



## FCC PART 15.247

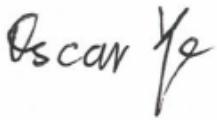
### TEST REPORT

For

#### Klip Xtreme LLC

10310 NW 121 Way Suite 100, Medley, Florida 33178, United States

**FCC ID: 2BOF4KPP500**

<b>Report Type:</b>	<b>Product Name:</b>
Original Report	KPP-500 Wireless Presenter
<b>Report Number:</b>	<u>RSHA250414001-00B</u>
<b>Report Date:</b>	<u>2025-05-27</u>
<b>Reviewed By:</b>	<u>Bard Liu</u> 
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## REPORT REVISION HISTORY

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Number of Revisions	Report No.	Version	Issue Date	Description
0	RSHA250414001-00B	R1V1	2025-05-27	Initial Release

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

Applicant:	Klip Xtreme LLC
Tested Model:	KPP-500
Product Name:	KPP-500 Wireless Presenter
Power Supply:	DC 5V from USB port or DC 3.7V from battery
RF Function:	BLE
Operating Band/Frequency:	2402-2480MHz
Maximum Output Power:	BLE (1 Mbps): 5.45 dBm
Channel Number:	40
Channel Separation:	2 MHz
Modulation Type	GFSK
Antenna Type:	PCB Antenna
★Maximum Antenna Gain:	-0.33 dBi

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

*All measurement and tested data in this report was gathered from production sample serial number: RSHA250414001-1(for conducted emissions and radiated emissions test), RSHA250414001-2(for RF conducted test) ((Assigned by BACL (Kunshan). The EUT supplied by the applicant was received on 2025-04-14.)*

### Objective

This report is prepared for *Klip Xtreme LLC* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communications Commission rules.

The tests were performed in order to determine Compliant with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 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 and FCC KDB 558074 D01 15.247 Meas Guidance v05r02.

**Measurement Uncertainty**

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

Channel List for BLE mode:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	14	2430	28	2458
1	2404	15	2432	29	2460
2	2406	16	2434	30	2462
3	2408	17	2436	31	2464
4	2410	18	2438	32	2466
5	2412	19	2440	33	2468
6	2414	20	2442	34	2470
7	2416	21	2444	35	2472
8	2418	22	2446	36	2474
9	2420	23	2448	37	2476
10	2422	24	2450	38	2478
11	2424	25	2452	39	2480
12	2426	26	2454	/	/
13	2428	27	2456	/	/

EUT was tested with channel 0, 19 and 39.

### EUT Exercise Software

RF Test Tool: Non\_Signaling\_Test\_Tool

★Power level: 5.9

Note: The power level was declared by the applicant.

### Special Accessories

No special accessory.

### Equipment Modifications

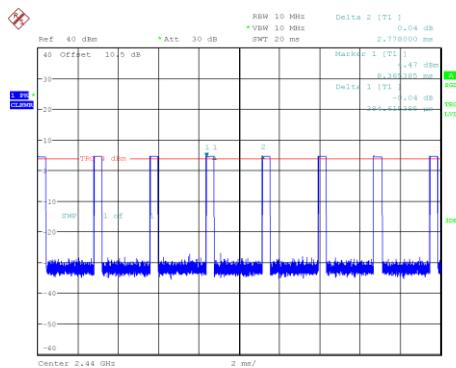
No modification was made to the EUT tested.

## Environmental Conditions & Test Information

<b>Test Date:</b>	2025-04-23
<b>Temperature:</b>	25 °C
<b>Relative Humidity:</b>	53 %
<b>ATM Pressure:</b>	101.3 kPa
<b>Test Result:</b>	Pass
<b>Test Engineer:</b>	Neil Zhou

### Duty Cycle:

#### BLE (1 Mbps)



Mode	Duty Cycle (%)	T <sub>on</sub> (ms)	T <sub>on+off</sub> (ms)
BLE (1 Mbps)	13.86	0.385	2.778

### Support Equipment List and Details

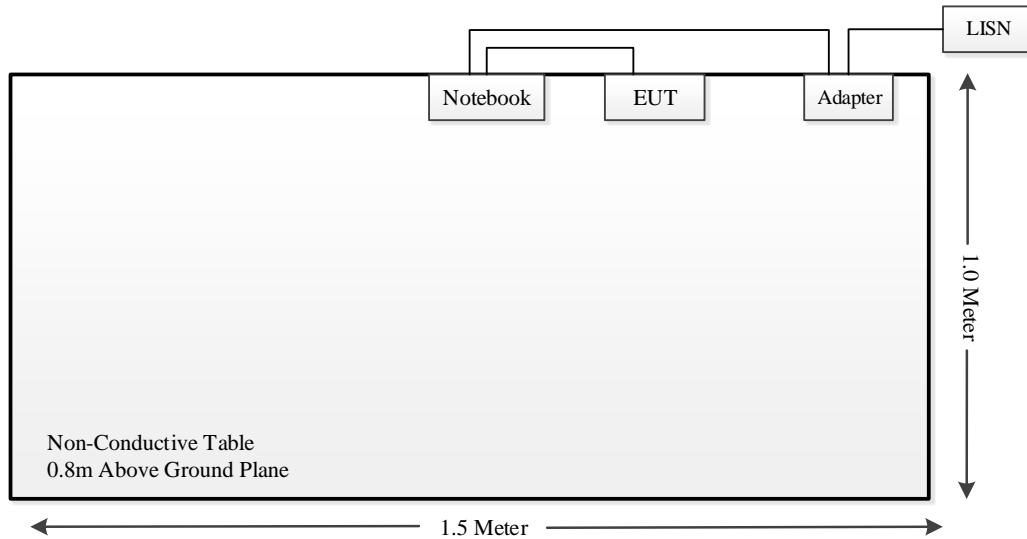
Manufacturer	Description	Model	Serial Number
Lenovo	Notebook	Thinkpad T470S	83ECAF1B-E1AF-4053-95DE-2E51B8D188D7
/	Adapter	/	/

### External I/O Cable

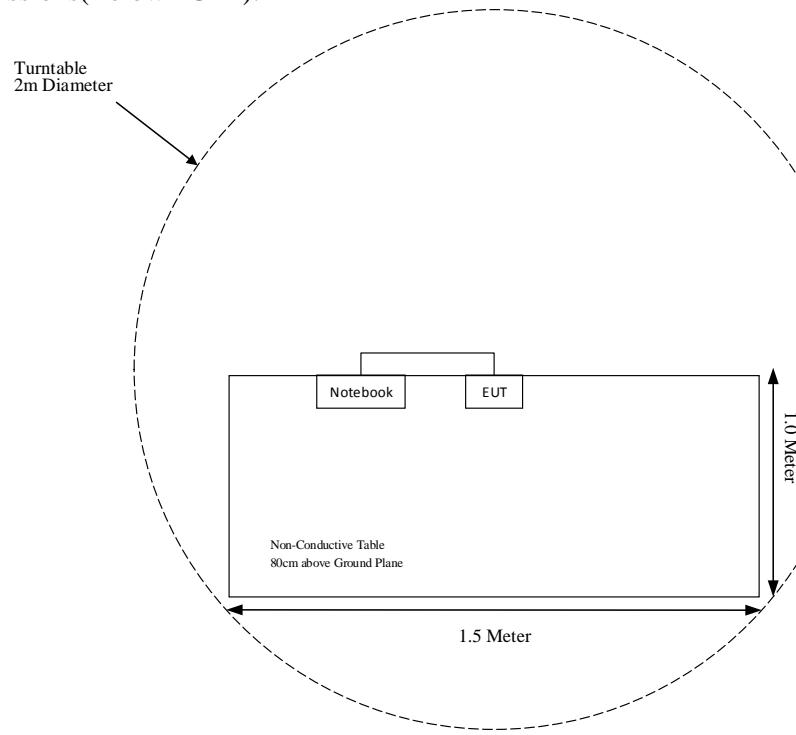
Cable Description	Length (m)	From Port	To Port
Power Cable 1	1.0	LISN	Adapter
Power Cable 2	1.5	Notebook	Adapter
Power Cable 3	1.0	EUT	Notebook

### Block Diagram of Test Setup

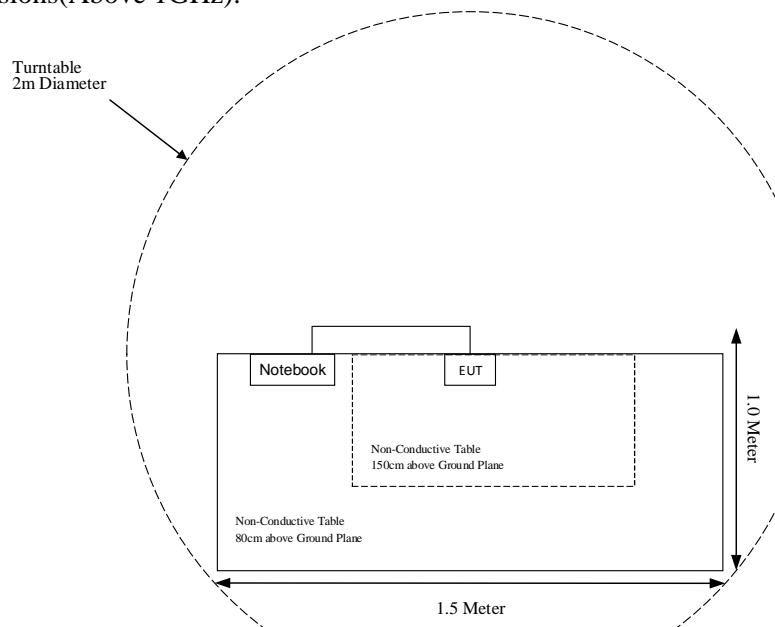
For Conducted Emissions:



For Radiated Emissions(Below 1GHz):



For Radiated Emissions(Above 1GHz):



## TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>Radiated Emission Test (Chamber #1)</b>					
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	2024-10-29	2027-10-28
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	2024-04-23	2025-04-22
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
<b>Radiated Emission Test (Chamber #2)</b>					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2025-04-09	2026-04-08
ETS-LINDGREN	Horn Antenna	3115	9311-4159	2024-12-02	2025-12-01
ETS-LINDGREN	Horn Antenna	3116	2516	2024-12-12	2027-12-11
A.H.Systems, inc	Amplifier	PAM-0118P	512	2025-04-09	2026-04-08
SELECTOR	Amplifier	EM18G40G	060726	2025-04-09	2026-04-08
MICRO-TRONICS	Band Reject Filter	BRM50702	G024	2024-08-05	2025-08-04
Narda	Attenuator	10dB	10dB-01	2025-04-08	2026-04-07
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-11	011	2025-04-09	2026-04-08
MICRO-COAX	Coaxial Cable	Cable-12	012	2025-04-09	2026-04-08
MICRO-COAX	Coaxial Cable	Cable-13	013	2025-04-09	2026-04-08
<b>RF Conducted Test</b>					
Rohde & Schwarz	Spectrum Analyzer	FSU26	200103	2025-04-09	2026-04-08
Narda	Attenuator	10dB	10dB-01	2025-04-08	2026-04-07
XHFDZ	RG316 Coaxial Cable	SMA-316	XHF-1175	Each time	N/A
<b>Conducted Emission Test</b>					
Rohde & Schwarz	EMI Test Receiver	ESR	1316.3003K03-101746-zn	2024-07-28	2025-07-27
Rohde & Schwarz	LISN	ENV216	101115	2024-04-23	2025-04-22
Audix	Test Software	e3	V9	N/A	N/A
Rohde & Schwarz	Pulse limiter	ESH3-Z2	100552	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-15	015	2024-04-23	2025-04-22

**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
§1.1307(b)(1)& §2.1093	RF EXPOSURE	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 (a)	AC Line Conducted Emissions	Compliant
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliant
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliant
§15.247(b)(3)	Maximum Conducted Output Power	Compliant
§15.247(d)	Band Edge	Compliant
§15.247(e)	Power Spectral Density	Compliant

## FCC §1.1307(b) & §2.1093 - RF EXPOSURE

### Applicable Standard

According to §15.247(i) and §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB447498 D01 General RF Exposure Guidance v06:

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

### Measurement Result

Mode	Frequency Range (MHz)	Max Tune-up Conducted Power		Calculated Distance (mm)	Calculated Value	Threshold (1-g SAR)	SAR Test Exclusion
		(dBm)	(mW)				
BLE	2402-2480	5.5	3.55	5.0	2.0	3.0	Yes

**Result: So the standalone SAR evaluation is not necessary.**

## **FCC §15.203 – ANTENNA REQUIREMENT**

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### **Applicable Standard**

According to FCC § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

### **Antenna Connector Construction**

The EUT has a PCB Antenna for BLE, and the antenna gain is -0.33 dBi, which is permanently attached to the unit, fulfill the requirement of this section. Please refer to the EUT photos.

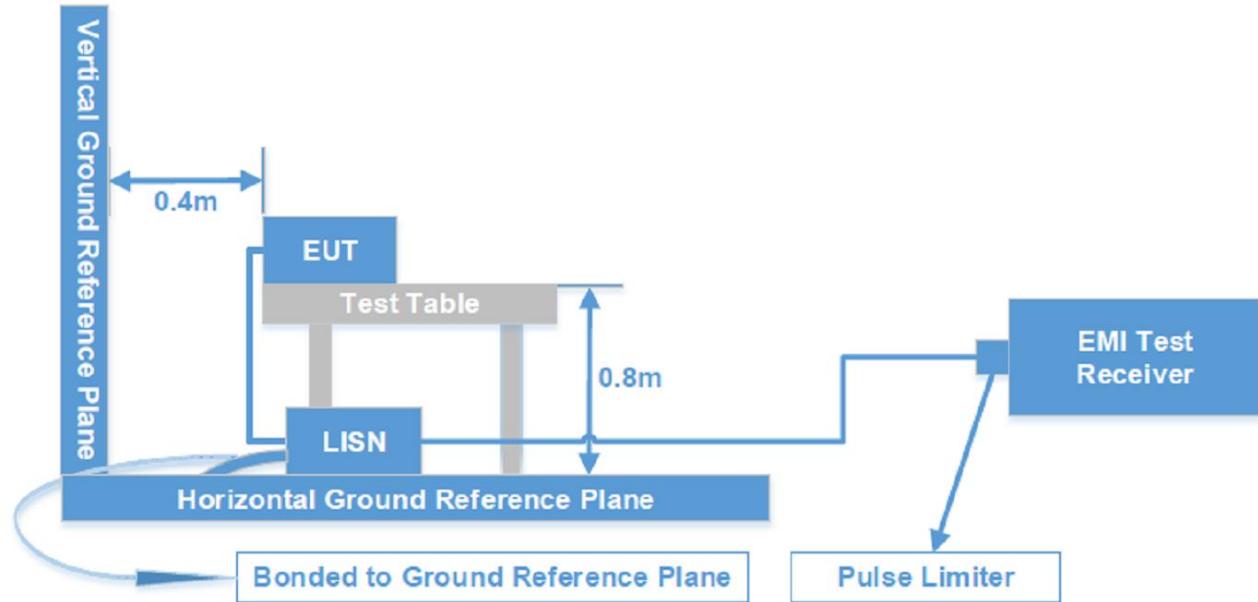
**Result:** Compliant.

## FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

### Applicable Standard

FCC §15.207(a)

### Test System Setup



The measurement procedure of EUT setup is according with ANSI C63.10-2013. The related limit was specified in FCC Part 15.207.

### EMI Test Receiver Setup

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

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

Frequency Range	RBW	VBW
150 kHz – 30 MHz	9 kHz	30 kHz

## Test Procedure

ANSI C63.10-2013 clause 6.2

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

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

If the maximum peak value of the emissions is below the average limit, the QP value and average value measurement will not need to be performed and only record the maximum peak measured value to meet the requirements.

## Level & Over Limit Calculation

The Level is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)

Level (dB $\mu$ V) = Read level (dB $\mu$ V) + Factor (dB)

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

Over Limit (dB) = Level (dB $\mu$ V) - Limit (dB $\mu$ V)

## Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

## Test Data: See Appendix

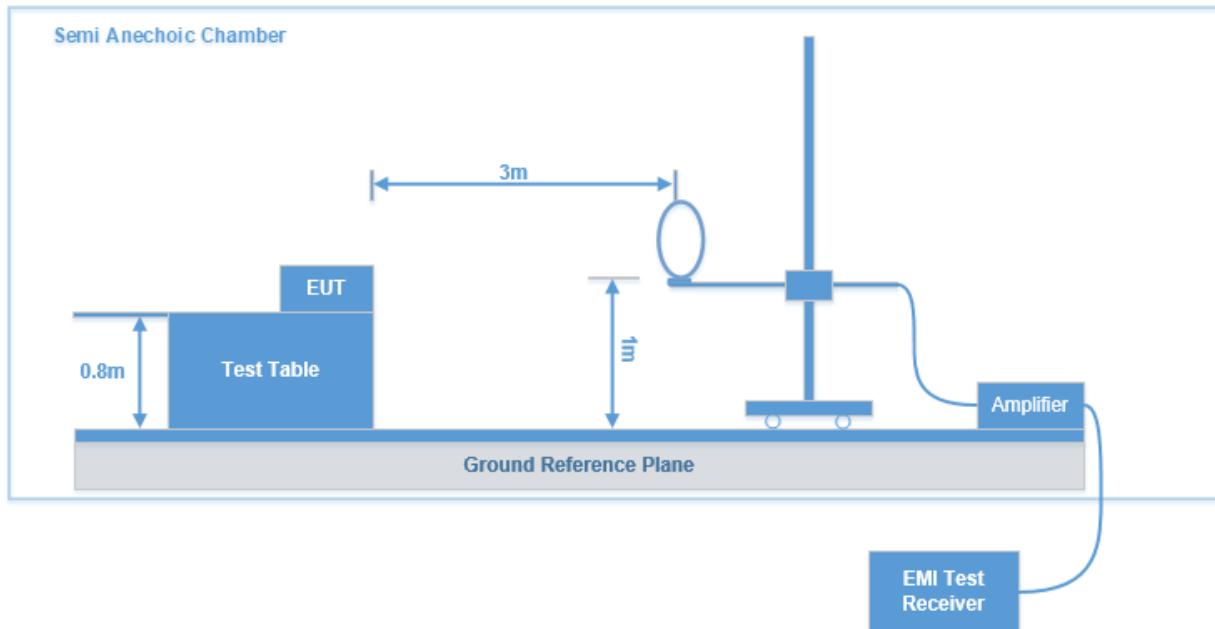
## FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

### Applicable Standard

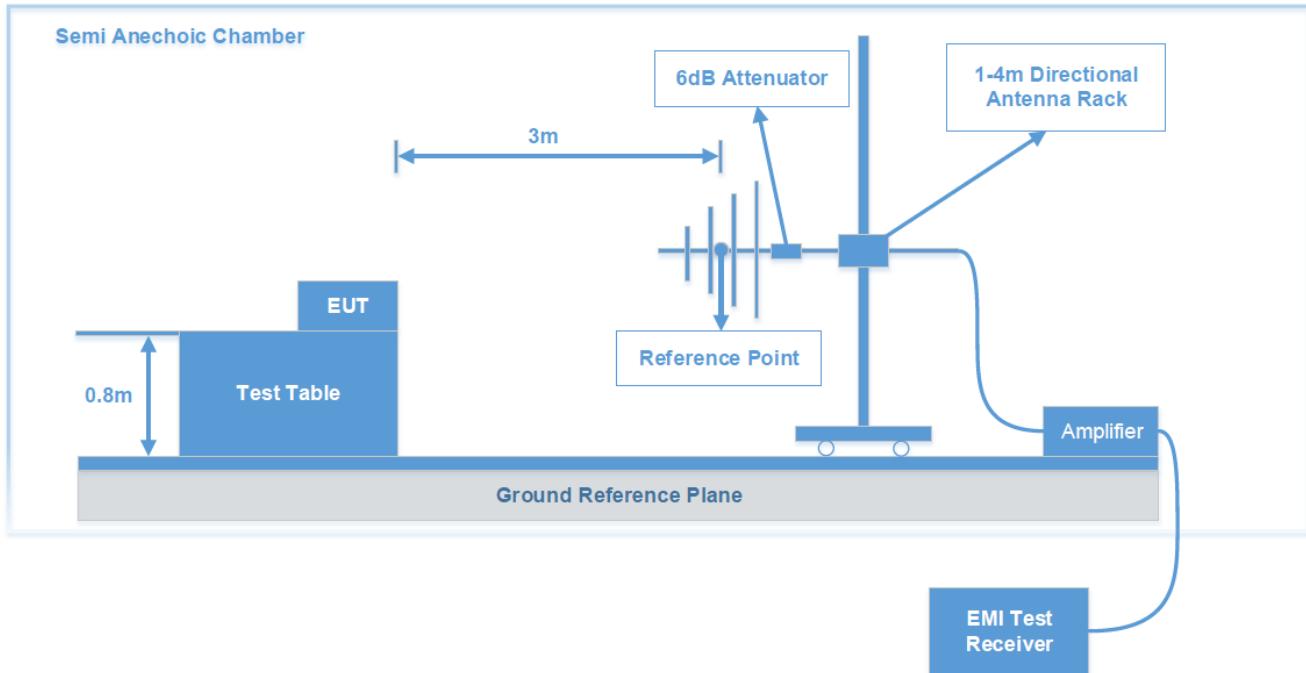
FCC §15.247 (d); §15.209; §15.205;

### Test System Setup

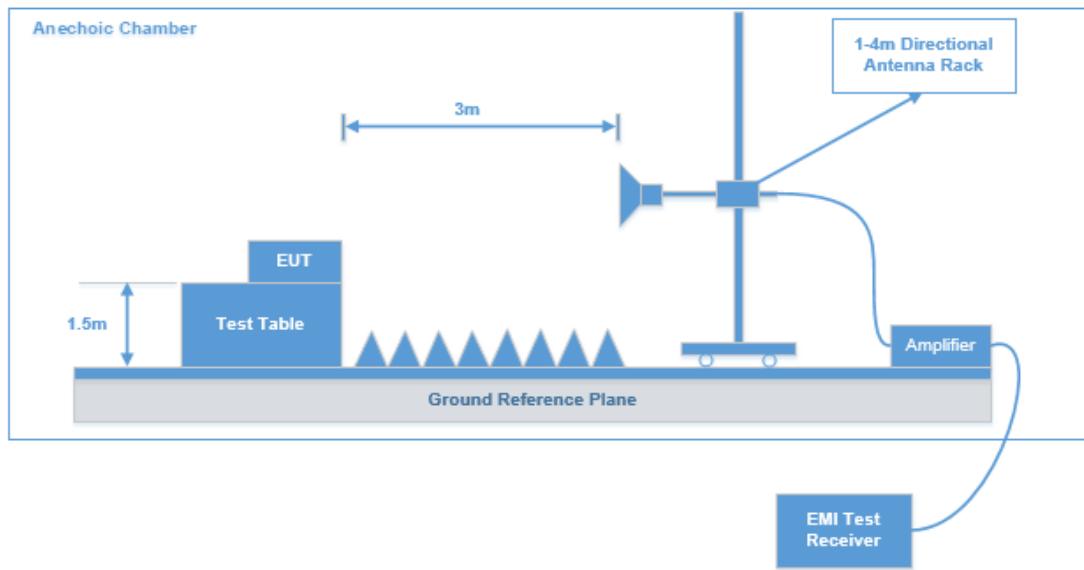
**9 kHz - 30 MHz:**



**30 MHz - 1 GHz:**



### Above 1 GHz:



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 15.247 limits.

### EMI Test Receiver 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

### Test Procedure

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.

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.

## 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 (dB $\mu$ V/m) = Meter Reading (dB $\mu$ V) + 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 (dB $\mu$ V/m) – Corrected Amplitude (dB $\mu$ V/m)

Note: The QuasiPeak (dB $\mu$ V/m), MaxPeak (dB $\mu$ V/m), Average (dB $\mu$ V/m) which shown in the data table are all Corrected Amplitude.

## Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.209 and 15.247.

## Test Data: See Appendix

## FCC §15.247(a) (2) – 6 dB EMISSION BANDWIDTH

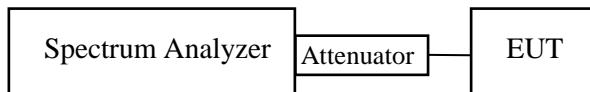
### Applicable Standard

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

### Test Procedure

According to ANSI C63.10-2013 sub-clause 11.8.1

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW)  $\geq 3 * \text{RBW}$ .
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. 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.



Note: the offset=Attenuator (10dB) + Cable loss (0.5dB) has been added in Spectrum Analyzer.

### Test Data: See Appendix

## FCC §15.247(b) (3) - MAXIMUM CONDUCTED OUTPUT POWER

### Applicable Standard

According to FCC §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

### Test Procedure

According to ANSI C63.10-2013 sub-clause 11.9.1.1

1. Set the  $\text{RBW} \geq \text{DTS}$  bandwidth.
2. Set  $\text{VBW} \geq 3 * \text{RBW}$ .
3. Set span  $\geq 3 * \text{RBW}$
4. Sweep time = auto couple.
5. Detector = peak.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use peak marker function to determine the peak amplitude level.



Note: the offset=Attenuator (10dB) + Cable loss (0.5dB) has been added in Spectrum Analyzer.

### Test Data: See Appendix

## FCC §15.247(d) – BAND EDGE

### Applicable Standard

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)).

### Test Procedure

According to ANSI C63.10-2013 sub-clause 6.10.

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.



Note: the offset=Attenuator (10dB) + Cable loss (0.5dB) has been added in Spectrum Analyzer.

### Test Data: See Appendix

## FCC §15.247(e) - POWER SPECTRAL DENSITY

### Applicable Standard

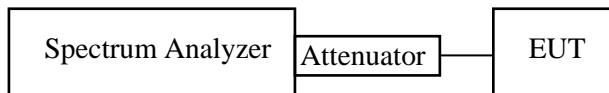
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

### Test Procedure

According to ANSI C63.10-2013 sub-clause 11.10.2

The following procedure shall be used if maximum peak conducted output power was used to determine compliance, and it is optional if the maximum conducted (average) output power was used to determine compliance:

1. Set the RBW to:  $3\text{kHz} \leq \text{RBW} \leq 100\text{ kHz}$ .
2. Set the VBW  $\geq 3 * \text{RBW}$ .
3. Set the span to 1.5 times the DTS bandwidth.
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the maximum amplitude level within the RBW.
9. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.



Note: the offset=Attenuator (10dB) + Cable loss (0.5dB) has been added in Spectrum Analyzer.

### Test Data: See Appendix

## **EUT PHOTOGRAPHS**

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

## **TEST SETUP PHOTOGRAPHS**

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

## APPENDIX - TEST DATA

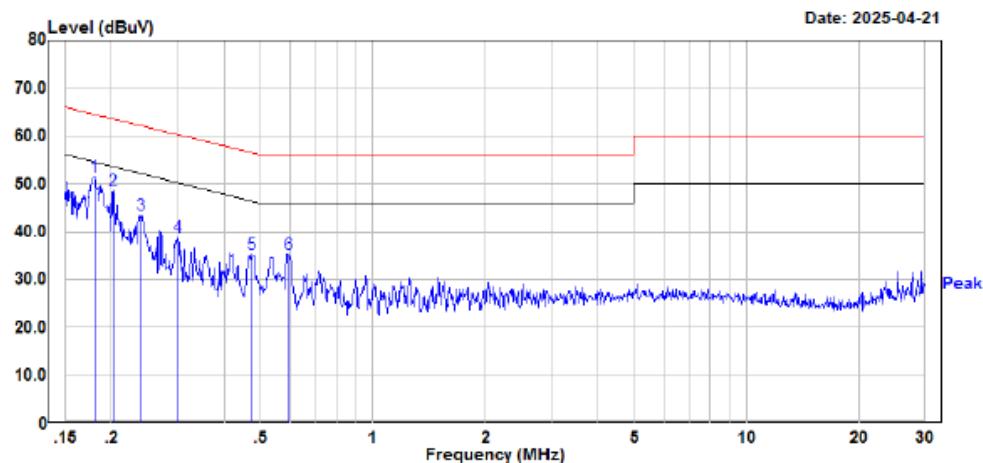
### AC LINE CONDUCTED EMISSIONS

#### Environmental Conditions & Test Information

Test Date:	2025-04-21
Temperature:	22.1 °C
Relative Humidity:	52 %
ATM Pressure:	101.1 kPa
Test Result:	Pass
Test Engineer:	Myles Miao

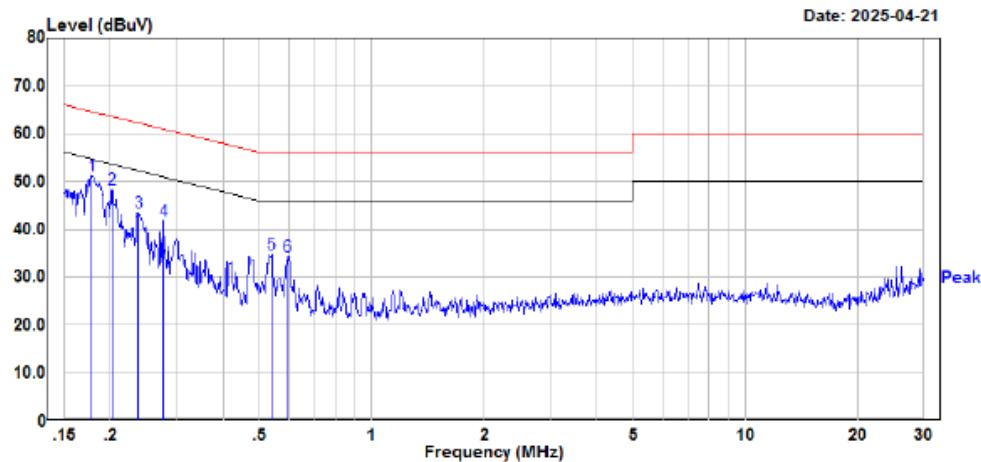
EUT operation mode: Transmitting in BLE (1 Mbps) low channel (maximum output power)

AC 120V/60 Hz, Line



Site : CE  
 Condition : limit\FCC PART 15.207  
 : DET:Peak  
 Project No. : RSHA250414001  
 Model : KPP-500  
 Phase : L  
 Voltage : 120V/60Hz  
 Mode : BLE 1M  
 Test Equipment : ENV216,ESR  
 Receiver Setting : RBW: 9 kHz,Sweep Time: Auto  
 Temperature : 22.1°C  
 Humidity : 52%  
 Atmospheric pressure: 101.1kPa  
 Test Engineer : Myles Miao

Freq	Read		Limit		Over	Remark
	MHz	dBuV	dB	dBuV	dB	
1	0.180	31.42	20.12	51.54	64.47	-12.93 Peak
2	0.202	28.41	20.11	48.52	63.52	-15.00 Peak
3	0.238	23.41	20.13	43.54	62.15	-18.61 Peak
4	0.300	18.81	20.17	38.98	60.25	-21.27 Peak
5	0.474	15.19	20.18	35.37	56.44	-21.07 Peak
6	0.594	15.23	20.10	35.33	56.00	-20.67 Peak

**AC 120V/60 Hz, Neutral**

Site : CE  
Condition : limit\FCC PART 15.207  
: DET:Peak  
Project No. : RSHA250414001  
Model : KPP-500  
Phase : N  
Voltage : 120V/60Hz  
Mode : BLE 1M  
Test Equipment : ENV216,ESR  
Receiver Setting : RBW: 9 kHz,Sweep Time: Auto  
Temperature : 22.1°C  
Humidity : 52%  
Atmospheric pressure: 101.1kPa  
Test Engineer : Myles Miao

Freq	Read			Limit			Over
	Level	Factor	Level	Line	Line	Remark	
MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.179	31.10	20.12	51.22	64.55	-13.33	Peak
2	0.202	28.13	20.11	48.24	63.52	-15.28	Peak
3	0.237	23.42	20.13	43.55	62.19	-18.64	Peak
4	0.277	21.67	20.15	41.82	60.91	-19.09	Peak
5	0.540	14.60	20.12	34.72	56.00	-21.28	Peak
6	0.597	14.22	20.10	34.32	56.00	-21.68	Peak

## SPURIOUS EMISSIONS

### Environmental Conditions & Test Information

Test Item:	SPURIOUS EMISSIONS		
	9kHz - 1GHz	1 GHz - 18 GHz	18 GHz - 25 GHz
Test Date:	2025-04-18	2025-04-22	2025-05-08
Temperature:	22.5 °C	20.3 °C	23 °C
Relative Humidity:	48 %	52 %	53 %
ATM Pressure:	101.1 kPa	101.0 kPa	101.3 kPa
Test Result:	Pass	Pass	Pass
Test Engineer:	Jerry Yan	Destine Hu	Hugh Wu

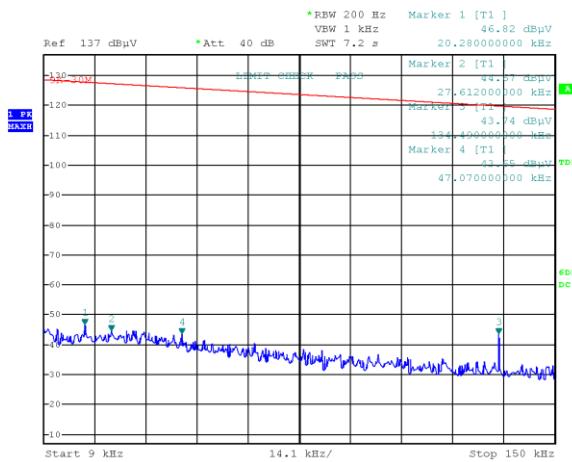
**Test Result:** Compliant.

*EUT operation mode: Transmitting*

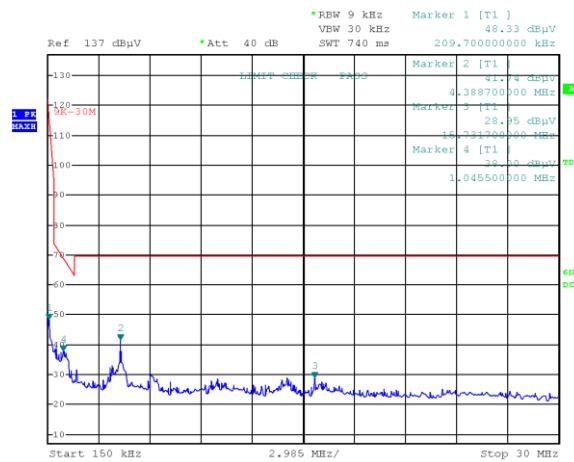
*After pre-scan in the X, Y and Z axes of orientation, the worst case is below:*

**9 kHz-30MHz: Transmitting in maximum output power mode BLE (1 Mbps) low channel Parallel(worst case)**

#### 9kHz-150kHz



#### 150kHz-30MHz



Project No.RSHA250414001  
Date: 18.APR.2025 09:16:19

Tester:Jerry Yan

Project No.RSHA250414001  
Date: 18.APR.2025 09:19:24

Tester:Jerry Yan

**9 kHz-150 kHz**

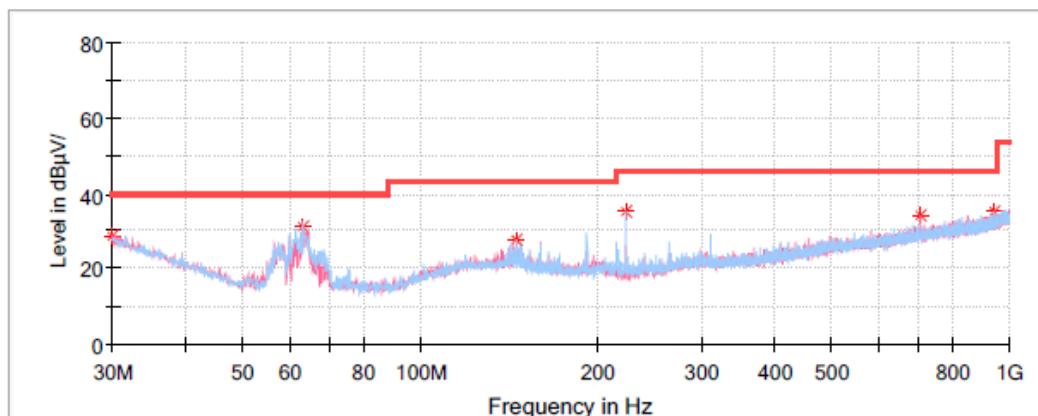
Frequency (kHz)	Corrected Amplitude (dB $\mu$ V/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dB $\mu$ V/m) @3m	Margin (dB)
20.28	46.82	PK	-0.56	121.64	74.82
27.61	44.67	PK	-0.60	118.78	74.11
47.07	43.65	PK	-3.34	114.15	70.50
134.49	43.74	PK	-10.68	105.03	61.29

**150 kHz-30 MHz**

Frequency (MHz)	Corrected Amplitude (dB $\mu$ V/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dB $\mu$ V/m) @3m	Margin (dB)
0.21	48.33	PK	-13.89	101.16	52.83
1.05	38.00	PK	-27.78	67.18	29.18
4.39	41.74	PK	-31.97	69.54	27.80
15.73	28.95	PK	-33.20	69.54	40.59

**30 MHz - 1 GHz:****Transmitting in maximum output power BLE 1M low channel****Low Channel: 2402 MHz****Common Information**

Project No: RSHA250414001  
 EUT Model: KPP-500  
 Test Mode: Transmitting in BLE-1M mode low channel  
 Standard: FCC Part 15.205 & FCC Part 15.209&FCC Part 15.247  
 Test Equipment: ESCI, JB3, 310N  
 Receiver Setting: RBW:100 kHz, VBW: 300 kHz, Sweep Time: Auto  
 Temperature: 22.5 °C  
 Humidity: 48%  
 Barometric Pressure: 101.1kPa  
 Test Engineer: Jerry Yan  
 Test Date: 2025/4/18

**Critical\_Freqs**

Frequency (MHz)	MaxPeak (dB µV/m)	Limit (dB µV/m)	Margin (dB)	Pol	Corr. (dB/m)
30.000000	28.93	40.00	11.07	V	-4.8
63.465000	31.16	40.00	8.84	H	-16.9
145.308750	27.89	43.50	15.61	H	-11.5
224.000000	35.43	46.00	10.57	H	-13.2
705.483750	34.07	46.00	11.93	V	-2.0
942.163750	34.97	46.00	11.03	H	1.2

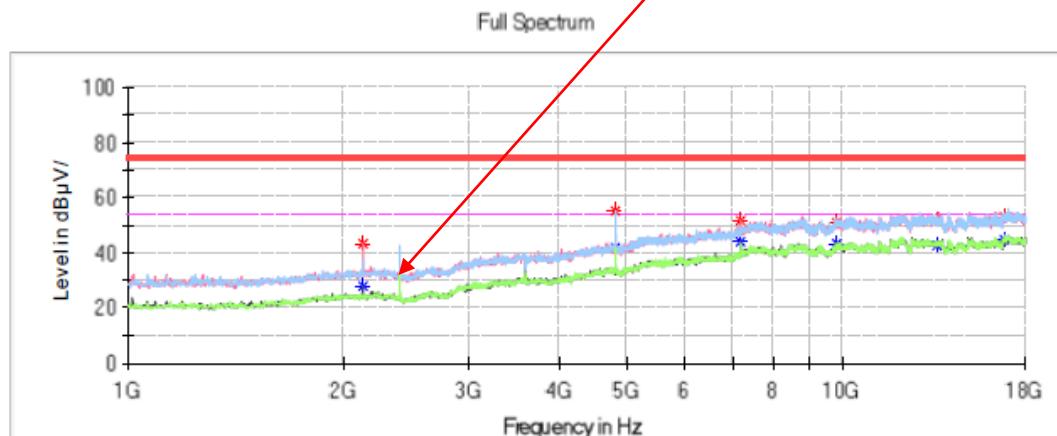
**1 GHz-18 GHz:**  
**BLE (1 Mbps)**

**Low Channel: 2402 MHz**

### Common Information

Project No.: RSHA250414001  
 EUT Model: KPP-500  
 Test Mode: BLE 1M  
 Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
 Test Equipment: ESU40,3115,PAM-0118P  
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
 Temperature: 20.3°C  
 Humidity: 52%  
 Atmospheric Pressure: 101.0kPa  
 Test Engineer: Destine Hu  
 Test Date: 2025/4/22

Fundamental Test with Band Reject Filter



### Critical\_Freqs

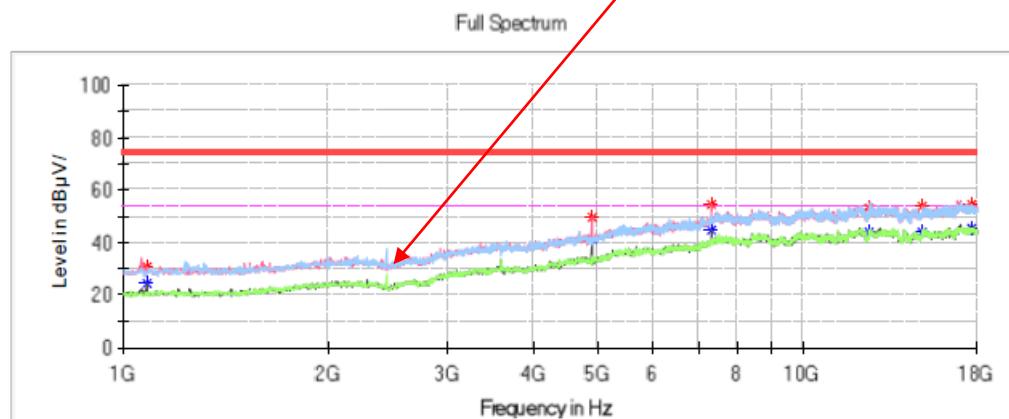
Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2128.800000	43.26	---	74.00	30.74	V	-11.3
2128.800000	---	27.99	54.00	26.01	V	-11.3
4804.600000	54.97	---	74.00	19.03	H	-3.2
4804.600000	---	41.98	54.00	12.02	H	-3.2
7205.000000	51.79	---	74.00	22.21	V	3.1
7205.000000	---	44.26	54.00	9.74	V	3.1
9802.600000	---	43.03	54.00	10.97	V	6.5
9802.600000	50.81	---	74.00	23.19	V	6.5
13563.000000	---	42.98	54.00	11.02	V	9.6
13563.000000	51.96	---	74.00	22.04	V	9.6
16840.600000	---	44.63	54.00	9.37	H	11.8
16840.600000	53.09	---	74.00	20.91	H	11.8

## Middle Channel: 2440 MHz

## Common Information

Project No.: RSHA250414001  
 EUT Model: KPP-500  
 Test Mode: BLE 1M  
 Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
 Test Equipment: ESU40.3115,PAM-0118P  
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
 Temperature: 20.3°C  
 Humidity: 52%  
 Atmospheric Pressure: 101.0kPa  
 Test Engineer: Destine Hu  
 Test Date: 2025/4/22

Fundamental Test with  
Band Reject Filter



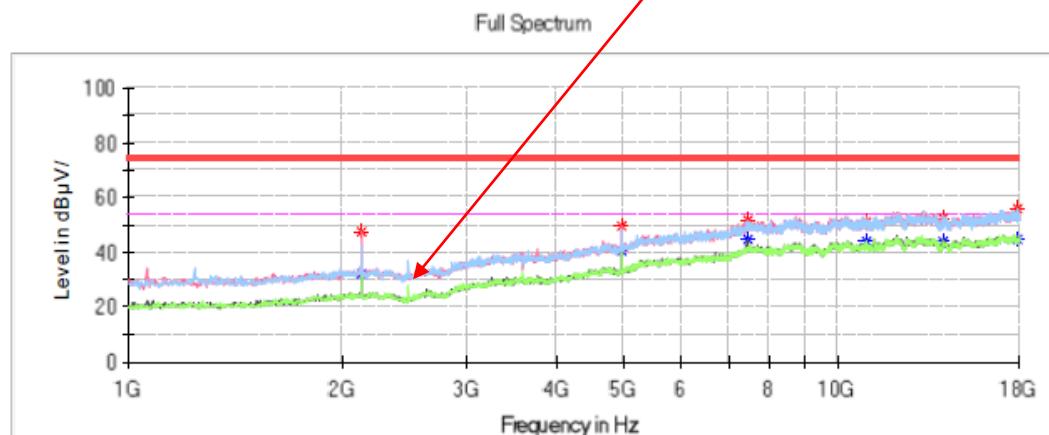
## Critical\_Freqs

Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1081.600000	---	24.34	54.00	29.66	V	-15.3
1081.600000	30.54	---	74.00	43.46	V	-15.3
4879.400000	---	40.93	54.00	13.07	V	-2.9
4879.400000	49.46	---	74.00	24.54	V	-2.9
7320.600000	---	44.93	54.00	9.07	V	3.4
7320.600000	54.41	---	74.00	19.59	V	3.4
12519.200000	---	44.27	54.00	9.73	H	9.7
12519.200000	53.32	---	74.00	20.68	H	9.7
14926.400000	---	44.19	54.00	9.81	V	9.3
14926.400000	53.76	---	74.00	20.24	V	9.3
17656.600000	---	45.14	54.00	8.86	V	11.7
17656.600000	54.62	---	74.00	19.38	V	11.7

**High Channel: 2480 MHz****Common Information**

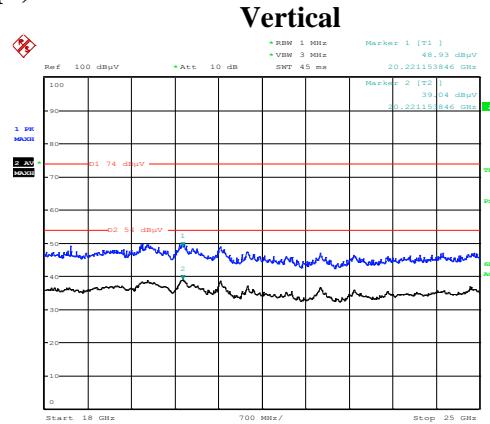
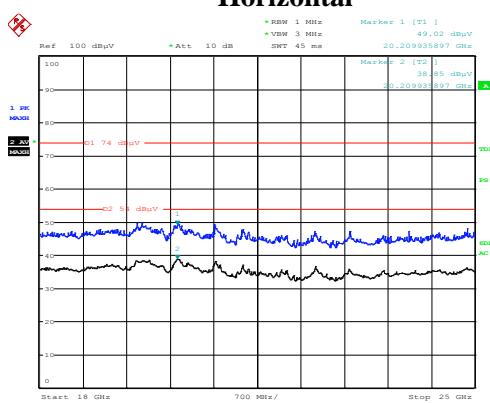
Project No.: RSHA250414001  
 EUT Model: KPP-500 Wireless Presenter  
 Test Mode: BLE 1M  
 Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
 Test Equipment: ESU40,3115,PAM-0118P  
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
 Temperature: 20.3°C  
 Humidity: 52%  
 Atmospheric Pressure: 101.0kPa  
 Test Engineer: Destine Hu  
 Test Date: 2025/4/22

Fundamental Test with Band Reject Filter

**Critical\_Freqs**

Frequency (MHz)	MaxPeak (dB μV/m)	Average (dB μV/m)	Limit (dB μV/m)	Margin (dB)	Pol	Corr. (dB/m)
2128.800000	---	32.25	54.00	21.75	V	-11.3
2128.800000	47.72	---	74.00	26.28	V	-11.3
4957.600000	---	40.41	54.00	13.59	V	-2.6
4957.600000	49.90	---	74.00	24.10	V	-2.6
7439.600000	---	44.53	54.00	9.47	V	3.7
7439.600000	51.91	---	74.00	22.09	V	3.7
10934.800000	---	43.76	54.00	10.24	H	7.3
10934.800000	51.34	---	74.00	22.66	H	7.3
14028.800000	---	43.85	54.00	10.15	H	9.8
14028.800000	52.67	---	74.00	21.33	H	9.8
17857.200000	---	44.87	54.00	9.13	H	11.8
17857.200000	55.77	---	74.00	18.23	H	11.8

**18 GHz - 25 GHz :**  
**Transmitting in maximum output power BLE (1 Mbps) low channel:**  
**Horizontal**



Project No :RSHA250414001  
 Date: 8.MAY.2025 19:06:05

Tester :Hugh Wu

Project No :RSHA250414001  
 Date: 8.MAY.2025 19:42:46

Tester :Hugh Wu

Frequency (GHz)	Max Peak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
20.22	---	39.04	54	14.96	V	12.48
20.22	48.93	---	74	25.07	V	12.48
20.21	---	38.85	54	15.15	H	12.47
20.21	49.02	---	74	24.98	H	12.47

## RESTRICTED BANDS EMISSION:

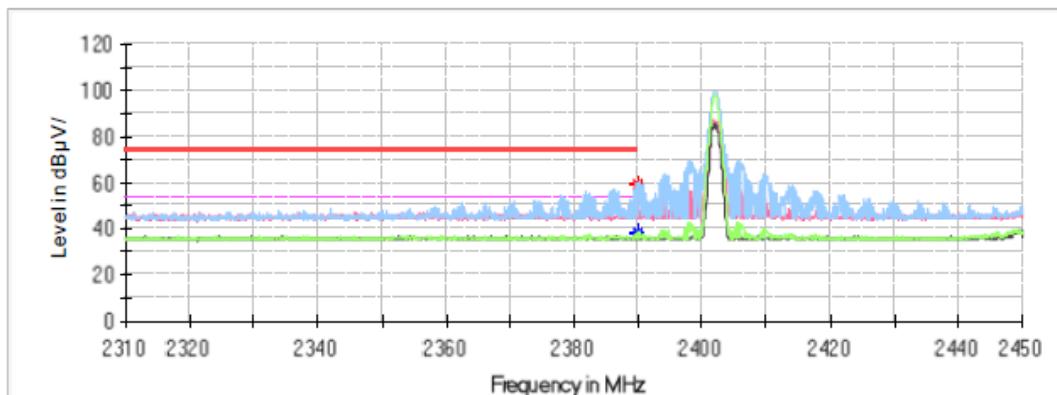
BLE (1 Mbps)

## Left Side

## Common Information

Project No.: RSHA250414001  
 EUT Model: KPP-500  
 Test Mode: BLE 1M  
 Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209  
 Test Equipment: ESU40,3115,PAM-0118P  
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
 Temperature: 20.3°C  
 Humidity: 52%  
 Atmospheric Pressure: 101.0kPa  
 Test Engineer: Destine Hu  
 Test Date: 2025/4/22

Full Spectrum



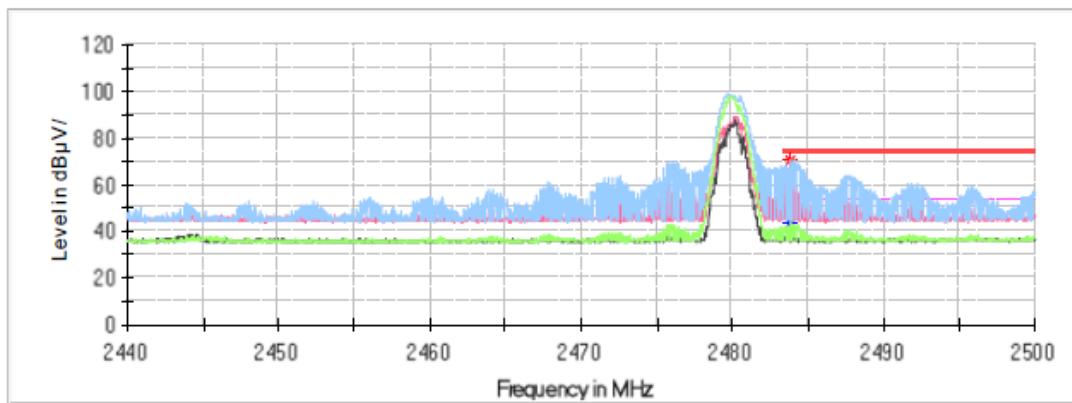
## Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2389.856000	---	37.36	54.00	16.64	H	-0.6
2389.856000	59.75	---	74.00	14.25	H	-0.6
2389.968000	---	38.37	54.00	15.63	V	-0.6
2389.968000	58.47	---	74.00	15.53	V	-0.6

**Right Side****Common Information**

Project No.: RSHA250414001  
EUT Model: KPP-500 Wireless Presenter  
Test Mode: BLE 1M  
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209  
Test Equipment: ESU40.3115,PAM-0118P  
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto  
Temperature: 20.3°C  
Humidity: 52%  
Atmospheric Pressure: 101.0kPa  
Test Engineer: Destine Hu  
Test Date: 2025/4/22

Full Spectrum

**Critical\_Freqs**

Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2483.800000	---	43.50	54.00	10.50	H	-0.3
2483.800000	70.39	---	74.00	3.61	H	-0.3

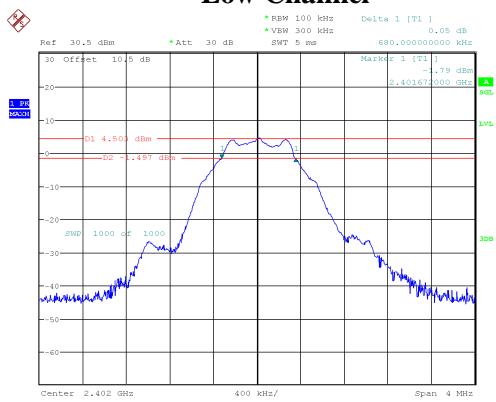
**6 dB EMISSION BANDWIDTH****Environmental Conditions & Test Information**

Test Date:	2025-04-23
Temperature:	25 °C
Relative Humidity:	53 %
ATM Pressure:	101.3 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

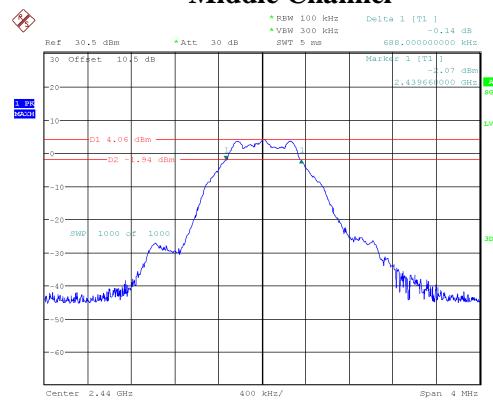
Mode	Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (MHz)
BLE (1 Mbps)	Low	2402	0.680	≥0.5
	Middle	2440	0.688	≥0.5
	High	2480	0.676	≥0.5

## BLE (1 Mbps)

## Low Channel



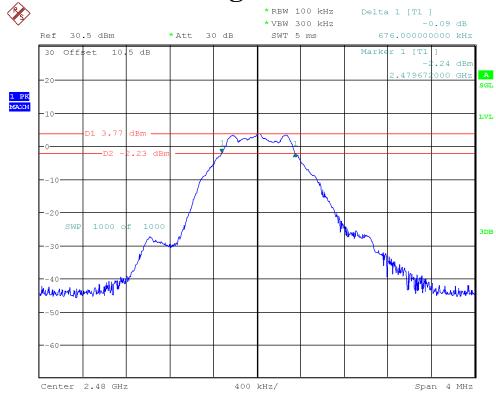
## Middle Channel



ProjectNo.:RSHA250414001 Tester:Neil Zhou  
Date: 23.APR.2025 11:30:19

ProjectNo.:RSHA250414001 Tester:Neil Zhou  
Date: 23.APR.2025 11:40:20

## High Channel



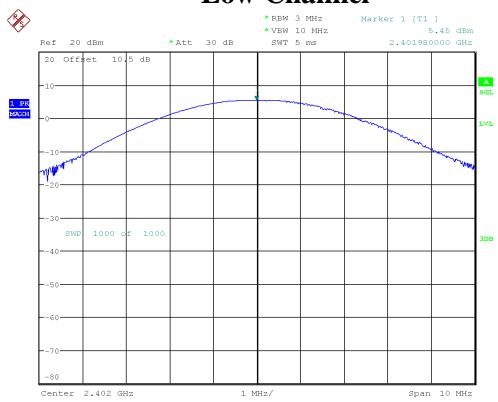
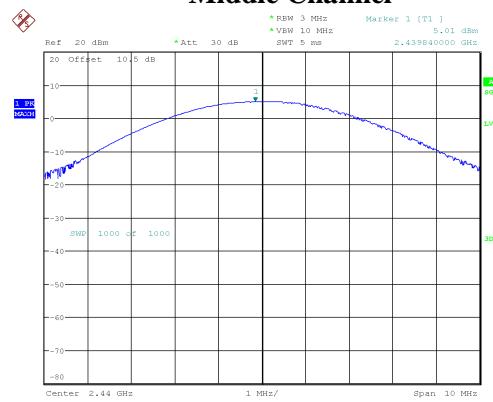
ProjectNo.:RSHA250414001 Tester:Neil Zhou  
Date: 23.APR.2025 11:50:09

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

Test Date:	2025-04-23
Temperature:	25 °C
Relative Humidity:	53 %
ATM Pressure:	101.3 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

**Test Result:** Compliant.*EUT operation mode: Transmitting*

Mode	Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Limit (dBm)	Result
BLE (1 Mbps)	Low	2402	5.45	30	Pass
	Middle	2440	5.01	30	Pass
	High	2480	4.70	30	Pass

**BLE (1 Mbps)****Low Channel****Middle Channel**

ProjectNo.:RSHA250414001 Tester:Neil Zhou  
Date: 23.APR.2025 11:38:09

ProjectNo.:RSHA250414001 Tester:Neil Zhou  
Date: 23.APR.2025 11:47:34

**High Channel**

ProjectNo.:RSHA250414001 Tester:Neil Zhou  
Date: 23.APR.2025 11:58:41

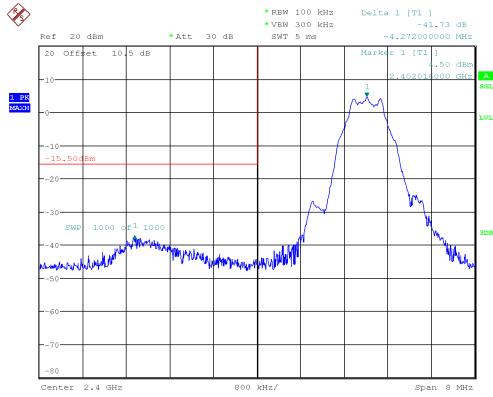
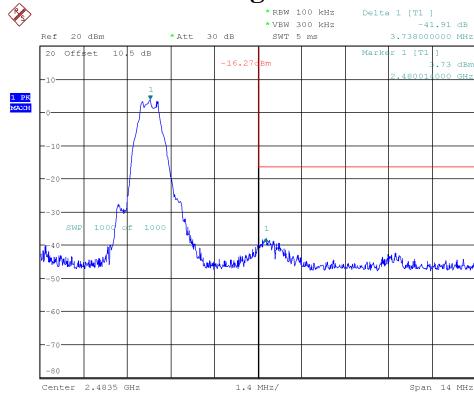
**BAND EDGE****Environmental Conditions & Test Information**

<b>Test Date:</b>	2025-04-23
<b>Temperature:</b>	25 °C
<b>Relative Humidity:</b>	53 %
<b>ATM Pressure:</b>	101.3 kPa
<b>Test Result:</b>	Pass
<b>Test Engineer:</b>	Neil Zhou

**Test Result:** Compliant.

*EUT operation mode: Transmitting*

Mode	Channel	Frequency (MHz)	Result (dBc)	Limit (dBc)
BLE (1 Mbps)	Low	2402	41.73	20
	High	2480	41.91	

**BLE (1 Mbps)****Left Side****Right Side**

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

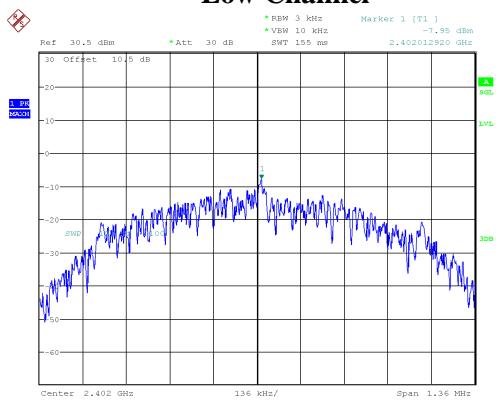
<b>Test Date:</b>	2025-04-23
<b>Temperature:</b>	25 °C
<b>Relative Humidity:</b>	53 %
<b>ATM Pressure:</b>	101.3 kPa
<b>Test Result:</b>	Pass
<b>Test Engineer:</b>	Neil Zhou

**Test Result:** Compliant.*EUT operation mode: Transmitting*

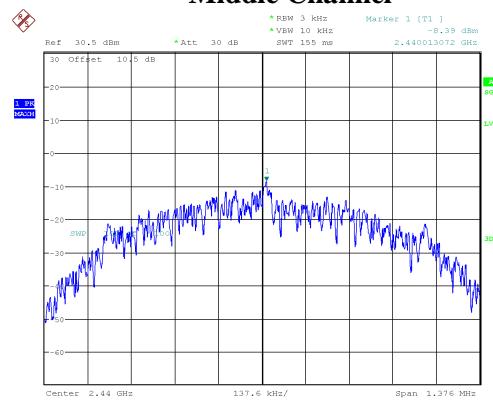
<b>Mode</b>	<b>Channel</b>	<b>Frequency (MHz)</b>	<b>PSD (dBm/3kHz)</b>	<b>Limit (dBm/3kHz)</b>
BLE (1 Mbps)	Low	2402	-7.95	≤8
	Middle	2440	-8.39	≤8
	High	2480	-8.62	≤8

## BLE (1 Mbps)

## Low Channel



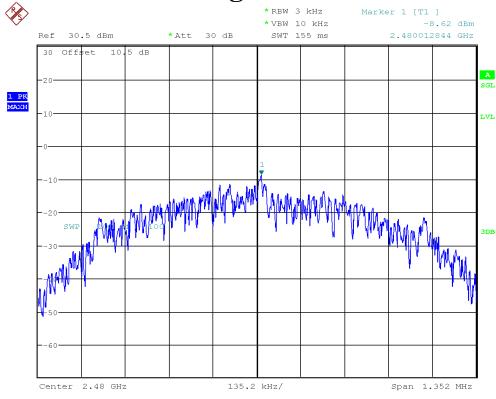
## Middle Channel



ProjectNo.:RSHA250414001 Tester:Neil Zhou  
 Date: 23.APR.2025 11:38:33

ProjectNo.:RSHA250414001 Tester:Neil Zhou  
 Date: 23.APR.2025 11:47:58

## High Channel



ProjectNo.:RSHA250414001 Tester:Neil Zhou  
 Date: 23.APR.2025 11:59:05

### **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 \*\*\*\*\***