

# **FCC** Radio Test Report

FCC ID: X4Y23092

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

Project No. : 1502C027

Equipment : Wireless AC dual-band router

Model Name : ARN04904U1

Applicant : NEXXT SOLUTIONS

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

Date of Receipt: Feb. 03, 2015

Date of Test : Feb. 03, 2015~Feb. 26, 2015 | Feb. 27, 2015 | Feb. 27, 2015 | Ested by : BTL Inc.

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Report No.: BTL-FCCP-1-1502C027 Page 1 of 143



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Report No.: BTL-FCCP-1-1502C027 Page 2 of 143



Table of Contents	Page
1 . CERTIFICATION	6
2 . SUMMARY OF TEST RESULTS	7
2.1 TEST FACILITY	8
2.2 MEASUREMENT UNCERTAINTY	8
3 . GENERAL INFORMATION	9
3.1 GENERAL DESCRIPTION OF EUT	9
3.2 DESCRIPTION OF TEST MODES  3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	11 12
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING  3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TES	
3.5 DESCRIPTION OF SUPPORT UNITS	13
	_
4 . EMC EMISSION TEST	14
4.1 CONDUCTED EMISSION MEASUREMENT 4.1.1 POWER LINE CONDUCTED EMISSION LIMITS	14 14
4.1.2 TEST PROCEDURE	14
4.1.3 DEVIATION FROM TEST STANDARD	14
4.1.4 TEST SETUP 4.1.5 EUT OPERATING CONDITIONS	15 15
4.1.6 EUT TEST CONDITIONS	15
4.1.7 TEST RESULTS	15
4.2 RADIATED EMISSION MEASUREMENT	16
4.2.1 RADIATED EMISSION LIMITS 4.2.2 TEST PROCEDURE	16 17
4.2.2 TEST PROCEDURE 4.2.3 DEVIATION FROM TEST STANDARD	17
4.2.4 TEST SETUP	17
4.2.5 EUT OPERATING CONDITIONS	18
4.2.6 EUT TEST CONDITIONS 4.2.7 TEST RESULTS (9KHZ TO 30MHZ)	18 19
4.2.8 TEST RESULTS (BETWEEN 30MHZ TO 1000 MHZ)	19
4.2.9 TEST RESULTS (ABOVE 1000 MHZ)	19
5 . BANDWIDTH TEST	20
5.1 APPLIED PROCEDURES	20
5.1.1 TEST PROCEDURE 5.1.2 DEVIATION FROM STANDARD	20 20
5.1.2 DEVIATION FROM STANDARD 5.1.3 TEST SETUP	20 20
5.1.4 EUT OPERATION CONDITIONS	20
5.1.5 EUT TEST CONDITIONS	20
5.1.6 TEST RESULTS	20

Report No.: BTL-FCCP-1-1502C027 Page 3 of 143



Table of Contents	Page
6. MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST 6.1 APPLIED PROCEDURES / LIMIT 6.1.1 TEST PROCEDURE 6.1.2 DEVIATION FROM STANDARD 6.1.3 TEST SETUP 6.1.4 EUT OPERATION CONDITIONS 6.1.5 EUT TEST CONDITIONS 6.1.6 TEST RESULTS 7. ANTENNA CONDUCTED SPURIOUS EMISSION	21 21 21 21 21 21 21 21
7.1 APPLIED PROCEDURES / LIMIT 7.1.1 TEST PROCEDURE 7.1.2 DEVIATION FROM STANDARD 7.1.3 TEST SETUP 7.1.4 EUT OPERATION CONDITIONS 7.1.5 EUT TEST CONDITIONS 7.1.6 TEST RESULTS	22 22 22 22 22 22 22 22 22
8 . POWER SPECTRAL DENSITY TEST  8.1 APPLIED PROCEDURES / LIMIT  8.1.1 TEST PROCEDURE  8.1.2 DEVIATION FROM STANDARD  8.1.3 TEST SETUP  8.1.4 EUT OPERATION CONDITIONS  8.1.5 EUT TEST CONDITIONS  8.1.6 TEST RESULTS	23 23 23 23 23 23 23 23 23
9 . MEASUREMENT INSTRUMENTS LIST	24
10 . EUT TEST PHOTO	26
ATTACHMENT A - CONDUCTED EMISSION ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)	30 33
ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)	35
ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)	42
ATTACHMENT E - BANDWIDTH  ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER	91 100
ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION	104
ATTACHMENT H - POWER SPECTRAL DENSITY	129

Report No.: BTL-FCCP-1-1502C027 Page 4 of 143



#### **REPORT ISSUED HISTORY**

Issued No.	Description	Issued Date
BTL-FCCP-1-1502C027	Original Issue.	Feb. 27, 2015

Report No.: BTL-FCCP-1-1502C027 Page 5 of 143



#### 1. CERTIFICATION

Equipment : Wireless AC dual-band router

Brand Name: NEXXT Model Name: ARN04904U1

Applicant : NEXXT SOLUTIONS

Date of Test : Feb. 03, 2015~Feb. 26, 2015 Test Sample : ENGINEERING SAMPLE

Standard(s): FCC Part15, Subpart C: 2013 (15.247) / ANSI C63.4-2009

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-1-1502C027) 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).

Report No.: BTL-FCCP-1-1502C027 Page 6 of 143



#### 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

Applied Standard(s): FCC Part15 (15.247), Subpart C: 2013					
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.
- (2) The test follows FCC KDB Publication No. 558074 D01 DTS Meas Guidance v03r02 (Measurement Guidelines of DTS)

Report No.: BTL-FCCP-1-1502C027 Page 7 of 143



#### 2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-C02/DG-CB03** at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.523792 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 reported uncertainty of measurement y  $\pm$  U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %  $^{\circ}$ 

#### A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U, (dB)	NOTE
DG-C02	CISPR	150 KHz ~ 30MHz	1.94	

#### B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)	NOTE
		9KHz~30MHz	V	3.79	
		9KHz~30MHz	Н	3.57	
		30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	Н	3.60	
DG-CB03	CISPR	200MHz ~ 1,000MHz	V	3.86	
DG-CD03	CISEIX	200MHz ~ 1,000MHz	Н	3.94	
		1GHz~18GHz	V	3.12	
		1GHz~18GHz	Н	3.68	
		18GHz~40GHz	V	4.15	
		18GHz~40GHz	Н	4.14	

Report No.: BTL-FCCP-1-1502C027 Page 8 of 143



#### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

Equipment	Wireless AC dual-band router		
Brand Name	NEXXT		
Model Name	ARN04904U1		
Model Difference	N/A		
	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: 13.94dBm 802.11g: 22.28dBm 802.11n(20MHz): 23.58dBm 802.11n(40MHz): 22.43dBm	
Power Source	DC voltage supplied from AC/DC adapter Brand/Model: NEXXT/TEA12-12100		
Power Rating	I/P: AC 100-240V 50/60Hz 0.3A O/P: 12V 1A		

#### Note:

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

Report No.: BTL-FCCP-1-1502C027 Page 9 of 143



#### 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)				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	50001241	Dipole	N/A	4.92	TX/RX
2	N/A	50001241	Dipole	N/A	4.92	TX/RX

#### Note:

- (1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R), all transmit signals are completely uncorrelated, then, **Direction gain = G**ant, that is Directional gain=4.92.
- (2) ANT 1 for 1TX was found to be the worst case and recorded

4.

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

Report No.: BTL-FCCP-1-1502C027 Page 10 of 143



#### 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%.

Report No.: BTL-FCCP-1-1502C027 Page 11 of 143



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

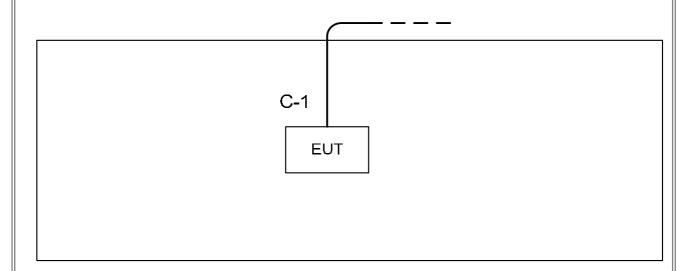
During testing, channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final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

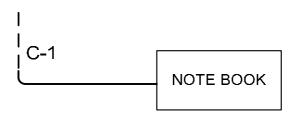
Test software version		MTool_2.0.1.1	
Frequency (MHz)	2412	2437	2462
802.11b	38	40	41
802.11g	47	58	55
802.11n (20MHz)	47	48	52
Frequency	2422	2437	2452
802.11n (40MHz)	38	45	45

Report No.: BTL-FCCP-1-1502C027 Page 12 of 143



#### 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	Series No.	Note
E-1	NOTEBOOK	DELL	INSPIRON	DOC	N/A	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	YES	NO	10M	RJ45

Report No.: BTL-FCCP-1-1502C027 Page 13 of 143



#### 4. EMC EMISSION TEST

#### 4.1 CONDUCTED EMISSION MEASUREMENT

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

Francisco (MIII-)	Conducted Limit (dBµV)		
Frequency of Emission (MHz)	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.

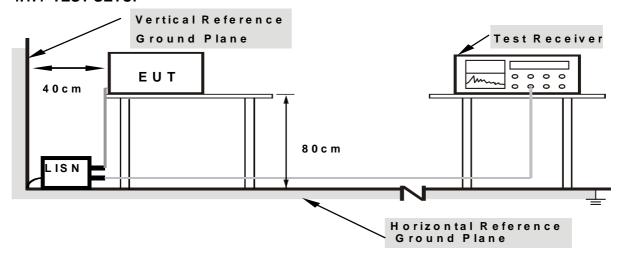
#### 4.1.3 DEVIATION FROM TEST STANDARD

No deviation

Report No.: BTL-FCCP-1-1502C027 Page 14 of 143



#### 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.

Report No.: BTL-FCCP-1-1502C027 Page 15 of 143



#### 4.2 RADIATED EMISSION MEASUREMENT

#### 4.2.1 RADIATED EMISSION LIMITS

20dB in any 100 KHz bandwidth outside the operating frequency band. 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)	
r requericy (ivil 12)	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

Report No.: BTL-FCCP-1-1502C027 Page 16 of 143



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

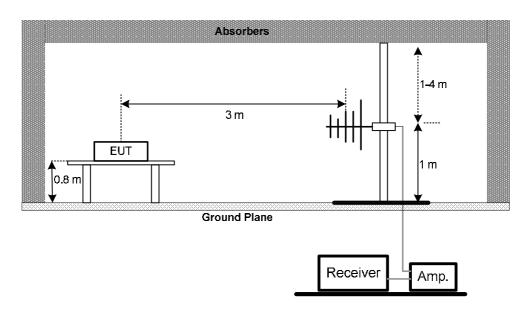
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter fully-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 0.8 m; 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. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.2.3 DEVIATION FROM TEST STANDARD

No deviation

#### 4.2.4 TEST SETUP

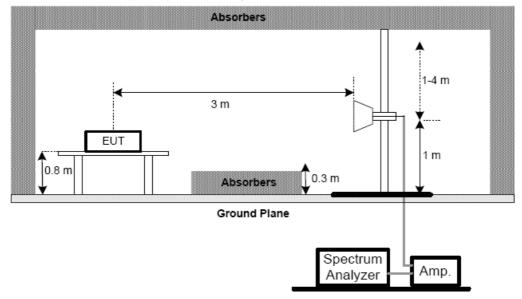
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



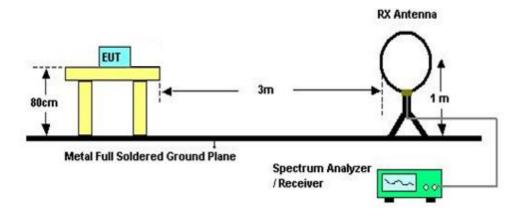
Report No.: BTL-FCCP-1-1502C027 Page 17 of 143



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



#### (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

Report No.: BTL-FCCP-1-1502C027 Page 18 of 143



#### 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.

Report No.: BTL-FCCP-1-1502C027 Page 19 of 143



#### **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,
- b. 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.

Report No.: BTL-FCCP-1-1502C027 Page 20 of 143



#### 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 v03r02.

#### 6.1.2 DEVIATION FROM STANDARD

No deviation.

#### 6.1.3 TEST SETUP

EUT	Power 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.

Report No.: BTL-FCCP-1-1502C027 Page 21 of 143



#### 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.

#### 7.1.2 DEVIATION FROM STANDARD

No deviation.

#### 7.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

#### 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.

Report No.: BTL-FCCP-1-1502C027 Page 22 of 143



#### 8. POWER SPECTRAL DENSITY TEST

#### 8.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C							
Section	Section Test Item		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



#### **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.

Report No.: BTL-FCCP-1-1502C027 Page 23 of 143



## 9. MEASUREMENT INSTRUMENTS LIST

	Conducted Emission Measurement								
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until				
1	LISN	EMCO	3816/2	00052765	Mar. 29, 2015				
2	LISN	R&S	ENV216	101447	Mar. 29, 2015				
3	Test Cable	N/A	C_17	N/A	Mar. 14, 2015				
4	EMI TEST RECEIVER	R&S	ESCS30	833364/017	Mar. 29, 2015				
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Mar. 29, 2015				
6	Measurement Software	Farad		N/A	N/A				

	Radiated Emission Measurement								
Item Kind of Equipment Mar		Manufacturer	Type No. Serial No.		Calibrated until				
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 29, 2015				
2	Amplifier	HP	8447D	2944A09673	Mar. 29, 2015				
3	Receiver	AGILENT	N9038A	MY5213003 9	Sep. 30, 2015				
4	Test Cable	N/A	C-01_CB03	N/A	Jul. 01, 2015				
5	Controller	СТ	SC100	N/A	N/A				
6	Antenna ETS		3115	00075789	Mar. 29, 2015				
7	Amplifier	Agilent	8449B	3008A02274	Mar. 29, 2015				
8	Receiver	AGILENT	N9038A	MY5213003 9	Sep. 30, 2015				
9	Test Cable	HUBER+SUHNER	C-48	N/A	Apr. 30, 2015				
10	Controller	СТ	SC100	N/A	N/A				
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Feb. 21, 2016				
12	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Feb. 21, 2016				
13	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Mar. 29, 2015				
14	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A				

Report No.: BTL-FCCP-1-1502C027 Page 24 of 143



	6dB Bandwidth Measurement						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 02, 2015		

	Peak Output Power Measurement							
Item	Item Kind of Equipment Manufa		Type No.	Serial No.	Calibrated until			
1	P-series Power meter	Agilent	N1911A	MY45100473	Mar. 29, 2015			
2	Wireband Power sensor	Agilent	N1921A	MY51100041	Mar. 29, 2015			

	Antenna Conducted Spurious Emission Measurement							
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until			
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 02, 2015			

	Power Spectral Density Measurement						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 02, 2015		

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

All calibration period of equipment list is one year.

Report No.: BTL-FCCP-1-1502C027 Page 25 of 143



# 10. EUT TEST PHOTO

#### **Conducted Measurement Photos**





Report No.: BTL-FCCP-1-1502C027 Page 26 of 143



# **Radiated Measurement Photos**

# 9KHz to 30MHz





Report No.: BTL-FCCP-1-1502C027 Page 27 of 143



# **Radiated Measurement Photos**

## 30MHz to 1000MHz



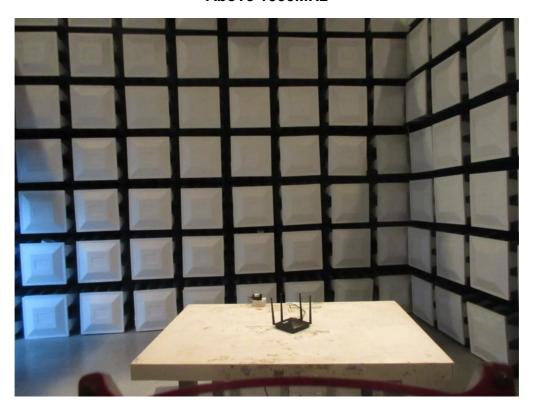


Report No.: BTL-FCCP-1-1502C027 Page 28 of 143



## **Radiated Measurement Photos**

# Above 1000MHz





Report No.: BTL-FCCP-1-1502C027 Page 29 of 143

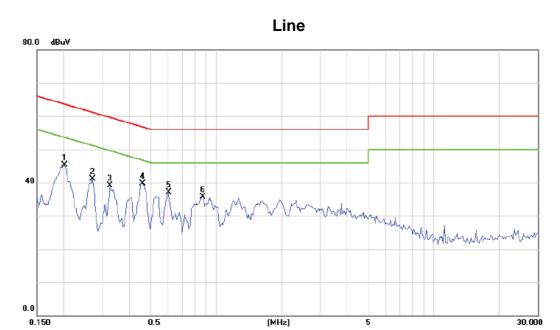


ATTACHMENT A - CONDUCTED EMISSION

Report No.: BTL-FCCP-1-1502C027 Page 30 of 143







No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.2008	35.72	9.50	45.22	63.58	-18.36	peak	
2	0.2711	31.57	9.53	41.10	61.08	-19.98	peak	
3	0.3258	29.50	9.55	39.05	59.56	-20.51	peak	
4 *	0.4586	30.08	9.62	39.70	56.72	-17.02	peak	
5	0.6070	27.49	9.59	37.08	56.00	-18.92	peak	
6	0.8688	26.20	9.59	35.79	56.00	-20.21	peak	

Report No.: BTL-FCCP-1-1502C027 Page 31 of 143





# 

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.2008	36.37	9.57	45.94	63.58	-17.64	peak	
2	0.2594	31.46	9.57	41.03	61.45	-20.42	peak	
3	0.3297	28.08	9.57	37.65	59.46	-21.81	peak	
4	0.3922	28.14	9.58	37.72	58.02	-20.30	peak	
5	0.4625	27.35	9.58	36.93	56.65	-19.72	peak	
6	1.8687	24.14	9.63	33.77	56.00	-22.23	peak	

Report No.: BTL-FCCP-1-1502C027 Page 32 of 143



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

Report No.: BTL-FCCP-1-1502C027 Page 33 of 143



Test Mode: TX Mode 2412MHz

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits	Margin	Note
(MHz)	0°/90°	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOLE
0.0195	0°	8.16	24.30	32.46	121.80	-89.34	AVG
0.0195	0°	9.37	24.30	33.67	141.80	-108.13	PEAK
0.0246	0°	6.28	24.01	30.29	119.79	-89.50	AVG
0.0246	0°	7.15	24.01	31.16	139.79	-108.63	PEAK
0.0378	0°	2.13	23.17	25.30	116.05	-90.75	AVG
0.0378	0°	3.41	23.17	26.58	136.05	-109.47	PEAK
0.4190	0°	0.17	19.99	20.16	95.16	-75.00	AVG
0.4190	0°	1.56	19.99	21.55	115.16	-93.61	PEAK
1.0548	0°	20.38	19.59	39.97	67.14	-27.17	QP
2.1937	0°	24.72	19.38	44.10	69.54	-25.44	QP

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits	Margin	Note
(MHz)	0°/90°	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
0.0241	90°	6.12	24.04	30.16	119.96	-89.80	AVG
0.0241	90°	7.53	24.04	31.57	139.96	-108.39	PEAK
0.0307	90°	3.25	23.62	26.87	117.87	-90.99	AVG
0.0307	90°	4.18	23.62	27.80	137.87	-110.06	PEAK
0.0382	90°	1.32	23.15	24.47	115.96	-91.50	AVG
0.0382	90°	1.96	23.15	25.11	135.96	-110.86	PEAK
0.0436	90°	-1.37	22.81	21.44	114.81	-93.38	AVG
0.0436	90°	0.54	22.81	23.35	134.81	-111.47	PEAK
0.8163	90°	18.65	20.33	38.98	69.37	-30.38	QP
2.5318	90°	25.31	19.18	44.49	69.54	-25.05	QP

Report No.: BTL-FCCP-1-1502C027 Page 34 of 143



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

Report No.: BTL-FCCP-1-1502C027 Page 35 of 143





127.000

224.000

# **Vertical** 80.0 dBuV/m 0.0 30.000

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	39.7000	48.41	-14.27	34.14	40.00	-5.86	peak	
2		97.9000	45.91	-16.68	29.23	43.50	-14.27	peak	
3	1	99.7500	43.11	-14.97	28.14	43.50	-15.36	peak	
4	3	399.5700	40.09	-9.55	30.54	46.00	-15.46	peak	
5	6	600.3600	39.74	-7.89	31.85	46.00	-14.15	peak	
6	8	300.1800	33.04	-2.89	30.15	46.00	-15.85	peak	

515.000 612.000

709.000

806.000

1000.000 MHz

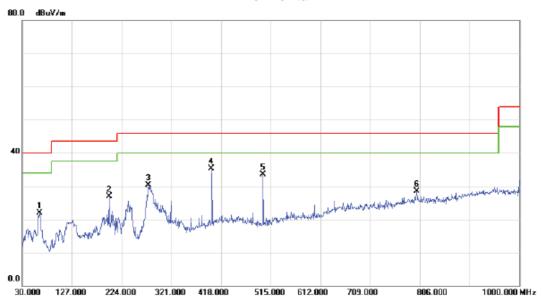
418.000

Report No.: BTL-FCCP-1-1502C027 Page 36 of 143



Test Mode: TX B MODE CHANNEL 01

### Horizontal



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		63.9500	37.32	-15.47	21.85	40.00	-18.15	peak	
2		199.7500	41.78	-14.97	26.81	43.50	-16.69	peak	
3		276.3800	42.92	-12.63	30.29	46.00	-15.71	peak	
4	*	399.5700	44.84	-9.55	35.29	46.00	-10.71	peak	
5		500.4500	43.99	-10.50	33.49	46.00	-12.51	peak	
6		800.1800	31.38	-2.89	28.49	46.00	-17.51	peak	

Report No.: BTL-FCCP-1-1502C027 Page 37 of 143





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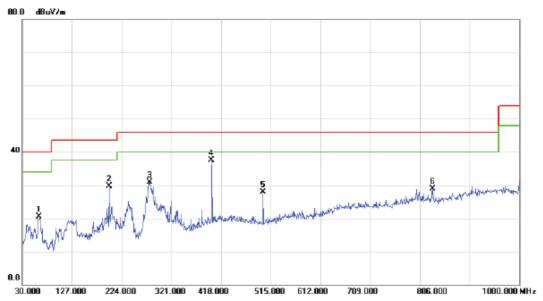
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	38.7300	47.70	-14.32	33.38	40.00	-6.62	peak	
2		96.9300	45.69	-16.84	28.85	43.50	-14.65	peak	
3		199.7500	44.02	-14.97	29.05	43.50	-14.45	peak	
4	;	399.5700	40.32	-9.55	30.77	46.00	-15.23	peak	
5	(	600.3600	40.64	-7.89	32.75	46.00	-13.25	peak	
6	;	800.1800	32.27	-2.89	29.38	46.00	-16.62	peak	

Report No.: BTL-FCCP-1-1502C027 Page 38 of 143



Test Mode: TX B MODE CHANNEL 06

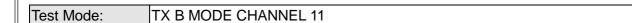
### Horizontal



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		62.9800	35.97	-15.39	20.58	40.00	-19.42	peak	
2		199.7500	44.68	-14.97	29.71	43.50	-13.79	peak	
3		278.3200	43.30	-12.45	30.85	46.00	-15.15	peak	
4	*	399.5700	47.14	-9.55	37.59	46.00	-8.41	peak	
5		500.4500	38.47	-10.50	27.97	46.00	-18.03	peak	
6		831.2200	31.93	-3.05	28.88	46.00	-17.12	peak	

Report No.: BTL-FCCP-1-1502C027 Page 39 of 143





# Vertical 80.0 dBuV/m 40 40 40 30.000 127.000 224.000 321.000 418.000 515.000 612.000 709.000 806.000 1000.000 MHz

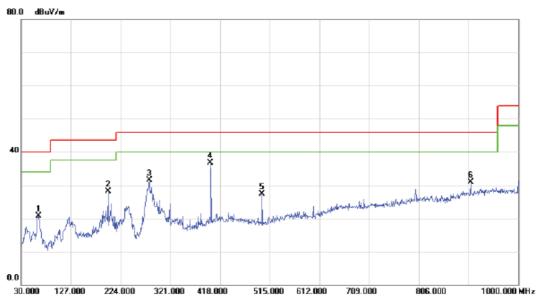
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	39.7000	47.13	-14.27	32.86	40.00	-7.14	peak		
2		96.9300	45.75	-16.84	28.91	43.50	-14.59	peak		
3		199.7500	44.45	-14.97	29.48	43.50	-14.02	peak		
4		399.5700	40.01	-9.55	30.46	46.00	-15.54	peak		
5		600.3600	40.48	-7.89	32.59	46.00	-13.41	peak		
6		958.2900	29.97	-0.25	29.72	46.00	-16.28	peak		

Report No.: BTL-FCCP-1-1502C027 Page 40 of 143



Test Mode: TX B MODE CHANNEL 11

### Horizontal



No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		63.9500	36.12	-15.47	20.65	40.00	-19.35	peak	
2		199.7500	42.99	-14.97	28.02	43.50	-15.48	peak	
3		280.2600	43.73	-12.27	31.46	46.00	-14.54	peak	
4	*	399.5700	46.35	-9.55	36.80	46.00	-9.20	peak	
5		500.4500	37.85	-10.50	27.35	46.00	-18.65	peak	
6		906.8800	32.31	-1.34	30.97	46.00	-15.03	peak	

Report No.: BTL-FCCP-1-1502C027 Page 41 of 143

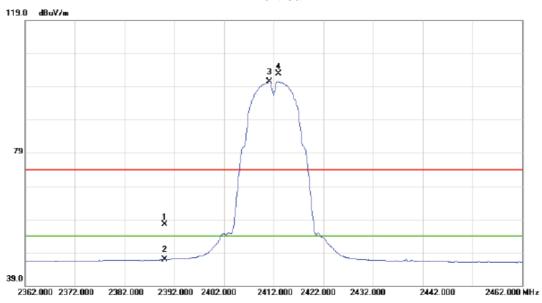


ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ	<b>'.)</b>

Report No.: BTL-FCCP-1-1502C027 Page 42 of 143



### Vertical

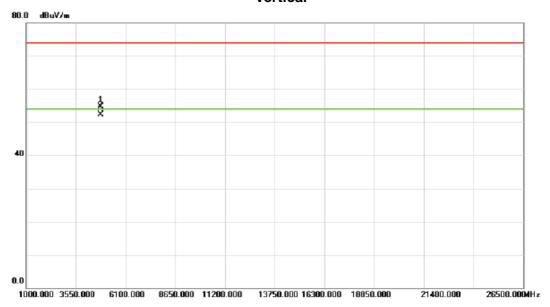


	No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
Ī			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		2390.000	25.55	31.88	57.43	74.00	-16.57	peak	
	2		2390.000	15.00	31.88	46.88	54.00	-7.12	AVG	
	3	*	2411.200	68.65	31.91	100.56	54.00	46.56	AVG	NO limit
	4	Х	2413.000	71.04	31.91	102.95	74.00	28.95	peak	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 43 of 143



### Vertical

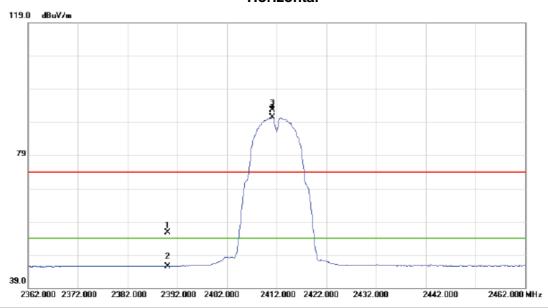


No.	MI	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4823.925	51.01	3.62	54.63	74.00	-19.37	peak	
2	*	4823.970	48.65	3.62	52.27	54.00	-1.73	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 44 of 143



### Horizontal

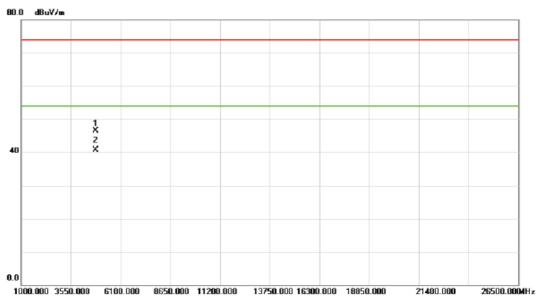


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	23.74	31.88	55.62	74.00	-18.38	peak	
2		2390.000	13.71	31.88	45.59	54.00	-8.41	AVG	
3	Х	2411.100	60.88	31.91	92.79	74.00	18.79	peak	NO limit
4	*	2411.200	58.62	31.91	90.53	54.00	36.53	AVG	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 45 of 143



### Horizontal



No.	Mi	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4823.750	42.81	3.62	46.43	74.00	-27.57	peak	
2	*	4824.010	37.15	3.62	40.77	54.00	-13.23	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 46 of 143



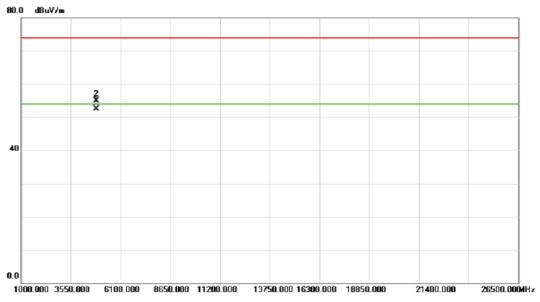
# Vertical 119.0 dBuV/m 79 2387.000 2397.000 2407.000 2417.000 2427.000 2437.000 2447.000 2457.000 2467.000 2487.000 MHz

No.	M	k. Fre		Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MH	z	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	Х	2436.1	00	71.70	31.94	103.64	74.00	29.64	peak	NO limit
2	*	2436.2	00	69.41	31.94	101.35	54.00	47.35	AVG	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 47 of 143



### Vertical

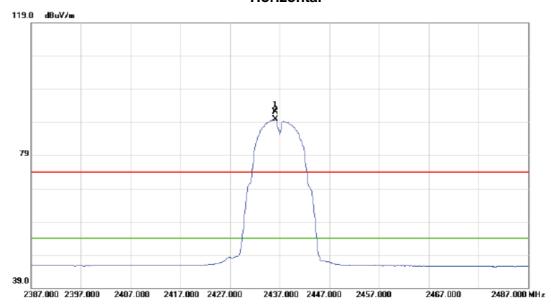


No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4873.970	48.83	3.72	52.55	54.00	-1.45	AVG	
2		4873.985	51.24	3.72	54.96	74.00	-19.04	peak	

Report No.: BTL-FCCP-1-1502C027 Page 48 of 143



### Horizontal

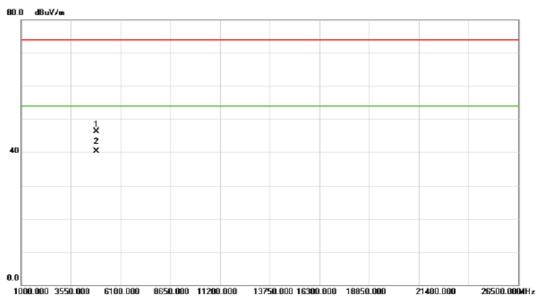


No.	М	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	Х	2436.200	60.16	31.94	92.10	74.00	18.10	peak	NO limit	
2	*	2436.200	57.87	31.94	89.81	54.00	35.81	AVG	NO limit	

Report No.: BTL-FCCP-1-1502C027 Page 49 of 143



### Horizontal

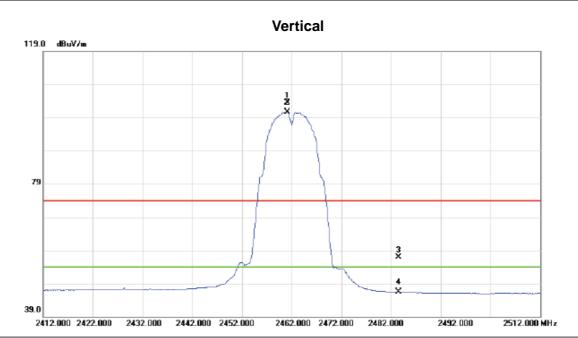


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	42.54	3.72	46.26	74.00	-27.74	peak	
2	*	4874.000	36.51	3.72	40.23	54.00	-13.77	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 50 of 143



Orthogonal Axis:	X
Test Mode :	TX B MODE 2462MHz

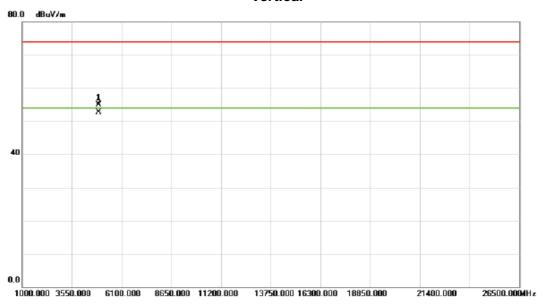


	No.	M	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
Ī			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1	Х	2461.100	71.60	31.98	103.58	74.00	29.58	peak	NO limit
	2	*	2461.200	68.79	31.98	100.77	54.00	46.77	AVG	NO limit
	3		2483.500	24.82	32.01	56.83	74.00	-17.17	peak	
	4		2483.500	14.48	32.01	46.49	54.00	-7.51	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 51 of 143



### Vertical

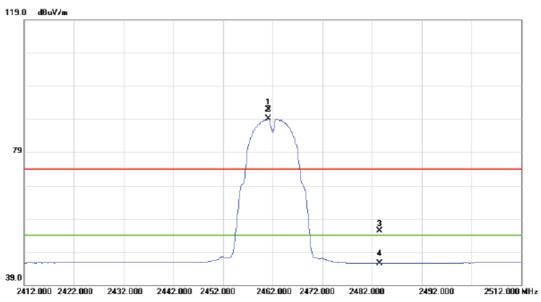


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.005	51.19	3.80	54.99	74.00	-19.01	peak	
2	*	4924.035	48.89	3.80	52.69	54.00	-1.31	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 52 of 143



### Horizontal

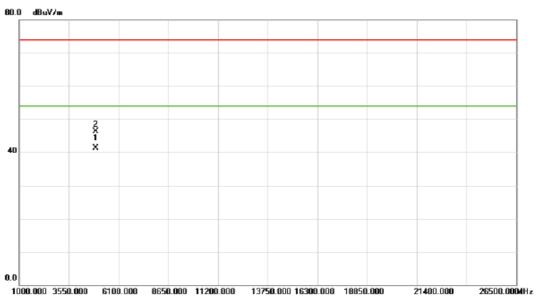


No.	М	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	Х	2	461.100	59.85	31.98	91.83	74.00	17.83	peak	NO limit	
2	*	2	461.200	57.15	31.98	89.13	54.00	35.13	AVG	NO limit	
3		2	483.500	23.37	32.01	55.38	74.00	-18.62	peak		
4		2	483.500	13.50	32.01	45.51	54.00	-8.49	AVG		

Report No.: BTL-FCCP-1-1502C027 Page 53 of 143



### Horizontal

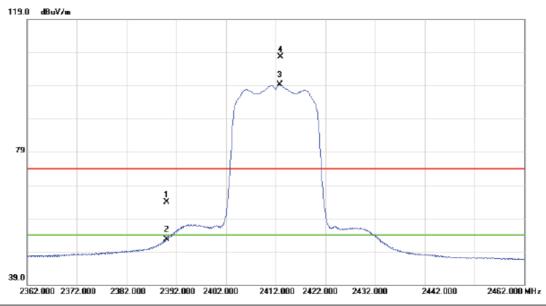


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4923.980	37.55	3.80	41.35	54.00	-12.65	AVG	
2		4924.035	42.60	3.80	46.40	74.00	-27.60	peak	

Report No.: BTL-FCCP-1-1502C027 Page 54 of 143



### Vertical

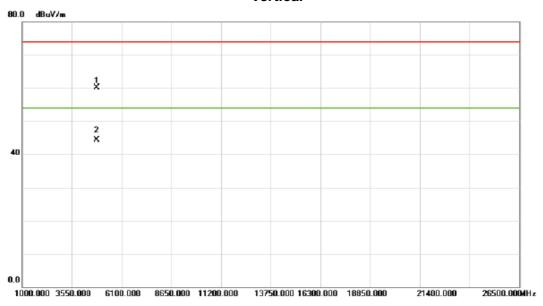


	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
Ī			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		2390.000	32.10	31.88	63.98	74.00	-10.02	peak	
	2		2390.000	20.84	31.88	52.72	54.00	-1.28	AVG	
	3	*	2412.800	67.35	31.91	99.26	54.00	45.26	AVG	NO limit
	4	Х	2413.000	75.71	31.91	107.62	74.00	33.62	peak	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 55 of 143



### Vertical

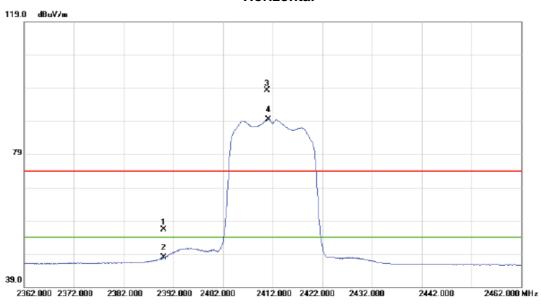


No.	М	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4823.945	56.43	3.62	60.05	74.00	-13.95	peak	
2	*	4823.965	40.65	3.62	44.27	54.00	-9.73	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 56 of 143



### 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	24.32	31.88	56.20	74.00	-17.80	peak	
2		2390.000	16.02	31.88	47.90	54.00	-6.10	AVG	
3	Х	2410.800	66.43	31.91	98.34	74.00	24.34	peak	NO limit
4	*	2411.200	57.62	31.91	89.53	54.00	35.53	AVG	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 57 of 143



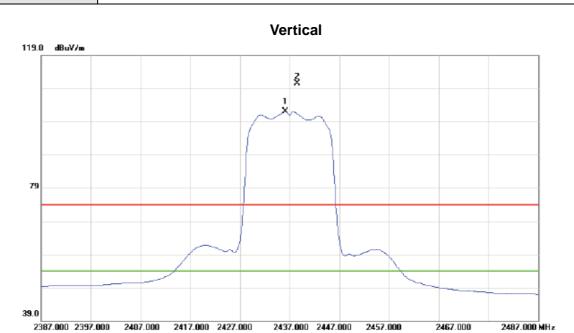
### Horizontal



No.	Mi	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4823.985	31.81	3.62	35.43	54.00	-18.57	AVG	
2		4824.080	44.80	3.62	48.42	74.00	-25.58	peak	

Report No.: BTL-FCCP-1-1502C027 Page 58 of 143



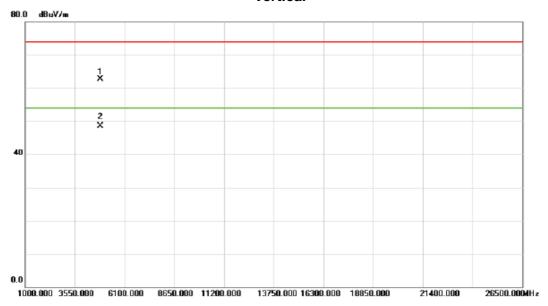


No.	М	lk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin			
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	24	436.200	70.25	31.94	102.19	54.00	48.19	AVG	NO limit	
2	Х	24	438.500	78.59	31.94	110.53	74.00	36.53	peak	NO limit	

Report No.: BTL-FCCP-1-1502C027 Page 59 of 143



### Vertical

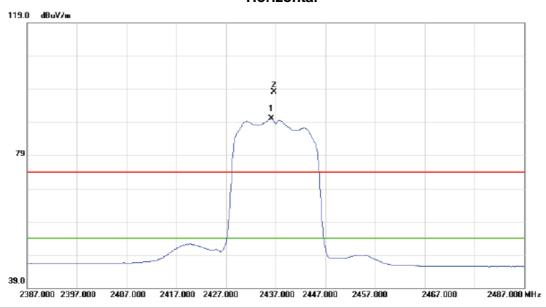


No.	No. Mk. Freq.				ect Measu or men		Margin	1	
		MH	z dBu	V dB	dBuV/r	n dBuV/m	dB	Detector	Comment
1		4873.67	75 59.0	1 3.7	2 62.73	74.00	-11.27	peak	
2	*	4873.93	35 44.8	3.7	2 48.54	54.00	-5.46	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 60 of 143



### Horizontal

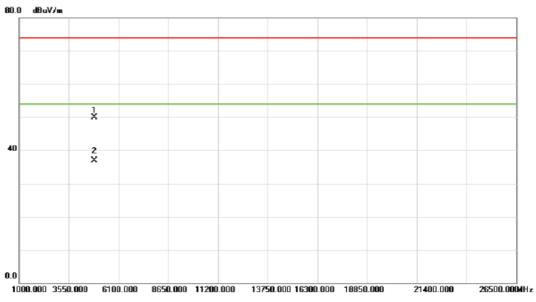


No.	М	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2436.200	58.11	31.94	90.05	54.00	36.05	AVG	NO limit
2	Х	2436.700	66.13	31.94	98.07	74.00	24.07	peak	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 61 of 143



### Horizontal



No.	М	k.	Freq.	Reading Level		Measure- ment	Limit	Margin		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		487	3.950	46.22	3.72	49.94	74.00	-24.06	peak	
2	*	487	4.145	33.20	3.72	36.92	54.00	-17.08	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 62 of 143



# Vertical 119.0 dBuV/m 79 39.0 2412.000 2422.000 2432.000 2442.000 2452.000 2462.000 2472.000 2482.000 2492.000 2512.000 MHz

No.	M	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	24	61.300	68.59	31.98	100.57	54.00	46.57	AVG	NO limit
2	Х	24	61.800	76.86	31.98	108.84	74.00	34.84	peak	NO limit
3		24	83.500	31.93	32.01	63.94	74.00	-10.06	peak	
4		24	83.500	20.83	32.01	52.84	54.00	-1.16	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 63 of 143



### Vertical

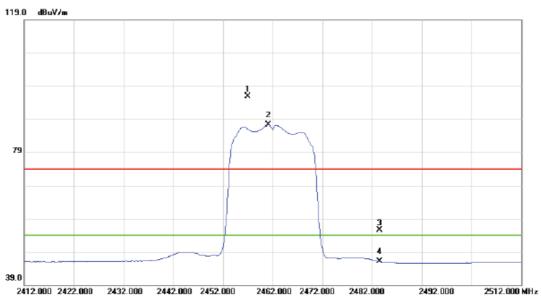


No.	Mi	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4923.940	44.10	3.80	47.90	54.00	-6.10	AVG	
2		4924.105	58.87	3.80	62.67	74.00	-11.33	peak	

Report No.: BTL-FCCP-1-1502C027 Page 64 of 143



### Horizontal

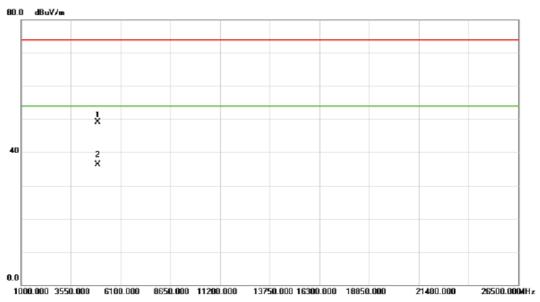


No.	No. Mk.		Freq.	Reading Level	Correct Measure Factor ment		Limit Margin				
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	Х	2	457.000	63.87	31.98	95.85	74.00	21.85	peak	NO limit	
2	*	2	461.200	55.32	31.98	87.30	54.00	33.30	AVG	NO limit	
3		2	483.500	23.47	32.01	55.48	74.00	-18.52	peak		
4		2	483.500	14.06	32.01	46.07	54.00	-7.93	AVG		

Report No.: BTL-FCCP-1-1502C027 Page 65 of 143



### Horizontal



No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4923.995	45.37	3.80	49.17	74.00	-24.83	peak	
2	*	4924.015	32.44	3.80	36.24	54.00	-17.76	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 66 of 143



### Vertical 119.0 dBuV/m 79

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	35.54	31.88	67.42	74.00	-6.58	peak	
2		2390.000	20.91	31.88	52.79	54.00	-1.21	AVG	
3	Х	2412.200	76.58	31.91	108.49	74.00	34.49	peak	NO limit
4	*	2412.800	67.11	31.91	99.02	54.00	45.02	AVG	NO limit

2412.000 2422.000 2432.000

2442.000

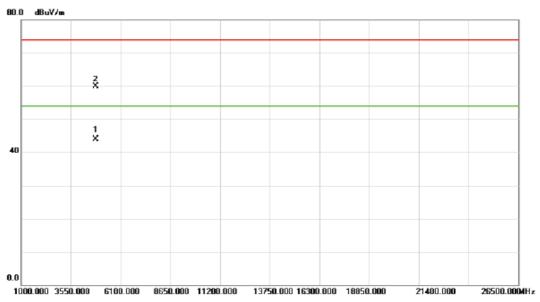
2462.000 MHz

2362.000 2372.000 2382.000 2392.000 2402.000

Report No.: BTL-FCCP-1-1502C027 Page 67 of 143



### Vertical

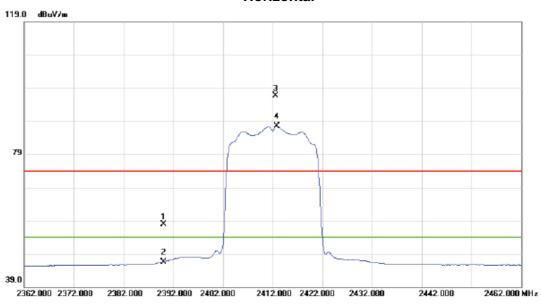


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4823.920	40.33	3.62	43.95	54.00	-10.05	AVG	
2		4824.055	56.31	3.62	59.93	74.00	-14.07	peak	

Report No.: BTL-FCCP-1-1502C027 Page 68 of 143



### Horizontal

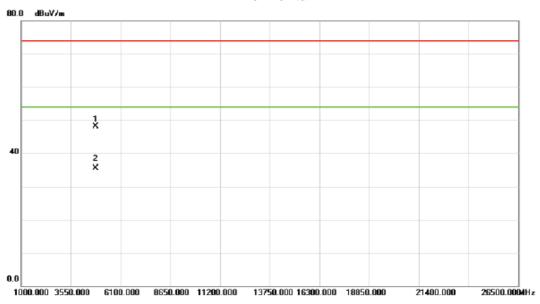


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	25.97	31.88	57.85	74.00	-16.15	peak	
2		2390.000	14.64	31.88	46.52	54.00	-7.48	AVG	
3	Х	2412.600	64.72	31.91	96.63	74.00	22.63	peak	NO limit
4	*	2412.800	55.56	31.91	87.47	54.00	33.47	AVG	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 69 of 143



### Horizontal



No.	No. Mk. Freq.		Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4823.995	44.58	3.62	48.20	74.00	-25.80	peak	
2	*	4823.995	31.80	3.62	35.42	54.00	-18.58	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 70 of 143



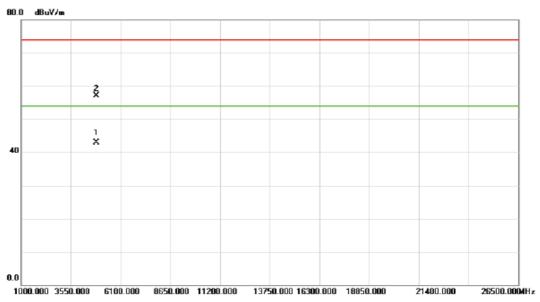
# Vertical 119.0 dBuV/m 79 39.0 2387.000 2397.000 2407.000 2417.000 2427.000 2437.000 2447.000 2457.000 2467.000 2487.000 MHz

No.	N	lk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	24	436.200	67.73	31.94	99.67	54.00	45.67	AVG	NO limit
2	Х	24	436.300	76.62	31.94	108.56	74.00	34.56	peak	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 71 of 143



### Vertical

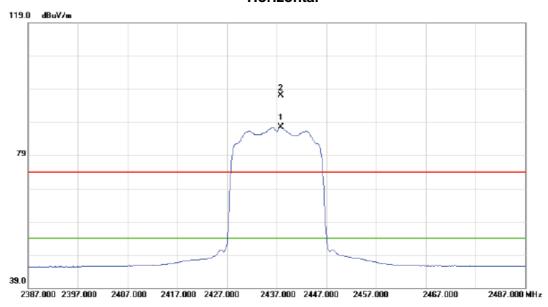


No.	M	c. Freq.	_	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4873.905	39.16	3.72	42.88	54.00	-11.12	AVG	
2		4873.985	53.45	3.72	57.17	74.00	-16.83	peak	

Report No.: BTL-FCCP-1-1502C027 Page 72 of 143



### Horizontal

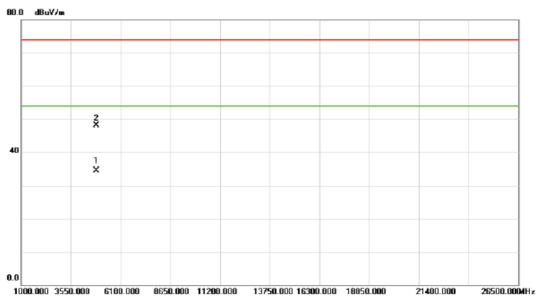


No.	М	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2437.800	55.49	31.94	87.43	54.00	33.43	AVG	NO limit
2	Х	2437.900	65.25	31.94	97.19	74.00	23.19	peak	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 73 of 143



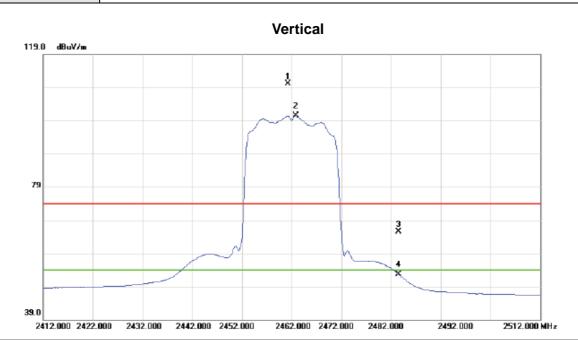
### Horizontal



No.	Mi	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4873.970	30.73	3.72	34.45	54.00	-19.55	AVG	
2		4874.015	44.33	3.72	48.05	74.00	-25.95	peak	

Report No.: BTL-FCCP-1-1502C027 Page 74 of 143





No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	Х	2461.300	78.21	31.98	110.19	74.00	36.19	peak	NO limit
2	*	2462.800	68.50	31.98	100.48	54.00	46.48	AVG	NO limit
3		2483.500	33.42	32.01	65.43	74.00	-8.57	peak	
4		2483.500	20.74	32.01	52.75	54.00	-1.25	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 75 of 143



### Vertical

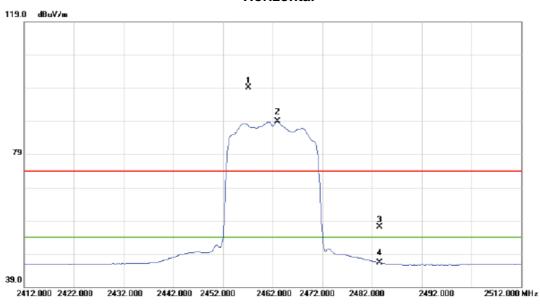


No.	Mi	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4923.985	40.89	3.80	44.69	54.00	-9.31	AVG	
2		4924.010	55.07	3.80	58.87	74.00	-15.13	peak	

Report No.: BTL-FCCP-1-1502C027 Page 76 of 143



### Horizontal



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	ı		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	Х	2457.100	67.04	31.98	99.02	74.00	25.02	peak	NO limit	
2	*	2463.000	56.85	31.98	88.83	54.00	34.83	AVG	NO limit	
3		2483.500	25.17	32.01	57.18	74.00	-16.82	peak		
4		2483.500	14.34	32.01	46.35	54.00	-7.65	AVG		

Report No.: BTL-FCCP-1-1502C027 Page 77 of 143



### Horizontal

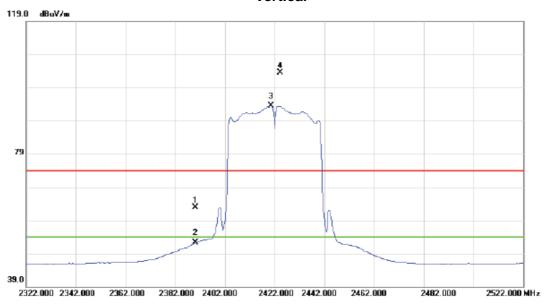


No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4923.950	43.89	3.80	47.69	74.00	-26.31	peak	
2	*	4924.065	30.82	3.80	34.62	54.00	-19.38	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 78 of 143



### Vertical

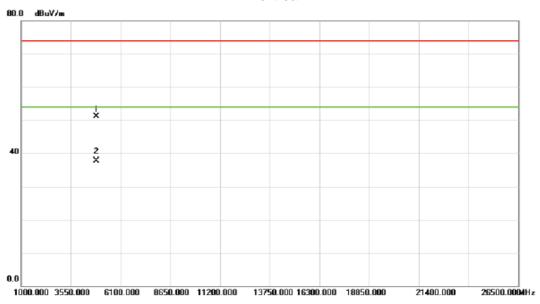


No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	30.98	31.88	62.86	74.00	-11.14	peak	
2		2390.000	20.33	31.88	52.21	54.00	-1.79	AVG	
3	*	2420.400	61.49	31.92	93.41	54.00	39.41	AVG	NO limit
4	Х	2424.200	71.66	31.93	103.59	74.00	29.59	peak	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 79 of 143



### Vertical

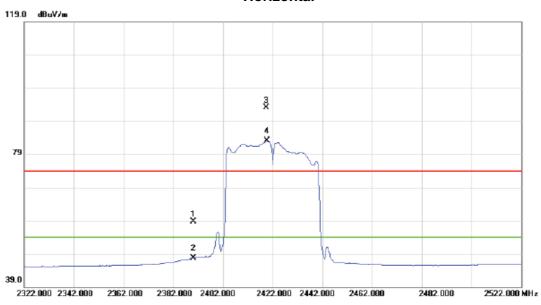


No.	М	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4843.940	47.36	3.66	51.02	74.00	-22.98	peak	
2	*	4843.960	34.09	3.66	37.75	54.00	-16.25	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 80 of 143



### 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	26.89	31.88	58.77	74.00	-15.23	peak	
2		2390.000	15.87	31.88	47.75	54.00	-6.25	AVG	
3	Х	2419.400	61.24	31.92	93.16	74.00	19.16	peak	NO limit
4	*	2419.800	51.09	31.92	83.01	54.00	29.01	AVG	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 81 of 143



### Horizontal



No.	М	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4843.930	27.82	3.66	31.48	54.00	-22.52	AVG	
2		4844.100	40.27	3.66	43.93	74.00	-30.07	peak	

Report No.: BTL-FCCP-1-1502C027 Page 82 of 143



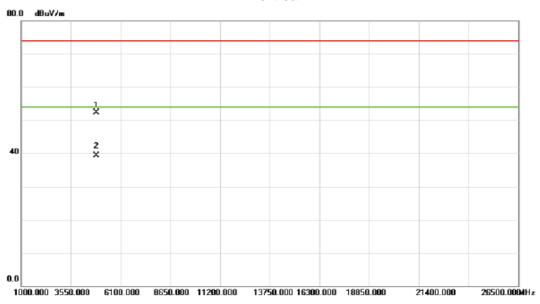
# Vertical 119.0 dBuV/m 79 2397.000 2357.000 2377.000 2397.000 2417.000 2437.000 2457.000 2477.000 2497.000 2537.000 MHz

No.	М	lk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	24	434.600	63.75	31.94	95.69	54.00	41.69	AVG	NO limit
2	Х	24	435.600	73.89	31.94	105.83	74.00	31.83	peak	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 83 of 143



### Vertical

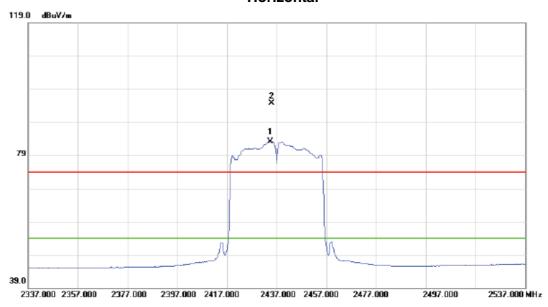


No.	М	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		48	74.060	48.50	3.72	52.22	74.00	-21.78	peak	
2	*	48	74.060	35.56	3.72	39.28	54.00	-14.72	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 84 of 143



### Horizontal



No.	М	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	24	34.400	51.17	31.94	83.11	54.00	29.11	AVG	NO limit
2	Х	24	35.000	62.80	31.94	94.74	74.00	20.74	peak	NO limit

Report No.: BTL-FCCP-1-1502C027 Page 85 of 143



### Horizontal

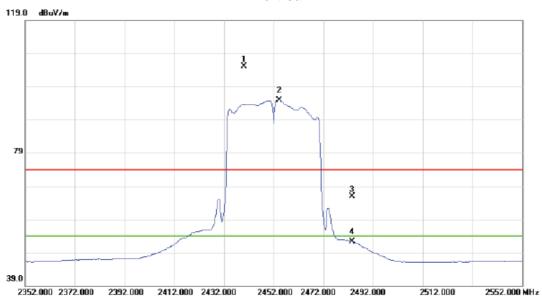


No.	М	k. Freq.	Reading Level		Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.025	39.76	3.72	43.48	74.00	-30.52	peak	
2	*	4874.025	27.95	3.72	31.67	54.00	-22.33	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 86 of 143



### Vertical

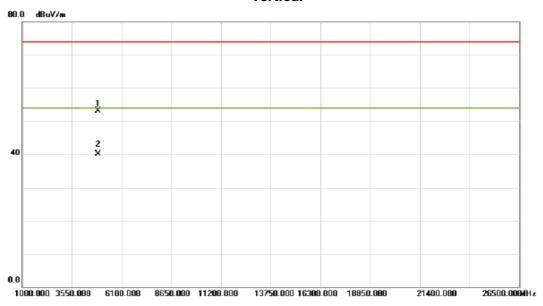


No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	Х	2440.000	73.09	31.95	105.04	74.00	31.04	peak	NO limit
2	*	2454.200	63.04	31.96	95.00	54.00	41.00	AVG	NO limit
3		2483.500	33.86	32.01	65.87	74.00	-8.13	peak	
4		2483.500	20.38	32.01	52.39	54.00	-1.61	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 87 of 143



### Vertical

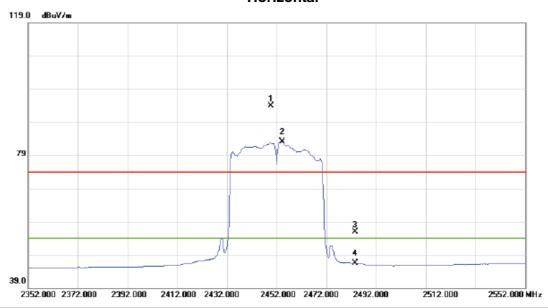


No.	Mi	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4903.990	49.39	3.77	53.16	74.00	-20.84	peak	
2	*	4903.990	36.43	3.77	40.20	54.00	-13.80	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 88 of 143



### Horizontal



No.	M	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	Х	2449.800	62.04	31.96	94.00	74.00	20.00	peak	NO limit
2	*	2454.200	51.05	31.96	83.01	54.00	29.01	AVG	NO limit
3		2483.500	23.93	32.01	55.94	74.00	-18.06	peak	
4		2483.500	14.45	32.01	46.46	54.00	-7.54	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 89 of 143



### Horizontal



No.	Mi	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4904.065	40.68	3.77	44.45	74.00	-29.55	peak	
2	*	4904.145	28.08	3.77	31.85	54.00	-22.15	AVG	

Report No.: BTL-FCCP-1-1502C027 Page 90 of 143



ATTA	ACHMENT E - BA	ANDWIDTH	

Report No.: BTL-FCCP-1-1502C027 Page 91 of 143



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

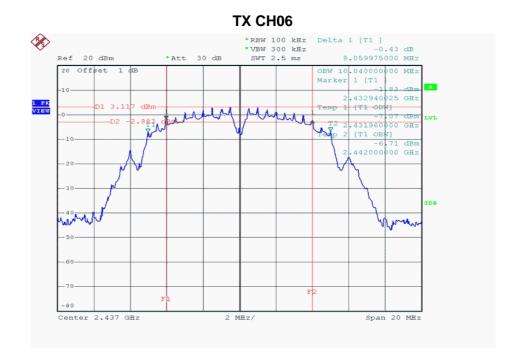
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	8.50	10.08	500	Complies
2437	8.06	10.04	500	Complies
2462	8.11	10.08	500	Complies

### **TX CH01**



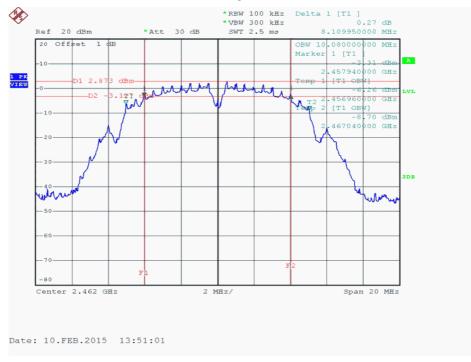
Report No.: BTL-FCCP-1-1502C027 Page 92 of 143





### TX CH11

Date: 10.FEB.2015 13:50:07



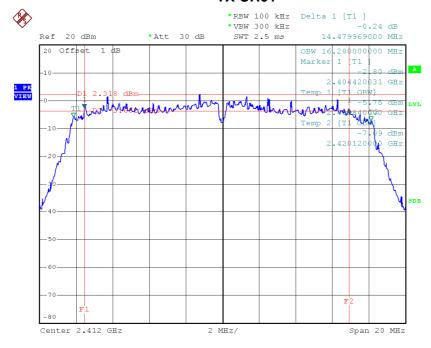
Report No.: BTL-FCCP-1-1502C027



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

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	14.48	16.28	500	Complies
2437	14.46	16.32	500	Complies
2462	15.04	16.28	500	Complies

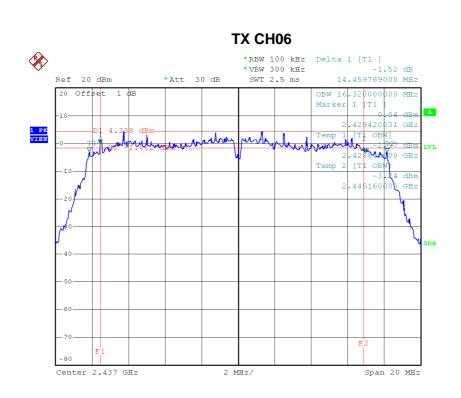
### TX CH01



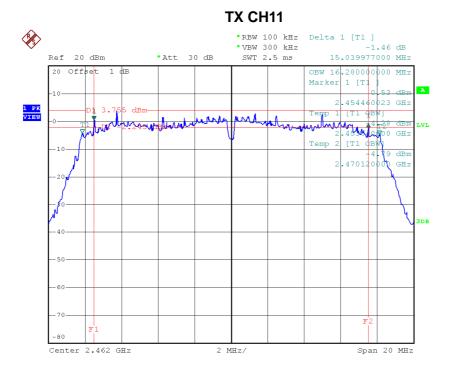
Date: 10.FEB.2015 13:52:51

Report No.: BTL-FCCP-1-1502C027 Page 94 of 143





Date: 10.FEB.2015 13:54:28



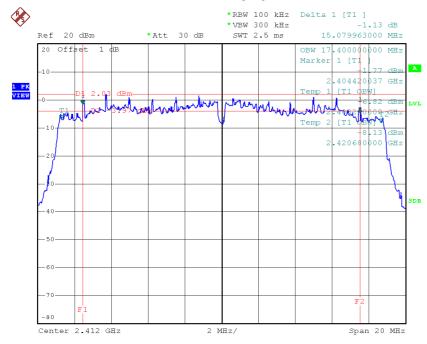
Date: 10.FEB.2015 13:55:20



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

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	15.08	17.40	500	Complies
2437	13.27	17.48	500	Complies
2462	14.16	17.40	500	Complies

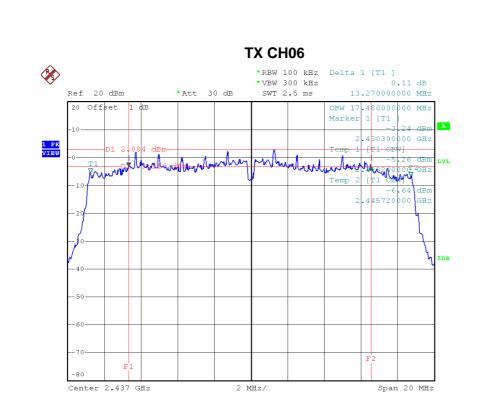
### **TX CH01**



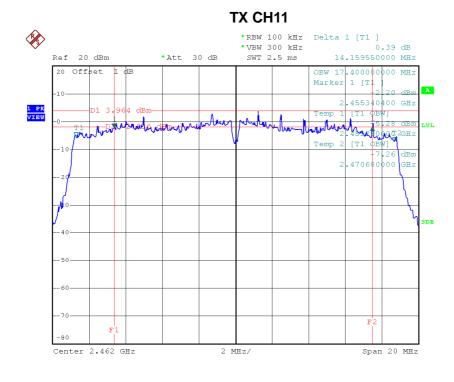
Date: 10.FEB.2015 13:57:09

Report No.: BTL-FCCP-1-1502C027 Page 96 of 143









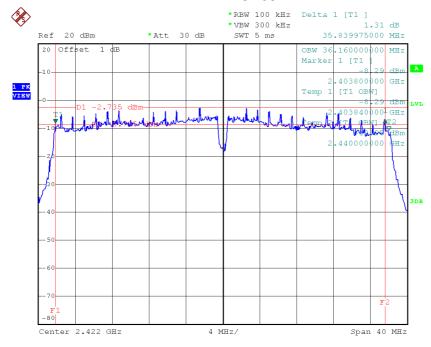
Date: 10.FEB.2015 13:59:32



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

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	35.84	36.16	500	Complies
2437	35.80	36.08	500	Complies
2452	34.40	36.08	500	Complies

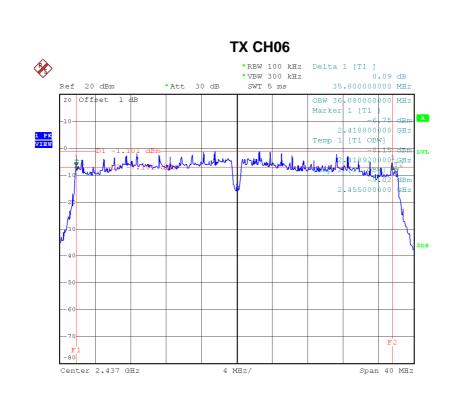
### **TX CH03**



Date: 10.FEB.2015 14:09:20

Report No.: BTL-FCCP-1-1502C027 Page 98 of 143





Date: 10.FEB.2015 14:10:19

# 

Date: 10.FEB.2015 14:12:04



ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER

Report No.: BTL-FCCP-1-1502C027 Page 100 of 143



# 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	13.58	0.02	30.00	1.00	Complies
2437	13.91	0.02	30.00	1.00	Complies
2462	13.94	0.02	30.00	1.00	Complies

# 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	19.97	0.10	30.00	1.00	Complies
2437	22.28	0.17	30.00	1.00	Complies
2462	21.68	0.15	30.00	1.00	Complies

Report No.: BTL-FCCP-1-1502C027 Page 101 of 143



### 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	19.92	0.10	30.00	1.00	Complies
2437	19.90	0.10	30.00	1.00	Complies
2462	20.90	0.12	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	20.90	0.12	30.00	1.00	Complies
2437	20.11	0.10	30.00	1.00	Complies
2462	20.22	0.11	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	23.45	0.22	30.00	1.00	Complies
2437	23.02	0.20	30.00	1.00	Complies
2462	23.58	0.23	30.00	1.00	Complies

Report No.: BTL-FCCP-1-1502C027 Page 102 of 143



### 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	17.90	0.06	30.00	1.00	Complies
2437	19.55	0.09	30.00	1.00	Complies
2452	19.33	0.09	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	17.40	0.05	30.00	1.00	Complies
2437	19.28	0.08	30.00	1.00	Complies
2452	19.20	0.08	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	20.67	0.12	30.00	1.00	Complies
2437	22.43	0.17	30.00	1.00	Complies
2452	22.28	0.17	30.00	1.00	Complies

Report No.: BTL-FCCP-1-1502C027 Page 103 of 143



ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

Report No.: BTL-FCCP-1-1502C027 Page 104 of 143

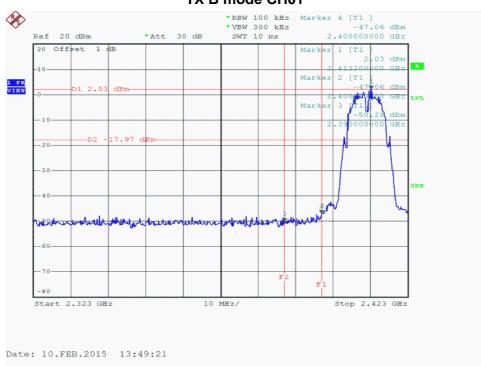


est Mode ·	TX B Mode_ANT 1
	TX B MODE_ART 1

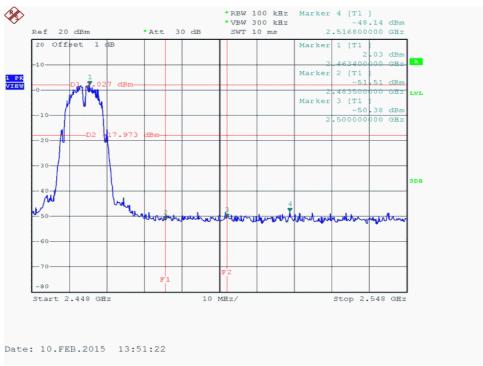
Report No.: BTL-FCCP-1-1502C027



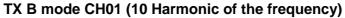


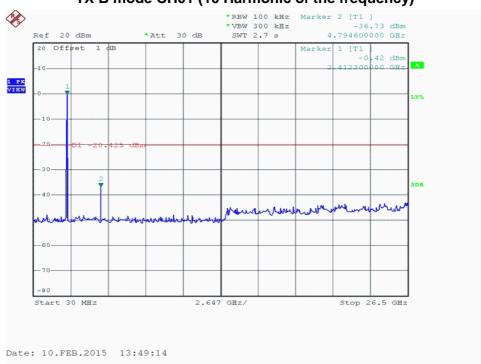


### TX B mode CH11

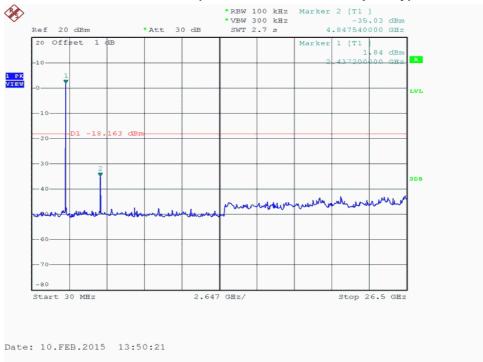








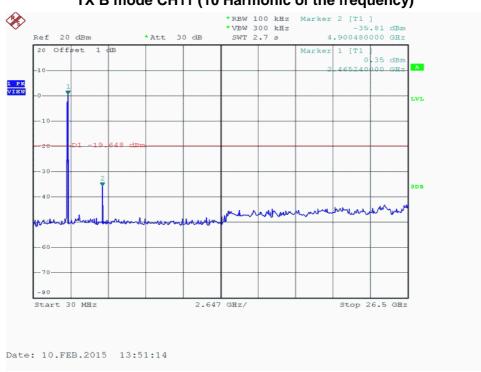
### TX B mode CH06 (10 Harmonic of the frequency)



Report No.: BTL-FCCP-1-1502C027 Page 107 of 143



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

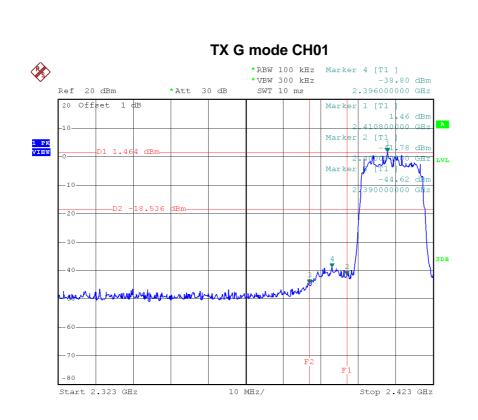


Report No.: BTL-FCCP-1-1502C027



Test Mode :	TX G Mode_ANT 1





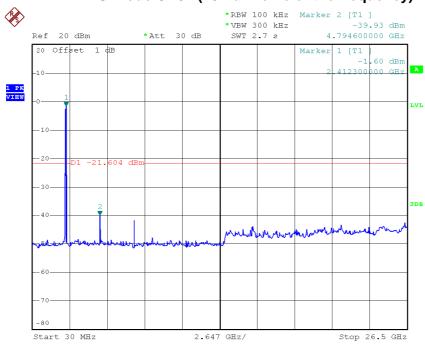


# \*REW 100 kHz Marker 4 [T1 ] \*VBW 300 kHz -43.85 dBm \*Att 30 dB SWT 10 ms 2.484200000 GHz 20 Offset 1 dB Marker 1 [T1 44 dBm 44 d1 dBm 2463200000 GHz -10 Marker 2 [T1 -44.78 dBm 2.483200000 GHz Marker 3 [T1 -51.06 dBm 2.50000000 GHz -20 D2 -18.586 dBm 2.50000000 GHz Start 2.448 GHz 10 MHz/ Stop 2.548 GHz

Date: 10.FEB.2015 13:55:41

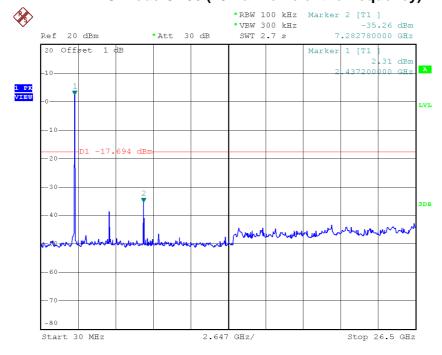






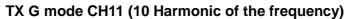
Date: 10.FEB.2015 13:53:04

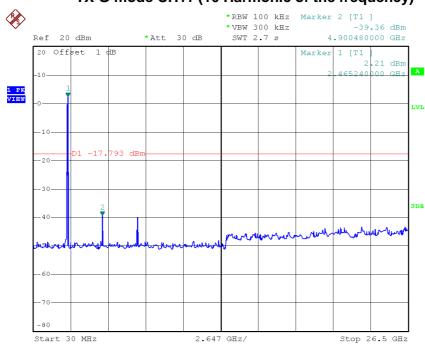
### TX G mode CH06 (10 Harmonic of the frequency)



Date: 10.FEB.2015 13:54:42







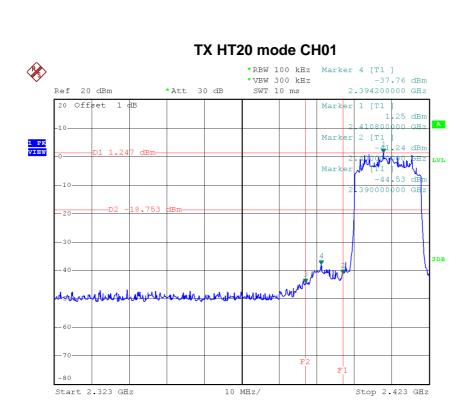
Date: 10.FEB.2015 13:55:34

Report No.: BTL-FCCP-1-1502C027 Page 112 of 143



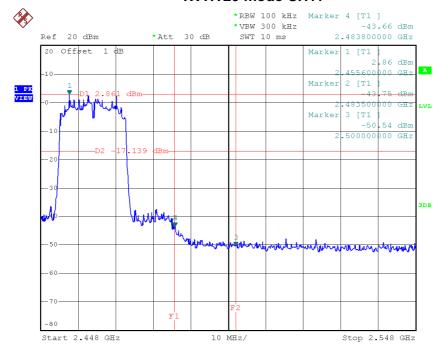
Test Mode:	TX N-20M Mode_ANT 1





Date: 10.FEB.2015 13:57:30

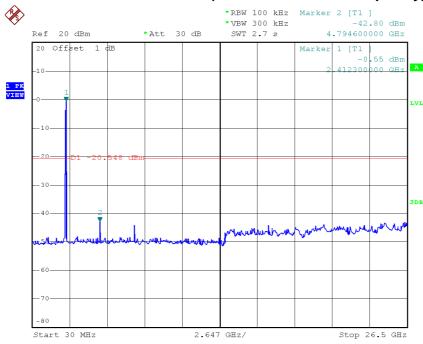
### TX HT20 mode CH11



Date: 10.FEB.2015 13:59:53

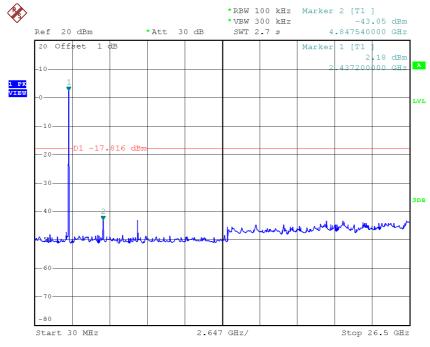






Date: 10.FEB.2015 13:57:22

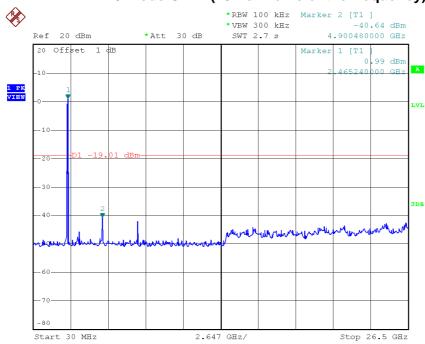
### TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 10.FEB.2015 13:58:39





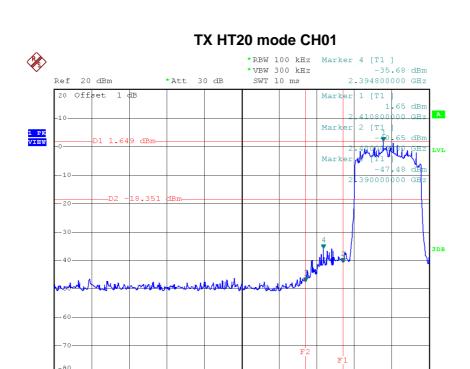


Date: 10.FEB.2015 13:59:46



Test Mode :	TX N-20M Mode_ANT 2





10 MHz/

Stop 2.423 GHz

Date: 10.FEB.2015 14:01:49

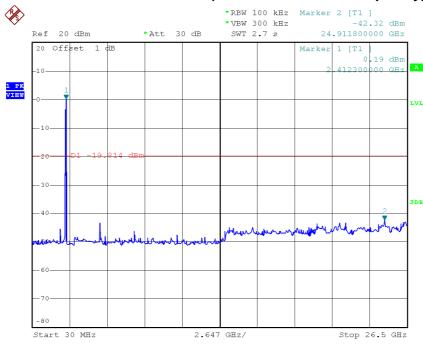
Start 2.323 GHz

# TX HT20 mode CH11 \*RBW 100 kHz Marker 4 [T1 ] -46.10 dBm 2.484200000 GHz \*VBW 300 kHz SWT 10 ms Ref 20 dBm \*Att 30 dB 20 Offset 1 dB Marker 1 [T1 ] 2.45 dBm Marker 2 [T1] 1 PK VIEW -46 58 dBn .483500000 GHZ Marker 3 [T1 -49.23 dBm 3DB Stop 2.548 GHz

Date: 10.FEB.2015 14:03:40

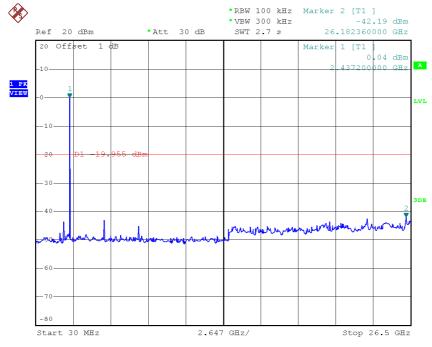






Date: 10.FEB.2015 14:01:42

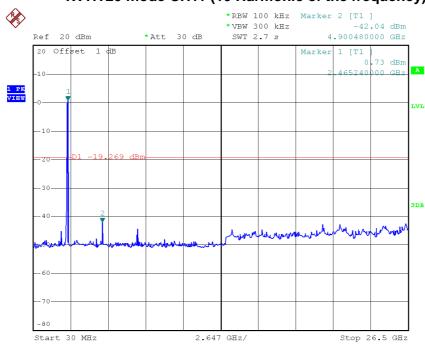
### TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 10.FEB.2015 14:02:40





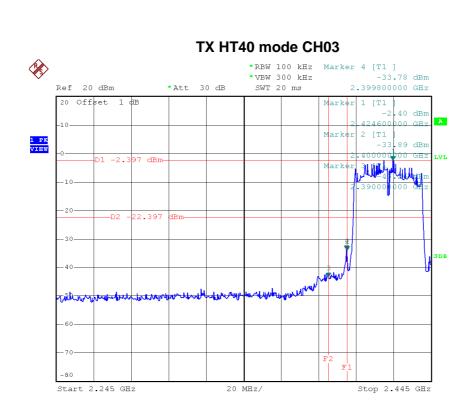


Date: 10.FEB.2015 14:03:32



est Mode :	TX N-40M Mode_ANT 1	





Date: 10.FEB.2015 14:09:41

### \*RBW 100 kHz Marker 4 [T1 ] -40.11 dBm \*VBW 300 kHz SWT 20 ms Ref 20 dBm \*Att 30 dB 2.486400000 GHz 20 Offset 1 dB Marker 1 [T1 ] -0.94 dBm 449600000 снz Marker 2 [T1 | -43 02 dBm 1 PK VIEW 483500000 GHZ Muly Marker 3 [T1] -49.02 dBm 3DB

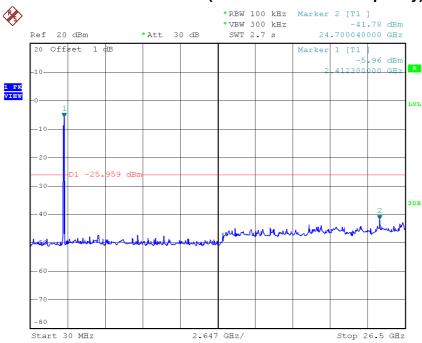
TX HT40 mode CH09

Date: 10.FEB.2015 14:12:25

Stop 2.63 GHz

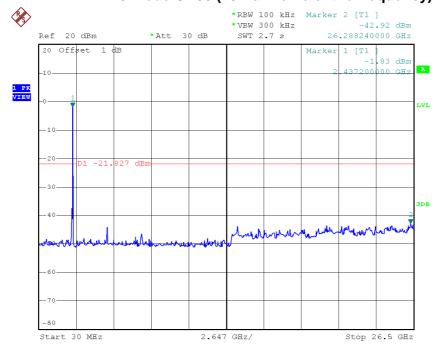






Date: 10.FEB.2015 14:09:34

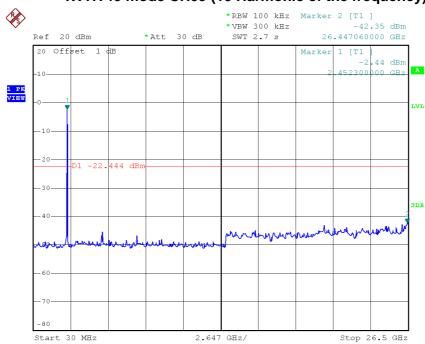
## TX HT40 mode CH06 (10 Harmonic of the frequency)



Date: 10.FEB.2015 14:10:33





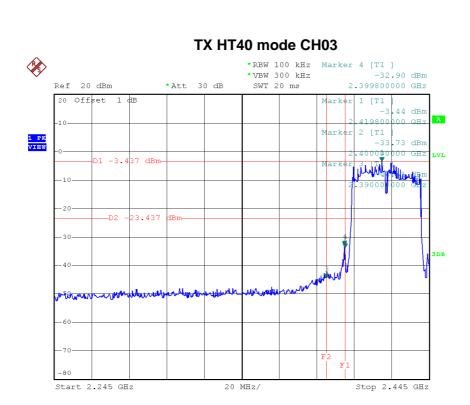


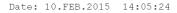
Date: 10.FEB.2015 14:12:18



est Mode :	TX N-40M Mode_ANT 2	





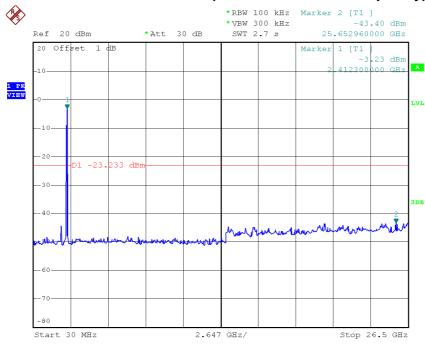


# TX HT40 mode CH09 \*RBW 100 kHz Marker 4 [T1 ] \*VBW 300 kHz -43.74 dBm SWT 20 ms Ref 20 dBm \*Att 30 dB 2.485600000 GHz 20 Offset 1 dB Marker 1 [T1 ] -1.85 dBm Marker 2 [T1] 1 PK VIEW -45.72 dBm .483500000 GHZ LVL Marker 3 [T1 ] -48 42 dBm 3DB Stop 2.63 GHz

Date: 10.FEB.2015 14:07:19

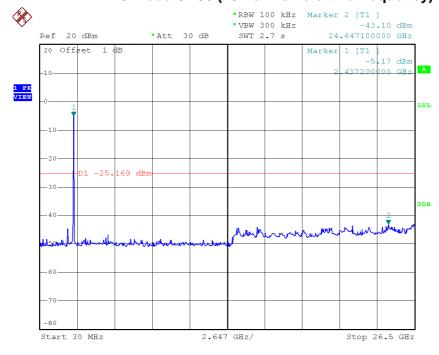






Date: 10.FEB.2015 14:05:16

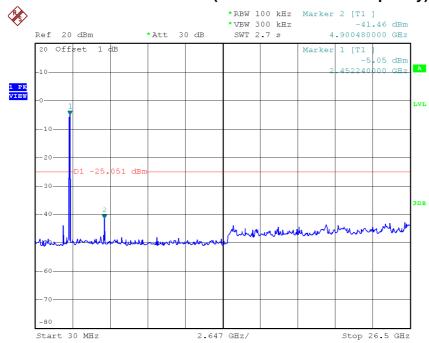
### TX HT40 mode CH06 (10 Harmonic of the frequency)



Date: 10.FEB.2015 14:06:18



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



Date: 10.FEB.2015 14:07:11



ATTACHMENT H - POWER SPECTRAL DENSITY					

Report No.: BTL-FCCP-1-1502C027 Page 129 of 143



# 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	-12.11	0.06	8.00	Complies
2437	-11.41	0.07	8.00	Complies
2462	-11.52	0.07	8.00	Complies

### **TX CH01**



Report No.: BTL-FCCP-1-1502C027 Page 130 of 143





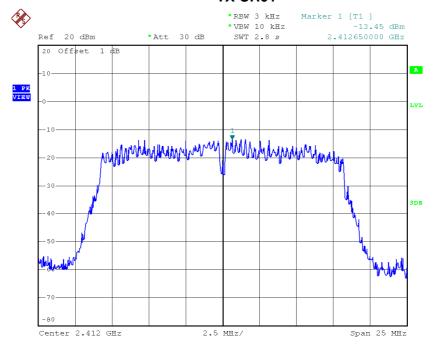




### Test Mode :TX G Mode\_CH01/06/11\_ANT 1

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-13.45	0.05	8.00	Complies
2437	-9.42	0.11	8.00	Complies
2462	-10.39	0.09	8.00	Complies

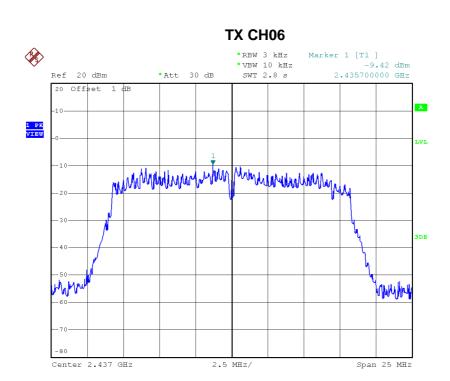
### TX CH01



Date: 10.FEB.2015 13:53:21

Report No.: BTL-FCCP-1-1502C027 Page 132 of 143





Date: 10.FEB.2015 13:54:51

# \*RBW 3 kHz Marker 1 [T1 ] \*VBW 10 kHz -10.39 dBm Ref 20 dBm \*Att 30 dB SWT 2.8 s 2.462650000 GHz 20 Offset 1 dB -10 -20 -30 -40 -40 -50 -60 -70 -80 Center 2.462 GHz 2.5 MHz/ Span 25 MHz

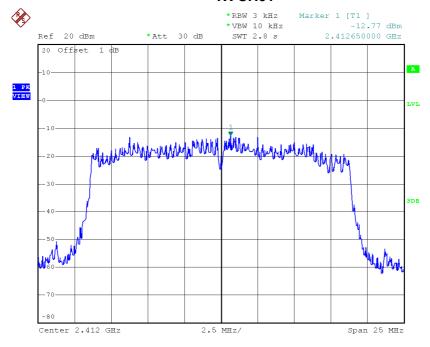
Date: 10.FEB.2015 13:55:50



### 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	-12.77	0.05	8.00	Complies
2437	-11.22	0.08	8.00	Complies
2462	-11.86	0.07	8.00	Complies

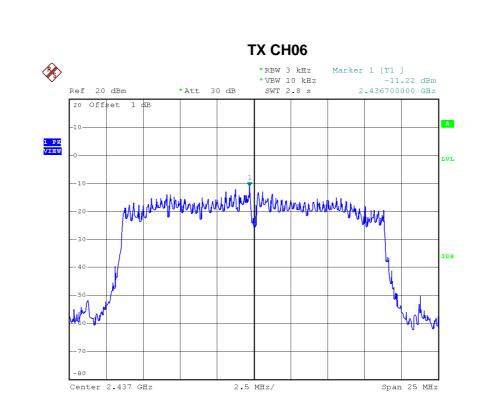
### TX CH01



Date: 10.FEB.2015 13:57:39

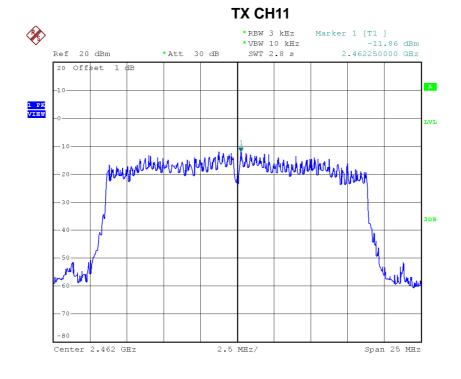
Report No.: BTL-FCCP-1-1502C027 Page 134 of 143





Date: 10.FEB.2015 13:58:48

Date: 10.FEB.2015 14:00:02

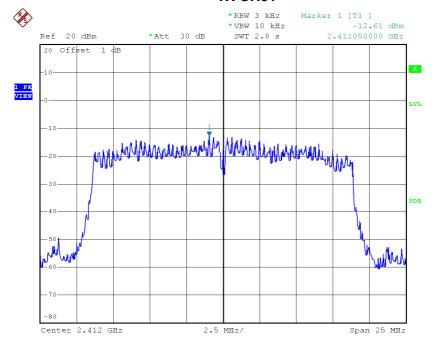




### Test Mode: TX N-20M Mode\_CH01/06/11\_ANT 2

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-12.61	0.05	8.00	Complies
2437	-12.04	0.06	8.00	Complies
2462	-10.93	0.08	8.00	Complies

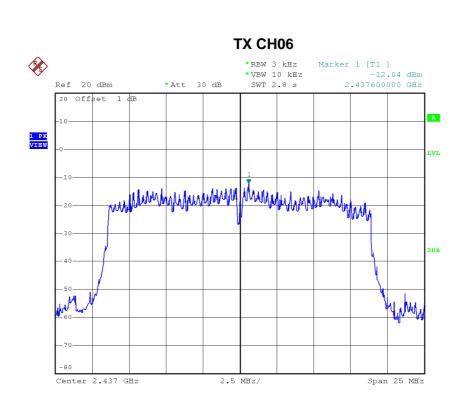
### TX CH01



Date: 10.FEB.2015 14:01:58

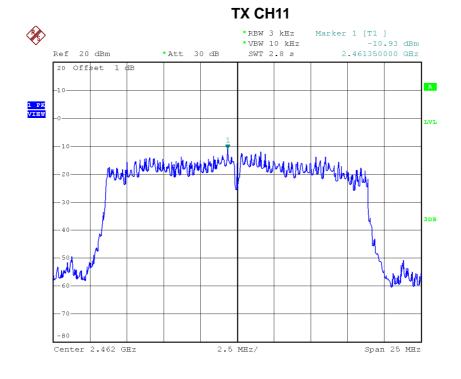
Report No.: BTL-FCCP-1-1502C027 Page 136 of 143





Date: 10.FEB.2015 14:02:49

Date: 10.FEB.2015 14:03:48





# 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	-9.68	0.11	8.00	Complies
2437	-8.60	0.14	8.00	Complies
2462	-8.36	0.15	8.00	Complies

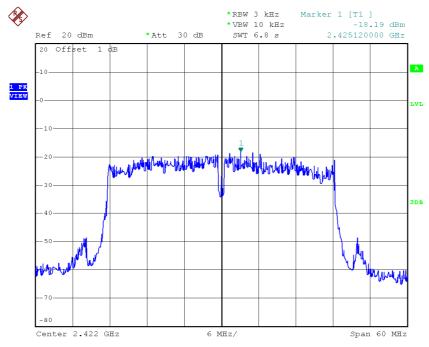
Report No.: BTL-FCCP-1-1502C027 Page 138 of 143



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

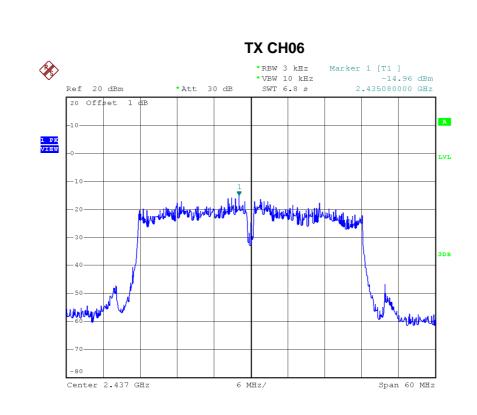
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2422	-18.19	0.02	8.00	Complies
2437	-14.96	0.03	8.00	Complies
2452	-16.85	0.02	8.00	Complies

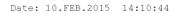
### TX CH03

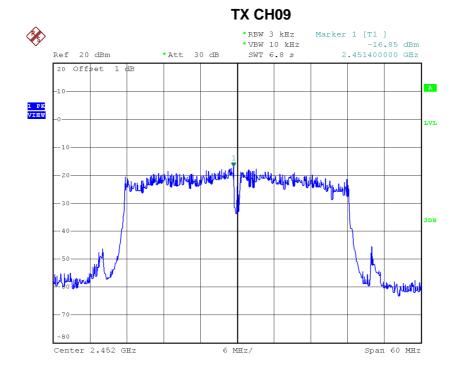


Date: 10.FEB.2015 14:09:53









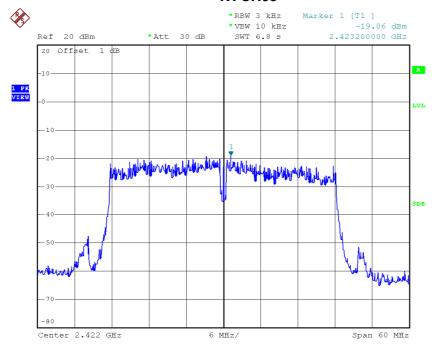
Date: 10.FEB.2015 14:12:37



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	-19.06	0.01	8.00	Complies
2437	-16.14	0.02	8.00	Complies
2452	-16.83	0.02	8.00	Complies

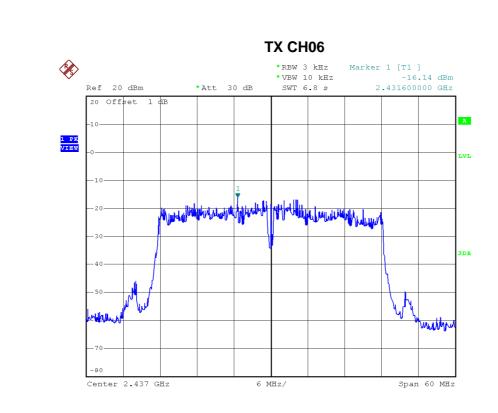
### TX CH03

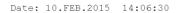


Date: 10.FEB.2015 14:05:36

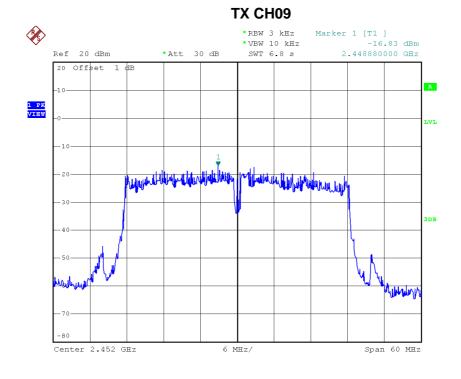
Report No.: BTL-FCCP-1-1502C027 Page 141 of 143







Date: 10.FEB.2015 14:07:31





# 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	-15.59	0.03	8.00	Complies
2437	-12.50	0.06	8.00	Complies
2452	-13.83	0.04	8.00	Complies

Report No.: BTL-FCCP-1-1502C027 Page 143 of 143