



Co-location Report

FCC ID: 2A64B-GPR11

Applicant: Ecovacs Home Service Robotics Co., Ltd.

Address: No.518 Songwei Road, Wusongjiang industry Park,
Guoxiang Street, Wuzhong District, Suzhou, 215100
Jiangsu, P.R. China

Product: Lawn Mowing Robot

Model No.: GPR12

Serial Model No.: GPR11

FCC Rule(s): Part 2, 22 (H), 27(L)
Part 15 Subpart C (Section 15.247)
Part 15 Subpart C (Section 15.209)

Result: Complies

Received Date: 2024-11-18

Test Date: 2025-01-04

Reviewed By:

Denise Zhou

Approved By:

Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2013. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2411RSU033-U4	V01	Initial Report	2025-01-16	Invalid
2411RSU033-U4	V02	Update Product Information	2025-01-22	Invalid
2411RSU033-U4	V03	Update Module Information	2025-04-03	Valid

CONTENTS

Description	Page
1. General Information	4
1.1. Applicant	4
1.2. Manufacturer	4
1.3. Testing Facility	4
1.4. Product Information	5
1.5. Radio Specification under Test	6
1.6. Working Frequencies	8
2. Test Configuration	10
2.1. Test Mode	10
2.2. Test System Connection Diagram	10
2.3. Test Software	10
2.4. Applied Standards	11
2.5. Test Environment Condition	11
3. Measuring Instrument	12
4. Decision Rules and Measurement Uncertainty	13
4.1. Decision Rules	13
4.2. Measurement Uncertainty	13
5. Radiated Spurious Emissions Measurement (Co-location)	14
5.1. Test Limit	14
5.2. Test Procedure	15
5.3. Test Setting	15
5.4. Test Setup	17
5.5. Test Result	18
Appendix A - Test Setup Photograph	26
Appendix B - EUT Photograph	27

1. General Information

1.1. Applicant

Ecovacs Home Service Robotics Co., Ltd.

No.518 Songwei Road, Wusongjiang industry Park, Guoxiang Street, Wuzhong District, Suzhou, 215100

Jiangsu, P.R. China

1.2. Manufacturer

Ecovacs Home Service Robotics Co., Ltd.

No.518 Songwei Road, Wusongjiang industry Park, Guoxiang Street, Wuzhong District, Suzhou, 215100

Jiangsu, P.R. China

1.3. Testing Facility

☒	Test Site – MRT Suzhou Laboratory			
	Laboratory Location (Suzhou - Wuzhong)			
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China			
	Laboratory Location (Suzhou - SIP)			
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China			
	Laboratory Location (Suzhou - Wujiang)			
	Building 1, No.1 Xingdong Road, Wujiang, Suzhou, Jiangsu, People's Republic of China			
☐	Laboratory Accreditations			
	A2LA: 3628.01		CNAS: L10551	
	FCC: CN1166		ISED: CN0001	
	VCCI:	☐ R-20025	☐ G-20034	☐ C-20020
		☐ T-20020		
		☐ R-20141	☐ G-20134	☐ C-20103
			☐ T-20104	
☐	Test Site – MRT Shenzhen Laboratory			
	Laboratory Location (Shenzhen)			
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China			
	Laboratory Accreditations			
	A2LA: 3628.02		CNAS: L10551	
☐	FCC: CN1284		ISED: CN0105	
	Test Site – MRT Taiwan Laboratory			
	Laboratory Location (Taiwan)			
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)			
	Laboratory Accreditations			
☐	TAF: 3261			
	FCC: 291082, TW3261		ISED: TW3261	

1.4. Product Information

Product Name	Lawn Mowing Robot
Model No.	GPR12
Serial Model No.	GPR11
Serial No.	E07J12345F164RRX0019
Wi-Fi Specification	802.11b/g/n
Bluetooth Version	Bluetooth v5.2 BLE Only
3GPP Specification	WCDMA Band II/IV/V LTE Band 2/4/5/12/13/14/66/71
GNSS Specification	GPS, GLONASS, BDS, Galileo
Lora Specification	902.75 ~ 920.95MHz
Antenna Specification	Refer to Section 1.5
Operating Temp.	5 ~ 40°C
Power Type	By Battery
Contain Integrated Modular Information	
Cellular Modular Information	Modular Name: LTE Module Model Number: EC25-AFXD Brand Name: Quectel FCC ID: XMR202008EC25AFXD
Accessory	
Rechargeable Lithium-ion Battery Pack	Model: S34-LI-324-5000 Nominal Voltage: 32.4V Typical Capacity: 5000mAh Rated Capacity: 4600mAh
Remarks:	
- The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer. - The two models are the same except different models of charging station and different battery capacity. The charging station model of GPR12 is CH2491A, and battery capacity is 5Ah. The charging station model of GPR11 is CH2491, and battery capacity is 3Ah. Model GPR12 is selected for testing.	

1.5. Radio Specification under Test

For 3G/4G:

UTRA Specification	
Single Band	Band II/IV/V
TX Frequency Range	Band II: 1850 ~ 1910MHz, Band IV: 1710 ~ 1755MHz Band V: 824 ~ 849MHz
RX Frequency Range	Band II: 1930 ~ 1990MHz, Band IV: 2110 ~ 2155MHz Band V: 869 ~ 894MHz
Modulation	QPSK, 16QAM
E-UTRA Specification	
Single Band	FDD Band: 2, 4, 5, 12, 13, 14, 66, 71
FDD TX Frequency Range	LTE Band 2: 1850 ~ 1910 MHz; LTE Band 4: 1710 ~ 1755 MHz LTE Band 5: 824 ~ 849MHz; LTE Band 12: 699 ~ 716 MHz LTE Band 13: 777 ~ 787 MHz; LTE Band 14: 788 ~ 798 MHz; LTE Band 66: 1710 ~ 1780 MHz; LTE Band 71: 663 ~ 698 MHz
FDD RX Frequency Range	LTE Band 2: 1930 ~ 1990 MHz; LTE Band 4: 2110 ~ 2155 MHz LTE Band 5: 869 ~ 894MHz; LTE Band 12: 729 ~ 746 MHz LTE Band 13: 746 ~ 756 MHz; LTE Band 14: 758 ~ 768 MHz LTE Band 66: 2110 ~ 2200 MHz; LTE Band 71: 617 ~ 652 MHz
Modulation	QPSK, 16QAM
Antenna Type	Dipole Antenna
Max Antenna Gain	3.0dBi for WCDMA Band 4.0dBi for LTE Band

For Bluetooth-LE:

Frequency Range	2402 ~ 2480MHz
Channel Number	40
Type of Modulation	GFSK
Data Rate	1Mbps & 2Mbps
Antenna Type	PIFA Antenna
Antenna Gain	4.56 dBi

For 2.4G Wi-Fi:

Frequency Range	802.11b/g/n-HT20: 2412 ~ 2472 MHz 802.11n-HT40: 2422 ~ 2462 MHz
Channel Number	802.11b/g/n-HT20: 13 802.11n-HT40: 9
Type of Modulation	802.11b: DSSS 802.11g/n: OFDM
Data Rate	802.11b: 1/2/5.5/11Mbps 802.11g: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 150Mbps
Antenna Type	PIFA Antenna
Antenna Gain	4.56 dBi

For Lora:

Frequency Range	902.75 ~ 920.95MHz
Channel Number	10
Type of modulation	FSK
Antenna Type	PIFA Antenna
Antenna Gain	0.5 dBi

Note: The above information is declared by the manufacturer.

1.6. Working Frequencies

For Bluetooth-LE:

Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2404 MHz	02	2406 MHz
03	2408 MHz	04	2410 MHz	05	2412 MHz
06	2414 MHz	07	2416 MHz	08	2418 MHz
09	2420 MHz	10	2422 MHz	11	2424 MHz
12	2426 MHz	13	2428 MHz	14	2430 MHz
15	2432 MHz	16	2434 MHz	17	2436 MHz
18	2438 MHz	19	2440 MHz	20	2442 MHz
21	2444 MHz	22	2446 MHz	23	2448 MHz
24	2450 MHz	25	2452 MHz	26	2454 MHz
27	2456 MHz	28	2458 MHz	29	2460 MHz
30	2462 MHz	31	2464 MHz	32	2466 MHz
33	2468 MHz	34	2470 MHz	35	2472 MHz
36	2474 MHz	37	2476 MHz	38	2478 MHz
39	2480 MHz	--	--	--	--

2.4G Wi-Fi:

802.11b/g/n-HT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz
04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz
10	2457 MHz	11	2462 MHz	12	2467 MHz
13	2472 MHz	--	--	--	--

802.11n-HT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz
06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	10	2457 MHz	11	2462 MHz

For Lora:

Channel	Frequency	Channel	Frequency	Channel	Frequency
00	902.75MHz	01	904.15MHz	02	906.25MHz
03	908.35MHz	04	910.45MHz	05	912.55MHz
06	914.65MHz	07	916.75MHz	08	918.85MHz
09	920.95MHz	--	--	--	--

2. Test Configuration

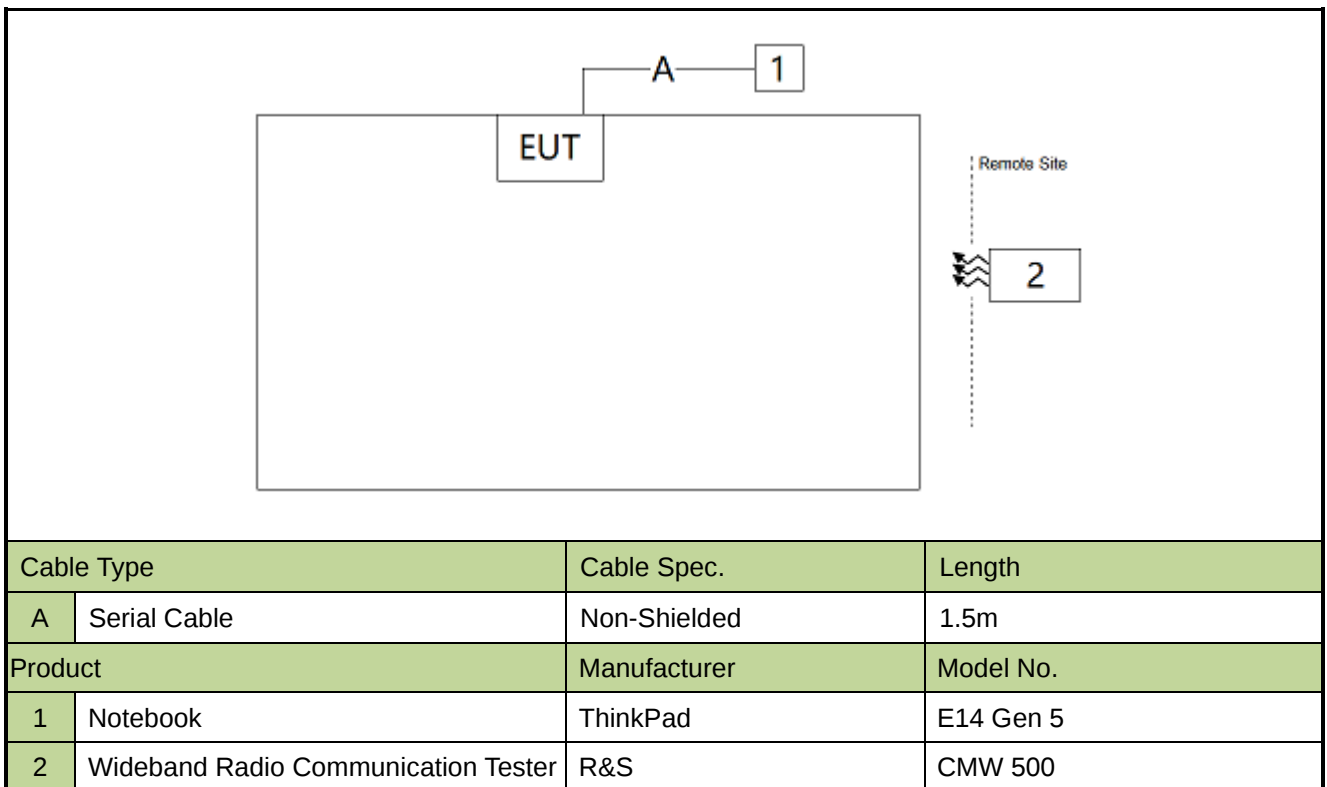
2.1. Test Mode

Mode 1: Transmit by Normal Operation 2.4G WiFi and BLE + Lora at 902.75MHz + WCDMA Band 4 at 1732.6MHz.

Mode 2: Transmit by Normal Operation 2.4G WiFi and BLE + Lora at 902.75MHz + LTE Band 5 at 836.5MHz.

Note: The above testing scenarios were provided by the manufacturer, these are the worst case.

2.2. Test System Connection Diagram



2.3. Test Software

The test utility software used during testing was “Putty” and commands were provided by the manufacturer.

2.4. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.247
- FCC Part 15 Subpart C §15.209
- FCC Part 22 Subpart H
- FCC Part 27 Subpart L
- KDB 558074 D01v05r02
- ANSI C63.10-2013
- ANSI C63.26:2015
- FCC KDB 971168 D01 v03r01: Power Meas License Digital Systems

2.5. Test Environment Condition

Ambient Temperature	15 ~ 35°C
Relative Humidity	20% ~ 75%RH

3. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
Anechoic Chamber	RIKEN	SIP-AC1	MRTSUE06554	1 year	2025-12-20	SIP-AC1
Horn Antenna	R&S	HF907	MRTSUE06610	1 year	2025-06-12	SIP-AC1
Thermohygrometer	testo	608-H1	MRTSUE06616	1 year	2025-10-16	SIP-AC1
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06645	1 year	2025-07-05	SIP-AC1
Preamplifier	MRT	AMP-AC1	MRTSUE11265	1 year	2025-11-05	SIP-AC1
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06599	1 year	2025-09-08	SIP-AC1
Preamplifier	EMCI	EMC184045SE	MRTSUE06602	1 year	2025-10-08	SIP-AC1
Signal Analyzer	Keysight	N9010B	MRTSUE06603	1 year	2025-09-05	SIP-AC1
EMI Test Receiver	R&S	ESR3	MRTSUE06613	1 year	2025-10-13	SIP-AC1

Software	Version	Function
e3	230711	EMI Test Software
Controller_MF 7802BS	1.02	RE Antenna & Turntable

4. Decision Rules and Measurement Uncertainty

4.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2.

(Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

4.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Radiated Emission Measurement

The maximum measurement uncertainty is evaluated as:

Coaxial: 9kHz~30MHz: 2.61dB

Coplanar: 9kHz~30MHz: 2.62dB

Horizontal: 30MHz~200MHz: 3.79dB

200MHz~1GHz: 3.91dB

1GHz~40GHz: 4.99dB

Vertical: 30MHz~200MHz: 4.06dB

200MHz~1GHz: 5.21dB

1GHz~40GHz: 4.90dB

5. Radiated Spurious Emissions Measurement (Co-location)

5.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

Note 1: For below 1GHz, Due to the frequency range of radiated stray emissions in FCC Part 22/27 being 9KHz ~ 1GHz, which is looser than the 9KHz ~ 1GHz range in FCC Part 15.209, the test limits are based on FCC Part 22/27.

Note 2: For above 1GHz, Due to the frequency range of radiated stray emissions in FCC Part 22/27 being 1GHz ~ 10th, which is looser than the 1GHz ~ 10th range in FCC Part 15.209, the test limits are based on FCC Part 22/27.

For FCC Part 22(H), 27(L) requirements

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm.

$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters. The emission limit equal to 82.3dBμV/m.

5.2. Test Procedure

ANSI C63.10 - 2013 - Section 11.11 & 11.12

ANSI C63.10 - 2013 - Section 6.3 (General Requirements)

ANSI C63.10 - 2013 - Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 - 2013 - Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10 - 2013 - Section 6.6 (Standard test method above 1GHz)

ANSI C63.26 - 2015 - Section 5.2.7 & 5.5

5.3. Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000MHz	1MHz

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

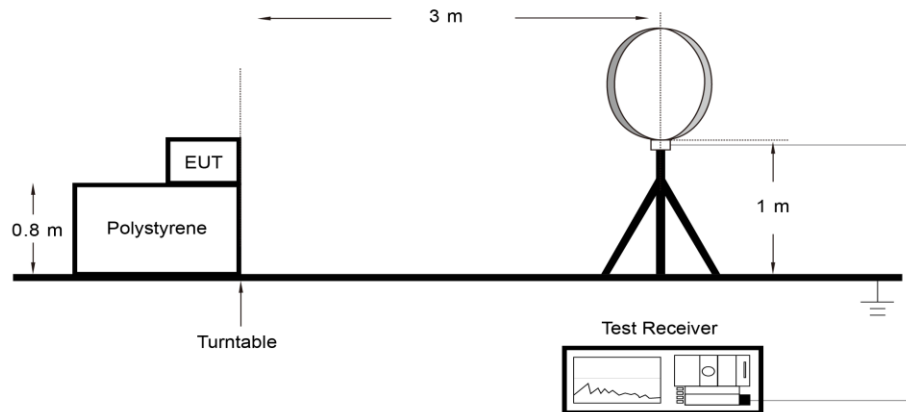
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

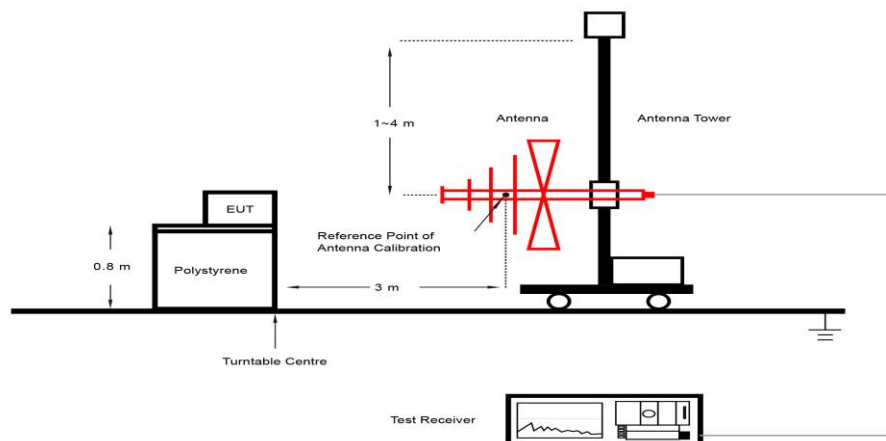
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; if the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10Hz
If the EUT duty cycle is $< 98\%$, set $\text{VBW} \geq 1/T$. T is the minimum transmission duration.
4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = Auto
7. Trace mode = Max hold
8. Trace was allowed to stabilize

5.4. Test Setup

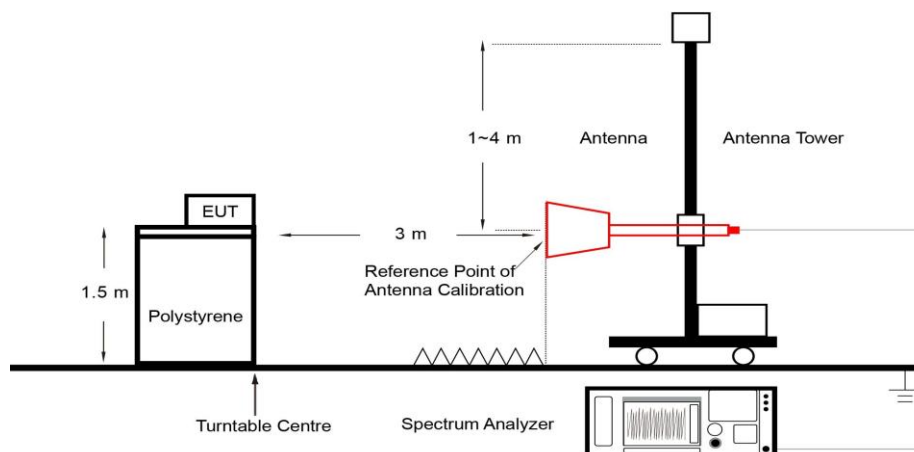
Below 30MHz Test Setup:



30MHz ~ 1GHz Test Setup:



Above 1GHz Test Setup:



5.5. Test Result

The Result of Radiated Emission above 1GHz:

Test Site	SIP-AC1	Test Engineer	Mero Zhou
Test Date	2025-01-04	Test Configuration	Mode 1

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
12133.3	35.4	13.1	48.5	82.3	-33.8	Peak	Horizontal
16308.5	37.3	19.0	56.3	82.3	-26.0	Peak	Horizontal
17921.8	35.2	23.4	58.6	82.3	-23.7	Peak	Horizontal
14788.7	36.4	17.9	54.3	82.3	-28.0	Peak	Vertical
17017.4	36.8	20.1	56.9	82.3	-25.4	Peak	Vertical
17915.0	33.9	23.6	57.5	82.3	-24.8	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	SIP-AC1	Test Engineer	Mero Zhou
Test Date	2025-01-04	Test Configuration	Mode 2

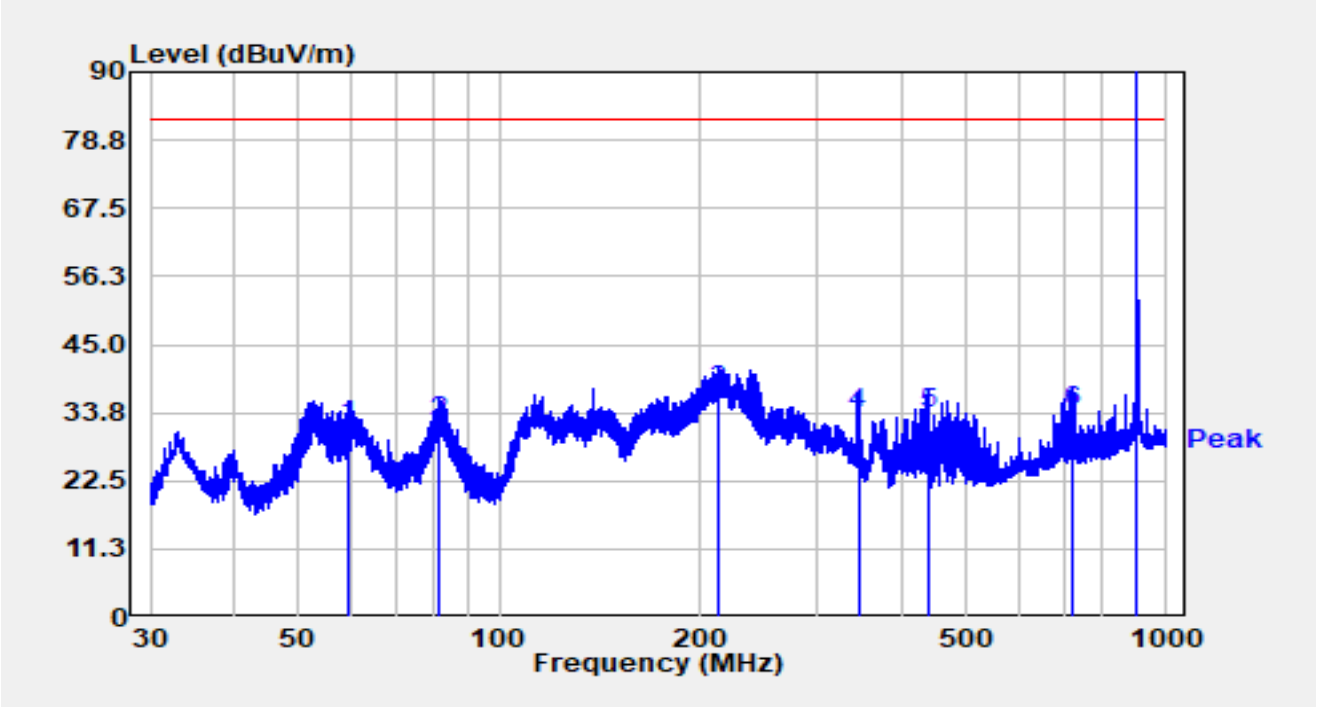
Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
4182.4	42.8	3.7	46.5	82.3	-35.8	Peak	Horizontal
9607.1	39.5	9.6	49.1	82.3	-33.2	Peak	Horizontal
17840.2	34.9	23.3	58.2	82.3	-24.1	Peak	Horizontal
9919.9	38.5	11.1	49.6	82.3	-32.7	Peak	Vertical
15866.5	37.3	18.6	55.9	82.3	-26.4	Peak	Vertical
17685.5	36.3	21.5	57.8	82.3	-24.5	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The Result of Radiated Emission below 1GHz:

Site	SIP-AC1	Test Date	2025-01-04
Temperature	17.5°C	Humidity	43.9%
Limit	FCC_Part 22&27_RSE (3m)_dBuV	Test Engineer	Mero Zhou
Factor	VULB 9168_00998_25-2000MHz	Polarity	Horizontal
EUT	Lawn Mowing Robot	Test Voltage	By Battery
Test Mode	Mode 1		

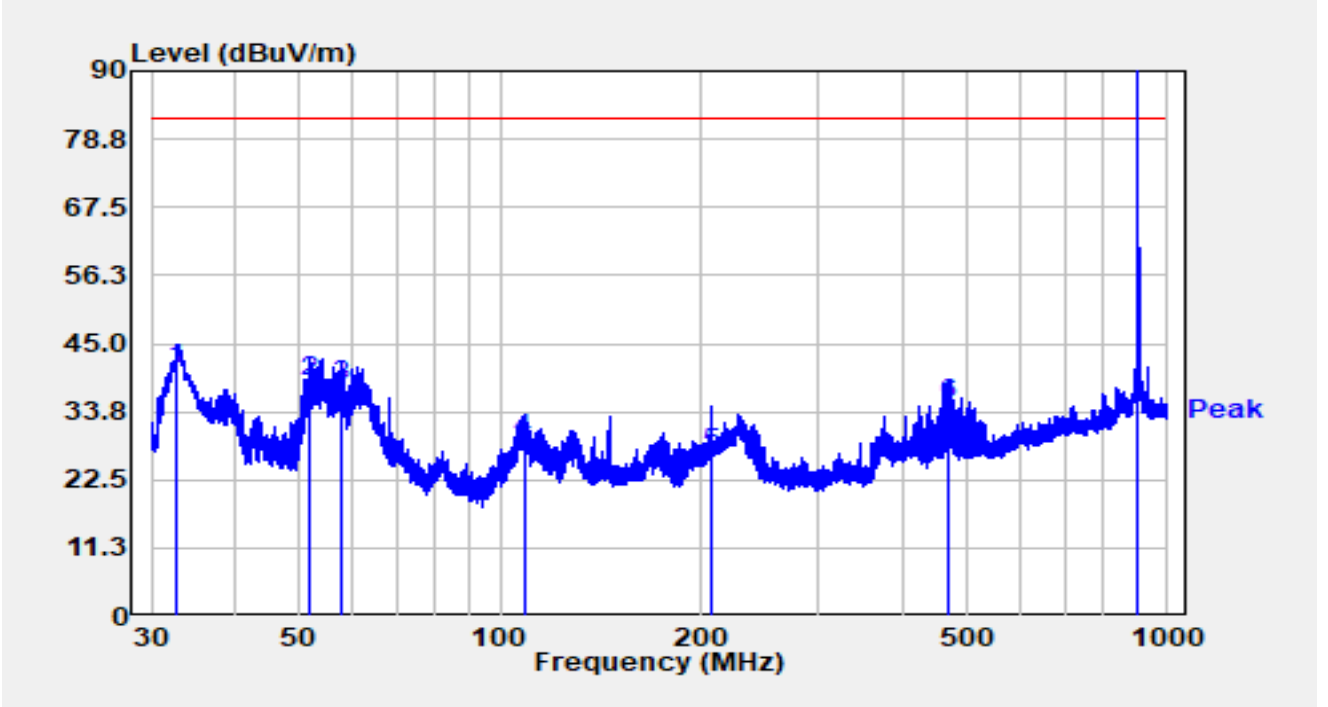


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		59.566	13.50	17.97	31.47	-50.83	82.30	QP
2		81.126	18.80	13.41	32.21	-50.09	82.30	QP
3	*	213.239	22.50	14.77	37.27	-45.03	82.30	QP
4		344.990	14.20	19.35	33.55	-48.75	82.30	QP
5		440.042	11.40	22.08	33.48	-48.82	82.30	QP
6		720.209	6.80	27.03	33.83	-48.47	82.30	QP
7		902.993	76.16	29.13	105.28	N/A	N/A	Peak

Notes:

1. " *", means this data is the worst emission level.
2. C.F (dB/m) = Antenna Factor (dB/m)+ Cable Loss (dB).
3. Measurement(dBμV/m) = Reading(dBμV) + C.F (dB/m).
4. The point (7) is Lora fundamental frequency that is not evaluated in this standard.
5. The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site	SIP-AC1	Test Date	2025-01-04
Temperature	17.5°C	Humidity	43.9%
Limit	FCC_Part 22&27_RSE (3m)_dBuV	Test Engineer	Mero Zhou
Factor	VULB 9168_00998_25-2000MHz	Polarity	Vertical
EUT	Lawn Mowing Robot	Test Voltage	By Battery
Test Mode	Mode 1		

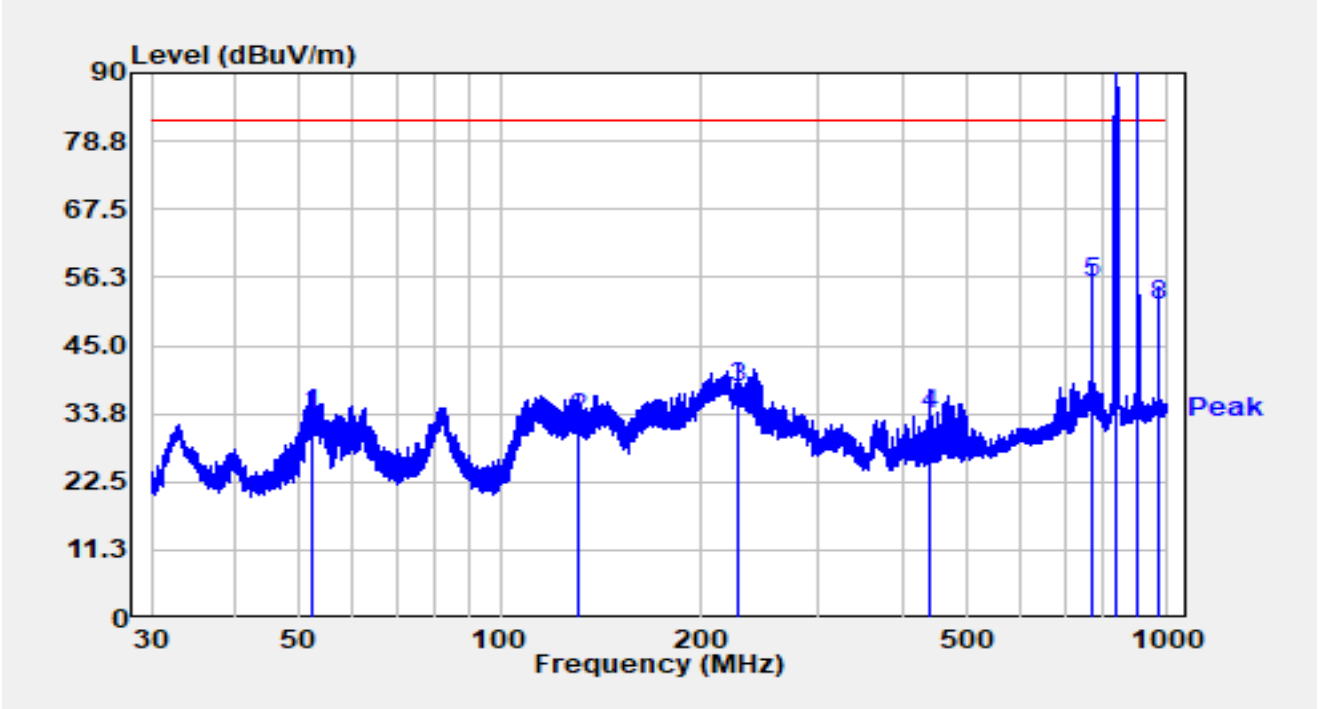


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	32.795	23.70	17.15	40.85	-41.45	82.30	QP
2		51.716	20.60	18.25	38.85	-43.45	82.30	QP
3		57.614	20.20	18.00	38.20	-44.10	82.30	QP
4		108.419	14.10	14.97	29.07	-53.23	82.30	QP
5		207.050	12.10	14.67	26.77	-55.53	82.30	QP
6		470.029	12.40	22.45	34.85	-47.45	82.30	QP
7		902.993	84.40	29.13	113.52	N/A	N/A	Peak

Notes:

1. " *", means this data is the worst emission level.
2. C.F (dB/m) = Antenna Factor (dB/m)+ Cable Loss (dB).
3. Measurement(dBμV/m) = Reading(dBμV) + C.F (dB/m).
4. The point (7) is Lora fundamental frequency that is not evaluated in this standard.
5. The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site	SIP-AC1	Test Date	2025-01-04
Temperature	17.5°C	Humidity	43.9%
Limit	FCC_Part 22&27_RSE (3m)_dBuV	Test Engineer	Mero Zhou
Factor	VULB 9168_00998_25-2000MHz	Polarity	Horizontal
EUT	Lawn Mowing Robot	Test Voltage	By Battery
Test Mode	Mode 2		



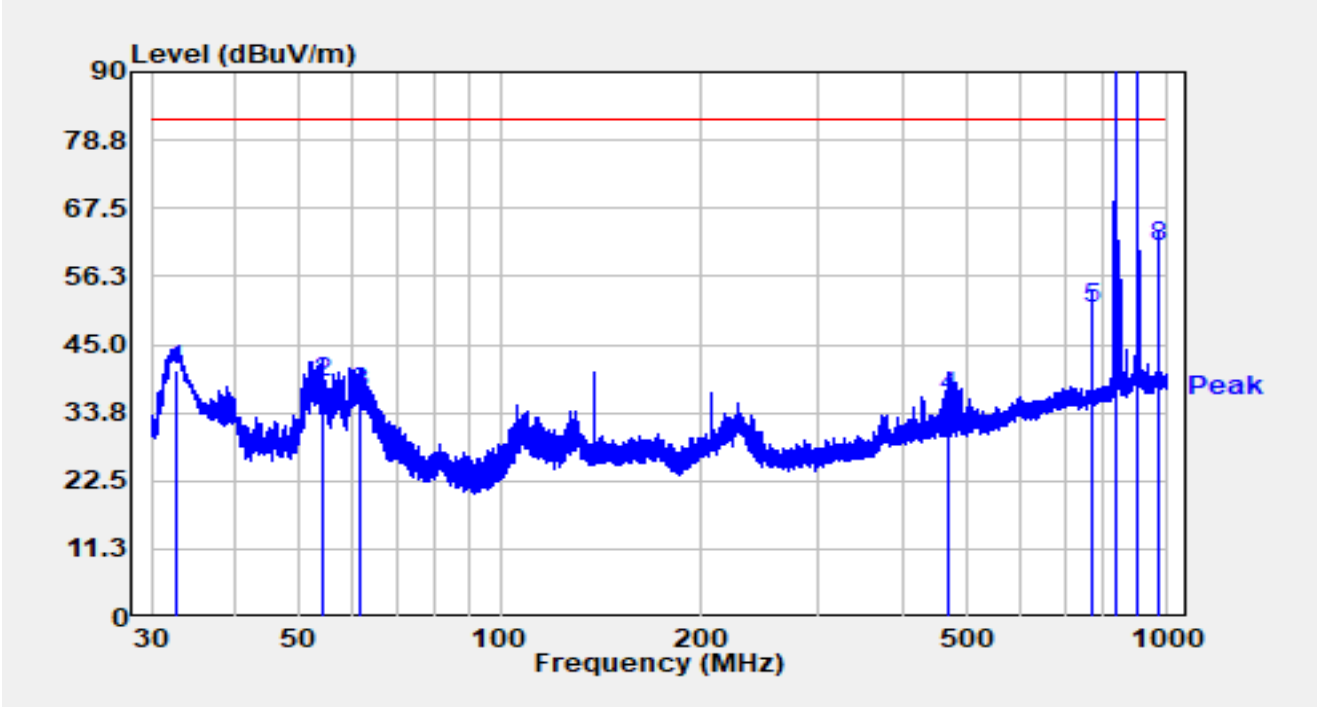
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		52.428	15.40	18.28	33.68	-48.62	82.30	QP
2		130.425	16.40	16.69	33.09	-49.21	82.30	QP
3		226.258	22.90	14.97	37.87	-44.43	82.30	QP
4		440.042	11.60	22.08	33.68	-48.62	82.30	QP
5	*	769.827	27.30	27.97	55.27	-27.03	82.30	QP
6		836.538	83.40	28.65	112.05	N/A	N/A	Peak
7		902.676	76.12	29.15	105.27	N/A	N/A	Peak
8		968.594	21.20	30.48	51.68	-30.62	82.30	QP

Notes:

1. " *", means this data is the worst emission level.
2. C.F (dB/m) = Antenna Factor (dB/m)+ Cable Loss (dB).
3. Measurement(dBμV/m) = Reading(dBμV) + C.F (dB/m).
4. The point (6) is LTE fundamental frequency and the point (7) is Lora fundamental frequency that are not evaluated in this standard.
5. The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that

proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site	SIP-AC1	Test Date	2025-01-04
Temperature	17.5°C	Humidity	43.9%
Limit	FCC_Part 22&27_RSE (3m)_dBuV	Test Engineer	Mero Zhou
Factor	VULB 9168_00998_25-2000MHz	Polarity	Vertical
EUT	Lawn Mowing Robot	Test Voltage	By Battery
Test Mode	Mode 2		



No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		32.772	23.50	17.15	40.65	-41.65	82.30	QP
2		54.261	20.50	18.31	38.81	-43.49	82.30	QP
3		61.368	19.40	17.71	37.11	-45.19	82.30	QP
4		470.029	13.90	22.45	36.35	-45.95	82.30	QP
5		770.908	22.90	27.94	50.84	-31.46	82.30	QP
6		836.244	84.87	28.59	113.46	N/A	N/A	Peak
7		902.676	84.27	29.15	113.41	N/A	N/A	Peak
8	*	969.274	30.60	30.53	61.13	-21.17	82.30	QP

Notes:

1. " *", means this data is the worst emission level.
2. C.F (dB/m) = Antenna Factor (dB/m)+ Cable Loss (dB).
3. Measurement(dBμV/m) = Reading(dBμV) + C.F (dB/m).
4. The point (6) is LTE fundamental frequency and the point (7) is Lora fundamental frequency that are not evaluated in this standard.

5. The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value.

Therefore, the data is not presented in the report.

Appendix A - Test Setup Photograph

Refer to “2411RSU033-UT” file.

Appendix B - EUT Photograph

Refer to "2411RSU033-UE" file.

_____ The End _____