

MRT Technology (Suzhou) Co., Ltd Phone: +86-512-66308358 Web: www.mrt-cert.com Report No.: 1708RSU01401 Report Version: V02 Issue Date: 11-19-2017

# **MEASUREMENT REPORT**

FCC PART 15.250

**FCC ID**: 2ALS8-NB5213

**APPLICANT:** Ninebot (Changzhou) Tech Co., Ltd.

**Application Type:** Certification

**Product:** Segway miniPLUS

Model No.: N4M350

**Brand Name:** SEGWAY

**FCC Classification:** Wideband Transmitter (WBT)

FCC Rule Part(s): Part 15, Section 15.250

Test Procedure(s): ANSI C63.10-2013

**Test Date:** August 02 ~ November 19, 2017

Reviewed By : Survy Sur

(Sunny Sun)

Approved By: Marlinchen

(Marlin Chen)



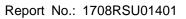


The test results relate only to the samples tested.

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 ANCI 63.10-2013. Test results reported herein relate only to the item(s) tested.

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# **Revision History**

Report No. Version		Description	Issue Date	Note
1708RSU01401	Rev. 01	Initial Report	11-11-2017	Invalid
1708RSU01401	Rev. 02	Updated the Standard	11-19-2017	Valid

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# §2.1033 General Information

Applicant:	Ninebot (Changzhou) Tech Co., Ltd.				
Applicant Address:	16F-17F, Block A, Building 3, Changwu Mid Road 18#, Wujin Dist.,				
	Changzhou, Jiangsu, China.				
Manufacturer:	Ninebot (Changzhou) Tech Co., Ltd.				
Manufacturer Address:	16F-17F, Block A, Building 3, Changwu Mid Road 18#, Wujin Dist.,				
	Changzhou, Jiangsu, China.				
Test Site:	MRT Technology (Suzhou) Co., Ltd				
Test Site Address:	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic				
	Development Zone, Suzhou, China				
MRT FCC Registration No.:	893164				
FCC Rule Part(s):	FCC CFR 47 Part 15, section 15.250				
Test Device Serial No.:	N/A ☐ Production ☐ Pre-Production ☐ Engineering				

### **Test Facility / Accreditations**

Measurements were performed at MRT Laboratory located in Tian'edang Rd., Suzhou, China.

- MRT facility is a FCC registered (MRT Reg. No. 893164) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules.
- MRT facility is an IC registered (MRT Reg. No. 11384A-1) test laboratory with the site description on file at Industry Canada.
- MRT facility is a VCCI registered (R-4179, G-814, C-4664, T-2206) test laboratory with the site description on file at VCCI Council.
- MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications and Radio testing for FCC, Industry Canada, EU and TELEC Rules.



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#### 1. INTRODUCTION

#### 1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

#### 1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taihu Lake. These measurement tests were conducted at the MRT Technology (Suzhou) Co., Ltd. Facility located at D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2009 on September 30, 2013.



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### 2. PRODUCT INFORMATION

### 2.1. Feature of Equipment under Test

Product Name:	Segway miniPLUS			
Model No.:	N4M350			
Brand Name:	SEGWAY			
RF Function:	Bluetooth v4.1 (BLE Only), UWB			
Operation Frequency:	Bluetooth: 2402 ~ 2480MHz, UWB: 6489.6 MHz			
Antenna Type:	Bluetooth Antenna: PCB Antenna,			
Аптеппа туре.	UWB Antenna: Anchor Antenna			
Antenna Gain:	Bluetooth Antenna: 5dBi			
Antenna Gam.	UWB Antenna: 9.95dBi			
Modulation:	☐ Frequency Hopping Modulation ☐ Stepped Frequency Modulation			
iviodulation.	☐ Swept Frequency Modulation ☐ other			
UWB Power Setting:	13.5			

### 2.2. Test Mode

Test Mode	Mode 1: Transmit at 6489MHz
1000 10000	Wode 1. Transmit at 6 Toolwi 12

### 2.3. Description of Test Software

N/A

#### 2.4. Device Capabilities

This device contains the following capabilities:

UWB & Bluetooth Device.

### 2.5. Test Configuration

The **Segway miniPLUS** was tested per the guidance of ANSI C63.10-2013.

### 2.6. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

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### 2.7. Labeling Requirements

### Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practical, only the FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.

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#### 3. DESCRIPTION of TEST

#### 3.1. Evaluation Procedure

The measurement procedures described in the American National Standard for Procedures for measuring ultra-wideband devices (ANSI C63.10-2013).

Deviation from measurement procedure......None

#### 3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 8'x4'x4' shielded enclosure. A 1m x 2m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz,  $50\Omega/50$ uH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground-plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the receiver and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The receiver was scanned from 150kHz to 30MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Each emission was also maximized by varying: power lines, the mode of operation or data exchange speed, or support equipment whichever determined the worst-case emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions were used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

An extension cord was used to connect to a single LISN which powered by EUT. The extension cord was calibrated with LISN, the impedance and insertion loss are compliance with the requirements as stated in ANSI C63.10-2013.

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#### 3.3. Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. A MF Model 210SS turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable. For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-40GHz was placed on top of the 1.5 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, if applicable, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions. According to 3dB Beam-Width of horn antenna, the horn antenna should be always directed to the EUT when rising height.

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### 4. 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 the Segway miniPLUS is permanently attached.
- There are no provisions for connection to an external antenna.

#### Conclusion:

The **Segway miniPLUS** unit complies with the requirement of §15.203.

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# 5. TEST EQUIPMENT CALIBRATION DATE

### Radiated Disturbance - AC1

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
MXE EMI Receiver	Agilent	N9038A	MRTSUE06125	1 year	2018/08/17
Loop Antenna	Schwarzbeck	FMZB1519	MRTSUE06025	1 year	2017/12/21
Bilog Period Antenna	Schwarzbeck	VULB9162	MRTSUE06022	1 year	2018/10/21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06171	1 year	2018/11/18
Broadband Coaxial Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06106	1 year	2017/12/10
Broadband Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06024	1 year	2018/04/25
Digitial Thermometer & Hygrometer	Minggao	ETH529	MRTSUE06170	1 year	2017/11/30
Anechoic Chamber	RIKEN	Chamber-AC1	MRTSUE06213	1 year	2018/05/10

### Conducted Test Equipment - TR3

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2018/04/25
MXE EMI Receiver	Keysight	N9038A	MRTSUE06125	1 year	2018/08/17
Signal Analyzer	R&S	FSV40	MRTSUE06218	1 year	2018/03/27
Programmable Temperature & Humidity Chamber		BYH-1500L	MRTSUE06051	1 year	2017/12/06
Temperature/Humidity Meter	Yuhuaze	HTC-2	MRTSUE06184	1 year	2017/12/22

Software	Version	Function
e3	V8.3.5	EMI Test Software

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# 6. 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 - SR2

Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):

150kHz~30MHz: 3.46dB

#### Radiated Emission Measurement - AC1

Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):

9kHz ~ 1GHz: ± 4.18dB 1GHz ~ 40GHz: ± 4.76dB

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### 7. TEST RESULT

# 7.1. Summary

Product Name: Segway miniPLUS

FCC ID: 2ALS8-NB5213

FCC Classification: Wideband Transmitter (WBT)

FCC	Test	Test	Test	Test	Reference	
Section(s)	Description	Limit	Condition	Result		
FCC Section	Operation	within the	Conducted	Pass	Section 7.2	
15.250(a)	Frequency	5925-7250 MHz	Conducted	1 833	Section 7.2	
FCC Section	Occupied	>50 MHz	Conducted	Pass	Section 7.2	
15.250(b)	Bandwidth	>50  VIFI2	Conducted	Pass	Section 7.2	
FCC Continu	Radiated Spurious					
FCC Section	Emissions	Refer to Section 7.3		Pass	Section 7.3	
15.250(d)(4)	below 960 MHz					
FCC Section	Radiated Spurious					
	Emissions above	Refer to Section 7.4		Pass	Section 7.4	
15.250(d)(1)	960 MHz		Radiated			
FCC Section	Radiated Spurious					
	Emissions in GPS	Refer to Section 7.4		Pass	Section 7.4	
15.250(d)(2)	Band					
FCC Section	Peak Power within	Defeate Coeties 7.5		Desc	Section	
15.250(d)(3)	50 MHz Bandwidth	Refer to Section 7.5		Pass	7.5	
FCC Section	AC Conducted	Defeate Costion 7.0	Candustad	Door	Continu 7.0	
15.207	Emission	Refer to Section 7.6	Conducted	Pass	Section 7.6	

#### Notes:

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.

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### 7.2. Occupied Bandwidth and Operation Frequency Range Measurement

#### 7.2.1.Test Limit

The −10 dB bandwidth of a device operating under the provisions of this section must be contained within the 5925-7250 MHz band under all conditions and the fundamental emission shall be at least 50 MHz.

#### 7.2.2.Test Procedure used

ANSI C63.10-2013, section 6.8 & 10.1

#### 7.2.3.Test Setting

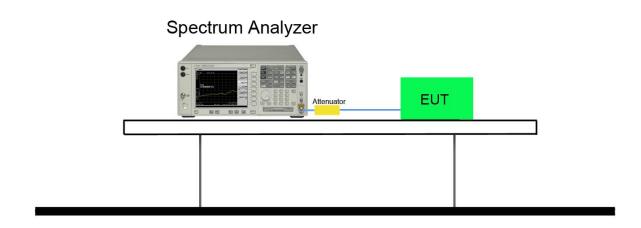
The frequency at which the maximum power level is measured with the peak detector is designated  $f_M$ . The peak power measurements shall be made using a spectrum analyzer or EMI receiver with a 1 MHz resolution bandwidth and a video bandwidth of 1 MHz or greater. The instrument shall be set to peak detection using the maximum-hold trace mode. The outermost 1 MHz segments above and below  $f_M$ , where the peak power falls by 10 dB relative to the level at  $f_M$ , are designated as  $f_H$  and  $f_L$ , respectively:

- a) For the lowest frequency bound  $f_L$ , the emission is searched from a frequency lower than  $f_M$  that has, by inspection, a peak power much lower than 10 dB less than the power at  $f_M$  and increased toward  $f_M$  until the peak power indicates 10 dB less than the power at  $f_M$ . The frequency of that segment is recorded.
- b) This process is repeated for the highest frequency bound  $f_H$ , beginning at a frequency higher than  $f_M$  that has, by inspection, a peak power much lower than 10 dB below the power at  $f_M$ . The frequency of that segment is recorded.
- c) The two recorded frequencies represent the highest fH and lowest  $f_L$  bounds of the UWB transmission, and the -10 dB bandwidth (B 10) is defined as ( $f_H f_L$ ). The center frequency (fc) is mathematically determined from ( $f_H f_L$ ) / 2.
- d) The fractional bandwidth is defined as  $2(f_H f_L) / (f_H + f_L)$ .
- e) Determine whether the -10 dB bandwidth ( $f_H f_L$ ) is  $\geq 500$  MHz, or whether the fractional bandwidth  $2(f_H f_L) / (f_H + f_L)$  is  $\geq 0.2$ .

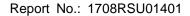
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# 7.2.4.Test Setup



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### 7.2.5.Test Result

Product	Segway miniPLUS	Temperature	25°C		
Test Engineer	Roy Cheng	Relative Humidity	60%		
Test Site	TR3	Test Date	2017/11/20		
Test Item	-10dB Occupied Bandwidth & Operation Frequency Range				

Voltage (%)	Power (VAC)	Temp (°C)	-10dB Bandwidth (MHz)			Operation Frequency Range (MHz)		
( /6)	(VAC)	( 0)	0min	2 min	5 min	10 min	Lower (Min)	Upper (Max)
		- 30	644.40	681.90	682.65	689.45	6145.35	6834.75
		- 20	650.40	661.65	689.40	703.65	6138.60	6842.25
		- 10	622.65	657.90	662.40	672.15	6162.60	6834.75
		0	623.40	655.65	658.65	731.40	6139.35	6870.75
100%		+ 10	619.65	669.90	672.15	693.15	6141.60	6834.75
		+ 20 (Ref)	675.90	684.90	686.40	691.65	6143.85	6835.50
		+ 30	658.65	666.90	672.90	678.15	6146.10	6824.25
		+ 40	635.40	647.40	683.40	684.15	6149.85	6834.00
		+ 50	648.90	672.15	672.90	689.40	6145.35	6834.75
115%	138	+ 20	655.65	677.40	689.15	690.15	6144.60	6834.75
85%	102	+ 20	662.40	665.40	669.15	688.65	6146.10	6834.75

Note 1: All the test result of -10dB Bandwidth is greater than 50MHz and meet with FCC rule.

Note 2: All the test result of Operation Frequency Range is within the 5925-7250 MHz and meet with FCC rule.

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## 7.3. Radiated Spurious Emission Measurements Below 960MHz

#### 7.3.1.Test Limit

FCC	FCC Part 15 Subpart C Paragraph 15.209					
Frequency	Field Strength	Measured Distance				
[MHz]	[uV/m]	[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				

#### 7.3.2.Test Procedure Used

ANSI C63.10-2013, sections 10.2, 10.3

### 7.3.3.Test Setting

- 1. RBW = as specified in Table 1
- 2. VBW ≥ 3 RBW
- 3. Sweep Detector = peak
- 4. Sweep time = auto couple
- 5. Trace mode = max hold
- 6. Trace was allowed to stabilize and record the test result with Table 1 measurement detector.

Table 1 - RBW as a function of frequency

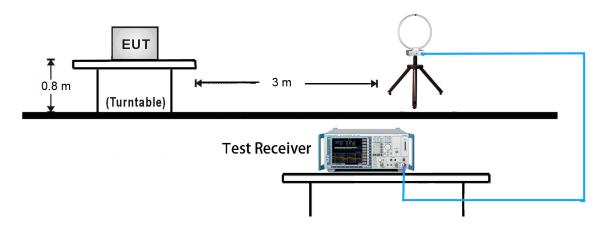
Frequency	RBW	Measurement Detector
9 ~ 150 kHz	200 ~ 300 Hz	Peak or CISPR quasi-peak
0.15 ~ 30 MHz	9 ~ 10 kHz	Peak or CISPR quasi-peak
30 ~ 1000 MHz	100 ~ 120 kHz	CISPR quasi-peak

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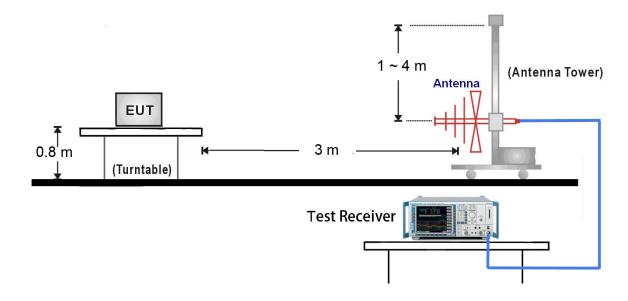


### 7.3.4.Test Setup

## 9kHz ~ 30MHz Test Setup:



# 30MHz ~ 1GHz Test Setup:



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### 7.3.5.Test Result

Product	Segway miniPLUS	Temperature	25°C
Test Engineer	Roy Cheng	Relative Humidity	60%
Test Site	AC1	Test Date	2017/08/06
Test Item	Radiated Spurious Emission Measurements Below 960MHz		

Frequency	Equivalent field	Limit	Margin	Polarity	Verdict
(MHz)	strength dBµv/m(MHz)	dBμv/m(MHz)	(dB)		
83.73	16.84	40.00	-23.16	Horizontal	Pass
146.18	24.98	43.50	-18.52	Horizontal	Pass
281.18	32.52	46.00	-13.48	Horizontal	Pass
299.48	34.40	46.00	-11.60	Horizontal	Pass
345.78	29.45	46.00	-16.55	Horizontal	Pass
474.12	28.50	46.00	-17.50	Horizontal	Pass
80.23	24.19	40.00	-15.81	Vertical	Pass
111.50	29.80	43.50	-13.70	Vertical	Pass
143.12	30.49	43.50	-13.01	Vertical	Pass
201.83	32.71	43.50	-10.79	Vertical	Pass
345.13	30.78	46.00	-15.22	Vertical	Pass
476.15	27.16	46.00	-18.84	Vertical	Pass

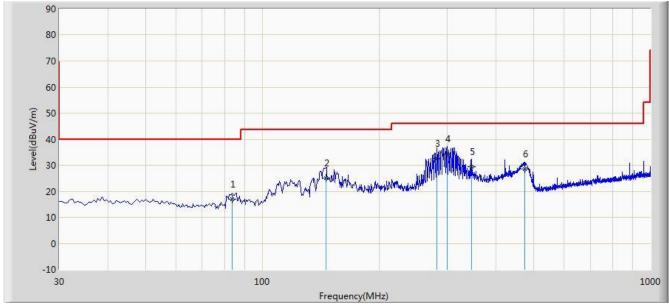
Note 1: The Margin = Equivalent field strength - Limit.

Note 2: The detail test plots have been showed as below.

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Site: AC1	Time: 2017/08/07 - 22:30
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: VULB 9168_20-2000MHz	Polarity: Horizontal
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1			83.726	16.837	6.723	-23.163	40.000	10.115	QP
2			146.183	24.973	10.048	-18.527	43.500	14.925	QP
3			281.176	32.512	18.715	-13.488	46.000	13.797	QP
4		*	299.475	34.396	20.158	-11.604	46.000	14.238	QP
5			345.781	29.451	14.128	-16.549	46.000	15.323	QP
6			474.124	28.499	10.487	-17.501	46.000	18.012	QP

Note 1: Measure Level  $(dB\mu V/m)$  = Reading Level  $(dB\mu V)$  + Factor (dB)

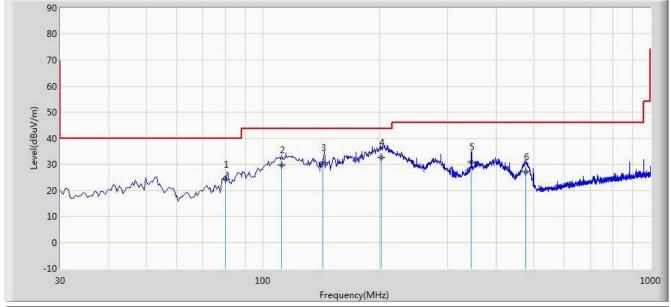
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz), therefore no data appear in the report.

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Site: AC1	Time: 2017/08/07 - 22:53
Limit: FCC_Part15.209_RE(3m)	Engineer: Will Yan
Probe: VULB 9168_20-2000MHz	Polarity: Vertical
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1			80.226	24.195	14.091	-15.805	40.000	10.104	QP
2			111.495	29.799	17.618	-13.701	43.500	12.181	QP
3			143.119	30.488	15.772	-13.012	43.500	14.716	QP
4		*	201.825	32.709	21.590	-10.791	43.500	11.119	QP
5			345.125	30.784	15.472	-15.216	46.000	15.312	QP
6			476.153	27.154	9.115	-18.846	46.000	18.040	QP

Note 1: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz), therefore no data appear in the report.

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### 7.4. Radiated Spurious Emission Measurements Above 960MHz

#### 7.4.1.Test Limit

	Radiated emission average limits above 960MHz					
Frequency	RBW	EIRP of spurious	Equivalent field strength			
[MHz]	[kHz]	[dBm]	limit @ 1m [dB(µV/m)]			
960 - 1610	1000	-75.3	29.4			
1610 - 1990	1000	-63.3	41.4			
1990 - 3100	1000	-61.3	43.4			
3100 - 5925	1000	-51.3	53.4			
5925 - 7250	1000	-41.3	63.4			
7250-10600	1000	-51.3	53.4			
Above 10600	1000	-61.3	43.4			
	Radiated emission average limits in GPS Band					
1164 - 1240	≥ 1	-85.3	19.4			
1559 - 1610	≥ 1	-85.3	19.4			

Note 1: Because the limits are so low, some bands may have been scanned at a distance closer than 1 meter. If any emissions were detected in these bands, final measurements were made at distance of 1 meter or greater. The actual distance for final measurement was indicated in the measurement data.

Note 2: Equivalent field strength limit @ 1m = EIRP of spurious[dBm] + 95.2 + 20\*log(3m/1m)

#### 7.4.2.Test Procedure Used

ANSI C63.10-2013, sections 10.2, 10.3

#### 7.4.3.Test Setting

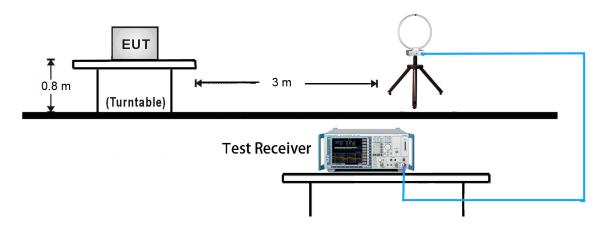
The rms detector is selected, make the trace to max hold and the sweep time and number of measurement bins are set to provide the requisite 1 ms integration time. In this test, the RBW may be reduced to a minimum of 1 kHz (30 kHz is recommended) to enhance the resolution of the individual spectral lines. A ratio of VBW / RBW > 3 shall be maintained when possible.

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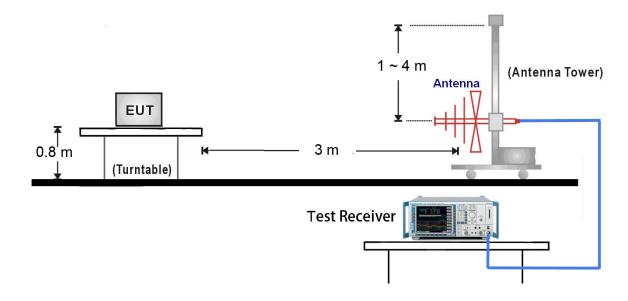


### 7.4.4.Test Setup

## 9kHz ~ 30MHz Test Setup:



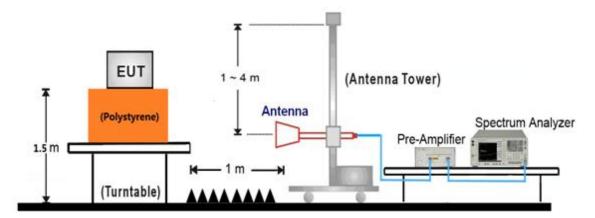
# 30MHz ~ 1GHz Test Setup:



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### 1GHz ~ 40GHz Test Setup:



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### 7.4.5.Test Result

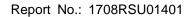
Product	Segway miniPLUS	Temperature	25°C
Test Engineer	Roy Cheng	Relative Humidity	60%
Test Site	AC1	Test Date	2017/08/06
Test Item	Radiated Spurious Emission Measurements above 960MHz		

Frequency	Equivalent field strength	Limit in MHz	Margin	Polarity	Verdict
Range (MHz)	in MHz (dBµv/m)	(dBµv/m)	(dB)		
000 4640	27.78	29.40	-1.62	Horizontal	Pass
960 ~ 1610	26.53	29.40	-2.87	Vertical	Pass
1010 1000	23.11	41.40	-18.29	Horizontal	Pass
1610 ~ 1990	23.44	41.40	-17.96	Vertical	Pass
1000 2100	22.30	43.40	-21.10	Horizontal	Pass
1990 ~ 3100	22.81	43.40	-20.59	Vertical	Pass
2400 5025	32.01	53.40	-21.39	Horizontal	Pass
3100 - 5925	32.24	53.40	-21.16	Vertical	Pass
E00E 70E0	48.65	63.40	-14.75	Horizontal	Pass
5925 - 7250	52.93	63.40	-10.47	Vertical	Pass
7050 40000	40.77	53.40	-12.63	Horizontal	Pass
7250-10600	40.84	53.40	-12.56	Vertical	Pass
Above 10600	27.78	43.40	-15.62	Horizontal	Pass
Above 10600	26.53	43.40	-16.87	Vertical	Pass

Note 1: The Margin = Equivalent field strength - Limit.

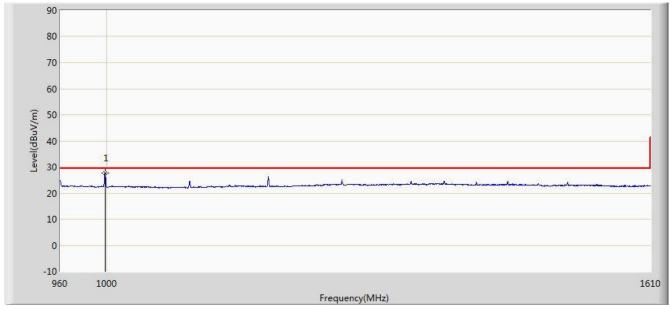
Note 2: The detail test plots have been showed as below.

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C:t A C4	Time as 0047/00/07 40:40
Site: AC1	Time: 2017/08/07 - 19:10
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	



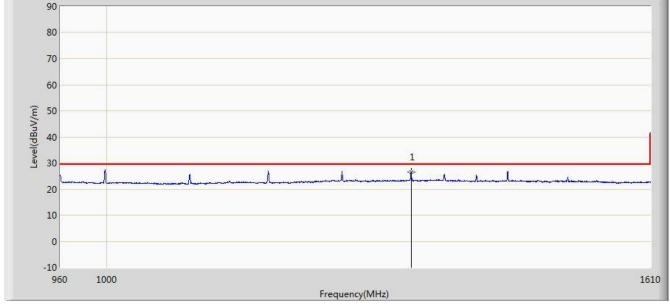
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1		*	998.350	27.776	39.030	-1.624	29.400	-11.254	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2ALS8-NB5213 Page Number: 27 of 52



Site: AC1	Time: 2017/08/07 - 19:21
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	•



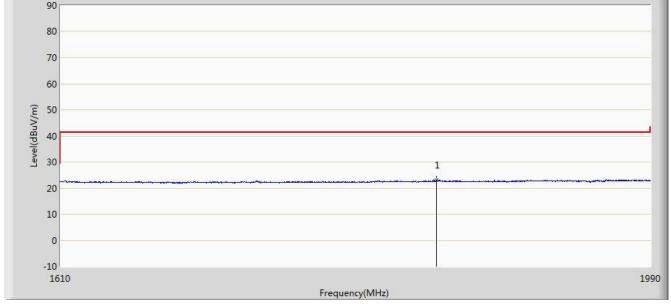
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1		*	1305.475	26.528	34.736	-2.872	29.400	-8.208	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2ALS8-NB5213 Page Number: 28 of 52



Site: AC1	Time: 2017/08/07 - 19:30
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	·



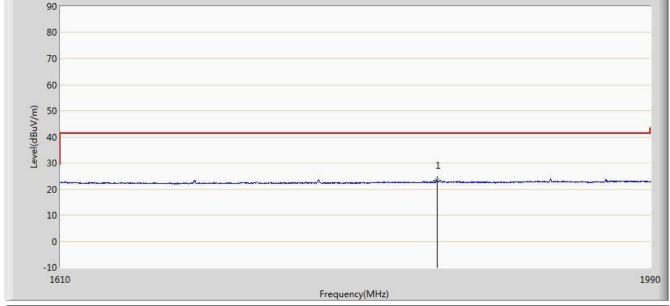
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1		*	1842.940	23.105	29.773	-18.295	41.400	-6.668	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2ALS8-NB5213 Page Number: 29 of 52



Site: AC1	Time: 2017/08/07 - 19:35
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	



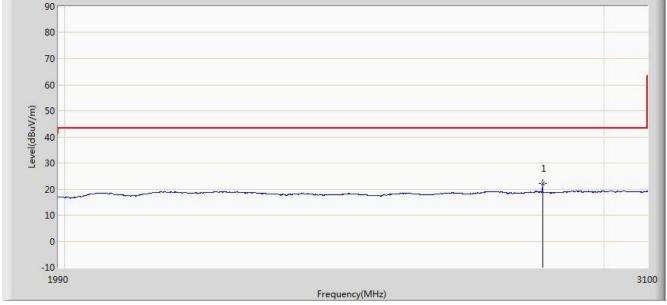
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1		*	1843.130	23.437	30.104	-17.963	41.400	-6.667	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2ALS8-NB5213 Page Number: 30 of 52



Site: AC1	Time: 2017/08/07 - 19:39
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	



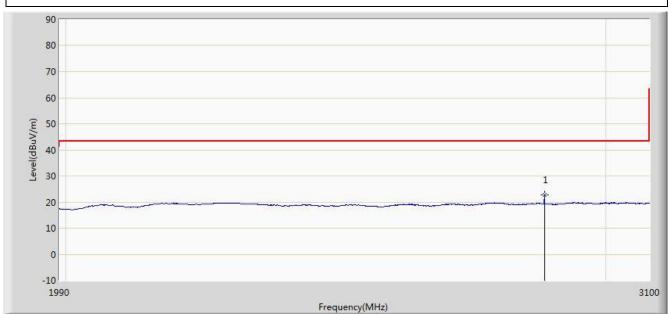
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1		*	2864.680	22.298	24.649	-21.102	43.400	-2.351	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2ALS8-NB5213 Page Number: 31 of 52



Site: AC1	Time: 2017/08/07 - 19:39
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Alex Ma
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	



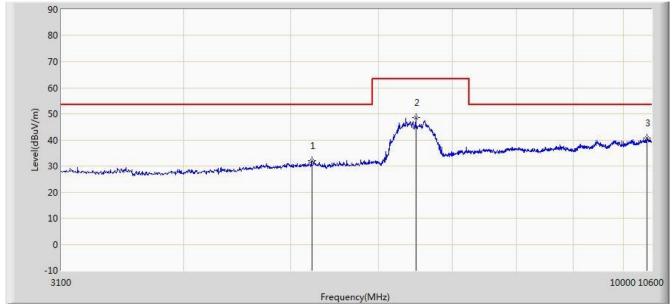
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1		*	2864.680	22.814	25.165	-20.586	43.400	-2.351	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2ALS8-NB5213 Page Number: 32 of 52



Site: AC1	Time: 2017/08/07 - 19:45
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	



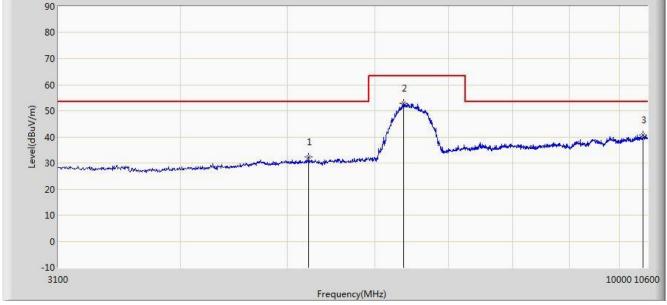
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1			5226.250	32.013	28.808	-21.387	53.400	3.205	AV
2			6490.000	48.650	42.748	-14.750	63.400	5.901	AV
3		*	10510.000	40.766	28.330	-12.634	53.400	12.436	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2ALS8-NB5213 Page Number: 33 of 52



Site: AC1	Time: 2017/08/07 - 19:57
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	



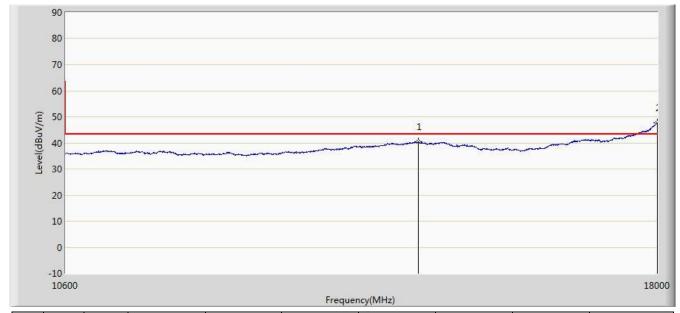
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5230.000	32.239	29.037	-21.161	53.400	3.202	AV
2		*	6373.750	52.932	47.659	-10.468	63.400	5.273	AV
3			10506.250	40.839	28.408	-12.561	53.400	12.432	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2ALS8-NB5213 Page Number: 34 of 52



Site: AC1	Time: 2017/08/07 - 20:03
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	·



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1			14533.100	40.496	24.807	-2.904	43.400	15.689	AV
2		*	17996.301	47.742	24.857	N/A	N/A	22.885	AV

Note 1: Measure Level  $(dB\mu V/m)$  = Reading Level  $(dB\mu V)$  + Factor (dB)

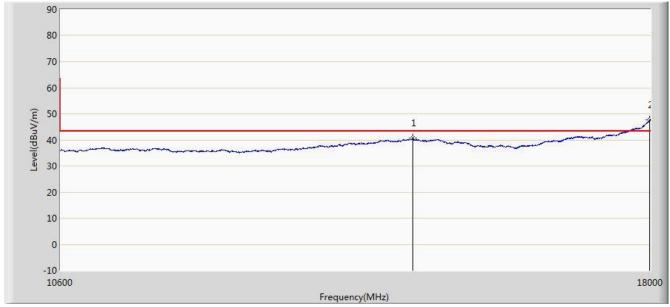
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Note 2: The test plot of this frequency range was base noise unrelated to the UWB transmission. We had reduced the RBW to assess this frequency range.

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Site: AC1	Time: 2017/08/07 - 20:08
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1			14544.200	40.635	24.985	-2.765	43.400	15.649	AV
2		*	17992.600	47.707	24.904	N/A	N/A	22.803	AV

Note 1: Measure Level ( $dB\mu V/m$ ) = Reading Level ( $dB\mu V$ ) + Factor (dB)

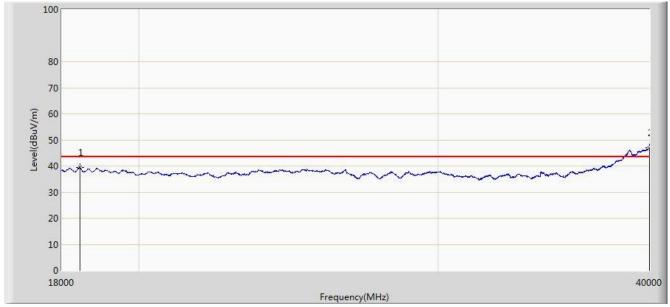
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Note 2: The test plot of this frequency range was base noise unrelated to the UWB transmission. We had reduced the RBW to assess this frequency range.

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Site: AC1	Time: 2017/08/07 - 21:09
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9170_18-40GHz	Polarity: Horizontal
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1			18451.000	39.366	29.984	-4.034	43.400	9.382	AV
2		*	39989.000	46.888	27.924	N/A	N/A	18.964	AV

Note 1: Measure Level ( $dB\mu V/m$ ) = Reading Level ( $dB\mu V$ ) + Factor (dB)

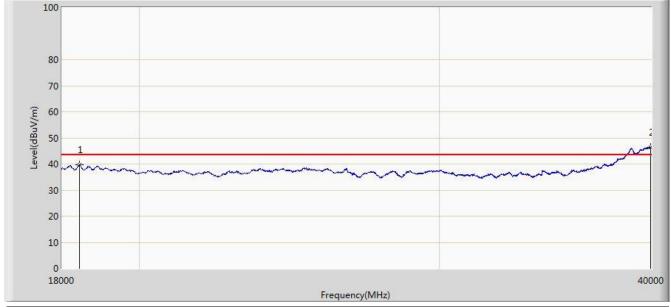
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Note 2: The test plot of this frequency range was base noise unrelated to the UWB transmission. We had reduced the RBW to assess this frequency range.

FCC ID: 2ALS8-NB5213 Page Number: 37 of 52



Site: AC1	Time: 2017/08/07 - 21:11
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9170_18-40GHz	Polarity: Vertical
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	•



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1			18440.000	39.667	30.232	-3.733	43.400	9.435	AV
2		*	39978.000	46.497	27.610	N/A	N/A	18.887	AV

Note 1: Measure Level  $(dB\mu V/m)$  = Reading Level  $(dB\mu V)$  + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Note 2: The test plot of this frequency range was base noise unrelated to the UWB transmission. We had reduced the RBW to assess this frequency range.

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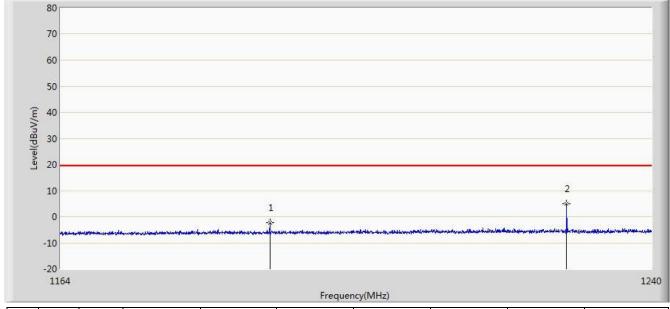
# Radiated Emission in GPS Receive Band Test Result Summary

Frequency	Equivalent field strength	Limit in MHz	Margin (dB)	Polarity	Verdict
(MHz)	in MHz (dBµv/m)	(dBµv/m)			
4404 4040	4.95	19.40	-14.45	Horizontal	Pass
1164 ~ 1240	10.48	19.40	-8.92	Vertical	Pass
4550 4040	0.50	19.40	-18.90	Horizontal	Pass
1559 ~ 1610	1.13	19.40	-18.27	Vertical	Pass

Note 1: The Margin = Equivalent field strength – Limit.

Note 2: The detail test plots have been showed as below.

Site: AC1	Time: 2017/08/07 - 20:17
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1			1190.410	-2.279	7.069	-21.679	19.400	-9.347	AV
2		*	1228.790	4.948	13.762	-14.452	19.400	-8.813	AV

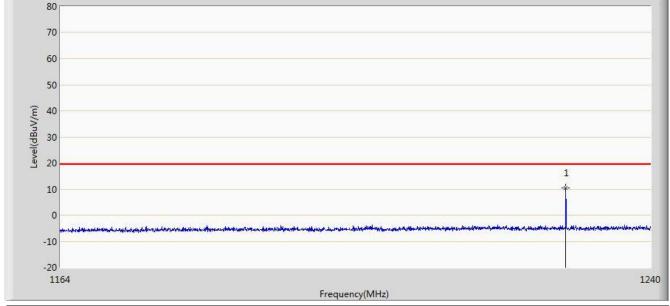
Note: Measure Level  $(dB\mu V/m)$  = Reading Level  $(dB\mu V)$  + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2ALS8-NB5213 Page Number: 39 of 52



Site: AC1	Time: 2017/08/07 - 20:24
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	·



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1		*	1228.790	10.475	19.289	-8.925	19.400	-8.813	AV

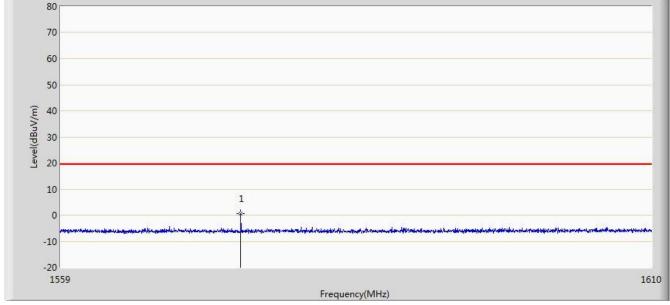
Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Site: AC1	Time: 2017/08/07 - 20:34
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	•



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1		*	1574.402	0.503	8.188	-18.897	19.400	-7.685	AV

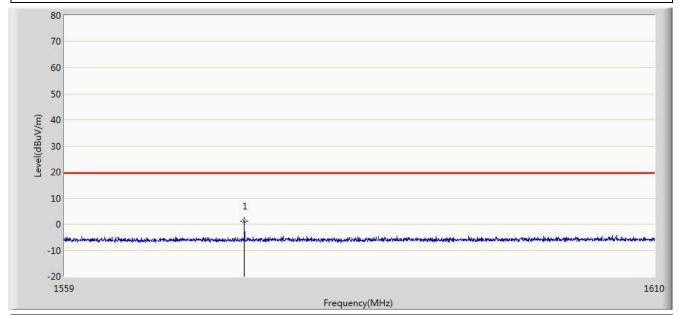
Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Site: AC1	Time: 2017/08/07 - 20:44
Limit: FCC_Part 15.250_RMS (1M)	Engineer: Will Yan
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Segway miniPLUS	Power: By Battery
Note: Transmit at 6489MHz	



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1		*	1574.402	1.126	8.811	-18.274	19.400	-7.685	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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#### 7.5. Peak Power within 50 MHz bandwidth

#### 7.5.1.Test Limit

This test was performed to measure effective radiated power emanated by transmitter at carrier frequency. Specification test limits are given in the following table.

### **Peak Power Limit (EIRP)**

Assigned frequency band	EIRP in 50MHz BW	Equivalent field strength limit in				
(MHz)	(dBm)	MHz @ 1m (dBµv/m)				
FCC section 15.250(d)(3)						
5925 ~ 7250	20 log <sup>(RBW/50)</sup>	70.74				

Note 1: Because the limits are so low, some bands may have been scanned at a distance closer than 1 meter. If any emissions were detected in these bands, final measurements were made at distance of 1 meter or greater. The actual distance for final measurement was indicated in the measurement data.

Note 2: Peak power limit at 1m = 20\*log(1MHz/50MHz) + 95.2 + 20\*log(3m/1m) = 70.74dBµv/m

#### 7.5.2.Test Procedure Used

ANSI C63.10-2013, Section 10.3

#### 7.5.3.Test Setting

#### Bandwidth conversion of peak power measurements

It is acceptable to employ an RBW(1MHz) of less than 50 MHz (but no less than 1 MHz) when performing the required peak power measurements. When this approach is employed, the peak emissions EIRP limit (0 dBm / 50 MHz) is converted to a limit commensurate with the RBW by employing a [20 log (RBW/50 MHz)] relationship. For example, the peak power limit could be expressed in a 1 MHz

bandwidth as follows in Equation:

$$EIRP_{1MHz} = 20log(1MHz/50MHz) dBm = (-34dB) = -34dBm$$

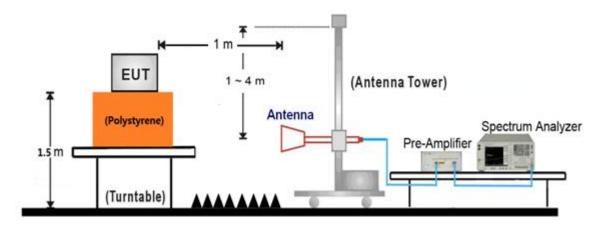
When a resolution bandwidth of less than 50 MHz is used, this measurement shall be performed over a 50 MHz span centered on the frequency associated with the highest detected average emission level.

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## 7.5.4.Test Setup

## 1GHz ~ 40GHz Test Setup:



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## 7.5.5.Test Result

Product	Segway miniPLUS	Temperature	25°C			
Test Engineer	Roy Cheng	Relative Humidity	60%			
Test Site	AC1	Test Date	2017/08/07			
Test Item	Peak Power within 50MHz BW					

Frequency	Equivalent field	Limit	Margin (dB)	Polarity	Verdict
(MHz)	strength dBµv/m(MHz)	dBμv/m(MHz)			
6335.10	62.84	70.74	-7.90	Horizontal	Pass
6489.63	57.12	70.74	-13.62	Vertical	Pass

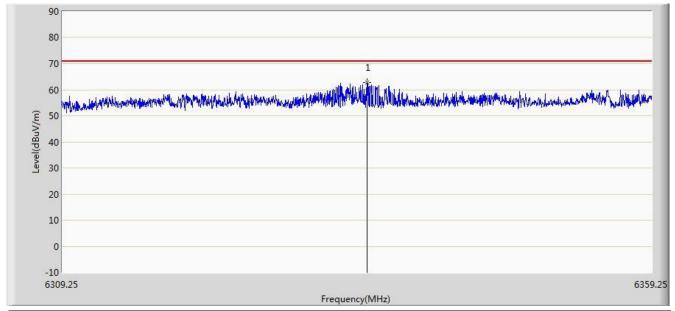
Note 1: The Margin = Equivalent field strength - Limit.

Note 2: The detail test plots have been showed as below.

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Note: Bandwidth conversion of peak power measurements					
EUT: Segway miniPLUS	Power: By Battery				
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal				
Limit: FCC_Part 15.250_(1m)	Engineer: Will Yan				
Site: AC1	Time: 2017/08/07 - 18:44				



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1		*	6335.100	62.842	57.791	-7.898	70.740	5.051	PK

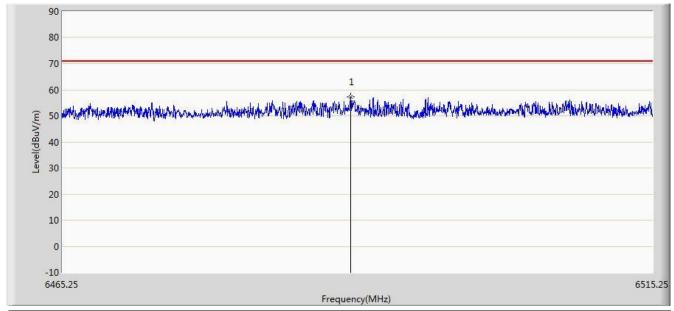
Note: Measure Level ( $dB\mu V/m$ ) = Reading Level ( $dB\mu V$ ) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB).

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Note: Bandwidth conversion of peak power measurements					
EUT: Segway miniPLUS Power: By Battery					
Probe: BBHA9120D_1-18GHz	Polarity: Vertical				
Limit: FCC_Part 15.250_(1m)	Engineer: Will Yan				
Site: AC1	Time: 2017/08/07 - 18:53				



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)		
				(dBuV/m)	(dBuV)				
1		*	6489.625	57.119	51.219	-13.621	70.740	5.899	PK

Note: Measure Level ( $dB\mu V/m$ ) = Reading Level ( $dB\mu V$ ) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB).

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### 7.6. AC Conducted Emissions Measurement

#### 7.6.1.Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits							
Frequency (MHz)	QP (dBuV)	AV (dBuV)					
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.

#### 7.6.2.Test Procedure Used

FCC Part 15 Subpart C Paragraph 15.207

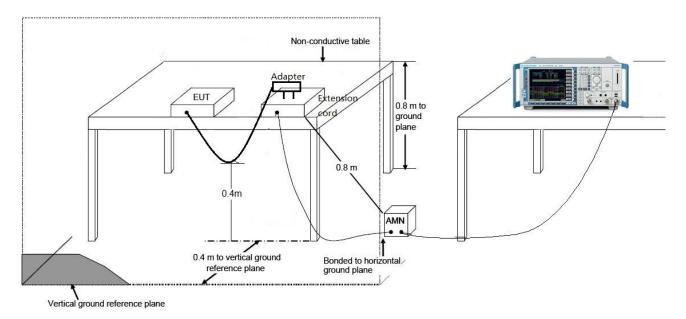
## 7.6.3.Test Setting

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal.

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## 7.6.4.Test Setup

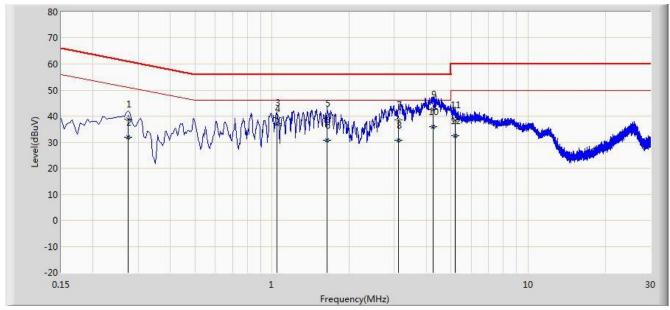


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### 7.6.5.Test Result

Site: SR2	Time: 2017/08/09 - 20:13				
Limit: FCC_Part15.207_CE_AC Power	Engineer: Bacon Dong				
Probe: ENV216_101683_Filter On	Polarity: Line				
EUT: Segway miniPLUS	Power: AC 120V/60Hz				
Worst Case Mode: Transmit at 6489MHz					



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1			0.274	38.949	28.965	-22.047	60.996	9.983	QP
2			0.274	31.888	21.904	-19.108	50.996	9.983	AV
3			1.046	39.545	29.638	-16.455	56.000	9.907	QP
4		*	1.046	36.988	27.081	-9.012	46.000	9.907	AV
5			1.642	39.066	29.183	-16.934	56.000	9.884	QP
6			1.642	30.777	20.893	-15.223	46.000	9.884	AV
7			3.114	38.586	28.728	-17.414	56.000	9.858	QP
8			3.114	30.633	20.775	-15.367	46.000	9.858	AV
9			4.250	42.654	32.677	-13.346	56.000	9.978	QP
10			4.250	35.973	25.996	-10.027	46.000	9.978	AV
11			5.170	38.515	28.469	-21.485	60.000	10.047	QP
12			5.170	32.527	22.480	-17.473	50.000	10.047	AV

Note: Measure Level (dB $\mu$ V) = Reading Level (dB $\mu$ V) + Factor (dB)

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

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Site: SR2	Time: 2017/08/09 - 20:19				
Limit: FCC_Part15.207_CE_AC Power	Engineer: Bacon Dong				
Probe: ENV216_101683_Filter On	Polarity: Neutral				
EUT: Segway miniPLUS	Power: AC 120V/60Hz				
Worst Case Mode: Transmit at 6489MHz					

80 70 60 50 10 0 -10 -20 0.15 1 10 30

Frequency(MHz)

No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1			0.274	42.798	32.779	-18.198	60.996	10.019	QP
2			0.274	34.593	24.575	-16.403	50.996	10.019	AV
3			1.214	41.464	31.562	-14.536	56.000	9.902	QP
4		*	1.214	38.495	28.594	-7.505	46.000	9.902	AV
5			1.426	40.653	30.760	-15.347	56.000	9.893	QP
6			1.426	32.163	22.271	-13.837	46.000	9.893	AV
7			2.986	40.976	31.110	-15.024	56.000	9.866	QP
8			2.986	34.939	25.073	-11.061	46.000	9.866	AV
9			4.334	43.119	33.131	-12.881	56.000	9.988	QP
10			4.334	35.835	25.846	-10.165	46.000	9.988	AV
11			6.230	37.211	27.076	-22.789	60.000	10.135	QP
12			6.230	31.222	21.087	-18.778	50.000	10.135	AV

Note: Measure Level (dB $\mu$ V) = Reading Level (dB $\mu$ V) + Factor (dB)

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

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## 8. CONCLUSION

The data collected relate only the item(s) tested and show that the **Segway miniPLUS FCC ID: 2ALS8-NB5213** is in compliance with Part 15.250 of the FCC Rules.

———— The End