



FCC Radio Test Report

FCC ID: X4YVEK3600

This report concerns (chec	:k one): ⊠]Original Gra	ant	II Change
Project No. Equipment Test Model Series Model Applicant Address	: AEFME : N/A : NEXXT	3600-AC Who 904U1 SOLUTIONS	ole Home Mesh WiFi System S /E. MIAMI FLORIDA 33178	
Date of Receipt Date of Test Issued Date Tested by), 2018 ~ Apr s, 2019	. 18, 2018	
Testing Engineer		:	Rose Liu	-
Technical Manago	ər	:	David Mao (David Mao)	_
Authorized Signa	itory	:	Steven Lu)	-

BTL INC

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

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



Certificate #5123.02

Report No.: BTL-FCCP-1-1812C201 Page 1 of 199 Report Version: R00





Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. BTL shall have no liability for any declarations, inferences or generalizations drawn by the client or others from BTL issued reports.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, A2LA, or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the ISO/IEC 17025 requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

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.

Report No.: BTL-FCCP-1-1812C201 Page 2 of 199





Table of Contents Pa	ge
REPORT ISSUED HISTORY	5
1. GENERAL SUMMARY	6
2 . SUMMARY OF TEST RESULTS	7
2.30MMART OF TEST RESULTS 2.1 TEST FACILITY	8
2.1 TEST FACILITY 2.2 MEASUREMENT UNCERTAINTY	8
3 . GENERAL INFORMATION	9
3.1 GENERAL INFORMATION 3.1 GENERAL DESCRIPTION OF EUT	9
3.1 GENERAL DESCRIPTION OF EUT 3.2 DESCRIPTION OF TEST MODES	9 11
3.2 DESCRIPTION OF TEST MODES 3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING	13
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	
3.5 DESCRIPTION OF SUPPORT UNITS	14
4 . EMC EMISSION TEST	15
4.1 CONDUCTED EMISSION MEASUREMENT	15 15
4.1.1 POWER LINE CONDUCTED EMISSION LIMITS	15 15
4.1.2 TEST PROCEDURE	15
4.1.3 DEVIATION FROM TEST STANDARD 4.1.4 TEST SETUP	15 46
4.1.4 TEST SETUP 4.1.5 EUT OPERATING CONDITIONS	16 16
4.1.6 EUT TEST CONDITIONS	16
4.1.7 TEST RESULTS	16
4.2 RADIATED EMISSION MEASUREMENT	17
4.2.1 RADIATED EMISSION LIMITS 4.2.2 TEST PROCEDURE	17 18
4.2.3 DEVIATION FROM TEST STANDARD	18
4.2.4 TEST SETUP	19
4.2.5 EUT OPERATING CONDITIONS 4.2.6 EUT TEST CONDITIONS	20 20
4.2.7 TEST RESULTS (9KHZ TO 30MHZ)	20
4.2.8 TEST RESULTS (30MHZ TO 1000MHZ)	20
4.2.9 TEST RESULTS (ABOVE 1000MHZ)	20
5 . BANDWIDTH TEST	21
5.1 APPLIED PROCEDURES 5.1.1 TEST PROCEDURE	21
5.1.1 TEST PROCEDURE 5.1.2 DEVIATION FROM STANDARD	21 21
5.1.3 TEST SETUP	21
5.1.4 EUT OPERATION CONDITIONS	21
5.1.5 EUT TEST CONDITIONS 5.1.6 TEST RESULTS	21 21

Report No.: BTL-FCCP-1-1812C201

Page 3 of 199 Report Version: R00





Table of Contents	Page
6 . MAXIMUM OUTPUT POWER TEST	22
6.1 APPLIED PROCEDURES / LIMIT 6.1.1 TEST PROCEDURE	22 22
6.1.2 DEVIATION FROM STANDARD	22 22
6.1.3 TEST SETUP 6.1.4 EUT OPERATION CONDITIONS	22
6.1.5 EUT TEST CONDITIONS	22
6.1.6 TEST RESULTS	22
7 . ANTENNA CONDUCTED SPURIOUS EMISSION	23
7.1 APPLIED PROCEDURES / LIMIT	23
7.1.1 TEST PROCEDURE 7.1.2 DEVIATION FROM STANDARD	23 23
7.1.2 DEVIATION FROM GTANDARD	23
7.1.4 EUT OPERATION CONDITIONS	23
7.1.5 EUT TEST CONDITIONS	23
7.1.6 TEST RESULTS	23
8 . POWER SPECTRAL DENSITY TEST	24
8.1 APPLIED PROCEDURES / LIMIT 8.1.1 TEST PROCEDURE	24 24
8.1.2 DEVIATION FROM STANDARD	24
8.1.3 TEST SETUP	24
8.1.4 EUT OPERATION CONDITIONS	24
8.1.5 EUT TEST CONDITIONS 8.1.6 TEST RESULTS	24 24
9 . MEASUREMENT INSTRUMENTS LIST	2 4 25
10 . EUT TEST PHOTO	27
APPENDIX A - CONDUCTED EMISSION	31
APPENDIX B - RADIATED EMISSION (9KHZ TO 30MHZ)	34
APPENDIX C - RADIATED EMISSION (30MHZ TO 1000MHZ)	39
APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)	46
APPENDIX E - BANDWIDTH	95
APPENDIX F - MAXIMUM OUTPUT POWER	108
APPENDIX G - ANTENNA CONDUCTED SPURIOUS EMISSION	114
APPENDIX H - POWER SPECTRAL DENSITY	175

Report No.: BTL-FCCP-1-1812C201

Page 4 of 199 Report Version: R00





REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Jan. 28, 2019





1. GENERAL SUMMARY

Equipment: Vektor 3600-AC Whole Home Mesh WiFi System

Brand Name: NEXXT

Test Model : AEFME904U1

Series Model: N/A

Applicant : NEXXT SOLUTIONS Manufacturer: NEXXT SOLUTIONS

Address : 3505 N.W 107TH AVE. MIAMI FLORIDA 33178 U.S.A Date of Test : Mar. 30, 2018 ~ Apr. 18, 2018

Test Sample: Engineering Sample No.: D180302743, D181212055 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-1-1812C201) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of A2LA according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

Test results included in this report are only for the WLAN 2.4GHz part.

Report No.: BTL-FCCP-1-1812C201 Page 6 of 199





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		
15.247(d)/ 15.205/ 15.209	Transmitter Radiated Emissions	PASS		

NOTE:

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





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: 357015 BTL's designation number for FCC: CN1240

2.2 MEASUREMENT UNCERTAINTY

The measurement uncertainty figures shall be calculated according the methods described in the ETSI TR 100 028 and shall correspond to an expansion factor (coverage factor) k=1.96 or k=2(which provide confidence levels of respectively 90% and 95.45% in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)). Measurement Uncertainty for a Level of Confidence of 95 %, U=2xUc(y).

The BTL measurement uncertainty as below table:

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	V	3.82	
DG-CB03 CISF		30MHz ~ 200MHz	Ι	3.78	
	CICDD	200MHz ~ 1,000MHz	V	4.10	
	CISER	200MHz ~ 1,000MHz	Τ	4.06	
		1GHz~18GHz	V	3.12	
		1GHz~18GHz	Ι	3.68	
		18GHz~40GHz	V	4.15	
	•			18GHz~40GHz	Ι

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

Report No.: BTL-FCCP-1-1812C201 Page 8 of 199





3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Vektor 3600-AC Whole Home Mesh WiFi System		
Brand Name	NEXXT		
Test Model	AEFME904U1		
Series Model	N/A		
Model Difference	N/A		
	Operation Frequency	2412MHz ~ 2462MHz	
Product Description	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM	
	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.)_ Non Beamforming	802.11b: 27.64dBm 802.11g: 27.76dBm 802.11n(20MHz): 27.72dBm 802.11n(40MHz): 27.75dBm	
	Output Power (Max.)_ 802.11n(20MHz): 27.58dBm With Beamforming 802.11n(40MHz): 27.38dBm		
Power Source	DC Voltage supplied from AC/DC adapter. Model: BN052-A09009U		
Power Rating	I/P: 100-240V~ 50/60Hz 0.3A O/P: 9V===1.0A		

Note:

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





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	80	2447	11	2462
03	2422	06	2437	09	2452		

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Internal	N/A	3
2	N/A	N/A	Internal	N/A	3

Note:

This EUT supports CDD, and all antennas have the same gain, so Directional gain= G_{ANT} +Array Gain.

- (1) For Non-Beamforming, for power spectral density measurements, Array Gain=10log(N_{ANT}/N_{SS}) dB, that is Directional gain=3+10log(2/1)=6.01. So, the power density limit is 8-6.01+6=7.99.
- (2) Beamforming Gain: 3dBi, so Directional gain=3+3=6dBi.

4. The worst case for 1TX/ 2TX as follow:

THE WORST COSC TOT TITAL ZITA OS TOHOW.				
Operating Mode TX Mode	1TX	2TX		
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)		





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	

For Band Edge 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	

Report No.: BTL-FCCP-1-1812C201 Page 11 of 199





6dB Spectrum Bandwidth		
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	

Maximum Conducted Output Power		
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	

Power Spectral Density		
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-1-1812C201 Page 12 of 199
Report Version: R00





3.3 TABLE OF PARAMETERS OF TEST 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

Non-Beamforming

non zoumonning			
Test software version	MP_TEST		
Frequency (MHz)	2412	2437	2462
802.11b	38	38	38
802.11g	26	28	28
802.11n (20MHz)	27/24	28/25	29/26
Frequency (MHz)	2422	2437	2452
802.11n (40MHz)	27/25	28/26	28/26

With Beamforming

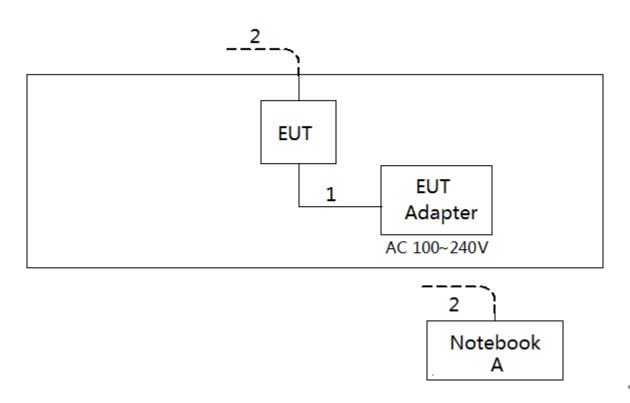
Test software version	MP_TEST		
Frequency (MHz)	2412	2437	2462
802.11n (20MHz)	27/24	28/25	29/26
Frequency (MHz)	2422	2437	2452
802.11n (40MHz)	27/25	28/26	28/26

Report No.: BTL-FCCP-1-1812C201 Page 13 of 199





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.	Series No.
Α	Notebook	Lenovo	INSPIRON 1420	JX193A01SDC2

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.2m	DC Cable
2	NO	NO	10m	RJ45 Cable

Report No.: BTL-FCCP-1-1812C201 Page 14





4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

Fraguency of Emission (MHz)	Conducted Limit (dBµV)		
Frequency of Emission (MHz)	Quasi-peak	Average	
0.15 -0.50	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 equipment 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

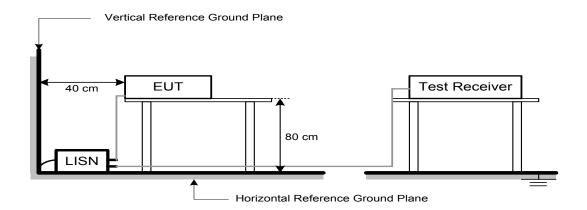
No deviation

Report No.: BTL-FCCP-1-1812C201 Page 15 of 199





4.1.4 TEST SETUP



4.1.5 EUT OPERATING CONDITIONS

The EUT was placed on the test table and programmed in normal function.

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 Appendix A.





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)		
	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	1MHz / 3MHz for Peak,
(Emission in restricted band)	1MHz / 1/T for Average

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 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

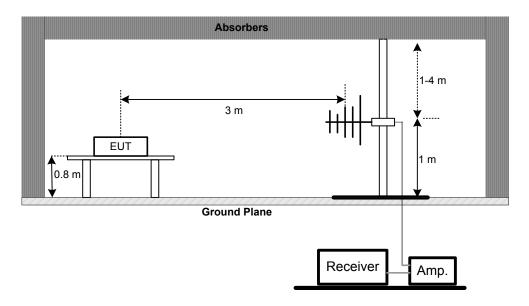
Report No.: BTL-FCCP-1-1812C201 Page 18 of 199



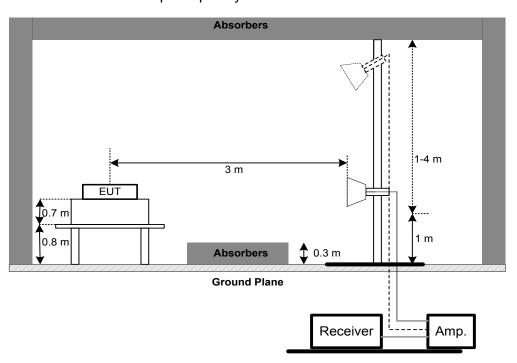


4.2.4 TEST SETUP

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



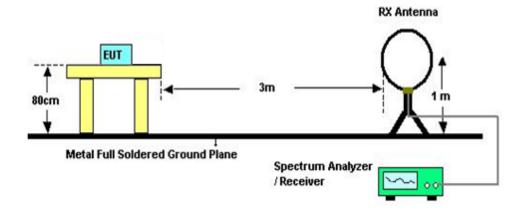
(B) Radiated Emission Test Set-Up Frequency Above 1 GHz







(C) For Radiated Emissions Below 30MHz



4.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.2.6 EUT TEST CONDITIONS

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

4.2.7 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Appendix 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 (30MHZ TO 1000MHZ)

Please refer to the Appendix C.

4.2.9 TEST RESULTS (ABOVE 1000MHZ)

Please refer to the Appendix D.

Remark:

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





5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES

FCC Part15 (15.247) , Subpart C				
Section Test Item Frequency Range (MHz) Result				
15.247(a)(2)	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 was programmed to be in continuously transmitting mode.

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 Appendix E.





6. MAXIMUM 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 11.9.1 of ANSI C63.10-2013.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP

EUT	Power Meter
	1 OWEL WICKE

6.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

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 Appendix F.





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 or a radiated measurement, provided the transmitter demonstrates compliance with the peak Output Power limits. If the transmitter complies with the Output Power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

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 was programmed to be in continuously transmitting mode.

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 Appendix G.

Report No.: BTL-FCCP-1-1812C201 Page 23 of 199





8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section Test Item Limit Frequency Range (MHz) Result				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 was programmed to be in continuously transmitting mode.

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 Appendix H.





9. MEASUREMENT INSTRUMENTS LIST

	Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	EMI Test Receiver	R&S	ESCI	100382	Mar. 11, 2019	
2	LISN	EMCO	3816/2	52765	Mar. 11, 2019	
3	50Ω Terminator	SHX	TF2-3G-A	8122901	Mar. 11, 2019	
4	TWO-LINE V-NETWORK	R&S	ENV216	101447	Mar. 11, 2019	
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A	
6	Cable	N/A	RG223	12m	Oct. 19, 2018	

	Radiated Emission Measurement - Below 1GHz											
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until							
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 11, 2019							
2	Amplifier	HP	8447D	2944A09673	Oct. 19, 2018							
3	Receiver	Agilent	N9038A	MY52130039	Aug. 20, 2018							
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	Jun. 26, 2018							
5	Controller	CT	SC100	N/A	N/A							
6	Controller	MF	MF-7802	MF780208416	N/A							
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A							
8	Antenna	EM	EM-6876-1	230	Feb. 07, 2019							

	Radiated Emission Measurement - Above 1GHz											
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until							
1	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 11, 2019							
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 08, 2018							
3	Amplifier	Agilent	8449B	3008A02274	Mar. 11, 2019							
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 11, 2019							
5	Receiver	Agilent	N9038A	MY52130039	Aug. 20, 2018							
6	Controller	СТ	SC100	N/A	N/A							
7	Controller	MF	MF-7802	MF780208416	N/A							
8	Cable	emci	EMC104-SM-SM-1 2000(12m)	N/A	Jun. 26, 2018							
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A							





	6dB Bandwidth Measurement										
Item	Nanufacturer Type No. Serial No. Calibrated until										
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018						

	Peak Output Power Measurement											
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until							
1	Power Meter	ANRITSU	ML2495A	1128009	Mar. 11, 2019							
2	Pulse Power Sensor	ANRITSU	MA 2411B	1027500	Mar. 11, 2019							

	Antenna Conducted Spurious Emission Measurement										
Item	em Kind of Equipment Manufacturer Type No. Serial No. Calibrated until										
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018						

	Power Spectral Density Measurement										
Item	Nanufacturer Type No. Serial No. Calibrated until										
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018						

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

All calibration period of equipment list is one year.





10. EUT TEST PHOTO







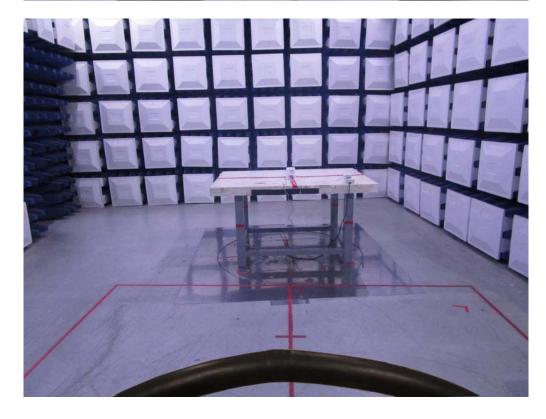




Radiated Measurement Photos

9KHz to 30MHz



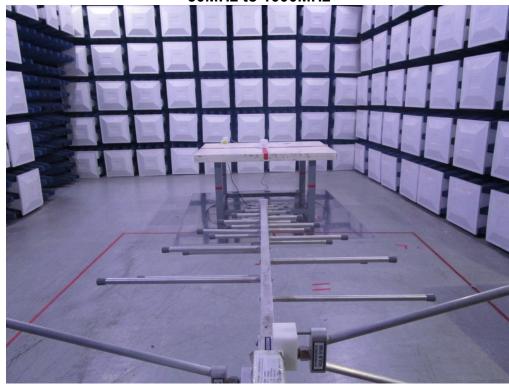






Radiated Measurement Photos

30MHz to 1000MHz



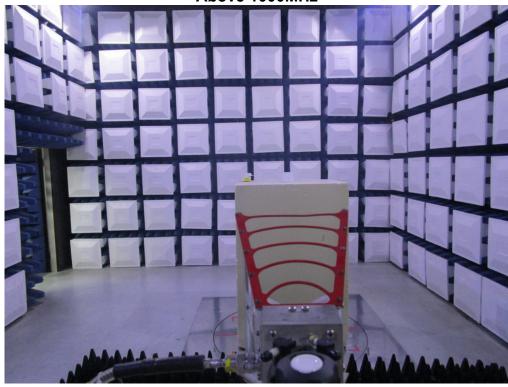


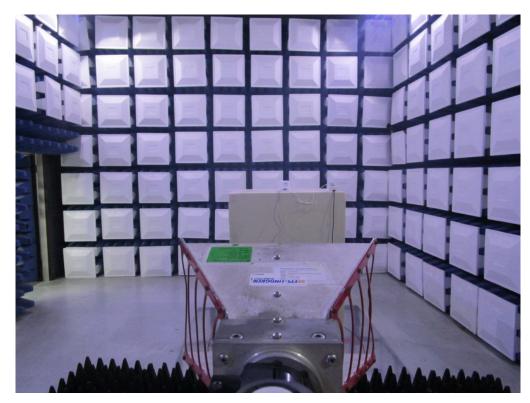




Radiated Measurement Photos

Above 1000MHz









 'le	- 1
APPENDIX A - CONDUCTED EMISSION	

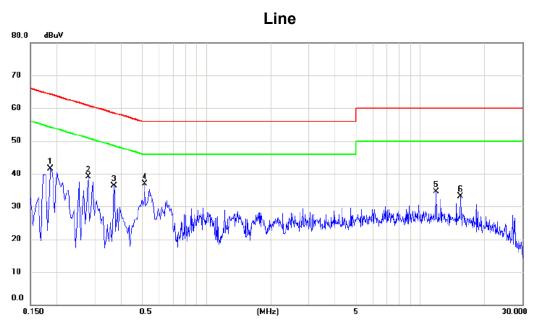
Report No.: BTL-FCCP-1-1812C201

Page 31 of 199 Report Version: R00





Test Mode : TX MODE

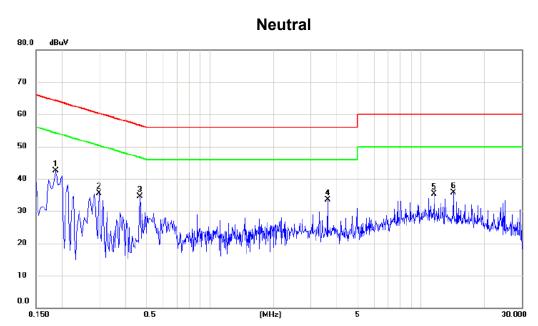


No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1860	31.72	9.77	41.49	64.21	-22.72	peak	
2	0.2805	29.29	9.73	39.02	60.80	-21.78	peak	
3	0.3704	26.52	9.75	36.27	58.49	-22.22	peak	
4 *	0.5144	27.12	9.73	36.85	56.00	-19.15	peak	
5	11.8230	24.12	10.42	34.54	60.00	-25.46	peak	
6	15.3690	22.58	10.62	33.20	60.00	-26.80	peak	





Test Mode : TX MODE



No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBu∀	dB	Detector	Comment
1 *	0.1860	32.90	9.69	42.59	64.21	-21.62	peak	
2	0.2985	25.88	9.65	35.53	60.28	-24.75	peak	
3	0.4650	24.87	9.63	34.50	56.60	-22.10	peak	
4	3.6195	23.66	9.93	33.59	56.00	-22.41	peak	
5	11.5034	24.93	10.39	35.32	60.00	-24.68	peak	
6	14.2035	25.08	10.58	35.66	60.00	-24.34	peak	

Report No.: BTL-FCCP-1-1812C201

Page 33 of 199 Report Version: R00





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

Report No.: BTL-FCCP-1-1812C201

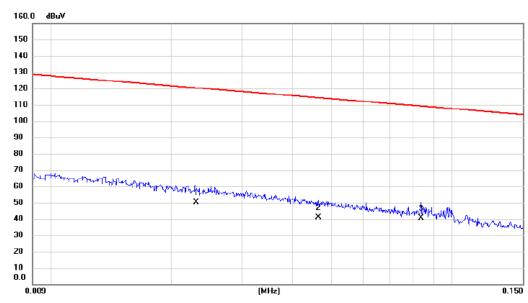
Page 34 of 199 Report Version: R00





Test Mode: TX MODE

Ant 0°



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.0230	30.80	19.53	50.33	120.37	-70.04	AVG	
2	0.0465	22.30	18.82	41.12	114.26	-73.14	AVG	
3 *	0.0838	22.60	18.02	40.62	109.14	-68.52	AVG	

Report No.: BTL-FCCP-1-1812C201

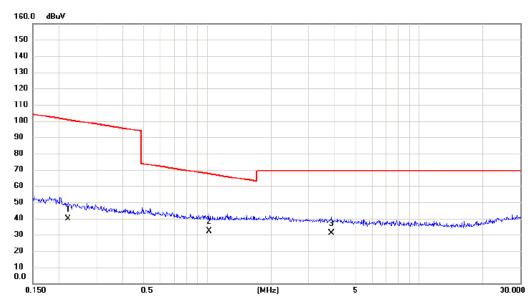
Page 35 of 199 Report Version: R00





Test Mode: TX MODE

Ant 0°



No. Mk.	Freq.			Measure- ment		Margin		
	MHz	dBuV	dB	dBuV	dBu∀	dB	Detector	Comment
1	0.2197	23.10	16.74	39.84	100.77	-60.93	AVG	
2 *	1.0211	16.40	15.88	32.28	67.42	-35.14	QP	
3	3.8603	15.90	14.99	30.89	69.54	-38.65	QP	

Report No.: BTL-FCCP-1-1812C201

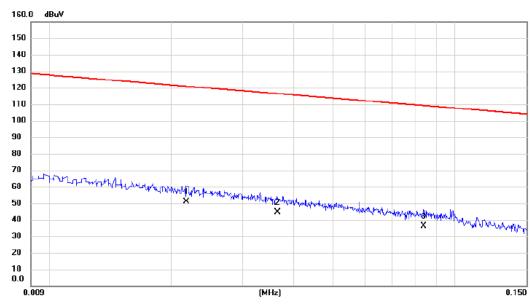
Page 36 of 199 Report Version: R00





Test Mode: TX MODE

Ant 90°



No. Mk.	Freq.		Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.0218	31.30	19.57	50.87	120.84	-69.97	AVG	
2	0.0365	25.60	19.13	44.73	116.36	-71.63	AVG	
3	0.0838	18.30	18.02	36.32	109.14	-72.82	AVG	

Report No.: BTL-FCCP-1-1812C201

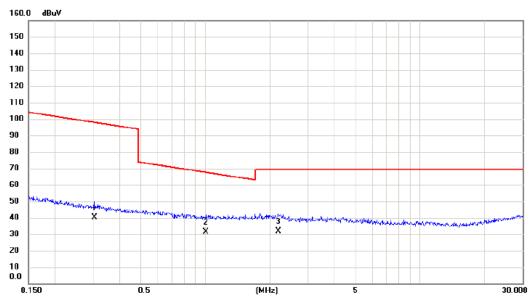
Page 37 of 199 Report Version: R00





Test Mode: TX MODE

Ant 90°



No. Mk.	Freq.	Reading Level		Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.3051	23.50	16.62	40.12	97.92	-57.80	AVG	
2 *	1.0050	15.70	15.89	31.59	67.56	-35.97	QP	
3	2.1898	16.30	15.45	31.75	69.54	-37.79	QP	

Report No.: BTL-FCCP-1-1812C201

Page 38 of 199 Report Version: R00





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

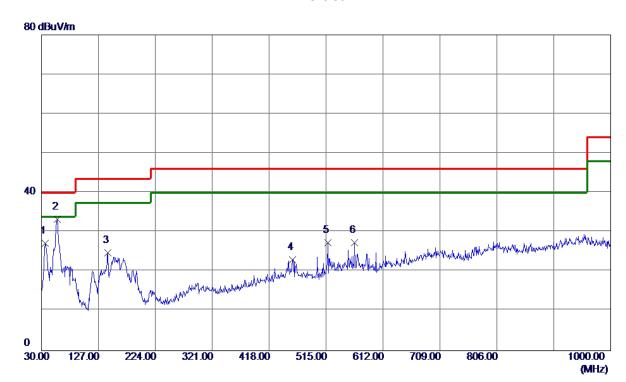
Report No.: BTL-FCCP-1-1812C201

Page 39 of 199 Report Version: R00





Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	36. 7900	42. 49	-15. 24	27. 25	40.00	-12.75	Peak	
2 *	57. 1600	49.06	-15. 73	33. 33	40.00	-6. 67	Peak	
3	143. 4900	37. 38	-12. 56	24.82	43.50	-18.68	Peak	
4	457.7700	31. 27	-8. 28	22.99	46.00	-23.01	Peak	
5	517. 9099	35. 54	-8. 13	27.41	46.00	-18. 59	Peak	
6	563. 5000	33. 73	-6. 38	27. 35	46.00	-18.65	Peak	

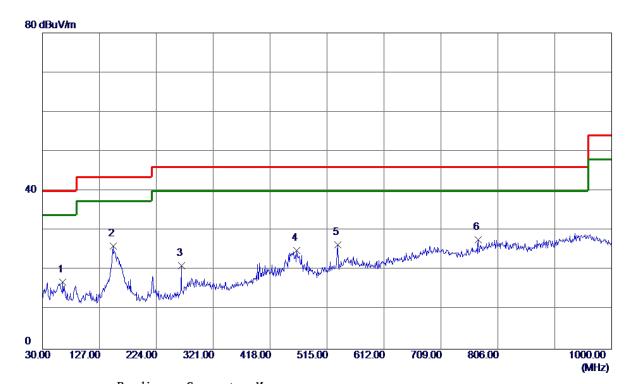
Report No.: BTL-FCCP-1-1812C201

Page 40 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	64.9200	33. 98	-17.03	16. 95	40.00	-23.05	Peak	
2 *	150. 2800	38. 29	-12. 16	26. 13	43.50	-17.37	Peak	
3	266. 6800	34.76	-13. 59	21. 17	46.00	-24.83	Peak	
4	463. 5900	33. 31	-8.41	24.90	46.00	-21. 10	Peak	
5	533. 4300	33. 52	-7. 17	26. 35	46.00	-19.65	Peak	
6	773. 0200	30. 90	-3. 26	27.64	46.00	-18. 36	Peak	

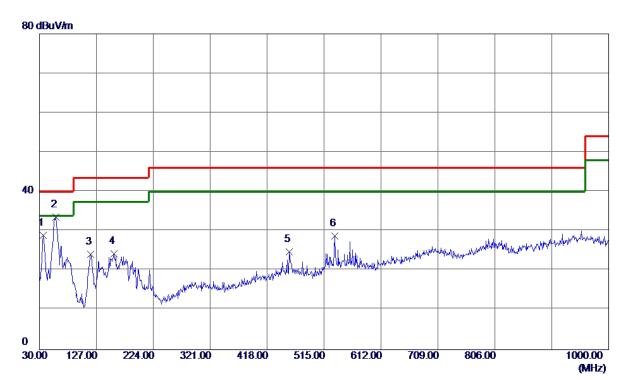
Report No.: BTL-FCCP-1-1812C201

Page 41 of 199 Report Version: R00





Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	36. 7900	44. 20	-15. 24	28. 96	40.00	-11.04	Peak	
2 *	58. 1300	49. 46	-15. 91	33. 55	40.00	-6.45	Peak	
3	117. 3000	39. 90	-15. 75	24. 15	43.50	-19.35	Peak	
4	157.0700	35. 82	-11.55	24. 27	43.50	-19. 23	Peak	
5	455. 8300	33. 10	-8. 24	24.86	46.00	-21.14	Peak	
6	533. 4300	35. 99	-7. 17	28. 82	46.00	-17. 18	Peak	

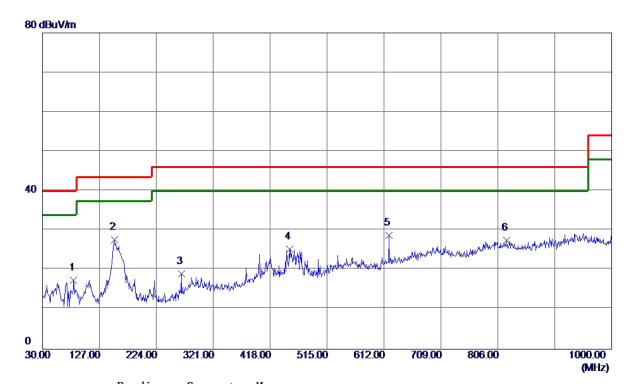
Report No.: BTL-FCCP-1-1812C201

Page 42 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	83. 3500	36. 99	-19. 51	17.48	40.00	-22. 52	Peak	
2 *	153. 1900	39. 55	-11. 90	27.65	43.50	-15.85	Peak	
3	266. 6800	32.61	-13. 59	19.02	46.00	-26.98	Peak	
4	450.9800	33. 47	-8. 13	25. 34	46.00	-20.66	Peak	
5	620.7300	35. 28	-6. 51	28.77	46.00	-17.23	Peak	
6	821. 5200	29. 40	-1. 94	27.46	46.00	-18. 54	Peak	

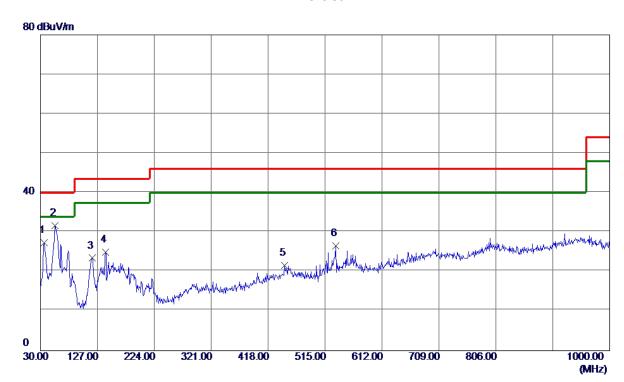
Report No.: BTL-FCCP-1-1812C201

Page 43 of 199 Report Version: R00





Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	36. 7900	42. 56	-15. 24	27. 32	40.00	-12.68	Peak	
2 *	55. 2200	47.10	-15. 47	31.63	40.00	-8. 37	Peak	
3	118. 2700	39. 04	-15.60	23.44	43.50	-20.06	Peak	
4	140. 5800	37.76	-12.73	25.03	43.50	-18.47	Peak	
5	446. 1300	29.79	-8. 26	21. 53	46.00	-24.47	Peak	
6	533. 4300	33. 67	-7. 17	26. 50	46.00	-19.50	Peak	

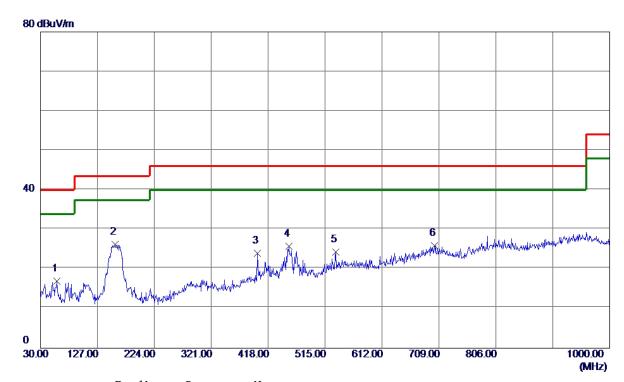
Report No.: BTL-FCCP-1-1812C201

Page 44 of 199 Report Version: R00





Horizontal



Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
58. 1300	32.89	-15. 91	16. 98	40.00	-23.02	Peak	
157.0700	37.75	-11.55	26. 20	43.50	-17. 30	Peak	
399. 5700	34.04	-10. 11	23. 93	46.00	-22.07	Peak	
453.8900	33. 93	-8. 20	25. 73	46.00	-20. 27	Peak	
533. 4300	31.42	-7. 17	24. 25	46.00	-21.75	Peak	
701. 2400	29. 35	-3.44	25. 91	46.00	-20.09	Peak	
	MHz 58. 1300 157. 0700 399. 5700 453. 8900 533. 4300	MHz dBuV/m	MHz dBuV/m dB 58.1300 32.89 -15.91 157.0700 37.75 -11.55 399.5700 34.04 -10.11 453.8900 33.93 -8.20 533.4300 31.42 -7.17	MHz dBuV/m dB dBuV/m 58.1300 32.89 -15.91 16.98 157.0700 37.75 -11.55 26.20 399.5700 34.04 -10.11 23.93 453.8900 33.93 -8.20 25.73 533.4300 31.42 -7.17 24.25	MHz dBuV/m dB dBuV/m dBuV/m 58.1300 32.89 -15.91 16.98 40.00 157.0700 37.75 -11.55 26.20 43.50 399.5700 34.04 -10.11 23.93 46.00 453.8900 33.93 -8.20 25.73 46.00 533.4300 31.42 -7.17 24.25 46.00	MHz dBuV/m dB dBuV/m dBuV/m dB 58.1300 32.89 -15.91 16.98 40.00 -23.02 157.0700 37.75 -11.55 26.20 43.50 -17.30 399.5700 34.04 -10.11 23.93 46.00 -22.07 453.8900 33.93 -8.20 25.73 46.00 -20.27 533.4300 31.42 -7.17 24.25 46.00 -21.75	MHz dBuV/m dB dBuV/m dBuV/m dB Detector 58.1300 32.89 -15.91 16.98 40.00 -23.02 Peak 157.0700 37.75 -11.55 26.20 43.50 -17.30 Peak 399.5700 34.04 -10.11 23.93 46.00 -22.07 Peak 453.8900 33.93 -8.20 25.73 46.00 -20.27 Peak 533.4300 31.42 -7.17 24.25 46.00 -21.75 Peak

Report No.: BTL-FCCP-1-1812C201

Page 45 of 199 Report Version: R00





APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)

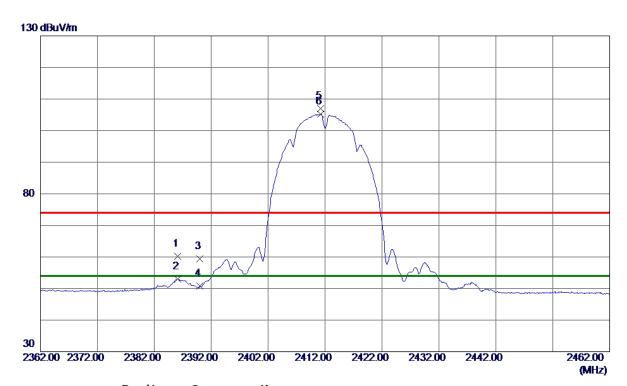
Report No.: BTL-FCCP-1-1812C201

Page 46 of 199 Report Version: R00





Vertical



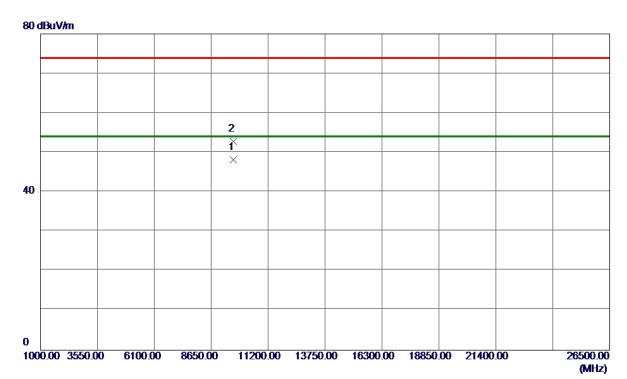
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2386. 1000	41. 16	19. 12	60. 28	74.00	-13.72	Peak	
2	2386. 1000	33. 92	19. 12	53.04	54.00	-0.96	AVG	
3	2390.0000	40. 24	19. 14	59. 38	74.00	-14.62	Peak	
4	2390.0000	31. 59	19. 14	50. 73	54.00	-3. 27	AVG	
5	2411. 2000	87.86	19. 22	107.08	74.00	33. 08	Peak	No Limit
6 *	2411. 2000	86. 03	19. 22	105. 25	54.00	51. 25	AVG	No Limit





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

Vertical

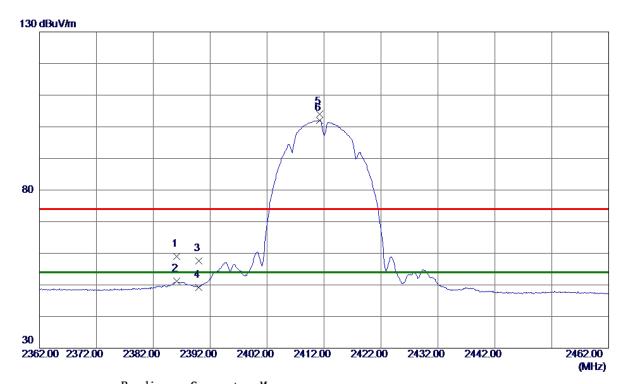


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9648. 0100	34. 14	13. 97	48. 11	54.00	-5. 89	AVG	
2	9648. 0400	38. 90	13. 97	52. 87	74.00	-21. 13	Peak	





Horizontal

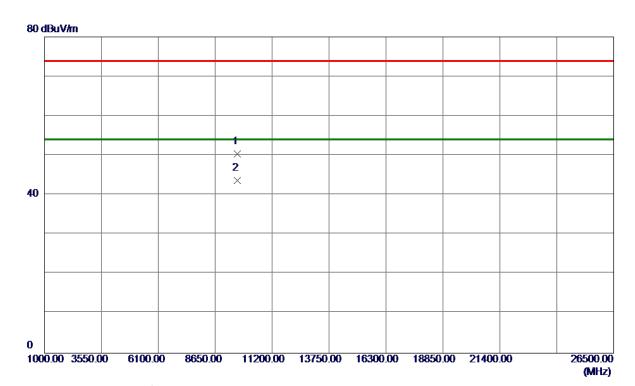


Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
2386. 1000	39. 93	19. 12	59. 05	74.00	-14.95	Peak	
2386. 1000	32. 01	19. 12	51. 13	54.00	-2.87	AVG	
2390.0000	38. 52	19. 14	57.66	74.00	-16. 34	Peak	
2390.0000	30. 15	19. 14	49. 29	54.00	-4.71	AVG	
2411. 2000	84.73	19. 22	103. 95	74.00	29.95	Peak	No Limit
2411. 2000	82. 79	19. 22	102. 01	54.00	48.01	AVG	No Limit
	MHz 2386. 1000 2386. 1000 2390. 0000 2390. 0000 2411. 2000	Freq. Level	MHz dBuV/m dB 2386. 1000 39. 93 19. 12 2386. 1000 32. 01 19. 12 2390. 0000 38. 52 19. 14 2390. 0000 30. 15 19. 14 2411. 2000 84. 73 19. 22	MHz dBuV/m dB dBuV/m 2386.1000 39.93 19.12 59.05 2386.1000 32.01 19.12 51.13 2390.0000 38.52 19.14 57.66 2390.0000 30.15 19.14 49.29 2411.2000 84.73 19.22 103.95	MHz dBuV/m dB dBuV/m dBuV/m 2386.1000 39.93 19.12 59.05 74.00 2386.1000 32.01 19.12 51.13 54.00 2390.0000 38.52 19.14 57.66 74.00 2390.0000 30.15 19.14 49.29 54.00 2411.2000 84.73 19.22 103.95 74.00	MHz dBuV/m dB dBuV/m dBuV/m dB 2386. 1000 39. 93 19. 12 59. 05 74. 00 -14. 95 2386. 1000 32. 01 19. 12 51. 13 54. 00 -2. 87 2390. 0000 38. 52 19. 14 57. 66 74. 00 -16. 34 2390. 0000 30. 15 19. 14 49. 29 54. 00 -4. 71 2411. 2000 84. 73 19. 22 103. 95 74. 00 29. 95	MHz dBuV/m dB dBuV/m dB uV/m dB uV/m </td





Horizontal

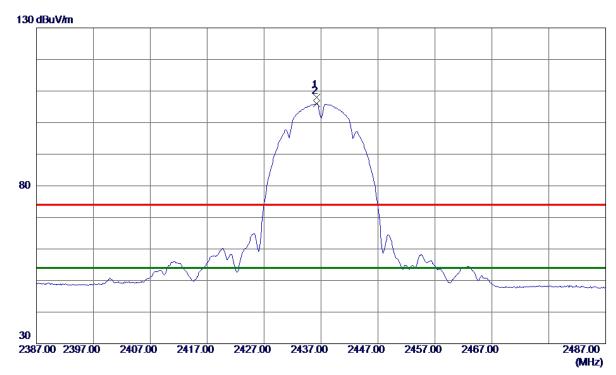


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9647.3700	36. 44	13. 97	50.41	74.00	-23. 59	Peak	
2 *	9648. 0199	29. 66	13. 97	43.63	54.00	-10. 37	AVG	





Vertical

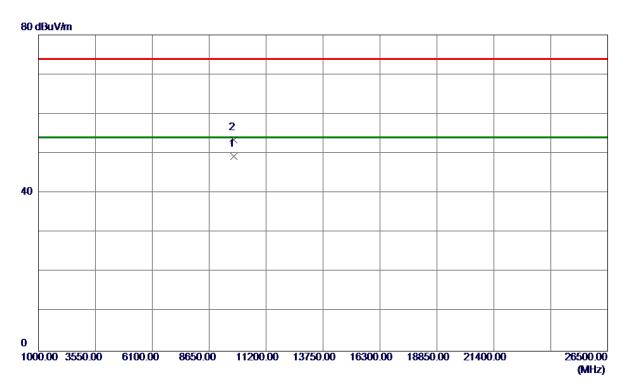


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2436. 2000	88. 66	19. 31	107. 97	74.00	33. 97	Peak	No Limit
2 *	2436. 2000	86.71	19. 31	106. 02	54.00	52. 0 2	AVG	No Limit





Vertical

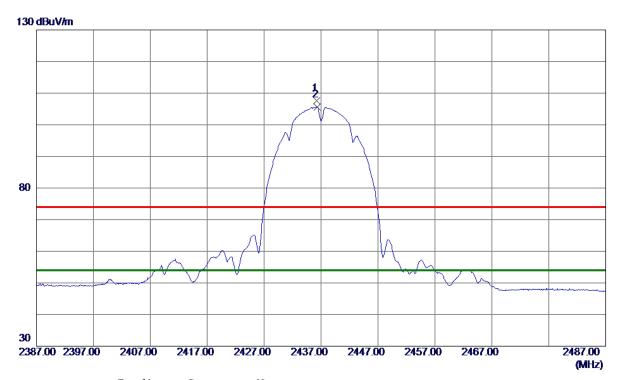


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9748. 0300	35. 17	14.04	49. 21	54.00	-4.79	AVG	
2	9748, 0500	39. 45	14. 04	53, 49	74. 00	-20, 51	Peak	





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2436. 2000	88. 32	19. 31	107.63	74.00	33.63	Peak	No Limit
2 *	2436. 3000	86. 37	19. 31	105. 68	54.00	51.68	AVG	No Limit

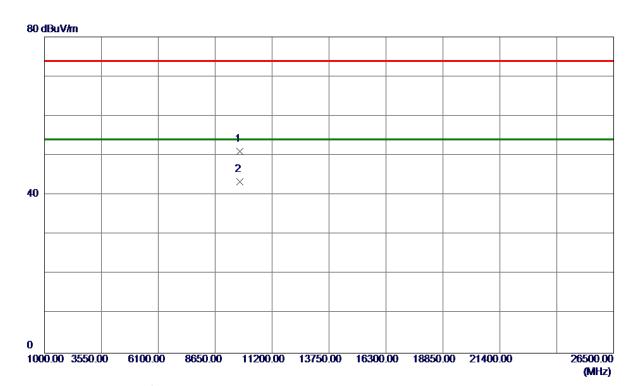
Report No.: BTL-FCCP-1-1812C201

Page 53 of 199 Report Version: R00





Horizontal

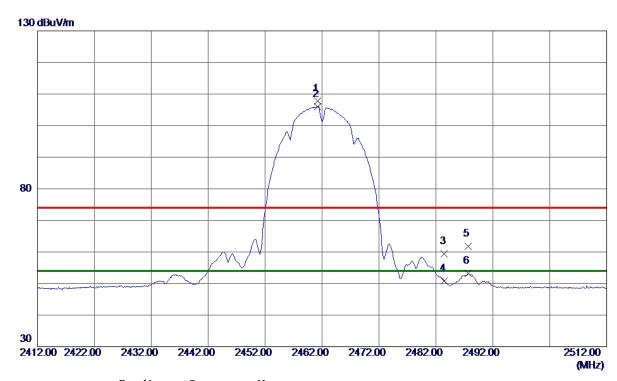


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747.8099	37.00	14.04	51.04	74.00	-22.96	Peak	
2 *	9748. 1000	29. 33	14.04	43. 37	54.00	-10.63	AVG	





Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2461. 2000	88. 45	19. 40	107.85	74.00	33.85	Peak	No Limit
2 *	2461. 2000	86. 66	19. 40	106.06	54.00	52.06	AVG	No Limit
3	2483. 5000	39. 95	19. 48	59. 43	74.00	-14.57	Peak	
4	2483. 5000	31. 35	19. 48	50.83	54.00	-3. 17	AVG	
5	2487.7000	42. 21	19. 50	61.71	74.00	-12. 29	Peak	
6	2487.7000	33. 63	19. 50	53. 13	54.00	-0.87	AVG	

Report No.: BTL-FCCP-1-1812C201

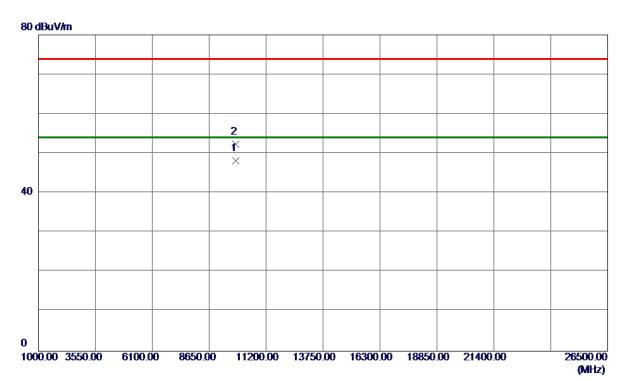
Page 55 of 199 Report Version: R00





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

Vertical

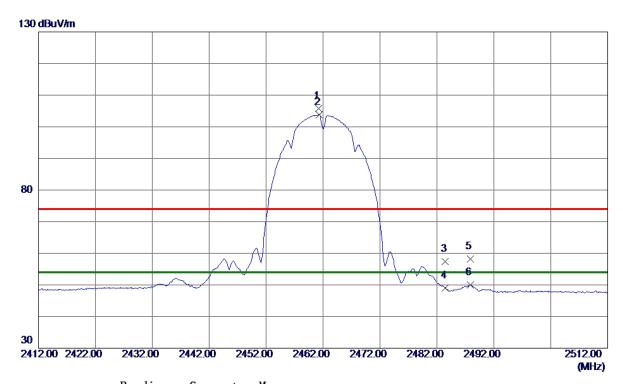


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9848. 0100	33. 98	14. 11	48.09	54.00	-5. 91	AVG	
2	9848, 0300	38, 17	14. 11	52, 28	74.00	-21, 72	Peak	





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2461. 2000	86. 45	19. 40	105.85	74.00	31.85	Peak	No Limit
2 *	2461. 3000	84. 48	19. 40	103.88	54.00	49.88	AVG	No Limit
3	2483. 5000	37. 92	19. 48	57.40	74.00	-16. 60	Peak	
4	2483. 5000	29.60	19. 48	49.08	54.00	-4.92	AVG	
5	2487.9000	38. 65	19. 50	58. 15	74.00	-15.85	Peak	
6	2487.9000	30. 42	19. 50	49. 92	54.00	-4.0 8	AVG	

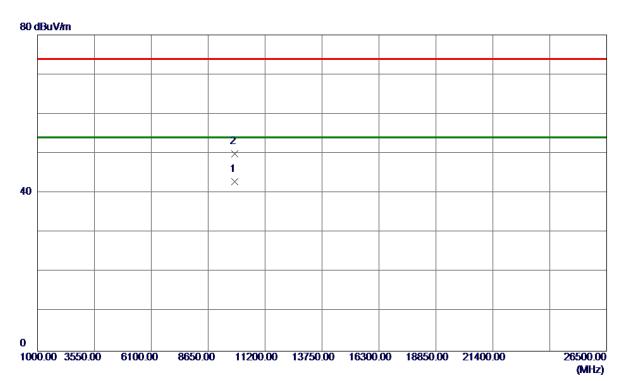
Report No.: BTL-FCCP-1-1812C201

Page 57 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9848. 0900	28.74	14. 11	42.85	54.00	-11. 15	AVG	
2	9848, 1100	35, 88	14. 11	49. 99	74.00	-24. 01	Peak	

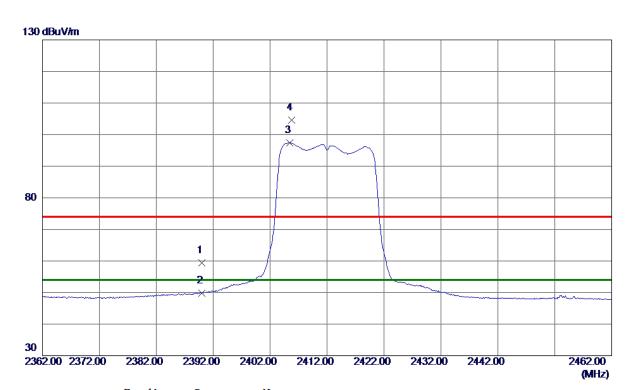
Report No.: BTL-FCCP-1-1812C201

Page 58 of 199 Report Version: R00





Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	40. 35	19. 14	59. 49	74.00	-14.51	Peak	
2	2390.0000	30.74	19. 14	49.88	54.00	-4.12	AVG	
3 *	2405. 4000	78. 23	19. 19	97.42	54.00	43.42	AVG	No Limit
4	2405.8000	85. 45	19. 20	104.65	74.00	30.65	Peak	No Limit

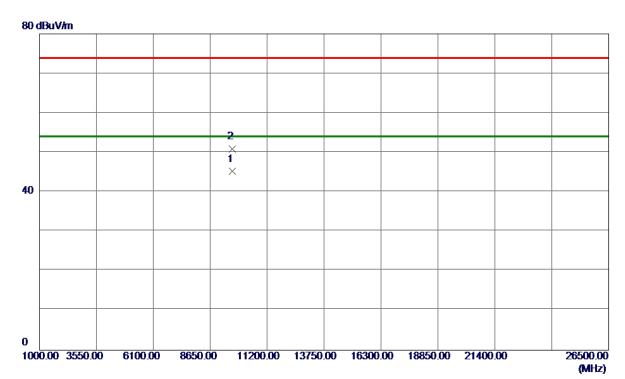
Report No.: BTL-FCCP-1-1812C201

Page 59 of 199 Report Version: R00





Vertical

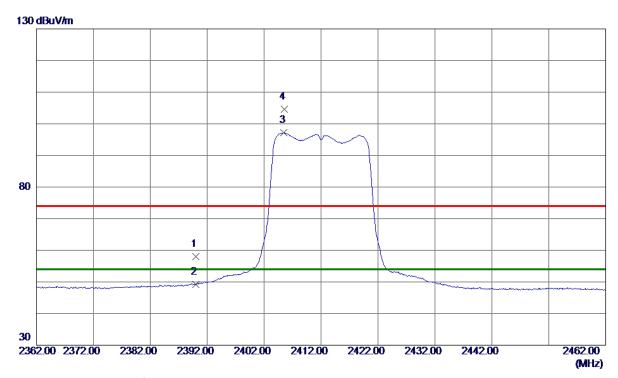


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9647. 9900	31. 23	13. 97	45. 20	54.00	-8.80	AVG	
2	9648, 0400	36, 92	13. 97	50.89	74.00	-23. 11	Peak	





Horizontal

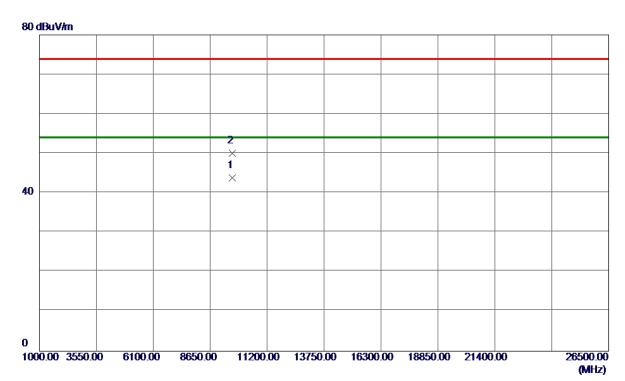


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	38. 95	19. 14	58. 09	74.00	-15.91	Peak	
2	2390.0000	30. 12	19. 14	49. 26	54.00	-4.74	AVG	
3 *	2405. 5000	77. 92	19. 19	97.11	54.00	43. 11	AVG	No Limit
4	2405.6000	85. 35	19. 19	104.54	74.00	30. 54	Peak	No Limit





Horizontal

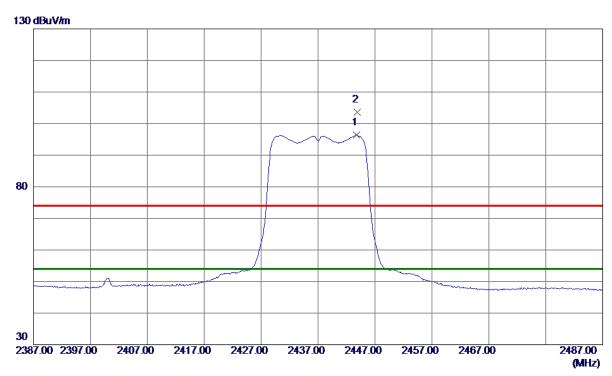


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9648. 0400	29.85	13. 97	43.82	54.00	-10. 18	AVG	
2	9648, 2100	36. 09	13. 97	50.06	74.00	-23.94	Peak	





Vertical

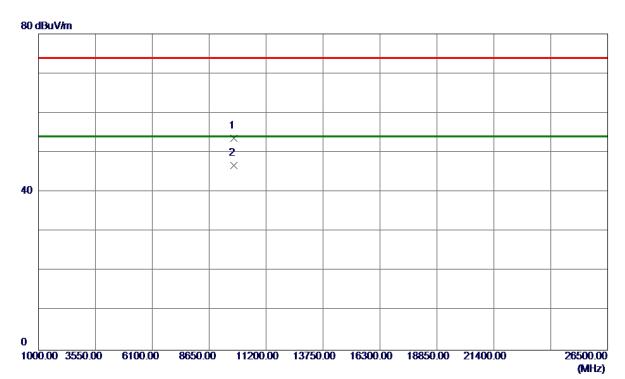


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2443.8000	77.00	19. 34	96. 34	54.00	42.34	AVG	No Limit
2	2443. 9000	84. 24	19. 34	103. 58	74.00	29. 58	Peak	No Limit





Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747. 8900	39. 50	14.04	53. 54	74.00	-20.46	Peak	
2 *	9748. 0400	32.71	14. 04	46. 75	54.00	-7. 25	AVG	

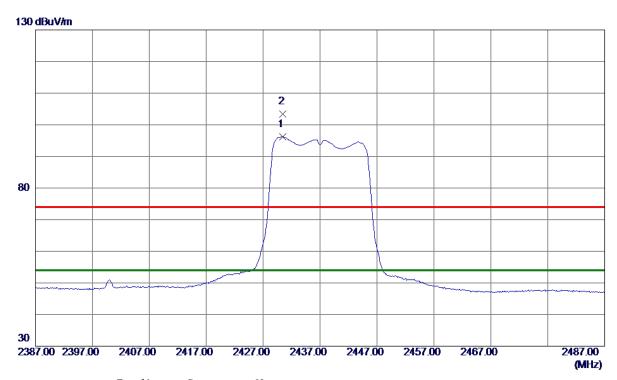
Report No.: BTL-FCCP-1-1812C201

Page 64 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2430. 4000	76. 91	19. 29	96. 20	54.00	42. 20	AVG	No Limit
2	2430. 5000	84. 15	19. 29	103.44	74.00	29.44	Peak	No Limit

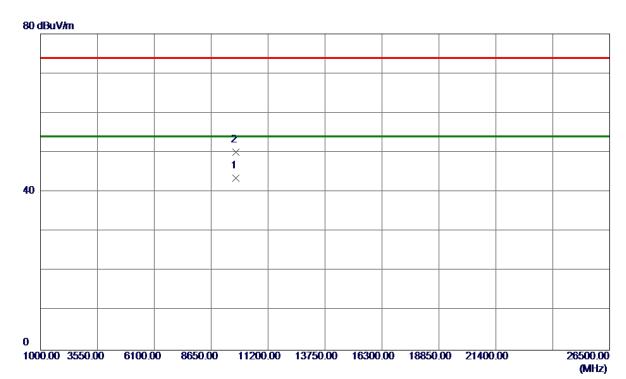
Report No.: BTL-FCCP-1-1812C201

Page 65 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	${ t Measure} \ { t ment}$	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9748. 0800	29.41	14.04	43. 45	54.00	-10. 55	AVG	
2	9748. 2300	36. 02	14. 04	50.06	74.00	-23. 94	Peak	

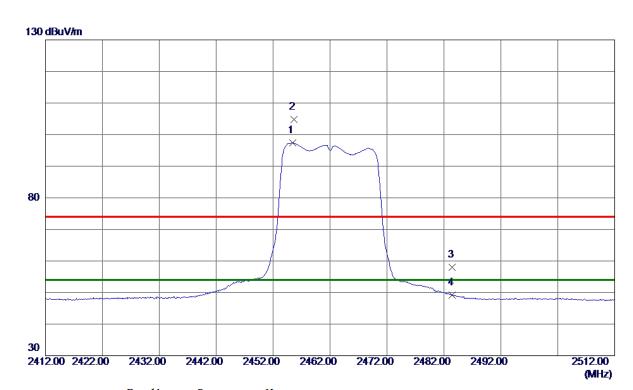
Report No.: BTL-FCCP-1-1812C201

Page 66 of 199 Report Version: R00





Vertical

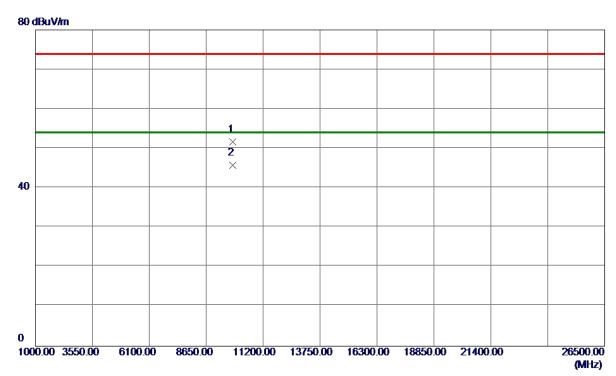


No. Freq. Reading Correct Measure Limit Margin	
MHz dBuV/m dB dBuV/m dBuV/m dB Detector	Comment
1 * 2455. 4000 78. 00 19. 38 97. 38 54. 00 43. 38 AVG	No Limit
2 2455.7000 85.35 19.38 104.73 74.00 30.73 Peak	No Limit
3 2483.5000 38.44 19.48 57.92 74.00 -16.08 Peak	
4 2483. 5000 29. 66 19. 48 49. 14 54. 00 -4. 86 AVG	





Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9847. 9600	37. 59	14. 11	51.70	74.00	-22. 30	Peak	
2 *	9848, 0300	31.71	14. 11	45, 82	54. 00	-8. 18	AVG	

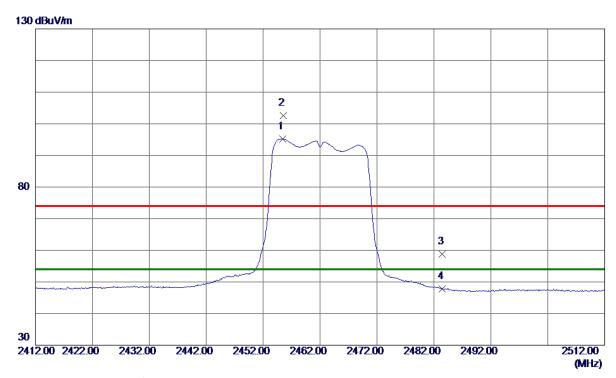
Report No.: BTL-FCCP-1-1812C201

Page 68 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2455. 4000	75. 82	19. 38	95. 20	54.00	41.20	AVG	No Limit
2	2455.6000	83. 22	19. 38	102.60	74.00	28. 60	Peak	No Limit
3	2483. 5000	39. 30	19. 48	58. 78	74.00	-15. 22	Peak	
4	2483. 5000	28. 39	19. 48	47.87	54.00	-6. 13	AVG	

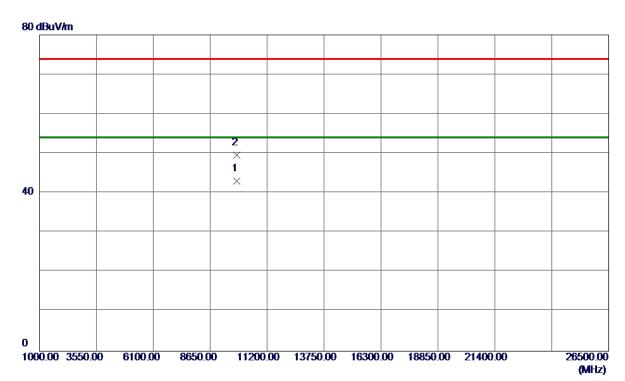
Report No.: BTL-FCCP-1-1812C201

Page 69 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9848. 0500	28. 94	14. 11	43.05	54.00	-10.95	AVG	
2	9848, 0800	35. 55	14. 11	49. 66	74.00	-24. 34	Peak	

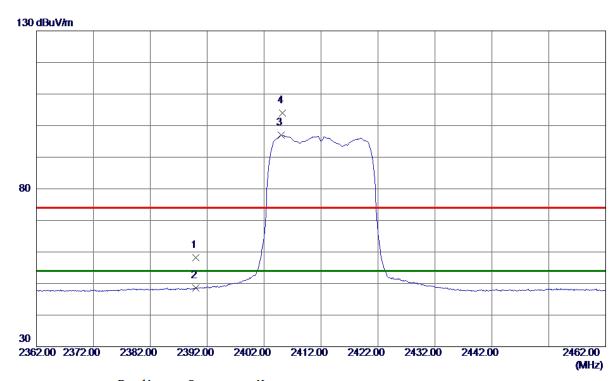
Report No.: BTL-FCCP-1-1812C201

Page 70 of 199 Report Version: R00





Vertical

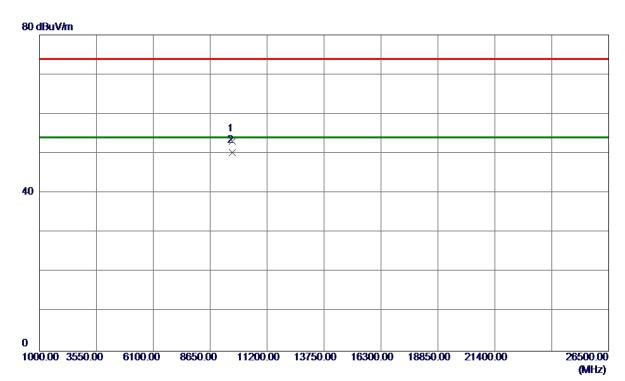


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	39. 10	19. 14	58. 24	74.00	-15. 76	Peak	
2	2390.0000	29.44	19. 14	48. 58	54.00	-5.42	AVG	
3 *	2405.0000	77.71	19. 19	96. 90	54.00	42.90	AVG	No Limit
4	2405. 2000	84. 74	19. 19	103. 93	74.00	29. 93	Peak	No Limit





Vertical

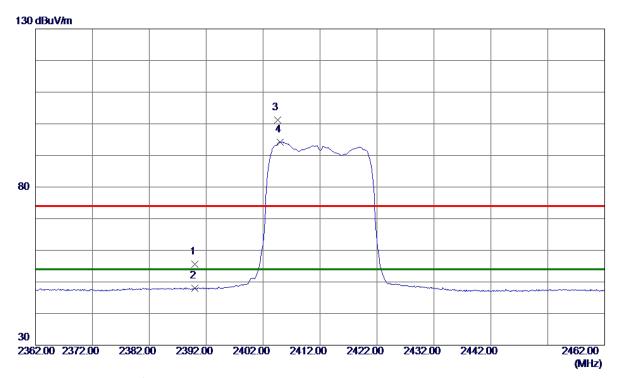


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9647. 9900	39. 11	13. 97	53. 0 8	74.00	-20. 92	Peak	
2 *	9648, 0199	36, 20	13. 97	50. 17	54.00	-3, 83	AVG	





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	36. 44	19. 14	55. 58	74.00	-18.42	Peak	
2	2390.0000	28. 86	19. 14	48.00	54.00	-6.00	AVG	
3	2404. 5000	82. 09	19. 19	101. 28	74.00	27. 28	Peak	No Limit
4 *	2405.0000	75. 10	19. 19	94. 29	54.00	40. 29	AVG	No Limit

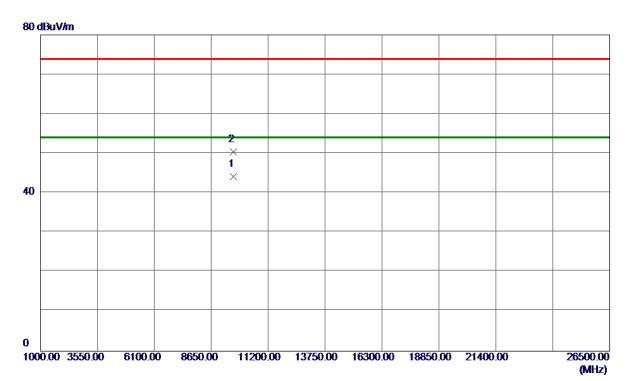
Report No.: BTL-FCCP-1-1812C201

Page 73 of 199 Report Version: R00





Horizontal

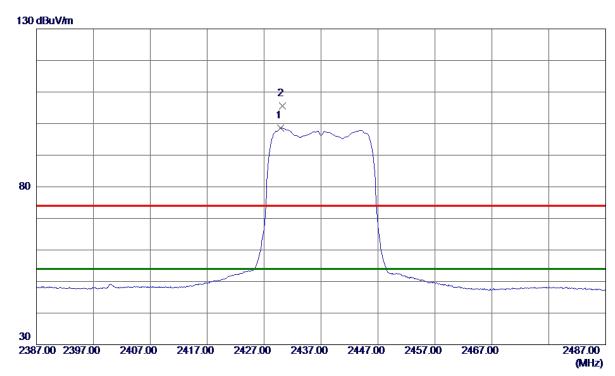


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9648. 0100	30. 18	13. 97	44. 15	54.00	-9.85	AVG	
2	9648, 1700	36, 49	13. 97	50. 46	74.00	-23, 54	Peak	





Vertical



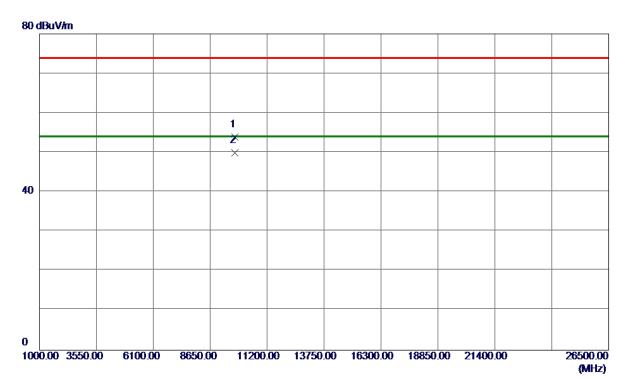
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2429.9000	79. 34	19. 28	98. 62	54.00	44.62	AVG	No Limit
2	2430. 2000	86. 31	19. 29	105. 60	74.00	31.60	Peak	No Limit





Orthogonal Axis:	X
Test Mode :	TX N-20M MODE 2437MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9748. 0100	39. 91	14.04	53. 95	74.00	-20.05	Peak	
2 *	9748, 0500	35. 87	14. 04	49. 91	54.00	-4. 09	AVG	

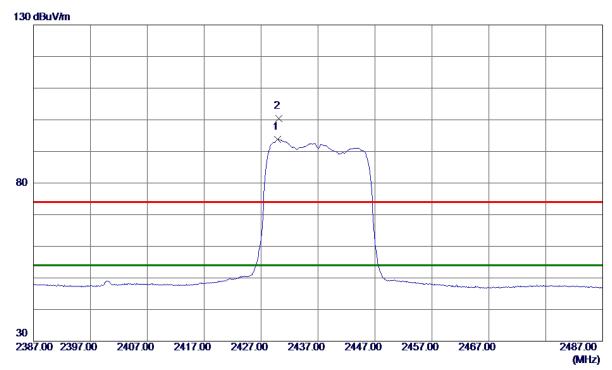
Report No.: BTL-FCCP-1-1812C201

Page 76 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	${ t Measure} \ { t ment}$	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2429. 9000	74.45	19. 28	93. 73	54.00	39.73	AVG	No Limit
2	2430, 1000	81. 19	19. 29	100.48	74.00	26. 48	Peak	No Limit

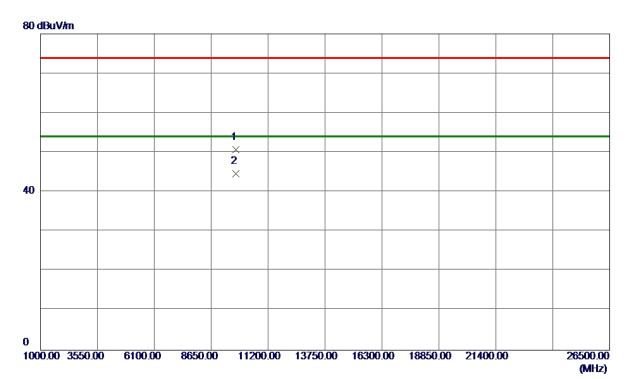
Report No.: BTL-FCCP-1-1812C201

Page 77 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747. 9000	36. 62	14.04	50. 66	74.00	-23. 34	Peak	
2 *	9748. 0400	30. 53	14. 04	44. 57	54. 00	-9. 43	AVG	

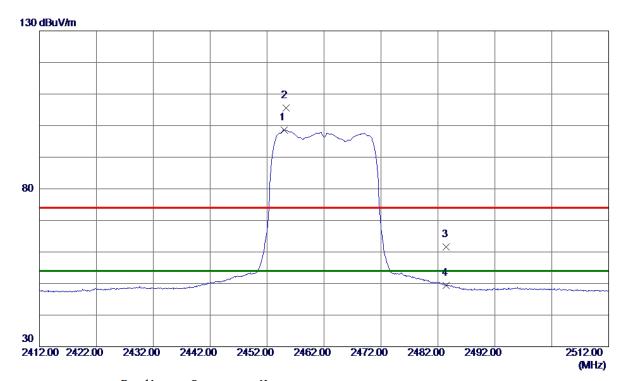
Report No.: BTL-FCCP-1-1812C201

Page 78 of 199 Report Version: R00





Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2455.0000	79. 23	19. 38	98. 61	54.00	44.61	AVG	No Limit
2	2455. 3000	86. 18	19. 38	105. 56	74.00	31. 56	Peak	No Limit
3	2483. 5000	42.09	19. 48	61. 57	74.00	-12.43	Peak	
4	2483. 5000	29. 93	19. 48	49.41	54.00	-4. 59	AVG	

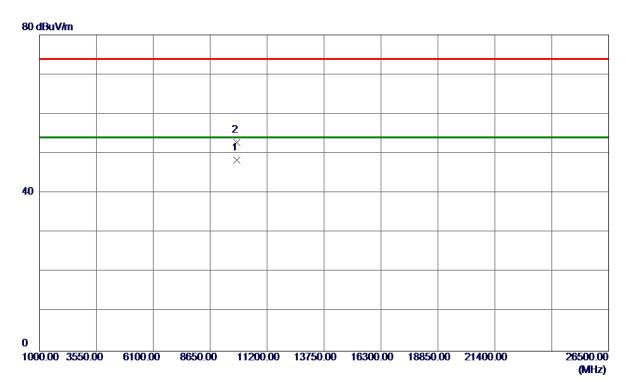
Report No.: BTL-FCCP-1-1812C201

Page 79 of 199 Report Version: R00





Vertical

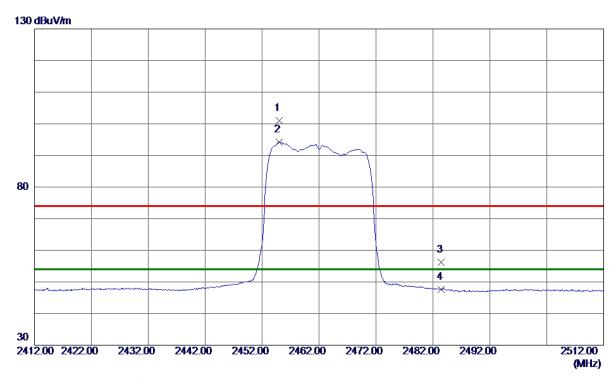


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9848. 0500	34. 25	14. 11	48. 36	54.00	-5. 64	AVG	
2	9848, 1500	38. 65	14. 11	52. 76	74.00	-21, 24	Peak	





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2455.0000	81. 61	19. 38	100. 99	74.00	26. 99	Peak	No Limit
2 *	2455.0000	74.80	19. 38	94. 18	54.00	40. 18	AVG	No Limit
3	2483. 5000	36. 80	19. 48	56. 28	74.00	-17.72	Peak	
4	2483. 5000	28. 07	19. 48	47.55	54.00	-6. 45	AVG	

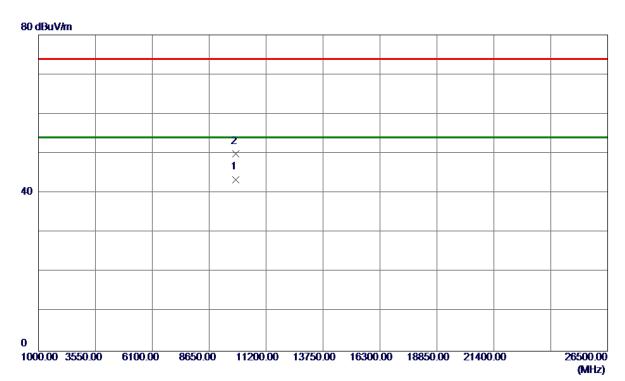
Report No.: BTL-FCCP-1-1812C201

Page 81 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9848. 0400	29. 33	14. 11	43. 44	54.00	-10. 56	AVG	
2	9848, 0599	35, 88	14. 11	49. 99	74.00	-24.01	Peak	

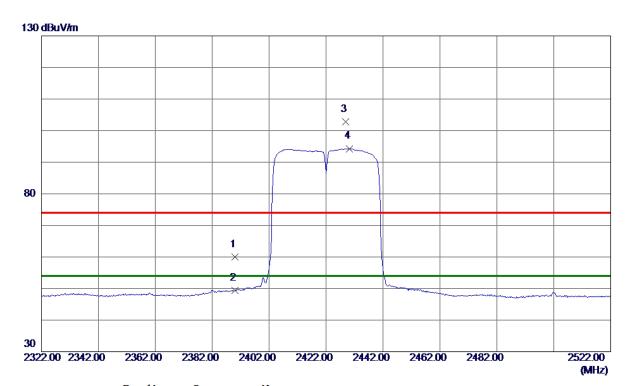
Report No.: BTL-FCCP-1-1812C201

Page 82 of 199 Report Version: R00





Vertical

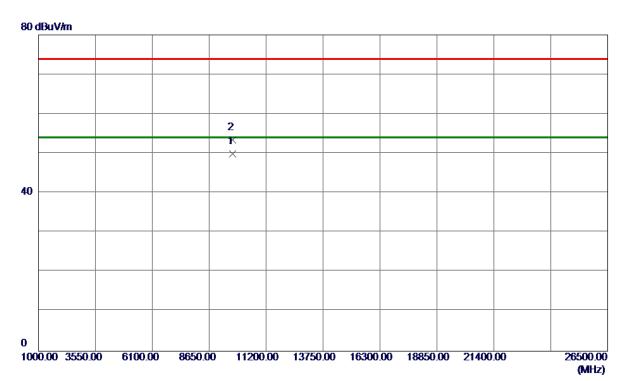


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	40.79	19. 14	59. 93	74.00	-14.07	Peak	
2	2390.0000	30. 25	19. 14	49. 39	54.00	-4.61	AVG	
3	2428.8000	83. 55	19. 28	102.83	74.00	28.83	Peak	No Limit
4 *	2430. 2000	75. 01	19. 29	94. 30	54.00	40.30	AVG	No Limit





Vertical

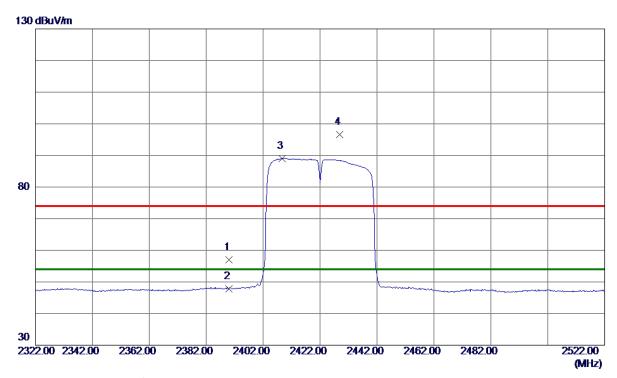


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9688. 0300	35. 86	14.00	49.86	54.00	-4. 14	AVG	
2	9688, 1100	39, 45	14.00	53, 45	74. 00	-20, 55	Peak	





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	37.81	19. 14	56. 95	74.00	-17.05	Peak	
2	2390.0000	28.70	19. 14	47.84	54.00	-6. 16	AVG	
3 *	2408.6000	69.83	19. 21	89. 04	54.00	35. 04	AVG	No Limit
4	2428.8000	77. 39	19. 28	96. 67	74.00	22.67	Peak	No Limit

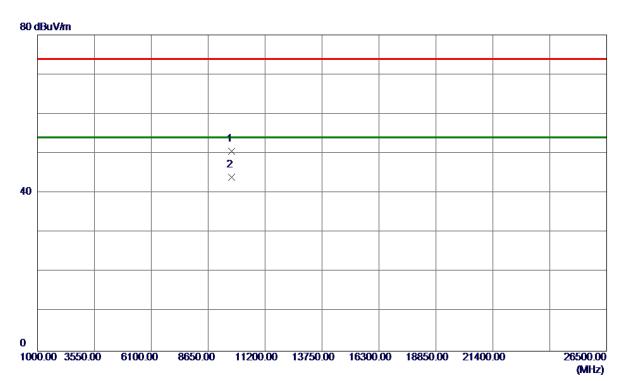
Report No.: BTL-FCCP-1-1812C201

Page 85 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9687.8700	36. 52	14.00	50 . 52	74.00	-23.48	Peak	
2 *	9688, 0199	30. 05	14.00	44. 05	54.00	-9. 95	AVG	

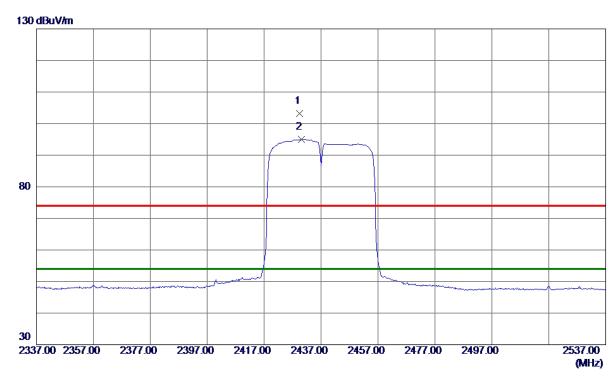
Report No.: BTL-FCCP-1-1812C201

Page 86 of 199 Report Version: R00





Vertical

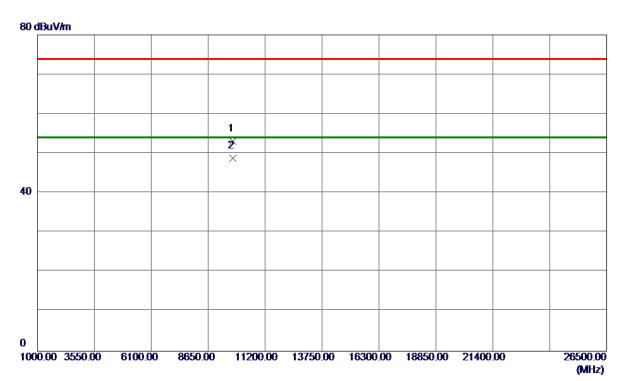


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2429. 4000	83.83	19. 28	103. 11	74.00	29. 11	Peak	No Limit
2 *	2430.0000	75. 70	19. 29	94.99	54.00	40.99	AVG	No Limit





Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9748. 0199	39. 05	14.04	53. 09	74.00	-20. 91	Peak	
2 *	9748, 0800	34, 82	14. 04	48. 86	54. 00	-5. 14	AVG	

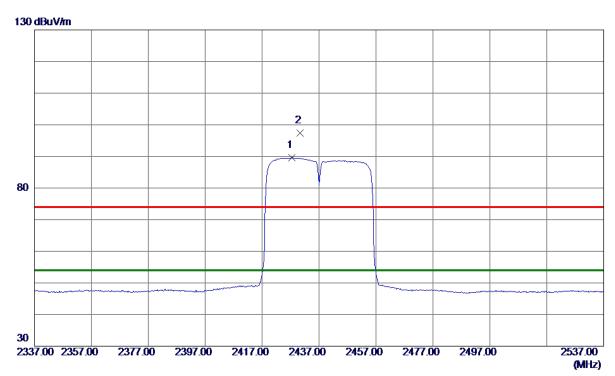
Report No.: BTL-FCCP-1-1812C201

Page 88 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2427. 4000	70. 26	19. 28	89. 54	54.00	35. 54	AVG	No Limit
2	2430, 4000	78. 08	19, 29	97. 37	74.00	23, 37	Peak	No Limit

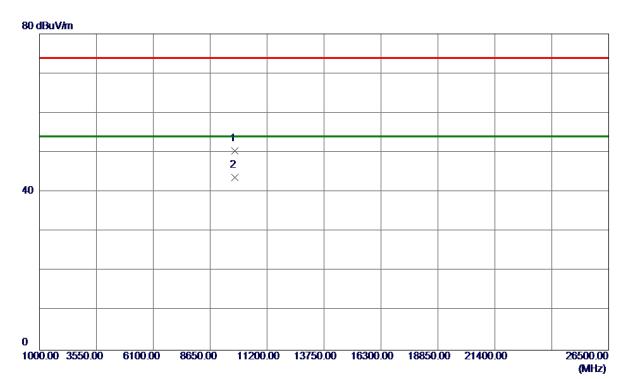
Report No.: BTL-FCCP-1-1812C201

Page 89 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747. 9700	36. 39	14.04	50.43	74.00	-23. 57	Peak	
2 *	9748, 0599	29.71	14. 04	43.75	54.00	-10. 25	AVG	

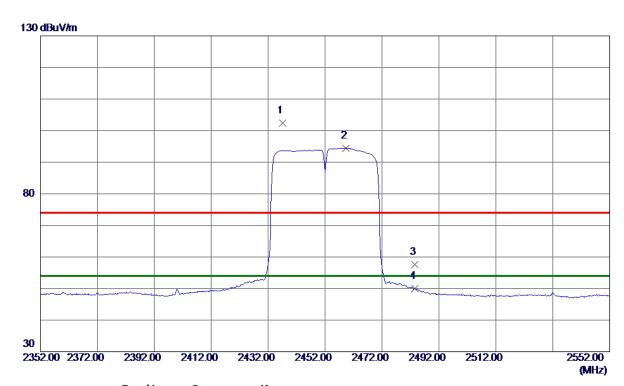
Report No.: BTL-FCCP-1-1812C201

Page 90 of 199 Report Version: R00





Vertical

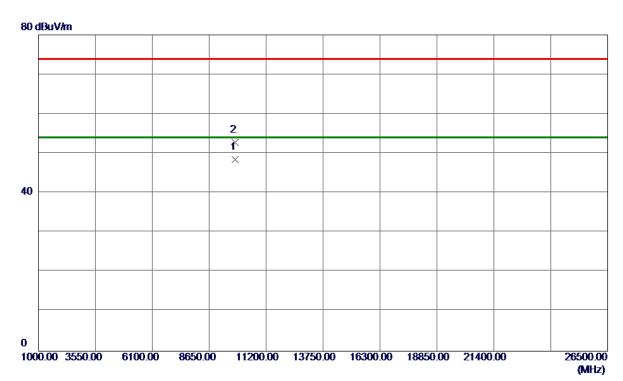


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2437.0000	83.00	19. 31	102. 31	74.00	28. 31	Peak	No Limit
2 *	2459. 4000	75. 07	19. 39	94.46	54.00	40.46	AVG	No Limit
3	2483. 5000	38. 15	19.48	57.63	74.00	-16. 37	Peak	
4	2483. 5000	30. 53	19. 48	50. 01	54.00	-3.99	AVG	





Vertical

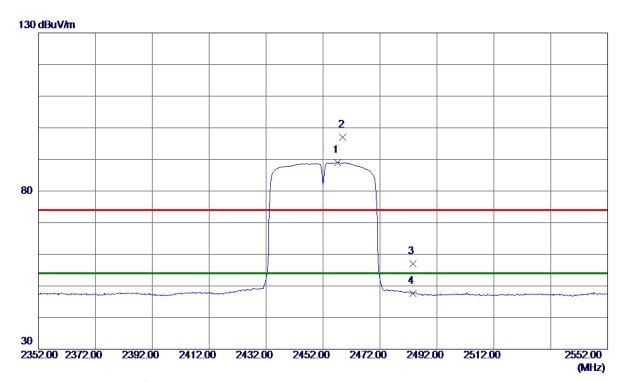


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9808. 0400	34.41	14.08	48. 49	54.00	-5. 51	AVG	
2	9808, 2699	38, 74	14. 08	52, 82	74.00	-21, 18	Peak	





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2457. 2000	69. 58	19. 39	88. 97	54.00	34.97	AVG	No Limit
2	2459.0000	77.65	19. 39	97.04	74.00	23. 04	Peak	No Limit
3	2483. 5000	37.47	19. 48	56. 95	74.00	-17.05	Peak	
4	2483. 5000	28. 18	19. 48	47.66	54.00	-6. 34	AVG	

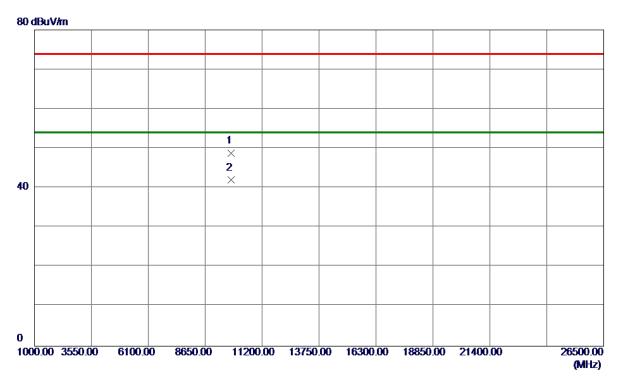
Report No.: BTL-FCCP-1-1812C201

Page 93 of 199 Report Version: R00





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9807. 9800	34.73	14.08	48.81	74.00	-25. 19	Peak	
2 *	9808, 0400	27. 92	14. 08	42.00	54.00	-12.00	AVG	

Report No.: BTL-FCCP-1-1812C201

Page 94 of 199 Report Version: R00





APPENDIX E - BANDWIDTH

Report No.: BTL-FCCP-1-1812C201

Page 95 of 199 Report Version: R00



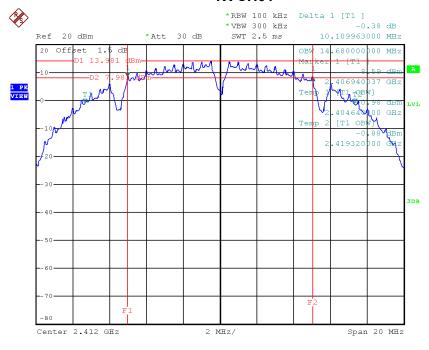


Non-Beamforming

Test Mode: TX B Mode_CH01/06/11

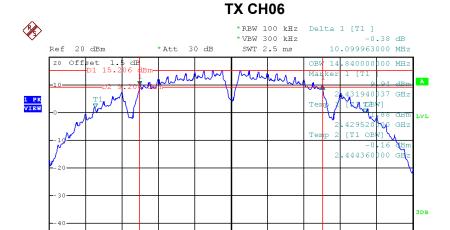
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	10.11	14.68	500	Complies
2437	10.10	14.84	500	Complies
2462	10.10	14.64	500	Complies









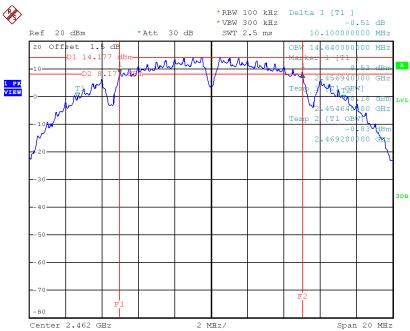




2 MHz/

Span 20 MHz

Center 2.437 GHz



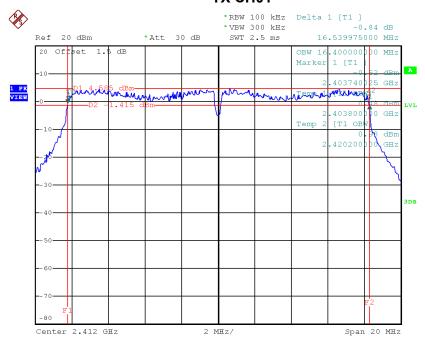




Test Mode: TX G Mode_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.54	16.4	500	Complies
2437	16.58	16.4	500	Complies
2462	16.58	16.44	500	Complies

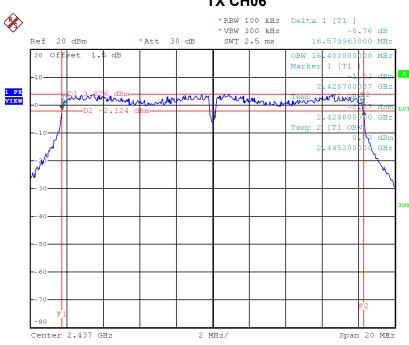
TX CH01



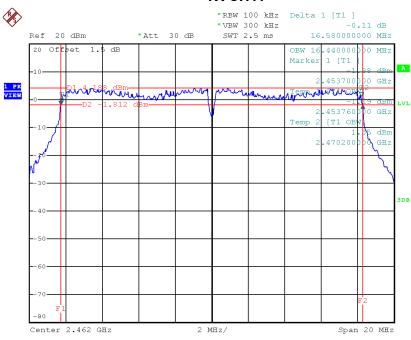








TX CH11



Report No.: BTL-FCCP-1-1812C201 Page 99

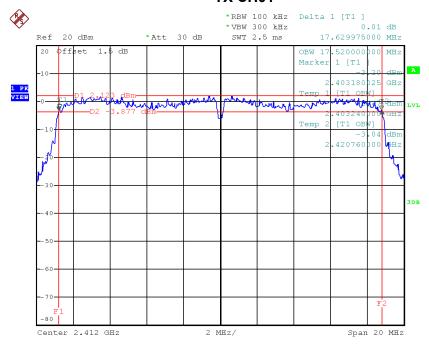




Test Mode: TX N-20MHz Mode_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.63	17.52	500	Complies
2437	17.62	17.52	500	Complies
2462	17.63	17.52	500	Complies

TX CH01

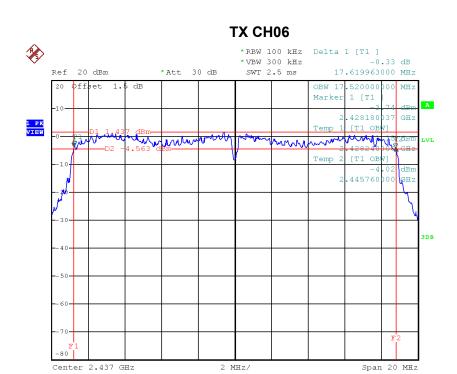


Report No.: BTL-FCCP-1-1812C201

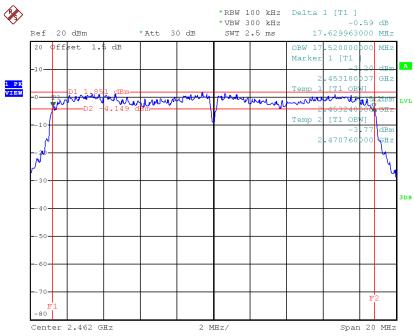
Page 100 of 199 Report Version: R00











Report No.: BTL-FCCP-1-1812C201

Page 101 of 199 Report Version: R00

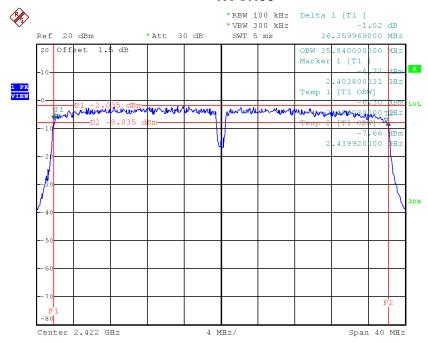




Test Mode: TX N-40MHz Mode_CH03/06/09

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	36.36	35.84	500	Complies
2437	36.41	35.92	500	Complies
2452	36.49	35.92	500	Complies

TX CH03

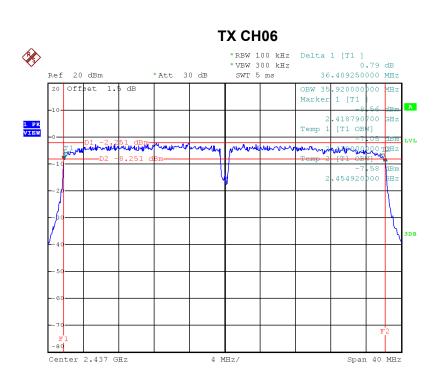


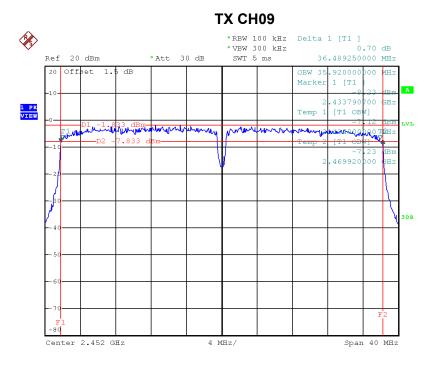
Report No.: BTL-FCCP-1-1812C201

Page 102 of 199 Report Version: R00









Report No.: BTL-FCCP-1-1812C201

Page 103 of 199 Report Version: R00



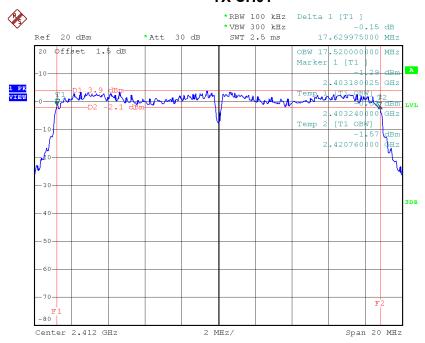


With Beamforming

Test Mode: TX N-20MHz Mode_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.63	17.52	500	Complies
2437	17.63	17.52	500	Complies
2462	17.62	17.52	500	Complies

TX CH01

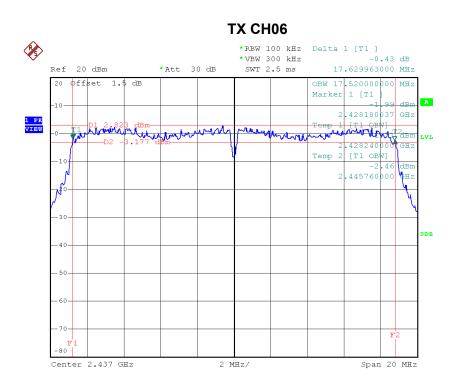


Report No.: BTL-FCCP-1-1812C201

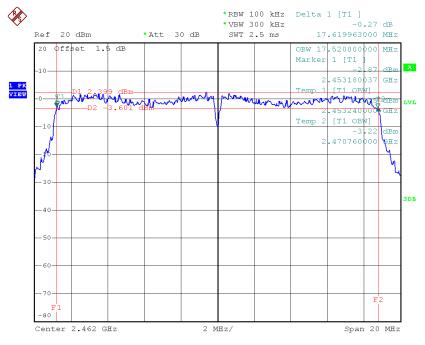
Page 104 of 199 Report Version: R00











Report No.: BTL-FCCP-1-1812C201

Page 105 of 199 Report Version: R00

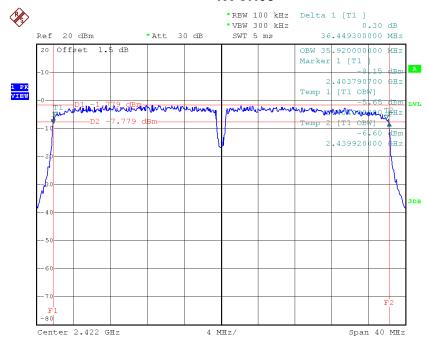




Test Mode: TX N-40MHz Mode_CH03/06/09

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	36.45	35.92	500	Complies
2437	36.52	35.92	500	Complies
2452	36.56	35.92	500	Complies

TX CH03

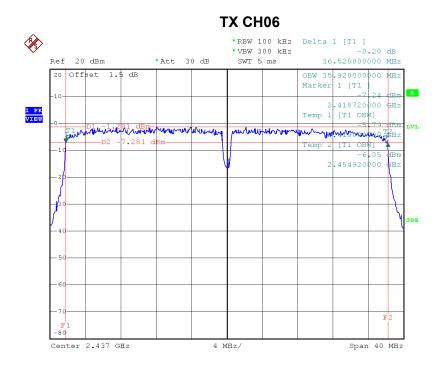


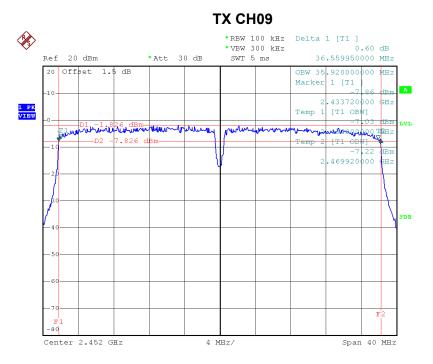
Report No.: BTL-FCCP-1-1812C201

Page 106 of 199 Report Version: R00









Report No.: BTL-FCCP-1-1812C201

Page 107 of 199 Report Version: R00





 APPENDIX F - MAXIMUM OUTPUT POWER

Report No.: BTL-FCCP-1-1812C201

Page 108 of 199 Report Version: R00





Non-Beamforming

Test Mode :TX B Mode_CH01/06/11							
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result		
(MHz)	(dBm)	(W)	(dBm)	(W)	Resuit		
2412	27.46	0.56	30.00	1.00	Complies		
2437	27.64	0.58	30.00	1.00	Complies		
2462	27.39	0.55	30.00	1.00	Complies		

Test Mode :TX G Mode_CH01/06/11							
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result		
(MHz)	(dBm)	(W)	(dBm)	(W)	Result		
2412	27.44	0.55	30.00	1.00	Complies		
2437	27.76	0.60	30.00	1.00	Complies		
2462	27.58	0.57	30.00	1.00	Complies		

Report No.: BTL-FCCP-1-1812C201

Page 109 of 199 Report Version: R00





Test Mode :TX N20 Mode_CH01/06/11_ANT 1							
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result		
(MHz)	(dBm)	(W)	(dBm)	(W)	Result		
2412	24.47	0.28	30.00	1.00	Complies		
2437	24.92	0.31	30.00	1.00	Complies		
2462	24.26	0.27	30.00	1.00	Complies		

Test Mode :TX N20 Mode_CH01/06/11_ANT 2							
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result		
(MHz)	(dBm)	(W)	(dBm)	(W)	Result		
2412	24.56	0.29	30.00	1.00	Complies		
2437	24.48	0.28	30.00	1.00	Complies		
2462	24.35	0.27	30.00	1.00	Complies		

Test Mode :TX N20 Mode_CH01/06/11_Total							
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result		
(MHz)	(dBm)	(W)	(dBm)	(W)	Resuit		
2412	27.53	0.57	30.00	1.00	Complies		
2437	27.72	0.59	30.00	1.00	Complies		
2462	27.32	0.54	30.00	1.00	Complies		

Page 110 of 199 Report Version: R00





Test Mode :TX N40 Mode_CH03/06/09_ANT 1							
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result		
(MHz)	(dBm)	(W)	(dBm)	(W)	Result		
2422	24.57	0.29	30.00	1.00	Complies		
2437	24.41	0.28	30.00	1.00	Complies		
2452	24.63	0.29	30.00	1.00	Complies		

Test Mode :TX N40 Mode_CH03/06/09_ANT 2							
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result		
(MHz)	(dBm)	(W)	(dBm)	(W)	Result		
2422	24.23	0.26	30.00	1.00	Complies		
2437	24.42	0.28	30.00	1.00	Complies		
2452	24.85	0.31	30.00	1.00	Complies		

Test Mode :TX N40 Mode_CH03/06/09_Total							
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result		
(MHz)	(dBm)	(W)	(dBm)	(W)	Resuit		
2422	27.41	0.55	30.00	1.00	Complies		
2437	27.43	0.55	30.00	1.00	Complies		
2452	27.75	0.60	30.00	1.00	Complies		

Page 111 of 199 Report Version: R00





With Beamforming

Test Mode :TX N20 Mode_CH01/06/11_ANT 1							
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result		
(MHz)	(dBm)	(W)	(dBm)	(W)	Resuit		
2412	24.41	0.28	30.00	1.00	Complies		
2437	24.76	0.30	30.00	1.00	Complies		
2462	24.18	0.26	30.00	1.00	Complies		

Test Mode :TX N20 Mode_CH01/06/11_ANT 2							
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result		
(MHz)	(dBm)	(W)	(dBm)	(W)	Result		
2412	24.43	0.28	30.00	1.00	Complies		
2437	24.37	0.27	30.00	1.00	Complies		
2462	24.54	0.28	30.00	1.00	Complies		

Test Mode :TX N20 Mode_CH01/06/11_Total							
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result		
(MHz)	(dBm)	(W)	(dBm)	(W)	Resuit		
2412	27.43	0.55	30.00	1.00	Complies		
2437	27.58	0.57	30.00	1.00	Complies		
2462	27.37	0.55	30.00	1.00	Complies		

Report No.: BTL-FCCP-1-1812C201

Page 112 of 199 Report Version: R00





Test Mode :TX N40 Mode_CH03/06/09_ANT 1							
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result		
(MHz)	(dBm)	(W)	(dBm)	(W)	Result		
2422	24.41	0.28	30.00	1.00	Complies		
2437	24.36	0.27	30.00	1.00	Complies		
2452	24.32	0.27	30.00	1.00	Complies		

Test Mode :TX N40 Mode_CH03/06/09_ANT 2						
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result	
(MHz)	(dBm)	(W)	(dBm)	(W)	Result	
2422	24.18	0.26	30.00	1.00	Complies	
2437	24.38	0.27	30.00	1.00	Complies	
2452	24.29	0.27	30.00	1.00	Complies	

Test Mode :TX N40 Mode_CH03/06/09_Total						
Frequency	Output Power	Output Power	Max. Limit	Max. Limit	Result	
(MHz)	(dBm)	(W)	(dBm)	(W)		
2422	27.31	0.54	30.00	1.00	Complies	
2437	27.38	0.55	30.00	1.00	Complies	
2452	27.32	0.54	30.00	1.00	Complies	

Page 113 of 199 Report Version: R00





APPENDIX G - ANTENNA CONDUCTED SPURIOUS EMISSION

Page 114 of 199 Report Version: R00

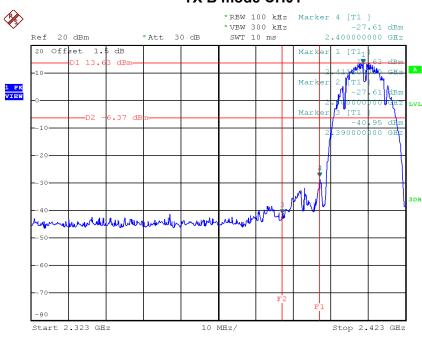




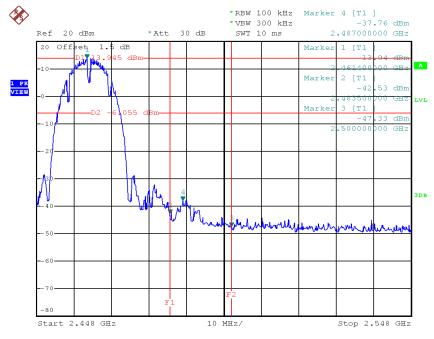
Non-Beamforming

Test Mode: TX B Mode

TX B mode CH01



TX B mode CH11



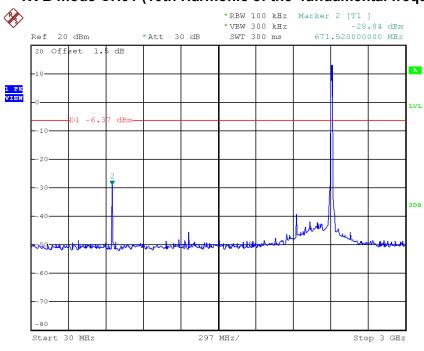
Report No.: BTL-FCCP-1-1812C201

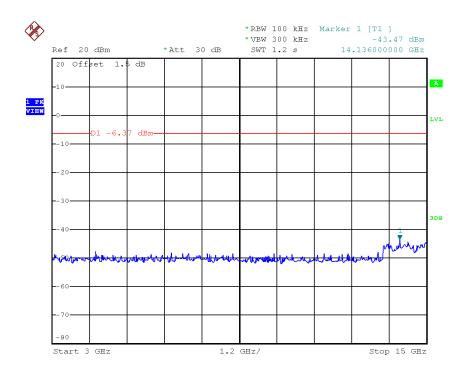
Page 115 of 199 Report Version: R00





TX B mode CH01 (10th Harmonic of the fundamental frequency)



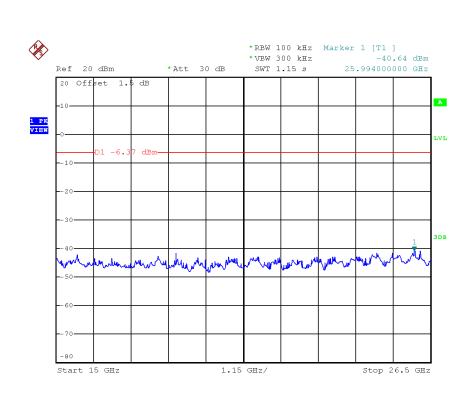


Report No.: BTL-FCCP-1-1812C201

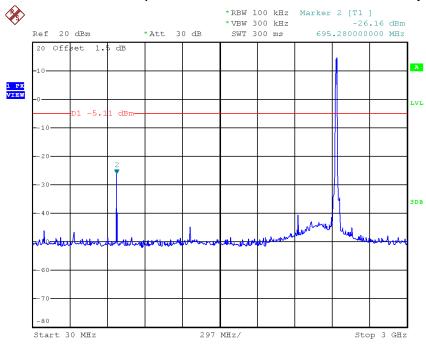
Page 116 of 199 Report Version: R00







TX B mode CH06 (10th Harmonic of the fundamental frequency)

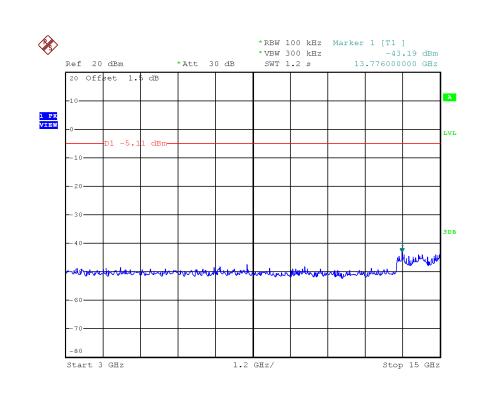


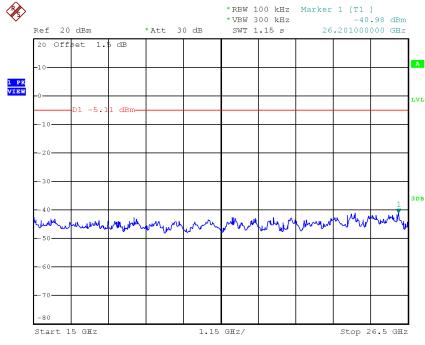
Report No.: BTL-FCCP-1-1812C201

Page 117 of 199 Report Version: R00







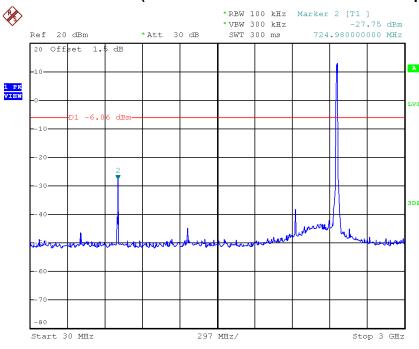


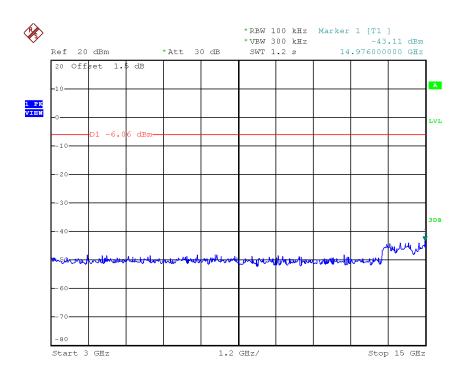
Page 118 of 199 Report Version: R00





TX B mode CH11 (10th Harmonic of the fundamental frequency)



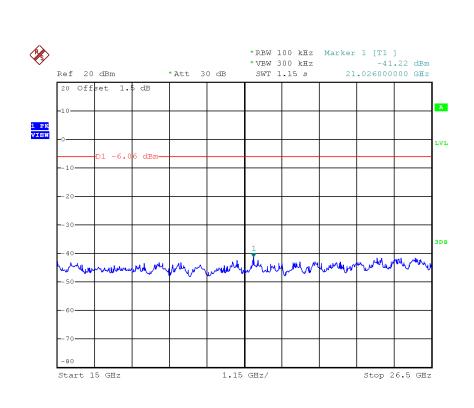


Report No.: BTL-FCCP-1-1812C201

Page 119 of 199 Report Version: R00







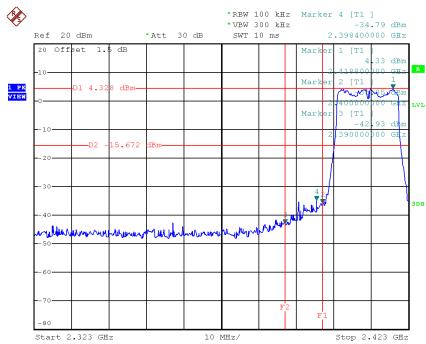
Page 120 of 199 Report Version: R00



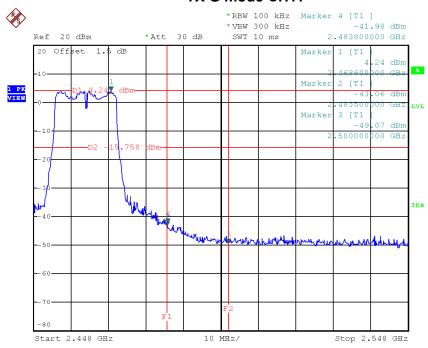


Test Mode: TX G Mode





TX G mode CH11



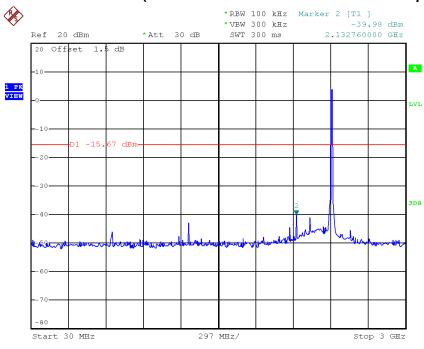
Report No.: BTL-FCCP-1-1812C201

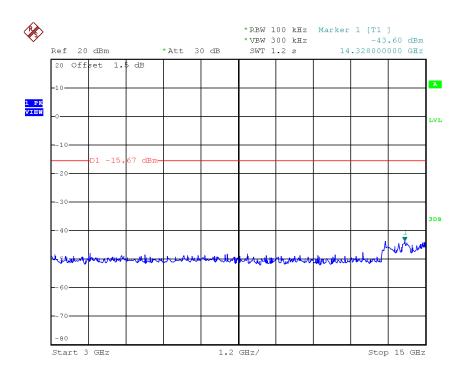
Page 121 of 199 Report Version: R00





TX G mode CH01 (10th Harmonic of the fundamental frequency)



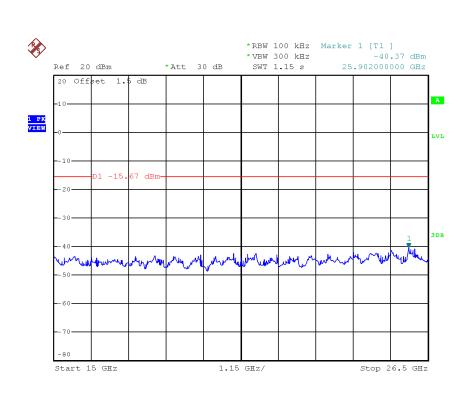


Report No.: BTL-FCCP-1-1812C201

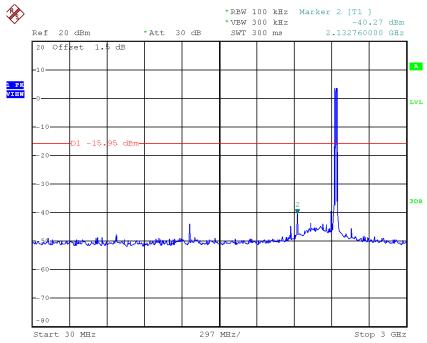
Page 122 of 199 Report Version: R00







TX G mode CH06 (10th Harmonic of the fundamental frequency)

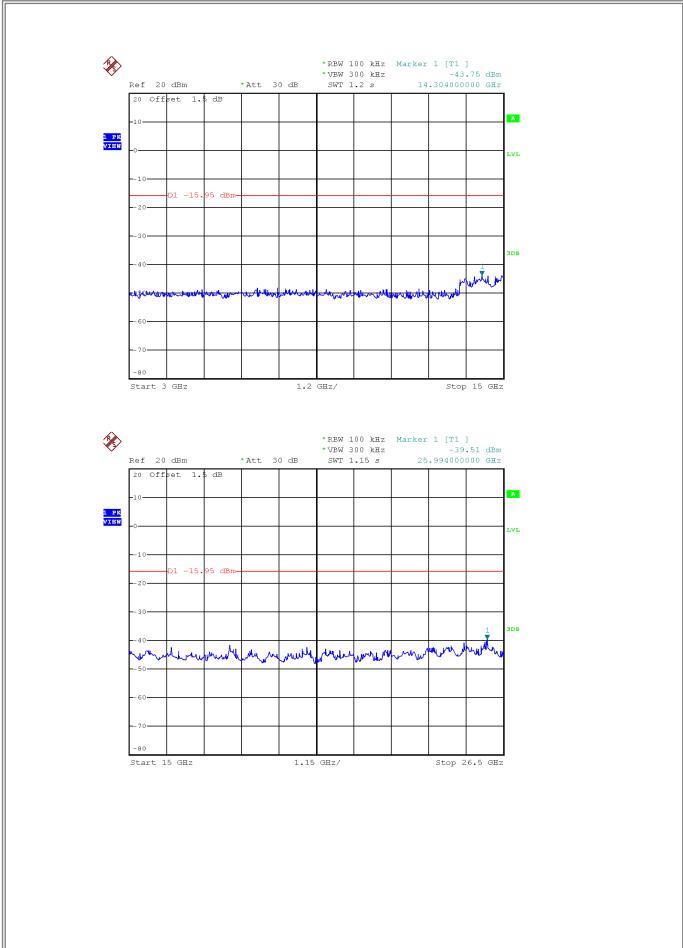


Report No.: BTL-FCCP-1-1812C201

Page 123 of 199 Report Version: R00





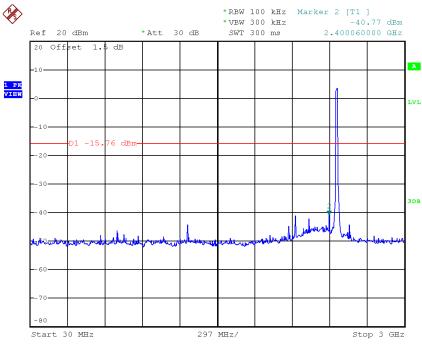


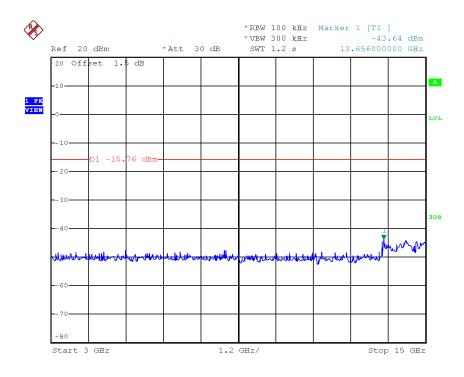
Page 124 of 199 Report Version: R00







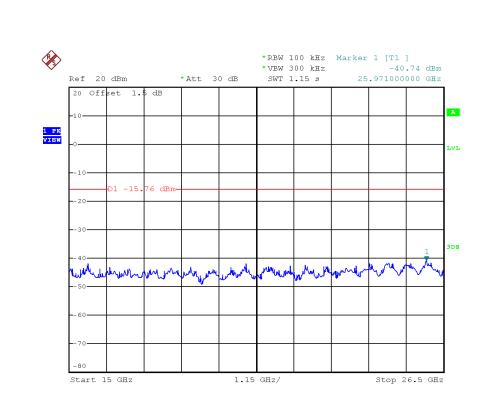




Page 125 of 199 Report Version: R00







Page 126 of 199 Report Version: R00