



RF TEST REPORT

Report No.: SHATBL2605019W05

Applicant : TableTop Media, LLC d/b/a Ziosk
Product Name : Ziosk Mini 2
Brand Name : Ziosk
Model Name : Z700
Series Model : N/A
FCC ID : XOX-Z700
Test Standard : FCC Part 15 Subpart E §15.407
Date of Sample Arrival : May 14, 2026
Date of Test : May 14, 2026~Jun.12, 2026
Issue Date : Jun.12, 2026

Report Prepared by :

Emily

(Emily)

Report Approved by :

Guozheng Li

(Guozheng Li)

Authorized Signatory :

Terry Yang

(Terry Yang)



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Tel: +86(0)21-51298625

Web: www.atbl-lab.com

Email: atbl@atbl-lab.com

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Declaration Of Report

- 1.The device has been tested by ATBL, and the test results show that the equipment under test (EUT) is in compliance with the requirements of 47 CFR 15.407. And it is applicable only to the tested sample identified in the report.
- 2.This report shall not be reproduced except in full, without the written approval of ATBL, this document only be altered or revised by ATBL, personal only, and shall be noted in the revision of the document.
- 3.The general information of EUT in this report is provided by the customer or manufacture, ATBL is only responsible for the test data but not for the information provided by the customer or manufacture.
- 4.The results in this report is only apply to the sample as tested under conditions. The customer or manufacturer is responsible for ensuring that the additional production units of this model have the same electrical and mechanical components.
- 5.In this report, '□' indicates that EUT does not support content after '□', and '☑' indicates that it supports content after '☑'

Revision History

Rev.	Issue Date	Report No.	Effect Page	Contents
00	Jun.12, 2026	SHATBL2605019W05	ALL	Initial Release

Summary Of Test Result

Report Section	Standard Section	Test Item	Result	Remark
3.1	47 CFR 15.407(a)	Emission Bandwidth (26dBm Bandwidth)	PASS	-
3.1	--	Occupied Bandwidth	PASS	-
3.2	15.407(b)	In-Band Emissions	PASS	--
3.3	15.407(d)	Contention Based Protocol	PASS	-
3.4	47 CFR 15.407(a)	Maximum E.I.R.P.	PASS	--
3.5	47 CFR 15.407(a)	Power Spectral Density	PASS	-
3.6	47 CFR 15.407(g)	Frequency Stability	PASS	--
3.7	47 CFR 15.407(b) & 15.209(a)	Undesirable emission	PASS	-
3.7	47 CFR 15.407(b)/15.209(a)/15.205(a)	Radiated Emissions	PASS	--
3.8	47 CFR 15.207(a)	AC Power Conducted Emission	PASS	-
3.9	--	Duty Cycle	Reporting only	--
3.10	47 CFR 15.203	Antenna Requirement	PASS	-

Remark: 'N/A' denotes test is not applicable in this Test Report.

1. General Description

1.1. Applicant

Name : TableTop Media, LLC d/b/a Ziosk
Address : 6201 W Plano Parkway Suite. 450, Plano, TEXAS 75093

1.2. Manufacturer

Name : Z-TECH COMMUNICATION(SZ)CO.,LTD
Address : RM 2001 Floor 20. Block 1.Qianhai Kexing Science Park,49 Yintian Road, Xixiang Baoan ,Shenzhen, China, 518102

1.3. Factory

Name : HUAGUAN TECHNOLOGY (HEYUAN) CO.,LTD.
Address : HuaGuan Science and Technology Park, North of Gaoxin 7th Road, West of Xingye Avenue, Heyuan High-tech Development Zone.

1.4. General Information of EUT

Product Name	Ziosk Mini 2
Model Name	Z700
Series model	N/A
Model Difference	N/A
Sample No.	260500407
Power supply	DC 3.7V by Battery
Adapter	N/A
Battery	DC 3.7V 20800mAh
Hardware Version	HW ID:00
Software Version	9.0.0.6
Connecting I/O Port(s)	Refer to the remark below

Remark:

The above information of EUT was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.5. Equipment Specification

Equipment Specification		
Frequency Range	UNII-5: 5925 MHz ~ 6425 MHz;UNII-6: 6425 MHz ~ 6525 MHz; UNII-7: 6525 MHz ~ 6875 MHz;UNII-8: 6875 MHz ~ 7125 MHz;	
Maximum Output Power	☑802.11ax(HE)20:	8.12dBm
	☑802.11ax(HE)40:	10.60dBm
	☑802.11ax(HE)80:	14.57dBm
	☐802.11ax(HE)160:	N/A
Type of Modulation	802.11ax: OFDMA (BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM)	
FCC Classification:	6GHz Low Power Indoor Client (6XD)	

1.6. Antenna Information

Antenna Type	Antenna	Frequency Band MHz	Antenna Gain dBi	Beam Antenna gain (dBi)	--
PIFA Antenna	Antenna 0	5955-7125	1.71	4.70	--
	Antenna 1	5955-7125	1.66		

Note:

Unequal antenna gains, with equal transmit powers, For antenna gains given by $G_1, G_2, \dots, G_x$ dBi

(i) If transmit signals are *correlated*, then

Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

1.7. Modification of EUT

No modifications are made to the EUT during all test items.

1.8. Laboratory Information

Company Name	: Shanghai ATBL Technology Co., Ltd.
Address	: Building 8, No.160 Basheng Road, Waigaoqiao Free Trade Zone, Pudong New Area, Shanghai
Telephone	: +86(0)21-51298625
FCC-Registration Number	: 485917
Designation Number	: CN1306
A2LA Number	: 6184.01
CNAS Number	: CNAS L14531
ISED Designation Number	: 27371
CAB identifier	: CN0116

1.9. Applicable Standards

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

47 CFR Part 15 Subpart E §15.407;

FCC KDB789033 D02 General UNII Test Procedures New Rules v02r01;

FCC KDB 662911 D01 Multiple Transmitter Output v02r01;

KDB 987594 D02 U-NII 6GHz EMC Measurement v01

ANSI C63.10-2020+Cor 1-2023

Remark:

All test items were verified and recorded according to the standards and without any deviation during the test.

2. Test Configuration of EUT

2.1. Carrier Frequency Channel

For UNII-5:			
Mode	Channel	Frequency (MHz)	CH
IEEE 802.11ax 20MHz	Lowest channel	5955	1
	Middle channel	6175	45
	Highest channel	6415	93
IEEE 802.11ax 40MHz	Lowest channel	5965	3
	Middle channel	6165	43
	Highest channel	6405	91
IEEE 802.11ax 80MHz	Lowest channel	5985	7
	Highest channel	6145	39

For UNII-6:			
Mode	Channel	Frequency (MHz)	CH
IEEE 802.11ax 20MHz	Lowest channel	6435	97
	Middle channel	6475	105
	Highest channel	6515	113
IEEE 802.11ax 40MHz	Lowest channel	6445	99
	Middle channel	6485	107
	Highest channel	6525	115
IEEE 802.11ax 80MHz	Lowest channel	6385	87
	Highest channel	6465	103

For UNII-7:

Mode	Channel	Frequency (MHz)	CH
IEEE 802.11ax 20MHz	Lowest channel	6535	117
	Middle channel	6695	149
	Highest channel	6855	181
IEEE 802.11ax 40MHz	Lowest channel	6565	123
	Middle channel	6685	147
	Highest channel	6845	179
IEEE 802.11ax 80MHz	Straddle	6545	119
	Lowest channel	6625	135
	Middle channel	6705	151
	Highest channel	6785	167
	Straddle	6865	183

For UNII-8:

Mode	Channel	Frequency (MHz)	CH
IEEE 802.11ax 20MHz	Lowest channel	6895	189
	Middle channel	7095	229
	Highest channel	7115	233
IEEE 802.11n/ax 40MHz	Straddle	6885	187
	Lowest channel	6925	195
	Middle channel	6965	203
	Highest channel	7085	227
IEEE 802.11ax 80MHz	Lowest channel	6945	199
	Highest channel	7025	215

2.2. Test Modes

Final test modes are considering the modulation and worse data rates as below table.

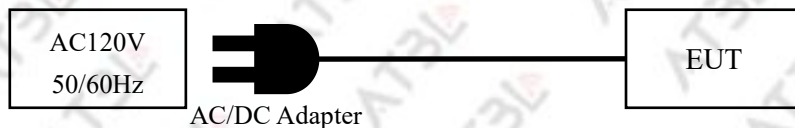
Summary Table of Test Channel			
Test Item	Mode	Frequency Band	Channel
For Conducted and Radiated Test	802.11ax(HE)20:	U-NII-5	Lowest,Middle,Highest Channel
		U-NII-6	Lowest,Middle,Highest Channel
		U-NII-7	Lowest,Middle,Highest Channel
		U-NII-8	Lowest,Middle,Highest Channel
	802.11ax(HE)40:	U-NII-5	Lowest,Middle,Highest Channel
		U-NII-6	Lowest,Middle,Highest Channel
		U-NII-7	Lowest,Middle,Highest Channel
		U-NII-8	Straddle,Lowest,Middle, Highest Channel
	802.11ax(HE)80:	U-NII-5	Lowest,Highest Channel
		U-NII-6	Lowest,Highest Channel
		U-NII-7	Straddle,Lowest,Middle, Highest Channe
		U-NII-8	Lowest,Highest Channe
For AC Power-line Conducted Emission	802.11aX20:CH01_5955MHz		

Remark:

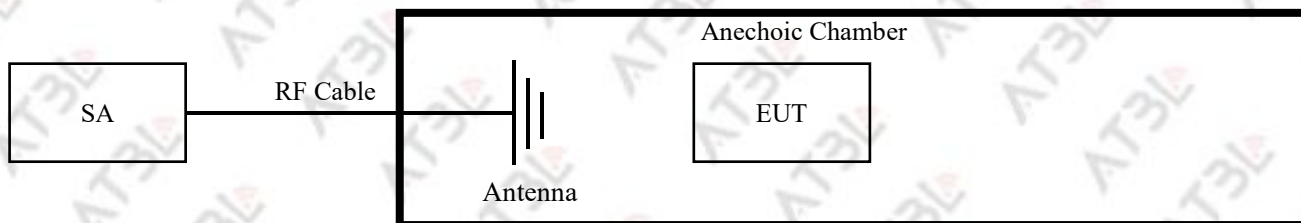
All the test modes of Radiated Spurious Emission (RSE) were tested at the worst data rate; only the worse data shown in report.

2.3. Block Diagram of Test System

2.3.1. For AC Power-Line Conducted Emission

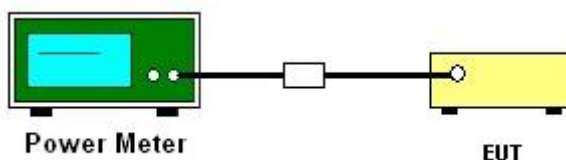


2.3.2. For Radiated Spurious Emission

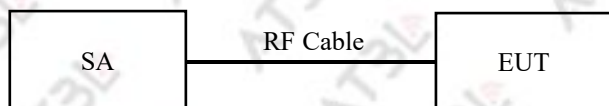


2.3.3. For Conducted Test

Power:



Other:



2.4. Description of Support Units

NO.	Unit	Brand	Model	Description
1	RF Cable	PASTERNAK	PE300	0.5cm
2	Laptop	Lenovo	T480	PF-16A6N8

2.5. Test Software and Power Level

During the test, the channel and power control software provided by the customer is used to control the operation channel and output power level.

2.6. EUT Operating Conditions

For AC power-line conducted emission, the EUT was connected under the large package sizes transmission.

For radiated spurious emission and conducted test, the engineering test program was provided and make the EUT to continuous transmit.

2.7. Equipment List

2.7.1. For AC Power-Line Conducted Emission

Kind of Equipment	Manu facturer	Type No.	Serial No.	equipment number	Calibrated until	Calibrated due until	Cal. Interval
EMI Test Receiver	R&S	ESPI	100679	SHATBL-E012	2025.08.20	2026.08.19	1 year
LISN	R&S	ENV216	101300	SHATBL-E013	2025.08.20	2026.08.19	1 year
LISN	R&S	ENV216	100333	SHATBL-E041	2025.08.20	2026.08.19	1 year
CE Cable	Chuangce xing	2M	EMI0014	SHATBL-E014	N/A	N/A	N/A
Temperature & Humidity	Deli	Deli	EMI0015	SHATBL-E015	2025.08.01	2026.07.31	1 year
Testing Software	FALA	EZ-EMC(V er.EMC-C ON 3A1.1)	EMI0044	SHATBL-E044	N/A	N/A	N/A

2.7.2. For Radiated Spurious Emission

Kind of Equipment	Manu facturer	Type No.	Serial No.	equipment number	Calibrated until	Calibrated due until	Cal. Interval
Signal analyzer	Agilent	N9020A	MY50200811	SHATBL-E017	2025.08.20	2026.08.19	1 year
Amplifier	JPT	JPA0118-5 5-303A	1910001800055 000	SHATBL-E006	2025.08.20	2026.08.19	1 year
Amplifier	JPT	JPA-10M1 G32	2101010003500 1	SHATBL-E005	2025.08.20	2026.08.19	1 year
Antenna/Turn table Controller	Brilliant	N/A	N/A	SHATBL-E007	N/A	N/A	N/A
Loop Antenna(9kHz-30 MHz)	Daze	ZN30900C	20077	SHATBL-E042	2025.08.20	2026.08.19	1 year
Bilog Antenna	SCHWAR ZBECK	VULB 9168	01174	SHATBL-E008	2025.08.20	2026.08.19	1 year
Broad-band Horn Antenna	SCHWAR ZBECK	BBHA 9120D	02334	SHATBL-E009	2025.08.20	2026.08.19	1 year
Horn Antenna	COM-PO WER	AH-1840	10100008	SHATBL-E043	2025.07.27	2026.07.26	1 year
Thermometer	DeLi	N/A	N/A	SHATBL-E015	2025.08.01	2026.07.31	1 year
Test Software	FALA	EMC-RI(V er.4A2)	N/A	N/A	N/A	N/A	N/A
Wideband radio communication tester	R&S	CMW500	101331	SHATBL-W044	2025.07.28	2026.07.27	1 year
Spectrum analyzer	R&S	FSV40-N	101761	SHATBL-W036	2025.07.28	2026.07.27	1 year
Filter box	XH microwave	RSE01	N/A	SHATBL-W030	N/A	N/A	N/A

2.7.3. For Conducted Test

Kind of Equipment	Manu facturer	Type No.	Serial No.	equipment number	Calibrated until	Calibrated due until	Cal. Interval
Power sensor	DARE	RPR3006 W	16I00054SN016	SHATBL-W008	2025.07.28	2026.07.27	1 year
Adjustable Attenuator	Agilent	8494B	MY42144015	SHATBL-W009	2025.07.28	2026.07.27	1 year
Adjustable Attenuator	Agilent	8496B	MY42143776	SHATBL-W010	2025.07.28	2026.07.27	1 year
Environmental Test Chamber	KSON	THS-B6C- 150	9159K	SHATBL-W019	2026.03.31	2027.03.30	1 year
Signal analyzer	Keysight	N9020A	MY50510136	SHATBL-W003	2025.07.18	2026.07.17	1 year
Vector signal generator	Agilent	N5182A	MY48180764	SHATBL-W043	2025.07.18	2026.07.17	1 year
Analog signal generator	Keysight	N5182B	MY57300196	SHATBL-W005	2025.07.18	2026.07.17	1 year
Wideband radio communication tester	R&S	CMW500	101331	SHATBL-W007	2025.07.28	2026.07.27	1 year
Switch Box	Cesheng	smu 1003	WCS20221215	SHATBL-W046	2026.03.21	2027.03.20	1 year
Thermometer	DeLi	N/A	N/A	SHATBL-W011	2025.08.01	2026.07.31	1 year
Test Software	Cesheng	WCS-WC N	N/A	SHATBL-W021	N/A	N/A	N/A

Remark:

Calibration duration for above equipments is 1 year.

2.8. Measurement Uncertainty

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

No.	Item	Uncertainty
1	Conducted Output Power	1.27dB
2	Power spectral density	1.28dB
3	Conducted Frequency Stability	10.14Hz
4	Conducted spurious emissions	1.73dB
5	RF Cable Loss	1.22dB
6	Radiated Spurious Emission 9KHz-30MHz	2.35dB
7	Radiated Spurious Emission 30MHz-1GHz	2.59dB
8	Radiated Spurious Emission 1GHz-18GHz	2.62dB
9	Radiated Spurious Emission 18GHz - 40GHz	2.80dB
10	Occupied bandwidth	23.20Hz
11	Conducted Emissions	9kHz ~ 150kHz
		150kHz ~ 30MHz
		3.4dB
		3.73dB

2.9 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature	Normal Temperature:	22°C
Voltage	Normal Voltage:	DC 3.7V
Other	Relative Humidity:	57%
	Air Pressure:	102kPa

2.10. Labeling Requirements

Per 2.1074 & 15.19: Docket 95-19:

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practical, only the FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.

3. Test Result

3.1. 26dB Emission Bandwidth and Occupied Bandwidth

3.1.1. Limit

N/A

3.1.2. Test Procedure

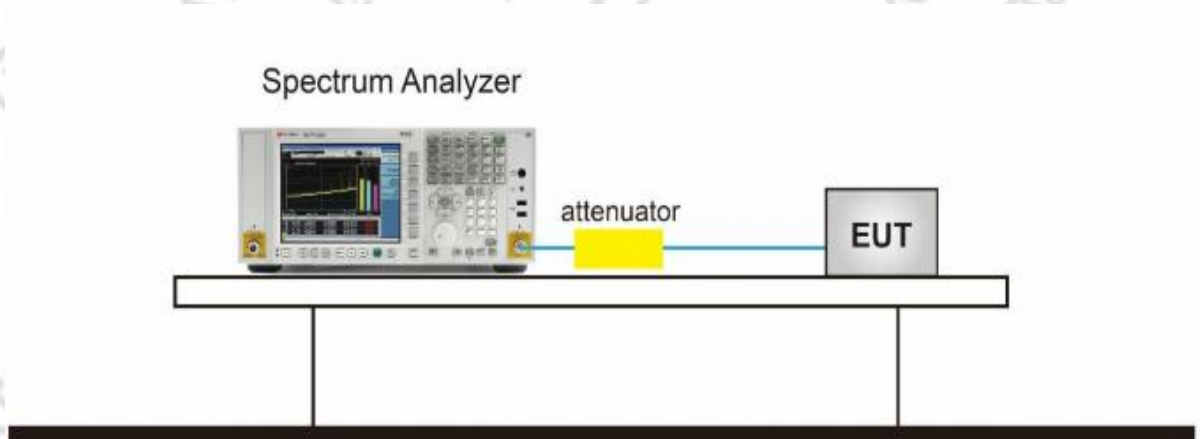
Emission Bandwidth:

- 1).Set RBW = shall be in the range of 1% to 5% of the emission Bandwidth.
- 2).Set the video bandwidth (VBW) > RBW.
- 3).Detector = Peak.
- 4).Trace mode = Max hold.
- 5).Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is in the range of 1% to 5%.

99% Occupied Bandwidth:

- 1).Set center frequency to the nominal EUT channel center frequency.
- 2).Set span = 1.5 times to 5.0 times the OBW.
- 3).Set RBW = 1% to 5% of the OBW
- 4).Set VBW $\geq$ 3 RBW
- 5).Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- 6).Use the 99% power bandwidth function of the instrument (if available). If the instrument does not have a 99% power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

3.1.3. Test Setup



3.1.4. Test Result of Emission Bandwidth And 99% Occupied Bandwidth

Please refer to the Appendix A1.

3.2. In-Band Emissions

3.2.1. Limit

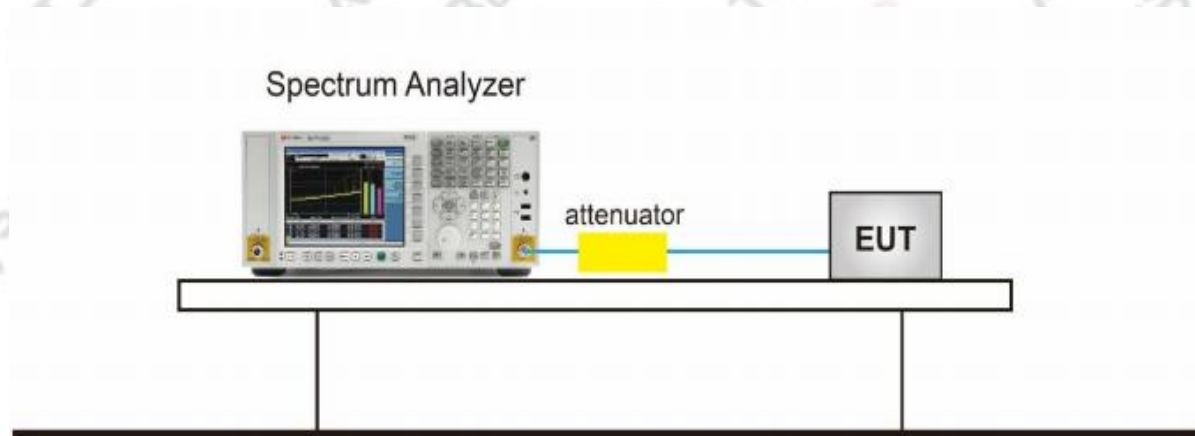
Section 15.407(b)(7). For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

3.2.2. Test Procedure

Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:

- 1).Set the span to encompass the entire 26 dB EBW of the signal.
- 2).Set RBW = same RBW used for 26 dB EBW measurement.
- 3).Set the video bandwidth 3 x RBW.
- 4).Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
- 5).Sweep time = auto.
- 3).Detector = RMS.
- 4).Trace mode = Max hold.
- 5).Trace average at least 100 traces in power averaging (rms) mode.
- 6).the channel bandwidth is defined as 26 dB EBW or 99% of the occupied bandwidth to develop the emission mask.

3.2.3. Test Setup



3.2.4. Test Result of Minimum Emission Bandwidth

Please refer to the Appendix A2.

3.3. Contention Based Protocol

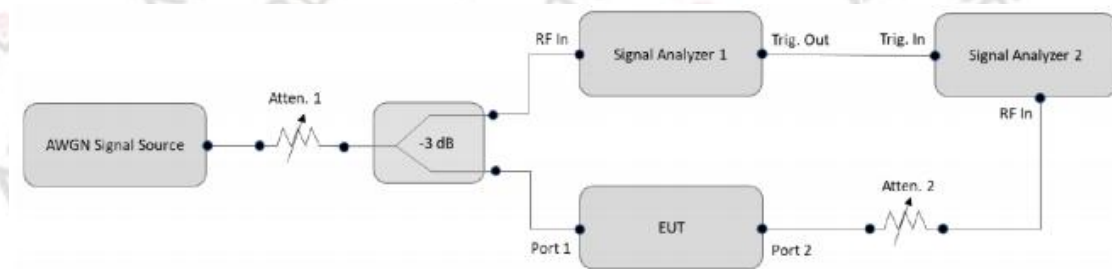
3.3.1. Standard Requirement

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel and stay off the channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain. To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

3.3.2. Test Procedure:

- 1). Configure the EUT to transmit with a constant duty cycle.
- 2). Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
- 3). Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2, as shown in Figure 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
- 4). Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two.
- 5). Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
- 6). Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in Figure 2.
- 7). Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
- 8). Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
- 9). (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
- 10). Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.

3.3.3.Test Setup



3.3.4.Test Result

Please refer to the Appendix A3.

3.4. Maximum E.I.R.P.

3.4.1. Limit

For the band 5.925-7.125 GHz:

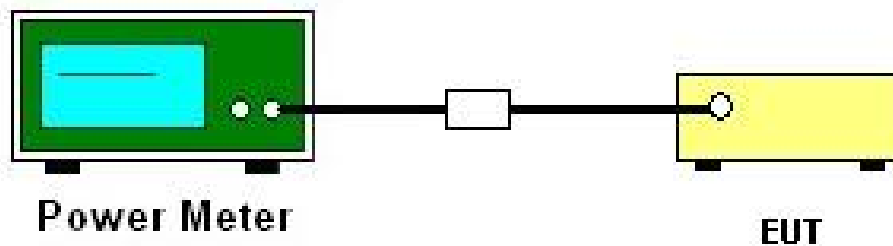
For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum power spectral density must not exceed -1 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

3.4.2. Test Procedure

ANSI C63.10-2020+Cor 1-2023 Section 11.9.2.3 Method PM-G.

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

3.4.3. Test Setup



3.4.4. Test Result of Maximum Conducted Average Output Power

Please refer to the Appendix A4.

3.5. Power Spectral Density

3.5.1. Limit

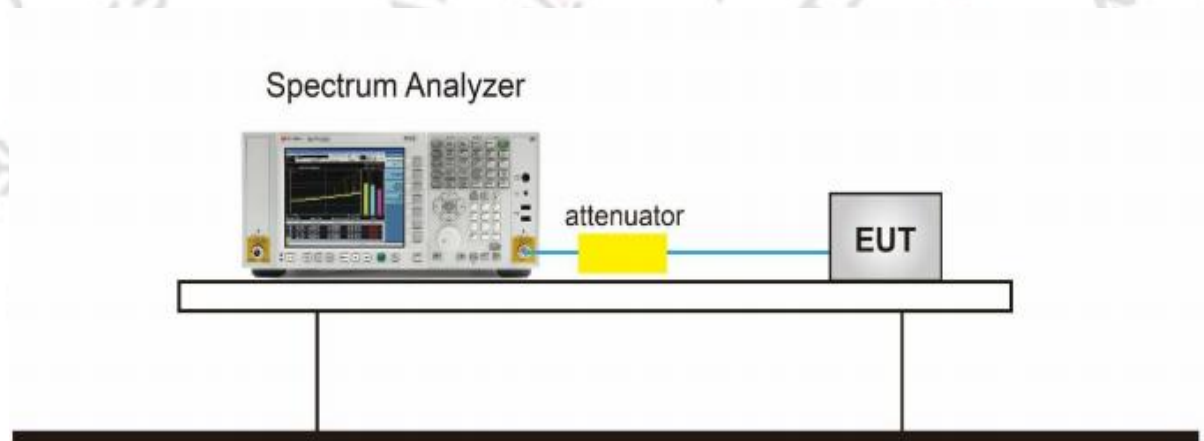
For the band 5.925-7.125 GHz:

1). For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum power spectral density must not exceed -1dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

3.5.2. Test Procedure

- 1). Measure the duty cycle, x , of the transmitter output signal as described in II.B.
- 2). Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- 3). Set RBW = 1 MHz.
- 4). Set VBW $\geq$ 3 MHz.
- 5). Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$. (This ensures that bin-to-bin spacing is $\leq \text{RBW}/2$, so that narrowband signals are not lost between frequency bins.)
- 6). Sweep time = auto.
- 7). Detector = averaging, if available. Otherwise, use sample detector mode.
- 8). Do not use sweep triggering. Allow the sweep to "free run."
- 9). Trace mode = averaging.

3.5.3. Test Setup



3.5.4. Test Result of Power Spectral Density

Please refer to the Appendix A5.

3.6. Frequency Stability

3.6.1. 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.

3.6.2. Test Procedure

Frequency Stability under Temperature Variations:

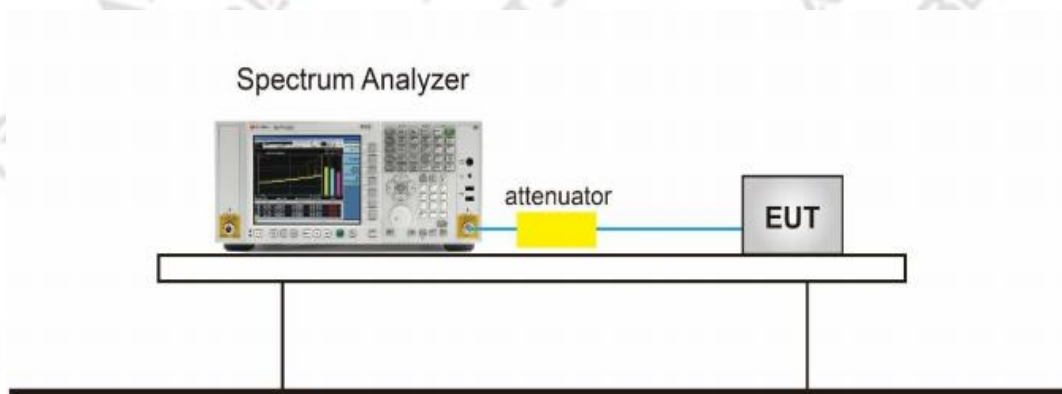
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Frequency Stability under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

3.6.3. Test Setup



3.6.4. Test Result

Please refer to the Appendix A6.

3.7. Radiated Spurious Emission and Restricted Band

3.7.1. Limit

47 CFR 15.407(b):The maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

1).For transmitters operating in the 5.925-7.125GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27dBm/MHz.

47 CFR 15.209(a): The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

3.7.2. Test Procedure

- 1).The testing follows ANSI C63.10-2020+Cor 1-2023 clause 11.11 & 11.12.
- 2).The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
- 3).The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
- 4).The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 5).Corrected Reading: Antenna Factor + Cable Loss + Read Level - Pre-amp Factor = Level.
- 6).For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
- 7).For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than peak limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Use the following spectrum analyzer settings:

Span shall wide enough to fully capture the emission being measured;

When frequency < 1 GHz:

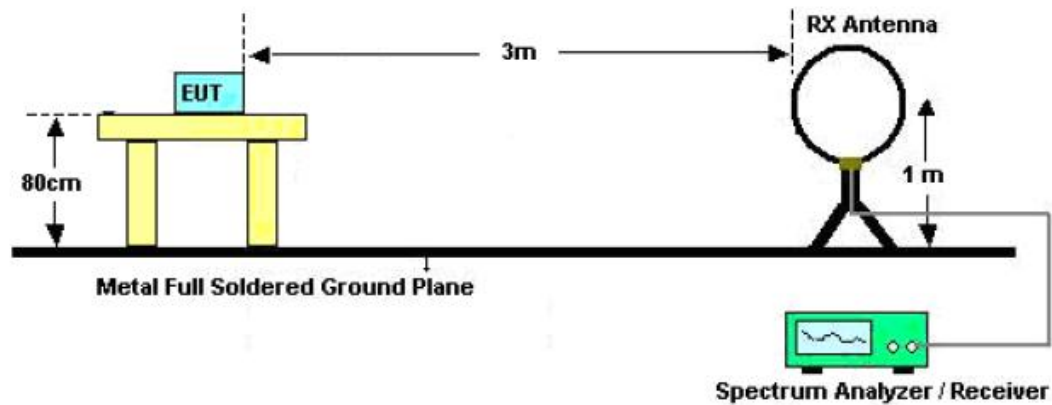
- Set RBW=100 kHz; VBW $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold;

When frequency $\geq$ 1 GHz:

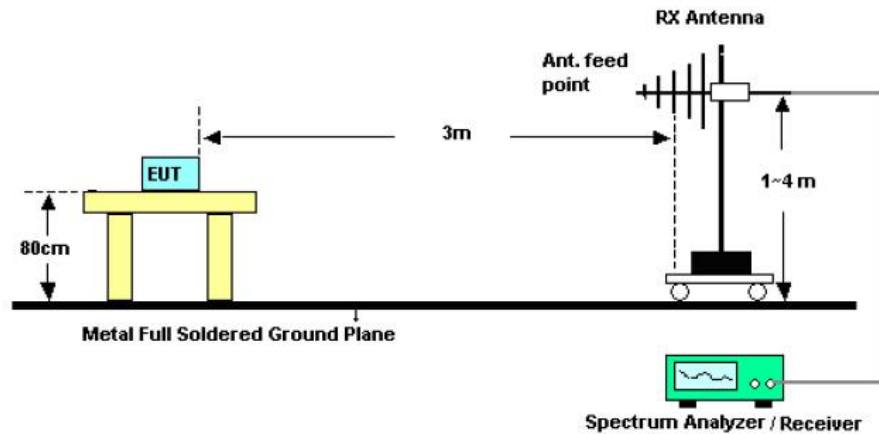
- Set RBW = 1 MHz; VBW = 3 MHz for peak measurement;
- Set RBW = 1 MHz; VBW = 10 Hz, when duty cycle is no less than 98 percent or VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.7.3. Test Setup

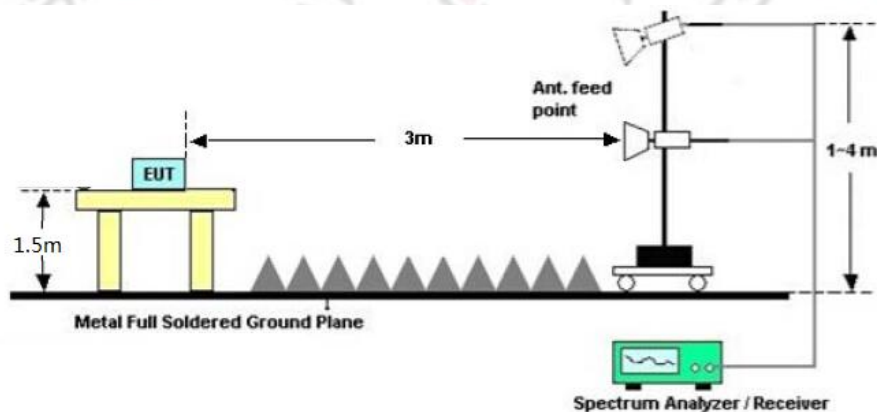
3.7.3.1. For radiated emissions below 30MHz



3.7.3.2. For radiated emissions from 30MHz to 1GHz



3.7.3.3. For radiated emissions above 1GHz



3.7.4. Test Result of Radiated Spurious Emission

Please refer to the Appendix B_Radiated Data for 6GHz WIFI.

3.7.5. Test Result of Restricted Band

Please refer to the Appendix B_Radiated Data for 6GHz WIFI.

3.8. AC Power-Line Conducted Emission

3.8.1.Limit

47 CFR 15.207(a): For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table:

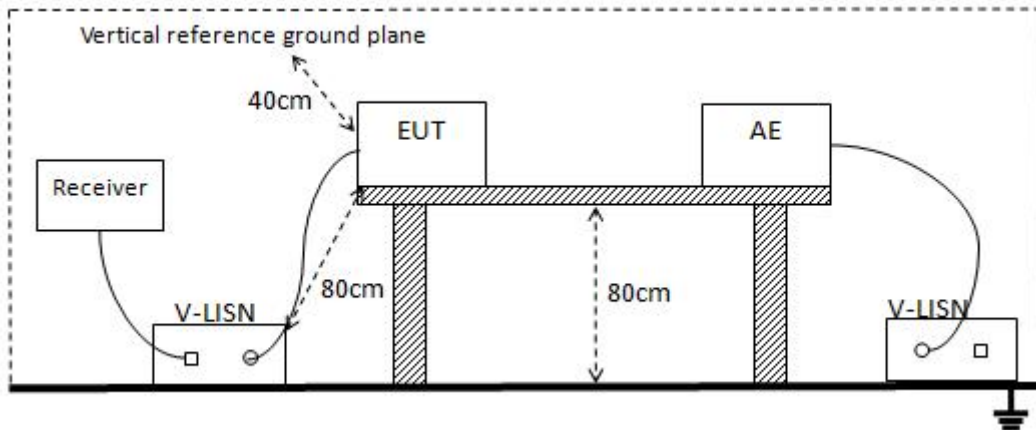
Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

3.8.2.Test Procedure

- 1).The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- 2).Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3).All the support units are connecting to the other LISN.
- 4).The LISN provides 50 ohm coupling impedance for the measuring instrument.
- 5).The FCC states that a 50 ohm, 50microhenry LISN should be used.
- 6).Both sides of AC line were checked for maximum conducted interference.
- 7).The frequency range from 150 kHz to 30 MHz was searched.
- 8).Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.8.3.Test Setup



3.8.4.Test Result of AC Power-Line Conducted Emission

Please refer to the Appendix B_Radiated Data for 6GHz WIFI.

3.9. Duty Cycle

3.9.1. Limit

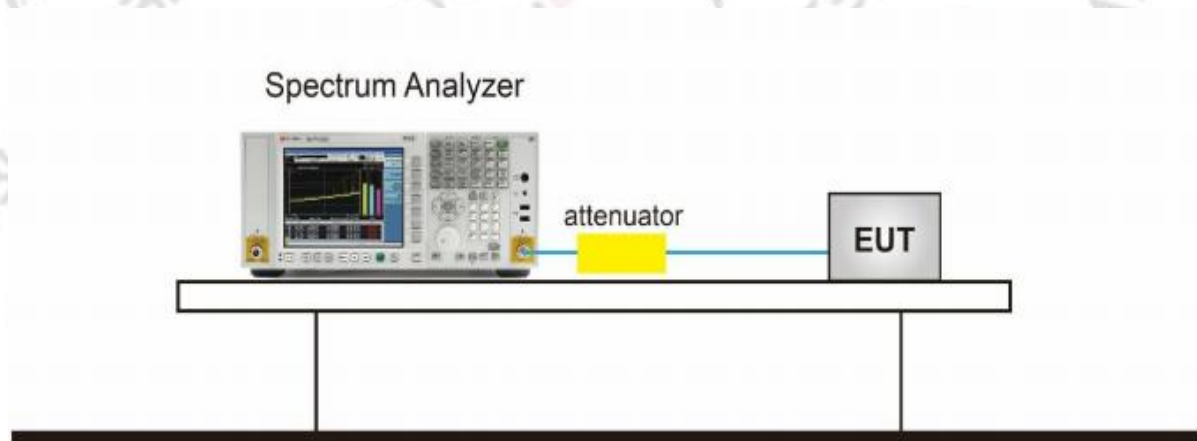
There is no limit requirement for Duty Cycle.

3.9.2. Test Procedure

Measurements of duty cycle and transmission duration shall be performed using one of the following techniques:

- 1).A diode detector and an oscilloscope that together have a sufficiently short response time to permit accurate measurements of the ON and OFF times of the transmitted signal.
- 2).The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:
 - a).Set the center frequency of the instrument to the center frequency of the transmission.
 - b).Set $RBW \geq OBW$ if possible; otherwise, set RBW to the largest available value.
 - c).Set $VBW \geq RBW$. Set detector = peak or average.
 - d).The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$ and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if $T \leq 16.7 \mu s$.)

3.9.3. Test Setup



3.9.4. Test Result

Please refer to the Appendix A7.

3.10. Antenna Requirement

3.10.1.Standard Requirement

According to 47 CFR 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

3.10.2.EUT Antenna

The antenna used for the EUT is PIFA Antenna, which meets the antenna requirements.

4. Test Setup Photographs

Please refer to the Appendix C.

5. External And Internal Photos of The EUT

External Please refer to the Appendix D.

Internal Please refer to the Appendix D.

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