

# **FCC Test Report**

Report No.: AGC04228190304FE02

FCC ID : WTDS041ATWS

**APPLICATION PURPOSE**: Original Equipment

**PRODUCT DESIGNATION**: Wireless Headset

BRAND NAME : Dacom

MODEL NAME S041A TWS, K6H, K6H Pro, S041A, S041B TWS, S041C

TWS, G48A, G48B, G48C

**CLIENT** : Shenzhen Sande Dacom Electronics Co.,Ltd.

**DATE OF ISSUE** : Apr. 18, 2019

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

REPORT VERSION : V1.0

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

# **CAUTION:**

This report shall not be reproduced except in full without the written permission of the test laboratory and shall not be quoted out of context.



The results spowford this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.

Fax: +86-755 2600 8484

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China

E-mail: agc@agc-cert.com

Tel: +86-755 2908 1955



Report No.: AGC04228190304FE02

Page 2 of 65

# REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	Alleron / Company	Apr. 18, 2019	Valid	Initial Release

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by (SE), this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed et attp://www.agc.gett.com.



# **TABLE OF CONTENTS**

1. VERIFICATION OF CONFORMITY	5
2. GENERAL INFORMATION	6
2.1. PRODUCT DESCRIPTION	6
2.2. TABLE OF CARRIER FREQUENCYS	6
2.3. RECEIVER INPUT BANDWIDTH	7
2.4. EXAMPLE OF A HOPPING SEQUENCY IN DATA MODE	7
2.5. EQUALLY AVERAGE USE OF FREQUENCIES AND BEHAVIOUR	
2.6. RELATED SUBMITTAL(S) / GRANT (S)	7
2.7. TEST METHODOLOGY	8
2.8. SPECIAL ACCESSORIES	
2.9. EQUIPMENT MODIFICATIONS	8
3. MEASUREMENT UNCERTAINTY	
3. WEASUREWIT UNCERTAINTT	3. M. K. W.
4. DESCRIPTION OF TEST MODES	Southing State of Coppy Con
4. DESCRIPTION OF TEST MODES	
5. SYSTEM TEST CONFIGURATION	
5.1. CONFIGURATION OF EUT SYSTEM	11
5.2 EQUIPMENT USED IN TESTED SYSTEM	11
5.3. SUMMARY OF TEST RESULTS	11
	E Global Compliant
6. TEST FACILITY	12
7. PEAK OUTPUT POWER	
7.1. MEASUREMENT PROCEDURE	13
7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	
7.3. LIMITS AND MEASUREMENT RESULT	
8. 20DB BANDWIDTH	20
8.1. MEASUREMENT PROCEDURE	20
8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	20
8.3. LIMITS AND MEASUREMENT RESULTS	

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 1000, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at alther. I www.agc. gett.com.



9. CONDUCTED SPURIOUS EMISSION	27
9.1. MEASUREMENT PROCEDURE	
9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	
9.3. MEASUREMENT EQUIPMENT USED	27
9.4. LIMITS AND MEASUREMENT RESULT	27
10. RADIATED EMISSION	37
10.1. MEASUREMENT PROCEDURE	37
10.2. TEST SETUP	
10.3. LIMITS AND MEASUREMENT RESULT	
10.4. TEST RESULT	40
11. NUMBER OF HOPPING FREQUENCY	50
11.1. MEASUREMENT PROCEDURE	50
11.2. TEST SETUP (BLOCK DIAGRAM OF CONFIGURATION)	
11.3. MEASUREMENT EQUIPMENT USED	
11.4. LIMITS AND MEASUREMENT RESULT	50
12. TIME OF OCCUPANCY (DWELL TIME)	51
12.1. MEASUREMENT PROCEDURE	51
12.2. TEST SETUP (BLOCK DIAGRAM OF CONFIGURATION)	
12.3. MEASUREMENT EQUIPMENT USED	51
12.4. LIMITS AND MEASUREMENT RESULT	51
13. FREQUENCY SEPARATION	55
13.1. MEASUREMENT PROCEDURE	55
13.2. TEST SETUP (BLOCK DIAGRAM OF CONFIGURATION)	
13.3. MEASUREMENT EQUIPMENT USED	
13.4. LIMITS AND MEASUREMENT RESULT	
APPENDIX A: PHOTOGRAPHS OF TEST SETUP	56
	, recorded to the second secon

The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by KEC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gett.com.



# 1. VERIFICATION OF CONFORMITY

Applicant	Shenzhen Sande Dacom Electronics Co.,Ltd.		
Address	Building I, NO.10, East of Shangxue Science & Technology Industrial Park, Bantian, Longgang, Shenzhen, China		
manufacturer	Shenzhen Sande Dacom Electronics Co.,Ltd.		
Address	Building I, NO.10, East of Shangxue Science & Technology Industrial Park, Bantian, Longgang, Shenzhen, China		
Factory	Shenzhen Sande Dacom Electronics Co.,Ltd.		
Address	Building I, NO.10, East of Shangxue Science & Technology Industrial Park, Bantian, Longgang, Shenzhen, China		
Product Designation	Wireless Headset		
Brand Name	Dacom		
Test Model	S041A TWS		
Series Model	K6H, K6H Pro, S041A, S041B TWS, S041C TWS, G48A, G48B, G48C		
Difference Description	All the same except for the model name		
Date of test	Apr. 11, 2019 to Apr. 18, 2019		
Deviation	None of the second of the seco		
Condition of Test Sample	Normal Normal		
Test Result	Pass @ # # # # # # # # # # # # # # # # # #		
Report Template	AGCRT-US-BR/RF		

#### We hereby certify that:

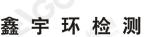
The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested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

Tested By	Draven	di
	Draven Li(Li Ming Liang)	Apr. 18, 2019
Reviewed By	Now Zhang	
	Max Zhang(Zhang Yi)	Apr. 18, 2019
Approved By	Foresto	2:
	Forrest Lei(Lei Yonggang) Authorized Officer	Apr. 18, 2019

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.go.tt.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



Report No.: AGC04228190304FE02 Page 6 of 65

# 2. GENERAL INFORMATION

# 2.1. PRODUCT DESCRIPTION

The EUT is designed as "Wireless Headset". It is designed by way of utilizing the GFSK, Pi/4 DQPSK and 8DPSK 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	6.491dBm(Max)
Bluetooth Version	V 5.0
Modulation	BR ⊠GFSK, EDR ⊠π /4-DQPSK, ⊠8DPSK BLE □GFSK 1Mbps □GFSK 2Mbps
Number of channels	79
Hardware Version	S041-87638FR_VA
Software Version	V5.0
Antenna Designation	Chip Antenna
Antenna Gain	OdBi Sandara
Power Supply	DC 3.7V by battery

Note: The left earphone and right earphone are the same, the left earphone had been tested in the report.

### 2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency
100	O The Company	2402MHZ
The temporal	The state of the s	2403MHZ
e Market of Colonia (e) Market of Colonia (e	The Co	
CO " CO	38	2440 MHZ
2402~2480MHZ	39	2441 MHZ
TO TOTAL OF THE PARTY OF THE PA	© 7 American 40	2442 MHZ
de grande de la Companya de la Compa		
	77	2479 MHZ
	78	2480 MHZ

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a state of the sample (s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a state of the sample (s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a state of the sample (s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission.



#### 2.3. RECEIVER INPUT BANDWIDTH

The input bandwidth of the receiver is 1.3MHZ,In every connection one Bluetooth device is the master and the other one is slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master. Additionally the type of connection(e.g. single of multislot packet) is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also the slave of the connection will use these settings.

Repeating of a packet has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case. That means, a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.

#### 2.4. EXAMPLE OF A HOPPING SEQUENCY IN DATA MODE

Example of a 79 hopping sequence in data mode: 40,21,44,23,42,53,46,55,48,33,52,35,50,65,54,67 56,37,60,39,58,69,62,71,64,25,68,27,66,57,70,59 72,29,76,31,74,61,78,63,01,41,05,43,03,73,07,75 09,45,13,47,11,77,15,00,64,49,66,53,68,02,70,06 01, 51, 03, 55, 05, 04

#### 2.5. EQUALLY AVERAGE USE OF FREQUENCIES AND BEHAVIOUR

The generation of the hopping sequence in connection mode depends essentially on two input values:

- 1. LAP/UAP of the master of the connection.
- 2. Internal master clock

The LAP(lower address part) are the 24 LSB's of the 48 BD\_ADDRESS. The BD\_ADDRESS is an unambiguous number of every Bluetooth unit. The UAP(upper address part) are the 24MSB's of the 48BD ADDRESS

The internal clock of a Bluetooth unit is derived from a free running clock which is never adjusted and is never turned off. For ehavior zation with other units only offset are used. It has no relation to the time of the day. Its resolution is at least half the RX/TX slot length of 312.5us. The clock has a cycle of about one day(23h30). In most case it is implemented as 28 bit counter. For the deriving of the hopping sequence the entire. LAP(24 bits), 4LSB's (4bits) (Input 1) and the 27MSB's of the clock (Input 2) are used. With this input values different mathematical procedures (permutations, additions, XOR-operations) are performed to generate te Sequence. This will be done at the beginning of every new transmission.

Regarding short transmissions the Bluetooth system has the following ehavior:

The first connection between the two devices is established, a hopping sequence was generated. For Transmitting the wanted data the complete hopping sequence was not used. The connection ended. The second connection will be established. A new hopping sequence is generated. Due to the fact the Bluetooth clock has a different value, because the period between the two transmission is longer(and it Cannot be shorter) than the minimum resolution of the clock(312.5us). The hopping sequence will always Differ from the first one.

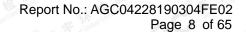
### 2.6. RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: WTDS041ATWS** filing to comply with the FCC PART 15.247 requirements.

The results spound this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gott.com.

Attestation of Global Compliance

GC 8





# 2.7. 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.

#### 2.8. SPECIAL ACCESSORIES

Refer to section 5.2.

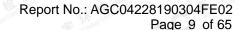
#### 2.9. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China





# 3. MEASUREMENT UNCERTAINTY

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in measurement" (GUM) published by CISPR and ANSI.

- Uncertainty of Conducted Emission, Uc = ±3.2 dB
- Uncertainty of Radiated Emission below 1GHz, Uc = ±3.9 dB
- Uncertainty of Radiated Emission above 1GHz, Uc = ±4.8 dB
- Uncertainty of total RF power, conducted, Uc = ±0.8dB
- Uncertainty of spurious emissions, conducted, Uc = ±2.7dB
- Uncertainty of Occupied Channel Bandwidth: Uc = ±2 %
- Uncertainty of Dwell Time: Uc = ±2 %
- Uncertainty of Frequency: Uc = ±2 %

The results spowed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.

Attestation of Global Compliance

(GC) S

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



# 4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel GFSK
2	Middle channel GFSK
© 3	High channel GFSK
GO 4	Low channel π/4-DQPSK
5	Middle channel π/4-DQPSK
6	High channel π/4-DQPSK
7 0	Low channel 8DPSK
8	Middle channel 8DPSK
9 4 3	High channel 8DPSK
10	Hopping mode GFSK
11	Hopping mode π/4-DQPSK
12	Hopping mode 8DPSK

#### 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.

The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.



Report No.: AGC04228190304FE02 Page 11 of 65

# 5. SYSTEM TEST CONFIGURATION

# **5.1. CONFIGURATION OF EUT SYSTEM**

EUT	
	EUT

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

Item	Equipment	Model No.	ID or Specification	Remark
1	Wireless Headset	S041A TWS	WTDS041ATWS	EUT

#### 5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
15.247	Peak Output Power	Compliant
15.247	20 dB Bandwidth	Compliant
15.247	Spurious Emission	Compliant
15.247&15.209	Radiated Emission	Compliant
15.247	Number of Hopping Frequency	Compliant
15.247	Time of Occupancy	Compliant
15.247	Frequency Separation	Compliant
15.207	Line Conducted Emission	N/A

NOTE: N/A stands for not applicable. The device can not use the BT function with charging.

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.



Report No.: AGC04228190304FE02 Page 12 of 65



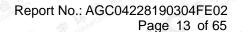
# 6. TEST FACILITY

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 RADIATED EMISSION TEST**

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Jun. 12, 2018	Jun. 11, 2019
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 20, 2018	Dec. 19, 2019
2.4GHz Fliter	Micro-tronics	087	N/A	Jun. 12, 2018	Jun. 11, 2019
Attenuator	Weinachel Corp	58-30-33	N/A	Jun. 12, 2018	Jun. 11, 2019
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep. 21, 2017	Sep. 20, 2020
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. 25, 2018	Oct. 24, 2019
ANTENNA	SCHWARZBECK	VULB9168	D69250	Sep. 28, 2017	Sep. 27, 2019

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ACC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gett.com.





# 7. PEAK OUTPUT POWER

# 7.1. MEASUREMENT PROCEDURE

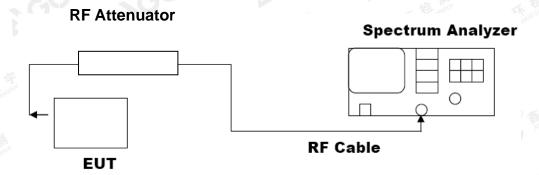
For peak power test:

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
- 3. RBW > 20 dB bandwidth of the emission being measured.
- 4. VBW ≥RBW.
- 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**



The results spowford this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.



# 7.3. LIMITS AND MEASUREMENT RESULT

	PEAK OUTPUT POWER MEASUR FOR GFSK MOUDULA		
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.402	1.393	30	Pass
2.441	2.769	30	Pass
2.480	3.424	30	Pass

#### CH<sub>0</sub>



The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 100°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gett.com.



#### **CH39**



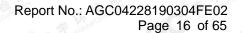
#### **CH78**



The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by (CC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a tittp://www.agc.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F., Building 2, No.1-4,Chaxi Sanwei Technical Industrial Park,Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China





	PEAK OUTPUT POWER MEAS FOR II /4-DQPSK MC		
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.402	3.726	30	Pass
2.441	5.444	30	Pass
2.480	5.999	30	Pass

# CH<sub>0</sub>



**CH39** 

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 100°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gett.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4,Chaxi Sanwei Technical Industrial Park,Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China





#### **CH78**

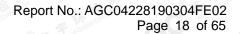


The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.go.tt.com.

Attestation of Global Compliance

IGC 8

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China





	PEAK OUTPUT POWER MEASUREMENT RESULT			
	FOR 8-DPSK MODULA	TION		
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail	
2.402	4.192	30	Pass	
2.441	5.880	30	Pass	
2.480	6.491	30	Pass	

#### CH<sub>0</sub>



The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by (CC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a tittp://www.agc.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



#### **CH39**



#### **CH78**

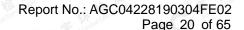


The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.go.tt.com.

Attestation of Global Compliance

\GC ?

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4,Chaxi Sanwei Technical Industrial Park,Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



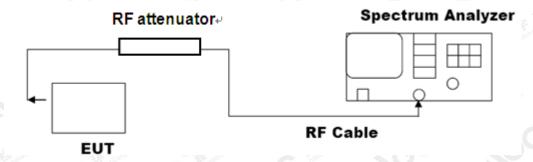


# 8. 20DB BANDWIDTH

#### **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 Span = approximately 2 to 5 times the 20 dB bandwidth, centered on a hoping channel
  The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video
  bandwidth (VBW) shall be approximately three times RBW; Sweep = auto; Detector function = peak
- 4. Set SPA Trace 1 Max hold, then View.

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



# 8.3. LIMITS AND MEASUREMENT RESULTS

MEASUREMENT RESULT FOR GFSK MOUDULATION			
Measurement Result			ult
Applicable Limits	Test Data (MHz) Criter		Criteria
N/A	Low Channel	0.9627	PASS
	Middle Channel	0.9623	PASS
	High Channel	0.9632	PASS

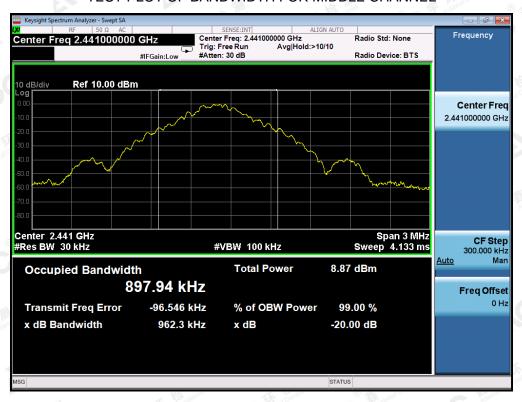
The results spowed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.



# TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



#### TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



The results spowfil this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

Attestation of Global Compliance

**IGC** 8

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



# TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by (CC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a tittp://www.agc.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



MEASUREMENT RESULT FOR ∏ /4-DQPSK MODULATION			
Measurement Result			ult
Applicable Limits	Test Data (MHz) Criteria		Criteria
GC MANA	Low Channel	1.368	PASS
	Middle Channel	1.371	PASS
The fill the state of the state	High Channel	1.367	PASS

#### TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

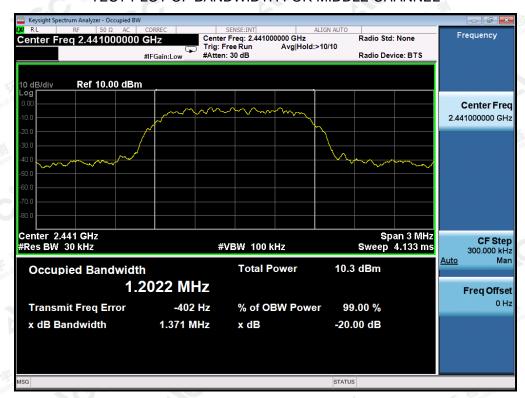
Attestation of Global Compliance

IGC 8

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



#### TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



#### TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



The results spowfil this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.



MEASUREMENT RESULT FOR 8-DPSK MODULATION			
Measurement Result			lt
Applicable Limits	Test Data (MHz) Criteri		Criteria
© Affendado de Casa	Low Channel	1.350	PASS
N/A	Middle Channel	1.349	PASS
	High Channel	1.349	PASS

#### TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

Attestation of Global Compliance

IGC 8

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



#### TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



#### TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



The results spowfil this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.



Report No.: AGC04228190304FE02 Page 27 of 65



# 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 the Span = wide enough to capture the peak level of the in-band emission and all spurious emissions from the lowest frequency generated in the EUT up through the 10th harmonic.
  RBW = 100 kHz; VBW= 300 kHz; Sweep = auto; Detector function = peak.
- 4. Set SPA Trace 1 Max hold, then View.

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

The same as described in section 8.2

#### 9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6

#### 9.4. LIMITS AND MEASUREMENT RESULT

LIMITS AND MEASUREMENT RESULT			
A multi-abla I imita	Measurement Result		
Applicable Limits	Test Data	Criteria	
In any 100 KHz Bandwidth Outside the	At least -20dBc than the limit	GO DACC	
frequency band in which the spread spectrum intentional radiator is operating, the radio frequency	Specified on the BOTTOM Channel	PASS	
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	The territory of the te	The state of the s	
level of the desired power. In addition, radiation emissions which fall in the restricted bands, as defined in §15.205(a), must also	At least -20dBc than the limit Specified on the TOP Channel	PASS	
comply with the radiated emission limits specified in§15.209(a))	S The state of country of the state of the s		

The results spowed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.

Attestation of Global Compliance

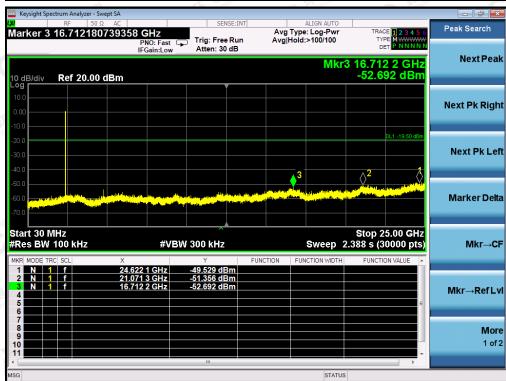
Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



# **TEST RESULT FOR ENTIRE FREQUENCY RANGE**

TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE
OF GFSK MODULATION IN LOW CHANNEL





The results spound this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by XCC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a training and the sample (s) are retained for 30 days only. The document is issued by XCC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a training and the sample (s) are retained for 30 days only. The document is issued by XCC, this document is a sample (s) are retained for 30 days only. The document is issued by XCC, this document is a sample (s) are retained for 30 days only. The document is issued by XCC, this document is a sample (s) are retained for 30 days only. The document is issued by XCC, this document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only are retained fo

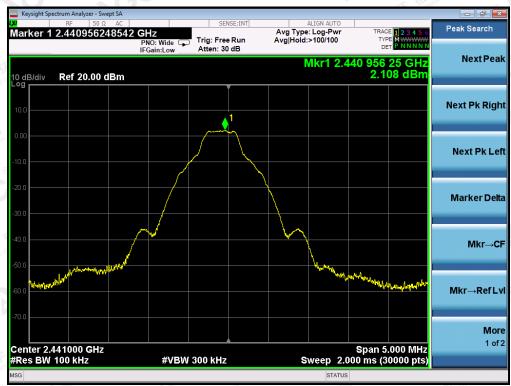
Attestation of Global Compliance

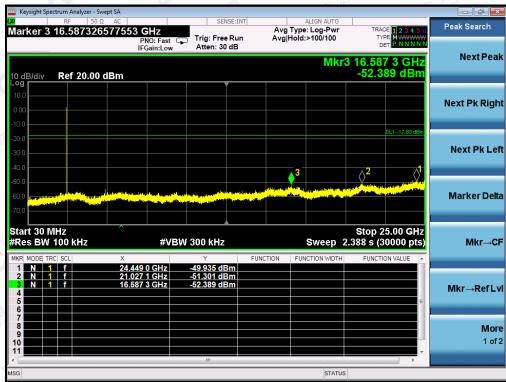
VGC 8

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4,Chaxi Sanwei Technical Industrial Park,Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



# TEST PLOT OF OUT OF BAND EMISSIONS OF GFSK MODULATION IN MIDDLE CHANNEL





The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.go.tt.com.

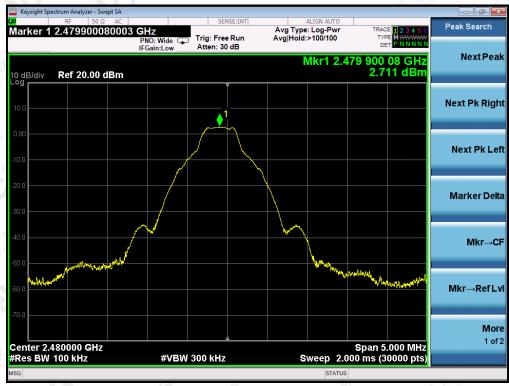
Attestation of Global Compliance

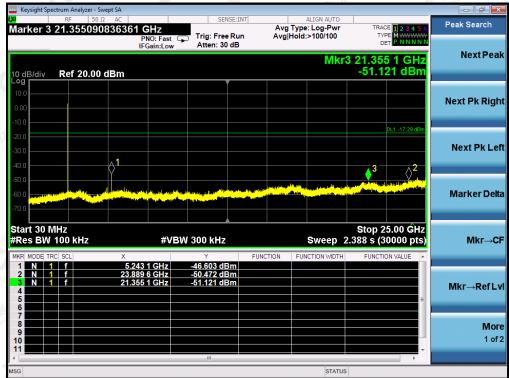
VGC 8

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4,Chaxi Sanwei Technical Industrial Park,Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



# TEST PLOT OF OUT OF BAND EMISSIONS OF GFSK MODULATION IN HIGH CHANNEL





Note: The peak emissions without marker on the above plots are fundamental wave and need not to compare with the limit. The GFSK modulation is the worst case and only those data recorded in the report.

The results shows if this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a the confirmed at a three-like the confirmed at a three-like three-like

Attestation of Global Compliance

(GC) S



#### **TEST RESULT FOR BAND EDGE**

# GFSK MODULATION IN LOW CHANNEL Hopping off



### Hopping on

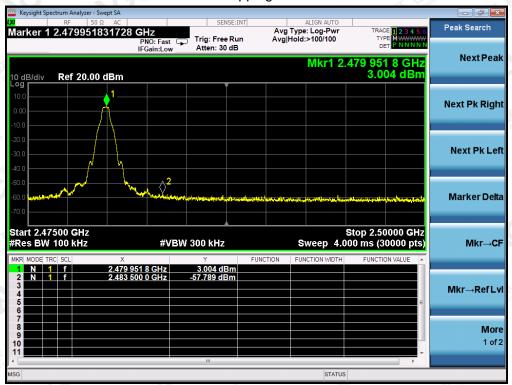


The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.go.tt.com.

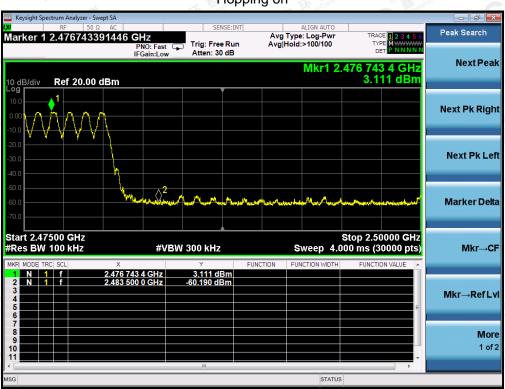
**IGC** 8



# GFSK MODULATION IN HIGH CHANNEL Hopping off



### Hopping on



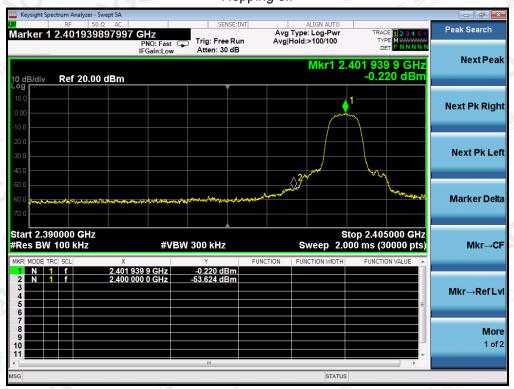
The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ACC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



# $\pi$ /4-DQPSK MODULATION IN LOW CHANNEL Hopping off



### Hopping on



The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ACC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

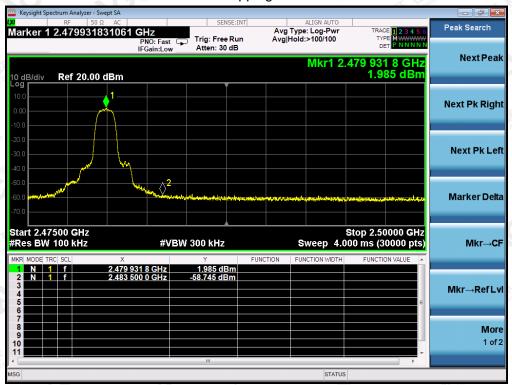
Attestation of Global Compliance

\GC g

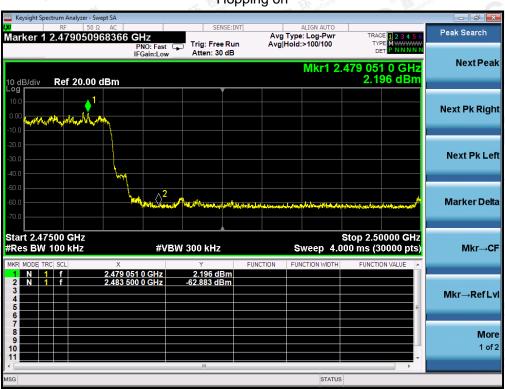
Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4,Chaxi Sanwei Technical Industrial Park,Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



# $\pi$ /4-DQPSK MODULATION IN HIGH CHANNEL Hopping off



### Hopping on



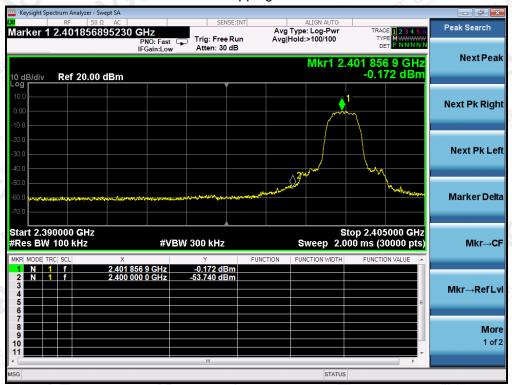
The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ACC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4,Chaxi Sanwei Technical Industrial Park,Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



# 8-DPSK MODULATION IN LOW CHANNEL Hopping off



### Hopping on



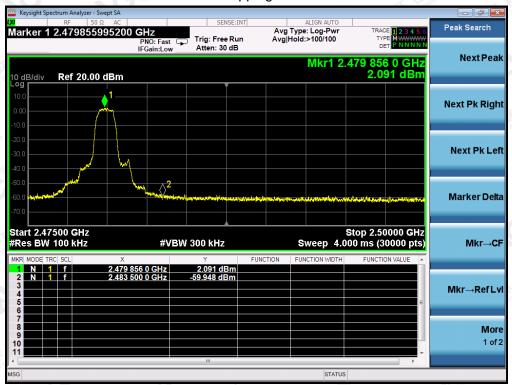
The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ACC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

Attestation of Global Compliance

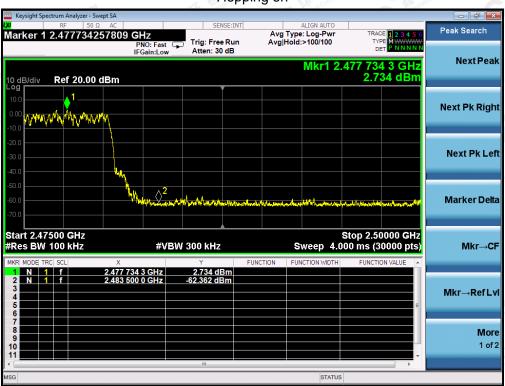
Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



# 8-DPSK MODULATION IN HIGH CHANNEL Hopping off



# Hopping on



The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ACC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4,Chaxi Sanwei Technical Industrial Park,Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



Report No.: AGC04228190304FE02 Page 37 of 65

### 10. RADIATED EMISSION

#### 10.1. MEASUREMENT PROCEDURE

- 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.
- 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.

The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.



Report No.: AGC04228190304FE02

Page 38 of 65

# The following table is the setting of spectrum analyzer and receiver.

	Spectrum Parameter	Setting
	Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
K Compliance	Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Clops,	Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP
CO.	Start ~Stop Frequency	1GHz~26.5GHz 1MHz/3MHz for Peak, 1MHz/3MHz for Average

Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ACC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attr://www.agc-gett.com.

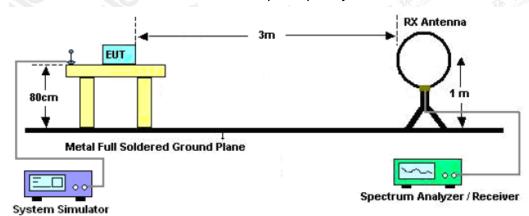
Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China

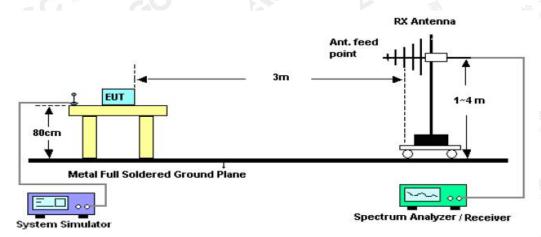


# 10.2. TEST SETUP

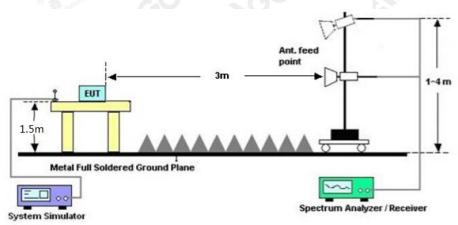
# Radiated Emission Test-Setup Frequency Below 30MHz



# RADIATED EMISSION TEST SETUP 30MHz-1000MHz



# RADIATED EMISSION TEST SETUP ABOVE 1000MHz



The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ACC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.



Report No.: AGC04228190304FE02

Page 40 of 65

# 10.3. 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 K K	30
30~88	100	3
88~216	150	3
216~960	200	The state of the s
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

#### 10.4. TEST RESULT

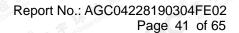
# **RADIATED EMISSION BELOW 30MHZ**

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

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.go.tt.com.

Attestation of Global Compliance

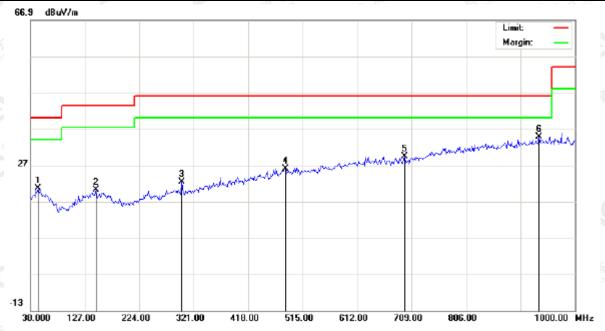
Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4,Chaxi Sanwei Technical Industrial Park,Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China





# **RADIATED EMISSION BELOW 1GHZ**

EUT	Wireless Headset	Model Name	S041A TWS
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 4	Antenna	Horizontal



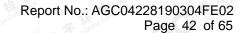
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	•	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		42.9333	0.59	19.98	20.57	40.00	-19.43	peak			
2		146.4000	1.08	19.22	20.30	43.50	-23.20	peak			
3		299.9833	3.03	19.47	22.50	46.00	-23.50	peak			
4		484.2833	1.35	24.67	26.02	46.00	-19.98	peak			
5		696.0667	1.31	28.10	29.41	46.00	-16.59	peak			
6	*	935.3333	2.85	32.00	34.85	46.00	-11.15	peak			

RESULT: PASS

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 1000, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at http://www.agc.gett.com.

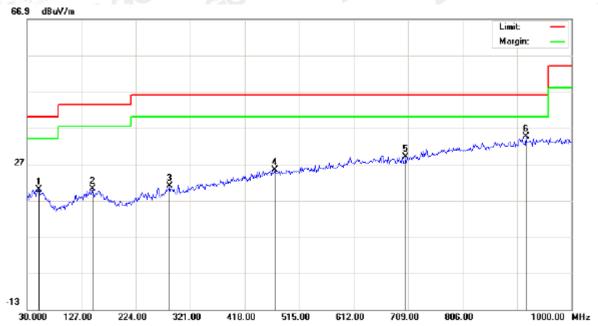
Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F. , Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China





EUT	Wireless Headset	Model Name	S041A TWS
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 4	Antenna	Vertical



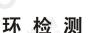
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		51.0167	0.44	19.64	20.08	40.00	-19.92	peak			
2		146.4000	0.98	19.22	20.20	43.50	-23.30	peak			
3		283.8167	1.17	19.85	21.02	46.00	-24.98	peak			
4		471.3500	0.95	24.41	25.36	46.00	-20.64	peak			
5		704.1500	0.77	28.24	29.01	46.00	-16.99	peak		·	
6	*	919.1667	2.83	31.86	34.69	46.00	-11.31	peak			

# **RESULT: PASS**

Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

2. All test modes had been pre-tested. The mode 4 is the worst case and recorded in the report.

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ACC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.



Report No.: AGC04228190304FE02

Page 43 of 65

# **RADIATED EMISSION ABOVE 1GHZ**

EUT	Wireless Headset	Model Name	S041A TWS
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	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4804.062	46.36	3.76	50.12	74.00	-23.88	peak
4804.062	44.90	3.76	48.66	54.00	-5.34	AVG
7206.093	35.91	8.17	44.08	74.00	-29.92	peak
7206.093	33.61	8.17	41.78	54.00	-12.22	AVG
- F Global C	3 3 College College	R F OF	obe			
Attestation	® Mastalion of	Attestation				
Remark:	0 . 6				ALIE A	极地
actor = Ante	enna Factor + Ca	ble Loss – F	Pre-amplifier.	Ą	Compilar	The stop of Court

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

EUT	Wireless Headset	Model Name	S041A TWS
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	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4804.062	49.71	3.76	53.47	74.00	-20.53	peak
4804.062	44.05	3.76	47.81	54.00	-6.19	AVG
7206.093	37.88	8.17	46.05	74.00	-27.95	peak
7206.093	34.83	8.17	43.00	54.00	-11.00	AVG
) (m)	of Global C	allon of Glo	Allest			
Remark:	LOC 1					TIME SALE
actor = Ante	enna Factor + Ca	ble Loss –	Pre-amplifier.	TK Compliance	新	al Compile

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 1000, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at http://www.agc.gett.com.



Report No.: AGC04228190304FE02 Page 44 of 65

EUT	Wireless Headset	Model Name	S041A TWS
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
4882.062	48.07	3.78	51.85	74.00	-22.15	peak
4882.062	43.03	3.78	46.81	54.00	-7.19	AVG
7323.093	41.31	8.23	49.54	74.00	-24.46	peak
7323.093	39.41	8.23	47.64	54.00	-6.36	AVG
213	. juj	1	3 1100°	F of Global	® A nation of Gu	
I The com	Ele Complet	77	Props Coun	ttestation.	Attes	
Remark:	® # "Jon of Globb	® station of	- (10			
Factor = Ante	enna Factor + Ca	able Loss – I	Pre-amplifier.		litr-	199

EUT	Wireless Headset	Model Name	S041A TWS
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
4882.062	47.69	3.78	51.47	74.00	-22.53	peak
4882.062	43.86	3.78	47.64	54.00	-6.36	AVG
7323.093	40.41	8.23	48.64	74.00	-25.36	peak
7323.093	36.21	8.23	44.44	54.00	-9.56	AVG
(B) Age	No.	5100	1			
				lite-		-700
Remark:				Ki poliance	不	Compliance
Factor = Ante	enna Factor + Ca	able Loss -	Pre-amplifier.	Global Co.	® # If of Glob	<b>a.</b> C

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 100°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at although the confirmed at all the



Report No.: AGC04228190304FE02

Page 45 of 65

EUT	Wireless Headset	Model Name	S041A TWS
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Horizontal

			The III of	1007	2001 000	100 (0)
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4960.062	47.17	3.81	50.98	74.00	-23.02	peak
4960.062	44.83	3.81	48.64	54.00	-5.36	AVG
7440.093	39.37	8.27	47.64	74.00	-26.36	peak
7440.093	36.78	8.27	45.05	54.00	-8.95	AVG
1/2	: 10		3 100°	F of Global	® # Jon of Gro	
The acom	X Company	7	nops Cour.	trestatio.	Attes	
Remark:	® # Jon of Globs	® station of	6			
Factor = Ante	enna Factor + Ca	ble Loss – I	Pre-amplifier.		litir-	1997

EUT	Wireless Headset	Model Name	S041A TWS
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
4960.062	47.41	3.81	51.22	74.00	-22.78	peak
4960.062	44.89	3.81 🦠 🍇	48.70	54.00	-5.30	AVG
7440.093	40.38	8.27	48.65	74.00	-25.35	peak
7440.093	37.36	8.27	45.63	54.00	-8.37	AVG
				1117		12 3
	-dil	litte:	K	inpliance .	EN a Compile	(B) The station of
emark:	A Transco	TK Kil plance	- F Global	® 45 3	on of Glov	
actor = Ante	enna Factor + Ca	able Loss – Pi	re-amplifier.	Alles		

# **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.

All test modes had been tested. The GFSK modulation is the worst case and recorded in the report.

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.go.tt.com.