RF Exposure Evaluation Report

Product	:	CORE 2 DUO
Trade mark	:	N/A
Model/Type reference	:	C2D-BK, C2D-WH
Serial Number	:	N/A
Report Number	:	EED32R81089002
FCC ID	:	2BQB2-0037172152
Date of Issue	:	Jul. 30, 2025
Test Standards	:	47 CFR Part 1.1307 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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Approved by: Aaron Ma

Date: Jul. 30, 2025

Check No.: 1407010725

1 Contents

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

2.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz	
Modulation Type:	BLE: GFSK	
Test Power Grade:	3	
Test Software of EUT:	nRF Connect	
Antenna Type:	Pebble Antenna	
Antenna Gain:	0.41dBi	
Power Supply:	Battery:	DC 3.7V
Sample Received Date:	Jul. 02, 2025	
Sample tested Date:	Jul. 02, 2025 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
C2D-BK	The shell is black.
C2D-WH	The shell is white.

2.4 Test Location

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

None.

2.6 Abnormalities from Standard Conditions

None.

2.7 Other Information Requested by the Customer

None.

3 SAR Evaluation

3.1 RF Exposure Compliance Requirement

3.1.1 Limits

The SAR-based exemption formula of § 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

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

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

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

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.

3.1.3 EUT RF Exposure Evaluation

For Stand alone:

BLE:

Frequency (MHz)	Estimation distance (cm)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	ERP (dBm)	ERP (mW)	Limit (mW)	MPE 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;

⑥The test data please refer to the report of EED32R81089001 and only the worst case data was recorded in the report.

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;

3. The result(s) shown in this report refer(s) only to the sample(s) tested;

4. Unless otherwise stated,the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule stated in ILAC-G8:09/2019/CNAS-GL015:2022;

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*** End of Report ***