

Project No: TM-2402000232P
Report No.: TMWK2402000517KS

FCC ID: W5O-BT2400PRO

Page: 1 / 10
Rev.: 00

SAR TEST REPORT

FCC 47 CFR § 2.1093

for

BATTERY TESTER

Model Name.: BT2400PRO

Prepared for:

DHC Specialty Corp.
7Fl,No.83,Chou Tzu St.Nei Hu,Taipei 114,Taiwan

Prepared by

Compliance Certification Services Inc.
Wugu Lab.
No.11, Wugong 6th Rd., Wugu Dist.,
New Taipei City, Taiwan.
Issue Date: July 11, 2024

Note: This document may be altered or revised by Compliance Certification Services Inc. personnel only, and shall be noted in the revision section of the document. The client should not use it to claim product endorsement by TAF, NIST or any government agencies. The test results in the report only apply to the tested sample.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: TMWK2402000517KS

Page: 2 / 10
Rev.: 00

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	July 11, 2024	Initial Issue	ALL	Peggy Tsai

Table of Contents

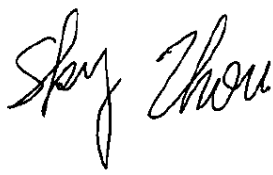
1	ATTESTATION OF TEST RESULTS	4
2	TEST METHODOLOGY.....	5
3	DEVICE UNDER TEST (DUT) INFORMATION	6
3.1	DUT DESCRIPTION	6
3.2	WIRELESS TECHNOLOGIES.....	6
4	CONDUCTED OUTPUT POWER MEASUREMENTS.....	7
4.1	WI-FI 2.4GHZ (DTS BAND)	7
5	ANTENNA LOCATION	8
6	RF EXPOSURE CONDITIONS (TEST CONFIGURATIONS)	9
6.1	STANDALONE SAR TEST EXCLUSION CONSIDERATIONS	9
7	FACILITIES.....	10



Report No.: TMWK2402000517KS

Page: 4 / 10
Rev.: 00

1 Attestation of Test Results

Applicant Name	DHC Specialty Corp.
Model Name	BATTERY TESTER
Applicable Standards	FCC 47 CFR § 2.1093 KDB 447498 D04 Interim General RF Exposure Guidance v01
Receive EUT Date:	February 27, 2024
Date Tested	March 19, 2024
Test Results	Pass
Compliance Certification Services Inc. , tested the above equipment in accordance with the requirements set forth in the above standards. Determination of compliance is based on the results of the compliance measurement,not taking into account measurement instrumentation uncertainty.All indications of Pass/Fail in this report are opinions expressed by Compliance Certification Services Inc, based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.	
Approved & Released By: 	Tested by: 
Sky Zhou Asst. Section Manager Compliance Certification Services Inc.	Jack Yang Engineer Compliance Certification Services Inc.



Page: 5 / 10
Rev.: 00

Report No.: TMWK2402000517KS

2 Test Methodology

All calculations were made in accordance with FCC KDB 447498 D04 Interim General RF Exposure Guidance v01

Report No.: TMWK2402000517KS

3 Device Under Test (DUT) Information

3.1 DUT Description

Applicant Name	DHC Specialty Corp.
Applicant Address	7F, No. 83, Chou Tzu St. Nei Hu, Taipei 114, Taiwan
Manufacturer Name	DHC Specialty Corp.
Manufacturer Address	7F., NO. 308, Sec. 1, Datong Rd, Xizhi Dist., NEW TAIPEI CITY 22146, TAIWAN
Product	BATTERY TESTER
Trade Name	DHC
Model No.	BT2400PRO
Model Discrepancy	N/A
Device Dimension	Overall (Length x Width): 280 mm x 132 mm Overall Diagonal: 309 mm
Back Cover	☒ Normal Battery Cover
Battery Options	Alkaline battery, Rating 9Vdc, Six batteries are connected in parallel.
Sample Stage	PVT

3.2 Wireless Technologies

Wireless technologies	Frequency bands	Peak Antenna Gain (dBi)	Operating mode
Wi-Fi	2.4 GHz	2	802.11b 802.11g 802.11n (HT20)
Antenna Specification	Type	MIFA Antenna	

Notes:

- The sample selected for test was prototype that representative to production product and was provided by manufacturer
- Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received

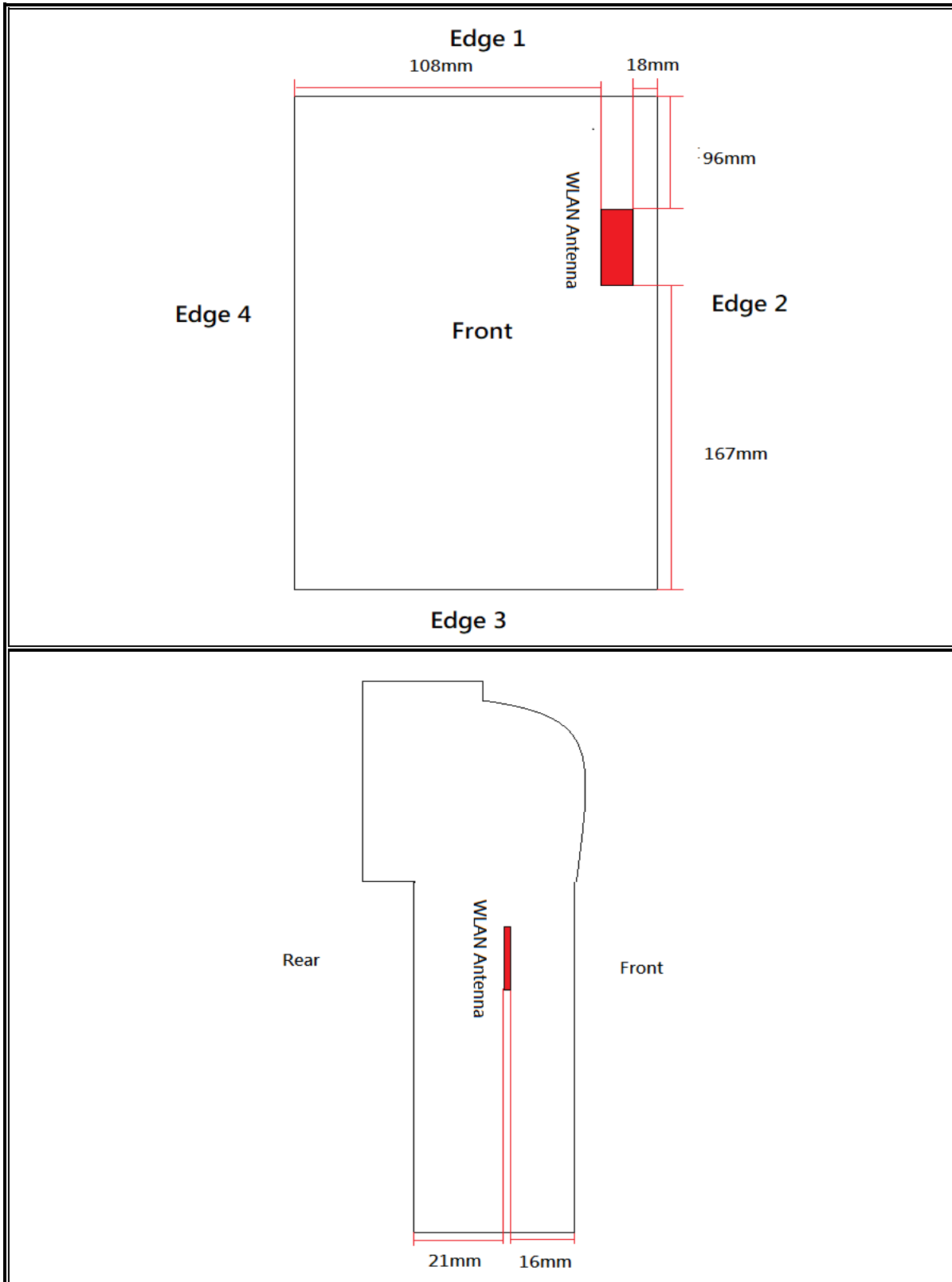
4 Conducted Output Power Measurements

4.1 Wi-Fi 2.4GHz (DTS Band)

Measured Results

Band	Mode	Data Rate	Ch #	Freq. (MHz)	Meas. Avg Pw r (dBm)	Tune-up Limit (dBm)	SAR Test (Yes/No)
2.4GHz (DTS)	802.11b	1 Mbps	1	2412	11.05	12.5	No
			6	2437	11.02		
			11	2462	11.90		
	802.11g	6 Mbps	1	2412	10.46	12.0	No
			6	2437	10.42		
			11	2462	11.26		
	802.11n (HT20)	MCS0	1	2412	10.53	12.0	No
			6	2437	10.50		
			11	2462	11.32		

5 Antenna Location



Report No.: TMWK2402000517KS

6 RF Exposure Conditions (Test Configurations)

Refer to Section 5 for the specific details of the antenna-to-antenna and antenna-to-edge(s) distances.

6.1 Standalone SAR Test Exclusion Considerations

Since the Dedicated Host Approach is applied, the SAR-based exemption in Appendix B of KDB 447498 D04 is applied together with KDB 616217 § 4.3 to determine the minimum test separation distance:

- When the separation distance from the antenna to an adjacent edge is ≤ 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.
- When the separation distance from the antenna to an adjacent edge is > 5 mm, the actual antenna-to-edge separation distance is applied to determine SAR test exclusion.
- The available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula.

P_{th} is given by:

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

- The separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz .

P_{th} is given by:

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

where

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

and f is in GHz, d is the separation distances (cm).

SAR Test Exclusion Calculations for $1.5 \text{ GHz} \leq f \leq 6 \text{ GHz}$

The SAR test exemption is 2.5 times the SAR-based exemption threshold.

The device was assessed the 10g SAR limits.

Tx Interface	Frequency (GHz)	Output Power		Antenna Gain (dBi)	ERP (dBm)	ERP Threshold (mW)	Separation Distances (cm)					P_{th} (mW)					Exemption result				
		dBm	mW				Rear	Edge1	Edge2	Edge3	Edge4	Rear	Edge1	Edge2	Edge3	Edge4	Rear	Edge1	Edge2	Edge3	Edge4
WiFi 2.4GHz	2.462	12.50	18	2	12.35	17.18	2.1	9.6	1.8	16.7	10.8	105	1461	28	5472	2368	-EXEMPT-	-EXEMPT-	-EXEMPT-	-EXEMPT-	-EXEMPT-

Conclusion:

The Max. output power and $ERP \leq P_{th}$ (mW) ; therefore, this qualifies for SAR test exclusion.



Page: 10 / 10
Rev.: 00

Report No.: TMWK2402000517KS

7 Facilities

All measurement facilities used to collect the measurement data are located at

☒ No.11, Wugong 6th Rd., Wugu Dist., New Taipei City 24891, Taiwan.

END OF REPORT