RF TEST REPORT

Applicant	Mobiwire SAS
FCC ID	QPN-HOTAH
Product	MobiWire Hotah
Brand	MobiWire
Model	MobiWire Hotah
Report No.	R1809A0432-R6
Issue Date	November 23, 2018

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15E (2018)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Peng Tao

Performed by: Peng Tao

Kai Xu

Approved by: Kai Xu

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Summary of measurement results

Number	Summary of measurements of results	Clause in FCC rules	Verdict
1	Average conducted output power	15.407(a)	PASS
2	Occupied bandwidth	15.407(e)	PASS
3	Frequency stability	15.407(g)	PASS
4	Maximum power spectral density	15.407(a)	PASS
5	Unwanted Emissions	15.407(b)	PASS
6	Conducted Emissions	15.207	PASS
Date of Testing: September 24, 2018 ~November 5, 2018			

1. Test Laboratory

1.1. Notes of the test report

This report shall not be reproduced in full or partial, without the written approval of **TA technology (shanghai) co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test facility

CNAS (accreditation number: L2264)

TA Technology (Shanghai) Co., Ltd. has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS).

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

IC (recognition number is 8510A)

TA Technology (Shanghai) Co., Ltd. has been listed by industry Canada to perform electromagnetic emission measurement.

VCCI (recognition number is C-4595, T-2154, R-4113, G-10766)

TA Technology (Shanghai) Co., Ltd. has been listed by industry Japan to perform electromagnetic emission measurement.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

1.3. Testing Location

Company:	TA Technology (Shanghai) Co., Ltd.
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2. General Description of Equipment under Test

Client Information

Applicant	Mobiwire SAS
Applicant address	79 avenue Francois Arago, 92000 NANTERRE France
Manufacturer	Mobiwire SAS
Manufacturer address	79 avenue Francois Arago, 92000 NANTERRE France

General information

EUT Description	
Model	MobiWire Hotah
IMEI	IMEI 1: 352361100000124 IMEI 2: 352361100000132
Hardware Version	V01
Software Version	V01
Power Supply	Battery/AC adapter
Antenna Type	Internal Antenna
Antenna Gain	-1.5dBi
additional beamforming gain	NA
Test Mode(s)	U-NII-2A(5250MHz-5350MHz) U-NII-2C(5470MHz-5725MHz without 5600MHz -5650MHz)
Modulation Type	802.11a
Max. Conducted Power	14.33dBm
Operating Frequency Range(s)	U-NII-2A:5250-5350MHz U-NII-2C:5470-5725MHz (without 5600MHz -5650MHz)
Operating temperature range:	-20 ° C to 60° C
Operating voltage range:	3.6 V to 4.35 V
State AC voltage:	3.8V
EUT Accessory	
Battery	Manufacturer: Ningbo Veken Battery Co.,LTD Model: 178144515
Adapter 1	Manufacturer: DongGuan Aohai Power Technology Co.,Ltd Model: A88-502000
Adapter 2	Manufacturer: Dongguan Aohai Power Technology CO.,

	LTD Model: A824-050200U
Adapter 3	Manufacturer: Dongguan Aohai Power Technology CO., LTD Model: A70-502000
Earphone	Manufacturer: Shenzhen Juwei Electronics Co.,Ltd Model: JWEP0752-M01
USB Cable	Manufacturer: Shenzhen Juwei Electronics Co.,Ltd Model: USB2.0 A/M TO TYPE C/M CABLE 1M
Note: The information of the EUT is declared by the manufacturer. 2. There is more than one Adapter, each one should be applied throughout the compliance test respectively, and however, only the worst case (Adapter 1) will be recorded in this report.	

3. Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC CFR47 Part 15E (2018) Unlicensed National Information Infrastructure Devices

ANSI C63.10 (2013)

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

4. Test Configuration

Test Mode

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate. Preliminary tests have been done on all the configuration for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates are shown as following table.

Band	**Data Rate**
802.11a	6 Mbps

Wireless Technology and Frequency Range

Wireless Technology		Bandwidth	Channel	Frequency
Wi-Fi	U-NII-2A	20 MHz	52	5260MHz
			56	5280MHz
			60	5300MHz
			64	5320MHz
	U-NII-2C	20 MHz	100	5500MHz
			104	5520MHz
			108	5540MHz
			112	5560MHz
			116	5580MHz
			132	5660MHz
			136	5680MHz
			140	5700MHz
Does this device support TPC Function? ☒Yes ☐No				
Does this device support TDWR Band? ☐Yes ☒No				

5. Test Case Results

5.1. Occupied Bandwidth

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

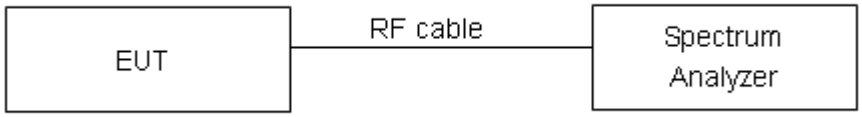
For U-NII-1/U-NII-2A/U-NII-2C, set RBW ≈1% OCB kHz, VBW ≥ 3 × RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in the fundamental emission.

For U-NII-3, Set RBW = 100 kHz, VBW ≥ 3 × RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

Use the 99 % power bandwidth function of the instrument

Test Setup



Limits

Rule FCC Part §15.407(e)

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 936 Hz.

Test Results:

U-NII-2A

Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	5260	16.836	26.96	PASS
	5300	16.660	24.31	PASS
	5320	16.697	25.99	PASS

U-NII-2C

Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	5500	16.600	25.02	PASS
	5580	16.604	21.11	PASS
	5700	16.608	22.90	PASS

U-NII-2A, 802.11a

Carrier frequency (MHz): 5260

U-NII-2C, 802.11a

Carrier frequency (MHz): 5500

U-NII-2A, 802.11a

Carrier frequency (MHz): 5300

U-NII-2C, 802.11a

Carrier frequency (MHz): 5580

U-NII-2A, 802.11a

Carrier frequency (MHz):5320

U-NII-2C, 802.11a

Carrier frequency (MHz):5700

5.2. Average Power Output –Conducted

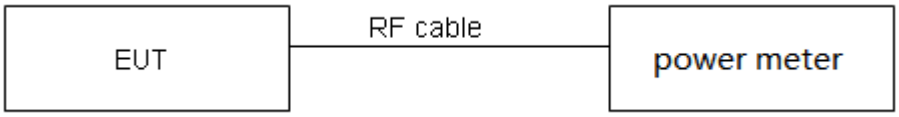
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

During the process of the testing, The EUT was connected to the average power meter through an external attenuator and a known loss cable. The EUT is max power transmission with proper modulation. We use Maximum average Conducted Output Power Level Method in KDB789033 for this test

Test Setup



Limits

Rule FCC Part 15.407(a)(1)(2)(3)
(1) For the band 5.15-5.25 GHz.
(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude

the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3)For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 0.44 dB.

Test Results

Band	T_{on} (ms)	$T_{(on+off)}$ (ms)	Duty cycle	Duty cycle correction Factor(dB)
802.11a	1.39	1.43	0.97	0.11
Note: when Duty cycle>0.98, Duty cycle correction Factor not required.				

Single Antenna Power Index						
Packet Type	CH52	CH60	CH64	CH100	CH116	CH140
802.11a	17	17	17	17	17	17

Network Standards		Channel/Frequency (MHz)	B=26 dB bandwidth (MHz)	Limit 11 dBm + 10 log B (dBm)	Final Limit(dBm)
U-NII-2A	802.11a	52/5260	26.96	25.31>24	24
		60/5300	24.31	24.86>24	24
		64/5320	25.99	25.15>24	24
U-NII-2C	802.11a	100/5500	25.02	24.98>24	24
		116/5580	21.11	24.24>24	24
		140/5700	22.90	24.60>24	24
Note: 250mW=24dBm					

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

U-NII-2A

Network Standards	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	52/5260	14.22	14.33	24.00	PASS
	60/5300	14.16	14.27	24.00	PASS
	64/5320	13.99	14.10	24.00	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor					

U-NII-2C

Network Standards	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	100/5500	13.92	14.03	24.00	PASS
	116/5580	13.88	13.99	24.00	PASS
	140/5700	12.99	13.10	24.00	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor					

5.3. Frequency Stability

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

1. Frequency stability with respect to ambient temperature

a) Supply the EUT with a nominal ac voltage or install a new or fully charged battery in the EUT. If possible, a dummy load shall be connected to the EUT because an antenna near the metallic walls of an environmental test chamber could affect the output frequency of the EUT. If the EUT is equipped with a permanently attached, adjustable-length antenna, then the EUT shall be placed in the center of the chamber with the antenna adjusted to the shortest length possible. Turn ON the EUT and tune it to one of the number of frequencies shown in 5.6.

b) Couple the unlicensed wireless device output to the measuring instrument by connecting an antenna to the measuring instrument with a suitable length of coaxial cable and placing the measuring antenna near the EUT (e.g., 15 cm away), or by connecting a dummy load to the measuring instrument, through an attenuator if necessary.

c) Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).

d) Turn the EUT OFF and place it inside the environmental temperature chamber. For devices that have oscillator heaters, energize only the heater circuit.

e) Set the temperature control on the chamber to the highest specified in the regulatory requirements for the type of device and allow the oscillator heater and the chamber temperature to stabilize.

f) While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.

g) Measure the frequency at each of frequencies specified in 5.6.

h) Switch OFF the EUT but do not switch OFF the oscillator heater.

i) Lower the chamber temperature by not more that 10 C, and allow the temperature inside the chamber to stabilize.

j) Repeat step f) through step i) down to the lowest specified temperature.

2. Frequency stability when varying supply voltage

Unless otherwise specified, these tests shall be made at ambient room temperature (+15 C to +25 C). An antenna shall be connected to the antenna output terminals of the EUT if possible. If the EUT is equipped with or uses an adjustable-length antenna, then it shall be fully extended.

a) Supply the EUT with nominal voltage or install a new or fully charged battery in the EUT. Turn ON the EUT and couple its output to a frequency counter or other frequency-measuring instrument.

b) Tune the EUT to one of the number of frequencies required in 5.6. Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
c) Measure the frequency at each of the frequencies specified in 5.6.
d) Repeat the above procedure at 85% and 115% of the nominal supply voltage.

Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 936Hz

Test Results

Voltage (V)	Temperature (°C)	U-NII-2A Test Results			
		5300MHz			
		1min	2min	5min	10min
3.8	-20	5300.004355	5300.000704	5299.997157	5299.988932
3.8	-10	5299.995432	5299.999027	5299.990809	5299.987446
3.8	0	5299.986056	5299.989450	5299.986202	5299.982953
3.8	10	5299.978705	5299.982171	5299.981031	5299.982651
3.8	20	5299.971338	5299.973579	5299.971426	5299.975994
3.8	30	5299.967259	5299.972806	5299.965363	5299.974770
3.8	40	5299.960000	5299.965583	5299.956358	5299.969397
3.8	50	5299.950254	5299.955952	5299.948677	5299.967732
3.6	20	5299.941061	5299.955949	5299.945727	5299.961351
4.35	20	5299.931208	5299.952693	5299.937482	5299.958701
MHz		-0.068792	-0.047307	-0.062518	-0.041299
PPM		-12.979570	-8.925796	-11.795904	-7.792247

Voltage (V)	Temperature (°C)	U-NII-2C Test Results			
		5580MHz			
		1min	2min	5min	10min
3.8	-20	5580.007545	5579.998159	5579.992165	5579.987716
3.8	-10	5579.999790	5579.992329	5579.985563	5579.986648
3.8	0	5579.991607	5579.986143	5579.976087	5579.983789
3.8	10	5579.990101	5579.978770	5579.976054	5579.979526
3.8	20	5579.980417	5579.972124	5579.967326	5579.974735
3.8	30	5579.976814	5579.964756	5579.965708	5579.965158
3.8	40	5579.973308	5579.961837	5579.962081	5579.960894
3.8	50	5579.965836	5579.960814	5579.955046	5579.953578
3.6	20	5579.957663	5579.958401	5579.949075	5579.945040
4.35	20	5579.955142	5579.956670	5579.946571	5579.938253
MHz		-0.044858	-0.043330	-0.053429	-0.061747
PPM		-8.039110	-7.765269	-9.575176	-11.065779

5.4. Power Spectral Density

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

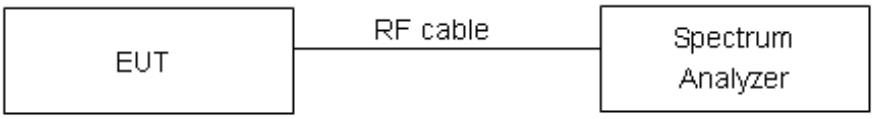
The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

Set RBW = 500 kHz, VBW =1.5MHz for the band 5.725-5.85 GHz

Set RBW = 1 MHz, VBW =3MHz for the band 5.150-5.250 GHz

The conducted PSD is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically.

Test setup



Limits

Rule FCC Part 15.407(a)(1)/ Part 15.407(a)(2) / Part 15.407(a)(3)
For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmittingantennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Frequency Bands/MHz	Limits
5150-5250	11dBm/MHz
5.25-5.35 GHz and 5.47-5.725 GHz	11dBm/MHz
5725-5850	30dBm/500kHz

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 0.75dB.

Test Results:

Note: Power Spectral Density =Read Value+Duty cycle correction factor

U-NII-2A

Network Standards	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	52	3.406	3.52	11	PASS
	60	3.662	3.77	11	PASS
	64	3.662	3.77	11	PASS

U-NII-2C

Network Standards	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	100	3.843	3.95	11	PASS
	116	4.412	4.52	11	PASS
	140	3.284	3.39	11	PASS

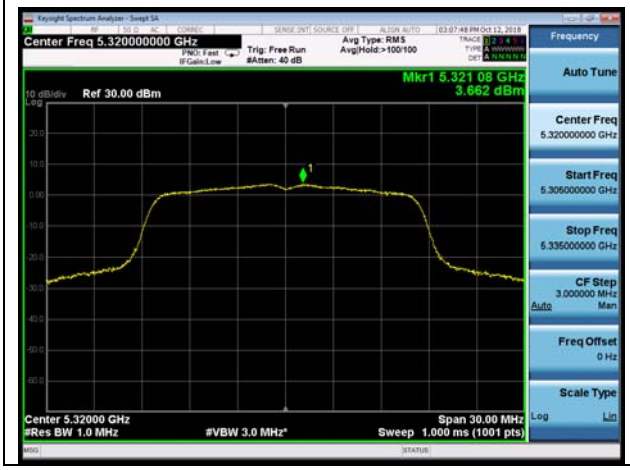
U-NII-2A, 802.11a, Channel No.: 52

U-NII-2C, 802.11a, Channel No.: 100

U-NII-2A, 802.11a, Channel No.: 60

U-NII-2C, 802.11a, Channel No.: 116

U-NII-2A, 802.11a, Channel No.: 64



U-NII-2C, 802.11a, Channel No.: 140

5.5. Unwanted Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The test set-up was made in accordance to the general provisions of ANSI C63.10-2013. The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration.
Sweep the whole frequency band range from 9kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

During the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.
Set the spectrum analyzer in the following:
Below 1GHz (detector: Peak and Quasi-Peak)
RBW=100kHz / VBW=300kHz / Sweep=AUTO
Above 1GHz (detector: Peak):
I) Peak emission levels are measured by setting the instrument as follows:
1) RBW = 1 MHz.
2) VBW ≥ [3 × RBW]
3) Detector = peak.
4) Sweep time = auto.
5) Trace mode = max hold.
6) Allow sweeps to continue until the trace stabilizes. Note that if the transmission is not continuous, then the time required for the trace to stabilize will increase by a factor of approximately 1 / D, where D is the duty cycle.

II) Average emission levels are measured by setting the instrument as follows:
a) RBW = 1 MHz.
b) VBW ≥ [3 × RBW].
c) Detector = RMS (power averaging), if [span / (# of points in sweep)] ≤ RBW / 2. Satisfying this condition can require increasing the number of points in the sweep or reducing the span. If the condition is not satisfied, then the detector mode shall be set to peak.
d) Averaging type = power (i.e., rms) (As an alternative, the detector and averaging type may be set for linear voltage averaging. Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.)

e) Sweep time = auto.

f) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, then the number of traces shall be increased by a factor of 1 / D, where D is the duty cycle. For example, with 50% duty cycle, at least 200 traces shall be averaged. (If a specific emission is demonstrated to be continuous—i.e., 100% duty cycle—then rather than turning ON and OFF with the transmit cycle, at least 100 traces shall be averaged.)

g) If tests are performed with the EUT transmitting at a duty cycle less than 98%, then a correction factor shall be added to the measurement results prior to comparing with the emission limit, to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:

1) If power averaging (rms) mode was used in the preceding step e), then the correction factor is [10 log (1 / D)], where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB shall be added to the measured emission levels.

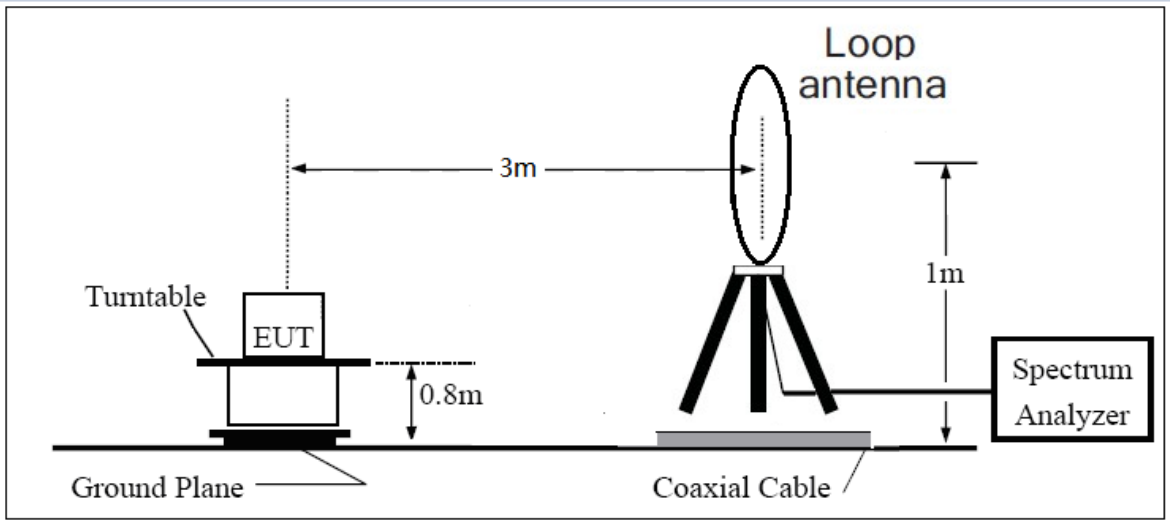
2) If linear voltage averaging mode was used in the preceding step e), then the correction factor is [20 log (1 / D)], where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB shall be added to the measured emission levels.

3) If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning ON and OFF with the transmit cycle, then no duty cycle correction is required for that emission.

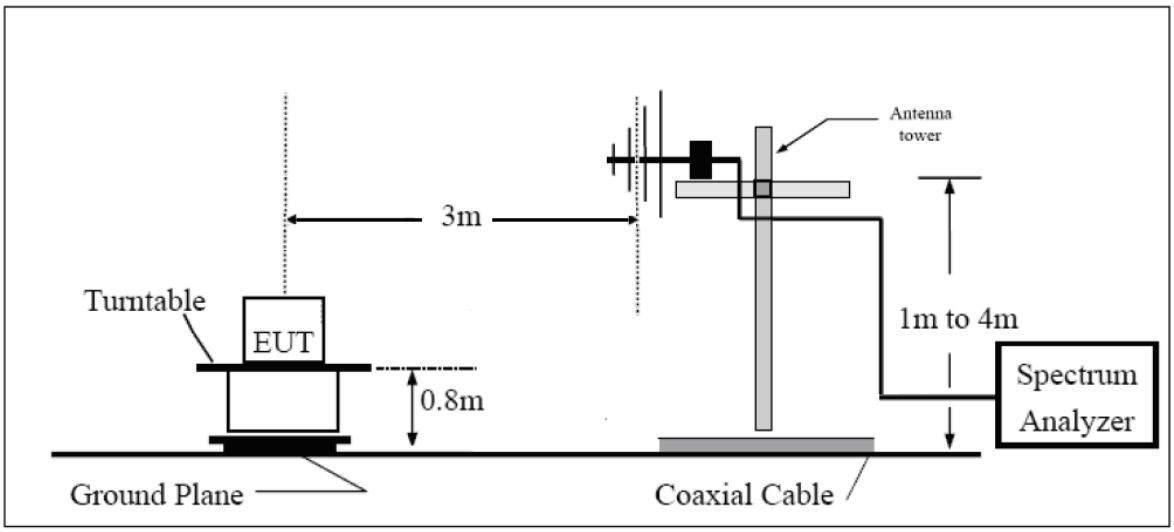
The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the loop antenna is vertical, others antenna are vertical and horizontal.

The test is in transmitting mode.

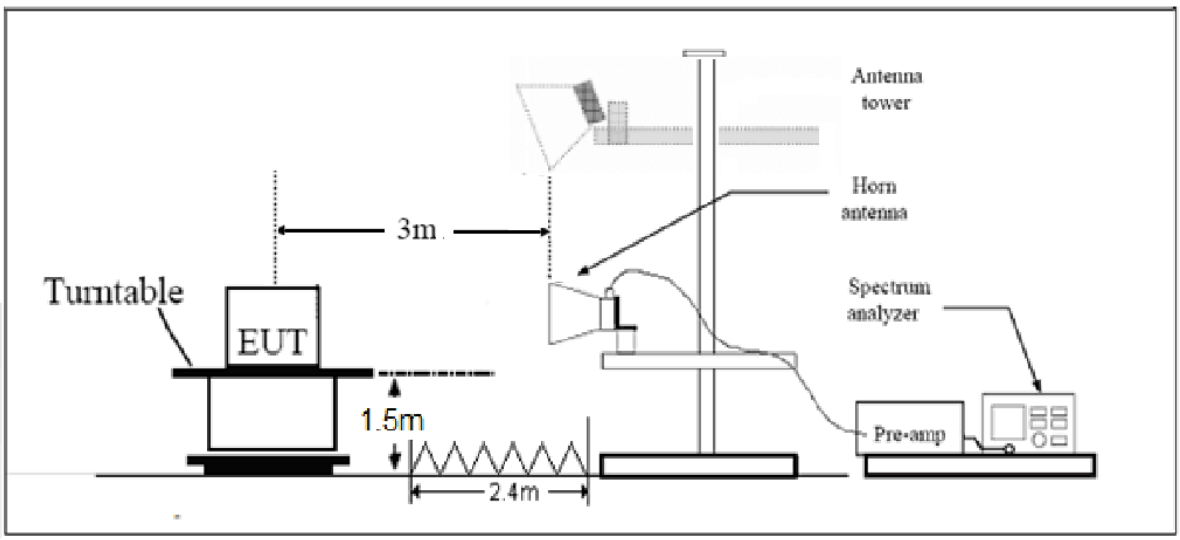
9KHz~~~30MHz



30MHz~~~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

(1) For transmitters operating in the 5725-5850 MHz band: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(2) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz(68.2dBμV/m).

(3) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz(68.2dBμV/m).

(4) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz(68.2dBμV/m).

Note: the following formula is used to convert the EIRP to field strength

§1、E[dBμV/m] = EIRP[dBm] - 20 log(d[meters]) + 104.77, where E = field strength and

d = distance at which field strength limit is specified in the rules;

§2、E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters

(5) Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table.

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
0.009–0.490	2400/F(kHz)	/
0.490–1.705	24000/F(kHz)	/
1.705–30.0	30	/
30-88	100	40
88-216	150	43.5
216-960	200	46
Above960	500	54

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	[2]
13.36 - 13.41			

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96.

Frequency	Uncertainty
9KHz-30MHz	3.55dB
30MHz-200MHz	4.016dB
200MHz-1GHz	3.28dB
1GHz-18G	3.70dB
18GHz-26.5GHz	5.78dB
26.5G-40GHz	5.82dB

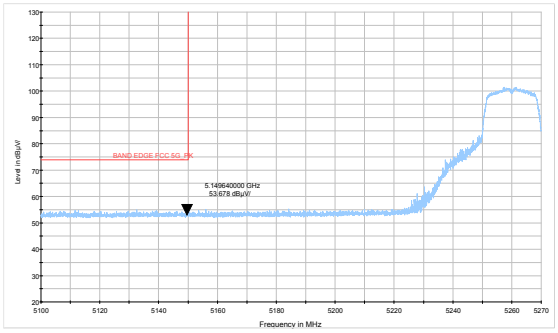
Test Results:

The modulation and bandwidth are similar for 802.11n mode for 20MHz/40MHz and 802.11ac mode for V20MHz/V40MHz, therefore investigated worst case to representative mode in test report.

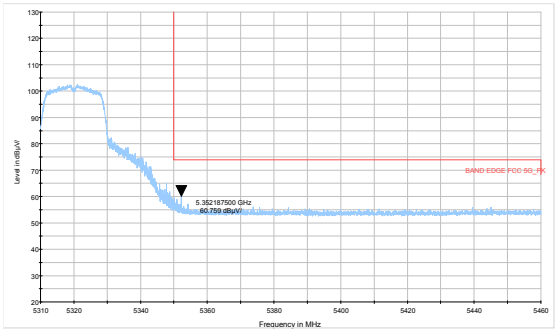
The signal beyond the limit is carrier.

U-NII-2A

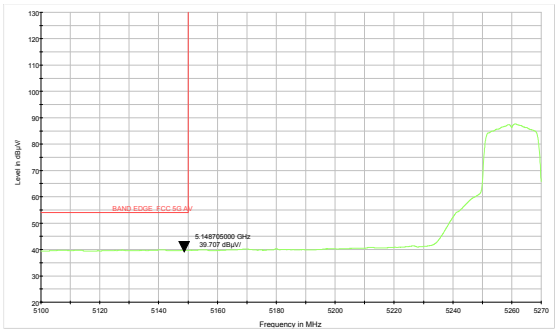
802.11a-Channel 52: Peak



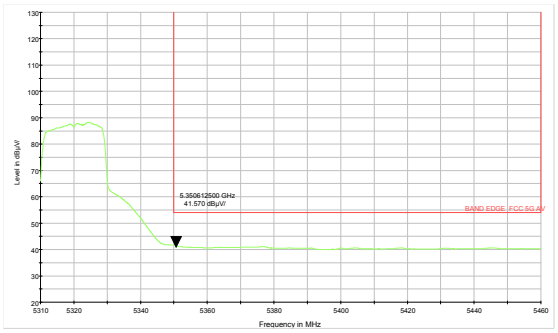
802.11a-Channel 64: Peak



802.11a-Channel 52: Average

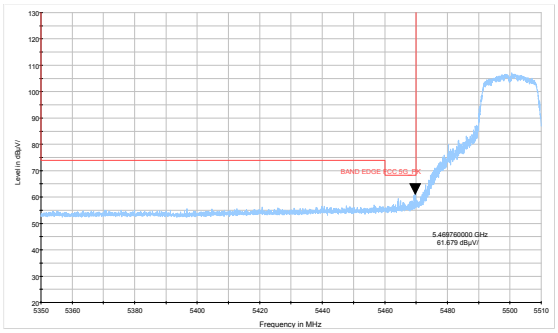


802.11a-Channel 64: Average

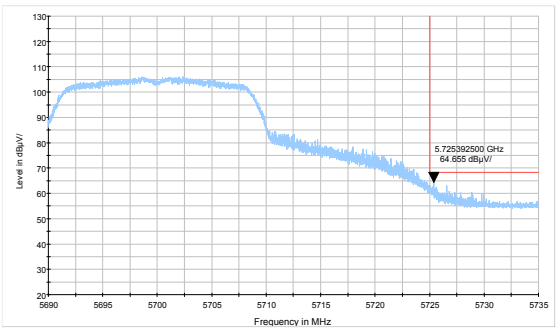


U-NII-2C

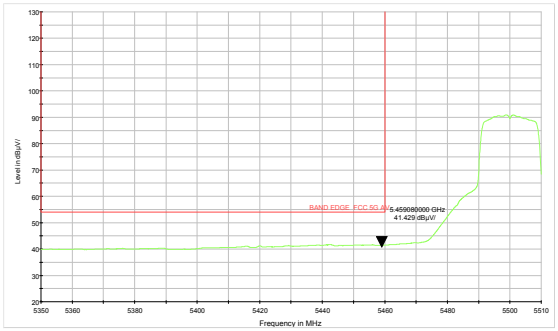
802.11a-Channel 100: Peak



802.11a-Channel 140: Peak



802.11a-Channel 100: Average



Result of RE

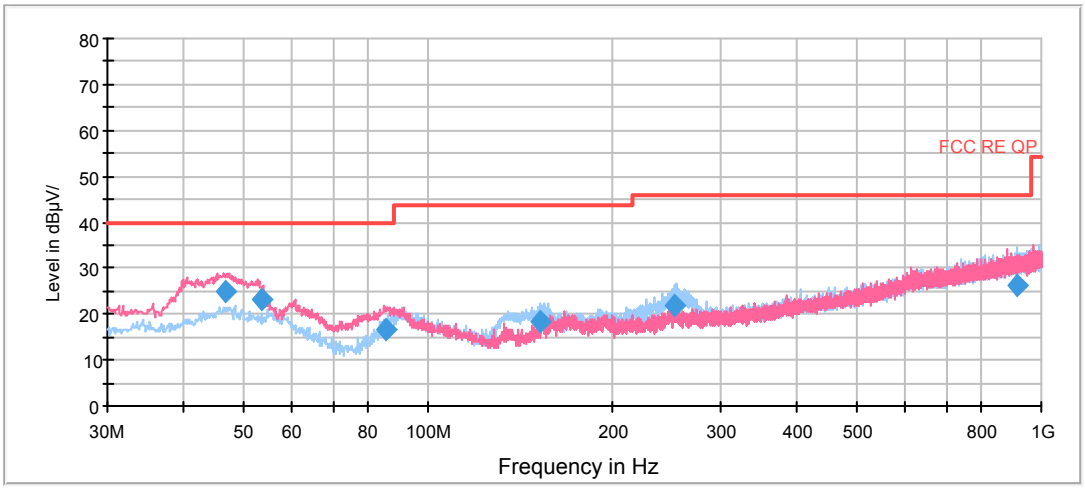
Test result

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the Emissions in the frequency band 9kHz-30MHz and 26.5GHz-40GHz are more than 20dB below the limit are not reported.

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes with all channels, 802.11a CH56 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Continuous TX mode:

RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Reading value (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
46.648750	25.0	11.9	100.0	V	276.0	13.1	15.0	40.0
53.407500	23.2	10.4	100.0	V	264.0	12.8	16.8	40.0
85.647500	16.7	6.2	100.0	V	56.0	10.5	23.3	40.0
152.500000	18.4	9.1	200.0	H	87.0	9.3	25.1	43.5
252.983750	21.8	7.3	100.0	H	279.0	14.5	24.2	46.0
911.531250	26.4	-0.6	200.0	H	40.0	27.0	19.6	46.0

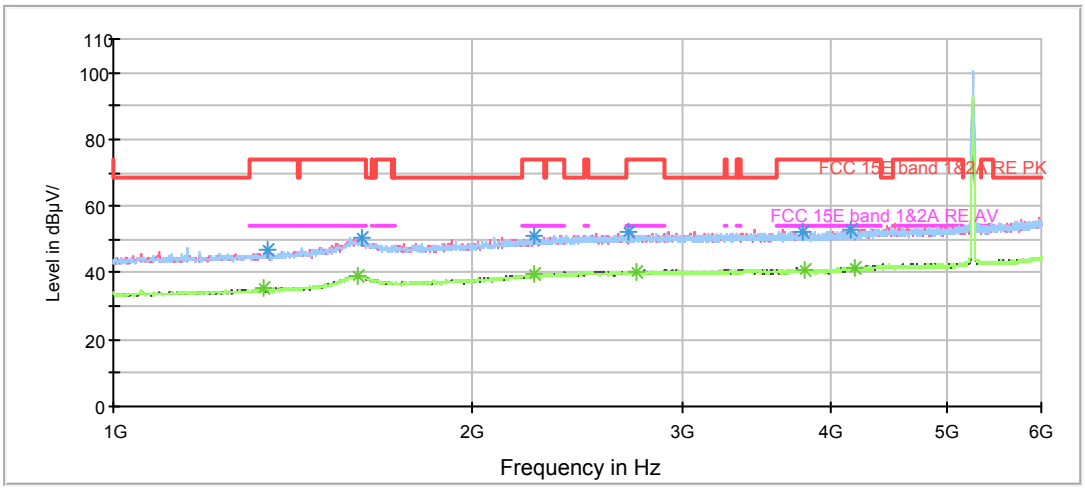
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

802.11a CH52

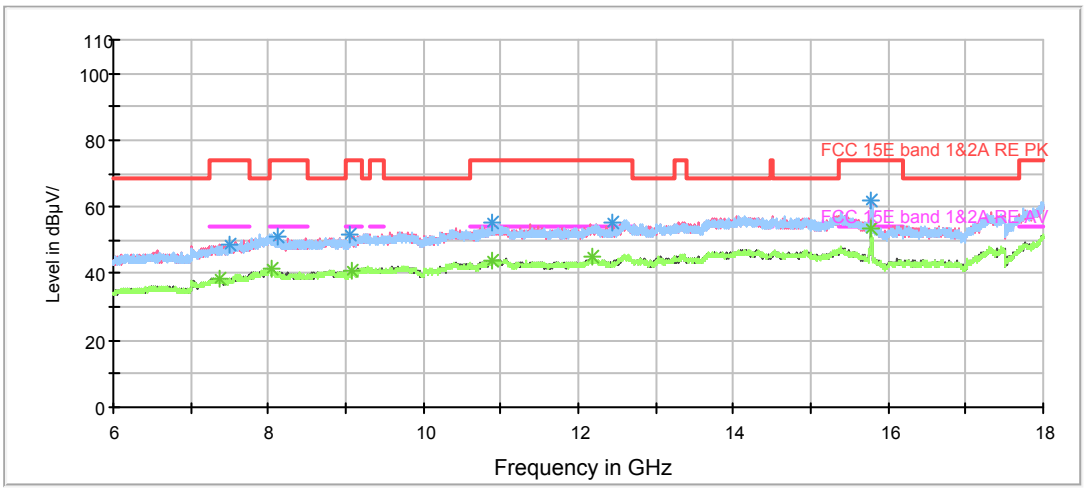
RE 1G-6GHz PK+AV Class B



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 6GHz

RE 1G-18GHz PK+AV Class B



Radiates Emission from 6GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1345.000000	46.6	200.0	V	2.0	51.3	-4.7	27.4	74
1613.750000	50.6	100.0	H	4.0	50.9	-0.3	23.4	74
2256.250000	51.4	100.0	H	2.0	50.7	0.7	22.6	74
2701.250000	52.2	200.0	V	290.0	50.1	2.1	21.8	74
3785.000000	52.1	200.0	H	278.0	48.5	3.6	21.9	74
4147.500000	53.0	100.0	H	18.0	48.6	4.4	21.0	74

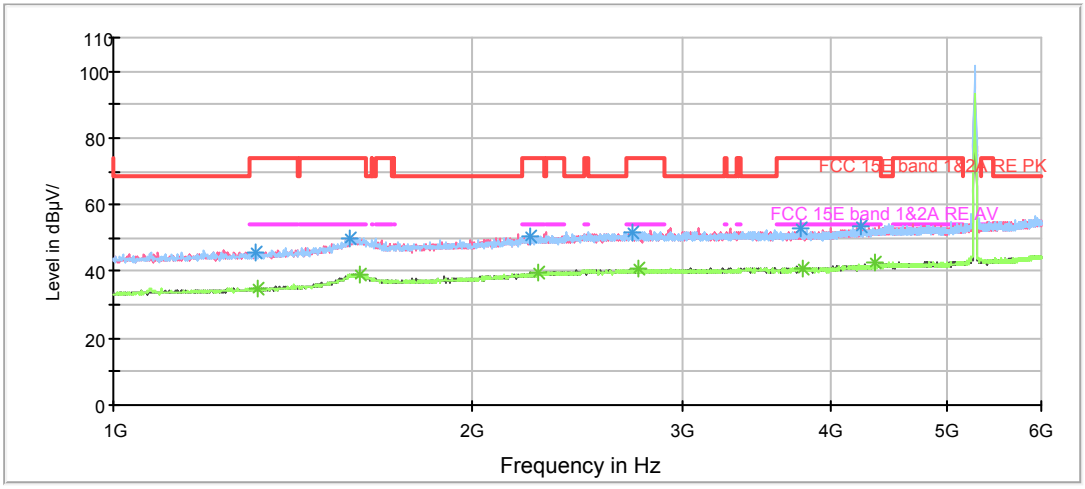
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1337.500000	35.4	100.0	V	180.0	40.2	-4.8	18.6	54
1605.000000	39.1	100.0	H	13.0	39.2	-0.1	14.9	54
2252.500000	39.6	100.0	H	81.0	38.9	0.7	14.4	54
2743.750000	40.5	100.0	V	356.0	38.2	2.3	13.5	54
3798.750000	41.0	200.0	H	356.0	37.4	3.6	13.0	54
4181.250000	41.6	100.0	H	90.0	37.1	4.5	12.4	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

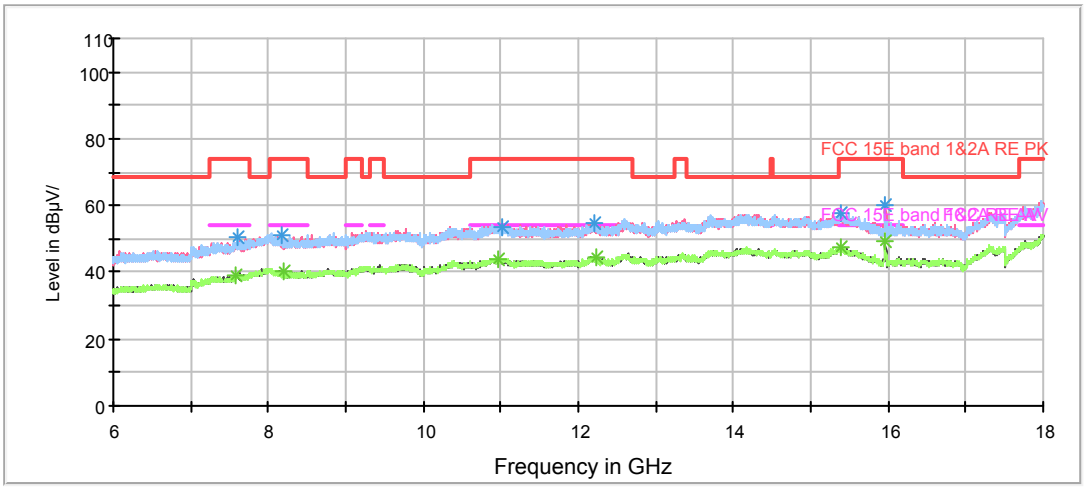
802.11a CH56

RE 1G-6GHz PK+AV Class B



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 6GHz

RE 1G-18GHz PK+AV Class B



Radiates Emission from 6GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1317.500000	45.9	200.0	V	1.0	50.8	-4.9	28.1	74
1581.250000	50.1	100.0	H	18.0	50.5	-0.4	23.9	74
2236.250000	50.3	200.0	H	91.0	49.7	0.6	23.7	74
2723.750000	51.8	100.0	V	358.0	49.6	2.2	22.2	74
3775.000000	53.1	100.0	H	51.0	49.5	3.6	20.9	74
4228.750000	53.5	200.0	H	130.0	48.9	4.6	20.5	74

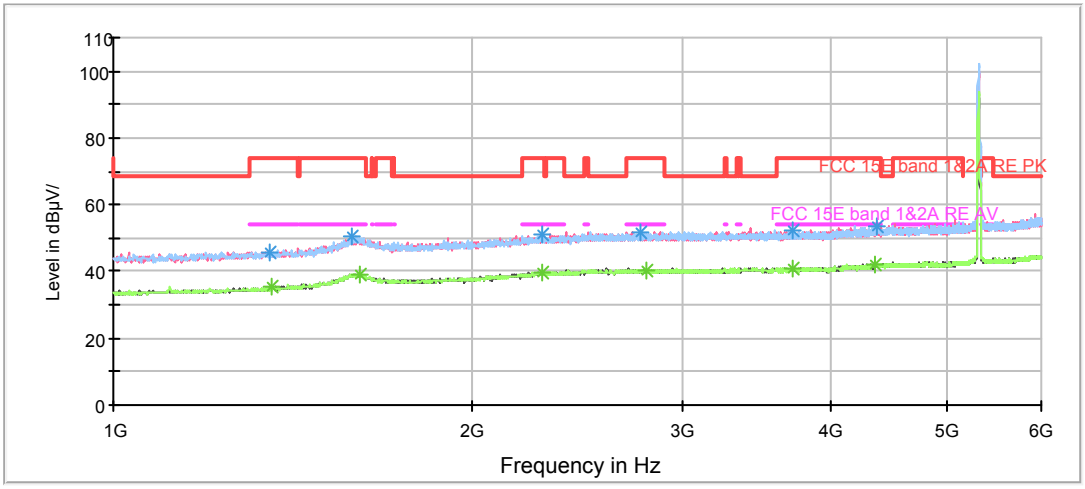
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1322.500000	35.0	100.0	V	0.0	39.9	-4.9	19.0	54
1610.000000	39.3	200.0	V	181.0	39.5	-0.2	14.7	54
2267.500000	39.5	200.0	V	37.0	38.7	0.8	14.5	54
2755.000000	41.0	100.0	V	315.0	38.7	2.3	13.0	54
3778.750000	41.0	100.0	H	12.0	37.4	3.6	13.0	54
4351.250000	42.6	200.0	V	162.0	37.7	4.9	11.4	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

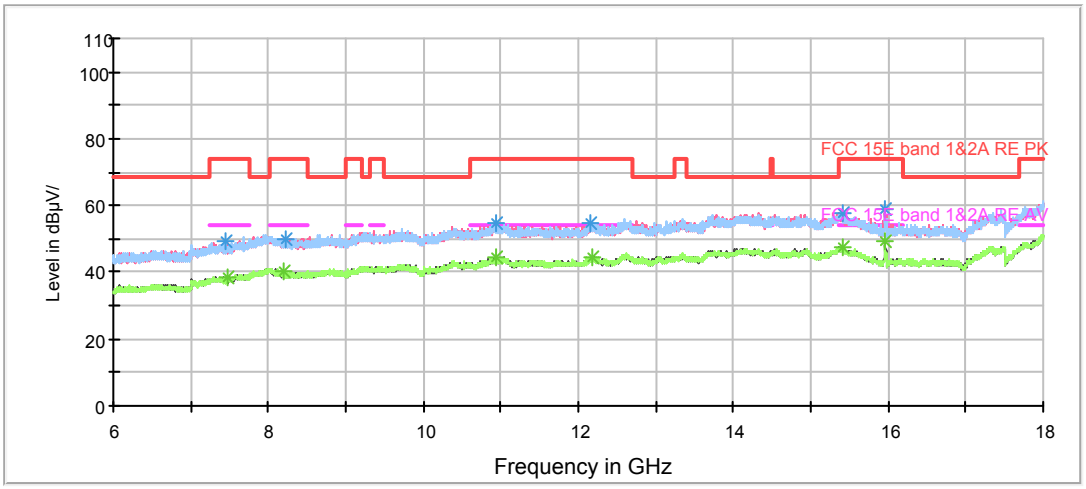
802.11a CH64

RE 1G-6GHz PK+AV Class B



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 6GHz

RE 1G-18GHz PK+AV Class B



Radiates Emission from 6GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1352.500000	45.9	200.0	V	110.0	50.6	-4.7	28.1	74
1582.500000	50.4	200.0	H	354.0	50.8	-0.4	23.6	74
2290.000000	50.9	100.0	H	94.0	50.0	0.9	23.1	74
2767.500000	51.8	100.0	H	2.0	49.5	2.3	22.2	74
3708.750000	52.1	200.0	H	290.0	48.6	3.5	21.9	74
4372.500000	53.7	200.0	V	138.0	48.7	5.0	20.3	74

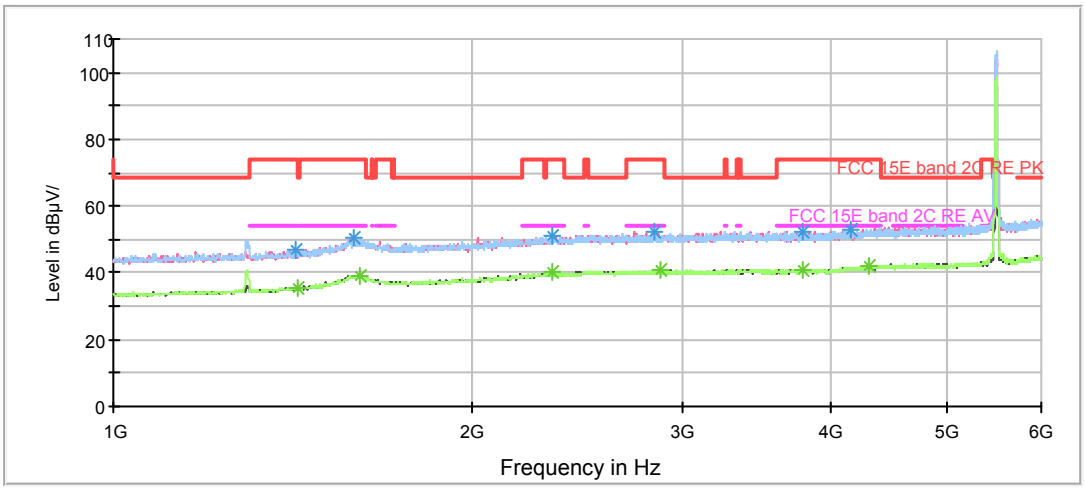
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1355.000000	35.5	200.0	V	52.0	40.2	-4.7	18.5	54
1610.000000	39.3	100.0	V	0.0	39.5	-0.2	14.7	54
2285.000000	39.8	200.0	V	6.0	38.9	0.9	14.2	54
2796.250000	40.4	100.0	V	266.0	38.0	2.4	13.6	54
3710.000000	40.6	100.0	V	237.0	37.1	3.5	13.4	54
4351.250000	42.0	200.0	V	0.0	37.1	4.9	12.0	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH100

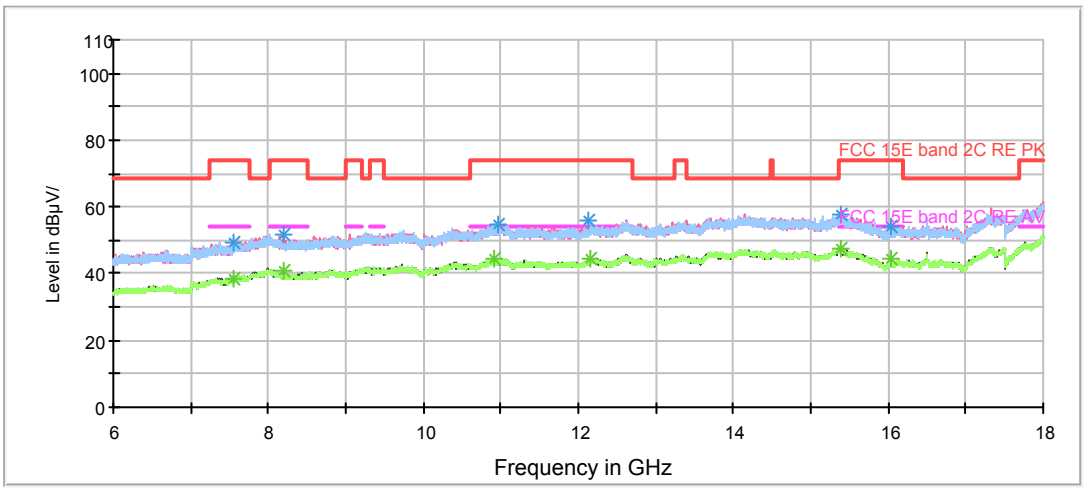
RE 1G-6GHz PK+AV Class B



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 6GHz

RE 1G-18GHz PK+AV Class B



Radiates Emission from 6GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1422.500000	47.1	200.0	H	355.0	51.2	-4.1	26.9	74
1592.500000	50.7	100.0	H	0.0	51.0	-0.3	23.3	74
2335.000000	51.0	100.0	V	94.0	49.9	1.1	23.0	74
2843.750000	52.0	200.0	H	355.0	49.5	2.5	22.0	74
3783.750000	52.5	200.0	H	266.0	48.9	3.6	21.5	74
4150.000000	52.9	100.0	V	242.0	48.5	4.4	21.1	74

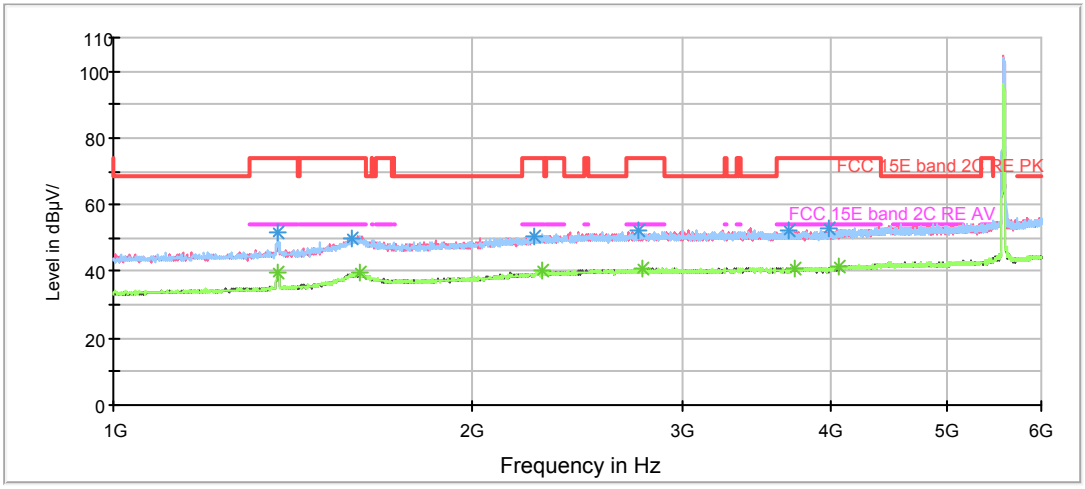
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1426.250000	35.4	100.0	V	0.0	39.4	-4.0	18.6	54
1607.500000	39.2	100.0	V	352.0	39.3	-0.1	14.8	54
2335.000000	40.0	100.0	H	74.0	38.9	1.1	14.0	54
2878.750000	40.9	100.0	V	356.0	38.4	2.5	13.1	54
3786.250000	40.8	100.0	V	184.0	37.2	3.6	13.2	54
4302.500000	42.3	100.0	H	1.0	37.5	4.8	11.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

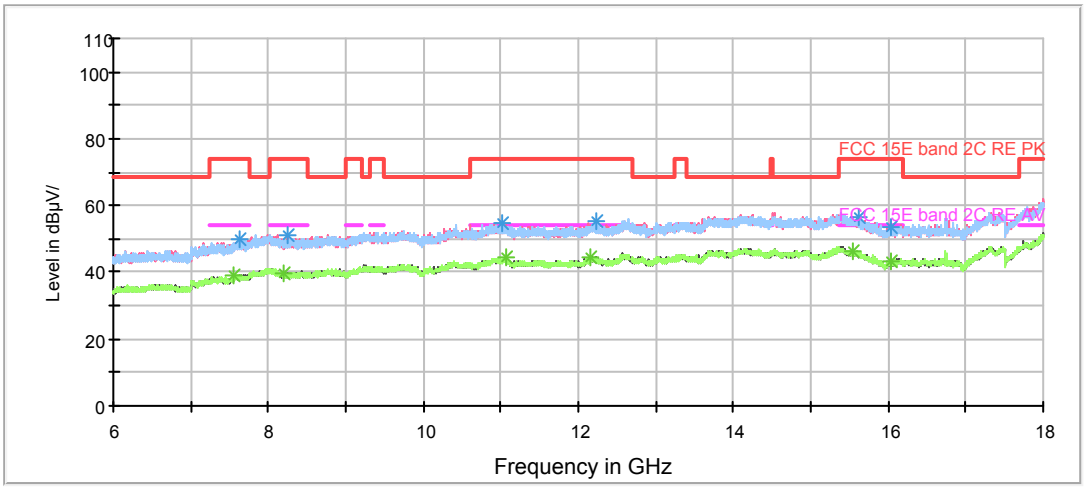
802.11a CH116

RE 1G-6GHz PK+AV Class B



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 6GHz

RE 1G-18GHz PK+AV Class B



Radiates Emission from 6GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1372.500000	51.6	100.0	H	174.0	56.2	-4.6	22.4	74
1582.500000	50.0	100.0	H	59.0	50.4	-0.4	24.0	74
2252.500000	50.5	200.0	V	136.0	49.8	0.7	23.5	74
2758.750000	52.3	100.0	H	5.0	50.0	2.3	21.7	74
3690.000000	52.5	100.0	V	226.0	49.0	3.5	21.5	74
3988.750000	52.9	100.0	V	338.0	49.0	3.9	21.1	74

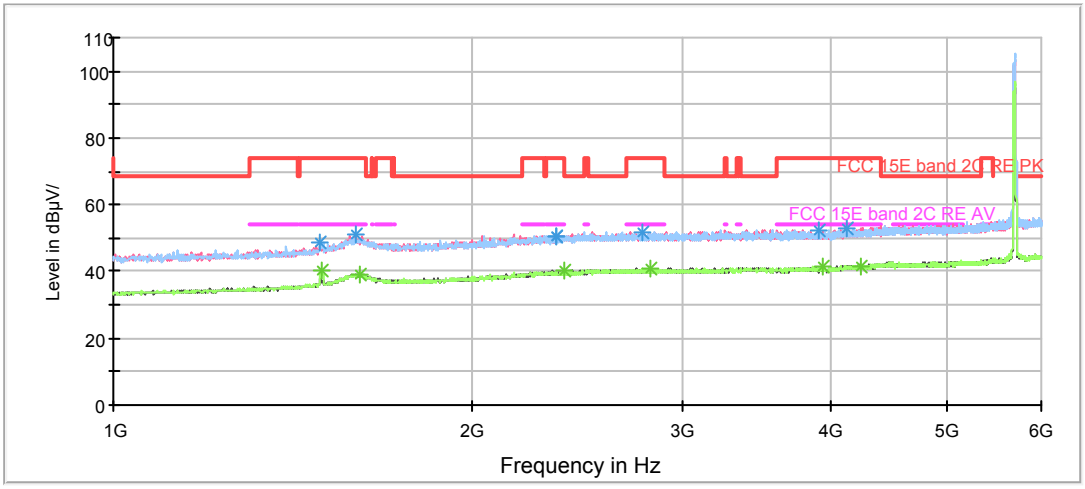
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1373.750000	39.6	100.0	V	136.0	44.2	-4.6	14.4	54
1611.250000	39.5	200.0	H	248.0	39.7	-0.2	14.5	54
2285.000000	40.0	200.0	V	88.0	39.1	0.9	14.0	54
2778.750000	40.8	100.0	V	264.0	38.4	2.4	13.2	54
3727.500000	40.7	200.0	V	1.0	37.1	3.6	13.3	54
4055.000000	41.2	200.0	V	0.0	37.1	4.1	12.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

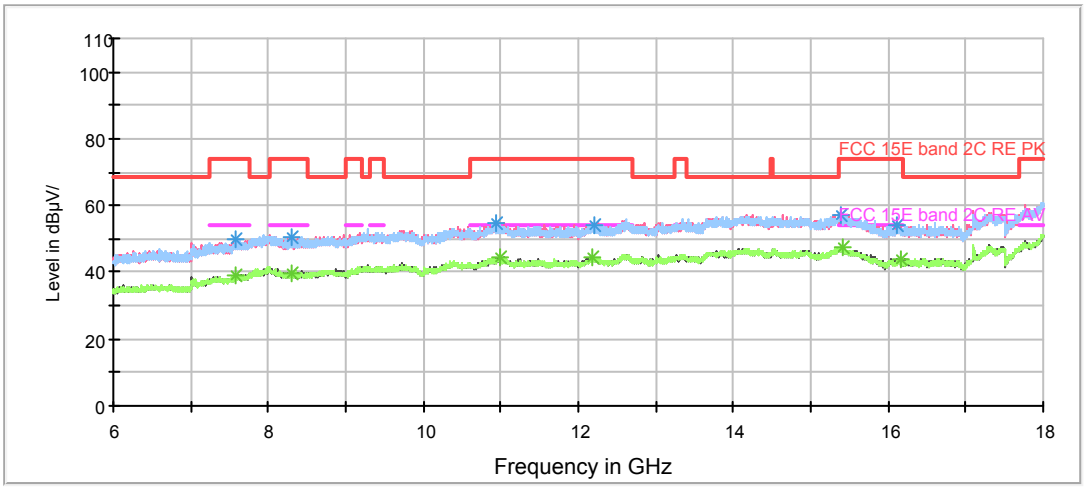
802.11a CH140

RE 1G-6GHz PK+AV Class B



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 6GHz

RE 1G-18GHz PK+AV Class B



Radiates Emission from 3GHz to 8GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1492.500000	48.6	100.0	H	173.0	51.9	-3.3	25.4	74
1595.000000	51.1	100.0	V	6.0	51.3	-0.2	22.9	74
2351.250000	50.8	200.0	H	0.0	49.6	1.2	23.2	74
2351.250000	50.8	200.0	H	0.0	49.6	1.2	23.2	74
2782.500000	51.6	100.0	H	22.0	49.2	2.4	22.4	74
3902.500000	52.3	200.0	V	57.0	48.6	3.7	21.7	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1493.750000	40.5	100.0	H	173.0	43.8	-3.3	13.5	54
1610.000000	39.4	200.0	V	192.0	39.6	-0.2	14.6	54
2386.250000	40.4	100.0	H	154.0	39.0	1.4	13.6	54
2823.750000	40.7	100.0	H	5.0	38.3	2.4	13.3	54
3932.500000	41.4	100.0	V	355.0	37.7	3.7	12.6	54
4242.500000	41.8	200.0	H	129.0	37.2	4.6	12.2	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

5.6. Conducted Emission

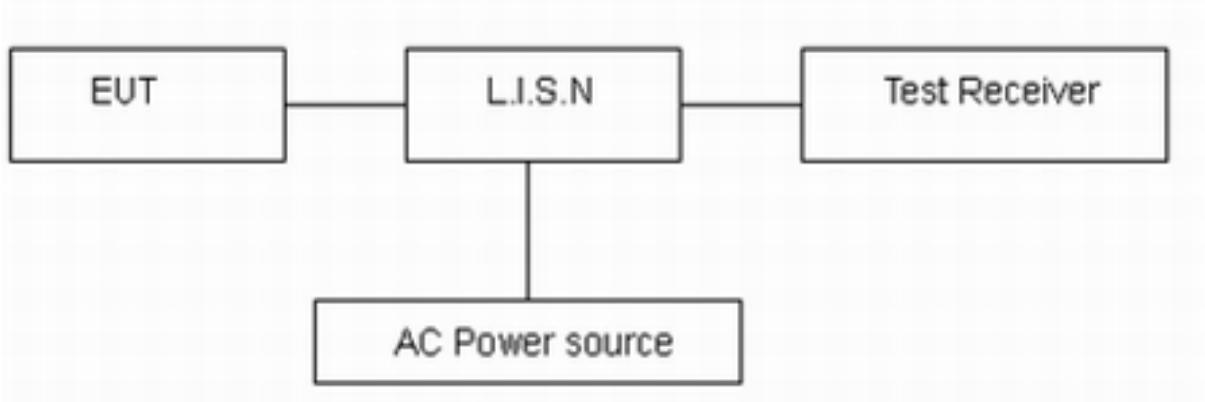
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

The EUT IS placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10-2013.Connect the AC power line of the EUT to the LISN Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9kHz, VBW is set to 30kHz The measurement result should include both L line and N line.
The test is in transmitting mode.

Test Setup



Note: AC Power source is used to change the voltage 110V/60Hz.

Limits

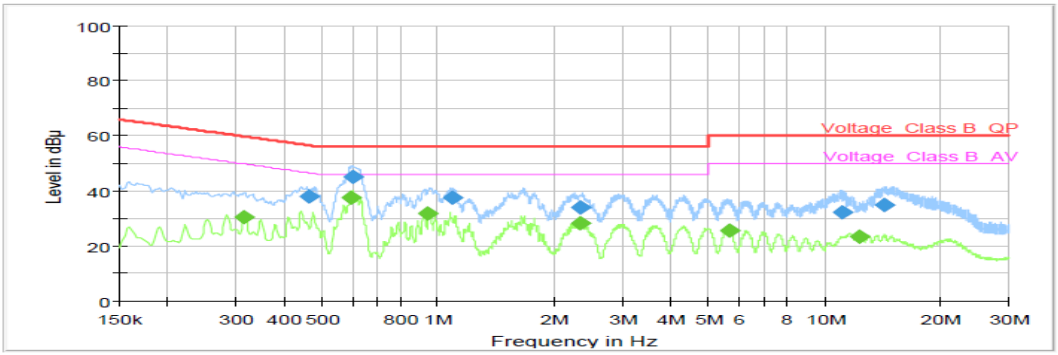
Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50
*: Decreases with the logarithm of the frequency.		

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U= 2.69 dB.

Test Results:

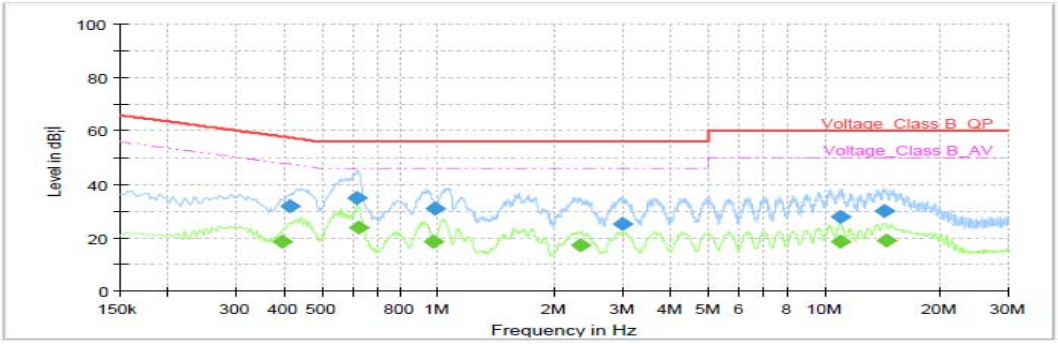
Following plots, Blue trace uses the peak detection and Green trace uses the average detection. During the test, the Conducted Emission was performed in all modes with all channels, 802.11a CH56 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Frequency (MHz)	QuasiPeak (dB µ V)	Average (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.313250	---	30.56	49.88	19.32	1000.0	9.000	L1	ON	19.2
0.461500	37.91	---	56.67	18.76	1000.0	9.000	L1	ON	19.2
0.596500	---	37.48	46.00	8.52	1000.0	9.000	L1	ON	19.3
0.600000	45.31	---	56.00	10.69	1000.0	9.000	L1	ON	19.3
0.942250	---	31.98	46.00	14.02	1000.0	9.000	L1	ON	19.2
1.094500	37.72	---	56.00	18.28	1000.0	9.000	L1	ON	19.2
2.330750	---	28.39	46.00	17.61	1000.0	9.000	L1	ON	19.0
2.337250	34.15	---	56.00	21.85	1000.0	9.000	L1	ON	19.0
5.655750	---	25.54	50.00	24.46	1000.0	9.000	L1	ON	19.1
11.075250	32.33	---	60.00	27.67	1000.0	9.000	L1	ON	19.4
12.402500	---	23.60	50.00	26.40	1000.0	9.000	L1	ON	19.4
14.343250	34.82	---	60.00	25.18	1000.0	9.000	L1	ON	19.5

L line

Conducted Emission from 150 KHz to 30 MHz



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.395000	---	18.52	47.96	29.44	1000.0	9.000	N	ON	19.2
0.412500	31.95	---	57.60	25.65	1000.0	9.000	N	ON	19.2
0.617750	34.99	---	56.00	21.01	1000.0	9.000	N	ON	19.3
0.620250	---	24.05	46.00	21.95	1000.0	9.000	N	ON	19.3
0.971746	---	18.54	46.00	27.46	1000.0	9.000	N	ON	19.2
0.981250	31.03	---	56.00	24.97	1000.0	9.000	N	ON	19.2
2.337000	---	17.39	46.00	28.61	1000.0	9.000	N	ON	19.0
2.998249	25.24	---	56.00	30.76	1000.0	9.000	N	ON	19.1
10.976474	27.96	---	60.00	32.04	1000.0	9.000	N	ON	19.4
11.013000	---	18.76	50.00	31.24	1000.0	9.000	N	ON	19.4
14.320246	30.17	---	60.00	29.83	1000.0	9.000	N	ON	19.4
14.402498	---	19.01	50.00	30.99	1000.0	9.000	N	ON	19.5

N line

Conducted Emission from 150 KHz to 30 MHz

6. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Spectrum Analyzer	R&S	FSV40	15195-01-00	2018-05-20	2019-05-19
EMI Test Receiver	R&S	ESCI	100948	2018-05-20	2019-05-19
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2017-09-26	2019-09-25
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	9163-201	2017-11-18	2019-11-17
Double Ridged Waveguide Horn Antenna	R&S	HF907	100126	2018-07-07	2020-07-06
Standard Gain Horn	ETS-Lindgren	3160-09	00102643	2018-06-20	2020-06-19
Standard Gain Horn	STEATITE	QSH-SL-26-40 -K-15	16779	2017-07-20	2019-07-19
Broadband Horn Antenna	SCHWARZBECK	BBHA 9120D	430	2018-07-07	2020-07-06
EMI Test Receiver	R&S	ESR	101667	2018-05-20	2019-05-19
LISN	R&S	ENV216	101171	2016-12-16	2019-12-15
Spectrum Analyzer	KEYSIGHT	N9020A	MY54420163	2017-12-17	2018-12-16
RF Cable	Agilent	SMA 15cm	0001	/	/
TEMPERATURE CHAMBER	WEISS	VT4002	582261194500 10	2017-12-17	2018-12-16
WLAN AP	Cisco	Air-AP1262N-A-K9	LDK102073 (FCC ID)	/	/
AV Power Meter	R&S	NRP	104306	2018-05-20	2019-05-19
Power Probe	R&S	NRP-Z21	104799	2018-05-20	2019-05-19
DC Power Supply	GWINSTEK	GPS-3030D	GEP882653	2018-05-20	2020-05-19
Software	R&S	EMC32	9.26.0	/	/

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

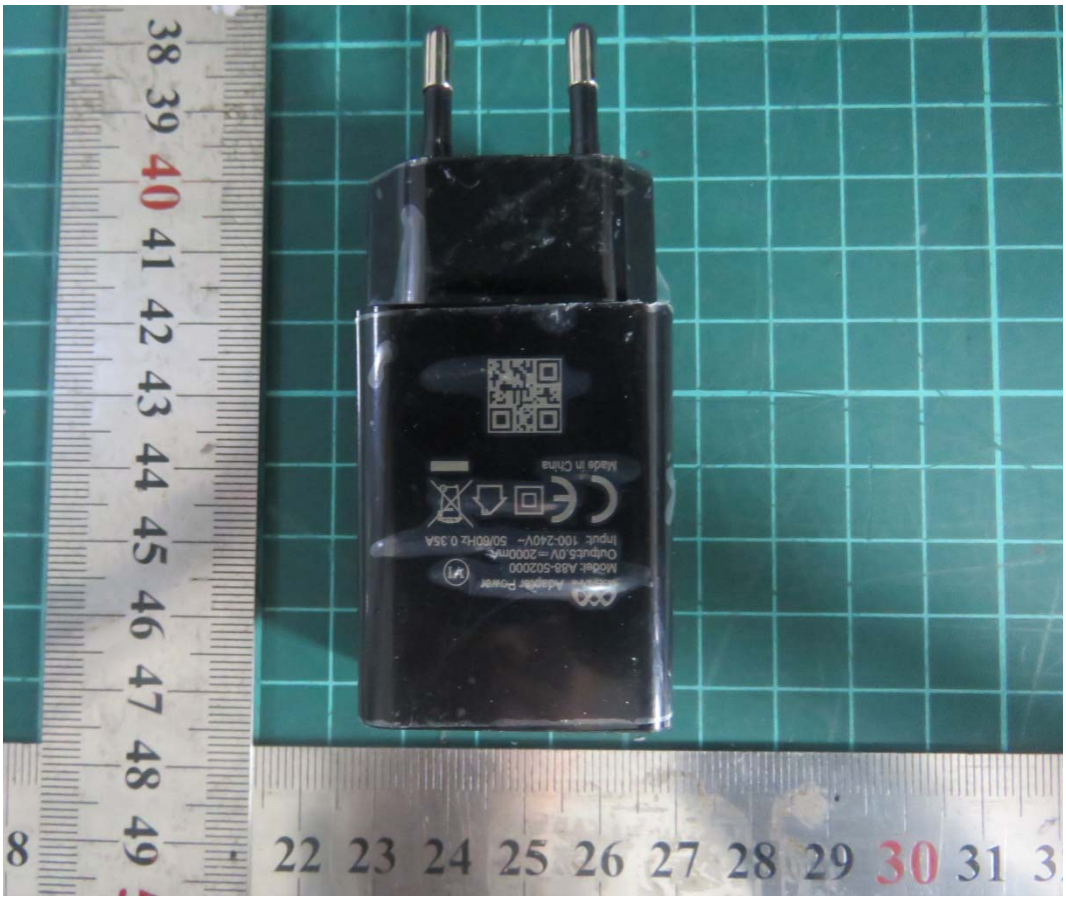
ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance

Front Side

Back Side

a: EUT



Adapter 1

Adapter 2

Adapter 3

b: Adapter

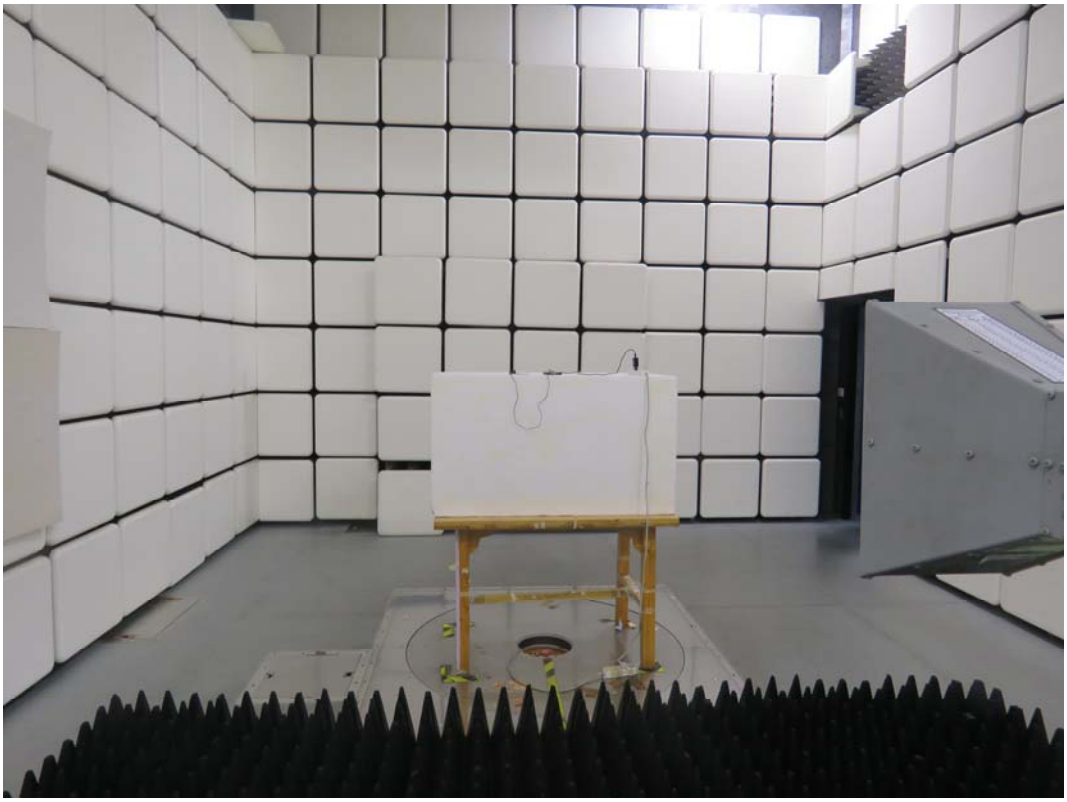
c. Earphone

d. USB Cable

Picture 1 EUT and Accessory

A.2 Test Setup

30MHz-1GHz



Above 1GHz

Picture 2 Radiated Emission Test Setup

Picture 3 Conducted Emission Test Setup