

Radio Measurement and Test Report For

Winstars Technology Limited

**Block 4, TaiSong Industrial Park, DaLang Street, LongHua Town, Bao'an
district, Shenzhen, China**

Test Standards:	<u>EN 300 440-1 V1.6.1 (2010-08)</u> <u>EN 300 440-2 V1.4.1 (2010-08)</u>
Product Description:	<u>High Power Wi-fi AP/Router</u>
Tested Model:	<u>WS-WN570HA1</u>
Report No.:	<u>STR15098069E-2</u>
Tested Date:	<u>2015-09-08 to 2015-09-22</u>
Issued Date:	<u>2015-09-22</u>
Tested By:	<u>Jack Kang / Engineer</u> 
Reviewed By:	<u>Silin Chen / Engineer</u> 
Approved & Authorized By:	<u>Jandy So / PSQ Manager</u> 
Prepared By:	

Shenzhen SEM.Test Technology Co., Ltd.
1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road,
Bao'an District, Shenzhen, P.R.C. (518101)
Tel.: +86-755-33663308 Fax.: +86-755-33663309 Website: www.semtest.com.cn

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen SEM.Test Technology Co., Ltd.

TABLE OF CONTENTS

1 GENERAL INFORMATION	3
1.1 Product Description for Equipment Under Test (EUT)	3
1.2 Test Standards	4
1.3 Test Methodology	4
1.4 Test Facility.....	4
1.5 EUT Setup and Test Mode	5
1.6 Measurement Uncertainty	5
1.7 Test Equipment List and Details	6
2. SUMMARY OF TEST RESULTS.....	7
3. EQUIVALENT ISOTROPICALLY RADIATED POWER	8
3.1 Standard Applicable	8
3.2 Test Procedure.....	8
3.3 Summary of Test Results	9
4. PERMITTED RANGE OF OPERATING FREQUENCIES.....	10
4.1 Applicable Standard	10
4.2 Test Procedure.....	10
4.3 Test Results/Plots	11
5. SPURIOUS EMISSIONS.....	13
5.1 Limit of Spurious Emissions.....	13
5.2 Test Procedure.....	13
5.3 Environmental Conditions	13
5.4 Summary of Test Results/Plots	13
6. DUTY CYCLE	21
6.1 Applicable Standard	21
6.2 Test Procedure.....	21
6.3 Environmental Conditions	21
6.4 Summary of Test Results/Plots	21
7. RECEIVER SPURIOUS EMISSIONS.....	22
7.1 Limit of Spurious Emissions.....	22
7.2 Test Procedure.....	22
7.3 Environmental Conditions	22
7.4 Summary of Test Results/Plots	22
EXHIBIT 1 - PRODUCT LABELING	25
Proposed CE Label Format	25
Proposed Label Location on EUT.....	25
EXHIBIT 2 - EUT PHOTOGRAPHS.....	26
EXHIBIT 3 - TEST SETUP PHOTOGRAPHS.....	30

1 GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Winstars Technology Limited
Address of applicant: Block 4, TaiSong Industrial Park, DaLang Street, LongHua Town, Bao'an district, Shenzhen, China
Manufacturer: Winstars Technology Limited
Address of manufacturer: Block 4, TaiSong Industrial Park, DaLang Street, LongHua Town, Bao'an district, Shenzhen, China

General Description of EUT	
Product Name:	High Power Wi-fi AP/Router
Trade Name:	N/A
Model No.:	WS-WN570HA1
Adding Model(s):	525824
Rated Voltage:	DC 24V from adapter
Power Adaptor Model:	Model: TDX-2400500 Input: AC 100-240V 50/60Hz, Output: DC 24V 0.5A
<i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i>	

Technical Characteristics of EUT	
Wi-Fi(5.8G)	
Support Standards:	802.11ac
Frequency Range:	5775-5825MHz for 802.11a
RF Output Power:	13.52dBm (EIRP)
Type of Modulation:	BPSK/QPSK/16QAM/64QAM/256QAM
Quantity of Channels	6 for 802.11ac
Channel Separation:	10MHz
Type of Antenna:	External Antenna
Antenna Gain:	7.0dBi

1.2 Test Standards

The following report is prepared on behalf of the Winstars Technology Limited in accordance with ETSI EN 300 440-2, Electromagnetic compatibility and Radio spectrum Matters (ERM); Short range devices; Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive.

The objective of the manufacturer is to determine compliance with ETSI EN 300 440-2, Electromagnetic compatibility and Radio spectrum Matters (ERM); Short range devices; Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product maybe which result in lowering the immunity should be checked to ensure compliance has been maintained

1.3 Test Methodology

All measurements contained in this report were conducted with ETSI EN 300 440-1, Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Part 1: Technical characteristics and test methods.

The equipment under test (EUT) was configured to measure its highest possible emission level. For more detail refer to the Operating Instructions.

1.4 Test Facility

FCC – Registration No.: 934118

Shenzhen SEM.Test Technology Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files and the Registration is 934118.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Shenzhen SEM.Test Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

CNAS Registration No.: L4062

Shenzhen SEM.Test Technology Co., Ltd. is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L4062. All measurement facilities used to collect the measurement data are located at 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C (518101).

1.5 EUT Setup and Test Mode

The equipment under test (EUT) was configured to measure its highest possible emission/immunity level. The test modes were adapted according to the operation manual for use, the EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	Low Channel	5775 MHz
TM2	Middle Channel	5805 MHz
TM3	High Channel	5825 MHz

Test Conditions					
	Normal	LTLV	LTHV	HTHV	HTLV
Temperature (°C)	20	-20	-20	55	55
Voltage (V)	AC 230V	AC 207V	AC 253V	AC 207V	AC 253V

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
DC Cable	1.0	Unshielded	Without Ferrite
RJ45 Cable	1.0	Unshielded	Without Ferrite

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Notebook	Lenovo	E10	LR-63C8R

1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
EIRP	Conducted	$\pm 0.42\text{dB}$
Frequency Range	---	$\pm 1 \times 10^{-7}$
Transmitter Spurious Emissions	Radiated	$\pm 5.2\text{dB}$
Receiver Spurious Emissions	Radiated	$\pm 5.2\text{dB}$

1.7 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Due. Date
Spectrum Analyzer	Agilent	E4407B	MY41440400	2016-06-16
Spectrum Analyzer	Agilent	N9020A	US47140102	2016-06-16
Signal Generator	Agilent	83752A	3610A01453	2016-06-16
Power Divider	Weinschel	1506A	PM204	2016-06-16
Spectrum Analyzer	Rohde & Schwarz	FSP	836079/035	2016-06-16
EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2016-06-16
Amplifier	Agilent	8447F	3113A06717	2016-06-16
Amplifier	C&D	PAP-1G18	2002	2016-06-16
Broadband Antenna	Schwarz beck	VULB9163	9163-333	2016-06-16
Horn Antenna	ETS	3117	00086197	2016-06-16
DC Power Supply	LW	APR-3003	N/A	2016-06-16
Attenuator	ATTEN	ATS100-4-20	/	2016-06-16

2. SUMMARY OF TEST RESULTS

Standards	Reference	Description of Test Item	Result
EN 300440-1 V1.6.1 (2010-08)	7.1.3	Equivalent Isotropically Radiated Power	Pass
	7.2.4	Permitted Range of Operating Frequencies	Pass
	7.3.6	Spurious Emissions	Pass
	7.4.3	Duty Cycle	Pass
	7.5.1	Additional requirements for FHSS equipment	N/A
	8.3.5	Receiver Spurious Radiations	Pass
Pass: The EUT complies with the essential requirements in the standard Fail: The EUT does not comply with the essential requirements in the standard N/A: not applicable			

3. Equivalent Isotropically Radiated Power

3.1 Standard Applicable

According to ETSI EN 300 440-1 section 7.1.3, the effective radiated power shall not exceed the power class value given in following table:

Table 4: Maximum radiated peak power (e.i.r.p.)

Frequency Bands	Power	Application	Notes
2 400 MHz to 2 483,5 MHz	10 mW e.i.r.p.	Generic use	
2 400 MHz to 2 483,5 MHz	25 mW e.i.r.p.	Detection, movement and alert applications	
(a) 2 446 MHz to 2 454 MHz	500 mW e.i.r.p.	RFID	See also table 6 and annex C
(b) 2 446 MHz to 2 454 MHz	4 W e.i.r.p.	RFID	See also table 6 and annex C
5 725 MHz to 5 875 MHz	25 mW e.i.r.p.	Generic use	
9 200 MHz to 9 500 MHz	25 mW e.i.r.p.	Radiodetermination: radar, detection, movement and alert applications	
9 500 MHz to 9 975 MHz	25 mW e.i.r.p.	Radiodetermination: Radar, detection, movement and alert applications	
10,5 GHz to 10,6 GHz	500 mW e.i.r.p.	Radiodetermination: Radar, detection, movement and alert applications	
13,4 GHz to 14,0 GHz	25 mW e.i.r.p.	Radiodetermination: Radar, detection, movement and alert applications	
17,1 GHz to 17,3 GHz	400 mW e.i.r.p.	Radiodetermination: GBSAR detection, movement and alert applications	See annex E
24,00 GHz to 24,25 GHz	100 mW e.i.r.p.	Generic use and Radiodetermination: radar, detection, movement and alert applications	

3.2 Test Procedure

According to section 7.1.2 of the standard EN 300440-1, the test procedure shall be as follows:

- Using a suitable means, the output of the transmitter shall be connected to the spectrum analyzer, the spectrum analyzer 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.
- The average output power of the transmitter shall be determined using the spectrum analyzer. 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:

$$P = A + G + 10 \log (1/x);$$
- The measurement shall be repeated at the lowest, the middle, and the highest frequency of the stated frequency range. These frequencies shall be recorded. FHSS equipment shall be made to hop continuously to each of these three frequencies separately. These measurements shall be performed at normal and extreme test conditions.

3.3 Summary of Test Results

Test Conditions	Measured Value	Antenna Gain	EIRP	Limit
	dBm	dB <i>i</i>	dBm	dBm
Low Channel (5775MHz)				
Normal	6.52	7	13.52	13.98
LTLV	6.42	7	13.42	13.98
LTHV	6.30	7	13.30	13.98
HTHV	6.09	7	13.09	13.98
HTLV	6.28	7	13.28	13.98
Middle Channel (5805MHz)				
Normal	5.89	7	12.89	13.98
LTLV	5.85	7	12.85	13.98
LTHV	5.79	7	12.79	13.98
HTHV	5.69	7	12.69	13.98
HTLV	5.76	7	12.76	13.98
High Channel (5825MHz)				
Normal	5.62	7	12.62	13.98
LTLV	5.56	7	12.56	13.98
LTHV	5.59	7	12.59	13.98
HTHV	5.61	7	12.61	13.98
HTLV	5.46	7	12.46	13.98

4. Permitted Range of Operating Frequencies

4.1 Applicable Standard

According to EN 300 440-1 section 7.2

The frequency range of the equipment is determined by the lowest and highest frequencies occupied by the power envelope in accordance with CEPT/ERC Recommendation 74-01 [2].

f_H is the highest frequency of the power envelope, it is the frequency furthest above the frequency of maximum power

where the output power drops below the level of -75 dBm/Hz spectral power density (-30 dBm if measured in a 30 kHz reference bandwidth) eirp.

f_L is the lowest frequency of the power envelope; it is the frequency furthest below the frequency of maximum power

where the output power drops below the level of -75 dBm/Hz spectral power density (-30 dBm if measured in a 30 kHz reference bandwidth) eirp.

4.2 Test Procedure

According to section 7.2.2 of the standard EN 300440-1, the test procedure shall be as follows:

1. Put the spectrum analyzer in video averaging mode with a minimum of 50 sweeps selected.
2. 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 analyzer.
3. Using the marker of the spectrum analyzer, find lowest frequency below the operating frequency at which spectral power density drops below the required value.
4. Select the highest operating frequency of the equipment under test and find the highest frequency at which the spectral power density drop below the required value.
5. The difference between the frequencies measured in step 3 and step 4 is the operating frequency range.

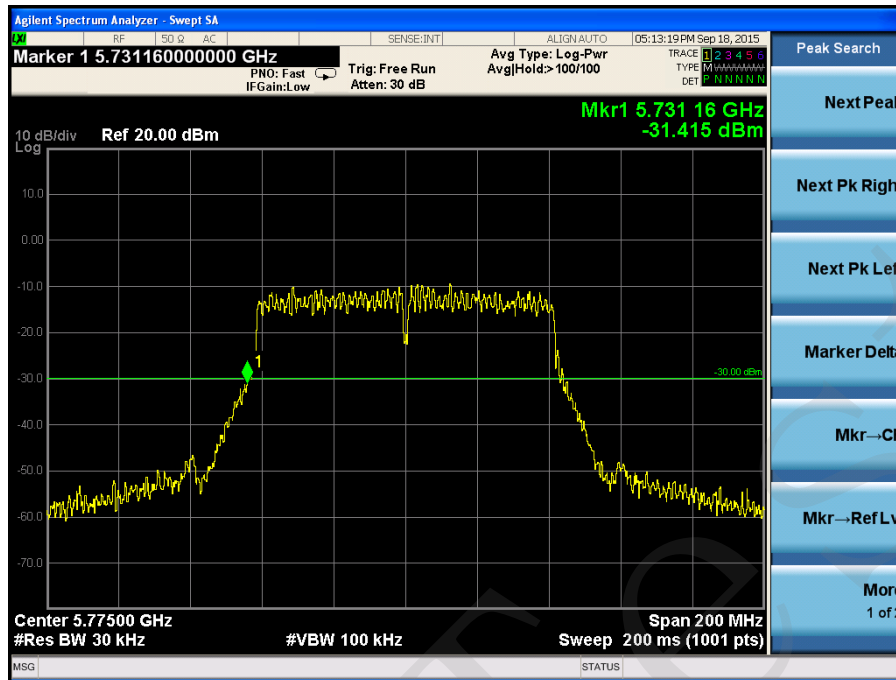
The equivalent isotropically radiated power is then calculated from the measured value, the known antenna gain, relative to an isotropic antenna, and if applicable, any losses due to cables and connectors in the measurement system.

4.3 Test Results/Plots

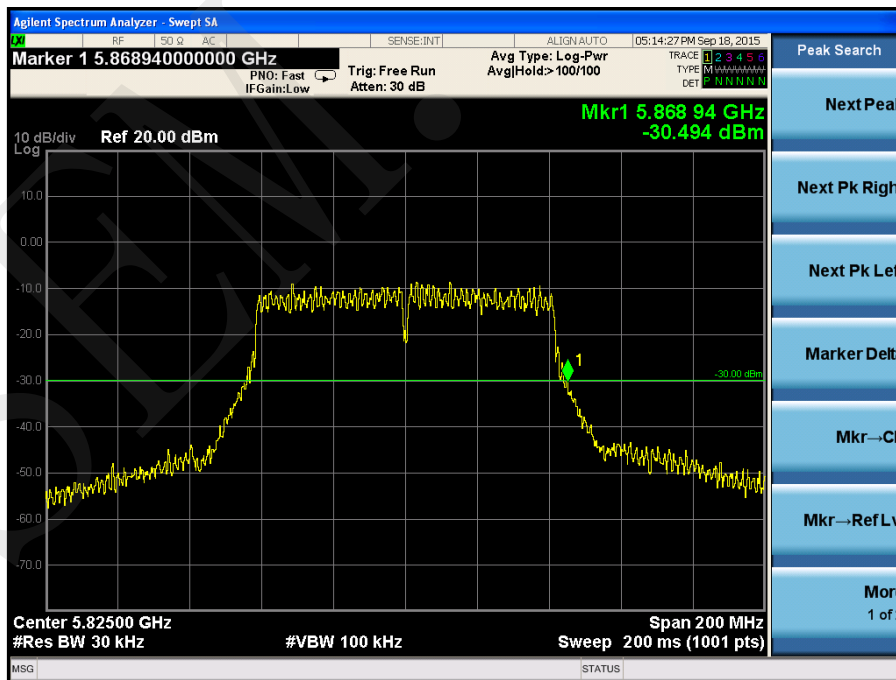
Test Conditions	Frequencies (MHz) at -30dBm/30kHz (EIRP)	
	Lowest Frequency (fL)	Highest Frequency (fH)
Normal	5731.16	5868.94
LTLV	5731.24	5868.86
LTHV	5731.24	5868.86
HTHV	5731.16	5868.94
HTLV	5731.16	5868.94
The frequency range lies within the band 5725MHz to 5875MHz (fL > 5725MHz and fH < 5875MHz), fullfit the requirements of the standard.		

Test plots hereby for reference with the normal case:

Lowest Frequency Channel Edge for reference:



Highest Frequency Channel Edge for reference:



5. Spurious Emissions

5.1 Limit of Spurious Emissions

The power of any spurious emission shall not exceed the following values given in the following table.

Table 5: Spurious emissions

Frequency ranges	47 MHz to 74 MHz 87,5 MHz to 108 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other frequencies $\leq 1\,000$ MHz	Frequencies $> 1\,000$ MHz
State			
Operating	4 nW	250 nW	1 μ W
Standby	2 nW	2 nW	20 nW

5.2 Test Procedure

The EUT was placed on a nonmetal table which is 1.5 meter above the grounded reference plane and set to work in normal operation mode. Details refer to EN 300 440-1 subclause 7.3.4.

The EUT was operating at transmitting mode to represent worst case during final qualification test.

5.3 Environmental Conditions

Temperature:	23 °C
Relative Humidity:	45%
ATM Pressure:	1014 mbar

5.4 Summary of Test Results/Plots

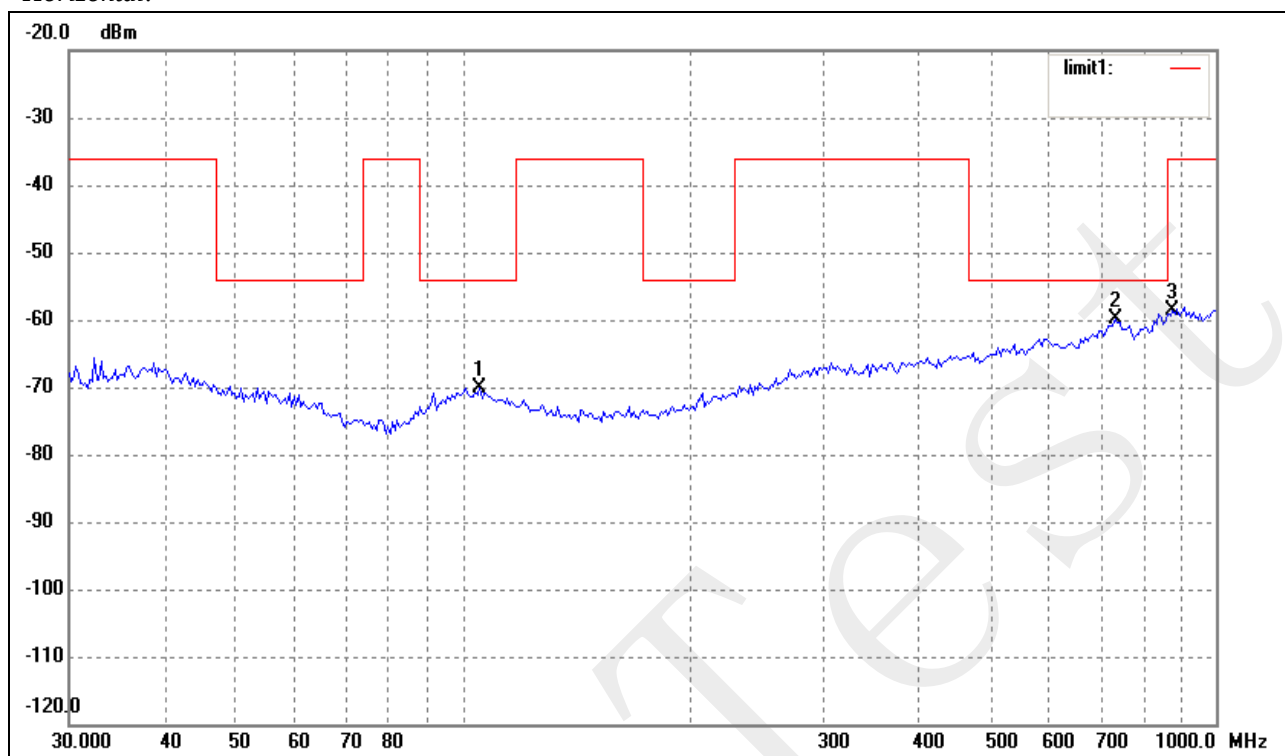
According to the data sheet, the EUT complied with the EN 300 440 standards, and had the worst margin of:

-5.41 dB at 851.0353 MHz in the Horizontal polarization, High Channel, 3Meters

Spurious Emission from 30MHz to 1GHz

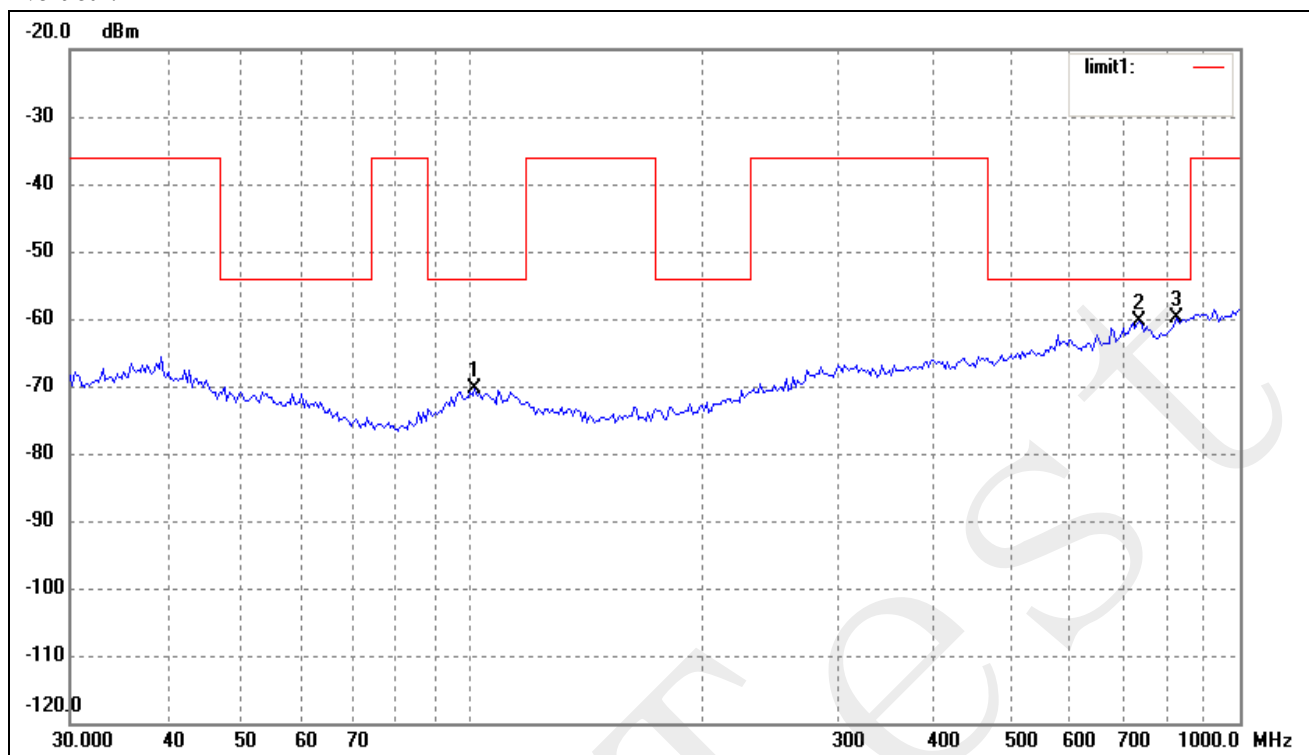
Test Mode: Transmitting-Low channel (5775MHz)

Horizontal:



No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	105.2718	-87.47	17.40	-70.07	-54.00	-16.07	ERP
2	734.4913	-86.97	26.98	-59.99	-54.00	-5.99	ERP
3	875.2470	-87.16	28.42	-58.74	-36.00	-22.74	ERP

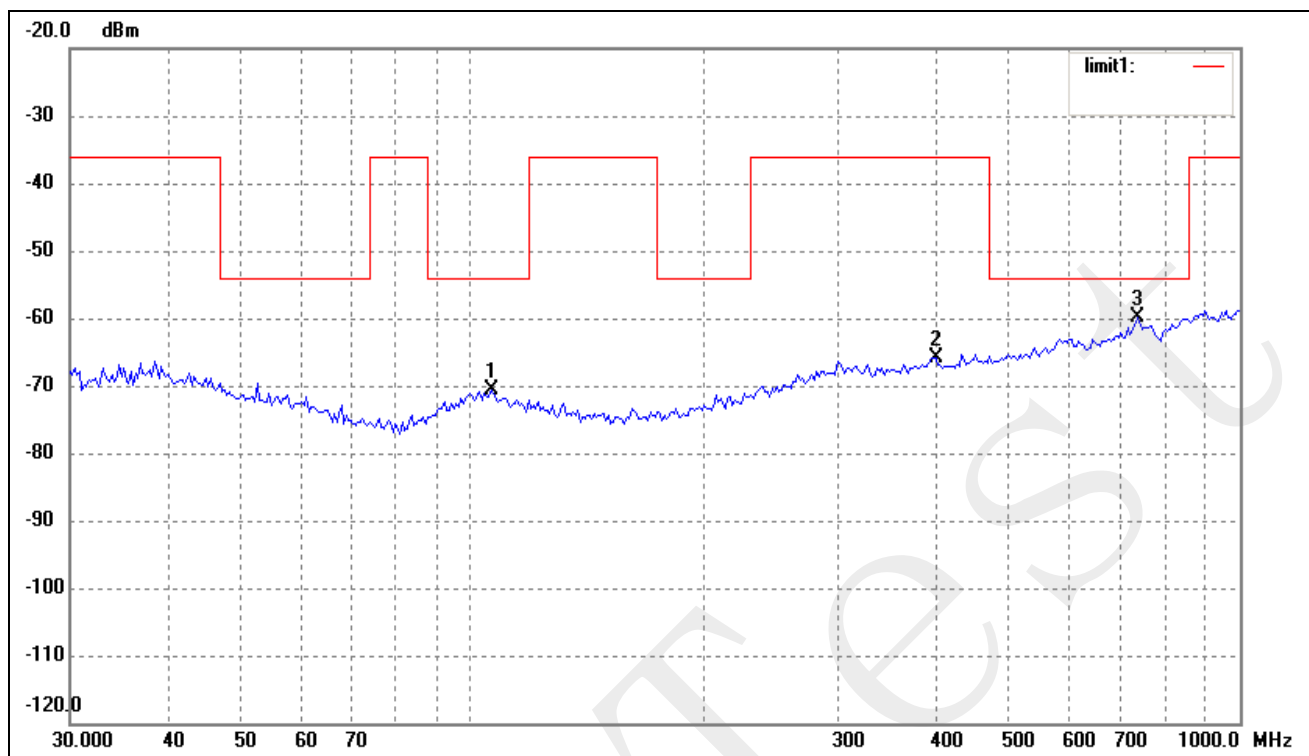
Vertical:



No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	100.9340	-88.20	17.85	-70.35	-54.00	-16.35	ERP
2	739.6605	-87.62	27.29	-60.33	-54.00	-6.33	ERP
3	827.4934	-86.67	26.91	-59.76	-54.00	-5.76	ERP

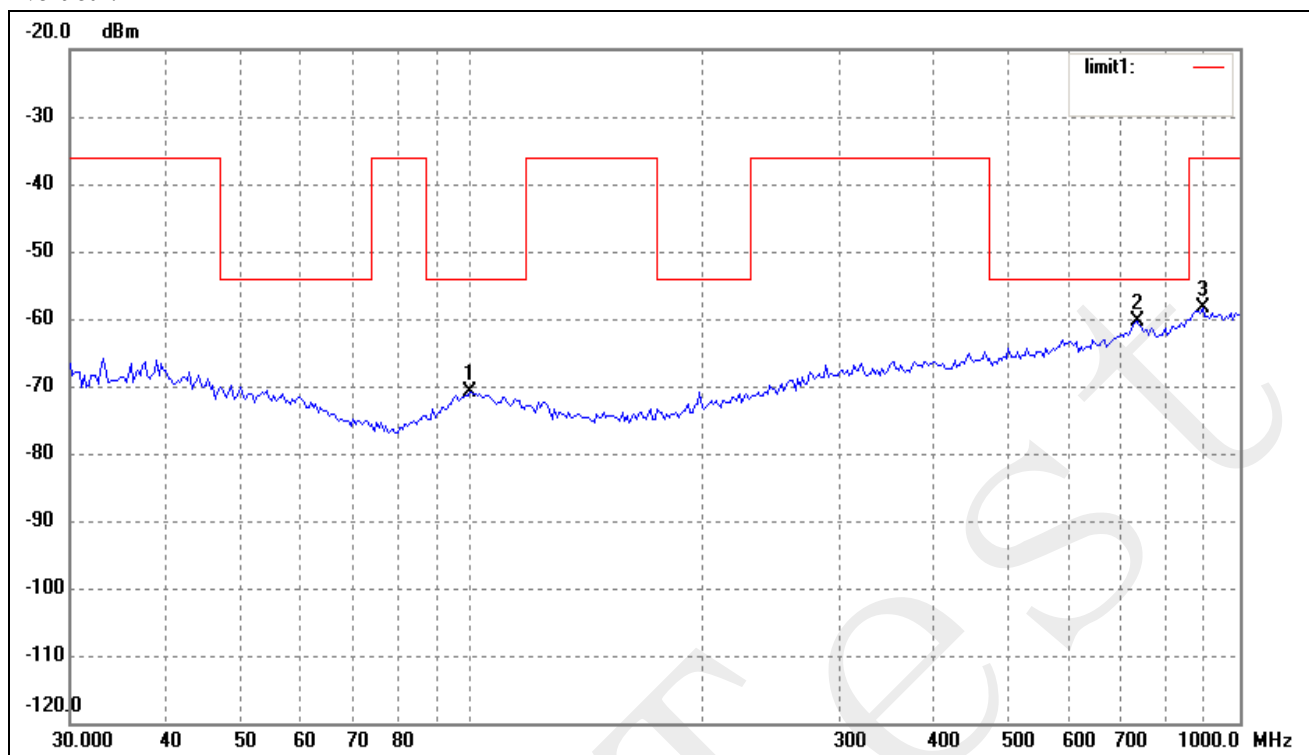
Test Mode: Transmitting-Middle channel (5805MHz)

Horizontal:



No.	Frequency (MHz)	Reading (dBm)	Correct dB	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	106.0126	-88.06	17.32	-70.74	-54.00	-16.74	ERP
2	401.8385	-87.70	21.88	-65.82	-36.00	-29.82	ERP
3	734.4913	-86.89	26.98	-59.91	-54.00	-5.91	ERP

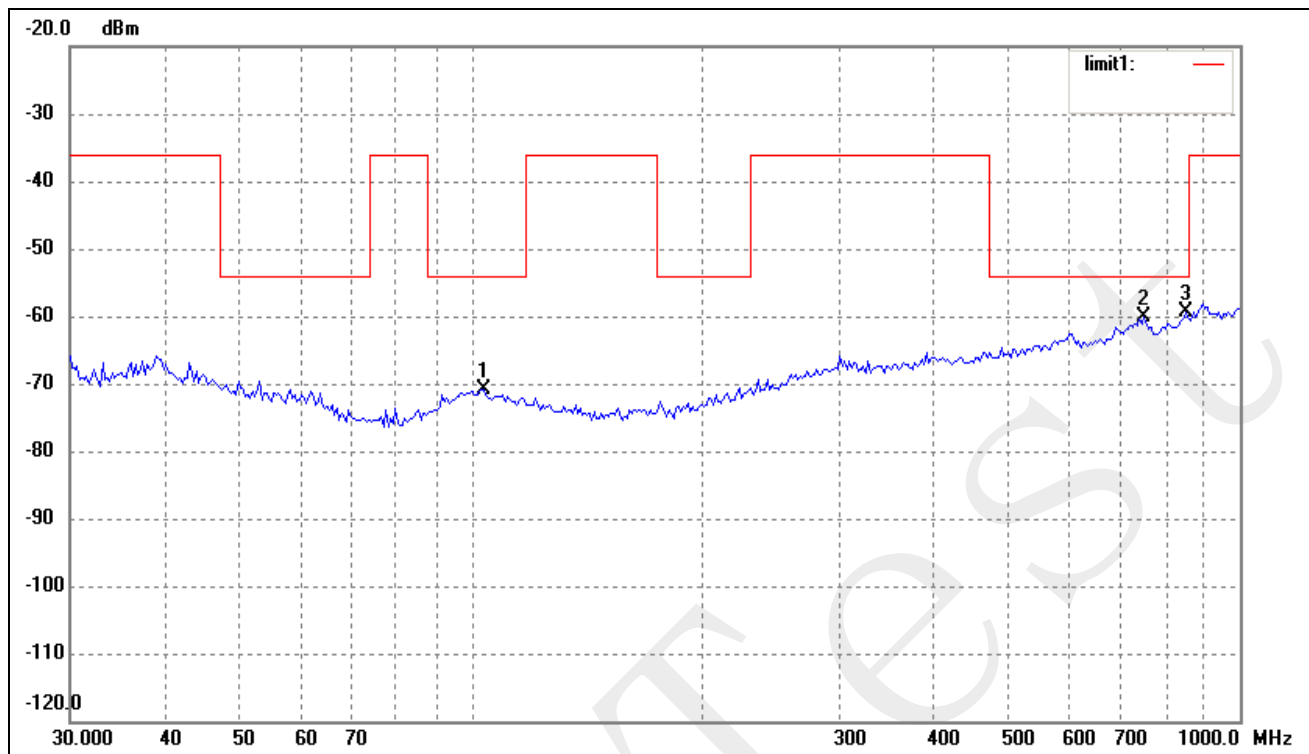
Vertical:



No.	Frequency (MHz)	Reading (dBm)	Correct dB	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	99.5281	-88.82	17.83	-70.99	-54.00	-16.99	ERP
2	734.4913	-87.28	26.98	-60.30	-54.00	-6.30	ERP
3	893.8567	-86.84	28.55	-58.29	-36.00	-22.29	ERP

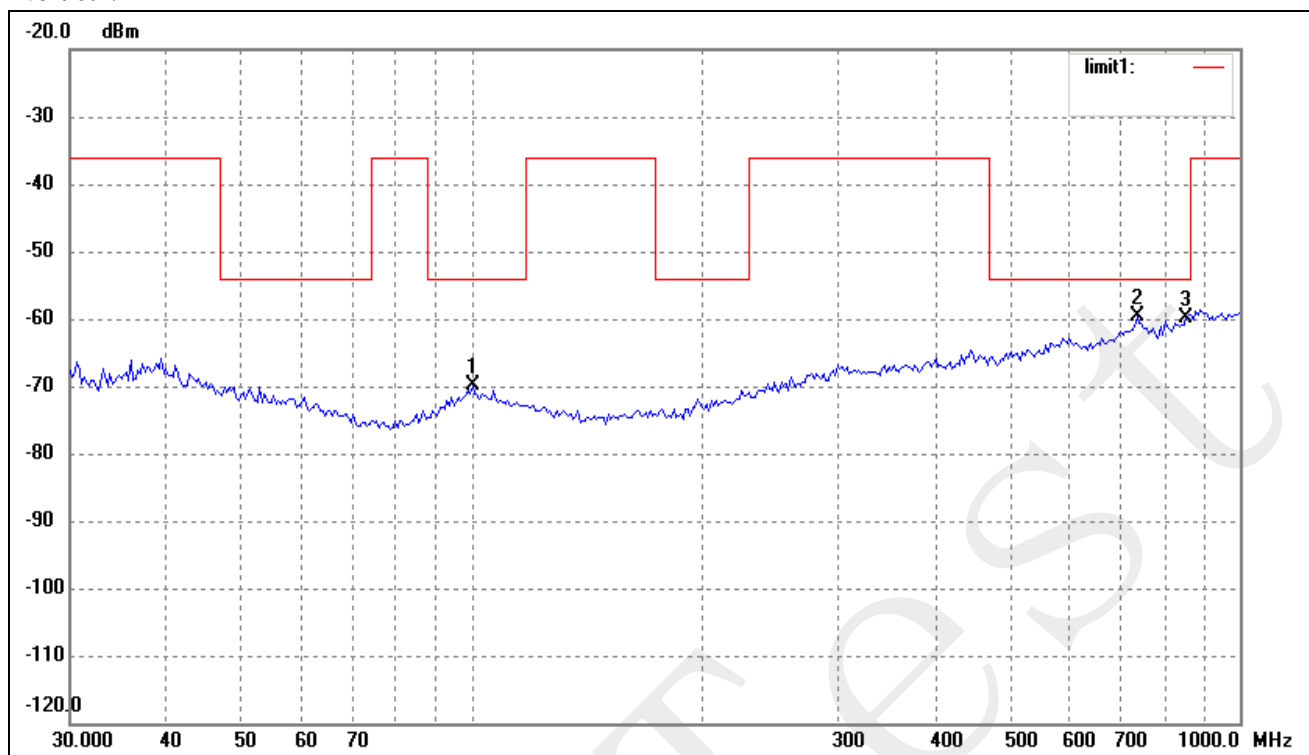
Test Mode: Transmitting-High channel (5825MHz)

Horizontal:



No.	Frequency (MHz)	Reading (dBm)	Correct dB	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	103.8055	-88.41	17.55	-70.86	-54.00	-16.86	ERP
2	750.1083	-86.91	26.87	-60.04	-54.00	-6.04	ERP
3	851.0353	-87.11	27.70	-59.41	-54.00	-5.41	ERP

Vertical:



No.	Frequency (MHz)	Reading (dBm)	Correct dB	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	100.2286	-87.78	17.92	-69.86	-54.00	-15.86	ERP
2	734.4913	-86.52	26.98	-59.54	-54.00	-5.54	ERP
3	851.0353	-87.46	27.70	-59.76	-54.00	-5.76	ERP

Spurious Emission Above 1GHz

Frequency	Reading	Correct	Result	Limit	Margin	Polar
(MHz)	(dBm)	dB	(dBm)	(dBm)	(dB)	H/V
Low Channel-5775MHz						
11550	-51.43	3.1	-48.33	-30	-18.33	H
17325	-53.45	4.2	-49.25	-30	-19.25	H
11550	-51.27	3.1	-48.17	-30	-18.17	V
17325	-53.75	4.2	-49.55	-30	-19.55	V
Middle Channel-5805MHz						
11610	-51.28	3.1	-48.18	-30	-18.18	H
17415	-52.73	4.5	-48.23	-30	-18.23	H
11610	-51.36	3.1	-48.26	-30	-18.26	V
17415	-55.53	4.5	-51.03	-30	-21.03	V
High Channel-5825MHz						
11650	-51.26	3.1	-48.16	-30	-18.16	H
17475	-55.54	4.5	-51.04	-30	-21.04	H
11650	-49.37	3.1	-46.27	-30	-16.27	V
17475	-54.46	4.5	-49.96	-30	-19.96	V

Note: Testing is carried out with frequency rang 30MHz to 40 GHz, which above 4th Harmonics are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

6. Duty Cycle

6.1 Applicable Standard

Test is conducting under the description of ETSI EN 300 440-1 section 7.4. Where an acknowledgement is required, the additional transmitter on-time shall be included and declared by the manufacturer.

Frequency Band	Duty cycle	Application	Notes
2 400 MHz to 2 483,5 MHz	No Restriction	Generic use	
2 400 MHz to 2 483,5 MHz	No Restriction	Detecting and movement and alert applications	
(a) 2 446 MHz to 2 454 MHz	No Restriction	RFID	See annex C
(b) 2 446 MHz to 2 454 MHz	≤ 15 %	RFID	See annex C
5 725 MHz to 5 875 MHz	No Restriction	Generic use	
9 200 MHz to 9 500 MHz	No Restriction	Detecting and movement and alert applications	
9 500 MHz to 9 975 MHz	No Restriction	Detecting and movement and alert applications	
10,5 GHz to 10,6 GHz	No Restriction	For detecting and movement and alert applications	
13,4 GHz to 14,0 GHz	No Restriction	Detecting and movement and alert applications	
17,1 GHz to 17,3 GHz	DAA or equivalent techniques	GBSAR detecting and movement and alert applications	See annex E
24,00 GHz to 24,25 GHz	No Restriction	Generic use and for detecting and movement and alert applications	

6.2 Test Procedure

Test is conducting under the description of ETSI EN 300 440-1 section 7.4.2.

6.3 Environmental Conditions

Temperature:	22 °C
Relative Humidity:	45%
ATM Pressure:	1019 mbar

6.4 Summary of Test Results/Plots

For generic use devices operating at frequency range 5725-5875MHz, according to ETSI EN 300 440-1, the duty cycle is no restriction.

7. Receiver Spurious Emissions

7.1 Limit of Spurious Emissions

According to the ETSI EN 300 440-1 section 8.3.5, the power of any spurious emission shall not exceed 2 nW in the range 25 MHz to 1 GHz and shall not exceed 20 nW on frequencies above 1 GHz.

7.2 Test Procedure

The EUT was placed on a nonmetal table which is 1.5 meter above the grounded reference plane and set to work in receiving operation mode. For more detail please refer to the ETSI EN 300 440-1 section 8.3.4.

The EUT was operating at normal to represent worst case during final qualification test.

7.3 Environmental Conditions

Temperature:	22 °C
Relative Humidity:	45%
ATM Pressure:	1019 mbar

7.4 Summary of Test Results/Plots

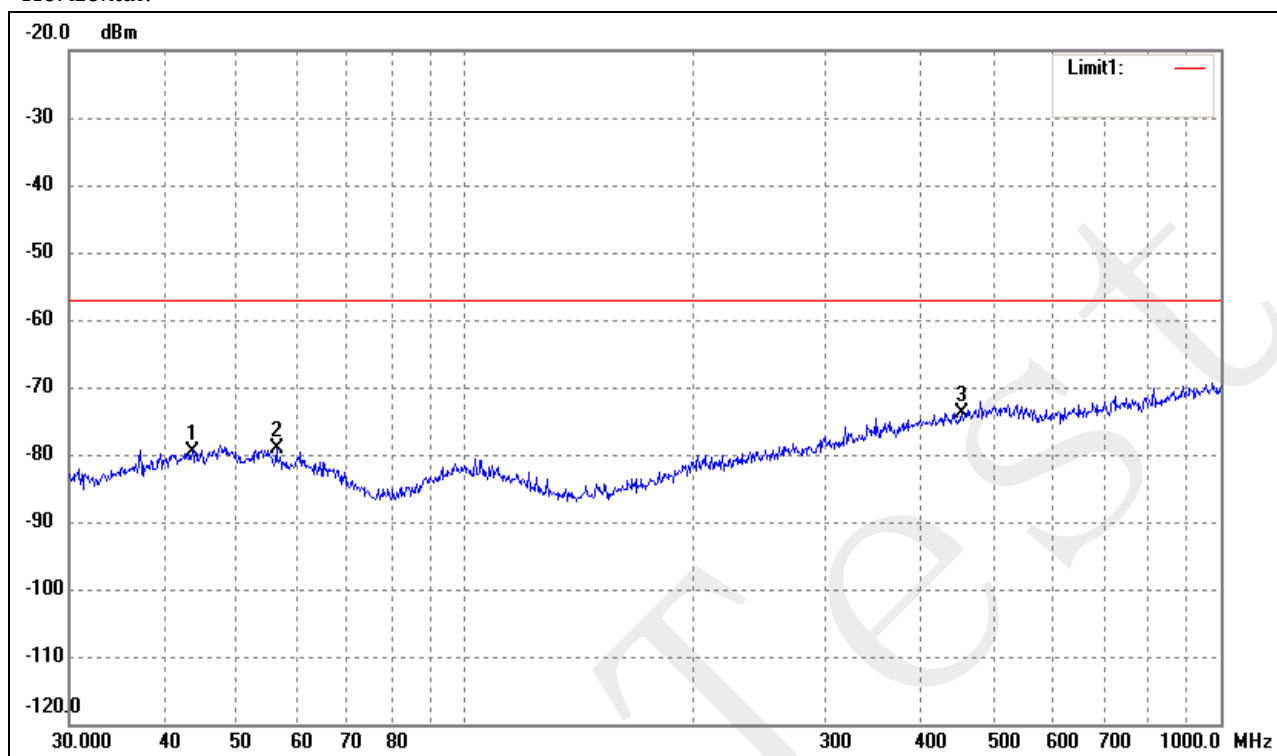
According to the data sheet, the EUT complied with the EN 300 440 standards, and had the worst margin of:

-14.26 dB at 737.0714 MHz in the Vertical polarization, Receiving mode, 3Meters

Receiver Spurious Emission From 30MHz To 1GHz

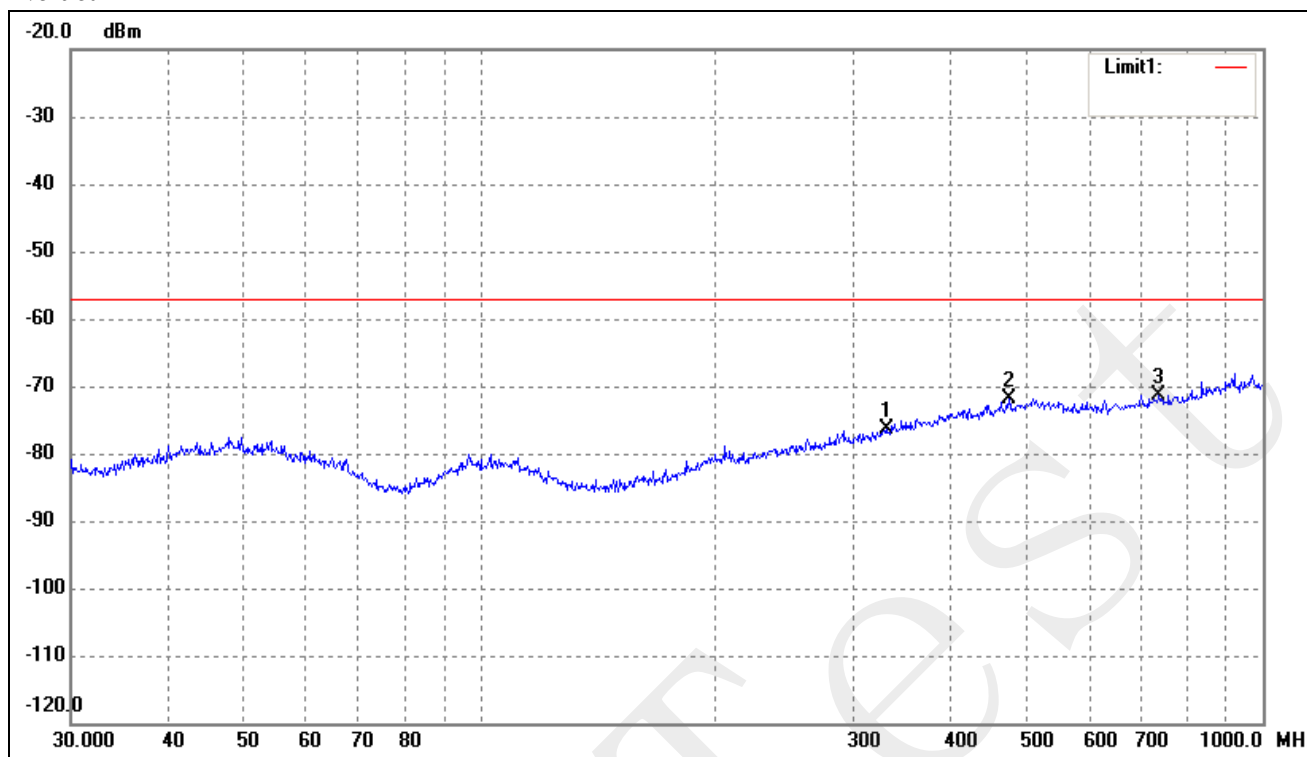
Test Mode: Receiving mode

Horizontal:



No.	Frequency (MHz)	Reading (dBm)	Correct dB	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	43.6585	-71.77	-7.73	-79.50	-57.00	-22.50	ERP
2	56.3948	-71.04	-8.16	-79.20	-57.00	-22.20	ERP
3*	454.3100	-71.70	-2.11	-73.81	-57.00	-16.81	ERP

Vertical

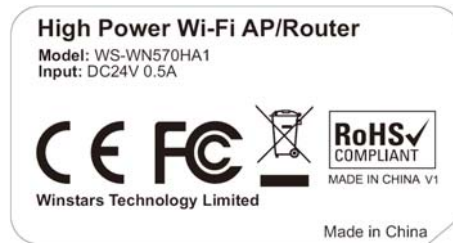


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBm)	dB	(dBm)	(dBm)	(dB)	
1	330.1949	-83.22	6.80	-76.42	-57.00	-19.42	ERP
2	473.8347	-82.08	10.09	-71.99	-57.00	-14.99	ERP
3*	737.0714	-81.44	10.18	-71.26	-57.00	-14.26	ERP

Note: Testing is carried out with frequency rang 30MHz to 10th Harmonics frequency, which above 1GHz are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

EXHIBIT 1 - PRODUCT LABELING

Proposed CE Label Format



Specifications: Text is Black in color and is justified. Labels are printed in indelible ink on permanent adhesive backing or silk-screened onto the EUT or shall be affixed at a conspicuous location on the EUT. The 'CE' marking must be affixed to the EUT or to its data plate. Where this is not possible or not warranted on account of the nature of the apparatus, it must be affixed to the packaging, if any, and to the accompanying documents. The 'CE' marking must have a height of at least 5 mm. If the 'CE' marking is reduced or enlarged the proportions given in the above graduated drawing must be respected.

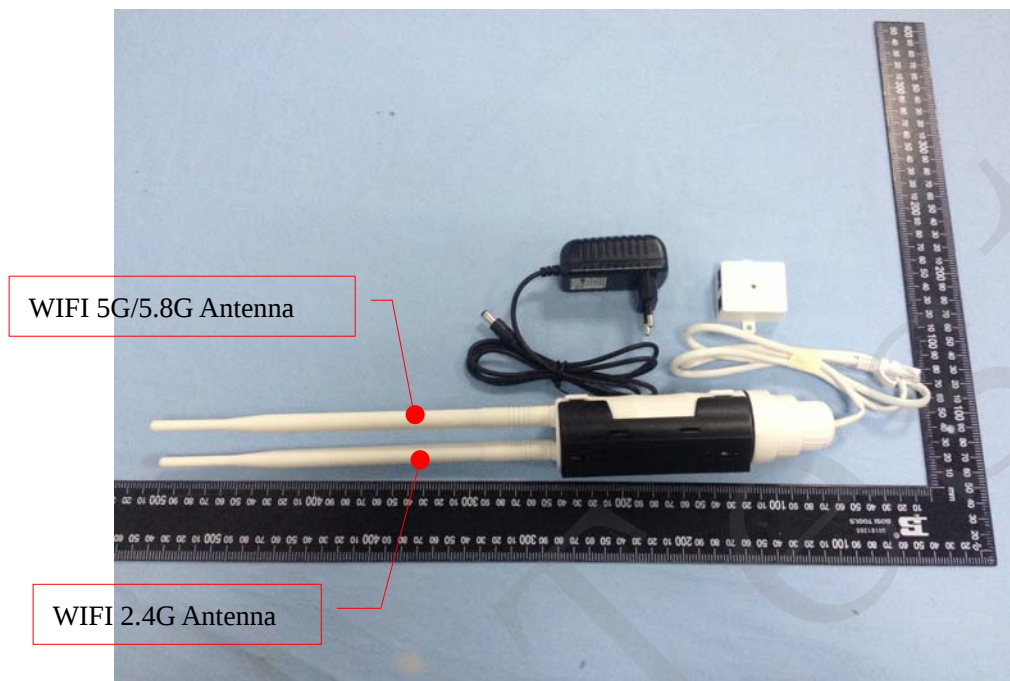
Proposed Label Location on EUT

CE Label Location



EXHIBIT 2 - EUT PHOTOGRAPHS

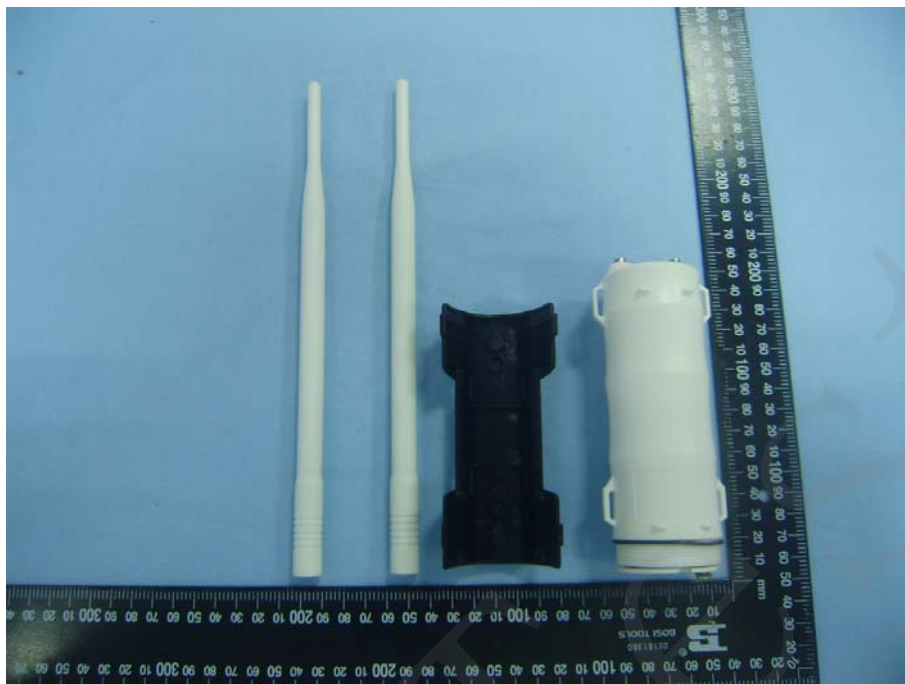
EUT View 1



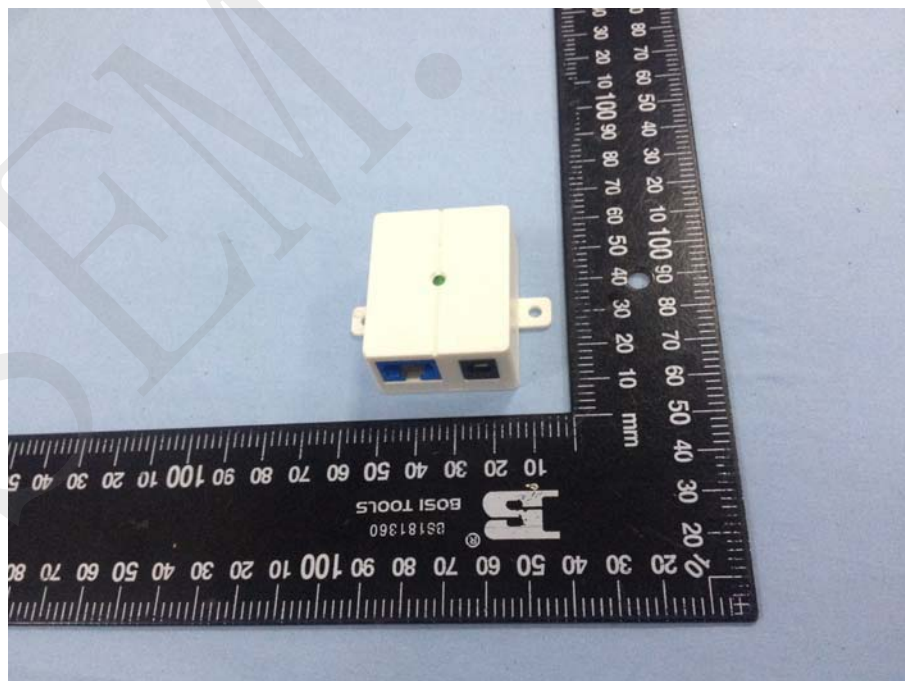
EUT View 2

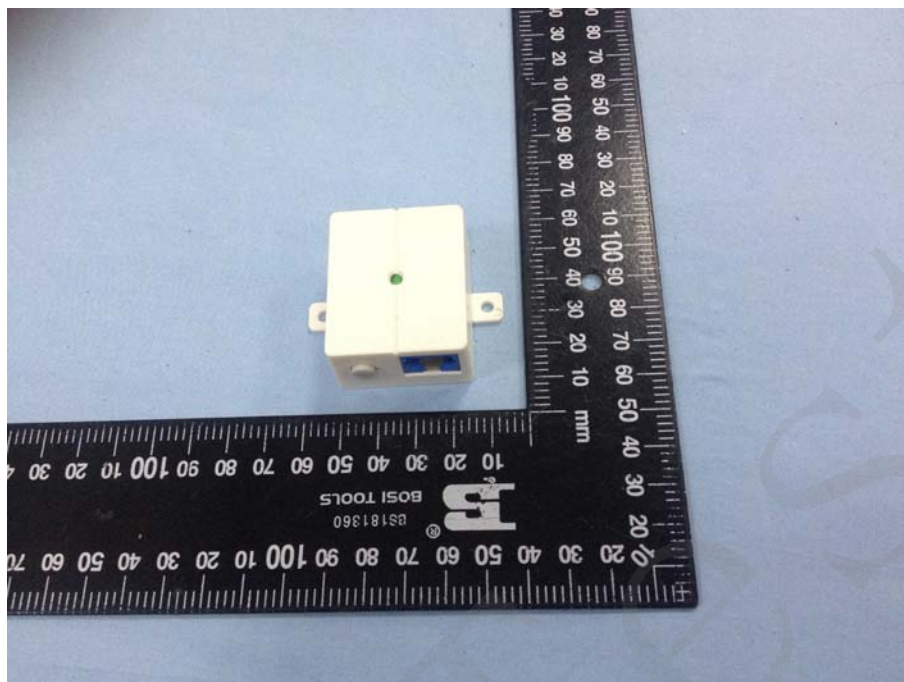
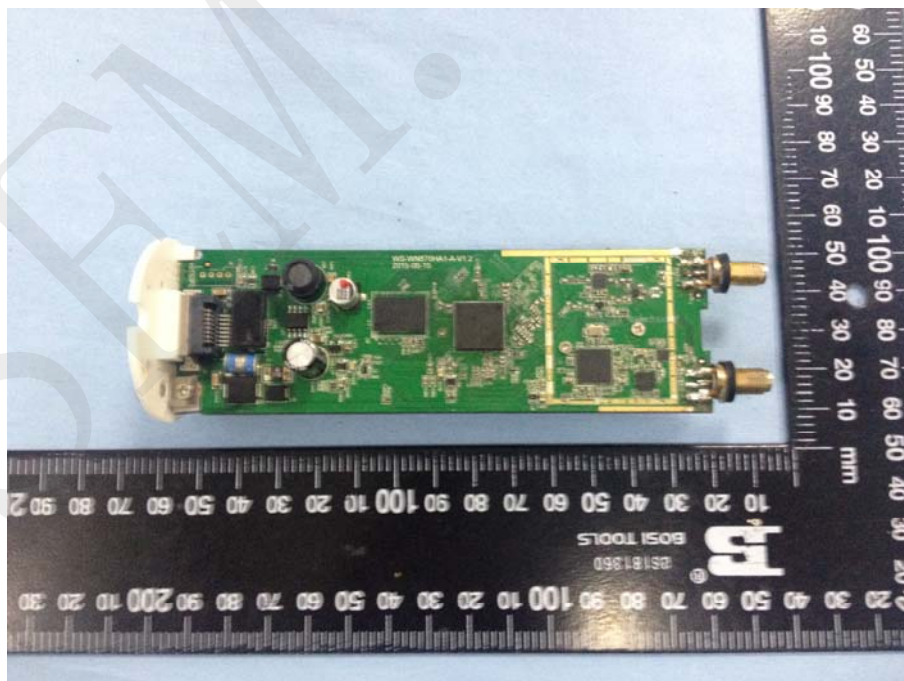


EUT View 3



EUT View 4



EUT View 5**EUT Housing and Board View 1**

EUT Housing and Board View 2

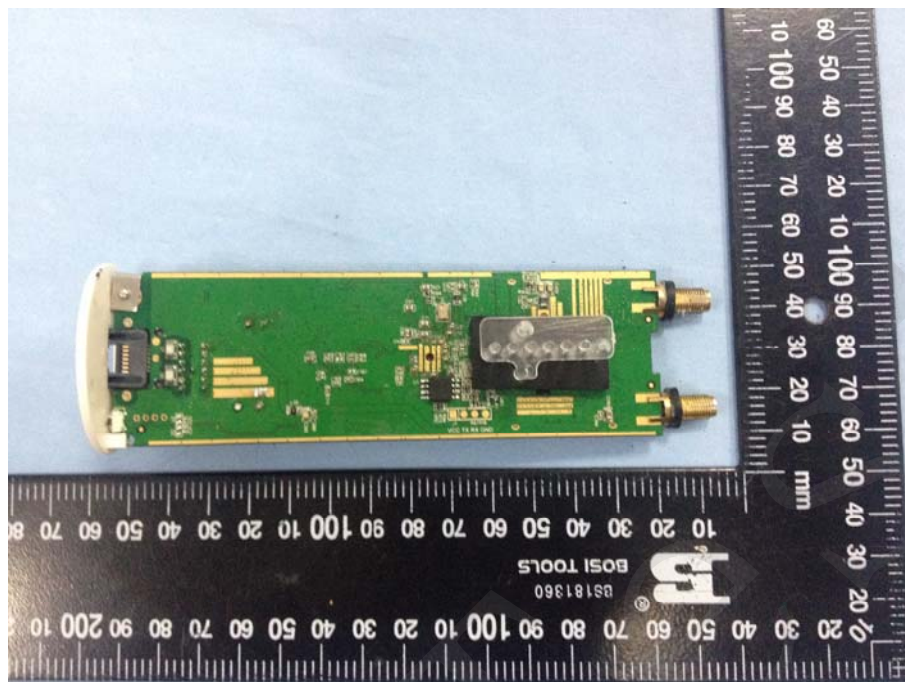


EXHIBIT 3 - TEST SETUP PHOTOGRAPHS

Spurious Emission Test Setup (Below 1GHz)



Spurious Emission Test Setup (Above 1GHz)



Extreme Conditions Test Setup



***** END OF REPORT *****