

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

- DASY System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss:** This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	38.3 $\pm$ 6 %	1.85 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.4 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	52.6 W/kg $\pm$ 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.21 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.6 W/kg $\pm$ 16.5 % (k=2)

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 $\pm$ 0.2) °C	53.0 $\pm$ 6 %	2.01 mho/m $\pm$ 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	12.5 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	49.3 W/kg $\pm$ 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	5.93 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	23.6 W/kg $\pm$ 16.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	$51.7 \Omega + 2.1 j\Omega$
Return Loss	- 31.6 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	$49.4 \Omega + 2.5 j\Omega$
Return Loss	- 31.8 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.157 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
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DASY5 Validation Report for Head TSL

Date: 07.12.2023

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:715

Communication System: UID 0 - CW; Frequency: 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.85$ S/m; $\epsilon_r = 38.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.96, 7.96, 7.96) @ 2450 MHz; Calibrated: 03.11.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 03.10.2023
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 116.1 V/m; Power Drift = 0.03 dB

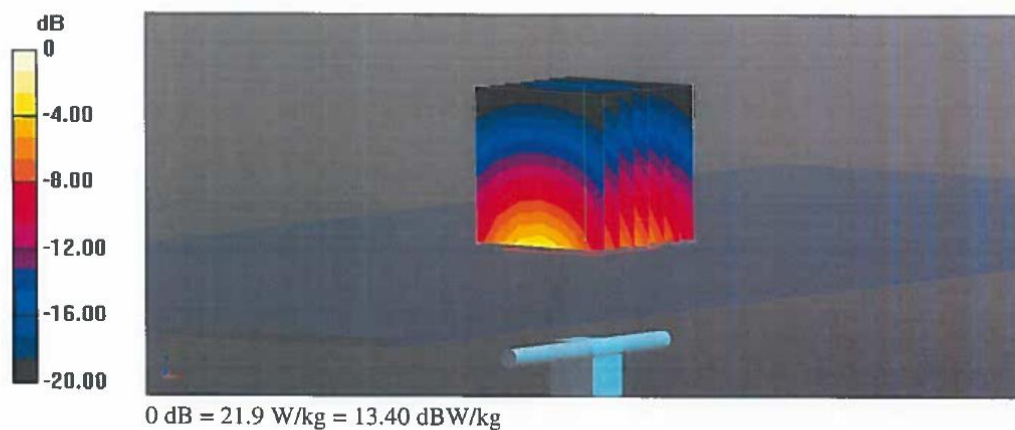
Peak SAR (extrapolated) = 26.5 W/kg

SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.21 W/kg

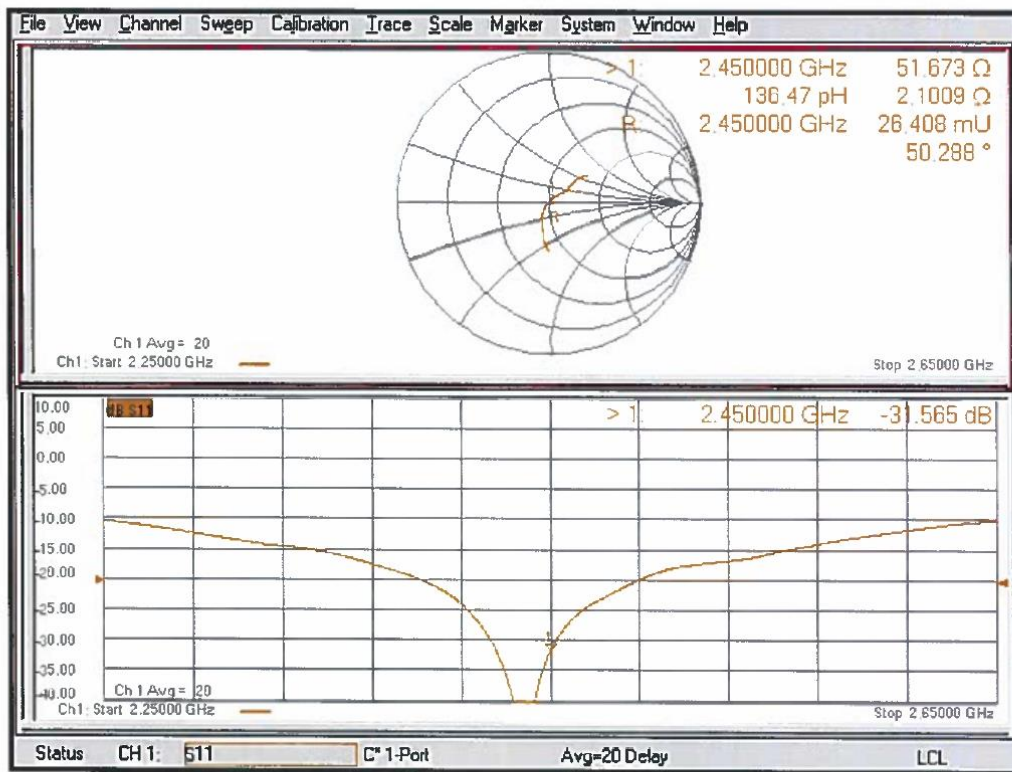
Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 50.6%

Maximum value of SAR (measured) = 21.9 W/kg



Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 06.12.2023

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:715

Communication System: UID 0 - CW; Frequency: 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.01$ S/m; $\epsilon_r = 53$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(8.12, 8.12, 8.12) @ 2450 MHz; Calibrated: 03.11.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 03.10.2023
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 107.3 V/m; Power Drift = 0.08 dB

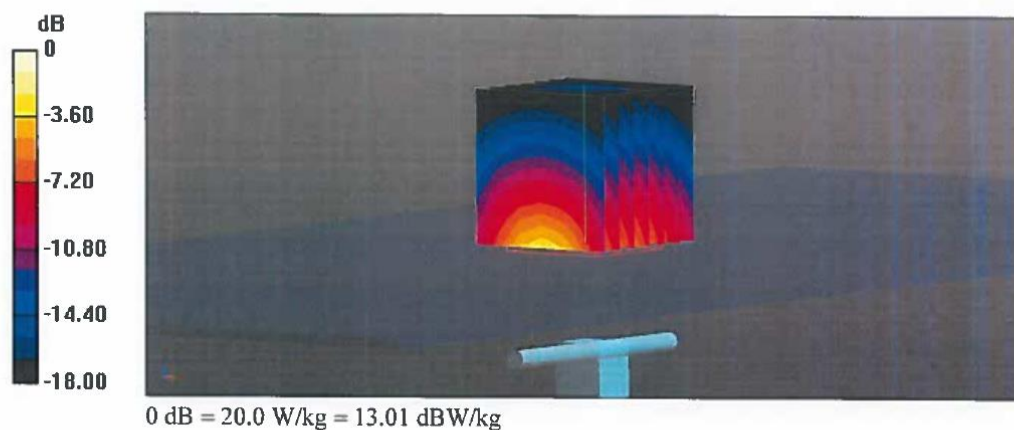
Peak SAR (extrapolated) = 23.3 W/kg

SAR(1 g) = 12.5 W/kg; SAR(10 g) = 5.93 W/kg

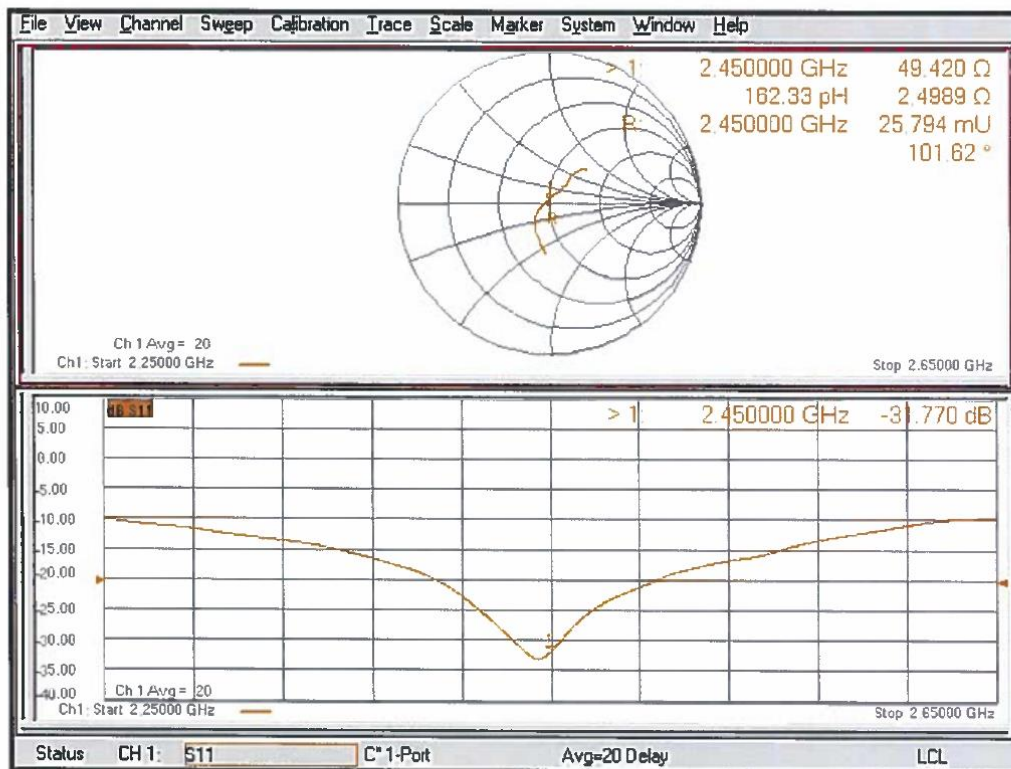
Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 54.6%

Maximum value of SAR (measured) = 20.0 W/kg



Impedance Measurement Plot for Body TSL





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Accreditation No.: **SCS 0108**

Client **TÜV SÜD**
Fareham, United Kingdom

Certificate No. **D6.5GHzV2-1071_Jul24**

CALIBRATION CERTIFICATE

Object **D6.5GHzV2 - SN:1071**

Calibration procedure(s) **QA CAL-22.v7**
Calibration Procedure for SAR Validation Sources between 3-10 GHz

Calibration date: **July 04, 2024**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^{\circ}\text{C}$ and humidity $< 70\%$.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power sensor R&S NRP33T	SN: 100967	28-Mar-24 (No. 217-04038)	Mar-25
Reference 20 dB Attenuator	SN: BH9394 (20k)	26-Mar-24 (No. 217-04046)	Mar-25
Mismatch combination	SN: 84224 / 360D	28-Mar-24 (No. 217-04050)	Mar-25
Reference Probe EX3DV4	SN: 7405	01-Jul-24 (No. EX3-7405_Jul24)	Jul-25
DAE4	SN: 908	27-Mar-24 (No. DAE4-908_Mar24)	Mar-25
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator Anapico APSIN20G	SN: 827	18-Dec-18 (in house check Jan-24)	In house check: Jan-25
Power sensor NRP-Z23	SN: 100169	10-Jan-19 (in house check Jan-24)	In house check: Jan-25
Power sensor NRP-18T	SN: 100950	28-Sep-22 (in house check Jan-24)	In house check: Jan-25
Network Analyzer Keysight E5063A	SN:MY54504221	31-Oct-19 (in house check Oct-22)	In house check: Oct-25

Calibrated by:	Name Aldonia Georgiadou	Function Laboratory Technician	Signature
Approved by:	Name Sven Kühn	Function Technical Manager	Signature

Issued: July 8, 2024

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: D6.5GHzV2-1071_Jul24

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N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range Of 4 MHz To 10 GHz)", October 2020.

Additional Documentation:

- b) DASY System Handbook

Methods Applied and Interpretation of Parameters:

- **Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- **Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- **Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The Return Loss ensures low reflected power. No uncertainty required.
- **SAR measured:** SAR measured at the stated antenna input power.
- **SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- **SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.
- **The absorbed power density (APD):** The absorbed power density is evaluated according to Samaras T, Christ A, Kuster N, "Compliance assessment of the epithelial or absorbed power density above 6 GHz using SAR measurement systems", Bioelectromagnetics, 2021 (submitted). The additional evaluation uncertainty of 0.55 dB (rectangular distribution) is considered.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.



Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY6	V16.2
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	5 mm	with Spacer
Zoom Scan Resolution	dx, dy = 3.4 mm, dz = 1.4 mm	Graded Ratio = 1.4 (Z direction)
Frequency	6500 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	34.5	6.07 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	35.8 $\pm$ 6 %	6.26 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	---	---

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	29.5 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	297 W/kg $\pm$ 24.7 % (k=2)

SAR averaged over 8 cm ³ (8 g) of Head TSL	Condition	
SAR measured	100 mW input power	6.57 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	66.3 W/kg $\pm$ 24.4 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	5.37 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	54.2 W/kg $\pm$ 24.4 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	49.5 Ω - 1.1 j Ω
Return Loss	- 38.4 dB

APD (Absorbed Power Density)

APD averaged over 1 cm ²	Condition	
APD measured	100 mW input power	297 W/m ²
APD measured	normalized to 1W	2970 W/m ² $\pm$ 29.2 % (k=2)

APD averaged over 4 cm ²	condition	
APD measured	100 mW input power	131 W/m ²
APD measured	normalized to 1W	1310 W/m ² $\pm$ 28.9 % (k=2)

*The reported APD values have been derived using the psSAR1g and psSAR8g.

General Antenna Parameters and Design

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
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DASY6 Validation Report for Head TSL

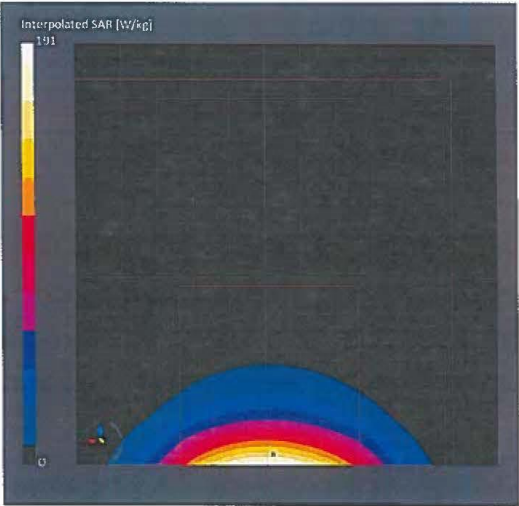
Measurement Report for D6.5GHz-1071, UID 0 -, Channel 6500 (6500.0MHz)

Device under Test Properties			
Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
D6.5GHz	16.0 x 6.0 x 300.0	SN: 1071	-

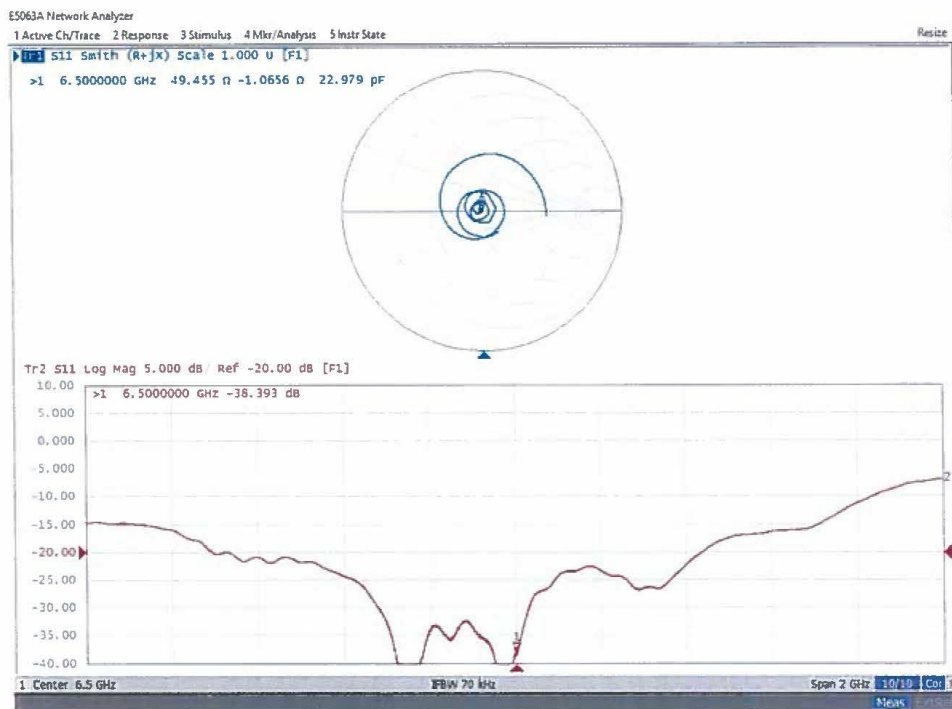
Exposure Conditions							
Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Cond. [S/m]	TSL Permittivity
Flat, HSL	5.00	Band	CW,	6500	5.42	6.26	35.8

Hardware Setup		Probe, Calibration Date		DAE, Calibration Date	
Phantom	TSL				
MFP V8.0 Center - 1182	HBBL600-10000V6	EX3DV4 - SN7405, 2024-07-01		DAE4 Sn908, 2024-03-27	

Scan Setup		Measurement Results	
		Zoom Scan	
Grid Extents [mm]	22.0 x 22.0 x 22.0	Date	2024-07-04, 13:30
Grid Steps [mm]	3.4 x 3.4 x 1.4	psSAR1g [W/Kg]	29.5
Sensor Surface [mm]	1.4	psSAR8g [W/Kg]	6.57
Graded Grid	Yes	psSAR10g [W/Kg]	5.37
Grading Ratio	1.4	Power Drift [dB]	0.03
MAIA	N/A	Power Scaling	Disabled
Surface Detection	VMS + 6p	Scaling Factor [dB]	
Scan Method	Measured	TSL Correction	No correction
		M2/M1 [%]	54.3
		Dist 3dB Peak [mm]	4.8



Impedance Measurement Plot for Head TSL





ANNEX C

TEST RESULTS



Measurement Report for A3112, BACK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 39 (2441.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2441.0, 39	7.41	1.79	39.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 target_for_DAK 3.5 Head ELI 19.36 deg.C 2024-Jul-17 SYS6 B6.prn, 2024-Jul-17	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-18, 02:51	2024-07-18, 02:58
psSAR1g [W/Kg]	0.252	0.262
psSAR10g [W/Kg]	0.126	0.119
Power Drift [dB]	0.15	0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		71.9
Dist 3dB Peak [mm]		9.0

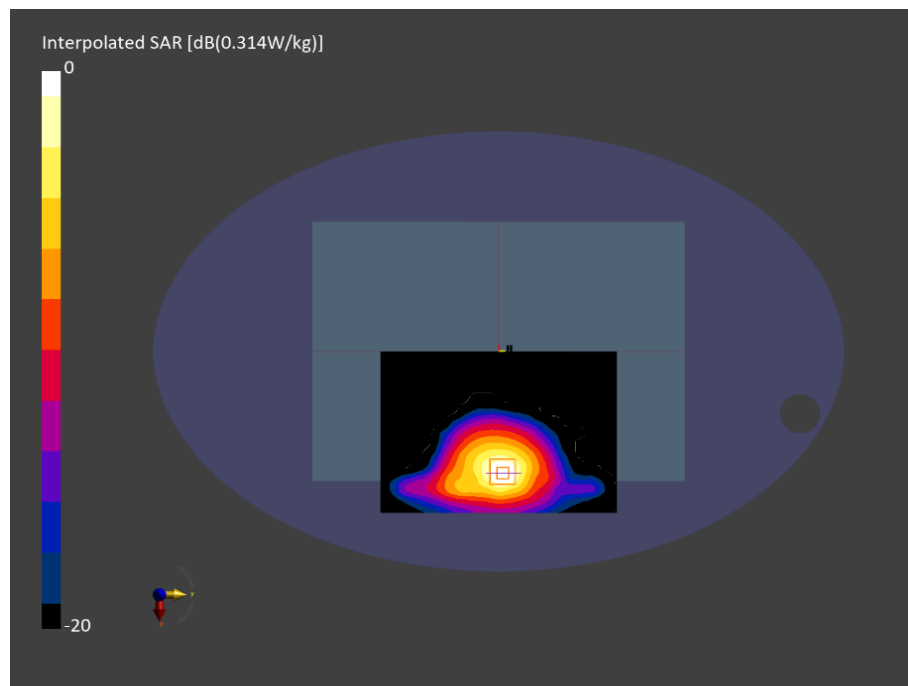


Figure C.1: SAR Testing Results for the A3112 at 2441 MHz Core 0



Measurement Report for A3112, BACK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 78 (2480.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2480.000, 78	7.41	1.83	39.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 target_for_DAK 3.5 Head ELI 19.36 deg.C 2024-Jul-17 SYS6 B6.prn, 2024-Jul-17	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-18, 04:26	2024-07-18, 04:34
psSAR1g [W/Kg]	0.204	0.200
psSAR10g [W/Kg]	0.098	0.090
Power Drift [dB]	0.04	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		71.6
Dist 3dB Peak [mm]		8.6

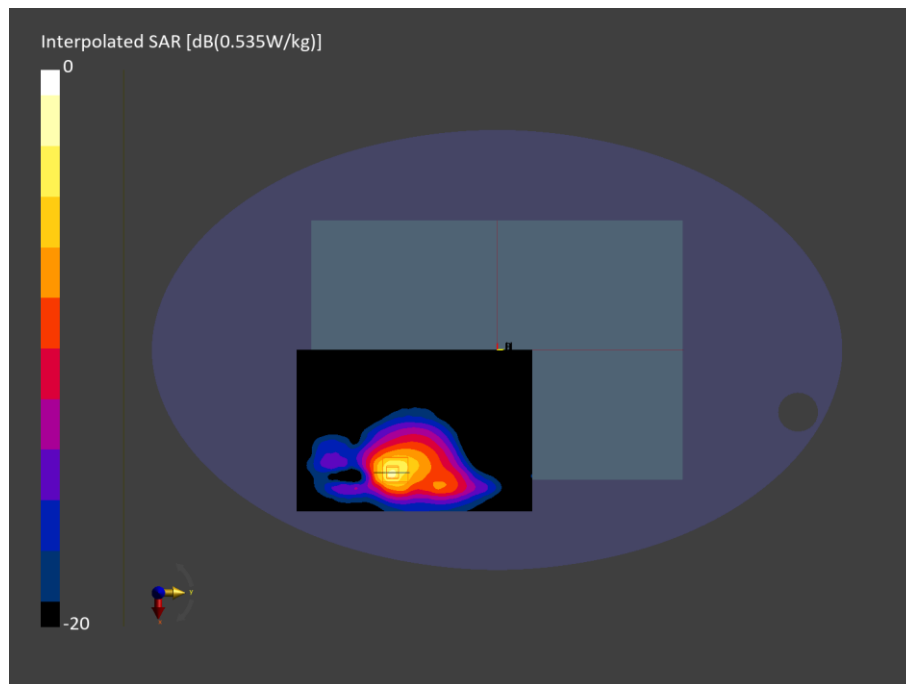


Figure C.2: SAR Testing Results for the A3112 at 2480 MHz Core 1



Measurement Report for A3112, BACK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 0 (2402.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2402.0, 0	7.41	1.76	39.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 target_for_DAK 3.5 Head ELI 19.36 deg.C 2024-Jul-17 SYS6 B6.prn, 2024-Jul-17	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	4.6 x 4.6 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-18, 05:57	2024-07-18, 06:07
psSAR1g [W/Kg]	0.066	0.066
psSAR10g [W/Kg]	0.033	0.031
Power Drift [dB]	-0.01	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		72.7
Dist 3dB Peak [mm]		8.7

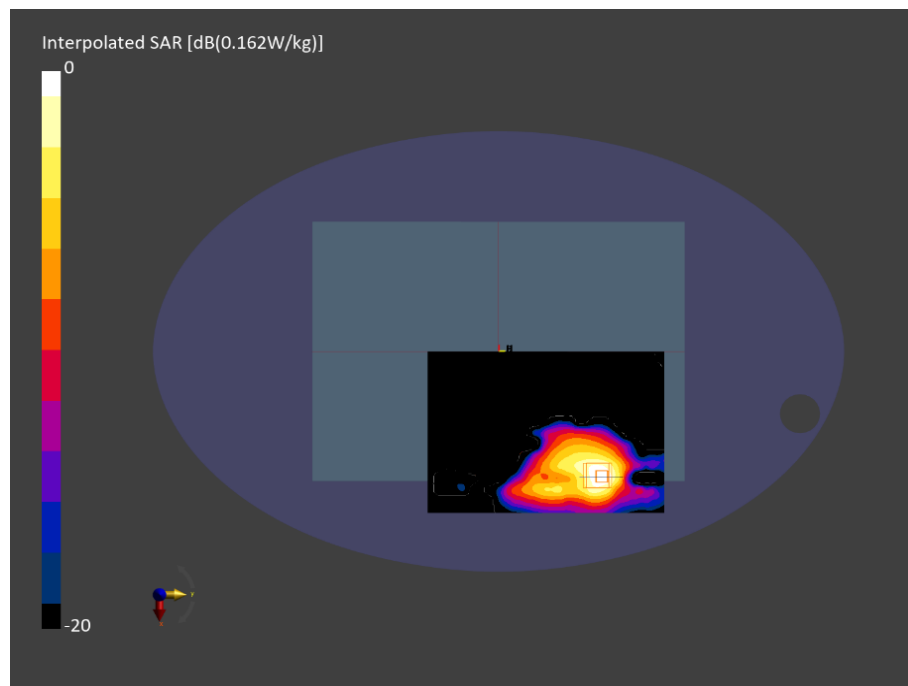


Figure C.3: SAR Testing Results for the A3112 at 2402 MHz Core 2



Measurement Report for A3112, BACK, Custom Band, CW, Channel 5250000 (5250.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	5250.000, 5250000	5.46	4.56	34.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head ELI 19.34 deg.C 2024-Jul-19 SYS6 B6.prn, 2024-Jul-19	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-20, 03:10	2024-07-20, 03:19
psSAR1g [W/Kg]	0.462	0.498
psSAR10g [W/Kg]	0.170	0.171
Power Drift [dB]	0.07	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		59.7
Dist 3dB Peak [mm]		8.7

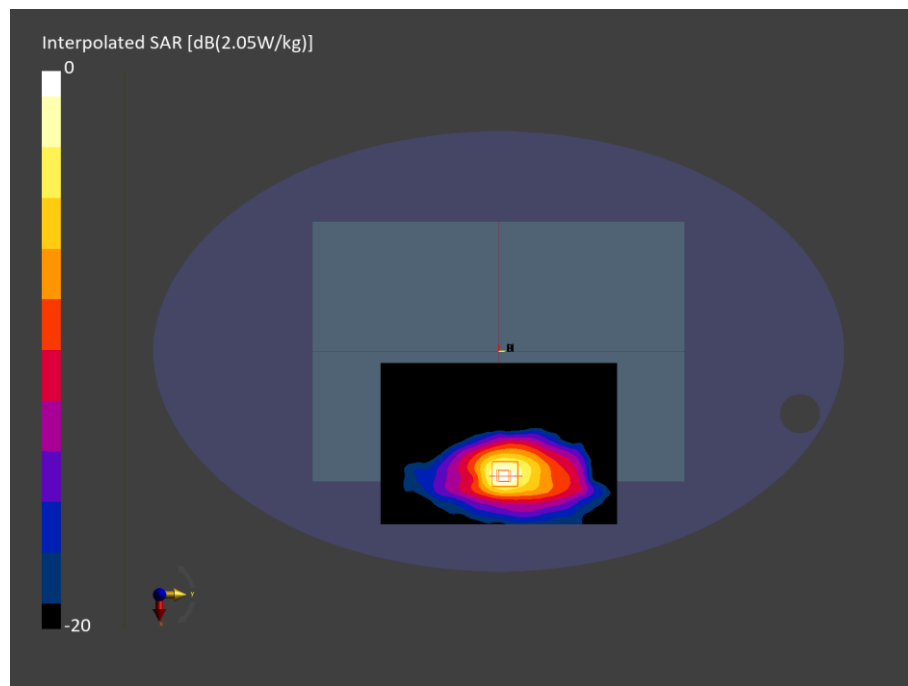


Figure C.4: SAR Testing Results for the A3112 at 5250 MHz Core 0



Measurement Report for A3112, BACK, Custom Band, CW, Channel 5250000 (5250.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	5250.000, 5250000	5.46	4.56	34.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head ELI 19.34 deg.C 2024-Jul-19 SYS6 B6.prn, 2024-Jul-19	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-20, 03:32	2024-07-20, 03:43
psSAR1g [W/Kg]	0.512	0.534
psSAR10g [W/Kg]	0.187	0.186
Power Drift [dB]	0.01	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		60.7
Dist 3dB Peak [mm]		8.7

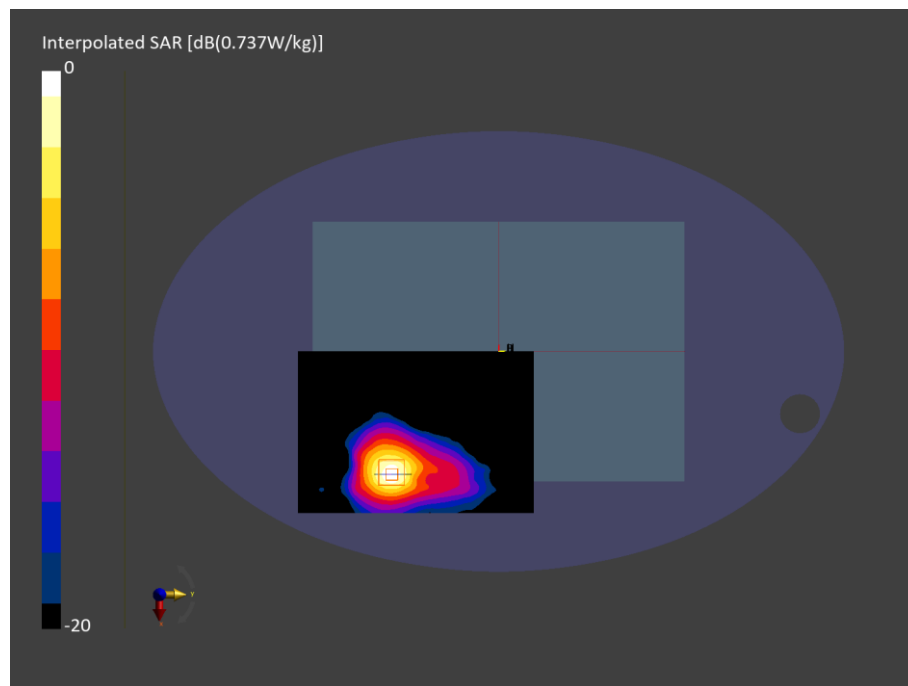


Figure C.5: SAR Testing Results for the A3112 at 5250 MHz Core 1



Measurement Report for A3112, BACK, Custom Band, CW, Channel 5850000 (5850.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	5850.0, 5850000	4.85	5.22	32.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head ELI 19.34 deg.C 2024-Jul-19 SYS6 B6.prn, 2024-Jul-19	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-20, 05:09	2024-07-20, 05:16
psSAR1g [W/Kg]	0.490	0.532
psSAR10g [W/Kg]	0.171	0.173
Power Drift [dB]	-0.01	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		55.1
Dist 3dB Peak [mm]		8.1

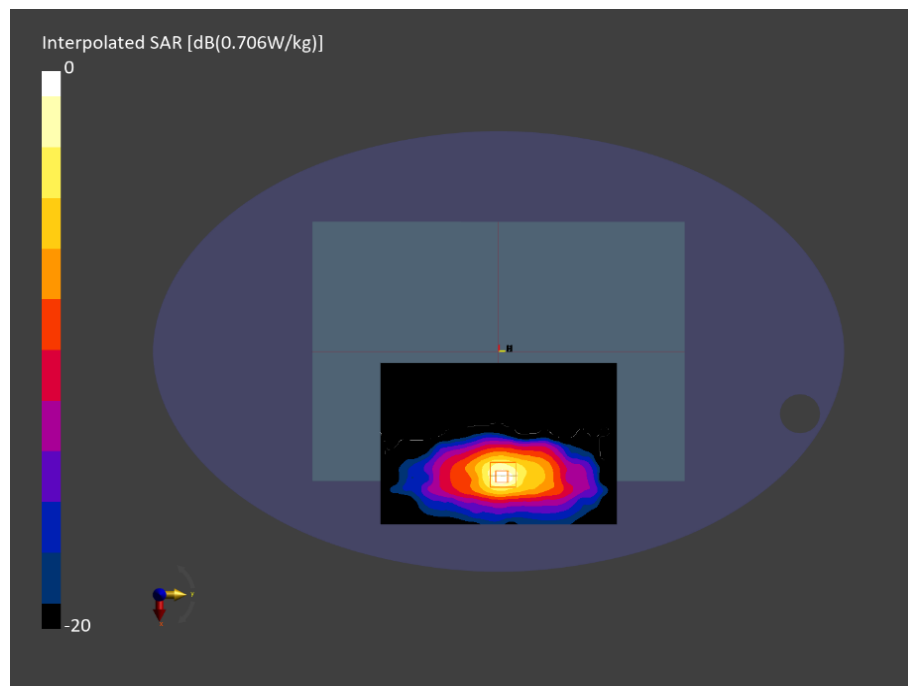


Figure C.6: SAR Testing Results for the A3112 at 5850 MHz Core 0



Measurement Report for A3112, BACK, Custom Band, CW, Channel 5850000 (5850.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	5850.0, 5850000	4.85	5.22	32.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head ELI 19.34 deg.C 2024-Jul-19 SYS6 B6.prn, 2024-Jul-19	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-20, 06:02	2024-07-20, 06:11
psSAR1g [W/Kg]	0.602	0.626
psSAR10g [W/Kg]	0.224	0.220
Power Drift [dB]	-0.07	0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		56.2
Dist 3dB Peak [mm]		8.4

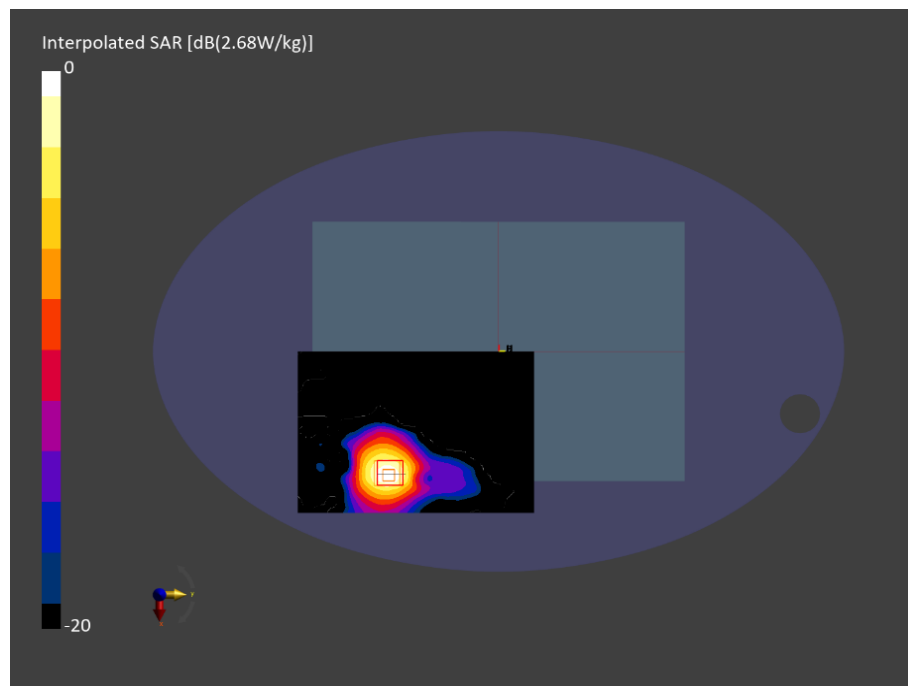


Figure C.7: SAR Testing Results for the A3112 at 5850 MHz Core 1



Measurement Report for A3112, BACK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 39 (2441.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2441.0, 39	7.41	1.79	39.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 target for DAK 3.5 Head ELI 19.36 deg.C 2024-Jul-17 SYS6 B6.prn, 2024-Jul-17	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-18, 02:51	2024-07-18, 02:58
psSAR1g [W/Kg]	0.252	0.262
psSAR10g [W/Kg]	0.126	0.119
Power Drift [dB]	0.15	0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		71.9
Dist 3dB Peak [mm]		9.0

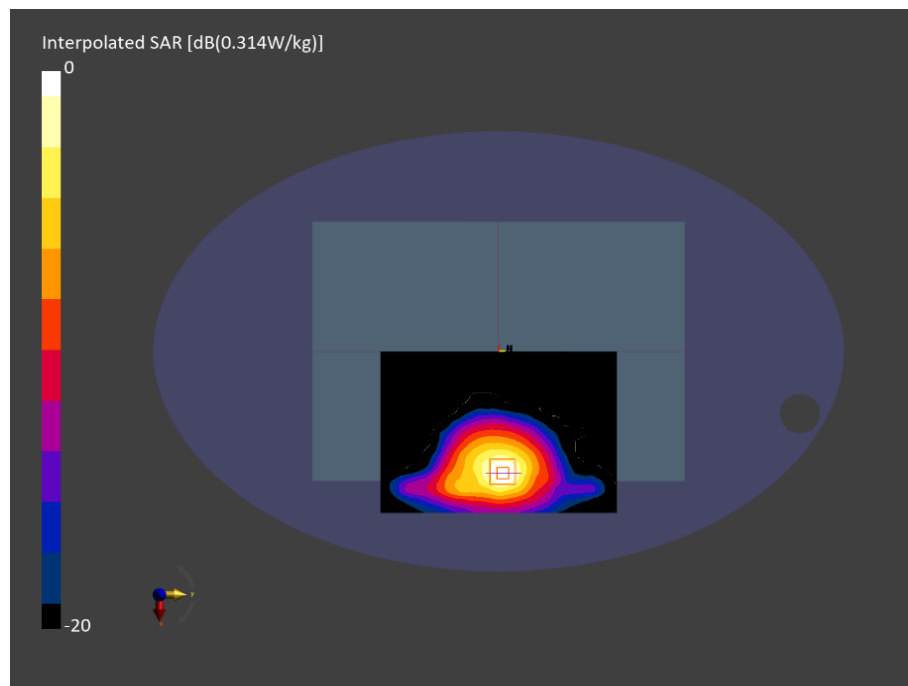


Figure C.8: SAR Testing Results for the A3112 at 2441 MHz Core 0



Measurement Report for A3112, BACK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 78 (2480.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2480.0, 78	7.05	1.84	39.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 target_for_DAK 3.5 Head 19.42 deg.C 2024-Jul-19 SYS5 B5.prn, 2024-Jul-19	EX3DV4 - SN7805, 2024-02-14	DAE4ip Sn1785, 2024-02-13

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-19, 22:29	2024-07-19, 22:38
psSAR1g [W/Kg]	0.188	0.190
psSAR10g [W/Kg]	0.091	0.085
Power Drift [dB]	0.24	0.18
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		72.9
Dist 3dB Peak [mm]		8.6

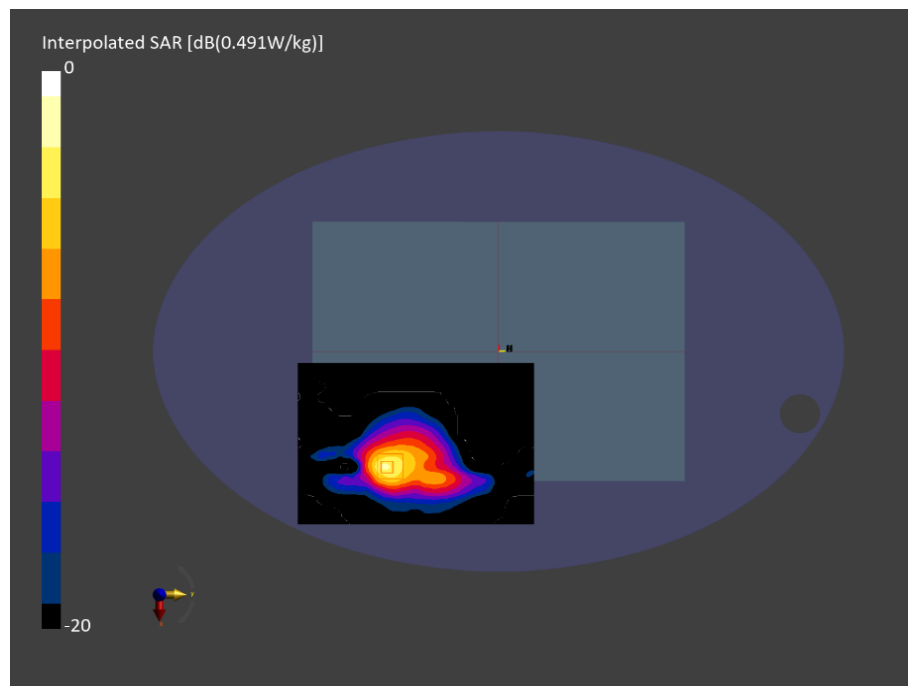


Figure C.9: SAR Testing Results for the A3112 at 2480 MHz Core 1



Measurement Report for A3112, BACK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 0 (2402.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2402.0, 0	7.41	1.76	39.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 target_for_DAK 3.5 Head ELI 19.36 deg.C 2024-Jul-17 SYS6 B6.prn, 2024-Jul-17	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	4.6 x 4.6 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-18, 05:57	2024-07-18, 06:07
psSAR1g [W/Kg]	0.066	0.066
psSAR10g [W/Kg]	0.033	0.031
Power Drift [dB]	-0.01	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		72.7
Dist 3dB Peak [mm]		8.7

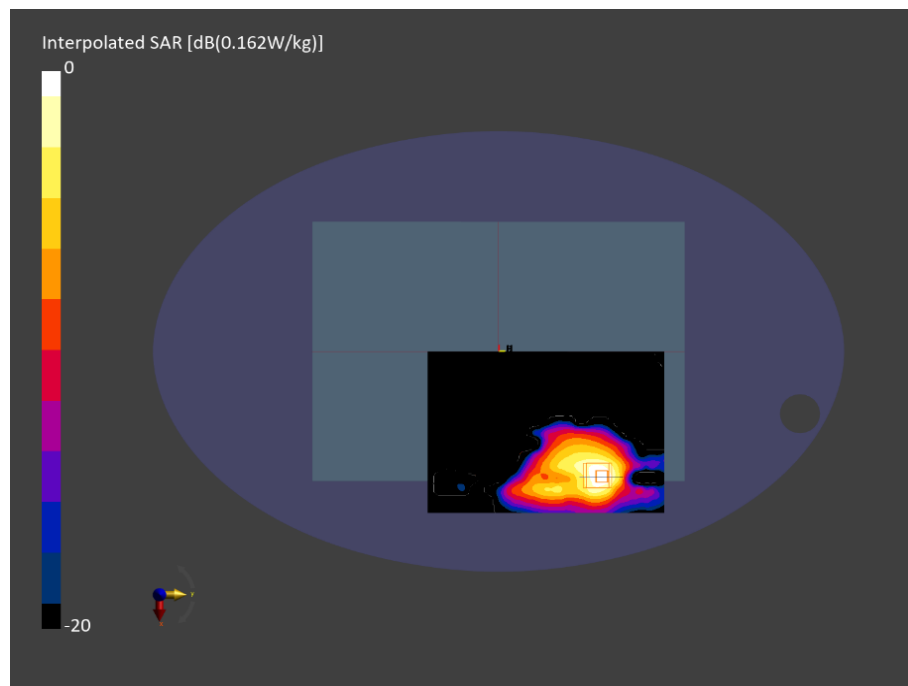


Figure C.10: SAR Testing Results for the A3112 at 2402 MHz Core 2



Measurement Report for A3112, BACK, Custom Band, CW, Channel 5250000 (5250.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	5250.0, 5250000	5.18	4.58	34.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 target for_DAK 3.5 Head 19.42 deg.C 2024-Jul-19 SYS5 B5.prn, 2024-Jul-19	EX3DV4 - SN7805, 2024-02-14	DAE4ip Sn1785, 2024-02-13

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-19, 18:17	2024-07-19, 18:26
psSAR1g [W/Kg]	0.280	0.311
psSAR10g [W/Kg]	0.10	0.098
Power Drift [dB]	0.09	-0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		58.4
Dist 3dB Peak [mm]		8.0

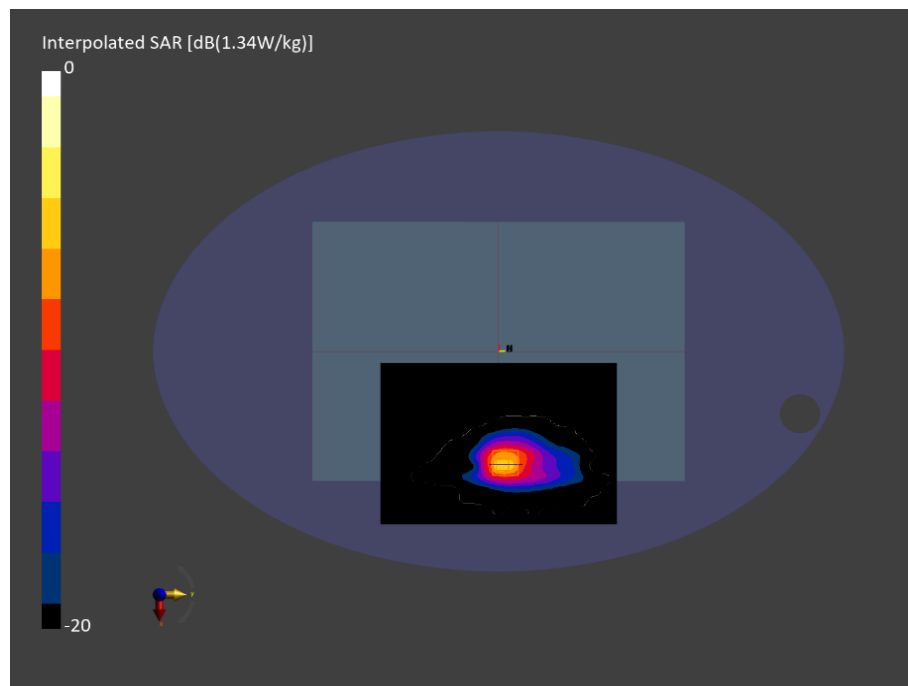


Figure C.11: SAR Testing Results for the A3112 at 5250 MHz Core 0



Measurement Report for A3112, BACK, Custom Band, CW, Channel 5200000 (5200.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	5200.000, 5200000	5.18	4.52	34.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 target_for_DAK 3.5 Head 19.42 deg.C 2024-Jul-19 SYS5 B5.prm, 2024-Jul-19	EX3DV4 - SN7805, 2024-02-14	DAE4ip Sn1785, 2024-02-13

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-20, 02:39	2024-07-20, 02:48
psSAR1g [W/Kg]	0.278	0.310
psSAR10g [W/Kg]	0.103	0.102
Power Drift [dB]	0.11	0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		60.4
Dist 3dB Peak [mm]		7.9

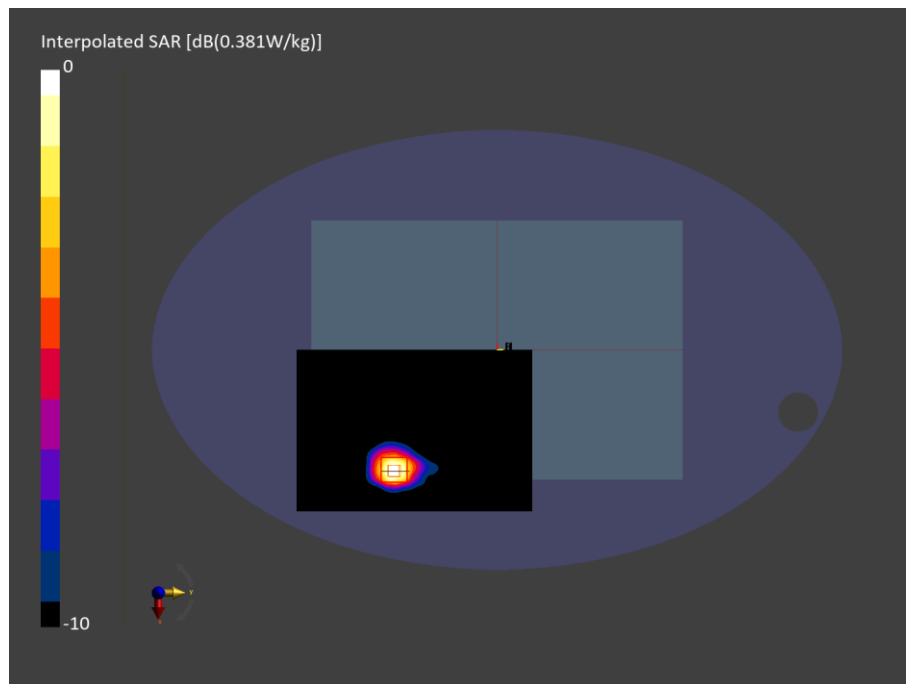


Figure C.12: SAR Testing Results for the A3112 at 5200 MHz Core 1



Measurement Report for A3112, BACK, Custom Band, CW, Channel 5850000 (5850.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	5850.000, 5850000	4.63	5.24	33.0

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 target for_DAK 3.5 Head 19.42 deg.C 2024-Jul-19 SYS5 B5.prn, 2024-Jul-19	EX3DV4 - SN7805, 2024-02-14	DAE4ip Sn1785, 2024-02-13

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-20, 03:06	2024-07-20, 03:18
psSAR1g [W/Kg]	0.305	0.365
psSAR10g [W/Kg]	0.108	0.109
Power Drift [dB]	0.27	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		53.9
Dist 3dB Peak [mm]		7.6

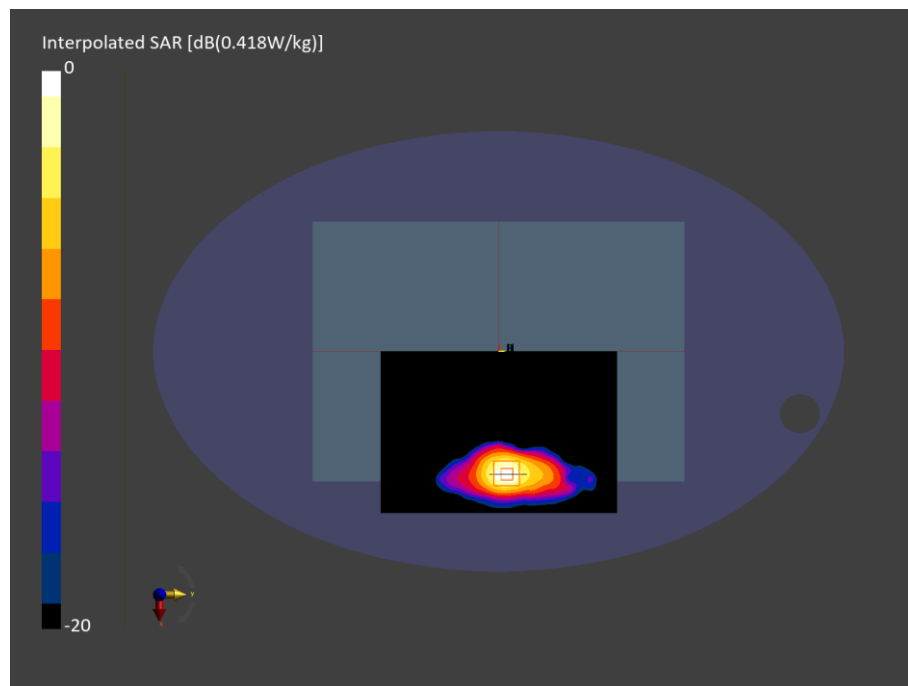


Figure C.13: SAR Testing Results for the A3112 at 5850 MHz Core 0



Measurement Report for A3112, BACK, Custom Band, CW, Channel 5725000 (5725.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	5725.000, 5725000	4.63	5.11	33.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 target for_DAK 3.5 Head 19.42 deg.C 2024-Jul-19 SYS5 B5.prn, 2024-Jul-19	EX3DV4 - SN7805, 2024-02-14	DAE4ip Sn1785, 2024-02-13

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-20, 05:52	2024-07-20, 06:01
psSAR1g [W/Kg]	0.393	0.420
psSAR10g [W/Kg]	0.143	0.136
Power Drift [dB]	-0.01	-0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.6
Dist 3dB Peak [mm]		7.9

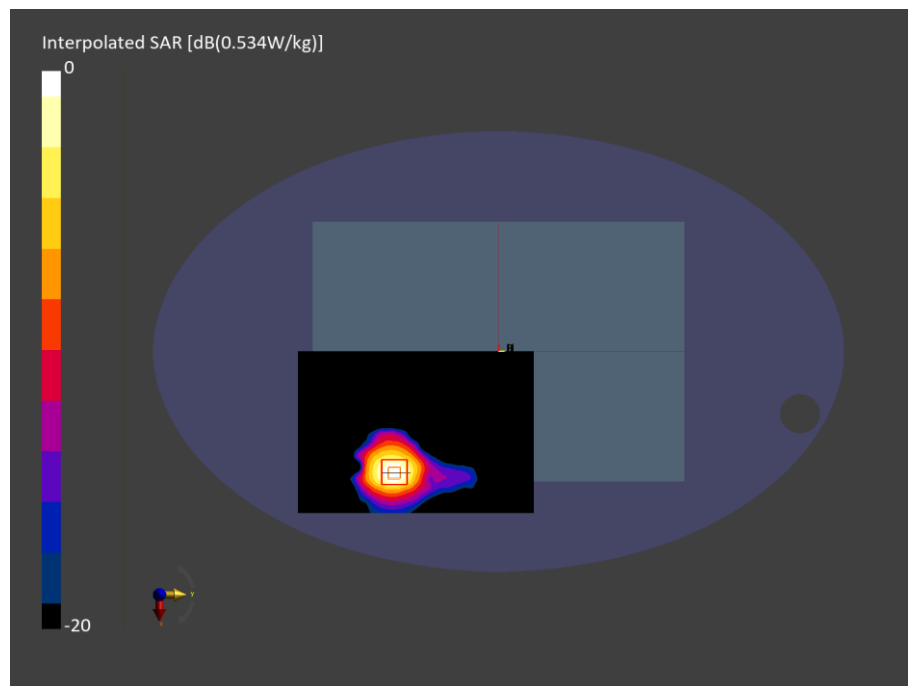


Figure C.14: SAR Testing Results for the A3112 at 5725 MHz Core 1



Measurement Report for A3112, BACK, Custom Band, CW, Channel 2405000 (2405.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	2405.0, 2405000	7.05	1.79	39.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 DAK 3.5 Head ELI 19.75 deg.C 2024-Aug-05 SYS5 B5.prn, 2024-Aug-05	EX3DV4 - SN7805, 2024-02-14	DAE4 Sn1712, 2024-07-08

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-05, 18:52	2024-08-05, 18:59
psSAR1g [W/Kg]	0.622	0.648
psSAR10g [W/Kg]	0.316	0.307
Power Drift [dB]	-0.01	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		74.1
Dist 3dB Peak [mm]		9.5

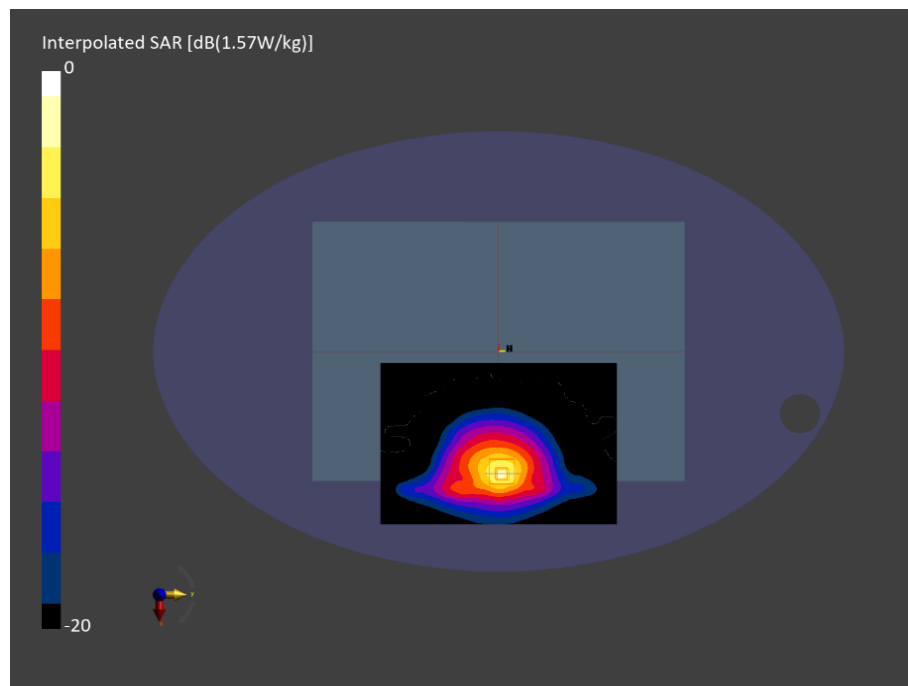


Figure C.15: SAR Testing Results for the A3112 at 2405 MHz Core 0



Measurement Report for A3112, BACK, Custom Band, CW, Channel 2480000 (2480.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	2480.0, 2480000	7.05	1.85	39.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 DAK 3.5 Head ELI 19.75 deg.C 2024-Aug-05 SYS5 B5.prn, 2024-Aug-05	EX3DV4 - SN7805, 2024-02-14	DAE4 Sn1712, 2024-07-08

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	160.0 x 240.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-05, 23:15	2024-08-05, 23:23
psSAR1g [W/Kg]	0.604	0.606
psSAR10g [W/Kg]	0.290	0.275
Power Drift [dB]	0.00	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		73.2
Dist 3dB Peak [mm]		8.6

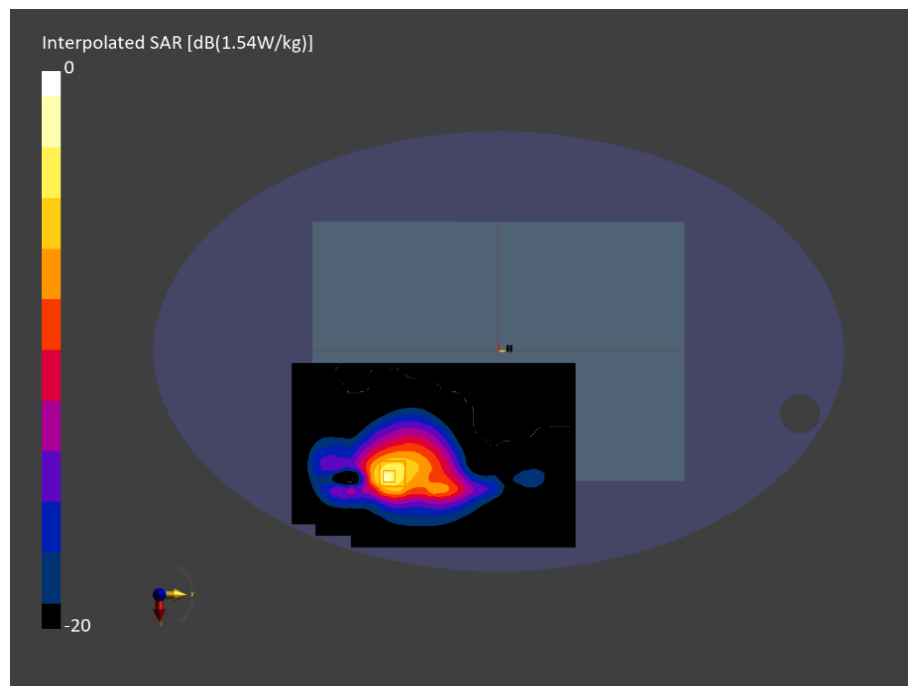


Figure C.16: SAR Testing Results for the A3112 at 2480 MHz Core 1



Measurement Report for A3112, BACK, Custom Band, CW, Channel 2440000 (2440.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	2440.0, 2440000	7.05	1.82	39.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 DAK 3.5 Head ELI 19.75 deg.C 2024-Aug-05 SYS5 B5.prn, 2024-Aug-05	EX3DV4 - SN7805, 2024-02-14	DAE4 Sn1712, 2024-07-08

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-06, 04:16	2024-08-06, 04:25
psSAR1g [W/Kg]	0.102	0.099
psSAR10g [W/Kg]	0.050	0.047
Power Drift [dB]	-0.02	0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		71.5
Dist 3dB Peak [mm]		8.5

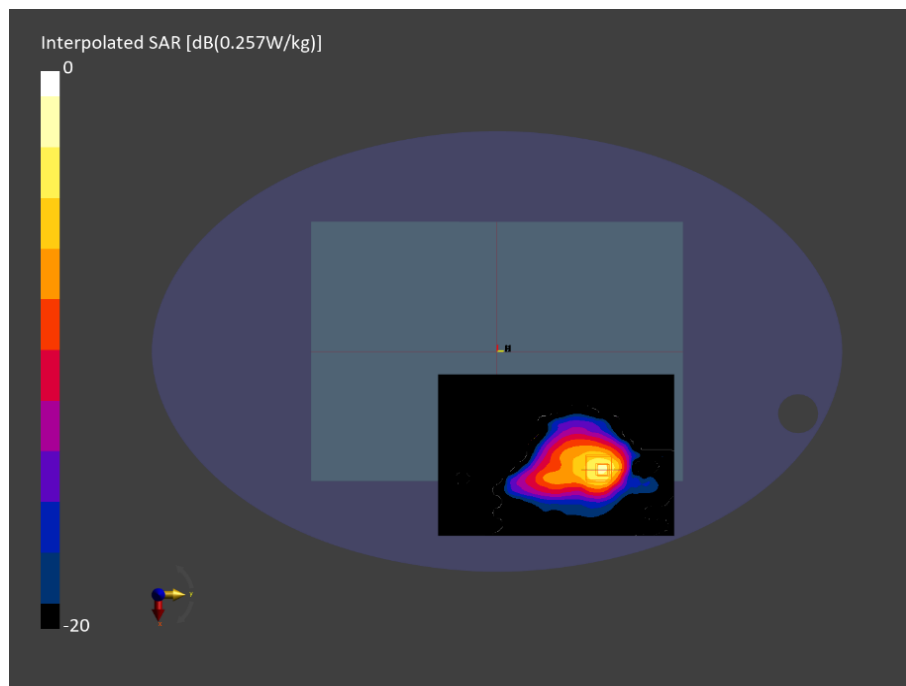


Figure C.17: SAR Testing Results for the A3112 at 2440 MHz Core 2



Measurement Report for A3112, BACK, Custom Band, CW, Channel 2480000 (2480.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	2480.0, 2480000	7.41	1.85	39.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head ELI 19.80 deg.C 2024-Aug-05 SYS6 B6.prn, 2024-Aug-05	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-05, 19:36	2024-08-05, 19:44
psSAR1g [W/Kg]	0.251	0.244
psSAR10g [W/Kg]	0.116	0.108
Power Drift [dB]	-0.03	-0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		71.7
Dist 3dB Peak [mm]		9.0

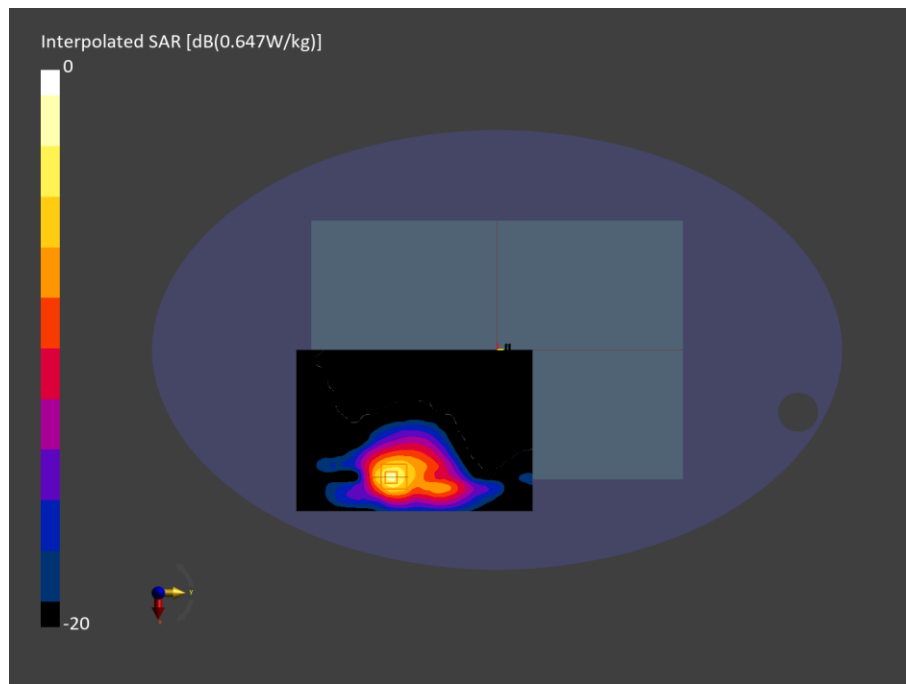


Figure C.18: SAR Testing Results for the A3112 at 2440 MHz Core 2



Measurement Report for A3112, BACK, Custom Band, CW, Channel 2480000 (2480.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	2480.0, 2480000	7.41	1.85	39.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head ELI 19.80 deg.C 2024-Aug-05 SYS6 B6.prn, 2024-Aug-05	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-05, 19:36	2024-08-05, 19:44
psSAR1g [W/Kg]	0.251	0.244
psSAR10g [W/Kg]	0.116	0.108
Power Drift [dB]	-0.03	-0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		71.7
Dist 3dB Peak [mm]		9.0

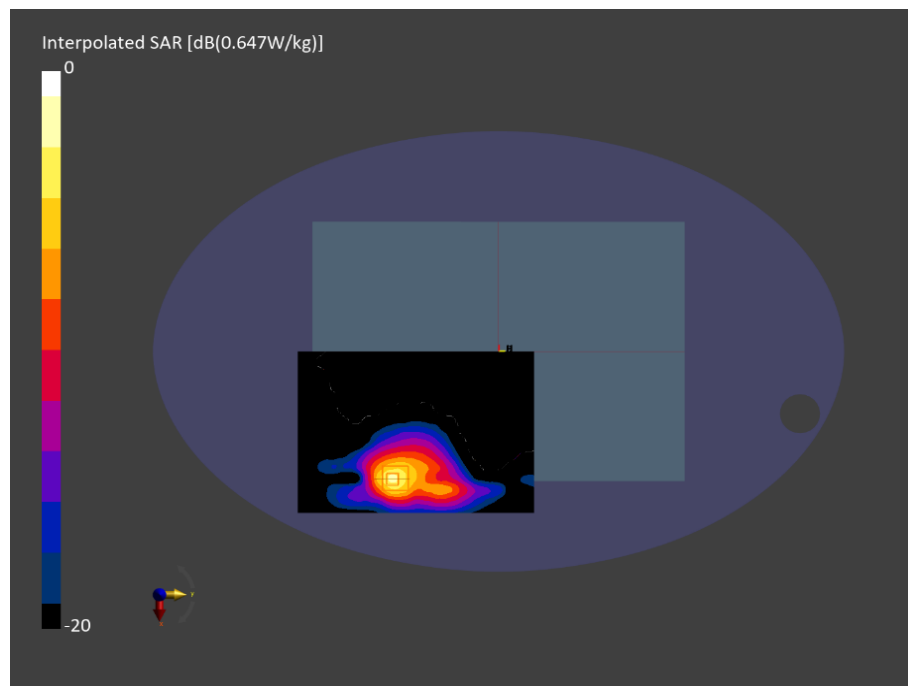


Figure C.19: SAR Testing Results for the A3112 at 2480 MHz Core 1



Measurement Report for A3112, BACK, Custom Band, CW, Channel 2440000 (2440.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	Custom Band	CW, 0--	2440.0, 2440000	7.05	1.82	39.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 DAK 3.5 Head ELI 19.75 deg.C 2024-Aug-05 SYS5 B5.prn, 2024-Aug-05	EX3DV4 - SN7805, 2024-02-14	DAE4 Sn1712, 2024-07-08

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-06, 04:16	2024-08-06, 04:25
psSAR1g [W/Kg]	0.102	0.099
psSAR10g [W/Kg]	0.050	0.047
Power Drift [dB]	-0.02	0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		71.5
Dist 3dB Peak [mm]		8.5

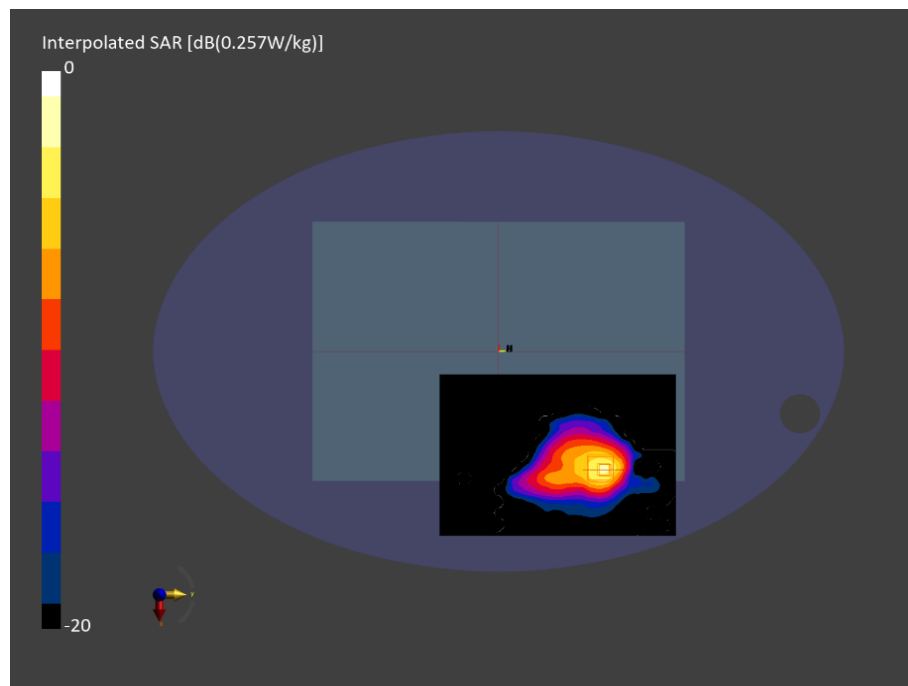


Figure C.20: SAR Testing Results for the A3112 at 2440 MHz Core 2



Measurement Report for A3112, BACK, WLAN 2.4GHz, IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle), Channel 10 (2457.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 2.4GHz	WLAN, 10416-AAA	2457.0, 10	7.05	1.81	38.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 DAK 3.5 Head 20.28 deg.C 2024-Jul-22 SYS5 B5.prn, 2024-Jul-22	EX3DV4 - SN7805, 2024-02-14	DAE4ip Sn1785, 2024-02-13

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-23, 14:10	2024-07-23, 14:17
psSAR1g [W/Kg]	0.678	0.717
psSAR10g [W/Kg]	0.337	0.323
Power Drift [dB]	-0.02	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		71.8
Dist 3dB Peak [mm]		9.5

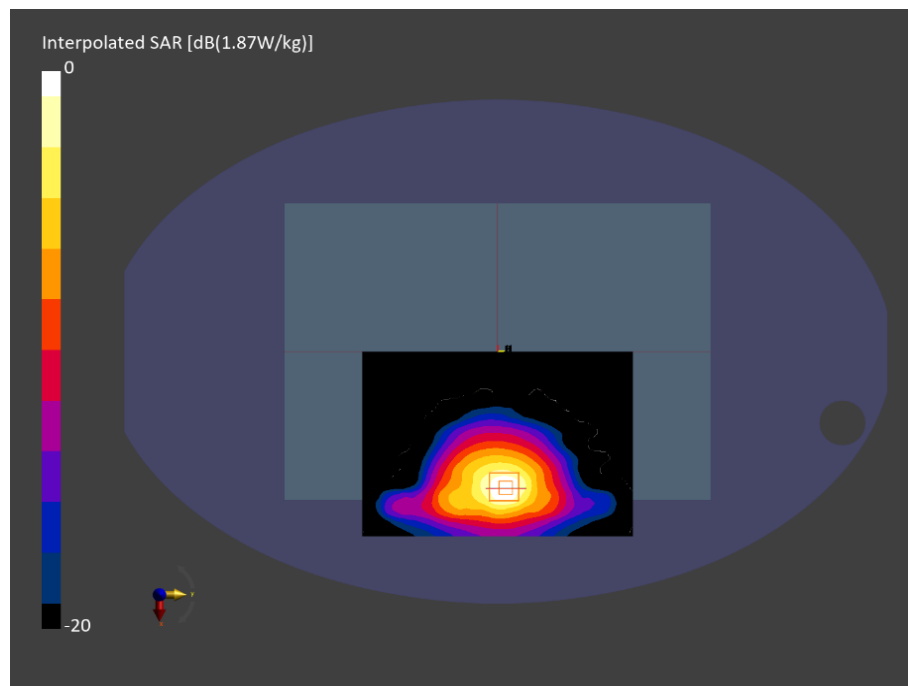


Figure C.21: SAR Testing Results for the A3112 at 2457 MHz Core 0



Measurement Report for A3112, BACK, WLAN 2.4GHz, IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle), Channel 10 (2457.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 2.4GHz	WLAN, 10416-AAA	2457.0, 10	7.05	1.81	38.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 DAK 3.5 Head 20.28 deg.C 2024-Jul-22 SYS5 B5.prn, 2024-Jul-22	EX3DV4 - SN7805, 2024-02-14	DAE4ip Sn1785, 2024-02-13

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-23, 11:57	2024-07-23, 12:06
psSAR1g [W/Kg]	0.500	0.507
psSAR10g [W/Kg]	0.249	0.232
Power Drift [dB]	0.04	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		72.2
Dist 3dB Peak [mm]		9.0

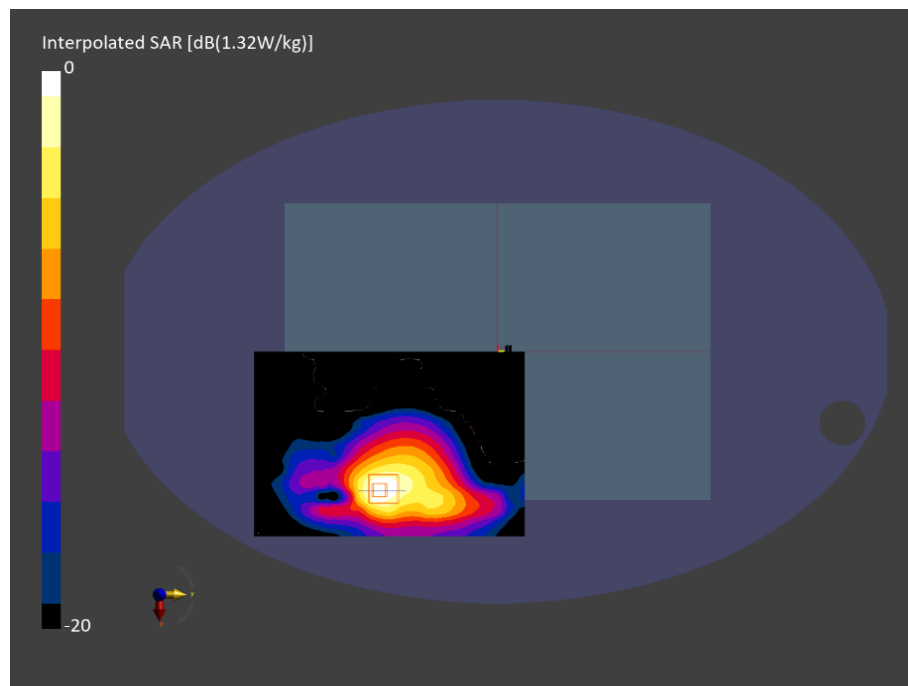


Figure C.22: SAR Testing Results for the A3112 at 2457 MHz Core 1



Measurement Report for A3112, BACK, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle), Channel 11 (2462.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	320.0 x 222.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 2.4GHz	WLAN, 10415-AAA	2462.0, 11	7.05	1.81	38.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 DAK 3.5 Head 20.28 deg.C 2024-Jul-22 SYS5 B5.prn, 2024-Jul-22	EX3DV4 - SN7805, 2024-02-14	DAE4ip Sn1785, 2024-02-13

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-23, 07:14	2024-07-23, 07:22
psSAR1g [W/Kg]	0.673	0.726
psSAR10g [W/Kg]	0.326	0.325
Power Drift [dB]	-0.01	0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		71.6
Dist 3dB Peak [mm]		8.3

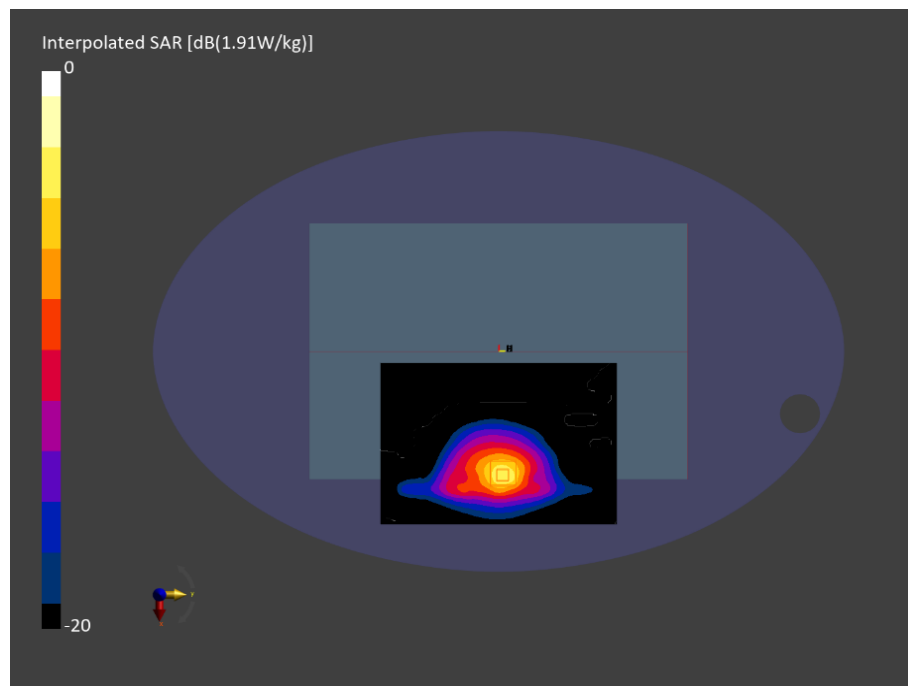


Figure C.23: SAR Testing Results for the A3112 at 2462 MHz Core 0



Measurement Report for A3112, BACK, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle), Channel 11 (2462.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 2.4GHz	WLAN, 10415-AAA	2462.0, 11	7.05	1.81	38.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 DAK 3.5 Head 20.28 deg.C 2024-Jul-22 SYS5 B5.prn, 2024-Jul-22	EX3DV4 - SN7805, 2024-02-14	DAE4ip Sn1785, 2024-02-13

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-23, 10:24	2024-07-23, 10:33
psSAR1g [W/Kg]	0.460	0.463
psSAR10g [W/Kg]	0.227	0.211
Power Drift [dB]	0.01	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		72.3
Dist 3dB Peak [mm]		8.6

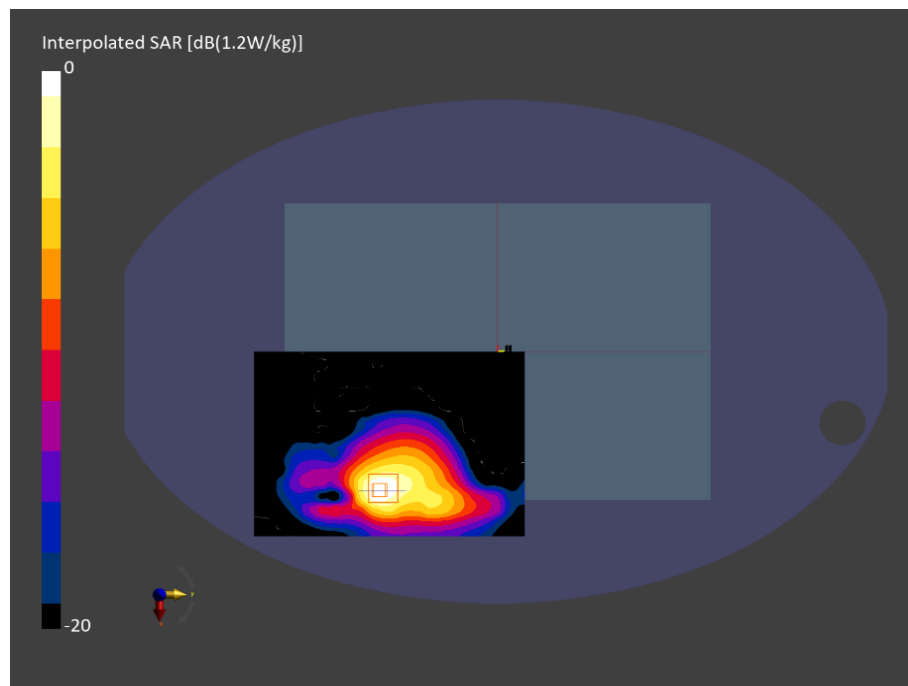


Figure C.24: SAR Testing Results for the A3112 at 2462 MHz Core 1



Measurement Report for A3112, BACK, WLAN 2.4GHz, IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK), Channel 10 (2457.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 2.4GHz	WLAN, 10196-CAD	, 10	7.05	1.81	38.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2202	HBBL-600-10000 DAK 3.5 Head 20.28 deg.C 2024-Jul-22 SYS5 B5.prn, 2024-Jul-22	EX3DV4 - SN7805, 2024-02-14	DAE4ip Sn1785, 2024-02-13

Scans Setup

	Area Scan	Zoom Scan	Zoom Scan
Grid Extents [mm]	x 200.0	30.0 x 30.0 x 30.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4	1.4
Graded Grid	n/a	Yes	Yes
Grading Ratio	n/a	1.5	1.5
MAIA	N/A	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan	Zoom Scan
Date	2024-07-23, 20:13	2024-07-23, 20:20	2024-07-23, 20:29
psSAR1g [W/Kg]	0.724	0.762	0.544
psSAR10g [W/Kg]	0.356	0.345	0.251
Power Drift [dB]	0.09	0.12	0.12
Power Scaling	Disabled	Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	Positive only	Positive only	Positive only
M2/M1 [%]		72.0	73.4
Dist 3dB Peak [mm]		9.3	8.7

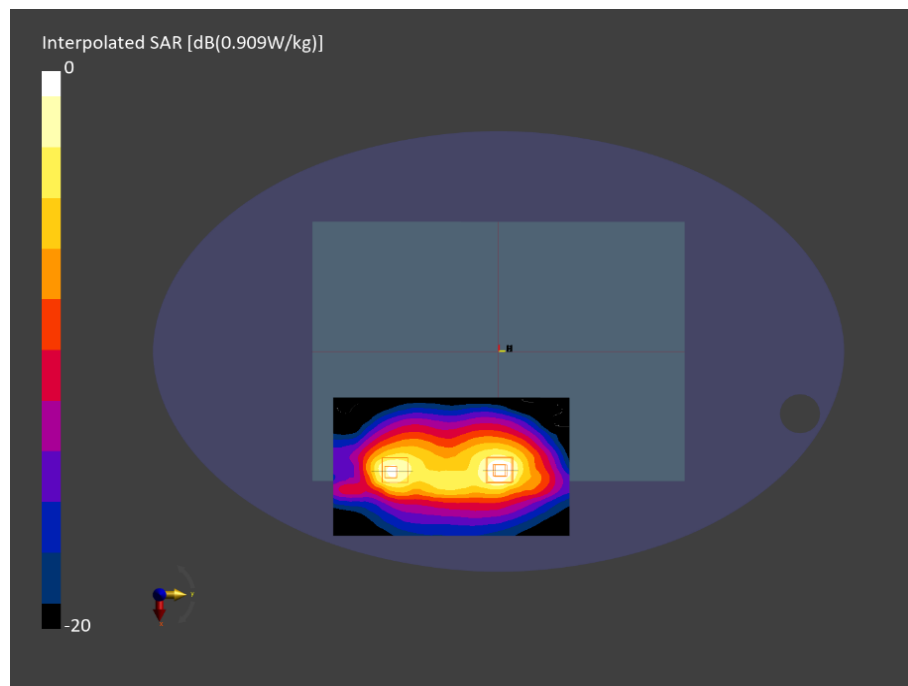


Figure C.25: SAR Testing Results for the A3112 at 2457 MHz Core 0 & Core 1



Measurement Report for A3112, BACK, U-NII-1, U-NII-2A, IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle), Channel 42 (5210.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	U-NII-1, U-NII-2A	WLAN, 10544-AAC	5210.0, 42	5.46	4.56	34.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head ELI 20.71 deg.C 2024-Jul-24 SYS6 B6.prn, 2024-Jul-24	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-24, 13:17	2024-07-24, 13:26
psSAR1g [W/Kg]	0.634	0.716
psSAR10g [W/Kg]	0.235	0.236
Power Drift [dB]	0.06	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		59.1
Dist 3dB Peak [mm]		8.0

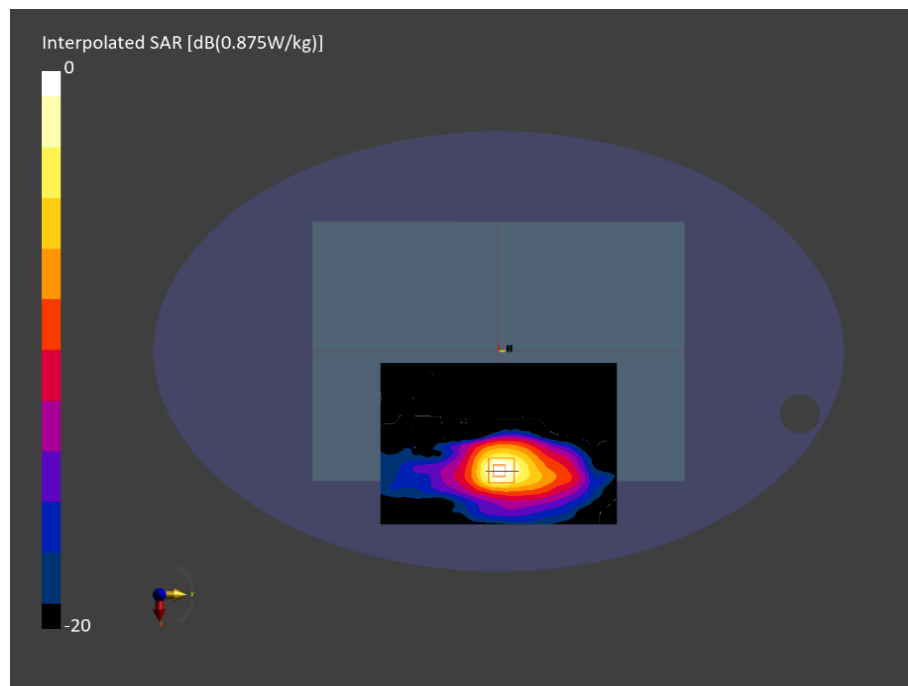


Figure C.26: SAR Testing Results for the A3112 at 5210 MHz Core 0



Measurement Report for A3112, BACK, WLAN 5GHz, IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle), Channel 42 (5210.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 5GHz	WLAN, 10544-AAC	5210.0, 42	5.46	4.56	34.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head ELI 20.71 deg.C 2024-Jul-24 SYS6 B6.prn, 2024-Jul-24	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	140.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-07-24, 20:38	2024-07-24, 20:46
psSAR1g [W/Kg]	0.673	0.734
psSAR10g [W/Kg]	0.256	0.257
Power Drift [dB]	-0.04	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		61.2
Dist 3dB Peak [mm]		8.1

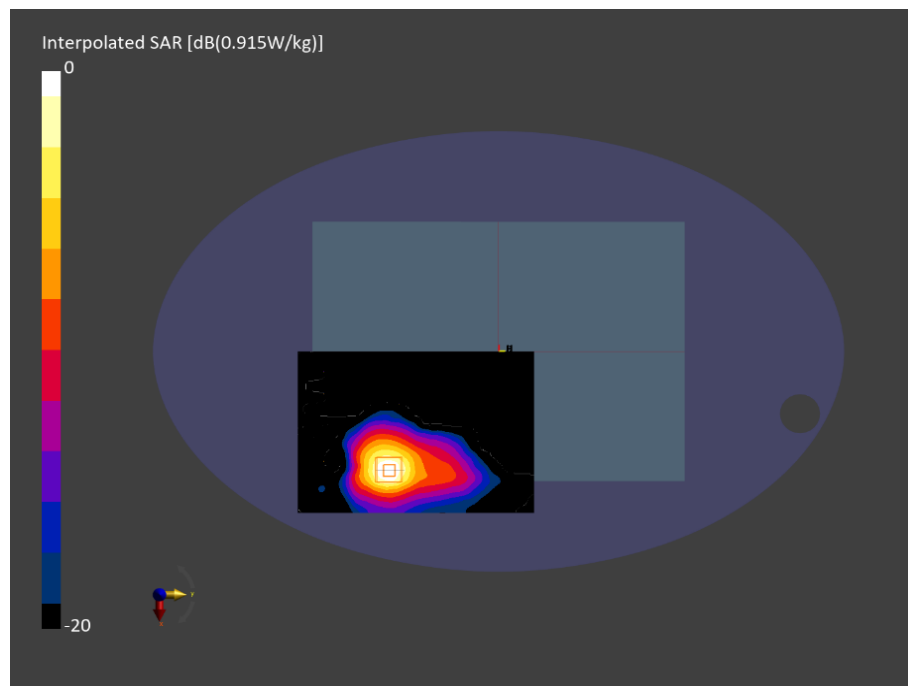


Figure C.27: SAR Testing Results for the A3112 at 5210 MHz Core 1



Measurement Report for A3112, BACK, U-NII-1, U-NII-2A, IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK), Channel 46 (5230.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
A3112,	315.0 x 225.0 x 15.0		Laptop

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	U-NII-1, U-NII-2A	WLAN, 10114-CAD	, 46	5.46	4.54	33.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2203	HBBL-600-10000 DAK 3.5 Head ELI 19.60 deg.C 2024-Jul-26 SYS6 B6.prm, 2024-Jul-26	EX3DV4 - SN7809, 2024-05-13	DAE4ip Sn1789, 2024-05-03

Scans Setup

	Area Scan	Zoom Scan	Zoom Scan
Grid Extents [mm]	x 260.0	22.0 x 22.0 x 22.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4	1.4
Graded Grid	n/a	Yes	Yes
Grading Ratio	n/a	1.4	1.4
MAIA	N/A	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan	Zoom Scan
Date	2024-07-26, 10:59	2024-07-26, 11:07	2024-07-26, 11:15
psSAR1g [W/Kg]	0.793	0.816	0.730
psSAR10g [W/Kg]	0.289	0.285	0.251
Power Drift [dB]	0.00	-0.04	-0.06
Power Scaling	Disabled	Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	Positive only	Positive only	Positive only
M2/M1 [%]		61.6	60.9
Dist 3dB Peak [mm]		9.0	8.0

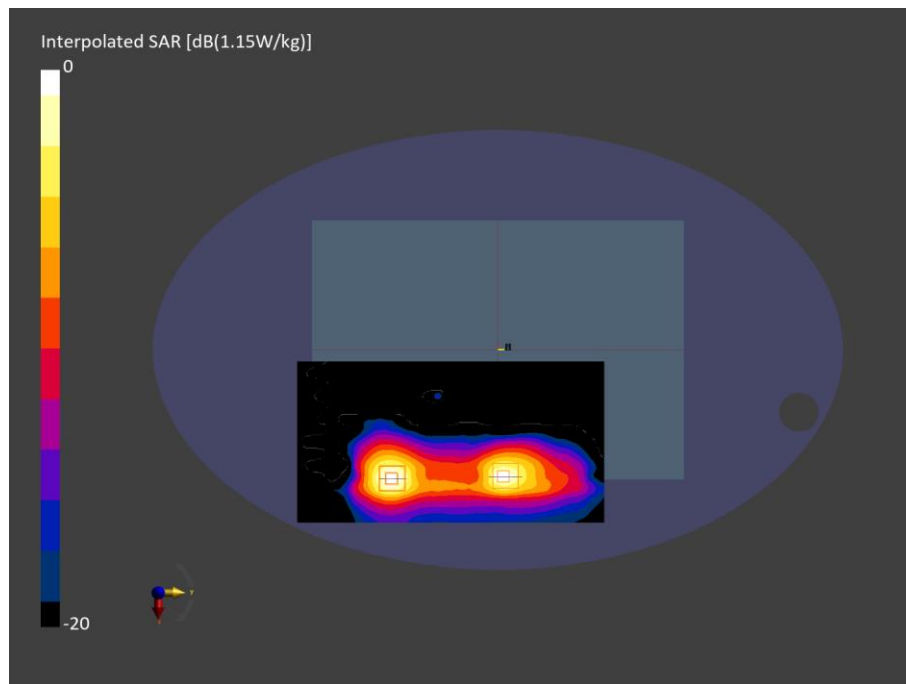


Figure C.28: SAR Testing Results for the A3112 at 5230 MHz Core 0 & Core 1