

TEST REPORT

Applicant: Fujian Newland Payment Technology Co.,Ltd.

Address: No. B602, Building #1, Haixia Jingmao Plaza, Fuzhou Bonded Area 350015, Fujian 350015 China

Product Name: POS Terminal

FCC ID: 2AM6U-NA750G

IC: 25226-N750

HVIN: ND_01_12_01_02, ND_01_13_01_01, ND_01_13_01_03,
ND_01_12_01_01

47 CFR Part 15, Subpart C(15.247)

RSS-247 Issue 4 July 24 2025

Standard(s): RSS-Gen, Issue 5, February 2021 Amendment 2
ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 +Errata to
C63.10a-2024
KDB 558074 D01 15.247 Meas Guidance v05r02

Report Number: 2502Y81547E-RF-00B

Report Date: 2025/12/19

The above device has been tested and found compliant with the requirement of the relevant standards by Bay Area Compliance Laboratories Corp. (Dongguan).

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CONTENTS

DOCUMENT REVISION HISTORY	4
1. GENERAL INFORMATION	5
1.1 GENERAL DESCRIPTION OF EQUIPMENT UNDER TEST	5
1.2 ACCESSORY INFORMATION	5
1.3 ANTENNA INFORMATION DETAIL ▲	6
1.4 EQUIPMENT MODIFICATIONS	6
2. SUMMARY OF TEST RESULTS	7
3. DESCRIPTION OF TEST CONFIGURATION	9
3.1 OPERATION FREQUENCY DETAIL	9
3.2 EUT OPERATION CONDITION	9
3.3 SUPPORT EQUIPMENT LIST AND DETAILS	9
3.4 SUPPORT CABLE LIST AND DETAILS	9
3.5 BLOCK DIAGRAM OF TEST SETUP	10
3.6 TEST FACILITY	12
3.7 MEASUREMENT UNCERTAINTY	12
4. REQUIREMENTS AND TEST PROCEDURES	13
4.1 AC LINE CONDUCTED EMISSIONS	13
4.1.1 Applicable Standard	13
4.1.2 EUT Setup	15
4.1.3 EMI Test Receiver Setup	15
4.1.4 Test Procedure	16
4.1.5 Corrected Amplitude & Margin Calculation	16
4.1.6 Test Result	16
4.2 RADIATED SPURIOUS EMISSIONS	17
4.2.1 Applicable Standard	17
4.2.2 EUT Setup	17
4.2.3 EMI Test Receiver & Spectrum Analyzer Setup	19
4.2.4 Test Procedure	20
4.2.5 Corrected Result & Margin Calculation	20
4.2.6 Test Result	20
4.3 MAXIMUM CONDUCTED OUTPUT POWER	21
4.3.1 Applicable Standard	21
4.3.2 EUT Setup	21
4.3.3 Test Procedure	21
4.3.4 Test Result	21
4.4 CONDUCTED SPURIOUS EMISSION	22
4.4.1 Applicable Standard	22
4.4.2 EUT Setup	22
4.4.3 Test Procedure	22
4.4.4 Test Result	23
4.5 ANTENNA REQUIREMENT	24
4.5.1 Applicable Standard	24

4.5.2 Judgment	24
5. TEST DATA AND RESULTS	25
5.1 AC LINE CONDUCTED EMISSIONS	25
5.2 RADIATED SPURIOUS EMISSIONS.....	28
5.3 SPOT CHECK WITH MAXIMUM CONDUCTED OUTPUT POWER.....	40
EXHIBIT A - EUT PHOTOGRAPHS.....	42
EXHIBIT B - TEST SETUP PHOTOGRAPHS	43

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2502Y81547E-RF-00B	Original Report	2025/12/19

1. GENERAL INFORMATION

1.1 General Description of Equipment under Test

EUT Name:	POS Terminal
EUT Model:	N750
Operation Frequency:	2402-2480 MHz
Maximum Peak Output Power (Conducted) ▲:	9.85dBm
Modulation Type:	GFSK, $\pi/4$ -DQPSK, 8DPSK
Rated Input Voltage:	3.8Vdc from battery or 5Vdc from adapter
Serial Number:	For AC line conducted emissions test: 3BFI-3(Configuration 3#) For Radiated Spurious Emissions test: 3BFI-1(Configuration 1#) For RF Conducted test: 3BFI-5(Configuration 1#)
EUT Received Date:	2025/10/16
EUT Received Status:	Good

Note :
1.Per 15B& ICES-003 Issue 7 report, Powered by Battery 2#+Adapter 3#+ Configuration 3# was the worst for AC line conducted emissions and Powered by Battery 1#+Adapter 3#+ Configuration 1# was the worst for Radiated Spurious Emissions, so only performed it.

1.2 Accessory Information

Accessory Description	Manufacturer	Model	Parameters
Adapter 1#	SHENZHEN HONOR ELECTRONIC CO.,LTD.	ADS-12B-06 05010E	Input: 100-240Vac 50/60Hz MAX 0.3A Output: 5.0Vdc 2.0A 10.0W
Adapter 2#	SHENZHEN HONOR ELECTRONIC CO.,LTD.	ADS-12EA-05 05010E	Input: 100-240Vac, 50/60Hz; Max 0.3A Output: 5.0Vdc 2.0A 10.0W
Adapter 3#	XIAMEN KELI ELECTRONICS CO.,LTD	KL-WD050200	Input: 100-240Vac 50/60Hz 0.5A Output: 5.0Vdc 2.0A 10.0W
Battery 1#	EVE ENERGY CO., LTD	NL3836A	3.8V 3600mAh
Battery 2#	GuangDong Fenghua New Energy Co.,Ltd.	NL3836A	3.8V 3600 mAh
Battery 3#	GuangDong Fenghua New Energy Co.,Ltd.	NL3853A	3.8V 5200 mAh

Optional Material:

Material Description	Manufacturer	Parameter
Battery 1#	EVE ENERGY CO., LTD	3.8V 3600mAh
Battery 2#	GuangDong Fenghua New Energy Co.,Ltd.	3.8V 3600 mAh
Battery 3#	GuangDong Fenghua New Energy Co.,Ltd.	3.8V 5200 mAh
LCD 1#	/	Model: CF1133
LCD 2#	/	Model: GT2863
LCD 3#	/	Model: incell
Rear camera 1#	/	Model: GC5035
Rear camera 2#	/	Model: GC05A2

EUT Information:

Configuration	HVIN
Configuration 1#	ND_01_12_01_02
Configuration 2#	ND_01_13_01_01
Configuration 3#	ND_01_13_01_03
Configuration 4#	ND_01_12_01_01

The following Configuration were select to test:

Configuration	Professional scanning module	External charging IC	LCD 1#	LCD 2#	LCD 3#	Rear camera 1#	Rear camera 2#
Configuration 1#	×	√	√	×	×	√	×
Configuration 2#	√	×	×	√	×	×	√
Configuration 3#	√	×	×	×	√	×	√
Configuration 4#	×	×	√	×	×	×	√

1.3 Antenna Information Detail ▲

Antenna Type	input impedance (Ohm)	Frequency Range (MHz)	Antenna Gain (dBi)
PIFA	50	2400-2500	-3.37
The design of compliance with §15.203:			
☒	Unit uses a permanently attached antenna.		
☐	Unit uses a unique coupling to the intentional radiator.		
☐	Unit was professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.		

1.4 Equipment Modifications

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

2. SUMMARY OF TEST RESULTS

Standard(s)/Rule(s)	Description of Test	Result	Note
FCC §15.207(a) RSS-Gen Clause 8.8	AC Line Conducted Emissions	Compliant	/
FCC §15.205, §15.209, §15.247(d) RSS-Gen Clause 8.10 RSS-247 Clause 6.6	Radiated Spurious Emissions	Compliant	/
FCC §15.247(a)(1) RSS-247 Clause 6.2.3.1 a)	20 dB Emission Bandwidth	Compliant*	The test result please refer to report SEWA2205000012RG02 [▲] page33-38 for FCC and SEWA2205000012RG09 [▲] page31-36 for IC
RSS-Gen Clause 6.7	99% Occupied Bandwidth	Compliant*	The test result please refer to report SEWA2205000012RG09 [▲] page37-42 for IC
FCC §15.247(a)(1) RSS-247 Clause 6.2.3.1 a)	Channel Separation	Compliant*	The test result please refer to report SEWA2205000012RG02 [▲] Page46-48 for FCC and SEWA2205000012RG09 [▲] Page44-46 for IC
FCC §15.247(a)(1)(iii) RSS-247 Clause 6.2.3.1 b)	Number Of Hopping Frequency	Compliant*	The test result please refer to report SEWA2205000012RG02 [▲] Page55-57 for FCC and SEWA2205000012RG09 [▲] Page53-55 for IC
FCC §15.247(a)(1)(iii) RSS-247 Clause 6.2.3.1 b)	Time Of Occupancy (Dwell Time)	Compliant*	The test result please refer to report SEWA2205000012RG02 [▲] Page49-54 for FCC and SEWA2205000012RG09 [▲] Page47-52 for IC
FCC §15.247(b)(1) RSS-247 Clause 6.2.3.2	Maximum Conducted Output Power	Reporting*	The test result please refer to report SUCR250600057102 [▲] Page25 for FCC and SUCR250600057109 [▲] Page26 for IC
FCC §15.247(d) RSS-247 Clause 6.6	Conducted Spurious Emission	Compliant*	The test result please refer to report SEWA2205000012RG02 [▲] Page58-77 for FCC and SEWA2205000012RG09 [▲] Page56-75 for IC
FCC §15.203 RSS-Gen Clause 6.8	Antenna Requirement	Compliant	/

Note 1:

Compliant*: The device built in a certified module, model: SC200E-NA, LPDDR4X Hardware Version: R1.0, FCC ID:XMR2022SC200ENA[▲], IC: 10224A-022SC200ENA[▲], per spot check, the RF parameters are identical with the CIIPC module, FCC report: SUCR250600057102[▲], IC report: SUCR250600057109[▲], which was issued by SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd. on 2025/07/21 for FCC and 2025/07/22 for IC, the CIIPC module based on the original module, therefore, the RF conducted test items please refer to the original module, FCC report: SEWA2205000012RG02[▲], IC report: SEWA2205000012RG09[▲], which was issued by SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd. on 2022/06/24 for FCC and IC. (according to KDB 996369 D02 Module Q&A v02r02, Answer 1 b))

Reporting*: The device built in a certified module, model: SC200E-NA, LPDDR4X Hardware Version: R1.0, FCC ID:XMR2022SC200ENA[▲], IC: 10224A-022SC200ENA[▲], per spot check, the RF parameters are identical with the CIIPC module, FCC report: SUCR250600057102[▲], IC report: SUCR250600057109[▲], which was issued by SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd. on 2025/07/21 for FCC and 2025/07/22 for IC. (according to KDB 996369 D02 Module Q&A v02r02, Answer 1 b))

The Bay Area Compliance Laboratories Corp.(Dongguan) is responsible for all the information provided in this report, except when information is provided by the customer as identified in this report.

3. DESCRIPTION OF TEST CONFIGURATION

3.1 Operation Frequency Detail

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	40	2442
1	2403	41	2443
...	...	...	...
...	...	...	...
...	...	78	2480
39	2441	/	/

Note: The above frequencies in bold were performed the test.

3.2 EUT Operation Condition

The EUT was configured for testing in Engineering Mode, which was provided by the manufacturer. The EUT configuration as below:

EUT Exercise Software:	QRCT3		
The software was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer▲:			
Test Modes	Power Level Setting		
	Lowest Channel	Middle Channel	Highest Channel
GFSK(BDR)	9	9	9
$\pi/4$ -DQPSK(2EDR)	9	9	9
8DPSK(3EDR)	9	9	9

Note:

1. For AC line conducted emissions, the maximum output power mode and channel was tested.
2. For Radiated Spurious Emissions 9kHz~ 1GHz and 18~25GHz, the maximum output power mode and channel was tested.

3.3 Support Equipment List and Details

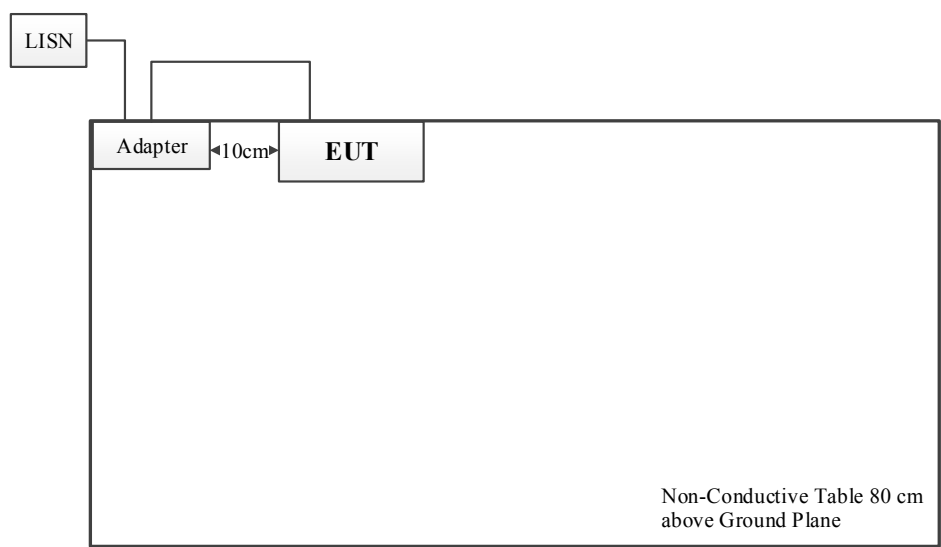
Manufacturer	Description	Model	Serial Number
/	/	/	/

3.4 Support Cable List and Details

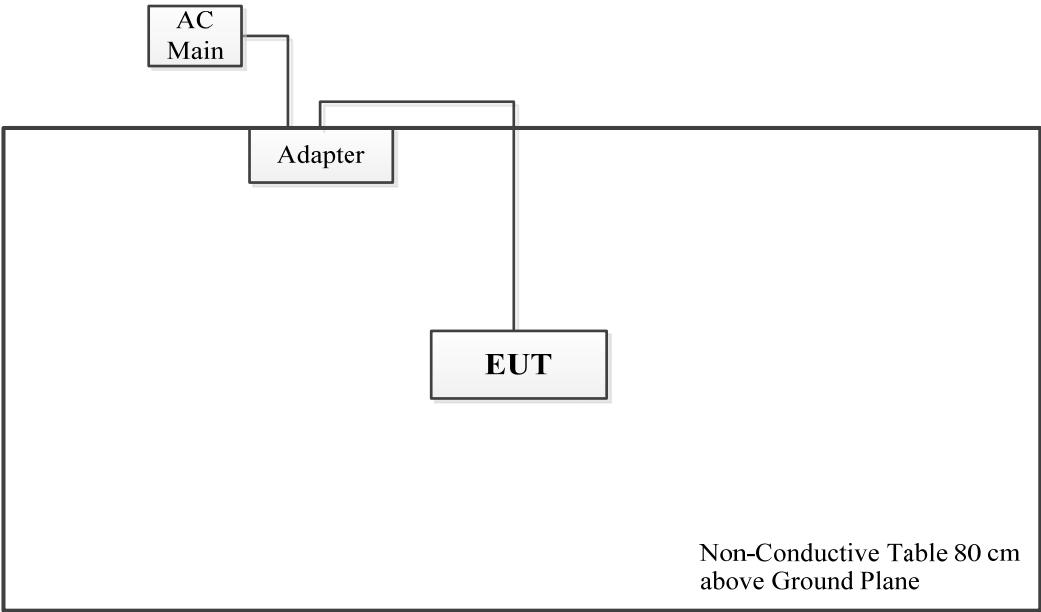
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
USB Cable	NO	NO	1.2	Adapter	EUT

3.5 Block Diagram of Test Setup

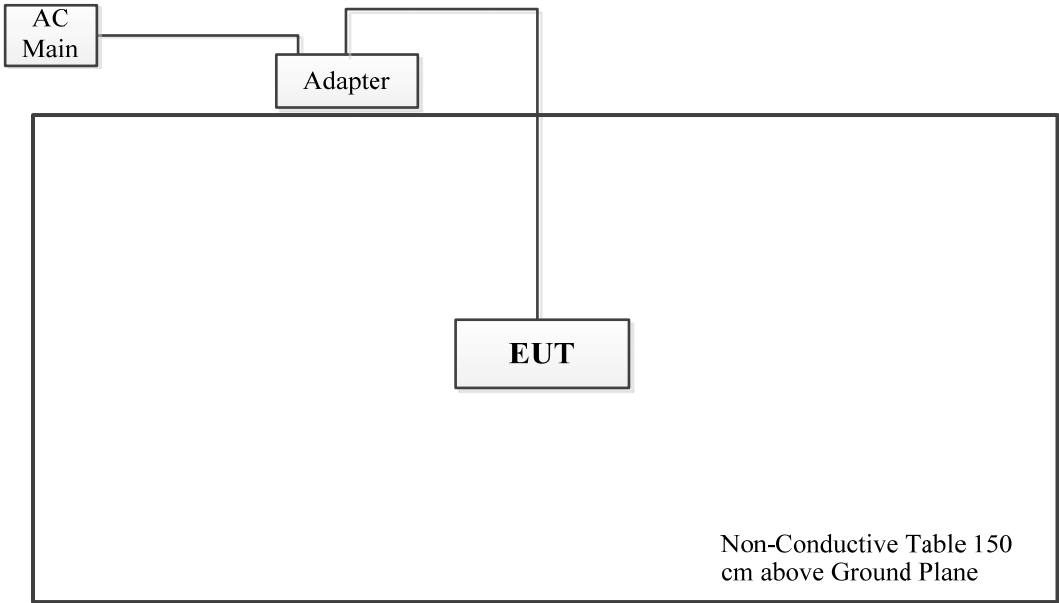
AC line conducted emissions:



Spurious Emissions:
Below 1GHz:



Above 1GHz:



3.6 Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, 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. : 829273, the FCC Designation No. : CN5044.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

3.7 Measurement Uncertainty

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

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	$\pm 5\%$
RF output power, conducted	$\pm 0.61\text{ dB}$
Power Spectral Density, conducted	$\pm 0.61\text{ dB}$
Unwanted Emissions, radiated	9kHz~30MHz: 3.3dB, 30MHz~200MHz: 4.55 dB, 200MHz~1GHz: 5.92 dB, 1GHz~6GHz: 4.98 dB, 6GHz~18GHz: 5.89 dB, 18GHz~26.5GHz: 5.47 dB, 26.5GHz~40GHz: 5.63 dB
Unwanted Emissions, conducted	$\pm 2.47\text{ dB}$
Temperature	$\pm 1^\circ\text{C}$
Humidity	$\pm 5\%$
DC and low frequency voltages	$\pm 0.4\%$
Duty Cycle	1%
AC Power Lines Conducted Emission	3.11 dB (150 kHz to 30 MHz)

4. REQUIREMENTS AND TEST PROCEDURES

4.1 AC Line Conducted Emissions

4.1.1 Applicable Standard

FCC§15.207(a).

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN).

Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

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

*Decreases with the logarithm of the frequency.

(b) The limit shown in paragraph (a) of this section shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

- (1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.
- (2) For all other carrier current systems: 1000 μ V within the frequency band 535-1705 kHz, as measured using a 50 μ H/50 ohms LISN.
- (3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in §15.205, §15.209, §15.221, §15.223, or §15.227, as appropriate.

(c) Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

RSS-Gen Clause 8.8

Unless stated otherwise in the applicable RSS, for radio apparatus that are designed to be connected to the public utility AC power network, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the range 150 kHz to 30 MHz shall not exceed the limits in table 4, as measured using a 50 μ H / 50 Ω line impedance stabilization network. This requirement applies for the radio frequency voltage measured between each power line and the ground terminal of each AC power-line mains cable of the EUT.

For an EUT that connects to the AC power lines indirectly, through another device, the requirement for compliance with the limits in table 4 shall apply at the terminals of the AC power-line mains cable of a representative support device, while it provides power to the EUT. The lower limit applies at the boundary between the frequency ranges. The device used to power the EUT shall be representative of typical applications.

Table 4 – AC power-line conducted emissions limits

Frequency (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 ¹	56 to 46 ¹
0.5 – 5	56	46
5 – 30	60	50

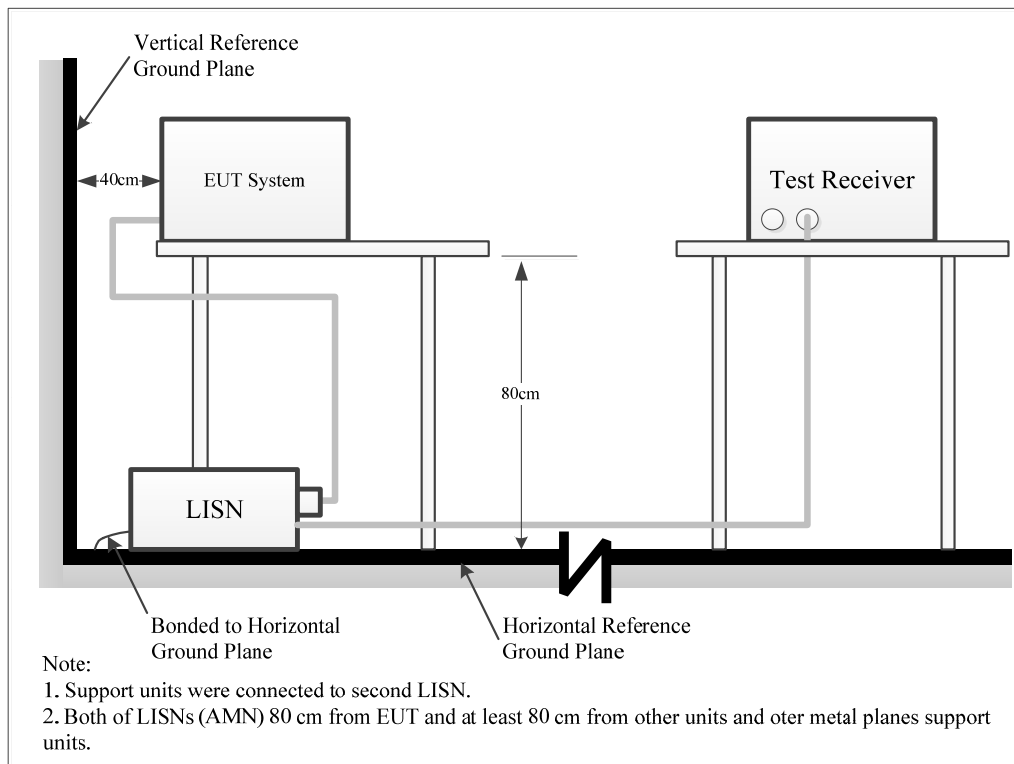
Note 1: The level decreases linearly with the logarithm of the frequency.

For an EUT with a permanent or detachable antenna operating between 150 kHz and 30 MHz, the AC power-line conducted emissions must be measured using the following configurations:

(a) Perform the AC power-line conducted emissions test with the antenna connected to determine compliance with the limits of table 4 outside the transmitter's fundamental emission band.

(b) Retest with a dummy load instead of the antenna to determine compliance with the limits of table 4 within the transmitter's fundamental emission band. For a detachable antenna, remove the antenna and connect a suitable dummy load to the antenna connector. For a permanent antenna, remove the antenna and terminate the RF output with a dummy load or network that simulates the antenna in the fundamental frequency band.

4.1.2 EUT Setup



The setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207 , RSS-Gen limits.

The spacing between the peripherals was 10 cm.

The adapter or EUT was connected to the main LISN with a 120 V/60 Hz AC power source.

4.1.3 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	IF B/W
150 kHz – 30 MHz	9 kHz

4.1.4 Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase (“hot”) line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

4.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = attenuation caused by cable loss + voltage division factor of AMN

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

4.1.6 Test Result

Please refer to section 5.1.

4.2 Radiated Spurious Emissions

4.2.1 Applicable Standard

FCC §15.247 (d);

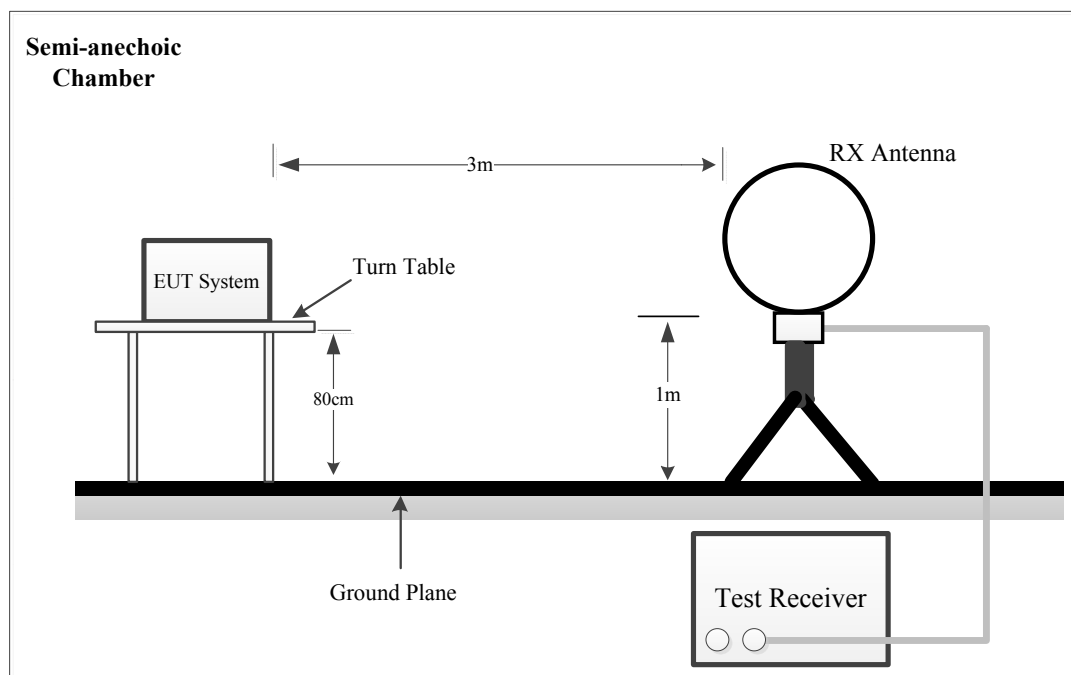
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

RSS-247 Clause 6.6

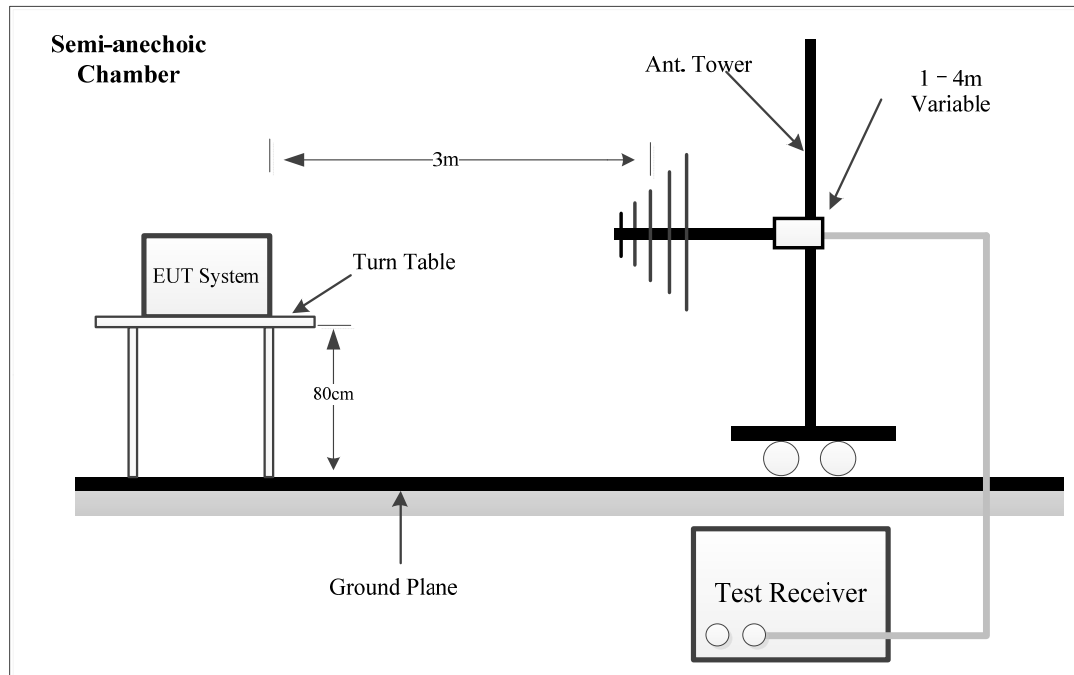
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum device, digitally modulated device, or hybrid system is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power - based on either an RF conducted or a radiated measurement-provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 6.3.2, the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

4.2.2 EUT Setup

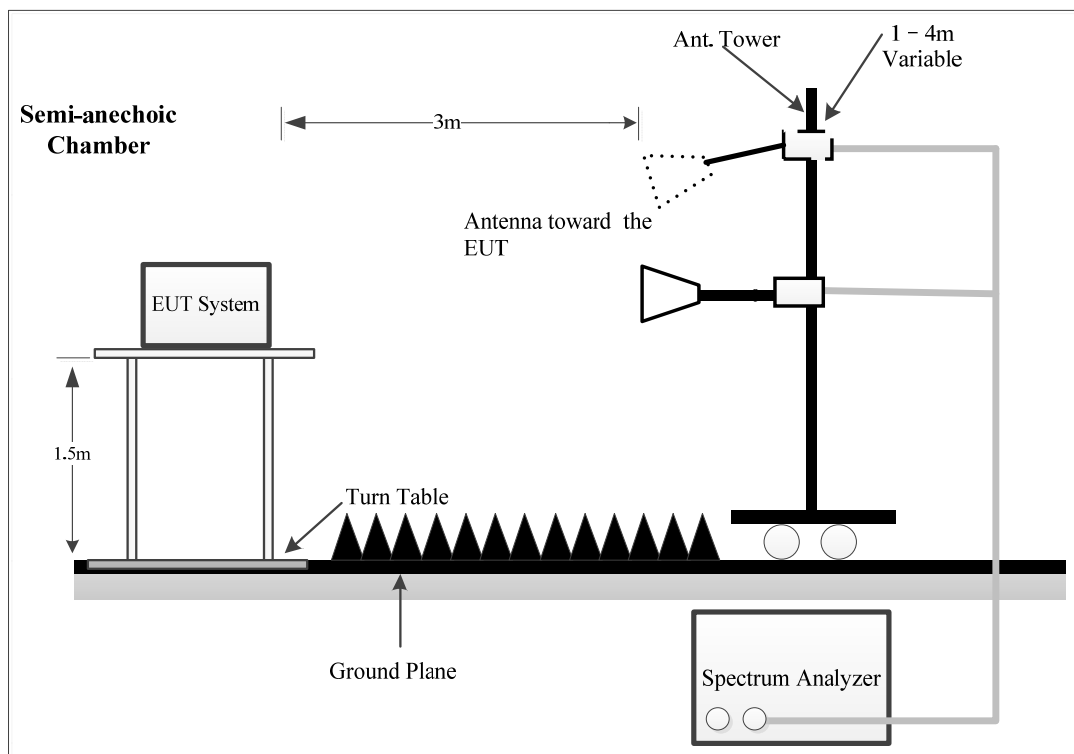
9kHz~30MHz:



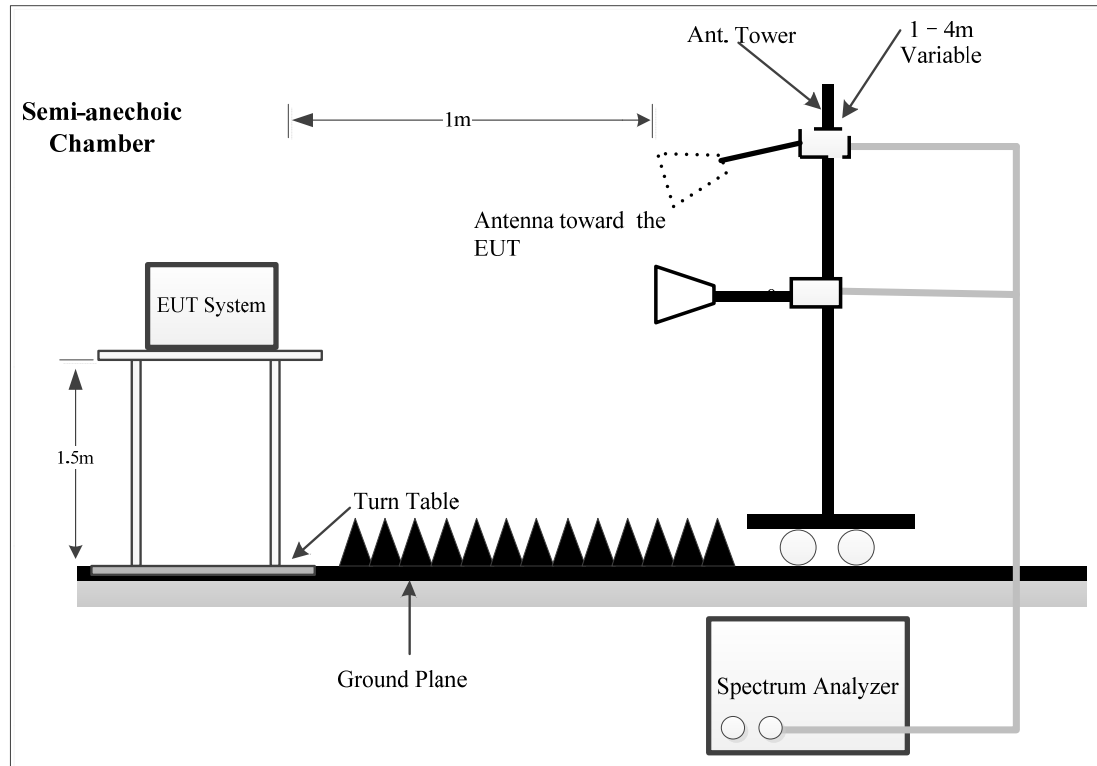
30MHz~1GHz:



1-18GHz:



18-25GHz:



The radiated emissions were performed in the semi-anechoic chamber, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209, FCC 15.247 limits & RSS-247, RSS-Gen limits.

For 9kHz-30MHz test, the lowest height of the magnetic antenna shall be 1 m above the ground and three antenna orientations (parallel, perpendicular, and ground-parallel) shall be measured.

4.2.3 EMI Test Receiver & Spectrum Analyzer Setup

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

9kHz-1000MHz:

Frequency Range	Measurement	RBW	Video B/W	IF B/W	Detector
9 kHz-150 kHz	QP/AV	200 Hz	1 kHz	200 Hz	QP/AV
150 kHz-30 MHz	QP/AV	9 kHz	30 kHz	9 kHz	QP/AV
30 MHz-1000 MHz	Peak	120 kHz	500 kHz	/	PK
	QP	/	/	120 kHz	QP

Above 1GHz:

Pre-scan:

Frequency Range	Measurement	RBW	Video B/W	Detector
Above 1 GHz	Peak	1MHz	3 MHz	PK
	AV	1MHz	5kHz	PK

Final measurement for emission identified during the pre-scan:

Frequency Range	Measurement	RBW	Video B/W	Detector
Above 1 GHz	Peak	1MHz	3 MHz	PK
	AV	1MHz	10 Hz	PK

4.2.4 Test Procedure

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

Data was required in Quasi-peak measurement for frequency range of 9 kHz-1 GHz except 9-90 kHz, 110-490 kHz, employing an average measurement, peak and Average measurement for frequencies above 1 GHz.

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.

For Radiated 18-25GHz test, which was performed at 1.0 m distance, according to C63.10, the test result shall be extrapolated to the specified distance using an extrapolation Factor of 20dB/decade from 3m to 1.0m
Distance extrapolation Factor = $20 \log (\text{specific distance [3m]}/\text{test distance [1.0m]})$ dB = 9.54 dB

4.2.5 Corrected Result & Margin Calculation

$$E_{Log} = 20 \times \log_{10}(E_{Linear})$$

E_{Linear} is the field strength of the emission, in $\mu\text{V/m}$

E_{Log} is the field strength of the emission, in $\text{dB}\mu\text{V/m}$

For 9kHz-30MHz test, test distance is 3m, extrapolation limit shall be calculated using Equation:

$$E_{\text{limit-measure}} = E_{\text{limit-Standard}} + 40 \times \log_{10} (d_{\text{standard}}/d_{\text{measure}})$$

The basic equation except 18-25GHz test is as follows:

Factor = Antenna Factor + Cable Loss- Amplifier Gain

For Radiated 18-25GHz test:

Factor = Antenna Factor + Cable Loss- Distance extrapolation Factor

Result = Reading + Factor

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

For the spurious emission below 30MHz, the limit was convert from $\text{dB}\mu\text{A/m}$ to $\text{dB}\mu\text{V/m}$ by adding 51.5 dB.

4.2.6 Test Result

Please refer to section 5.2.

4.3 Maximum Conducted Output Power

4.3.1 Applicable Standard

FCC §15.247 (b)(1)

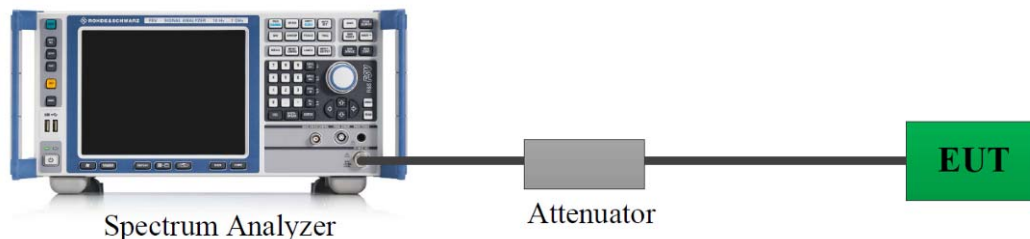
For frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725–5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts

According to RSS-247 Clause 6.2.3.2

The following transmitter output power and e.i.r.p. requirements shall apply:

- a. if the hopset uses 75 or more hopping channels, the maximum peak conducted output power shall not exceed 1.0 W.
- b. if the hopset uses less than 75 hopping channels the maximum peak conducted output power shall not exceed 0.125 W.
- c. the e.i.r.p. shall not exceed 4 W, except as provided in sections 6.5 a) and b).

4.3.2 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port. The insert loss of this RF cable/attenuator was offset into the setting of test equipment:

Offset=Insert loss of RF cable+ Insert loss of attenuator

4.3.3 Test Procedure

According to ANSI C63.10-2020 Section 7.8.5

This is an RF-conducted test to evaluate maximum peak output power. Use a direct connection between the antenna port of the unlicensed wireless device and the spectrum analyzer, through suitable attenuation. Frequency hopping shall be disabled for this test. Use the following spectrum analyzer settings:

- a) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
- b) RBW > 20 dB bandwidth of the emission being measured.
- c) VBW ≥ RBW.
- d) Sweep: No faster than coupled (auto) time.
- e) Detector function: Peak.
- f) Trace: Max-hold.
- g) Allow trace to stabilize.
- h) Use the marker-to-peak function to set the marker to the peak of the emission.
 - i) The indicated level is the peak output power, after any corrections for external attenuators and cables.
 - j) A spectral plot of the test results and setup description shall be included in the test report.

NOTE—A peak responding power meter may be used, where the power meter and sensor system video bandwidth is greater than the occupied bandwidth of the unlicensed wireless device, rather than a spectrum analyzer.

4.3.4 Test Result

Please refer to section 5.3.

4.4 Conducted Spurious Emission

4.4.1 Applicable Standard

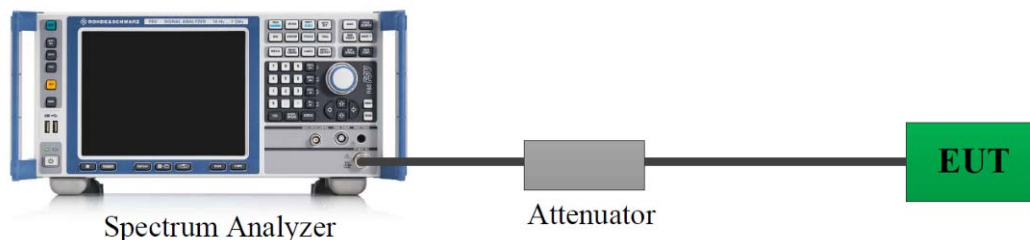
FCC §15.247 (d);

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

RSS-247 Clause 6.6

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum device, digitally modulated device, or hybrid system is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power - based on either an RF conducted or a radiated measurement-provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 6.3.2, the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

4.4.2 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port. The insert loss of this RF cable/attenuator was offset into the setting of test equipment:

Offset=Insert loss of RF cable+ Insert loss of attenuator

4.4.3 Test Procedure

According to ANSI C63.10-2020 Section 7.8.7.2

Compliance with a relative limit at the band-edges (e.g., -20 dBc) shall be made on the lowest and on the highest channels with frequency hopping disabled and repeated with frequency hopping enabled.

For the latter test the hopping sequence shall include the lowest and highest channels.

For measurements with the hopping disabled the analyzer screen shall clearly show compliance with the requirement within 10 MHz of the allocated band-edge.

For measurements with the hopping enabled the analyzer screen shall clearly show compliance with the requirement within 10 MHz of both of the allocated band-edges. This could require separate spectral plots for each band-edge.

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW $\geq [3 \times \text{RBW}]$.
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements. Report the three highest emissions relative to the limit.

4.4.4 Test Result

Please refer to section 5.4.

4.5 Antenna Requirement

4.5.1 Applicable Standard

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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. 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.

RSS-Gen §6.8

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

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

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

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

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

This radio transmitter [enter the device's ISED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

4.5.2 Judgment

Compliant. Please refer to the Antenna Information detail in Section 1.3.

5. TEST DATA AND RESULTS

5.1 AC Line Conducted Emissions

Serial Number:	3BFI-3	Test Date:	2025/11/04
Test Site:	CE	Test Mode:	Transmitting
Tester:	Yolo Fan	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.3	Relative Humidity: (%)	49	ATM Pressure: (kPa)	101.8
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101614	2025/6/25	2026/6/24
Unknown	Coaxial Cable	RG 142	C-0200-05	2025/5/6	2026/5/5
R&S	EMI Test Receiver	ESCI	100224	2025/6/25	2026/6/24
Audix	Test Software	E3	191218 V9	N/A	N/A

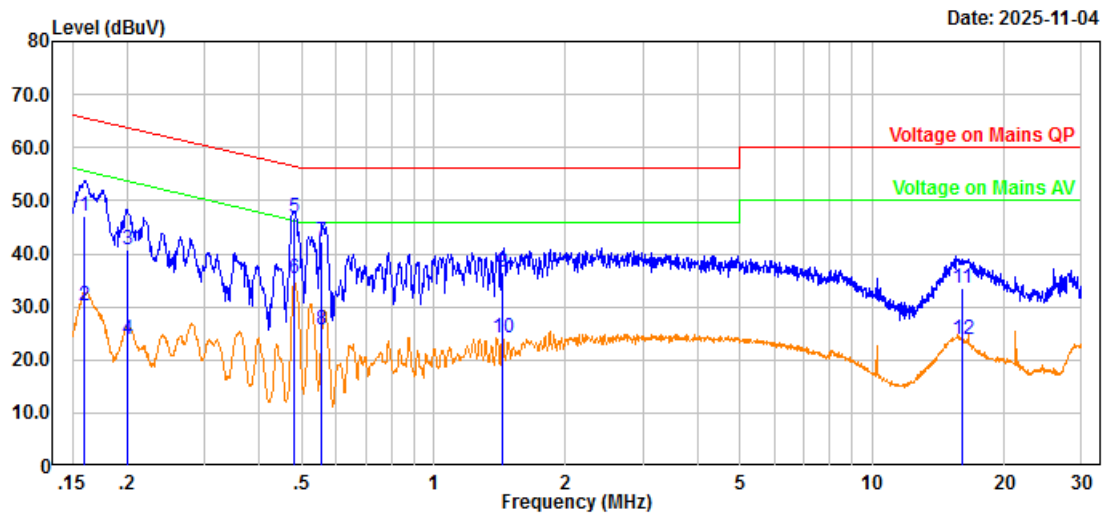
* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Note: 3EDR High channel was tested.

Project No.: 2502Y81547E-RF
 Port: Line
 Test Mode: Transmitting
 IF B/W 9kHz PK/AV

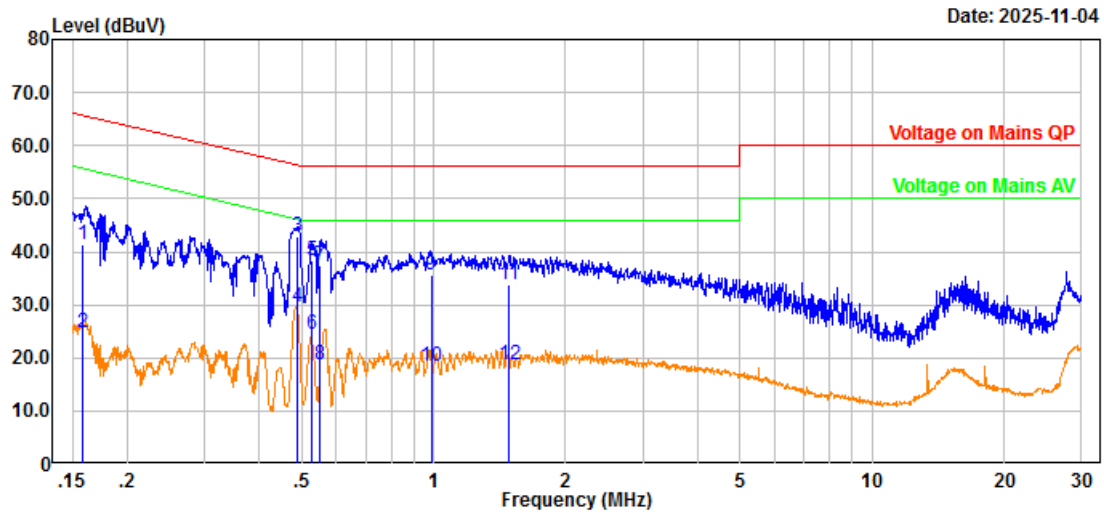
Serial No.: 3BFI-3
 Tester: Yolo Fan
 Note: BT



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Measurement
1	0.160	35.95	11.12	47.07	65.47	18.40	QP
2	0.160	19.17	11.12	30.29	55.47	25.18	Average
3	0.200	29.87	10.80	40.67	63.60	22.93	QP
4	0.200	12.97	10.80	23.77	53.60	29.83	Average
5	0.481	36.10	10.62	46.72	56.33	9.61	QP
6	0.481	24.71	10.62	35.33	46.33	11.00	Average
7	0.554	31.80	10.56	42.36	56.00	13.64	QP
8	0.554	15.11	10.56	25.67	46.00	20.33	Average
9	1.439	25.37	11.03	36.40	56.00	19.60	QP
10	1.439	13.07	11.03	24.10	46.00	21.90	Average
11	15.995	22.50	11.14	33.64	60.00	26.36	QP
12	15.995	12.69	11.14	23.83	50.00	26.17	Average

Project No.: 2502Y81547E-RF
Port: neutral
Test Mode: Transmitting
IF B/W 9kHz PK/AV

Serial No.: 3BFI-3
Tester: Yolo Fan
Note: BT



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Measurement
1	0.159	30.71	10.74	41.45	65.53	24.08	QP
2	0.159	14.04	10.74	24.78	55.53	30.75	Average
3	0.489	32.32	10.53	42.85	56.19	13.34	QP
4	0.489	19.18	10.53	29.71	46.19	16.48	Average
5	0.526	27.84	10.50	38.34	56.00	17.66	QP
6	0.526	13.82	10.50	24.32	46.00	21.68	Average
7	0.551	26.88	10.48	37.36	56.00	18.64	QP
8	0.551	8.17	10.48	18.65	46.00	27.35	Average
9	0.987	24.59	10.89	35.48	56.00	20.52	QP
10	0.987	7.38	10.89	18.27	46.00	27.73	Average
11	1.482	22.71	11.05	33.76	56.00	22.24	QP
12	1.482	7.61	11.05	18.66	46.00	27.34	Average

5.2 Radiated Spurious Emissions

1) 9kHz - 1GHz

Serial Number:	3BFI-1	Test Date:	2025/10/31
Test Site:	Chamber10m	Test Mode:	Transmitting
Tester:	Zoo Zou	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.7	Relative Humidity: (%)	49	ATM Pressure: (kPa)	101.6
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
EMCO	Passive Loop Antenna	6512	9706-1206	2023/10/25	2026/10/24
Sunol Sciences	Hybrid Antenna	JB3	A060611-1	2023/9/6	2026/9/5
Narda	Coaxial Attenuator	779-6dB	04269	2023/9/6	2026/9/5
Unknown	Coaxial Cable	C-NJNJ-50	C-1000-01	2025/7/1	2026/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-04	2025/7/1	2026/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0530-01	2025/7/1	2026/6/30
Sonoma	Amplifier	310N	185914	2025/8/25	2026/8/24
R&S	EMI Test Receiver	ESR3	102453	2025/6/25	2026/6/24
Audix	Test Software	E3	191218 V9	N/A	N/A

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

Test Data:

Please refer to the below plots.

After pre-scan in the X, Y and Z axes of orientation, the worst case is refer to plots.

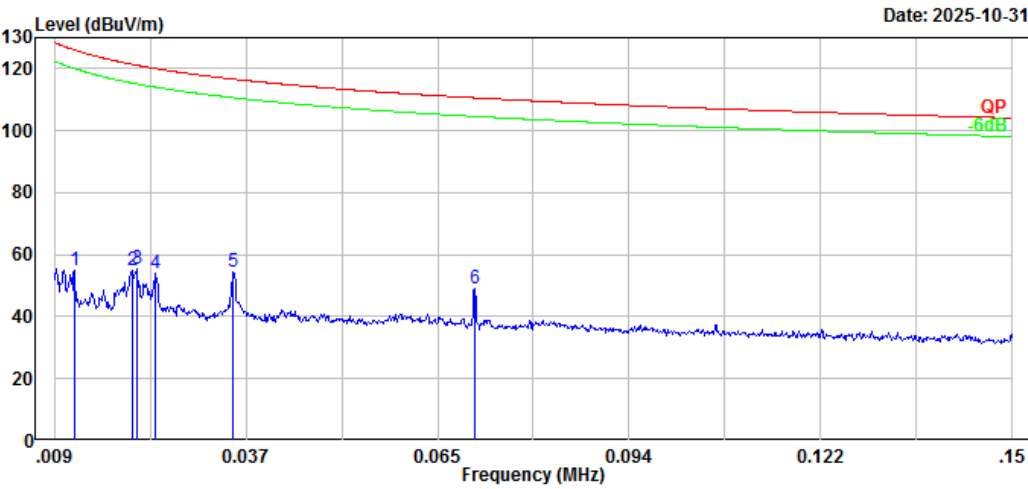
Note: 3EDR High channel was tested.

9kHz~30MHz:

Three antenna orientations (parallel, perpendicular, and ground-parallel) were measured, the worst orientations were below:

Project No.: 2502Y81547E-RF
Polarization: Parallel
Test Mode: Transmitting
Note: BT
RBW:200Hz VBW:1kHz

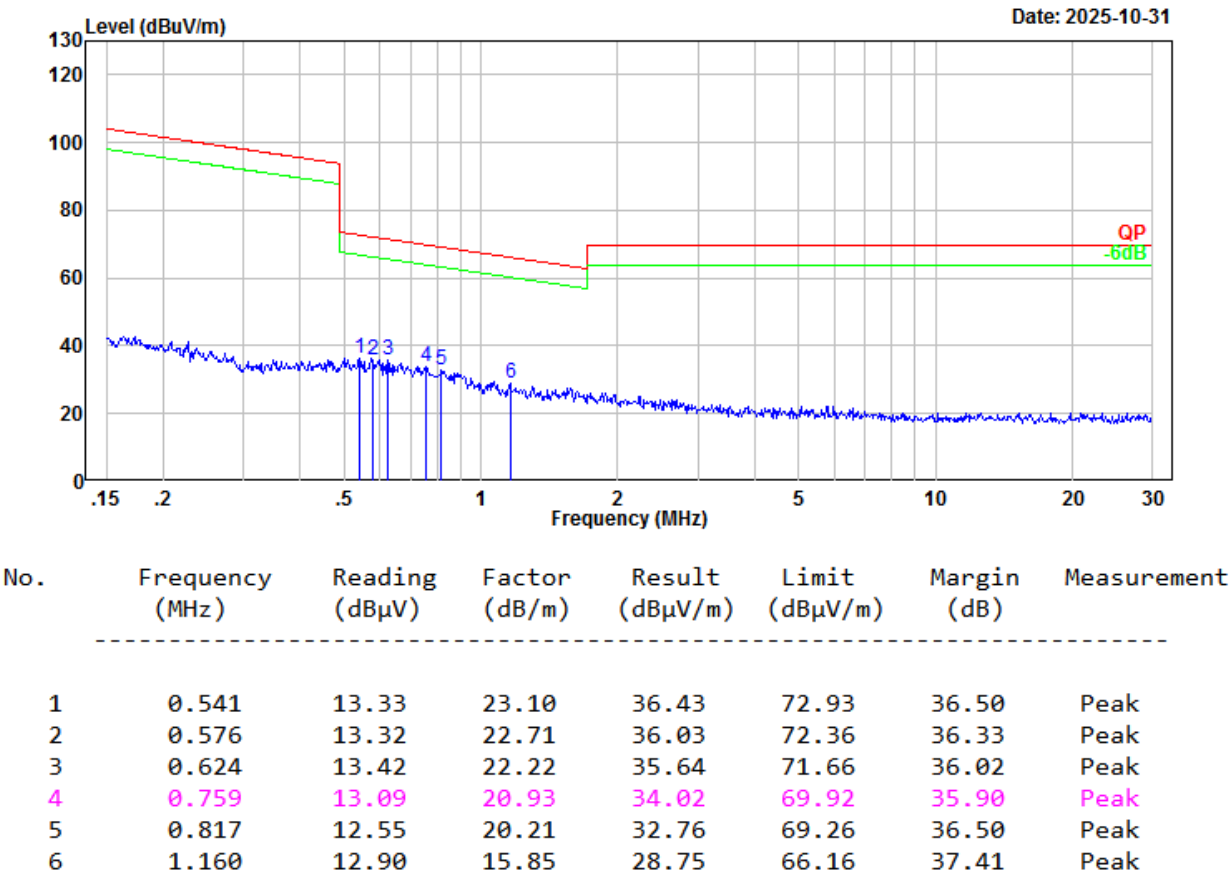
Serial No.: 38FI-1
Tester: Zoo Zou



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	0.012	2.78	52.30	55.08	126.05	70.97	Peak
2	0.020	5.25	49.93	55.18	121.40	66.22	Peak
3	0.021	5.64	49.76	55.40	121.11	65.71	Peak
4	0.024	5.11	49.05	54.16	120.02	65.86	Peak
5	0.035	8.01	46.60	54.61	116.63	62.02	Peak
6	0.071	8.69	40.44	49.13	110.59	61.46	Peak

Project No.: 2502Y81547E-RF
Polarization: Parallel
Test Mode: Transmitting
Note: BT
RBW:9kHz VBW:30kHz

Serial No.: 3BFI-1
Tester: Zoo Zou



30MHz-1GHz:

Project No.: 2502Y81547E-RF

Serial No.: 3BFI-1

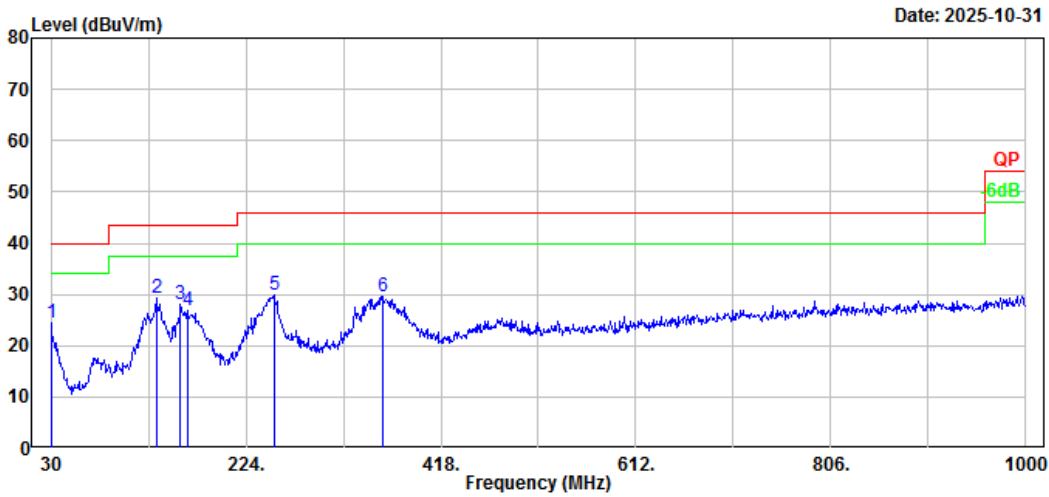
Polarization: Horizontal

Tester: Zoo Zou

Test Mode: Transmitting

Note: BT

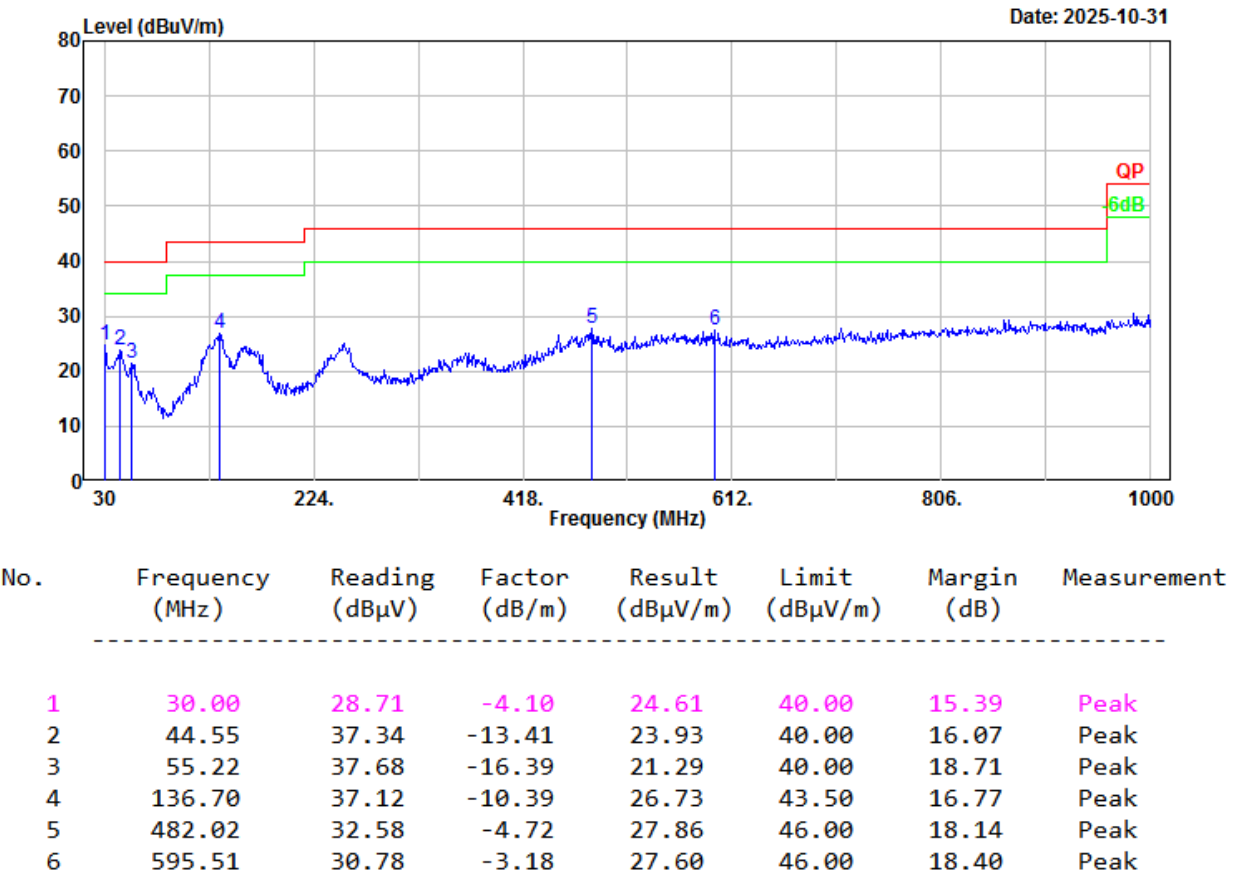
RBW:120kHz VBW:500kHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	30.00	28.45	-4.10	24.35	40.00	15.65	Peak
2	134.76	39.34	-10.18	29.16	43.50	14.34	Peak
3	159.01	38.97	-10.89	28.08	43.50	15.42	Peak
4	165.80	38.09	-11.32	26.77	43.50	16.73	Peak
5	252.13	41.55	-11.57	29.98	46.00	16.02	Peak
6	360.77	37.84	-8.25	29.59	46.00	16.41	Peak

Project No.: 2502Y81547E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: BT
RBW:120kHz VBW:500kHz

Serial No.: 3BFI-1
Tester: Zoo Zou



2) 1-25GHz:

Serial Number:	3BFI-1	Test Date:	2025/10/29
Test Site:	Chamber B	Test Mode:	Transmitting
Tester:	Willem Qiu	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	23.6	Relative Humidity: (%)	37	ATM Pressure: (kPa)	101.8

Test Equipment List and Details:

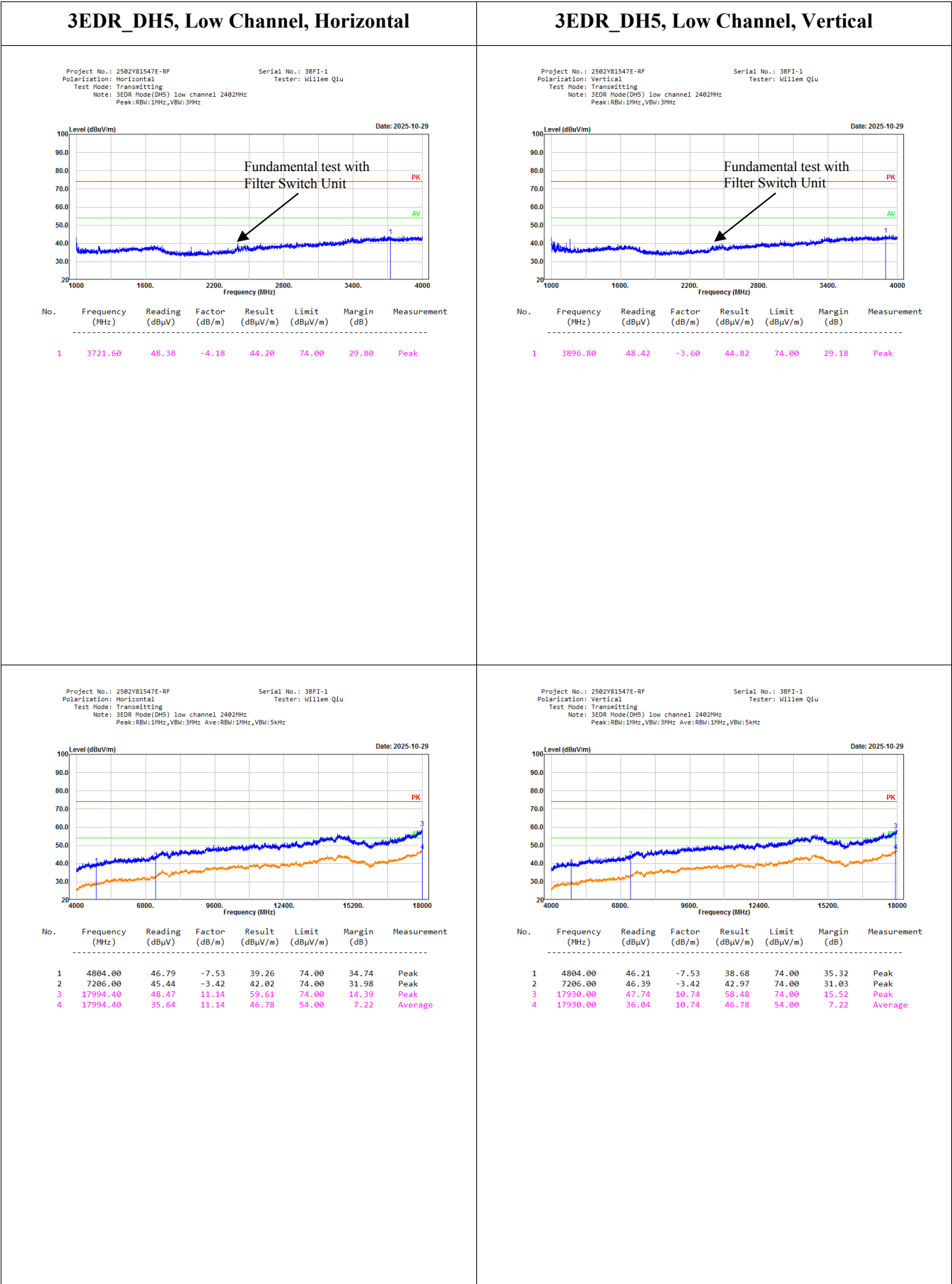
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
ETS-Lindgren	Horn Antenna	3115	000 527 35	2023/9/7	2026/9/6
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-02 1304	2023/2/22	2026/2/21
Xinhang Macrowave	Coaxial Cable	XH750A-N/J-SMA/J-10M	20231117004 #0001	2024/11/17	2025/11/16
Xinhang Macrowave	Coaxial Cable	XH360A-2.92/J-2.92/J-6M-A	20231208001 #0001	2024/12/9	2025/12/8
AH	Preamplifier	PAM-0118P	469	2025/4/11	2026/4/10
AH	Preamplifier	PAM-1840VH	191	2025/7/31	2026/7/30
R&S	Spectrum Analyzer	FSV40	101944	2025/8/8	2026/8/7
Audix	Test Software	E3	191218 V9	N/A	N/A
Decentest	Multiplex Switch Test Control Set & Filter Switch Unit	DT7220SCU & DT7220FSU	DS79902 & DS79905	2025/8/25	2026/8/24

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

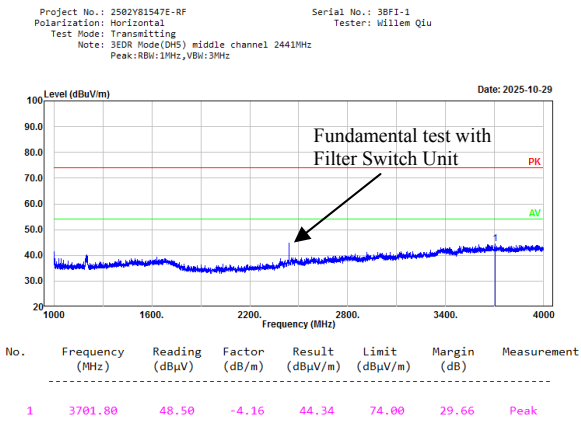
Test Data:

Please refer to the below plots.
After pre-scan in the X, Y and Z axes of orientation, the worst case is refer to plots.

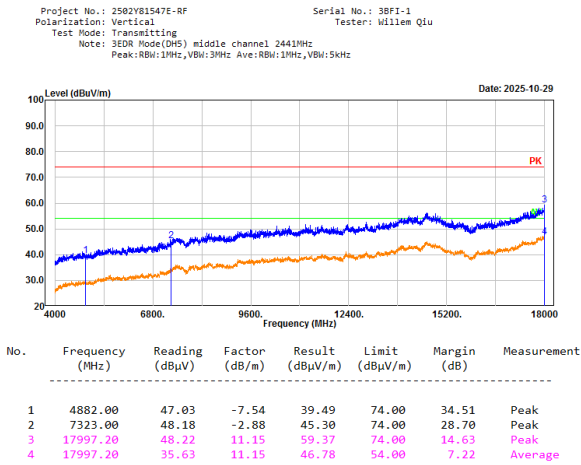
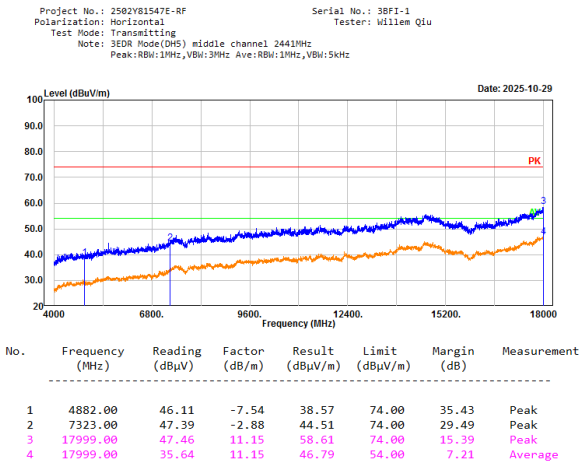
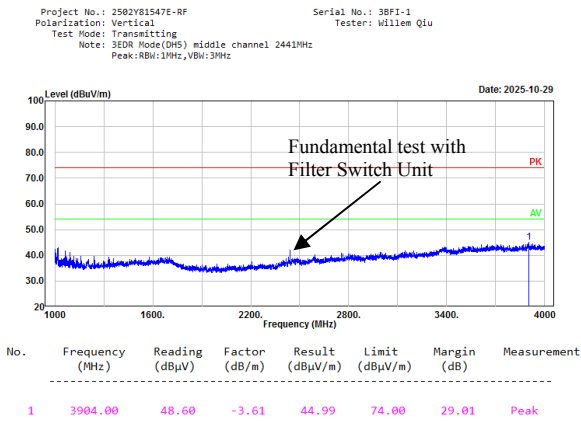
The maximum output power mode was tested.
1-18GHz:



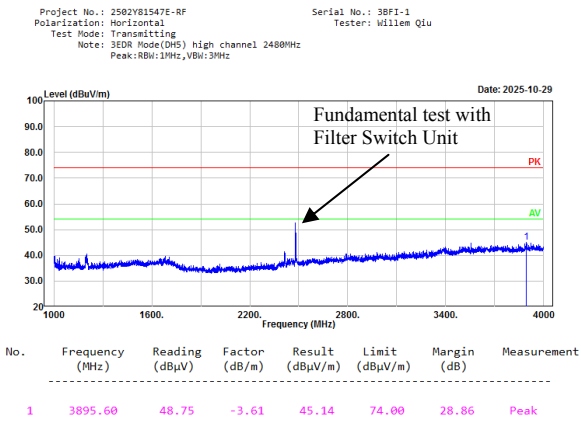
3EDR_DH5, Middle Channel, Horizontal



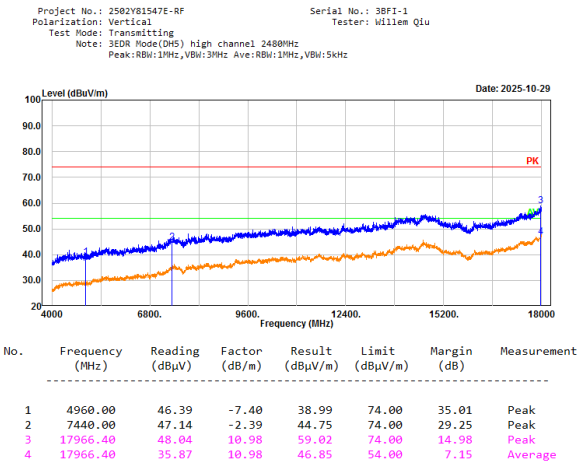
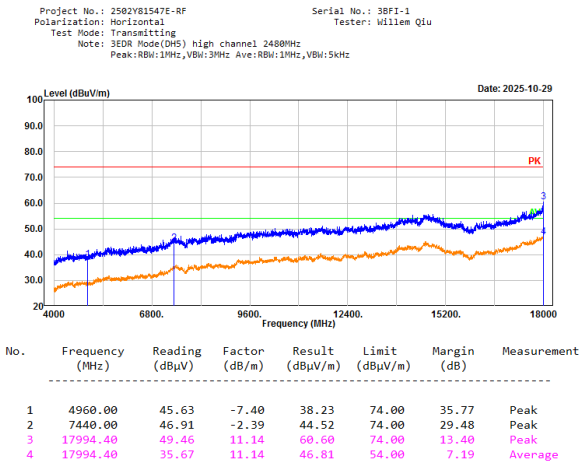
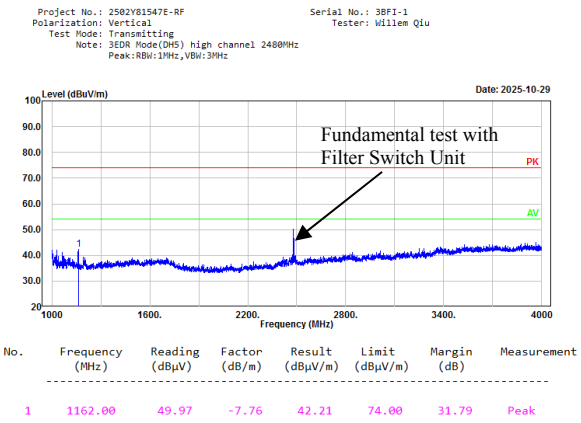
3EDR_DH5, Middle Channel, Vertical



3EDR_DH5, High Channel, Horizontal



3EDR_DH5, High Channel, Vertical



18-25GHz:
No Emission was detected in the range 18-25GHz, test was performed on the mode and channel which with the maximum power.

Project No.: 2502Y81547E-RF

Serial No.: 38F1-1

Polarization: Horizontal

Tester: Willem Qiu

Test Mode: Transmitting

Note: BT

Peak: RBW:1MHz, VBW:3MHz

Level (dBuV/m)

100

90.0

80.0

70.0

60.0

50.0

40.0

30.0

20

18000

19400

20800

22200

23600

25000

Frequency (MHz)

2025-10-29

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	19839.60	47.61	0.27	47.88	74.00	26.12	Peak

Project No.: 2502Y81547E-RF

Serial No.: 38F1-1

Polarization: Vertical

Tester: Willem Qiu

Test Mode: Transmitting

Note: BT

Peak: RBW:1MHz, VBW:3MHz

Level (dBuV/m)

100

90.0

80.0

70.0

60.0

50.0

40.0

30.0

20

18000

19400

20800

22200

23600

25000

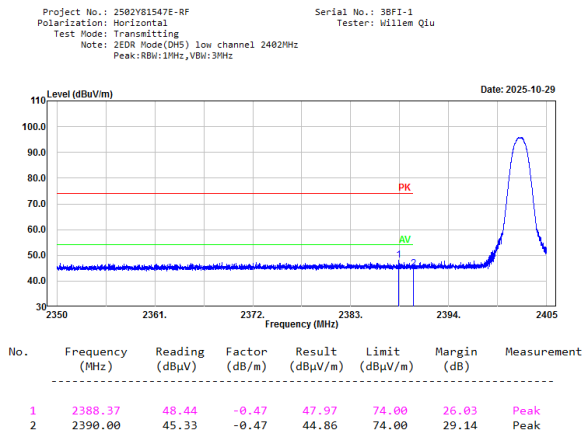
Frequency (MHz)

2025-10-29

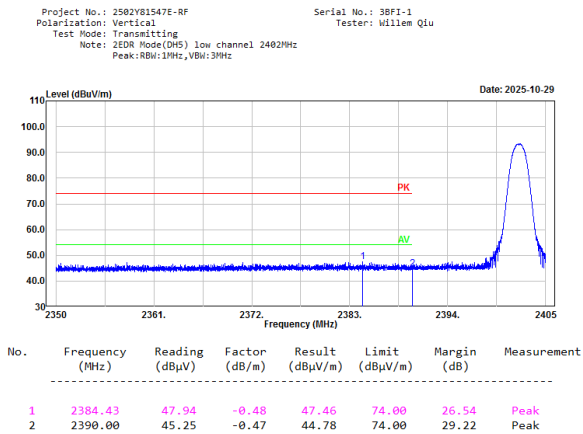
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	19866.20	48.05	0.20	48.25	74.00	25.75	Peak

Bandedge:

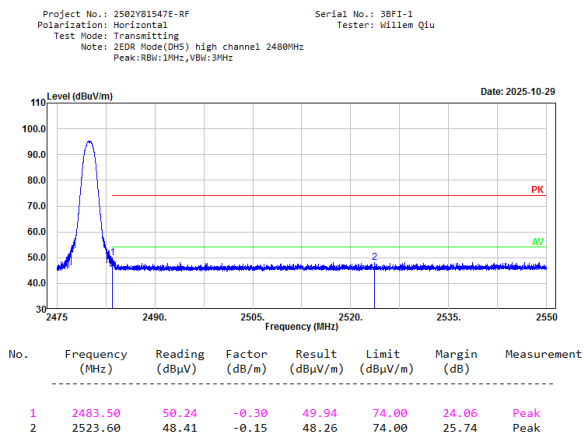
2EDR_DH5, Low Channel, Bandedge, Horizontal



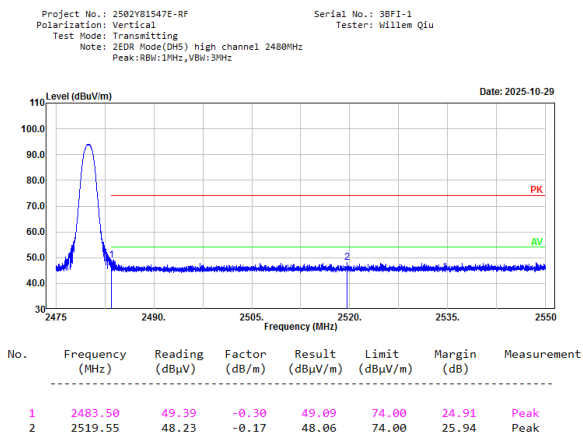
2EDR_DH5, Low Channel, Bandedge, Vertical



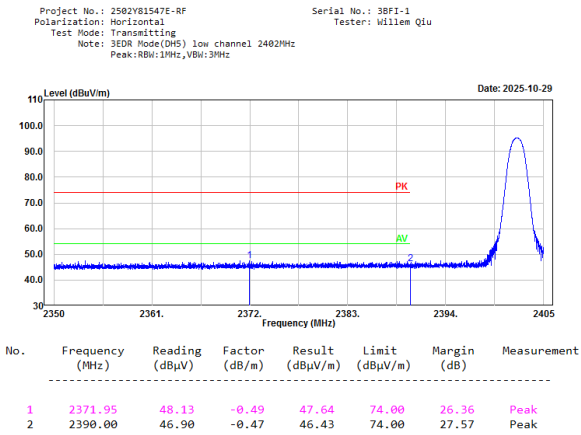
2EDR_DH5,, High Channel, Bandedge, Horizontal



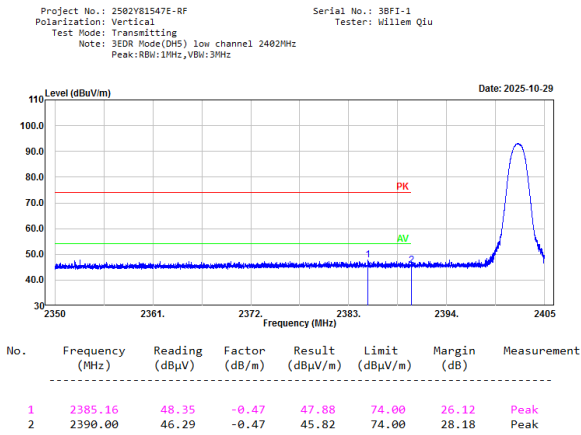
2EDR_DH5,, High Channel, Bandedge, Vertical



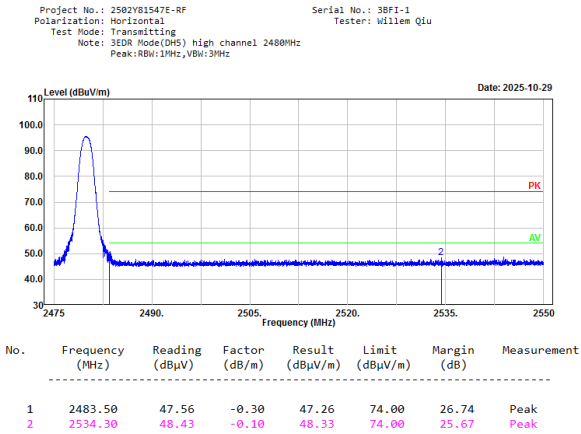
3EDR_DH5, Low Channel, Bandedge, Horizontal



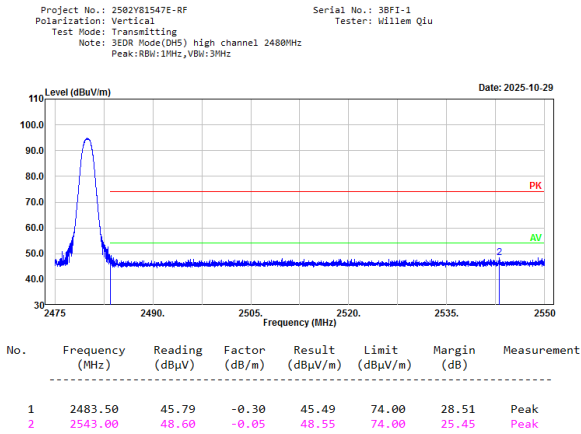
3EDR_DH5, Low Channel, Bandedge, Vertical



3EDR_DH5, High Channel, Bandedge, Horizontal



3EDR_DH5, High Channel, Bandedge, Vertical



5.3 Spot Check With Maximum Conducted Output Power

Test Information:

Serial No.:	3BFI-5	Test Date:	2025/10/27
Test Site:	RF	Test Mode:	Transmitting
Tester:	Conor Fu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C):	28.0	Relative Humidity: (%)	38	ATM Pressure: (kPa)	101.2
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Eastsheep	Coaxial Attenuator	5W-N-JK-6G-10dB	F-08-EM503	2025/06/06	2026/06/05
R&S	Spectrum Analyzer	FSV40	101589	2025/07/28	2026/07/27

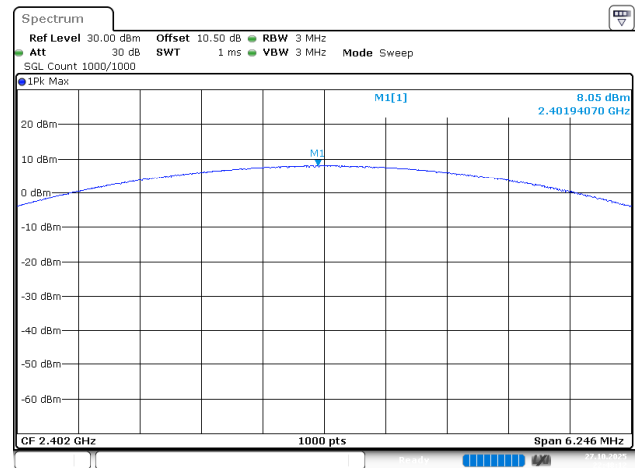
* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Mode	Test Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)	Verdict
3EDR_DH5	2402	8.05	21.00	Pass
	2441	9.34	21.00	Pass
	2480	9.48	21.00	Pass
Max.EIRP		6.11	36.00	Pass

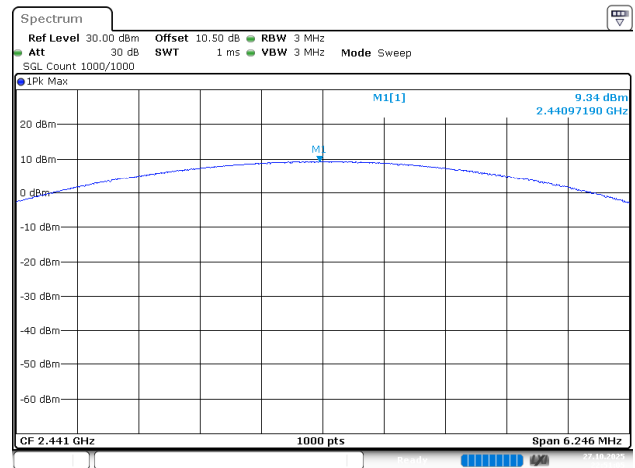
Note:
The Spot Check data were similar to the CIIPC report data.

3EDR_DH5_Low



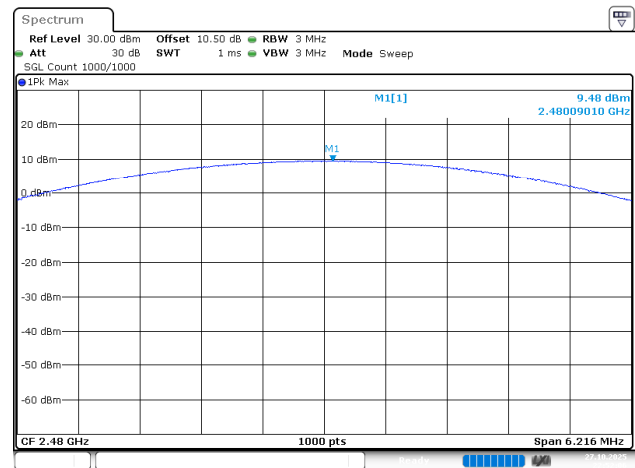
ProjectNo.:2502Y81547E-RF Tester:Conor Fu
Date: 27.OCT.2025 22:48:13

3EDR_DH_Middle



ProjectNo.:2502Y81547E-RF Tester:Conor Fu
Date: 27.OCT.2025 22:51:06

3EDR_DH5_High



ProjectNo.:2502Y81547E-RF Tester:Conor Fu
Date: 27.OCT.2025 22:52:06

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the attachment 2502Y81547E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2502Y81547E-RF-INP EUT INTERNAL PHOTOGRAPHS.

EXHIBIT B - TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2502Y81547E-RF-00A-TSP TEST SETUP PHOTOGRAPHS.

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