

FCC PART 15.407

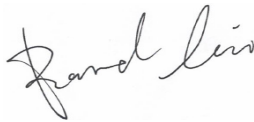
TEST REPORT

For

NURLMCH INC.

2F, NO.1, CHAOMA7THST., XITUN DIST, TAICHUNG CITY 407024, Taiwan

FCC ID: 2BOAG-ENPULSE-M2

Report Type: Original Report	Product Name: Wireless communication module
Report Number:	RSHA250304001-00B
Report Date:	2025-04-08
Reviewed By:	Bard Liu 
Approved By:	Kyle Xu 
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road, Kunshan, Jiangsu province, China Tel: +86-512-86175000 Fax: +86-512-88934268 www.baclcorp.com.cn

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Kunshan). This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, or any agency of the U.S. Government.

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RSHA250304001-00B	R1V1	2025-04-08	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	NURLMCH INC.	
Product Name:	Wireless communication module	
Tested Model:	ENPULSE M2	
Power Supply:	DC 12V	
RF Function:	SRD	
Operating Band/Frequency:	Band 1: 5180-5240 MHz; Band 4: 5745-5825 MHz	
Maximum Average Power:	Band 1: 16.52 dBm Band 4: 19.75 dBm	
Channel Number:	Band 1: 4; Band 4: 5	
Modulation Type:	BPSK	
Antenna Type:	FPC Antenna	
★Maximum Antenna Gain:	Antenna 1	Band 1: -1.61 dBi; Band 4: 0.39 dBi
	Antenna 2	Band 1: -1.61 dBi; Band 4: 0.39 dBi

Note: The maximum antenna gain was provided by the applicant.

All measurement and test data in this report was gathered from production sample serial number: RSHA250304001-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2025-03-04.)

Objective

This type approval report is prepared for *NURLMCH INC.* in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions' rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.209 and 15.407 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

Measurement Uncertainty

Item		Uncertainty
AC Power Lines Conducted Emissions		3.19 dB
RF conducted test with spectrum		0.9dB
RF Output Power with Power meter		0.5dB
Radiated emission	9 kHz~150 kHz	3.8dB
	150 kHz~30 MHz	3.4dB
	30MHz~1GHz	6.11dB
	1GHz~6GHz	4.45dB
	6GHz~18GHz	5.23dB
	18GHz~40GHz	5.65dB
Occupied Bandwidth		0.5kHz
Temperature		1.0°C
Humidity		6%

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu Province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) is accredited in accordance with ISO/IEC 17025:2017 by NVLAP (Lab code: 600338-0), and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No.: CN5055.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

Test channel list as below:

For **5180~5240 MHz** band, EUT was tested with Channel 1, 2 and 4.

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5180	3	5220
2	5200	4	5240

For **5745~5825 MHz** band, EUT was tested with Channel 1, 3 and 5.

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5745	4	5805
2	5765	5	5825
3	5785	/	/

Equipment Modifications

No modification was made to the EUT tested.

EUT Exercise Software

RF test tool: Putty

5180~5240 MHz band

Antenna	Mode	Channel	Frequency (MHz)	★Power Level
Antenna 1	SRD	Low	5180	48
		Middle	5200	48
		High	5240	48
Antenna 2	SRD	Low	5180	48
		Middle	5210	48
		High	5240	48

5745~5825 MHz band

Antenna	Mode	Channel	Frequency (MHz)	★Power Level
Antenna 1	SRD	Low	5745	64
		Middle	5785	64
		High	5825	64
Antenna 2	SRD	Low	5745	64
		Middle	5785	64
		High	5825	64

Note: 1. The power level was declared by the applicant.
 2. SISO and MIMO share same power level.

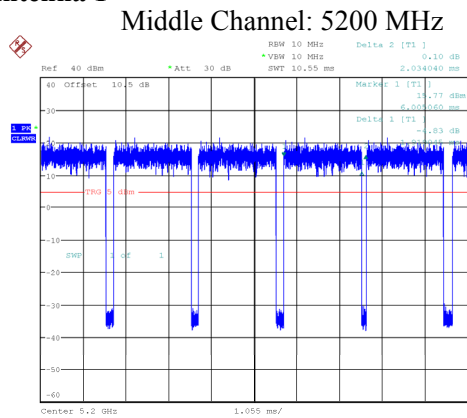
Environmental Conditions & Test Information

Test Date:	2025-03-17~2025-03-19
Temperature:	24.9-25.5 °C
Relative Humidity:	60-62 %
ATM Pressure:	100.2-101.3kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

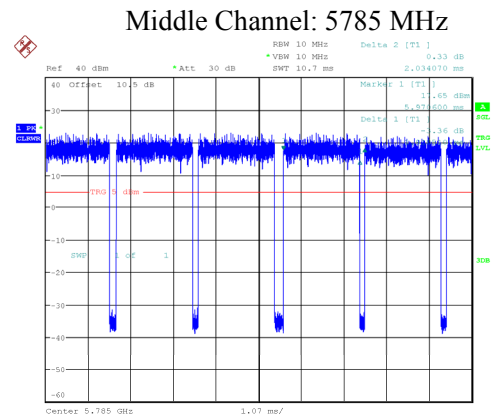
Antenna	Mode	Frequency (MHz)	Transmission Duration (ms)	Transmission Period	Duty Cycle (%)	Duty Cycle Factor (dB)
Antenna 1	SRD	5200	1.919	2.034	94.35	0.25
Antenna 2	SRD	5200	1.919	2.142	89.59	0.48

Antenna	Mode	Frequency (MHz)	Transmission Duration (ms)	Transmission Period	Duty Cycle (%)	Duty Cycle Factor (dB)
Antenna 1	SRD	5785	1.919	2.034	94.35	0.25
Antenna 2	SRD	5785	1.918	2.151	89.17	0.50

Duty Cycle: Antenna 1

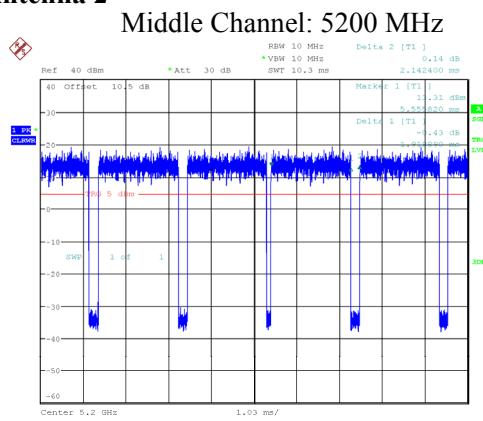


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Date: 17_MAR.2025 14:06:33

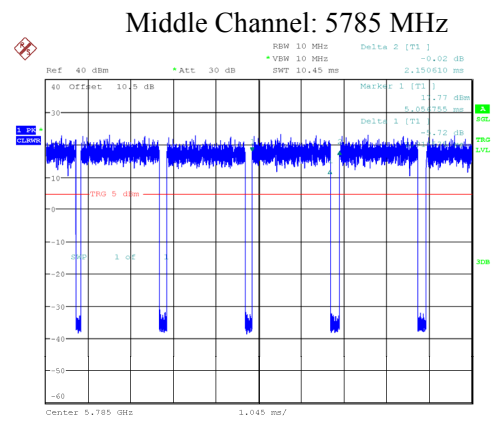


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Antenna 2



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17_MAR.2025 14:43:18



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19_MAR.2025 20:32:02

Note: Offset (10.5dB)= Attenuator(10dB)+Cable loss(0.5dB)

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

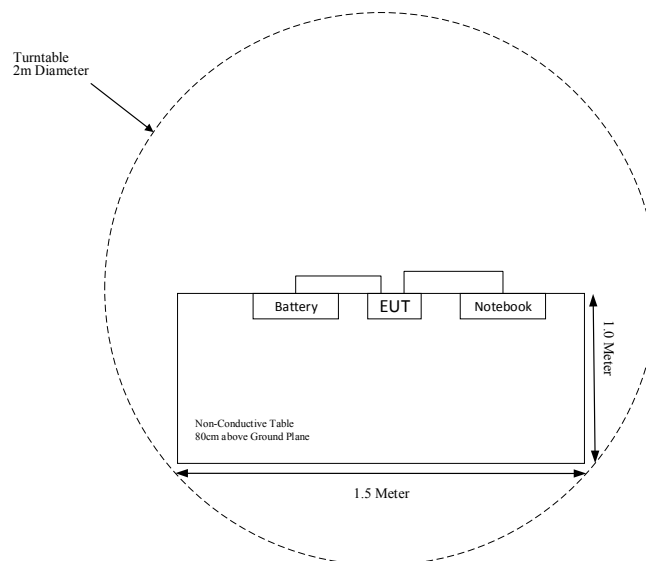
Manufacturer	Description	Model	Serial Number
DELL	Notebook	GX620	D65874152
SHEN ZHEN UNITEK TECHNOLOGY CO.,LTD.	Battery	21700-2S2P	/

External I/O Cable

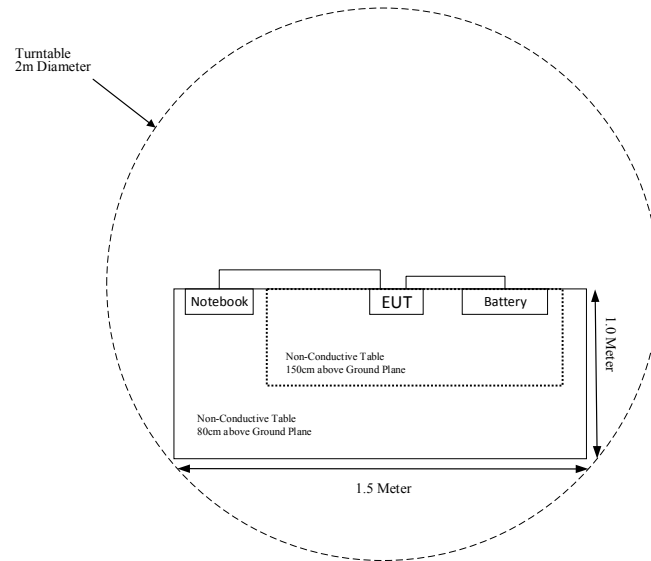
Cable Description	Length (m)	From Port	To Port
RJ45	1.0	EUT	Notebook
Power Cable	1.0	Battery	EUT

Block Diagram of Test Setup

For Radiated Emissions (Below 1GHz):



For Radiated Emissions (Above 1GHz):



TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test (Chamber #1)					
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2024-04-23	2025-04-22
Sunol Sciences	Broadband Antenna	JB3	A090314-1	2024-11-08	2027-11-07
Narda	6dB Attenuator	773-6	10690812-2-1	2024-11-08	2027-11-07
BACL	Active Loop Antenna	1313-1A	4041511	2024-11-22	2027-11-21
Sonoma Instrument	Pre-amplifier	310N	171205	2024-04-23	2025-04-22
Rohde & Schwarz	Auto Test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-8	008	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-9	009	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-10	010	2024-04-23	2025-04-22
Radiated Emission Test (Chamber #2)					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2024-04-25	2025-04-24
ETS-LINDGREN	Horn Antenna	3115	9207-3900	2024-11-03	2027-11-02
ETS-LINDGREN	Horn Antenna	3116	2516	2024-01-06	2025-01-05
A.H.Systems, inc	Amplifier	PAM-0118P	512	2024-04-25	2025-04-24
SELECTOR	Amplifier	EM18G40G	060726	2024-04-25	2025-04-24
MICRO-TRONICS	Band Reject Filter	BRM50716	G059	2024-05-23	2025-05-22
Narda	Attenuator	10dB	010	2024-04-23	2025-04-22
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-11	011	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-12	012	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-13	013	2024-04-25	2025-04-24
RF Conducted Test					
Rohde & Schwarz	Signal Analyzer	FSU26	200103	2024-04-24	2025-04-23
Narda	Attenuator	10 dB	011	2024-04-23	2025-04-22
Anritsu	Power Sensor	MA24418A	12621	2024-04-23	2025-04-22
XHFDZ	RG178 Coaxial Cable	SMA-178	XHF-1102	Each time	N/A

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

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1310 & §2.1091	Maximum Permissible Exposure (MPE)	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 & §15.407(b) (9)	AC Power Line Conducted Emissions	Not Applicable (See Note)
§ 15.205 & §15.209 & §15.407(b)	Undesirable Emission & Restricted Bands	Compliant
§§15.407(a) & §15.407(e)	Emission Bandwidth	Compliant
§15.407(a)	Conducted Transmitter Output Power	Compliant
§15.407(a)	Power Spectral Density	Compliant

Note: EUT is powered by a battery that is not connected to an AC power cord.

FCC §1.1310 & §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart §2.1091 and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm²)	Averaging Time (minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

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

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculated Formulary

Predication of MPE limit at a given distance

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Calculated Data:

Mode	Frequency Range (MHz)	Antenna Gain		★Tune-up Output Power		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
5.2G SRD	5180-5240	-1.61	0.69	17	50.12	20	0.0069	1.0
5.8G SRD	5745-5825	0.39	1.09	20	100.00	20	0.0218	1.0

Note:

1. For the above tune up power were declared by the manufacturer.
2. 5.2G SRD and 5.8G SRD cannot transmit simultaneously.

Result: The device meet FCC MPE at 20 cm distance.

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- Antenna must be permanently attached to the unit.
- Antenna must use a unique type of connector to attach to the EUT.
- Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.407, if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

Antenna use a unique type of connector to attach to the EUT. fulfill the requirement of this section. Please refer to the EUT photos.

Antenna	Antenna Type	Frequency Range	Max. Antenna Gain	Input impedance
1	FPC antenna	5180-5240 MHz	-1.61 dBi	50Ω
		5745~5825 MHz	0.39 dBi	
2	FPC antenna	5180-5240 MHz	-1.61 dBi	50Ω
		5745~5825 MHz	0.39 dBi	

Result: Compliant.

§15.205 & §15.209 & §15.407(B) – UNDESIRABLE EMISSION & RESTRICTED BANDS

Applicable Standard

FCC §15.407 (b); §15.209; §15.205;

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of - 27 dBm/MHz.

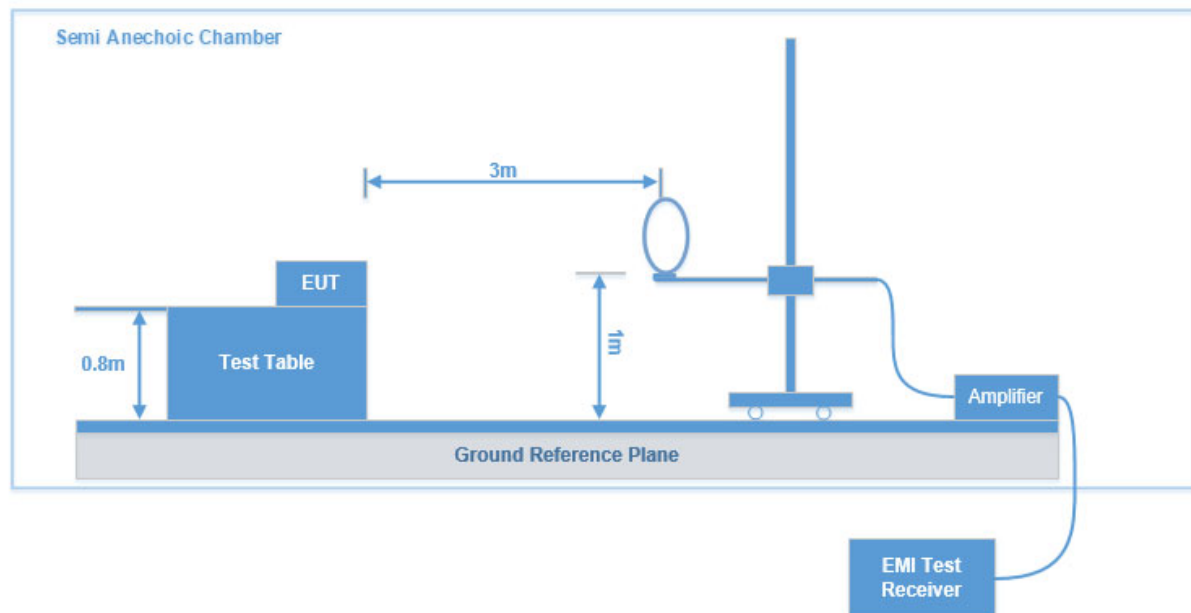
For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of – 27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

As per FCC §15.35(d): Unless otherwise specified, on any frequency or frequencies above 1000MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000MHz shall be performed using a minimum resolution bandwidth of 1MHz.

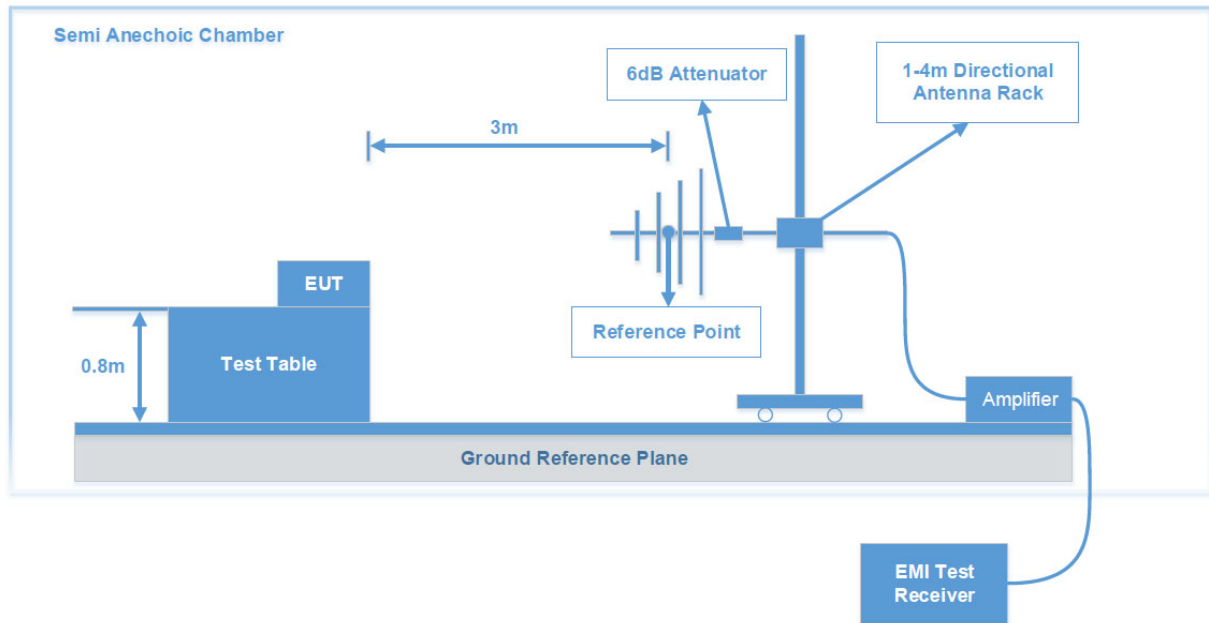
According to 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: $E \text{ [dB}\mu\text{V/m]} = \text{EIRP [dBm]} + 95.2$, for $d = 3$ meters.

Test System Setup

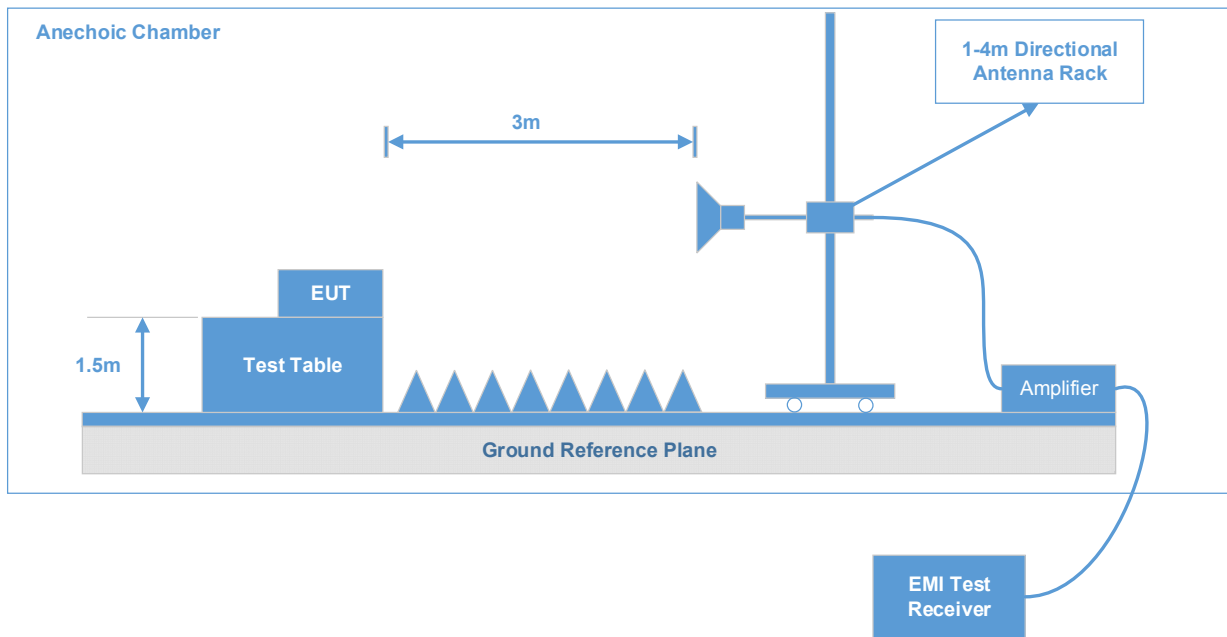
9 kHz - 30 MHz:

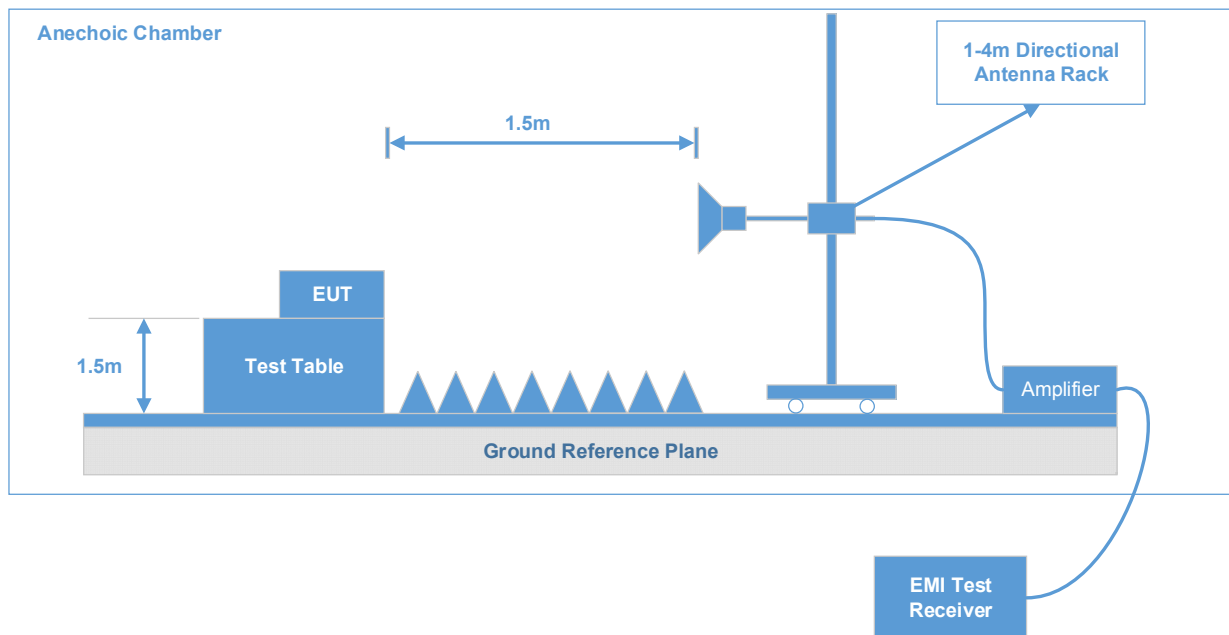


30 MHz - 1 GHz:



1 GHz - 18 GHz:



18 GHz - 40 GHz:

The radiated emission tests were performed in the 3 meters test site for below 18GHz and 1.5m for 18-40 GHz, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209 and FCC 15.407 limits. The limit at 1.5m for 18-40 GHz is 80dB μ V/m (Peak) and 60dB μ V/m (Average)

The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209 and FCC 15.407 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.

EMI Test Receiver & Spectrum Analyzer Setup

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

Frequency Range	RBW	VBW	IF B/W	Measurement
9 kHz - 150 kHz	200 Hz	1 kHz	200 Hz	QP/Average
150 kHz - 30 MHz	9 kHz	30 kHz	9 kHz	QP/ Average
30 MHz - 1000 MHz	100 kHz	300 kHz	/	Peak
	/	/	120 kHz	QP
Above 1GHz	1MHz	3 MHz	/	Peak
	1MHz	3 MHz	/	Average

For 9 kHz-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.

Test Procedure

During the radiated emission test, the adapter was connected to AC floor outlet. Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

If the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 6 dB below the QP emission limit, there's no need to record the measured QP level of the emissions in the report.

Corrected Amplitude & Margin Calculation

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

Corrected Amplitude (dBμV/m) = Meter Reading (dBμV) + Corrected factor (dB/m)

Corrected factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

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

Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Note: The QuasiPeak (dBμV/m), MaxPeak (dBμV/m), Average (dBμV/m) which shown in the data table are all Corrected Amplitude.

Test Data: See Appendix

FCC §15.407(a) & §15.407(e)–EMISSION BANDWIDTH

Applicable Standard

The maximum power spectral density 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. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz band is made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure**1. Emission Bandwidth (EBW)**

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

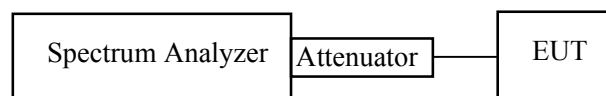
- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3. Occupied bandwidth

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW}/\text{RBW})]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.

- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).



Note: Offset (10.5dB) = Attenuator(10dB) + Cable loss(0.5dB)

Test Data: See Appendix

FCC §15.407(a) – CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

According to §15.407(a)(1)

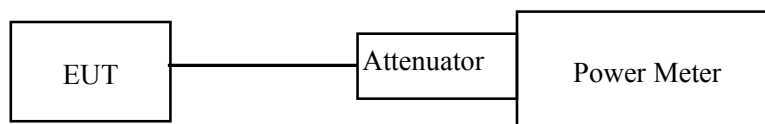
For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

According to §15.407(a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
3. Add a correction factor to the display.



Test Data: See Appendix

FCC §15.407(a) - POWER SPECTRAL DENSITY

Applicable Standard

According to §15.407(a) (1)

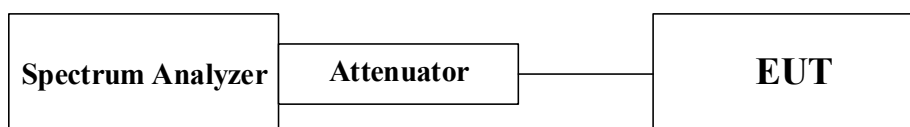
For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

According to §15.407(a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

The measurements are based on C63.10:2013 and method SA-2 used



Note: Offset (10.5dB) = Attenuator(10dB)+Cable loss(0.5dB)

Test Data: See Appendix

EUT PHOTOGRAPHS

Please refer to the attachment EXHIBIT A - EUT EXTERNAL PHOTOGRAPHS and EXHIBIT B - EUT INTERNAL PHOTOGRAPHS.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment EUT C - TEST SETUP PHOTOGRAPHS.

APPENDIX - TEST DATA

Transmitter Unwanted Emissions & Restricted frequency bands

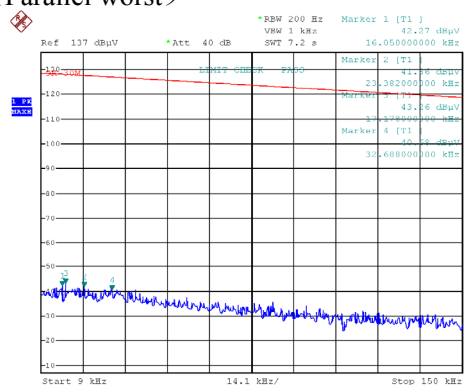
Environmental Conditions & Test Information

Test Date:	2025-03-12~2025-03-17
Temperature:	16.7-25.5 °C
Relative Humidity:	56-60 %
ATM Pressure:	100.2-101.6kPa
Test Result:	Pass
Test Engineer:	Jerry Yan/ Destine Hu/ Hugh Wu

EUT operation mode: Transmitting

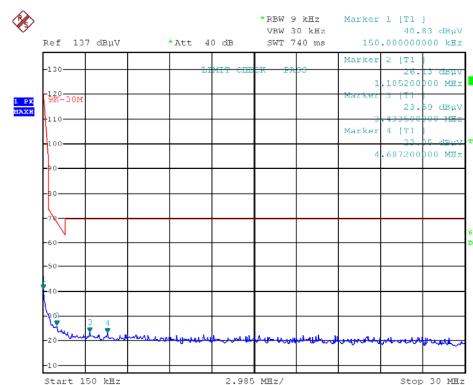
After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

9 kHz - 30 MHz: (Transmitting in maximum output power 5745-5825MHz Band Antenna 1+Antenna 2 high channel)
(Parallel worst)



Project No. RSHA250304001
Date: 17.MAR.2025 19:30:42

Tester: Jerry Yan



Project No. RSHA250304001
Date: 17.MAR.2025 19:36:00

Tester: Jerry Yan

9 kHz - 150 kHz

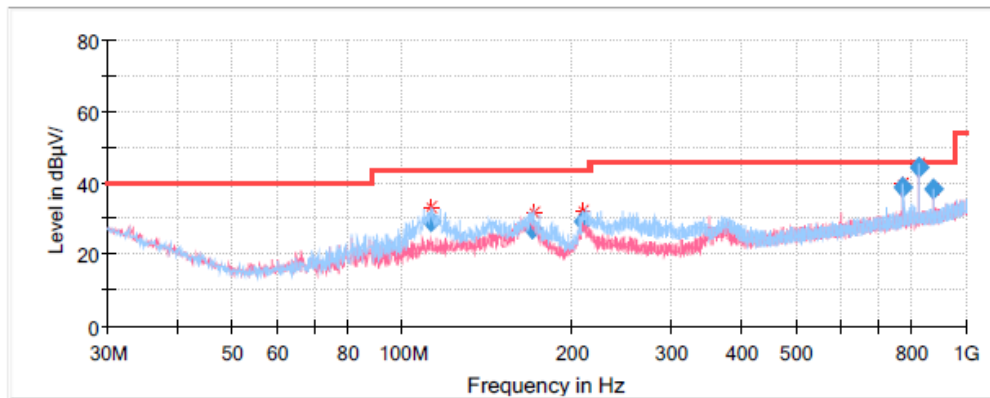
Frequency (kHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
16.05	42.27	PK	-0.54	123.50	81.23
17.18	43.26	PK	-0.55	122.90	79.64
23.38	41.86	PK	-0.58	120.23	78.37
32.69	40.68	PK	-1.04	117.32	76.64

150 kHz - 30 MHz

Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.15	40.83	PK	-11.34	104.08	63.25
1.11	26.13	PK	-27.97	66.70	40.57
3.43	23.59	PK	-31.97	69.54	45.95
4.69	23.05	PK	-33.17	69.54	46.49

30MHz - 1GHz (5180-5240MHz Band): Antenna 1+Antenna 2 (worst case)**Low Channel: 5180 MHz****Common Information**

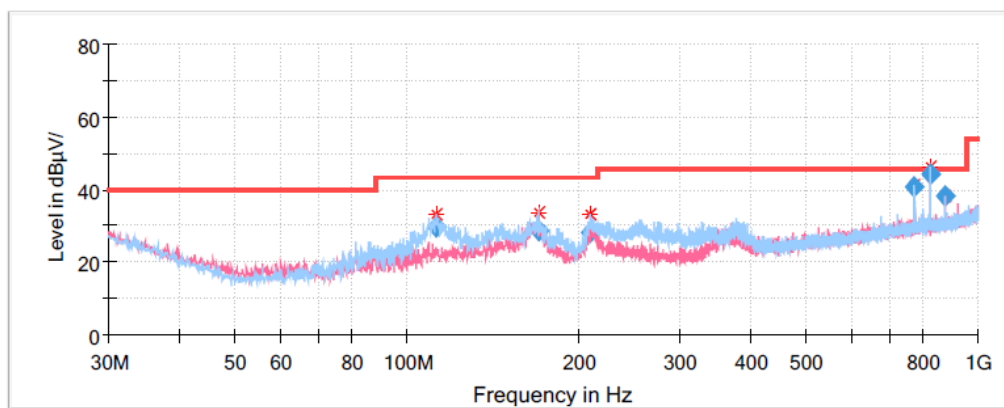
Project No:	RSHA250304001
EUT Model:	ENPULSE M2
Test Mode:	transmitting
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Receiver Setting:	RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature:	16.7°C
Humidity:	56%
Barometric Pressure:	101.6kPa
Test Engineer:	Jerry Yan
Test Date:	2025/3/12

**Final Result**

Frequency (MHz)	QuasiPeak (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
112.817745	29.08	43.50	14.42	H	-12.2
170.544200	27.07	43.50	16.43	H	-12.6
209.714600	29.07	43.50	14.43	H	-12.7
775.018550	38.53	46.00	7.47	H	-1.2
825.002050	44.42	46.00	1.58	H	-0.6
875.016200	38.33	46.00	7.67	H	-0.1

Middle Channel: 5200 MHz**Common Information**

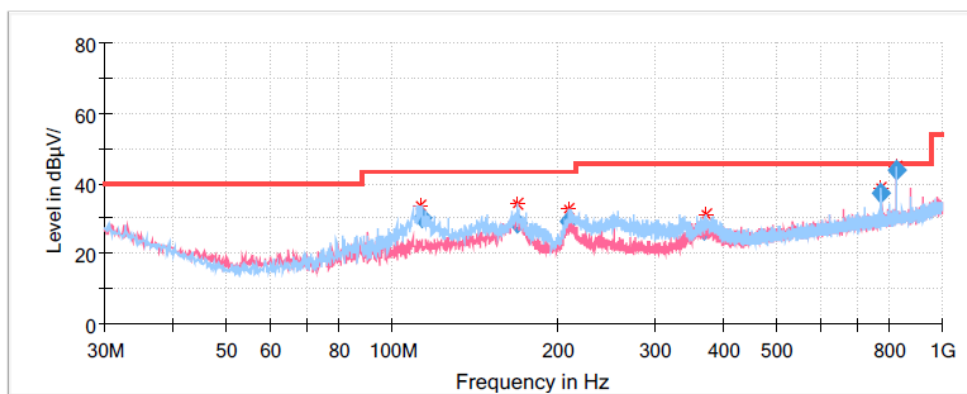
Project No:	RSHA250304001
EUT Model:	ENPULSE M2
Test Mode:	transmitting
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Receiver Setting:	RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature:	16.7°C
Humidity:	56%
Barometric Pressure:	101.6 kPa
Test Engineer:	Jerry Yan
Test Date:	2025/3/12

**Final Result**

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
112.240000	29.88	43.50	13.62	H	-12.3
169.772900	28.87	43.50	14.63	H	-12.5
209.362700	28.23	43.50	15.27	H	-12.7
775.009250	40.57	46.00	5.43	H	-1.2
825.008050	44.25	46.00	1.75	H	-0.6
875.017400	38.44	46.00	7.56	H	-0.1

High Channel: 5240 MHz**Common Information**

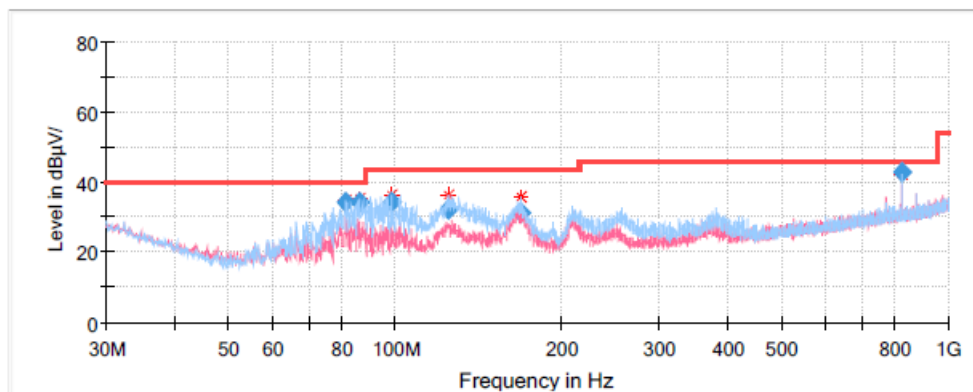
Project No: RSHA250304001
EUT Model: ENPULSE M2
Test Mode: transmitting
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESCI, JB3, 310N
Receiver Setting:
Temperature: RBW:100 kHz, VBW: 300 kHz, Sweep Time: Auto
Humidity: 16.7 °C
Barometric Pressure: 56%
Test Engineer: 101.6 kPa
Test Date: Jerry Yan
2025/3/12

**Final Result**

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
113.124400	29.98	43.50	13.52	H	-12.1
168.845200	28.81	43.50	14.69	H	-12.5
209.755650	29.34	43.50	14.16	H	-12.7
370.459650	26.77	46.00	19.23	H	-8.7
774.996050	37.04	46.00	8.96	H	-1.2
825.003850	43.71	46.00	2.29	H	-0.6

30MHz - 1GHz (5745-5825MHz Band): Antenna 1+Antenna 2 (worst case)**Low Channel: 5745 MHz****Common Information**

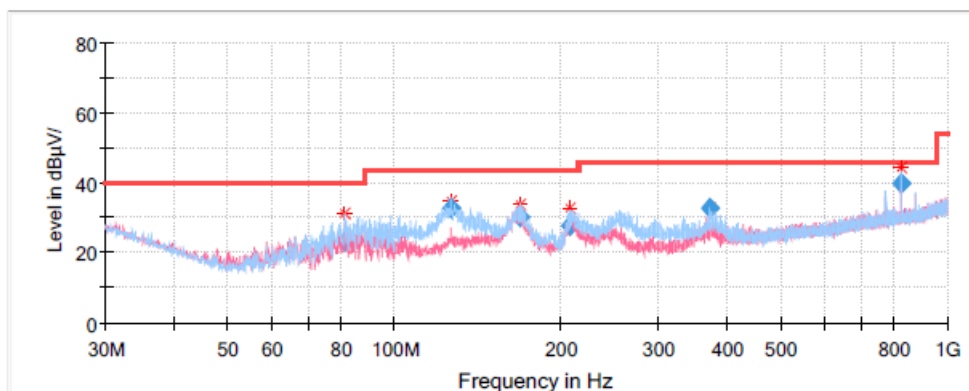
Project No: RSHA250304001
 EUT Model: ENPULSE M2
 Test Mode: transmitting
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Equipment: ESCI, JB3, 310N
 Receiver Setting: RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
 Temperature: 16.7°C
 Humidity: 56%
 Barometric Pressure: 101.6kPa
 Test Engineer: Jerry Yan
 Test Date: 2025/3/12

**Final Result**

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
81.502950	34.16	40.00	5.84	H	-17.1
86.043600	34.06	40.00	5.94	H	-17.0
98.426150	34.42	43.50	9.08	H	-14.7
124.248850	32.09	43.50	11.41	H	-10.9
168.414800	31.00	43.50	12.50	H	-12.4
825.016150	42.95	46.00	3.05	H	-0.6

Middle Channel: 5785 MHz**Common Information**

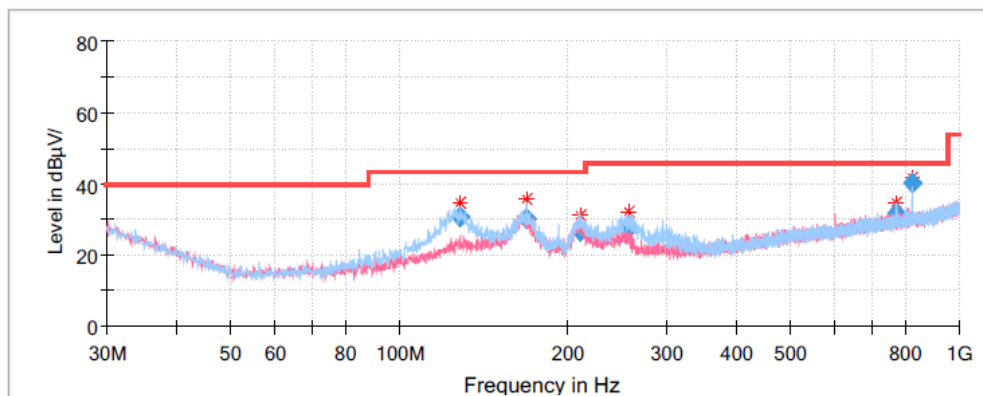
Project No: RSHA250304001
 EUT Model: ENPULSE M2
 Test Mode: transmitting
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Equipment: ESCI, JB3, 310N
 Receiver Setting: RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
 Temperature: 16.7°C
 Humidity: 56%
 Barometric Pressure: 101.6kPa
 Test Engineer: Jerry Yan
 Test Date: 2025/3/12

**Final Result**

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
81.199300	22.97	40.00	17.03	H	-17.1
126.656050	32.93	43.50	10.57	H	-11.0
168.857150	30.05	43.50	13.45	H	-12.5
207.535200	27.47	43.50	16.03	H	-12.5
370.625800	32.65	46.00	13.35	H	-8.7
825.008050	39.73	46.00	6.27	H	-0.6

High Channel: 5825 MHz**Common Information**

Project No: RSHA250304001
EUT Model: ENPULSE M2
Test Mode: transmitting
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESCI, JB3, 310N
Receiver Setting: RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature: 16.7°C
Humidity: 56%
Barometric Pressure: 101.6 kPa
Test Engineer: Jerry Yan
Test Date: 2025/3/12

**Final Result**

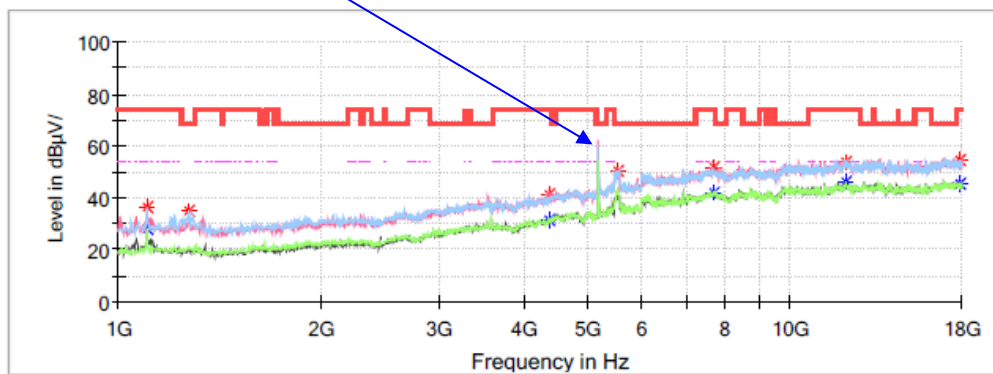
Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
128.488100	30.64	43.50	12.86	H	-11.0
168.406100	30.12	43.50	13.38	H	-12.4
210.361400	26.76	43.50	16.74	H	-12.7
256.364100	27.47	46.00	18.53	H	-12.0
775.018850	31.92	46.00	14.08	H	-1.2
825.012900	40.40	46.00	5.60	H	-0.6

1GHz - 18GHz (5180-5240MHz Band):**Antenna 1+Antenna 2 SRD****Low Channel: 5180 MHz****Common Information**

Project No.: RSHA250304001
Test Mode: transmitting
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Test Engineer: Destine Hu

Fundamental Test with Band Reject Filter

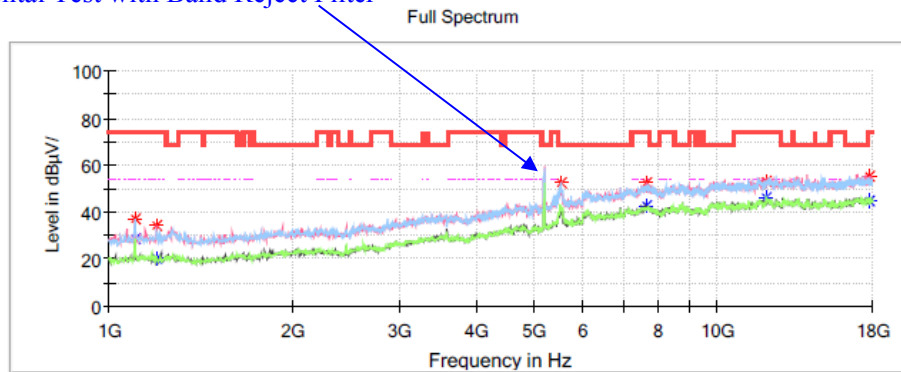
Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1102.000000	---	27.80	54.00	26.20	H	-15.3
1102.000000	36.19	---	74.00	37.81	H	-15.3
1275.400000	34.77	---	68.20	33.43	H	-15.1
4389.800000	---	31.71	54.00	22.29	V	-4.6
4389.800000	41.60	---	74.00	32.40	V	-4.6
5532.200000	50.50	---	68.20	17.70	H	-0.3
7691.200000	---	42.11	54.00	11.89	V	3.9
7691.200000	51.94	---	74.00	22.06	V	3.9
12087.400000	---	45.84	54.00	8.16	H	9.1
12087.400000	53.87	---	74.00	20.13	H	9.1
17935.400000	---	45.36	54.00	8.64	V	11.9
17935.400000	54.53	---	74.00	19.47	V	11.9

Middle Channel: 5200 MHz**Common Information**

Project No.: RSHA250304001
 Test Mode: transmitting
 Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
 Test Engineer: Destine Hu

Fundamental Test with Band Reject Filter**Critical_Freqs**

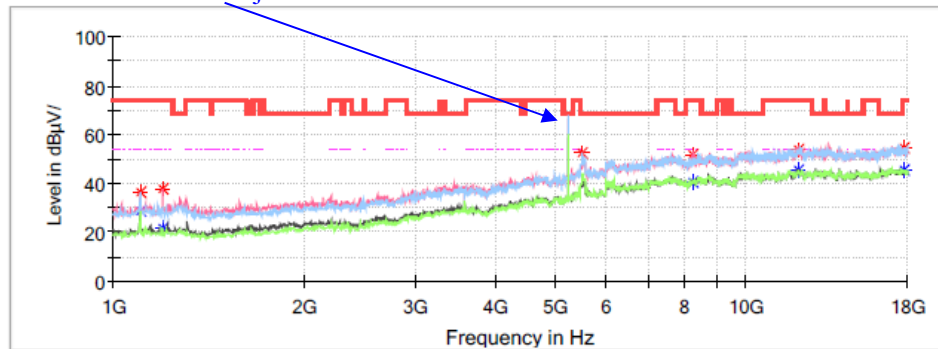
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1102.000000	---	28.75	54.00	25.25	H	-15.3
1102.000000	36.97	---	74.00	37.03	H	-15.3
1197.200000	---	20.19	54.00	33.81	V	-15.2
1197.200000	34.44	---	74.00	39.56	V	-15.2
5545.800000	52.35	---	68.20	15.85	H	-0.3
7657.200000	---	42.38	54.00	11.62	V	3.9
7657.200000	52.20	---	74.00	21.80	V	3.9
12063.600000	53.47	---	74.00	20.53	H	9.1
12063.600000	---	45.82	54.00	8.18	H	9.1
17813.000000	---	44.55	54.00	9.45	V	11.8
17813.000000	55.23	---	74.00	18.77	V	11.8

High Channel: 5240 MHz**Common Information**

Project No.: RSHA250304001
 Test Mode: transmitting
 Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
 Test Engineer: Destine Hu

Fundamental Test with Band Reject Filter

Full Spectrum

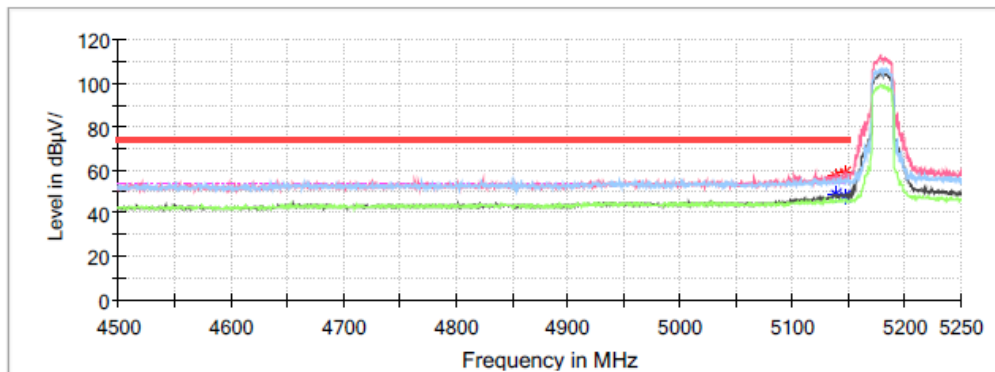
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1102.000000	36.69	---	74.00	37.31	H	-15.3
1102.000000	---	29.01	54.00	24.99	H	-15.3
1197.200000	37.80	---	74.00	36.20	V	-15.2
1197.200000	---	21.52	54.00	32.48	V	-15.2
5511.800000	52.21	---	68.20	15.99	H	-0.3
8214.800000	---	40.52	54.00	13.48	V	4.6
8214.800000	51.92	---	74.00	22.08	V	4.6
12121.400000	---	45.72	54.00	8.28	H	9.1
12121.400000	54.04	---	74.00	19.96	H	9.1
17813.000000	---	45.27	54.00	8.73	H	11.8
17813.000000	54.65	---	74.00	19.35	H	11.8

Band Edge:**Low Channel****Common Information**

Project No.: RSHA250304001
Test Mode: transmitting
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Test Engineer: Destine Hu

Full Spectrum

**Critical Freqs**

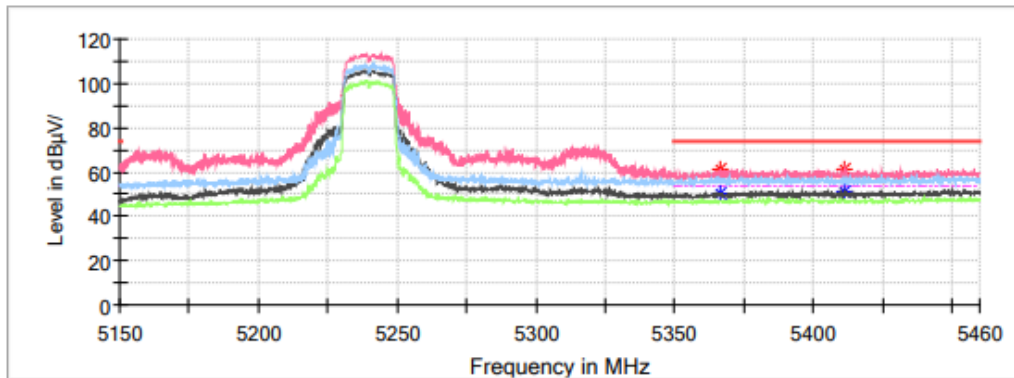
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5138.700000	---	48.78	54.00	5.22	V	8.2
5138.700000	56.82	---	74.00	17.18	V	8.2
5147.100000	---	47.99	54.00	6.01	V	8.2
5147.100000	58.54	---	74.00	15.46	V	8.2

High Channel

Common Information

Project No.: RSHA250304001
Test Mode: transmitting
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Test Engineer: Destine Hu

Full Spectrum



Critical Freqs

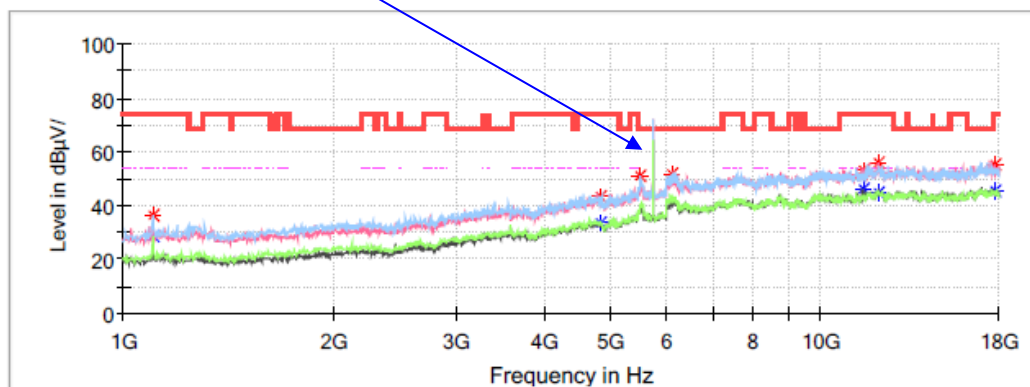
Frequency (MHz)	MaxPeak (dB μV/m)	Average (dB μV/m)	Limit (dB μV/m)	Margin (dB)	Pol	Corr. (dB/m)
5366.628000	---	50.05	54.00	3.95	V	8.8
5366.628000	61.65	---	74.00	12.35	V	8.8
5410.896000	---	50.80	54.00	3.20	V	8.9
5410.896000	61.49	---	74.00	12.51	V	8.9

1GHz - 18GHz (5745-5825MHz Band):**Antenna 1+Antenna 2 SRD****Low Channel: 5745 MHz****Common Information**

Project No.: RSHA250304001
Test Mode: transmitting
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Test Engineer: Destine Hu

Fundamental Test with Band Reject Filter

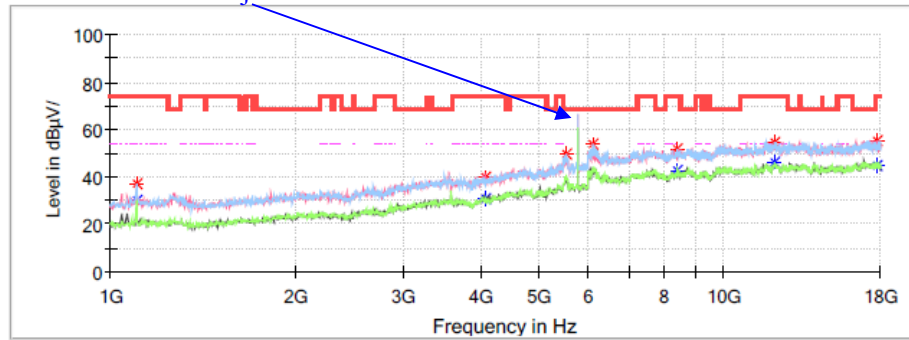
Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1102.000000	36.41	---	74.00	37.59	H	-15.3
1102.000000	---	28.68	54.00	25.32	H	-15.3
4835.200000	---	33.54	54.00	20.46	V	-3.0
4835.200000	43.46	---	74.00	30.54	V	-3.0
5511.800000	50.78	---	68.20	17.42	H	-0.3
6120.400000	52.03	---	68.20	16.17	H	0.1
11495.800000	---	46.29	54.00	7.71	V	8.8
11495.800000	53.21	---	74.00	20.79	V	8.8
12067.000000	---	44.86	54.00	9.14	H	9.1
12067.000000	55.71	---	74.00	18.29	H	9.1
17768.800000	---	45.49	54.00	8.51	V	11.8
17768.800000	54.92	---	74.00	19.08	V	11.8

Middle Channel: 5785 MHz**Common Information**

Project No.: RSHA250304001
Test Mode: transmitting
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Test Engineer: Destine Hu

Fundamental Test with Band Reject Filter Full Spectrum**Critical Freqs**

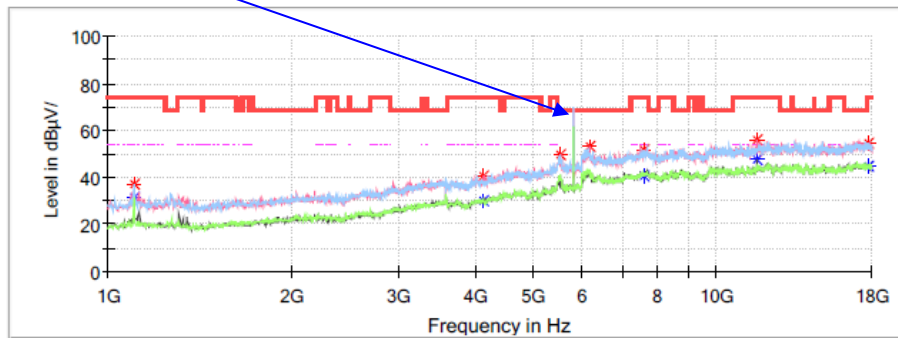
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1102.000000	37.10	---	74.00	36.90	H	-15.3
1102.000000	---	30.03	54.00	23.97	H	-15.3
4097.400000	---	30.72	54.00	23.28	V	-5.6
4097.400000	40.11	---	74.00	33.89	V	-5.6
5552.600000	49.37	---	68.20	18.83	H	-0.3
6127.200000	53.72	---	68.20	14.48	H	0.1
8405.200000	---	42.31	54.00	11.69	V	5.1
8405.200000	51.77	---	74.00	22.23	V	5.1
12087.400000	---	45.81	54.00	8.19	H	9.1
12087.400000	54.33	---	74.00	19.67	H	9.1
17813.000000	54.90	---	74.00	19.10	V	11.8
17813.000000	---	44.73	54.00	9.27	V	11.8

High Channel: 5825 MHz**Common Information**

Project No.:	RSHA250304001
Test Mode:	transmitting
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Receiver Setting:	RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Test Engineer:	Destine Hu

Fundamental Test with Band Reject Filter

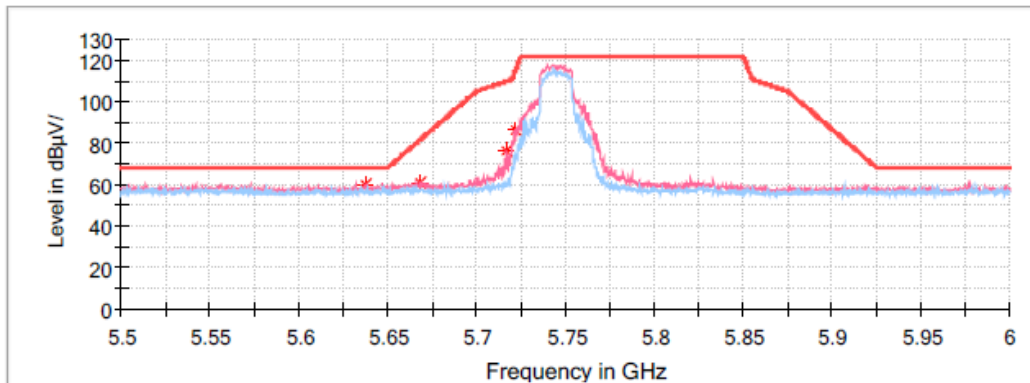
Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1102.000000	---	31.23	54.00	22.77	H	-15.3
1102.000000	37.15	---	74.00	36.85	H	-15.3
4141.600000	---	30.33	54.00	23.67	V	-5.4
4141.600000	40.41	---	74.00	33.59	V	-5.4
5528.800000	49.56	---	68.20	18.64	H	-0.3
6181.600000	53.08	---	68.20	15.12	H	0.2
7616.400000	---	40.81	54.00	13.19	V	3.9
7616.400000	51.53	---	74.00	22.47	V	3.9
11648.800000	56.08	---	74.00	17.92	V	8.9
11648.800000	---	47.39	54.00	6.61	V	8.9
17765.400000	---	44.97	54.00	9.03	H	11.8
17765.400000	54.58	---	74.00	19.42	H	11.8

Band Edge:**Low Channel****Common Information**

Project No.: RSHA250304001
Test Mode: transmitting
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Test Engineer: Destine Hu

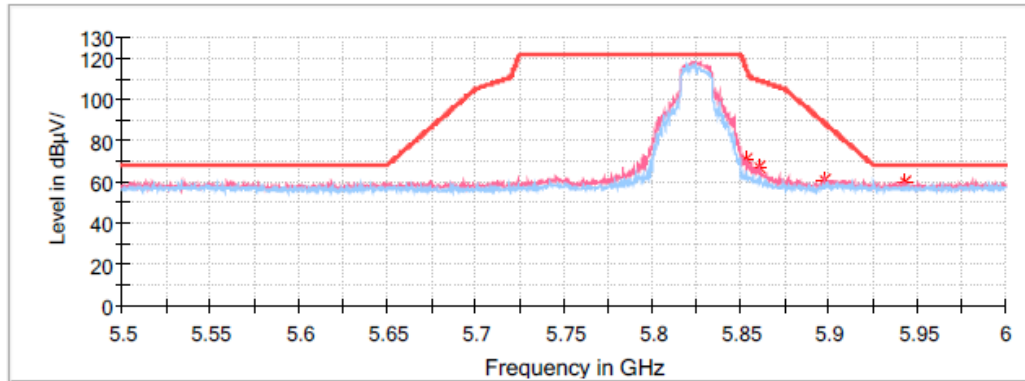
Full Spectrum**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5637.800000	59.80	---	68.20	8.40	V	9.0
5668.600000	60.90	---	81.96	21.06	V	8.9
5716.600000	76.25	---	109.85	33.60	V	8.9
5721.600000	86.36	---	114.45	28.09	V	8.9

High Channel**Common Information**

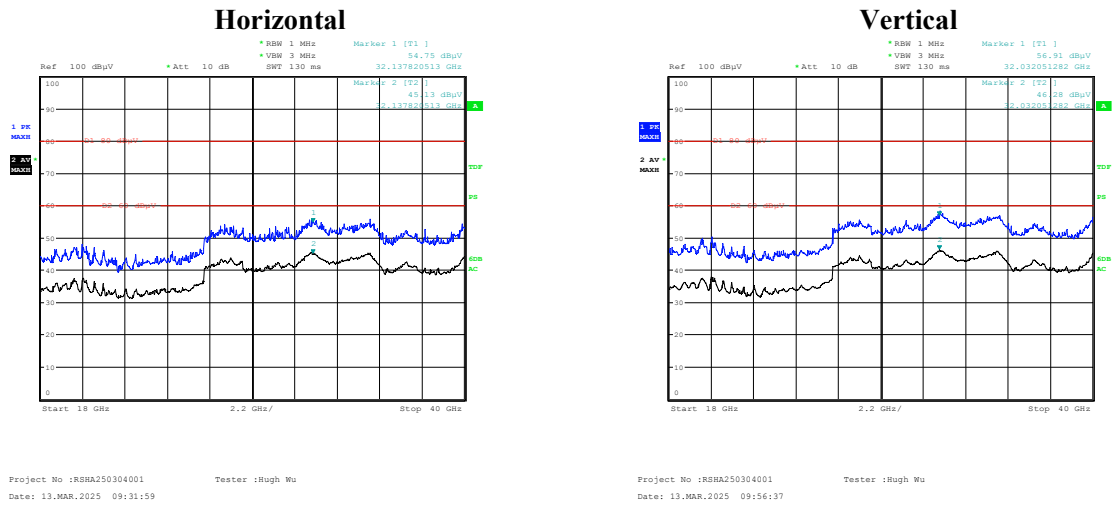
Project No.: RSHA250304001
Test Mode: transmitting
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Test Engineer: Destine Hu

Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5852.800000	70.85	---	115.82	44.96	V	8.7
5860.200000	67.20	---	109.34	42.15	V	8.7
5897.800000	60.71	---	88.33	27.62	V	8.7
5942.600000	60.40	---	68.20	7.80	V	8.6

18GHz-40GHz: 5745-5825 MHz Antenna 1+Antenna 2 SRD High channel



Note: The test distance is 1.5m. The limit is 80dBμV/m (Peak) and 60dBμV/m (Average).

Frequency (GHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
32.03	---	46.28	60	13.72	V	23.17
32.03	56.91	---	80	23.09	V	23.17
32.14	---	45.13	60	14.87	H	23.28
32.14	54.75	---	80	25.25	H	23.28

EMISSION BANDWIDTH**Environmental Conditions & Test Information**

Test Date:	2025-03-17~2025-03-19
Temperature:	24.9-25.5 °C
Relative Humidity:	60-62 %
ATM Pressure:	100.2-101.3kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

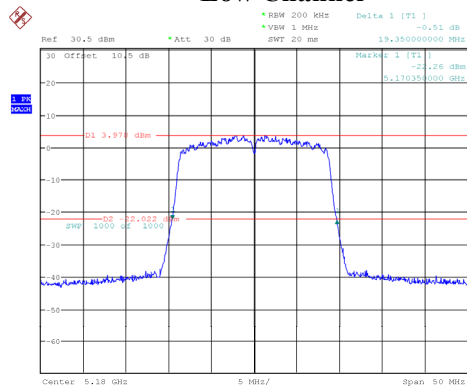
EUT operation mode: Transmitting

5180-5240MHz

Antenna	Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
Antenna 1	SRD	Low	5180	19.35
		Middle	5200	19.35
		High	5240	19.30
Antenna 2	SRD	Low	5180	19.40
		Middle	5200	19.35
		High	5240	19.30

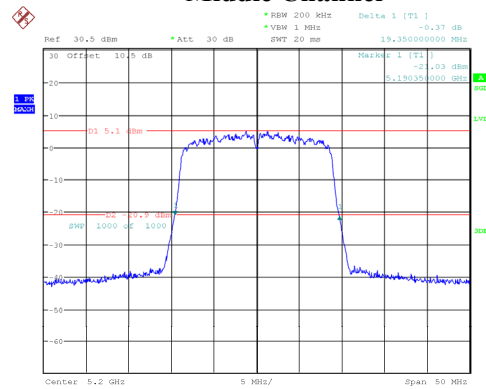
Antenna 1

Low Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:01:49

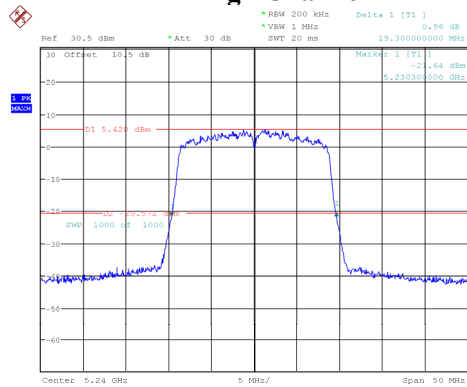
Middle Channel



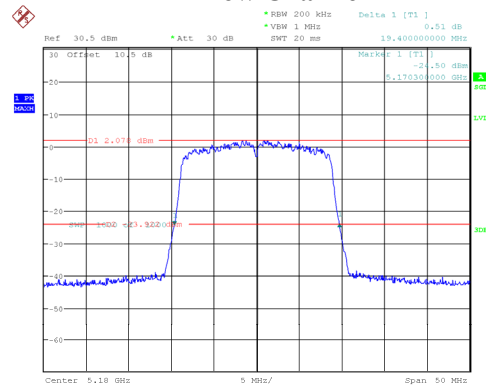
ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:07:31

Antenna 2

Low Channel

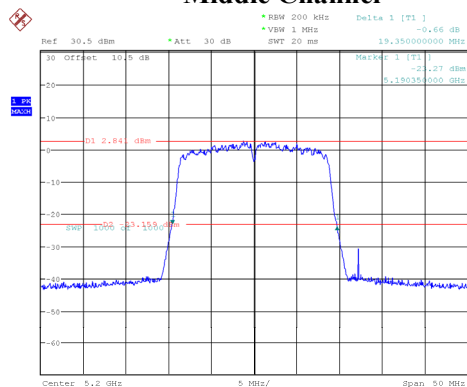


ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:13:19



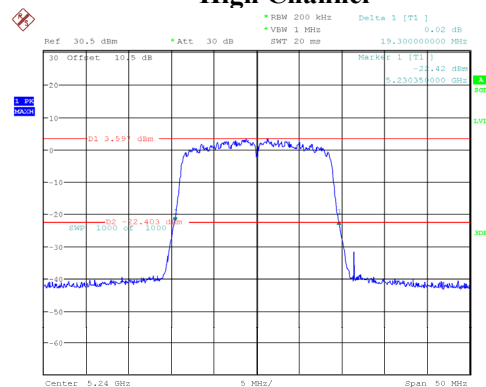
ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:40:34

Middle Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:44:16

High Channel



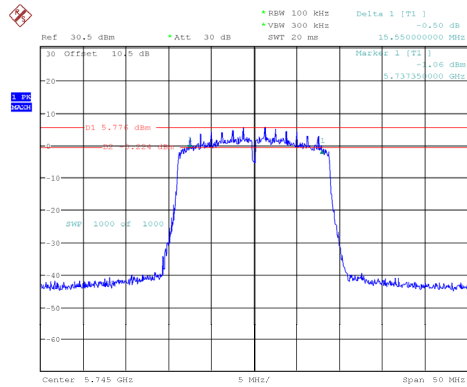
ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:47:35

5745-5825MHz

Antenna	Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Antenna 1	SRD	Low	5745	15.550	≥ 0.5
		Middle	5785	15.250	
		High	5825	15.200	
Antenna 2	SRD	Low	5745	15.700	≥ 0.5
		Middle	5785	15.600	
		High	5825	15.300	

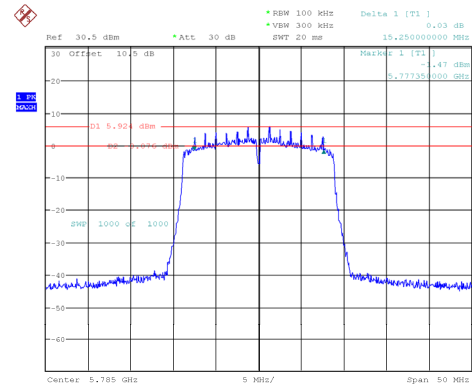
Antenna 1

Low Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
 Date: 19.MAR.2025 20:41:19

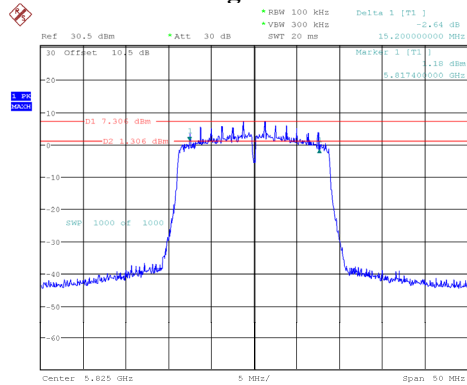
Middle Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
 Date: 19.MAR.2025 20:44:42

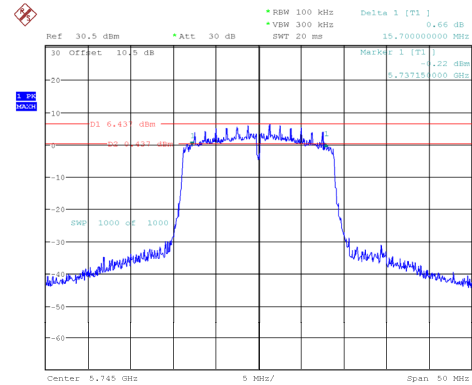
Antenna 2

High Channel



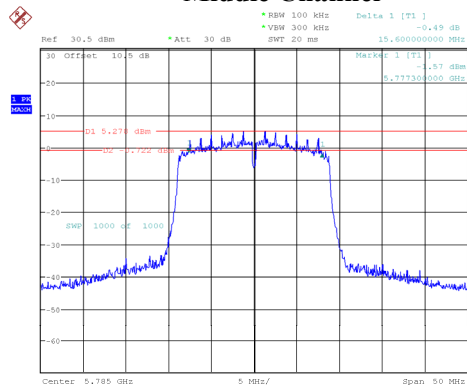
ProjectNo.:RSHA250304001 Tester:Neil Zhou
 Date: 19.MAR.2025 20:47:58

Low Channel



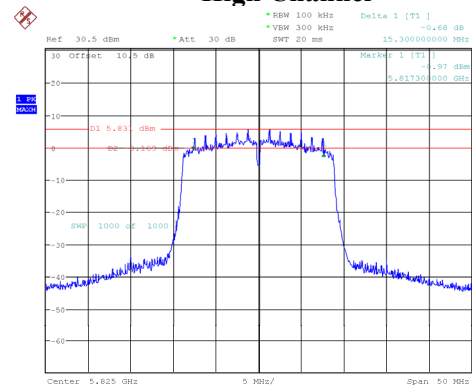
ProjectNo.:RSHA250304001 Tester:Neil Zhou
 Date: 19.MAR.2025 20:29:26

Middle Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
 Date: 19.MAR.2025 20:33:00

High Channel



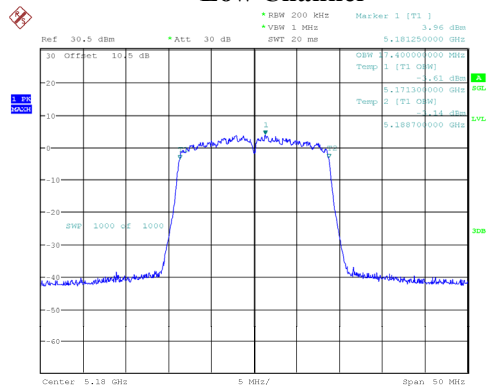
ProjectNo.:RSHA250304001 Tester:Neil Zhou
 Date: 19.MAR.2025 20:36:30

Antenna	Mode	Channel	Frequency (MHz)	99% Bandwidth (MHz)
Antenna 1	SRD	Low	5180	17.400
		Middle	5200	17.400
		High	5240	17.400
Antenna 2	SRD	Low	5180	17.400
		Middle	5200	17.400
		High	5240	17.400

Note: The 99% Occupied Bandwidth have not fall into the band 5250-5350MHz, please refer to the test plots of 99% Occupied Bandwidth.

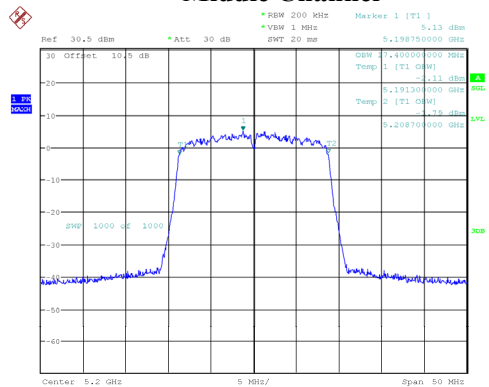
Antenna 1

Low Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:02:48

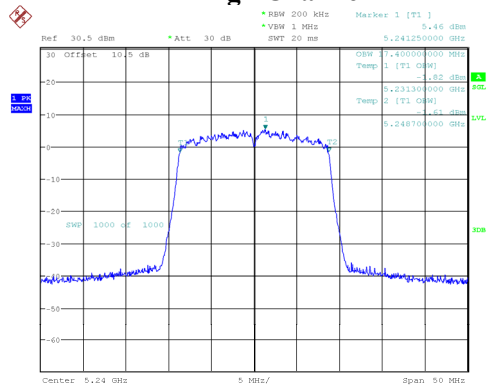
Middle Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:08:29

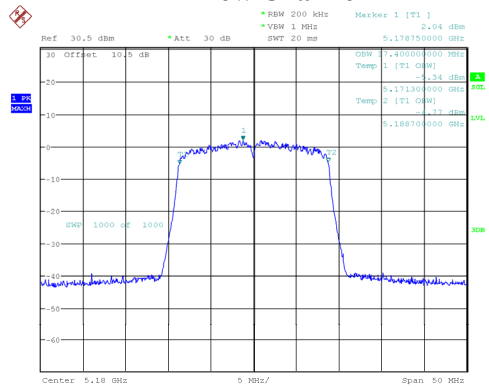
Antenna 2

High Channel



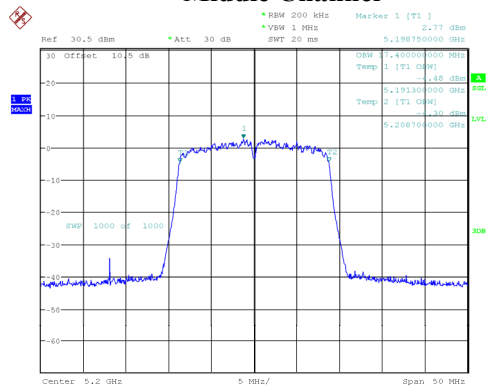
ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:14:23

Low Channel



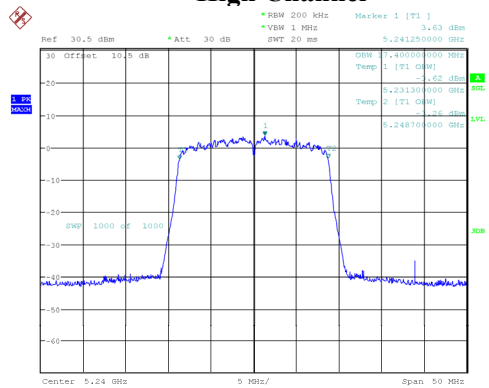
ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:41:33

Middle Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:45:16

High Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:48:39

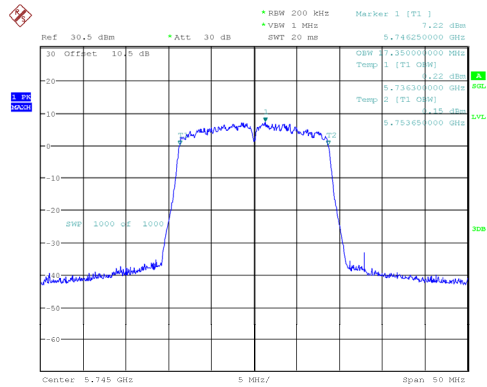
Antenna	Mode	Channel	Frequency (MHz)	99% Bandwidth (MHz)
Antenna 1	SRD	Low	5745	17.350
		Middle	5785	17.400
		High	5825	17.350
Antenna 2	SRD	Low	5745	17.400
		Middle	5785	17.400
		High	5825	17.350

Note:

The 99% Occupied Bandwidth have not fall into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

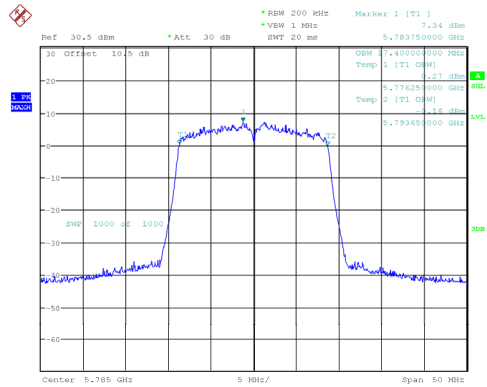
Antenna 1

Low Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19.MAR.2025 20:42:18

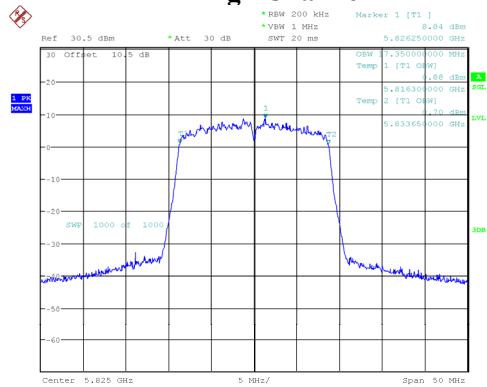
Middle Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19.MAR.2025 20:45:41

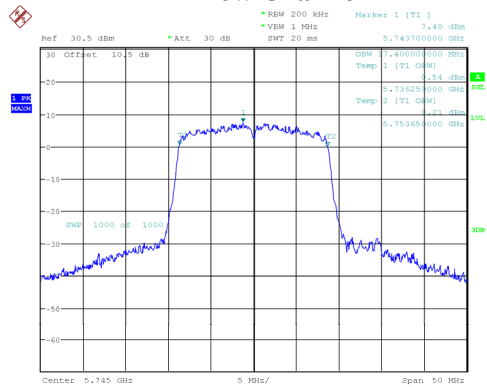
Antenna 2

High Channel



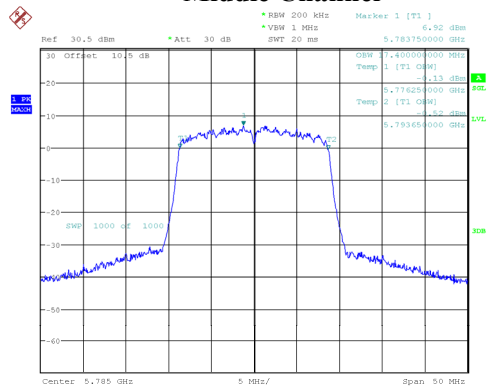
ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19.MAR.2025 20:48:57

Low Channel



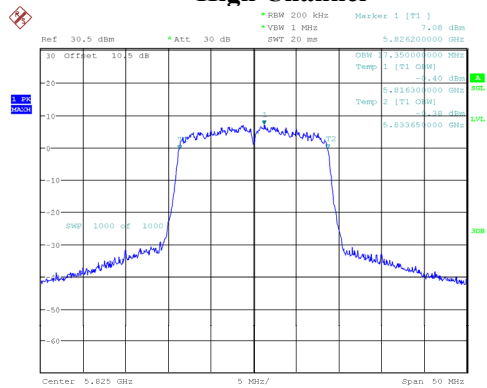
ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19.MAR.2025 20:30:24

Middle Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19.MAR.2025 20:33:59

High Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19.MAR.2025 20:37:29

CONDUCTED TRANSMITTER OUTPUT POWER**Environmental Conditions & Test Information**

Test Date:	2025-03-17~2025-03-19
Temperature:	24.9-25.5 °C
Relative Humidity:	60-62 %
ATM Pressure:	100.2-101.3kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

Test Mode: Transmitting

Antenna	Mode	Channel	Frequency (MHz)	Max Conducted Average Output Power (dBm)	Limit (dBm)
Antenna 1	SRD	Low	5180	13.04	30
		Middle	5200	14.06	30
		High	5240	14.34	30
Antenna 2	SRD	Low	5180	11.24	30
		Middle	5200	11.77	30
		High	5240	12.48	30
Antenna 1+Antenna 2	SRD	Low	5180	15.24	30
		Middle	5200	16.07	30
		High	5240	16.52	30

Note: 1. The EUT is an outdoor access point and the maximum antenna gain is -1.61dBi, the EIRP less than 21dBm

2. $\text{Antenna 1} + \text{Antenna 2} = 10 * \text{LOG} (10^{(\text{Antenna 1}/10)} + 10^{(\text{Antenna 2}/10)})$

3. All transmit signals are *completely uncorrelated* with each other, Directional gain = G_{ANT}

Antenna	Mode	Channel	Frequency (MHz)	Max Conducted Average Output Power (dBm)	Limit (dBm)
Antenna 1	SRD	Low	5745	16.01	30
		Middle	5785	15.91	30
		High	5825	17.27	30
Antenna 2	SRD	Low	5745	16.38	30
		Middle	5785	16.02	30
		High	5825	16.14	30
Antenna 1+Antenna 2	SRD	Low	5745	19.21	30
		Middle	5785	18.98	30
		High	5825	19.75	30

Note: 1. $\text{Antenna 1+Antenna 2} = 10 \cdot \text{LOG} (10^{\text{Antenna 1/10}} + 10^{\text{Antenna 2/10}})$

2. All transmit signals are *completely uncorrelated* with each other, Directional gain = G_{ANT}

POWER SPECTRAL DENSITY**Environmental Conditions & Test Information**

Test Date:	2025-03-17~2025-03-19
Temperature:	24.9-25.5 °C
Relative Humidity:	60-62 %
ATM Pressure:	100.2-101.3kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

Test Mode: Transmitting

5180-5240MHz

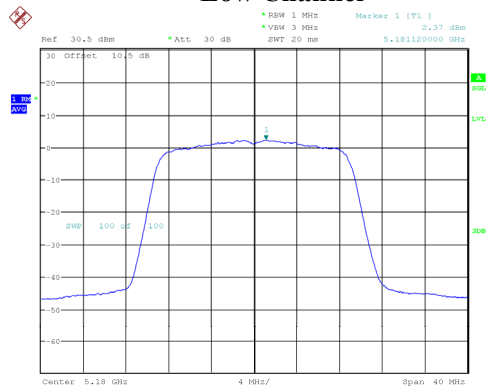
Antenna	Mode	Channel	Frequency (MHz)	Reading (dBm/MHz)	Duty Cycle Factor (dB)	Result (dBm/MHz)	Limit (dBm/MHz)
Antenna 1	SRD	Low	5180	2.37	0.25	2.62	17
		Middle	5200	3.52	0.25	3.77	17
		High	5240	3.65	0.25	3.90	17
Antenna 2	SRD	Low	5180	0.54	0.48	1.02	17
		Middle	5200	1.30	0.48	1.78	17
		High	5240	1.87	0.48	2.35	17
Antenna 1 +Antenna 2	SRD	Low	5180	/	/	4.90	17
		Middle	5200	/	/	5.90	17
		High	5240	/	/	6.20	17

Note: 1. Antenna 1+Antenna 2 = $10 \cdot \log(10^{\text{Antenna 1/10}} + 10^{\text{Antenna 2/10}})$

2. All transmit signals are *completely uncorrelated* with each other, Directional gain = G_{ANT}

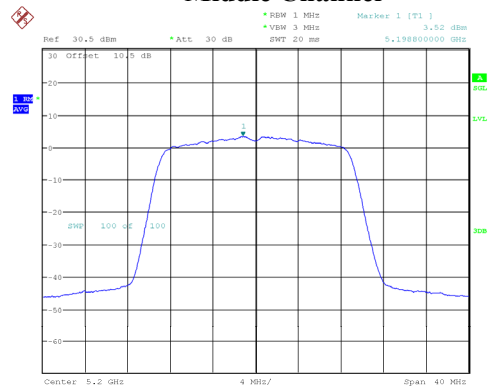
Antenna 1

Low Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:03:14

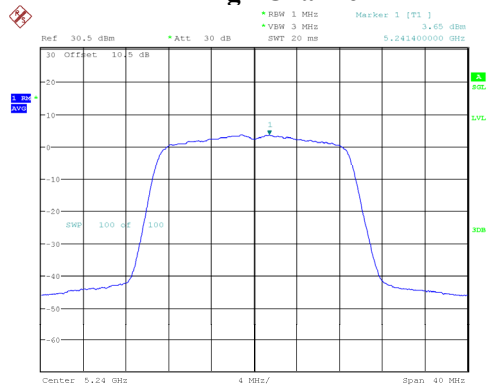
Middle Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:08:55

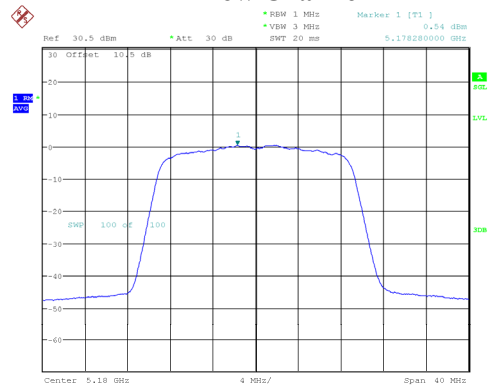
Antenna 2

High Channel



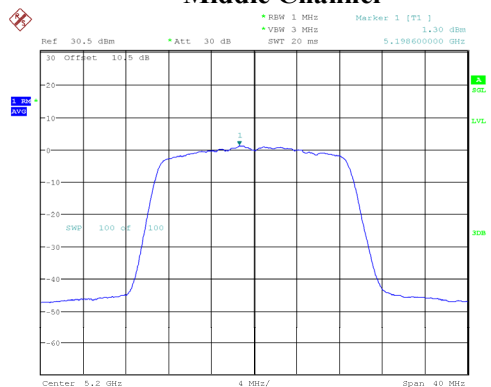
ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:14:49

Low Channel



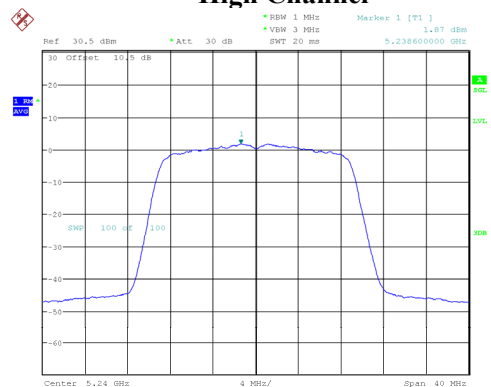
ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:42:00

Middle Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:45:43

High Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 17.MAR.2025 14:49:06

5745-5825MHz

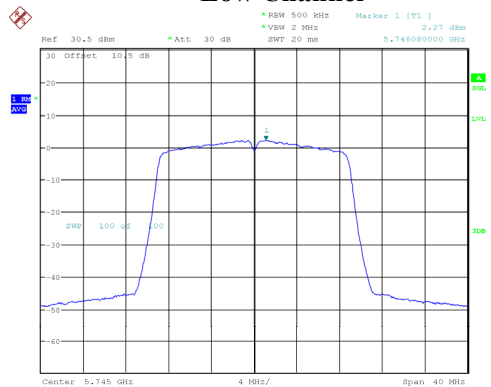
Antenna	Mode	Channel	Frequency (MHz)	Reading (dBm/500kHz)	Duty Cycle Factor (dB)	Result (dBm/500kHz)	Limit (dBm/500kHz)
Antenna 1	SRD	Low	5745	2.27	0.25	2.52	30
		Middle	5785	2.19	0.25	2.44	30
		High	5825	3.54	0.25	3.79	30
Antenna 2	SRD	Low	5745	2.67	0.50	3.17	30
		Middle	5785	2.32	0.50	2.82	30
		High	5825	2.37	0.50	2.87	30
Antenna 1 +Antenna 2	SRD	Low	5745	/	/	5.87	30
		Middle	5785	/	/	5.64	30
		High	5825	/	/	6.36	30

Note: 1. Antenna 1+Antenna 2 = $10 \cdot \log(10^{\text{Antenna 1/10}} + 10^{\text{Antenna 2/10}})$

2. All transmit signals are *completely uncorrelated* with each other, Directional gain = G_{ANT}

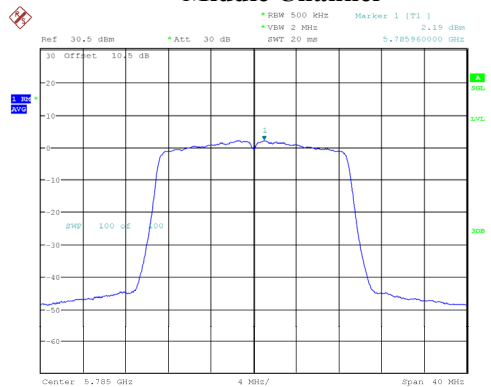
Antenna 1

Low Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19.MAR.2025 20:42:45

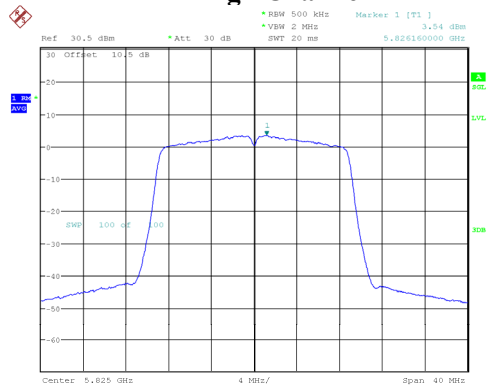
Middle Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19.MAR.2025 20:46:08

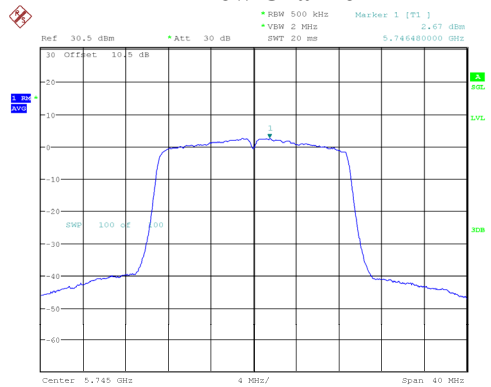
Antenna 2

High Channel



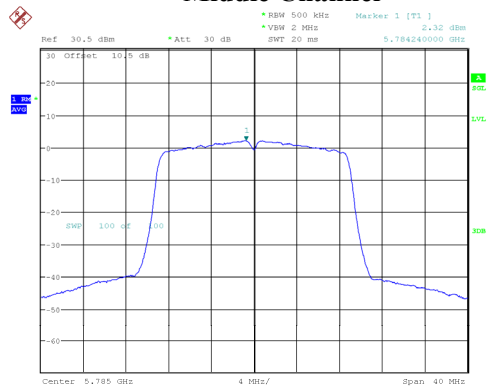
ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19.MAR.2025 20:49:25

Low Channel



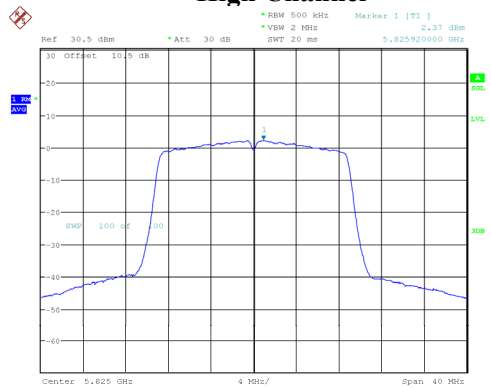
ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19.MAR.2025 20:50:51

Middle Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19.MAR.2025 20:54:25

High Channel



ProjectNo.:RSHA250304001 Tester:Neil Zhou
Date: 19.MAR.2025 20:57:57

Declarations

1. The laboratory is not responsible for the authenticity of any information provided by the applicant. Information from the applicant that may affect test results is marked with “★”.
2. The test data was only valid for the test sample(s).
3. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.
4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor $k=2$ with the 95.45% confidence interval.

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