



SAR REFERENCE DIPOLE CALIBRATION REPORT

Ref: ACR.335.15.23.BES.A

7.3 BODY LIQUID MEASUREMENT

Frequency MHz	Relative permittivity (ϵ_r')		Conductivity (σ) S/m	
	required	measured	required	measured
150	61.9 ±10 %		0.80 ±10 %	
300	58.2 ±10 %		0.92 ±10 %	
450	56.7 ±10 %		0.94 ±10 %	
750	55.5 ±10 %		0.96 ±10 %	
835	55.2 ±10 %		0.97 ±10 %	
900	55.0 ±10 %		1.05 ±10 %	
915	55.0 ±10 %		1.06 ±10 %	
1450	54.0 ±10 %		1.30 ±10 %	
1610	53.8 ±10 %		1.40 ±10 %	
1800	53.3 ±10 %		1.52 ±10 %	
1900	53.3 ±10 %		1.52 ±10 %	
2000	53.3 ±10 %		1.52 ±10 %	
2100	53.2 ±10 %		1.62 ±10 %	
2300	52.9 ±10 %		1.81 ±10 %	
2450	52.7 ±10 %		1.95 ±10 %	
2600	52.5 ±10 %	52.6	2.16 ±10 %	2.22
3000	52.0 ±10 %		2.73 ±10 %	
3300	51.6 ±10 %		3.08 ±10 %	
3500	51.3 ±10 %		3.31 ±10 %	
3700	51.0 ±10 %		3.55 ±10 %	
3900	50.8 ±10 %		3.78 ±10 %	
4200	50.4 ±10 %		4.13 ±10 %	
4600	49.8 ±10 %		4.60 ±10 %	
4900	49.4 ±10 %		4.95 ±10 %	
5200	49.0 ±10 %		5.30 ±10 %	
5300	48.9 ±10 %		5.42 ±10 %	
5400	48.7 ±10 %		5.53 ±10 %	
5500	48.6 ±10 %		5.65 ±10 %	
5600	48.5 ±10 %		5.77 ±10 %	
5800	48.2 ±10 %		6.00 ±10 %	

Page: 11/13

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

This document shall not be reproduced, except in full or in part, without the written approval of MVG. The information contained herein is to be used only for the purpose for which it is submitted and is not to be released in whole or part without written approval of MVG.



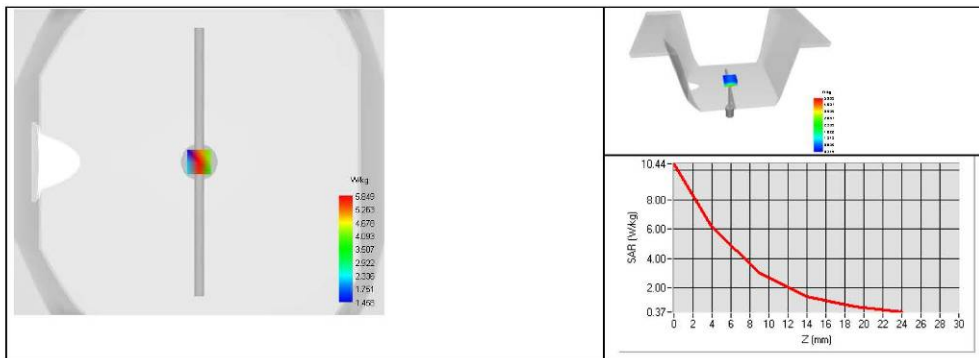
SAR REFERENCE DIPOLE CALIBRATION REPORT

Ref: ACR.335.15.23.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}' : 52.6 σ : 2.22
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	2600 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	55.23 (5.52)	24.65(2.47)





SAR REFERENCE DIPOLE CALIBRATION REPORT

Ref: ACR.335.15.23.BES.A

8 LIST OF EQUIPMENT

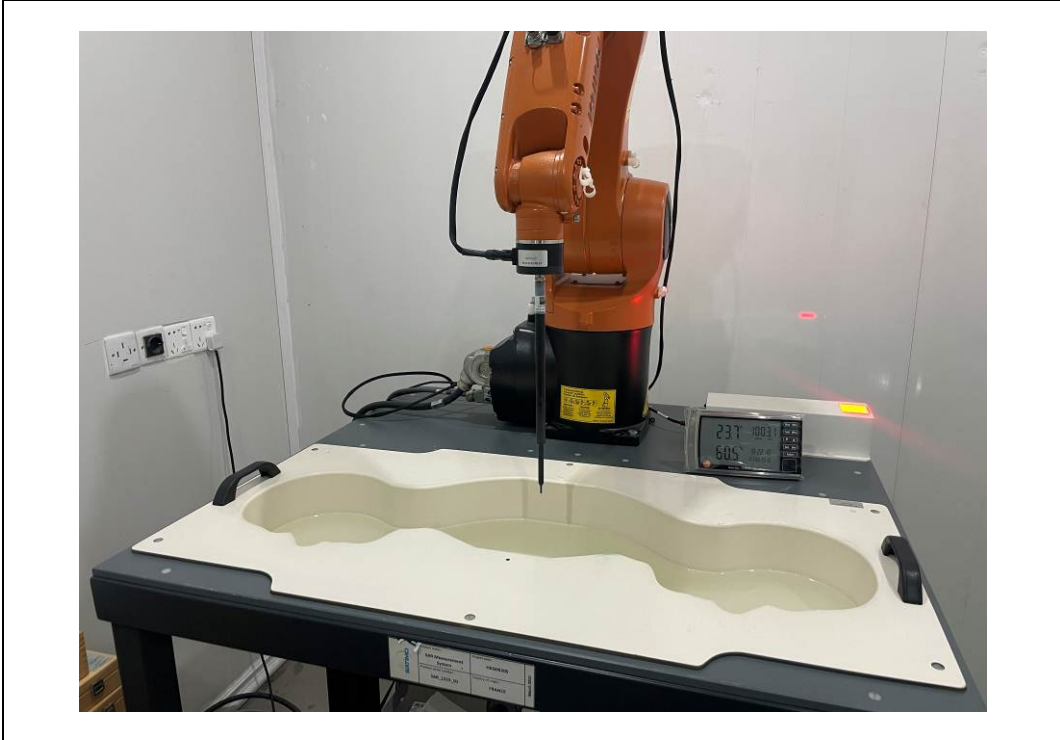
Equipment Summary Sheet				
Equipment Description	Manufacturer / Model	Identification No.	Current Calibration Date	Next Calibration Date
SAM Phantom	MVG	SN-13/09-SAM68	Validated. No cal required.	Validated. No cal required.
COMOSAR Test Bench	Version 3	NA	Validated. No cal required.	Validated. No cal 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 EPGO333	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

Page: 13/13

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

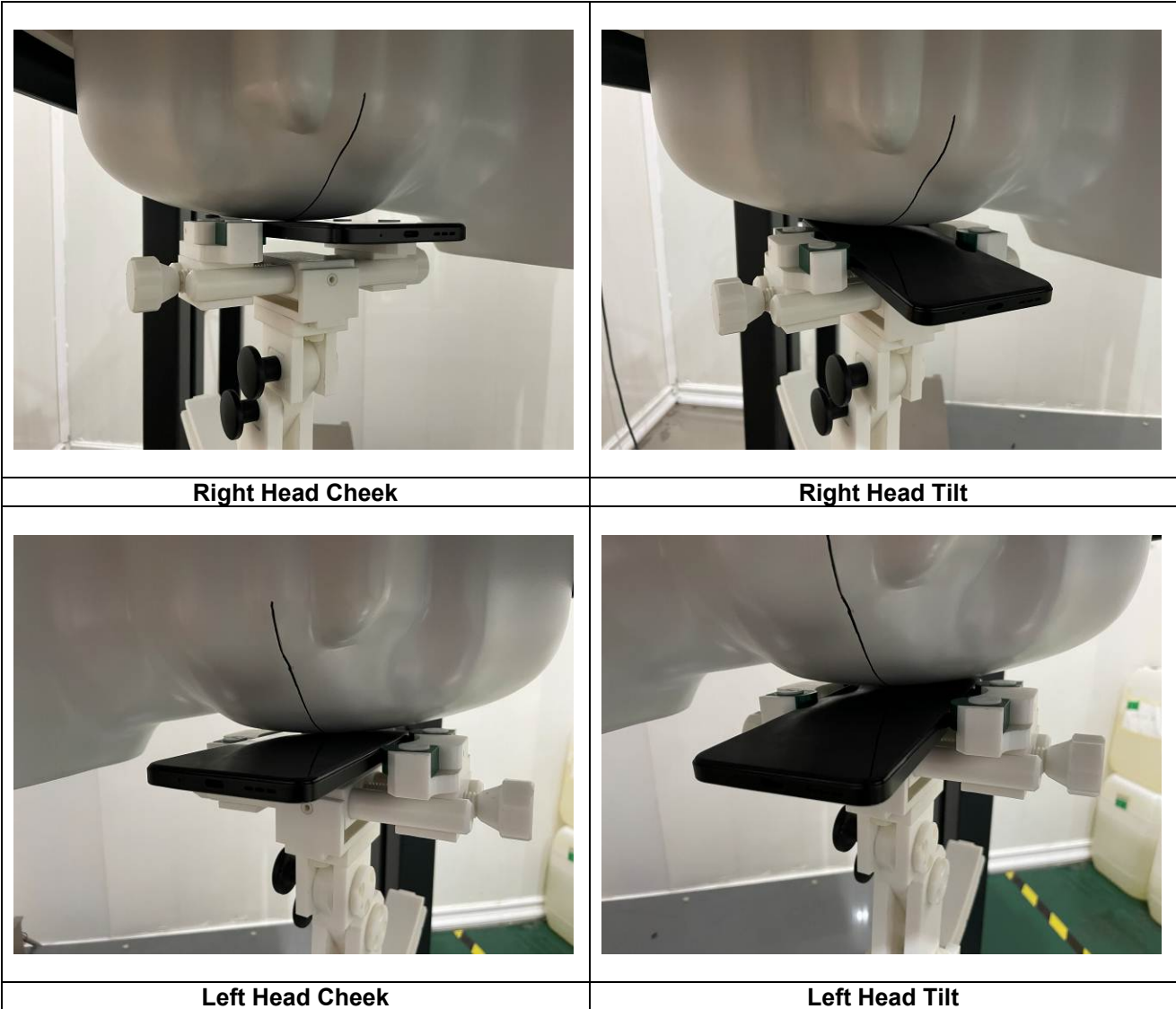
This document shall not be reproduced, except in full or in part, without the written approval of MVG. The information contained herein is to be used only for the purpose for which it is submitted and is not to be released in whole or part without written approval of MVG.

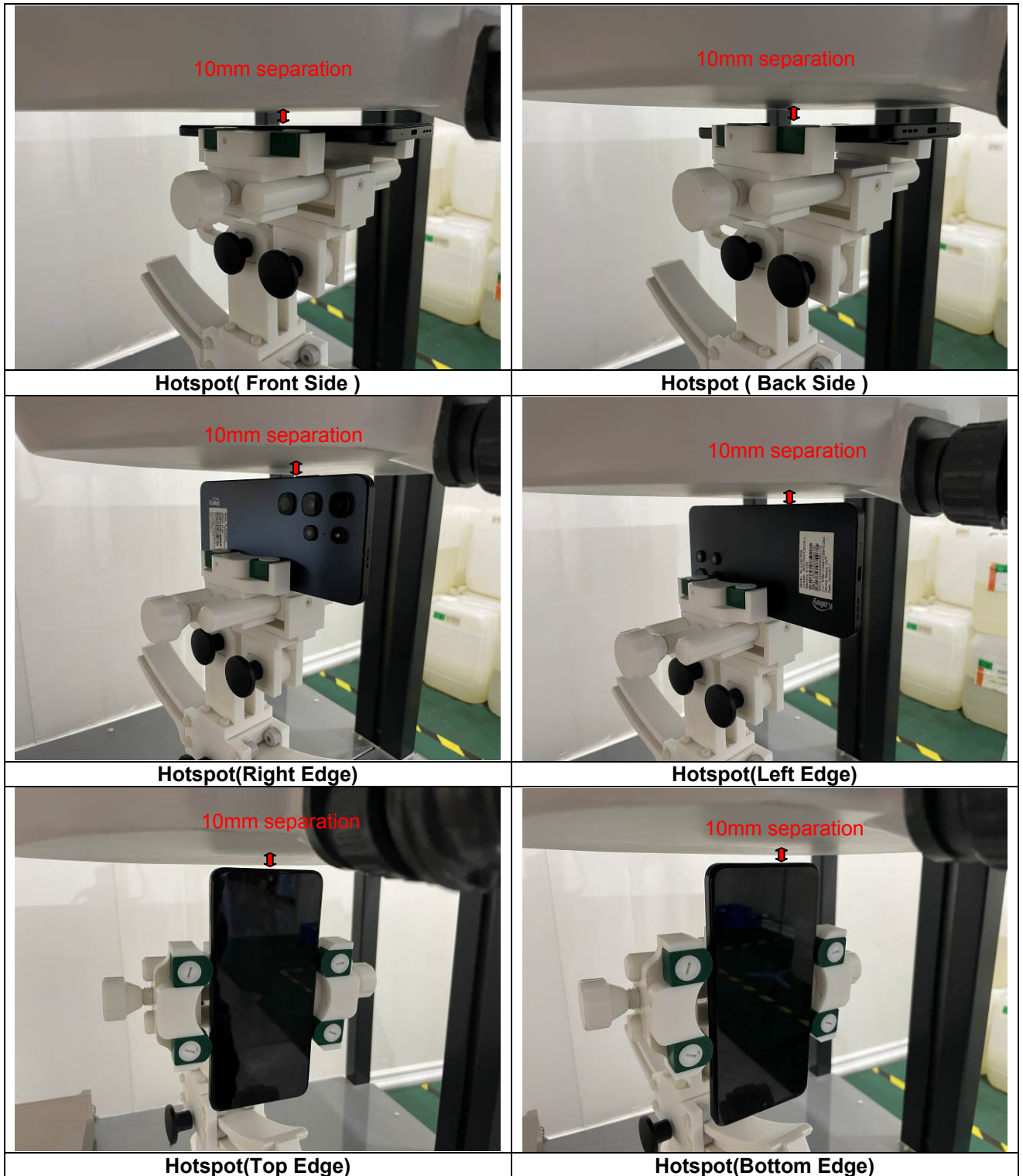
17 SAR System Photos



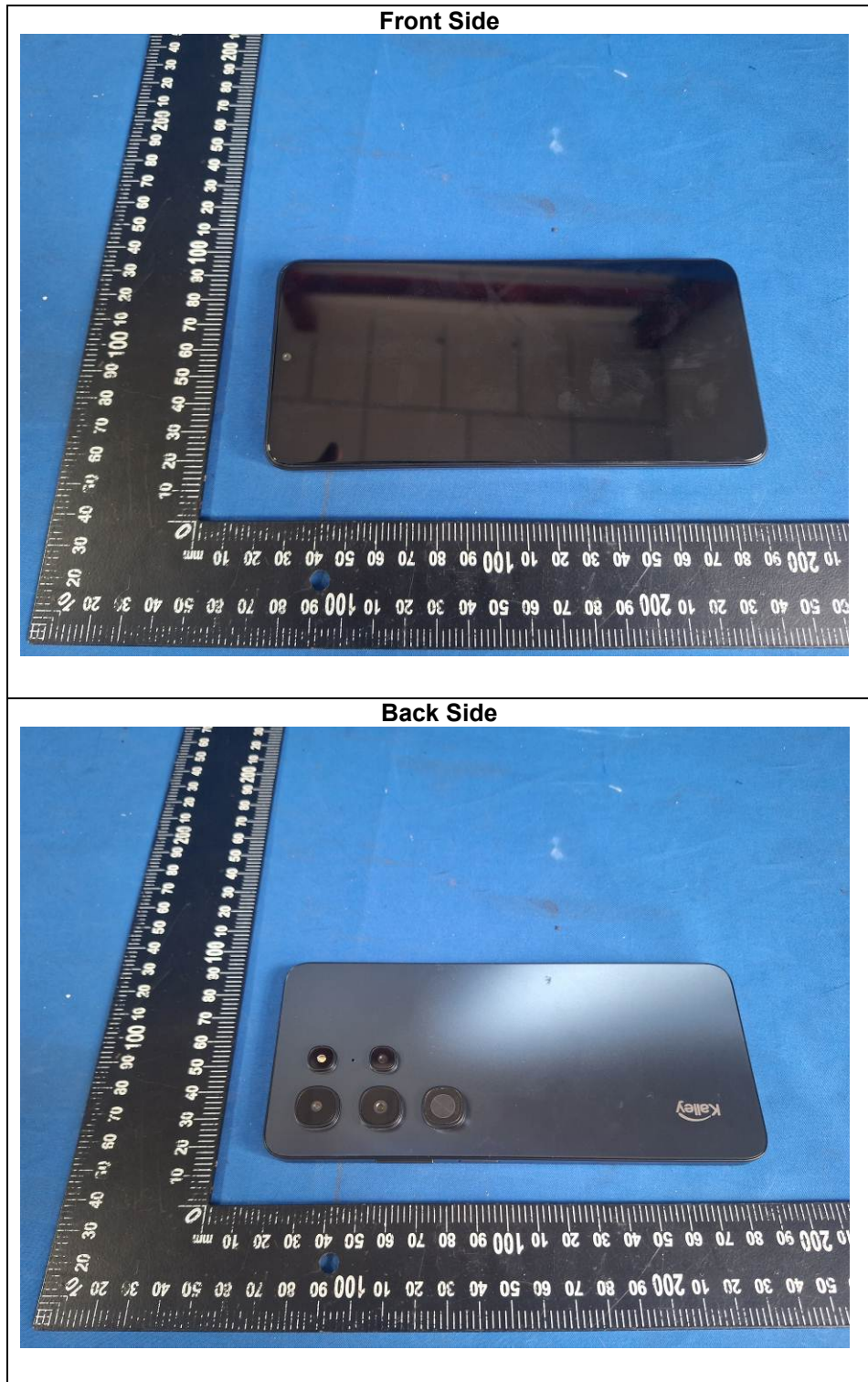
Liquid depth \geq 15cm

18 Setup Photos





19 EUT Photos



====End of Report====