

# TEST REPORT

**Applicant:** Punkt Tronics AG  
**Address:** Via Losanna 4, Lugano, Switzerland  
**Equipment Type:** Smartphone  
**Model Name:** MC 02  
**Brand Name:** Punkt.  
**FCC ID:** Z3PMC02  
**Test Standard:** 47 CFR Part 96.47  
**Sample Arrival Date:** Dec. 21, 2023  
**Test Date:** Dec. 21, 2023 - Jan. 17, 2024  
**Date of Issue:** Jan. 25, 2024

## ISSUED BY:

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**Revision History**

| <u>Version</u> | <u>Issue Date</u>    | <u>Revisions Content</u>                               |
|----------------|----------------------|--------------------------------------------------------|
| <u>Rev. 01</u> | <u>Jan. 23, 2024</u> | <u>Initial Issue</u>                                   |
| <u>Rev. 02</u> | <u>Jan. 25, 2024</u> | <u>Update the applicant's name, brand, and FCC ID.</u> |

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# 1 GENERAL INFORMATION

## 1.1 Test Laboratory

|              |                                                                                                                              |
|--------------|------------------------------------------------------------------------------------------------------------------------------|
| Name         | Shenzhen BALUN Technology Co., Ltd.                                                                                          |
| Address      | Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China |
| Phone Number | +86 755 6685 0100                                                                                                            |

## 1.2 Test Location

|          |                                                                                                                                                                                                                         |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name     | Shenzhen BALUN Technology Co., Ltd.                                                                                                                                                                                     |
| Location | <input checked="" type="checkbox"/> Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China                                                        |
|          | <input type="checkbox"/> 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China |

## 2 PRODUCT INFORMATION

### 2.1 Applicant Information

|           |                                    |
|-----------|------------------------------------|
| Applicant | Punkt Tronics AG                   |
| Address   | Via Losanna 4, Lugano, Switzerland |

### 2.2 Manufacturer Information

|              |                                                                      |
|--------------|----------------------------------------------------------------------|
| Manufacturer | UWIN INNOVATIOIN (HONG KONG) LIMITED                                 |
| Address      | ROOM D 10/F TOWER A BILLION CENTRE 1 WANG KWONG RD<br>KOWLOON BAY KL |

### 2.3 General Description for Equipment under Test (EUT)

|                                              |                  |
|----------------------------------------------|------------------|
| EUT Name                                     | Smartphone       |
| Model Name Under Test                        | MC 02            |
| Series Model Name                            | N/A              |
| Description of Model<br>name differentiation | N/A              |
| Hardware Version                             | N/A              |
| Software Version                             | MC02.20231230.U0 |
| Dimensions (Approx.)                         | N/A              |
| Weight (Approx.)                             | N/A              |

## 2.4 Technical Information

The following is the technical information of the EUT tested frequency bands in this report.

|                 |             |                                                                                     |                     |
|-----------------|-------------|-------------------------------------------------------------------------------------|---------------------|
| Operating Bands |             | 5G Network<br>SA: NR n48                                                            |                     |
| Modulation Type |             | CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM<br>DFT-s-OFDM: QPSK / 16QAM / 64QAM / 256QAM |                     |
| SCS             |             | 30kHz                                                                               |                     |
| Device Type     |             | End User Device                                                                     |                     |
| Band            | Power Class | Tx Frequency Range                                                                  | Rx Frequency Range  |
| NR n48          | 3           | 3550 MHz ~ 3700 MHz                                                                 | 3550 MHz ~ 3700 MHz |

Note1: The EUT information provided by the applicant. For more detailed band specifications and features description, please refer to the manufacturer's specifications or user's manual.

## 3 SUMMARY OF TEST RESULTS

### 3.1 Test Standards

| No. | Identity       | Document Title                   |
|-----|----------------|----------------------------------|
| 1   | 47 CFR Part 96 | CITIZENS BROADBAND RADIO SERVICE |

### 3.2 Test Verdict

| No. | Test Description                         | FCC Part No. | Test Result | Test Verdict |
|-----|------------------------------------------|--------------|-------------|--------------|
| 1   | End user device additional requirements. | 96.47        | ANNEX A.1   | Pass         |

## 4 GENERAL TEST CONFIGURATIONS

### 4.1 Test Environments

During the measurement, the environmental conditions were within the listed ranges:

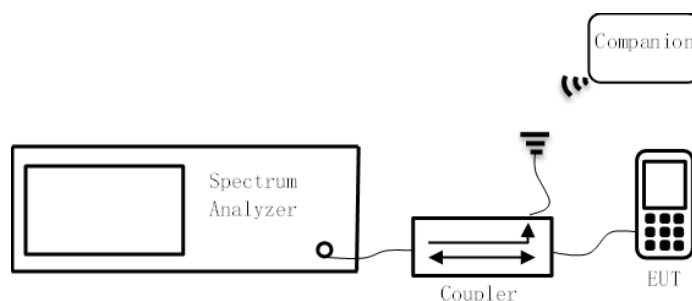
|                             |                         |                   |
|-----------------------------|-------------------------|-------------------|
| Relative Humidity           |                         | 20% to 75%        |
| Atmospheric Pressure        |                         | 98 kPa to 102 kPa |
| Test Temperature of the EUT | NT (Normal Temperature) | 15 °C to 35 °C    |

### 4.2 Test Equipment List

| Description             | Manufacturer | Model       | Serial No.       | Version | Cal. Date  | Cal. Due   |
|-------------------------|--------------|-------------|------------------|---------|------------|------------|
| <b>CBRS Test System</b> |              |             |                  |         |            |            |
| Spectrum Analyzer       | keysight     | N9020A      | MY50531628       | A.16.09 | 2023.05.12 | 2024.05.11 |
| 5G NR Base Station      | Baicells     | BSC7048A243 | AP21RBAAN0300107 | N/A     | N/A        | N/A        |

### 4.3 Test Setup

#### 4.3.1 For Conducted Test



(Diagram 1)

## 5 TEST ITEMS

### 5.1 End user device additional requirements

#### 5.1.1 Limit

FCC § 96.47

(a)End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation.

(1)An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.

#### 5.1.2 Test Setup

The section 4.3.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

#### 5.1.3 Test Procedure

Following procedure can be done by applying WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification, use the certified CBSD (FCC ID: 2AG32BSC7048A243) as companion device to show compliance with Part 96.47requirement for End User Device(EUD):

1. Setup with frequency 3605-3625MHz and power level 17dBm/MHz
2. Enable AP service from BaiCore management
3. Check EUD Tx Frequency and power
4. Disable AP service from BaiCore management
  - a. Check EUD stops transmission within 10seconds.
5. Setup with frequency 3670-3690MHz and power level 7dBm/MHz
6. Enable AP service from BaiCore management
7. Check EUD Tx Frequency and power
8. Disable AP service from BaiCore management
  - a. Check EUD stops transmission within 10seconds.

#### 5.1.4 Test Result

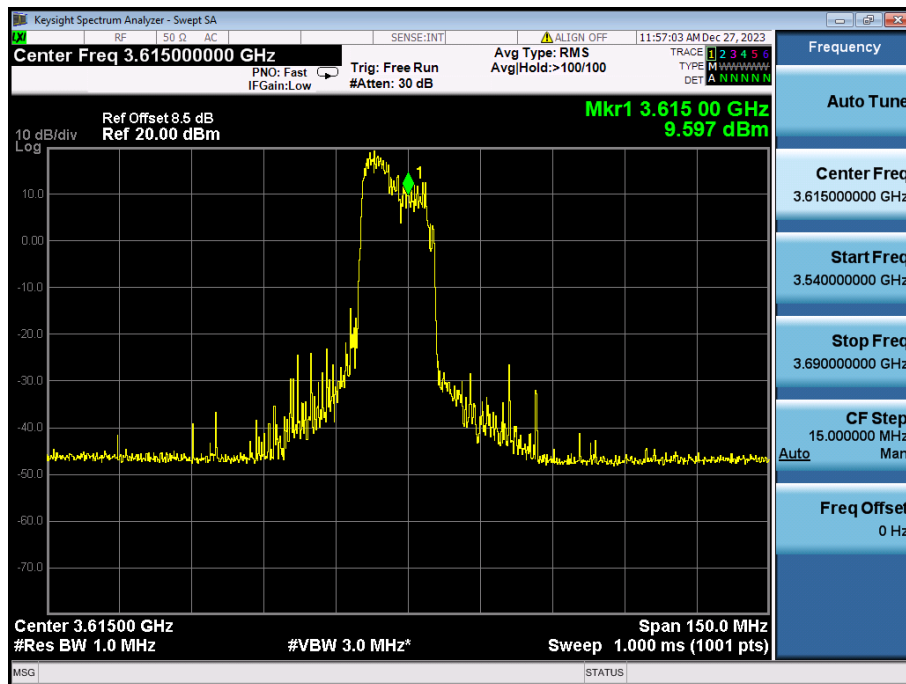
Please refer to ANNEX A.1.

## ANNEX A TEST RESULTS

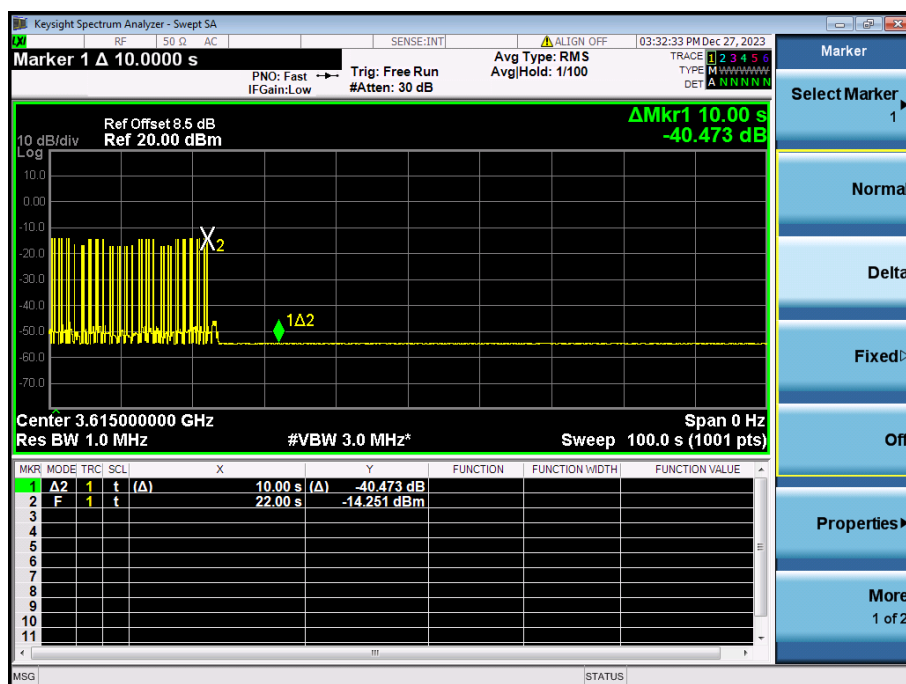
### A.1 End user device additional requirements

Test Band: CBSD transmit at frequency 3605-3625MHz and power level 17dBm/MHz

#### Frequency Operation

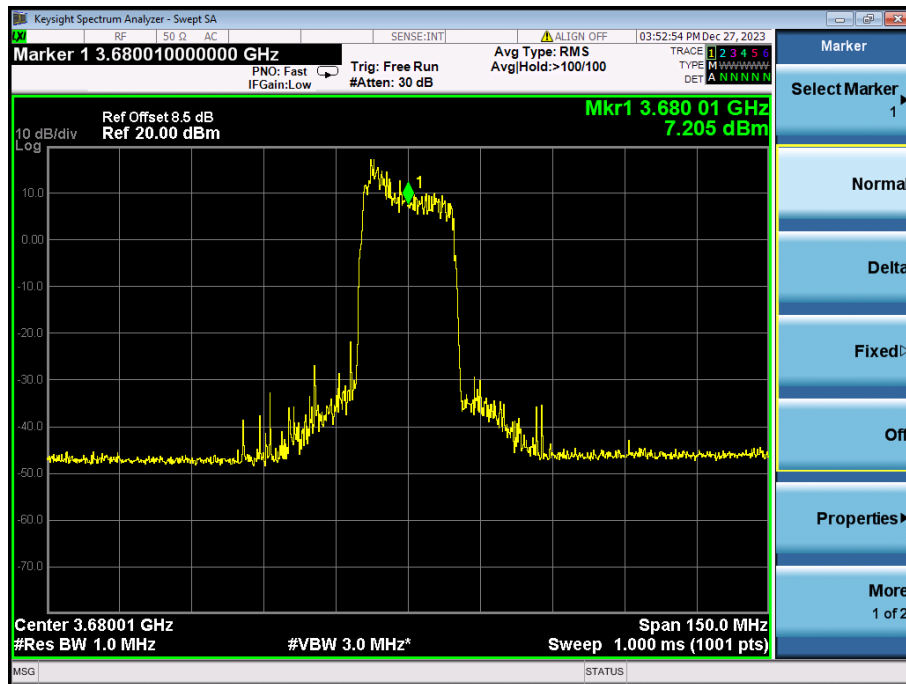


#### Discontinues Operations within 10s

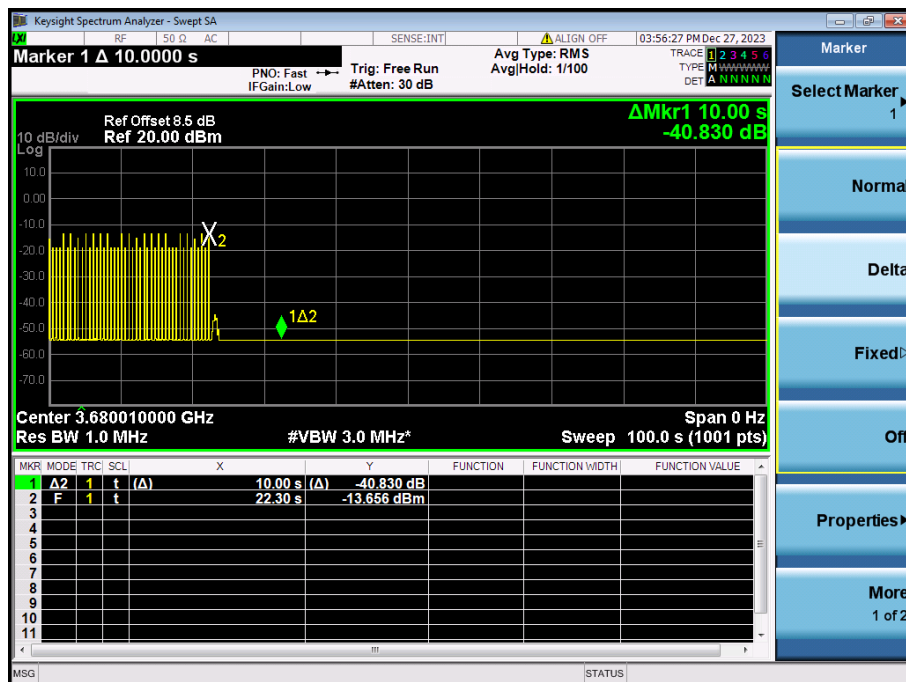


Test Band: CBSD transmit at frequency 3670-3690MHz and power level 7dBm/MHz

### Frequency Operation



### Discontinues Operations within 10s



## **ANNEX B TEST SETUP PHOTOS**

Please refer to the document “BL-SZ23C1113-AR.PDF”.

## **ANNEX C EUT EXTERNAL PHOTOS**

Please refer to the document “BL-SZ23C1113-AW.PDF”.

## **ANNEX D EUT INTERNAL PHOTOS**

Please refer the document “BL-SZ23C1113-AI.PDF”.

## Statement

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--END OF REPORT--