

TEST REPORT

Product : SenseCAP Asset Tracker T2000-B
Trade mark : Seeed Studio
Model/Type reference : SenseCAP Asset Tracker T2000-B
Serial Number : N/A
Report Number : EED32S80401304
FCC ID : Z4T-T2000B
Date of Issue : May 07, 2026
Test Standards : 47 CFR Part 15 Subpart C
Test result : PASS

Prepared for:

Seeed Technology Co.,Ltd

**9F,Building G3,TCL International E city,Shuguang Community,Xili
street,Nanshan,Shenzhen, Guangdong Province, P.R.C**

Prepared by:

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May 07, 2026



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2 Test Summary

Test Item	Test Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart C Section 15.203/15.247 (c)	PASS
AC Power Line Conducted Emission	47 CFR Part 15, Subpart C Section 15.207	N/A
Maximum Conducted Output Power	47 CFR Part 15, Subpart C Section 15.247 (b)(2)	PASS
20dB Emission Bandwidth	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	PASS
Carrier Frequency Separation	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	PASS
Number of Hopping Channels	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	PASS
Time of Occupancy	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	PASS
Band Edge Measurements	47 CFR Part 15, Subpart C Section 15.247(d)	PASS
Conducted Spurious Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	PASS
Radiated Spurious emissions	47 CFR Part 15, Subpart C Section 15.205/15.209	PASS
Restricted bands around fundamental frequency	47 CFR Part 15, Subpart C Section 15.205/15.209	PASS
Remark: N/A: The product is powered by batteries.		

3 General Information

3.1 Client Information

Applicant:	Seeed Technology Co.,Ltd
Address of Applicant:	9F,Building G3,TCL International E city,Shuguang Community,Xili street,Nanshan,Shenzhen, Guangdong Province, P.R.C
Manufacturer:	Seeed Technology Co.,Ltd
Address of Manufacturer:	9F,Building G3,TCL International E city,Shuguang Community,Xili street,Nanshan,Shenzhen, Guangdong Province, P.R.C
Factory:	Shenzhen Xinxian Technology Co.,Limited.
Address of Factory:	5th Floor,102 first Floor,Building B17,HengfengIndustrial town No.739 Zhoushi Road,Hangcheng Street,Bao'an District,Shenzhen

3.2 General Description of EUT

Product Name:	SenseCAP Asset Tracker T2000-B	
Model No.:	SenseCAP Asset Tracker T2000-B	
Test Model No.:	SenseCAP Asset Tracker T2000-B	
Trade Mark:	Seeed Studio	
Product Type:	☐ Mobile ☐ Portable ☒ Fix Location	
Operation Frequency:	LoRa(FHSS) 125KHz Bandwidth: 902.3-914.9MHz	
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)	
Modulation Type:	LoRa	
Number of Channel:	64(declared by the client)	
Hopping Channel Type:	Adaptive Frequency Hopping systems	
Antenna Type:	FPC Antenna	
Antenna Gain:	-4.52 dBi	
Power Supply:	Battery:	DC 3.6V
Test Voltage:	DC 3.6V	
Sample Received Date:	Mar. 02, 2026	
Sample tested Date:	Mar. 02, 2026 to May 07, 2026	

Operation Frequency each of channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	902.3	20	906.3	40	910.3	60	914.3
1	902.5	21	906.5	41	910.5	61	914.5
2	902.7	22	906.7	42	910.7	62	914.7
3	902.9	23	906.9	43	910.9	63	914.9
4	903.1	24	907.1	44	911.1		
5	903.3	25	907.3	45	911.3		
6	903.5	26	907.5	46	911.5		
7	903.7	27	907.7	47	911.7		
8	903.9	28	907.9	48	911.9		
9	904.1	29	908.1	49	912.1		
10	904.3	30	908.3	50	912.3		
11	904.5	31	908.5	51	912.5		
12	904.7	32	908.7	52	912.7		
13	904.9	33	908.9	53	912.9		
14	905.1	34	909.1	54	913.1		
15	905.3	35	909.3	55	913.3		
16	905.5	36	909.5	56	913.5		
17	905.7	37	909.7	57	913.7		
18	905.9	38	909.9	58	913.9		
19	906.1	39	910.1	59	914.1		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency(MHz)
The lowest channel (CH0)	902.3
The middle channel (CH32)	908.7
The highest channel (CH63)	914.9

3.3 Test Configuration

EUT Test Software Settings:		
Test Software:	MobaXterm_Personal_22.1.exe	
EUT Power Grade:	Default (Power level is built-in set parameters and cannot be changed and selected)	
Use test software to set the lowest frequency, the middle frequency and the highest frequency keep transmitting of the EUT.		
Mode	Channel	Frequency(MHz)
LoRa	CH0	902.3
	CH32	908.7
	CH63	914.9

3.4 Test Environment

Operating Environment:	
Radiated Spurious Emissions:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar
Conducted Emissions:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar
RF Conducted:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar

3.5 Description of Support Units

The EUT has been tested independently.

3.6 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd
Hongwei Industrial Park, Zone 70, Bao'an District, Shenzhen, Guangdong, China
Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164, Test Firm Registration No.: 260439

3.7 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	RF power, conducted	0.46dB (30MHz-1GHz)
		0.55dB (1GHz-40GHz)
3	Radiated Spurious emission test	3.3dB (9kHz-30MHz)
		4.3dB (30MHz-1GHz)
		4.5dB (1GHz-18GHz)
		3.4dB (18GHz-40GHz)
4	Conduction emission	3.5dB (9kHz-150kHz)
		3.1dB (150kHz-30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

3.8 Equipment List

RF test system					
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Spectrum Analyzer	Keysight	N9010A	MY54510339	11-25-2025	11-24-2026
Spectrum Analyzer	R&S	FSW43	102978	08-11-2025	08-10-2026
Signal Generator	Keysight	N5182B	MY53051549	11-13-2025	11-12-2026
Signal Generator	Agilent	N5181A	MY46240094	11-25-2025	11-24-2026
DC Power	Keysight	E3642A	MY56376072	11-13-2025	11-12-2026
Communication test set	R&S	CMW500	169004	03-03-2025 02-06-2026	03-02-2026 02-05-2027
RF control unit(power unit)	JS Tonscend	JS0806-2	24I80620925	07-21-2025	07-20-2026
Wi-Fi 7GHz Band Extender	JS Tonscend	TS-WF7U2	2206200002	05-12-2025	05-11-2026
high-low temperature test chamber	Dong Guang Qin Zhuo	LK-80GA	QZ20150611879	11-13-2025	11-12-2026
Temperature/ Humidity Indicator	biaozhi	HM10	1804186	05-26-2025	05-25-2026
BT&WI-FI Automatic test software	JS Tonscend	JS1120-3	V3.6.21	---	---
Digital multimeter	FLUKE	17B MAX	59545050WS	10-15-2025	10-14-2026

Conducted disturbance Test					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
				(mm-dd-yyyy)	(mm-dd-yyyy)
Receiver	R&S	ESCI	100435	04-08-2025 04-07-2026	04-07-2026 04-06-2027
Temperature/ Humidity Indicator	Defu	TH128	/	03-31-2025 03-24-2026	03-30-2026 03-23-2027
LISN	R&S	ENV216	100098	09-13-2025	09-12-2026
Barometer	changchun	DYM3	1188	---	---
Test software	Fara	EZ-EMC	EMC-CON 3A1.1	---	---
Capacitive voltage probe	Schwarzbeck	CVP 9222C	00124	06-07-2025	06-06-2026
ISN	TESEQ	ISN T800	30297	11-24-2025	11-23-2026

3M Semi-anechoic Chamber (2)- Radiated disturbance Test					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
				(mm-dd-yyyy)	(mm-dd-yyyy)
3M Chamber & Accessory Equipment	TDK	SAC-3	---	01/13/2024	01/12/2027
Receiver	R&S	ESC17	100938-003	09/03/2025	09/02/2026
TRILOG Broadband Antenna	schwarzbeck	VULB 9163	9163-618	05/14/2025	05/13/2026
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-076	04/07/2025 03/29/2026	04/06/2026 03/28/2027
Microwave Preamplifier	Tonscend	EMC051845SE	980380	11/25/2025	11/24/2026
Horn Antenna	A.H.SYSTEMS	SAS-574	374	07/02/2023	07/01/2026
Horn Antenna	ETS-LINGREN	BBHA 9120D	9120D-1869	04/07/2025 03-31-2026	04/06/2026 03-30-2027
Preamplifier	Agilent	11909A	12-1	03/03/2025 02/06/2026	03/02/2026 02/07/2027
Preamplifier	CD	PAP-1840-60	6041.6042	05/26/2025	05/25/2026
Test software	Fara	EZ-EMC	EMEC-3A1-Pre	---	---
Cable line	Fulai(7M)	SF106	5219/6A	01/13/2024	01/12/2027
Cable line	Fulai(6M)	SF106	5220/6A	01/13/2024	01/12/2027
Cable line	Fulai(3M)	SF106	5216/6A	01/13/2024	01/12/2027
Cable line	Fulai(3M)	SF106	5217/6A	01/13/2024	01/12/2027

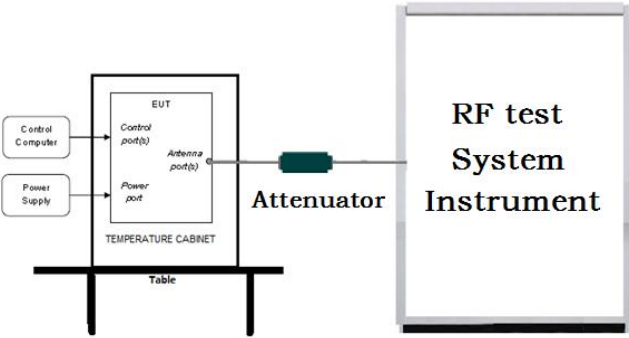
3M full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Fully Anechoic Chamber	TDK	FAC-3	---	01-29-2024	01-28-2027
Receiver	Keysight	N9038A	MY57290136	12-22-2025	12-21-2026
Spectrum Analyzer	Keysight	N9020B	MY57111112	12-21-2025	12-20-2026
Spectrum Analyzer	Keysight	N9030B	MY57140871	12-21-2025	12-20-2026
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-12-2025 03-29-2026	04-11-2026 03-28-2027
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-12-2025 04-03-2026	04-11-2026 04-02-2027
Horn Antenna	ETS-LINDGREN	3117	57407	06-29-2025	06-28-2026
Preamplifier	EMCI	EMC001330	980563	03-03-2025 02-06-2026	03-02-2026 02-05-2027
Preamplifier	EMCI	EMC051845SE	980380	11-25-2025	11-24-2026
Preamplifier	Tonscend	TAP-011858	AP21B806112	07-07-2025	07-06-2026
Communication test set	R&S	CMW500	104466	11-25-2025	11-24-2026
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	03-31-2025 03-24-2026	03-30-2026 03-23-2027
RSE Automatic test software	JS Tonscend	JS36-RSE	V5.0.0.1	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	01-29-2024	01-28-2027
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	01-29-2024	01-28-2027
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	01-29-2024	01-28-2027
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	01-29-2024	01-28-2027
Cable line	Times	EMC104-NMNM-1000	SN160710	01-29-2024	01-28-2027
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	01-29-2024	01-28-2027
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	01-29-2024	01-28-2027
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	01-29-2024	01-28-2027
Cable line	Times	HF160-KMKM-3.00M	393493-0001	01-29-2024	01-28-2027

4 Test results and Measurement Data

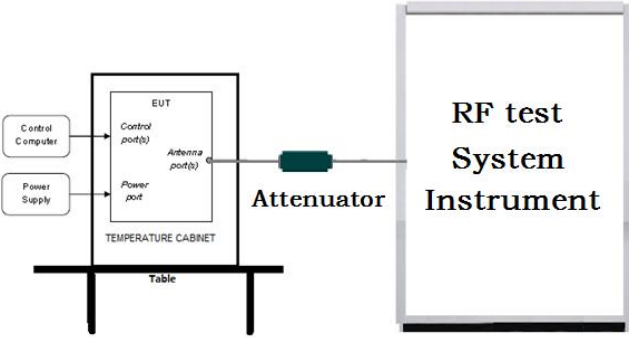
4.1 Antenna Requirement

Standard requirement:	47 CFR Part 15C Section 15.203 /247(c)
15.203 requirement: 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. 15.247(b) (4) requirement: The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	
EUT Antenna:	Please see Internal photos
The antenna is FPC antenna. The best case gain of the antenna is -4.52 dBi.	

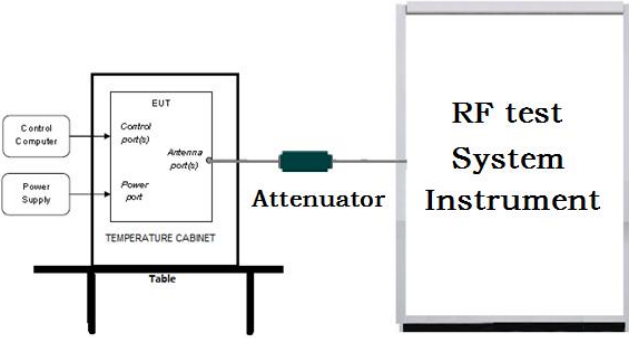
4.2 Maximum Conducted Output Power

Test Requirement:	47 CFR Part 15C Section 15.247 (b)(2)
Test Method:	ANSI C63.10-2020
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	Use the following spectrum analyzer settings: Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel RBW > the 20 dB bandwidth of the emission being measured VBW ≥ RBW Sweep = auto Detector function = peak Trace = max hold Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission.
Limit:	21dBm
Exploratory Test Mode:	Non-hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	1 watt (30 dBm) for systems employing at least 50 hopping channels; and, 0.25 watts (24 dBm) for systems employing less than 50 hopping channels, but at least 25 hopping channels, as permitted under paragraph (a)(1)(i) of this section.
Test Results:	Refer to Appendix A

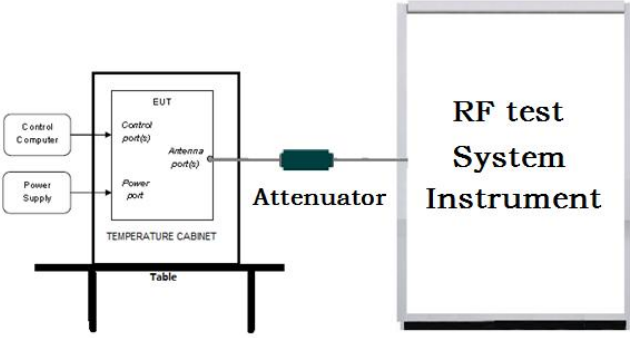
4.3 20dB Emission Bandwidth

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10-2020
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Use the following spectrum analyzer settings for 20dB Bandwidth measurement. Span = approximately 2 to 5 times the 20 dB bandwidth, centered on a hopping channel; 1%≤RBW ≤5% of the 20 dB bandwidth; VBW≥3RBW; Sweep = auto; Detector function = peak; Trace = max hold. 4. Measure and record the results in the test report.
Limit:	The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.
Exploratory Test Mode:	Non-hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	Refer to clause 3.3
Test Results:	Refer to Appendix A

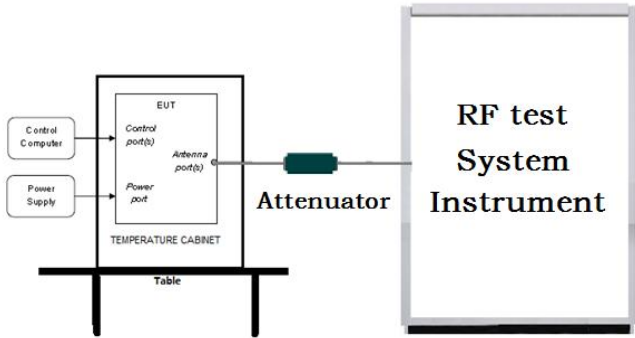
4.4 Carrier Frequency Separation

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10-2020
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Enable the EUT hopping function. 4. Use the following spectrum analyzer settings: Span = wide enough to capture the peaks of two adjacent channels; RBW is set to approximately 30% of the channel spacing, adjust as necessary to best identify the center of each individual channel; VBW≥RBW; Sweep = auto; Detector function = peak; Trace = max hold. 5. Use the marker-delta function to determine the separation between the peaks of the adjacent channels. Record the value in report.
Limit:	Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.
Test Mode:	Hopping transmitting with all kind of modulation
Test Results:	Refer to Appendix A

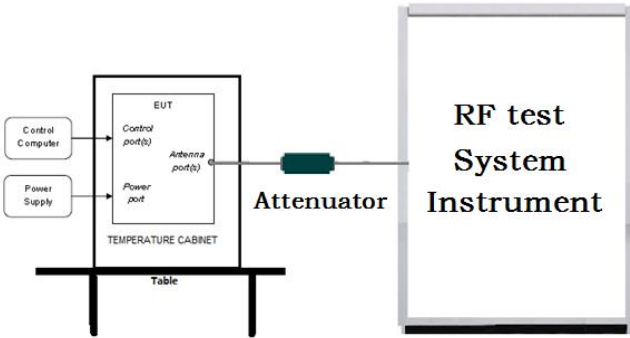
4.5 Number of Hopping Channel

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10-2020
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Enable the EUT hopping function. 4. Use the following spectrum analyzer settings: Span = the frequency band of operation; set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller; VBW≥RBW; Sweep= auto; Detector function = peak; Trace = max hold. 5. The number of hopping frequency used is defined as the number of total channel. 6. Record the measurement data in report.
Limit:	At least 25 non overlapping hopping channels. If the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping channels.
Test Mode:	Hopping transmitting with all kind of modulation
Test Results:	Refer to Appendix A

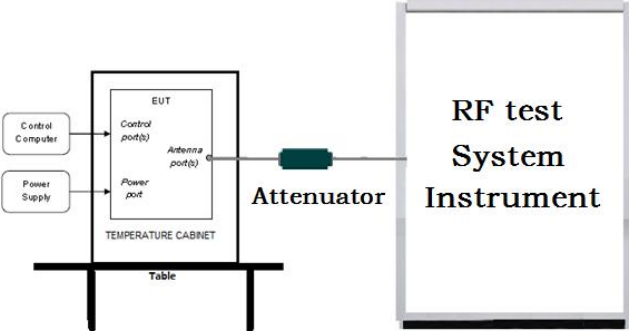
4.6 Time of Occupancy

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10-2020
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Enable the EUT hopping function. 4. Use the following spectrum analyzer settings: Span = zero span, centered on a hopping channel; RBW shall be $\leq$ channel spacing and where possible RBW should be set $\gg 1/T$, where T is the expected dwell time per channel; VBW$\geq$RBW; Sweep = as necessary to capture the entire dwell time per hopping channel; Detector function = peak; Trace = max hold. 5. Measure and record the results in the test report.
Limit:	If the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within 10 second period.
Test Mode:	Hopping transmitting with all kind of modulation and all kind of data type.
Test Results:	Refer to Appendix A

4.7 Band edge Measurements

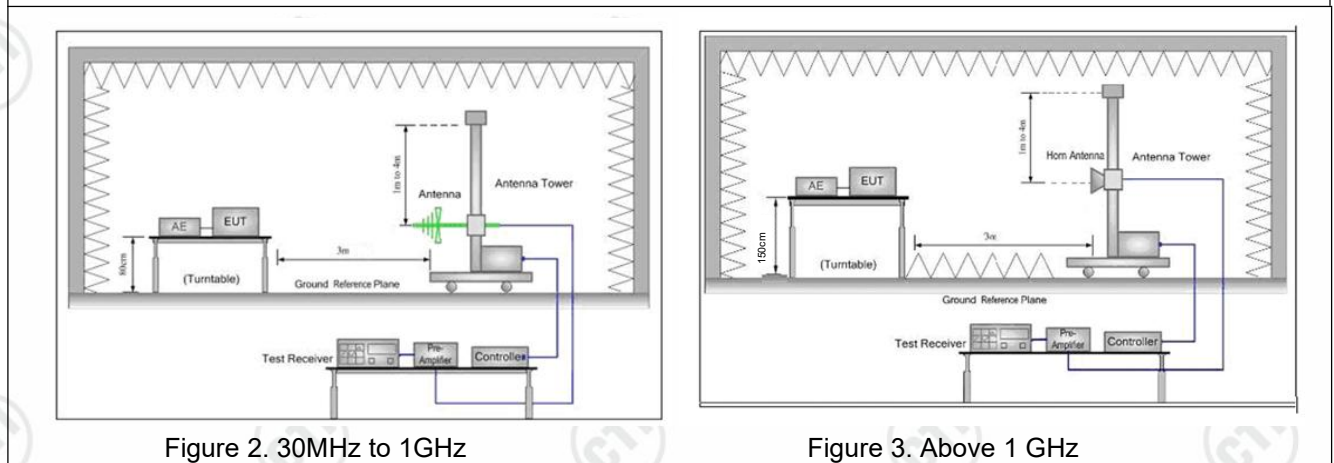
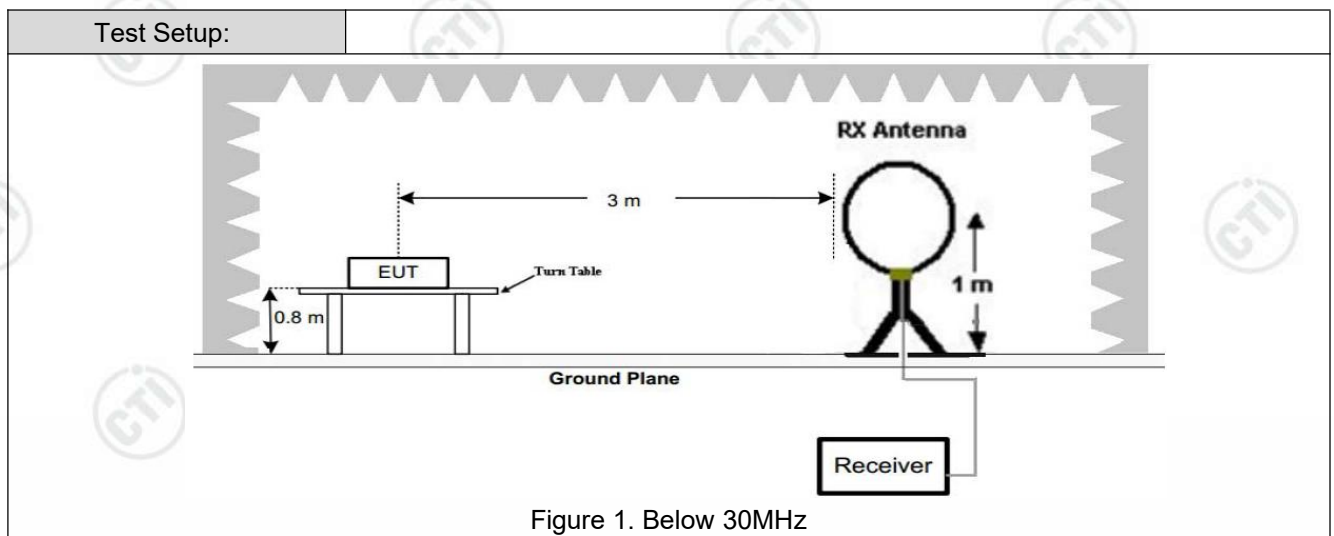
Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10-2020
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	1. Set to the maximum power setting and enable the EUT transmit continuously. 2. Set RBW = 100 kHz, VBW = 300 kHz ($\geq$RBW). Band edge emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100kHz RBW. The attenuation shall be 30 dB instead of 20 dB when RMS conducted output power procedure is used. 3. Enable hopping function of the EUT and then repeat step 2 and 3. 4. Measure and record the results in the test report.
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Exploratory Test Mode:	Hopping and Non-hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	Refer to clause 3.3
Test Results:	Refer to Appendix A

4.8 Conducted Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10-2020
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Set RBW = 100 kHz, VBW = 300kHz, scan up through 10th harmonic. All harmonics / spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100kHz RBW. 4. Measure and record the results in the test report. 5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Exploratory Test Mode:	Non-hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	Refer to clause 3.3
Test Results:	Refer to Appendix A

4.9 Radiated Spurious Emission & Restricted bands

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205				
Test Method:	ANSI C63.10-2020				
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	30MHz-1GHz	Peak	100 kHz	300kHz	Peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10kHz	Average
Limit:	Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz-88MHz	100	40.0	Quasi-peak	3
	88MHz-216MHz	150	43.5	Quasi-peak	3
	216MHz-960MHz	200	46.0	Quasi-peak	3
	960MHz-1GHz	500	54.0	Quasi-peak	3
	Above 1GHz	500	54.0	Average	3
	Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.				



Test Procedure:

- 1) Below 1G: The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
 - 2) Above 1G: The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- Note: For the radiated emission test above 1GHz:
Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
 - The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both

	horizontal and vertical polarizations of the antenna are set to make the measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. g. Test the EUT in the lowest channel (2402MHz), the middle channel (2441MHz), the Highest channel (2480MHz) h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case. i. Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Non-hopping transmitting mode with all kind of modulation and all kind of data type
Final Test Mode:	Through Pre-scan, find the model a is the worst case. Pretest the EUT at Transmitting mode, For below 1GHz part, through pre-scan, the worst case is the lowest channel. Only the worst case is recorded in the report.
Test Results:	Pass

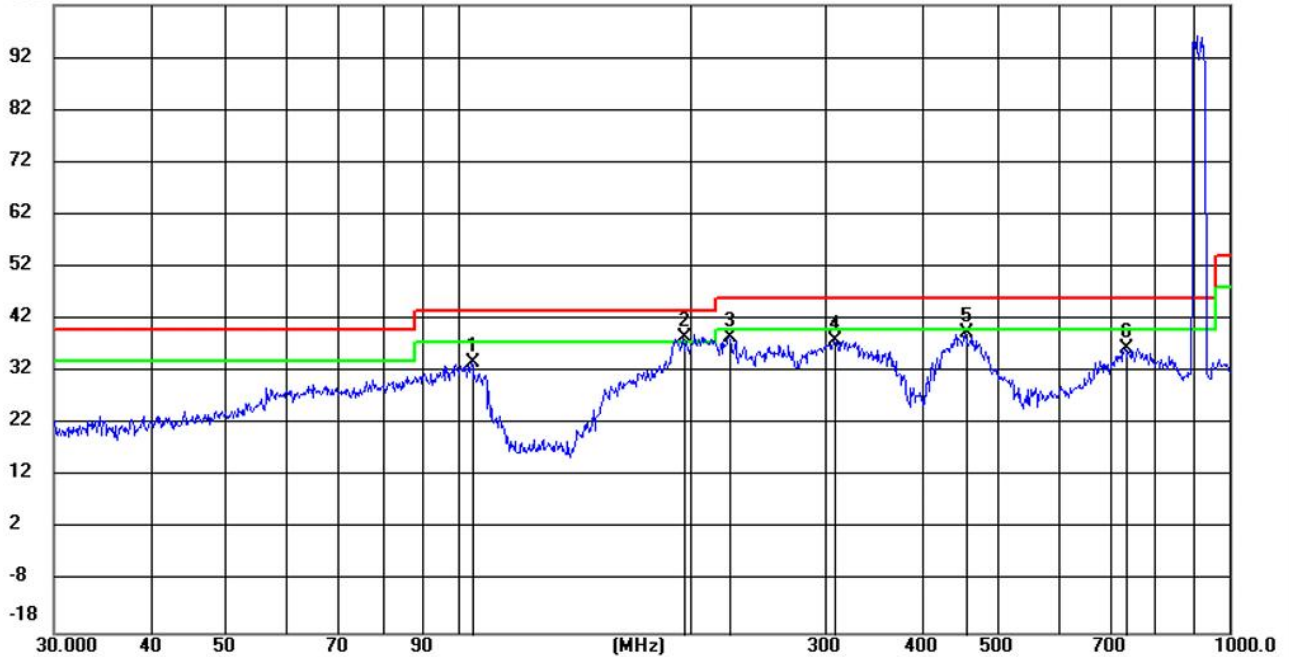
Radiated Spurious Emission below 1GHz:

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes, only the worst case mode a was recorded in the report.

Test Graph

Horizontal:

102.0 dBuV/m

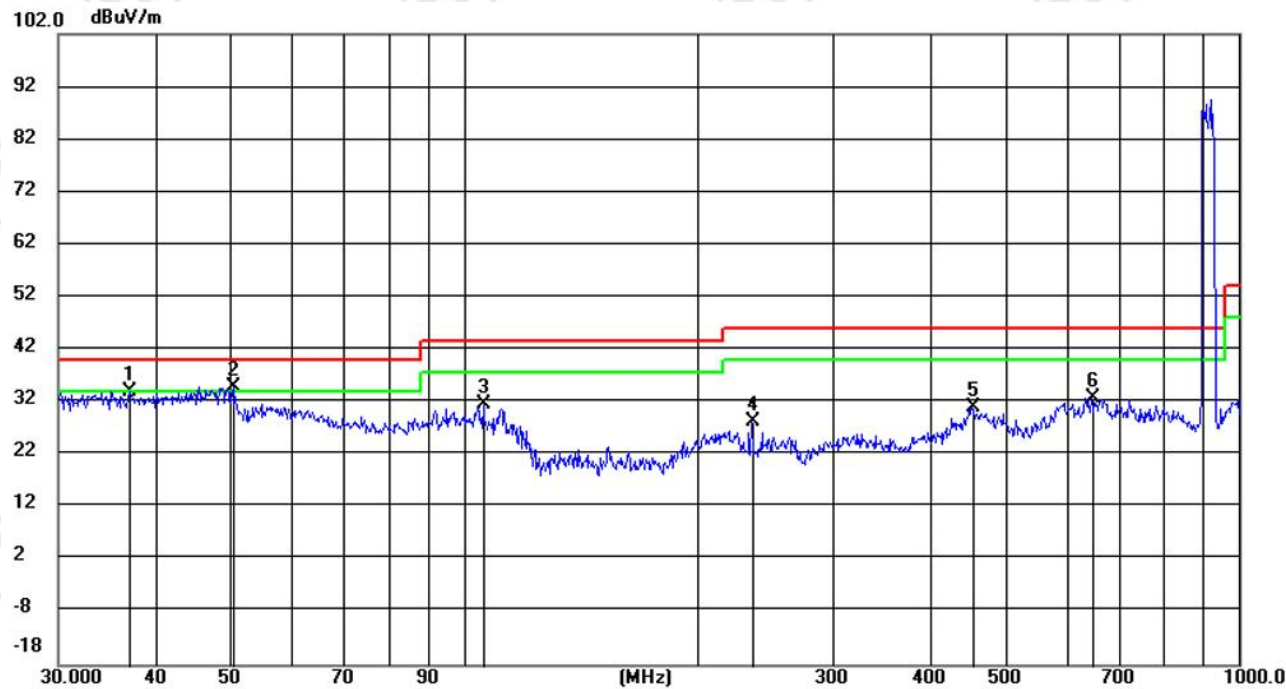


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Antenna Height cm	Table Degree	Comment
1		104.3895	20.12	13.73	33.85	43.50	-9.65	QP	100	184
2	*	196.2687	26.10	12.59	38.69	43.50	-4.81	QP	100	140
3		224.9527	25.20	13.43	38.63	46.00	-7.37	QP	100	140
4		307.3459	21.47	16.56	38.03	46.00	-7.97	QP	100	255
5		454.4693	19.32	20.14	39.46	46.00	-6.54	QP	100	202
6		732.4336	12.06	24.27	36.33	46.00	-9.67	QP	100	95

Remark:

1. Margin=Measurement(Level)-Limit.
2. Measurement(Level)=Reading Level+Correct Factor.
3. In the test results, an asterisk (*) indicates Maximum Data, a cross (X) indicates over Limit, an exclamation mark (!) indicates over -6dB margin Limit.
4. The part beyond the limit in the figure is Operation Frequency of the EUT. According to 47 CFR Part 15C Section 247(d) This test does not require an assessment.

Vertical:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Antenna Height cm	Table Degree	Comment
1	!	37.1028	21.05	12.96	34.01	40.00	-5.99	QP	100	149	
2	*	50.5682	20.41	14.58	34.99	40.00	-5.01	QP	100	34	
3		106.3104	17.83	13.86	31.69	43.50	-11.81	QP	100	158	
4		235.3620	14.51	13.90	28.41	46.00	-17.59	QP	100	69	
5		453.9915	10.96	20.13	31.09	46.00	-14.91	QP	100	78	
6		646.2515	9.39	23.48	32.87	46.00	-13.13	QP	100	345	

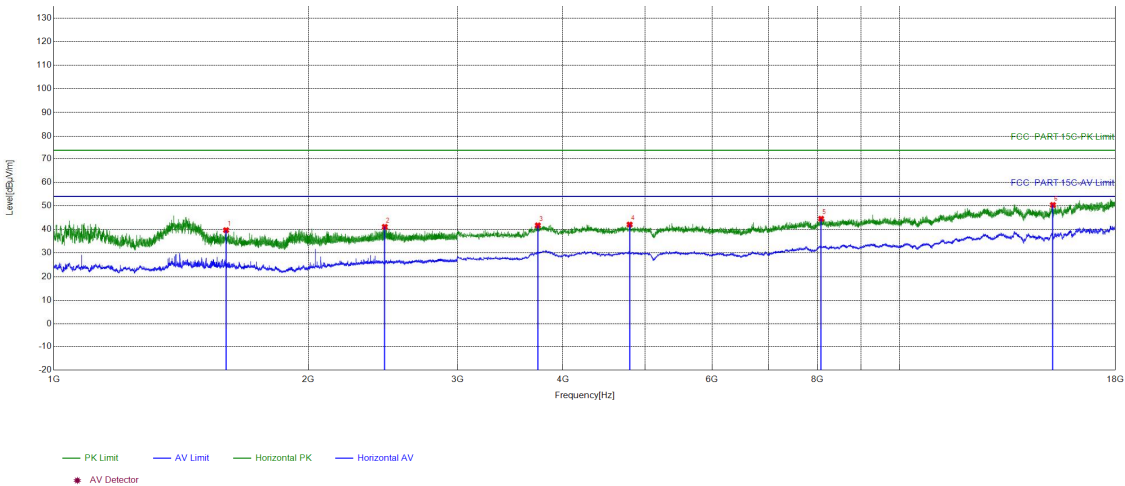
Remark:

1. $\text{Margin} = \text{Measurement (Level)} - \text{Limit}$.
2. $\text{Measurement (Level)} = \text{Reading Level} + \text{Correct Factor}$.
3. In the test results, an asterisk (*) indicates Maximum Data, a cross (X) indicates over Limit, an exclamation mark (!) indicates over -6dB margin Limit.
4. The part beyond the limit in the figure is Operation Frequency of the EUT. According to 47 CFR Part 15C Section 247(d) This test does not require an assessment.

Radiated Spurious Emission above 1GHz:

Test_Mode	TX	Test_Frequency	902.3MHz
Ant	/	Test_Date	2026/4/9

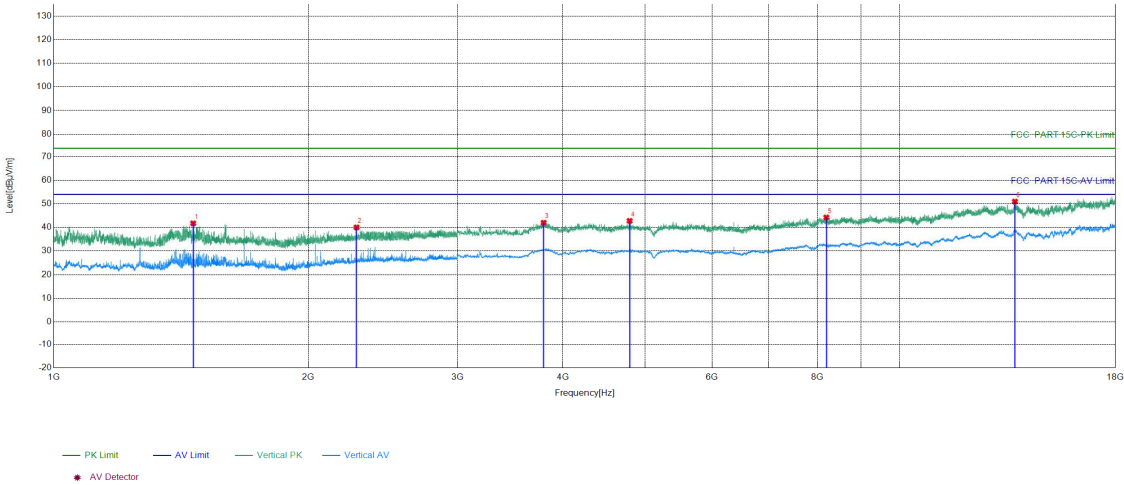
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1598.4598	-20.99	60.68	39.69	74.00	34.31	PASS	Horizontal	PK
2	2462.5463	-17.53	58.61	41.08	74.00	32.92	PASS	Horizontal	PK
3	3735.0735	-12.83	54.56	41.73	74.00	32.27	PASS	Horizontal	PK
4	4795.6796	-8.61	50.69	42.08	74.00	31.92	PASS	Horizontal	PK
5	8078.0078	-1.04	45.58	44.54	74.00	29.46	PASS	Horizontal	PK
6	15182.7183	11.47	38.91	50.38	74.00	23.62	PASS	Horizontal	PK

Test_Mode	TX	Test_Frequency	902.3MHz
Ant	/	Test_Date	2026/4/9

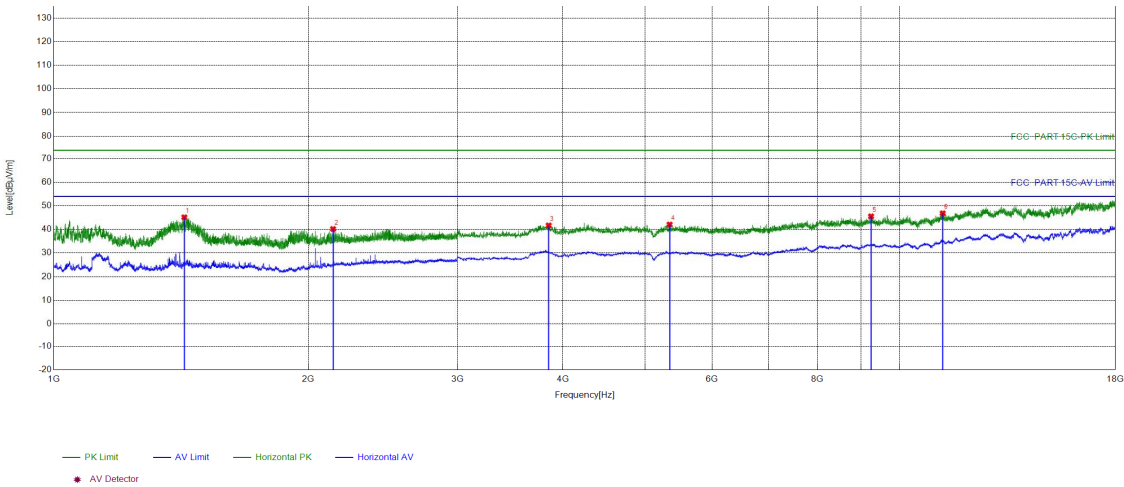
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1461.4461	-21.59	63.34	41.75	74.00	32.25	PASS	Vertical	PK
2	2280.128	-18.28	58.31	40.03	74.00	33.97	PASS	Vertical	PK
3	3795.0795	-12.48	54.49	42.01	74.00	31.99	PASS	Vertical	PK
4	4795.6796	-8.61	51.40	42.79	74.00	31.21	PASS	Vertical	PK
5	8193.5194	-1.38	45.62	44.24	74.00	29.76	PASS	Vertical	PK
6	13690.069	7.29	43.68	50.97	74.00	23.03	PASS	Vertical	PK

Test_Mode	TX	Test_Frequency	908.7MHz
Ant	/	Test_Date	2026/4/9

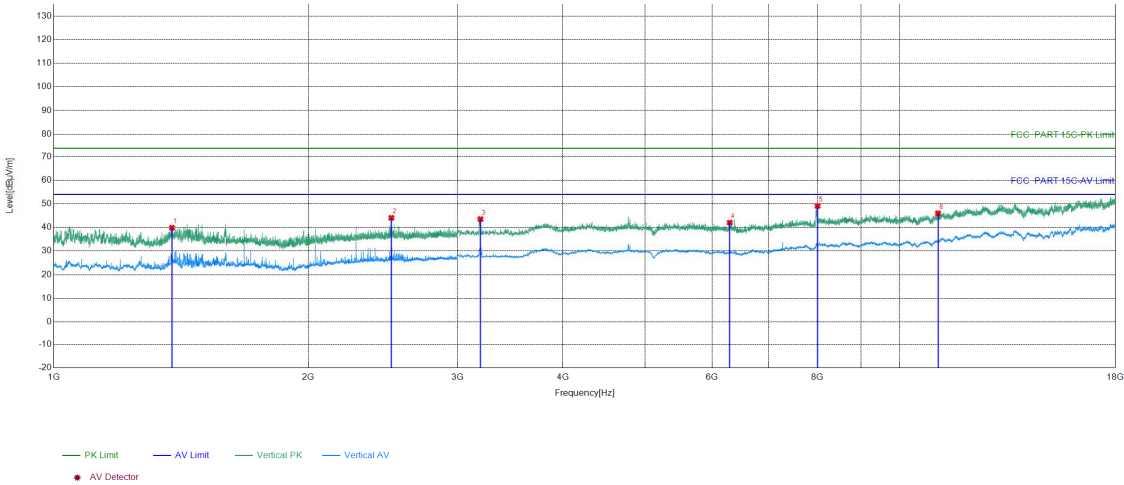
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1426.8427	-21.65	66.81	45.16	74.00	28.84	PASS	Horizontal	PK
2	2138.9139	-18.88	59.07	40.19	74.00	33.81	PASS	Horizontal	PK
3	3847.5848	-12.10	53.81	41.71	74.00	32.29	PASS	Horizontal	PK
4	5347.7348	-6.94	49.03	42.09	74.00	31.91	PASS	Horizontal	PK
5	9254.1254	0.64	44.91	45.55	74.00	28.45	PASS	Horizontal	PK
6	11247.8248	2.39	44.46	46.85	74.00	27.15	PASS	Horizontal	PK

Test_Mode	TX	Test_Frequency	908.7MHz
Ant	/	Test_Date	2026/4/9

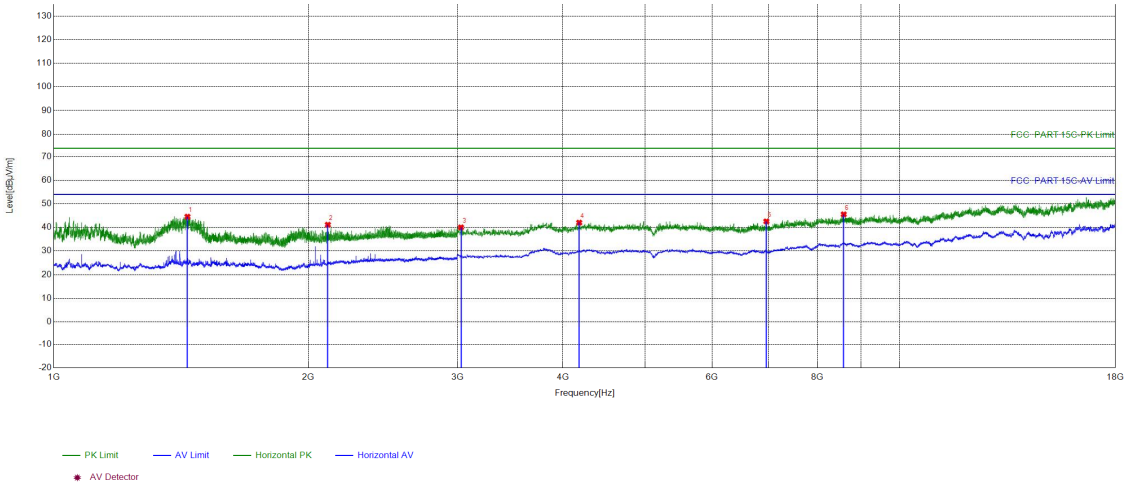
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1379.638	-21.82	61.67	39.85	74.00	34.15	PASS	Vertical	PK
2	2506.9507	-17.14	61.22	44.08	74.00	29.92	PASS	Vertical	PK
3	3195.0195	-14.47	58.01	43.54	74.00	30.46	PASS	Vertical	PK
4	6298.8299	-4.84	46.88	42.04	74.00	31.96	PASS	Vertical	PK
5	8000	-1.36	50.43	49.07	74.00	24.93	PASS	Vertical	PK
6	11105.3105	2.16	43.87	46.03	74.00	27.97	PASS	Vertical	PK

Test_Mode	TX	Test_Frequency	914.9MHz
Ant	/	Test_Date	2026/4/9

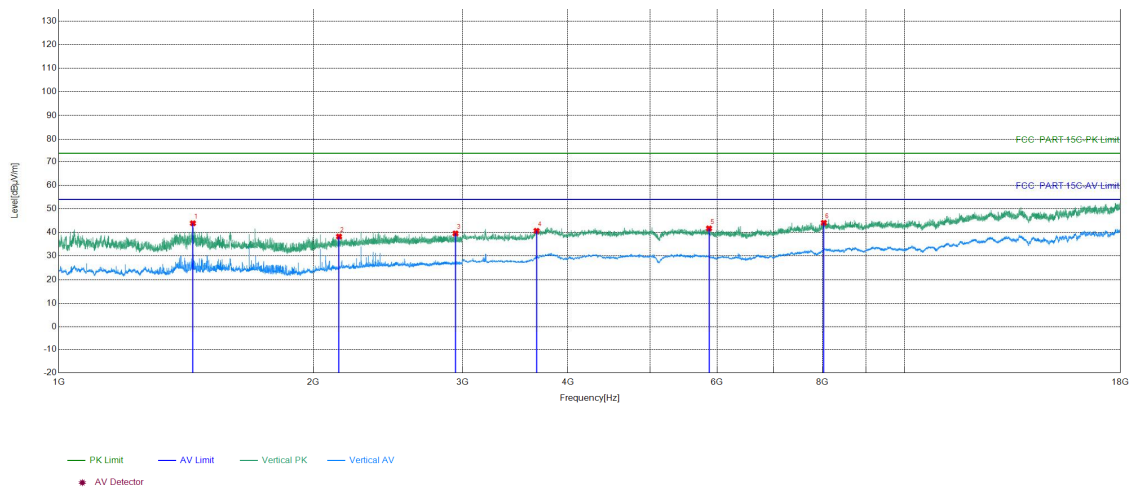
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1439.0439	-21.63	66.19	44.56	74.00	29.44	PASS	Horizontal	PK
2	2108.9109	-19.01	60.16	41.15	74.00	32.85	PASS	Horizontal	PK
3	3030.003	-14.48	54.51	40.03	74.00	33.97	PASS	Horizontal	PK
4	4180.6181	-11.01	53.06	42.05	74.00	31.95	PASS	Horizontal	PK
5	6958.8959	-2.98	45.55	42.57	74.00	31.43	PASS	Horizontal	PK
6	8591.0591	-0.52	46.08	45.56	74.00	28.44	PASS	Horizontal	PK

Test_Mode	TX	Test_Frequency	914.9MHz
Ant	/	Test_Date	2026/4/9

Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1440.6441	-21.63	65.52	43.89	74.00	30.11	PASS	Vertical	PK
2	2144.7145	-18.85	57.11	38.26	74.00	35.74	PASS	Vertical	PK
3	2944.7945	-15.77	55.35	39.58	74.00	34.42	PASS	Vertical	PK
4	3672.0672	-12.82	53.50	40.68	74.00	33.32	PASS	Vertical	PK
5	5872.7873	-5.53	47.23	41.70	74.00	32.30	PASS	Vertical	PK
6	8028.5028	-1.15	45.23	44.08	74.00	29.92	PASS	Vertical	PK

Remark:

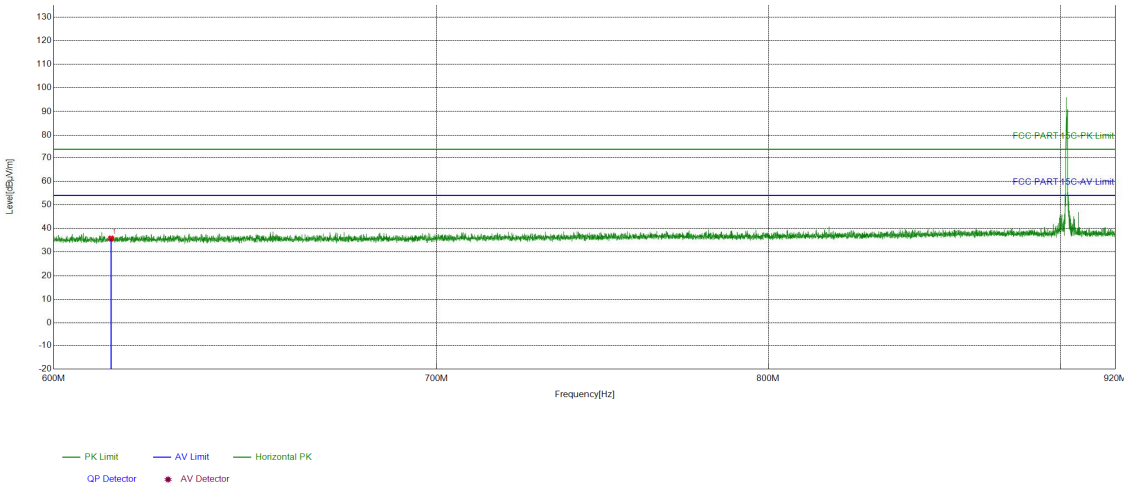
- The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- Scan from 9kHz to 25GHz, the disturbance above 10GHz and below 30MHz was very low. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. The report records the lowest Peak value. If the Peak value is greater than 54dBμV/m, then the Average value at that time is recorded.

Restricted bands:

Test plot as follows:

Test_Mode	TX	Test_Frequency	902.3MHz
Ant	/	Test_Date	2026/4/9

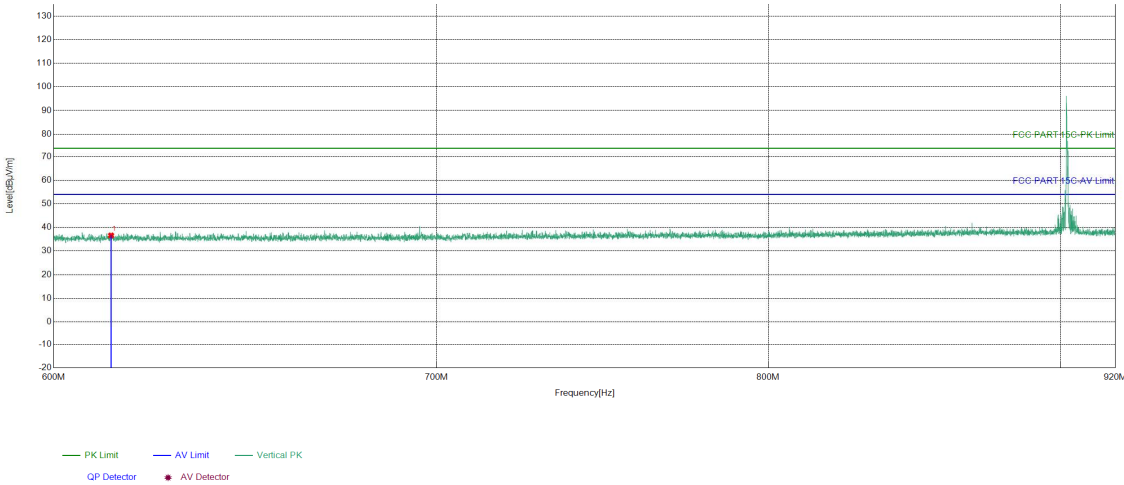
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	614	-8.49	44.25	35.76	46.00	10.24	PASS	Horizontal	PK

Test_Mode	TX	Test_Frequency	902.3MHz
Ant	/	Test_Date	2026/4/9

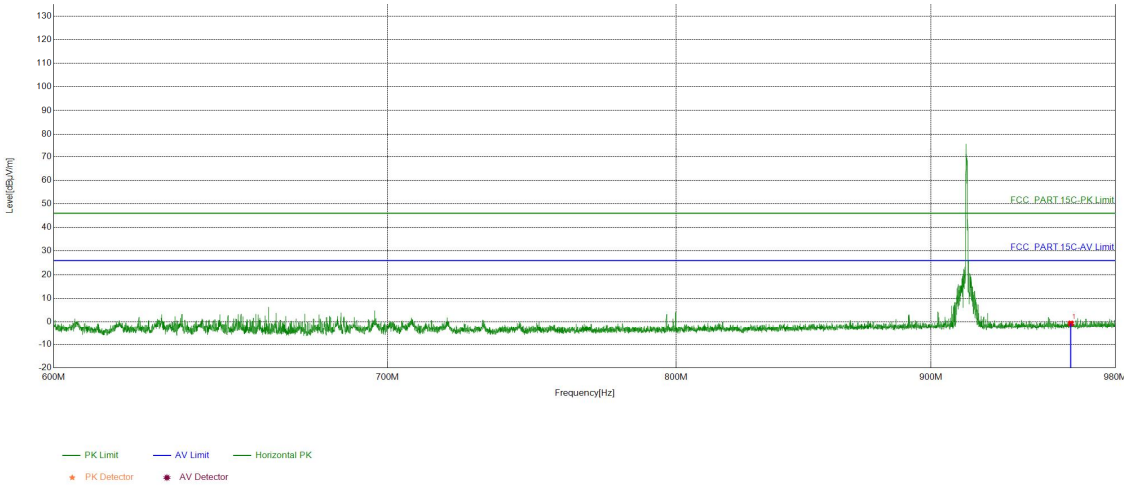
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	614	-8.49	45.10	36.61	46.00	9.39	PASS	Vertical	PK

Test_Mode	TX	Test_Frequency	914.9MHz
Ant	/	Test_Date	2026/4/9

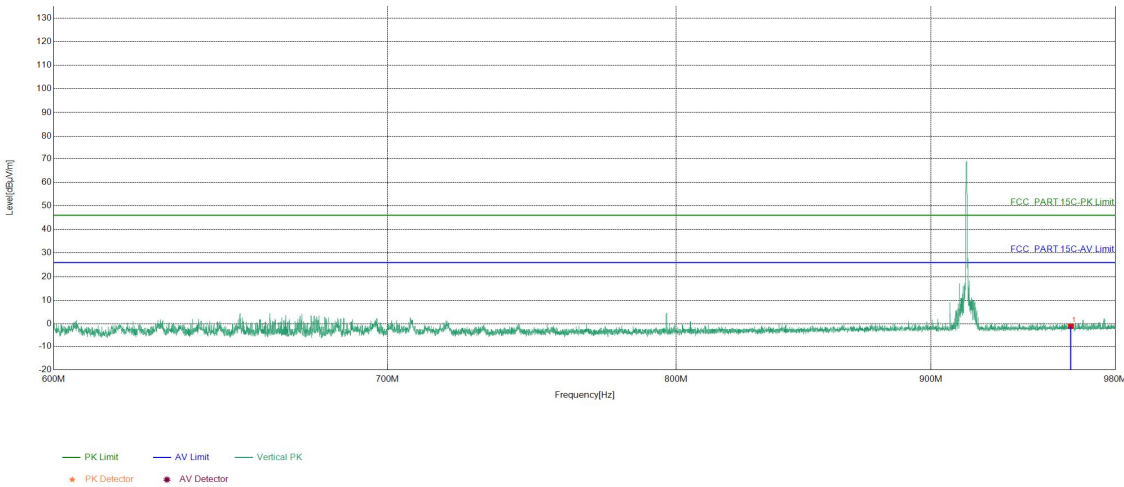
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	960	-35.46	34.74	-0.72	46.00	46.72	PASS	Horizontal	PK

Test_Mode	TX	Test_Frequency	914.9MHz
Ant	/	Test_Date	2026/4/9

Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	960	-35.46	34.43	-1.03	46.00	47.03	PASS	Vertical	PK

Note:
The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level =Receiver Reading - Correct Factor
Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

5 Appendix A

Refer to Appendix: LoRa(FHSS) of EED32S80401304

6 PHOTOGRAPHS

Refer to Appendix Photographs of Report No. EED32S80401301.

Statement

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule stated in ILAC-G8:09/2019/CNAS-GL015:2022;
5. Without written approval of CTI, this report can't be reproduced except in full;

*** End of Report ***