



## FCC PART 15.247

### TEST REPORT

For

**SPACEWALKER PTE. LTD.**

60 PAYA LEBAR ROAD #07-54 PAYA LEBAR SQUARE SINGAPORE (409051)

**FCC ID: 2BK3M-GT3U001**

<b>Report Type:</b> Original Report	<b>Product Name:</b> NAVEE Electric Scooter
<b>Report Number:</b> RKSA240902002-00B	
<b>Report Date:</b>	2024-12-10
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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	RKSA240902002-00B	R1V1	2024-12-10	Initial Release

## GENERAL INFORMATION

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

Applicant:	SPACEWALKER PTE. LTD.
Tested Model:	GT3-U
Series Model:	GT3 Pro-U, GT3 Max-U
Model Difference:	motor, battery capacity, model name, see the declaration letter for details
Product Name:	NAVEE Electric Scooter
Power Supply:	DC 46.8V from battery
RF Function:	BLE 1Mbps, BLE 2Mbps
Operating Band/Frequency:	2402-2480 MHz
Maximum Output Power:	BLE (1 Mbps): 4.60 dBm BLE (2 Mbps): 4.60 dBm
Channel Number:	40
Channel Separation:	2 MHz
Modulation Type	GFSK
Antenna Type:	PCB Antenna
★Maximum Antenna Gain:	0.21 dBi

#### Adapter Information:

Model: FY-5461500

Input: 100-240V, 50-60Hz, 2.5A

Output: 54.6V, 1.5A

*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:*

*RKSA240902002-1(GT3-U), RKSA240902002-2(GT3 Pro-U), RKSA240902002-3(GT3 Max-U) (Assigned by BACL (Kunshan). The EUT supplied by the applicant was received on 2024-09-02.)*

### Objective

This report is prepared for *SPACEWALKER PTE. LTD.* 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
	150 kHz~30 MHz
	30MHz~1GHz
	1GHz~6GHz
	6GHz~18GHz
	18GHz~40GHz
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: RTL8762x\_RFTestTool.exe

★Power level: -13.2

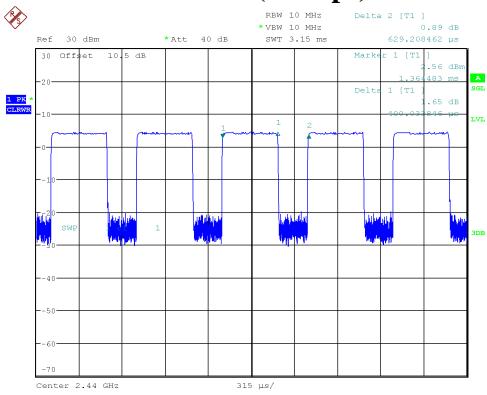
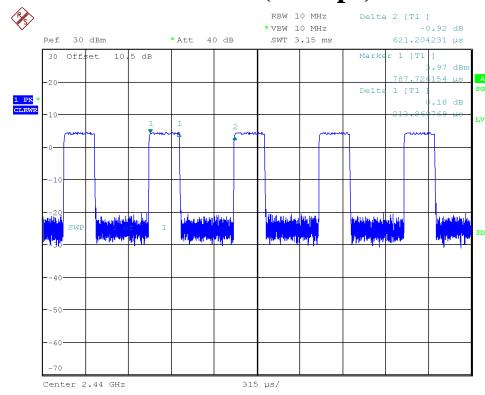
Note: The power level was declared by the applicant.

### Special Accessories

No special accessory.

### Equipment Modifications

No modification was made to the EUT tested.

**Duty Cycle:****BLE (1 Mbps)****BLE (2 Mbps)**

ProjectNo.:RKSA240902002 Tester:Neil Zhou  
Date: 24.SEP.2024 19:20:24

ProjectNo.:RKSA240902002 Tester:Neil Zhou  
Date: 24.SEP.2024 19:38:22

Mode	Duty Cycle (%)	T <sub>on</sub> (ms)	T <sub>on+off</sub> (ms)	10log(1/x)
BLE (1 Mbps)	63.59	0.400	0.629	1.97
BLE (2 Mbps)	34.46	0.214	0.621	4.63

**Note:** “x” means the Duty Cycle.

**Support Equipment List and Details**

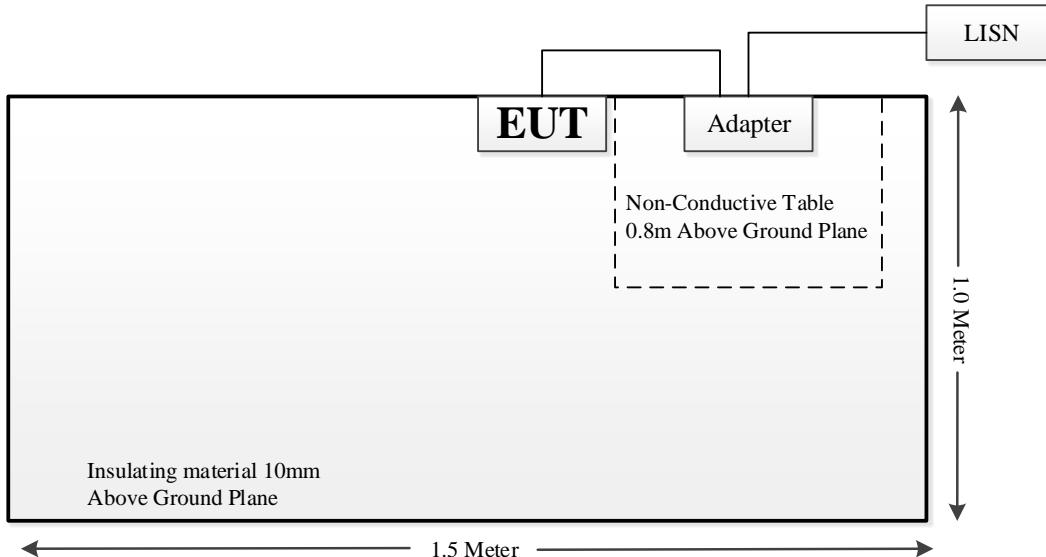
Manufacturer	Description	Model	Serial Number
/	/	/	/

**External I/O Cable**

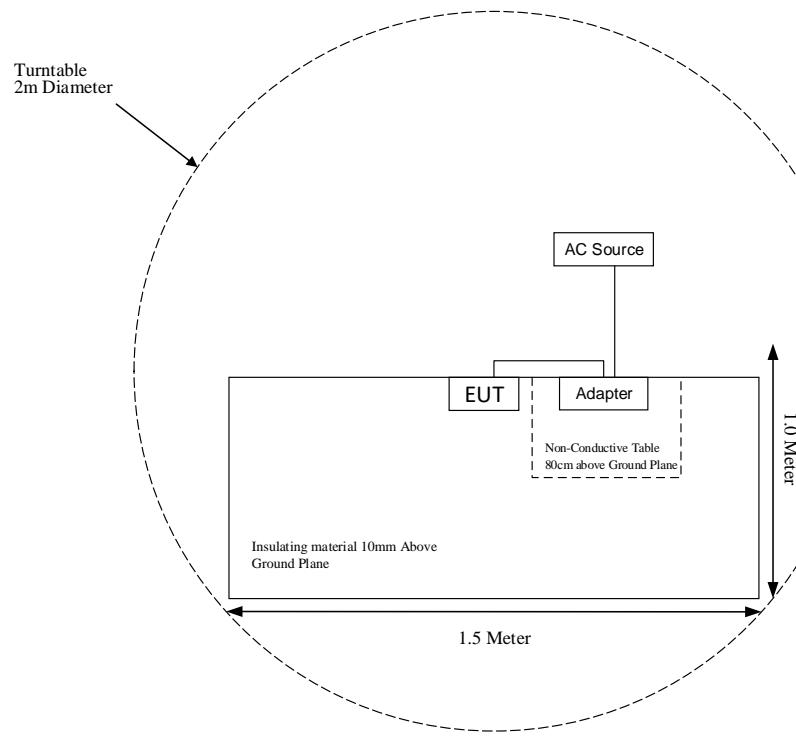
Cable Description	Length (m)	From Port	To Port
Power Cable 1	1.0	AC Source/LISN	Adapter
Power Cable 2	1.5	Adapter	EUT

**Block Diagram of Test Setup**

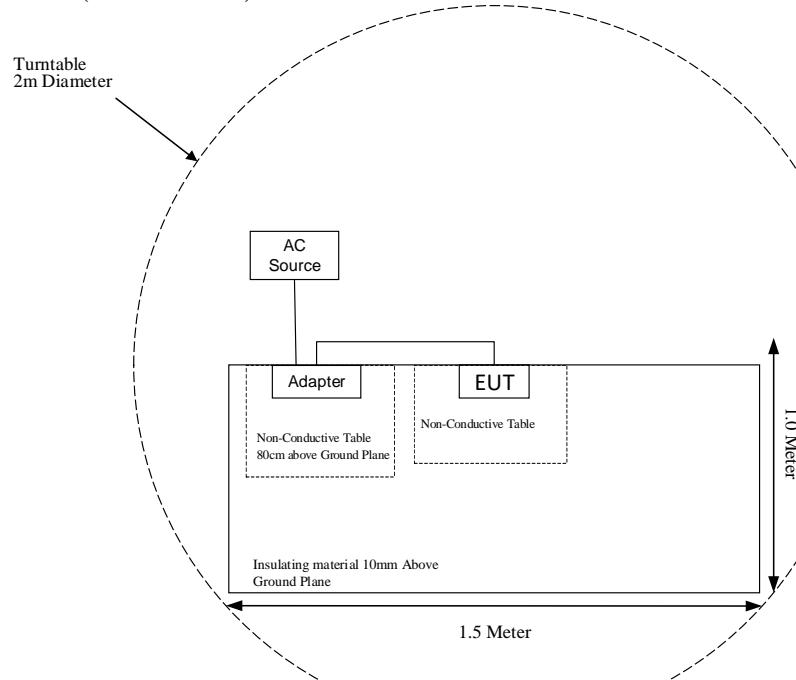
For Conducted Emissions:



For Radiated Emissions(Below 1GHz):



For Radiated Emissions(Above 1GHz):



Note: the EUT Antenna 1.5m above Ground Plane

## 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	2023-11-11	2024-11-10
ETS-LINDGREN	Loop Antenna	6512	108100	2023-11-09	2024-11-08
ETS-LINDGREN	Loop Antenna	6512	108100	2024-11-03	2027-11-02
Narda	6 dB Attenuator	773-6	10690812-2-1	2023-11-11	2024-11-10
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
<b>Radiated Emission Test (Chamber #2)</b>					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2024-04-25	2025-04-24
ETS-LINDGREN	Horn Antenna	3115	9311-4159	2023-12-02	2024-12-01
ETS-LINDGREN	Horn Antenna	3116	2516	2023-12-08	2024-12-07
A.H.Systems,inc	Amplifier	PAM-0118P	512	2024-04-25	2025-04-24
MICRO-TRONICS	Band Reject Filter	BRM50702	G024	2024-04-23	2025-04-22
Narda	Attenuator	10dB	010	2024-04-23	2025-04-22
SELECTOR	Amplifier	EM18G40G	60726	2024-04-25	2025-04-24
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2024-04-23	2025-04-22
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
<b>RF Conducted Test</b>					
Rohde & Schwarz	Spectrum Analyzer	FSU26	200103	2024-04-24	2025-04-23
Narda	Attenuator	10dB	010	2024-04-23	2025-04-22
XHFDZ	RG178 Coaxial Cable	SMA-178	XHF-1102	Each time	N/A
<b>Conducted Emission Test</b>					
Rohde & Schwarz	EMI Test Receiver	ESR	101746	2024-04-23	2025-04-22
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	0357.8810.54	2024-03-29	2025-03-28
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	5.0	3.16	5.0	0.979	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 0.21 dBi, which is permanently attached to the unit, fulfill the requirement of this section. Please refer to the EUT photos.

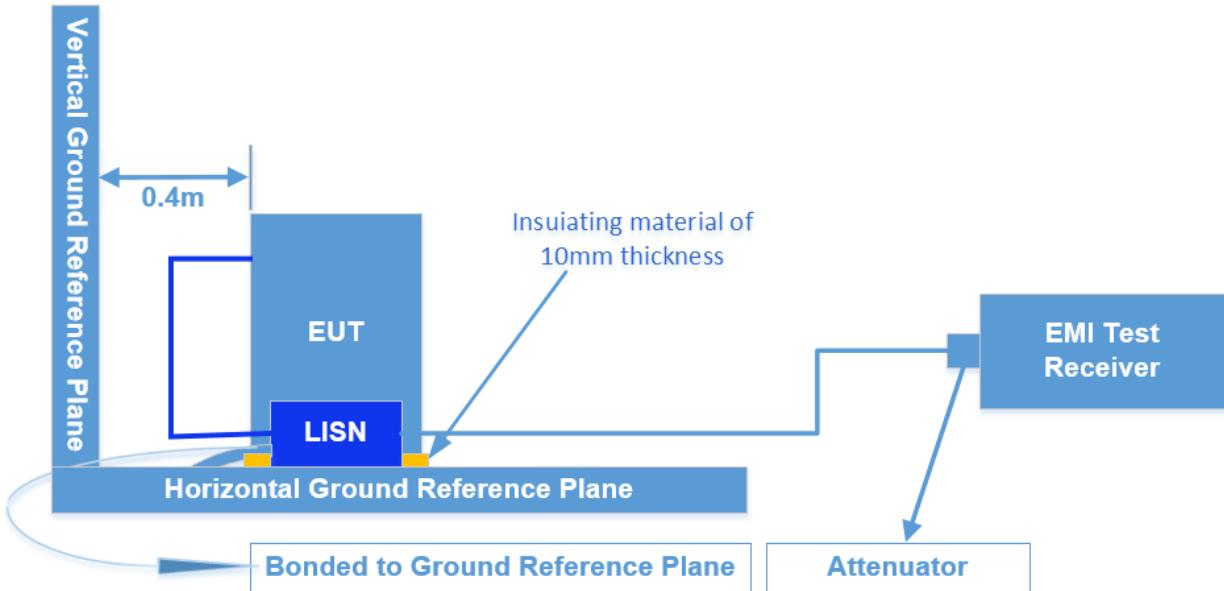
**Result:** Compliant.

## 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

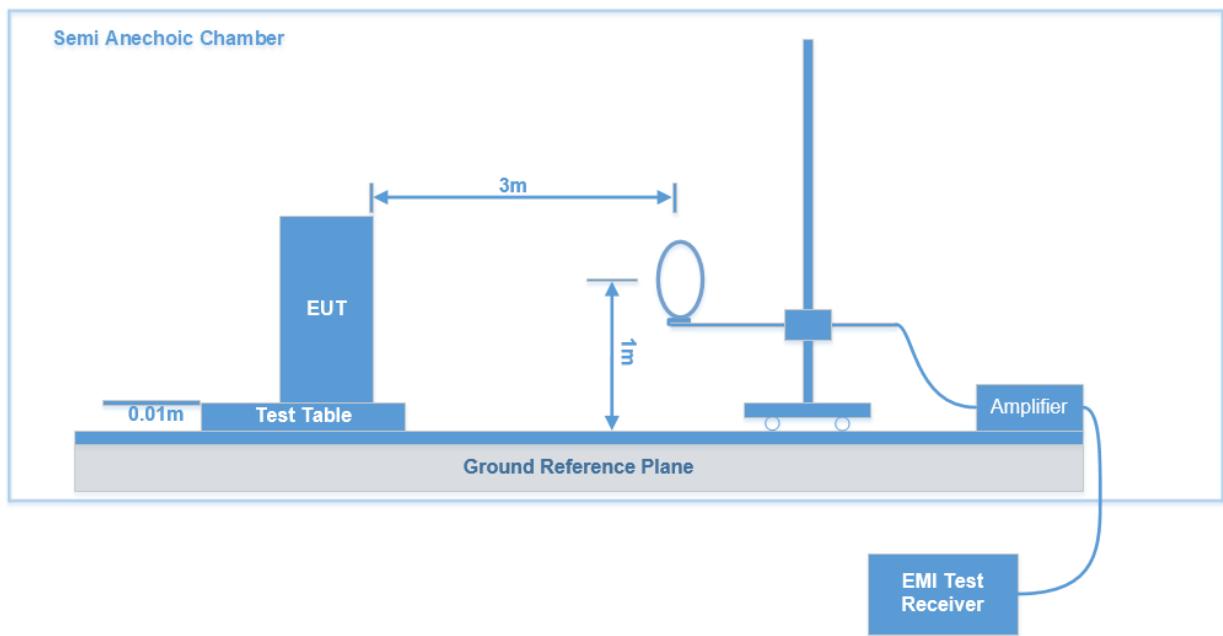
## FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

### Applicable Standard

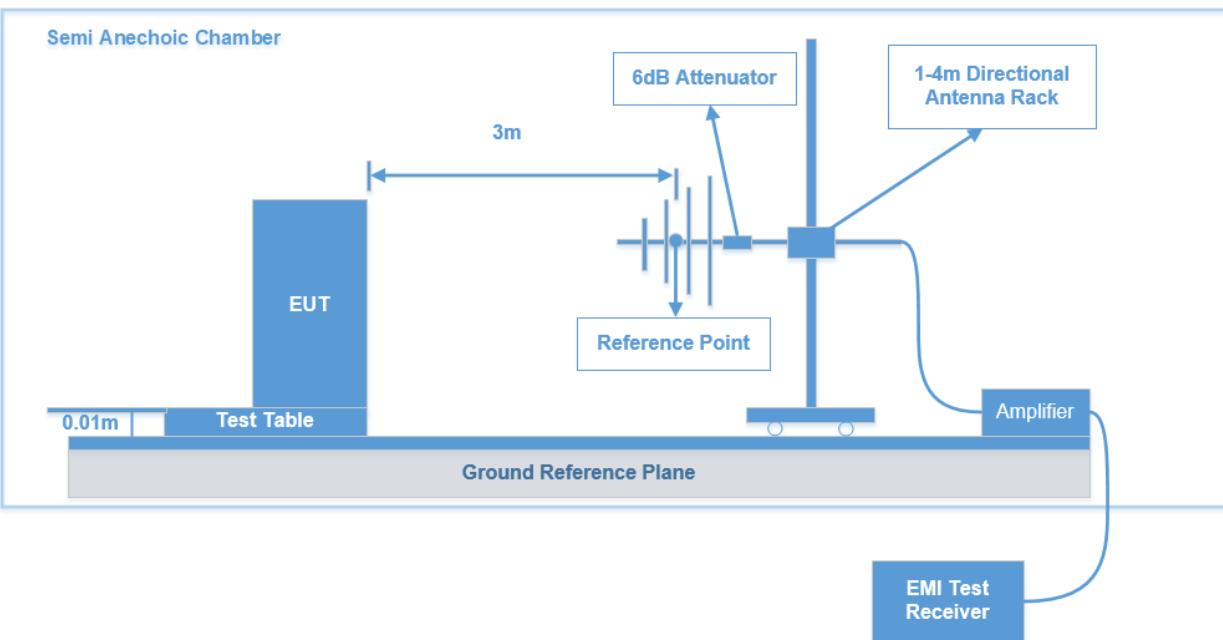
FCC §15.247 (d); §15.209; §15.205;

### Test System Setup

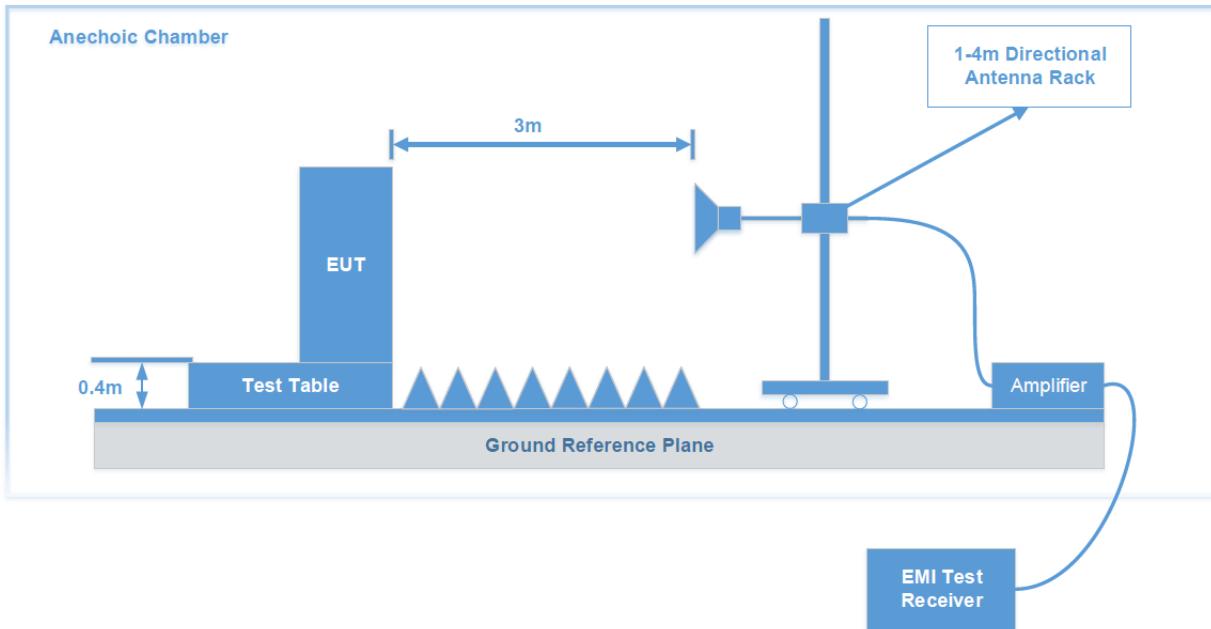
#### 9 kHz - 30 MHz:



#### 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

The system was investigated from 9 kHz to 25 GHz.

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

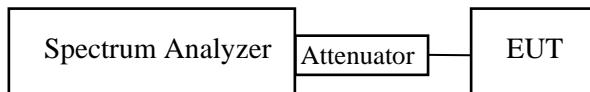
### Applicable Standard

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.



**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 RBW  $\geq$  DTS bandwidth.
2. Set 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.



**Test Data: See Appendix**

## FCC §15.247(d) – BAND EDGE

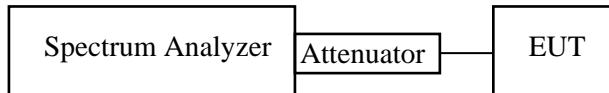
### Applicable Standard

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.



### Test Data: See Appendix

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

### Applicable Standard

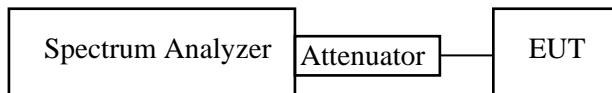
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of 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.



**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

### Environmental Conditions & Test Information

Test Item:	AC LINE CONDUCTED EMISSIONS	SPURIOUS EMISSIONS			
		9kHz – 30MHz	30MHz - 1GHz	1 GHz - 18 GHz	18 GHz - 25 GHz
Test Date:	2024-09-10 to 2024-12-03	2024-09-19 to 2024-12-09	2024-09-18	2024-09-20	2024-09-26
Temperature:	28.1 °C - 17.4°C	25.7 °C - 26 °C	26.3 °C	25.3 °C	25.8 °C
Relative Humidity:	55 % - 57%	50 % - 52 %	51 %	52 %	50 %
ATM Pressure:	101.1 kPa - 102.4 kPa	101.1 kPa – 102.0 kPa	101.2 kPa	101.4 kPa	101.3 kPa
Test Result:	Pass	Pass	Pass	Pass	Pass
Test Engineer:	Leah Li & Myles Miao	Grace Luo & Jerry Yan	Grace Luo	Klein Zhu	Hugh Wu

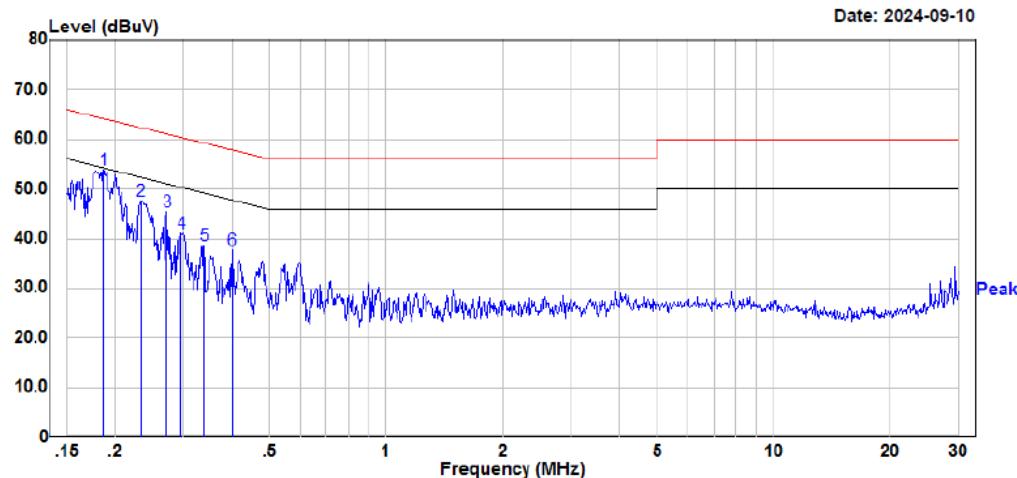
Test Item:	DUTY CYCLE	6 DB EMISSION BANDWIDTH	MAXIMUM CONDUCTED OUTPUT POWER	BAND EDGE	POWER SPECTRAL DENSITY
Test Date:	2024-09-24	2024-09-24	2024-09-24	2024-09-24	2024-09-24
Temperature:	24.6 °C	24.6 °C	24.6 °C	24.6 °C	24.6 °C
Relative Humidity:	49 %	49 %	49 %	49 %	49 %
ATM Pressure:	101.2 kPa	101.2 kPa	101.2 kPa	101.2 kPa	101.2 kPa
Test Result:	/	Pass	Pass	Pass	Pass
Test Engineer:	Neil Zhou	Neil Zhou	Neil Zhou	Neil Zhou	Neil Zhou

## AC LINE CONDUCTED EMISSIONS

*GT3-U*

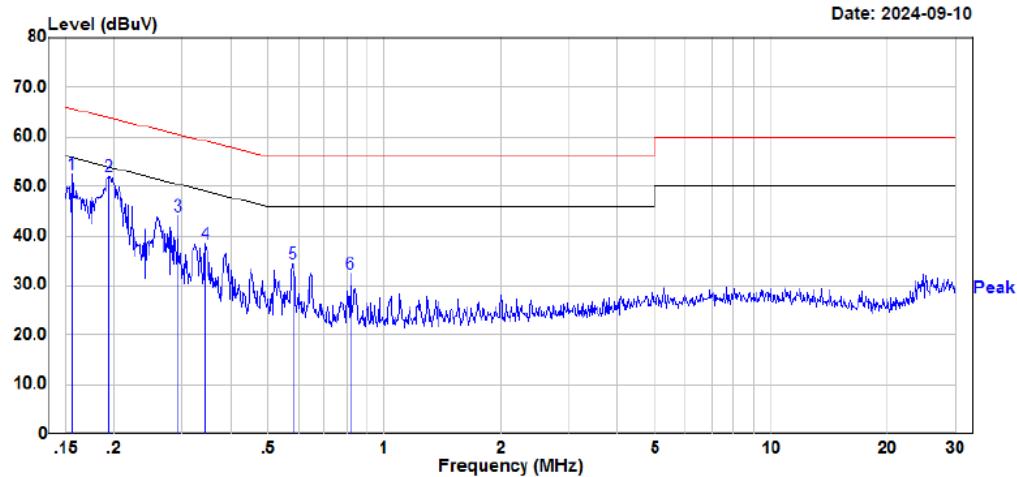
*EUT operation mode: Transmitting in BLE (1 Mbps) low channel (maximum output power)*

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



Site : CE  
 Condition : limit\FCC PART 15.207  
 : DET:Peak  
 Project No. : RSHA240902002  
 Model : GT3-U  
 Phase : L  
 Voltage : 120V/60Hz  
 Mode : BLE 1M  
 Test Equipment : ENV216,ESR  
 Temperature : 28.1°C  
 Humidity : 55%  
 Atmospheric pressure: 101.1kPa  
 Test Engineer : Leah Li

	Freq	Read Level	Factor	Limit Level	Line	Over Limit	Remark
	MHz	dBuV		dBuV	dBuV		
1	0.186	33.85	20.11	53.96	64.22	-10.26	Peak
2	0.233	27.44	20.12	47.56	62.36	-14.80	Peak
3	0.271	25.26	20.15	45.41	61.07	-15.66	Peak
4	0.295	21.05	20.16	41.21	60.37	-19.16	Peak
5	0.338	18.44	20.19	38.63	59.25	-20.62	Peak
6	0.400	17.56	20.20	37.76	57.84	-20.08	Peak

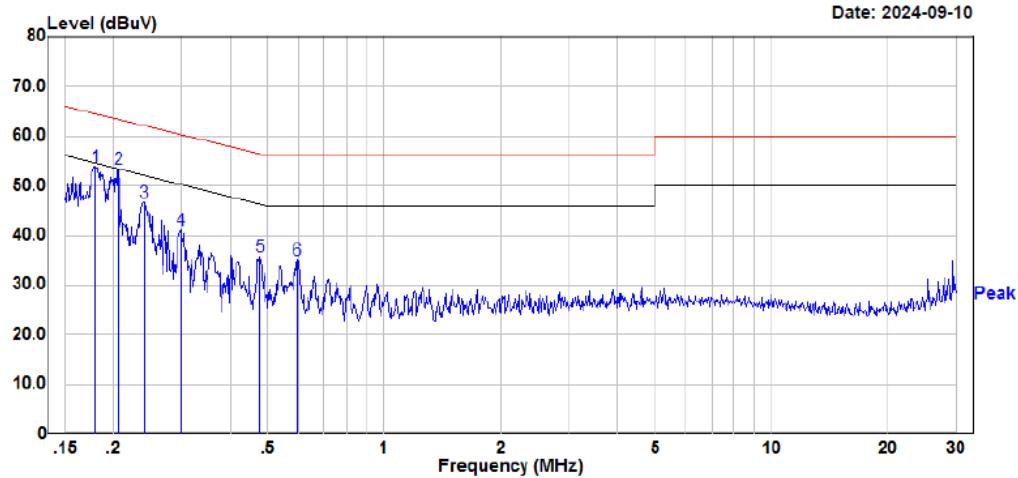
**AC 120V/60 Hz, Neutral**

Site : CE  
Condition : limit\FCC PART 15.207  
            : DET:Peak  
Project No. : RSHA240902002  
Model : GT3-U  
Phase : N  
Voltage : 120V/60Hz  
Mode : BLE 1M  
Test Equipment : ENV216, ESR  
Temperature : 28.1°C  
Humidity : 55%  
Atmospheric pressure: 101.1kPa  
Test Engineer : Leah Li

	Freq	Read		Limit	Over	Remark
		Level	Factor			
1	0.155	32.27	20.11	52.38	65.71	-13.33 Peak
2	0.193	31.95	20.11	52.06	63.89	-11.83 Peak
3	0.293	23.82	20.16	43.98	60.45	-16.47 Peak
4	0.343	18.16	20.19	38.35	59.13	-20.78 Peak
5	0.579	14.20	20.11	34.31	56.00	-21.69 Peak
6	0.817	12.42	19.92	32.34	56.00	-23.66 Peak

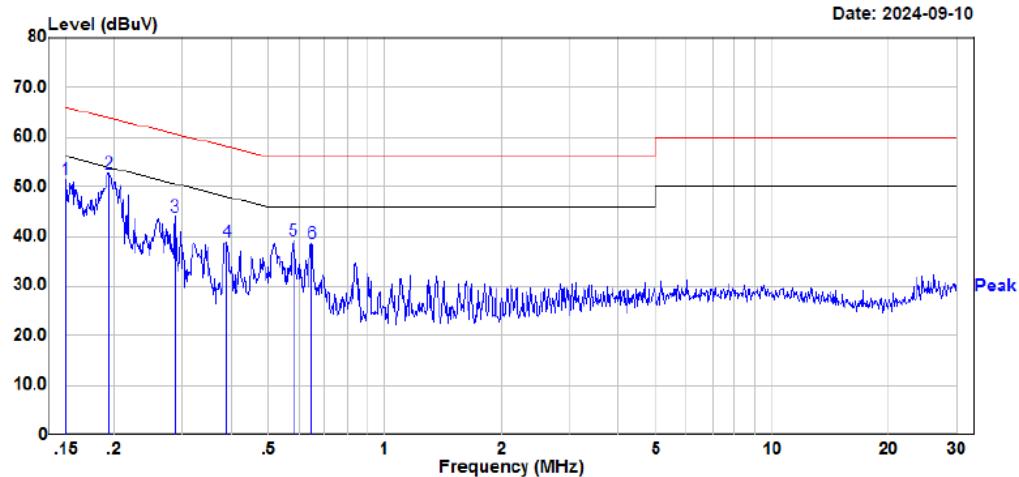
EUT operation mode: Transmitting in BLE (2 Mbps) low channel (maximum output power)

### AC 120V/60 Hz, Line



Site : CE  
Condition : limit\FCC PART 15.207  
              : DET:Peak  
Project No. : RSHA240902002  
Model : GT3-U  
Phase : L  
Voltage : 120V/60Hz  
Mode : BLE 2M  
Test Equipment : ENV216, ESR  
Temperature : 28.1°C  
Humidity : 55%  
Atmospheric pressure: 101.1kPa  
Test Engineer : Leah Li

	Freq	Read Level	Factor	Limit Level	Over Line	Over Limit	Remark
	MHz	dBuV		dBuV	dBuV		
1	0.179	33.88	20.12	54.00	64.51	-10.51	Peak
2	0.205	33.27	20.11	53.38	63.39	-10.01	Peak
3	0.240	26.50	20.13	46.63	62.11	-15.48	Peak
4	0.298	21.00	20.17	41.17	60.29	-19.12	Peak
5	0.477	15.60	20.18	35.78	56.40	-20.62	Peak
6	0.597	14.94	20.10	35.04	56.00	-20.96	Peak

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

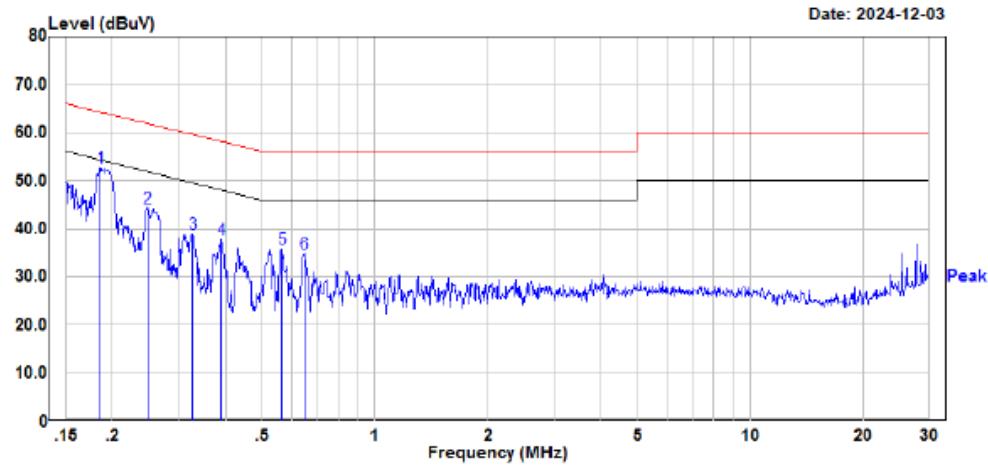
Site : CE  
Condition : limit\FCC PART 15.207  
Project No. : DET:Peak  
Model : RSHA240902002  
Phase : GT3-U  
Voltage : N  
Mode : 120V/60Hz  
Test Equipment : BLE 2M  
Temperature : ENV216, ESR  
Humidity : 28.1°C  
Atmospheric pressure: 55%  
Test Engineer : Leah Li

	Freq	Read Level	Factor	Limit Level	Line	Over Limit	Remark
	MHz	dBuV		dBuV	dBuV		
1	0.150	31.45	20.12	51.57	66.00	-14.43	Peak
2	0.193	32.61	20.11	52.72	63.89	-11.17	Peak
3	0.287	23.80	20.16	43.96	60.62	-16.66	Peak
4	0.391	18.76	20.20	38.96	58.05	-19.09	Peak
5	0.579	19.07	20.11	39.18	56.00	-16.82	Peak
6	0.646	18.69	20.08	38.77	56.00	-17.23	Peak

GT3 Pro-U

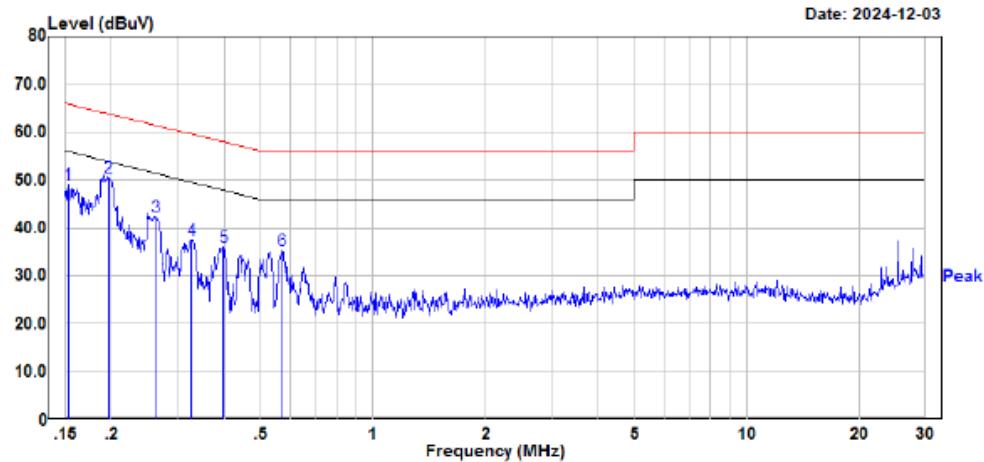
EUT operation mode: Transmitting in BLE (1 Mbps) low channel (maximum output power)

AC 120V/60 Hz, Line



Site : CE  
 Condition : limit\FCC PART 15.207  
 : DET:Peak  
 Project No. : RKSA240902002  
 Model : GT3 Pro-U  
 Phase : L  
 Voltage : 120V/60Hz  
 Mode : BLE 1M  
 Test Equipment : ENV216,ESR  
 Receiver Setting : RBW: 9 kHz, VBW: 30 kHz, Sweep Time: Auto  
 Temperature : 17.4°C  
 Humidity : 57%  
 Atmospheric pressure: 102.4kPa  
 Test Engineer : Myles Miao

	Freq	Read		Limit		Over	Remark
		Level	Factor	Level	Line		
1	0.186	32.47	20.11	52.58	64.22	-11.64	Peak
2	0.248	24.05	20.14	44.19	61.82	-17.63	Peak
3	0.326	18.70	20.18	38.88	59.54	-20.66	Peak
4	0.391	17.40	20.20	37.60	58.05	-20.45	Peak
5	0.565	15.58	20.10	35.68	56.00	-20.32	Peak
6	0.649	14.71	20.08	34.79	56.00	-21.21	Peak

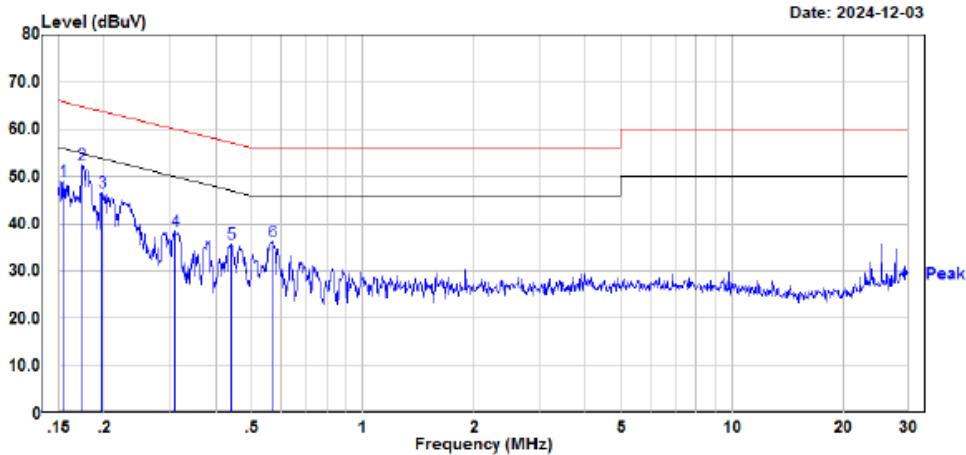
**AC 120V/60 Hz, Neutral**

Site : CE  
Condition : limit\FCC PART 15.207  
Project No. : DET:Peak  
Model : RKSA240902002  
Phase : GT3 Pro-U  
Voltage : N  
Mode : 120V/60Hz  
Test Equipment : BLE 1M  
Receiver Setting : ENV216,ESR  
Temperature : RBW: 9 kHz, VBW: 30 kHz, Sweep Time: Auto  
Humidity : 17.4°C  
Atmospheric pressure: 57%  
Test Engineer : Myles Miao

	Freq	Read Level	Factor	Limit Level	Over Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.153	28.91	20.12	49.03	65.83	-16.80	Peak
2	0.196	30.45	20.11	50.56	63.76	-13.20	Peak
3	0.262	22.10	20.14	42.24	61.36	-19.12	Peak
4	0.326	17.38	20.18	37.56	59.54	-21.98	Peak
5	0.398	15.87	20.20	36.07	57.89	-21.82	Peak
6	0.570	15.27	20.10	35.37	56.00	-20.63	Peak

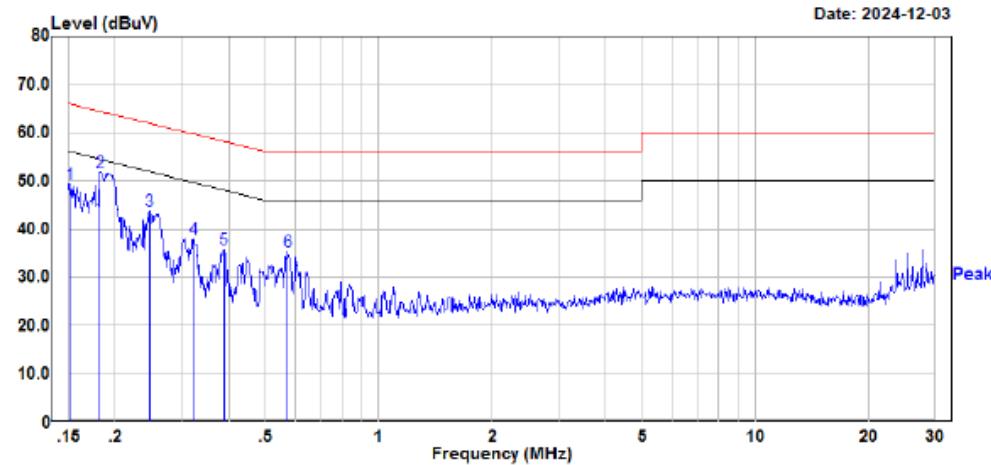
EUT operation mode: Transmitting in BLE (2 Mbps) low channel (maximum output power)

### AC 120V/60 Hz, Line



Site : CE  
 Condition : limit\FCC PART 15.207  
 : DET:Peak  
 Project No. : RKSA240902002  
 Model : GT3 Pro-U  
 Phase : L  
 Voltage : 120V/60Hz  
 Mode : BLE 2M  
 Test Equipment : ENV216, ESR  
 Receiver Setting : RBW: 9 kHz, VBW: 30 kHz, Sweep Time: Auto  
 Temperature : 17.4°C  
 Humidity : 57%  
 Atmospheric pressure: 102.4kPa  
 Test Engineer : Myles Miao

	Freq	Read		Limit		Over Line Limit	Remark
		Level	Factor	Level	dBuV		
1	0.155	29.01	20.11	49.12	65.75	-16.63	Peak
2	0.174	32.38	20.11	52.49	64.76	-12.27	Peak
3	0.197	26.51	20.11	46.62	63.72	-17.10	Peak
4	0.311	18.20	20.17	38.37	59.96	-21.59	Peak
5	0.440	15.65	20.23	35.88	57.06	-21.18	Peak
6	0.570	16.16	20.10	36.26	56.00	-19.74	Peak

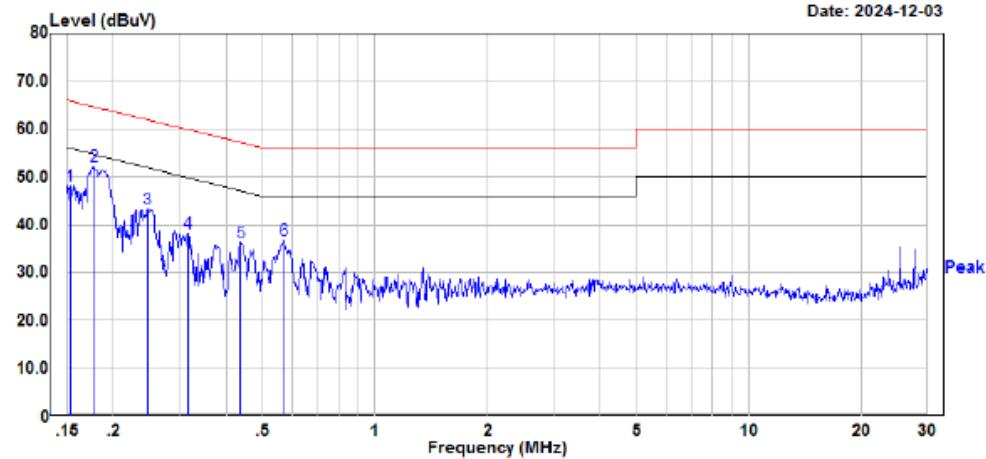
**AC 120V/60 Hz, Neutral**

Site : CE  
Condition : limit\FCC PART 15.207  
: DET:Peak  
Project No. : RKSA240902002  
Model : GT3 Pro-U  
Phase : N  
Voltage : 120V/60Hz  
Mode : BLE 2M  
Test Equipment : ENV216,ESR  
Receiver Setting : RBW: 9 kHz, VBW: 30 kHz, Sweep Time: Auto  
Temperature : 17.4°C  
Humidity : 57%  
Atmospheric pressure: 102.4kPa  
Test Engineer : Myles Miao

	Freq	Read Level	Factor	Limit Level	Line	Over Limit	Remark
	MHz	dBuV		dBuV	dBuV		
1	0.152	29.30	20.12	49.42	65.92	-16.50	Peak
2	0.182	31.71	20.12	51.83	64.39	-12.56	Peak
3	0.247	23.52	20.13	43.65	61.86	-18.21	Peak
4	0.322	17.76	20.18	37.94	59.67	-21.73	Peak
5	0.389	15.48	20.20	35.68	58.09	-22.41	Peak
6	0.573	15.21	20.10	35.31	56.00	-20.69	Peak

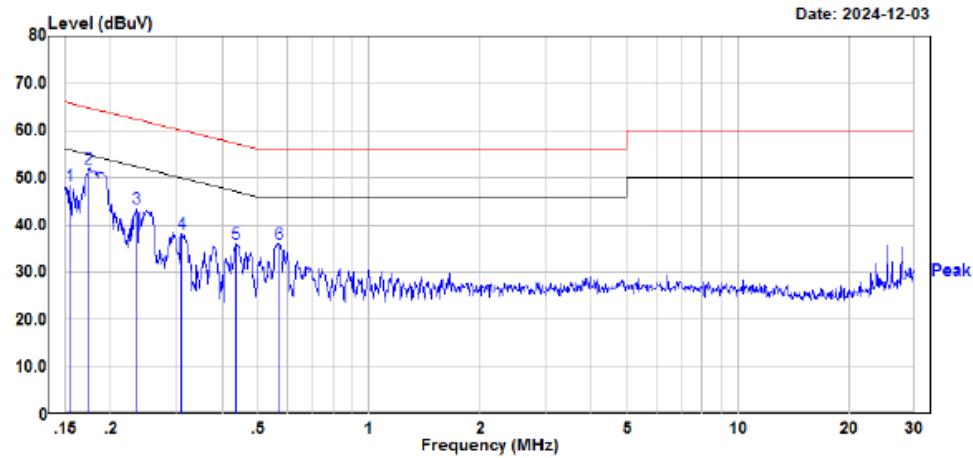
GT3 Max-U

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. : RKSA240902002  
 Model : GT3 Max-U  
 Phase : L  
 Voltage : 120V/60Hz  
 Mode : BLE 1M  
 Test Equipment : ENV216,ESR  
 Receiver Setting : RBW: 9 kHz, VBW: 30 kHz, Sweep Time: Auto  
 Temperature : 17.4°C  
 Humidity : 57%  
 Atmospheric pressure: 102.4kPa  
 Test Engineer : Myles Miao

	Freq	Read		Limit		Over	Remark
		Level	Factor	Level	Line		
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.153	28.08	20.12	48.20	65.83	-17.63	Peak
2	0.177	32.04	20.12	52.16	64.63	-12.47	Peak
3	0.247	23.16	20.13	43.29	61.86	-18.57	Peak
4	0.317	18.07	20.18	38.25	59.79	-21.54	Peak
5	0.438	16.05	20.23	36.28	57.10	-20.82	Peak
6	0.570	16.59	20.10	36.69	56.00	-19.31	Peak

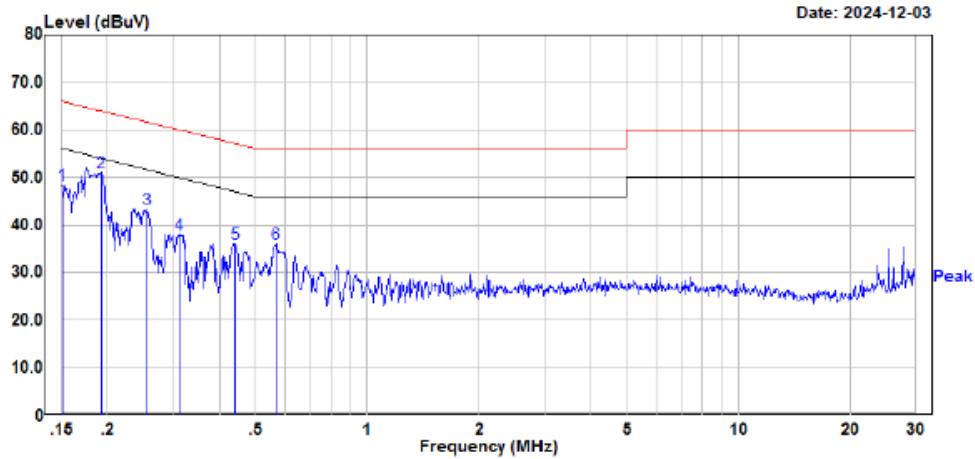
**AC 120V/60 Hz, Neutral**

Site : CE  
Condition : limit\FCC PART 15.207  
Project No. : DET:Peak  
Model : RKSA240902002  
Phase : GT3 Max-U  
Voltage : N  
Mode : 120V/60Hz  
Test Equipment : BLE 1M  
Receiver Setting : ENV216,ESR  
Temperature : RBW: 9 kHz, VBW: 30 kHz, Sweep Time: Auto  
Humidity : 17.4°C  
Atmospheric pressure: 57%  
Test Engineer : Myles Miao

Freq	Read			Limit	Over	Remark
	MHz	Level	Factor			
1	0.155	28.15	20.11	48.26	65.75	-17.49 Peak
2	0.173	31.88	20.11	51.99	64.80	-12.81 Peak
3	0.235	23.45	20.13	43.58	62.27	-18.69 Peak
4	0.311	18.12	20.17	38.29	59.96	-21.67 Peak
5	0.436	15.72	20.23	35.95	57.14	-21.19 Peak
6	0.570	16.03	20.10	36.13	56.00	-19.87 Peak

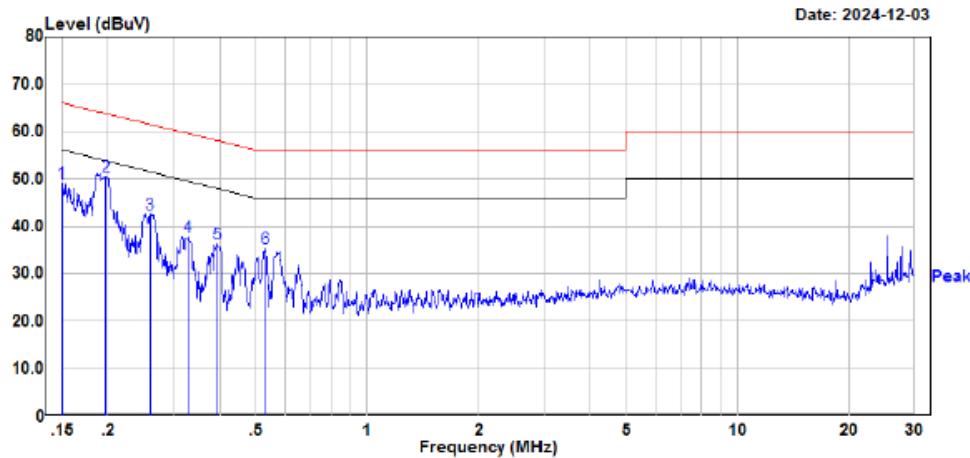
EUT operation mode: Transmitting in BLE (2 Mbps) low channel (maximum output power)

### AC 120V/60 Hz, Line



Site : CE  
Condition : limit\FCC PART 15.207  
Project No. : DET:Peak  
Model : RKSA240902002  
Phase : GT3 Max-U  
Voltage : L  
Mode : 120V/60Hz  
Test Equipment : ENV216,ESR  
Receiver Setting : BLE 2M  
Temperature : RBW: 9 kHz, VBW: 30 kHz, Sweep Time: Auto  
Humidity : 17.4°C  
Atmospheric pressure: 57%  
Test Engineer : 102.4kPa  
Myles Miao

	Freq	Read		Limit		Over	Remark
		MHz	dB <sub>UV</sub>	Factor	dB <sub>UV</sub>	Line	
1	0.151	28.21	20.12	48.33	65.96	-17.63	Peak
2	0.192	30.98	28.11	51.09	63.93	-12.84	Peak
3	0.256	23.15	20.14	43.29	61.57	-18.28	Peak
4	0.312	17.68	20.17	37.85	59.91	-22.06	Peak
5	0.440	15.78	20.23	36.01	57.06	-21.05	Peak
6	0.568	15.96	20.10	36.06	56.00	-19.94	Peak

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

Site : CE  
 Condition : limit\FCC PART 15.207  
 : DET:Peak  
 Project No. : RKSA240902002  
 Model : GT3 Max-U  
 Phase : N  
 Voltage : 120V/60Hz  
 Mode : BLE 2M  
 Test Equipment : ENV216,ESR  
 Receiver Setting : RBW: 9 kHz, VBW: 30 kHz, Sweep Time: Auto  
 Temperature : 17.4°C  
 Humidity : 57%  
 Atmospheric pressure: 102.4kPa  
 Test Engineer : Myles Miao

Freq	Read		Limit		Over		Remark
	MHz	dBuV	Factor	Level	Line	dB	
1	0.150	29.00	20.12	49.12	66.00	-16.88	Peak
2	0.197	30.44	20.11	50.55	63.72	-13.17	Peak
3	0.260	22.37	20.14	42.51	61.45	-18.94	Peak
4	0.328	17.56	20.18	37.74	59.50	-21.76	Peak
5	0.393	16.16	20.20	36.36	58.01	-21.65	Peak
6	0.532	15.07	20.12	35.19	56.00	-20.81	Peak

## SPURIOUS EMISSIONS

**Test Result:** Compliant.

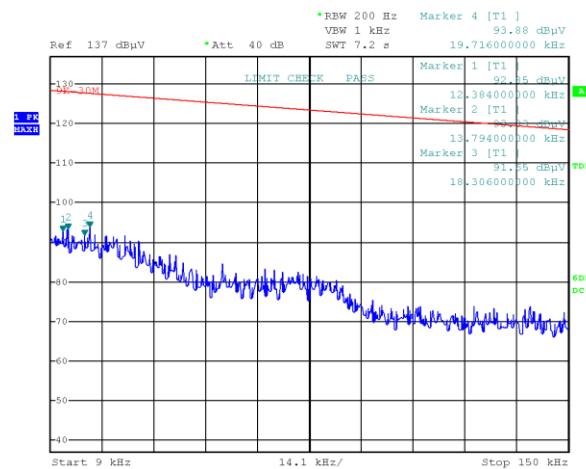
*EUT operation mode: Transmitting*

**9 kHz-30 MHz:** (Transmitting in maximum output power BLE (2 Mbps) low channel)

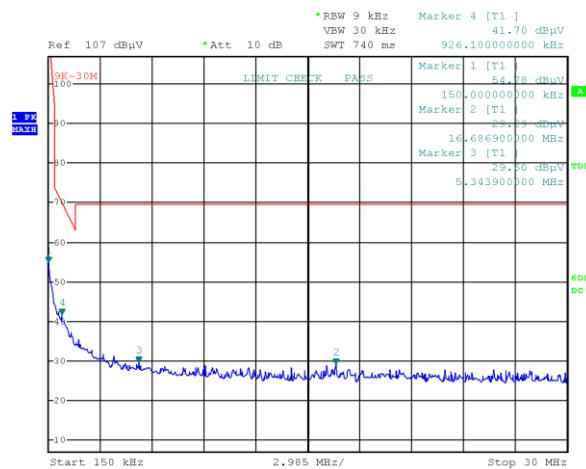
**Parallel (worst case)**

**Model:** GT3-U

### 9 kHz-150kHz



### 150 kHz -30 MHz



Project No.RKSA240902002  
Date: 9.DEC.2024 11:38:20

Tester:Jerry Yan

Project No.RKSA240902002  
Date: 19.SEP.2024 03:05:45

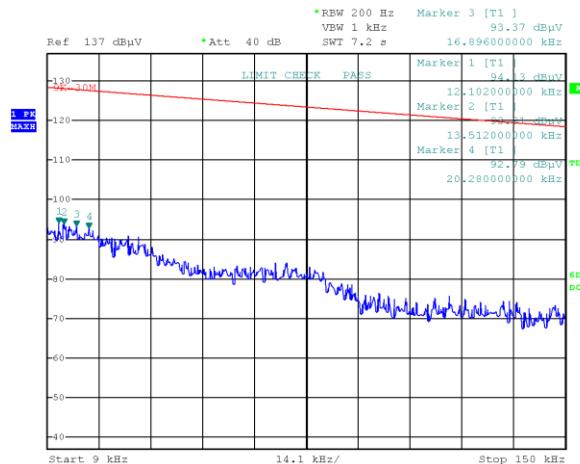
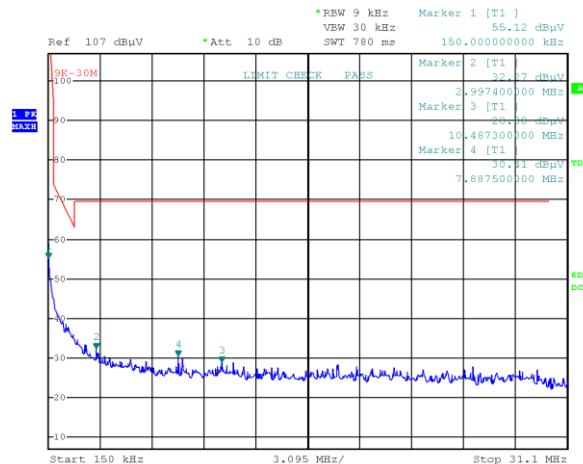
Tester:Grace Luo

### 9 kHz-150 kHz

Frequency (MHz)	Corrected Amplitude (dBµV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBµV/m) @3m	Margin (dB)
0.012384	92.85	PK	54.85	125.75	32.90
0.013794	93.33	PK	53.95	124.81	31.48
0.018306	91.65	PK	51.08	122.35	30.70
0.019716	93.88	PK	50.18	121.71	27.83

### 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)
0.15000	54.78	PK	50.90	104.08	49.30
16.68690	29.29	PK	5.87	69.54	40.25
5.34390	29.60	PK	7.92	69.54	39.94
0.92610	41.70	PK	18.26	68.27	26.57

**Model: GT3 Pro-U****9 kHz-150kHz****150 kHz -30 MHz**Project No.RKSA240902002  
Date: 9.DEC.2024 11:34:16

Tester:Jerry Yan

Project No.RKSA240902002  
Date: 19.SEP.2024 03:17:40

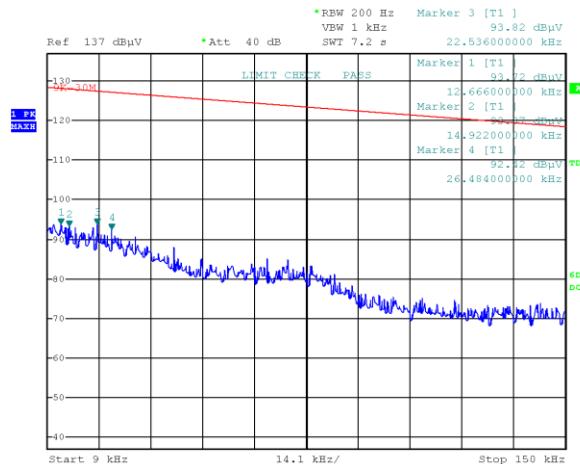
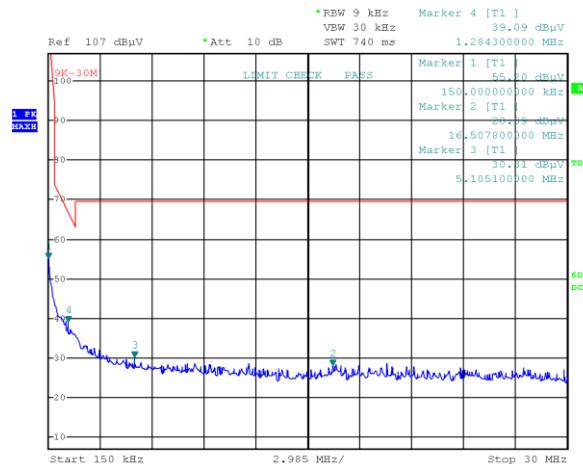
Tester:Grace Luo

**9 kHz-150 kHz**

Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.012102	94.13	PK	55.03	125.95	31.82
0.013512	93.91	PK	54.13	124.99	31.08
0.016896	93.37	PK	51.98	123.05	29.68
0.020280	92.79	PK	49.92	121.46	28.67

**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)
0.15000	55.12	PK	50.90	104.08	48.96
2.99740	32.27	PK	10.21	69.54	37.27
10.48730	28.88	PK	6.36	69.54	40.66
7.88750	30.41	PK	6.45	69.54	39.13

**Model: GT3 Max-U****9 kHz-150kHz****150 kHz -30 MHz**Project No.RKSA240902001  
Date: 9.DEC.2024 11:30:22

Tester:Jerry Yan

Project No.RKSA240902002  
Date: 19.SEP.2024 03:01:59

Tester:Grace Luo

**9 kHz-150 kHz**

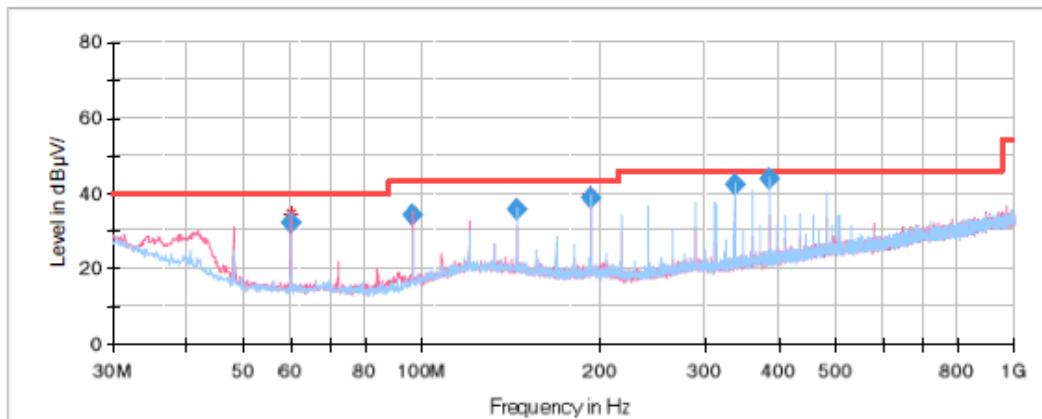
Frequency (MHz)	Corrected Amplitude (dB $\mu$ V/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dB $\mu$ V/m) @3m	Margin (dB)
0.012666	93.72	PK	54.67	125.55	31.83
0.014922	93.37	PK	53.23	124.13	30.76
0.022536	93.82	PK	49.29	120.55	26.73
0.026484	92.42	PK	48.18	119.15	26.73

**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)
0.15000	55.20	PK	50.90	104.08	48.88
16.50780	28.09	PK	5.88	69.54	41.45
5.10510	30.31	PK	8.18	69.54	39.23
1.28430	39.09	PK	5.10	65.43	26.34

**BLE (1 Mbps)****30 MHz - 1 GHz: (Transmitting in maximum output power low channel)****GT3-U****Common Information**

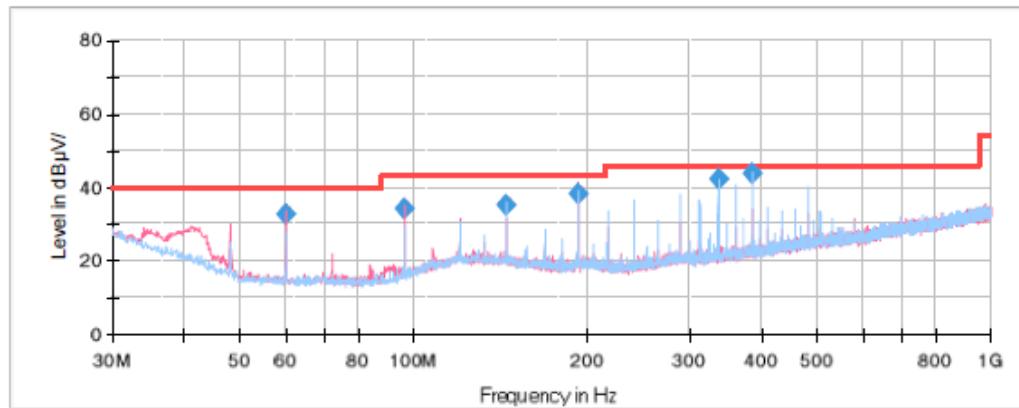
Project No:	RKSA240902002
EUT Model:	GT3-U
Test Mode:	Transmitting in BLE-1M mode
Standard:	FCC Part 15.205 & FCC Part 15.209&FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Temperature:	26.3°C
Humidity:	51%
Barometric Pressure:	101.2kPa
Test Engineer:	Grace Luo
Test Date:	2024/9/18

**Final Result**

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
60.007250	32.43	40.00	7.57	V	-17.6
96.195300	34.11	43.50	9.39	V	-15.4
144.293700	35.74	43.50	7.76	H	-11.6
192.401150	38.70	43.50	4.80	H	-12.5
336.718400	42.47	46.00	3.53	H	-9.6
384.785600	43.76	46.00	2.24	H	-8.4

**GT3 Pro-U****Common Information**

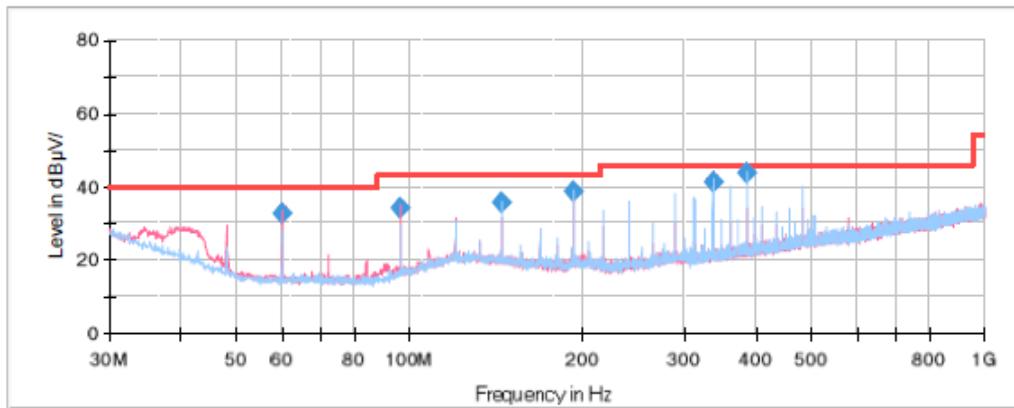
Project No: RKSA240902002  
EUT Model: GT3 Pro-U  
Test Mode: Transmitting in BLE-1M mode  
Standard: FCC Part 15.205 & FCC Part 15.209&FCC Part 15.247  
Test Equipment: ESCI, JB3, 310N  
Temperature: 26.3°C  
Humidity: 51%  
Barometric Pressure: 101.2kPa  
Test Engineer: Grace Luo  
Test Date: 2024/9/18

**Final\_Result**

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
60.010550	32.69	40.00	7.31	V	-17.6
96.207600	34.09	43.50	9.41	V	-15.4
144.324300	35.08	43.50	8.42	H	-11.6
192.401150	38.18	43.50	5.32	H	-12.5
336.707900	42.51	46.00	3.49	H	-9.6
384.783200	43.85	46.00	2.15	H	-8.4

**GT3 Max-U****Common Information**

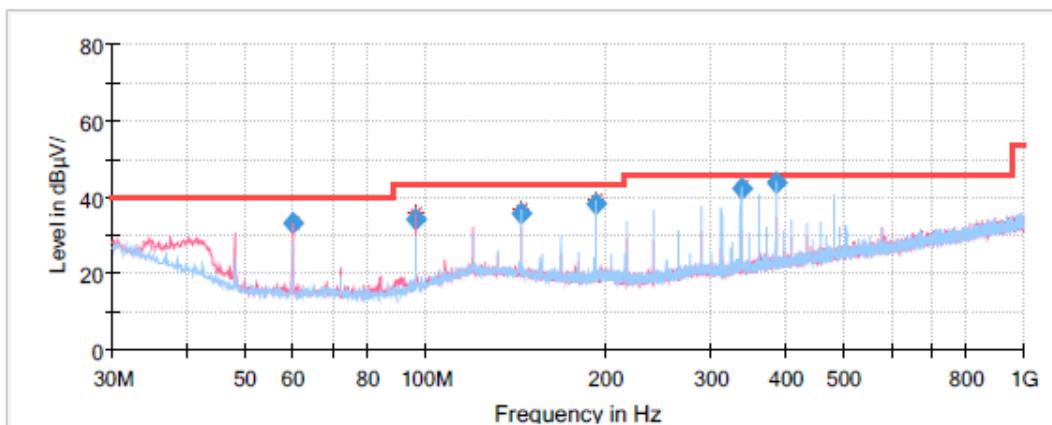
Project No: RKSA240902002  
EUT Model: GT3 Max-U  
Test Mode: Transmitting in BLE-1M mode  
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247  
Test Equipment: ESCI, JB3, 310N  
Temperature: 26.3°C  
Humidity: 51%  
Barometric Pressure: 101.2kPa  
Test Engineer: Grace Luo  
Test Date: 2024/9/18

**Final Result**

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
60.005750	32.68	40.00	7.32	V	-17.6
96.204300	34.36	43.50	9.14	V	-15.4
144.297900	35.76	43.50	7.74	H	-11.6
192.388850	38.52	43.50	4.98	H	-12.5
336.673400	41.18	46.00	4.82	H	-9.6
384.808700	44.00	46.00	2.00	H	-8.4

**BLE (2 Mbps)****30 MHz - 1 GHz: (Transmitting in maximum output power low channel)****GT3-U****Common Information**

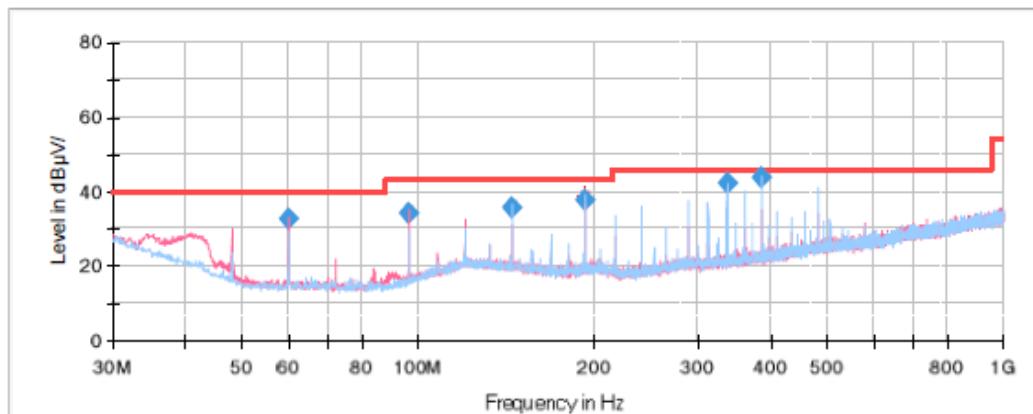
Project No:	RKSA240902002
EUT Model:	GT3-U
Test Mode:	Transmitting in BLE-2M mode
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Temperature:	26.3°C
Humidity:	51%
Barometric Pressure:	101.2kPa
Test Engineer:	Grace Luo
Test Date:	2024/9/18

**Final Result**

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
59.997050	33.02	40.00	6.98	V	-17.6
96.198600	34.34	43.50	9.16	V	-15.4
144.307800	35.70	43.50	7.80	H	-11.6
192.377150	38.48	43.50	5.02	H	-12.5
336.696800	42.43	46.00	3.57	H	-9.6
384.770600	43.94	46.00	2.06	H	-8.4

**GT3 Pro-U****Common Information**

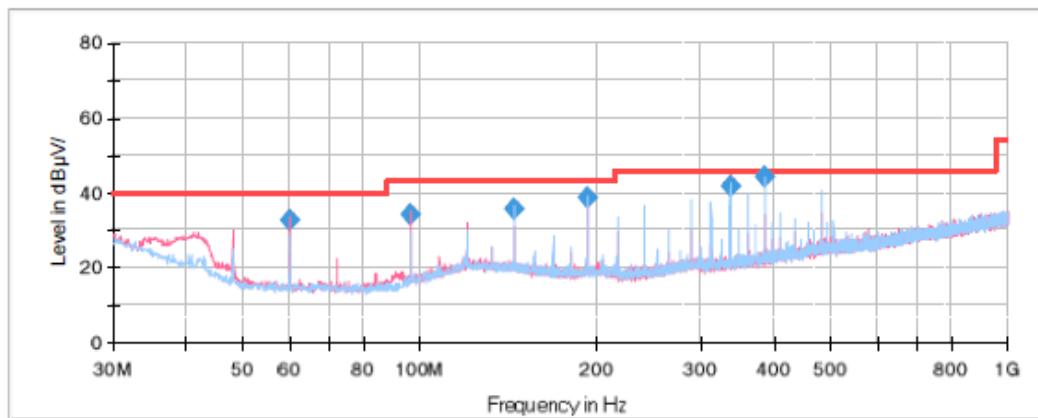
Project No: RKSA240902002  
EUT Model: GT3 Pro-U  
Test Mode: Transmitting in BLE-2M mode  
Standard: FCC Part 15.205 &FCC Part 15.209&FCC Part 15.247  
Test Equipment: ESCI, JB3, 310N  
Temperature: 26.3°C  
Humidity: 51%  
Barometric Pressure: 101.2kPa  
Test Engineer: Grace Luo  
Test Date: 2024/9/18

**Final Result**

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
60.010850	32.85	40.00	7.15	V	-17.6
96.205500	34.39	43.50	9.11	V	-15.4
144.278400	35.74	43.50	7.76	H	-11.6
192.370850	37.98	43.50	5.52	H	-12.5
336.706050	42.47	46.00	3.53	H	-9.6
384.776600	43.79	46.00	2.21	H	-8.4

**GT3 Max-U****Common Information**

Project No: RKSA240902002  
EUT Model: GT3 Max-U  
Test Mode: Transmitting in BLE-2M mode  
Standard: FCC Part 15.205 & FCC Part 15.209&FCC Part 15.247  
Test Equipment: ESCI, JB3, 310N  
Temperature: 26.3°C  
Humidity: 51%  
Barometric Pressure: 101.2kPa  
Test Engineer: Grace Luo  
Test Date: 2024/9/18

**Final Result**

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
60.008450	32.66	40.00	7.34	V	-17.6
96.189900	34.43	43.50	9.07	V	-15.4
144.287700	35.81	43.50	7.69	H	-11.6
192.399350	38.64	43.50	4.86	H	-12.5
336.664650	41.80	46.00	4.20	H	-9.6
384.790400	44.03	46.00	1.97	H	-8.4

**BLE (1 Mbps)****1 GHz-18 GHz:****Low Channel: 2402 MHz****Common Information**

Project No.:

RKSA240902002

Test Mode:

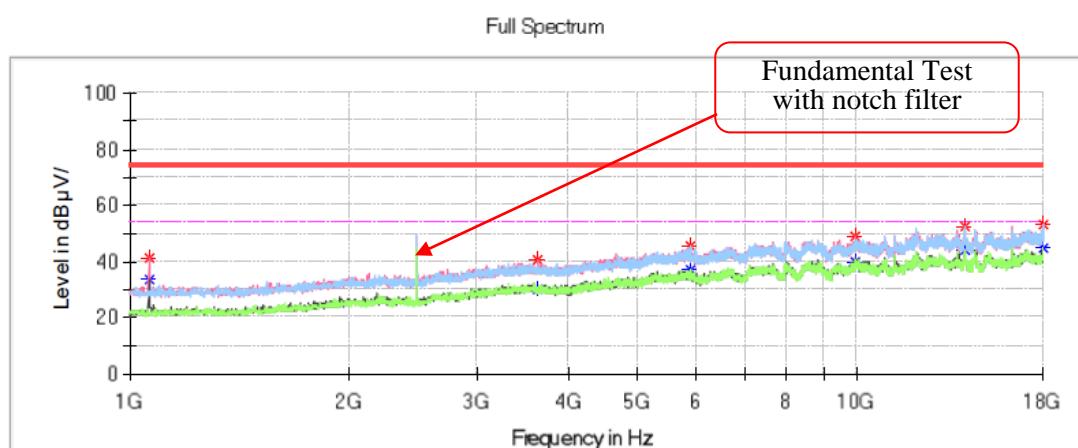
BLE 1M

Standard:

FCC Part 15.205&amp; FCC Part 15.209&amp;FCC Part 15.247

Test Engineer:

Klein Zhu

**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)
1064.600000	---	33.22	54.00	20.78	V	-15.4
1064.600000	41.02	---	74.00	32.98	V	-15.4
3640.100000	---	29.83	54.00	24.17	H	-6.2
3640.100000	40.38	---	74.00	33.62	H	-6.2
5879.000000	---	36.78	54.00	17.22	H	-0.1
5879.000000	45.24	---	74.00	28.76	H	-0.1
9950.500000	---	40.14	54.00	13.86	H	7.0
9950.500000	48.76	---	74.00	25.24	H	7.0
14001.600000	---	43.97	54.00	10.03	V	9.8
14001.600000	52.41	---	74.00	21.59	V	9.8
17998.300000	---	45.10	54.00	8.90	V	12.0
17998.300000	53.47	---	74.00	20.53	V	12.0

**Middle Channel: 2440 MHz****Common Information**

Project No.:

RKSA240902002

Test Mode:

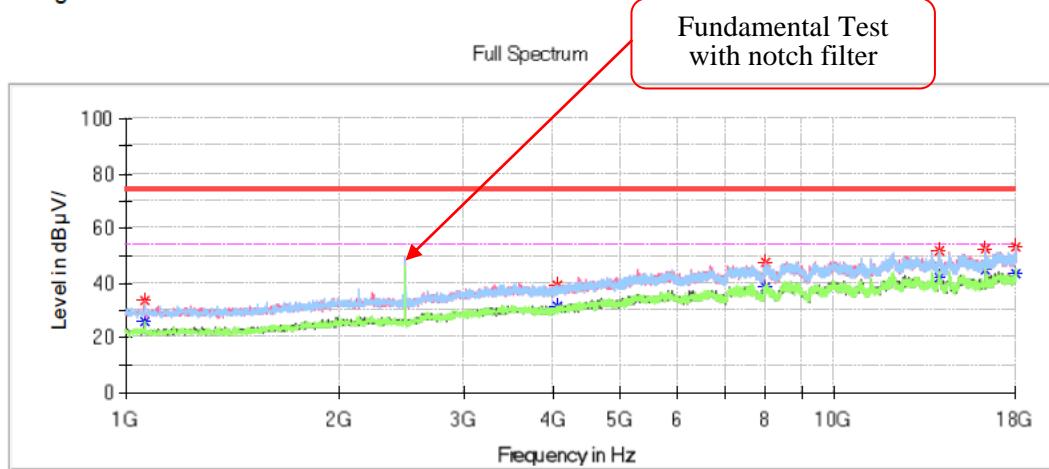
BLE 1M

Standard:

FCC Part 15.205&amp; FCC Part 15.209&amp;FCC Part 15.247

Test Engineer:

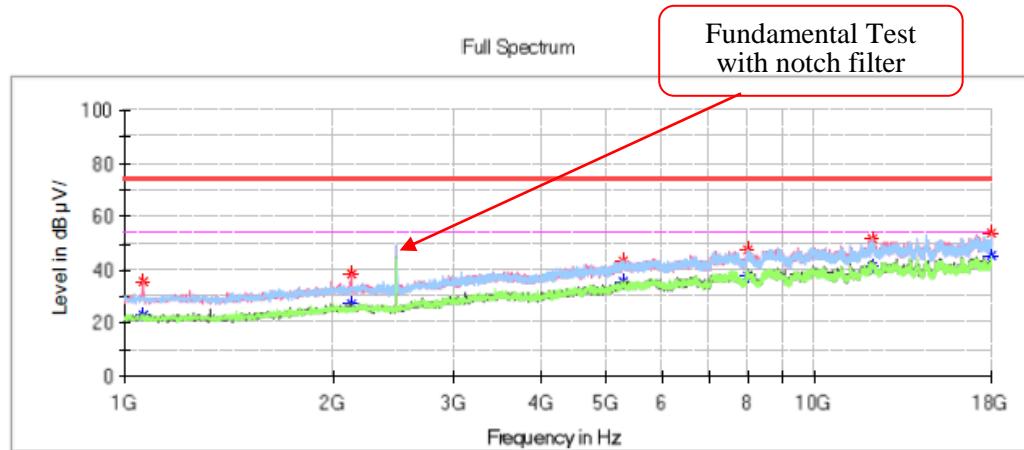
Klein Zhu

**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)
1061.200000	33.48	---	74.00	40.52	V	-15.4
1061.200000	---	25.84	54.00	28.16	V	-15.4
4049.800000	---	31.33	54.00	22.67	H	-5.7
4049.800000	39.51	---	74.00	34.49	H	-5.7
7990.400000	47.68	---	74.00	26.32	V	3.9
7990.400000	---	38.26	54.00	15.74	V	3.9
14054.300000	51.84	---	74.00	22.16	V	9.8
14054.300000	---	41.71	54.00	12.29	V	9.8
16305.100000	52.28	---	74.00	21.72	H	10.2
16305.100000	---	44.53	54.00	9.47	H	10.2
17996.600000	---	43.40	54.00	10.60	H	12.0
17996.600000	52.91	---	74.00	21.09	H	12.0

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

Project No.: RKSA240902002  
 Test Mode: BLE 1M  
 Standard: FCC Part 15.205& FCC Part 15.209&FCC Part 15.247  
 Test Engineer: Klein Zhu

**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)
1061.200000	35.60	---	74.00	38.40	V	-15.4
1061.200000	---	23.17	54.00	30.83	V	-15.4
2128.800000	38.57	---	74.00	35.43	V	-11.3
2128.800000	---	27.62	54.00	26.38	V	-11.3
5272.100000	43.43	---	74.00	30.57	H	-1.3
5272.100000	---	35.97	54.00	18.03	H	-1.3
8005.700000	47.72	---	74.00	26.28	H	3.9
8005.700000	---	37.74	54.00	16.26	H	3.9
12119.700000	51.61	---	74.00	22.39	H	9.1
12119.700000	---	41.61	54.00	12.39	H	9.1
18000.000000	---	45.21	54.00	8.79	V	12.0
18000.000000	53.61	---	74.00	20.39	V	12.0

**Restricted Bands Emission:****Left Side****Common Information**

Project No.:

RKSA240902002

Test Mode:

BLE 1M

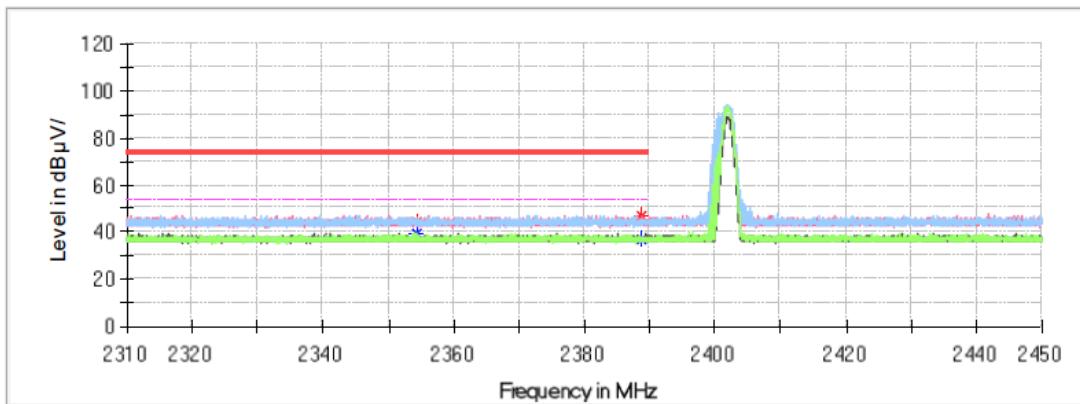
Standard:

FCC Part 15.205&amp; FCC Part 15.209&amp;FCC Part 15.247

Test Engineer:

Klein Zhu

Full Spectrum

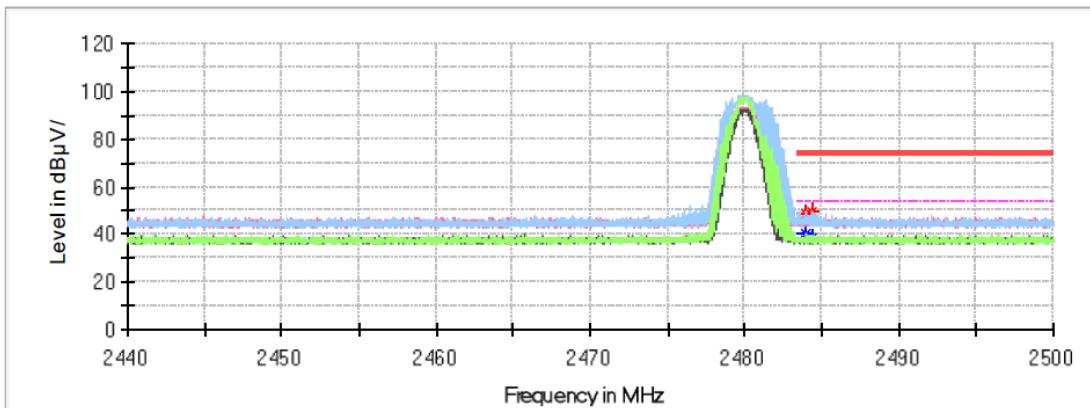
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2354.478000	44.54	---	74.00	29.46	H	-0.7
2354.478000	---	39.50	54.00	14.50	H	-0.7
2388.652000	47.32	---	74.00	26.68	V	-0.6
2388.652000	---	36.99	54.00	17.01	V	-0.6

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

Project No.: RKSA240902002  
Test Mode: BLE 1M  
Standard: FCC Part 15.205& FCC Part 15.209&FCC Part 15.247  
Test Engineer: Klein Zhu

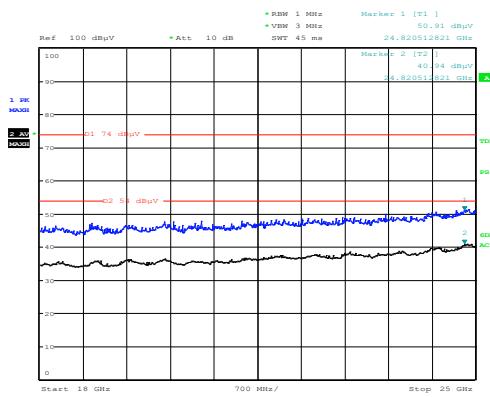
Full Spectrum

**Critical\_Freqs**

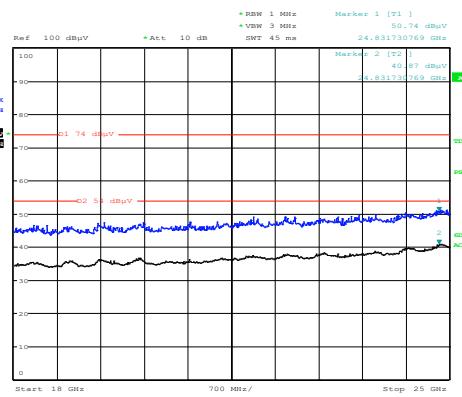
Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2483.944000	---	39.88	54.00	14.12	H	-0.3
2483.944000	48.50	---	74.00	25.50	H	-0.3
2484.364000	---	38.40	54.00	15.60	H	-0.3
2484.364000	49.84	---	74.00	24.16	H	-0.3

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

**Horizontal**



**Vertical**



Project No :RKSA240902002  
Date: 26.SEP.2024 13:31:34

Tester :Hugh Wu

Project No :RKSA240902002  
Date: 26.SEP.2024 13:46:45

Tester :Hugh Wu

Note: The test distance is 3m. The limit is 74dB $\mu$ V/m (Peak) and 54dB $\mu$ V/m (Average)

BLE (2 Mbps)

1GHz-18GHz:

**Low Channel: 2402 MHz****Common Information**

Project No.:

RKSA240902002

Test Mode:

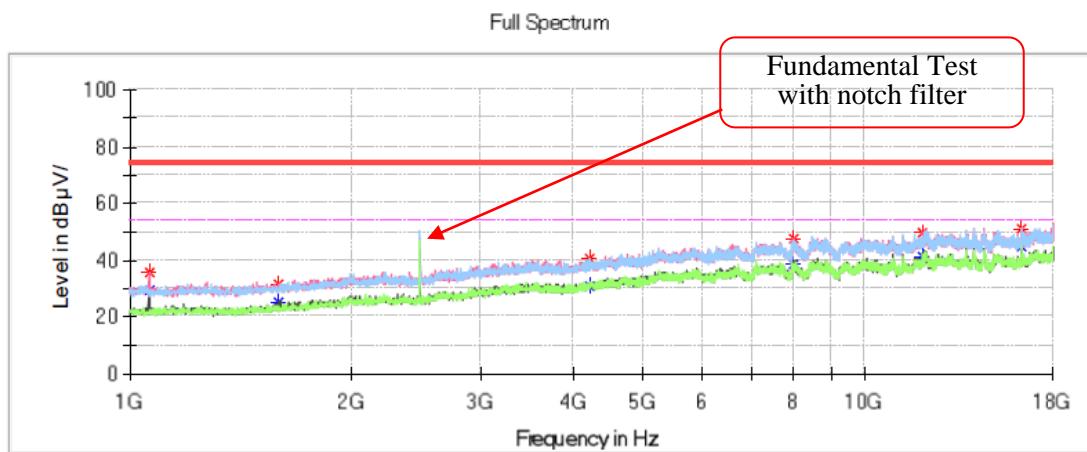
BLE 2M

Standard:

FCC Part 15.205&amp; FCC Part 15.209&amp;FCC Part 15.247

Test Engineer:

Klein Zhu

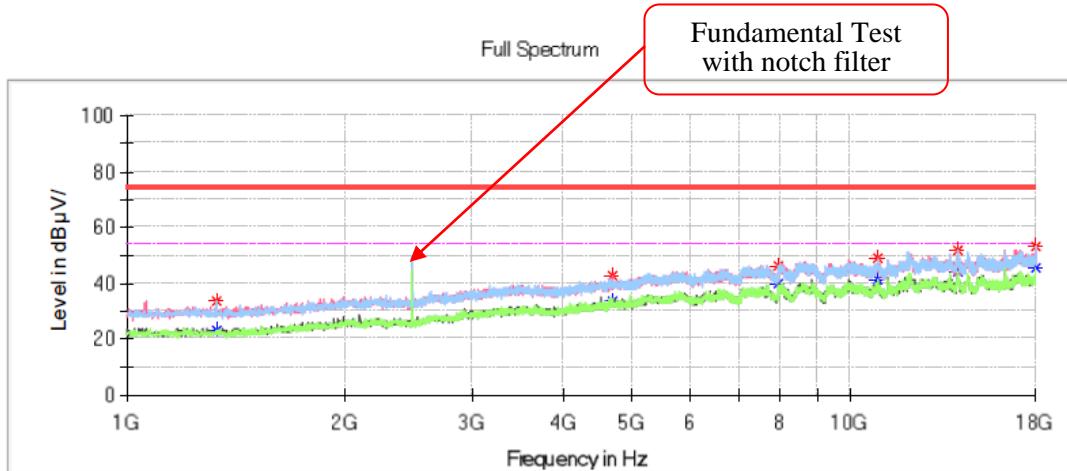
**Critical\_Freqs**

Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1061.200000	35.88	---	74.00	38.12	V	-15.4
1061.200000	---	29.37	54.00	24.63	V	-15.4
1589.900000	---	25.17	54.00	28.83	V	-14.2
1589.900000	31.78	---	74.00	42.22	V	-14.2
4209.600000	---	30.76	54.00	23.24	H	-5.2
4209.600000	40.29	---	74.00	33.71	H	-5.2
8009.100000	---	38.59	54.00	15.41	V	3.9
8009.100000	47.41	---	74.00	26.59	V	3.9
11937.800000	---	41.44	54.00	12.56	H	9.0
11937.800000	49.43	---	74.00	24.57	H	9.0
16301.700000	---	44.43	54.00	9.57	H	10.2
16301.700000	50.74	---	74.00	23.26	H	10.2

**Middle Channel: 2440 MHz****Common Information**

Project No.:  
Test Mode:  
Standard:  
Test Engineer:

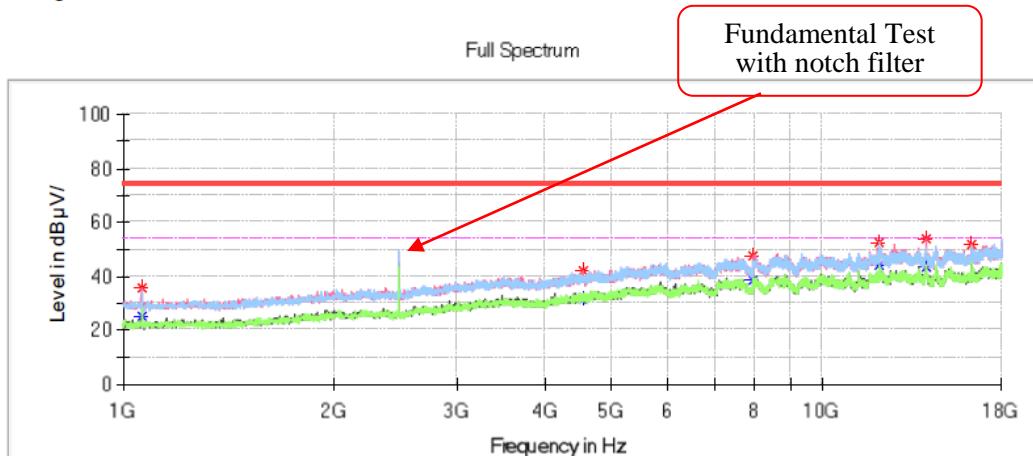
RKSA240902002  
BLE 2M  
FCC Part 15.205& FCC Part 15.209&FCC Part 15.247  
Klein Zhu

**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)
1326.400000	---	23.07	54.00	30.93	H	-15.0
1326.400000	<b>33.27</b>	---	74.00	40.73	H	-15.0
4697.500000	---	33.54	54.00	20.46	V	-3.5
4697.500000	<b>42.36</b>	---	74.00	31.64	V	-3.5
7954.700000	---	39.58	54.00	14.42	V	3.9
7954.700000	<b>46.02</b>	---	74.00	27.98	V	3.9
10861.700000	---	41.56	54.00	12.44	H	7.3
10861.700000	<b>49.24</b>	---	74.00	24.76	H	7.3
14005.000000	---	44.29	54.00	9.71	V	9.8
14005.000000	<b>51.75</b>	---	74.00	22.25	V	9.8
17998.300000	<b>53.25</b>	---	74.00	20.75	V	12.0
17998.300000	---	45.72	54.00	8.28	V	12.0

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

Project No.: RKSA240902002  
 Test Mode: BLE 2M  
 Standard: FCC Part 15.205& FCC Part 15.209&FCC Part 15.247  
 Test Engineer: Klein Zhu

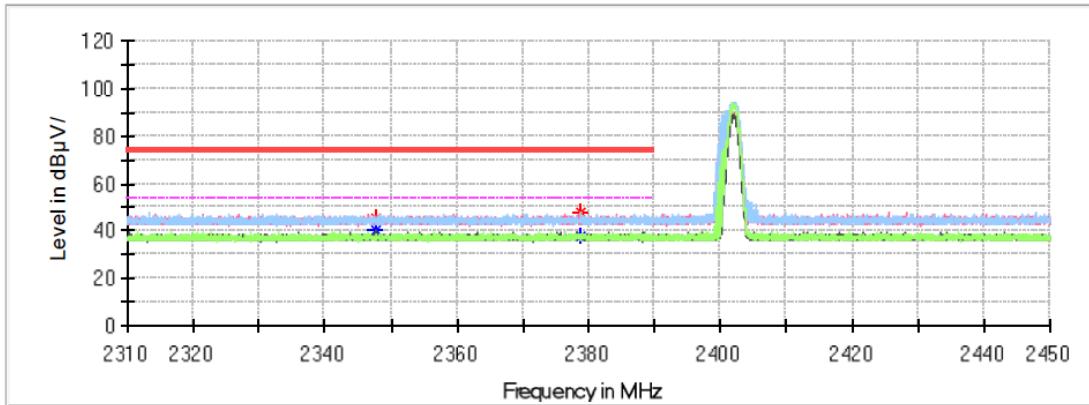
**Critical\_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1061.200000	35.46	---	74.00	38.54	V	-15.4
1061.200000	---	25.33	54.00	28.67	V	-15.4
4539.400000	41.99	---	74.00	32.01	V	-4.1
4539.400000	---	31.62	54.00	22.38	V	-4.1
7951.300000	47.38	---	74.00	26.62	V	3.9
7951.300000	---	38.48	54.00	15.52	V	3.9
12056.800000	52.63	---	74.00	21.37	H	9.0
12056.800000	---	44.02	54.00	9.98	H	9.0
14003.300000	53.60	---	74.00	20.40	V	9.8
14003.300000	---	43.66	54.00	10.34	V	9.8
16303.400000	51.49	---	74.00	22.51	V	10.2
16303.400000	---	46.23	54.00	7.77	V	10.2

**Restricted Bands Emission:****Left Side****Common Information**

Project No.: RKSA240902002  
Test Mode: BLE 2M  
Standard: FCC Part 15.205& FCC Part 15.209&FCC Part 15.247  
Test Engineer: Klein Zhu

Full Spectrum

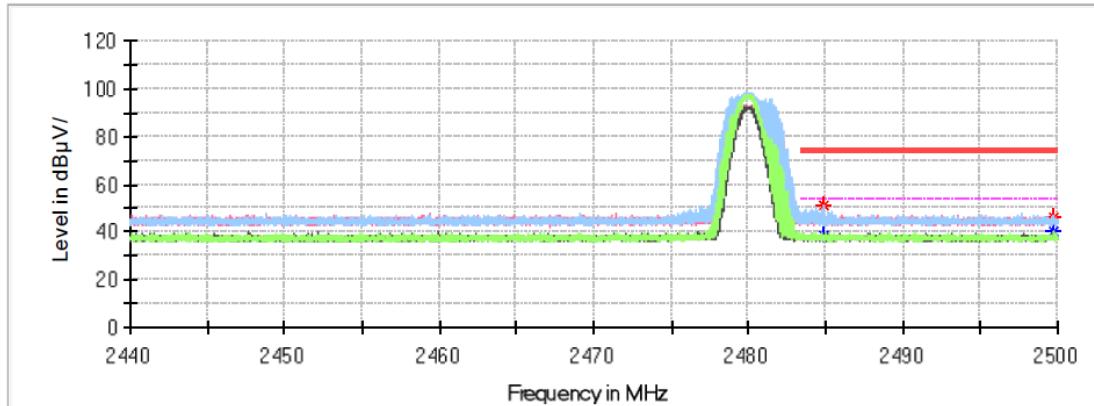
**Critical\_Freqs**

Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2347.576000	---	39.90	54.00	14.10	V	-0.7
2347.576000	45.48	---	74.00	28.52	V	-0.7
2378.782000	---	38.08	54.00	15.92	H	-0.6
2378.782000	47.82	---	74.00	26.18	H	-0.6

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

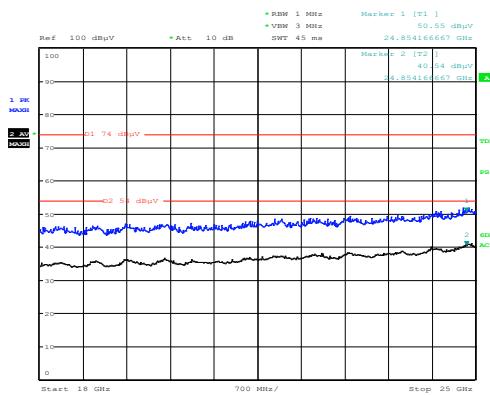
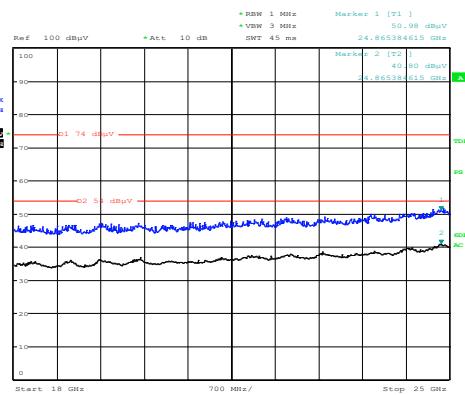
Project No.: RKSA240902002  
Test Mode: BLE 2M  
Standard: FCC Part 15.205& FCC Part 15.209&FCC Part 15.247  
Test Engineer: Klein Zhu

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)
2484.874000	51.18	---	74.00	22.82	H	-0.3
2484.874000	---	38.74	54.00	15.26	H	-0.3
2499.736000	45.76	---	74.00	28.24	H	-0.2
2499.736000	---	40.25	54.00	13.75	H	-0.2

### 18 GHz - 25 GHz (Transmitting in maximum output power BLE (2 Mbps) low channel):

**Horizontal****Vertical**

Project No :RKSA240902002  
Date: 26.SEP.2024 14:02:36

Tester :Hugh Wu

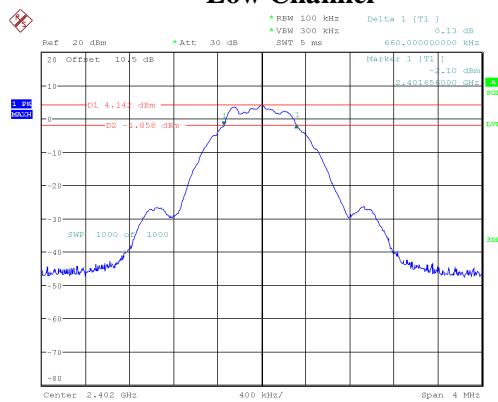
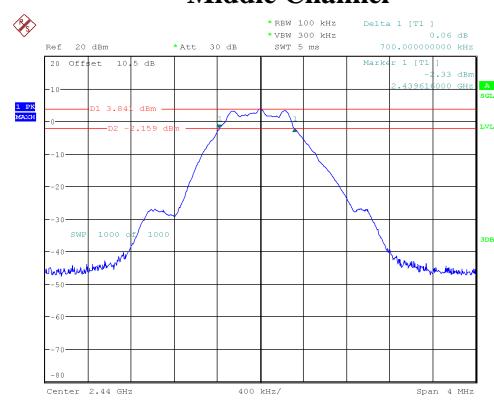
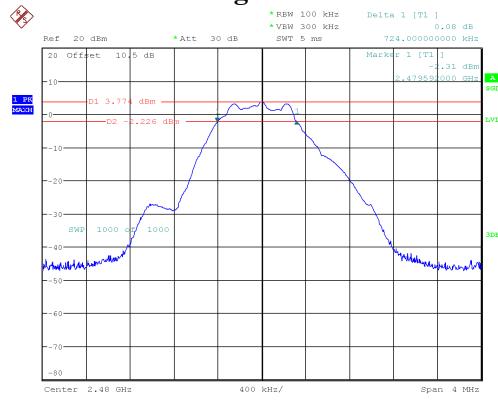
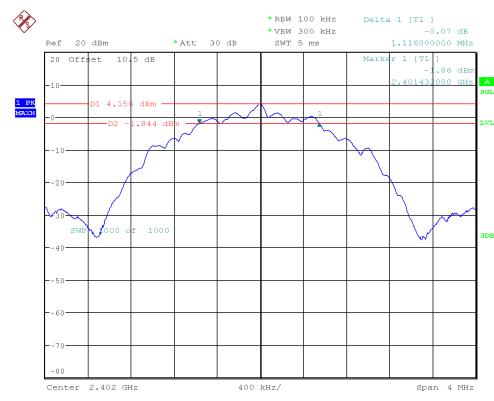
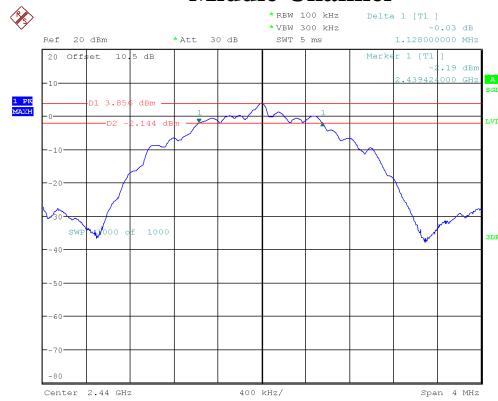
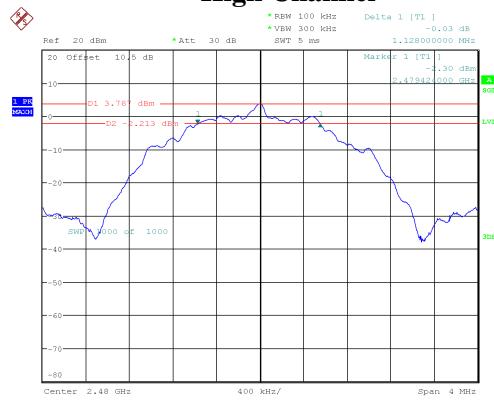
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Tester :Hugh Wu

Note: The test distance is 3m. The limit is 74dB $\mu$ V/m (Peak) and 54dB $\mu$ V/m (Average)

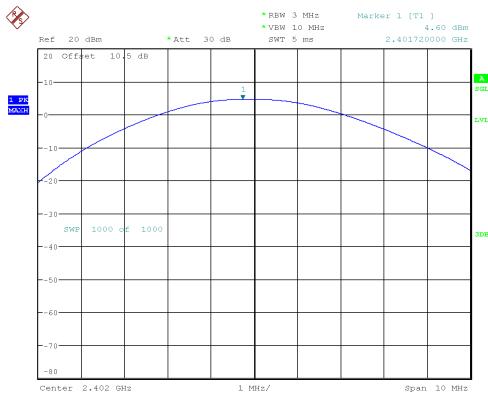
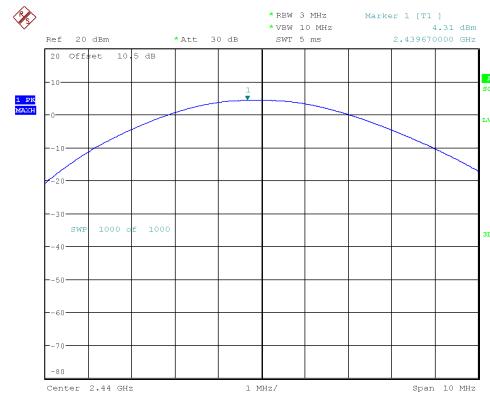
**6 dB EMISSION BANDWIDTH**

Mode	Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (MHz)
BLE (1 Mbps)	Low	2402	0.660	≥0.5
	Middle	2440	0.700	≥0.5
	High	2480	0.724	≥0.5
BLE (2 Mbps)	Low	2402	1.116	≥0.5
	Middle	2440	1.128	≥0.5
	High	2480	1.128	≥0.5

**BLE (1 Mbps)****Low Channel****Middle Channel****High Channel****BLE (2 Mbps)****Low Channel****Middle Channel****High Channel**

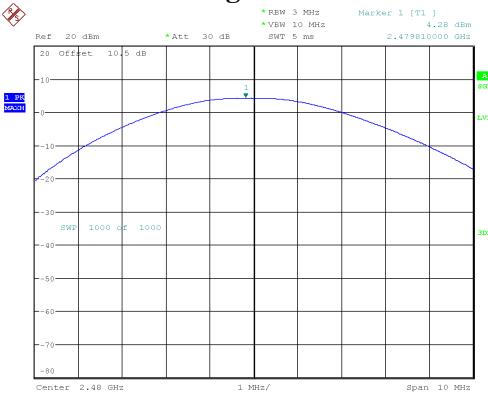
**MAXIMUM CONDUCTED OUTPUT POWER****Test Result:** Compliant.*EUT operation mode: Transmitting*

Mode	Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Limit (dBm)	Result
BLE (1 Mbps)	Low	2402	4.60	30	Pass
	Middle	2440	4.31	30	Pass
	High	2480	4.28	30	Pass
BLE (2 Mbps)	Low	2402	4.60	30	Pass
	Middle	2440	4.33	30	Pass
	High	2480	4.28	30	Pass

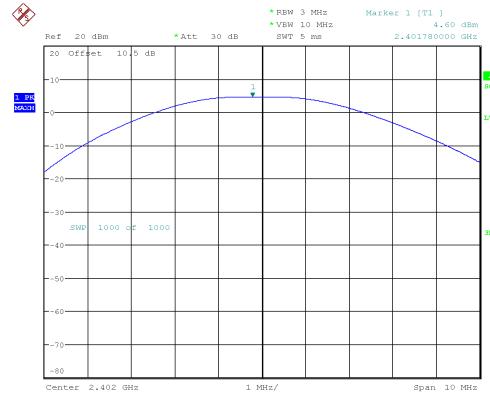
**BLE (1 Mbps)****Low Channel****Middle Channel**

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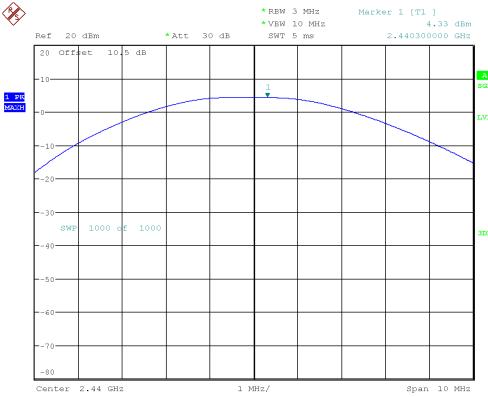
ProjectNo.:RKSA240902002 Tester:Neil Zhou  
Date: 24.SEP.2024 19:21:20

**High Channel**

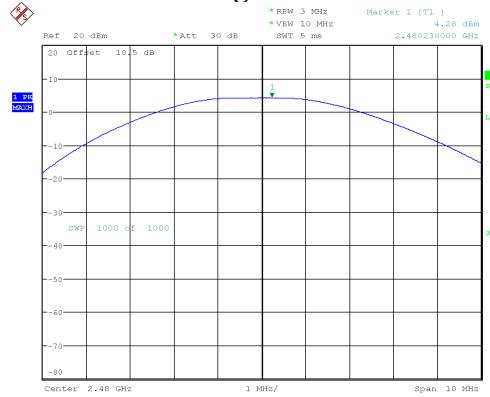
ProjectNo.:RKSA240902002 Tester:Neil Zhou  
Date: 24.SEP.2024 19:27:53

**BLE (2 Mbps)****Low Channel**

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Date: 24.SEP.2024 19:33:24

**Middle Channel**

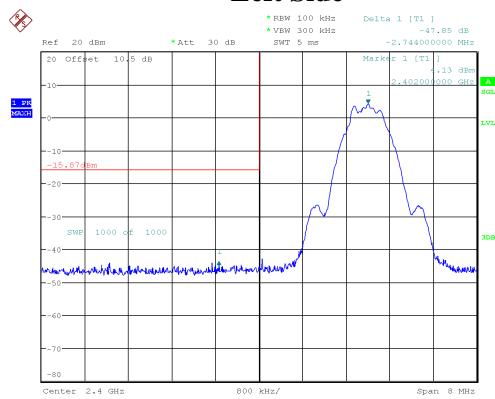
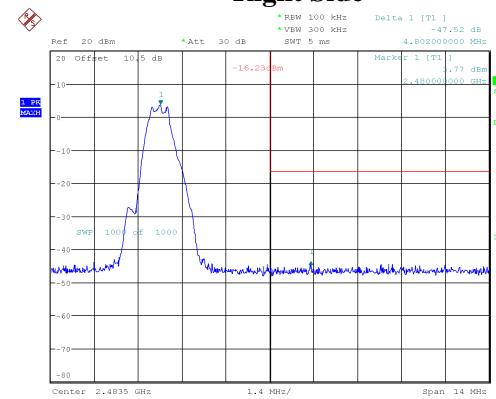
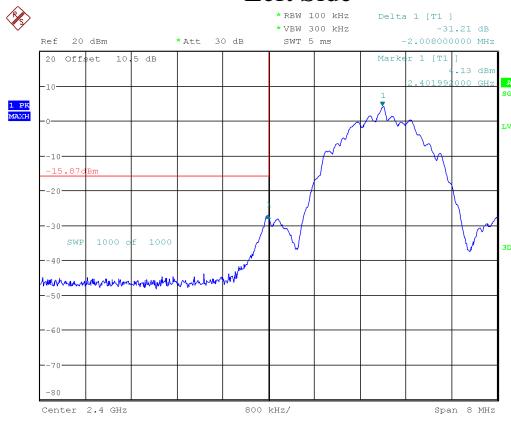
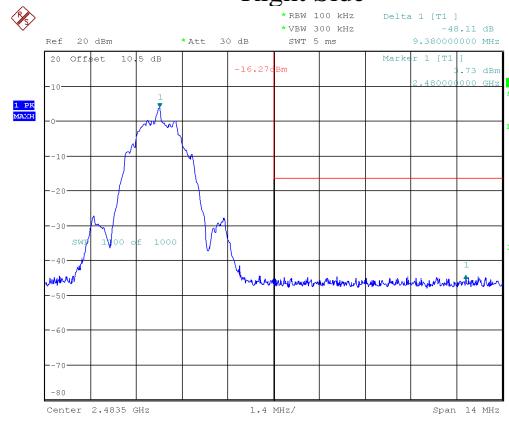
ProjectNo.:RKSA240902002 Tester:Neil Zhou  
Date: 24.SEP.2024 19:39:40

**High Channel**

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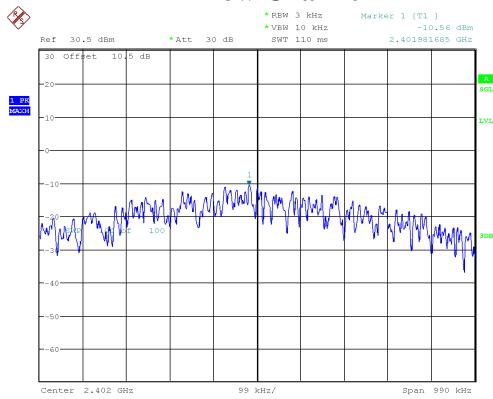
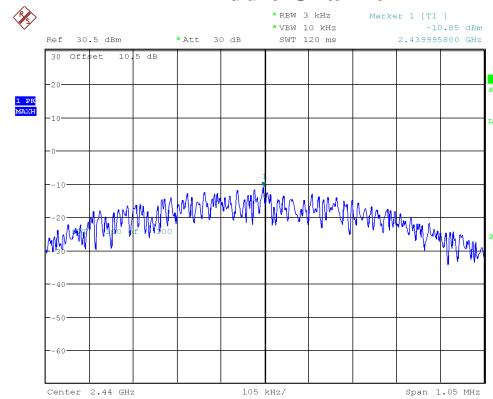
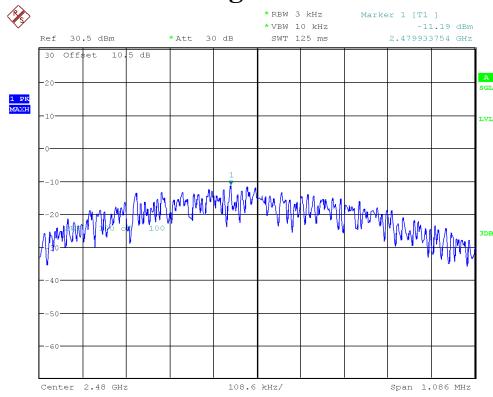
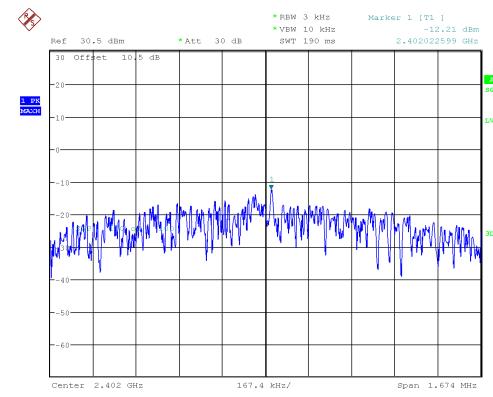
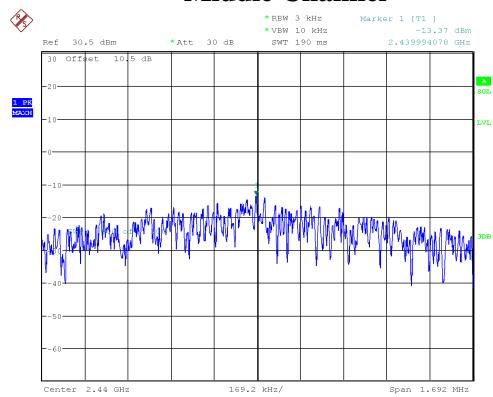
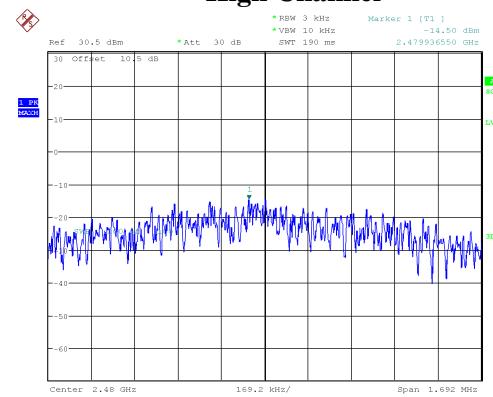
**BAND EDGE****Test Result:** Compliant.*EUT operation mode: Transmitting*

Mode	Channel	Frequency (MHz)	Result (dBc)	Limit (dBc)
BLE (1 Mbps)	Low	2402	47.85	20
	High	2480	47.52	
BLE (2 Mbps)	Low	2402	31.21	20
	High	2480	48.11	

**BLE (1 Mbps)****Left Side****Right Side****BLE (2 Mbps)****Left Side****Right Side**

**POWER SPECTRAL DENSITY****Test Result:** Compliant.*EUT operation mode: Transmitting*

Mode	Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)
BLE (1 Mbps)	Low	2402	-10.56	≤8
	Middle	2440	-10.85	≤8
	High	2480	-11.19	≤8
BLE (2 Mbps)	Low	2402	-12.21	≤8
	Middle	2440	-13.37	≤8
	High	2480	-14.50	≤8

**BLE (1 Mbps)****Low Channel****Middle Channel****High Channel****BLE (2 Mbps)****Low Channel****Middle Channel****High Channel**

**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 \*\*\*\*\*