



FCC Radio Test Report

FCC ID: 2ADBM-LS9AD-AC11DBT

This report concerns (check one): ⊠Original Grant □Class I Change □Class II Change : 1610C103 Project No. Equipment : media/audio streaming module Model Name : LS9AD-AC11DBT
Applicant : Libre Wireless Technologies Inc : 5405 Alton Parkway, Suite A-563, Irvine, CA 92604, Address USA Date of Receipt : Oct. 17, 2016 Date of Test : Oct. 17, 2016 ~ Nov. 23, 2016 | Issued Date : Nov. 24, 2016 | BTL Inc. **Testing Engineer Technical Manager** (David Mao) **Authorized Signatory** (Steven Lu)

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

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-3-1610C103	Original Issue.	Nov. 22, 2016

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1. CERTIFICATION

Equipment : media/audio streaming module

Brand Name: Libre Sync

Model Name: LS9AD-AC11DBT

Applicant : Libre Wireless Technologies Inc Manufacturer : Shenzhen Zowee Technology Co., Ltd

Address : NO.5 Zowee technology building, Science & Technology industrial park of

privately owned enterprises, Pingshan, Xili, Nanshan district, Shenzhen,

China.

Factory : Shenzhen Zowee Technology Co., Ltd

Address : NO.5 Zowee technology building, Science & Technology industrial park of

privately owned enterprises, Pingshan, Xili, Nanshan district, Shenzhen,

China.

Date of Test : Oct. 17, 2016 ~ Nov. 23, 2016

Test Sample: Engineering Sample

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

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-3-1610C103) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

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2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

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

NOTE:

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

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2.1 TEST FACILITY

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

BTL's test firm number for FCC: 319330

2.2 MEASUREMENT UNCERTAINTY

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

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

A. Conducted Measurement:

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

B. Radiated Measurement:

Wedsurement.					
Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)	
		9KHz~30MHz	V	3.79	
		9KHz~30MHz	Н	3.57	
		30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	Н	3.78	
DG-CB03	CISPR	200MHz ~ 1,000MHz	V	4.10	
DG-CB03	CISER	200MHz ~ 1,000MHz	Η	4.06	
		1GHz~18GHz	V	3.12	
		1GHz~18GHz	Η	3.68	
		18GHz~40GHz	V	4.15	
		18GHz~40GHz	I	4.14	

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

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3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	media/audio streaming module			
Brand Name	Libre Sync	Libre Sync		
Model Name	LS9AD-AC11DBT			
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 433 Mbps		
	Output Power (Max.) For ANT 1	802.11b: 19.23dBm 802.11g: 26.64dBm 802.11n(20MHz): 27.1dBm 802.11n(40MHz): 27.81dBm		
	Output Power (Max.) For ANT 2	802.11b: 19.32dBm 802.11g: 26.61dBm 802.11n(20MHz): 27.29dBm 802.11n(40MHz): 27.87dBm		
Power Source	Supplied from system.			
Power Rating	DC 3.3V			

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	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	Librewireless	LSANT-1A-250	PCB	N/A	4	N/A
2	Librewireless	LSANT-1A-250	PCB	N/A	4	N/A

Note:

Equipment with 2 diversity antennas operating in switched diversity mode by which at any moment in time only 1 antenna is used.

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3.2 DESCRIPTION OF TEST MODES

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

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

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

	For Conducted Test
Final Test Mode	Description
Mode 5	TX MODE

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

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	

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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 (6.5Mbps) 802.11n HT40 mode : BPSK (13.5Mbps)
 - For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated below 1G test, the 802.11b is found to be the worst case and recorded.
- (4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

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3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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

ANT 1

Test software version	DutApi_w8887_BrdigeEth.exe		
Frequency (MHz)	2412 2437 2462		
802.11b	15	15	15
802.11g	13	16	16
802.11n (20MHz)	8	16	9
Frequency	2422	2437	2452
802.11n (40MHz)	10	18	10

ANT 2

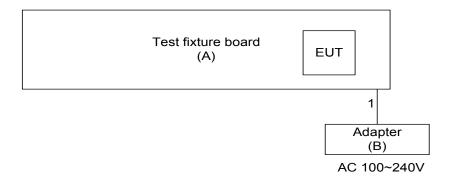
Test software version	DutApi_w8887_BrdigeEth.exe		
Frequency (MHz)	2412	2437	2462
802.11b	15	15	15
802.11g	14	15	15
802.11n (20MHz)	13	15	15
Frequency	2422	2437	2452
802.11n (40MHz)	10	18	12

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3.2 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



Ground plane
(Remote System)

3.3 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.
Α	Test fixture board	N/A	N/A	N/A	N/A
В	Adapter	Vonhk	KSAFE0900270W1US	VER	N/A

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.45	Power Cable

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4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

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

Note:

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

The following table is the setting of the receiver

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

4.1.2 TEST PROCEDURE

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

4.1.3 DEVIATION FROM TEST STANDARD

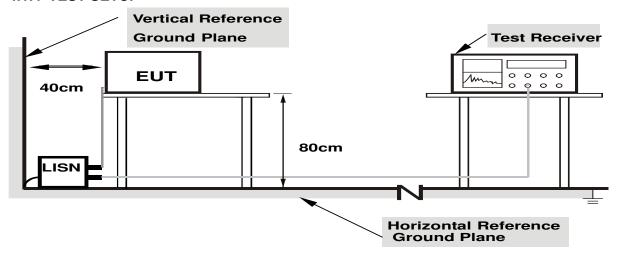
No deviation

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4.1.4 TEST SETUP



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

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

4.1.5 EUT OPERATING CONDITIONS

The EUT was 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 Attachment A.

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4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS

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

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

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

Frequency (MHz)	(dBuV/m) (at 3 meters)	
Frequency (Miriz)	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

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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

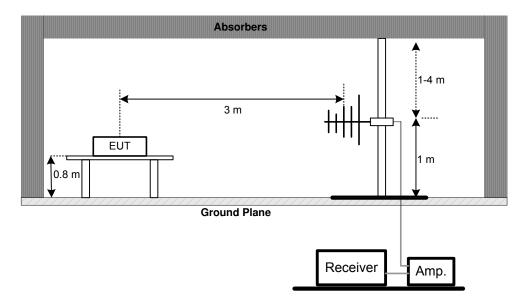
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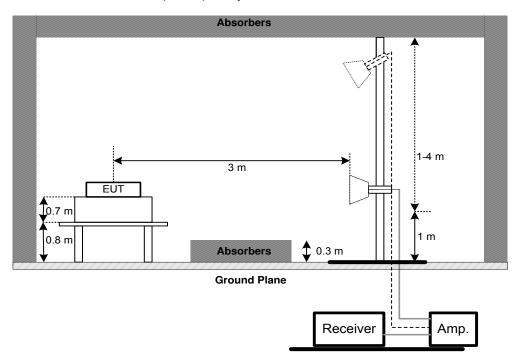


4.2.4 TEST SETUP

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



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

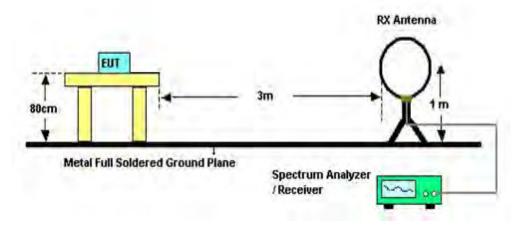


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(C) For Radiated Emissions Below 30MHz



4.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.2.6 EUT TEST CONDITIONS

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

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 (30MHZ TO 1000 MHZ)

Please refer to the Attachment C.

4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment D.

Remark:

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

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5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES

FCC Part15 (15.247) , Subpart C						
Section Test Item Frequency Range (MHz) Result						
15.247(a)(2)	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 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 Attachment E.

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6. MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

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

6.1.1 TEST PROCEDURE

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

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP

EUT	Power Meter
	1 GWGI WIGGGI

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 Attachment F.

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7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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 that the transmitter demonstrates compliance with the peak conducted power limits.

7.1.1 TEST PROCEDURE

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

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

The EUT 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 Attachment G.

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8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

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

8.1.1 TEST PROCEDURE

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

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

8.1.4 EUT OPERATION CONDITIONS

The EUT 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 Attachment H.

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9. MEASUREMENT INSTRUMENTS LIST

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

	Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 27, 2017	
2	Amplifier	HP	8447D	2944A09673	Nov. 08, 2017	
3	Receiver	AGILENT	N9038A	MY52130039	Oct. 10, 2017	
4	Test Cable	emci	LMR-400(30MH z-1GHz)	C-01	Jun. 26, 2017	
5	Control	CT	SC100	N/A	N/A	
6	Position Control	MF	MF-7802	MF780208416	N/A	
7	Antenna	ETS	3115	00075789	Mar. 27, 2017	
8	Amplifier	Agilent	8449B	3008A02274	Nov. 01, 2017	
9	Receiver	AGILENT	N9038A	MY52130039	Oct. 10, 2017	
10	Test Cable	emci	EMC104-SM-S M-10000(1GHz -26.5GHz)	C-68	Jun. 26, 2017	
11	Controller	CT	SC100	N/A	N/A	
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Apr. 23, 2017	
13	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 27, 2017	
14	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Sep. 06, 2017	
15	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A	

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

	Peak Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	P-series Power meter	Agilent	N1911A	MY45100473	Mar. 27, 2017	
2	Wireband Power sensor	Agilent	N1921A	MY51100041	Mar. 27, 2017	

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

	Power Spectral Density Measurement								
Item	Nanufacturer Type No. Serial No. Calibrated un								
1	Spectrum Analyzer	R&S	FSP 40	100185	Sep. 04, 2017				

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

All calibration period of equipment list is one year.

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10. EUT TEST PHOTO

Conducted Measurement Photos





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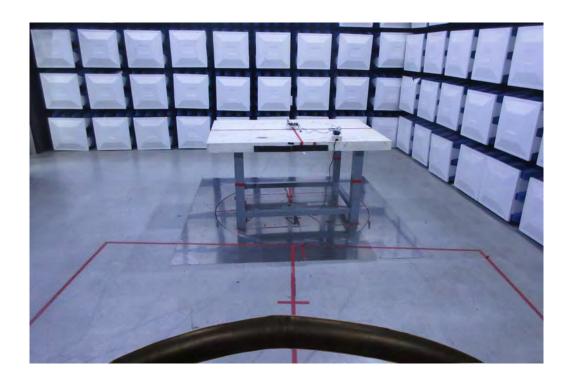




Radiated Measurement Photos

9KHz to 30MHz





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Radiated Measurement Photos

30MHz to 1000MHz





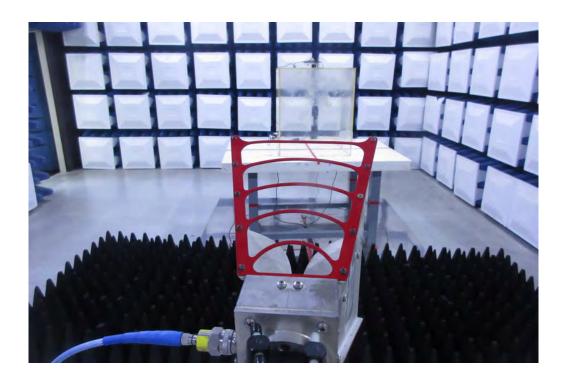
Report No.: BTL-FCCP-3-1610C103

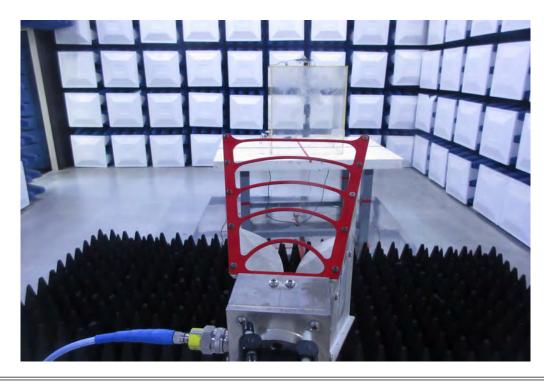




Radiated Measurement Photos

Above 1000MHz





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ATTACHMENT A - CONDUCTED EMISSION

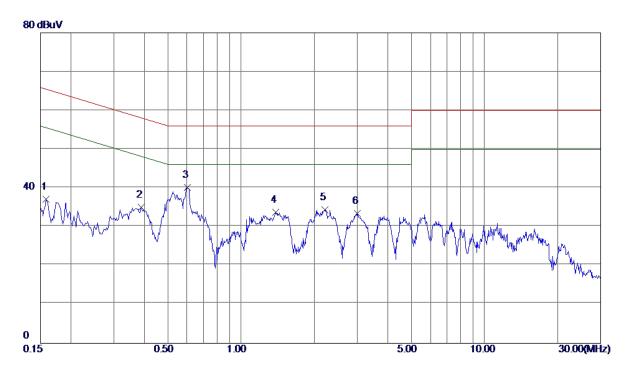
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Test Mode: TX MODE

Line



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0. 1580	27. 67	9. 52	37. 19	65. 57	-28. 38	Peak	
2	0. 3899	25. 51	9. 54	35. 05	58. 07	-23. 02	Peak	
3 *	0.6020	30. 49	9. 64	40. 13	56.00	-15. 87	Peak	
4	1. 3860	23. 93	9. 83	33. 76	56.00	-22. 24	Peak	
5	2. 2100	24. 38	9. 97	34. 35	56.00	-21. 65	Peak	
6	3. 0100	23. 33	10. 09	33. 42	56. 00	-22. 58	Peak	

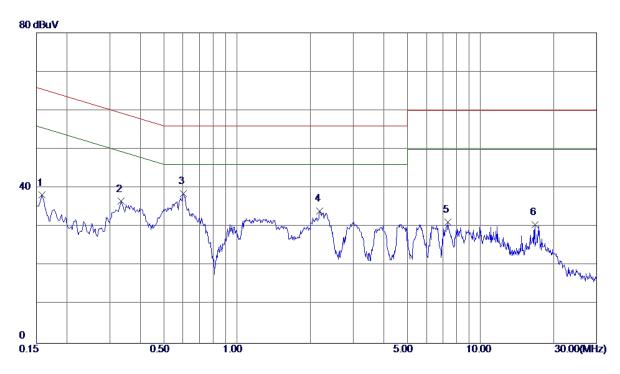
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Test Mode: TX MODE

Neutral



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0. 1580	28. 68	9. 48	38. 16	65. 57	-27. 41	Peak	
2	0. 3339	27. 03	9. 53	36. 56	59. 35	-22. 79	Peak	
3 *	0.6020	29. 19	9. 44	38. 63	56.00	-17. 37	Peak	
4	2. 1820	24. 42	9. 73	34. 15	56.00	-21. 85	Peak	
5	7. 3580	21. 21	10.00	31. 21	60.00	-28. 79	Peak	
6	16. 7180	20. 18	10. 41	30. 59	60.00	-29. 41	Peak	

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

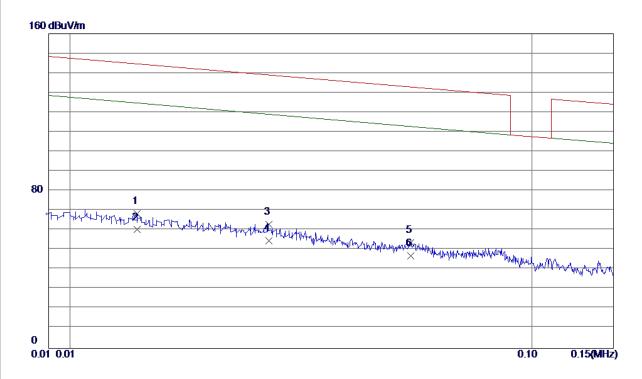
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Test Mode: TX B MODE CHANNEL 01

Ant 0°



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	0.0140	44. 46	23. 88	68. 34	147. 26	−78. 92	Peak	
2 *	0.0140	36. 44	23. 88	60. 32	127. 26	-66. 94	AVG	
3	0.0270	40. 45	22. 66	63. 11	144. 05	-80. 94	Peak	
4	0.0270	32. 15	22. 66	54. 81	124. 05	-69. 24	AVG	
5	0.0546	33. 96	19. 77	53. 73	137. 24	-83. 51	Peak	
6	0.0546	27. 12	19. 77	46. 89	117. 24	-70. 35	AVG	

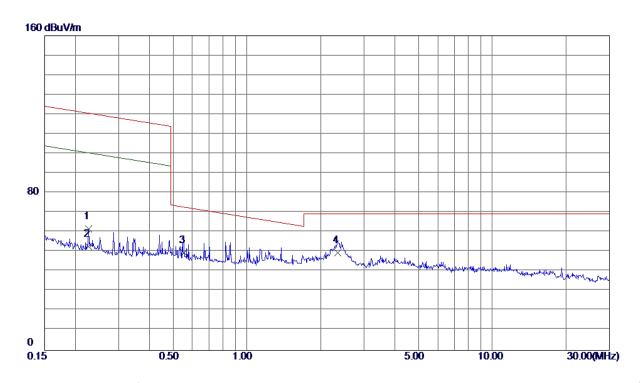
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Test Mode: TX B MODE CHANNEL 01

Ant 0°



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	0. 2267	42. 98	18. 67	61. 65	122. 79	−61. 14	Peak	
2	0. 2267	34. 12	18. 67	52. 79	102. 79	-50. 00	AVG	
3	0. 5551	31. 24	18. 39	49. 63	73. 22	-23. 59	QP	
4 *	2. 3460	32. 20	17. 46	49. 66	69. 54	-19. 88	QP	

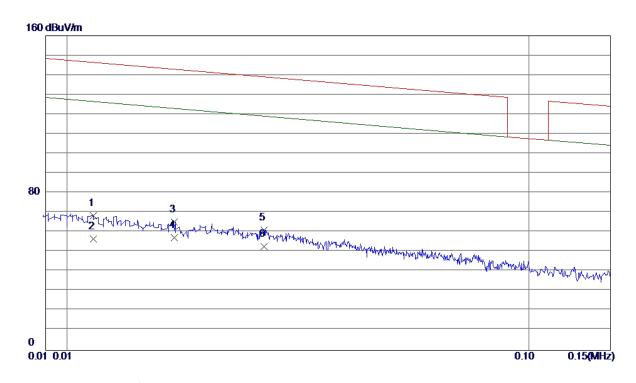
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Test Mode: TX B MODE CHANNEL 01

Ant 90°



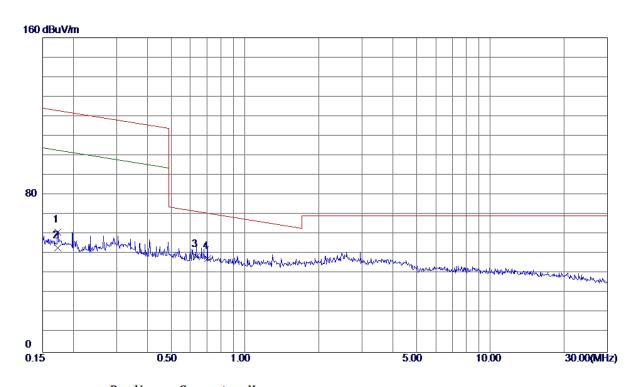
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	0.0114	44. 41	24. 04	68. 45	147. 90	−79. 45	Peak	
2	0.0114	32. 45	24. 04	56. 49	127. 90	-71. 41	AVG	
3	0.0171	41.62	23. 69	65. 31	146. 50	-81. 19	Peak	
4 *	0.0171	33. 58	23. 69	57. 27	126. 50	-69. 23	AVG	
5	0.0267	38. 57	22. 70	61. 27	144. 12	-82. 85	Peak	
6	0.0267	30. 10	22. 70	52. 80	124. 12	-71. 32	AVG	

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Ant 90°



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	0. 1730	42. 49	18. 72	61. 21	124.63	-63. 42	Peak	
2	0. 1730	34. 41	18. 72	53. 13	104.63	-51. 50	AVG	
3 *	0. 6338	30. 28	18. 43	48. 71	72. 52	-23. 81	QP	
4	0. 7046	29. 22	18. 46	47. 68	71.89	-24. 21	QP	

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

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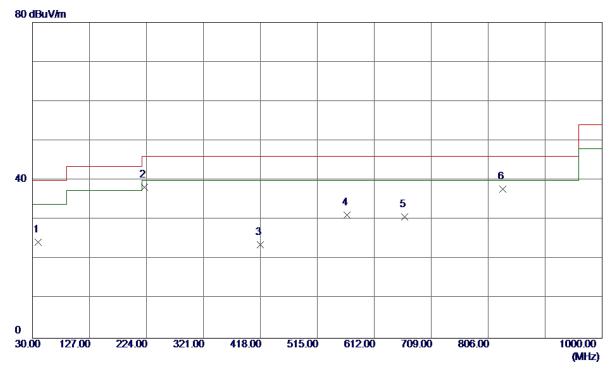




ANT 1

Test Mode: TX B MODE CHANNEL 01

Vertical



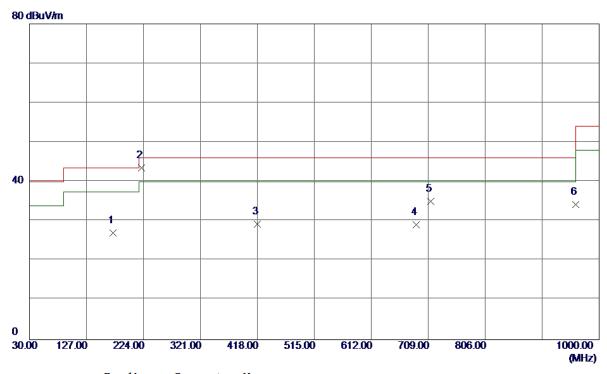
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	39. 2150	38. 32	-14.00	24. 32	40.00	-15. 68	Peak	
2 *	221. 0900	52. 46	-14. 16	38. 30	46.00	-7. 70	Peak	
3	418. 0000	31. 60	-7. 86	23. 74	46.00	-22. 26	Peak	
4	565. 4400	36. 50	-5. 32	31. 18	46.00	-14. 82	Peak	
5	663. 4099	34. 37	-3.62	30. 75	46.00	-15. 25	Peak	
6	831. 2199	38. 46	-0. 68	37. 78	46.00	-8. 22	Peak	

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Horizontal

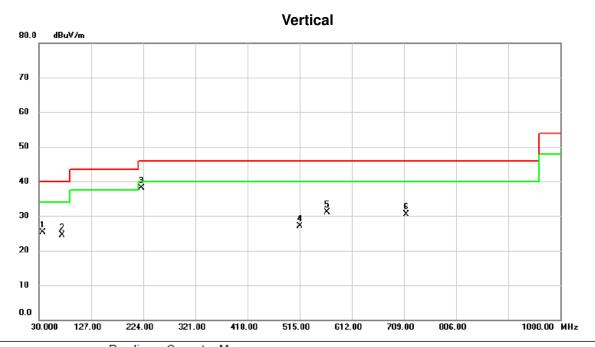


Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
172. 1050	39. 42	-12. 37	27. 05	43. 50	-16. 45	Peak	
221. 0900	57. 74	-14. 16	43. 58	46.00	-2. 42	Peak	
418. 0000	37. 18	-7. 86	29. 32	46.00	-16. 68	Peak	
688. 1450	31. 64	-2. 59	29. 05	46.00	-16. 95	Peak	
712. 8800	37. 04	-2. 07	34. 97	46.00	-11. 03	Peak	
959. 7450	31. 98	2. 30	34. 28	46.00	-11. 72	Peak	
	MHz 172. 1050 221. 0900 418. 0000 688. 1450 712. 8800	Freq. Level	Hred. Level Factor MHz dBuV/m dB 172. 1050 39. 42 -12. 37 221. 0900 57. 74 -14. 16 418. 0000 37. 18 -7. 86 688. 1450 31. 64 -2. 59 712. 8800 37. 04 -2. 07	Hreq. Level Factor ment MHz dBuV/m dB dBuV/m 172. 1050 39. 42 -12. 37 27. 05 221. 0900 57. 74 -14. 16 43. 58 418. 0000 37. 18 -7. 86 29. 32 688. 1450 31. 64 -2. 59 29. 05 712. 8800 37. 04 -2. 07 34. 97	Hreq. Level Factor ment Limit MHz dBuV/m dB dBuV/m dBuV/m 172. 1050 39. 42 -12. 37 27. 05 43. 50 221. 0900 57. 74 -14. 16 43. 58 46. 00 418. 0000 37. 18 -7. 86 29. 32 46. 00 688. 1450 31. 64 -2. 59 29. 05 46. 00 712. 8800 37. 04 -2. 07 34. 97 46. 00	MHz dBuV/m dB dBuV/m dBuV/m dB 172. 1050 39. 42 -12. 37 27. 05 43. 50 -16. 45 221. 0900 57. 74 -14. 16 43. 58 46. 00 -2. 42 418. 0000 37. 18 -7. 86 29. 32 46. 00 -16. 68 688. 1450 31. 64 -2. 59 29. 05 46. 00 -16. 95 712. 8800 37. 04 -2. 07 34. 97 46. 00 -11. 03	MHz dBuV/m dB dBuV/m dBuV/m dB Detector 172. 1050 39. 42 -12. 37 27. 05 43. 50 -16. 45 Peak 221. 0900 57. 74 -14. 16 43. 58 46. 00 -2. 42 Peak 418. 0000 37. 18 -7. 86 29. 32 46. 00 -16. 68 Peak 688. 1450 31. 64 -2. 59 29. 05 46. 00 -16. 95 Peak 712. 8800 37. 04 -2. 07 34. 97 46. 00 -11. 03 Peak

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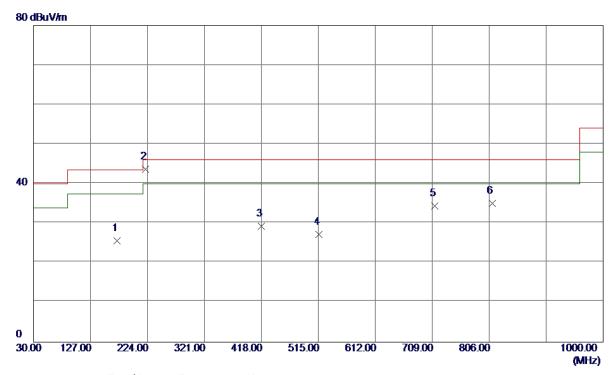
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		37.275	39.23	-14.01	25.22	40.00	-14.78	peak	
2		73.650	41.13	-16.57	24.56	40.00	-15.44	peak	
3	*	221.090	52.30	-14.16	38.14	46.00	-7.86	peak	
4		515.970	35.11	-8.06	27.05	46.00	-18.95	peak	
5		565.440	36.52	-5.32	31.20	46.00	-14.80	peak	
6		712.880	32.59	-2.06	30.53	46.00	-15.47	peak	

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Horizontal

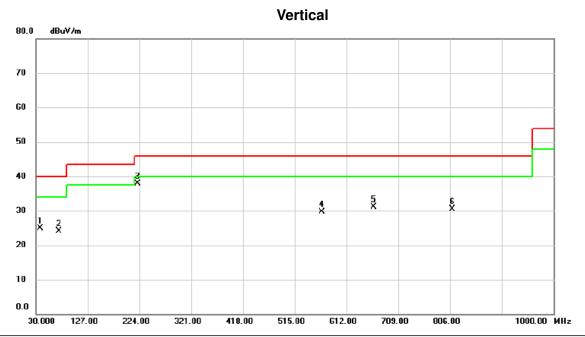


No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	172. 1050	38. 00	-12. 37	25. 63	43. 50	-17. 87	Peak	
2 *	221. 0900	57. 87	-14. 16	43. 71	46.00	-2. 29	Peak	
3	418. 0000	37. 08	-7. 86	29. 22	46.00	-16. 78	Peak	
4	515. 9699	35. 29	-8. 07	27. 22	46.00	-18. 78	Peak	
5	712. 8800	36. 53	-2. 07	34. 46	46.00	-11. 54	Peak	
6	810. 8500	35. 11	-0.07	35. 04	46.00	-10. 96	Peak	

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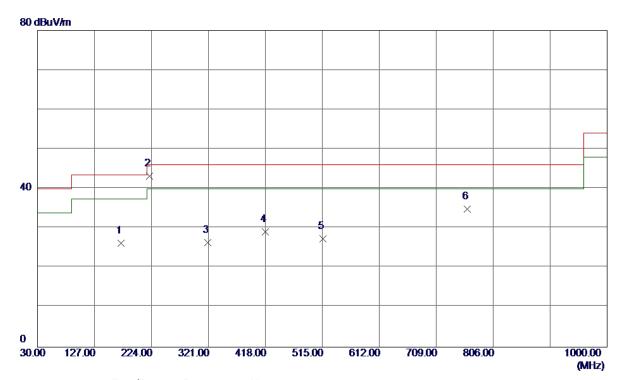
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	38.245	39.03	-14.12	24.91	40.00	-15.09	peak	
2	73.650	40.61	-16.57	24.04	40.00	-15.96	peak	
3 *	221.090	52.14	-14.16	37.98	46.00	-8.02	peak	
4	565.440	34.98	-5.32	29.66	46.00	-16.34	peak	
5	663.410	34.70	-3.63	31.07	46.00	-14.93	peak	
6	810.850	30.47	-0.06	30.41	46.00	-15.59	peak	

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Horizontal



No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	172. 1050	38. 59	-12. 37	26. 22	43. 50	-17. 28	Peak	
2 *	221. 0900	57. 38	-14. 16	43. 22	46.00	-2. 78	Peak	
3	319. 5450	37. 02	−10. 57	26. 45	46.00	-19. 55	Peak	
4	418.0000	36. 92	-7. 86	29. 06	46.00	-16. 94	Peak	
5	515. 9699	35. 39	-8. 07	27. 32	46.00	-18. 68	Peak	
6	761.8650	36. 29	-1. 44	34. 85	46.00	-11. 15	Peak	

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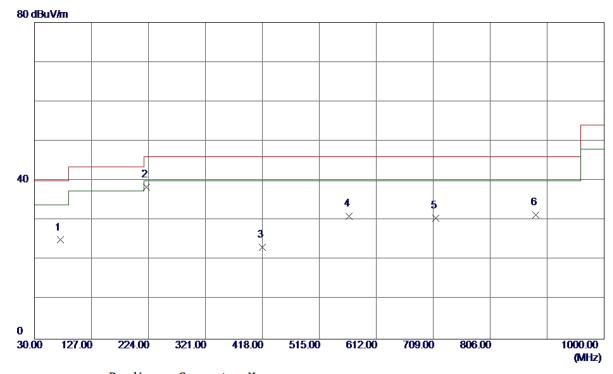




ANT 2

Test Mode: TX B MODE CHANNEL 01

Vertical



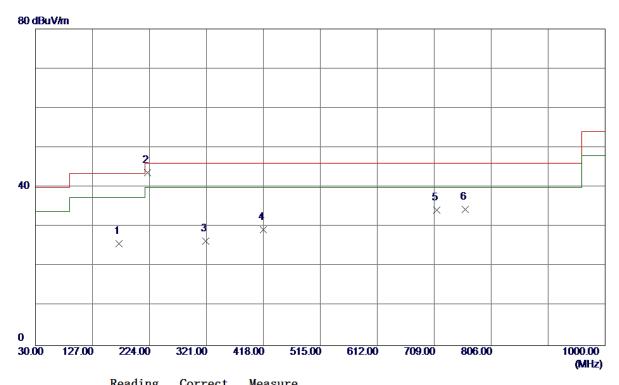
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	73.6500	41. 61	-16. 57	25. 04	40.00	-14. 96	Peak	
2 *	221. 0900	52. 52	-14. 16	38. 36	46.00	-7. 64	Peak	
3	418. 0000	31. 02	-7. 86	23. 16	46.00	-22. 84	Peak	
4	565. 4400	36. 31	-5. 32	30. 99	46.00	-15. 01	Peak	
5	712. 8800	32. 58	-2. 07	30. 51	46. 00	-15. 49	Peak	
6	883. 1150	30. 07	1. 33	31. 40	46.00	-14. 60	Peak	

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Horizontal



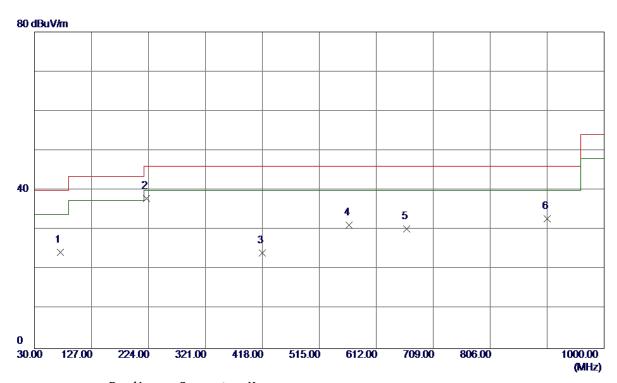
No.	Freq.	Leve1	Factor	measure	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	172. 1050	38. 14	-12. 37	25. 77	43. 50	-17. 73	Peak	
2 *	221. 0900	57. 86	-14. 16	43. 70	46.00	-2. 30	Peak	
3	319. 5450	37. 04	-10. 57	26. 47	46.00	-19. 53	Peak	
4	418. 0000	37. 13	-7. 86	29. 27	46.00	-16. 73	Peak	
5	712. 8800	36. 36	-2. 07	34. 29	46.00	-11. 71	Peak	
6	761. 8650	35. 78	-1. 44	34. 34	46.00	-11. 66	Peak	

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Vertical



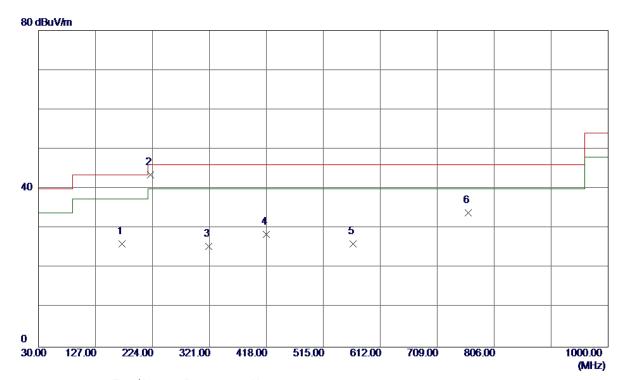
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	73.6500	40. 86	-16. 57	24. 29	40.00	-15. 71	Peak	
2 *	221. 0900	52. 14	-14. 16	37. 98	46.00	-8. 02	Peak	
3	418. 0000	32. 07	-7. 86	24. 21	46.00	-21. 79	Peak	
4	565. 4400	36. 54	-5. 32	31. 22	46.00	-14. 78	Peak	
5	663. 4099	33. 90	-3. 62	30. 28	46. 00	-15. 72	Peak	
6	902. 5150	30. 10	2. 63	32. 73	46.00	-13. 27	Peak	

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Horizontal



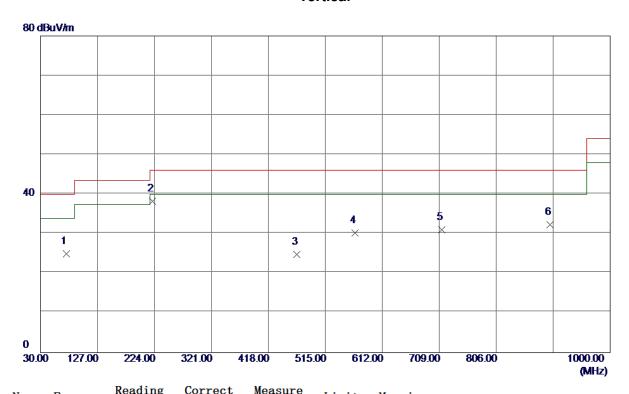
No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	172. 1050	38. 52	-12. 37	26. 15	43. 50	−17. 35	Peak	
2 *	221. 0900	57. 74	-14. 16	43. 58	46.00	-2. 42	Peak	
3	319. 5450	35. 98	−10. 57	25. 41	46.00	-20. 59	Peak	
4	418. 0000	36. 41	-7. 86	28. 55	46.00	−17. 45	Peak	
5	565. 4400	31. 39	-5. 32	26. 07	46.00	-19. 93	Peak	
6	761.8650	35. 32	-1. 44	33. 88	46.00	-12. 12	Peak	

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Vertical



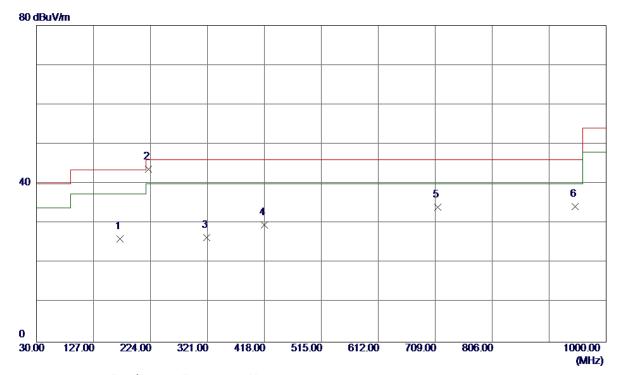
No.	Freq.	Leve1	Factor	measure	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	73.6500	41. 48	-16. 57	24. 91	40.00	-15. 09	Peak	
2 *	221. 0900	52. 34	-14. 16	38. 18	46.00	-7. 82	Peak	
3	466. 9850	33. 43	-8. 58	24. 85	46.00	-21. 15	Peak	
4	565. 4400	35. 54	-5. 32	30. 22	46.00	-15. 78	Peak	
5	712. 8800	33. 14	-2. 07	31. 07	46.00	-14. 93	Peak	
6	897. 6650	29. 93	2. 46	32. 39	46.00	-13. 61	Peak	

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Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	172. 1050	38. 48	-12. 37	26. 11	43. 50	-17. 39	Peak	
2 *	221. 0900	57. 83	-14. 16	43. 67	46.00	-2. 33	Peak	
3	319. 5450	36. 92	−10. 57	26. 35	46.00	−19. 65	Peak	
4	418. 0000	37. 52	-7. 86	29. 66	46.00	-16. 34	Peak	
5	712. 8800	36. 21	-2. 07	34. 14	46.00	-11.86	Peak	
6	947. 6200	31. 81	2. 45	34. 26	46.00	-11. 74	Peak	

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ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

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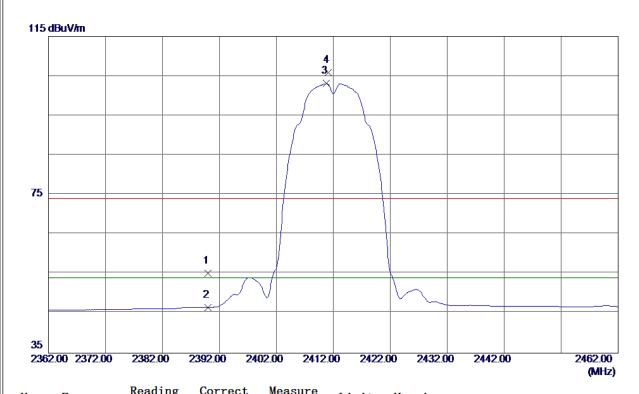




ANT 1

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

Vertical



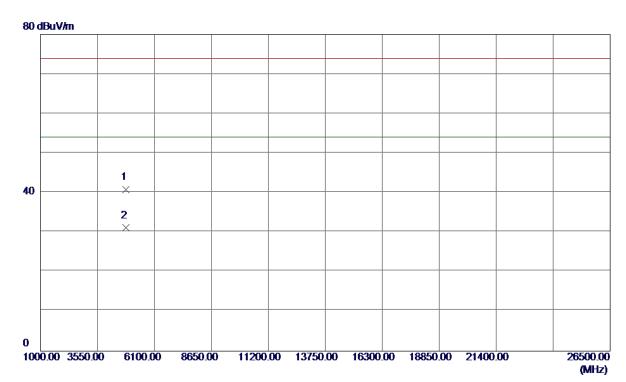
No.	Freq.	Leve1	Factor	measure	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	22. 15	33. 01	55. 16	74.00	-18. 84	Peak	
2	2390. 0000	13. 52	33. 01	46. 53	54.00	-7. 47	AVG	
3 *	2410. 8000	70. 02	33. 10	103. 12	54.00	49. 12	AVG	No Limit
4	2411. 1500	72. 84	33. 10	105. 94	74.00	31. 94	Peak	No Limit

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Vertical



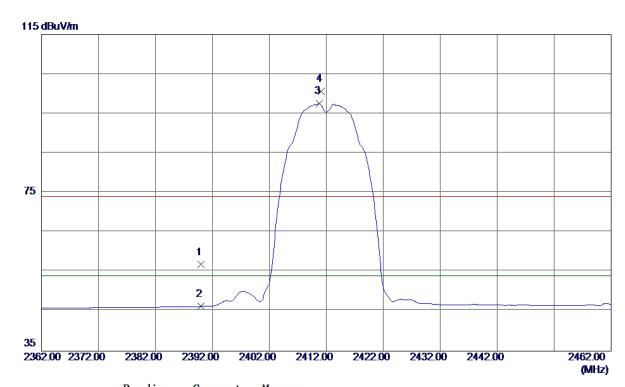
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823. 9580	35. 94	4. 85	40. 79	74.00	-33. 21	Peak	
2 *	4823. 9880	26. 27	4. 85	31. 12	54. 00	-22. 88	AVG	

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Horizontal



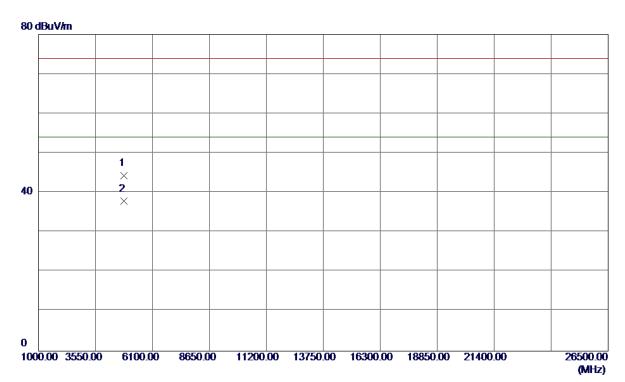
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	23. 83	33. 01	56. 84	74.00	-17. 16	Peak	
2	2390. 0000	13. 27	33. 01	46. 28	54.00	-7. 72	AVG	
3 *	2410. 7500	64. 41	33. 10	97. 51	54.00	43. 51	AVG	No Limit
4	2411. 1500	67. 56	33. 10	100.66	74.00	26. 66	Peak	No Limit
4	2411. 1500	67. 56	33. 10	100. 66	74. 00	26. 66	Peak	No Limit

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Horizontal



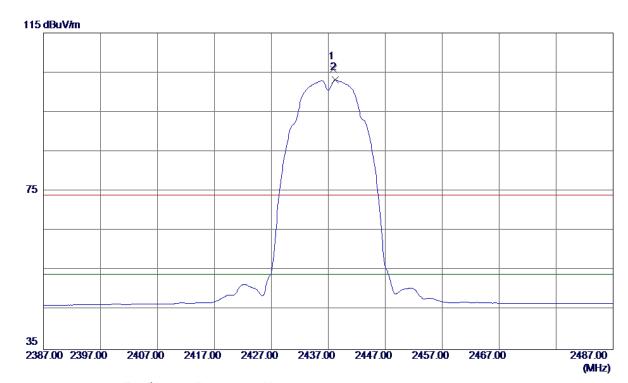
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823.9080	39. 54	4. 85	44. 39	74.00	-29. 61	Peak	
2 *	4823. 9850	32. 99	4. 85	37. 84	54. 00	-16. 16	AVG	

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Vertical



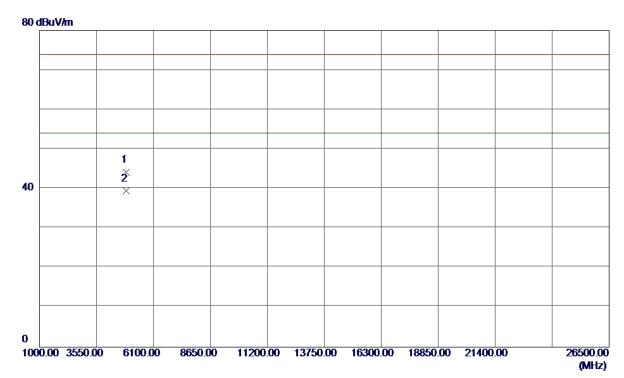
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2437. 9000	72. 62	33. 21	105. 83	74.00	31. 83	Peak	No Limit
2 *	2438. 2500	69. 92	33. 21	103. 13	54.00	49. 13	AVG	No Limit

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Vertical



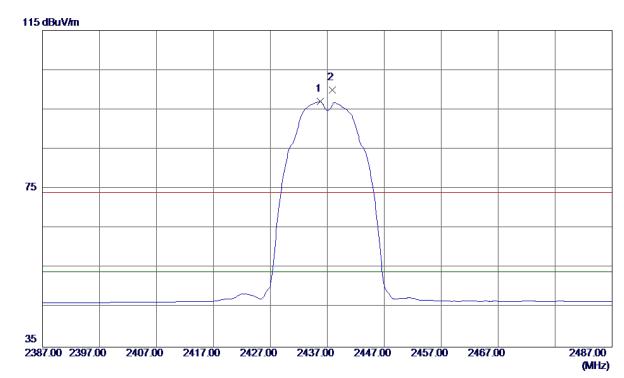
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873. 9080	39. 02	5. 07	44. 09	74.00	-29. 91	Peak	
2 *	4873. 9770	34. 37	5. 07	39. 44	54. 00	-14. 56	AVG	

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Horizontal



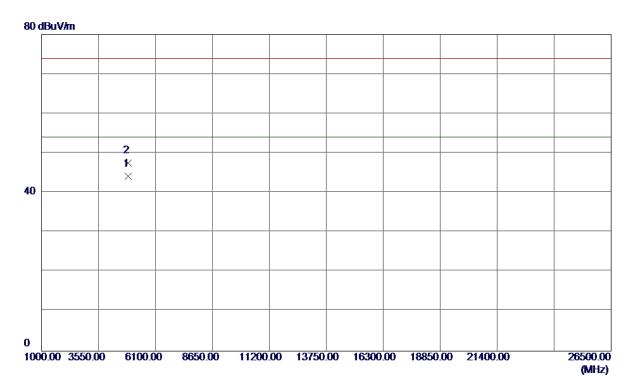
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2435. 7500	63. 86	33. 20	97. 06	54.00	43.06	AVG	No Limit
2	2437. 9000	66. 81	33. 21	100. 02	74. 00	26. 02	Peak	No Limit

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Horizontal



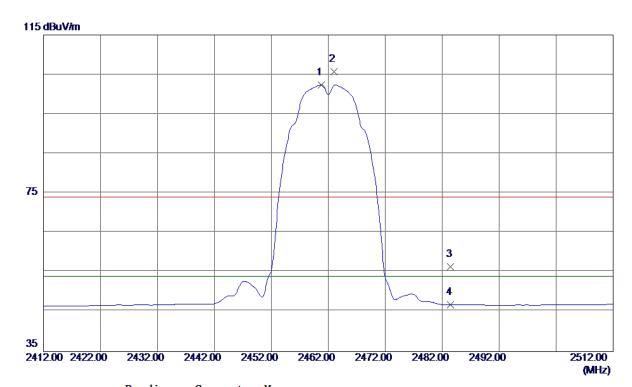
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4873. 9830	39. 13	5. 07	44. 20	54.00	-9. 80	AVG	
2	4874. 0099	42. 52	5. 07	47. 59	74. 00	-26. 41	Peak	

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Vertical



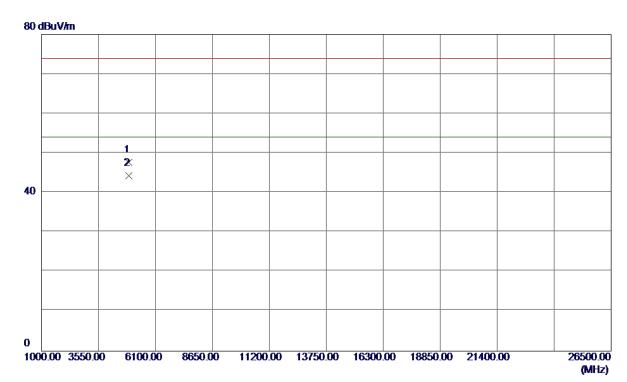
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2460. 7500	69. 11	33. 31	102. 42	54.00	48. 42	AVG	No Limit
2	2462. 9500	72. 38	33. 32	105. 70	74.00	31. 70	Peak	No Limit
3	2483. 5000	23. 07	33. 40	56. 47	74.00	-17. 53	Peak	
4	2483. 5000	13. 42	33. 40	46.82	54.00	-7. 18	AVG	

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Vertical



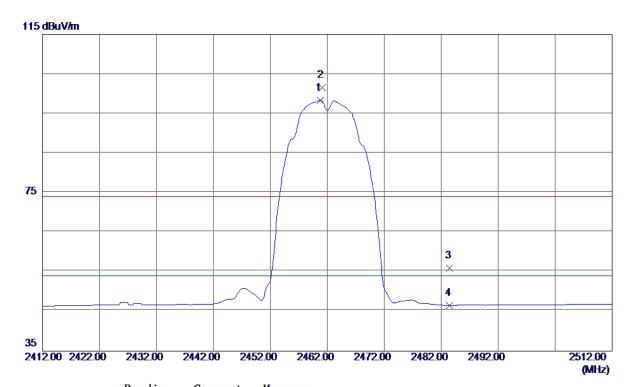
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923. 9650	42. 44	5. 28	47. 72	74.00	-26. 28	Peak	
2 *	4923. 9650	39. 09	5. 28	44. 37	54.00	-9. 63	AVG	

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Horizontal



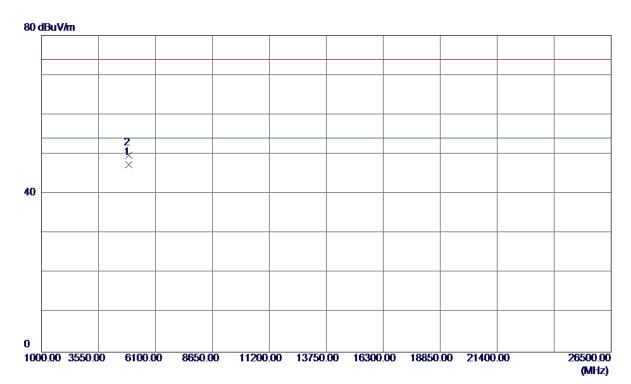
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2460. 7500	65. 11	33. 31	98. 42	54.00	44. 42	AVG	No Limit
2	2461. 1500	68. 20	33. 31	101. 51	74.00	27. 51	Peak	No Limit
3	2483. 5000	22. 54	33. 40	55. 94	74.00	-18. 06	Peak	
4	2483. 5000	13. 18	33. 40	46. 58	54.00	-7. 42	AVG	

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Horizontal



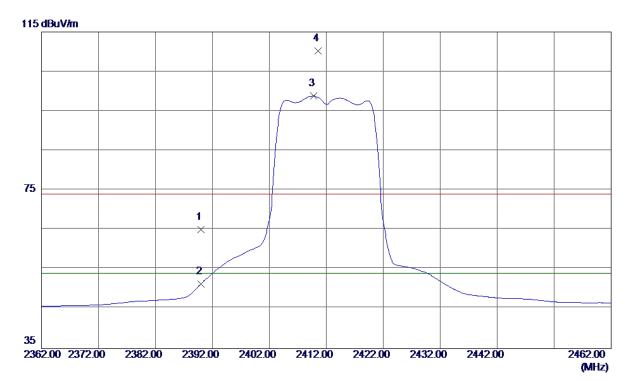
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4923. 9720	42. 10	5. 28	47. 38	54.00	-6. 62	AVG	
2	4924. 0830	44. 50	5. 28	49. 78	74. 00	-24. 22	Peak	

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Vertical



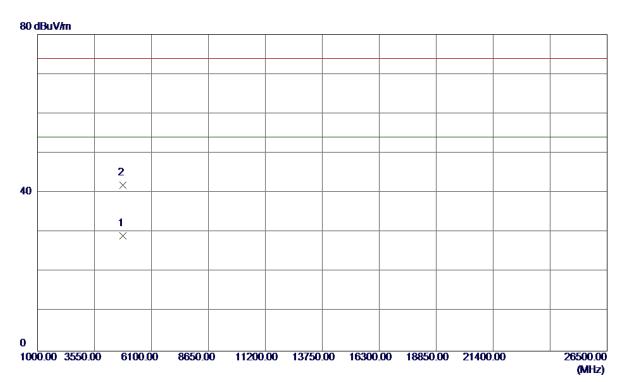
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	31. 18	33. 88	65. 06	74.00	-8. 94	Peak	
2	2390. 0000	17. 47	33. 88	51. 35	54.00	-2.65	AVG	
3 *	2409.8000	64. 83	33. 99	98. 82	54.00	44.82	AVG	No Limit
4	2410. 6000	76. 17	33. 99	110. 16	74. 00	36. 16	Peak	No Limit

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Vertical



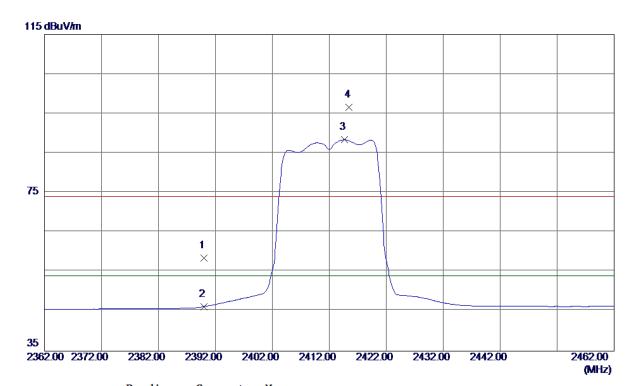
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824. 0730	24. 26	4. 85	29. 11	54.00	-24. 89	AVG	
2	4824. 5550	37. 08	4. 86	41. 94	74. 00	-32. 06	Peak	

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Horizontal



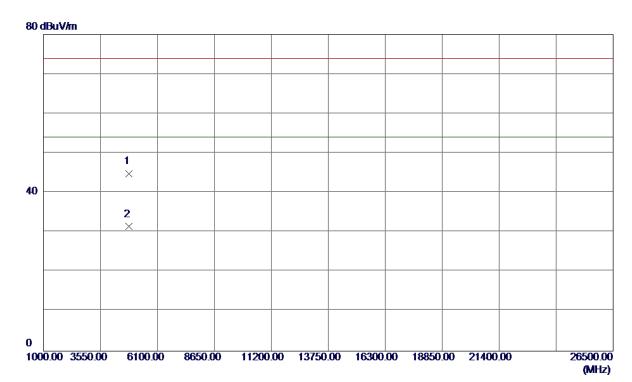
Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
2390. 0000	24. 69	33. 88	58. 57	74.00	-15. 43	Peak	
2390. 0000	12. 38	33. 88	46. 26	54.00	-7. 74	AVG	
2414. 7000	54. 36	34. 02	88. 38	54.00	34. 38	AVG	No Limit
2415. 5000	62. 60	34. 02	96. 62	74. 00	22. 62	Peak	No Limit
	MHz 2390. 0000 2390. 0000 2414. 7000	Freq. Level	Hreq. Level Factor MHz dBuV/m dB 2390.0000 24.69 33.88 2390.0000 12.38 33.88 2414.7000 54.36 34.02	Hreq. Level Factor ment MHz dBuV/m dB dBuV/m 2390.0000 24.69 33.88 58.57 2390.0000 12.38 33.88 46.26 2414.7000 54.36 34.02 88.38	Hreq. Level Factor ment Limit MHz dBuV/m dB dBuV/m dBuV/m 2390.0000 24.69 33.88 58.57 74.00 2390.0000 12.38 33.88 46.26 54.00 2414.7000 54.36 34.02 88.38 54.00	Hreq. Level Factor ment Limit Margin MHz dBuV/m dB dBuV/m dBuV/m dB 2390.0000 24.69 33.88 58.57 74.00 -15.43 2390.0000 12.38 33.88 46.26 54.00 -7.74 2414.7000 54.36 34.02 88.38 54.00 34.38	MHz dBuV/m dB dBuV/m dB uV/m d uV/m dB uV/m d uV/m

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Horizontal



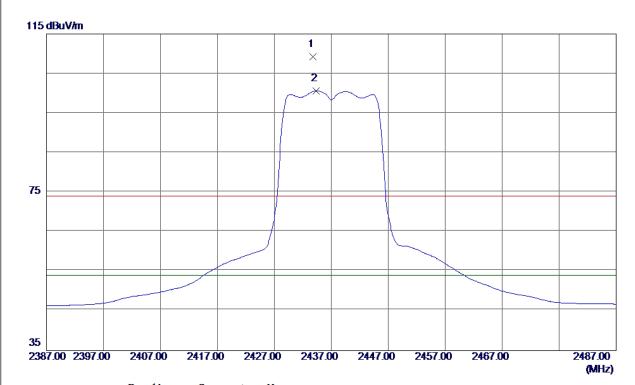
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823. 3820	39. 92	4. 85	44. 77	74.00	-29. 23	Peak	
2 *	4824. 0850	26. 59	4. 85	31. 44	54. 00	-22. 56	AVG	

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Vertical



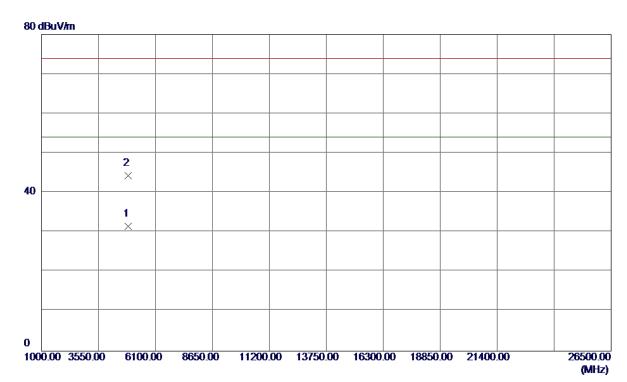
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2433. 8000	76. 07	33. 19	109. 26	74.00	35. 26	Peak	No Limit
2 *	2434. 3500	67. 41	33. 20	100. 61	54. 00	46. 61	AVG	No Limit

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Vertical



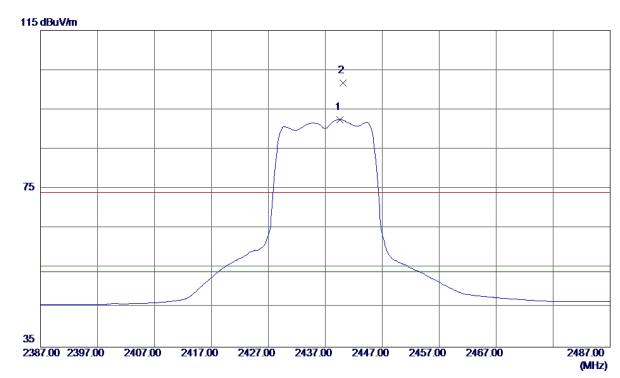
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874. 0070	26. 41	5. 07	31. 48	54.00	-22. 52	AVG	
2	4874. 3350	39. 27	5. 07	44. 34	74. 00	-29. 66	Peak	

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Horizontal



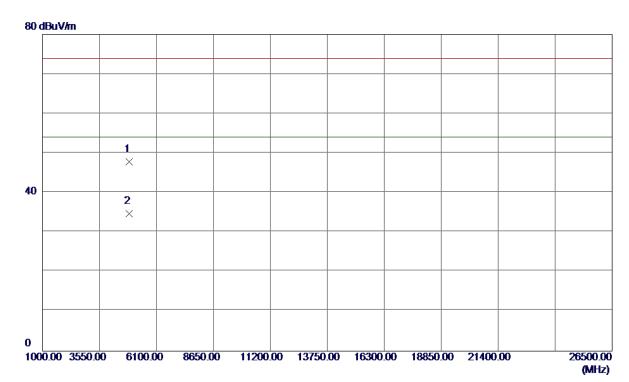
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2439. 6000	58. 36	34. 16	92. 52	54.00	38. 52	AVG	No Limit
2	2440. 1000	67. 49	34. 16	101. 65	74. 00	27. 65	Peak	No Limit

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Horizontal



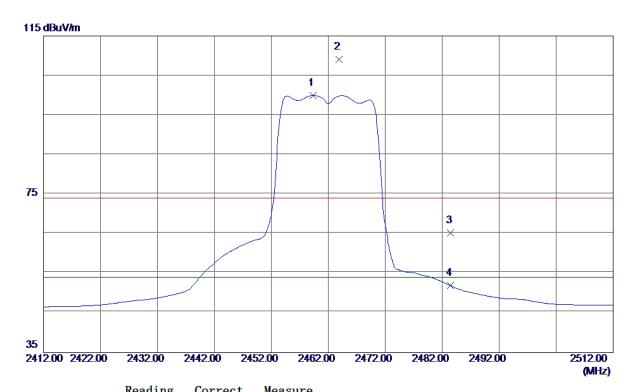
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873. 3580	42.82	5. 06	47. 88	74.00	-26. 12	Peak	
2 *	4874. 1629	29. 69	5. 07	34. 76	54. 00	-19. 24	AVG	

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Vertical



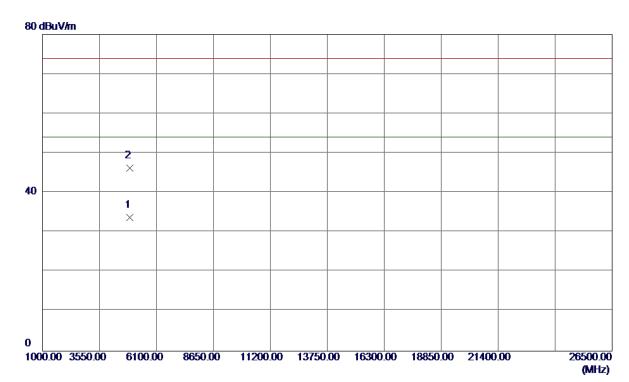
No.	Freq.	Reading Level	Factor	measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2459. 3000	66. 69	33. 30	99. 99	54.00	45. 99	AVG	No Limit
2	2463. 8500	75. 79	33. 32	109. 11	74.00	35. 11	Peak	No Limit
3	2483. 5000	31. 86	33. 40	65. 26	74.00	-8. 74	Peak	
4	2483. 5000	18. 49	33. 40	51. 89	54.00	-2. 11	AVG	

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Vertical



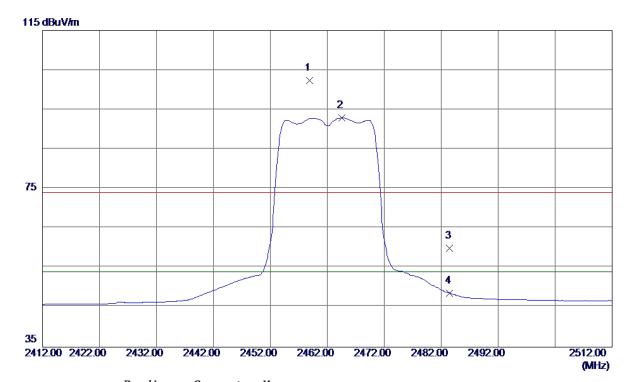
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924. 0000	28. 46	5. 28	33. 74	54.00	-20. 26	AVG	
2	4924. 0419	40. 94	5. 28	46. 22	74. 00	-27. 78	Peak	

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Horizontal



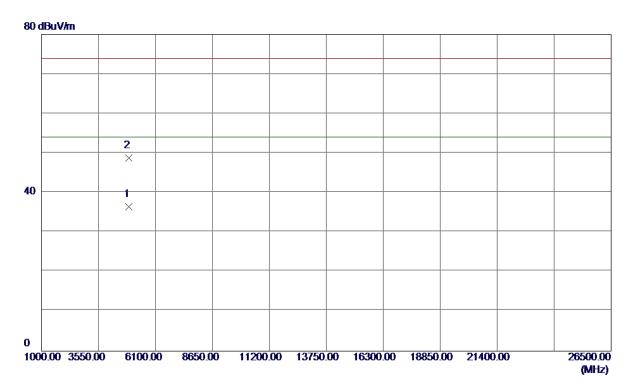
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2458. 9000	68. 09	34. 27	102. 36	74.00	28. 36	Peak	No Limit
2 *	2464. 6000	58. 61	34. 31	92. 92	54.00	38. 92	AVG	No Limit
3	2483. 5000	25. 60	34. 41	60. 01	74.00	-13. 99	Peak	
4	2483. 5000	14. 23	34. 41	48. 64	54.00	-5. 36	AVG	

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Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924. 0000	31. 27	5. 28	36. 55	54.00	−17. 45	AVG	
2	4924. 0450	43. 54	5. 28	48. 82	74. 00	-25. 18	Peak	

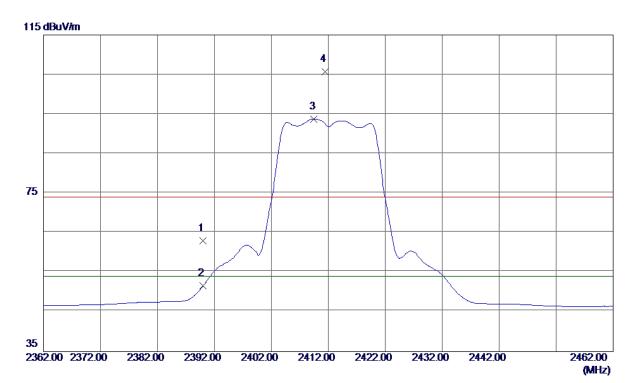
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Orthogonal Axis:	X
Test Mode :	TX N-20M MODE 2412MHz

Vertical



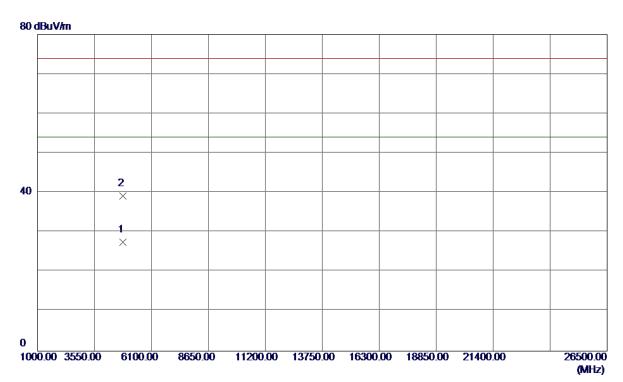
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	29. 10	33. 88	62. 98	74.00	-11. 02	Peak	
2	2390. 0000	17. 69	33. 88	51. 57	54.00	-2. 43	AVG	
3 *	2409. 5000	59. 81	33. 99	93. 80	54.00	39. 80	AVG	No Limit
4	2411. 4000	71. 79	34. 00	105. 79	74. 00	31. 79	Peak	No Limit

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Vertical



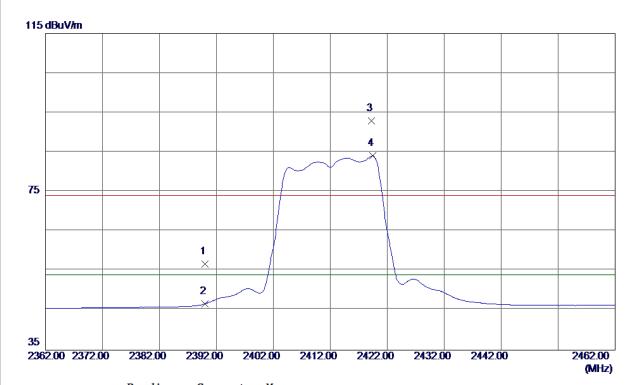
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824. 1240	22. 74	4. 85	27. 59	54.00	-26. 41	AVG	
2	4824. 2410	34. 42	4. 85	39. 27	74. 00	-34. 73	Peak	

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Horizontal



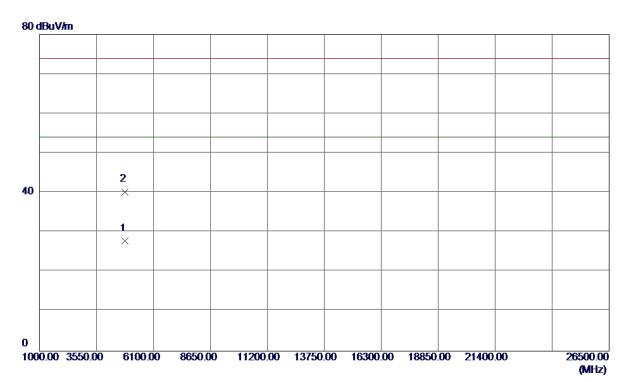
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	22. 95	33. 88	56. 83	74.00	-17. 17	Peak	
2	2390. 0000	12. 82	33. 88	46. 70	54.00	-7. 30	AVG	
3	2419. 2000	58. 82	34. 04	92. 86	74.00	18. 86	Peak	No Limit
4 *	2419. 4000	50. 02	34. 05	84. 07	54.00	30. 07	AVG	No Limit

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Horizontal



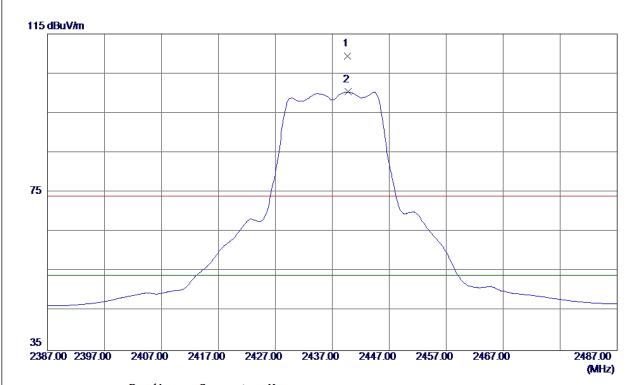
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824. 1240	23. 03	4. 85	27. 88	54.00	-26. 12	AVG	
2	4824. 2450	35. 39	4. 85	40. 24	74. 00	-33. 76	Peak	

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Vertical



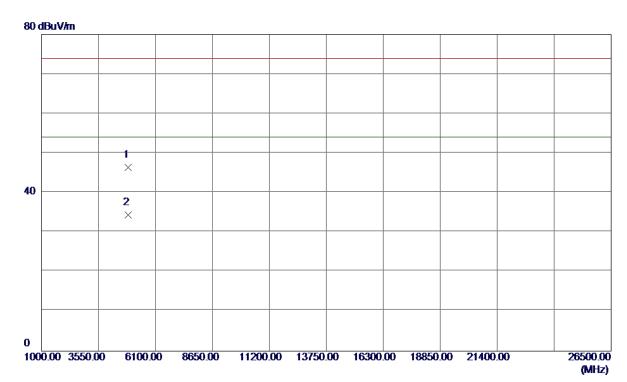
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2439. 7000	76. 15	33. 22	109. 37	74.00	35. 37	Peak	No Limit
2 *	2439. 7500	67. 14	33. 22	100. 36	54.00	46. 36	AVG	No Limit

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Vertical



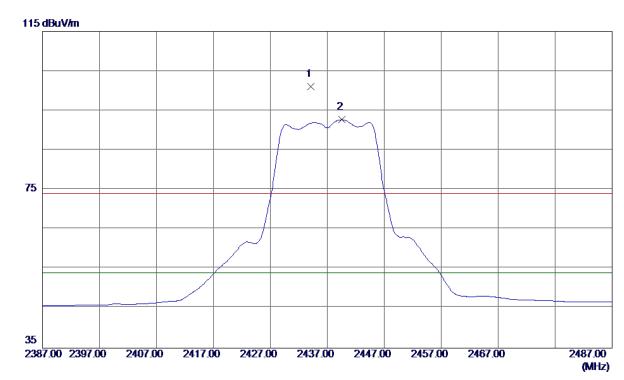
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4874. 0750	41. 27	5. 07	46. 34	74.00	-27. 66	Peak	
2 *	4874. 2100	29. 31	5. 07	34. 38	54. 00	-19. 62	AVG	

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Horizontal



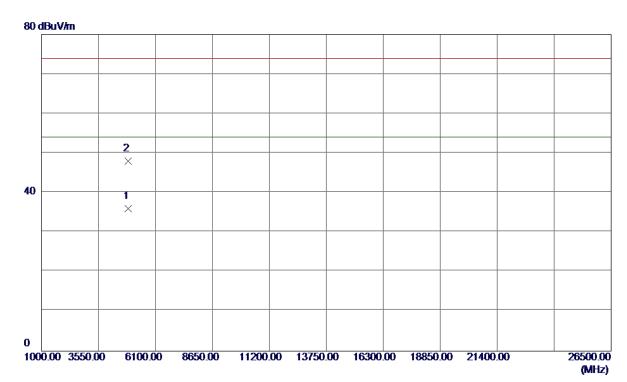
No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2434. 1000	67. 01	34. 13	101. 14	74.00	27. 14	Peak	No Limit
2 *	2439. 6000	58. 53	34. 16	92. 69	54. 00	38. 69	AVG	No Limit

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Horizontal



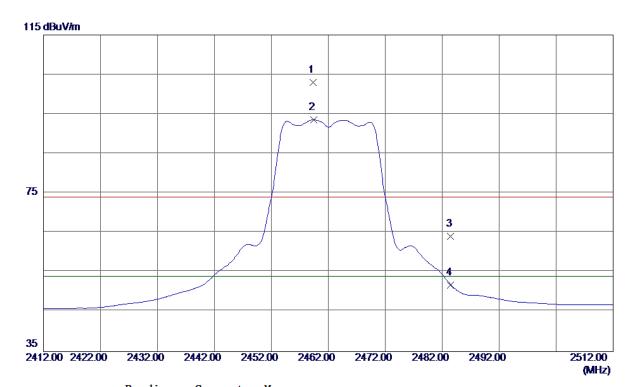
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874. 3210	30. 95	5. 07	36. 02	54.00	-17. 98	AVG	
2	4874. 4250	42. 94	5. 07	48. 01	74. 00	-25. 99	Peak	

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Vertical



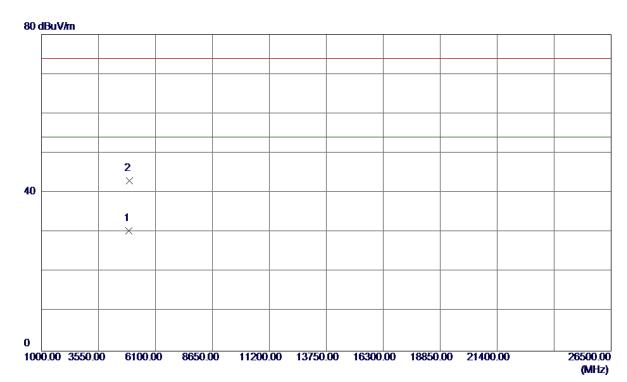
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2459. 3000	68. 69	34. 28	102. 97	74.00	28. 97	Peak	No Limit
2 *	2459. 4000	59. 26	34. 28	93. 54	54.00	39. 54	AVG	No Limit
3	2483. 5000	29. 75	34. 41	64. 16	74.00	-9.84	Peak	
4	2483. 5000	17. 46	34. 41	51. 87	54.00	-2. 13	AVG	

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Vertical



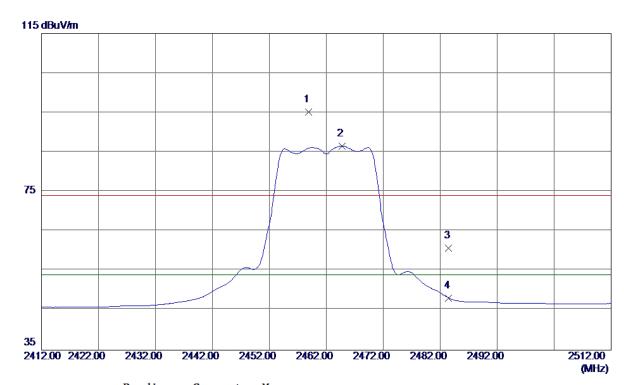
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4923. 9850	25. 06	5. 28	30. 34	54.00	-23. 66	AVG	
2	4924. 7330	37. 83	5. 28	43. 11	74. 00	-30. 89	Peak	

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Horizontal



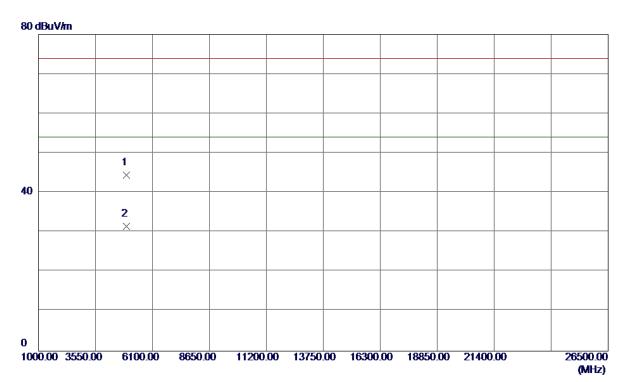
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2458. 9000	60. 82	34. 27	95. 09	74.00	21. 09	Peak	No Limit
2 *	2464. 8000	52. 25	34. 31	86. 56	54.00	32. 56	AVG	No Limit
3	2483. 5000	26. 31	34. 41	60. 72	74.00	-13. 28	Peak	
4	2483. 5000	13. 73	34. 41	48. 14	54.00	-5. 86	AVG	

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Horizontal



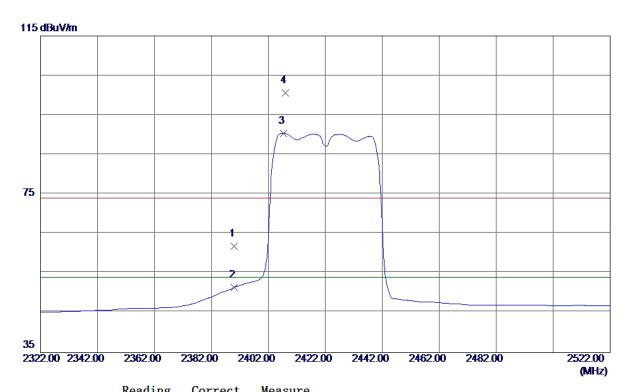
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4924. 4740	39. 13	5. 28	44. 41	74.00	-29. 59	Peak	
2 *	4924. 8540	26. 20	5. 28	31. 48	54. 00	-22. 52	AVG	

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Vertical



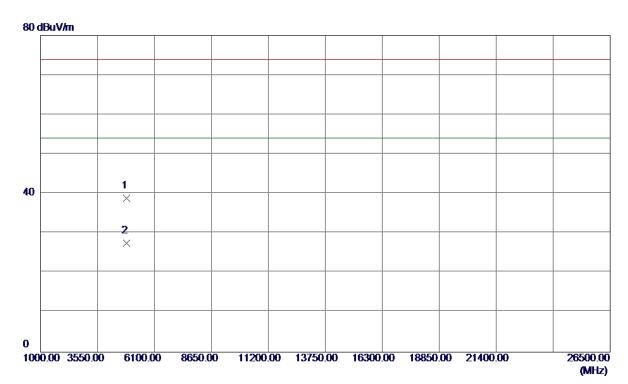
No.	Freq.	Reading Level	Factor	measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	28. 01	33. 88	61. 89	74.00	-12. 11	Peak	
2	2390. 0000	17. 58	33. 88	51. 46	54.00	-2.54	AVG	
3 *	2407. 4000	56. 43	33. 98	90. 41	54.00	36. 41	AVG	No Limit
4	2408. 0000	66. 61	33. 98	100. 59	74.00	26. 59	Peak	No Limit

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Vertical



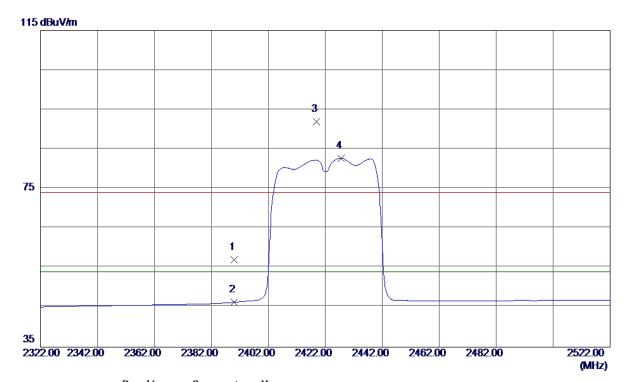
No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4841. 7150	33. 98	4. 93	38. 91	74.00	-35. 09	Peak	
2 *	4843. 8950	22. 53	4. 94	27. 47	54. 00	-26. 53	AVG	

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Horizontal



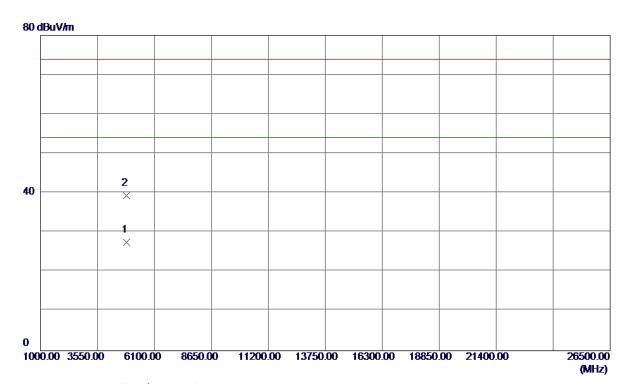
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	23. 16	33. 88	57. 04	74.00	-16. 96	Peak	
2	2390. 0000	12. 44	33. 88	46. 32	54.00	-7. 68	AVG	
3	2418. 8000	57. 90	34. 04	91. 94	74.00	17. 94	Peak	No Limit
4 *	2427. 6000	48. 64	34. 09	82. 73	54.00	28. 73	AVG	No Limit

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Horizontal



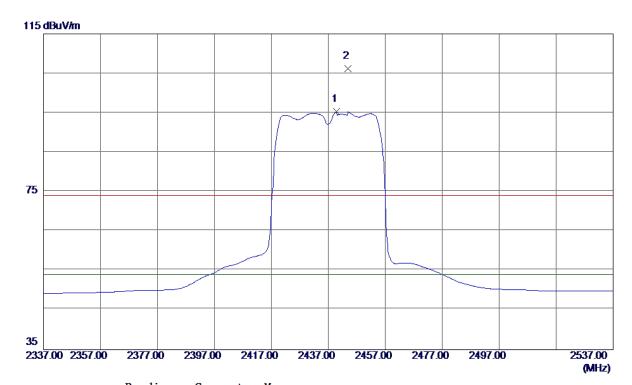
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4843. 9700	22. 61	4. 94	27. 55	54.00	-26. 45	AVG	
2	4844. 6720	34. 40	4. 94	39. 34	74.00	-34. 66	Peak	

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Vertical



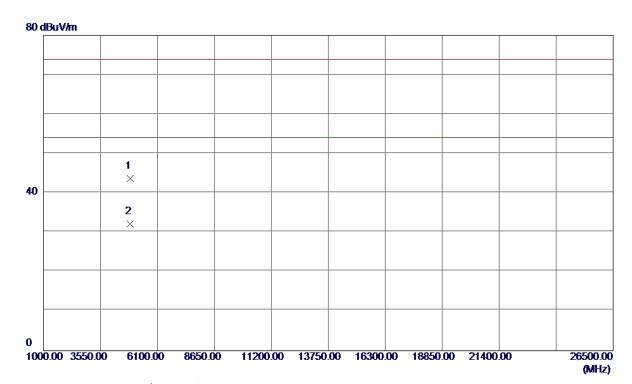
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2439. 8000	61. 09	34. 16	95. 25	54.00	41. 25	AVG	No Limit
2	2443. 8000	72. 05	34. 19	106. 24	74.00	32. 24	Peak	No Limit

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Vertical



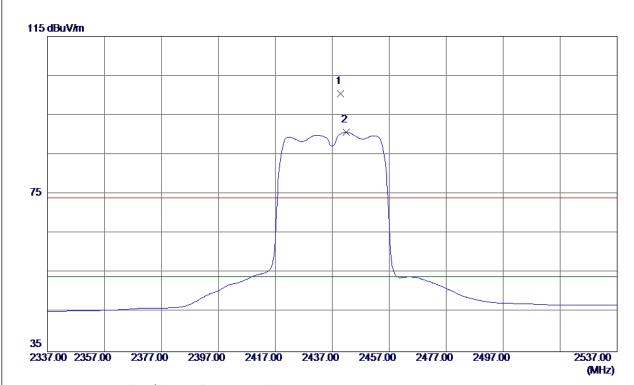
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4870. 2500	38. 64	5. 05	43. 69	74.00	-30. 31	Peak	
2 *	4874. 1500	27. 06	5. 07	32. 13	54.00	-21.87	AVG	

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Horizontal



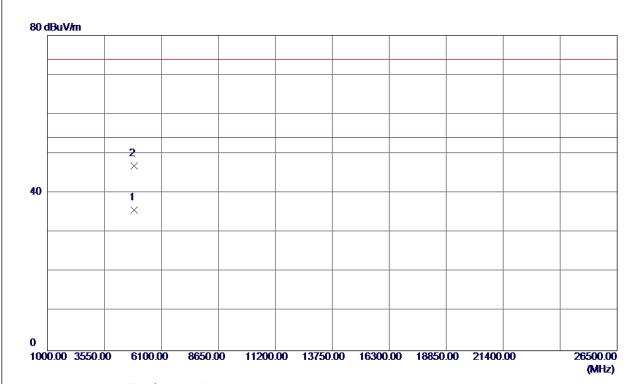
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2439. 8000	66. 23	34. 16	100. 39	74.00	26. 39	Peak	No Limit
2 *	2441. 8000	56. 45	34. 17	90. 62	54.00	36. 62	AVG	No Limit

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Horizontal



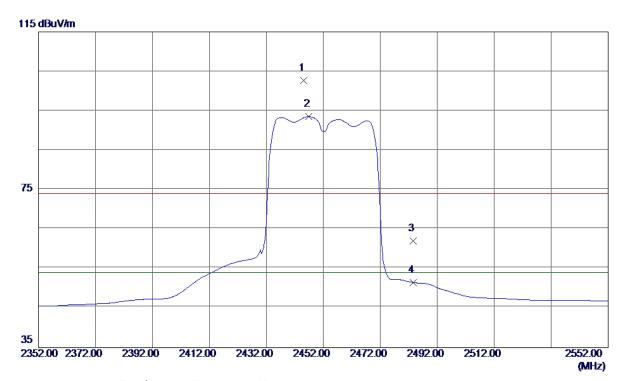
No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874. 5000	30. 68	5. 07	35. 75	54.00	-18. 25	AVG	
2	4879. 6000	41.81	5. 09	46. 90	74.00	-27. 10	Peak	

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Vertical



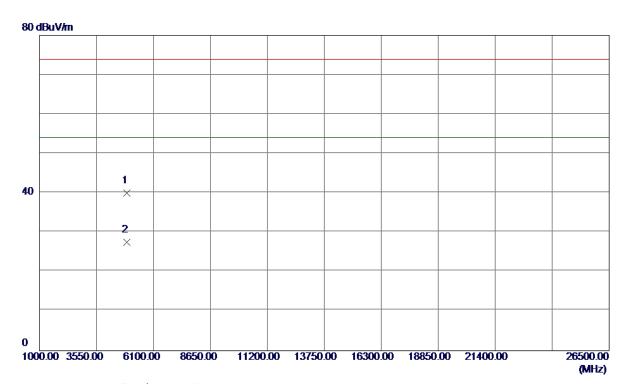
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2445. 2000	68. 52	34. 19	102. 71	74.00	28. 71	Peak	No Limit
2 *	2446. 8000	59. 34	34. 20	93. 54	54.00	39. 54	AVG	No Limit
3	2483. 5000	27. 58	34. 41	61. 99	74.00	-12. 01	Peak	
4	2483. 5000	17. 07	34. 41	51. 48	54.00	-2. 52	AVG	

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Vertical



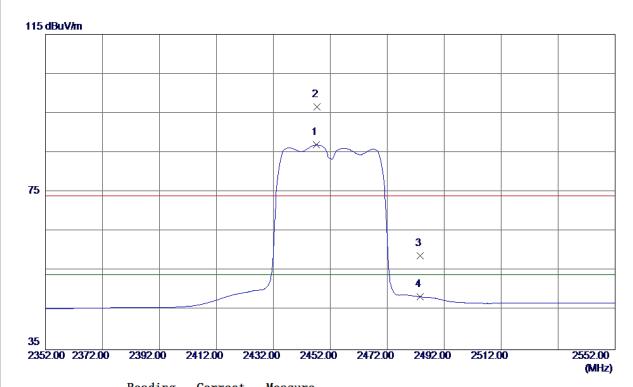
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4904. 3500	34. 80	5. 19	39. 99	74.00	-34. 01	Peak	
2 *	4904. 5500	22. 25	5. 20	27. 45	54.00	-26. 55	AVG	

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Horizontal



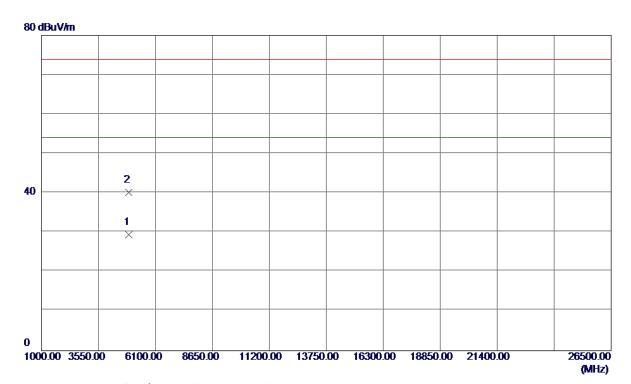
No.	Freq.	keading Level	Factor	measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2447. 2000	52. 73	34. 21	86. 94	54.00	32. 94	AVG	No Limit
2	2447. 4000	62. 35	34. 21	96. 56	74.00	22. 56	Peak	No Limit
3	2483. 5000	24. 45	34. 41	58. 86	74.00	-15. 14	Peak	
4	2483. 5000	13. 99	34. 41	48. 40	54.00	-5. 60	AVG	

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Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4904. 2000	24. 26	5. 19	29. 45	54.00	-24. 55	AVG	
2	4906. 1000	34. 94	5. 20	40. 14	74.00	-33. 86	Peak	

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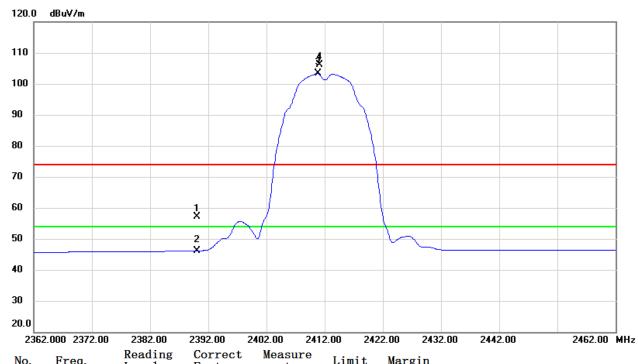




ANT 2

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

Vertical



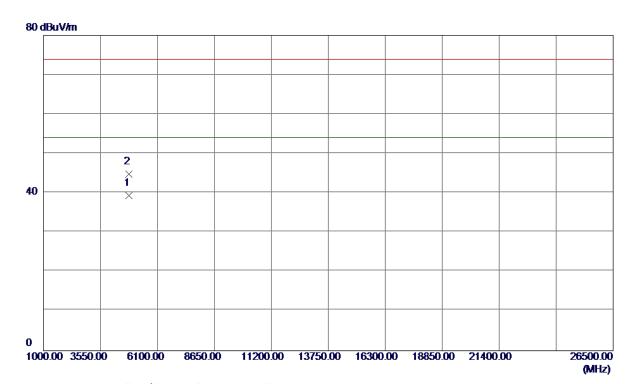
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	23. 37	33. 88	57. 25	74.00	-16. 75	Peak	
2	2390. 0000	12. 30	33. 88	46. 18	54.00	-7. 82	AVG	
3 *	2410.8000	69. 32	34. 00	103. 32	54.00	49. 32	AVG	No Limit
4	2411. 2000	72. 22	34. 00	106. 22	74. 00	32. 22	Peak	No Limit

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Vertical



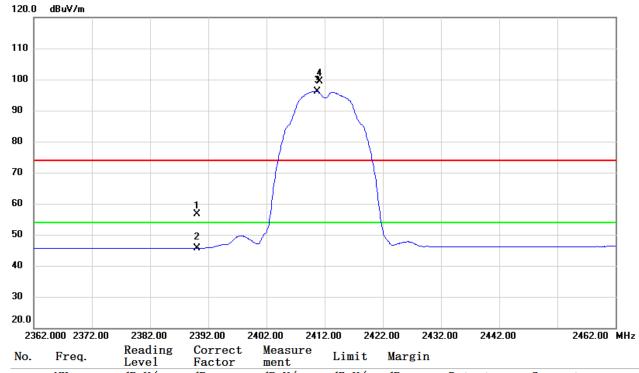
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4823. 9850	34. 44	4. 85	39. 29	54.00	-14. 71	AVG	
2	4823. 9880	39. 96	4. 85	44. 81	74. 00	-29. 19	Peak	

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Horizontal



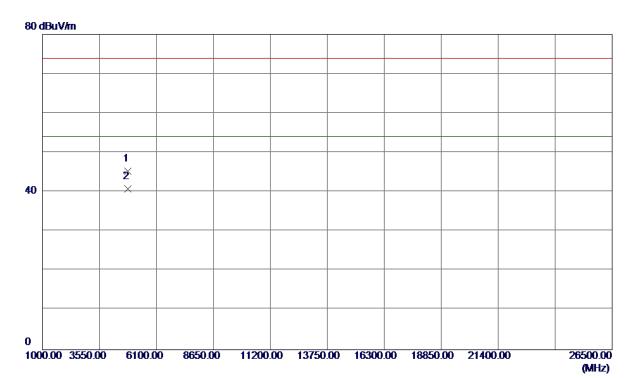
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	22. 70	33. 88	56. 58	74.00	-17. 42	Peak	
2	2390. 0000	11. 85	33. 88	45. 73	54.00	-8. 27	AVG	
3 *	2410. 7000	62. 19	34. 00	96. 19	54.00	42. 19	AVG	No Limit
4	2411. 2000	65. 35	34. 00	99. 35	74.00	25. 35	Peak	No Limit

Report No.: BTL-FCCP-3-1610C103





Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823. 8100	40. 37	4. 85	45. 22	74. 00	-28. 78	Peak	
2 *	4823, 9770	36, 01	4. 85	40, 86	54. 00	-13. 14	AVG	

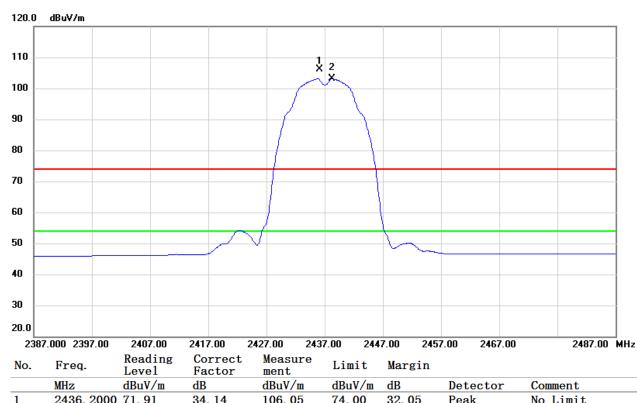
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Orthogonal Axis:	x
Test Mode :	TX B MODE 2437MHz

Vertical



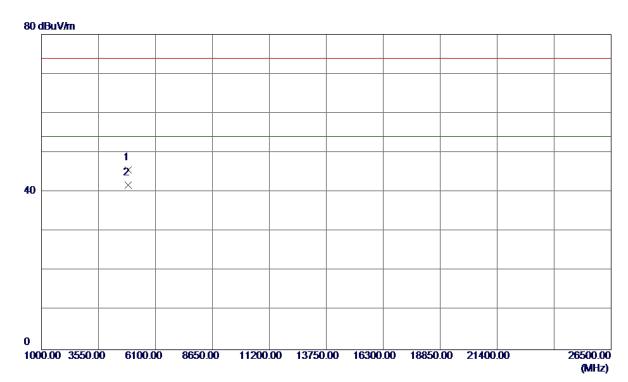
No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2436. 2000	71. 91	34. 14	106. 05	74.00	32. 05	Peak	No Limit
2 *	2438. 3000	69. 04	34. 15	103. 19	54. 00	49. 19	AVG	No Limit

Report No.: BTL-FCCP-3-1610C103





Vertical



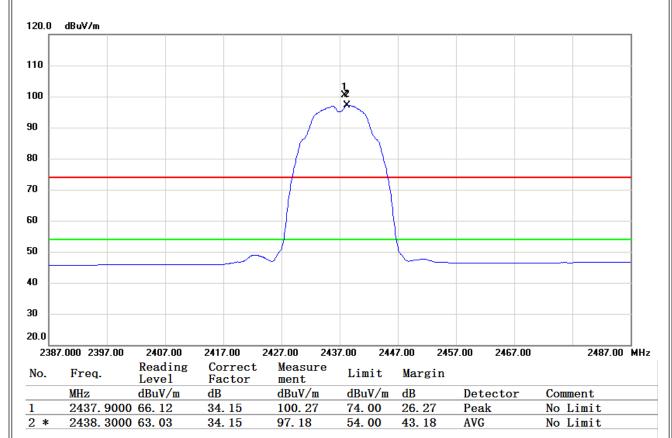
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873. 9850	40. 55	5. 07	45. 62	74.00	-28. 38	Peak	
2 *	4874. 0280	36. 62	5. 07	41. 69	54.00	-12. 31	AVG	

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Horizontal

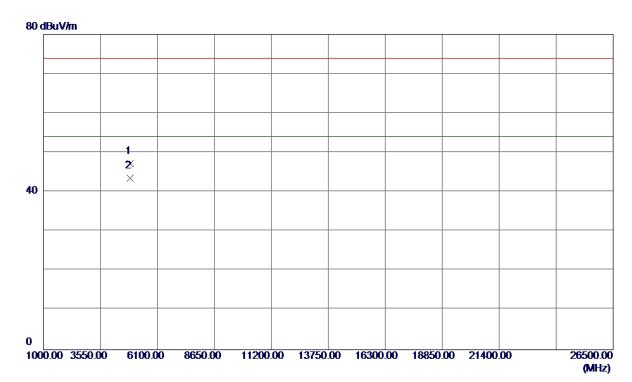


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Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873. 8630	42.06	5. 07	47. 13	74.00	-26. 87	Peak	
2 *	4874. 0280	38. 41	5. 07	43. 48	54.00	-10. 52	AVG	

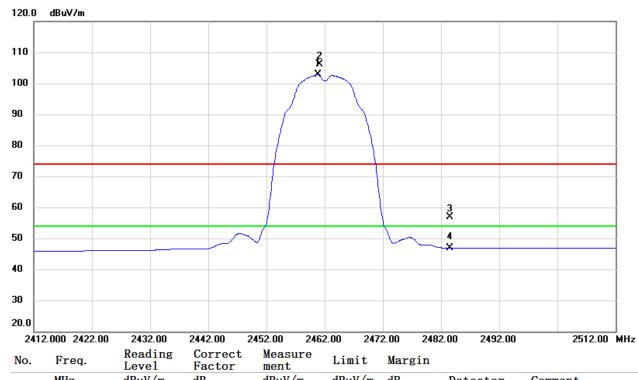
Report No.: BTL-FCCP-3-1610C103 Page 107 of 233





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

Vertical



No	-	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2460. 8000	68. 57	34. 28	102. 85	54.00	48. 85	AVG	No Limit
2		2461. 2000	71. 73	34. 29	106. 02	74. 00	32. 02	Peak	No Limit
3		2483. 5000	22. 59	34. 41	57. 00	74. 00	-17. 00	Peak	
4		2483. 5000	12. 42	34. 41	46. 83	54.00	-7. 17	AVG	

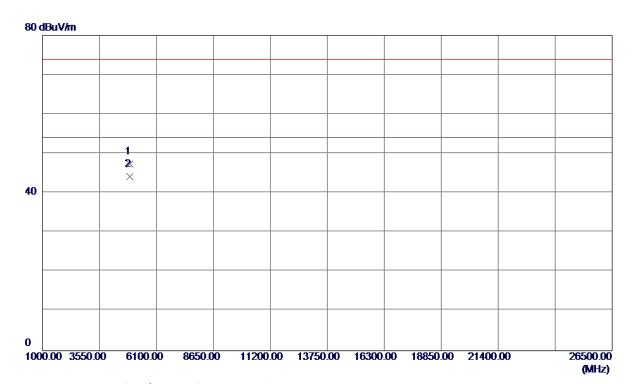
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Orthogonal Axis: X
Test Mode: TX B MODE 2462MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923. 8630	42.05	5. 28	47. 33	74.00	-26. 67	Peak	
2 *	4923. 9800	38. 91	5. 28	44. 19	54.00	-9. 81	AVG	

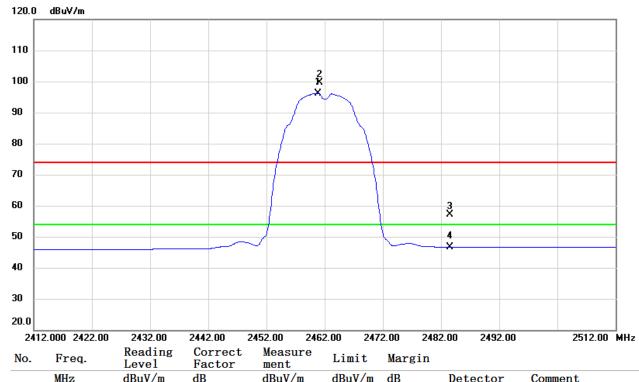
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Orthogonal Axis: X
Test Mode: TX B MODE 2462MHz

Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2460. 8000	61. 97	34. 28	96. 25	54.00	42. 25	AVG	No Limit
2	2461. 2000	65. 29	34. 29	99. 58	74.00	25. 58	Peak	No Limit
3	2483. 5000	22. 79	34. 41	57. 20	74.00	-16. 80	Peak	
4	2483. 5000	12. 15	34. 41	46. 56	54.00	-7. 44	AVG	

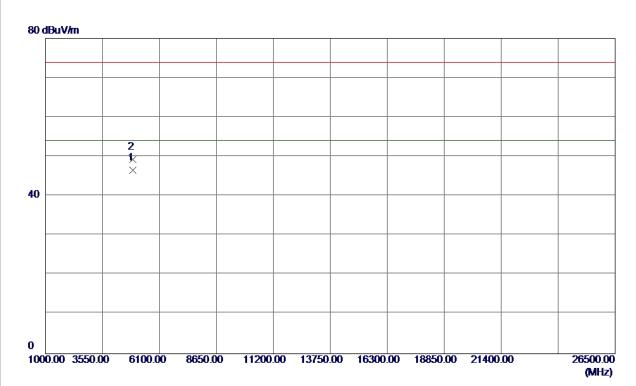
Report No.: BTL-FCCP-3-1610C103





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

Horizontal



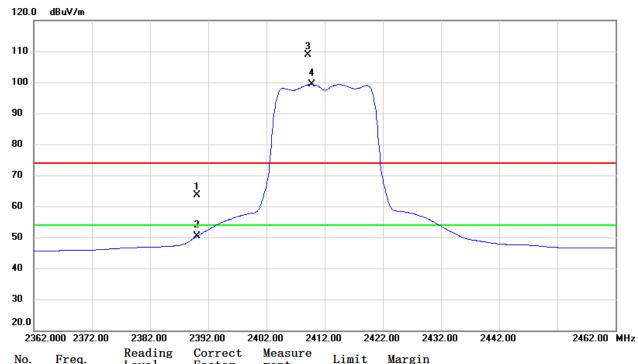
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4923. 9830	41. 25	5. 28	46. 53	54.00	-7. 47	AVG	
2	4924. 0550	43. 94	5. 28	49. 22	74.00	-24. 78	Peak	

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



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	29. 79	33. 88	63. 67	74.00	-10. 33	Peak	
2	2390. 0000	16. 44	33. 88	50. 32	54.00	-3. 68	AVG	
3	2409. 2000	74. 85	33. 99	108. 84	74.00	34. 84	Peak	No Limit
4 *	2409. 8000	65. 34	33. 99	99. 33	54. 00	45. 33	AVG	No Limit

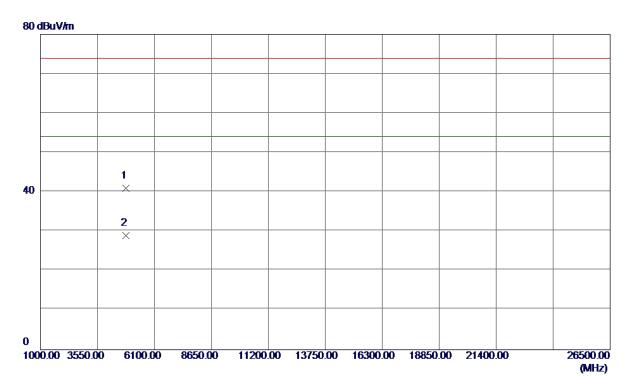
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Orthogonal Axis: X
Test Mode: TX G MODE 2412MHz

Vertical



No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4824. 0170	36. 10	4. 85	40. 95	74.00	-33. 05	Peak	
2 *	4824. 1180	24. 08	4. 85	28. 93	54.00	-25.07	AVG	

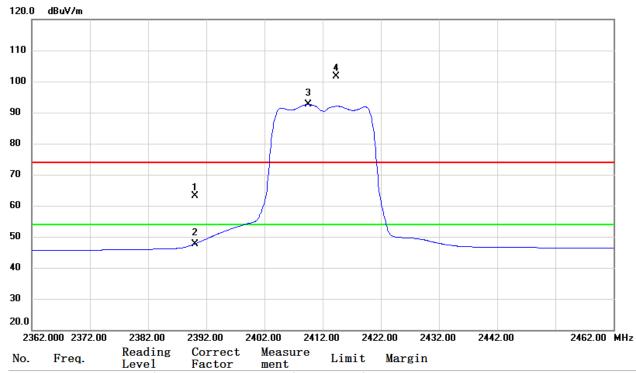
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Orthogonal Axis: X
Test Mode: TX G MODE 2412MHz

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	29. 23	33. 88	63. 11	74.00	-10.89	Peak	
2	2390.0000	13. 84	33. 88	47. 72	54.00	-6. 28	AVG	
3 *	2409. 5000	58. 62	33. 99	92. 61	54.00	38. 61	AVG	No Limit
4	2414. 3000	67. 67	34. 02	101. 69	74.00	27. 69	Peak	No Limit

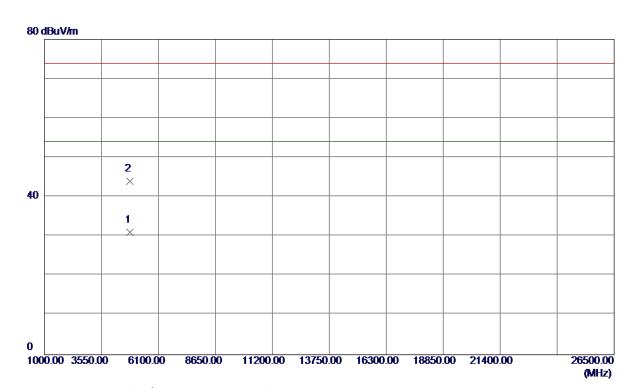
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Orthogonal Axis: X
Test Mode: TX G MODE 2412MHz

Horizontal



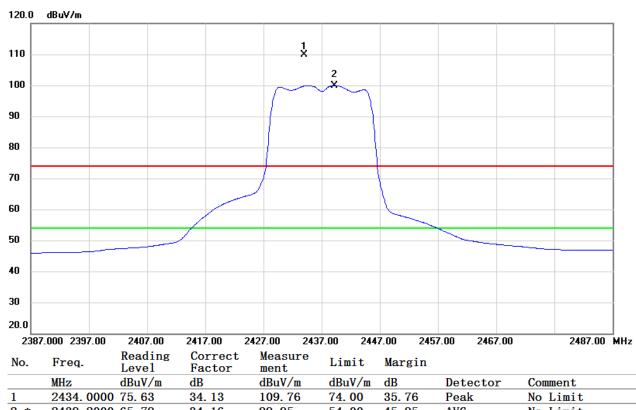
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4823. 7670	26. 15	4. 85	31. 00	54.00	-23. 00	AVG	
2	4824. 3650	39. 15	4. 86	44. 01	74.00	-29. 99	Peak	

Report No.: BTL-FCCP-3-1610C103 Page 115 of 233





Orthogonal Axis:	x
Test Mode :	TX G MODE 2437MHz



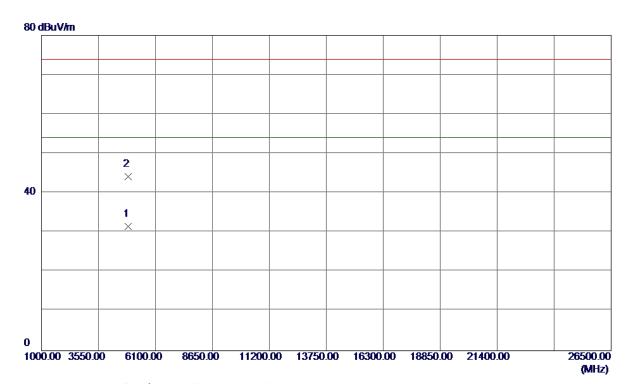
	.000 L001.00	2101.00	L	E1.00	.00		.00 2.01.00	E TOT TOT
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2434. 0000	75. 63	34. 13	109. 76	74.00	35. 76	Peak	No Limit
2 *	2439. 2000	65. 79	34. 16	99. 95	54. 00	45. 95	AVG	No Limit

Report No.: BTL-FCCP-3-1610C103 Page 116 of 233





Vertical



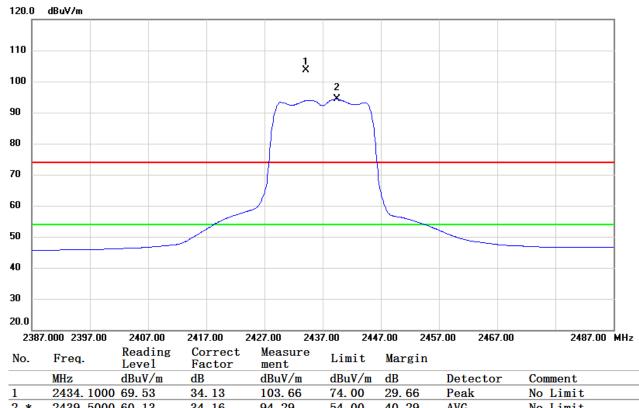
No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874. 2000	26. 38	5. 07	31. 45	54.00	-22. 55	AVG	
2	4875. 6349	39. 14	5. 07	44. 21	74.00	-29. 79	Peak	

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Horizontal



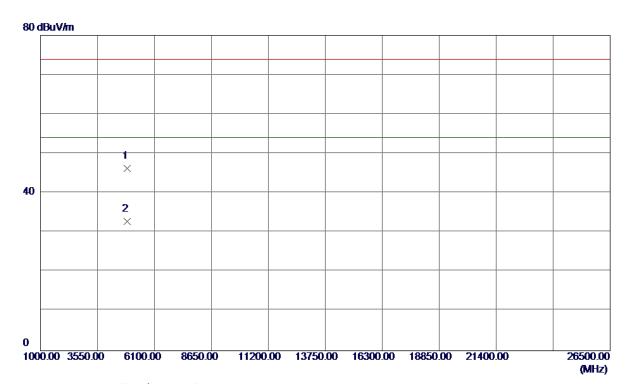
No.	Freq.	Leve1	Factor	ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2434. 1000	69. 53	34. 13	103.66	74.00	29. 66	Peak	No Limit
2 *	2439. 5000	60. 13	34. 16	94. 29	54.00	40. 29	AVG	No Limit

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Horizontal



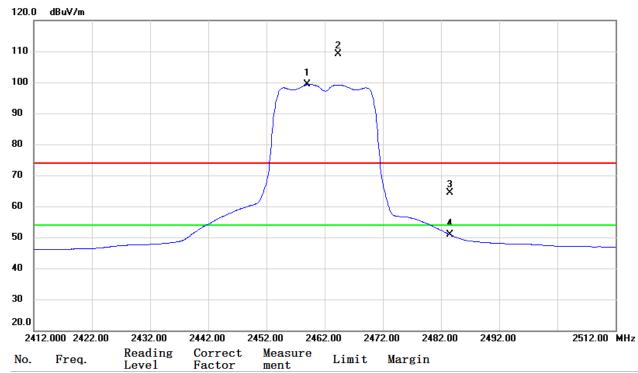
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873. 5870	41. 13	5. 06	46. 19	74.00	-27. 81	Peak	
2 *	4874. 0280	27. 79	5. 07	32. 86	54.00	-21. 14	AVG	

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



No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2459. 0000	65. 10	34. 27	99. 37	54.00	45. 37	AVG	No Limit
2	2464. 3000	74. 89	34. 30	109. 19	74. 00	35. 19	Peak	No Limit
3	2483. 5000	29. 95	34. 41	64. 36	74. 00	-9. 64	Peak	
4	2483. 5000	16. 50	34. 41	50. 91	54. 00	-3. 09	AVG	

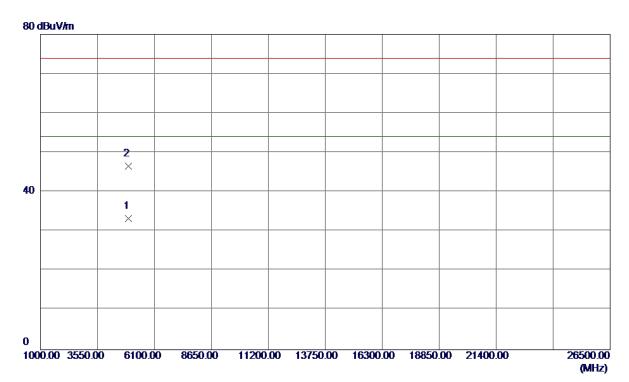
Report No.: BTL-FCCP-3-1610C103 Page 120 of 233





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

Vertical



No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924. 2480	28. 07	5. 28	33. 35	54.00	-20.65	AVG	
2	4924. 3180	41. 34	5. 28	46. 62	74. 00	-27. 38	Peak	

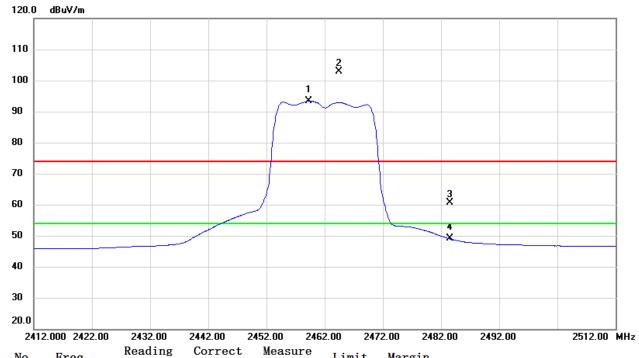
Report No.: BTL-FCCP-3-1610C103 Page 121 of 233





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

Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2459. 3000	59. 11	34. 28	93. 39	54.00	39. 39	AVG	No Limit
2	2464. 4000	68. 52	34. 30	102. 82	74. 00	28. 82	Peak	No Limit
3	2483. 5000	26. 16	34. 41	60. 57	74.00	-13. 43	Peak	
4	2483. 5000	14. 60	34. 41	49. 01	54.00	-4.99	AVG	

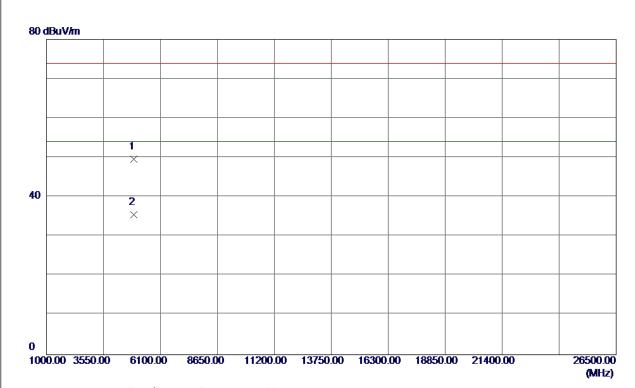
Report No.: BTL-FCCP-3-1610C103 Page 122 of 233





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

Horizontal



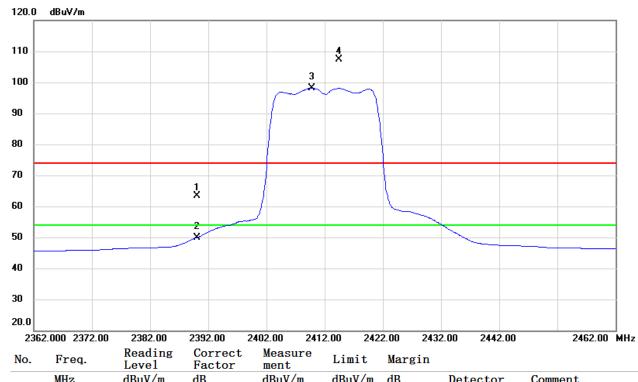
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923. 4000	44. 24	5. 28	49. 52	74.00	-24. 48	Peak	
2 *	4923. 9750	30. 24	5. 28	35. 52	54.00	-18. 48	AVG	

Report No.: BTL-FCCP-3-1610C103 Page 123 of 233





Orthogonal Axis:	x
Test Mode:	TX N-20M MODE 2412MHz



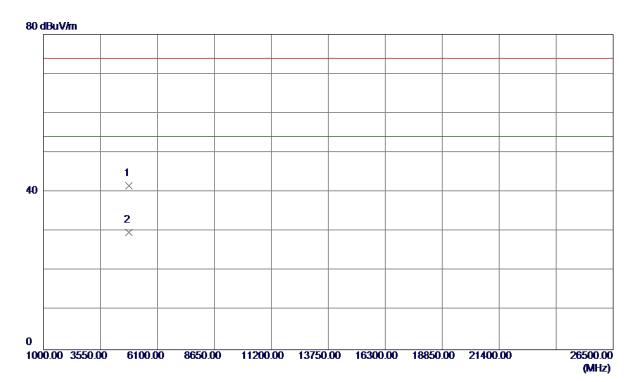
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	29. 54	33. 88	63. 42	74.00	-10. 58	Peak	
2	2390.0000	16. 04	33. 88	49. 92	54.00	-4.08	AVG	
3 *	2409.8000	64. 19	33. 99	98. 18	54.00	44. 18	AVG	No Limit
4	2414. 4000	73. 37	34. 02	107. 39	74. 00	33. 39	Peak	No Limit

Report No.: BTL-FCCP-3-1610C103





Vertical



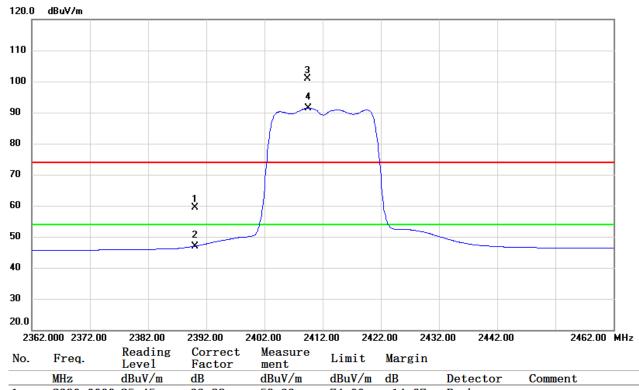
No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4822. 7300	36. 80	4. 85	41.65	74.00	-32. 35	Peak	
2 *	4823. 8870	24. 92	4. 85	29. 77	54.00	-24. 23	AVG	

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Horizontal



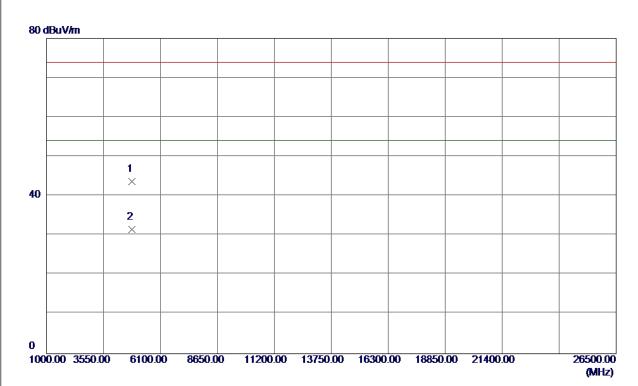
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	25. 45	33. 88	59. 33	74.00	-14. 67	Peak	
2	2390.0000	13. 12	33. 88	47. 00	54.00	−7. 00	AVG	
3	2409. 4000	66. 86	33. 99	100.85	74.00	26. 85	Peak	No Limit
4 *	2409. 5000	57. 43	33. 99	91. 42	54.00	37. 42	AVG	No Limit

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Horizontal



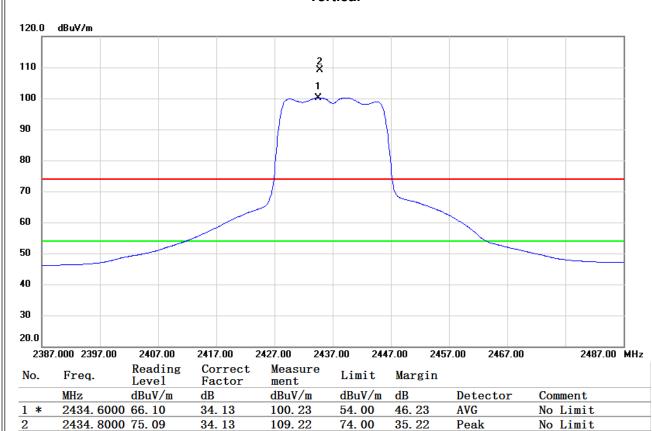
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823. 6450	38. 83	4. 85	43. 68	74.00	-30. 32	Peak	
2 *	4823. 9169	26. 67	4. 85	31. 52	54. 00	-22. 48	AVG	

Report No.: BTL-FCCP-3-1610C103 Page 127 of 233





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

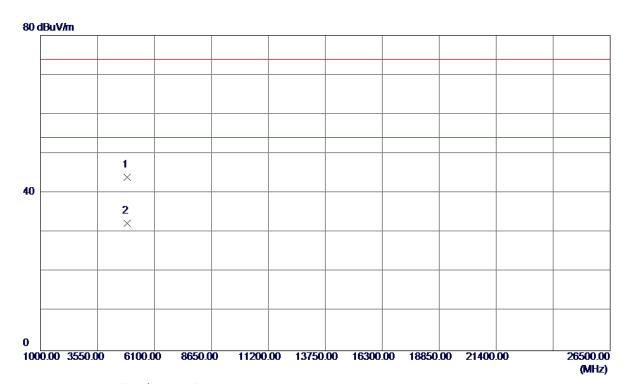


Report No.: BTL-FCCP-3-1610C103 Page 128 of 233





Vertical



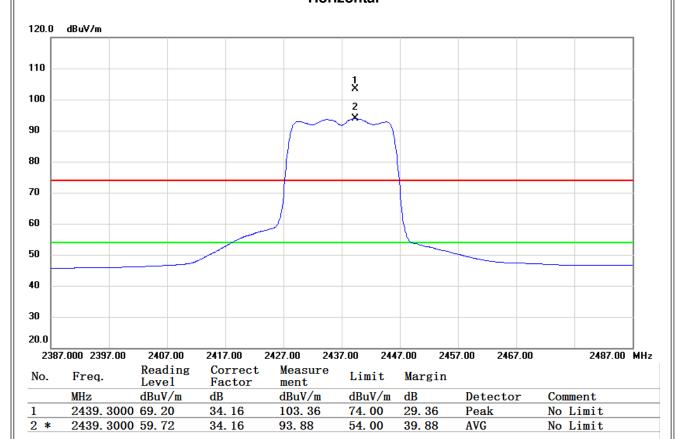
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873. 5150	38. 99	5. 06	44. 05	74.00	-29. 95	Peak	
2 *	4873. 9850	27. 32	5. 07	32. 39	54.00	-21. 61	AVG	

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Horizontal

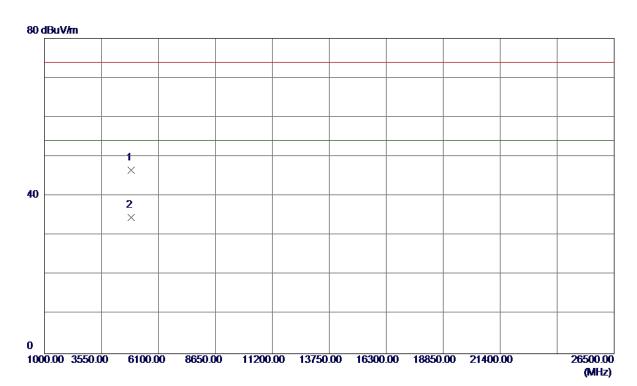


Report No.: BTL-FCCP-3-1610C103 Page 130 of 233





Horizontal



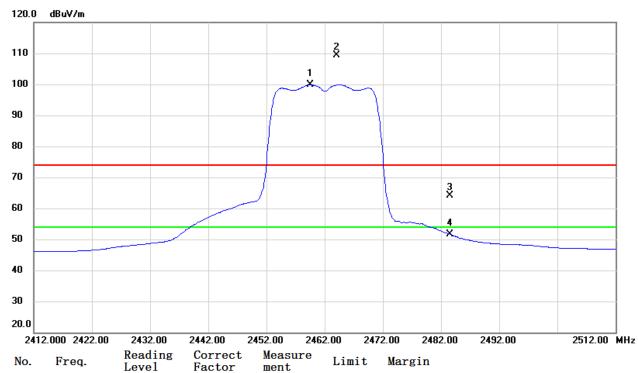
No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873. 6200	41. 52	5. 06	46. 58	74.00	-27. 42	Peak	
2 *	4874. 0000	29. 46	5. 07	34. 53	54.00	-19. 47	AVG	

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Orthogonal Axis:	x
Test Mode :	TX N-20M MODE 2462MHz



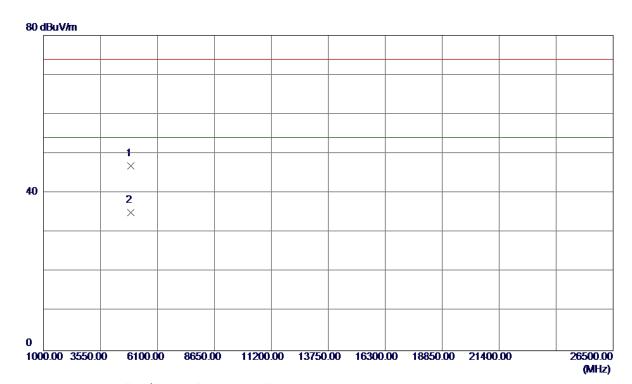
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2459.6000	65. 62	34. 28	99. 90	54.00	45. 90	AVG	No Limit
2	2464. 1000	75. 12	34. 30	109. 42	74.00	35. 42	Peak	No Limit
3	2483. 5000	29. 76	34. 41	64. 17	74.00	-9. 83	Peak	
4	2483. 5000	17. 31	34. 41	51. 72	54. 00	-2. 28	AVG	

Report No.: BTL-FCCP-3-1610C103





Vertical



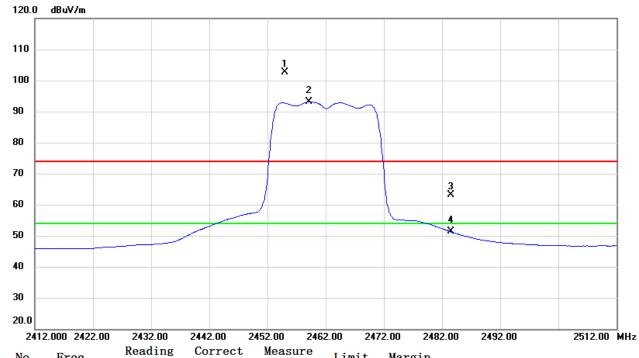
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923. 8100	41.65	5. 28	46. 93	74.00	-27. 07	Peak	
2 *	4923. 9850	29. 81	5. 28	35. 09	54.00	-18. 91	AVG	

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Horizontal



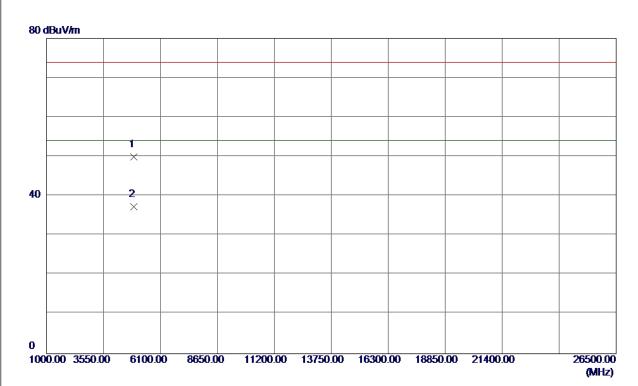
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2455. 0000	68. 32	34. 25	102. 57	74.00	28. 57	Peak	No Limit
2 *	2459. 1000	58. 91	34. 27	93. 18	54.00	39. 18	AVG	No Limit
3	2483. 5000	28. 69	34. 41	63. 10	74.00	-10. 90	Peak	
4	2483. 5000	16. 85	34. 41	51. 26	54.00	-2. 74	AVG	

Report No.: BTL-FCCP-3-1610C103





Horizontal



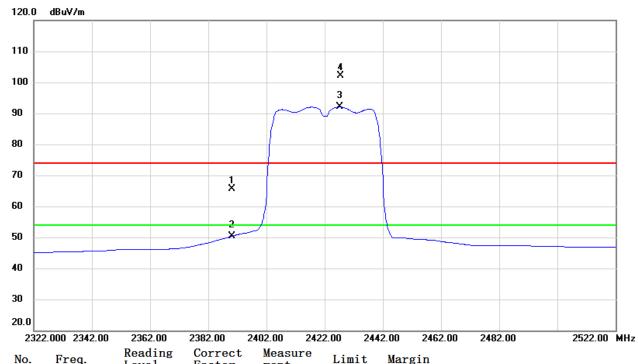
No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923. 6720	44. 66	5. 28	49. 94	74.00	-24. 06	Peak	
2 *	4923. 9880	32.00	5. 28	37. 28	54.00	-16. 72	AVG	

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



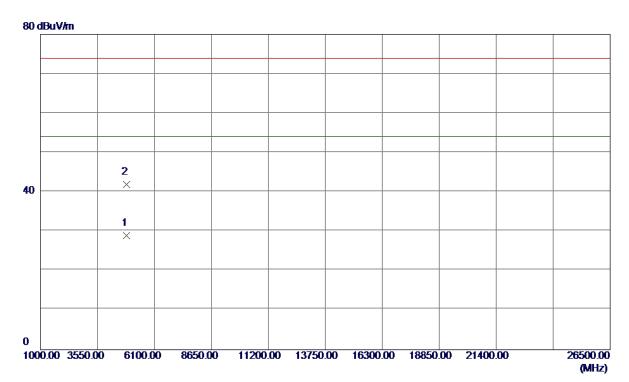
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	31. 65	33. 88	65. 53	74.00	-8. 47	Peak	
2	2390.0000	16. 47	33. 88	50. 35	54.00	-3. 65	AVG	
3 *	2427. 2000	57. 96	34. 09	92. 05	54.00	38. 05	AVG	No Limit
4	2427. 4000	67. 97	34. 09	102. 06	74. 00	28. 06	Peak	No Limit

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Vertical



No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4842. 7700	23. 96	4. 93	28. 89	54.00	-25. 11	AVG	
2	4845. 3100	36. 98	4. 94	41. 92	74. 00	-32. 08	Peak	

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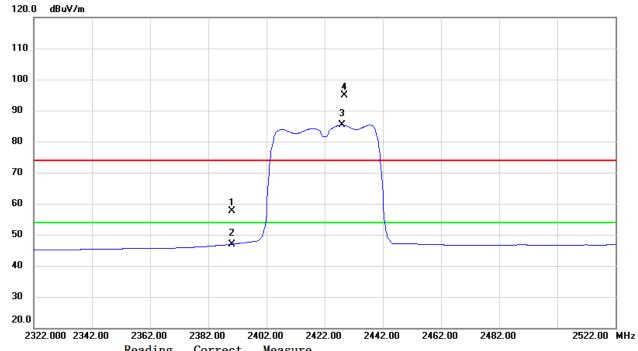




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Orthogonal Axis: X
Test Mode: TX N-40M MODE 2422MHz

Horizontal



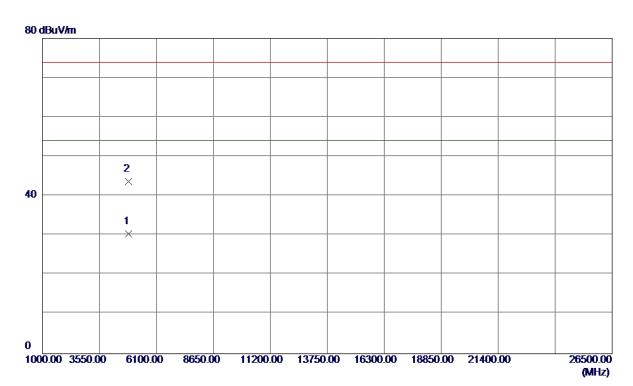
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	23. 64	33. 88	57. 52	74.00	-16. 48	Peak	
2	2390.0000	13. 08	33. 88	46. 96	54.00	−7. 04	AVG	
3 *	2428.0000	51. 22	34. 10	85. 32	54.00	31. 32	AVG	No Limit
4	2428. 8000	60. 77	34. 10	94. 87	74.00	20.87	Peak	No Limit

Report No.: BTL-FCCP-3-1610C103





Horizontal



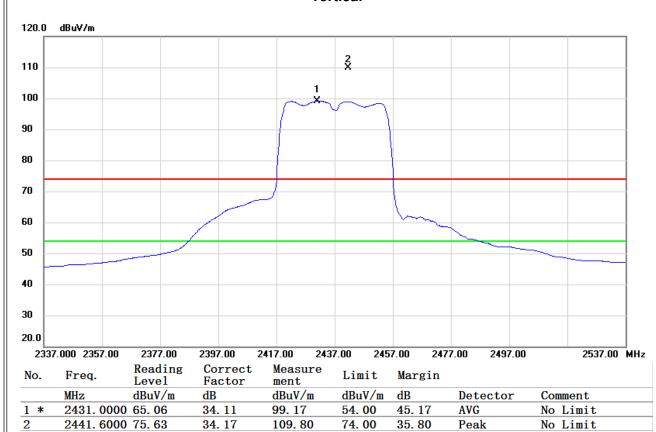
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4844. 6450	25. 39	4. 94	30. 33	54.00	-23. 67	AVG	
2	4845. 9800	38. 75	4. 95	43. 70	74. 00	-30. 30	Peak	

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Vertical

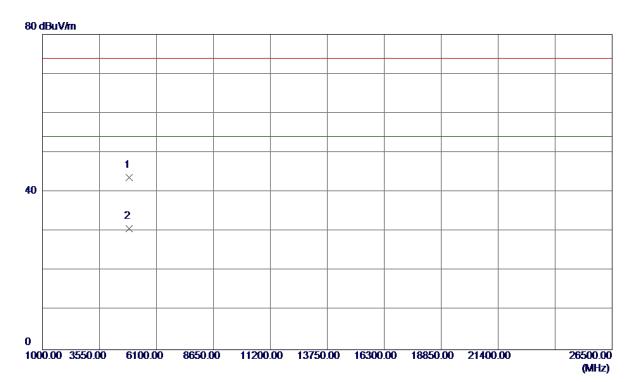


Report No.: BTL-FCCP-3-1610C103





Vertical



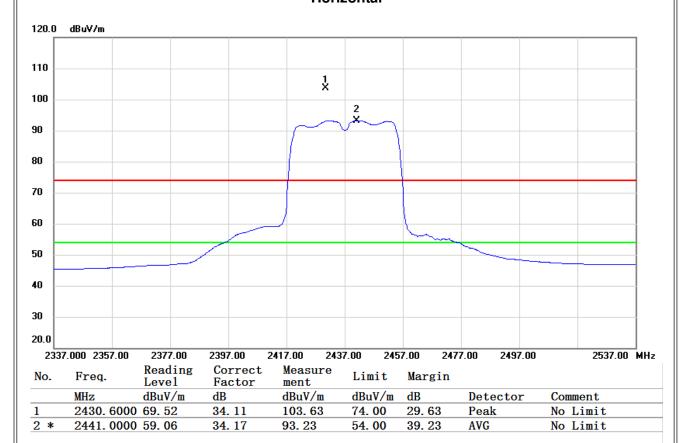
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873. 7830	38. 55	5. 06	43. 61	74.00	-30. 39	Peak	
2 *	4875. 2200	25. 66	5. 07	30. 73	54.00	-23. 27	AVG	

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Horizontal

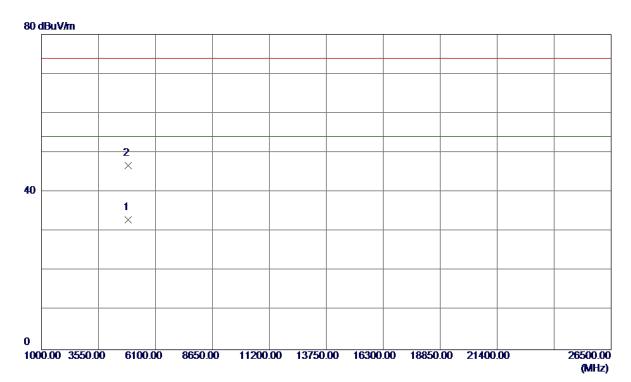


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Horizontal



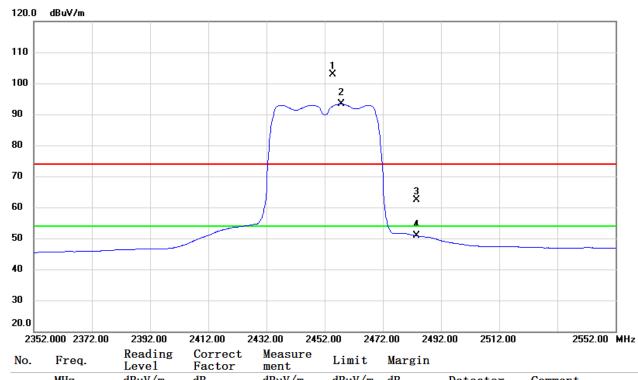
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4873. 8230	27. 92	5. 06	32. 98	54.00	-21. 02	AVG	
2	4874. 0099	41.66	5. 07	46. 73	74.00	-27. 27	Peak	

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Orthogonal Axis:	X
Test Mode :	TX N-40M MODE 2452MHz



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2454. 8000	68. 72	34. 25	102. 97	74.00	28. 97	Peak	No Limit
2 *	2457. 8000	59. 11	34. 27	93. 38	54.00	39. 38	AVG	No Limit
3	2483. 5000	28. 00	34. 41	62. 41	74.00	-11. 59	Peak	
4	2483. 5000	16. 37	34. 41	50. 78	54. 00	-3. 22	AVG	

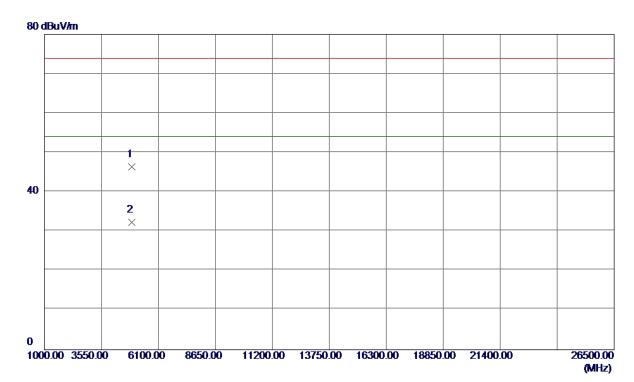
Report No.: BTL-FCCP-3-1610C103





Orthogonal Axis: X
Test Mode: TX N-40M MODE 2452MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4904. 9770	41. 19	5. 20	46. 39	74.00	-27. 61	Peak	
2 *	4905. 2200	27. 18	5. 20	32. 38	54. 00	-21. 62	AVG	

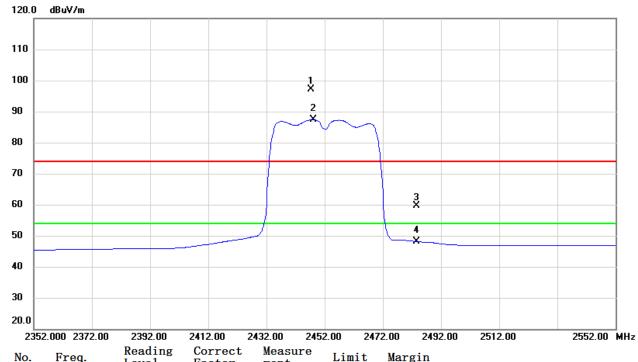
Report No.: BTL-FCCP-3-1610C103 Page 145 of 233





Orthogonal Axis: X
Test Mode: TX N-40M MODE 2452MHz

Horizontal



ľ	No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2447. 4000	63. 02	34. 21	97. 23	74.00	23. 23	Peak	No Limit
2	<u></u> *	2448. 0000	53. 17	34. 21	87. 38	54.00	33. 38	AVG	No Limit
3	}	2483. 5000	25. 15	34. 41	59. 56	74.00	-14. 44	Peak	
4	Į.	2483. 5000	13. 70	34. 41	48. 11	54.00	-5. 89	AVG	

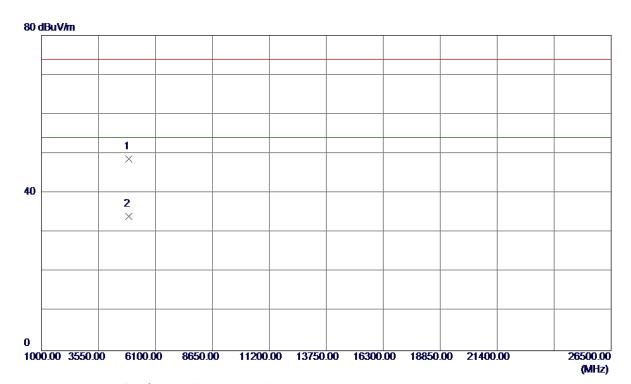
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Orthogonal Axis: X
Test Mode: TX N-40M MODE 2452MHz

Horizontal



No.	Freq.	Reading Leve1	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4905. 1050	43. 40	5. 20	48. 60	74.00	-25. 40	Peak	
2 *	4905. 2350	28. 91	5. 20	34. 11	54.00	-19.89	AVG	

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	7
ATTACHMENT E - BANDWIDTH	



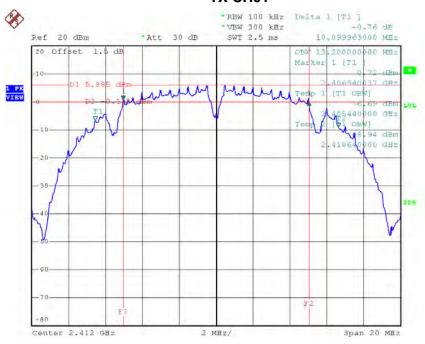


ANT 1

Test Mode: TX B Mode_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	10.10	13.2	500	Complies
2437	10.10	13.24	500	Complies
2462	10.10	13.24	500	Complies

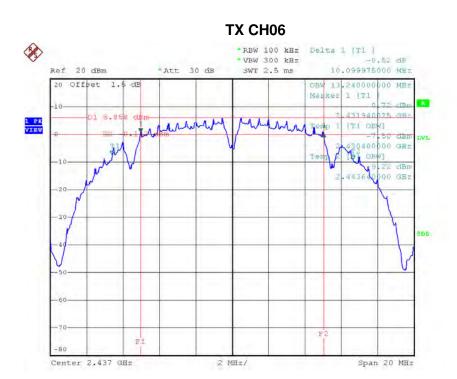
TX CH01



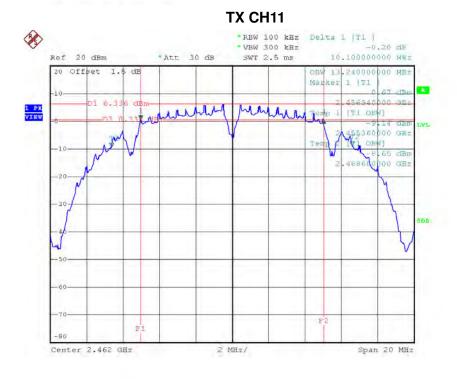
Date: 28.0CT.2016 19:20:23







Date: 28.0CT.2016 19:22:09



Date: 28.0CT.2016 19:23:50

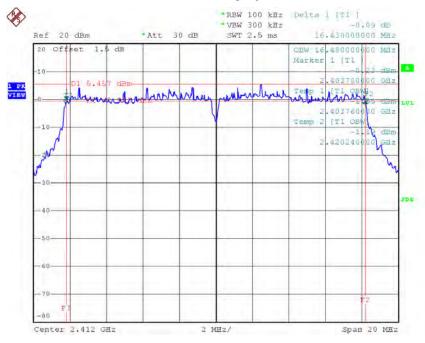




Test Mode: TX G Mode_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.43	16.48	500	Complies
2437	16.44	16.48	500	Complies
2462	16.40	16.44	500	Complies

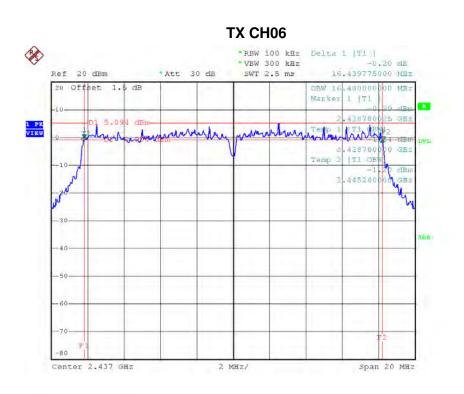
TX CH01



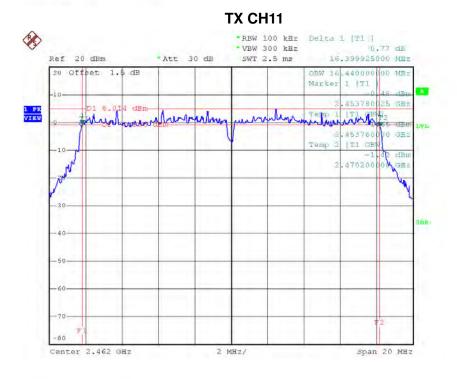
Date: 28.0CT.2016 19:25:55







Date: 28.0CT.2016 19:28:12



Date: 28.0CT.2016 19:30:43

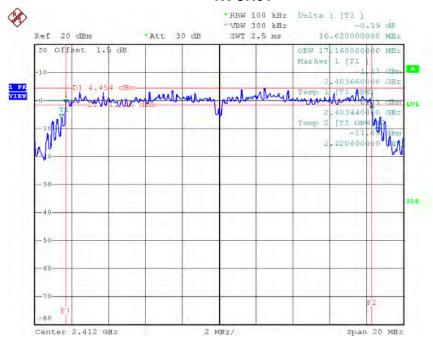




Test Mode: TX N-20MHz Mode_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.62	17.16	500	Complies
2437	16.64	17.20	500	Complies
2462	16.62	17.16	500	Complies

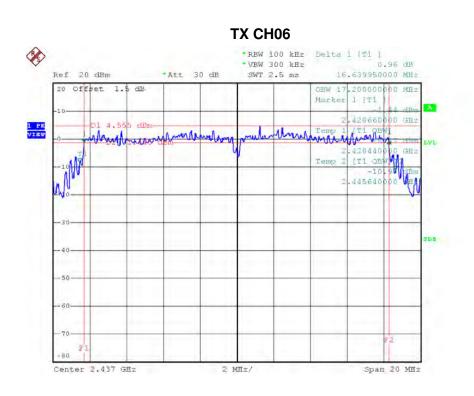
TX CH01



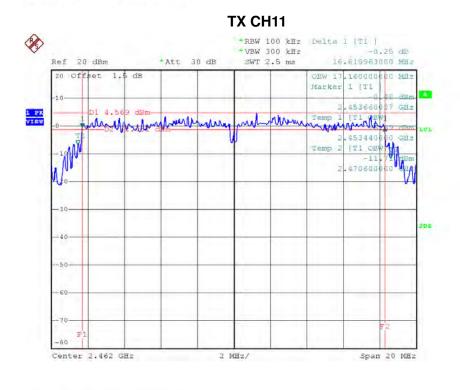
Date: 28.0CT.2016 19:32:18







Date: 28.OCT.2016 19:36:10



Date: 28.0CT.2016 19:37:26

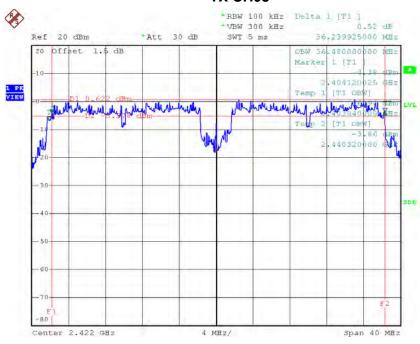




Test Mode: TX N-40MHz Mode_CH03/06/09

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	36.24	36.48	500	Complies
2437	36.24	36.40	500	Complies
2452	36.64	36.40	500	Complies

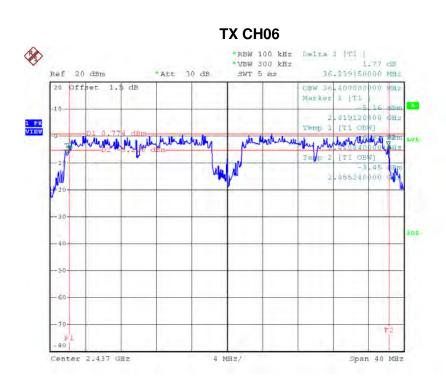
TX CH03



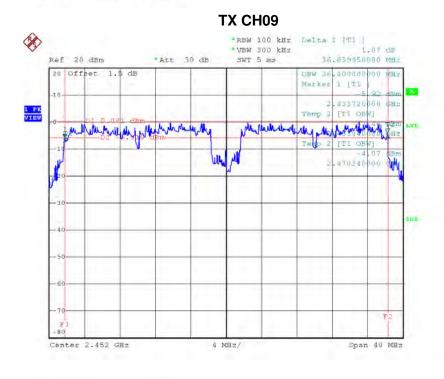
Date: 28.0CT.2016 19:39:03







Date: 28.0CT.2016 19:45:16



Date: 28.0CT.2016 19:49:08