

System Performance Check Data (1900MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1900V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom, TSL Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D1900	CW, 0--	1900.0, 50	8.40	1.39	40.3	21.8	20.9

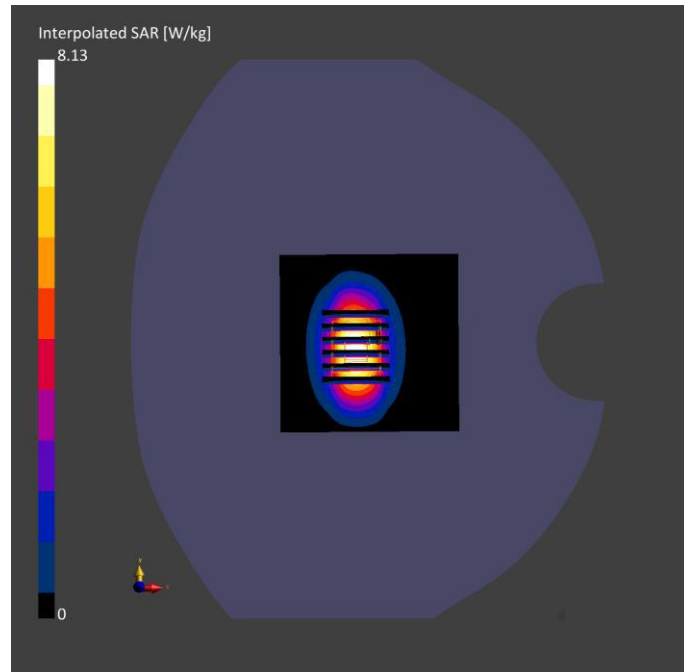
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-14	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-03-14	2023-03-14
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	4.21	4.07
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.24	2.11
Graded Grid	Yes	Yes	Power Drift [dB]	-0.16	-0.03
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		81.6
			Dist 3dB Peak [mm]		9.6



System Performance Check Data (1900MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1900V2, SPEAG	10.0 x 10.0 x 3.0	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	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D1900	CW, 0--	1900.0, 50	8.40	1.38	39.3	22.0	21.0

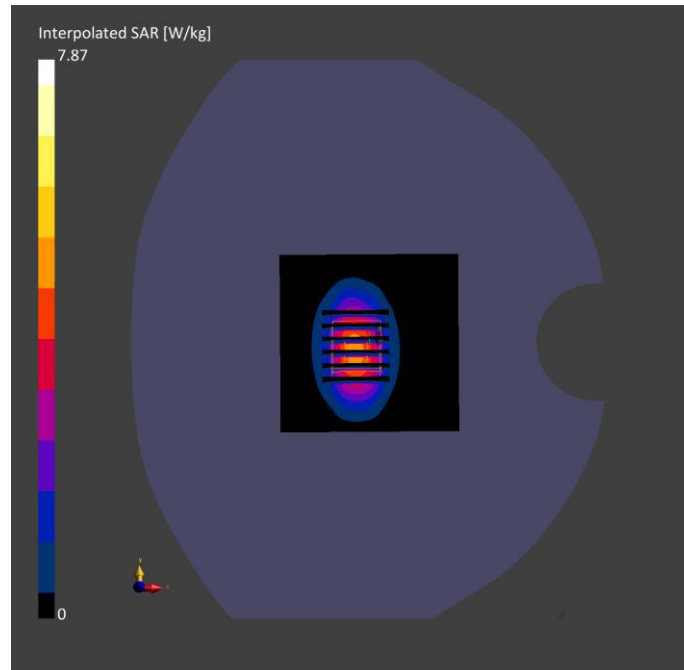
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-15	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-03-15	2023-03-15
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	4.08	4.13
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.17	1.98
Graded Grid	Yes	Yes	Power Drift [dB]	-0.08	0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		82.0
			Dist 3dB Peak [mm]		9.6



System Performance Check Data (1900MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1900V2, SPEAG	10.0 x 10.0 x 3.0	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	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D1900	CW, 0--	1900.0, 50	8.40	1.38	39.8	22.5	21.3

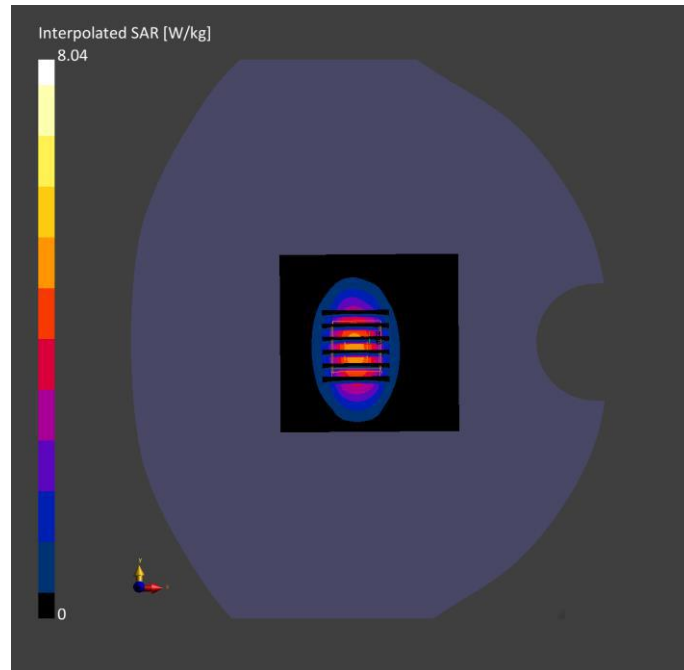
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-16	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-03-16	2023-03-16
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	4.21	3.88
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.24	1.95
Graded Grid	Yes	Yes	Power Drift [dB]	-0.16	-0.03
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		81.6
			Dist 3dB Peak [mm]		9.6



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	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	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	1.96	37.9	21.9	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-17	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

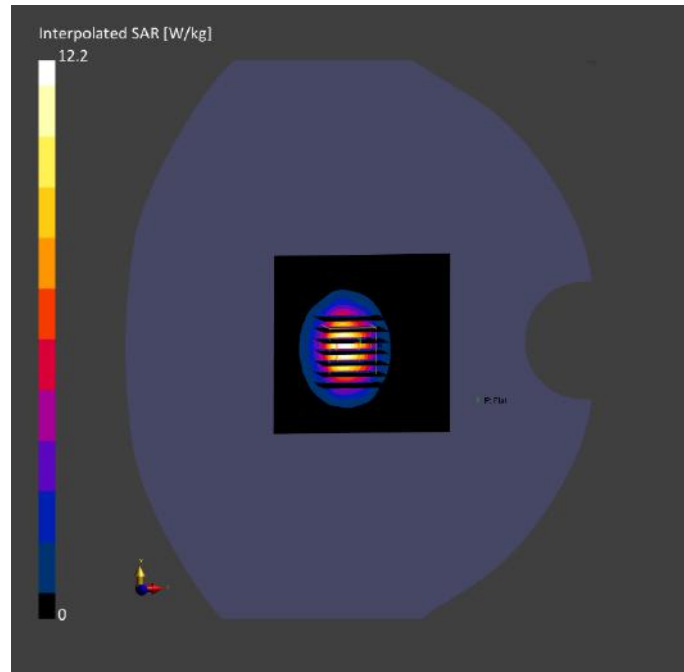
Scan Setup

Area Scan Zoom Scan

Grid Extents [mm]	80.0 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	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-17	2023-03-17
psSAR1g [W/kg]	5.71	5.59
psSAR10g [W/kg]	2.60	2.45
Power Drift [dB]	0.00	-0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.6
Dist 3dB Peak [mm]		9.0



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	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	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	1.91	39.3	22.4	21.1

Hardware Setup

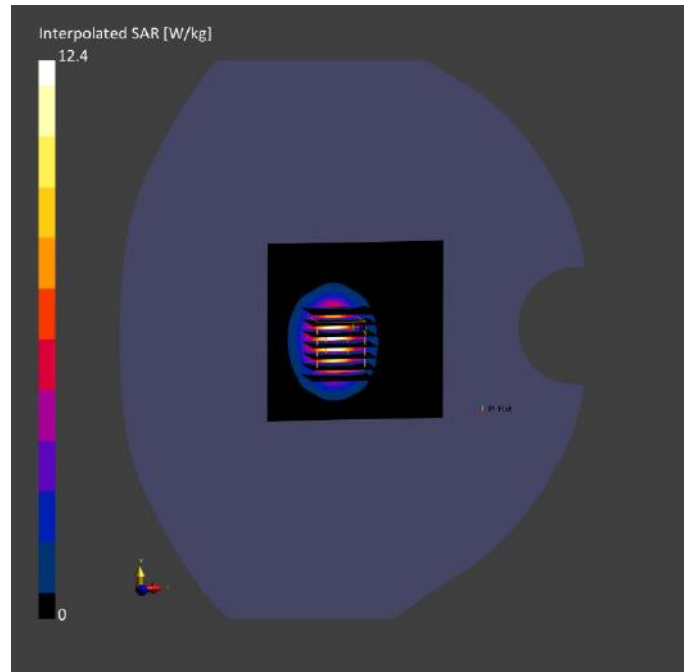
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-18	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 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	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-18	2023-03-18
psSAR1g [W/kg]	5.86	5.77
psSAR10g [W/kg]	2.63	2.55
Power Drift [dB]	0.00	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		80.4
Dist 3dB Peak [mm]		8.9



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom Section, n, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	1.96	39.1	22.3	21.3

Hardware Setup

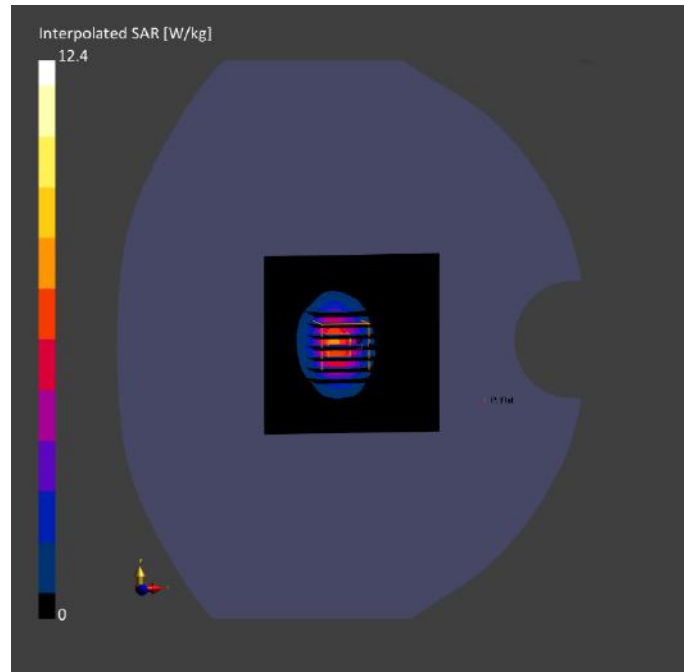
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-19	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 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	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-19	2023-03-19
psSAR1g [W/kg]	5.81	5.83
psSAR10g [W/kg]	2.65	2.44
Power Drift [dB]	0.01	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.6
Dist 3dB Peak [mm]		9.0



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	2.01	38.6	22.2	21.1

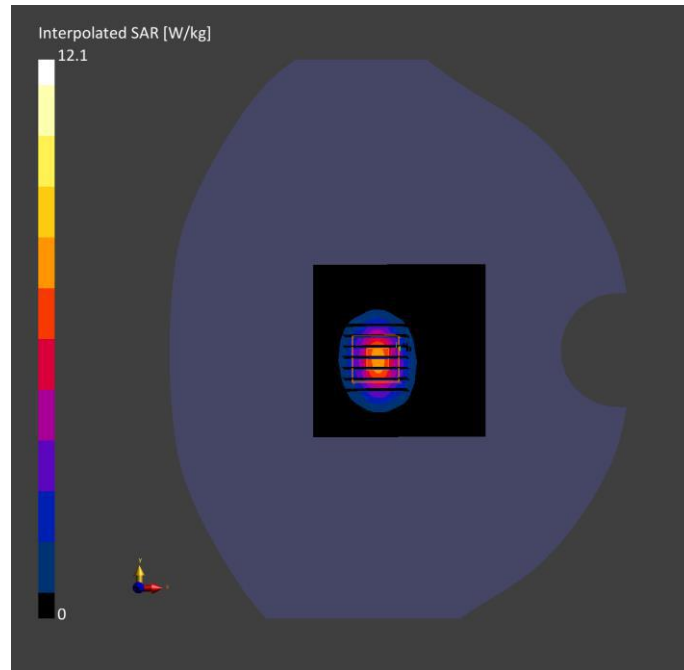
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-20	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-03-20	2023-03-20
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.71	5.94
Sensor	3.0	1.4	psSAR10g [W/kg]	2.60	2.57
Surface [mm]			Power Drift [dB]	0.00	-0.01
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		80.1
			Dist 3dB Peak [mm]		9.2



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	1.97	38.3	22.2	21.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-21	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

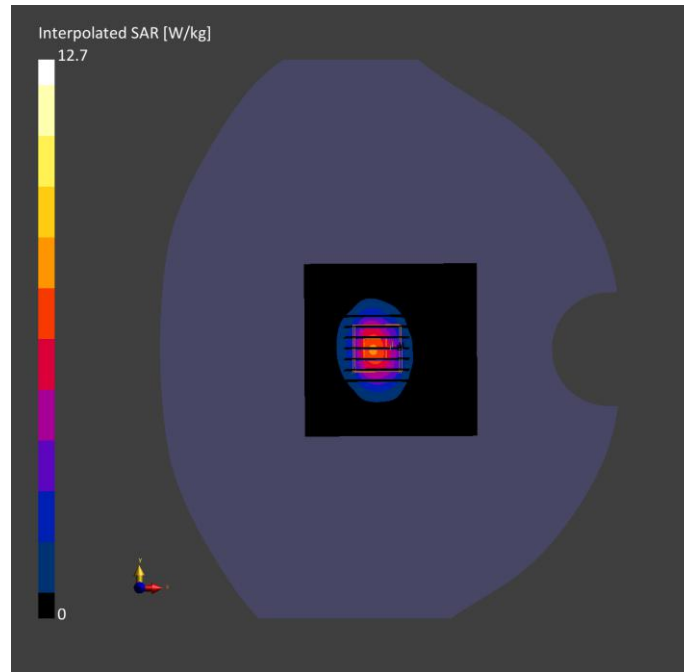
Scan Setup

Area Scan Zoom Scan

Grid Extents [mm]	80.0 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	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-21	2023-03-21
psSAR1g [W/kg]	5.86	5.41
psSAR10g [W/kg]	2.63	2.38
Power Drift [dB]	0.00	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.4
Dist 3dB Peak [mm]		8.6



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	1.91	39.0	21.8	20.9

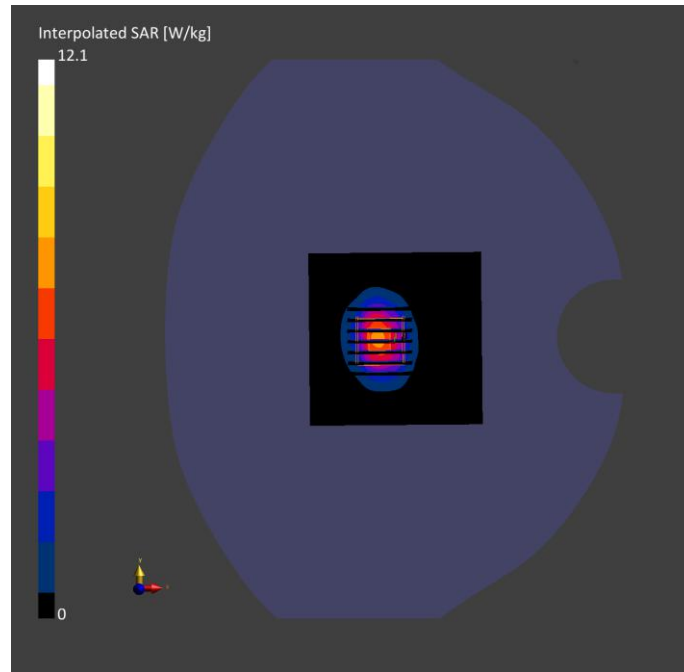
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-22	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-03-22	2023-03-22
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.81	5.61
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.65	2.39
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	0.08
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Detection			TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		80.2
			Dist 3dB Peak [mm]		9.1



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	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	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	1.99	37.7	22.3	21.4

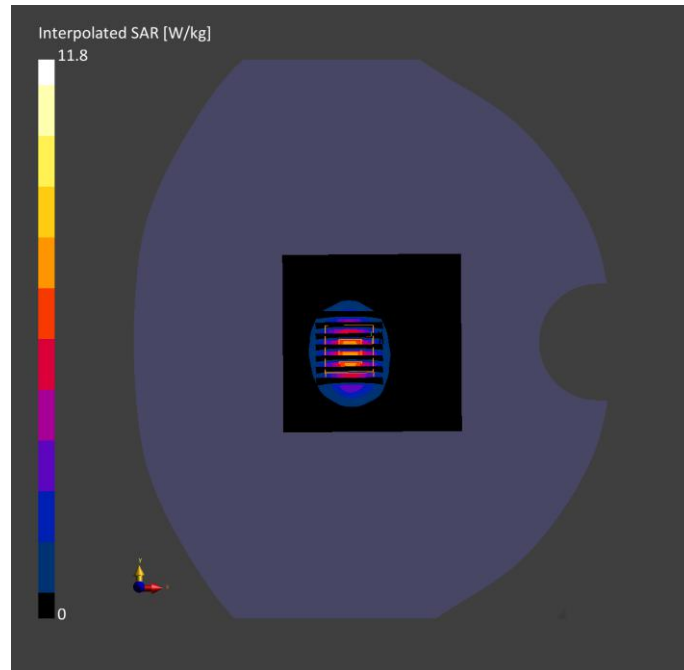
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-23	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-03-23	2023-03-23
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.71	5.67
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.56	2.49
Graded Grid	Yes	Yes	Power Drift [dB]	0.04	0.09
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		80.4
			Dist 3dB Peak [mm]		9.3



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	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	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	1.97	39.1	221.	21.1

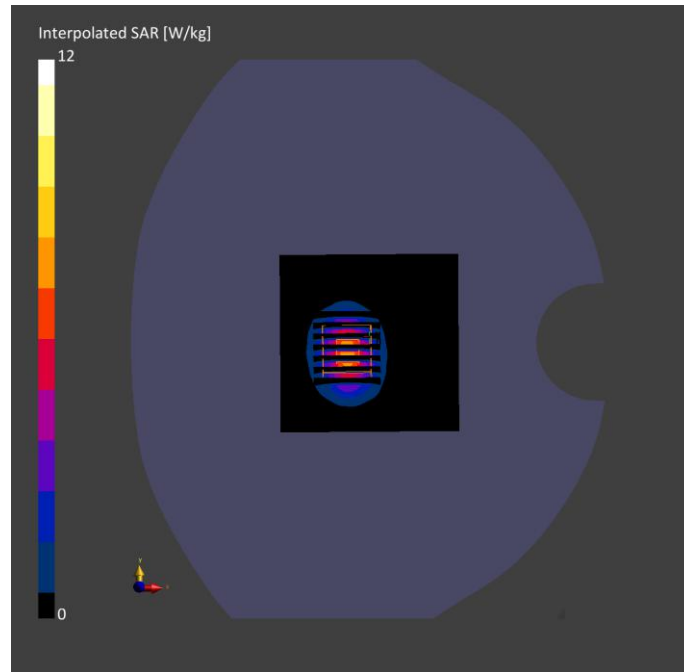
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-24	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-03-24	2023-03-24
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.85	5.74
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.66	2.56
Graded Grid	Yes	Yes	Power Drift [dB]	-0.01	0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		79.3
			Dist 3dB Peak [mm]		9.0



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	1.99	37.8	22.1	21.0

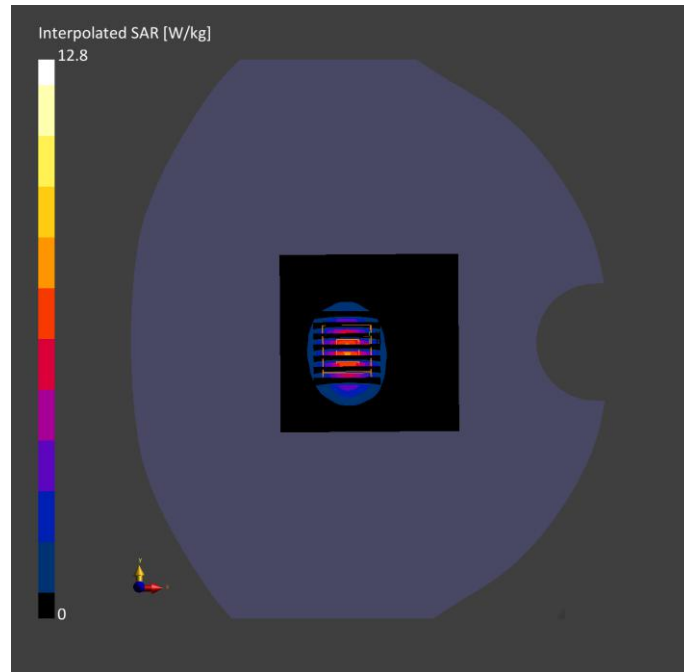
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-25	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-03-25	2023-03-25
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.88	5.70
Sensor	3.0	1.4	psSAR10g [W/kg]	2.66	2.48
Surface [mm]			Power Drift [dB]	-0.04	-0.02
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Detection			M2/M1 [%]		80.5
Scan Method	Measured	Measured	Dist 3dB Peak [mm]		9.5



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	1.96	39.6	22.3	21.2

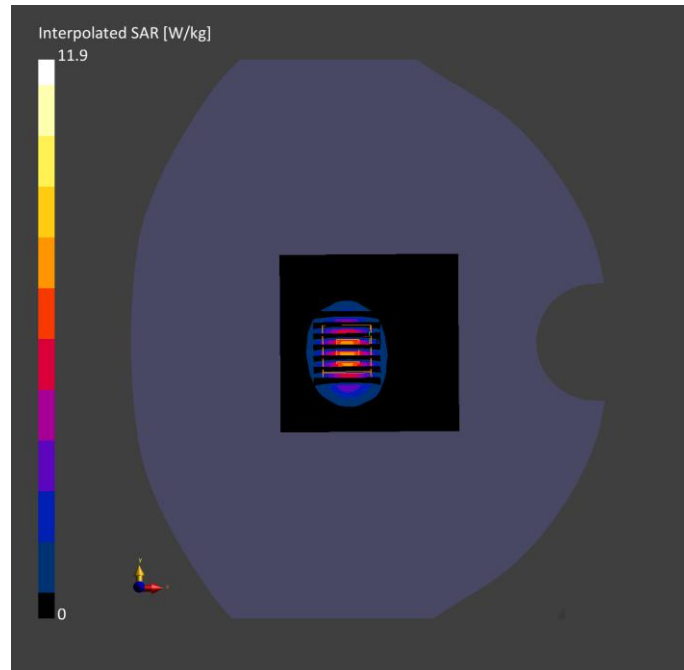
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-26	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-03-26	2023-03-26
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.80	5.65
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.69	2.40
Graded Grid	Yes	Yes	Power Drift [dB]	0.06	0.03
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		80.6
			Dist 3dB Peak [mm]		9.0



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	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	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	1.99	39.2	220	20.9

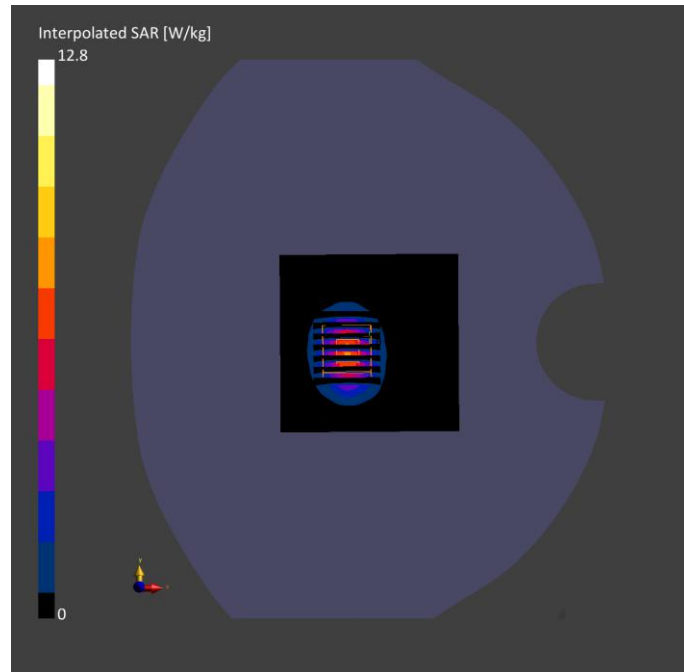
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-27	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-03-27	2023-03-27
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.90	5.84
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.69	2.52
Graded Grid	Yes	Yes	Power Drift [dB]	-0.10	-0.13
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		80.5
			Dist 3dB Peak [mm]		9.4



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	1.97	40.3	22.1	20.9

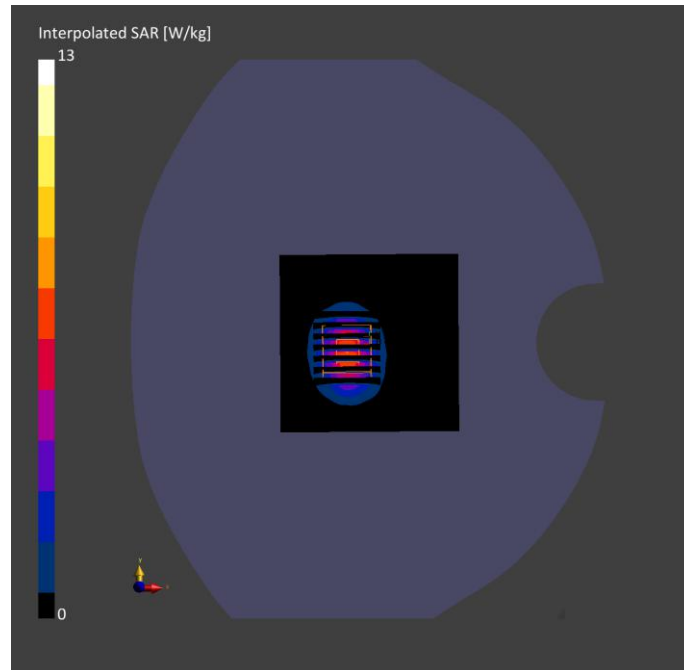
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-28	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-03-28	2023-03-28
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.71	5.91
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.53	2.60
Graded Grid	Yes	Yes	Power Drift [dB]	0.10	-0.13
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Detection			TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		81.1
			Dist 3dB Peak [mm]		9.9



System Performance Check Data (5250MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D5GHZV2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		Validation band	CW, 0--	5250.0, 5250	5.45	4.70	35.8	22.4	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-29	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

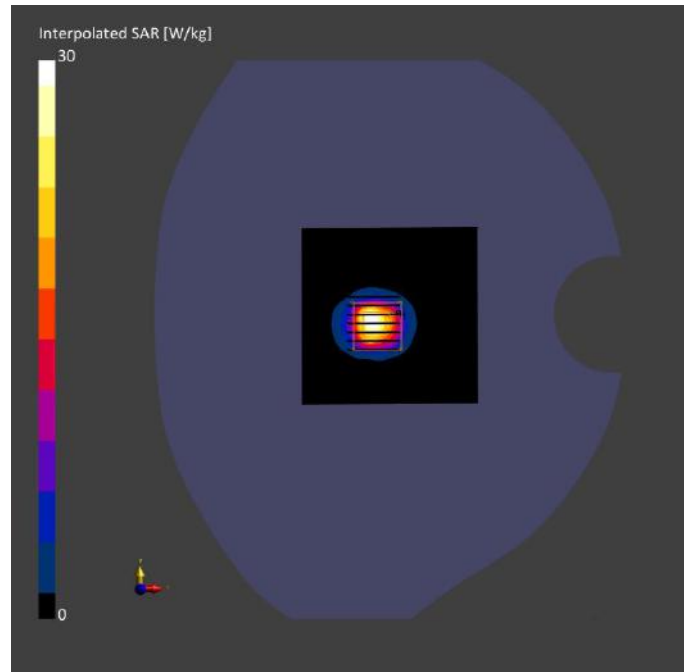
Scan Setup

Area Scan Zoom Scan

Grid Extents [mm]	80.0 x 80.0	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	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-29	2023-03-29
psSAR1g [W/kg]	7.80	7.85
psSAR10g [W/kg]	2.16	2.24
Power Drift [dB]	-0.14	0.00
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		64.6
Dist 3dB Peak [mm]		6.8



System Performance Check Data (5250MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D5GHZV2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		Validation on band	CW, 0--	5250.0, 5250	5.45	4.73	36.1	22.2	21.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-30	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

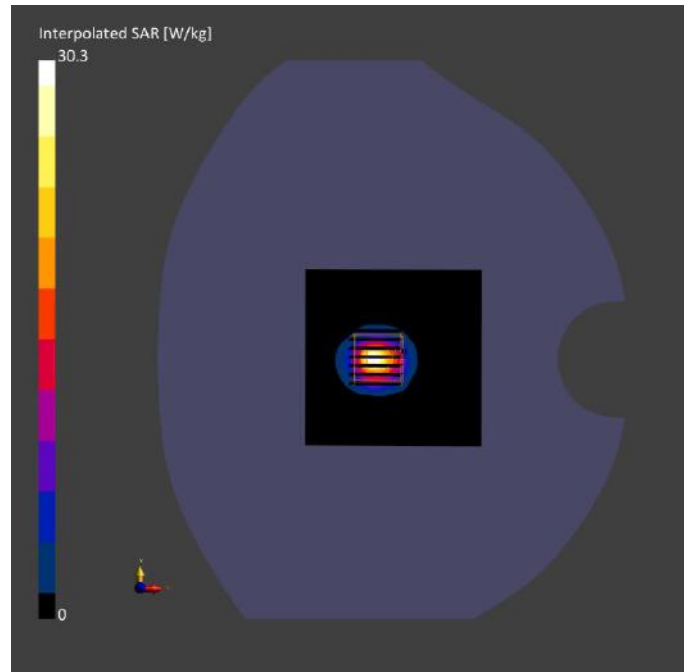
Scan Setup

Area Scan Zoom Scan

Grid Extents [mm]	80.0 x 80.0	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	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-30	2023-03-30
psSAR1g [W/kg]	7.42	8.07
psSAR10g [W/kg]	2.21	2.11
Power Drift [dB]	0.00	0.12
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		66.5
Dist 3dB Peak [mm]		6.9



System Performance Check Data (5600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D5GHZV2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		Validation band	CW, 0--	5600.0, 5600	4.9	5.06	35.3	22.2	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-30	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

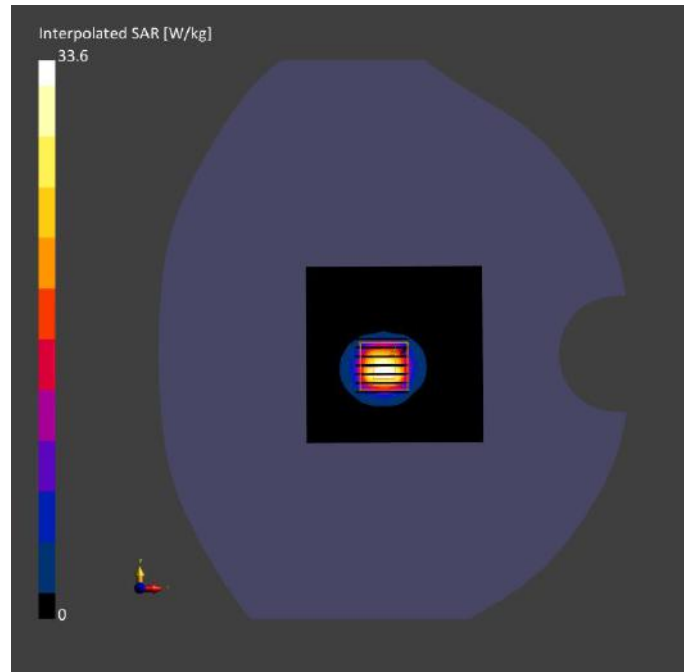
Scan Setup

Area Scan Zoom Scan

Grid Extents [mm]	80.0 x 80.0	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	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-30	2023-03-30
psSAR1g [W/kg]	7.90	8.12
psSAR10g [W/kg]	2.21	2.29
Power Drift [dB]	0.01	-0.02
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		62.3
Dist 3dB Peak [mm]		7.2



System Performance Check Data (5750MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D5GHZV2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		Validation band	CW, 0--	5750.0, 5750	5.0	5.17	35.6	22.6	21.7

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-31	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

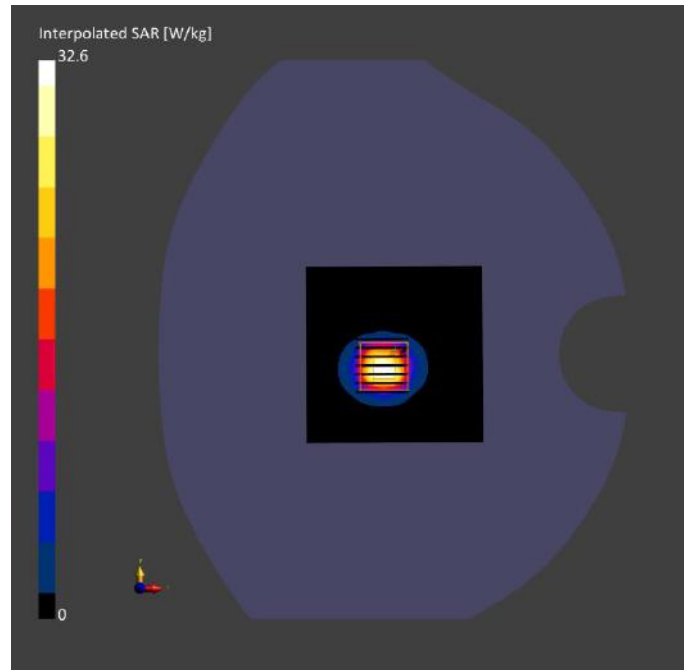
Scan Setup

Area Scan Zoom Scan

Grid Extents [mm]	80.0 x 80.0	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	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-31	2023-03-31
psSAR1g [W/kg]	7.33	7.87
psSAR10g [W/kg]	2.19	2.19
Power Drift [dB]	-0.01	-0.12
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		61.4
Dist 3dB Peak [mm]		7.4



System Performance Check Data (5750MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D5GHZV2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		Validation band	CW, 0--	5750.0, 5750	5.0	5.24	35.2	22.3	21.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-01	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

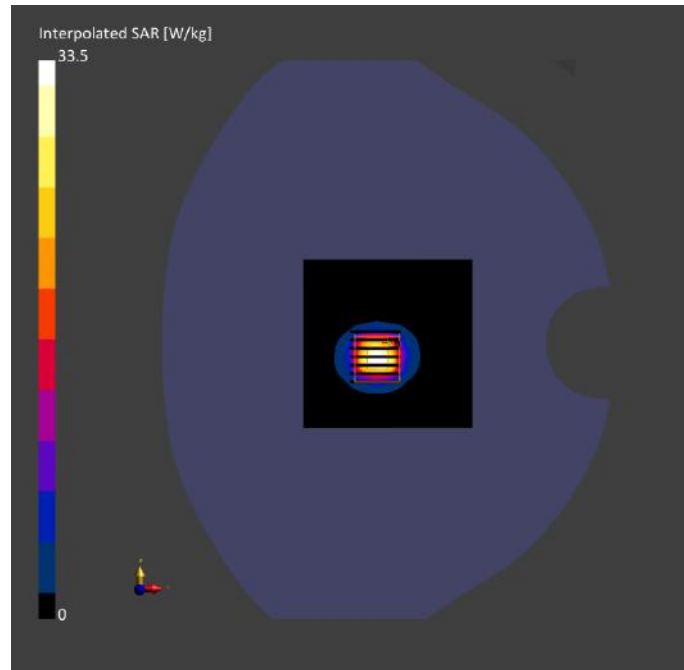
Scan Setup

Area Scan Zoom Scan

Grid Extents [mm]	80.0 x 80.0	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	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-01	2023-04-01
psSAR1g [W/kg]	6.53	7.66
psSAR10g [W/kg]	2.09	2.08
Power Drift [dB]	0.01	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.1
Dist 3dB Peak [mm]		7.4



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	2.01	38.6	22.2	21.2

Hardware Setup

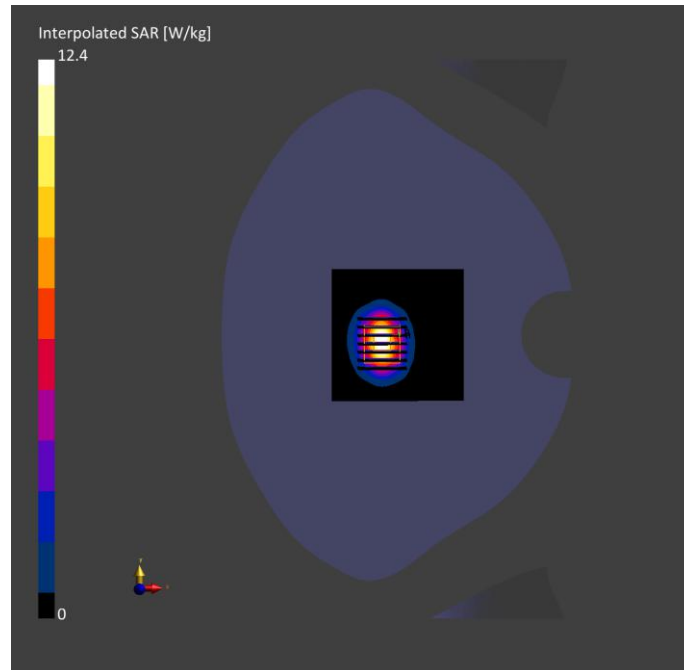
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-10	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 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	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-10	2023-04-10
psSAR1g [W/kg]	5.80	5.85
psSAR10g [W/kg]	2.60	2.48
Power Drift [dB]	0.00	0.05
Power Scaling	Disabled	Disabled
TSL Correction	No correction	No correction
M2/M1 [%]		80.4
Dist 3dB Peak [mm]		8.9



System Performance Check Data (2450MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D2450V2, SPEAG	40.0 x 8.0 x 8.0	Dipole

Exposure Conditions

Phantom, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D2450	CW, 0--	2450.0, 2450	7.79	1.78	39.3	22.2	21.2

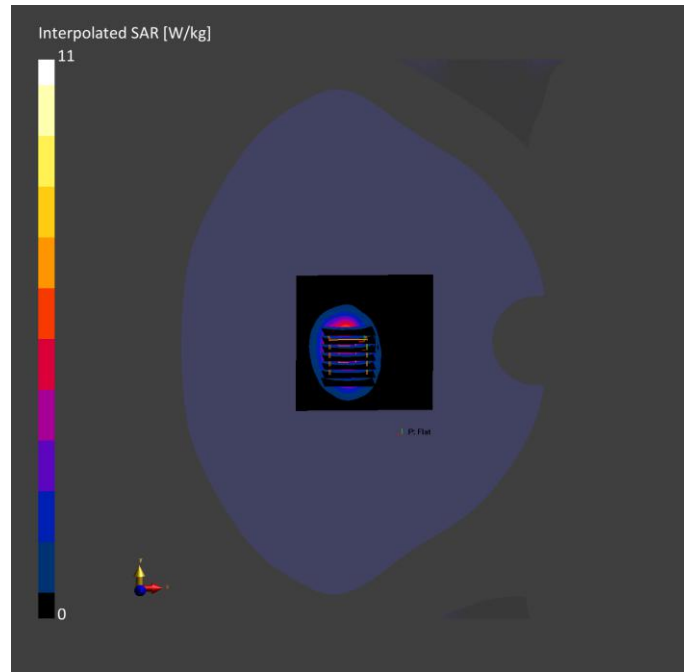
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-13	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-04-13	2023-04-13
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.34	5.51
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.45	2.44
Graded Grid	Yes	Yes	Power Drift [dB]	-0.02	0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		80.8
			Dist 3dB Peak [mm]		8.9



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	1.96	38.6	22.4	21.4

Hardware Setup

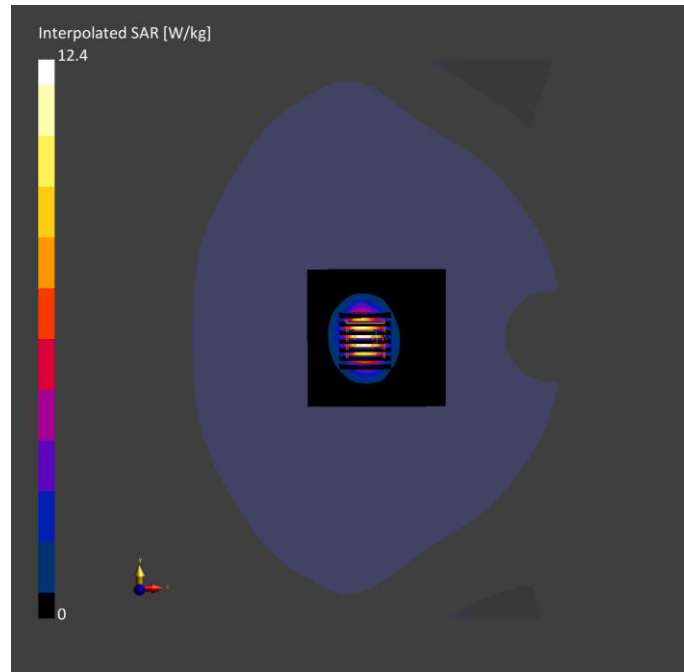
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-14	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 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	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-14	2023-04-14
psSAR1g [W/kg]	5.75	5.88
psSAR10g [W/kg]	2.59	2.63
Power Drift [dB]	0.01	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.6
Dist 3dB Peak [mm]		9.0



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.56	2.02	37.9	22.3	21.3

Hardware Setup

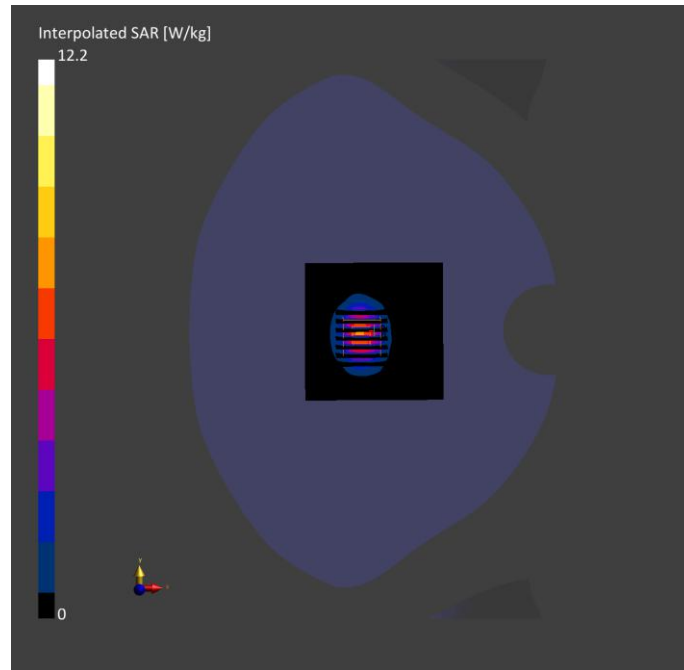
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-15	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 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	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-15	2023-04-15
psSAR1g [W/kg]	5.70	5.77
psSAR10g [W/kg]	2.52	2.59
Power Drift [dB]	0.01	-0.15
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.6
Dist 3dB Peak [mm]		9.0



System Performance Check Data (1750MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1750V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D1750	CW, 0--	1750.0, 50	8.69	1.38	39.5	22.1	21.1

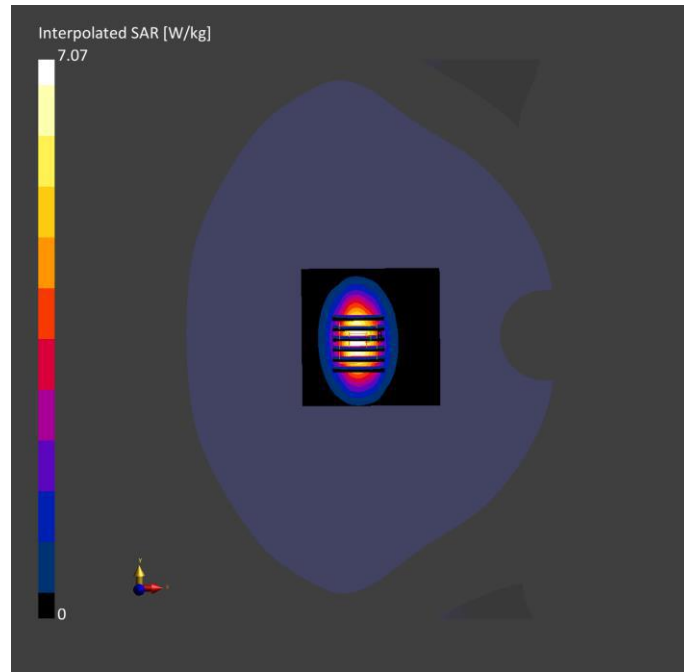
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-16	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2023-04-16	2023-04-16
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	3.71	3.77
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	1.99	2.01
Graded Grid	Yes	Yes	Power Drift [dB]	-0.03	-0.04
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		81.9
			Dist 3dB Peak [mm]		10.7



ANNEX C TEST DATA

Meas.1 Right Head with Cheek on Middle Channel in GSM 850 4Slots mode with Antenna.1

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

PhAntom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	CHEEK, 0.00	GS M 850	GSM, 10028 -DAC	836.6, 190	10.44	0.92	40.8	22.4	21.2

Hardware Setup

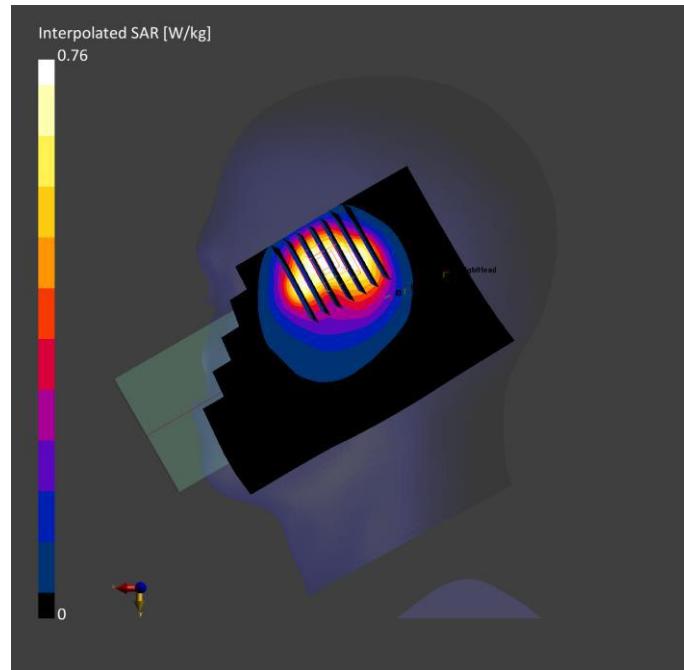
PhAntom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-04	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-04	2023-03-04
psSAR1g [W/kg]	0.325	0.387
psSAR10g [W/kg]	0.220	0.206
Power Drift [dB]	-0.03	-0.04
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		47.8
Dist 3dB Peak [mm]		8.0



Meas.2 Body Plane with Front Side 15mm on Middle Channel in GSM850 4Slots mode with Antenna.0

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	FRONT, 15.00	GS, M, 850	GSM, 10028 -DAC	836.6, 190	10.44	0.92	40.8	22.4	21.2

Hardware Setup

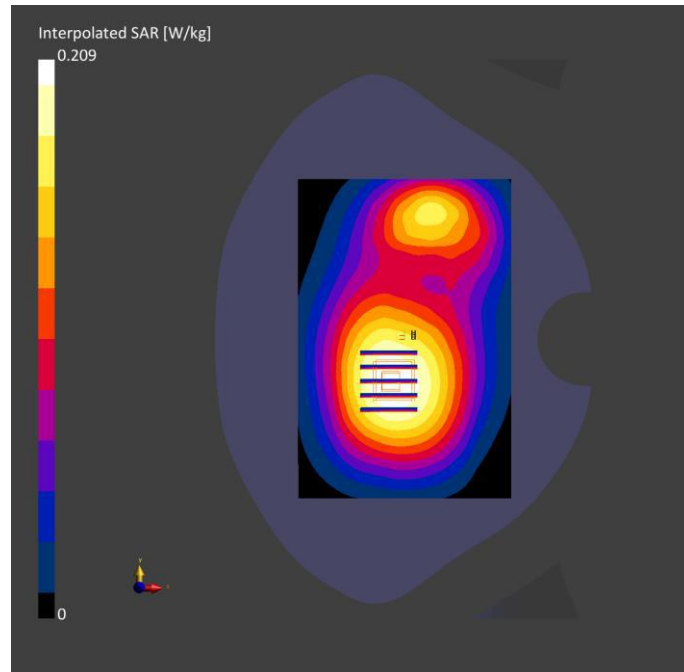
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-04	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor	3.0	1.4
Surface [mm]		
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-04	2023-03-04
psSAR1g [W/kg]	0.154	0.160
psSAR10g [W/kg]	0.108	0.122
Power Drift [dB]	-0.01	0.00
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		76.1
Dist 3dB Peak [mm]		> 16.0



Meas.3 Body Plane with Back Side 10mm on Middle Channel in GSM850 4Slots mode with Antenna.0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	GS M 850	GSM, 10028 -DAC	836.6, 190	10.44	0.92	40.8	22.4	21.2

Hardware Setup

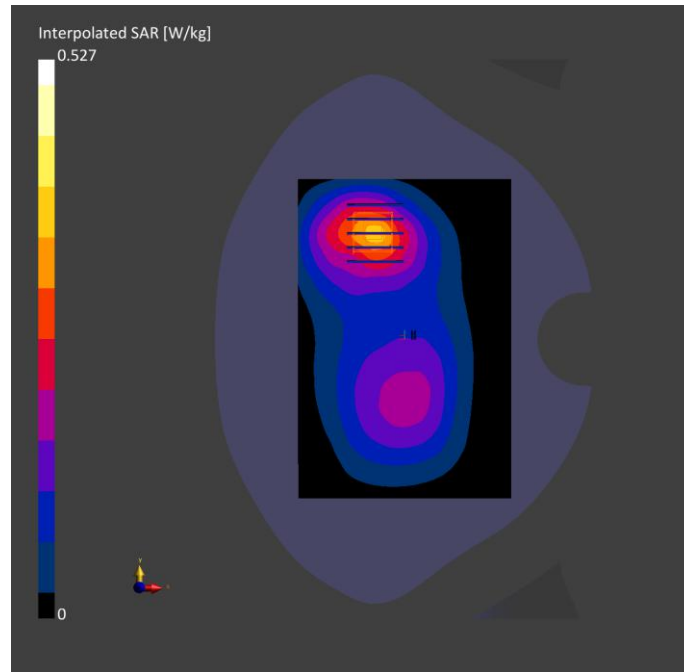
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-04	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-04	2023-03-04
psSAR1g [W/kg]	0.323	0.325
psSAR10g [W/kg]	0.207	0.200
Power Drift [dB]	0.01	-0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		61.9
Dist 3dB Peak [mm]		15.1



Meas.4 Right Head with Tilt on High Channel in GSM 1900 3Slots mode with Antenna.4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	TILT, 0.00	PCS 190	GSM, 10027-DAC	1909.8, 810	8.4	1.44	38.6	22.3	21.2

Hardware Setup

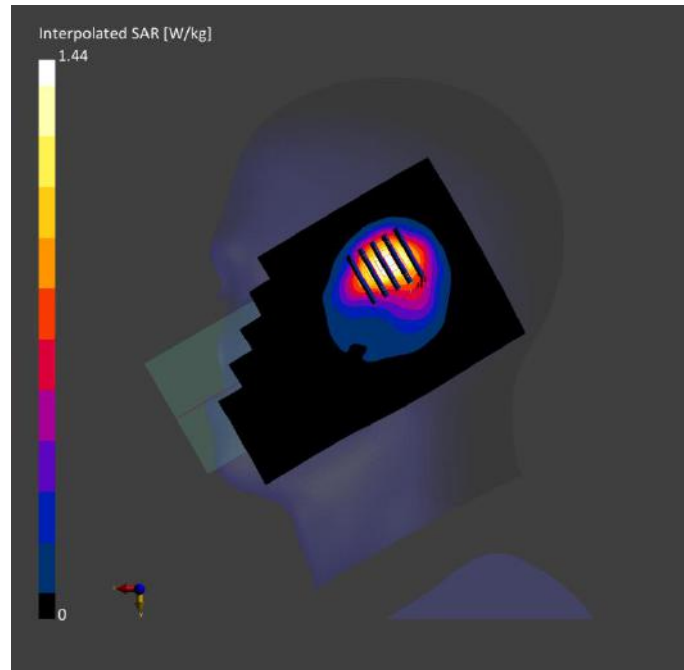
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-13	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-13	2023-03-13
psSAR1g [W/kg]	0.719	0.765
psSAR10g [W/kg]	0.411	0.404
Power Drift [dB]	0.01	0.02
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		48.3
Dist 3dB Peak [mm]		10.0



Meas.5 Body Plane with Back Side 15mm on Low Channel in GSM1900 3Slots mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	PCS 190	GSM, 10027-DAC	1850.2, 512	8.4	1.39	40.9	22.3	21.2

Hardware Setup

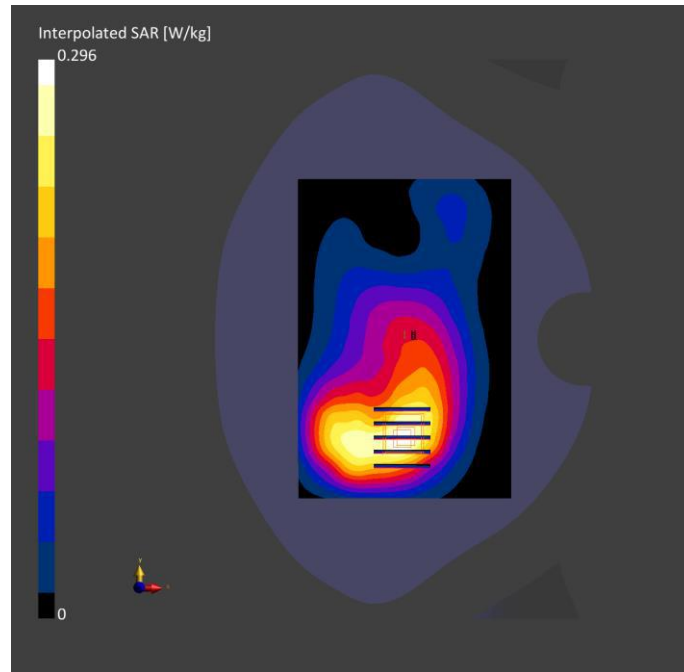
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-13	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-13	2023-03-13
psSAR1g [W/kg]	0.183	0.189
psSAR10g [W/kg]	0.111	0.119
Power Drift [dB]	-0.00	0.00
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		62.7
Dist 3dB Peak [mm]		18.7



Meas.6 Body Plane with Bottom Edge 10mm on Low Channel in GSM1900 3Slots mode with Antenna.3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 10.00	PCS 190	GSM, 10027 -DAC	1850.2, 512	8.4	1.39	40.9	22.3	21.2

Hardware Setup

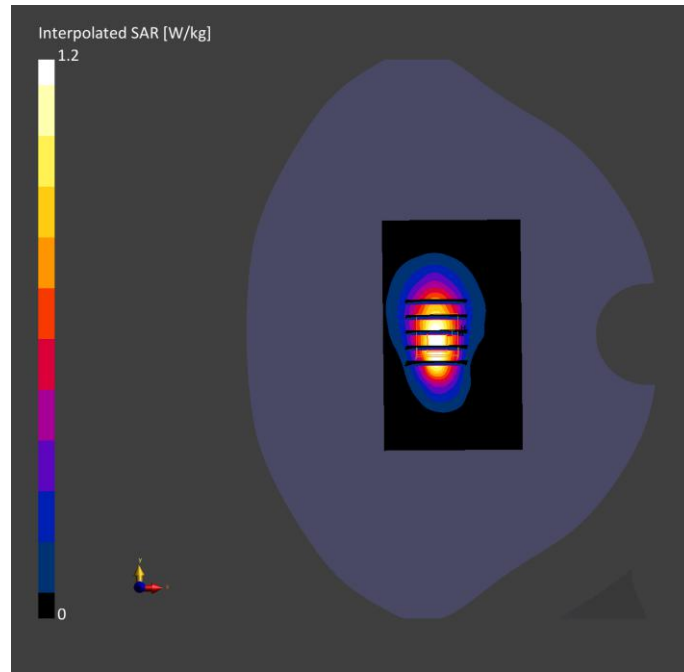
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-13	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-13	2023-03-13
psSAR1g [W/kg]	0.635	0.654
psSAR10g [W/kg]	0.328	0.341
Power Drift [dB]	-0.00	-0.05
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.0
Dist 3dB Peak [mm]		8.0



Meas.7 Right Head with Cheek on High Channel in WCDMA Band2 mode with Antenna.4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	CHEEK, 0.00	Band 2	WCDMA, 10011-CAC	1907.6, 9538	8.4	1.42	39.7	21.8	20.9

Hardware Setup

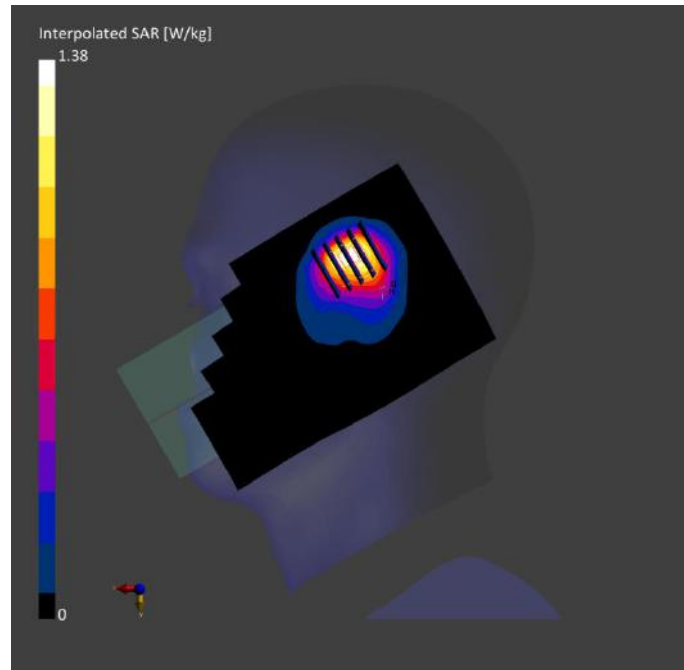
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-07	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-07	2023-04-07
psSAR1g [W/kg]	0.740	0.732
psSAR10g [W/kg]	0.414	0.387
Power Drift [dB]	0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.4
Dist 3dB Peak [mm]		8.6



Meas.8 Body Plane with Back Side 15mm on Middle Channel in WCDMA Band2 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 2	WCDMA, 10457-AAB	1880.0, 9400	8.4	1.37	40.7	21.8	20.9

Hardware Setup

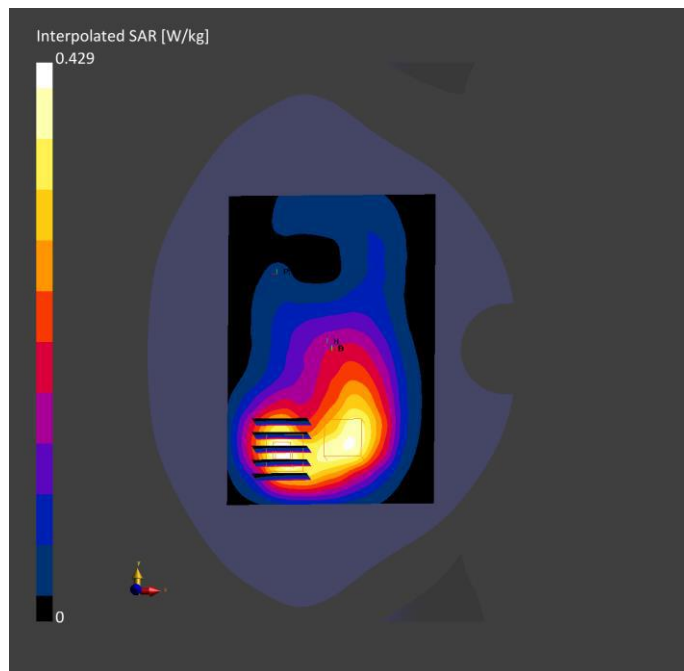
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-07	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-07	2023-04-07
psSAR1g [W/kg]	0.250	0.255
psSAR10g [W/kg]	0.147	0.151
Power Drift [dB]	0.00	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		57.5
Dist 3dB Peak [mm]		14.8



Meas.9 Body Plane with Top Edge 10mm on Middle Channel in WCDMA Band2 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 10.00	Band 2	WCDMA, 10457-AAB	1880.0, 9400	8.4	1.37	40.7	21.8	20.9

Hardware Setup

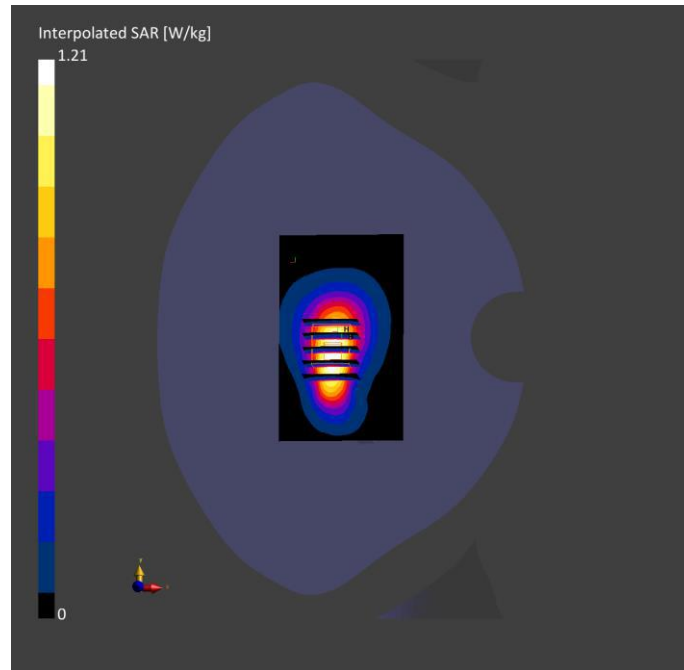
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-07	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-07	2023-04-07
psSAR1g [W/kg]	0.679	0.688
psSAR10g [W/kg]	0.377	0.387
Power Drift [dB]	0.00	-0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.5
Dist 3dB Peak [mm]		9.7



Meas.10 Body Plane with Top Edge 0mm on Middle Channel in WCDMA Band2 mode with Antenna.4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 0.00	Band 2	WCDMA, 10457-AAB	1880.0, 9400	8.4	1.37	40.7	21.8	20.9

Hardware Setup

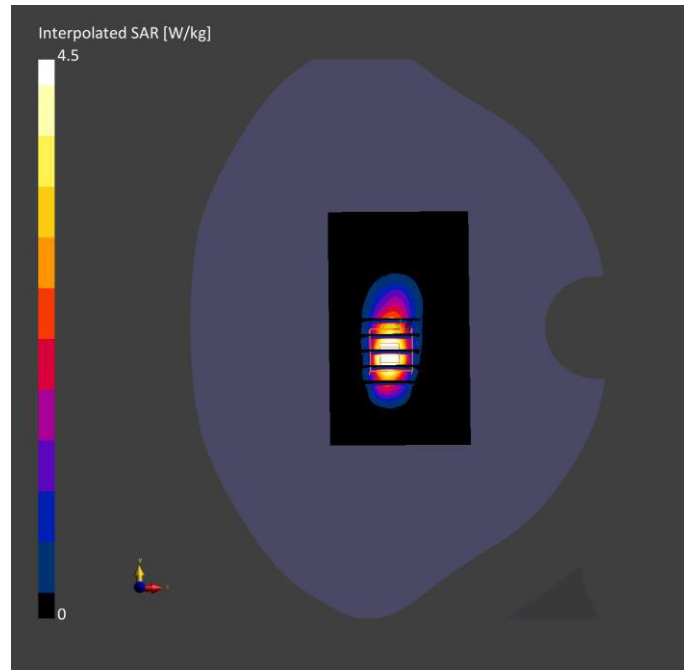
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-07	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-07	2023-04-07
psSAR1g [W/kg]	4.10	4.32
psSAR10g [W/kg]	1.85	1.73
Power Drift [dB]	-0.03	-0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		40.6
Dist 3dB Peak [mm]		4.8



Meas.11 Right Head with Tilt on High Channel in WCDMA Band4 mode with Antenna.4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	TILT, 0.00	Band 4	WCDMA, 10011-CAC	1752.6, 1513	8.69	1.42	38.7	22.3	21.1

Hardware Setup

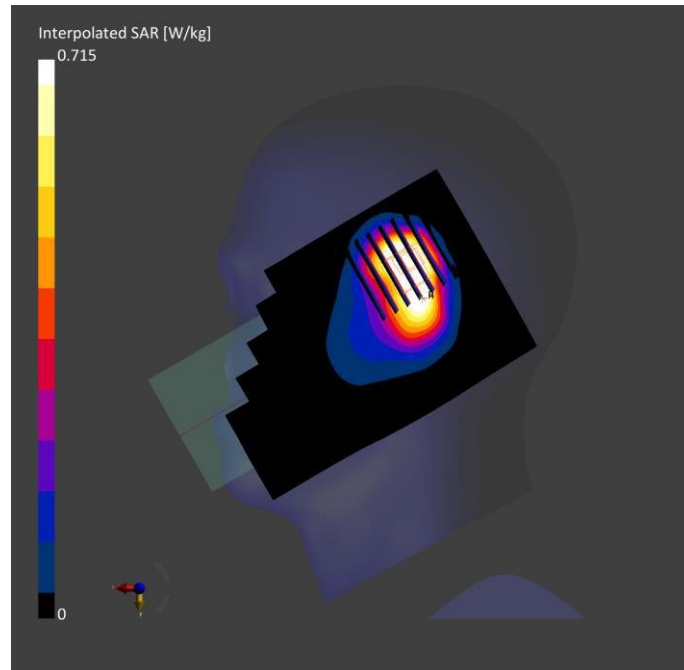
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-07	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-07	2023-03-07
psSAR1g [W/kg]	0.304	0.370
psSAR10g [W/kg]	0.181	0.189
Power Drift [dB]	-0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.9
Dist 3dB Peak [mm]		8.0



Meas.12 Body Plane with Back Side 15mm on Low Channel in WCDMA Band4 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 4	WCDMA, 10457-AAB	1712.4, 1312	8.69	1.37	41.5	22.3	21.1

Hardware Setup

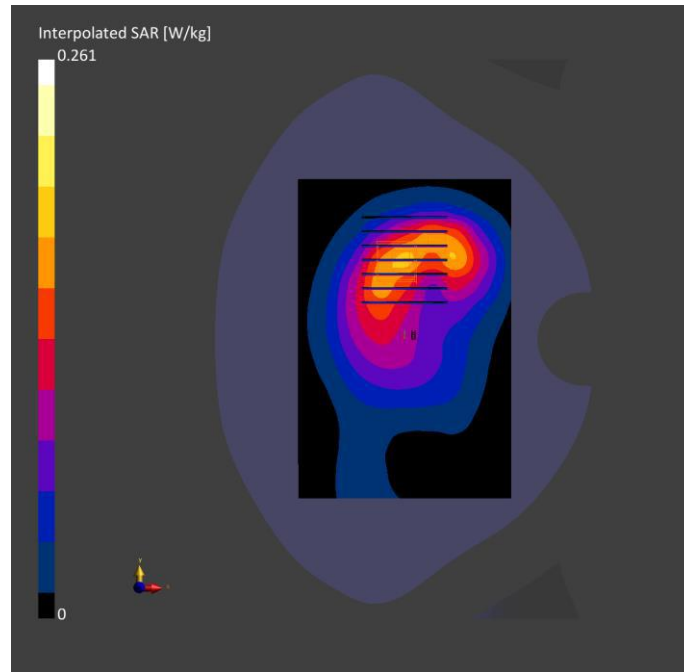
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-07	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-07	2023-03-07
psSAR1g [W/kg]	0.151	0.159
psSAR10g [W/kg]	0.093	0.098
Power Drift [dB]	0.02	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		59.4
Dist 3dB Peak [mm]		16.0



Meas.13 Body Plane with Bottom Edge 10mm on Low Channel in WCDMA Band4 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 10.00	Band 4	WCDMA, 10457-AAB	1712.4, 1312	8.69	1.37	41.5	22.3	21.1

Hardware Setup

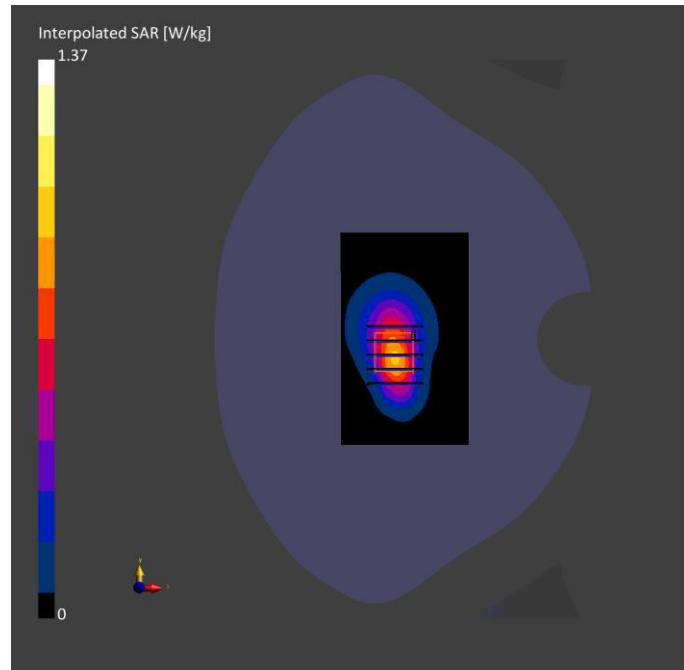
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-07	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-07	2023-03-07
psSAR1g [W/kg]	0.763	0.779
psSAR10g [W/kg]	0.416	0.425
Power Drift [dB]	-0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.9
Dist 3dB Peak [mm]		10.7



Meas.14 Body Plane with Bottom Edge 0mm on Low Channel in WCDMA Band4 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 0.00	Band 4	WCDMA, 10457-AAB	1712.4, 1312	8.69	1.37	41.5	22.3	21.1

Hardware Setup

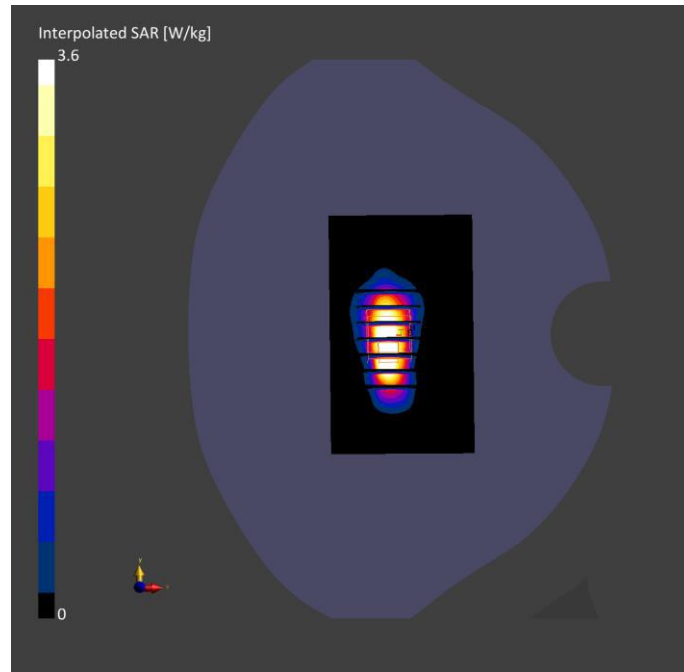
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-07	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-07	2023-03-07
psSAR1g [W/kg]	3.56	3.60
psSAR10g [W/kg]	1.70	1.59
Power Drift [dB]	-0.01	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		32.0
Dist 3dB Peak [mm]		4.8



Meas.15 Right Head with Cheek on Low Channel in WCDMA Band5 mode with Antenna.1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	CHEEK, 0.00	Band 5	WCDMA, 10011-CAC	826.4, 4132	10.44	0.88	41.6	22.4	21.2

Hardware Setup

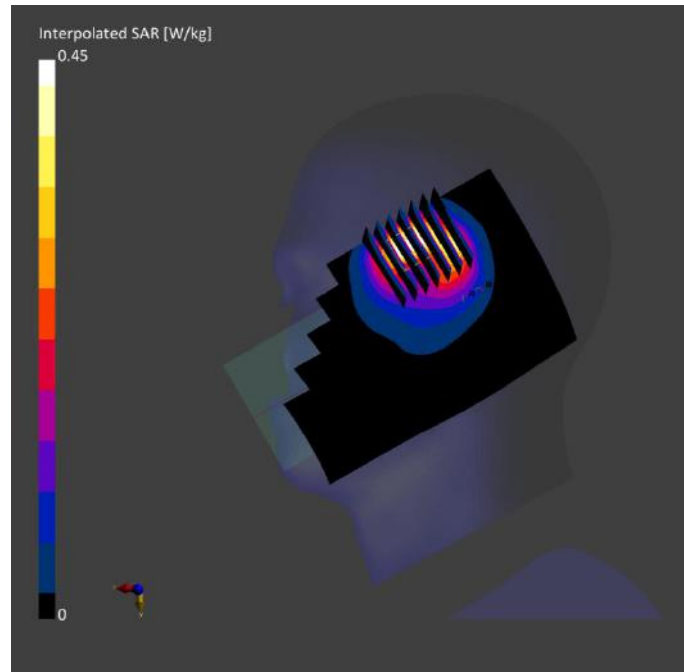
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-04	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-04	2023-03-04
psSAR1g [W/kg]	0.236	0.232
psSAR10g [W/kg]	0.146	0.124
Power Drift [dB]	-0.02	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.6
Dist 3dB Peak [mm]		6.4



Meas.16 Body Plane with Back Side 15mm on Middle Channel in WCDMA Band5 mode with Antenna.0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 5	WCDMA, 10457-AAB	836.4, 4182	10.44	0.92	40.9	22.4	21.2

Hardware Setup

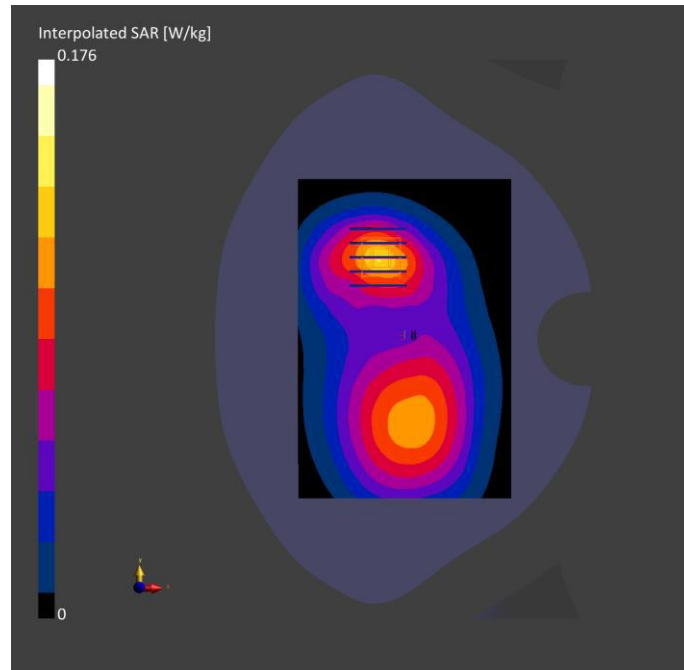
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-04	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-04	2023-03-04
psSAR1g [W/kg]	0.113	0.113
psSAR10g [W/kg]	0.074	0.071
Power Drift [dB]	0.00	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		62.4
Dist 3dB Peak [mm]		18.7



Meas.17 Body Plane with Back Side 10mm on Middle Channel in WCDMA Band5 mode with Antenna.0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 5	WCDMA, 10457-AAB	836.4, 4182	10.44	0.92	40.9	22.4	21.2

Hardware Setup

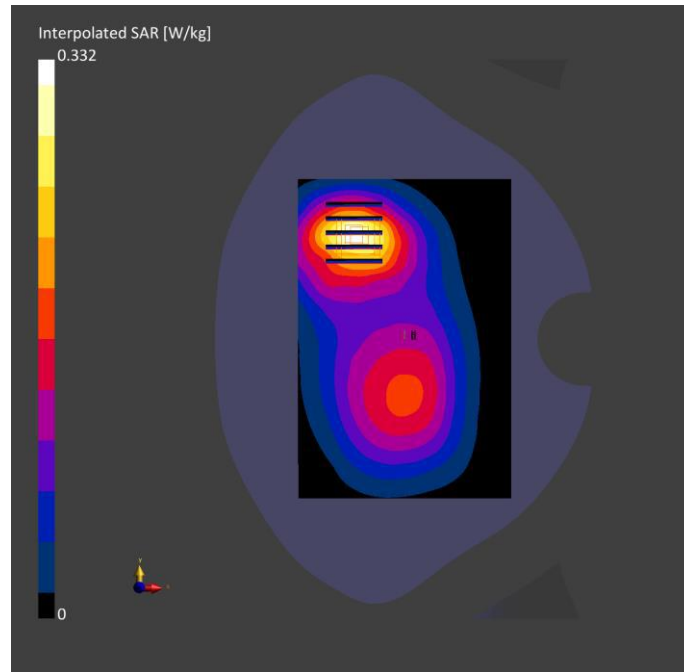
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-04	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-04	2023-03-04
psSAR1g [W/kg]	0.203	0.202
psSAR10g [W/kg]	0.130	0.124
Power Drift [dB]	0.01	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		59.5
Dist 3dB Peak [mm]		14.8



Meas.18 Right Head with Tilt on Middle Channel in LTE Band2 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	TILT, 0.00	Band 2	LTE-FDD, 10169-CAF	1880.0, 18900	8.4	1.38	39.5	22.0	21.0

Hardware Setup

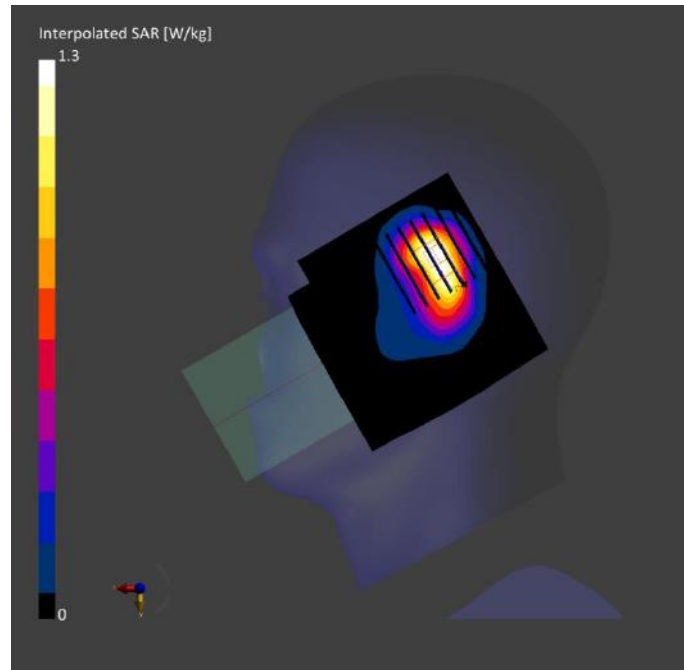
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-08	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor	3.0	1.4
Surface [mm]		
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-08	2023-04-08
psSAR1g [W/kg]	0.555	0.640
psSAR10g [W/kg]	0.317	0.321
Power Drift [dB]	0.03	-0.02
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.3
Dist 3dB Peak [mm]		8.0



Meas.19 Body Plane with Back Side 15mm on High Channel in LTE Band2 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 2	LTE-FDD, 10169-CAF	1900.0, 19100	8.4	1.38	39.3	22.0	21.0

Hardware Setup

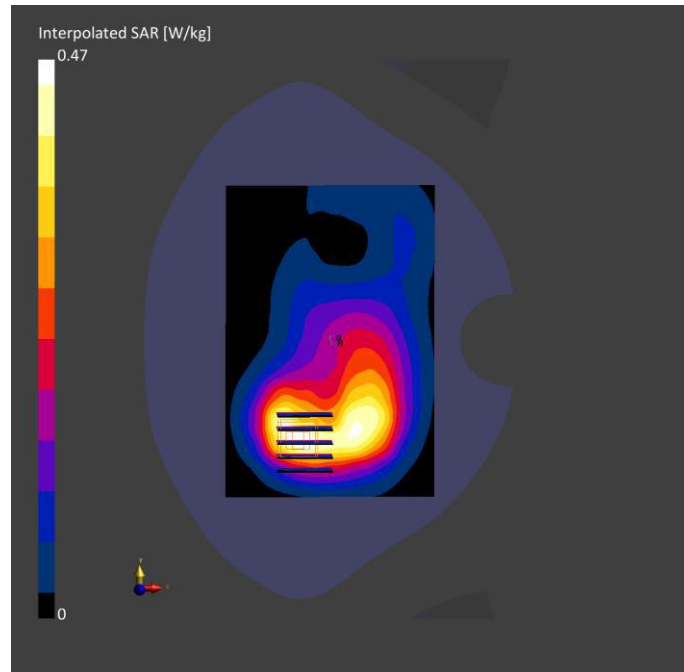
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-08	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-08	2023-04-08
psSAR1g [W/kg]	0.265	0.271
psSAR10g [W/kg]	0.158	0.159
Power Drift [dB]	-0.01	-0.01
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.9
Dist 3dB Peak [mm]		14.8



Meas.20 Body Plane with Top Edge 10mm on High Channel in LTE Band2 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 10.00	Band 2	LTE-FDD, 10169-CAF	1900.0, 19100	8.4	1.38	39.3	22.0	21.0

Hardware Setup

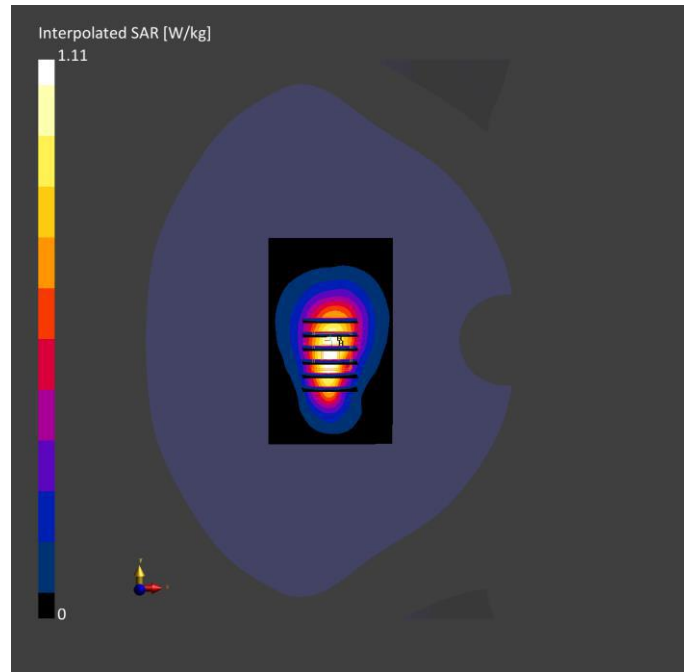
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-08	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-08	2023-04-08
psSAR1g [W/kg]	0.621	0.628
psSAR10g [W/kg]	0.340	0.353
Power Drift [dB]	-0.01	-0.02
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.6
Dist 3dB Peak [mm]		11.2



Meas.21 Right Head with Cheek on Middle Channel in LTE Band4 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	CHEEK, 0.00	Band 4	LTE-FDD, 10169-CAF	1732.5, 20175	8.69	1.36	40.6	22.1	20.8

Hardware Setup

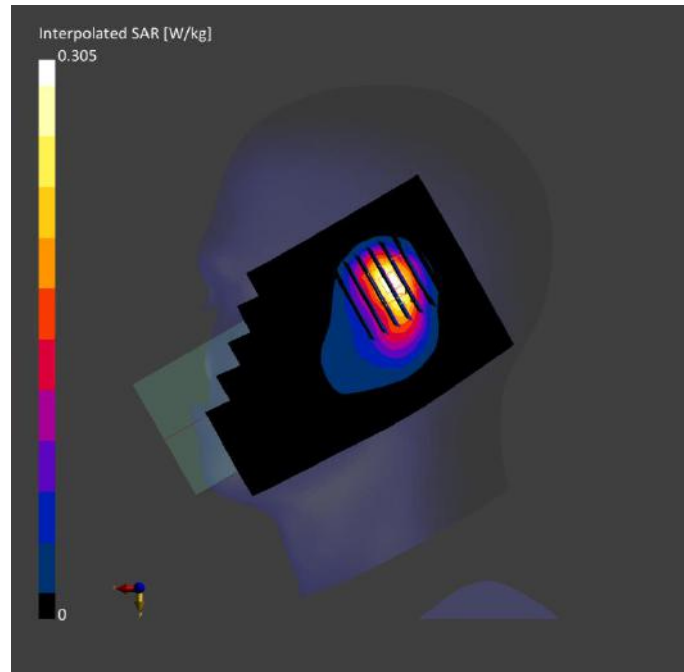
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-08	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	Y	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-08	2023-03-08
psSAR1g [W/kg]	0.147	0.165
psSAR10g [W/kg]	0.083	0.083
Power Drift [dB]	-0.17	0.02
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.0
Dist 3dB Peak [mm]		7.2



Meas.22 Body Plane with Back Side 15mm on Middle Channel in LTE Band4 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 4	LTE-FDD, 10169-CAF	1732.5, 20175	8.69	1.36	40.6	22.1	20.8

Hardware Setup

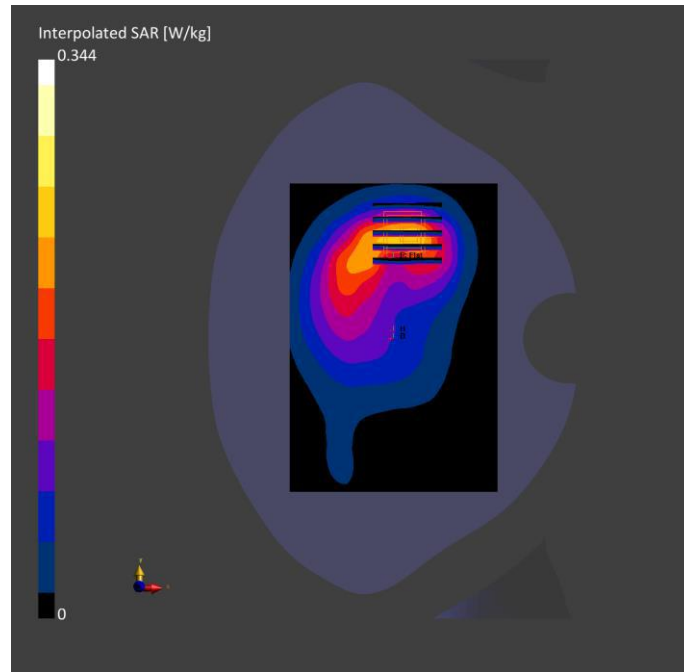
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-08	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-08	2023-03-08
psSAR1g [W/kg]	0.208	0.209
psSAR10g [W/kg]	0.123	0.124
Power Drift [dB]	-0.00	-0.02
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.5
Dist 3dB Peak [mm]		14.8



Meas.23 Body Plane with Bottom Edge 10mm on High Channel in LTE Band4 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 10.00	Band 4	LTE-FDD, 10169-CAF	1745.0, 20300	8.69	1.38	40.0	22.1	20.8

Hardware Setup

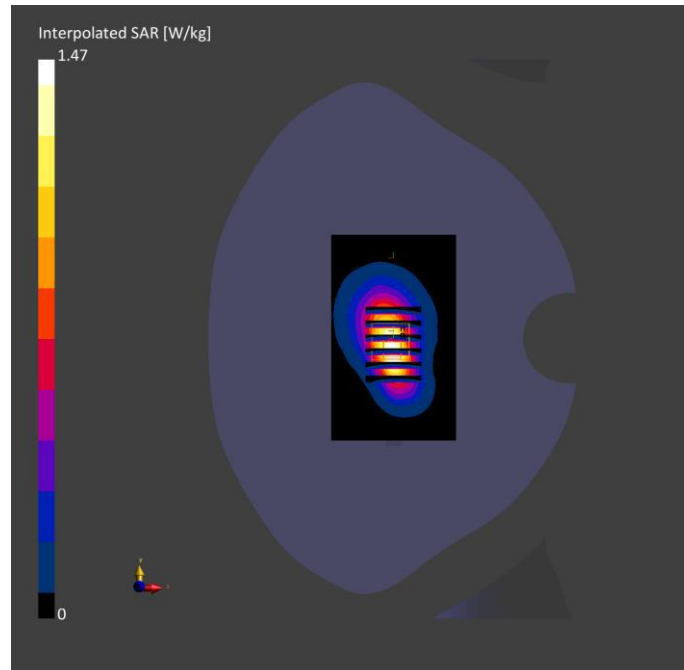
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-08	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-08	2023-03-08
psSAR1g [W/kg]	0.802	0.823
psSAR10g [W/kg]	0.433	0.446
Power Drift [dB]	-0.00	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.6
Dist 3dB Peak [mm]		10.1



Meas.24 Body Plane with Bottom Edge 0mm on Low Channel in LTE Band4 mode with Antenna.3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 0.00	Ban d 4	LTE- FDD, 10169 -CAF	1732.5, 20175	8.69	1.36	40.6	22.1	20.8

Hardware Setup

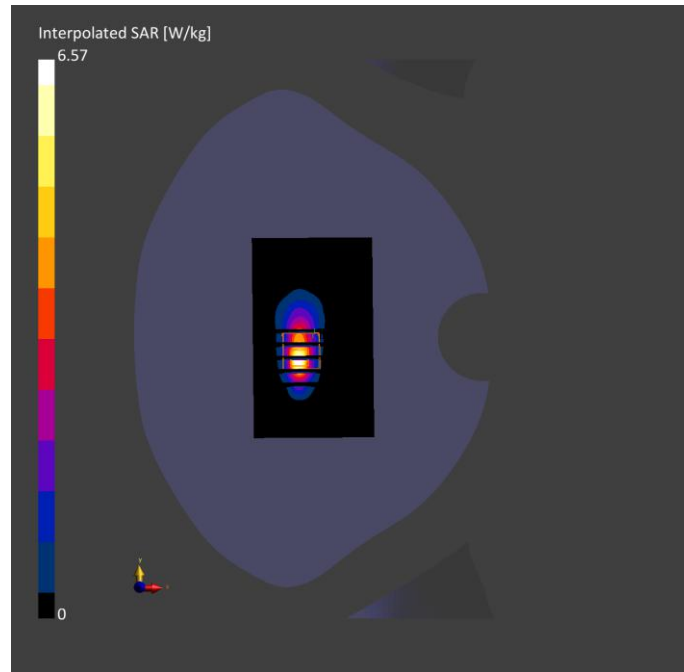
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-08	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-08	2023-03-08
psSAR1g [W/kg]	2.73	2.67
psSAR10g [W/kg]	1.14	1.06
Power Drift [dB]	-0.01	-0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		38.4
Dist 3dB Peak [mm]		4.8



Meas.25 Right Head with Cheek on High Channel in LTE Band5 mode with Antenna.1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	CHEEK, 0.00	Band 5	LTE-FDD, 10175-CAH	844.0, 20600	10.44	0.92	40.3	22.1	20.9

Hardware Setup

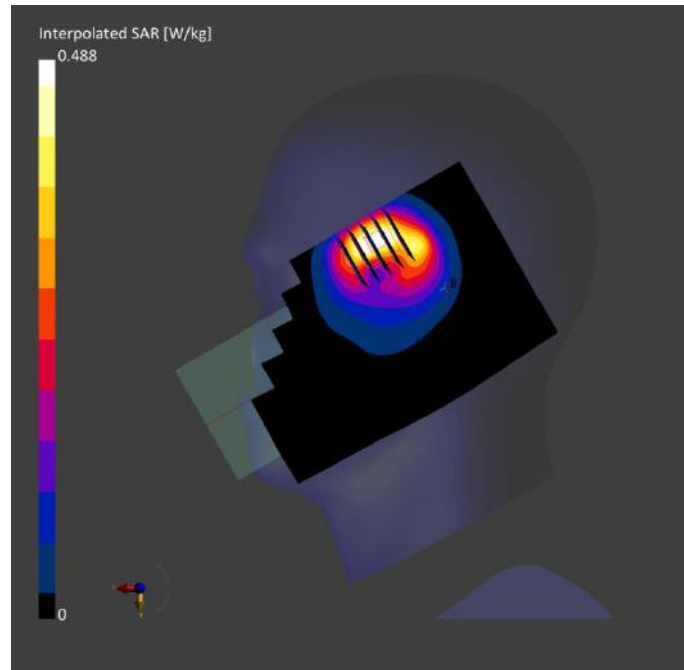
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-05	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-05	2023-03-05
psSAR1g [W/kg]	0.284	0.256
psSAR10g [W/kg]	0.176	0.138
Power Drift [dB]	-0.12	-0.08
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.9
Dist 3dB Peak [mm]		9.4



Meas.26 Body Plane with Back Side 15mm on Middle Channel in LTE Band5 mode with Antenna.0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 5	LTE-FDD, 10175-CAH	836.5, 20525	10.44	0.91	41.1	22.1	20.9

Hardware Setup

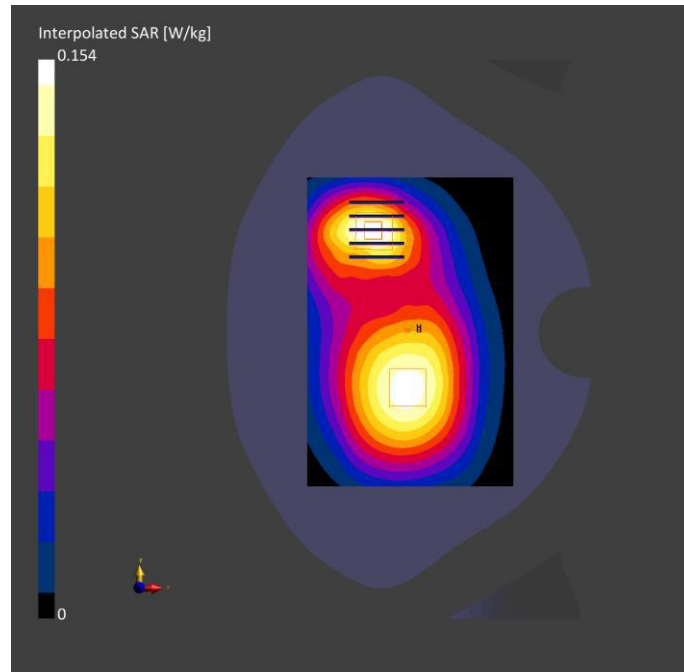
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-05	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-05	2023-03-05
psSAR1g [W/kg]	0.098	0.099
psSAR10g [W/kg]	0.067	0.063
Power Drift [dB]	0.04	-0.02
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		63.5
Dist 3dB Peak [mm]		18.7



Meas.27 Body Plane with Back Side 10mm on Middle Channel in LTE Band5 mode with Antenna.0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 5	LTE-FDD, 10175-CAH	836.5, 20525	10.44	0.91	41.1	22.1	20.9

Hardware Setup

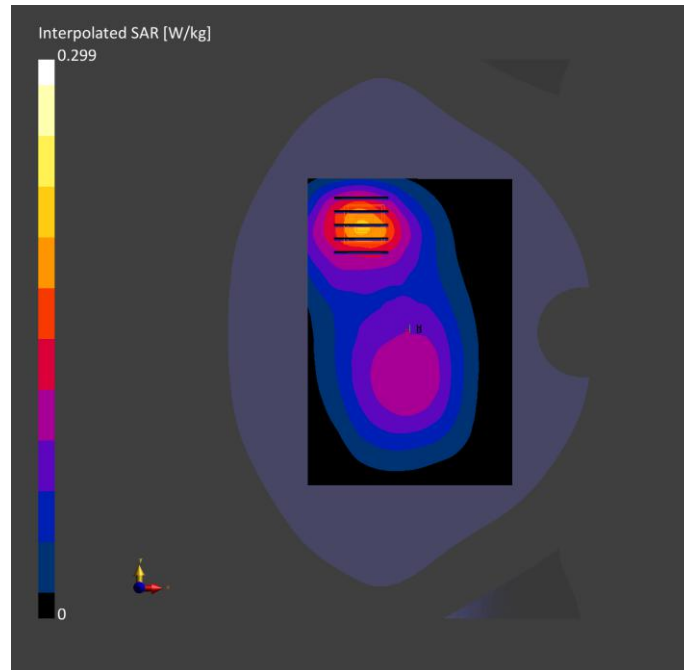
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-05	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-05	2023-03-05
psSAR1g [W/kg]	0.179	0.184
psSAR10g [W/kg]	0.118	0.113
Power Drift [dB]	-0.01	0.00
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		59.9
Dist 3dB Peak [mm]		16.5



Meas.28 Right Head with Tilt on High Channel in LTE Band7 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	TILT, 0.00	Band 7	LTE-FDD, 10169-CAF	2560.0, 21350	7.56	1.91	39.5	21.9	21.1

Hardware Setup

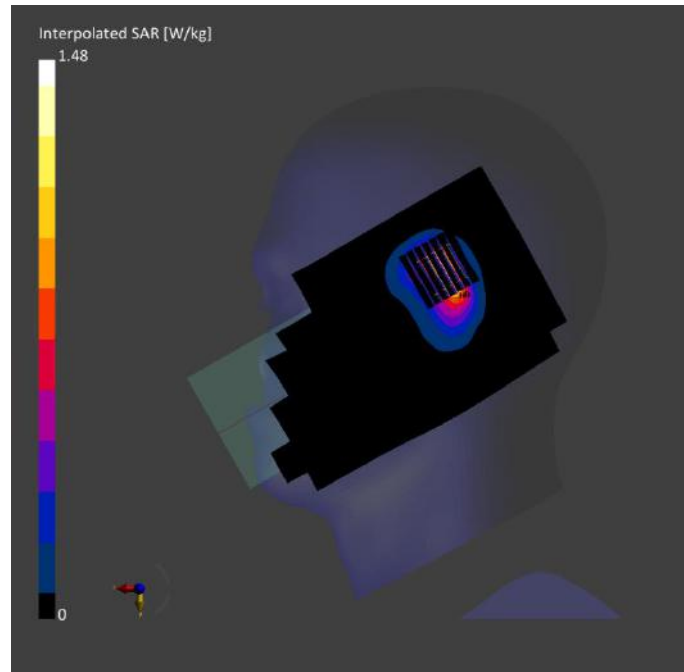
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-09	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-09	2023-04-09
psSAR1g [W/kg]	0.688	0.692
psSAR10g [W/kg]	0.318	0.309
Power Drift [dB]	0.02	-0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		45.2
Dist 3dB Peak [mm]		7.0



Meas.29 Body Plane with Back Side 15mm on Middle Channel in LTE Band7 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 7	LTE-FDD, 10169-CAF	2535.0, 21100	7.56	1.87	39.7	21.9	21.1

Hardware Setup

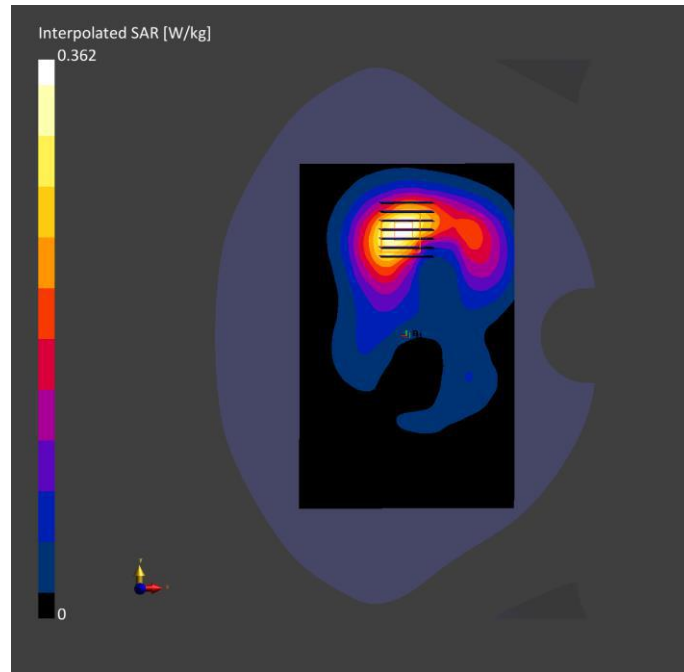
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-09	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	Y	Y
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-09	2023-04-09
psSAR1g [W/kg]	0.197	0.201
psSAR10g [W/kg]	0.104	0.109
Power Drift [dB]	-0.00	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		53.2
Dist 3dB Peak [mm]		12.7



Meas.30 Body Plane with Top Edge 10mm on Middle Channel in LTE Band7 mode with Antenna. 4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 10.00	Band 7	LTE-FDD, 10169-CAF	2535.0, 21100	7.56	1.87	39.7	21.9	21.1

Hardware Setup

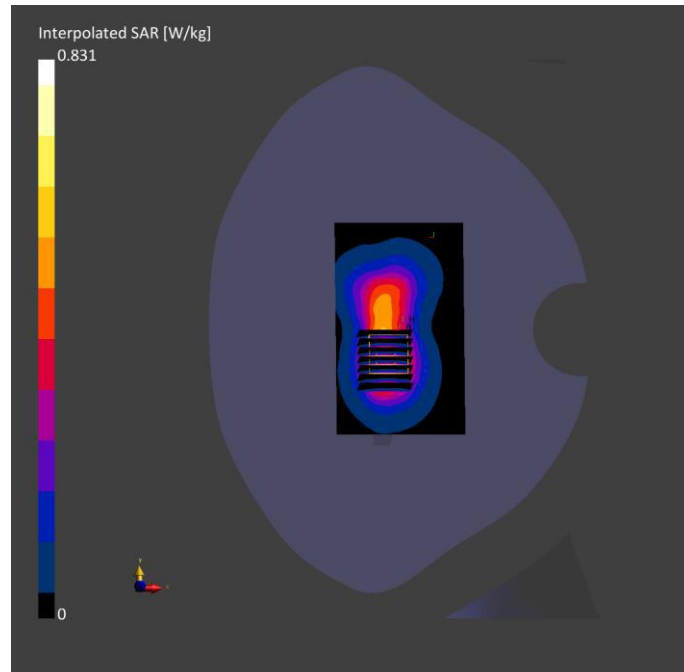
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-09	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-09	2023-04-09
psSAR1g [W/kg]	0.378	0.418
psSAR10g [W/kg]	0.190	0.199
Power Drift [dB]	0.00	-0.02
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.5
Dist 3dB Peak [mm]		10.4



Meas.31 Body Plane with Bottom Edge 0mm on Middle Channel in LTE Band7 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 0.00	Band 7	LTE-FDD, 10169-CAF	2535.0, 21100	7.56	1.87	39.7	21.9	21.1

Hardware Setup

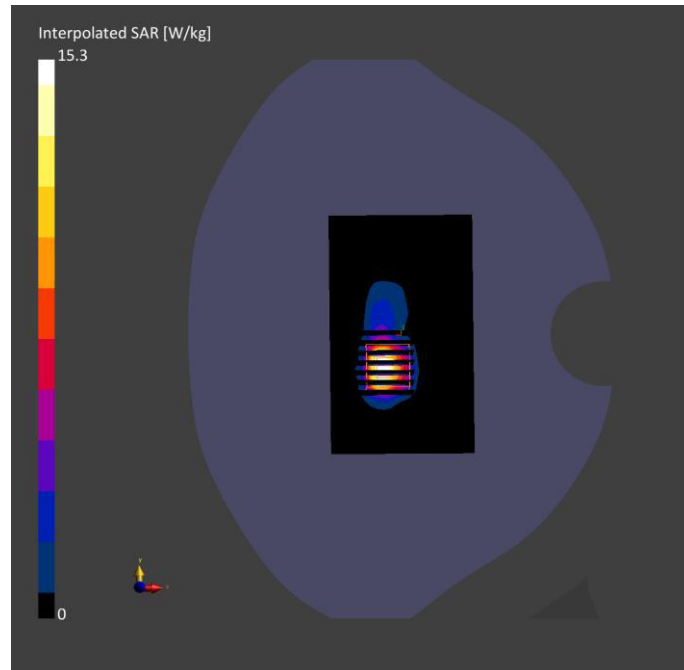
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-09	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-09	2023-04-09
psSAR1g [W/kg]	4.16	5.88
psSAR10g [W/kg]	1.75	2.02
Power Drift [dB]	-0.04	-0.02
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		38.3
Dist 3dB Peak [mm]		6.0



Meas.32 Right Head with Cheek on Middle Channel in LTE Band12 mode with Antenna.1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	CHEEK, 0.00	Band 12	LTE-FDD, 10175-CAH	711.0, 23130	10.96	0.87	43.1	22.3	21.1

Hardware Setup

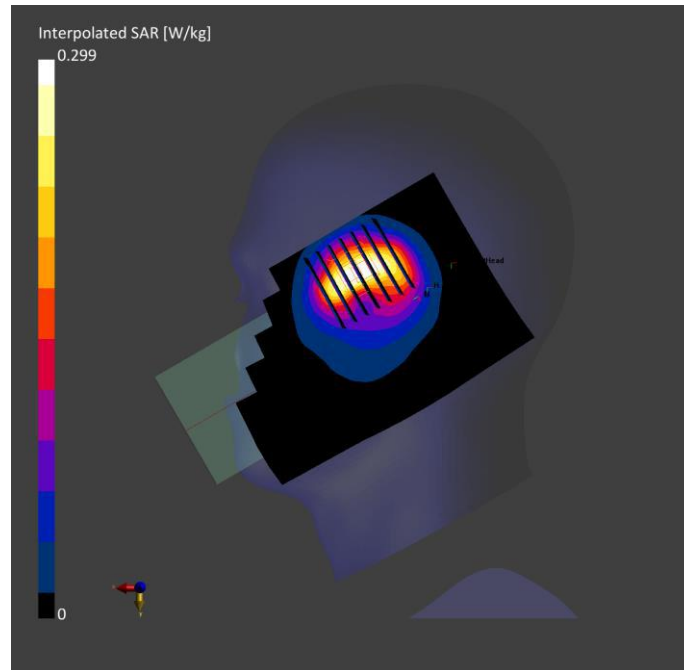
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-02	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-02	2023-03-02
psSAR1g [W/kg]	0.144	0.146
psSAR10g [W/kg]	0.093	0.076
Power Drift [dB]	0.08	-0.00
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		45.5
Dist 3dB Peak [mm]		7.1



Meas.33 Body Plane with Back Side 15mm on Middle Channel in LTE Band12 mode with Antenna.0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 12	LTE-FDD, 10175-CAH	711.0, 23130	10.96	0.87	43.1	22.3	21.1

Hardware Setup

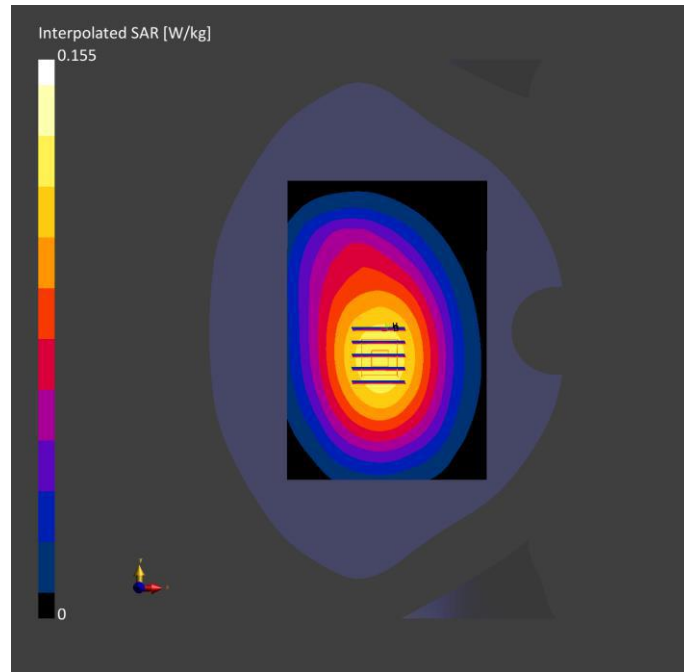
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-02	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-02	2023-03-02
psSAR1g [W/kg]	0.114	0.119
psSAR10g [W/kg]	0.081	0.091
Power Drift [dB]	-0.00	0.00
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		76.5
Dist 3dB Peak [mm]		16.0



Meas.34 Body Plane with Right Edge 10mm on Middle Channel in LTE Band12 mode with Antenna.0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE RIGHT, 10.00	Band 12	LTE-FDD, 10175-CAH	711.0, 23130	10.96	0.87	43.1	22.3	21.1

Hardware Setup

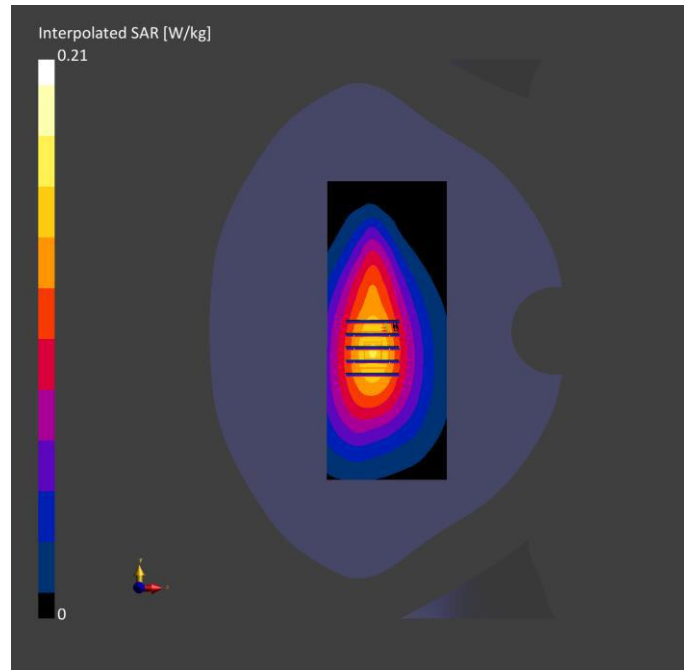
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-02	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-02	2023-03-02
psSAR1g [W/kg]	0.139	0.143
psSAR10g [W/kg]	0.096	0.099
Power Drift [dB]	-0.01	0.00
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		67.2
Dist 3dB Peak [mm]		16.1



Meas.35 Right Head with Cheek on Middle Channel in LTE Band13 mode with Antenna.1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	CHEEK, 0.00	Band 13	LTE-FDD, 10175-CAH	782.0, 23230	10.96	0.92	40.8	22.3	21.1

Hardware Setup

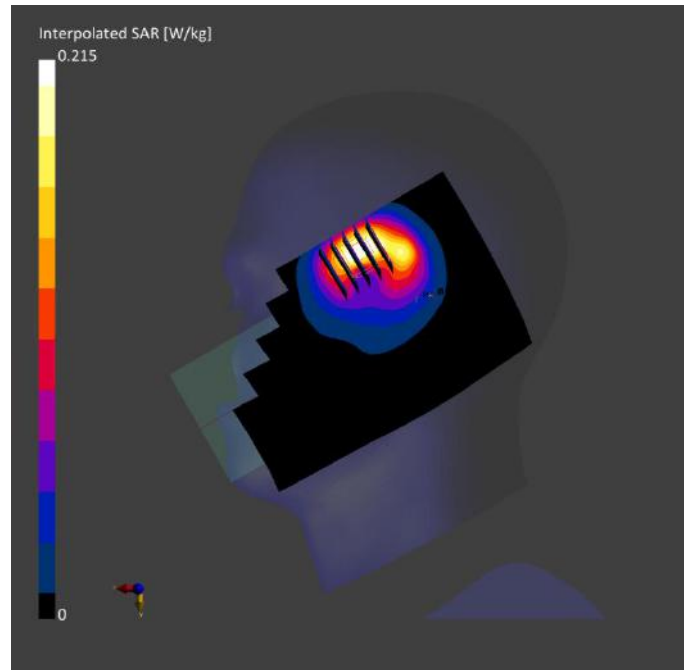
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-02	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-02	2023-03-02
psSAR1g [W/kg]	0.115	0.110
psSAR10g [W/kg]	0.071	0.059
Power Drift [dB]	0.04	0.04
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.0
Dist 3dB Peak [mm]		9.6



Meas.36 Body Plane with Back Side 15mm on Middle Channel in LTE Band13 mode with Antenna.0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 13	LTE-FDD, 10175-CAH	782.0, 23230	10.96	0.92	40.8	22.3	21.1

Hardware Setup

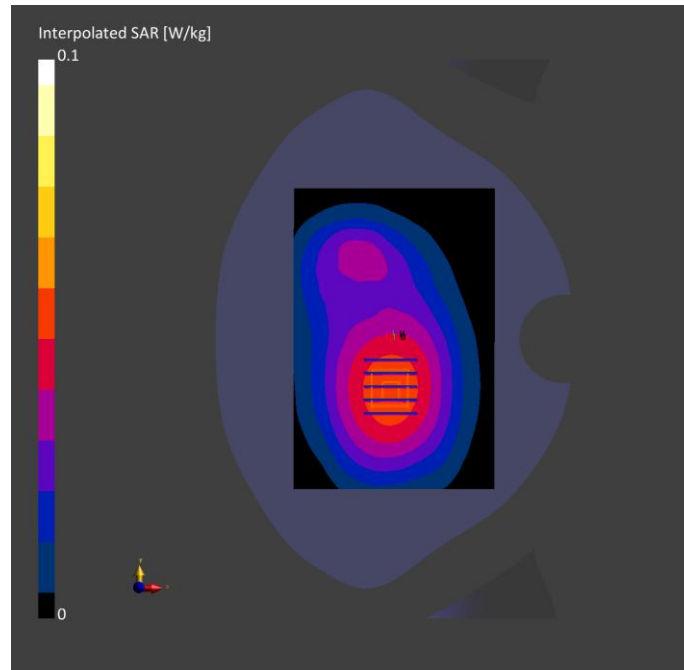
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-02	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	Y	Y
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-02	2023-03-02
psSAR1g [W/kg]	0.050	0.053
psSAR10g [W/kg]	0.036	0.040
Power Drift [dB]	-0.17	0.00
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		75.9
Dist 3dB Peak [mm]		13.2



Meas.37 Body Plane with Right Edge 10mm on Middle Channel in LTE Band13 mode with Antenna.1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE RIGHT, 10.00	Band 13	LTE-FDD, 10175-CAH	782.0, 23230	10.96	0.92	40.8	22.3	21.1

Hardware Setup

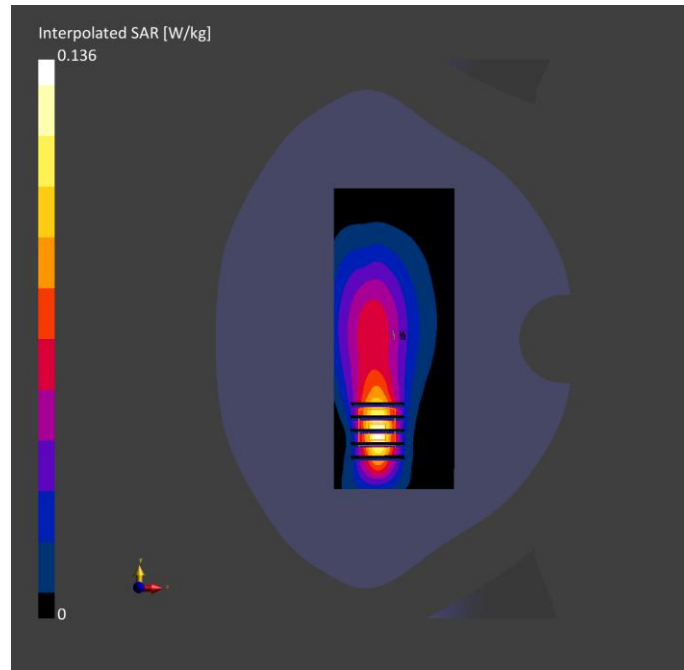
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-02	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	Y	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-02	2023-03-02
psSAR1g [W/kg]	0.077	0.076
psSAR10g [W/kg]	0.046	0.042
Power Drift [dB]	0.01	0.05
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.0
Dist 3dB Peak [mm]		9.6



Meas.38 Right Head with Cheek on Middle Channel in LTE Band17 mode with Antenna.1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	CHEEK, 0.00	Band 17	LTE-FDD, 10175-CAH	709.0, 23780	10.96	0.87	43.3	22.4	21.3

Hardware Setup

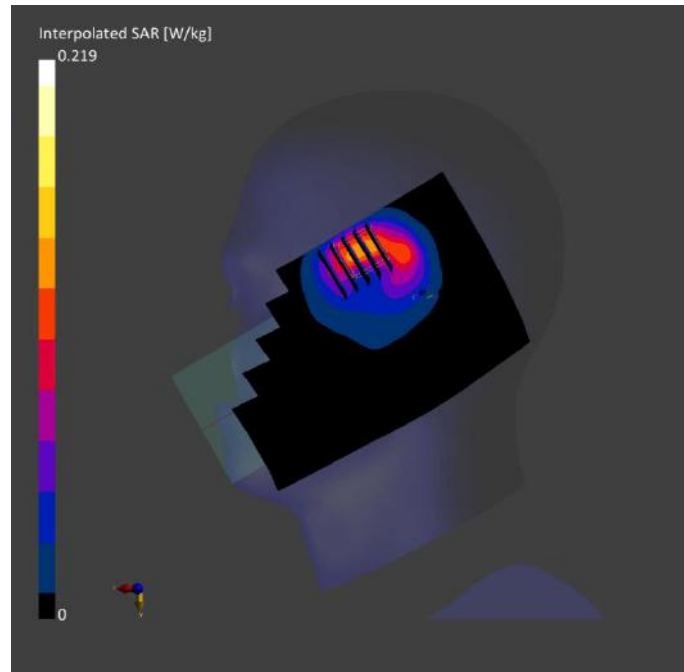
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-03	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-03	2023-03-03
psSAR1g [W/kg]	0.118	0.110
psSAR10g [W/kg]	0.074	0.059
Power Drift [dB]	0.03	-0.02
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.3
Dist 3dB Peak [mm]		8.2



Meas.39 Body Plane with Back Side 15mm on Middle Channel in LTE Band17 mode with Antenna.0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 17	LTE-FDD, 10175-CAH	709.0, 23780	10.96	0.87	43.3	22.4	21.3

Hardware Setup

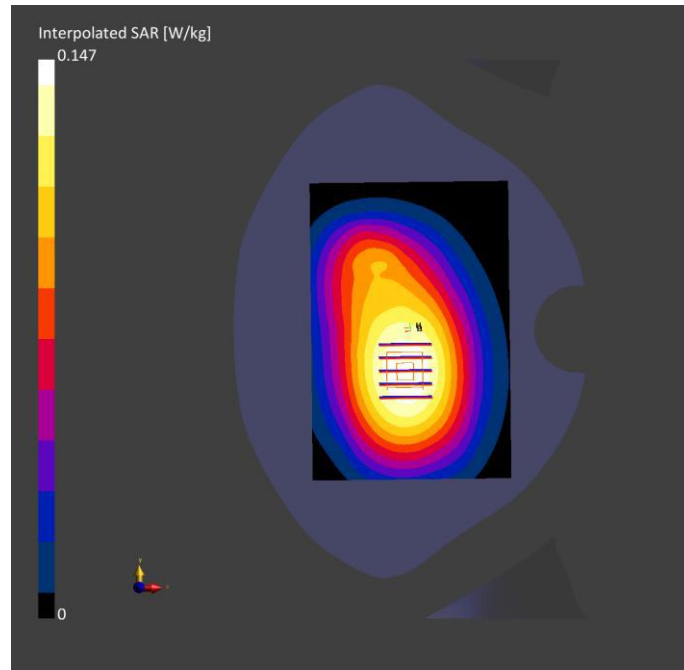
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-03	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-03	2023-03-03
psSAR1g [W/kg]	0.107	0.113
psSAR10g [W/kg]	0.077	0.087
Power Drift [dB]	0.00	-0.01
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.1
Dist 3dB Peak [mm]		13.4



Meas.40 Body Plane with Right Edge 10mm on Middle Channel in LTE Band17 mode with Antenna.0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE RIGHT, 10.00	Band 17	LTE-FDD, 10175-CAH	709.0, 23780	10.96	0.87	43.3	22.4	21.3

Hardware Setup

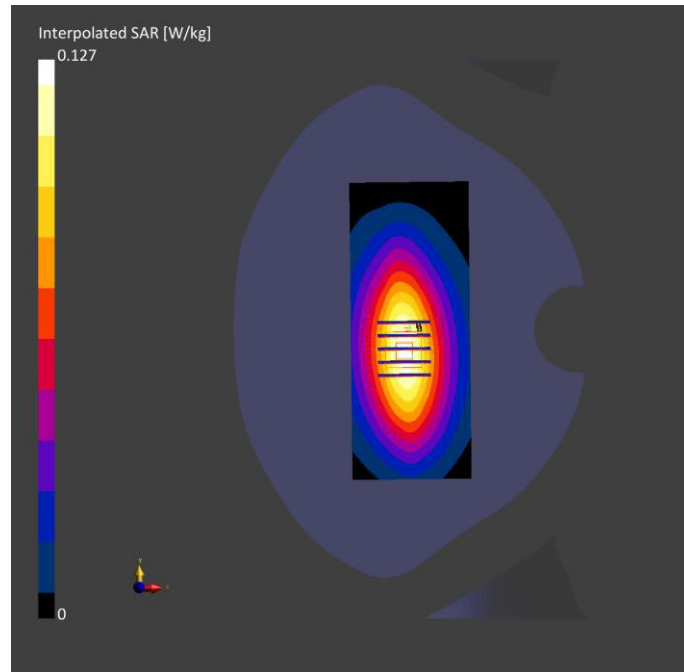
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-03	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	Y	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-03	2023-03-03
psSAR1g [W/kg]	0.084	0.086
psSAR10g [W/kg]	0.058	0.059
Power Drift [dB]	-0.00	0.06
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		66.8
Dist 3dB Peak [mm]		14.2



Meas.41 Right Head with Cheek on High Channel in LTE Band26 mode with Antenna.1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	CHEEK, 0.00	Band 26	LTE-FDD, 10181-CAF	841.5, 26965	10.44	0.91	40.9	22.1	20.9

Hardware Setup

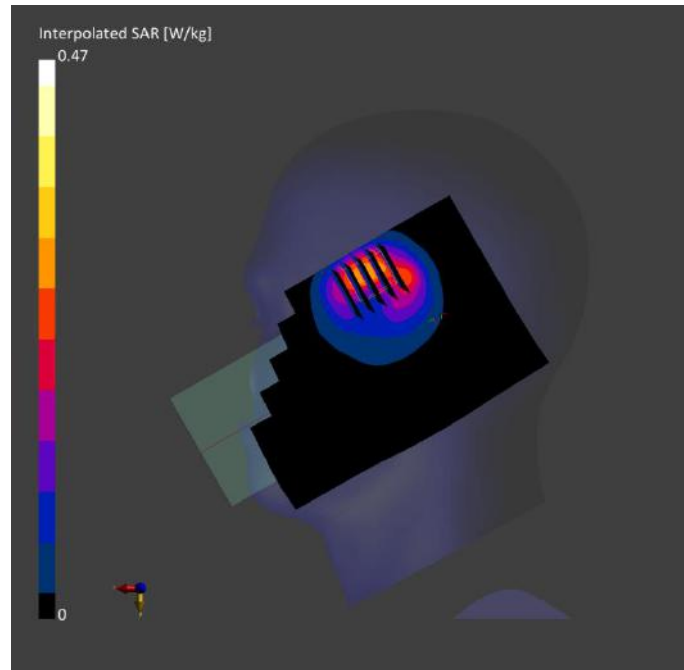
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-05	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-05	2023-03-05
psSAR1g [W/kg]	0.262	0.247
psSAR10g [W/kg]	0.162	0.133
Power Drift [dB]	0.03	-0.00
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.7
Dist 3dB Peak [mm]		9.9



Meas.42 Body Plane with Back Side 15mm on High Channel in LTE Band26 mode with Antenna.0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 26	LTE-FDD, 10181-CAF	841.5, 26965	10.44	0.91	40.9	22.1	20.9

Hardware Setup

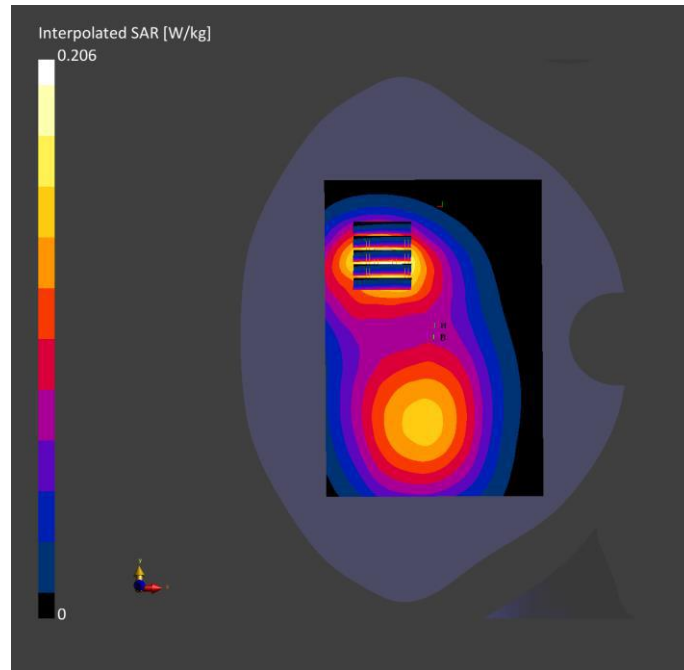
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-05	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-05	2023-03-05
psSAR1g [W/kg]	0.129	0.129
psSAR10g [W/kg]	0.084	0.081
Power Drift [dB]	0.01	-0.01
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.4
Dist 3dB Peak [mm]		17.2



Meas.43 Body Plane with Back Side 10mm on High Channel in LTE Band26 mode with Antenna.0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 26	LTE-FDD, 10181-CAF	841.5, 26965	10.44	0.91	40.9	22.1	20.9

Hardware Setup

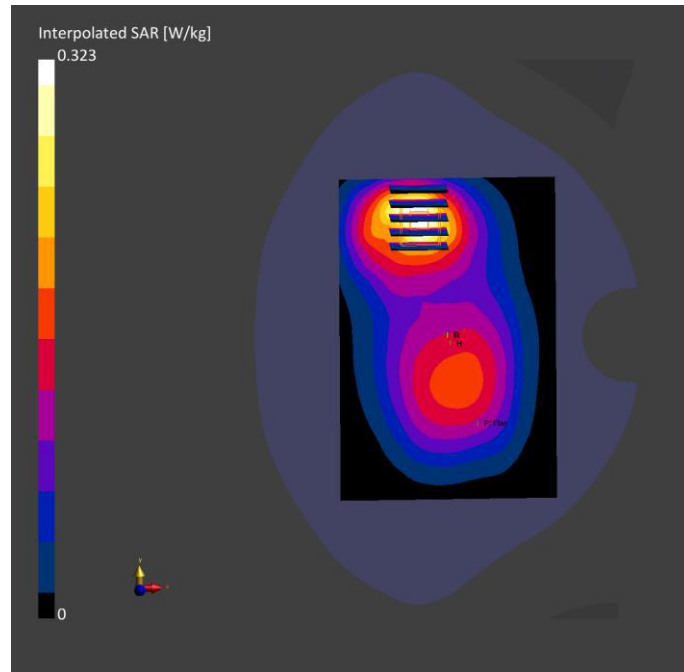
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-05	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-05	2023-03-05
psSAR1g [W/kg]	0.195	0.197
psSAR10g [W/kg]	0.128	0.120
Power Drift [dB]	0.02	0.00
Power	Disabled	Disabled
Scaling		
Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		59.5
Dist 3dB Peak [mm]		14.8



Meas.44 Right Head with Cheek on High Channel in LTE Band66 mode with Antenna.1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	CHEEK, 0.00	Band 66	LTE-FDD, 10169-CAF	1770.0, 132572	8.69	1.41	39.0	22.0	21.1

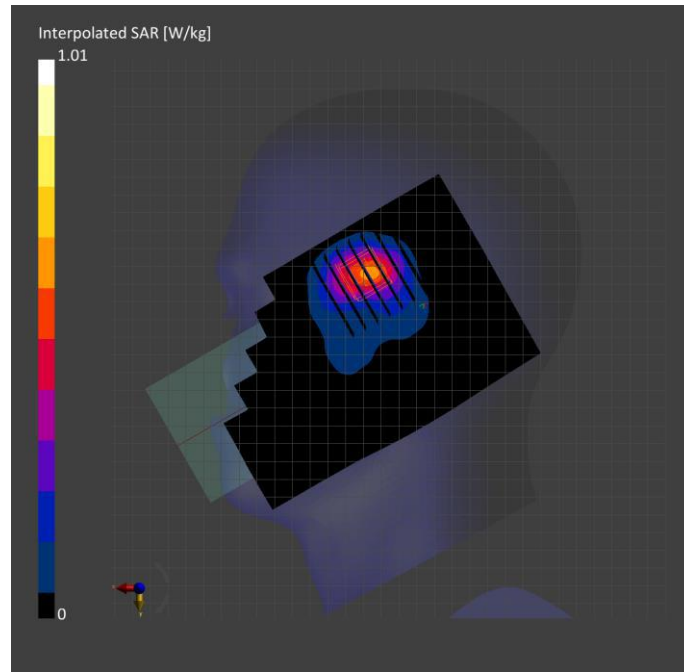
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-10	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0	Date	2023-03-10	2023-03-10
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.504	0.589
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.279	0.308
Graded Grid	Yes	Yes	Power Drift [dB]	-0.42	-0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA Surface	N/A	N/A	Scaling		
Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		60.3
			Dist 3dB Peak [mm]		9.6



Meas.45 Body Plane with Back Side 15mm on Middle Channel in LTE Band66 mode with Antenna.3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 66	LTE-FDD, 10169-CAF	1745.0, 132322	8.69	1.36	41.3	22.0	21.1

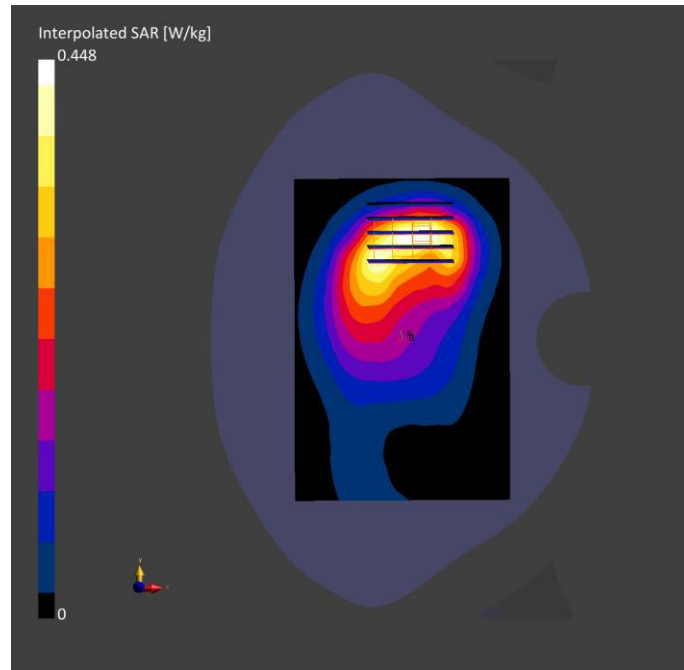
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-10	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0	Date	2023-03-10	2023-03-10
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.274	0.274
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.163	0.167
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA Surface	N/A	N/A	Scaling		
Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		59.9
			Dist 3dB Peak [mm]		13.7



Meas.46 Body Plane with Bottom Edge 10mm on Middle Channel in LTE Band66 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 10.00	Band 66	LTE-FDD, 10169-CAF	1745.0, 132322	8.69	1.36	41.3	22.0	21.1

Hardware Setup

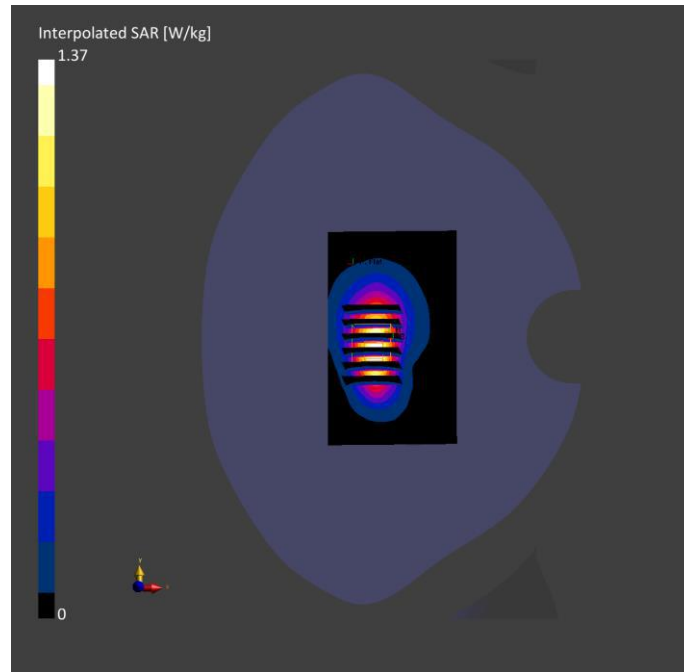
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-10	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-10	2023-03-10
psSAR1g [W/kg]	0.728	0.758
psSAR10g [W/kg]	0.391	0.411
Power Drift [dB]	-0.03	-0.04
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.4
Dist 3dB Peak [mm]		9.6



Meas.47 Body Plane with Bottom Edge 0mm on Middle Channel in LTE Band66 mode with Antenna.3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 0.00	Band 66	LTE-FDD, 10169-CAF	1745.0, 132322	8.69	1.36	41.3	22.0	21.1

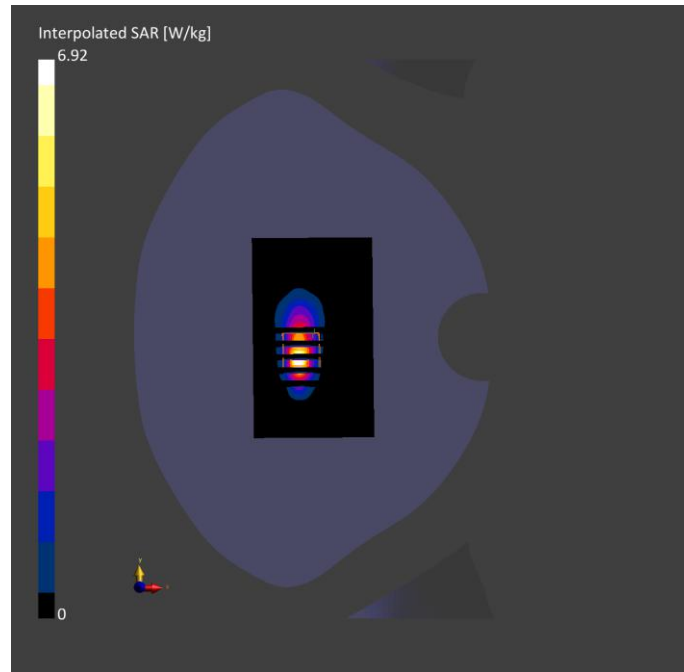
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-10	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	32.0 x 32.0 x 30.0	Date	2023-03-10	2023-03-10
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	2.63	2.58
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	1.10	1.03
Graded Grid	Yes	Yes	Power Drift [dB]	-0.01	-0.04
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		37.8
			Dist 3dB Peak [mm]		4.8



Meas.48 Right Head with Tilt on Middle Channel in LTE Band38 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	TILT, 0.00	Band 38	LTE-TDD, 10172-CAH	2595.0, 38000	7.56	1.93	39.5	22.1	21.0

Hardware Setup

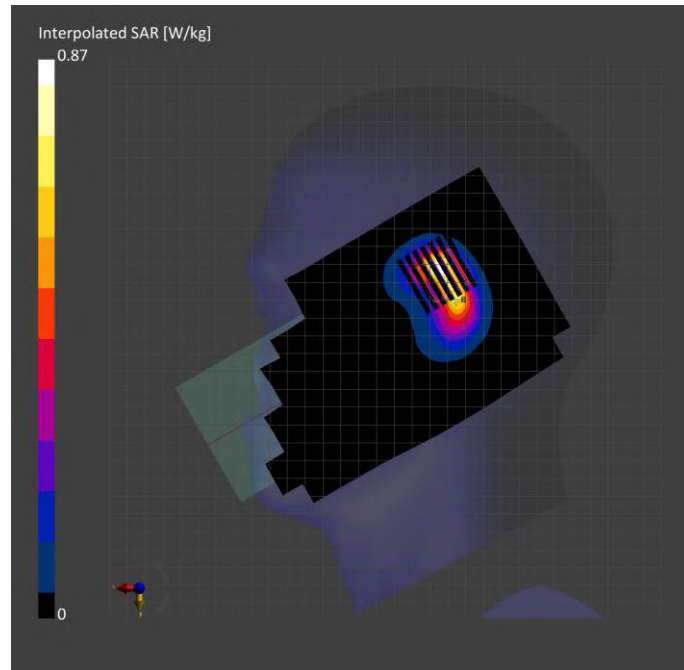
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-19	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-19	2023-03-19
psSAR1g [W/kg]	0.380	0.396
psSAR10g [W/kg]	0.177	0.175
Power Drift [dB]	-0.02	-0.04
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		46.9
Dist 3dB Peak [mm]		6.1



Meas.49 Body Plane with Back Side 15mm on High Channel in LTE Band38 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 38	LTE-TDD, 10172-CAH	2610.0, 38150	7.56	1.99	37.7	22.3	21.3

Hardware Setup

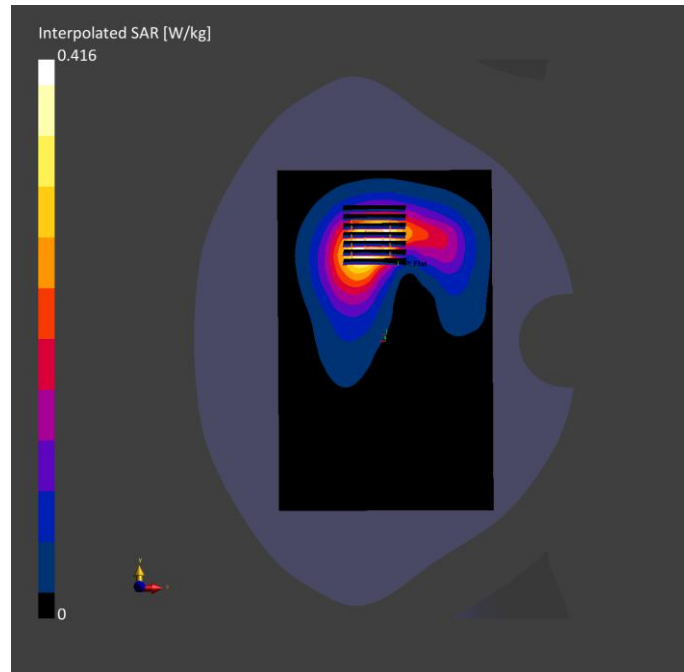
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-19	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	Y	Y
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-19	2023-03-19
psSAR1g [W/kg]	0.214	0.224
psSAR10g [W/kg]	0.114	0.118
Power Drift [dB]	-0.00	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.7
Dist 3dB Peak [mm]		11.4



Meas.50 Body Plane with Bottom Edge 10mm on High Channel in LTE Band38 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 10.00	Band 38	LTE-TDD, 10172-CAH	2610.0, 38150	7.56	1.99	37.7	22.3	21.3

Hardware Setup

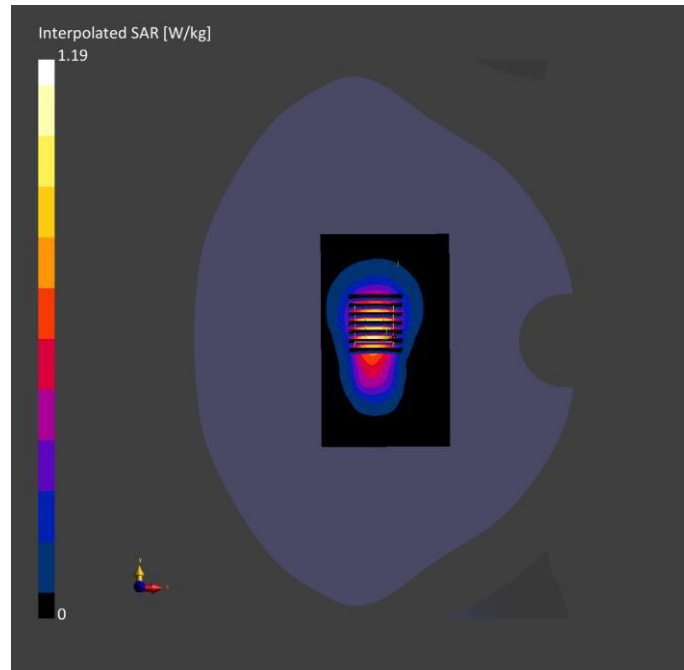
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-19	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-19	2023-03-19
psSAR1g [W/kg]	0.537	0.616
psSAR10g [W/kg]	0.275	0.297
Power Drift [dB]	-0.01	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.5
Dist 3dB Peak [mm]		10.0



Meas.51 Right Head with Tilt on Middle Channel in LTE Band41 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	TILT, 0.00	Band 41	LTE-TDD, 10172-CAH	2593.0, 40620	7.56	1.96	38.7	22.2	21.2

Hardware Setup

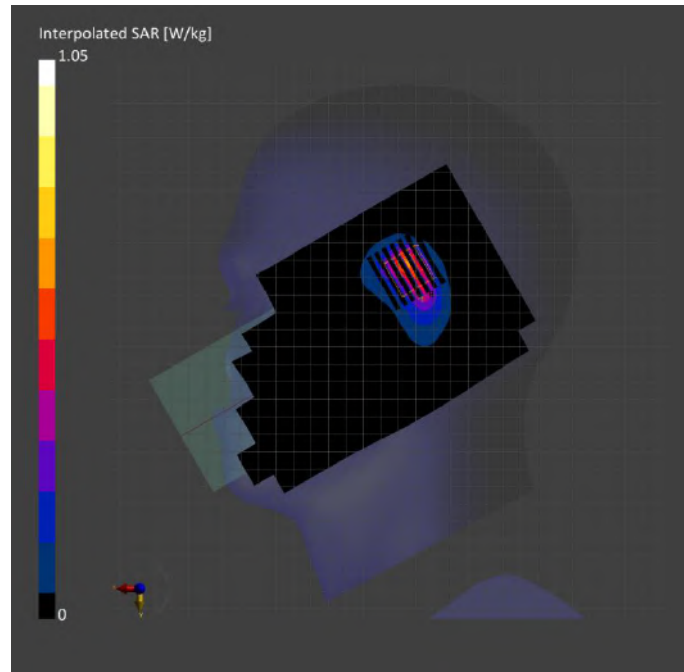
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-21	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-21	2023-03-21
psSAR1g [W/kg]	0.476	0.493
psSAR10g [W/kg]	0.224	0.221
Power Drift [dB]	0.03	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		48.5
Dist 3dB Peak [mm]		7.1



Meas.52 Body Plane with Back Side 15mm on Middle Channel in LTE Band41 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 41	LTE-TDD, 10172-CAH	2593.0, 40620	7.56	1.96	38.7	22.2	21.2

Hardware Setup

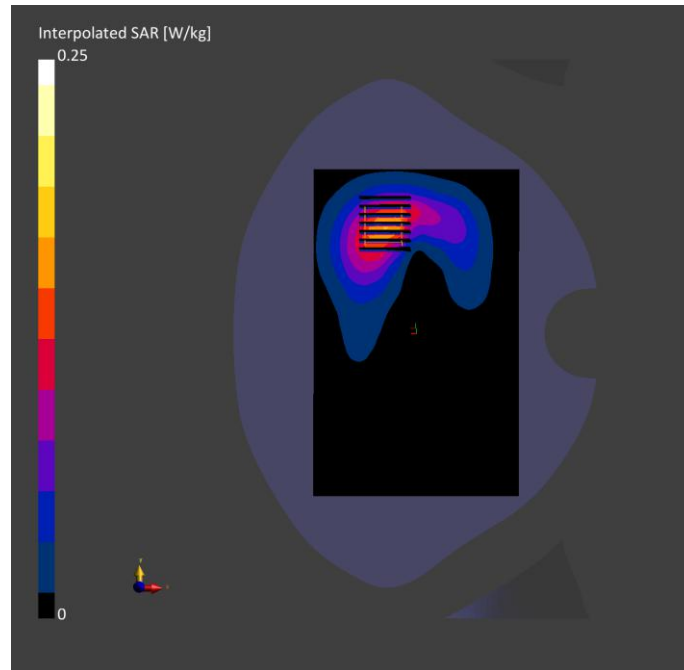
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-21	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	Y	Y
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-21	2023-03-21
psSAR1g [W/kg]	0.136	0.137
psSAR10g [W/kg]	0.072	0.073
Power Drift [dB]	0.02	0.00
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.7
Dist 3dB Peak [mm]		11.4



Meas.53 Body Plane with Bottom Edge 10mm on Middle Channel in LTE Band41 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 10.00	Band 41	LTE-TDD, 10172-CAH	2593.0, 40620	7.56	1.96	38.7	22.2	21.2

Hardware Setup

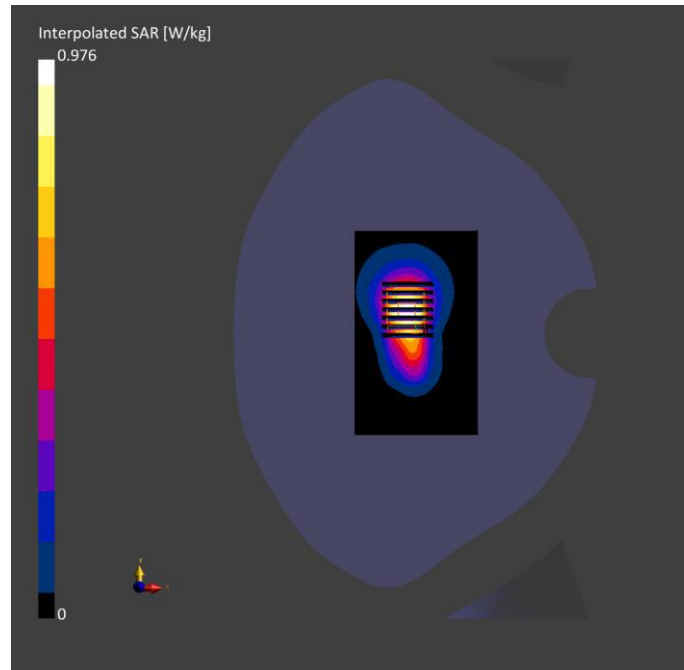
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-21	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-21	2023-03-21
psSAR1g [W/kg]	0.441	0.499
psSAR10g [W/kg]	0.221	0.237
Power Drift [dB]	-0.00	0.02
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.9
Dist 3dB Peak [mm]		9.0



Meas.54 Body Plane with Bottom Edge 0mm on Middle Channel in LTE Band41 mode with Antenna.3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 0.00	Band 41	LTE-TDD, 10172-CAH	2593.0, 40620	7.56	1.96	38.7	22.2	21.2

Hardware Setup

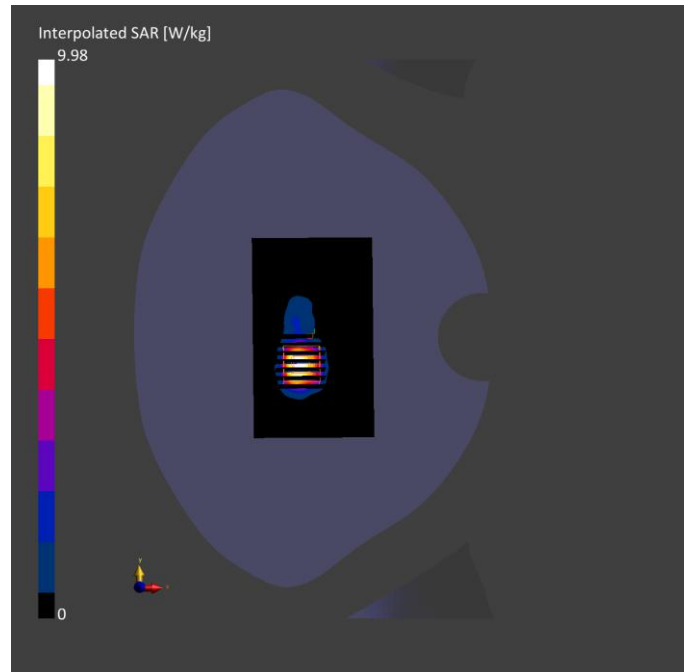
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-21	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-21	2023-03-21
psSAR1g [W/kg]	2.50	3.67
psSAR10g [W/kg]	1.06	1.24
Power Drift [dB]	0.00	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		35.8
Dist 3dB Peak [mm]		5.0



Meas.55 Right Head with Cheek on 167300 Channel in NR Band5 mode with Antenna.1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	CHEEK, 0.00	Band 5	5G NR FR1 FDD, 10931 -AAC	836.5, 167300	10.44	0.91	41.3	22.0	21.0

Hardware Setup

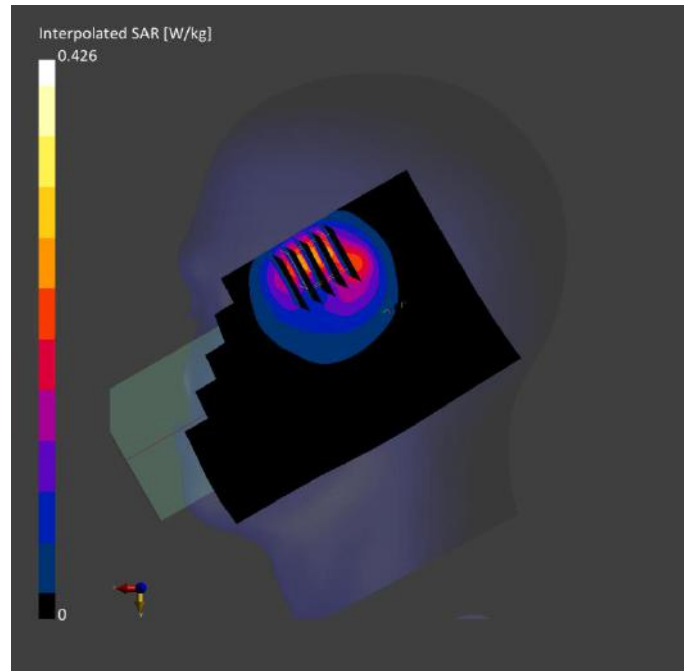
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-06	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup
Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0	Date	2023-03-06	2023-03-06
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.234	0.223
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.145	0.121
Graded Grid	Yes	Yes	Power Drift [dB]	-0.04	0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA Surface	N/A	N/A	Scaling		
Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		51.8

Dist 3dB Peak
[mm]

9.7



Meas.56 Body Plane with Back Side 15mm on 167300 Channel in NR Band5 mode with Antenna.0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band n5	5G NR FR1 FDD, 10931 -AAC	836.5, 167300	10.44	0.91	41.3	22.0	21.0

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-06	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

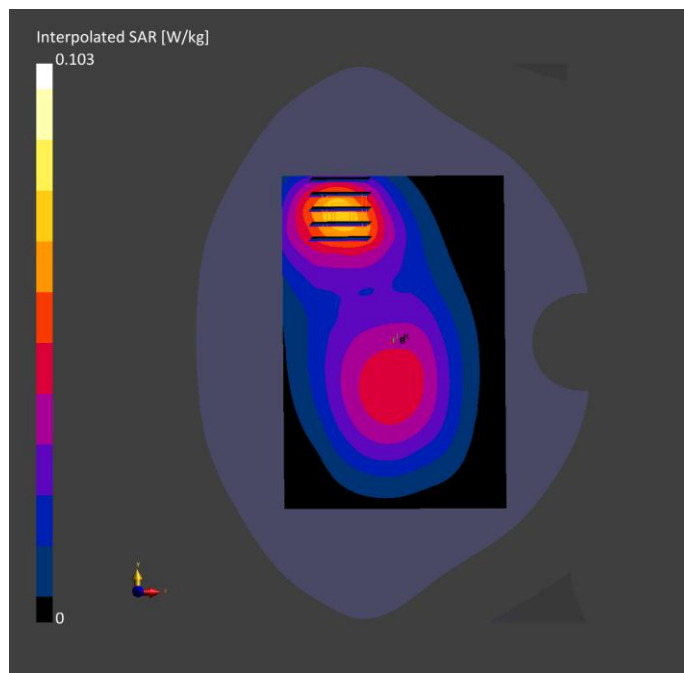
Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0	Date	2023-03-06	2023-03-06
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.065	0.066
Sensor	3.0	1.4	psSAR10g [W/kg]	0.043	0.042
Surface [mm]			Power Drift [dB]	0.01	0.00
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	Y	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		62.5

Dist 3dB Peak
[mm]

15.0



Meas.57 Body Plane with Back Side 10mm on 167300 Channel in NR Band5 mode with Antenna.0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

PhAntom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band n5	5G NR FR1 FDD, 10931 -AAC	836.5, 167300	10.44	0.91	41.3	22.0	21.0

Hardware Setup

PhAntom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-06	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

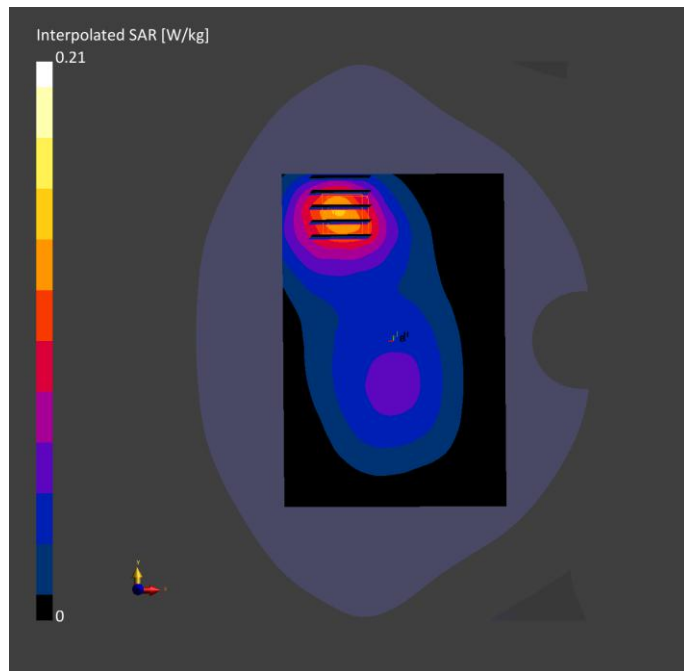
Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0	Date	2023-03-06	2023-03-06
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.123	0.126
Sensor	3.0	1.4	psSAR10g [W/kg]	0.082	0.077
Surface [mm]			Power Drift [dB]	-0.05	-0.03
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		58.3

Dist 3dB Peak
[mm]

14.8



Meas.58 Right Head with Tilted on 507000 Channel in NR Band7 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	TILT, 0.00	Band 7	5G NR FR1 FDD, 10939 -AAC	2535.0, 507000	7.56	1.87	39.3	22.4	21.4

Hardware Setup

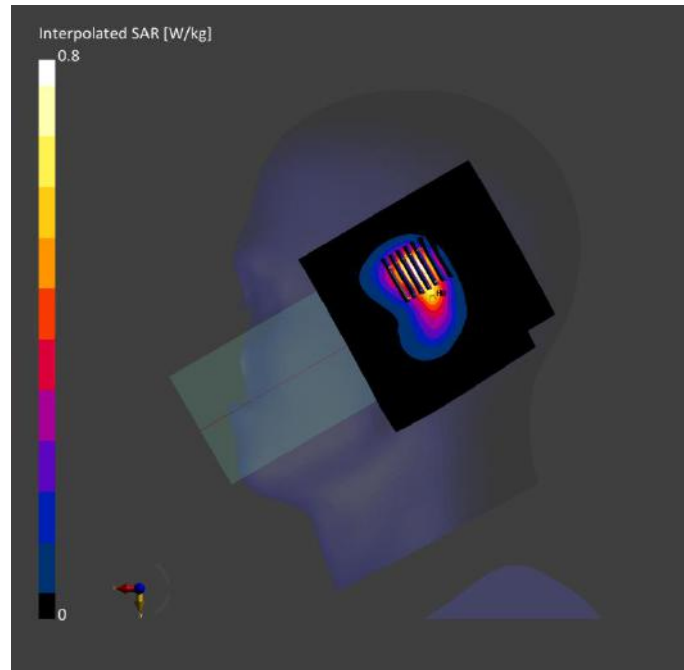
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-14	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 120.0	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	3.0	1.4
Surface [mm]		
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-14	2023-04-14
psSAR1g [W/kg]	0.690	0.686
psSAR10g [W/kg]	0.317	0.307
Power Drift [dB]	-0.11	-0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.7
Dist 3dB Peak [mm]		7.0



Meas.59 Plane with Back Side 15mm on 507000 Channel in NR Band7 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band n7	5G NR FR1 FDD, 10931 -AAC	2535.0, 507000	7.56	1.87	39.4	22.3	21.4

Hardware Setup

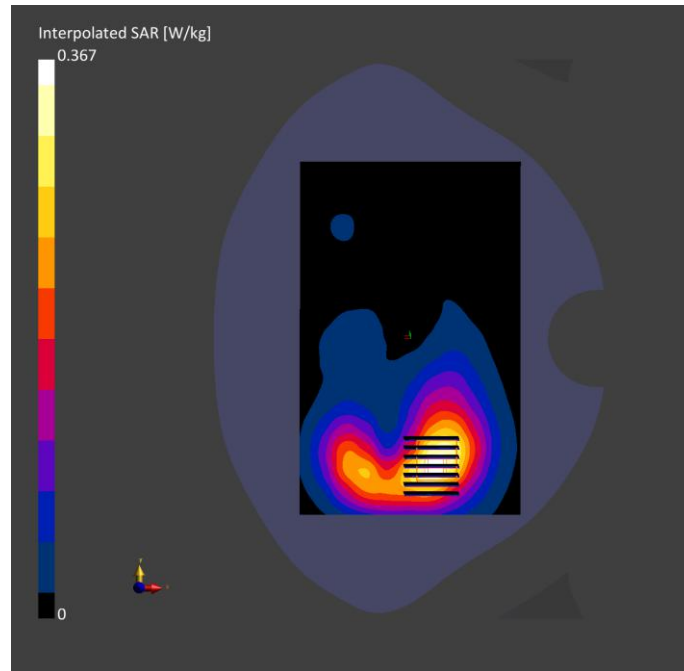
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-23	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup
Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2023-03-23	2023-03-23
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.207	0.208
Sensor	3.0	1.4	psSAR10g [W/kg]	0.112	0.116
Surface [mm]			Power Drift [dB]	-0.05	-0.03
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	Y	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		54.5

Dist 3dB Peak
[mm]

15.6



Meas.60 Body Plane with Bottom Edge 10mm on 507000 Channel in NR Band7 mode with Antenna.3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 10.00	Band n7	5G NR FR1 FDD, 10939 -AAC	2535.0, 507000	7.56	1.87	39.4	22.3	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-23	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

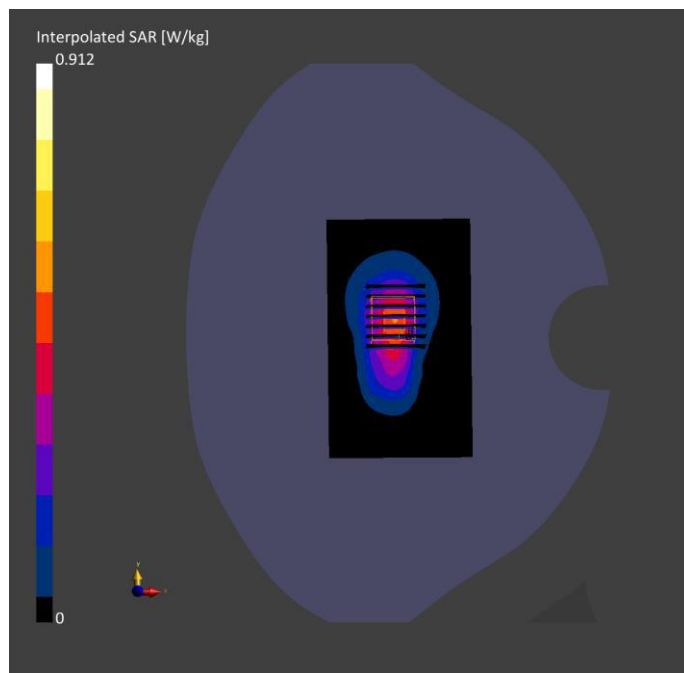
Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0	Date	2023-03-23	2023-03-23
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.426	0.476
Sensor	3.0	1.4	psSAR10g [W/kg]	0.215	0.234
Surface [mm]			Power Drift [dB]	0.03	-0.00
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		52.0

Dist 3dB Peak
[mm]

9.8



Meas.61 Body Plane with Top Edge 0mm on 507000 Channel in NR Band7 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 0.00	Band n7	5G NR FR1 FDD, 10939 -AAC	2535.0, 507000	7.56	1.87	39.3	22.4	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-14	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

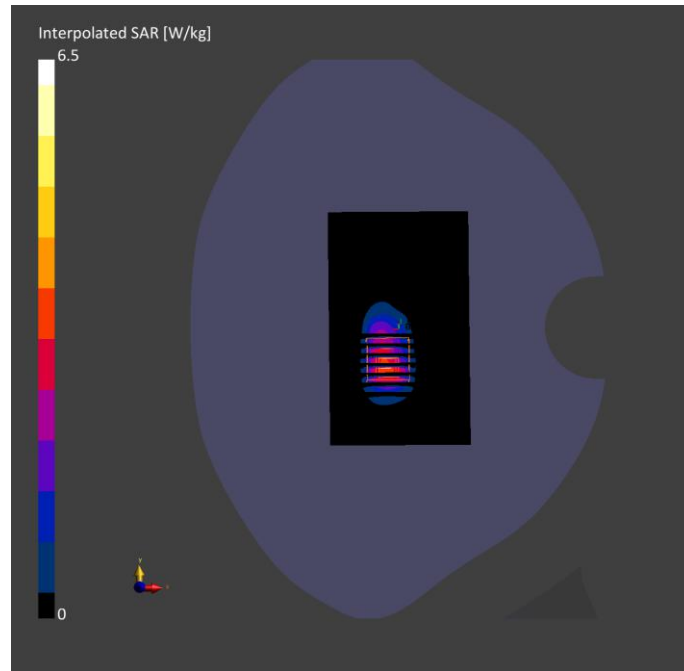
	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor	3.0	1.4
Surface [mm]		
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-14	2023-04-14
psSAR1g [W/kg]	2.81	4.50
psSAR10g [W/kg]	1.29	1.57
Power Drift [dB]	-0.01	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		34.6

Dist 3dB Peak
[mm]

5.0



Meas.62 Right Head with Tilted on 519000 Channel in NR Band38 mode with Antenna.4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	TILT, 0.00	Band n38	5G NR FR1 TDD, 10794 -AAE	2595.0, 519000	7.56	1.94	38.9	22.4	21.4

Hardware Setup

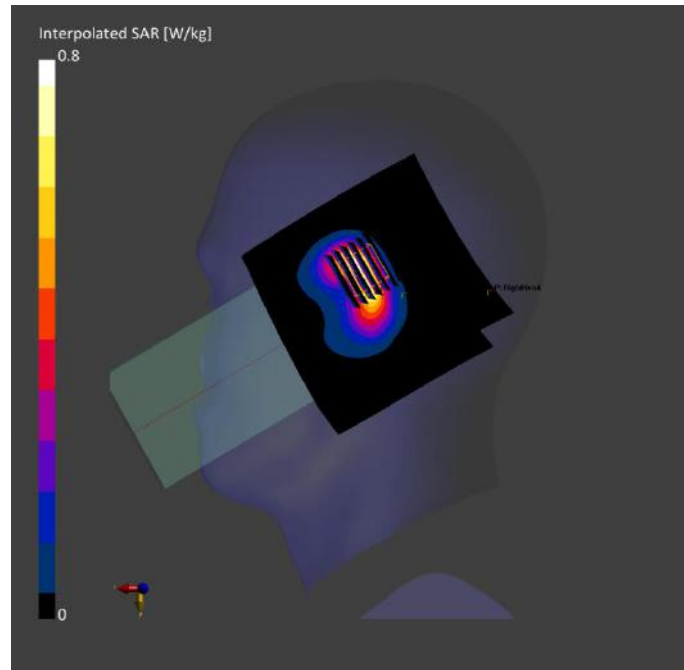
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-14	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 120.0	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	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface Detection	N/A	N/A
Scan Method	VMS + 6p Measured	VMS + 6p Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-14	2023-04-14
psSAR1g [W/kg]	0.688	0.684
psSAR10g [W/kg]	0.306	0.294
Power Drift [dB]	0.04	-0.01
Power	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		76.6
Dist 3dB Peak [mm]		6.7



Meas.63 Body Plane with Back Side 15mm on 519000 Channel in NR Band38 mode with Antenna.4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band n38	5G NR FR1 TDD, 10900 -AAC	2595.0, 519000	7.56	1.93	39.5	22.1	21.0

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-25	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

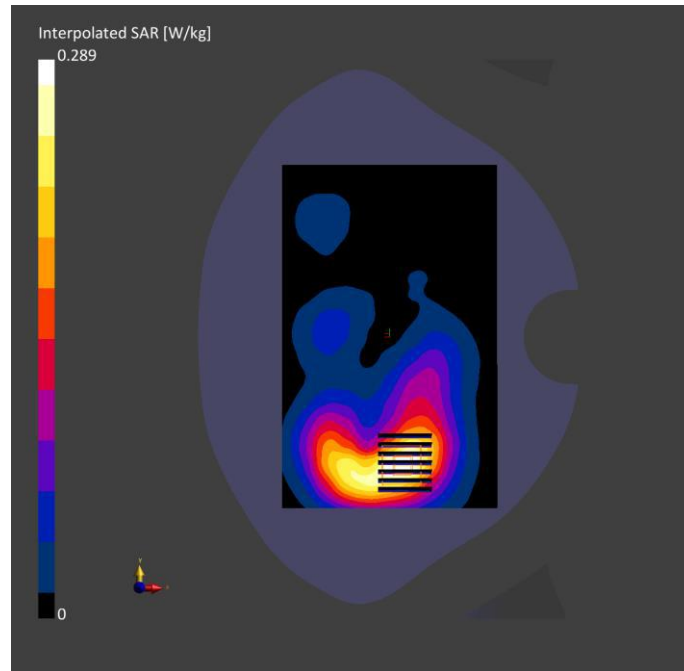
Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2023-03-25	2023-03-25
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.163	0.162
Sensor	3.0	1.4	psSAR10g [W/kg]	0.088	0.089
Surface [mm]			Power Drift [dB]	-0.01	-0.03
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	Y	Y	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		53.4

Dist 3dB Peak
[mm]

15.8



Meas.64 Body Plane with Bottom Edge 10mm on 519000 Channel in NR Band38 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 10.00	Band n38	5G NR FR1 TDD, 10900 -AAC	2595.0, 519000	7.56	1.93	39.5	22.1	21.0

Hardware Setup

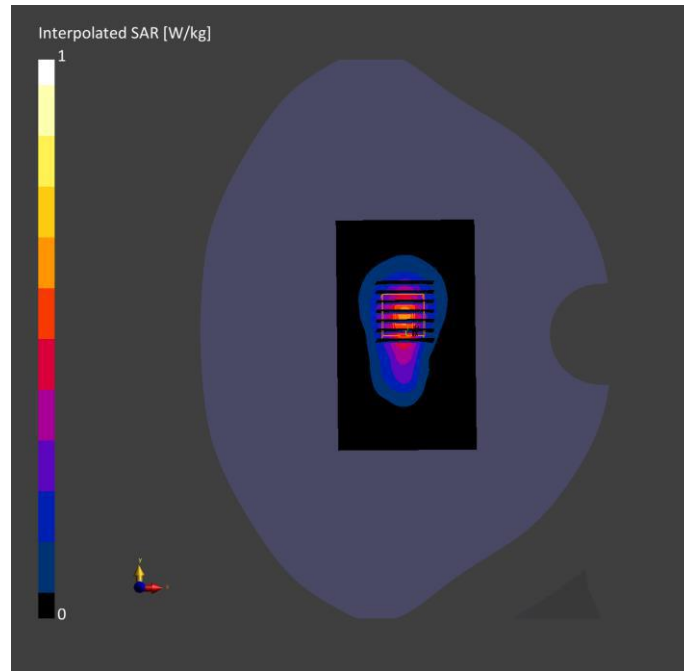
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-25	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup
Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0	Date	2023-03-25	2023-03-25
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.485	0.523
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.231	0.252
Graded Grid	Yes	Yes	Power Drift [dB]	-0.03	0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA Surface	N/A	N/A	Scaling		
Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		52.2

Dist 3dB Peak
[mm]

9.2



Meas.65 Body Plane with Top Edge 0mm on 519000 Channel in NR Band38 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 0.00	Band n38	5G NR FR1 TDD, 10900 -AAC	2595.0, 519000	7.56	1.94	38.9	22.4	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-14	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

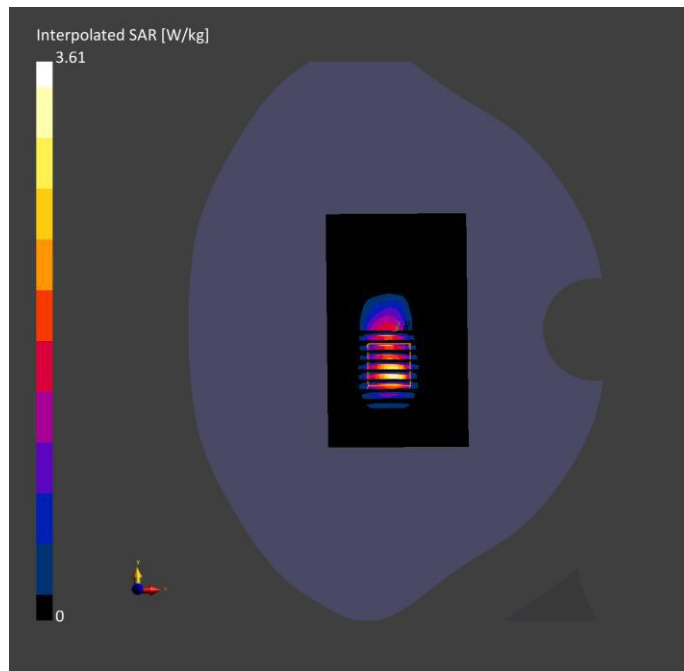
	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-14	2023-04-14
psSAR1g [W/kg]	2.34	3.61
psSAR10g [W/kg]	0.971	1.20
Power Drift [dB]	0.00	0.02
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		33.9

Dist 3dB Peak
[mm]

5.0



Meas.66 Right Head with Tilted on 518598 Channel in NR Band41 mode with Antenna.4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	TILT, 0.00	Band 41	5G NR FR1 TDD, 10803 -AAF	2592.99, 518598	7.56	1.98	40.3	22.3	21.3

Hardware Setup

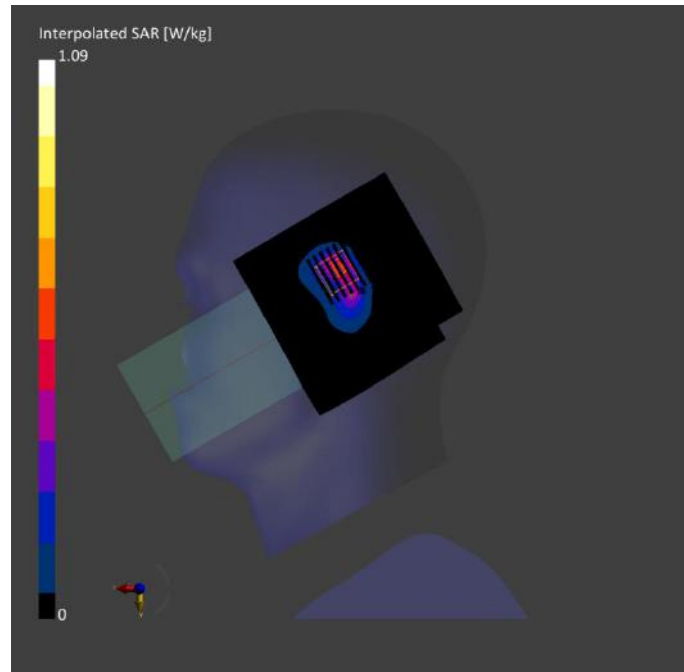
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-15	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 120.0	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	3.0	1.4
Surface [mm]		
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-15	2023-04-15
psSAR1g [W/kg]	0.459	0.462
psSAR10g [W/kg]	0.204	0.200
Power Drift [dB]	0.01	0.03
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.4
Dist 3dB Peak [mm]		7.0



Meas.67 Body Plane with Back Side 15mm on 518598 Channel in NR Band41 mode with Antenna.4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band n41	5G NR FR1 TDD, 10917 -AAD	2592.99, 518598	7.56	1.95	39.3	22.0	20.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-27	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

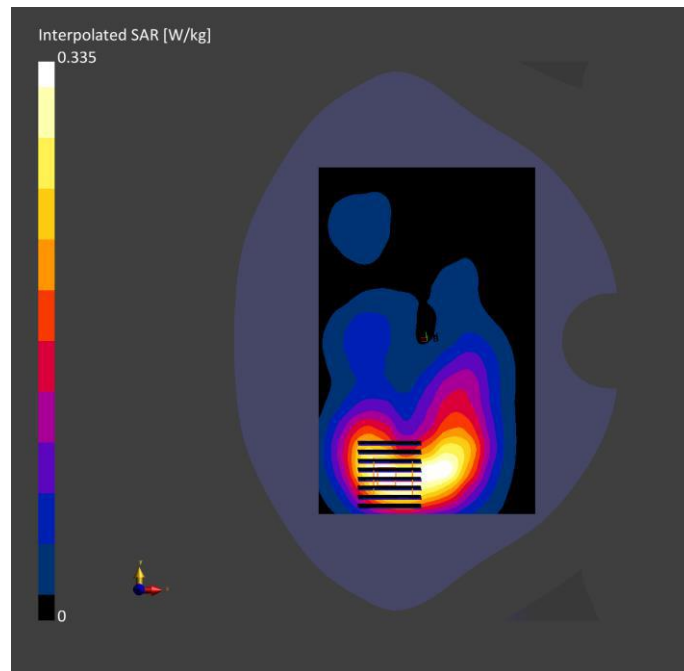
Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2023-03-27	2023-03-27
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.179	0.181
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.099	0.098
Graded Grid	Yes	Yes	Power Drift [dB]	-0.02	0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	Y	Y	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		52.7

Dist 3dB Peak
[mm]

13.9



Meas.68 Body Plane with Bottom Edge 10mm on 518598 Channel in NR Band41 mode with Antenna.3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 10.00	Band 41	5G NR FR1 TDD, 10917 -AAD	2592.99, 518598	7.56	1.95	39.3	22.0	20.9

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-27	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

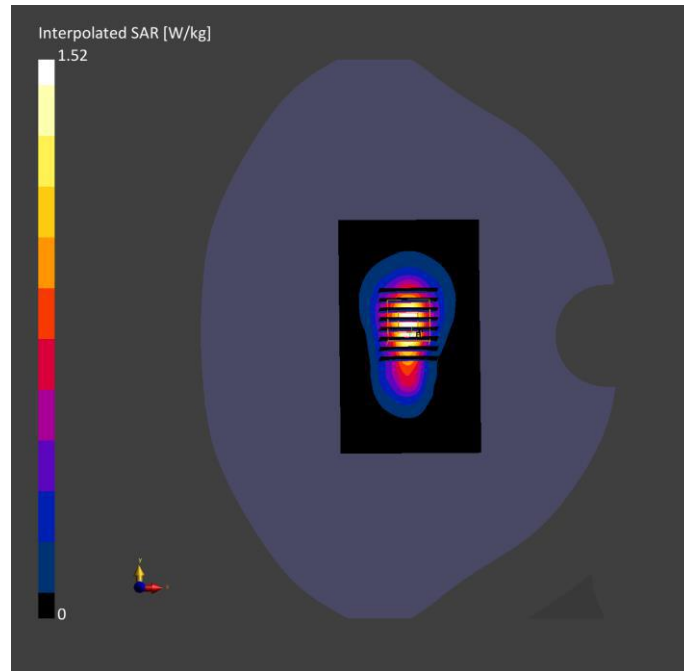
Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0	Date	2023-03-27	2023-03-27
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.715	0.783
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.332	0.366
Graded Grid	Yes	Yes	Power Drift [dB]	0.00	-0.04
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		52.0

Dist 3dB Peak
[mm]

9.0



Meas.69 Body Plane with Top Edge 0mm on 518598 Channel in NR Band41 mode with Antenna.4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 0.00	Band n41	5G NR FR1 TDD, 10917 -AAD	2592.99, 518598	7.56	1.98	40.3	22.3	21.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-15	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

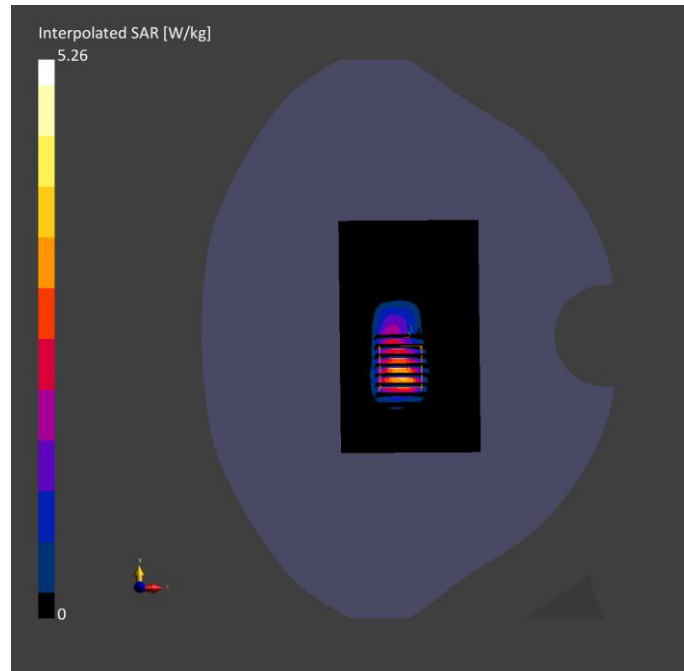
Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0	Date	2023-04-15	2023-04-15
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	2.84	5.26
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	1.28	1.65
Graded Grid	Yes	Yes	Power Drift [dB]	-0.02	-0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		30.5

Dist 3dB Peak
[mm]

4.0



Meas.70 Right Head with Cheek on 349000 Channel in NR Band66 mode with Antenna.1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	CHEEK, 0.00	Band 66	5G NR FR1 FDD, 10931-AAC	1745.0, 349000	8.69	1.37	41.0	22.1	21.1

Hardware Setup

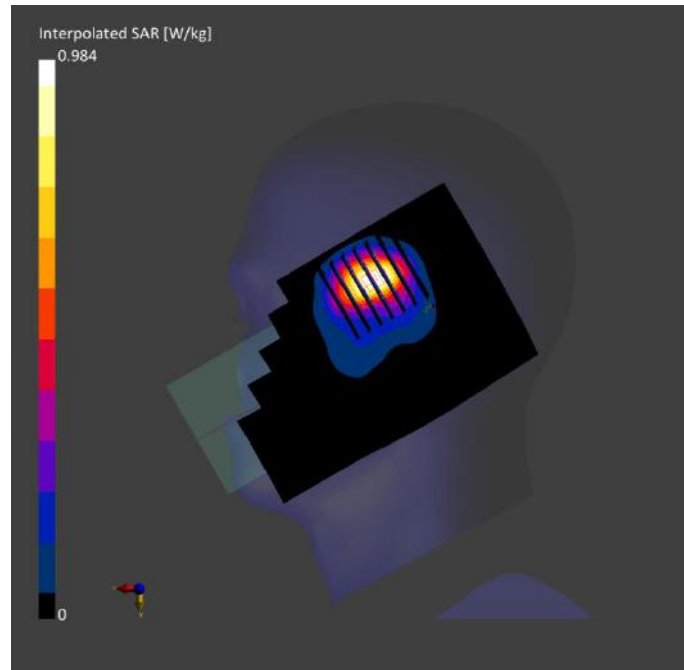
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-16	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor	3.0	1.4
Surface [mm]		
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-16	2023-04-16
psSAR1g [W/kg]	0.480	0.576
psSAR10g [W/kg]	0.268	0.302
Power Drift [dB]	0.01	0.08
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		61.1
Dist 3dB Peak [mm]		9.4



Meas.71 Body Plane with Back Side 15mm on 349000 Channel in NR Band66 mode with Antenna.3
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 66	5G NR FR1 FDD, 10938-AAC	1745.0, 349000	8.69	1.37	41.0	22.1	21.1

Hardware Setup

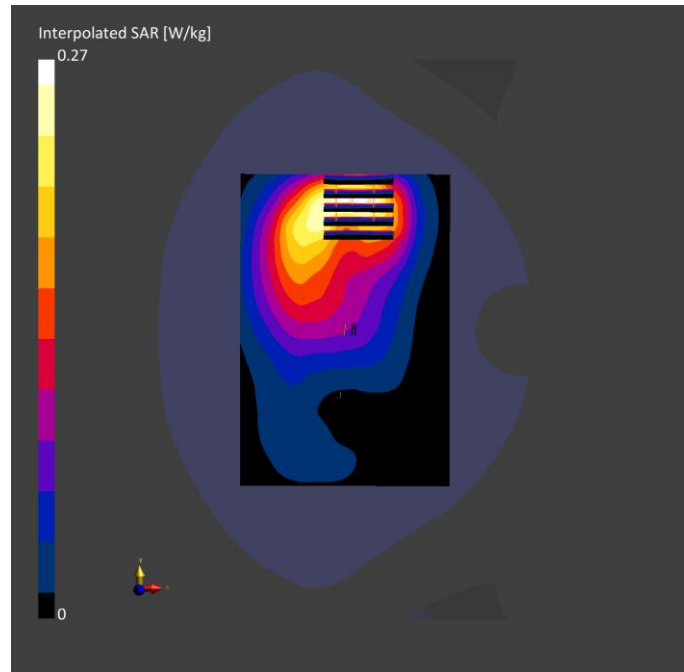
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-16	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor	3.0	1.4
Surface [mm]		
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-16	2023-04-16
psSAR1g [W/kg]	0.169	0.168
psSAR10g [W/kg]	0.102	0.102
Power Drift [dB]	-0.06	-0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.1
Dist 3dB Peak [mm]		14.8



Meas.72 Body Plane with Bottom Edge 10mm on 349000 Channel in NR Band66 mode with Antenna.3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 10.00	Band 66	5G NR FR1 FDD, 10939 -AAC	1745.0, 349000	8.69	1.37	41.0	22.1	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-16	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

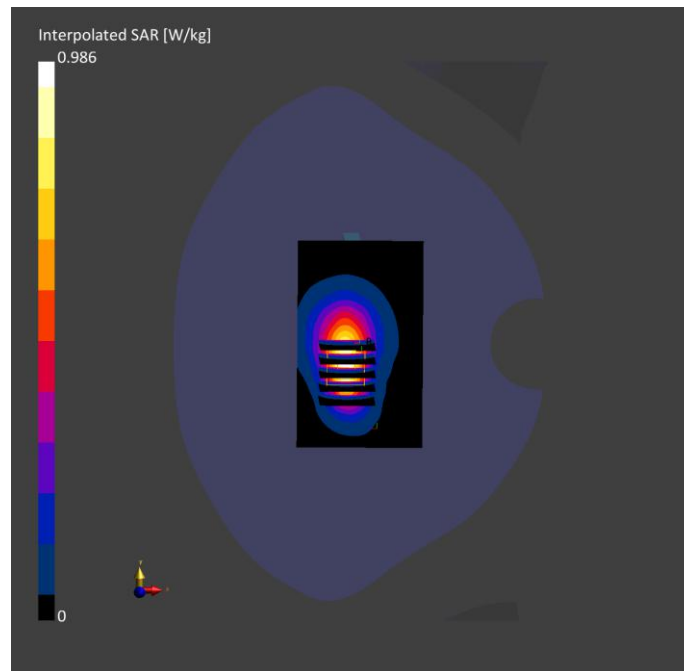
Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	32.0 x 32.0 x 30.0	Date	2023-04-16	2023-04-16
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.543	0.548
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.292	0.299
Graded Grid	Yes	Yes	Power Drift [dB]	-0.01	-0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA Surface	N/A	N/A	Scaling		
Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		56.6

Dist 3dB Peak
[mm]

10.7



Meas.73 Body Plane with Bottom Edge 0mm on 349000 Channel in NR Band66 mode with Antenna.3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE BOTTO M, 0.00	Band n66	5G NR FR1 FDD, 10939 -AAC	1745.0, 349000	8.69	1.37	41.0	22.1	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-16	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

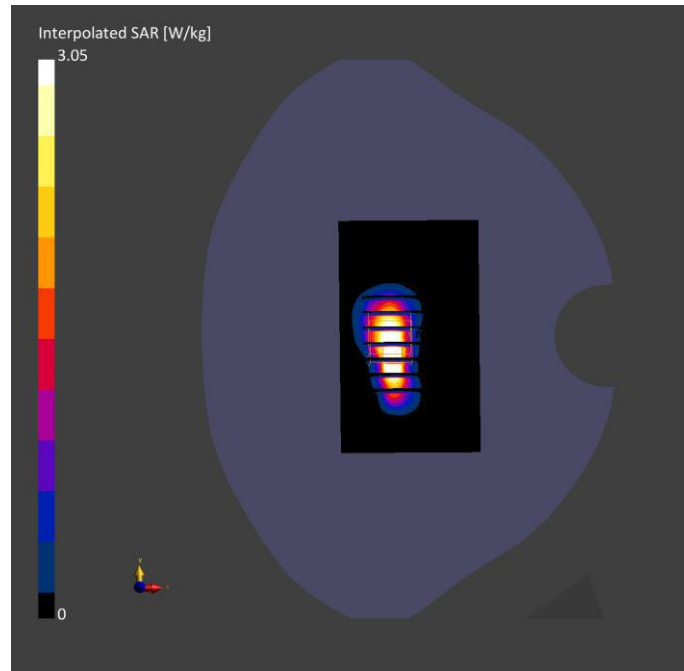
Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	32.0 x 32.0 x 30.0	Date	2023-04-16	2023-04-16
Grid Steps [mm]	9.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	3.15	3.05
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	1.39	1.31
Graded Grid	Yes	Yes	Power Drift [dB]	0.04	-0.06
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		31.5

Dist 3dB Peak
[mm]

4.8



Meas.74 Left Head with Cheek on 1 Channel in IEEE802.11b mode with Antenna.2&Antenna.8
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
LeftHead, HSL	CHEEK, 0.00	WLAN, 2.4G Hz	WLAN, 10012-CAB	2412.0, 1	7.79	1.70	40.5	22.2	21.2

Hardware Setup

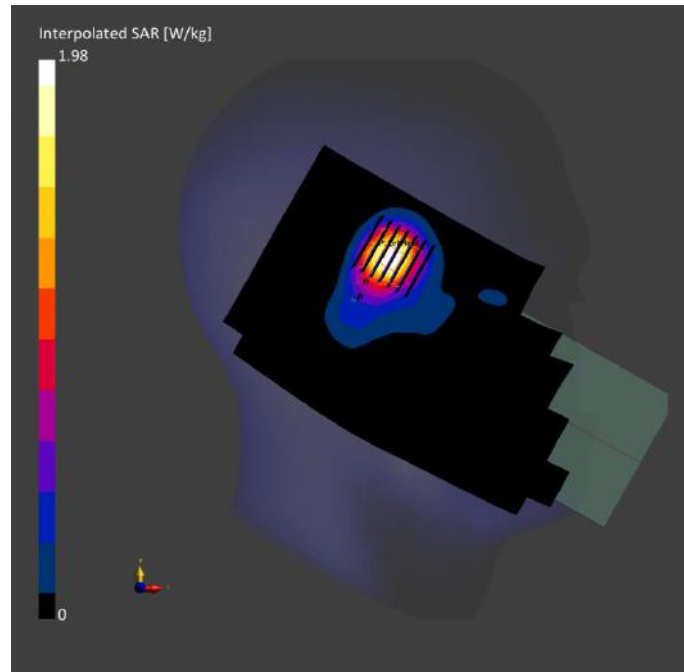
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-13	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-13	2023-04-13
psSAR1g [W/kg]	0.990	1.03
psSAR10g [W/kg]	0.487	0.501
Power Drift [dB]	0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.1
Dist 3dB Peak [mm]		12.0



Meas.75 Body Plane with Back Side 15mm on 6 Channel in IEEE802.11b mode with Antenna.2&Antenna.8

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	WLAN 2.4GHZ	WLAN, 10012-CAB	2437.0, 6	7.79	1.76	40.3	22.2	21.2

Hardware Setup

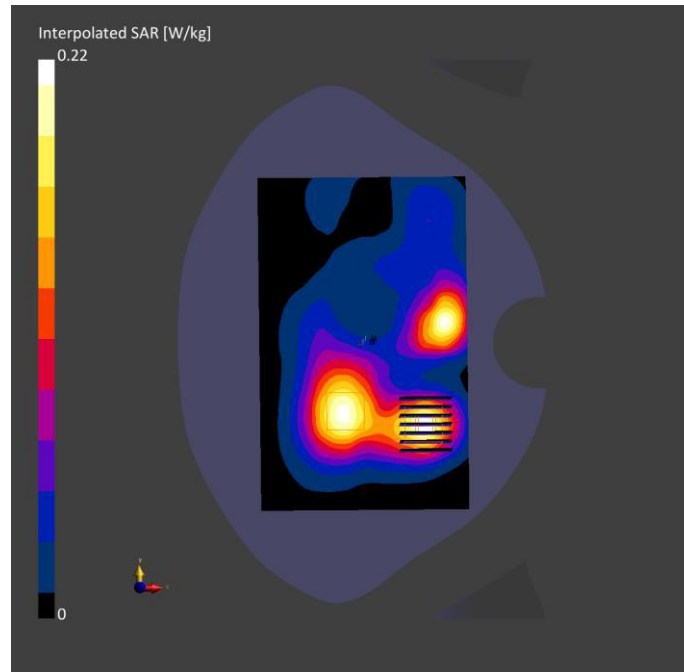
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-13	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-13	2023-04-13
psSAR1g [W/kg]	0.116	0.116
psSAR10g [W/kg]	0.064	0.061
Power Drift [dB]	0.01	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.4
Dist 3dB Peak [mm]		13.9



Meas.76 Body Plane with Left Edge 10mm on 6 Channel in IEEE802.11b mode with Antenna.2&Antenna.8

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	WLAN 2.4GHZ	WLAN, 10012-CAB	2437.0, 6	7.79	1.76	40.3	22.2	21.2

Hardware Setup

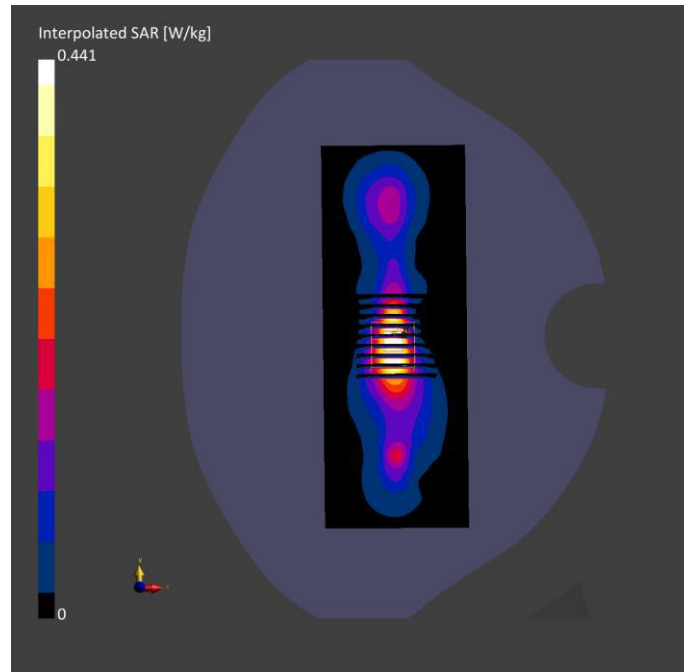
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-13	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-13	2023-04-13
psSAR1g [W/kg]	0.399	0.441
psSAR10g [W/kg]	0.173	0.187
Power Drift [dB]	-0.01	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		45.4
Dist 3dB Peak [mm]		7.0



Meas.77 Left Head with Cheek on 54 Channel in IEEE802.11n40 mode with Antenna.2&Antenna.7

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
LeftHead, HSL	CHEEK, 0.00	WLAN, 5GHz	WLAN, 10114-CAD	5270.0, 54	5.45	4.73	35.5	22.4	21.4

Hardware Setup

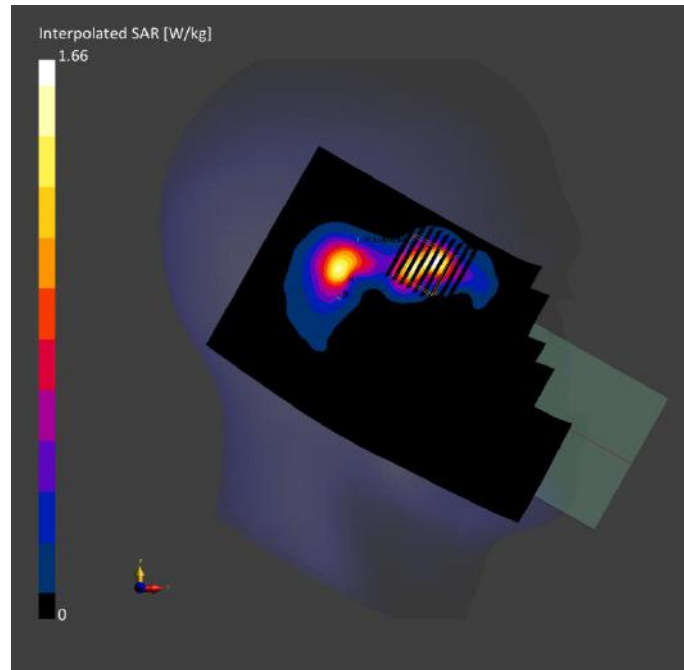
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-29	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-29	2023-03-29
psSAR1g [W/kg]	0.441	0.464
psSAR10g [W/kg]	0.154	0.161
Power Drift [dB]	-0.16	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		24.1
Dist 3dB Peak [mm]		1.1



Meas.78 Left Head with Tilt on 122 Channel in IEEE802.11ac80 mode with Antenna.2&Antenna.7

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
LeftHead, HSL	TILT, 0.00	WLAN	WLAN, 10544z -AAC	5610.0, 122	4.9	5.07	35.1	22.1	21.1

Hardware Setup

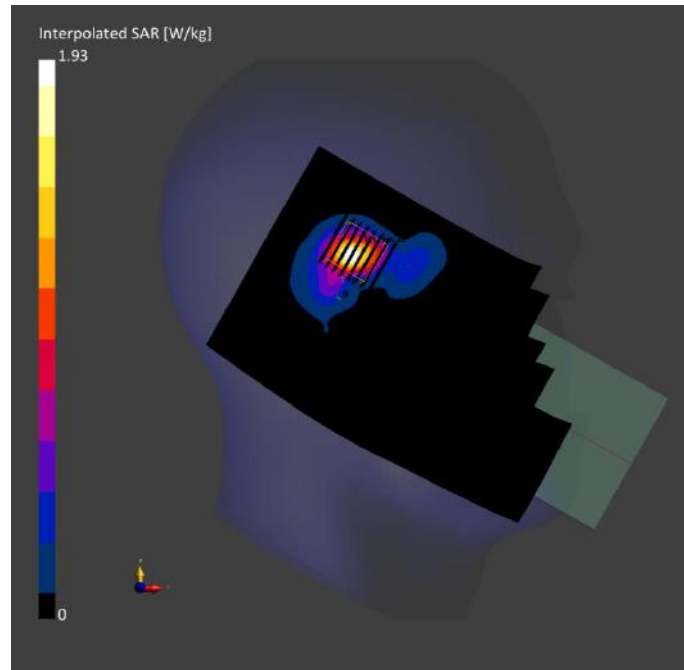
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-30	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-30	2023-03-30
psSAR1g [W/kg]	0.468	0.501
psSAR10g [W/kg]	0.153	0.166
Power Drift [dB]	0.17	0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.7
Dist 3dB Peak [mm]		6.1



Meas.79 Left Head with Tilt on 155 Channel in IEEE 802.11ac80 mode with Antenna.7
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom, TSL Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Left Head, HSL	TILT, 0.00	WLAN	WLAN, 10544z	5775.0, 155	5.0	5.22	35.3	22.6	21.7

Hardware Setup

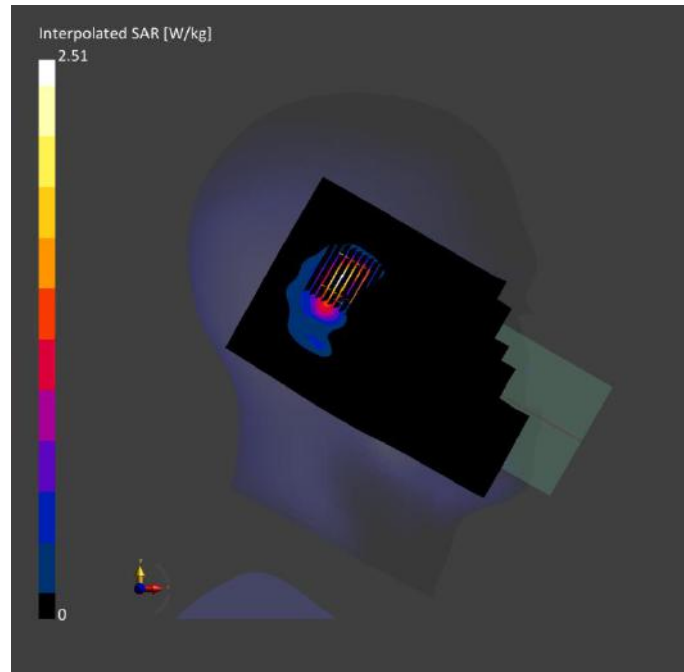
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-31	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-31	2023-03-31
psSAR1g [W/kg]	0.566	0.602
psSAR10g [W/kg]	0.185	0.185
Power Drift [dB]	-0.11	-0.13
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.2
Dist 3dB Peak [mm]		5.6



Meas.80 Body Plane with Back Side 15mm on 54 Channel in IEEE802.11n40 mode with Antenna.2&Antenna.7

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	WLAN	WLAN, 10114z	5270.0, 54	5.45	4.73	35.5	22.4	21.4

Hardware Setup

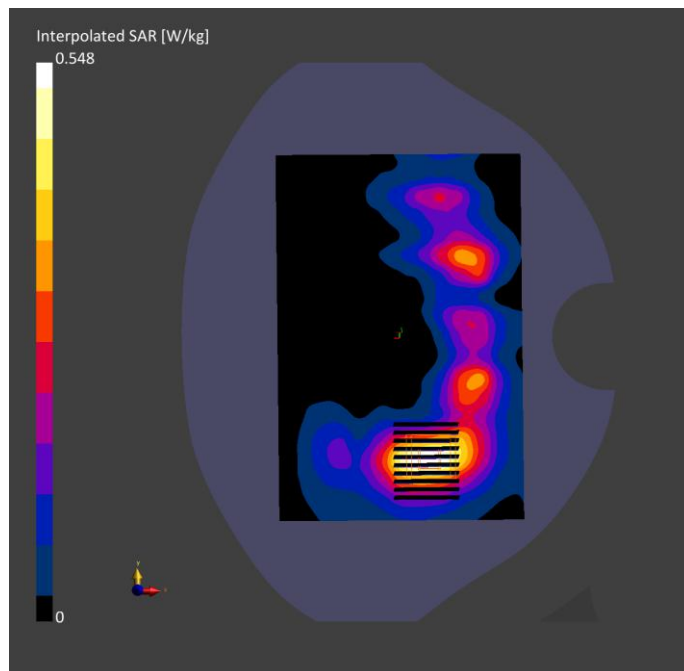
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-29	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-29	2023-03-29
psSAR1g [W/kg]	0.168	0.172
psSAR10g [W/kg]	0.070	0.071
Power Drift [dB]	-0.05	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.5
Dist 3dB Peak [mm]		11.5



Meas.81 Body Plane with Back Side 15mm on 122 Channel in IEEE802.11ac80 mode with Antenna.2&Antenna.7
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	WLAN	WLAN, 10544	5610.0, 122	4.9	5.07	35.1	22.1	21.1
		5GHz	-AAC						

Hardware Setup

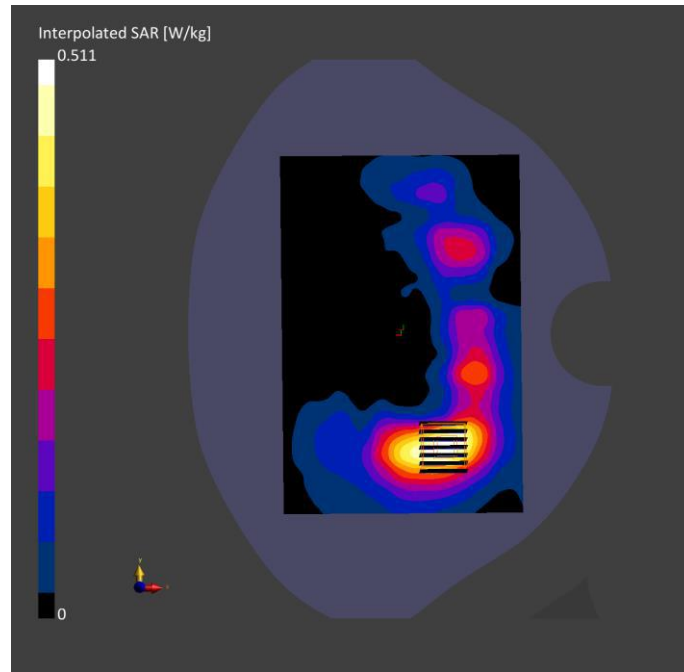
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-30	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-30	2023-03-30
psSAR1g [W/kg]	0.139	0.148
psSAR10g [W/kg]	0.057	0.060
Power Drift [dB]	0.08	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		53.2
Dist 3dB Peak [mm]		11.8



Meas.82 Body Plane with Back Side 15mm on 155 Channel in IEEE802.11ac80 mode with Antenna.2&Antenna.7

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	WLAN	WLAN, 10544z	5775.0, 155	5.0	5.22	35.3	22.6	21.7

Hardware Setup

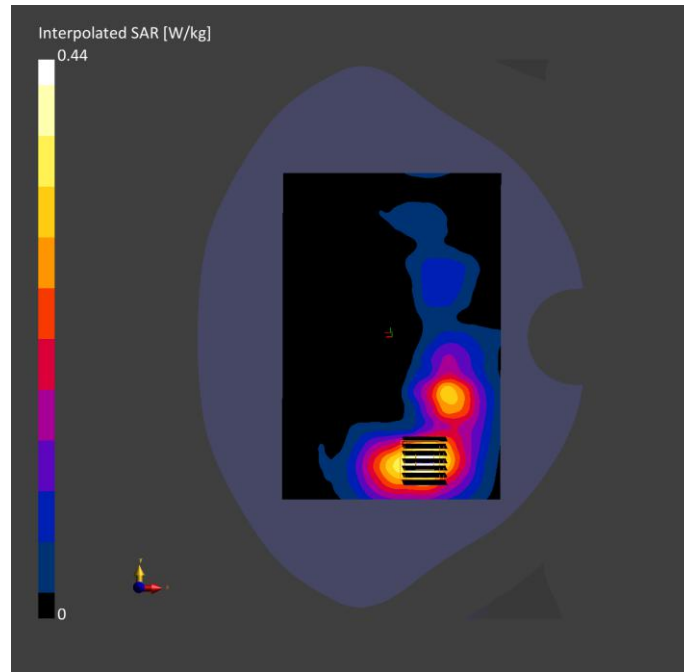
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-31	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-31	2023-03-31
psSAR1g [W/kg]	0.133	0.122
psSAR10g [W/kg]	0.054	0.047
Power Drift [dB]	0.06	0.18
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.1
Dist 3dB Peak [mm]		10.0



Meas.83 Body Plane with Top Edge 10mm on 46 Channel in IEEE802.11n40 mode with Antenna.2&Antenna.7

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 10.00	WLAN	WLAN, 10114z	5230.0, 46	5.45	4.68	35.9	22.4	21.4

Hardware Setup

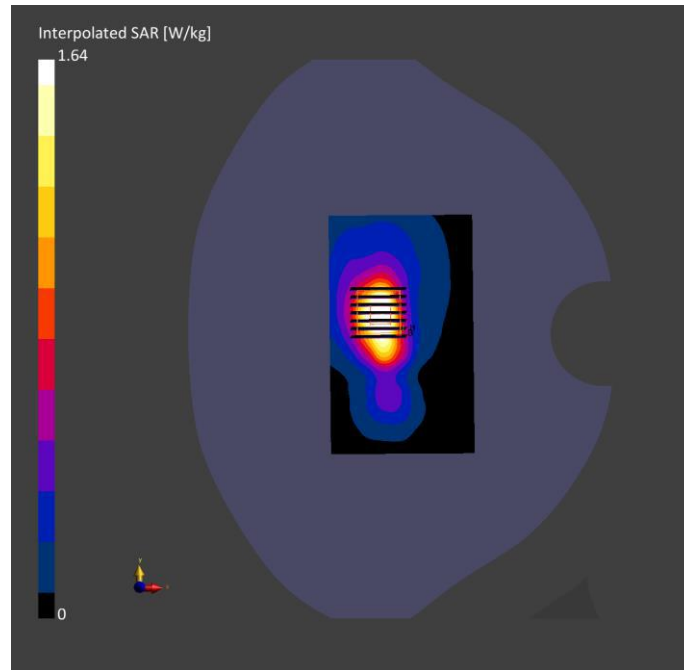
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-29	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	9.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-29	2023-03-29
psSAR1g [W/kg]	0.434	0.466
psSAR10g [W/kg]	0.158	0.164
Power Drift [dB]	-0.10	0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.4
Dist 3dB Peak [mm]		8.0



Meas.84 Body Plane with Left Edge 10mm on 155 Channel in IEEE802.11ac80 mode with Antenna.2&Antenna.7
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	WLAN	WLAN, 10544	5775.0, 155	5.0	5.22	35.3	22.6	21.7

Hardware Setup

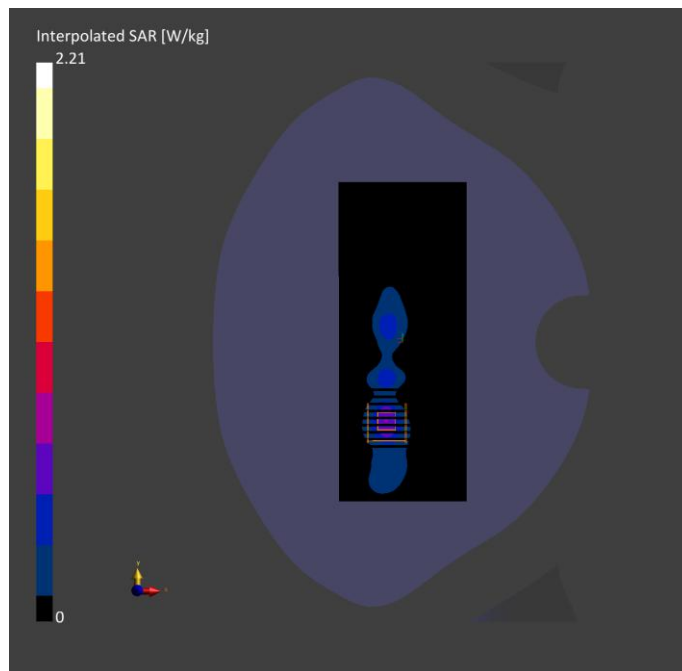
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-31	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 180.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	9.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-31	2023-03-31
psSAR1g [W/kg]	0.518	0.544
psSAR10g [W/kg]	0.170	0.176
Power Drift [dB]	-0.01	0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.1
Dist 3dB Peak [mm]		7.9



Meas.85 Body Plane with Top Edge 0mm on 54 Channel in IEEE802.11n40 mode with Antenna.2&Antenna.7

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 0.00	WLAN	WLAN, 10114z	5270.0, 54	5.45	4.73	35.5	22.4	21.4

Hardware Setup

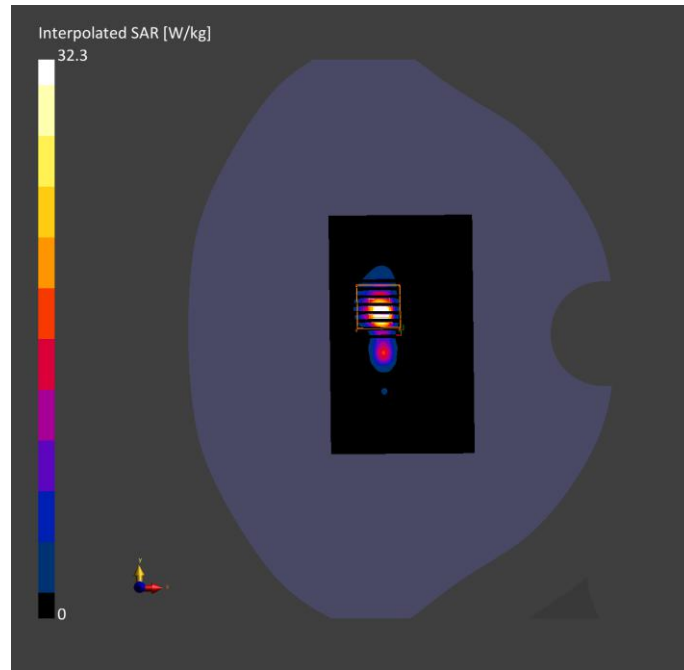
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-29	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	9.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-03-29	2023-03-29
psSAR1g [W/kg]	4.28	6.62
psSAR10g [W/kg]	1.02	1.24
Power Drift [dB]	-0.01	-0.11
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.0
Dist 3dB Peak [mm]		4.1



Meas.86 Body Plane with Top Edge 0mm on 122 Channel in IEEE802.11ac80 mode with Antenna.2&Antenna.7

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 15.00	WLAN	WLAN, 10544z	5610.0, 122	4.9	5.07	35.1	22.1	21.1

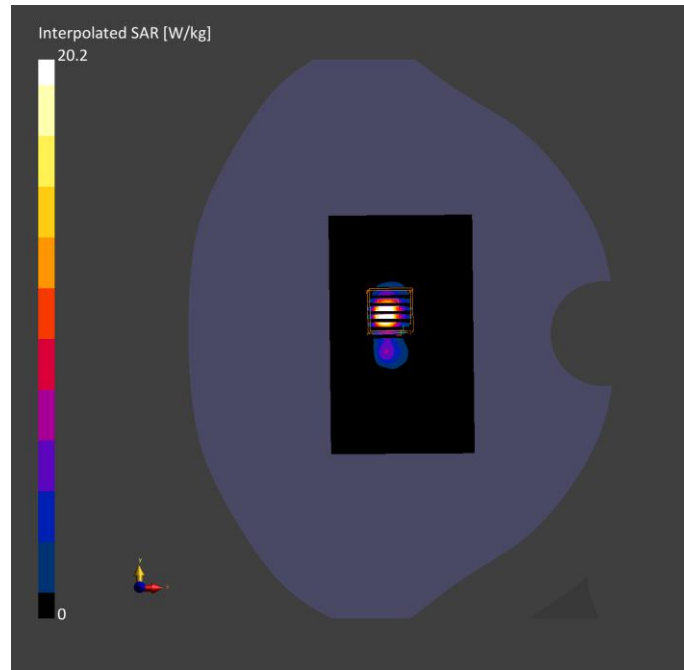
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-03-30	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	24.0 x 24.0 x 22.0	Date	2023-03-30	2023-03-30
Grid Steps [mm]	9.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]	2.92	3.69
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.633	0.683
Graded Grid	Yes	Yes	Power Drift [dB]	-0.01	-0.04
Grading Ratio	1.5	1.4	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		46.2
			Dist 3dB Peak [mm]		4.0



Meas.87 Left Head with Cheek on 78 Channel in Bluetooth mode mode with Antenna.8

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Left Head, HSL	CHEEK, 0.00	ISM, 2.4 GHz Band	Bluetooth, 10032-CAA	2480.0, 78	7.79	1.87	37.9	22.2	21.2

Hardware Setup

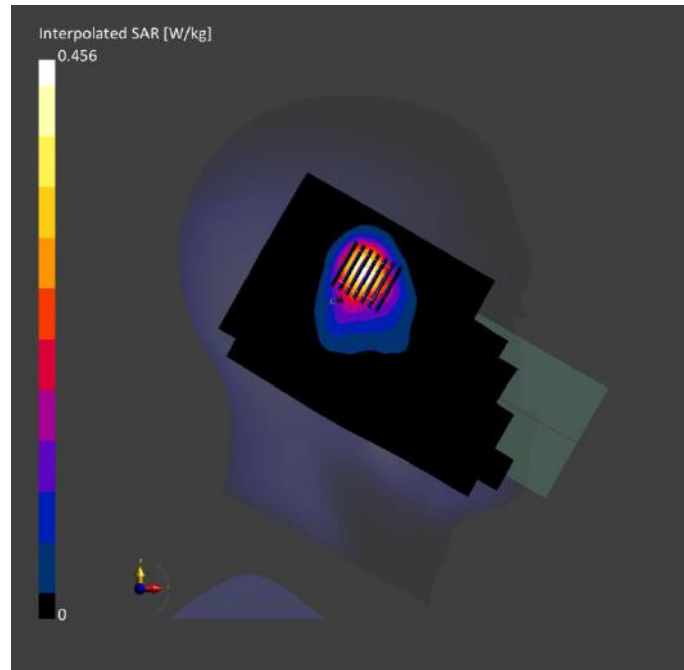
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-13	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-13	2023-04-13
psSAR1g [W/kg]	0.247	0.238
psSAR10g [W/kg]	0.122	0.121
Power Drift [dB]	0.02	-0.01
Power	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		47.9
Dist 3dB Peak [mm]		12.0



Meas.88 Body Plane with Back Side 15mm on 78 Channel in Bluetooth mode with Antenna.8
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 5.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2480.0, 78	7.79	1.87	37.9	22.2	21.2

Hardware Setup

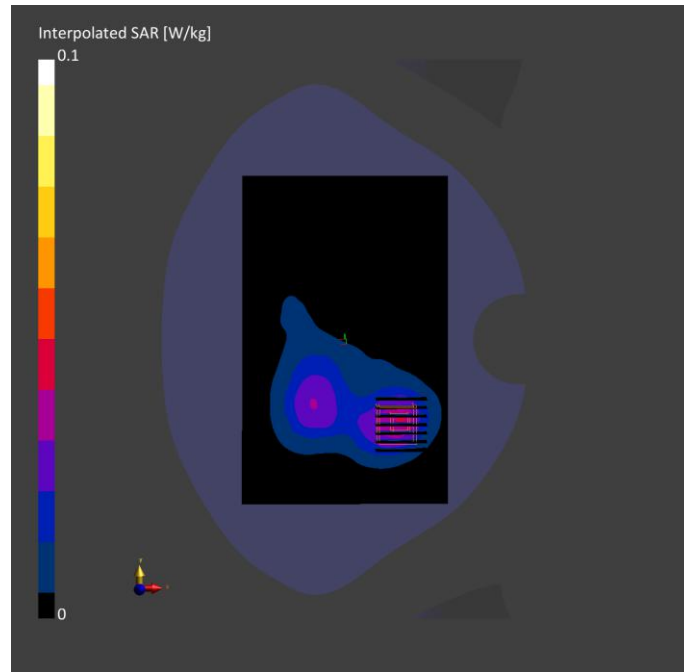
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-13	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor	3.0	1.4
Surface [mm]		
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-13	2023-04-13
psSAR1g [W/kg]	0.034	0.034
psSAR10g [W/kg]	0.018	0.018
Power Drift [dB]	-0.25	-0.05
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		48.8
Dist 3dB Peak [mm]		> 15.0



Meas.89 Body Plane with Top Edge 10mm on 78 Channel in Bluetooth mode with Antenna.8

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Phone	162.0 x 74.0 x 9.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 10.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2480.0, 78	7.79	1.87	37.9	22.2	21.2

Hardware Setup

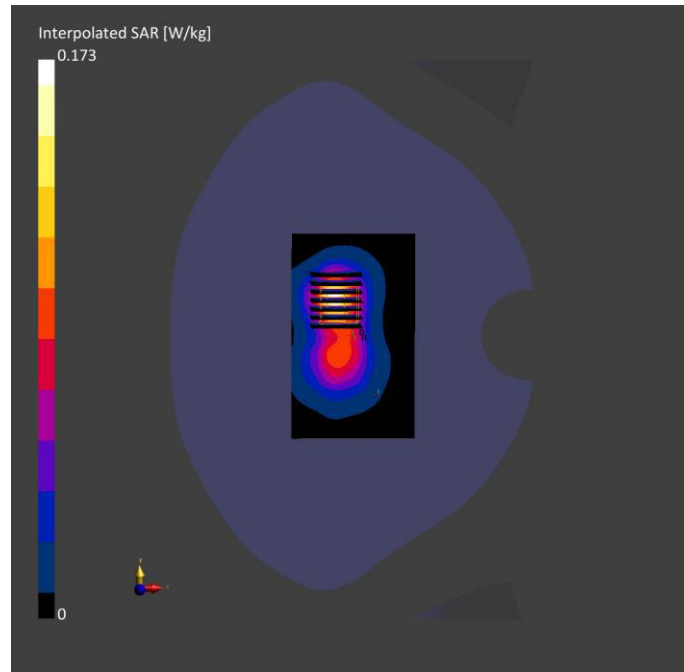
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2023-04-13	EX3DV4 - SN7607, 2022-07-04	DAE4 Sn878, 2022-06-13

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor	3.0	1.4
Surface [mm]		
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-04-13	2023-04-13
psSAR1g [W/kg]	0.081	0.084
psSAR10g [W/kg]	0.038	0.039
Power Drift [dB]	0.61	0.04
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.3
Dist 3dB Peak [mm]		8.5



ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2320162-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ2320162-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ2320162-AC.pdf”.

Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the "inspection and testing dedicated stamp" or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--