



FCC PART 15.247 TEST REPORT

For

Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd.

Building A2, Shangjinwan Headquarters Economic Park, No.2288, Wuzhong Avenue, Wuzhong Economic Development Zone, Suzhou Jiangsu P.R. China

FCC ID: 2A4GZ-V254050U

Report Type: **Product Name:** NAVEE Electric Scooter Original Report **Report Number:** RKSA240801001-00A **Report Date:** 2024-11-12 Pard lin Oscar Yo **Reviewed By:** Bard Liu Oscar Ye Approved By: Prepared By: Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road, Kunshan, Jiangsu Province, China Tel: +86-512-86175000 Fax: +86-512-88934268 www.baclcorp.com.cn

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

TABLE OF CONTENTS

REPORT REVISION HISTORY	4
GENERAL INFORMATION	
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	
OBJECTIVE	
TEST METHODOLOGY	
Measurement Uncertainty	
TEST FACILITY	
SYSTEM TEST CONFIGURATION	
DESCRIPTION OF TEST CONFIGURATION	
EUT Exercise Software	
SPECIAL ACCESSORIES	
EQUIPMENT MODIFICATIONS	
EXTERNAL I/O CABLE.	
BLOCK DIAGRAM OF TEST SETUP	
TEST EQUIPMENT LIST	
SUMMARY OF TEST RESULTS	
FCC §1.1307(b) & §2.1093 - RF EXPOSURE	
APPLICABLE STANDARD	
FCC §15.203 – ANTENNA REQUIREMENT	
APPLICABLE STANDARD	
ANTENNA CONNECTOR CONSTRUCTION	
FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS	
APPLICABLE STANDARD	
TEST SYSTEM SETUP	
EMI TEST RECEIVER SETUPTEST PROCEDURE	
TEST RESULTS SUMMARY	
TEST DATA: SEE APPENDIX	
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS	17
APPLICABLE STANDARD	
TEST SYSTEM SETUP	
EMI TEST RECEIVER SETUP	
TEST PROCEDURE	
TEST RESULTS SUMMARY	
TEST DATA: SEE APPENDIX	
FCC §15.247(a) (2) – 6 dB EMISSION BANDWIDTH	
APPLICABLE STANDARD	
TEST PROCEDURE	
FCC §15.247(b) (3) - MAXIMUM CONDUCTED OUTPUT POWER	
APPLICABLE STANDARD	
TEST PROCEDURE	

FCC §15.247(d) – BAND EDGE	22
APPLICABLE STANDARD	
TEST PROCEDURE	22
TEST DATA: SEE APPENDIX	
FCC §15.247(e) - POWER SPECTRAL DENSITY	23
APPLICABLE STANDARD	
TEST PROCEDURE	23
TEST DATA: SEE APPENDIX	
EUT PHOTOGRAPHS	24
TEST SETUP PHOTOGRAPHS	25
Appendix - TEST DATA	26
ENVIRONMENTAL CONDITIONS & TEST INFORMATION	26
AC LINE CONDUCTED EMISSIONS	27
SPURIOUS EMISSIONS	31
6 DB EMISSION BANDWIDTH	50
MAXIMUM CONDUCTED OUTPUT POWER	
BAND EDGE	
POWER SPECTRAL DENSITY	

REPORT REVISION HISTORY

Number of Revisions Report No.		Version	Issue Date	Description
0	RKSA240801001-00A	R1V1	2024-11-12	Initial Release

Report No.: RKSA240801001-00A

FCC Part 15.247 Page 4 of 57

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd.
Tested Model:	V25i-U
Series Model:	V25-U, V40i-U, V50i-U
Model Difference:	Battery pack, Turn signal, details as declaration letter
Product Name:	NAVEE Electric Scooter
Power Supply:	DC 36V
RF Function:	BLE 1Mbps, BLE 2Mbps
Operating Band/Frequency:	2402-2480MHz
Maximum Output Power:	BLE (1 Mbps): 6.03 dBm BLE (2 Mbps): 6.05 dBm
Channel Number:	40
Channel Separation:	2 MHz
Modulation Type	GFSK
Antenna Type:	PCB Antenna
★ Maximum Antenna Gain:	0.2 dBi

Report No.: RKSA240801001-00A

Adapter Information: Model: LI-0554200130NA

Input: 100-240V, 50-60Hz, 2.0A MAX Output: 41.0V, 1.3A; 42.0V MAX

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: RKSA240801001-1 (Assigned by BACL (Kunshan). The EUT supplied by the applicant was received on 2024-08-01.)

Objective

This report is prepared for *Brightway Innovation Intelligent Technology (Suzhou) Co., 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.

FCC Part 15.247 Page 5 of 57

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.

Report No.: RKSA240801001-00A

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Kunshan). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

	Item	Uncertainty
AC Power Line	es Conducted Emissions	3.19 dB
RF conducte	ed test with spectrum	0.9 dB
RF Output Po	ower with Power meter	0.5 dB
	9 kHz~150 kHz	3.8 dB
	150 kHz~30 MHz	3.4 dB
De diete de amienieure	30MHz~1GHz	6.11 dB
Radiated emissions	1GHz~6GHz	4.45 dB
	6GHz~18GHz	5.23 dB
	18GHz~40GHz	5.65 dB
Оссир	pied Bandwidth	0.5 kHz
Te	emperature	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.

FCC Part 15.247 Page 6 of 57

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	/	/

Report No.: RKSA240801001-00A

EUT was tested with channel 0, 19 and 39.

EUT Exercise Software

RF Test Tool: RTL8762x_RFTestTool.exe

★Power level: Default

Note: The power level was declared by the applicant.

Special Accessories

No special accessory.

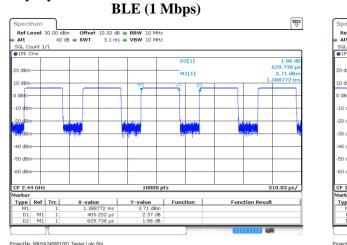
Equipment Modifications

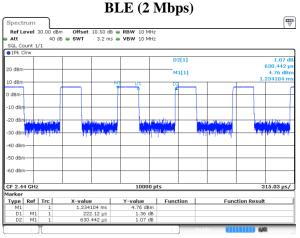
No modification was made to the EUT tested.

FCC Part 15.247 Page 7 of 57

Duty Cycle:

Date: 26.AUG.2024 14:24:07





ProjectNo.:RKSA240801001 Tester:Loki Shi Date: 26.AUG.2024 14:35:37

Mode	Duty Cycle (%)	Ton(ms)	Ton+off(ms)	10log(1/x)
BLE (1 Mbps)	64.29	0.405	0.630	1.92
BLE (2 Mbps)	35.24	0.222	0.630	4.53

Note: "x" means the Duty Cycle.

FCC Part 15.247 Page 8 of 57

Support Equipment List and Details

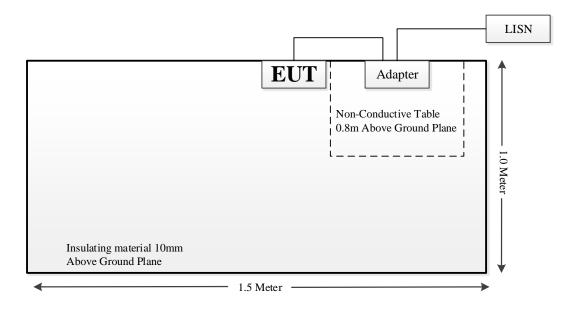
Manufacturer	Description	Model	Serial Number
/	/	/	/

External I/O Cable

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

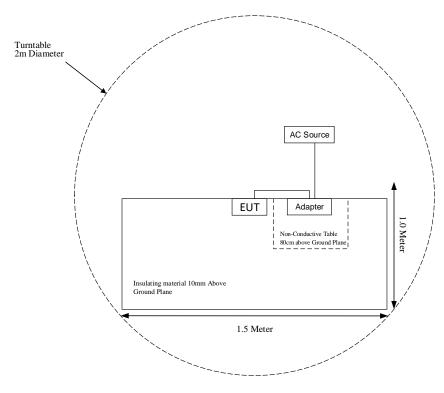
Block Diagram of Test Setup

For Conducted Emissions:

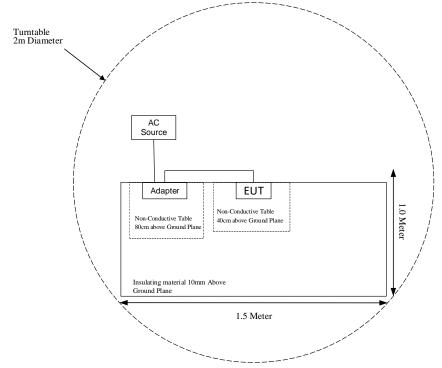


FCC Part 15.247 Page 9 of 57

For Radiated Emissions(Below 1GHz):



For Radiated Emissions(Above 1GHz):



Note: the EUT Antenna 1.5m above Ground Plane

FCC Part 15.247 Page 10 of 57

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date		
Radiated Emission Test (Chamber #1)							
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2024-04-23	2025-04-22		
Sunol Sciences	Broadband Antenna	JB3	A090314-1	2023-11-11	2024-11-10		
ETS-LINDGREN	Loop Antenna	6512	108100	2023-11-09	2024-11-08		
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		
	Radiated	l Emission Test (Cha	mber #2)				
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	2024-04-23	2025-04-22		
MICRO-COAX	Coaxial Cable	Cable-12	012	2024-04-23	2025-04-22		
		RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSV40-N	103298	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		
	Co	onducted Emission T	est				
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	2024-04-23	2025-04-22		
MICRO-COAX	Coaxial Cable	Cable-15	015	2024-04-23	2025-04-22		

Report No.: RKSA240801001-00A

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).

FCC Part 15.247 Page 11 of 57

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

Report No.: RKSA240801001-00A

FCC Part 15.247 Page 12 of 57

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.

Report No.: RKSA240801001-00A

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:

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

- f(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 ≤ 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)		une-up ed Power	Calculated Distance (mm)	Calculated Value	Threshold (1-g SAR)	SAR Test Exclusion
	(IVIIIZ)	(dBm)	(mW)				
BLE	2402-2480	6.5	4.47	5.0	1.4	3.0	Yes

Result: So the standalone SAR evaluation is not necessary.

FCC Part 15.247 Page 13 of 57

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

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

Report No.: RKSA240801001-00A

Antenna Connector Construction

The EUT has a PCB antenna for BLE, and the antenna gain is 0.2 dBi, which is permanently attached to the unit, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliant.

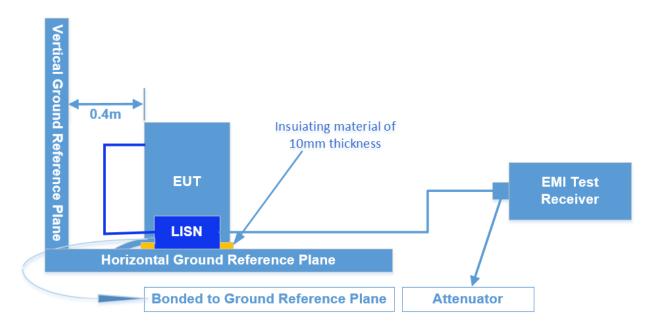
FCC Part 15.247 Page 14 of 57

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a)

Test System Setup



Report No.: RKSA240801001-00A

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

FCC Part 15.247 Page 15 of 57

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.

Report No.: RKSA240801001-00A

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\muV) = Read level (dB\muV) + 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 μ V) - Limit (dB μ 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 Part 15.247 Page 16 of 57

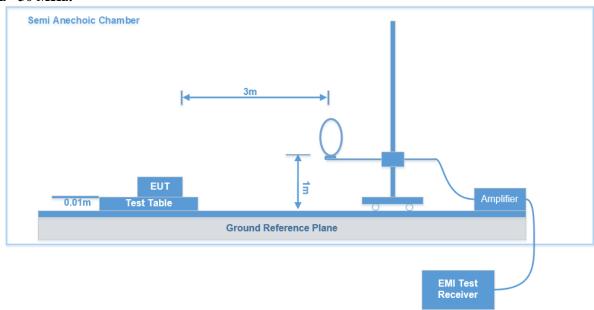
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

FCC §15.247 (d); §15.209; §15.205;

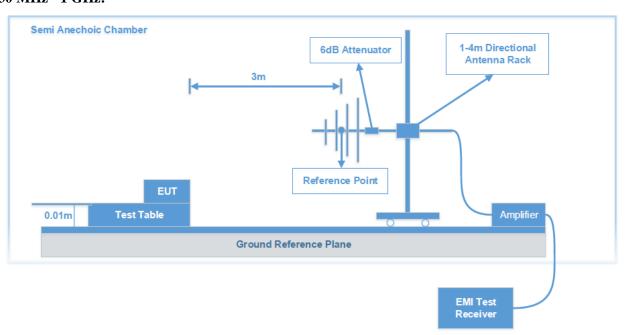
Test System Setup

9 kHz - 30 MHz:

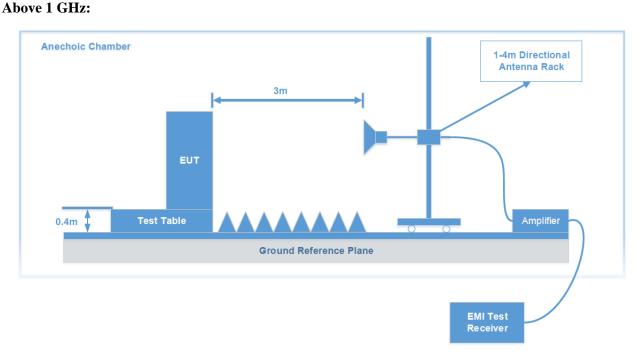


Report No.: RKSA240801001-00A

30 MHz - 1 GHz:



FCC Part 15.247 Page 17 of 57



Report No.: RKSA240801001-00A

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
30 MHZ - 1000 MHZ	/	/	120 kHz	QP
Above 1GHz	1MHz	3 MHz	/	Peak
Above IGHZ	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.

FCC Part 15.247 Page 18 of 57

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 μ V/m) – Corrected Amplitude (dB μ 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 <u>FCC Title 47, Part 15, Subpart C, section 15.205, 15.209 and 15.247.</u>

Test Data: See Appendix

FCC Part 15.247 Page 19 of 57

FCC $\S15.247(a)$ (2) – 6 dB EMISSION BANDWIDTH

Applicable Standard

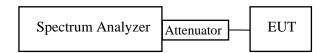
Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Report No.: RKSA240801001-00A

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 * 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 Part 15.247 Page 20 of 57

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

Applicable Standard

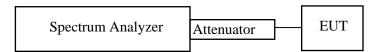
According to FCC §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted 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.

Report No.: RKSA240801001-00A

Test Procedure

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

- 1. Set the RBW \geq DTS bandwidth.
- 2. Set $VBW \ge 3 * RBW$.
- 3. Set span \geq 3 * 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 Part 15.247 Page 21 of 57

FCC §15.247(d) – BAND EDGE

Applicable Standard

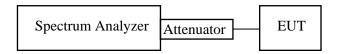
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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)).

Report No.: RKSA240801001-00A

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 Part 15.247 Page 22 of 57

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.

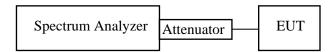
Report No.: RKSA240801001-00A

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: $3kHz \le RBW \le 100 \text{ kHz}$.
- 2. Set the VBW \geq 3*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

FCC Part 15.247 Page 23 of 57

EUT PHOTOGRAPHS

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

Report No.: RKSA240801001-00A

FCC Part 15.247 Page 24 of 57

Report No.: RKSA240801001-00A

TEST SETUP PHOTOGRAPHS

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

FCC Part 15.247 Page 25 of 57

Appendix - TEST DATA

Environmental Conditions & Test Information

T 4.74	AC LINE		SPURIOUS EMISSI	ONS	DAMEN CALCULE
Test Item:	EMISSIONS	9kHz - 1GHz	1 GHz - 18 GHz	18 GHz - 25 GHz	DUTY CYCLE
Test Date:	2024-08-16	2024-08-15	2024-08-18	2024-09-12	2024-08-26
Temperature:	26.6 °C	26.4 °C	25.3 °C	25.8 ℃	25.6 ℃
Relative Humidity:	50 %	45 %	52 %	50 %	49 %
ATM Pressure:	100.8 kPa	1008 kPa	100.4 kPa	100.3 kPa	100.6 kPa
Test Result:	'est Result: Pass Pass Pass		Pass	/	
Test Engineer:	Leah Li	Grace Luo	Grace Luo Destine Hu Hugh Wu		Loki Shi

Report No.: RKSA240801001-00A

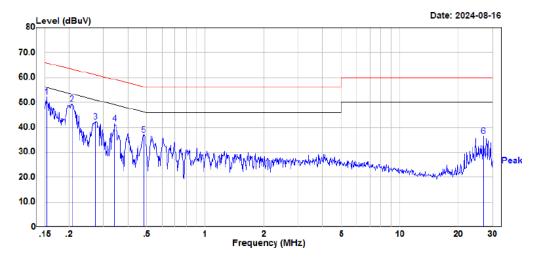
Test Item:	6 DB EMISSION BANDWIDTH	MAXIMUM CONDUCTED OUTPUT POWER	BAND EDGE	POWER SPECTRAL DENSITY
Test Date:	2024-08-26	2024-08-26	2024-08-26	2024-08-26
Temperature:	25.6 °C	25.6 °C	25.6 °C	25.6 °C
Relative Humidity:	49 %	49 %	49 %	49 %
ATM Pressure:	100.6 kPa	100.6 kPa	100.6 kPa	100.6 kPa
Test Result:	Pass	Pass	Pass	Pass
Test Engineer:	Loki Shi	Loki Shi	Loki Shi	Loki Shi

FCC Part 15.247 Page 26 of 57

AC LINE CONDUCTED EMISSIONS

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

AC 120V/60 Hz, Line



Site : CE

Condition : limit\FCC Part 15.207

: DET:Peak

Project No. : RKSA240801001

Model : V25i-U Phase : L

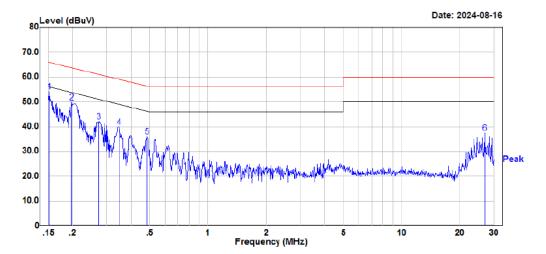
Voltage : 120V/60Hz Mode : BLE 1M Test Equipment : ENV216, ESR Temperature : $26.6\,^{\circ}C$ Humidity : 50%

Atmospheric pressure: 100.8kPa Test Engineer : Leah Li

		Read			Limit	0ver	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.153	32.01	20.12	52.13	65.83	-13.70	Peak
2	0.206	29.25	20.12	49.37	63.35	-13.98	Peak
3	0.273	22.20	20.15	42.35	61.03	-18.68	Peak
4	0.341	21.28	20.19	41.47	59.17	-17.70	Peak
5	0.482	16.87	20.16	37.03	56.31	-19.28	Peak
6	26.884	16.63	19.83	36.46	60.00	-23.54	Peak

FCC Part 15.247 Page 27 of 57

AC 120V/60 Hz, Neutral



Site : CE

Condition : limit\FCC Part 15.207

: DET:Peak

Project No. : RKSA240801001

Model : V25i-U

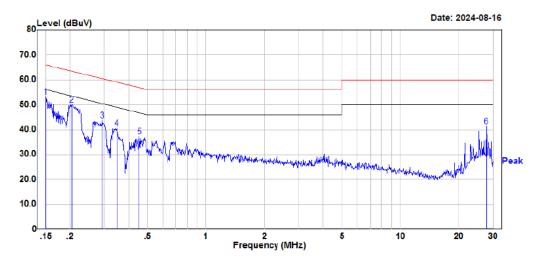
Phase : N

Voltage : 120V/60Hz Mode : BLE 1M Test Equipment : ENV216,ESR Temperature : 26.6℃ Humidity : 50% Atmospheric pressure: 100.8kPa Test Engineer : Leah Li

		Read			Limit	0ver	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	——dB	dBuV	dBuV	——dB	
1	0.152	33.96	20.12	54.08	65.92	-11.84	Peak
2	0.197	29.63	20.11	49.74	63.72	-13.98	Peak
3	0.273	21.90	20.15	42.05	61.03	-18.98	Peak
4	0.347	19.75	20.19	39.94	59.04	-19.10	Peak
5	0.484	15.89	20.16	36.05	56.27	-20.22	Peak
6	26.884	17.61	19.83	37.44	60.00	-22.56	Peak

FCC Part 15.247 Page 28 of 57 EUT operation mode: Transmitting in BLE (2 Mbps) middle channel (maximum output power)

AC 120V/60 Hz, Line



Site : CE

Condition : limit\FCC Part 15.207

: DET:Peak
Project No. : RKSA240801001

Model : V25i-U

Phase : L

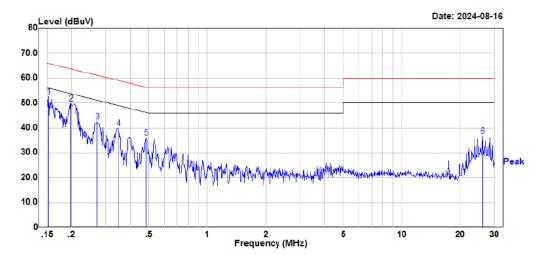
Voltage : 120V/60Hz
Mode : BLE 2M
Test Equipment : ENV216,ESR
Temperature : 26.6°C
Humidity : 50%

Atmospheric pressure: 100.8kPa Test Engineer : Leah Li

		Read			Limit	0ver	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	33.03	20.12	53.15	66.00	-12.85	Peak
2	0.203	29.95	20.11	50.06	63.47	-13.41	Peak
3	0.293	23.65	20.16	43.81	60.45	-16.64	Peak
4	0.347	20.31	20.19	40.50	59.04	-18.54	Peak
5	0.454	16.93	20.22	37.15	56.81	-19.66	Peak
6	27.700	21.38	19.85	41.23	60.00	-18.77	Peak

FCC Part 15.247 Page 29 of 57

AC 120V/60 Hz, Neutral



Site

Condition : limit\FCC Part 15.207

: DET:Peak

Project No. : RKSA240801001

Model : V25i-U

Phase : N

Voltage : 120V/60Hz Mode : BLE 2M Test Equipment : ENV216,ESR Temperature : 26.6℃ Humidity : 50% Atmospheric pressure: 100.8kPa

Test Engineer : Leah Li

		Read			Limit	0ver	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.152	32.62	20.12	52.74	65.88	-13.14	Peak
2	0.198	29.71	20.11	49.82	63.68	-13.86	Peak
3	0.271	22.40	20.15	42.55	61.07	-18.52	Peak
4	0.348	19.69	20.19	39.88	59.00	-19.12	Peak
5	0.484	15.77	20.16	35.93	56.27	-20.34	Peak
6	26.092	16.96	19.82	36.78	60.00	-23.22	Peak

FCC Part 15.247 Page 30 of 57

SPURIOUS EMISSIONS

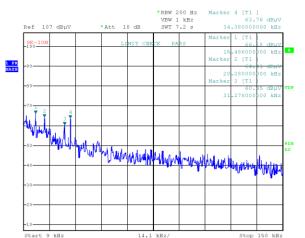
Test Result: Compliant.

EUT operation mode: Transmitting

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

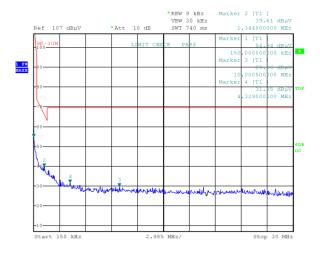
Parallel(worst case)

9kHz-150kHz



150kHz-30MHz

Report No.: RKSA240801001-00A



Project No.RKSA240801001 Date: 15.AUG.2024 14:10:37 Tester:Grace Luo

Project No.RKSA240801001 Date: 15.AUG.2024 13:53:22 Tester:Grace Luo

9kHz-150kHz

Frequency (MHz)	Corrected Amplitude (dBµV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBµV/m) @3m	Margin (dB)
0.015486	66.18	PK	52.87	123.81	57.63
0.02028	64.41	PK	49.92	121.46	57.05
0.031278	60.45	PK	46.87	117.70	57.25
0.03438	63.76	PK	46.06	116.88	53.12

150kHz-30MHz

Frequency (MHz)	Corrected Amplitude (dBµV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBµV/m) @3m	Margin (dB)
0.15000	54.94	PK	50.90	104.08	49.14
1.34400	39.81	PK	5.87	65.04	25.23
10.00050	29.36	PK	6.40	69.54	40.18
4.32900	31.85	PK	15.48	69.54	37.69

FCC Part 15.247 Page 31 of 57

BLE (1 Mbps) 30 MHz - 1 GHz:

Low Channel: 2402 MHz

Common Information

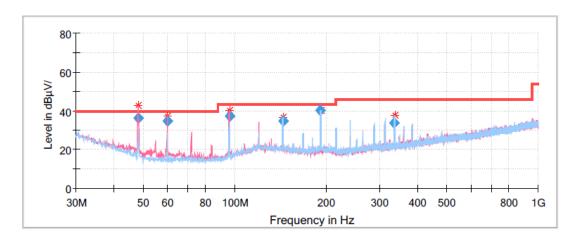
Project No: RKSA240801001 EUT Model: NAVEE Electric Scooter

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

Temperature:26.4%Humidity:45%Barometric Pressure:100.8kPaTest Engineer:Grace LuoTest Date:2024/8/15



Final_Result

Frequency	QuasiPeak	Limit	Margin	Pol	Corr.
(MHz)	(dB _μ V/m)	(dBμ V/m)	(dB)		(dB/m)
48.010400	36.25	40.00	3.75	V	-15.7
60.004250	34.77	40.00	5.23	٧	-17.6
95.995500	37.44	43.50	6.06	V	-15.4
144.341150	34.81	43.50	8.69	H	-11.6
191.966150	40.17	43.50	3.33	Η	-12.5
335.956100	33.49	46.00	12.51	Н	-9.6

FCC Part 15.247 Page 32 of 57

Middle Channel: 2440 MHz

Common Information

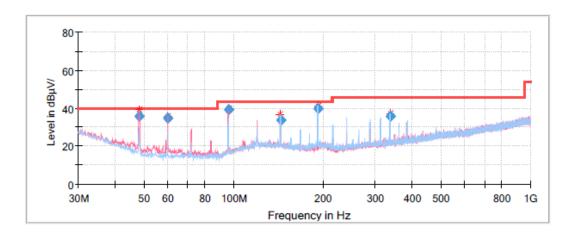
Project No: RKSA240801001 EUT Model: NAVEE Electric Scooter

Test Mode: Transmitting in BLE-1M mode middle channel

Standard: FCC Part 15.205 &FCC Part 15.209&FCC Part 15.247

Test Equipment: ESCI, JB3, 310N

Temperature: 26.4℃ Humidity: 45% Barometric Pressure: 100.8kPa Test Engineer: Grace Luo Test Date: 2024/8/15



Final Result

Frequency	QuasiPeak	Limit	Margin	Pol	Corr.
(MHz)	(dB _µ V/m)	(dBμ V/m)	(dB)		(dB/m)
48.025700	35.67	40.00	4.33	V	-15.7
60.006950	34.76	40.00	5.24	V	-17.6
96.215000	39.16	43.50	4.34	V	-15.4
144.340700	33.91	43.50	9.59	Н	-11.6
192.424300	39.65	43.50	3.85	Н	-12.5
336.769100	35.84	46.00	10.16	Н	-9.6

FCC Part 15.247 Page 33 of 57

High Channel:2480 MHz

Common Information

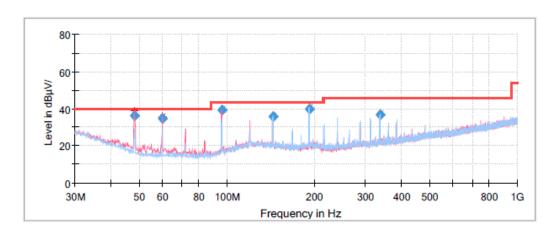
Project No: RKSA240801001 EUT Model: NAVEE Electric Scooter

Test Mode: Transmitting in BLE-1M mode high channel

Standard: FCC Part 15.205 &FCC Part 15.209&FCC Part 15.247

Test Equipment: ESCI, JB3, 310N

Temperature: 26.4℃ Humidity: 45% Barometric Pressure: 100.8kPa Test Engineer: Grace Luo Test Date: 2024/8/15



Final Result

i mai_recare							
Frequency	QuasiPeak	Limit	Margin	Pol	Corr.		
(MHz)	(dBµ V/m)	(dBµ V/m)	(dB)		(dB/m)		
47.990900	36.14	40.00	3.86	V	-15.7		
59.992550	34.66	40.00	5.34	V	-17.6		
96.197600	39.43	43.50	4.07	V	-15.4		
144.303000	35.87	43.50	7.63	Н	-11.6		
192.398150	39.85	43.50	3.65	Н	-12.5		
336,706700	36.92	46.00	9.08	Н	-9.6		

FCC Part 15.247 Page 34 of 57

Report No.: RKSA240801001-00A

BLE (2 Mbps) 30 MHz - 1 GHz:

Low Channel: 2402 MHz

Common Information

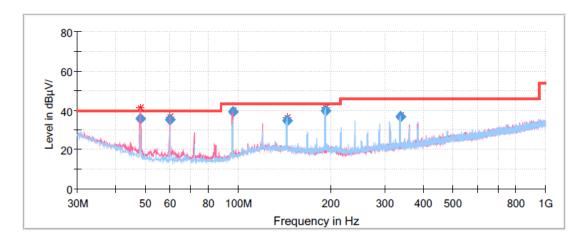
Project No: RKSA240801001 EUT Model: NAVEE Electric Scooter

Test Mode: Transmitting in BLE-2M mode low channel

Standard: FCC Part 15.205 &FCC Part 15.209&FCC Part 15.247

Test Equipment: ESCI, JB3, 310N

Temperature:26.4 °CHumidity:45 %Barometric Pressure:100.8kPaTest Engineer:Grace LuoTest Date:2024/8/15



Final Result

Frequency	QuasiPeak	Limit	Margin	Pol	Corr.
(MHz)	(dB _μ V/m)	(dBμ V/m)	(dB)		(dB/m)
48.057200	35.53	40.00	4.47	V	-15.7
60.004250	35.09	40.00	4.91	V	-17.6
96.180600	39.36	43.50	4.14	V	-15.4
144.275700	34.73	43.50	8.77	H	-11.6
192.383150	39.63	43.50	3.87	H	-12.5
336.685050	36.83	46.00	9.17	Н	-9.6

FCC Part 15.247 Page 35 of 57

Middle Channel: 2440 MHz

Common Information

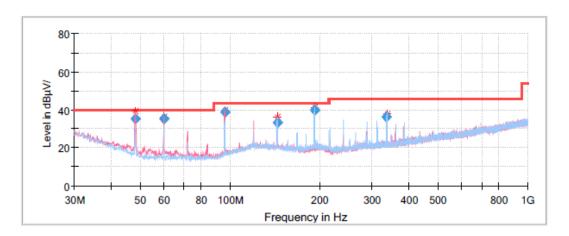
Project No: RKSA240801001 EUT Model: NAVEE Electric Scooter

Test Mode: Transmitting in BLE-2M mode middle channel

Standard: FCC Part 15.205 &FCC Part 15.209&FCC Part 15.247

Test Equipment: ESCI, JB3, 310N

Test Equipment: 26.4 ℃
Humidity: 45%
Barometric Pressure: 100.8kPa
Test Engineer: Grace Luo
Test Date: 2024/8/15



Final Result

Frequency	QuasiPeak	Limit	Margin	Pol	Corr.
(MHz)	(dBμ V/m)	(dBμ V/m)	(dB)		(dB/m)
48.033200	35.47	40.00	4.53	٧	-15.7
59.948750	35.45	40.00	4.55	٧	-17.6
96.381250	38.75	43.50	4.75	٧	-15.3
144.217500	33.16	43.50	10.34	Н	-11.6
192.350150	39.72	43.50	3.78	Н	-12.5
336.395250	36.00	46.00	10.00	Н	-9.6

FCC Part 15.247 Page 36 of 57

High Channel:2480 MHz

Common Information

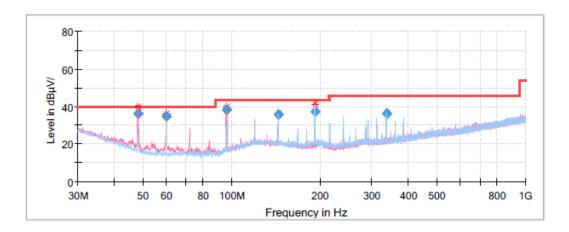
Project No: RKSA240801001 EUT Model: NAVEE Electric Scooter

Test Mode: Transmitting in BLE-2M mode high channel

Standard: FCC Part 15.205 &FCC Part 15.209&FCC Part 15.247

Test Equipment: ESCI, JB3, 310N

Temperature: 26.4℃
Humidity: 45%
Barometric Pressure: 100.8kPa
Test Engineer: Grace Luo
Test Date: 2024/8/15



Final Result

Frequency	QuasiPeak	Limit	Margin	Pol	Corr.
(MHz)	(dBμ V/m)	(dBμ V/m)	(dB)		(dB/m)
48.064700	36.00	40.00	4.00	V	-15.7
59.948750	34.70	40.00	5.30	V	-17.6
96.081250	38.39	43.50	5.11	V	-15.4
144.280950	35.87	43.50	7.63	Н	-11.6
192.731450	37.23	43.50	6.27	Н	-12.5
336.628650	36.33	46.00	9.67	Н	-9.6

FCC Part 15.247 Page 37 of 57

BLE (1 Mbps) 1 GHz-18 GHz:

Low Channel: 2402 MHz

Report No.: RKSA240801001-00A

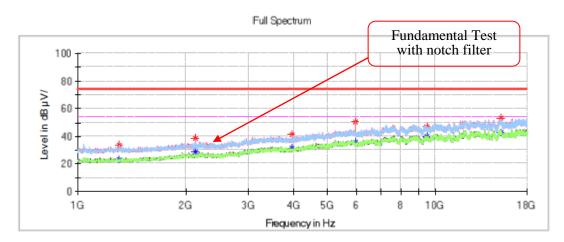
Common Information

Project No.: RKSA240801001

Test Mode: BLE 1M

Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209

Test Engineer: Destine Hu



Critical Freqs

Officious_Fire)					
Frequency	MaxPeak	Average	Limit	Margin	Pol	Corr.
(MHz)	(dB µ V/m)	(dB µ V/m)	(dB μ V/m)	(dB)		(dB/m)
1309.400000	33.67		74.00	40.33	Н	-15.0
1309.400000		23.40	54.00	30.60	Н	-15.0
2127.100000	38.62		74.00	35.38	V	-11.3
2127.100000		28.78	54.00	25.22	V	-11.3
3956.300000	40.93		74.00	33.07	V	-5.9
3956.300000		31.15	54.00	22.85	V	-5.9
5972.500000	50.10		74.00	23.90	V	0.0
5972.500000		35.89	54.00	18.11	V	0.0
9450.700000		39.72	54.00	14.28	V	5.4
9450.700000	47.19		74.00	26.81	V	5.4
15266.400000		42.38	54.00	11.62	V	9.6
15266.400000	52.93		74.00	21.07	V	9.6

FCC Part 15.247 Page 38 of 57

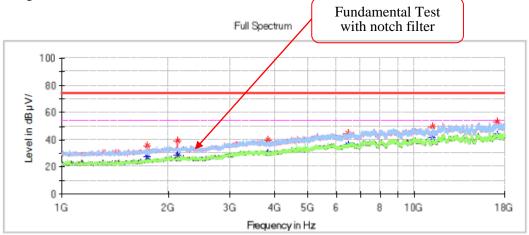
Middle Channel: 2440 MHz

Common Information

Project No.: RKSA240801001
Test Mode: BLE 1M

Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209

Test Engineer: Destine Hu



Critical Freqs

Cillical_Fied	5					
Frequency	MaxPeak	Average	Limit	Margin	Pol	Corr.
(MHz)	(dB µ V/m)	(dB µ V/m)	(dB μ V/m)	(dB)		(dB/m)
1744.600000	35.79		74.00	38.21	V	-13.3
1744.600000		27.53	54.00	26.47	V	-13.3
2128.800000		28.70	54.00	25.30	V	-11.3
2128.800000	39.00		74.00	35.00	V	-11.3
3839.000000		29.96	54.00	24.04	V	-6.0
3839.000000	40.18		74.00	33.82	V	-6.0
6470.600000		36.04	54.00	17.96	Н	0.5
6470.600000	44.96		74.00	29.04	Н	0.5
11210.200000		41.06	54.00	12.94	V	8.0
11210.200000	49.93		74.00	24.07	V	8.0
17139.800000		43.35	54.00	10.65	V	12.1
17139.800000	53.10		74.00	20.90	V	12.1

FCC Part 15.247 Page 39 of 57

High Channel: 2480 MHz

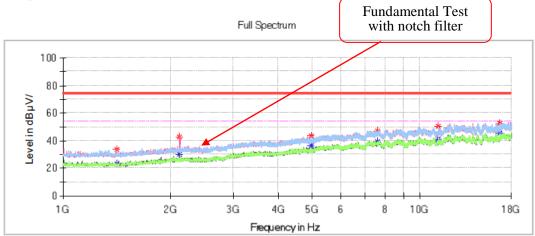
Common Information

Project No.: RKSA240801001

Test Mode: BLE 1M

Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209

Test Engineer: Destine Hu



Critical_Freqs

Official_i req	Į –					
Frequency	MaxPeak	Average	Limit	Margin	Pol	Corr.
(MHz)	(dB µ V/m)	(dB μ V/m)	(dB μ V/m)	(dB)		(dB/m)
1413.100000		23.02	54.00	30.98	Н	-14.9
1413.100000	33.44		74.00	40.56	Н	-14.9
2122.000000		29.96	54.00	24.04	V	-11.4
2122.000000	42.34		74.00	31.66	V	-11.4
4959.300000		36.16	54.00	17.84	V	-2.6
4959.300000	43.21		74.00	30.79	V	-2.6
7609.600000		39.17	54.00	14.83	V	3.9
7609.600000	47.06		74.00	26.94	V	3.9
11208.500000		41.26	54.00	12.74	Н	8.0
11208.500000	50.03		74.00	23.97	Н	8.0
16752.200000		45.43	54.00	8.57	Н	11.5
16752.200000	52.62		74.00	21.38	Н	11.5

FCC Part 15.247 Page 40 of 57

Restricted Bands Emission:

Left Side

Common Information

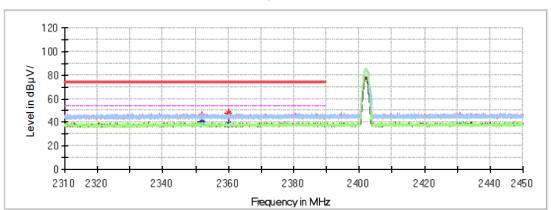
Project No.: RKSA240801001

Test Mode: BLE 1M

Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209

Test Engineer: Destine Hu

Full Spectrum



Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2351.888000		40.59	54.00	13.41	Н	-0.7
2351.888000	45.11		74.00	28.89	Н	-0.7
2359.952000		38.21	54.00	15.79	V	-0.7
2359.952000	48.12		74.00	25.88	V	-0.7

FCC Part 15.247 Page 41 of 57

Report No.: RKSA240801001-00A

Right Side

Common Information

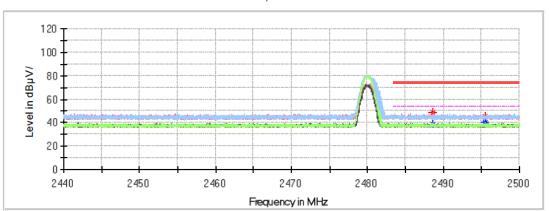
Project No.: RKSA240801001

Test Mode: BLE 1M

Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209

Test Engineer: Destine Hu

Full Spectrum

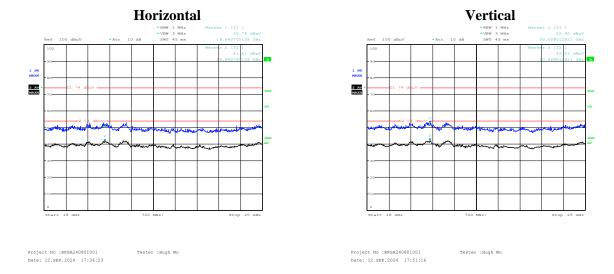


Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2488.588000	48.47		74.00	25.53	V	-0.2
2488.588000		38.19	54.00	15.81	V	-0.2
2495.452000	45.21		74.00	28.79	Н	-0.2
2495.452000		40.04	54.00	13.96	Н	-0.2

FCC Part 15.247 Page 42 of 57

18 GHz - 25 GHz (middle channel was worst):



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

FCC Part 15.247 Page 43 of 57

BLE (2 Mbps) 1GHz-18GHz:

Low Channel: 2402 MHz

Report No.: RKSA240801001-00A

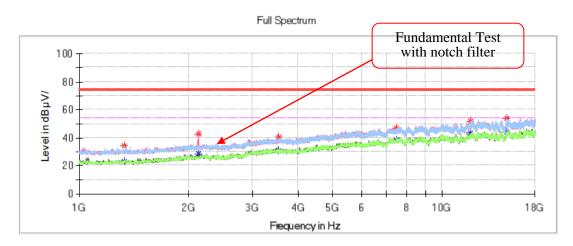
Common Information

Project No.: RKSA240801001

Test Mode: BLE 2M

Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209

Test Engineer: Destine Hu



Critical Freqs

Frequency	MaxPeak	Average	Limit	Margin	Pol	Corr.
(MHz)	(dB µ V/m)	(dB µ V/m)	(dB µ V/m)	(dB)		(dB/m)
1328.100000	34.12		74.00	39.88	Н	-15.0
1328.100000		23.17	54.00	30.83	Н	-15.0
2128.800000	42.87		74.00	31.13	V	-11.3
2128.800000		28.96	54.00	25.04	V	-11.3
3536.400000	40.33		74.00	33.67	V	-6.3
3536.400000		30.80	54.00	23.20	V	-6.3
7482.100000	46.97		74.00	27.03	Н	3.8
7482.100000		38.48	54.00	15.52	Н	3.8
11939.500000	51.47		74.00	22.53	V	9.0
11939.500000		43.16	54.00	10.84	V	9.0
15021.600000		44.05	54.00	9.95	Н	9.4
15021.600000	54.09		74.00	19.91	Н	9.4

FCC Part 15.247 Page 44 of 57

Middle Channel: 2440 MHz

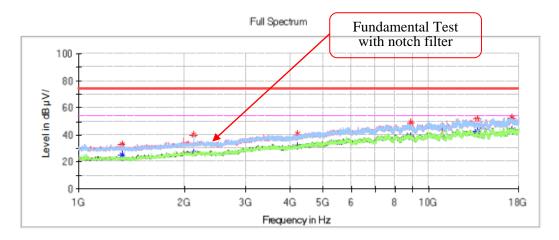
Common Information

Project No.: RKSA240801001

Test Mode: BLE 2M

Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209

Test Engineer: Destine Hu



Critical_Freqs

Corr. IB/m)
•
45.0
15.0
15.0
11.3
11.3
-5.2
-5.2
5.4
5.4
9.7
9.7
12.0
12.0

FCC Part 15.247 Page 45 of 57

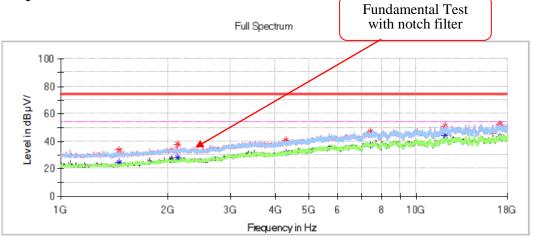
High Channel: 2480 MHz

Common Information

Project No.: RKSA240801001
Test Mode: BLE 2M

Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209

Test Engineer: Destine Hu



Critical Freqs

Frequency	MaxPeak	Average	Limit	Margin	Pol	Corr.
(MHz)	(dB µ V/m)	(dB µ V/m)	(dB µ V/m)	(dB)		(dB/m)
1455.600000		24.66	54.00	29.34	V	-14.8
1455.600000	33.77		74.00	40.23	V	-14.8
2127.100000		27.81	54.00	26.19	V	-11.3
2127.100000	37.95		74.00	36.05	V	-11.3
4286.100000		31.61	54.00	22.39	Н	-5.0
4286.100000	40.37		74.00	33.63	Н	-5.0
7436.200000		36.95	54.00	17.05	V	3.7
7436.200000	47.13		74.00	26.87	V	3.7
12055.100000		43.86	54.00	10.14	V	9.0
12055.100000	51.23		74.00	22.77	V	9.0
17076.900000		43.02	54.00	10.98	Н	12.2
17076.900000	52.44		74.00	21.56	Н	12.2

FCC Part 15.247 Page 46 of 57

Report No.: RKSA240801001-00A

Restricted Bands Emission:

Left Side

Common Information

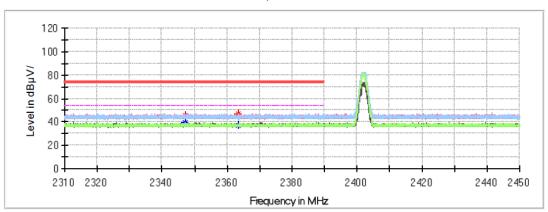
Project No.: Test Mode: RKSA240801001

BLE 2M

Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209

Test Engineer: Destine Hu

Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2347.114000		39.81	54.00	14.19	Н	-0.7
2347.114000	45.69		74.00	28.31	Н	-0.7
2363.298000		36.64	54.00	17.36	Н	-0.7
2363.298000	47.36		74.00	26.64	Н	-0.7

FCC Part 15.247 Page 47 of 57

Right Side

Common Information

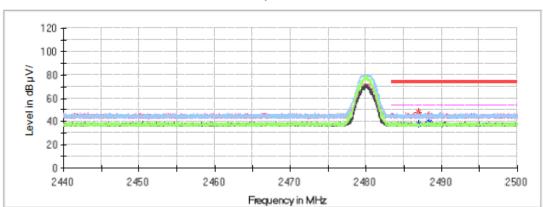
Project No.: RKSA240801001

Test Mode: BLE 2M

Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209

Test Engineer: Destine Hu

Full Spectrum

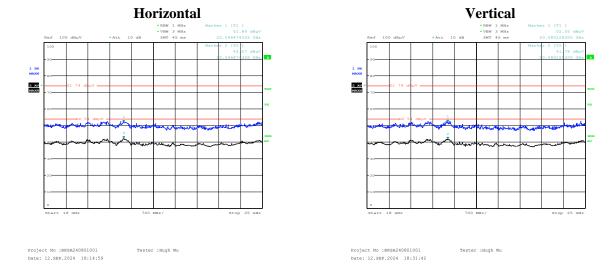


Critical Freqs

Frequency	MaxPeak	Average	Limit	Margin	Pol	Corr.
(MHz)	(dB µ V/m)	(dB µ V/m)	(dB μ V/m)	(dB)		(dB/m)
2486.926000	48.11		74.00	25.89	Н	-0.2
2486.926000		37.49	54.00	16.51	Н	-0.2
2488.318000	44.91		74.00	29.09	Н	-0.2
2488.318000		39.72	54.00	14.28	Н	-0.2

FCC Part 15.247 Page 48 of 57

18 GHz - 25 GHz (middle channel was worst):



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

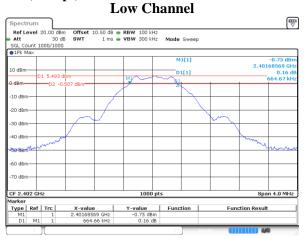
FCC Part 15.247 Page 49 of 57

6 dB EMISSION BANDWIDTH

Mode	Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (MHz)
	Low	2402	0.665	≥0.5
BLE (1 Mbps)	Middle	2440	0.777	≥0.5
	High	2480	0.877	≥0.5
	Low	2402	0.961	≥0.5
BLE (2 Mbps)	Middle	2440	1.133	≥0.5
	High	2480	0.965	≥0.5

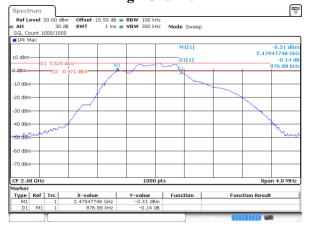
FCC Part 15.247 Page 50 of 57

BLE (1 Mbps)



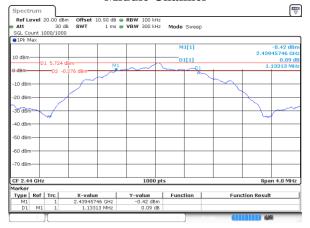
Date: 26.AUG.2024 14:15:06

High Channel



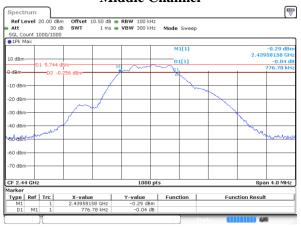
ProjectNo.:RKSA240801001 Tester:Loki Shi Date: 26 AUG 2024 14:25:31

Middle Channel



ProjectNo.:RKSA240801001 Tester:Loki Shi Date: 26.AUG.2024 14:33:32

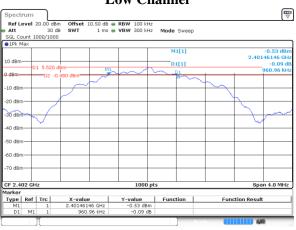
Middle Channel



Date: 26.AUG.2024 14:20:50

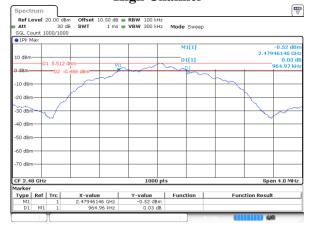
BLE (2 Mbps)

Low Channel



ProjectNo.:RKSA240801001 Tester:Loki Shi Date: 26 AUG 2024 14:30:05

High Channel



ProjectNo.:RKSA240801001 Tester:Loki Shi

Date: 26.AUG.2024 14:37:15

FCC Part 15.247 Page 51 of 57

MAXIMUM CONDUCTED OUTPUT POWER

Test Result: Compliant.

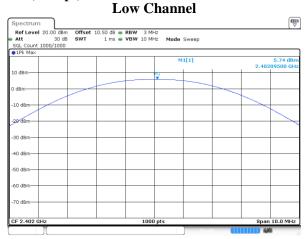
EUT operation mode: Transmitting

Mode	Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Limit (dBm)	Result
BLE (1 Mbps)	Low	2402	5.74	30	Pass
	Middle	2440	6.03	30	Pass
	High	2480	5.81	30	Pass
BLE (2 Mbps)	Low	2402	5.78	30	Pass
	Middle	2440	6.05	30	Pass
	High	2480	5.85	30	Pass

Report No.: RKSA240801001-00A

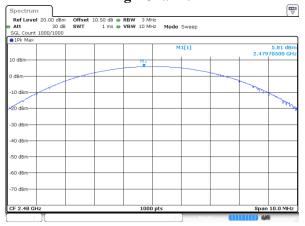
FCC Part 15.247 Page 52 of 57

BLE (1 Mbps)



Date: 26.AUG.2024 14:19:13

High Channel



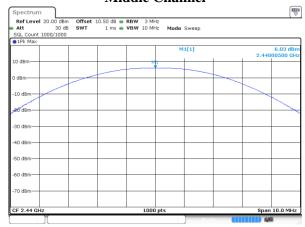
ProjectNo.:RKSA240801001 Tester:Loki Shi Date: 26.AUG.2024 14:27:58

Middle Channel



ProjectNo.:RKSA240801001 Tester:Loki Shi Date: 26.AUG.2024 14:35:49

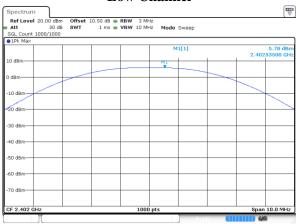
Middle Channel



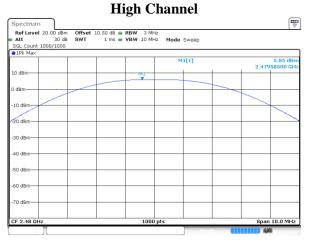
ProjectNo.:RKSA240801001 Tester:Loki Shi Date: 26.AUG.2024 14:24:21

BLE (2 Mbps)

Low Channel



Date: 26.AUG.2024 14:32:15



Date: 26.AUG.2024 14:39:55

FCC Part 15.247 Page 53 of 57

Report No.: RKSA240801001-00A

BAND EDGE

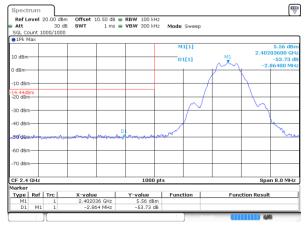
Test Result: Compliant.

EUT operation mode: Transmitting

Mode	Channel	Frequency (MHz)	Result (dBc)	Limit (dBc)
BLE (1 Mbps)	Low	2402	53.73	20
	High	2480	53.10	
BLE (2 Mbps)	Low	2402	31.71	20
	High	2480	53.29	

BLE (1 Mbps)

Left Side



Date: 26.AUG.2024 14:14:56

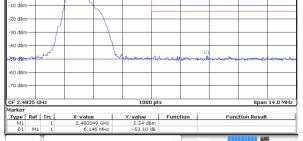
BLE (2 Mbps)



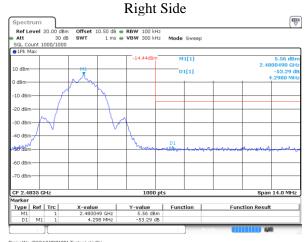
Date: 26 AUG 2024 14:29:55



Right Side



Date: 26.AUG.2024 14:25:20



Date: 26 AUG 2024 14:37:04

FCC Part 15.247 Page 54 of 57

POWER SPECTRAL DENSITY

Test Result: Compliant.

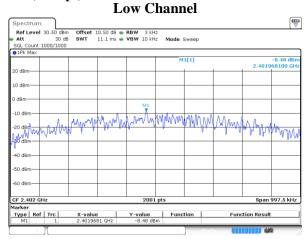
EUT operation mode: Transmitting

Mode	Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)
BLE (1 Mbps)	Low	2402	-8.48	≤8
	Middle	2440	-8.70	≤8
	High	2480	-10.01	≤8
BLE (2 Mbps)	Low	2402	-10.65	≤8
	Middle	2440	-12.95	≤8
	High	2480	-11.37	≤8

Report No.: RKSA240801001-00A

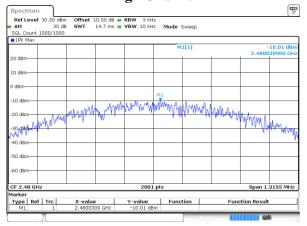
FCC Part 15.247 Page 55 of 57

BLE (1 Mbps)



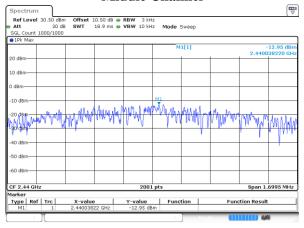
Date: 26.AUG.2024 14:19:35

High Channel



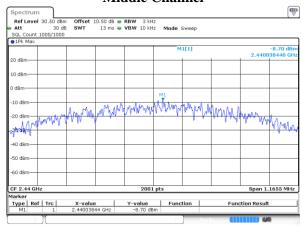
ProjectNo.:RKSA240801001 Tester:Loki Shi Date: 26 AUG 2024 14:28:25

Middle Channel



ProjectNo.:RKSA240801001 Tester:Loki Shi Date: 26.AUG.2024 14:36:21

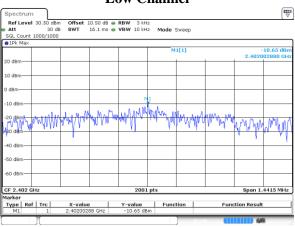
Middle Channel



Date: 26.AUG.2024 14:24:46

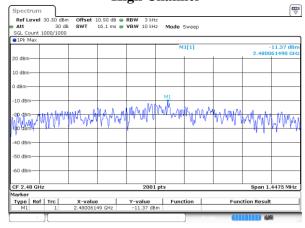
BLE (2 Mbps)

Low Channel



ProjectNo.:RKSA240801001 Tester:Loki Shi Date: 26 AUG 2024 14:32:44

High Channel



Date: 26.AUG.2024 14:40:24

FCC Part 15.247 Page 56 of 57

Declarations

Report No.: RKSA240801001-00A

- 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 " \star ".
- 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 *****

FCC Part 15.247 Page 57 of 57