TEST REPORT

Applicant Name:	Bytech NY Inc.
Address:	2585 West 13th Street, Brooklyn NY 11223, New York, United States
Report Number:	2601P41703E-RF-00
FCC ID:	2AHN6-MSWS135

Test Standard (s)

FCC PART 15.249

Sample Description

Product Type:	Ergo Wireless Mouse-ASST
Model No.:	BY-MS-WS-135-AC
Multiple Model(s) No.:	BY-MS-WS-135-BL, BY-MS-WS-135-PK, BY-MS-WS-135-BK
Trade Mark:	N/A
Date Received:	2026/01/16
Issue Date:	2026/02/13

Test Result:	Pass▲

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

Prepared and Checked By:

Allen Bai
RF Engineer

Approved By:

Nancy Wang
RF Supervisor

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 may contain data that are not covered by the NVLAP accreditation and are marked with an asterisk "▼".

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2601P41703E-RF-00	Original Report	2026/02/13

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Ergo Wireless Mouse-ASST
Tested Model	BY-MS-WS-135-AC
Multiple Model(s)	BY-MS-WS-135-BL, BY-MS-WS-135-PK, BY-MS-WS-135-BK
UPC Number	805112143733, 805112143740, 805112144259
SKU Number	9237973, 9241236
Lot Number	BY011026
Frequency Range	2402-2479MHz
Maximum E-field strength	98.01 dBuV/m@3m
Modulation Technique	GFSK
Antenna Specification#	2.34dBi (provided by the applicant)
Voltage Range	DC 1.5V from battery
Sample serial number	3G7V-4 (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	N/A
Note: The Multiple models are electrically identical with the test model except for model number and colors. Please refer to the declaration letter# for more detail, which was provided by manufacturer.	

Objective

This test report is in accordance with Part 2-Subpart J, and Part 15-Subparts A and C of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.209, 15.215 and 15.249 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020, American National Standard of Procedures for Compliance 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
Occupied Channel Bandwidth		52.29kHz(k=1.96, 95% level of confidence)
RF Frequency		81.235Hz(k=1.96, 95% level of confidence)
RF output power, conducted		1.57dB(k=1.96, 95% level of confidence)
Conducted Spurious Emission		2.48dB(k=1.96, 95% level of confidence)
AC Power Lines Conducted Emissions	9kHz~150 kHz	3.46dB(k=2, 95% level of confidence)
	150 kHz ~30MHz	3.72dB(k=2, 95% level of confidence)
Radiated Emissions	0.009MHz~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)
	1GHz - 6GHz	6.18dB(k=2, 95% level of confidence)
	6GHz - 18GHz	6.62dB(k=2, 95% level of confidence)
	18GHz - 40GHz	6.66dB(k=2, 95% level of confidence)
Temperature		±0.4℃
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, test firm registration No.: 715558, the FCC Designation No. : CN5045.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing by manufacturer.

Frequency Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	**2402**	9	2446
2	2408	10	2451
3	2417	11	2456
4	2419	12	2460
5	2421	13	2468
6	2423	14	2474
7	2428	15	2478
8	**2437**	**16**	**2479**

Note: Test on Channel 1, 8 and 16.

EUT Exercise Software

"Fcc_test_tool.exe#" exercise software was used and the power level is 7#. The software and power level were provided by the manufacturer.

Equipment Modifications

No modifications were made to the unit tested.

Support Equipment List and Details

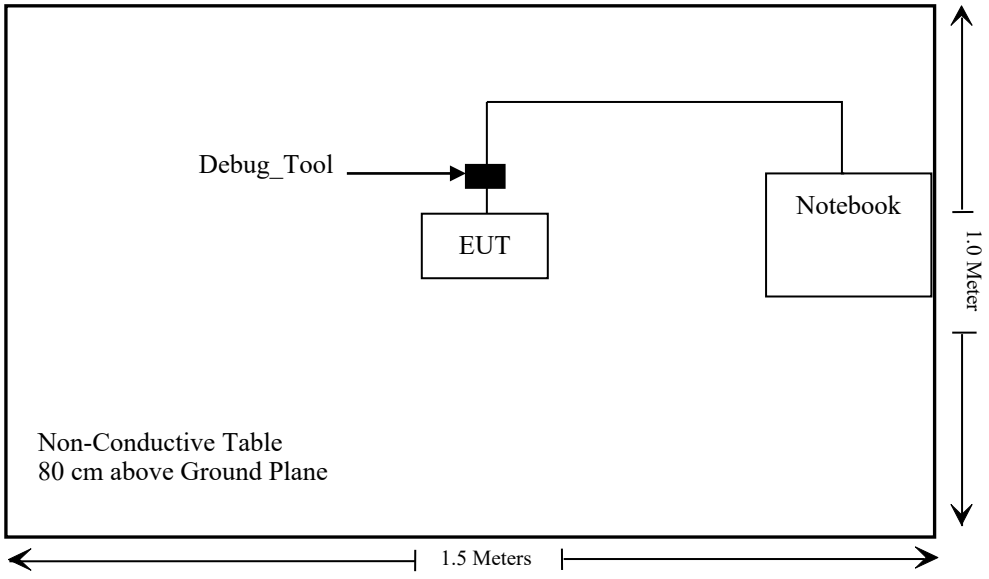
Manufacturer	Description	Model	Serial Number
DELL	Notebook	Latitude E6410	5QYD4Q1
Unknown	Debug_Tool	HQPCB-2 E469747	Unknown

Support Cable Descriptions

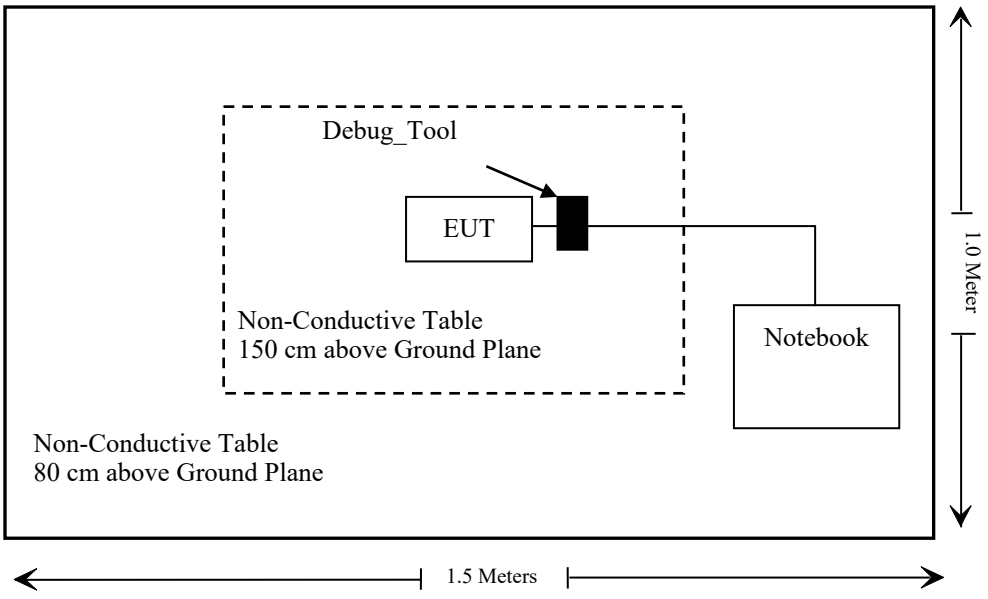
Cable Description	Length (m)	From/Port	To
Unshielded detachable USB extension cable	2.0	Debug_Tool	Notebook
Unshielded Detachable Dupont cable	0.1	EUT	Debug_Tool

Block Diagram of Test Setup

For Radiated Emissions below 1GHz:



For Radiated Emission above 1GHz:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b) (3) &§2.1093	RF EXPOSURE	Compliant
§15.203	Antenna Requirement	Compliant
§15.207(a)	AC Line Conducted Emissions	Not Applicable
15.205, §15.209, §15.249(a)(c)(d)	Radiated Emissions& Outside of Band Emission	Compliant
§15.215 (c)	20 dB Bandwidth	Compliant

Not Applicable: The EUT is powered by battery only.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emissions 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
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2025/09/01	2026/08/31
A.H.System	Preamplifier	PAM-0118P	489	2025/09/08	2026/09/07
Schwarzbeck	Horn Antenna	BBHA9120D (1201)	1143	2023/07/26	2026/07/25
Unknown	Chamber B Cable	Cable B1	Cable B1	2025/09/08	2026/09/07
Unknown	Chamber B Cable	Cable B2	Cable B2	2025/09/08	2026/09/07
Unknown	Chamber B Cable	Cable B3	Cable B3	2025/09/08	2026/09/07
JD	Multiplex Switch Test Control Set	DT7220SCU	DS79903	2025/08/12	2026/08/11
JD	Filter Switch Unit	DT7220FSU	DS79906	2025/08/12	2026/08/11
A.H.System	Pre-amplifier	PAM-1840VH	190	2025/09/08	2026/09/07
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
Unknown	Chamber B Cable	Cable B4	Cable B4	2025/09/17	2026/09/16
Unknown	Chamber B Cable	Cable B5	Cable B5	2025/09/17	2026/09/16
Audix	EMI Test software	E3	191218 V9(c)	NCR	NCR
TDK	Chamber	Chamber B	1#	2023/07/14	2026/07/13

*** 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).

§1.1307 (b) (3) &§2.1093 - RF EXPOSURE

Applicable Standard

According to FCC §2.1093 and §1.1307(b)(3)(i)(B)

According to KDB 447498 D04 Interim General RF Exposure Guidance v01

This exemption is applicable to the frequency range between 300 MHz and 6 GHz, with test separation distances between 0.5 cm and 40 cm, and for all RF sources in fixed, mobile, and portable device exposure conditions.

Accordingly, a RF source is considered an RF exempt device if its available maximum time averaged (matched conducted) power or its effective radiated power (ERP), whichever is greater, are below a specified threshold. This exemption threshold was derived based on general population 1-g SAR requirements and is detailed in Appendix C.

Either SAR-based or MPE-based exemption may be considered for test exemption for fixed, mobile, or portable device exposure conditions; therefore, the contributions from each exemption in conjunction with the measured SAR (Evaluated term) shall be used to determine exemption for simultaneous transmission according to Formula (C.1) [repeated from § 1.1307(b)(3)(ii)(B)].

SAR-based thresholds are derived based on frequency, power, and separation distance of the RF source. The formula defines the thresholds in general for either available maximum time averaged power or maximum time-averaged ERP, whichever is greater.

If the ERP of a device is not easily determined, such as for a portable device with a small form factor, the applicant may use the available maximum time-averaged power exclusively if the device antenna or radiating structure does not exceed an electrical length of λ/4.

As for devices with antennas of length greater than λ/4 where the gain is not well defined, but always less than that of a half-wave dipole (length λ/2), the available maximum time-averaged power generated by the device may be used in place of the maximum time-averaged ERP, where that value is not known.

The separation distance is the smallest distance from any part of the antenna or radiating structure for all persons, during operation at the applicable ERP. In the case of mobile or portable devices, the separation distance is from the outer housing of the device where it is closest to the antenna.

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by Formula (B.2).

$$P_{\text{th}}\ (\text{mW}) = \begin{cases} ERP_{20\ \text{cm}}(d/20\ \text{cm})^{x} & d \le 20\ \text{cm} \\ ERP_{20\ \text{cm}} & 20\ \text{cm} < d \le 40\ \text{cm} \end{cases} \quad \text{(B. 2)}$$

where

$$x = -\log_{10}\left(\frac{60}{ERP_{20\ \text{cm}}\sqrt{f}}\right)$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20\text{cm}}$ is per Formula (B.1).
The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)										
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

$$P_{\text{th}}\ (\text{mW}) = ERP_{20\ \text{cm}}\ (\text{mW}) = \begin{cases} 2040f & 0.3\ \text{GHz} \le f < 1.5\ \text{GHz} \\ 3060 & 1.5\ \text{GHz} \le f \le 6\ \text{GHz} \end{cases} \quad \text{(B. 1)}$$

$$\sum_{i=1}^{a} \frac{P_i}{P_{\text{th},i}} + \sum_{j=1}^{b} \frac{ERP_j}{ERP_{\text{th},j}} + \sum_{k=1}^{c} \frac{Evaluated_k}{Exposure\ Limit_k} \le 1 \quad \text{(C. 1)}$$

a number of fixed, mobile, or portable RF sources claiming exemption using the § 1.1307(b)(3)(i)(B) formula for P_{th}, including existing exempt transmitters and those being added.

b number of fixed, mobile, or portable RF sources claiming exemption using the applicable § 1.1307(b)(3)(i)(C) Table 1 formula for Threshold ERP, including existing exempt transmitters and those being added.

c number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance.

P_i the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).

$P_{\text{th},i}$ the exemption threshold power (Pth) according to the § 1.1307(b)(3)(i)(B) formula for fixed, mobile, or portable RF source i.

ERP_j the available maximum time-averaged power or the ERP, whichever is greater, of fixed, mobile, or portable RF source j.

$ERP_{\text{th},j}$ exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least $\lambda/2\pi$, according to the applicable § 1.1307(b)(3)(i)(C) Table 1 formula at the location in question.

$Evaluated_k$ the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation.

$Exposure\ Limit_k$ either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable sources, as applicable

The sum of the ratios of the applicable terms for SAR-based, MPE-based and measured SAR or MPE shall be less than 1, to determine simultaneous transmission exposure compliance.

Measurement Result

For worst case:

Radio	Frequency (MHz)	Distance (mm)	P_{th} (mW)	Maximum E-Field (dBuV/m@3m)	Maximum ERP (dBm)	The Greater of ERP	
						dBm	mW
SRD	2402-2479	5	2.72	98.01	0.66	0.66	1.16

Note: 1. antenna gain# was declared and provided by the applicant
2. EIRP = E-Field – 95.2 @3m, ERP = EIRP - 2.15

Result: Compliant

FCC§15.203 - ANTENNA REQUIREMENT

Applicable Standard

According to FCC § 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 use of a standard antenna jack or electrical connector is prohibited.

Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

Antenna Connector Construction

The EUT has one internal antenna which was permanently attached and the antenna gain# is 2.34dBi, fulfill the requirement of this section. Please refer to the EUT photos.

Antenna Type	Antenna Gain#	Impedance	Frequency Range
PCB	2.34dBi	50Ω	2402-2479MHz

Result: Compliant.

FCC§15.205, §15.209 & §15.249(a)(c)(d) - RADIATED EMISSIONS

Applicable Standard

As per FCC§15.249 (a), except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

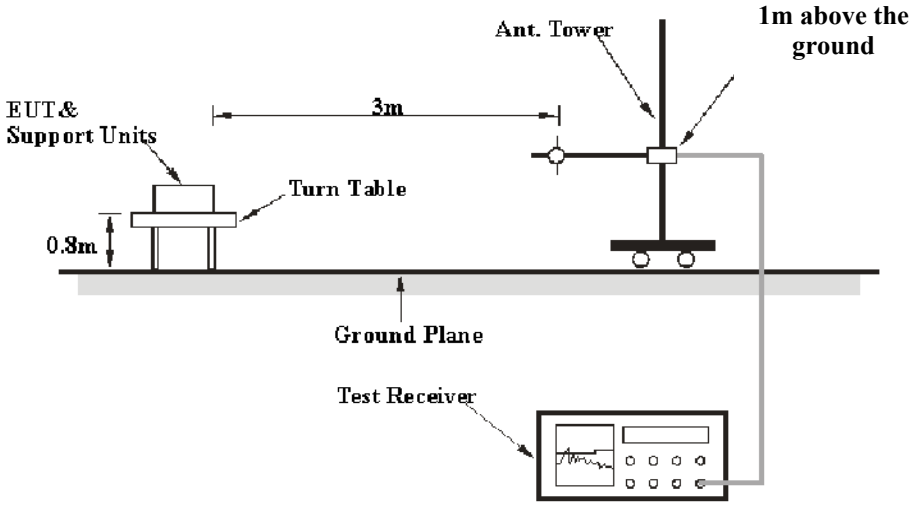
Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24.0–24.25 GHz	250	2500

As per FCC§15.249 (c), Field strength limits are specified at a distance of 3 meters.

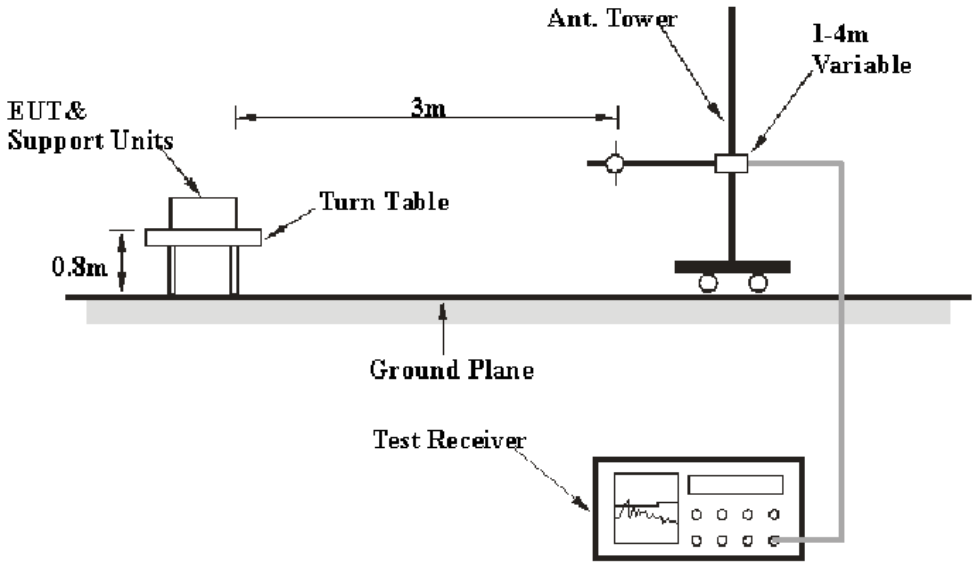
As per FCC§15.249 (d), Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

EUT Setup

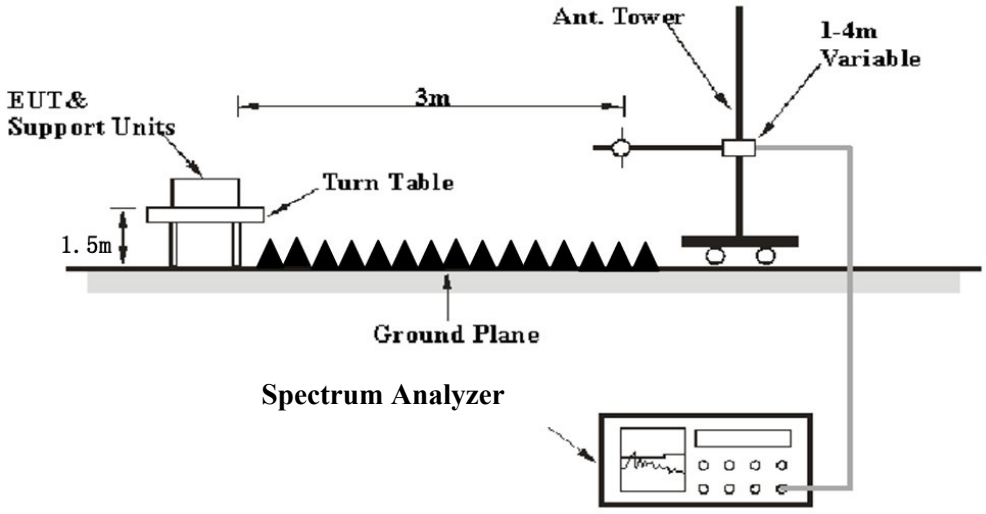
9 kHz-30MHz:



30MHz-1GHz:



Above 1GHz:



The radiated emission and out of band emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209/15.205 and FCC 15.249 limits.

EMI Test Receiver & Spectrum Analyzer Setup

The EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurement	Detector
9 kHz – 150 kHz	/	/	200 Hz	QP	QP
	300 Hz	1 kHz	/	PK	PK
150 kHz – 30 MHz	/	/	9 kHz	QP	QP
	10 kHz	30 kHz	/	PK	PK
30 MHz – 1000 MHz	/	/	120 kHz	QP	QP
	100 kHz	300 kHz	/	PK	PK
Above 1 GHz	Harmonics				
	1MHz	3 MHz	/	PK	PK
	Average Emission Level=Peak Emission Level+20*log(Duty cycle)				
	Band Edge & Other Emissions				
	1MHz	3 MHz	/	PK	PK
	1MHz	≥10 Hz	/	Average	PK

For Duty cycle measurement:

Use the duty cycle factor correction factor method per 15.35(c).
Duty cycle=On time/100milliseconds, On time=N1*L1+N2*L2+…Nn-1*Ln-1+Nn*Ln,
Where N1 is number of type 1 pulses, L1 is length of type 1 pulse, etc.

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

The EUT is set 3 meter away from the testing antenna, which is varied from 1-4 meter, and the EUT is placed on a turntable, which is 0.8 meter above ground plane for below 1GHz or 1.5 meter for above 1GHz, the table shall be rotated for 360 degrees to find out the highest emission. The receiving antenna should be changed the polarization both of horizontal and vertical.

All final data was recorded in Quasi-peak detection mode except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz, average detection modes for frequency bands 9–90 kHz and 110–490 kHz, peak and average detection modes for frequencies above 1 GHz.

For 9 kHz-30MHz, the report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground-parallel) unless the margin is greater than 20 dB.

All emissions under the average limit and under the noise floor have not recorded in the report.

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:

Factor = Antenna Factor + Cable Loss - 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:

Over Limit = Level – Limit; Margin = Limit–Corrected Amplitude
Level / Corrected Amplitude = Read Level + Factor

Test Data

Environmental Conditions

Temperature:	21.5~24.5 ℃
Relative Humidity:	45 %
ATM Pressure:	101.4~101.5 kPa

The testing was performed by Anson Su on 2026-01-26 for below 1GHz and Leon Guo on 2026-01-23 for above 1GHz.

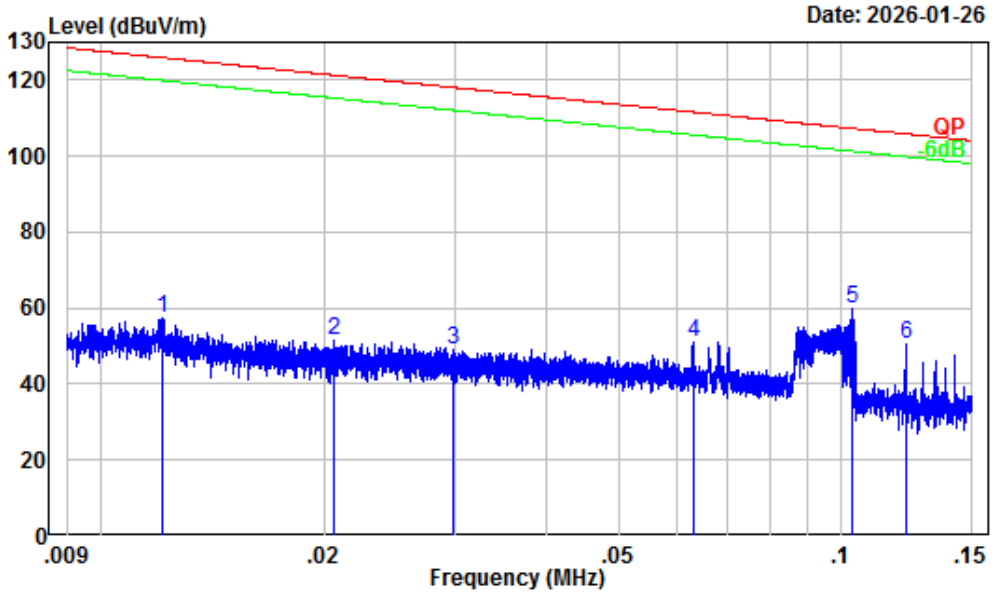
EUT operation mode: Transmitting (Maximum output power mode, Middle channel)

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

9 kHz-30MHz:

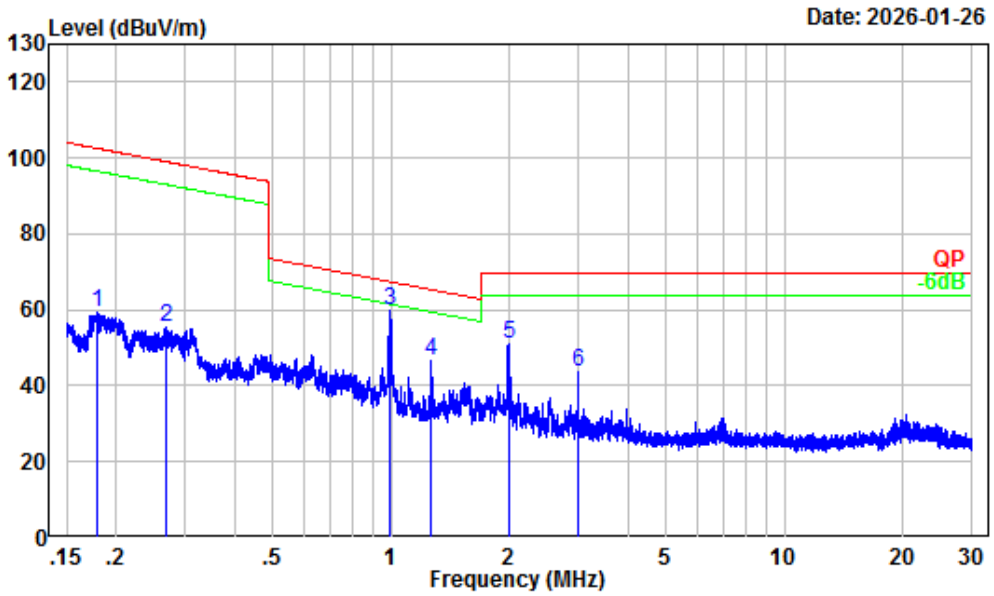
Note: When the test result of peak was less than the limit of QP/Average more than 6dB, just peak value were recorded.

Parallel (worst case)



Site : Chamber A
Condition : 3m
Project Number : 2601P41703E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.012	31.90	25.40	57.30	125.93	-68.63	Peak
2	0.021	30.27	21.28	51.55	121.29	-69.74	Peak
3	0.030	28.52	20.69	49.21	118.09	-68.88	Peak
4	0.063	25.09	26.11	51.20	111.60	-60.40	Peak
5	0.104	21.79	37.92	59.71	107.30	-47.59	Peak
6	0.122	20.70	30.03	50.73	105.87	-55.14	Peak

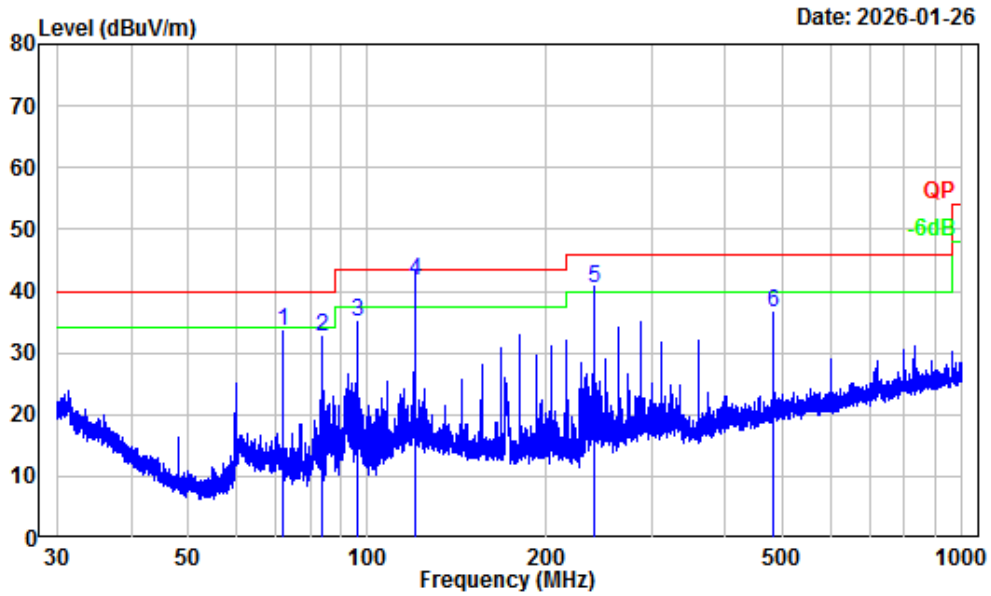


Site : Chamber A
Condition : 3m
Project Number : 2601P41703E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 10/30kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.180	17.28	41.99	59.27	102.49	-43.22	Peak
2	0.268	12.10	43.26	55.36	99.05	-43.69	Peak
3	0.997	1.22	58.41	59.63	67.50	-7.87	Peak
4	1.265	0.46	45.99	46.45	65.38	-18.93	Peak
5	1.988	-1.57	52.75	51.18	69.54	-18.36	Peak
6	2.988	-2.14	45.57	43.43	69.54	-26.11	Peak

30MHz-1GHz:

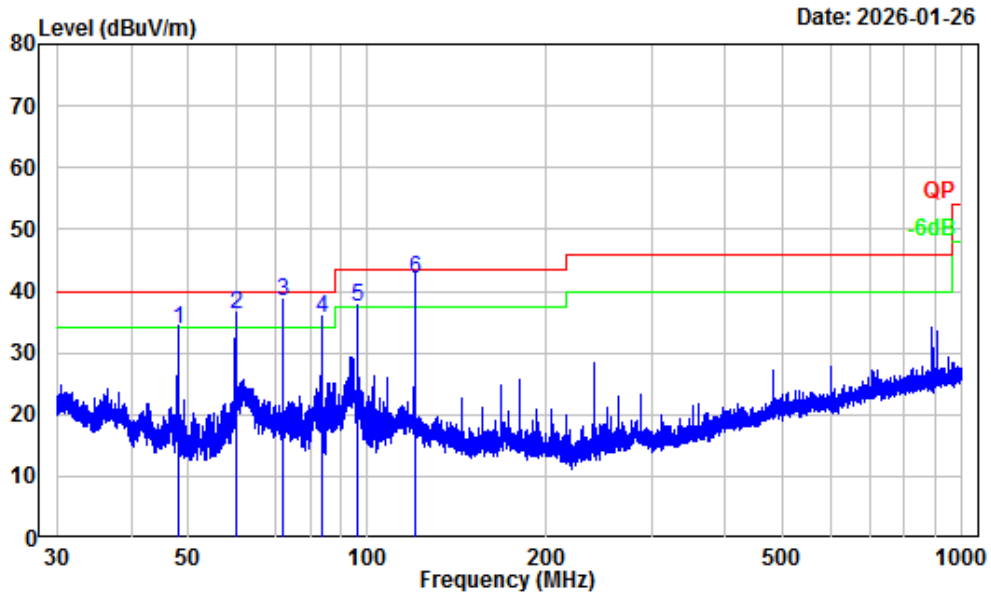
Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2601P41703E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	71.99	-17.85	51.32	33.47	40.00	-6.53	Peak
2	84.00	-18.09	50.59	32.50	40.00	-7.50	Peak
3	96.01	-17.02	52.07	35.05	43.50	-8.45	Peak
4	119.91	-11.46	53.20	41.74	43.50	-1.76	QP
5	239.99	-13.32	53.70	40.38	46.00	-5.62	QP
6	480.11	-6.34	42.85	36.51	46.00	-9.49	Peak

Vertical



Site : Chamber A
Condition : 3m Vertical
Project Number : 2601P41703E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	47.99	-17.34	51.20	33.86	40.00	-6.14	QP
2	60.02	-18.12	54.20	36.08	40.00	-3.92	QP
3	72.02	-17.85	56.09	38.24	40.00	-1.76	QP
4	84.00	-18.09	53.60	35.51	40.00	-4.49	QP
5	95.97	-17.03	54.40	37.37	43.50	-6.13	QP
6	119.91	-11.46	53.40	41.94	43.50	-1.56	QP

Above 1GHz:

Frequency (MHz)	Reading (dBµV)	PK/AV	Polar (H/V)	Factor (dB/m)	Absolute Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Low Channel							
2402.00	109.00	PK	H	-10.99	98.01	114.00	-15.99
2402.00	98.05	PK	V	-10.99	87.06	114.00	-26.94
4804.00	77.64	PK	H	-7.83	69.81	74	-4.19
4804.00	67.70	PK	V	-7.83	59.87	74	-14.13
Middle Channel							
2437.00	108.92	PK	H	-10.91	98.01	114.00	-15.99
2437.00	98.18	PK	V	-10.91	87.27	114.00	-26.73
4874.00	77.73	PK	H	-7.68	70.05	74	-3.95
4874.00	67.59	PK	V	-7.68	59.91	74	-14.09
High Channel							
2479.00	107.54	PK	H	-10.92	96.62	114.00	-17.38
2479.00	96.75	PK	V	-10.92	85.83	114.00	-28.17
4958.00	75.18	PK	H	-7.58	67.60	74	-6.40
4958.00	65.76	PK	V	-7.58	58.18	74	-15.82

Note:
Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Absolute Level (Corrected Amplitude） = Factor + Reading
Margin = Absolute Level - Limit
The other spurious emission which is 20dB to the limit or in noise floor level was not recorded.

Field Strength of Average							
Frequency (MHz)	**Peak Measurement @3m (dBμV/m)**	**Polar (H/V)**	**Duty Cycle Correction Factor (dB)**	**Corrected Ampitude (dBμV/m)**	**Limit (dBμV/m)**	**Margin (dB)**	**Comment**
Low Channel 2402MHz							
2402.00	98.01	H	-55.65	42.36	94	-51.64	fundamental
2402.00	87.06	V	-55.65	31.41	94	-62.59	fundamental
4804.00	69.81	H	-55.65	14.16	54	-39.84	Harmonic
4804.00	59.87	H	-55.65	4.22	54	-49.78	Harmonic
Middle Channel 2437MHz							
2437.00	98.01	H	-55.65	42.36	94	-51.64	fundamental
2437.00	87.27	V	-55.65	31.62	94	-62.38	fundamental
4874.00	70.05	H	-55.65	14.40	54	-39.60	Harmonic
4874.00	59.91	H	-55.65	4.26	54	-49.74	Harmonic
High Channel 2479MHz							
2479.00	96.62	H	-55.65	40.97	94	-53.03	fundamental
2479.00	85.83	V	-55.65	30.18	94	-63.82	fundamental
4958.00	67.60	H	-55.65	11.95	54	-42.05	Harmonic
4958.00	58.18	H	-55.65	2.53	54	-51.47	Harmonic

Note:

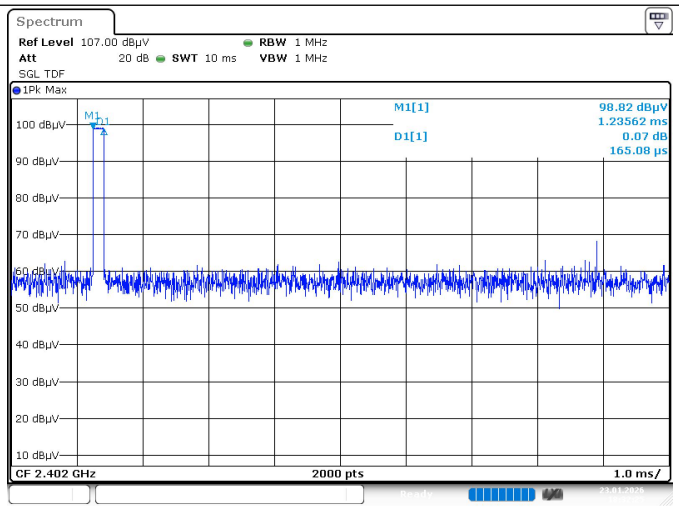
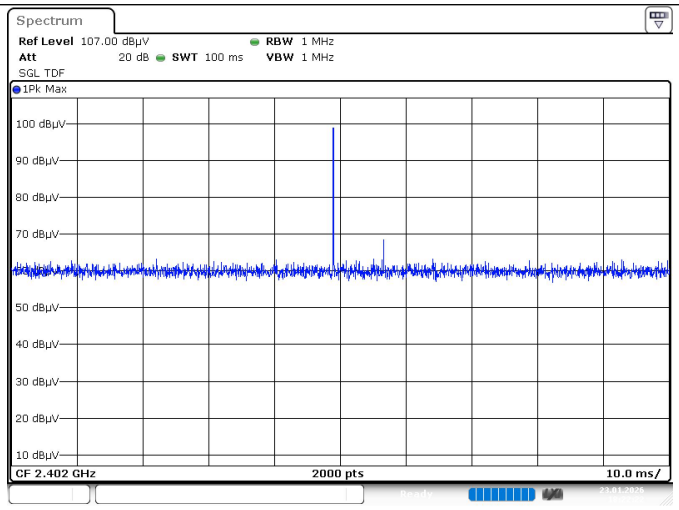
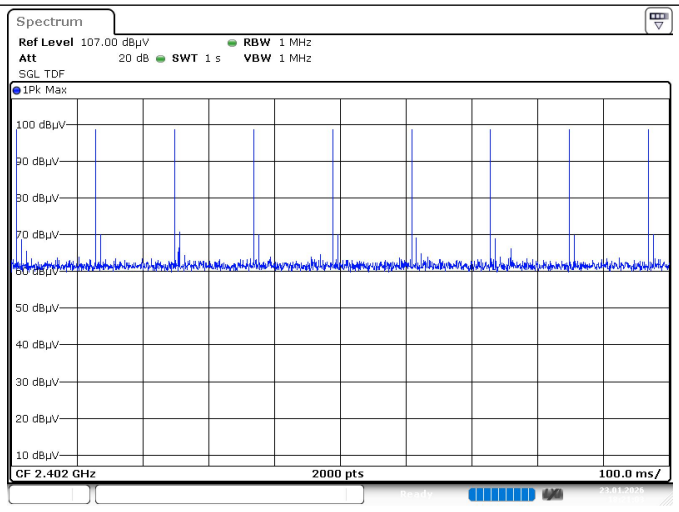
Absolute Level = Corrected Factor + Reading
Margin = Corrected. Amplitude - Limit
Average level= Peak level+ Duty Cycle Corrected Factor
For fundamental, the peak value compliance with the limit of Average.

Duty cycle：

Ton =0.165ms

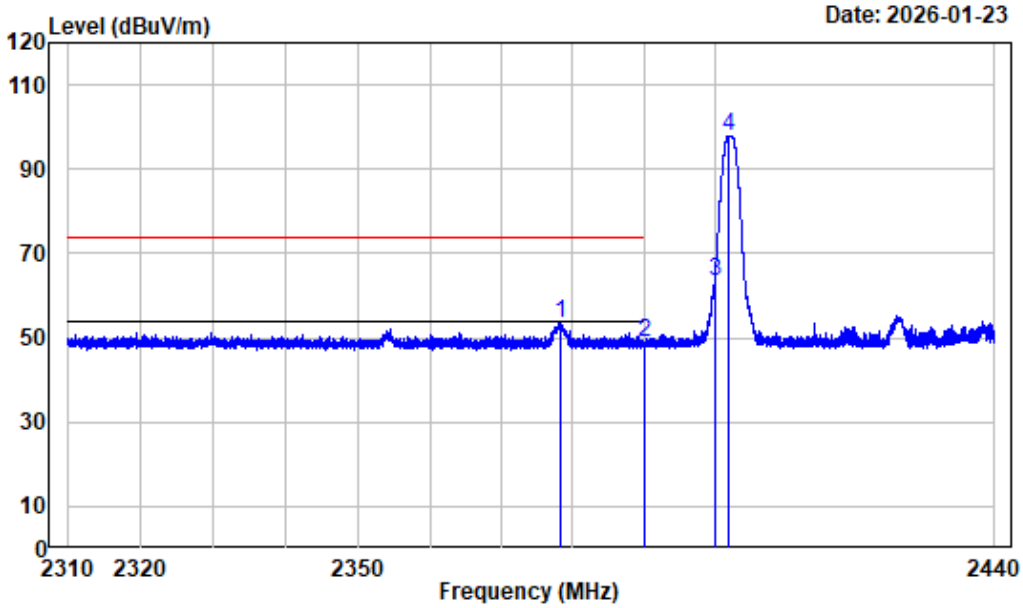
Duty cycle = Ton/100 = 0.16508/100=0.00165

Duty Cycle Corrected Factor = 20lg (Duty cycle) = 20lg0.00165= -55.65

Duty Cycle (10ms)	
Duty Cycle (100ms)	
Duty Cycle (1s)	

Test plots for Band Edge Measurements (Radiated):

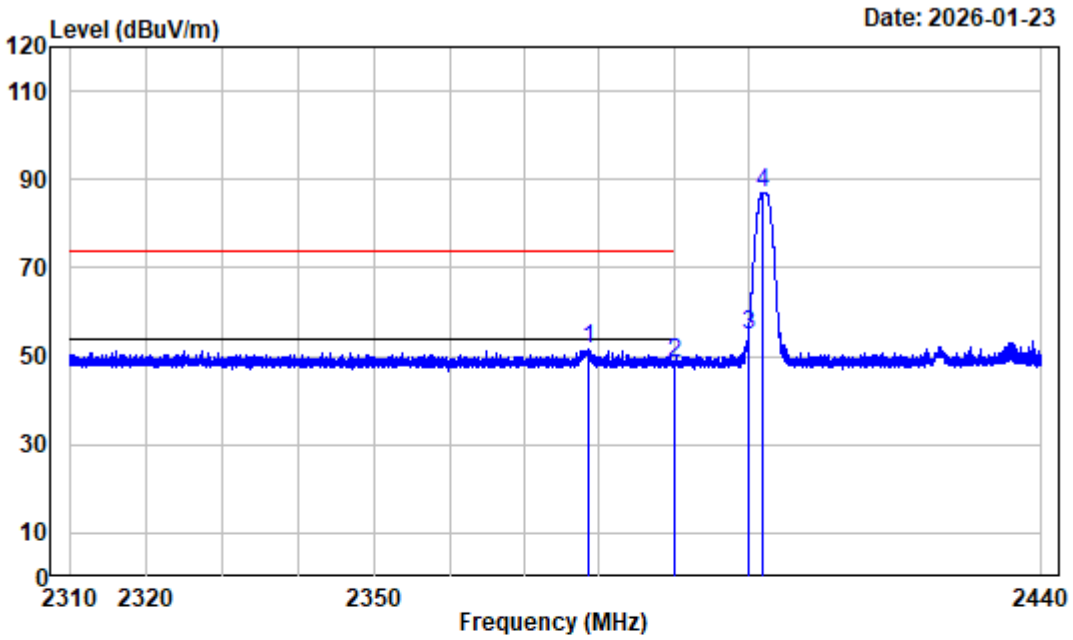
Test Channel:	2402MHz	Ant. Polar. :	Horizontal



Condition : Horizontal
Project No. : 2601P41703E-RF
Tester : Leon Guo
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4G_2402

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2378.250	-10.95	64.18	53.23	74.00	-20.77	Peak
2	2390.000	-10.97	59.89	48.92	74.00	-25.08	Peak
3	2400.000	-10.99	74.35	63.36	74.00	-10.64	Peak
4	2402.000	-10.99	109.00	98.01	114.00	-15.99	Peak

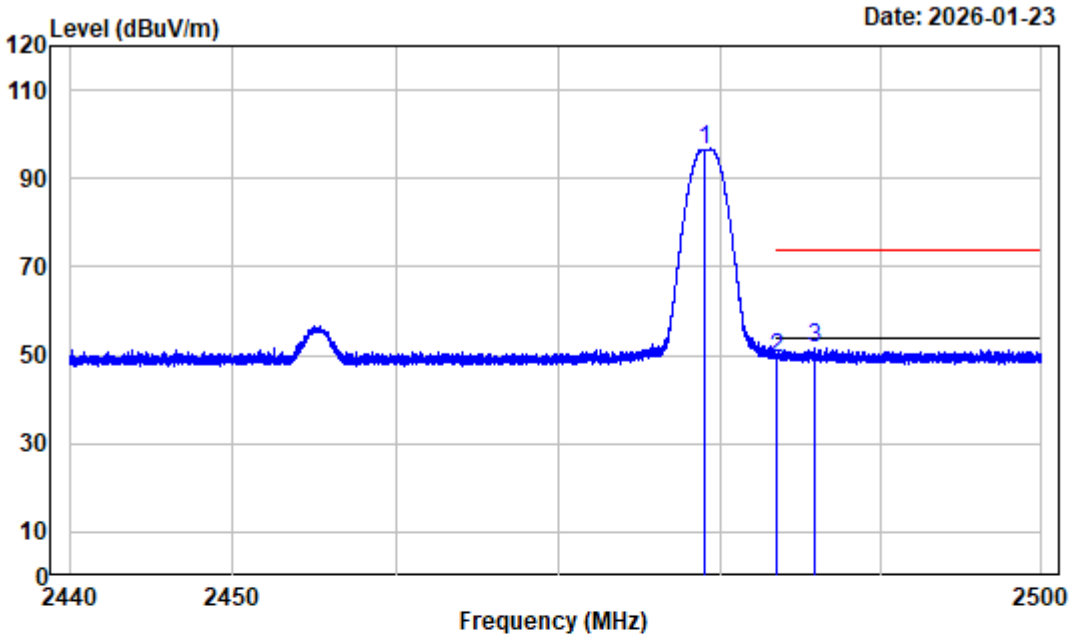
Test Channel:	2402MHz	Ant. Polar. :	Vertical



Condition : Vertical
Project No. : 2601P41703E-RF
Tester : Leon Guo
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4G_2402

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2378.429	-10.95	62.35	51.40	74.00	-22.60	Peak
2	2390.000	-10.97	59.49	48.52	74.00	-25.48	Peak
3	2400.000	-10.99	65.71	54.72	74.00	-19.28	Peak
4	2402.000	-10.99	98.05	87.06	114.00	-26.94	Peak

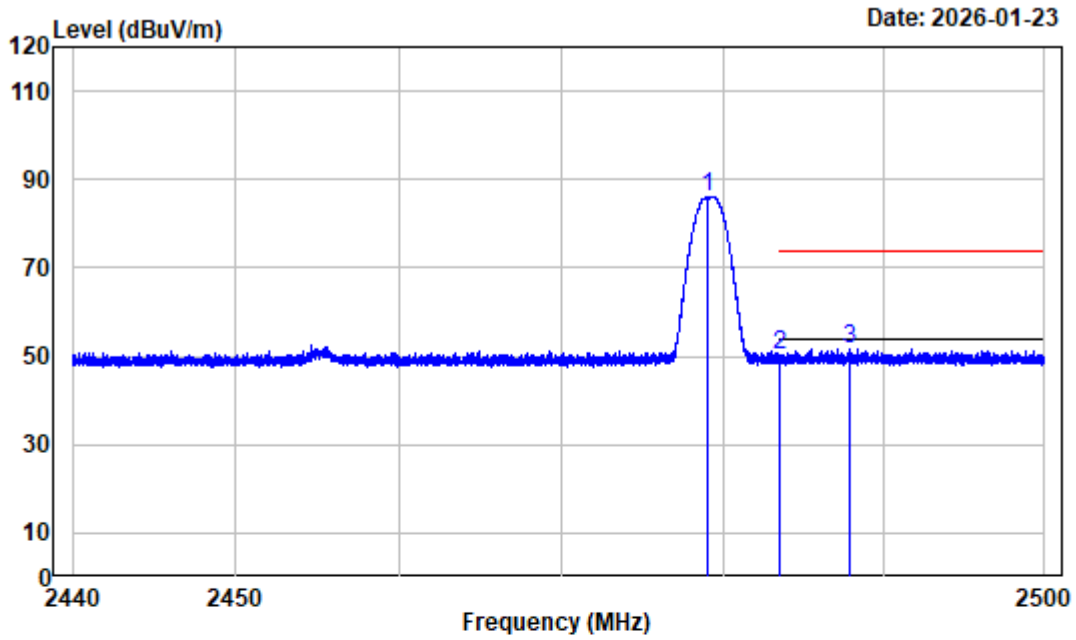
Test Channel:	2479MHz	Ant. Polar. :	Horizontal



Condition : Horizontal
Project No. : 2601P41703E-RF
Tester : Leon Guo
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4G_2479

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2479.000	-10.92	107.54	96.62	114.00	-17.38	Peak
2	2483.500	-10.93	60.26	49.33	74.00	-24.67	Peak
3	2485.900	-10.93	62.45	51.52	74.00	-22.48	Peak

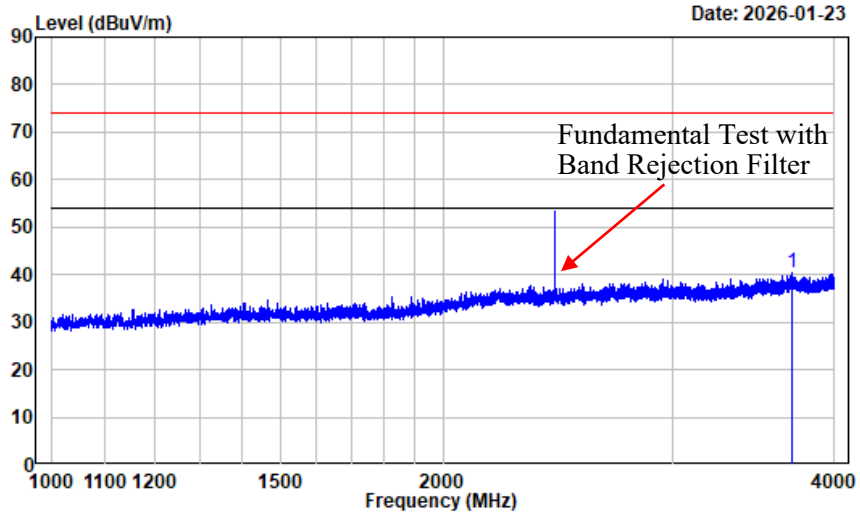
Test Channel:	2479MHz	Ant. Polar. :	Vertical



Condition : Vertical
Project No. : 2601P41703E-RF
Tester : Leon Guo
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4G_2479

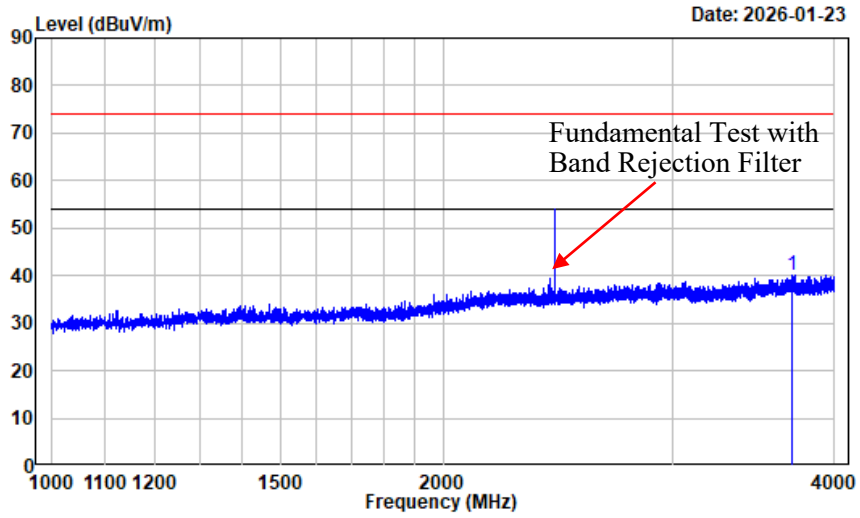
	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2479.000	-10.92	96.75	85.83	114.00	-28.17	Peak
2	2483.500	-10.93	61.01	50.08	74.00	-23.92	Peak
3	2487.880	-10.93	62.60	51.67	74.00	-22.33	Peak

Listed with the worst case test plot:

Horizontal	
1-4GHz	 Condition : Horizontal Project No. : 2601P41703E-RF Tester : Leon Guo Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak Note : 2.4G_2437 Freq Factor Read Level Level Limit Line Over Limit Remark MHz dB/m dBuV dBuV/m dBuV/m dB 1 3709.375 -8.53 48.94 40.41 74.00 -33.59 Peak

Vertical

1-4GHz

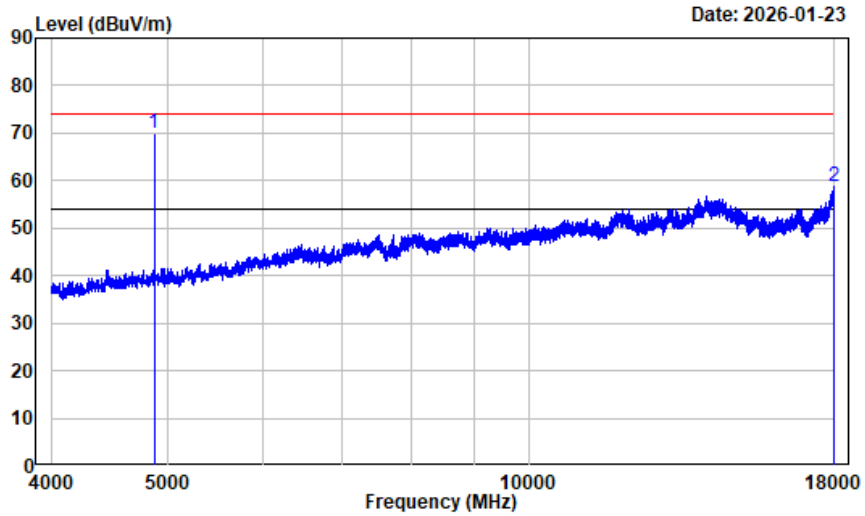



```
Condition       : Vertical
Project No.     : 2601P41703E-RF
Tester          : Leon Guo
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note            : 2.4G_2437
```

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3710.875	-8.55	48.79	40.24	74.00	-33.76	Peak

Horizontal-Peak

4-18GHz

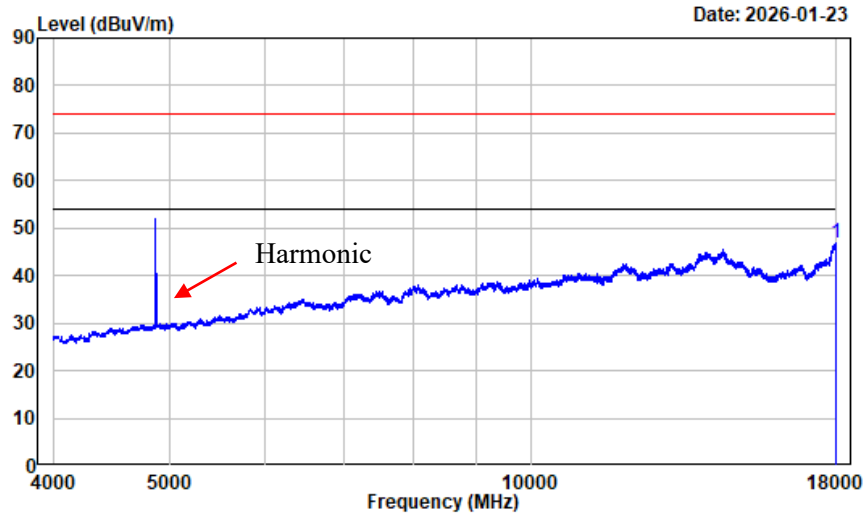



```
Condition       : Horizontal
Project No.     : 2601P41703E-RF
Tester          : Leon Guo
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note            : 2.4G_2437
```

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4874.000	-7.68	77.73	70.05	74.00	-3.95	Peak
2	17973.750	9.44	49.26	58.70	74.00	-15.30	Peak

Horizontal-Average

4-18GHz

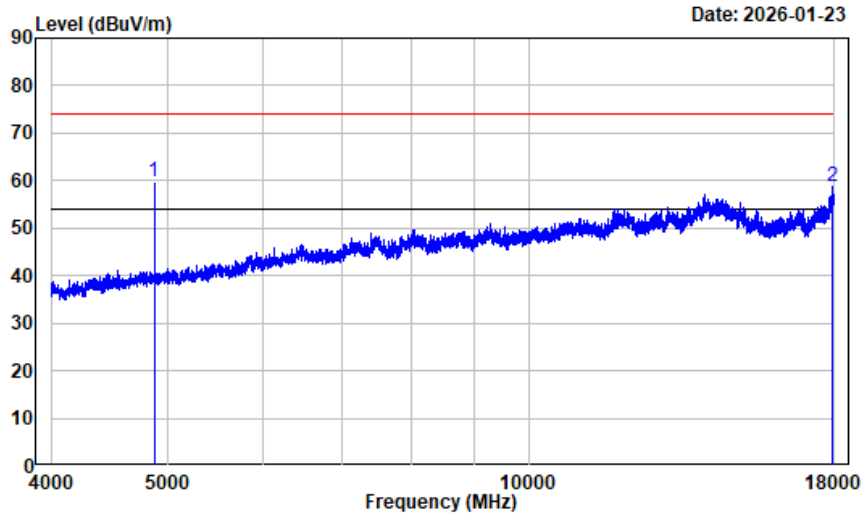



```
Condition       : Horizontal
Project No.     : 2601P41703E-RF
Tester          : Leon Guo
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note            : 2.4G_2437
```

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17963.250	9.39	37.37	46.76	54.00	-7.24	Average

Vertical-Peak

4-18GHz

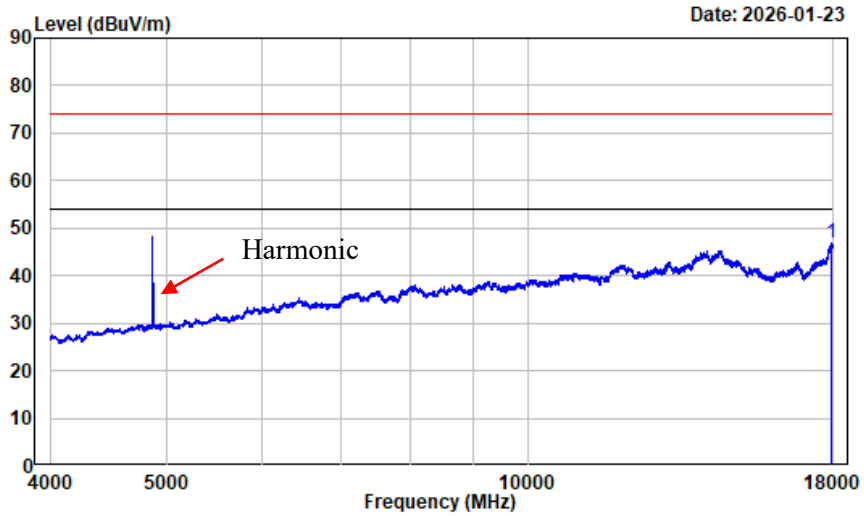


Condition : Vertical
Project No. : 2601P41703E-RF
Tester : Leon Guo
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4G_2437

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4874.000	-7.68	67.59	59.91	74.00	-14.09	Peak
2	17954.500	9.35	49.49	58.84	74.00	-15.16	Peak

Vertical-Average

4-18GHz

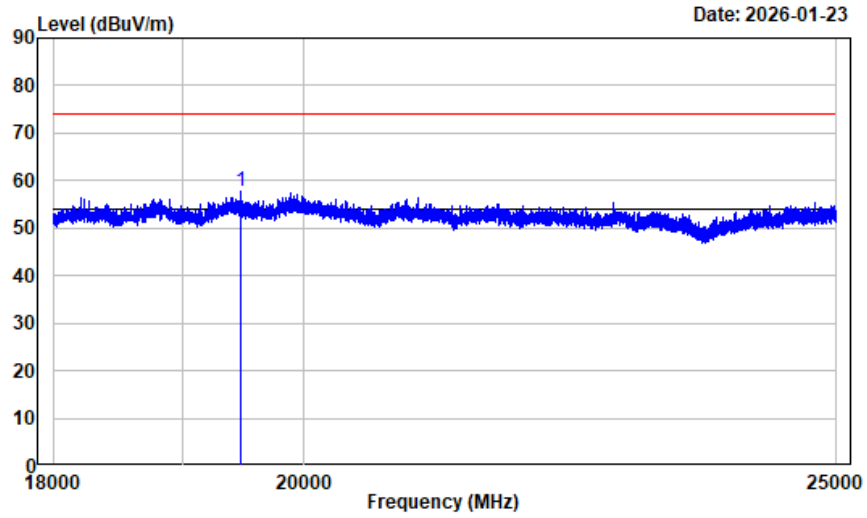


Condition : Vertical
Project No. : 2601P41703E-RF
Tester : Leon Guo
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note : 2.4G_2437

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17944.000	9.30	37.48	46.78	54.00	-7.22	Average

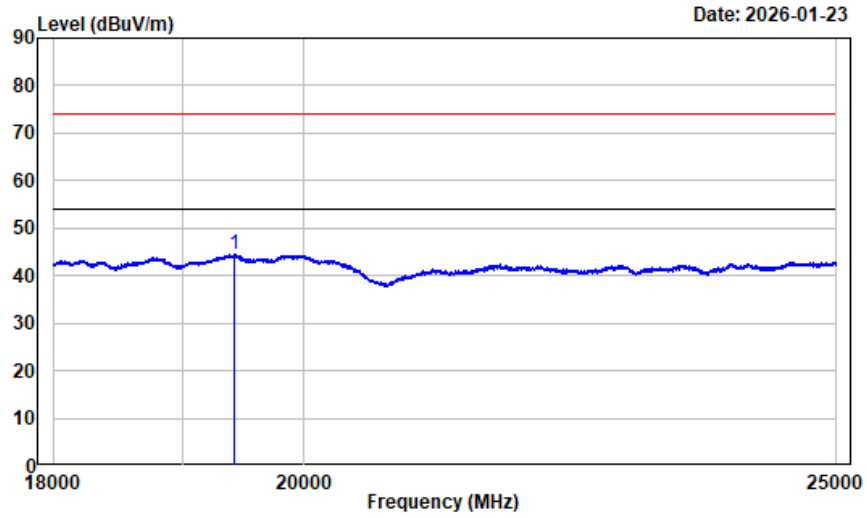
Horizontal-Peak

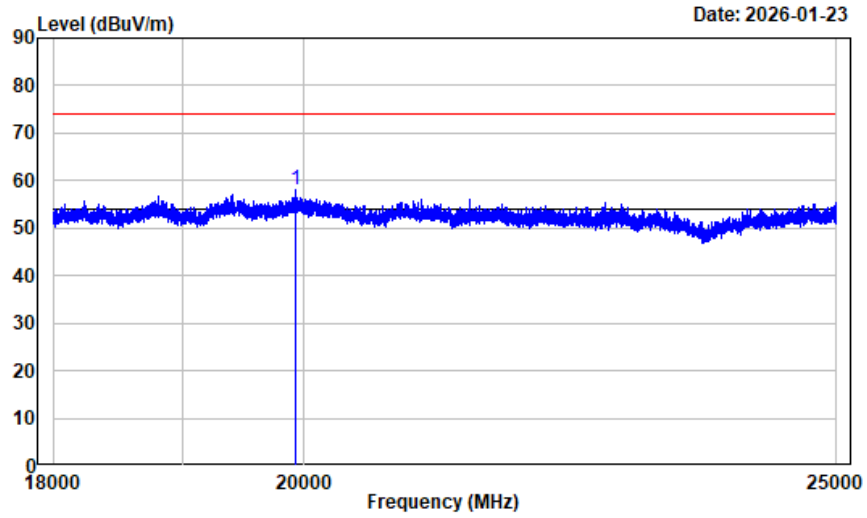
18-25GHz



Condition : Horizontal
Project No. : 2601P41703E-RF
Tester : Leon Guo
Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak
Note : 2.4G_2437

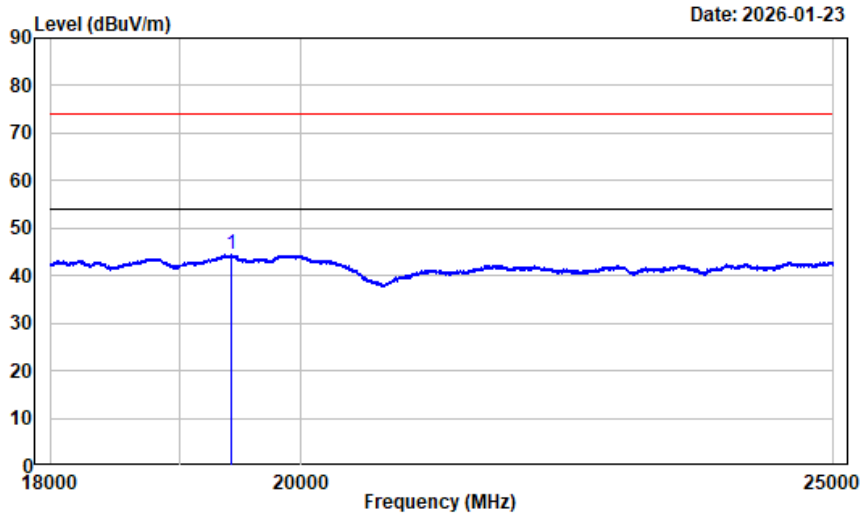
	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	19479.630	17.36	40.51	57.87	74.00	-16.13	Peak

Horizontal-Average	
18-25GHz	 Condition : Horizontal Project No. : 2601P41703E-RF Tester : Leon Guo Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak Note : 2.4G_2437 Freq / Factor / Read Level / Limit Level / Limit Line / Over Limit / Remark MHz / dB/m / dBuV / dBuV/m / dBuV/m / dB 1 19419.250 17.32 27.08 44.40 54.00 -9.60 Average

Vertical-Peak	
18-25GHz	 Condition : Vertical Project No. : 2601P41703E-RF Tester : Leon Guo Spectrum setting: Peak reading:RBW:1MHz VBW:3MHz Detector:Peak Note : 2.4G_2437 Freq Factor Read Level Limit Line Over Limit Remark MHz dB/m dBuV dBuV/m dBuV/m dB 1 19927.630 17.81 40.29 58.10 74.00 -15.90 Peak

Vertical-Average

18-25GHz




```
Condition       : Vertical
Project No.     : 2601P41703E-RF
Tester          : Leon Guo
Spectrum setting: Average reading:RBW:1MHz VBW:1kHz Detector:Peak
Note            : 2.4G_2437
```

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	19419.250	17.32	27.08	44.40	54.00	-9.60	Average

FCC§15.215(c) - 20dB EMISSION BANDWIDTH

Applicable Standard

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.

Test Procedure

Test Method: ANSI C63.10-2020 Clause 6.9.2

a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW.

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be at least three times RBW, unless otherwise specified by the applicable requirement.

c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.6.2.

d) Steps a) through c) might require iteration to adjust within the specified tolerances.

e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target "−xx dB down" requirement; that is, if the requirement calls for measuring the −20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the reference value.

f) Set detection mode to peak and trace mode to max-hold.

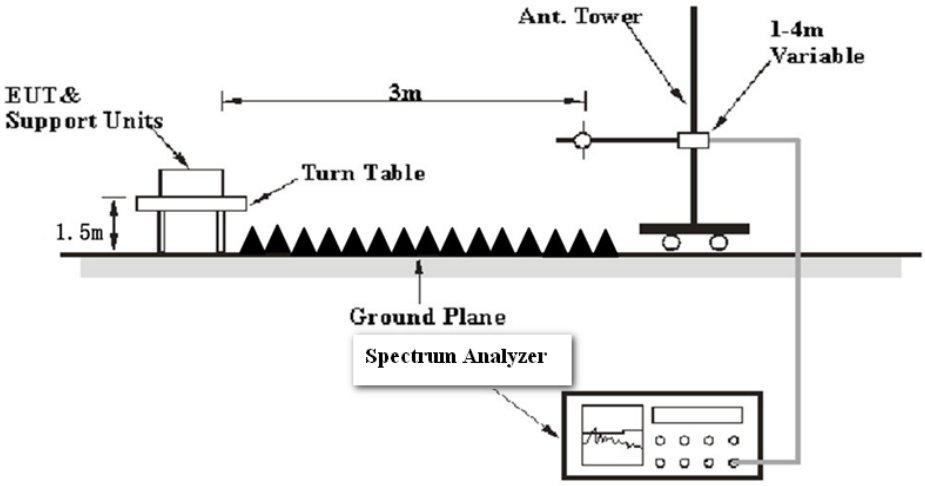
g) Determine the reference value: Set the EUT to transmit an unmodulated carrier or modulated signal, as applicable. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).

h) Determine the "−xx dB down amplitude" using [(reference value) - xx]. Alternatively, this calculation may be made by using the marker-delta function of the instrument.

i) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j).

j) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the "−xx dB down amplitude" determined in step h). If a marker is below this "−xx dB down amplitude" value, then it shall be as close as possible to this value. The dBc bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the "−xx dB down amplitude" determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.

k) The dBc bandwidth shall be reported by providing spectral plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).



Test Data

Environmental Conditions

Temperature:	21.5 ℃
Relative Humidity:	45 %
ATM Pressure:	101.5 kPa

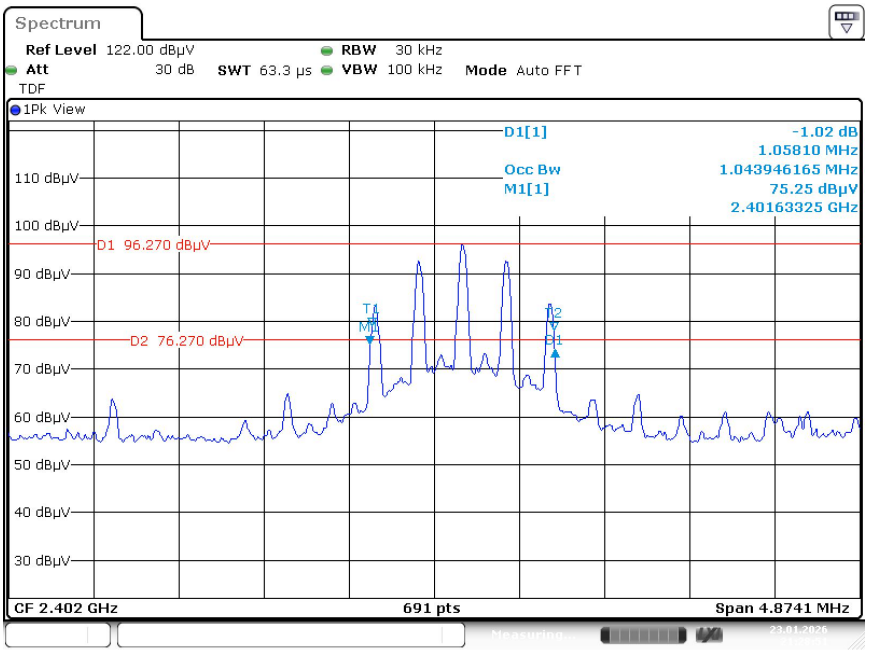
The testing was performed by Leon Guo on 2026-01-23.

EUT operation mode: Transmitting

Please refer to the following table and plots.

Channel	Frequency (MHz)	20dB Bandwidth (MHz)
Low	2402	1.058
Middle	2437	1.056
High	2479	1.056

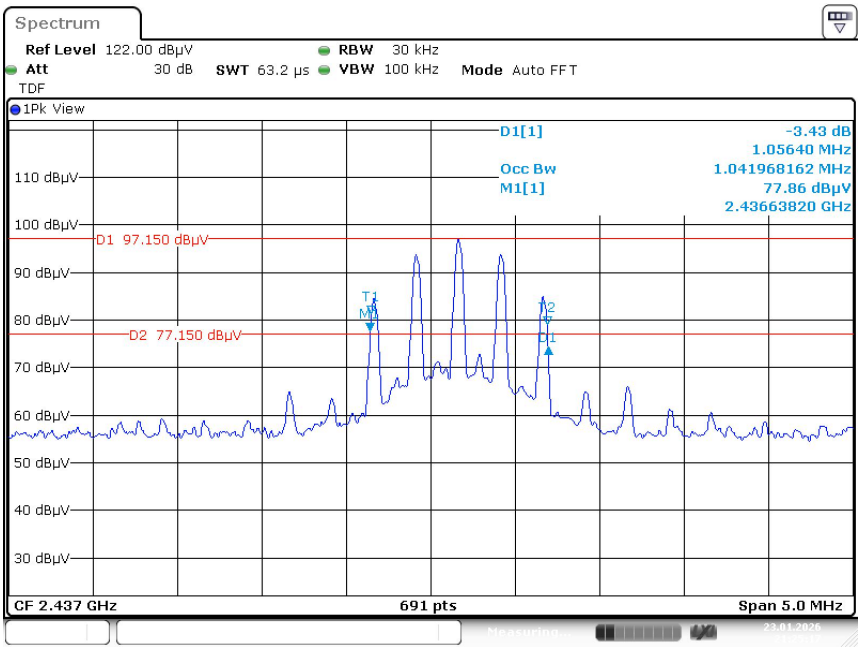
Low channel



ProjectNo.:2601P41703E-RF Tester:Leon Guo

Date: 23.JAN.2026 21:28:52

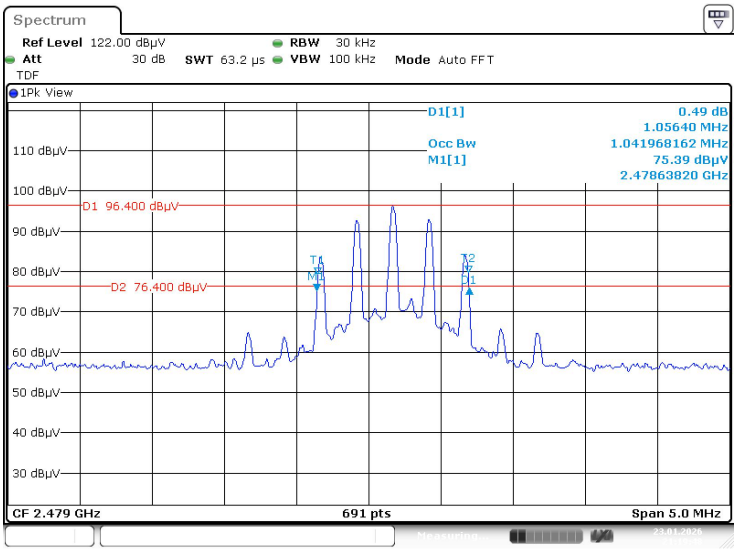
Middle Channel



ProjectNo.:2601P41703E-RF Tester:Leon Guo

Date: 23.JAN.2026 21:25:17

High Channel



ProjectNo.:2601P41703E-RF Tester:Leon Guo

Date: 23.JAN.2026 21:19:48

EUT PHOTOGRAPHS

Please refer to the attachment 2601P41703E-RF-EXP External photo and 2601P41703E-RF-INP Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2601P41703E-RF-00-TSP Test Setup photo.

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