RF Exposure Report

Project Number: 5045970 **Offer Number:** SUW-202212003797

Report Number: 5045970EMC04 **Revision Level:** 2

Client: Philips Medical Systems

Equipment Under Test: Telemetry Monitor

Product Name: Philips Telemetry Monitor 5500

Model Number: 867232

FCC ID: PQC-5500SH1A4

Applicable Standards: 47 CFR §§ 2.1093 (Portable)

FCC KDB 447498 D01 General RF Exposure Guidance v06

Report issued on: 18 July 2025

Result: Exempt from SAR evaluation

FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 3212.01
This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the Federal Government.

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Reviewed by: Stephen Whalen, EMC Lab Manager

TABLE OF CONTENTS

1 General Information

1.1 *Client Information*

Company Name:	Philips Medical Systems North America Co.
Address:	222 Jacobs Street
City, State, Zip, Country:	Cambridge, MA 02141, USA

1.2 *Test Laboratory*

Name:	SGS North America, Inc.
Address:	620 Old Peachtree Road NW, Suite 100
City, State, Zip, Country:	Suwanee, GA 30024, USA
Accrediting Body:	A2LA
Type of lab:	Testing Laboratory
Certificate Number:	3212.01

1.3 *General Information of EUT*

Equipment Under Test:	Telemetry Monitor
Product Name:	Philips Telemetry Monitor 5500
Model Number:	867232
Serial Number:	USPP000164
FCC ID:	PQC-5500SH1A4
Frequency Ranges:	1395 – 1400 MHz (WMTS) 1427 – 1432 MHz (WMTS) 2402 – 2480 MHz (BLE)
Data Modes:	Smart Hopping – GFSK/BPSK/QPSK/8PSK (WMTS) Bluetooth Low Energy – GFSK (BLE)
Antennas:	WMTS: PCB Planar Antenna (2.0 dBi peak gain)* BLE: Inverted F Chip Antenna (1.7 dBi peak gain)*
Maximum Conducted Power:	WMTS: 18.5 dBm (with tune-up tolerance) at 3.1% duty cycle* BLE: 2.86 dBm at 100% assumed worst case duty cycle
Rated Voltage:	$4.5V_{DC}$
Test Voltage:	$4.5V_{DC}$ (from three D cell batteries or via USB from laptop)
Sample Received Date:	18 May 2023
Dates of testing:	06-26 June 2023

*Data was not measured by SGS laboratory and therefore SGS is not responsible for accuracy. Data obtained via customer, specification sheet, previous filing or other.

1.4 *Separation Distance*

According to information provided by the manufacturer, the minimum separation distance between the radiating structure of the EUT and the patient's body is 5mm.

2 SAR Exclusion Calculations

The highest output power (including tune-up tolerance) in conjunction with the maximum possible operating duty cycle and the transmit frequency has been used to demonstrate compliance. The WMTS tune-up tolerance and maximum duty cycle were provided in documents from the client. The maximum tune-up tolerance for the high power WMTS channels is 15 dBm ±3.5 dB (including over temperature).

The EUT is considered a body application.

WMTS – Channel 15

447498 D01 General RF Exposure Guidance v06
SAR test exclusion calculations
Section 4.3: General SAR test exclusion guidance / Section 4.3.1: Standalone SAR test exclusion considerations

	Input	Select Units	
Max Power:	18.5	dBm	
Duty Cycle:	3.1%		<== *Source based time average duty cycle*
Min separation distance:	5	mm	
Frequency, f:	1398	MHz	

Value reference Number	Values used for Calculation		Reference number definition
v1	2.000	mW	*[max. power of channel, including tune-up tolerance, mW] 'Rounded to nearest mW*
v2	5	mm	*[min. test separation distance, mm] 'Rounded to nearest mm*
v3	1.182		*[√f(GHz)]*

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,

Exclusion Calculation(1g):	0.4729	number	<== *[v2 / v3] must be less than 3*
Exclusion Calculation(10g):	0.4729	number	<== *[v2 / v3] must be less than 7.5*

Conclusions (Body):	The EUT max power is BELOW the threshold. SAR Testing is NOT required for Body applications
Conclusions (Extremity):	The EUT max power is BELOW the threshold. SAR Testing is NOT required for Extremity applications

WMTS – Channel 17

447498 D01 General RF Exposure Guidance v06
SAR test exclusion calculations
Section 4.3: General SAR test exclusion guidance / Section 4.3.1: Standalone SAR test exclusion considerations

	Input	Select Units	
Max Power:	18.5	dBm	
Duty Cycle:	3.1%		<== *Source based time average duty cycle*
Min separation distance:	5	mm	
Frequency, f:	1430	MHz	

Value reference Number	Values used for Calculation		Reference number definition
v1	2.000	mW	*[max. power of channel, including tune-up tolerance, mW] 'Rounded to nearest mW*
v2	5	mm	*[min. test separation distance, mm] 'Rounded to nearest mm*
v3	1.196		*[√f(GHz)]*

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,

Exclusion Calculation(1g):	0.4783	number	<== *[v2 / v3] must be less than 3*
Exclusion Calculation(10g):	0.4783	number	<== *[v2 / v3] must be less than 7.5*

Conclusions (Body):	The EUT max power is BELOW the threshold. SAR Testing is NOT required for Body applications
Conclusions (Extremity):	The EUT max power is BELOW the threshold. SAR Testing is NOT required for Extremity applications

BLE – Channel 0

447498 D01 General RF Exposure Guidance v06

SAR test exclusion calculations

Section 4.3: General SAR test exclusion guidance / Section 4.3.1: Standalone SAR test exclusion considerations

	Input	Select Units	
Max Power:	2.86	dBm	
Duty Cycle:	100.0%		*<== Source based time average duty cycle*
Min separation distance:	5	mm	
Frequency, f:	2402	MHz	

Value reference Number	Values used for Calculation		Reference number definition
v1	2.000	mW	*[max. power of channel, including tune-up tolerance, mW] 'Rounded to nearest mW*
v2	5	mm	*[min. test separation distance, mm] 'Rounded to nearest mm*
v3	1.550		*[√f(GHz)]*

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,

Exclusion Calculation(1g):	0.6199	number	<== *[v2 / v3] must be less than 3*
Exclusion Calculation(10g):	0.6199	number	<== *[v2 / v3] must be less than 7.5*

Conclusions (Body):	The EUT max power is BELOW the threshold. SAR Testing is NOT required for Body applications
Conclusions (Extremity):	The EUT max power is BELOW the threshold. SAR Testing is NOT required for Extremity applications

BLE – Channel 39

447498 D01 General RF Exposure Guidance v06

SAR test exclusion calculations

Section 4.3: General SAR test exclusion guidance / Section 4.3.1: Standalone SAR test exclusion considerations

	Input	Select Units	
Max Power:	2.61	dBm	
Duty Cycle:	100.0%		*<== Source based time average duty cycle*
Min separation distance:	5	mm	
Frequency, f:	2480	MHz	

Value reference Number	Values used for Calculation		Reference number definition
v1	2.000	mW	*[max. power of channel, including tune-up tolerance, mW] 'Rounded to nearest mW*
v2	5	mm	*[min. test separation distance, mm] 'Rounded to nearest mm*
v3	1.575		*[√f(GHz)]*

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,

Exclusion Calculation(1g):	0.6299	number	<== *[v2 / v3] must be less than 3*
Exclusion Calculation(10g):	0.6299	number	<== *[v2 / v3] must be less than 7.5*

Conclusions (Body):	The EUT max power is BELOW the threshold. SAR Testing is NOT required for Body applications
Conclusions (Extremity):	The EUT max power is BELOW the threshold. SAR Testing is NOT required for Extremity applications

3 Revision History

Revision Level	Description of changes	Revision Date
0	Initial Release	02 November 2023
1	Added WMTS tune-up tolerance in section 2	17 July 2025
2	Corrected WMTS tune-up tolerance power values	18 July 2025