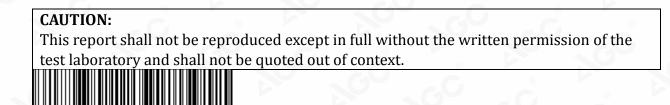


FCC Test Report

Report No.: AGC09241200701FE03

FCC ID	: 2ADKJ-EXT1
APPLICATION PURPOSE	: Original Equipment
PRODUCT DESIGNATION	: PROCESSOR UNIT
BRAND NAME	: Victor /JVC
MODEL NAME	: XP-EXT1P
APPLICANT	: Dailan Golden HuaLu Digital Technology Co., Ltd.
DATE OF ISSUE	: July 22, 2020
STANDARD(S)	: FCC Part 15.247
REPORT VERSION	: V1.0

Attestation of Global Compliance(Shenzhen) Co., Ltd



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuence of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.

 Attestation of Global Compliance(Shenzhen)Co., Ltd

 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

 Tel: +86-755 2523 4088
 E-mail: agc@agc-cert.com



REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0		July 22, 2020	Valid	Initial Release

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the openicated restruction Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written aphorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issue of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

 Attestation of Global Compliance(Shenzhen)Co., Ltd

 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

 Tel: +86-755 2523 4088
 E-mail: agc@agc-cert.com



TABLE OF CONTENTS

1. VERIFICATION OF CONFORMITY	
2. GENERAL INFORMATION	
2.1. PRODUCT DESCRIPTION	
2.2. TABLE OF CARRIER FREQUENCYS	
2.3. RECEIVER INPUT BANDWIDTH	7
2.4. EXAMPLE OF A HOPPING SEQUENCY IN DATA MODE	
2.5. EQUALLY AVERAGE USE OF FREQUENCIES AND BEHAVIOUR	
2.6. RELATED SUBMITTAL(S) / GRANT (S)	
2.7. TEST METHODOLOGY	
2.8. SPECIAL ACCESSORIES	
2.9. EQUIPMENT MODIFICATIONS	
3. MEASUREMENT UNCERTAINTY	
4. DESCRIPTION OF TEST MODES	
5. SYSTEM TEST CONFIGURATION	11
5.1. CONFIGURATION OF EUT SYSTEM	
5.2. EQUIPMENT USED IN TESTED SYSTEM	11
5.3. SUMMARY OF TEST RESULTS	
6. TEST FACILITY	
7. PEAK OUTPUT POWER	
7.1. MEASUREMENT PROCEDURE	
7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	
7.3. LIMITS AND MEASUREMENT RESULT	
8. 20DB BANDWIDTH	
8.1. MEASUREMENT PROCEDURE	21
8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	
8.3. LIMITS AND MEASUREMENT RESULTS	
9. CONDUCTED SPURIOUS EMISSION	
9.1. MEASUREMENT PROCEDURE	
9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	
9.3. MEASUREMENT EQUIPMENT USED	
9.4. LIMITS AND MEASUREMENT RESULT	
10. RADIATED EMISSION	41
10.1. MEASUREMENT PROCEDURE	
10.2. TEST SETUP	
10.3. LIMITS AND MEASUREMENT RESULT	Sedicated Pesting/Inspection

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated restriction of Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGE. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Report No.:AGC09241200701FE03 Page 4 of 78

10.4. TEST RESULT	
11. NUMBER OF HOPPING FREQUENCY	
11.1. MEASUREMENT PROCEDURE	
11.2. TEST SETUP (BLOCK DIAGRAM OF CONFIGURATION)	
11.3. MEASUREMENT EQUIPMENT USED	
11.4. LIMITS AND MEASUREMENT RESULT	
12. TIME OF OCCUPANCY (DWELL TIME)	
12.1. MEASUREMENT PROCEDURE	55
12.2. TEST SETUP (BLOCK DIAGRAM OF CONFIGURATION)	55
12.3. MEASUREMENT EQUIPMENT USED	
12.4. LIMITS AND MEASUREMENT RESULT	55
13. FREQUENCY SEPARATION	
13.1. MEASUREMENT PROCEDURE	
13.2. TEST SETUP (BLOCK DIAGRAM OF CONFIGURATION)	
13.3. MEASUREMENT EQUIPMENT USED	
13.4. LIMITS AND MEASUREMENT RESULT	
14. FCC LINE CONDUCTED EMISSION TEST	
14.1. LIMITS OF LINE CONDUCTED EMISSION TEST	
14.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST	60
14.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST	61
14.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST	61
14.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST	62
APPENDIX A: PHOTOGRAPHS OF TEST SETUP	
APPENDIX B: PHOTOGRAPHS OF EUT	

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, and the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuer of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



1. VERIFICATION OF CONFORMITY

Applicant	Dailan Golden HuaLu Digital Technology Co., Ltd.
Address	No.1, Hua Road, High-Tech Zone, Dalian, China
Manufacturer	JVCKENWOOD Corporation
Address	3-12, Moriya-cho, Kanagawa-ku, Yokohama-shi Kanagawa 221-0022, Japan
Factory	Dailan Golden HuaLu Digital Technology Co., Ltd.
Address	No.1, Hua Road, High-Tech Zone, Dalian, China
Product Designation	PROCESSOR UNIT
Brand Name	Victor /JVC
Test Model	XP-EXT1P
Date of test	July 06, 2020 to July 22, 2020
Deviation	No any deviation from the test method
Condition of Test Sample	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.

Prepared By

Reviewed By

John Zerry

John Zeng Project Engineer

July 22, 2020

Max Zhans

Max Zhang

July 22, 2020

Approved By

Lowes

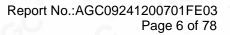
Reviewer

Forrest Lei Authorized Officer

July 22, 2020

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the bedicated resting/inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGE the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15da Gate the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/





2. GENERAL INFORMATION

2.1.PRODUCT DESCRIPTION

The EUT is designed as "PROCESSOR UNIT". 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	2.402GHz to 2.480GHz
RF Output Power	-0.051dBm(Max)
Bluetooth Version	V5.0
Modulation	BR ⊠GFSK, EDR ⊠π /4-DQPSK,⊠8DPSK BLE ⊠GFSK 1Mbps □GFSK 2Mbps
Number of Channels	79 Channels
Hardware Version	V0.5
Software Version	V1.0.2
Antenna Designation	Integral Antenna(Comply with requirements of the FCC part 15.203)
Antenna Gain	2dBi
Power Supply	DC 12V by adapter

2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency
	0	2402MHZ
		2403MHZ
0		
	38	2440 MHZ
2402~2480MHZ	39	2441 MHZ
	40	2442 MHZ
	77	2479 MHZ
	78	2480 MHZ

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Festive/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter approver, and the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



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 isan 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 timeof the day. Its resolution is at least half the RX/TX slot length of 312.5us. The clock has a cycle of aboutone 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 teSequence. This will be done at the beginning of every new transmission.

Regarding short transmissions the Bluetooth system has the following7ehavior:

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.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the topologicated restriction of stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGE. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuer of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



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

This submittal(s) (test report) is intended for **FCC ID: 2ADKJ-EXT1** filing to comply with the FCC PART 15.247 requirements.

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.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the stand resting / nspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGC, he test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

 Attestation of Global Compliance(Shenzhen)Co., Ltd

 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

 Tel: +86-755 2523 4088
 E-mail: agc@agc-cert.com
 Web: http://cn.agc-cert.com/



3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, 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 spurious emissions, conducted, Uc = ±2.7 dB
- Uncertainty of Occupied Channel Bandwidth: Uc =±2 %
- Uncertainty of Dwell Time: Uc =±2 %
- Uncertainty of Frequency: Uc =±2 %

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the stand of the stand of the test results stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGE the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

 Attestation of Global Compliance(Shenzhen)Co., Ltd

 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

 Tel: +86-755 2523 4088
 E-mail: agc@agc-cert.com

Web: http://cn.agc-cert.com/



4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel GFSK
2	Middle channel GFSK
3	High channel GFSK
4	Low channel π/4-DQPSK
5	Middle channel π/4-DQPSK
6	High channel π/4-DQPSK
7	Low channel 8DPSK
8	Middle channel 8DPSK
9	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. Software Setting

Contiguer RF	RE ATH BE BE ATH		
* n	Citz	O TEST MORE	START
FREQUENCY TRUM	Deresa		
TX POWER TREM Tx Modulations Photomy	Dry.		
Channel TXVCA Setting Offering Power Cantrol Level	010-242340	Packet Type: Dog Packed Type: At 1	
TX Printer	IDRIMAX -		

Dedicated Fe Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Solicated resolution of Active and resolution of the report is not permitted without the written authorization of Active authorization of Active authorization of Active authorization of Active authorization authorization of Active authorization authorizati /Inspection he test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15d ne test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

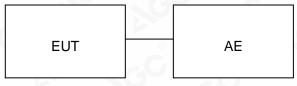
Attestation of Global Compliance(Shenzhen)Co., Ltd Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/



5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Radiated Emission Configure :



Conducted Emission Configure :

	<u> </u>	
EUT		AE

5.2.EQUIPMENT USED IN TESTED SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	PROCESSOR UNIT	XP-EXT1P	2ADKJ-EXT1	EUT
2	Adapter	N/A	AC1.5m unshielded, DC1.5m unshielded	Accessory
3	Control Box	N/A	USB-TTL	AE

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC, the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
15.247 (b)(1)	Peak Output Power	Compliant
15.247(a)(1)	20 dB Bandwidth	Compliant
15.247 (d)	Conducted Spurious Emission	Compliant
15.209	Radiated Emission	Compliant
15.247 (a)(1)(iii)	Number of Hopping Frequency	Compliant
15.247 (a)(1)(iii)	Time of Occupancy	Compliant
15.247 (a)(1)	Frequency Separation	Compliant
15.207	Conducted Emission	Compliant

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, and the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuer of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

 Attestation of Global Compliance(Shenzhen)Co., Ltd

 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

 Tel: +86-755 2523 4088
 E-mail: agc@agc-cert.com



6. TEST FACILITY

TestSite	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, 2022
LISN	R&S	ESH2-Z5	100086	Aug. 26, 2019	Aug. 25, 2020
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, 2022
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 12, 2019	Dec. 11, 2020
2.4GHz Fliter	EM Electronics	2400-2500MHz	N/A	Mar. 23, 2020	Mar. 22, 2022
Attenuator	ZHINAN	E-002	N/A	Sep. 09, 2019	Sep. 08, 2020
Horn antenna	SCHWARZBE CK	BBHA 9170	#768	Sep. 09, 2019	Sep. 08, 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	Oct. 15, 2019	Oct. 16, 2020
ANTENNA	SCHWARZBE CK	VULB9168	494	Jan. 09, 2019	Jan. 08, 2021
Test software	FARA	EZ-EMC (Ver RA-03A)	N/A	N/A	N/A

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGC the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issue of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



7. PEAK OUTPUT POWER

7.1. MEASUREMENT PROCEDURE

For peak power test:

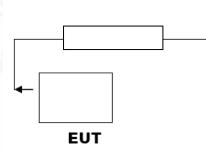
- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
- 3. RBW > 20 dB bandwidth of the emission being measured.
- 4. VBW \geq RBW.
- 5. Sweep: Auto.
- 6. Detector function: Peak.
- 7. Trace: Max hold.

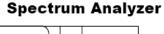
Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power, after any corrections for external attenuators and cables.

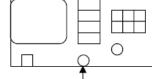
7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

RF Attenuator

PEAK POWER TEST SETUP







RF Cable

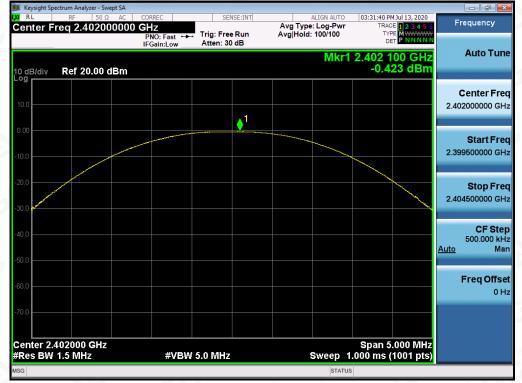
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the stand in the stand of the stand in the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



7.3. LIMITS AND MEASUREMENT RESULT

PEAK OUTPUT POWER MEASUREMENT RESULT							
FOR GFSK MOUDULATION Frequency (GHz) Peak Power (dBm) Applicable Limits (dBm) Pass or Fail							
2.402	-0.423	30	Pass				
2.441	-0.149	30	Pass				
2.480	-0.051	30	Pass				

CH0



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Festing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written exchanged by the Bedicated Festing/Inspection presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

Report No.:AGC09241200701FE03 Page 16 of 78



CH39 SE:INT Avg Type: Log-Pwr Avg|Hold: 100/100 Frequency Center Freq 2.441000000 GHz Trig: Free Run Atten: 30 dB PNO: Fast IFGain:Low Auto Tune Mkr1 2.441 090 GHz -0.149 dBm I0 dB/div Ref 20.00 dBm **Center Freq** 2.441000000 GHz ▲1 Start Freq 2.438500000 GHz Stop Freq 2.443500000 GHz CF Step 500.000 kHz <u>Auto</u> Mar Freq Offset 0 Hz Center 2.441000 GHz #Res BW 1.5 MHz Span 5.000 MHz Sweep 1.000 ms (1001 pts) #VBW 5.0 MHz STATUS

CH78

Keysight Spectrum Ar K	alyzer - Swept SA 50 Ω AC	CORREC	CENCE ANT	ALIGN AUT	0 00.00.47.043.42.000	
Center Freq 2		GHz	SENSE:INT	Avg Type: Log-Pw Avg Hold:>100/100	/r TRACE 1 2 3 4 5	6 Frequency
		PNO: Fast ↔ IFGain:Low	Atten: 30 dB		DET PNNN	
10 dB/div Ref	20.00 dBm			Mk	r1 2.480 130 GH -0.051 dBr	2
10.0						Center Freq 2.480000000 GHz
0.00			↓ 1			Start Fred
-10.0						2.477500000 GHz
-30.0						Stop Fred 2.482500000 GHz
-40.0						CF Step 500.000 kH Auto Mar
-50.0						
-60.0						Freq Offse 0 H:
-70.0						
Center 2.48000 #Res BW 1.5 M		#VBV	V 5.0 MHz	Sweep	Span 5.000 MH 1.000 ms (1001 pt	lz s)
MSG				STA	TUS	

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, and the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

	PEAK OUTPUT POWER MEASUREMENT RESULT					
	FOR II /4-DQPSK M	ODULATION				
Frequency (GHz)Peak Power (dBm)Applicable Limits (dBm)Pass or Fa						
2.402	-0.561	21	Pass			
2.441	-0.285	21	Pass			
2.480	-0.177	21	Pass			

AGC®



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, or having he test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

Report No.:AGC09241200701FE03 Page 18 of 78



CH39 SE:INT Avg Type: Log-Pwr Avg|Hold: 100/100 Frequency Center Freq 2.441000000 GHz Trig: Free Run Atten: 30 dB PNO: Fast IFGain:Low Auto Tune Mkr1 2.441 130 GHz -0.285 dBm 10 dB/div Ref 20.00 dBm **Center Freq** 2.441000000 GHz ▲1 Start Freq 2.438500000 GHz Stop Freq 2.443500000 GHz CF Step 500.000 kHz <u>Auto</u> Mar Freq Offset 0 Hz Center 2.441000 GHz #Res BW 1.5 MHz Span 5.000 MHz Sweep 1.000 ms (1001 pts) #VBW 5.0 MHz STATUS

CH78

	ectrum Analyzer - Swe									- đ	×
Center F	RF 50 Ω req 2.48000		DRREC		ISE:INT	Avg Type	ALIGN AUTO	TRAC	4 Jul 13, 2020 E 1 2 3 4 5 6	Frequency	/
	·	F	PNO: Fast ↔ FGain:Low	. Trig: Free Atten: 30		Avg Hold:		DE		Auto T	
10 dB/div Log	Ref 20.00 c	IBm					Mkr1	2.480 1 -0.1	55 GHz 77 dBm	Auto T	une
10.0										Center F 2.480000000	
0.00					♦ ¹					2.40000000	
-10.0										Start F 2.477500000	
-20.0	and a second							- Mallow Marine	W. J.	Oton F	- ro
-30.0									معل <u> الر</u>	Stop F 2.482500000	
-40.0										CF S	
-50.0										500.000 <u>Auto</u>	Ма
-60.0										Freq Of	
-70.0											он
Center 2.4 #Res BW	80000 GHz 1.5 MHz		#VBW	/ 5.0 MHz			Sweep 1	Span 5 .000 ms (.000 MHz 1001 pts)		
MSG							STATUS				

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, and the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

PEAK OUTPUT POWER MEASUREMENT RESULT					
	FOR 8-DPSK MODULA	TION			
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail		
2.402	-0.614	21	Pass		
2.441	-0.370	21	Pass		
2.480	-0.190	21	Pass		

AGC®



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Pestivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the square of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

CH0

Report No.:AGC09241200701FE03 Page 20 of 78



CH39



CH78

💓 Keysight Sp	ectrum Analyzer - Swept SA RF 50 Ω A		SENSE:INT	ALIGN AUT	0 03:41:26 PM Jul 13, 2020	
	req 2.4800000	00 GHz		Avg Type: Log-Pw Avg Hold: 100/100		Frequency
		PNO: Fast ↔ IFGain:Low	Atten: 30 dB		DET P NNNN	Auto Tune
10 dB/div	Ref 20.00 dBn	n		Mk	r1 2.480 170 GHz -0.190 dBm	
10.0						Center Freq 2.48000000 GHz
0.00					Marcon	Start Freq 2.477500000 GHz
-20.0					And the second s	Stop Freq 2.482500000 GHz
-40.0						CF Step 500.000 kHz <u>Auto</u> Man
-60.0						Freq Offset 0 Hz
-70.0	480000 GHz				Spop 5 000 Milia	
Center 2. #Res BW		#VBV	V 5.0 MHz	Sweep	Span 5.000 MHz 1.000 ms (1001 pts)	
MSG				STA	TUS	

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, and the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

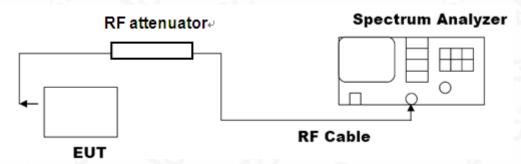


8. 20DB BANDWIDTH

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)



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the stand inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC in the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



8.3. LIMITS AND MEASUREMENT RESULTS

MEASUREMENT RESULT FOR GFSK MOUDULATION					
Applicable Limite	Measurement Result				
Applicable Limits	Test Data	Criteria			
	Low Channel	1.086	PASS		
N/A	Middle Channel	1.084	PASS		
	High Channel	1.085	PASS		

10:56:16 AM Jul 21, 2020 Radio Std: None Trace/Detector Center Freq: 2.402000000 GHz Trig: Freq Run Avg|Hold:>10/10 x dB -20.00 dE Trig: Free Run #Atten: 10 dB Radio Device: BTS Ref 20.00 dBm **Clear Write** Average Max Hold Center 2.402 GHz #Res BW 30 kHz Span 3 MHz Sweep 4.133 ms #VBW 100 kHz **Min Hold** Occupied Bandwidth **Total Power** 4.95 dBm 1.0379 MHz Detector Average I Mar 16.734 kHz <u>Auto</u> **Transmit Freq Error OBW Power** 99.00 % x dB Bandwidth 1.086 MHz x dB -20.00 dB

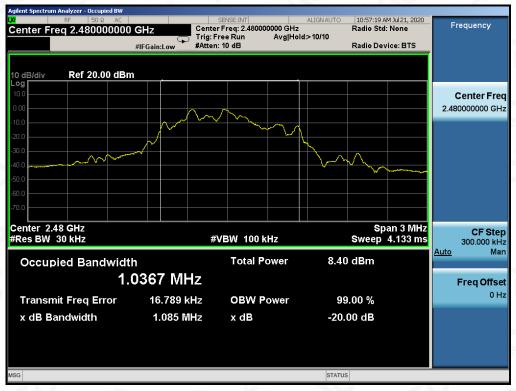
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the bedicated fresh g/inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, being a standard fresh g/inspection of AGC in the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the bedicated frame/inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC in the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15da/Castra the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.



MEASUREMENT RESULT FOR II /4-DQPSK MODULATION						
Annlinghla Limita		Measurement Result				
Applicable Limits	Test Data	(MHz)	Criteria			
N/A	Low Channel	1.222	PASS			
	Middle Channel	1.220	PASS			
	High Channel	1.219	PASS			

TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the bedicated fresh g/inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, being a standard fresh g/inspection of AGC in the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

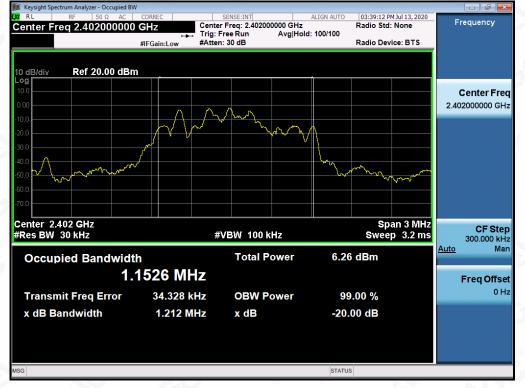


Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the bedicated fracting/inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written beinvalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written beinvalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written beinvalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written beinvalid. Copying or excerpting portion of or eport issued by AGC should be submitted to AGC within 15day affective is in the report apply only to the test report should be addressed to AGC by agc@agc-cert.com.



MEASUREMENT RESULT FOR 8-DPSK MODULATION						
Measurement Result						
Applicable Limits	Test Data	(MHz)	Criteria			
	Low Channel	1.212	PASS			
N/A	Middle Channel	1.213	PASS			
	High Channel	1.214	PASS			

TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the bedicated frame/inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC in the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15da/Castra the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the bedicated frame/inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC in the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15da/Castra the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.



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

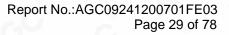
9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6

9.4. LIMITS AND MEASUREMENT RESULT

LIMITS AND MEASUREMENT RESULT						
Annlinghla Limita	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	At least -20dBc than the limit 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 level of the desired power. In addition, radiation emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in§15.209(a))	At least -20dBc than the limit Specified on the TOP Channel	PASS				

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the selected "Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day affective in the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.





TEST RESULT FOR ENTIRE FREQUENCY RANGE TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OFGFSK MODULATION IN LOW CHANNEL



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Festing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGC, the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

Report No.:AGC09241200701FE03 Page 30 of 78



Keysight Spectrum Analyzer - Swept SA							
RL RF 50 Ω A0 Center Freq 13.741750	0000 GHz PNO: Fast ↔	SENSE:II	Avg	ALIGN AUTO Type: Log-Pwr Hold: 10/10	03:42:54 PM Jul 13, 2 TRACE 123 TYPE MWW DET P NN	456 www	Frequency
10 dB/div Ref 20.00 dBr	IFGain:Low	Atten: 30 dB		Mkr	1 24.242 7 G -48.149 d	iliz	Auto Tun
							Center Fre 13.741750000 GH
-20.0					-21.0	<u>3 dBm</u>	Start Fre 2.483500000 GH
-50.0 -60.0 -70.0							Stop Fre 25.00000000 GH
Start 2.48 GHz #Res BW 100 kHz	#VBV	V 300 kHz	FUNCTION	Sweep 2	Stop 25.00 (2.152 s (30000) FUNCTION VALUE	pts)	CF Ste 2.251650000 GH <u>Auto</u> Ma
1 N 1 F 2 3 4 5 6	24.242 7 GHz	-48.149 dBm				E	Freq Offso 0 ⊦
7 8 9 10 11						•	

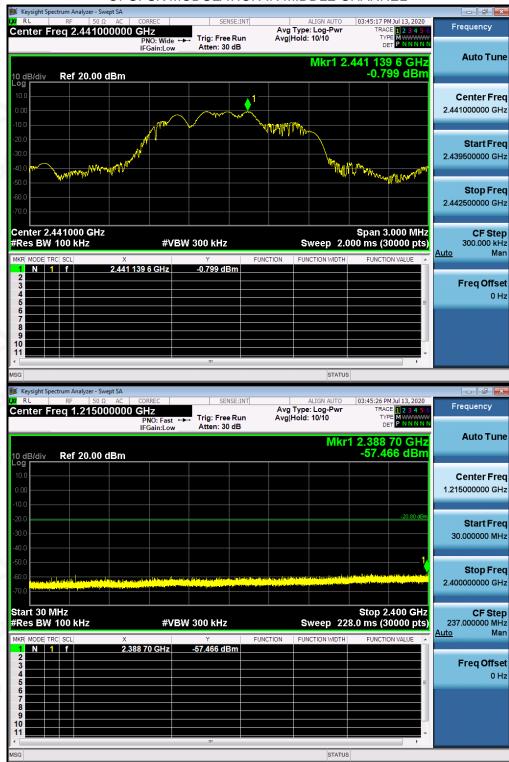
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, and the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuer of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

 Attestation of Global Compliance(Shenzhen)Co., Ltd

 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

 Tel: +86-755 2523 4088
 E-mail: agc@agc-cert.com





TEST PLOT OF OUT OF BAND EMISSIONS OFGFSK MODULATION IN MIDDLE CHANNEL

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Figure/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, be test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuence of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.

Report No.:AGC09241200701FE03 Page 32 of 78



🔰 Keysight Spectrum Analyzer - Swept SA					
LX RL RF 50Ω AC			ALIGN AUTO 0	3:45:52 PM Jul 13, 2020 TRACE 1 2 3 4 5 6	Frequency
Center Freq 13.7417500	PNO: Fast +++ Trig: Free IFGain:Low Atten: 30	Run Avg Hold	: 10/10	DET PNNNN	Auto Tune
10 dB/div Ref 20.00 dBm				4.239 7 GHz -47.323 dBm	
10.0 0.00 -10.0					Center Freq 13.741750000 GHz
-20.0				-20.80 dBm	Start Freq 2.483500000 GHz
-50.0 -60.0 -70.0	nni kang ing panging na na kang na				Stop Freq 25.000000000 GHz
Start 2.48 GHz #Res BW 100 kHz	#VBW 300 kHz			Stop 25.00 GHz 52 s (30000 pts)	CF Step 2.251650000 GHz <u>Auto</u> Man
1 N 1 f 24 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4.239 7 GHz -47.323 dE			н	Freq Offset 0 Hz
6 7 8 9 10 11					
MSG			STATUS	4	

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, and the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuer of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

 Attestation of Global Compliance(Shenzhen)Co., Ltd

 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

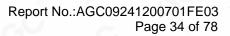
 Tel: +86-755 2523 4088
 E-mail: agc@agc-cert.com





TEST PLOT OF OUT OF BAND EMISSIONS OFGFSK MODULATION IN HIGH CHANNEL

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Figure/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, be test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuence of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.





	n Analyzer - Swept SA					
	RF 50 Ω AC		SENSE:INT	ALIGN AUTO Avg Type: Log-Pwr	03:47:23 PM Jul 13, 2020 TRACE 1 2 3 4 5 6	Frequency
Center Freq	13.7500000	PNO: Fast	Trig: Free Run Atten: 30 dB	Avg Hold: 10/10	TYPE MWWWW DET PNNNNN	Auto Tune
10 dB/div Re	ef 20.00 dBm			MIK	1 24.219 2 GHz -47.168 dBm	
10.0 0.00 -10.0						Center Freq 13.750000000 GHz
-20.0 -30.0 -40.0					-20.63 dBm	Start Freq 2.500000000 GHz
-50.0 -60.0 -70.0						Stop Freq 25.00000000 GHz
Start 2.50 GH #Res BW 100	0 kHz		Y SOO KHZ	Sweep :	Stop 25.00 GHz 2.152 s (30000 pts)	CF Step 2.250000000 GHz <u>Auto</u> Man
MKR MODE TRC SC 1 N 1 f 2 3 4 5 6 7 8 9 9 10 11 8 4 4 5 6 6 7 7 8 9 9 10 11 8 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7		4.219 2 GHz	Y FUN -47.168 dBm 	CTION FUNCTION WUTH	FUNCTION VALUE	Freq Offset 0 Hz

Note: The GFSK modulation is the worst case and only those data recorded in the report.

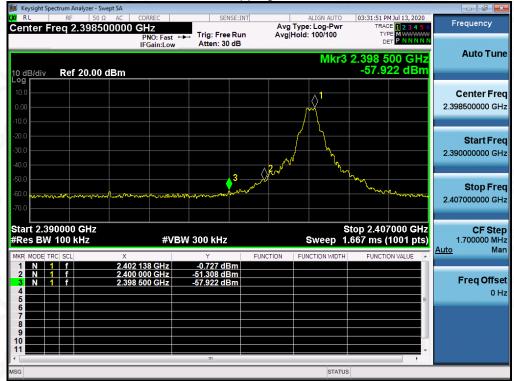
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, and the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuerce of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



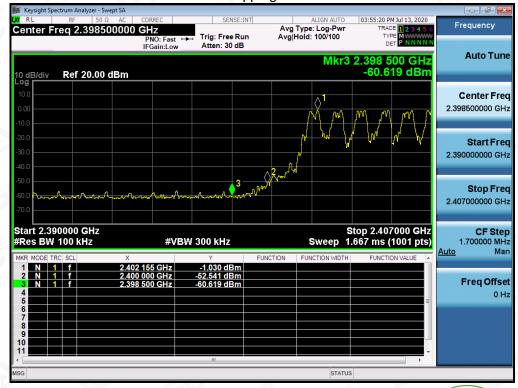
TEST RESULT FOR BAND EDGE

GFSK MODULATION IN LOW CHANNEL

Hopping off

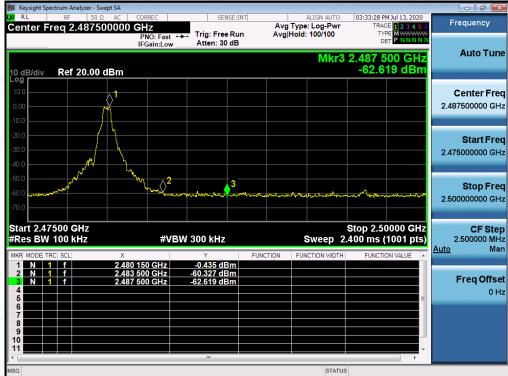


Hopping on



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the bedicated Proving/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGE the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day affective the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

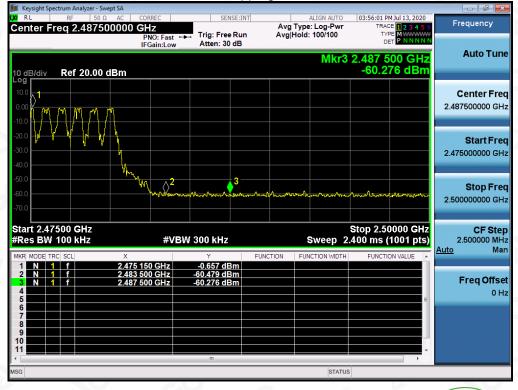




GFSK MODULATION IN HIGH CHANNEL

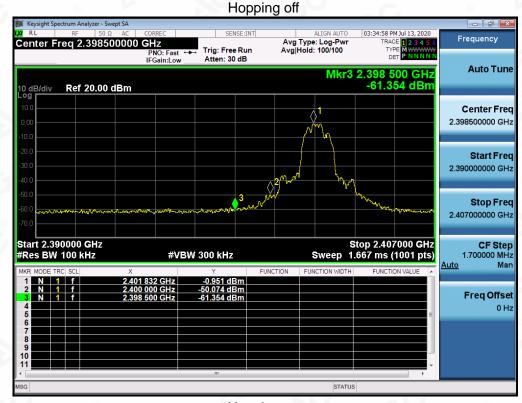
Hopping off

Hopping on



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Sbedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGS. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuence of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.





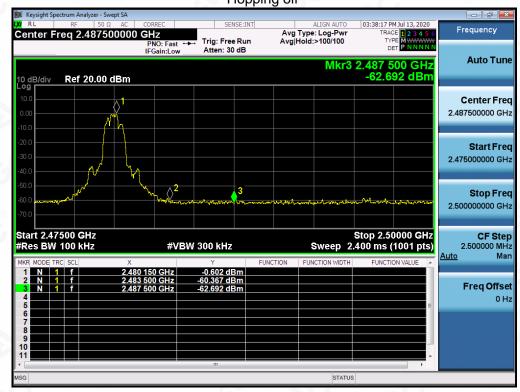
π /4-DQPSK MODULATION IN LOW CHANNEL

Hopping on



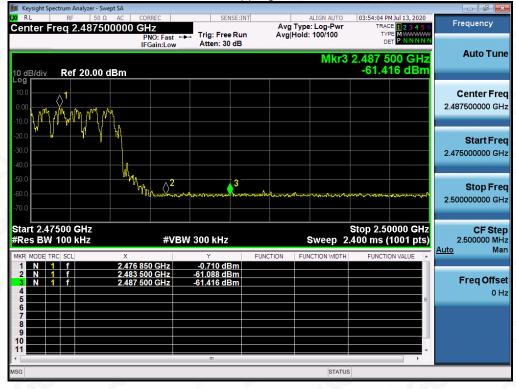
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, be test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuence of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.





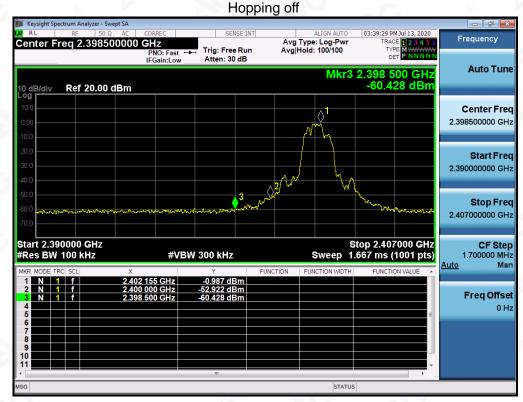
π /4-DQPSK MODULATION IN HIGH CHANNEL Hopping off

Hopping on



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, be test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuence of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.





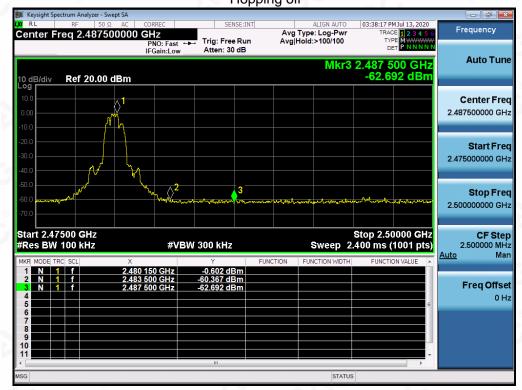
8-DPSK MODULATION IN LOW CHANNEL

Hopping on



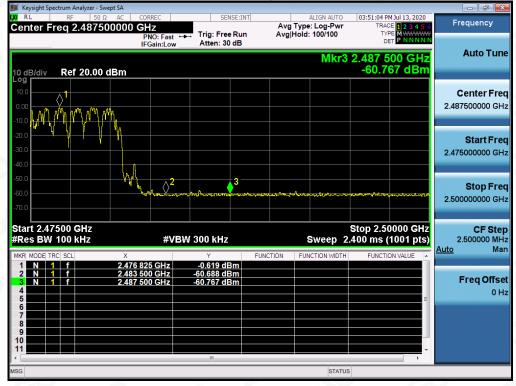
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, between the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.





8-DPSK MODULATION IN HIGH CHANNEL Hopping off

Hopping on



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the bedicated festing/inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, and horization of AGC, the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuence of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.



10. RADIATED EMISSION

10.1. MEASUREMENT PROCEDURE

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

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pestro/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGE. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.



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

Spectrum 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		
Start ~Stop Frequency	1GHz~26.5GHz 1MHz/3MHz for Peak, 1MHz/3MHz for Avera		

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

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written approver, and the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuer of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

 Attestation of Global Compliance(Shenzhen)Co., Ltd

 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

 Tel: +86-755 2523 4088
 E-mail: agc@agc-cert.com