Steven Lu)

# BTL INC

No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

TEL: +86-769-8318-3000FAX: +86-769-8319-6000

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#### **Declaration**

**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C.**, or National Institute of Standards and Technology (**NIST**) of **U.S.A.** 

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#### Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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# **REPORT ISSUED HISTORY**

Issued No.	Description	Issued Date
BTL-FCCP-4-1510C002	Original Issue.	Nov. 03, 2015

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#### 1. CERTIFICATION

Equipment : 3G/4G TRINITY PORTABLE SIM-BASED WI-FI HOTSPOT

Brand Name: NEXXT

Model Name: ARNPR3G5U1

Applicant : NEXXT SOLUTIONS Manufacturer : NEXXT SOLUTIONS

Address : 3505 N.W 107TH AVE, MIAMI, FL, 33178

Date of Test : Oct. 08, 2015 ~ Nov. 02, 2015

Test Sample: Engineering Sample

Standard(s): 47 CFR FCC Part 24 Subpart E

47 CFR FCC Part 2 & ANSI/TIA-603-D-2010

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-4-1510C002) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

Test result included in this report is only for the WCDMA Band II approvalpart of the product.

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# 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part 24 Subpart E & Part 2						
Standard(s) Section FCC	Test Item	Judgment	Remark			
2.1046 24.232(c)	Radiated power	PASS				
2.1049 24.238(a)	Occupied Bandwidth	PASS				
2.1051 24.238(a)	Conducted Spurious Emissions	PASS				
2.1053 24.238(a)	Radiated Spurious Emissions	PASS				
24.238(a)	Band Edge Measurements	PASS				
24.232(d)	Peak To Average Ratio	PASS				
2.1055 24.235	Frequency Stability	PASS				

#### NOTE:

(1)" N/A" denotes test is not applicable to this device.

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#### 2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's test firm number for FCC: 319330

#### 2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2  $U_{cispr}$  requirement.

The reported uncertainty of measurement  $\mathbf{y} \pm \mathbf{U}$ , where expanded uncertainty  $\mathbf{U}$  is based on astandard uncertainty multiplied by a coverage factor of  $\mathbf{k=2}$ , providing a level of confidence of approximately  $\mathbf{95}\%$   $\circ$ 

#### A. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
DG-CB03 (3m)		9KHz ~ 30MHz	V	3.79
	CISPR	9KHz ~ 30MHz	Н	3.57
		30MHz ~ 200MHz	V	3.82
		30MHz ~ 200MHz	Н	3.78
		200MHz ~ 1,000MHz	V	4.10
		200MHz ~ 1,000MHz	Н	4.06

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
DG-CB03 (3m)		1GHz ~ 18GHz	٧	3.12
		1GHz ~ 18GHz	I	3.68
		18GHz ~ 40GHz	V	4.15
		18GHz ~ 40GHz	Н	4.14

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

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## 3. GENERAL INFORMATION

## 3.1 GENERAL DESCRIPTION OF EUT

Equipment	3G/4G TRINITY PORTABLE SIM-BASED WI-FI HOTSPOT			
Brand Name	NEXXT			
Model Name	ARNPR3G5U1			
Model Difference	NA			
Modulation Type	WCDMA	BPSK		
Operation Frequency	WCDMA	1852.4 ~ 1907.6 MHz		
Max. EIRP Power	WCDMA 23.97dBm			
Antenna Type	Fixed Internal Antenna			
Antenna Gain	-0.94dBi			
Power Source	#1 Supplied from PC USB port. #2 Supplied from LI-ion Battery.			
Power Rating	#1 DC 5V #2 2000mAh/3.7V/7.4Wh			

#### Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. The EUT contains following accessory devices.

Product	Brand	Model	Description
Battery	N/A	BM301	3.7Vdc, 2000mAh
USB Cable	N/A	N/A	0.8m shielded cable without core

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#### 3.2 DESCRIPTION OF TEST MODES AND TEST CONDITION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, X/Y/Z axis and antenna ports.

The worst case was found when positioned on Z-plane for ERP and Z-axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

WCDMA MODE							
Test Item	Available Channel	Tested Channel	Mode				
EIRP	9262 to 9538	9262, 9400, 9538	WCDMA				
Condcudeted Emission	9262 to 9538	9262, 9400, 9538	WCDMA				
Radiated Emission	9262 to 9538	9262	WCDMA				
Band Edge	9262 to 9538	9262, 9538	WCDMA				
Peak to Average Ratio	9262 to 9538	9262, 9400, 9538	WCDMA				
Frequency Stability	9262 to 9538	9400	WCDMA				

**Note:** This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in **QPSK** modulation.

#### **EUT TEST CONDITIONS:**

Test Item	Environmental Conditions	Input Power	Tested By
EIRP	25°C, 65%RH	DC 3.7V	Kai Xu
Occupied Bandwidth	25°C, 65%RH	DC 3.7V	Kai Xu
Conducted Emission	25°C, 65%RH	DC 3.7V	Kai Xu
Radiated Emission	25°C, 65%RH	DC 3.7V	Kai Xu
Band Edge	25°C, 65%RH	DC 3.7V	Kai Xu
Peak to Average Ratio	25°C, 65%RH	DC 3.7V	Kai Xu
Frequency Stability	25°C, 65%RH	DC 3.7V	Kai Xu

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3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED							
E.I.R.P	:						
				EUT			
	SCRIPTION C				ether w		emote system Ground Plane ssary accessories or
suppo		llowing suppo					a representative test
Item	Equipment	Mfr/Brand	Model/Type No.	FCC	ID	Series No.	Note
-	-	-	-	-		-	-
Item	Shielded Type	e Ferrite Cor	e Length			No	ote
	-	-	-			-	-

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#### 4. TEST RESULT

#### 4.1 OUTPUT POWER MEASUREMENT

#### 4.1.1 LIMIT

Mobile / Portable station are limited to 2 watts e.i.r.p.

#### 4.1.2 TEST PROCEDURE

#### **EIRP/ERP:**

- 1. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 1MHz for GSM, GPRS & EDGE, 5MHz for WCDMA and CDMA, and 10MHz for LTE mode
- 2. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- 3. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step b. Record the power level of S.G
- 5. EIRP = Output power level of S.G TX cable loss + Antenna gain of substitution horn.E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power 2.15dBi.

#### Conducted Power:

The EUT was set up for the maximum power with GSM, GPRS, EDGE, WCDMA, CDMA, and LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

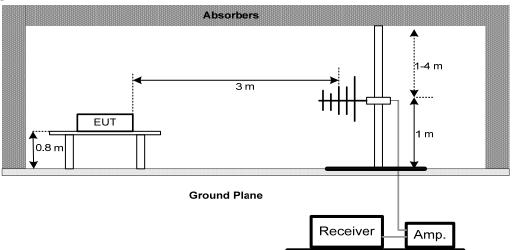
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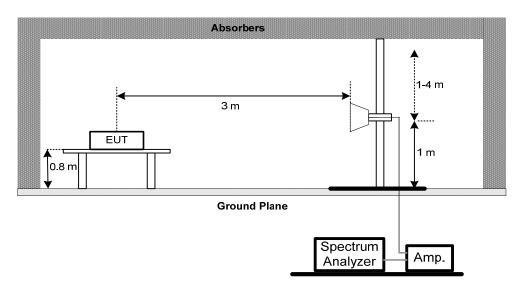
#### **4.1.3 TESTSETUP LAYOUT**

## **ERP Power Measurement**

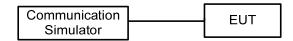
#### **Below 1G**



#### **Above 1G**



#### **Conducted Power Measurement**



#### 4.1.4 TEST DEVIATION

No deviation

#### 4.1.5 TEST RESULTS

Please refer to the Attachment A.

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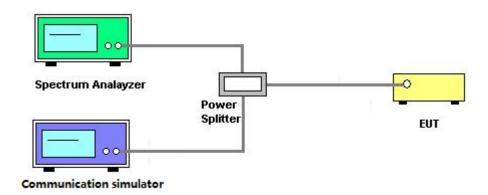


#### 4.2 OCCUPIED BANDWIDTH MEASUREMENT

#### **4.2.1 TEST PROCEDURE**

The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

#### **4.2.2 TEST SETUP LAYOUT**



#### **4.2.3 TEST DEVIATION**

No deviation

#### **4.2.4 TEST RESULTS**

Please refer to the Attachment B.

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#### 4.3 CONDUCTED EMISSIONS MEASUREMENT

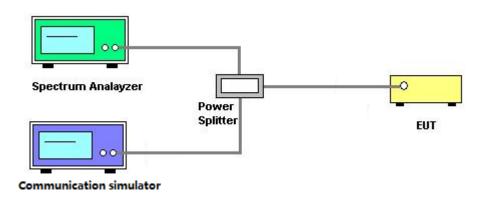
#### 4.3.1 LIMIT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to -13dBm.

#### **4.3.2 TEST PROCEDURES**

- 1. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- 2. Measuring frequency range is from 9 kHz to 9GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

# 4.3.3 TESTSETUP LAYOUT



#### 4.3.4 TESTDEVIATION

No deviation

#### 4.3.5 TEST RESULTS

Please refer to the Attachment C.

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#### 4.4 RADIATED EMISSIONS MEASUREMENT

#### 4.4.1 LIMIT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to -13dBm.

#### 4.4.2 TEST PROCEDURES

- 1. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- 2. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G
- 3. EIRP = Output power level of S.G TX cable loss + Antenna gain of substitution horn.
- 4. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power 2.15dBi.
- 5. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

#### 4.4.3 TESTSETUP LAYOUT

This test setup layout is the same as that shown in **section 4.1.3.** 

#### 4.4.4 TESTDEVIATION

No deviation

#### 4.4.5 TEST RESULTS

Please refer to the Attachment D.

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#### 4.5 BAND EDGE MEASUREMENT

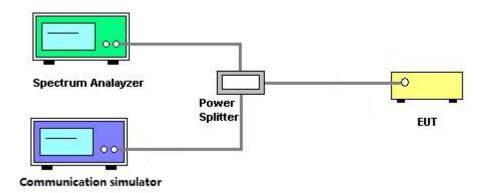
#### 4.5.1 LIMIT

A Power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

#### 4.5.2 TEST PROCEDURES

- 1. All measurements were done at low and high operational frequency range.
- 2. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 3kHz and VB of the spectrum is 10kHz (GSM/GPRS/EDGE).
- 3. The center frequency of spectrum is the band edge frequency and span is 5MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (WCDMA).
- 4. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 13kHz and VB of the spectrum is 51kHz (LTE Bandwidth 1.4MHz).
- 5. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 30kHz and VB of the spectrum is 100kHz (LTE Bandwidth 3MHz).
- 6. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (LTE Bandwidth 5MHz/10MHz).
- 7. Record the max trace plot into the test report.

#### 4.5.3 TESTSETUP LAYOUT



#### 4.5.4 TESTDEVIATION

No deviation

#### 4.5.5 TEST RESULTS

Please refer to the Attachment E.

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#### 4.6 PEAK TO AVERAGE RATIO MEASUREMENT

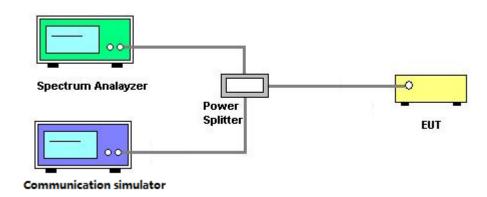
#### 4.6.1 LIMIT

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

#### **4.6.2 TEST PROCEDURES**

- 1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
- 2. Set the number of counts to a value that stabilizes the measured CCDF curve;
- 3. Record the maximum PAPR level associated with a probability of 0.1%.

#### 4.6.3 TESTSETUP LAYOUT



#### 4.6.4 TESTDEVIATION

No deviation

#### 4.6.5 TEST RESULTS

Please refer to the Attachment F.

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#### 4.7 FREQUENCY STABILITY MEASUREMENT

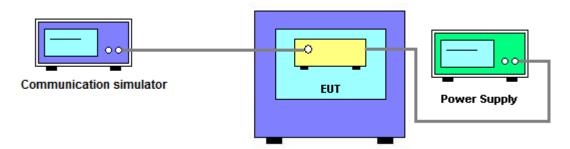
#### 4.7.1 LIMIT

1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

#### **4.7.2 TEST PROCEDURES**

- 1. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- 2. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- 3. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5°C during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.
- 4. The frequency error was recorded frequency error from the communication simulator.

#### 4.7.3 TESTSETUP LAYOUT



#### 4.7.4 TESTDEVIATION

No deviation

#### 4.7.5 TEST RESULTS

Please refer to the Attachment G.

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# 5. LIST OF MEASUREMENT EQUIPMENTS

	Radiated Emission & ERP or EIRP Measurement						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 28, 2016		
2	Amplifier	HP	8447D	2944A09673	Nov. 17, 2015		
3	Receiver	AGILENT	N9038A	MY52130039	Oct. 11, 2016		
4	Test Cable	emci	LMR-400(30MH z-1GHz)	C-01	Jun. 28, 2016		
5	Controller	СТ	SC100	N/A	N/A		
6	Antenna	ETS	3115	75789	Mar. 28, 2016		
7	Amplifier	Agilent	8449B	3008A02274	Nov. 02, 2015		
8	Test Cable	emci	EMC104-SM-S M-10000(1GHz -26.5GHz)	C-68	Jun. 28, 2016		
9	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Mar. 28, 2016		
10	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 28, 2016		
11	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A		
12	Wireless Communication Test Set	(8960 Series) Agilent	E5515C	MY48364183	Mar. 28, 2016		

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	Conducted Emission & Band Edge & Occupied Bandwidth Measurement										
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until						
1	EXA SpectrumAnalyzer	Agilent	N9010A	MY50520044	Mar. 28, 2016						
2	Wireless Communication Test Set	(8960 Series)Agilent	E5515C	MY48364183	Mar. 28, 2016						
3	wideband radio communication tester	R&S	CMW500	152372	Jan.30, 2016						
4	POWER SPLITTER	Mini-Circuits	ZFRSC-123- S+	331000910-1	Mar. 17, 2016						
5	Test Cable	N/A	RG316	Cable4-001	Jul. 15, 2016						
6	Test Cable	N/A	RG316	Cable4-002	Jul. 15, 2016						

	Frequency Stability Measurement										
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until						
1	Wireless Communication Test Set	(8960 Series)Agilent	E5515C	MY48364183	Mar. 28, 2016						
2	wideband radio communication tester	R&S	CMW500	152372	Jan.30, 2016						
3	POWER SPLITTER	Mini-Circuits	ZFRSC-123- S+	331000910-1	Mar. 17, 2016						
4	Test Cable	N/A	RG316	Cable4-001	Jul. 15, 2016						
5	Const Temp. & Hu midity Chamber	GIANT FORCE	ITH-225-20- S	IAB0309-001	Dec.05, 2015						
6	DC power supply	GW Instek	GPC-3030D N	EK880675	Oct. 13, 2016						

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

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# 6. EUT TEST PHOTO

# **Radiated Measurement Photos**

# 30MHz to 1000MHz





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# **Radiated Measurement Photos**

# Above 1000MHz





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ATTACHMENT A - OUTPUT	POWER

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#### **E.I.R.P Power**

	WCDMA Band II									
Plane	Channel	Frequency (MHz)	EIRP(dBm)	Max. Limit (dBm)	Polarization (H/V)					
	9262	1852.4	23.93	33.00	Н					
	9400	1880.0	23.97	33.00	Н					
7	9538	1907.6	23.00	33.00	Н					
	9262	1852.4	23.30	33.00	V					
	9400 1880.0 23.40		23.40	33.00	V					
	9538	1907.6	22.01	33.00	V					

#### **Conducted Power:**

Band	WCDMA II							
TX Channel		9262	9400	9538				
RX Channel	Max. Tune-up Power	9662	9800	9938				
Frequency	1 GWCi	1852.4	1880	1907.6				
RMC 12.2K	23.00	22.89	22.55	22.39				
RMC 64K	23.00	22.87	22.52	22.33				
RMC 144K	23.00	22.88	22.50	22.34				
RMC 384K	23.00	22.87	22.51	22.35				
HSDPA Subtest-1	22.00	21.95	21.67	21.58				
HSDPA Subtest-2	22.00	21.88	21.63	21.53				
HSDPA Subtest-3	22.00	21.42	21.20	21.07				
HSDPA Subtest-4	22.00	21.42	21.19	21.04				
HSUPA Subtest-1	20.50	19.89	19.65	19.55				
HSUPA Subtest-2	20.50	19.30	19.06	18.94				
HSUPA Subtest-3	20.50	20.37	20.11	19.95				
HSUPA Subtest-4	20.50	19.81	19.59	18.86				
HSUPA Subtest-5	20.50	19.91	19.58	19.40				
HSPA+ Subtest-1	22.00	21.89	21.61	21.39				
HSPA+ Subtest-2	22.00	21.88	21.59	21.40				
HSPA+ Subtest-3	22.00	21.92	21.56	21.42				
HSPA+ Subtest-4	22.00	21.89	21.55	21.38				
HSPA+ Subtest-1 (UL 16 QAM)	20.50	20.37	20.10	20.05				

#### **REMARKS:**

- 1. Radiated Output Power(dBm)=Raw Value(dBm) + Correction Factor(dB) +Ant Gain(dBi)
- 2. Correction Factor(dB) = Power SplitterLoss(dB) + Cable Loss(dB)
- 3. The antenna gain is -0.94dBi
- 4. Tests have been conducted for both vertical and horizontal plane and the worst case was found in horizontal plane and the results were selected and recorded in the report

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ATTACHMENT B - OCCUPIED BANDWIDTH

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Test Mode: TX Mode ConfigurationWCDMA-12.2K RMC								
Channel	Frequency	99% OBW -26dBc (MHz) Bandwidth(MHz)		Result				
9262	1852.400MHz	4.16	4.69	Complies				
9400	1880.000 MHz	4.16	4.69	Complies				
9538	1907.600 MHz	4.16	4.69	Complies				

## 99% Occupied Bandwidth channel 9262



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### 99% Occupied Bandwidth channel 9400



#### 99% Occupied Bandwidth channel 9538



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ATTACHMENT C – CONDUCTED EMISSIONS

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# Conducted Spurious of Configuration- 12.2K RMC channel 9400



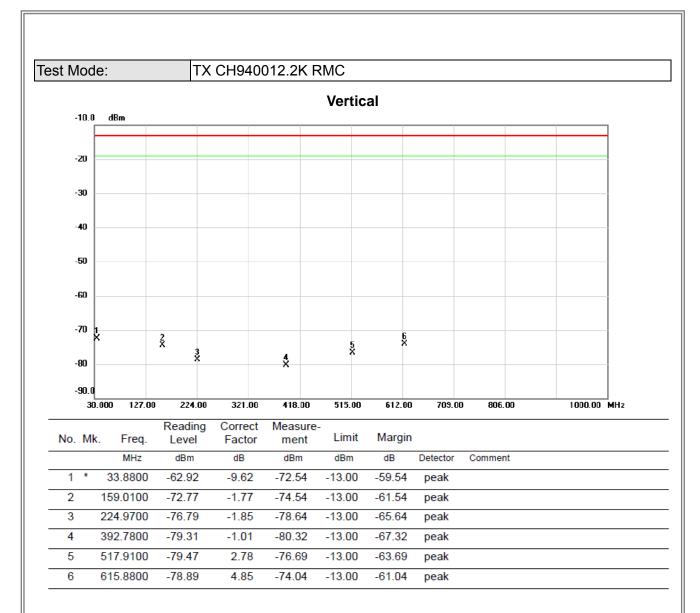
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ATTACHMENT D - RADIATED EMISSION

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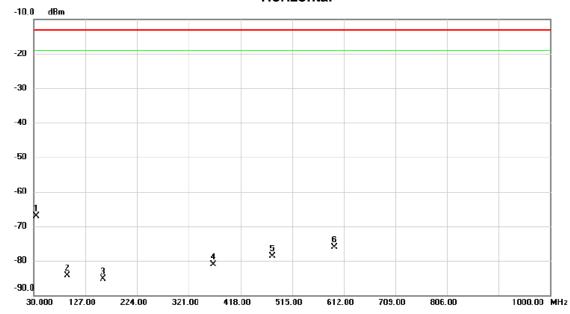






Test Mode: TX CH940012.2K RMC

## Horizontal



	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
			MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
	1	*	33.8800	-67.97	0.91	-67.06	-13.00	-54.06	peak	
	2		92.0800	-76.06	-8.24	-84.30	-13.00	-71.30	peak	
	3	•	159.9800	-81.12	-4.21	-85.33	-13.00	-72.33	peak	
	4		366.5900	-80.43	-0.71	-81.14	-13.00	-68.14	peak	
	5	4	478.1400	-78.92	0.20	-78.72	-13.00	-65.72	peak	
	6	į	594.5400	-78.47	2.28	-76.19	-13.00	-63.19	peak	
_										

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20000.00 MHz

Test Mode: TX CH940012.2K RMC

10.0

0

-10

-20

-30

-40

-50

-60

-70.0

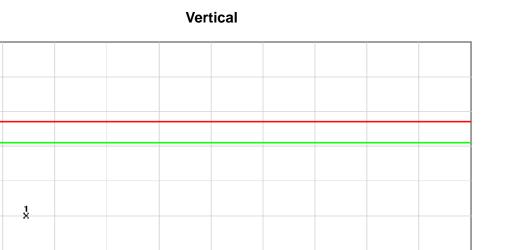
1000.000 2900.00

4800.00

6700.00

8600.00

dBm

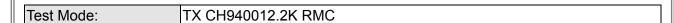


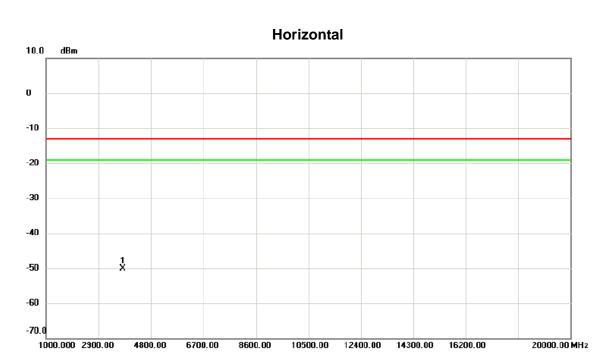
10500.00 12400.00 14300.00 16200.00

No.	М	c. Freq.			Measure- ment		Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	3761.540	-55.10	14.51	-40.59	-13.00	-27.59	peak	

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No. Mk	c. Freq.			Measure- ment		Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	3761.620	-61.46	11.35	-50.11	-13.00	-37.11	peak	

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ATTACHMENT E - BAND EDGE						

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# Band Edge on Configuration WCDMA- 12.2K RMC / Channel 9262-CONDUCTED MODE



# Band Edge on Configuration WCDMA- 12.2K RMC / Channel 9538-CONDUCTED MODE



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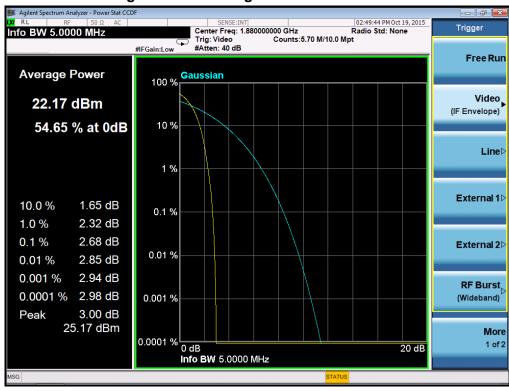


ATTACHMENT F – PEAK TO AVERAGE RATIO					

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# Peak to Average Ratio of Configuration- 12.2K RMC channel 9400



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ATTACHMENT G - FREQUENCY STABILITY					

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# Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	2.64	0.001404255	2.5
10	1.24	0.000659574	2.5
20	1.15	0.000611702	2.5
30	2.39	0.001271277	2.5
40	3.41	0.00181383	2.5
45	5.24	0.002787234	2.5
Max. Deviation (ppm)	5.24	0.002787234	2.5

# Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.7	6.58	0.0035	2.5
3.5	4.05	0.002154255	2.5
4.35	6.12	0.003255319	2.5
Max. Deviation (ppm)	6.58	0.0035	2.5

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