



# FCC RF Test Report

## (BLE)

**Report No.:** JYTSZ-R12-2400545

**Applicant:** Zero Friction LLC

**Address of Applicant:** 1Trans Am Plaza Drive Suite 540 Oakbrook Terrace Illinois  
United States

**Equipment Under Test (EUT)**

Product Name: Stride

Model No.: STR1000

Trade Mark: Zero friction stride

**FCC ID:** 2AJY2STR1000

**Applicable Standards:** FCC CFR Title 47 Part 15C (§15.247)

**Date of Sample Receipt:** 18 Apr., 2024

**Date of Test:** 19 Apr., to 08 Oct., 2024

**Date of Report Issued:** 08 Oct., 2024

**Test Result:** PASS

**Project by:**

*Luasong*  
Project Engineer

**Date:**

*08 Oct., 2024*

**Reviewed by:**

*Deto Chang*  
Senior Engineer

**Date:**

*08 Oct., 2024*

**Approved by:**

*James Wei*  
Manager

**Date:**

*08 Oct., 2024*

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 above the application standard version. Test results reported herein relate only to the item(s) tested.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

## 1 Version

Version No.	Date	Description
00	05 Jun., 2024	Original
01	08 Oct., 2024	Updated Emissions in Restricted Frequency Bands Spot-check test data

## 2 Contents

Page

<b>Cover Page</b> .....	<b>1</b>
<b>1 Version</b> .....	<b>2</b>
<b>2 Contents</b> .....	<b>3</b>
<b>3 General Information</b> .....	<b>4</b>
3.1 Client Information .....	4
3.2 General Description of E.U.T. ....	4
3.3 Test Mode and Test Environment .....	5
3.4 Description of Test Auxiliary Equipment .....	5
3.5 Measurement Uncertainty .....	5
3.6 Additions to, Deviations, or Exclusions from the Method .....	5
3.7 Laboratory Facility .....	6
3.8 Laboratory Location .....	6
3.9 Test Instruments List .....	7
<b>4 Measurement Setup and Procedure</b> .....	<b>8</b>
4.1 Test Channel .....	8
4.2 Test Setup .....	8
4.3 Test Procedure .....	10
<b>5 Test Results</b> .....	<b>11</b>
5.1 Summary .....	11
5.1.1 Clause and Data Summary .....	11
5.1.2 Test Limit .....	12
5.2 RF Output Power Spot-check .....	13
5.3 Emissions in Restricted Frequency Bands Spot-check .....	14
5.4 Radiated Spurious Emission Spot-check .....	22

### 3 General Information

#### 3.1 Client Information

Applicant:	Zero Friction LLC
Address:	1Trans Am Plaza Drive Suite 540 Oakbrook Terrace Illinois United States
Manufacturer:	Protrade Business Alliance Ltd
Address:	3F Rammon House, Mongkok, Kowloon Hong Kong
Factory:	DongGuan Delei Industrial Development co., Ltd
Address:	Room 301, Building 1 Zenglu Road, Chashan town DongGuan

#### 3.2 General Description of E.U.T.

Product Name:	Stride
Model No.:	STR1000
Operation Frequency:	2402 MHz - 2480 MHz
Channel Numbers:	40
Channel Separation:	2MHz
Modulation Technology:	GFSK
Data Speed:	1 Mbps (LE 1M PHY), 2 Mbps (LE 2M PHY)
Antenna Type:	Internal Antenna
Antenna Gain:	-0.47dBi (declare by applicant)
Antenna transmit mode:	SISO (1TX, 1RX)
Power Supply:	Rechargeable Li-ion Battery DC3.7V, 680mAh
AC Adapter:	Model: H721-2942000D Input: AC100-240V, 50/60Hz, 2.0A Output: DC 29.4V, 2.0A 58.8W
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

### 3.3 Test Mode and Test Environment

Test Mode:	
Transmitting mode	Keep the EUT in continuous transmitting with modulation
<b>Remark:</b> 1. For AC power line conducted emission and radiated spurious emission (below 1GHz), pre-scan all data speed, found 1 Mbps (LE 1M PHY) was worse case mode. The report only reflects the test data of worst mode. 2. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing. The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for these modes. Just the worst case position (H mode) shown in report.	
Operating Environment:	
Temperature:	15℃ ~ 35℃
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Voltage:	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.
Test Engineer:	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.

### 3.4 Description of Test Auxiliary Equipment

The EUT has been tested as an independent unit.
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### 3.5 Measurement Uncertainty

Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.
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### 3.6 Additions to, Deviations, or Exclusions from the Method

No
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### 3.7 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

### 3.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info-JYTee@lets.com, Website: <http://jyt.lets.com>

### 3.9 Test Instruments List

Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.

#### Spot-Check Instruments List:

Radiated Emission(3m FAR):					
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m FAR	YUNYI	9m*6m*6m	WXJ097	06-15-2023	06-14-2028
BiConiLog Antenna	Schwarzbeck	VULB9163	WXJ097-2	07-13-2023	07-12-2024
				07-01-2024	06-30-2025
Biconical Antenna	Schwarzbeck	VUBA9117	WXJ002-1	07-02-2021	07-01-2024
				07-01-2024	06-30-2025
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ097-3	07-14-2023	07-13-2024
				06-16-2024	06-15-2025
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ002-3	12-28-2023	12-27-2024
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-5	12-28-2023	12-27-2024
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-6	12-28-2023	12-27-2024
Pre-amplifier (30MHz ~ 1GHz)	YUNYI	PAM-310N	WXJ097-5	05-14-2023	05-13-2024
				04-24-2024	04-23-2025
Pre-amplifier (1GHz ~ 18GHz)	YUNYI	PAM-118N	WXJ097-6	05-14-2023	05-13-2024
				04-24-2024	04-23-2025
Pre-amplifier (18GHz ~ 40GHz)	RF System	TRLA-180400G45B	WXJ002-7	12-28-2023	12-27-2024
EMI Test Receiver	Rohde & Schwarz	ESCI3	WXJ003	12-27-2023	12-26-2024
Spectrum Analyzer	Rohde & Schwarz	FSP 30	WXJ004	12-27-2023	12-26-2024
Spectrum Analyzer	KEYSIGHT	N9010B	WXJ081-1	06-13-2023	06-12-2024
				06-11-2024	06-10-2025
Coaxial Cable (30MHz ~ 1GHz)	JYTSZ	JYT3M-1G-NN-13M	WXG097-1	08-01-2023	07-31-2024
				07-30-2024	06-29-2025
Coaxial Cable (1GHz ~ 18GHz)	JYTSZ	JYT3M-18G-NN-8M	WXG097-2	08-01-2023	07-31-2024
				07-30-2024	06-29-2025
Coaxial Cable (18GHz ~ 40GHz)	JYTSZ	JYT3M-40G-SS-8M	WXG097-3	08-01-2023	07-31-2024
				07-30-2024	06-29-2025
High Band Reject Filter Group	Tonscend	JS0806-F	WXJ089	N/A	
Low Band Reject Filter Group	Tonscend	JS0806-F	WXJ097-4	N/A	
Test Software	Tonscend	TS+	Version: 5.0.0		

Conducted Method:					
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
Spectrum Analyzer	Keysight	N9010B	WXJ004-3	11-01-2023	10-31-2024
Temperature Humidity Chamber	ZHONG ZHI	CZ-A-80D	WXJ032-3	01-09-2023	01-08-2025
Power Detector Box	MWRFTTEST	MW100-PSB	WXJ007-4	09-25-2023	09-24-2024
				09-10-2024	09-09-2025
DC Power Supply	Keysight	E3642A	WXJ025-2	N/A	
RF Control Unit	MWRFTTEST	MW100-RFCB	WXG006	N/A	
Test Software	MWRFTTEST	MTS 8310	Version: 2.0.0.0		

## 4 Measurement Setup and Procedure

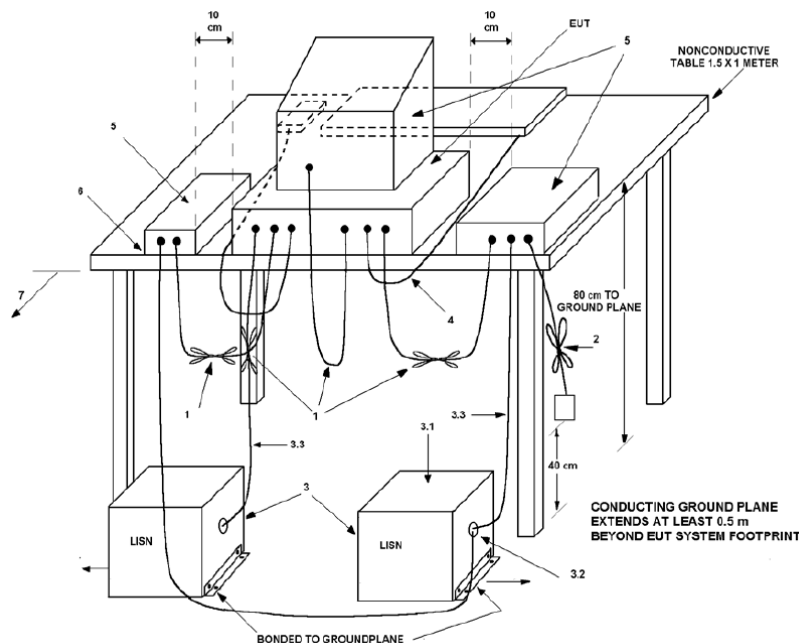
### 4.1 Test Channel

According to ANSI C63.10-2013 chapter 5.6.1 Table 4 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:

Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
0	2402	20	2442	39	2480

### 4.2 Test Setup

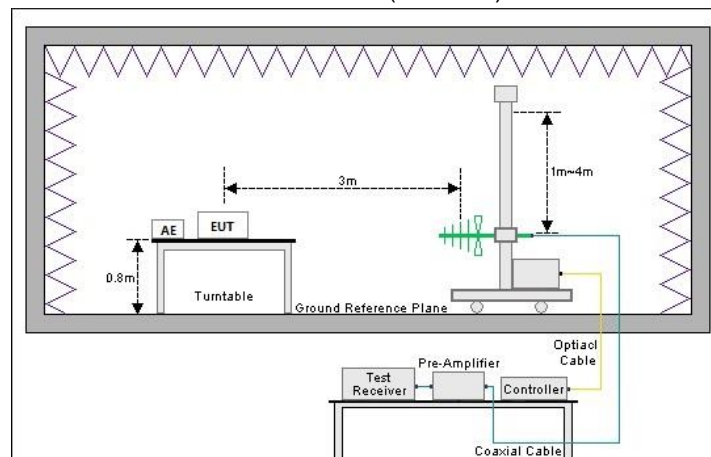
#### 1) Conducted emission measurement:



**Note:** The detailed descriptions please refer to Figure 8 of ANSI C63.4:2014.

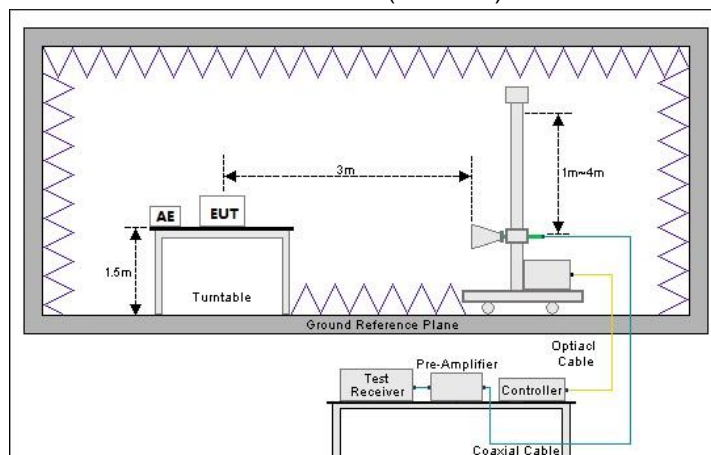
#### 2) Radiated emission measurement:

Below 1GHz (3m SAC)

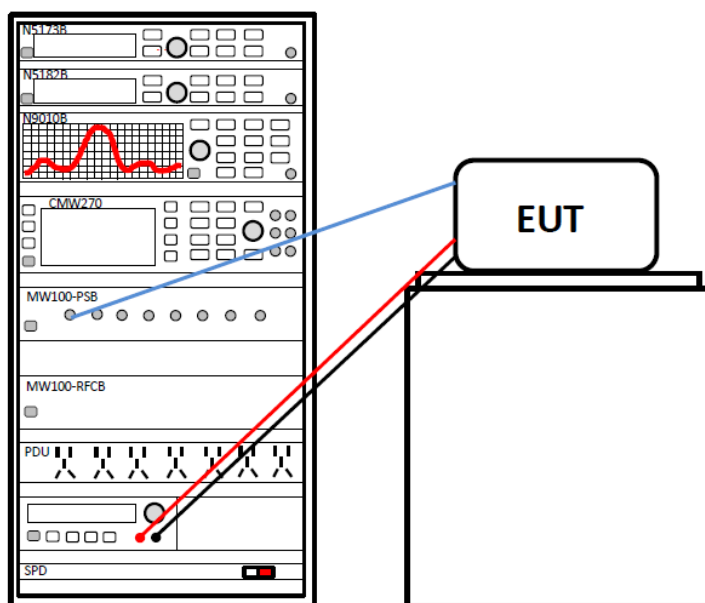




Above 1GHz (3m SAC)



### 3) Conducted test method



### 4.3 Test Procedure

Test method	Test step
Conducted emission	<ol style="list-style-type: none"> <li>1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.</li> </ol>
Radiated emission	<p><b>For below 1GHz:</b></p> <ol style="list-style-type: none"> <li>1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m.</li> <li>2. EUT works in each mode of operation that needs to be tested , and having the EUT continuously working, respectively on 3 axis (X, Y &amp; Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.</li> <li>3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.</li> </ol> <p><b>For above 1GHz:</b></p> <ol style="list-style-type: none"> <li>1. The EUT was placed on the tabletop of a rotating table 1.5 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the receiving antenna is 3 m.</li> <li>2. EUT works in each mode of operation that needs to be tested , and having the EUT continuously working, respectively on 3 axis (X, Y &amp; Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.</li> <li>3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.</li> </ol>
Conducted test method	<ol style="list-style-type: none"> <li>1. The BLE antenna port of EUT was connected to the test port of the test system through an RF cable.</li> <li>2. The EUT is keeping in continuous transmission mode and tested in all modulation modes.</li> <li>3. Open the test software, prepare a test plan, and control the system through the software. After the test is completed, the test report is exported through the test software.</li> </ol>

## 5 Test Results

### 5.1 Summary

#### 5.1.1 Clause and Data Summary

Test items	Standard clause	Test data	Result
Antenna Requirement	15.203 15.247 (b)(4)	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.
AC Power Line Conducted Emission	15.207	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.
Conducted Output Power	15.247 (b)(3)	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.
6dB Emission Bandwidth 99% Occupied Bandwidth	15.247 (a)(2)	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.
Power Spectral Density	15.247 (e)	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.
Band-edge Emission Conduction Spurious Emission	15.247 (d)	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.
Emissions in Restricted Frequency Bands	15.205 15.247 (d)	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.
Emissions in Non-restricted Frequency Bands	15.209 15.247(d)	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.	Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A.
<b>Remark:</b> 1. Please refer to report A2005306-C01-R01, FCC ID: 2ATCG-BB832QI4A issued by Shenzhen Alpha Product Testing Co., Ltd			
<b>Test Method:</b>	ANSI C63.10-2013 KDB 558074 D01 15.247 Meas Guidance v05r02		

### 5.1.2 Test Limit

Test items	Limit																														
AC Power Line Conducted Emission	<table><tr><th rowspan="2">Frequency (MHz)</th><th colspan="2">Limit (dBµV)</th></tr><tr><th>Quasi-Peak</th><th>Average</th></tr><tr><td>0.15 – 0.5</td><td>66 to 56 <small>Note 1</small></td><td>56 to 46 <small>Note 1</small></td></tr><tr><td>0.5 – 5</td><td>56</td><td>46</td></tr><tr><td>5 – 30</td><td>60</td><td>50</td></tr></table> <p><b>Note 1:</b> The limit level in dBµV decreases linearly with the logarithm of frequency. <b>Note 2:</b> The more stringent limit applies at transition frequencies.</p>	Frequency (MHz)	Limit (dBµV)		Quasi-Peak	Average	0.15 – 0.5	66 to 56 <small>Note 1</small>	56 to 46 <small>Note 1</small>	0.5 – 5	56	46	5 – 30	60	50																
Frequency (MHz)	Limit (dBµV)																														
	Quasi-Peak	Average																													
0.15 – 0.5	66 to 56 <small>Note 1</small>	56 to 46 <small>Note 1</small>																													
0.5 – 5	56	46																													
5 – 30	60	50																													
Conducted Output Power	For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.																														
6dB Emission Bandwidth	The minimum 6 dB bandwidth shall be at least 500 kHz.																														
99% Occupied Bandwidth	N/A																														
Power Spectral Density	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.																														
Band-edge Emission  Conduction Spurious Emission	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).																														
Emissions in Restricted Frequency Bands  Emissions in Non-restricted Frequency Bands	<table><tr><th rowspan="2">Frequency (MHz)</th><th colspan="2">Limit (dBµV/m)</th><th rowspan="2">Detector</th></tr><tr><th>@ 3m</th><th>@ 10m</th></tr><tr><td>30 – 88</td><td>40.0</td><td>30.0</td><td>Quasi-peak</td></tr><tr><td>88 – 216</td><td>43.5</td><td>33.5</td><td>Quasi-peak</td></tr><tr><td>216 – 960</td><td>46.0</td><td>36.0</td><td>Quasi-peak</td></tr><tr><td>960 – 1000</td><td>54.0</td><td>44.0</td><td>Quasi-peak</td></tr></table> <p><b>Note:</b> The more stringent limit applies at transition frequencies.</p> <table><tr><th rowspan="2">Frequency</th><th colspan="2">Limit (dBµV/m) @ 3m</th></tr><tr><th>Average</th><th>Peake</th></tr><tr><td>Above 1 GHz</td><td>54.0</td><td>74.0</td></tr></table> <p><b>Note:</b> The measurement bandwidth shall be 1 MHz or greater.</p>	Frequency (MHz)	Limit (dBµV/m)		Detector	@ 3m	@ 10m	30 – 88	40.0	30.0	Quasi-peak	88 – 216	43.5	33.5	Quasi-peak	216 – 960	46.0	36.0	Quasi-peak	960 – 1000	54.0	44.0	Quasi-peak	Frequency	Limit (dBµV/m) @ 3m		Average	Peake	Above 1 GHz	54.0	74.0
Frequency (MHz)	Limit (dBµV/m)		Detector																												
	@ 3m	@ 10m																													
30 – 88	40.0	30.0	Quasi-peak																												
88 – 216	43.5	33.5	Quasi-peak																												
216 – 960	46.0	36.0	Quasi-peak																												
960 – 1000	54.0	44.0	Quasi-peak																												
Frequency	Limit (dBµV/m) @ 3m																														
	Average	Peake																													
Above 1 GHz	54.0	74.0																													

## 5.2 RF Output Power Spot-check

### BLE-1M PHY:

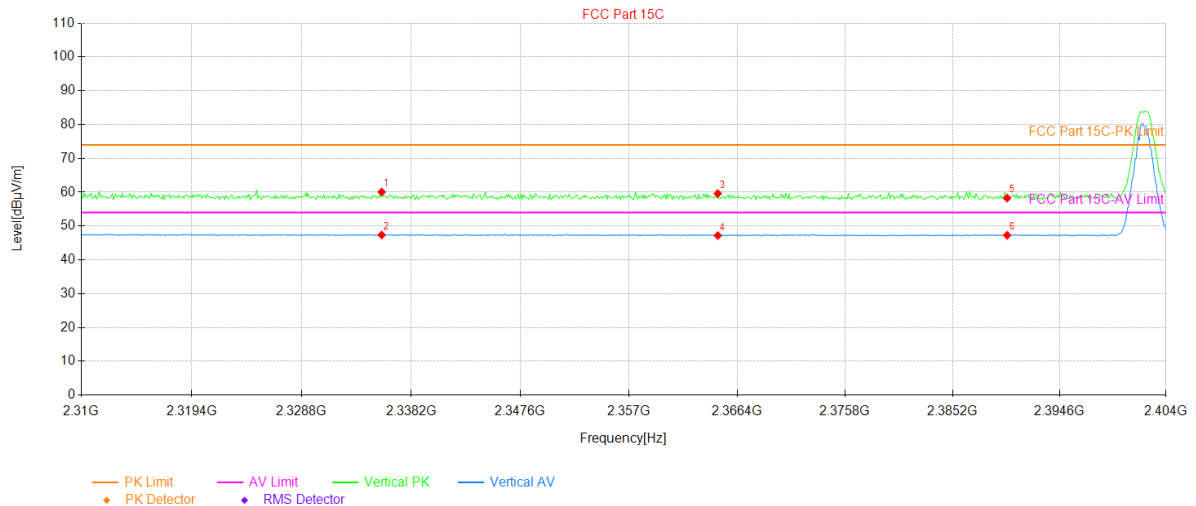
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	1.696	30	Pass
NVNT	BLE	2442	Ant1	1.861	30	Pass
NVNT	BLE	2480	Ant1	1.654	30	Pass

### BLE-2M PHY:

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	1.726	30	Pass
NVNT	BLE	2442	Ant1	1.855	30	Pass
NVNT	BLE	2480	Ant1	1.658	30	Pass

### 5.3 Emissions in Restricted Frequency Bands Spot-check

Product Name:	Stride	Product Model:	STR1000
Test By:	Real Chen	Test mode:	BLE Tx (LE 1M PHY)
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	DC 3.3V		



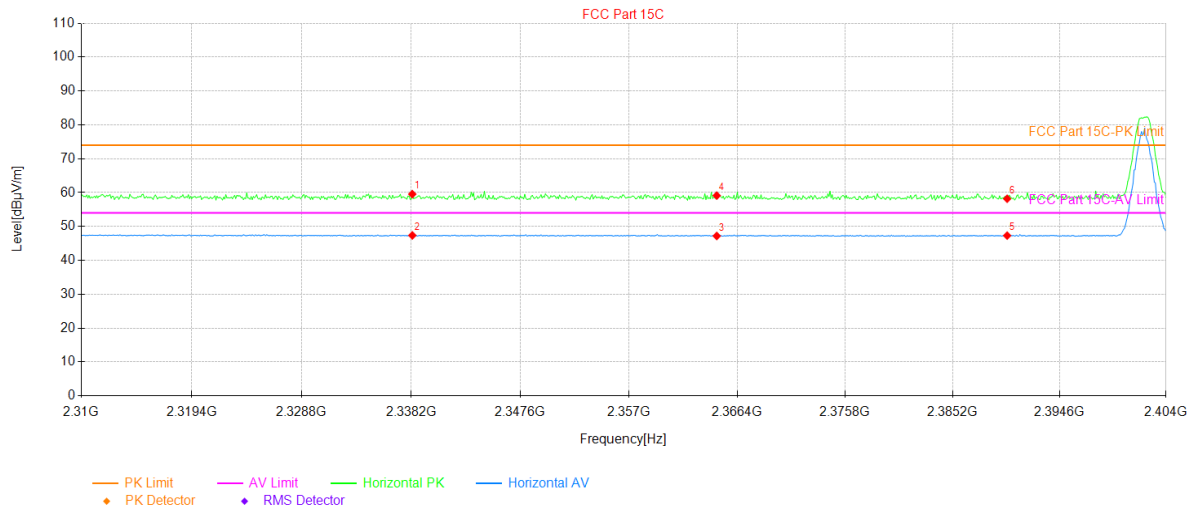
#### Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2335.66	23.90	36.17	60.07	74.00	13.93	133	PK	PASS	Vertical
2	2335.66	11.19	36.17	47.36	54.00	6.64	92	AV	PASS	Vertical
3	2364.71	23.27	36.34	59.61	74.00	14.39	319	PK	PASS	Vertical
4	2364.71	10.84	36.34	47.18	54.00	6.82	207	AV	PASS	Vertical
5	2390.00	21.79	36.47	58.26	74.00	15.74	193	PK	PASS	Vertical
6	2390.00	10.79	36.47	47.26	54.00	6.74	285	AV	PASS	Vertical

#### Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

Product Name:	Stride	Product Model:	STR1000
Test By:	Real Chen	Test mode:	BLE Tx (LE 1M PHY)
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	DC 3.3V		



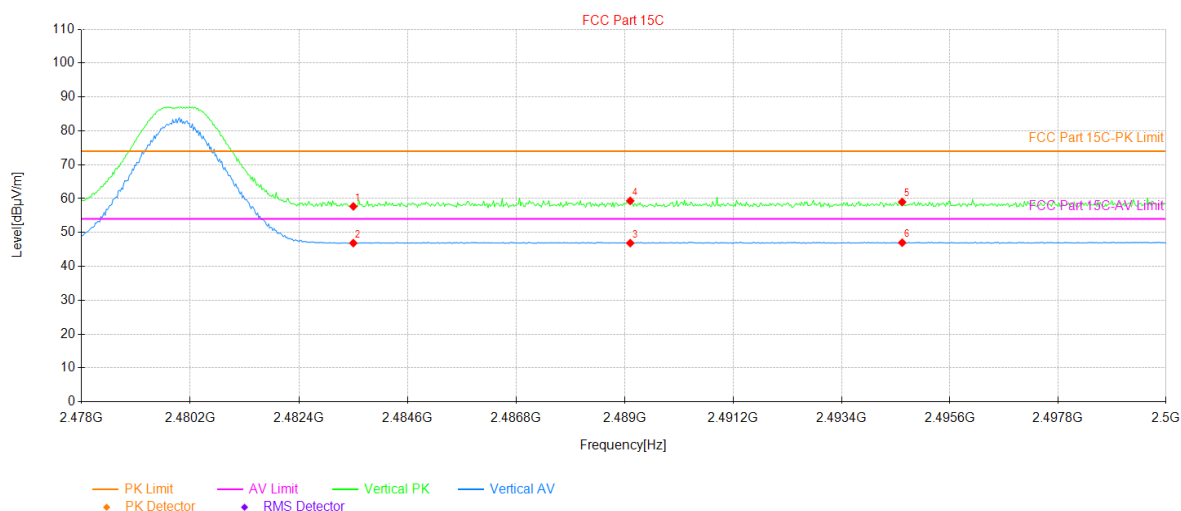
#### Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2338.29	23.37	36.18	59.55	74.00	14.45	2	PK	PASS	Horizontal
2	2338.29	11.19	36.18	47.37	54.00	6.63	2	AV	PASS	Horizontal
3	2364.61	10.86	36.34	47.20	54.00	6.80	75	AV	PASS	Horizontal
4	2364.61	22.77	36.34	59.11	74.00	14.89	217	PK	PASS	Horizontal
5	2390.00	10.83	36.47	47.30	54.00	6.70	172	AV	PASS	Horizontal
6	2390.00	21.72	36.47	58.19	74.00	15.81	268	PK	PASS	Horizontal

#### Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

Product Name:	Stride	Product Model:	STR1000
Test By:	Real Chen	Test mode:	BLE Tx (LE 1M PHY)
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	DC 3.3V		



#### Suspected Data List

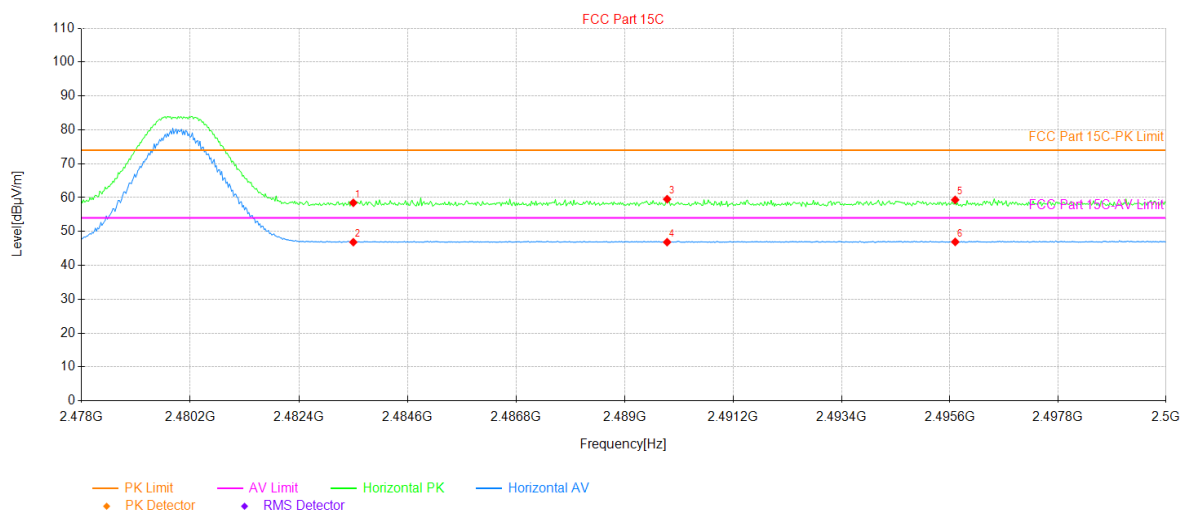
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2483.50	21.58	36.11	57.69	74.00	16.31	61	PK	PASS	Vertical
2	2483.50	10.76	36.11	46.87	54.00	7.13	34	AV	PASS	Vertical
3	2489.11	10.74	36.13	46.87	54.00	7.13	319	AV	PASS	Vertical
4	2489.11	23.20	36.13	59.33	74.00	14.67	210	PK	PASS	Vertical
5	2494.63	22.84	36.16	59.00	74.00	15.00	76	PK	PASS	Vertical
6	2494.63	10.83	36.16	46.99	54.00	7.01	76	AV	PASS	Vertical

#### Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).



Product Name:	Stride	Product Model:	STR1000
Test By:	Real Chen	Test mode:	BLE Tx (LE 1M PHY)
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	DC 3.3V		



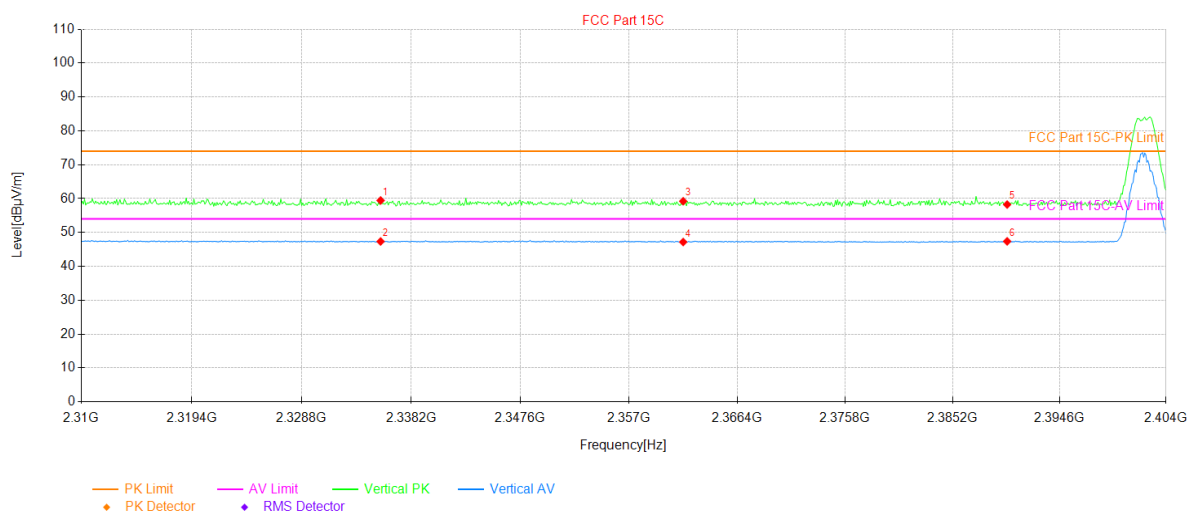
#### Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2483.50	22.36	36.11	58.47	74.00	15.53	311	PK	PASS	Horizontal
2	2483.50	10.73	36.11	46.84	54.00	7.16	131	AV	PASS	Horizontal
3	2489.86	23.39	36.14	59.53	74.00	14.47	22	PK	PASS	Horizontal
4	2489.86	10.72	36.14	46.86	54.00	7.14	146	AV	PASS	Horizontal
5	2495.71	23.16	36.16	59.32	74.00	14.68	26	PK	PASS	Horizontal
6	2495.71	10.76	36.16	46.92	54.00	7.08	358	AV	PASS	Horizontal

#### Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

Product Name:	Stride	Product Model:	STR1000
Test By:	Real Chen	Test mode:	BLE Tx (LE 2M PHY)
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	DC 3.3V		



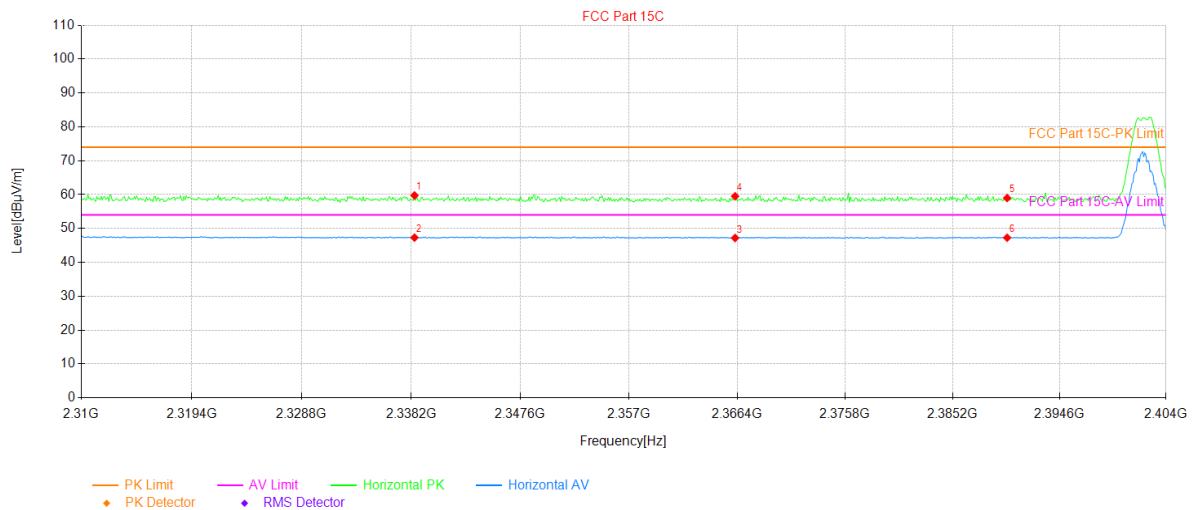
#### Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2335.57	23.27	36.17	59.44	74.00	14.56	181	PK	PASS	Vertical
2	2335.57	11.18	36.17	47.35	54.00	6.65	219	AV	PASS	Vertical
3	2361.70	22.90	36.33	59.23	74.00	14.77	86	PK	PASS	Vertical
4	2361.70	10.85	36.33	47.18	54.00	6.82	311	AV	PASS	Vertical
5	2390.00	21.78	36.47	58.25	74.00	15.75	237	PK	PASS	Vertical
6	2390.00	10.91	36.47	47.38	54.00	6.62	63	AV	PASS	Vertical

#### Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

Product Name:	Stride	Product Model:	STR1000
Test By:	Real Chen	Test mode:	BLE Tx (LE 2M PHY)
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	DC 3.3V		



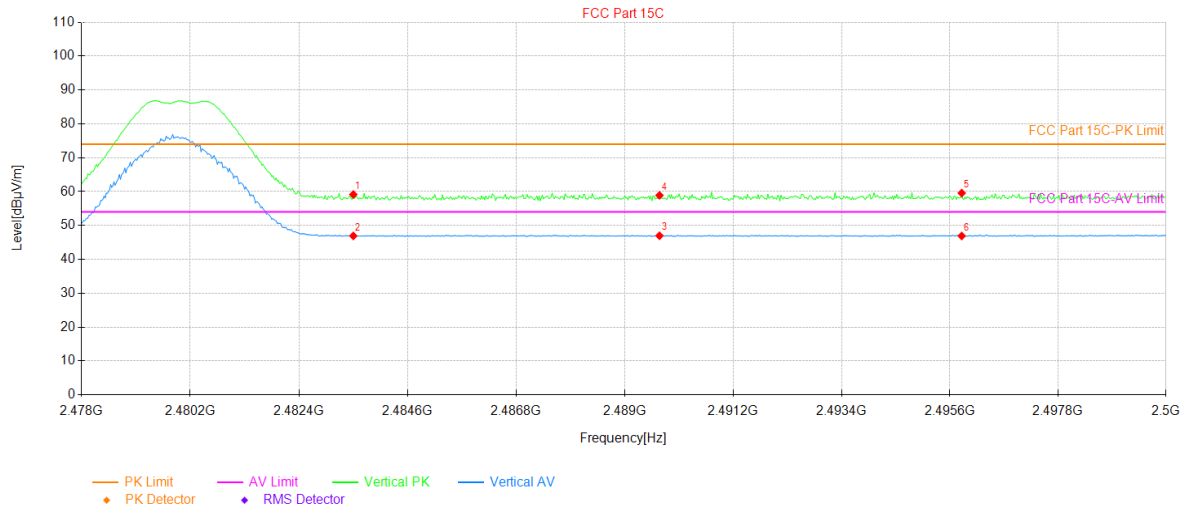
#### Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2338.48	23.56	36.19	59.75	74.00	14.25	109	PK	PASS	Horizontal
2	2338.48	11.11	36.19	47.30	54.00	6.70	38	AV	PASS	Horizontal
3	2366.21	10.85	36.35	47.20	54.00	6.80	360	AV	PASS	Horizontal
4	2366.21	23.16	36.35	59.51	74.00	14.49	213	PK	PASS	Horizontal
5	2390.00	22.51	36.47	58.98	74.00	15.02	83	PK	PASS	Horizontal
6	2390.00	10.81	36.47	47.28	54.00	6.72	20	AV	PASS	Horizontal

#### Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

Product Name:	Stride	Product Model:	STR1000
Test By:	Real Chen	Test mode:	BLE Tx (LE 2M PHY)
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	DC 3.3V		



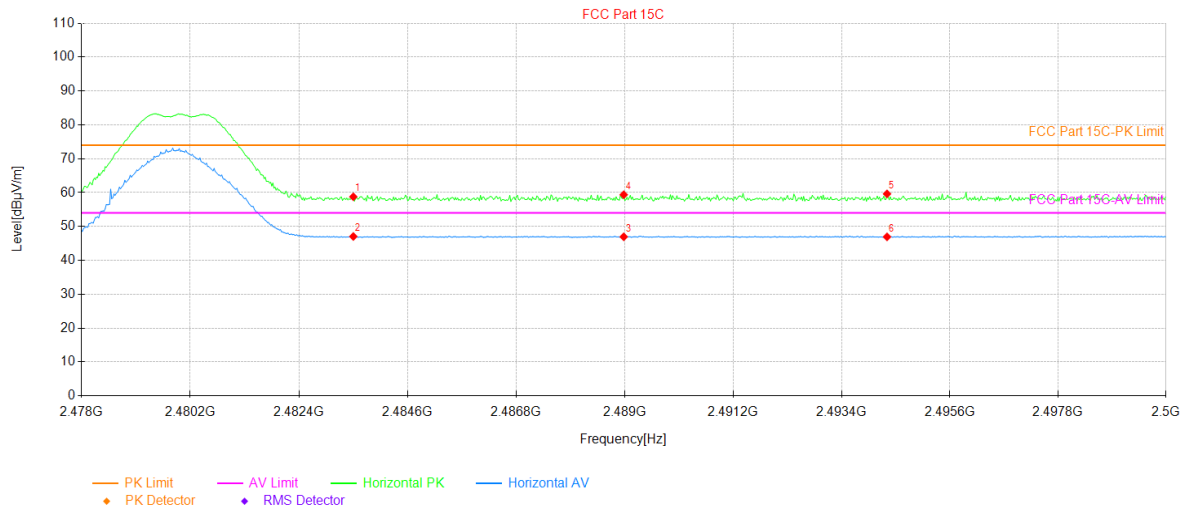
#### Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2483.50	23.04	36.11	59.15	74.00	14.85	80	PK	PASS	Vertical
2	2483.50	10.81	36.11	46.92	54.00	7.08	236	AV	PASS	Vertical
3	2489.70	10.84	36.13	46.97	54.00	7.03	180	AV	PASS	Vertical
4	2489.70	22.76	36.13	58.89	74.00	15.11	300	PK	PASS	Vertical
5	2495.84	23.40	36.16	59.56	74.00	14.44	87	PK	PASS	Vertical
6	2495.84	10.75	36.16	46.91	54.00	7.09	285	AV	PASS	Vertical

#### Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

Product Name:	Stride	Product Model:	STR1000
Test By:	Real Chen	Test mode:	BLE Tx (LE 2M PHY)
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	DC 3.3V		



#### Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Verdict	Polarity
1	2483.50	22.66	36.11	58.77	74.00	15.23	155	PK	PASS	Horizontal
2	2483.50	10.93	36.11	47.04	54.00	6.96	264	AV	PASS	Horizontal
3	2488.98	10.82	36.13	46.95	54.00	7.05	347	AV	PASS	Horizontal
4	2488.98	23.23	36.13	59.36	74.00	14.64	53	PK	PASS	Horizontal
5	2494.32	23.48	36.15	59.63	74.00	14.37	109	PK	PASS	Horizontal
6	2494.32	10.79	36.15	46.94	54.00	7.06	328	AV	PASS	Horizontal

#### Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

## 5.4 Radiated Spurious Emission Spot-check

BLE Tx (LE 1M PHY)						
Test channel: Lowest channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4804.00	55.28	-8.00	47.28	74.00	26.72	Vertical
4804.00	57.61	-8.00	49.61	74.00	24.39	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4804.00	49.91	-8.00	41.91	54.00	12.09	Vertical
4804.00	51.80	-8.00	43.80	54.00	10.20	Horizontal
Test channel: Middle channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4884.00	54.84	-7.45	47.39	74.00	26.61	Vertical
4884.00	57.99	-7.45	50.54	74.00	23.46	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4884.00	49.71	-7.45	42.26	54.00	11.74	Vertical
4884.00	51.66	-7.45	44.21	54.00	9.79	Horizontal
Test channel: Highest channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4960.00	54.95	-7.08	47.87	74.00	26.13	Vertical
4960.00	57.28	-7.08	50.20	74.00	23.80	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4960.00	50.34	-7.08	43.26	54.00	10.74	Vertical
4960.00	51.97	-7.08	44.89	54.00	9.11	Horizontal
<b>Remark:</b> 1. Level = Reading + Factor. 2. Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

BLE Tx (LE 2M PHY)						
Test channel: Lowest channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4804.00	54.89	-8.00	46.89	74.00	27.11	Vertical
4804.00	57.65	-8.00	49.65	74.00	24.35	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4804.00	50.49	-8.00	42.49	54.00	11.51	Vertical
4804.00	52.40	-8.00	44.40	54.00	9.60	Horizontal
Test channel: Middle channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4884.00	54.68	-7.45	47.23	74.00	26.77	Vertical
4884.00	58.16	-7.45	50.71	74.00	23.29	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4884.00	49.36	-7.45	41.91	54.00	12.09	Vertical
4884.00	51.38	-7.45	43.93	54.00	10.07	Horizontal
Test channel: Highest channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4960.00	54.69	-7.08	47.61	74.00	26.39	Vertical
4960.00	57.62	-7.08	50.54	74.00	23.46	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
4960.00	50.36	-7.08	43.28	54.00	10.72	Vertical
4960.00	51.89	-7.08	44.81	54.00	9.19	Horizontal
<b>Remark:</b> 1. Level = Reading + Factor. 2. Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

-----End of report-----