

# **FCC Test Report**

Report No.: AGC00688201219FE06

**FCC ID** : 2AU6EDNS-5B12

**APPLICATION PURPOSE** : Original Equipment

**PRODUCT DESIGNATION**: Wireless USB Adapter

BRAND NAME : Techkey

**MODEL NAME** : 5B12, 5B10

**APPLICANT**: Shenzhen Denos Trade Co., Ltd.

**DATE OF ISSUE** : Dec. 30, 2020

**STANDARD(S)** FCC Part 15.407

**TEST PROCEDURE(S)** KDB 789033 D02 v02r01

**REPORT VERSION** : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

AGC



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



Page 2 of 116

# REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	1	Dec. 30, 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 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 appropriate 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 issued of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



# **TABLE OF CONTENTS**

1. VERIFICATION OF CONFORMITY	6
2. GENERAL INFORMATION	7
	0
2.1. PRODUCT DESCRIPTION	
2.2. TABLE OF CARRIER FREQUENCYS	
2.3. RELATED SUBMITTAL(S) / GRANT (S)	9
2.4. TEST METHODOLOGY	9
2.5. SPECIAL ACCESSORIES	9
2.6. EQUIPMENT MODIFICATIONS	9
2.7. ANTENNA REQUIREMENT	9
	30
3. MEASUREMENT UNCERTAINTY	
4. DESCRIPTION OF TEST MODES	11
5. SYSTEM TEST CONFIGURATION	12
5.1. CONFIGURATION OF EUT SYSTEM	
5.2. EQUIPMENT USED IN EUT SYSTEM	
5.3. SUMMARY OF TEST RESULTS	12
6. TEST FACILITY	13
7. MAXIMUM CONDUCTED OUTPUT POWER	14
7.1. MEASUREMENT PROCEDURE	
7.2. TEST SET-UP	
7.3. LIMITS AND MEASUREMENT RESULT	15
8. 6DB BANDWIDTH	17
8.1.1 -6DB BANDWIDTH MEASUREMENT PROCEDURE	
8.1.2 99% OCCUPIED BANDWIDTH	17
8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	17
8.3. LIMITS AND MEASUREMENT RESULTS	18
9 EMISSION RANDWIDTH	33

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



9.1. MEASUREMENT PROCEDURE	33
9.1.126dB Bandwidth MEASUREMENT PROCEDURE	33
9.1.2. 99.00% Occupied Bandwidth MEASUREMENT PROCEDURE	33
9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	33
9.3. LIMITS AND MEASUREMENT RESULTS	34
10. MAXIMUM CONDUCTED OUTPUT AVERAGE POWER SPECTRAL DENSITY	42
10.1 MEASUREMENT PROCEDURE	42
10.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	42
10.3 MEASUREMENT EQUIPMENT USED	
10.4 LIMITS AND MEASUREMENT RESULT	42
11. CONDUCTED SPURIOUS EMISSION	59
11.1. MEASUREMENT PROCEDURE	59
11.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	59
11.3. MEASUREMENT EQUIPMENT USED	59
11.4. LIMITS AND MEASUREMENT RESULT	
12. RADIATED EMISSION	85
12.1. MEASUREMENT PROCEDURE	
12.2. TEST SETUP	
12.3. LIMITS AND MEASUREMENT RESULT	
12.4. TEST RESULT	87
13. BAND EDGE EMISSION	98
13.1. MEASUREMENT PROCEDURE	98
13.2. TEST SET-UP	98
13.3. TEST RESULT	99
14. FCC LINE CONDUCTED EMISSION TEST	105
14.1. LIMITS OF LINE CONDUCTED EMISSION TEST	105
14.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST	105
14.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST	106
14.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST	
14.5 TEST RESULT OF LINE CONDUCTED EMISSION TEST	107

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



Report No.: AGC00688201219FE06 Page 5 of 116

APPENDIX A: PHOTOGRAPHS OF TEST SETUP	109
APPENDIX B: PHOTOGRAPHS OF EUT	C 20 20 41
APPENDIX B: PHOTOGRAPHS OF EUT	I I

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the special pedicated fresh dynapection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter appropriation 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 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.



# 1. VERIFICATION OF CONFORMITY

Applicant	Shenzhen Denos Trade Co., Ltd.		
Address	Room 610, Shibida Building, No. 55 ZhenHua Rd, Futian District, Shen Zhen, GuangDong, China		
Manufacturer	SHEN ZHEN SHI XIN HUA TIAN TECHNOLOGY CO., LTD		
Address	3Foor, B Buliding, DaHong Industrial Park, GuangMin District, Shenzhen City, China		
Factory	SHEN ZHEN SHI XIN HUA TIAN TECHNOLOGY CO., LTD		
Address	3Foor, B Buliding, DaHong Industrial Park, GuangMin District, Shenzhen City, China		
Product Designation	Wireless USB Adapter		
Brand Name	Techkey		
Test Model	5B12		
Series Model	5B10		
Difference description	All the series models are the same as the test model except for the model names.		
Date of test	Dec. 21, 2020 to Dec. 30, 2020		
Deviation	No any deviation from the test method		
Condition of Test Sample	Normal		
Test Result	Pass		
Report Template	AGCRT-US-BGN/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 requirement of FCC Part 15 Rules requirement.

Prepared By	sky dong	
NOC V	Sky Dong (Project Engineer)	Dec. 30, 2020
Reviewed By	Max Zhang	c.C
Sec. 100	Max Zhang (Reviewer)	Dec. 30, 2020
Approved By	Formare	
NOC.	Forrest Lei (Authorized Officer)	Dec. 30, 2020

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 appropriation 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 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.



Page 7 of 116

# 2. GENERAL INFORMATION

# 2.1. PRODUCT DESCRIPTION

The EUT is designed as "Wireless USB Adapter". It is designed by way of utilizing the OFDM technology to achieve the system operation.

A major technical description of EUT is described as following

Operation Frequency	5150 MHz ~ 5250MHz; 5725 MHz ~ 5850MHz	
Output Power	IEEE 802.11a20:5.51dBm; IEEE 802.11n(20):5.51dBm; IEEE802.11n(40):5.06dBm; IEEE 802.11ac(20):5.41dBm; IEEE 802.11ac(40):5.72dBm; IEEE 802.11ac(80):5.22dBm	
Modulation	BPSK, QPSK, 16QAM, 64QAM, 128QAM, 256QAM,OFDM	
Number of channels	15	
Hardware Version	A	
Software Version	V1.0	
Antenna Designation Dedicated Antenna (Comply with requirements of the FCC part 15.203)		
Antenna Gain	5dBi	
Power Supply	DC 5V by PC	

# Note:

- 1. The EUT is designed as indoor access point operating device
- 2. The device do not support TPC.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Festivo/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 purportization of AGC within 15day after the issue of 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.



Page 8 of 116

# 2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency	Frequency Band	Channel Number	Frequency
	36	5180 MHz	5725 GHz ~ 5850GHz	149	5745 MHz
-0	38	5190 MHz		151	5755 MHz
20	40	5200 MHz		153	5765 MHz
5150 GHz ~	42	5210 MHz		155	5775MHz
5250GHz	44	5220 MHz		157	5785 MHz
	46	5230 MHz		159	5795 MHz
	48	5240 MHz		161	5805 MHz
			200	165	5825MHz

Note: For 20MHZ bandwidth system use Channel 36,40,44,48,149,153,157,161,165; For 40MHZ bandwidth system use Channel 38,46,151,159. For 80MHZ bandwidth system use Channel 42,155.

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





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

This submittal(s) (test report) is intended for **FCC ID**: **2AU6EDNS-5B12** filing to comply with the FCC Part 15 requirements.

# 2.4. TEST METHODOLOGY

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

Others testing (listed at item 5.3) was performed according to the procedures in FCC Part 15.407 rules KDB 789033 D02

# 2.5. SPECIAL ACCESSORIES

Refer to section 5.2.

#### 2.6. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

# 2.7. ANTENNA REQUIREMENT

EUT has a unique antenna connector (reverse SMA head)

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 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 authorization of AGC whe 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.



Page 10 of 116

# 3. MEASUREMENT UNCERTAINTY

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

- Uncertainty of Conducted Emission, Uc = ±3.2 dB
- Uncertainty of Radiated Emission below 1GHz, Uc = ±3.9 dB
- Uncertainty of Radiated Emission above 1GHz, Uc = ±4.8 dB

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



Page 11 of 116

# 4. DESCRIPTION OF TEST MODES

Mode	Available channel	Tested channel	Modulation	Date
				rate(Mbps)
802.11a/n/ac20	36,40,44,48,149,153,157,161,165	36,40,	OFDM	6Mbps/MCS0
- 60		48,149,157,165		(6)
802.11n/ac40	38,46,151,159	38,46, 151,159	OFDM	MCS0
802.11ac80	42, 155	42, 155	OFDM	MCS0

#### Note:

- 1. The EUT has been set to operate continuously on tested channel individually, and the EUT is operating at its maximum duty cycle>or equal 98%
- 2. All modes under which configure applicable have been tested and the worst mode test data recording in the test report, if no other mode data.
- 3. The test software is the RTLBTAPP Version 5.1.2.4 which can set the EUT into the individual test modes.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Factorization Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written appropriation of AGC where 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 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.

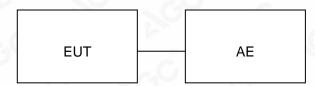


Page 12 of 116

# 5. SYSTEM TEST CONFIGURATION

# **5.1. CONFIGURATION OF EUT SYSTEM**

Configure 1:



# 5.2. EQUIPMENT USED IN EUT SYSTEM

Item	Equipment Model No.		ID or Specification	Remark
1	Wireless USB Adapter	5B12	2AU6EDNS-5B12	EUT
2	Laptop	MateBook 14	DC 5V	AE

# **5.3. SUMMARY OF TEST RESULTS**

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.407	6dB Bandwidth	Compliant
§15.407	Emission Bandwidth	Compliant
§15.407	Maximum conducted output power	Compliant
§15.407	Conducted Spurious Emission	Compliant
§15.407	Maximum Conducted Output Power Density	Compliant
§15.209	Radiated Emission	Compliant
§15.407	Band Edges	Compliant
§15.207	Line Conduction 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 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 authorization of AGC within 15day 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.



Page 13 of 116

# 6. TEST FACILITY

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

# **TEST EQUIPMENT OF CONDUCTED EMISSION TEST**

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

# **TEST EQUIPMENT OF RADIATED EMISSION TEST**

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	May 15, 2020	May 14, 2021
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 07, 2020	Dec. 06, 2021
Power sensor	Aglient	U2021XA	MY54110007	Jun. 08, 2020	Jun. 07, 2021
2.4GHz Fliter	EM Electronics	2400-2500MHz	N/A	Mar. 23, 2020	Mar. 22, 2022
Attenuator	ZHINAN	E-002	N/A	Sep. 03, 2020	Sep. 02, 2022
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep.21, 2019	Sep. 20, 2021
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	May 22, 2020	May 21, 2022
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	May 17, 2019	May 16, 2021
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Sep. 03, 2020	Sep. 02, 2022
ANTENNA	SCHWARZBECK	VULB9168	494	Sep. 20, 2019	Sep. 19, 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 written appropriation 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 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.



Page 14 of 116

# 7. MAXIMUM CONDUCTED OUTPUT POWER

# 7.1. MEASUREMENT PROCEDURE

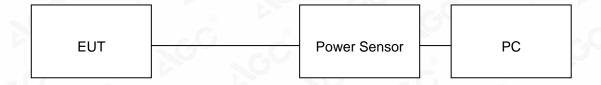
For average power test:

- 1. Connect EUT RF output port to power sensor through an RF attenuator.
- 2. Connect the power sensor to the PC.
- 3. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 4. Record the maximum power from the software.

**Note**: The EUT was tested according to KDB 789033 for compliance to FCC 47CFR 15.407 requirements.

# 7.2. TEST SET-UP

#### **AVERAGE POWER SETUP**



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 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.



Page 15 of 116

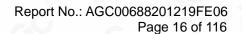
# 7.3. LIMITS AND MEASUREMENT RESULT

LIMITS	LIMITS AND MEASUREMENT RESULT FOR 802.11A20 MODULATION					
Frequency (MHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail			
5180	4.18	30	Pass			
5200	5.29	30	Pass			
5240	4.83	30	Pass			
5745	4.09	30	Pass			
5785	5.51	30	Pass			
5825	5.17	30	Pass			

LIMITS	LIMITS AND MEASUREMENT RESULT FOR 802.11N20 MODULATION					
Frequency (MHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail			
5180	5.44	30	Pass			
5200	5.51	30	Pass			
5240	4.97	30	Pass			
5745	4.46	30	Pass			
5785	4.18	30	Pass			
5825	4.28	30	Pass			

LIMITS A	LIMITS AND MEASUREMENT RESULT FOR 802.11N40 MODULATION					
Frequency (MHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail			
5190	4.37	30	Pass			
5230	4.74	30	Pass			
5755	5.06	30	Pass			
5795	4.95	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 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 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.



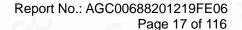


Frequency (MHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
5180	5.04	30	Pass
5200	4.75	30	Pass
5240	4.44	30	Pass
5745	4.47	30	Pass
5785	5.41	30	Pass
5825	4.24	30	Pass

LIMITS AND MEASUREMENT RESULT FOR 802.11AC40 MODULATION					
Frequency (MHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail		
5190	5.72	30	Pass		
5230	4.96	30	Pass		
5755	5.26	30	Pass		
5795	5.12	30	Pass		

LIMITS AND MEASUREMENT RESULT FOR 802.11AC80 MODULATION					
Frequency Average Power Applicable Limits Pass or Fail (dBm)					
5210	3.48	30	Pass		
5775	5.22	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 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 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.





#### 8. 6dB BANDWIDTH

# 8.1.1 -6dB BANDWIDTH MEASUREMENT PROCEDURE

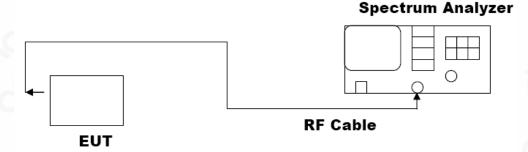
- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the EUT Work on operation frequency individually.
- 3. Set RBW = 100kHz.
- 4. Set the VBW ≥3\*RBW. Detector = Peak. Trace mode = max hold.
- 5. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.

# 8.1.2 99% OCCUPIED BANDWIDTH

- 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 1.5 to 5 times the OBW, centered on a nominal 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.

Note: The EUT was tested according to KDB 789033 for compliance to FCC 47CFR 15.407 requirements.

# 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 "Bedicated Residual 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.



Page 18 of 116

# 8.3. LIMITS AND MEASUREMENT RESULTS

LIM	ITS AND MEASUREME	NT RESULT FOR 80	02.11A20 MODULATIO	ON
		Applicab	le Limits	
Applicable Limits				
Applicable Lillins	Frequency (MHz)	-6dB Bandwidth	99.00% Occupied Bandwidth	Criteria
	5745MHz	16.31	16.447	PASS
>500KHZ	5785MHz	16.30	16.451	PASS
	5825MHz	16.32	16.449	PASS

LIMIT	S AND MEASUREMEN	NI RESULT FOR 802	2.11N2U/4U MODULAT	ION
		Applicab	ole Limits	
Applicable Limits				
Applicable Lillins	Frequency (MHz)	-6dB Bandwidth	99.00% Occupied Bandwidth	Criteria
	5745MHz	16.81	17.524	PASS
30 a	5785MHz	16.71	17.536	PASS
>500KHZ	5825MHz	16.90	17.538	PASS
8	5755MHz	35.40	36.142	PASS
100 a	5795MHz	35.48	36.151	PASS

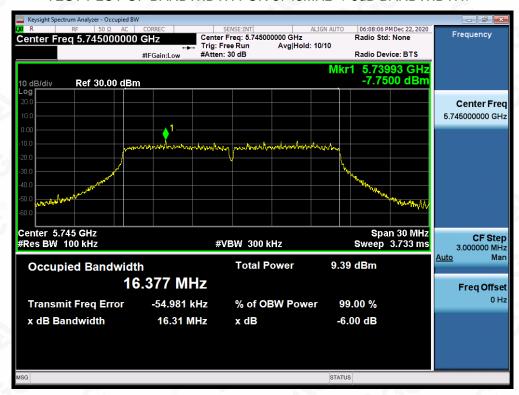
LIMITS AND MEASUREMENT RESULT FOR 802.11AC20/40/80 MODULATION					
		Applicab	le Limits		
Applicable Limits					
Applicable Ellinto	Frequency (MHz)	-6dB Bandwidth	99.00% Occupied Bandwidth	Criteria	
	5745MHz	16.91	17.536	PASS	
	5785MHz	17.11	17.551	PASS	
. 500KHZ	5825MHz	16.94	17.536	PASS	
>500KHZ _	5755MHz	35.79	36.141	PASS	
	5795MHz	35.49	36.136	PASS	
SO CO	5775MHz	75.22	75.280	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 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 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.

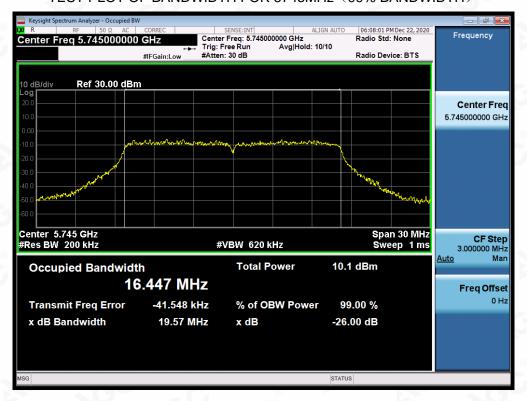


# **802.11a20 TEST RESULT**

#### TEST PLOT OF BANDWIDTH FOR 5745MHz (-6dB BANDWIDTH)



### TEST PLOT OF BANDWIDTH FOR 5745MHz (99% BANDWIDTH)



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Festivo/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 portion of AGC within 15day 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.



# TEST PLOT OF BANDWIDTH FOR 5785MHz (-6dB BANDWIDTH)



#### TEST PLOT OF BANDWIDTH FOR 5785MHz (99% BANDWIDTH)



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 exchorization 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 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.



# TEST PLOT OF BANDWIDTH FOR 5825MHz (-6dB BANDWIDTH)



#### TEST PLOT OF BANDWIDTH FOR 5825MHz (99% BANDWIDTH)

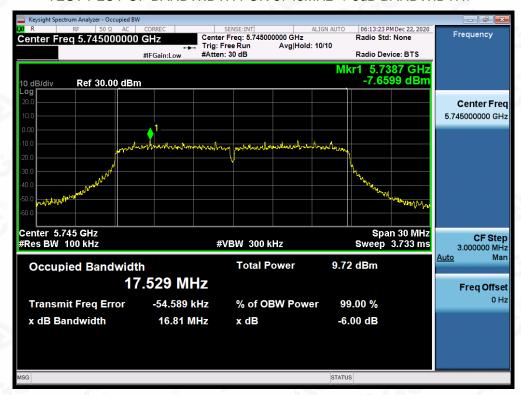


Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written portorization 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 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.

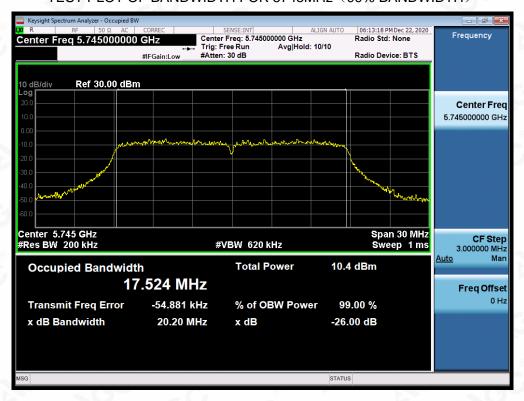


# 802.11n20 TEST RESULT

#### TEST PLOT OF BANDWIDTH FOR 5745MHz (-6dB BANDWIDTH)



### TEST PLOT OF BANDWIDTH FOR 5745MHz (99% BANDWIDTH)



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



# TEST PLOT OF BANDWIDTH FOR 5785MHz (-6dB BANDWIDTH)



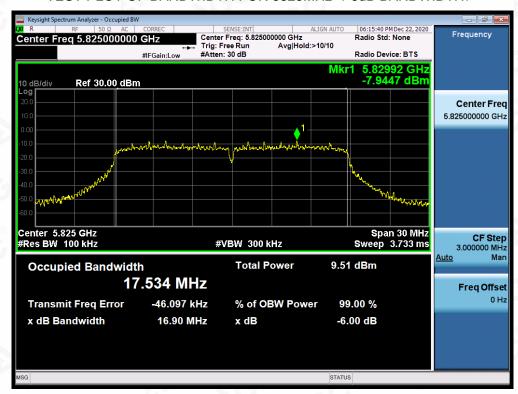
#### TEST PLOT OF BANDWIDTH FOR 5785MHz (99% BANDWIDTH)



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 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 15day after the issued 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 5825MHz (-6dB BANDWIDTH)



#### TEST PLOT OF BANDWIDTH FOR 5825MHz (99% BANDWIDTH)



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

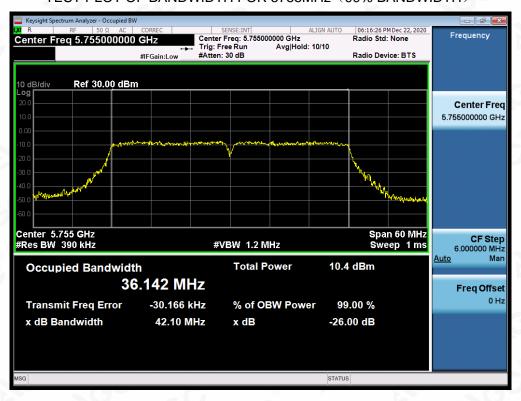


# **802.11n40 TEST RESULT**

#### TEST PLOT OF BANDWIDTH FOR 5755MHz (-6dB BANDWIDTH)



### TEST PLOT OF BANDWIDTH FOR 5755MHz (99% BANDWIDTH)



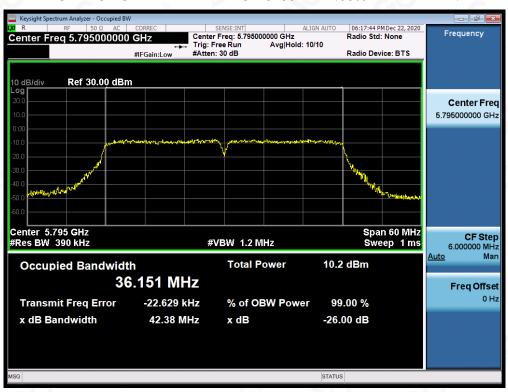
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written 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 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.



# TEST PLOT OF BANDWIDTH FOR 5795MHz (-6dB BANDWIDTH)



#### TEST PLOT OF BANDWIDTH FOR 5795MHz (99% BANDWIDTH)

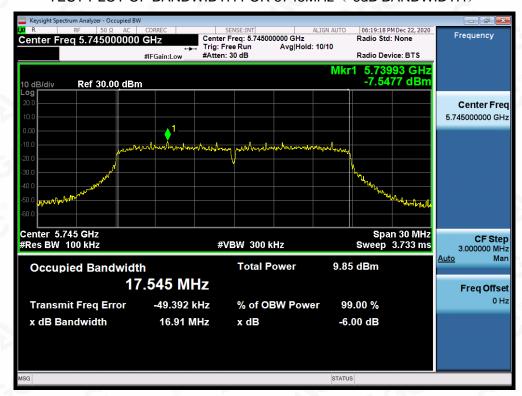


Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Figure/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written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

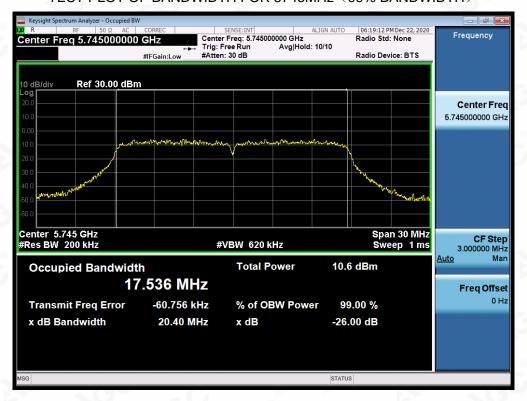


# 802.11ac20 TEST RESULT

### TEST PLOT OF BANDWIDTH FOR 5745MHz (-6dB BANDWIDTH)



### TEST PLOT OF BANDWIDTH FOR 5745MHz (99% BANDWIDTH)



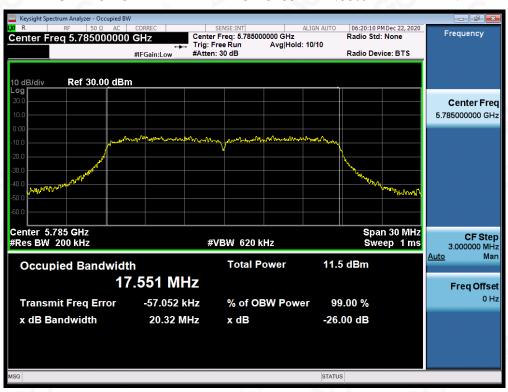
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written 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 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.



# TEST PLOT OF BANDWIDTH FOR 5785MHz (-6dB BANDWIDTH)



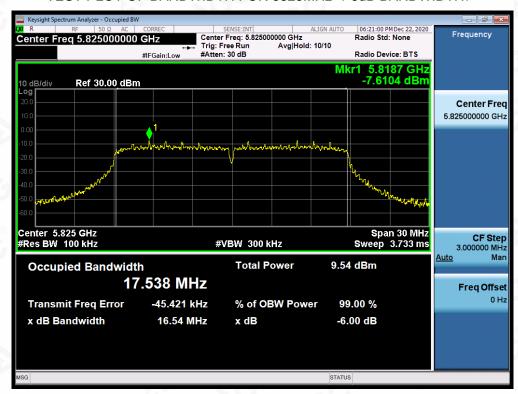
#### TEST PLOT OF BANDWIDTH FOR 5785MHz (99% BANDWIDTH)



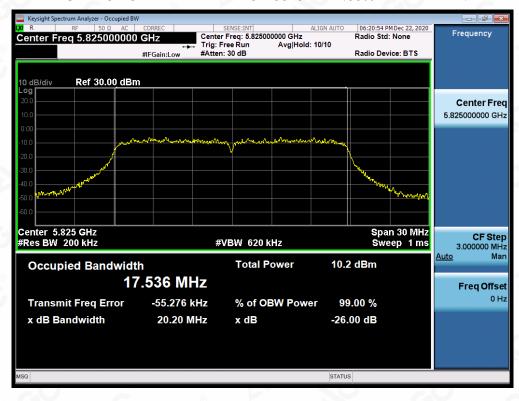
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written exhorization 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 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.



# TEST PLOT OF BANDWIDTH FOR 5825MHz (-6dB BANDWIDTH)



#### TEST PLOT OF BANDWIDTH FOR 5825MHz (99% BANDWIDTH)

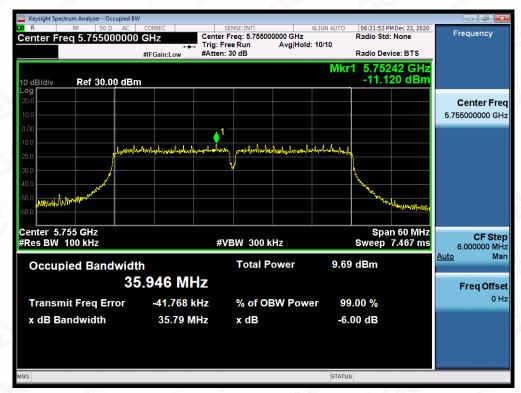


Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written portorization 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 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.

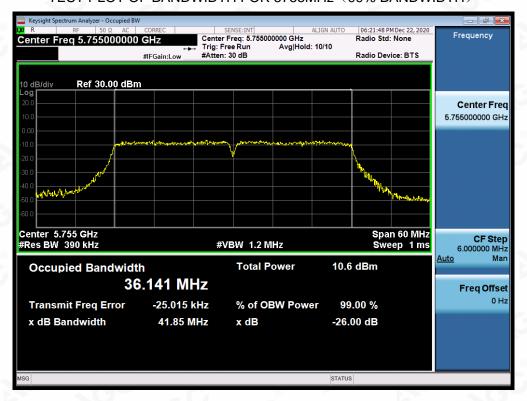


# 802.11ac40 TEST RESULT

#### TEST PLOT OF BANDWIDTH FOR 5755MHz (-6dB BANDWIDTH)



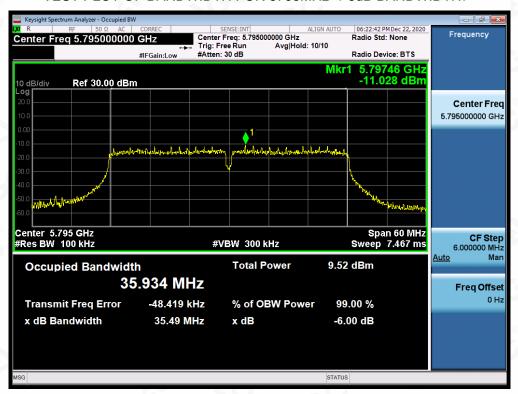
### TEST PLOT OF BANDWIDTH FOR 5755MHz (99% BANDWIDTH)



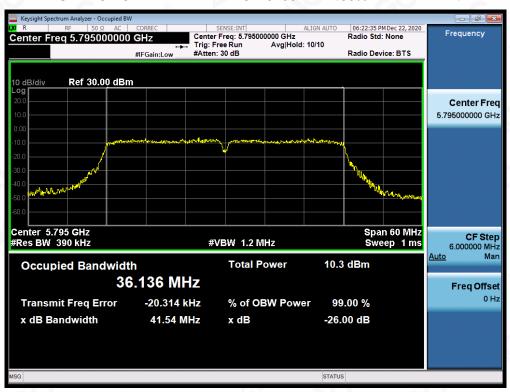
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written portion of AGC within 15day 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.



# TEST PLOT OF BANDWIDTH FOR 5795MHz (-6dB BANDWIDTH)



#### TEST PLOT OF BANDWIDTH FOR 5795MHz (99% BANDWIDTH)

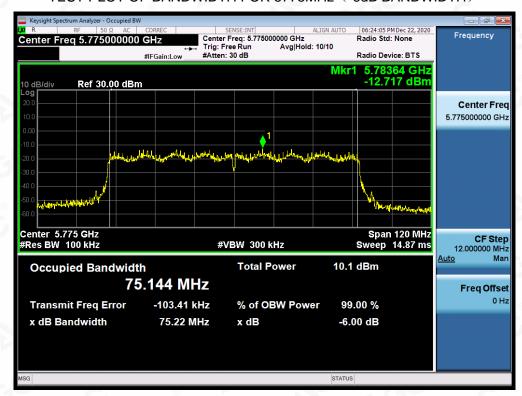


Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written portorization 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 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.

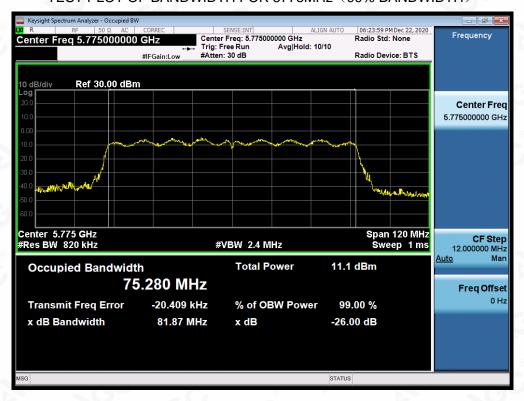


# 802.11ac80 TEST RESULT

### TEST PLOT OF BANDWIDTH FOR 5775MHz (-6dB BANDWIDTH)



### TEST PLOT OF BANDWIDTH FOR 5775MHz (99% BANDWIDTH)



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



# 9. EMISSION BANDWIDTH

#### 9.1. MEASUREMENT PROCEDURE

#### 9.1.1. -26dB Bandwidth MEASUREMENT PROCEDURE

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission.

Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

# 9.1.2. 99.00% Occupied Bandwidth MEASUREMENT PROCEDURE

- a) Connect the antenna port(s) to the spectrum analyzer input.
- b)Configure the spectrum analyzer as shown below (enter all losses between the transmitter output and the spectrum analyzer).

Center Frequency = Channel center frequency

Span=2 x emission bandwidth

RBW = 1% to 5% of the emission bandwidth

VBW>3 x RBW

Sweep time= auto couple

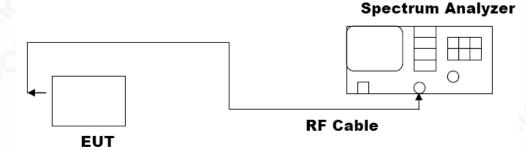
Detector = Peak

Trace mode = max hold

- c)Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter wave form on the spectrum analyzer.
- d) Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is 1% to 5%.

Note: The EUT was tested according to KDB 789033 for compliance to FCC 47CFR 15.407 requirements.

# 9.2. 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 Bolicated 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 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 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.



Page 34 of 116

# 9.3. LIMITS AND MEASUREMENT RESULTS

LIMITS AND MEASUREMENT RESULT FOR 802.11A20 MODULATION						
		Арр	licable Limits			
Applicable Limits	Test Data (MHz)					
	Frequency (MHz)	-26dB Bandwidth	99.00% Occupied Bandwidth	Criteria		
	5180MHz	19.71	16.451	PASS		
Within the Band	5200MHz	20.24	16.450	PASS		
	5240MHz	19.79	16.454	PASS		

Limitor			302.11N20/40 MODULA	AIION
Applicable Limits	Applicable Limits  Test Data (MHz)			
	Frequency (MHz)	-26dB Bandwidth	99.00% Occupied  Bandwidth	Criteria
Within the Band	5180MHz	20.20	17.531	PASS
	5200MHz	20.23	17.538	PASS
	5240MHz	20.28	17.533	PASS
	5190MHz	41.74	36.133	PASS
	5230MHz	41.39	36.114	PASS

LIMITS AND MEASUREMENT RESULT FOR 802.11AC20/40/80 MODULATION				
	Applicable Limits			
Applicable Limits	Test Data (MHz)			
Applicable Lilling	Frequency (MHz)	-26dB Bandwidth	99.00% Occupied Bandwidth	Criteria
	5180MHz	20.22	17.517	PASS
	5200MHz	20.29	17.536	PASS
Within the Band	5240MHz	20.28	17.528	PASS
100	5190MHz	41.55	36.141	PASS
	5230MHz	41.50	36.087	PASS
	5210MHz	79.84	75.151	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 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 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.



# **802.11a20 TEST RESULT**TEST PLOT OF BANDWIDTH FOR 5180MHz



# TEST PLOT OF BANDWIDTH FOR 5200MHz



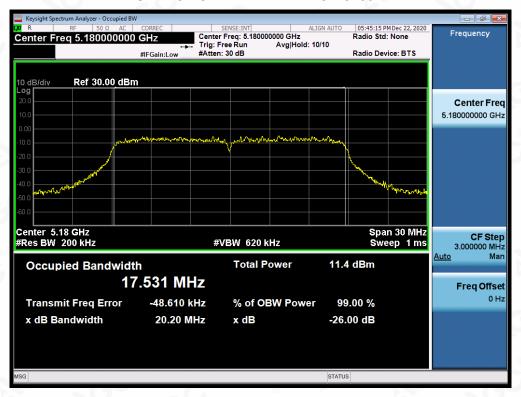
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written 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 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.



# TEST PLOT OF BANDWIDTH FOR 5240MHz



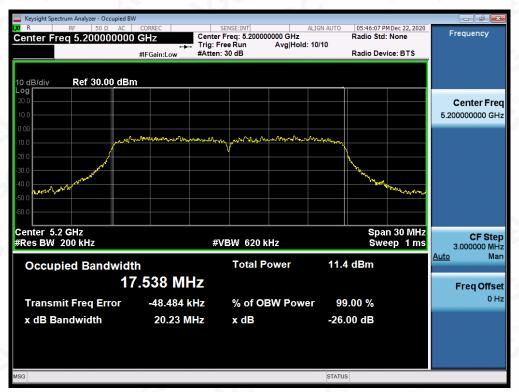
# 802.11n20 TEST RESULT TEST PLOT OF BANDWIDTH FOR 5180MHz



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



# TEST PLOT OF BANDWIDTH FOR 5200MHz



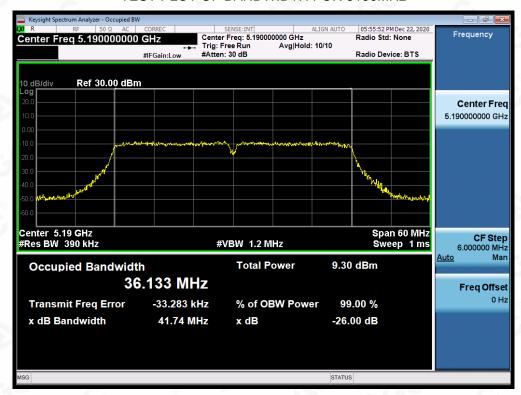
#### TEST PLOT OF BANDWIDTH FOR 5240MHz



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



# **802.11n40 TEST RESULT**TEST PLOT OF BANDWIDTH FOR 5190MHz



# TEST PLOT OF BANDWIDTH FOR 5230MHz



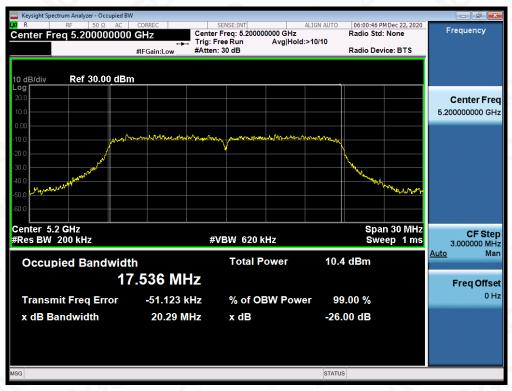
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written portion of AGC within 15day 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.



# 802.11ac20 TEST RESULT TEST PLOT OF BANDWIDTH FOR 5180MHz



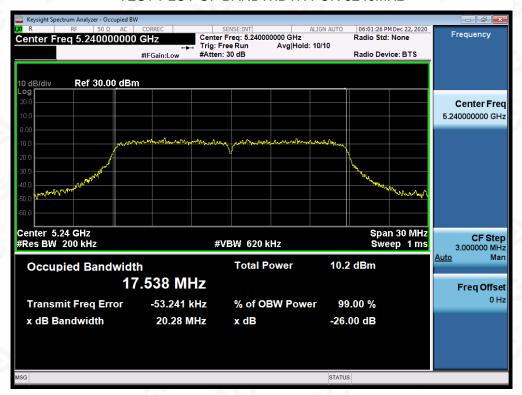
# TEST PLOT OF BANDWIDTH FOR 5200MHz



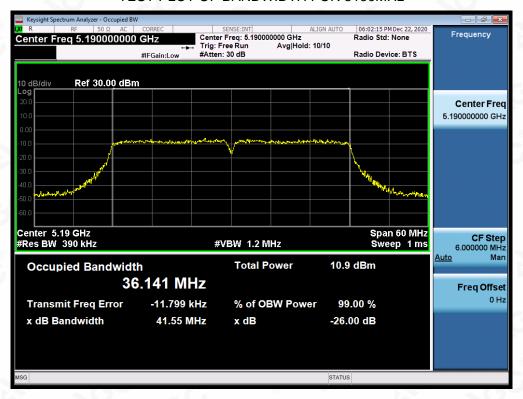
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written 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 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.



# TEST PLOT OF BANDWIDTH FOR 5240MHz



# **802.11ac40 TEST RESULT**TEST PLOT OF BANDWIDTH FOR 5190MHz



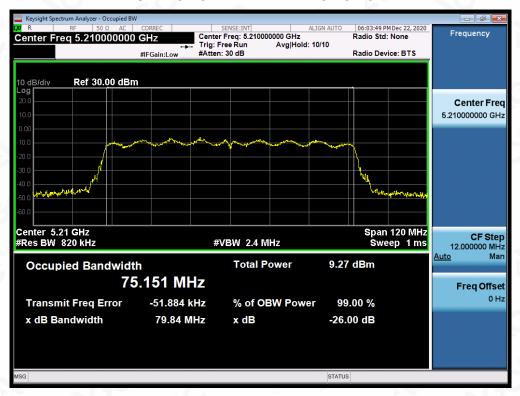
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written 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 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.



# TEST PLOT OF BANDWIDTH FOR 5230MHz



# 802.11ac80 TEST RESULT TEST PLOT OF BANDWIDTH FOR 5210MHz



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



Page 42 of 116

# 10. MAXIMUM CONDUCTED OUTPUT AVERAGE POWER SPECTRAL DENSITY 10.1 MEASUREMENT PROCEDURE

Refer to KDB 789033 section F

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

Refer To Section 8.2.

# **10.3 MEASUREMENT EQUIPMENT USED**

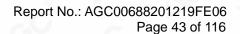
Refer To Section 6.

# 10.4 LIMITS AND MEASUREMENT RESULT

LIMITS AND MEASUREMENT RESULT FOR 802.11A20 MODULATION				
Frequency (MHz)	Power density (dBm/MHz)	Applicable Limits (dBm/MHz)	Pass or Fail	
5180	-6.822	17	Pass	
5200	-5.843	17	Pass	
5240	-6.104	17	Pass	
Frequency (MHz)	Power density (30dBm/500kHz)	Applicable Limits (30dBm/500kHz)	Pass or Fail	
5745	-9.803	30	Pass	
5785	-8.546	30	Pass	
5825	-8.762	30	Pass	

LIMITS AND MEASUREMENT RESULT FOR 802.11N20 MODULATION				
Frequency (MHz)	Power density (dBm/MHz)	Applicable Limits (dBm/MHz)	Pass or Fail	
5180	-5.821	17	Pass	
5200	-5.841	17	Pass	
5240	-6.308	17	Pass	
Frequency (MHz)	Power density (30dBm/500kHz)	Applicable Limits (30dBm/500kHz)	Pass or Fail	
5745	-9.665	30	Pass	
5785	-9.920	30	Pass	
5825	-9.734	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 Pestud/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 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.





Гиодиловой	Danier današti.	Applicable Limite	
Frequency (MHz)	Power density (dBm/MHz)	Applicable Limits (dBm/MHz)	Pass or Fail
5190	-9.933	17	Pass
5230	-9.549	17	Pass
Frequency (MHz)	Power density (30dBm/500kHz)	Applicable Limits (30dBm/500kHz)	Pass or Fail
5755	-12.158	30	Pass
5795	-12.327	30	Pass

LIMITS AND MEASUREMENT RESULT FOR 802.11AC20 MODULATION				
Frequency (MHz)	Power density (dBm/MHz)	Applicable Limits (dBm/MHz)	Pass or Fail	
5180	-6.221	17	Pass	
5200	-6.491	17	Pass	
5240	-6.851	17	Pass	
Frequency (MHz)	Power density (30dBm/500kHz)	Applicable Limits (30dBm/500kHz)	Pass or Fail	
5745	-9.618	30	Pass	
5785	-8.665	30	Pass	
5825	-9.965	30	Pass	

LIMITS A	LIMITS AND MEASUREMENT RESULT FOR 802.1AC40 MODULATION				
Frequency (MHz)	Power density (dBm/MHz)	Applicable Limits (dBm/MHz)	Pass or Fail		
5190	-8.524	17	Pass		
5230	-9.410	17	Pass		
Frequency (MHz)	Power density (30dBm/500kHz)	Applicable Limits (30dBm/500kHz)	Pass or Fail		
5755	-11.832	30	Pass		
5795	-12.123	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 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 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.



Page 44 of 116

LIMITS AND MEASUREMENT RESULT FOR 802.1AC80 MODULATION				
Frequency (MHz)	Power density (dBm/MHz)	Applicable Limits (dBm/MHz)	Pass or Fail	
5210	-12.593	17	Pass	
Frequency (MHz)	Power density (30dBm/500kHz)	Applicable Limits (30dBm/500kHz)	Pass or Fail	
5775	-13.364	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 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 writter purportation 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 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.



# **802.11a20 TEST RESULT**TEST PLOT OF SPECTRAL DENSITY FOR 5180MHz



# TEST PLOT OF SPECTRAL DENSITY FOR 5200MHz



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



# TEST PLOT OF SPECTRAL DENSITY FOR 5240MHz



# TEST PLOT OF SPECTRAL DENSITY FOR 5745MHz



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Pest no/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 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.



# TEST PLOT OF SPECTRAL DENSITY FOR 5785MHz



# TEST PLOT OF SPECTRAL DENSITY FOR 5825MHz



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Pest no/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 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.