

# **FCC Test Report**

Report No.: AGC08073201202FE02

FCC ID : 2ATZS-T3

APPLICATION PURPOSE : Original Equipment

**PRODUCT DESIGNATION**: Bluetooth Transmitter and Receiver

**BRAND NAME** : N/A

**MODEL NAME** : See page 5

**APPLICANT**: Shenzhen Leadinway Technology Co.,Ltd

**DATE OF ISSUE** : Dec. 23, 2020

**STANDARD(S)** : FCC Part 15.247

**REPORT VERSION** : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



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Page 2 of 68

# REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Dec. 23, 2020	Valid	Initial Release

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Page 3 of 68

# **TABLE OF CONTENTS**

1. VERIFICATION OF COMPLIANCE	
2. GENERAL INFORMATION	6
2.1. PRODUCT DESCRIPTION	6
2.2. TABLE OF CARRIER FREQUENCYS	6
2.3. RELATED SUBMITTAL(S)/GRANT(S)	7
2.4. TEST METHODOLOGY	
2.5. SPECIAL ACCESSORIES	7
2.6. EQUIPMENT MODIFICATIONS	
2.7. ANTENNA REQUIREMENT	
3. MEASUREMENT UNCERTAINTY	8
4. DESCRIPTION OF TEST MODES	g
5. SYSTEM TEST CONFIGURATION	10
5.1. CONFIGURATION OF TESTED SYSTEM	10
5.2. EQUIPMENT USED IN TESTED SYSTEM	10
5.3. SUMMARY OF TEST RESULTS	10
6. TEST FACILITY	11
7. PEAK OUTPUT POWER	12
7.1. MEASUREMENT PROCEDURE	12
7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	12
7.3. LIMITS AND MEASUREMENT RESULT	13
8. 6 DB BANDWIDTH	17
8.1. MEASUREMENT PROCEDURE	17
8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	17
8.3. LIMITS AND MEASUREMENT RESULTS	17
9. CONDUCTED SPURIOUS EMISSION	21
9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	21
9.3. MEASUREMENT EQUIPMENT USED	
9.4. LIMITS AND MEASUREMENT RESULT	21
10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY	36

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Page 4 of 68

10.1. MEASUREMENT PROCEDURE	36
10.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	36
10.3. MEASUREMENT EQUIPMENT USED	
10.4. LIMITS AND MEASUREMENT RESULT	36
11. RADIATED EMISSION	40
11.1. MEASUREMENT PROCEDURE	40
11.2. TEST SETUP	
11.3. LIMITS AND MEASUREMENT RESULT	
11.4. TEST RESULT	42
12. FCC LINE CONDUCTED EMISSION TEST	56
12.1. LIMITS OF LINE CONDUCTED EMISSION TEST	56
12.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST	56
12.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST	57
12.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST	57
12.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST	58
APPENDIX A: PHOTOGRAPHS OF TEST SETUP	60
APPENDIX B: PHOTOGRAPHS OF EUT	62

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Page 5 of 68

#### 1. VERIFICATION OF COMPLIANCE

Applicant	Shenzhen Leadinway Technology Co., Ltd			
Address	29 Building, Baotian industrial District Chentian, Xixiang Town, Shenzhen, Guangdong, China			
Manufacturer	Shenzhen Leadinway Technology Co., Ltd			
Address	29 Building, Baotian industrial District Chentian, Xixiang Town, Shenzhen, Guangdong, China			
Factory	Shenzhen Leadinway Technology Co., Ltd			
Address	29 Building, Baotian industrial District Chentian, Xixiang Town, Shenzhen, Guangdong, China			
Product Designation	Bluetooth Transmitter and Receiver			
Brand Name	N/A			
Test Model	T3			
Series Model	T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T17, T18, T19, T20			
Difference Description	All the same except for the model name.			
Date of test	Dec. 10, 2020 to Dec. 22, 2020			
Deviation	No any deviation from the test method			
Condition of Test Sample	Normal			
Test Result	Pass			
Report Template	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

John Zeng
(Project Engineer)

Max Zhang
(Reviewer)

Approved By

Forrest Lei
(Authorized Officer)

Dec. 22, 2020

Dec. 23, 2020

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Page 6 of 68

# 2. GENERAL INFORMATION

#### 2.1. PRODUCT DESCRIPTION

The EUT is designed as a "Bluetooth Transmitter and Receiver". It is designed by way of utilizing the GFSK technology to achieve the system operation.

A major technical description of EUT is described as following

Operation Frequency	2.402 GHz to 2.480GHz				
RF Output Power	-5.883dBm (Max)				
Bluetooth Version	V5.0				
Modulation	BR □GFSK, EDR □π /4-DQPSK, □8DPSK BLE □GFSK 1Mbps □GFSK 2Mbps				
Number of channels 40 Channel					
Antenna Designation Ceramic Antenna (Comply with requirements of the FCC part 19					
Antenna Gain	0dBi				
Hardware Version	YHW-T3(ATS2831)-V1.2-20200914				
Software Version	ATS2831_YHW_T3_SVN1664_20201117				
Power Supply	DC 3.7V by battery				

#### 2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency	
C e L	0	2402 MHz	
100 CC	1	2404 MHz	
2400~2483.5MHz			
cC a	38	2478 MHz	
100 CO	39	2480 MHz	

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Page 7 of 68

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

This submittal(s) (test report) is intended for **FCC ID: 2ATZS-T3** 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 5.2.

#### 2.6. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

#### 2.7. ANTENNA REQUIREMENT

This intentional radiator is designed with a permanently attached antenna of an antenna to ensure that no antenna other than that furnished by the responsible party shall be used with the device. For more information of the antenna, please refer to the APPENDIX B: PHOTOGRAPHS OF EUT.

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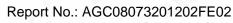
Page 8 of 68

#### 3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y ±U, where expended 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, Uc = ±3.1 dB
- Uncertainty of Radiated Emission below 1GHz, Uc = ±4.0 dB
- Uncertainty of Radiated Emission above 1GHz, Uc = ±4.8 dB
- Uncertainty of total RF power, conducted,  $Uc = \pm 0.8 \text{ dB}$
- Uncertainty of RF power density, conducted, Uc = ±2.6 dB
- Uncertainty of spurious emissions, conducted, Uc = ±2.7 dB
- Uncertainty of Occupied Channel Bandwidth: Uc = ±2 %

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Page 9 of 68

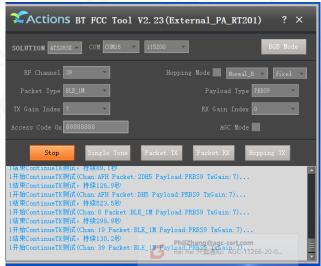
#### 4. DESCRIPTION OF TEST MODES

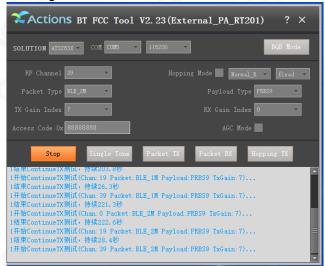
NO.	TEST MODE DESCRIPTION
1	Low channel TX (1M)
2	Middle channel TX (1M)
3	High channel TX (1M)
4	Low channel TX (2M)
5	Middle channel TX (2M)
6	High channel TX (2M)

#### 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.

Software Setting





g/Inspection The test results

the test report.

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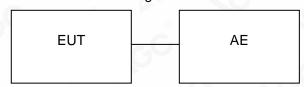


Page 10 of 68

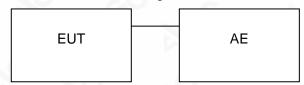
# 5. SYSTEM TEST CONFIGURATION

#### **5.1. CONFIGURATION OF TESTED SYSTEM**

Radiated Emission Configure:



Conducted Emission Configure:



#### **5.2. EQUIPMENT USED IN TESTED SYSTEM**

Item	Equipment	Model No.	ID or Specification	Remark
1	Bluetooth Transmitter and Receiver	Т3	2ATZS-T3	EUT
2	Control Box	N/A	USB-TTL	AE
3	USB Cable	N/A	0.8m unshielded	Accessory
4	Adapter	TY0500100E1MN	N/A	AE
5	AUX Cable	N/A	0.6m unshielded	Accessory

#### **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)	7 (e) Maximum Conducted Output Power Density		
15.209 Radiated Emission		Compliant	
15.207	Conducted Emission	Compliant	

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Page 11 of 68

## 6. TEST FACILITY

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

#### TEST EQUIPMENT OF CONDUCTED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESPI	101206	May 15, 2020	May 14, 2021
LISN	R&S	ESH2-Z5	100086	Jul. 03, 2020	Jul. 02, 2021
Test software	R&S	ES-K1(Ver.V1.71)	N/A	N/A	N/A

#### **TEST EQUIPMENT OF RADIATED EMISSION TEST**

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	May 15, 2020	May 14, 2021
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 07, 2020	Dec. 06, 2021
2.4GHz Filter	EM Electronics	2400-2500MHz	N/A	Mar. 23, 2020	Mar. 22, 2022
Attenuator	ZHINAN	E-002	N/A	Sep. 03, 2020	Sep. 02, 2022
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep. 21, 2019	Sep. 20, 2021
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	May 22, 2020	May 21, 2022
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	May 17, 2019	May 16, 2021
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Sep. 03, 2020	Sep. 02, 2022
ANTENNA	SCHWARZBECK	VULB9168	494	Jan. 09, 2019	Jan. 08, 2021
Test software	Tonscend	JS32-RE (Ver.2.5)	N/A	N/A	N/A

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Page 12 of 68

#### 7. PEAK OUTPUT POWER

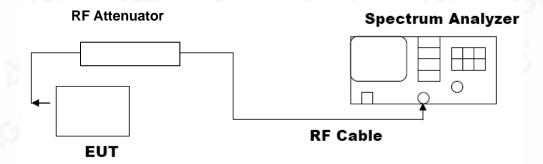
#### 7.1. MEASUREMENT PROCEDURE

For peak power test:

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. RBW≥DTS bandwidth
- 3. VBW≥3\*RBW.
- 4. SPAN≥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



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Page 13 of 68

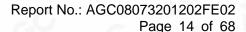
#### 7.3. LIMITS AND MEASUREMENT RESULT

PEAK OUTPUT POWER MEASUREMENT RESULT FOR GFSK MOUDULATION			
2.402	-6.351	30	Pass
2.440	-6.213	30	Pass
2.480	-5.883	30	Pass

CH<sub>0</sub>



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**CH19** 







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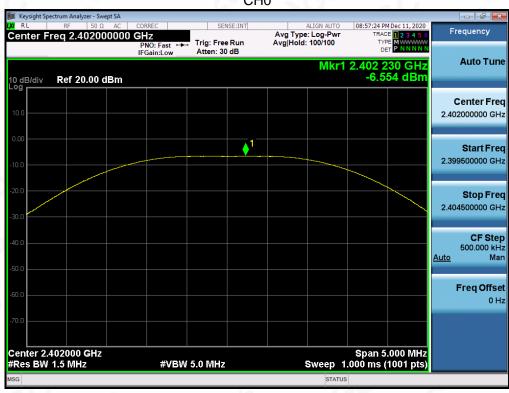


Page 15 of 68

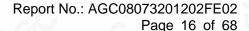
2M

PEAK OUTPUT POWER MEASUREMENT RESULT FOR GFSK MOUDULATION			
2.402	-6.554	30	Pass
2.440	-6.335	30	Pass
2.480	-6.012	30	Pass

CH<sub>0</sub>



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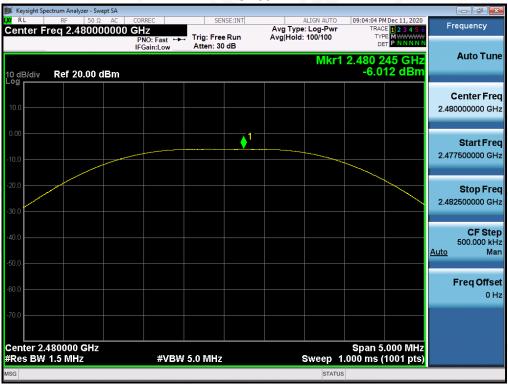




#### **CH19**



#### **CH39**



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Page 17 of 68

#### 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 ≥ 3×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**

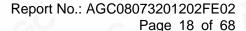
1M

	LIMITS AND MEASU	REMENT RESULT	
A P I I . I ! ! (		Applicable Limits	
Applicable Limits	Test Data	ı (kHz)	Criteria
>500KHZ	Low Channel	714.5	PASS
	Middle Channel	711.1	PASS
	High Channel	708.2	PASS

#### TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



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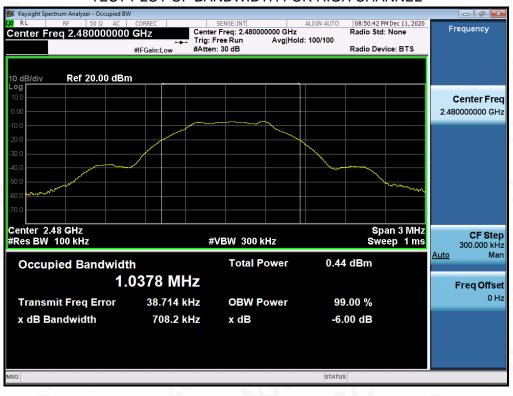




#### TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



#### TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



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Page 19 of 68

/Inspection The test results the test report.

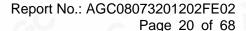
2M

LIMITS AND MEASUREMENT RESULT				
Augusta alala I tuatta	Applicable Limits			
Applicable Limits	Test Data (kHz)		Criteria	
>500KHZ	Low Channel	1170	PASS	
	Middle Channel	1187	PASS	
	High Channel	1192	PASS	

#### TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



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#### TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



#### TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



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Page 21 of 68

## 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.

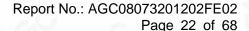
#### 9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6.

#### 9.4. LIMITS AND MEASUREMENT RESULT

LIMITS AND MEASUREMENT RESULT				
A collection to the section	Measurement Result			
Applicable Limits	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		

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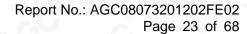


#### **TEST RESULT FOR ENTIRE FREQUENCY RANGE--1M**

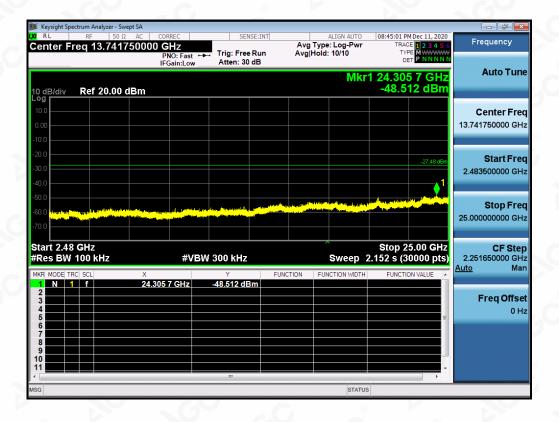
GFSK MODULATION IN LOW CHANNEL



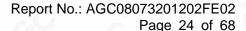
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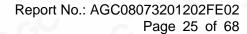




#### GFSK MODULATION IN MIDDLE CHANNEL



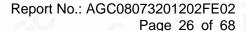
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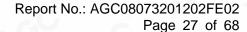




#### GFSK MODULATION IN HIGH CHANNEL



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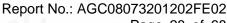






Note: The peak emissions without marker on the above plots are fundamental wave and need not to compare with the limit.

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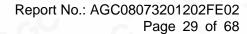
Page 28 of 68

#### **TEST RESULT FOR ENTIRE FREQUENCY RANGE--2M**

GFSK MODULATION IN LOW CHANNEL



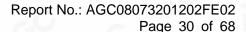
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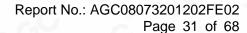




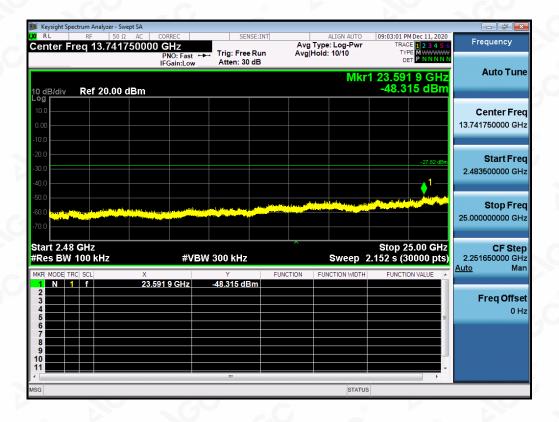
#### GFSK MODULATION IN MIDDLE CHANNEL



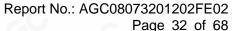
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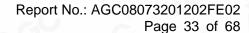


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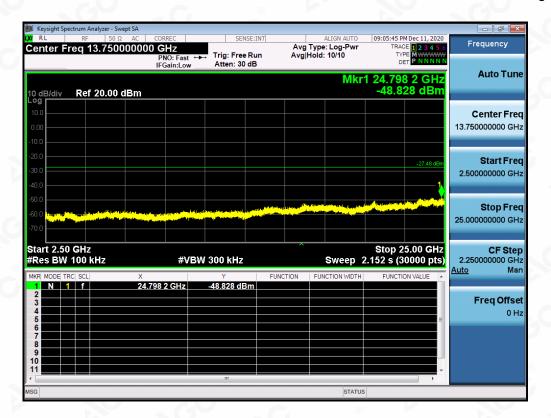
# GFSK MODULATION IN HIGH CHANNEL



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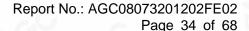






Note: The peak emissions without marker on the above plots are fundamental wave and need not to compare with the limit.

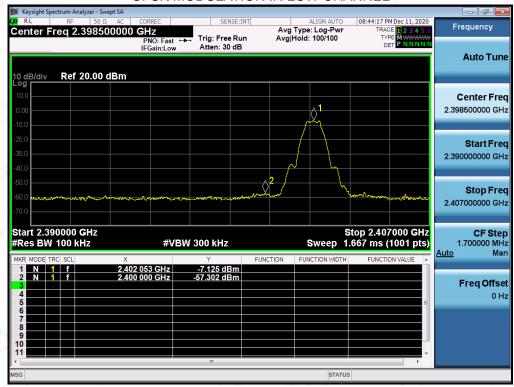
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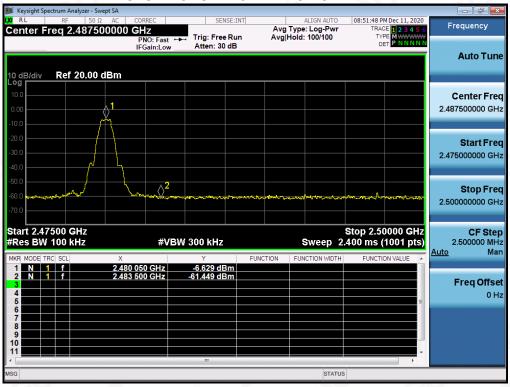


# **TEST RESULT FOR BAND EDGE--1M**

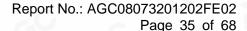
#### GFSK MODULATION IN LOW CHANNEL



#### GFSK MODULATION IN HIGH CHANNEL



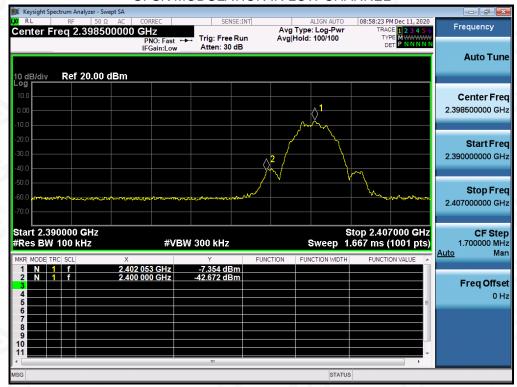
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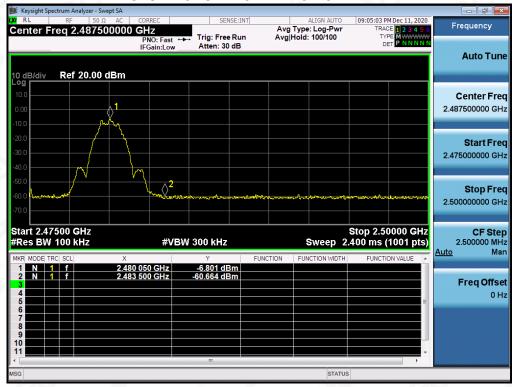


# **TEST RESULT FOR BAND EDGE--2M**

#### GFSK MODULATION IN LOW CHANNEL



#### GFSK MODULATION IN HIGH CHANNEL



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Page 36 of 68

#### 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 the 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

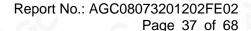
1M

Channel No.	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-21.933	8	Pass
Middle Channel	-21.633	8	Pass
High Channel	-21.261	8	Pass

#### TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL



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TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL



#### TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL



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Page 38 of 68

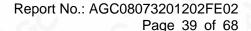
2M

Channel No.	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-25.221	8	Pass
Middle Channel	-24.976	8	Pass
High Channel	-24.693	8	Pass

# TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL



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TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL



#### TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL



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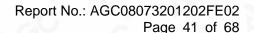
Page 40 of 68

#### 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 emission, 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.
- 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.

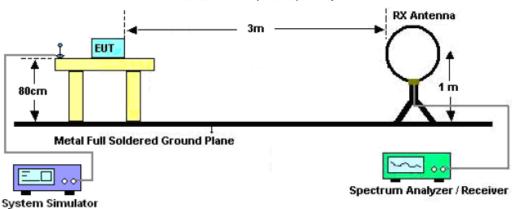
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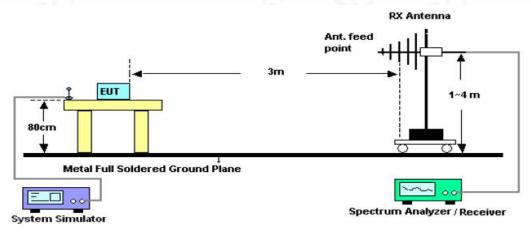


#### 11.2. TEST SETUP

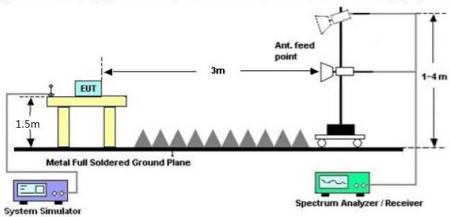
## Radiated Emission Test-Setup Frequency Below 30MHz



#### RADIATED EMISSION TEST SETUP 30MHz-1000MHz



### RADIATED EMISSION TEST SETUP ABOVE 1000MHz



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Page 42 of 68

#### 11.3. LIMITS AND MEASUREMENT RESULT

15.209 Limit in the below table has to be followed

Frequencies (MHz)	Field Strength (microvolts/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**

The amplitude of spurious emissions from 9kHz to 30MHz which are attenuated more than 20 dB below the permissible value need not be reported.

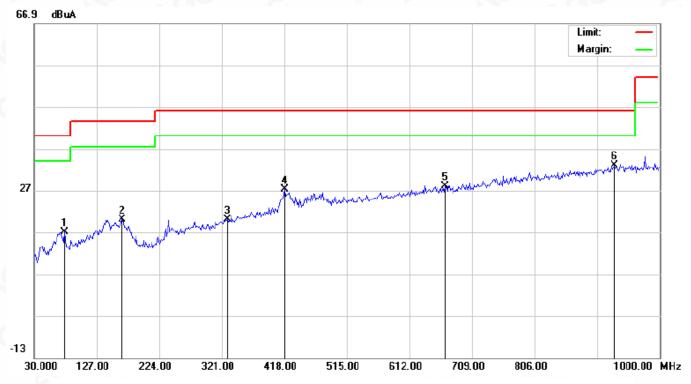
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Page 43 of 68

#### **RADIATED EMISSION BELOW 1GHZ**

EUT	Bluetooth Transmitter and Receiver	Model Name	Т3
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Horizontal



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuA	dB	dBuA	dBuA	dB	Detector
1		76.8833	1.42	15.62	17.04	40.00	-22.96	peak
2		165.8000	1.32	18.59	19.91	43.50	-23.59	peak
3		329.0833	-0.49	20.49	20.00	46.00	-26.00	peak
4		418.0000	3.86	23.34	27.20	46.00	-18.80	peak
5		666.9667	0.30	27.75	28.05	46.00	-17.95	peak
6	*	928.8667	1.13	31.95	33.08	46.00	-12.92	peak

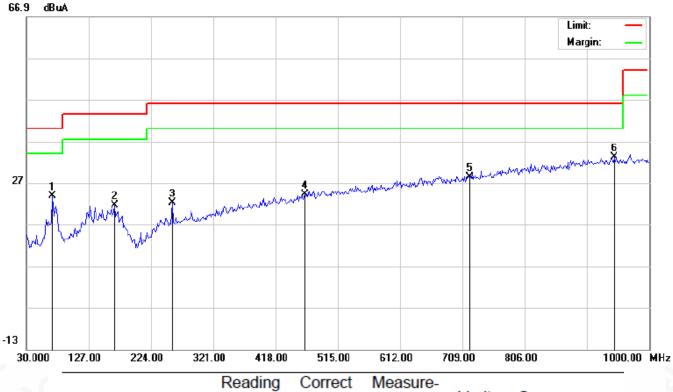
**RESULT: PASS** 

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Page 44 of 68

EUT	Bluetooth Transmitter and Receiver	Model Name	Т3
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuA	dB	dBuA	dBuA	dB	Detector
1		70.4167	6.70	17.02	23.72	40.00	-16.28	peak
2	1	67.4167	3.18	18.43	21.61	43.50	-21.89	peak
3	2	256.3333	3.91	18.37	22.28	46.00	-23.72	peak
4	4	63.2667	0.04	24.25	24.29	46.00	-21.71	peak
5	7	20.3167	-0.12	28.61	28.49	46.00	-17.51	peak
6	* 6	45.0333	1.08	32.09	33.17	46.00	-12.83	peak

# RESULT: PASS Note:

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

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Page 45 of 68

g/Inspection The test results

#### **RADIATED EMISSION ABOVE 1GHZ**

EUT	Bluetooth Transmitter and Receiver	Model Name	Т3
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type	
4804.000	43.28	0.08	43.36	74	-30.64	peak o	
4804.000	35.69	0.08	35.77	54	-18.23	AVG	
7206.000	38.34	2.21	40.55	74	-33.45	peak	
7206.000	31.95	2.21	34.16	54	-19.84	AVG	
-GG				×60		•	

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

EUT	Bluetooth Transmitter and Receiver	Model Name	Т3
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	\/alua Typa
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Value Type
4804.000	44.55	0.08	44.63	74	-29.37	peak
4804.000	34.14	0.08	34.22	54	-19.78	AVG
7206.000	38.97	2.21	41.18	74	-32.82	peak
7206.000	31.41	2.21	33.62	54	-20.38	AVG
8			C	8		
emark:	®					
actor = Anter	nna Factor + Cabl	e Loss – Pre-	amplifier.			> @

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Page 46 of 68

g/Inspection
The test results
the test report.

EUT	Bluetooth Transmitter and Receiver	Model Name	Т3
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4880.000	45.32	0.14	45.46	74	-28.54	peak
4880.000	36.75	0.14	36.89	54	-17.11	AVG
7320.000	40.05	2.36	42.41	74	-31.59	peak
7320.000	32.88	2.36	35.24	54	-18.76	AVG
-C			4 (04	-C	©	
emark:						
ctor = Anter	nna Factor + Cable	Loss – Pre-	amplifier.			

EUT	Bluetooth Transmitter and Receiver	Model Name	Т3
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4880.000	45.69	0.14	45.83	74	-28.17	peak
4880.000	38.14	0.14	38.28	54	-15.72	AVG
7320.000	41.75	2.36	44.11	74	-29.89	peak
7320.000	33.07	2.36	35.43	54	-18.57	AVG
<u> </u>			-C			C
emark:	©					
actor = Anter	nna Factor + Cable	Loss – Pre-	amplifier.	. (1		®

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Page 47 of 68

EUT	Bluetooth Transmitter and Receiver	Model Name	Т3
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4960.000	44.29	0.22	44.51	74	-29.49	peak
4960.000	36.33	0.22	36.55	54	-17.45	AVG
7440.000	39.27	2.64	41.91	74	-32.09	peak
7440.000	29.54	2.64	32.18	54	-21.82	AVG
	0		4 CG	_6	<u> </u>	
mark:						

Factor -	Antenna	Factor +	Cable	Loss	Pre-amplifier.	
i actoi –	Antenna	T actor T	Cable	LU33 —	rie-amplilier.	

EUT	Bluetooth Transmitter and Receiver	Model Name	Т3
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4960.000	43.17	0.22	43.39	74	-30.61	peak
4960.000	34.52	0.22	34.74	54	-19.26	AVG
7440.000	38.19	2.64	40.83	74	-33.17	peak
7440.000	30.48	2.64	33.12	54	-20.88	AVG
0		_60	**			4
emark:	<u> </u>					
actor = Anter	nna Factor + Cabl	e Loss - Pre-	amplifier.			

#### **RESULT: PASS**

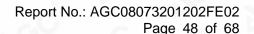
#### Note:

The amplitude of other spurious emissions from 1G to 25 GHz which are attenuated more than 20 dB below the permissible value need not be reported.

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

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

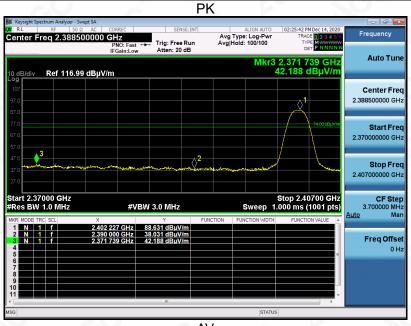
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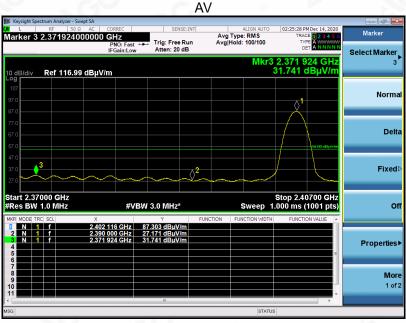




**TEST RESULT FOR RESTRICTED BANDS REQUIREMENTS--1M** 

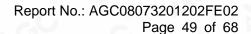
EUT	Bluetooth Transmitter and Receiver	Model Name	Т3
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal





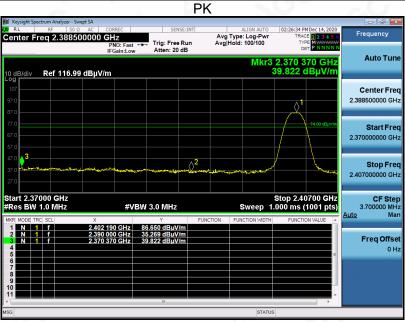
**RESULT: PASS** 

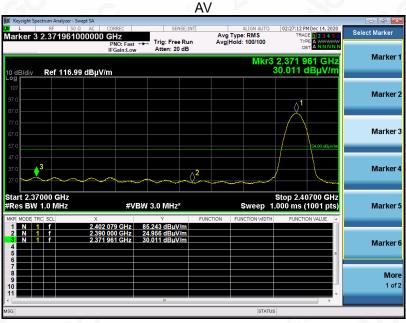
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EUT	Bluetooth Transmitter and Receiver	Model Name	Т3
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical





**RESULT: PASS** 

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