

FCC Test Report

Report No.: AGC02324200805FE03

FCC ID	: 2ARYG-WE1
APPLICATION PURPOSE	: Original Equipment
PRODUCT DESIGNATION	: SooPods Wireless Earbuds
BRAND NAME	: isooco
MODEL NAME	: WE1
APPLICANT	: Foneric Technology Co., Ltd.
DATE OF ISSUE	: Sep. 01,2020
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 Pestua/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 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/



REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	. /	Sep. 01,2020	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 "Dedicated 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 explorization 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.

 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	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	7
	2.6. RELATED SUBMITTAL(S) / GRANT (S)	8
	2.7. TEST METHODOLOGY	8
	2.8. SPECIAL ACCESSORIES	8
	2.9. EQUIPMENT MODIFICATIONS	8
	2.10. ANTENNA REQUIREMENT	8
	3. MEASUREMENT UNCERTAINTY	9
	4. DESCRIPTION OF TEST MODES	10
	5. SYSTEM TEST CONFIGURATION	11
	5.1. CONFIGURATION OF EUT SYSTEM	11
	5.2. EQUIPMENT USED IN TESTED SYSTEM	11
	5.3. SUMMARY OF TEST RESULTS	11
	6. TEST FACILITY	12
	7. PEAK OUTPUT POWER	13
	7.1. MEASUREMENT PROCEDURE	13
	7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	
	7.3. LIMITS AND MEASUREMENT RESULT	
	8. 20DB BANDWIDTH	
	8.1. MEASUREMENT PROCEDURE	26
	8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	
	8.3. LIMITS AND MEASUREMENT RESULTS	
	9. CONDUCTED SPURIOUS EMISSION	33
St pr	9.1. MEASUREMENT PROCEDURE ny report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Pesting/Inspection tamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter approvation of AGE, the test results resented 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 issuer of the test report. urther enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.	33
A	ttestation of Global Compliance(Shenzhen)Co Ltd	



9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	
9.3. MEASUREMENT EQUIPMENT USED	
9.4. LIMITS AND MEASUREMENT RESULT	
10. RADIATED EMISSION	
10.1. MEASUREMENT PROCEDURE	
10.2. TEST SETUP	
10.3. LIMITS AND MEASUREMENT RESULT	
10.4. TEST RESULT	
11. NUMBER OF HOPPING FREQUENCY	
11.1. MEASUREMENT PROCEDURE	59
11.2. TEST SETUP (BLOCK DIAGRAM OF CONFIGURATION)	
11.3. MEASUREMENT EQUIPMENT USED	
11.4. LIMITS AND MEASUREMENT RESULT	59
12. TIME OF OCCUPANCY (DWELL TIME)	60
12.1. MEASUREMENT PROCEDURE	
12.2. TEST SETUP (BLOCK DIAGRAM OF CONFIGURATION)	
12.3. MEASUREMENT EQUIPMENT USED	
12.4. LIMITS AND MEASUREMENT RESULT	
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	65
14.1. LIMITS OF LINE CONDUCTED EMISSION TEST	
14.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST	
14.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST	
14.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST	
14.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST	66
APPENDIX A: PHOTOGRAPHS OF TEST SETUP	
APPENDIX B: PHOTOGRAPHS OF EUT	G

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pasting/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 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	Foneric Technology Co., Ltd.		
Address	4F, Fuxing Bldg, BinlangRoad, Futian Free Trade Zone, Shenzhen, China		
Manufacturer	Dongguan UiiSii Electronics Co., Ltd		
Address	No.8 , Hengxing Road, Hengkeng industrial Park, Liaobu Town, Dongguan City, Guangdong Province, China		
Factory	Dongguan UiiSii Electronics Co., Ltd		
Address	No.8 , Hengxing Road, Hengkeng industrial Park, Liaobu Town, Dongguan City, Guangdong Province, China		
Product Designation	SooPods Wireless Earbuds		
Brand Name	isooco		
Test Model	WE1		
Date of test	Aug. 14,2020 to Sep. 01,2020		
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

Then Huony

Thea Huang Project Engineer

Sep. 01,2020

Max Zhand **Reviewed By**

Max Zhang Reviewer

Sep. 01,2020

Approved By

Forrest Lei

Authorized Officer

Sep. 01,2020

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the stand 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 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.

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 "SooPods Wireless Earbuds". It is designed by way of utilizing the GFSK, π /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 2.480 GHz **RF Output Power** 5.947dBm (Max) **Bluetooth Version** V 5.0 BR \square GFSK, EDR $\square \pi$ /4-DQPSK, \square 8DPSK Modulation BLE GFSK 1Mbps GFSK 2Mbps Number of channels 79 V1.2 **Hardware Version Software Version** V0.1.4 Antenna Designation FPC Antenna (Comply with requirements of the FCC part 15.203) -0.2dBi Antenna Gain DC 3.7V by battery or DC 5V by adapter **Power Supply**

Note: 1. The EUT doesn't support BLE.

2. The EUT comprises left and right channel headsets, both are the same in SCH but different in the PC B Layout. The RF output power of each headset had been tested and recorded in the report. For the other test items, the left headset had been tested and recorded in this report as the worst case bec ause of the higher power.

2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency
	0	2402 MHz
		2403 MHz
	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 for the distingtion 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 aphorization 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.



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 multi slot 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 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 behavior action with other units only offset is 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 bits 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 the Sequence. This will be done at the beginning of every new transmission.

Regarding short transmissions the Bluetooth system has the following behavior:

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

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Facture/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 Safter 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.



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: 2ARYG-WE1** 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.

2.10. ANTENNA REQUIREMENT

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

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Fasting/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 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.



3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y ±U, where expended uncertainty U is based on a standard

uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

- Uncertainty of Conducted Emission, Uc = ±3.2 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, $Uc = \pm 0.8$ dB
- Uncertainty of spurious emissions, conducted, Uc = ±2.7dB
- Uncertainty of Occupied Channel Bandwidth: Uc = ±2 %
- Uncertainty of Dwell Time: $Uc = \pm 2\%$
- Uncertainty of Frequency: $Uc = \pm 2 \%$

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the stand 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 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 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.



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

Classic BL	E				E.
FCC Test C CBT Test		T address	Stop		
RF Control					
RF Mode	TX TEST -	Packet Type	3DH5	-	10/
Hopping	OFF -	TX Frequency	2480	-	
TX Power	7 🔹	RX Frequency	2402	*	in the
Scenario	PRBS Pattern			•	
LOG: FCC tes LOG: [COM8] LOG: BR/EDR	open, 1500000b	pa		*	
COM8 is open		500000bps		+	

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 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 and a state of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.

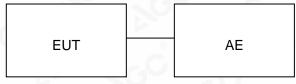
Attestation of Global Compliance(Shenzhen)Co., Ltd Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/



5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Radiated Emission Configure:



Conducted Emission Configure:

EUT		AE
	_	

5.2. EQUIPMENT USED IN TESTED SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	SooPods Wireless Earbuds	WF1 2ARYG		EUT
2	Adapter	TY0500100E1MN	N/A	AE
3	Charger line	G258	N/A	AE
4	control board	EPS-35-3.3	DC 3.3V	AE

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	Not applicable

Note: The EUT is powered by battery. The EUT can not use the BT function with charging

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Period/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 on a standard 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.



6. TEST FACILITY

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

TEST EQUIPMENT OF CONDUCTED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESPI	101206	May 15, 2020	May 14, 2021
LISN	R&S	ESH2-Z5	100086	Jul. 03,2020	Jul. 02,2022
Test software	R&S	ES-K1(Ver.V1.71)	N/A	N/A	N/A

TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	May 15, 2020	May 14, 2021
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 12, 2019	Dec. 11, 2020
2.4GHz Filter	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	SCHWARZBECK	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	SCHWARZBECK	VULB9168	494	Jan. 09, 2019	Jan. 08, 2021
Test software	Tonscend	JS32-RE (Ver.2.5)	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 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 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.



7. PEAK OUTPUT POWER

7.1. MEASUREMENT PROCEDURE

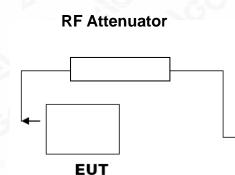
For peak power test:

- 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.

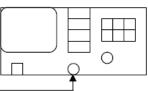
Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power, after any corrections for external attenuators and cables.

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

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

THE LEFT EAR:

	PEAK OUTPUT POWER MEASUR FOR GFSK MOUDULA		
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.402	4.799	30	Pass
2.441	4.323	30	Pass
2.480	3.157	30	Pass



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 Safer 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.: AGC02324200805FE03 Page 15 of 78



CH39 ENSE: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 Mkr1 2.441 055 GHz 4.323 dBm Auto Tune Ref 20.00 dBm 10 dB/div **Center Freq** 2.441000000 GHz 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



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 writter approver, and 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.: AGC02324200805FE03 Page 16 of 78

	PEAK OUTPUT POWER MEASU FOR Π/4-DQPSK MOD		
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.402	5.462	21	Pass
2.441	4.965	21	Pass
2.480	3.907	21	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 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.

Report No.: AGC02324200805FE03 Page 17 of 78



CH39



CH78

🔰 Keysight Spectrum Analyzer - Swept SA							
M RL RF 50 Ω AC Center Freq 2.480000000		SENSE:INT	Avg Type: Avg Hold:		TRAC	Aug 20, 2020	Frequency
	PNO: Fast +++ IFGain:Low	Atten: 30 dB	Avginoid.	100/100	DE	PNNNNN	
10 dB/div Ref 20.00 dBm				Mkr1	2.480 0 3.90	50 GHz 07 dBm	Auto Tune
10.0		∮ ¹					Center Freq 2.480000000 GHz
-10.0							Start Freq 2.477500000 GHz
-20.0							Stop Freq 2.482500000 GHz
-40.0							CF Step 500.000 kHz <u>Auto</u> Man
-60.0							Freq Offset 0 Hz
-70.0 Center 2.480000 GHz					Span 5.	.000 MHz	
#Res BW 1.5 MHz	#VBW :	5.0 MHz	8		.000 ms (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 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.

	PEAK OUTPUT POWER MEASURI FOR 8-DPSK MODULA		
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.402	5.947	21	Pass
2.441	5.323	21	Pass
2.480	4.307	21	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 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.

Report No.: AGC02324200805FE03 Page 19 of 78



CH39 NSE: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 2.440 990 GHz 5.323 dBm Ref 20.00 dBm 10 dB/div **Center Freq** 2.441000000 GHz Start Freq 2.438500000 GHz Stop Freq 2.443500000 GHz CF Step 500.000 kHz <u>Auto</u> Ма **Freq Offset**

CH78

Keysight Spectrum Analyzer - Swept SA	000050					
RL RF 50Ω AC Center Freq 2.480000000	CORREC	SENSE:INT	ALIGN AUT Avg Type: Log-Pw Avg Hold: 100/100	r TRAC	1 Aug 20, 2020 E 1 2 3 4 5 6 DE M WWWWW	Frequency
	PNO: Fast +++ IFGain:Low	Atten: 30 dB		DE		• • • • • •
10 dB/div Ref 20.00 dBm			Mk	r1 2.479 9 4.3	65 GHz 07 dBm	Auto Tur
10.0		1				Center Fr 2.480000000 G
10.0						Start Fr 2.477500000 G
20.0						Stop Fr 2.482500000 G
40.0						CF St 500.000 k <u>Auto</u> M
80.0						Freq Offs 0
70.0				Spop 5	.000 MHz	
Res BW 1.5 MHz	#VBW :	5.0 MHz	Sweep	span 5. 1.000 ms (1001 pts)	
ISG			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.



THE RIGHT EAR:

	PEAK OUTPUT POWER MEASURI		
Frequency	FOR GFSK MOUDULA Peak Power	FION Applicable Limits	Pass or Fail
(GHz)	(dBm)	(dBm)	Fass of Fall
2.402	2.907	30	Pass
2.441	2.358	30	Pass
2.480	1.704	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.: AGC02324200805FE03 Page 21 of 78





CH78



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Specificated 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.

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/

	PEAK OUTPUT POWER MEASU FOR Π/4-DQPSK MODU		
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.402	3.605	21	Pass
2.441	2.971	21	Pass
2.480	2.571	21	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 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.

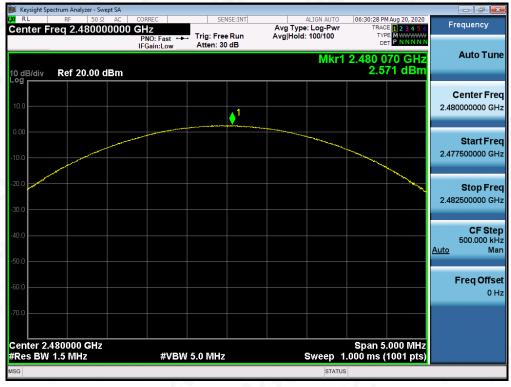
Report No.: AGC02324200805FE03 Page 23 of 78



CH39



CH78



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.



	PEAK OUTPUT POWER MEASUR FOR 8-DPSK MODULA		
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.402	3.948	21	Pass
2.441	3.324	21	Pass
2.480	2.598	21	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 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.

Report No.: AGC02324200805FE03 Page 25 of 78



CH39



CH78



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.

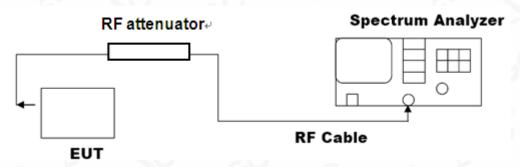


8. 20DB BANDWIDTH

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 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.



8.3. LIMITS AND MEASUREMENT RESULTS

MEASUREMENT RESULT FOR GFSK MOUDULATION				
Angliaghta Limita	Measurement Result Test Data (MHz) Criteria			
Applicable Limits				
	Low Channel	0.951	PASS	
N/A	Middle Channel	0.949	PASS	
	High Channel	0.951	PASS	

04:12:01 PM Aug 20, 2020 SENSE:INT Center Freq: 2.402000000 GHz Trig: Free Run Avg|Hol #Atten: 30 dB Frequency 102000000 GHz Radio Std: None Avg|Hold: 100/100 #IFGain:Low Radio Device: BTS Ref 20.00 dBm **Center Freq** 2.402000000 GHz Center 2.402 GHz #Res BW 30 kHz Span 3 MHz Sweep 3.2 ms CF Step 300.000 kHz #VBW 100 kHz <u>Auto</u> 12.0 dBm **Occupied Bandwidth Total Power** 832.93 kHz Freq Offset 0 Hz -16.626 kHz **Transmit Freq Error OBW Power** 99.00 % 951.4 kHz x dB Bandwidth 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.



MEASURE		OQPSK MODULATIO	N
Appliachte Limite		Measurement Resu	lt
Applicable Limits	Test Data	Test Data (MHz)	
N/A	Low Channel	1.290	PASS
	Middle Channel	1.290	PASS
	High Channel	1.313	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 writter aphorization of AGE 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 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.



MEASUREMENT RESULT FOR 8-DPSK MODULATION							
Applicable Limite		Measurement Result					
Applicable Limits	Test Dat	Test Data (MHz)					
	Low Channel	1.307	PASS				
N/A	Middle Channel	1.309	PASS				
-0	High Channel	1.312	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 Sedicated Pertog/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/Cafter 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 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.



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.
- 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

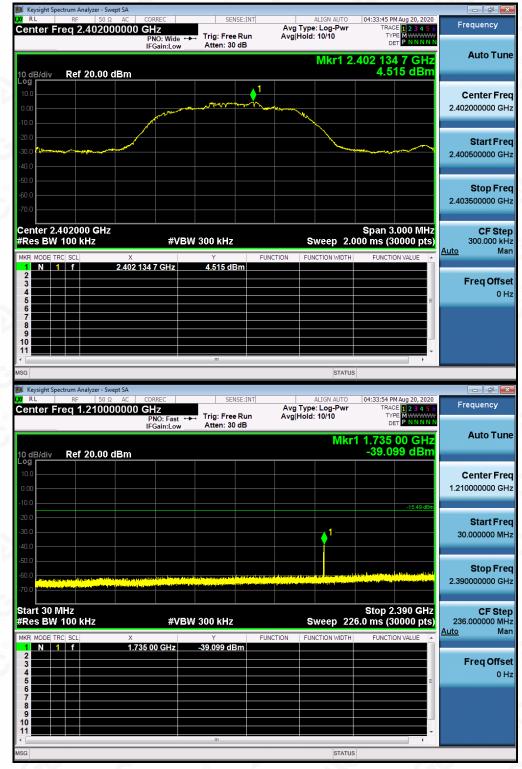
LIMITS AND MEASUREMENT RESULT									
Annlinghta Limita	Measurement Result								
Applicable Limits	Test Data	Criteria							
In any 100 kHz Bandwidth Outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency	At least -20dBc than the limit Specified 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.

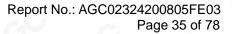


TEST RESULT FOR ENTIRE FREQUENCY RANGE

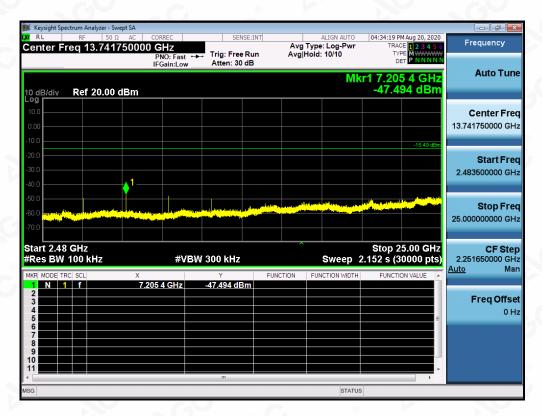
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF 8DPSK MODULATION IN LOW CHANNEL



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the 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 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.







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

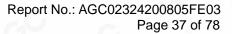
Web: http://cn.agc-cert.com/





TEST PLOT OF OUT OF BAND EMISSIONS OF 8DPSK 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.







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

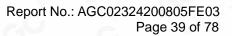
Web: http://cn.agc-cert.com/



Keysight Spectrum Analyzer		L artic	C-INT.	ALLCH ALLTC	04/20/21 01	Aug 20, 2020	
a RL RF Center Freq 2.48	50 Ω AC CORREC			ALIGN AUTO Type: Log-Pwr	04:38:21 PM TRACE	Aug 20, 2020	Frequency
	PNO: Wide IFGain:Lov			Hold: 10/10	TYPI DE	1 2 3 4 5 6 E M P N N N N N	
		•		Mkr1 2	480 149	4 GHz	Auto Tu
10 dB/div Ref 20.0	00 dBm				2.92	25 dBm	
og			1				
10.0							Center Fi 2.480000000 G
10.00			All Allowed and a second	me			2.480000000
20.0							
30.0							Start Fr
40.0					~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		2.478500000 0
50.0							
50.0							Stop Fi
70.0							2.481500000 0
					0 0	000 8411-	
Center 2.480000 G Res BW 100 kHz		/BW 300 kHz		Sweep 2.0	span 3. 100 ms (30	000 MHz 0000 pts)	CF S 300.000
IKR MODE TRC SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTIO		<u>Auto</u> M
1 N 1 f	2.480 149 4 GHz	2.925 dBr		1 one north of the	1010110		
2 3							Freq Off
4						=	C
6 7							
8							
10							
<		m		STATUS		•	
Keysight Spectrum Analyzer						F .	
SG SG Keysight Spectrum Analyzer RL RF	50 Ω AC CORREC	SENS		ALIGN AUTO	04:38:31 PM	1Aug 20, 2020 E 1 2 3 4 5 6	Frequency
SG SG Keysight Spectrum Analyzer RL RF	50 Ω AC CORREC 5000000 GHz PNO: Fast	SENS	Avç Run Avg	ALIGN AUTO	04:38:31 PM	1Aug 20, 2020 E 1 2 3 4 5 6 E M WWWWW T P N N N N N	
SG Keysight Spectrum Analyzer RL RF	50 Ω AC CORREC 50000000 GHz	SENS	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACE TYPE DE	E 1 2 3 4 5 6 E MWWWWW P N N N N N	Frequency
Keysight Spectrum Analyzer RL RF Center Freq 1.21 OdB/div Ref 20.	50 Ω AC CORREC 50000000 GHZ PNO: Fast IFGain:Lov	SENS	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACI TYPI DE 1 2.240	E 1 2 3 4 5 6 E MWWWWW P N N N N N	Frequency
G Keysight Spectrum Analyzer RL RF Center Freq 1.21 0 dB/div Ref 20.	50 Ω AC CORREC 50000000 GHZ PNO: Fast IFGain:Lov	SENS	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACI TYPI DE 1 2.240		Frequency Auto Tu
C dB/div Ref 20.0	50 Ω AC CORREC 50000000 GHZ PNO: Fast IFGain:Lov	SENS	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACI TYPI DE 1 2.240		Frequency Auto Tu Center F
C dB/div Ref 20.0	50 Ω AC CORREC 50000000 GHZ PNO: Fast IFGain:Lov	SENS	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACI TYPI DE 1 2.240		Frequency Auto Tu Center F
G Keysight Spectrum Analyzer RL RF Content Freq 1.21 O dB/div Ref 20.0 0 dB/div Ref 20.0 0 0 0 0 0 0	50 Ω AC CORREC 50000000 GHZ PNO: Fast IFGain:Lov	SENS	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACI TYPI DE 1 2.240		Frequency Auto Tu Center Fr 1.215000000 0
G Keysight Spectrum Analyzer RL RF Senter Freq 1.215 0 dB/div Ref 20.0 0 dD/div Ref 20.0 0 dD/div Ref 20.0 0 dD/div Ref 20.0 0 dD/div Ref 20.0	50 Ω AC CORREC 50000000 GHZ PNO: Fast IFGain:Lov	SENS	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACI TYPI DE 1 2.240	E 123456 E MWWWWW P NNNNN 89 GHz 84 dBm	Frequency Auto Tu Center Fr 1.215000000 C Start Fr
G Reysight Spectrum Analyzer RL RF center Freq 1.215 0 dB/div Ref 20.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50 Ω AC CORREC 50000000 GHZ PNO: Fast IFGain:Lov	SENS	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACI TYPI DE 1 2.240	E 123456 E MWWWWW P NNNNN 89 GHz 84 dBm	Frequency Auto Tu Center F 1.215000000 0 Start Fr
G Reysight Spectrum Analyzer RL RF center Freq 1.215 0 dB/div Ref 20.0	50 Ω AC CORREC 50000000 GHZ PNO: Fast IFGain:Lov	SENS	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACI TYPI DE	E 123456 E MWWWWW P NNNNN 89 GHz 84 dBm	Frequency Auto Tu Center F 1.215000000 0 Start Fr 30.000000 M
G RL RF enter Freq 1.21! 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50 Q AC CORREC 5000000 GHz PNO: Fast IFGain:Lov 00 dBm	SENS	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACI TYPI DE	E 123456 E MWWWWW P NNNNN 89 GHz 84 dBm	Frequency Auto Tu Center F 1.215000000 0 Start F 30.000000 N Stop F
Comparison of the sector	50 Q AC CORREC 5000000 GHz PNO: Fast IFGain:Lov 00 dBm	Trig: Free I Atten: 30 c	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACI TYPI DE	E 123456 E MWWWWW P NNNNN 89 GHz 84 dBm	Frequency Auto Tu Center F 1.215000000 0 Start F 30.000000 N Stop F
G SG Keysight Spectrum Analyzer RL RF Center Freq 1.21: O dB/div Ref 20.0 9	50 Q AC CORREC 5000000 GHz PNO: Fast IFGain:Lov 00 dBm	Trig: Free I Atten: 30 c	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACE TYPP 0E 1 2.240 1 -57.88	12 3 4 5 6 M WWWWW P N N N N N 89 GHz 34 dBm -17.08 dBm	Frequency Auto TL Center Fl 1.215000000 C Start Fl 30.000000 N Stop Fl 2.400000000 C
O dB/div Ref 20.0 RL RF Itenter Freq 1.215 CodB/div Ref 20.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 <	50 Q AC CORREC 5000000 CHZ PNO: Fast IFGain:Lov 00 dBm	Trig: Free I Atten: 30 c	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10	04:38:31 PM TRACE TYPP 0E 1 2.240 1 -57.88	1 2 3 4 5 6 M WWWWWW M WWWWWW 89 GHz 34 dBm -17.08 dBm -17.08 dBm -17.08 dBm	Frequency Auto TL Center Fr 1.215000000 0 Start Fr 30.000000 N Stop Fr 2.400000000 0
O dB/div Ref 20.1 0 od B/div Ref 20.1 20.1 0 od B/div Ref 20.1 20.1 10 od 0 0 0 0 10 od 0 0 0 0 0 0 10 od 0	50 Q AC CORREC 5000000 CHZ PNO: Fast IFGain:Lov 00 dBm	Trig: Free Atten: 30 o	Avç Run Avg	ALIGN AUTO g Type: Log-Pwr Hold: 10/10 Mkr	04:38:31 PM TRACE TYPP 0E 1 2.240 1 -57.88	1 2 3 4 5 6 M WWWWW M WWWWW 89 GHz 34 dBm -17.08 dBm -17.08 dBm 400 GHz 0000 pts)	Frequency Auto TL Center Fr 1.215000000 0 Start Fr 30.000000 N Stop Fr 2.400000000 0 CF St 237.000000 N
G Resignt Spectrum Analyzer RL RF Center Freq 1.215 CodB/div Ref 20.1	50 Ω AC CORREC 5000000 GHz PNO: Fast IFGain:Lov 00 dBm	/BW 300 kHz	Run Avg B	ALIGN AUTO 3 Type: Log-Pwr Hold: 10/10 Mkr Sweep 22	04:38:31 PM TRACE TYPP DE 1 2.240 1 -57.88 -57.57.88 -57.88 -57.88 -57.88 -57.5	1 2 3 4 5 6 M WWWWW M WWWWW 89 GHz 34 dBm -17.08 dBm -17.08 dBm 400 GHz 0000 pts)	Frequency Auto Tu Center Fr 1.215000000 0 Start Fr 30.000000 N Stop Fr 2.400000000 0 CF St 237.000000 N
G R RF Center Freq 1.215 Ref 20.1 Code Ref 20.1	50 Q AC CORREC 5000000 CHZ PNO: Fast IFGain:Lov 00 dBm Control Characteristics Control Cha	/BW 300 kHz	Run Avg B	ALIGN AUTO 3 Type: Log-Pwr Hold: 10/10 Mkr Sweep 22	04:38:31 PM TRACE TYPP DE 1 2.240 1 -57.88 -57.57.88 -57.88 -57.88 -57.88 -57.5	1 2 3 4 5 6 M WWWWW M WWWWW 89 GHz 34 dBm -17.08 dBm -17.08 dBm 400 GHz 0000 pts)	Frequency Auto Tu Center Fri 1.215000000 G Start Fri 30.000000 M Stop Fri 2.400000000 G CF St 237.000000 M Auto Tu Auto Tu Stop Fri 2.40000000 G CF St 237.000000 M Auto Freq Offst
Center Freq 1.21 O dB/div Ref 20.1 O dB/div Ref 2	50 Q AC CORREC 5000000 CHZ PNO: Fast IFGain:Lov 00 dBm Control Characteristics Control Cha	/BW 300 kHz	Run Avg B	ALIGN AUTO 3 Type: Log-Pwr Hold: 10/10 Mkr Sweep 22	04:38:31 PM TRACE TYPP DE 1 2.240 1 -57.88 -57.57.88 -57.88 -57.88 -57.88 -57.5	1 2 3 4 5 6 M WWWWW M WWWWW 89 GHz 34 dBm -17.08 dBm -17.08 dBm 400 GHz 0000 pts)	Frequency Auto Tu Center Fri 1.215000000 G Start Fri 30.000000 M Stop Fri 2.400000000 G CF St 237.000000 M Auto Tu Auto Tu Stop Fri 2.40000000 G CF St 237.000000 M Auto Freq Offst
SG SG Keysight Spectrum Analyzer R RL RF Center Freq 1.215 10.0 B 0.00 B	50 Q AC CORREC 5000000 CHZ PNO: Fast IFGain:Lov 00 dBm Control Characteristics Control Cha	/BW 300 kHz	Run Avg B	ALIGN AUTO 3 Type: Log-Pwr Hold: 10/10 Mkr Sweep 22	04:38:31 PM TRACE TYPP DE 1 2.240 1 -57.88 -57.57.88 -57.88 -57.88 -57.88 -57.5	12 3 4 5 6 M 300 W N N N 89 GHz 84 dBm -17.08 dBm 1 -17.08 dBm 1 400 GHz 0000 pts) N VALUE ▲	Frequency Auto Tu Center Fri 1.215000000 G Start Fri 30.000000 M Stop Fri 2.400000000 G CF St 237.000000 M Auto Tu Auto Tu Stop Fri 2.40000000 G CF St 237.000000 M Auto Freq Offst
SG SG Is Keysight Spectrum Analyzer R Q RL RF Center Freq 1.215 Conter Freq 1.215	50 Q AC CORREC 5000000 CHZ PNO: Fast IFGain:Lov 00 dBm Control Characteristics Control Cha	/BW 300 kHz	Run Avg B	ALIGN AUTO 3 Type: Log-Pwr Hold: 10/10 Mkr Sweep 22	04:38:31 PM TRACE TYPP DE 1 2.240 1 -57.88 -57.89 -57.88 -57.57 -57.57 -57.57 -57.57 -57.57 -	12 3 4 5 6 M 300 W N N N 89 GHz 84 dBm -17.08 dBm 1 -17.08 dBm 1 400 GHz 0000 pts) N VALUE ▲	Frequency Auto Tu Center Fri 1.215000000 G Start Fri 30.000000 M Stop Fri 2.400000000 G CF St 237.000000 M Auto Tu Auto Tu Stop Fri 2.40000000 G CF St 237.000000 M Auto Freq Offst
Image: sector of the	50 Q AC CORREC 5000000 CHZ PNO: Fast IFGain:Lov 00 dBm Control Characteristics Control Cha	/BW 300 kHz	Run Avg B	ALIGN AUTO 3 Type: Log-Pwr Hold: 10/10 Mkr Sweep 22	04:38:31 PM TRACE TYPP DE 1 2.240 1 -57.88 -57.89 -57.88 -57.57 -57.57 -57.57 -57.57 -57.57 -	12 3 4 5 6 M 300 W N N N 89 GHz 84 dBm -17.08 dBm 1 -17.08 dBm 1 400 GHz 0000 pts) N VALUE ▲	Frequency Auto Tu Center Fri 1.215000000 G Start Fri 30.000000 M Stop Fri 2.400000000 G CF St 237.000000 M Auto Tu Auto Tu Stop Fri 2.40000000 G CF St 237.000000 M Auto Freq Offst
G Resignt Spectrum Analyzer RL RF CodE/div Ref 20.1 CodE/div Ref 20.1 <td>50 Q AC CORREC 5000000 CHZ PNO: Fast IFGain:Lov 00 dBm Control Characteristics Control Cha</td> <td>/BW 300 kHz</td> <td>Run Avg B</td> <td>ALIGN AUTO 3 Type: Log-Pwr Hold: 10/10 Mkr Sweep 22</td> <td>04:38:31 PM TRACE TYPP DE 1 2.240 1 -57.88 -57.89 -57.88 -57.57 -57.57 -57.57 -57.57 -57.57 -</td> <td>12 3 4 5 6 M 300 W N N N 89 GHz 84 dBm -17.08 dBm 1 -17.08 dBm 1 400 GHz 0000 pts) N VALUE ▲</td> <td>Auto Tu Center Fi 1.215000000 0 Start Fi 30.00000 0 Stop Fi 2.40000000 0 CF St 237.00000 0</td>	50 Q AC CORREC 5000000 CHZ PNO: Fast IFGain:Lov 00 dBm Control Characteristics Control Cha	/BW 300 kHz	Run Avg B	ALIGN AUTO 3 Type: Log-Pwr Hold: 10/10 Mkr Sweep 22	04:38:31 PM TRACE TYPP DE 1 2.240 1 -57.88 -57.89 -57.88 -57.57 -57.57 -57.57 -57.57 -57.57 -	12 3 4 5 6 M 300 W N N N 89 GHz 84 dBm -17.08 dBm 1 -17.08 dBm 1 400 GHz 0000 pts) N VALUE ▲	Auto Tu Center Fi 1.215000000 0 Start Fi 30.00000 0 Stop Fi 2.40000000 0 CF St 237.00000 0

TEST PLOT OF OUT OF BAND EMISSIONS OF 8DPSK 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 bedicated for the formation of the stamp. 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 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.





	Spectrum Analy											
Center	_R ⊧ Freq 13.				SEN	NSE:INT		ALIGN AUTO e: Log-Pwr		Aug 20, 2020	Frequ	lency
Contor	ricq io.	00000	PNO:	∠ Fast ↔ in:Low	Trig: Free Atten: 30		Avg Hold		TYP			
	_	_	IFGai	n:Low	Atten. v			Mkr	1 24 203	3 5 GHz	Au	uto Tune
10 dB/div	Ref 20	.00 dB	m					WIN		73 dBm		
Log												
10.0												nter Freq
0.00											13.75000	0000 GHz
-10.0										-17.08 dBm		
-20.0											St	tart Freq
-30.0											2.50000	0000 GHz
-40.0										\ '		
-50.0				1				The second s	i din a dan manaki		St	top Freq
-60.0 1 0.0	history de parte			P. C. Street of the second		A STREET, STRE	and the second secon	and the second				0000 GHz
-70.0												
Start 2.5	50 GHz						~		Stop 2	5.00 GHz		CF Step
#Res BV	V 100 kHz	2		#VBW	300 kHz			Sweep 2	2.152 s (3	0000 pts)	2.25000 Auto	0000 GHz Man
MKR MODE			Х		Y		CTION FU	NCTION WIDTH	FUNCTIO	ON VALUE	Auto	wan
1 N 2	1 f		24.293 5 0	SHZ	-47.973 dE	3m					_	
3											Fre	e q Offset 0 Hz
5										E		UHZ
6 7				<u>ک ک</u>								
8												
10												
11					III							
MSG								STATUS	;			

Note: The 8DPSK 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 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.