



# **FCC Radio Test Report** FCC ID:Q78-ZXHNH267N

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

Project No. : 1410C211A Equipment : Home Gateway

Model Name : ZXHN H267N, ZXHN H168N

Applicant : ZTE Corporation

: ZTE Plaza, Hi-Tech Park, Nanshan District, Address

Shenzhen, Guangdong, P.R.China

Date of Receipt: Oct. 28, 2014

Oct. 27, 2016

: Oct. 28, 2014 ~ Nov. 24, 2014 **Date of Test** 

Oct. 27, 2016 ~ Nov. 16, 2016

Dec. 28, 2016 ~Jan. 16, 2017

Issued Date : Feb. 24, 2017

Tested by : BTL Inc.

**Testing Engineer** 

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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-1-1410C211	Original report.	Nov. 25, 2014
BTL-FCCP-1-1410C211A	Compared with the previous report (BTL-FCCP-1-1410C211), the model ZXHN H168N is added, the difference with original model as below:  a. Removed two voice ports and one USB port. b. Adapter: RD1200500-C55-EMG only for ZXHN H168N c. The standards are updated to the latest. Radiated emission and conducted emission has been re-evaluated and recorded in the test report, the rest are the same.	Nov. 17, 2016
MDG1612014	The Adapter: RD1200500-C55-EMG change to RD1201000-C55-HMG, Radiated emission (below 1G) and conducted emission has been re-evaluated and recorded in the test report, the rest are the same.	Feb. 24, 2017

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#### 1. CERTIFICATION

Equipment : Home Gateway Brand Name : ZTE 中兴, ZTE

Model Name: ZXHN H267N, ZXHN H168N

Applicant : ZTE Corporation Manufacturer : ZTE Corporation

Address : ZTE Plaza, Hi-Tech Park, Nanshan District, Shenzhen, Guangdong, P.R.China

Factory : ZTE Corporation

Address : ZTE Plaza, Hi-Tech Park, Nanshan District, Shenzhen, Guangdong, P.R.China

Date of Test : Oct. 28, 2014 ~ Nov. 24, 2014 Oct. 27, 2016 ~ Nov. 16, 2016

Dec. 28, 2016 ~Jan. 16, 2017

Test Sample: ENGINEERING SAMPLE

Standard(s) : FCC Part15, Subpart C:(15.247) / ANSI C63.10-2013

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-1-1410C211A) 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).

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# 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

Applied Standard(s): FCC Part15 (15.247) , Subpart C				
Standard(s) Section	Test Item	Judgment	Remark	
15.207	Conducted Emission	PASS		
15.247(d)	Antenna conducted Spurious Emission	PASS		
15.247(a)(2)	6dB Bandwidth	PASS		
15.247(b)(3)	Peak Output Power	PASS		
15.247(e)	Power Spectral Density	PASS		
15.203	Antenna Requirement	PASS		
15.209/15.205	Transmitter Radiated Emissions	PASS		

## NOTE:

(1)" N/A" denotes test is not applicable in this test report.

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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<sub>cispr</sub> requirement.

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

#### A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150 KHz ~ 30MHz	2.32

#### B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)		
		9KHz~30MHz	V	3.79		
		9KHz~30MHz	Η	3.57		
		30MHz ~ 200MHz	<b>V</b>	3.82		
	CB03 CISPR	CISPR	DC CB02 CICBB	30MHz ~ 200MHz	Ι	3.78
DG CB03				CICDD	200MHz ~ 1,000MHz	V
DG-CB03			200MHz ~ 1,000MHz	Н	4.06	
		1GHz~18GHz	V	3.12		
		1GHz~18GHz	Н	3.68		
		18GHz~40GHz	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	Home Gateway			
Brand Name	ZTE 中兴, ZTE	ZTE 中兴, ZTE		
Model Name	ZXHN H267N,ZXHN H16	8N		
Model Difference	Please refer to page 5.			
	Operation Frequency	2412~2462 MHz		
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM		
Product Description	Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 300 Mbps		
	Output Power (Max.)	802.11b: 24.33dBm 802.11g: 22.66dBm 802.11n(20MHz): 25.85dBm 802.11n(40MHz): 26.71dBm		
Power Source	#1 DC voltage supplied from AC Adapter. Model: RD1201500-C55-1MG Model: RD1201000-C55-HMG #2 Supplied from PoE.			
Power Rating	#1 I/P: AC 100-240V~ 50/60Hz 0.6A MAX O/P: DC 12V 1.5A I/P: AC 100-240V~ 50/60Hz 0.6A MAX O/P: DC 12V 1A #2 DC 48V			

#### Note:

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

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#### 2. Channel List:

	CH01 – CH11 for 802.11b, 802.11g, 802.11n(20MHz) CH03 – CH09 for 802.11n(40MHz)						
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

## 3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	N/A	W2G4-S01-Z	PIFA	N/A	2	TX/RX
2	N/A	N/A	PIFA	N/A	3	TX/RX

Note:

(1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed two transmitters and two receivers (2T2R), all transmit signals are completely uncorrelated, then, **Direction gain = Gant**, that is Directional gain=3.

4.

Operating Mode  TX Mode	1TX	2TX
802.11b	-	V (ANT 1 + ANT 2)
802.11g	-	V (ANT 1 + ANT 2)
802.11n(20MHz)	-	V (ANT 1 + ANT 2)
802.11n(40MHz)	-	V (ANT 1 + ANT 2)

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#### 3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11
Mode 2	TX G MODE CHANNEL 01/06/11
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09
Mode 5	TX MODE

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test		
Final Test Mode	Description	
Mode 5	TX MODE	

For Radiated Test			
Final Test Mode Description			
Mode 1	TX B MODE CHANNEL 01/06/11		
Mode 2 TX G MODE CHANNEL 01/06/11			
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11		
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09		

#### Note:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
  - 802.11g mode: OFDM (6Mbps)
  - 802.11n HT20 mode : BPSK (13Mbps)
  - 802.11n HT40 mode: BPSK (27Mbps)
  - For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated below 1G test, the 802.11b is found to be the worst case and recorded.
- (4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

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#### 3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

During testing, channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN

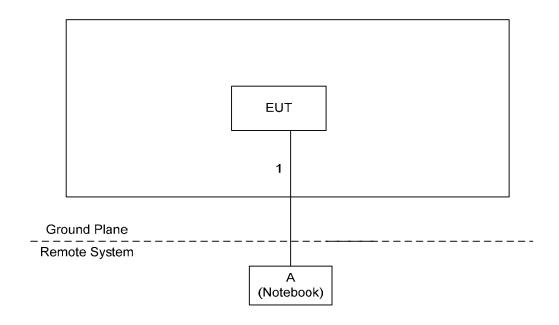
Test software version		RT5x7xQA	
Frequency (MHz)	2412	2437	2462
802.11b	13	14	15
802.11g	19	1C	1E
802.11n (20MHz)	15	18	15
Frequency	2422	2437	2452
802.11n (40MHz)	7	9	9

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#### 3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



## 3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID/IC	Series No.
Α	Notebook	DELL	INSPIRON 1420	DOC	N/A

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	ОИ	10m	RJ45 Cable

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#### 4. EMC EMISSION TEST

#### 4.1 CONDUCTED EMISSION MEASUREMENT

## 4.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

Frequency of Emission (MHz)	Conducted Limit (dBµV)		
	Quasi-peak	Average	
0.15 -0.5	66 to 56*	56 to 46*	
0.50 -5.0	56	46	
5.0 -30.0	60	50	

#### Note

- (1) The limit of " \* " decreases with the logarithm of the frequency
- (2) The test result calculated as following: Measurement Value = Reading Level + Correct Factor Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use) Margin Level = Measurement Value - Limit Value

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

#### **4.1.2 TEST PROCEDURE**

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.1.3 DEVIATION FROM TEST STANDARD

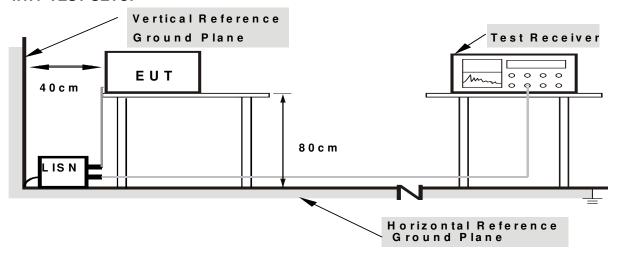
No deviation

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#### 4.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

#### **4.1.5 EUT OPERATING CONDITIONS**

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

## 4.1.6 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

#### 4.1.7 TEST RESULTS

Please refer to the Attachment A.

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#### 4.2 RADIATED EMISSION MEASUREMENT

#### 4.2.1 RADIATED EMISSION LIMITS

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (9KHz-1000MHz)

Frequency	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

#### LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

Frequency (MHz)	(dBuV/m) (at 3 meters)	
Frequency (MHZ)	PEAK	AVERAGE
Above 1000	74	54

#### Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following: Measurement Value = Reading Level + Correct Factor Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use) Margin Level = Measurement Value - Limit Value

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW	RBW 1MHz VBW 3MHz peak detector for Pk value
(Emission in restricted band)	RMS detector for AV value

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9KHz~90KHz for PK/AVG detector
Start ~ Stop Frequency	90KHz~110KHz for QP detector

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Start ~ Stop Frequency	110KHz~490KHz for PK/AVG detector
Start ~ Stop Frequency	490KHz~30MHz for QP detector
Start ~ Stop Frequency	30MHz~1000MHz for QP detector

#### 4.2.2 TEST PROCEDURE

- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.2.3 DEVIATION FROM TEST STANDARD

No deviation

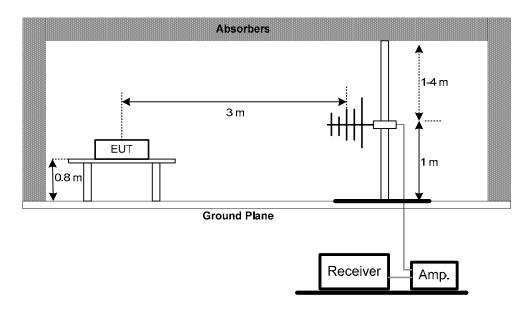
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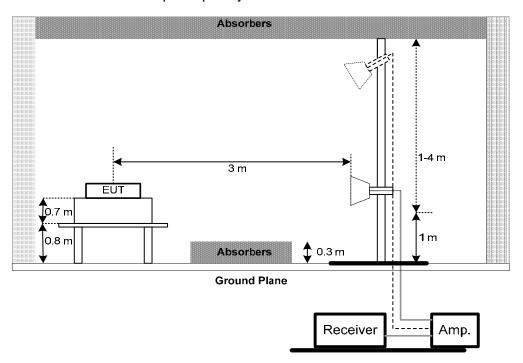


## 4.2.4 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency Above 1 GHz

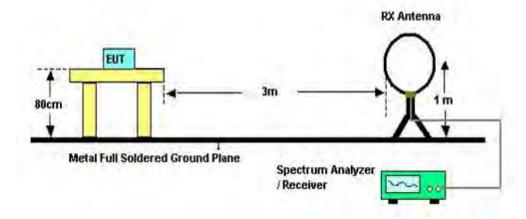


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## (C) For radiated emissions below 30MHz



## **4.2.5 EUT OPERATING CONDITIONS**

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

## **4.2.6 EUT TEST CONDITIONS**

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

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## 4.2.7 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Attachment B

#### Remark:

- (1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
- (2) Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.

## 4.2.8 TEST RESULTS (BETWEEN 30MHZ TO 1000 MHZ)

Please refer to the Attachment C.

## 4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment D.

#### Remark:

(1) No limit: This is fundamental signal, the judgment is not applicable. For fundamental signal judgment was referred to Peak output test.

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#### 5. BANDWIDTH TEST

#### **5.1 APPLIED PROCEDURES**

FCC Part15 (15.247), Subpart C				
Section Test Item Frequency Range (MHz) Result				
15.247(a)(2) Bandwidth 2400-2483.5 PASS				

#### **5.1.1 TEST PROCEDURE**

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- h Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.

#### **5.1.2 DEVIATION FROM STANDARD**

No deviation.

#### 5.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

## **5.1.4 EUT OPERATION CONDITIONS**

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

#### **5.1.5 EUT TEST CONDITIONS**

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

## **5.1.6 TEST RESULTS**

Please refer to the Attachment E.

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#### 6. MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST

#### **6.1 APPLIED PROCEDURES / LIMIT**

FCC Part15 (15.247), Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Maximum Output Power	1 Watt or 30dBm	2400-2483.5	PASS

#### **6.1.1 TEST PROCEDURE**

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- b. The maximum peak conducted output power was performed in accordance with method 9.1.2 of FCC KDB 558074 D01 DTS Meas Guidance and FCC KDB 662911 D01 Multiple Transmitter Output.

#### **6.1.2 DEVIATION FROM STANDARD**

No deviation.

#### 6.1.3 TEST SETUP

EUT	Power Meter
	, c., c. Meter

## **6.1.4 EUT OPERATION CONDITIONS**

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

Transmit output power was measured while the host equipment supply voltage was varied from 85 % to 115 % of the nominal rated supply voltage. No change in transmit output power was observed.

#### **6.1.5 EUT TEST CONDITIONS**

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

## 6.1.6 TEST RESULTS

Please refer to the Attachment F.

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#### 7. ANTENNA CONDUCTED SPURIOUS EMISSION

#### 7.1 APPLIED PROCEDURES / LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

#### 7.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = Auto.
- c. Offset=antenna gain+cable loss

#### 7.1.2 DEVIATION FROM STANDARD

No deviation.

#### 7.1.3 TEST SETUP



#### 7.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

#### 7.1.5 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

#### 7.1.6 TEST RESULTS

Please refer to the Attachment G.

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#### 8. POWER SPECTRAL DENSITY TEST

#### 8.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247), Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

#### **8.1.1 TEST PROCEDURE**

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW=3KHz, VBW=10KHz, Sweep time = Auto.

#### 8.1.2 DEVIATION FROM STANDARD

No deviation.

#### 8.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

## **8.1.4 EUT OPERATION CONDITIONS**

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

## **8.1.5 EUT TEST CONDITIONS**

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

#### 8.1.6 TEST RESULTS

Please refer to the Attachment H.

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## 9. MEASUREMENT INSTRUMENTS LIST

	Conducted Emission Measurement				
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	0052765	Mar. 27, 2017
2	LISN	R&S	ENV216	101447	Mar. 27, 2017
3	Test Cable	emci	RG223(9KHz -30MHz)	C_17	Mar. 10, 2017
4	EMI Test Receiver	R&S	ESCI	100382	Mar. 27, 2017
5	50Ω Terminator	SHX	TF2-3G-A	08122901	Mar. 27, 2017
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1 -01	N/A	N/A

	Radiated Emission Measurement				
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 27, 2017
2	Amplifier	HP	8447D	2944A09673	Nov. 08, 2017
3	Receiver	AGILENT	N9038A	MY5213003 9	Oct. 10, 2017
4	Test Cable	emci	LMR-400(30MH z-1GHz)	C-01	Jun. 26, 2017
5	Control	CT	SC100	N/A	N/A
6	Position Control	MF	MF-7802	MF78020841 6	N/A
7	Antenna	ETS	3115	00075789	Mar. 27, 2017
8	Amplifier	Agilent	8449B	3008A02274	Oct. 31, 2017
9	Receiver	AGILENT	N9038A	MY5213003 9	Oct. 10, 2016
10	Test Cable	emci	EMC104-SM-S M-10000(1GHz -26.5GHz)	C-68	Jun. 26, 2017
11	Controller	CT	SC100	N/A	N/A
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Apr. 23, 2017
13	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 27, 2017
14	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Sep. 06, 2017
15	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

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		6dB Bandwidt	th Measureme	ent	
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Sep. 04, 2017

	Peak Output Power Measurement				
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	P-series Power meter	Agilent	N1911A	MY45100473	Sep. 04, 2017
2	Wireband Power sensor	Agilent	N1921A	MY51100041	Sep. 04, 2017

	Antenna Conducted Spurious Emission Measurement				
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Sep. 04, 2017

	Power Spectral Density Measurement				
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Sep. 04, 2017

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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# **10. EUT TEST PHOTO**

## **Conducted Measurement Photos**





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# **Radiated Measurement Photos**

# 9KHz to 30MHz





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# **Radiated Measurement Photos**

# **30MHz to 1000MHz**





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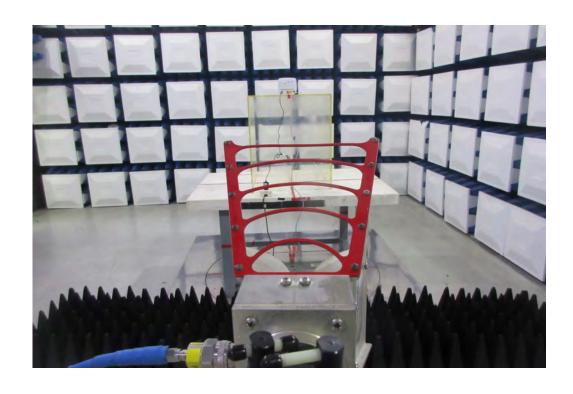




## **Radiated Measurement Photos**

# Above 1000MHz





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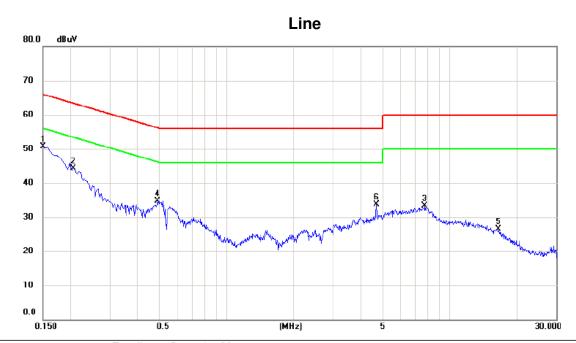
ATTACHMENT A - CONDUCTED EMISSION

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Test Mode: TX MODE



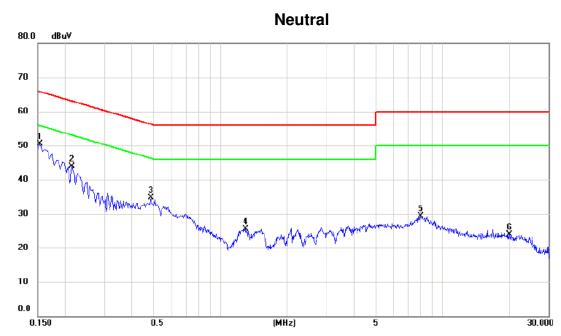
	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
-			MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
_	1	*	0.1500	41.14	9.57	50.71	66.00	-15.29	peak	
-	2		0.2060	34.79	9.57	44.36	63.37	-19.01	peak	
-	3		7.7220	22.82	10.42	33.24	60.00	-26.76	peak	
-	4		0.4900	25.04	9.68	34.72	56.17	-21.45	peak	
-	5		16.5460	15.82	10.73	26.55	60.00	-33.45	peak	
	6		4.7100	23.39	10.29	33.68	56.00	-22.32	peak	
-										

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Test Mode: TX MODE



	No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
	1 *	0.1540	40.88	9.55	50.43	65.78	-15.35	peak	
	2	0.2140	34.42	9.57	43.99	63.05	-19.06	peak	
	3	0.4860	25.16	9.49	34.65	56.24	-21.59	peak	
	4	1.2940	15.67	9.76	25.43	56.00	-30.57	peak	
	5	7.9500	19.08	10.32	29.40	60.00	-30.60	peak	
-	6	19.9980	12.94	10.90	23.84	60.00	-36.16	peak	

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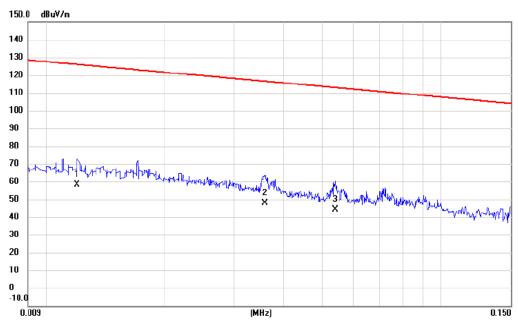
ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)

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Test Mode: TX Mode 2412MHz\_Ant 0



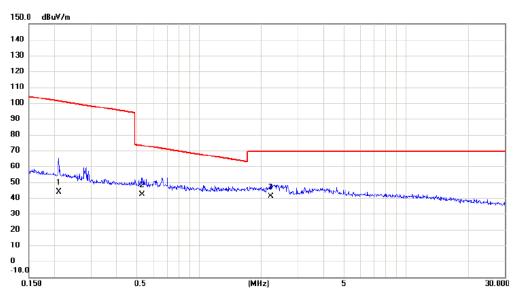
No. Mk.	Freq.	Reading Level		Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	0.0120	34.19	24.00	58.19	126.02	-67.83	AVG	
2	0.0358	26.20	21.57	47.77	116.53	-68.76	AVG	
3	0.0540	24.40	19.77	44.17	112.96	-68.79	AVG	

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Test Mode: TX Mode 2412MHz\_Ant 0



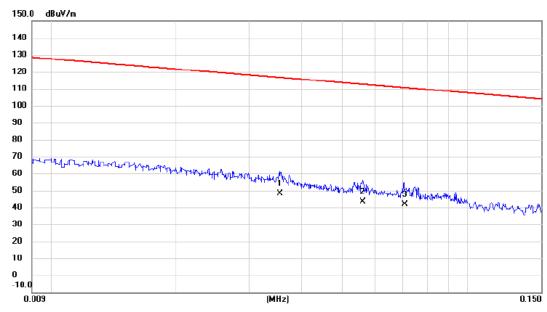
No. Mk.	Freq.			Measure- ment Limit		Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	0.2094	25.10	18.69	43.79	101.19	-57.40	AVG	
2	0.5293	23.90	18.38	42.28	73.13	-30.85	QP	
3 *	2.2250	23.30	17.62	40.92	69.54	-28.62	QP	

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Test Mode: TX Mode 2412MHz\_Ant 90



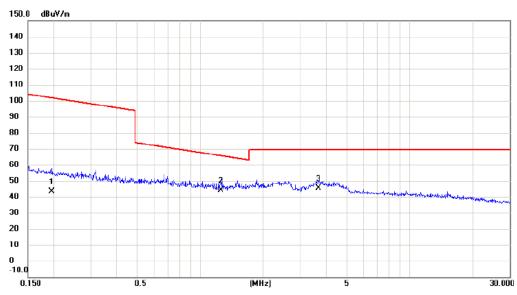
No. Mk.	Freq.	_		Measure ment	- Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	0.0354	26.60	21.62	48.22	116.62	-68.40	AVG	
2	0.0560	23.70	19.76	43.46	112.64	-69.18	AVG	
3	0.0706	22.10	19.58	41.68	110.63	-68.95	AVG	

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Test Mode: TX Mode 2412MHz\_Ant 90



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	0.1955	24.70	18.69	43.39	101.78	-58.39	AVG	
2 *	1.2555	26.50	17.74	44.24	65.63	-21.39	QP	
3	3.6611	27.30	18.04	45.34	69.54	-24.20	QP	

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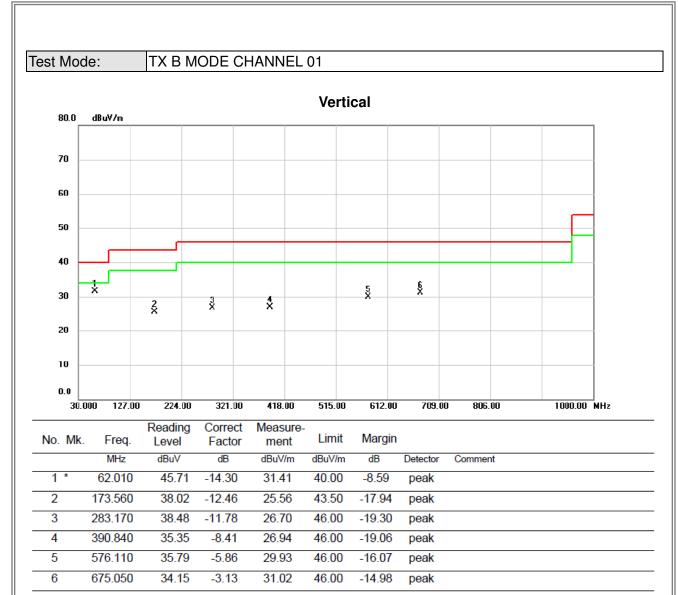


ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)

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30.000

127.00

224.00

321.00

418.00



Test Mode: TX B MODE CHANNEL 01

## Horizontal 80.0 dBuV/m 70 60 40 20 10

	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
_	1		75.590	38.19	-16.52	21.67	40.00	-18.33	peak	
_	2		127.000	34.63	-12.68	21.95	43.50	-21.55	peak	
_	3		229.820	42.87	-13.38	29.49	46.00	-16.51	peak	
_	4	*	409.270	46.60	-7.83	38.77	46.00	-7.23	peak	
_	5		552.830	33.93	-4.68	29.25	46.00	-16.75	peak	
-	6		800.180	35.81	0.25	36.06	46.00	-9.94	peak	
_										

515.00

612.00

709.00

806.00

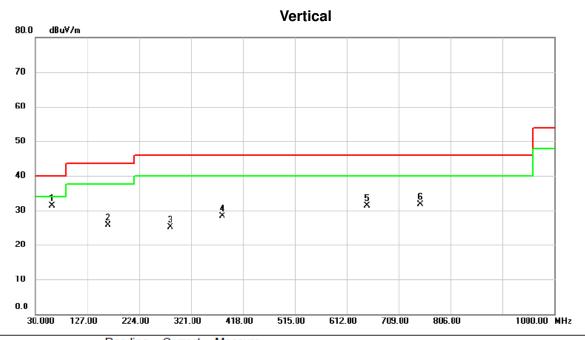
1000.00 MHz

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Test Mode: TX B MODE CHANNEL 06



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	62.010	45.65	-14.30	31.35	40.00	-8.65	peak	
2	165.800	37.99	-12.21	25.78	43.50	-17.72	peak	
3	282.200	36.94	-11.87	25.07	46.00	-20.93	peak	
4	380.170	37.39	-9.14	28.25	46.00	-17.75	peak	
5	649.830	35.44	-4.19	31.25	46.00	-14.75	peak	
6	749.740	33.68	-1.97	31.71	46.00	-14.29	peak	

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30.000

127.00

224.00

321.00

418.00



1000.00 MHz

Test Mode: TX B MODE CHANNEL 06

# Horizontal 80.0 dBuV/m 70 60 40 30 20 10 0.0

	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
_			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
_	1		74.620	38.38	-16.58	21.80	40.00	-18.20	peak	
_	2		157.070	35.11	-12.38	22.73	43.50	-20.77	peak	
_	3		232.730	45.00	-13.48	31.52	46.00	-14.48	peak	
	4		418.000	43.32	-7.85	35.47	46.00	-10.53	peak	
_	5		529.550	33.50	-6.66	26.84	46.00	-19.16	peak	
_	6	*	800.180	35.27	0.25	35.52	46.00	-10.48	peak	
_										

515.00

612.00

709.00

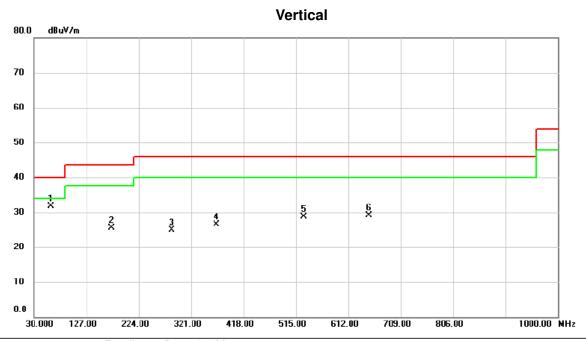
806.00

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Test Mode: TX B MODE CHANNEL 11



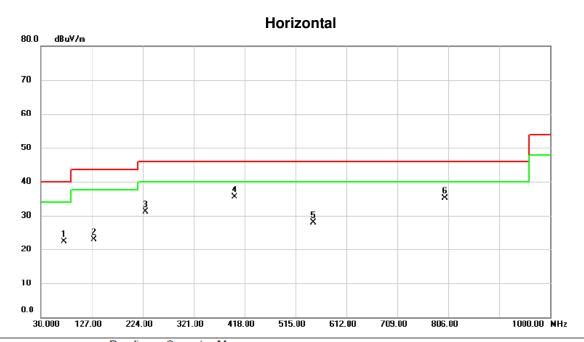
	No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
-		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
-	1 *	62.010	45.91	-14.30	31.61	40.00	-8.39	peak	
_	2	173.560	37.89	-12.46	25.43	43.50	-18.07	peak	
-	3	285.110	36.51	-11.63	24.88	46.00	-21.12	peak	
-	4	367.560	36.60	-10.01	26.59	46.00	-19.41	peak	
-	5	529.550	35.46	-6.66	28.80	46.00	-17.20	peak	
-	6	649.830	33.33	-4.19	29.14	46.00	-16.86	peak	
-									

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Test Mode: TX B MODE CHANNEL 11



	No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1	74.620	38.92	-16.58	22.34	40.00	-17.66	peak	
_	2	130.880	35.40	-12.48	22.92	43.50	-20.58	peak	
	3	229.820	44.51	-13.38	31.13	46.00	-14.87	peak	
	4 *	399.570	43.41	-7.81	35.60	46.00	-10.40	peak	
	5	549.920	32.39	-4.55	27.84	46.00	-18.16	peak	
	6	800.180	34.83	0.25	35.08	46.00	-10.92	peak	
_									

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ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

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### Vertical 115.0 dBuV/m 105 95 85 75 65 55 45 35.0 2362.000 2372.00 2382.00 2392.00 2412.00 2422.00 2432.00 2442.00 2462.00 MHz 2402.00

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1		2390.000	21.74	33.87	55.61	74.00	-18.39	peak		
2		2390.000	12.61	33.87	46.48	54.00	-7.52	AVG		
3	Х	2409.300	69.76	33.98	103.74	74.00	29.74	peak	No Limit	
4	*	2413.100	64.13	34.01	98.14	54.00	44.14	AVG	No Limit	

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### Vertical dBuV/m 80.0 70 60 50 40 30 20 10 0.0 1000.000 3550.00 6100.00 8650.00 11200.00 13750.00 16300.00 18850.00 21400.00 26500.00 MHz

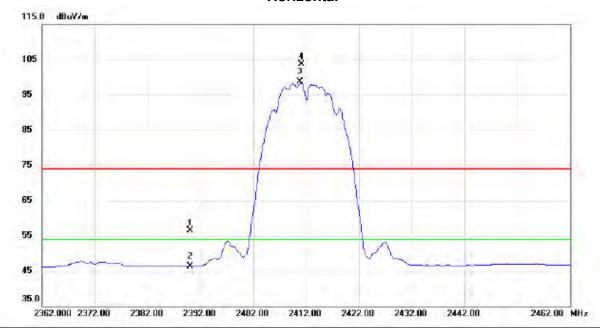
No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	4	4823.940	41.52	5.46	46.98	74.00	-27.02	peak		
2	* 2	4823.950	35.98	5.46	41.44	54.00	-12.56	AVG		

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### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	- 1	2390.000	22.68	33.87	56.55	74.00	-17.45	peak	
2		2390.000	12.50	33.87	46.37	54.00	-7.63	AVG	Jan 1997
3	*	2410.900	64.63	34.00	98.63	54.00	44.63	AVG	No Limit
4	X	2411.200	69.63	34.00	103.63	74.00	29.63	peak	No Limit

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0.0

1000.000 3550.00

6100.00

8650.00



Orthogonal Axis: X
Test Mode: TX B MODE 2412MHz

# Horizontal 80.0 dBuV/m 70 60 2 X 1 10

No.	Mk.	Freq.	Level	Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	4823.965	34.77	5.46	40.23	54.00	-13.77	AVG		
2	9	4824.050	40.38	5.46	45.84	74.00	-28.16	peak		

16300.00

18850.00

21400.00

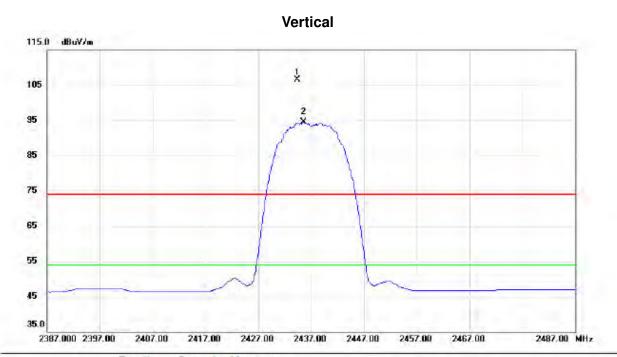
26500.00 MHz

11200.00 13750.00

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Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment
X	2434.400	72.40	34.13	106.53	74.00	32.53	peak	No Limit
*	2435.600	60.31	34.14	94.45	54.00	40.45	AVG	No Limit
	X	Appendict the state of the	Mk. Freq. Level  MHz dBuV  X 2434.400 72.40	Mk. Freq. Level Factor  MHz dBuV dB  X 2434.400 72.40 34.13	Mk.         Freq.         Level         Factor         ment           MHz         dBuV         dB         dBuV/m           X         2434.400         72.40         34.13         106.53	MHz dBuV dB dBuV/m dBuV/m X 2434.400 72.40 34.13 106.53 74.00	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dBuV/m         dB           X         2434.400         72.40         34.13         106.53         74.00         32.53	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dBuV/m         dB         Detector           X         2434.400         72.40         34.13         106.53         74.00         32.53         peak

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### Vertical dBuV/m 80.0 70 3 \* × 50 40 20 10 0.0 1000.000 3550.00 6100.00 8650.00 11200.00 13750.00 16300.00 18850.00 21400.00 26500.00 MHz

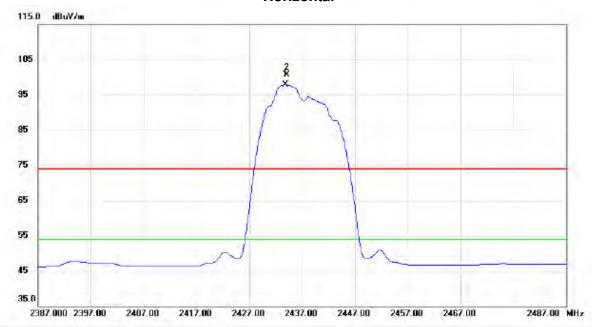
No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	* 4	4873.950	40.55	5.71	46.26	54.00	-7.74	AVG		
2	- 2	4874.000	44.32	5.71	50.03	74.00	-23.97	peak		

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### Horizontal



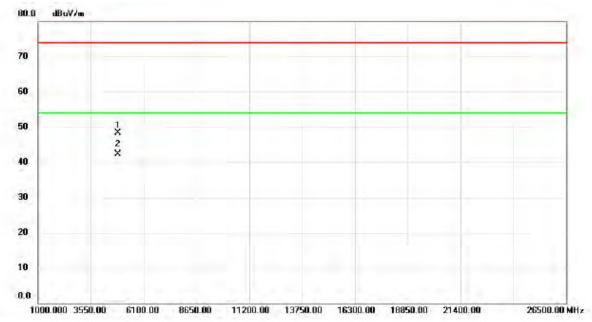
Mk.	Freq.	Level	Factor	ment	Limit	Margin			
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
*	2433.800	63.80	34.13	97.93	54.00	43.93	AVG	No Limit	
X	2434.200	66.60	34.13	100.73	74.00	26.73	peak	No Limit	
	*	STARTS SEE STATE	Mk. Freq. Level  MHz dBuV  * 2433.800 63.80	Mk. Freq. Level Factor  MHz dBuV dB  * 2433.800 63.80 34.13	Mk. Freq. Level Factor ment  MHz dBuV dB dBuV/m  * 2433.800 63.80 34.13 97.93	Mk.         Freq.         Level         Factor         ment         Limit           MHz         dBuV         dB         dBuV/m         dBuV/m           *         2433.800         63.80         34.13         97.93         54.00	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dBuV/m         dB           *         2433.800         63.80         34.13         97.93         54.00         43.93	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dBuV/m         dB         Detector           *         2433.800         63.80         34.13         97.93         54.00         43.93         AVG	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dB uV/m         dB         Detector         Comment           *         2433.800         63.80         34.13         97.93         54.00         43.93         AVG         No Limit

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### Horizontal



No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	4	4873.870	42.56	5.71	48.27	74.00	-25.73	peak		
2	* - 2	4874.015	36.64	5.71	42.35	54.00	-11.65	AVG		

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### Vertical 115.0 dBuV/m Š 105 95 85 75 65 3 55 45 2412.000 2422.00 2432.00 2442.00 2452.00 2462.00 2472.00 2482.00 2492.00 2512.00 MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	2461.300	61.21	34.29	95.50	54.00	41.50	AVG	No Limit	
2	Χ :	2461.600	73.09	34.29	107.38	74.00	33.38	peak	No Limit	
3	- 0	2483.500	23.39	34.41	57.80	74.00	-16.20	peak		
4		2483,500	12.74	34.41	47.15	54.00	-6.85	AVG		
	_									

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### Vertical 80.0 dBuV/m 70 50 40 30 20 10 0.0 1000.000 3550.00 8650.00 11200.00 13750.00 16300.00 18850,00 21400.00 26500.00 MHz 6100.00

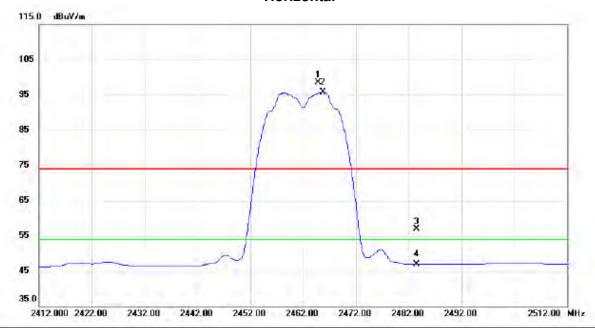
No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4	1923.865	44.51	5.94	50.45	74.00	-23.55	peak	
2	* 4	1924.005	41.09	5.94	47.03	54.00	-6.97	AVG	

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### Horizontal



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment	
1	Х	2464.800	64.12	34.31	98.43	74.00	24.43	peak	No Limit	
2	*	2465.800	61.47	34.31	95.78	54.00	41.78	AVG	No Limit	
3		2483.500	22.40	34.41	56.81	74.00	-17.19	peak		
4		2483,500	12.44	34.41	46.85	54.00	-7.15	AVG		

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### Horizontal



Mk.	Freq.	Level	Factor	ment	Limit	Margin			
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
4	923.970	43.48	5.94	49.42	74.00	-24.58	peak		
* 4	924.060	37.47	5.94	43.41	54.00	-10.59	AVG		
	4	MHz 4923.970	Mk. Freq. Level  MHz dBuV  4923.970 43.48	Mk. Freq. Level Factor  MHz dBuV dB  4923.970 43.48 5.94	Mk.         Freq.         Level         Factor         ment           MHz         dBuV         dB         dBuV/m           4923.970         43.48         5.94         49.42	MHz dBuV dB dBuV/m dBuV/m 4923.970 43.48 5.94 49.42 74.00	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dBuV/m         dB           4923.970         43.48         5.94         49.42         74.00         -24.58	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dBuV/m         dB         Detector           4923.970         43.48         5.94         49.42         74.00         -24.58         peak	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dB         Detector         Comment           4923.970         43.48         5.94         49.42         74.00         -24.58         peak

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### Vertical 115.0 dBuV/m 105 \* 95 85 75 65 55 45 35.0 2362.000 2372.00 2382.00 2392.00 2402.00 2412.00 2422.00 2432.00 2442.00 2462.00 MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment
1	- 1	2390.000	22.14	33.87	56.01	74.00	-17.99	peak	
2	- 3	2390.000	12.82	33.87	46.69	54.00	-7.31	AVG	
3	* :	2413.300	58.72	34.01	92.73	54.00	38.73	AVG	No Limit
4	X :	2415.400	66.73	34.02	100.75	74.00	26.75	peak	No Limit

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### Vertical dBuV/m 80.0 70 50 ½ 40 30 20 10 0.0 1000.000 3550.00 8650.00 11200.00 13750.00 16300.00 18850.00 21400.00 26500.00 MHz 6100.00

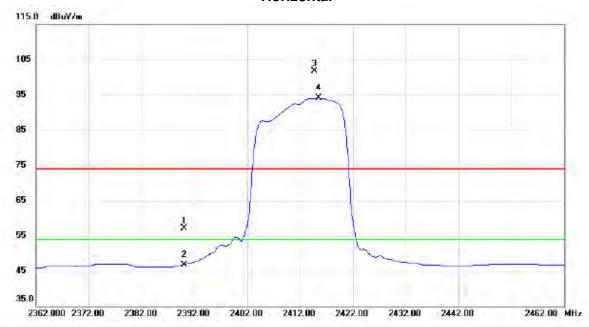
Mk.	Freq.	Level	Factor	ment	Limit	Margin			
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
4	822.175	37.65	5.45	43.10	74.00	-30.90	peak		
* 4	824.030	25.13	5.46	30.59	54.00	-23.41	AVG		
	4	there was also	Mk. Freq. Level  MHz dBuV  4822.175 37.65	Mk. Freq. Level Factor  MHz dBuV dB  4822.175 37.65 5.45	Mk.         Freq.         Level         Factor         ment           MHz         dBuV         dB         dBuV/m           4822.175         37.65         5.45         43.10	MHz dBuV dB dBuV/m dBuV/m 4822.175 37.65 5.45 43.10 74.00	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dBuV/m         dB           4822.175         37.65         5.45         43.10         74.00         -30.90	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dBuV/m         dB         Detector           4822.175         37.65         5.45         43.10         74.00         -30.90         peak	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dBuV/m         dB         Detector         Comment           4822.175         37.65         5.45         43.10         74.00         -30.90         peak

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### Horizontal



No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	-	2390.000	23.24	33.87	57.11	74.00	-16.89	peak	
2		2390.000	12.93	33.87	46.80	54.00	-7.20	AVG	
3	X :	2414.700	67.64	34.02	101.66	74.00	27.66	peak	No Limit
4	*	2415.600	59.99	34.02	94.01	54.00	40.01	AVG	No Limit

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10

0.0

1000.000 3550.00

6100.00

8650.00



Orthogonal Axis: X
Test Mode: TX G MODE 2412MHz

### Horizontal 80.0 dBuV/m 70 60 1 2 X 20

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1		4823.790	37.06	5.45	42.51	74.00	-31.49	peak		
2	*	4823.970	25.37	5.46	30.83	54.00	-23.17	AVG		

13750.00

16300.00

18850.00

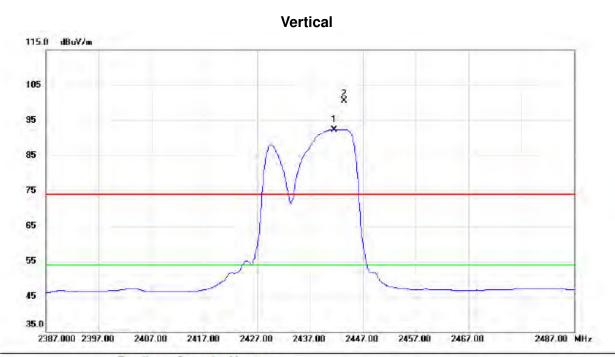
21400.00

26500.00 MHz

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No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2441.600	58.21	34.17	92.38	54.00	38.38	AVG	No Limit
2	X	2443.500	66.32	34.18	100.50	74.00	26.50	peak	No Limit

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### Vertical dBuV/m 80.0 70 60 50 3 40 30 20 10 0.0 1000.000 3550.00 8650.00 11200.00 13750.00 16300.00 18850.00 21400.00 26500.00 MHz 6100.00

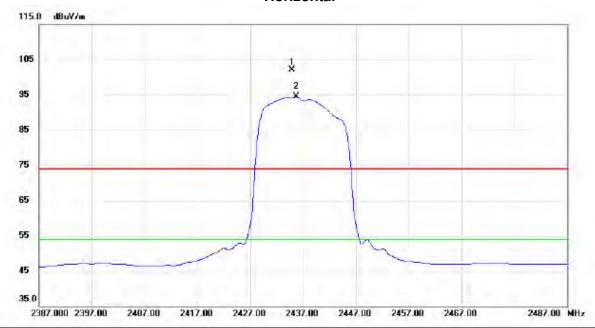
No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	* 4	1875.090	29.28	5.70	34.98	54.00	-19.02	AVG		
2	4	4875.590	41.33	5.70	47.03	74.00	-26.97	peak		

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### Horizontal



No.	Mk	. Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment	
1	X	2434.900	68.02	34.13	102.15	74.00	28.15	peak	No Limit	
2	*	2435.700	60.27	34.14	94.41	54.00	40.41	AVG	No Limit	

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### Horizontal

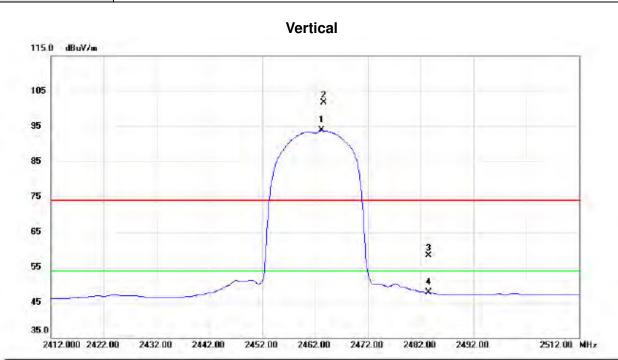


No.	Mk.	Freq.	Level	Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	4872.780	27.90	5.70	33.60	54.00	-20.40	AVG		
2	- 9	4872.935	39.80	5.70	45.50	74.00	-28.50	peak		

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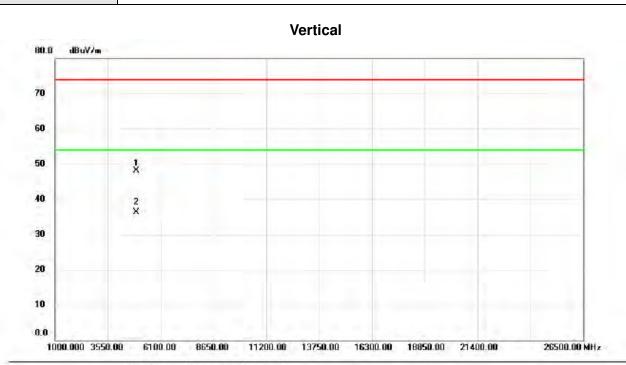


No. Mi	c. Free		Reading Level	Correct Factor	Measure- ment	Limit	Margin			
	MH	z	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1 *	2463.30	00	59.52	34.30	93.82	54.00	39.82	AVG	No Limit	
2 X	2463.70	00	67.31	34.30	101.61	74.00	27.61	peak	No Limit	
3	2483.50	00	23.81	34.41	58.22	74.00	-15.78	peak		
4	2483,50	00	13.41	34.41	47.82	54.00	-6.18	AVG		

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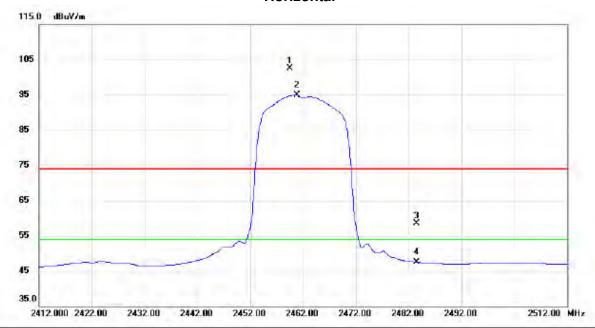
No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	4	4923.375	42.22	5.93	48.15	74.00	-25.85	peak		
2	* 4	4925.005	30.45	5.94	36.39	54.00	-17.61	AVG		

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### Horizontal



No.	Mk	. Freq.	Reading Level	Factor	ment	Limit	Margin			
		MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment	
1	Х	2459.600	68.33	34.27	102.60	74.00	28.60	peak	No Limit	
2	*	2460.800	60.64	34.28	94.92	54.00	40.92	AVG	No Limit	
3		2483.500	24.17	34.41	58.58	74.00	-15.42	peak		
4		2483,500	13.11	34.41	47.52	54.00	-6.48	AVG		

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### Horizontal



No.	Mk.	Freq.	Level	Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	4921.595	29.92	5.93	35.85	54.00	-18.15	AVG		
2		4921.965	40.69	5.93	46.62	74.00	-27.38	peak		

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### Vertical 115.0 dBuV/m 105 4 95 85 75 65 X 55 45 35.0 2362.000 2372.00 2382.00 2392.00 2402.00 2412.00 2422.00 2432.00 2442.00 2462.00 MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	1	2390.000	22.77	33.87	56.64	74.00	-17.36	peak	
2	- 2	2390.000	12.95	33.87	46.82	54.00	-7.18	AVG	
3	* - 2	2409.500	55.77	33.99	89.76	54.00	35.76	AVG	No Limit
4	X 2	2413.300	65.90	34.01	99.91	74.00	25.91	peak	No Limit

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### Vertical dBuV/m 80.0 70 60 50 ž 40 20 10 0.0 1000.000 3550.00 6100.00 8650.00 13750.00 16300.00 18850.00 21400.00 26500.00 MHz

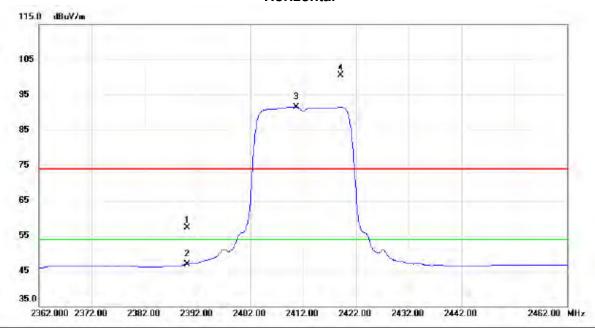
No.	Mk.	Freq.		Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	4823.985	23.39	5.46	28.85	54.00	-25.15	AVG		
2		4825.130	35.23	5.46	40.69	74.00	-33.31	peak		

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#### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	23.37	33.87	57.24	74.00	-16.76	peak	
2		2390.000	13.11	33.87	46.98	54.00	-7.02	AVG	
3	* - :	2410.700	57.51	34.00	91.51	54.00	37.51	AVG	No Limit
4	X	2419,100	66.50	34.05	100.55	74.00	26.55	peak	No Limit

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#### Horizontal

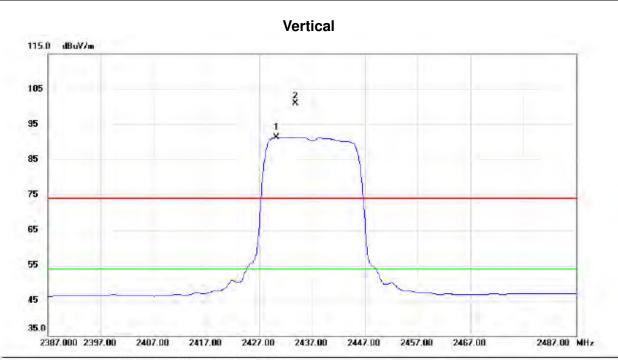


No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	* 4	1822.100	23.94	5.45	29.39	54.00	-24.61	AVG		
2	- 4	4824.075	34.98	5.46	40.44	74.00	-33.56	peak		

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No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	2430.300	57.14	34.11	91.25	54.00	37.25	AVG	No Limit	
2	X	2433.900	66.74	34.13	100.87	74.00	26.87	peak	No Limit	

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## Vertical dBuV/m 80.0 70 60 50 40 20 10 0.0 1000.000 3550.00 8650.00 11200.00 13750.00 16300.00 18850.00 21400.00 26500.00 MHz 6100.00

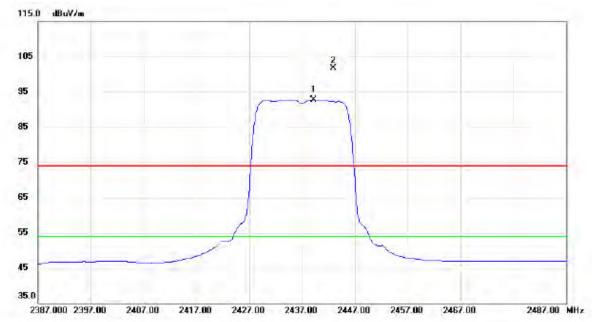
No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	4	1874.575	37.56	5.71	43.27	74.00	-30.73	peak		
2	* 4	1875.440	26.10	5.70	31.80	54.00	-22.20	AVG		

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# Horizontal



No.	Mk	. Freq.	Level	Factor	ment.	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	2439.200	58.58	34.16	92.74	54.00	38.74	AVG	No Limit	
2	X	2442.900	67.53	34.18	101.71	74.00	27.71	peak	No Limit	

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#### Horizontal



No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	4	1874.325	37.59	5.71	43.30	74.00	-30.70	peak		
2	* 4	1876.070	26.14	5.70	31.84	54.00	-22.16	AVG		

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## Vertical 115.0 dBuV/m 105 X 95 85 75 65 X 55 45 2412.000 2422.00 2432.00 2442.00 2452.00 2462.00 2472.00 2482.00 2492.00 2512.00 MHz

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	X	2455.300	66.59	34.25	100.84	74.00	26.84	peak	No Limit	
2	*	2468.800	56.77	34.33	91.10	54.00	37.10	AVG	No Limit	
3		2483.500	24.77	34.41	59.18	74.00	-14.82	peak		
4		2483,500	13.76	34.41	48.17	54.00	-5.83	AVG		

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#### Vertical dBuV/m 80.0 70 60 50 1 X 40 2 X 30 20 10 0.0 1000.000 3550.00 8650.00 11200.00 13750.00 16300.00 18850,00 21400.00 26500.00 MHz 6100.00

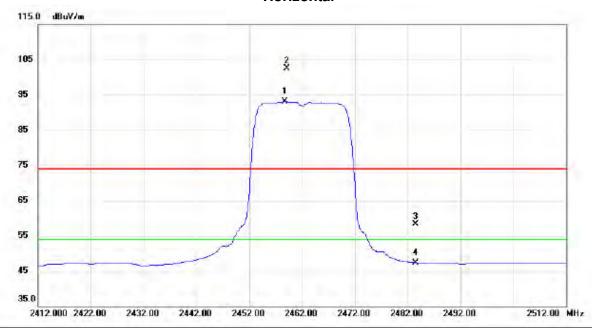
No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	4	922.020	41.11	5.93	47.04	74.00	-26.96	peak		
2	* 4	924.140	27.48	5.94	33.42	54.00	-20.58	AVG		

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#### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment	
10	*	2458.700	58.77	34.27	93.04	54.00	39.04	AVG	No Limit	
2	X	2459.100	68.18	34.27	102.45	74.00	28.45	peak	No Limit	
3	-	2483.500	23.82	34.41	58.23	74.00	-15.77	peak		
4		2483,500	12.98	34.41	47.39	54.00	-6.61	AVG		

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## Horizontal



No.	Mk.	Freq.	Level	Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	- 4	4921.830	40.78	5.93	46.71	74.00	-27.29	peak		
2	* 4	4923.715	27.42	5.93	33.35	54.00	-20.65	AVG		

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## Vertical 115.0 dBuV/m 105 X 95 85 75 65 X 55 45 2322.000 2342.00 2362.00 2382.00 2402.00 2422.00 2442.00 2462.00 2482.00 2522.00 MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	- 1	2390.000	26.05	33.87	59.92	74.00	-14.08	peak		
2		2390.000	15.71	33.87	49.58	54.00	-4.42	AVG		
3	X	2427.000	63.11	34.09	97.20	74.00	23.20	peak	No Limit	
4	*	2437.400	53.46	34.15	87,61	54.00	33.61	AVG	No Limit	
	_									_

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#### Vertical dBuV/m 80.0 70 60 50 8 40 30 20 10 0.0 1000.000 3550.00 6100.00 8650.00 11200.00 13750.00 16300.00 18850.00 21400.00 26500.00 MHz

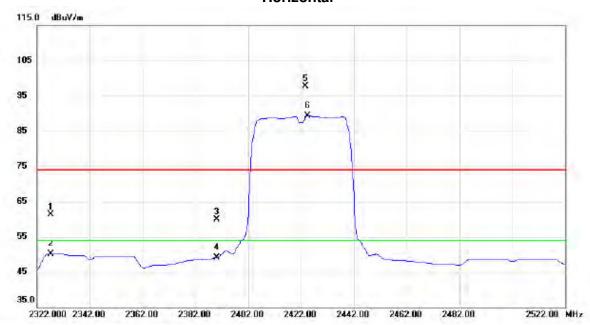
No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	* .	4843.795	24.66	5.54	30.20	54.00	-23.80	AVG		
2	- 1	4845.235	36.16	5.56	41.72	74.00	-32.28	peak		

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#### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment
1	2	2327.200	27.76	33.52	61.28	74.00	-12.72	peak	
2	2	2327.200	16.66	33.52	50.18	54.00	-3.82	AVG	
3	- 2	2390.000	26.01	33.87	59.88	74.00	-14.12	peak	
4	2	2390.000	15.31	33.87	49.18	54.00	-4.82	AVG	
5 )	X 2	2423.800	63.65	34.07	97.72	74.00	23.72	peak	No Limit
6 *	* 2	2424.400	55.20	34.07	89.27	54.00	35.27	AVG	No Limit
10000					37500000				

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dBuV/m

80.0



Orthogonal Axis: X
Test Mode: TX N-40M MODE 2422MHz

# Horizontal

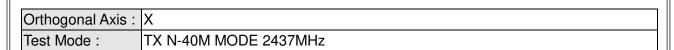


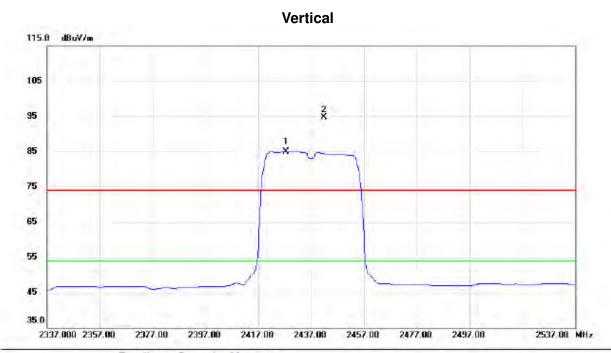
No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	* 4	1843.250	23.92	5.54	29.46	54.00	-24.54	AVG		
2	4	1844.445	36.00	5.55	41.55	74.00	-32.45	peak		

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No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment	
10	*	2427.400	50.83	34.10	84.93	54.00	30.93	AVG	No Limit	
2	X	2441.800	60.62	34.17	94.79	74.00	20.79	peak	No Limit	

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## Vertical dBuV/m 80.0 70 60 50 2 40 20 10 0.0 1000.000 3550.00 6100.00 8650.00 11200.00 13750.00 16300.00 18850.00 21400.00 26500.00 MHz

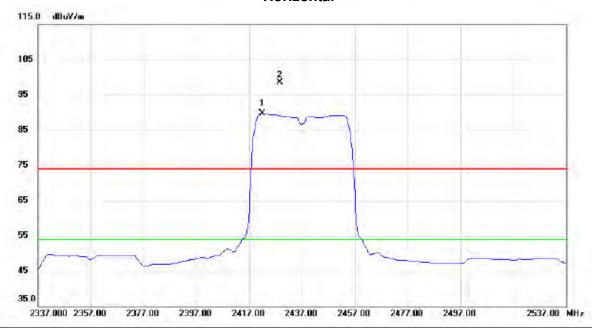
No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Margin			
		MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment	
1	4	1875.265	25.42	5.70	31.12	74.00	-42.88	peak		
2	* 4	1875.300	38.78	5.70	44.48	54.00	-9.52	AVG		

Report No.: BTL-FCCP-1-1410C211A Page 88 of 154





#### Horizontal



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	2421.800	55.60	34.06	89.66	54.00	35.66	AVG	No Limit	
2	X	2428.600	64.42	34.10	98.52	74.00	24.52	peak	No Limit	

Report No.: BTL-FCCP-1-1410C211A Page 89 of 154





# Horizontal



No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	4	4873.525	34.76	5.70	40.46	74.00	-33.54	peak		
2	* 4	4873.630	24.68	5.70	30.38	54.00	-23.62	AVG		

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## Vertical 115.0 dBuV/m 105 3 95 85 75 65 3 X 55 45 2512.00 2352.000 2372.00 2392.00 2412.00 2432.00 2452.00 2472.00 2492.00 2552.00 MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment	
10	*	2436.800	54.89	34.15	89.04	54.00	35.04	AVG	No Limit	
2	X	2438.200	64.88	34.16	99.04	74.00	25.04	peak	No Limit	
3	-	2483.500	24.78	34.41	59.19	74.00	-14.81	peak		
4		2483,500	14.62	34.41	49.03	54.00	-4.97	AVG		_

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# Vertical 80.0 dBuV/m 70 50 40 20 10 0.0 1000.000 3550.00 8650.00 11200.00 13750.00 16300.00 18850.00 21400.00 26500.00 MHz 6100.00

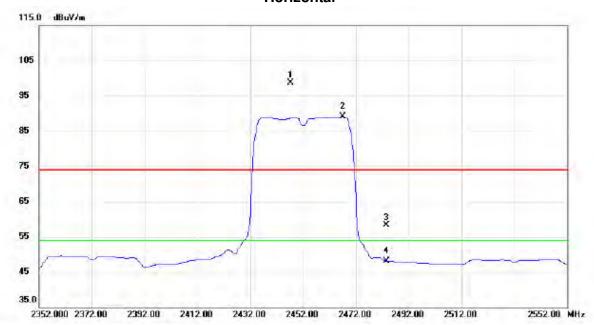
No.	Mk.	Freq.	Level	Factor	ment.	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	4	4903.285	39.73	5.84	45.57	74.00	-28.43	peak		
2	* 4	4905.495	25.28	5.85	31.13	54.00	-22.87	AVG		

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#### Horizontal



Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
	MHz	dBuV	₫B	dBuV/m	dBuV/m	dB	Detector	Comment	
Х	2447.400	64.41	34.21	98.62	74.00	24.62	peak	No Limit	
*	2467.200	54.69	34.32	89.01	54.00	35.01	AVG	No Limit	
	2483.500	23.82	34.41	58.23	74.00	-15.77	peak		
	2483,500	13.75	34.41	48.16	54.00	-5.84	AVG		
	X	MHz X 2447.400 * 2467.200 2483.500	Mk. Freq. Level  MHz dBuV  X 2447.400 64.41  * 2467.200 54.69  2483.500 23.82	Mk. Freq. Level Factor  MHz dBuV dB  X 2447.400 64.41 34.21  * 2467.200 54.69 34.32  2483.500 23.82 34.41	Mk.         Freq.         Level         Factor         ment           MHz         dBuV         dB         dBuV/m           X         2447.400         64.41         34.21         98.62           *         2467.200         54.69         34.32         89.01           2483.500         23.82         34.41         58.23	Mk.         Freq.         Level         Factor         ment         Limit           MHz         dBuV         dB         dBuV/m         dBuV/m         dBuV/m         dBuV/m         dBuV/m         dBuV/m         dBuV/m         2480/m         74.00         34.21         98.62         74.00         74.00         34.32         89.01         54.00         54.00         2483.500         23.82         34.41         58.23         74.00	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dBuV/m         dBuV/m         dB           X         2447.400         64.41         34.21         98.62         74.00         24.62           *         2467.200         54.69         34.32         89.01         54.00         35.01           2483.500         23.82         34.41         58.23         74.00         -15.77	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dBuV/m         dB         Detector           X         2447.400         64.41         34.21         98.62         74.00         24.62         peak           *         2467.200         54.69         34.32         89.01         54.00         35.01         AVG           2483.500         23.82         34.41         58.23         74.00         -15.77         peak	Mk.         Freq.         Level         Factor         ment         Limit         Margin           MHz         dBuV         dB         dBuV/m         dB         Detector         Comment           X         2447.400         64.41         34.21         98.62         74.00         24.62         peak         No Limit           *         2467.200         54.69         34.32         89.01         54.00         35.01         AVG         No Limit           2483.500         23.82         34.41         58.23         74.00         -15.77         peak

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# Horizontal



No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	4	1904.405	35.91	5.85	41.76	74.00	-32.24	peak		
2	* 4	904.495	24.91	5.85	30.76	54.00	-23.24	AVG		

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ATTACHMENT E - BANDWIDTH

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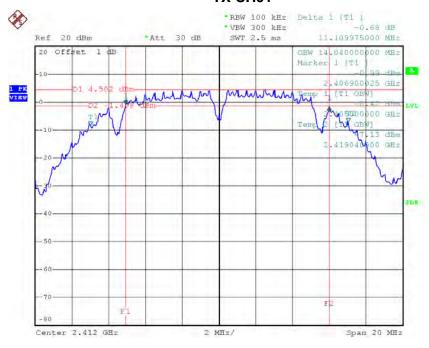




## Test Mode: TX B Mode\_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	11.11	14.04	500	Complies
2437	10.24	14.24	500	Complies
2462	11.15	14.24	500	Complies

#### TX CH01

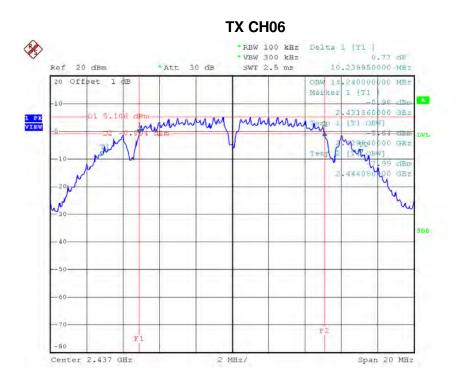


Date: 8.NOV.2014 14:43:13

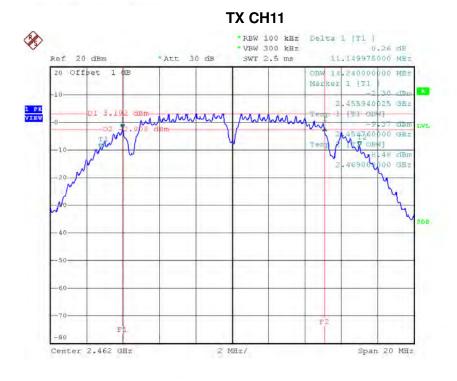
Report No.: BTL-FCCP-1-1410C211A Page 96 of 154







Date: 8.NOV.2014 14:45:25



Date: 8.NOV.2014 14:48:18

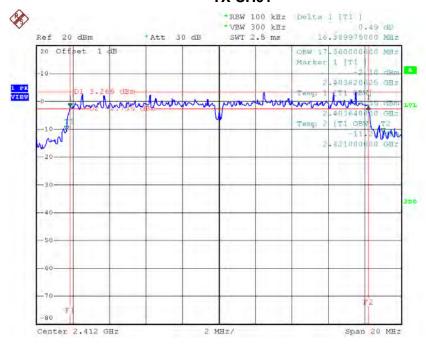




# Test Mode: TX G Mode\_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.39	17.36	500	Complies
2437	16.39	16.56	500	Complies
2462	16.00	16.44	500	Complies

#### TX CH01

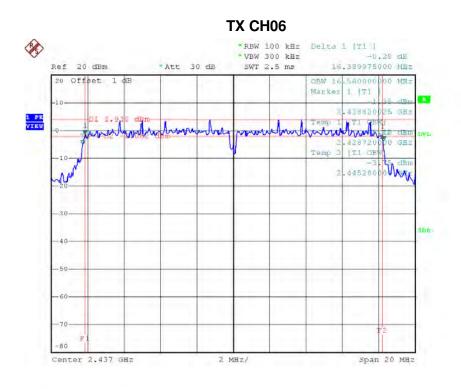


Date: 8.NOV.2014 15:13:07

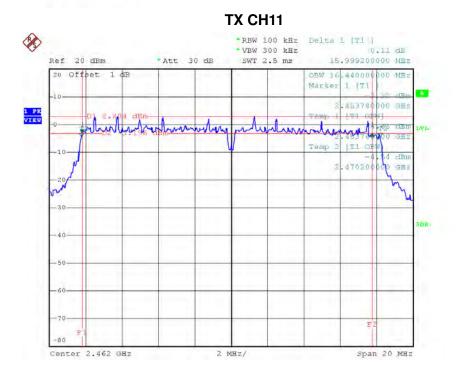
Report No.: BTL-FCCP-1-1410C211A







Date: 8.NOV.2014 15:14:58



Date: 8.Nov.2014 15:17:19

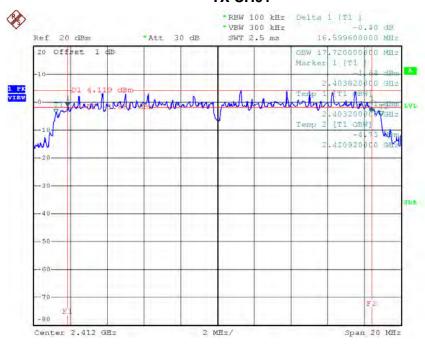




# Test Mode: TX N-20MHz Mode\_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.60	17.72	500	Complies
2437	16.48	17.60	500	Complies
2462	17.00	17.52	500	Complies

#### TX CH01

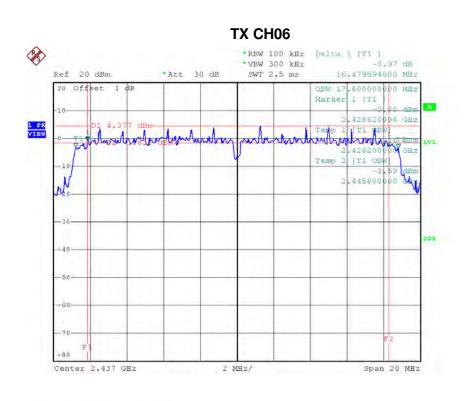


Date: 8.NOV.2014 15:26:55

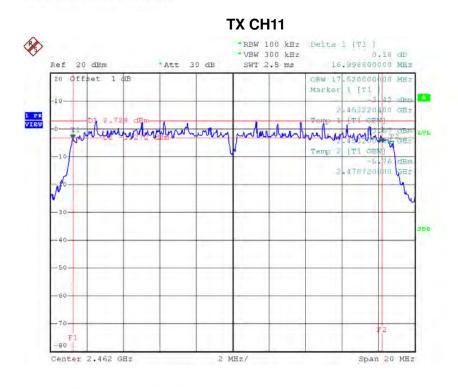
Report No.: BTL-FCCP-1-1410C211A







Date: 8.NOV.2014 15:28:41



Date: 8.NOV.2014 15:30:30

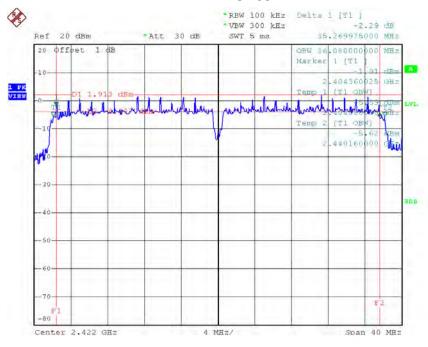




#### Test Mode: TX N-40MHz Mode\_CH03/06/09

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	35.27	36.08	500	Complies
2437	35.20	36.00	500	Complies
2452	35.36	35.92	500	Complies

#### **TX CH03**

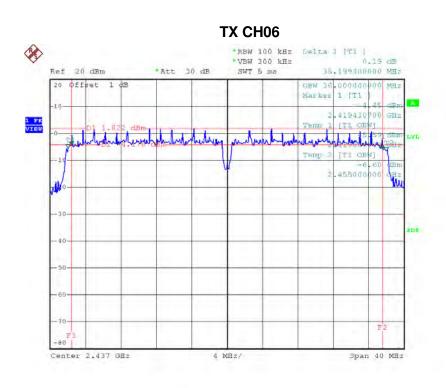


Date: 8.NOV.2014 15:39:50

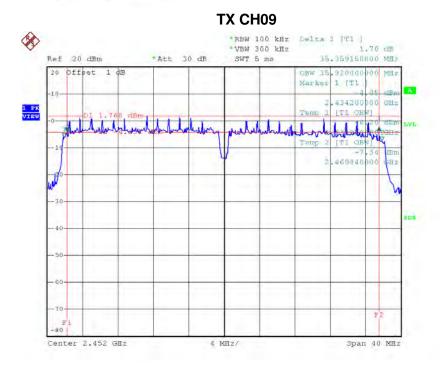
Report No.: BTL-FCCP-1-1410C211A







Date: 8.NOV\_2014 15:42:07



Date: 8.NOV-2014 15:44:09





ATTACHMENT F - MAXIMUM PEAK CONDUCTED OUTF	TU
POWER	

Report No.: BTL-FCCP-1-1410C211A





## Test Mode :TX B Mode\_CH01/06/11\_ANT 1

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	22.16	0.16	30.00	1.00	Complies
2437	22.14	0.16	30.00	1.00	Complies
2462	20.52	0.11	30.00	1.00	Complies

# Test Mode :TX B Mode\_CH01/06/11\_ANT 2

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	20.01	0.10	30.00	1.00	Complies
2437	19.52	0.09	30.00	1.00	Complies
2462	18.40	0.07	30.00	1.00	Complies

# Test Mode :TX B Mode\_CH01/06/11\_Total

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	24.23	0.26	30.00	1.00	Complies
2437	24.03	0.25	30.00	1.00	Complies
2462	22.60	0.18	30.00	1.00	Complies

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## Test Mode :TX G Mode\_CH01/06/11\_ANT 1

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	20.28	0.11	30.00	1.00	Complies
2437	21.23	0.13	30.00	1.00	Complies
2462	19.78	0.10	30.00	1.00	Complies

# Test Mode :TX G Mode\_CH01/06/11\_ANT 2

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	18.53	0.07	30.00	1.00	Complies
2437	17.14	0.05	30.00	1.00	Complies
2462	18.03	0.06	30.00	1.00	Complies

# Test Mode :TX G Mode\_CH01/06/11\_Total

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	22.50	0.18	30.00	1.00	Complies
2437	22.66	0.18	30.00	1.00	Complies
2462	22.00	0.16	30.00	1.00	Complies

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## Test Mode :TX N20 Mode\_CH01/06/11\_ANT 1

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	23.52	0.22	30.00	1.00	Complies
2437	24.01	0.25	30.00	1.00	Complies
2462	20.36	0.11	30.00	1.00	Complies

# Test Mode :TX N20 Mode\_CH01/06/11\_ANT 2

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	22.03	0.16	30.00	1.00	Complies
2437	20.58	0.11	30.00	1.00	Complies
2462	19.91	0.10	30.00	1.00	Complies

# Test Mode :TX N20 Mode\_CH01/06/11\_Total

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	25.85	0.38	30.00	1.00	Complies
2437	25.64	0.37	30.00	1.00	Complies
2462	23.15	0.21	30.00	1.00	Complies

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## Test Mode :TX N40 Mode\_CH03/06/09\_ANT 1

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	25.23	0.33	30.00	1.00	Complies
2437	23.60	0.23	30.00	1.00	Complies
2452	23.80	0.24	30.00	1.00	Complies

## Test Mode :TX N40 Mode\_CH03/06/09\_ANT 2

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	21.31	0.14	30.00	1.00	Complies
2437	22.26	0.17	30.00	1.00	Complies
2452	19.38	0.09	30.00	1.00	Complies

# Test Mode :TX N40 Mode\_CH03/06/09\_Total

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	26.71	0.47	30.00	1.00	Complies
2437	25.99	0.40	30.00	1.00	Complies
2452	25.14	0.33	30.00	1.00	Complies

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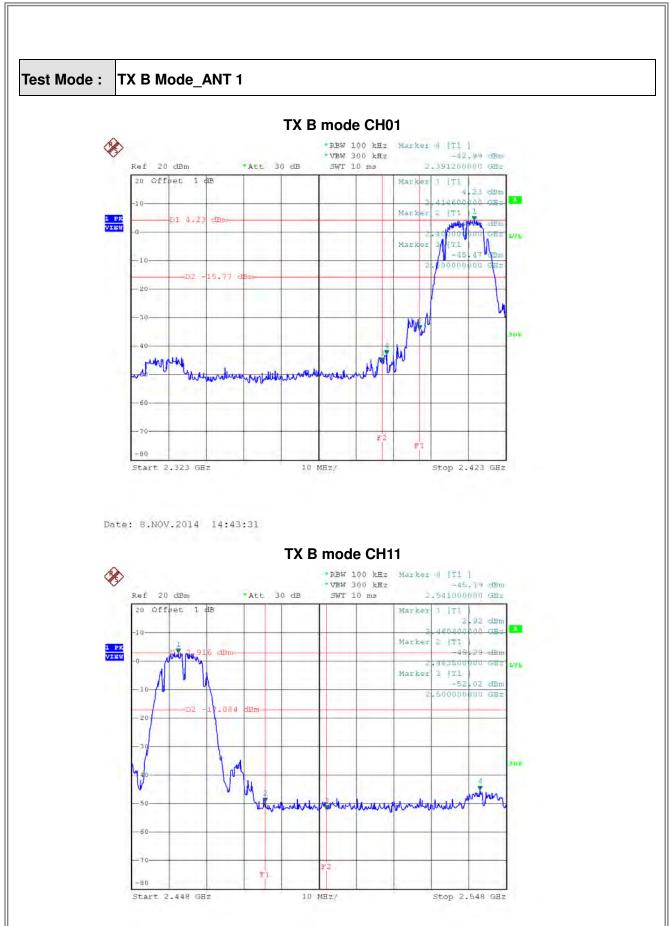


# ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

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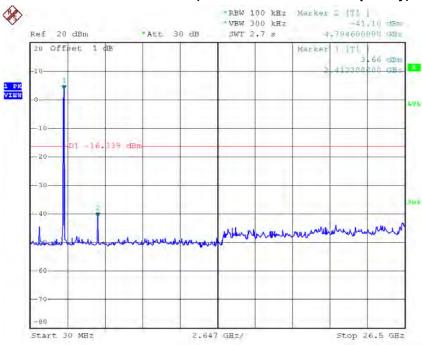
Report No.: BTL-FCCP-1-1410C211A

Date: 8.NOV.2014 14:48:36



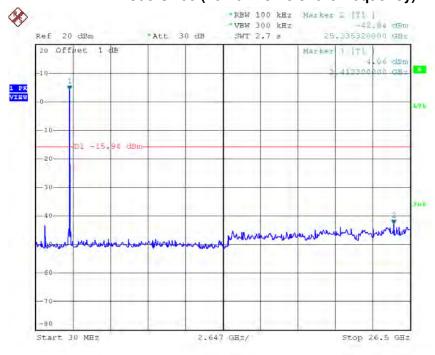






Date: 8.NOV.2014 14:43:23

#### TX B mode CH06 (10 Harmonic of the frequency)

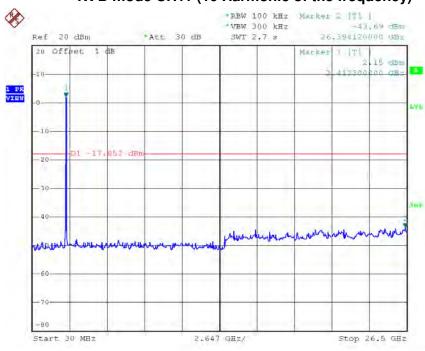


Date: 8.NOV.2014 14:45:36





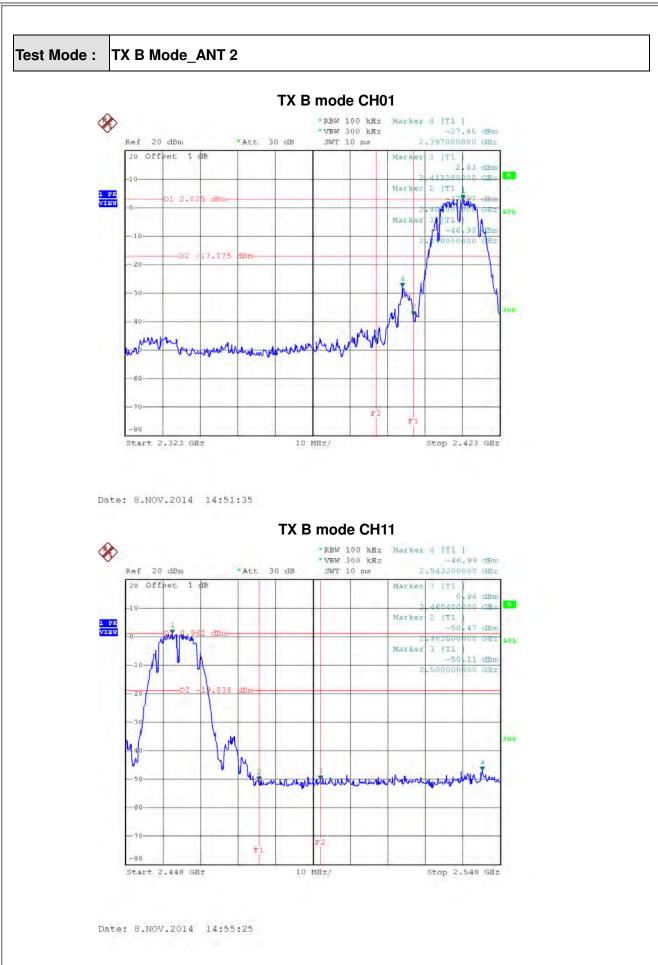
## TX B mode CH11 (10 Harmonic of the frequency)



Date: 8.NOV.2014 14:48:28

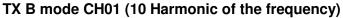


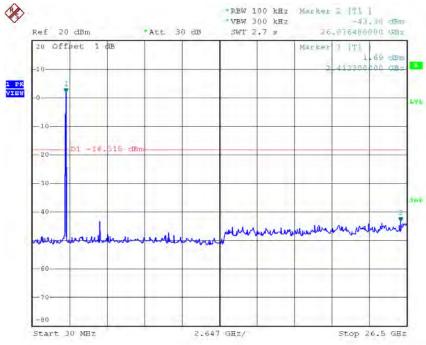






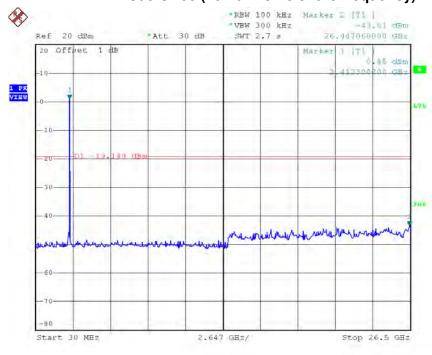






Date: 8.NOV.2014 14:51:28

#### TX B mode CH06 (10 Harmonic of the frequency)

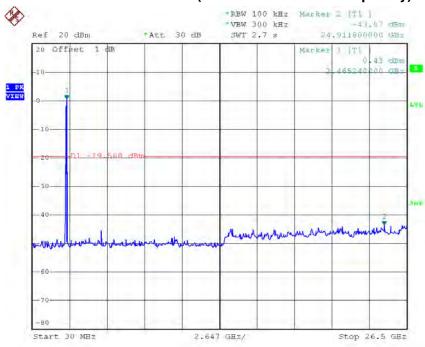


Date: 8.NOV.2014 14:53:31





## TX B mode CH11 (10 Harmonic of the frequency)

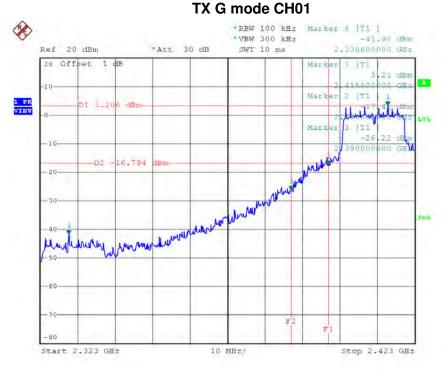


Date: 8.NOV.2014 14:55:18









Date: 8.NOV.2014 15:13:25

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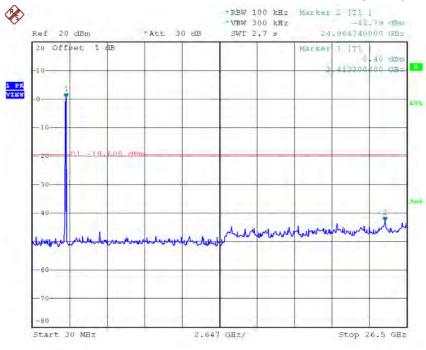
Report No.: BTL-FCCP-1-1410C211A

Date: 8.NOV.2014 15:17:37



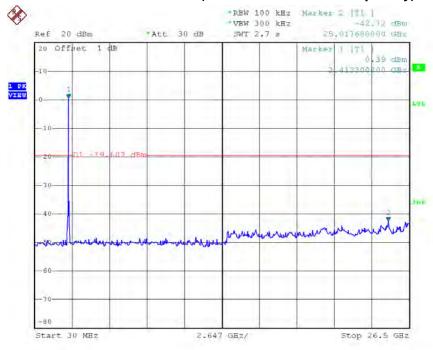






Date: 8.NOV.2014 15:13:18

#### TX G mode CH06 (10 Harmonic of the frequency)

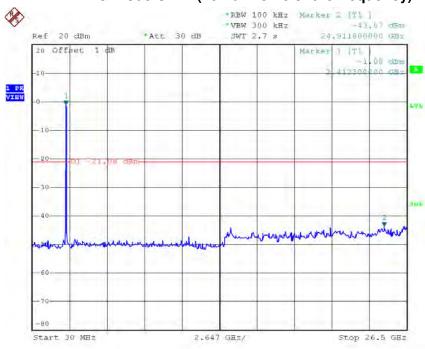


Date: 8.NOV.2014 15:15:08





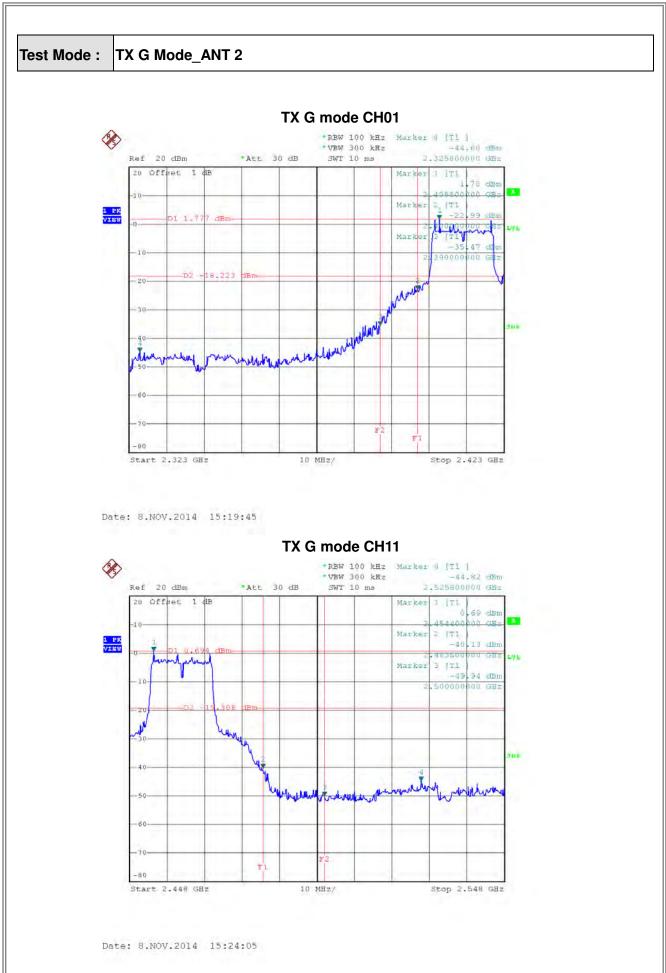
## TX G mode CH11 (10 Harmonic of the frequency)



Date: 8.NOV.2014 15:17:29



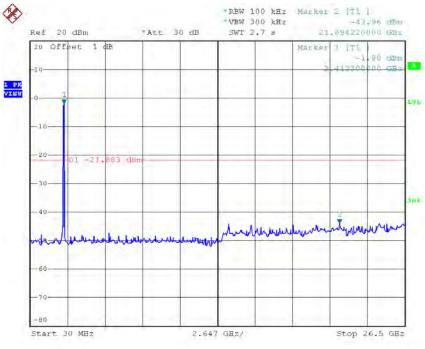






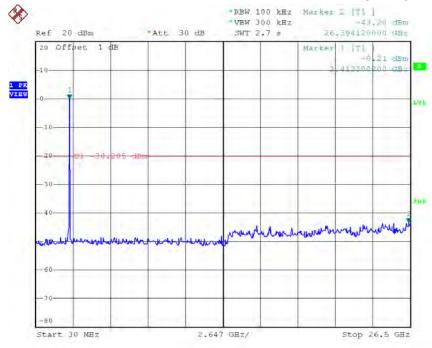






Date: 8.NOV.2014 15:19:38

#### TX G mode CH06 (10 Harmonic of the frequency)

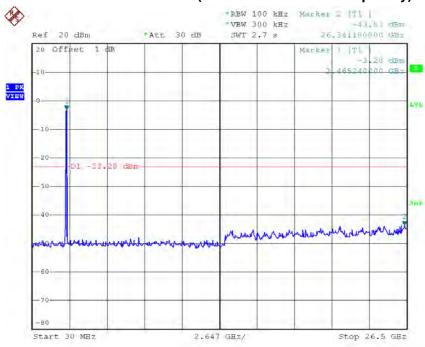


Date: 8.NOV.2014 15:21:43





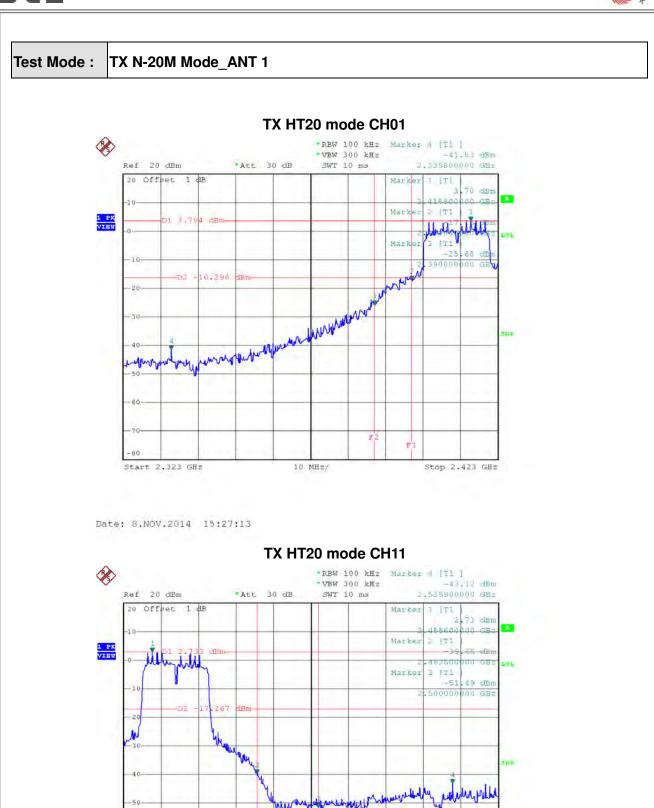
## TX G mode CH11 (10 Harmonic of the frequency)



Date: 8.NOV.2014 15:23:58







10 MHz/

Date: 8.NOV.2014 15:30:48

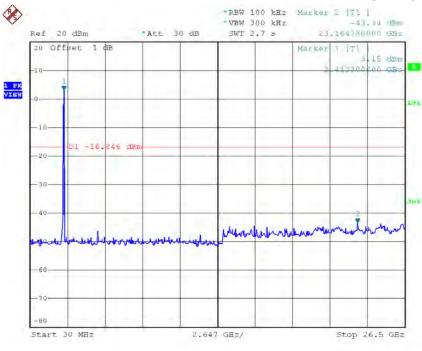
Start 2.448 GHz

Stop 2.548 GHz



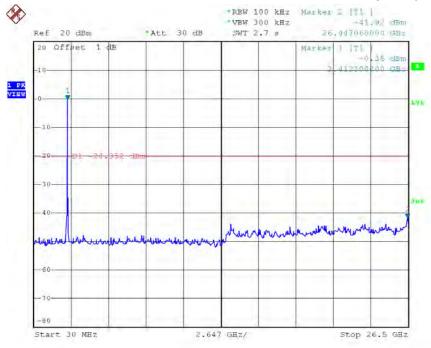






Date: 8.NOV.2014 15:27:05

#### TX HT20 mode CH06 (10 Harmonic of the frequency)

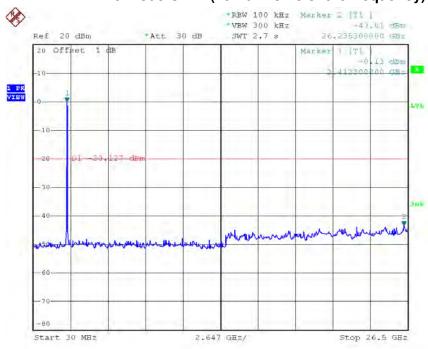


Date: 8.NOV.2014 15:28:51





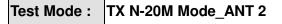
## TX HT20 mode CH11 (10 Harmonic of the frequency)



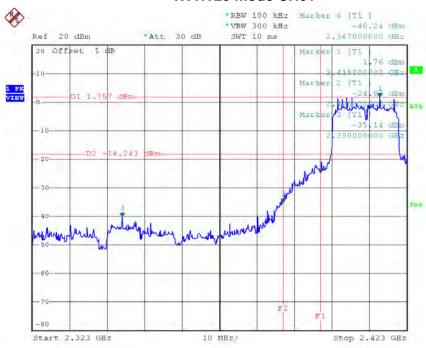
Date: 8.NOV.2014 15:30:41





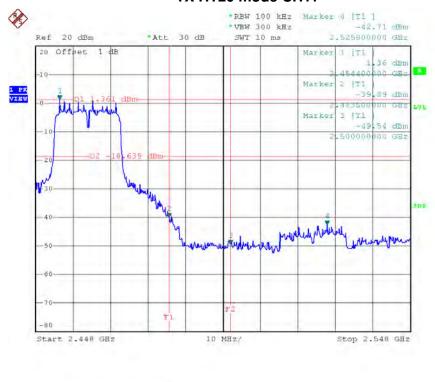


#### TX HT20 mode CH01



Date: 8.NOV.2014 15:32:45

#### TX HT20 mode CH11

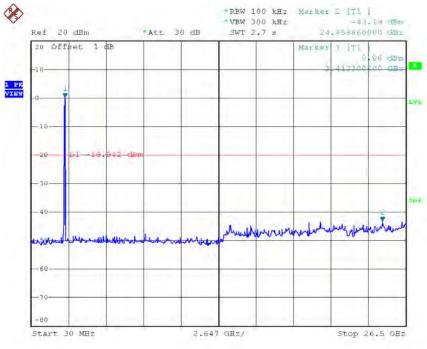


Date: 8.NOV.2014 15:36:24



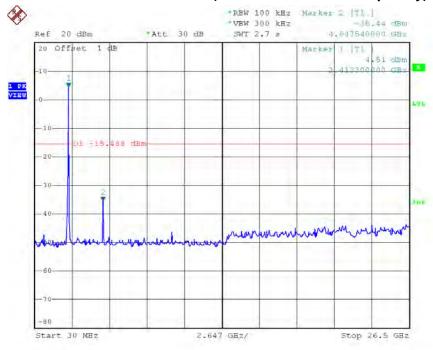






Date: 8.NOV.2014 15:32:38

#### TX HT20 mode CH06 (10 Harmonic of the frequency)

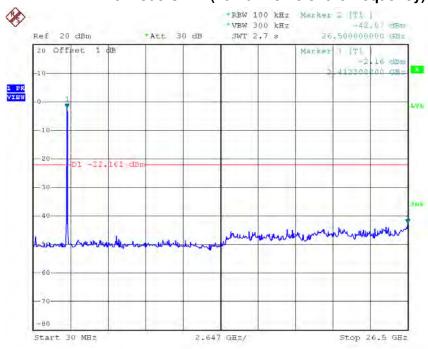


Date: 8.NOV.2014 15:34:43





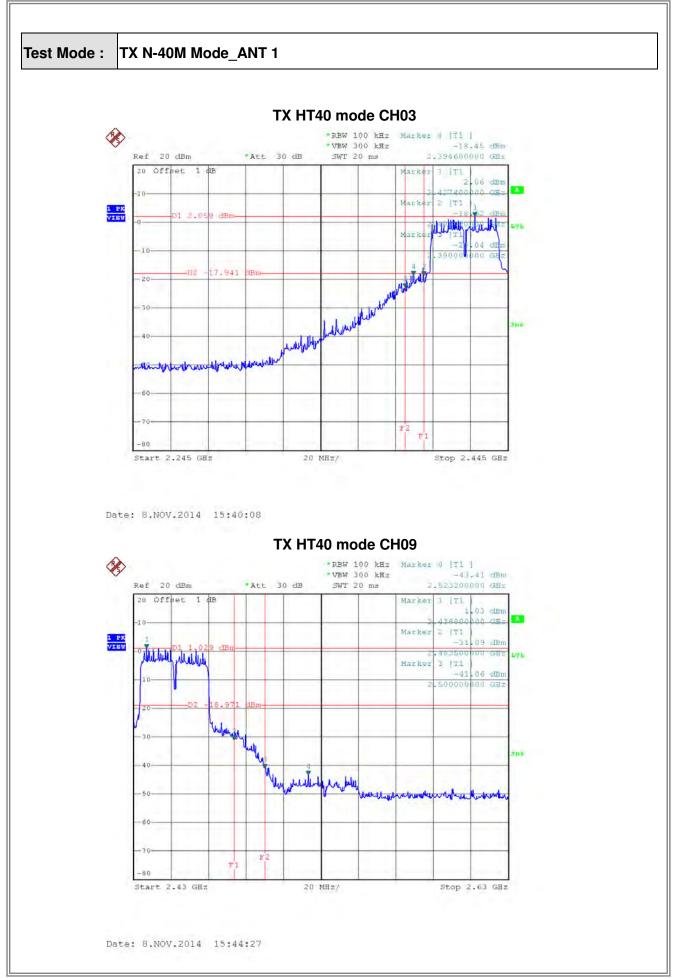
## TX HT20 mode CH11 (10 Harmonic of the frequency)



Date: 8.NOV.2014 15:36:17



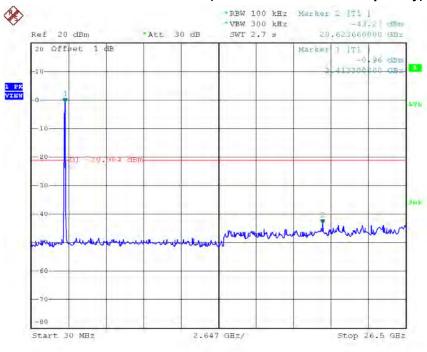






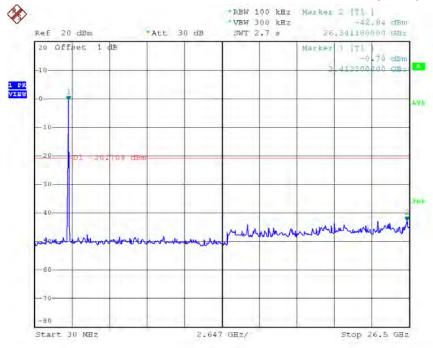






Date: 8.NOV.2014 15:40:01

#### TX HT40 mode CH06 (10 Harmonic of the frequency)

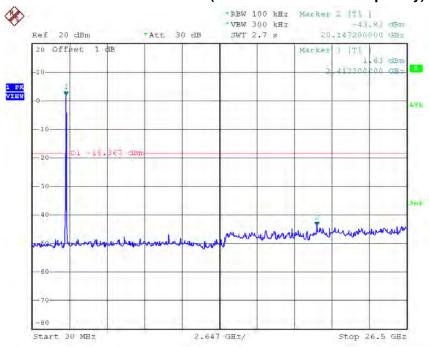


Date: 8.NOV.2014 15:42:18





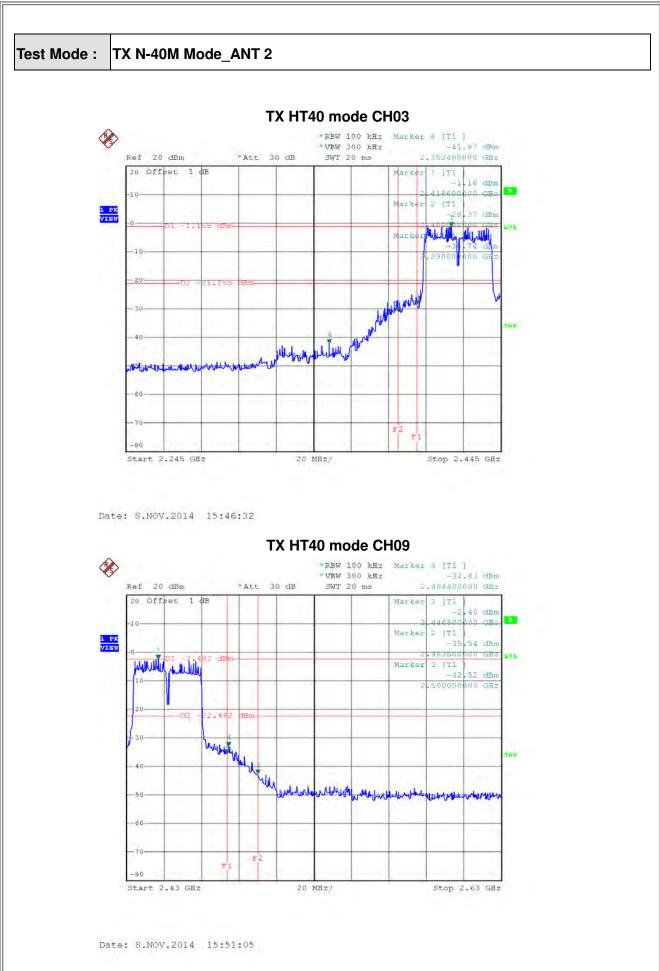
## TX HT40 mode CH09 (10 Harmonic of the frequency)



Date: 8.NOV.2014 15:44:20



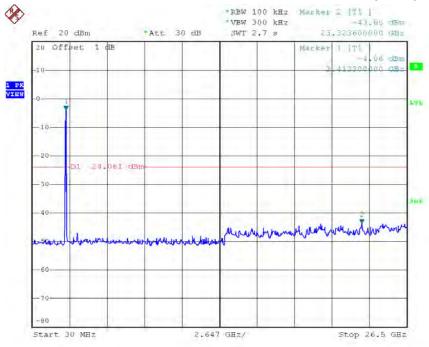






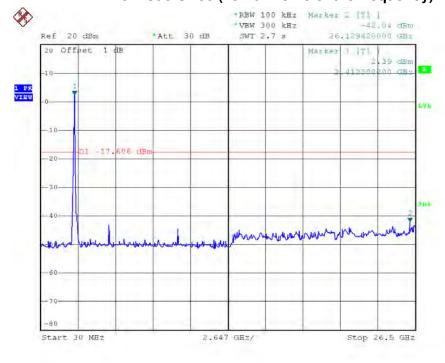






Date: 8.NOV.2014 15:46:25

#### TX HT40 mode CH06 (10 Harmonic of the frequency)

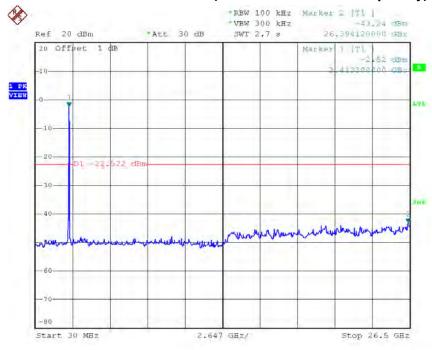


Date: 8.NOV.2014 15:48:49





## TX HT40 mode CH09 (10 Harmonic of the frequency)



Date: 8.NOV.2014 15:50:58





ATTACHMENT H - POWER SPECTRAL DENSITY

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## Test Mode :TX B Mode\_CH01/06/11\_ANT 1

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-11.49	0.07	8.00	Complies
2437	-12.76	0.05	8.00	Complies
2462	-14.19	0.04	8.00	Complies

#### TX CH01

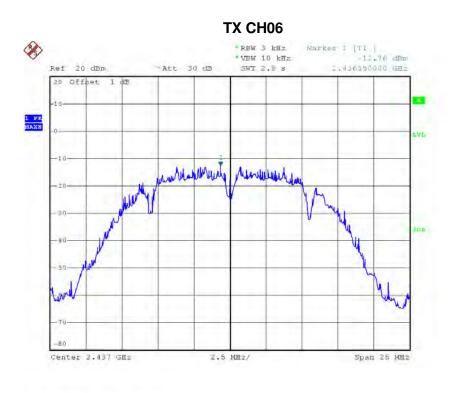


Date: 24.NOV.2014 19:53:02

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Date: 24.NoV.2014 20:05:16

# 

Date: 24.Nov.2014 20:08:52

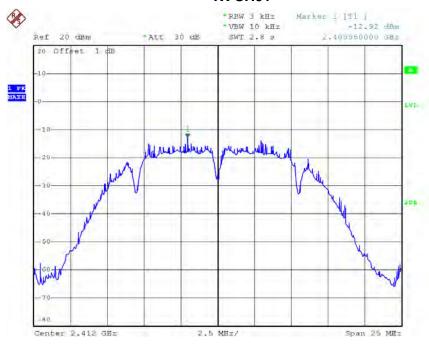




## Test Mode :TX B Mode\_CH01/06/11\_ANT 2

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-12.92	0.05	8.00	Complies
2437	-3.30	0.47	8.00	Complies
2462	-13.14	0.05	8.00	Complies

#### TX CH01

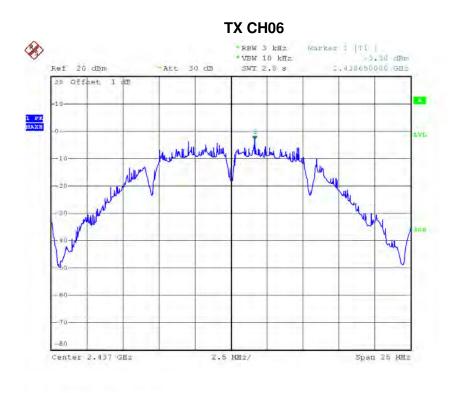


Date: 24.NOV.2014 19:58:47

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Date: 24.Nov.2014 20:02:03

# 

Date: 24.Nov.2014 20:11:15





## Test Mode :TX B Mode\_CH01/06/11\_Total

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-9.14	0.12	8.00	Complies
2437	-2.83	0.52	8.00	Complies
2462	-10.62	0.09	8.00	Complies

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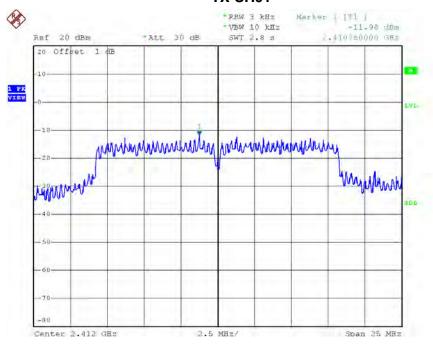




## Test Mode :TX G Mode\_CH01/06/11\_ANT 1

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-11.98	0.06	8.00	Complies
2437	-12.19	0.06	8.00	Complies
2462	-12.98	0.05	8.00	Complies

#### TX CH01



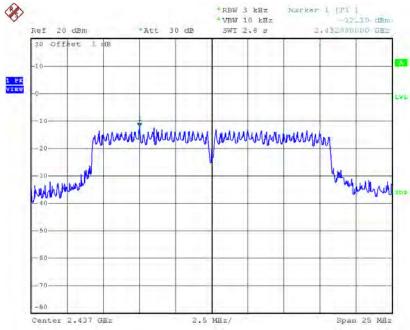
Date: 8.Nov.2014 15:13:39

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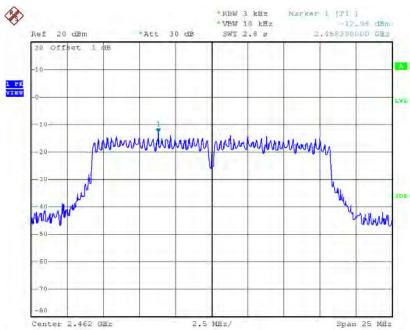






Date: 8.NOV.2014 15:15:22

#### TX CH11



Date: 8.NOV.2014 15:17:50

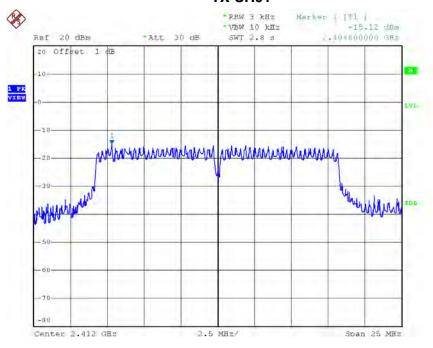




## Test Mode :TX G Mode\_CH01/06/11\_ANT 2

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-15.12	0.03	8.00	Complies
2437	-16.40	0.02	8.00	Complies
2462	-15.14	0.03	8.00	Complies

#### TX CH01

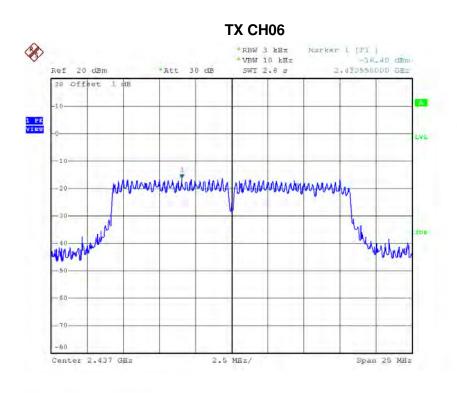


Date: 8.NOV.2014 15:19:59

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Date: 8.NOV.2014 15:21:57

# 

Date: 8.NOV.2014 15:24:19





## Test Mode :TX G Mode\_CH01/06/11\_Total

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-10.26	0.09	8.00	Complies
2437	-10.79	0.08	8.00	Complies
2462	-10.91	0.08	8.00	Complies

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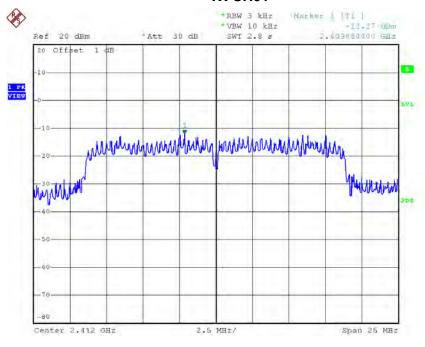




## Test Mode: TX N-20M Mode\_CH01/06/11\_ANT 1

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-12.27	0.06	8.00	Complies
2437	-12.49	0.06	8.00	Complies
2462	-13.61	0.04	8.00	Complies

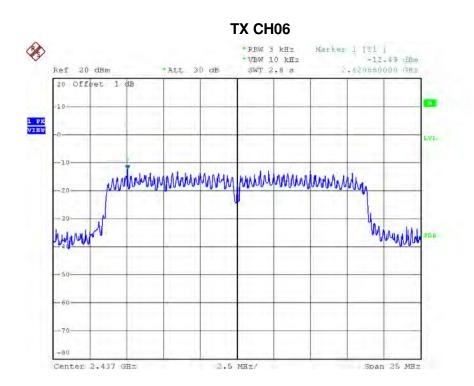
#### TX CH01



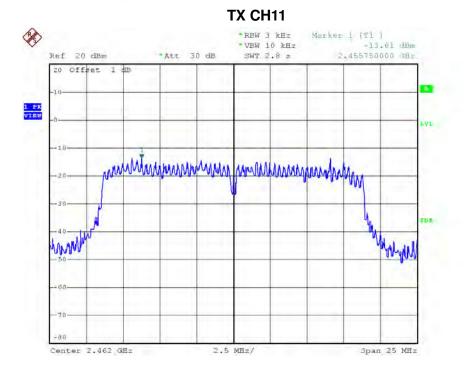
Date: 8.NOV.2014 15:27:21











Date: 8.NOV.2014 15:30:57

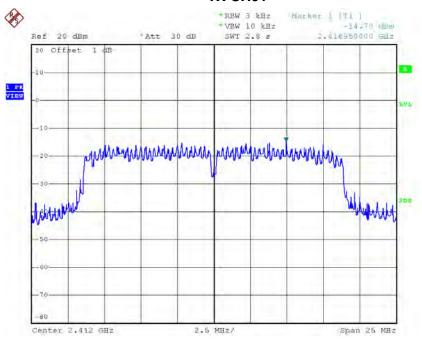




## Test Mode: TX N-20M Mode\_CH01/06/11\_ANT 2

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-14.70	0.03	8.00	Complies
2437	-15.94	0.03	8.00	Complies
2462	-15.70	0.03	8.00	Complies

#### TX CH01

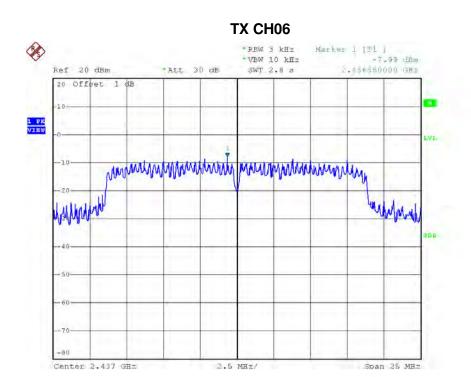


Date: 8.NOV.2014 15:32:54

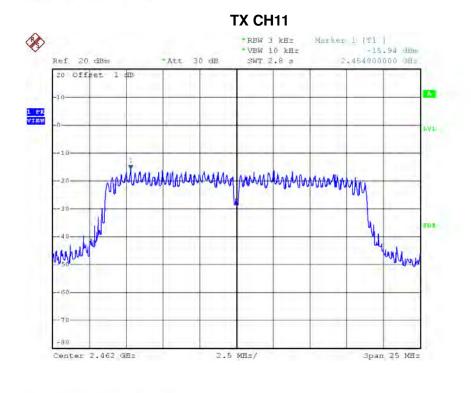
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Date: 8.NOV.2014 15:34:52



Date: 8.NOV.2014 15:36:33





## Test Mode : TX N-20M Mode\_CH01/06/11\_Total

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-10.31	0.09	8.00	Complies
2437	-10.87	0.08	8.00	Complies
2462	-11.52	0.07	8.00	Complies

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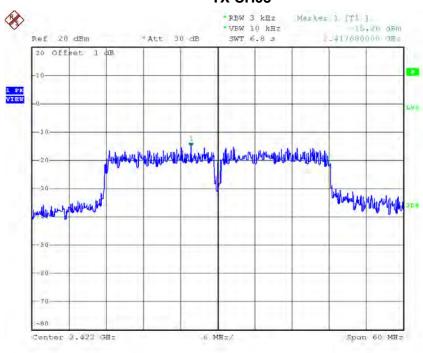




#### Test Mode: TX N-40M Mode\_CH03/06/09\_ANT 1

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2422	-15.26	0.03	8.00	Complies
2437	-14.78	0.03	8.00	Complies
2452	-15.30	0.03	8.00	Complies

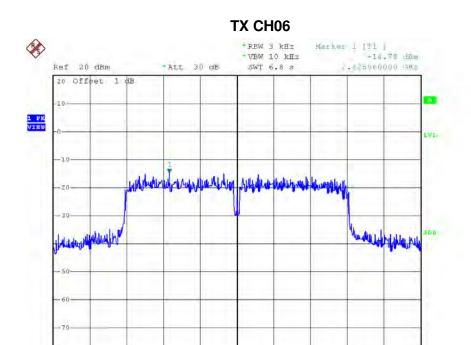
#### **TX CH03**



Date: 8.NOV.2014 15:40:20





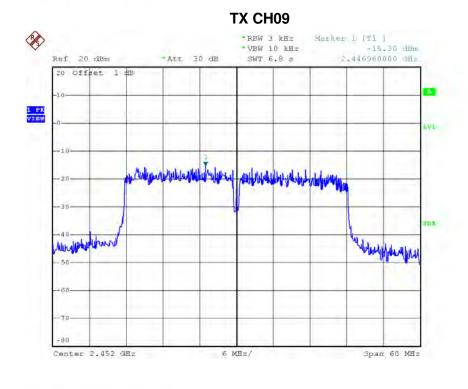


6 MHz/

Span 60 MHz

Date: 8.NOV.2014 15:42:29

Center 2.437 GHz



Date: 8.NOV.2014 15:44:39

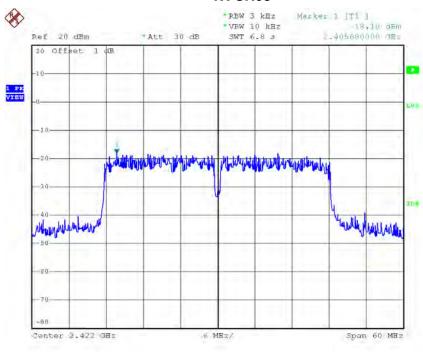




#### Test Mode: TX N-40M Mode\_CH03/06/09\_ANT 2

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2422	-18.10	0.02	8.00	Complies
2437	-6.24	0.24	8.00	Complies
2452	-17.21	0.02	8.00	Complies

#### **TX CH03**

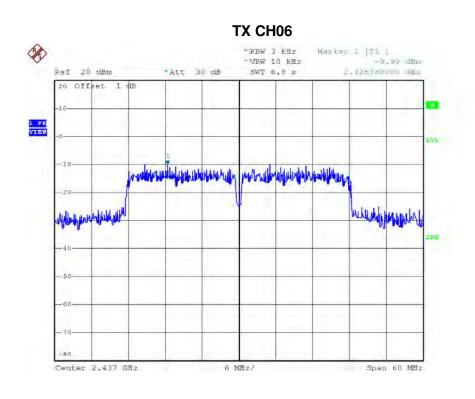


Date: 8.Nov.2014 15:46:44

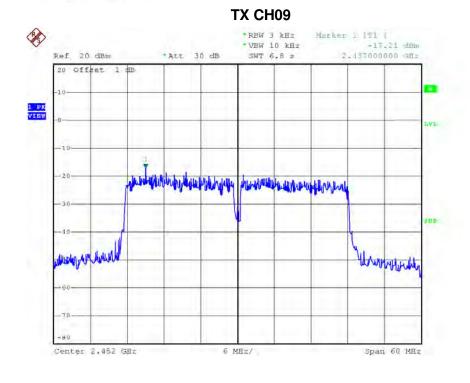
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Date: 8.NOV.2014 15:49:00



Date: 8.NOV.2014 15:51:17





## Test Mode: TX N-40M Mode\_CH03/06/09\_Total

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2422	-13.44	0.05	8.00	Complies
2437	-5.67	0.27	8.00	Complies
2452	-13.14	0.05	8.00	Complies

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