TEST REPORT

Applicant Name:	Shenzhen Hollyland Technology Co., Ltd
Address:	8F, Building 5D, Skyworth Innovation Valley, Tangtou Road, Shiyan Street, Baoan District, Shenzhen, 518055 China
Report Number:	2501S11852E-RF-00D
FCC ID:	2ADZC-5711T

Test Standard (s)

FCC PART 15D

Sample Description

Product Type:	Full-Duplex Wireless Intercom System
Model No.:	Solidcom ANT01
Multiple Model(s) No.:	Solidcom H1
Trade Mark:	HOLLYLAND, HOLLYVIEW
Date Received:	2025-04-27
Issue Date:	2025-07-04

Test Result:	Pass▲

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

Prepared and Checked By:

Ekko Wu
RF Engineer

Approved By:

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.
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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2501S11852E-RF-00D	Original Report	2025-07-04

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Full-Duplex Wireless Intercom System
Tested Model	Solidcom ANT01
Multiple Model(s)	Solidcom H1
Frequency Range	1921.536-1928.448MHz
Maximum conducted peak output power	19.69dBm(Module 1) 19.42dBm(Module 2)
Modulation Technique	GFSK
Antenna Specification#	3.77dBi (It is provided by the applicant)
Voltage Range	DC 56V from PoE or DC 14.8V from battery
Sample serial number	322S-3 for Conducted and Radiated Emissions Test 322S-4 for RF Conducted Test (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
POE Information	Model: RP029-5601080YE Input: AC 100-240V~50/60Hz, 1.5A Max. Output: DC 56.0V, 1.08A, 60.48W
Note 1: The Multiple models are electrically identical with the test model except for model name and sales channel. Please refer to the declaration letter# for more detail, which was provided by manufacturer. Note 2: For the radiated emission below 1GHz test, the worst case is powered by the PoE according to the Wi-Fi report, so only test this power supply in this report.	

Objective

The tests were performed in order to determine the compliance of the EUT with FCC Part 15-Subpart D, section 15.207, 15.315, 15.317, 15.319 and 15.323 rules. The EMI measurements were performed according to the measurement procedure described in ANSI C63.17 – 2013.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.17 - 2013, American National Standard Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) 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		109.2kHz(k=2, 95% level of confidence)
RF Frequency		56.6Hz(k=2, 95% level of confidence)
RF output power, conducted		0.86dB(k=2, 95% level of confidence)
Unwanted Emission, conducted		1.60dB(k=2, 95% level of confidence)
AC Power Lines Conducted Emissions	9kHz-150kHz	3.63dB(k=2, 95% level of confidence)
	150kHz-30MHz	3.66dB(k=2, 95% level of confidence)
Radiated Emissions	0.009MHz~30MHz	3.60dB(k=2, 95% level of confidence)
	30MHz~200MHz (Horizontal)	5.32dB(k=2, 95% level of confidence)
	30MHz~200MHz (Vertical)	5.43dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Horizontal)	5.77dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Vertical)	5.73dB(k=2, 95% level of confidence)
	1GHz - 6GHz	5.34dB(k=2, 95% level of confidence)
	6GHz - 18GHz	5.40dB(k=2, 95% level of confidence)
	18GHz - 40GHz	5.64dB(k=2, 95% level of confidence)
Temperature		±1℃
Humidity		±1%
Supply voltages		±0.4%

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.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured to testing mode which is provided by the manufacturer.

The EUT has two DECT Modules, each module has two antennas. The two modules can transmit at the same time in different channels. But the two antennas can't transmit simultaneously for individual module.

Equipment Modifications

"SecureCRTPortable.exe" software was used.

Local Support Equipment List and Details

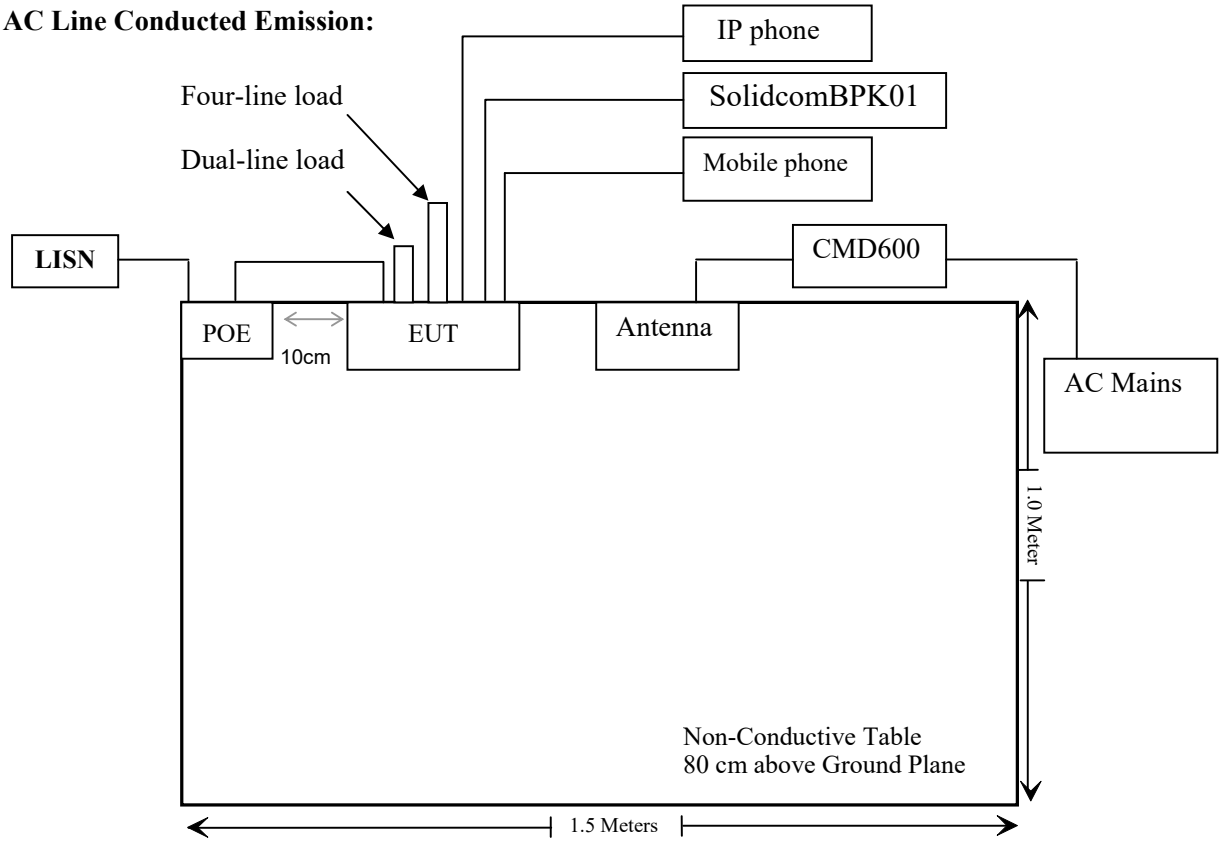
Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Digital Radio Communication Tester	CMD60	830553/018
HOLLYLAND	Dual-line load	Unknown	Unknown
HOLLYLAND	Four-line load	Unknown	Unknown
HOLLYLAND	Waist bag	Solidcom BPK01	Unknown
YEALINK	IP phone	SIP-T73W	Unknown
Redmi	Mobile phone	M2012K10C	Unknown
RISUNIC	PoE	RP029-5601080YE	Unknown

External I/O Cable

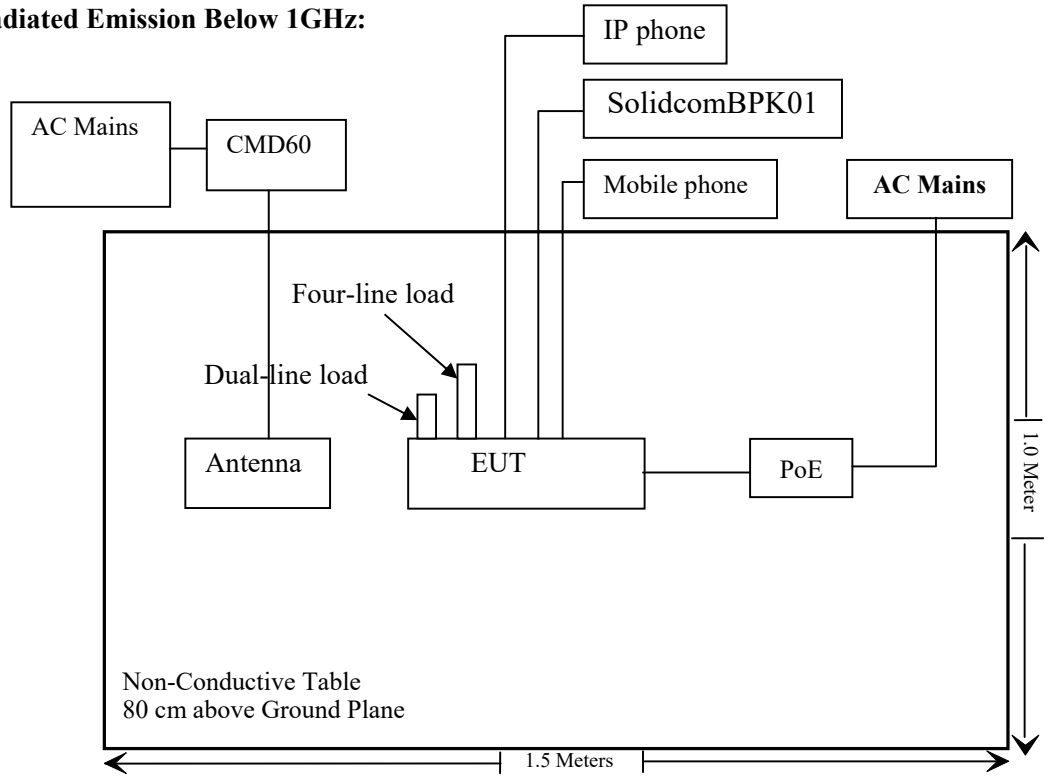
Cable Description	Length (m)	From Port	To
Un-shielded Detachable AC Cable	0.5	AC Mains	CMD60
Unshielded Detachable AC Cable	1.5	PoE	LISN/AC Mains
Unshielded Detachable RJ45 Cable	2.0	EUT	PoE
Unshielded Detachable USB Cable	1.5	EUT	Mobile phone
Unshielded Detachable USB Cable	1.5	EUT	Solidcom BPK01
Unshielded Detachable RJ45 Cable	5.0	EUT	IP phone

Block Diagram of Test Setup

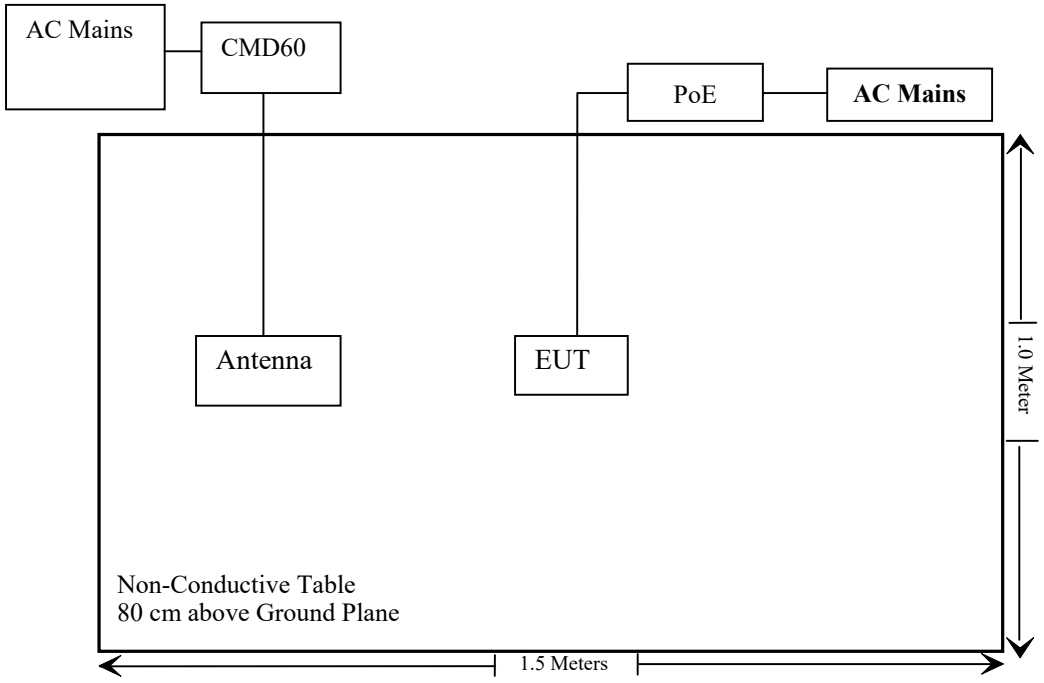
AC Line Conducted Emission:



Radiated Emission Below 1GHz:



Radiated Emission Above 1GHz:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1310 & §2.1091	RF Exposure Evaluation	Compliant
§ 15.317, § 15.203	Antenna Requirement	Compliant
§ 15.315, § 15.207	Conducted Emission	Compliant
§15.205, §15.209, § 15.319 (g)	Radiated Emissions	Compliant
§ 15.323 (a)	Emission Bandwidth	Compliant
§ 15.319 (c)	Peak Transmit Power	Compliant
§ 15.319 (d)	Power Spectral Density	Compliant
§ 15.323 (d)	Emission Inside and Outside the sub-band	Compliant
§ 15.323 (f)	Frequency Stability	Compliant
§ 15.323 (c)(e) § 15.319 (f)	Specific Requirements for UPCS	Compliant

Note 1: the EUT has two DECT modules: Module 1 and Module 2. The two modules have four same antennas.
Note 2: Module 1: According to the output power test, ANT 2 was the higher output power which was chosen for the full test.
Note 3: Module 2: According to the output power test, ANT 1 was the higher output power which was chosen for the full test.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2024/12/04	2025/12/03
Rohde & Schwarz	LISN	ENV216	101613	2024/12/04	2025/12/03
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2025/04/29	2026/04/28
Unknown	CE Cable	Unknown	UF A210B-1-0720-504504	2025/04/29	2026/04/28
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
Radiated Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2024/12/04	2025/12/03
Sonoma instrument	Pre-amplifier	310 N	186238	2025/04/29	2026/04/28
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Cable	Chamber A Cable 1	N/A	2025/04/29	2026/04/28
Unknown	Cable	XH500C	J-10M-A	2025/04/29	2026/04/28
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
Unknown	Cable	2Y194	0735	2024/12/04	2025/12/03
Unknown	Cable	PNG214	1354	2024/12/04	2025/12/03
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2025/03/26	2026/03/25
A.H.System	Preamplifier	PAM-0118P	489	2024/11/15	2025/11/14
Schwarzbeck	Horn Antenna	BBHA9120D(1201)	1143	2023/07/26	2026/07/25
Unknown	RF Cable	KMSE	735	2024/12/06	2025/12/05
Unknown	RF Cable	UFA147	219661	2024/12/06	2025/12/05
Unknown	RF Cable	XH750A-N	J-10M	2024/12/06	2025/12/05
JD	Filter Switch Unit	DT7220FSU	DS79906	2024/09/09	2025/09/08
JD	Multiplex Switch Test Control Set	DT7220SCU	DS79903	2024/09/09	2025/09/08
A.H.System	Pre-amplifier	PAM-1840VH	190	2025/04/29	2026/04/28
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
UTIFLEX	RF Cable	NO. 13	232308-001	2024/12/18	2025/12/17
Audix	EMI Test software	E3	191218(V9)	NCR	NCR

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSV40-N	102259	2024/12/04	2025/12/03
Rohde & Schwarz	Digital Radio Communication Tester	CMD60	830553/018	2025/04/29	2026/04/28
Unknown	10dB Attenuator	Unknown	F-03-EM065	2024/06/27	2025/06/26
BACL	Temperature & Humidity Chamber	BTH-150-40	30145	2024/12/06	2025/12/05
instek	DC Power Supply	GPS-3030DD	EM832096	NCR	NCR
Fluke	Digital Multimeter	287	19000011	2025/04/29	2026/04/28
Keysight	MXG Vector Signal Generator	N5182B	MY53051503	2024/12/04	2025/12/03
Agilent	Signal Generator	N5183A	MY50140588	2024/09/13	2025/09/12
WEINSCHEL	Power Splitter	1515	RH476	2024/06/27	2025/06/26

*** 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).

RF EXPOSURE EVALUATION

MPE-Based Exemption

Applicable Standard

According to subpart 15.247 (i) and subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

According to KDB 447498 D04 v01 Interim General RF Exposure Guidance

MPE-Based Exemption:
General frequency and separation-distance dependent MPE-based effective radiated power(ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(3)(i)(C)] to support an exemption from further evaluation from 300 kHz through 100 GHz.

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	1,920 R^2.
1.34-30	3,450 R^2/f^2.
30-300	3.83 R^2.
300-1,500	0.0128 R^2f.
1,500-100,000	19.2R^2.

Ris the minimum separation distance in meters
f = frequency in MHz

For multiple RF sources: Multiple RF sources are exempt if:

in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation:

$$\sum_{i=1}^{a}\frac{P_i}{P_{th,i}}+\sum_{j=1}^{b}\frac{ERP_j}{ERP_{th,j}}+\sum_{k=1}^{c}\frac{Evaluated_k}{Exposure\ Limit_k}\leq 1$$

Result

Mode	Frequency (MHz)	Tune up conducted power# (dBm)	Antenna Gain#		ERP		Evaluation Distance (m)	ERP Limit (W)
			(dBi)	(dBd)	(dBm)	(W)		
BT	2402-2480	7.5	1.74	-0.41	7.09	0.005	0.2	0.768
BLE	2402-2480	5.0	1.74	-0.41	4.59	0.003	0.2	0.768
Wi-Fi	2412-2462	22.5	1.74	-0.41	22.09	0.162	0.2	0.768
DECT Module 1	1921.536-1928.448	20.0	3.77	1.62	21.62	0.145	0.2	0.768
DECT Module 2	1921.536-1928.448	20.0	3.77	1.62	21.62	0.145	0.2	0.768

Note: 1. The tune up conducted power and antenna gain was declared by the applicant.
2. 0dBd=2.15dBi
3. The BT/BLE/Wi-Fi, DECT Module 1 and DECT Module 2 can transmit at same time, the BT/BLE and Wi-Fi cannot transmit at same time.

Simultaneous transmitting consideration (worst case):

The ratio= $ERP_{Wi\text{-}Fi}$ /Limit + $ERP_{DECT\ Module\ 1}$/Limit + $ERP_{DECT\ Module\ 2}$/Limit
= 0.162/0.768+ 0.145/0.768 +0.145/0.768 =0.59<1.0

So simultaneous exposure is compliant.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliant

§ 15.317, § 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 four same antennas which use the RP-N type connector and the maximum antenna gain[#] is 3.77dBi, fulfill the requirement of this section. Please refer to the EUT photos.

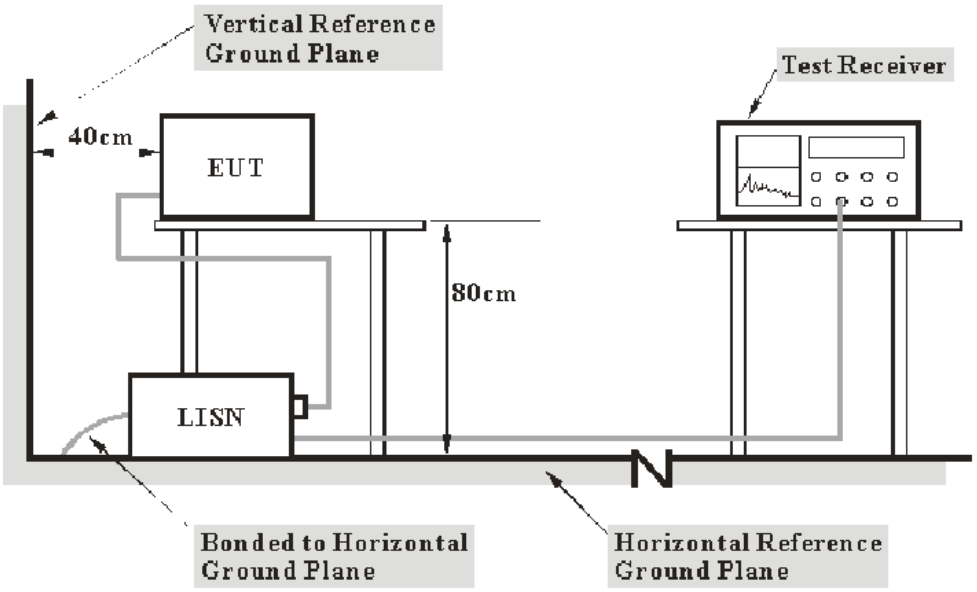
Result: Compliant

FCC§15.315 & §15.207 - CONDUCTED EMISSIONS

Applicable Standard

FCC§15.315, an unlicensed PCS device that is designed to be connected to the public utility (AC) power line must meet the limits specified in §15.207.

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC 15.315 and FCC 15.207 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

The adapter was connected to a 120 VAC/60 Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

Factor & Over Limit Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

Factor = LISN VDF + Cable Loss

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

Over Limit = Level – Limit
Level = Read Level + Factor

Note: The term "cable loss" refers to the combination of a cable and a 10dB transient limiter (attenuator).

Test Data

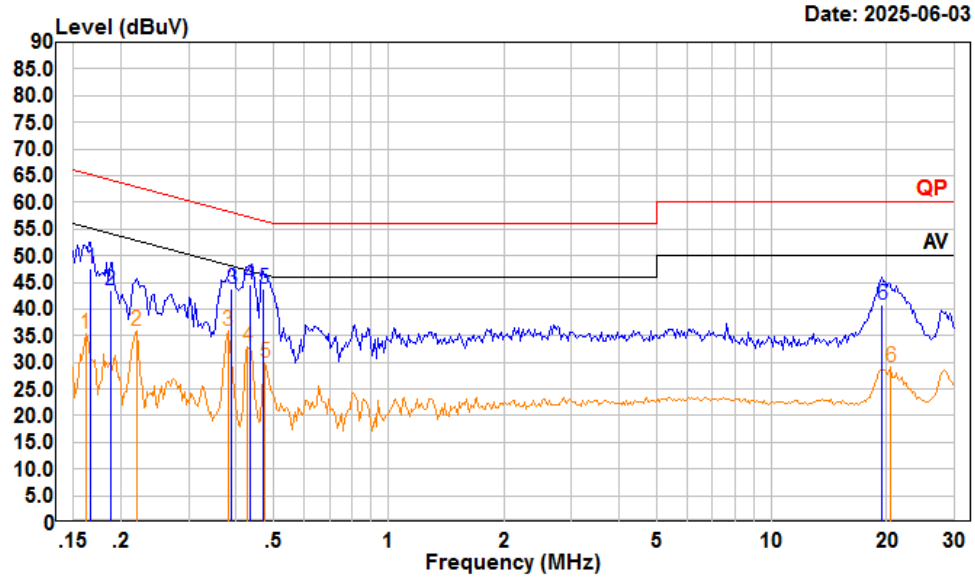
Environmental Conditions

Temperature:	26.7 ℃
Relative Humidity:	68 %
ATM Pressure:	100.1 kPa

The testing was performed by Macy Shi on 2025-06-03.

Test mode: Transmitting

Module 1 (Maximum output power mode: ANT 2 Low channel)
AC 120V/60 Hz, Line



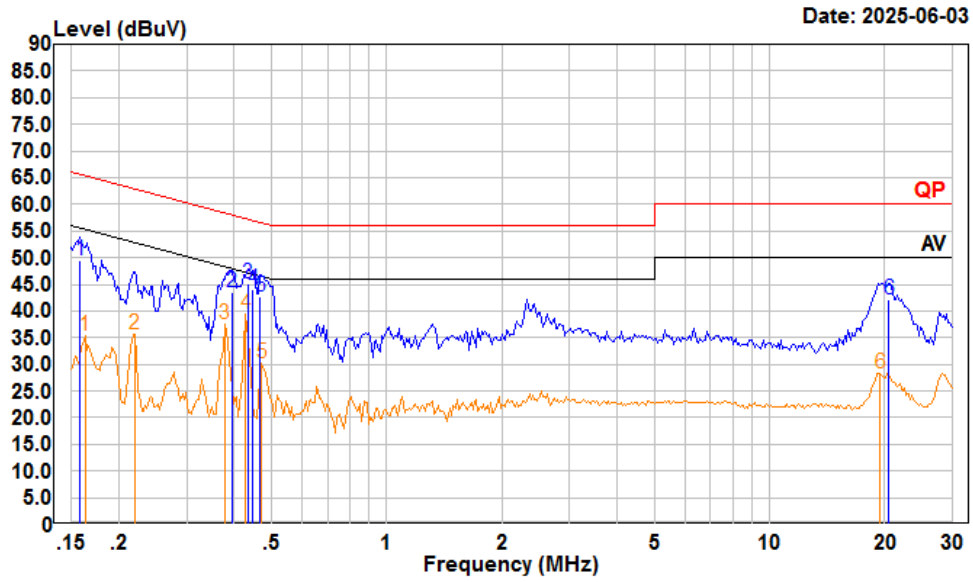
Trace: 1

Condition: Line
Project : 2501S11852E-RF
tester : Macy.shi Note:Transmitting
Setting : RBW:9kHz

	Freq	Read Level	LISN Level	Cable Factor	Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.167	27.39	47.67	10.09	10.19	65.12	-17.45	QP
2	0.187	23.30	43.46	9.97	10.19	64.15	-20.69	QP
3	0.389	23.30	43.85	10.34	10.21	58.08	-14.23	QP
4	0.433	24.09	44.71	10.41	10.21	57.20	-12.49	QP
5	0.471	23.00	43.65	10.46	10.19	56.49	-12.84	QP
6	19.428	20.30	40.93	10.38	10.25	60.00	-19.07	QP

	Freq	Read Level	LISN Level	Cable Factor	Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.162	15.16	35.46	10.12	10.18	55.38	-19.92	Average
2	0.220	15.76	35.91	9.96	10.19	52.83	-16.92	Average
3	0.381	15.49	36.01	10.32	10.20	48.25	-12.24	Average
4	0.428	12.42	33.03	10.40	10.21	47.29	-14.26	Average
5	0.476	9.29	29.95	10.47	10.19	46.41	-16.46	Average
6	20.486	8.43	29.07	10.39	10.25	50.00	-20.93	Average

AC 120V/60 Hz, Neutral



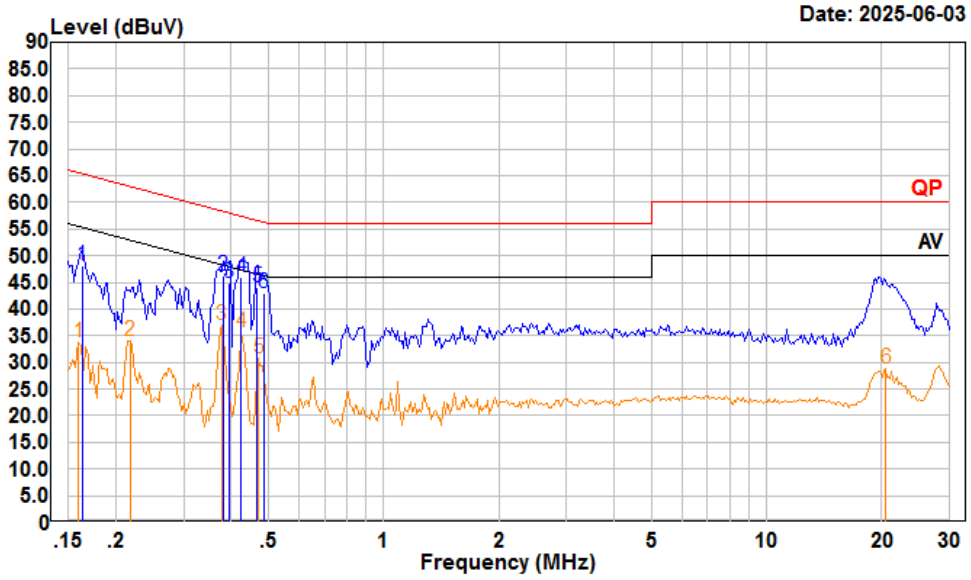
Trace: 1

Condition: Neutral
Project : 2501S11852E-RF
tester : Macy.shi Note:Transmitting
Setting : RBW:9kHz

	Freq	Read Level	LISN Level	Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.158	29.11	49.54	10.26	10.17	65.56	-16.02	QP
2	0.393	22.90	43.58	10.47	10.21	57.99	-14.41	QP
3	0.433	24.40	45.13	10.52	10.21	57.20	-12.07	QP
4	0.447	23.40	44.14	10.54	10.20	56.93	-12.79	QP
5	0.466	21.91	42.66	10.56	10.19	56.58	-13.92	QP
6	20.486	21.70	42.16	10.21	10.25	60.00	-17.84	QP

	Freq	Read Level	LISN Level	Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.163	15.02	35.44	10.24	10.18	55.30	-19.86	Average
2	0.220	15.27	35.61	10.15	10.19	52.83	-17.22	Average
3	0.377	16.90	37.55	10.45	10.20	48.34	-10.79	Average
4	0.428	18.80	39.53	10.52	10.21	47.29	-7.76	Average
5	0.471	9.40	30.16	10.57	10.19	46.49	-16.33	Average
6	19.428	7.83	28.27	10.19	10.25	50.00	-21.73	Average

Module 2(Maximum output power mode: ANT 1 High channel)
AC 120V/60 Hz, Line



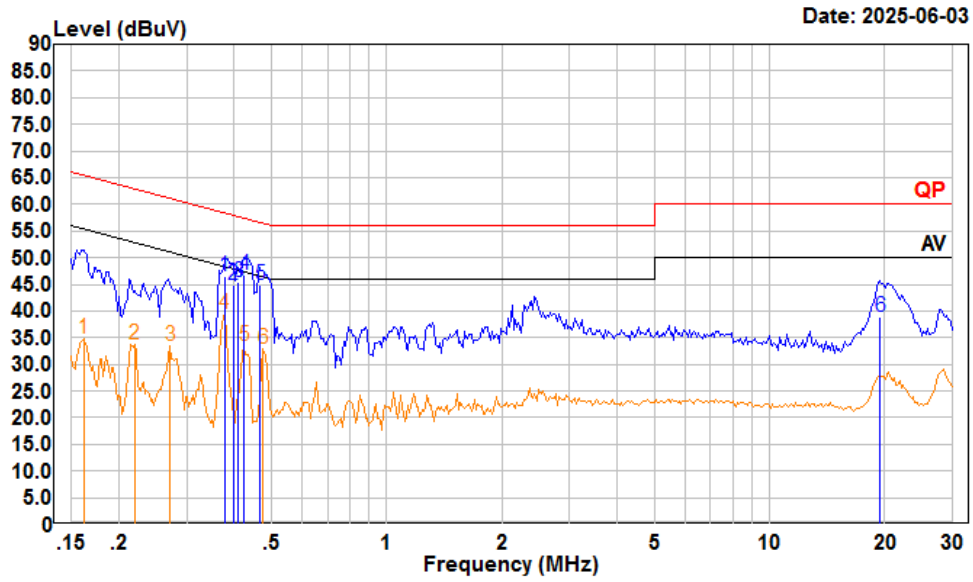
Trace: 1

Condition: Line
Project : 2501S11852E-RF
tester : Macy.shi Note:Transmitting
Setting : RBW:9kHz

	Freq	Read Level	LISN Level	Cable Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.163	27.73	48.02	10.11	10.18	65.30	-17.28	QP
2	0.381	25.64	46.16	10.32	10.20	58.25	-12.09	QP
3	0.393	24.23	44.78	10.34	10.21	57.99	-13.21	QP
4	0.424	25.42	46.02	10.39	10.21	57.37	-11.35	QP
5	0.466	23.42	44.06	10.45	10.19	56.58	-12.52	QP
6	0.486	22.30	42.97	10.48	10.19	56.23	-13.26	QP

	Freq	Read Level	LISN Level	Cable Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.160	13.39	33.69	10.13	10.17	55.47	-21.78	Average
2	0.217	13.92	34.06	9.95	10.19	52.92	-18.86	Average
3	0.377	16.57	37.09	10.32	10.20	48.34	-11.25	Average
4	0.424	14.97	35.57	10.39	10.21	47.37	-11.80	Average
5	0.471	10.12	30.77	10.46	10.19	46.49	-15.72	Average
6	20.486	8.23	28.87	10.39	10.25	50.00	-21.13	Average

AC 120V/60 Hz, Neutral



Trace: 1

Condition: Neutral
Project : 2501S11852E-RF
tester : Macy.shi Note:Transmitting
Setting : RBW:9kHz

	Freq	Read Level	LISN Level	Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.377	25.80	46.45	10.45	10.20	58.34	-11.89	QP
2	0.398	24.10	44.79	10.47	10.22	57.90	-13.11	QP
3	0.410	24.60	45.31	10.49	10.22	57.64	-12.33	QP
4	0.424	26.00	46.72	10.51	10.21	57.37	-10.65	QP
5	0.466	24.01	44.76	10.56	10.19	56.58	-11.82	QP
6	19.428	18.40	38.84	10.19	10.25	60.00	-21.16	QP

	Freq	Read Level	LISN Level	Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.162	14.27	34.70	10.25	10.18	55.38	-20.68	Average
2	0.220	13.41	33.75	10.15	10.19	52.83	-19.08	Average
3	0.272	12.97	33.44	10.27	10.20	51.07	-17.63	Average
4	0.377	18.74	39.39	10.45	10.20	48.34	-8.95	Average
5	0.424	12.67	33.39	10.51	10.21	47.37	-13.98	Average
6	0.476	12.12	32.88	10.57	10.19	46.41	-13.53	Average

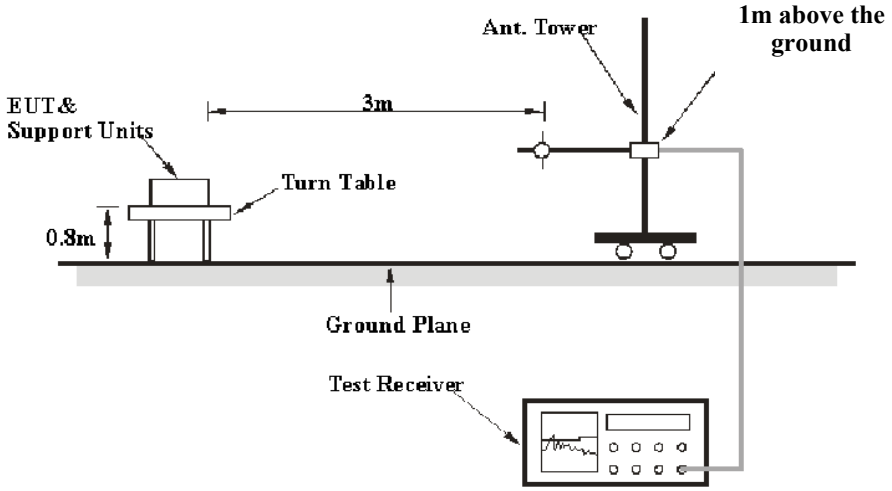
FCC §15.205, §15.209 & §15.319 (g) - RADIATED EMISSIONS

Applicable Standard

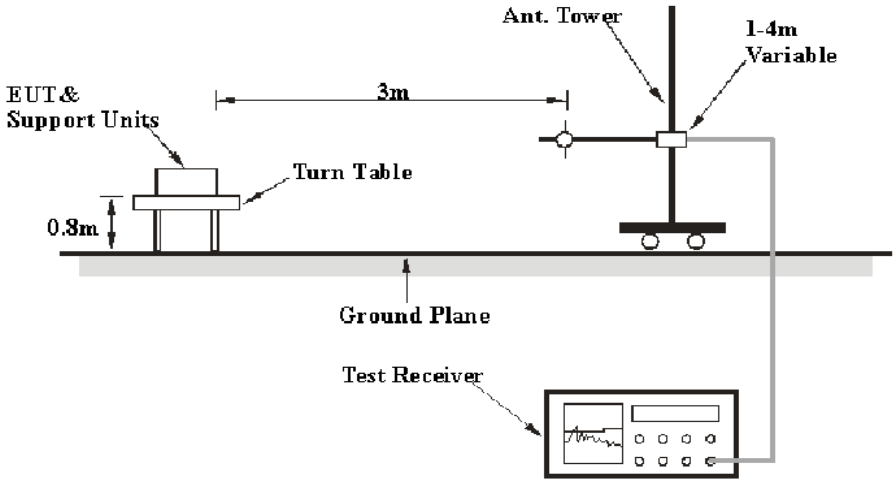
FCC §15.205; §15.209; §15.319 (g)

EUT Setup

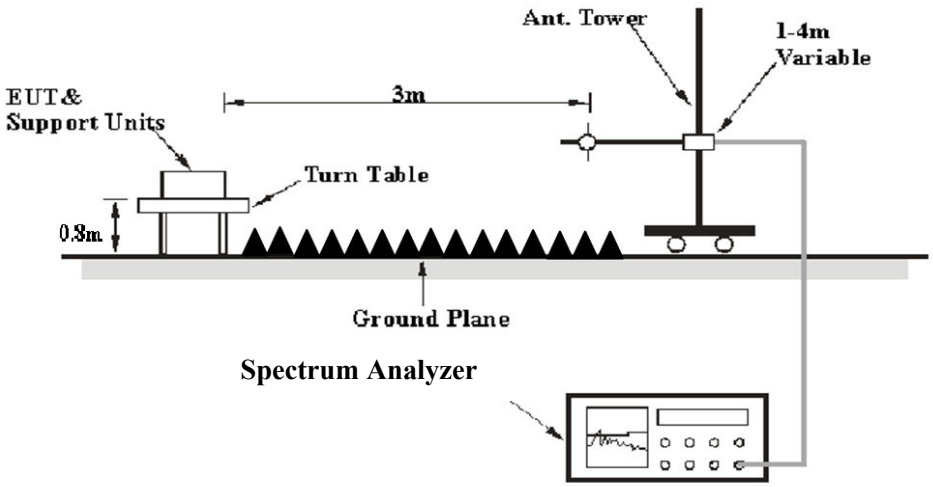
9 kHz-30MHz:



30MHz-1GHz:



Above 1GHz:



The radiated emission tests were performed in the 3 meters, using the setup accordance with the ANSI C63.17-2013. The specification used was the FCC 15.209 and FCC 15.319 (g) 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	Detector	Measurement
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	Fundament al &Harmonics				
	1MHz	3 MHz	/	PK	PK
	Average Emission Level=Peak Emission Level+20*log(Duty cycle)				
	Other Emissions				
	1MHz	3 MHz	/	PK	PK
	1MHz	1kHz	/	PK	Average

Test Procedure

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

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.

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

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

Test Data

Environmental Conditions

Temperature:	22.1~24.8 ℃
Relative Humidity:	47~61 %
ATM Pressure:	100.6~101.1 kPa

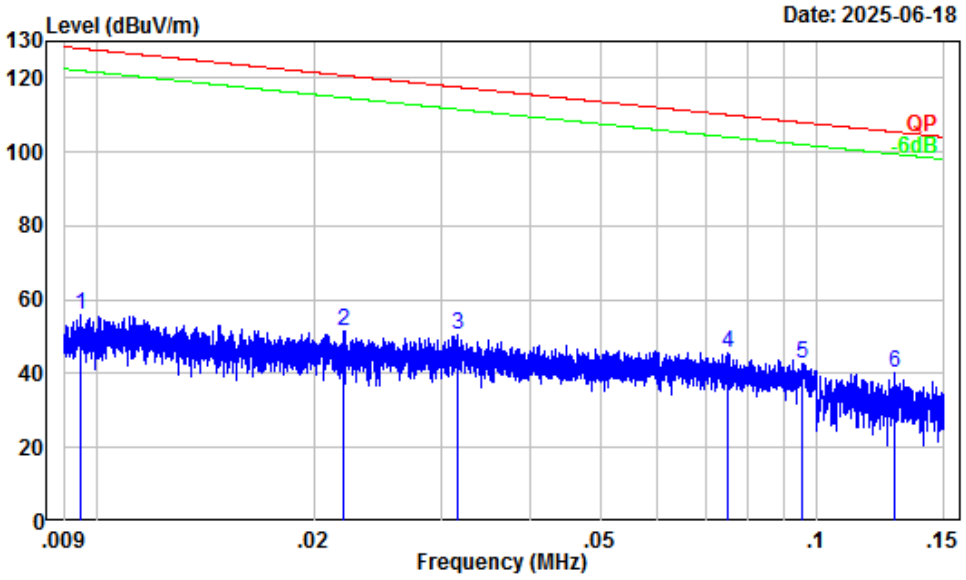
The testing was performed by Alex Yan on 2025-06-18 for below 1GHz and Wing K Ji on 2025-05-24 for above 1GHz.

Test mode: Transmitting

Note 1: For the radiated spurious emission below 30MHz, only the worst case (parallel) was recorded.
Note 2: For the radiated spurious emission below 1GHz, when the test result of peak was less than the limit of QP/Average more than 6dB, just peak value were recorded.

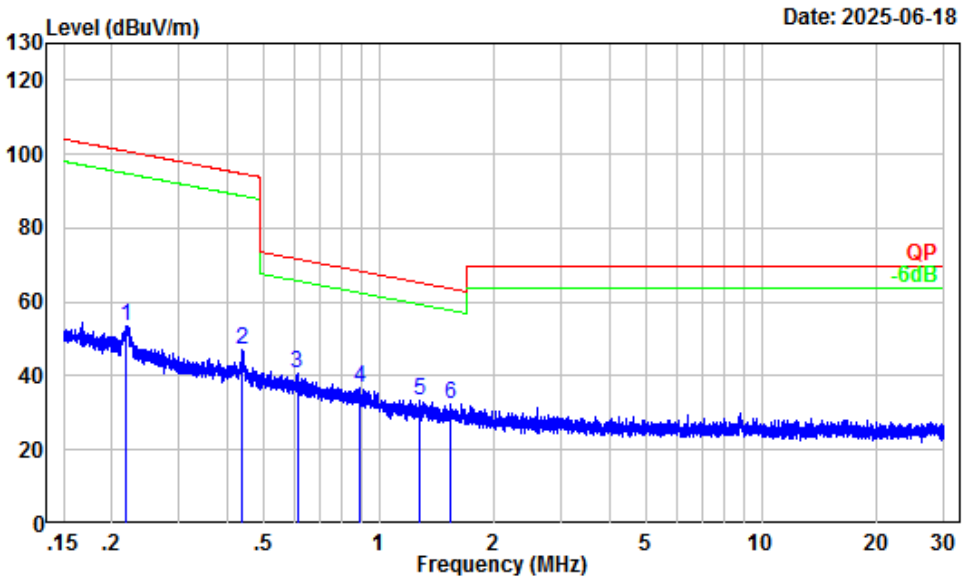
Module 1 (Maximum output power mode: ANT 2 Low channel)

9 kHz-30MHz:



Site : Chamber A
Condition : 3m
Project Number : 2501S11852E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.009	32.40	23.61	56.01	128.06	-72.05	Peak
2	0.022	30.01	21.66	51.67	120.73	-69.06	Peak
3	0.032	28.32	22.21	50.53	117.57	-67.04	Peak
4	0.075	23.87	21.62	45.49	110.06	-64.57	Peak
5	0.095	22.34	20.47	42.81	108.04	-65.23	Peak
6	0.128	20.35	20.04	40.39	105.46	-65.07	Peak

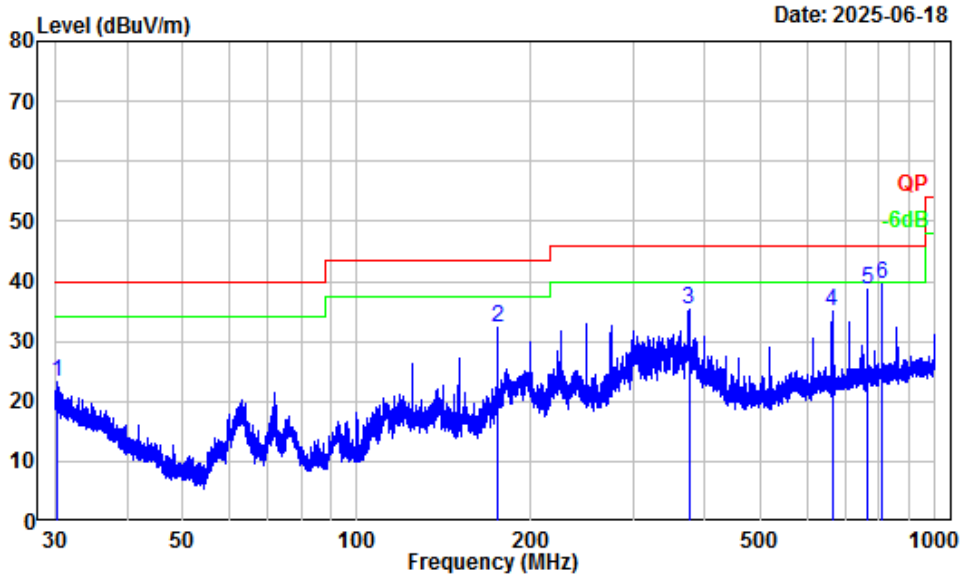


Site : Chamber A
Condition : 3m
Project Number : 2501S11852E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 10/30kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.218	15.06	38.53	53.59	100.85	-47.26	Peak
2	0.438	7.58	39.49	47.07	94.77	-47.70	Peak
3	0.612	5.02	35.49	40.51	71.83	-31.32	Peak
4	0.891	2.02	35.00	37.02	68.50	-31.48	Peak
5	1.272	0.44	33.15	33.59	65.34	-31.75	Peak
6	1.540	-0.31	32.85	32.54	63.65	-31.11	Peak

30MHz-1GHz:

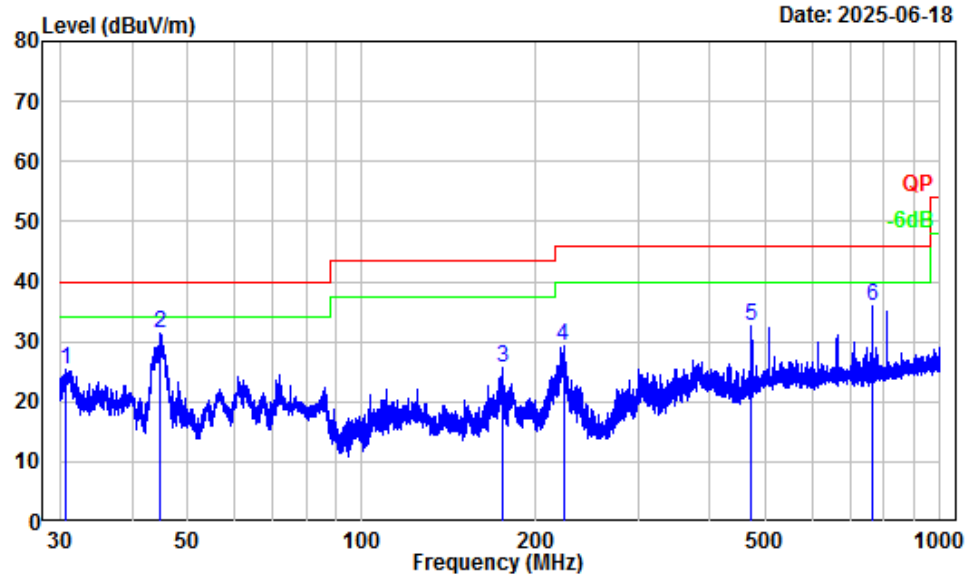
Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2501S11852E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	30.18	-6.05	29.41	23.36	40.00	-16.64	Peak
2	175.04	-13.37	45.58	32.21	43.50	-11.29	Peak
3	375.12	-9.28	44.53	35.25	46.00	-10.75	Peak
4	663.76	-3.89	38.94	35.05	46.00	-10.95	Peak
5	762.04	-2.64	41.26	38.62	46.00	-7.38	Peak
6	811.33	-2.03	41.72	39.69	46.00	-6.31	Peak

Vertical

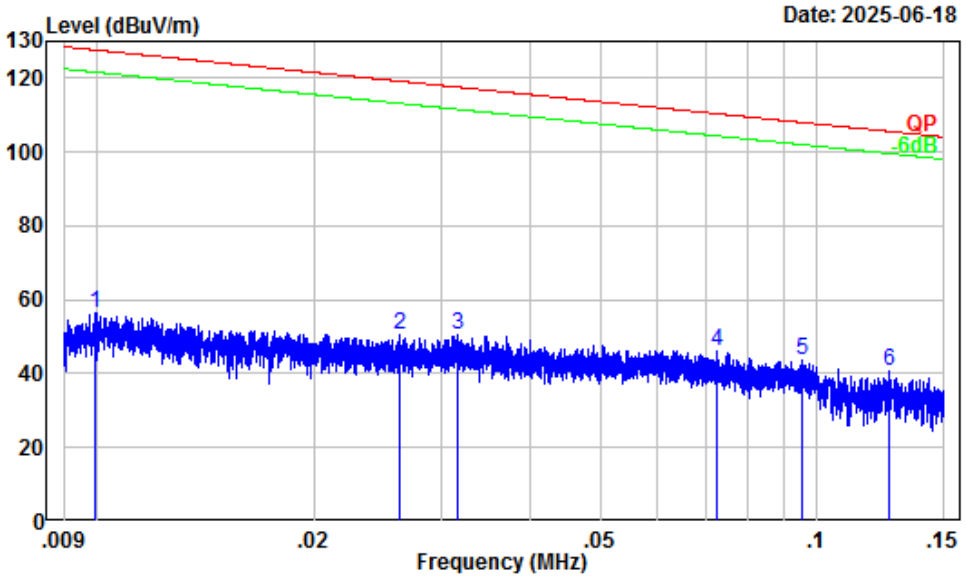


Site : Chamber A
Condition : 3m Vertical
Project Number : 2501S11852E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	30.81	-6.38	31.80	25.42	40.00	-14.58	Peak
2	44.78	-15.73	47.08	31.35	40.00	-8.65	Peak
3	175.04	-13.37	38.96	25.59	43.50	-17.91	Peak
4	223.05	-14.12	43.38	29.26	46.00	-16.74	Peak
5	470.94	-6.72	39.36	32.64	46.00	-13.36	Peak
6	762.04	-2.64	38.46	35.82	46.00	-10.18	Peak

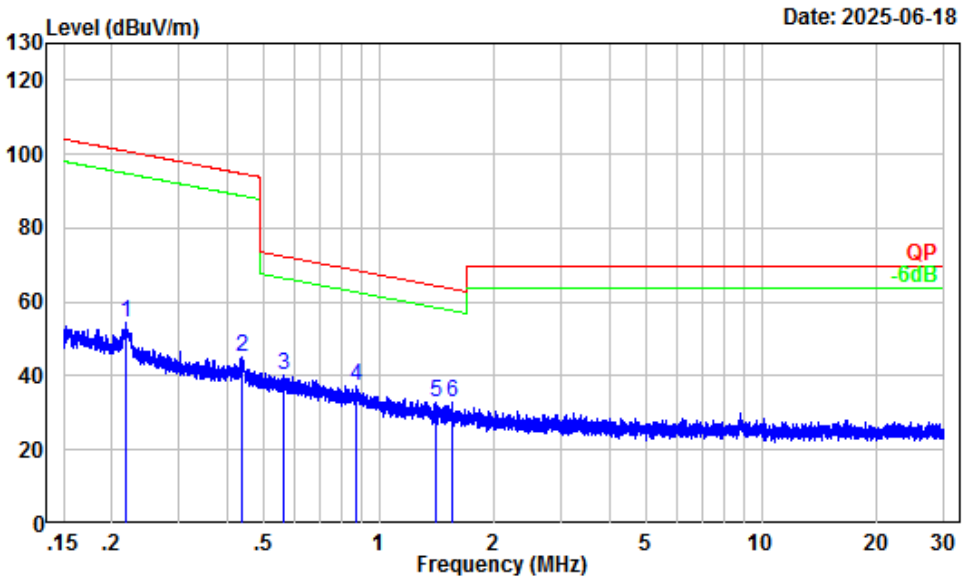
Module 2 (Maximum output power mode: ANT 1 High channel)

9 kHz-30MHz:



Site : Chamber A
Condition : 3m
Project Number : 2501S11852E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.010	32.30	23.98	56.28	127.62	-71.34	Peak
2	0.026	29.19	21.41	50.60	119.19	-68.59	Peak
3	0.032	28.32	22.21	50.53	117.57	-67.04	Peak
4	0.073	24.15	21.81	45.96	110.40	-64.44	Peak
5	0.095	22.34	21.25	43.59	108.03	-64.44	Peak
6	0.126	20.46	20.12	40.58	105.59	-65.01	Peak

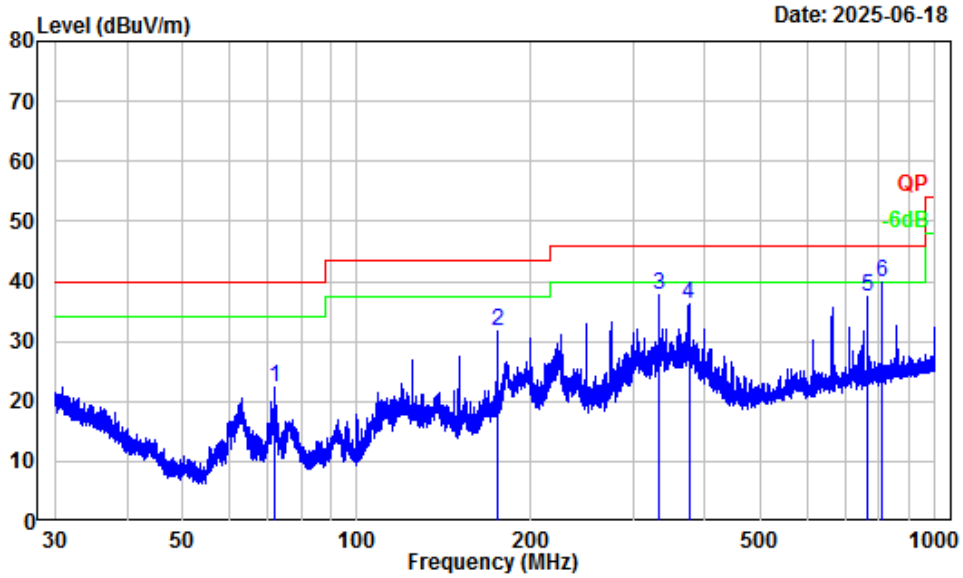


Site : Chamber A
Condition : 3m
Project Number : 2501S11852E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 10/30kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.219	15.01	39.39	54.40	100.81	-46.41	Peak
2	0.437	7.59	37.48	45.07	94.79	-49.72	Peak
3	0.561	5.65	34.73	40.38	72.60	-32.22	Peak
4	0.874	2.15	35.14	37.29	68.67	-31.38	Peak
5	1.413	0.04	33.00	33.04	64.41	-31.37	Peak
6	1.548	-0.33	33.00	32.67	63.60	-30.93	Peak

30MHz-1GHz:

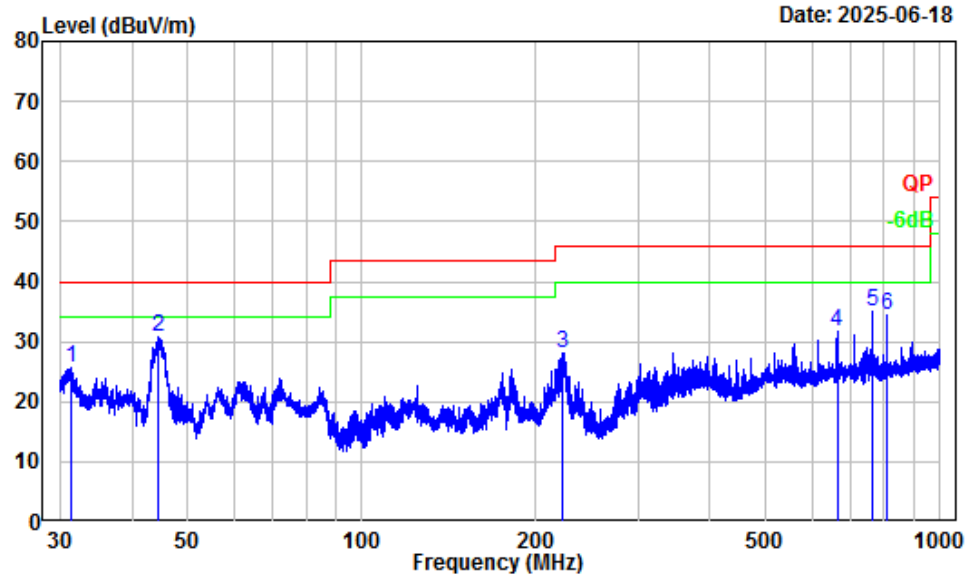
Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2501S11852E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	71.96	-17.85	40.15	22.30	40.00	-17.70	Peak
2	174.96	-13.38	45.22	31.84	43.50	-11.66	Peak
3	332.96	-10.58	48.29	37.71	46.00	-8.29	Peak
4	375.12	-9.28	45.44	36.16	46.00	-9.84	Peak
5	762.04	-2.64	40.03	37.39	46.00	-8.61	Peak
6	811.33	-2.03	41.87	39.84	46.00	-6.16	Peak

Vertical



Site : Chamber A
Condition : 3m Vertical
Project Number : 2501S11852E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	31.43	-6.73	32.54	25.81	40.00	-14.19	Peak
2	44.41	-15.47	46.12	30.65	40.00	-9.35	Peak
3	221.59	-14.16	42.38	28.22	46.00	-17.78	Peak
4	663.76	-3.89	35.49	31.60	46.00	-14.40	Peak
5	762.04	-2.64	37.67	35.03	46.00	-10.97	Peak
6	811.33	-2.03	36.46	34.43	46.00	-11.57	Peak

Above 1GHz:

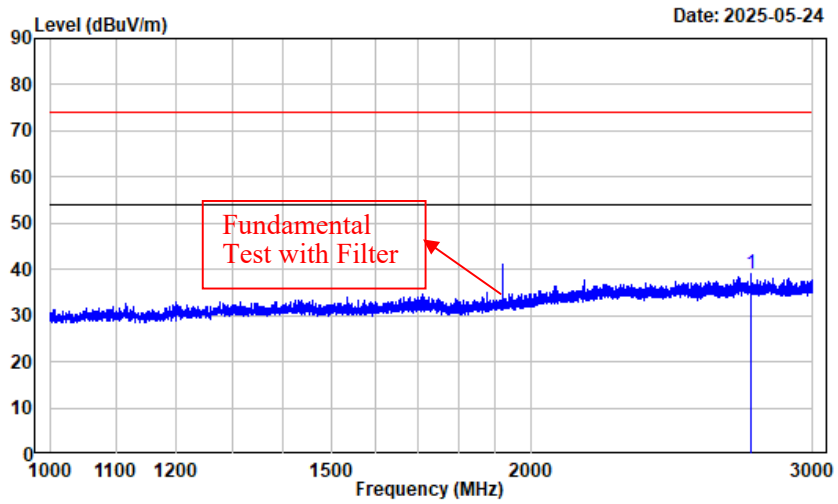
Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/AV					
Module 1							
ANT 1							
Low Channel							
1921.54	133.31	PK	H	-13.26	120.05	/	/
1921.54	120.48	PK	V	-13.26	107.22	/	/
3843.07	61.70	PK	H	-9.96	51.74	74	-22.26
3843.07	52.16	PK	V	-9.96	42.20	74	-31.80
Middle Channel							
1924.99	133.59	PK	H	-13.24	120.35	/	/
1924.99	119.60	PK	V	-13.24	106.36	/	/
3849.98	61.26	PK	H	-9.97	51.29	74	-22.71
3849.98	52.64	PK	V	-9.97	42.67	74	-31.33
High Channel							
1928.45	132.71	PK	H	-13.21	119.50	/	/
1928.45	119.29	PK	V	-13.21	106.08	/	/
3856.90	61.02	PK	H	-9.95	51.07	74	-22.93
3856.90	52.40	PK	V	-9.95	42.45	74	-31.55
ANT 2							
Low Channel							
1921.54	128.83	PK	H	-13.26	115.57	/	/
1921.54	118.12	PK	V	-13.26	104.86	/	/
3843.07	53.06	PK	H	-9.96	43.10	74	-30.90
3843.07	50.19	PK	V	-9.96	40.23	74	-33.77
Middle Channel							
1924.99	128.45	PK	H	-13.24	115.21	/	/
1924.99	116.91	PK	V	-13.24	103.67	/	/
3849.98	53.38	PK	H	-9.97	43.41	74	-30.59
3849.98	50.24	PK	V	-9.97	40.27	74	-33.73
High Channel							
1928.45	127.41	PK	H	-13.21	114.20	/	/
1928.45	116.76	PK	V	-13.21	103.55	/	/
3856.90	53.20	PK	H	-9.95	43.25	74	-30.75
3856.90	50.26	PK	V	-9.95	40.31	74	-33.69

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/AV					
Module 2							
ANT 1							
Low Channel							
1921.54	132.13	PK	H	-13.26	118.87	/	/
1921.54	119.66	PK	V	-13.26	106.40	/	/
3843.07	57.23	PK	H	-9.96	47.27	74	-26.73
3843.07	52.37	PK	V	-9.96	42.41	74	-31.59
Middle Channel							
1924.99	132.27	PK	H	-13.24	119.03	/	/
1924.99	118.76	PK	V	-13.24	105.52	/	/
3849.98	56.77	PK	H	-9.97	46.80	74	-27.20
3849.98	50.66	PK	V	-9.97	40.69	74	-33.31
High Channel							
1928.45	131.76	PK	H	-13.21	118.55	/	/
1928.45	118.16	PK	V	-13.21	104.95	/	/
3856.90	56.78	PK	H	-9.95	46.83	74	-27.17
3856.90	50.51	PK	V	-9.95	40.56	74	-33.44
ANT 2							
Low Channel							
1921.54	128.99	PK	H	-13.26	115.73	/	/
1921.54	121.11	PK	V	-13.26	107.85	/	/
3843.07	57.14	PK	H	-9.96	47.18	74	-26.82
3843.07	53.24	PK	V	-9.96	43.28	74	-30.72
Middle Channel							
1924.99	128.98	PK	H	-13.24	115.74	/	/
1924.99	120.86	PK	V	-13.24	107.62	/	/
3849.98	56.50	PK	H	-9.97	46.53	74	-27.47
3849.98	54.10	PK	V	-9.97	44.13	74	-29.87
High Channel							
1928.45	128.81	PK	H	-13.21	115.60	/	/
1928.45	119.52	PK	V	-13.21	106.31	/	/
3856.90	56.02	PK	H	-9.95	46.07	74	-27.93
3856.90	54.12	PK	V	-9.95	44.17	74	-29.83

Note:
Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Factor + Reading
Margin = Corrected. Amplitude - Limit

Listed with the worst harmonic margin test plot:

Module 1 ANT 1

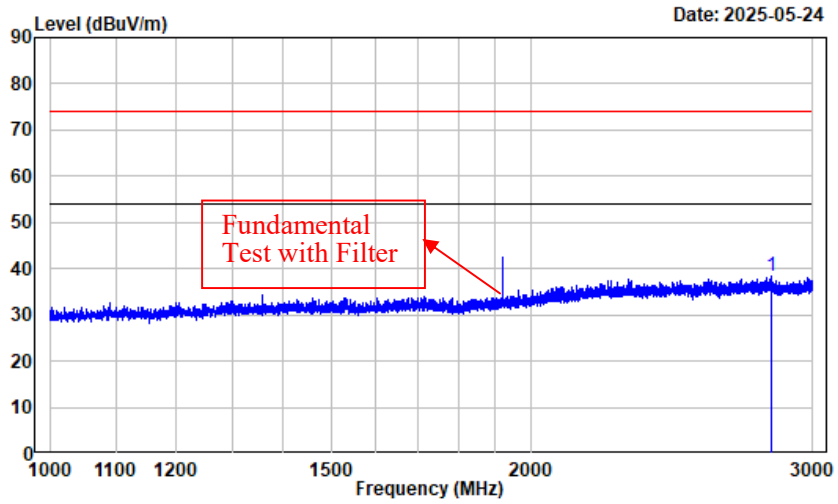
Horizontal	
1-3GHz	

Condition : Horizontal
Project No. : 2501S11852E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : DECT1_ANT1_1921.536MHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2742.468	-10.63	49.68	39.05	74.00	-34.95	Peak

Vertical

1-3GHz

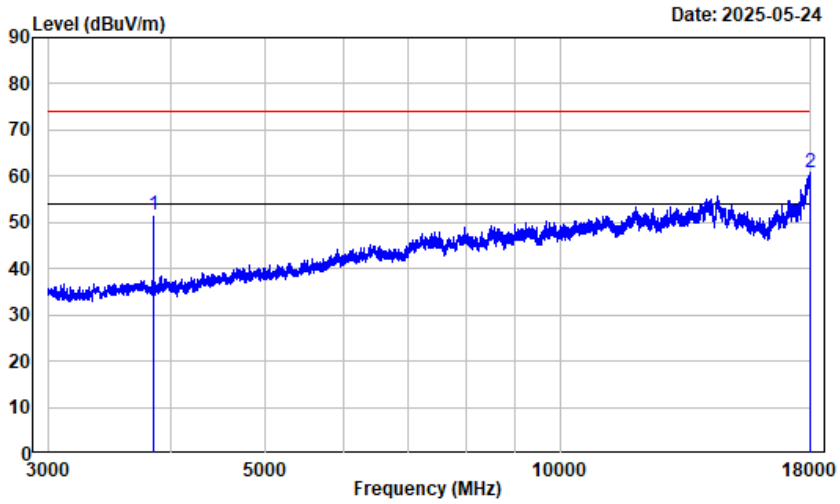



```
Condition        : Vertical
Project No.      : 2501S11852E-RF
Tester           : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note             : DECT1_ANT1_1921.536MHz
```

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2827.729	-10.44	48.86	38.42	74.00	-35.58	Peak

Horizontal-Peak

3-18GHz

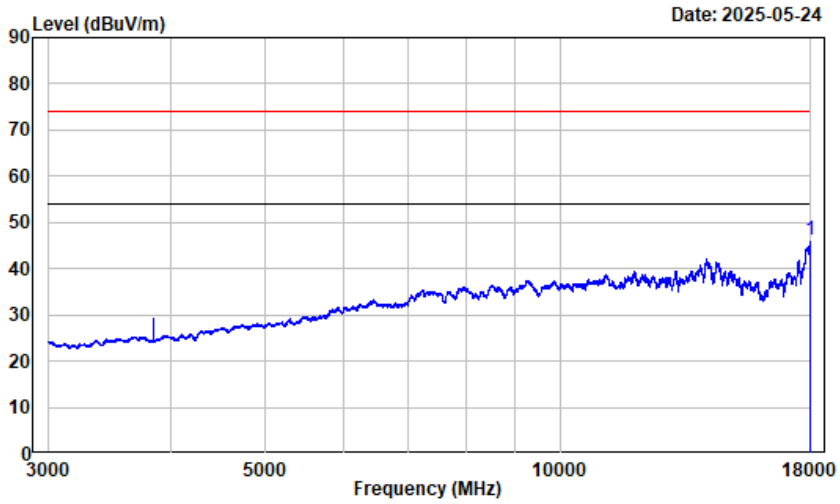


Condition : Horizontal
Project No. : 2501S11852E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : DECT1_ANT1_1921.536MHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3843.070	-9.96	61.70	51.74	74.00	-22.26	Peak
2	17964.370	13.02	47.60	60.62	74.00	-13.38	Peak

Horizontal-Average

3-18GHz

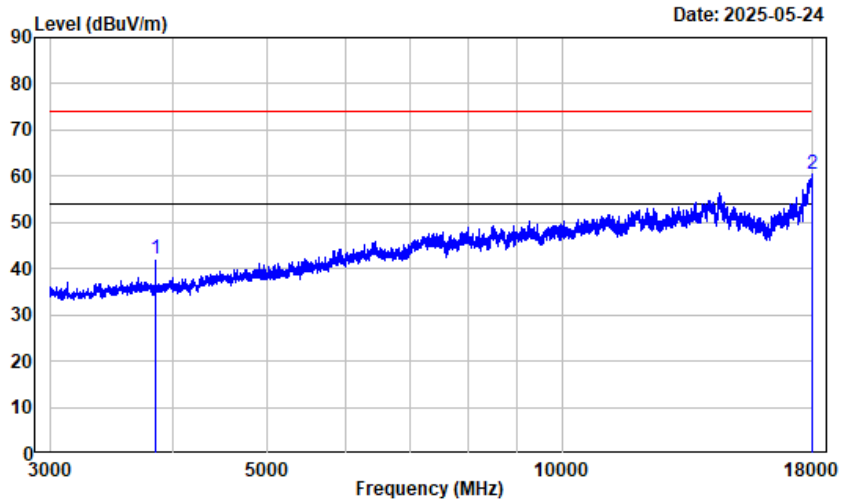


Condition : Horizontal
Project No. : 2501S11852E-RF
Tester : Wing K Ji
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak
Note : DECT1_ANT1_1921.536MHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17996.250	13.18	33.10	46.28	54.00	-7.72	Average

Vertical-Peak

3-18GHz

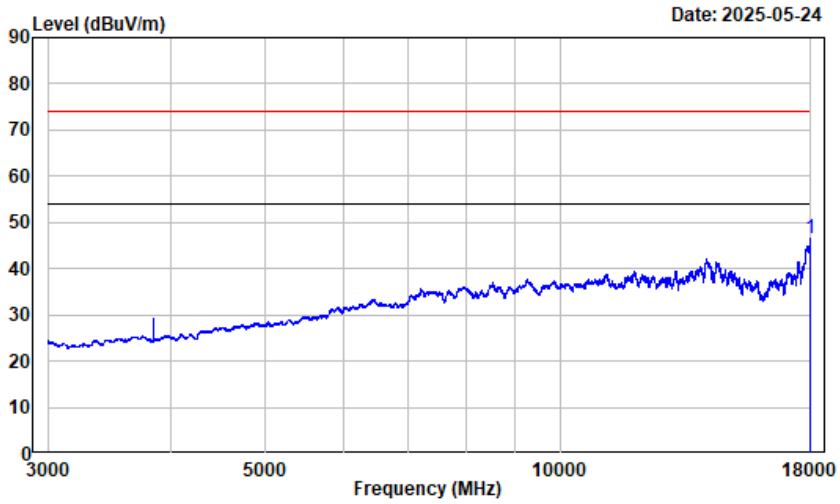


Condition : Vertical
Project No. : 2501S11852E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : DECT1_ANT1_1921.536MHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3843.070	-9.96	52.16	42.20	74.00	-31.80	Peak
2	17990.620	13.15	47.15	60.30	74.00	-13.70	Peak

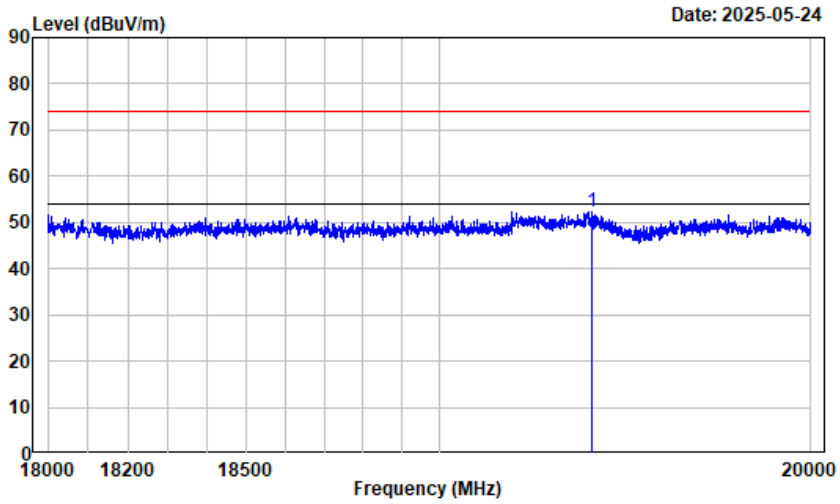
Vertical-Average

3-18GHz



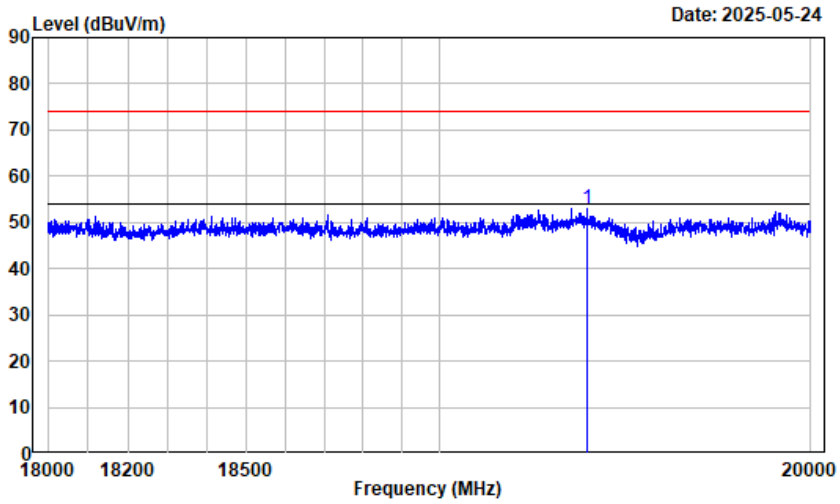
Condition : Vertical
Project No. : 2501S11852E-RF
Tester : Wing K Ji
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak
Note : DECT1_ANT1_1921.536MHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17998.130	13.19	33.26	46.45	54.00	-7.55	Average

Horizontal	
18-20GHz	 Condition : Horizontal Project No. : 2501S11852E-RF Tester : Wing K Ji Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak Note : DECT1_ANT1_1921.536MHz Freq / Factor / Read Level / Limit Level / Limit Line / Over Limit / Remark MHz / dB/m / dBuV / dBuV/m / dBuV/m / dB 1 19405.430 15.45 36.83 52.28 74.00 -21.72 peak

Vertical

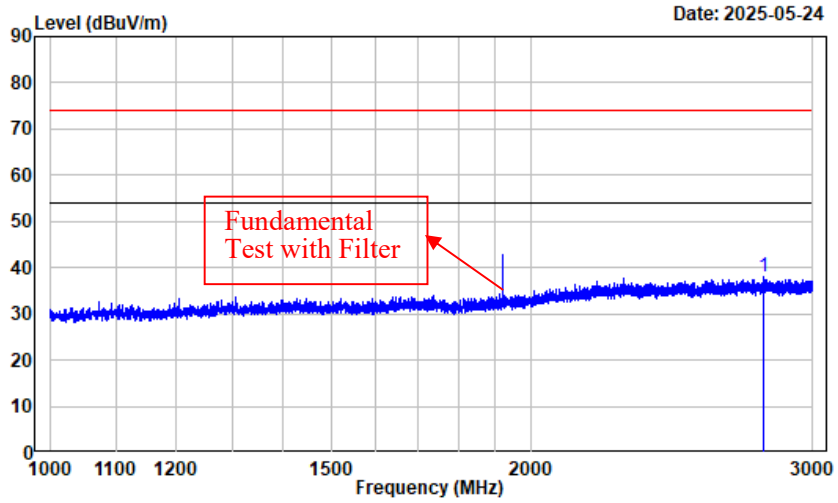
18-20GHz

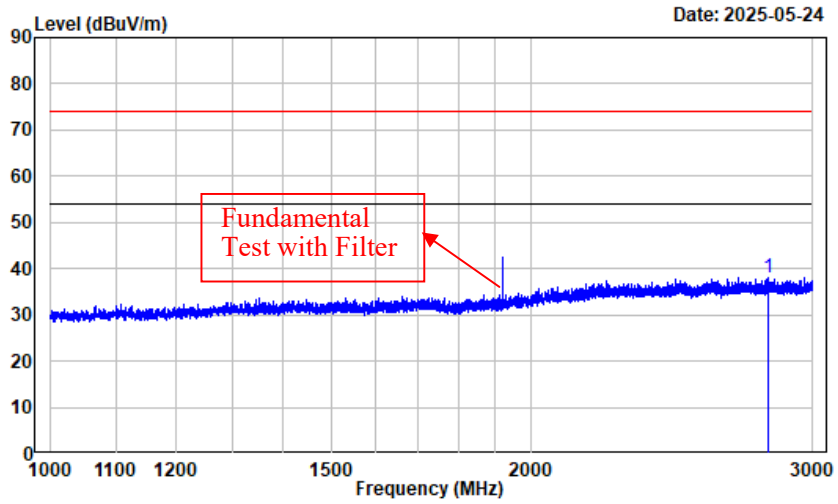


Condition : Vertical
Project No. : 2501S11852E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : DECT1_ANT1_1921.536MHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	19393.170	15.45	37.57	53.02	74.00	-20.98	peak

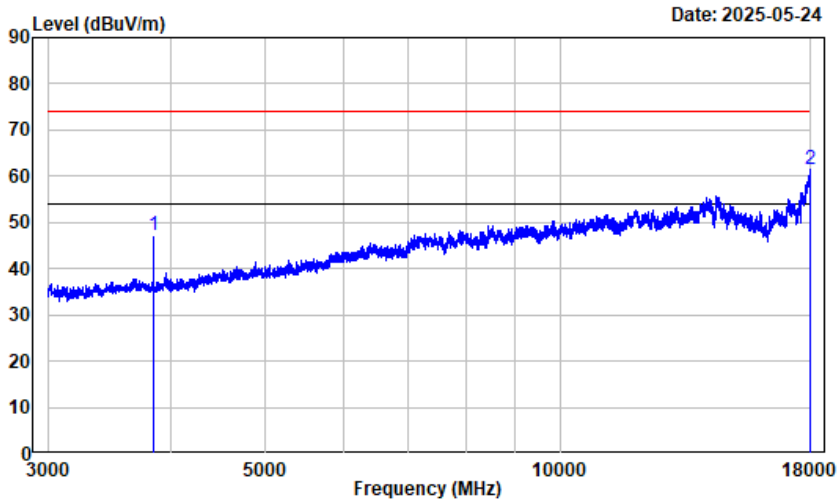
Module 2 ANT 1

Horizontal	
1-3GHz	 Condition : Horizontal Project No. : 2501S11852E-RF Tester : Wing K Ji Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak Note : DECT2_ANT1_1921.536MHz Freq / Factor / Read Level / Limit Level / Limit Line / Over Limit / Remark MHz / dB/m / dBuV / dBuV/m / dBuV/m / dB 1 2796.975 -10.59 48.79 38.20 74.00 -35.80 Peak

Vertical	
1-3GHz	 Condition : Vertical Project No. : 2501S11852E-RF Tester : Wing K Ji Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak Note : DECT2_ANT1_1921.536MHz Freq / Factor / Read Level / Limit Level / Limit Line / Over Limit / Remark MHz / dB/m / dBuV / dBuV/m / dBuV/m / dB 1 2815.977 -10.50 48.47 37.97 74.00 -36.03 Peak

Horizontal-Peak

3-18GHz

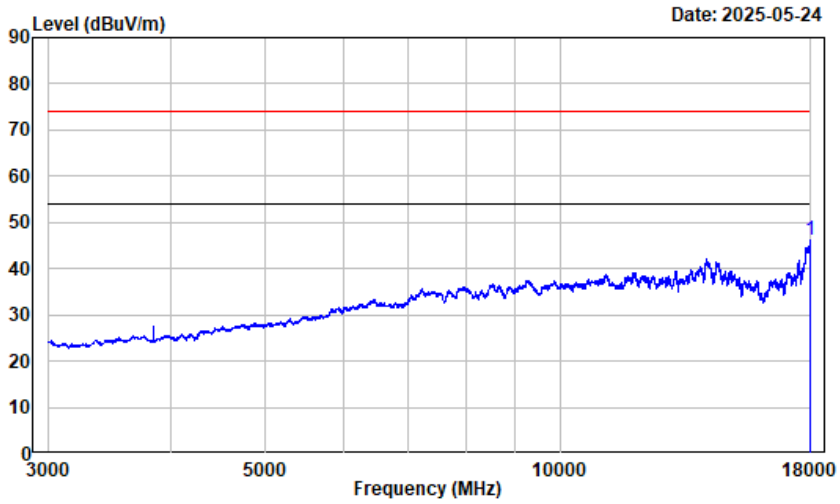


Condition : Horizontal
Project No. : 2501S11852E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : DECT2_ANT1_1921.536MHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3843.070	-9.96	57.23	47.27	74.00	-26.73	Peak
2	17983.120	13.11	48.36	61.47	74.00	-12.53	Peak

Horizontal-Average

3-18GHz

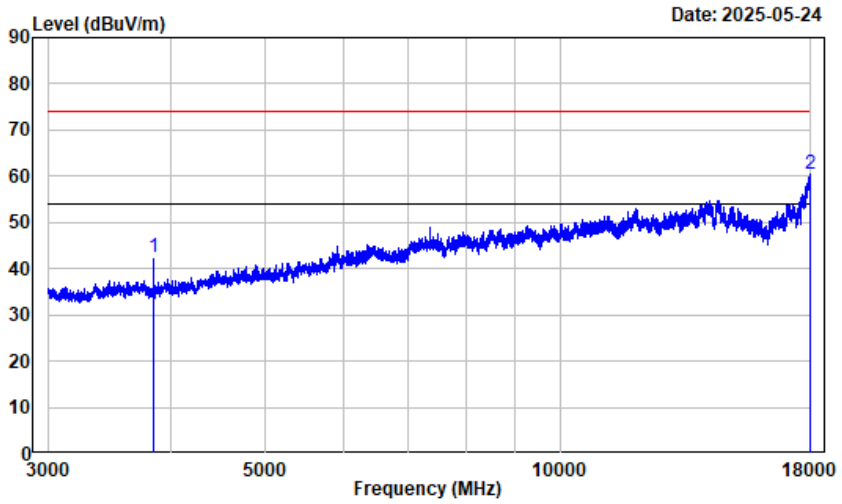


Condition : Horizontal
Project No. : 2501S11852E-RF
Tester : Wing K Ji
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak
Note : DECT2_ANT1_1921.536MHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17998.780	13.20	33.08	46.28	54.00	-7.72	Average

Vertical-Peak

3-18GHz

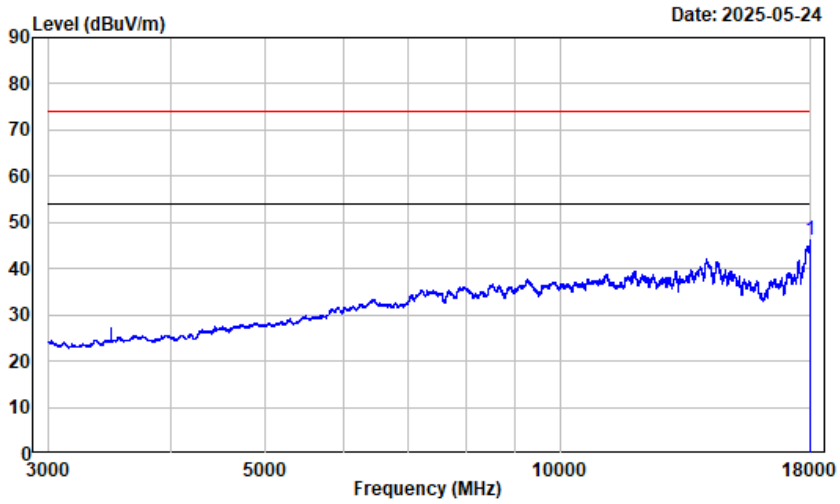


Condition : Vertical
Project No. : 2501S11852E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : DECT2_ANT1_1921.536MHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3843.070	-9.96	52.37	42.41	74.00	-31.59	Peak
2	17981.250	13.11	47.43	60.54	74.00	-13.46	Peak

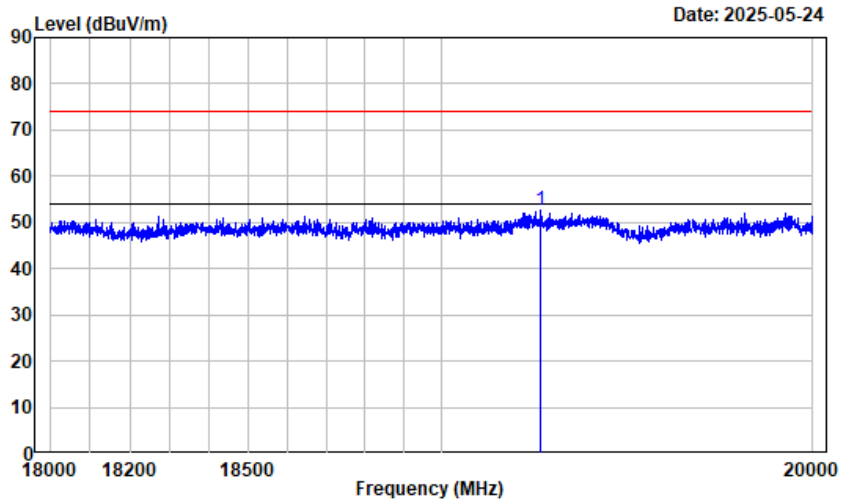
Vertical-Average

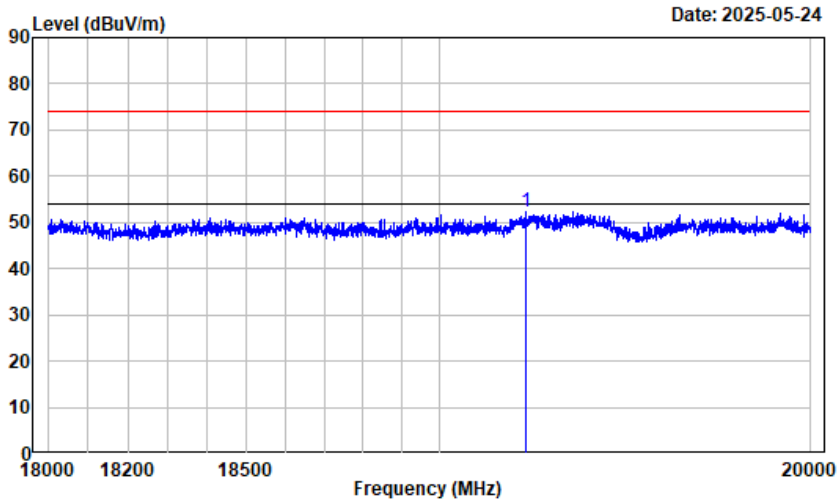
3-18GHz



Condition : Vertical
Project No. : 2501S11852E-RF
Tester : Wing K Ji
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak
Note : DECT2_ANT1_1921.536MHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17998.130	13.19	33.07	46.26	54.00	-7.74	Average

Horizontal	
18-20GHz	 Condition : Horizontal Project No. : 2501S11852E-RF Tester : Wing K Ji Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak Note : DECT2_ANT1_1921.536MHz Freq / Factor / Read Level / Limit Level / Limit Line / Over Limit / Remark MHz / dB/m / dBuV / dBuV/m / dBuV/m / dB 1 19261.030 15.41 37.12 52.53 74.00 -21.47 peak

Vertical	
18-20GHz	 Condition : Vertical Project No. : 2501S11852E-RF Tester : Wing K Ji Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak Note : DECT2_ANT1_1921.536MHz Freq / Factor / Read Level / Limit Level / Limit Line / Over Limit / Remark MHz / dB/m / dBuV / dBuV/m / dBuV/m / dB 1 19227.780 15.42 37.00 52.42 74.00 -21.58 peak

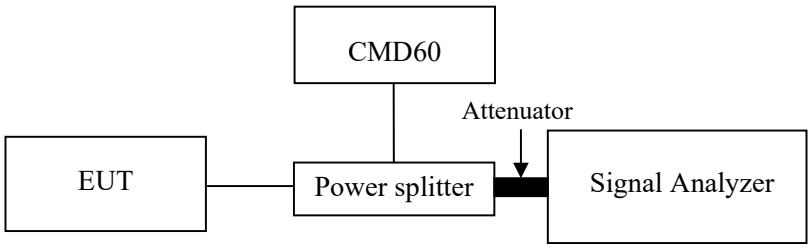
FCC§15.323 (a) - EMISSION BANDWIDTH

Applicable Standard

Operation shall be contained within the 1920–1930 MHz band. The emission bandwidth shall be less than 2.5 MHz and greater than 50 kHz.

The emission bandwidth is measured in accordance with ANSI C63.17 sub-clause 6.1.3 using the setup below:

Test Setup 1:



The width, in Hz, of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that is 26 dB down relative to the maximum level of the modulated carrier. It is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1% of the emission band-width of the device under measurement. [Extraction from 47 CFR 15, subpart D, 15.303 (C)].

Test Procedure

Using the manufacturer's information on occupied bandwidth set the spectrum analyzer as follows:

Resolution bandwidth	1.0% of the emission bandwidth (as close as possible)
Video bandwidth	>3 times the resolution bandwidth
Number of sweeps	sufficient to stability the trace
Detection mode	peak detection with maximum hold

Test Data

Environmental Conditions

Temperature:	25.1~25.8 ℃
Relative Humidity:	47~50 %
ATM Pressure:	100.0~100.2 kPa

The testing was performed by Rainbow Zhu on 2025-05-20 and 2025-05-21.

Test mode: Transmitting

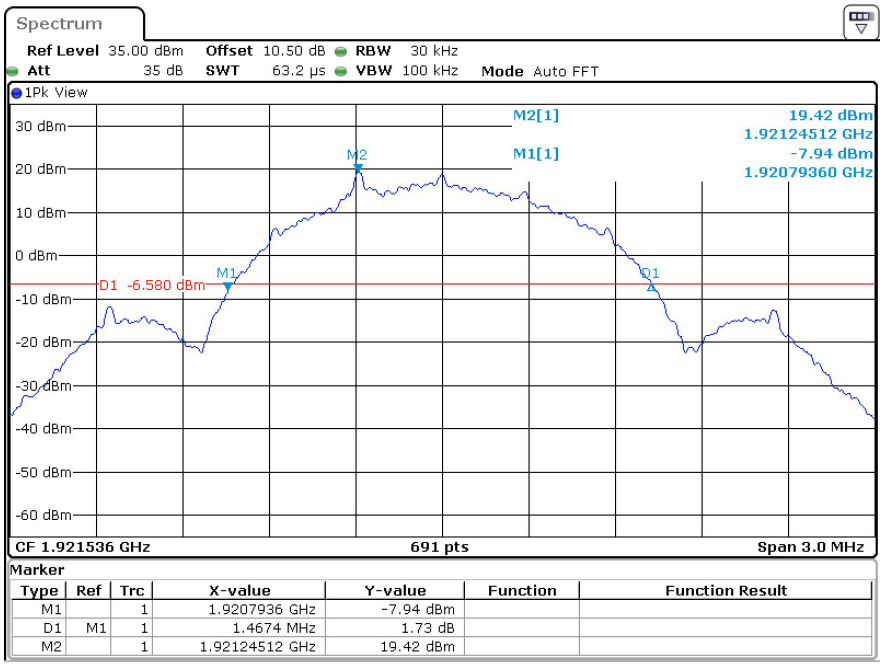
***Test Result: Compliant**. Please refer to the following table and plots.*

Module 1

Channel	Center Frequency (MHz)	99% Emission Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)	Limit
Low	1921.536	1.177	1.467	50 kHz ~ 2.5 MHz
Middle	1924.992	1.177	1.459	50 kHz ~ 2.5 MHz
High	1928.448	1.177	1.450	50 kHz ~ 2.5 MHz

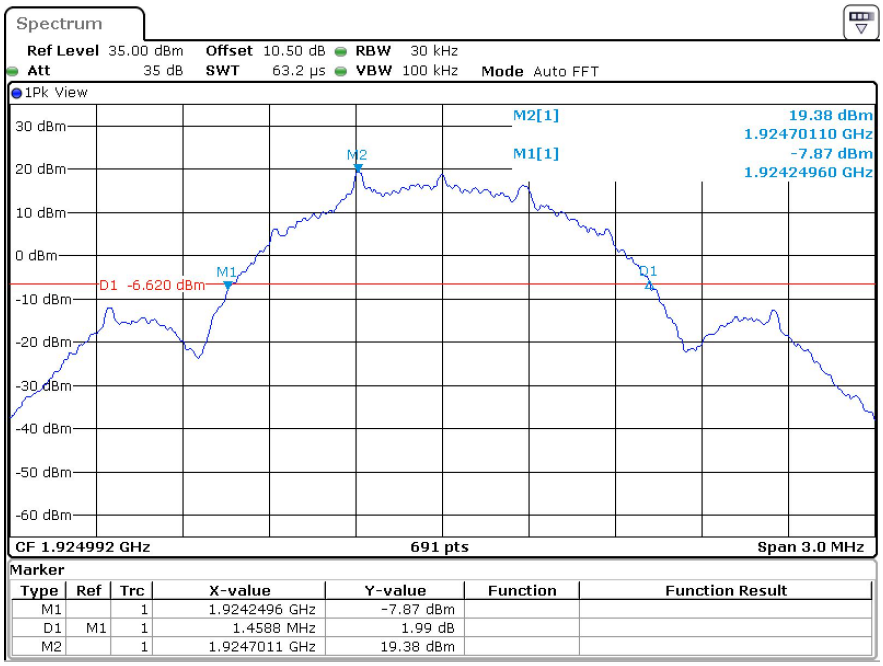
26 dB Emission Bandwidth

Low Channel



ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu
Date: 21.MAY.2025 10:44:52

Middle Channel



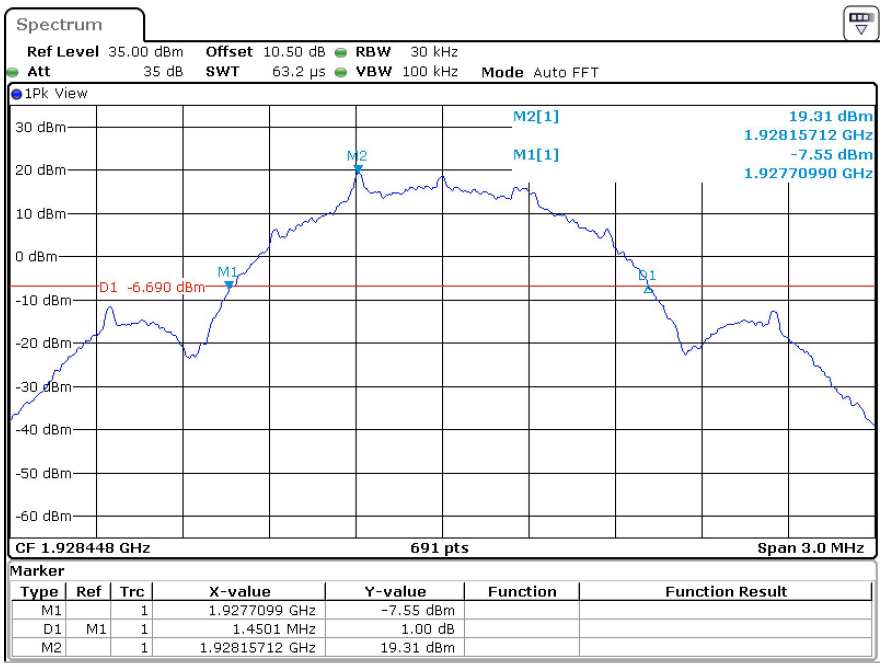
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.9242496 GHz	-7.87 dBm		
D1	M1	1	1.4588 MHz	1.99 dB		
M2		1	1.9247011 GHz	19.38 dBm		

ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

Date: 20.MAY.2025 17:31:49

High Channel



Marker

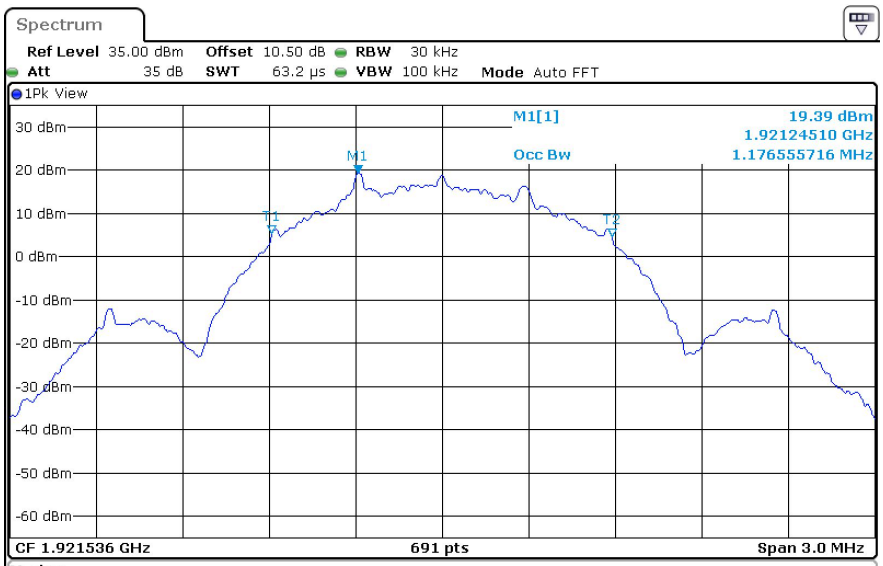
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.9277099 GHz	-7.55 dBm		
D1	M1	1	1.4501 MHz	1.00 dB		
M2		1	1.92815712 GHz	19.31 dBm		

ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

Date: 20.MAY.2025 17:27:48

99% Emission Bandwidth

Low Channel



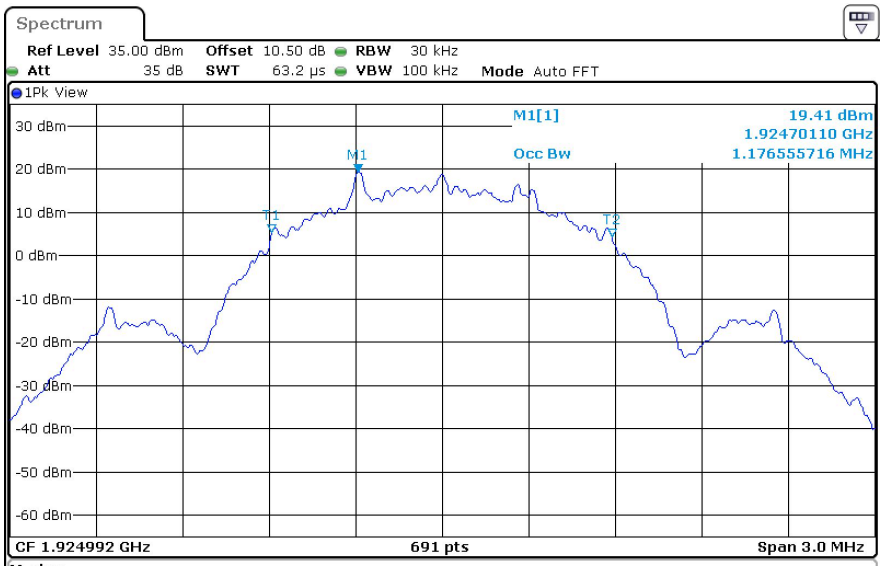
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.9212451 GHz	19.39 dBm		
T1		1	1.92094555 GHz	5.30 dBm	Occ Bw	1.176555716 MHz
T2		1	1.92212211 GHz	4.68 dBm		

ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

Date: 21.MAY.2025 10:58:22

Middle Channel



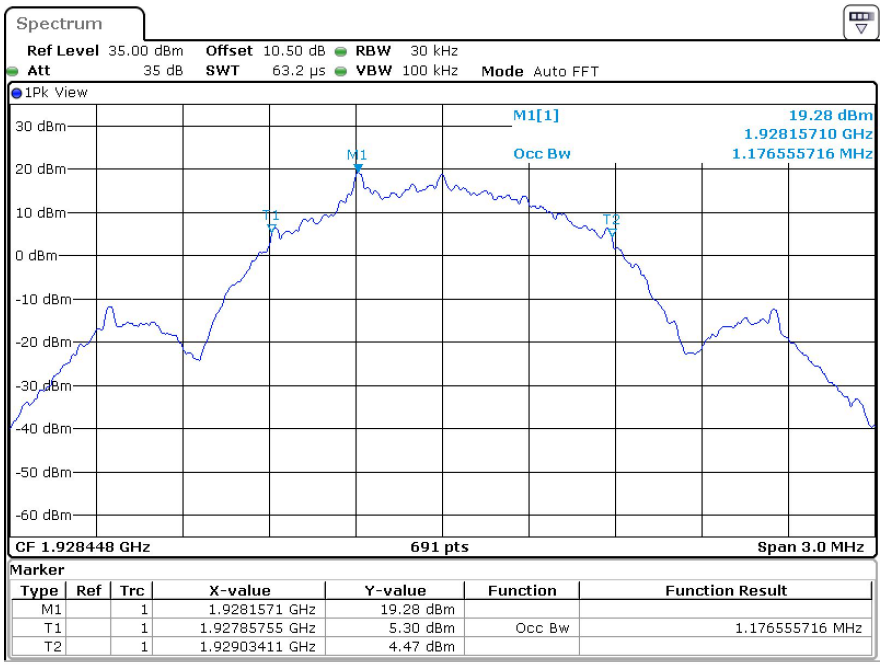
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.9247011 GHz	19.41 dBm		
T1		1	1.92440155 GHz	5.39 dBm	Occ Bw	1.176555716 MHz
T2		1	1.92557811 GHz	4.47 dBm		

ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

Date: 21.MAY.2025 11:06:28

High Channel



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.9281571 GHz	19.28 dBm		
T1		1	1.92785755 GHz	5.30 dBm	Occ Bw	1.176555716 MHz
T2		1	1.92903411 GHz	4.47 dBm		

ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

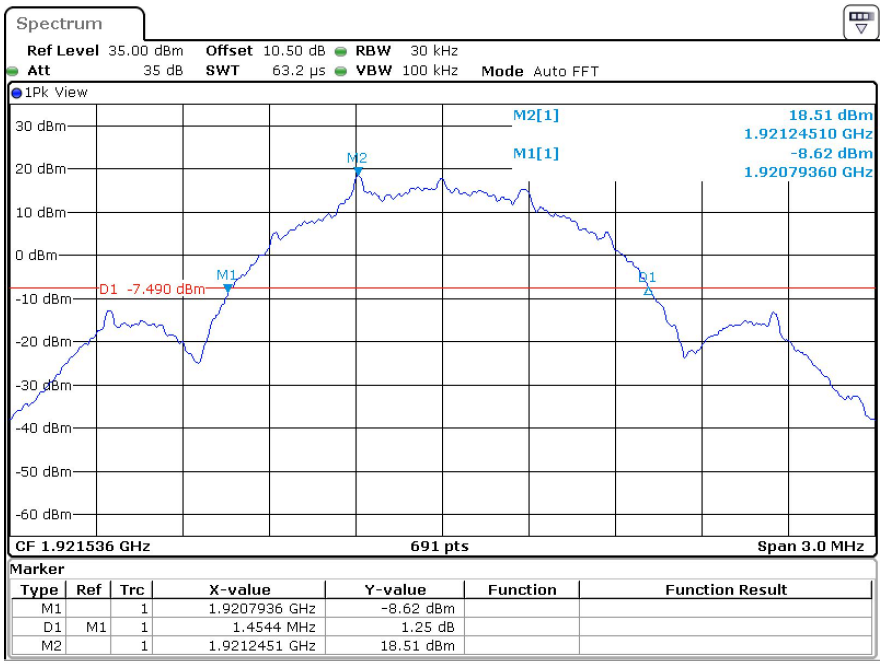
Date: 21.MAY.2025 11:02:56

Module 2

Channel	Center Frequency (MHz)	99% Emission Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)	Limit
Low	1921.536	1.181	1.454	50 kHz ~ 2.5 MHz
Middle	1924.992	1.181	1.459	50 kHz ~ 2.5 MHz
High	1928.448	1.181	1.450	50 kHz ~ 2.5 MHz

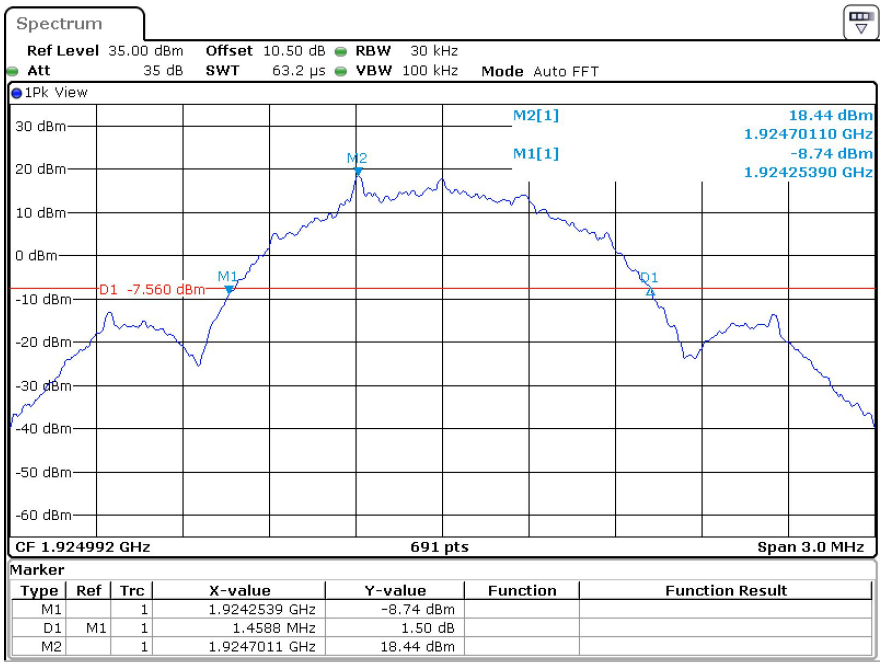
26 dB Emission Bandwidth

Low Channel



ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu
Date: 21.MAY.2025 15:55:08

Middle Channel



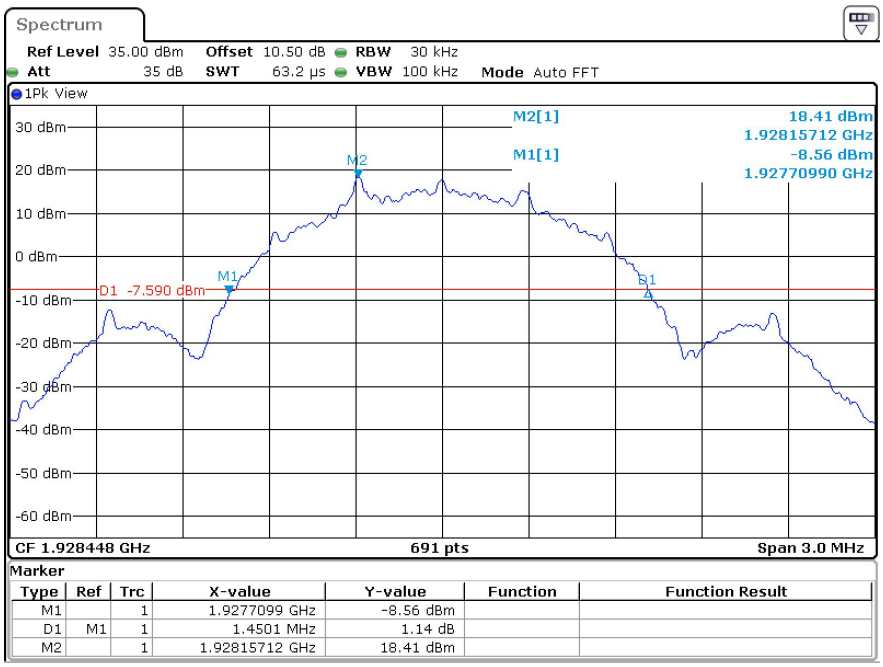
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.9242539 GHz	-8.74 dBm		
D1	M1	1	1.4588 MHz	1.50 dB		
M2		1	1.9247011 GHz	18.44 dBm		

ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

Date: 21.MAY.2025 15:57:50

High Channel



Marker

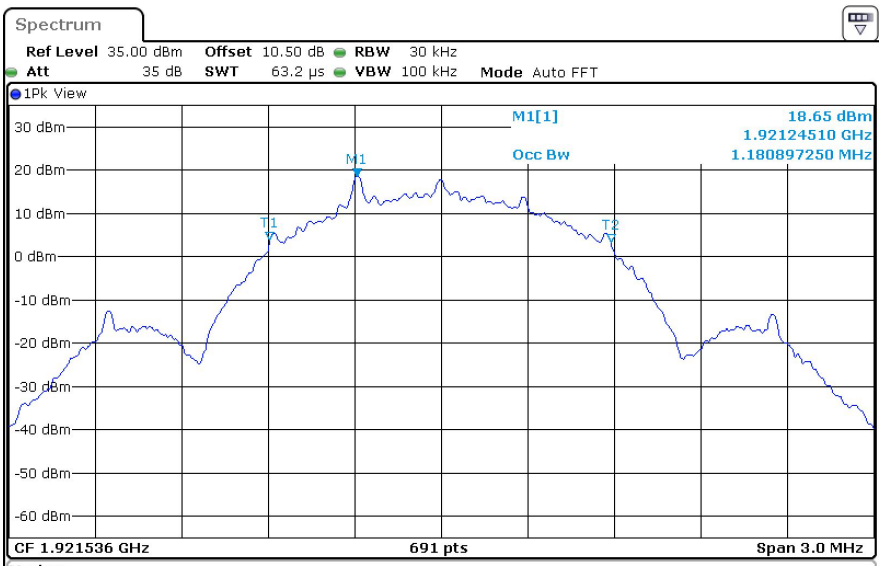
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.9277099 GHz	-8.56 dBm		
D1	M1	1	1.4501 MHz	1.14 dB		
M2		1	1.92815712 GHz	18.41 dBm		

ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

Date: 21.MAY.2025 15:46:55

99% Emission Bandwidth

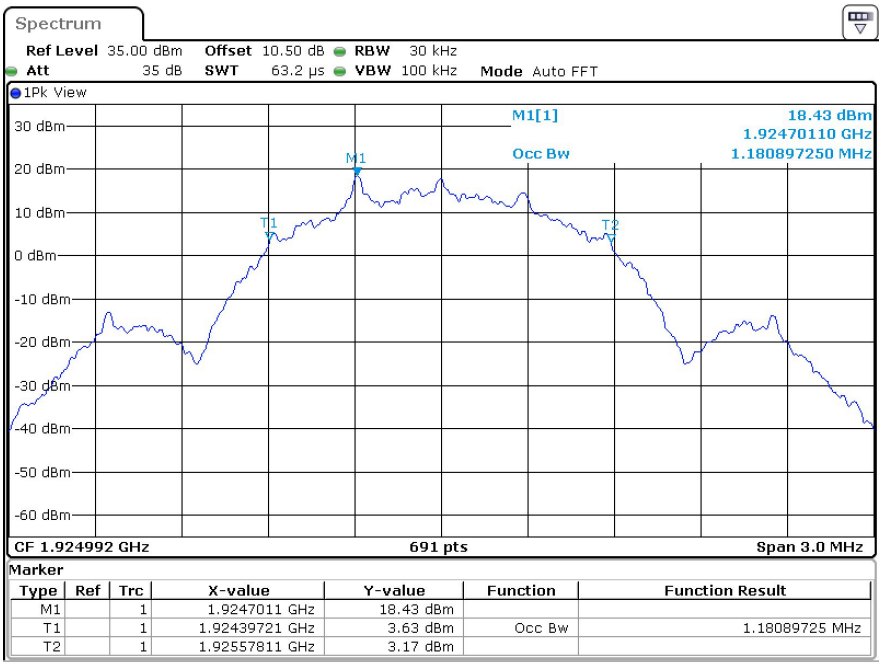
Low Channel



ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

Date: 21.MAY.2025 16:05:18

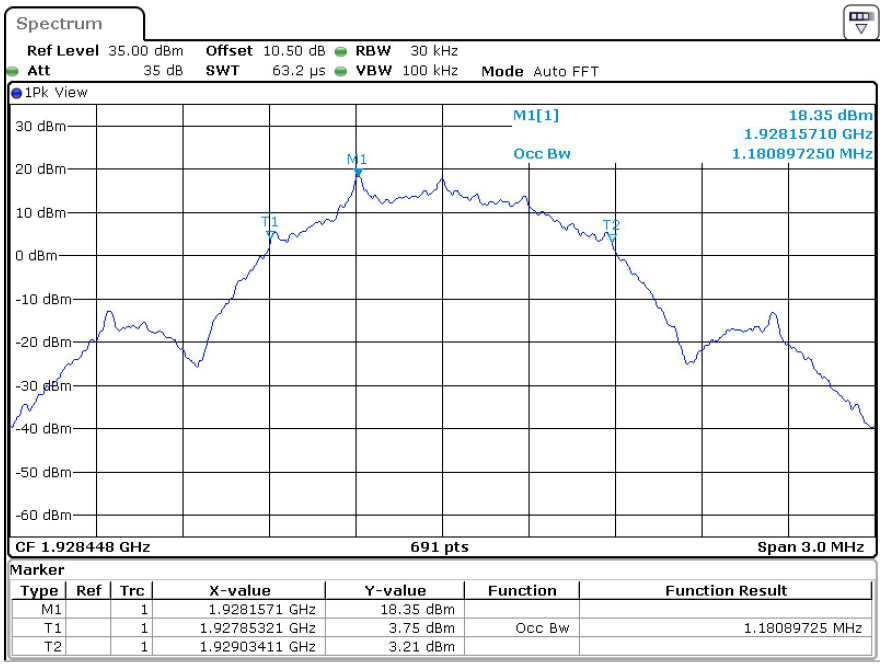
Middle Channel



ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

Date: 21.MAY.2025 16:00:11

High Channel



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.9281571 GHz	18.35 dBm		
T1		1	1.92785321 GHz	3.75 dBm	Occ Bw	1.18089725 MHz
T2		1	1.92903411 GHz	3.21 dBm		

ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

Date: 21.MAY.2025 16:02:56

FCC§15.319 (c) - PEAK TRANSMIT POWER

Applicable Standard

The peak power output as measured over an interval of time equal to the frame rate or transmission burst of the device under all conditions of modulation. Usually this parameter is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used[47 CFR 15, subpart D, 15.303].

The peak transmit power is according to ANSI C63.17-2013 §6.1.2

Per FCC Part15.319 (c) Peak transmit power shall not exceed 100 microwatts multiplied by the square root of the emission bandwidth in hertz. Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

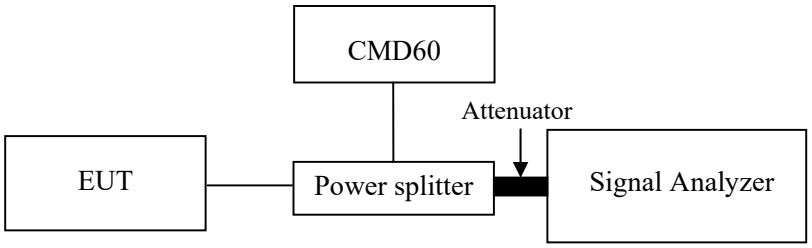
Per FCC Part15.319 (e), the peak transmit power shall be reduced by the amount in decibels that the maximum directional gain of the antenna exceeds 3 dBi.

Calculation of Peak Transmit Power Limit:
Peak Transmit Power Limit = $100\mu W \times (EBW)^{1/2}$
EBW is the transmit emission bandwidth in Hz determined in the other test item:

Test Procedure

Using the manufacturer's information on occupied bandwidth set the spectrum analyzer as follows:

RBW	≥ Emission bandwidth
Video bandwidth	≥ RBW
Span	Zero
Center frequency	Nominal center frequency of channels
Amplitude scale	Log (linear may be used if analyzer has sufficient linear dynamic range and accuracy)
Detection	Peak detection
Trigger	Video
Sweep rate	Sufficiently rapid to permit the transmit pulse to be resolved accurately



Test Data

Environmental Conditions

Temperature:	25.1~25.8 ℃
Relative Humidity:	47~50 %
ATM Pressure:	100.0~100.2 kPa

The testing was performed by Rainbow Zhu on 2025-06-17 and 2025-06-20.

Test mode: Transmitting

***Test Result: Compliant**. Please refer to the following table and plots.*

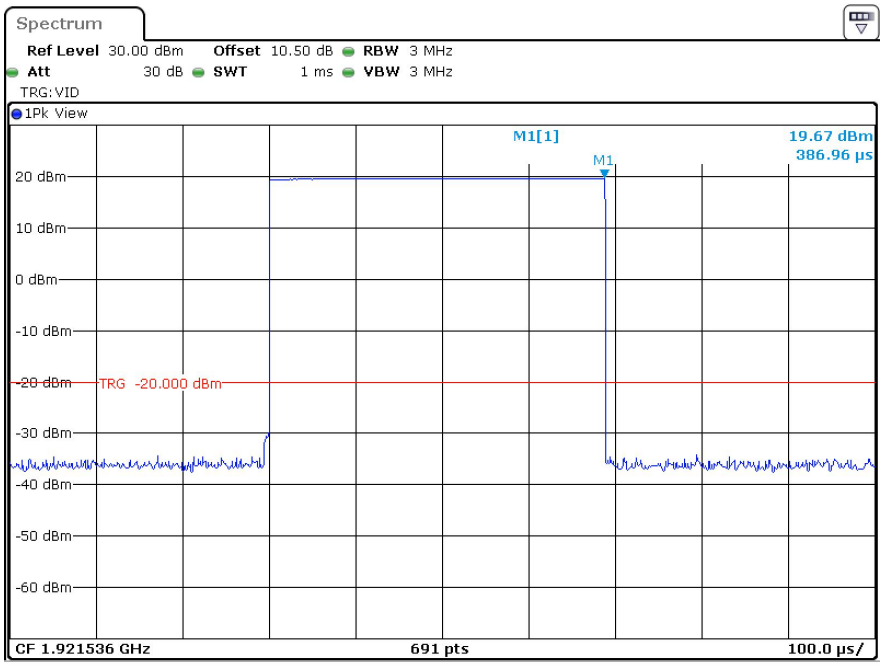
Module 1

ANT 1

Channel	Frequency (MHz)	Peak Transmit Power (dBm)	Limit (dBm)
Low	1921.536	19.67	20.06
Middle	1924.992	19.63	20.05
High	1928.448	19.64	20.04
$EBW_{Low\ channel}$ = 1467000Hz, $EBW_{Middle\ channel}$ = 1459000 Hz, $EBW_{High\ channel}$ = 1450000 Hz Peak Transmit Power Limit = $100(EBW)^{1/2}$ μW			

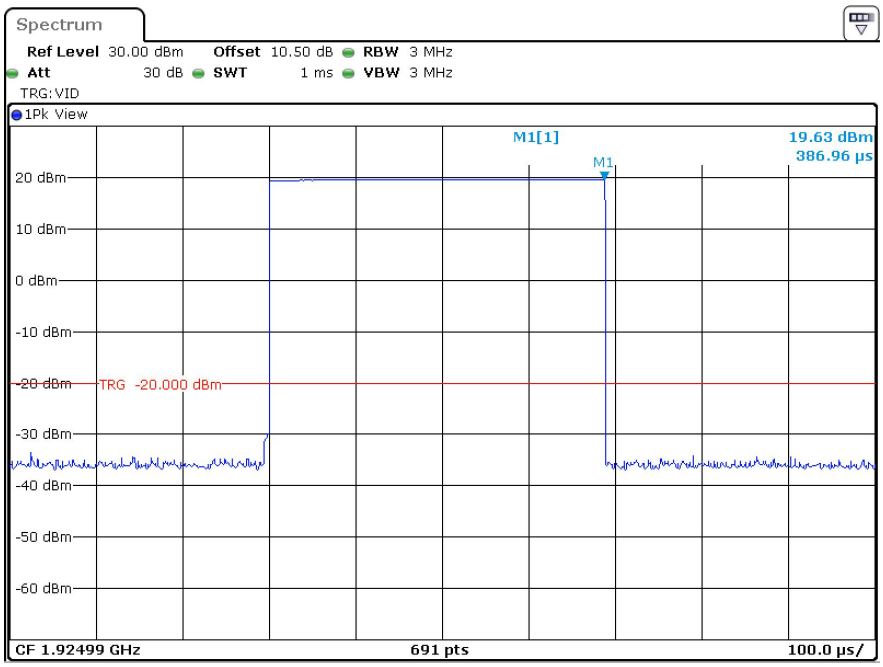
Note: the limit was reduced 3.77dBi-3dBi=0.77dB

Low Channel



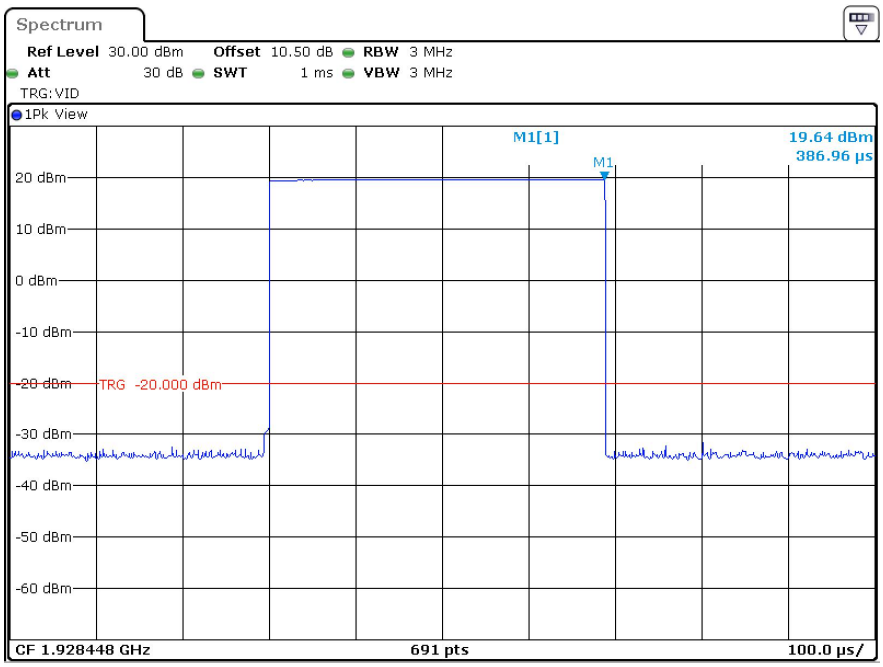
ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu
Date: 17.JUN.2025 14:31:31

Middle Channel



ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu
Date: 17.JUN.2025 14:30:13

High Channel



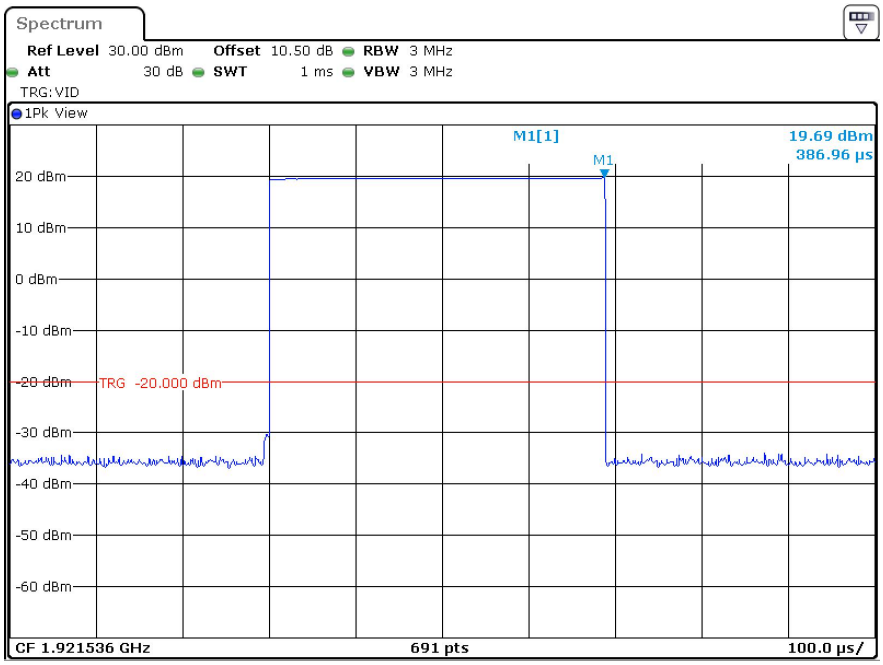
ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu
Date: 17.JUN.2025 14:28:44

ANT 2

Channel	Frequency (MHz)	Peak Transmit Power (dBm)	Limit (dBm)
Low	1921.536	19.69	20.06
Middle	1924.992	19.65	20.05
High	1928.448	19.66	20.04
$EBW_{Low\ channel}$ = 1467000Hz, $EBW_{Middle\ channel}$ = 1459000 Hz, $EBW_{High\ channel}$ = 1450000 Hz Peak Transmit Power Limit = $100(EBW)^{1/2}$ µW			

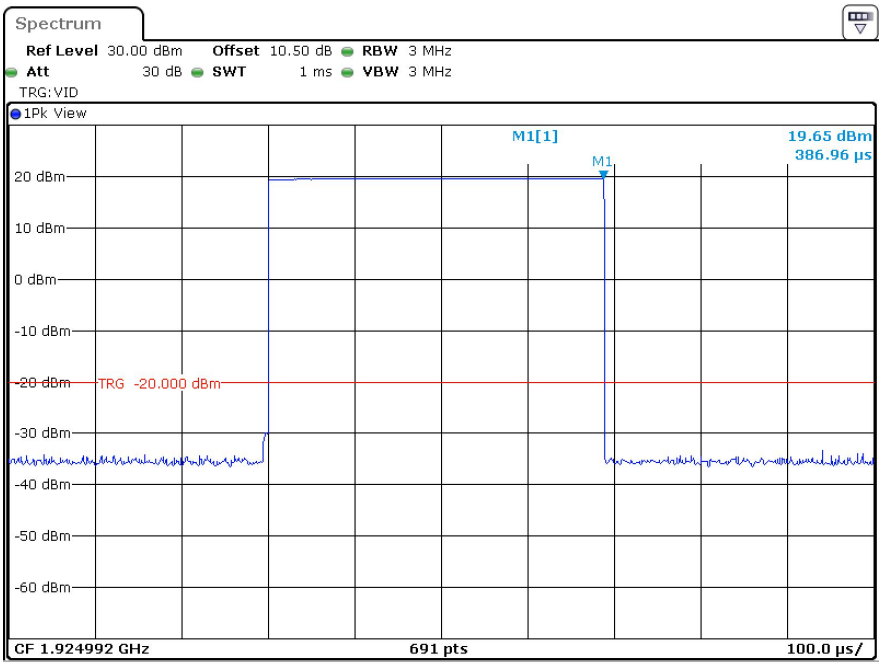
Note: the limit was reduced 3.77dBi-3dBi=0.77dB

Low Channel



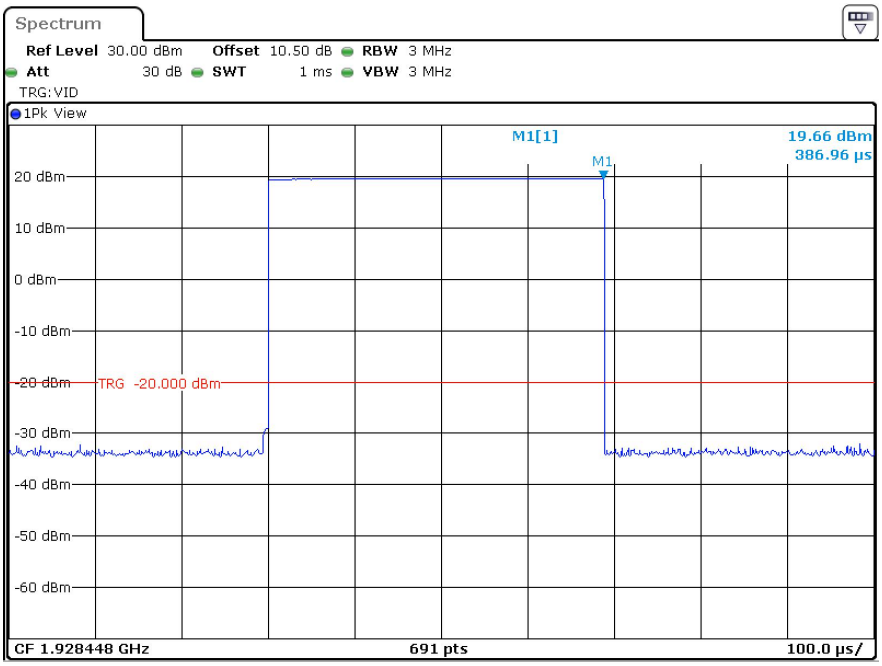
ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu
Date: 17.JUN.2025 14:48:38

Middle Channel



ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu
Date: 17.JUN.2025 14:49:58

High Channel



ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu
Date: 17.JUN.2025 14:52:28

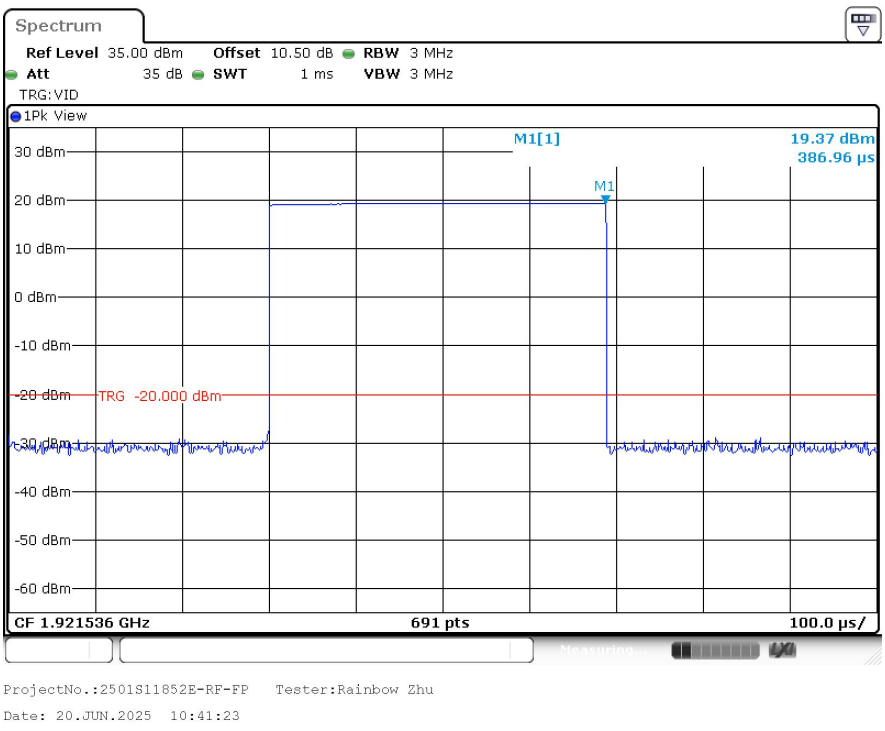
Module 2

ANT 1

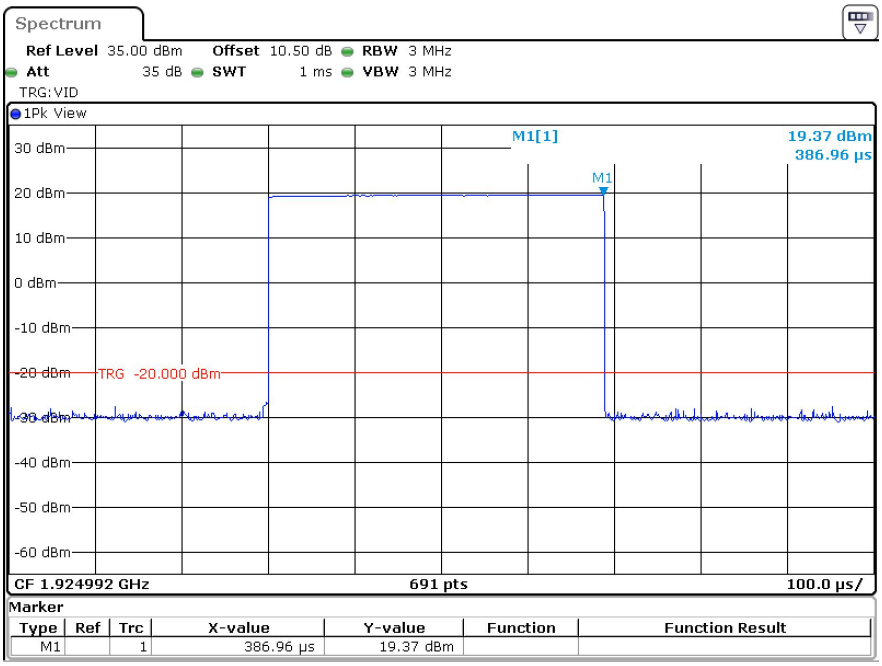
Channel	Frequency (MHz)	Peak Transmit Power (dBm)	Limit (dBm)
Low	1921.536	19.37	20.04
Middle	1924.992	19.37	20.05
High	1928.448	19.42	20.04
$EBW_{Low\ channel}$ = 1454000Hz, $EBW_{Middle\ channel}$ = 1459000 Hz, $EBW_{High\ channel}$ = 1450000 Hz Peak Transmit Power Limit = $100(EBW)^{1/2}$ µW			

Note: the limit was reduced 3.77dBi-3dBi=0.77dB

Low Channel



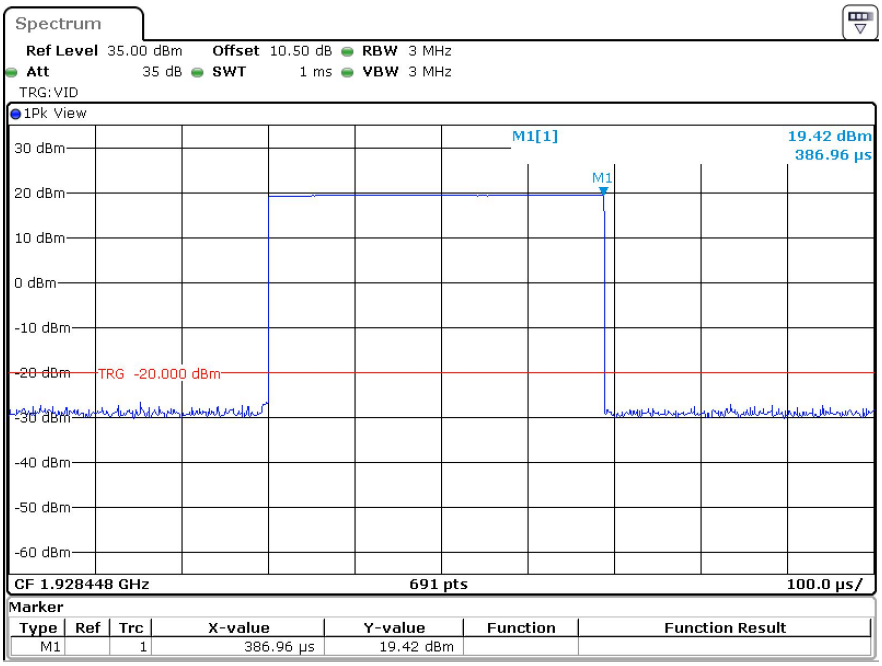
Middle Channel



ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

Date: 17.JUN.2025 16:31:08

High Channel



ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

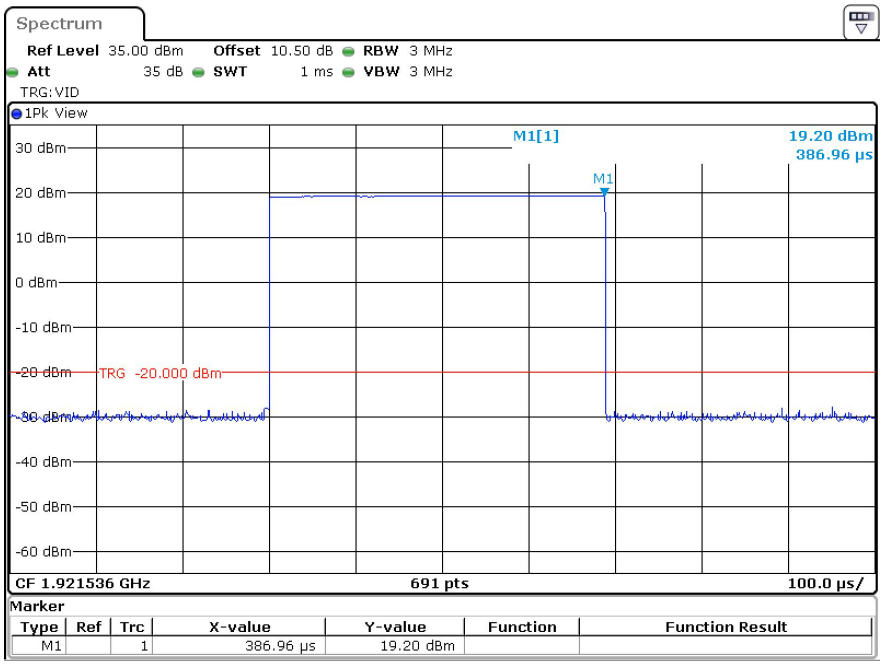
Date: 17.JUN.2025 16:29:57

ANT 2

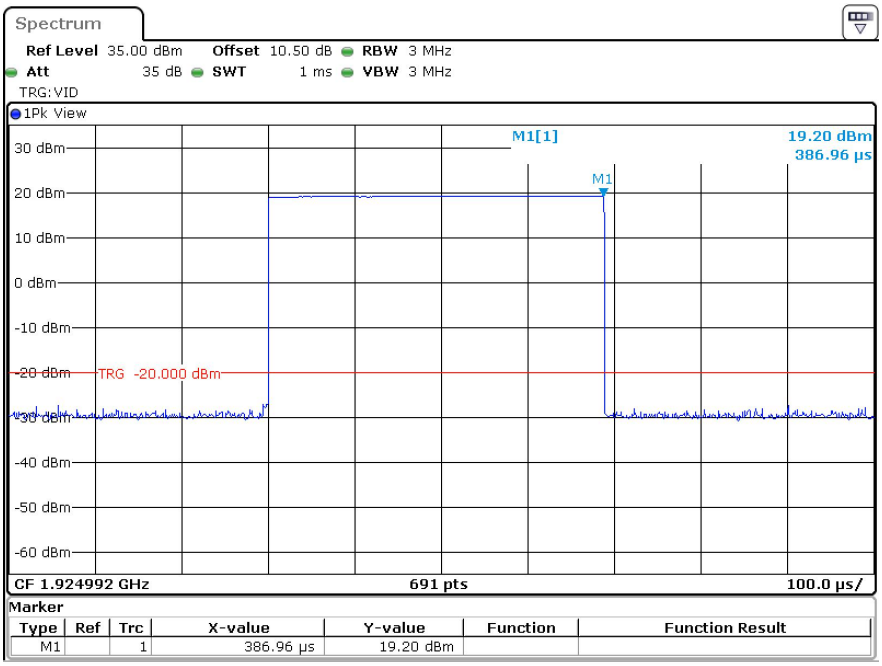
Channel	Frequency (MHz)	Peak Transmit Power (dBm)	Limit (dBm)
Low	1921.536	19.20	20.04
Middle	1924.992	19.20	20.05
High	1928.448	19.39	20.04
$EBW_{Low\ channel}$ = 1454000Hz, $EBW_{Middle\ channel}$ = 1459000 Hz, $EBW_{High\ channel}$ = 1450000 Hz Peak Transmit Power Limit = $100(EBW)^{1/2}$ µW			

Note: the limit was reduced 3.77dBi-3dBi=0.77dB

Low Channel



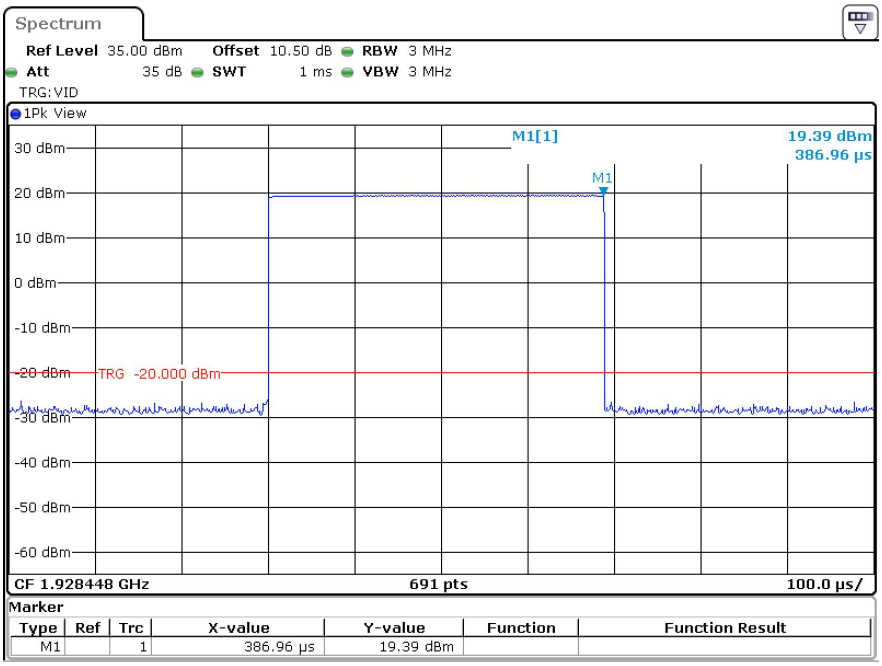
Middle Channel



ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

Date: 17.JUN.2025 17:00:18

High Channel



ProjectNo.:2501S11852E-RF-FP Tester:Rainbow Zhu

Date: 17.JUN.2025 16:58:58

FCC§15.319 (d) - POWER SPECTRAL DENSITY

Applicable Standard

The average pulse energy in a 3 kHz bandwidth is divided by the pulse duration.

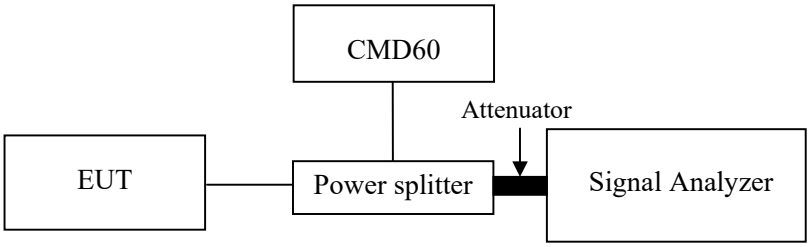
The power spectral density shall not exceed 3mW in any 3 kHz bandwidth as measured with a spectrum analyzer having a resolution bandwidth of 3 kHz.

The power spectral density is measured in accordance with ANSI C63.17.2013 Clause 6.1.5.

Test Procedure

Using the manufacturer's information on occupied bandwidth set the spectrum analyzer as follows:

RBW	3 kHz
Video bandwidth	≥ 3 × RBW
Span	Zero span at frequency with the maximum level (frequency determined in 6.1.3 if the same type of signal (continuous versus burst) was used in 6.1.3)
Center frequency	Spectral peak as determined in 6.1.3
Sweep time	For burst signals, sufficient to include essentially all of the maximum length burst at the output of a 3 kHz filter (e.g., maximum input burst duration plus 600 μs). For continuous signals, 20 ms.
Amplitude scale	Log power
Detection	Sample detection and averaged for a minimum of 100 sweeps
Trigger	External or internal



Test Data

Environmental Conditions

Temperature:	25.1~25.8 ℃
Relative Humidity:	47~50 %
ATM Pressure:	100.0~100.2 kPa

The testing was performed by Rainbow Zhu on 2025-05-20 and 2025-05-21.

Test mode: Transmitting

Test Result: Compliant. *Please refer to following table and plots*