

## TEST REPORT

**Product** : reMarkable 2  
**Trade mark** : reMarkable  
**Model/Type reference** : RM110,RM111,RM112,RM113  
**Serial Number** : 3f74f3579f1  
**Report Number** : EED32N80457902  
**Date of Issue** : Aug. 24, 2021  
**Product Class** : Item 19-3 of Article 2 Paragraph 1  
**Test result** : PASS

Prepared for:

**reMarkable AS**  
**Biermanns gate 6, 0473 Oslo, Norway**

Prepared by:

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Date:

Aug. 24, 2021



Check No.:1021080621

## 1 Version

Version No.	Date	Description
00	Aug. 24, 2021	Original

## 2 Test Summary

Test	Test Requirement	Limit/Severity	Result
Antenna Requirement	Item 19-3 of Article 2 Paragraph 1	Notice 88 Appendix 43,B-1 (1)&(2)	PASS
Number of channels or channel separation	Item 19-3 of Article 2 Paragraph 1	7	PASS
Tolerance of frequency	Item 19-3 of Article 2 Paragraph 1	20×10-6 or less	PASS
Occupied Bandwidth	Item 19-3 of Article 2 Paragraph 1	For BW=20MHz:OFDM ≤ 19MHz; Others ≤ 18MHz For BW=40MHz:OFDM ≤ 38MHz For BW=80MHz:OFDM ≤ 78MHz	PASS
Tolerance of adjacent channel leakage power and out-band leakage power	Item 19-3 of Article 2 Paragraph 1	Adjacent channel leakage power See page 74 Out-band leakage power EIRP : refer to Item 19-3 of Article 2 Paragraph 1 Table 1	PASS
Antenna Power	Item 19-3 of Article 2 Paragraph 1	OFDM 20MHz sys: 10mW/MHz or less 40MHz sys: 5 mW /MHz or less 80MHz sys: 2.5 mW /MHz or less Tolerance : +20%,-80%	PASS
Tolerance of unwanted emission intensity(conducted)	Item 19-3 of Article 2 Paragraph 1	2.5μW / MHz	N/A
Interference prevention capability	Item 19-3 of Article 2 Paragraph 1	Article 49	N/A
Carrier sense capability	Item 19-3 of Article 2 Paragraph 1	Article 49	PASS
RF accessibility	Item 19-3 of Article 2 Paragraph 1	Article 49	N/A
Burst Length	Item 19-3 of Article 2 Paragraph 1	4ms or less	PASS
Limit of secondary radiated emissions(conducted)	Item 19-3 of Article 2 Paragraph 1	(1) Below 1GHz : 4nW (2) 1GHz - 10GHz : 20nW (3) 10GHz or higher : 20nW	PASS
Spurious Emission of Rx	Item 19-3 of Article 2 Paragraph 1	(1) Below 1 GHz: -54dBm (2) (2) 1GHz or higher: -47dBm	PASS

**Remark:**

Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.

EUT: In this whole report EUT means Equipment Under Test.

Tx: In this whole report Tx (or tx) means the product in transmitting status.

Rx: In this whole report Rx (or rx) means the product in receiving status.

RF: In this whole report RF means Radiated Frequency.

DS: Direct spreading

FH: Frequency hopping

OFDM: Orthogonal frequency division multiplexing.

Model No.: RM110,RM111,RM112,RM113

Only the model RM110 was tested,The added models and original model:The Electrical circuit design,Layout, components and internal wiring are identical.Only the model name and packaging contents are different.

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## 4 General Information

### 4.1 Client Information

Applicant:	reMarkable AS
Address of Applicant:	Biermanns gate 6, 0473 Oslo, Norway
Manufacturer:	reMarkable AS
Address of Manufacturer:	Biermanns gate 6, 0473 Oslo, Norway
Factory:	Dongguan Kaifa Technology Co., Ltd.
Address of Factory:	No.2 Junma Road, Chigang Community, Humen Town, Dongguan City, Guangdong Province, 523921. P. R. China

### 4.2 General Description of EUT

Product Name:	reMarkable 2	
Model No.(EUT):	RM110,RM111,RM112,RM113	
Test Model No:	RM110	
Trade mark:	reMarkable	
EUT Supports Radios application:	5GHz Wi-Fi : 5.15-5.25GHz	
Operating Frequency:	5GHz Wi-Fi : 5.15-5.25GHz	
Conducted rate power:	2.00mW/MHz (W52 Band_802.11a-HT20) 1.50mW/MHz (W52 Band_802.11n-HT20)	
Type of Modulation:	IEEE for 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11n(HT20) : OFDM (64QAM, 16QAM, QPSK,BPSK)	
Transmit Data Rate:	IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps IEEE 802.11n HT20: up to 216.7 Mbps.	
Antenna Type:	PCB antenna	
Antenna gain:	6.35 dBi	
Test Power Grade:	Default	
Test Software of EUT:	PUTTY	
Power Supply:	USB Port	DC 5V
	Battery:	Model: Fusion DC 3.85V 3000mAh 11.55Wh
Test Voltage:	DC 3.85V	
Sample Received Date:	Jun. 11, 2021	
Sample tested Date:	Jun. 11, 2021 to Aug. 12, 2021	

## 4.3 EUT Test Environment Recorded

Temperature:	26°C
Humidity:	55% RH
Atmospheric Pressure:	1010mbar

## 4.4 Description of Support Units

The EUT has been tested with associated equipment below.

Associated equipment name		Manufacture	model	S/N serial number	Supplied by	Certification
A	Notebook	DELL	DELL 3490	D245DX2	DELL	MIC

## 4.5 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd.

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

## 4.6 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Frequency Error	10 Hz
2	Occupied Bandwidth	10 kHz
3	Antenna Power	0.55dB
4	Spurious Emissions	0.46dB(30MHz-1GHz)
		0.55dB(1GHz-18GHz)
5	Carrier sense capability	1.0dB
6	Temperature test	0.64°C
7	Humidity test	3.8%
8	DC and low frequency voltages test	0.026%

## 5 Equipment List

Equipment	Manufacturer	Model	Serial No.	Cal. Date	Due date	Calibration body	Classification
Spectrum Analyzer	R&S	FSV40	101200	09-02-2020	09-01-2021	LISAI	(c)
Spectrum Analyzer	R&S	FSP40	100416	04-29-2021	04-28-2022	CTI	(c)
Temperature/ Humidity Indicator	biaozhi	GM1360	EJ1611459	02-21-2021	02-20-2022	CTIMT	(c)
Signal Generator	Keysight	E8257D	MY5340110 6	12-28-2020	12-27-2021	CTIMT	(c)
Digital multimeter	FLUKE	111	90240138	05-13-2020	05-11-2022	CTIMT	(c)

### Remark:

- (a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) in Japan (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1) in JRL.
- (b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (Act No. 51 of 1992) .
- (c) Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).
- (d) Calibration, etc. conducted by using measuring instruments and other equipment listed in the right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (a) to(c).

From JRL Article 24-2, paragraph 4, Item 2

## 6 Radio Technical Requirements Specification

**Table 1: 5 GHz band low-power data communication system (1) (5.2GHz band) (Item 19-3 of Article 2 Paragraph 1)**

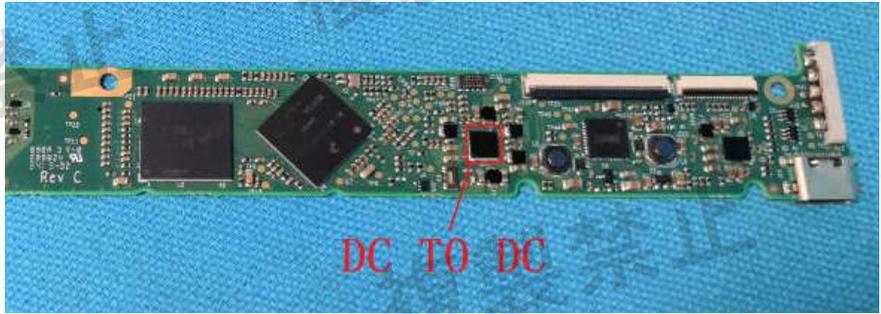
Items	Technical standard
Assigned frequency or designated frequency	5180, 5200, 5220, 5240, 5190, 5230, 5210MHz
Communication method	One-way communication, simplex, semi-duplex, or duplex operation of digital signal transmission including spread spectrum
Number of channels or channel separation	7
Tolerance of frequency ( $\times 10^{-6}$ )	$20 \times 10^{-6}$
Tolerance of occupied bandwidth	For BW=20MHz:OFDM $\leq 19$ MHz; Others $\leq 18$ MHz For BW=40MHz:OFDM $\leq 38$ MHz For BW=80MHz:OFDM $\leq 78$ MHz
Antenna power	OFDM 20MHz sys: 10mW/MHz or less 40MHz sys: 5 mW /MHz or less 80MHz sys: 2.5 mW /MHz or less Tolerance : +20%,-80%
Tolerance of spurious emission intensity	2.5 $\mu$ W / MHz
Tolerance of adjacent channel leakage power and out-band leakage power	Adjacent channel leakage power See page 74 Out-band leakage power EIRP : refer to Item 19-3 of Article 2 Paragraph 1 Table 1
Transmission burst length	4ms or less
Limit of secondary radiated emissions	(1) Below 1GHz : 4nW (2) 1GHz - 10GHz : 20nW (3) 10GHz or higher : 20nW
Interference prevention function	Shall have the function of automatic transmission or reception of identification code.
Structure	Shall be of the structure that the RF and modulator sections excluding antenna cannot easily be opened.
Note	DS: Direct spread OFDM: Orthogonal frequency division multiplexing

Note: The Technical Standards described here do not cover all of the regulated items.

## 6.1 Transmitter Requirements

### 7.1.1 EUT test voltage and Frequency

#### 6.1.1.1 EUT test voltage

<b>Power Supply:</b>	Battery:	Model: Fusion DC 3.85V 3000mAh 11.55Wh	
<b>Test voltage require:</b>	Supply the rated voltage and the rated voltage $\pm 10\%$ to power supply. However, If the fluctuation of input voltage to the circuit of RF unit (except power supply) of test equipment is under $\pm 1\%$ , when input voltage from external power supply to the test equipment is fluctuated by $\pm 10\%$ : Conduct the test with the rated voltage only.		
<b>RF circuit test points:</b>			
<b>Power Supply result:</b>	The measurement result of the voltage fluctuation at RF circuit when DC 3.85V $\pm 10\%$ .		
	Remark	DC Input	DC 3V3
	NV	4.24V	3.310V
	LV	3.85V	3.300V
	HV	3.47V	3.290V
NT: Normal Temperature NV: Normal Voltage LV: Low Voltage HV: High Voltage			

## 6.1.1.2 Test frequency

Test frequencies:	If the EUT can be set to 3 or more different (carrier) frequencies in 1 allocated band, testing shall be performed using the Lowest, Middle and the Highest frequency (L,M and H). If there are 2 or fewer frequencies, testing shall be performed with the available frequencies.		
Frequency range over which device operates	Number of frequencies	Location in the range of operation	
1 MHz or less	1	Middle	
1 to 10 MHz	2	1 near top and 1 near bottom	
More than 10 MHz	3	1 near top. 1 near middle and 1 near bottom	

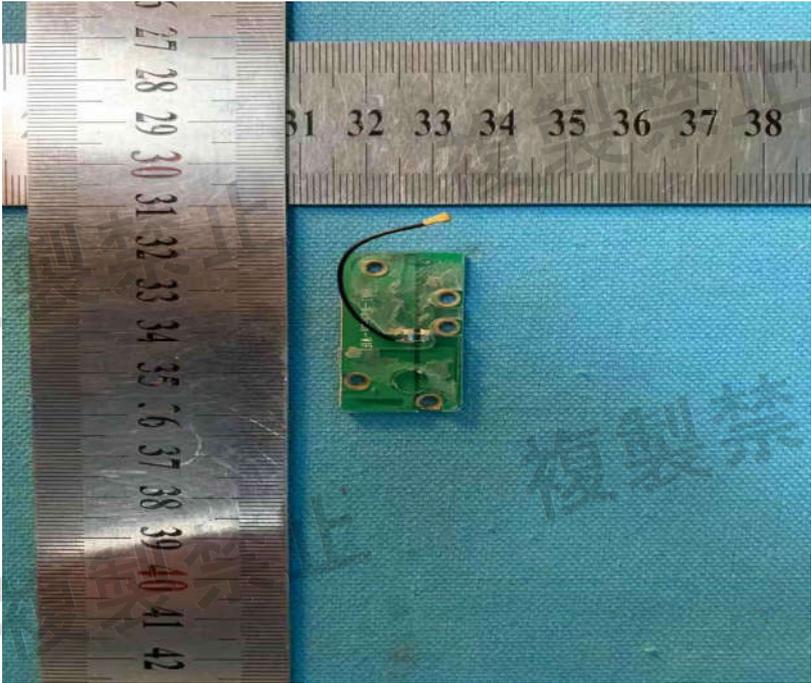
EUT channels and frequencies list:

802.11a 20MHz	
802.11n 20MHz	
W52	
Channel	Frequency (MHz)
36	5180
40	5200
44	5220
48	5240

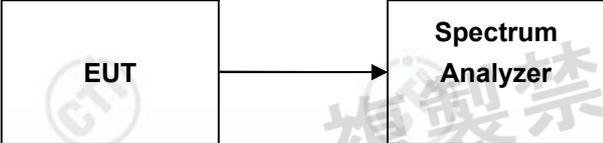
Test channel:

Test mode	Test channel/frequency(MHz)
Mode 1: IEEE 802.11a W52 mode	CH36/5180, CH40/5200, CH 48/5240
Mode 4: IEEE 802.11n 20MHz W52 mode	CH36/5180, CH40/5200, CH 48/5240

## 7.1.2 Antenna Requirement

<p><b>Standard requirement</b></p>	
	<p>Applicable for equipment with an antenna terminal, including testing terminals) If an antenna connector is available, all relevant tests will be carried out conducted. If not, tests will be carried out in an anechoic room or with a suitable test-fixture.</p>
<p><b>EUT Antenna</b></p>	
	
	<p>The antenna is integrated on the PCB Antenna and no consideration of replacement. The best case gain of the antenna is 6.35 dBi</p>
	<p><b>Result:</b> An antenna connector is available; all relevant tests will be carried out conducted.</p>

### 7.1.3 Tolerance of frequency

<b>Test Requirement:</b>	Item 19-3 of Article 2 Paragraph 1
<b>EUT Operation:</b>	
<b>Test Status:</b>	Enter the unmodulation mode for the product. Test in Channel lowest, middle and highest, keep in continuously transmitting status.
<b>Test Configuration:</b>	 <pre> graph LR     EUT[EUT] --&gt; SA[Spectrum Analyzer]             </pre>
<b>Test Conditions:</b>	Frequency Counter or Spectrum Analyzer is used for measurement.
<b>EUT conditions:</b>	Modulation/Spread/Hopping off, CW Tx If EUT does not accept “Modulation OFF” mode in the measurement, you may use “Modulation ON” mode. In that case you can use the Max power Frequency as the measuring results.
<b>Spectrum Analyzer conditions:</b>	Frequency: Test Frequency Span 1MHz RBW 10KHz (Modulation OFF), VBW 10KHz (Modulation OFF), Sweep Time Auto Detector mode Positive peak Indication mode Max hold
<b>Technical standard:</b>	Tolerance of frequency: $\pm 20 \times 10^{-6}$
<b>Test result:</b>	Refer to Appendix: 5G WIFI of Report No. EED32N80457902

## 7.1.4 Occupied Bandwidth

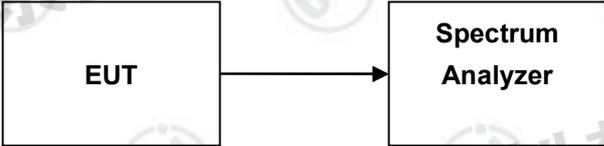
<b>Test Requirement:</b>	Item 19-3 of Article 2 Paragraph 1
<b>EUT Operation:</b>	
<b>Test Status:</b>	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
<b>Test Configuration:</b>	 <pre> graph LR     EUT[EUT] --&gt; SA[Spectrum Analyzer]             </pre>
<b>EUT conditions:</b>	Modulation/Spread/Hopping on. For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
<b>Spectrum Analyzer conditions:</b>	Frequency: Test Frequency Span 40MHz/80MHz/160MHz RBW 300 kHz VBW 300 kHz Sweep Time Auto detector mode Positive peak Indication mode Max hold OBW 99%
<b>Technical standard:</b>	For BW=20MHz:OFDM $\leq$ 19MHz; Others $\leq$ 18MHz For BW=40MHz:OFDM $\leq$ 38MHz For BW=80MHz:OFDM $\leq$ 78MHz
<b>Test result:</b>	Refer to Appendix: 5G WIFI of Report No. EED32N80457902

## 7.1.5 Adjacent Channel Power Tolerance

<b>Test Requirement:</b>	Item 19-3 of Article 2 Paragraph 1
<b>EUT Operation:</b>	
<b>Test Status:</b>	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).Following channel(s) was (were) selected for the final test as listed below.
<b>Test Configuration:</b>	<div style="text-align: center;">  <pre> graph LR     EUT[EUT] --&gt; SA[Spectrum Analyzer]             </pre> </div>
<b>EUT conditions:</b>	Modulation/Spread/Hopping on. For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
<b>Spectrum Analyzer conditions:</b>	Frequency: Test Frequency RBW 300 kHz, VBW 300 kHz Tx bandwidth 20MHz Adjacent channel bandwidth 20MHz, Channel spacing 20MHz Alternate channel bandwidth 20MHz, Channel spacing 40MHz Sweep Time Auto detector mode Positive peak Indication mode Max hold
<b>Technical standard:</b>	20MHz system (OB: below 20MHz) (1) Mean power of $\pm 10$ MHz; bandwidth at 20MHz; detuning : -25dBc (2) Mean power of $\pm 10$ MHz; bandwidth at 40MHz; detuning : -40dBc 40MHz system (OB: over 20, below 40MHz) (1) Mean power of $\pm 20$ MHz; bandwidth at 40MHz; detuning : -25dBc (2) Mean power of $\pm 20$ MHz; bandwidth at 80MHz; detuning : -40dBc 80MHz system (OB: over 40, below 80MHz) Mean power of $\pm 40$ MHz; bandwidth at 80MHz; detuning : -25dBc
<b>Test result:</b>	Refer to Appendix: 5G WIFI of Report No. EED32N80457902

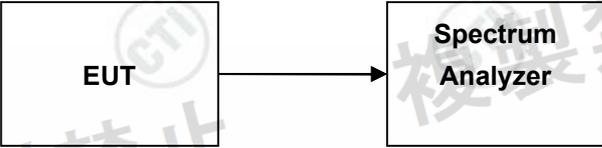
Note: The cable loss and antenna gain have been put into spectrum analyzer as amplitude offset.

## 7.1.6 Out-Band Emissions Power

<b>Test Requirement:</b>	Item 19-3 of Article 2 Paragraph 1
<b>EUT Operation:</b>	
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).Following channel(s) was (were) selected for the final test as listed below.
<b>Test Configuration:</b>	<div style="text-align: center;">  <pre> graph LR     EUT[EUT] --&gt; SA[Spectrum Analyzer]             </pre> </div>
<b>EUT conditions:</b>	Modulation/Spread/Hopping on. For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
<b>Spectrum Analyzer conditions:</b>	Step 1 All spurious are measured by peak mode. Step 2: Frequency: Spurious Frequency RBW 1 MHz VBW 1 MHz Sweep Time Auto detector mode Sample Indication mode Max hold
<b>Technical standard:</b>	OB: ≤18MHz 5140-5142MHz ≤2.5μW/MHz 5142-5150MHz ≤15μW/MHz 5250-5251MHz ≤10 <sup>-f+5250</sup> mW/MHz 5251-5260MHz ≤10 <sup>-8/90(f-5251)-1</sup> mW/MHz 5260-5266.7MHz ≤10 <sup>-3/25(f-5260)-1.8</sup> mW/MHz 5266.7-5360MHz ≤2.5μW/MHz OB: 18-19MHz 5135-5142MHz ≤2.5μW/MHz 5142-5150MHz ≤15μW/MHz 5250-5251MHz ≤10 <sup>-f+5250</sup> mW/MHz 5251-5260MHz ≤10 <sup>-8/90(f-5251)-1</sup> mW/MHz 5260-5266.7MHz ≤10 <sup>-3/25(f-5260)-1.8</sup> mW/MHz 5266.7-5365MHz ≤2.5μW/MHz OB: 19-38MHz 5100-5141.6MHz ≤2.5μW/MHz 5141.6-5150MHz ≤15μW/MHz 5250-5251MHz ≤10 <sup>-f+5250</sup> /2mW/MHz 5251-5270MHz ≤10 <sup>-8/190(f-5251)-1</sup> /2mW/MHz 5270-5278.4MHz ≤10 <sup>-3/50(f-5270)-1.8</sup> /2mW/MHz 5278.4-5400MHz ≤2.5μW/MHz OB: 38-78MHz 5020-5123.2MHz ≤2.5μW/MHz 5123.2-5150MHz ≤15μW/MHz 5250-5251MHz ≤10 <sup>-f+5250</sup> /4mW/MHz 5251-5290MHz ≤10 <sup>-8/390(f-5251)-1</sup> /4mW/MHz 5290-5296.7MHz ≤10 <sup>-3/100(f-5280)-1.8</sup> /4mW/MHz 5296.7-5480MHz ≤2.5μW/MHz
<b>Test result:</b>	Refer to Appendix: 5G WIFI of Report No. EED32N80457902

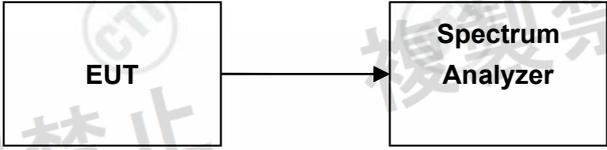
Note: The cable loss and antenna gain have been put into spectrum analyzer as amplitude offset. .

## 7.1.7 Antenna Power

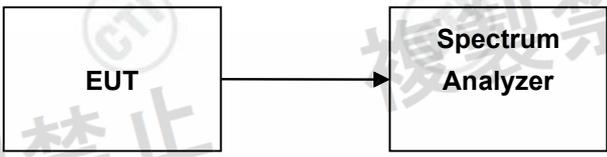
<b>Test Requirement:</b>	Item 19-3 of Article 2 Paragraph 1
<b>EUT Operation:</b>	
<b>Test Status:</b>	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
<b>Test Configuration:</b>	<div style="text-align: center;">  <pre> graph LR     EUT[EUT] --&gt; SA[Spectrum Analyzer]             </pre> </div>
<b>EUT conditions:</b>	Modulation/Spread/Hopping on For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
<b>Spectrum Analyzer conditions(FHSS):</b>	Frequency: Test Frequency Span 40MHz/80MHz/160MHz RBW 1 MHz VBW 1 MHz Sweep Time Auto detector mode Positive peak Indication mode Max hold
<b>Technical standard:</b>	OFDM 20MHz sys: 10mW/MHz or less 40MHz sys: 5 mW /MHz or less 80MHz sys: 2.5 mW /MHz or less Tolerance : +20%,-80%
<b>E.I.R.P.</b>	≤10mW/MHz (OBW ≤19MHz) ≤5mW/MHz (19 ≤OBW ≤38MHz) ≤2.5mW/MHz (38 ≤OBW ≤78MHz)
<b>Test result:</b>	Refer to Appendix: 5G WIFI of Report No. EED32N80457902

Note: The cable loss have been put into spectrum analyzer as amplitude offset.

## 7.1.8 Spurious Emissions of Tx

<b>Test Requirement:</b>	Item 19-3 of Article 2 Paragraph 1
<b>EUT Operation:</b>	
<b>Test Status:</b>	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
<b>Test Configuration:</b>	 <pre> graph LR     EUT[EUT] --&gt; SA[Spectrum Analyzer]             </pre>
<b>EUT conditions:</b>	Modulation/Spread/Hopping on. For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
<b>Spectrum Analyzer conditions:</b>	Step1 All spurious are measured from 30MHz to 26 GHz by peak mode. Step 2: Frequency: Spurious Frequency RBW 100kHz (30 – 1GHz), 1000KHz (over 1GHz) VBW 100kHz (30 – 1GHz), 1000KHz (over 1GHz) Sweep Time Auto detector mode Sample Indication mode Max hold
<b>Technical standard:</b>	20MHz system OB: below 18MHz: (1) Below 5140MHz, 2.5μW/MHz (2) Over 5360MHz, 2.5μW/MHz OB: over 18MHz, below 19MHz (1) Below 5135MHz, 2.5μW/MHz (2) Over 5365MHz, 2.5μW/MHz 40MHz system OB:From 19MHz to 38MHz (1) Below 5100MHz, 2.5μW/MHz (2) Over 5400MHz, 2.5μW/MHz 80MHz system OB:From 38MHz to 78MHz (1) Below 5020MHz, 2.5μW/MHz (2) Over 5480MHz, 2.5μW/MHz
<b>Test result:</b>	Refer to Appendix: 5G WIFI of Report No. EED32N80457902

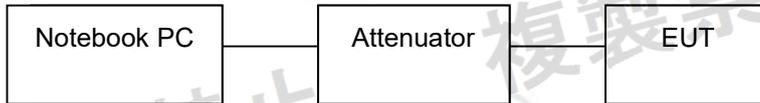
## 7.1.9 Transmission Burst Length

<b>Test Requirement:</b>	Item 19-3 of Article 2 Paragraph 1
<b>EUT Operation:</b>	
<b>Test Status:</b>	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
<b>Test Configuration:</b>	 <pre> graph LR     EUT[EUT] --&gt; SA[Spectrum Analyzer]             </pre>
<b>EUT conditions:</b>	Modulation/Spread/Hopping on. For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
<b>Spectrum Analyzer conditions:</b>	Frequency: Test Frequency Span 0 MHz RBW 1 MHz, VBW 1 MHz, Sweep Time: $\geq 1$ ms Detector mode Positive peak Indication mode Max hold
<b>Technical standard:</b>	Burst length $\leq 8$ ms
<b>Test result:</b>	Refer to Appendix: 5G WIFI of Report No. EED32N80457902

## 7.1.10 Interference prevention function

### 1) Measurement system diagram

#### (1) When transmitting identification code



#### Test result:

- 1) The transmitting mode of EUT is normal operating, the interference prevention function does meet the requirements (Good).
- 2) The receiving mode of EUT is normal operating, the interference prevention function does meet the requirements (Good).

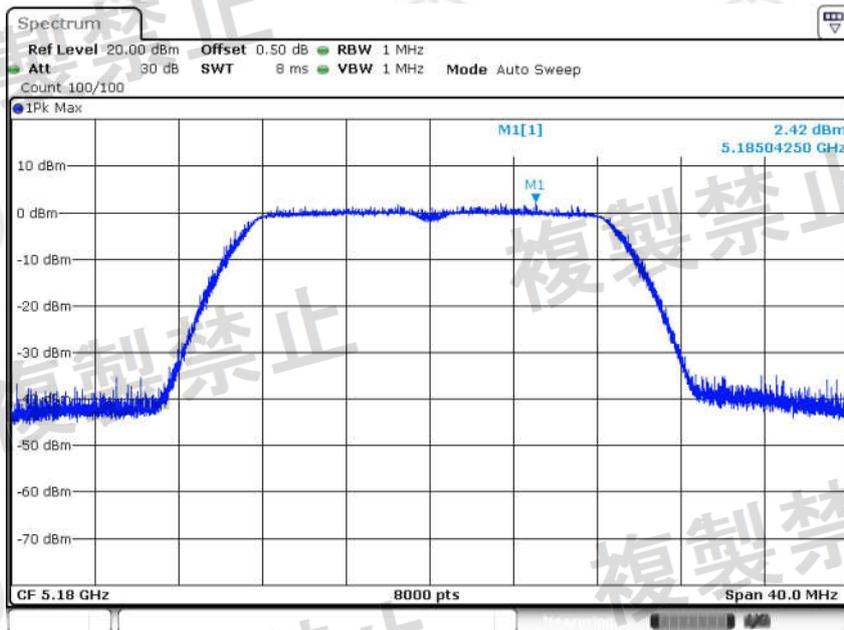
ac:83:f3:fb:20:08

## 7.1.11 Carrier sense capability

Conducted carrier sense function with test procedure annex table No.45 and confirmed the result was good.

**Test result:** The unit does meet the requirements

### Carrier sense capability, 11n HT20, 5180 MHz



Date: 11.AUG.2021 04:09:24



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## 7.1.12 RF accessibility

### Standard requirement

Article 49-20, paragraph 1 (a)

The EUT shall be constructed in such a way that sensitive RF parts, (like modulation and oscillator parts) cannot be reached easily by the user. These parts shall be covered by soldered metal caps or glue or by other mechanical covers. If the covers are fixed with screws, these shall be not the common type(s) like a Phillips, but special versions like Torx, so that the user cannot open the device with common tools.

<input type="checkbox"/> Sealed with special screws.
<input type="checkbox"/> Plastic chassis is being welded using ultrasonic waves.
<input type="checkbox"/> Chassis is glued using a special adhesive.
<input type="checkbox"/> Metal covers are spot-fused.
<input type="checkbox"/> Cover is specially interlocked.
<input type="checkbox"/> RF and Modulation components are covered with shielding case and this shielding case is soldered.
<input type="checkbox"/> Shield case is welded at RF and modulation parts, and ID-ROM is welded using the BGA Method.
<input type="checkbox"/> Shield case is welded at RF and modulation parts, and ID-ROM is glued at its lead with a special adhesive.
<input type="checkbox"/> Shield case is welded at RF and modulation parts, and ID-ROM is glued with anon-transparent laminating agent.
<input checked="" type="checkbox"/> RF and Modulation parts are mounted on PCB with surface mount technology, and there is no any adjustable parts on PCB or adjustable parts are not exposed.

## 6.2 Receiver Requirements

### 6.2.1 Conducted Spurious Emissions of Rx

<b>Test Requirement:</b>	Item 19-3 of Article 2 Paragraph 1
<b>EUT Operation:</b>	
<b>Test Status:</b>	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
<b>Test Configuration:</b>	 <pre> graph LR     EUT[EUT] --&gt; SA[Spectrum Analyzer]             </pre>
<b>EUT conditions:</b>	Rx
<b>Spectrum Analyzer conditions:</b>	Step 1 All spurious are measured from 30 MHz to 26 GHz by peak mode. Step 2: Frequency: Spurious Frequency RBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz) VBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz) Sweep Time Auto detector mode Sample Indication mode Max hold
<b>Technical standard:</b>	(1) Below 1GHz : 4nW (2) 1GHz - 10GHz : 20nW (3) 10GHz or higher : 20nW
<b>Test result:</b>	Refer to Appendix: 5G WIFI of Report No. EED32N80457902