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TEST REPORT

Report No.....:	**KS2005S00105E01**
FCC ID.....:	**2AM8GVOREZA**
Applicant.....:	**GUANGZHOU LIE DUN ELECTRONICS TECHNOLOGY CO., LIMITED**
Address.....:	No.4 plant of No.43 South International Trade Avenue, Hualong Town, Panyu Dstrict, Guangzhou, China, 511434
Manufacturer.....:	Guangzhou Lie Dun Electronics Technology CO.,Ltd
Address.....:	Building 4, 43 International Trade Avenue South, Hualong, Panyu, Guangzhou, China, 511434
Factory .....:	Guangzhou Lie Dun Electronics Technology CO.,Ltd
Address.....:	Building 4, 43 International Trade Avenue South, Hualong, Panyu, Guangzhou, China, 511434
Product Name.....:	**VOREZA II**
Trade Mark.....:	VOREZA
Model/Type reference.....:	VOR2-IEC2-X04
Listed Model(s).....:	/
Standard.....:	**FCC Part 15, Subpart E (15.407:2017)**
Date of Receipt.....:	Sep.15, 2020
Date of Test Date.....:	Jan.18, 2021- June.11, 2021
Date of issue.....:	June.11, 2021
Test result.....:	**Pass**

Compiled by: (Printed name+signature)	Rory Huang	Rory Huang
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Approved by: (Printed name+signature)	Neil Wan	Neil Wan

KSIGN(Guangdong) Testing Co.,Ltd. KSIGN APPROVED

Testing Laboratory Name.....:	**KSIGN(Guangdong) Testing Co., Ltd.**
Address.....:	West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu,Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, People's Republic of China

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TABLE OF CONTENTS Page

1. TEST SUMMARY..... 3

1.1. Test Standards.....3
1.2. Report version.....3
1.3. Test Description.....4
1.4. Test Facility..... 5
1.5. Measurement Uncertainty.....6
1.6. Environmental conditions.....6

2. GENERAL INFORMATION..... 7

2.1. General Description of EUT.....7
2.2. Operation State.....8
2.3. Measurement Instruments List.....9
2.4. Test Software.....9

3. TEST ITEM AND RESULTS.....10

3.1. Antenna Requirement.....10
3.2. Conducted Emission..... 11
3.3. 26dB Bandwidth and 99% Occupied Bandwidth Test.....14
3.4. Conducted Output Power Test.....27
3.5. Maximum Power Spectral Density Test..... 29
3.6. Frequency Stability Measurement.....36
3.7. Band Edge Emissions(Radiated).....38
3.8. Radiated Spurious Emissions.....44
3.9. Conducted Spurious Emission.....55

4. EUT TEST PHOTOS..... 71

5. PHOTOGRAPHS OF EUT CONSTRUCTIONAL..... 72

1. TEST SUMMARY

1.1. Test Standards

The tests were performed according to following standards:

FCC Part 15, Subpart E(15.407) - for 802.11a/n/ac, the test procedure follows the FCC KDB 789033 D02 General UNII Test Procedures New Rules V02r01.

ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.

KDB 789033: GUIDELINES FOR COMPLIANCE TESTING OF UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE (U-NII) DEVICES PART 15, SUBPART E .

1.2. Report version

Revised No.	Date of issue	Description
01	June.11, 2021	Original

1.3. Test Description

FCC Part 15 Subpart E(15.407)			
Test Item	**Test require**	**Result**	**Test Engineer**
Antenna Requirement	15.203	Pass	Emiya Lin
Conducted Emission	15.207	Pass	Emiya Lin
Band Edge Emissions	15.407(b)	Pass	Emiya Lin
26dB Bandwidth & 99% Bandwidth	15.407(a)	Pass	Emiya Lin
6dB Bandwidth (only for UNII-3)	15.407(e)	N/A	N/A
Maximum Conducted Output Power	15.407(a)	Pass	Emiya Lin
Maximum Power Spectral Density	15.407(a)	Pass	Emiya Lin
Transmitter Radiated Spurious Emission	15.407(b)	Pass	Emiya Lin
Peak Excursion	15.407(a)	Pass	Emiya Lin
Frequency Stability	15.407(g)	Pass	Emiya Lin
Transmitter Power Control	15.407(h)(1)	N/A	N/A

Note:

1.The measurement uncertainty is not included in the test result.

2. Transmit Power Control was not tested as the maximum EIRP is less than 500mW (27dBm) in U-NII Bands 2&3.

3. “N/A” is an abbreviation for “Not Applicable”.

1.4. Test Facility

Address of the report laboratory

KSIGN(Guangdong) Testing Co., Ltd.

West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu,Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, People's Republic of China

Laboratory accreditation

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L13261
KSIGN(Guangdong) Testing Co., Ltd. has been assessed and proved to be in Compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No.: 5457.01
KSIGN(Guangdong) Testing Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

IC Registration No.: CN0096
The 3m alternate test site of KSIGN(Guangdong) Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: CN0096

FCC-Registration No.: CN1272
KSIGN(Guangdong) Testing Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

1.5. Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the KSIGN(Guangdong) Testing Co., Ltd. system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device. Below is the best measurement capability for KSIGN(Guangdong) Testing Co., Ltd.

Test Items	Measurement Uncertainty	Notes
Transmitter power conducted	0.42 dB	(1)
Transmitter power Radiated	2.14 dB	(1)
Conducted spurious emissions 9kHz~40GHz	1.60 dB	(1)
Radiated spurious emissions 9kHz~40GHz	2.20 dB	(1)
Conducted Emissions 9kHz~30MHz	3.20 dB	(1)
Radiated Emissions 30~1000MHz	4.70 dB	(1)
Radiated Emissions 1~18GHz	5.00 dB	(1)
Radiated Emissions 18~40GHz	5.54 dB	(1)
Occupied Bandwidth	2.80 dB	(1)

Note (1): This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

1.6. Environmental conditions

Normal Condition	Temperature	15 °C to +35 °C
	Relative humidity	20 % to 75 %.
	Voltage	The equipment shall be the nominal voltage for which the equipment was designed.
Extreme Condition	Temperature	Measurements shall be made over the extremes of the operating temperature range as declared by the manufacturer
	Voltage	Measurements shall be made over the extremes of the operating temperature range as declared by the manufacturer

Normal Condition	T_N=Normal Temperature	25 °C
Extreme Condition	T_L=Lower Temperature	-20 °C
	T_H=Higher Temperature	50 °C

2. GENERAL INFORMATION

2.1. General Description of EUT

Test Sample Number:	1-1-1(Normal Sample),1-1-2(Engineering Sample)
Product Name:	VOREZA II
Trademark:	VOREZA
Model/Type reference:	VOR2-IEC2-X04
Listed models:	/
Model Difference:	/
Power Supply(Adapter):	MODEL:SOY-1200300 INPUT: 100-240V~ 50/60Hz 1.2A max. OUTPUT: DC 12.0V 3.0A, 36.0W
Battery:	DC 7.6V 13000mAh/98.8Wh
Hardware version:	ZA801 REV11
Software version:	EC: E7.CD.06 BIOS: E.ZA102_1.V10.048 Windows10 pro: 1803

Technical index for 5G WIFI					
Operation Band:	☒ U-NII-1	☐ U-NII-2A	☐ U-NII-2C	☐ U-NII-3	
Operation Frequency Range:	U-NII-1:	5150MHz~5250MHz			
	U-NII-2A:	5250MHz~5350MHz			
	U-NII-2C:	5470MHz~5725MHz			
	U-NII-3:	5725MHz~5850MHz			
Support bandwidth:	802.11a	☒ 20MHz			
	802.11n	☒ 20MHz	☒ 40MHz		
	802.11ac	☒ 20MHz	☒ 40MHz	☒ 80MHz	☐ 160MHz
Modulation:	802.11a: OFDM (QPSK, BPSK, 16QAM, 64QAM) 802.11n: OFDM (QPSK, BPSK, 16QAM, 64QAM) 802.11ac: OFDM (QPSK, BPSK, 16QAM, 64QAM)				
Bit Rate of Transmitter:	802.11a: 6/9/12/18/24/36/48/54 Mbps 802.11n: up to 150Mbps 802.11ac: at most 433.3 Mbps				
Max Peak Output Power:	802.11a: 8.81dBm 802.11n (HT20): 8.82dBm 802.11n (HT40): 6.75dBm 802.11ac (HT20): 6.78dBm 802.11ac (HT40): 6.64dBm 802.11ac (HT80): 6.61dBm				
Antenna type:	FPC Antenna				
Antenna gain:	1.0dBi				

2.2. Operation State

➢ **Frequency list**

According to section 15.31(m), regards to the operating frequency range over 10 MHz, must select three channel which were tested. the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, please see the above gray bottom.

Band	Test Channel	20MHz		40MHz		80MHz	
		Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
I	CH_L	36	5180	38	5190	-	-
	CH_M	44	5220	-	-	42	5210
	CH_H	48	5240	46	5230	-	-

➢ **Data Rated**

Preliminary tests were performed in different data rate, and found which the below bit rate is worst case mode, so only show data which it is a worst case mode.

Mode	Data rate (worst mode)
802.11a	6Mbps
802.11n(HT20)	MCS0
802.11n(HT40)	MCS0
802.11ac(HT20)/(HT40)/(HT80)	MCS0

➢ **Test mode**

For RF test items
The engineering test program was provided and enabled to make EUT continuous transmit (duty cycle>98%).
For AC power line conducted emissions:
The EUT was set to connect with the WLAN AP under large package sizes transmission.
For Radiated spurious emissions test item:
The engineering test program was provided and enabled to make EUT continuous transmit(duty cycle>98%). The EUT in each of three orthogonal axis emissions had been tested ,but only the worst case (X axis) data Recorded in the report.

2.3. Measurement Instruments List

Tonscend JS0806-2 Test system					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
1	Spectrum Analyzer	R&S	FSV40-N	101798	04/07/2021
2	Vector Signal Generator	Agilent	N5182A	MY50142520	04/07/2021
3	Analog Signal Generator	HP	83752A	3344A00337	04/07/2021
4	Power Sensor	Agilent	E9304A	MY50390009	04/07/2021
5	Power Sensor	Agilent	E9300A	MY41498315	04/07/2021
6	Wideband Radio Communication Tester	R&S	CMW500	157282	04/07/2021
7	Climate Chamber	Angul	AGNH80L	1903042120	04/07/2021
8	Dual Output DC Power Supply	Agilent	E3646A	MY40009992	04/07/2021
9	RF Control Unit	Tonscend	JS0806-2	/	04/07/2021

Transmitter spurious emissions & Receiver spurious emissions					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
1	EMI Test Receiver	R&S	ESR	102525	04/07/2021
2	High Pass Filter	Chengdu E-Microwave	OHF-3-18-S	0E01901038	03/27/2021
3	High Pass Filter	Chengdu E-Microwave	OHF-6.5-18-S	0E01901039	03/27/2021
4	Spectrum Analyzer	HP	8593E	3831U02087	04/07/2021
5	Ultra-Broadband logarithmic period Antenna	Schwarzbeck	VULB 9163	01230	03/29/2023
6	Loop Antenna	Beijin ZHINAN	ZN30900C	18050	03/25/2021
7	Spectrum Analyzer	R&S	FSV40-N	101798	04/07/2021
8	Horn Antenna	Schwarzbeck	BBHA 9120 D	2023	03/29/2023
9	Pre-Amplifier	Schwarzbeck	BBV 9745	9745#129	04/07/2021
10	Pre-Amplifier	EMCI	EMC051835SE	980662	04/07/2021

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
1	LISN	R&S	ENV432	1326.6105.02	03/27/2021
2	EMI Test Receiver	R&S	ESR	102524	04/07/2021
3	Manual RF Switch	JS TOYO	/	MSW-01/002	04/07/2021

Note:
1)The Cal. Interval was one year.
2)The cable loss has calculated in test result which connection between each test instruments.

2.4. Test Software

Software name	Model	Version
Conducted emission Measurement Software	EZ-EMC	EMC-Con 3A1.1
Radiated emission Measurement Software	EZ-EMC	FA-03A.2.RE
Bluetooth and WIFI Test System	JS1120-3	2.5.77.0418

3. TEST ITEM AND RESULTS

3.1. Antenna Requirement

Standard Requirement

FCC CFR Title 47 Part 15 Subpart C Section 15.203:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Test Result

The directional gain of the antenna less than 6dBi, please refer to the EUT internal photographs antenna photo.

3.2. Conducted Emission

Limit

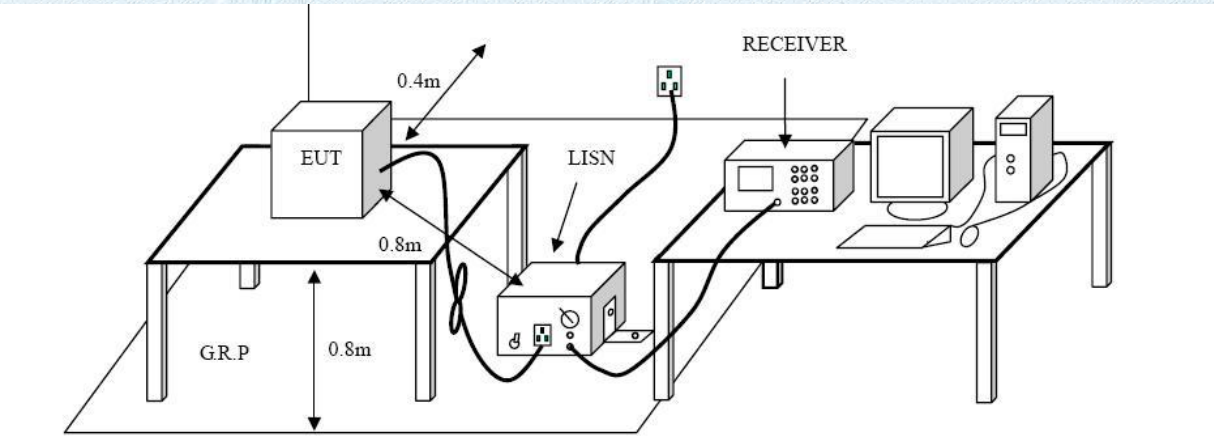
FCC CFR Title 47 Part 15 Subpart C Section 15.207:

Conducted Emission Test Limit

Frequency	Maximum RF Line Voltage (dBμV)	
	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

Notes:
(1) *Decreasing linearly with logarithm of the frequency.
(2) The lower limit shall apply at the transition frequencies.
(3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

Test Configuration



Test Procedure

1. The EUT was setup according to ANSI C63.10:2013 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment.
   The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
4. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
5. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
6. Conducted Emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
7. During the above scans, the emissions were maximized by cable manipulation.

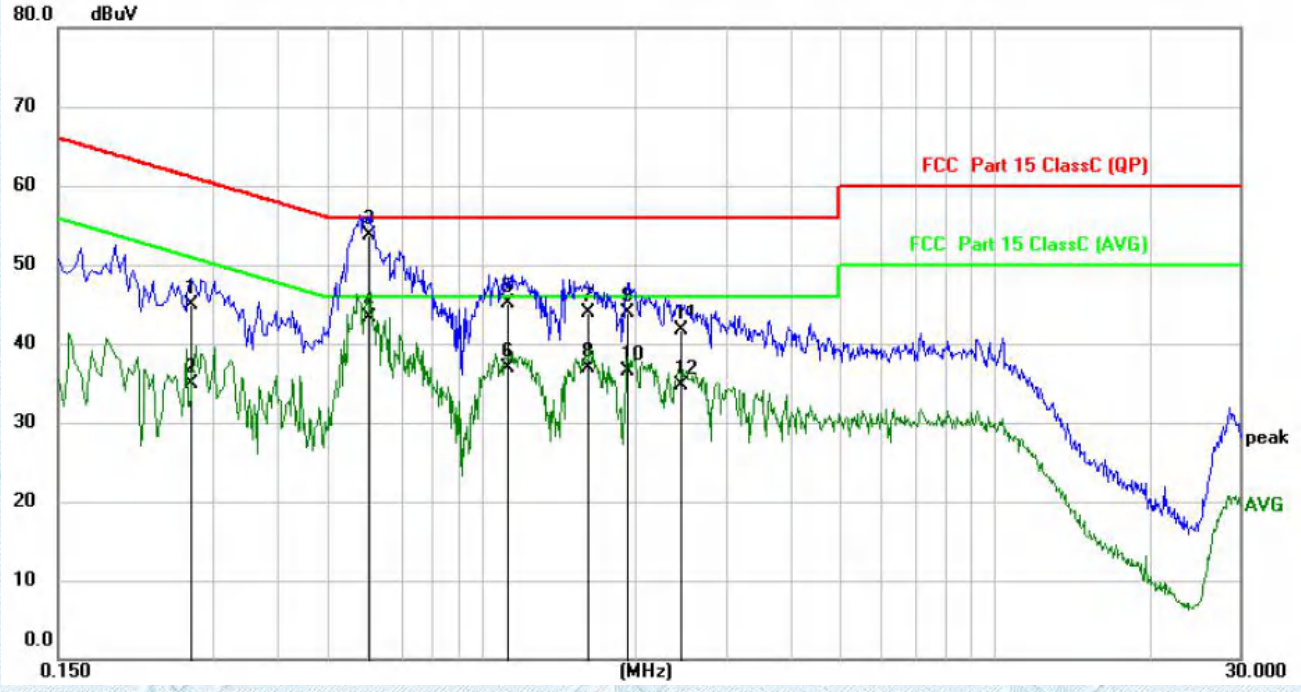
Test Mode

Please refer to the clause 2.2.

Test Results

Pre-scan 802.11a/n(HT20/HT40)/ac(HT20/HT40/HT80) modulation, and found the 802.11a modulation 5220MHz which it is worse case, so only show the test data for worse case.

Test Voltage:	AC 120V/60 Hz
Terminal:	Line
Test Mode:	Charging+WIFI

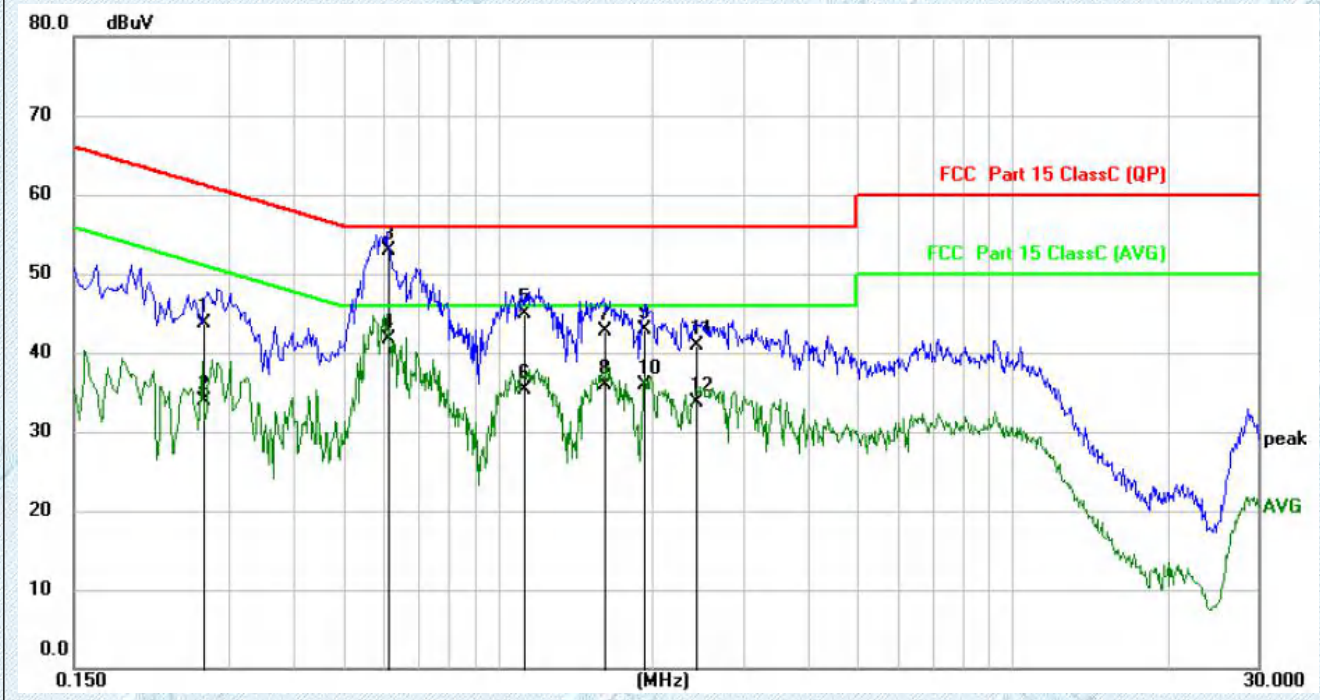


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2719	34.14	10.85	44.99	61.06	-16.07	QP
2		0.2719	24.12	10.85	34.97	51.06	-16.09	AVG
3	*	0.6035	42.86	10.87	53.73	56.00	-2.27	QP
4		0.6035	32.49	10.87	43.36	46.00	-2.64	AVG
5		1.1184	34.33	10.87	45.20	56.00	-10.80	QP
6		1.1184	25.98	10.87	36.85	46.00	-9.15	AVG
7		1.6145	32.98	10.88	43.86	56.00	-12.14	QP
8		1.6145	26.05	10.88	36.93	46.00	-9.07	AVG
9		1.9224	32.93	10.88	43.81	56.00	-12.19	QP
10		1.9224	25.54	10.88	36.42	46.00	-9.58	AVG
11		2.4364	30.83	10.90	41.73	56.00	-14.27	QP
12		2.4364	23.78	10.90	34.68	46.00	-11.32	AVG

Remarks:

1.Measurement = Reading Level+ Correct Factor
2.Over = Measurement -Limit

Test Voltage:	AC 120V/60 Hz
Terminal:	Neutral
Test Mode:	Charging+WIFI



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2683	32.91	10.85	43.76	61.17	-17.41	QP
2		0.2683	22.99	10.85	33.84	51.17	-17.33	AVG
3	*	0.6134	41.97	10.87	52.84	56.00	-3.16	QP
4		0.6134	30.77	10.87	41.64	46.00	-4.36	AVG
5		1.1215	33.95	10.87	44.82	56.00	-11.18	QP
6		1.1215	24.47	10.87	35.34	46.00	-10.66	AVG
7		1.6076	31.76	10.88	42.64	56.00	-13.36	QP
8		1.6076	24.96	10.88	35.84	46.00	-10.16	AVG
9		1.9192	32.06	10.88	42.94	56.00	-13.06	QP
10		1.9192	24.96	10.88	35.84	46.00	-10.16	AVG
11		2.4300	29.97	10.90	40.87	56.00	-15.13	QP
12		2.4300	22.77	10.90	33.67	46.00	-12.33	AVG

Remarks:

1.Measurement = Reading Level+ Correct Factor
2.Over = Measurement -Limit

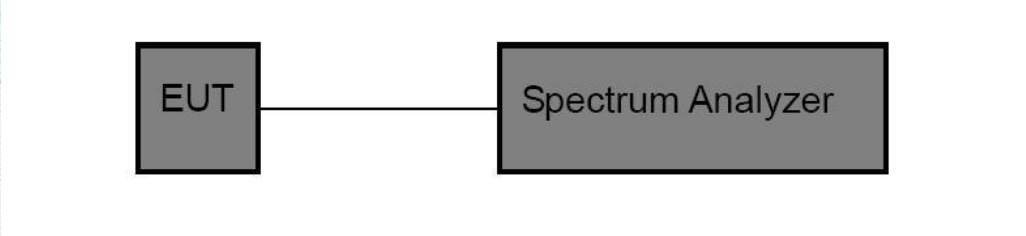
3.3. 26dB Bandwidth and 99% Occupied Bandwidth Test

Limit

The bandwidth at 26dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in KDB 789033 D02 , and at the appropriate frequencies. The spectrum analyzer's bandwidth measurement function is configured to measure the 26dB bandwidth.

FCC Part 15 Subpart C(15.407)		
Test Item	**Limit**	**Frequency Range (MHz)**
26 dB Bandwidth	N/A	5150~5250
		5250~5350
		5470~5725
6 dB Bandwidth	>500kHz	5725~5850

Test Configuration



Test Procedure

1. According KDB 789033 D02 – Section C
2. Connect the antenna port(s) to the spectrum analyzer input.
3. 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
4. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter wave form on the spectrum analyzer.
5. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission, and use the 99 % power bandwidth function of the instrument

The setting of the spectrum analyser as below:

26dB Bandwidth Test	
Spectrum Parameters	**Setting**
Attenuation	Auto
Span	>26 dB Bandwidth
RBW	Approximately 1% of the emission bandwidth
VBW	VBW>RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto
99% Occupied Bandwidth Test	
Spectrum Parameters	**Setting**
Attenuation	Auto
RBW	1% to 5% of the OBW
VBW	≥ 3RBW
Detector	Peak
Trace	Max Hold

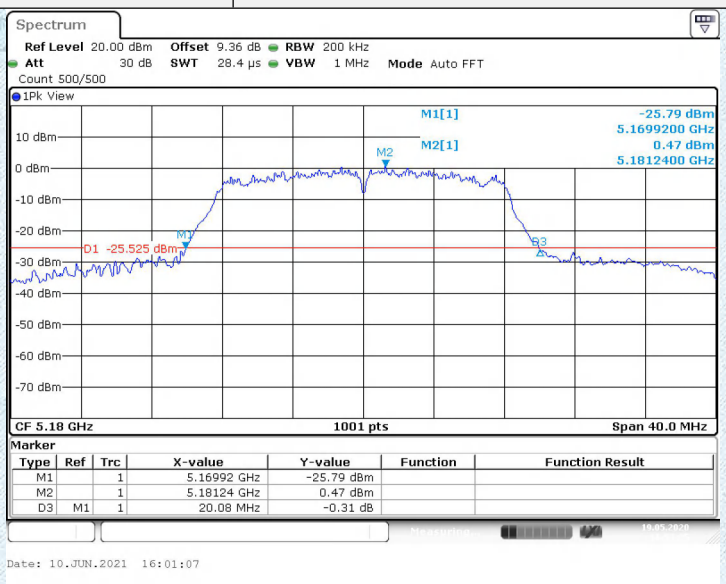
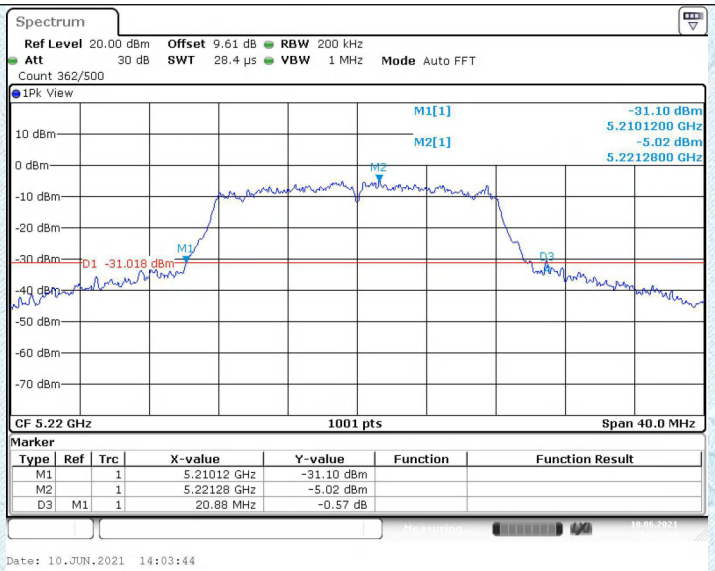
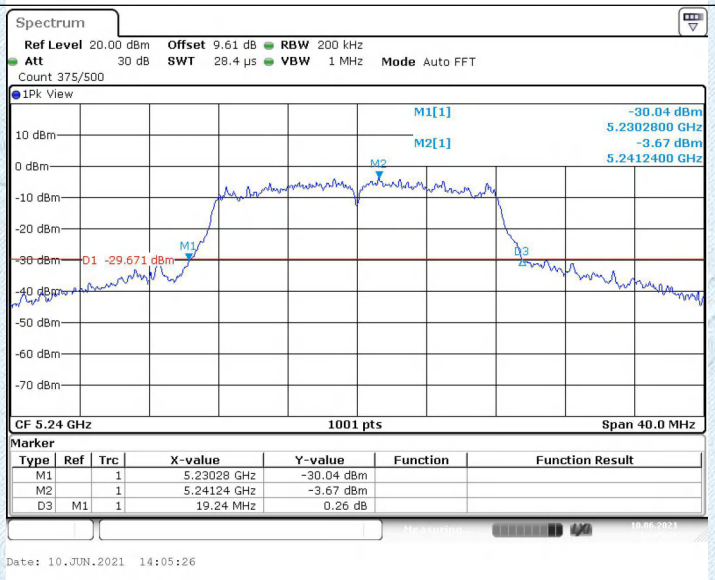
NOTE: The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

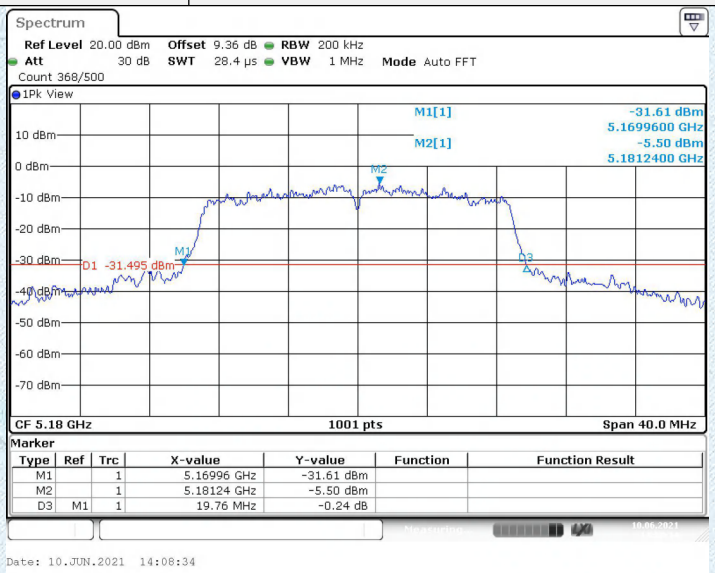
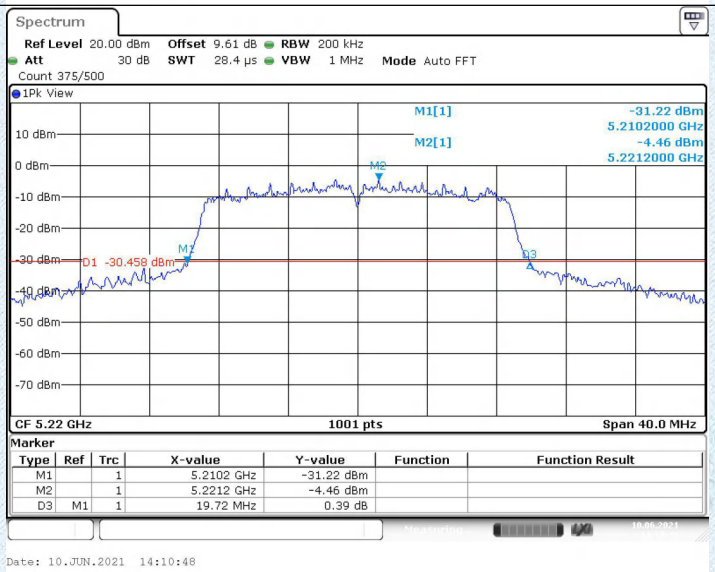
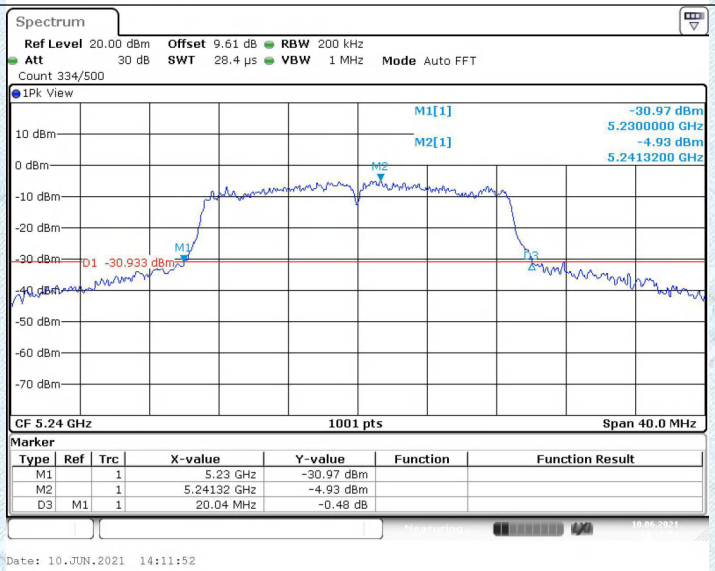
Test Mode

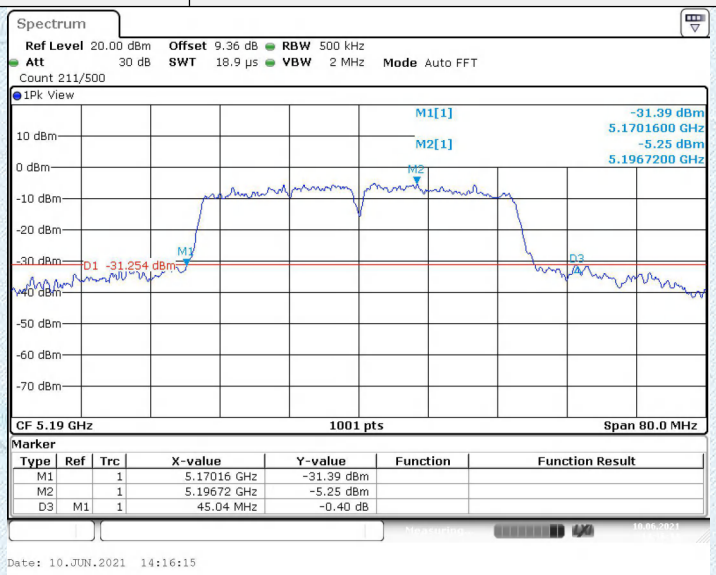
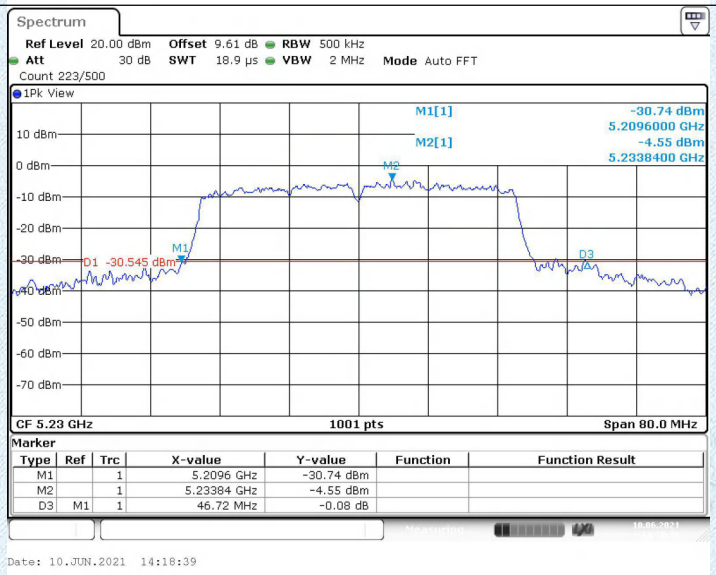
Please refer to the clause 2.2.

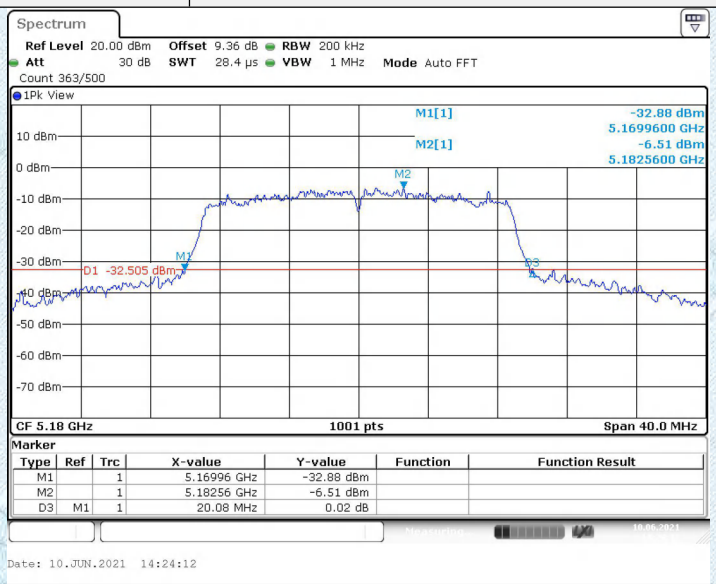
Test Results

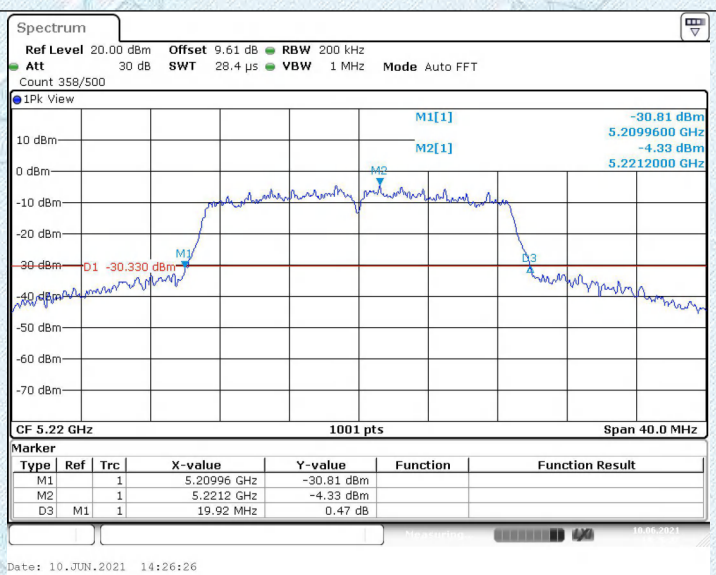
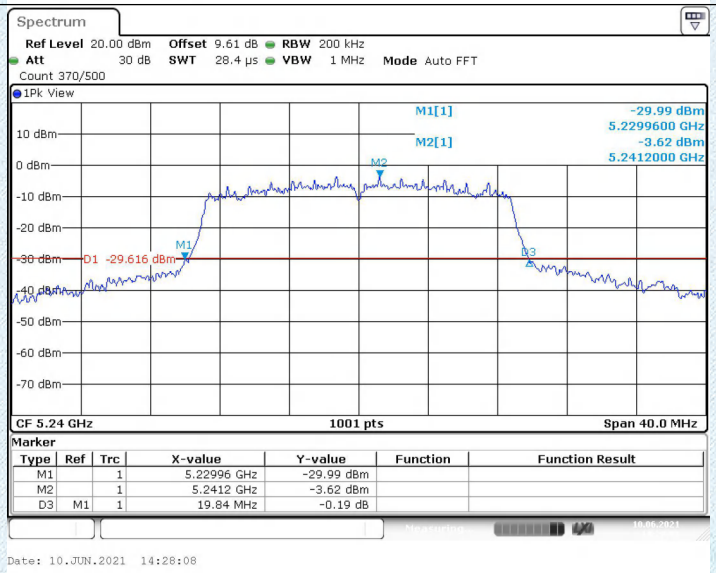
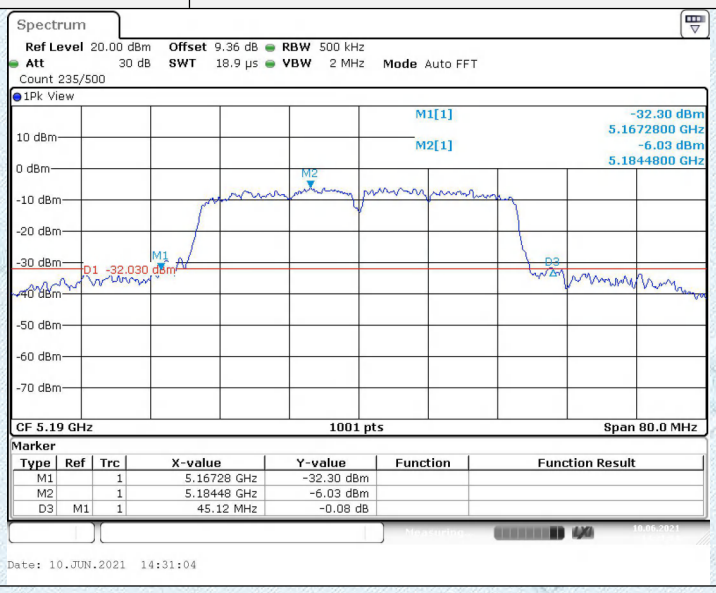
Band	Test Mode	Channel	26dB Bandwidth [MHz]	99% Occupied bandwidth (MHz)	Result
U-NII-1	802.11a	CH_L	20.080	17.383	Pass
		CH_M	20.880	16.983	Pass
		CH_H	19.240	17.143	Pass
	802.11n(HT20)	CH_L	19.760	18.022	Pass
		CH_M	19.720	18.142	Pass
		CH_H	20.040	18.022	Pass
	802.11n(HT40)	CH_L	45.040	36.284	Pass
		CH_H	46.720	36.364	Pass
	802.11ac(HT20)	CH_L	20.080	17.942	Pass
		CH_M	19.920	18.022	Pass
		CH_H	19.840	18.102	Pass
	802.11ac(HT40)	CH_L	45.120	36.523	Pass
		CH_H	53.520	36.523	Pass
	802.11ac(HT80)	CH_M	81.600	76.563	Pass

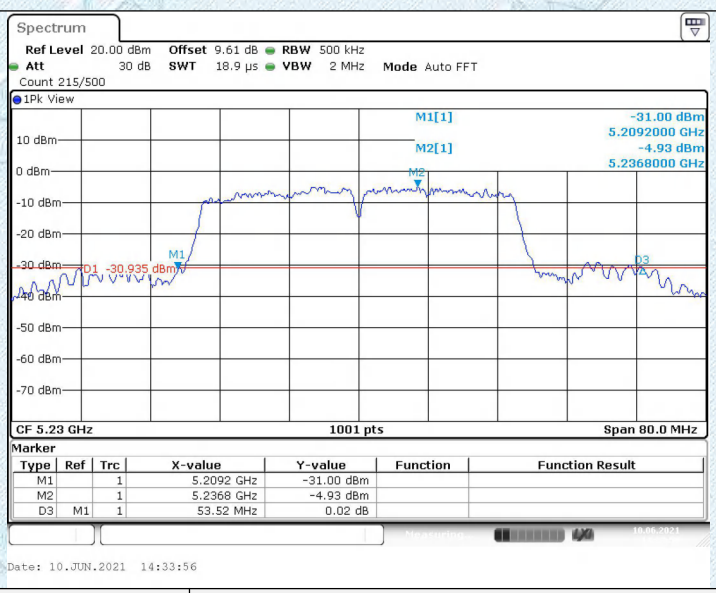
Band U-NII-1		
26dB bandwidth		**802.11a**
CH_L		
CH_M		
CH_H		

26dB bandwidth	802.11n (HT20)
CH_L	
CH_M	
CH_H	

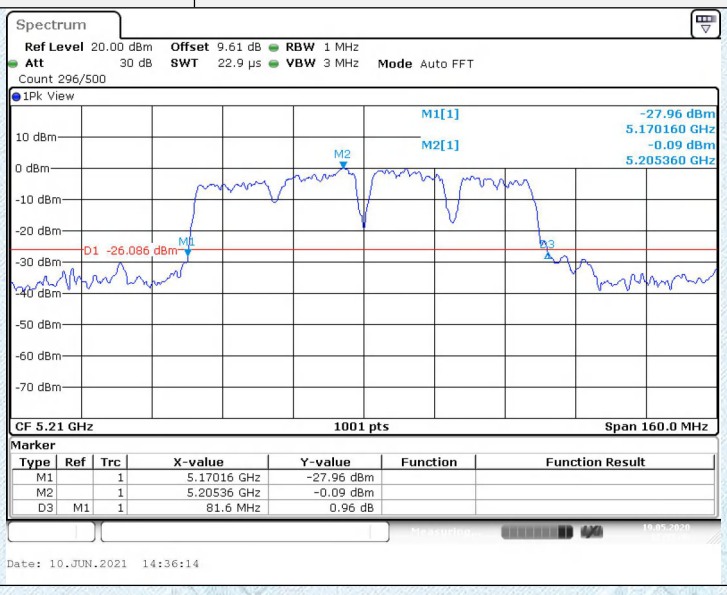
26dB bandwidth	802.11n (HT40)
CH_L	
CH_H	

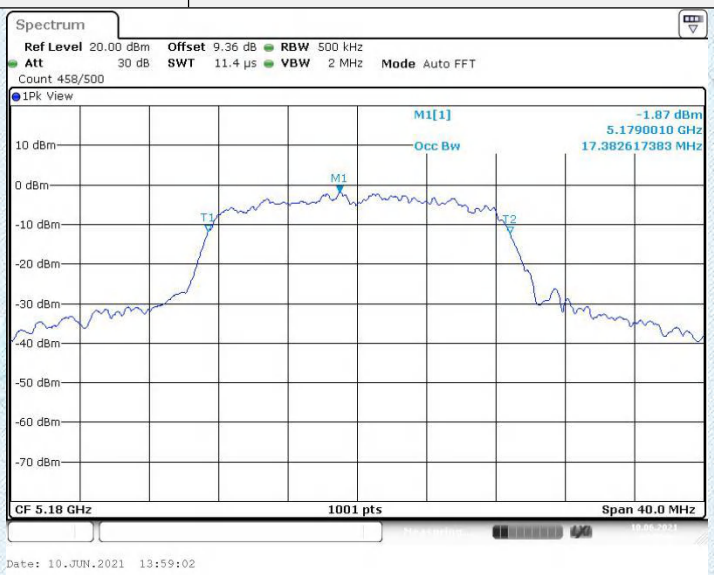
26dB bandwidth	802.11ac (HT20)
CH_L	

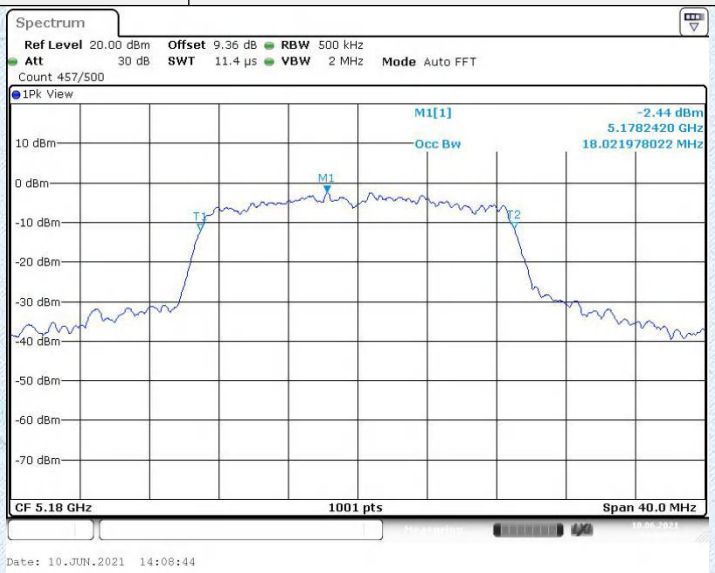
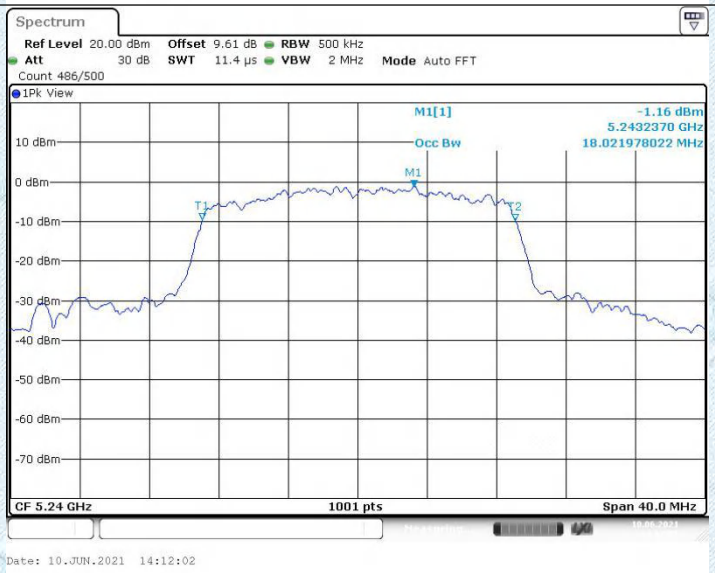
CH_M	
CH_H	
26dB bandwidth	**802.11ac (HT40)**
CH_L	

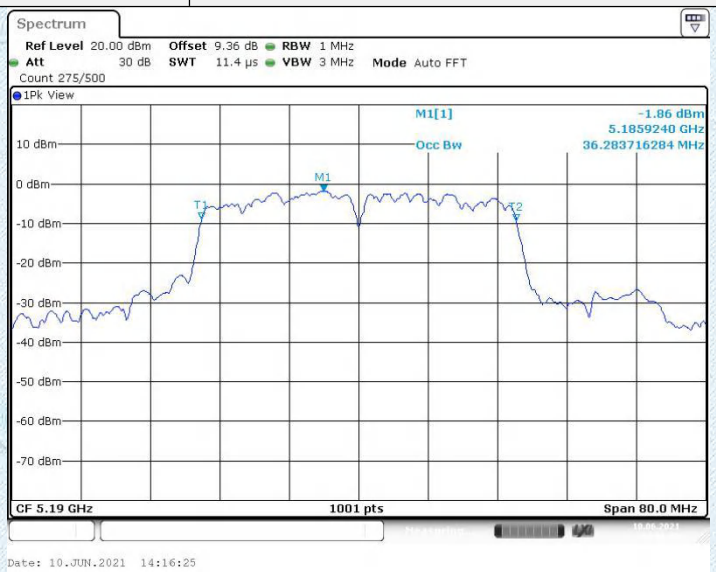
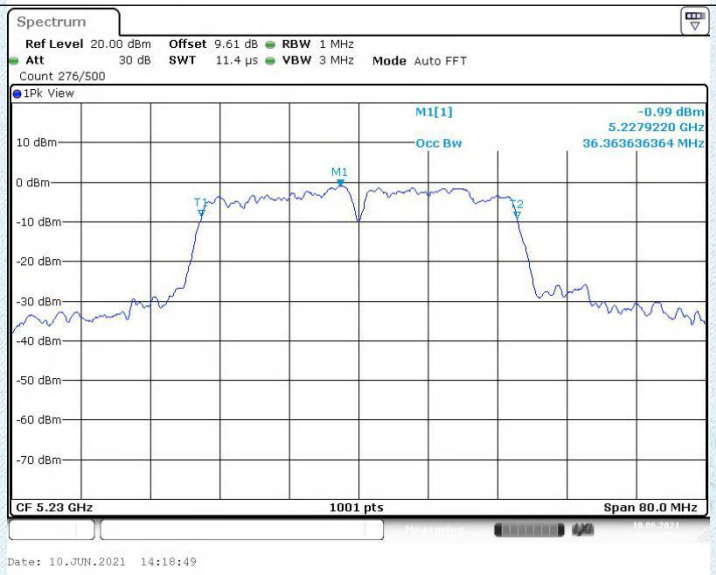
CH_H	

26dB bandwidth	802.11ac (HT80)

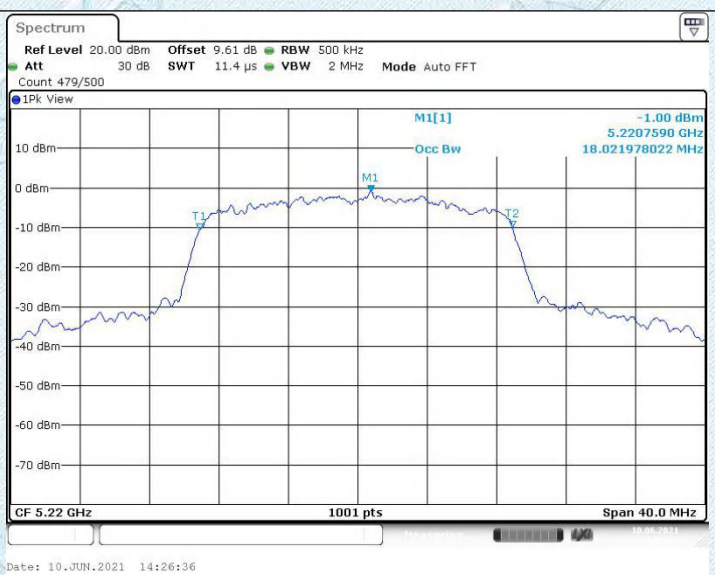
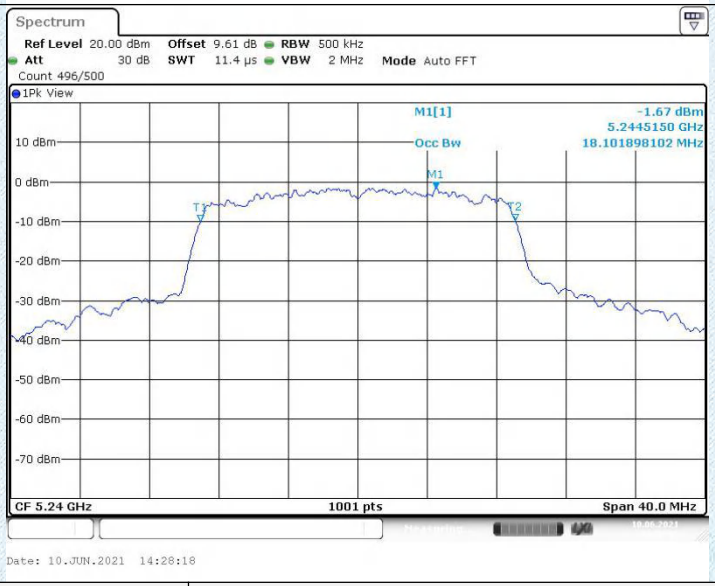
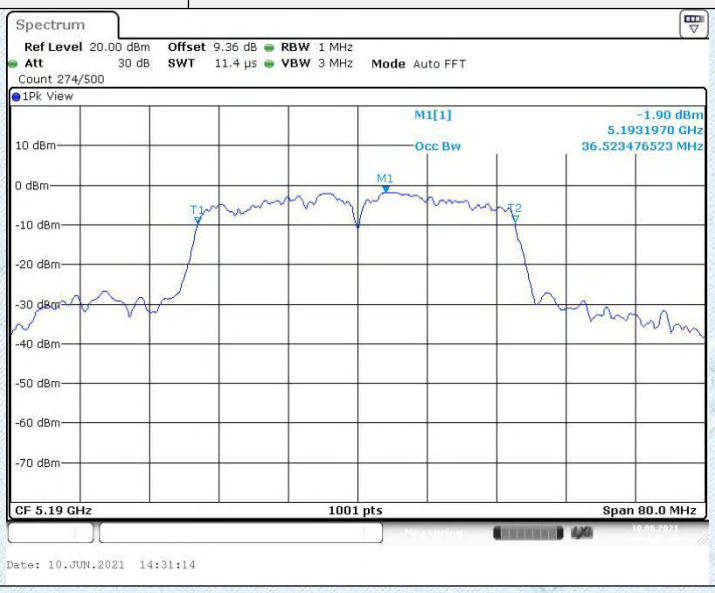
CH_M	

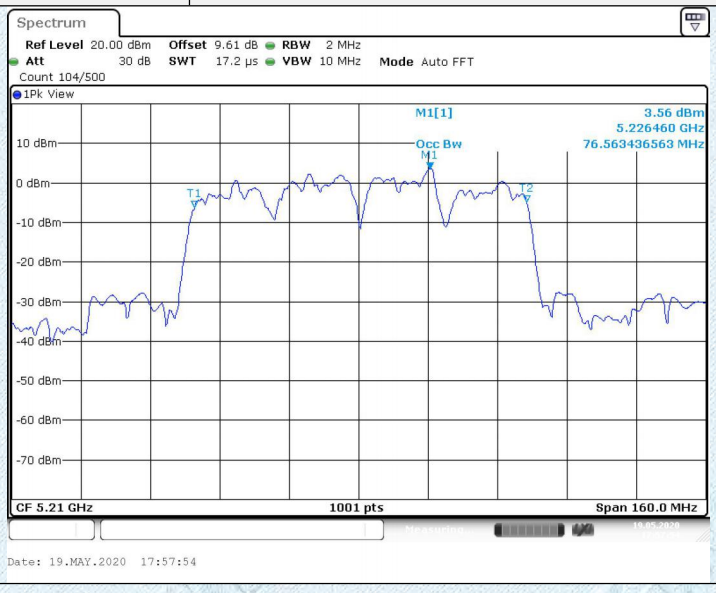
Band U-NII-1	
99% Occupied bandwidth	**802.11a**
CH_L	
CH_M	
CH_H	

99% Occupied bandwidth		802.11n (HT20)
CH_L		
CH_M		
CH_H		

99% Occupied bandwidth	802.11n (HT40)
CH_L	
CH_H	

99% Occupied bandwidth	802.11ac (HT20)
CH_L	

CH_M	
CH_H	
99% Occupied bandwidth	**802.11ac (HT40)**
CH_L	

CH_H	
99% Occupied bandwidth	**802.11ac (HT80)**
CH_M	

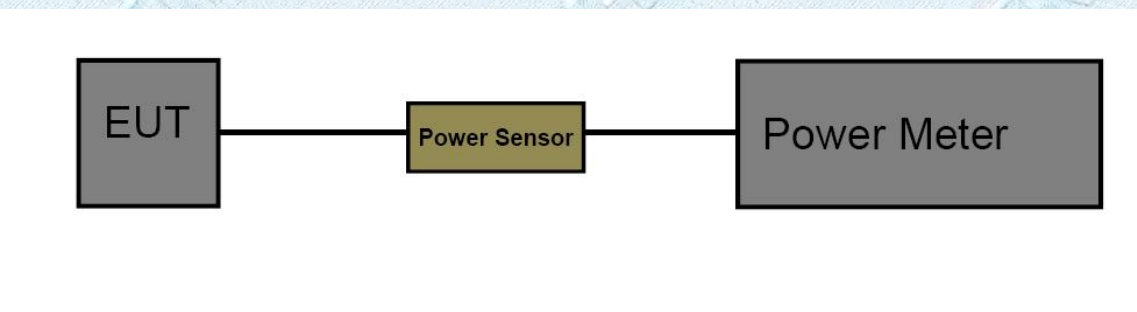
3.4. Conducted Output Power Test

Limit

FCC CFR Title 47 Part 15 Subpart E Section 15.407(a):

FCC Part 15 Subpart E(15.407)		
Test Item	**Limit**	**Frequency Range(MHz)**
Conducted Output Power	Fixed: 1 Watt (30dBm) Mobile and Portable: 250mW (24dBm)	5150~5250
	250mW (24dBm)	5250~5350
	250mW (24dBm)	5470~5725
	1 Watt (30dBm)	5725~5850

Test Configuration



Test Procedure

1. The EUT was tested according to according to section 3 of KDB 789033 D02 General UNII Test Procedures New Rules V02r01.
2. The maximum conducted output power may be measured using a broadband AVG RF power meter.
3. Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor.
4. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.
5. Record the measurement data.

Test Mode

Please refer to the clause 2.2.

Test Result

Band	Test Mode	Channel	Output Power (dBm)	Limit(MHz)	Result
U-NII-1	802.11a	CH_L	8.06	24	Pass
		CH_M	8.81		
		CH_H	8.81		
	802.11n(HT20)	CH_L	8.07	24	Pass
		CH_M	8.57		
		CH_H	8.82		
	802.11n(HT40)	CH_L	6.10	24	Pass
		CH_H	6.75		
	802.11ac(HT20)	CH_L	6.20	24	Pass
		CH_M	6.76		
		CH_H	6.78		
	802.11ac(HT40)	CH_L	5.88	24	Pass
		CH_H	6.64		
	802.11ac(HT80)	CH_M	6.61	24	Pass
Remark: The EUT provides one antennas for transmitting and receiving. Gain=1dBi< 6dBi So $P_{out}=P_{limit}$					

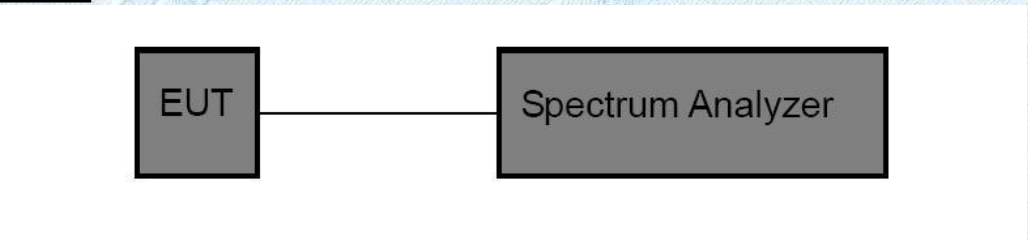
3.5. Maximum Power Spectral Density Test

Limit

FCC CFR Title 47 Part 15 Subpart E Section 15.407(a):

FCC Part 15 Subpart E(15.407)		
Test Item	**Limit**	**Frequency Range(MHz)**
Power Spectral Density	Other than Mobile and Portable : 17dBm/MHz Mobile and Portable : 11dBm/MHz	5150~5250
	11dBm/MHz	5250~5350
	11dBm/MHz	5470~5725
	30dBm/500kHz	5725~5850

Test Configuration



Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement is according to KDB 789033 D02 General UNII Test Procedures New Rules V02r01.

(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
(2) Set analyser centre frequency to transmitting frequency.
(3) Set the span to encompass the entire emissions bandwidth (EBW)(alternatively, the entire 99% OBW) of the signal.
(4) Set the RBW to: 1 MHz
(5) Set the VBW to: 3 MHz
(6) Detector: RMS
(7) Trace: Max Hold
(7) Sweep time: auto
(8) Trace average at least 100 traces in power averaging.
(9) User the peak marker function to determine the maximum amplitude level within the RBW. Apply correction to the result if different RBW is used.

NOTE: The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

Test Mode

Please refer to the clause 2.2.

Test Result

Band	Test Mode	Channel	Power Spectral Density (dBm/MHz)	Limit(dBm/MHz)	Result
U-NII-1	802.11a	CH_L	6.88	11	Pass
		CH_M	6.88		
		CH_H	7.45		
	802.11n(HT20)	CH_L	5.85	11	Pass
		CH_M	7.31		
		CH_H	7.47		
	802.11n(HT40)	CH_L	1.91	11	Pass
		CH_H	3.07		
	802.11ac(HT20)	CH_L	4.47	11	Pass
		CH_M	4.99		
		CH_H	5.02		
	802.11ac(HT40)	CH_L	1.34	11	Pass
		CH_H	2.41		
	802.11ac(HT80)	CH_M	-0.79	11	Pass