



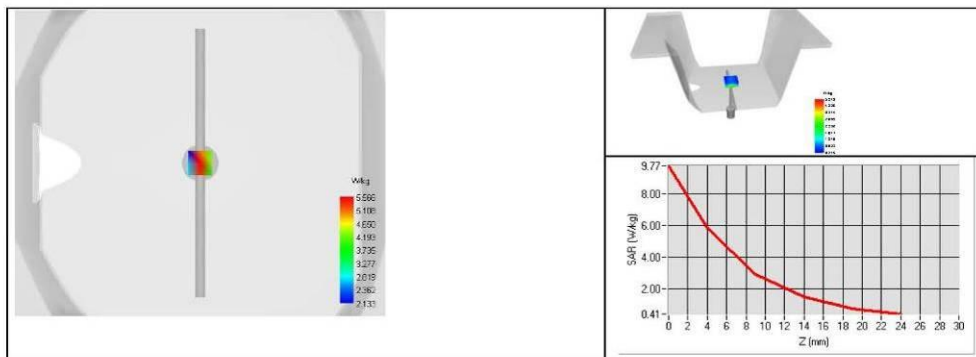
SAR REFERENCE DIPOLE CALIBRATION REPORT

Ref: ACR.335.14.23.BES.A

7.4 SAR MEASUREMENT RESULT WITH BODY LIQUID

Software	OPENSAR V5
Phantom	SN 13/09 SAM68
Probe	SN 41/18 EPG0333
Liquid	Body Liquid Values: ϵ_{ps}' : 53.4 sigma : 1.90
Distance between dipole center and liquid	15.0 mm
Area scan resolution	$dx=8mm/dy=8mm$
Zoon Scan Resolution	$dx=8mm/dy=8mm/dz=5mm$
Frequency	2450 MHz
Input power	20 dBm
Liquid Temperature	21 +/- 1 °C
Lab Temperature	21 +/- 1 °C
Lab Humidity	30-70 %

Frequency MHz	1 g SAR (W/kg/W)	10 g SAR (W/kg/W)
	measured	measured
2450	53.64 (5.36)	24.43(2.44)





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8 LIST OF EQUIPMENT

Equipment Summary Sheet				
Equipment Description	Manufacturer / Model	Identification No.	Current Calibration Date	Next Calibration Date
SAM Phantom	MVG	SN-13/09-SAM68	Validated. No cal required.	Validated. No cal required.
COMOSAR Test Bench	Version 3	NA	Validated. No cal required.	Validated. No cal required.
Network Analyzer	Rhode & Schwarz ZVM	100203	08/2021	08/2024
Network Analyzer	Agilent 8753ES	MY40003210	10/2022	10/2025
Network Analyzer - Calibration kit	Rhode & Schwarz ZV-Z235	101223	05/2022	05/2025
Network Analyzer - Calibration kit	HP 85033D	3423A08186	06/2021	06/2027
Calipers	Mitutoyo	SN 0009732	10/2022	10/2025
Reference Probe	MVG	SN 41/18 EPG0333	10/2022	10/2023
Multimeter	Keithley 2000	1160271	02/2023	02/2026
Signal Generator	Rhode & Schwarz SMB	106589	04/2022	04/2025
Amplifier	MVG	MODU-023-C-0002	Characterized prior to test. No cal required.	Characterized prior to test. No cal required.
Power Meter	NI-USB 5680	170100013	06/2021	06/2024
Power Meter	Rhode & Schwarz NRVD	832839-056	11/2022	11/2025
Directional Coupler	Krytar 158020	131467	Characterized prior to test. No cal required.	Characterized prior to test. No cal required.
Temperature/Humidity Sensor	Testo 184 H1	44225320	06/2021	06/2024

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Template_ACR.DDD.N.YY.MVGB.ISSUE_SAR Reference Dipole vJ

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Appendix A. Extended Calibration SAR Dipole

Referring to KDB865664 D01, if dipoles are verified in return loss ($< -20\text{dBm}$, within 20% of prior calibration), and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

Justification of Extended Calibration SAR Dipole SID2450– serial no. SN 09/15 DIP 2G450-363

Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2023-08-08	-24.82	/	44.3	/	0.2	/
2024-08-06	-24.64	6.67	45.7	1.5	0.4	0.2
2025-08-05	-24.48	8.64	56.1	1.7	0.5	0.3

Body						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2023-08-08	-31.92	/	47.5	/	0.4	/
2024-08-06	-31.68	7.51	47.2	0.4	0.5	0.1
2025-08-05	-31.45	9.67	46.7	1.2	0.8	0.4

The Return-Loss is $< -20\text{dB}$, and within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the value result should support extended.



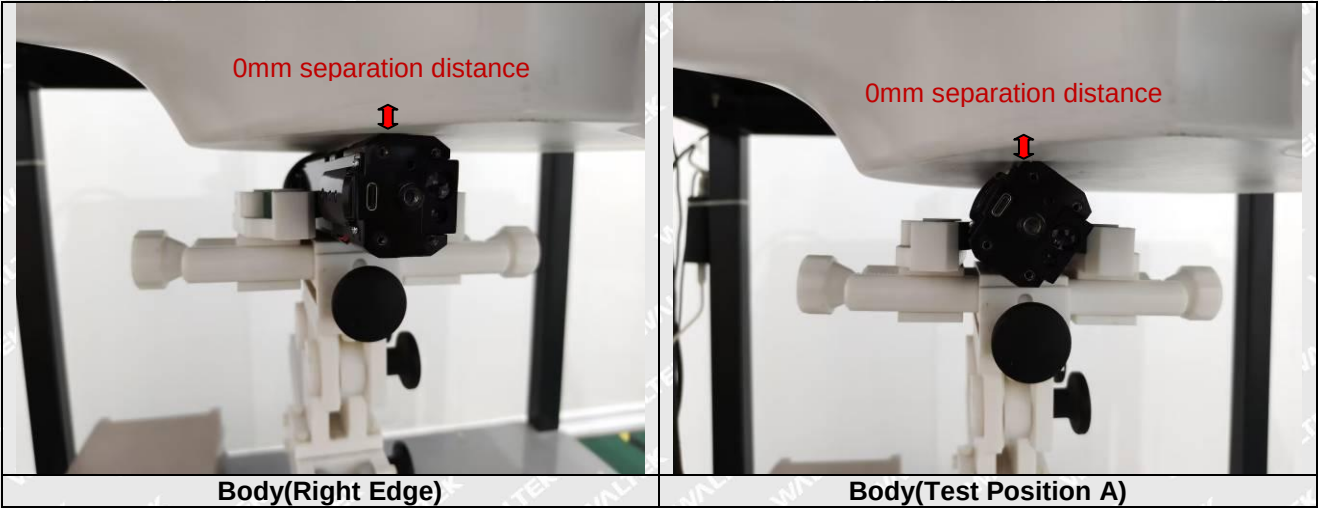
17 SAR System Photos



Liquid depth $\geq 15\text{cm}$



18 Setup Photos



WALTEK



19 EUT Photos



Front side



Back side

=====End of Report=====