

RF Exposure Evaluation Report

Product : Remote Control
Trade mark : PHILIPS
Model/Type reference : RF510B
Serial Number : N/A
Report Number : EED32O81344702
FCC ID : 2A9T3-RF510B
Date of Issue : Mar. 28, 2023
47 CFR Part 1.1307
47 CFR Part 2.1093
Test Standards : KDB447498D01 General RF Exposure
Guidance v06
Test result : PASS

Prepared for:

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Mar. 28, 2023



Check No.: 4504290822

2 Version

Version No.	Date	Description
00	Mar. 28, 2023	Original

3 Contents

	Page
1 COVER PAGE	1
2 VERSION	2
3 CONTENTS	3
4 GENERAL INFORMATION	4
4.1 CLIENT INFORMATION	4
4.2 GENERAL DESCRIPTION OF EUT	4
4.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD	4
4.4 TEST LOCATION	5
4.5 DEVIATION FROM STANDARDS	5
4.6 ABNORMALITIES FROM STANDARD CONDITIONS	5
4.7 OTHER INFORMATION REQUESTED BY THE CUSTOMER	5
5 SAR EVALUATION	6
5.1 RF EXPOSURE COMPLIANCE REQUIREMENT	6
5.1.1 <i>Standard Requirement</i>	6
5.1.2 <i>Limits</i>	6
5.1.3 <i>EUT RF Exposure Evaluation</i>	7
5.1.4 <i>EUT RF Exposure</i>	7

4 General Information

4.1 Client Information

Applicant:	Shenzhen C&D Electronics Co., Ltd
Address of Applicant:	9 floor, 9th A building, Baoneng Science and Technology Park, Qing Xiang Road No. 1, Longhua District, Shenzhen, Guangdong, China
Manufacturer:	Shenzhen C&D Electronics Co., Ltd
Address of Manufacturer:	9 floor, 9th A building, Baoneng Science and Technology Park, Qing Xiang Road No. 1, Longhua District, Shenzhen, Guangdong, China
Factory:	Shenzhen C&D Electronics Co., Ltd
Address of Factory:	9 floor, 9th A building, Baoneng Science and Technology Park, Qing Xiang Road No. 1, Longhua District, Shenzhen, Guangdong, China

4.2 General Description of EUT

Product Name:	Remote Control
Model No.(EUT):	RF510B
Trade Mark:	PHILIPS

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK
Test Power Grade:	Default
Test Software of EUT:	N/A
Antenna Type:	PCB Antenna
Antenna Gain:	2.84dBi
Power Supply:	DC 3.0V
Sample Received Date:	Dec. 28, 2022
Sample tested Date:	Dec. 28, 2022 to Jan. 13, 2023
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.	

4.4 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.

FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

Standalone SAR test exclusion considerations

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 Exclusion Threshold condition, listed below, is satisfied.

5.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot$

$[\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

The result is rounded to one decimal place for comparison

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 is applied to determine SAR test exclusion

5.1.3 EUT RF Exposure Evaluation

5.1.4 EUT RF Exposure

1) For Bluetooth LE

Measurement Data:

BLE:

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	2.38	2±1	3	1.995
Middle(2440MHz)	1.8	1±1	2	1.585
Highest(2480MHz)	0.94	0±1	1	1.259

Worst case:						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune- up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	2.38	2±1	3	1.995	0.628	3.0
Middle (2440MHz)	1.8	1±1	2	1.585	0.499	
Highest (2480MHz)	0.94	0±1	1	1.259	0.397	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report No.: EED32O81344701.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***