

FCC Radio Test Report

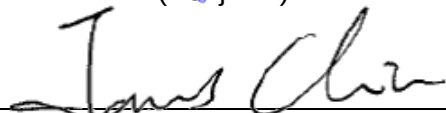
FCC ID: M82-AIM10W

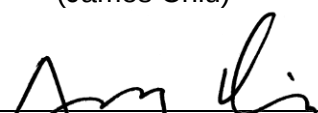
This report concerns (check one): ☒ Original Grant ☐ Class I Change ☐ Class II Change

Project No. : 1710083
Equipment : Computer
Test Model : AIM 10W
Series Model : AIM 10WXXXXXXXXXXXXXXXXXX (where X may be any alphanumeric character, blank or "-".)
Applicant : Advantech Co., Ltd.
Address : No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 11491, Taiwan, R.O.C.

Date of Receipt : Nov. 13, 2017
Date of Test : Nov. 13, 2017 ~ Feb. 27, 2018
Issued Date : Mar. 01, 2018
Tested by : BTL Inc.

Testing Engineer : 
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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-3-1710083	Original Issue.	Mar. 01, 2018

1. CERTIFICATION

Equipment : Computer
Brand Name : ADVANTECH
Test Model : AIM 10W
Series Model : AIM 10WXXXXXXXXXXXXXXXXX (where X may be any alphanumeric character , blank or "-".)
Applicant : Advantech Co., Ltd.
Manufacturer : Advantech Co., Ltd.
Address : No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 11491, Taiwan, R.O.C.
Factory : N/A
Address : N/A
Date of Test : Nov. 13, 2017 ~ Feb. 27, 2018
Test Sample : Production Unit
Standard(s) : FCC Part15, Subpart C:(15.247) / ANSI C63.10-2013

The above equipment has been tested and found in 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-3-1710083) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

Test results included in this report is only for the WIFI 2.4GHz part.

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

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

NOTE:

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

2.1 TEST FACILITY

The test facilities used to collect the test data in this report:

Conducted emission Test:

C05: (VCCI RN: C-4742; FCC RN:674415; FCC DN:TW0659)

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)

Radiated emission Test (Below 1 GHz):

CB15: (VCCI RN: G-20020; FCC RN:674415; FCC DN:TW0659; ISED Assigned Code:20088-5)

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)

Radiated emission Test (Above 1 GHz):

CB15: (VCCI RN: G-20031; FCC RN:674415; FCC DN:TW0659; ISED Assigned Code:20088-5)

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)

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 emission test:

Test Site	Method	Measurement Frequency Range	U,(dB)
C05	CISPR	150 kHz ~ 30MHz	2.68

B. Radiated emission test:

Test Site	Method	Measurement Frequency Range	U,(dB)
CB15 (3m)	CISPR	9kHz ~ 150kHz	2.82
		150kHz ~ 30MHz	2.58

Test Site	Method	Measurement Frequency Range	Ant.	U,(dB)
CB15 (3m)	CISPR	30MHz ~ 200MHz	V	4.20
		30MHz ~ 200MHz	H	3.64
		200MHz ~ 1,000MHz	V	4.56
		200MHz ~ 1,000MHz	H	3.90

Test Site	Method	Measurement Frequency Range	Ant.	U,(dB)
CB15 (3m)	CISPR	1GHz ~ 6GHz	V	4.46
		1GHz ~ 6GHz	H	4.40
		6GHz ~ 18GHz	V	3.88
		6GHz ~ 18GHz	H	4.00

Test Site	Method	Measurement Frequency Range	U,(dB)
CB15 (1m)	CISPR	18 ~ 26.5 GHz	4.62
		26.5 ~ 40 GHz	5.12

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our U_{lab} values in CISPR 16-4-2 terminology.

Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called U_{CISPR} , as follows:

Conducted Disturbance (mains port) – 150 kHz – 30 MHz: 3.6 dB

Radiated Disturbance (electric field strength on an open area test site or alternative test site) – 30 MHz – 1000 MHz: 5.2 dB

It can be seen that our U_{lab} values are smaller than U_{CISPR} .

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Computer	
Brand Name	ADVANTECH	
Test Model	AIM 10W	
Series Model	AIM 10WXXXXXXXXXXXXXXXXXX (where X may be any alphanumeric character , blank or “-”.)	
Model Difference	The market distribution is different only.	
Output Power (Max.)	Operation Frequency	2412~2462 MHz
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM
	Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 144.4 Mbps
	Output Power (Max.)	802.11b: 22.07dBm 802.11g: 24.54dBm 802.11n(20MHz): 23.61dBm
Power Source	DC Voltage supplied from AC/DC adapter.	
Power Rating	I/P: AC 100-240V~, 1.5A, 50~60Hz, 1.5A O/P: DC 19V---3.42A	
Products Covered	1 * AC Adapter: TAMURA / XEW1934N 2* Dock: 1) Desk Docking: ADVANTECH/AIM-OFD-0000 2) VESA Docking: ADVANTECH/AIM-DOC-0001	

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)							
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	Type	Connector	Frequency Range (MHz)	Gain w/ Cable loss (dBi) (peak)	Gain w/o Cable Loss (dBi) (peak)	Cable Loss (dBi) (peak)
MAIN	INPAQ	IEC 6036B0207601 WA-F-LB-02-113	PIFA	I-pex	2400-2500	0.65	1.32	0.67
					5150-5350	-0.69	0.32	1.01
					5470-5725	-0.16	0.88	1.04
					5725-5850	-0.04	1.05	1.09
AUX	INPAQ	IEC 6036B0207501 WA-F-LB-03-080-	PIFA	I-pex	2400-2500	-1.9	-1.68	0.22
					5150-5350	-0.05	0.28	0.33
					5470-5725	-0.3	0.04	0.34
					5725-5850	0.2	0.56	0.36

Note:

The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R) and employs Cyclic Delay Diversity (CDD).

In CDD mode,

For power spectral density:

Direction gain (dBi) =

$$10 \cdot \log\{[10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / N_{ANT}\} = 2.48 \text{ dBi} < 6 \text{ dBi}.$$

For conducted power:

For $N_{ANT} = 2 < 5$,

$$\text{Direction gain (dBi)} = G_{ANT} + 0 = 0.65 + 0 = 0.65$$

The Direction gain is less than 6, so conducted power limits will not be reduced.

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

3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly 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	Normal Link

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 4	Normal Link

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

Note:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
 802.11g mode: OFDM (6Mbps)
 802.11n HT20 mode : BPSK (13Mbps)
 For radiated emission tests, the highest output powers were set for final test.

3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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

Test software version	DOC		
Frequency (MHz)	2412	2437	2462
802.11b	16	16	16
802.11g	15	15	15
802.11n (20MHz)	14	14	14

3.4 DUTY CYCLE

If duty cycle is $\geq 98\%$, duty factor is not required.
If duty cycle is $< 98\%$, duty factor shall be considered.

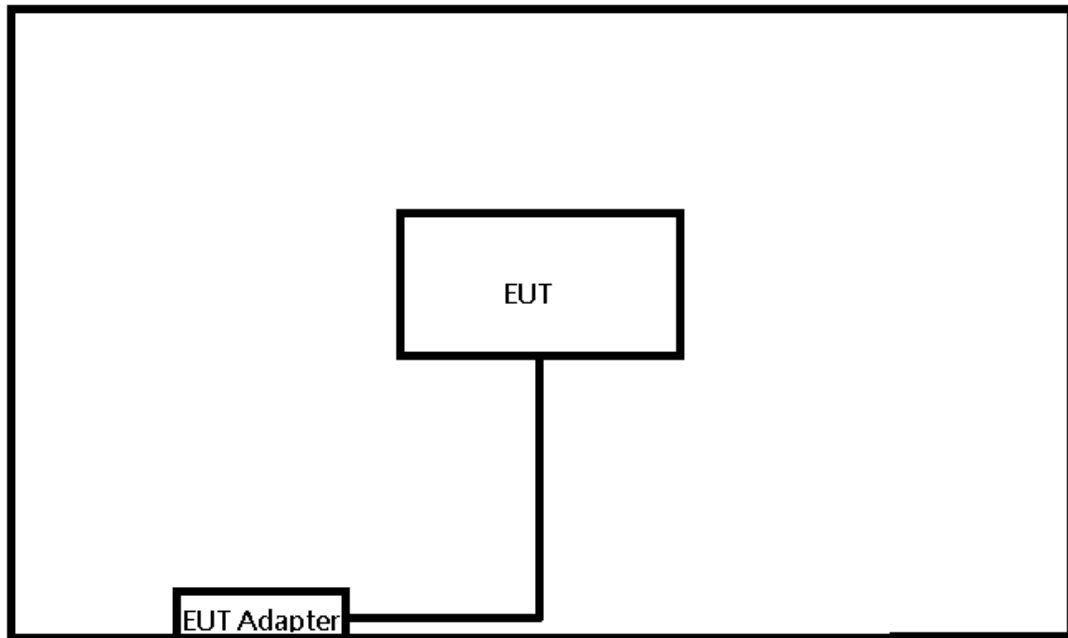
IEEE 802.11b Ref 20 dBm *Att 30 dB RBW 1 MHz Delta 2 [T1] 0.02 dB SWT 10 ms 8.540000 ms Marker 1 [T1] 7.82 dBm 820.000000 μs Delta 1 [T1] 0.02 dB 8.440000 ms Center 2.412 GHz 1 ms/ Date: 25.JAN.2018 14:14:25	IEEE 802.11g Ref 20 dBm *Att 30 dB RBW 1 MHz Delta 2 [T1] -0.03 dB SWT 5 ms 1.500000 ms Marker 1 [T1] 7.18 dBm 480.000000 μs Delta 1 [T1] -0.03 dB 1.360000 ms Center 2.412 GHz 500 μs/ Date: 25.JAN.2018 14:18:51
Duty cycle = $8.440 \text{ ms} / 8.540 \text{ ms} = 98.83\%$ Duty Factor = $10 * \log(1 / 0.9883) = 0.05$	Duty cycle = $1.360 \text{ ms} / 1.500 \text{ ms} = 90.67\%$ Duty Factor = $10 * \log(1 / 0.9067) = 0.43$
IEEE 802.11n (20 MHz) Ref 20 dBm *Att 30 dB RBW 1 MHz Delta 2 [T1] 0.10 dB SWT 5 ms 1.960000 ms Marker 1 [T1] 5.03 dBm 1.390000 ms Delta 1 [T1] 0.10 dB 1.900000 ms Center 2.412 GHz 500 μs/ Date: 25.JAN.2018 14:20:54	
Duty cycle = $1.900 \text{ ms} / 1.960 \text{ ms} = 96.94\%$ Duty Factor = $10 * \log(1 / 0.9694) = 0.14$	

Note:

For IEEE 802.11g & IEEE 802.11n (20 MHz):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle $< 98\%$).

3.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.5 DESCRIPTION OF SUPPORT UNITS

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

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.
-	-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
1	YES	NO	1.7m	Power Cable

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

Frequency of Emission (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15 -0.50	66 to 56*	56 to 46*
0. 0 -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

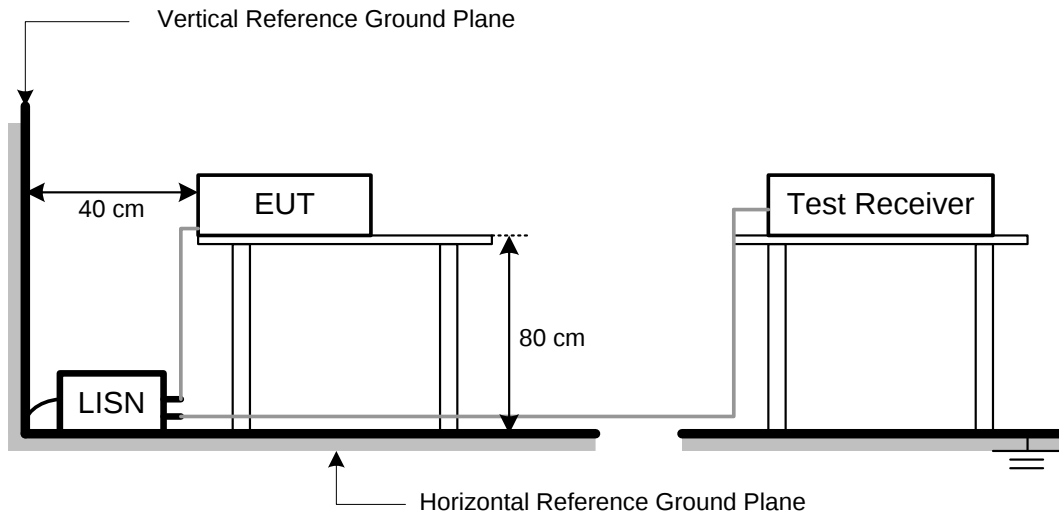
4.1.2 TEST PROCEDURE

- 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

4.1.4 TEST SETUP



4.1.5 EUT OPERATING CONDITIONS

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

4.1.6 EUT TEST CONDITIONS

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

4.1.7 TEST RESULTS

Please refer to the Appendix A.

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS

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

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

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

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

Notes:

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

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	1MHz / 3MHz for Peak, 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

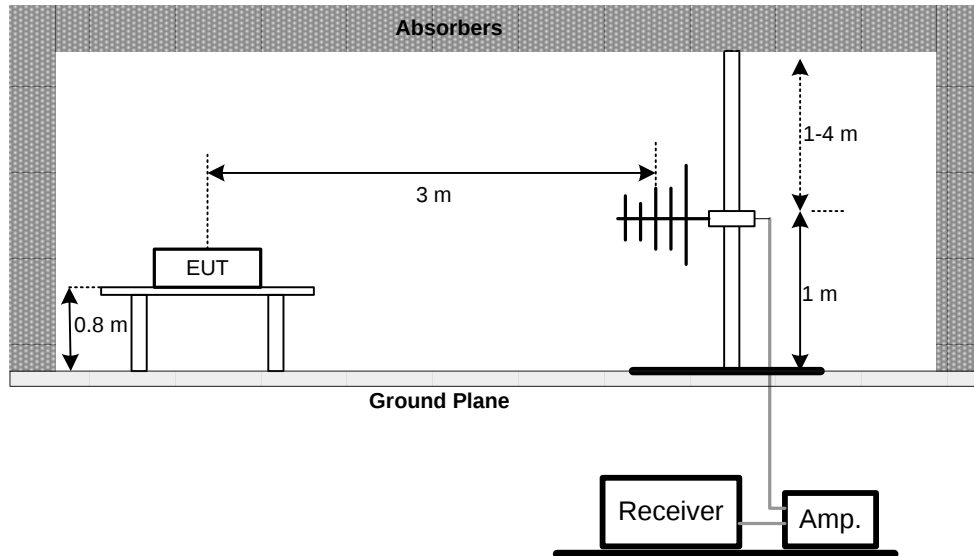
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 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)
- 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.
- 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).
- 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.
- 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.
- 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)
- 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)
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3 DEVIATION FROM TEST STANDARD

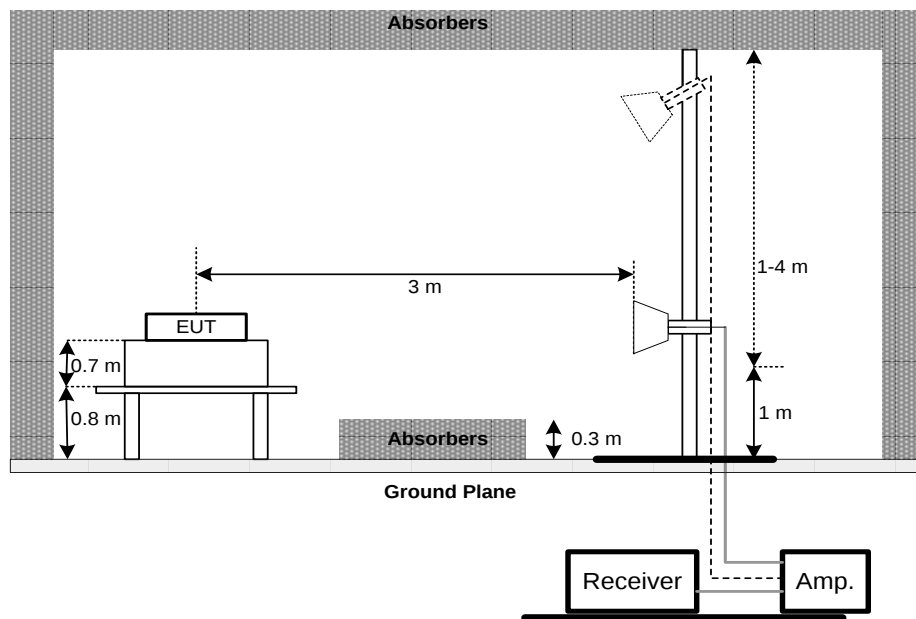
No deviation

4.2.4 TEST SETUP

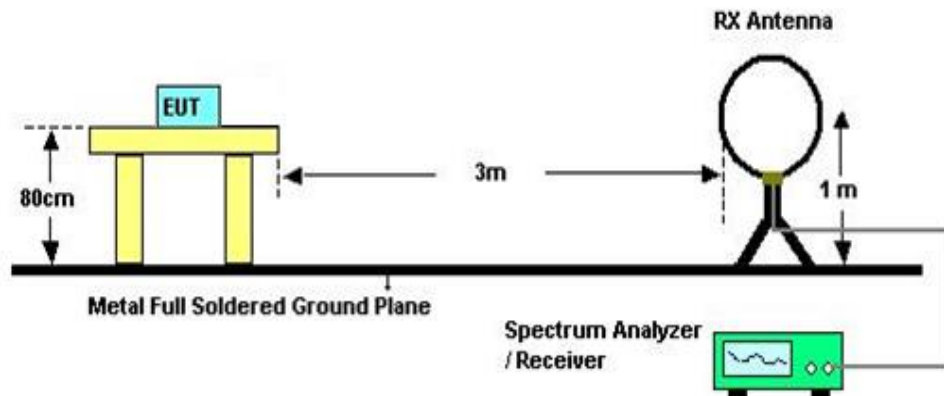
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



(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 Appendix B

Remark:

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

4.2.8 TEST RESULTS (30MHZ TO 1000 MHZ)

Please refer to the Appendix C.

4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Appendix D.

Remark:

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

5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES

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

5.1.1 TEST PROCEDURE

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

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.1.5 EUT TEST CONDITIONS

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

5.1.6 TEST RESULTS

Please refer to the Appendix E.

6. MAXIMUM 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

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- 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



6.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.1.5 EUT TEST CONDITIONS

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

6.1.6 TEST RESULTS

Please refer to the Appendix F.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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

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

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

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

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.1.5 EUT TEST CONDITIONS

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

8.1.6 TEST RESULTS

Please refer to the Appendix H.

9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TWO-LINE V-NETWORK	R&S	ENV216	101050	Jan. 24, 2019
2	Test Cable	TIMES	CFD300-NL	C02	Jun. 13, 2019
3	EMI Test Receiver	R&S	ESR7	101433	Dec. 07, 2019
4	Measurement Software	EZ	EZ EMC (Version NB-03A)	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Preamplifier	EMCI	012645B	980267	Feb. 28, 2018
2	Preamplifier	EMCI	EMC02325	980217	Dec. 27, 2019
3	Preamplifier	EMCI	EMC2654045	980030	Feb. 13, 2019
4	Test Cable	EMCI	EMC104-SM-S M-8000	8m	Jan. 03, 2019
5	Test Cable	EMCI	EMC104-SM-S M-800	150207	Jan. 03, 2019
6	Test Cable	EMCI	EEMC104-SM-S M-3000	151205	Jan. 03, 2019
7	MXE EMI Receiver	Agilent	N9038A	MY55420127	Jan. 08, 2019
8	Signal Analyzer	Agilent	N9010A	MY52220990	Feb. 21, 2019
9	Loop Ant	EMCO	6502	42960	Nov. 23, 2018
10	Horn Ant	SCHWARZBECK	BBHA 9120D	9120D-1342	Feb. 28, 2018
11	Horn Ant	Schwarzbeck	BBHA 9170	187	Dec. 05, 2019
12	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	9168-548	Jan. 15, 2019
13	5dB Attenuator	EMCI	EMCI-N-6-05	AT-N0623	Jan. 15, 2019

6dB Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	R&S/FSP30	100854	May 25, 2018

Peak Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	R&S/FSP30	100854	May 25, 2018
2	Power Meter	Anritsu	ML2495A	1128008	Aug. 16, 2018
3	Power Sensor	Anritsu	MA2411B	1126001	Aug. 16, 2018

Antenna Conducted Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	R&S/FSP30	100854	May 25, 2018

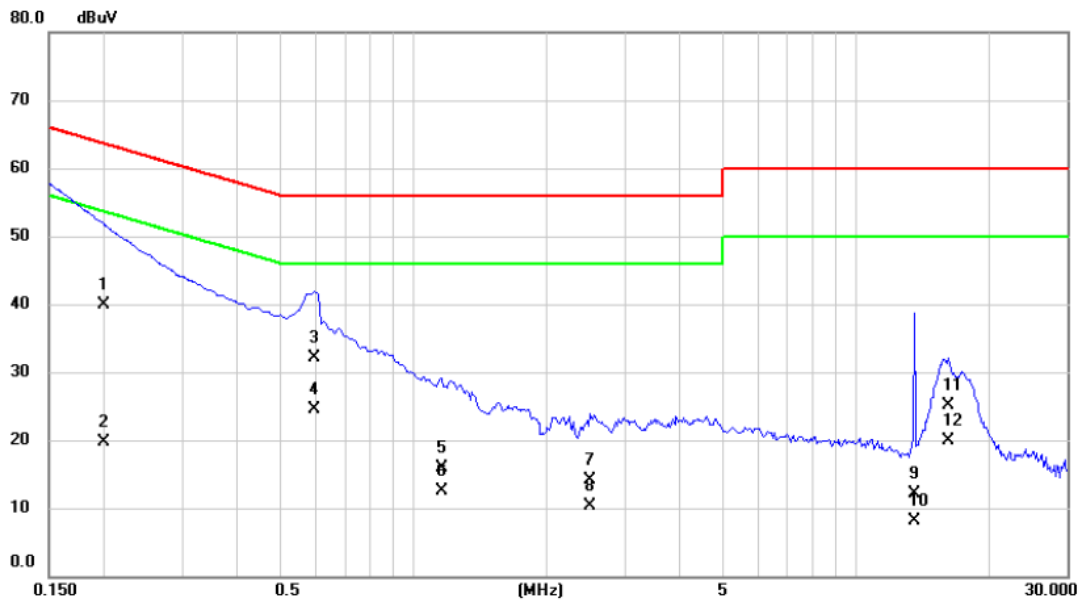
Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	R&S/FSP30	100854	May 25, 2018

Remark: "N/A" denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

APPENDIX A - CONDUCTED EMISSION

Test Mode: Normal Link

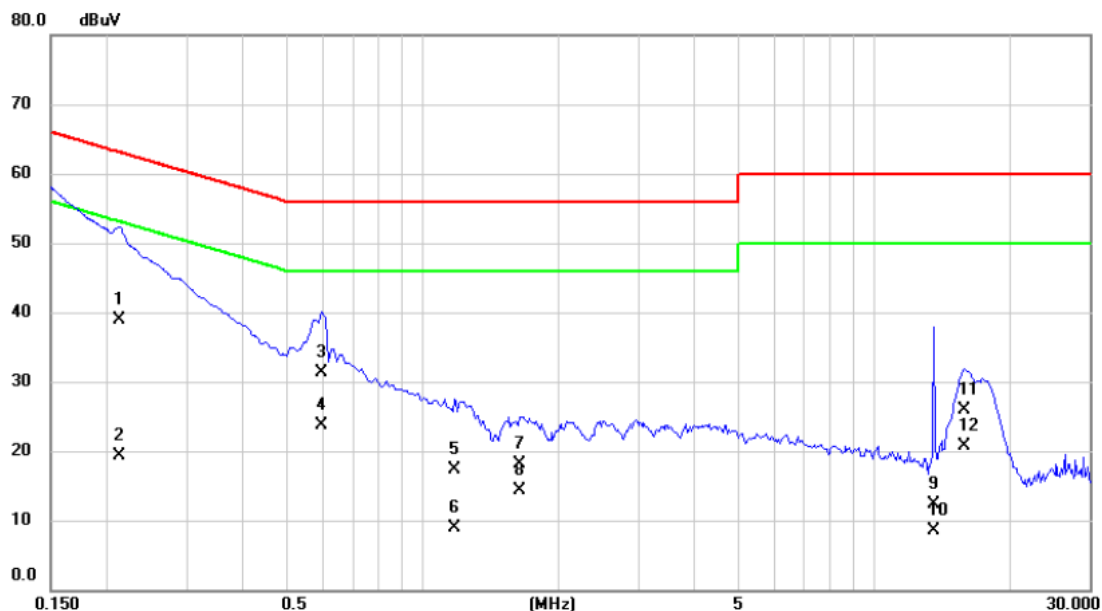
Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1997	30.20	9.71	39.91	63.62	-23.71	QP	
2		0.1997	9.90	9.71	19.61	53.62	-34.01	AVG	
3		0.5990	22.30	9.74	32.04	56.00	-23.96	QP	
4	*	0.5990	14.70	9.74	24.44	46.00	-21.56	AVG	
5		1.1570	6.10	9.74	15.84	56.00	-40.16	QP	
6		1.1570	2.80	9.74	12.54	46.00	-33.46	AVG	
7		2.4980	4.30	9.78	14.08	56.00	-41.92	QP	
8		2.4980	0.50	9.78	10.28	46.00	-35.72	AVG	
9		13.5500	2.10	9.98	12.08	60.00	-47.92	QP	
10		13.5500	-1.90	9.98	8.08	50.00	-41.92	AVG	
11		16.1500	15.20	9.98	25.18	60.00	-34.82	QP	
12		16.1500	9.90	9.98	19.88	50.00	-30.12	AVG	

Test Mode: Normal Link

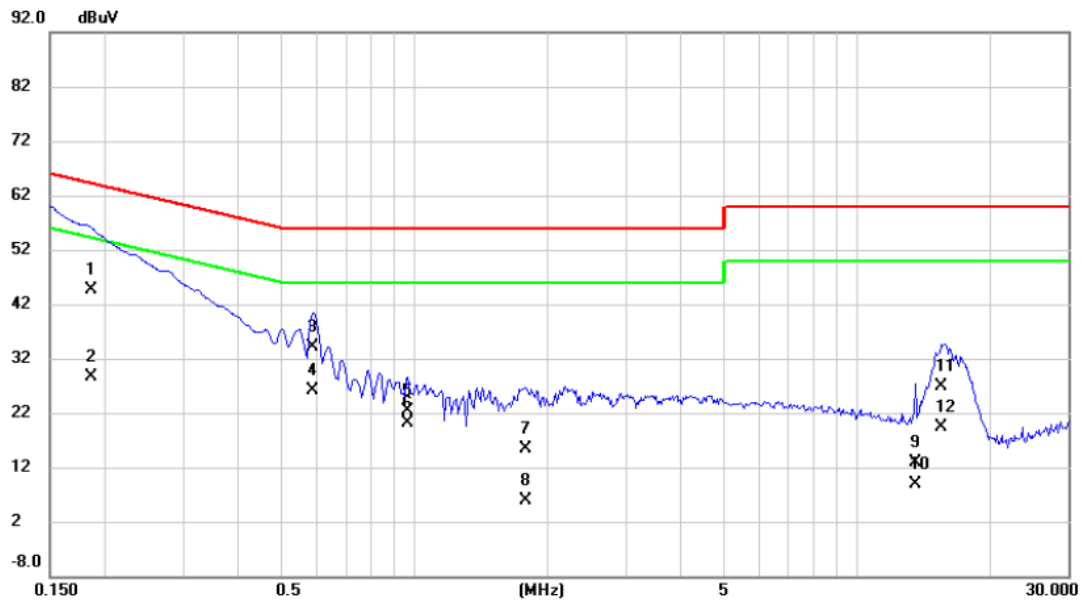
Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2123	29.20	9.65	38.85	63.11	-24.26	QP	
2		0.2123	9.60	9.65	19.25	53.11	-33.86	AVG	
3		0.5990	21.60	9.68	31.28	56.00	-24.72	QP	
4	*	0.5990	14.10	9.68	23.78	46.00	-22.22	AVG	
5		1.1750	7.70	9.69	17.39	56.00	-38.61	QP	
6		1.1750	-0.70	9.69	8.99	46.00	-37.01	AVG	
7		1.6430	8.30	9.71	18.01	56.00	-37.99	QP	
8		1.6430	4.50	9.71	14.21	46.00	-31.79	AVG	
9		13.5500	2.30	9.98	12.28	60.00	-47.72	QP	
10		13.5500	-1.50	9.98	8.48	50.00	-41.52	AVG	
11		15.8500	16.00	9.99	25.99	60.00	-34.01	QP	
12		15.8500	10.70	9.99	20.69	50.00	-29.31	AVG	

Test Mode: Normal Link_Desk Docking

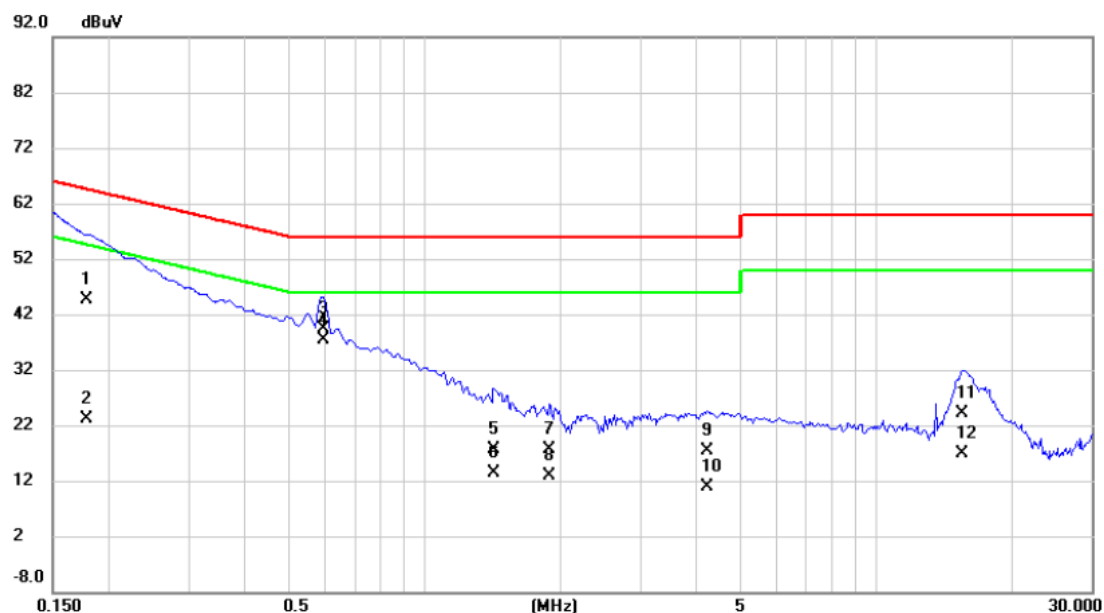
Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1857	35.00	9.72	44.72	64.23	-19.51	QP	
2		0.1857	18.90	9.72	28.62	54.23	-25.61	AVG	
3		0.5900	24.30	9.74	34.04	56.00	-21.96	QP	
4		0.5900	16.40	9.74	26.14	46.00	-19.86	AVG	
5		0.9680	12.70	9.74	22.44	56.00	-33.56	QP	
6		0.9680	10.40	9.74	20.14	46.00	-25.86	AVG	
7		1.7780	5.70	9.77	15.47	56.00	-40.53	QP	
8		1.7780	-4.00	9.77	5.77	46.00	-40.23	AVG	
9		13.5500	2.80	9.98	12.78	60.00	-47.22	QP	
10		13.5500	-1.20	9.98	8.78	50.00	-41.22	AVG	
11		15.5500	16.90	9.98	26.88	60.00	-33.12	QP	
12		15.5500	9.40	9.98	19.38	50.00	-30.62	AVG	

Test Mode: Normal Link_Desk Docking

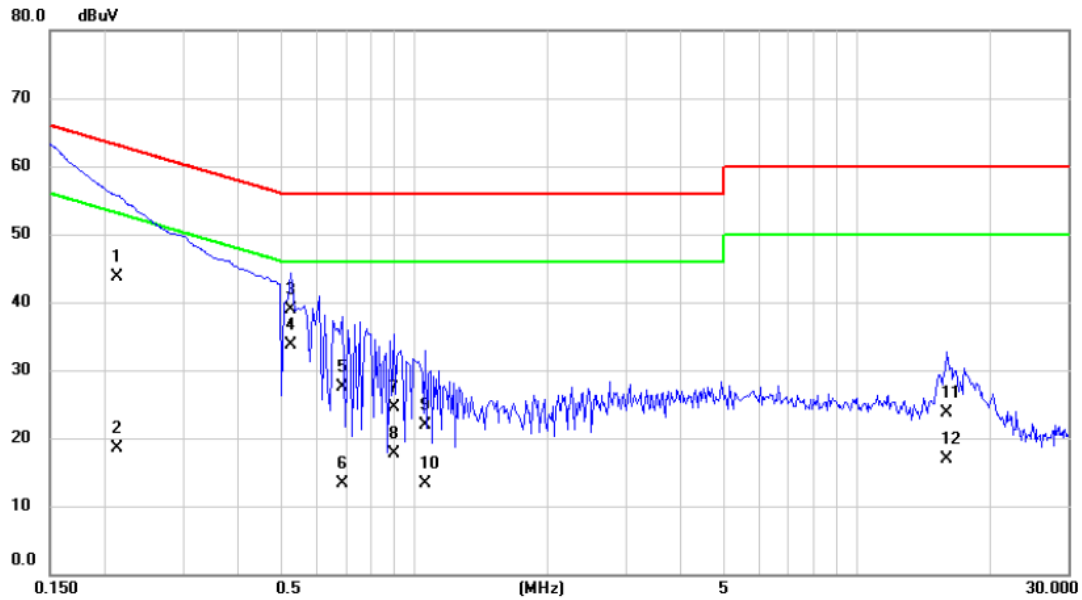
Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1780	35.10	9.65	44.75	64.58	-19.83	QP	
2		0.1780	13.60	9.65	23.25	54.58	-31.33	AVG	
3		0.5990	29.80	9.68	39.48	56.00	-16.52	QP	
4	*	0.5990	27.80	9.68	37.48	46.00	-8.52	AVG	
5		1.4270	7.90	9.69	17.59	56.00	-38.41	QP	
6		1.4270	3.80	9.69	13.49	46.00	-32.51	AVG	
7		1.8860	7.80	9.71	17.51	56.00	-38.49	QP	
8		1.8860	3.20	9.71	12.91	46.00	-33.09	AVG	
9		4.2260	7.50	9.77	17.27	56.00	-38.73	QP	
10		4.2260	1.10	9.77	10.87	46.00	-35.13	AVG	
11		15.4500	14.20	9.99	24.19	60.00	-35.81	QP	
12		15.4500	7.00	9.99	16.99	50.00	-33.01	AVG	

Test Mode: Normal Link_VESA Docking

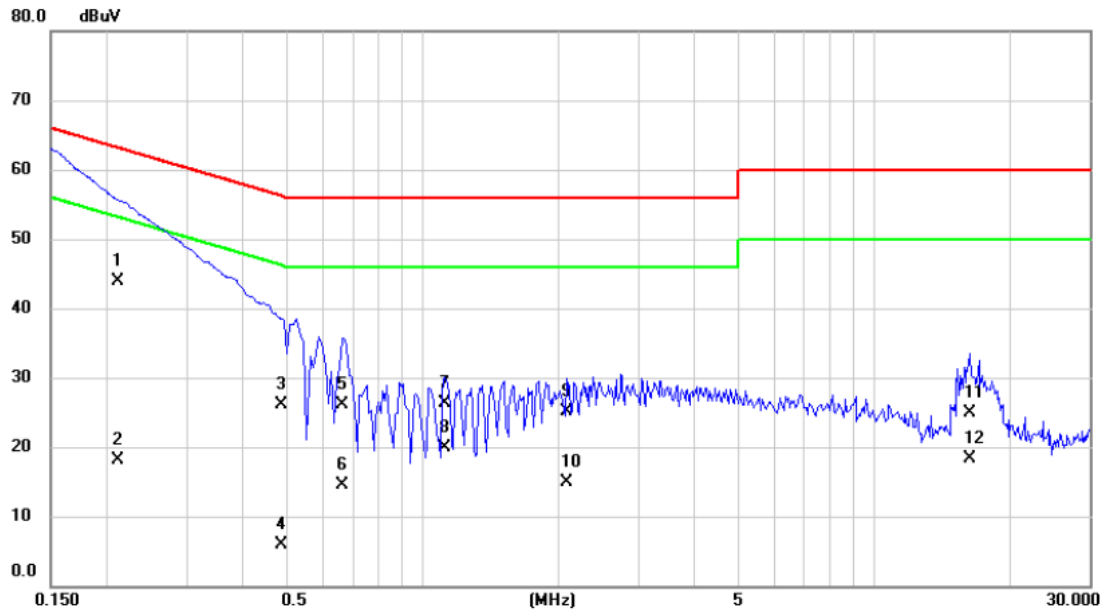
Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2130	33.90	9.71	43.61	63.09	-19.48	QP	
2		0.2130	8.80	9.71	18.51	53.09	-34.58	AVG	
3		0.5270	29.10	9.74	38.84	56.00	-17.16	QP	
4	*	0.5270	24.00	9.74	33.74	46.00	-12.26	AVG	
5		0.6890	17.80	9.74	27.54	56.00	-28.46	QP	
6		0.6890	3.50	9.74	13.24	46.00	-32.76	AVG	
7		0.8960	14.80	9.74	24.54	56.00	-31.46	QP	
8		0.8960	7.90	9.74	17.64	46.00	-28.36	AVG	
9		1.0580	12.10	9.74	21.84	56.00	-34.16	QP	
10		1.0580	3.60	9.74	13.34	46.00	-32.66	AVG	
11		15.9000	13.80	9.98	23.78	60.00	-36.22	QP	
12		15.9000	7.00	9.98	16.98	50.00	-33.02	AVG	

Test Mode: Normal Link_VESA Docking

Neutral

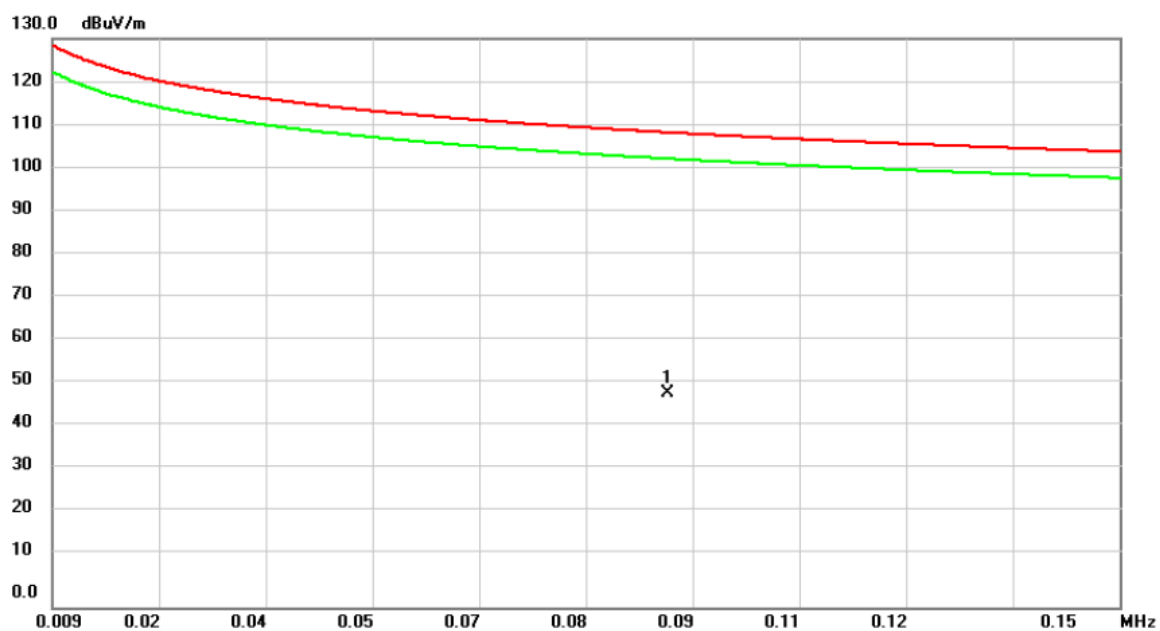


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.2110	34.30	9.65	43.95	63.17	-19.22	QP	
2		0.2110	8.40	9.65	18.05	53.17	-35.12	AVG	
3		0.4867	16.40	9.68	26.08	56.22	-30.14	QP	
4		0.4867	-3.70	9.68	5.98	46.22	-40.24	AVG	
5		0.6620	16.40	9.68	26.08	56.00	-29.92	QP	
6		0.6620	4.80	9.68	14.48	46.00	-31.52	AVG	
7		1.1210	16.70	9.69	26.39	56.00	-29.61	QP	
8		1.1210	10.30	9.69	19.99	46.00	-26.01	AVG	
9		2.0840	15.40	9.71	25.11	56.00	-30.89	QP	
10		2.0840	5.20	9.71	14.91	46.00	-31.09	AVG	
11		16.2500	15.00	9.99	24.99	60.00	-35.01	QP	
12		16.2500	8.40	9.99	18.39	50.00	-31.61	AVG	

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

Test Mode:	TX Mode
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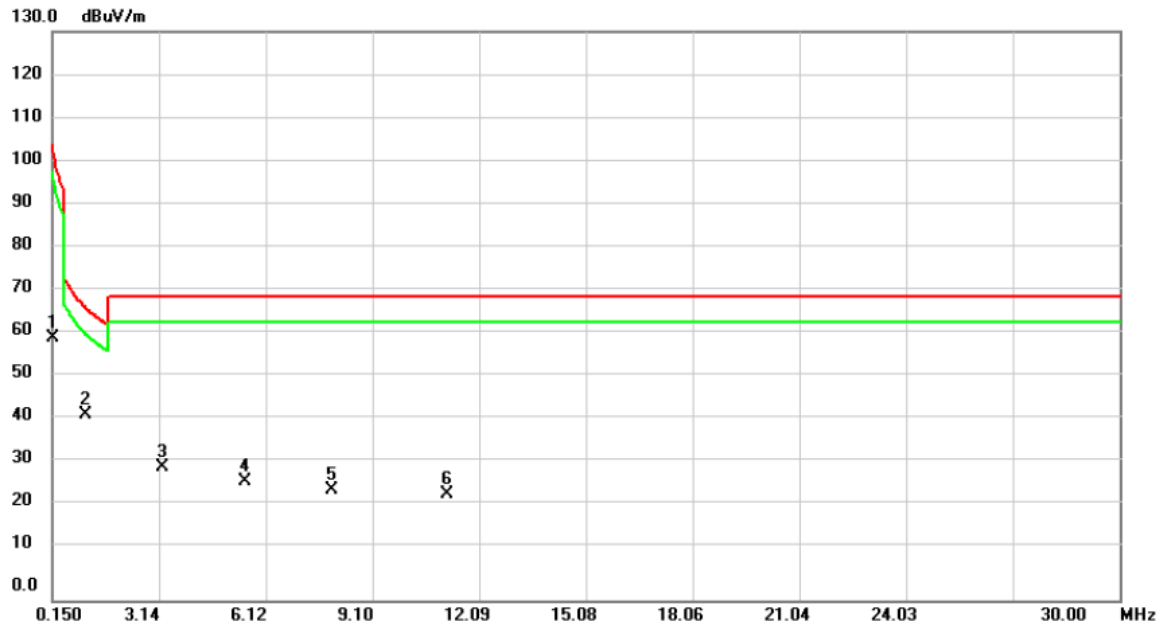
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1	*	0.0903	36.62	12.27	48.89	108.49	-59.60	peak

Test Mode: TX Mode

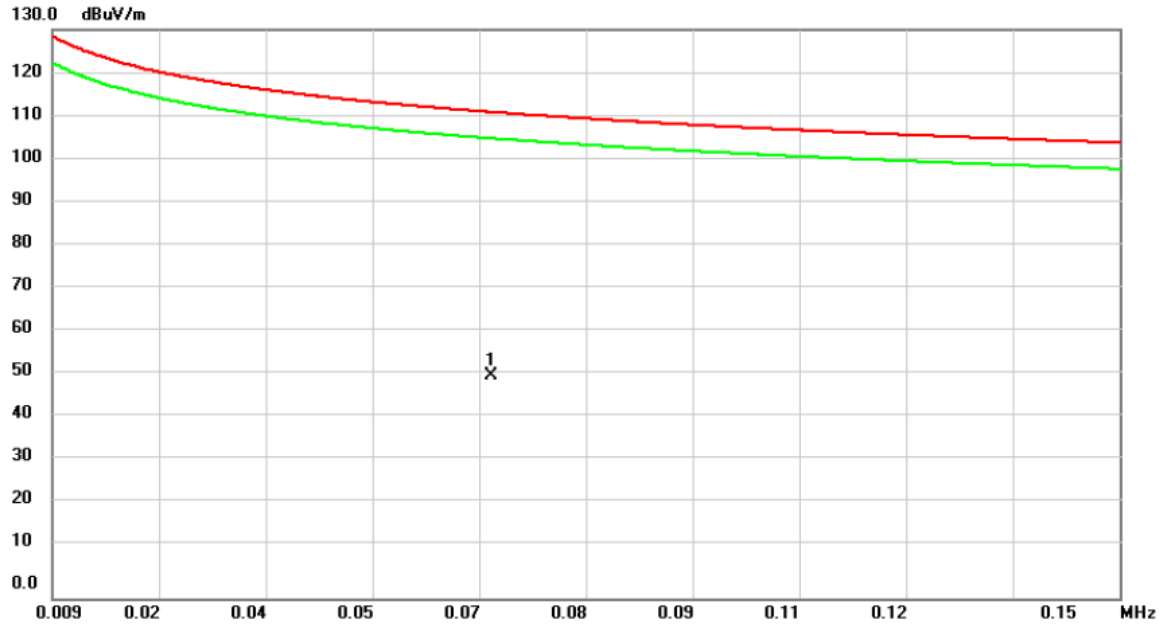
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		0.1500	47.93	12.03	59.96	104.08	-44.12	peak	
2	*	1.0750	30.36	11.97	42.33	66.98	-24.65	peak	
3		3.2244	19.31	11.13	30.44	69.54	-39.10	peak	
4		5.5230	15.90	11.39	27.29	69.54	-42.25	peak	
5		7.9706	13.82	11.34	25.16	69.54	-44.38	peak	
6		11.1942	12.82	11.26	24.08	69.54	-45.46	peak	

Test Mode: TX Mode

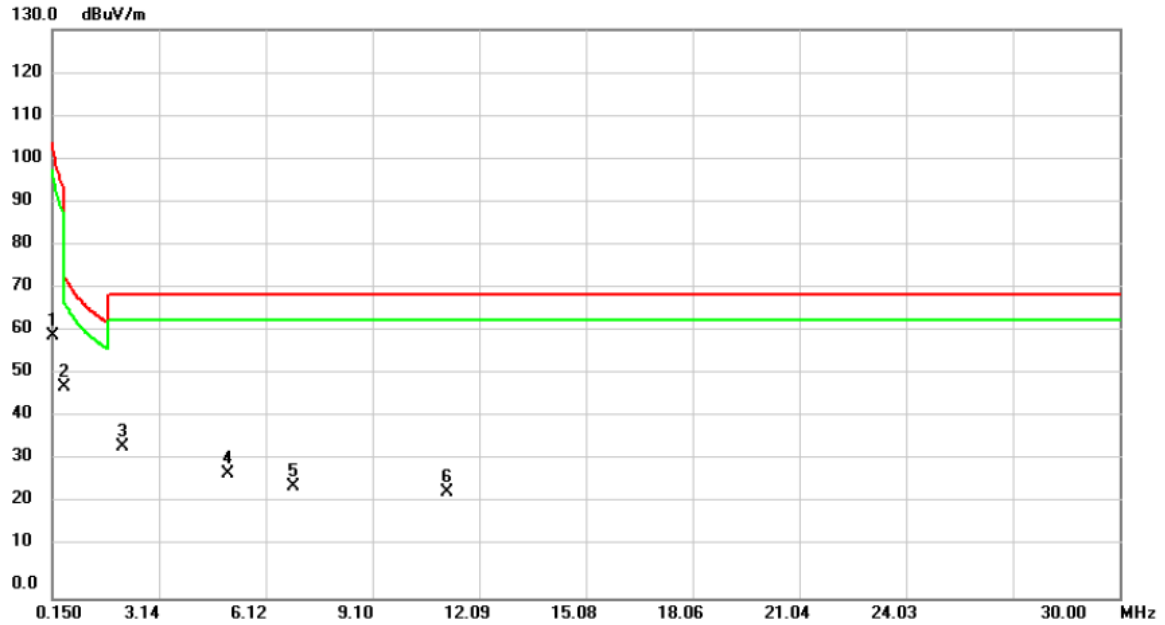
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1	*	0.0670	38.04	12.69	50.73	111.08	-60.35	peak

Test Mode: TX Mode

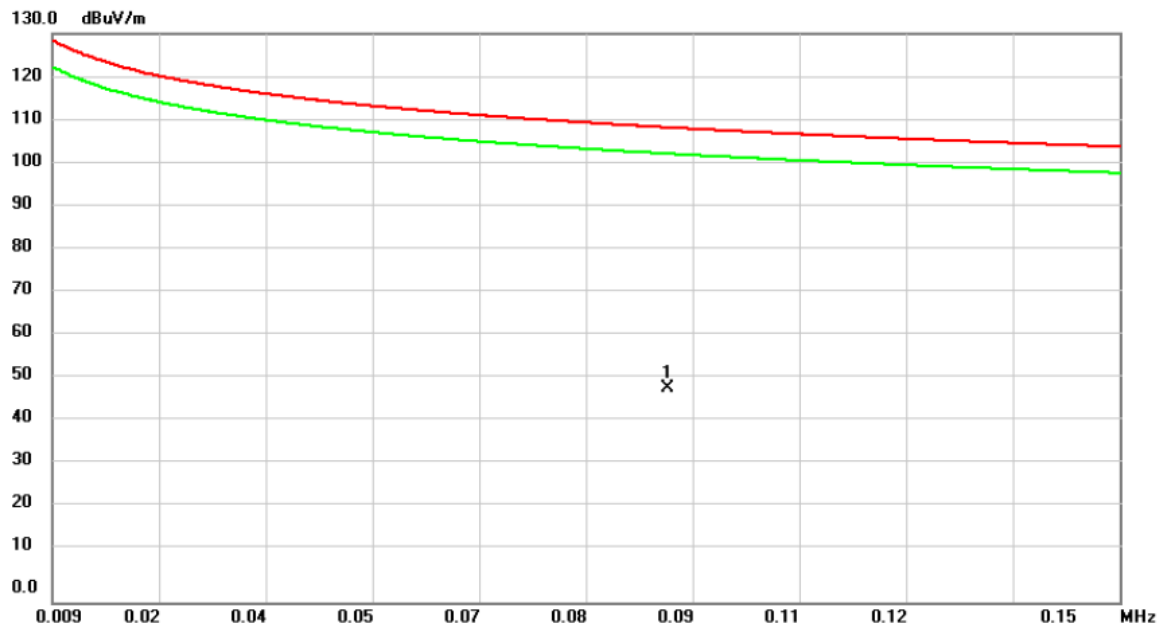
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		0.1500	47.93	12.03	59.96	104.08	-44.12	peak	
2	*	0.5080	36.55	11.80	48.35	73.49	-25.14	peak	
3		2.1200	23.06	11.50	34.56	69.54	-34.98	peak	
4		5.0750	16.98	11.40	28.38	69.54	-41.16	peak	
5		6.8960	14.14	11.36	25.50	69.54	-44.04	peak	
6		11.1942	12.82	11.26	24.08	69.54	-45.46	peak	

Test Mode: TX Mode_Desk Docking

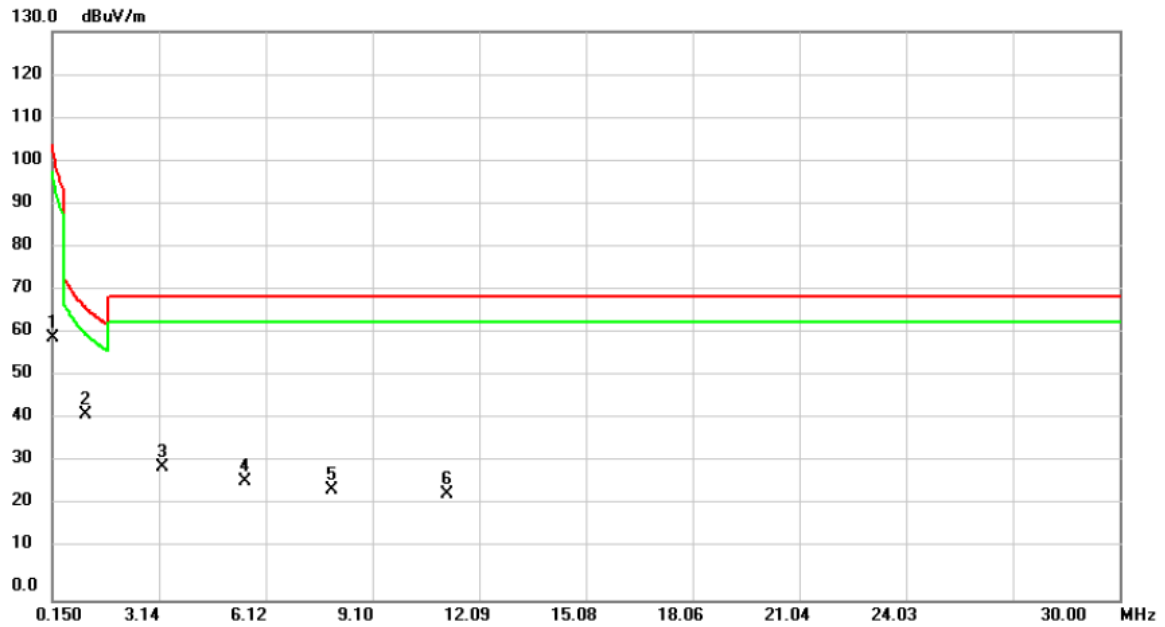
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1	*	0.0903	36.62	12.27	48.89	108.49	-59.60	peak

Test Mode: TX Mode_Desk Docking

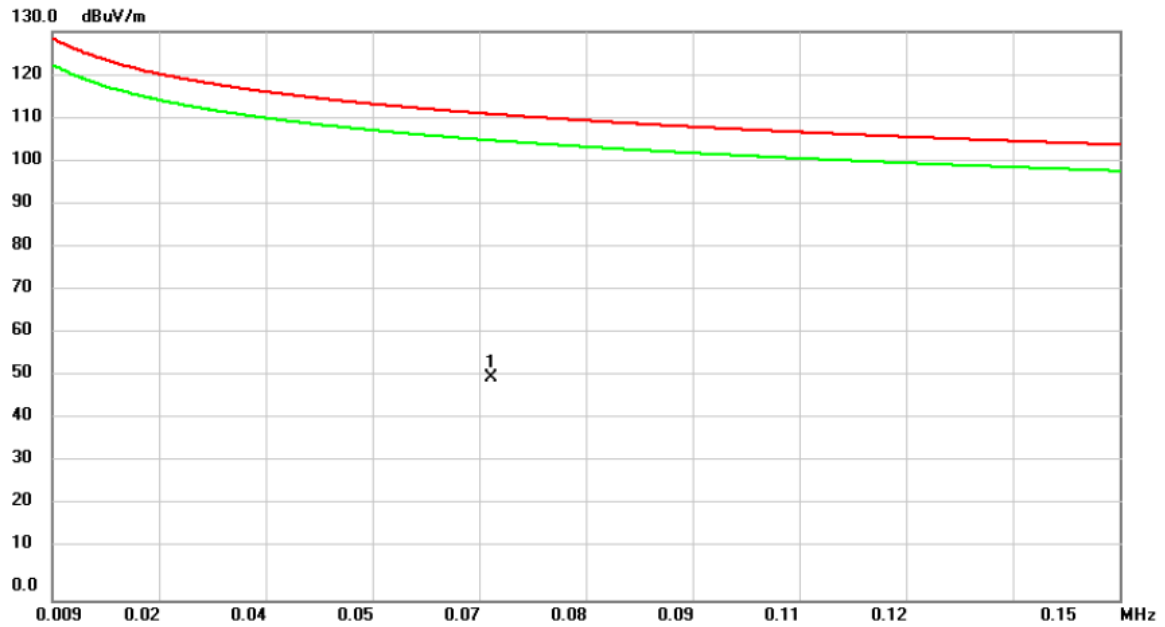
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		0.1500	47.93	12.03	59.96	104.08	-44.12	peak	
2	*	1.0750	30.36	11.97	42.33	66.98	-24.65	peak	
3		3.2244	19.31	11.13	30.44	69.54	-39.10	peak	
4		5.5230	15.90	11.39	27.29	69.54	-42.25	peak	
5		7.9706	13.82	11.34	25.16	69.54	-44.38	peak	
6		11.1942	12.82	11.26	24.08	69.54	-45.46	peak	

Test Mode: TX Mode_Desk Docking

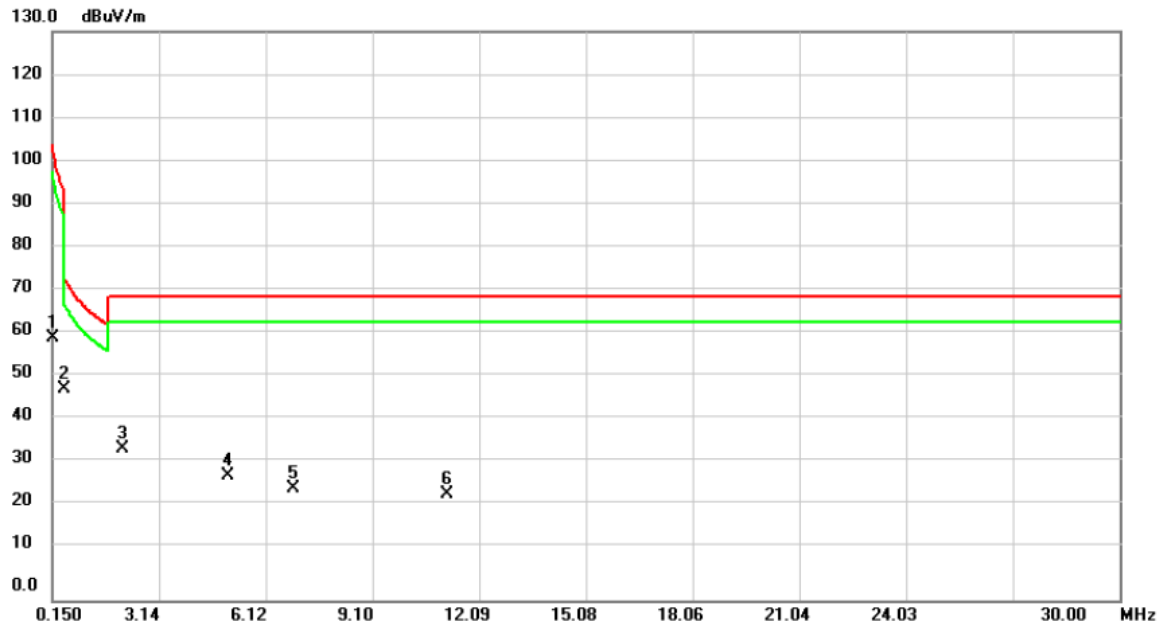
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1	*	0.0670	38.04	12.69	50.73	111.08	-60.35	peak

Test Mode: TX Mode_Desk Docking

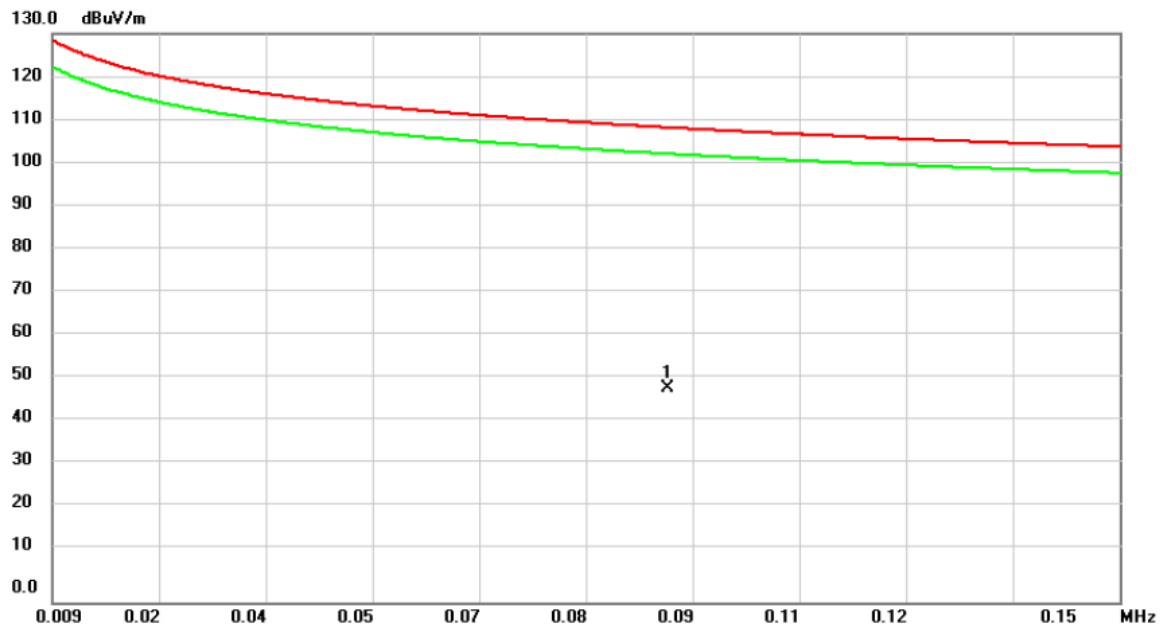
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		0.1500	47.93	12.03	59.96	104.08	-44.12	peak	
2	*	0.5080	36.55	11.80	48.35	73.49	-25.14	peak	
3		2.1200	23.06	11.50	34.56	69.54	-34.98	peak	
4		5.0750	16.98	11.40	28.38	69.54	-41.16	peak	
5		6.8960	14.14	11.36	25.50	69.54	-44.04	peak	
6		11.1942	12.82	11.26	24.08	69.54	-45.46	peak	

Test Mode: TX Mode_VESA Docking

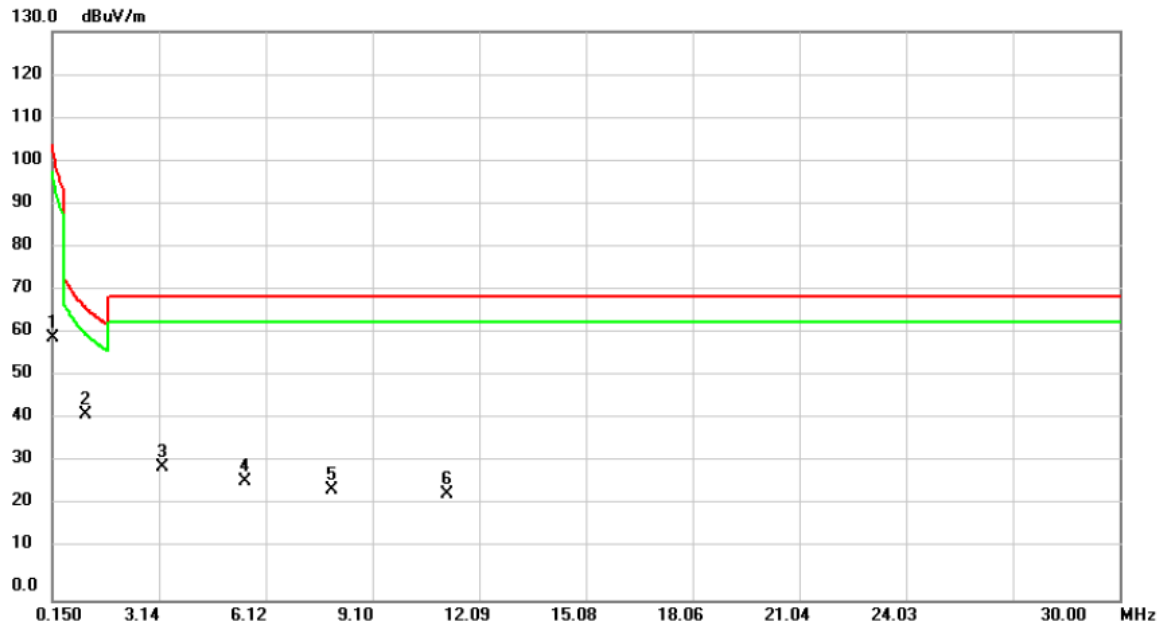
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1	*	0.0903	36.62	12.27	48.89	108.49	-59.60	peak

Test Mode: TX Mode_VESA Docking

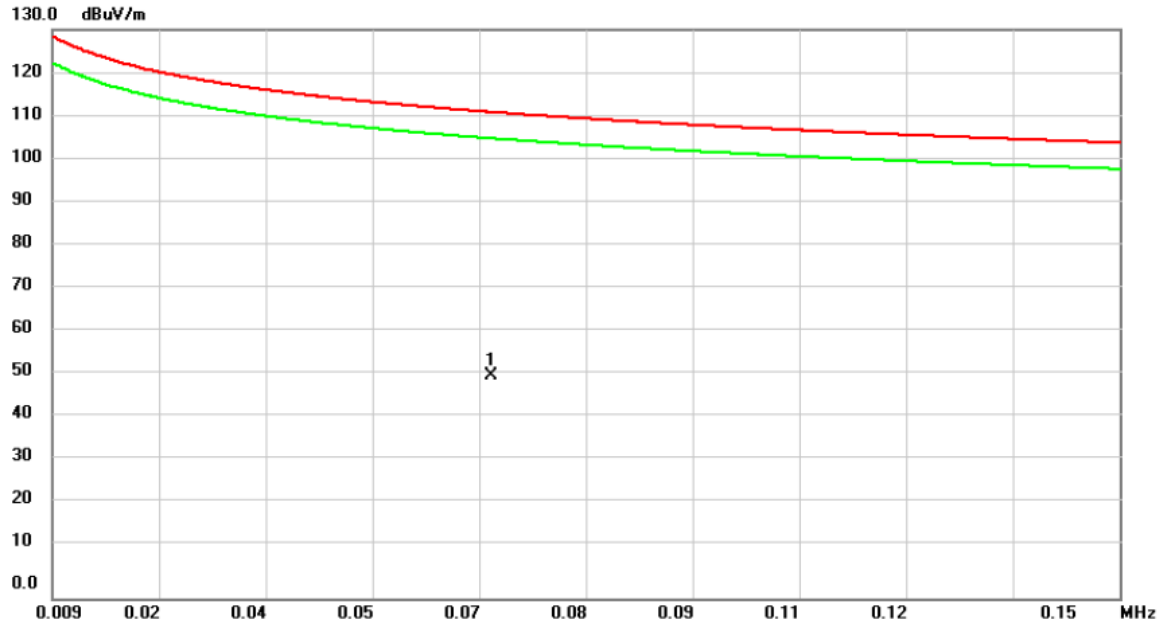
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		0.1500	47.93	12.03	59.96	104.08	-44.12	peak	
2	*	1.0750	30.36	11.97	42.33	66.98	-24.65	peak	
3		3.2244	19.31	11.13	30.44	69.54	-39.10	peak	
4		5.5230	15.90	11.39	27.29	69.54	-42.25	peak	
5		7.9706	13.82	11.34	25.16	69.54	-44.38	peak	
6		11.1942	12.82	11.26	24.08	69.54	-45.46	peak	

Test Mode:	TX Mode_VESA Docking
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Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1	*	0.0670	38.04	12.69	50.73	111.08	-60.35	peak

Test Mode: TX Mode_VESA Docking

Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		0.1500	47.93	12.03	59.96	104.08	-44.12	peak	
2	*	0.5080	36.55	11.80	48.35	73.49	-25.14	peak	
3		2.1200	23.06	11.50	34.56	69.54	-34.98	peak	
4		5.0750	16.98	11.40	28.38	69.54	-41.16	peak	
5		6.8960	14.14	11.36	25.50	69.54	-44.04	peak	
6		11.1942	12.82	11.26	24.08	69.54	-45.46	peak	

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

Test Mode	TX Mode	Polarization	Vertical
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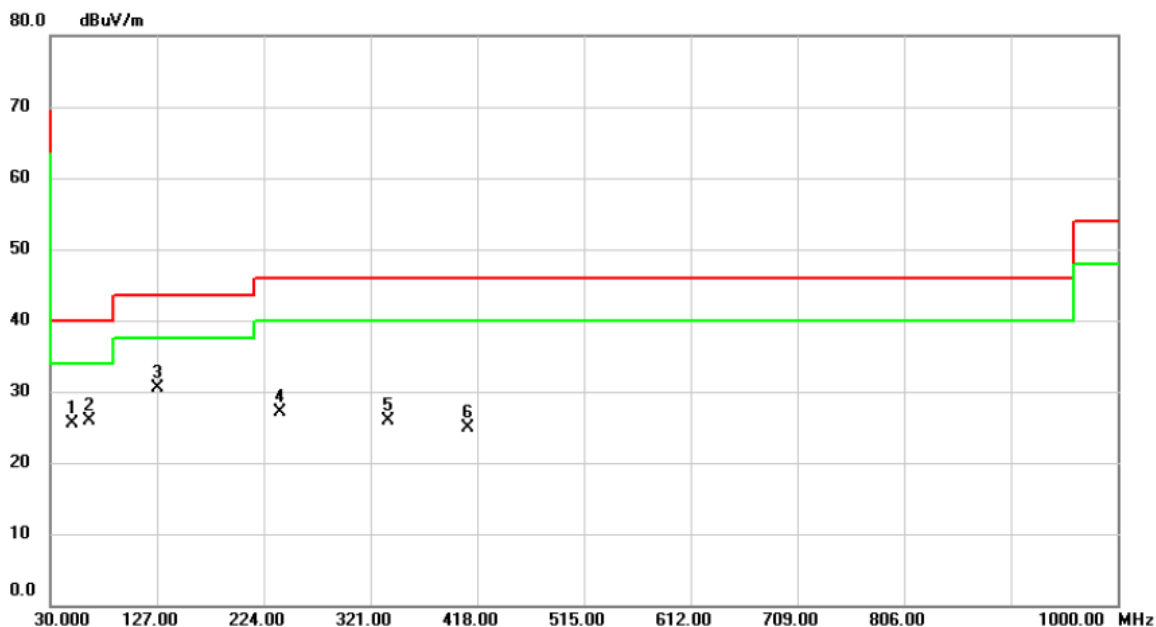
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	49.4000	42.92	-8.33	34.59	40.00	-5.41	peak	
2		80.4400	38.19	-11.94	26.25	40.00	-13.75	peak	
3		130.8800	34.21	-9.52	24.69	43.50	-18.81	peak	
4		246.3100	31.64	-9.19	22.45	46.00	-23.55	peak	
5		273.4700	30.52	-8.29	22.23	46.00	-23.77	peak	
6		746.8300	35.29	1.83	37.12	46.00	-8.88	peak	

Test Mode	TX Mode	Polarization	Horizontal
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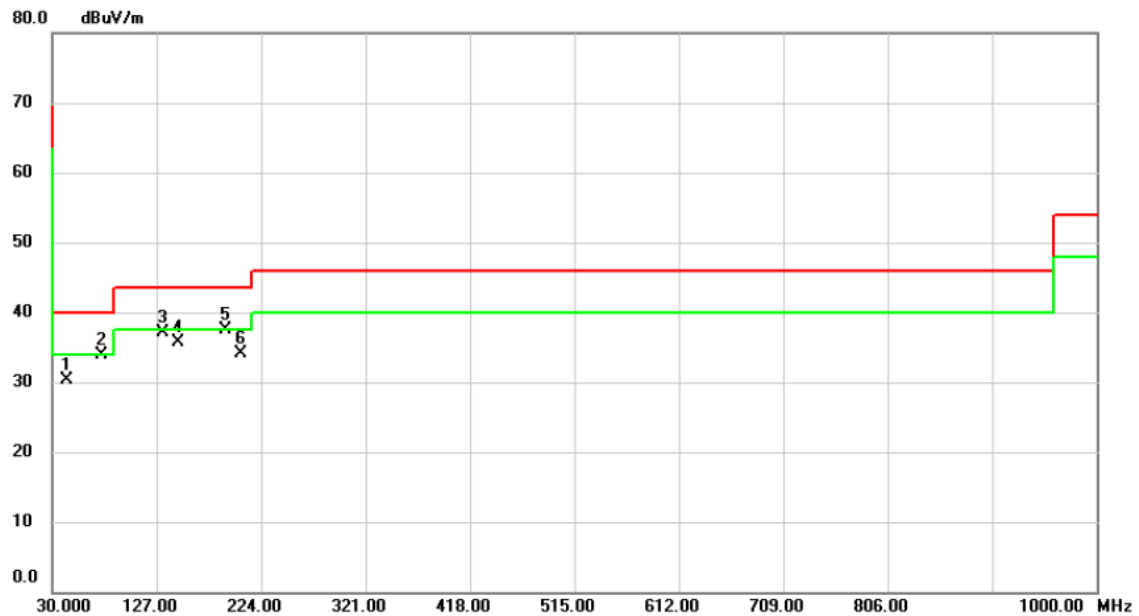
Orthogonal Axis: Z



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1		49.4000	33.77	-8.33	25.44	40.00	-14.56	peak
2		65.8900	35.33	-9.52	25.81	40.00	-14.19	peak
3	*	127.0000	40.33	-9.75	30.58	43.50	-12.92	peak
4		238.5500	36.64	-9.49	27.15	46.00	-18.85	peak
5		337.4900	32.41	-6.55	25.86	46.00	-20.14	peak
6		409.2700	29.69	-4.69	25.00	46.00	-21.00	peak

Test Mode	TX Mode _Desk Docking	Polarization	Vertical
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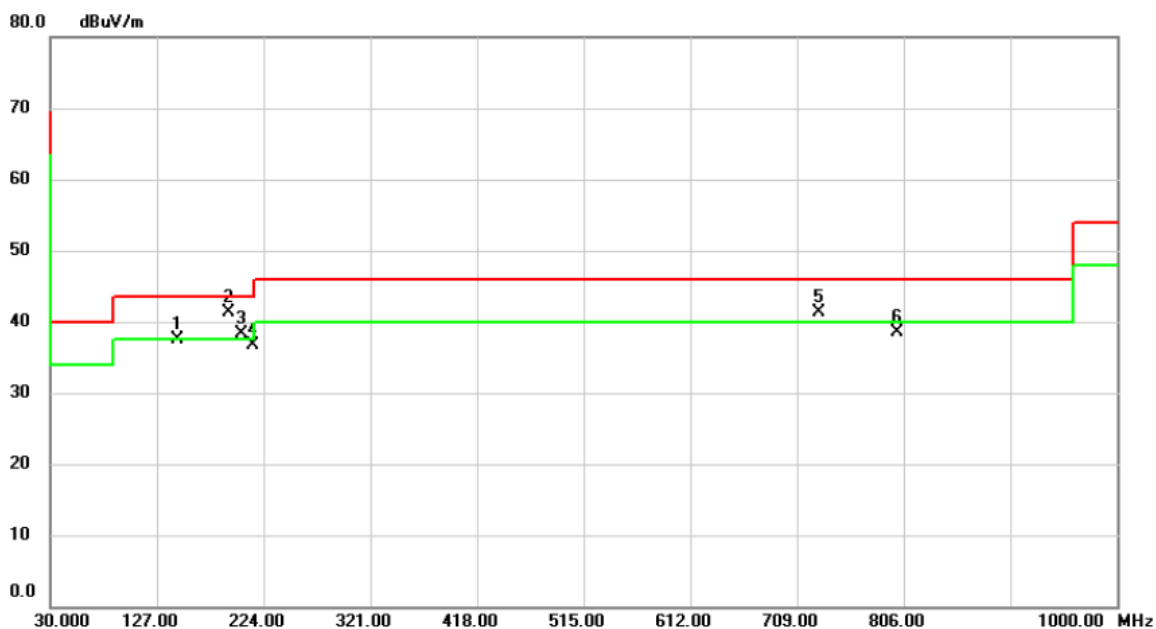
Orthogonal Axis: Z



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		43.5800	38.89	-8.56	30.33	40.00	-9.67	peak	
2		75.5900	45.04	-11.13	33.91	40.00	-6.09	peak	
3		132.8200	46.65	-9.46	37.19	43.50	-6.31	peak	
4		146.4000	44.82	-9.04	35.78	43.50	-7.72	peak	
5	*	191.0200	47.92	-10.36	37.56	43.50	-5.94	peak	
6		204.6000	44.86	-10.79	34.07	43.50	-9.43	peak	

Test Mode	TX Mode _Desk Docking	Polarization	Horizontal
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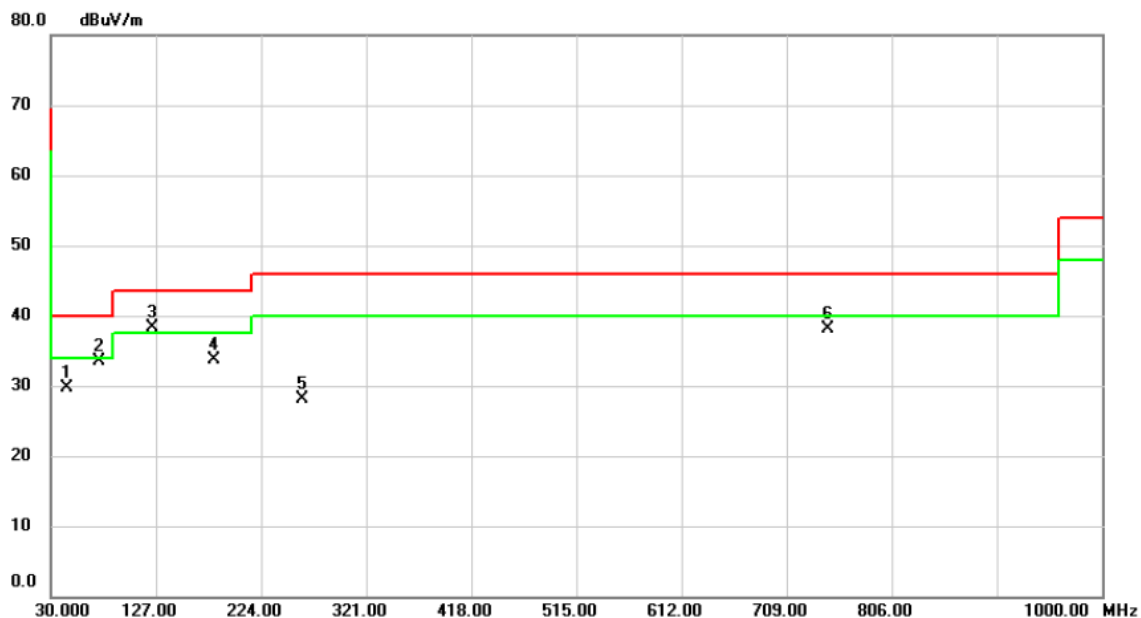
Orthogonal Axis: Z



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	!	145.4300	46.64	-9.05	37.59	43.50	-5.91	peak	
2	*	191.9900	51.80	-10.40	41.40	43.50	-2.10	peak	
3	!	203.6300	49.12	-10.76	38.36	43.50	-5.14	peak	
4		214.3000	47.53	-10.89	36.64	43.50	-6.86	peak	
5	!	729.3700	39.84	1.47	41.31	46.00	-4.69	peak	
6		800.1800	35.88	2.62	38.50	46.00	-7.50	peak	

Test Mode	TX Mode _VESA Docking	Polarization	Vertical
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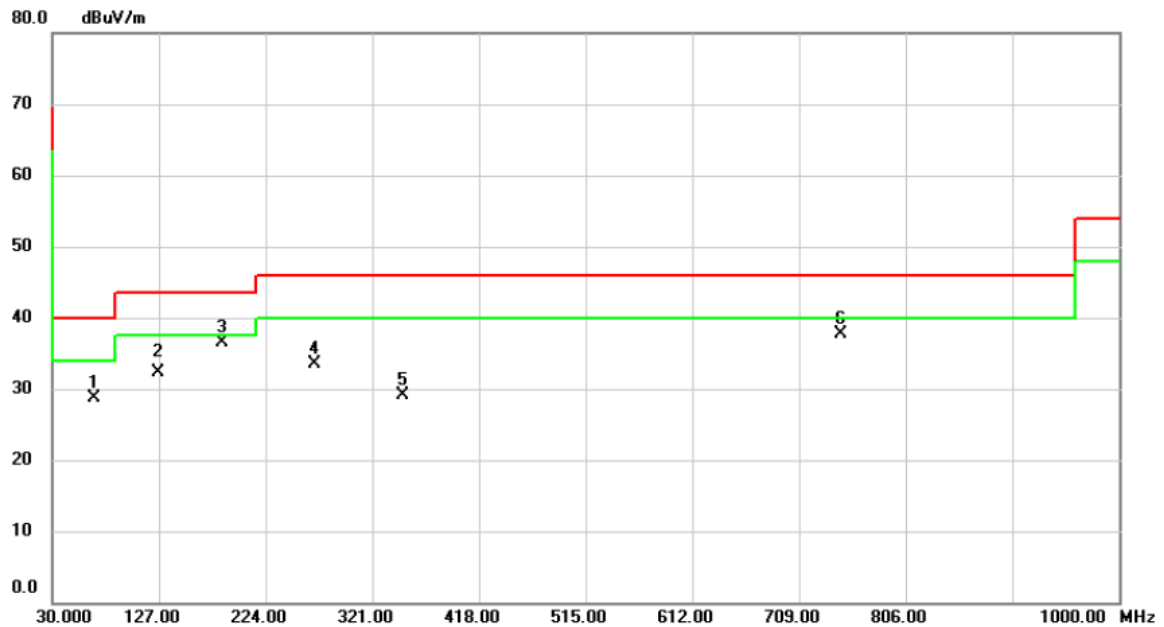
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		44.5500	38.35	-8.58	29.77	40.00	-10.23	peak	
2		74.6200	44.46	-10.98	33.48	40.00	-6.52	peak	
3	*	124.0900	48.20	-9.92	38.28	43.50	-5.22	peak	
4		180.3500	43.42	-9.64	33.78	43.50	-9.72	peak	
5		261.8300	36.76	-8.71	28.05	46.00	-17.95	peak	
6		746.8300	36.20	1.83	38.03	46.00	-7.97	peak	

Test Mode	TX Mode _VESA Docking	Polarization	Horizontal
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Orthogonal Axis: Z

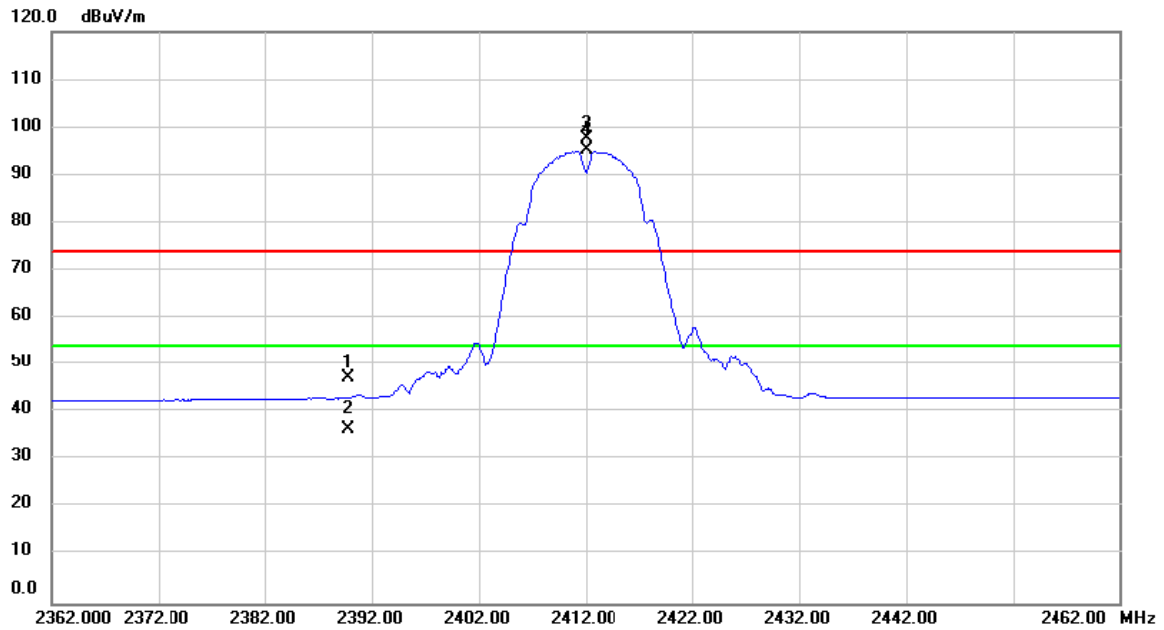


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		67.8300	38.55	-9.83	28.72	40.00	-11.28	peak	
2		126.0300	42.09	-9.81	32.28	43.50	-11.22	QP	
3	*	184.2300	46.41	-9.92	36.49	43.50	-7.01	peak	
4		268.6200	41.92	-8.49	33.43	46.00	-12.57	peak	
5		348.1600	35.36	-6.29	29.07	46.00	-16.93	peak	
6		746.8300	35.84	1.83	37.67	46.00	-8.33	peak	

APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)

Test Mode	TX B MODE _2412 MHz	Polarization	Vertical
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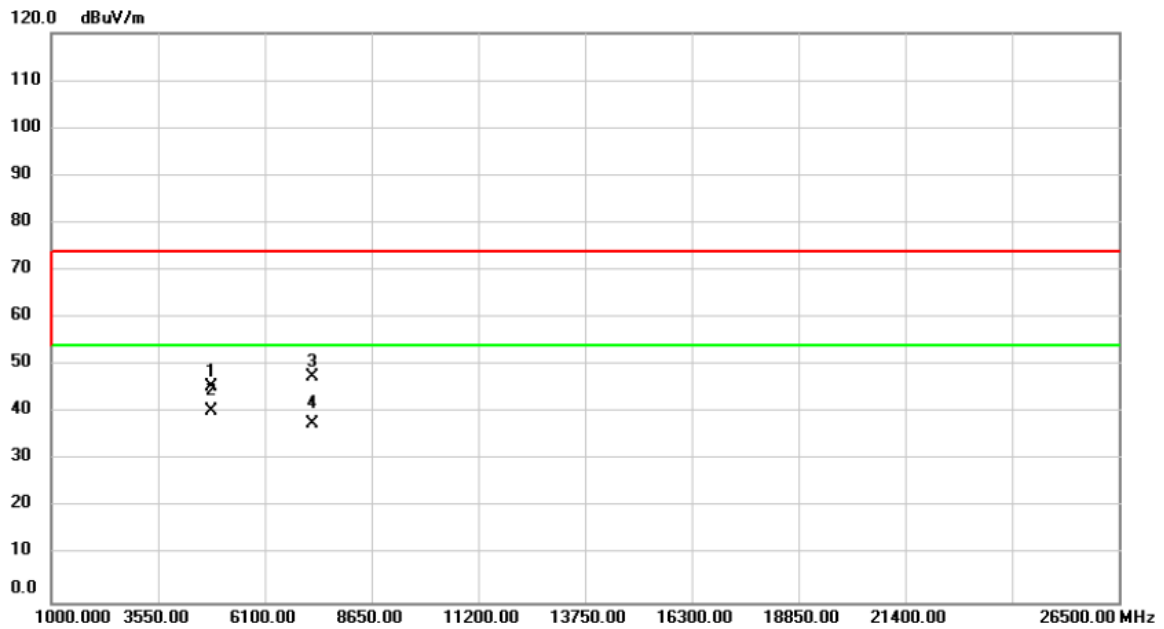
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2389.832	16.06	31.06	47.12	74.00	-26.88	peak	
2		2389.832	5.50	31.06	36.56	54.00	-17.44	AVG	
3	X	2412.000	66.39	31.14	97.53	74.00	23.53	peak	No Limit
4	*	2412.000	64.08	31.14	95.22	54.00	41.22	AVG	No Limit

Test Mode	TX B MODE _2412 MHz	Polarization	Vertical
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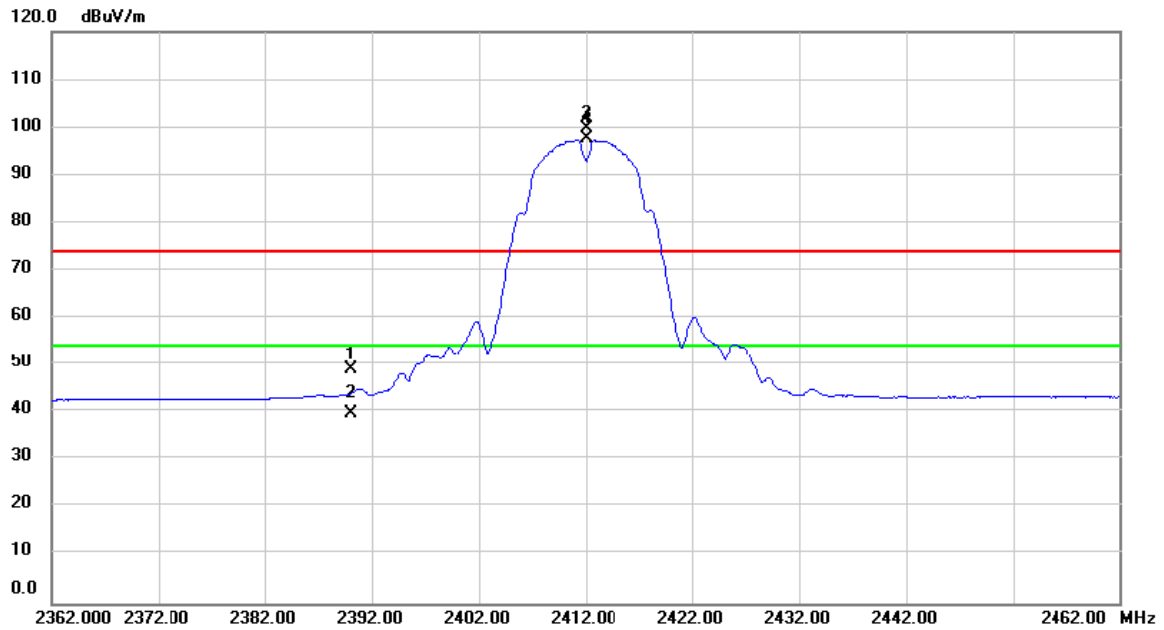
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4824.000	56.70	-11.37	45.33	74.00	-28.67	peak	
2	*	4824.000	51.86	-11.37	40.49	54.00	-13.51	AVG	
3		7236.000	52.98	-5.40	47.58	74.00	-26.42	peak	
4		7236.000	42.94	-5.40	37.54	54.00	-16.46	AVG	

Test Mode	TX B MODE _2412 MHz	Polarization	Horizontal
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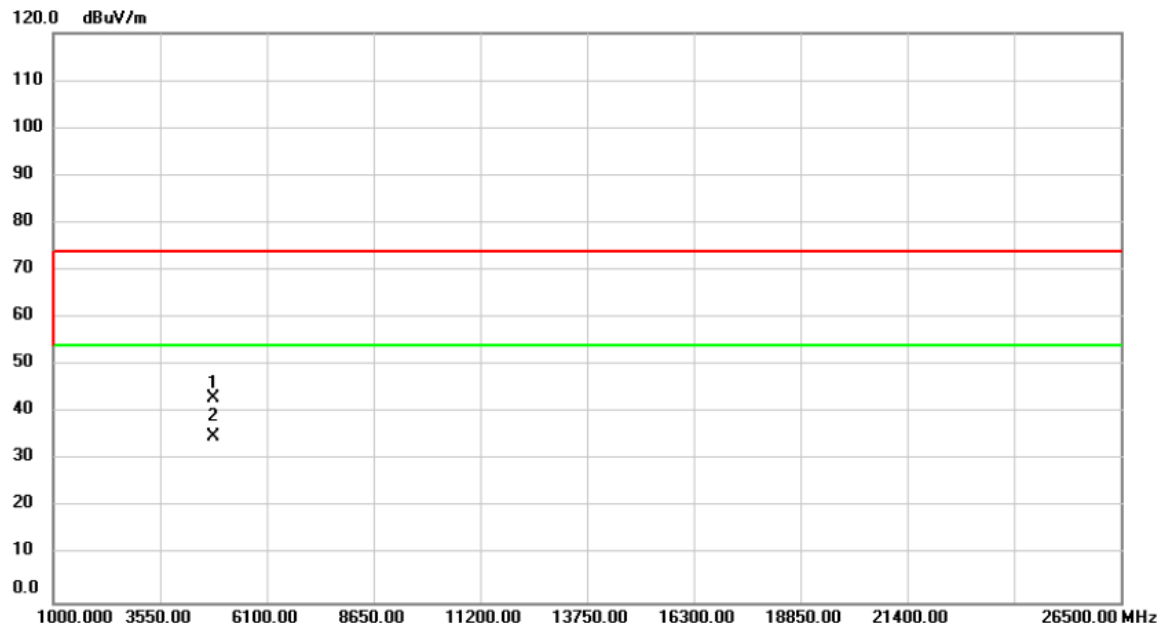
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	18.06	31.06	49.12	74.00	-24.88	peak	
2		2390.000	8.60	31.06	39.66	54.00	-14.34	AVG	
3	X	2412.000	68.72	31.14	99.86	74.00	25.86	peak	No Limit
4	*	2412.000	66.41	31.14	97.55	54.00	43.55	AVG	No Limit

Test Mode	TX B MODE _2412 MHz	Polarization	Horizontal
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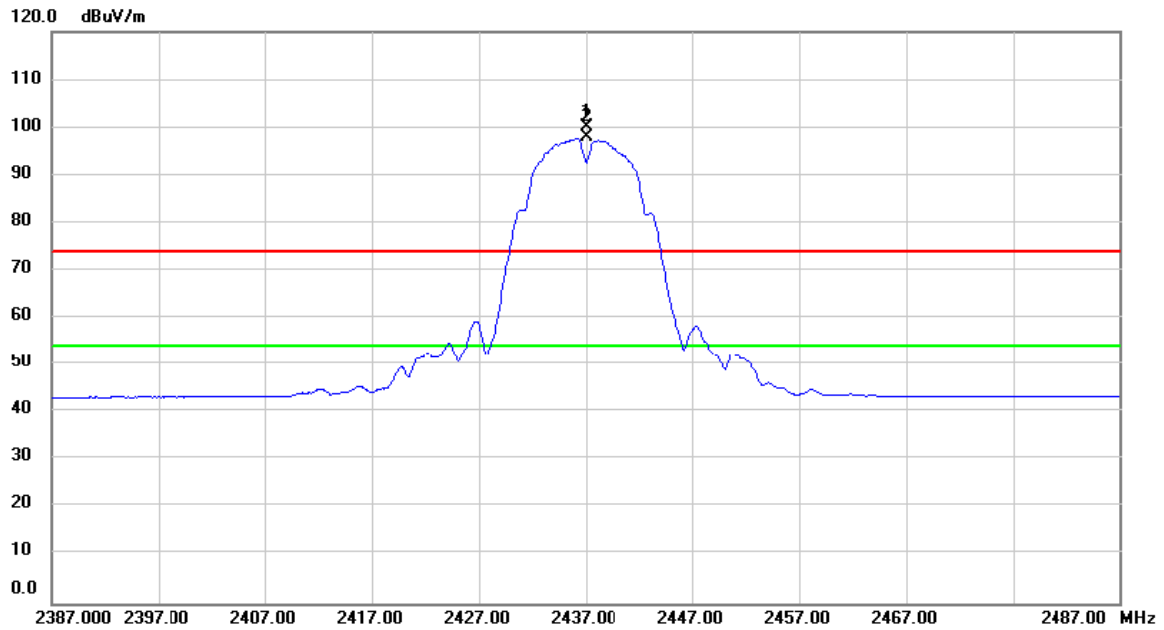
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4824.000	54.38	-11.37	43.01	74.00	-30.99	peak	
2	*	4824.000	46.32	-11.37	34.95	54.00	-19.05	AVG	

Test Mode	TX B MODE _2437 MHz	Polarization	Vertical
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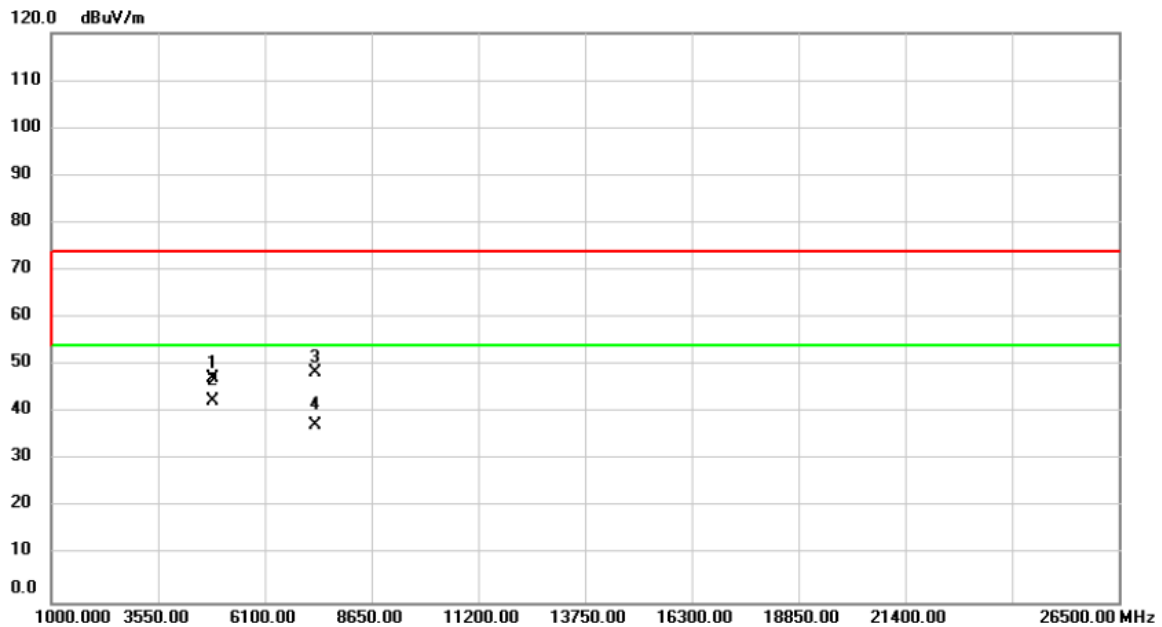
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2437.000	68.84	31.23	100.07	74.00	26.07	peak	No Limit
2	*	2437.000	66.66	31.23	97.89	54.00	43.89	AVG	No Limit

Test Mode	TX B MODE _2437 MHz	Polarization	Vertical
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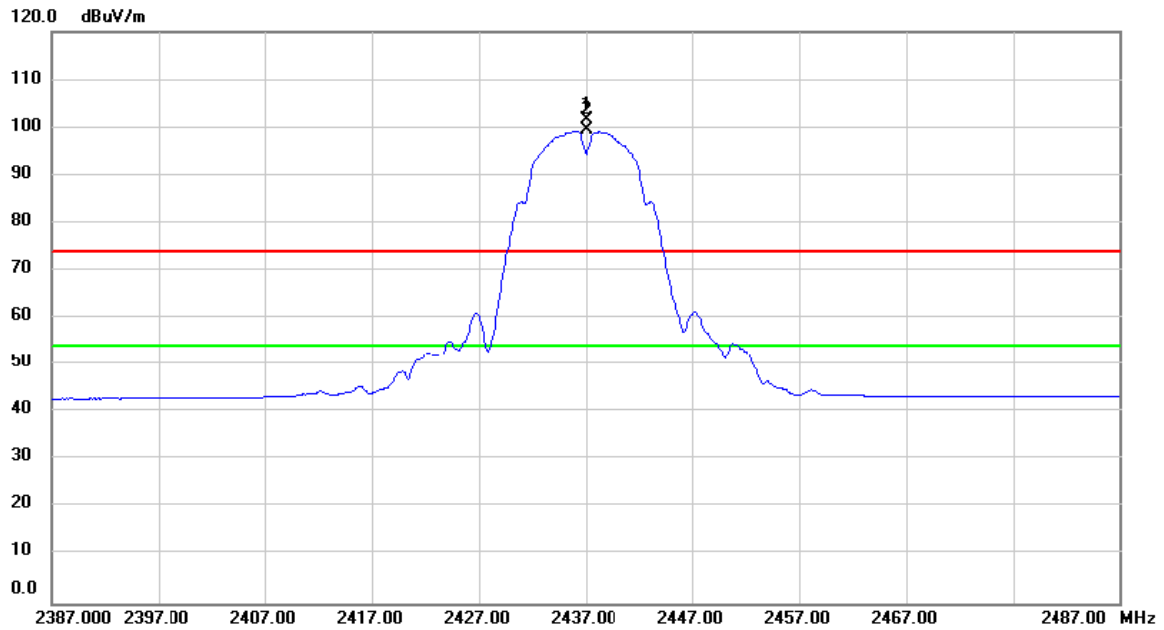
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4874.000	58.58	-11.29	47.29	74.00	-26.71	peak	
2	*	4874.000	53.87	-11.29	42.58	54.00	-11.42	AVG	
3		7311.000	53.56	-5.13	48.43	74.00	-25.57	peak	
4		7311.000	42.48	-5.13	37.35	54.00	-16.65	AVG	

Test Mode	TX B MODE _2437 MHz	Polarization	Horizontal
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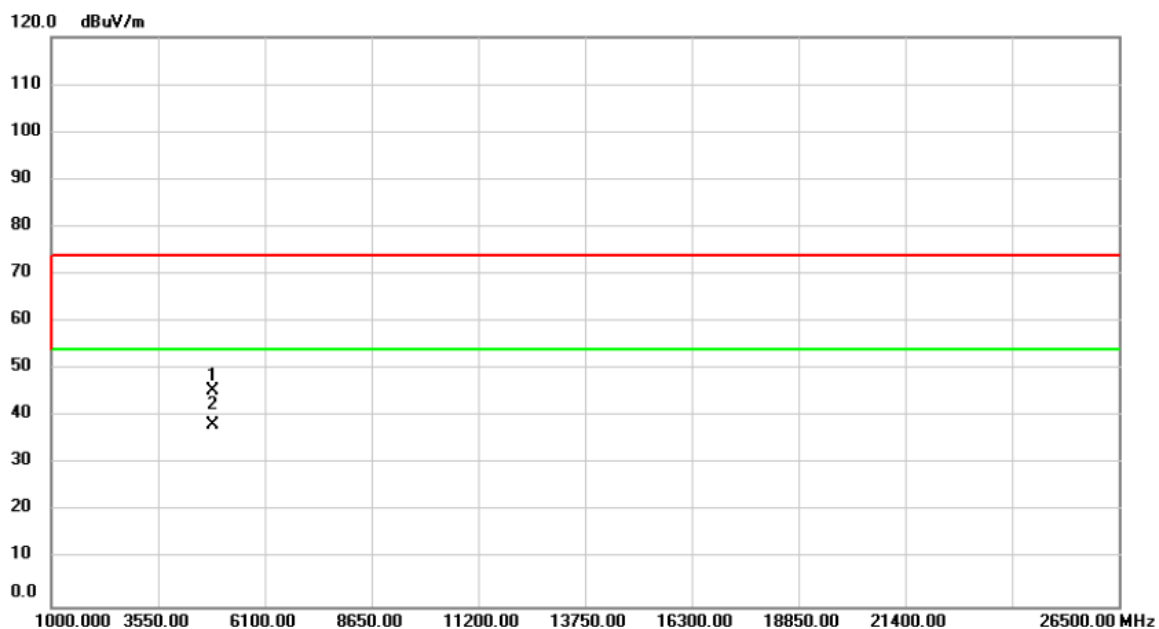
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2437.000	70.33	31.23	101.56	74.00	27.56	peak	No Limit
2	*	2437.000	68.17	31.23	99.40	54.00	45.40	AVG	No Limit

Test Mode	TX B MODE _2437 MHz	Polarization	Horizontal
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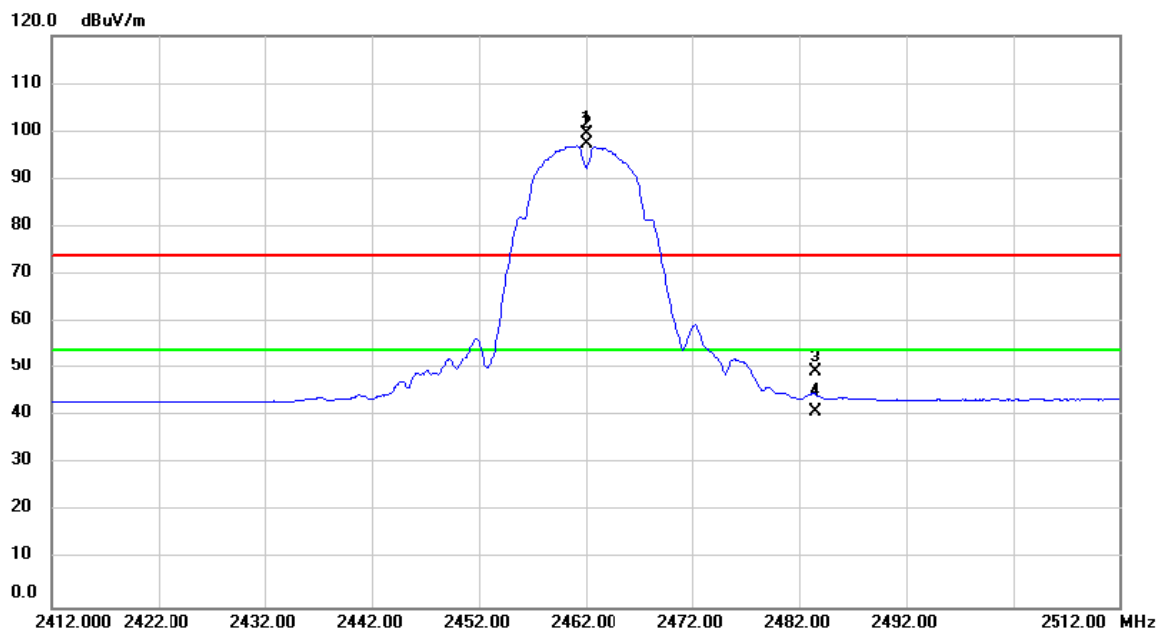
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4874.000	56.72	-11.29	45.43	74.00	-28.57	peak	
2	*	4874.000	49.47	-11.29	38.18	54.00	-15.82	AVG	

Test Mode	TX B MODE _2462 MHz	Polarization	Vertical
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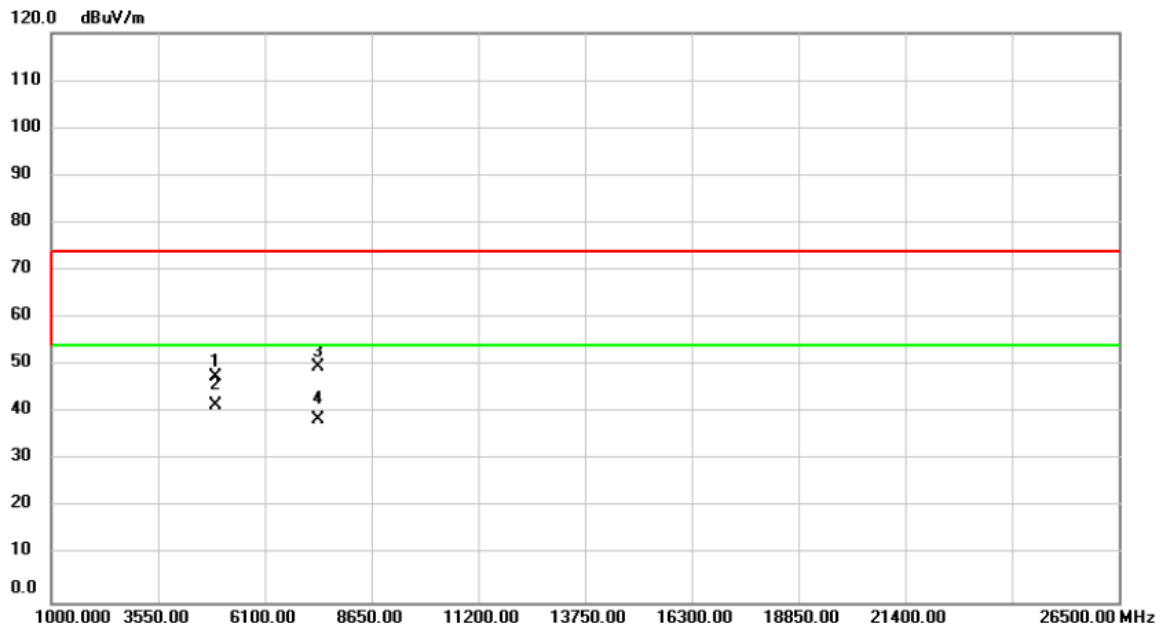
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2462.000	68.12	31.33	99.45	74.00	25.45	peak	No Limit
2	*	2462.000	65.93	31.33	97.26	54.00	43.26	AVG	No Limit
3		2483.500	17.96	31.41	49.37	74.00	-24.63	peak	
4		2483.500	9.44	31.41	40.85	54.00	-13.15	AVG	

Test Mode	TX B MODE _2462 MHz	Polarization	Vertical
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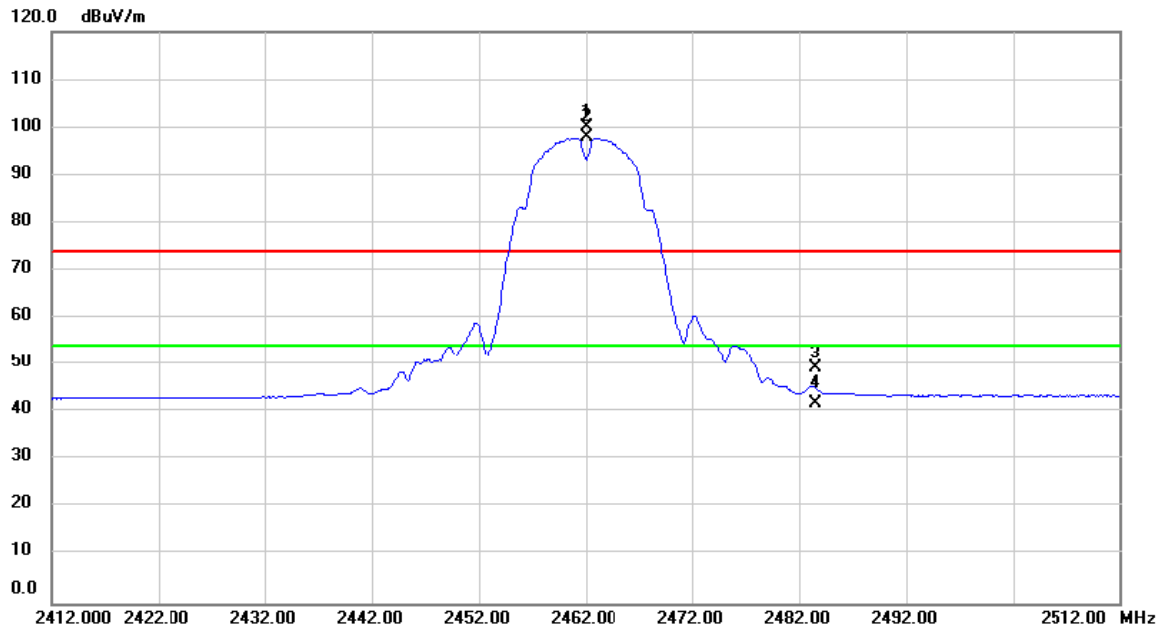
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.000	58.67	-11.22	47.45	74.00	-26.55	peak	
2	*	4924.000	52.65	-11.22	41.43	54.00	-12.57	AVG	
3		7386.000	54.62	-4.87	49.75	74.00	-24.25	peak	
4		7386.000	43.46	-4.87	38.59	54.00	-15.41	AVG	

Test Mode	TX B MODE _2462 MHz	Polarization	Horizontal
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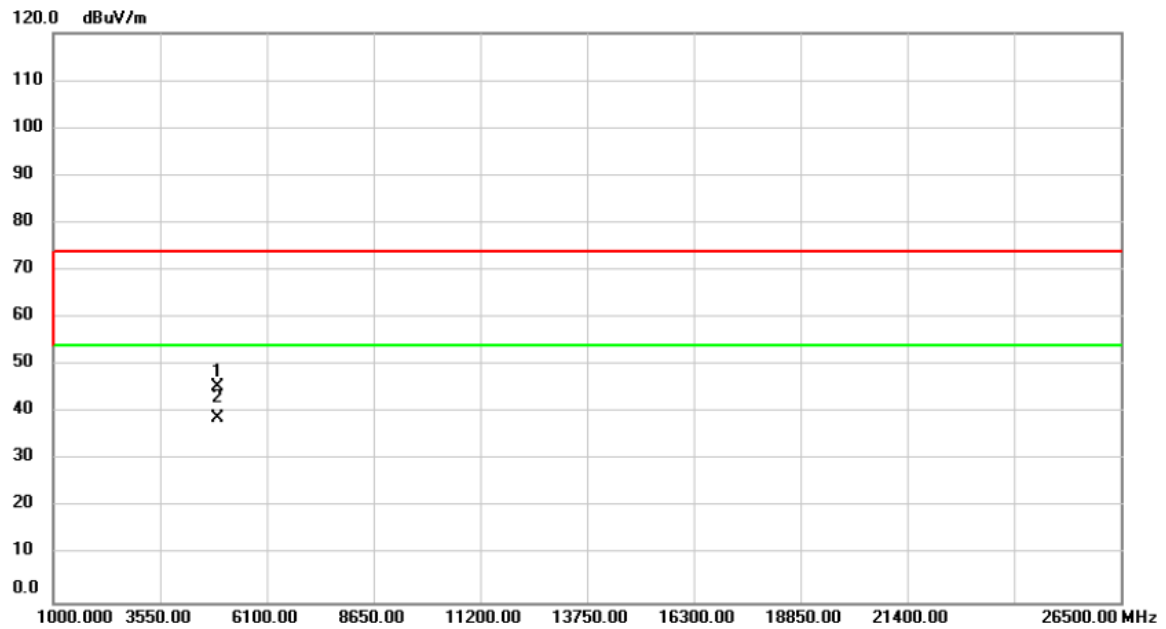
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2462.000	68.70	31.33	100.03	74.00	26.03	peak	No Limit
2	*	2462.000	66.58	31.33	97.91	54.00	43.91	AVG	No Limit
3		2483.500	18.03	31.41	49.44	74.00	-24.56	peak	
4		2483.500	10.45	31.41	41.86	54.00	-12.14	AVG	

Test Mode	TX B MODE _2462 MHz	Polarization	Horizontal
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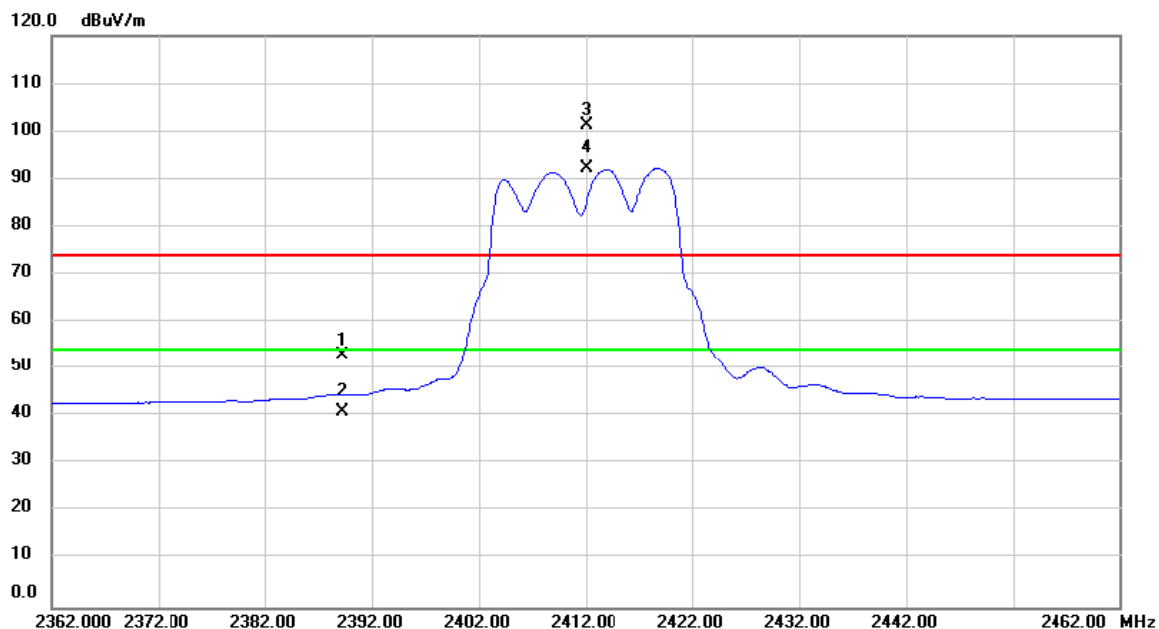
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.000	56.76	-11.22	45.54	74.00	-28.46	peak	
2	*	4924.000	50.00	-11.22	38.78	54.00	-15.22	AVG	

Test Mode	TX G MODE _2412 MHz	Polarization	Vertical
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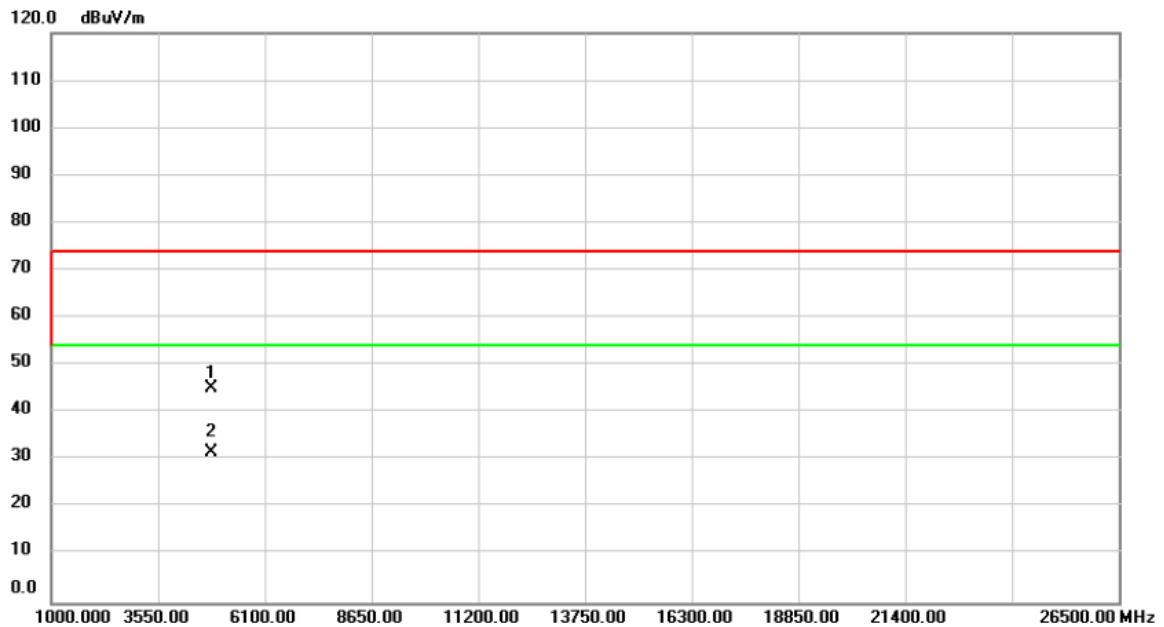
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2389.216	21.99	31.06	53.05	74.00	-20.95	peak	
2		2389.216	9.80	31.06	40.86	54.00	-13.14	AVG	
3	X	2412.000	70.21	31.14	101.35	74.00	27.35	peak	No Limit
4	*	2412.000	61.20	31.14	92.34	54.00	38.34	AVG	No Limit

Test Mode	TX G MODE _2412 MHz	Polarization	Vertical
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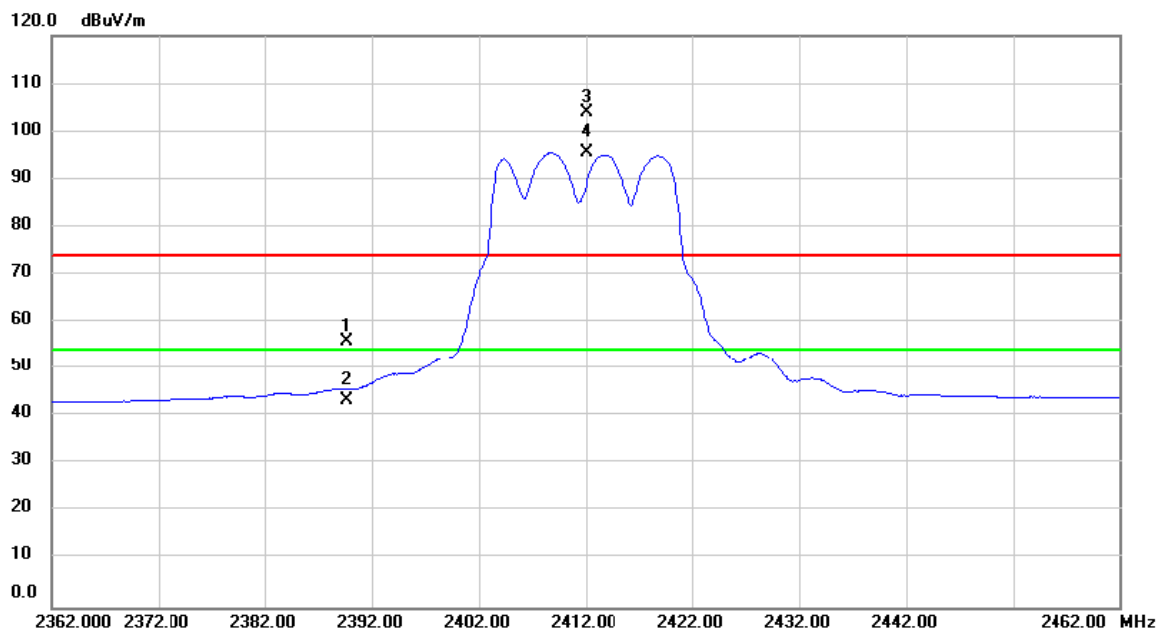
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4824.000	56.65	-11.37	45.28	74.00	-28.72	peak	
2	*	4824.000	43.07	-11.37	31.70	54.00	-22.30	AVG	

Test Mode	TX G MODE _2412 MHz	Polarization	Horizontal
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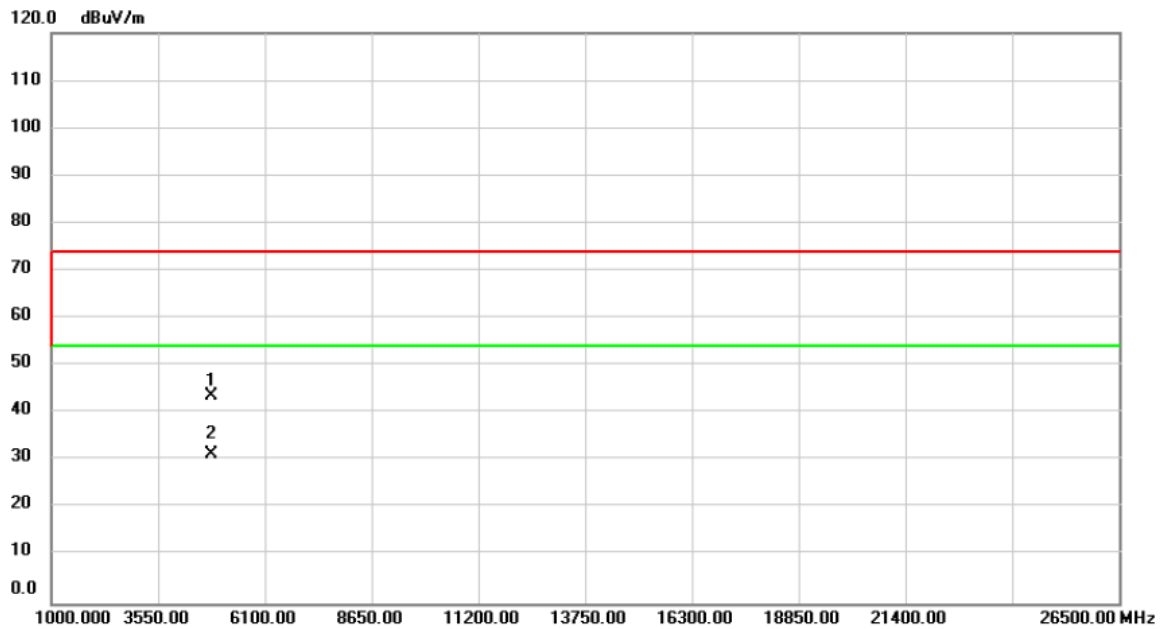
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2389.608	24.85	31.06	55.91	74.00	-18.09	peak	
2		2389.608	12.21	31.06	43.27	54.00	-10.73	AVG	
3	X	2412.000	72.82	31.14	103.96	74.00	29.96	peak	No Limit
4	*	2412.000	64.41	31.14	95.55	54.00	41.55	AVG	No Limit

Test Mode	TX G MODE _2412 MHz	Polarization	Horizontal
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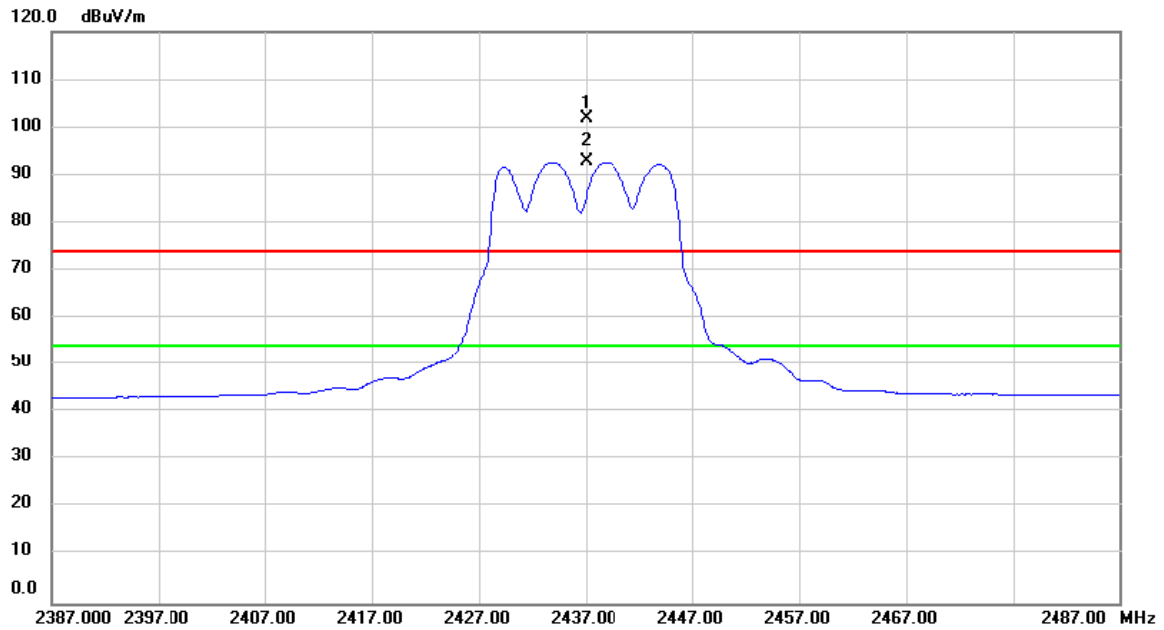
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4824.000	54.92	-11.37	43.55	74.00	-30.45	peak	
2	*	4824.000	42.63	-11.37	31.26	54.00	-22.74	AVG	

Test Mode	TX G MODE _2437 MHz	Polarization	Vertical
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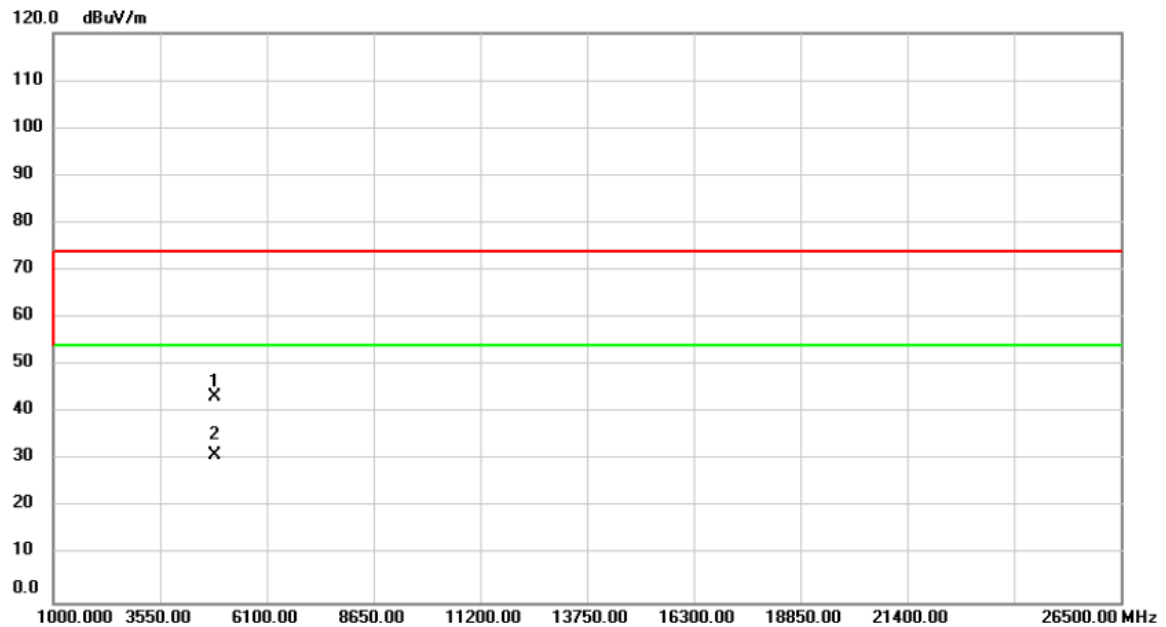
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2437.000	70.73	31.23	101.96	74.00	27.96	peak	No Limit
2	*	2437.000	61.54	31.23	92.77	54.00	38.77	AVG	No Limit

Test Mode	TX G MODE _2437 MHz	Polarization	Vertical
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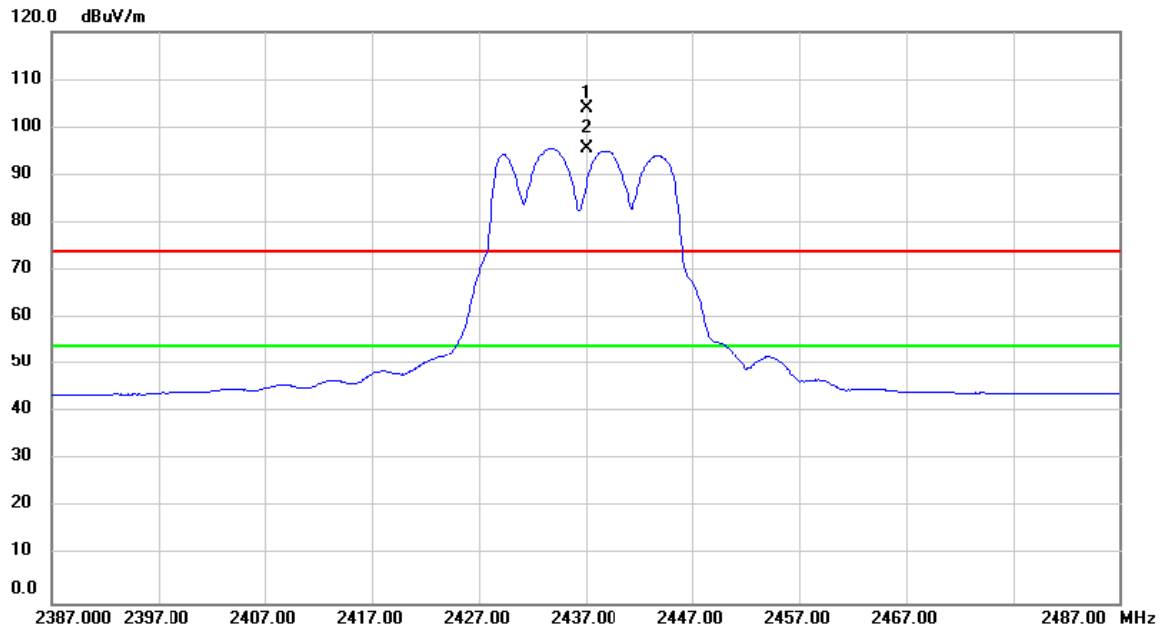
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4874.000	54.67	-11.29	43.38	74.00	-30.62	peak	
2	*	4874.000	42.20	-11.29	30.91	54.00	-23.09	AVG	

Test Mode	TX G MODE _2437 MHz	Polarization	Horizontal
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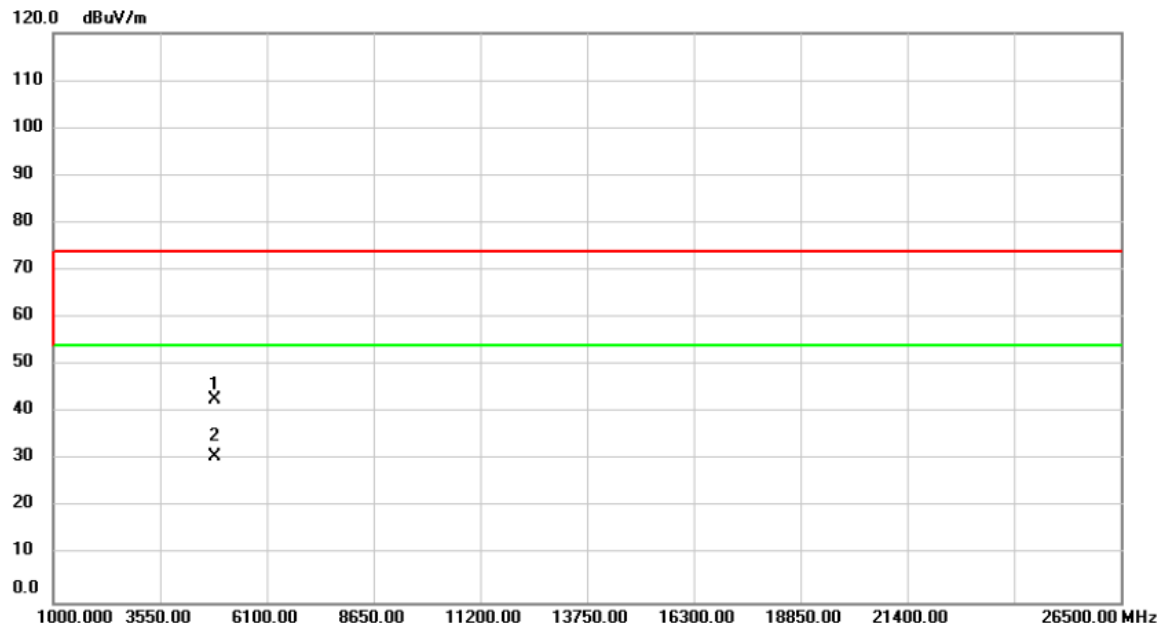
Orthogonal Axis: Z



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2437.000	72.74	31.23	103.97	74.00	29.97	peak	No Limit
2	*	2437.000	64.40	31.23	95.63	54.00	41.63	AVG	No Limit

Test Mode	TX G MODE _2437 MHz	Polarization	Horizontal
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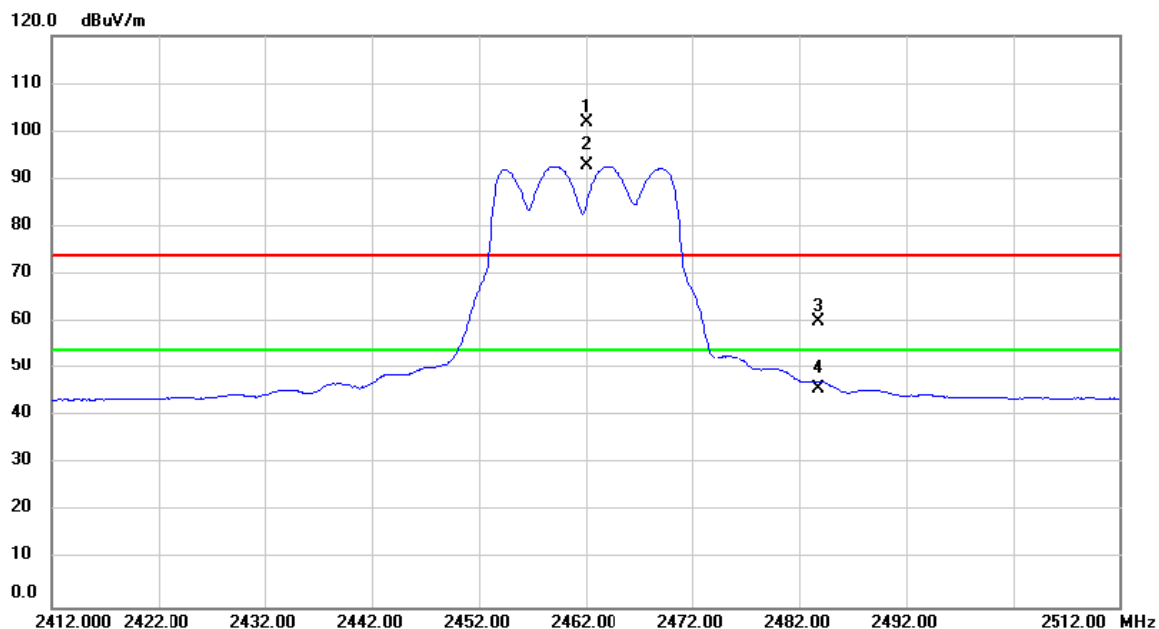
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4874.000	54.11	-11.29	42.82	74.00	-31.18	peak	
2	*	4874.000	42.02	-11.29	30.73	54.00	-23.27	AVG	

Test Mode	TX G MODE _2462 MHz	Polarization	Vertical
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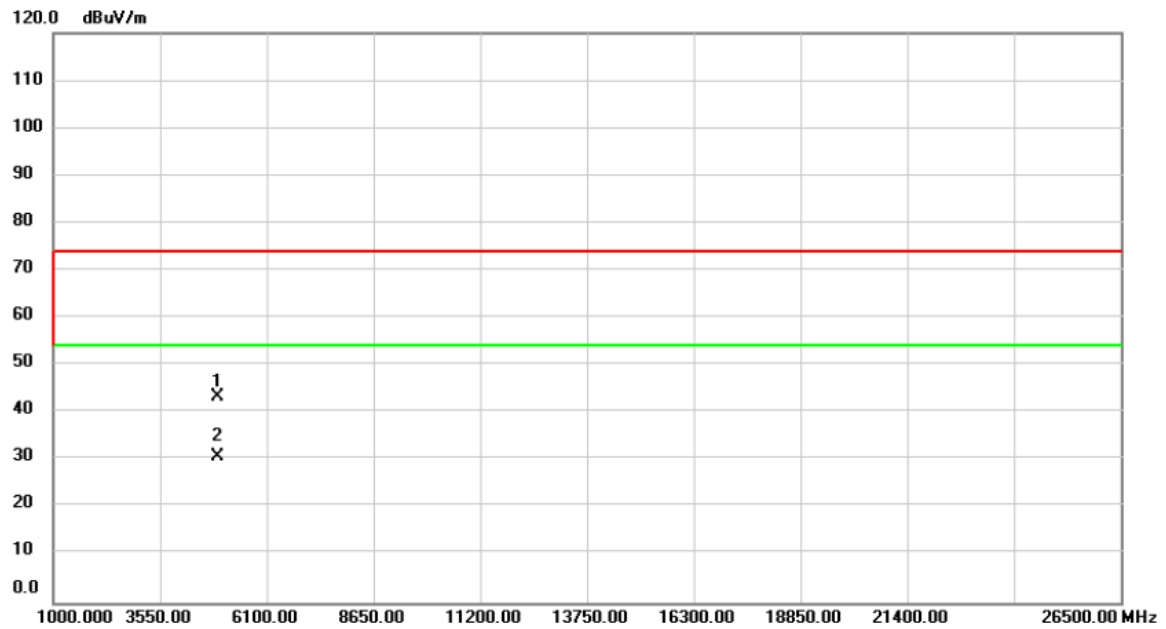
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2462.000	70.60	31.33	101.93	74.00	27.93	peak	No Limit
2	*	2462.000	61.64	31.33	92.97	54.00	38.97	AVG	No Limit
3		2483.756	28.77	31.41	60.18	74.00	-13.82	peak	
4		2483.756	14.36	31.41	45.77	54.00	-8.23	AVG	

Test Mode	TX G MODE _2462 MHz	Polarization	Vertical
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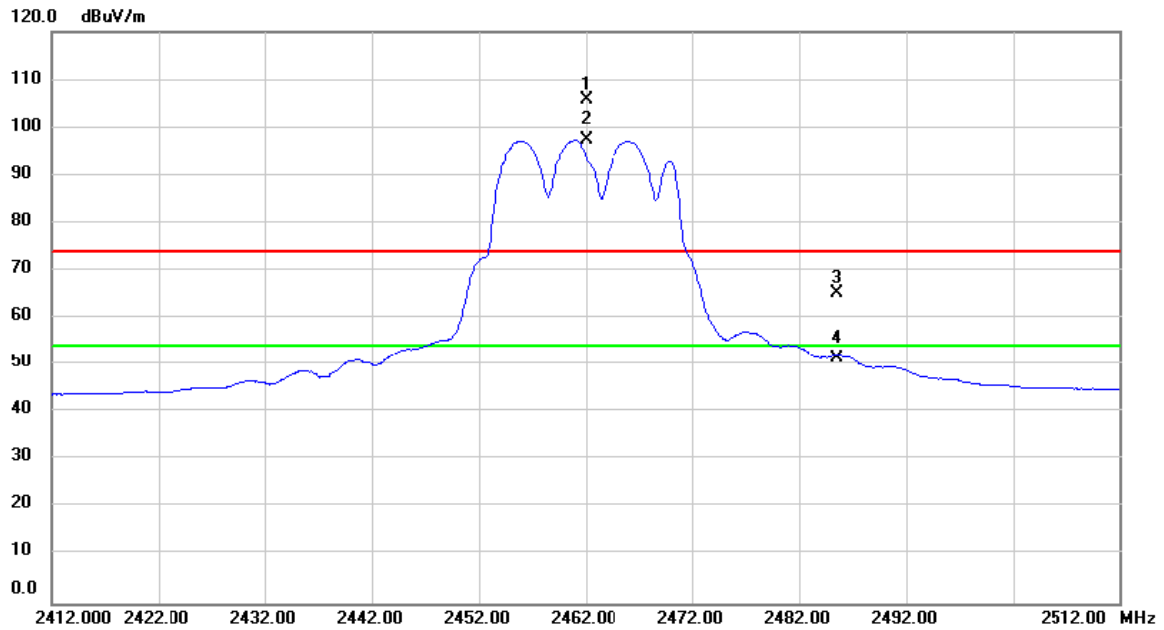
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.000	54.70	-11.22	43.48	74.00	-30.52	peak	
2	*	4924.000	42.09	-11.22	30.87	54.00	-23.13	AVG	

Test Mode	TX G MODE _2462 MHz	Polarization	Horizontal
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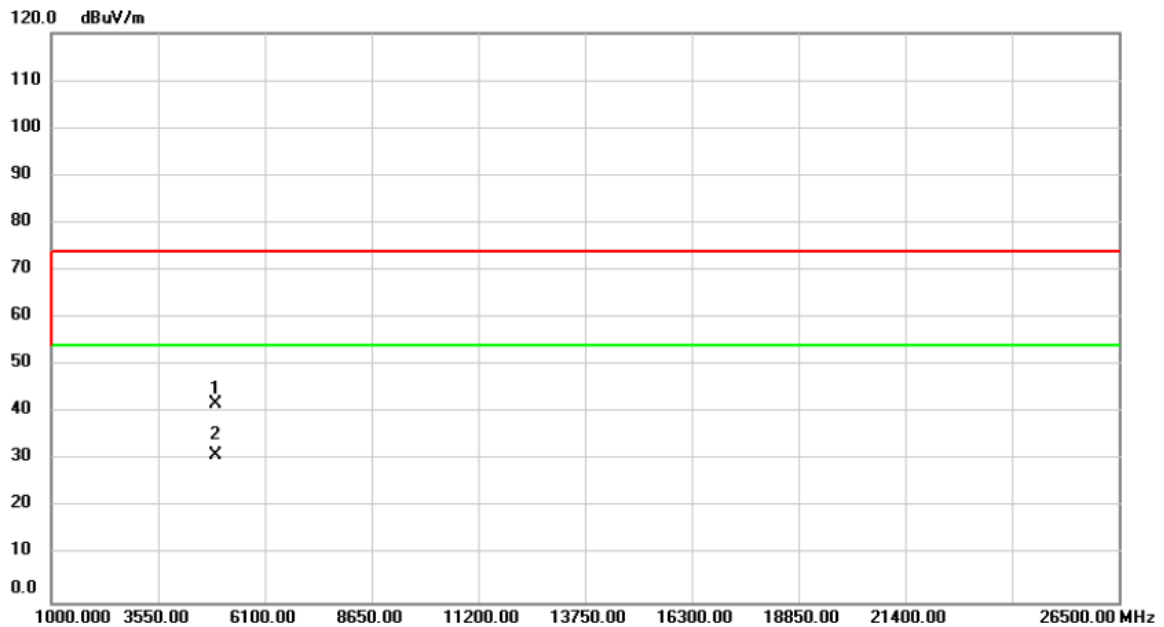
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2462.000	74.47	31.33	105.80	74.00	31.80	peak	No Limit
2	*	2462.000	65.99	31.33	97.32	54.00	43.32	AVG	No Limit
3		2485.523	33.80	31.42	65.22	74.00	-8.78	peak	
4		2485.523	20.00	31.42	51.42	54.00	-2.58	AVG	

Test Mode	TX G MODE _2462 MHz	Polarization	Horizontal
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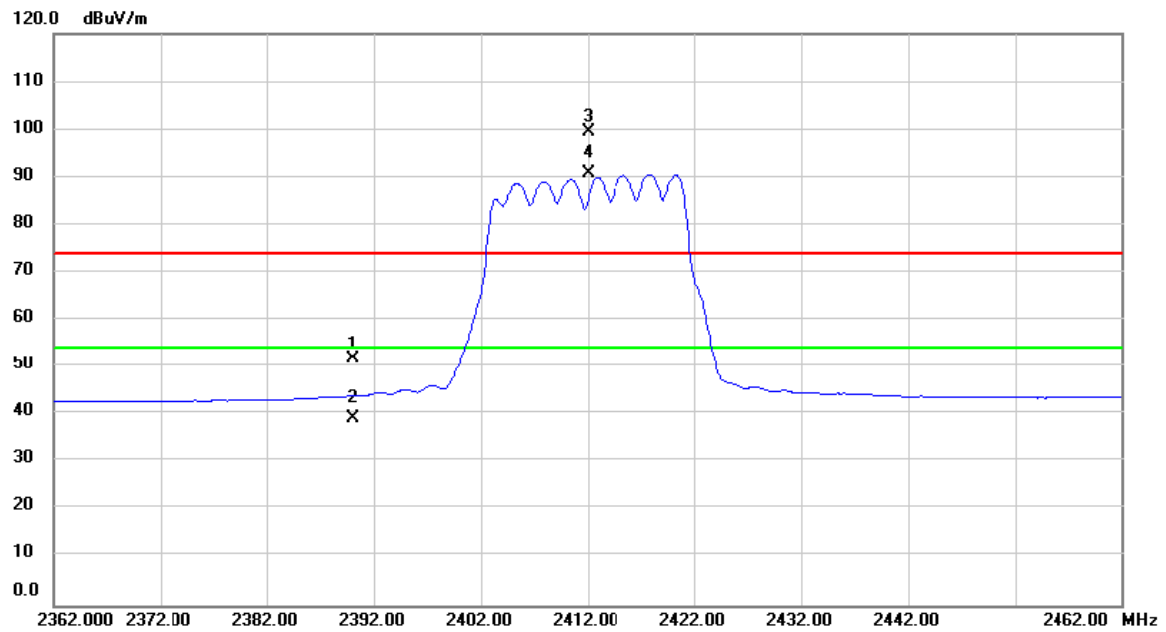
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.000	53.17	-11.22	41.95	74.00	-32.05	peak	
2	*	4924.000	42.28	-11.22	31.06	54.00	-22.94	AVG	

Test Mode	TX N-20M MODE 2412MHz	Polarization	Vertical
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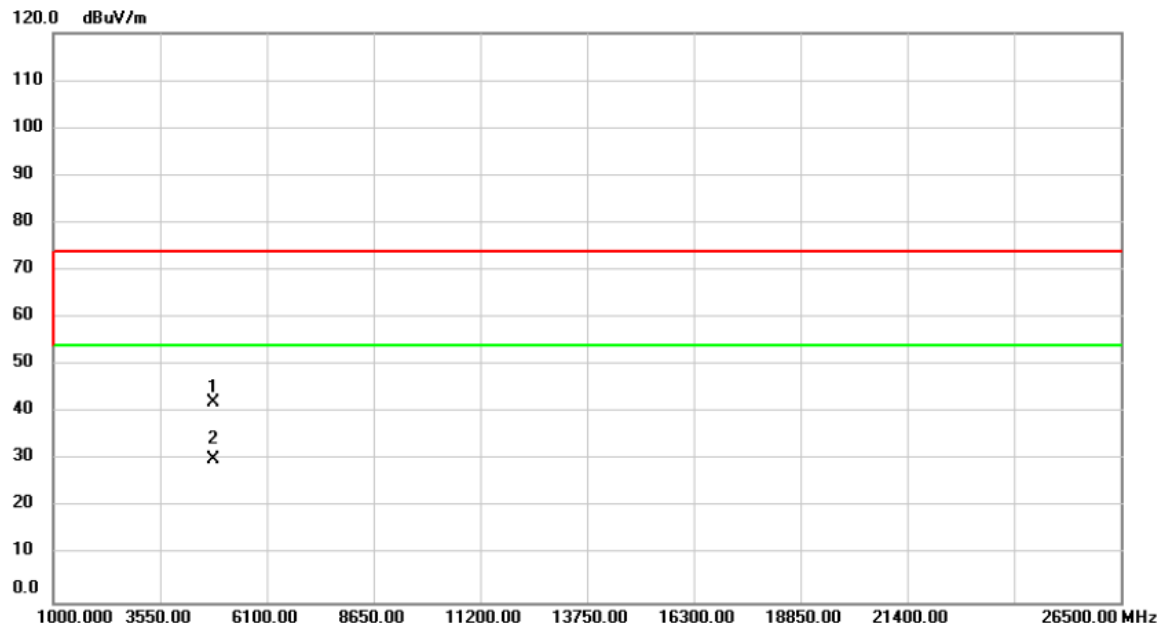
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	20.73	31.06	51.79	74.00	-22.21	peak	
2		2390.000	8.09	31.06	39.15	54.00	-14.85	AVG	
3	X	2412.000	68.19	31.14	99.33	74.00	25.33	peak	No Limit
4	*	2412.000	59.47	31.14	90.61	54.00	36.61	AVG	No Limit

Test Mode	TX N-20M MODE 2412MHz	Polarization	Vertical
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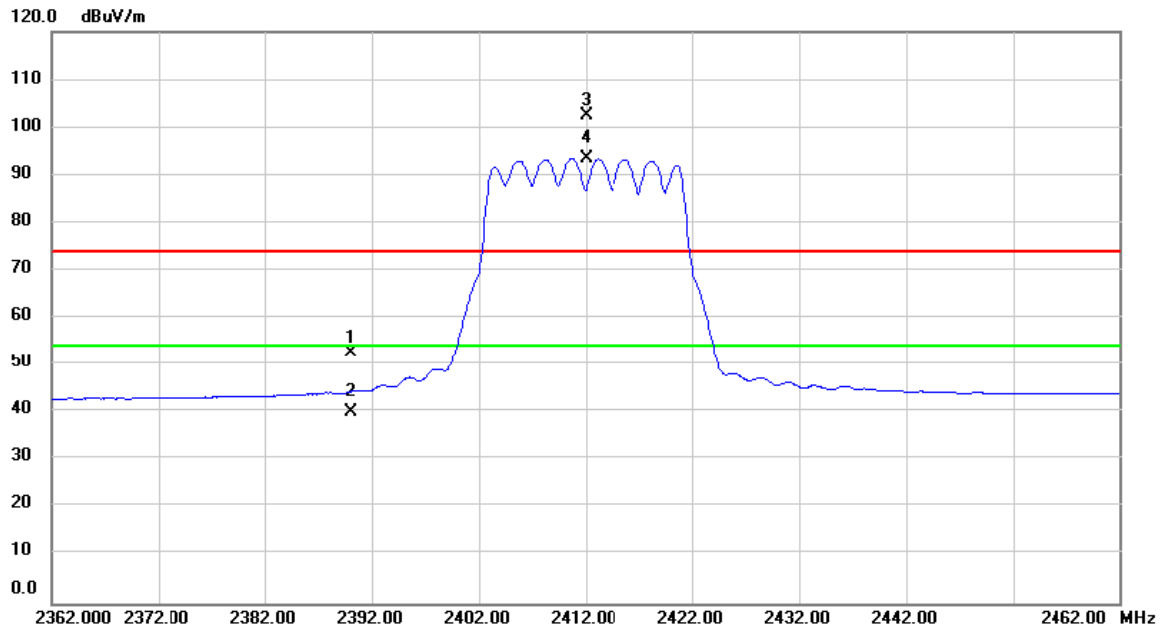
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4824.000	53.65	-11.37	42.28	74.00	-31.72	peak	
2	*	4824.000	41.44	-11.37	30.07	54.00	-23.93	AVG	

Test Mode	TX N-20M MODE 2412MHz	Polarization	Horizontal
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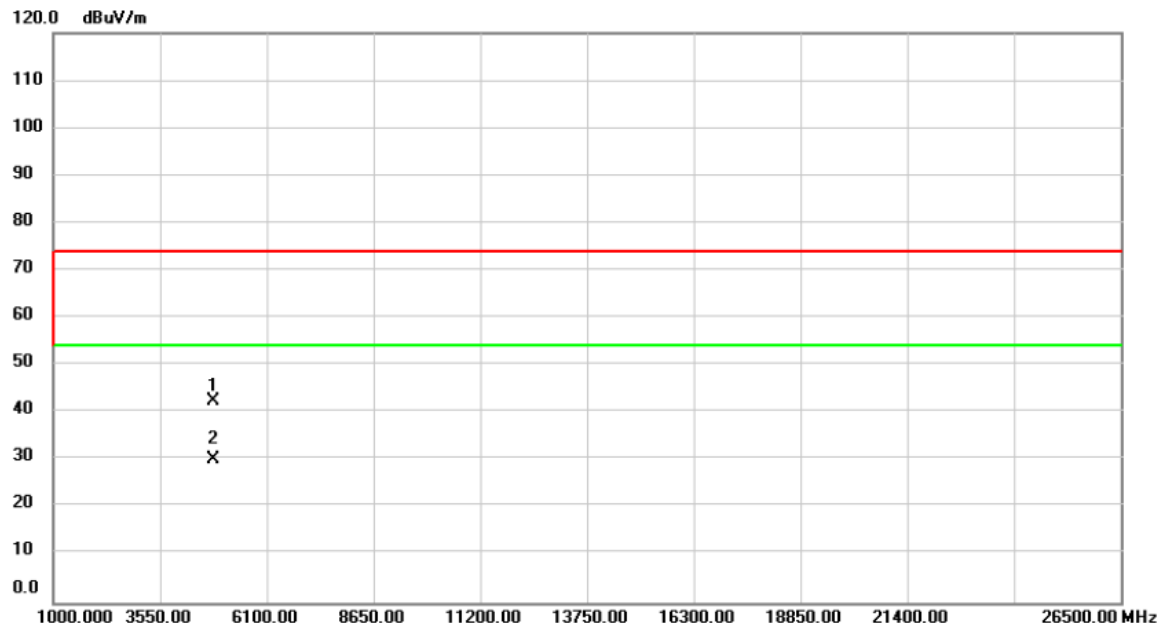
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	21.45	31.06	52.51	74.00	-21.49	peak	
2		2390.000	9.08	31.06	40.14	54.00	-13.86	AVG	
3	X	2412.000	71.20	31.14	102.34	74.00	28.34	peak	No Limit
4	*	2412.000	62.33	31.14	93.47	54.00	39.47	AVG	No Limit

Test Mode	TX N-20M MODE 2412MHz	Polarization	Horizontal
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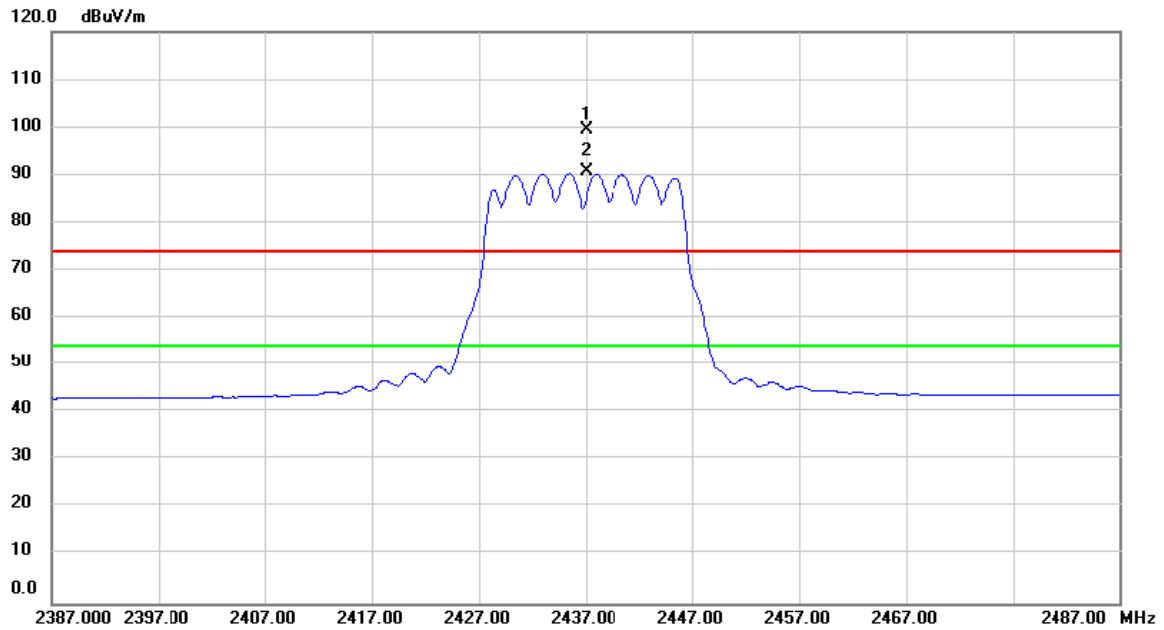
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4824.000	53.95	-11.37	42.58	74.00	-31.42	peak	
2	*	4824.000	41.42	-11.37	30.05	54.00	-23.95	AVG	

Test Mode	TX N-20M MODE 2437MHz	Polarization	Vertical
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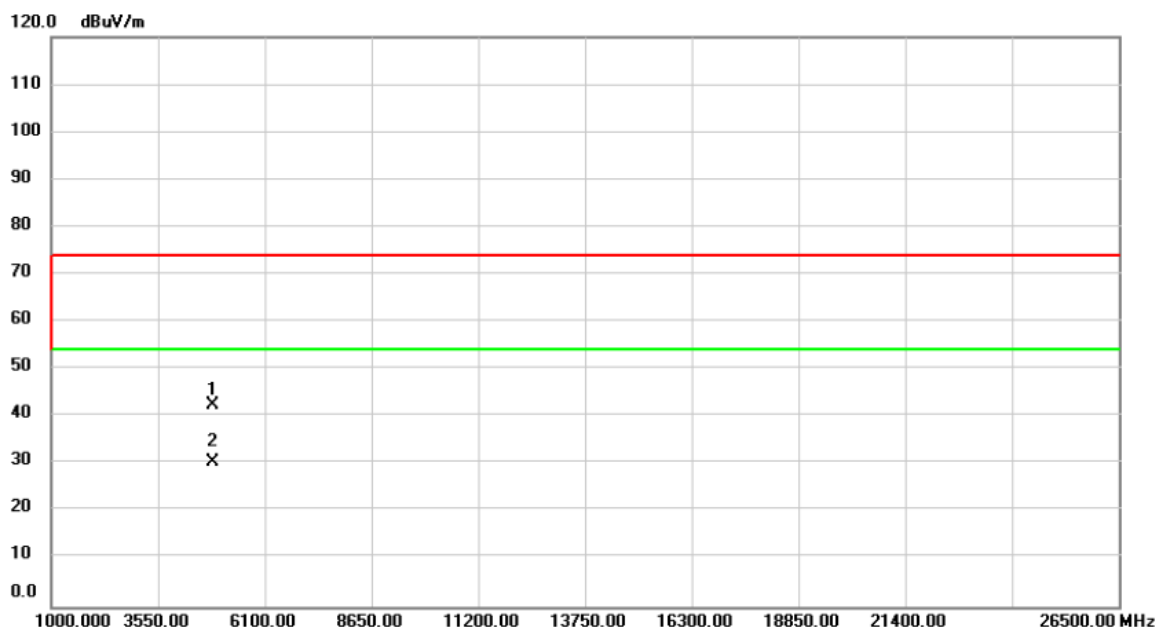
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2437.000	68.21	31.23	99.44	74.00	25.44	peak	No Limit
2	*	2437.000	59.38	31.23	90.61	54.00	36.61	AVG	No Limit

Test Mode	TX N-20M MODE 2437MHz	Polarization	Vertical
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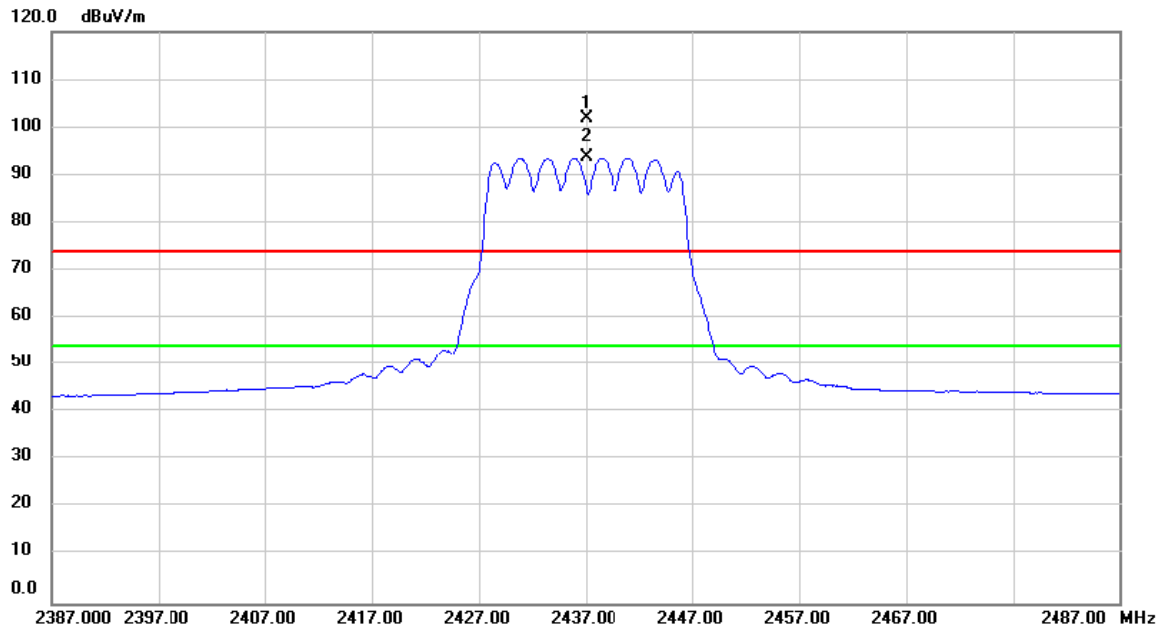
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4874.000	53.70	-11.29	42.41	74.00	-31.59	peak	
2	*	4874.000	41.73	-11.29	30.44	54.00	-23.56	AVG	

Test Mode	TX N-20M MODE 2437MHz	Polarization	Horizontal
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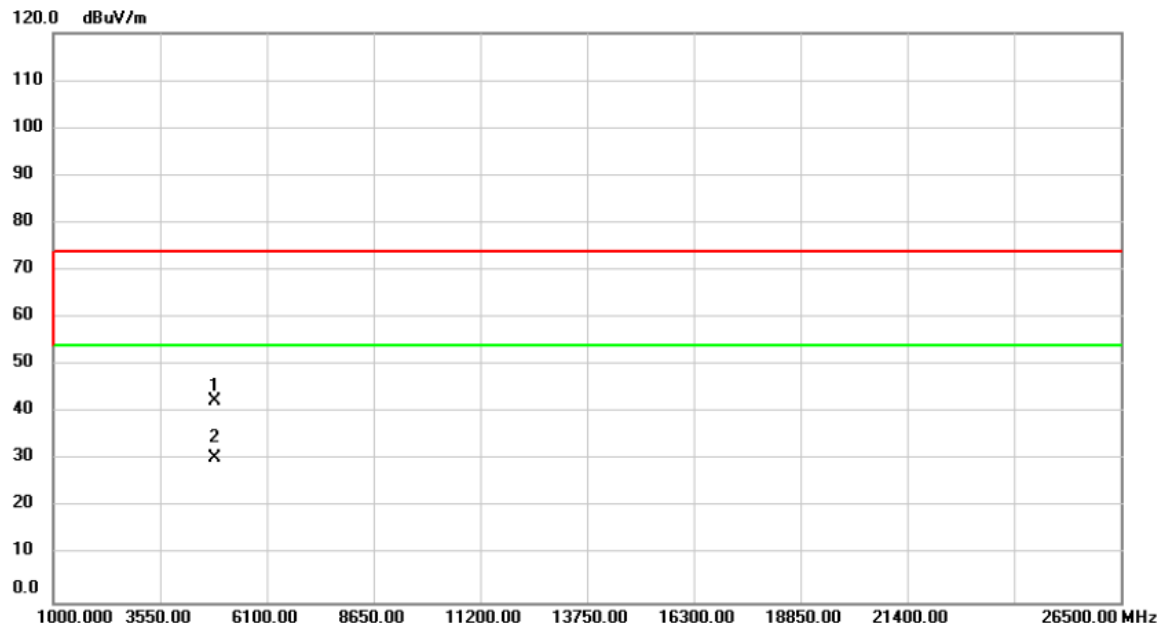
Orthogonal Axis: Z



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2437.000	70.63	31.23	101.86	74.00	27.86	peak	No Limit
2	*	2437.000	62.47	31.23	93.70	54.00	39.70	AVG	No Limit

Test Mode	TX N-20M MODE 2437MHz	Polarization	Horizontal
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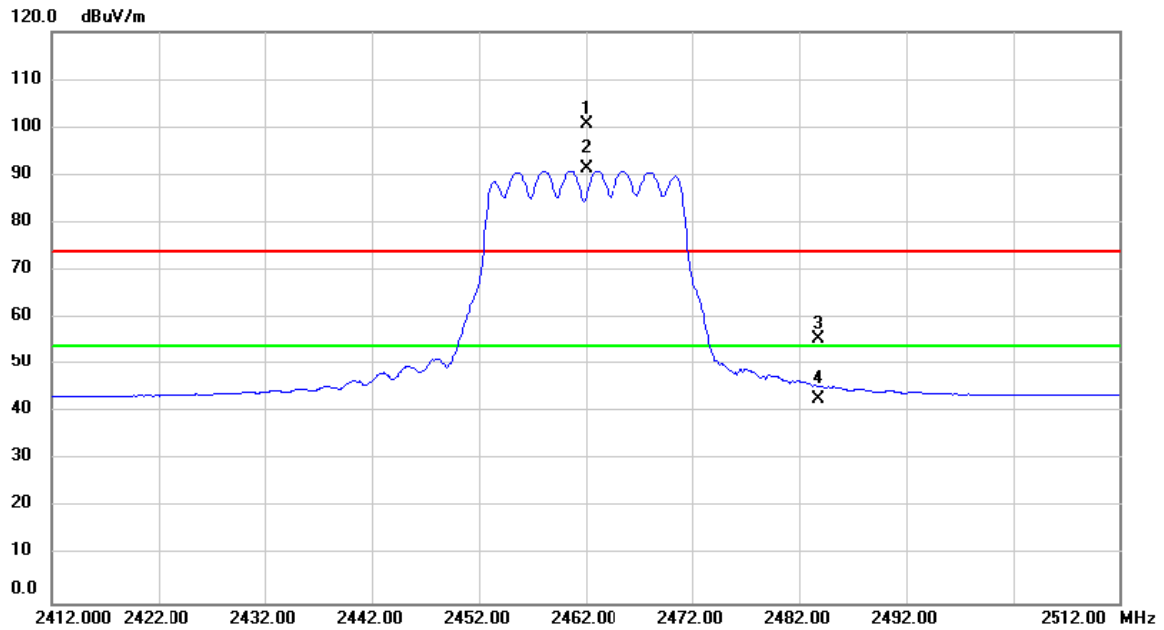
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4874.000	53.78	-11.29	42.49	74.00	-31.51	peak	
2	*	4874.000	41.71	-11.29	30.42	54.00	-23.58	AVG	

Test Mode	TX N-20M MODE 2462MHz	Polarization	Vertical
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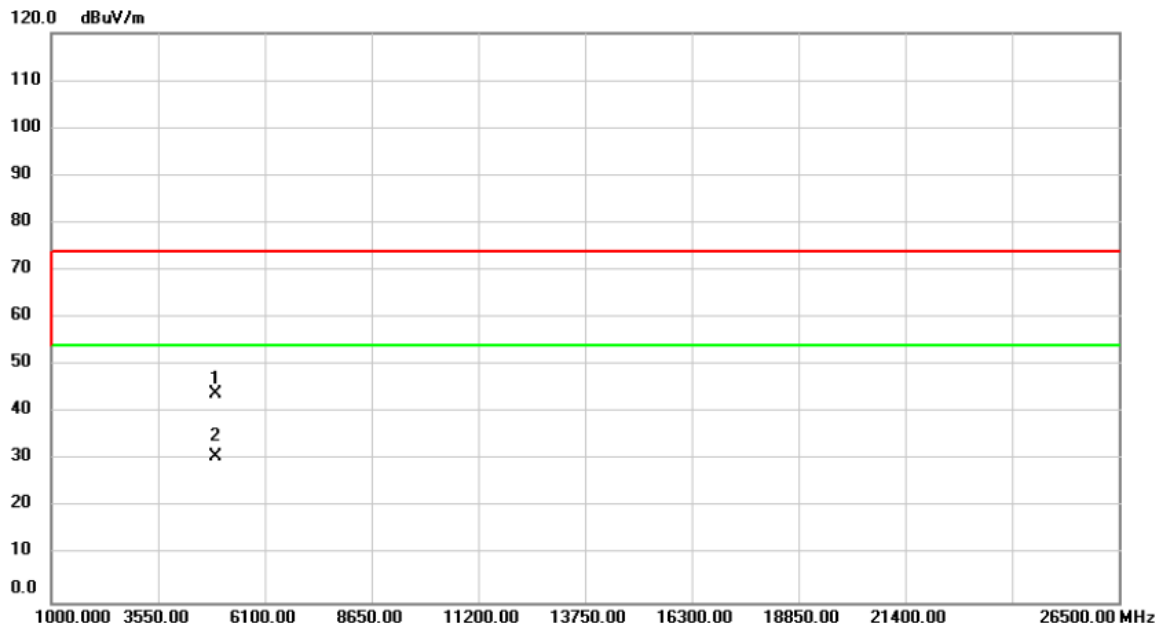
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2462.000	69.31	31.33	100.64	74.00	26.64	peak	No Limit
2	*	2462.000	59.91	31.33	91.24	54.00	37.24	AVG	No Limit
3		2483.814	24.22	31.41	55.63	74.00	-18.37	peak	
4		2483.814	11.28	31.41	42.69	54.00	-11.31	AVG	

Test Mode	TX N-20M MODE 2462MHz	Polarization	Vertical
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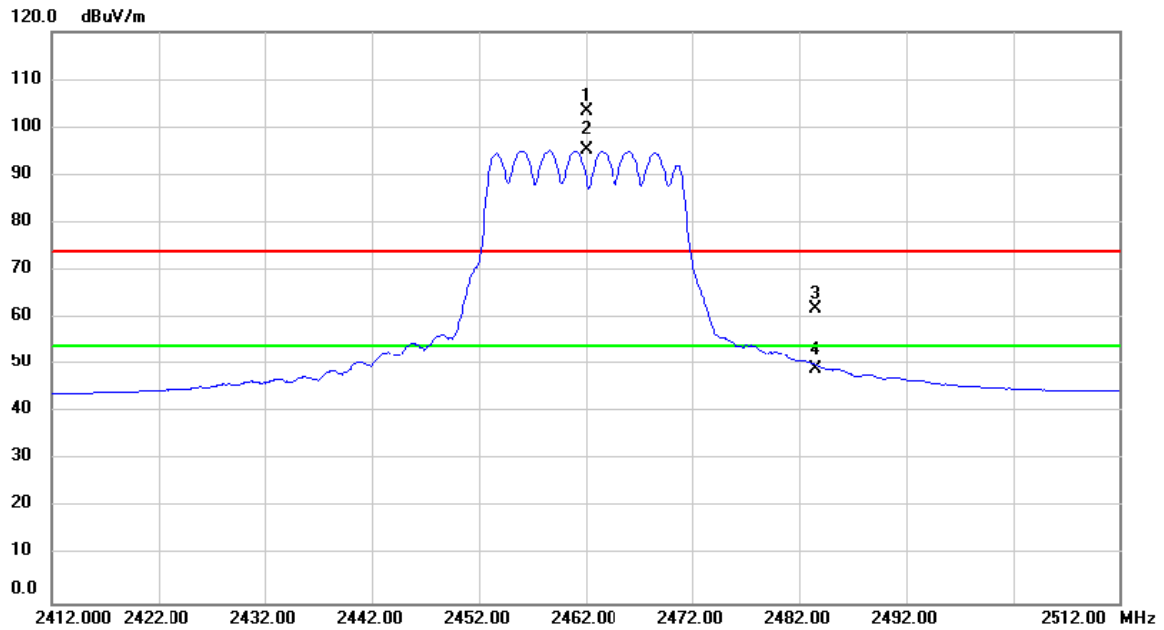
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.000	55.31	-11.22	44.09	74.00	-29.91	peak	
2	*	4924.000	41.90	-11.22	30.68	54.00	-23.32	AVG	

Test Mode	TX N-20M MODE 2462MHz	Polarization	Horizontal
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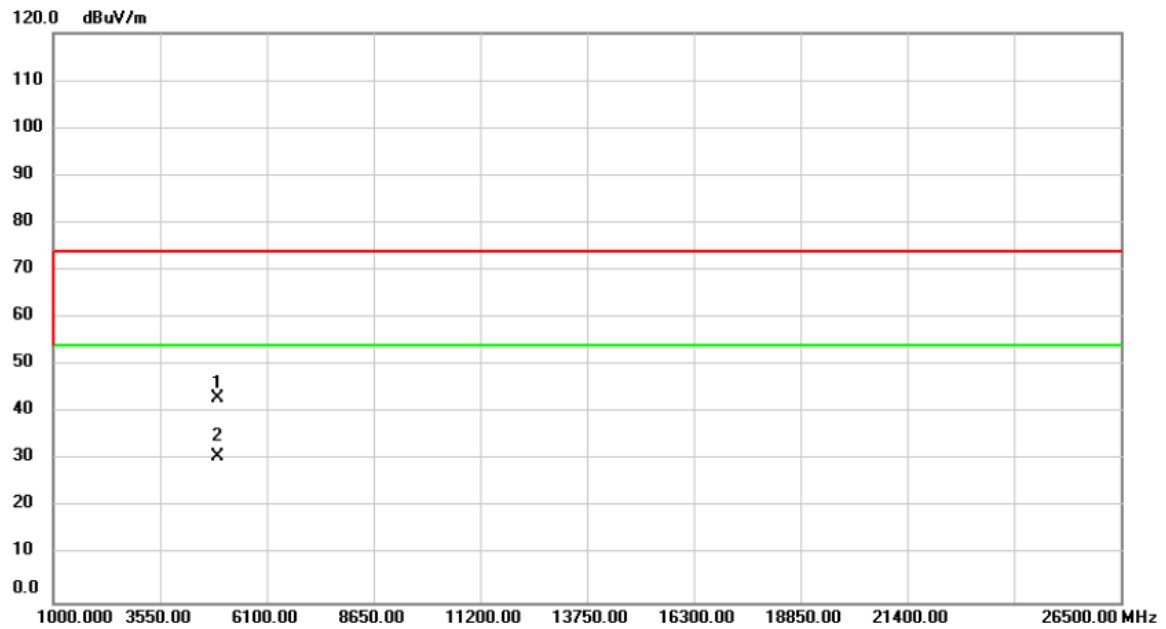
Orthogonal Axis: Z



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2462.000	72.00	31.33	103.33	74.00	29.33	peak	No Limit
2	*	2462.000	63.79	31.33	95.12	54.00	41.12	AVG	No Limit
3		2483.500	30.59	31.41	62.00	74.00	-12.00	peak	
4		2483.500	17.60	31.41	49.01	54.00	-4.99	AVG	

Test Mode	TX N-20M MODE 2462MHz	Polarization	Horizontal
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Orthogonal Axis: Z

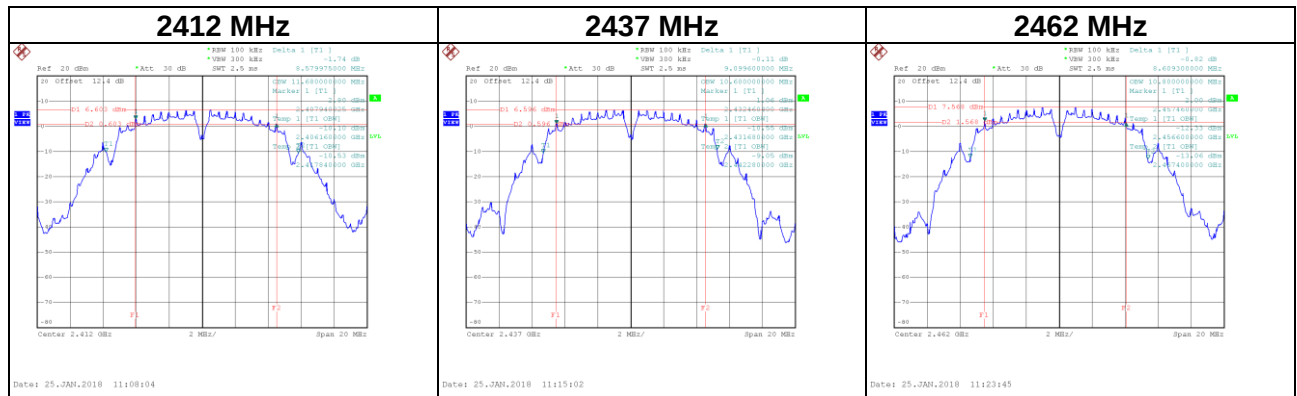


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.000	54.38	-11.22	43.16	74.00	-30.84	peak	
2	*	4924.000	42.08	-11.22	30.86	54.00	-23.14	AVG	

APPENDIX E - BANDWIDTH

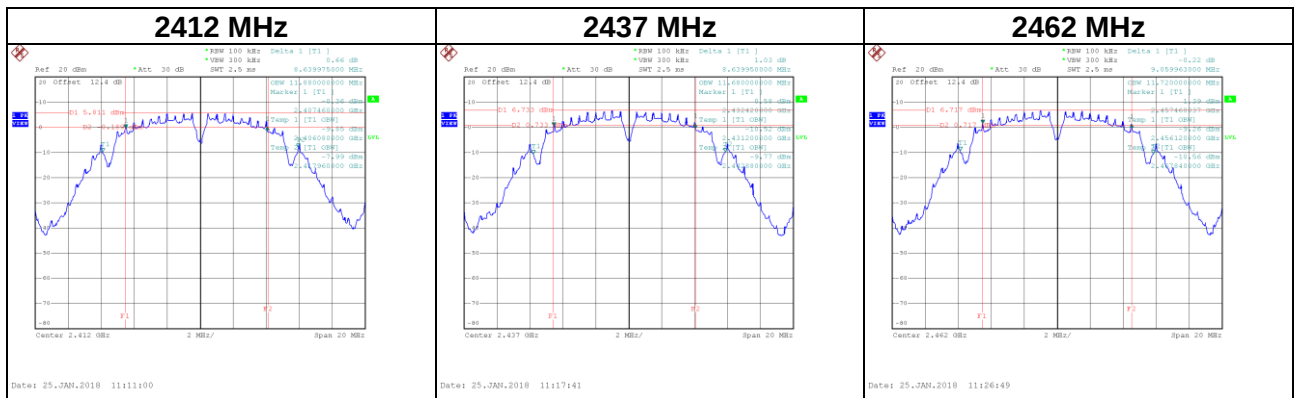
Test Mode : TX B Mode_CH01/06/11_ANT 1

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	8.58	11.68	500	Complies
2437	9.10	10.60	500	Complies
2462	8.61	10.80	500	Complies



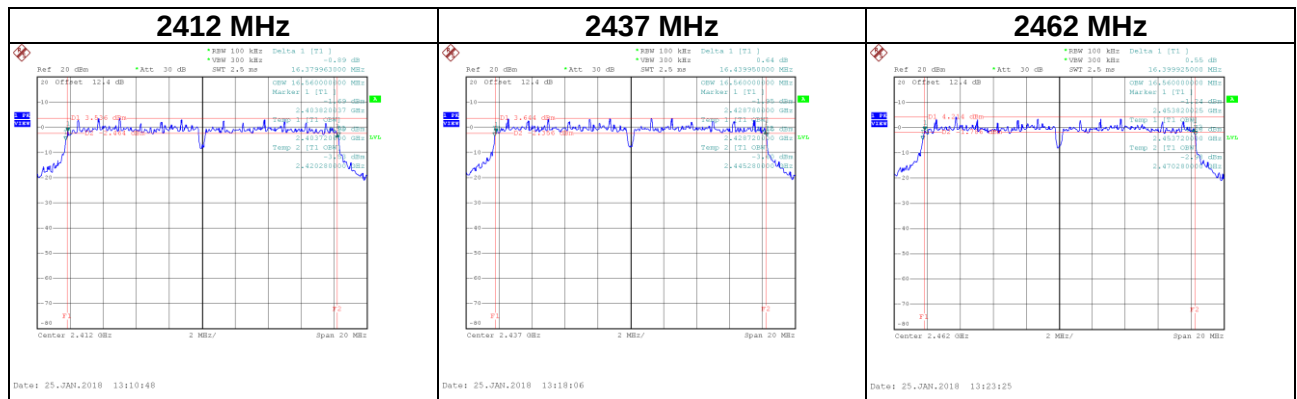
Test Mode : TX B Mode_CH01/06/11_ANT 2

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	8.64	11.88	500	Complies
2437	8.64	11.68	500	Complies
2462	9.06	11.72	500	Complies



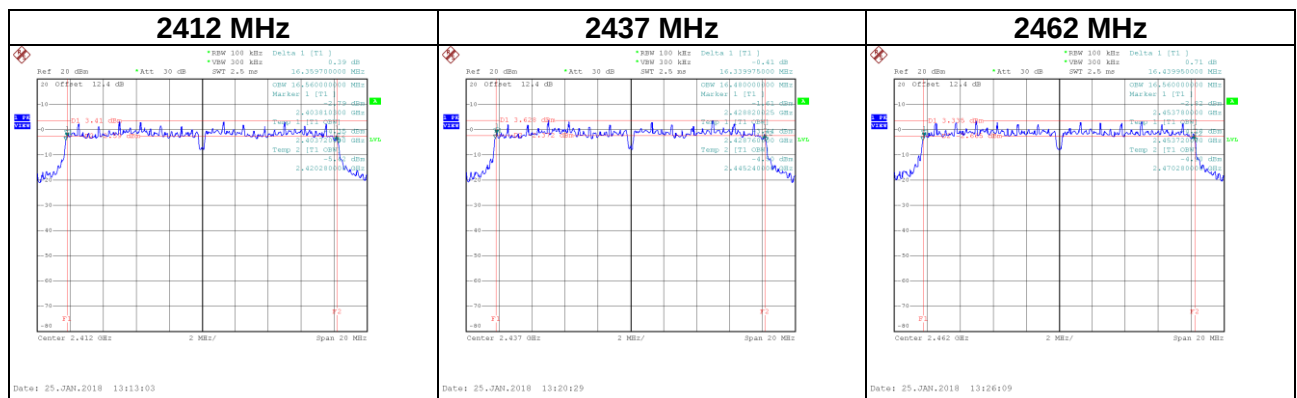
Test Mode: TX G Mode_CH01/06/11_ANT 1

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.38	16.56	500	Complies
2437	16.44	16.56	500	Complies
2462	16.40	16.56	500	Complies



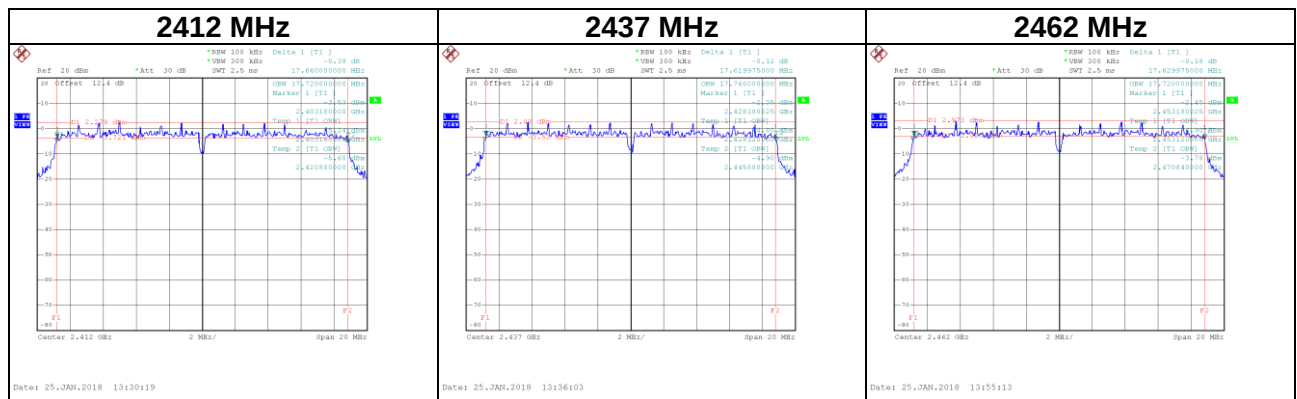
Test Mode: TX G Mode_CH01/06/11_ANT 2

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.36	16.56	500	Complies
2437	16.34	16.48	500	Complies
2462	16.44	16.56	500	Complies



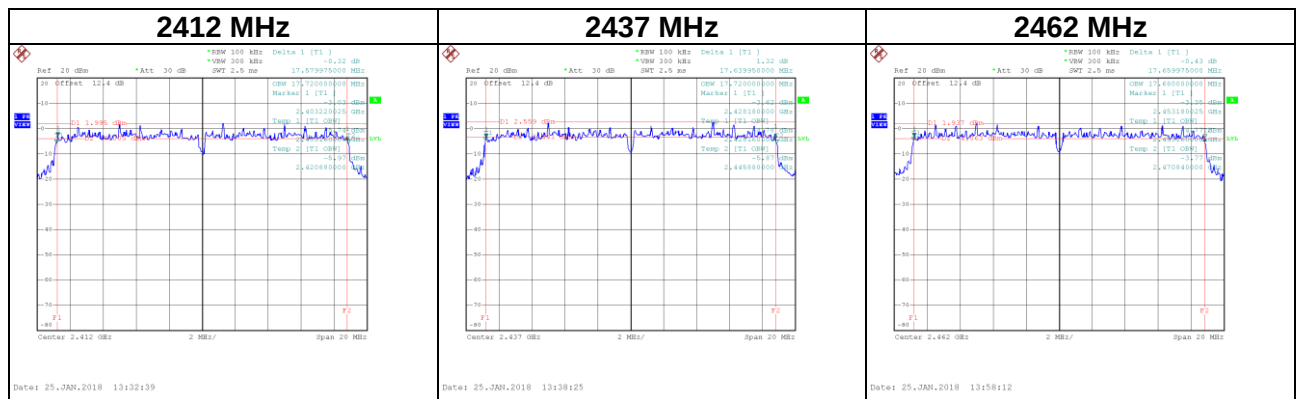
Test Mode : TX N-20MHz Mode_CH01/06/11_ANT 1

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.66	17.72	500	Complies
2437	17.62	17.76	500	Complies
2462	17.63	17.72	500	Complies



Test Mode : TX N-20MHz Mode_CH01/06/11_ANT 2

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.58	17.72	500	Complies
2437	17.64	17.72	500	Complies
2462	17.66	17.68	500	Complies



APPENDIX F - MAXIMUM PEAK CONDUCTED OUTPUT POWER

Test Mode :TX B Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	18.73	0.0746	30.00	1.00	Complies
2437	18.96	0.0787	30.00	1.00	Complies
2462	19.08	0.0809	30.00	1.00	Complies

Test Mode :TX B Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	17.90	0.0617	30.00	1.00	Complies
2437	18.78	0.0755	30.00	1.00	Complies
2462	19.03	0.0800	30.00	1.00	Complies

Test Mode :TX B Mode_CH01/06/11_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.35	0.1363	30.00	1.00	Complies
2437	21.88	0.1542	30.00	1.00	Complies
2462	22.07	0.1609	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.24	0.1330	30.00	1.00	Complies
2437	21.52	0.1419	30.00	1.00	Complies
2462	21.81	0.1517	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	20.90	0.1230	30.00	1.00	Complies
2437	21.13	0.1297	30.00	1.00	Complies
2462	21.22	0.1324	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	24.08	0.2561	30.00	1.00	Complies
2437	24.34	0.2716	30.00	1.00	Complies
2462	24.54	0.2841	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	20.69	0.1172	30.00	1.00	Complies
2437	20.42	0.1102	30.00	1.00	Complies
2462	20.79	0.1199	30.00	1.00	Complies

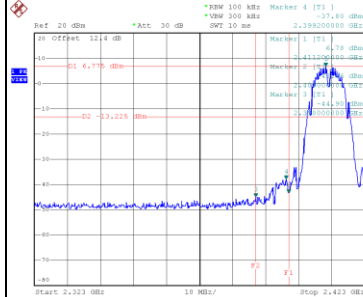
Test Mode :TX N20 Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	20.06	0.1014	30.00	1.00	Complies
2437	20.35	0.1084	30.00	1.00	Complies
2462	20.41	0.1099	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	23.40	0.2186	30.00	1.00	Complies
2437	23.40	0.2185	30.00	1.00	Complies
2462	23.61	0.2299	30.00	1.00	Complies

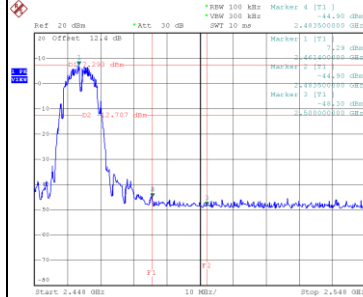
APPENDIX G - ANTENNA CONDUCTED SPURIOUS EMISSION

Test Mode :TX B Mode_CH01/06/11_ANT 1

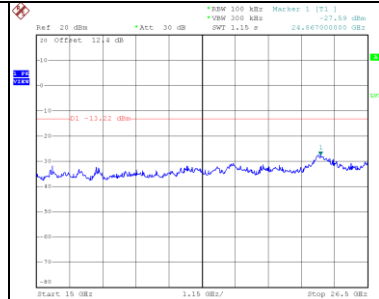
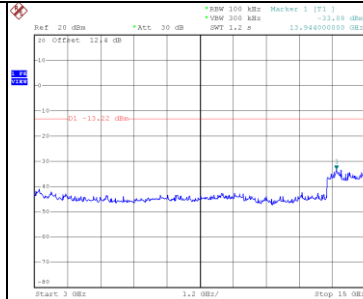
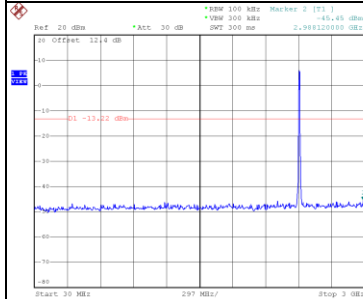
Bandedge-2412 MHz



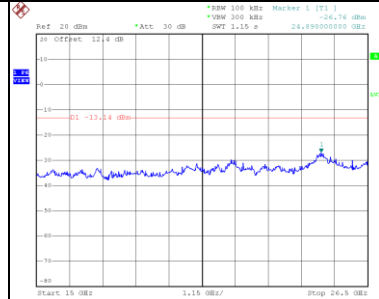
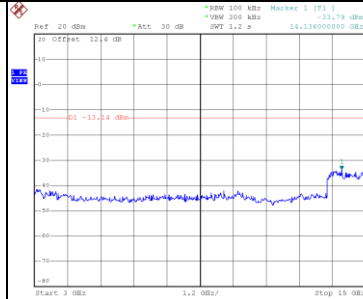
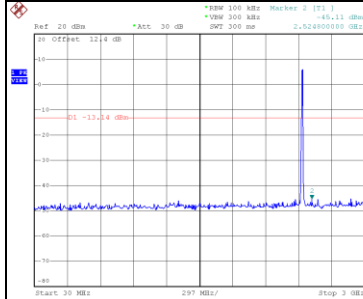
Bandedge-2462 MHz



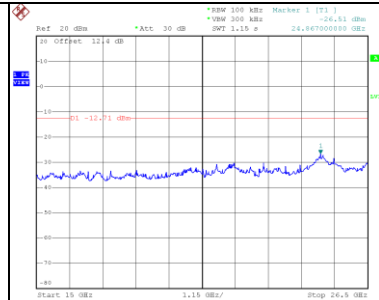
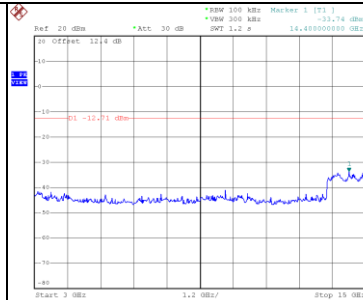
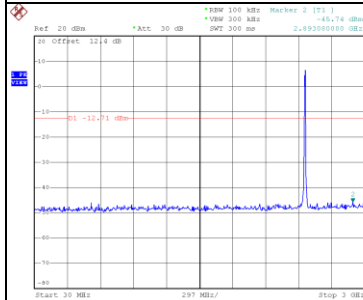
2412 MHz – 10 Harmonics



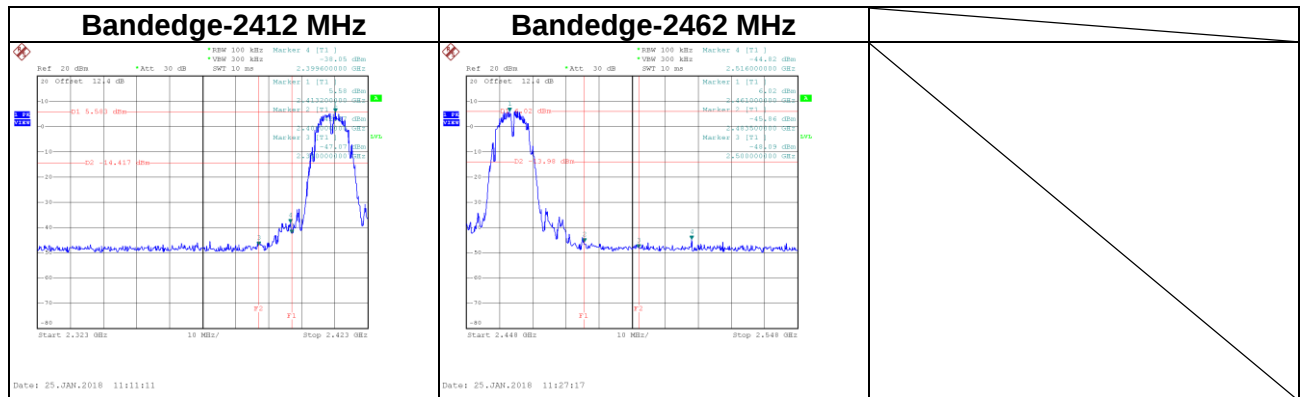
2437 MHz – 10 Harmonics



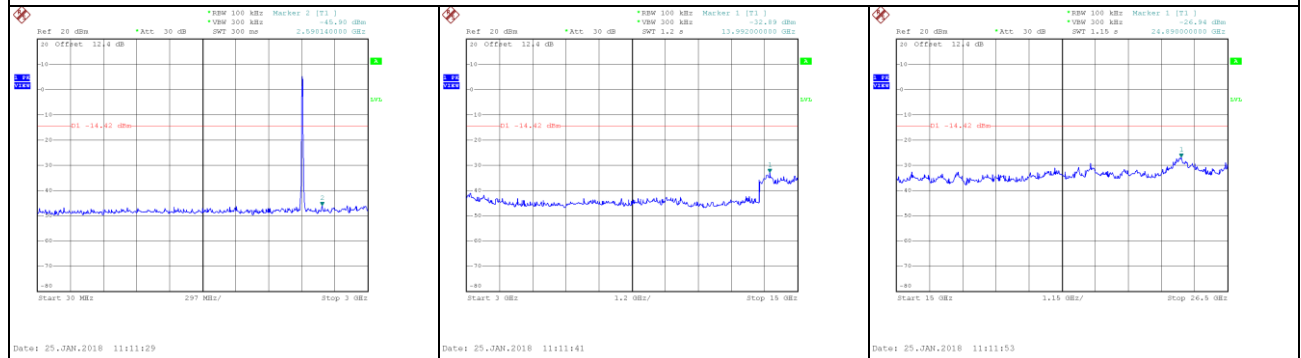
2462 MHz – 10 Harmonics



Test Mode :TX B Mode_CH01/06/11_ANT 2



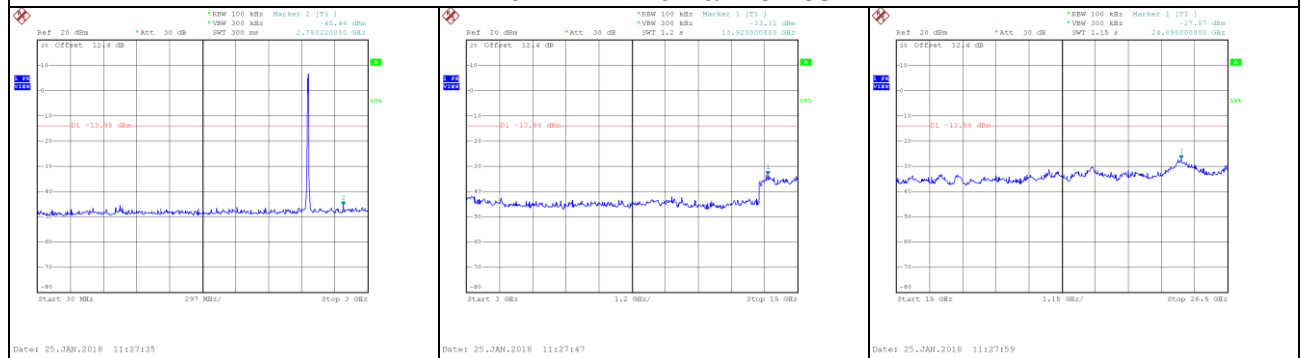
2412 MHz – 10 Harmonics



2437 MHz – 10 Harmonics

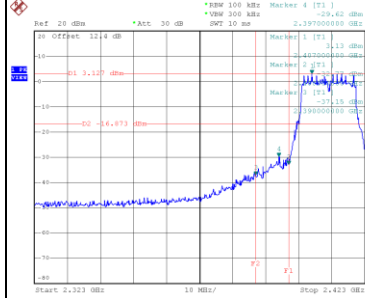


2462 MHz – 10 Harmonics



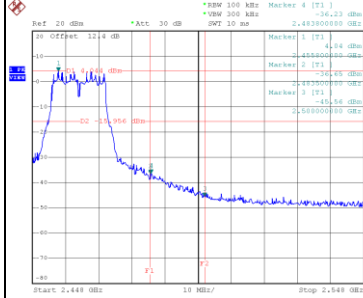
Test Mode :TX G Mode_CH01/06/11_ANT 1

Bandedge-2412 MHz

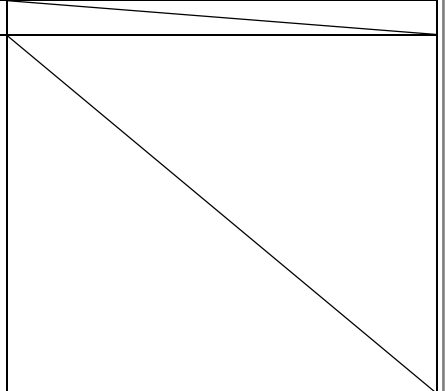


Date: 25.JAN.2018 13:11:00

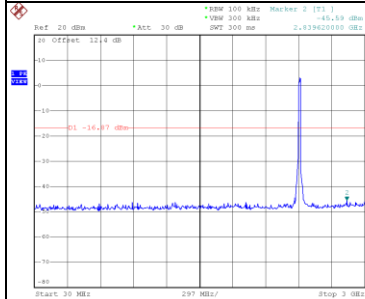
Bandedge-2462 MHz



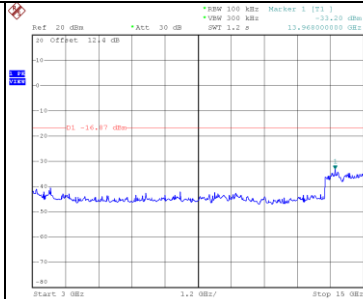
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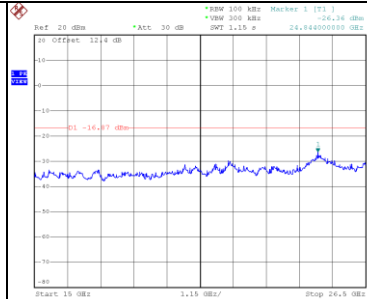
2412 MHz – 10 Harmonics



Date: 25.JAN.2018 13:11:18

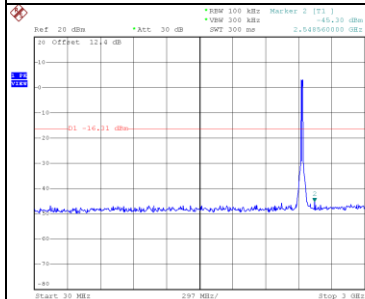


Date: 25.JAN.2018 13:11:29

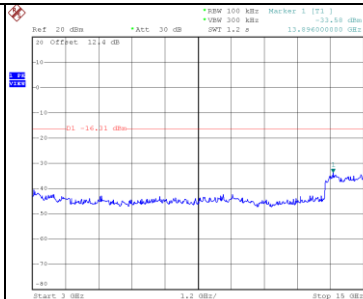


Date: 25.JAN.2018 13:11:41

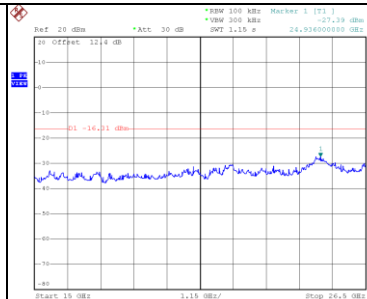
2437 MHz – 10 Harmonics



Date: 25.JAN.2018 13:18:52

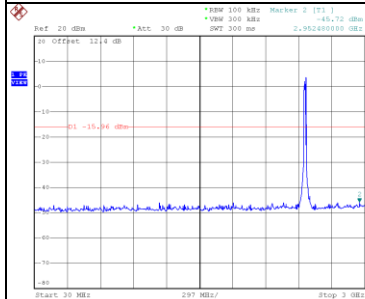


Date: 25.JAN.2018 13:19:04

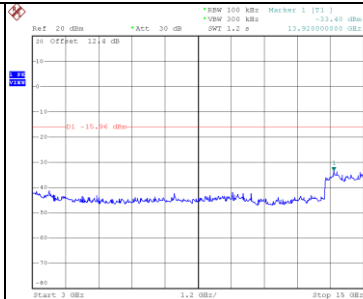


Date: 25.JAN.2018 13:19:16

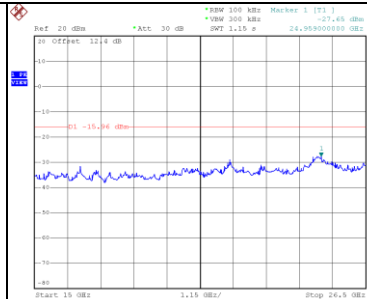
2462 MHz – 10 Harmonics



Date: 25.JAN.2018 13:24:12



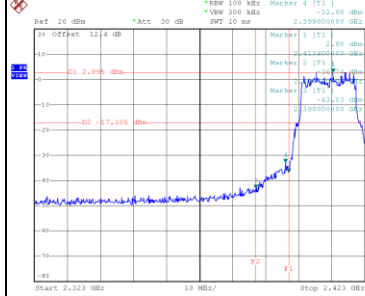
Date: 25.JAN.2018 13:24:23



Date: 25.JAN.2018 13:24:35

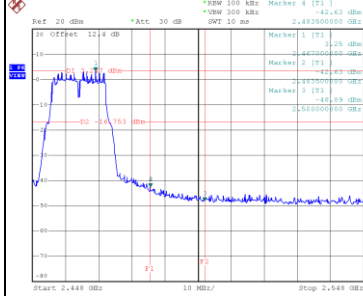
Test Mode :TX G Mode_CH01/06/11_ANT 2

Bandedge-2412 MHz



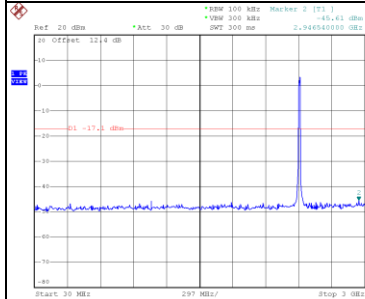
Date: 25.JAN.2018 13:13:15

Bandedge-2462 MHz

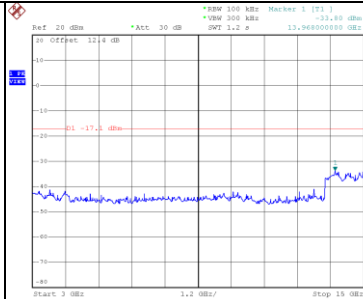


Date: 25.JAN.2018 13:26:38

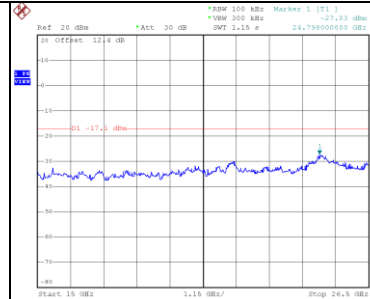
2412 MHz – 10 Harmonics



Date: 25.JAN.2018 13:13:13

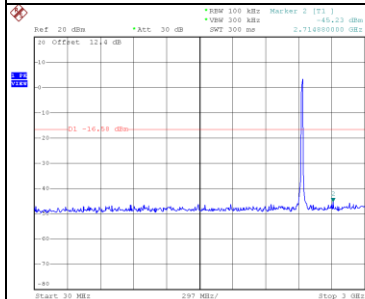


Date: 25.JAN.2018 13:13:44

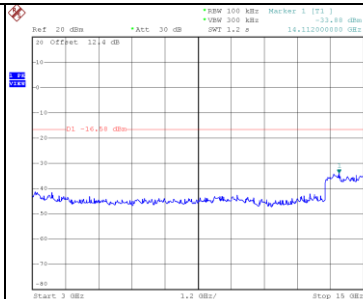


Date: 25.JAN.2018 13:13:56

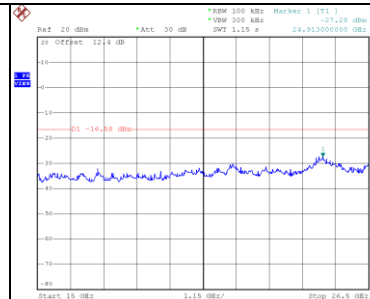
2437 MHz – 10 Harmonics



Date: 25.JAN.2018 13:21:15

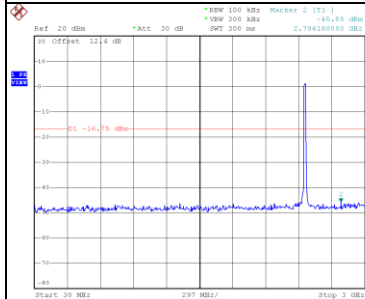


Date: 25.JAN.2018 13:21:27

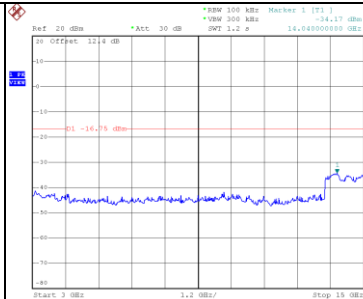


Date: 25.JAN.2018 13:21:38

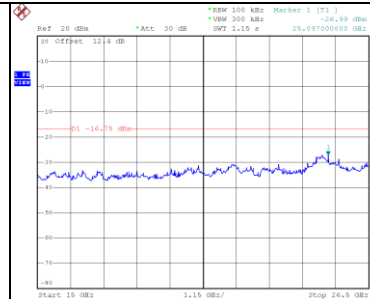
2462 MHz – 10 Harmonics



Date: 25.JAN.2018 13:26:55



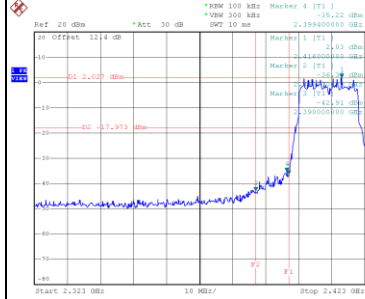
Date: 25.JAN.2018 13:27:07



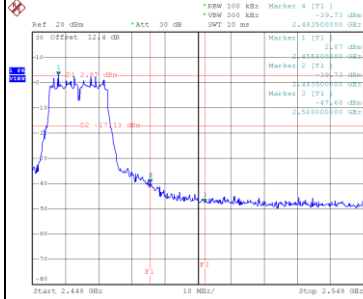
Date: 25.JAN.2018 13:27:19

Test Mode :TX N-20M Mode_CH01/06/11_ANT 1

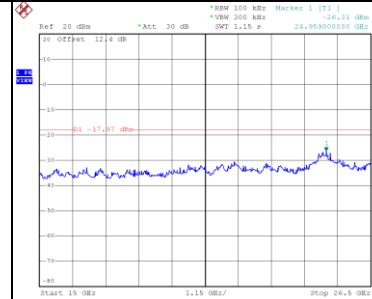
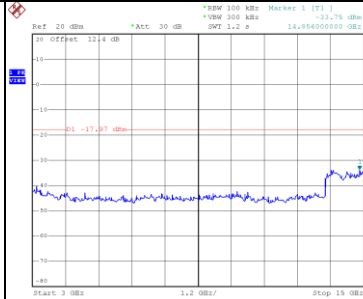
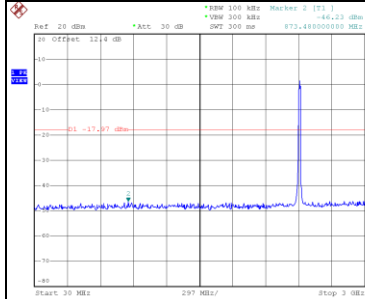
Bandedge-2412 MHz



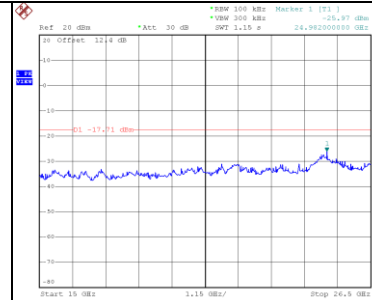
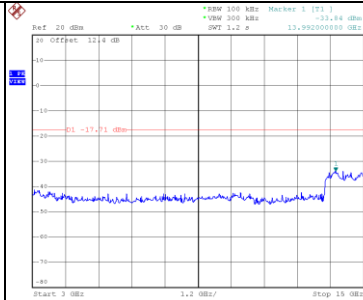
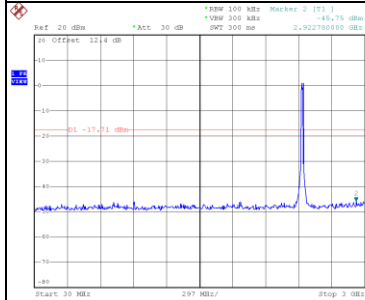
Bandedge-2462 MHz



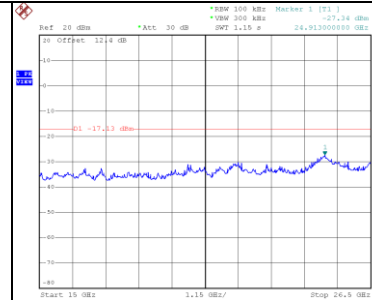
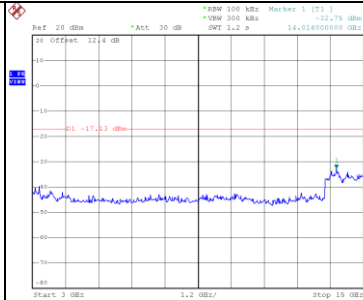
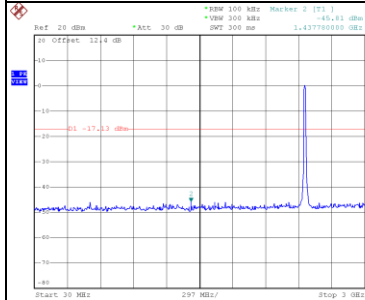
2412 MHz – 10 Harmonics



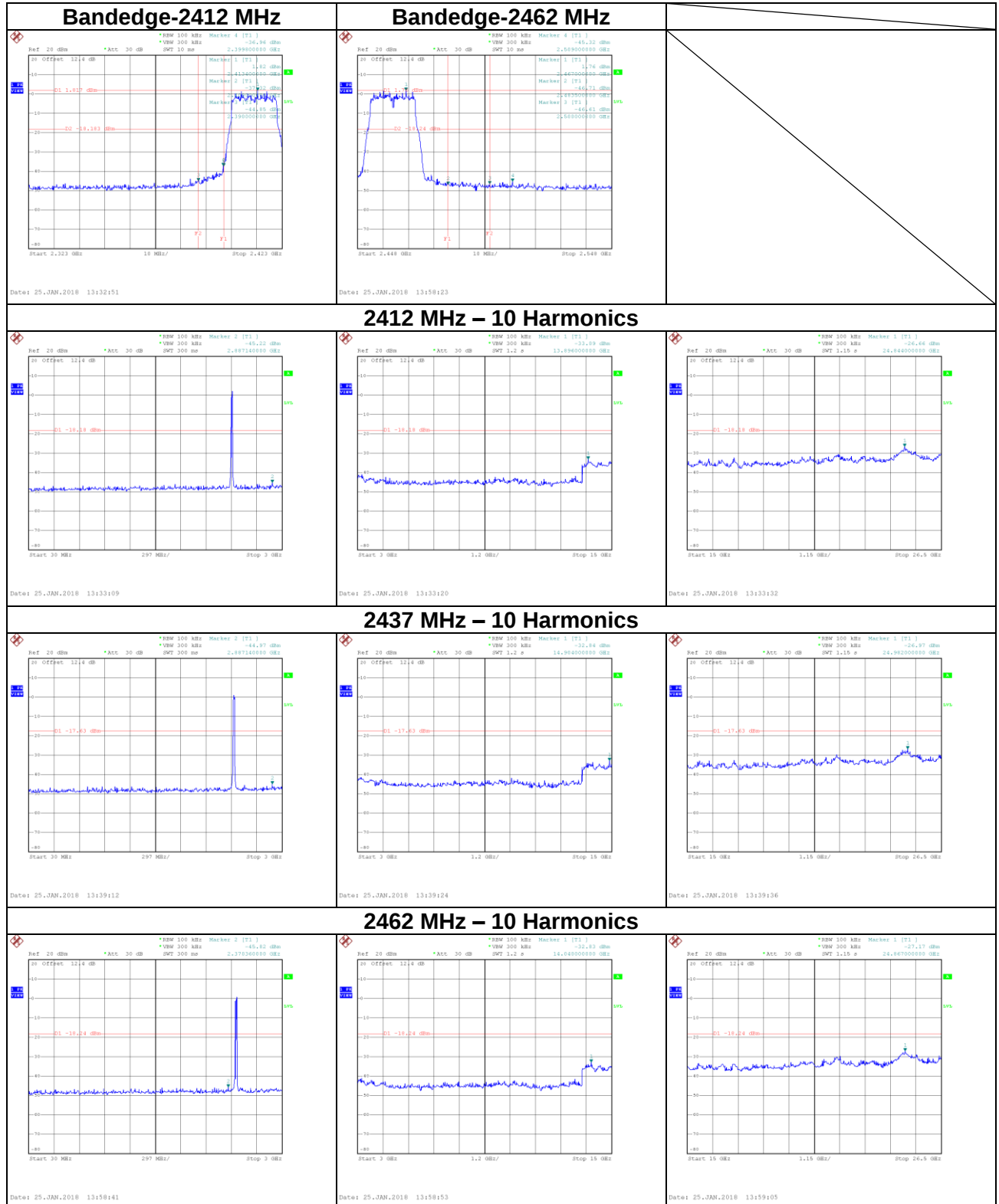
2437 MHz – 10 Harmonics



2462 MHz – 10 Harmonics



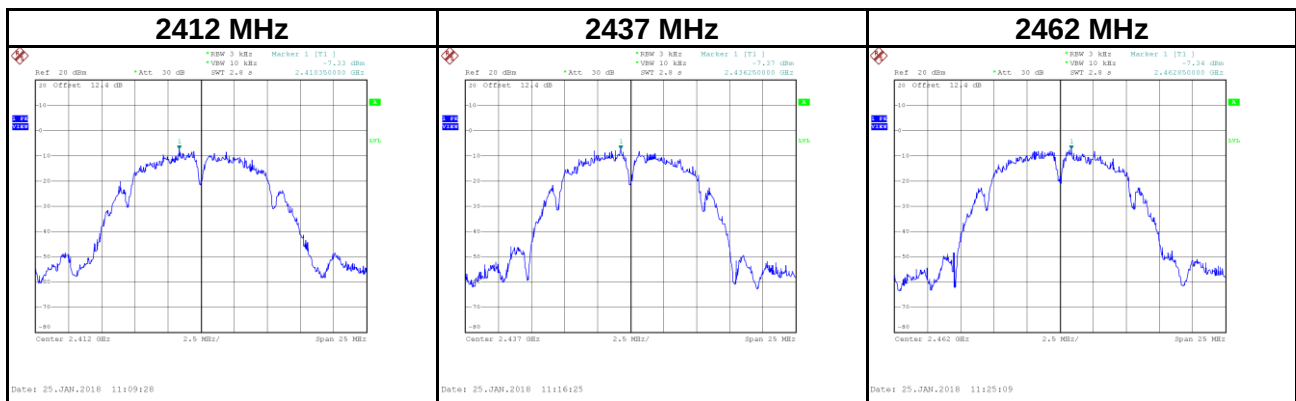
Test Mode :TX N-20M Mode_CH01/06/11_ANT 2



APPENDIX H - POWER SPECTRAL DENSITY

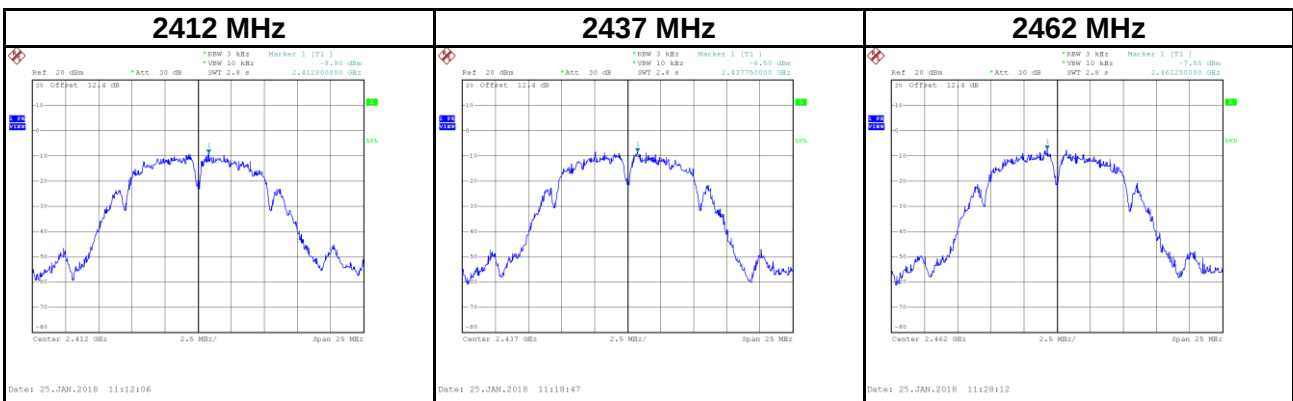
Test Mode :TX B Mode_CH01/06/11_ANT 1

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-7.33	0.18	8.00	Complies
2437	-7.37	0.18	8.00	Complies
2462	-7.34	0.18	8.00	Complies



Test Mode :TX B Mode_CH01/06/11_ANT 2

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-8.90	0.13	8.00	Complies
2437	-8.50	0.14	8.00	Complies
2462	-7.55	0.18	8.00	Complies

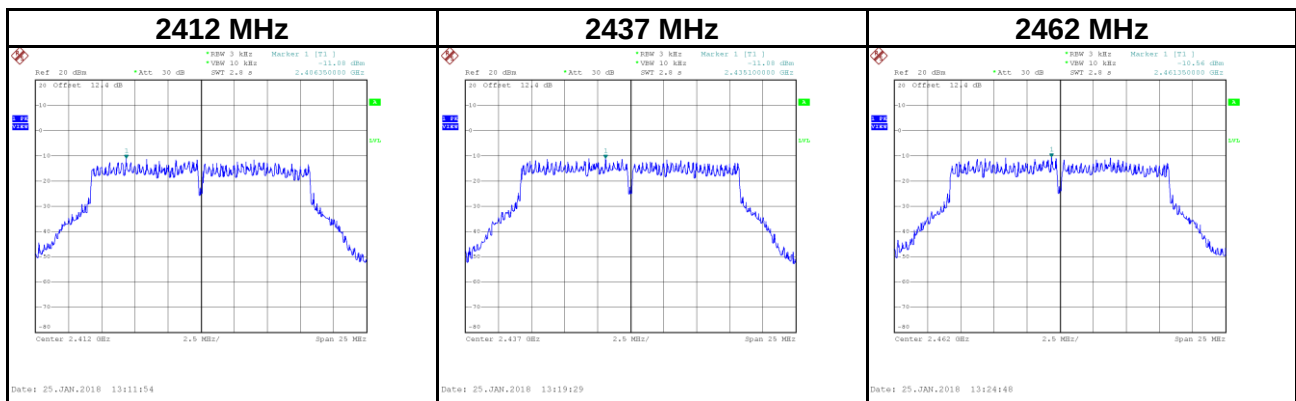


Test Mode :TX B Mode_CH01/06/11_Total

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-5.03	0.31	8.00	Complies
2437	-4.89	0.32	8.00	Complies
2462	-4.43	0.36	8.00	Complies

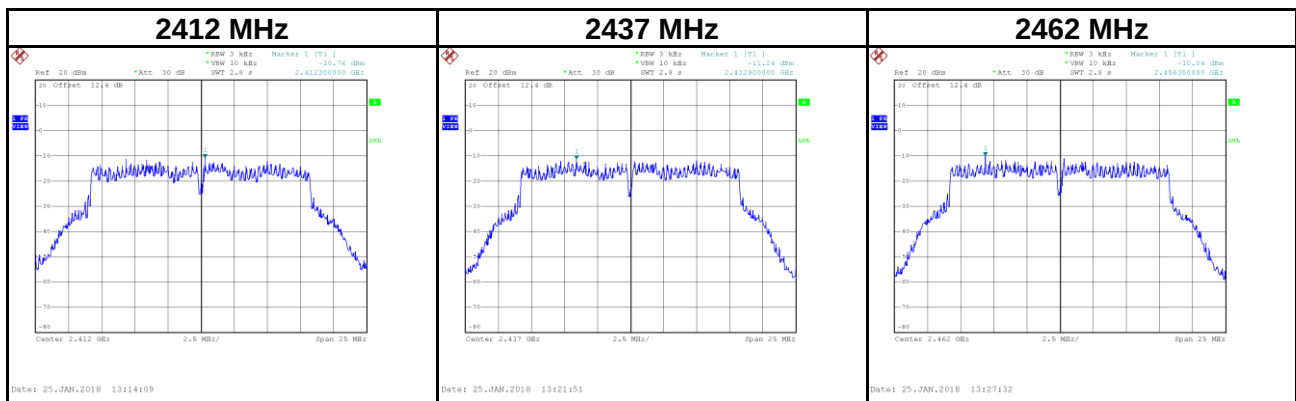
Test Mode :TX G Mode_CH01/06/11_ANT 1

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-11.08	0.08	8.00	Complies
2437	-11.08	0.08	8.00	Complies
2462	-10.56	0.09	8.00	Complies



Test Mode :TX G Mode_CH01/06/11_ANT 2

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-10.76	0.08	8.00	Complies
2437	-11.24	0.08	8.00	Complies
2462	-10.04	0.10	8.00	Complies

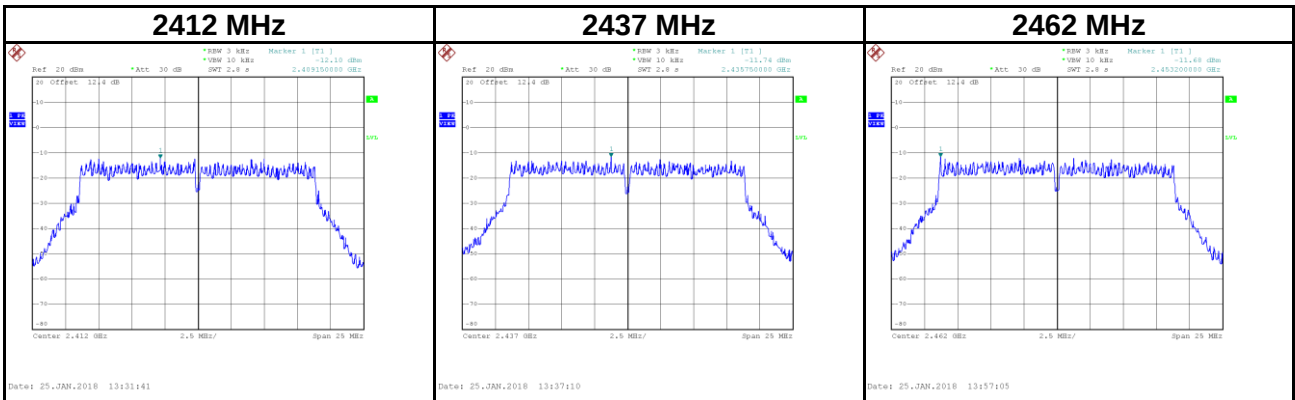


Test Mode :TX G Mode_CH01/06/11_Total

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-7.91	0.16	8.00	Complies
2437	-8.15	0.15	8.00	Complies
2462	-7.28	0.19	8.00	Complies

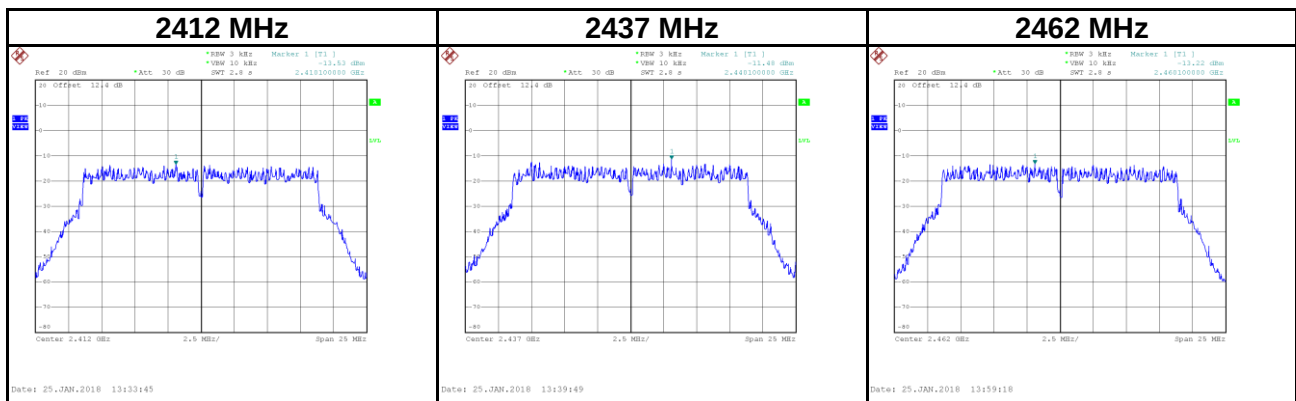
Test Mode : TX N-20M Mode_CH01/06/11_ANT 1

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-12.10	0.06	8.00	Complies
2437	-11.74	0.07	8.00	Complies
2462	-11.68	0.07	8.00	Complies



Test Mode : TX N-20M Mode_CH01/06/11_ANT 2

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-13.53	0.04	8.00	Complies
2437	-11.48	0.07	8.00	Complies
2462	-13.22	0.05	8.00	Complies



Test Mode : TX N-20M Mode_CH01/06/11_Total

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-9.75	0.11	8.00	Complies
2437	-8.60	0.14	8.00	Complies
2462	-9.37	0.12	8.00	Complies