

<b>Prüfbericht-Nr.:</b> <i>Test Report No.:</i>	<b>50278953 001</b>	<b>Auftrags-Nr.:</b> <i>Order No.:</i>	<b>238107925</b>	Seite 1 von 49 Page 1 of 49
<b>Kunden-Referenz-Nr.:</b> <i>Client Reference No.:</i>	N/A	<b>Auftragsdatum:</b> <i>Order date:</i>	19-Jul-2019	
<b>Auftraggeber:</b> <i>Client:</i>	Cyberpower Systems, Inc. 11F., No.26, Jinzhuang Rd., Neihu Dist., Taipei City 114, Taipei, Taiwan			
<b>Prüfgegenstand:</b> <i>Test item:</i>	WICED module			
<b>Bezeichnung / Typ-Nr.:</b> <i>Identification / Type No.:</i>	CPWMU01			
<b>Auftrags-Inhalt:</b> <i>Order content:</i>	FCC Part 15C / IC RSS-247 Test report (WiFi b/g/n)			
<b>Prüfgrundlage:</b> <i>Test specification:</i>	FCC 47CFR Part 15: Subpart C Section 15.247(DTS) RSS-247 (02-2017)			
<b>Wareneingangsdatum:</b> <i>Date of receipt:</i>	11-Apr-2019			
<b>Prüfmuster-Nr.:</b> <i>Test sample No.:</i>	A000965638-001 to 002			
<b>Prüfzeitraum:</b> <i>Testing period:</i>	17-Jun-2019 – 16-Aug-2019			
<b>Ort der Prüfung:</b> <i>Place of testing:</i>	EMC/RF Laboratory Taipei			
<b>Prüflaboratorium:</b> <i>Testing laboratory:</i>	TUV Rheinland Taiwan Ltd.			
<b>Prüfergebnis*:</b> <i>Test result*:</i>	Pass			
<b>Report date / tested by:</b>		<b>kontrolliert von / reviewed by:</b>		
01-Oct-2019 Jack Chang/Project Manager		01-Oct-2019 Arvin Ho/Vice General Manager		
<b>Datum</b> <i>Date</i>	<b>Name / Stellung</b> <i>Name / Position</i>	<b>Unterschrift</b> <i>Signature</i>	<b>Datum</b> <i>Date</i>	<b>Name / Stellung</b> <i>Name / Position</i>
<b>Sonstiges / Other:</b>				
<b>Zustand des Prüfgegenstandes bei Anlieferung:</b> <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
<p>* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft  P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet</p> <p>Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor  P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested</p>				
<p><b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b>  <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i></p>				

## TEST SUMMARY

### **5.1.1 ANTENNA REQUIREMENT**

RESULT: *Passed*

### **5.1.2 MAXIMUM CONDUCTED PEAK OUTPUT POWER**

RESULT: *Passed*

### **5.1.3 6dB BANDWIDTH AND 99% BANDWIDTH**

RESULT: *Passed*

### **5.1.4 POWER DENSITY**

RESULT: *Passed*

### **5.1.5 CONDUCTED SPURIOUS EMISSIONS AND FREQUENCY BAND EDGE MEASURED IN 100kHz BANDWIDTH**

RESULT: *Passed*

### **5.1.6 SPURIOUS EMISSION**

RESULT: *Passed*

### **5.2.1 MAINS CONDUCTED EMISSIONS**

RESULT: *Passed*

### **6.1.1 ELECTROMAGNETIC FIELDS**

RESULT: *Passed*

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## 1. General Remarks

### 1.1 Complementary Materials

The following attachments are integral parts of this test report:

**Appendix P: Photo Documentation internal view**  
(File Name: 50278953 001 APPENDIXP)

**Appendix D: Test Result of Radiated Emissions**  
(File Name: 50278953 001 APPENDIXD)

Test Specifications

The following standards were applied.

**Table 1: Applied Standard and Test Levels**

Radio
FCC 47CFR Part 15: Subpart C Section 15.247 FCC 47CFR Part 2: Subpart J Section 2.1091 RSS-247 Issue 2, Feb 2017 RSS-102 Issue 5, March 2015 RSS-Gen, Issue 5, March 2019 ANSI C63.10:2013 KDB558074 D01 DTS Meas Guidance v05r02 KDB447498 D01 General RF Exposure Guidance v06

### 1.2 Decision Rule of conformity

The decision rule of conformity of this test report is following the requirements of the requested standard in the quotation, and agreed among testing laboratory and manufacturer (applicant) to exclude the consideration of Measurement Uncertainty, unless it is required by the specific standard.

## 2. Test Sites

### 2.1 Test Laboratory

TUV Rheinland Taiwan Ltd.  
Taipei Testing Laboratories

11F. No.758, Sec. 4, Bade Rd., Songshan Dist.  
Taipei City 105  
Taiwan (R.O.C.)

### 2.2 Test Facility

TUV Rheinland Taiwan Ltd.

11F. No.758, Sec. 4, Bade Rd., Songshan Dist.  
Taipei City 105  
Taiwan (R.O.C.)

FCC RegistrationNo.: 180491  
IC Canada Registration No.: 9465A  
TAF Accredited NCC Test Lab. No.:3567  
TAF ISO17025 Certification effective period: 6<sup>th</sup>-May-2019 to 05<sup>th</sup>-May-2022



Testing Laboratory  
**3567**

## 2.3 List of Test and Measurement Instruments

**Table 2: List of Test and Measurement Equipment**

Kind of Equipment	Manu-facturer	Type	S/N	Last Calibration	Next Calibration
Test Software	Farad	EZ_EMC	Ver. TUV3A1	N/A	N/A
EMI Test Receiver	R&S	ESR 7***	101062	2018/10/01	2019/10/01
Spectrum Analyzer	R&S	FSV 40**	101514	2019/02/07	2020/02/07
EXA Signal Analyzer	KEYSIGHT	N9010A***	MY52221334	2019/02/15	2020/02/15
Preamplifier (30MHz -1GHz)	HP	8447F**	2805A03335	2018/08/22	2019/08/22
Pre-Amplifier (1GHz~18GHz)	EM Electronics	EM01G18G**	060558	2018/11/30	2019/11/30
Bilog Antenna	TESEQ	CBL 6111D**	29802	2018/08/22	2019/08/22
Horn Antenna	ETS-Lindgren	3117**	00218931	2018/12/27	2019/12/27
Horn Antenna (18GHz~40GHz)	COM-POWER	AH-840**	101029	2018/12/22	2019/12/22
Loop Antenna	Schwarzbeck	FMZB 1513**	1513-076	2018/06/21	2019/06/21
EMI Test Receiver	Rohde & Schwarz	ESCI 7*	100797	2019/01/16	2020/01/16
Two-Line V-Network	Rohde & Schwarz	ENV216*	101243	2019/06/23	2020/06/23

\*The test date of AC mains is 16<sup>th</sup>-Aug-2019.

\*\*The test date of Radiated test is 17<sup>th</sup>-Jun-2019.

\*\*\*The test date of Conducted test is 17<sup>th</sup>-Jun-2019.

## 2.4 Traceability

All measurement equipment calibrations are traceable to NML(Taiwan)/NIST(USA) or where calibration is performed outside Taiwan, to equivalent nationally recognized standards organizations.

## 2.5 Calibration

Equipment requiring calibration is calibrated periodically in a suitably accredited Calibration Lab. Additionally all equipment is verified for proper performance on a regular schedule using in house standards or comparisons.

## 2.6 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements .

**Table 3: Emission Measurement Uncertainty**

Parameter	Uncertainty
Radio Frequency	$\pm 1 \times 10^{-7}$
RF power, conducted	$\pm 1.5$ dB
RF power density, conducted	$\pm 3$ dB
spurious emissions, conducted	$\pm 3$ dB
all emissions, radiated	$\pm 6$ dB
Temperature	$\pm 1$ °C
Humidity	$\pm 5$ %



### 3. General Product Information

#### 3.1 Product Function and Intended Use

The EUT is a WICED module. It contains a IEEE802.11b/g/n compatible module enabling the user to communicate data through a Wireless interface.

For details refer to the User Guide, Data Sheet and Circuit Diagram.

#### 3.2 System Details and Ratings

**Table 4: Basic Information of EUT**

Item	EUT information
Kind of Equipment/Test Item	WICED module
Type Designation	CPWMU01
FCC ID	2AFG8CPWMU01
IC	11470A-CPWMU01
HVIN	V1.0

**Table 5: Technical Specification of EUT**

Technical Specification	Value
Operating Frequencies	802.11b/g/n HT20 : 2412 MHz ~ 2462 MHz
Channel Spacing	802.11b/g/n HT20 : 5MHz
Channel number	802.11b/g/n HT20 : 11
Operation Voltage	12Vdc
Modulation	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
Antenna gain	2.74dBi

### **3.3 Independent Operation Modes**

Basic operation modes are:

- A. Transmitting
  - 1. Low channel
  - 2. Middle channel
  - 3. High channel
- B. Receiving
- C. Standby
- D. Off

### **3.4 Noise Generating and Noise Suppressing Parts**

Refer to the Circuit Diagram.

### **3.5 Submitted Documents**

- Circuit Diagram
- Blocking Diagram
- Rating Label
- Technical Description

## 4. Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

### 4.2 Test Operation and Test Software

Setup for testing: The module is mounted on an Evaluation Board provided by the manufacturer. The EVB is provided with an USB interface which makes it possible to control the module through the test software installed on a notebook computer.

This software was running on the laptop computer connected to the EUT. It was used to enable the operation modes listed in section 3.3 as appropriate.

The samples were used as follows:  
Conducted sample: A000965638-001  
Radiation sample: A000965638-002

Full test was applied on all test modes, but only worst case was shown.

IEEE 802.11b mode:  
Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 1Mbps data rate were chosen for full testing.

IEEE 802.11g mode:  
Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 6Mbps data rate were chosen for full testing.

IEEE 802.11n HT 20 mode:  
Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with MCS0 data rate were chosen for full testing.

### 4.3 Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

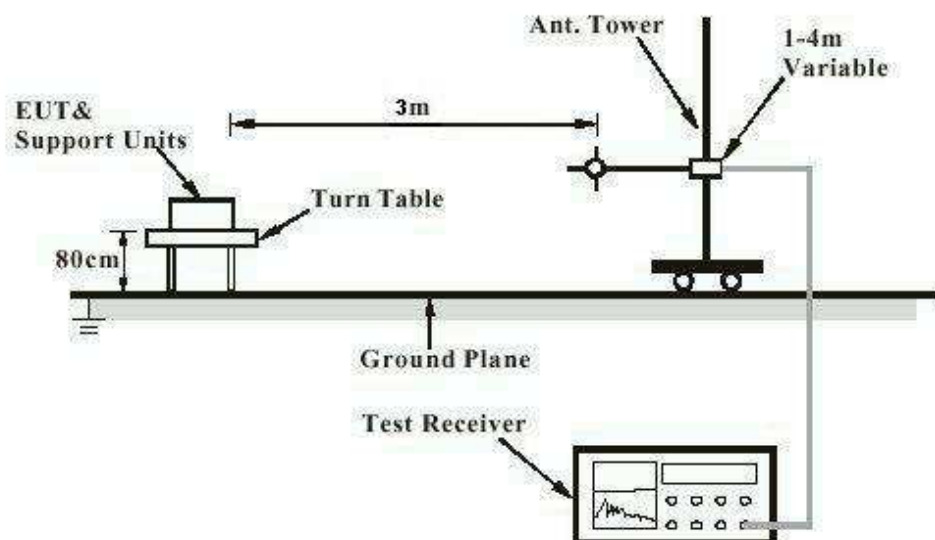
Description	Manufacturer	Model No.	Serial No.
Notebook(EMC-06)	Lenovo	TP00048A	PB-0F8B2
Test tool	cypress	WI_tool	-

### 4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

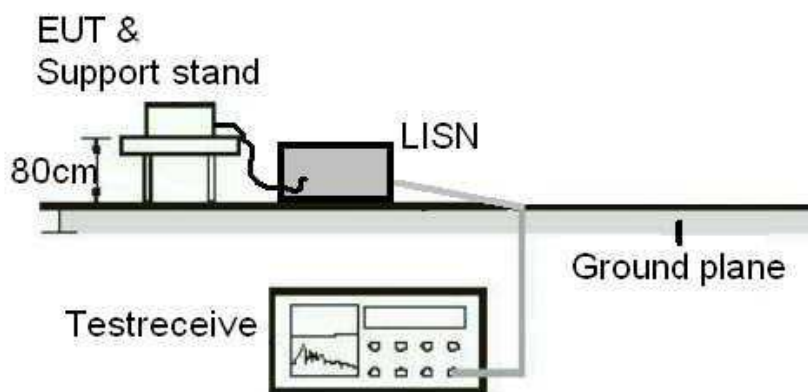
### 4.5 Test Setup Diagram

**Diagram of Measurement Configuration for Radiation Test**

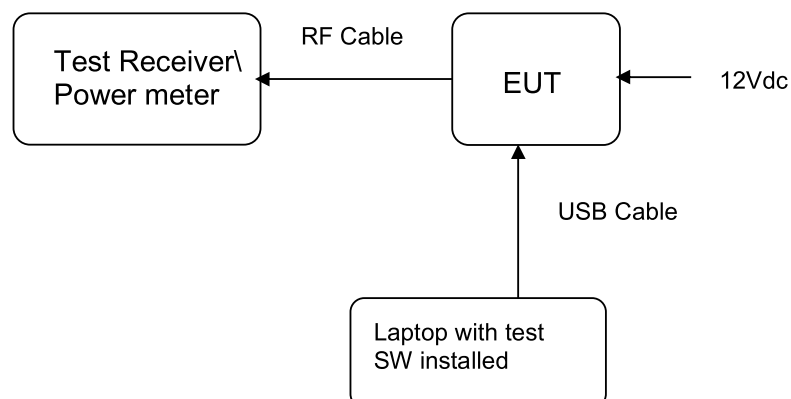


Note: Measurements above 1 GHz are done with a table height of 1.5m

**Diagram of Measurement Equipment Configuration for Mains Conduction Measurement (if applicable)**



**Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement**



## 5. Test Results

### 5.1 Transmitter Requirement & Test Suites

#### 5.1.1 Antenna Requirement

**RESULT:****Passed**

Test standard : FCC Part 15.247(b)(4), Part 15.203 and RSS-Gen 6.8

Requirement : use of approved antennas only with directional gains that do not exceed 6 dBi

According to the manufacturer declaration, the EUT has an antenna with Max directional gain of 2.74dBi. The antenna is connected through a proprietary connector with no possibility of replacement with a non-approved antenna by the end-user. Therefore, the EUT is considered to comply with this provision.

Refer to EUT photo for details.

**5.1.2 Maximum conducted Peak output power****RESULT:****Passed**

Test standard	:	FCC Part 15.247(b)(3), RSS-247 5.4(b)
Basic standard	:	ANSI C63.10:2013, KDB558074
Limit	:	1 Watt
Kind of test site	:	Shielded room

**Test setup**

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	20-24 °C
Relative humidity	:	50-65 %
Atmospheric pressure	:	100-103 kPa

**Table 6: Test result of Maximum conducted Peak output power (802.11b)**

Channel	Channel Frequency (MHz)	Output Power		Limit
		(dBm)	(W)	(W)
Low Channel	2412	22.49	0.17742	1
Middle Channel	2437	22.29	0.16943	1
High Channel	2462	22.18	0.16520	1

Pmax: 22.49dBm, 177.42mW

**Table 7: Test result of Maximum conducted Peak output power (802.11g)**

Channel	Channel Frequency (MHz)	Output Power		Limit
		(dBm)	(W)	(W)
Low Channel	2412	24.72	0.29648	1
Middle Channel	2437	24.61	0.28907	1
High Channel	2462	24.51	0.28249	1

Pmax: 24.72dBm, 296.48mW

**Table 8: Test result of Maximum conducted Peak output power (802.11n HT20)**

Channel	Channel Frequency (MHz)	Output Power		Limit
		(dBm)	(W)	(W)
Low Channel	2412	24.68	0.29376	1
Middle Channel	2437	24.64	0.29107	1
High Channel	2462	24.54	0.28445	1

Pmax: 24.68dBm, 293.76mW



### 5.1.3 6dB Bandwidth and 99% Bandwidth

**RESULT:**
**Passed**

Test standard : FCC Part 15.247(a)(2), RSS-247 5.2(a)  
 RSS-Gen (Issue 5) 6.7  
 Basic standard : ANSI C63.10:2013, KDB558074  
 Kind of test site : Shielded room

**Test setup**

Test Channel : Low/ Middle/ High  
 Operation Mode : A  
  
 Ambient temperature : 20-24°C  
 Relative humidity : 50-65%  
 Atmospheric pressure : 100-103 kPa

**Table 9: Test result of 6dB Bandwidth (802.11b)**

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Low Channel	2412	9.057	>0.5	Pass
Mid Channel	2437	8.541	>0.5	Pass
High Channel	2462	8.541	>0.5	Pass

**Table 10: Test result of 6dB Bandwidth (802.11g)**

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Low Channel	2412	15.315	>0.5	Pass
Mid Channel	2437	14.446	>0.5	Pass
High Channel	2462	14.835	>0.5	Pass

**Table 11: Test result of 6dB Bandwidth (802.11n HT20)**

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Low Channel	2412	15.135	>0.5	Pass
Mid Channel	2437	15.285	>0.5	Pass
High Channel	2462	15.105	>0.5	Pass

**Table 12: Test result of 99% Bandwidth (802.11b)**

Channel	Channel Frequency (MHz)	99% Bandwidth (MHz)
Mid Channel	2437	13.726

**Table 13: Test result of 99% Bandwidth (802.11g)**

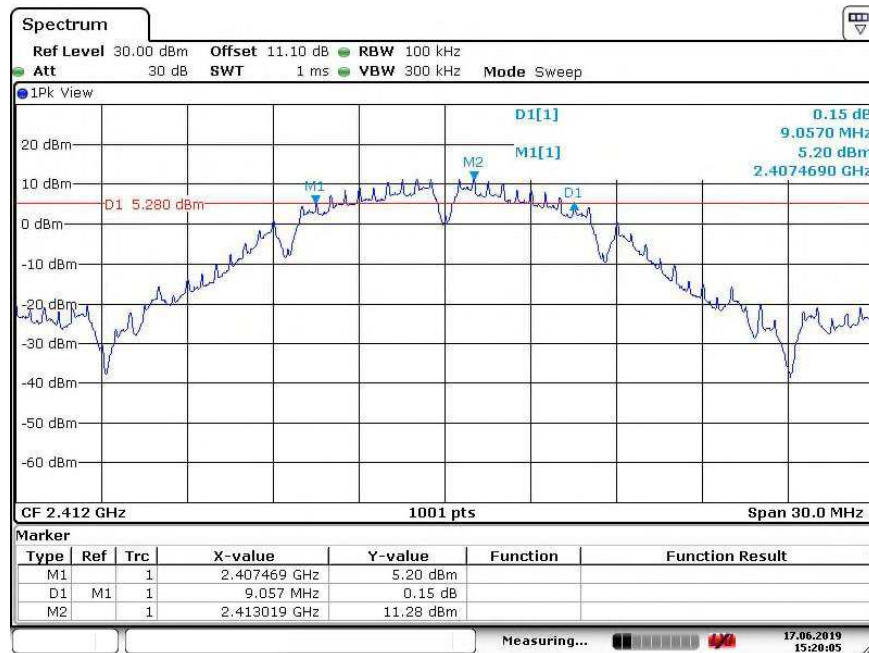
Channel	Channel Frequency (MHz)	99% Bandwidth (MHz)
Mid Channel	2437	17.922

**Table 14: Test result of 99% Bandwidth (802.11n HT20)**

Channel	Channel Frequency (MHz)	99% Bandwidth (MHz)
Mid Channel	2437	18.821

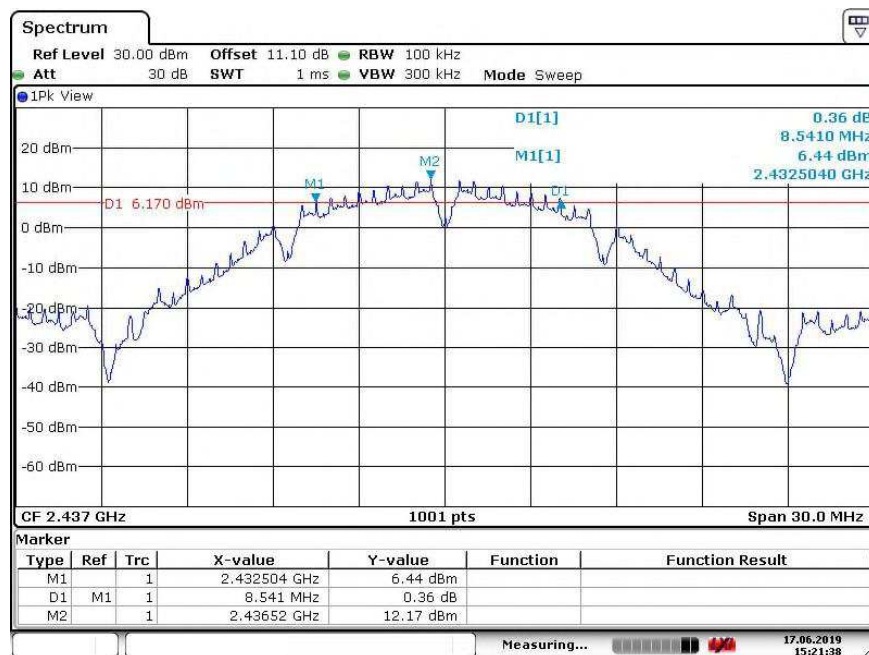
## Test Plot of 6dB Bandwidth, 802.11b

### Low Channel

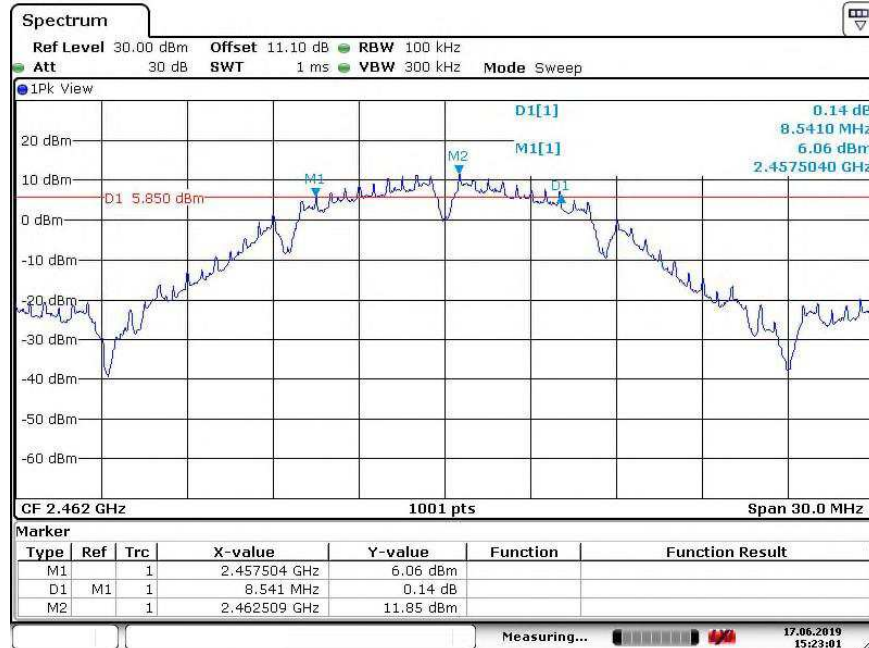


Date: 17. JUN. 2019 15:20:05

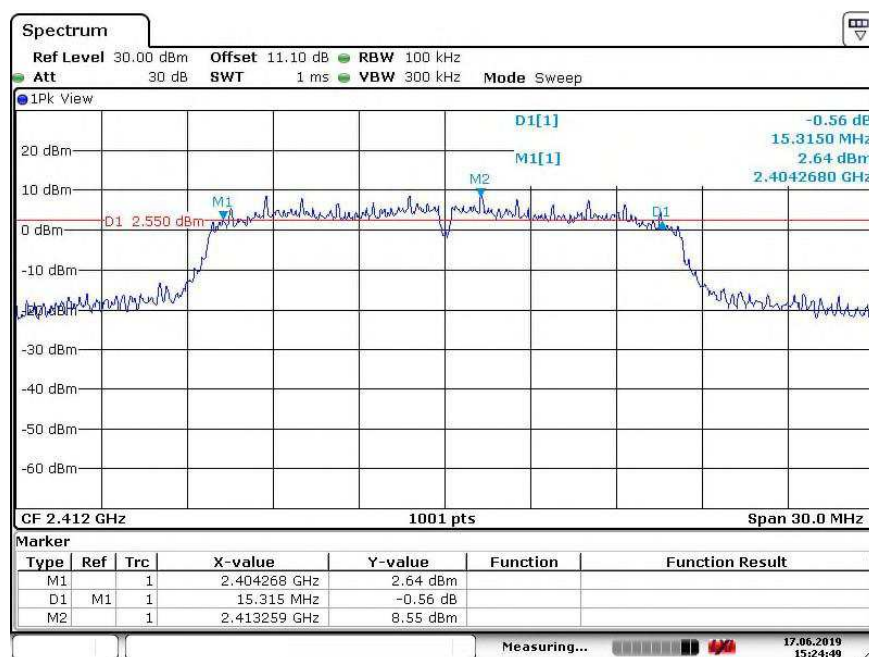
### Middle Channel



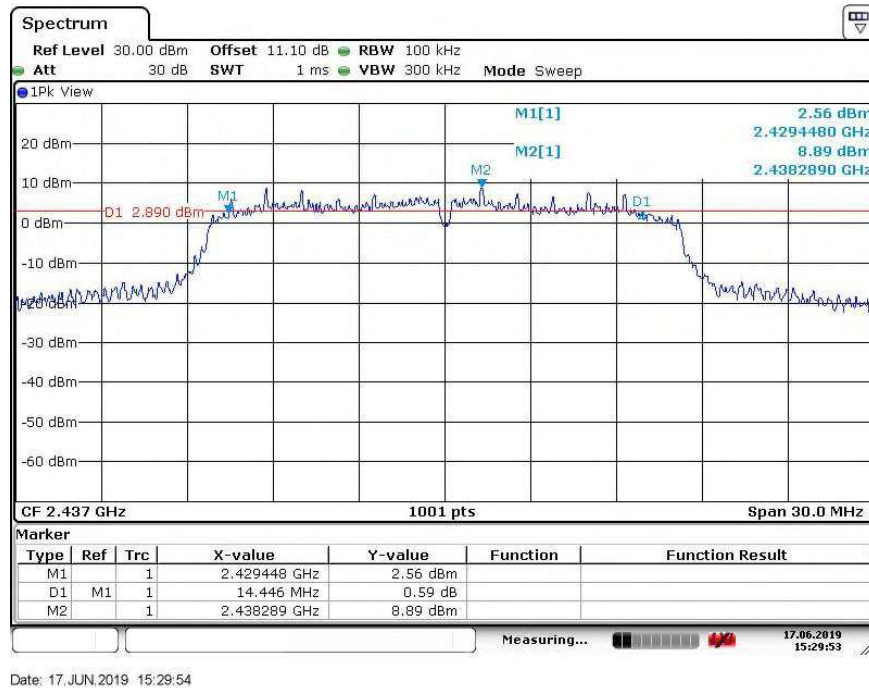
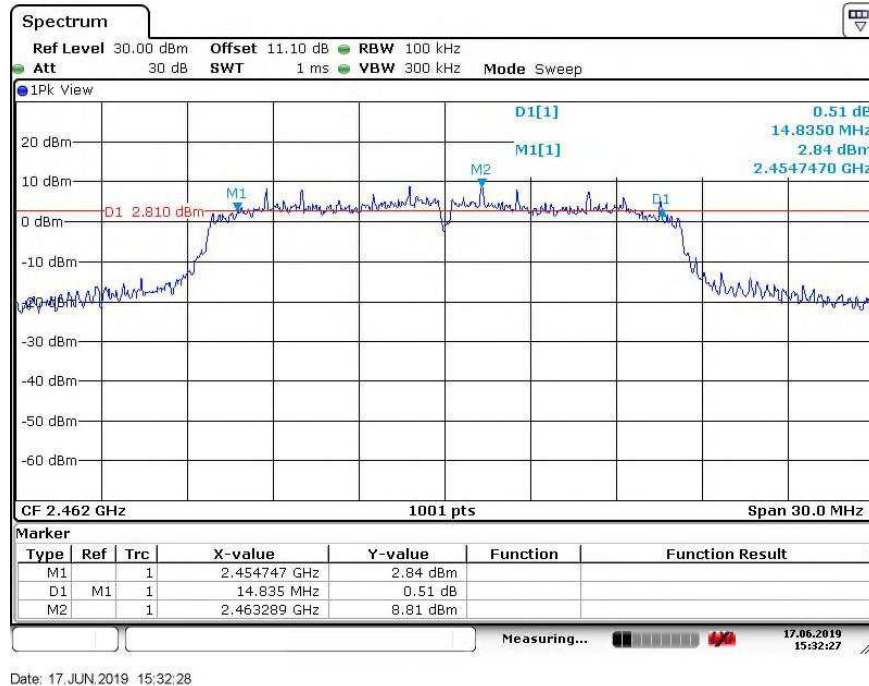
Date: 17. JUN. 2019 15:21:39

**High Channel**


Date: 17.JUN.2019 15:23:02

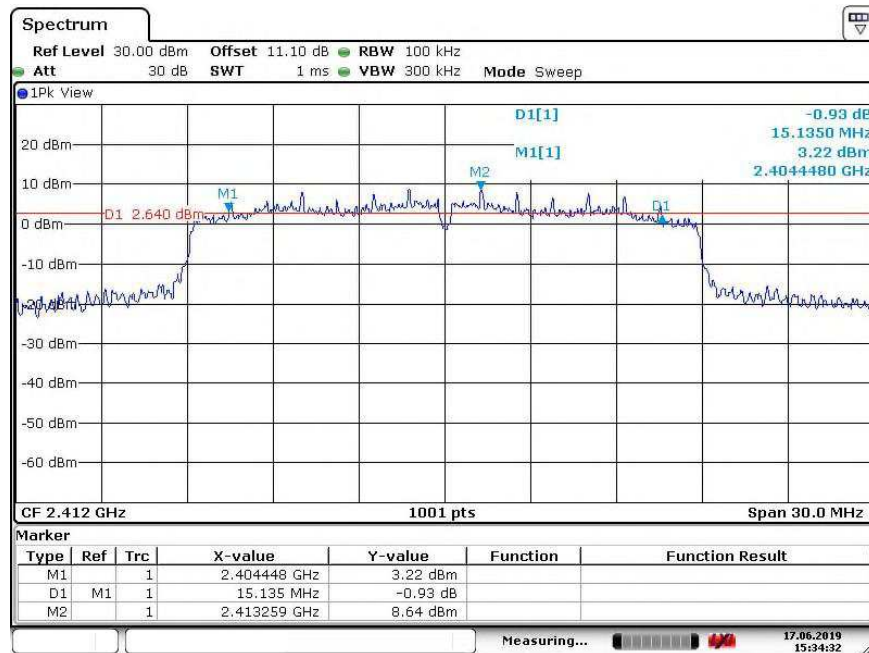
**Test Plot of 6dB Bandwidth, 802.11g**
**Low Channel**


Date: 17.JUN.2019 15:24:49

**Middle Channel**

**High Channel**


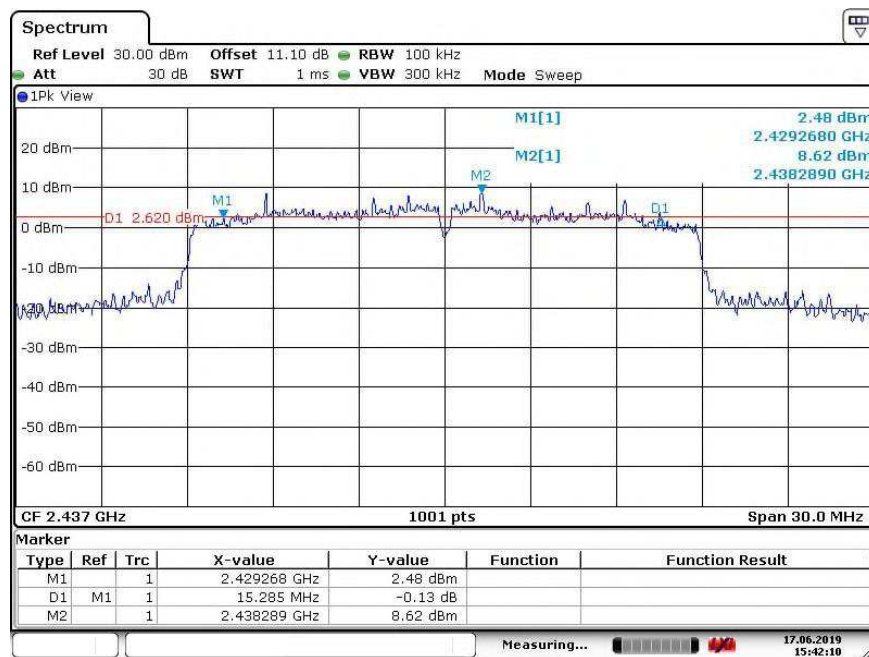
## Test Plot of 6dB Bandwidth, 802.11n HT20

### Low Channel

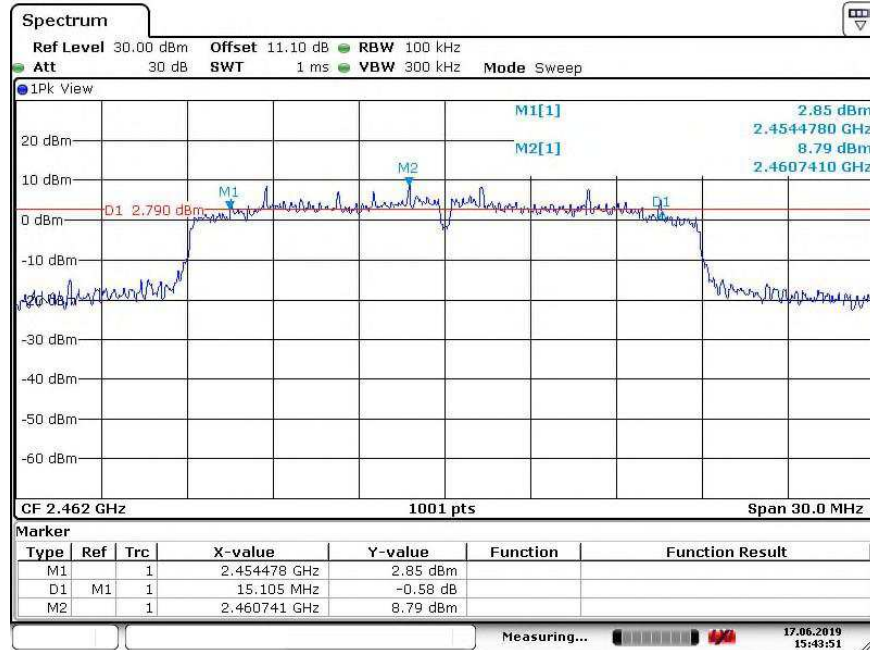


Date: 17 JUN 2019 15:34:32

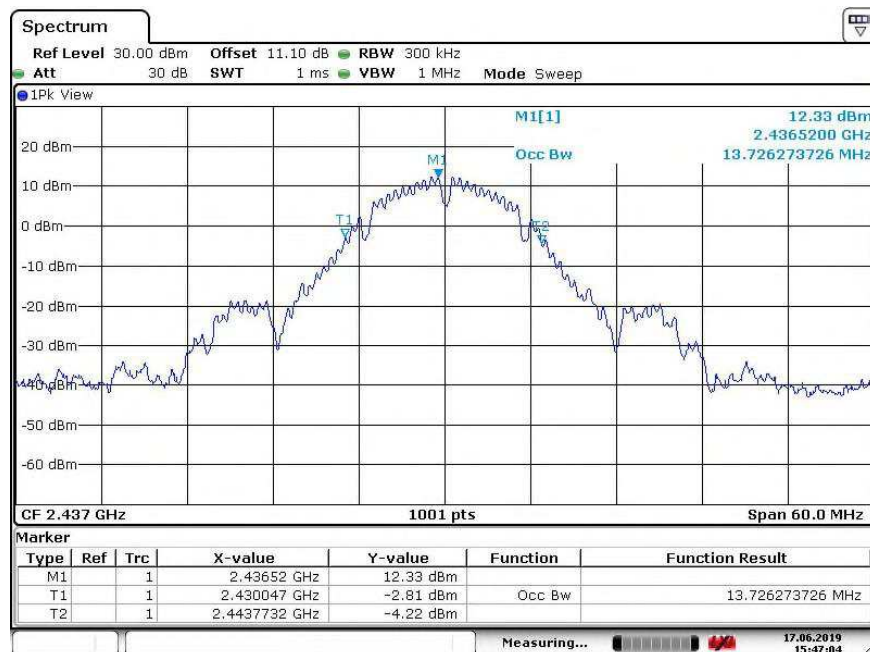
### Middle Channel



Date: 17 JUN 2019 15:42:10

**High Channel**


Date: 17.JUN.2019 15:43:51

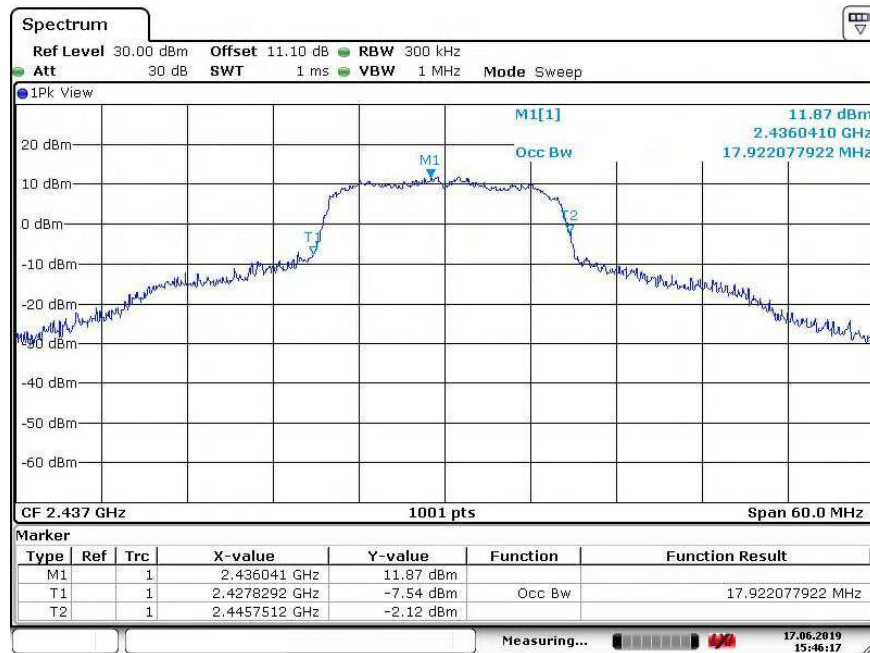
**Test Plot of 99% Bandwidth, 802.11b**
**Middle Channel**


Date: 17.JUN.2019 15:47:05



## Test Plot of 99% Bandwidth, 802.11g

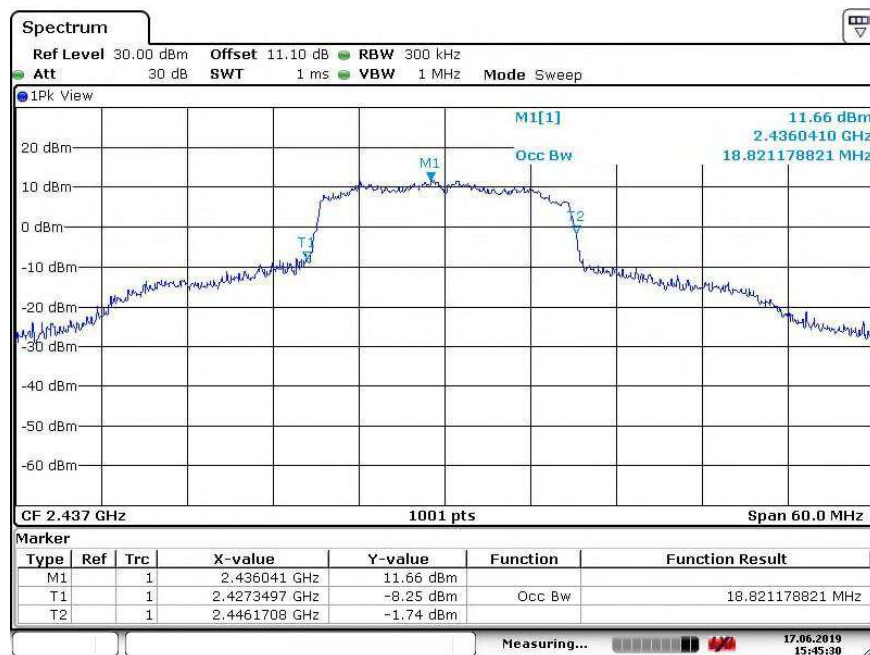
### Middle Channel



Date: 17 JUN 2019 15:46:17

## Test Plot of 99% Bandwidth, 802.11n HT20

### Middle Channel



Date: 17 JUN 2019 15:45:30



### 5.1.4 Power Density

**RESULT:**
**Passed**

Test standard : FCC Part 15.247(e) , RSS-247 5.2(b)  
 Basic standard : ANSI C63.10:2013, KDB558074  
 Kind of test site : Shielded room

**Test setup**

Test Channel : Low/ Middle/ High  
 Operation Mode : A  
 Ambient temperature : 20-24°C  
 Relative humidity : 50-65%  
 Atmospheric pressure : 100-103 kPa

**Table 15: Test result of Power Density (802.11b)**

Channel	Channel Frequency (MHz)	Power Density	Limit
		(dBm)	(dBm)
Low Channel	2412	-2.34	8
Middle Channel	2437	-2.29	8
High Channel	2462	-2.21	8

**Table 16: Test result of Power Density (802.11g)**

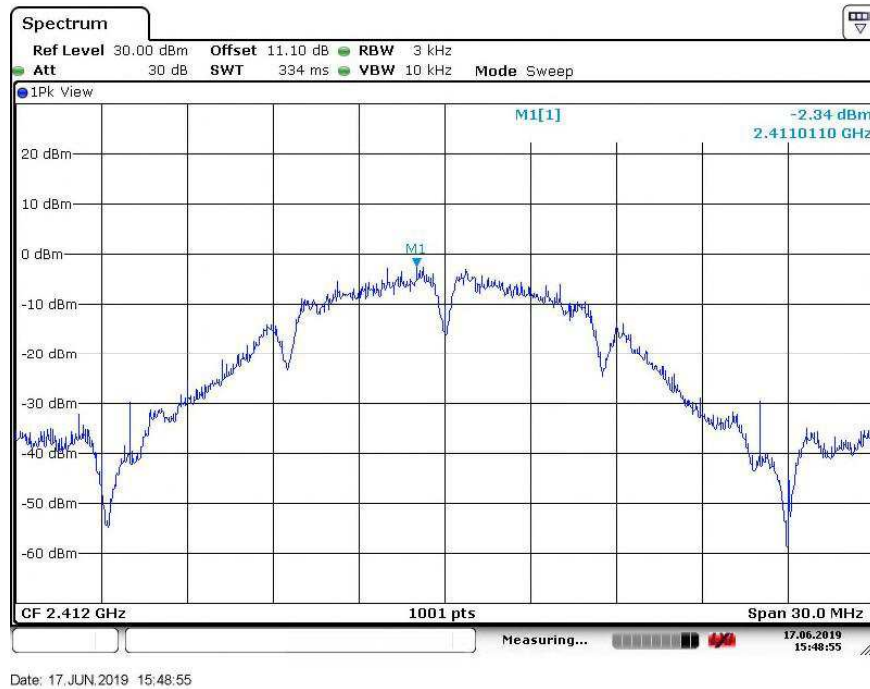
Channel	Channel Frequency (MHz)	Power Density	Limit
		(dBm)	(dBm)
Low Channel	2412	-5.76	8
Middle Channel	2437	-4.92	8
High Channel	2462	-5.40	8

**Table 17: Test result of Power Density (802.11n HT20)**

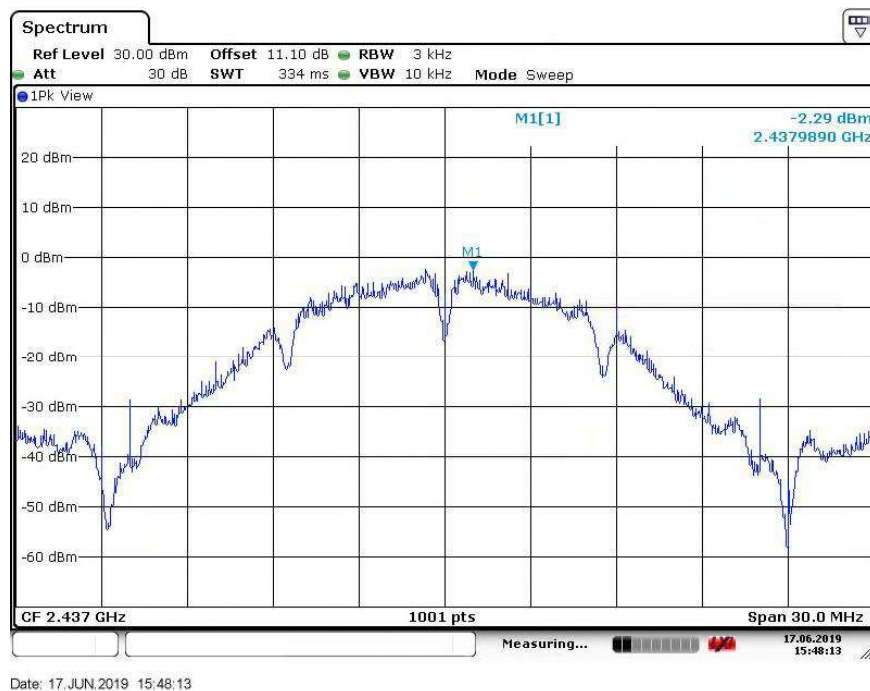
Channel	Channel Frequency (MHz)	Power Density	Limit
		(dBm)	(dBm)
Low Channel	2412	-5.61	8
Middle Channel	2437	-4.96	8
High Channel	2462	-5.12	8

## Test Plot of Power Density, 802.11b

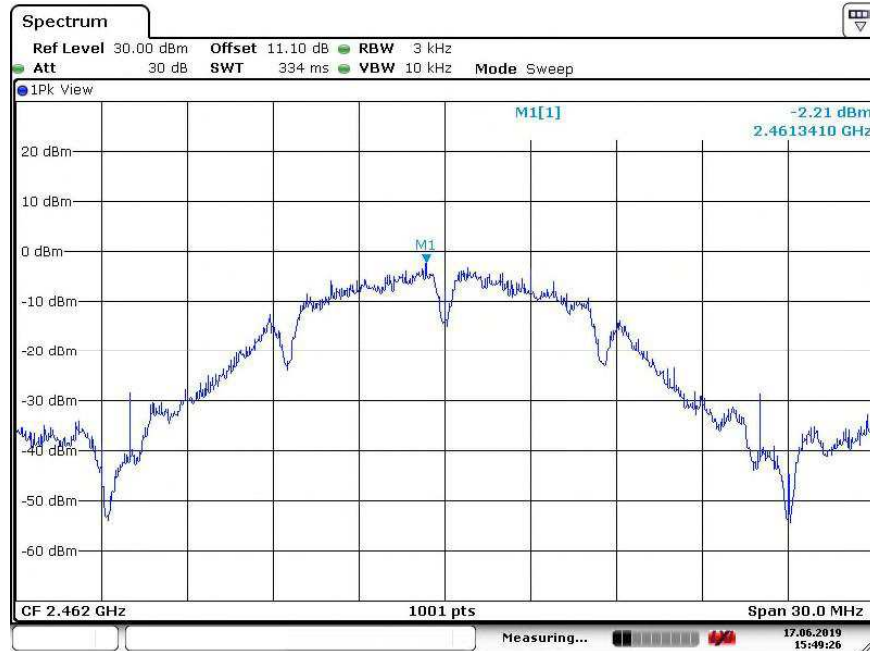
### Low Channel



### Middle Channel

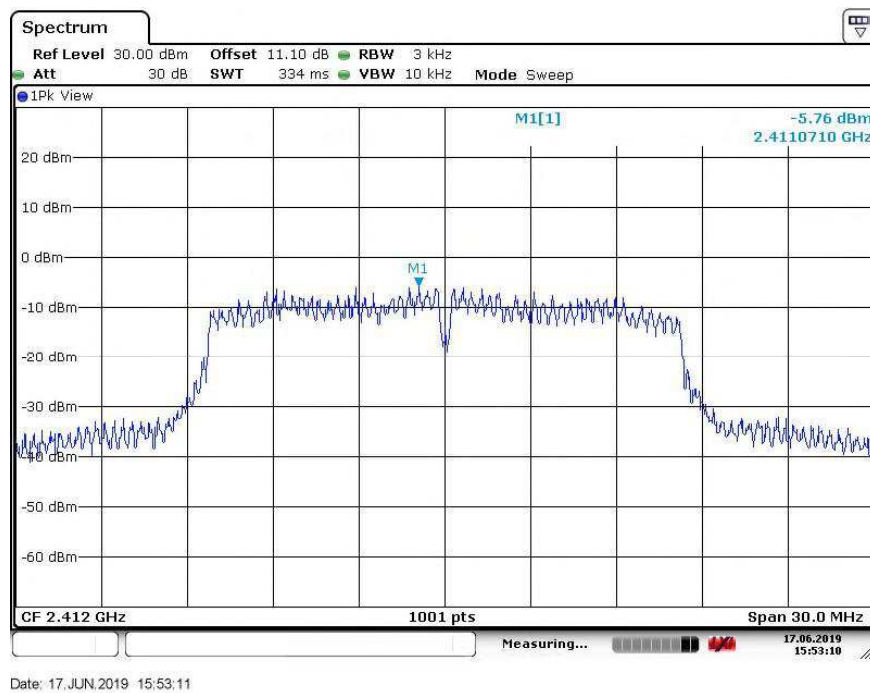


### High Channel

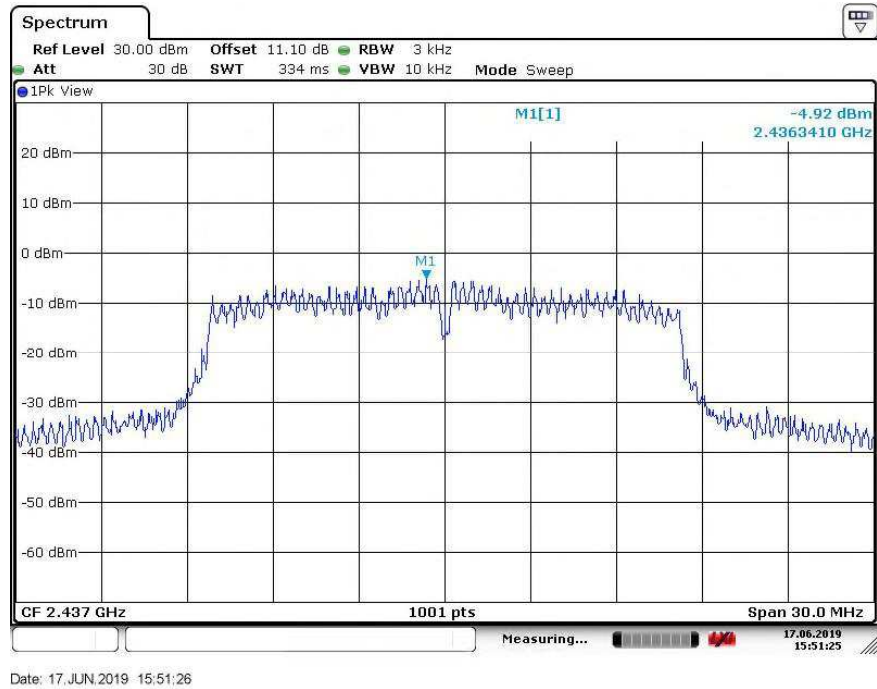


### Test Plot of Power Density, 802.11g

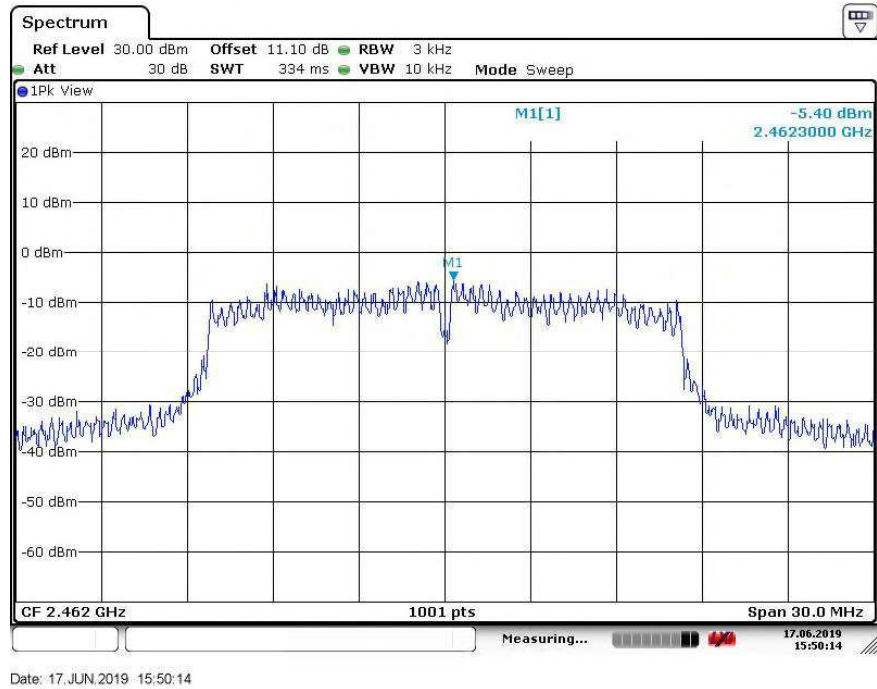
#### Low Channel



### Middle Channel

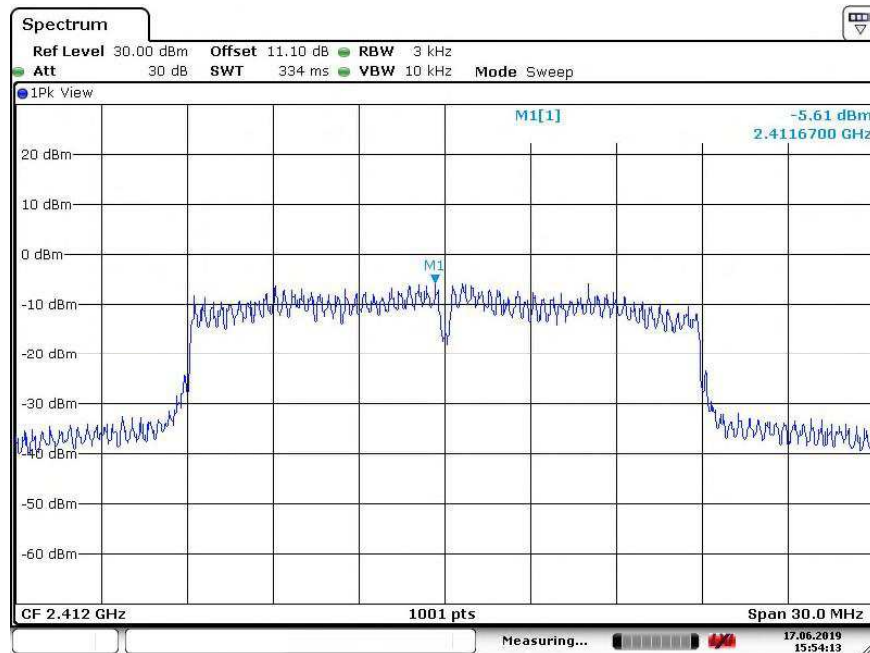


### High Channel

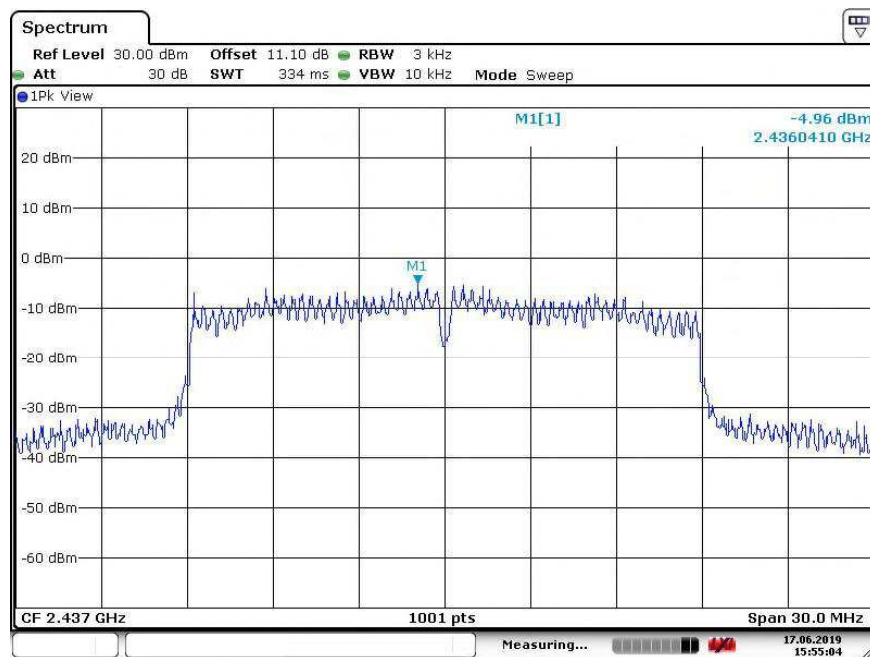


## Test Plot of Power Density, 802.11n HT20

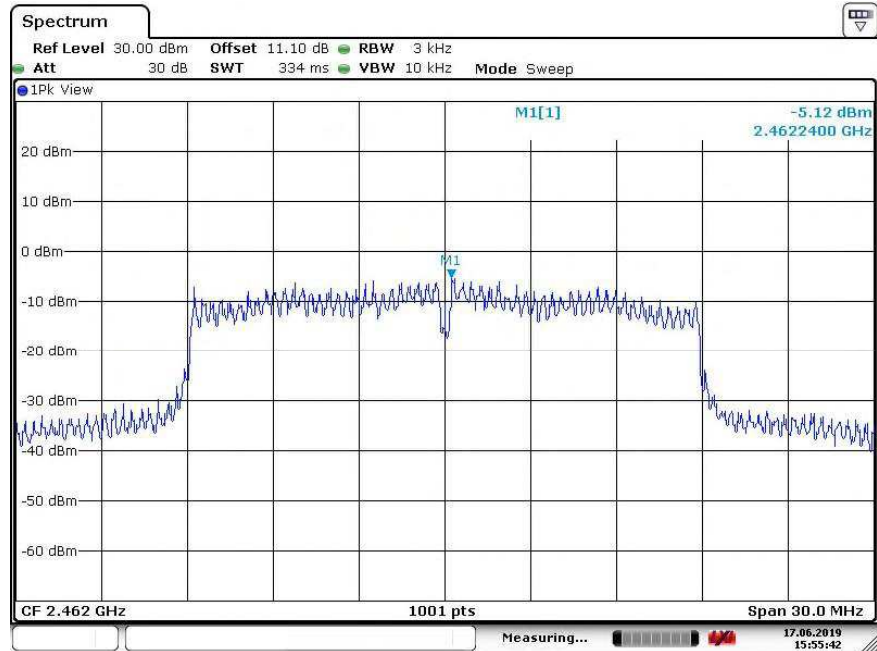
### Low Channel



### Middle Channel



### High Channel



Date: 17. JUN. 2019 15:55:42

**5.1.5 Conducted spurious emissions and Frequency Band Edge  
measured in 100kHz Bandwidth****RESULT:****Passed**

Test standard	:	FCC part 15.247(d), RSS-247 5.5
Basic standard	:	ANSI C63.10:2013, KDB558074
Limit	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power)
Kind of test site	:	Shielded room

**Test setup**

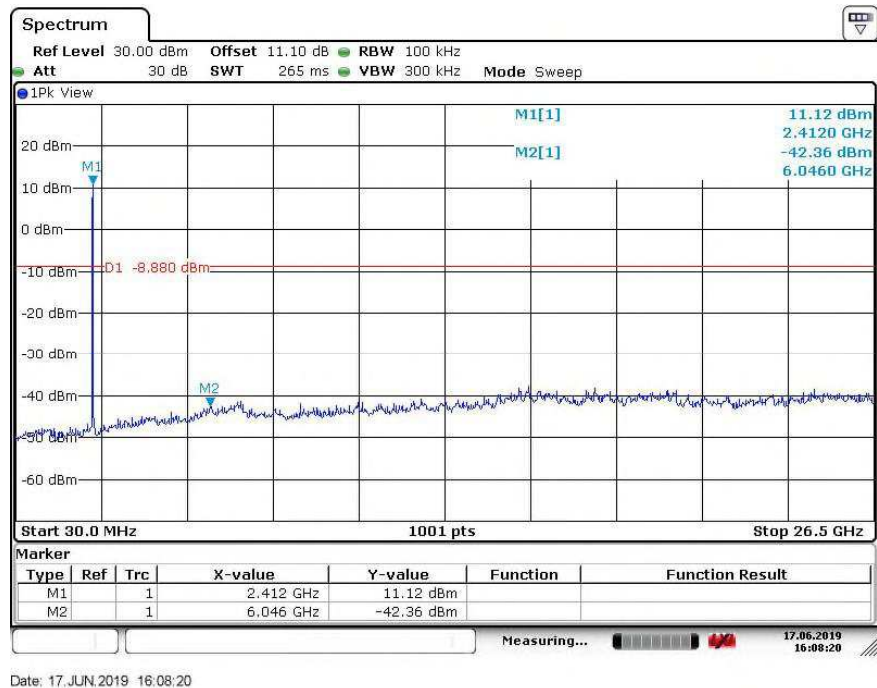
Test Channel	:	Low/ Mid/ High for spurious, Low/ High for Band Edge
Operation mode	:	A
Ambient temperature	:	20-24°C
Relative humidity	:	50-65%
Atmospheric pressure	:	100-103 kPa

All emissions are more than 20dB below fundamental, details refer to following test plot, and compliance is achieved as well.

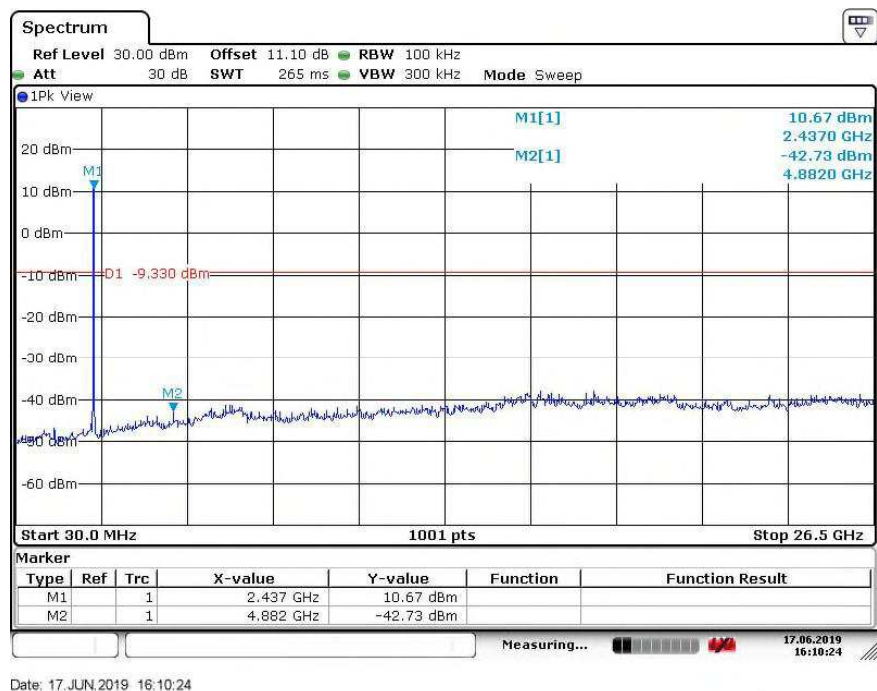
Due to the small size of the product and that there are no inductive components of significant size, 9kHz to 30MHz frequency range is not tested based on technical judgment.

## Test Plot 100kHz Conducted Emissions, 802.11b

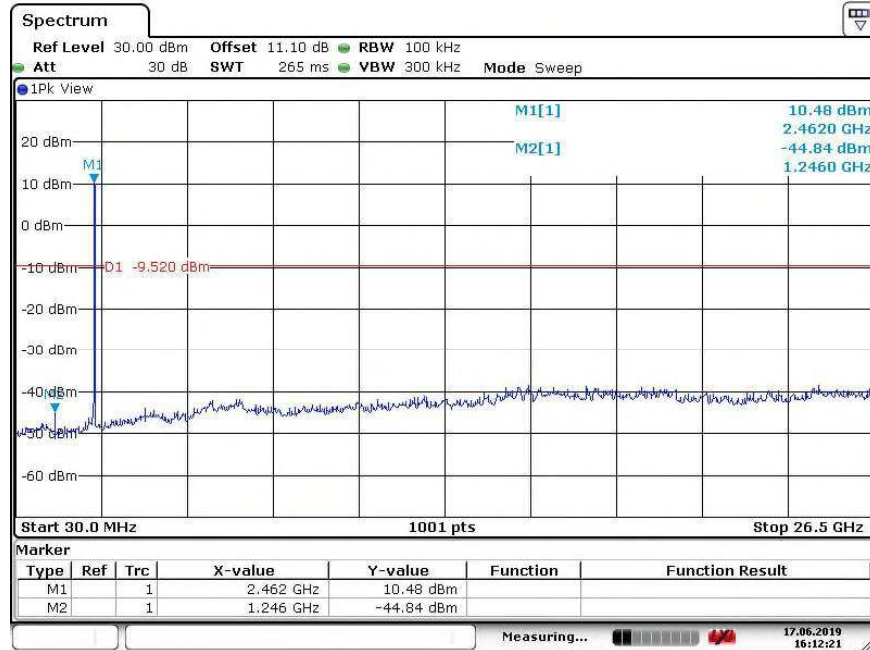
### Low Channel



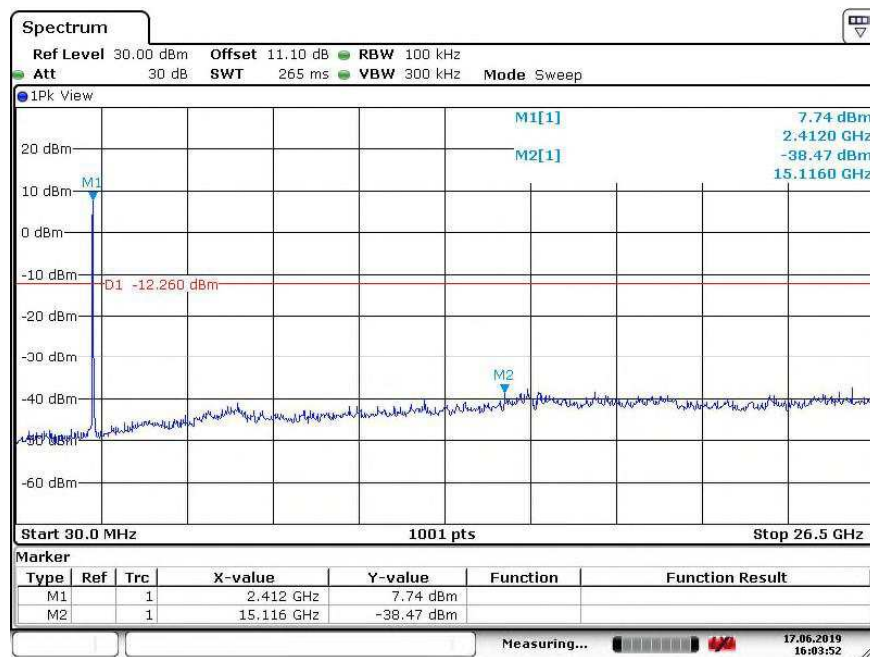
### Middle Channel



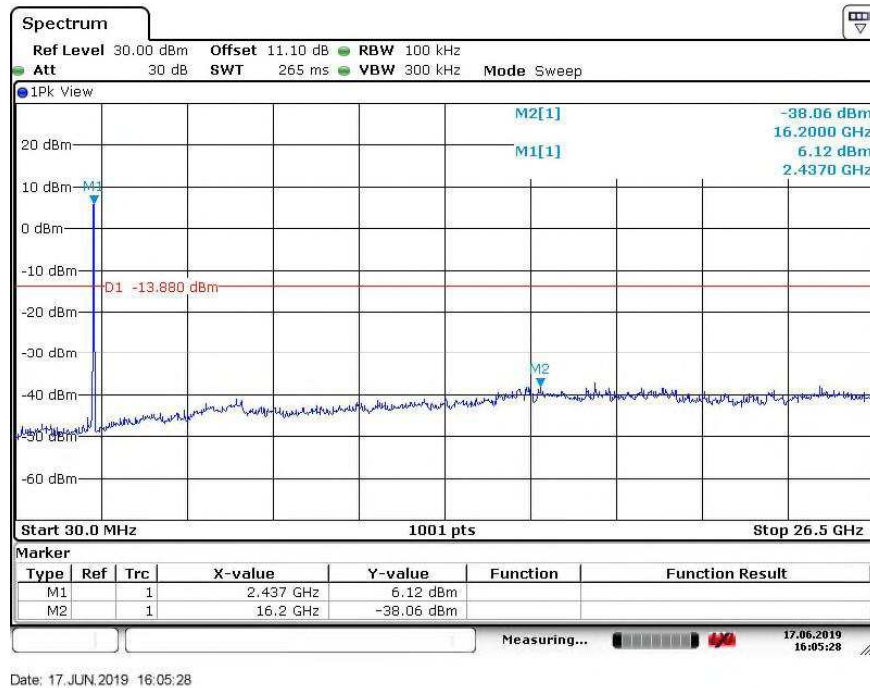
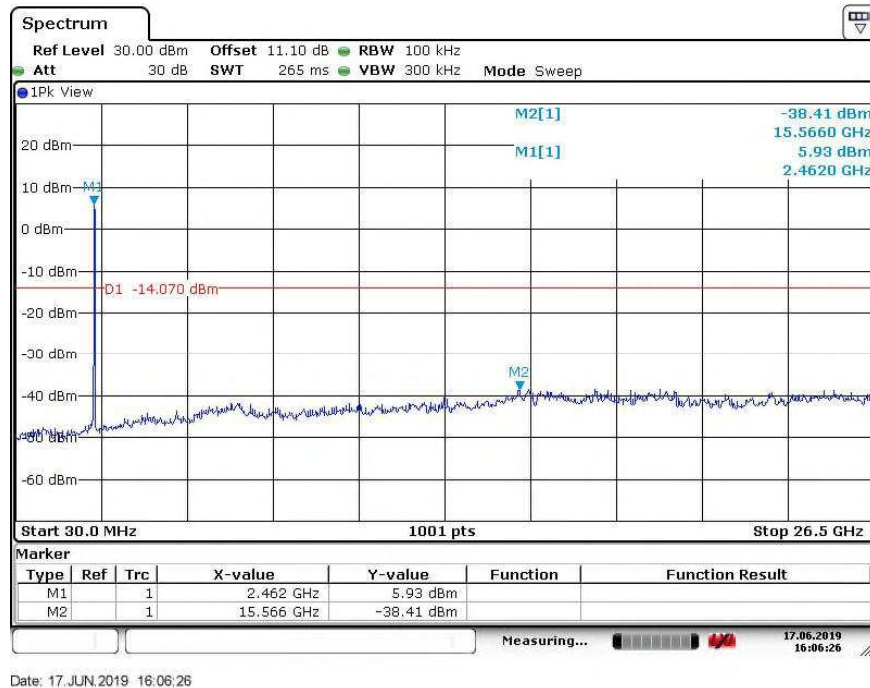


**High Channel**


Date: 17.JUN.2019 16:12:22

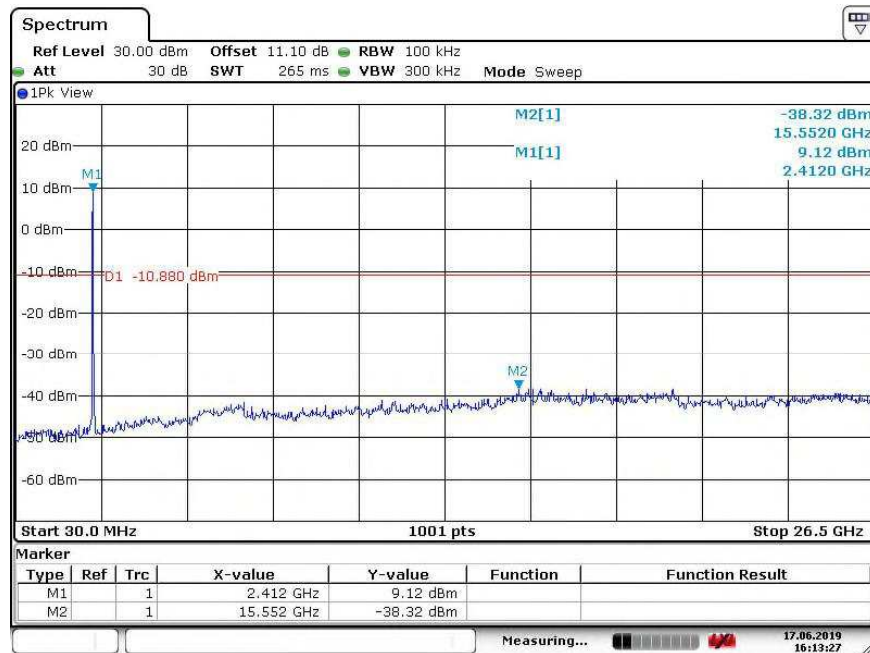
**Test Plot 100kHz Conducted Emissions, 802.11g**
**Low Channel**


Date: 17.JUN.2019 16:03:53

**Middle Channel**

**High Channel**


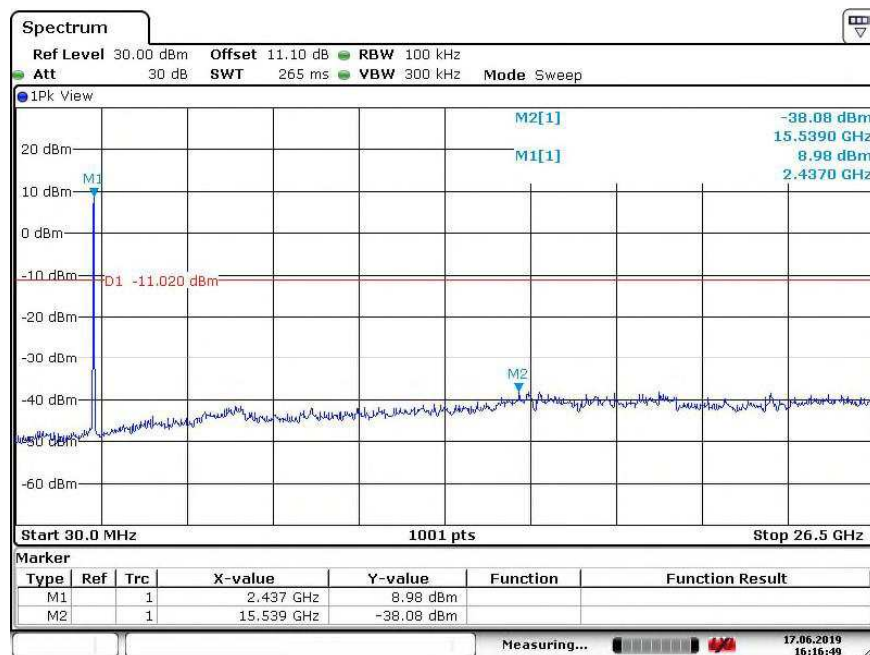
## Test Plot 100kHz Conducted Emissions, 802.11n HT20

### Low Channel



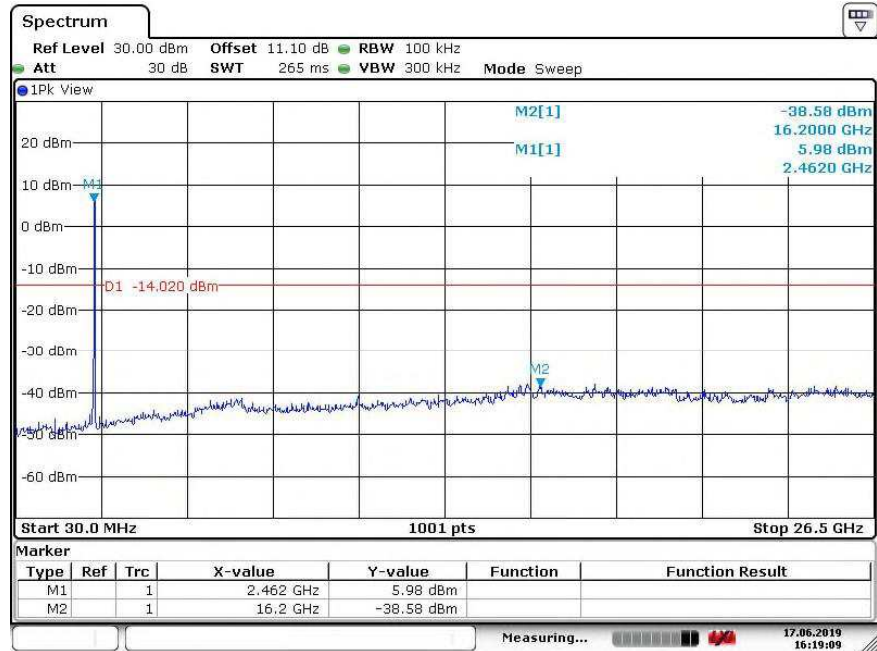
Date: 17.JUN.2019 16:13:28

### Middle Channel



Date: 17.JUN.2019 16:16:49

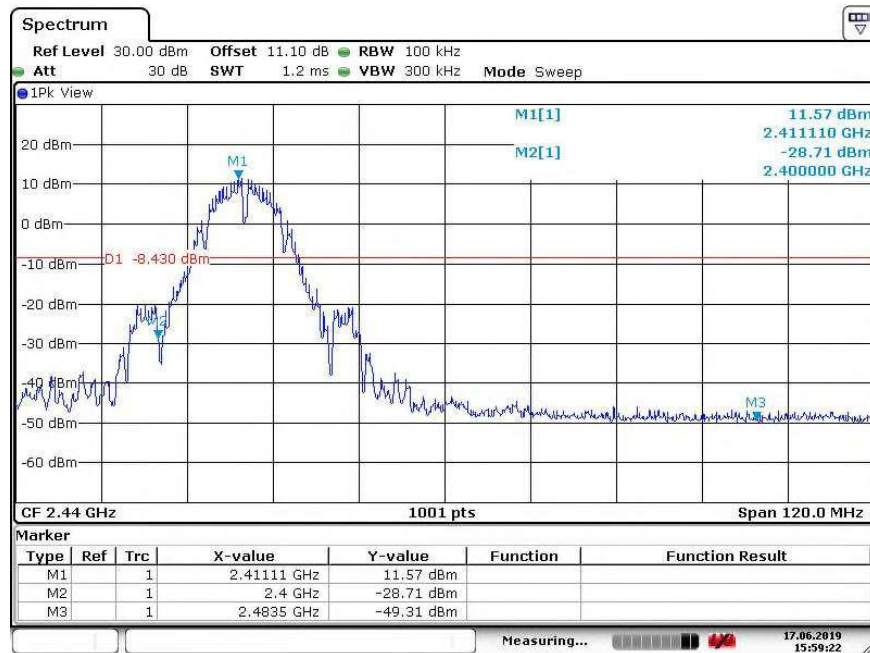
### High Channel



Date: 17.JUN.2019 16:19:09

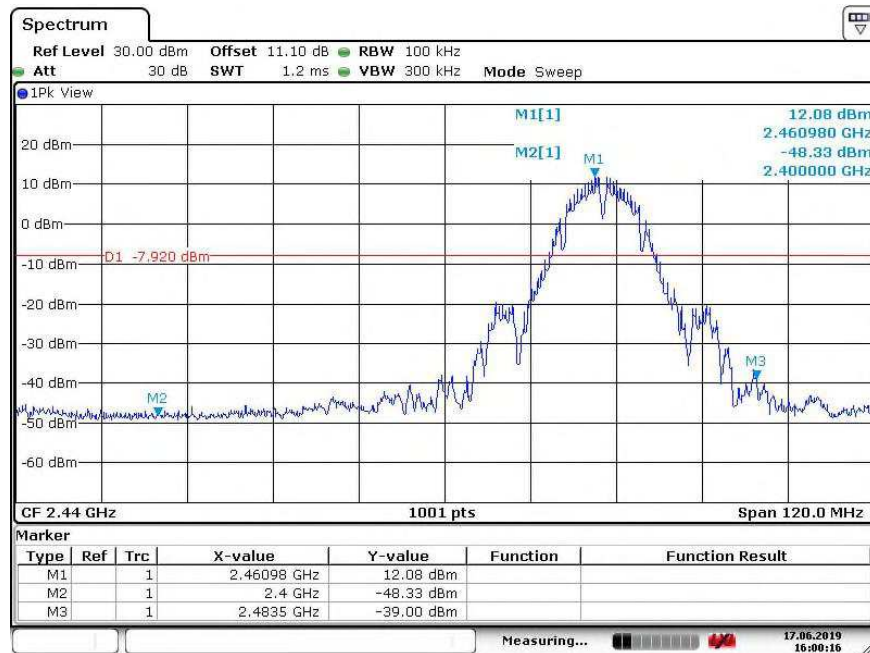
## Test Plot 100kHz RBW of Band Edge, 802.11b

### Low Channel



Date: 17. JUN. 2019 15:59:22

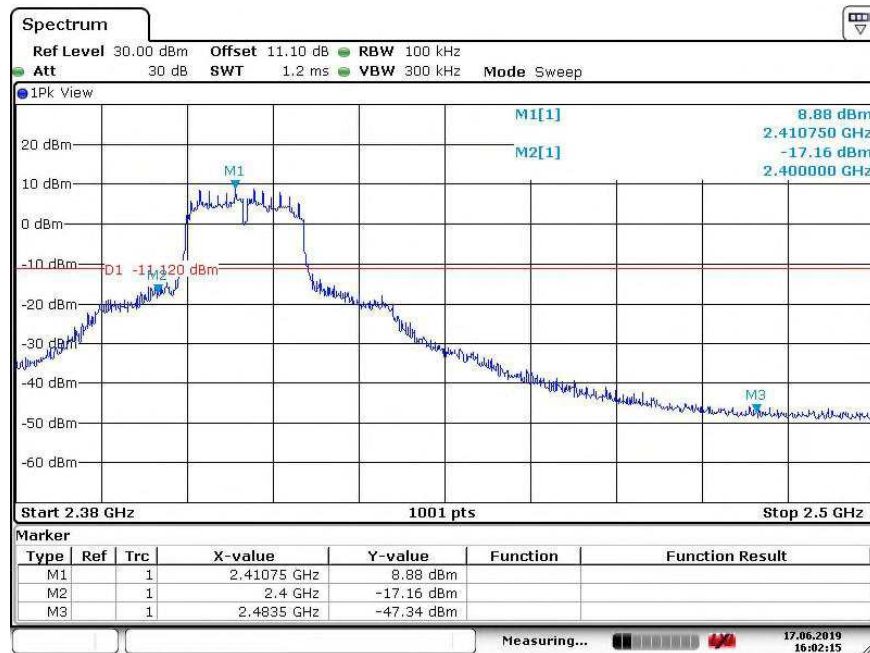
### High Channel



Date: 17. JUN. 2019 16:00:16

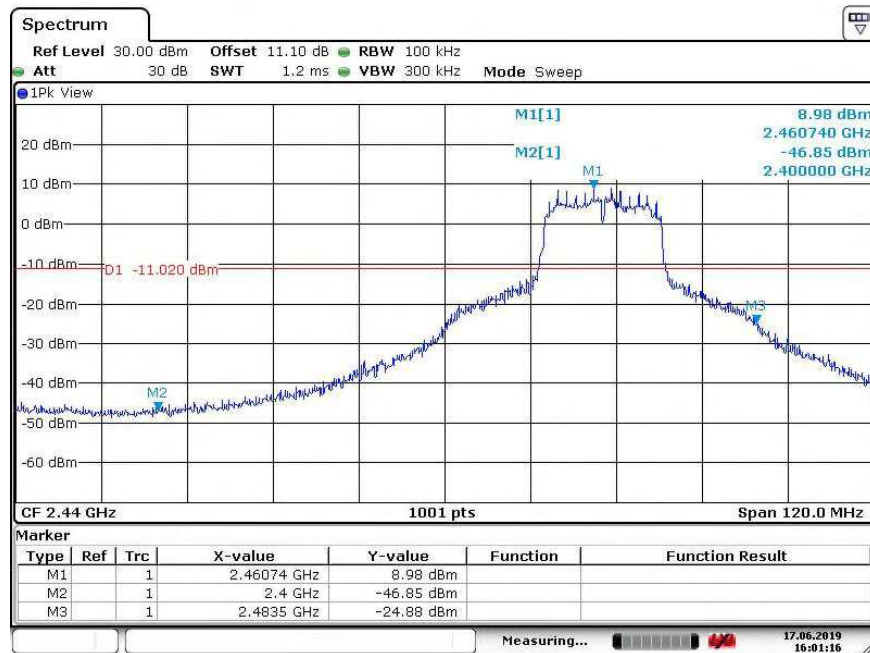
## Test Plot 100kHz RBW of Band Edge, 802.11g

### Low Channel



Date: 17 JUN 2019 16:02:15

### High Channel

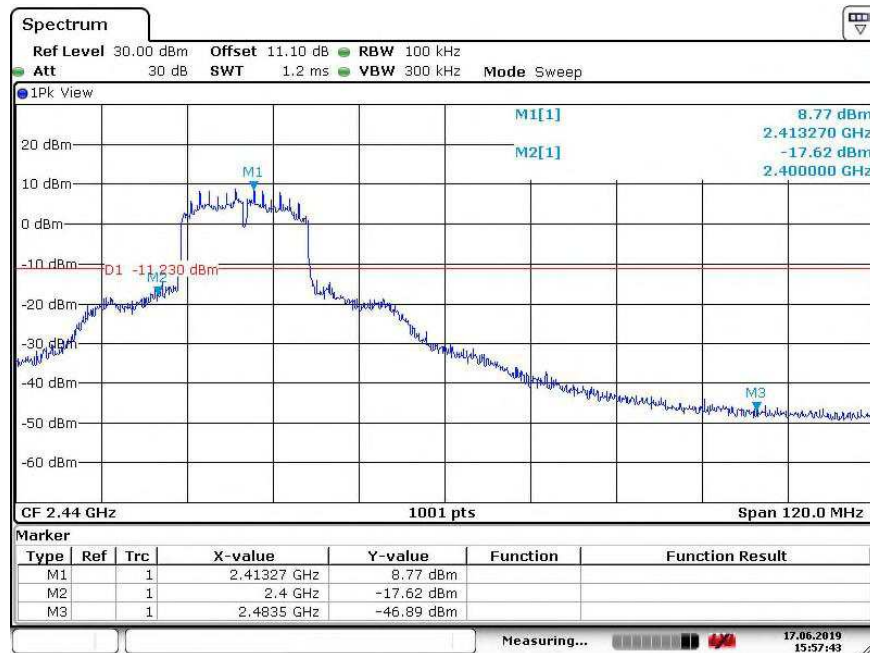


Date: 17 JUN 2019 16:01:17



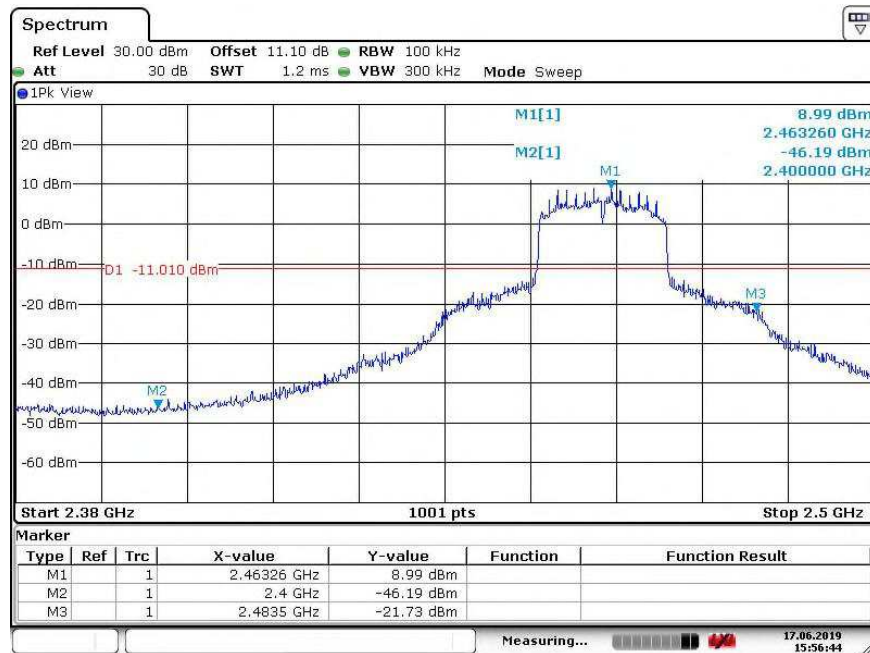
## Test Plot 100kHz RBW of Band Edge, 802.11n HT20

### Low Channel



Date: 17.JUN.2019 15:57:44

### High Channel



Date: 17.JUN.2019 15:56:44

### 5.1.6 Spurious Emission

**RESULT:****Passed**

Test standard : FCC part 15.247(d), FCC 15.205, FCC 15.209,  
RSS-247 5.5 and RSS-Gen issue 5

Basic standard : ANSI C63.10: 2013

Limits : Radiated emissions which fall in the restricted bands, as  
defined in FCC 15.205(a) and RSS-Gen i5, 8.10 (Table 7),  
must comply with the radiated emission limits specified in  
FCC 15.209(a) and RSS-Gen i5, 8.9 (Table 5 and 6).  
Emission radiated outside the specified frequency bands  
must comply with the radiated emission limits specified in  
FCC 15.209(a) and RSS-Gen i5, 8.9 (Table 5 and 6).

Kind of test site : 3m Semi-Anechoic Chamber

**Test setup**

Test Channel : Low/ Middle/ High

Operation mode : A, B

For details refer to Appendix D.

The Radiated Emissions testing was performed in the X, Y and Z axis orientation. The worst-case Axis orientation is recorded in this test report.

Factor (dB/m)=Antenna Factor(dB/m)+Cable loss (dB)  
Level(dBuV/m)=Reading(dBuV)+ Factor(dB/m)



## 5.2 Mains Emissions

### 5.2.1 Mains Conducted Emissions

**RESULT:****Passed**

Test standard : FCC Part 15.207  
FCC Part 15.107  
RSS-Gen i5 8.8

Limits : Mains Conducted emissions as defined in  
above test standards must comply with the  
mains conducted emission limits specified

Kind of test site : Shielded Room

**Test setup**

Test Channel : Middle  
Operation mode : A

Remark: For details refer to Appendix D.

## 6. Safety Human exposure

### 6.1 Radio Frequency Exposure Compliance

#### 6.1.1 Electromagnetic Fields

**RESULT:****Passed**

Test standard : FCC KDB Publication 447498 D01 v06  
47CFR 1.1310  
47CFR 2.1091  
RSS-102 issue 5

**FCC:**

Therefore the maximum output power of the transmitter is 487.5mW < 496mW(Distance: 90mm), hence the EUT is excluded from SAR evaluation according to FCC KDB publication 447498 D01: Mobile Portable RF Exposure.

**Canada:**

Separation distance is more than 20 cm, thus mobile device exposure limits can be applied.

**Maximum Exposure:**

Power to Antenna (mW)	296.48 mW
Power to Antenna (dBm)	24.7 dBm
Antenna Gain	2.74 dBi
Power+Ant Gain	557.2 mW
Distance	20 cm
S=	0.111 mW/cm <sup>2</sup>

Limit Canada: 0.557 mW/cm<sup>2</sup>

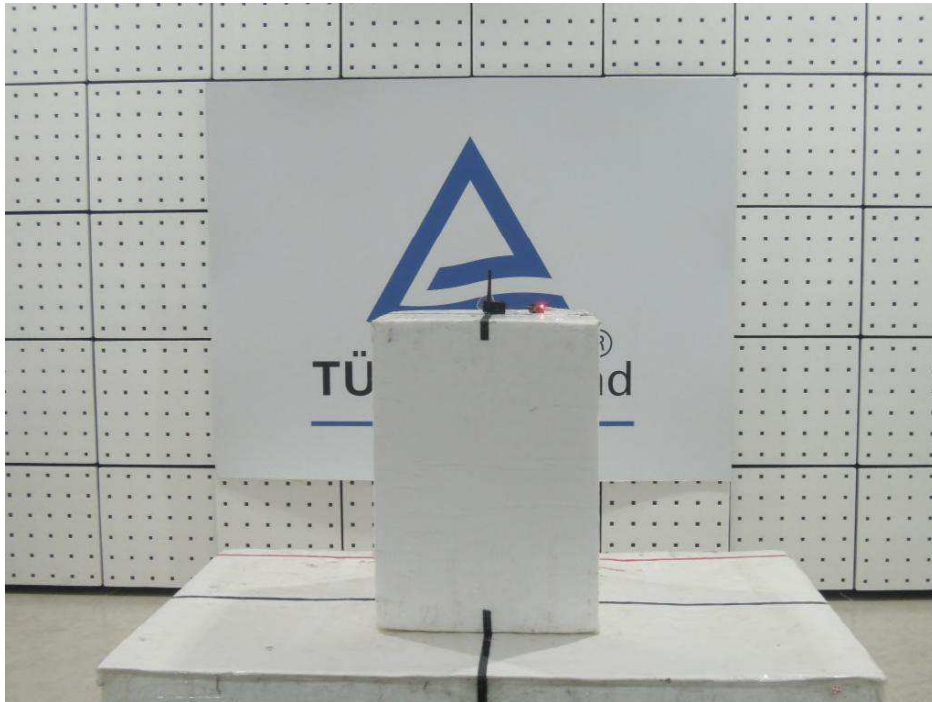
---End---

## 7. Photographs of the Test Set-Up

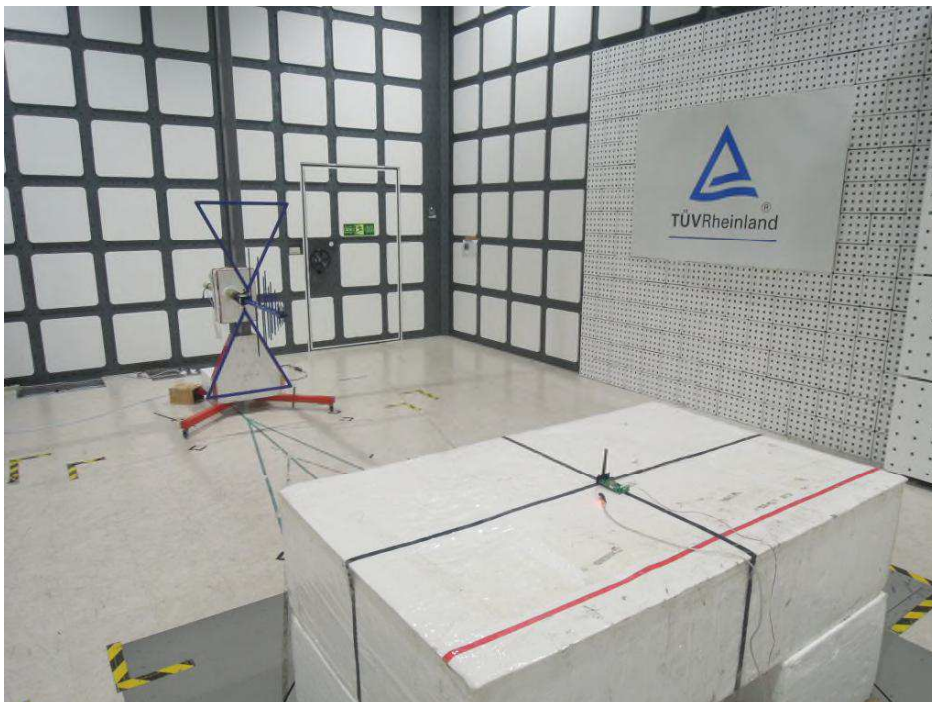
Photograph 1: Set-up for Spurious Emissions (Front View 1)



**Photograph 2: Set-up for Spurious Emissions (Front View 2)**

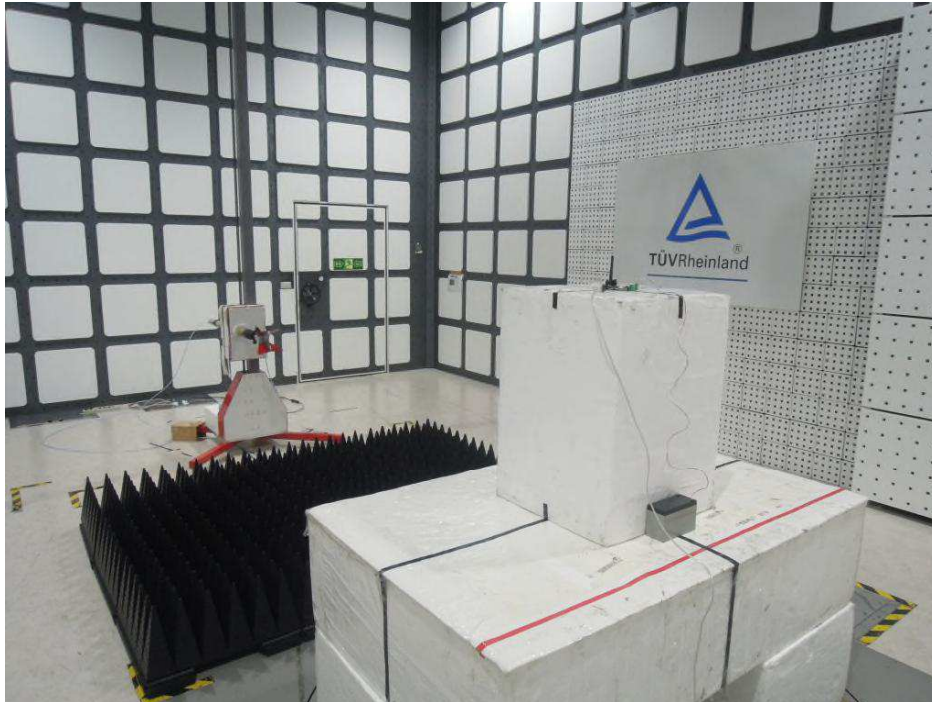


**Photograph 3: Set-up for Spurious Emissions (Back View 1)**





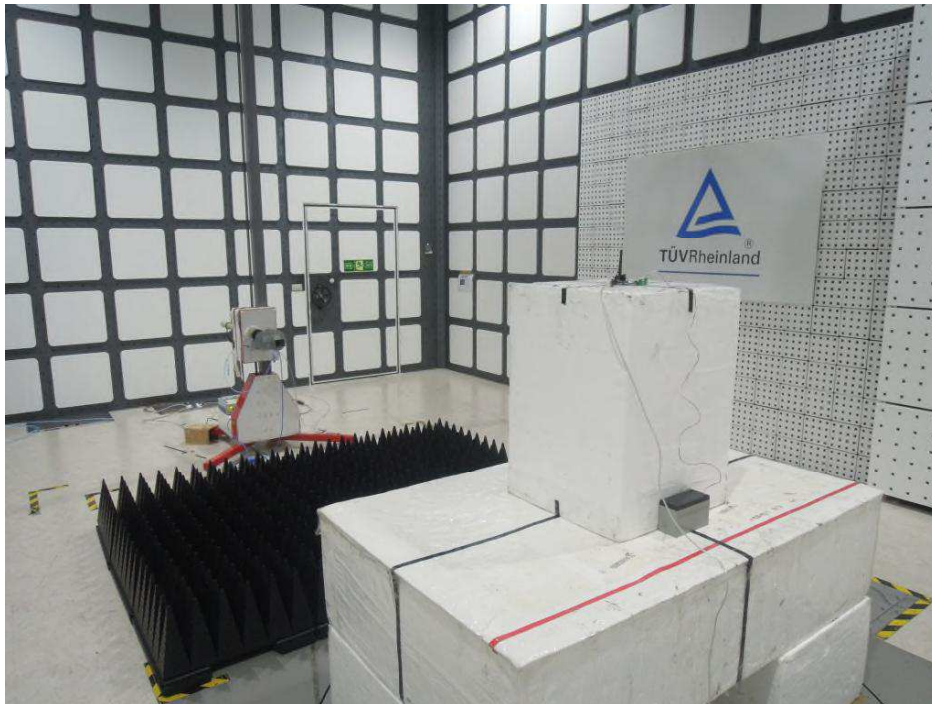
**Photograph 4: Set-up for Spurious Emissions (Back View 2)**



**Photograph 5: Set-up for Spurious Emissions (Back View 3)**



**Photograph 6: Set-up for Spurious Emissions (Back View 4)**

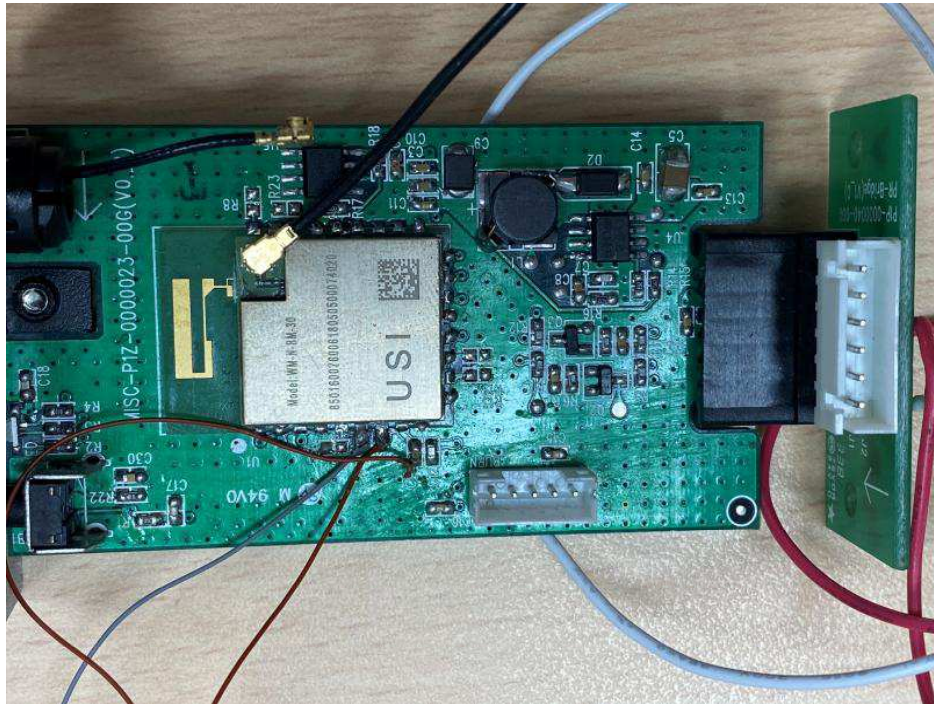


**Photograph 7: Set-up for Conducted testing**

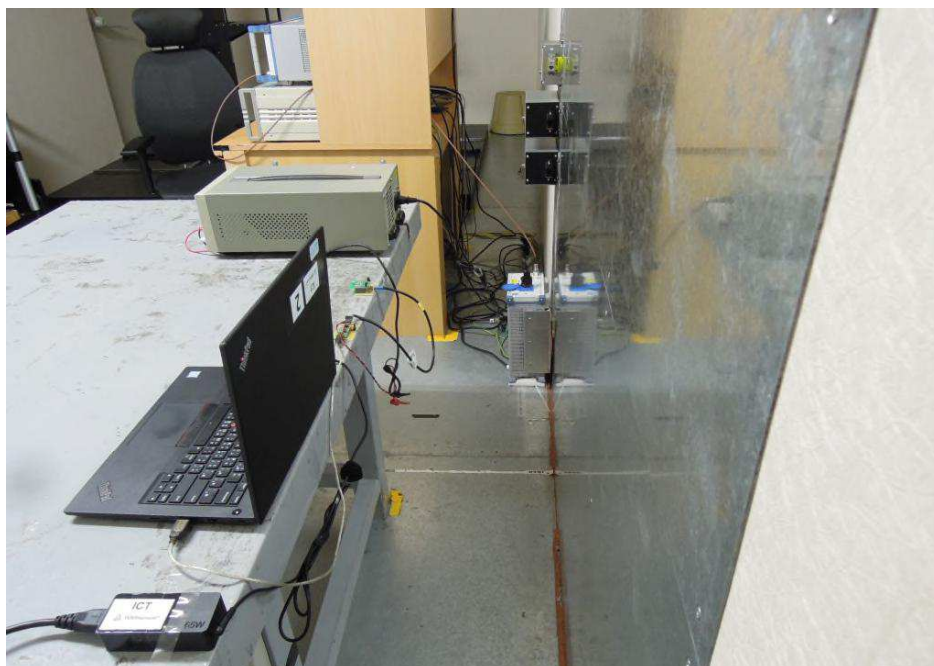




**Photograph 8: Set-up for Conducted testing**



**Photograph 9: Set-up for Mains Conducted testing (Back View)**



**Photograph 10: Set-up for Mains Conducted testing (Front View)**





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