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# FCC Test Report

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Report No.: AGC01559200404FE02

**FCC ID** : 2AANZSTMSR  
**APPLICATION PURPOSE** : Original Equipment  
**PRODUCT DESIGNATION** : Stem Genius RC Speedster/ Roadster  
**BRAND NAME** : N/A  
**MODEL NAME** : STM-SR-ASST, STM-SR-GRN, STM-SR-YLW  
**APPLICANT** : DGL GROUP LTD.  
**DATE OF ISSUE** : May 27, 2020  
**STANDARD(S)** : FCC Part 15.247  
**REPORT VERSION** : V1.0

## Attestation of Global Compliance (Shenzhen) Co., Ltd

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### REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	May 27, 2020	Valid	Initial Release



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## 1. VERIFICATION OF COMPLIANCE

<b>Applicant</b>	DGL GROUP LTD.
<b>Address</b>	195 Raritan Center Parkway Edison, NJ 08837
<b>Manufacturer</b>	DGL GROUP LTD.
<b>Address</b>	195 Raritan Center Parkway Edison, NJ 08837
<b>Factory</b>	DGL GROUP LTD.
<b>Address</b>	195 Raritan Center Parkway Edison, NJ 08837
<b>Product Designation</b>	Stem Genius RC Speedster/ Roadster
<b>Brand Name</b>	N/A
<b>Test Model</b>	STM-SR-ASST
<b>Series Model</b>	STM-SR-GRN, STM-SR-YLW
<b>Difference Description</b>	All the same except for the model name and appearance modelling color
<b>Date of test</b>	Apr. 29, 2020 to May 25, 2020
<b>Deviation</b>	No any deviation from the test method
<b>Condition of Test Sample</b>	Normal
<b>Test Result</b>	Pass
<b>Report Template</b>	AGCRT-US-BLE/RF

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC part 15.247.

Prepared By   
 Erik Yang  
 (Project Engineer) May 25, 2020

Reviewed By   
 Max Zhang  
 (Reviewer) May 27, 2020

Approved By   
 Forrest Lei  
 (Authorized Officer) May 27, 2020



## 2.GENERAL INFORMATION

### 2.1PRODUCT DESCRIPTION

The EUT is designed as a “Stem Genius RC Speedster/ Roadster”. It is designed by way of utilizing the GPRS technology to achieve the system operation.

A major technical description of EUT is described as following

<b>Operation Frequency</b>	2.405 GHz to 2.475GHz
<b>RF Output Power</b>	-2.463dBm(Max)
<b>Modulation</b>	GFSK
<b>Number of channels</b>	71 Channel
<b>Antenna Designation</b>	Integral Antenna(Comply with requirements of the FCC part 15.203)
<b>Antenna Gain</b>	0dBi
<b>Hardware Version</b>	SY-8001-1
<b>Software Version</b>	N/A
<b>Power Supply</b>	DC3V by battery

### 2.2. TABLE OF CARRIER FREQUENCIES

Frequency Band	Channel Number	Frequency
2400~2483.5MHZ	1	2405MHZ
	2	2406MHZ
	3	2407MHZ
	4	2408MHZ
	5	2409MHZ
	6	2410MHZ
	:	:
	70	2474MHZ
	71	2475MHZ



### 2.3 RELATED SUBMITTAL(S)/GRANT(S)

This submittal(s) (test report) is intended for **FCC ID: 2AANZSTMSR** filing to comply with the FCC Part 15.247 requirements.

### 2.4 TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

### 2.5 SPECIAL ACCESSORIES

Refer to section 2.2.

### 2.6 EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.



### 3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95%.

- Uncertainty of Conducted Emission,  $U_c = \pm 3.2$  dB
- Uncertainty of Radiated Emission below 1GHz,  $U_c = \pm 3.9$  dB
- Uncertainty of Radiated Emission above 1GHz,  $U_c = \pm 4.8$  dB
- Uncertainty of total RF power, conducted,  $U_c = \pm 0.8$  dB
- Uncertainty of RF power density, conducted,  $U_c = \pm 2.6$  dB
- Uncertainty of spurious emissions, conducted,  $U_c = \pm 2.7$  dB
- Uncertainty of Occupied Channel Bandwidth:  $U_c = \pm 2$  %





#### 4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel TX(2405MHz)
2	Middle channel TX(2440MHz)
3	High channel TX(2475MHz)

Note:

1. Only the result of the worst case was recorded in the report, if no other cases.
2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
3. For Conducted Test method, a temporary antenna connector is provided by the manufacture.
4. The EUT enters test modes by pressing button of EUT.



## 5. SYSTEM TEST CONFIGURATION

### 5.1 CONFIGURATION OF TESTED SYSTEM



### 5.2 EQUIPMENT USED IN TESTED SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	Stem Genius RC Speedster/ Roadster	STM-SR-ASST	2AANZSTMSR	EUT

### 5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
15.247 (b)(3)	Peak Output Power	Compliant
15.247 (a)(2)	6 dB Bandwidth	Compliant
15.247 (d)	Conducted Spurious Emission	Compliant
15.247 (e)	Maximum Conducted Output Power Density	Compliant
15.209	Radiated Emission	Compliant
15.207	Conducted Emission	N/A

Note: The EUT is only powered by battery.



## 6. TEST FACILITY

<b>Test Site</b>	Attestation of Global Compliance (Shenzhen) Co., Ltd
<b>Location</b>	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
<b>Designation Number</b>	CN1259
<b>FCC Test Firm Registration Number</b>	975832
<b>A2LA Cert. No.</b>	5054.02
<b>Description</b>	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA

### TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Jun. 12, 2019	Jun. 26, 2020
EXA Signal Analyzer	Agilent	N9010A	MY53470504	Dec. 12, 2019	Dec. 11, 2020
2.4GHz Fliter	EM Electronics	2400-2500MHz	N/A	Mar. 23, 2020	Mar. 22, 2021
Attenuator	ZHINAN	E-002	N/A	Aug. 26, 2019	Aug. 25, 2020
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep. 09, 2019	Sep. 08, 2021
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	Jun. 14, 2018	Jun. 13, 2020
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	May. 26, 2018	May. 25, 2020
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Oct. 15, 2019	Oct. 14, 2020
ANTENNA	SCHWARZBECK	VULB9168	494	Jan. 09, 2019	Jan. 08, 2021
Test software	Tonscend	JS32-RE (Ver.2.5)	N/A	N/A	N/A



## 7. PEAK OUTPUT POWER

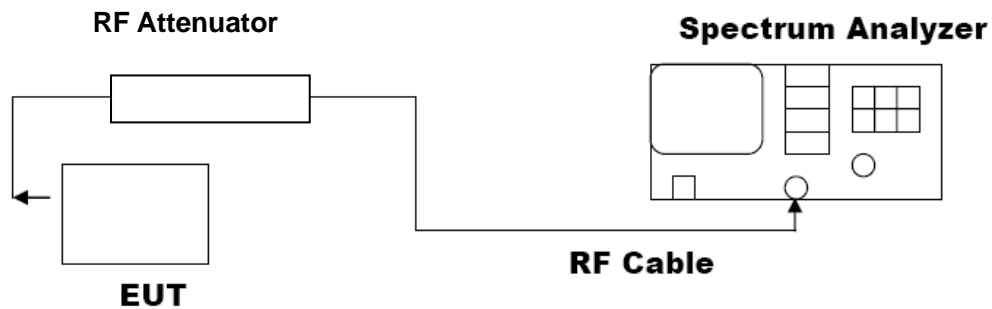
### 7.1. MEASUREMENT PROCEDURE

For peak power test:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2.  $RBW \geq DTS$  bandwidth
3.  $VBW \geq 3 * RBW$ .
4.  $SPAN \geq VBW$ .
5. Sweep: Auto.
6. Detector function: Peak.
7. Trace: Max hold.

Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power, after any corrections for external attenuators and cables.

### 7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION) PEAK POWER TEST SETUP



### 7.3. LIMITS AND MEASUREMENT RESULT

PEAK OUTPUT POWER MEASUREMENT RESULT FOR GFSK MOUDULATION			
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.405	-3.667	30	Pass
2.440	-3.756	30	Pass
2.475	-2.463	30	Pass

CH1

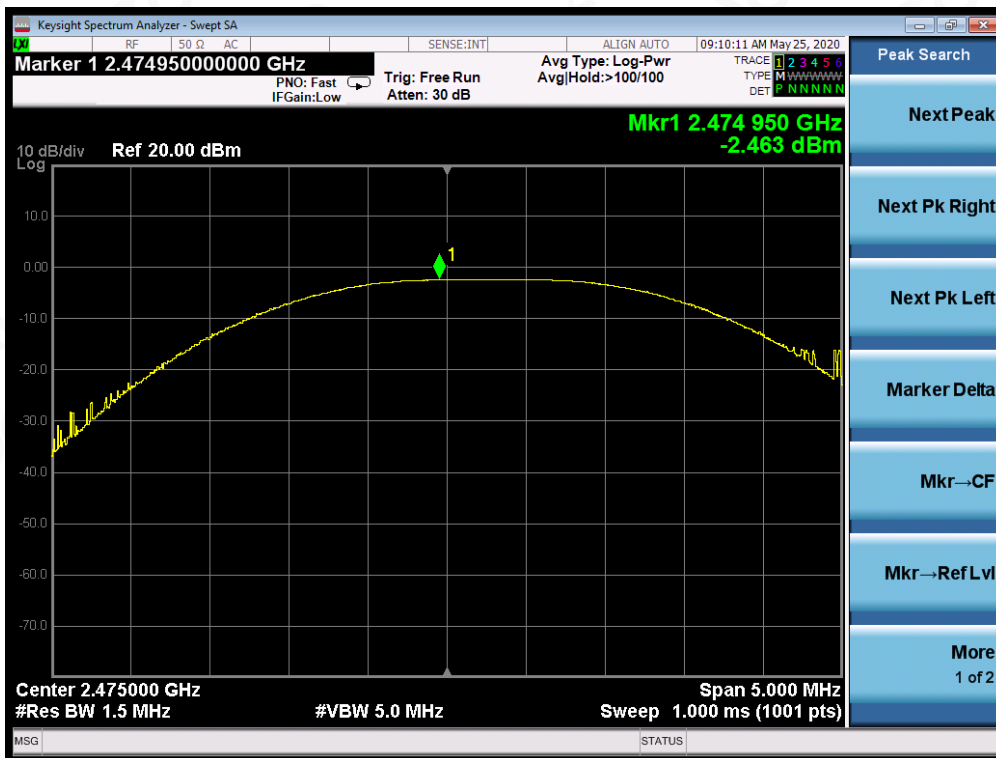




CH36



CH71



## 8. 6 DB BANDWIDTH

### 8.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
3. Set SPA Centre Frequency = Operation Frequency, RBW= 100 KHz, VBW $\geq$ 3 $\times$ RBW.
4. Set SPA Trace 1 Max hold, then View.

**Note:** The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

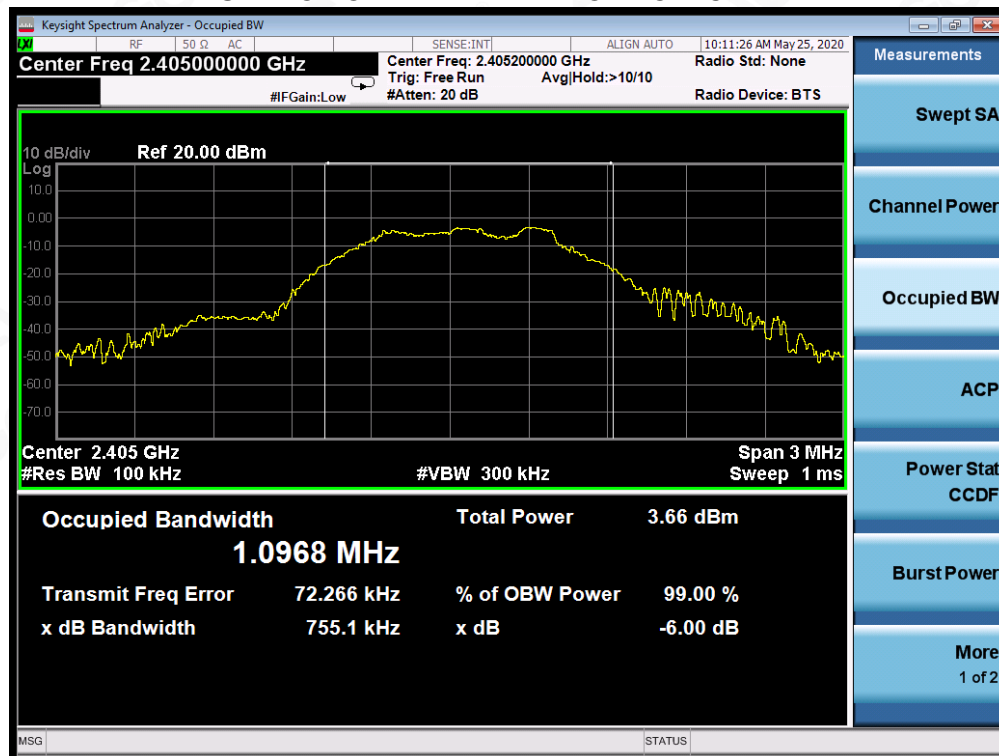
### 8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 7.2.

### 8.3. LIMITS AND MEASUREMENT RESULTS

LIMITS AND MEASUREMENT RESULT			
Applicable Limits	Applicable Limits		
	Test Data (kHz)		Criteria
>500KHZ	Low Channel	755.1	PASS
	Middle Channel	1083	PASS
	High Channel	767	PASS

TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



### TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



### TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



## 9. CONDUCTED SPURIOUS EMISSION

### 9.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
3. Set SPA Trace 1 Max hold, then View.

**Note:** The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

### 9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 7.2.

### 9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6.

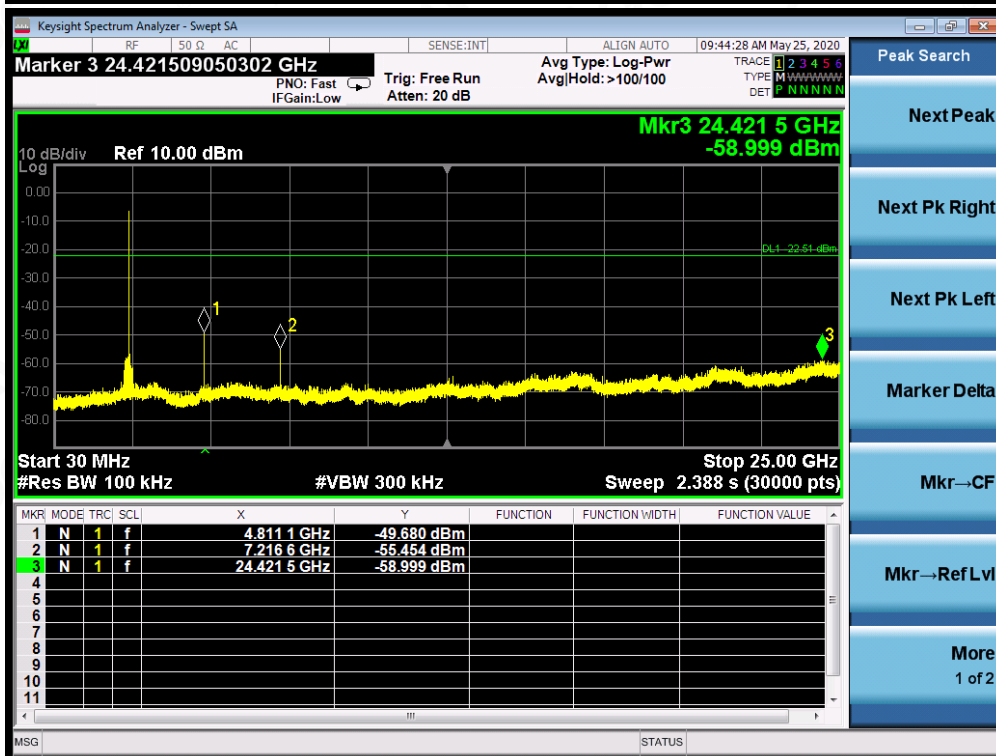
### 9.4. LIMITS AND MEASUREMENT RESULT

LIMITS AND MEASUREMENT RESULT		
Applicable Limits	Measurement Result	
	Test Data	Criteria
In any 100 KHz Bandwidth Outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produce by the intentional radiator shall be at least 20 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power.	At least -20dBc than the reference level	PASS



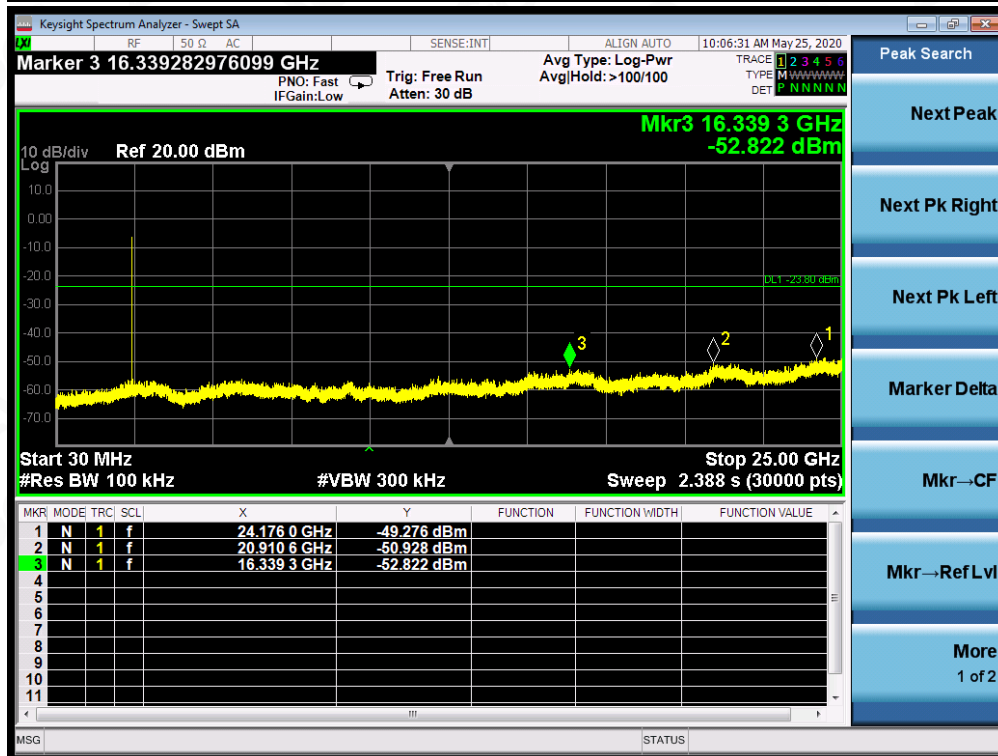
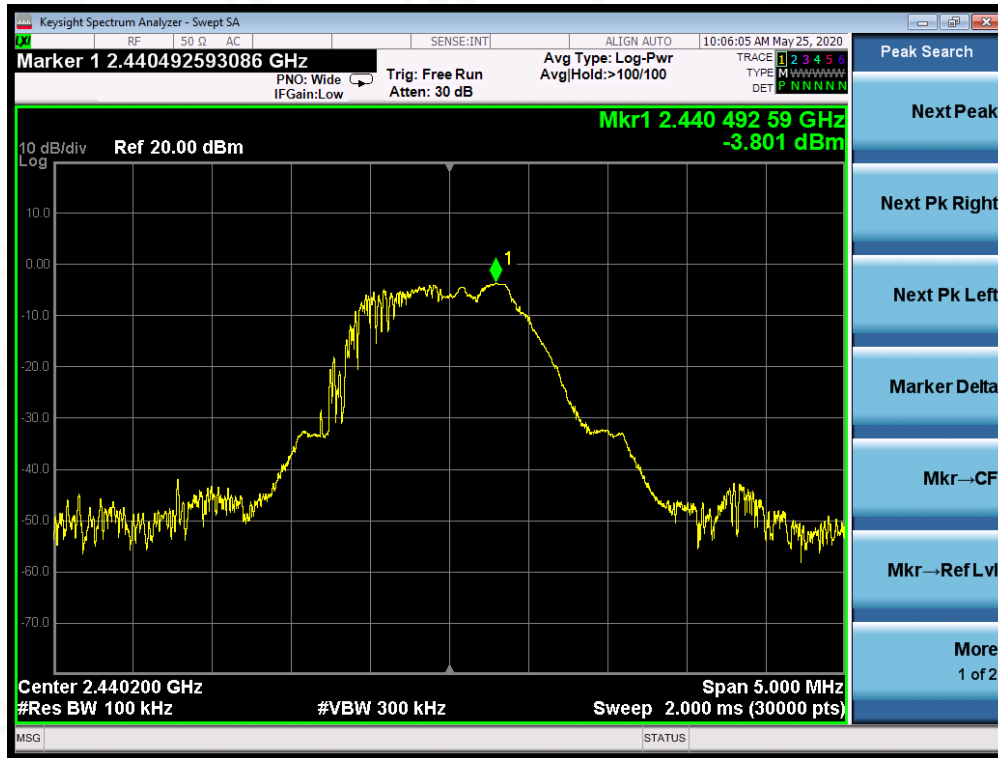


**TEST RESULT FOR ENTIRE FREQUENCY RANGE**  
**GPRS MODULATION IN LOW CHANNEL**

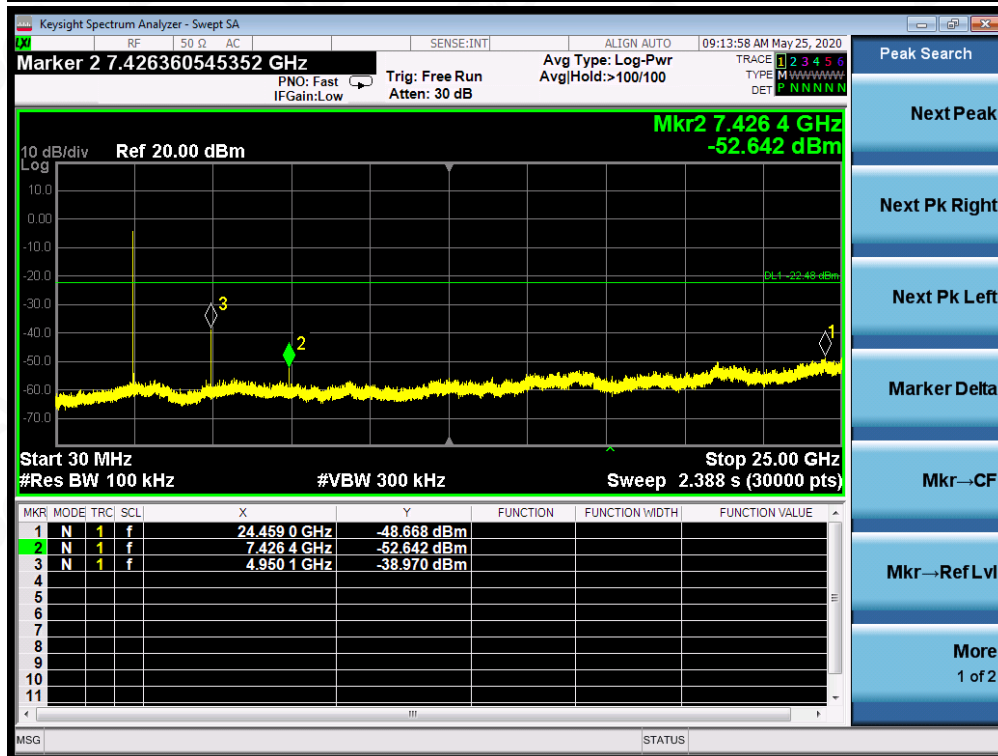




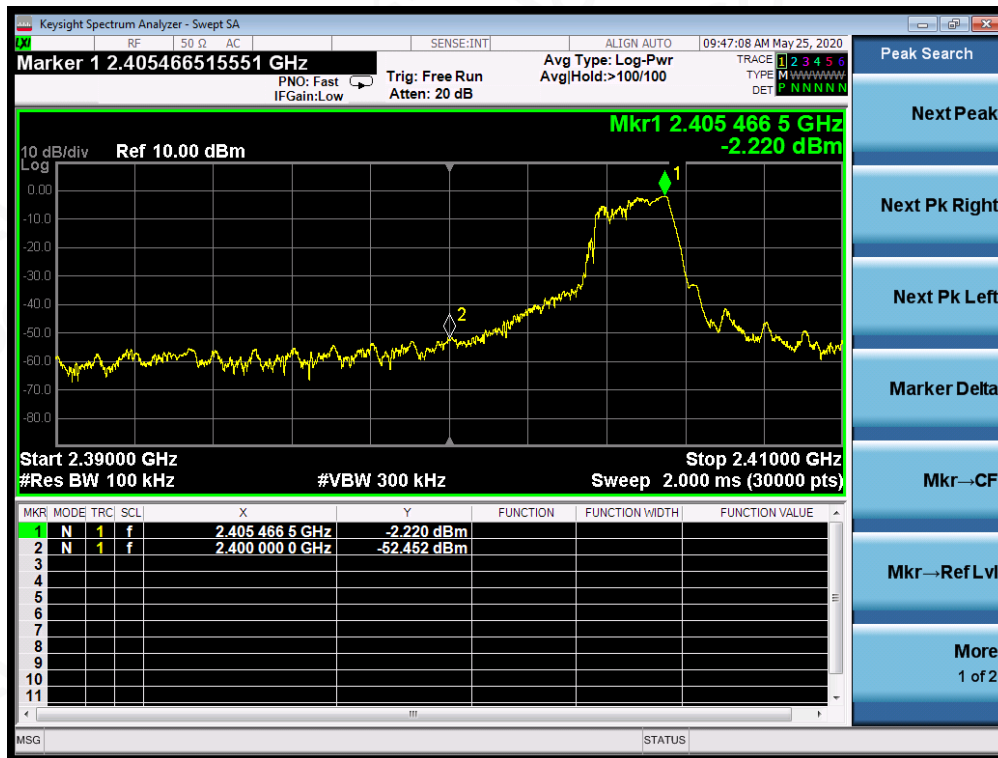
### GPRS MODULATION IN MIDDLE CHANNEL



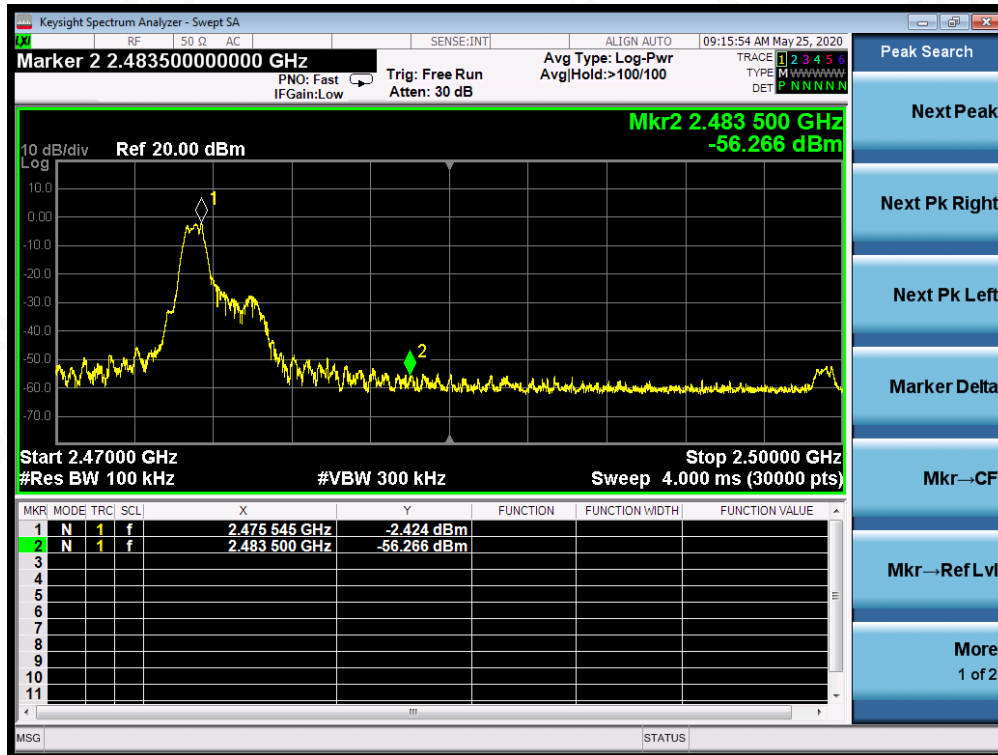
### GPRS MODULATION IN HIGH CHANNEL



### TEST RESULT FOR BAND EDGE GPRS MODULATION IN LOW CHANNEL



### GPRS MODULATION IN HIGH CHANNEL



## 10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY

### 10.1 MEASUREMENT PROCEDURE

- (1). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- (2). Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- (3). Set SPA Trace 1 Max hold, then View.

Note: The method of PKPSD in the KDB 558074 item 10.2 was used in this testing.

### 10.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

Refer To Section 7.2.

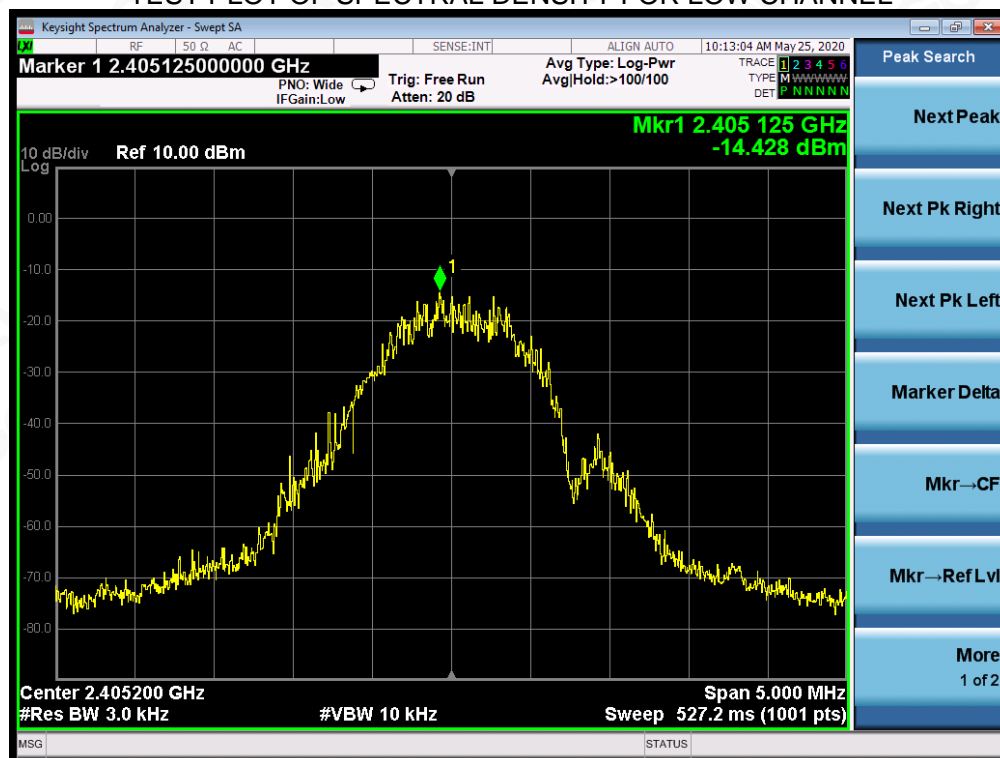
### 10.3 MEASUREMENT EQUIPMENT USED

Refer To Section 6.

### 10.4 LIMITS AND MEASUREMENT RESULT

Channel No.	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-14.428	8	Pass
Middle Channel	-15.815	8	Pass
High Channel	-14.406	8	Pass

TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL





TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL



TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL





## 11. RADIATED EMISSION

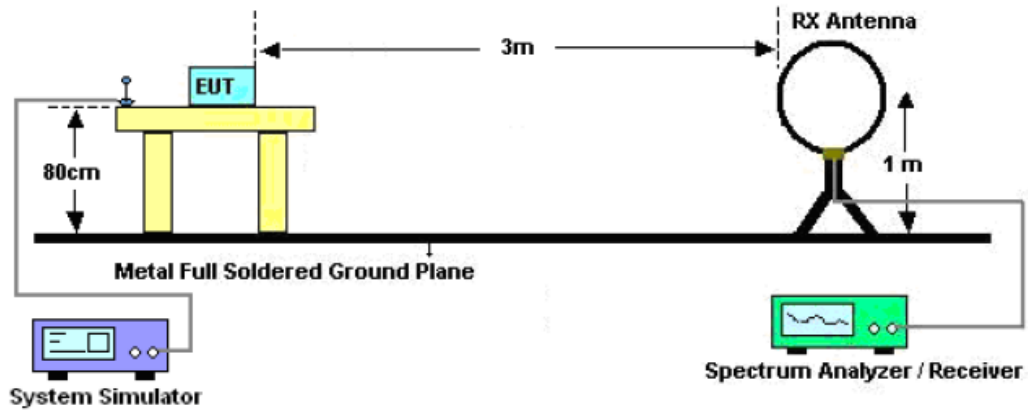
### 11.1. MEASUREMENT PROCEDURE

1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.

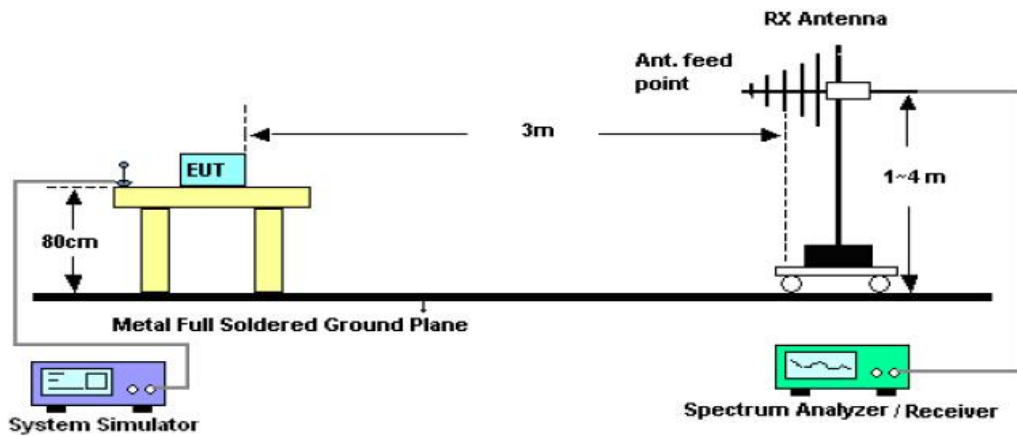


### 11.2. TEST SETUP

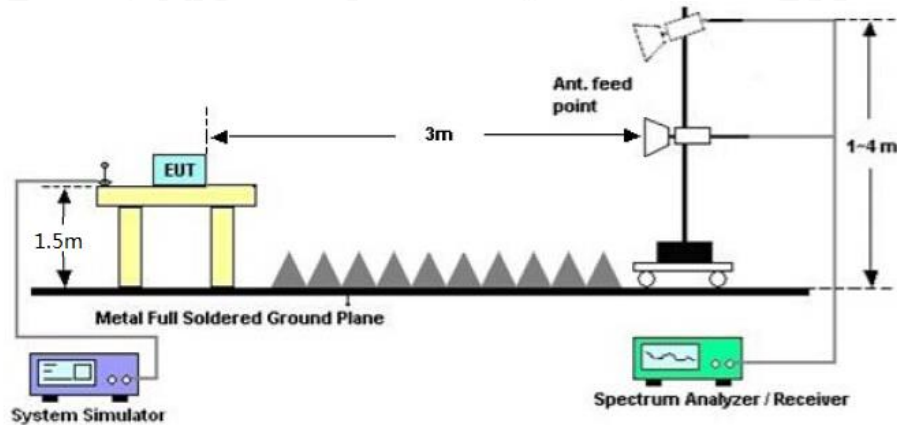
Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



**11.3. LIMITS AND MEASUREMENT RESULT**

15.209 Limit in the below table has to be followed

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Note: All modes were tested For restricted band radiated emission, the test records reported below are the worst result compared to other modes.

**11.4. TEST RESULT**

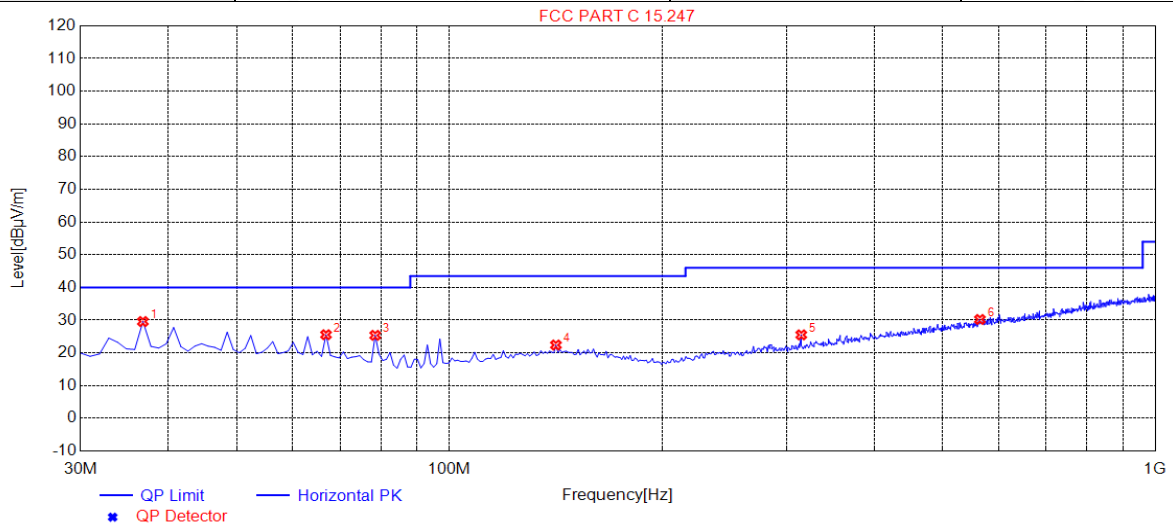
**RADIATED EMISSION BELOW 30MHZ**

No emission found between lowest internal used/generated frequencies to 30MHz.



**RADIATED EMISSION BELOW 1GHZ**

<b>EUT</b>	Stem Genius RC Speedster/ Roadster	<b>Model Name</b>	STM-SR-ASST
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 3	<b>Antenna</b>	Horizontal



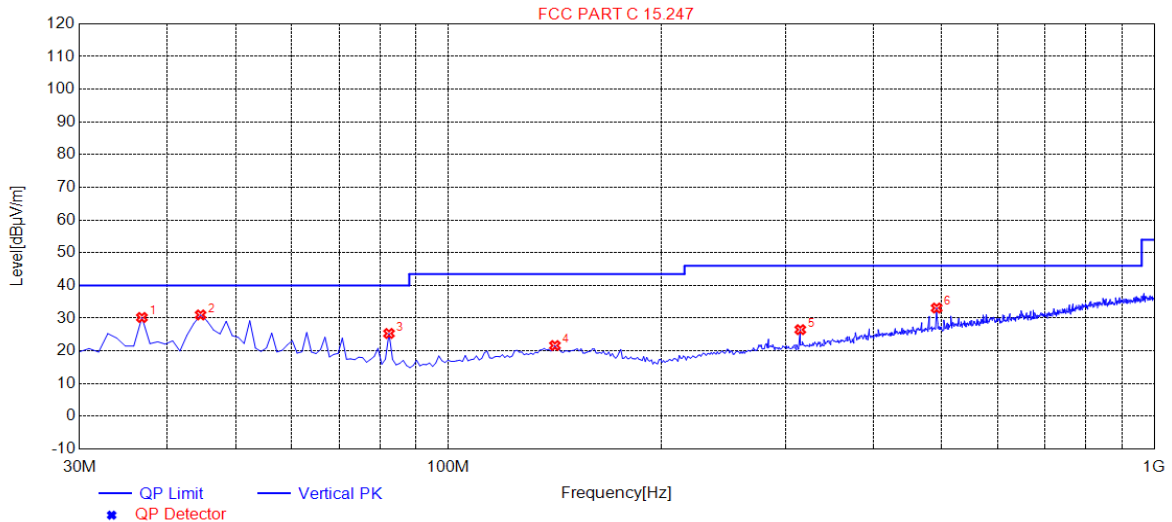
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	36.7900	29.59	14.16	40.00	10.41	200	108	Horizontal
2	66.8600	25.56	12.76	40.00	14.44	200	284	Horizontal
3	78.5000	25.38	10.46	40.00	14.62	200	150	Horizontal
4	141.5500	22.41	14.88	43.50	21.09	100	34	Horizontal
5	315.1800	25.52	16.48	46.00	20.48	100	7	Horizontal
6	564.4700	30.23	23.54	46.00	15.77	100	221	Horizontal

**RESULT: PASS**





<b>EUT</b>	Stem Genius RC Speedster/ Roadster	<b>Model Name</b>	STM-SR-ASST
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 3	<b>Antenna</b>	Vertical



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	36.7900	30.22	14.16	40.00	9.78	100	126	Vertical
2	44.5500	30.99	14.82	40.00	9.01	100	134	Vertical
3	82.3800	25.33	10.17	40.00	14.67	100	89	Vertical
4	141.5500	21.64	14.88	43.50	21.86	100	11	Vertical
5	315.1800	26.49	16.48	46.00	19.51	100	144	Vertical
6	491.7200	33.11	21.98	46.00	12.89	100	66	Vertical

**RESULT: PASS**

**Note:**

1. Factor=Antenna Factor + Cable loss, Margin= Limit - Level.
2. All test modes had been tested. The mode 3 is the worst case and recorded in the report.





**RADIATED EMISSION ABOVE 1GHZ**

<b>EUT</b>	Stem Genius RC Speedster/ Roadster	<b>Model Name</b>	STM-SR-ASST
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 1	<b>Antenna</b>	Horizontal

Frequency (MHz)	Meter Reading (dBµV)	Factor (dB)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Value Type
4810.000	48.56	0.08	48.64	74	-25.36	peak
4810.000	40.23	0.08	40.31	54	-13.69	AVG
7215.000	43.72	2.21	45.93	74	-28.07	peak
7215.000	35.18	2.21	37.39	54	-16.61	AVG

Remark:  
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

<b>EUT</b>	Stem Genius RC Speedster/ Roadster	<b>Model Name</b>	STM-SR-ASST
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 1	<b>Antenna</b>	Vertical

Frequency (MHz)	Meter Reading (dBµV)	Factor (dB)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Value Type
4810.000	45.93	0.08	46.01	74	-27.99	peak
4810.000	38.14	0.08	38.22	54	-15.78	AVG
7215.000	42.53	2.21	44.74	74	-29.26	peak
7215.000	34.17	2.21	36.38	54	-17.62	AVG

Remark:  
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



<b>EUT</b>	Stem Genius RC Speedster/ Roadster	<b>Model Name</b>	STM-SR-ASST
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 2	<b>Antenna</b>	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4880.000	47.61	0.14	47.75	74	-26.25	peak
4880.000	38.25	0.14	38.39	54	-15.61	AVG
7320.000	43.94	2.36	46.3	74	-27.7	peak
7320.000	34.03	2.36	36.39	54	-17.61	AVG

Remark:  
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

<b>EUT</b>	Stem Genius RC Speedster/ Roadster	<b>Model Name</b>	STM-SR-ASST
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 2	<b>Antenna</b>	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4880.000	46.82	0.14	46.96	74	-27.04	peak
4880.000	38.16	0.14	38.3	54	-15.7	AVG
7320.000	42.49	2.36	44.85	74	-29.15	peak
7320.000	35.14	2.36	37.5	54	-16.5	AVG

Remark:  
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



<b>EUT</b>	Stem Genius RC Speedster/ Roadster	<b>Model Name</b>	STM-SR-ASST
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 3	<b>Antenna</b>	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4950.000	46.18	0.22	46.4	74	-27.6	peak
4950.000	37.36	0.22	37.58	54	-16.42	AVG
7425.000	43.59	2.64	46.23	74	-27.77	peak
7425.000	35.14	2.64	37.78	54	-16.22	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

<b>EUT</b>	Stem Genius RC Speedster/ Roadster	<b>Model Name</b>	STM-SR-ASST
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 3	<b>Antenna</b>	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4950.000	45.91	0.22	46.13	74	-27.87	peak
4950.000	36.14	0.22	36.36	54	-17.64	AVG
7425.000	42.48	2.64	45.12	74	-28.88	peak
7425.000	34.18	2.64	36.82	54	-17.18	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

**RESULT: PASS**

**Note:**

Other emissions from 1G to 25 GHz are considered as ambient noise. No recording in the test report.

Factor = Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

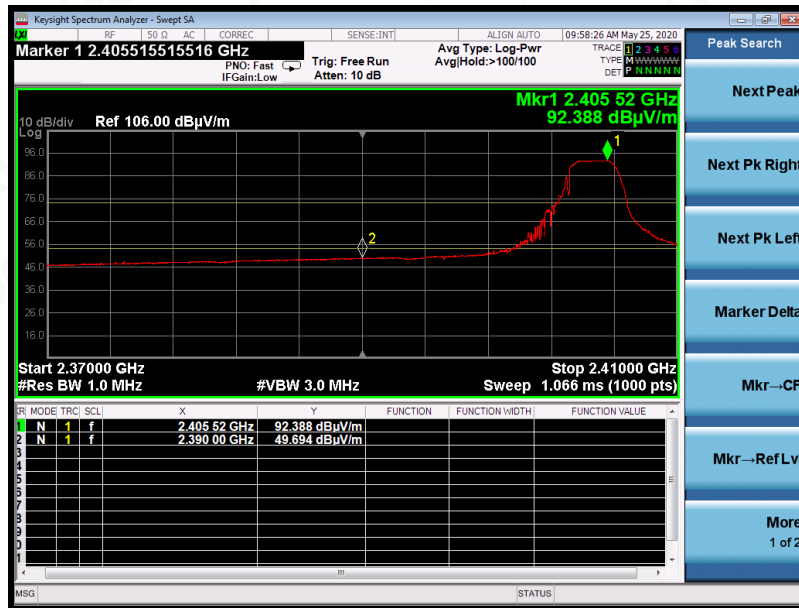
The “Factor” value can be calculated automatically by software of measurement system.



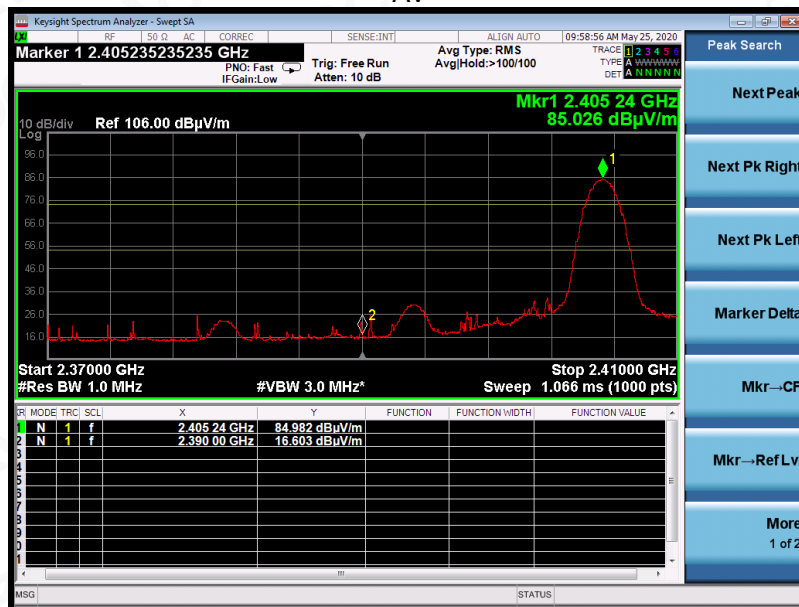
**TEST RESULT FOR RESTRICTED BANDS REQUIREMENTS**

<b>EUT</b>	Stem Genius RC Speedster/ Roadster	<b>Model Name</b>	STM-SR-ASST
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 1	<b>Antenna</b>	Horizontal

PK



AV



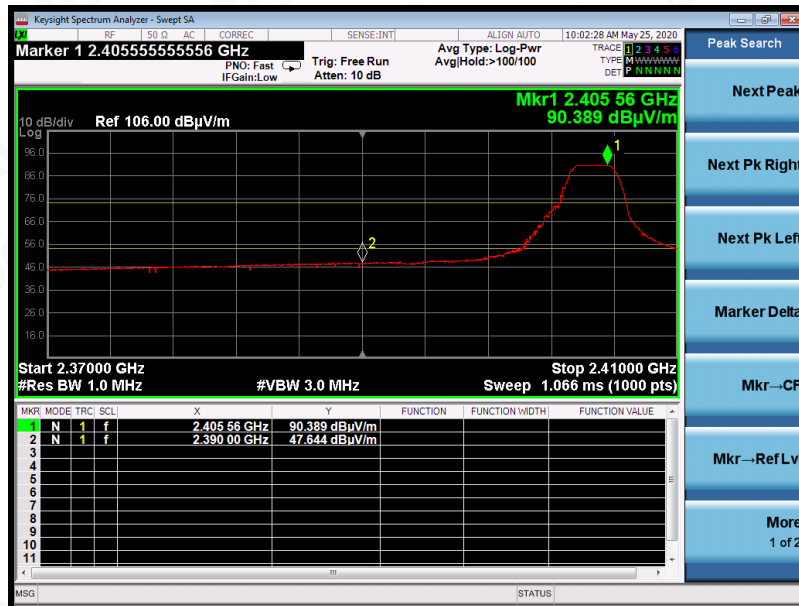
**RESULT: PASS**



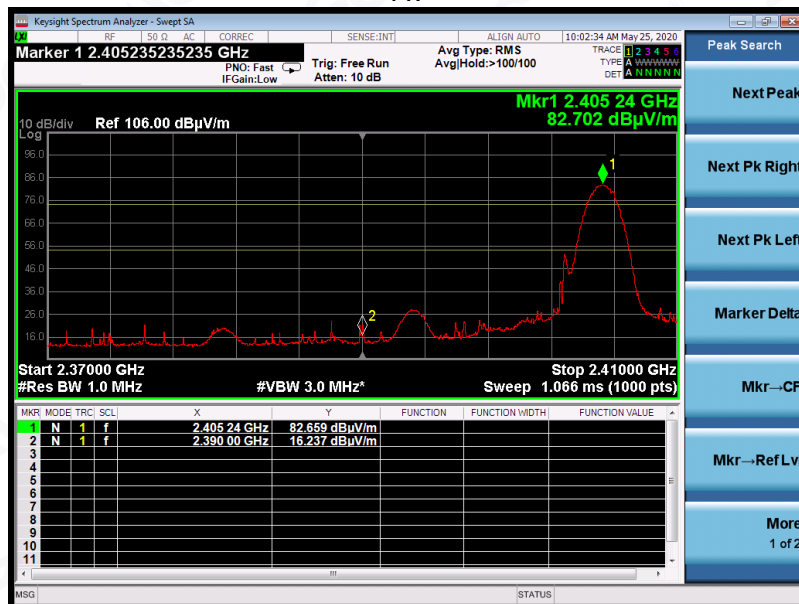


EUT	Stem Genius RC Speedster/ Roadster	Model Name	STM-SR-ASST
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical

PK



AV

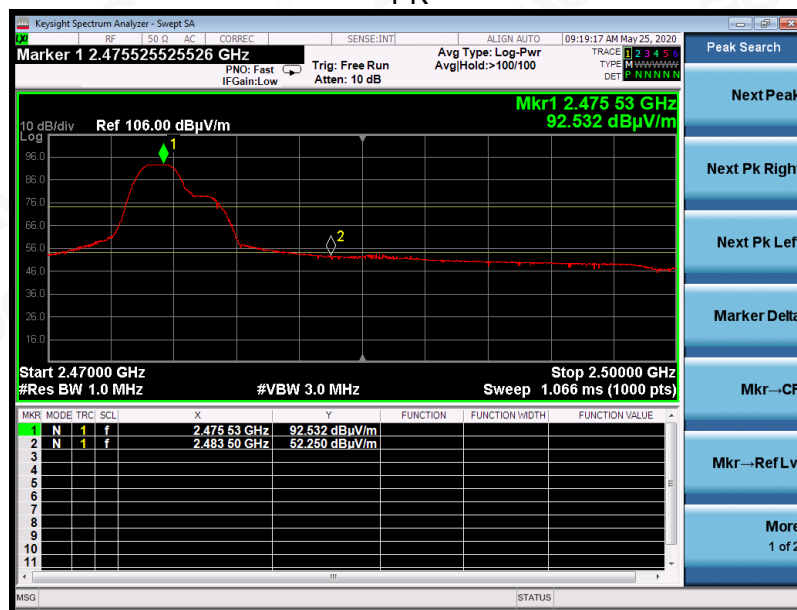


RESULT: PASS



EUT	Stem Genius RC Speedster/ Roadster	Model Name	STM-SR-ASST
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Horizontal

PK



AV

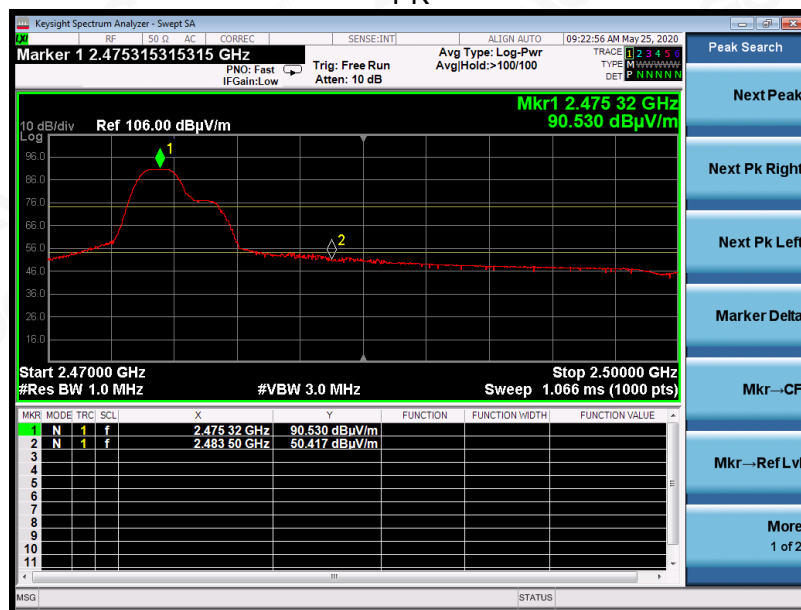


RESULT: PASS



EUT	Stem Genius RC Speedster/ Roadster	Model Name	STM-SR-ASST
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Vertical

PK



AV



**RESULT: PASS**

**Note:** The factor had been edited in the “Input Correction” of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB(µV) to represent the Amplitude. Use the F dB(µV/m) to represent the Field Strength. So A=F.





## APPENDIX A: PHOTOGRAPHS OF TEST SETUP

### RADIATED EMISSION TEST SETUP BELOW 1GHZ



### RADIATED EMISSION TEST SETUP ABOVE 1GHZ





**APPENDIX B: PHOTOGRAPHS OF EUT**

TOP VIEW OF EUT



BOTTOM VIEW OF EUT





FRONT VIEW OF EUT



BACK VIEW OF EUT





LEFT VIEW OF EUT



RIGHT VIEW OF EUT

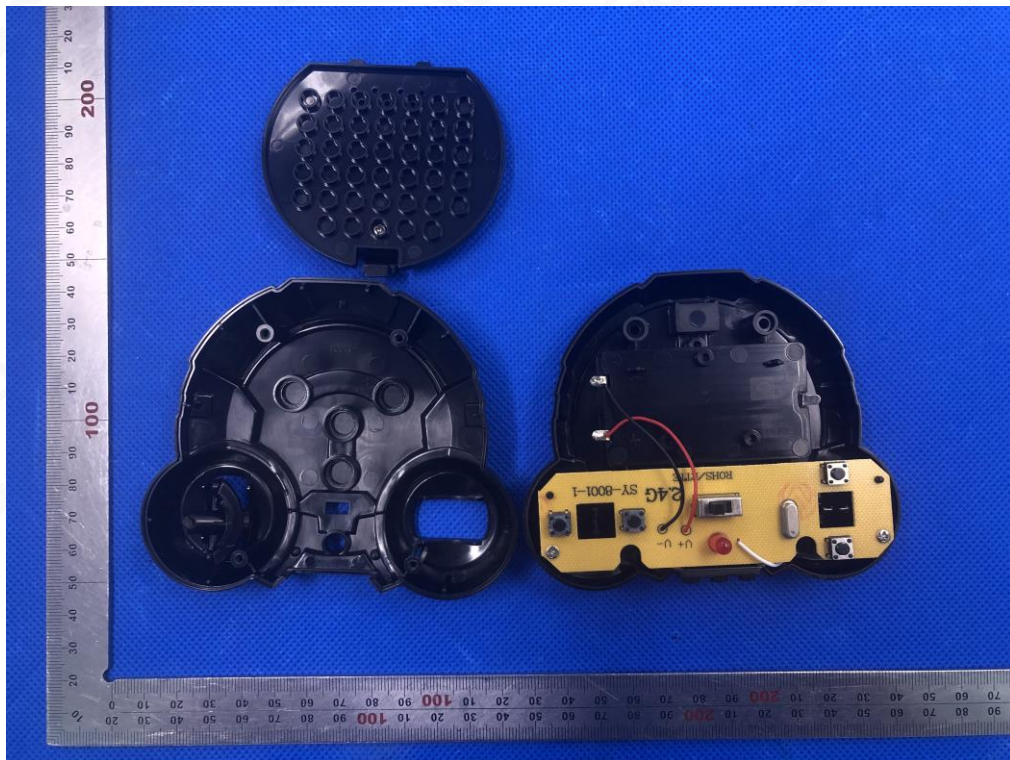




OPEN VIEW OF EUT-1

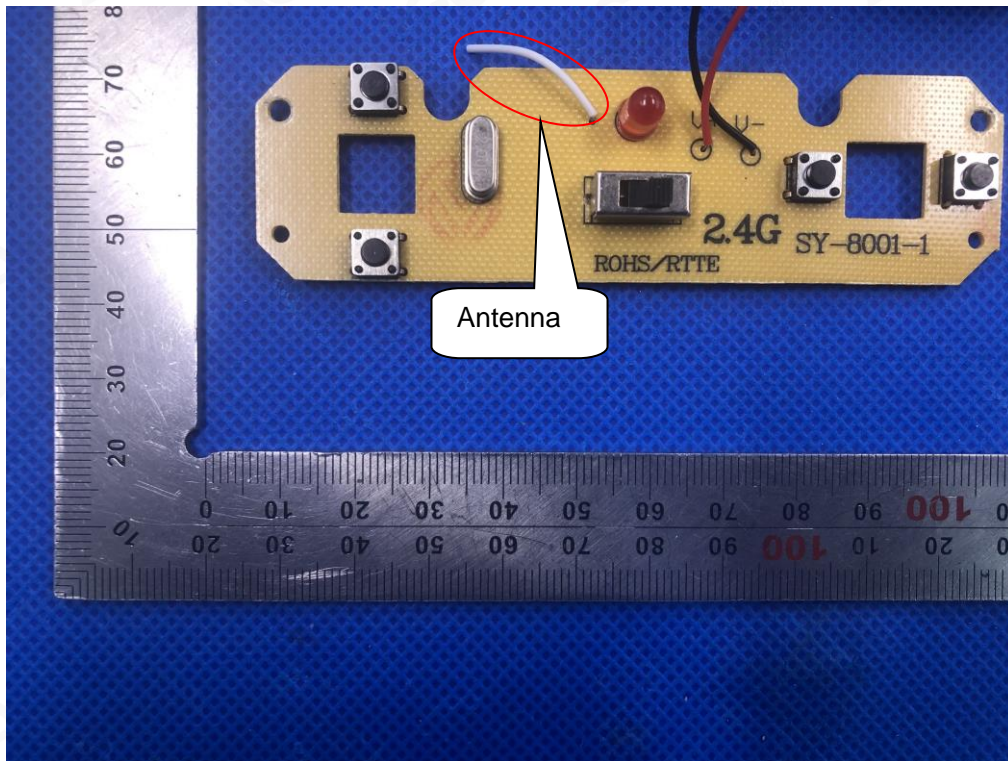


OPEN VIEW OF EUT-2

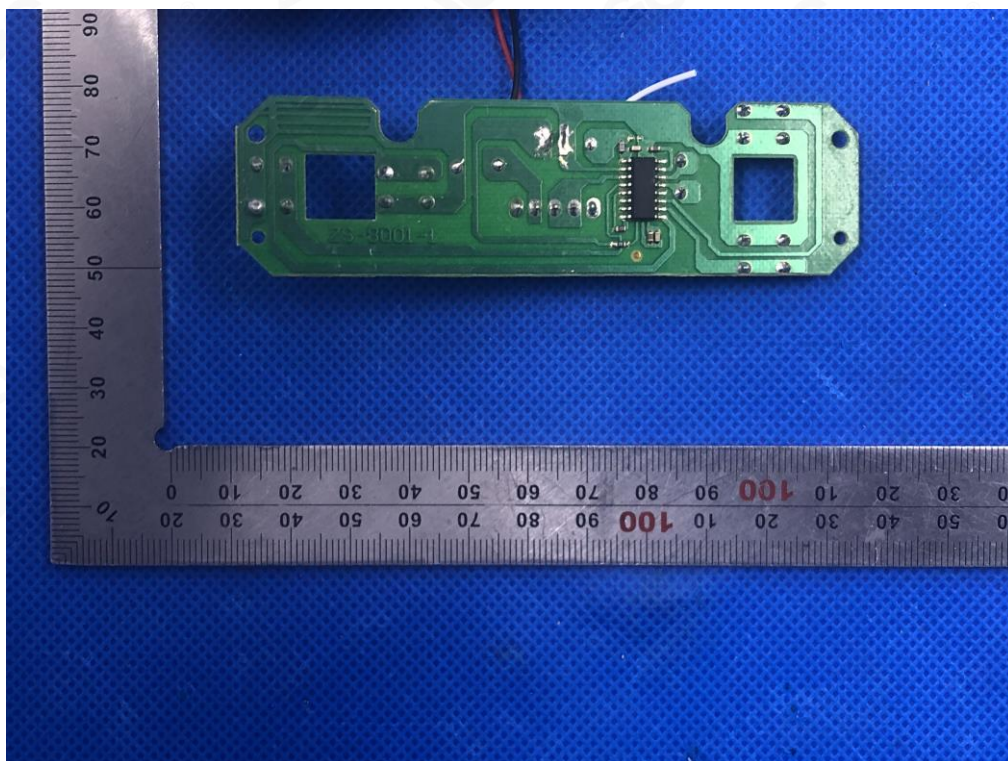




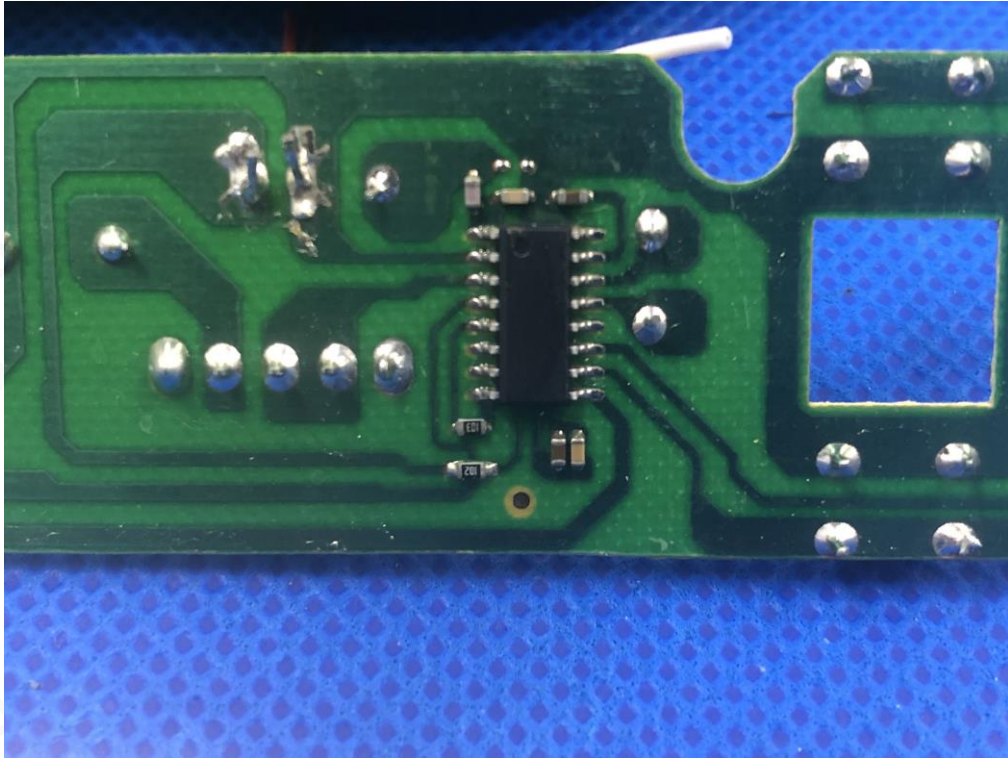
INTERNAL VIEW-1 OF EUT



INTERNAL VIEW-2 OF EUT



INTERNAL VIEW-3 OF EUT



----END OF REPORT----