

# FCC Radio Test Report

## FCC ID: QISBAH2-W19A

This report concerns: Original Grant

**Project No.** : 1904C015  
**Equipment** : Tablet  
**Test Model** : BAH2-W19  
**Series Model** : N/A  
**Applicant** : Huawei Technologies Co., Ltd.  
**Address** : Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, China

**Date of Receipt** : Apr. 03, 2019  
**Date of Test** : Apr. 08, 2019 ~ Apr. 23, 2019  
**Issued Date** : Apr. 24, 2019  
**Tested by** : BTL Inc.

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## Limitation

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

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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## REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Apr. 24, 2019

## 1. GENERAL SUMMARY

Equipment : Tablet  
Brand Name : HUAWEI  
Test Model : BAH2-W19  
Series Model : N/A  
Applicant : Huawei Technologies Co., Ltd.  
Manufacturer : Huawei Technologies Co., Ltd.  
Address : Administration Building, Headquarters of Huawei Technologies Co., Ltd.,  
Bantian, Longgang District, Shenzhen, 518129, China  
Date of Test : Apr. 08, 2019 ~ Apr. 23, 2019  
Test Sample : Engineering Sample No.: D190403498  
Standard(s) : FCC Part15, Subpart C (15.247)  
ANSI C63.10-2013  
KDB 558074 D01 15.247 Meas Guidance

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-2-1904C015) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of A2LA according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

**Test results included in this report are only for the Bluetooth LE part.**

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart C (15.247)				
Standard(s) Section	Test Item	Test Result	Judgment	Remark
15.207	AC Power Line Conducted Emissions	Appendix A	PASS	-----
15.247(d) 15.205(a) 15.209(a)	Radiated Emissions	Appendix B Appendix C Appendix D	PASS	-----
15.247(a)(2)	Bandwidth	Appendix E	PASS	-----
15.247(b)(3)	Maximum Output Power	Appendix F	PASS	-----
15.247(d)	Conducted Spurious Emission	Appendix G	PASS	-----
15.247(e)	Power Spectral Density	Appendix H	PASS	-----
15.203	Antenna Requirement	-----	PASS	-----

Note:

(1) "N/A" denotes test is not applicable to this device.

(2) BAH2-W19 has two storage scenarios: 3GB+32GB and 4GB+64GB.

All rest test items are conducted only for 4GB+64GB except RSE test. RSE test is done both for 4GB+64GB and 3GB+32GB. For the RSE of 3GB+32GB only the worst case is evaluated and recorded in the test report.



## 2.1 TEST FACILITY

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

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

## 2.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor ( $k=2$ ))

The BTL measurement uncertainty as below table:

### A. AC power line conducted emissions Measurement:

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



### B. Radiated emissions Measurement:

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

### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

Equipment	Tablet
Brand Name	HUAWEI
Test Model	BAH2-W19
Series Model	N/A
Model Difference(s)	Please refer to note 2.
Software Version	BAH2-W19 8.0.0.135(C605)
Hardware Version	SH0BAH2LM
Power Source	1# DC voltage supplied from AC/DC adapter. 2# Supplied from battery. 3# Supplied from USB port.
Power Rating	1# I/P: 100-240V ~50/60Hz, 0.5A O/P: 5V  2A OR 9V  2A 2# DC 3.82V, 7350mAh 3# DC 5V
Operation Frequency	2402 MHz ~ 2480 MHz
Modulation Technology	GFSK
Bit Rate of Transmitter	1Mbps
Output Power (Max.)	9.69 dBm (0.0093 W)

Note:

- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- BAH2-W19 has two storage scenarios, with different memory. EMCP Storage Capacity is 3GB+32GB, LPDDR3+EMMC separation Scheme storage capacity is 4GB+64GB. The two storage mode of peripheral circuit has slight change, but does not affect product performance. The differences about storage scenarios are showed in following table. Other parts of the Tablet are the same, including the appearance, the antenna, Chipset, Bluetooth mode, Wifi mode, Adapter, Battery, Mainboard, Software and so on.

Model	BAH2-W19	
Storage Scenarios	EMCP	LPDDR3+eMMC
Storage Capacity	3GB+32GB	4GB+64GB





### 3. Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	20	2442
01	2404	21	2444
02	2406	22	2446
03	2408	23	2448
04	2410	24	2450
05	2412	25	2452
06	2414	26	2454
07	2416	27	2456
08	2418	28	2458
09	2420	29	2460
10	2422	30	2462
11	2424	31	2464
12	2426	32	2466
13	2428	33	2468
14	2430	34	2470
15	2432	35	2472
16	2434	36	2474
17	2436	37	2476
18	2438	38	2478
19	2440	39	2480

### 4. Table for Filed Antenna:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Internal	N/A	0

5. The EUT contains following accessory devices:

Items	Brand	Factory	Model Name	Description
Adapter	HUAWEI	Salcomp (Shenzhen) Co., Ltd.	HW-090200UH0	I/P: 100-240V ~50/60Hz, 0.5A O/P: 5V  2A OR 9V  2A
		HENZHEN HUNTKEY ELECTRONICS CO., LTD.		
		BYD ELECTRONIC CO.,LTD.		
Li-ion Battery	HUAWEI	SCUD (Fujian) Electronics Co., Ltd.	HB2994I8ECW	Rated capacity: 7350mAh Nominal Voltage:  +3.82V Charging Voltage:  +4.40V
		SUNWODA Electronic Co., Ltd		
		Huizhou Desay Battery Co., Ltd		
USB Cable	-	HUIZHOU DEHONG TECHNOLOGY CO.,LTD.	330-50507	Signal Cable 5V~12V/3A USB2.0 USB-A to USB-C Charge Data Cable,1.0m,USB-C (24AWG+30AWG*2C+ 24AWG+2*28AWG Drain)*3.1mm,USB-A
		NingBo Broad Telecommunication Co.,Ltd.	CUDU01B-HC295-EH	
		HONGFUJIN PRECISION INDUSTRIAL(SHEN ZHEN).LTD	WA0020	
		Dongguan Mingji Electronics Technology Group Co.,Ltd	L99UC131-CS-H	
		Freeport Resources Enterprises (Jiangxi) Co.,Ltd	18-93C2CHO-001HF	
		LUXSHARE Precision Industry Co., Ltd.	203-1572-0	
HUAWEI Smart Dock for MediaPad M5 lite (10.1-inch)	HUAWEI	-	C-Bach2-Cradle	DC 9V,2A max

### 3.2 DESCRIPTION OF TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	TX Mode
Mode 2	TX Mode Channel 00

Following mode(s) as (were) found to be the worst case(s) and selected for the final test.

AC power line conducted emissions test	
Final Test Mode	Description
Mode 2	TX Mode Channel 00

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 2	TX Mode Channel 00

Radiated emissions test - Above 1GHz	
Final Test Mode	Description
Mode 1	TX Mode

Conducted test	
Final Test Mode	Description
Mode 1	TX Mode

Note:

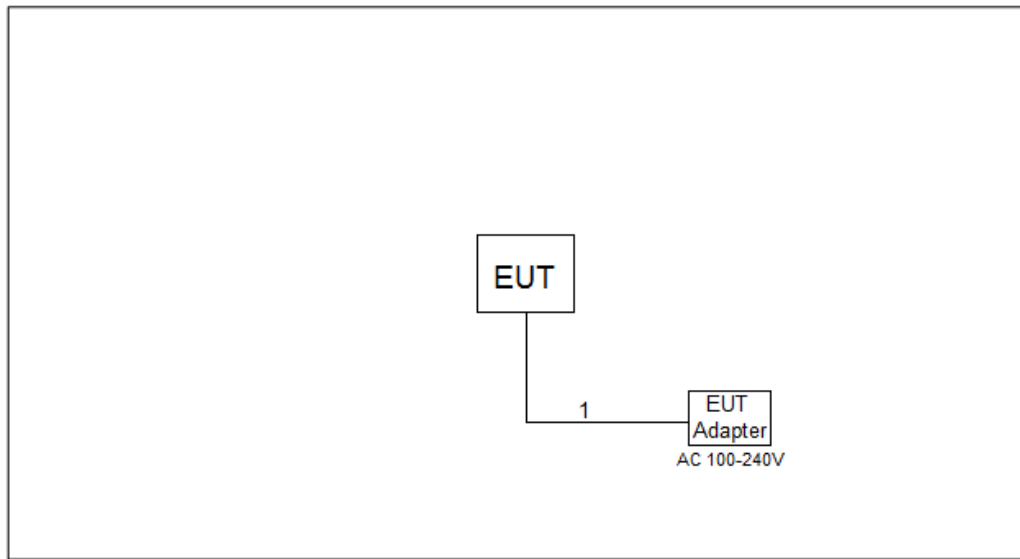
- (1) Radiated Emissions of middle channel is performed and Band edge of high and low channels are performed.
- (2) For radiated emission above 1 GHz test, 1GHz~26.5GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.

### 3.3 PARAMETERS OF TEST SOFTWARE

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 BT LE

Test Software	BT RF Auth1.0		
Frequency (MHz)	2402	2440	2480
Parameters	N/A	N/A	N/A

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



### 3.5 SUPPORT UNITS

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

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1m	DC Cable

## 4. AC POWER LINE CONDUCTED EMISSIONS TEST

### 4.1 LIMIT

Frequency of Emission (MHz)	Limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 to 46*
0.5 - 5.0	56	46
5.0 - 30.0	60	50

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

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

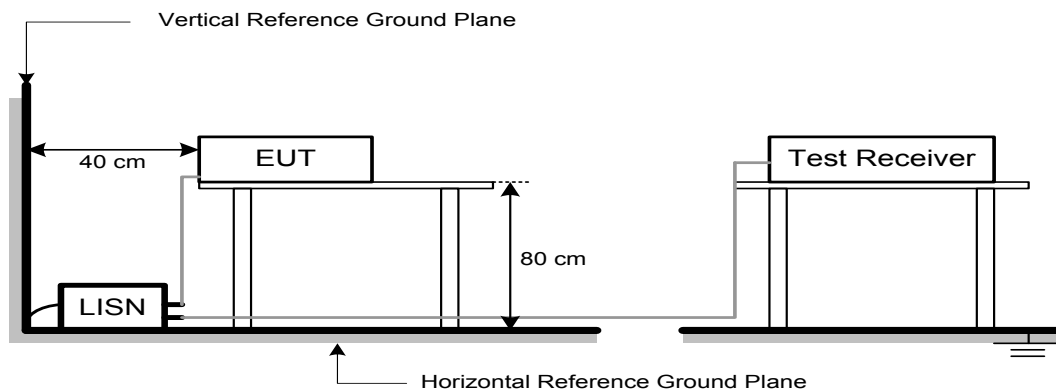
### 4.2 TEST PROCEDURE

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

### 4.3 DEVIATION FROM TEST STANDARD

No deviation

#### 4.4 TEST SETUP



#### 4.5 EUT OPERATING CONDITIONS

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

#### 4.6 EUT TEST CONDITIONS

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

#### 4.7 TEST RESULTS

Please refer to the APPENDIX A.

Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform. In this case, a “\*” marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150 kHz to 30 MHz.



## 5. RADIATED EMISSION TEST

### 5.1 LIMIT

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 (9 kHz-1000 MHz)

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
Above 960	500	3

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

Frequency (MHz)	Band edge/ Harmonic at 3m (dBμV/m)		Harmonic at 1.5m (dBμV/m)	
	Peak	Average	Peak	Average
Above 1000	74	54	80 (Note 5)	60 (Note 5)

Note:

- (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

$$(5) \quad FS_{\text{limit}} = FS_{\text{max}} - 20 \log \left( \frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

$$20 \log d_{\text{limit}}/d_{\text{measure}} = 20 \log 3/1.5 = 6 \text{ dB.}$$

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

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector

## 5.2 TEST PROCEDURE

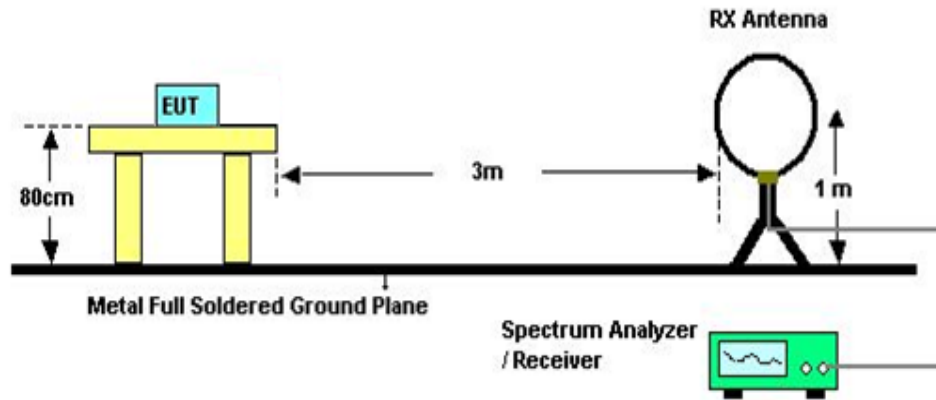
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- The measuring distance of 3 m or 1.5m 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 1 GHz.
- 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 1 GHz)
- 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 1 GHz)
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

## 5.3 DEVIATION FROM TEST STANDARD

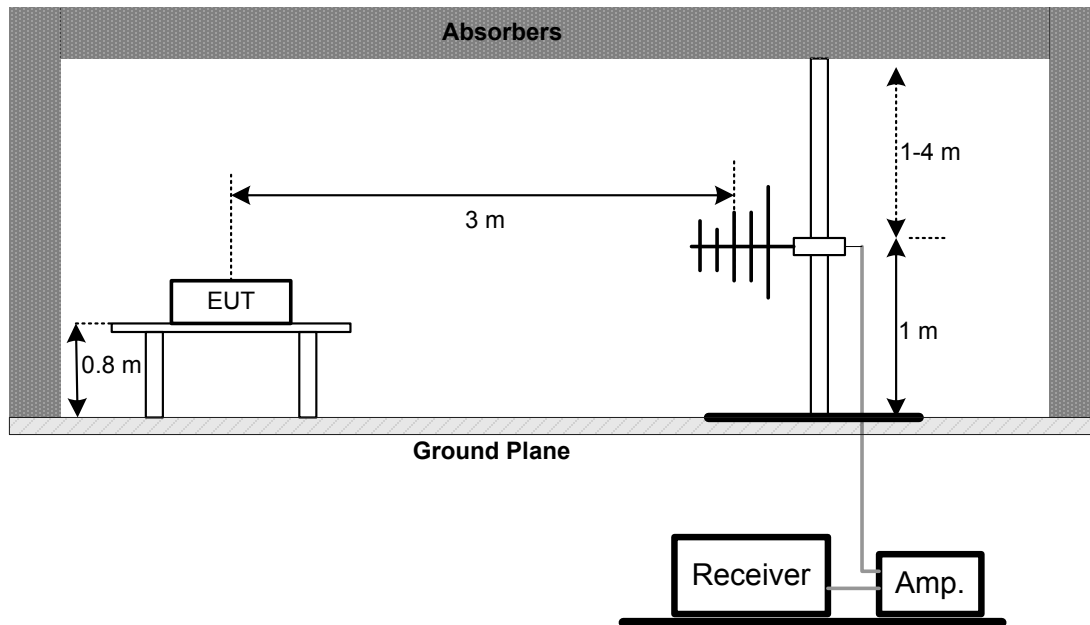
No deviation

## 5.4 TEST SETUP

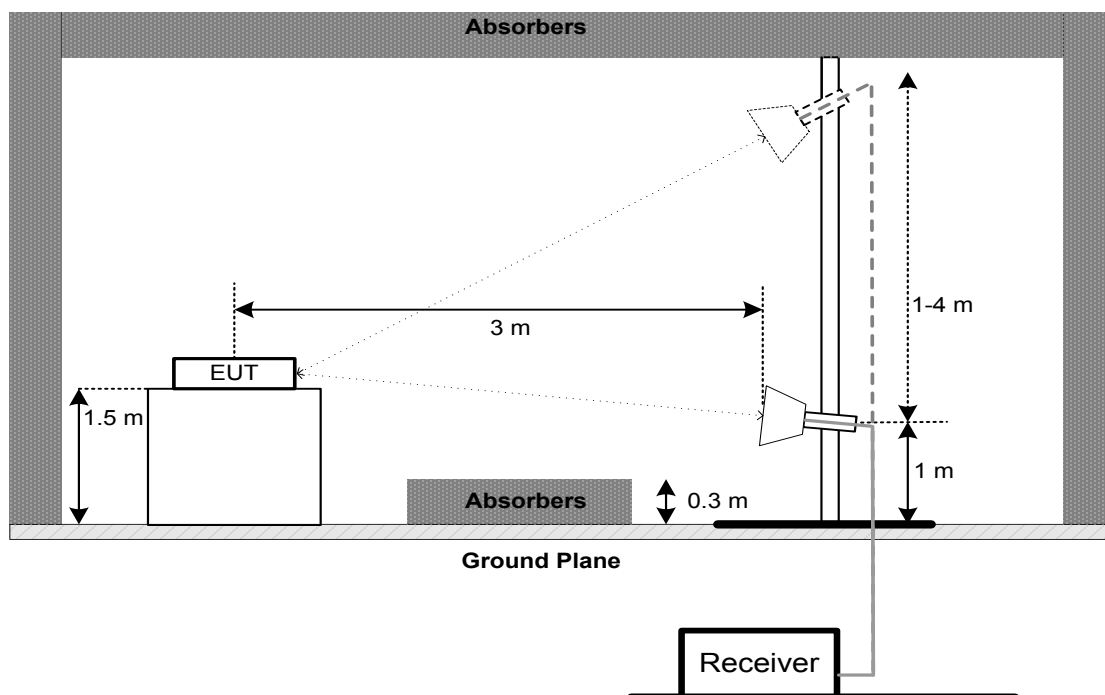
9 kHz-30 MHz



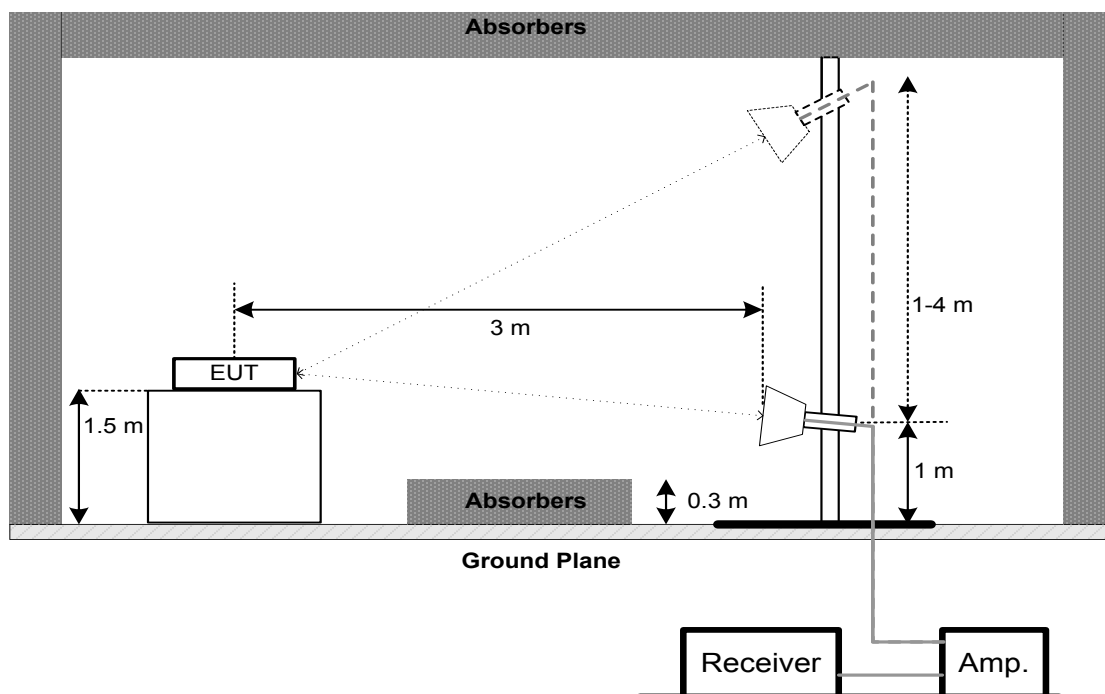
30 MHz to 1 GHz



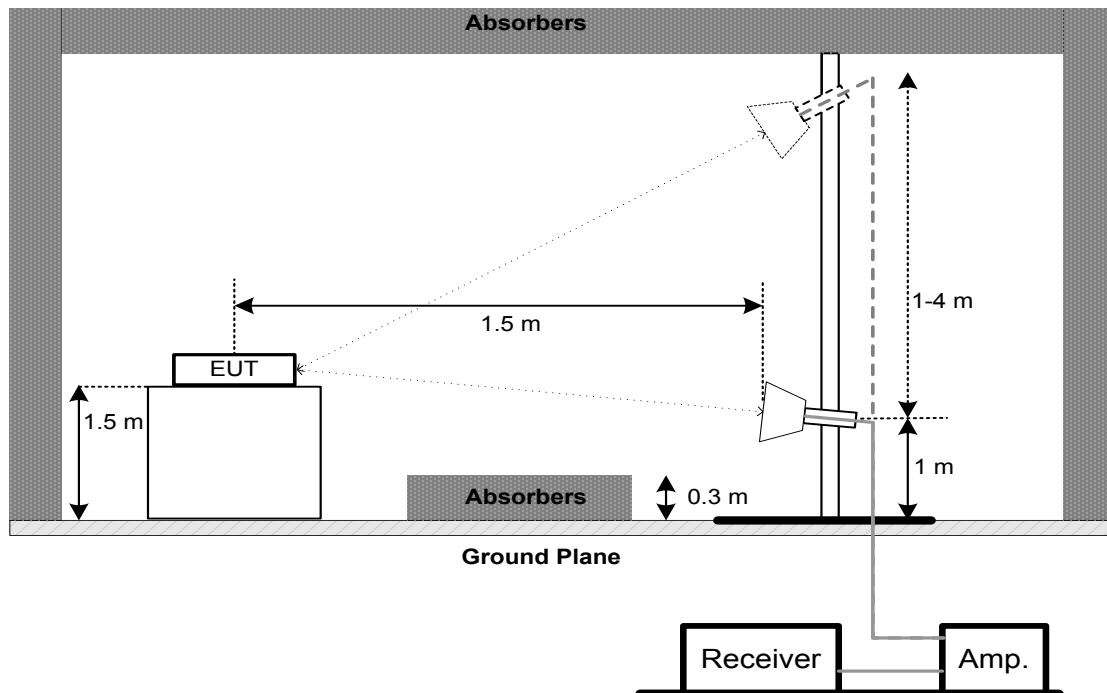
### Band edge



### Harmonic(1 GHz to 18 GHz)



### Harmonic(Above 18 GHz)



#### 5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 5.6 EUT TEST CONDITIONS

Temperature: 24°C    Relative Humidity: 68%    Test Voltage: AC 120V/60Hz

#### 5.7 TEST RESULT - 9 kHz TO 30 MHz

Please refer to the APPENDIX B

Remark:

- (1) Distance extrapolation factor =  $40 \log (\text{specific distance} / \text{test distance})$  (dB).
- (2) Limit line = specific limits (dBuV) + distance extrapolation factor.
- (3) For radiated emissions below 1GHz, all adapters had been pre-tested and in this report only recorded the worst case (Salcomp).

#### 5.8 TEST RESULT - 30 MHz TO 1000 MHz

Please refer to the APPENDIX C.

Remark:

- (1) For radiated emissions below 1GHz, all adapters had been pre-tested and in this report only recorded the worst case (Salcomp).

#### 5.9 TEST RESULT - 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.

## 6. BANDWIDTH TEST

### 6.1 LIMIT

FCC Part15, Subpart C (15.247)		
Section	Test Item	Limit
15.247(a)(2)	Bandwidth	$\geq 500$ kHz (6 dB bandwidth)

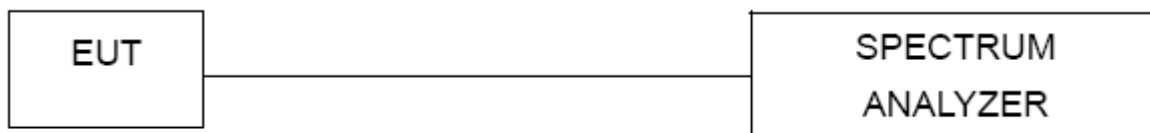
### 6.2 TEST PROCEDURE

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

### 6.3 DEVIATION FROM STANDARD

No deviation.

### 6.4 TEST SETUP



### 6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

### 6.6 EUT TEST CONDITIONS

Temperature: 25.9°C    Relative Humidity: 57.4%    Test Voltage: AC 120V/60Hz

### 6.7 TEST RESULTS

Please refer to the APPENDIX E.

## 7. MAXIMUM OUTPUT POWER TEST

### 7.1 LIMIT

FCC Part15, Subpart C (15.247)		
Section	Test Item	Limit
15.247(b)(3)	Maximum Output Power	1 watt or 30 dBm

### 7.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- The maximum conducted output power was performed in accordance with method 11.9.1.1 (for peak power) or 11.9.2.2 (for AVG power) of ANSI C63.10-2013.

### 7.3 DEVIATION FROM STANDARD

No deviation.

### 7.4 TEST SETUP



### 7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

### 7.6 EUT TEST CONDITIONS

Temperature: 25.9°C    Relative Humidity: 57.4%    Test Voltage: AC 120V/60Hz

### 7.7 TEST RESULTS

Please refer to the APPENDIX F.

## 8. CONDUCTED SPURIOUS EMISSION

### 8.1 LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak Output Power limits. If the transmitter complies with the Output Power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

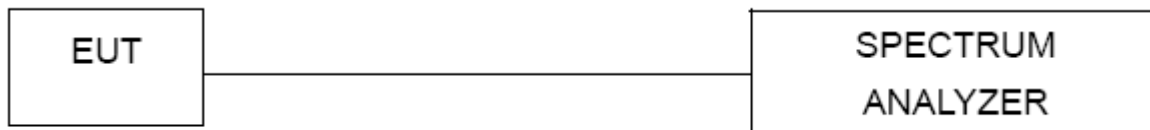
### 8.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting : RBW= 100 kHz, VBW=300 kHz, Sweep time = 10 ms.

### 8.3 DEVIATION FROM STANDARD

No deviation.

### 8.4 TEST SETUP



### 8.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

### 8.6 EUT OPERATION CONDITIONS

Temperature: 25.9°C    Relative Humidity: 57.4%    Test Voltage: AC 120V/60Hz

### 8.7 TEST RESULTS

Please refer to the APPENDIX G.



## 9. POWER SPECTRAL DENSITY TEST

### 9.1 LIMIT

FCC Part15, Subpart C (15.247)		
Section	Test Item	Limit
15.247(e)	Power Spectral Density	8 dBm (in any 3 kHz)

### 9.2 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=3 kHz, VBW=10 kHz, Sweep time = auto.

### 9.3 DEVIATION FROM STANDARD

No deviation.

### 9.4 TEST SETUP



### 9.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

### 9.6 EUT TEST CONDITIONS

Temperature: 25.9°C    Relative Humidity: 57.4%    Test Voltage: AC 120V/60Hz

### 9.7 TEST RESULTS

Please refer to the APPENDIX H.

## 10. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Mar. 10, 2020
2	LISN	EMCO	3816/2	52765	Mar. 10, 2020
3	50ohm Terminator	SHX	TF5-3	15041305	Mar. 10, 2020
4	Artificial-Mains Network	SCHWARZBECK	NSLK 8127	8127685	Mar. 10, 2020
5	TRANSIENT LIMITER	EM	EM-7600	772	Mar. 10, 2020
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
7	Cable	N/A	RG223	12m	Mar. 12, 2020

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EM	EM-6876-1	230	Jan. 15, 2020
2	Cable	N/A	RG 213/U	C-102	Jun. 01, 2019
3	EMI Test Receiver	R&S	ESCI	100895	Mar. 10, 2020
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 09, 2020
2	Amplifier	HP	8447D	2944A09673	Aug. 11, 2019
3	Receiver	Agilent	N9038A	MY52130039	Aug. 11, 2019
4	Cable	emci	LMR-400(30MHz-1GHz)(8m+5m)	N/A	May 25, 2019
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 09, 2020
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 30, 2019
3	Amplifier	Agilent	8449B	3008A02333	Mar. 10, 2020
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 10, 2020
5	Receiver	Agilent	N9038A	MY52130039	Aug. 11, 2019
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	mitron	B10-01-01-12M	18072744	Jul. 30, 2019
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Bandwidth					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 11, 2019

Maximum Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 11, 2019

Antenna Conducted Spurious Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 11, 2019

Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 11, 2019

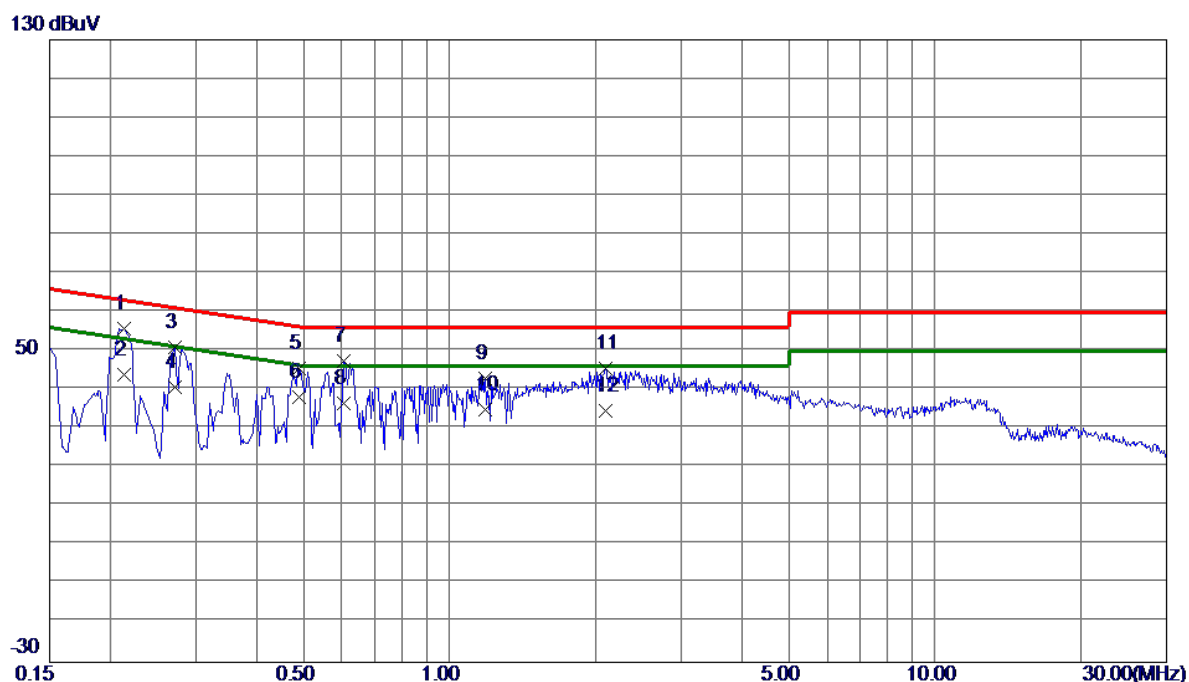
Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

## APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode: TX Mode Channel 00 \_1Mbps

## Line



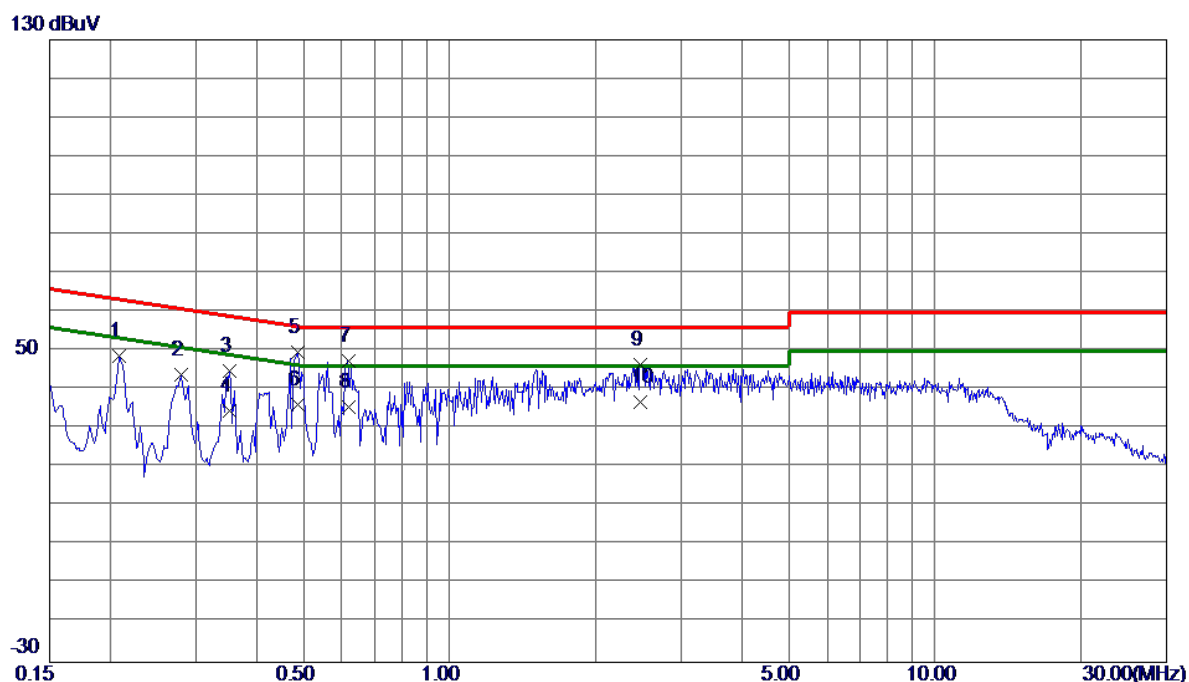
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.2140	45.18	10.48	55.66	63.05	-7.39	Peak	
2	0.2140	33.43	10.48	43.91	53.05	-9.14	AVG	
3	0.2714	40.37	10.48	50.85	61.07	-10.22	Peak	
4	0.2714	30.29	10.48	40.77	51.07	-10.30	AVG	
5	0.4890	35.12	10.50	45.62	56.18	-10.56	Peak	
6	0.4890	27.52	10.50	38.02	46.18	-8.16	AVG	
7	0.6044	37.00	10.52	47.52	56.00	-8.48	Peak	
8	0.6044	25.90	10.52	36.42	46.00	-9.58	AVG	
9	1.1849	32.34	10.59	42.93	56.00	-13.07	Peak	
10	1.1849	24.33	10.59	34.92	46.00	-11.08	AVG	
11	2.0940	34.87	10.64	45.51	56.00	-10.49	Peak	
12	2.0940	24.00	10.64	34.64	46.00	-11.36	AVG	

### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode Channel 00 \_1Mbps

### Neutral



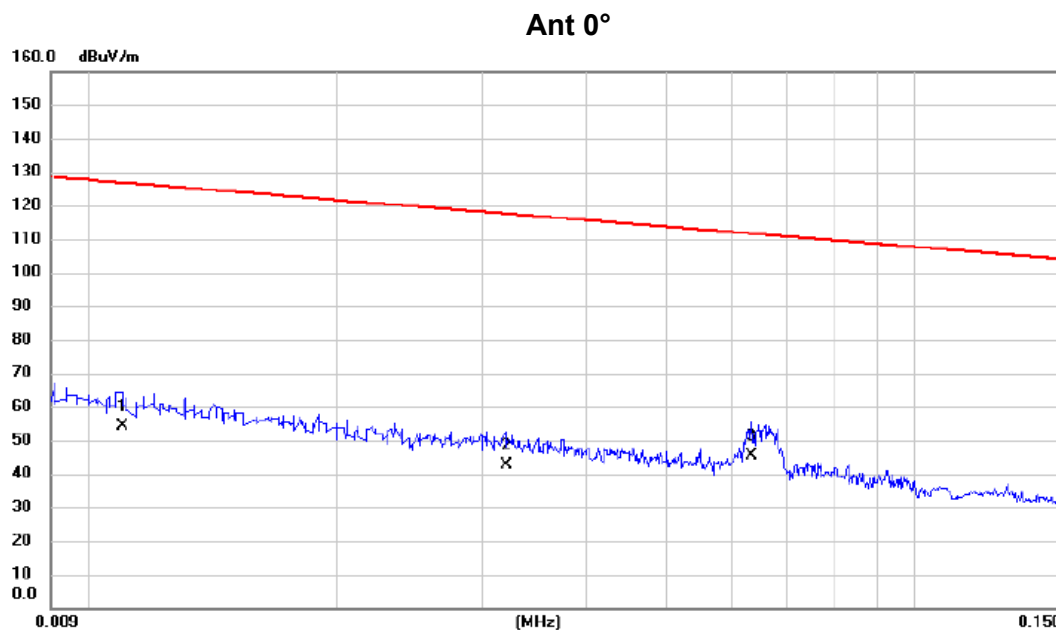
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.2084	38.24	10.45	48.69	63.27	-14.58	Peak	
2	0.2805	33.60	10.46	44.06	60.80	-16.74	Peak	
3	0.3523	34.50	10.46	44.96	58.91	-13.95	Peak	
4	0.3523	24.32	10.46	34.78	48.91	-14.13	AVG	
5 *	0.4873	39.30	10.49	49.79	56.21	-6.42	Peak	
6	0.4873	25.70	10.49	36.19	46.21	-10.02	AVG	
7	0.6180	36.96	10.49	47.45	56.00	-8.55	Peak	
8	0.6180	25.01	10.49	35.50	46.00	-10.50	AVG	
9	2.4765	35.91	10.63	46.54	56.00	-9.46	Peak	
10	2.4765	26.32	10.63	36.95	46.00	-9.05	AVG	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

## APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Test Mode: TX Mode Channel 00 \_1Mbps (4GB+64GB)



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.011	37.79	16.52	54.31	126.78	-72.47	AVG	
2		0.032	28.69	13.87	42.56	117.50	-74.94	AVG	
3	*	0.064	31.51	13.71	45.22	111.55	-66.33	AVG	

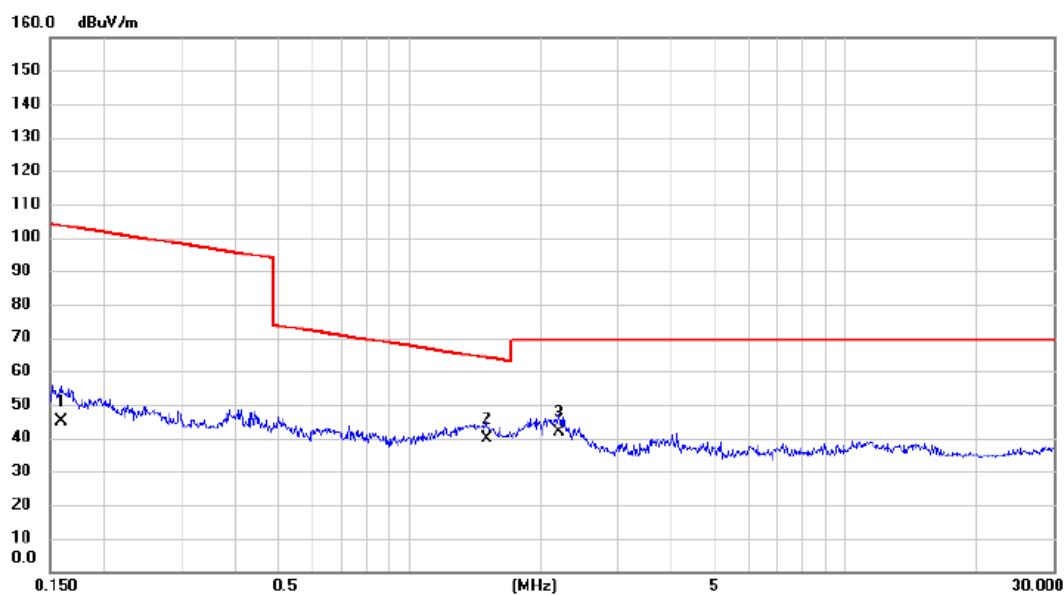
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.



Test Mode: TX Mode Channel 00 \_1Mbps (4GB+64GB)

Ant 0°

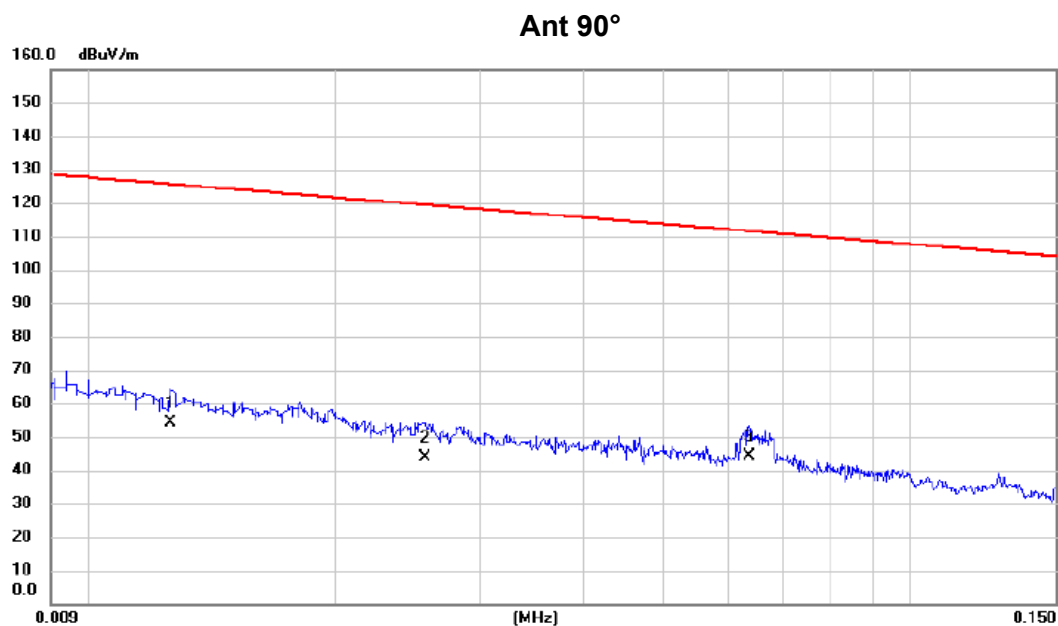


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.159	31.63	13.57	45.20	103.58	-58.38	AVG	
2	*	1.503	27.78	12.16	39.94	64.06	-24.12	QP	
3		2.213	30.24	11.69	41.93	69.54	-27.61	QP	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode Channel 00 \_1Mbps (4GB+64GB)



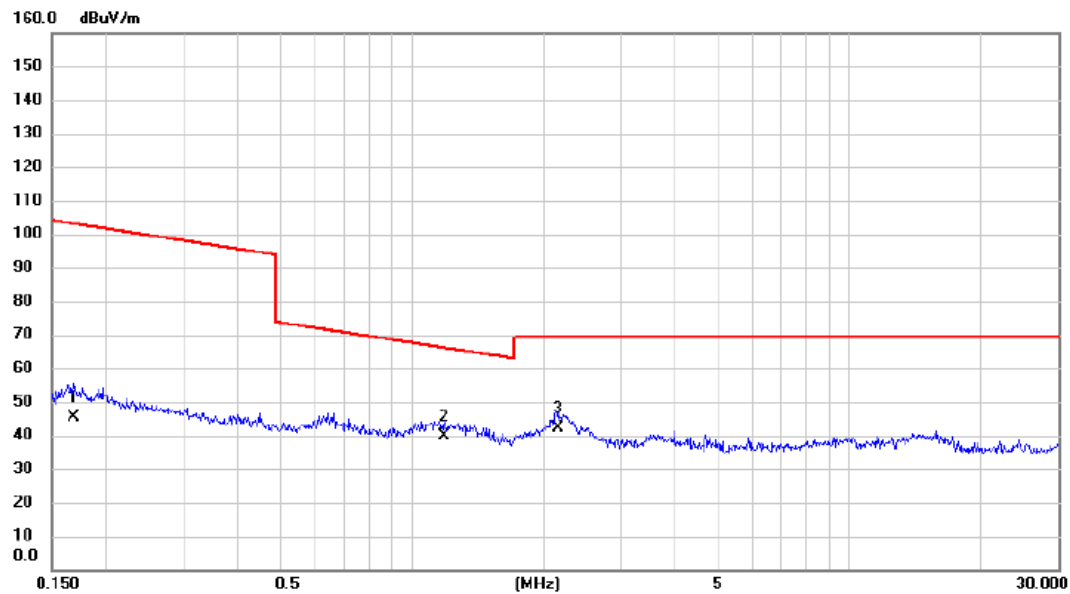
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.013	38.22	16.04	54.26	125.60	-71.34	AVG	
2		0.026	30.07	13.84	43.91	119.41	-75.50	AVG	
3	*	0.064	30.52	13.71	44.23	111.52	-67.29	AVG	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode Channel 00 \_1Mbps (4GB+64GB)

Ant 90°



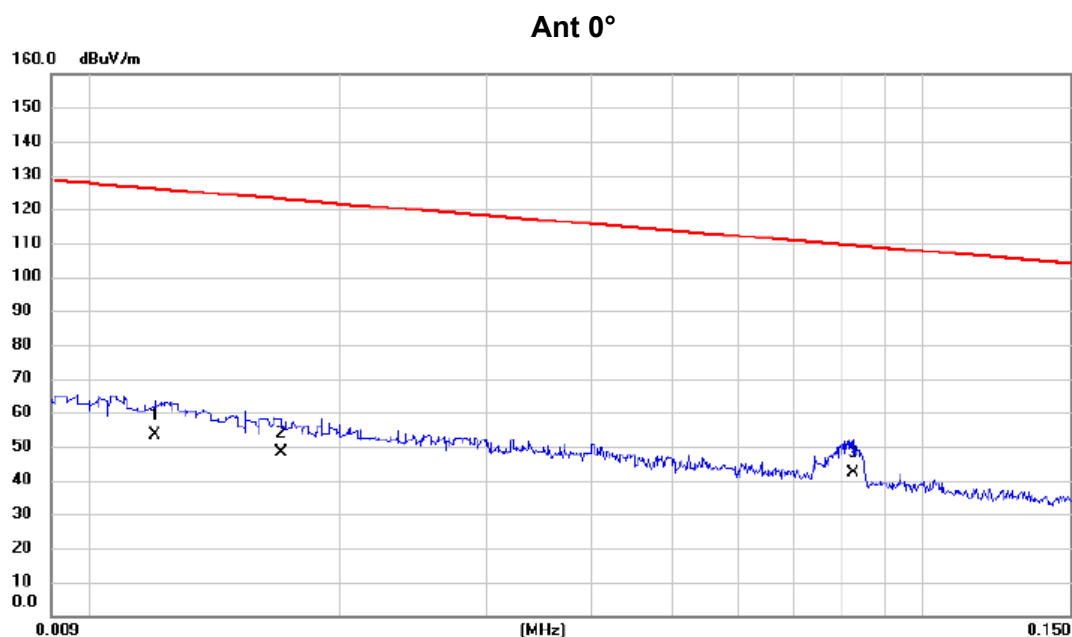
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.169	31.82	13.58	45.40	103.07	-57.67	AVG	
2	*	1.184	27.29	12.37	39.66	66.14	-26.48	QP	
3		2.167	30.47	11.72	42.19	69.54	-27.35	QP	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode Channel 00 \_1Mbps (3GB+32GB)



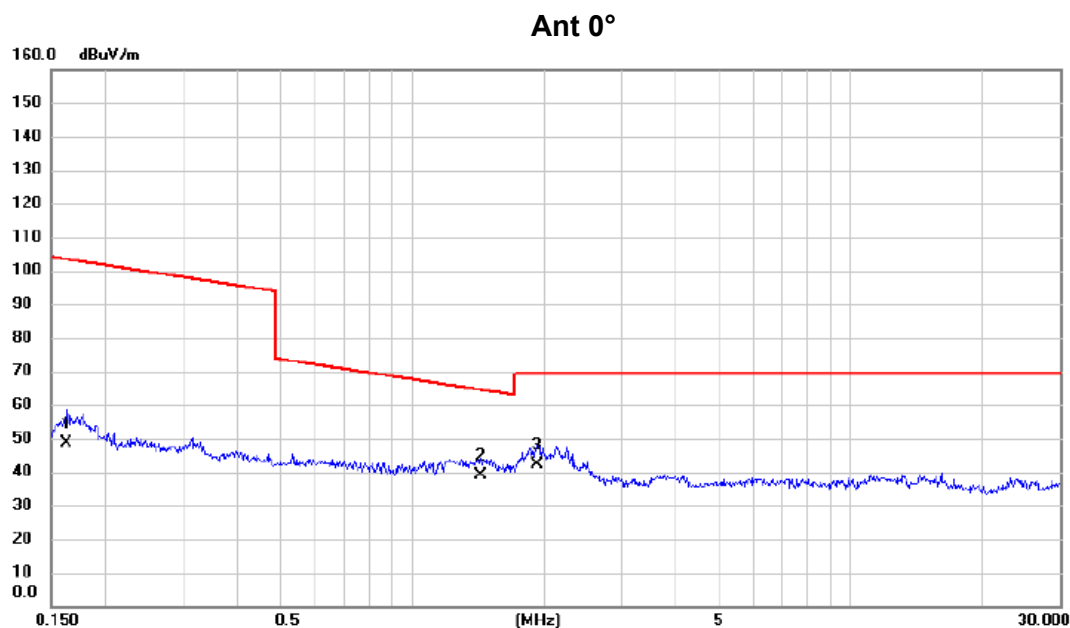
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.012	37.01	16.22	53.23	126.02	-72.79	AVG	
2		0.017	33.61	14.72	48.33	123.00	-74.67	AVG	
3	*	0.083	28.79	13.54	42.33	109.27	-66.94	AVG	

**REMARKS:**

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode Channel 00 \_1Mbps (3GB+32GB)



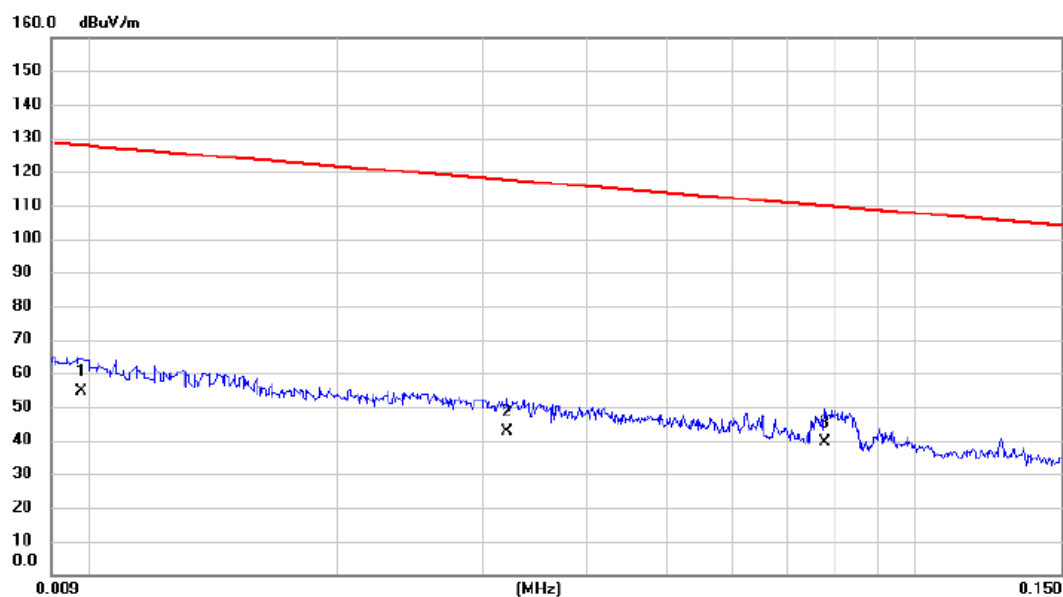
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.163	34.94	13.57	48.51	103.35	-54.84	AVG	
2	*	1.433	26.85	12.21	39.06	64.48	-25.42	QP	
3		1.928	30.24	11.86	42.10	69.54	-27.44	QP	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode Channel 00 \_1Mbps (3GB+32GB)

Ant 90°



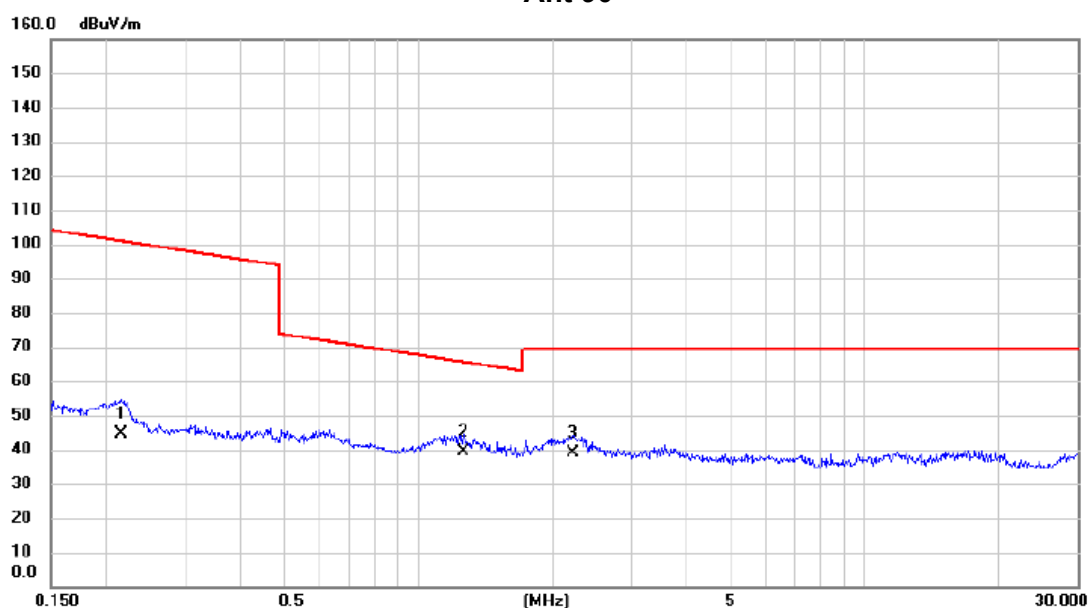
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.010	37.75	16.92	54.67	127.78	-73.11	AVG	
2		0.032	28.62	13.87	42.49	117.47	-74.98	AVG	
3	*	0.078	26.01	13.54	39.55	109.81	-70.26	AVG	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode Channel 00 \_1Mbps (3GB+32GB)

Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.216	30.92	13.63	44.55	100.91	-56.36	AVG	
2	*	1.262	27.09	12.32	39.41	65.58	-26.17	QP	
3		2.225	27.43	11.68	39.11	69.54	-30.43	QP	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

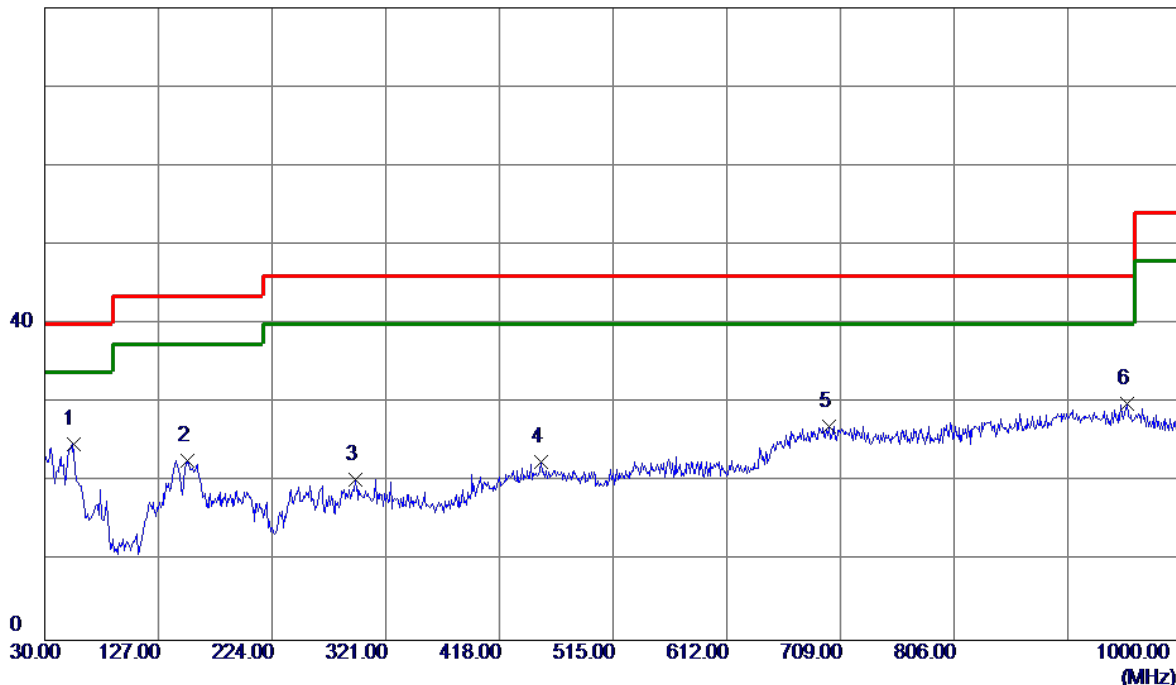
## APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ



Test Mode: TX Mode Channel 00 \_1Mbps (4GB+64GB)

**Vertical**

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	54.2500	39.71	-14.96	24.75	40.00	-15.25	Peak	
2	152.2200	34.01	-11.30	22.71	43.50	-20.79	Peak	
3	294.8100	31.02	-10.67	20.35	46.00	-25.65	Peak	
4	453.8900	29.98	-7.49	22.49	46.00	-23.51	Peak	
5	699.3000	29.81	-2.78	27.03	46.00	-18.97	Peak	
6	953.4400	28.65	1.33	29.98	46.00	-16.02	Peak	

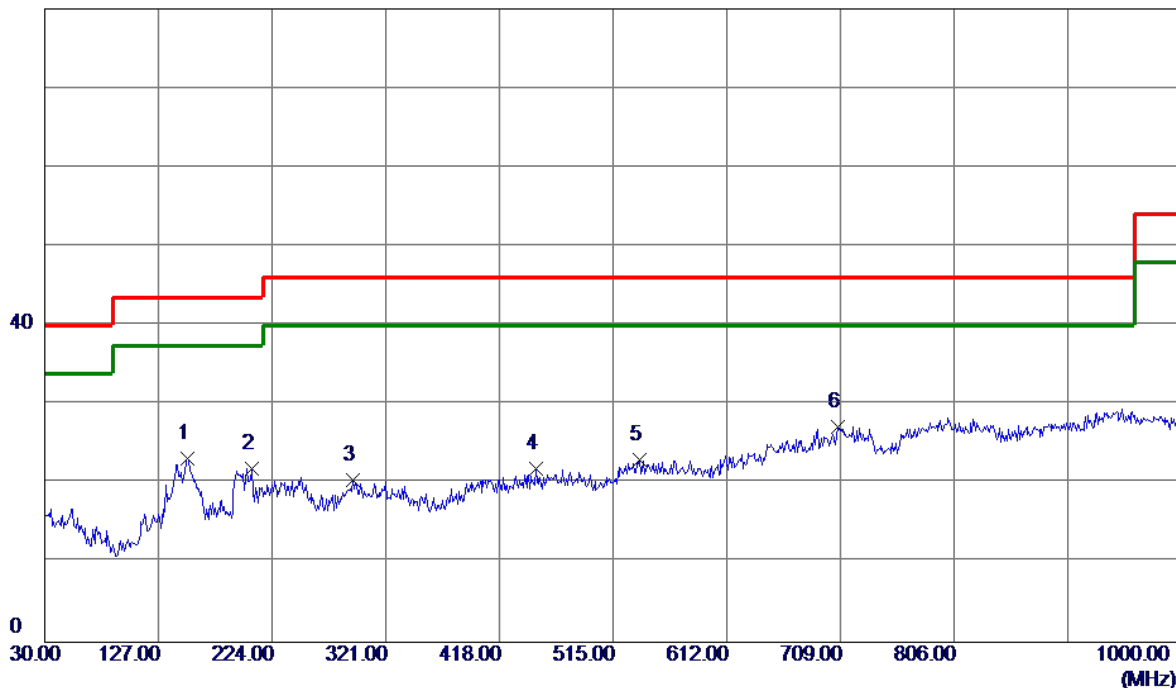
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX Mode Channel 00 _1Mbps (4GB+64GB)
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### Horizontal

80 dBuV/m

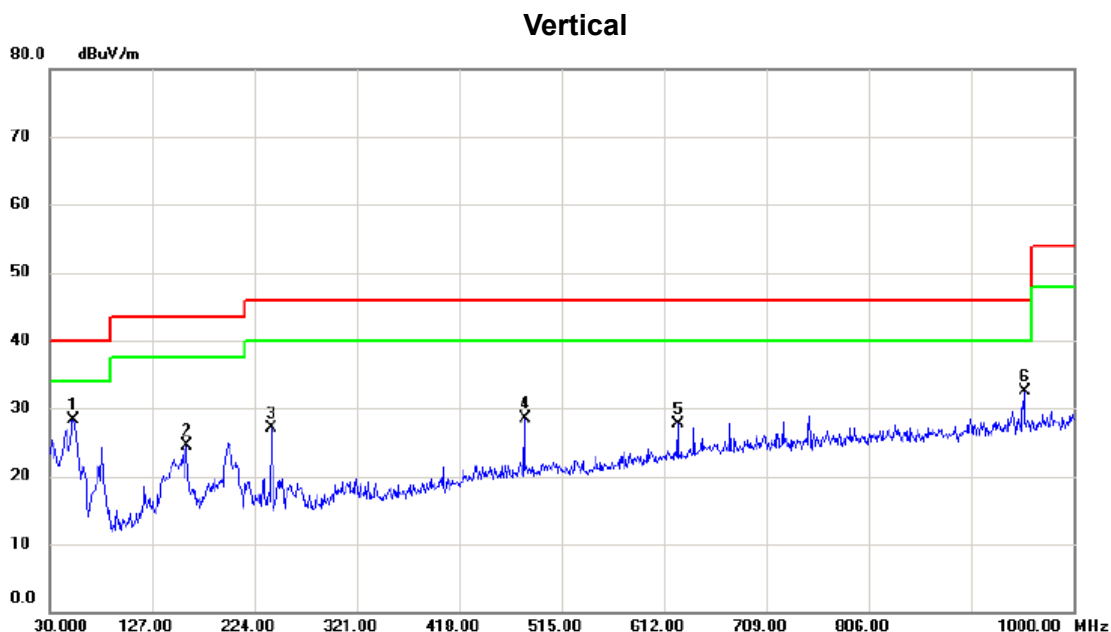


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	152.2200	34.44	-11.30	23.14	43.50	-20.36	Peak	
2	206.5399	37.19	-15.22	21.97	43.50	-21.53	Peak	
3	292.8700	31.27	-10.79	20.48	46.00	-25.52	Peak	
4	449.0400	29.33	-7.44	21.89	46.00	-24.11	Peak	
5	537.3100	29.31	-6.24	23.07	46.00	-22.93	Peak	
6 *	707.0600	30.18	-2.93	27.25	46.00	-18.75	Peak	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode Channel 00 \_1Mbps (3GB+32GB)



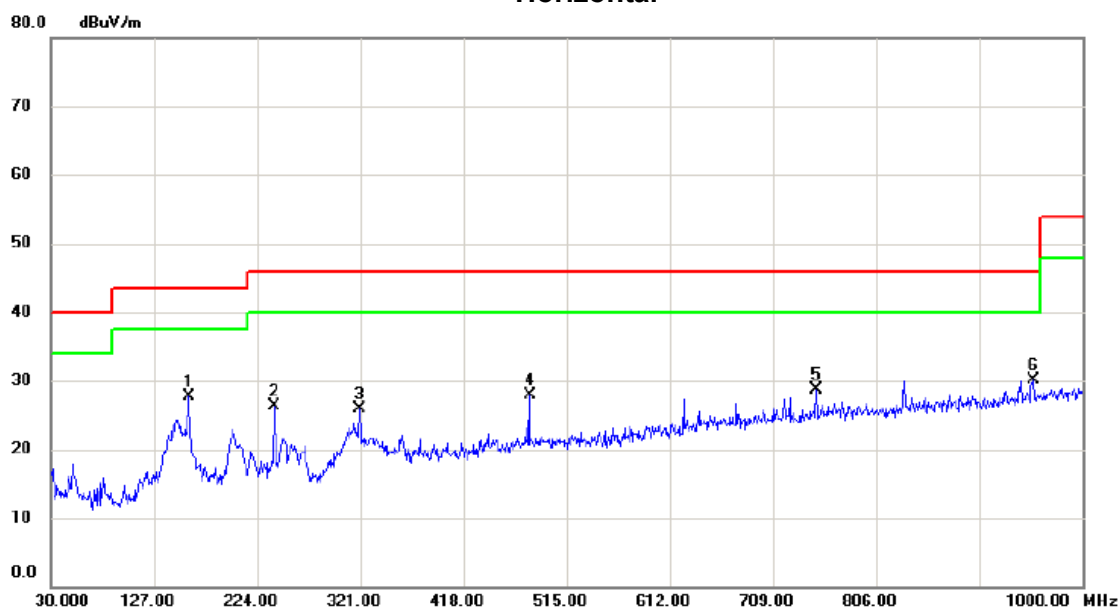
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	52.310	42.37	-14.01	28.36	40.00	-11.64	peak	
2		159.980	35.60	-11.07	24.53	43.50	-18.97	peak	
3		240.005	41.13	-14.06	27.07	46.00	-18.93	peak	
4		480.080	36.32	-7.91	28.41	46.00	-17.59	peak	
5		625.095	33.00	-5.25	27.75	46.00	-18.25	peak	
6		953.925	33.12	-0.65	32.47	46.00	-13.53	peak	

**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX Mode Channel 00 \_1Mbps (3GB+32GB)

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	159.980	38.68	-11.07	27.61	43.50	-15.89	peak	
2		240.005	40.34	-14.06	26.28	46.00	-19.72	peak	
3		320.030	37.22	-11.22	26.00	46.00	-20.00	peak	
4		480.080	35.85	-7.91	27.94	46.00	-18.06	peak	
5		750.225	32.39	-3.67	28.72	46.00	-17.28	peak	
6		953.925	30.71	-0.65	30.06	46.00	-15.94	peak	

#### REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

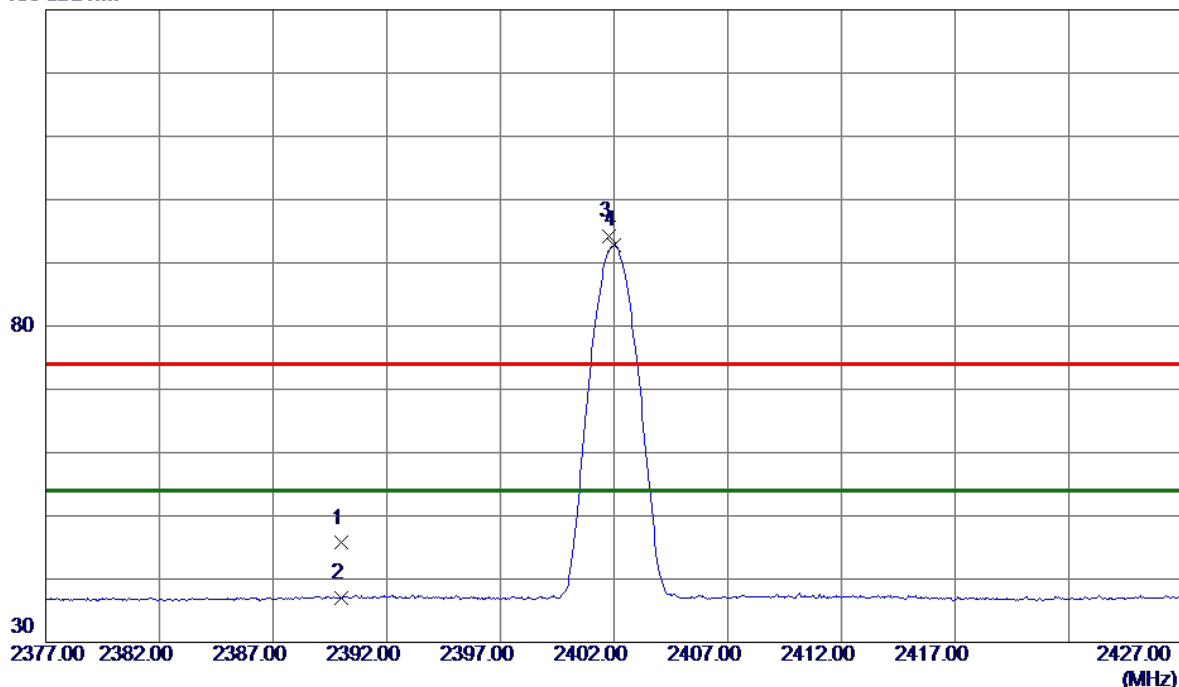
(2) Margin Level = Measurement Value - Limit Value.

## APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ

Test Mode : TX 2402 MHz \_CH00\_1Mbps (4GB+64GB)

**Vertical**

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	38.69	7.01	45.70	74.00	-28.30	Peak	
2	2390.0000	30.05	7.01	37.06	54.00	-16.94	AVG	
3	2401.7750	87.24	7.01	94.25	74.00	20.25	Peak	No Limit
4 *	2401.9750	85.80	7.01	92.81	54.00	38.81	AVG	No Limit

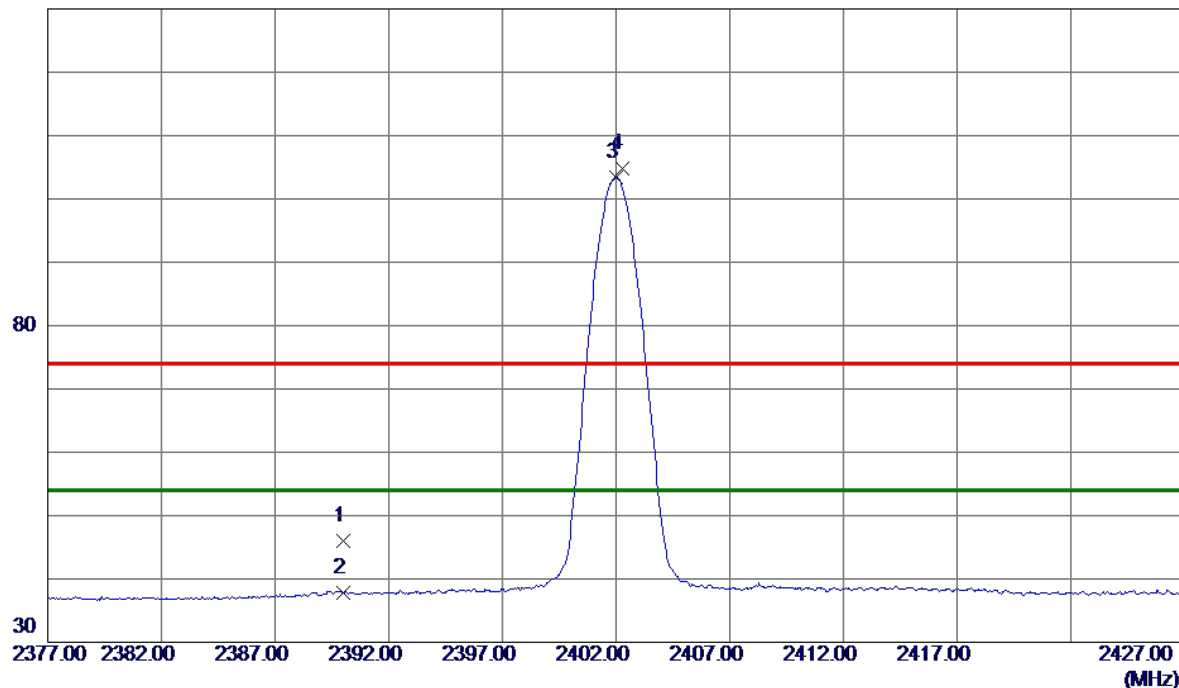
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode : TX 2402 MHz \_CH00\_1Mbps (4GB+64GB)

### Horizontal

130 dBuV/m



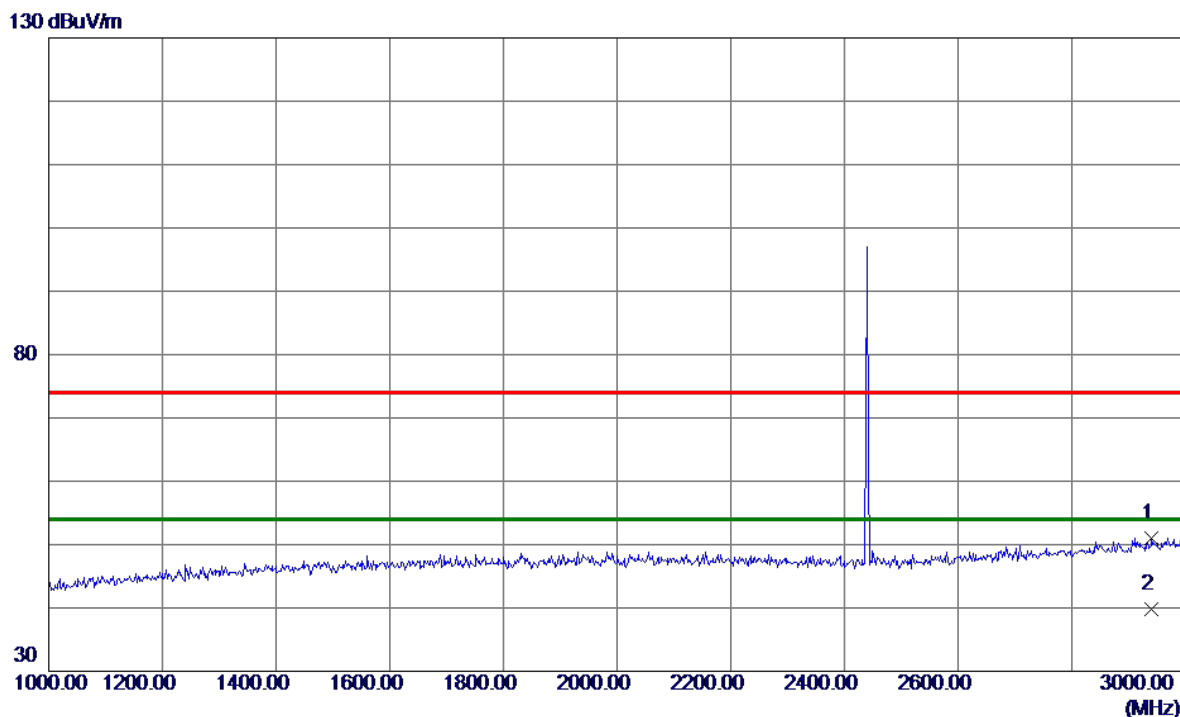
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	38.97	7.01	45.98	74.00	-28.02	Peak	
2	2390.0000	30.77	7.01	37.78	54.00	-16.22	AVG	
3 *	2402.0000	96.41	7.01	103.42	54.00	49.42	AVG	No Limit
4	2402.2500	97.83	7.01	104.84	74.00	30.84	Peak	No Limit

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode : TX 2440 MHz \_CH19\_1Mbps (4GB+64GB)

### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2941.0000	40.86	10.22	51.08	74.00	-22.92	Peak	
2 *	2941.0000	29.65	10.22	39.87	54.00	-14.13	AVG	

#### REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

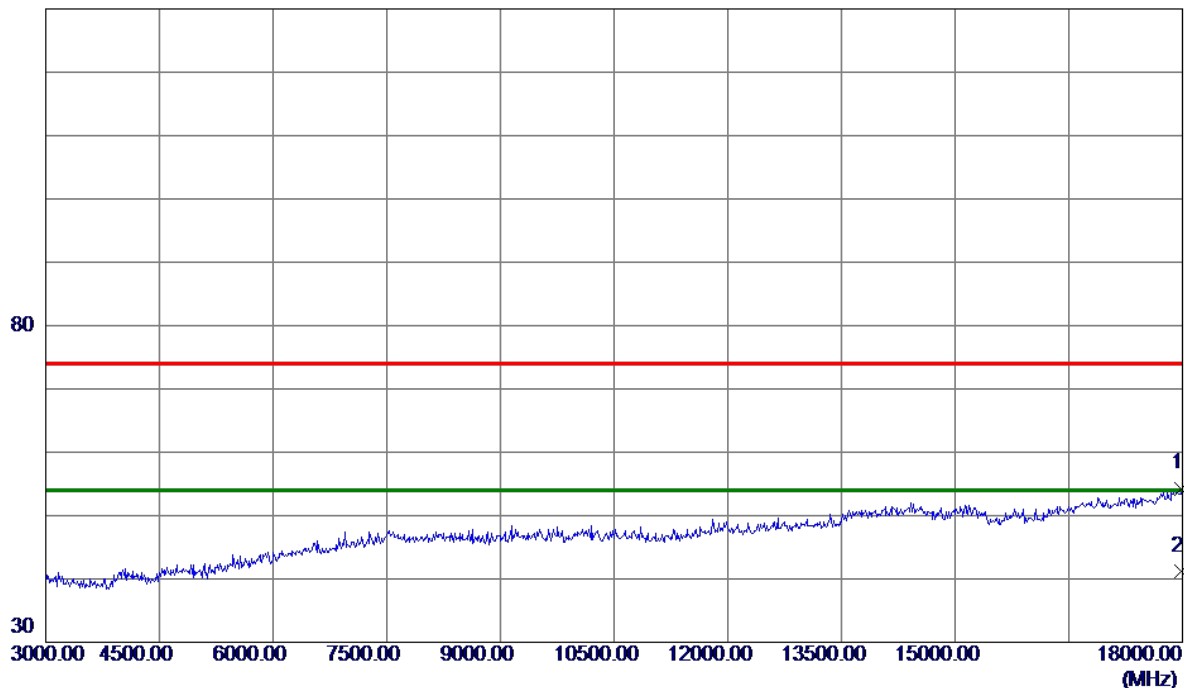
(2) Margin Level = Measurement Value - Limit Value.



Test Mode :	TX 2440 MHz _CH19_ 1Mbps (4GB+64GB)
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### Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	17985.0000	31.68	22.62	54.30	74.00	-19.70	Peak	
2 *	17985.0000	18.65	22.62	41.27	54.00	-12.73	AVG	

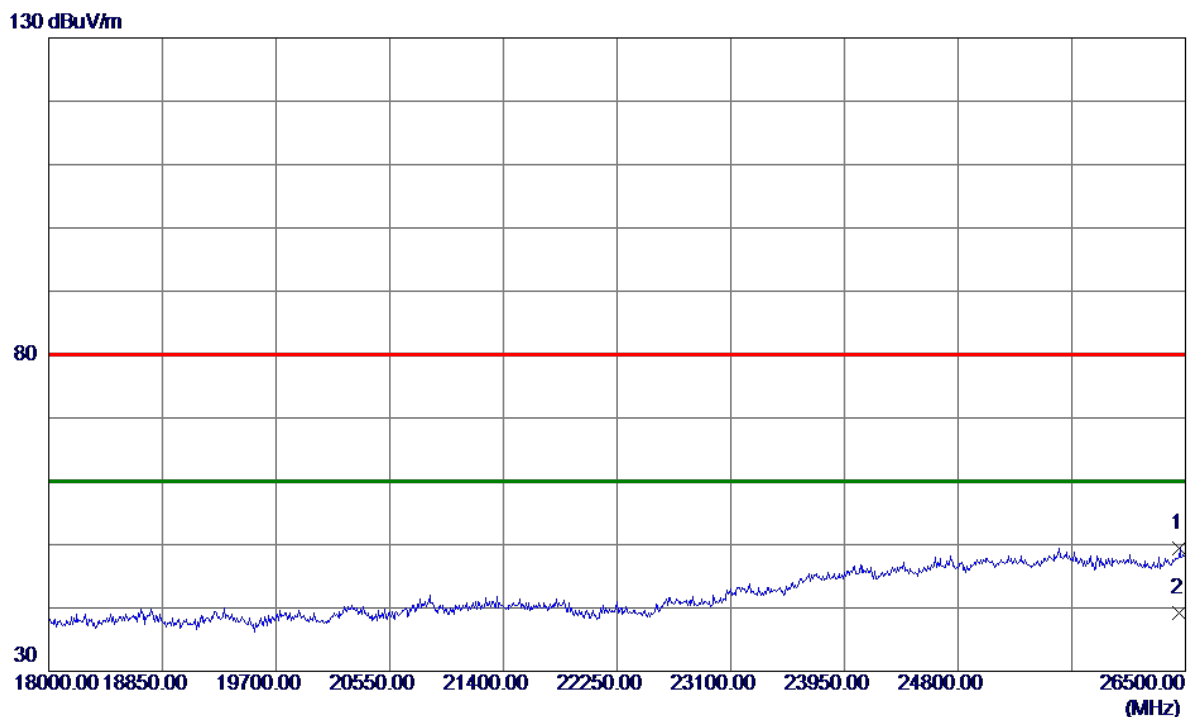
#### REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode : TX 2440 MHz \_CH19\_1Mbps (4GB+64GB)

### Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	26457.5000	28.62	20.75	49.37	80.00	-30.63	Peak	
2 *	26457.5000	18.40	20.75	39.15	60.00	-20.85	AVG	

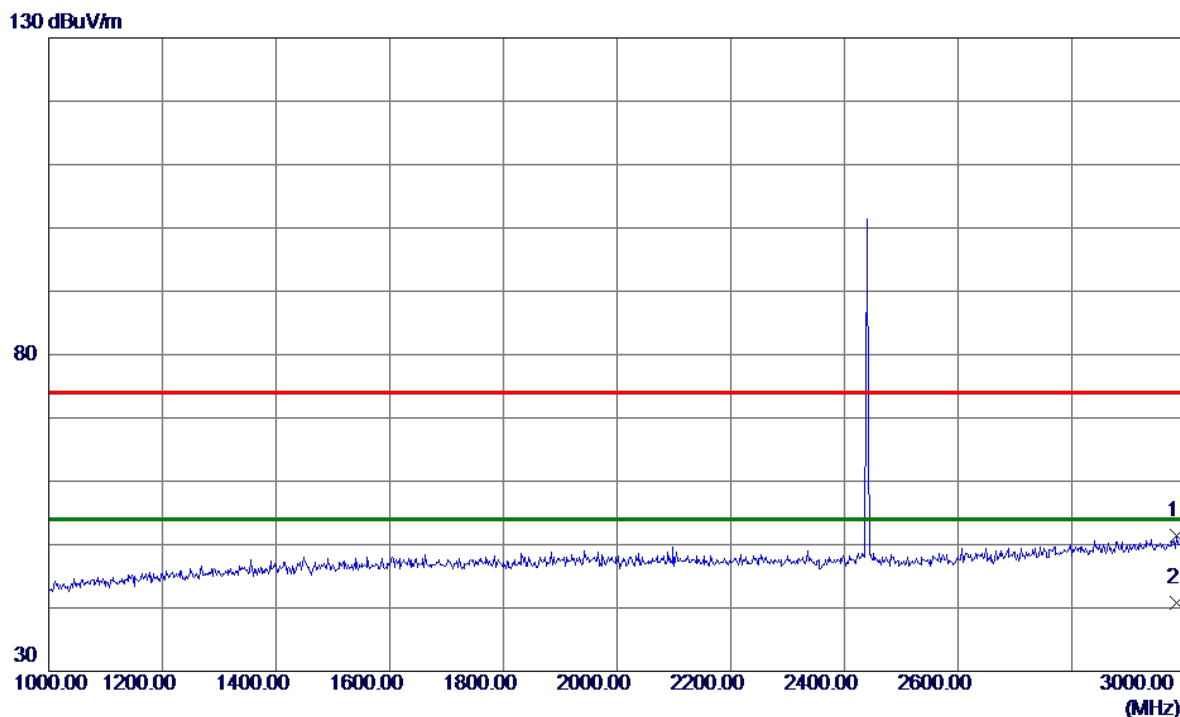
#### REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode : TX 2440 MHz \_CH19\_ 1Mbps (4GB+64GB)

### Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2985.0000	40.92	10.54	51.46	74.00	-22.54	Peak	
2 *	2985.0000	30.25	10.54	40.79	54.00	-13.21	AVG	

#### REMARKS:

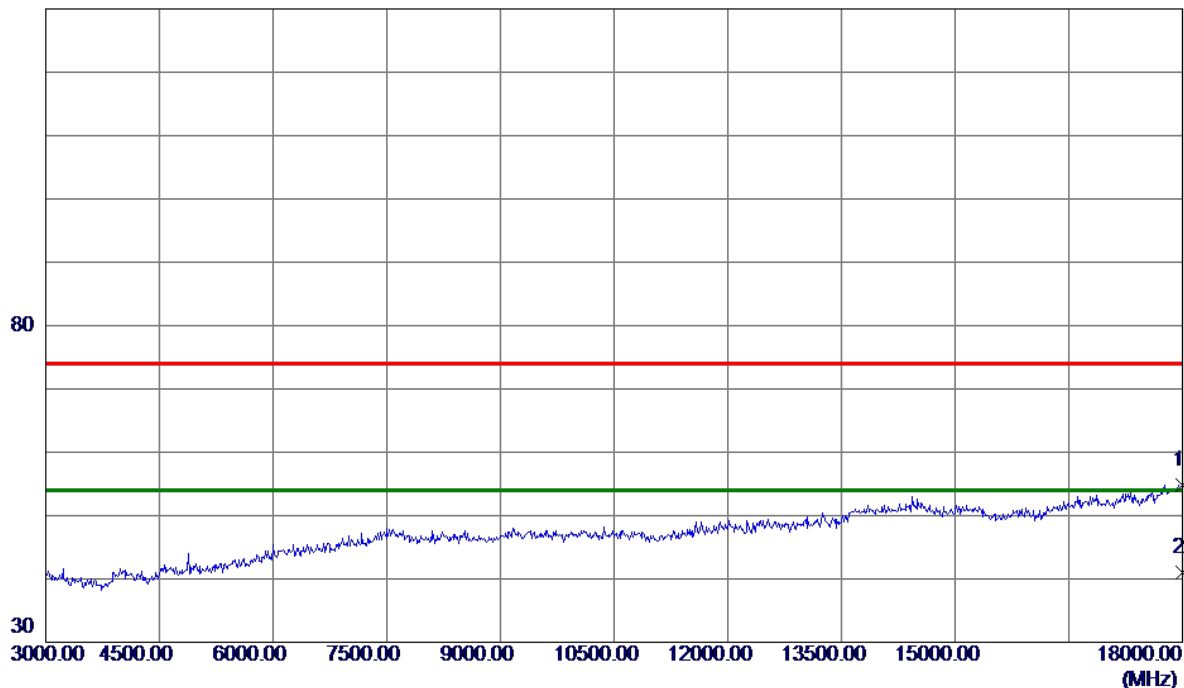
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode : TX 2440 MHz \_CH19\_ 1Mbps (4GB+64GB)

### Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	18000.0000	32.19	22.67	54.86	74.00	-19.14	Peak	
2 *	18000.0000	18.35	22.67	41.02	54.00	-12.98	AVG	

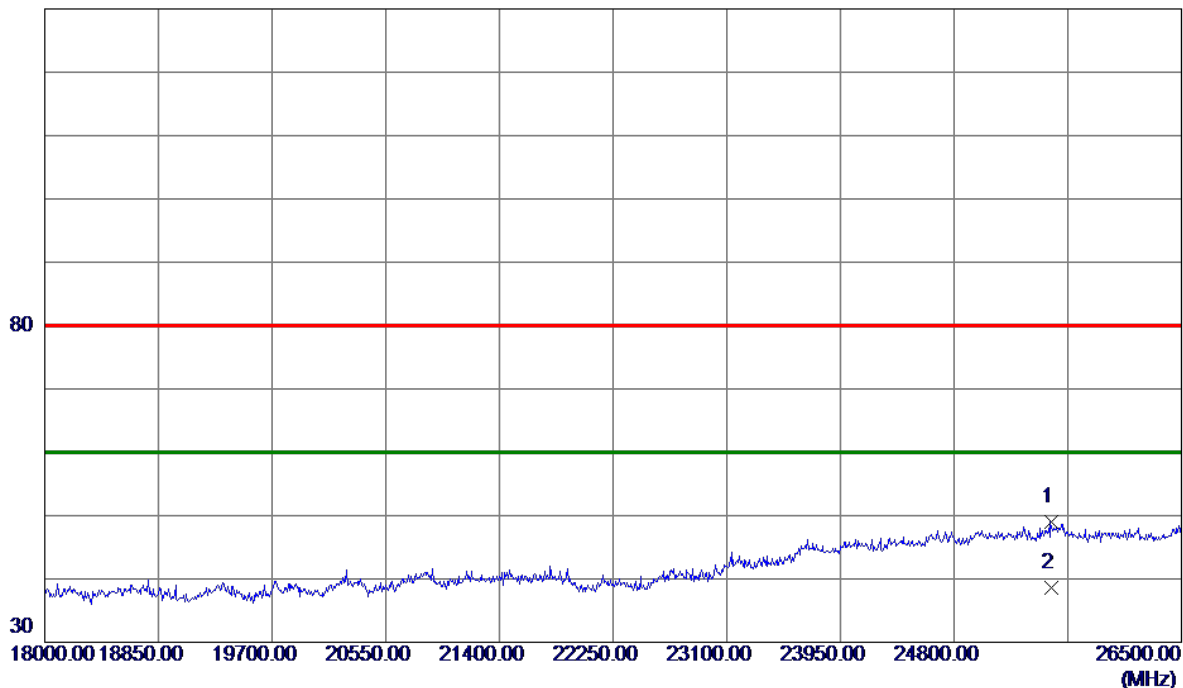
#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode : TX 2440 MHz \_CH19\_1Mbps (4GB+64GB)

### Horizontal

130 dBuV/m



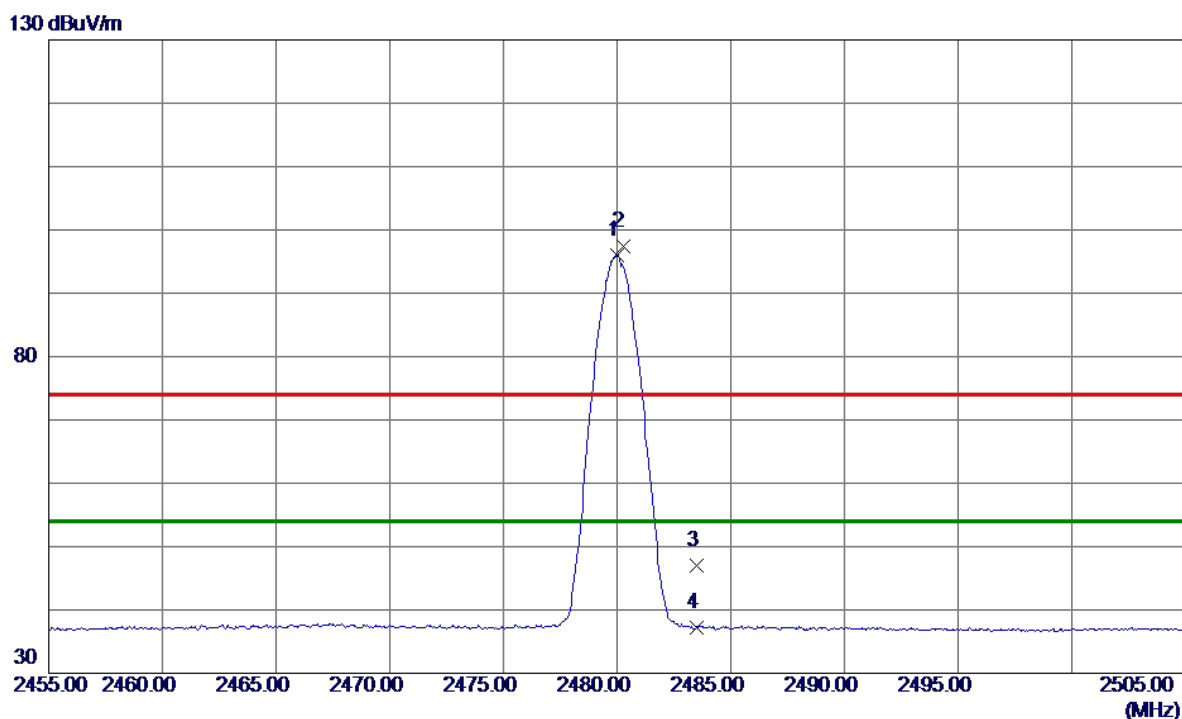
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	25526.7500	28.96	20.04	49.00	80.00	-31.00	Peak	
2 *	25526.7500	18.64	20.04	38.68	60.00	-21.32	AVG	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode : TX 2480 MHz \_CH39\_1Mbps (4GB+64GB)

**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2479.9750	89.00	7.03	96.03	54.00	42.03	AVG	No Limit
2	2480.2500	90.37	7.03	97.40	74.00	23.40	Peak	No Limit
3	2483.5000	39.97	7.03	47.00	74.00	-27.00	Peak	
4	2483.5000	30.25	7.03	37.28	54.00	-16.72	AVG	

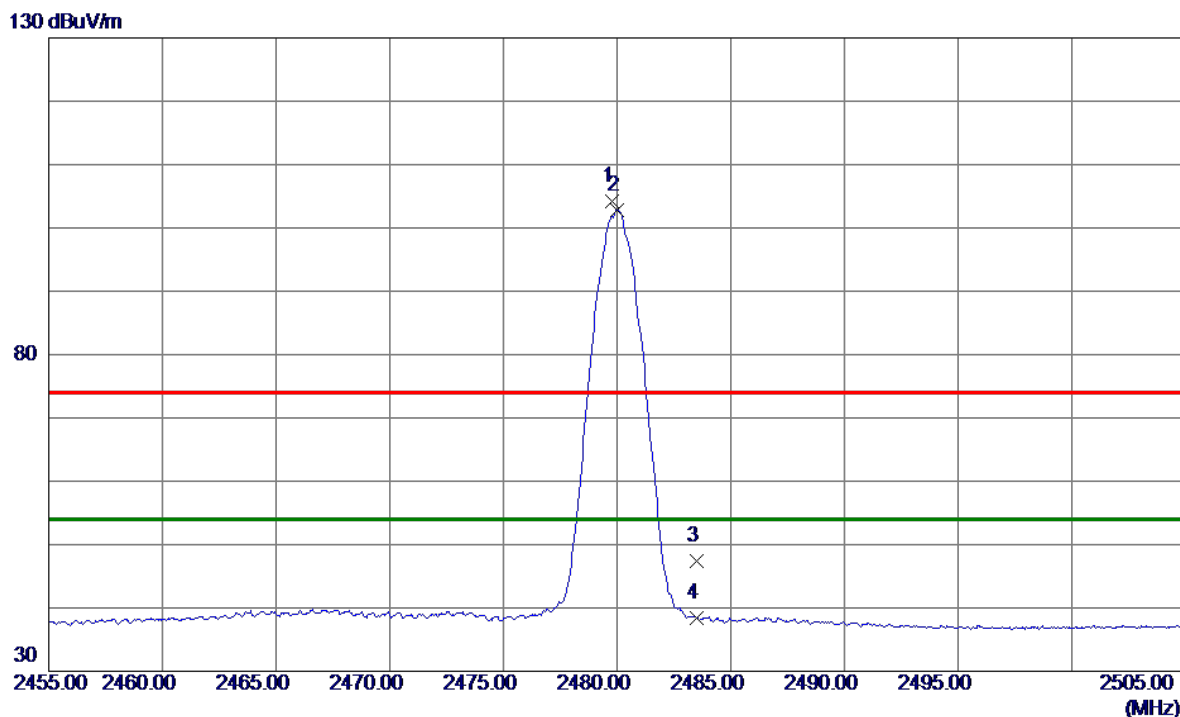
**REMARKS:**

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode : TX 2480 MHz \_CH39\_ 1Mbps (4GB+64GB)

### Horizontal



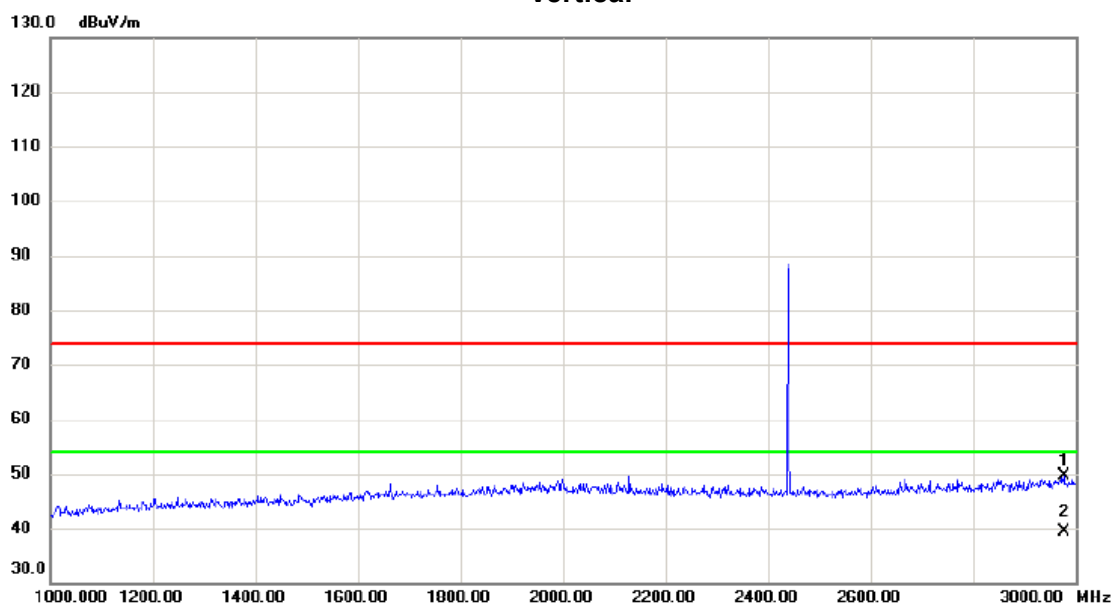
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2479.7750	97.23	7.03	104.26	74.00	30.26	Peak	No Limit
2 *	2480.0000	95.85	7.03	102.88	54.00	48.88	AVG	No Limit
3	2483.5000	40.43	7.03	47.46	74.00	-26.54	Peak	
4	2483.5000	31.40	7.03	38.43	54.00	-15.57	AVG	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode :	TX 2440 MHz _CH19_ 1Mbps (3GB+32GB)
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### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2976.000	40.62	8.93	49.55	74.00	-24.45	peak	
2	*	2976.000	30.33	8.93	39.26	54.00	-14.74	AVG	

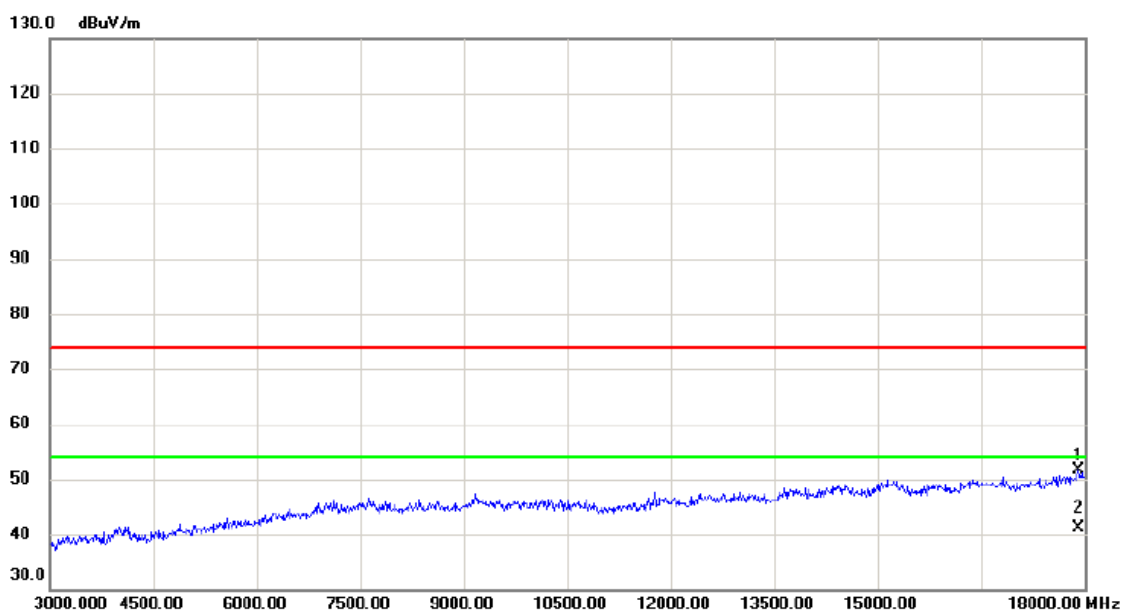
#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.



Test Mode :	TX 2440 MHz _CH19_ 1Mbps (3GB+32GB)
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### Vertical



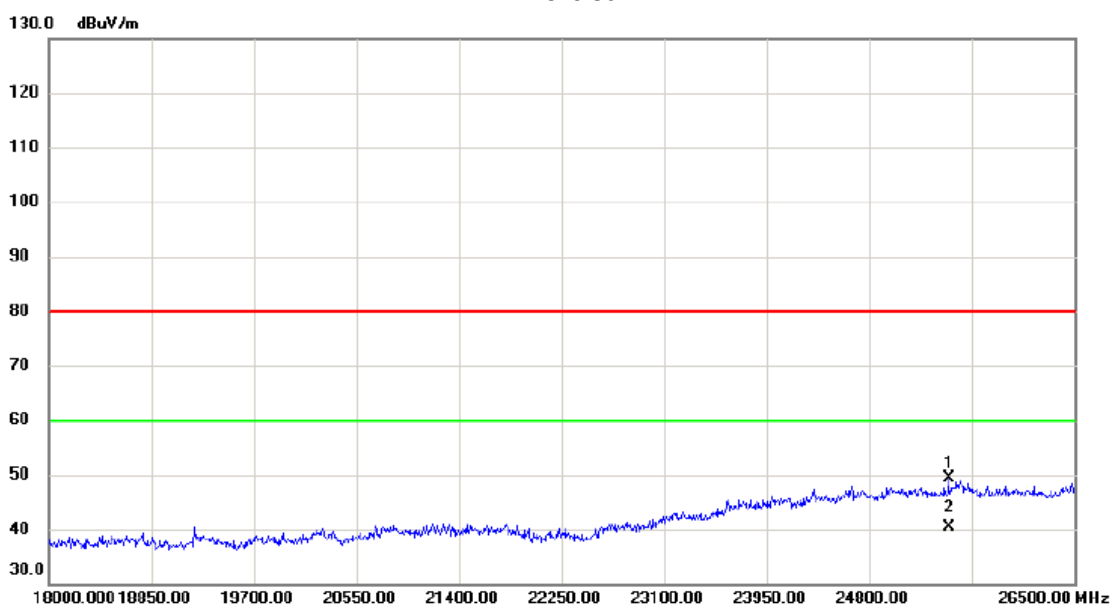
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		17917.500	32.41	19.15	51.56	74.00	-22.44	peak	
2	*	17917.500	22.10	19.15	41.25	54.00	-12.75	AVG	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode :	TX 2440 MHz _CH19_ 1Mbps (3GB+32GB)
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### Vertical



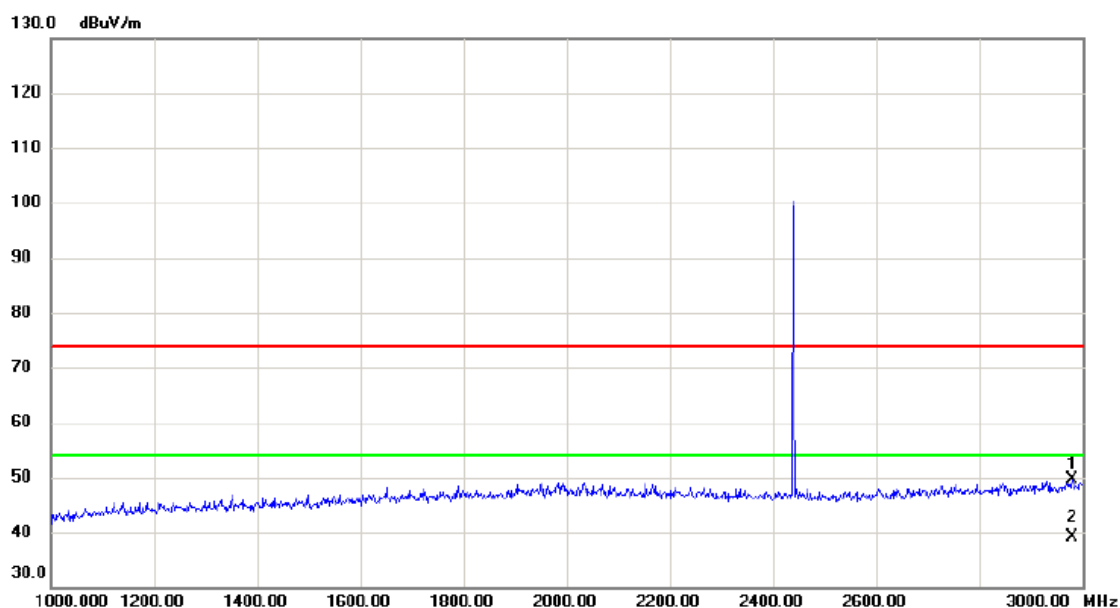
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		25458.750	29.43	20.03	49.46	80.00	-30.54	peak	
2	*	25458.750	20.24	20.03	40.27	60.00	-19.73	AVG	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode :	TX 2440 MHz _CH19_ 1Mbps (3GB+32GB)
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### Horizontal



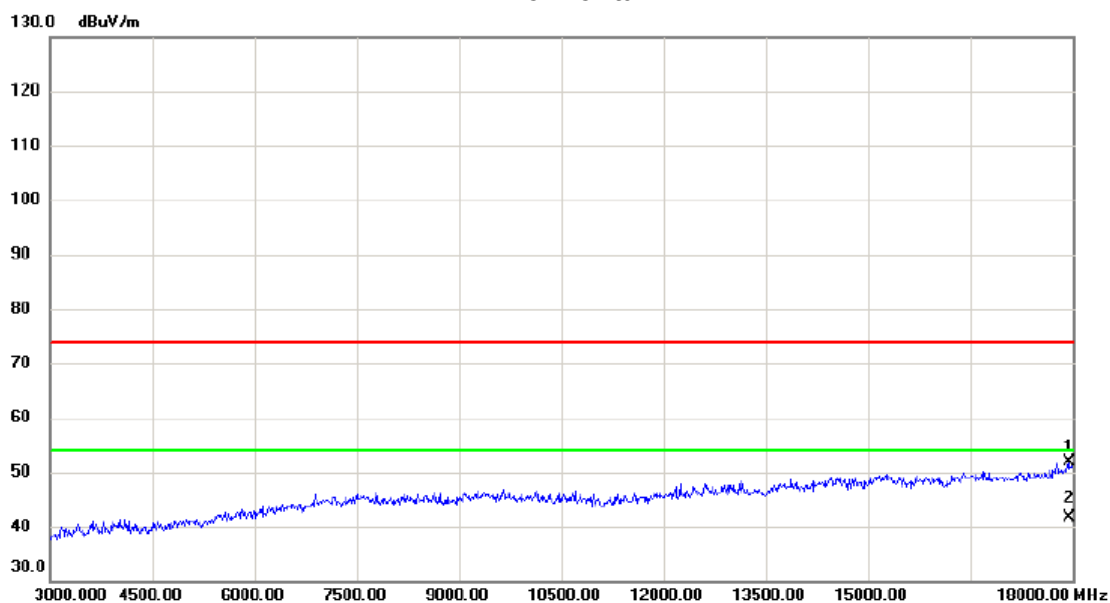
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2981.000	40.66	8.96	49.62	74.00	-24.38	peak	
2	*	2981.000	30.25	8.96	39.21	54.00	-14.79	AVG	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode : TX 2440 MHz \_CH19\_ 1Mbps (3GB+32GB)

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		17947.500	32.68	19.23	51.91	74.00	-22.09	peak	
2 *		17947.500	22.51	19.23	41.74	54.00	-12.26	AVG	

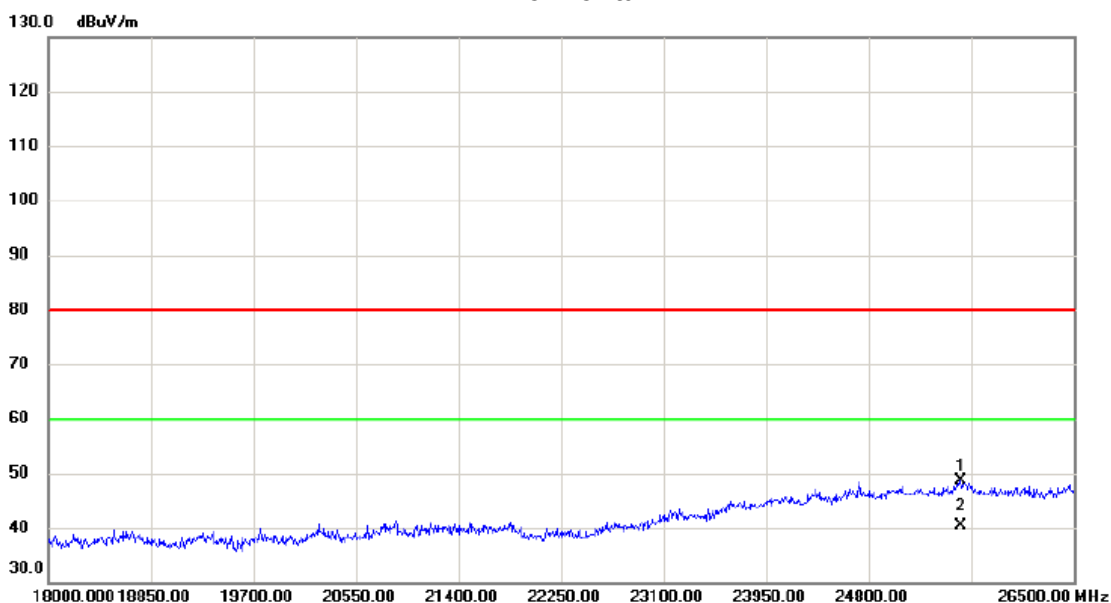
#### REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode : TX 2440 MHz \_CH19\_ 1Mbps (3GB+32GB)

### Horizontal



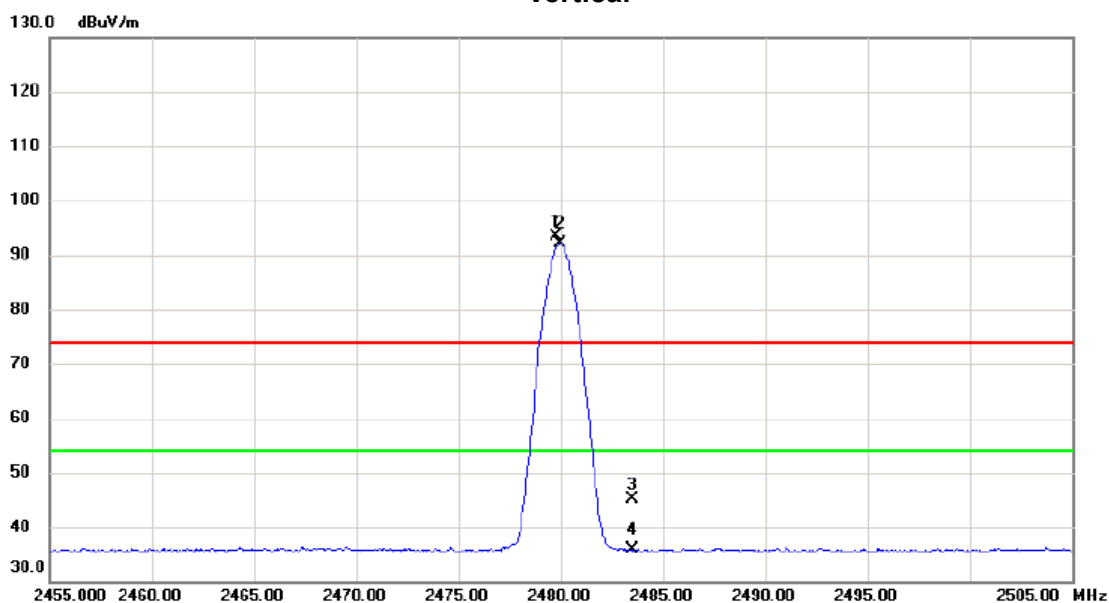
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		25560.750	28.53	20.01	48.54	80.00	-31.46	peak	
2	*	25560.750	20.37	20.01	40.38	60.00	-19.62	AVG	

#### REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode : TX 2480 MHz \_CH39\_1Mbps (3GB+32GB)

**Vertical**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2479.775	87.07	6.43	93.50	74.00	19.50	peak	No Limit
2	*	2479.975	85.69	6.43	92.12	54.00	38.12	AVG	No Limit
3		2483.500	38.64	6.43	45.07	74.00	-28.93	peak	
4		2483.500	29.37	6.43	35.80	54.00	-18.20	AVG	

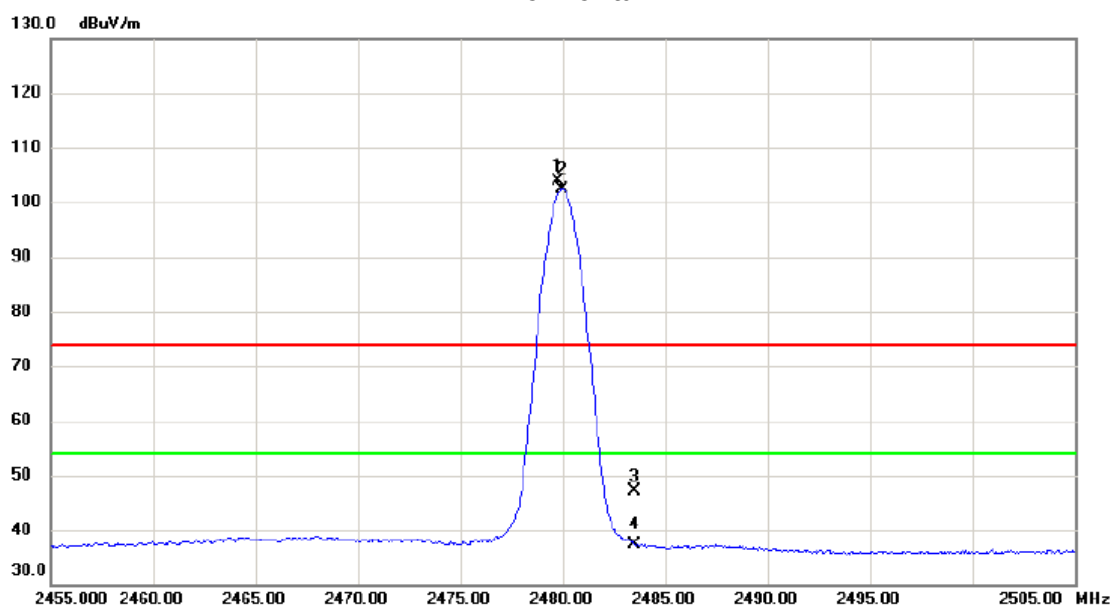
**REMARKS:**

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode : TX 2480 MHz \_CH39\_1Mbps (3GB+32GB)

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2479.775	97.38	6.43	103.81	74.00	29.81	peak	No Limit
2	*	2479.975	96.02	6.43	102.45	54.00	48.45	AVG	No Limit
3		2483.500	40.62	6.43	47.05	74.00	-26.95	peak	
4		2483.500	31.07	6.43	37.50	54.00	-16.50	AVG	

#### REMARKS:

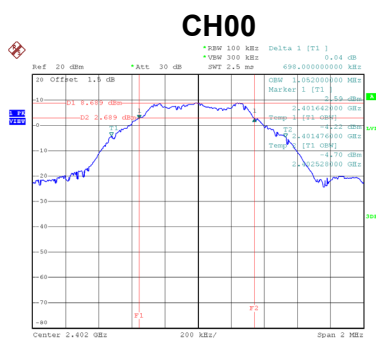
- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

## APPENDIX E - BANDWIDTH

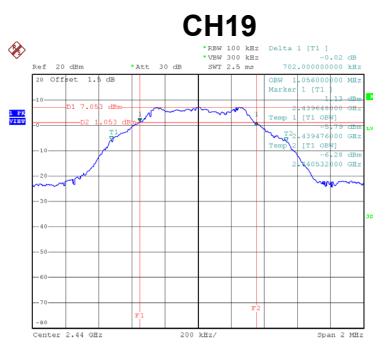


Test Mode:	CH00, CH19 , CH39 - 1Mbps
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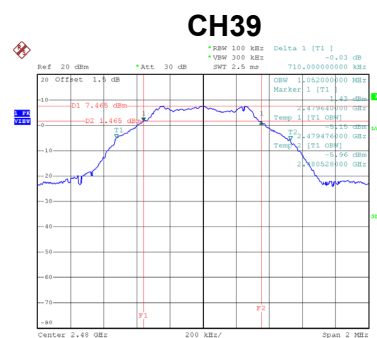
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Test Result
00	2402	0.698	1.052	500	Pass
19	2440	0.702	1.056	500	Pass
39	2480	0.710	1.052	500	Pass



Date: 16.APR.2019 16:56:01



Date: 16.APR.2019 16:58:15



Date: 16.APR.2019 17:00:14

## APPENDIX F - MAXIMUM OUTPUT POWER

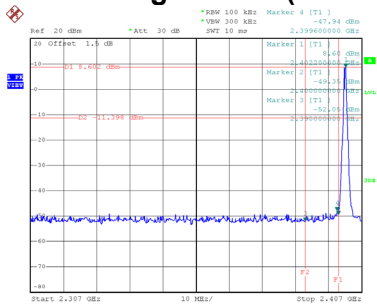
Test Mode :	CH00, CH19 , CH39 - 1Mbps
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Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	9.69	0.0093	30.00	1.00	Pass
2440	9.26	0.0084	30.00	1.00	Pass
2480	8.44	0.0070	30.00	1.00	Pass

## APPENDIX G - CONDUCTED SPURIOUS EMISSION

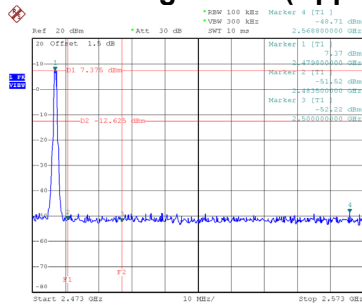
Test Mode : CH00, CH19 , CH39 - 1Mbps

### Bandedge- CH00 (Lower)



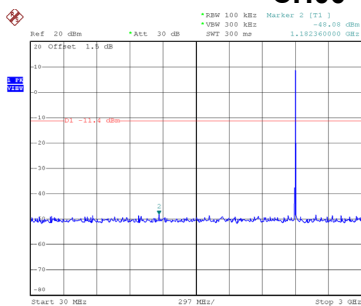
Date: 16.APR.2019 16:56:09

### Bandedge CH39 (Upper)

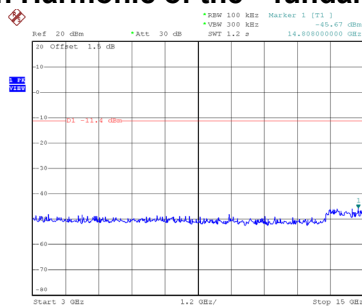


Date: 16.APR.2019 17:00:22

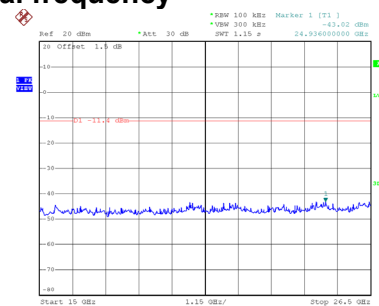
### CH00 – 10th Harmonic of the fundamental frequency



Date: 16.APR.2019 16:56:23

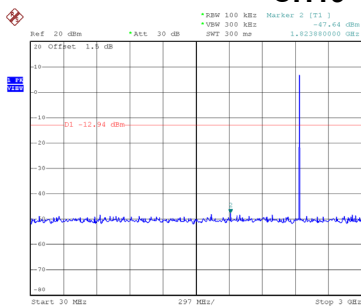


Date: 16.APR.2019 16:56:31

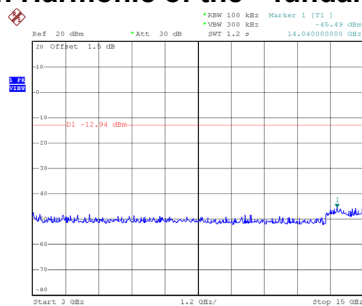


Date: 16.APR.2019 16:56:39

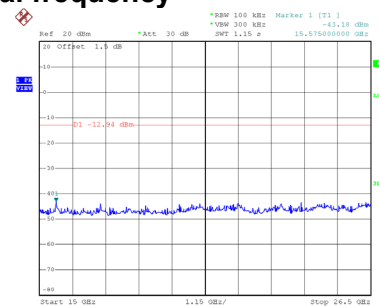
### CH19 – 10th Harmonic of the fundamental frequency



Date: 16.APR.2019 16:58:37

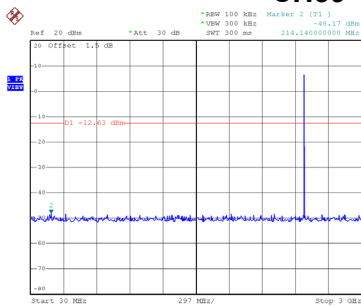


Date: 16.APR.2019 16:58:45

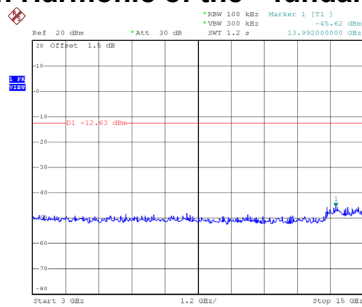


Date: 16.APR.2019 16:58:53

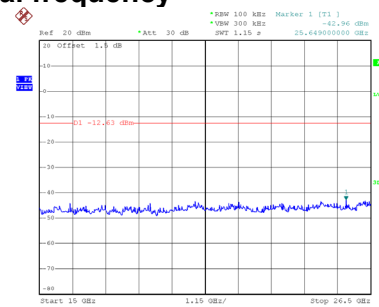
### CH39 – 10th Harmonic of the fundamental frequency



Date: 16.APR.2019 17:00:35



Date: 16.APR.2019 17:00:44

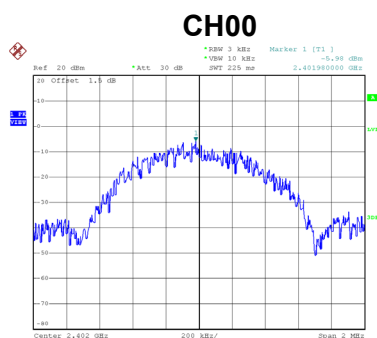


Date: 16.APR.2019 17:00:52

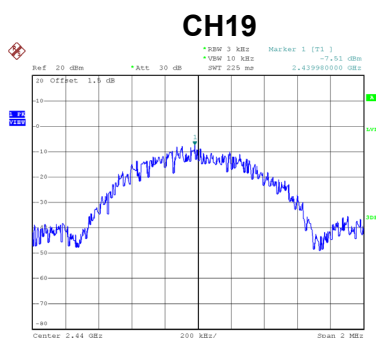
## APPENDIX H - POWER SPECTRAL DENSITY

Test Mode:	CH00, CH19 , CH39 - 1Mbps
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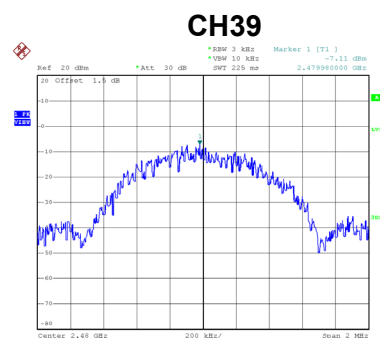
Channel	Frequency (MHz)	Power Spectral Density (dBm/3 kHz)	Max. Limit (dBm/3 kHz)	Test Result
00	2402	-5.980	8.00	Pass
19	2440	-7.510	8.00	Pass
39	2480	-7.110	8.00	Pass



Date: 16.APR.2019 16:57:29



Date: 16.APR.2019 16:58:59



Date: 16.APR.2019 17:00:58

End of Test Report