



# **RF Exposure Evaluation Report**

**Product CORE 2 DUO** 

N/A Trade mark

Model/Type reference : C2D-BK, C2D-WH

**Serial Number** N/A

**Report Number** : EED32R81089002 2BQB2-0037172152 **FCC ID** 

Date of Issue : Jul. 30, 2025

47 CFR Part 1.1307 **Test Standards** 

47 CFR Part 1.1310 47 CFR Part 2.1091 47 CFR Part 2.1093

KDB 447498 D04 Interim General RF

Exposure Guidance v01

Test result **PASS** 

Prepared for:

Core Devices LLC 2261 Market Street STE 22843, San Francisco, CA 94114

Prepared by:

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Check No.: 1407010725



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| 3.7                             | 3.1.1 Limits 3.1.2 Test P.  | rocedure  |                    |               |   |        | <br> |
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# 2 General Information

## 2.1 Client Information

| Applicant:               | Core Devices LLC   |  |  |  |  |
|--------------------------|--|--|--|--|--|
| Address of Applicant:    | 2261 Market Street STE 22843, San Francisco, CA 94114  |  |  |  |  |
| Manufacturer:            | Core Devices LLC   |  |  |  |  |
| Address of Manufacturer: | 2261 Market Street STE 22843, San Francisco, CA 94114  |  |  |  |  |
| Factory:                 | Seeed Technology Co., Ltd.   |  |  |  |  |
| Address of Factory:      | 9F, G3 Building, TCL International E City, Zhongshanyuan Road, Nanshan District, Shenzhen, Guangdong Province, P.R.C |  |  |  |  |

# 2.2 General Description of EUT

| Product Name:   | CORE 2 DUO     |      |      |
|-----------------|----------------|------|------|
| Model No.(EUT): | C2D-BK, C2D-WH |      |      |
| Test Model No.: | C2D-WH         |      |      |
| Trade Mark:     | N/A            | (0.) | (0,) |

## 2.3 Product Specification subjective to this standard

| Frequency Range:      | 2402MHz~     | 2480MHz             | (in)  |      | (3)   |      |
|-----------------------|--------------|---------------------|-------|------|-------|------|
| Modulation Type:      | BLE: GFS     | ζ                   | (6,7) |      | (6.5) |      |
| Test Power Grade:     | 3            |                     |       |      |       |      |
| Test Software of EUT: | nRF Conne    | ect                 |       |      |       |      |
| Antenna Type:         | Pebble Ant   | enna                |       | - 12 |       | -15  |
| Antenna Gain:         | 0.41dBi      |                     |       |      |       |      |
| Power Supply:         | Battery:     | DC 3.7V             |       | (0)  |       | (6)  |
| Sample Received Date: | Jul. 02, 202 | 25                  |       |      |       | -1 - |
| Sample tested Date:   | Jul. 02, 202 | 25 to Jul. 08, 2025 |       |      |       |      |

Remark:

Model No.: C2D-BK, C2D-WH.

Only the model C2D-WH was tested. The difference between C2D-BK and C2D-WH is that the casing of

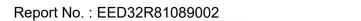
C2D-BK is black, while the casing of C2D-WH is white.

|     |        | Difference description |  |  |
|-----|--------|------------------------|--|--|
| 114 | C2D-BK | The shell is black.    |  |  |
| 1 4 | C2D-WH | The shell is white.    |  |  |









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All tests were performed at:

Centre Testing International Group Co., Ltd

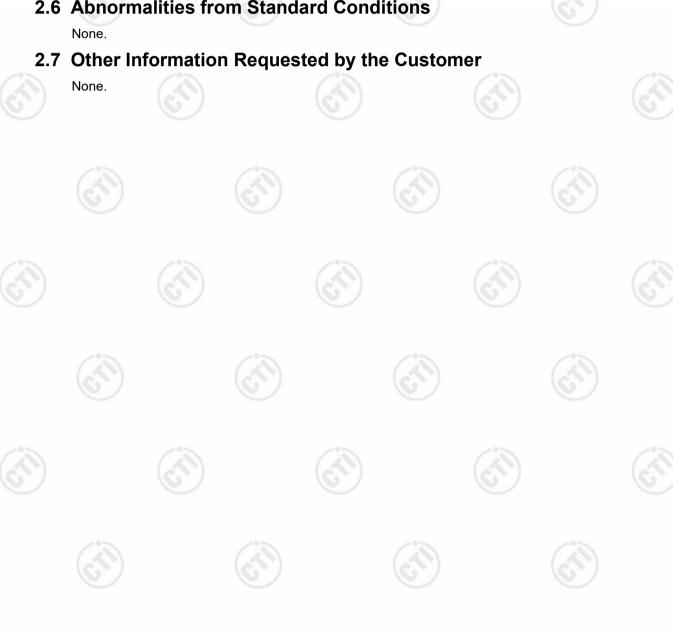
Hongwei Industrial Park, Zone 70, Bao'an District, Shenzhen, Guangdong, China

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

No tests were sub-contracted. FCC Designation No.: CN1164

## 2.5 Deviation from Standards

## 2.6 Abnormalities from Standard Conditions







## 3 SAR Evaluation

## 3.1 RF Exposure Compliance Requirement

#### **3.1.1 Limits**

The SAR-based exemption formula of  $\S 1.1307(b)(3)(i)(B)$ , repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by Formula

$$P_{\text{th}} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \le 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \le 40 \text{ cm} \end{cases}$$

where

$$x = -\log_{10}\left(\frac{60}{ERP_{20\,\mathrm{cm}}\sqrt{f}}\right)$$

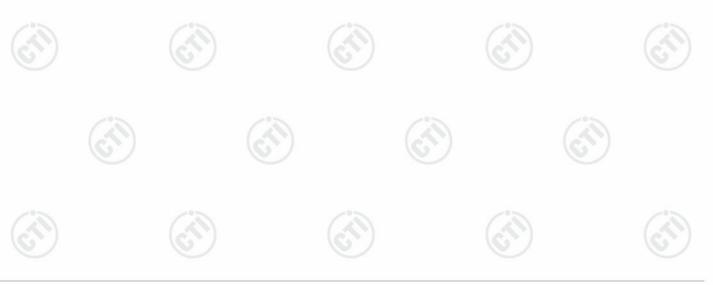
and f is in GHz, d is the separation distance (cm), and ERP20cm is per Formula (B.1).

$$P_{\text{th}} (\text{mW}) = ERP_{20 \text{ cm}} (\text{mW}) = \begin{cases} 2040f & 0.3 \text{ GHz} \le f < 1.5 \text{ GHz} \\ \\ 3060 & 1.5 \text{ GHz} \le f \le 6 \text{ GHz} \end{cases}$$
(B. 1)

The 1 mW Blanket Exemption of § 1.1307(b)(3)(i)(A) applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power of no more than 1 mW, regardless of separation distance.

#### 3.1.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.





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#### 3.1.3 EUT RF Exposure Evaluation

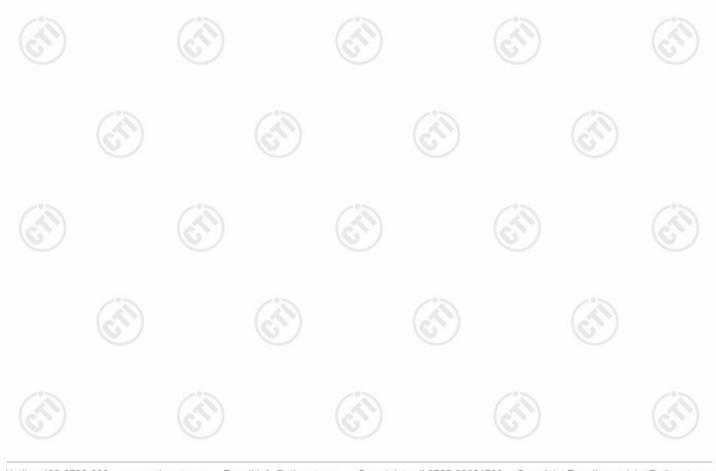
#### For Stand alone:

#### BLE:

| Frequency<br>(MHz) | Estimati<br>on<br>distance<br>(cm) | Max. Conducted Output power (dBm) | Antenna<br>Gain<br>(dBi) | EIRP<br>(dBm) | ERP<br>(dBm) | ERP<br>(mW) | Limit<br>(mW) | MPE<br>ratio | Result |
|--------------------|------------------------------------|-----------------------------------|--------------------------|---------------|--------------|-------------|---------------|--------------|--------|
| 2480               | 0.5                                | 2.58                              | 0.41                     | 2.99          | 0.84         | 1.2134      | 2.7172        | 0.4353       | Pass   |

#### Note:

- ①EIRP=conducted power+antenna gain;
- ②ERP=EIRP-2.15;
- ③EIRP(dBm) = Field strength of the fundamental signal(dBuV/m@3m) 95.23;
- $4ERP(mW) = 10^{(ERP (dBm)/10)};$
- ⑤The estimation distance is 0.5cm;
- ©The test data please refer to the report of EED32R81089001 and only the worst case data was recorded in the report.











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#### Statement

- 1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
- 2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
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