

MEASUREMENT REPORT

FCC PART 15.247 / RSS-247 Bluetooth

FCC ID: 2ALS8-PS0003
IC: 22636-PS0003
Applicant: Ninebot (Changzhou) Tech Co., Ltd.

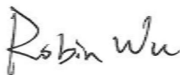
Application Type: Certification
Product: Ninebot S Kids
Model No.: Kids A75C
Brand Name: Ninebot
FCC Classification: FCC Part 15 Spread Spectrum Transmitter (DSS)
FCC Rule Part(s): Part 15 Subpart C (Section 15.247)
ISED Rule(s): RSS-247 Issue 2, RSS-GEN Issue 5
Test Procedure(s): ANSI C63.10-2013
Test Date: January 13 ~ 20, 2021

Reviewed By:



Vincent Yu

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
2101RSU019-U1	Rev. 01	Initial Report	03-18-2021	Valid

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1. GENERAL INFORMATION

1.1. Applicant

Ninebot (Changzhou) Tech Co., Ltd.

16F-17F, Block A, Building 3, Changwu Mid Road 18#, Wujin Dist., Changzhou, Jiangsu, China

1.2. Manufacturer

Ninebot (Changzhou) Tech Co., Ltd.

16F-17F, Block A, Building 3, Changwu Mid Road 18#, Wujin Dist., Changzhou, Jiangsu, 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 Accreditations	
A2LA: 3628.01	CNAS: L10551	
FCC: CN1166	ISED: CN0001	
VCCI: R-20025, G-20034, C-20020, T-20020		
☐	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: L3261-190725	
	FCC: 291082, TW3261	ISED: TW3261

2. PRODUCT INFORMATION

2.1. Feature of Equipment under Test

Product Name	Ninebot S Kids
Model No.	Kids A75C
Brand Name	Ninebot
HVIN	Kids A75C
PMN	Kids A75C
S/N	N5MAL2101C0019
Accessories	
Adapter	MODEL: NBW42D000D6N-US INPUT: 100 - 240V ~ 50/60Hz 0.7A Max OUTPUT: 42V 0.6A

2.2. Product Specification Subjective to this Report

Bluetooth Specification	V2.0 (BR only)
Operating Frequency	2402~2480MHz
Channel Number	79
Modulation	GFSK
Data Rate	1Mbps (GFSK)
Antenna Type	PCB Antenna
Antenna Gain	2dBi

Note: Above antenna information is provided by applicant.

The equipment under test (EUT) is the Ninebot S Kids. The test data contained in this report pertains only to the emissions due to the EUT's Bluetooth transmitter.

- 15.247(g): In accordance with the Bluetooth Industry Standard, the system is designed to comply with all of the regulations in Section 15.247 when the transmitter is presented with a continuous data (or information) system.
- 15.247(h): In accordance with the Bluetooth Industry Standard, the system does not coordinate its channels selection/ hopping sequence with other frequency hopping systems for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters.
- 15.247(h): The EUT employs Adaptive Frequency Hopping (AFH) which identifies sources of interference namely devices operating in 802.11 WLAN and excludes them from the list of available channels. The process of re-mapping reduces the number of test channels from 79 channels to a minimum number of 20 channels.

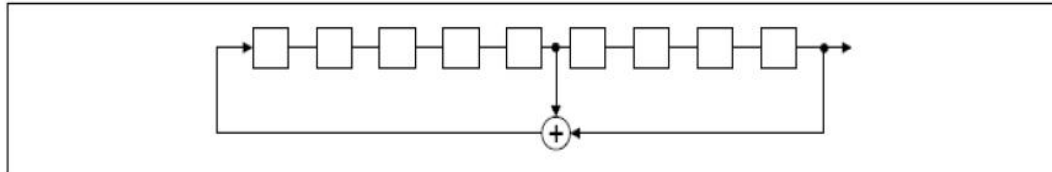
2.3. Working Frequencies for this report

Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2403 MHz	02	2404 MHz
03	2405 MHz	04	2406 MHz	05	2407 MHz
06	2408 MHz	07	2409 MHz	08	2410 MHz
09	2411 MHz	10	2412 MHz	11	2413 MHz
12	2414 MHz	13	2415 MHz	14	2416 MHz
15	2417 MHz	16	2418 MHz	17	2419 MHz
18	2420 MHz	19	2421 MHz	20	2422 MHz
21	2423 MHz	22	2424 MHz	23	2425 MHz
24	2426 MHz	25	2427 MHz	26	2428 MHz
27	2429 MHz	28	2430 MHz	29	2431 MHz
30	2432 MHz	31	2433 MHz	32	2434 MHz
33	2435 MHz	34	2436 MHz	35	2437 MHz
36	2438 MHz	37	2439 MHz	38	2440 MHz
39	2441 MHz	40	2442 MHz	41	2443 MHz
42	2444 MHz	43	2445 MHz	44	2446 MHz
45	2447 MHz	46	2448 MHz	47	2449 MHz
48	2450 MHz	49	2451 MHz	50	2452 MHz
51	2453 MHz	52	2454 MHz	53	2455 MHz
54	2456 MHz	55	2457 MHz	56	2458 MHz
57	2459 MHz	58	2460 MHz	59	2461 MHz
60	2462 MHz	61	2463 MHz	62	2464 MHz
63	2465 MHz	64	2466 MHz	65	2467 MHz
66	2468 MHz	67	2469 MHz	68	2470 MHz
69	2471 MHz	70	2472 MHz	71	2473 MHz
72	2474 MHz	73	2475 MHz	74	2476 MHz
75	2477 MHz	76	2478 MHz	77	2479 MHz
78	2480 MHz	--	--	--	--

2.4. Pseudorandom Frequency Hopping Sequence

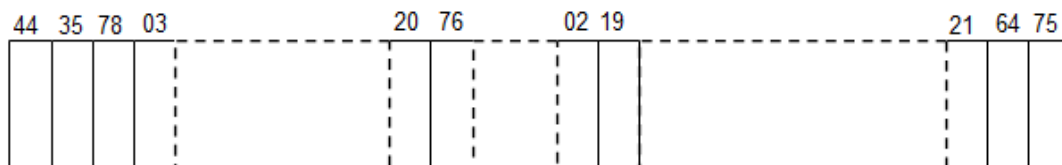
The pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONES; i.e. the shift register is initialized with nine ones.

- Number of shift register stages: 9
- Length of pseudo-random sequence: $2^9 - 1 = 511$ bits
- Longest sequence of zeros: 8 (non-inverted signal)



Linear Feedback Shift Register for Generation of the PRBS sequence

An example of Pseudorandom Frequency Hopping Sequence as follow:



Each frequency used equally on the average by each transmitter.

The system receivers have input bandwidths that match the hopping channel bandwidths of their Corresponding transmitters and shift frequencies in synchronization with the transmitted signals.

2.5. Test Mode

Test Mode	Mode 1: Transmit by DH5
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2.6. Test Software

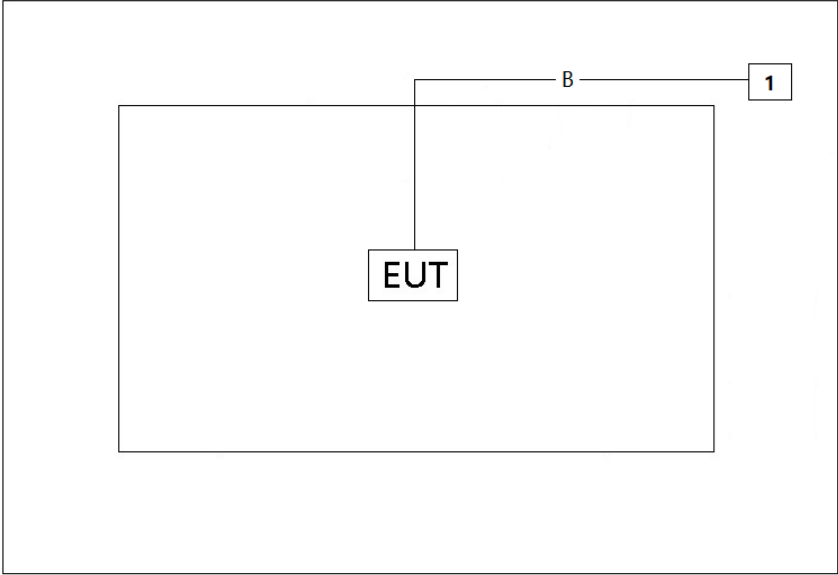
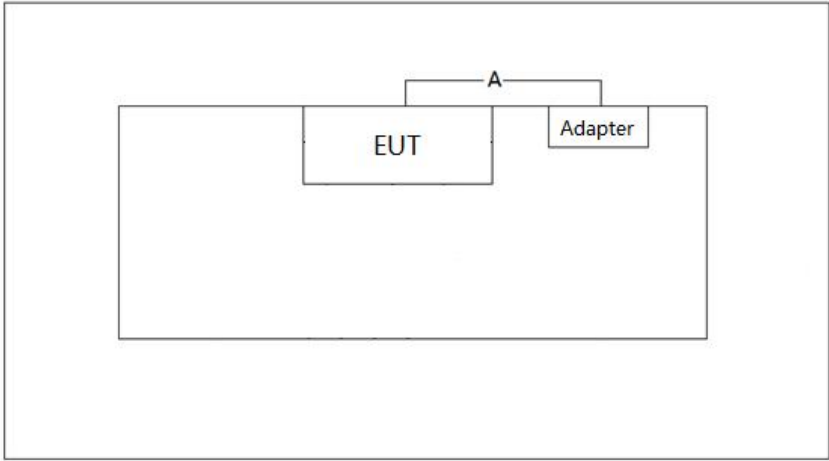
The test utility software used during testing was “BT_Tool”.

2.7. Test Environment Condition

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

2.8. Description of Test Configuration

The ANSI C63.10: 2013 was used to reference the appropriate EUT setup for testing.

Connection Diagram for Radiated Emissions Measurement		
		
Connection Diagram for AC Conducted Emission Measurement		
		
Cable Type	Signal Cable Description	
A	Power Cable	Shielding, > 1 m
B	Control Cable	Non-Shielded, > 5 m

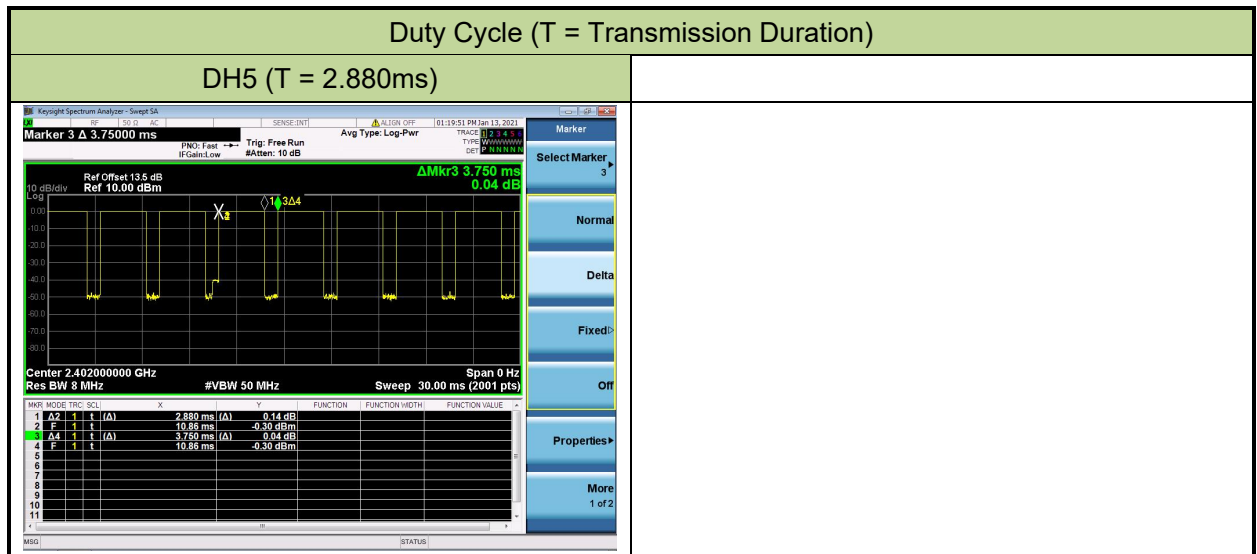
2.9. Test System Details

Product	Manufacturer	Model No.
1 Notebook	Lenovo	E495

2.10. Duty Cycle

The maximum achievable duty cycle was determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

Test Mode	Duty Cycle
DH5	76.80%



3. ANTENNA REQUIREMENTS

Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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 antenna of this device is **permanently attached**.
- There are no provisions for connection to an external antenna.

Conclusion:

The unit complies with the requirement of §15.203.

4. TEST EQUIPMENT CALIBRATION DATE

Conducted Emission (WZ-SR2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06185	1 year	2022/01/12
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2021/09/09
Thermal Hygrometer	testo	608-H1	MRTSUE06404	1 year	2021/07/26
Shielding Room	MIX-BEP	Chamber-SR2	MRTSUE06215	N/A	N/A

Radiated Emission (WZ-AC1)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2022/01/04
PXA Signal Analyzer	Keysight	N9030B	MRTSUE06395	1 year	2021/08/30
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2021/08/08
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2021/09/27
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06597	1 year	2021/12/14
Microwave System Amplifier	Agilent	83017A	MRTSUE06076	1 year	2021/11/14
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2021/06/11
Thermal Hygrometer	testo	608-H1	MRTSUE06403	1 year	2021/07/26
Anechoic Chamber	TDK	Chamber-AC1	MRTSUE06212	1 year	2021/04/30

Radiated Emission (WZ-AC2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
MXE EMI Receiver	Keysight	N9038A	MRTSUE06125	1 year	2021/07/02
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2021/05/26
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2021/10/25
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06597	1 year	2021/12/14
Broadband Coaxial Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2021/11/14
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2021/06/11
Thermal Hygrometer	Minggao	ETH529	MRTSUE06170	1 year	2021/12/08
Anechoic Chamber	RIKEN	Chamber-AC2	MRTSUE06213	1 year	2021/04/30

Conducted Test Equipment (WZ-TR3)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2021/04/14
EXA Signal Analyzer	Keysight	N9010B	MRTSUE06607	1 year	2022/01/07
Signal Analyzer	R&S	FSV40	MRTSUE06218	1 year	2021/04/14
Power Meter	Agilent	U2021XA	MRTSUE06030	1 year	2021/10/22
USB wideband power sensor	Keysight	U2021XA	MRTSUE06446	1 year	2021/08/30
USB wideband power sensor	Keysight	U2021XA	MRTSUE06447	1 year	2021/08/08
Bluetooth Test Set	Anritsu	MT8852B-042	MRTSUE06389	1 year	2021/06/11
Audio Analyzer	Agilent	U8903B	MRTSUE06143	1 year	2021/06/11
Modulation Analyzer	HP	HP8901A	MRTSUE06098	1 year	2021/09/26
Wideband Radio Communication Tester	R&S	CMW 500	MRTSUE06243	1 year	2021/10/20
DC Power Supply	GWINSTEK	DPS-3303C	MRTSUE06064	N/A	N/A
Temperature & Humidity Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2021/10/22
Thermal Hygrometer	testo	608-H1	MRTSUE06401	1 year	2021/07/26

Software	Version	Function
EMI Software	V3	EMI Test Software

5. 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 $k = 2$.

AC Conducted Emission Measurement
Measurement Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 9kHz~150kHz: 3.74dB 150kHz~30MHz: 3.44dB
Radiated Disturbance
Measurement Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): Horizontal: 30MHz~300MHz: 5.04dB 300MHz~1GHz: 4.95dB 1GHz~40GHz: 6.40dB Vertical: 30MHz~300MHz: 5.24dB 300MHz~1GHz: 6.03dB 1GHz~40GHz: 6.40dB
Spurious Emissions, Conducted
Measurement Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 0.78dB
Output Power
Measurement Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 1.13dB
Power Spectrum Density
Measurement Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 1.15dB
Occupied Bandwidth
Measurement Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 0.28%

6. TEST RESULT

6.1. Summary

FCC Part Section(s)	RSS Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.247(a)(1)	RSS-247 [5.1]	20dB Bandwidth	N/A	Conducted	N/A	Section 6.2
N/A	RSS-Gen [6.7]	99% Bandwidth	N/A		N/A	
15.247(b)(1)	RSS-247 [5.4(b)]	Peak Transmitter Output Power	Refer to Section 6.3		Pass	Section 6.3
15.247(a)(1)	RSS-247 [5.1]	Channel Separation	Refer to Section 6.4		Pass	Section 6.4
15.247(a)(1) (iii)	RSS-247 [5.1]	Number of Channels	> 15 Channels		Pass	Section 6.5
15.247(a)(1) (iii)	RSS-247 [5.1]	Time of Occupancy	< 0.4 sec in 31.6 sec period		Pass	Section 6.6
15.247(d)	RSS-247 [5.5]	Band Edge / out- of-Band Emissions	≥ 20dBc (Peak)		Pass	Section 6.7 Section 6.8
15.205, 15.209	RSS-247 [5.5]	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209	Radiated	Pass	Section 6.9 Section 6.10
15.207	RSS-Gen [8.8]	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Pass	Section 6.11

Notes:

- 1) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- 2) All modes of operation and data rates were investigated. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.

6.2. 20dB & 99% Bandwidth Measurement

6.2.1. Test Limit

N/A

6.2.2. Test Procedure Used

ANSI C63.10-2013 - Section 6.9.2 (20dB Bandwidth)

ANSI C63.10-2013 - Section 6.9.3 (99% Bandwidth)

6.2.3. Test Setting

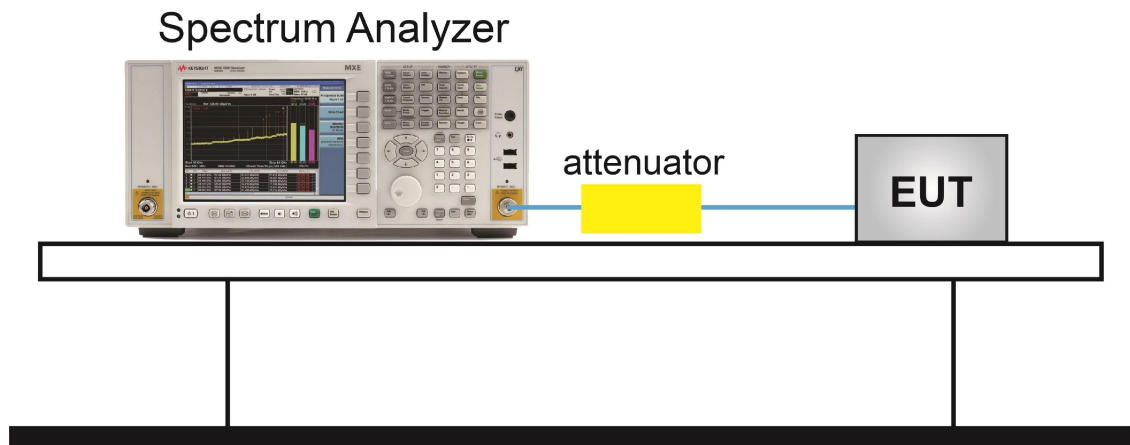
For 20dB Bandwidth

1. Set RBW $\geq 1\%$ to 5% of the 20dB Bandwidth
2. VBW = Approximately three times RBW
3. Span = Approximately 2 to 5 times the 20dB bandwidth, centered on a hopping channel
4. Detector = Peak
5. Trace mode = Max hold
6. Sweep = Auto couple
7. Allow the trace to stabilize
8. 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 20 dB relative to the maximum level measured in the fundamental emission.

For 99% bandwidth

1. Span = 1.5 times to 5 times the OBW
2. Set RBW = 1% to 5% the OBW
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = Max hold
6. Sweep = Auto couple
7. Allow the trace to stabilize

6.2.4. Test Setup



6.2.5. Test Result

Test Site	WZ-TR3	Test Engineer	Yuri Li
Test Date	2021/01/13		

Test Mode	Channel No.	Frequency (MHz)	20dB Bandwidth (kHz)	99% Bandwidth (kHz)
DH5	00	2402	949.5	845.2
DH5	39	2441	948.6	827.9
DH5	78	2480	947.5	824.2



6.3. Output Power Measurement

6.3.1. Test Limit

The maximum out power permissible output power is 1 Watt for all frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels.

The EIRP shall not exceed 4 Watt.

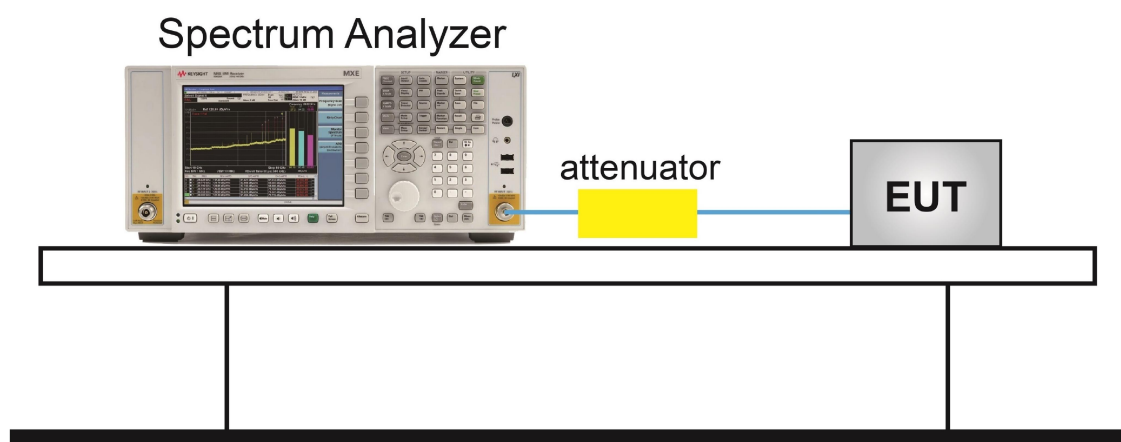
6.3.2. Test Procedure Used

ANSI C63.10-2013 - Section 7.8.5

6.3.3. Test Setting

1. Set RBW > the 20dB bandwidth of the emission being measured.
2. VBW $\geq$ RBW
3. Span = approximately five times the 20dB bandwidth, centered on a hopping channel
4. Detector = Peak
5. Trace mode = Max hold
6. Sweep = Auto couple
7. Allow the trace to stabilize
8. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power (don't forget added the external attenuation and cable loss)

6.3.4. Test Setup

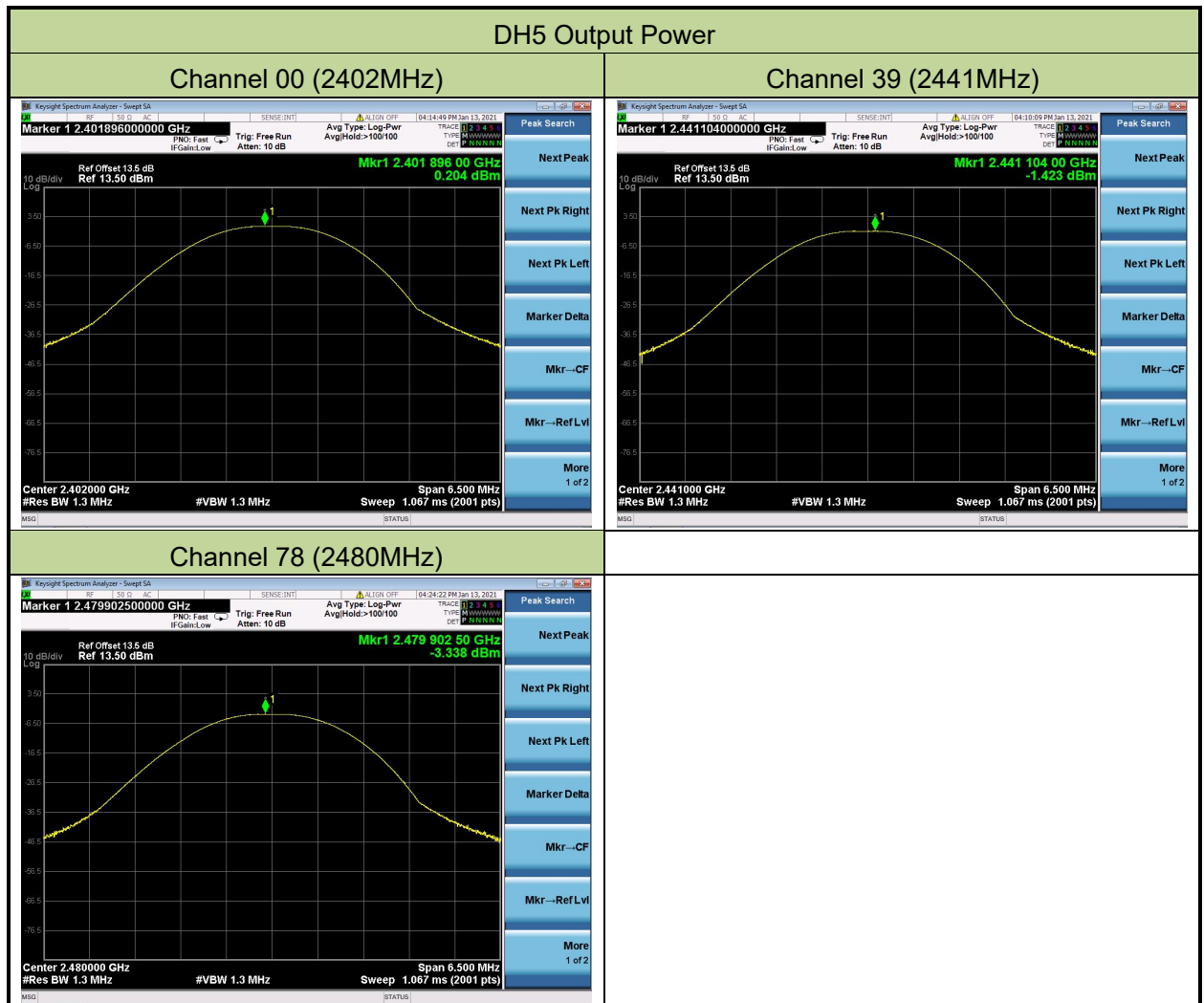


6.3.5. Test Result

Test Site	WZ-TR3	Test Engineer	Yuri Li
Test Date	2021/01/13		

Test Mode	Channel No.	Frequency (MHz)	Peak Power (dBm)	Peak Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
DH5	00	2402	0.20	≤ 30.00	2.20	≤ 36.02
DH5	39	2441	-1.42	≤ 30.00	0.58	≤ 36.02
DH5	78	2480	-3.34	≤ 30.00	-1.34	≤ 36.02

Note: EIRP (dBm) = Peak Power (dBm) + Antenna Gain (dBi), antenna gain = 2dBi.



6.4. Carrier Frequency Separation Measurement

6.4.1. Test Limit

The minimum permissible channel separation for this system is 2/3 the value of the 20dB BW.

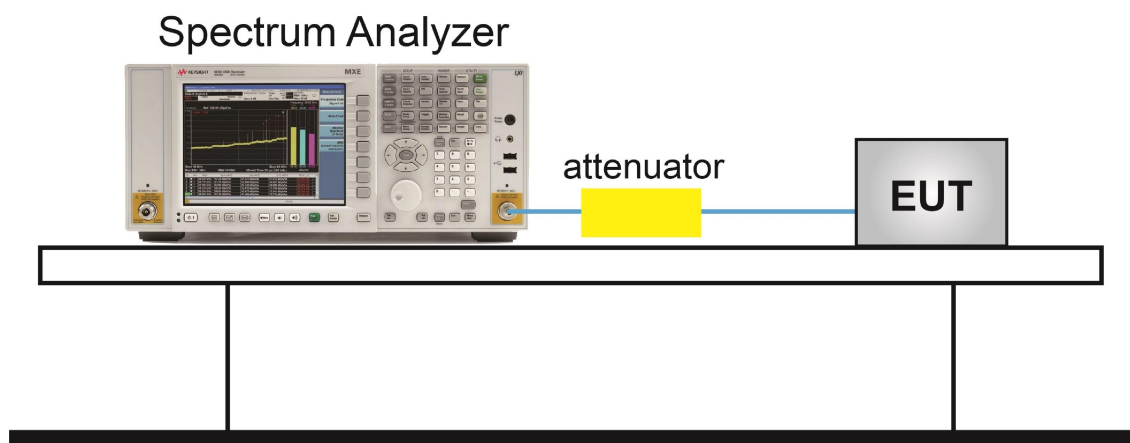
6.4.2. Test Procedure Used

ANSI C63.10-2013 - Section 7.8.2

6.4.3. Test Setting

1. Span = Wide enough to capture the peaks of two adjacent channels.
2. Start with the RBW set to approximately 30% of the channel spacing; adjust as necessary to best identify the center of each individual channel.
3. VBW $\geq$ RBW
4. Sweep time = Auto couple
5. Detector = Peak
6. Trace mode = Max hold
7. Allowed the trace to stabilize
8. Use the marker-delta function to determine the separation between the peaks of the adjacent channels.

6.4.4. Test Setup

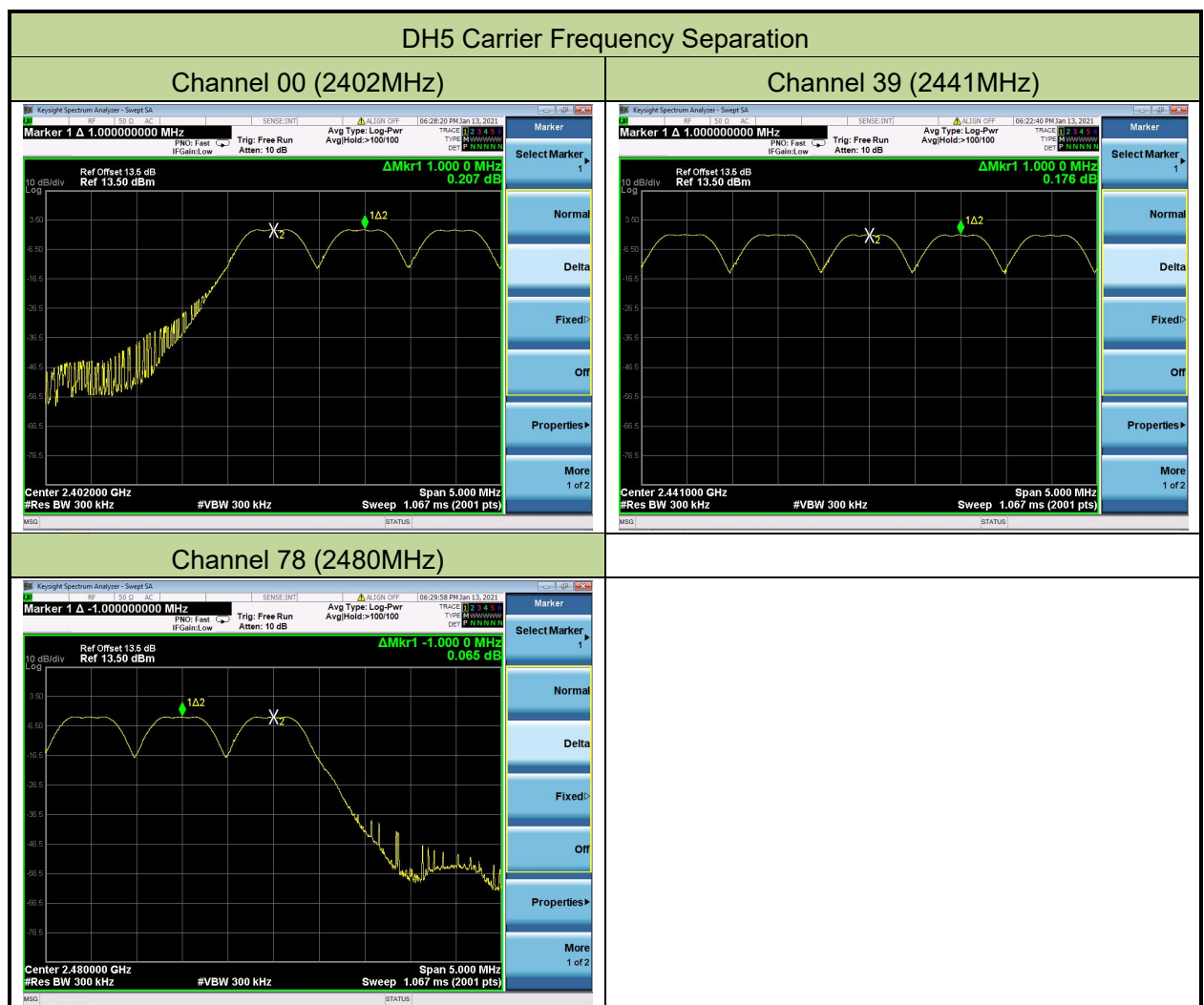


6.4.5. Test Result

Test Site	WZ-TR3	Test Engineer	Liz Yuan
Test Date	2021/01/13		

Test Mode	Channel No.	Frequency (MHz)	Limit (kHz)	Result
DH5	00	2402	≥ 633.0	Pass
DH5	39	2441	≥ 632.4	Pass
DH5	78	2480	≥ 631.7	Pass

Note: The Limit is 2/3 the value of the 20dB BW.



6.5. Number of Hopping Channels Measurement

6.5.1. Test Limit

This frequency hopping system must employ a minimum of 15 hopping channels.

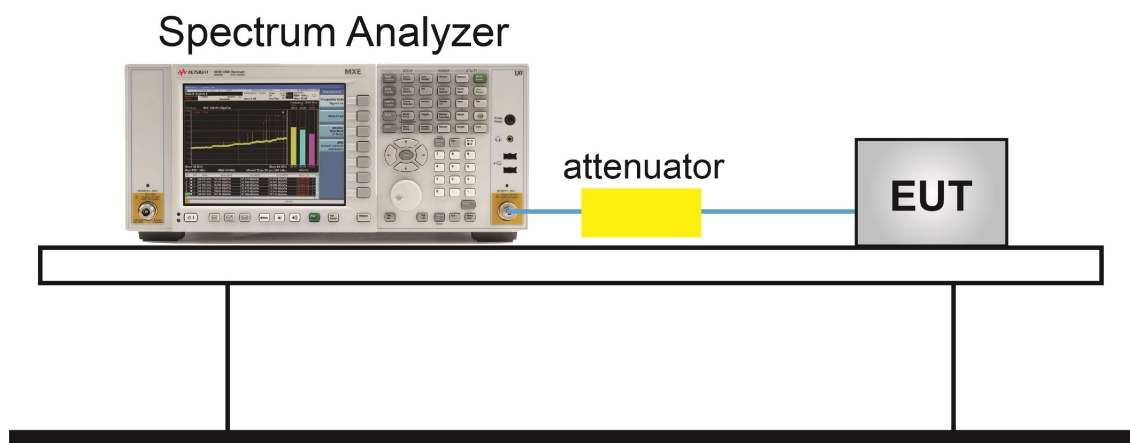
6.5.2. Test Procedure Used

ANSI C63.10-2013 - Section 7.8.3

6.5.3. Test Setting

1. Span = The frequency band of operation. Depending on the number of channels the device supports, it may be necessary to divide the frequency range of operation across multiple spans, to allow the individual channels to be clearly seen.
2. RBW: To identify clearly the individual channels, set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller.
3. VBW $\geq$ RBW
4. Sweep time = Auto couple
5. Detector = Peak
6. Trace mode = Max hold
7. Allow the trace to stabilize

6.5.4. Test Setup



6.5.5.Test Result

Test Site	WZ-TR3	Test Engineer	Yuri Li
Test Date	2021/01/13		

Test Mode (Hopping)	Channel Numbers	Frequency (MHz)	Limit (Hopping Channels)	Result
DH5	79	2402 ~ 2480	≥ 15	Pass



6.6. Time of Occupancy Measurement

6.6.1. Test Limit

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

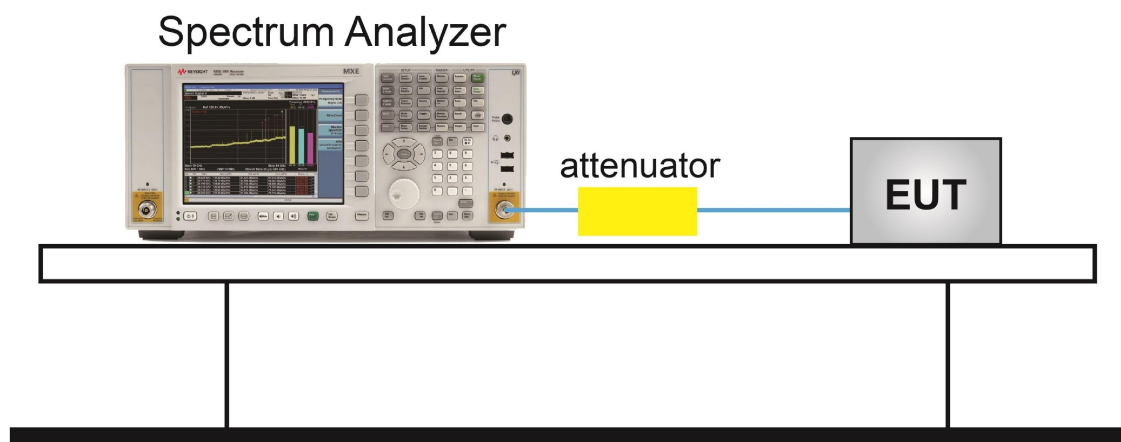
6.6.2. Test Procedure Used

ANSI C63.10-2013 - Section 7.8.4

6.6.3. Test Setting

1. Span = Zero span, centered on a hopping channel.
2. RBW shall be $\leq$ channel spacing and where possible RBW should be set $\gg 1 / T$, where T is the expected dwell time per channel.
3. VBW $\geq$ RBW
4. Sweep time = As necessary to capture the entire dwell time per hopping channel
5. Detector = Peak
6. Trace mode = Free run
7. Use the marker-delta function to determine the transmit time per hop. If this value varies with different modes of operation (data rate, modulation format, number of hopping channels, etc.), then repeat this test for each variation in transmit time.

6.6.4. Test Setup



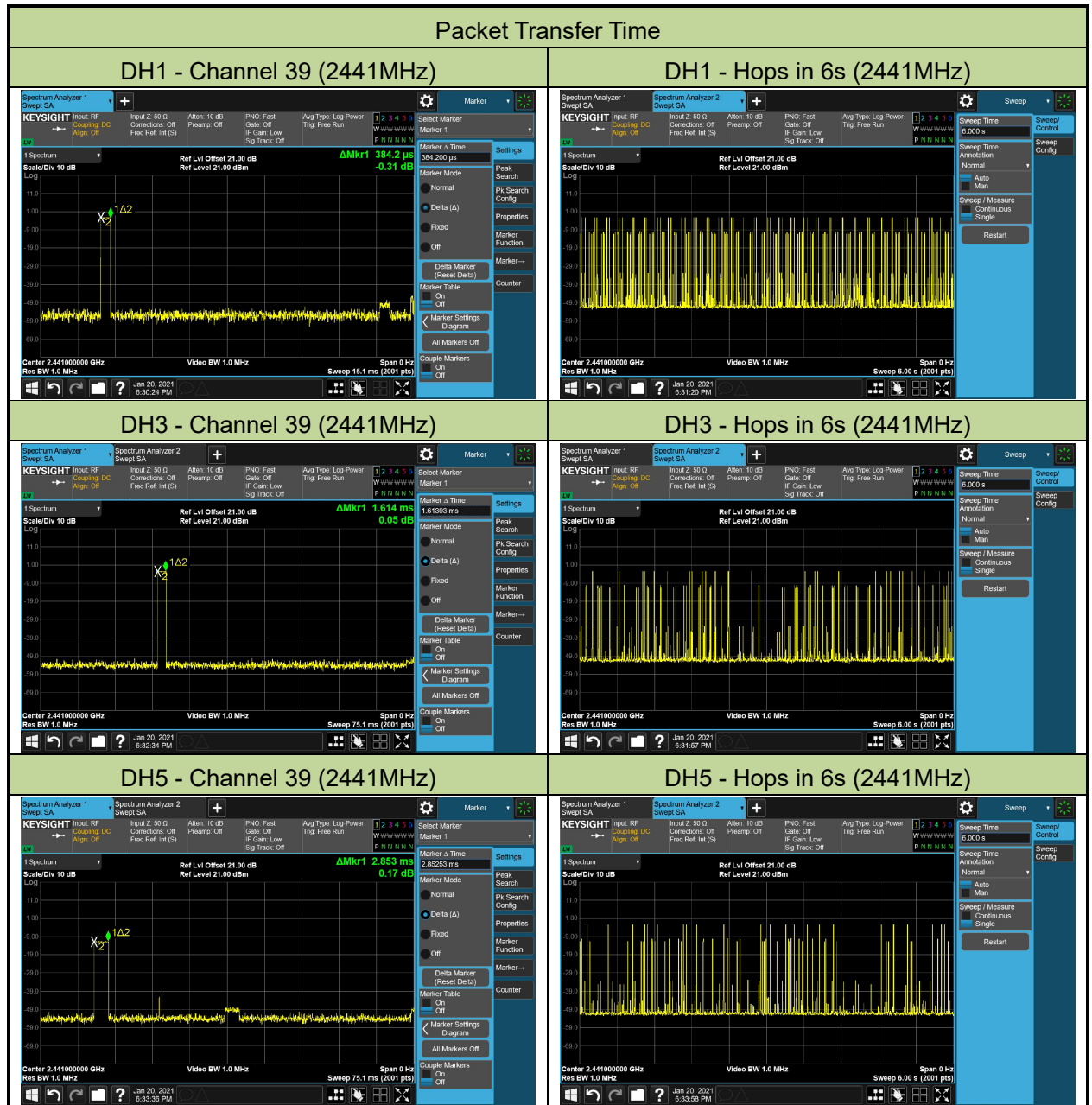
6.6.5. Test Result

Test Site	WZ-TR3	Test Engineer	Yuri Li
Test Date	2021/01/20		

Test Mode	Channel No.	Frequency (MHz)	Hops Over Occupancy Time (Hops)	Packet Transfer Time (ms)	Time of Occupancy (ms)	Limit (ms)	Result
DH1	39	2441	316	0.38	120.08	≤ 400	Pass
DH3	39	2441	158	1.61	254.38	≤ 400	Pass
DH5	39	2441	121	2.85	345.23	≤ 400	Pass

Note 1: Time of Occupancy = Packet Transfer Time * Hops in 31.6s.

Note 2: Hops in 31.6s = Hops in 6s * 31.6s / 6s.



6.7. Band-edge Compliance Measurement

6.7.1. Test Limit

The maximum permissible emission level is 20dBc. Any emissions were lying outside of the emission bandwidth and in authorized band edges to a field strength limit specified in Section 15.209 of the Title 47 CFR.

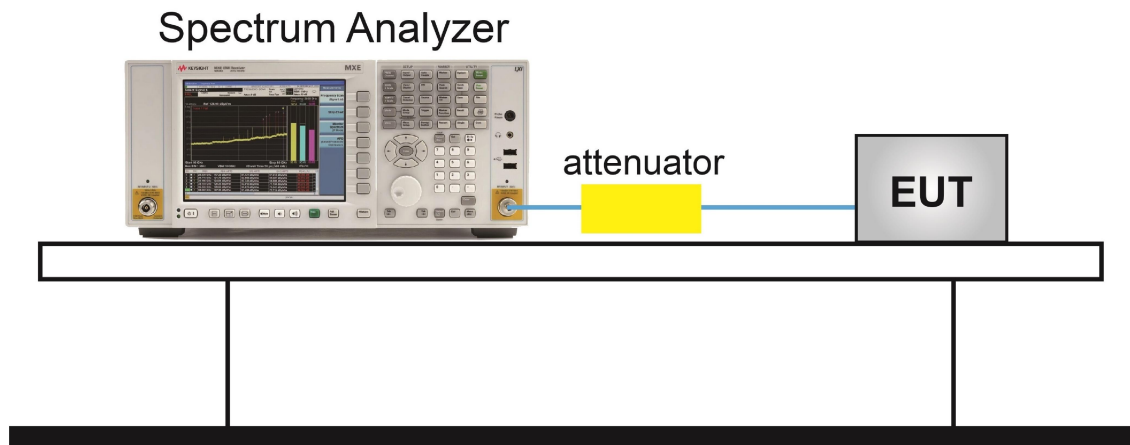
6.7.2. Test Procedure Used

ANSI C63.10-2013 - Section 6.10.4

6.7.3. Test Setting

1. Span = Wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation.
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Allow the trace to stabilize. Set the marker on the emission at the band edge, or on the highest modulation product outside of the band, if this level is greater than that at the band edge. Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission.

6.7.4. Test Setup



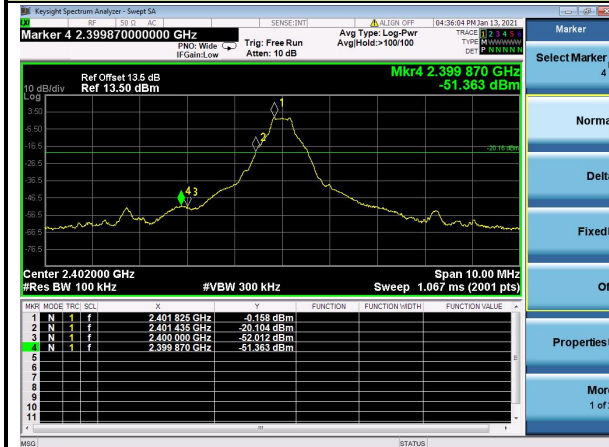
6.7.5. Test Result

Test Site	WZ-TR3	Test Engineer	Yuri Li
Test Date	2021/01/13		

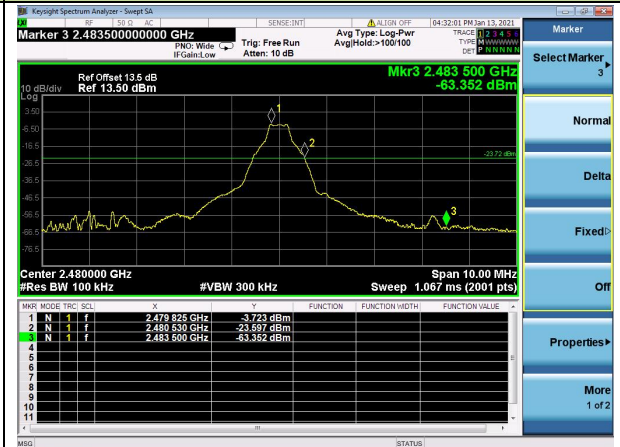
Test Mode	Channel No.	Frequency (MHz)	Limit	Result
DH5	00	2402	20dBc	Pass
DH5	78	2480	20dBc	Pass
DH5	00 ~ 78	2402 ~ 2480	20dBc	Pass

Band-edge Compliance

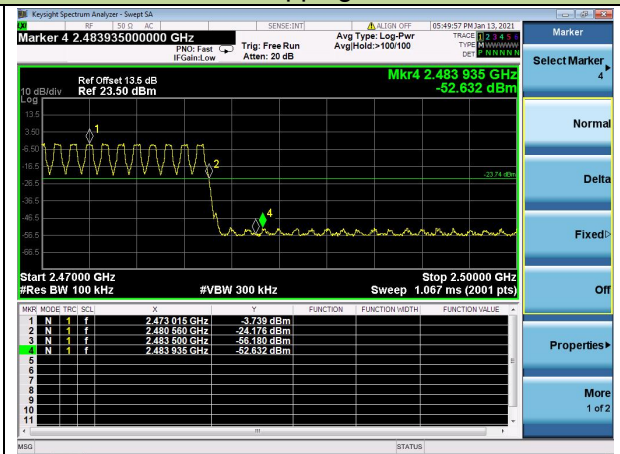
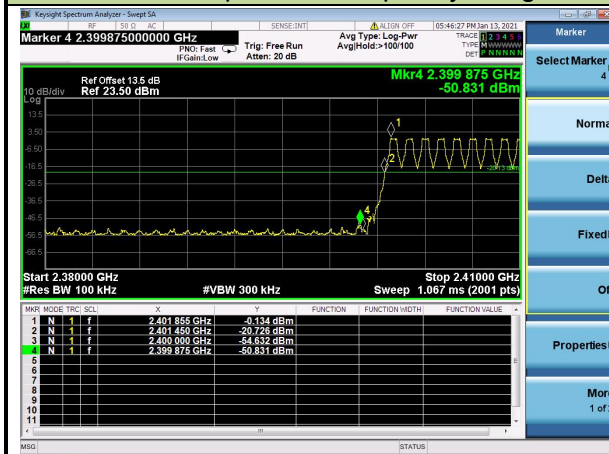
DH5 - Channel 00 (2402MHz)



DH5 - Channel 78 (2480MHz)



Operation Frequency Range of 20dB Bandwidth within Hopping Mode



6.8. Conducted Spurious Emissions Measurement

6.8.1. Test Limit

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 or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

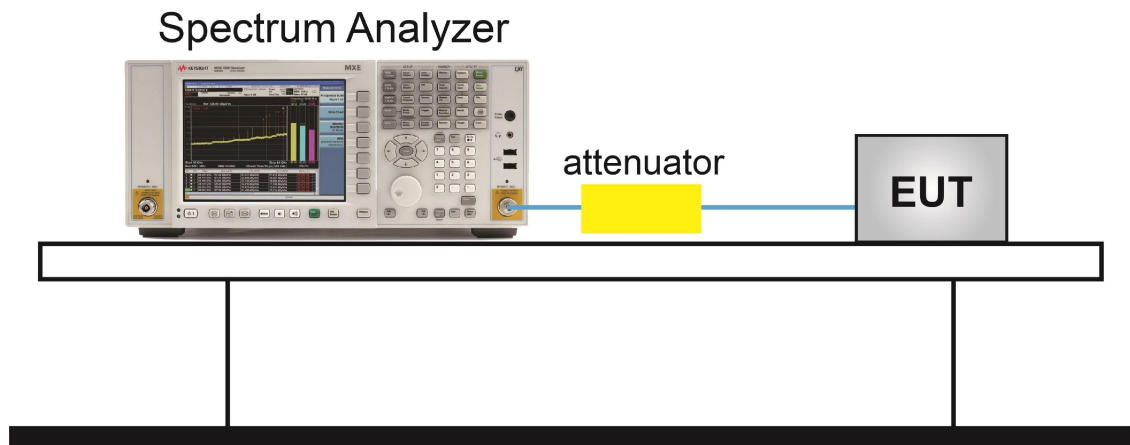
6.8.2. Test Procedure Used

ANSI C63.10-2013 - Section 7.8.8

6.8.3. Test Setting

1. Span = Wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize
8. Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this section.

6.8.4. Test Setup

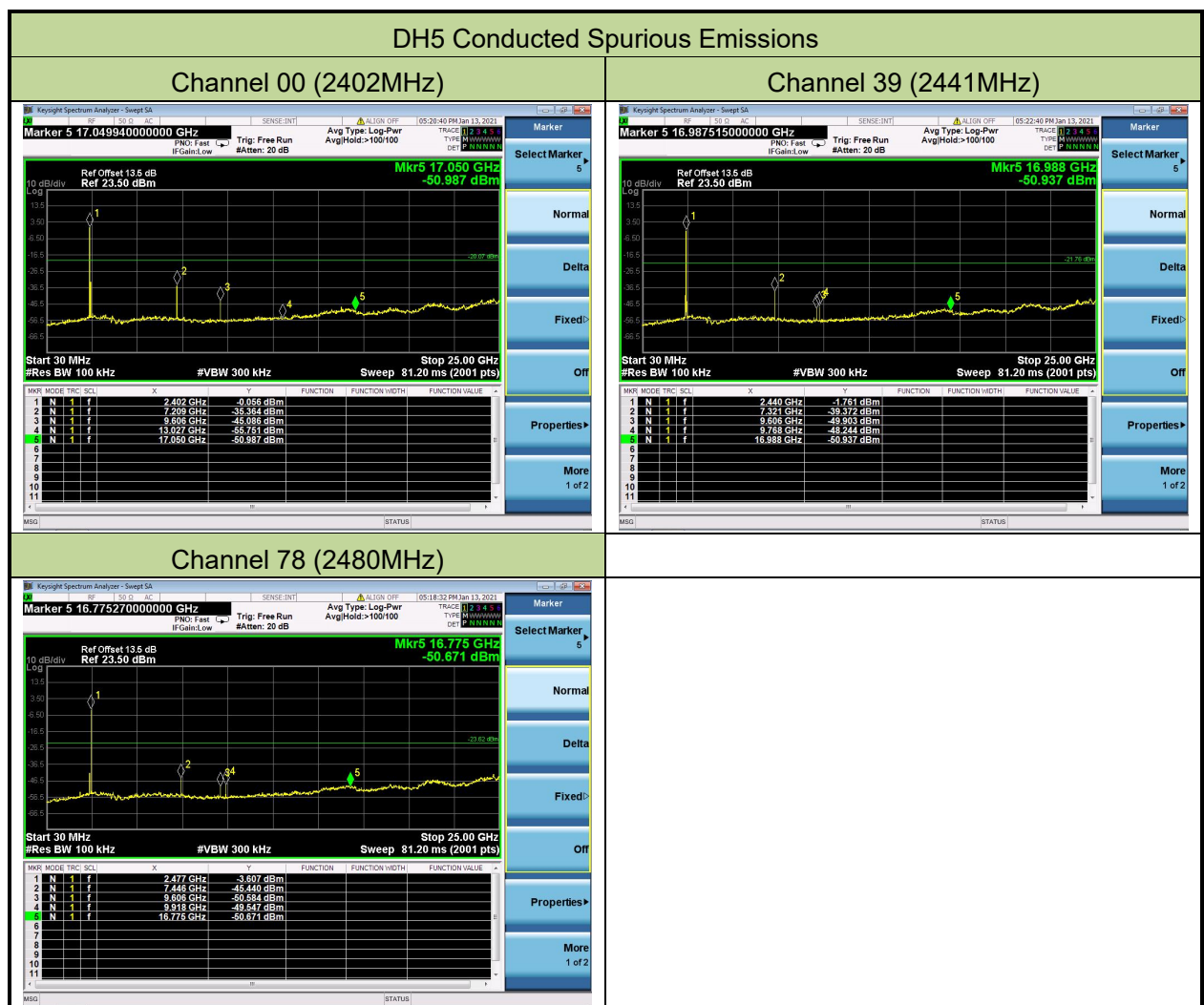


6.8.5. Test Result

Test Site	WZ-TR3	Test Engineer	Yuri Li
Test Date	2021/01/13		

Test Mode	Channel No.	Frequency (MHz)	Limit (dBm)	Result
DH5	00	2402	-20.07	Pass
DH5	39	2441	-21.76	Pass
DH5	78	2480	-23.62	Pass

Note: The limit is 20dB below the fundamental emission level.



6.9. Radiated Spurious Emission Measurement

6.9.1. 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 15.209 Limit		
Frequency [MHz]	Field Strength [$\mu\text{V/m}$]	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

All out of band emissions appearing in a restricted band as specified in Section 8.10 of the RSS-Gen must not exceed the limits shown in Table per Section 8.9.

RSS-Gen Section 8.9 Limit			
Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Magnetic Field Strength (H-Field) ($\mu\text{A/m}$)	Measured Distance (m)
0.009 - 0.490	--	6.37/F (F in kHz)	300
0.490 - 1.705	--	6.37/F (F in kHz)	30
1.705 - 30	--	0.08	30
30 - 88	100	--	3
88 - 216	150	--	3
216 - 960	200	--	3
Above 960	500	--	3

6.9.2. Test Procedure Used

ANSI C63.10-2013 - Section 6.3 & 6.4 & 6.5 & 6.6

6.9.3. 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
Above 1000 MHz	1 MHz

Quasi-Peak Measurements below 1GHz

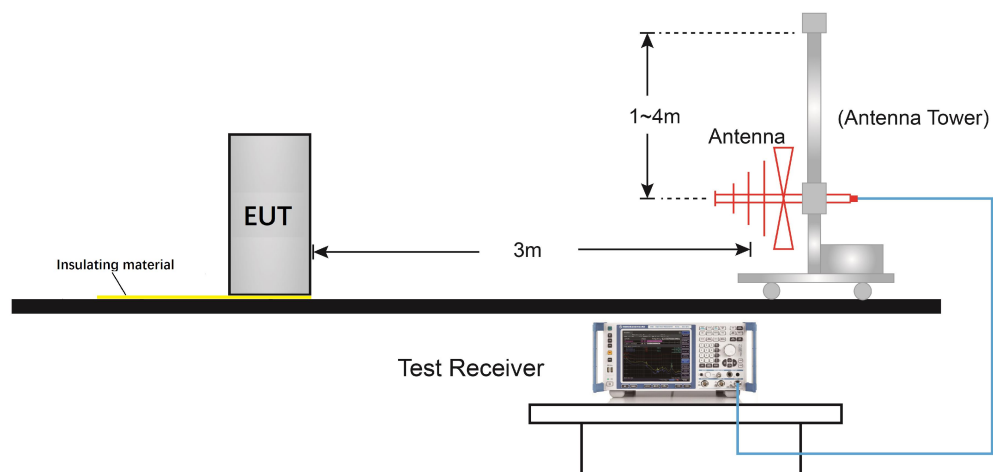
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

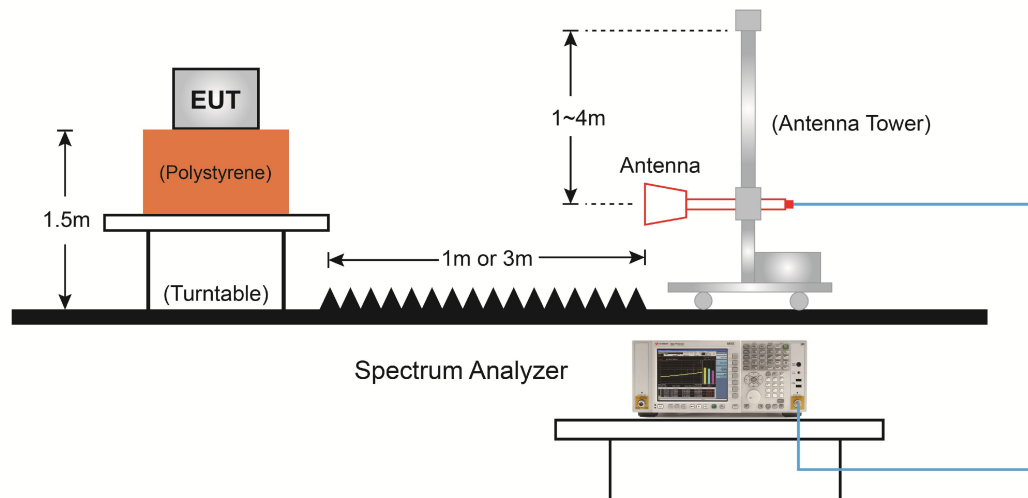
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

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. Set VBW $\geq 1/T$. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

6.9.4. Test Setup**Below 1GHz Test Setup:**

Above 1GHz Test Setup:



6.9.5. Test Result

Test Site	WZ-AC2	Test Engineer	Antony Yang
Test Date	2021/01/15	Test Channel	00
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4808.0	47.8	4.6	52.4	74.0	-21.6	Peak	Horizontal
*	7205.0	41.6	11.7	53.3	75.5	-22.2	Peak	Horizontal
	7443.0	37.9	12.6	50.5	74.0	-23.5	Peak	Horizontal
*	9610.5	41.5	14.9	56.4	75.5	-19.1	Peak	Horizontal
	4850.5	42.4	4.6	47.0	74.0	-27.0	Peak	Vertical
*	7205.0	40.7	11.7	52.4	75.5	-23.1	Peak	Vertical
	7439.7	45.1	12.6	57.7	74.0	-16.3	Peak	Vertical
	7439.7	36.2	12.7	48.9	54.0	-5.1	Average	Vertical
*	9610.5	40.0	14.9	54.9	75.5	-20.6	Peak	Vertical
Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (95.5dBμV/m) or 15.209 which is higher. Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB) Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)								

Test Site	WZ-AC2	Test Engineer	Antony Yang
Test Date	2021/01/15	Test Channel	39
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4850.5	45.4	4.6	50.0	74.0	-24.0	Peak	Horizontal
*	7205.0	40.2	11.7	51.9	76.0	-24.1	Peak	Horizontal
	7439.7	46.3	12.6	58.9	74.0	-15.1	Peak	Horizontal
	7439.7	38.6	12.7	51.3	54.0	-2.7	Average	Horizontal
*	9763.5	41.0	15.2	56.2	76.0	-19.8	Peak	Horizontal
	7281.5	38.6	12.6	51.2	74.0	-22.8	Peak	Vertical
	7439.5	44.0	12.6	56.6	74.0	-17.4	Peak	Vertical
	7439.5	37.4	12.7	50.1	54.0	-3.9	Average	Vertical
*	8599.0	34.4	13.1	47.5	76.0	-28.5	Peak	Vertical
*	9763.5	38.4	15.2	53.6	76.0	-22.4	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (96.0dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Test Site	WZ-AC2	Test Engineer	Antony Yang
Test Date	2021/01/15	Test Channel	78
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4850.5	44.8	4.6	49.4	74.0	-24.6	Peak	Horizontal
	7440.5	43.3	12.6	55.9	74.0	-18.1	Peak	Horizontal
	7440.5	36.3	12.6	48.9	54.0	-5.1	Average	Horizontal
*	9610.5	36.1	14.9	51.0	76.3	-25.3	Peak	Horizontal
*	9916.5	39.8	15.6	55.4	76.3	-20.9	Peak	Horizontal
	4850.5	42.1	4.6	46.7	74.0	-27.3	Peak	Vertical
	7440.1	43.5	12.6	56.1	74.0	-17.9	Peak	Vertical
	7440.1	37.3	12.6	49.9	54.0	-4.1	Average	Vertical
*	9610.5	37.2	14.9	52.1	76.3	-24.2	Peak	Vertical
*	9916.5	39.8	15.6	55.4	76.3	-20.9	Peak	Vertical

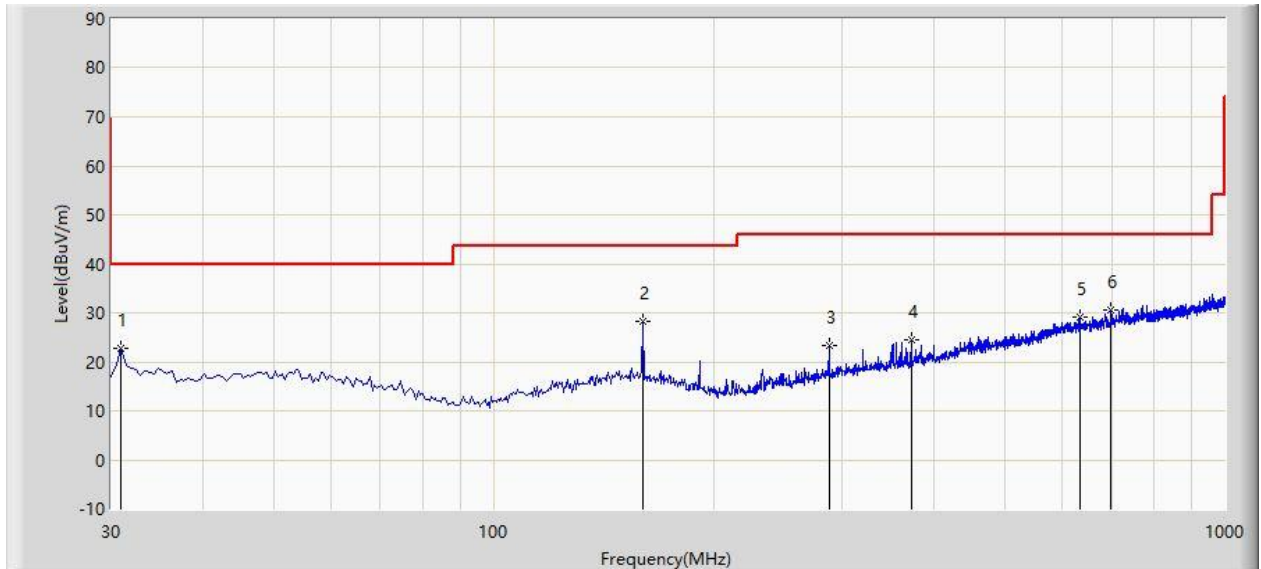
Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (96.3dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

The Worst Case of Radiated Emission below 1GHz:

Site: WZ-AC1	Time: 2021/01/18 - 21:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Buter Shi
Probe: WZ-AC1_VULB 9168 _30-1000MHz	Polarity: Horizontal
EUT: Ninebot S Kids	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2402MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1			30.970	22.681	6.009	-17.319	40.000	16.672	PK
2		*	159.980	28.176	9.978	-15.324	43.500	18.198	PK
3			287.535	23.236	4.844	-22.764	46.000	18.392	PK
4			372.410	24.474	3.958	-21.526	46.000	20.516	PK
5			634.310	28.988	2.605	-17.012	46.000	26.383	PK
6			697.845	30.676	3.448	-15.324	46.000	27.228	PK

Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

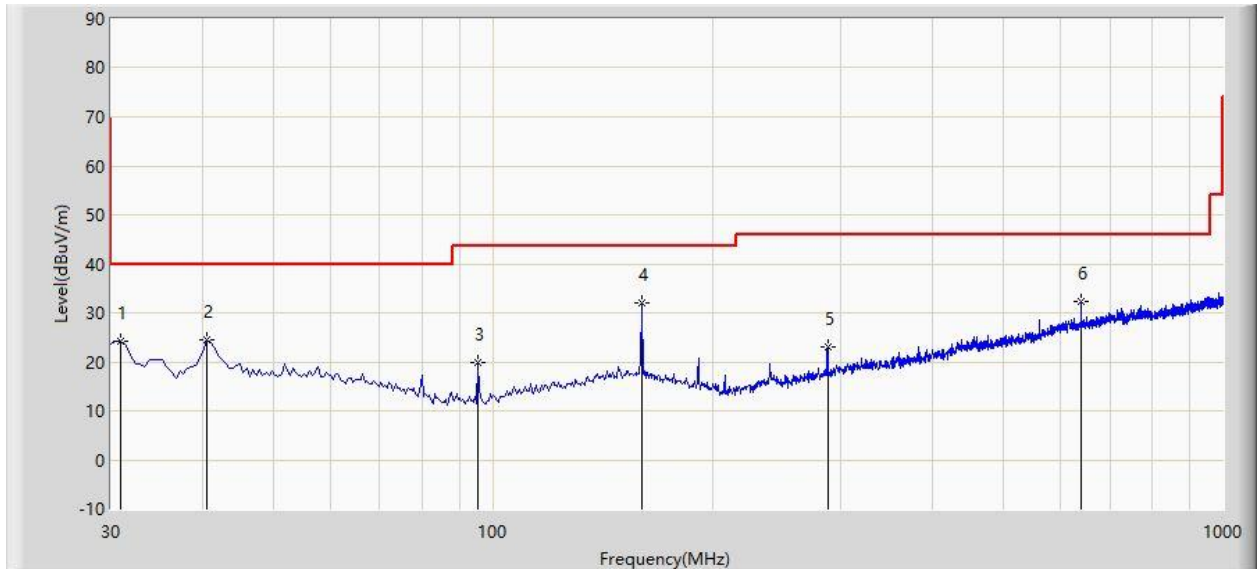
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: QP measurement was not performed when peak measure level was lower than the QP limit.

Note 3: 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: WZ-AC1	Time: 2021/01/18 - 21:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Buter Shi
Probe: WZ-AC1_VULB 9168 _30-1000MHz	Polarity: Vertical
EUT: Ninebot S Kids	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2402MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			30.970	24.238	7.566	-15.762	40.000	16.672	PK
2			40.670	24.477	6.960	-15.523	40.000	17.517	PK
3			95.475	19.819	7.080	-23.681	43.500	12.739	PK
4		*	159.980	31.938	13.740	-11.562	43.500	18.198	PK
5			287.535	22.966	4.574	-23.034	46.000	18.392	PK
6			640.130	32.372	5.938	-13.628	46.000	26.434	PK

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: QP measurement was not performed when peak measure level was lower than the QP limit.

Note 3: 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.

6.10. Radiated Restricted Band Edge Measurement

6.10.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41	--	--	--

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

FCC Part 15.209 Limit		
Frequency [MHz]	Field Strength [μ V/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

For RSS-Gen Section 8.10 Requirement

Radiated emissions which fall in the restricted bands, as defined in Section 8.10 of RSS-Gen, must also comply with the radiated emission limits specified in Section 8.9.

Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.026	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 - 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.362 - 8.366	1660 - 1710	--
8.37625 - 8.38675	1718.8 -1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 -2390	
12.51975 - 12.52025	2483.5 -2500	
12.57675 - 12.57725	2655 - 2900	
13.36 -13.41	3260 - 3267	
16.42 - 16.423	3332 -3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5460	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 - 8500	
108 - 138		

All out of band emissions appearing in a restricted band as specified in Section 8.10 of the RSS-Gen must not exceed the limits shown in Table per Section 8.9.

RSS-Gen Section 8.9 Limit			
Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Magnetic Field Strength (H-Field) ($\mu\text{A/m}$)	Measured Distance (m)
0.009 - 0.490	--	6.37/F (F in kHz)	300
0.490 - 1.705	--	6.37/F (F in kHz)	30
1.705 - 30	--	0.08	30
30 - 88	100	--	3
88 - 216	150	--	3
216 - 960	200	--	3
Above 960	500	--	3

6.10.2. Test Procedure Used

ANSI C63.10-2013 - Section 6.3 & 6.6 & 6.10

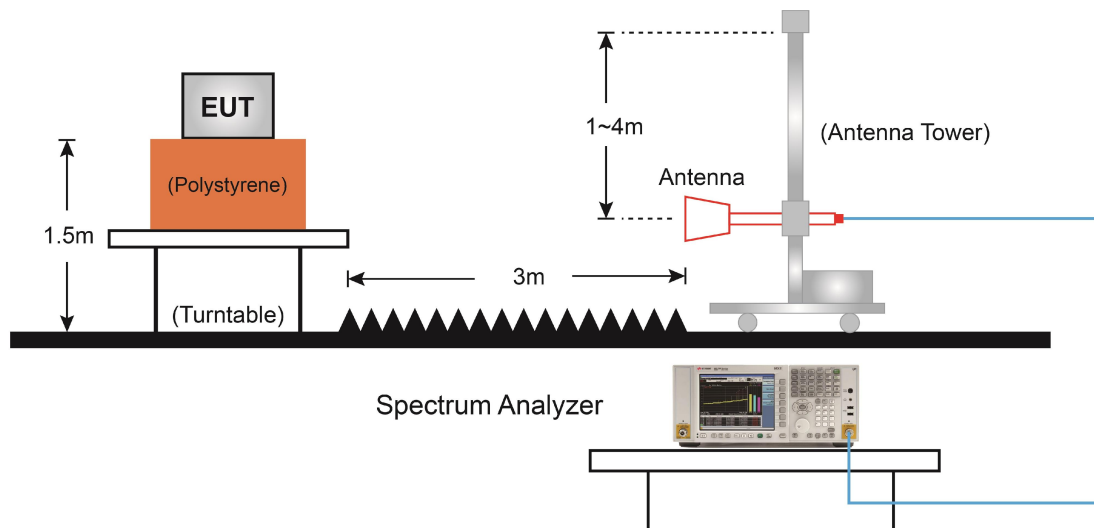
6.10.3. Test Setting

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

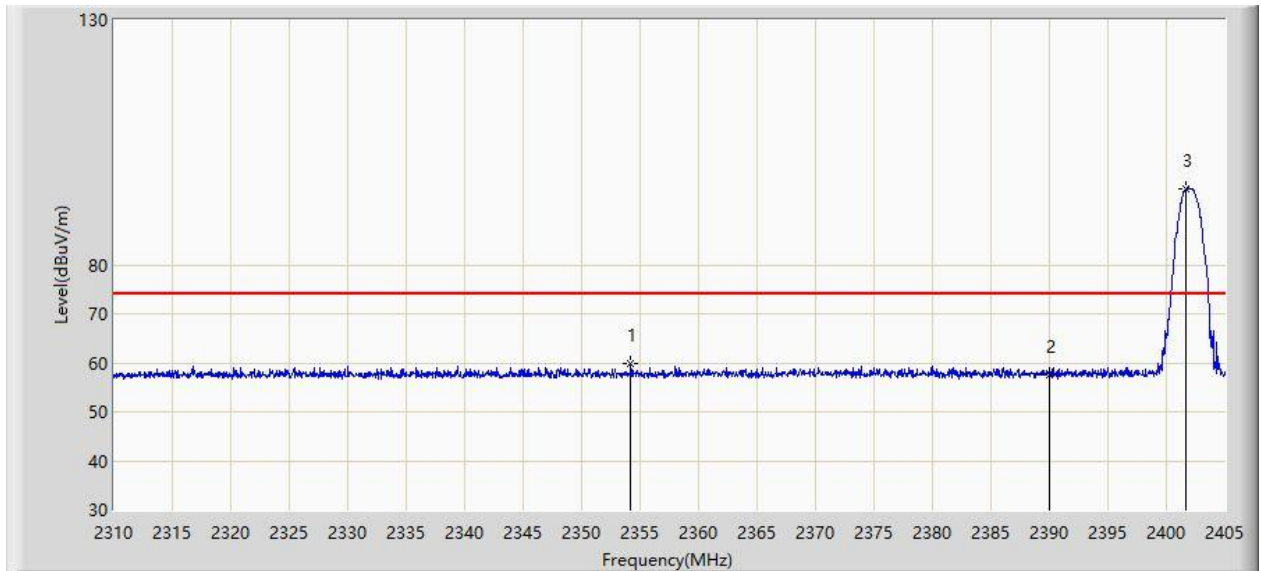
Average Measurements above 1GHz (Method VB)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. Set VBW $\geq 1/T$. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

6.10.4. Test Setup

6.10.5. Test Result

Site: WZ-AC2	Time: 2021/01/15 - 13:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Ninebot S Kids	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2402MHz	

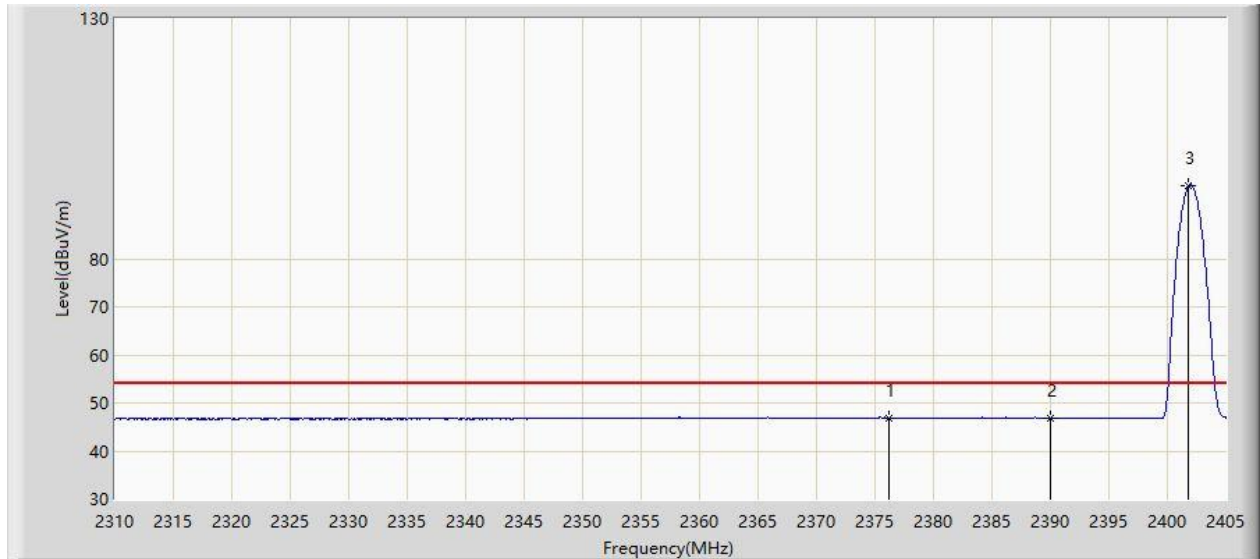


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1			2354.222	59.842	27.410	-14.158	74.000	32.432	PK
2			2390.000	57.628	25.277	-16.372	74.000	32.351	PK
3		*	2401.675	95.465	63.127	N/A	N/A	32.338	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: WZ-AC2	Time: 2021/01/15 - 13:43
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Ninebot S Kids	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2402MHz	

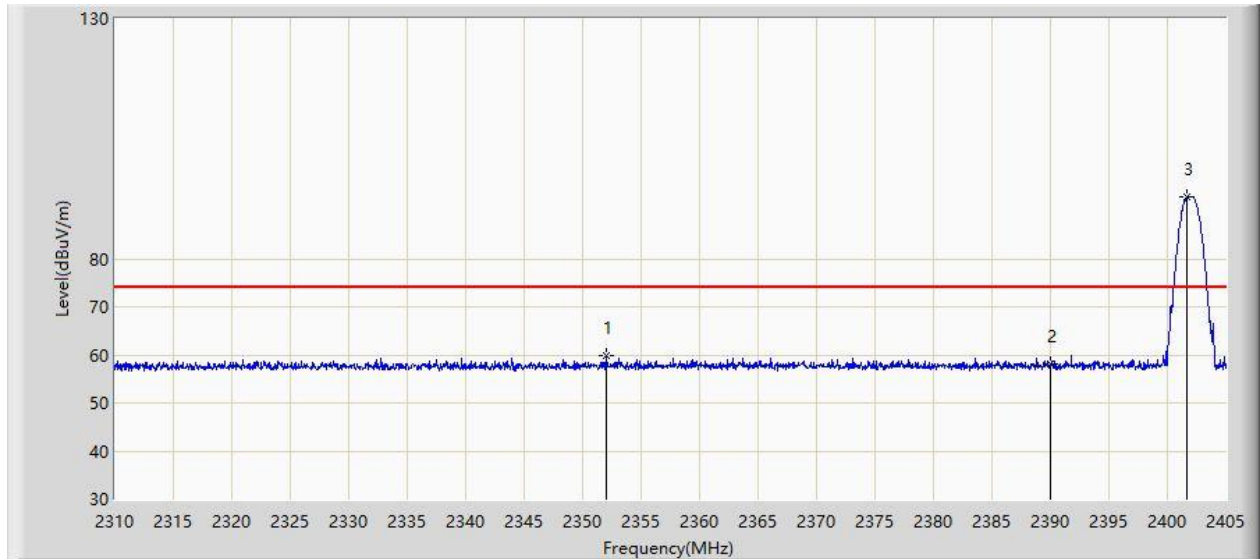


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2376.167	46.911	14.518	-7.089	54.000	32.393	AV
2			2390.000	46.858	14.507	-7.142	54.000	32.351	AV
3		*	2401.817	95.136	62.797	N/A	N/A	32.338	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: WZ-AC2	Time: 2021/01/15 - 13:45
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Ninebot S Kids	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2402MHz	

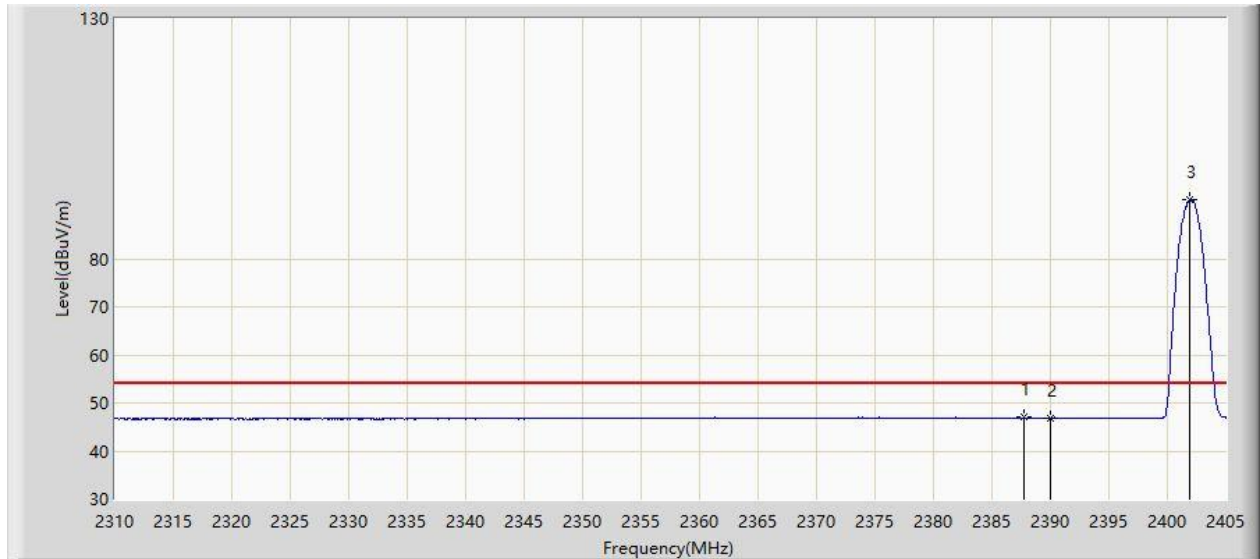


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1			2351.990	59.841	27.417	-14.159	74.000	32.424	PK
2			2390.000	58.164	25.813	-15.836	74.000	32.351	PK
3		*	2401.722	92.939	60.600	N/A	N/A	32.338	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: WZ-AC2	Time: 2021/01/15 - 13:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Ninebot S Kids	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2402MHz	

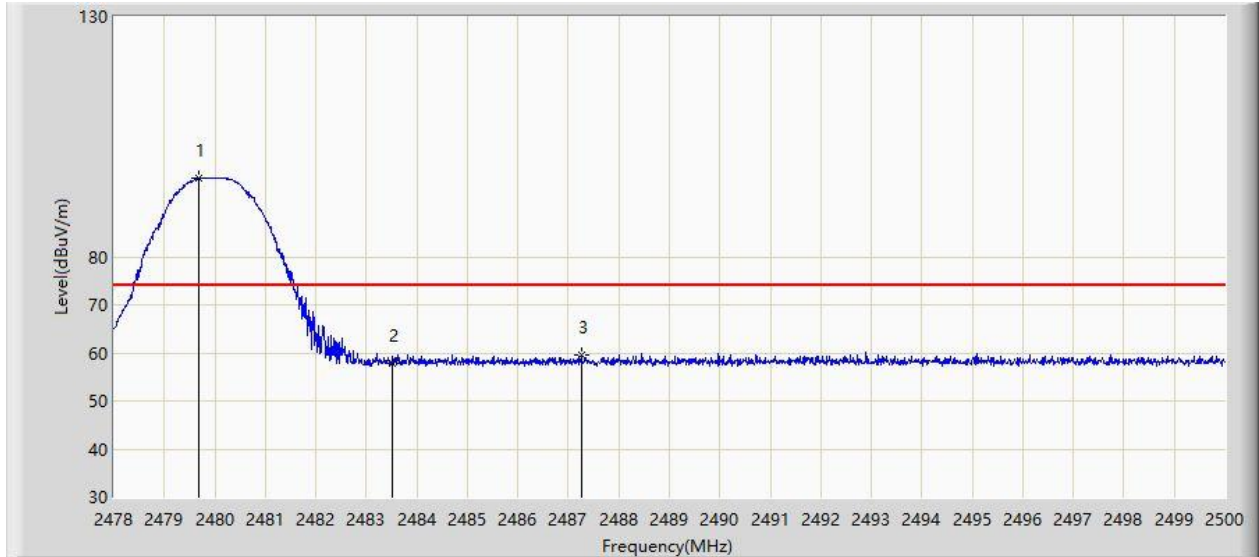


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1			2387.758	46.978	14.621	-7.022	54.000	32.357	AV
2			2390.000	46.847	14.496	-7.153	54.000	32.351	AV
3		*	2401.913	92.320	59.981	N/A	N/A	32.339	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: WZ-AC2	Time: 2021/01/15 - 13:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Ninebot S Kids	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2480MHz	

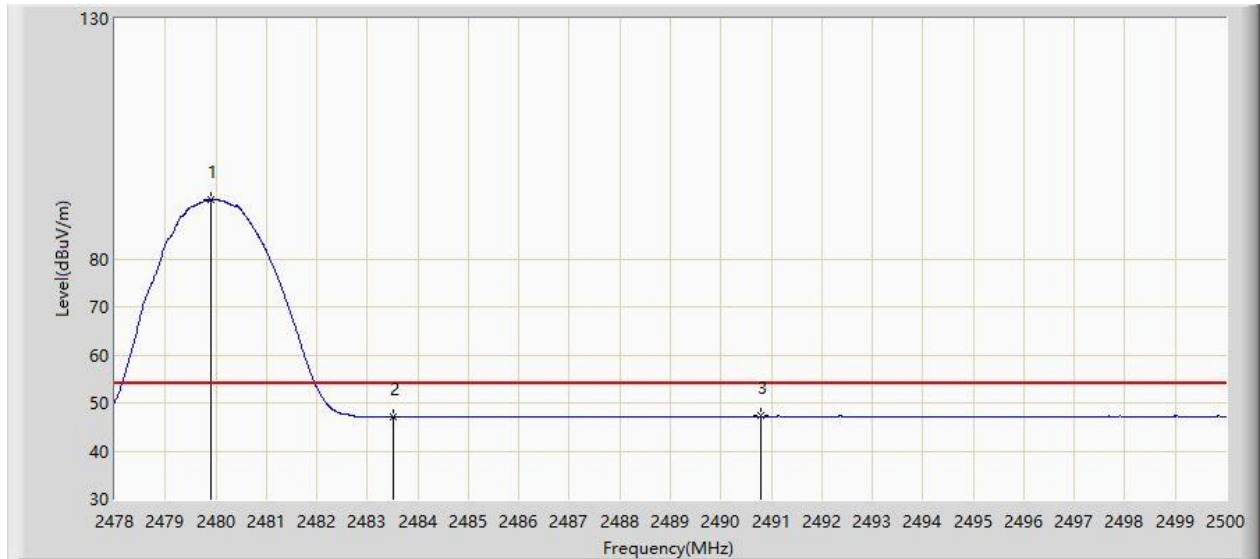


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB)	Type
1		*	2479.672	96.311	63.998	N/A	N/A	32.313	PK
2			2483.500	57.800	25.493	-16.200	74.000	32.307	PK
3			2487.251	59.445	27.145	-14.555	74.000	32.300	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: WZ-AC2	Time: 2021/01/15 - 13:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Ninebot S Kids	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2480MHz	

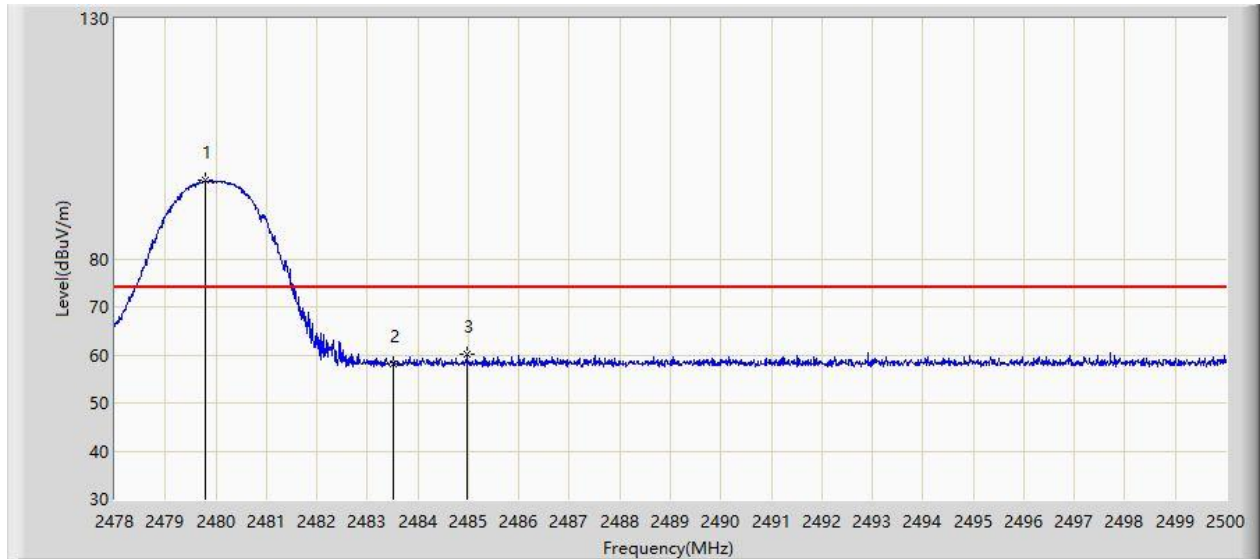


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.892	92.281	59.968	N/A	N/A	32.313	AV
2			2483.500	47.006	14.699	-6.994	54.000	32.307	AV
3			2490.793	47.252	14.946	-6.748	54.000	32.305	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: WZ-AC2	Time: 2021/01/15 - 13:55
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Ninebot S Kids	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2480MHz	

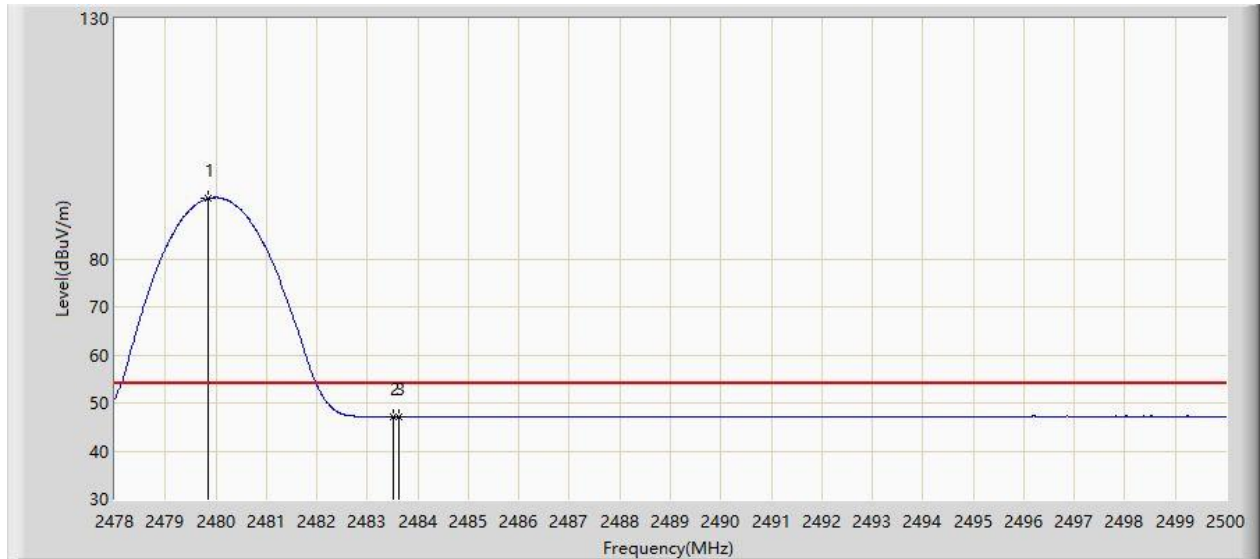


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.804	96.296	63.983	N/A	N/A	32.313	PK
2			2483.500	58.253	25.946	-15.747	74.000	32.307	PK
3			2484.974	60.103	27.799	-13.897	74.000	32.304	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: WZ-AC2	Time: 2021/01/15 - 13:58
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Ninebot S Kids	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2480MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.859	92.594	60.281	N/A	N/A	32.313	AV
2			2483.500	47.139	14.832	-6.861	54.000	32.307	AV
3			2483.632	47.168	14.862	-6.832	54.000	32.306	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

6.11. AC Conducted Emissions Measurement

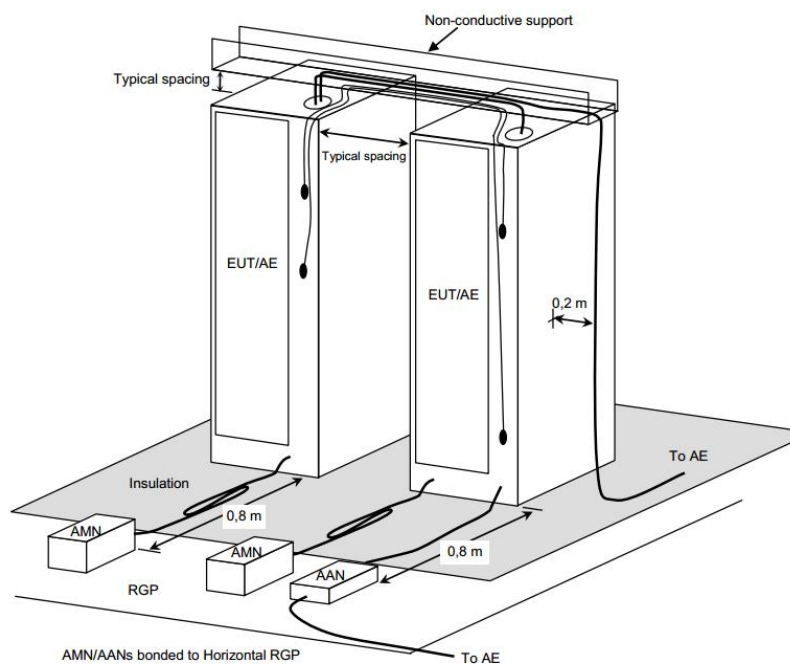
6.11.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits & RSS-Gen Issue 5 Section 8.8 Limits		
Frequency (MHz)	QP (dBµV)	Average (dBµV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

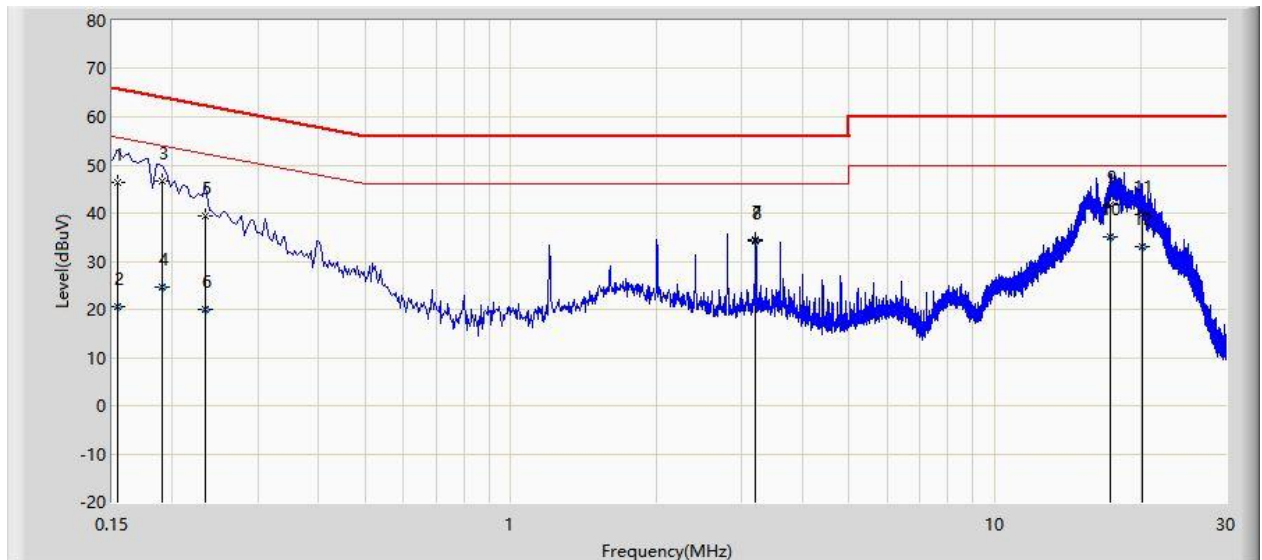
6.11.2. Test Setup



Example measurement arrangement for floor standing EUT

6.11.3.Test Result

Site: WZ-SR2	Time: 2021/01/19 - 18:17
Limit: FCC_Part15.207_CE_AC Power	Engineer: Hyde Yu
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Ninebot S Kids	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2402MHz	

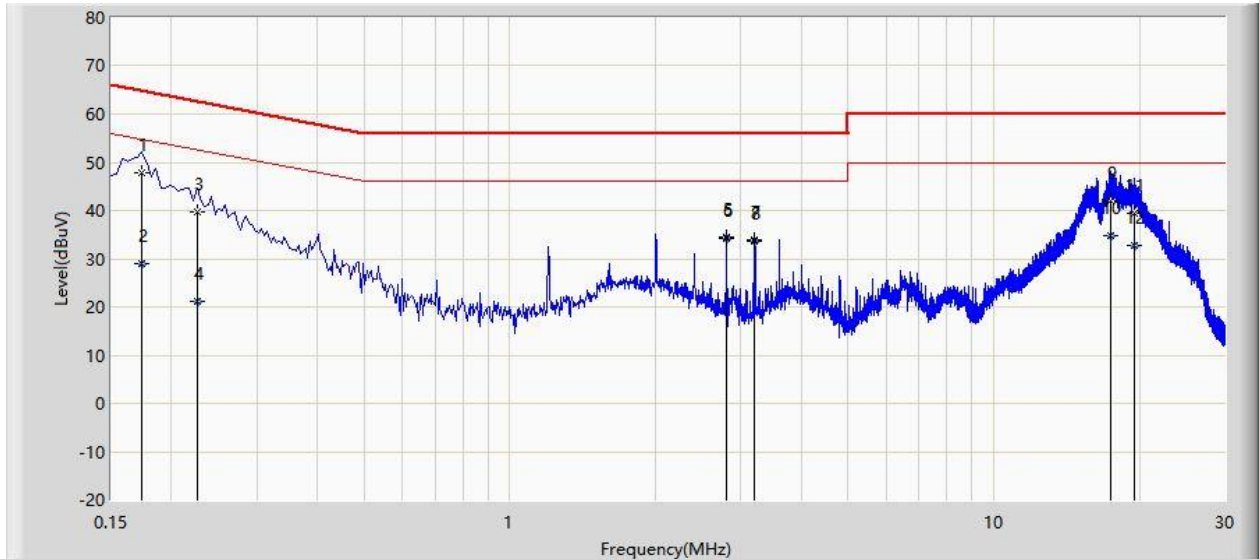


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV)	Factor (dB)	Type
1			0.154	46.326	36.885	-19.455	65.781	9.442	QP
2			0.154	20.543	11.102	-35.238	55.781	9.442	AV
3			0.190	46.646	37.187	-17.391	64.037	9.458	QP
4			0.190	24.616	15.158	-29.421	54.037	9.458	AV
5			0.234	39.404	29.942	-22.903	62.307	9.462	QP
6			0.234	19.926	10.465	-32.380	52.307	9.462	AV
7			3.206	34.601	24.989	-21.399	56.000	9.612	QP
8		*	3.206	34.170	24.558	-11.830	46.000	9.612	AV
9			17.362	41.735	31.583	-18.265	60.000	10.152	QP
10			17.362	35.098	24.947	-14.902	50.000	10.152	AV
11			20.146	39.687	29.454	-20.313	60.000	10.233	QP
12			20.146	33.011	22.778	-16.989	50.000	10.233	AV

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

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

Site: WZ-SR2	Time: 2021/01/19 - 18:21
Limit: FCC_Part15.207_CE_AC Power	Engineer: Hyde Yu
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: Ninebot S Kids	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at Channel 2402MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV)	Factor (dB)	Type
1			0.174	47.869	38.419	-16.898	64.767	9.450	QP
2			0.174	29.038	19.588	-25.729	54.767	9.450	AV
3			0.226	39.747	30.285	-22.849	62.595	9.461	QP
4			0.226	21.193	11.732	-31.402	52.595	9.461	AV
5			2.802	34.526	24.922	-21.474	56.000	9.604	QP
6		*	2.802	34.276	24.672	-11.724	46.000	9.604	AV
7			3.206	33.940	24.323	-22.060	56.000	9.617	QP
8			3.206	33.663	24.046	-12.337	46.000	9.617	AV
9			17.486	42.119	31.929	-17.881	60.000	10.190	QP
10			17.486	34.859	24.669	-15.141	50.000	10.190	AV
11			19.534	39.501	29.252	-20.499	60.000	10.249	QP
12			19.534	32.789	22.540	-17.211	50.000	10.249	AV

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

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

7. CONCLUSION

The data collected relate only the item(s) tested and show that the device is in compliance with Part 15C of the FCC Rules and RSS-247 of the ISED Rules.

The End

Appendix A - Test Setup Photograph

Refer to “2101RSU019-UT” file.

Appendix B - EUT Photograph

Refer to “2101RSU019-UE” file.