RF TEST REPORT

Certificate No.	:	TB210528151
Applicant	:	Navori SA
Equipment Under Test (EUT)		
EUT Name	:	StiX
Model No.	:	3700
Series Model No.	:	N/A
Brand Name	:	Navori
Receipt Date	:	2021-05-14
Test Date	:	2021-05-14 to 2021-06-22
Issue Date	:	2021-0622
Standards	:	ETSI EN 300 440 V2.2.1: 2018
Conclusions	:	**PASS**

In the configuration tested, the EUT complied with the standards specified above. The EUT technically complies with the Council Directive 2014/53/EU relating to radio equipment.

Test/Witness Engineer : Camille Li

Engineer Supervisor : Su

Engineer Manager : Ray Lai

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

1/F.,Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China
Tel: +86 75526509301 Fax: +86 75526509195

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Revision History

Report No.	Version	Description	Issued Date
TB-RF180396	Rev.01	Initial issue of report	2021-06-22

1 General Information

1.1 Client Information

Applicant	:	Navori SA
Address	:	Rue du Lion d'Or 4, CH-1003 Lausanne, Switzerland
Manufacturer	:	Shenzhen MicoRose Technology Co., Ltd.
Address	:	8B2A, Daqing Building, southeast of the intersection of Shennan Road and Guangshen Expressway, Futian District, Shenzhen, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	StiX	
Model No.	:	3700	
Product Description	:	Operation Frequency:	5G Band 4: 5745~5825 MHz
		Number of Channel:	Please see the note (3)
		Max. EIRP Power:	6.194dBm
		Antenna Type:	2.0 dBi PIFA Antenna
		Modulation Type:	802.11a: OFDM(QPSK, BPSK, 16QAM, 64QAM)
		Date Rate:	802.11a:54/48/35/24/18/12/9/6 Mbps
Power Rating	:	For Adapter: Input: 100-240V~ Output:5V⎓, 2.5A	
Software Version	:	android 9.0	
Hardware Version	:	V1	
Remark	:	The antenna gain provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.	

Note:

(1) This Test Report is EN 300 440 for 802.11a/n/ac, under relating to radio equipment Directive Article 3.2.

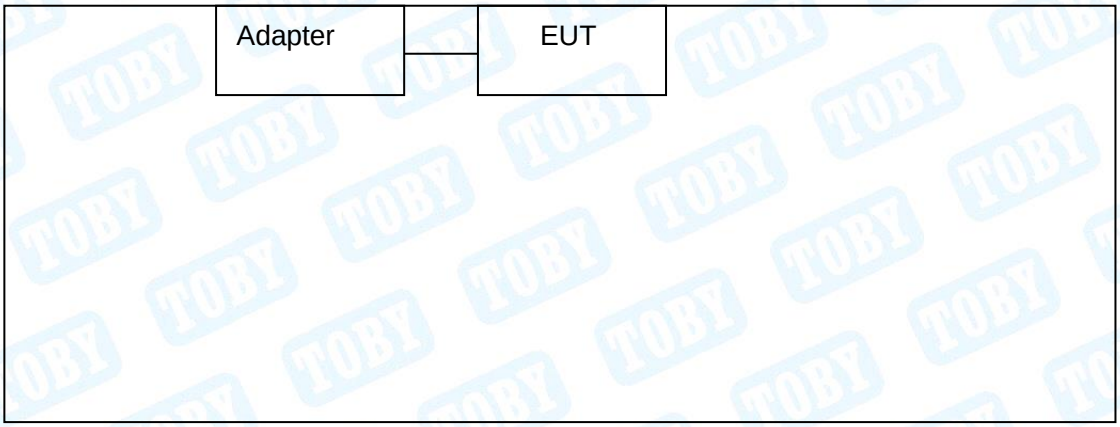
(2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

(3) Channel List:

5G Band 5745~5825 MHz(U-NII-3)				
Frequency Band	**Channel No.**	**Frequency**	**Channel No.**	**Frequency**
5745~5825 MHz	149	5745 MHz	157	5785 MHz
	151	5755 MHz	159	5795 MHz
	153	5765 MHz	161	5805 MHz
	155	5775 MHz	165	5825 MHz
Remark: For 20 MHz Bandwidth, use channel 149, 153, 157, 161, 165. For 40 MHz Bandwidth, use channel 151, 159. For 80 MHz Bandwidth, use channel 155				

(4) Antenna information is provided by the applicant.

1.3 Block Diagram Showing the Configuration of System Tested



1.4 Description of Support Units

Equipment Information				
Name	**Model**	**S/N**	**Manufacturer**	**Used " √ "**
Adapter	FJ-SW7260502500DE	-----	-----	√

1.5 Description of Operating Mode

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 possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Test Software: CMD				
Test Mode: Continuously transmitting				
Test Band 4: (5745~5825 MHz)				
Mode	**Data Rate**	**Channel**	**Parameters**	
			ANT. 0	**ANT. 1**
802.11a	OFDM/ 6Mbps	149	8	8
	OFDM/ 6Mbps	157	8	8
	OFDM/ 6Mbps	165	8	8

	Normal Test Conditions	**Extreme Test Conditions**
Temperature	15°C~35°C	-10°C~50°C
Humidity	20%~75%	N/A
Supply Voltage	AC 230V	AC 207V~DC 253V

Note :

(1)For tests at extreme temperatures, measurements shall be made in accordance with the procedures specified in clause 5.7.1.2(EN 300 440), at the upper and lower temperatures of the range as follows:

General	-20°C to +55°C
Portable	-10°C to +55°C
Normal indoor use	+5°C to +35°C

(2) **Mains voltage:**

The extreme test voltages for equipment to be connected to an ac mains source shall be the nominal mains voltage ±10 %. For equipment that operates over a range of mains voltages clause 5.7.2.4 applies.

Battery power sources:

When the radio equipment is intended for operation from the usual type of battery power sources the extreme test voltages shall be 1,3 and 0,9 multiplied by the nominal voltage of the battery (6 V, 12 V, etc.). For float charge applications using "gel-cell" type batteries the extreme voltage shall be 1,15 and 0,85 multiplied by the nominal voltage of the declared battery voltage.

Power sources using other types of batteries:

The lower extreme test voltages for equipment with power sources using batteries shall be as follows:

• for equipment with a battery indicator, the end point voltage as indicated;

• for equipment without a battery indicator the following end point voltages shall be used:

- for the Leclanché or the lithium type of battery:
  0,85 multiplied by the nominal voltage of the battery;

- for the nickel-cadmium type of battery:
  0,9 multiplied by the nominal voltage of the battery;

• for other types of battery or equipment, the lower extreme test voltage for the discharged condition shall be declared by the equipment manufacturer.

The nominal voltage is considered to be the upper extreme test voltage in this case.

1.6 Measurement Uncertainty

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

Test Item	Expanded Uncertainty (U_{Lab})
RF Power-Conducted	±0.95 dB
Radiated Emission (30MHz to 1000 MHz)	±4.40 dB
Radiated Emission (Above 1000MHz)	±4.20 dB
Temperature	±0.6℃
Humidity	±4%
ERP (Radiated)	±3.84 dB
Conducted Spurious Emission	±2.72 dB
Frequency Error	±52.45Hz
Occupied Bandwidth	±3.8%
Power Density	±0.92 dB

1.7 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F.,Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)
The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

A2LA Certificate No.: 4750.01
The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025：2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.

IC Registration No.: (11950A)
The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A.

2 Test Results Summary

Harmonised Standard ETSI EN 300 440					
No	**Description**	**Clause No.**	**U/C**	**Condition**	**Results**
Transmitter Items					
1	e.i.r.p	4.2.2	C	Applies to all devices with transmitters	PASS
2	Permitted range of operating frequencies	4.2.3	C	Applies to all devices with transmitters	PASS
3	Unwanted emissions in the spurious domain	4.2.4	C	Applies to all devices with transmitters	PASS
4	Duty cycle	4.2.5	C	Transmitting devices which do not use LBT, DAA, or RFID transmitters operating in the 2 446 to 2 454 MHz band transmitting more than 500 mW e.i.r.p. power level	N/A note(1)
5	Additional requirements for FHSS equipment	4.2.6	C	Equipment utilizing FHSS modulation	N/A note(2)
Receiver Items					
6	Adjacent channel selectivity	4.3.3	C	Applies to equipment Category 1 receivers	N/A note(3)
7	Blocking or desensitization	4.3.4	C	Applies to category 1, 2, and 3 SRD communication media receivers	PASS
8	Spurious radiations	4.3.5	C	Applies to all receivers, except receivers used in combination with permanently co-located transmitters continuously transmitting	PASS
9	Spectrum access techniques	4.4	C	Equipment which are not using duty cycle restrictions for media access	N/A
10	GBSAR antenna pattern	4.6.4	C	Applies only GBSAR systems	N/A
11	Limits for GBSAR	Annex I	C	Applies only GBSAR systems	N/A

Note: N/A is an abbreviation for Not Applicable and means this test item is not applicable for this device according to the technology characteristic of device.

“U/C”: Indicates whether the requirement is unconditionally applicable (U) or is conditional upon the manufacturer's claimed functionality of the equipment (C).

Note (1): Not applicable , This requirement applies to RFID transmitters operating in 2 446 MHz to 2 454 MHz only.

Note (2): Not applicable, since the test applies to FHSS Device only

Note (3): Not applicable, since the test applies to class 1 receivers only

Note (4): Not applicable, since the test applies to class 1 and class 2 receivers only

3 Test Equipment

Used Equipment List					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Wideband Radio Comunication Tester	Rohde & Schwarz	CMW500	144382	Sep. 11, 2020	Sep. 10, 2021
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 11, 2020	Sep. 10, 2021
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 11, 2020	Sep. 10, 2021
Analog Signal Generator	Agilent	N5181A	MY50141953	Sep. 11, 2020	Sep. 10, 2021
RF Power Sensor	DARE!! Instruments	RadiPowerRP R3006W	17I00015SNO26	Sep. 11, 2020	Sep. 10, 2021
	DARE!! Instruments	RadiPowerRP R3006W	17I00015SNO29	Sep. 11, 2020	Sep. 10, 2021
	DARE!! Instruments	RadiPowerRP R3006W	17I00015SNO31	Sep. 11, 2020	Sep. 10, 2021
	DARE!! Instruments	RadiPowerRP R3006W	17I00015SNO33	Sep. 11, 2020	Sep. 10, 2021
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 06, 2020	Jul. 05, 2021
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 06, 2020	Jul. 05, 2021
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 06, 2020	Jul. 05, 2021
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar.01, 2020	Feb. 28, 2022
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.01, 2020	Feb. 28, 2022
Pre-amplifier	Sonoma	310N	185903	Mar.01, 2020	Feb. 28, 2021
Pre-amplifier	HP	8447B	3008A00849	Feb. 25, 2021	Feb. 24, 2022
Cable	HUBER+SUHNER	100	SUCOFLEX	Feb. 25, 2021	Feb. 24, 2022
Positioning Controller	ETS-LINDGREN	2090	N/A	Feb. 25, 2021	Feb. 24, 2022
Temp. &Humidity Chamber	ZHONG ZHI	CZ-A-225D	HW08053	N/A	N/A
DC Power Supply	MATRIX	MPS-3005L-3	D806050W	Jul. 06, 2020	Jul. 05, 2021
AC Power Supply	HengJie	HPC-1110	2010007	Jul. 06, 2020	Jul. 05, 2021

4 Equivalent Isotropic Radiated Power (6dB Bandwidth)

4.1 Test Standard and Limit

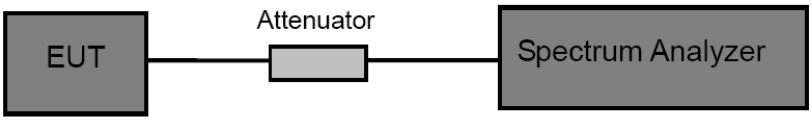
4.1.1 Test Standard

ETSI EN 300 440 V2.2.1:2018 clause 4.2.2

4.1.2 Test Limit

Test Item	Requirement
Non spread spectrum transmitters with a -6 dB bandwidth of up to 20 MHz and spread spectrum transmitters with channel bandwidth of up to 1 MHz	• non spread spectrum equipment with a -6 dB bandwidth of 20 MHz or less and a duty cycle above 50 %; • spread spectrum equipment with a -6 dB channel bandwidth of 1 MHz or less.
all other transmitter bandwidths	a) equipment with a -6 dB bandwidth greater than 20 MHz, and equipment with a duty cycle below 50 %; or for b) spread spectrum equipment with a channel bandwidth above 1 MHz.

4.2 Test Setup



4.3 Test Procedure

1. The transmitter output was connected to the spectrum analyzer.
2. Set the spectrum analyzer as following:
   - Resolution BW :100kHz.
   - Video BW :300kHz.
   - Detector : Peak.
   - Trace : Max Hold.
   - Sweep time : Auto.
   - Span : >Frequency Operating Bandwidth.

4.4 Deviation From Test Standard

No deviation

4.5 Test Data

Please refer to the Attachment A.

5 Equivalent Isotropic Radiated Power(e.i.r.p)

5.1 Test Standard and Limit

5.1.1 Test Standard

ETSI EN 300 440 V2.2.1:2018 clause 4.2.2

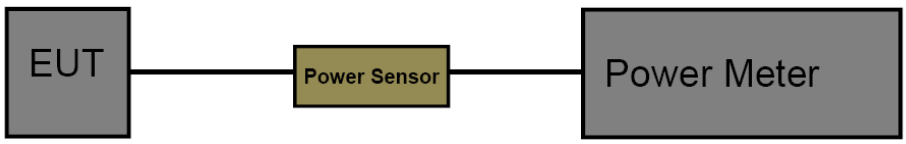
5.1.2 Test Limit

Maximum radiated peak power (e.i.r.p.)

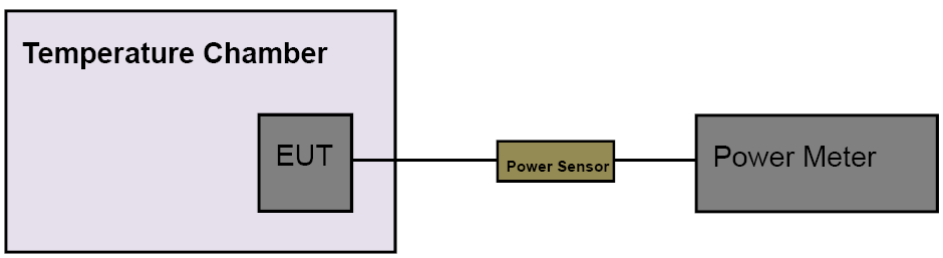
Frequency Bands	Power	Application
2 400 MHz to 2 483,5 MHz	10 mW e.i.r.p.	Non-specific short range devices
2 400 MHz to 2 483,5 MHz	25 mW e.i.r.p.	Radio determination devices
(a) 2 446 MHz to 2 454 MHz	500 mW e.i.r.p.	Radio Frequency Identification (RFID) devices
(b) 2 446 MHz to 2 454 MHz	4 W e.i.r.p.	Radio Frequency Identification (RFID) devices
5 725 MHz to 5 875 MHz	25 mW e.i.r.p.	Non-specific short range devices
9 200 MHz to 9 500 MHz	25 mW e.i.r.p.	Radio determination devices
9 500 MHz to 9 975 MHz	25 mW e.i.r.p.	Radio determination devices
10,5 GHz to 10,6 GHz	500 mW e.i.r.p.	Radio determination devices
13,4 GHz to 14,0 GHz	25 mW e.i.r.p.	Radio determination devices
17,1 GHz to 17,3 GHz	400 mW e.i.r.p.	Radio determination devices
24,00 GHz to 24,25 GHz	100 mW e.i.r.p.	Non-specific short range devices and Radio determination devices

5.2 Test Setup

Normal Condition



Extreme Condition



5.3 Test Procedure

Step 1:

• using a suitable means, the output of the transmitter shall be coupled to a matched diode detector;

• the output of the diode detector shall be connected to the vertical channel of an oscilloscope;

• the combination of the diode detector and the oscilloscope shall be capable of faithfully reproducing the envelope peaks and the duty cycle of the transmitter output signal;

• the observed duty cycle of the transmitter (Tx on/(Tx on + Tx off)) shall be noted as x, (0 < x < 1) and recorded.

Step 2:

• the average output power of the transmitter shall be determined using a wideband, calibrated RF power meter with a matched thermocouple detector or an equivalent thereof and, where applicable, with an integration period that exceeds the repetition period of the transmitter by a factor 5 or more. The observed value shall be recorded as "A" (in dBm);

• the e.i.r.p. shall be calculated from the above measured power output A, the observed duty cycle x, and the applicable antenna assembly gain "G" in dBi, according to the formula:

- $P = A + G + 10 \log (1/x)$;

5.4 Deviation From Test Standard

No deviation

5.5 Test Data

Please refer to the Attachment B.

6 Permitted Range of Operating Frequencies

6.1 Test Standard and Limit

6.1.1 Test Standard

ETSI EN 300 440 V2.2.1:2018 clause 4.2.3

6.1.2 Test Limit

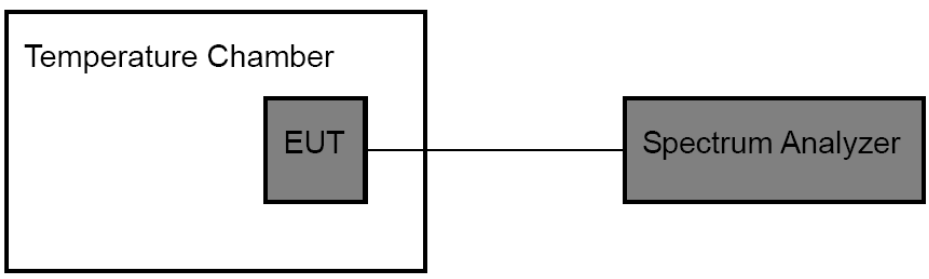
The width of the power spectrum envelope is fH -fL for a given operating frequency. In equipment that allows adjustment or selection of different operating frequencies, the power envelope takes up different positions in the allowed band. The frequency range is determined by the lowest value of fL and the highest value of fH resulting from the adjustment of the equipment to the lowest and highest operating frequencies.

The occupied bandwidth (i.e. the bandwidth in which 99 % of the wanted emission is contained) of the transmitter shall fall within the assigned frequency band.

For all equipment the frequency range shall lie within the frequency band given by clause 4.2.2.4, table 2. For non-harmonized frequency bands the available frequency range may differ between national administrations

Frequency Bands	Power	Application
2 400 MHz to 2 483,5 MHz	10 mW e.i.r.p.	Non-specific short range devices
2 400 MHz to 2 483,5 MHz	25 mW e.i.r.p.	Radio determination devices
(a) 2 446 MHz to 2 454 MHz	500 mW e.i.r.p.	Radio Frequency Identification (RFID) devices
(b) 2 446 MHz to 2 454 MHz	4 W e.i.r.p.	Radio Frequency Identification (RFID) devices
5 725 MHz to 5 875 MHz	25 mW e.i.r.p.	Non-specific short range devices
9 200 MHz to 9 500 MHz	25 mW e.i.r.p.	Radio determination devices
9 500 MHz to 9 975 MHz	25 mW e.i.r.p.	Radio determination devices
10,5 GHz to 10,6 GHz	500 mW e.i.r.p.	Radio determination devices
13,4 GHz to 14,0 GHz	25 mW e.i.r.p.	Radio determination devices
17,1 GHz to 17,3 GHz	400 mW e.i.r.p.	Radio determination devices
24,00 GHz to 24,25 GHz	100 mW e.i.r.p.	Non-specific short range devices and Radio determination devices

6.2 Test Setup



6.3 Test Procedure

a) Put the spectrum analyser in video averaging mode with a minimum of 50 sweeps selected;
b) Select the lowest operating frequency of the equipment under test and activate the transmitter with modulation applied. The RF emission of the equipment shall be displayed on the spectrum analyser;
c) Using the marker of the spectrum analyser, find the lowest frequency below the operating frequency at which the spectral power density drops below the level given in clause 4.2.3. This frequency shall be recorded in the test report;
d) Select the highest operating frequency of the equipment under test and find the highest frequency at which the spectral power density drops below the value given in clause 4.2.3. This frequency shall be recorded in the test report;
e) The difference between the frequencies measured in steps c) and d) is the operating frequency range. It shall be recorded in the test report.
This measurement shall be repeated for each frequency range declared by the manufacturer.

6.4 Deviation From Test Standard

No deviation

6.5 Test Data

Please refer to the Attachment C.

7 Unwanted Emissions In The Spurious Domain

7.1 Test Standard and Limit

7.1.1 Test Standard

ETSI EN 300 440 V2.2.1:2018 clause 4.2.4

7.1.2 Test Limit

The level of spurious emissions shall be measured as either:

a)i) their power level in a specified load (conducted emission); and

ii) their effective radiated power when radiated by the cabinet and structure of the equipment (cabinetradiation); or

b) their effective radiated power when radiated by the cabinet and the integral or dedicated antenna, in the case of equipment fitted with such an antenna and no permanent RF connector.

For measurements above 1000 MHz the peak value shall be measured using a spectrum analyser. The "max hold "function of a spectrum analyser shall be used. For measurements up to 1000 MHz the quasi-peak detector set in accordance with the specification of CISPR 16 [1], [2] and [3] shall be used.

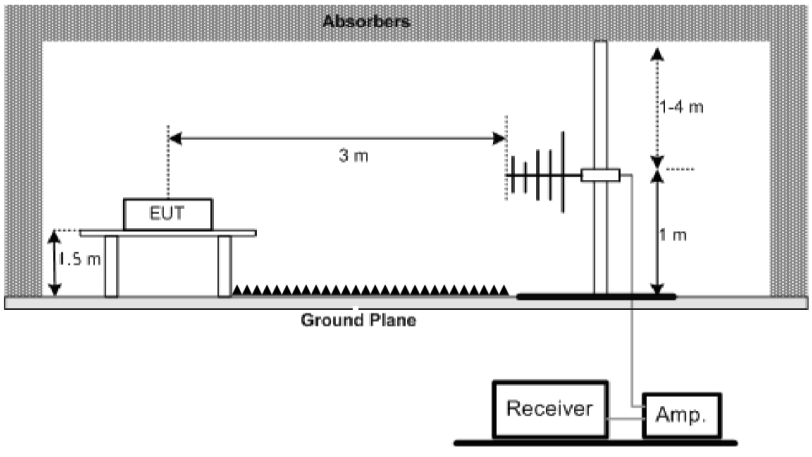
The correction for RBW described in clause 5.8.5 is to be applied to the measured results as applicable.

Spurious emissions Limit

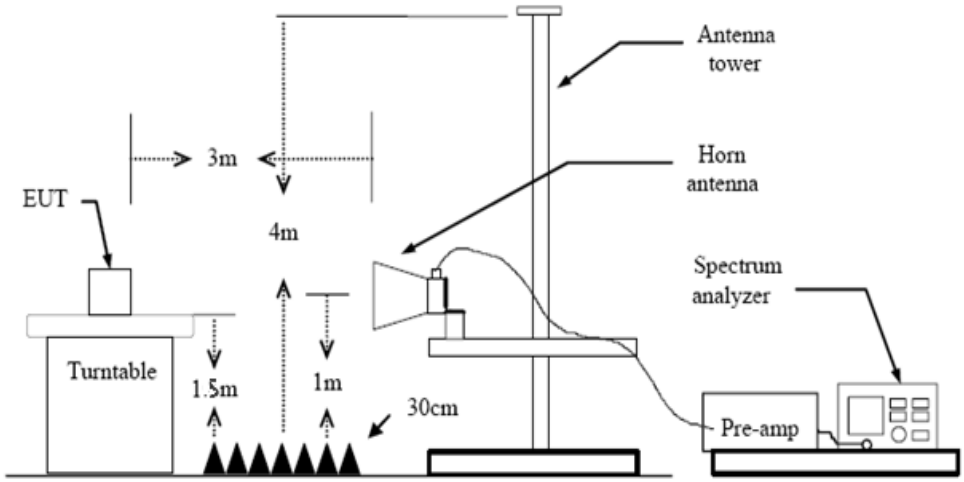
Frequency ranges / State	47MHz to 74MHz 87.5MHz to 108MHz 174MHz to 230MHz 470MHz to 862MHz	Other frequencies≦1000 MHz	Frequencies>1000 MHz
Operating	4nW(-54dBm)	250nW(-36dBm)	1uW(-30dBm)
Standby	2nW(-57dBm)	2nW(-57dBm)	20nW(-47dBm)

7.2 Test Setup

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



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



7.3 Test Procedure

Refer to EN 300 440,clause 4.2.4.3 for the test conditions and the measurement method.

7.4 Deviation From Test Standard

No deviation

7.5 Test Data

Please refer to the Attachment D.

8 Duty Cycle

8.1 Test Standard and Limit

8.1.1 Test Standard

ETSI EN 300 440 V2.2.1:2018 clause 4.2.5.4

8.1.2 Test Limit

Test Item	Limit
Duty Cycle	No restriction in generic use

Note: No limit and no necessary to test.

9 Blocking or desensitization

9.1 Test Standard and Limit

9.1.1 Test Standard

ETSI EN 300 440 V2.2.1:2018 clause 4.3.4

9.1.2 Test Limits

The blocking level, for any frequency within the specified ranges, shall not be less than the values given in table 6,except at frequencies on which spurious responses are found.

Table 6: Limits for blocking or desensitization

Receiver category	Limit
1	-30 dBm + k
2	-45 dBm + k
3	-60 dBm + k

The correction factor, k, is as follows:

$$k = -20\log f - 10\log BW$$

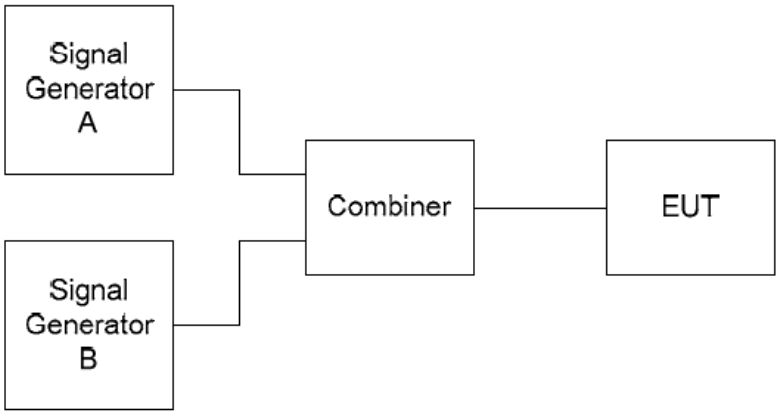
Where:

- f is the frequency in GHz;
- BW is the occupied bandwidth in MHz.

The factor k is limited within the following:

- -40 dB < k < 0 dB.

9.2 Test Setup



9.3 Test Procedure

This measurement shall be conducted under normal conditions.
Two signal generators A and B shall be connected to the receiver via a combining network to the receiver, either:
a) via a test fixture or a test antenna to the receiver integrated, dedicated or test antenna; or
b) directly to the receiver permanent or temporary antenna connector.

The method of coupling to the receiver shall be stated in the test report. Signal generator A shall be at the nominal frequency of the receiver, with normal modulation of the wanted signal. Signal generator B shall be unmodulated and shall be adjusted to a test frequency at approximately 10 times, 20 times and 50 times of the occupied bandwidth above upper band edge of occupied bandwidth.

Initially signal generator B shall be switched off and using signal generator A the level which still gives sufficient response shall be established. The output level of generator A shall then be increased by 3 dB.

Signal generator B is then switched on and adjusted until the wanted criteria are met. This level shall be recorded.

The measurement shall be repeated with the test frequency for signal generator B at 10 times, 20 times and 50 times of the occupied bandwidth below the lower band edge of the occupied bandwidth.

The blocking or desensitization shall be recorded as the level in dBm of lowest level of the unwanted signal (generator B).

For tagging systems (e.g. RF identification, anti-theft, access control, location and similar systems) signal generator A may be replaced by a physical tag positioned at 70 % of the measured system range in metres. In this case, the blocking or desensitization shall be recorded as the ratio in dB of lowest level of the unwanted signal (generator B) resulting in a non-read of the tag. to the declared sensitivity of the receiver +3 dB.

9.4 Deviation From Test Standard

No deviation

9.5 Test Data

Please refer to the Attachment E.

10 Spurious Emissions

10.1 Test Standard and Limit

10.1.1 Test Standard

ETSI EN 300 440 V2.2.1:2018 clause 4.3.5

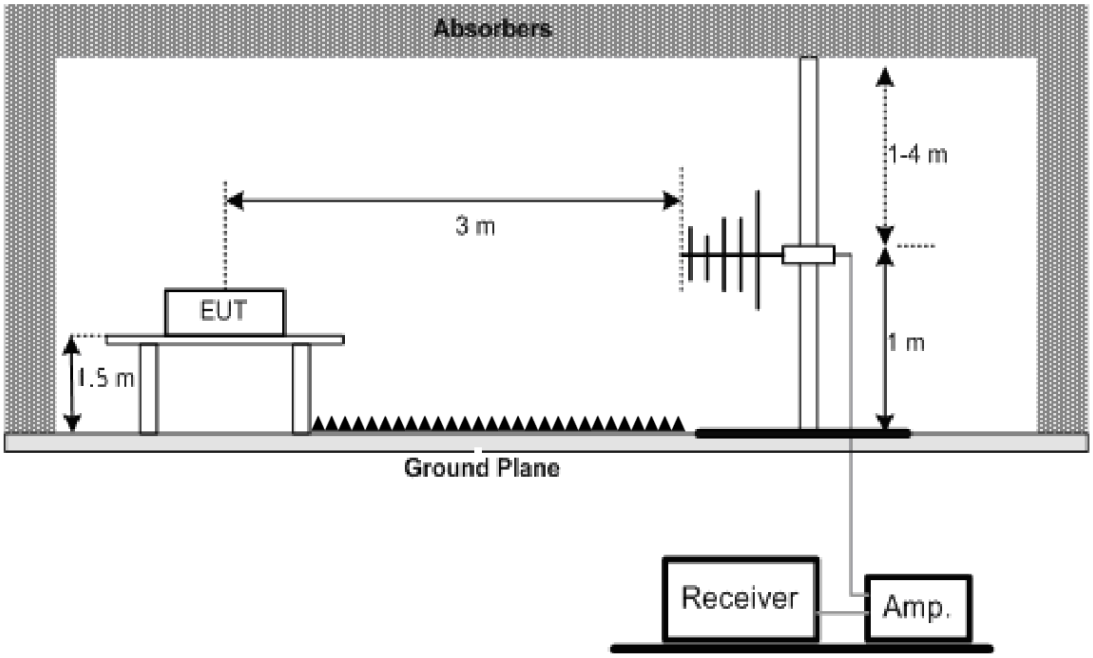
10.1.2 Limits

The spurious emissions of the receiver shall not exceed the values given in table.

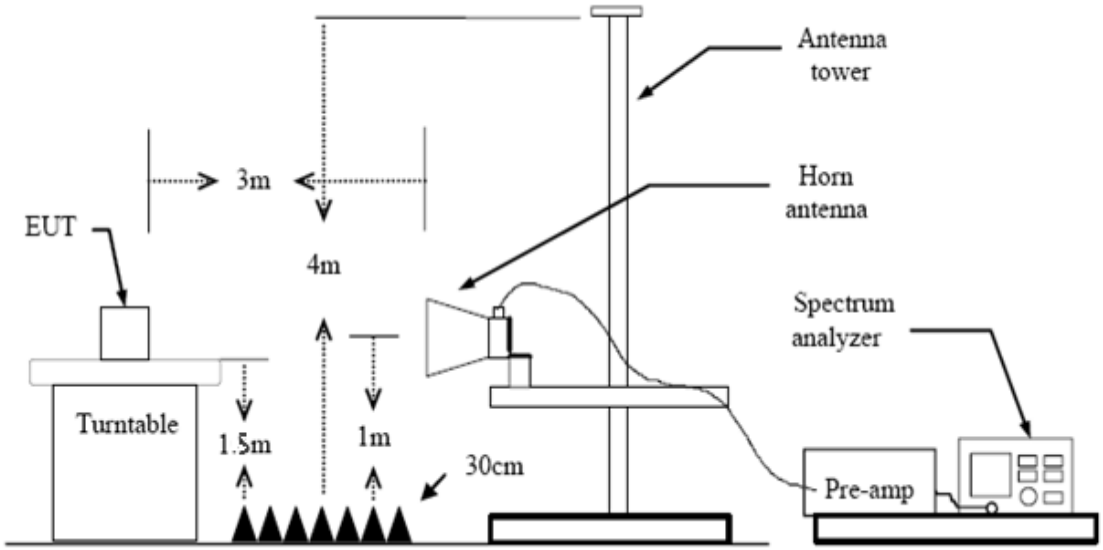
Frequency Range	Maximum Power
25MHz ~ 1GHz	2nW(-57dBm)
Above1GHz	20nW(-47dBm)

10.2 Test Setup

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



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



10.3 Test Procedure

Refer as EN 300 440, Refer to chapter 4.3.5.3for radiated measurement.

10.4 Deviation From Test Standard

No deviation

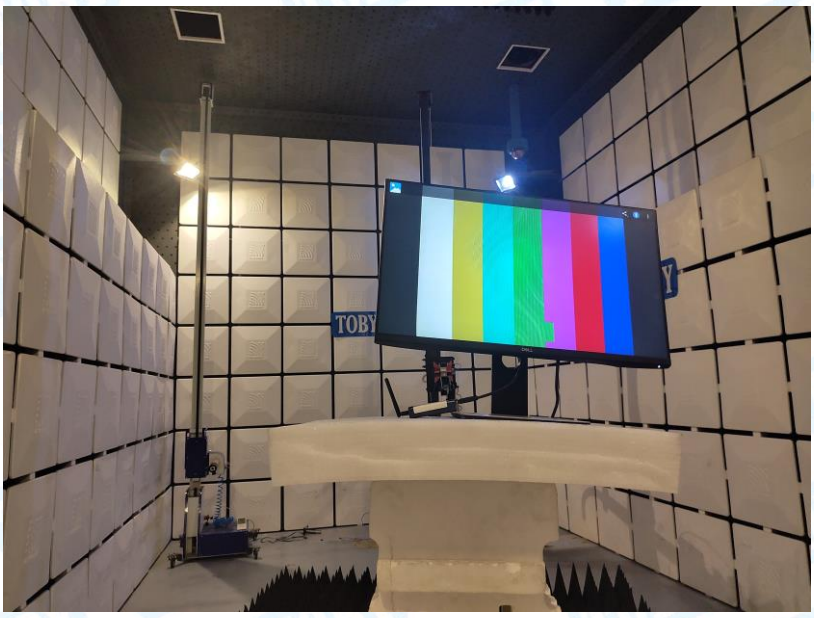
10.5 Test Data

Please refer to the Attachment F.

11 Photographs – Test Setup

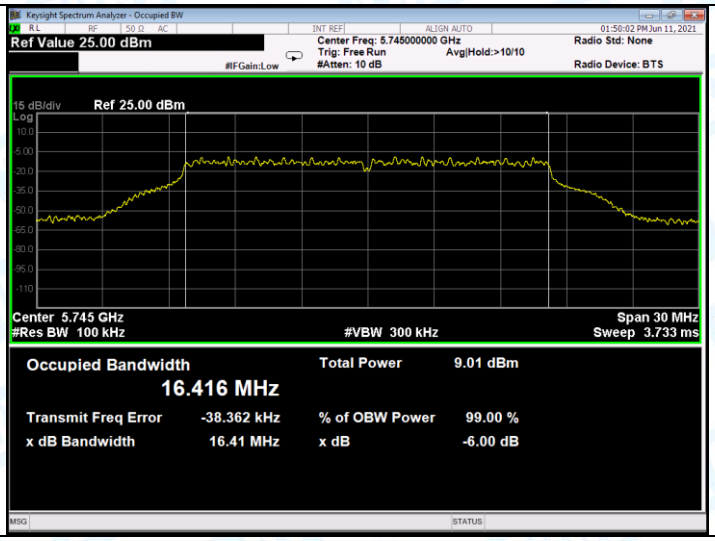
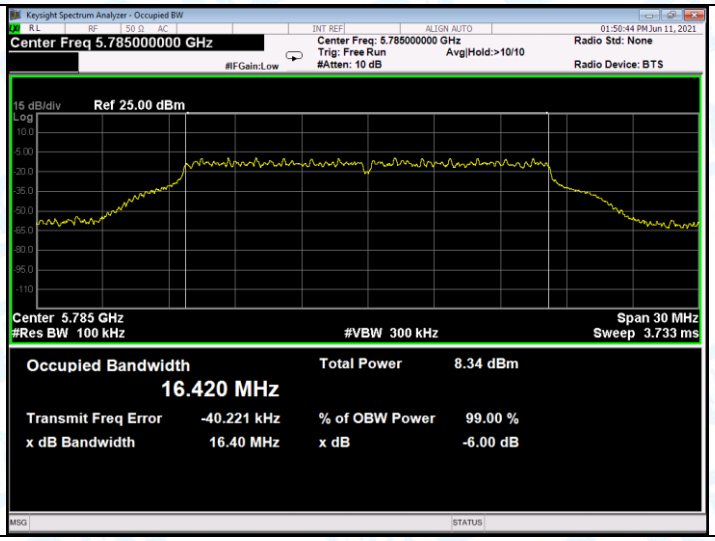
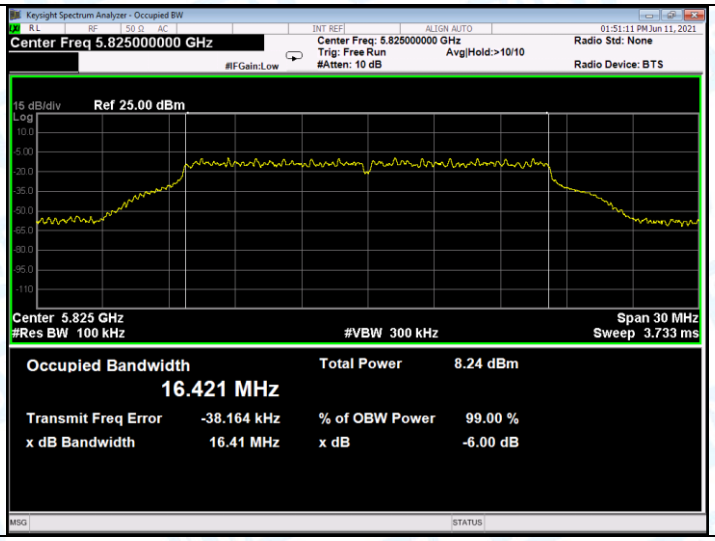
Radiated Spurious Emission (Below 1 GHz)

Radiated Spurious Emission (Above 1 GHz)



Attachment A--Equivalent Isotropic Radiated Power (6dB Bandwidth)

Test Voltage: AC 230V						
Test Conditions: Continous transmitting mode						
Rel.Humidity: 60%			**Pressure:** 1010 hPa			
Duty Cycle: 100 %						
Occupied Channel Bandwidth for 5745~5825 MHz						
Test Mode	**-6dB Bandwidth (MHz)**					
	CH 149 Ant 1	**CH 149 Ant 0**	**CH 157 Ant 1**	**CH 157 Ant 0**	**CH 165 Ant 1**	**CH 165 Ant 0**
802.11a	16.41	16.417	16.40	16.415	16.41	16.422
Please see following test data:						

802.11a
CH 149

CH 157

CH 165


Attachment B-- Equivalent Isotropic Radiated Power(e.i.r.p)

Test Voltage: AC 230V				
Test Conditions: 802.11a Continous transmitting				
Duty Cycle: 100 **%**				
Rel.Humidity: 60%		**Test Results**		
Pressure: 1010 hPa		**EIRP (dBm)**	**EIRP Limit (dBm)**	**Result**
CH 149: 5745 **MHz**				
Tnom 25° **C**	**Vnom** 230 **V**	**5.86**		Pass
Tmin 0° **C**	**Vmax** 207**V**	5.85		Pass
	Vmin 253**V**	5.81	**13.9**	Pass
Tmax 40° **C**	**Vmax** 207**V**	5.78		Pass
	Vmin 253**V**	10.28		Pass
CH 157: 5785 **MHz**				
Tnom 25° **C**	**Vnom** 230 **V**	4.67		Pass
Tmin 0° **C**	**Vmax** 207**V**	4.55		Pass
	Vmin 253**V**	4.52	**13.9**	Pass
Tmax 40° **C**	**Vmax** 207**V**	4.19		Pass
	Vmin 253**V**	4.32		Pass
CH 165: 5825 **MHz**				
Tnom 25° **C**	**Vnom** 230 **V**	4.05		Pass
Tmin 0° **C**	**Vmax** 207**V**	4.01		Pass
	Vmin 253**V**	3.98	**13.9**	Pass
Tmax 40° **C**	**Vmax** 207**V**	3.87		Pass
	Vmin 253**V**	4.02		Pass
Remark: **EIRP=A+G+10*log(1/x)** **G=2.0dBi X=1**				

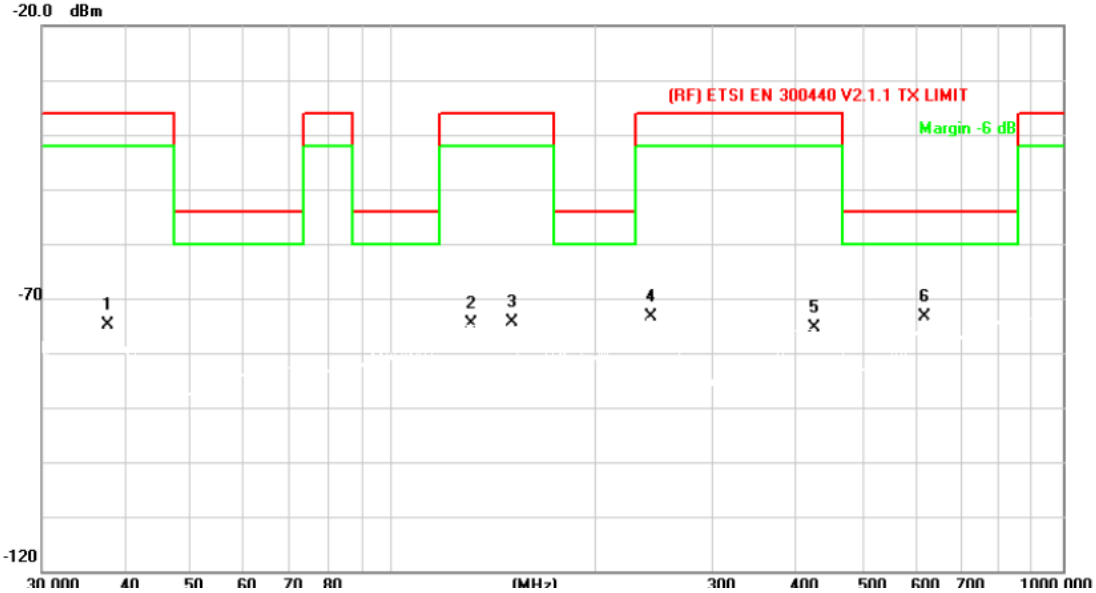
Attachment C-- Permitted Range of Operating Frequencies

Test Voltage: AC 230V				
Test Conditions: 802.11a Continous transmitting				
Duty Cycle: 100 **%**				
Rel.Humidity: 60%		**Test Results**		
Pressure: 1010 hPa				
Test Frequency: 5745 **MHz**		**Test Result (MHz)**	**Limit (MHz)**	**Result**
Tnom 25° **C**	**Vnom** 230 **V**	5735.2800	**>5725.0000**	Pass
Tmin 0° **C**	**Vmax** 207**V**	5735.3400	**>5725.0000**	Pass
	Vmin 253**V**	5735.6500	**>5725.0000**	Pass
Tmax 40° **C**	**Vmax** 207**V**	5735.7200	**>5725.0000**	Pass
	Vmin 253**V**	5735.5100	**>5725.0000**	Pass
Test Frequency: 5825 **MHz**				
Tnom 25° **C**	**Vnom** 230 **V**	5834.7200	**<5875.0000**	Pass
Tmin 0° **C**	**Vmax** 207**V**	5833.6500	**<5875.0000**	Pass
	Vmin 253**V**	5833.7700	**<5875.0000**	Pass
Tmax 40° **C**	**Vmax** 207**V**	5833.6500	**<5875.0000**	Pass
	Vmin 253**V**	5833.6600	**<5875.0000**	Pass

Attachment D--Unwanted Emissions In The Spurious Domain

Below 1 G

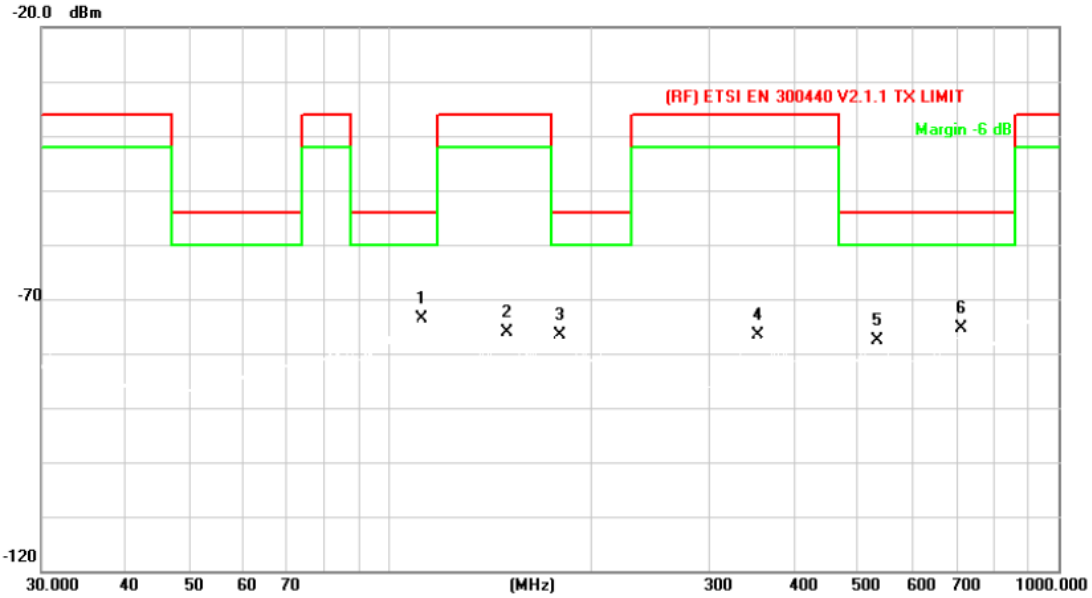
Temperature:	25 ℃	**Relative Humidity:**	41%
Test Voltage:	AC 230V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11 a Mode 5745MHz		
Remark:	Only show the worst case data.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBm	dB	dBm	dBm	dB	Detector
1		37.5478	-72.80	-2.17	-74.97	-36.00	-38.97	peak
2		130.8369	-63.52	-11.08	-74.60	-36.00	-38.60	peak
3		150.5378	-64.98	-9.45	-74.43	-36.00	-38.43	peak
4		242.5252	-76.57	3.31	-73.26	-36.00	-37.26	peak
5		425.0280	-77.87	2.39	-75.48	-36.00	-39.48	peak
6	*	620.7096	-80.18	6.77	-73.41	-54.00	-19.41	peak

Remark:
1. Corr. = Antenna Factor (dB) + Cable Loss (dB)
2. Margin (dB) =Peak(dBm)-Limit (dBm)

Temperature:	25 ℃	Relative Humidity:	41%
Test Voltage:	AC 230V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11 a Mode 5745MHz		
Remark:	Only show the worst case data.		

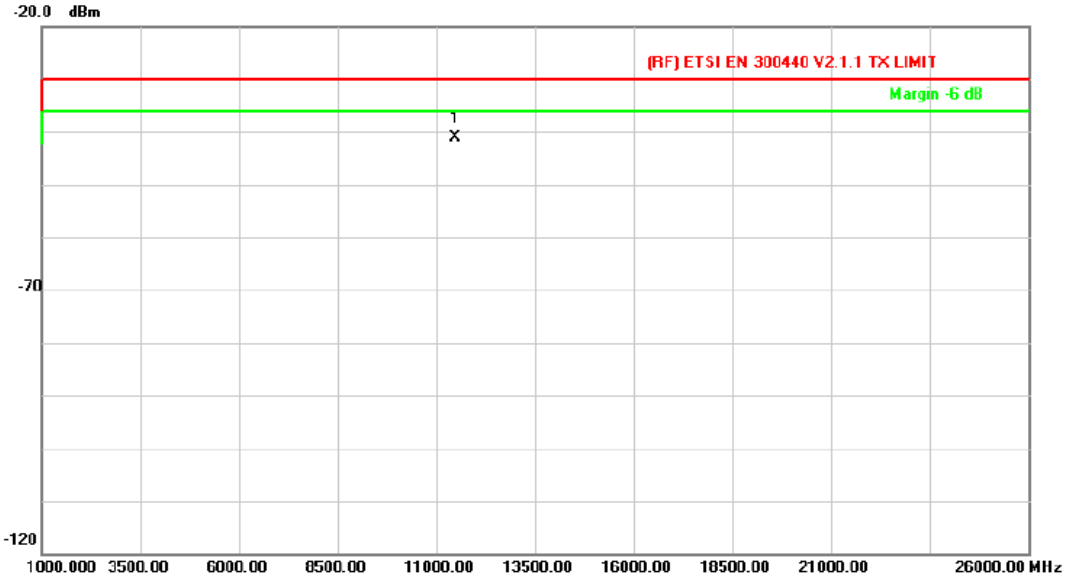


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBm	dB	dBm	dBm	dB	Detector
1	*	111.3468	-69.97	-3.54	-73.51	-54.00	-19.51	peak
2		149.4857	-69.30	-6.87	-76.17	-36.00	-40.17	peak
3		179.3863	-70.65	-6.01	-76.66	-54.00	-22.66	peak
4		354.1831	-75.90	-0.73	-76.63	-36.00	-40.63	peak
5		535.7073	-81.74	4.08	-77.66	-54.00	-23.66	peak
6		714.1734	-81.06	5.59	-75.47	-54.00	-21.47	peak

Remark:
1. Corr. = Antenna Factor (dB) + Cable Loss (dB)
2. Margin (dB) =Peak(dBm)-Limit (dBm)

Above 1 GHz

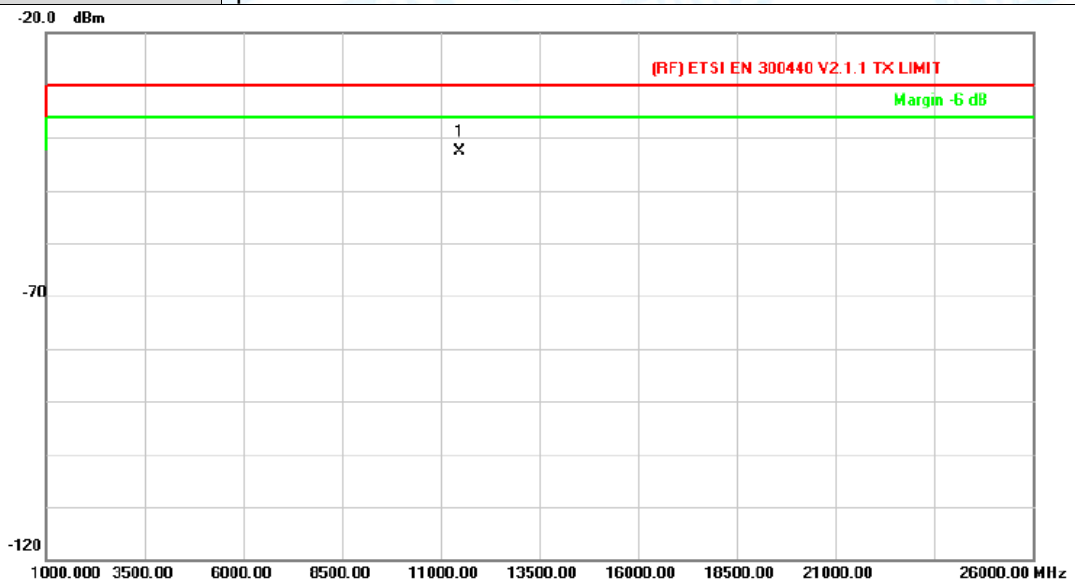
Temperature:	25 ℃	Relative Humidity:	41%
Test Voltage:	AC 230V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11 a Mode 5745MHz		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBm	dB	dBm	dBm	dB	Detector
1	*	11491.858	-73.18	31.94	-41.24	-30.00	-11.24	peak

Remark:
1. Corr. = Antenna Factor (dB) + Cable Loss (dB)
2. Margin (dB) =Peak(dBm)-Limit (dBm)

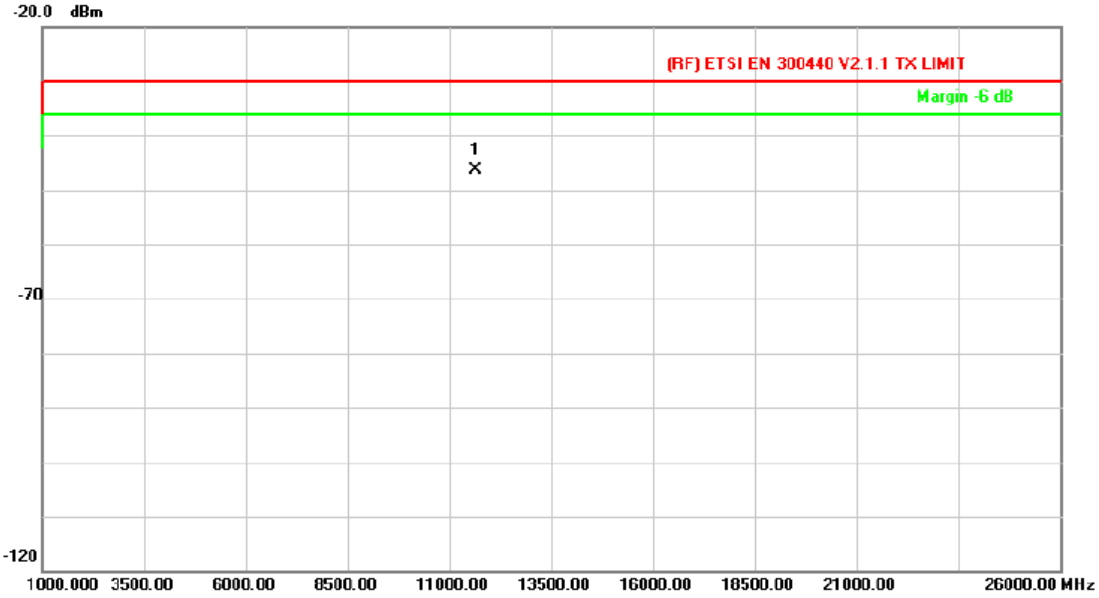
Temperature:	25 ℃	Relative Humidity:	41%
Test Voltage:	AC 230V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11 a Mode 5745MHz		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBm	dB	dBm	dBm	dB	Detector
1	*	11487.223	-77.79	35.29	-42.50	-30.00	-12.50	peak

Remark:
1. Corr. = Antenna Factor (dB) + Cable Loss (dB)
2. Margin (dB) =Peak(dBm)-Limit (dBm)

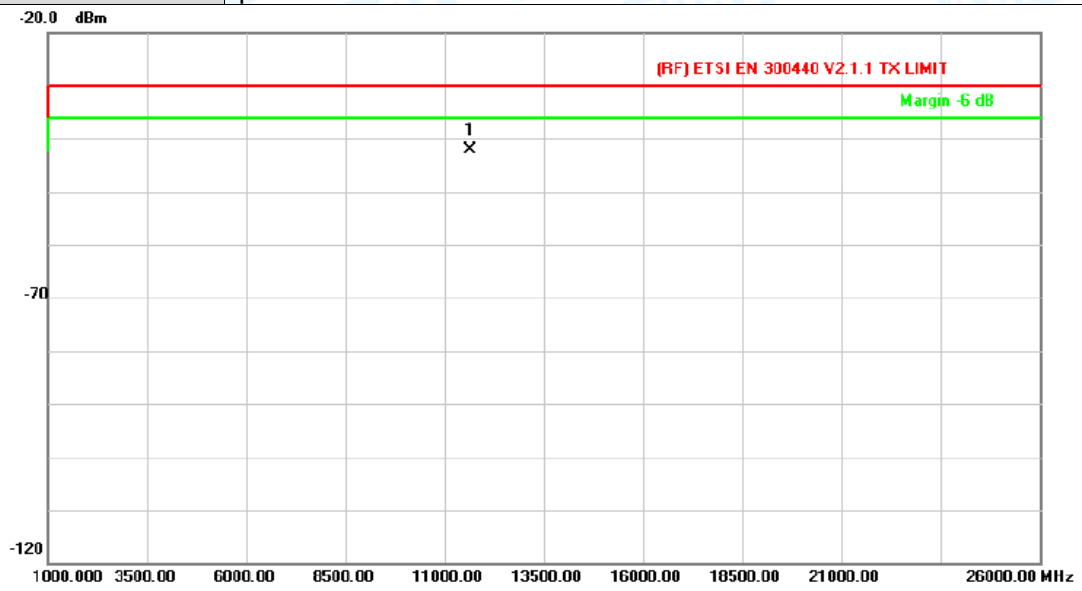
Temperature:	25 ℃	**Relative Humidity:**	41%
Test Voltage:	AC 230V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11 a Mode 5825MHz		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBm	dB	dBm	dBm	dB	Detector
1	*	11650.100	-78.50	32.22	-46.28	-30.00	-16.28	peak

Remark:
1. Corr. = Antenna Factor (dB) + Cable Loss (dB)
2. Margin (dB) =Peak(dBm)-Limit (dBm)

Temperature:	25 ℃	Relative Humidity:	41%
Test Voltage:	AC 230V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11 a Mode 5825MHz		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBm	dB	dBm	dBm	dB	Detector
1	*	11650.233	-70.87	34.11	-36.76	-30.00	-6.76	peak

Remark:
1. Corr. = Antenna Factor (dB) + Cable Loss (dB)
2. Margin (dB) =Peak(dBm)-Limit (dBm)

Attachment E-- Blocking or Desensitization

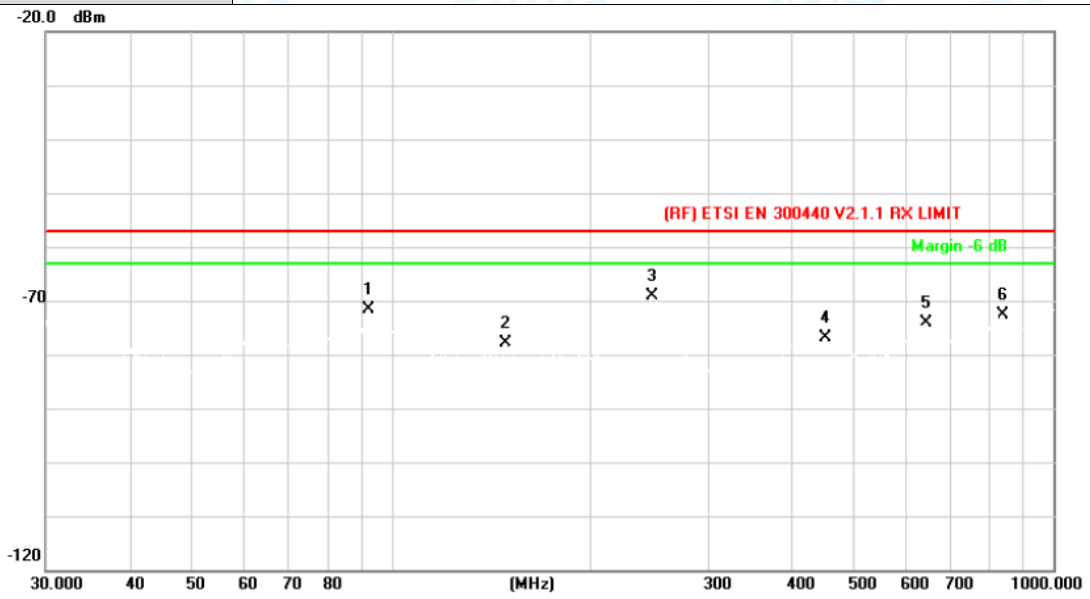
Receiver category 3											
Limit:	-60dBm+k										
Mode	**Frequency (MHz)**	**Occupied Bandwidth (MHz)**	**K (db)**	**Test Result(dBm)**						**Limit (dBm)**	**Result**
				Occupied Bandwidth above upper Band edge of Occupied Bandwidth			**Occupied Bandwidth below the lower Band edge of Occupied Bandwidth**				
				10 Times	**20 Times**	**50 Times**	**10 Times**	**20 Times**	**50 Times**		
802.11 a	5745	16.410	-27.34	-75.32	-70.33	-63.33	-75.33	-70.24	-63.45	⩾-87.34	PASS
	5785	16.400	-27.39	-75.63	-70.82	-64.11	-75.27	-69.94	-62.63	⩾-87.39	PASS
	5825	16.410	-27.46	-75.74	-69.53	-63.73	-74.86	-70.93	-62.63	⩾-87.46	PASS

Note: $k = -20\log f - 10\log BW$
- f is the frequency in GHz;
- BW is the occupied bandwidth in MHz.

Attachment F--Spurious Emissions of the Receiver

Below 1 G

Temperature:	25 ℃	**Relative Humidity:**	41%
Test Voltage:	AC 230V		
Ant. Pol.	Horizontal		
Test Mode:	RX 802.11 a Mode 5745MHz		
Remark:			



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBm	dB	dBm	dBm	dB	Detector
1		92.1388	-59.90	-11.65	-71.55	-57.00	-14.55	peak
2		148.4410	-68.29	-9.50	-77.79	-57.00	-20.79	peak
3	*	247.6819	-73.80	4.62	-69.18	-57.00	-12.18	peak
4		452.7196	-79.03	2.14	-76.89	-57.00	-19.89	peak
5		642.8613	-80.71	6.54	-74.17	-57.00	-17.17	peak
6		839.1816	-80.22	7.60	-72.62	-57.00	-15.62	peak

Remark:
1. Corr. = Antenna Factor (dB) + Cable Loss (dB)
2. Margin (dB) =Peak(dBm)-Limit (dBm)

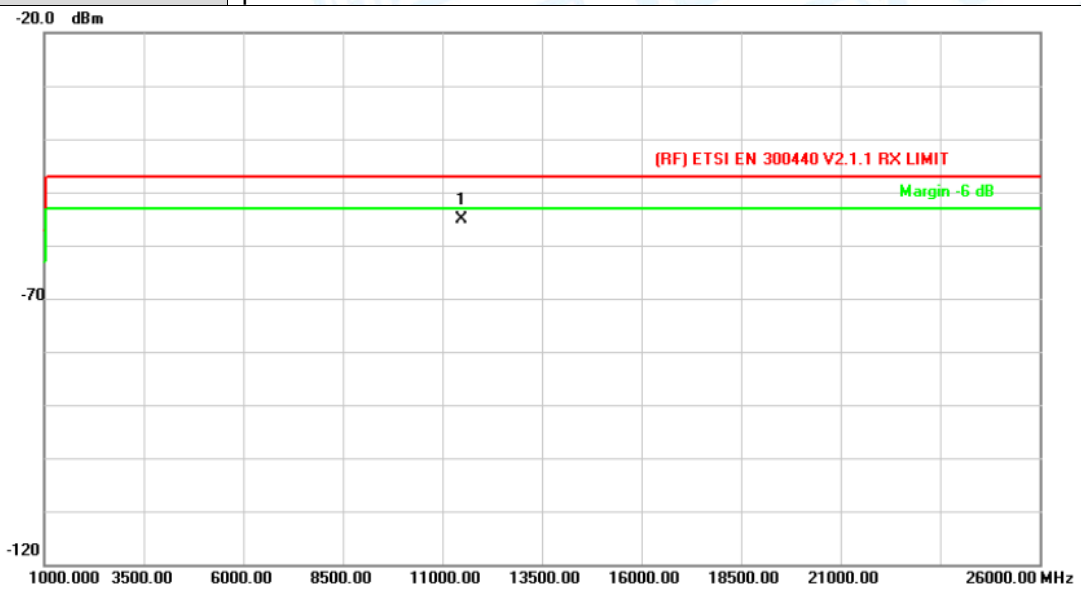
Temperature:	25 ℃	Relative Humidity:	41%
Test Voltage:	AC 230V		
Ant. Pol.	Vertical		
Test Mode:	RX 802.11 a Mode 5745MHz		
Remark:			

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBm	dB	dBm	dBm	dB	Detector
1		68.6310	-67.31	-12.88	-80.19	-57.00	-23.19	peak
2		121.9753	-72.41	-4.35	-76.76	-57.00	-19.76	peak
3		180.6484	-74.68	-6.01	-80.69	-57.00	-23.69	peak
4		351.7078	-76.24	-0.65	-76.89	-57.00	-19.89	peak
5		531.9633	-79.23	3.90	-75.33	-57.00	-18.33	peak
6	*	724.2611	-79.68	5.67	-74.01	-57.00	-17.01	peak

Remark:
1. Corr. = Antenna Factor (dB) + Cable Loss (dB)
2. Margin (dB) =Peak(dBm)-Limit (dBm)

Above 1 GHz

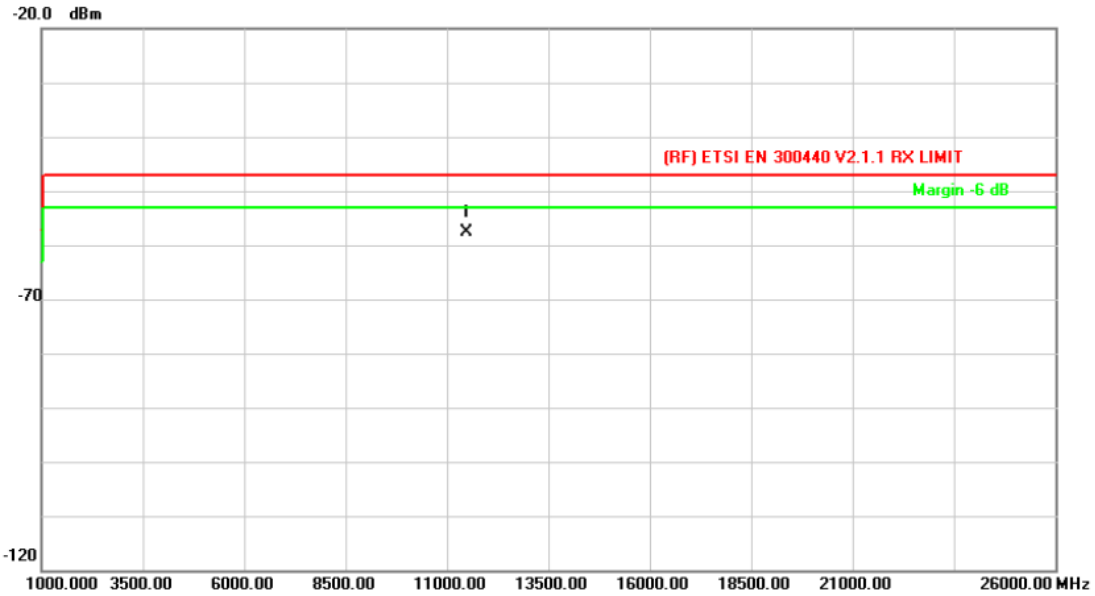
Temperature:	25 ℃	**Relative Humidity:**	41%
Test Voltage:	AC 230V		
Ant. Pol.	Horizontal		
Test Mode:	RX 802.11 a Mode 5745MHz		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBm	dB	dBm	dBm	dB	Detector
1	*	11490.265	-35.24	-19.99	-55.23	-47.00	-8.23	peak

Remark:
1. Corr. = Antenna Factor (dB) + Cable Loss (dB)
2. Margin (dB) =Peak(dBm)-Limit (dBm)

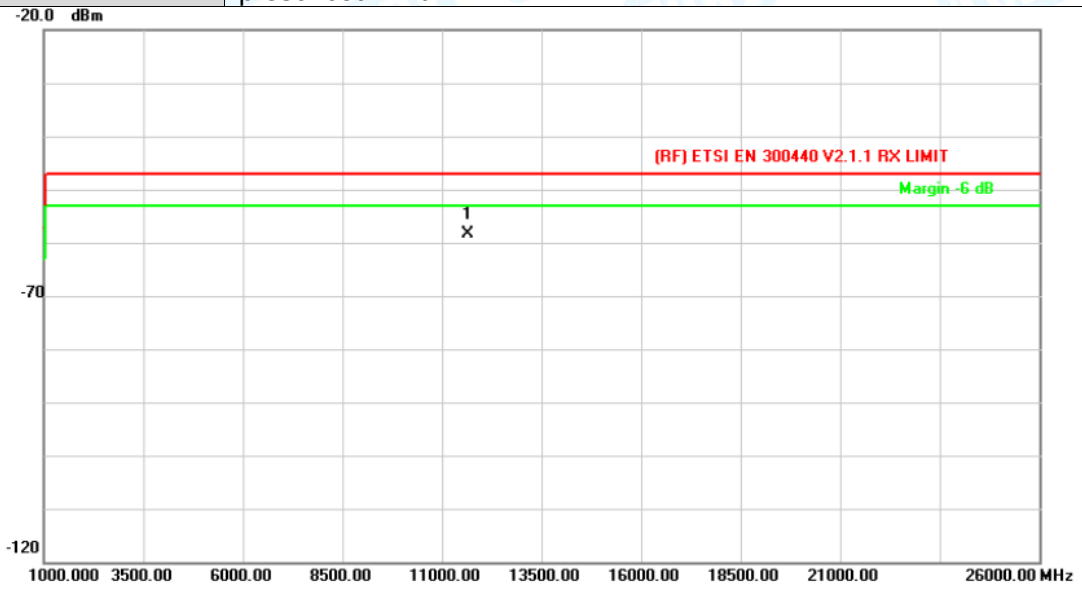
Temperature:	25 ℃	**Relative Humidity:**	41%
Test Voltage:	AC 230V		
Ant. Pol.	Vertical		
Test Mode:	RX 802.11 a Mode 5745MHz		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBm	dB	dBm	dBm	dB	Detector
1	*	11490.780	-37.63	-19.99	-57.62	-47.00	-10.62	peak

Remark:
1. Corr. = Antenna Factor (dB) + Cable Loss (dB)
2. Margin (dB) =Peak(dBm)-Limit (dBm)

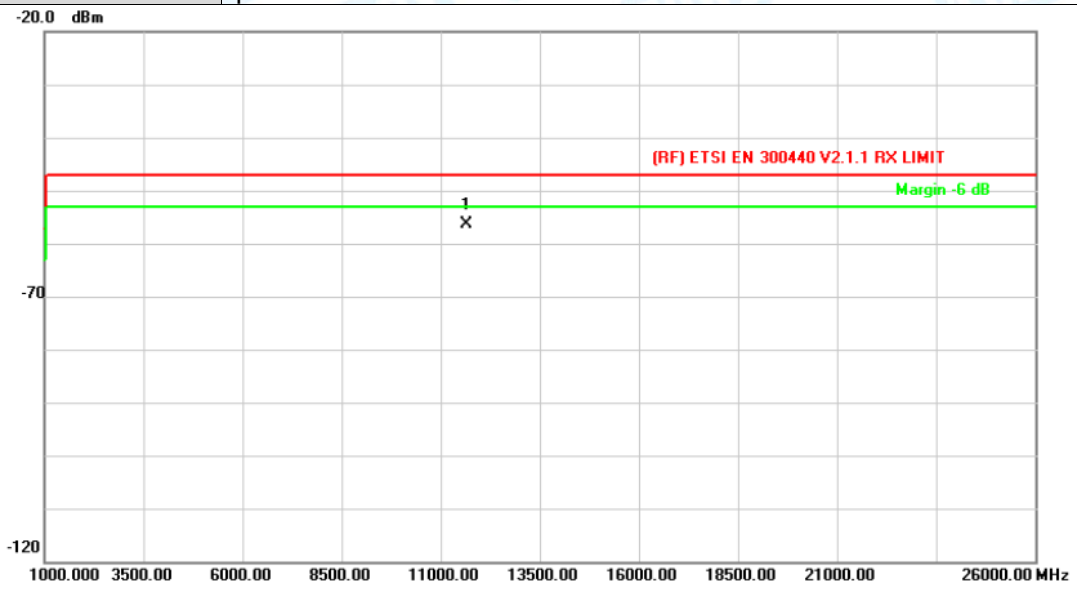
Temperature:	25 ℃	Relative Humidity:	41%
Test Voltage:	AC 230V		
Ant. Pol.	Horizontal		
Test Mode:	RX 802.11 a Mode 5825MHz		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBm	dB	dBm	dBm	dB	Detector
1	*	11650.554	-38.49	-19.93	-58.42	-47.00	-11.42	peak

Remark:
1. Corr. = Antenna Factor (dB) + Cable Loss (dB)
2. Margin (dB) =Peak(dBm)-Limit (dBm)

Temperature:	25 ℃	**Relative Humidity:**	41%
Test Voltage:	AC 230V		
Ant. Pol.	Vertical		
Test Mode:	RX 802.11 a Mode 5825MHz		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBm	dB	dBm	dBm	dB	Detector
1	*	11650.272	-36.34	-19.93	-56.27	-47.00	-9.27	peak

Remark:
1. Corr. = Antenna Factor (dB) + Cable Loss (dB)
2. Margin (dB) =Peak(dBm)-Limit (dBm)

-----END OF REPORT-----