

TEST REPORT

Applicant Name: Minda Corporation Limited
Address: FCC: D6-11, Sector-59, Noida, India
IC: D6-11, Sector-59 Distt. G.B. Nagar U.P. 201301 India
Report Number: 2601T23244E-RF
FCC ID: 2A29L-SMIT002
IC: 23641-SMIT002

Test Standard (s)

FCC Part 15C; RSS-GEN ISSUE 5, FEBRUARY 2021 AMENDMENT 2; RSS-210, ISSUE 11, JUNE 25, 2024

Sample Description

Product Type: IMMOBILIZER
Model No.: SMIT002
Multiple Model(s) No.: N/A
Trade Mark: Spark RE
Date Received: 2026/05/26
Issue Date: 2026/08/13

Test Result:	Pass▲
--------------	-------

▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Cheeb Huang

Cheeb Huang
RF Engineer

Approved By:

Jimmy Xiao

Jimmy Xiao
EMC Manager

Note: The information marked * is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.
This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.
This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP or any agency of the U.S. Government.
This report may contain data that are not covered by the NVLAP accreditation and are marked with an asterisk "▼".

Bay Area Compliance Laboratories Corp. (Shenzhen)

5F(B-West), 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China
Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY	3
GENERAL INFORMATION	4
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT).....	4
OBJECTIVE	4
TEST METHODOLOGY.....	4
MEASUREMENT UNCERTAINTY	5
TEST FACILITY	5
SYSTEM TEST CONFIGURATION.....	6
DESCRIPTION OF TEST CONFIGURATION	6
EUT EXERCISE SOFTWARE	6
LOCAL SUPPORT EQUIPMENT	6
EXTERNAL I/O CABLE.....	6
BLOCK DIAGRAM OF TEST SETUP	6
SUMMARY OF TEST RESULTS	7
TEST EQUIPMENT LIST	8
FCC §15.203 & RSS-GEN §6.8 - ANTENNA REQUIREMENT	9
APPLICABLE STANDARD	9
ANTENNA CONNECTED CONSTRUCTION	10
FCC §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE).....	11
APPLICABLE STANDARD	11
BLOCK DIAGRAM OF TEST SETUP	11
TEST PROCEDURES.....	11
TEST DATA.....	12
FCC §15.205, §15.209, RSS-GEN §8.9 & RSS-210 §8.3 - RADIATED EMISSIONS TEST	13
APPLICABLE STANDARD	13
EUT SETUP	14
EMI TEST RECEIVER SETUP	15
FACTOR & OVER LIMIT/MARGIN CALCULATION.....	15
TEST DATA.....	15
FCC §15.215 (C) AND RSS-GEN §6.7 - 20 DB EMISSION BANDWIDTH & 99% OCCUPIED BANDWIDTH	24
APPLICABLE STANDARD	24
TEST PROCEDURE.....	25
TEST DATA.....	25
EUT PHOTOGRAPHS	27
TEST SETUP PHOTOGRAPHS	28

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2601T23244E-RF	Original Report	2026/08/13

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

HVIN	V02.3
FVIN	IMMO07.0
Frequency Range	125kHz
Modulation Technique	ASK
Input Voltage	DC 8-18V
Sample serial number	3MNV-1 (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	N/A

Objective

This test report is in accordance with Part 2, Subpart J, and Part 15, Subparts A and C of the Federal Communications Commission's rules and RSS-210, ISSUE 11, JUNE 25, 2024 of the Innovation, Science and Economic Development Canada.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020+Cor.1-2023+C63.10a-2024 + Errata to C63.10a-2024▼, American National Standard of Procedures for Compliant Testing of Unlicensed Wireless Devices.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
AC Power Lines Conducted Emissions	9kHz-150kHz	3.46dB(k=2, 95% level of confidence)
	150kHz-30MHz	3.72dB(k=2, 95% level of confidence)
Radiated Emissions	9kHz – 30MHz	3.66dB(k=2, 95% level of confidence)
	30MHz~1000MHz (Horizontal)	5.10dB(k=2, 95% level of confidence)
	30MHz~1000MHz (Vertical)	6.28dB(k=2, 95% level of confidence)
Temperature		±0.4°C
Humidity		±2%
Supply voltages		DC±0.4%;AC±1%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0023.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a test mode.

EUT Exercise Software

No software used in test.

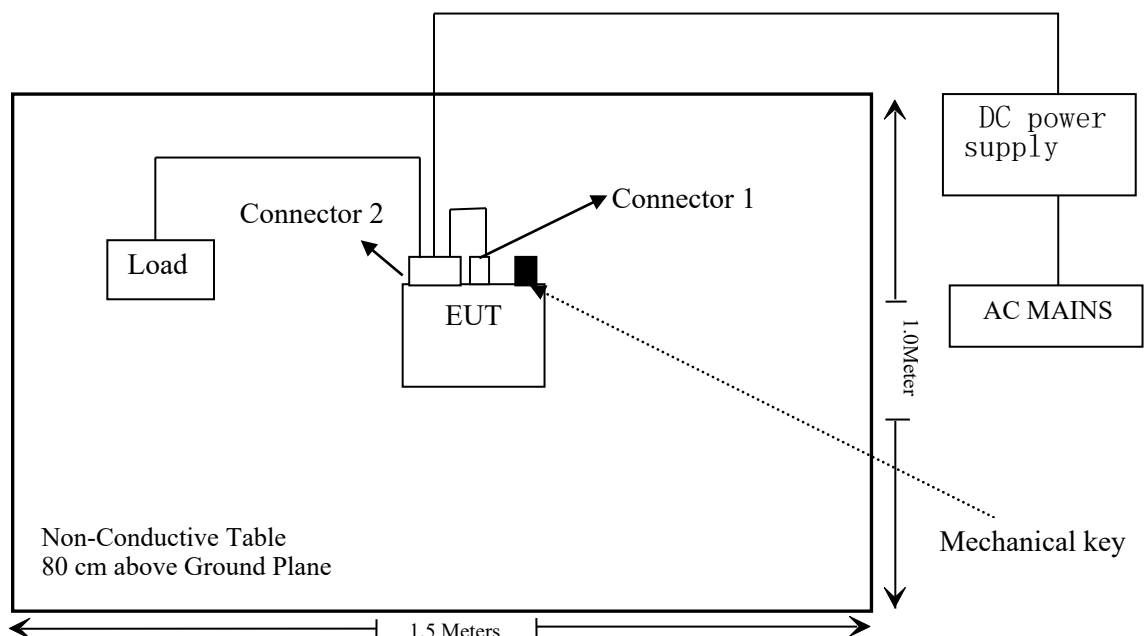
Local Support Equipment

Manufacturer	Description	Model	Serial Number
Unknown	DC power supply	Unknown	Unknown
Minda Corporation Limited	Mechanical key	Unknown	Unknown
Minda Corporation Limited	Load	Unknown	Unknown

External I/O Cable

Cable Description	Length (m)	From Port	To
Unshielded Detachable DC Cable	1.2	DC power supply	AC Mains
Unshielded Detachable DC Cable	2.5	EUT	DC power supply
Unshielded Detachable DC Cable	2.5	EUT	Load
Unshielded Un-Detachable DC Cable	2.0	Connector 1	Connector 2

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	IC Rules	Description of Test	Result
FCC §15.203	RSS-GEN §6.8	Antenna Requirement	Compliant
FCC §1.1310 & §2.1091	/	Maximum Permissible Exposure(MPE)	Compliant
FCC §15.207	RSS-Gen §8.8	AC Line Conducted Emission	Not applicable
§15.209 §15.205	RSS-210 §8.3 RSS-Gen §8.10	Radiated Emission Test	Compliant
§15.215 (c)	RSS-Gen §6.7	20dB Bandwidth & 99% Occupied Bandwidth	Compliant

Not applicable: The EUT was used in the vehicle condition.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Radiated Test					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2025/09/01	2026/08/31
Sonoma instrument	Pre-amplifier	310 N	186238	2025/09/08	2026/09/07
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Chamber A Cable	Cable A1	Cable A1	2025/09/08	2026/09/07
Unknown	Chamber A Cable	Cable A2	Cable A2	2025/09/08	2026/09/07
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
Unknown	Chamber A Cable	Cable A3	Cable A3	2025/09/08	2026/09/07
Unknown	Chamber A Cable	Cable A4	Cable A4	2025/09/08	2026/09/07
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
TDK	Chamber	Chamber A	2#	2023/07/12	2026/07/11
MPE					
SPEAG	Probe	MAGPy-8H3D-E3D	3106	2026/04/23	2027/04/22
SPEAG	Data Acquisition System	MAPGPY-DAS	3089	2026/04/23	2027/04/22

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §15.203 & RSS-GEN §6.8 - ANTENNA REQUIREMENT

Applicable Standard

According to § 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine Compliant with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

Antenna must be permanently attached to the unit.

Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the Compliant of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).

When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer.

The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.

For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:

This radio transmitter [enter the device's ISSED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device. Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

Antenna Connected Construction

The EUT has one coil antenna arrangement which was permanently attached, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliant.

FCC §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

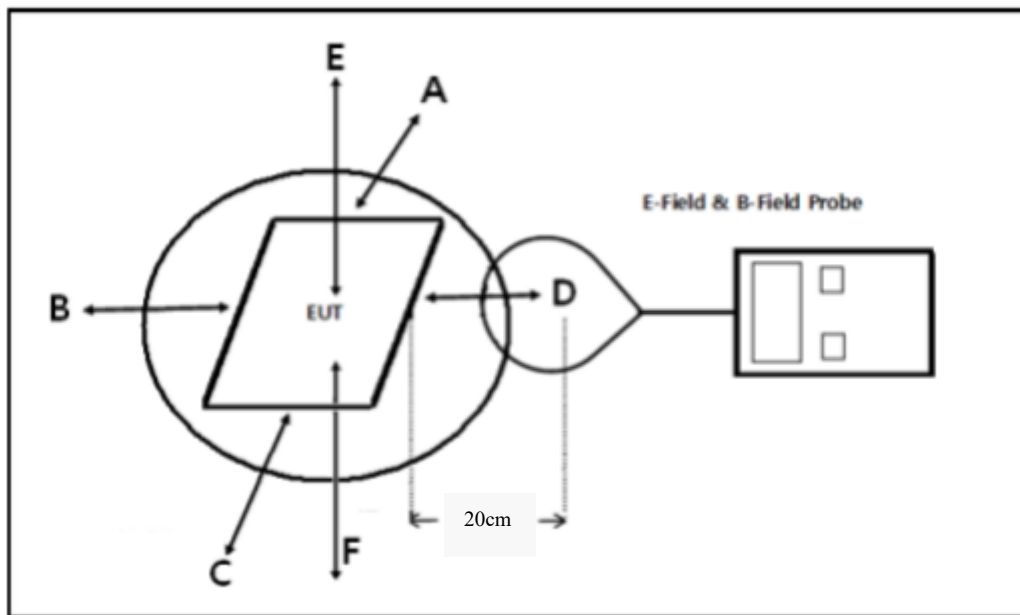
According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

Block Diagram of Test Setup



Test Procedures

1) Perform H-field and E-field measurements for each all sides of the EUT at 20cm, along all the principal axes defined with respect to the orientation of the transmitting element (e.g., coil or antenna).

Test Data**Environmental Conditions**

Temperature:	25.7 °C
Relative Humidity:	51 %
ATM Pressure:	100.9 kPa

The testing was performed by Zane Zhou on 2026-08-12.

Test mode: Transmitting

H-Field Strength

Test Frequency (kHz)	Position A (A/m)	Position B (A/m)	Position C (A/m)	Position D (A/m)	Position E (A/m)	Position F (A/m)	Limit (A/m)
125	0.01	0.01	0.01	0.01	0.05	0.02	1.63

E-Field Strength

Test Frequency (kHz)	Position A (V/m)	Position B (V/m)	Position C (V/m)	Position D (V/m)	Position E (V/m)	Position F (V/m)	Limit (V/m)
125	2.12	1.66	1.39	1.67	1.76	1.39	614

Note: Test with 20cm distance from all the sides.

FCC §15.205, §15.209, RSS-GEN §8.9 & RSS-210 §8.3 - RADIATED EMISSIONS TEST

Applicable Standard

According to FCC Part 15.209

(a) Except as provided elsewhere in this subpart, 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

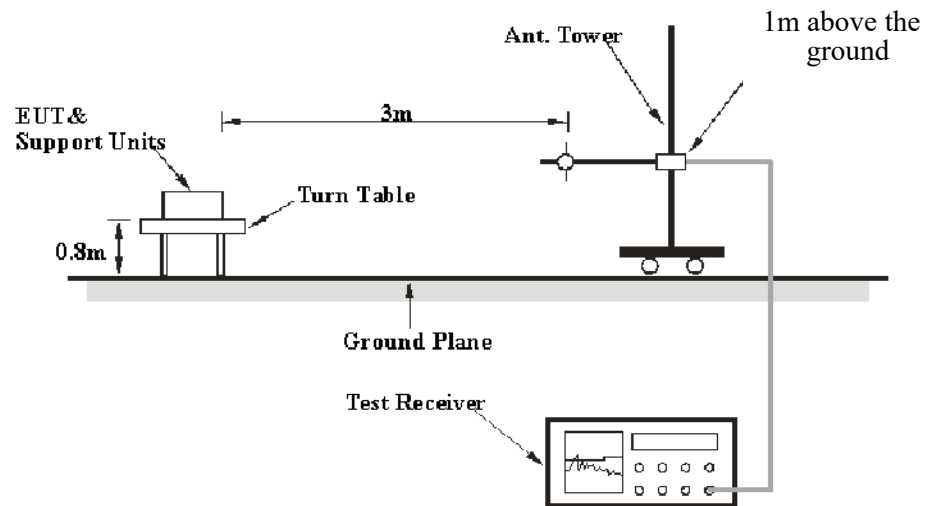
**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

8.3 Transmitters with wanted and unwanted emissions that are within the general field strength limits

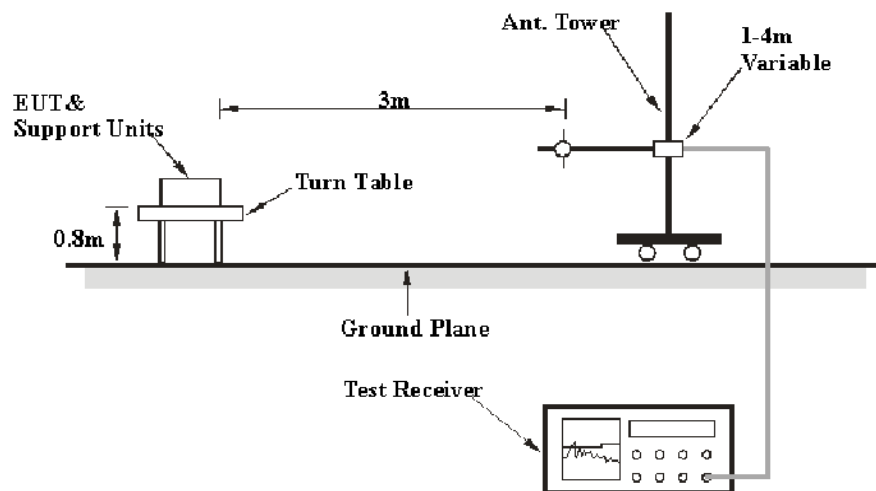
Transmitters whose wanted and unwanted emissions fall within the general field strength limits specified in RSS-Gen may operate licence-exempt in any of the frequency bands, other than the restricted frequency bands listed in RSS-Gen and the TV bands 54-72 MHz, 76-88 MHz, 174-216 MHz and 470-602 MHz, and shall be certified under RSS-210. Under no circumstances shall the level of any unwanted emissions exceed the level of the fundamental emissions.

EUT Setup

9 kHz-30MHz:



30MHz-1GHz:



The radiated emission tests were performed in the 3-meter chamber test site, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC Part Subpart C and RSS-Gen limits.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The system was investigated from 9 kHz to 1000MHz.

Frequency Range	RBW	Video B/W	IF B/W	Measurement
9 kHz – 150 kHz	/	/	200 Hz	QP
	300 Hz	1 kHz	/	PK
150 kHz – 30 MHz	/	/	9 kHz	QP
	10 kHz	30 kHz	/	PK
30 MHz – 1000 MHz	/	/	120 kHz	QP
	100 kHz	300 kHz	/	PK

All final data was recorded in Quasi-peak detection mode except for the frequency bands 9–90 kHz, 110–490 kHz, average detection modes for frequency bands 9–90 kHz and 110–490 kHz.

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform QP/Average measurement.

Factor & Over Limit/Margin Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Over Limit/Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

$$\text{Over Limit/Margin} = \text{Level} / \text{Corrected Amplitude} - \text{Limit}$$

$$\text{Level} / \text{Corrected Amplitude} = \text{Read Level} + \text{Factor}$$

Test Data

Environmental Conditions

Temperature:	23.7 °C
Relative Humidity:	54 %
ATM Pressure:	100.1 kPa

The testing was performed by Anson Su on 2026-06-06.

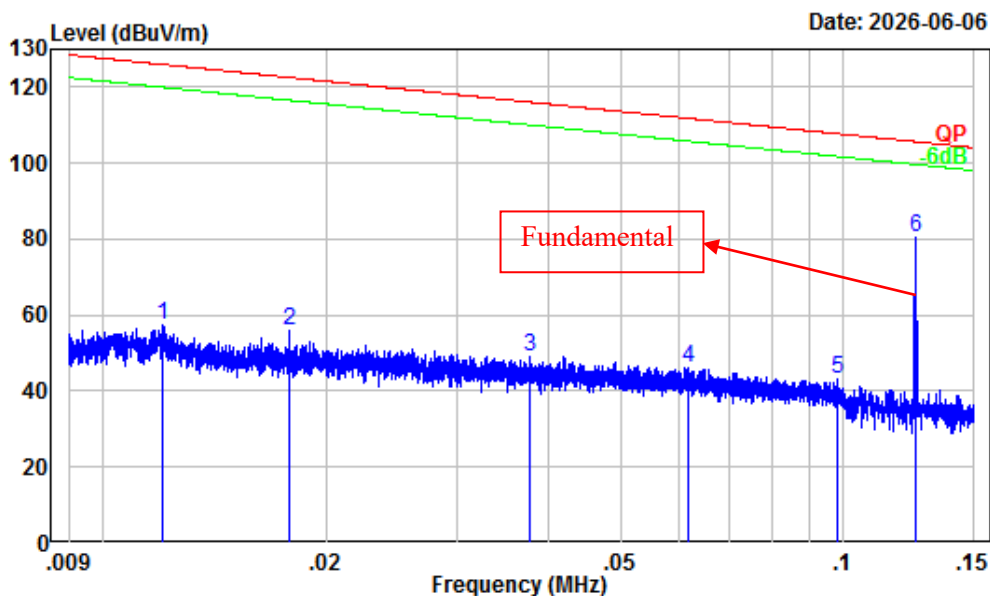
Test Mode: Transmitting

Note 1: Pre-scan in the X, Y and Z axes of orientation, the worst case X-axis of orientation was recorded.

Note 2: The spurious emission from 9 kHz-30MHz of IC RSS-GEN standard, the unit of final result on the test plots are dBμV/m, so the limit should be added by 51,5 dB from dBμA/m to dBμV/m.

Parallel:

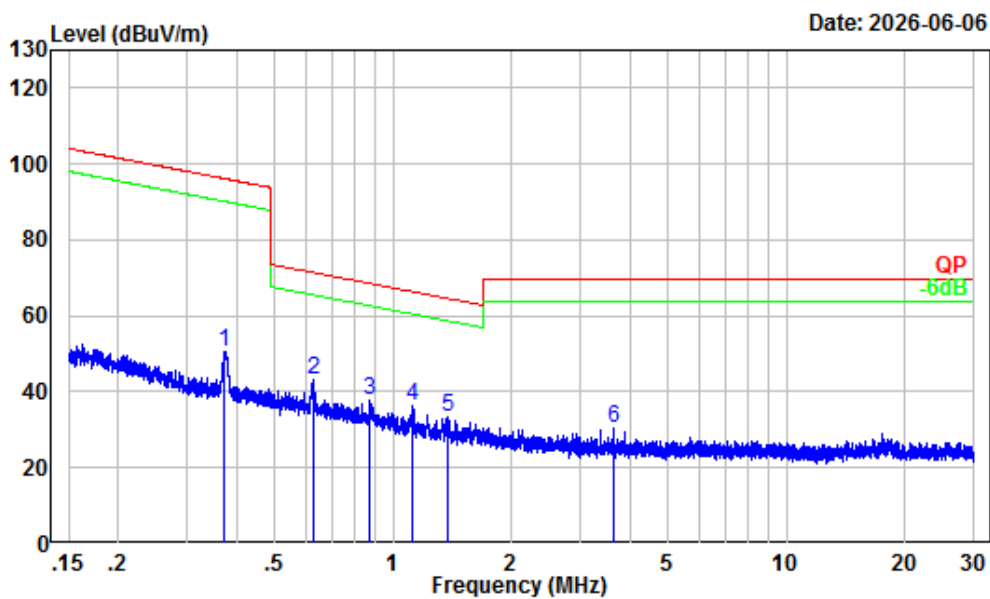
9 kHz~150 kHz



Site : Chamber A
Condition : 3m
Project Number : 2601T23244E-RF
Test Mode : Transmitting
Note : Parallel
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit	Over	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	Remark
1	0.012	31.91	25.38	57.29	125.97	-68.68	Peak
2	0.018	30.81	25.00	55.81	122.56	-66.75	Peak
3	0.038	27.68	21.58	49.26	116.06	-66.80	Peak
4	0.062	25.22	20.85	46.07	111.79	-65.72	Peak
5	0.098	22.13	21.18	43.31	107.77	-64.46	Peak
6	0.125	20.52	59.79	80.31	105.66	-25.35	Peak

150 kHz~30 MHz

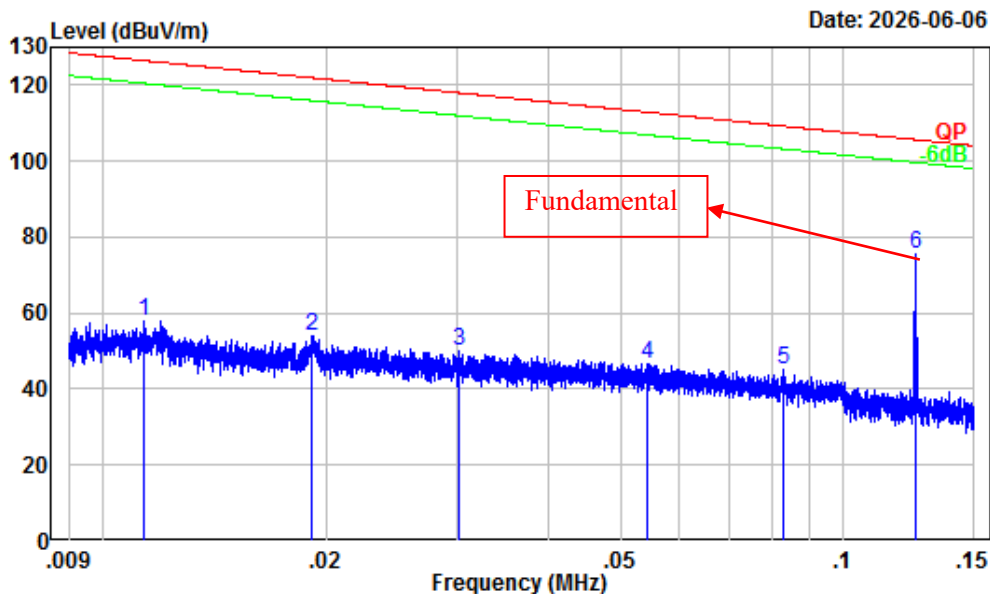


Site : Chamber A
Condition : 3m
Project Number : 2601T23244E-RF
Test Mode : Transmitting
Note : Parallel
Detector: Peak RBW/VBW: 10/30kHz
Tester : Anson Su

	Freq Factor		Read	Limit	Over	Remark
	MHz	dB/m	Level	Level	Line	
			dBuV	dBuV/m	dBuV/m	dB
1	0.374	8.80	41.80	50.60	96.16	-45.56 Peak
2	0.626	4.85	38.18	43.03	71.63	-28.60 Peak
3	0.874	2.14	35.64	37.78	68.66	-30.88 Peak
4	1.123	0.85	35.65	36.50	66.44	-29.94 Peak
5	1.377	0.15	33.23	33.38	64.64	-31.26 Peak
6	3.630	-2.50	32.89	30.39	69.54	-39.15 Peak

Ground-parallel:

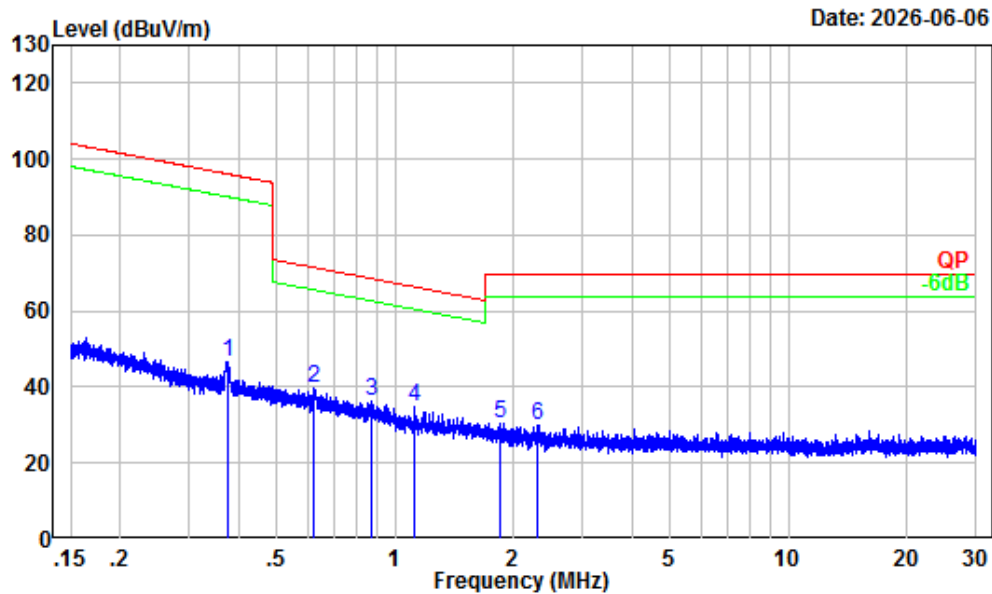
9 kHz~150 kHz



Site : Chamber A
Condition : 3m
Project Number : 2601T23244E-RF
Test Mode : Transmitting
Note : Ground-parallel
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit	Over	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	Remark
1	0.011	32.04	26.08	58.12	126.47	-68.35	Peak
2	0.019	30.55	23.34	53.89	121.94	-68.05	Peak
3	0.030	28.47	21.40	49.87	117.98	-68.11	Peak
4	0.054	25.96	20.85	46.81	112.90	-66.09	Peak
5	0.083	23.20	21.84	45.04	109.24	-64.20	Peak
6	0.125	20.52	55.00	75.52	105.66	-30.14	Peak

150 kHz~30 MHz

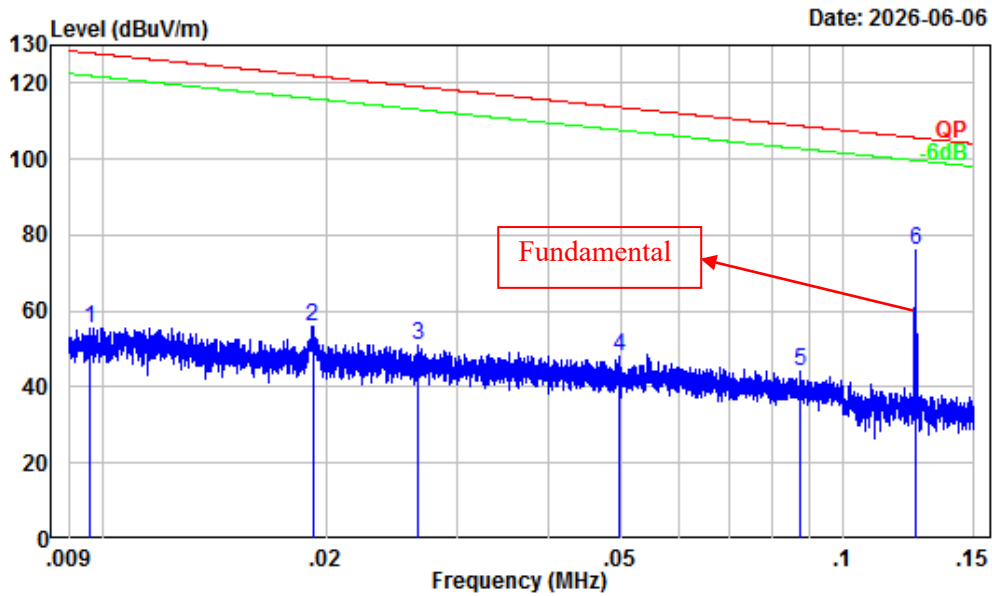


Site : Chamber A
Condition : 3m
Project Number : 2601T23244E-RF
Test Mode : Transmitting
Note : Ground-parallel
Detector: Peak RBW/VBW: 10/30kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.376	8.76	37.71	46.47	96.11	-49.64	Peak
2	0.624	4.87	34.81	39.68	71.65	-31.97	Peak
3	0.873	2.15	33.94	36.09	68.68	-32.59	Peak
4	1.123	0.86	33.94	34.80	66.45	-31.65	Peak
5	1.857	-1.20	31.83	30.63	69.54	-38.91	Peak
6	2.314	-1.77	31.84	30.07	69.54	-39.47	Peak

Perpendicular:

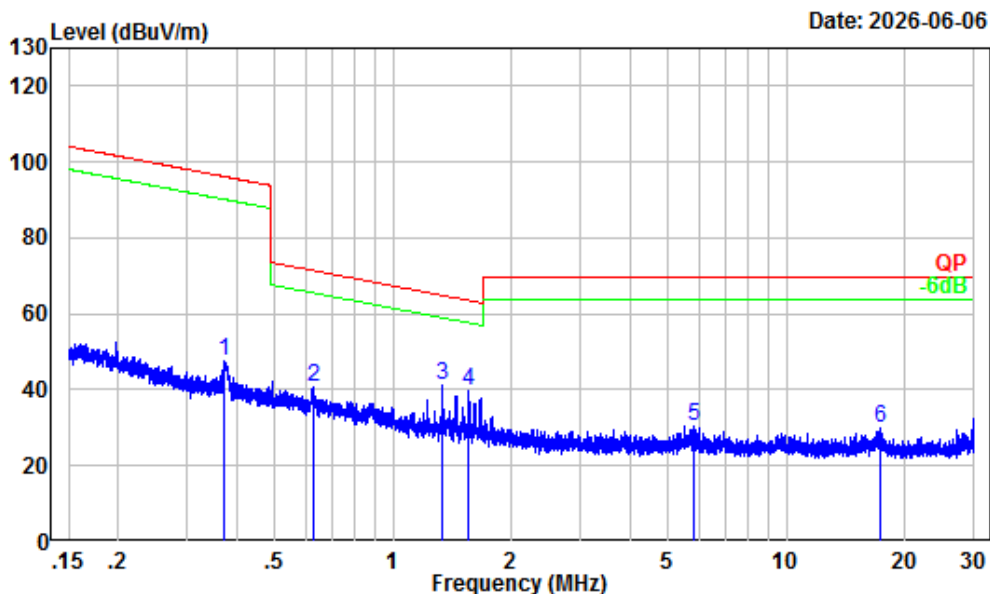
9 kHz~150 kHz



Site : Chamber A
Condition : 3m
Project Number : 2601T23244E-RF
Test Mode : Transmitting
Note : Perpendicular
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit	Over	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	Remark
1	0.010	32.38	23.17	55.55	127.96	-72.41	Peak
2	0.019	30.55	25.59	56.14	121.94	-65.80	Peak
3	0.027	29.13	22.08	51.21	119.08	-67.87	Peak
4	0.050	26.42	21.62	48.04	113.66	-65.62	Peak
5	0.087	22.88	21.04	43.92	108.77	-64.85	Peak
6	0.125	20.52	55.40	75.92	105.66	-29.74	Peak

150 kHz~30 MHz

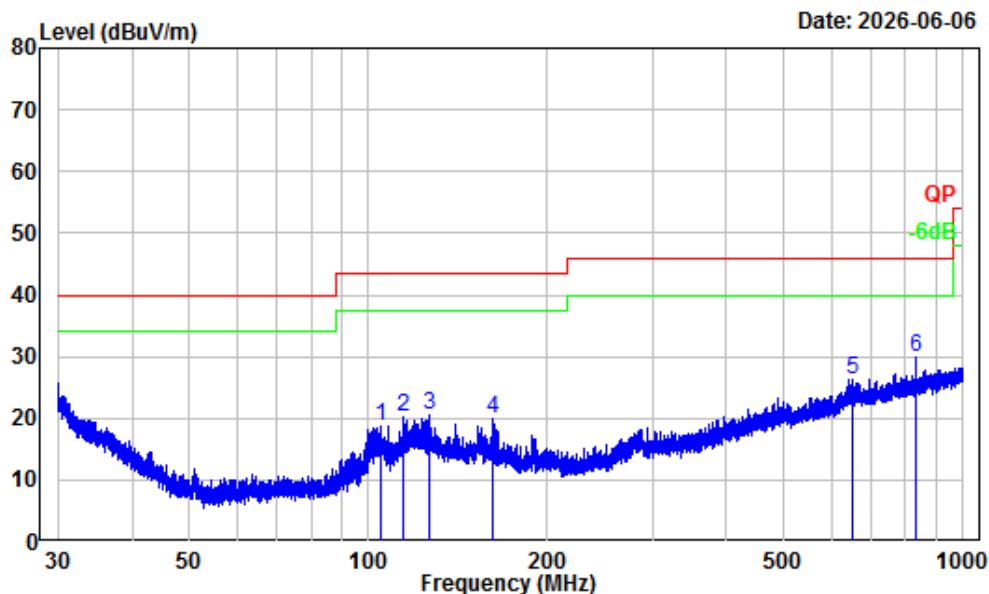


Site : Chamber A
Condition : 3m
Project Number : 2601T23244E-RF
Test Mode : Transmitting
Note : Perpendicular
Detector: Peak RBW/VBW: 10/30kHz
Tester : Anson Su

	Freq Factor		Read	Limit	Over	Remark
	MHz	dB/m	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	0.373	8.81	38.81	47.62	96.17	-48.55 Peak
2	0.627	4.83	35.98	40.81	71.61	-30.80 Peak
3	1.337	0.26	40.83	41.09	64.90	-23.81 Peak
4	1.558	-0.36	39.86	39.50	63.54	-24.04 Peak
5	5.851	-2.89	33.43	30.54	69.54	-39.00 Peak
6	17.279	-2.68	32.42	29.74	69.54	-39.80 Peak

30MHz~1GHz:

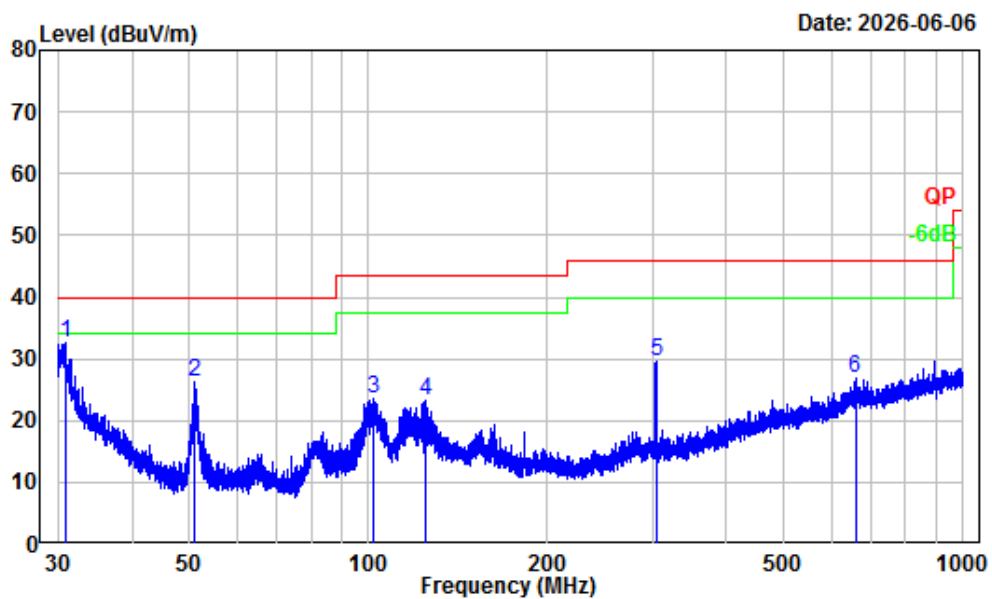
Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2601T23244E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq Factor		Read	Limit	Over	Remark
	MHz	dB/m	Level	Line	Limit	
			dBuV	dBuV/m	dBuV/m	dB
1	104.81	-14.38	33.08	18.70	43.50	-24.80 Peak
2	114.51	-12.19	32.53	20.34	43.50	-23.16 Peak
3	126.77	-11.12	31.51	20.39	43.50	-23.11 Peak
4	161.76	-12.63	32.64	20.01	43.50	-23.49 Peak
5	649.66	-3.04	29.26	26.22	46.00	-19.78 Peak
6	834.78	-1.67	31.55	29.88	46.00	-16.12 Peak

Vertical



Site : Chamber A
Condition : 3m Vertical
Project Number : 2601T23244E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq Factor		Read	Limit	Over	Remark
	MHz	dB/m	Level	Line	Limit	
			dBuV	dBuV/m	dBuV/m	dB
1	30.99	-6.24	38.75	32.51	40.00	-7.49 Peak
2	51.03	-17.99	44.17	26.18	40.00	-13.82 Peak
3	102.00	-15.25	38.76	23.51	43.50	-19.99 Peak
4	124.73	-11.13	34.39	23.26	43.50	-20.24 Peak
5	304.34	-10.98	40.60	29.62	46.00	-16.38 Peak
6	658.84	-3.09	29.99	26.90	46.00	-19.10 Peak

FCC §15.215 (c) and RSS-GEN §6.7 - 20 dB EMISSION BANDWIDTH & 99% OCCUPIED BANDWIDTH

Applicable Standard

According to § 15.215 (c)

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. In the case of intentional radiators operating under the provisions of subpart E, the emission bandwidth may span across multiple contiguous frequency bands identified in that subpart. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

According to RSS-Gen §6.7

The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

In some cases, the “x dB bandwidth” is required, which is defined as the frequency range between two points, one at the lowest frequency below and one at the highest frequency above the carrier frequency, at which the maximum power level of the transmitted emission is attenuated x dB below the maximum in-band power level of the modulated signal, where the two points are on the outskirts of the in-band emission.

The following conditions shall be observed for measuring the occupied bandwidth and x dB bandwidth: The Microphone shall be operated at its maximum carrier power measured under normal test conditions. The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.

The detector of the spectrum analyzer shall be set to “Sample”. However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or “Max Hold”) may be necessary to determine the occupied / x dB bandwidth if the device is not transmitting continuously.

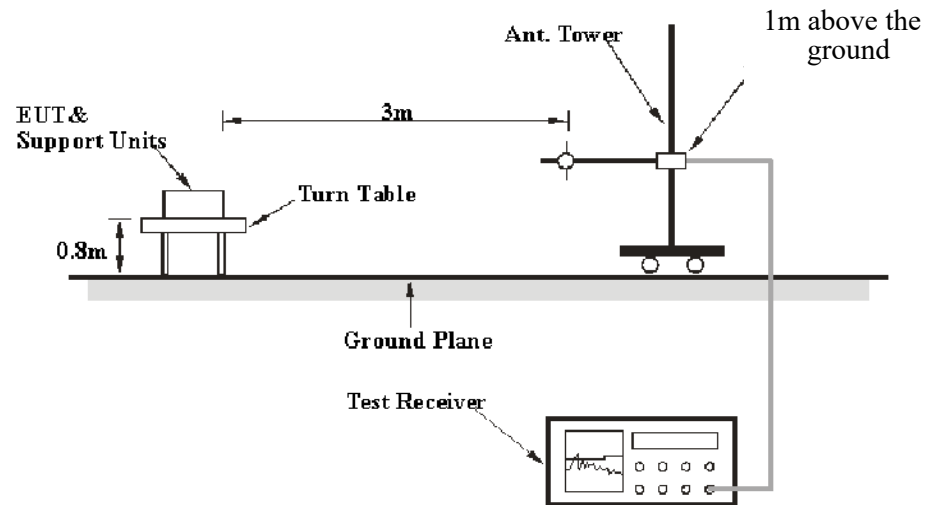
The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

For the 99% emission bandwidth, the trace data points are recovered and directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached, and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded. The difference between the two recorded frequencies is the occupied bandwidth (or the 99% emission bandwidth)

Test Procedure

Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.



Test Data

Environmental Conditions

Temperature:	23.7 °C
Relative Humidity:	54 %
ATM Pressure:	100.1 kPa

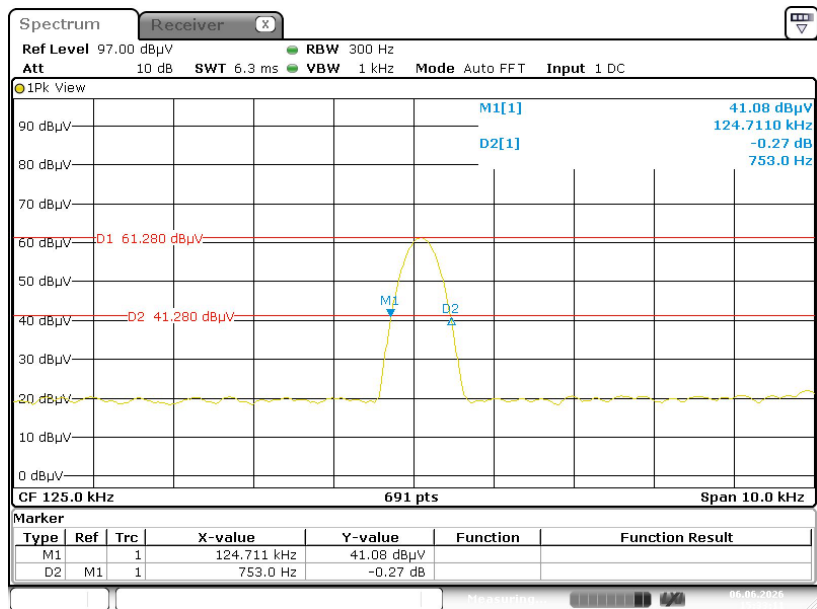
The testing was performed by Anson Su on 2026-06-06.

EUT operation mode: Transmitting

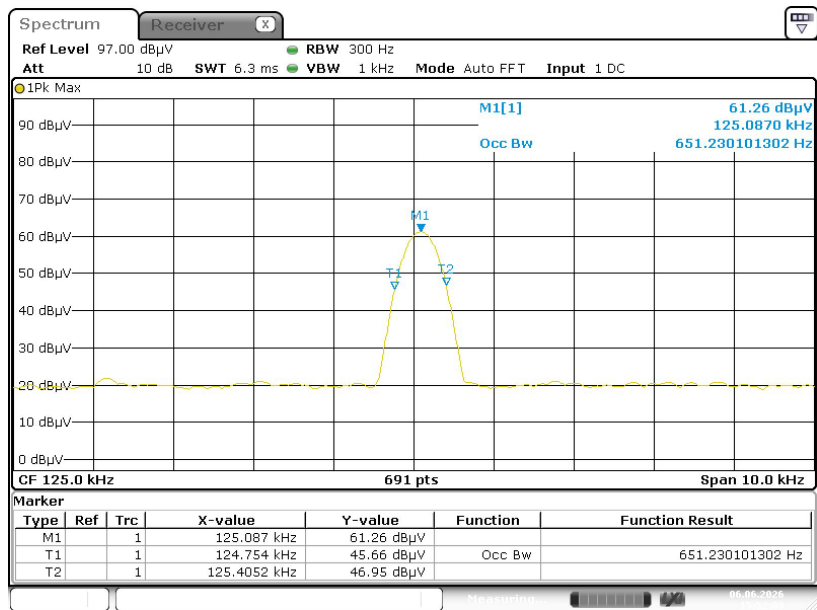
Test Result: Compliant. Please refer to following table and plot.

Channel Frequency (kHz)	20 dB Emission Bandwidth (kHz)	99% Occupied Bandwidth (kHz)
125	0.753	0.651

20 dB Emission Bandwidth



Occupied Bandwidth



EUT PHOTOGRAPHS

Please refer to the attachment 2601T23244E-RF-EXP External photo and 2601T23244E-RF-INP Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2601T23244E-RF-TSP Test Setup photo.

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