Test report No:
NIE: 77595RAN.001

Test report
IEEE Std 1528™-2013

(*) Identification of item tested	CPAP Device
(*) Trademark	ResMed
(*) Model and /or type reference tested	28330
(*) Derived model not tested	28541, 28542, 28405
(*) Other identification of the product	FCC ID : 2ACHL-AIR104GU IC : 9103A-AIR104GU HW version : R379-7135 SW version : SX558
(*) Features	4G, 3G, 2G
Manufacturer	ResMed Pty Ltd 1 Elizabeth Macarthur Drive, Bella Vista, NSW, 2153
Test method requested, standard	1. IEEE Std 1528™-2013. 2. FCC 47 CFR Part 2.1093.
Summary	Considering the results of the performed test, the item under test is IN COMPLIANCE with FCC 47CFR Part 2.1093 exposure limits. The maximum 1g volume averaged SAR found during this test have been 1,150 W/kg, for GPRS 850 MHz 3 slots mode.
Approved by (name / position & signature)	Miguel Lacave Antennas Lab Manager 2024.02.23 10:58:00 +01'00'
Date of issue	2024-02-21
Report template No	FAN44_00 (*) "Data provided by the client"

Index

Competences and guarantees 3
General conditions 3
Uncertainty 3
Data provided by the client 4
Usage of samples 6
Test sample description 6
Identification of the client 6
Testing period and place 6
Document history 7
Environmental conditions 7
Remarks and comments 7
Testing verdicts 9
Summary 9
Appendix A: Test configuration 10
Appendix B: Test results 22
Appendix C: Measurement report 35
Appendix D: System Validation Report 53
Appendix E: Calibration data 61
Appendix F: Photographs 146

Competences and guarantees

DEKRA Testing and Certification S.A.U. is a testing laboratory accredited by the National Accreditation Body (ENAC -Entidad Nacional de Acreditación), to perform the tests indicated in the Certificate No. 51/LE 147.

DEKRA Testing and Certification is a FCC-recognized accredited testing laboratory with appropriate scope of accreditation that include testing performed in this test report.

In order to assure the traceability to other national and international laboratories, DEKRA Testing and Certification S.A.U. has a calibration and maintenance program for its measurement equipment.

DEKRA Testing and Certification S.A.U. guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated on the report and, it is based on the knowledge and technical facilities available at DEKRA Testing and Certification at the time of performance of the test.

DEKRA Testing and Certification S.A.U. is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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General conditions

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA Testing and Certification S.A.U.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA Testing and Certification S.A.U. and the Accreditation Bodies.

Uncertainty

Uncertainty (factor k=2) was calculated according to the following documents:

1. DEKRA Testing and Certification S.A.U. internal document PODT000.
2. FCC OET KDB 865664 D01 - SAR Measurement Requirements for 100 MHz to 6 GHz v01r04 (August 2015).

Data provided by the client

The following data has been provided by the client:

1. Information relating to the description of the sample ("Identification of the item tested", "Trademark", "Model and/or type reference tested", “Other identification of the product”, “Features” and “Test sample description”).

2. Maximum output power, maximum antenna gain and installation/normal use conditions/testing distance information.

3. Derived model not tested. These models have been declared by the supplier of the sample as being the same as the model under test.

ResMed
Changing lives
with every breath

Date: 05-Feb-2024

DECLARATION OF EQUIVALENCE

This document declares that the following designated products are equivalent to the unit under test **28330**.

Model Name / Product Code	Marketing Name
28541	AirCurve 10 ST-A
28542	AirCurve 10 ST-A
28405	AirCurve 10 ST-A

All the above stated products have the same cellular hardware and firmware.

Applicant:
Company Name: ResMed Pty Ltd
Address: 1 Elizabeth Macarthur Drive,
Bella Vista NSW 2153
Australia

By,

Christopher Jenkins
Title: Manager – Systems Engineering
Company: ResMed Pty Ltd
Telephone: +61 2 8884 1517
e-mail: Christopher.jenkins@resmed.com.au

DEKRA Testing and Certification S.A.U. declines any responsibility with respect to the information provided by the client and that may affect the validity of results.

Usage of samples

Samples undergoing test have been selected by: ResMed Pty Ltd

Samples are composed of the following elements:

Sample	Control Nº	Description	Model	Serial Nº	Date of reception
S/01	77595_1.1	CPAP device	28330	22232884594	2023-12-23
S/01	77595_10.1	AC/DC	370006	-	2023-12-23
S/02	77595_7.1	CPAP device	28330	22232884595	2023-12-13
S/02	77595_10.1	AC/DC	370006	-	2023-12-23

1. Sample S/01 has undergone the test(s) specified in subclause “Test method requested”: Conducted average output power.
2. Sample S/02 has undergone the test(s) specified in subclause “Test method requested”: SAR evaluation for 2G, 3G and LTE modes.

Test sample description

Description of product ..... :	CPAP Device		
Software version..... :	SX558		
Hardware version ..... :	R379-7135		
Mounting position ..... :	[X]	Table top equipment	
	[ ]	Wall/Ceiling mounted equipment	
	[ ]	Equipment used next to the ear	
	[ ]	Hand-held equipment	
	[ ]	Other: Body-worn device	
Accessories (not part of the test item)..... :	Description	Type	Manufacturer
	Charging adapter	---	
	USB cable	---	

Identification of the client

ResMed Pty Ltd

1 Elizabeth Macarthur Drive, Bella Vista, NSW, 2153

Testing period and place

Test Location	DEKRA Testing and Certification S.A.U.
Date (start)	2024-01-16
Date (finish)	2024-02-05

Document history

Report number	Date	Description
72146RAN.001	2024-02-21	First release

Environmental conditions

Date	Max. Temp. ºC	Min. Temp. ºC	Max. Hum. %	Min. Hum. %	Limit
From 2024-01-16 to 2024-02-05	23.05	20.01	59.60	42.94	18-25 ºC, 30-70%

Remarks and comments

1. The Head tissue simulating liquid was used for both Head and Body exposure conditions.
2. The wost-case configuration from SAR report 72146RAN.001 has been measured for each frequency band, as mentioned in the FCC OET KDB 178919 D01 Permissive Change Policy v06 (October 2015).
3. Testing of GPRS EDGE mode is not required according to test reductions mentioned in FCC OET KDB 941225 D01 3G SAR Procedures, paragraph “5. GSM, GPRS and EDGE”
4. Testing of HSDPA/HSPA/HSPA+/DC-HSPA modes are not required according to paragraph “2.1 3G SAR test reduction procedure” mentioned in FCC OET KDB 941225 D01 3G SAR Procedures.
5. The tests have been performed by the technical personnel: Ismael Gamarro.

6. The instrumentation utilized to perform the tests covered in this test report is listed in the following table:

DEKRA Control Number	Equipment	S/N
02402	20 dB Attenuator, WEINSCHEL model 75A-20-11	902
04859	DAK software, SPEAG model DAK V1.10.325.10	-
04835	DC POWER SUPPLY 30V/5A 150W	MY58500043
03428	DIPOLO DE VALIDACIÓN 2000MHZ	1021
03527	DIPOLO DE VALIDACIÓN 2600MHZ	1023.
03430	Data acquisition device, SPEAG model DAE4	669
08876	Data acquisition device, SPEAG model DAE4	1690
09448	Dielectric probe kit, SPEAG model DAK-3.5	1329
03427	Dipole validation kit 1800 MHz, SPEAG model D1800V2	2D099
03919	Dipole validation kit 750 MHz, SPEAG model D750V3	1036
03426	Dipole validation kit 900 MHz, SPEAG model D900V2	1D007
06125	Dosimetric E-field Probe, SPEAG model EX3DV4	7461
09513	Dosimetric E-field Probe, SPEAG model EX3DV4	7766
04393	Dual Power meter, Agilent model E4419B	MY45103349
01084	Dual directional coupler, HP model 778D	15821
08902	Electro-optical converter, SPEAG model EOCip-60	1154
09449	Head Tissue Equivalent Liquid for 0.6-10 GHz, SPEAG model HBBL600-10000V6	-
08895	Measurement server, SPEAG model DASY6 SE UMS 028 CA	1602
09168	Oval flat phantom, SPEAG model ELI4 V8.0	2158
03526	POSICIONADOR DE PORTÁTILES	-
02216	Power Divider, PICOSECOND PULSE LABS model 5333-104	236310 1504
04164	Power Sensor 50 MHz-18GHz, R&S model NRP-Z81	100527
03485	Power amplifier, MITEQ model AMF-4D-00400600-50-30P	1456425
04392	Power sensor, Agilent model E9300A	SG41491189
04391	Power sensor, Agilent model E9300A	SG41491203
08894	Robot controller, Stäubli model CS8C	F15/5Z0NB1/C/01
08867	Robot, Stäubli model TX60L	F15/5Z0NB1/A
08898	SAR measurement software, SPEAG model cDASY6	-
03453	Temperature and humidity probe, Pico Technology model HUMIDIPROBE	UAL02/077
04482	Vector Network Analyzer, Agilent Technologies model N9923A FieldFox	US49470126
04804	WIDEBAND RADIO COMMUNICATION TESTER	100974
04948	WIDEBAND RADIO COMMUNICATION TESTER	150306

7. References

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093 and the following FCC Published RF exposure KDB procedures:

- FCC OET KDB 447498 D01 General RF Exposure Guidance v06 (October 2015).
- FCC OET KDB 865664 D01 - SAR Measurement Requirements for 100 MHz to 6 GHz v01r04 (August 2015).
- FCC OET KDB 865664 D02 RF Exposure Reporting v01r02 (October 2015).
- FCC OET KDB 941225 D01 3G SAR Procedures v03r01 (October 2015).
- FCC OET KDB 941225 D05 SAR for LTE Devices v02r05 (October 2015).
- FCC OET KDB 178919 D01 Permissive Change Policy v06 (October 2015).

Testing verdicts

Not applicable :	N/A
Pass :	P
Fail :	F
Not measured :	N/M

Summary

FCC 47CFR Part 2.1093	VERDICT			
	N/A	P	F	N/M
GSM 850		P		
GSM 1900		P		
WCDMA II		P		
WCDMA V		P		
LTE 2		P		
LTE 4		P		
LTE 5		P		
LTE 7		P		
LTE 12		P		
LTE 13		P		
LTE 26		P		
LTE 38		P		
LTE 41		P		

Appendix A: Test configuration

Index

1. GENERAL INTRODUCTION 12
1.1. Application Standard 12
1.2. General requirements 12
1.3. Measurement system requirements 12
1.4. Phantom requirements 12
1.5. Measurement Liquids requirements 13

2. MEASUREMENT SYSTEM 14
2.1. Measurement System 14
2.2. Device Holder 17
2.3. Test Positions of device relative to head and body 17
2.4. Test to be performed 17
2.5. Description of interpolation/extrapolation scheme 17
2.6. Determination of the largest peak spatial-average SAR 17
2.7. System Check 18

3. UNCERTAINTY 19

4. SAR LIMIT 20

5. DEVICE UNDER TEST 20
5.1. Dimensions 20
5.2. Wireless Technology 20
5.3. Simultaneous Transmission 21
5.4. Antenna Location 21

1. GENERAL INTRODUCTION

1.1. Application Standard

The Federal Communications Commission (FCC) sets the limits for General Population/Uncontrolled exposure to radio frequency electromagnetic fields for transmitting devices designed to be used within 20 centimetres of the body of the user under FCC 47 CFR Part 2.1093 - "Radiofrequency radiation exposure evaluation: portable devices", paragraph (d)(2).

1.2. General requirements

The SAR measurement has been performed continuing the following considerations and environment conditions:

The ambient temperature shall be in the range of 18ºC to 25ºC and the variation shall not exceed +/-2ºC during the test.

The ambient humidity shall be in the range of and 30% - 70%.

The device battery shall be fully charged before each measurement.

1.3. Measurement system requirements

The measurement system used for SAR tests fulfills the procedural and technical requirements described at the reference standards used.

1.4. Phantom requirements

The phantom model for body measurements is an elliptical open-top container with a flat bottom, with the following shape and dimensions:

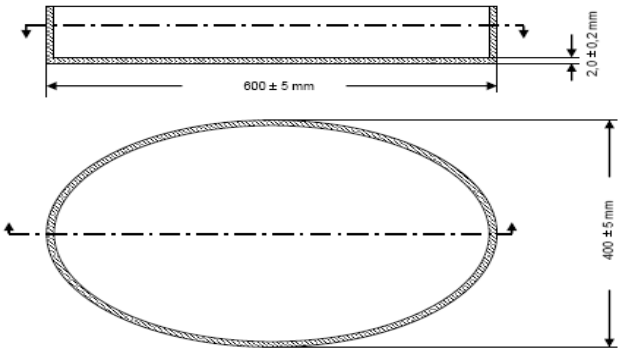


Figure 1: Proportions and shape of Phantom shell

1.5. Measurement Liquids requirements

The liquids used to simulate the human tissues, must fulfill the requirements of the dielectric properties required. These target dielectric properties are indicated into FCC OET KDB 865664 D01 Appendix A.

Frequency (MHz)	Head		Body	
	ε_r	σ (S/m)	ε_r	σ (S/m)
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800-2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00

Table 1: Liquid material requirements

To minimize the effect of reflections on peak spatial-average SAR values, from the upper surface of the tissue equivalent liquid, the depth of the liquid should be at least 15 cm.

Dielectric porperties values of the Tissue Simulant Liquids used for SAR measurements are included in Appendix B, Section 3, of this document.

2. MEASUREMENT SYSTEM

2.1. Measurement System

The DASY6 system for performing compliance tests consists of the following items:

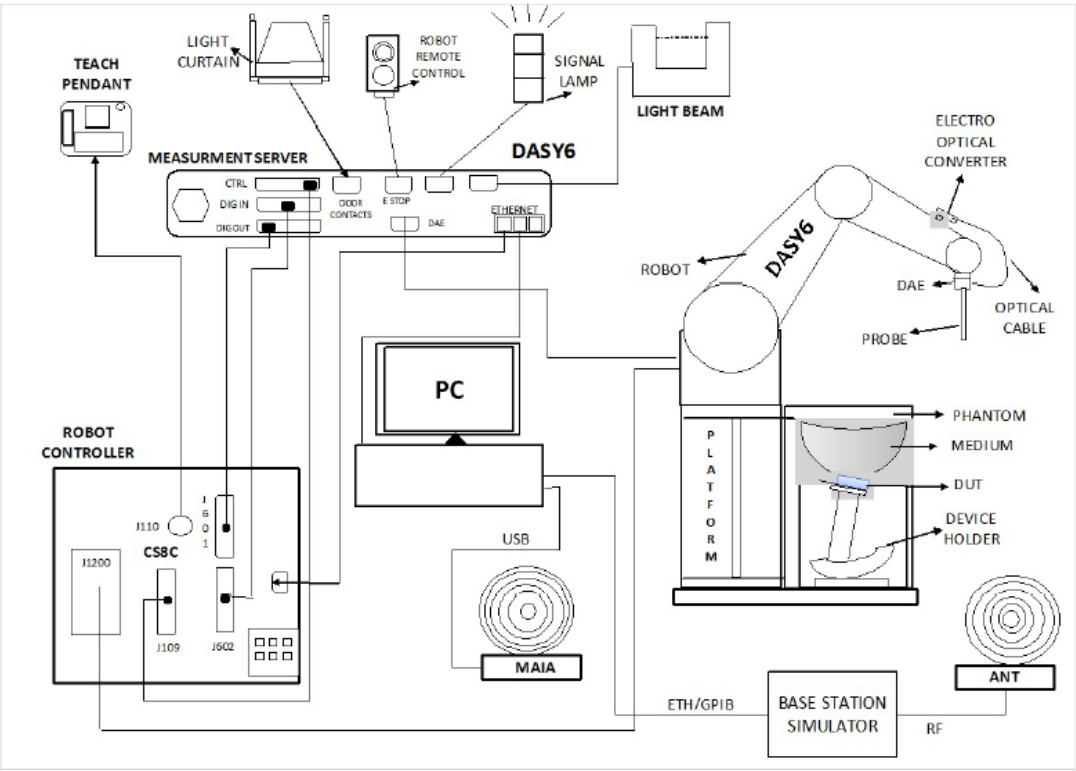
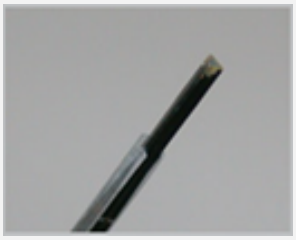


Figure 2: SAR Measurement system

- A standard high precision 6-axis robot (Stäubli TX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running the DASY software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

	Model	EX3DV4
	**Construction**	Symmetrical design with triangular core. Built-in shielding against static charges. PEEK enclosure material (resistant to organic solvents, e.g., DGBE).
	Frequency	10 MHz to > 6 GHz; Linearity: ± 0.2 dB (30 MHz to 6 GHz)
	Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)
	Dynamic Range	10 µW/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)
	Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1.0 mm

	Model	DAE4
	Construction	Signal amplifier, multiplexer, A/D converter, and control logic. Serial optical link communication with DASY4/5 embedded system (fully remote controlled). Two-step probe touch detector for mechanical surface detection and emergency robot stop.
	Measurement Range	-100 to +300 mV (16 bit resolution and two range settings: 4mV, 400mV)
	Input Offset Voltage	< 5 µV (with auto zero)
	Input Resistance	200 MOhm
	Input Blas Current	< 50 fA

	Model	ELI
	Construction	Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.
	Material	Vinylester, glass fiber reinforced (VE-GF)
	Liquid Compatibility	Compatible with all SPEAG tissue simulating liquids (incl. DGBE type)
	Shell Thickness	2 ± 0.2 mm (bottom plate)
	Dimensions	Major axis: 600 mm, Minor axis: 400 mm
	Filling Volume	Approx. 30 liters
	Wooden Support	SPEAG standard phantom table

Model	**Mounting Device for Laptop and Body-Worn Transmitters**
Construction	In combination with the Twin SAM V5.0/V5.0c or ELI Phantoms, the Mounting Device (Body-worn) enables testing of transmitters devices according to IEC 62209-2 specifications. The device holder can be locked for positioning at flat phantom section.
Material	Polyoxymethylene (POM), PET-G, Foam

Model	**System Validations Kits 450 MHz – 6 GHz**
Construction	Symmetrical dipole with I/4 balun. Enables measurement of feedpoint impedance with NWA. Matched for use near flat phantoms filled with tissue simulating solutions.
Frequency	450 MHz to 5800 MHz
Return Loss	20 dB at specified validation position
Dimensions (length and overall height in mm)	

Product	Dipole length	Overall height
D450V3	290.0	330.0
D750V3	179.0	330.0
D900V2	148.5	340.0
D1800V2	72.5	300.0
D2000V2	65.0	300.0
D2300V2	56.3	290.0
D2450V2	52.0	290.0
D2600V2	49.2	290.0
D3300V2	38.0	285.0
D3500V2	37.0	285.0
D3700V2	34.7	285.0
D3900V2	32.0	280.0
D4200V2	30.1	280.0
D4600V2	27.0	280.0
D4900V2	25.0	280.0
D5GHzV2	20.6	300.0

2.2. Device Holder

The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source in 5mm distance, a positioning uncertainty of ±0.5mm would produce a SAR uncertainty of ±20%. An accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions, in which the devices must be measured, are defined by the standards.

The DASY Laptop Holder extension is lightweight and made of POM, PET-G acrylic glass and foam. It fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin-SAM and ELI phantoms.

2.3. Test Positions of device relative to head and body

The device under test consists of a continuous Positive Airway Pressure (CPAP) Device which could be used near the head and body of the user placed on a bedside table.

This device is classified as a class II permissive change from the device tested in the test report 72146RAN.001. The worst case position identified was the Left edge at a separation distance of 20mm for all bands, excepts for band 41, where the position was Left edge at a 15mm distance.

The class II permissive change device has been tested in the Left edge position to compare with the maximum SAR values found in the 72146RAN.001 test report.

2.4. Test to be performed

Test shall be performed for each test position previously described, using the worst case configuration for each band foun in the test report 72146RAN.001.

2.5. Description of interpolation/extrapolation scheme

The local SAR inside the Phantom is measured using small dipole sensing elements inside a probe element. The probe tip must not be in contact with the Phantoms surface in order to minimise measurement errors, but the highest local SAR is obtained from measurements at a certain distance from the shell trough extrapolation. The accurate assessment of the maximum SAR averaged over 10 gr. requires a very fine resolution in the three dimensional scanned data array. Since the measurements have to be performed over a limited time, the measured data have to be interpolated to provide an array of sufficient resolution.

The interpolation of 2D area scan is used after the initial area scan, at a fixed distance from the Phantom shell wall. The initial scan data is collected with approx. 15 mm spatial resolution and this interpolation is used to find the location of the local maximum for positioning the subsequent 3D scanning within a 1mm resolution.

For the 3D scan, data is collected on a spatially regular 3D grid having 5 mm steps in both directions. After the data collection by the SAR probe, the data are extrapolated in the depth direction to assign values to points in the 3D array closer to the shell wall. A notional extrapolation value is also assigned to the first point outside the shell wall so that subsequent interpolation schemes will be applicable right up to the shell wall boundary.

2.6. Determination of the largest peak spatial-average SAR

To determine the maximum value of the peak spatial-average SAR of a DUT, all device positions, configurations and operational modes should be tested for each frequency band.

The averaging volume shall be chosen as 1gr. of contiguous tissue. The cubic volumes, over which the SAR measurements are averaged after extrapolation and interpolation, are chosen in order to include the highest values of local SAR.

The maximum SAR level for the DUT will be the maximum level obtained of the performed measurements indicated in the previous points.

2.7. System Check

Prior to the SAR measurements, system verification is done to verify the system accuracy. As IEEE 1528-2013, Annex paragraph 8.2.1 “System Check - Purpose” specifies, a complete SAR evaluation is done using a half-wavelength dipole as source with the frequency of the mid-band channel of the operating band, or within 10% of this channel, whichever is greater.

The measured 1 gr. and 10 gr. SAR should be within 10% of the expected target values specified in the calibration certificate of the dipole, for the specific tissue and frequency used.

3. UNCERTAINTY

According to FCC OET KDB 865664 D01, if the highest measured 1-g SAR is < 1.5 W/kg, SAR measurement uncertainty analysis is not required to be included into SAR report, but it has been included for ISO 17025 accreditation.

Uncertainty for 300 MHz – 3 GHz

ERROR SOURCES (source of uncertainty)	Uncertainty value (%)	Prob. Dist.	Div.	*ci (1g)*	*ci (10g)*	*Standard uncertainty (1g) (%)*	*Standard uncertainty (10g) (%)*
Measurement Equipment							
Probe Calibration	13.30%	N	2	1	1	6.65%	6.65%
Probe calibration drift	1.70%	R	√3	1	1	0.98%	0.98%
Axial Isotropy	4.70%	R	√3	0.7	0.7	1.90%	1.90%
Hemisfericall Isotropy	9.60%	R	√3	0.7	0.7	3.88%	3.88%
Boundary effect	1.00%	R	√3	1	1	0.58%	0.58%
Linearity	4.70%	R	√3	1	1	2.71%	2.71%
System Detection limits	0.25%	R	√3	1	1	0.14%	0.14%
Probe modulation response	4.80%	N	1	1	1	4.80%	4.80%
Readout electronics	0.30%	N	1	1	1	0.30%	0.30%
Response time	1.01%	R	√3	1	1	0.58%	0.58%
Integration time	2.60%	R	√3	1	1	1.50%	1.50%
RF Ambient noise	3.00%	R	√3	1	1	1.73%	1.73%
RF Ambient reflections	3.00%	R	√3	1	1	1.73%	1.73%
Probe positioner mech. restrictions	0.40%	R	√3	1	1	0.23%	0.23%
Probe positioning with respect to phantom shell	2.90%	R	√3	1	1	1.67%	1.67%
Max. SAR Eval.	2.00%	R	√3	1	1	1.15%	1.15%
Test Sample Related							
Device holder uncertainty	3.60%	N	1	1	1	3.60%	3.60%
Test sample positioning	2.90%	N	1	1	1	2.90%	2.90%
Drift of output power	2.50%	N	1	1	1	2.50%	2.50%
System Validation source (dipole)							
Deviation of experimental dipole from numerical dipole	0.00%	N	1	0	0	0.00%	0.00%
Input power and SAR drift measurement	2.00%	R	√3	1	1	1.15%	1.15%
Dipole axis to liquid distance	3.40%	R	√3	1	1	1.96%	1.96%
Phantom and Setup							
Phantom uncertainty (shape and thickness tolerances)	6.10%	R	√3	1	1	3.52%	3.52%
Algorithm for correcting SAR for deviations in permittivity and conductivity	1.90%	N	1	1	0.84	1.90%	1.60%
Liquid conductivity (meas.)	3.57%	N	1	0.78	0.71	2.79%	2.54%
Liquid permittivity (meas.)	3.57%	N	1	0.26	0.26	0.93%	0.93%
Liquid conductivity – temperature uncertainty	2.30%	R	√3	0.78	0.71	1.04%	0.94%
Liquid permittivity – temperature uncertainty	0.36%	R	√3	0.23	0.26	0.05%	0.05%
Combined standard uncertainty (Validation antenna)	$u_c = \sqrt{\sum_{1=1}^{m} c_i^2 \cdot u_i^2}$					9.88%	9.75%
Expanded uncertainty (confidence interval of 95%)	*ue =2.00 uc*					**19.77%**	**19.51%**
Combined standard uncertainty (DUT)	$u_c = \sqrt{\sum_{1=1}^{m} c_i^2 \cdot u_i^2}$					12.68%	12.58%
Expanded uncertainty (confidence interval of 95%)	*ue =2.00 uc*					**25.36%**	**25.16%**

Table 2: Uncertainty Assessment for 300 MHz - 3 GHz.

4. SAR LIMIT

Having a worst-case measurement, the SAR limit is valid for general population/uncontrolled exposure.

The SAR values have to be averaged over a mass of 1 gr. (SAR 1 gr.) with the shape of a cube and averaged over a mass of 10 gr (Extremity SAR 10 gr). These levels could not exceed the values indicated in the application Standard:

Standard	Exposure	SAR	SAR Limit (W/kg)
FCC 47 CFR Part 1.1310, Paragraph (c)	General population/Uncontrolled	SAR 1-g.	1.6
FCC 47 CFR Part 1.1310, Paragraph (c)	General population/Uncontrolled Extremity	SAR 10-g.	4.0

Table 3: SAR limit

5. DEVICE UNDER TEST

5.1. Dimensions

Dimensions	Millimetres
Height x Width x Depth	116.0 x 255.0 x 150.0

Table 4: DUT dimensions

5.2. Wireless Technology

Wireless Technology	Frequency Bands	Modes
GSM	850/1900	- Voice (GMSK) - GPRS (GMSK, MS class 33) - EGPRS (8PSK, MS class 33)
WCDMA	II//V	- UMTS Rel. 99 - HSDPA (Rel. 5) - HSPA (Rel. 6) - HSPA+ (Rel. 7)
LTE	2/4/5/7/12/13//26/38/41	QPSK and 16-QAM (Rel. 9)

Table 5: Supported modes

5.3. Simultaneous Transmission

The DUT does not support simultaneous transmission.

5.4. Antenna Location

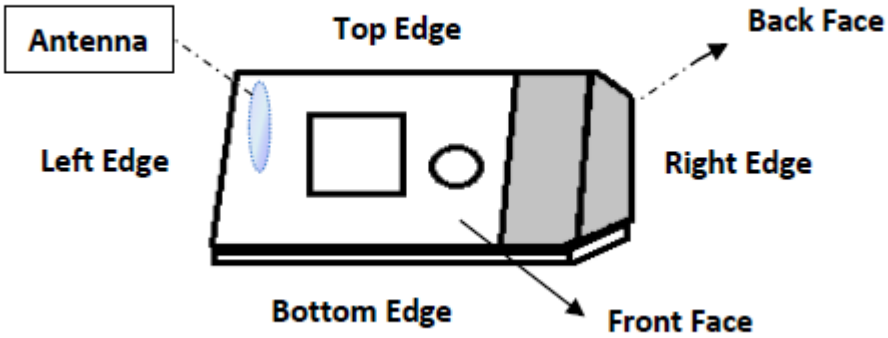


Figure 3: Antenna location sketch.

Appendix B: Test results

Index

1. TEST CONDITIONS 24
1.1. Power supply (V): 24
1.2. Temperature (ºC): 24
1.3. DUT information and test-site configurations 24
1.4. Test signal, Output Power and Frequencies 24

2. CONDUCTED AVERAGE POWER MEASUREMENTS 26
2.1. GSM/GPRS/EGPRS 26
2.2. WCDMA 26
2.3. LTE 27

3. TISSUE PARAMETERS MEASUREMENTS 28

4. SYSTEM CHECK MEASUREMENTS 29

5. MEASUREMENT RESULTS FOR SAR (SPECIFIC ABSORPTION RATE) 30
5.1. Summary maximum results for head measurements. 30
5.2. Summary maximum results for body measurements 31
5.3. Class II permissive change comparison. 32
5.4. GSM/GPRS/EGPRS 33
5.5. WCDMA/HSDPA/HSPA/HSPA+ 33
5.6. LTE 34

1. TEST CONDITIONS

1.1. Power supply (V):

Type of power supply = 90W AC Adapter

1.2. Temperature (ºC):

Tn = +20.00 to +25.00
The subscript n indicates normal test conditions.

1.3. DUT information and test-site configurations

For each band, the device under test (DUT) was positioned with the left edge against the flat phantom surface, following the worst-case configuration outlined in test report 72146RAN.001.
The separation distance between the DUT and the flat phantom surface was set at 20mm for all bands, except for band 41, where the separation distance was 15 mm due to the low level at 20 mm distance.

1.4. Test signal, Output Power and Frequencies

The sample sample was put into operation by using an R&S CMW 500 as base station simulator for 2G, 3G and LTE transmitting. The output power of the device was set to Power Control Level (PCL) maximum for all tests.

The maximum conducted time-averaged power of the device for each mode was measured with a power sensor R&S NRP-Z81.

The target power alignments, including tune-up tolerance, for RF components declared by the manufacturer for each supported technology are:

Technology / Mode	Band	Frequency (MHz)	Maximum Burst Averaged Output Power (Incl. Tune-Up) (dBm)	Maximum Frame Averaged Output Power (Incl. Tune-Up) (dBm)
GPRS 3TX	850	824 - 849	35.0	27.44
GPRS 3TX	1900	1850 - 1910	32.0	21.44

Technology / Mode	Band	Frequency (MHz)	Maximum Output Power (Incl. Tune-Up) (dBm)
UMTS	II	1850 - 1910	25.0
UMTS	V	826 - 847	25.0

Technology / Mode	Band	Frequency (MHz)	Maximum Output Power (Incl. Tune-Up) (dBm)
LTE	2	1850 - 1910	25.0
LTE	4	1710 - 1755	25.0
LTE	5	824 - 849	25.0
LTE	7	2500 - 2570	25.0
LTE	12	699 - 716	25.0
LTE	13	777 - 787	25.0
LTE	14	788 - 798	25.0
LTE	26	814 - 849	25.0
LTE	38	2572.5-2617.5	25.0
LTE	41	2496 - 2690	25.0

2. CONDUCTED AVERAGE POWER MEASUREMENTS

Conducted Output power has been measured in the worst-case configuration of test report 72146RAN.001.

2.1. GSM/GPRS/EGPRS

Technology	Band	Channel	Frequency (MHz)	Uplink Slots	PCL	Frame Average Output Power (dBm)	Burst Average Output Power (dBm)
GPRS	850	128	824.2	3	5	27.51	31.8
GPRS	1900	512	1850.2	3	0	24.22	28.5

2G Notes:

1. **GPRS 850**: For data mode. PCL 5, CS1 coding scheme and Gamma 3 were set to allow max power transmission for each slot.
2. **GPRS1900**: For data mode. PCL 0, CS1 coding scheme and Gamma 3 were set to allow max power transmission for each slot.

2.2. WCDMA

Technology	Band	Channel	Frequency (MHz)	Average Output Power (dBm)
WCDMA	FDD II	9538	1907.6	22.73
WCDMA	FDD V	4132	826.4	23.30

3G Notes:

1. **WCDMA:** The DUT supports power Class 3, with a nominal maximum output power of 24 dBm. Tests were completed according to 3GPP TS34.121, section 5.

Mode	Subtest	Rel99
WCDMA	Loopback Mode	Test Mode 1
	Rel99 RMC	12.2Kbps RMC
	Power Control Algorithm	Algorithm2
	βc/βd	8/15

2.3. LTE

Technology / Band	Bandwidth (MHz)	Modulation	MPR	UL RB Allocation	UL RB Start	Channel	Frequency (MHz)	Average Output Power (dBm)
LTE / FDD 2	20	QPSK	0	1	49	18700	1860	23.38
LTE / FDD 2	20	QPSK	0	1	49	18900	1880	23.33
LTE / FDD 4	20	QPSK	0	1	49	20050	1720	23.31
LTE / FDD 5	10	QPSK	0	1	24	20450	829	23.56
LTE / FDD 7	20	QPSK	0	1	49	21100	2535	22.00
LTE / FDD 12	10	QPSK	0	1	24	23095	707.5	23.15
LTE / FDD 13	10	QPSK	0	1	24	23230	782	23.69
LTE / FDD 26	15	QPSK	0	1	37	26865	831.5	23.50
LTE / TDD 38	20	QPSK	0	1	49	37850	2580	22.48
LTE / TDD 38	20	QPSK	0	1	49	38150	2610	22.89
LTE / TDD 41	20	QPSK	0	1	49	39750	2506	22.11
LTE / TDD 41	20	QPSK	1	50	24	39750	2506	22.03

LTE Notes:

1. LTE MPR is permanently implemented for the device. A-MPR was disabled for all SAR tests. The following power reductions are used for higher RB allocations and 16-QAM modulation:

Modulation	Channel bandwidth / Transmission bandwidth configuration [RB]						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

2. LTE TDD measurements were performed with CMW LTE TDD options “Uplink Downlink Configuration” set to “0” and “Special Subframe” set to “7” to transmit with the maximum uplink duty cycle.

3. TISSUE PARAMETERS MEASUREMENTS

Frequency (MHz)	Target Head Tissue		Measured Head Tissue		Deviation %		Measured Date
	Permittivity ε	Conductivity σ [S/m]	Permittivity ε	Conductivity σ [S/m]	Permittivity ε	Conductivity σ [S/m]	
750	41.94	0.89	41.40	0.93	-1.29	4.11	2024-01-16
835	41.55	0.91	40.27	0.98	-3.10	7.72	2024-01-17
900	41.50	0.97	40.11	1.01	-3.34	4.19	2024-01-17
1750	40.07	1.37	36.59	1.41	-8.67	2.58	2024-01-17
1800	40.00	1.40	36.45	1.44	-8.88	2.54	2024-01-17
1900	40.00	1.40	36.18	1.48	-9.55	5.61	2024-01-17
1750	40.07	1.37	37.81	1.35	-5.65	-1.71	2024-02-04
1800	40.00	1.40	37.75	1.38	-5.63	-1.47	2024-02-04
1900	40.00	1.40	37.50	1.44	-6.26	2.82	2024-02-04
2300	39.47	1.67	38.59	1.79	-2.22	7.16	2024-01-18
2450	39.20	1.80	38.31	1.91	-2.27	6.28	2024-01-18
2600	39.00	1.96	37.98	2.04	-2.63	4.00	2024-01-18
2300	39.47	1.67	37.74	1.72	-4.36	3.07	2024-01-22
2450	39.20	1.80	37.55	1.82	-4.22	0.91	2024-01-22
2600	39.00	1.96	37.24	1.92	-4.53	-2.31	2024-01-22
2300	39.47	1.67	37.61	1.69	-4.70	1.30	2024-02-03
2450	39.20	1.80	37.35	1.79	-4.73	-0.71	2024-02-03
2600	39.00	1.96	37.21	1.91	-4.61	-2.55	2024-02-03

Note: The dielectric properties have been measured by the contact probe method at 22° C.

DASY5 and DASY6 measurement systems have a SAR error compensation algorithm to automatically compensate the measured SAR results for deviations between the measured and required tissue dielectric parameters, so the tolerance for εr and σ may be relaxed to ± 10%.

- Composition / Information on ingredients

Head Tissue Simulation Liquids HBBL600-6000V6

Aqueos solution with surfactants and inhibitors, exact percentage concentration of components is withheld as a trade secret by the manufacturer. Contains:

Ehtanediol	<5.2 %
Sodium petroleum sulfonate	<2.9 %
Hexylene Glycol / 2 – Methyl-pentane-2,4-diol	<2.9 %
Alkoxylated alcohol, > C_{16}	<2.0 %

4. SYSTEM CHECK MEASUREMENTS

Execution Date	Frequency (MHz)	SAR over	Fast SAR (W/Kg)	SAR (W/Kg)	1 W Target SAR (W/Kg)	1 W Nor. SAR (W/Kg)	Drift (%)
2024/01/16	750	1 gr.	0.90	0.89	8.85	8.87	0.23
		10 gr.	0.60	0.58	5.81	5.82	0.17
2024/01/17	900	1 gr.	1.21	1.16	10.58	11.60	9.64
		10 gr.	0.79	0.75	6.81	7.45	9.40
2024/01/17	1800	1 gr.	3.98	3.98	39.74	39.80	0.15
		10 gr.	2.12	2.07	20.86	20.70	-0.77
2024/02/04	1800	1 gr.	3.72	3.63	39.74	39.80	-8.66
		10 gr.	1.98	1.91	20.86	20.70	-8.44
2024/01/18	2600	1 gr.	5.84	5.83	57.02	58.30	2.24
		10 gr	2.64	2.61	25.64	26.10	1.79
2024/01/22	2600	1 gr.	5.65	5.64	57.02	56.40	-1.09
		10 gr.	2.55	2.52	25.64	25.20	-1.72
2024/02/03	2600	1 gr.	5.43	5.42	57.02	56.40	-4.51
		10 gr.	2.48	2.43	25.64	25.20	-4.79

5. MEASUREMENT RESULTS FOR SAR (SPECIFIC ABSORPTION RATE)

5.1. Summary maximum results for head measurements.

Mode	Side / Position	Channel (Frequency)	Reported SAR 1-g (W/kg)	Limit SAR 1-g (W/kg)
GPRS 4 slots 850 MHz	Left face/20 mm	CH 128 (824.2 MHz)	1.150	1.6
GPRS 4 slots 1900 MHz	Left face/20 mm	CH 810 (1909.8 MHz)	0.376	1.6
WCDMA Band II	Left face/20 mm	CH 9538 (1907.6 MHz)	0.375	1.6
WCDMA Band V	Left face/20 mm	CH 4132 (826.4 MHz)	0.499	1.6
LTE Band 2	Left face/20 mm	CH 18700 (1860.0 MHz)	0.481	1.6
LTE Band 4	Left face/20 mm	CH 20300 (1745.0 MHz)	0.445	1.6
LTE Band 5	Left face/20 mm	CH 20450 (829.0 MHz)	0.504	1.6
LTE Band 7	Left face/20 mm	CH 21100 (2535.0 MHz)	0.143	1.6
LTE Band 12	Left face/20 mm	CH 23095 (707.5 MHz)	0.979	1.6
LTE Band 13	Left face/20 mm	CH 23230 (782.0 MHz)	0.783	1.6
LTE Band 26	Left face/20 mm	CH 26865 (831.5 MHz)	0.478	1.6
LTE Band 38	Left face/20 mm	CH 38150 (2610.0 MHz)	0.075	1.6
LTE Band 41	Left face/15 mm	CH 39750 (2506.0 MHz)	0.077	1.6

5.2. Summary maximum results for body measurements.

Mode	Side / Position	Channel (Frequency)	Reported SAR 1-g (W/kg)	Limit SAR 1-g (W/kg)
GPRS 3 slots 850 MHz	Left face/20 mm	CH 128 (824.2 MHz)	1.150	1.6
GPRS 3 slots 1900 MHz	Left face/20 mm	CH 810 (1909.8 MHz)	0.376	1.6
WCDMA Band II	Left face/20 mm	CH 9538 (1907.6 MHz)	0.375	1.6
WCDMA Band V	Left face/20 mm	CH 4233 (846.6 MHz)	0.546	1.6
LTE Band 2	Left face/20 mm	CH 18900 (1880.0 MHz)	0.386	1.6
LTE Band 4	Left face/20 mm	CH 20300 (1745.0 MHz)	0.445	1.6
LTE Band 5	Left face/20 mm	CH 20450 (829.0 MHz)	0.504	1.6
LTE Band 7	Left face/20 mm	CH 21100 (2535.0 MHz)	0.143	1.6
LTE Band 12	Left face/20 mm	CH 23095 (707.5 MHz)	0.979	1.6
LTE Band 13	Left face/20 mm	CH 23230 (782.0 MHz)	0.783	1.6
LTE Band 26	Left face/20 mm	CH 26865 (831.5 MHz)	0.478	1.6
LTE Band 38	Left face/20 mm	CH 37850 (2580.0 MHz)	0.107	1.6
LTE Band 41	Left face/15 mm	CH 39750 (2506.0 MHz)	0.070	1.6

5.3. Class II permissive change comparison.

The values obtained as a result of the difference between the class II permissive change model tested in this report and the reference model tested in the test report 72146RAN.002 are summarized in the following table:

Mode	Exposure Condition	Channel (Frequency)	Reported SAR 1-g (W/kg)	72146RAN.001 test report Reported SAR (W/Kg)	Result
GPRS 3 slots 850 MHz	Head	CH 128 (824.2 MHz)	1.150	1.210	-0.06
GPRS 3 slots 1900 MHz		CH 810 (1909.8 MHz)	0.376	0.481	-0.105
WCDMA Band II		CH 9538 (1907.6 MHz)	0.375	0.418	-0.043
WCDMA Band V		CH 4132 (826.4 MHz)	0.499	0.479	0.02
LTE Band 2		CH 18700 (1860.0 MHz)	0.481	0.481	0
LTE Band 4		CH 20300 (1745.0 MHz)	0.445	0.435	0.01
LTE Band 5		CH 20450 (829.0 MHz)	0.504	0.524	-0.02
LTE Band 7		CH 21100 (2535.0 MHz)	0.143	0.105	0.038
LTE Band 12		CH 23095 (707.5 MHz)	0.979	0.893	0.086
LTE Band 13		CH 23230 (782.0 MHz)	0.783	0.785	-0.002
LTE Band 26		CH 26865 (831.5 MHz)	0.478	0.434	-0.044
LTE Band 38		CH 38150 (2610.0 MHz)	0.075	0.061	0.014
LTE Band 41		CH 39750 (2506.0 MHz)	0.077	0.090	-0.013
GPRS 3 slots 850 MHz	Body	CH 128 (824.2 MHz)	1.150	1.157	-0.007
GPRS 3 slots 1900 MHz		CH 810 (1909.8 MHz)	0.376	0.312	0.064
WCDMA Band II		CH 9538 (1907.6 MHz)	0.375	0.304	0.071
WCDMA Band V		CH 4233 (846.6 MHz)	0.546	0.541	0.005
LTE Band 2		CH 18900 (1880.0 MHz)	0.386	0.322	0.064
LTE Band 4		CH 20300 (1745.0 MHz)	0.445	0.416	0.029
LTE Band 5		CH 20450 (829.0 MHz)	0.504	0.560	-0.056
LTE Band 7		CH 21100 (2535.0 MHz)	0.143	0.169	-0.026
LTE Band 12		CH 23095 (707.5 MHz)	0.979	0.835	0.144
LTE Band 13		CH 23230 (782.0 MHz)	0.783	0.786	-0.003
LTE Band 26		CH 26865 (831.5 MHz)	0.478	0.481	-0.003
LTE Band 38		CH 37850 (2580.0 MHz)	0.107	0.090	0.017
LTE Band 41		CH 39750 (2506.0 MHz)	0.070	0.059	0.011

5.4. GSM/GPRS/EGPRS

Tech.	Band	Expos. Cond.	Pos.	Dist (mm)	Channel	Freq. (MHz)	Estimated SAR 1-g (W/kg)	SAR 1-g (W/kg)	Power Drift (%)	Scale factor	Reported SAR 1-g (W/kg)	Limit SAR 1-g (W/kg)	Verdict	Plot No.
GPRS 3TX	850	Head	Left Edge	20	128	824.20	1.150	1.150	-0.803	1.000	1.150	1.600	Pass	1
GPRS 3TX	850	Body	Left Edge	20	128	824.20	1.150	1.150	-0.803	1.000	1.150	1.600	Pass	1
GPRS 3TX	1900	Head	Left Edge	20	810	1909.80	0.359	0.376	-1.03	1.000	0.376	1.600	Pass	2
GPRS 3TX	1900	Body	Left Edge	20	810	1909.80	0.359	0.376	-1.03	1.000	0.376	1.600	Pass	2

See Remarks and comments 1 and 2.

5.5. WCDMA/HSDPA/HSPA/HSPA+

Tech.	Band	Expos. Cond.	Pos.	Dist (mm)	Channel	Freq. (MHz)	Estimated SAR 1-g (W/kg)	SAR 1-g (W/kg)	Power Drift (%)	Scale factor	Reported SAR 1-g (W/kg)	Limit SAR 1-g (W/kg)	Verdict	Plot No.
WCDMA	FDDII	Head	Left Edge	20	9538	1907.60	0.270	0.280	-0.000	1.340	0.375	1.600	Pass	3
WCDMA	FDDII	Body	Left Edge	20	9538	1907.60	0.270	0.280	-0.000	1.340	0.375	1.600	Pass	3
WCDMA	FDDV	Head	Left Edge	20	4132	826.40	0.417	0.425	-1.031	1.180	0.499	1.600	Pass	4
WCDMA	FDDV	Body	Left Edge	20	4233	846.60	0.475	0.487	-0.115	1.120	0.546	1.600	Pass	5

See Remarks and comments 1 and 2.

5.6. LTE

Tech./Band	Expos. Cond.	Mode	Pos.	Dist (mm)	Channel	Freq. (MHz)	Estimated SAR 1-g (W/kg)	SAR 1-g (W/kg)	Power Drift (%)	Scale factor	Reported SAR 1-g (W/kg)	Limit SAR 1-g (W/kg)	Verdict	Plot No.
LTE/FDD2	Head	1RB Mid	Left Edge	20	18700	1860.00	0.402	0.417	1.625	1.153	0.481	1.600	Pass	6
LTE/FDD2	Body	1RB Mid	Left Edge	20	18900	1880.00	0.313	0.331	0.809	1.167	0.386	1.600	Pass	7
LTE/FDD4	Head	1RB Mid	Left Edge	20	20300	1745.00	0.373	0.380	-2.164	1.172	0.445	1.600	Pass	8
LTE/FDD4	Body	1RB Mid	Left Edge	20	20300	1745.00	0.373	0.380	-2.164	1.172	0.445	1.600	Pass	8
LTE/FDD5	Head	1RB Mid	Left Edge	20	20450	829.00	0.440	0.455	-0.459	1.107	0.504	1.600	Pass	9
LTE/FDD5	Body	1RB Mid	Left Edge	20	20450	829.00	0.440	0.455	-0.459	1.107	0.504	1.600	Pass	9
LTE/FDD7	Head	1RB Mid	Left Edge	20	21100	2535.00	0.098	0.101	-1.599	1.413	0.143	1.600	Pass	10
LTE/FDD7	Body	1RB Mid	Left Edge	20	21100	2535.00	0.098	0.101	-1.599	1.413	0.143	1.600	Pass	10
LTE/FDD12	Head	1RB Mid	Left Edge	20	23095	707.50	0.788	0.805	-0.115	1.216	0.979	1.600	Pass	11
LTE/FDD12	Body	1RB Mid	Left Edge	20	23095	707.50	0.788	0.805	-0.115	1.216	0.979	1.600	Pass	11
LTE/FDD13	Head	1RB Mid	Left Edge	20	23230	782.00	0.752	0.729	0.000	1.074	0.783	1.600	Pass	12
LTE/FDD13	Body	1RB Mid	Left Edge	20	23230	782.00	0.752	0.729	-0.115	1.074	0.783	1.600	Pass	12
LTE/FDD26	Head	1RB Mid	Left Edge	20	26865	831.50	0.410	0.426	-1.145	1.122	0.478	1.600	Pass	13
LTE/FDD26	Body	1RB Mid	Left Edge	20	26865	831.50	0.410	0.426	-1.145	1.122	0.478	1.600	Pass	13
LTE/TDD38	Head	1RB Mid	Left Edge	20	38150	2610.00	0.048	0.053	0.809	1.419	0.075	1.600	Pass	14
LTE/TDD38	Body	1RB Mid	Left Edge	20	37850	2580.00	0.080	0.083	-0.803	1.291	0.107	1.600	Pass	15
LTE/TDD41	Head	50% RB Mid	Left Edge	15	39750	2506.00	0.051	0.049	-1.145	1.574	0.077	1.600	Pass	16
LTE/TDD41	Body	1RB Mid	Left Edge	15	39750	2506.00	0.046	0.045	2.57	1.545	0.070	1.600	Pass	17

See Remarks and comments 1 and 2.

Appendix C: Measurement report

Plot Nº1

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	GSM 850	GSM, 10027-DAC	824.2, 128	9.47	0.956	41.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 750MHz - 2024-01-16 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

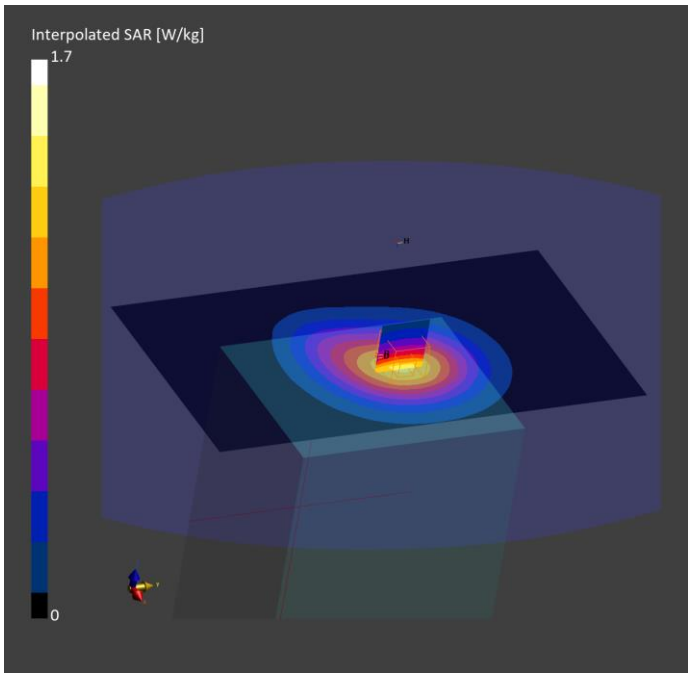
	Area Scan	Zoom Scan
Grid Extents [mm]	150.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-16, 14:40	2024-01-16, 14:47
psSAR1g [W/kg]	1.15	1.15
psSAR10g [W/kg]	0.800	0.821
Power Drift [dB]	-0.07	0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		87.8
Dist 3dB Peak [mm]		> 15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº2

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	PCS 1900	GSM, 10027-DAC	1909.8, 810	9.47	1.44	37.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 1800MHz - 2024-02-04 , --	EX3DV4 - SN7766, 2023-10-17	DAE4 Sn1690, 2023-10-20

Scan Setup

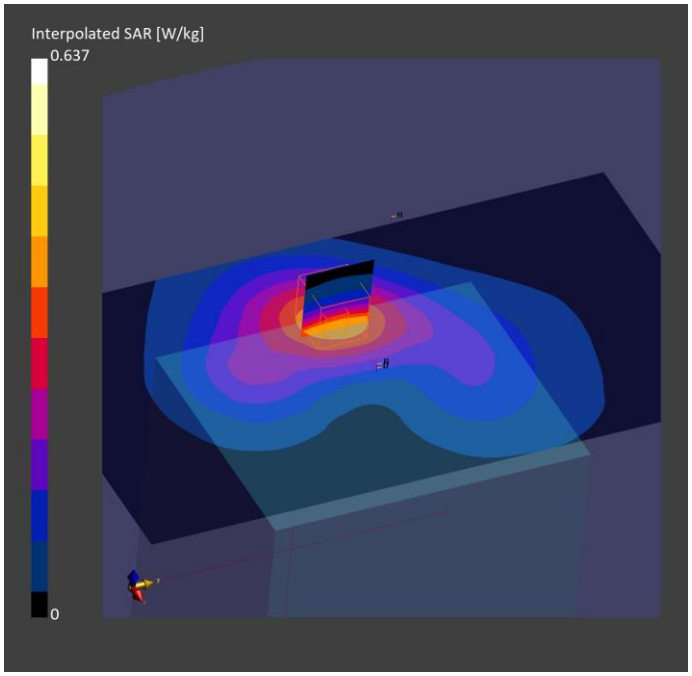
	Area Scan	Zoom Scan
Grid Extents [mm]	150.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-02-05, 10:00	2024-02-05, 10:18
psSAR1g [W/kg]	0.359	0.376
psSAR10g [W/kg]	0.222	0.238
Power Drift [dB]	-0.04	-0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		82.8
Dist 3dB Peak [mm]		> 15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 2	WCDMA, 10011-CAC	1907.6, 9538	8.3	1.48	36.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 1800MHz - 2024-01-17 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

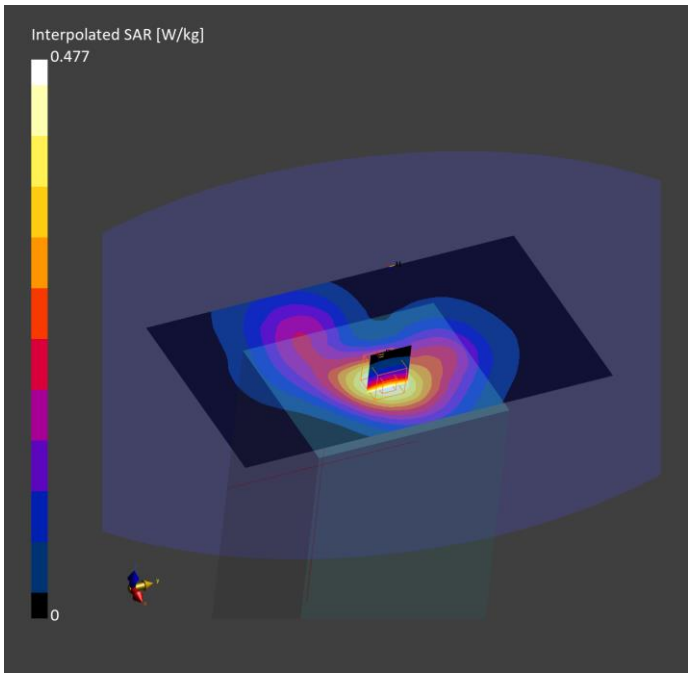
	Area Scan	Zoom Scan
Grid Extents [mm]	150.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-18, 12:59	2024-01-18, 13:05
psSAR1g [W/kg]	0.270	0.280
psSAR10g [W/kg]	0.166	0.175
Power Drift [dB]	0.01	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		83.1
Dist 3dB Peak [mm]		> 15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº4

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 5	WCDMA, 10011-CAC	826.4, 4132	9.47	0.957	41.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 750MHz - 2024-01-16 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

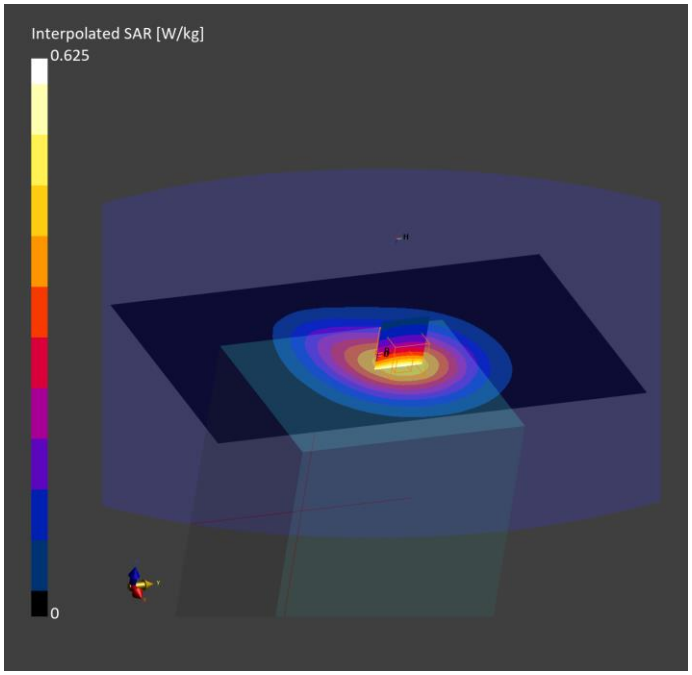
	Area Scan	Zoom Scan
Grid Extents [mm]	150.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-16, 15:04	2024-01-16, 15:10
psSAR1g [W/kg]	0.417	0.425
psSAR10g [W/kg]	0.289	0.302
Power Drift [dB]	-0.11	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		87.7
Dist 3dB Peak [mm]		> 15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº5

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 5	WCDMA, 10011-CAC	846.6, 4233	9.47	0.965	41.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 750MHz - 2024-01-16 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

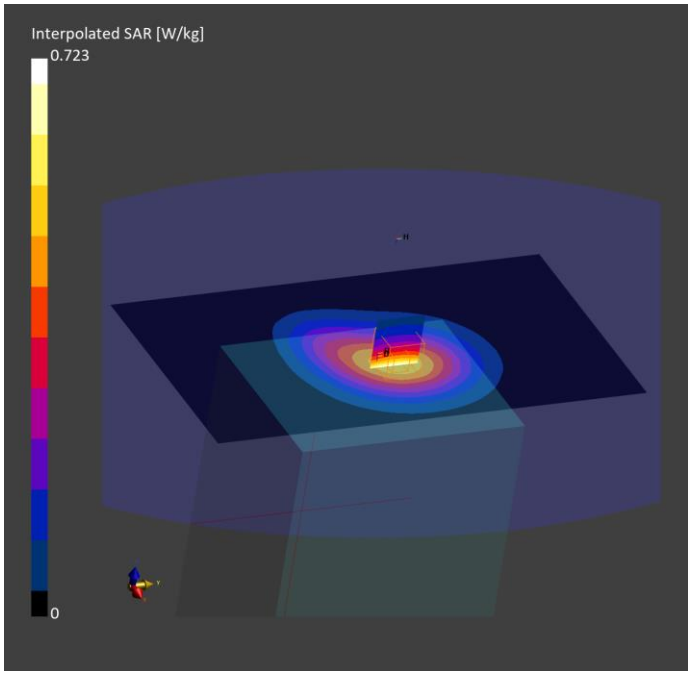
	Area Scan	Zoom Scan
Grid Extents [mm]	150.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-17, 10:37	2024-01-17, 10:42
psSAR1g [W/kg]	0.475	0.487
psSAR10g [W/kg]	0.328	0.344
Power Drift [dB]	0.01	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		87.5
Dist 3dB Peak [mm]		> 15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº6

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 2	LTE-FDD, 10169-CAF	1860.0, 18700	8.3	1.46	36.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 1800MHz - 2024-01-17 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

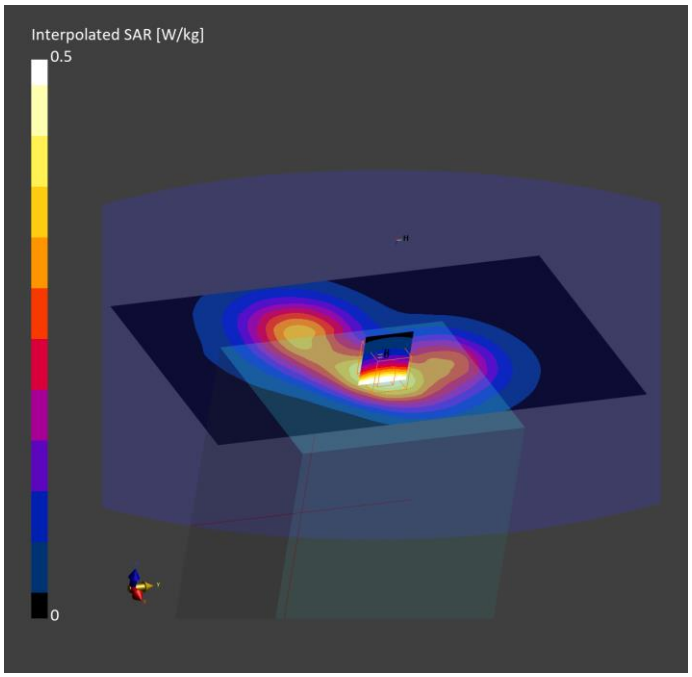
	Area Scan	Zoom Scan
Grid Extents [mm]	150.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-17, 14:23	2024-01-17, 14:29
psSAR1g [W/kg]	0.402	0.417
psSAR10g [W/kg]	0.249	0.264
Power Drift [dB]	-0.01	0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		83.4
Dist 3dB Peak [mm]		> 15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº7

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 2	LTE-FDD, 10169-CAF	1880.0, 18900	8.3	1.47	36.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 1800MHz - 2024-01-17 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

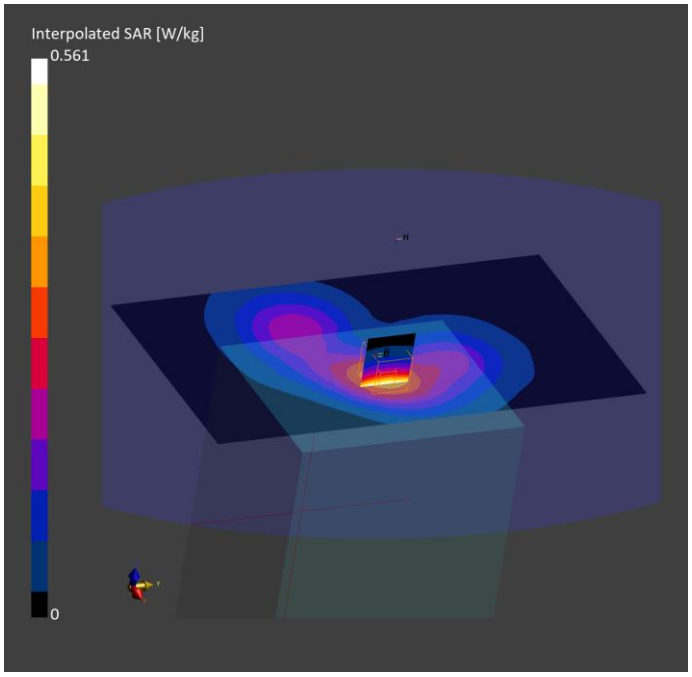
	Area Scan	Zoom Scan
Grid Extents [mm]	150.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-17, 14:51	2024-01-17, 14:57
psSAR1g [W/kg]	0.313	0.331
psSAR10g [W/kg]	0.194	0.208
Power Drift [dB]	-0.11	0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		82.8
Dist 3dB Peak [mm]		> 15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº8

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 4	LTE-FDD, 10169-CAF	1745.0, 20300	8.3	1.41	36.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 1800MHz - 2024-01-17 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

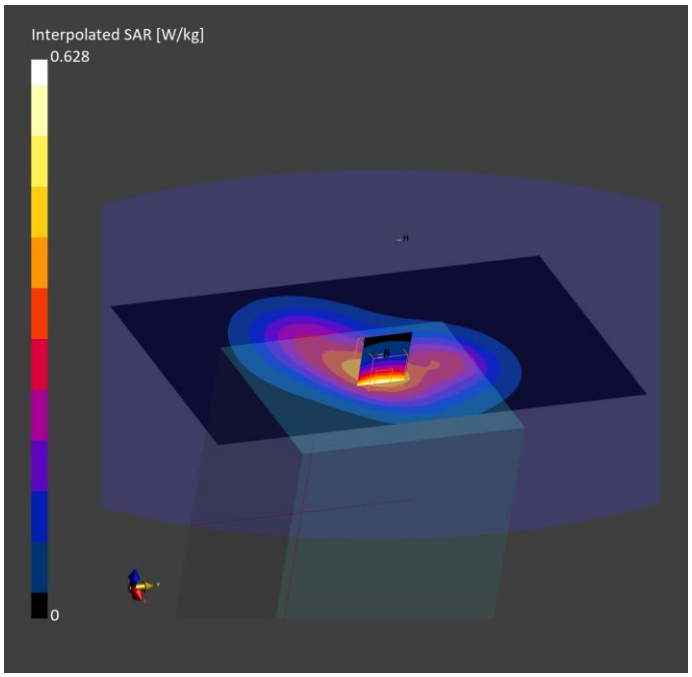
	Area Scan	Zoom Scan
Grid Extents [mm]	150.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-18, 10:19	2024-01-18, 10:25
psSAR1g [W/kg]	0.373	0.380
psSAR10g [W/kg]	0.236	0.246
Power Drift [dB]	-0.12	-0.10
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		84.2
Dist 3dB Peak [mm]		> 15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº9

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 5	LTE-FDD, 10175-CAH	829.0, 20450	9.47	0.958	41.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 750MHz - 2024-01-16 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

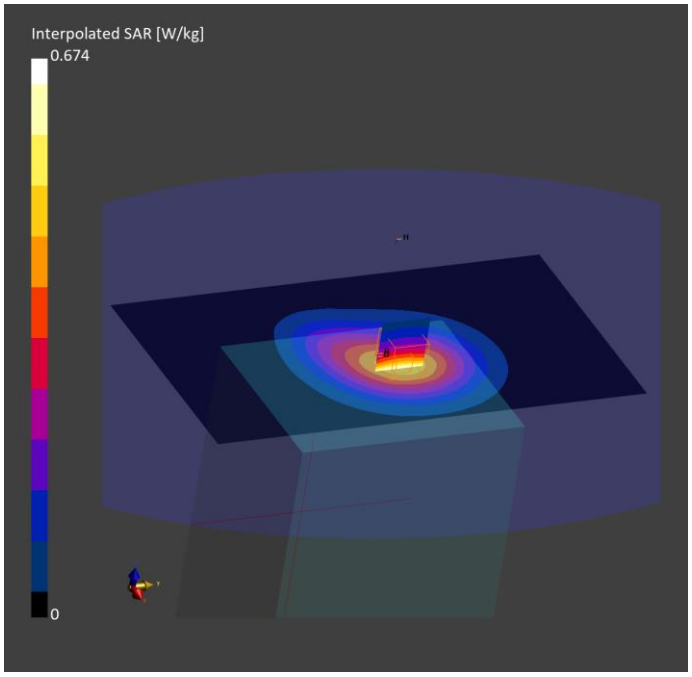
	Area Scan	Zoom Scan
Grid Extents [mm]	150.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-16, 15:53	2024-01-16, 15:59
psSAR1g [W/kg]	0.440	0.455
psSAR10g [W/kg]	0.304	0.322
Power Drift [dB]	0.03	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		87.5
Dist 3dB Peak [mm]		> 15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº10

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 7	LTE-FDD, 10169-CAF	2535.0, 21100	8.24	1.88	37.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 2600MHz - 2024-01-22 , --	EX3DV4 - SN7766, 2023-10-17	DAE4 Sn1690, 2023-10-20

Scan Setup

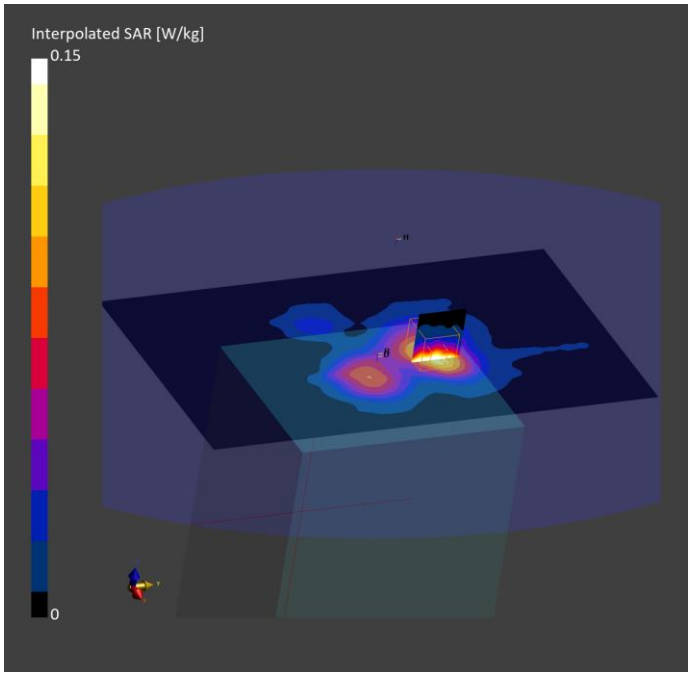
	Area Scan	Zoom Scan
Grid Extents [mm]	160.0 x 280.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-23, 08:58	2024-01-23, 09:07
psSAR1g [W/kg]	0.098	0.101
psSAR10g [W/kg]	0.054	0.057
Power Drift [dB]	-0.01	0.26
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		80.7
Dist 3dB Peak [mm]		15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº11

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 12	LTE-FDD, 10175-CAH	707.5, 23095	9.9	0.915	41.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 750MHz - 2024-01-16 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

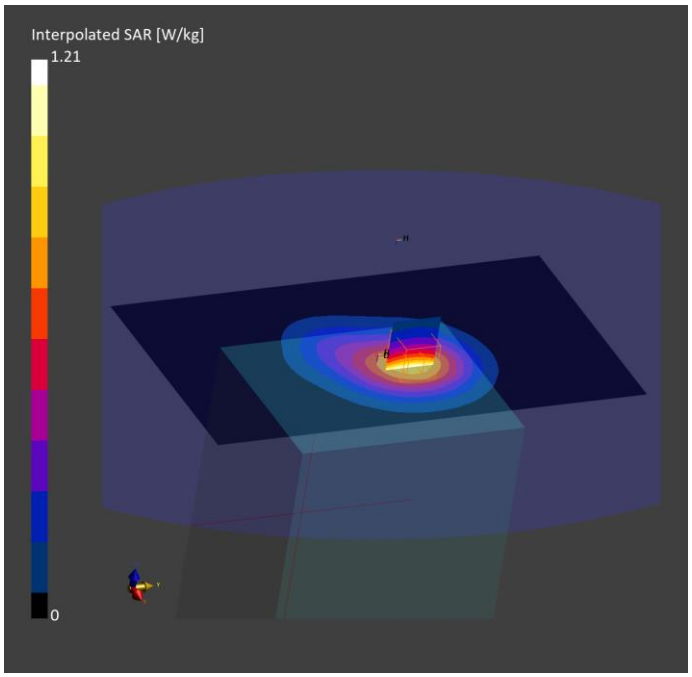
	Area Scan	Zoom Scan
Grid Extents [mm]	150.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-16, 17:10	2024-01-16, 17:15
psSAR1g [W/kg]	0.788	0.805
psSAR10g [W/kg]	0.543	0.560
Power Drift [dB]	-0.01	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		86.3
Dist 3dB Peak [mm]		> 15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº12

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 13	LTE-FDD, 10175-CAH	782.0, 23230	9.9	0.940	41.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 750MHz - 2024-01-16 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

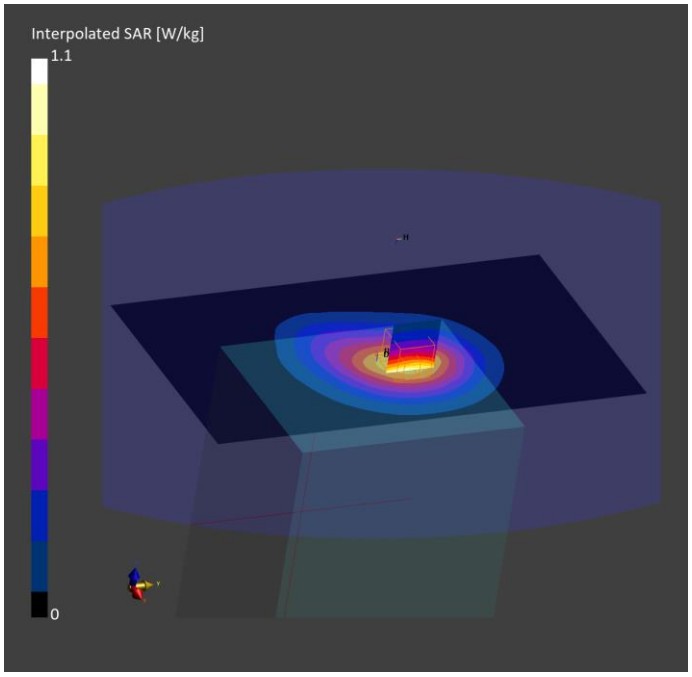
	Area Scan	Zoom Scan
Grid Extents [mm]	150.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-17, 09:12	2024-01-17, 09:18
psSAR1g [W/kg]	0.752	0.729
psSAR10g [W/kg]	0.516	0.515
Power Drift [dB]	0.01	-0.24
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		86.1
Dist 3dB Peak [mm]		> 15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº13

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 26	LTE-FDD, 10181-CAF	831.5, 26865	9.47	0.959	41.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 750MHz - 2024-01-16 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

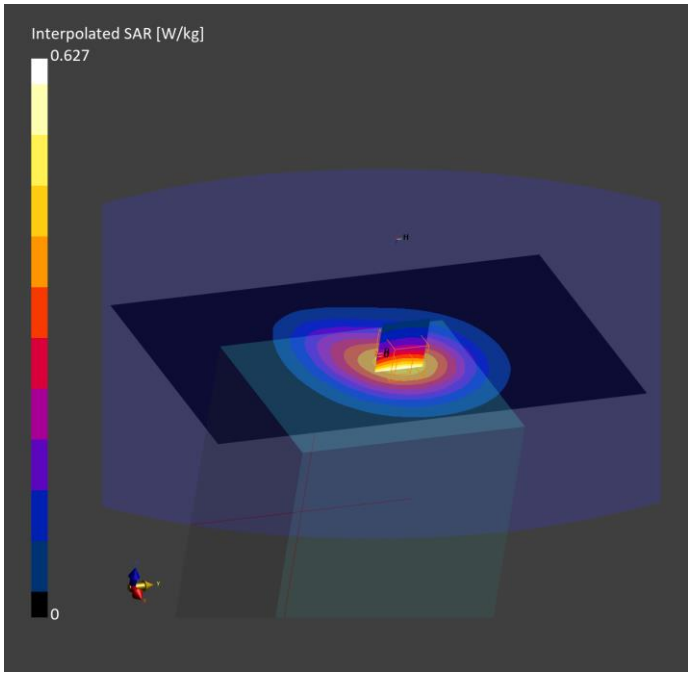
	Area Scan	Zoom Scan
Grid Extents [mm]	150.0 x 270.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-17, 09:47	2024-01-17, 09:53
psSAR1g [W/kg]	0.410	0.426
psSAR10g [W/kg]	0.285	0.302
Power Drift [dB]	-0.01	-0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		87.7
Dist 3dB Peak [mm]		> 15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº14

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 38	LTE-TDD, 10172-CAH	2610.0, 38150	8.24	1.92	37.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 2600MHz - 2024-01-22 , --	EX3DV4 - SN7766, 2023-10-17	DAE4 Sn1690, 2023-10-20

Scan Setup

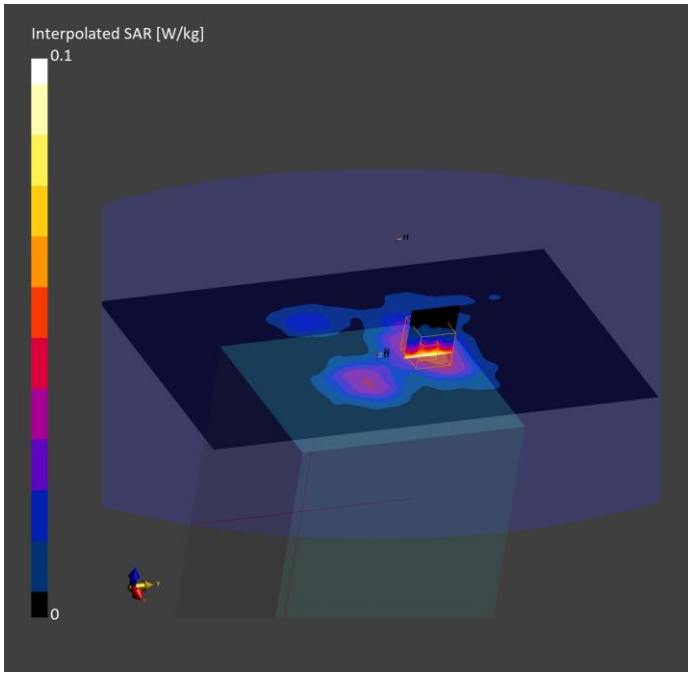
	Area Scan	Zoom Scan
Grid Extents [mm]	160.0 x 280.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-22, 16:14	2024-01-22, 16:21
psSAR1g [W/kg]	0.048	0.053
psSAR10g [W/kg]	0.026	0.030
Power Drift [dB]	-0.05	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		85.0
Dist 3dB Peak [mm]		17.1

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº15

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 38	LTE-TDD, 10435-AAG	2580.0, 37850	8.24	1.91	37.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 2600MHz - 2024-01-22 , --	EX3DV4 - SN7766, 2023-10-17	DAE4 Sn1690, 2023-10-20

Scan Setup

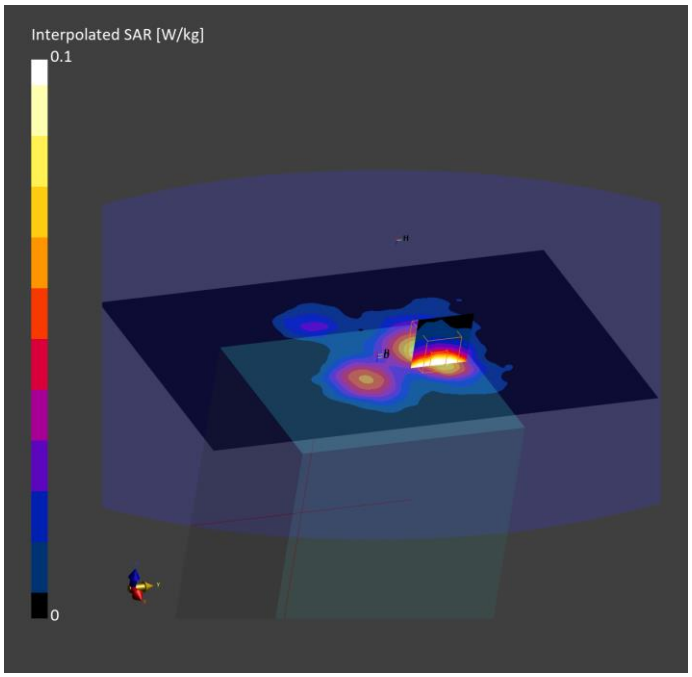
	Area Scan	Zoom Scan
Grid Extents [mm]	160.0 x 280.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-22, 15:00	2024-01-22, 15:10
psSAR1g [W/kg]	0.080	0.083
psSAR10g [W/kg]	0.043	0.047
Power Drift [dB]	0.12	-0.26
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		81.5
Dist 3dB Peak [mm]		16.5

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº16

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 41	LTE-TDD, 10151-CAH	2506.0, 39750	8.24	1.86	37.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 2600MHz - 2024-01-22 , --	EX3DV4 - SN7766, 2023-10-17	DAE4 Sn1690, 2023-10-20

Scan Setup

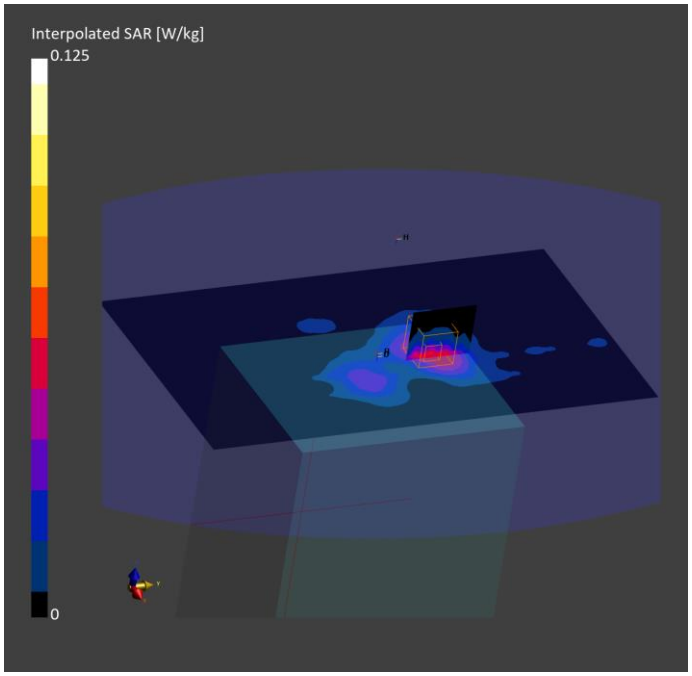
	Area Scan	Zoom Scan
Grid Extents [mm]	160.0 x 280.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-23, 13:06	2024-01-23, 13:17
psSAR1g [W/kg]	0.051	0.049
psSAR10g [W/kg]	0.028	0.029
Power Drift [dB]	0.07	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		82.2
Dist 3dB Peak [mm]		15.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Plot Nº17

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Airsense 10 Elite, ResMed Pty Ltd	240.0 x 140.0 x 115.0		CPAP Device

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	EDGE LEFT, 20.00	Band 41	LTE-TDD, 10172-CAH	2506.0, 39750	8.24	1.83	37.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 2600MHz - 2024-02-03 , --	EX3DV4 - SN7766, 2023-10-17	DAE4 Sn1690, 2023-10-20

Scan Setup

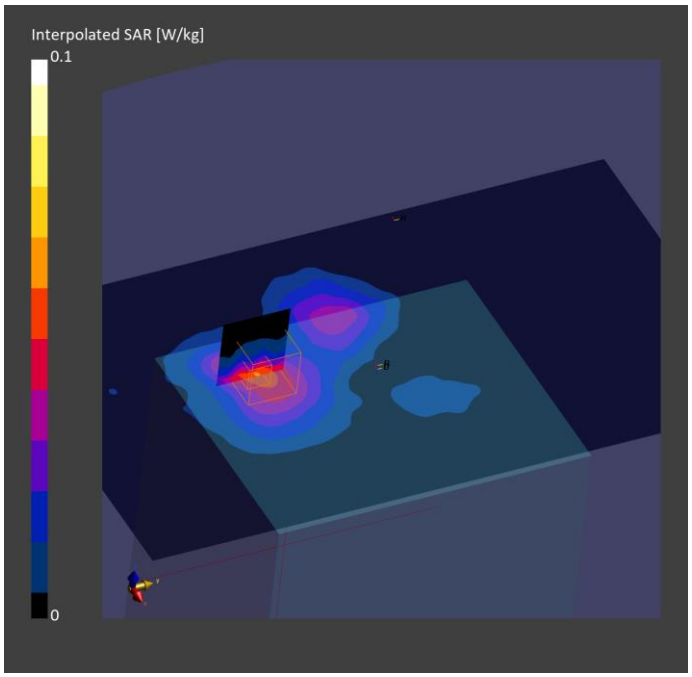
	Area Scan	Zoom Scan
Grid Extents [mm]	160.0 x 280.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-02-05, 12:04	2024-02-05, 12:13
psSAR1g [W/kg]	0.046	0.045
psSAR10g [W/kg]	0.025	0.025
Power Drift [dB]	0.13	-0.20
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		82.6
Dist 3dB Peak [mm]		11.2

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Appendix D: System Validation Report

Validation results in 750 MHz Band for Head TSL

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	n/a x n/a x n/a		Dipole

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	,		CW, 0--	750.0, 0	9.9	0.930	41.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 750MHz - 2024-01-16 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

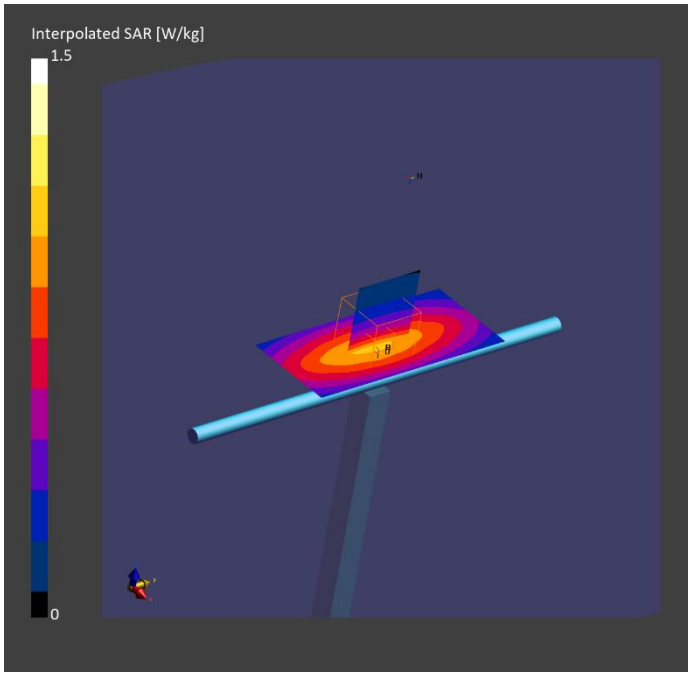
	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-16, 11:25	2024-01-16, 11:30
psSAR1g [W/kg]	0.895	0.887
psSAR10g [W/kg]	0.598	0.582
Power Drift [dB]	0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		86.5
Dist 3dB Peak [mm]		23.9

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Validation results in 900 MHz Band for Head TSL

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	n/a x n/a x n/a		Dipole

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	,		CW, 0--	900.0, 0	9.47	1.01	40.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 900MHz - 2023-01-17 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

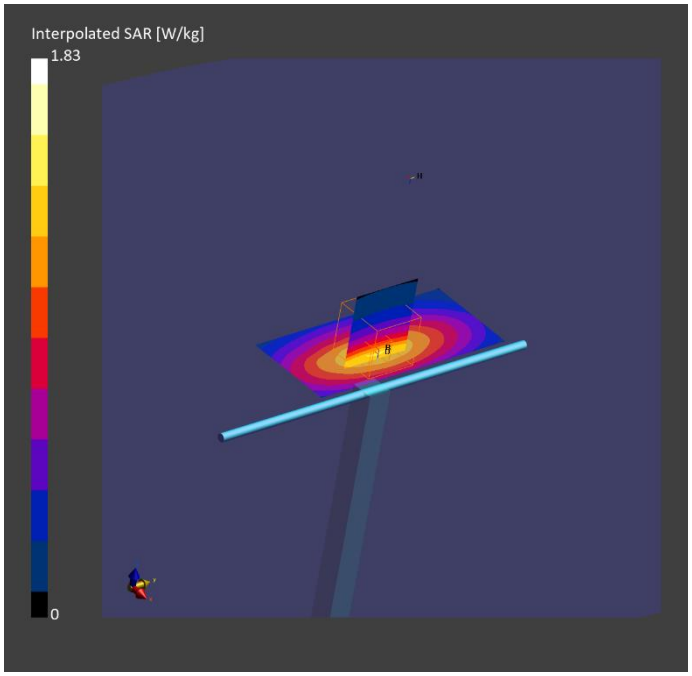
	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-17, 11:29	2024-01-17, 11:34
psSAR1g [W/kg]	1.21	1.16
psSAR10g [W/kg]	0.792	0.745
Power Drift [dB]	-0.09	-0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		86.5
Dist 3dB Peak [mm]		17.4

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Validation results in 1800 MHz Band for Head TSL

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	n/a x n/a x n/a		Dipole

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	,		CW, 0--	1800.0, 0	8.3	1.44	36.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 1800MHz - 2024-01-17 , --	EX3DV4 - SN7461, 2023-08-17	DAE4 Sn669, 2023-08-08

Scan Setup

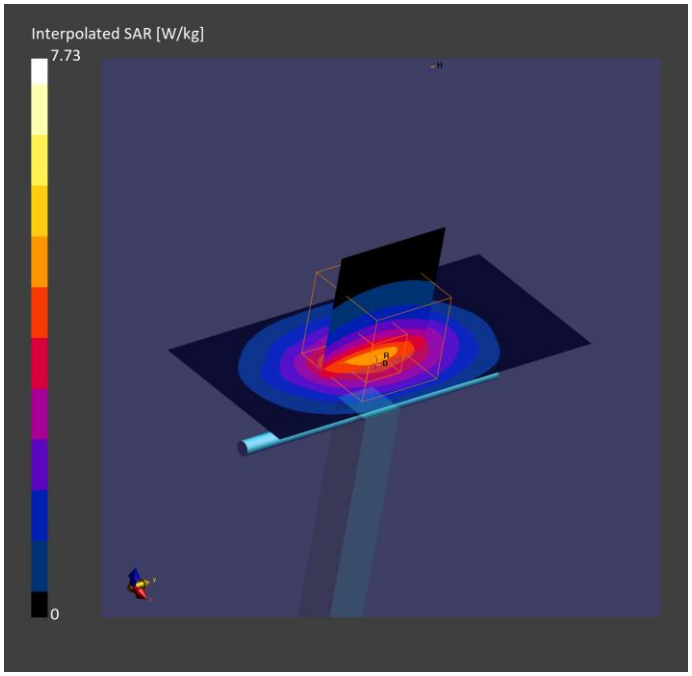
	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-17, 12:54	2024-01-17, 12:59
psSAR1g [W/kg]	3.98	3.98
psSAR10g [W/kg]	2.12	2.07
Power Drift [dB]	0.00	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		80.5
Dist 3dB Peak [mm]		10.8

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Validation results in 1800 MHz Band for Head TSL

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	n/a x n/a x n/a		Dipole

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	,		CW, 0--	1800.0, 0	9.47	1.38	37.8

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 1800MHz - 2024-02-04 , --	EX3DV4 - SN7766, 2023-10-17	DAE4 Sn1690, 2023-10-20

Scan Setup

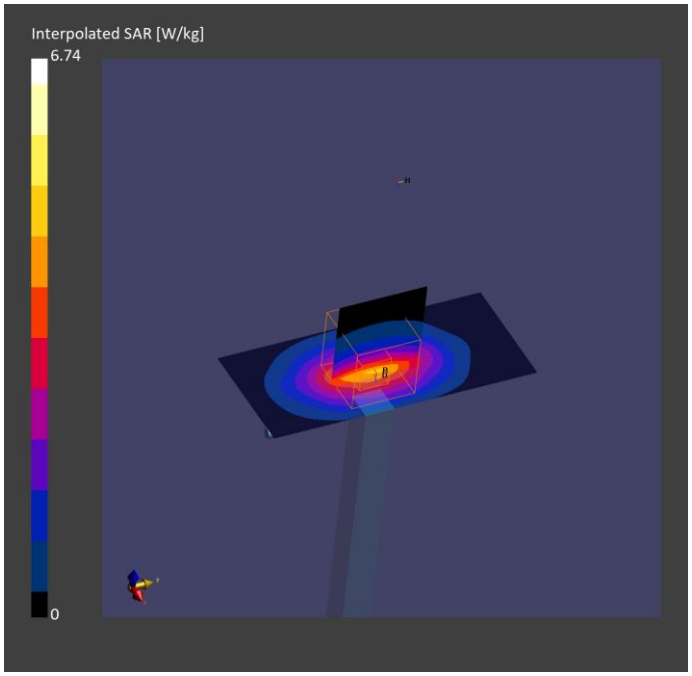
	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-02-04, 11:52	2024-02-04, 11:57
psSAR1g [W/kg]	3.72	3.63
psSAR10g [W/kg]	1.98	1.91
Power Drift [dB]	-0.06	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		82.5
Dist 3dB Peak [mm]		10.8

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Validation results in 2600 MHz Band for Head TSL

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	n/a x n/a x n/a		Dipole

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	,		CW, 0--	2600.0, 0	8.24	2.04	38.0

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 2600MHz - 2024-01-18 , --	EX3DV4 - SN7766, 2023-10-17	DAE4 Sn1690, 2023-10-20

Scan Setup

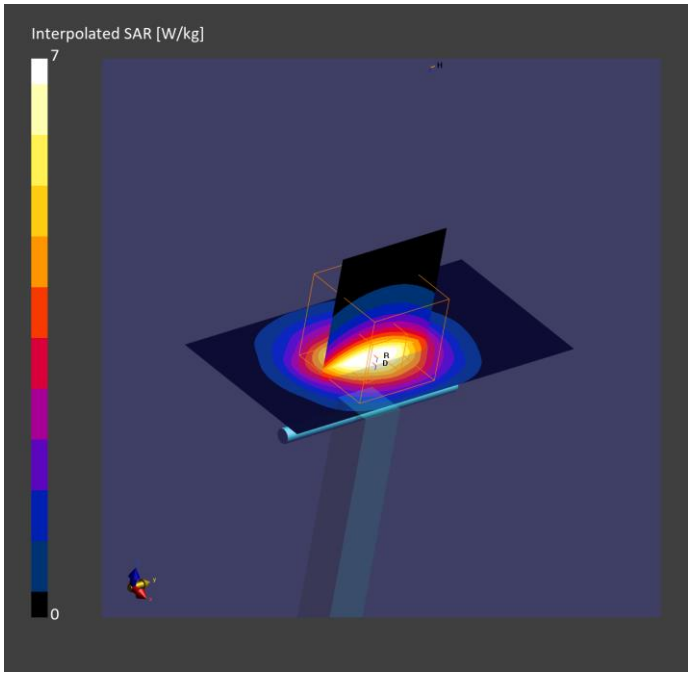
	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-18, 17:03	2024-01-18, 17:09
psSAR1g [W/kg]	5.84	5.83
psSAR10g [W/kg]	2.64	2.61
Power Drift [dB]	-0.00	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		79.1
Dist 3dB Peak [mm]		9.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Validation results in 2600 MHz Band for Head TSL

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	n/a x n/a x n/a		Dipole

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	,		CW, 0--	2600.0, 0	8.24	1.92	37.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 2600MHz - 2024-01-22 , --	EX3DV4 - SN7766, 2023-10-17	DAE4 Sn1690, 2023-10-20

Scan Setup

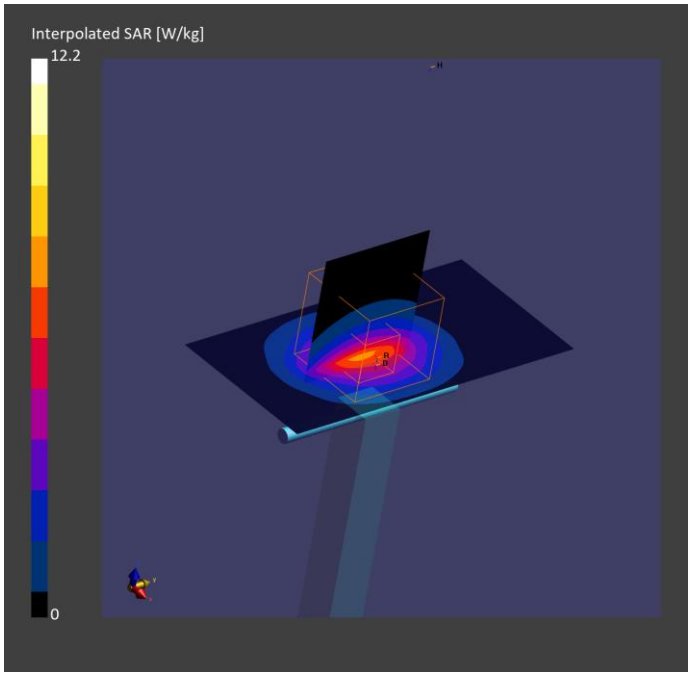
	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-01-22, 13:14	2024-01-22, 13:20
psSAR1g [W/kg]	5.65	5.64
psSAR10g [W/kg]	2.55	2.52
Power Drift [dB]	0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		78.8
Dist 3dB Peak [mm]		9.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)		



Validation results in 2600 MHz Band for Head TSL

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	n/a x n/a x n/a		Dipole

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	,		CW, 0--	2600.0, 0	8.24	1.91	37.2

Hardware Setup

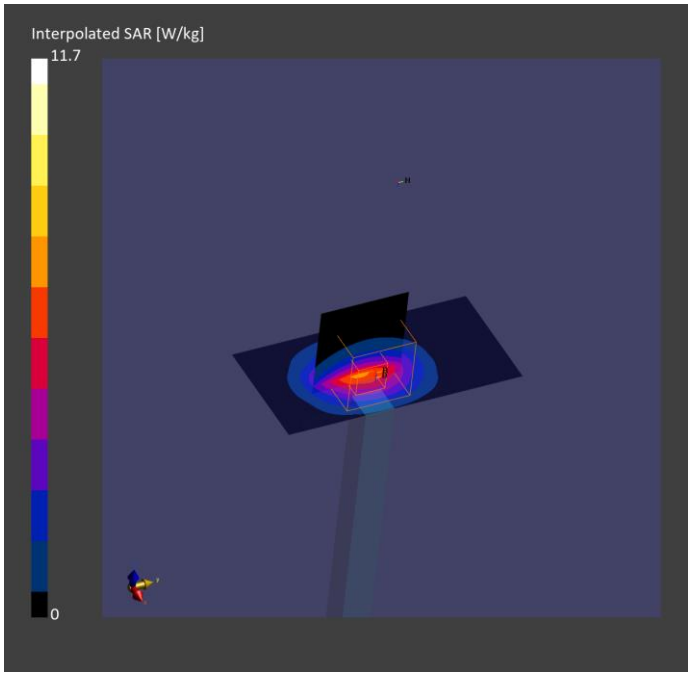
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2158	HBBL 600-10000V6 - 2600MHz - 2024-02-03 , --	EX3DV4 - SN7766, 2023-10-17	DAE4 Sn1690, 2023-10-20

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	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	2024-02-03, 13:22	2024-02-03, 13:28
psSAR1g [W/kg]	5.44	5.43
psSAR10g [W/kg]	2.48	2.43
Power Drift [dB]	0.00	-0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	Positive only	Positive only
M2/M1 [%]		79.3
Dist 3dB Peak [mm]		9.0

Warning(s) / Error(s)

Details	Area Scan	Zoom Scan
Warning(s)		
Error(s)