# RF Exposure Report

## FCC ID: L76-PORTAPRO2P0

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|---|---|---|
| **Report No.** | : | SSP24050269-2E |
| **Applicant** | : | Koss Corporation |
| **Product Name** | : | Bluetooth Headset |
| **Model Name** | : | Porta Pro Wireless 2.0 |
| **Test Standard** | : | FCC CFR 47 PART 2.1093 |
| **Date of Issue** | : | 2024-08-03 |

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This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen CCUT Quality Technology Co., Ltd.

## Test Report Basic Information

| | |
|---|---|
| **Applicant**.....: | Koss Corporation |
| Address of Applicant.....: | 4129 N. Port Washington Avenue, Milwaukee, Wisconsin 53212, United States |
| **Manufacturer**.....: | Koss Corporation |
| Address of Manufacturer.....: | 4129 N. Port Washington Avenue, Milwaukee, Wisconsin 53212, United States |
| **Product Name**.....: | Bluetooth Headset |
| **Brand Name**.....: | KOSS |
| **Main Model**.....: | Porta Pro Wireless 2.0 |
| **Series Models**.....: | - |
| **Test Standard**.....: | FCC CFR 47 PART 2.1093<br>KDB 447498 D01 v06 |
| **Date of Test** .....: | 2024-05-31 to 2024-07-16 |
| **Test Result**.....: | PASSED |

**Tested By** .....: Colin Chen (Colin Chen)

**Reviewed By**.....: Lieber Ouyang (Lieber Ouyang)

**Authorized Signatory**.....: Lahm Peng (Lahm Peng)

Shenzhen CCUT Quality Technology Co., Ltd. APPROVED

Note : This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen CCUT Quality Technology Co., Ltd.. All test data presented in this test report is only applicable to presented test sample.

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## Revision History

| Revision | Issue Date | Description | Revised By |
|---|---|---|---|
| V1.0 | 2024-08-03 | Initial Release | Lahm Peng |
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# 1. General Information

## 1.1 Product Information

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|---|---|
| Product Name: | Bluetooth Headset |
| Trade Name: | KOSS |
| Main Model: | Porta Pro Wireless 2.0 |
| Series Models: | - |
| Rated Voltage: | DC 3.7V by battery, USB 5V charging |
| Battery: | DC3.7V, 100mAh |
| Hardware Version: | PPWV2-V6 |
| Software Version: | V2 |
| Note 1: The test data is gathered from a production sample, provided by the manufacturer. | |

| **Wireless Specification** | |
|---|---|
| Wireless Standard: | Bluetooth BR/EDR |
| Operating Frequency: | 2402MHz ~ 2480MHz |
| RF Output Power: | -2.45dBm |
| Number of Channel: | 79 |
| Channel Separation: | 1MHz |
| Modulation: | GFSK, Pi/4 DQPSK, 8DPSK |
| Antenna Gain: | 1.75dBi |
| Type of Antenna: | SMD Antenna |
| Type of Device: | ☒ Portable Device ☐ Mobile Device ☐ Modular Device |

## 1.2 Test Facilities

| | |
|---|---|
| Laboratory Name: | **Shenzhen CCUT Quality Technology Co., Ltd.**<br>1F, Building 35, Changxing Technology Industrial Park, Yutang Street, Guangming District, Shenzhen, Guangdong, China |
| CNAS Laboratory No.: | L18863 |
| A2LA Certificate No.: | 6893.01 |
| FCC Registration No: | 583813 |
| ISED Registration No.: | CN0164 |
| All measurement facilities used to collect the measurement data are located at 1F, Building 35, Changxing Technology Industrial Park, Yutang Street, Guangming District, Shenzhen, Guangdong, China. | |

# 2. RF Exposure

## 2.1 Standard and Limit

3.0 for 1g SAR.

## 2.2 Test Procedure

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition(s), listed below, is (are) satisfied.

These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.

The minimum test separation distance defined in 4.1 f) is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander.

To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified, typically in the SAR measurement or SAR analysis report, by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, according to the required published RF exposure KDB procedures.

When no other RF exposure testing or reporting are required, a statement of justification and compliance must be included in the equipment approval, in lieu of the SAR report, to qualify for SAR test exclusion.

When required, the device specific conditions described in the other published RF exposure KDB procedures must be satisfied before applying these SAR test exclusion provisions.

a) For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] • [√f(GHz)] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

b) For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following (also illustrated in Appendix B):

1) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)·(f(MHz)/150)]} mW, for 100 MHz to 1500 MHz

2) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm) • 10]} mW, for > 1500 MHz and ≤ 6 GHz

c) For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also

illustrated in Appendix C):

1) For test separation distances > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by [1 + log(100/f(MHz))]

2) For test separation distances ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by ½

3) SAR measurement procedures are not established below 100 MHz.

When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any SAR test results below 100 MHz to be acceptable.

## 2.3 Test Data and Results

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

For BR+EDR

| Max Conducted Power(dBm) | Tune-up Power(dBm) | Max Tune-up Power(dBm) | Max Power(mW) | Frequency(MHz) | Min. distance(mm) | Calc. thresholds | limit |
|---|---|---|---|---|---|---|---|
| -2.45 | -2(±1) | -1 | 0.79 | 2480 | 5 | 0.2488186 | 3.0 |

So a SAR test is not required