

Measurement Report for Device, Rear, GSM 850, GPRS-FDD (TDMA, GMSK, TN 0-1), Channel 190 (836.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR , 10.00	GSM 850	GSM, 10024-DAC	836.6, 190	9.42	0.924	41.2

Hardware Setup

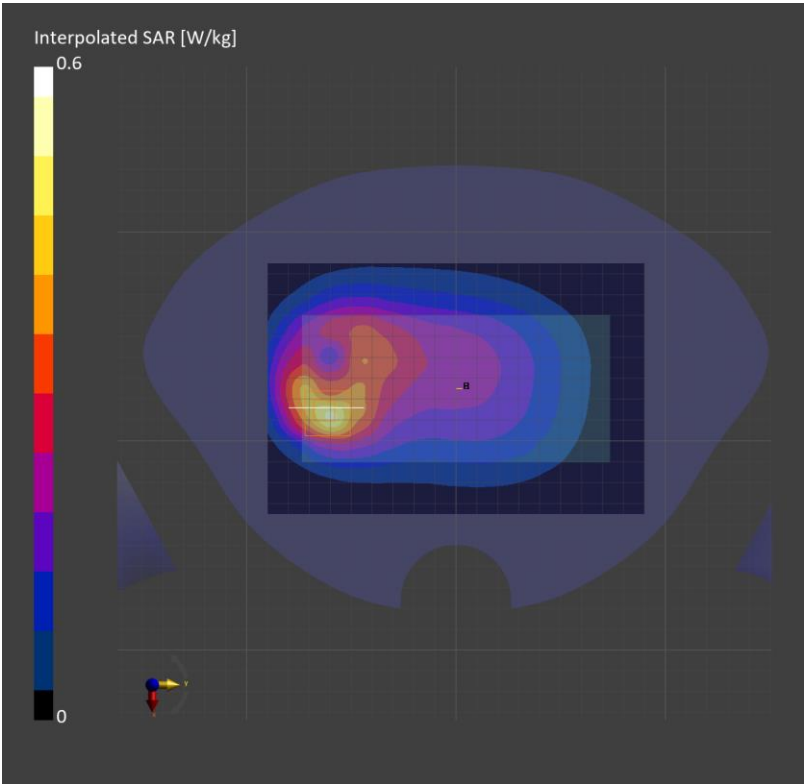
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Sep-01	EX3DV4 – SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.424	0.443
psSAR10g [W/Kg]	0.267	0.239
Power Drift [dB]	0.04	
M2 / M1 [%]		77.1
Dist 3dB Peak [mm]		11.9



Measurement Report for Device, TILT, GSM 850, GPRS-FDD (TDMA, GMSK, TN 0-1-2-3), Channel 128 (824.2 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	+TILT, 0.00	GSM 850	GSM, 10028-DAC	824.2, 128	9.42	0.912	41.9

Hardware Setup

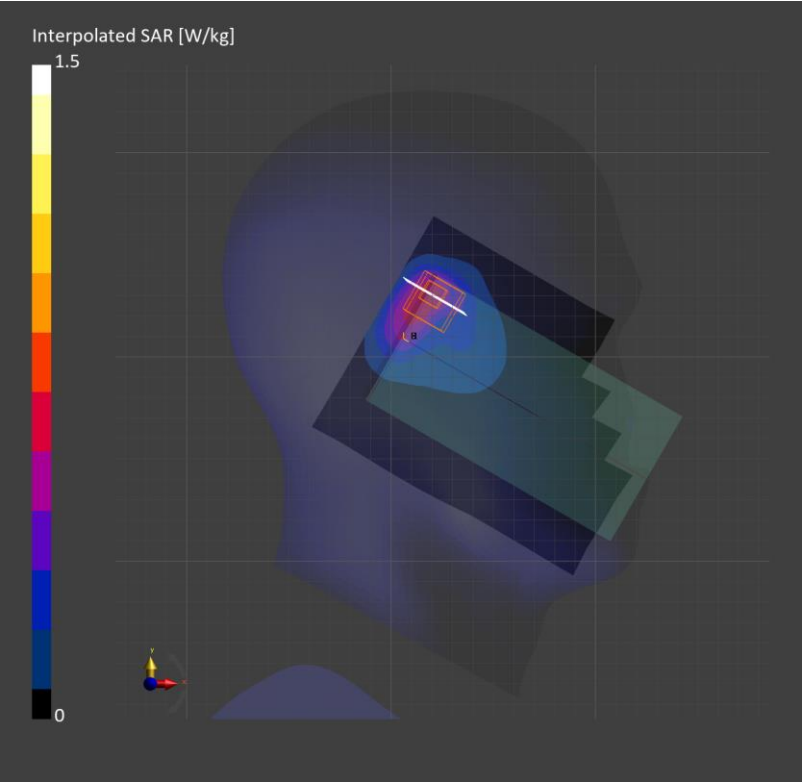
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Sep-25	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	3.8 x 3.8 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.623	0.729
psSAR10g [W/Kg]	0.384	0.315
Power Drift [dB]	0.00	
M2/M1 [%]		61.3
Dist 3dB Peak [mm]		5.5



Measurement Report for Device, EDGE LEFT, GSM 850, GPRS-FDD (TDMA, GMSK, TN 0-1), Channel 190 (836.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE LEFT, 10.00	GSM 850	GSM, 10024-DAC	836.6, 190	9.42	0.917	41.4

Hardware Setup

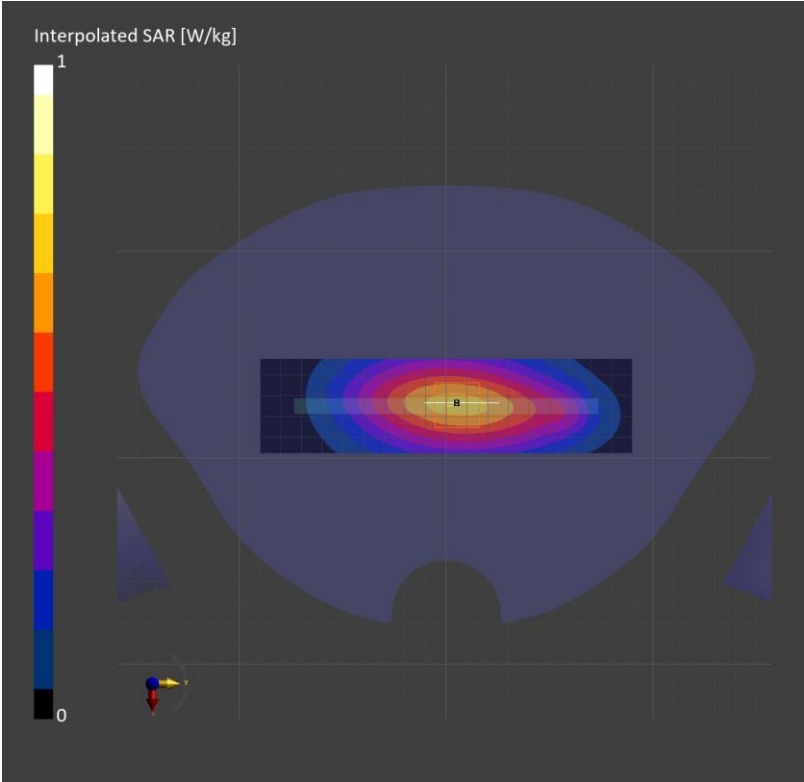
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Sep-21	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.620	0.634
psSAR10g [W/Kg]	0.419	0.429
Power Drift [dB]	-0.01	
M2 / M1 [%]		84.4
Dist 3dB Peak [mm]		19.2



Measurement Report for Device, LEFT TOUCH, PCS 1900, GPRS-FDD (TDMA, GMSK, TN 0-1-2), Channel 512 (1850.2 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Left Head, HSL	LEFT TOUCH, 0.00	PCS 1900	GSM, 10027-DAC	1850.2, 512	8.72	1.38	39.8

Hardware Setup

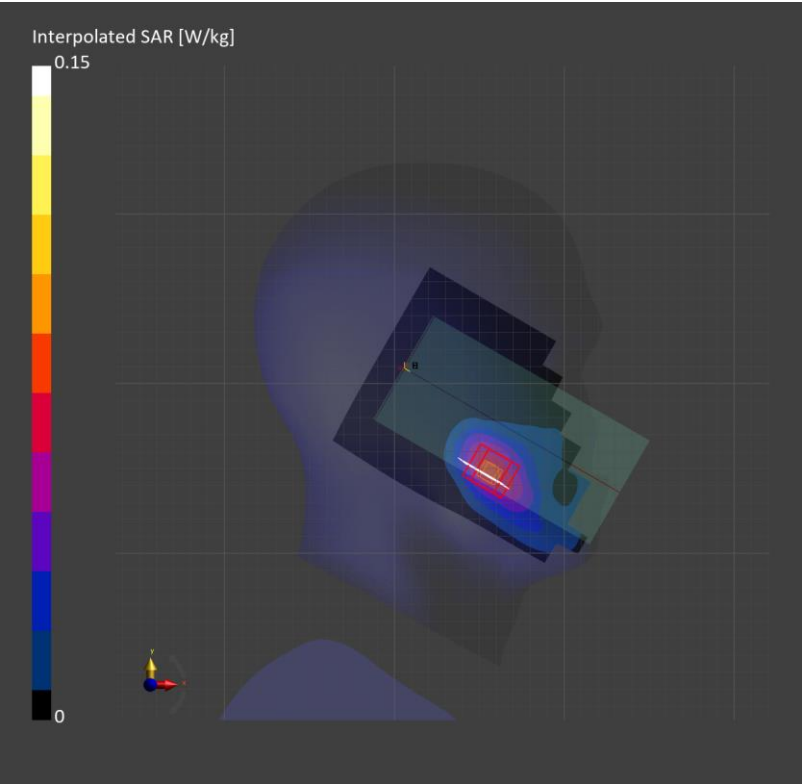
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-07	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.065	0.069
psSAR10g [W/Kg]	0.037	0.043
Power Drift [dB]	-0.08	
M2/M1 [%]		87.9
Dist 3dB Peak [mm]		8.4



Measurement Report for SM-S921U, EDGE BOTTOM, PCS 1900, GPRS-FDD (TDMA, GMSK, TN 0-1-2-3), Channel 661 (1880.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	PCS 1900	GSM, 10028-DAC	1880.0, 661	8.72	1.39	39.8

Hardware Setup

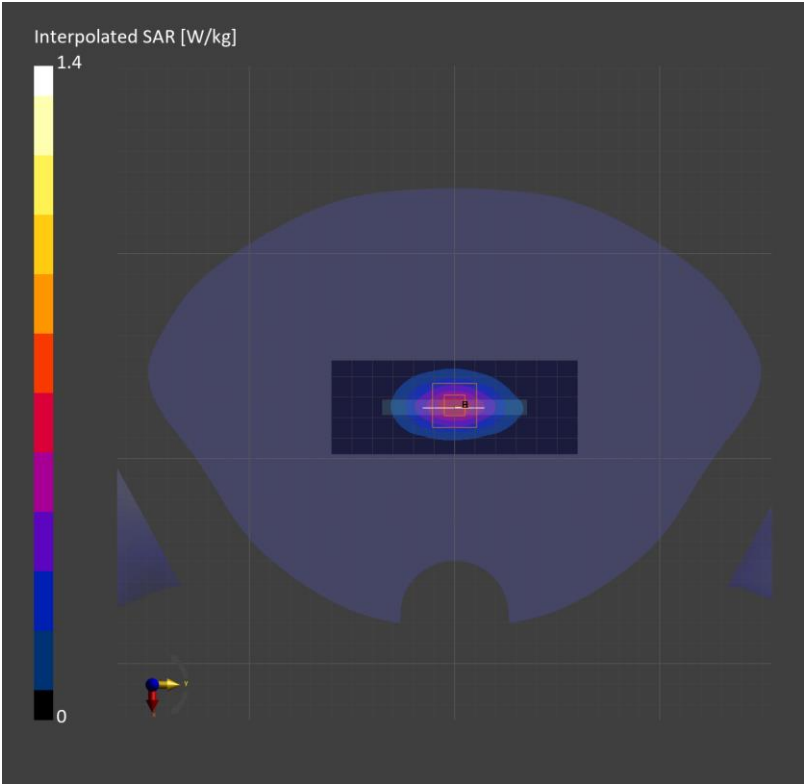
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-06	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.529	0.542
psSAR10g [W/Kg]	0.274	0.288
Power Drift [dB]	-0.01	
M2/M1 [%]		81.5
Dist 3dB Peak [mm]		9.6



Measurement Report for Device, LEFT TOUCH, Band 2, UMTS-FDD (DC-HSDPA), Channel 9400 (1880.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Left Head, HSL	LEFT TOUCH, 0.00	Band 2	WCDMA, 10457-AAB	1880.0, 9400	8.72	1.39	39.8

Hardware Setup

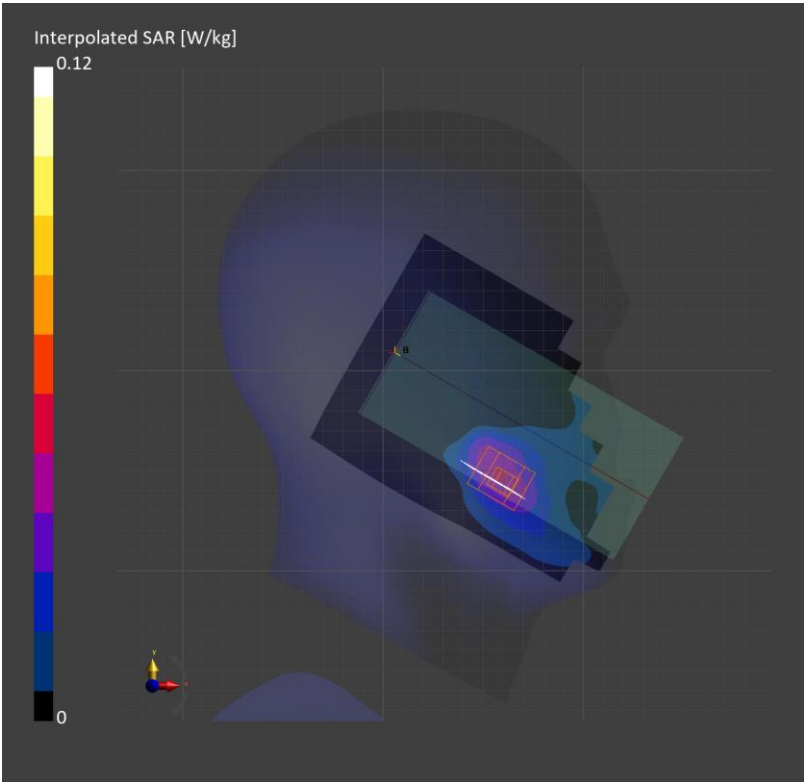
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-05	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.042	0.041
psSAR10g [W/Kg]	0.024	0.025
Power Drift [dB]	0.00	
M2 /M1 [%]		89.3
Dist 3dB Peak [mm]		8.4



Measurement Report for Device, EDGE BOTTOM, Band 2, UMTS-FDD (WCDMA), Channel 9262 (1852.4 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	Band 2	WCDMA, 10011-CAC	1852.4, 9262	8.72	1.38	39.8

Hardware Setup

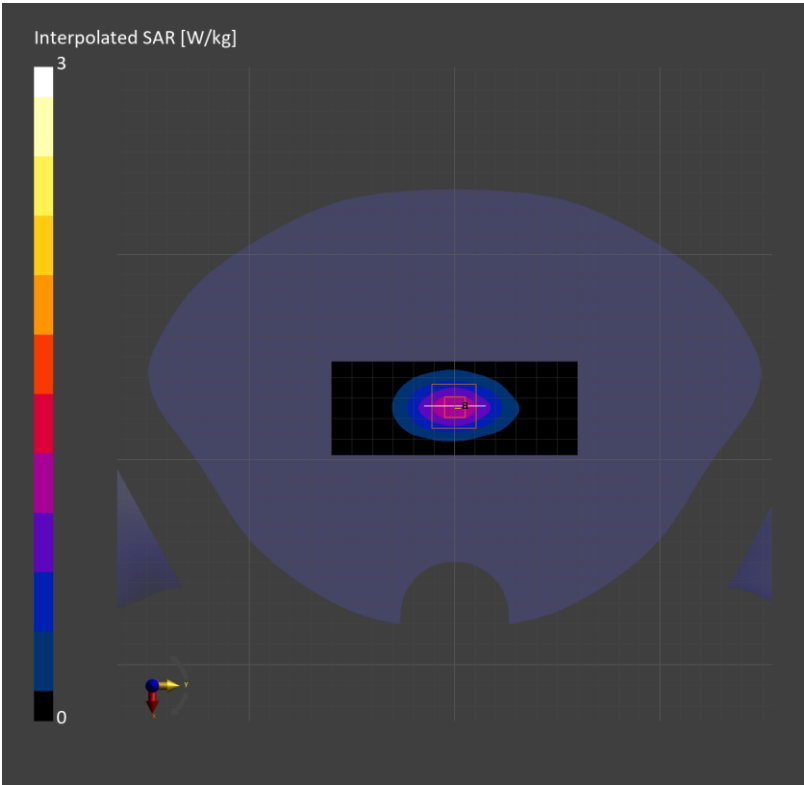
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-07	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	4.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.988	0.980
psSAR10g [W/Kg]	0.520	0.520
Power Drift [dB]	0.00	
M2 / M1 [%]		79.2
Dist 3dB Peak [mm]		10.3



Measurement Report for Device, LEFT TOUCH, Band 4, UMTS-FDD (WCDMA), Channel 1413 (1732.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Left Head, HSL	LEFT TOUCH, 0.00	Band 4	WCDMA, 10011-CAC	1732.6, 1413	9.13	1.32	39.7

Hardware Setup

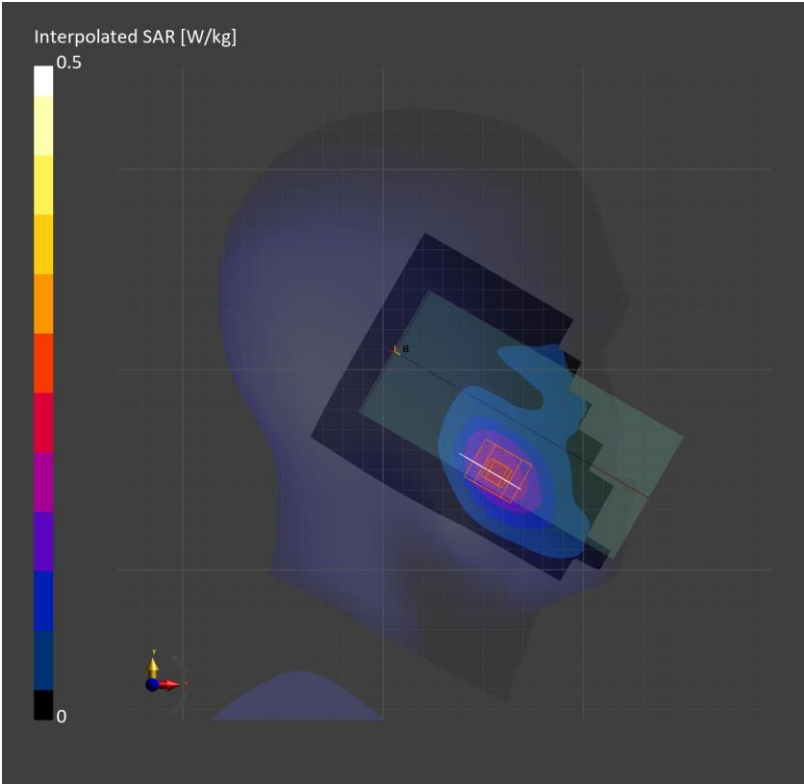
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-12	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.187	0.190
psSAR10g [W/Kg]	0.109	0.125
Power Drift [dB]	0.04	
M2/M1 [%]		91.3
Dist 3dB Peak [mm]		13.2



Measurement Report for SM-S921U, EDGE BOTTOM, Band 4, UMTS-FDD (DC-HSDPA), Channel 1513 (1752.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	Band 4	WCDMA, 10457-AAB	1752.6, 1513	8.4	1.33	39.5

Hardware Setup

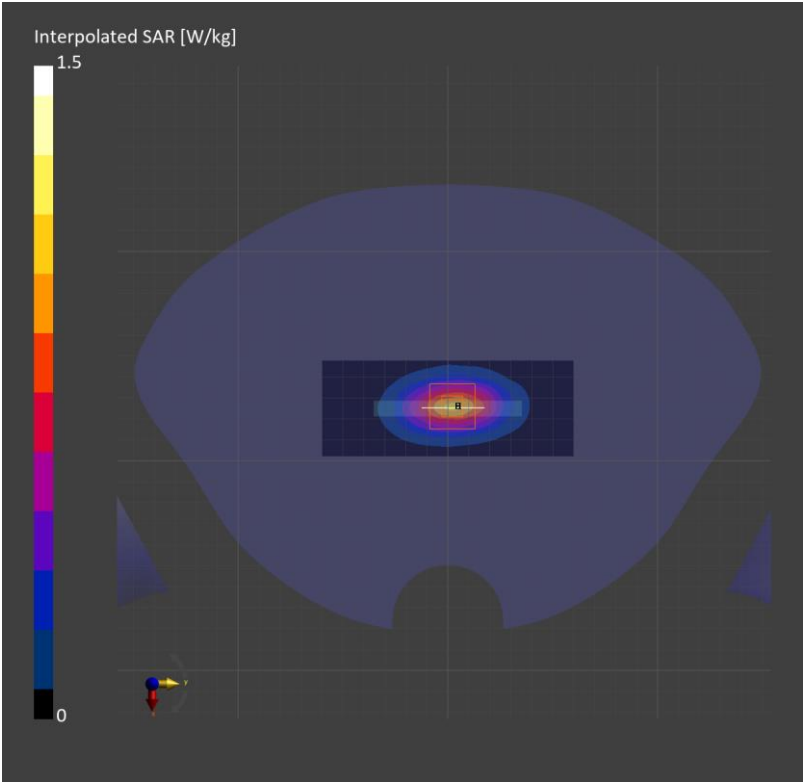
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2038	HBBL-600-10000, 2023-Oct-20	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.815	0.850
psSAR10g [W/Kg]	0.425	0.461
Power Drift [dB]	-0.02	
M2/M1 [%]		82.7
Dist 3dB Peak [mm]		9.6



Measurement Report for Device, REAR, Band 5, UMTS-FDD (WCDMA), Channel 4183 (836.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band 5	WCDMA, 10011-CAC	836.6, 4183	9.42	0.924	41.2

Hardware Setup

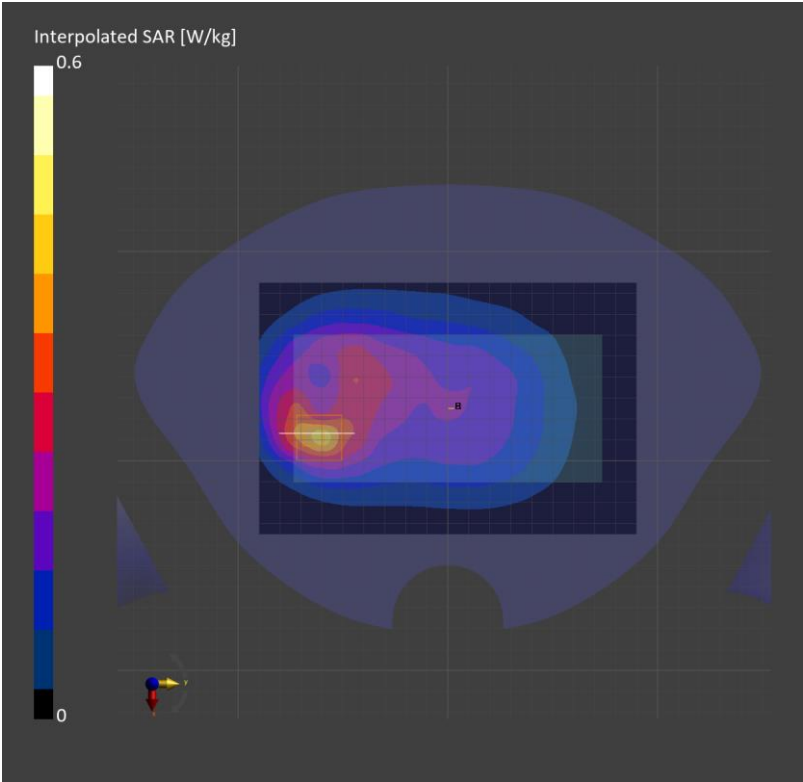
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Sep-01	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.352	0.354
psSAR10g [W/Kg]	0.221	0.197
Power Drift [dB]	-0.02	
M2/M1 [%]		79.9
Dist 3dB Peak [mm]		12.0



Measurement Report for Device, CHEEK, Band 5, UMTS-FDD (WCDMA), Channel 4132 (826.4 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	Touch, 0.00	Band 5	WCDMA, 10011-CAC	826.4, 4132	9.42	0.913	41.9

Hardware Setup

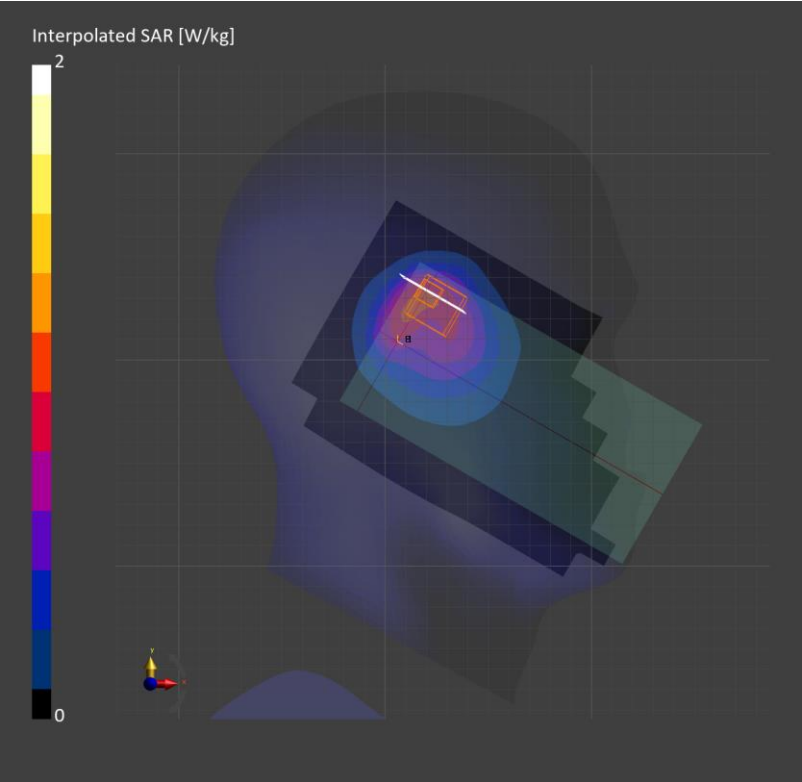
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Sep-25	EX3DV4 – SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	5.9 x 5.9 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.915	1.05
psSAR10g [W/Kg]	0.605	0.566
Power Drift [dB]	-0.01	
M2 / M1 [%]		71.3
Dist 3dB Peak [mm]		7.6



Measurement Report for Device, EDGE LEFT, Band 5, UMTS-FDD (WCDMA), Channel 4183 (836.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE LEFT, 10.00	Band 5	WCDMA, 10011-CAC	836.6, 4183	9.42	0.916	41.8

Hardware Setup

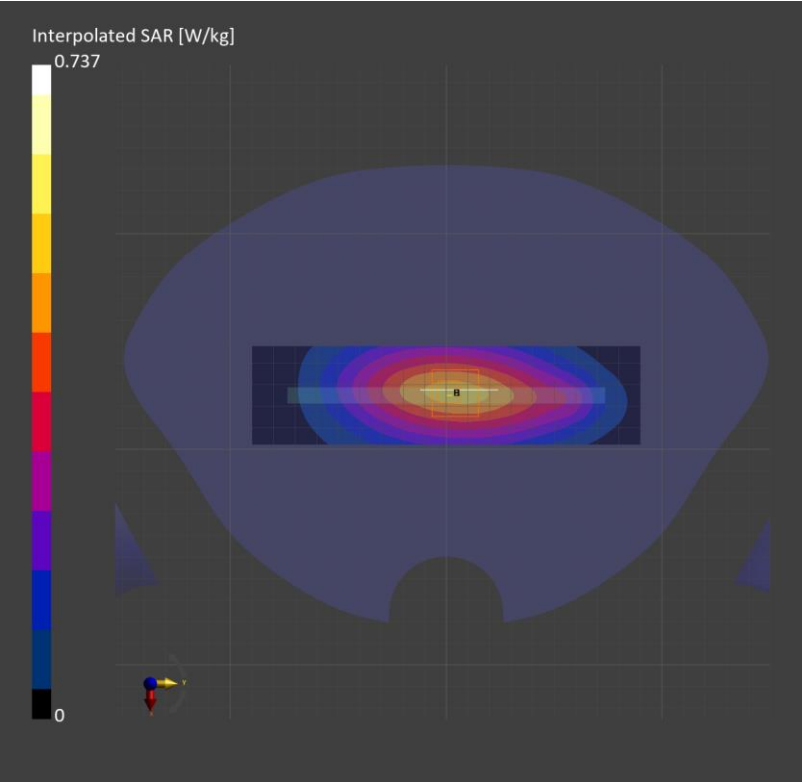
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Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Sep-26	EX3DV4 – SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.454	0.462
psSAR10g [W/Kg]	0.306	0.315
Power Drift [dB]	-0.01	
M2 / M1 [%]		84.8
Dist 3dB Peak [mm]		18.0



Measurement Report for Device, REAR, Band 5, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK), Channel 20525 (836.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band 5	LTE-FDD, 10175-CAH	836.5, 20525	9.42	0.924	41.2

Hardware Setup

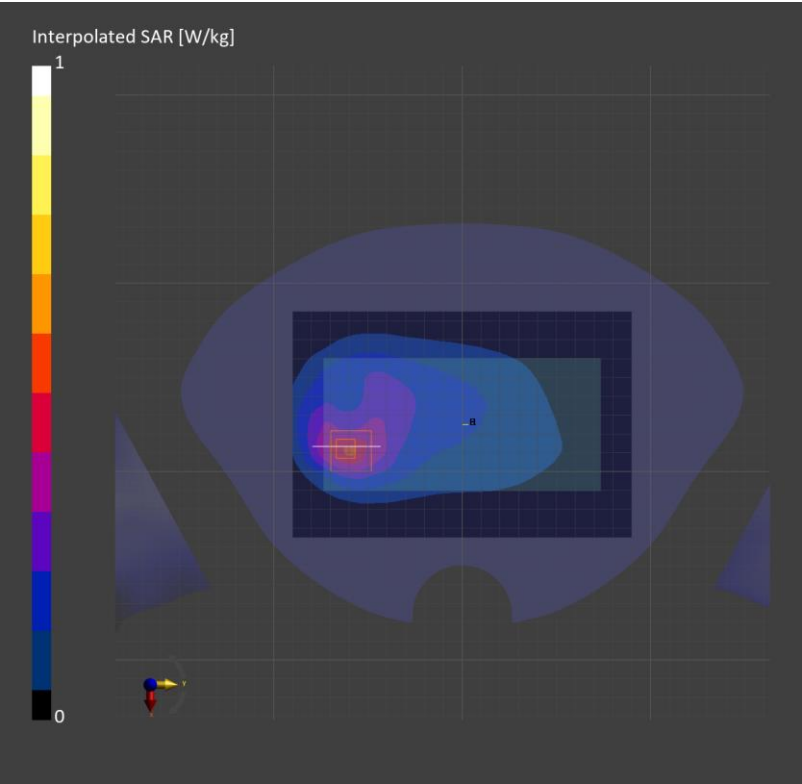
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Sep-01	EX3DV4 – SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.428	0.434
psSAR10g [W/Kg]	0.267	0.245
Power Drift [dB]	0.01	
M2/M1 [%]		80.5
Dist 3dB Peak [mm]		13.2



Measurement Report for Device, TILT, Band 5, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK), Channel 20525 (836.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	TILT, 0.00	Band 5	LTE-FDD, 10175-CAH	836.5, 20525	9.42	0.917	41.4

Hardware Setup

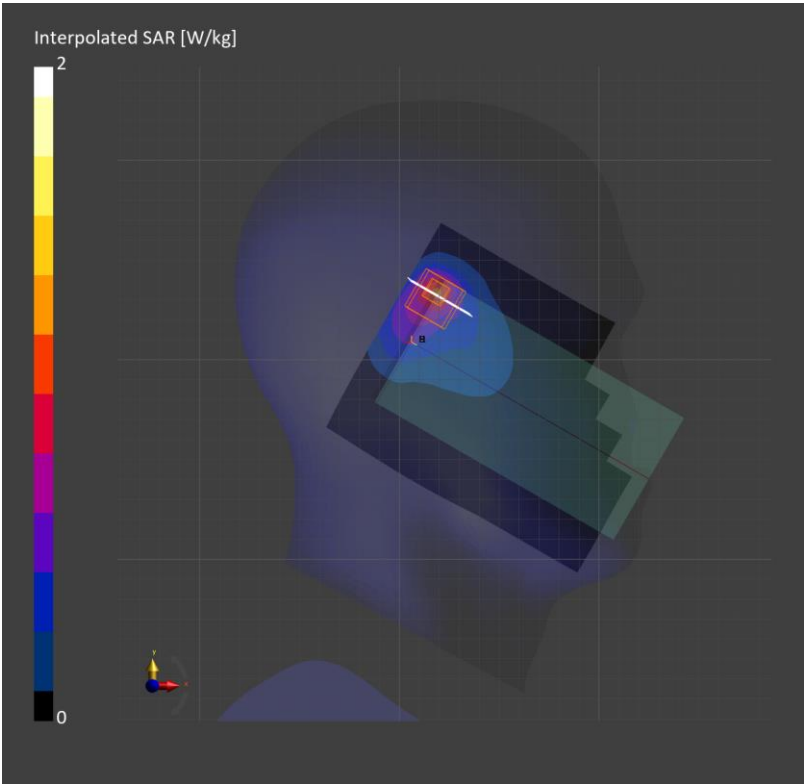
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Sep-21	EX3DV4 – SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	5.1 x 5.1 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.923	0.906
psSAR10g [W/Kg]	0.529	0.415
Power Drift [dB]	0.00	
M2/M1 [%]		57.3
Dist 3dB Peak [mm]		6.5



Measurement Report for SM-S921U, EDGE LEFT, Band 5, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK), Channel 20525 (836.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE LEFT, 10.00	Band 5	LTE-FDD, 10175-CAH	836.5, 20525	10.0	0.915	40.9

Hardware Setup

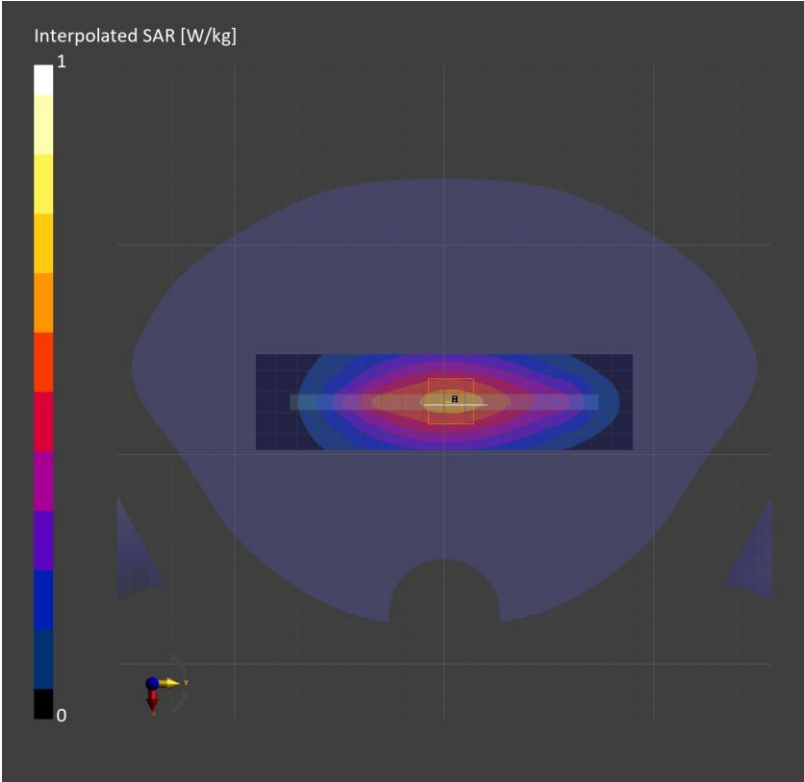
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-24	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.548	0.553
psSAR10g [W/Kg]	0.367	0.375
Power Drift [dB]	-0.07	
M2 / M1 [%]		83.1
Dist 3dB Peak [mm]		> 15.0



Measurement Report for Device, REAR, Band 7, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK), Channel 21100 (2535.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band 7	LTE-FDD, 10169-CAF	2535.0, 21100	7.29	1.85	39.7

Hardware Setup

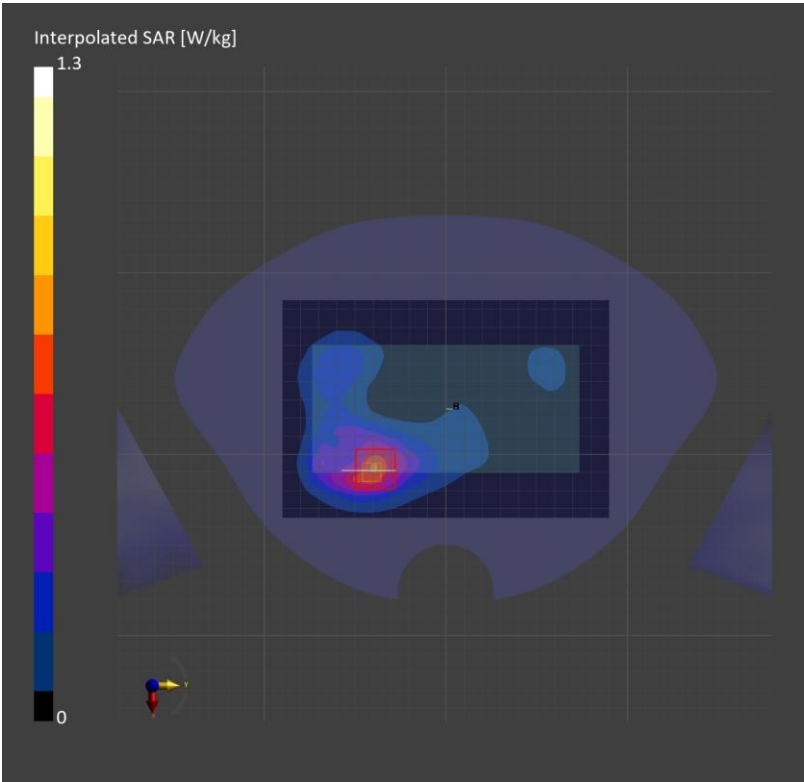
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2043	HBBL-600-10000, 2023-Sep-01	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1671, 2023-05-25

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.610	0.637
psSAR10g [W/Kg]	0.312	0.319
Power Drift [dB]	0.00	
M2 / M1 [%]		81.5
Dist 3dB Peak [mm]		10.3



Measurement Report for Device, TILT, Band 7, LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK), Channel 21350 (2560.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band 7	LTE-FDD, 10297-AAE	2560.0, 21350	7.68	1.94	38.7

Hardware Setup

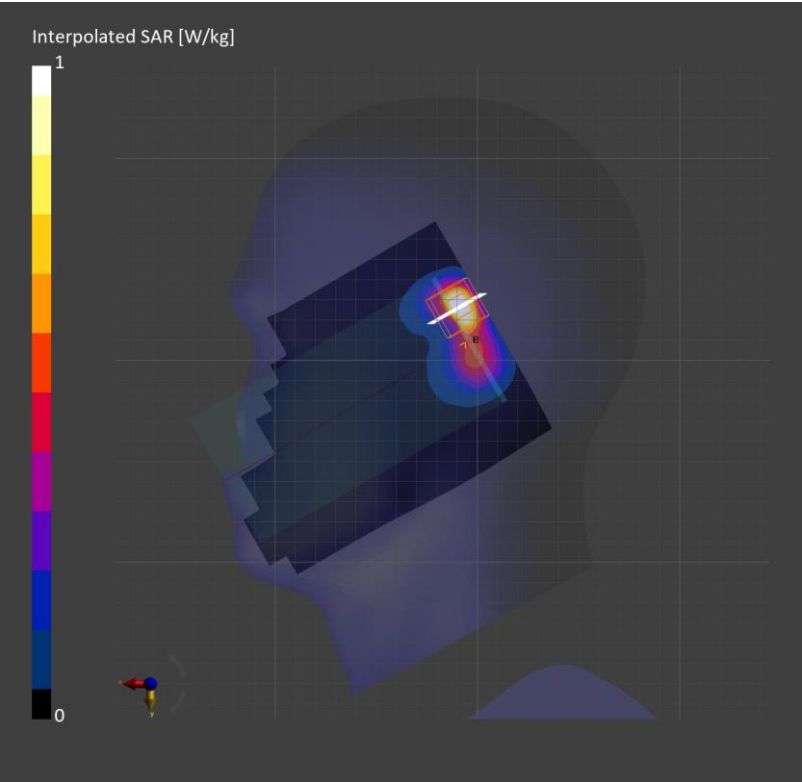
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2043	HBBL-600-10000, 2023-Sep-26	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1671, 2023-05-25

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.777	0.775
psSAR10g [W/Kg]	0.320	0.306
Power Drift [dB]	-0.01	
M2/M1 [%]		77.6
Dist 3dB Peak [mm]		6.4



Measurement Report for Device, EDGE TOP, Band 7, LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK), Channel 21100 (2535.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 10.00	Band 7	LTE-FDD, 10297-AAE	2535.0, 21100	7.68	1.92	38.8

Hardware Setup

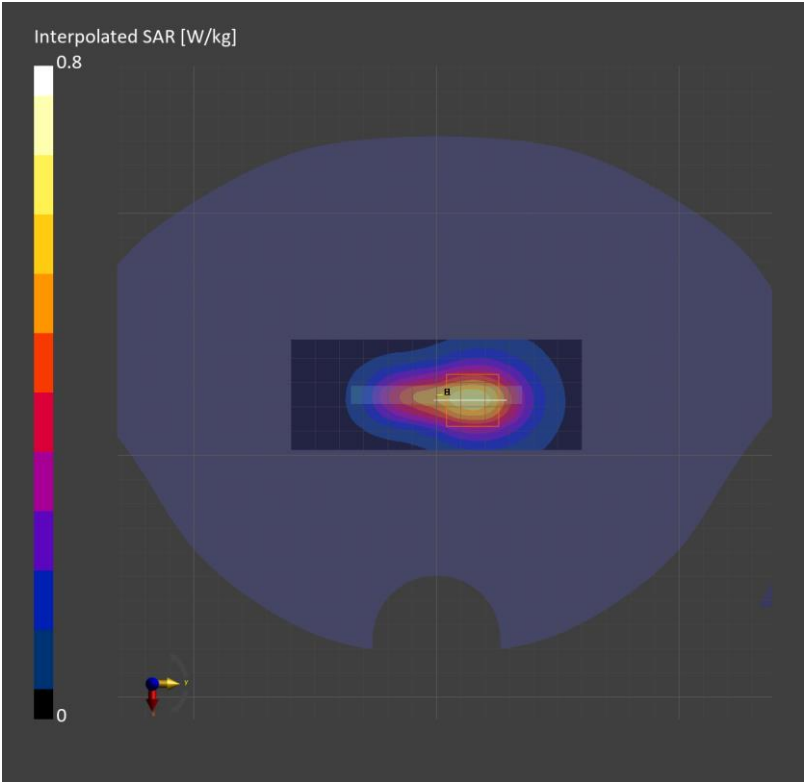
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2043	HBBL-600-10000, 2023-Sep-26	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1671, 2023-05-25

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.520	0.531
psSAR10g [W/Kg]	0.263	0.272
Power Drift [dB]	0.03	
M2/M1 [%]		82.0
Dist 3dB Peak [mm]		12.0



Measurement Report for Device, REAR, Band 12, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK), Channel 23095 (707.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band 12	LTE-FDD, 10175-CAH	707.5, 23095	9.65	0.897	41.4

Hardware Setup

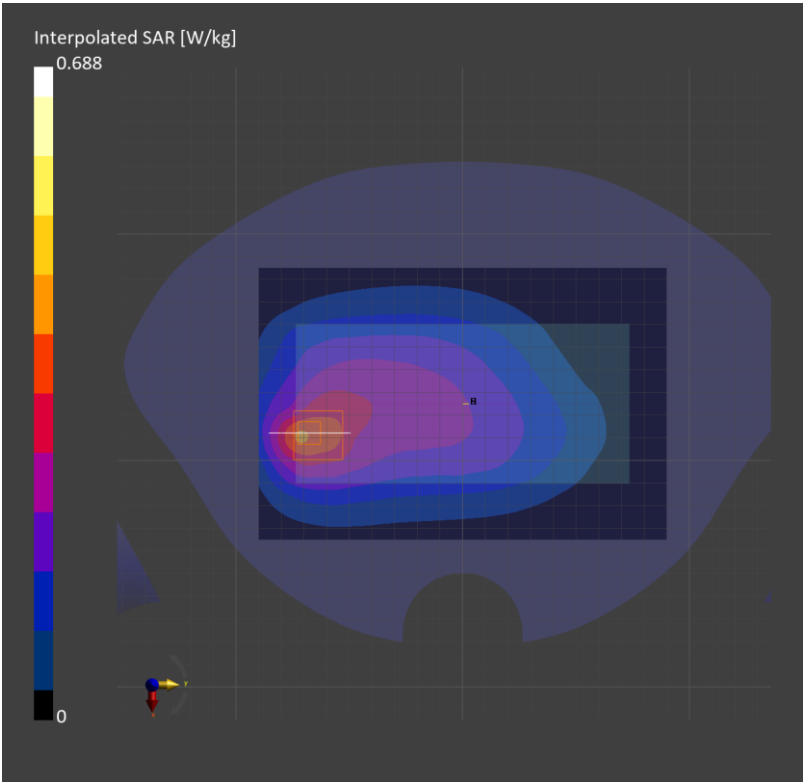
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Sep-14	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.352	0.355
psSAR10g [W/Kg]	0.233	0.208
Power Drift [dB]	0.00	
M2 / M1 [%]		79.5
Dist 3dB Peak [mm]		13.7



Measurement Report for Device, CHEEK, Band 12, LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK), Channel 23095 (707.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	Touch, 0.00	Band 12	LTE-FDD, 10108-CAH	707.5, 23095	9.65	0.897	41.4

Hardware Setup

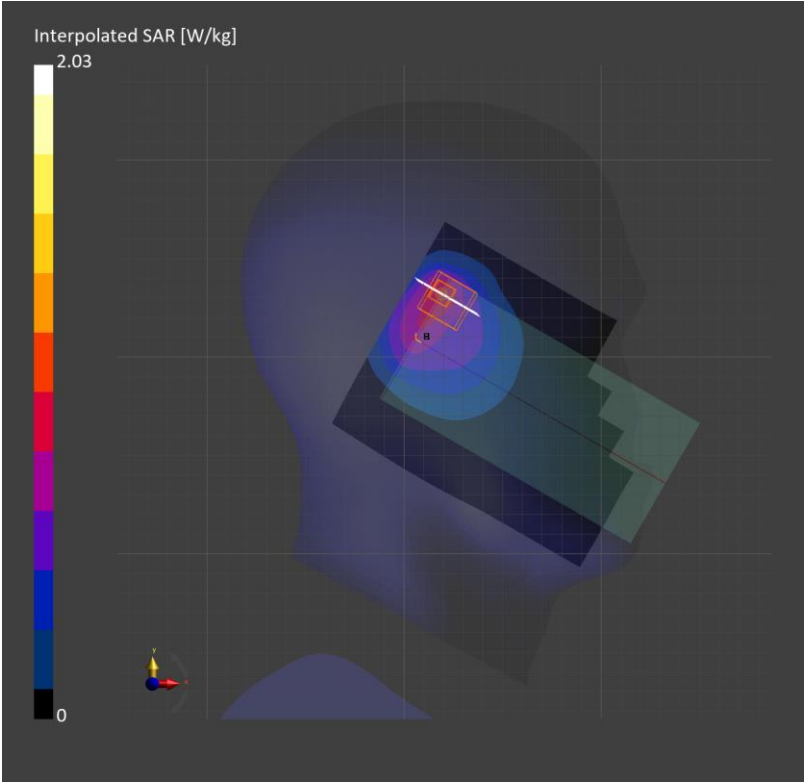
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Oct-03	EX3DV4 – SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.869	0.851
psSAR10g [W/Kg]	0.557	0.456
Power Drift [dB]	0.02	
M2/M1 [%]		75.0
Dist 3dB Peak [mm]		9.2



Measurement Report for SM-S921U, REAR, Band 12, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK), Channel 23095 (707.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band 12	LTE-FDD, 10175-CAH	707.5, 23095	10.28	0.871	41.8

Hardware Setup

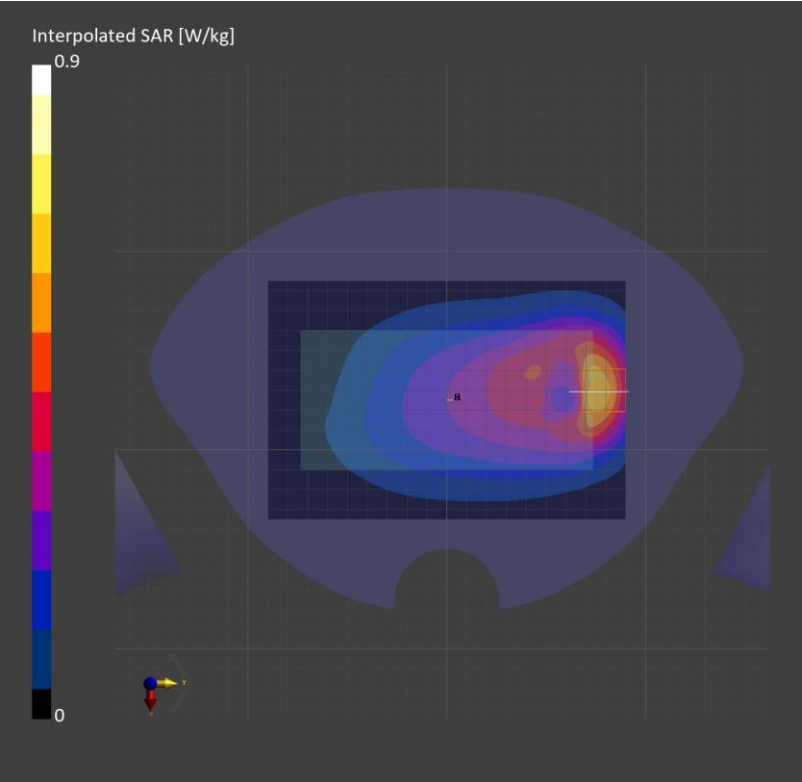
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-21	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.565	0.559
psSAR10g [W/Kg]	0.366	0.316
Power Drift [dB]	-0.05	
M2 / M1 [%]		81.2
Dist 3dB Peak [mm]		10.8



Measurement Report for Device, REAR, Band 13, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK), Channel 23230 (782.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band 13	LTE-FDD, 10175-CAH	782.0, 23230	9.65	0.901	41.3

Hardware Setup

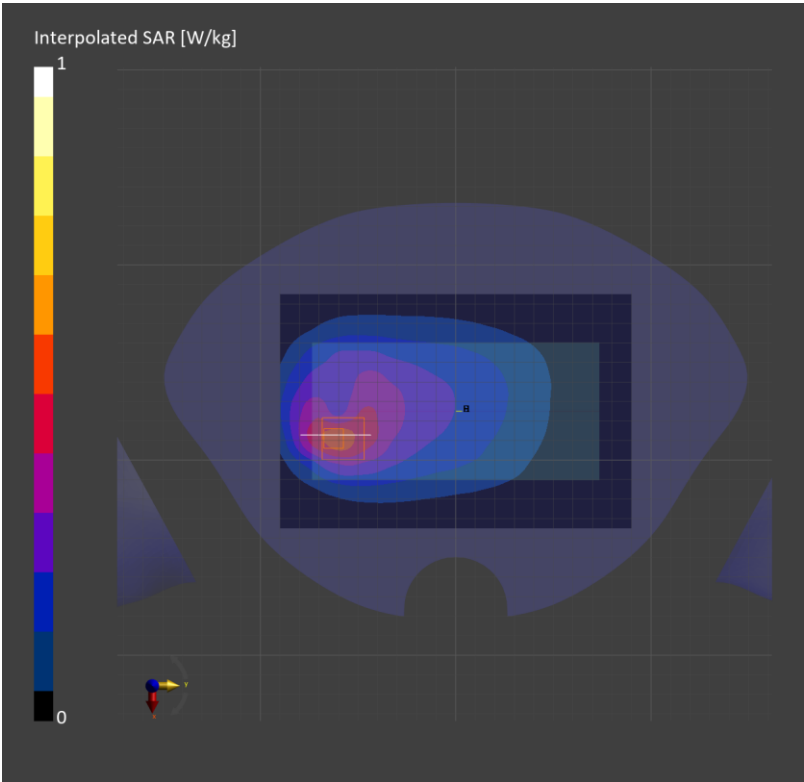
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Sep-01	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.478	0.484
psSAR10g [W/Kg]	0.306	0.280
Power Drift [dB]	0.02	
M2 / M1 [%]		78.8
Dist 3dB Peak [mm]		12.0



Measurement Report for Device, CHEEK, Band 13, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK), Channel 23230 (782.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	Touch, 0.00	Band 13	LTE-FDD, 10175-CAH	782.0, 23230	9.65	0.898	42.0

Hardware Setup

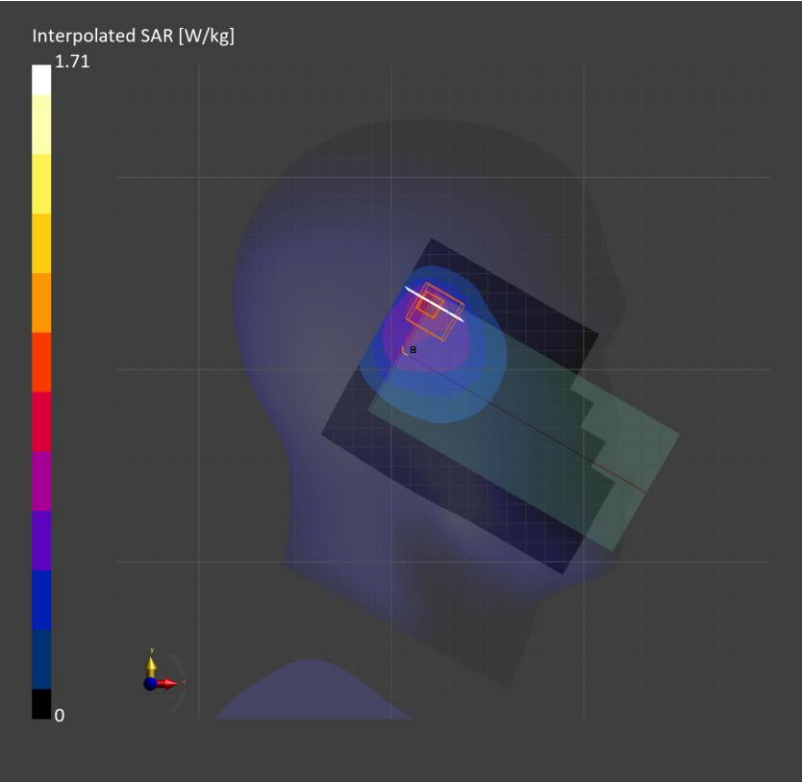
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Sep-26	EX3DV4 – SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	5.6 x 5.6 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.680	0.665
psSAR10g [W/Kg]	0.421	0.357
Power Drift [dB]	0.01	
M2 / M1 [%]		69.5
Dist 3dB Peak [mm]		7.2



Measurement Report for SM-S921U, EDGE LEFT, Band 13, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK), Channel 23230 (782.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE LEFT, 10.00	Band 13	LTE-FDD, 10175-CAH	782.0, 23230	10.28	0.892	41.1

Hardware Setup

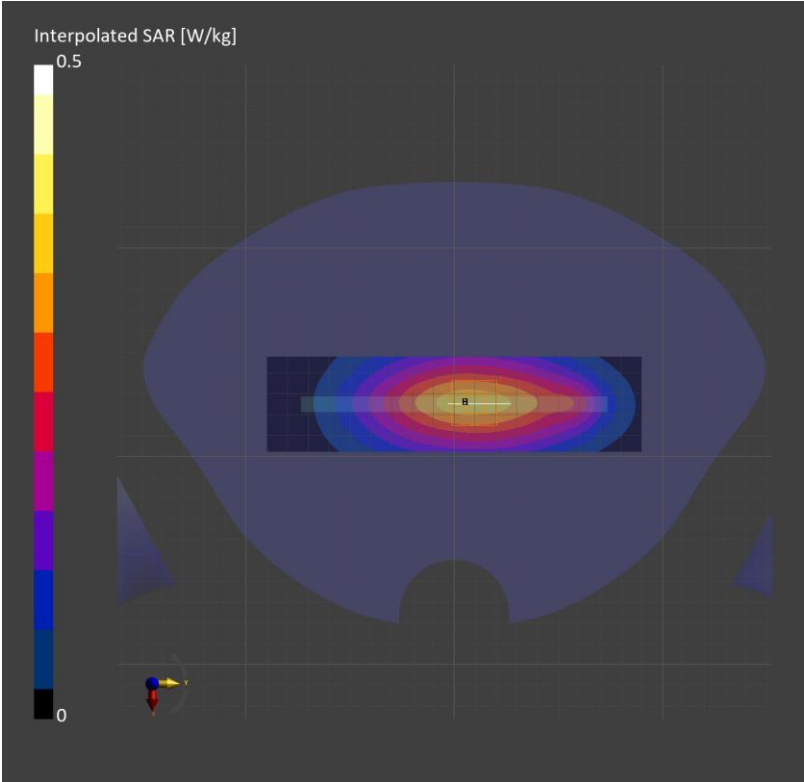
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-24	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.316	0.319
psSAR10g [W/Kg]	0.214	0.218
Power Drift [dB]	0.01	
M2 / M1 [%]		85.6
Dist 3dB Peak [mm]		> 15.0



Measurement Report for Device, REAR, Band 14, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK), Channel 23330 (793.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band 14	LTE-FDD, 10175-CAH	793.0, 23330	9.65	0.905	41.3

Hardware Setup

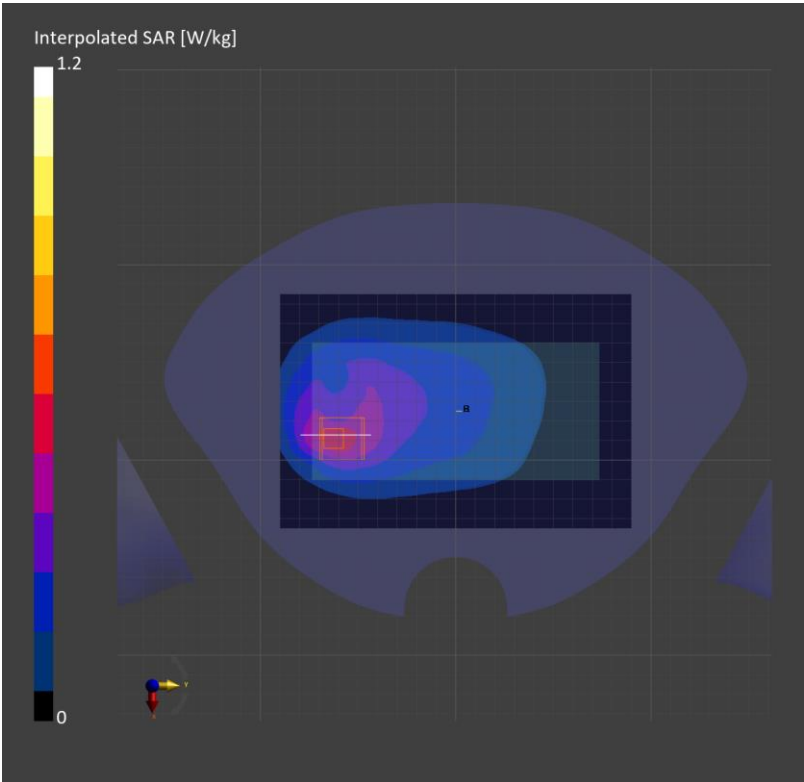
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Sep-01	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.495	0.494
psSAR10g [W/Kg]	0.314	0.284
Power Drift [dB]	0.01	
M2 / M1 [%]		78.8
Dist 3dB Peak [mm]		13.0



Measurement Report for Device, TILT, Band 14, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK), Channel 23330 (793.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	TILT, 0.00	Band 14	LTE-FDD, 10175-CAH	793.0, 23330	9.65	0.903	41.5

Hardware Setup

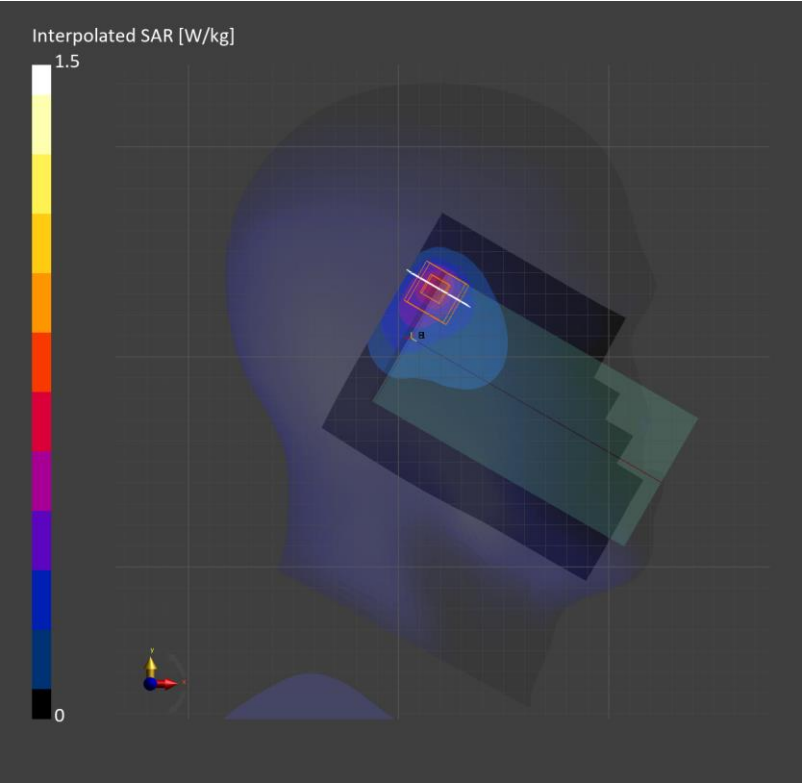
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Sep-21	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	5.5 x 5.5 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.573	0.592
psSAR10g [W/Kg]	0.333	0.270
Power Drift [dB]	0.02	
M2/M1 [%]		63.2
Dist 3dB Peak [mm]		6.7



Measurement Report for SM-S921U, EDGE LEFT, Band 14, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK), Channel 23330 (793.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE LEFT, 10.00	Band 14	LTE-FDD, 10175-CAH	793.0, 23330	10.28	0.896	41.0

Hardware Setup

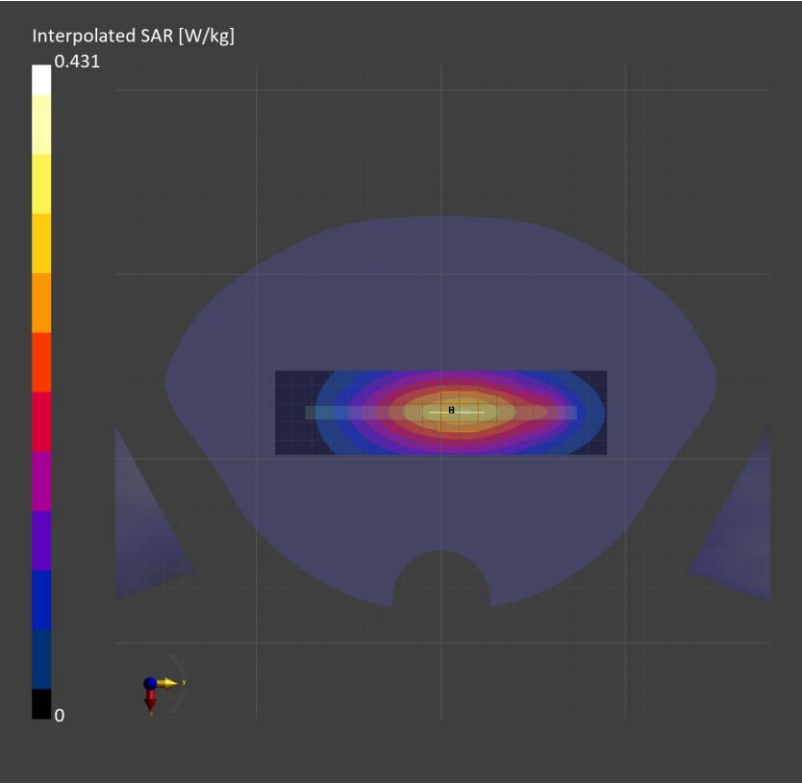
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-24	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.283	0.284
psSAR10g [W/Kg]	0.190	0.193
Power Drift [dB]	0.02	
M2 / M1 [%]		86.4
Dist 3dB Peak [mm]		> 15.0



Measurement Report for Device, EDGE BOTTOM, Band 25, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK), Channel 26140 (1860.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	Band 25	LTE-FDD, 10169-CAF	1860.0, 26140	8.72	1.37	39.6

Hardware Setup

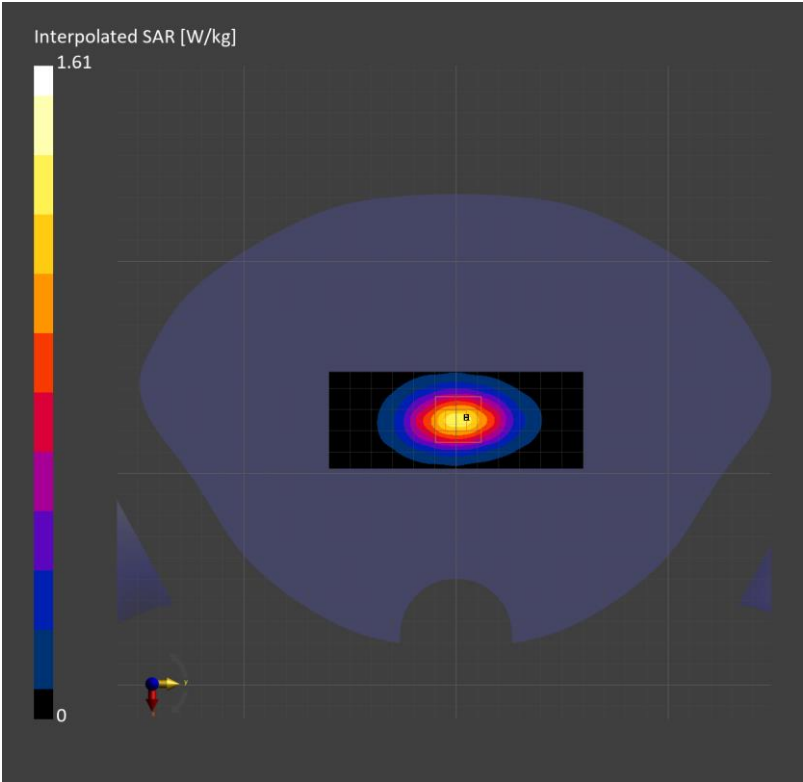
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-13	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	4.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	1.03	0.891
psSAR10g [W/Kg]	0.541	0.493
Power Drift [dB]	-0.01	
M2/M1 [%]		80.5
Dist 3dB Peak [mm]		10.8



Measurement Report for Device, TILT, Band 25, LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK) RBPosition:High AntennaCfg:SISO, Channel 26590 (1905.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band 25	LTE-FDD, 10297-AAE	1905.0, 26590	8.72	1.38	39.5

Hardware Setup

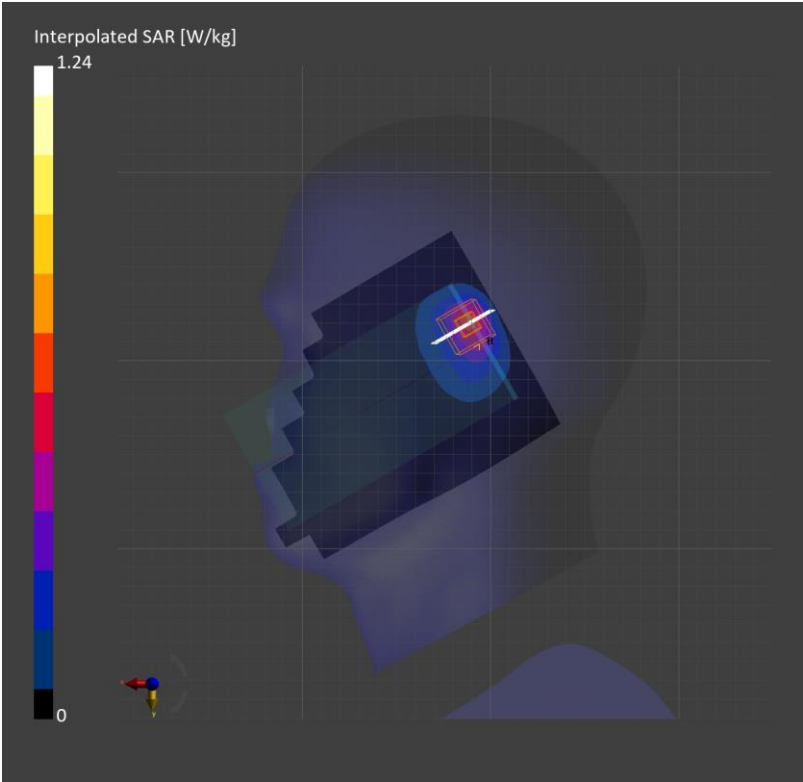
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Oct-30	EX3DV4 – SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.508	0.530
psSAR10g [W/Kg]	0.259	0.251
Power Drift [dB]	-0.04	
M2/M1 [%]		74.2
Dist 3dB Peak [mm]		7.3



Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 10.00	Band 25	LTE-FDD, 10169-CAF	1905.0, 26590	8.67	1.42	40.3

Hardware Setup

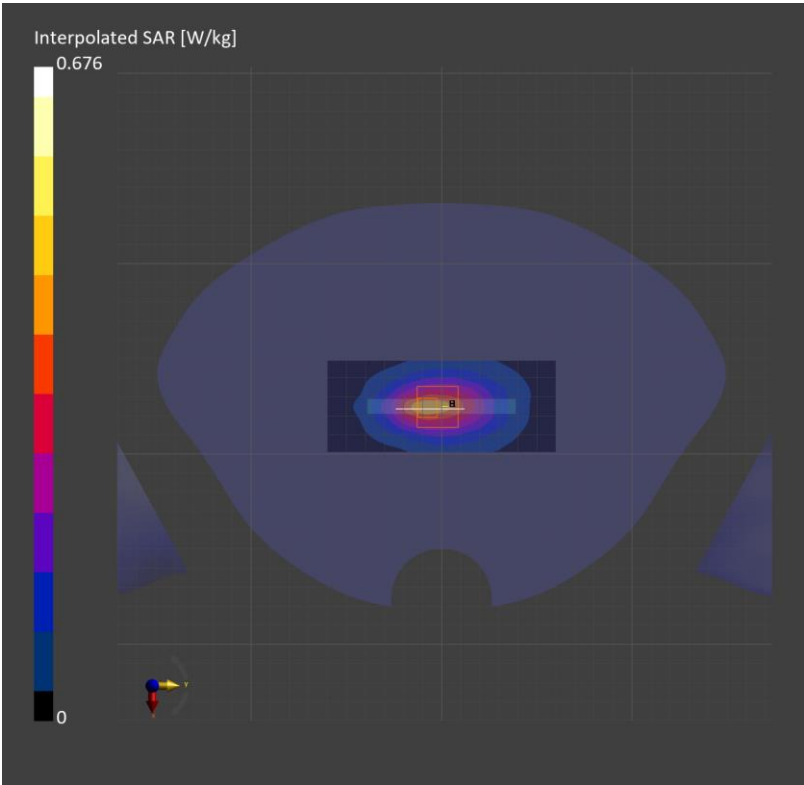
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 1991	HBBL-600-10000, 2023-Sep-20	EX3DV4 – SN7330, 2023-01-24	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.346	0.357
psSAR10g [W/Kg]	0.191	0.211
Power Drift [dB]	-0.11	
M2/M1 [%]		80.3
Dist 3dB Peak [mm]		11.4



Measurement Report for Device, REAR, Band 26, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK), Channel 26865 (831.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR 10.00	Band 26	LTE-FDD, 10181-CAF	831.5, 26865	9.42	0.922	41.2

Hardware Setup

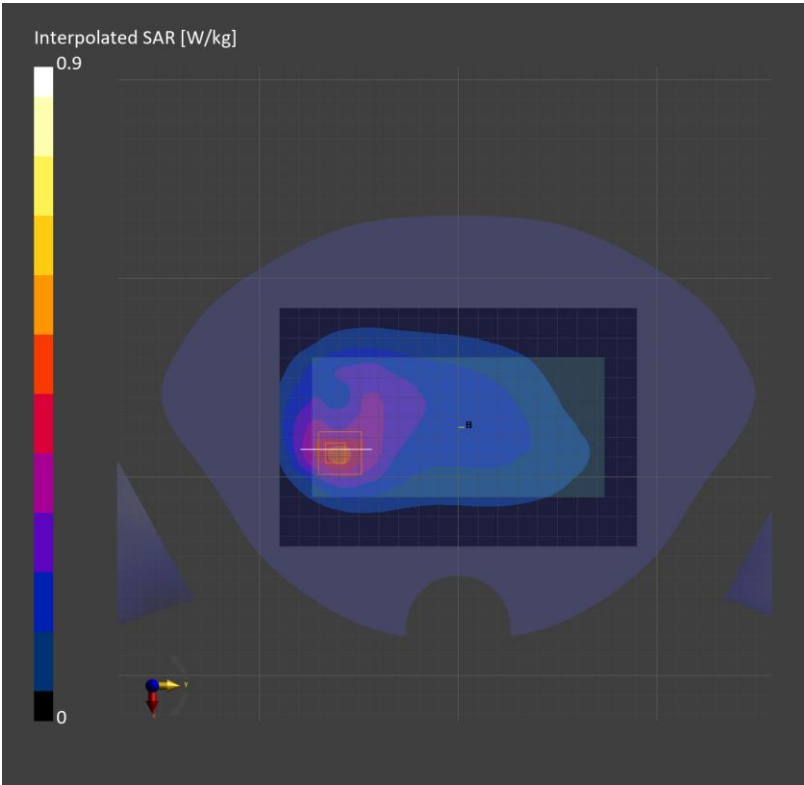
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Sep-01	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.413	0.424
psSAR10g [W/Kg]	0.259	0.241
Power Drift [dB]	0.01	
M2 / M1 [%]		82.2
Dist 3dB Peak [mm]		13.2



Measurement Report for Device, TILT, Band 26, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK), Channel 26865 (831.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	TILT, 0.00	Band 26	LTE-FDD, 10181-CAF	831.5, 26865	9.42	0.916	41.4

Hardware Setup

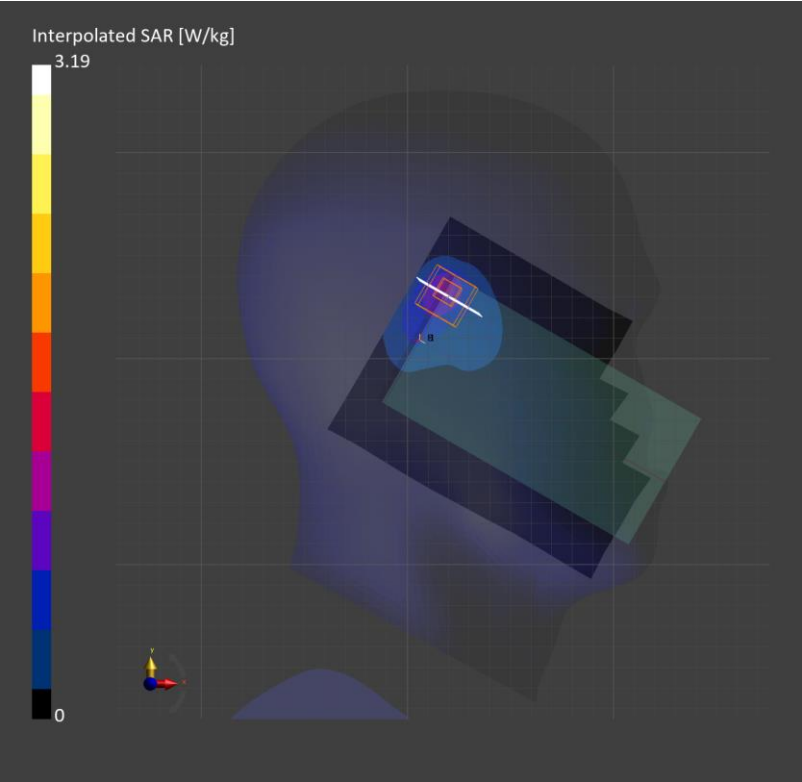
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Sep-21	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.928	0.926
psSAR10g [W/Kg]	0.542	0.418
Power Drift [dB]	0.01	
M2/M1 [%]		62.9
Dist 3dB Peak [mm]		6.4



Measurement Report for SM-S921U, EDGE LEFT, Band 26, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK), Channel 26865 (831.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE LEFT, 10.00	Band 26	LTE-FDD, 10181-CAF	831.5, 26865	10.0	0.913	40.9

Hardware Setup

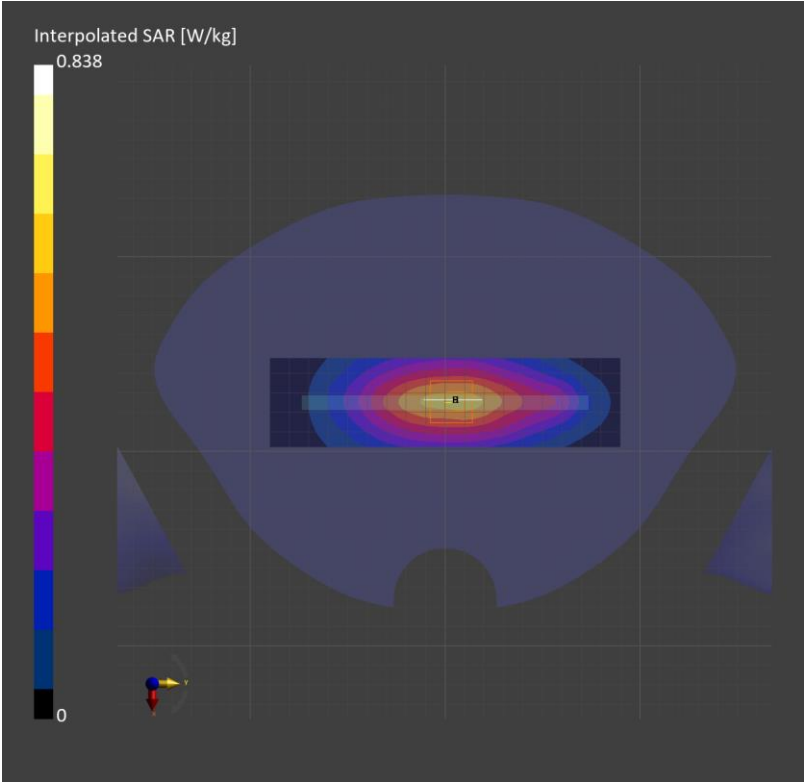
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-24	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.514	0.528
psSAR10g [W/Kg]	0.346	0.358
Power Drift [dB]	0.02	
M2 / M1 [%]		85.1
Dist 3dB Peak [mm]		> 15.0



Measurement Report for Device, EDGE BOTTOM, Band 30, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK), Channel 27710 (2310.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	Band 30	LTE-FDD, 10175-CAH	2310.0, 27710	8.3	1.64	38.6

Hardware Setup

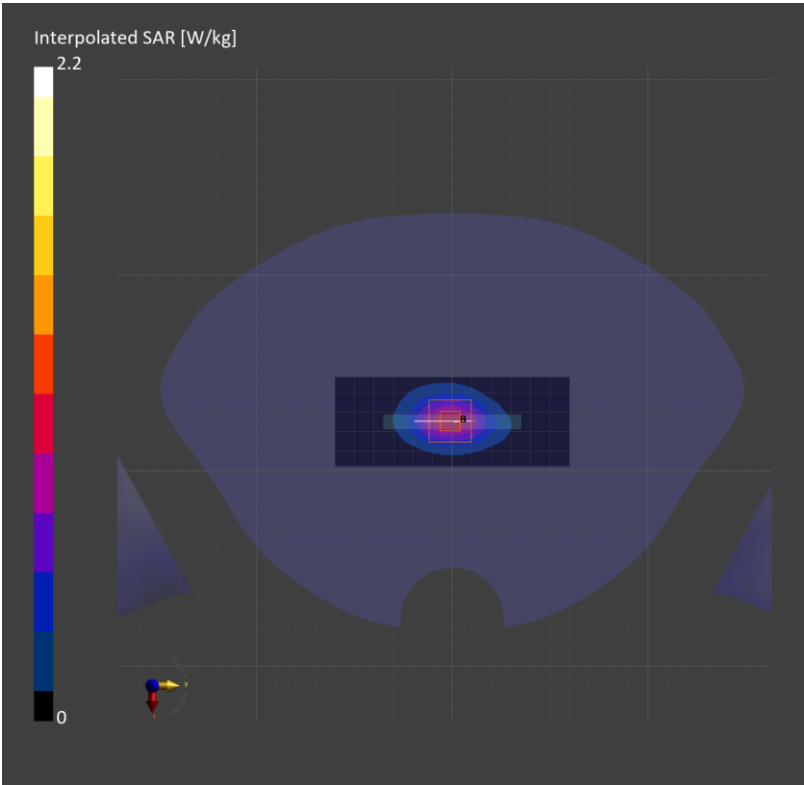
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-14	EX3DV4 - SN7330, 2023-01-24	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.828	0.871
psSAR10g [W/Kg]	0.413	0.453
Power Drift [dB]	-0.01	
M2 / M1 [%]		81.8
Dist 3dB Peak [mm]		10.0



Measurement Report for Device, TILT, Band 30, LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK), Channel 27710 (2310.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band 30	LTE-FDD, 10154-CAH	2310.0, 27710	8.3	1.66	38.9

Hardware Setup

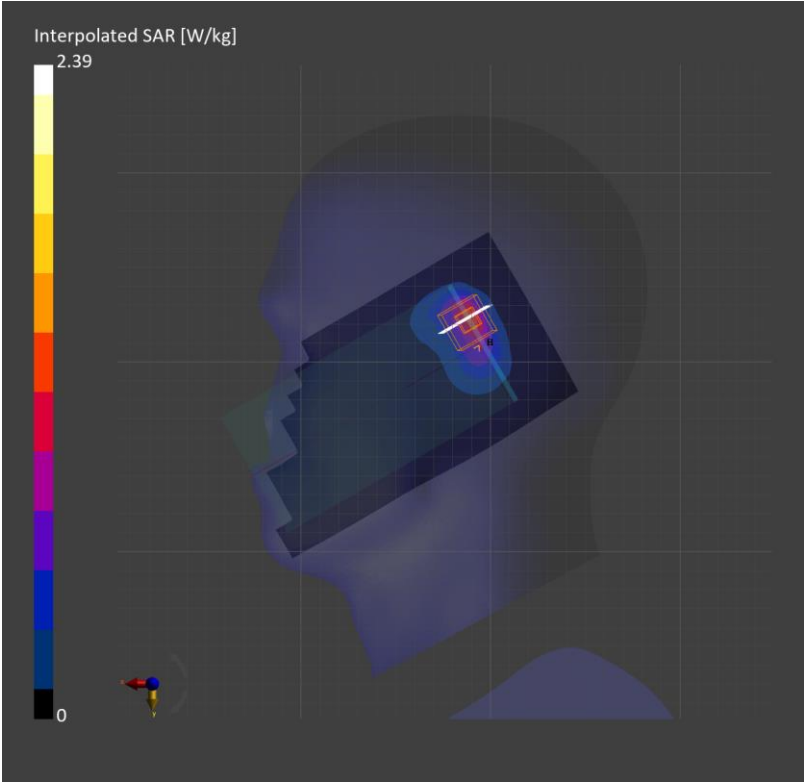
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-25	EX3DV4 - SN7330, 2023-01-24	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.981	1.04
psSAR10g [W/Kg]	0.469	0.480
Power Drift [dB]	0.03	
M2/M1 [%]		78.4
Dist 3dB Peak [mm]		7.1



Measurement Report for SM-S921U, EDGE TOP, Band 30, LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK), Channel 27710 (2310.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 10.00	Band 30	LTE-FDD, 10154-CAH	2310.0, 27710	8.3	1.64	38.8

Hardware Setup

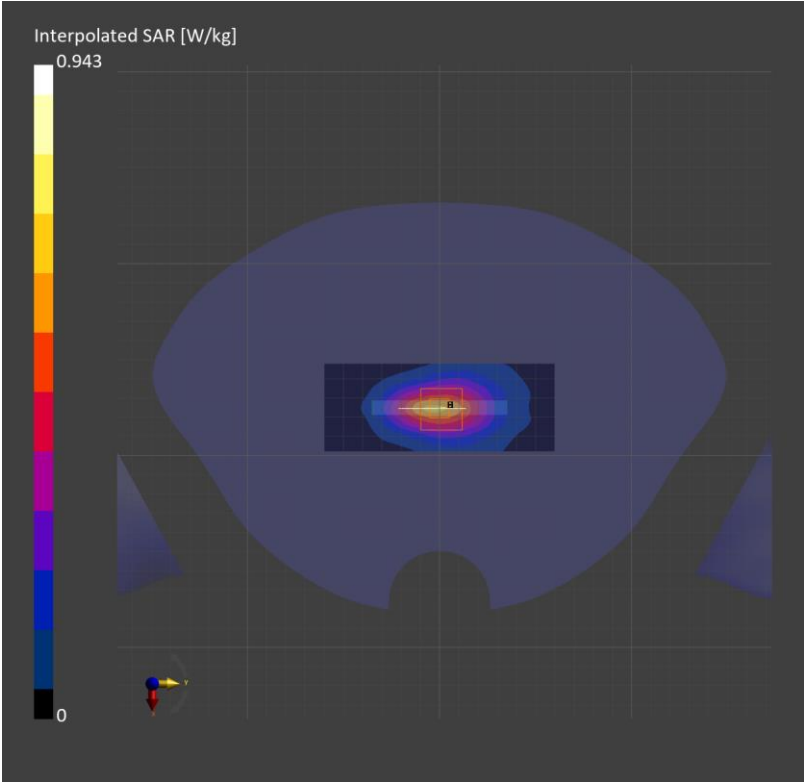
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-21	EX3DV4 - SN7330, 2023-01-24	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	4.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.508	0.520
psSAR10g [W/Kg]	0.266	0.293
Power Drift [dB]	-0.04	
M2 / M1 [%]		82.6
Dist 3dB Peak [mm]		11.8



LTE Band 41

Frequency: 2593 MHz; Communication System Channel Number: 40620; Duty Cycle: 1:1.59956

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 1.918$ S/m; $\epsilon_r = 39.448$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 7/17/2023
- Probe: EX3DV4 - SN7330; ConvF(7.74, 7.74, 7.74) @ 2593 MHz; Calibrated: 1/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Phantom section: Flat Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Bottom/QPSK RB 1/0 ch.40620/Area Scan (10x6x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.843 W/kg

Bottom/QPSK RB 1/0 ch.40620/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.06 V/m; Power Drift = -0.06 dB

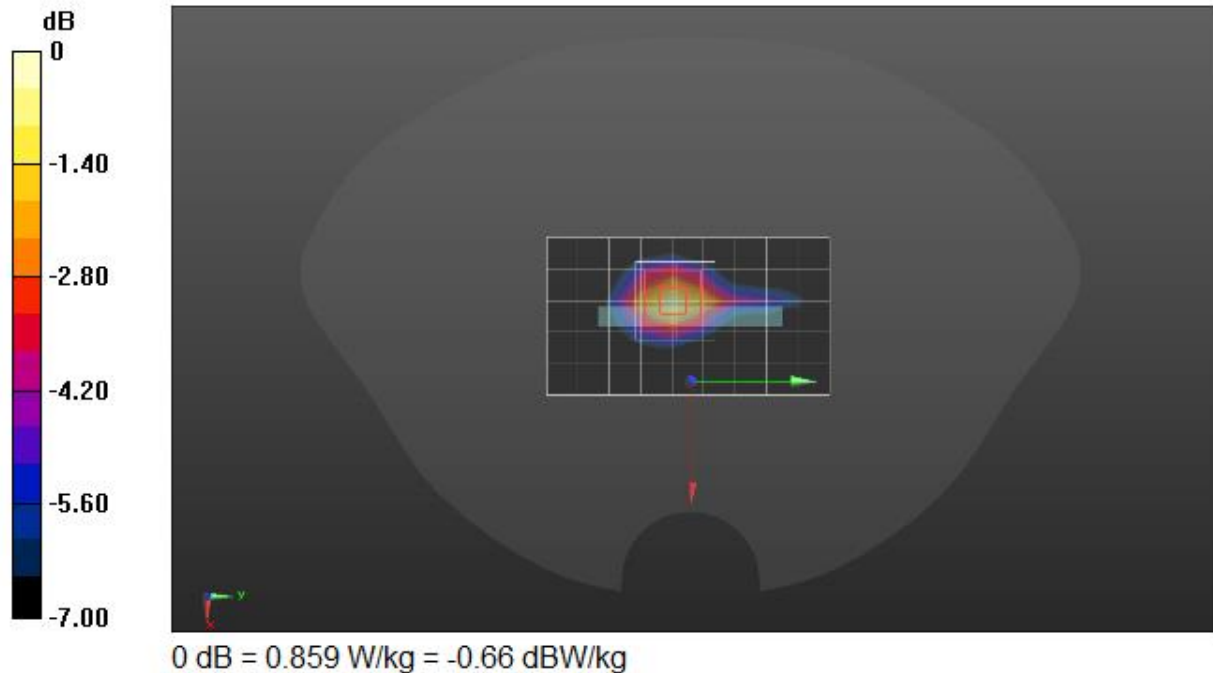
Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.543 W/kg; SAR(10 g) = 0.266 W/kg

Smallest distance from peaks to all points 3 dB below = 10.4 mm

Ratio of SAR at M2 to SAR at M1 = 52.9%

Maximum value of SAR (measured) = 0.859 W/kg



Measurement Report for Device, TILT, Band 41, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9), Channel 41490 (2680.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band 41	LTE-TDD, 10435-AAG	2680.0, 41490	7.2	1.97	38.2

Hardware Setup

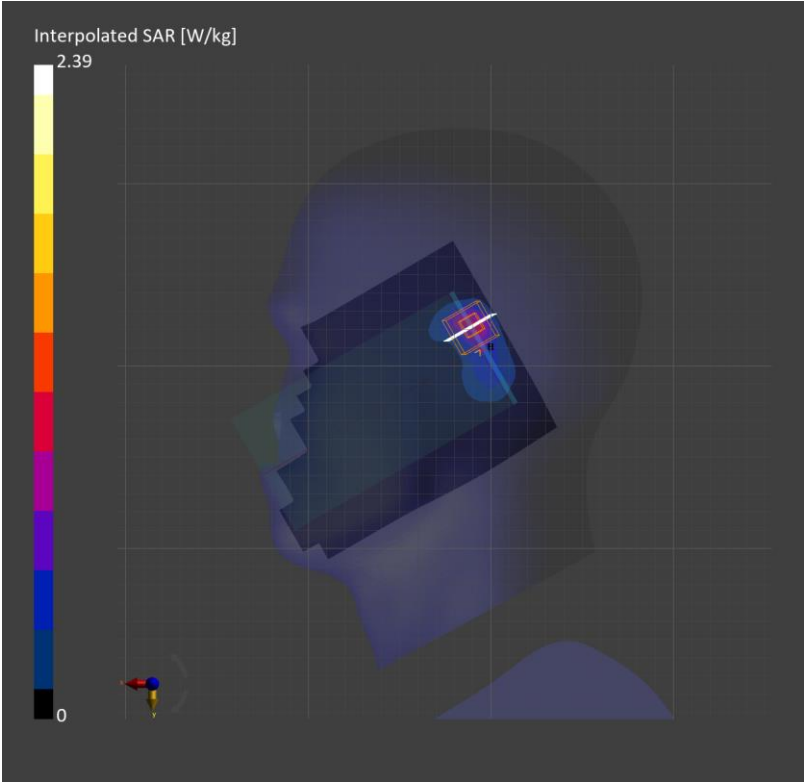
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2037	HBBL-600-10000, 2023-Oct-04	EX3DV4 – SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.801	0.924
psSAR10g [W/Kg]	0.362	0.366
Power Drift [dB]	0.01	
M2 / M1 [%]		74.2
Dist 3dB Peak [mm]		6.4



LTE Band 41

Frequency: 2680 MHz; Communication System Channel Number: 41490; Duty Cycle: 1:1.59956

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used: $f = 2680$ MHz; $\sigma = 1.984$ S/m; $\epsilon_r = 39.343$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 7/17/2023
- Probe: EX3DV4 - SN7330; ConvF(7.74, 7.74, 7.74) @ 2680 MHz; Calibrated: 1/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Phantom section: Flat Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Top/QPSK RB 1/0 ch.41490/Area Scan (10x6x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.782 W/kg

Top/QPSK RB 1/0 ch.41490/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.13 V/m; Power Drift = 0.08 dB

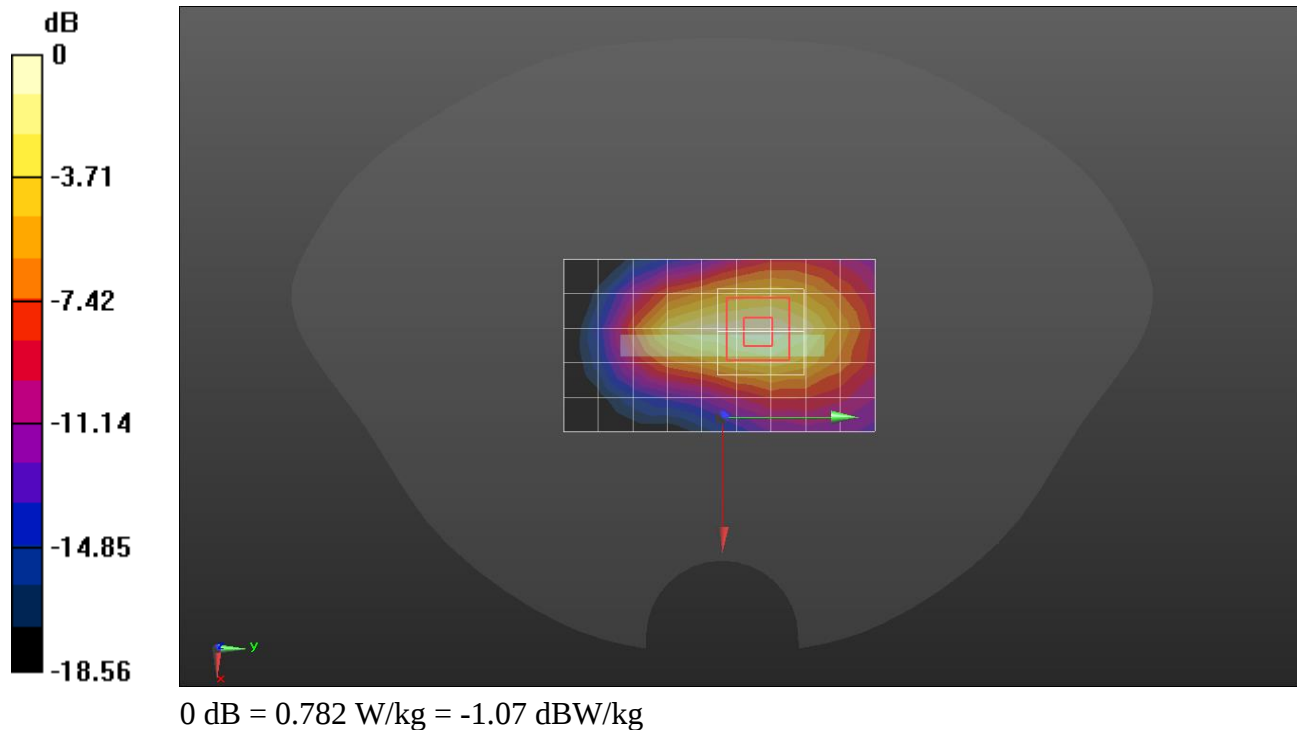
Peak SAR (extrapolated) = 0.999 W/kg

SAR(1 g) = 0.523 W/kg; SAR(10 g) = 0.273 W/kg

Smallest distance from peaks to all points 3 dB below = 11 mm

Ratio of SAR at M2 to SAR at M1 = 54%

Maximum value of SAR (measured) = 0.817 W/kg



Measurement Report for SM-S921U, TILT, Band 41, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9), Channel 41490 (2680.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band 41	LTE-TDD, 10435-AAG	2680.0, 41490	7.2	1.97	38.2

Hardware Setup

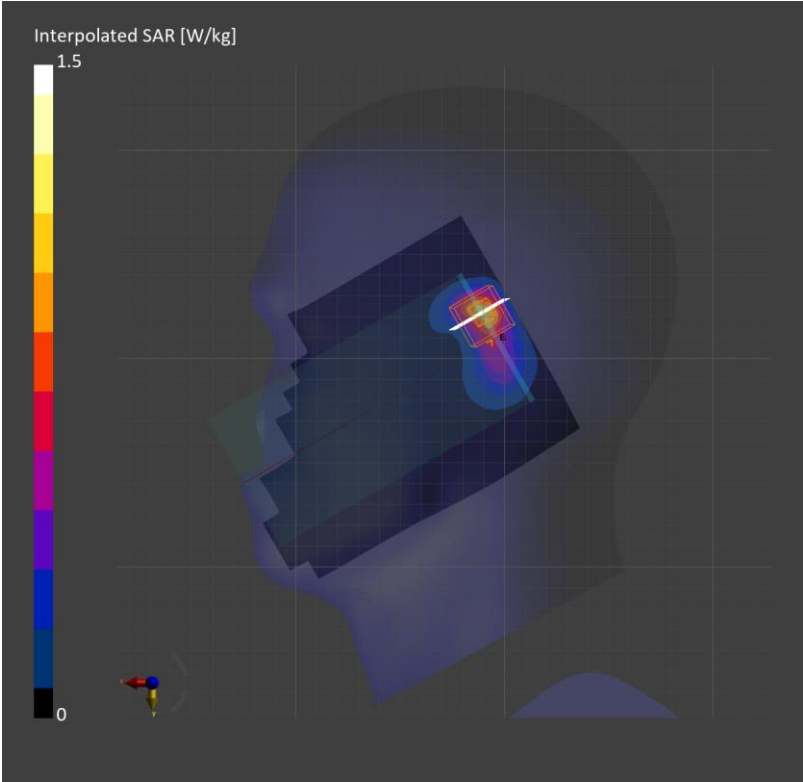
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Oct-06	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.815	0.916
psSAR10g [W/Kg]	0.370	0.364
Power Drift [dB]	-0.01	
M2/M1 [%]		74.9
Dist 3dB Peak [mm]		6.4



Measurement Report for SM-S921U, TILT, Band 48, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9), Channel 56640 (3690.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band 48	LTE-TDD, 10435-AAG	3690.0, 56640	7.03	3.07	38.3

Hardware Setup

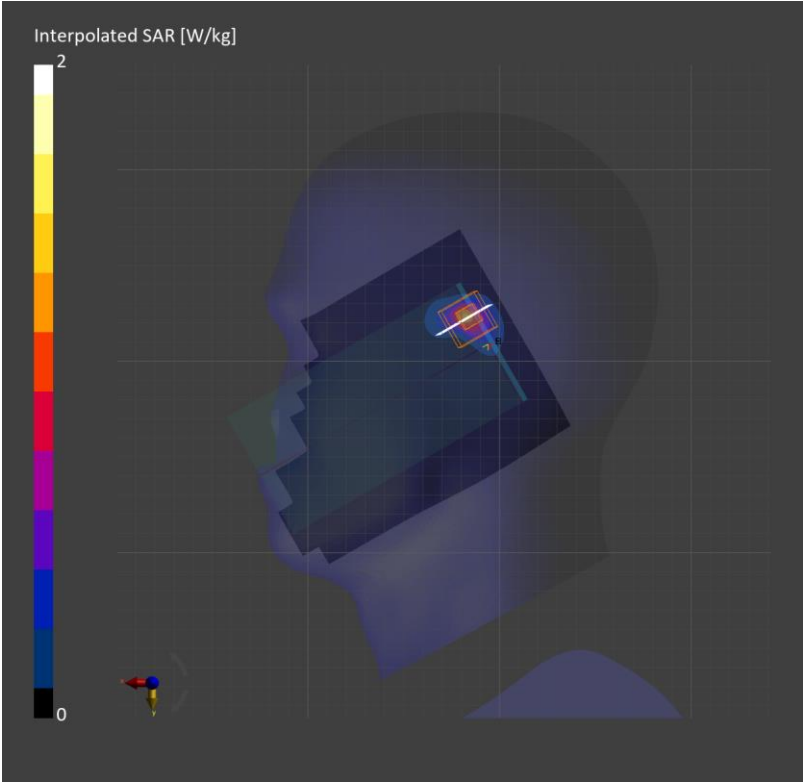
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Oct-04	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	4.5 x 4.5 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.872	0.933
psSAR10g [W/Kg]	0.289	0.290
Power Drift [dB]	0.01	
M2/M1 [%]		70.7
Dist 3dB Peak [mm]		5.1



Measurement Report for Device, REAR, Band 48, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9), Channel 56640 (3690.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	Rear, 10.00	Band 48	LTE-TDD, 10435-AAG	3690.0, 56640	7.03	3.11	37.1

Hardware Setup

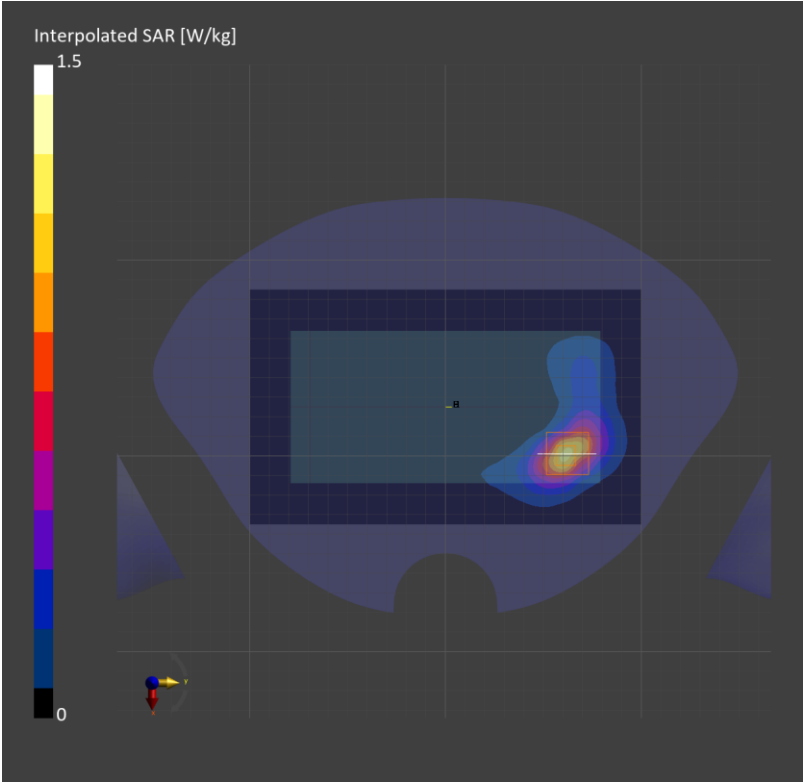
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Oct-10	EX3DV4 – SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	30.0 x 30.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.879	0.935
psSAR10g [W/Kg]	0.375	0.388
Power Drift [dB]	-0.01	
M2 / M1 [%]		74.4
Dist 3dB Peak [mm]		9.5



Measurement Report for SM-S921U, TILT, Band 48, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK), Channel 56640 (3690.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band 48	LTE-TDD, 10172-CAH	3690.0, 56640	6.93	3.11	39.4

Hardware Setup

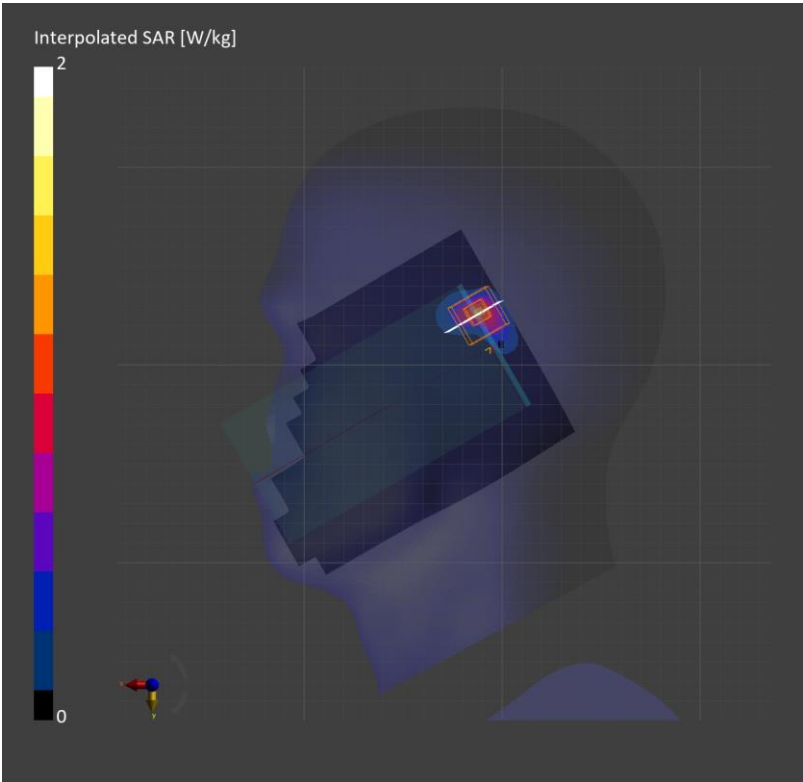
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2038	HBBL-600-10000, 2023-Oct-16	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	4.5 x 4.5 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.824	0.943
psSAR10g [W/Kg]	0.293	0.305
Power Drift [dB]	0.00	
M2 / M1 [%]		73.7
Dist 3dB Peak [mm]		5.8



Measurement Report for Device, EDGE BOTTOM, Band 66, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK), Channel 132572 (1770.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	Band 66	LTE-FDD, 10169-CAF	1770.0, 132572	9.13	1.34	39.6

Hardware Setup

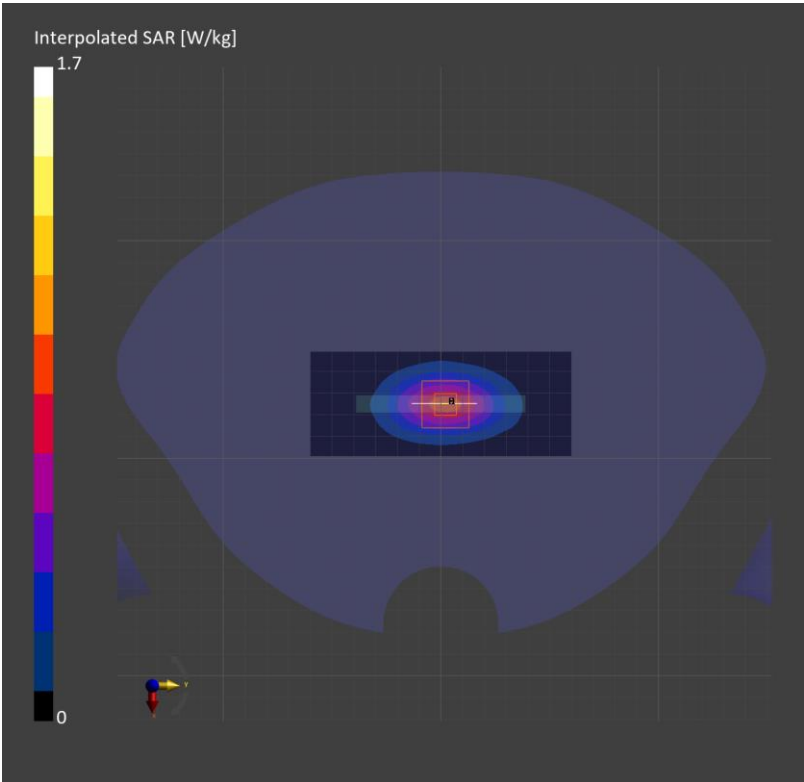
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-11	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	4.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.744	0.806
psSAR10g [W/Kg]	0.396	0.448
Power Drift [dB]	0.03	
M2 / M1 [%]		82.0
Dist 3dB Peak [mm]		10.8



Measurement Report for SM-S921U, EDGE BOTTOM, Band 66, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK), Channel 132322 (1745.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	Band 66	LTE-FDD, 10181-CAF	1745.0, 132322	8.54	1.36	39.5

Hardware Setup

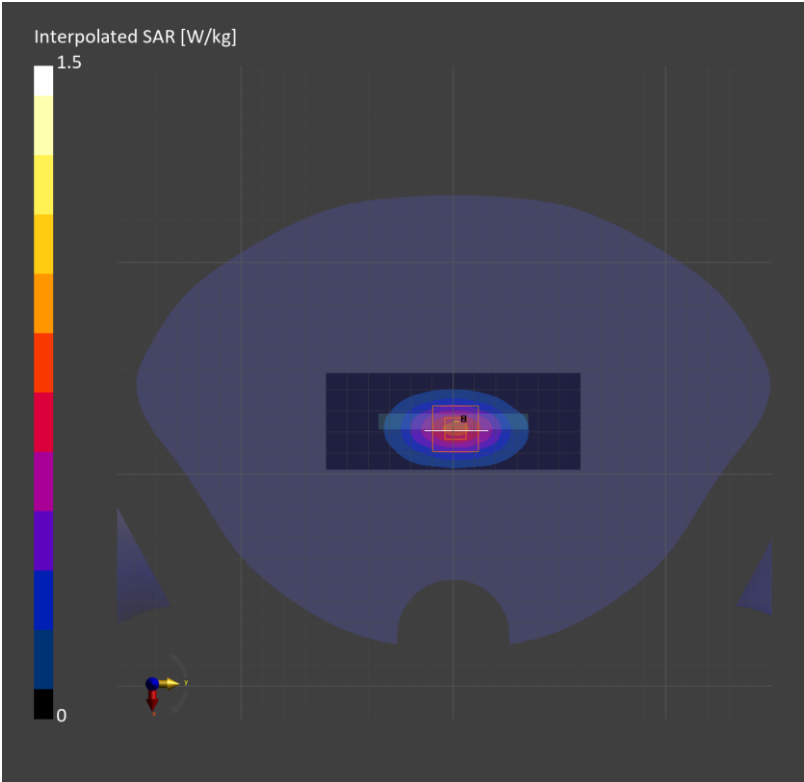
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-12	EX3DV4 - SN3871, 2023-08-25	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.644	0.666
psSAR10g [W/Kg]	0.344	0.361
Power Drift [dB]	0.00	
M2/M1 [%]		84.6
Dist 3dB Peak [mm]		10.8



Measurement Report for Device, TILT, Band 66, LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK) RBPosition:Low AntennaCfg:SISO, Channel 132072 (1720.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band 66	LTE-FDD, 10297-AAE	1720.0, 132072	8.61	1.34	40.1

Hardware Setup

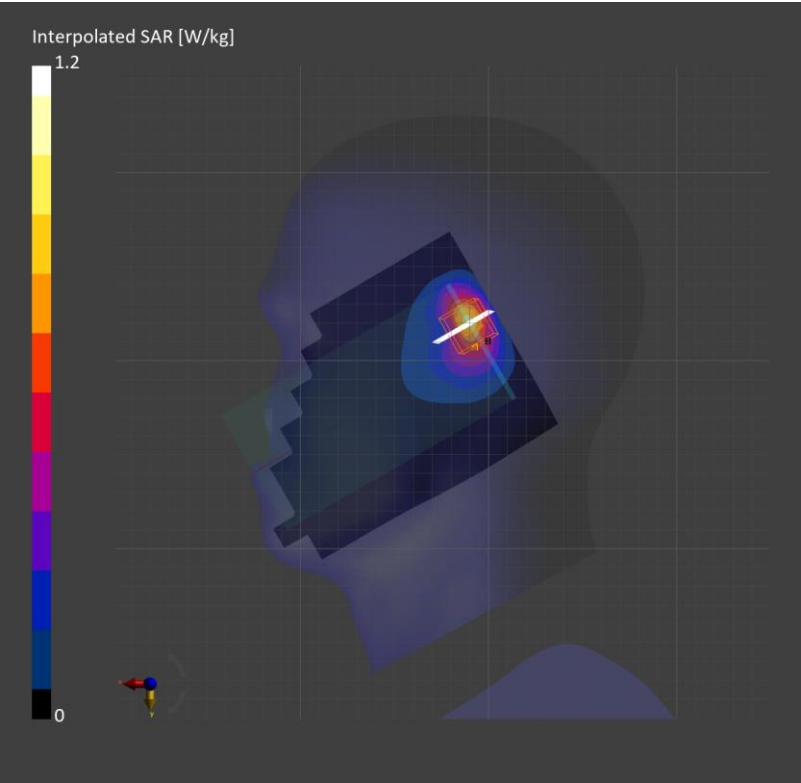
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2038	HBBL-600-10000, 2023-Nov-01	EX3DV4 – SN7376, 2023-07-25	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	5.7 x 5.7 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.721	0.726
psSAR10g [W/Kg]	0.383	0.362
Power Drift [dB]	0.01	
M2/M1 [%]		77.8
Dist 3dB Peak [mm]		7.7



Measurement Report for Device, EDGE TOP, Band 66, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK), Channel 132322 (1745.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 10.00	Band 66	LTE-FDD, 10169-CAF	1745.0, 132322	8.88	1.29	40.1

Hardware Setup

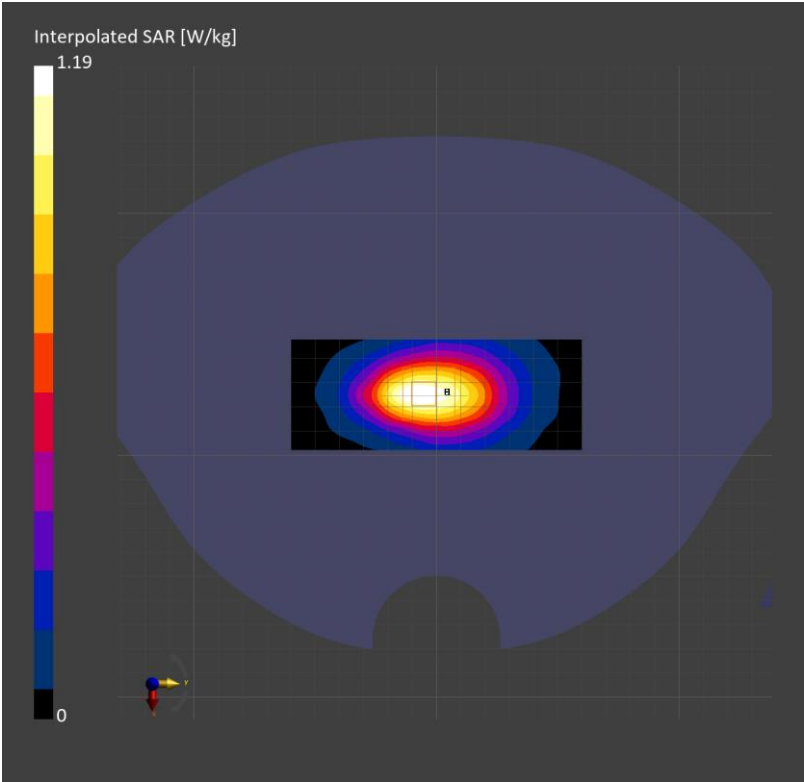
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-21	EX3DV4 - SN7330, 2023-01-24	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.657	0.696
psSAR10g [W/Kg]	0.375	0.415
Power Drift [dB]	0.01	
M2/M1 [%]		83.7
Dist 3dB Peak [mm]		12.0



Measurement Report for SM-S921U, TILT, Band 66, LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK) RBPosition:High AntennaCfg:SISO, Channel 132072 (1720.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band 66	LTE-FDD, 10297-AAE	1720.0, 132072	8.61	1.34	40.1

Hardware Setup

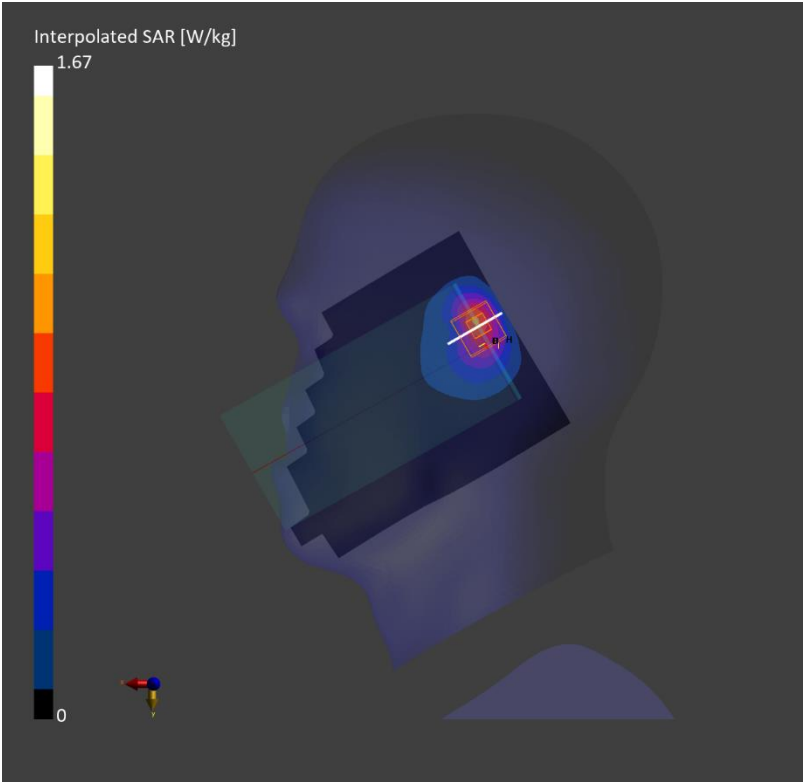
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2038	HBBL-600-10000, 2023-Nov-01	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	5.5 x 5.5 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.772	0.773
psSAR10g [W/Kg]	0.409	0.379
Power Drift [dB]	0.00	
M2/M1 [%]		77.2
Dist 3dB Peak [mm]		7.0



Measurement Report for Device, REAR, Band 71, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK), Channel 133297 (680.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band 71	LTE-FDD, 10169-CAF	680.5, 133297	9.65	0.868	41.5

Hardware Setup

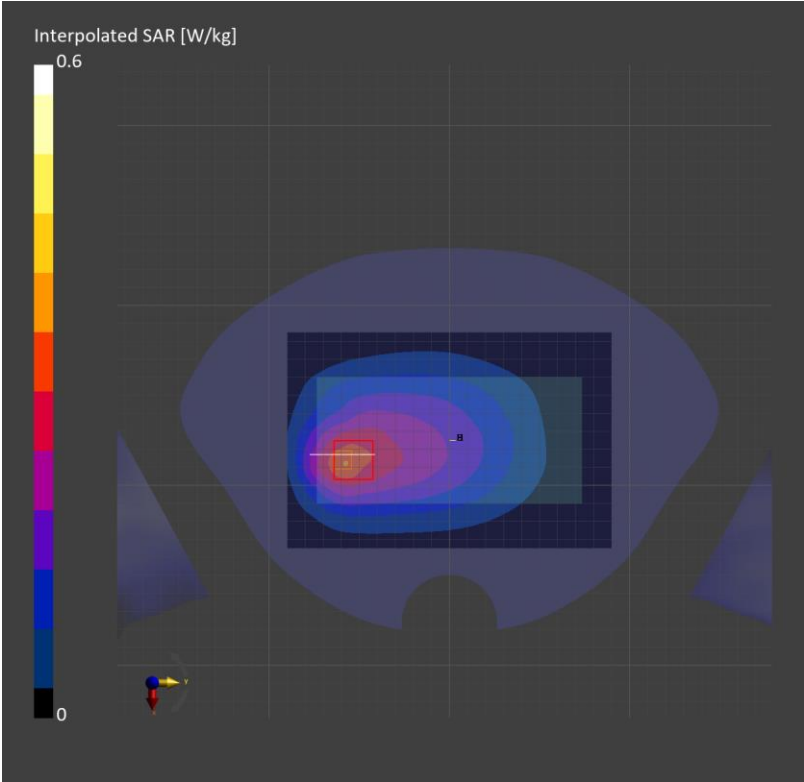
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Sep-01	EX3DV4 – SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.302	0.303
psSAR10g [W/Kg]	0.204	0.186
Power Drift [dB]	-0.03	
M2 / M1 [%]		80.6
Dist 3dB Peak [mm]		14.9



Measurement Report for Device, TILT, Band 71, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK), Channel 133297 (680.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	TILT, 0.00	Band 71	LTE-FDD, 10169-CAF	680.5, 133297	10.62	0.858	41.2

Hardware Setup

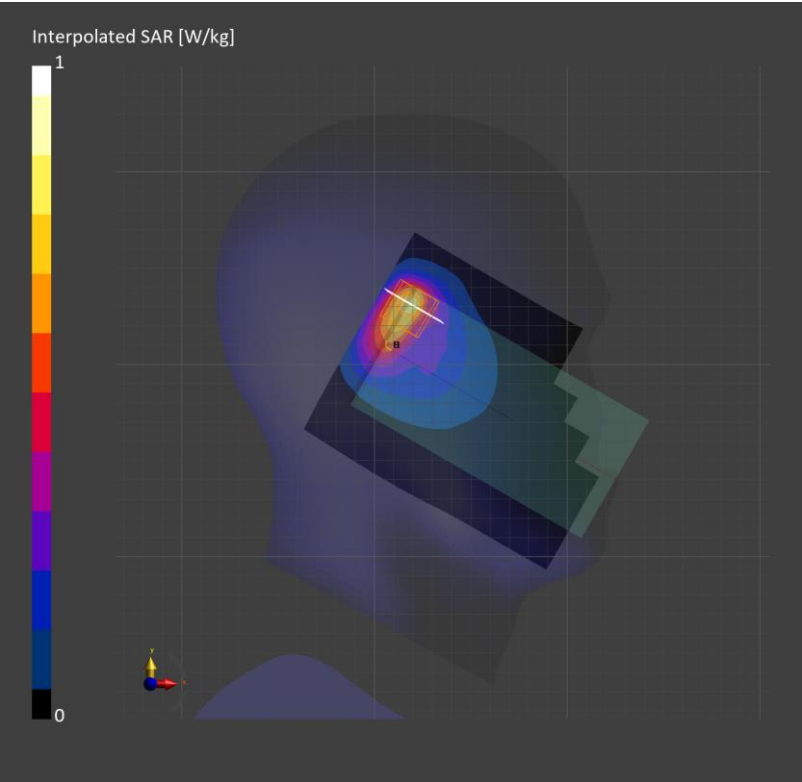
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Oct-18	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans 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	4.2 x 4.2 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.664	0.692
psSAR10g [W/Kg]	0.409	0.303
Power Drift [dB]	-0.00	
M2/M1 [%]		62.0
Dist 3dB Peak [mm]		5.9



Measurement Report for Device, REAR, Band 71, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK), Channel 133297 (680.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band 71	LTE-FDD, 10169-CAF	680.5, 133297	10.62	0.858	41.2

Hardware Setup

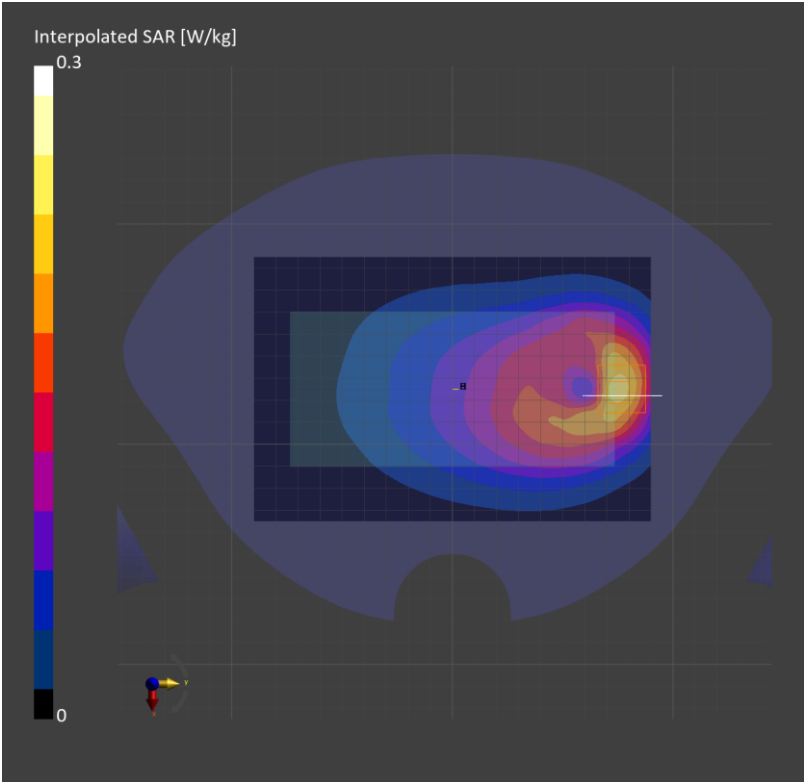
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Oct-17	EX3DV4 – SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.204	0.202
psSAR10g [W/Kg]	0.131	0.114
Power Drift [dB]	-0.00	
M2/M1 [%]		79.4
Dist 3dB Peak [mm]		10.8



Measurement Report for Device, REAR, Band n5, 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz), Channel 167300 (836.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR,10.00	Band n5	5G NR FR1 FDD, 10939-AAC	836.5, 167300	10.0	0.916	42.2

Hardware Setup

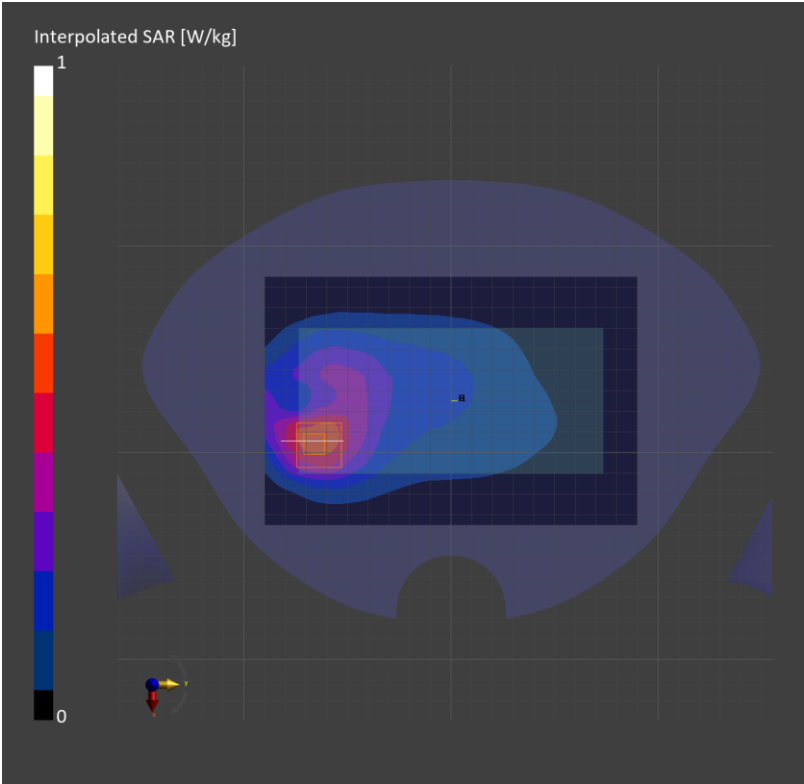
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-04	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.496	0.524
psSAR10g [W/Kg]	0.322	0.295
Power Drift [dB]	0.02	
M2/M1 [%]		81.6
Dist 3dB Peak [mm]		12.1



Measurement Report for SM-S921U, CHEEK, Band n5, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz), Channel 167300 (836.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	Touch, 0.00	Band n5	5G NR FR1 FDD, 10931-AAC	836.5, 167300	10.0	0.915	40.9

Hardware Setup

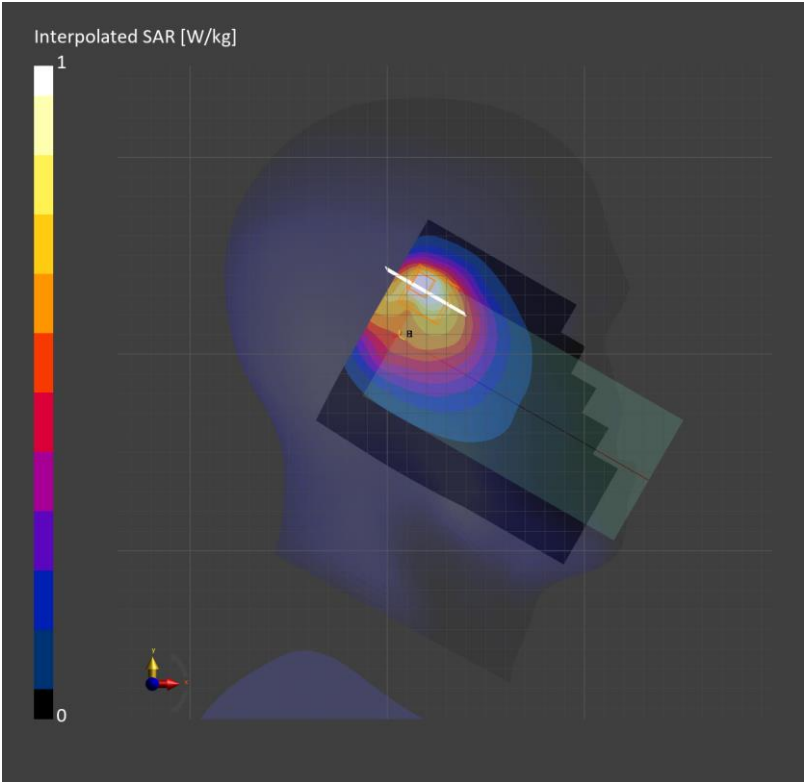
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-24	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	5.8 x 5.8 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.904	0.936
psSAR10g [W/Kg]	0.552	0.514
Power Drift [dB]	0.00	
M2/M1 [%]		67.1
Dist 3dB Peak [mm]		7.8



Measurement Report for SM-S921U, REAR, Band n5, 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz), Channel 167300 (836.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band n5	5G NR FR1 FDD, 10939-AAC	836.5, 167300	10.0	0.914	41.3

Hardware Setup

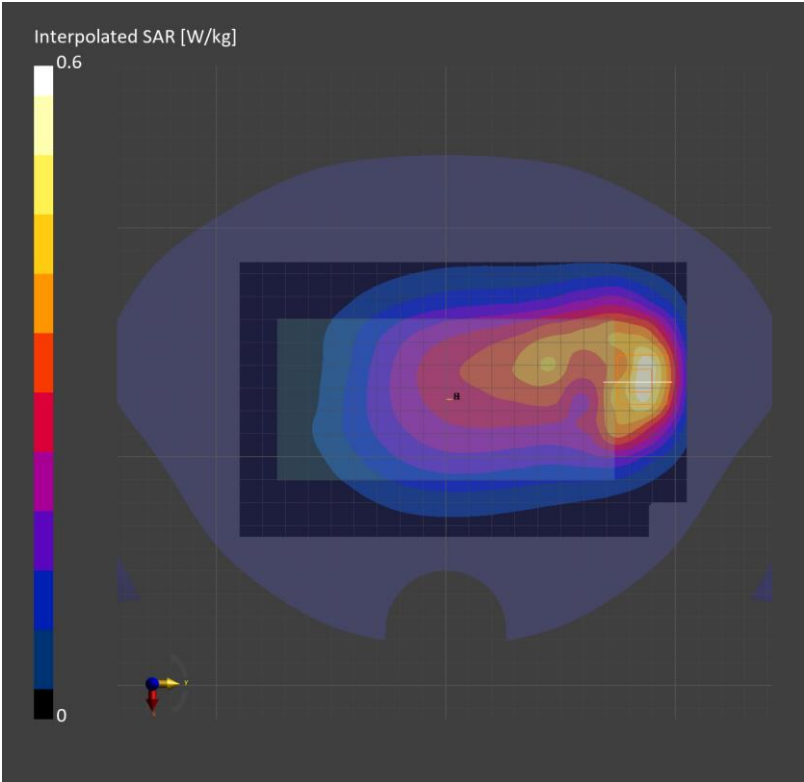
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2037	HBBL-600-10000, 2023-Sep-21	EX3DV4 – SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.456	0.522
psSAR10g [W/Kg]	0.297	0.295
Power Drift [dB]	-0.01	
M2/M1 [%]		82.1
Dist 3dB Peak [mm]		10.9



Measurement Report for Device, REAR, Band n7, 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz), Channel 507000 (2535.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band n7	5G NR FR1 FDD, 10942-AAC	2535.0, 507000	7.68	1.87	39.6

Hardware Setup

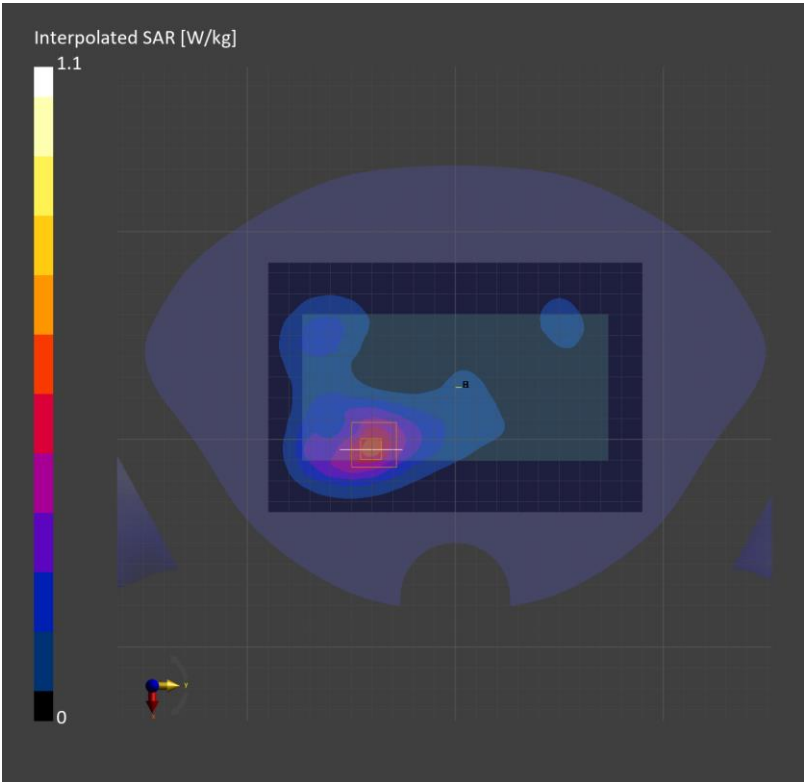
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2043	HBBL-600-10000, 2023-Sep-06	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1671, 2023-05-25

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.469	0.471
psSAR10g [W/Kg]	0.239	0.242
Power Drift [dB]	0.02	
M2 / M1 [%]		82.9
Dist 3dB Peak [mm]		11.7



Measurement Report for SM-S921U, TILT, Band n7, 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz), Channel 507000 (2535.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band n7	5G NR FR1 FDD, 10934-AAC	2535.0, 507000	7.2	1.85	38.4

Hardware Setup

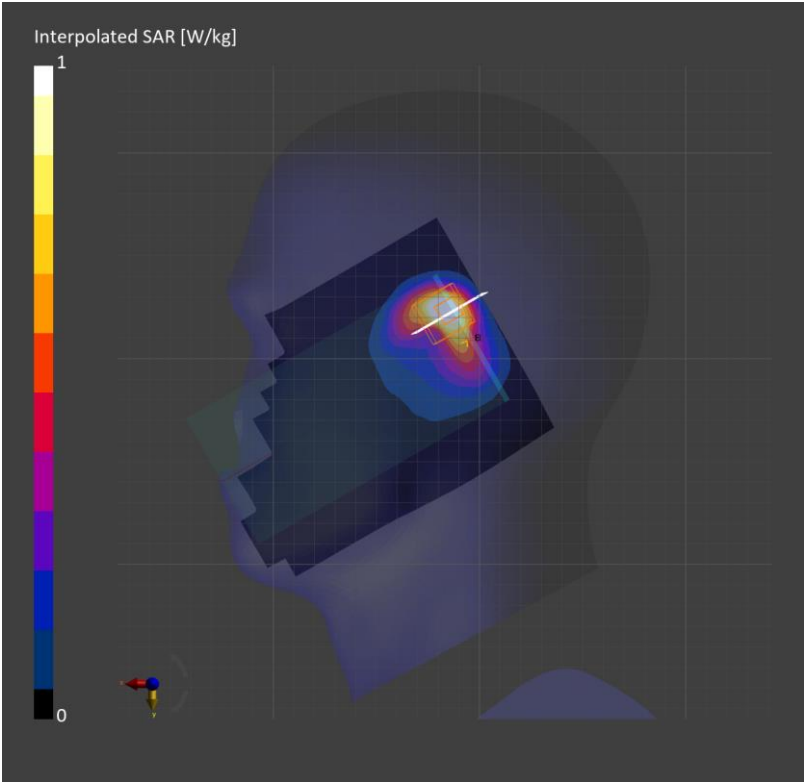
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Oct-05	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.900	0.923
psSAR10g [W/Kg]	0.405	0.399
Power Drift [dB]	0.00	
M2/M1 [%]		74.3
Dist 3dB Peak [mm]		7.1



Measurement Report for SM-S921U, EDGE TOP, Band n7, 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz), Channel 507000 (2535.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 10.00	Band n7	5G NR FR1 FDD, 10942-AAC	2535.0, 507000	7.2	1.85	39.7

Hardware Setup

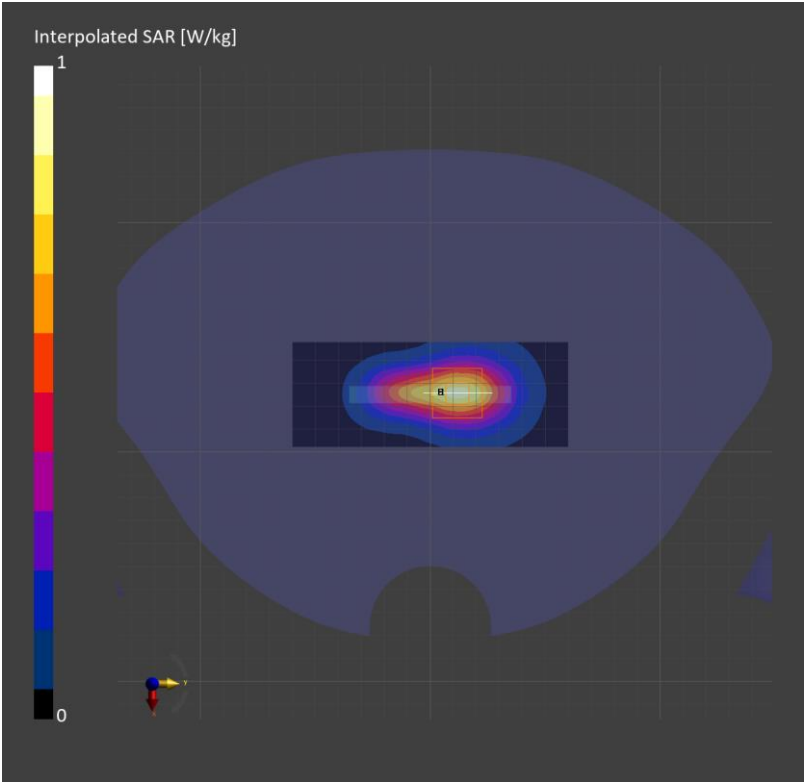
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-26	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.673	0.693
psSAR10g [W/Kg]	0.337	0.354
Power Drift [dB]	0.00	
M2/M1 [%]		79.3
Dist 3dB Peak [mm]		11.0



Measurement Report for Device, REAR, Band n12, 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz), Channel 141500 (707.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band n12	5G NR FR1 FDD, 10938-AAC	707.5, 141500	9.65	0.883	42.1

Hardware Setup

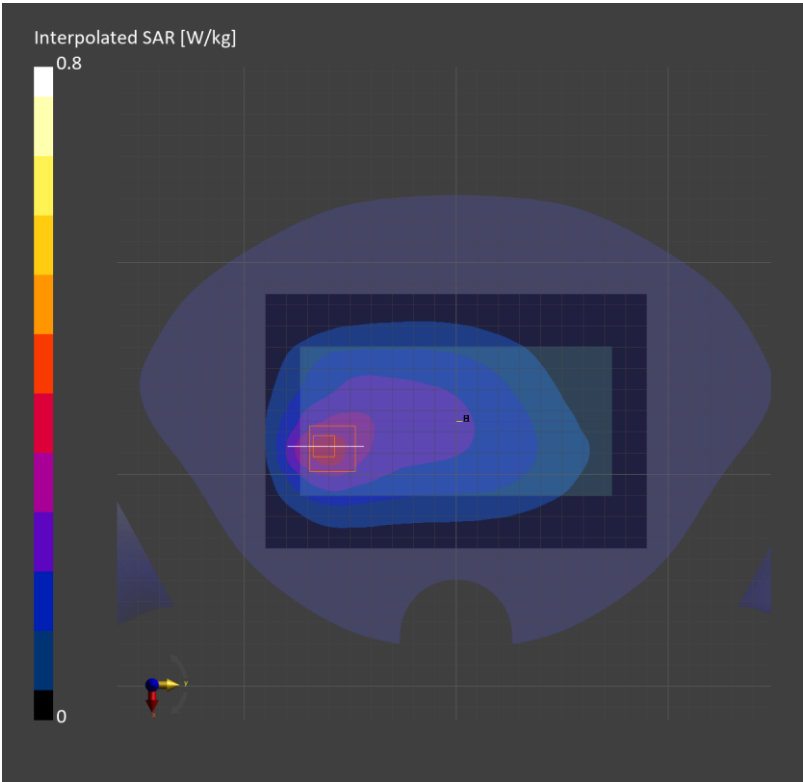
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Sep-15	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.326	0.333
psSAR10g [W/Kg]	0.213	0.191
Power Drift [dB]	-0.02	
M2 / M1 [%]		79.3
Dist 3dB Peak [mm]		13.5



Measurement Report for SM-S921U, CHEEK, Band n12, 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz), Channel 141500 (707.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	Touch, 0.00	Band n12	5G NR FR1 FDD, 10938-AAC	707.5, 141500	10.28	0.865	41.4

Hardware Setup

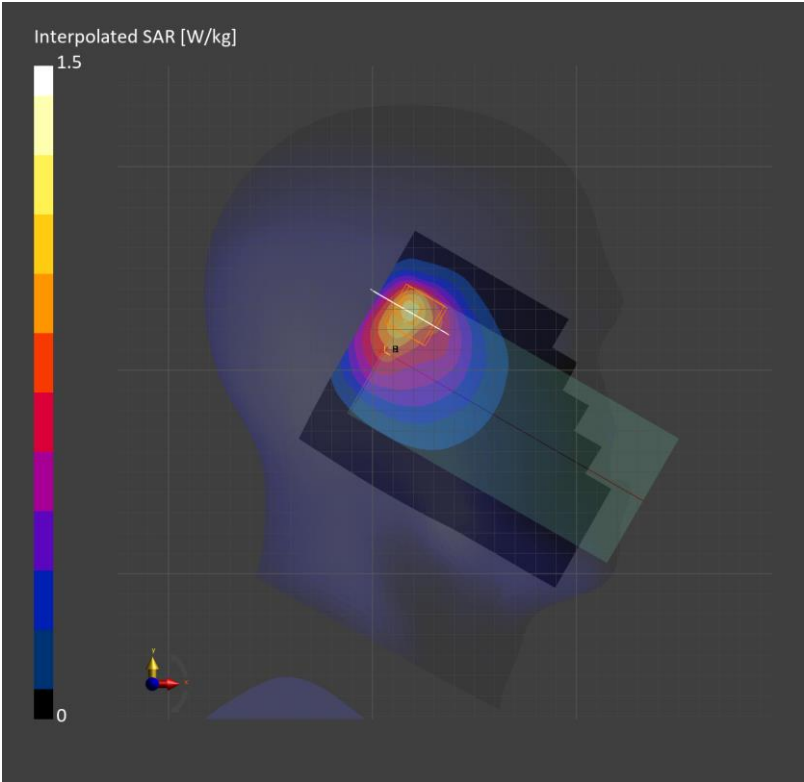
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-24	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	1.01	1.04
psSAR10g [W/Kg]	0.652	0.536
Power Drift [dB]	0.02	
M2/M1 [%]		67.3
Dist 3dB Peak [mm]		8.1



Measurement Report for Device, REAR, Band n12, 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz), Channel 141500 (707.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band n12	5G NR FR1 FDD, 10938-AAC	707.5, 141500	10.28	0.865	41.4

Hardware Setup

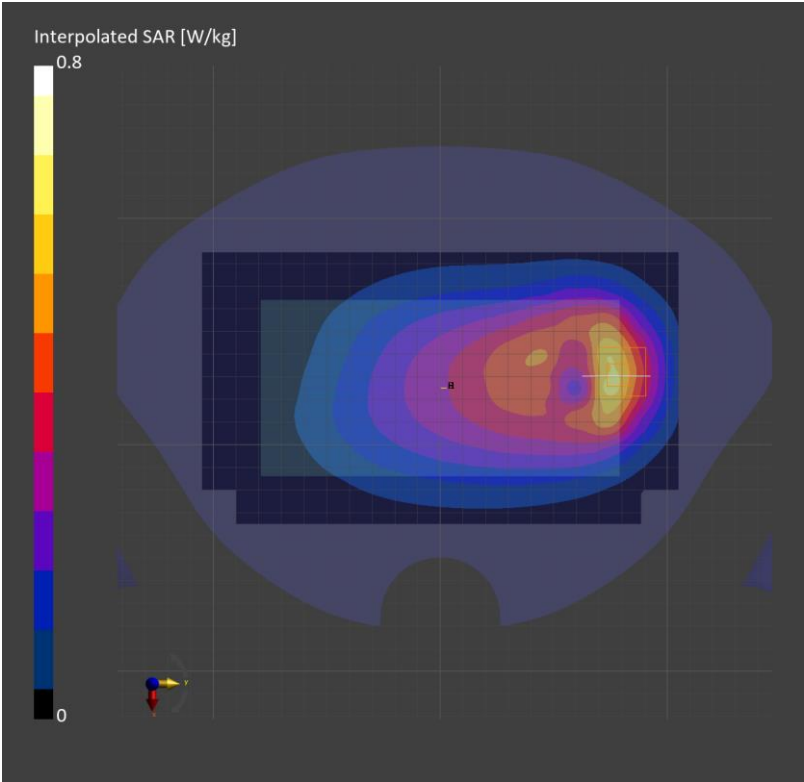
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-24	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.533	0.535
psSAR10g [W/Kg]	0.349	0.308
Power Drift [dB]	-0.02	
M2/M1 [%]		81.8
Dist 3dB Peak [mm]		10.8



Measurement Report for SM-S921U, EDGE BOTTOM, Band n25, 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz), Channel 376500 (1882.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	Band n25	5G NR FR1 FDD, 10942-AAC	1882.5, 376500	8.31	1.44	39.3

Hardware Setup

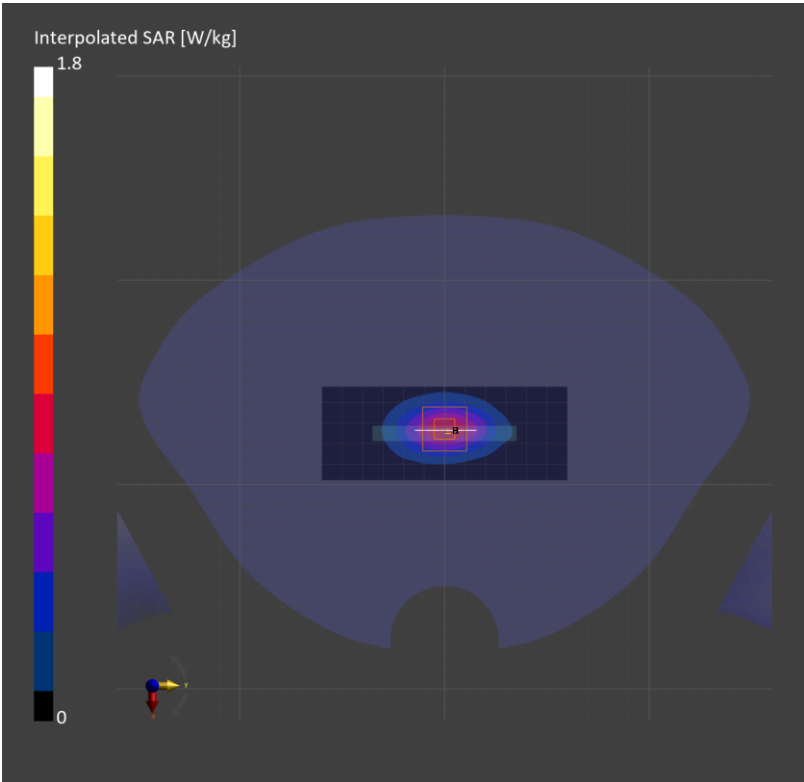
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-12	EX3DV4 - SN3871, 2023-08-25	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.718	0.726
psSAR10g [W/Kg]	0.368	0.380
Power Drift [dB]	-0.00	
M2 / M1 [%]		83.2
Dist 3dB Peak [mm]		9.6



Measurement Report for SM-S921U, TILT, Band n25, 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) RBPosition:Low AntennaCfg:SISO, Channel 376500 (1882.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band n25	5G NR FR1 FDD, 10934-AAC	1882.5, 376500	8.72	1.37	39.6

Hardware Setup

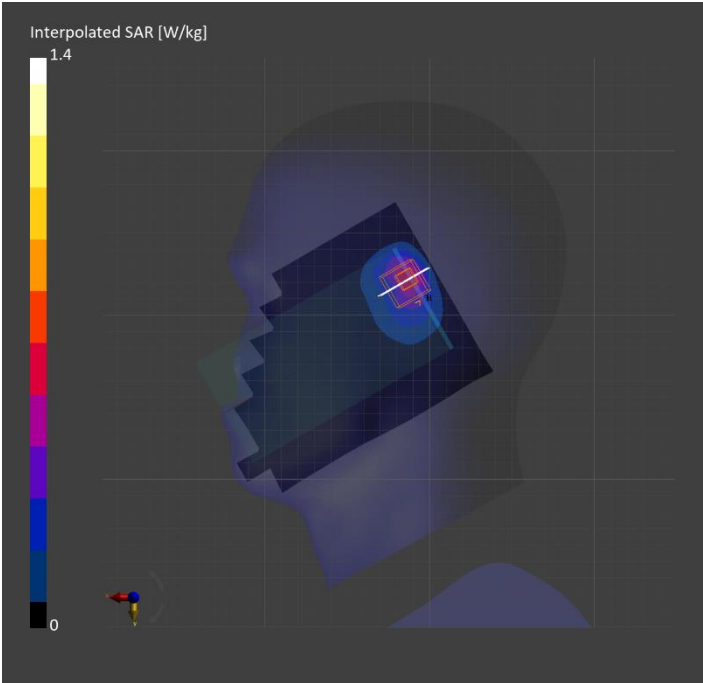
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Oct-30	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans 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	5.7 x 5.7 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/kg]	0.520	0.568
psSAR10g [W/kg]	0.268	0.269
Power Drift [dB]	-0.02	
M2/M1 [%]		72.1
Dist 3dB Peak [mm]		6.7



Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 10.00	Band n25	5G NR FR1 FDD, 10934-AAC	1882.5, 376500	8.67	1.37	39.9

Hardware Setup

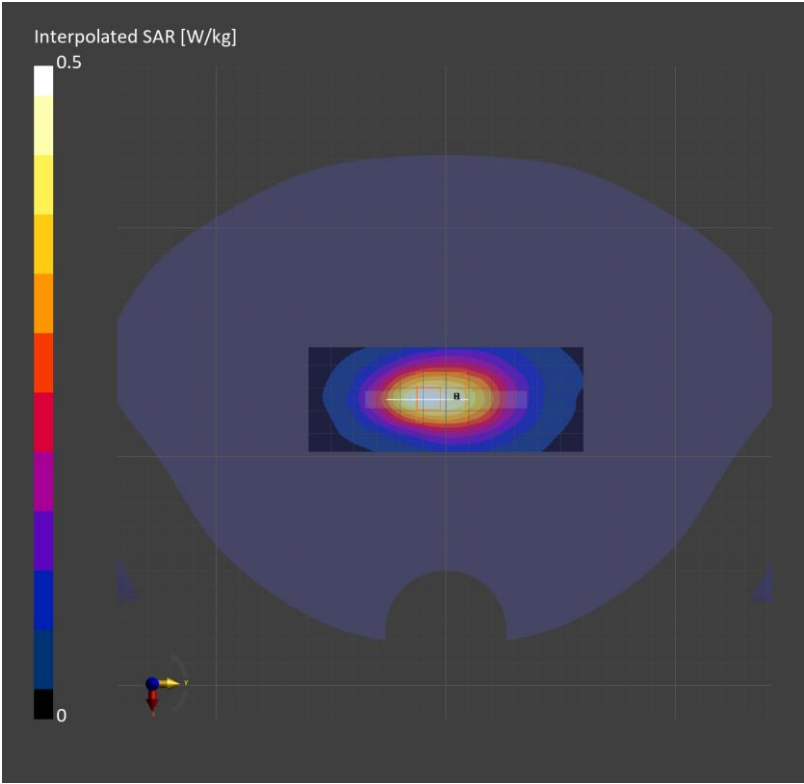
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 1991	HBBL-600-10000, 2023-Sep-21	EX3DV4 – SN7330, 2023-01-24	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	4.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.396	0.409
psSAR10g [W/Kg]	0.224	0.242
Power Drift [dB]	0.01	
M2 / M1 [%]		81.7
Dist 3dB Peak [mm]		11.4



Measurement Report for Device, REAR, Band n26, 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz), Channel 166300 (831.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band n26	5G NR FR1 FDD, 10939-AAC	831.5, 166300	10.0	0.914	42.2

Hardware Setup

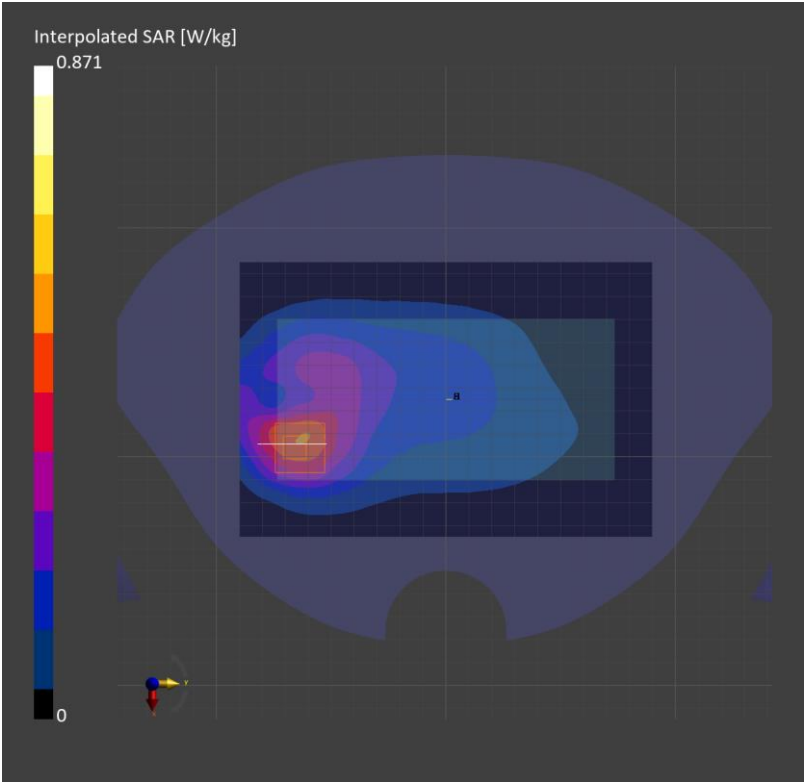
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-04	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.453	0.472
psSAR10g [W/Kg]	0.294	0.266
Power Drift [dB]	0.02	
M2/M1 [%]		81.5
Dist 3dB Peak [mm]		13.2



Measurement Report for SM-S921U, CHEEK, Band n26, 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz), Channel 166300 (831.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	Touch, 0.00	Band n26	5G NR FR1 FDD, 10939-AAC	831.5, 166300	10.0	0.912	41.3

Hardware Setup

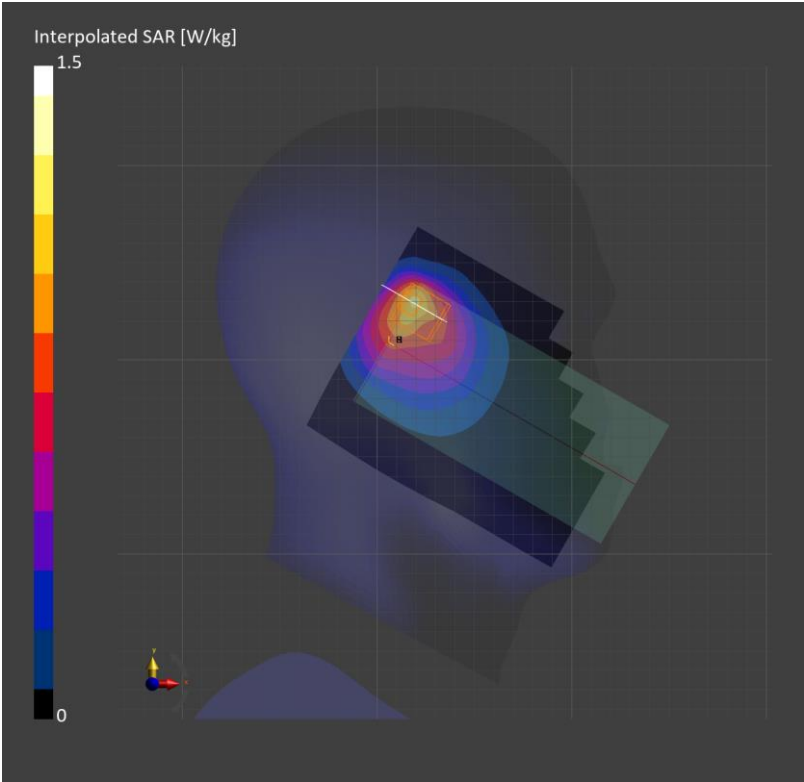
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-21	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.960	0.946
psSAR10g [W/Kg]	0.622	0.529
Power Drift [dB]	-0.02	
M2/M1 [%]		71.0
Dist 3dB Peak [mm]		9.2



Measurement Report for SM-S921U, REAR, Band n26, 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz), Channel 166300 (831.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band n26	5G NR FR1 FDD, 10939-AAC	831.5, 166300	10.0	0.912	41.3

Hardware Setup

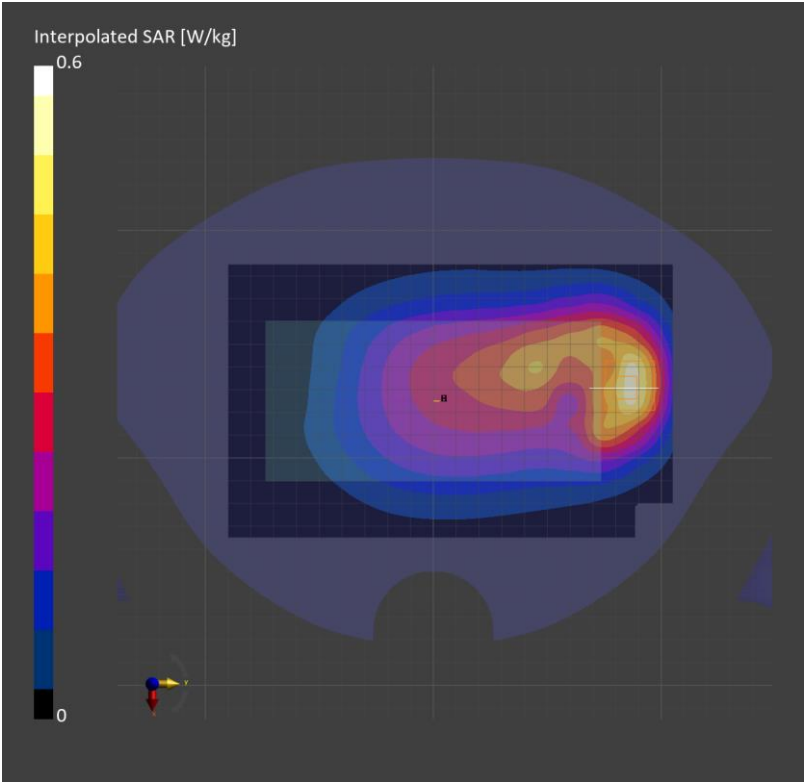
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-21	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.446	0.513
psSAR10g [W/Kg]	0.291	0.290
Power Drift [dB]	-0.02	
M2/M1 [%]		81.9
Dist 3dB Peak [mm]		10.8



Measurement Report for Device, EDGE BOTTOM, Band n30, 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz), Channel 462000 (2310.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	Band n30	5G NR FR1 FDD, 10929-AAC	2310.0, 462000	8.3	1.65	39.3

Hardware Setup

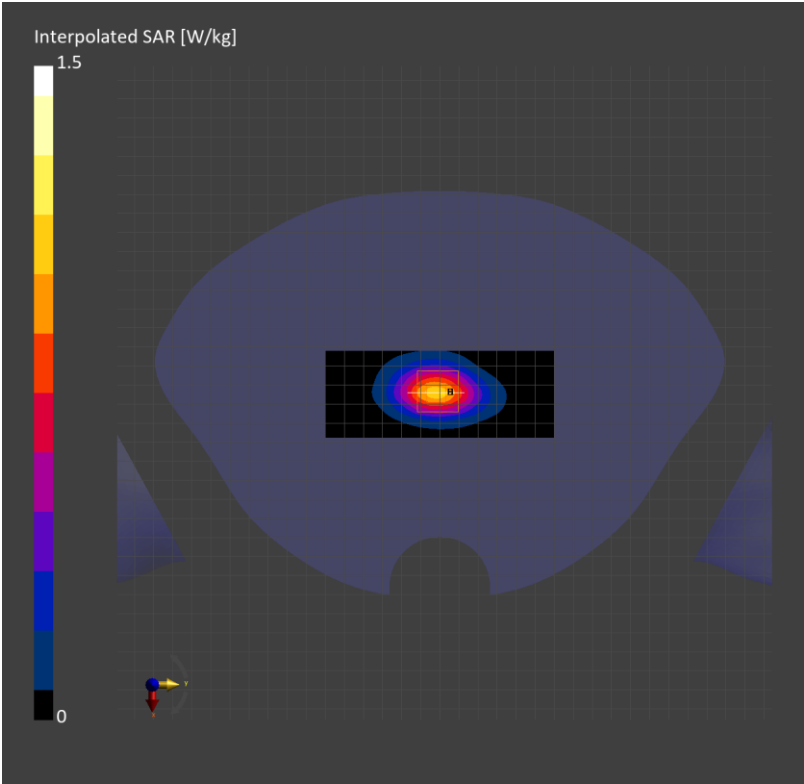
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-18	EX3DV4 - SN7330, 2023-01-24	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	4.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.833	0.885
psSAR10g [W/Kg]	0.415	0.461
Power Drift [dB]	0.02	
M2/M1 [%]		81.8
Dist 3dB Peak [mm]		10.0



Measurement Report for SM-S921U, TILT, Band n30, 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz), Channel 462000 (2310.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band n30	5G NR FR1 FDD, 10945-AAC	2310.0, 462000	8.3	1.66	38.9

Hardware Setup

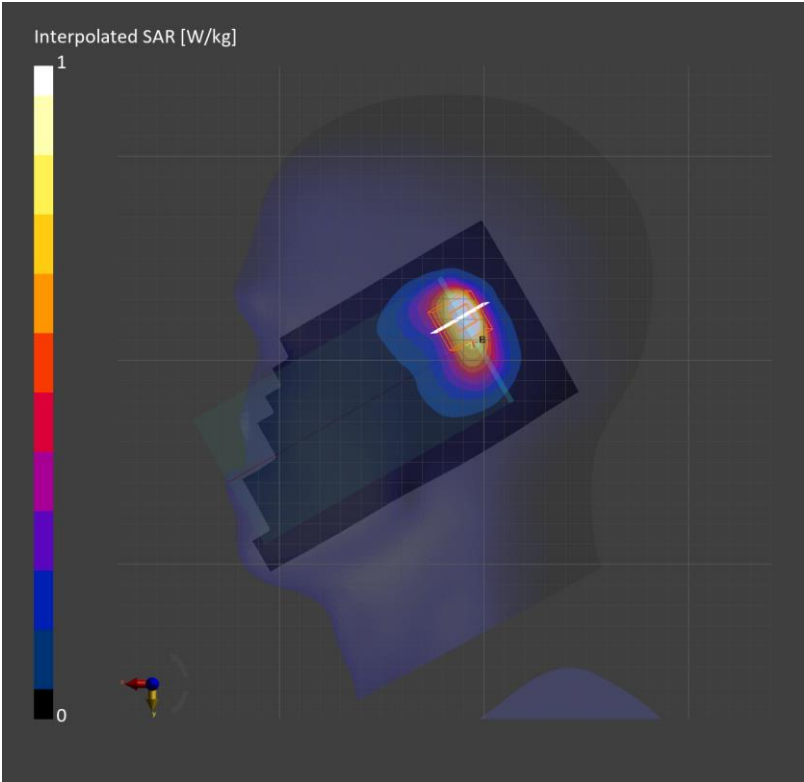
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-26	EX3DV4 - SN7330, 2023-01-24	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.977	1.02
psSAR10g [W/Kg]	0.456	0.465
Power Drift [dB]	0.02	
M2/M1 [%]		76.3
Dist 3dB Peak [mm]		7.1



Measurement Report for SM-S921U, EDGE TOP, Band n30, 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz), Channel 462000 (2310.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 10.00	Band n30	5G NR FR1 FDD, 10937-AAC	2310.0, 462000	8.3	1.66	38.9

Hardware Setup

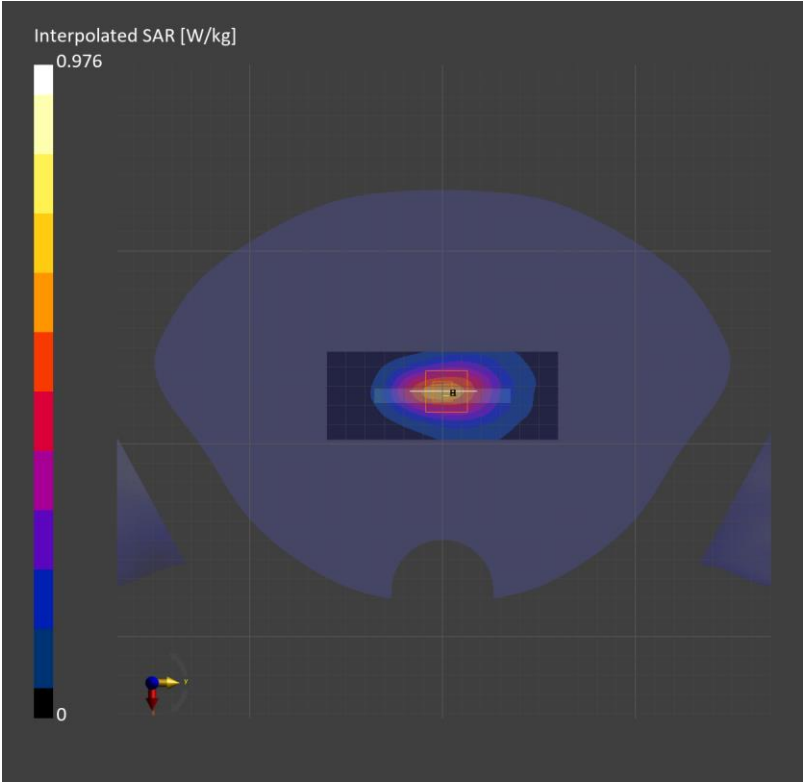
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Sep-26	EX3DV4 - SN7330, 2023-01-24	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	4.0	4.0

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.501	0.536
psSAR10g [W/Kg]	0.268	0.300
Power Drift [dB]	-0.08	
M2 / M1 [%]		83.2
Dist 3dB Peak [mm]		11.5



NR Band n41

Frequency: 2592.99 MHz; Communication System Channel Number: 518598; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2592.99$ MHz; $\sigma = 1.904$ S/m; $\epsilon_r = 39.147$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1591; Calibrated: 3/22/2023
- Probe: EX3DV4 - SN7651; ConvF(7.45, 8.08, 6.92) @ 2592.99 MHz; Calibrated: 5/30/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: SAM (20deg probe tilt) with CRP v5.0(Right); Phantom section: Right Section ; Type: QD000P40CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Right Tilt/QPSK RB 1/1 ch.518598/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.86 W/kg

Right Tilt/QPSK RB 1/1 ch.518598/Zoom Scan (8x8x9)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm

Reference Value = 28.52 V/m; Power Drift = 0.04 dB

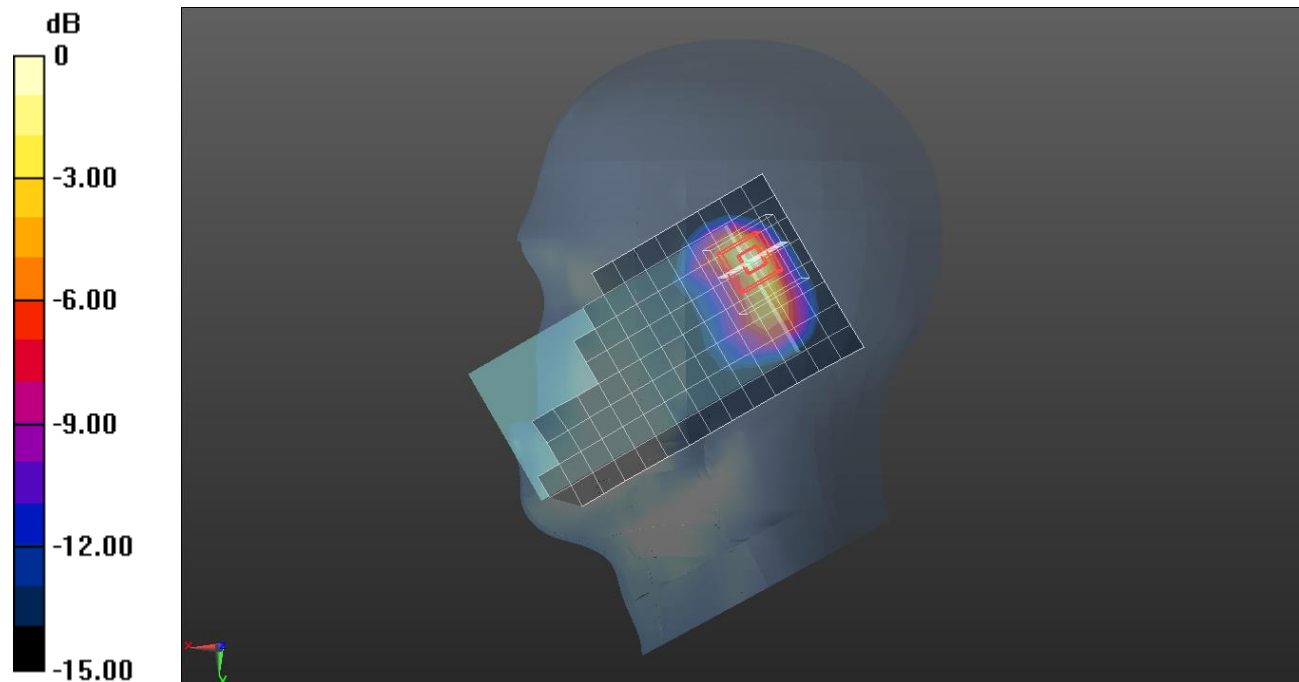
Peak SAR (extrapolated) = 2.45 W/kg

SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.420 W/kg

Smallest distance from peaks to all points 3 dB below = 6 mm

Ratio of SAR at M2 to SAR at M1 = 49.2%

Maximum value of SAR (measured) = 1.93 W/kg



0 dB = 1.86 W/kg = 2.70 dBW/kg

NR Band n41

Frequency: 2592.99 MHz; Communication System Channel Number: 518598; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2592.99$ MHz; $\sigma = 1.904$ S/m; $\epsilon_r = 39.147$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1591; Calibrated: 3/22/2023
- Probe: EX3DV4 - SN7651; ConvF(7.45, 8.08, 6.92) @ 2592.99 MHz; Calibrated: 5/30/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: SAM (20deg probe tilt) with CRP v5.0(Right); Phantom section: Flat Section ; Type: QD000P40CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Top/QPSK RB 1/1 ch.518598/Area Scan (10x6x1): Measurement grid: dx=12mm, dy=12mm.

Maximum value of SAR (measured) = 1.00 W/kg

Top/QPSK RB 1/1 ch.518598/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.47 V/m; Power Drift = 0.04 dB

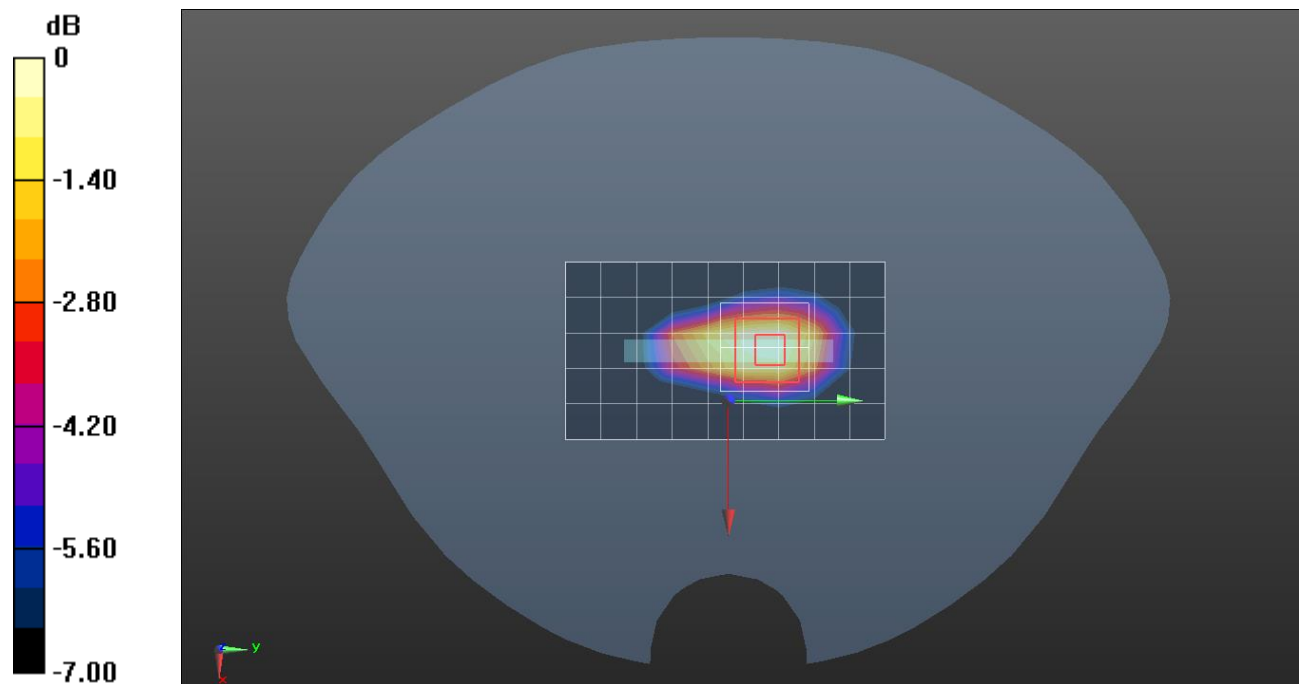
Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 0.810 W/kg; SAR(10 g) = 0.422 W/kg

Smallest distance from peaks to all points 3 dB below = 11.7 mm

Ratio of SAR at M2 to SAR at M1 = 51.9%.

Maximum value of SAR (measured) = 1.26 W/kg



0 dB = 1.00 W/kg = 0.00 dBW/kg

NR Band n41

Frequency: 2592.99 MHz; Communication System Channel Number: 518598; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2592.99$ MHz; $\sigma = 1.919$ S/m; $\epsilon_r = 39.969$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 7/17/2023
- Probe: EX3DV4 - SN7330; ConvF(7.74, 7.74, 7.74) @ 2592.99 MHz; Calibrated: 1/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Phantom section: Left Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Left Touch/QPSK RB 1/271 ch.518598/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.127 W/kg

Left Touch/QPSK RB 1/271 ch.518598/Zoom Scan (8x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.671 V/m; Power Drift = -0.04 dB

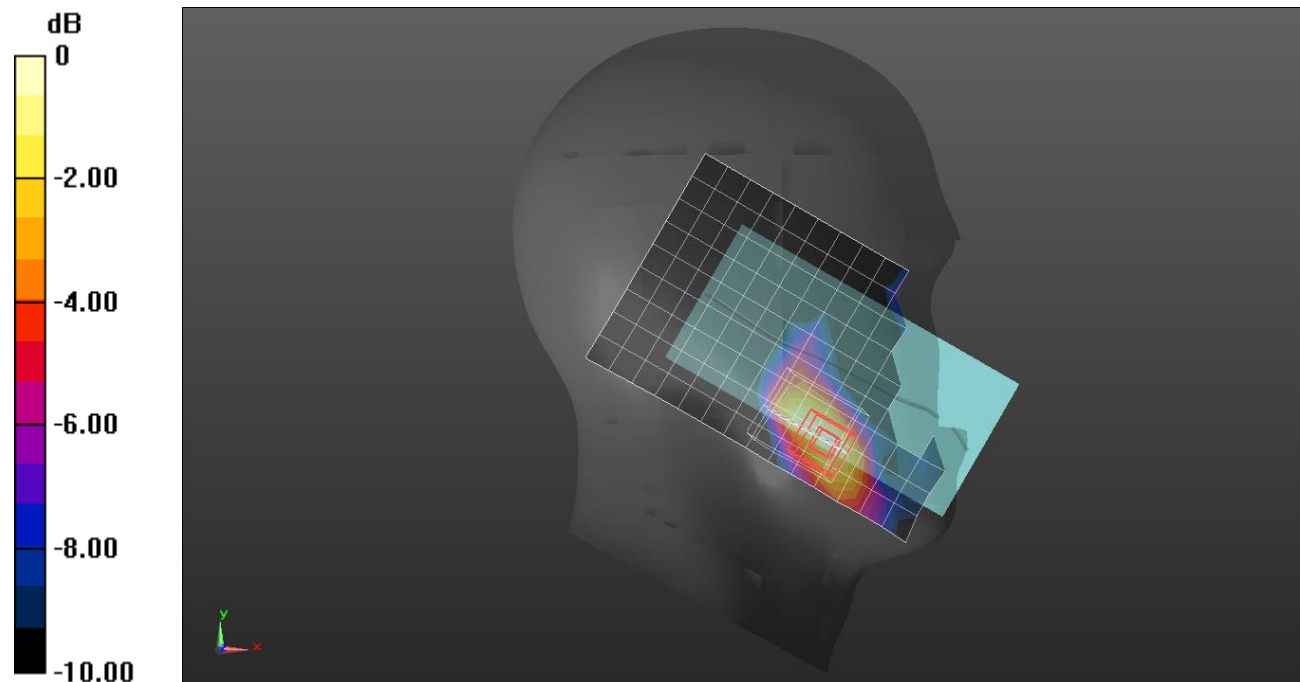
Peak SAR (extrapolated) = 0.156 W/kg

SAR(1 g) = 0.087 W/kg; SAR(10 g) = 0.048 W/kg

Smallest distance from peaks to all points 3 dB below = 9.9 mm

Ratio of SAR at M2 to SAR at M1 = 55.3%

Maximum value of SAR (measured) = 0.129 W/kg



0 dB = 0.127 W/kg = -8.96 dBW/kg

NR Band n41

Frequency: 2592.99 MHz; Communication System Channel Number: 518598; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2592.99$ MHz; $\sigma = 1.903$ S/m; $\epsilon_r = 39.534$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 7/17/2023
- Probe: EX3DV4 - SN7330; ConvF(7.74, 7.74, 7.74) @ 2592.99 MHz; Calibrated: 1/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Phantom section: Flat Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom/QPSK RB 135/138 ch.518598/Area Scan (10x6x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.725 W/kg

Bottom/QPSK RB 135/138 ch.518598/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.17 V/m; Power Drift = -0.06 dB

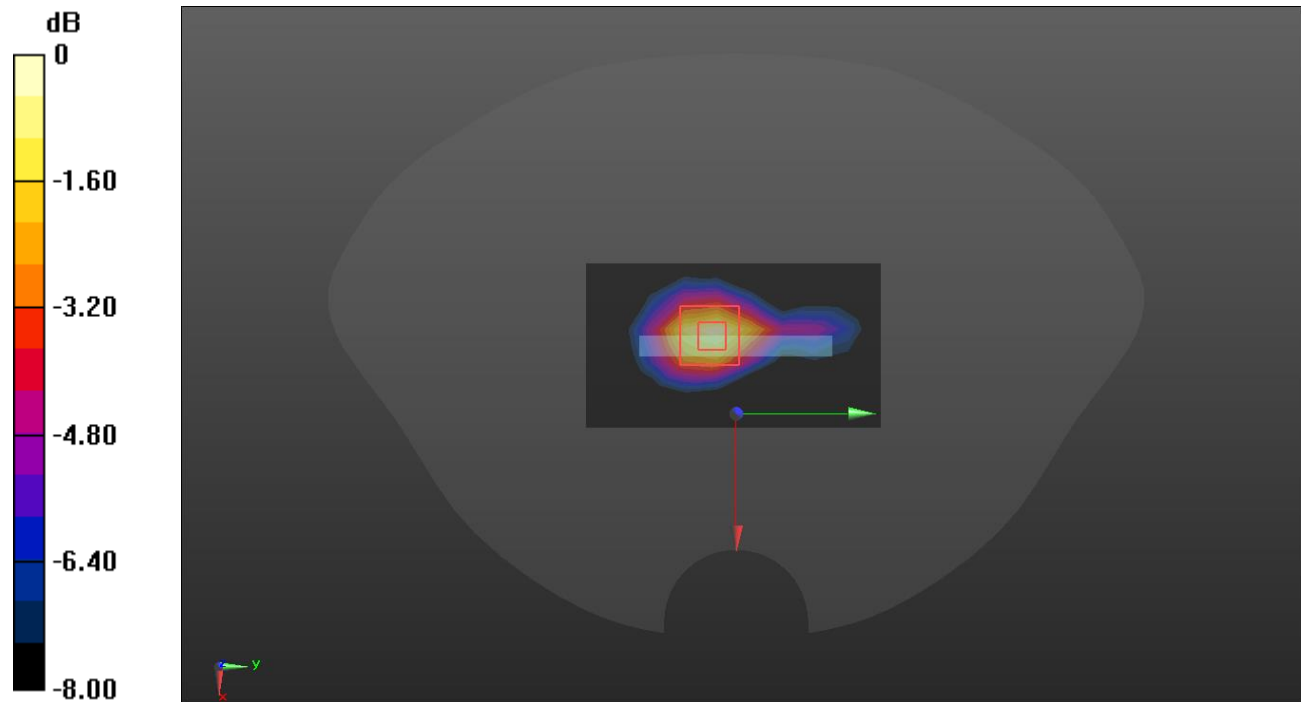
Peak SAR (extrapolated) = 0.999 W/kg

SAR(1 g) = 0.511 W/kg; SAR(10 g) = 0.251 W/kg

Smallest distance from peaks to all points 3 dB below = 10.4 mm

Ratio of SAR at M2 to SAR at M1 = 51.6%

Maximum value of SAR (measured) = 0.810 W/kg



0 dB = 0.725 W/kg = -1.40 dBW/kg

NR Band n41

Frequency: 2592.99 MHz; Communication System Channel Number: 518598; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2592.99$ MHz; $\sigma = 1.903$ S/m; $\epsilon_r = 39.534$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 7/17/2023
- Probe: EX3DV4 - SN7330; ConvF(7.74, 7.74, 7.74) @ 2592.99 MHz; Calibrated: 1/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Phantom section: Left Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Left Touch/QPSK RB 1/1 ch.518598/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.513 W/kg

Left Touch/QPSK RB 1/1 ch.518598/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.44 V/m; Power Drift = -0.05 dB

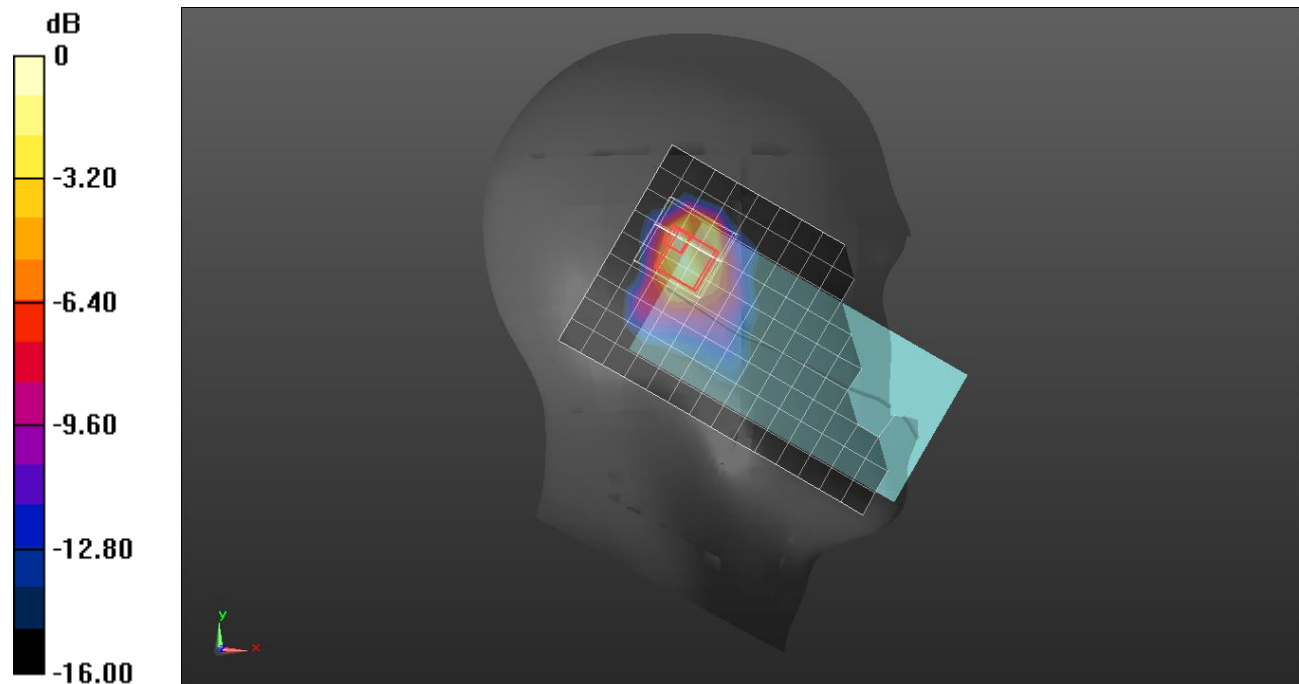
Peak SAR (extrapolated) = 0.779 W/kg

SAR(1 g) = 0.281 W/kg; SAR(10 g) = 0.129 W/kg

Smallest distance from peaks to all points 3 dB below = 5 mm

Ratio of SAR at M2 to SAR at M1 = 36.1%

Maximum value of SAR (measured) = 0.594 W/kg



0 dB = 0.513 W/kg = -2.90 dBW/kg

NR Band n41

Frequency: 2592.99 MHz; Communication System Channel Number: 518598; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2592.99$ MHz; $\sigma = 1.942$ S/m; $\epsilon_r = 38.735$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 7/17/2023
- Probe: EX3DV4 - SN7330; ConvF(7.74, 7.74, 7.74) @ 2592.99 MHz; Calibrated: 1/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Phantom section: Flat Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Rear/CW RB 1/1 ch.518598/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.300 W/kg

Rear/CW RB 1/1 ch.518598/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.61 V/m; Power Drift = -0.09 dB

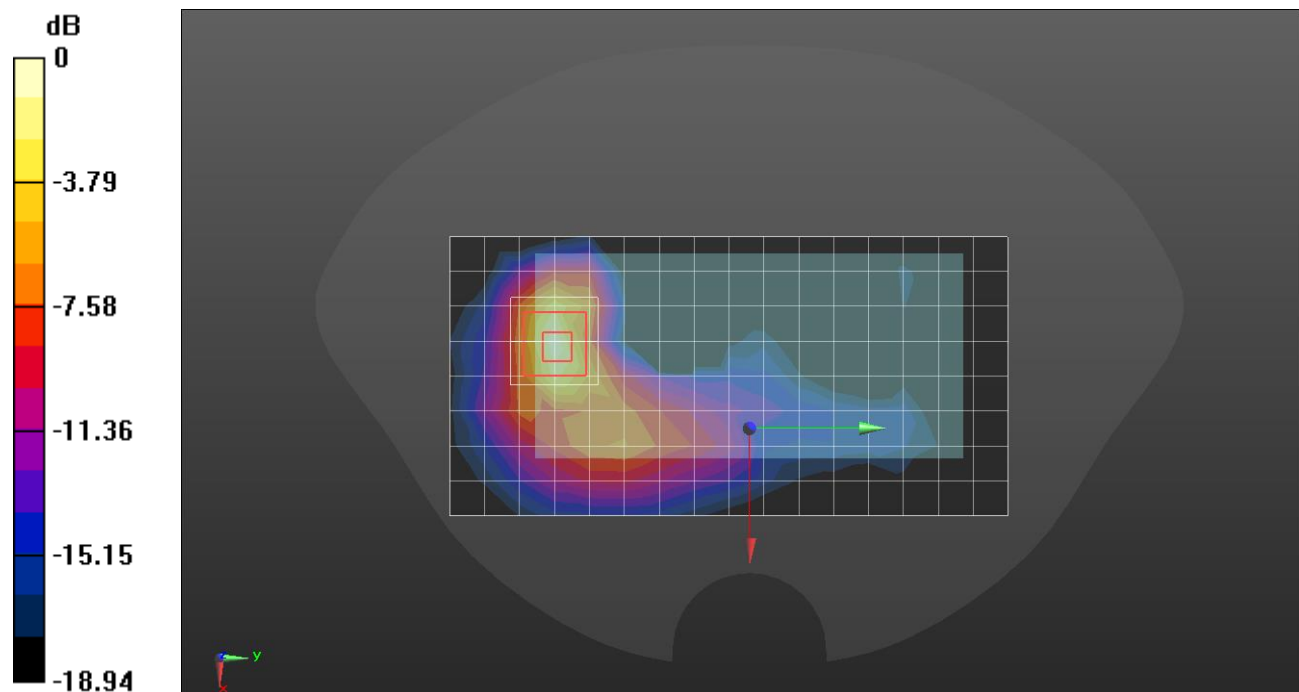
Peak SAR (extrapolated) = 0.350 W/kg

SAR(1 g) = 0.178 W/kg; SAR(10 g) = 0.082 W/kg

Smallest distance from peaks to all points 3 dB below = 7.1 mm

Ratio of SAR at M2 to SAR at M1 = 53.6%

Maximum value of SAR (measured) = 0.286 W/kg



0 dB = 0.300 W/kg = -5.23 dBW/kg

Measurement Report for Device, TILT, Band n48, 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz), Channel 638000 (3570.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band n48	5G NR FR1 TDD, 10903-AAD	3570.0, 638000	7.37	2.99	37.3

Hardware Setup

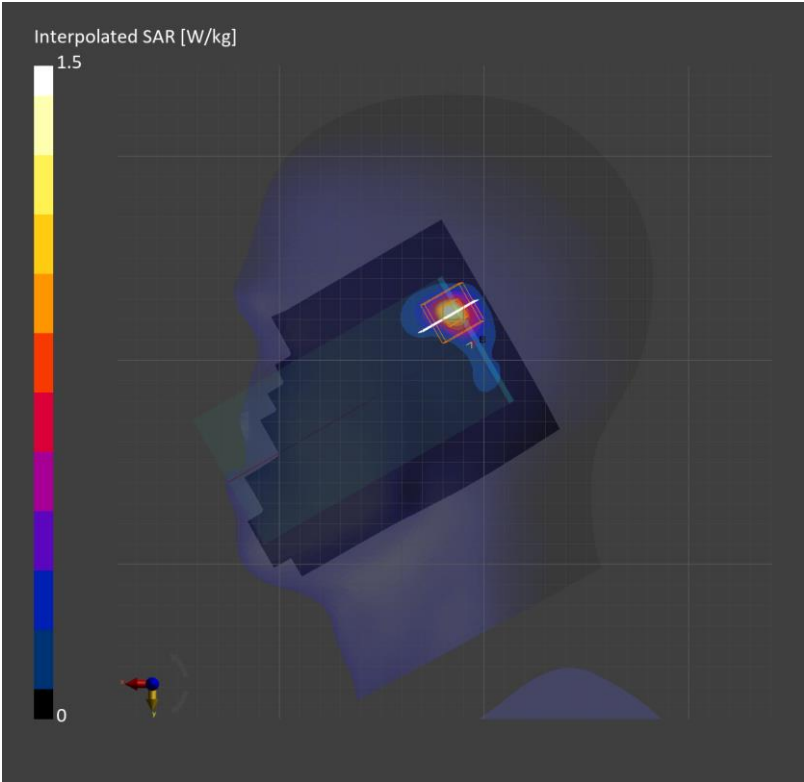
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Oct-11	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	4.5 x 4.5 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.897	0.981
psSAR10g [W/Kg]	0.316	0.320
Power Drift [dB]	-0.08	
M2/M1 [%]		74.3
Dist 3dB Peak [mm]		6.4



Measurement Report for Device, REAR, Band n48, 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz), Channel 645332 (3680.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	Rear, 10.00	Band n48	5G NR FR1 TDD, 10903-AAD	3680.0, 645332	7.03	3.10	37.1

Hardware Setup

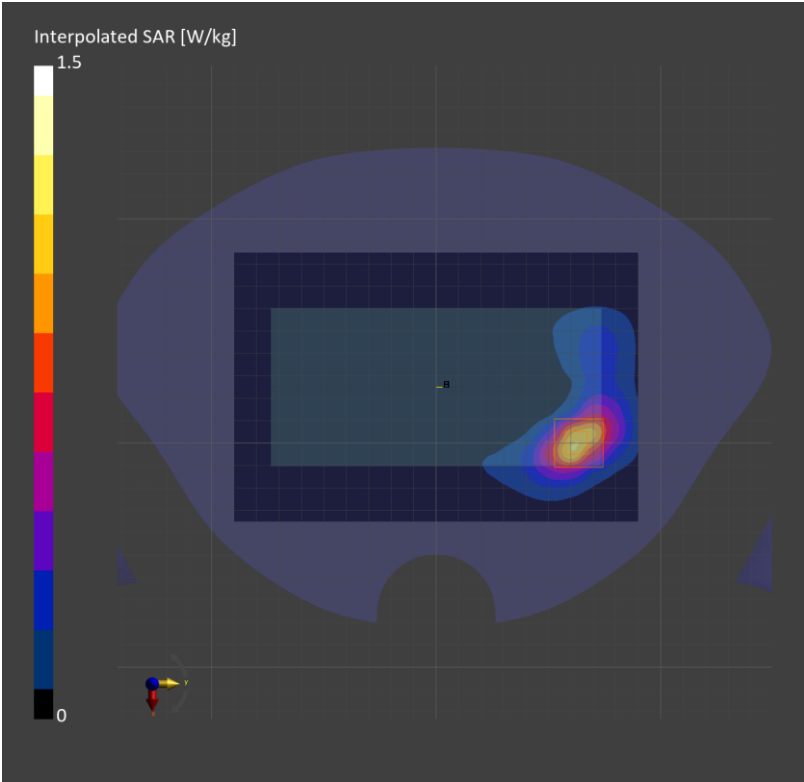
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Oct-10	EX3DV4 – SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.857	0.936
psSAR10g [W/Kg]	0.366	0.384
Power Drift [dB]	0.01	
M2/M1 [%]		74.2
Dist 3dB Peak [mm]		9.5



Measurement Report for Device, CHEEK, Custom Band, CW, Channel 3625000 (3625.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	Touch, 0.00	Custom Band	CW, 0--	3625.0, 3625000	7.03	3.04	37.2

Hardware Setup

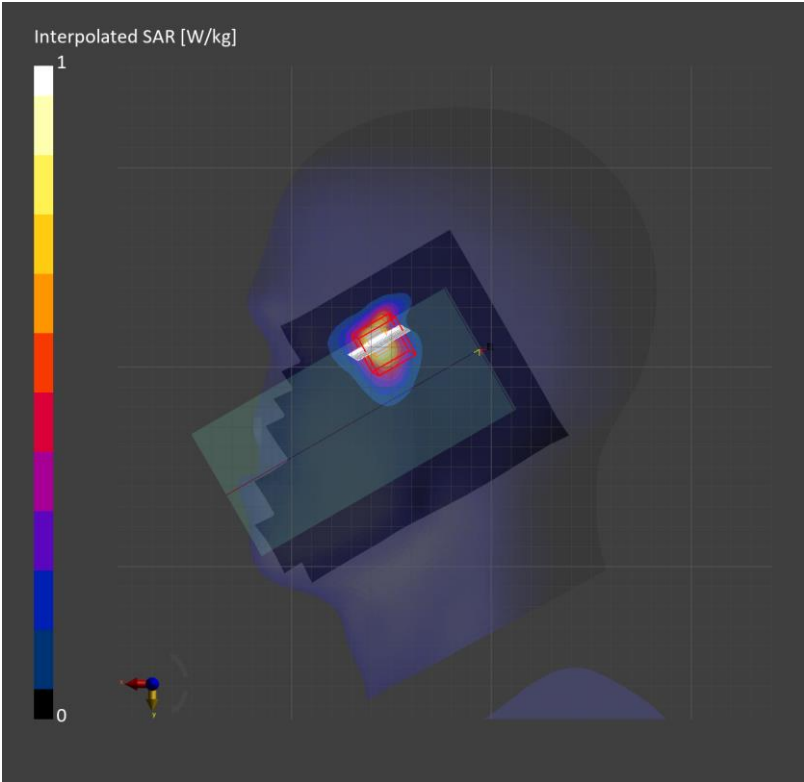
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Oct-11	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	4.3 x 4.3 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.864	0.917
psSAR10g [W/Kg]	0.311	0.319
Power Drift [dB]	-0.00	
M2/M1 [%]		73.5
Dist 3dB Peak [mm]		5.9



Measurement Report for Device, FRONT, Custom Band, CW, Channel 3570000 (3570.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	FRONT, 10.00	Custom Band	CW, 0--	3570.0, 3570000	7.37	2.99	37.3

Hardware Setup

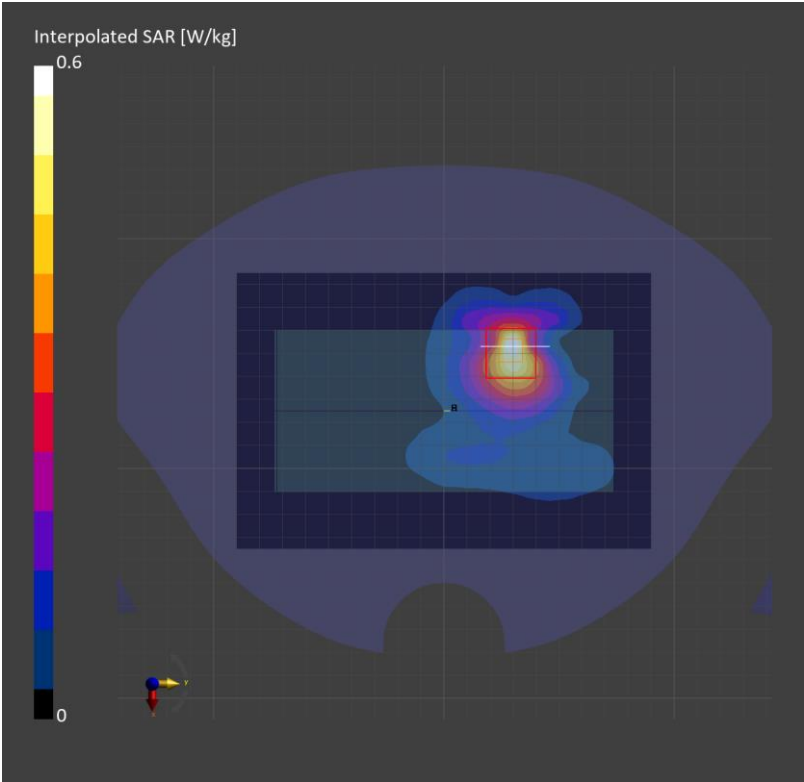
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2039	HBBL-600-10000, 2023-Oct-12	EX3DV4 – SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.423	0.451
psSAR10g [W/Kg]	0.184	0.186
Power Drift [dB]	0.02	
M2/M1 [%]		73.6
Dist 3dB Peak [mm]		8.3



Measurement Report for SM-S921U, EDGE BOTTOM, Band n66, 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) Channel 349000 (1745.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	Band n66	5G NR FR1 FDD, 10934-AAC	1745.0, 349000	8.54	1.36	39.5

Hardware Setup

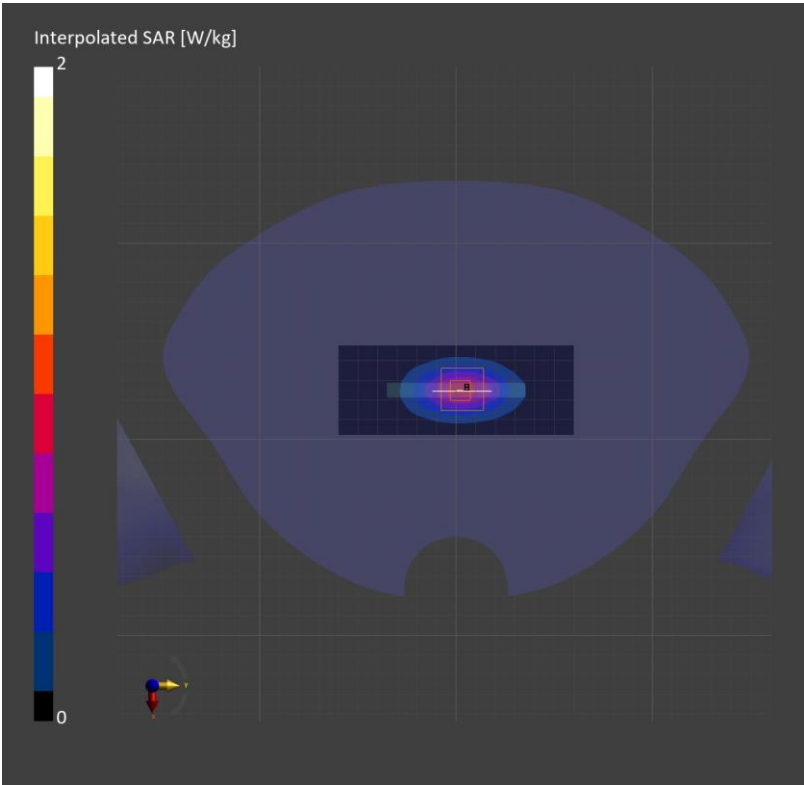
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-12	EX3DV4 - SN3871, 2023-08-25	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.743	0.762
psSAR10g [W/Kg]	0.389	0.406
Power Drift [dB]	0.01	
M2 / M1 [%]		83.3
Dist 3dB Peak [mm]		9.6



Measurement Report for SM-S921U, TILT, Band n66, 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz) RBPosition:Mid AntennaCfg:SISO, Channel 349000 (1745.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band n66	5G NR FR1 FDD, 10942-AAC	1745.0, 349000	9.13	1.33	41.3

Hardware Setup

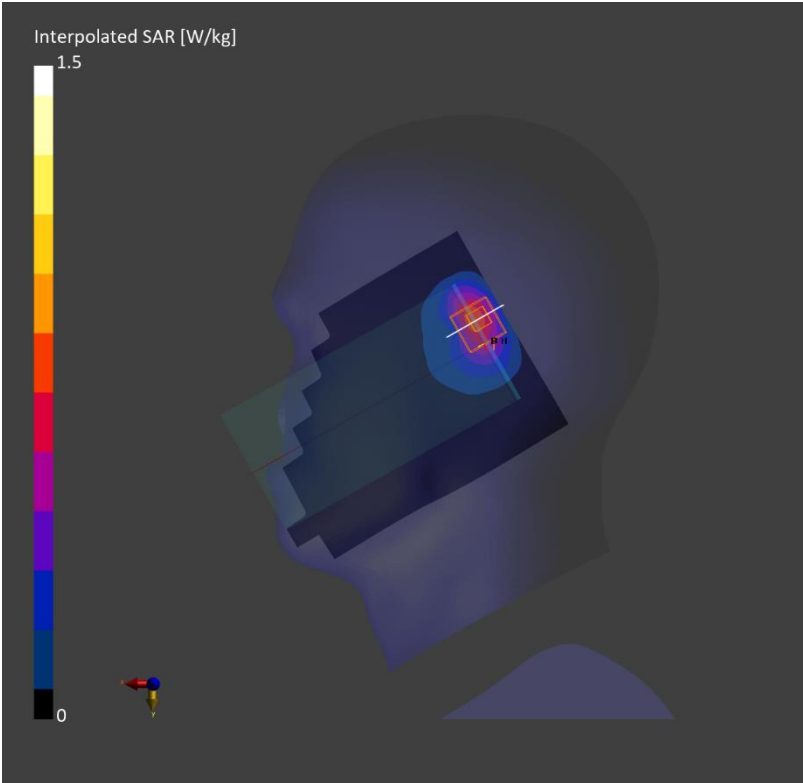
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Oct-30	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans 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	5.7 x 5.7 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.679	0.683
psSAR10g [W/Kg]	0.363	0.336
Power Drift [dB]	-0.02	-0.08
M2/M1 [%]		73.9
Dist 3dB Peak [mm]		7.3



Measurement Report for SM-S921U, EDGE TOP, Band n66, 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz), Channel 349000 (1745.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 10.00	Band n66	5G NR FR1 FDD, 10942-AAC	1745.0, 349000	8.54	1.39	40.7

Hardware Setup

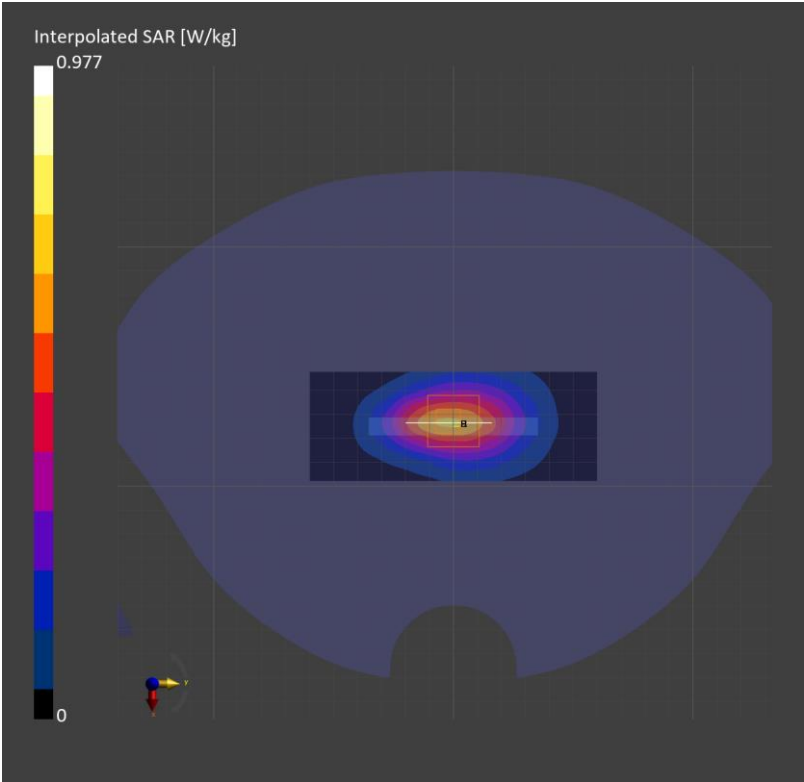
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-20	EX3DV4 - SN3871, 2023-08-25	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.546	0.555
psSAR10g [W/Kg]	0.310	0.315
Power Drift [dB]	-0.02	
M2/M1 [%]		83.2
Dist 3dB Peak [mm]		12.1



Measurement Report for Device, EDGE BOTTOM, Band n70, 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz), Channel 340500 (1702.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	Band n70	5G NR FR1 FDD, 10946-AAC	1702.5, 340500	8.54	1.30	40.7

Hardware Setup

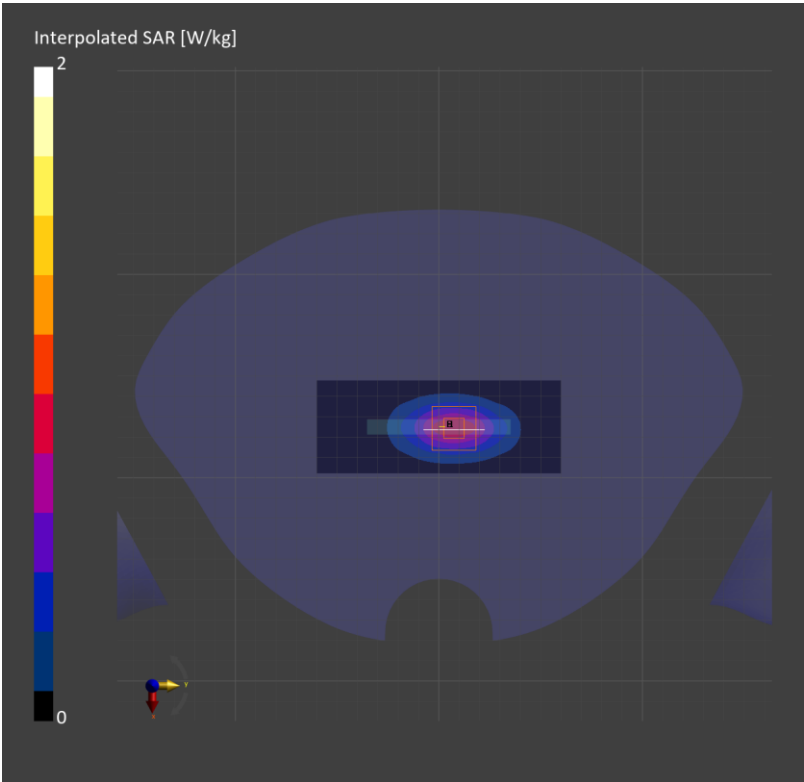
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-13	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.774	0.806
psSAR10g [W/Kg]	0.410	0.430
Power Drift [dB]	0.01	
M2 / M1 [%]		81.6
Dist 3dB Peak [mm]		9.6



Measurement Report for SM-S921U, TILT, Band n70, 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz) RBPosition:Mid AntennaCfg:SISO, Channel 340500 (1702.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band n70	5G NR FR1 FDD, 10938-AAC	1702.5, 340500	8.61	1.33	40.1

Hardware Setup

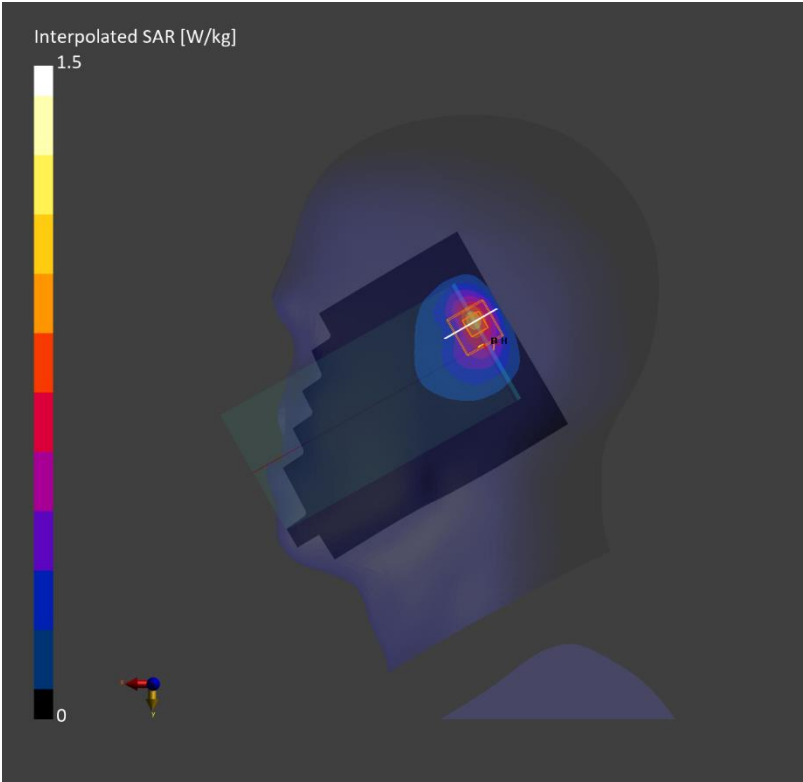
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2038	HBBL-600-10000, 2023-Oct-30	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	5.3 x 5.3 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.740	0.753
psSAR10g [W/Kg]	0.389	0.370
Power Drift [dB]	0.02	-0.01
M2/M1 [%]		76.2
Dist 3dB Peak [mm]		6.8



Measurement Report for SM-S921U, EDGE TOP, Band n70, 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz), Channel 340500 (1702.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 10.00	Band n70	5G NR FR1 FDD, 10938-AAC	1702.5, 340500	8.54	1.36	40.4

Hardware Setup

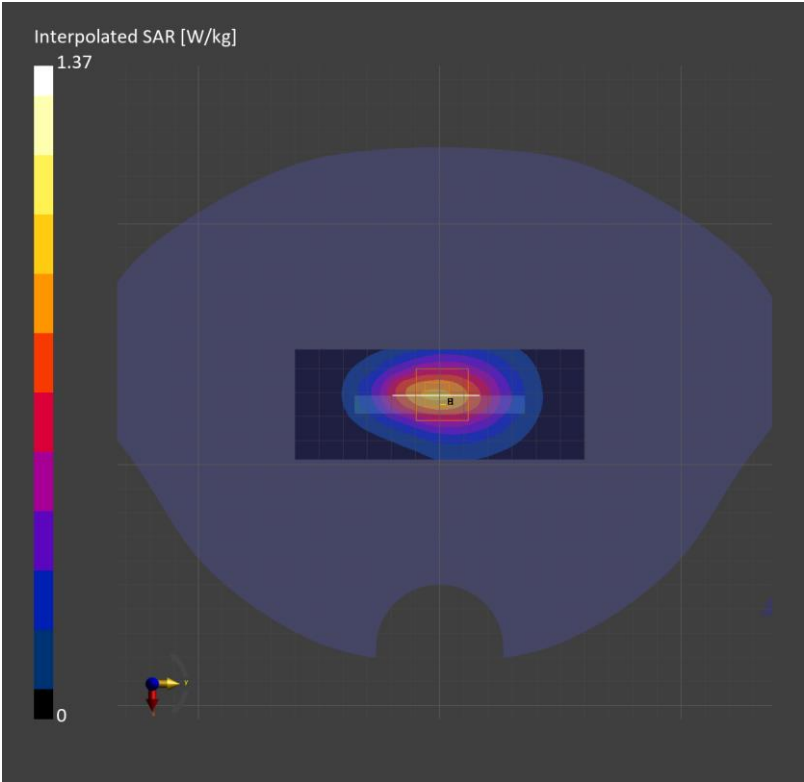
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-20	EX3DV4 - SN3871, 2023-08-25	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	7.61 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.778	0.796
psSAR10g [W/Kg]	0.442	0.453
Power Drift [dB]	-0.00	
M2/M1 [%]		83.8
Dist 3dB Peak [mm]		12.1



Measurement Report for Device, REAR, Band n71, 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz), Channel 136100 (680.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band n71	5G NR FR1 FDD, 10939-AAC	680.5, 136100	9.65	0.887	41.5

Hardware Setup

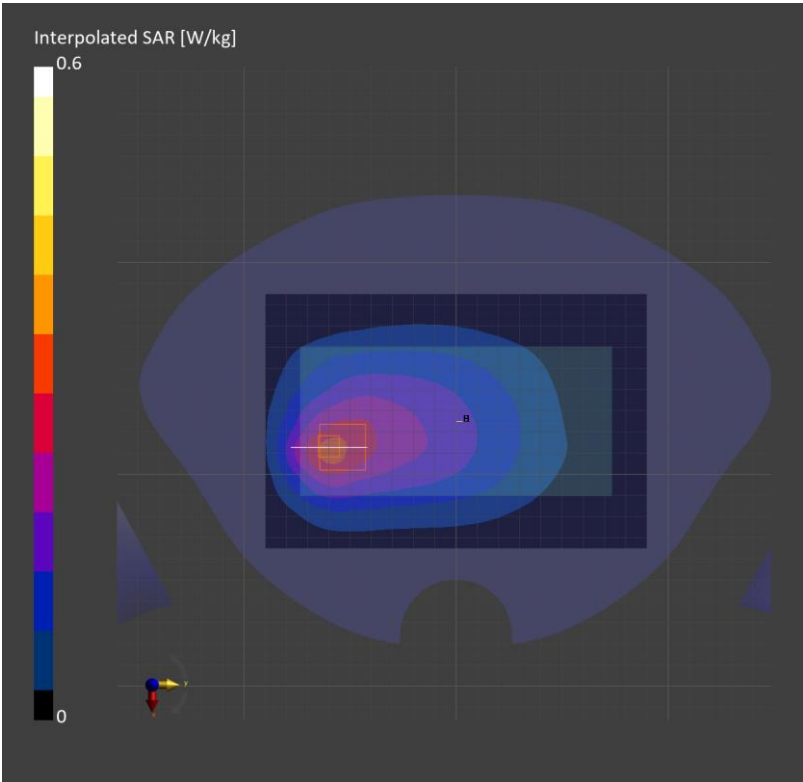
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Sep-11	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.283	0.283
psSAR10g [W/Kg]	0.187	0.172
Power Drift [dB]	-0.05	
M2 / M1 [%]		80.3
Dist 3dB Peak [mm]		14.9



Measurement Report for SM-S921U, CHEEK, Band n71, 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz), Channel 136100 (680.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	Touch, 0.00	Band n71	5G NR FR1 FDD, 10939-AAC	680.5, 136100	10.28	0.861	41.9

Hardware Setup

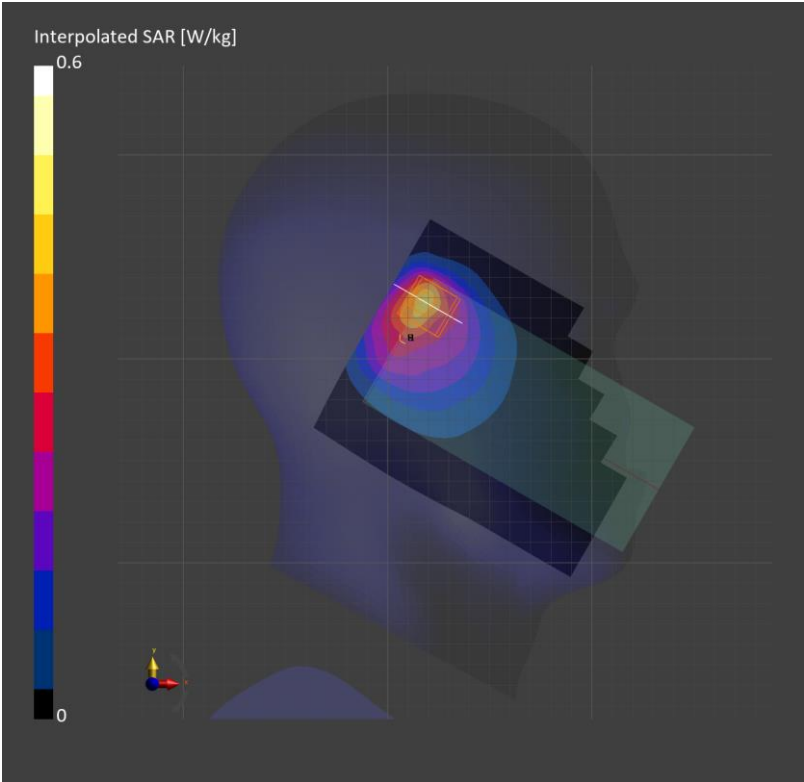
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000, 2023-Sep-21	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.363	0.365
psSAR10g [W/Kg]	0.234	0.188
Power Drift [dB]	-0.01	
M2/M1 [%]		68.6
Dist 3dB Peak [mm]		7.6



Measurement Report for Device, REAR, Band n71, 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz), Channel 136100 (680.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Band n71	5G NR FR1 FDD, 10939-AAC	680.5, 136100	10.62	0.858	41.2

Hardware Setup

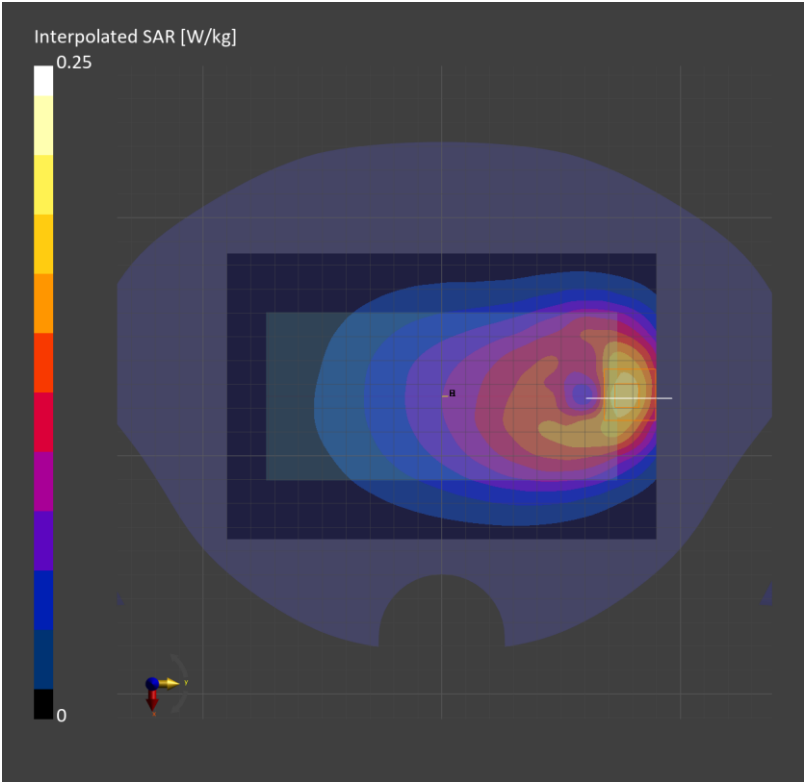
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000, 2023-Oct-18	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans 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	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.176	0.178
psSAR10g [W/Kg]	0.115	0.100
Power Drift [dB]	-0.03	
M2/M1 [%]		79.6
Dist 3dB Peak [mm]		9.9



Measurement Report for SM-S921U,RIGHT TILT, Band n77, 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz), Channel 633334 (3500.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Right Head, HSL	TILT, 0.00	Band n77	5G NR FR1 TDD, 10866-AAF	3500.0, 633334	7.07	2.85	39.0

Hardware Setup

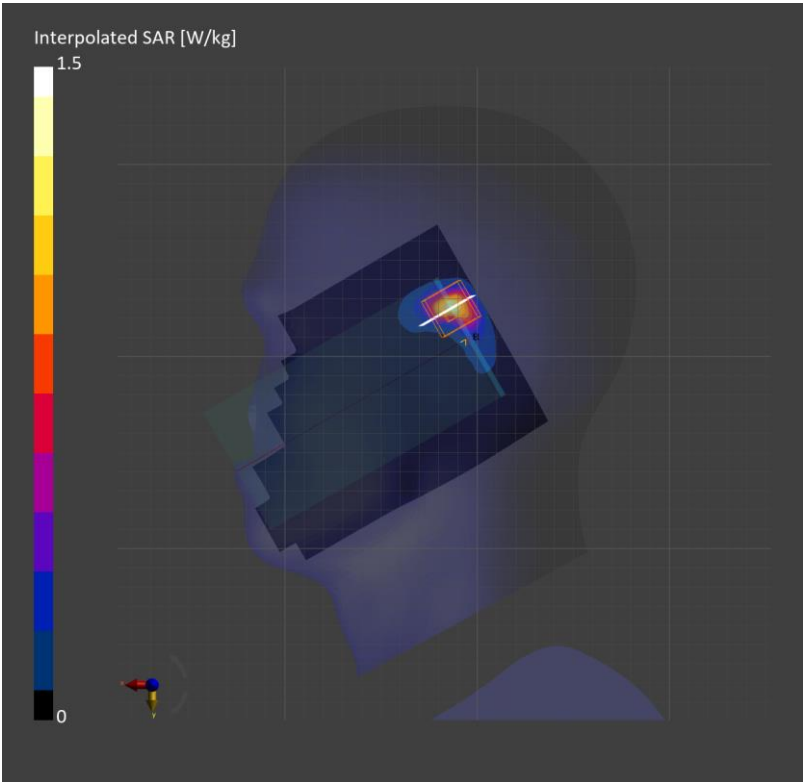
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2038	HBBL-600-10000, 2023-Oct-06	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	4.5 x 4.5 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.870	1.03
psSAR10g [W/Kg]	0.324	0.337
Power Drift [dB]	-0.01	
M2 / M1 [%]		72.9
Dist 3dB Peak [mm]		6.1



NR Band n77

Frequency: 3750 MHz; Communication System Channel Number: 650000; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used: $f = 3750$ MHz; $\sigma = 3.152$ S/m; $\epsilon_r = 37.812$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1668; Calibrated: 4/26/2023
- Probe: EX3DV4 - SN7313; ConvF(6.26, 6.53, 6.84) @ 3750 MHz; Calibrated: 3/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (Right); Phantom section: Flat Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Rear 10mm/CW RB 135/0_ch 650000/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.24 W/kg

Rear 10mm/CW RB 135/0_ch 650000/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=1.4mm

Reference Value = 19.16 V/m; Power Drift = -0.10 dB

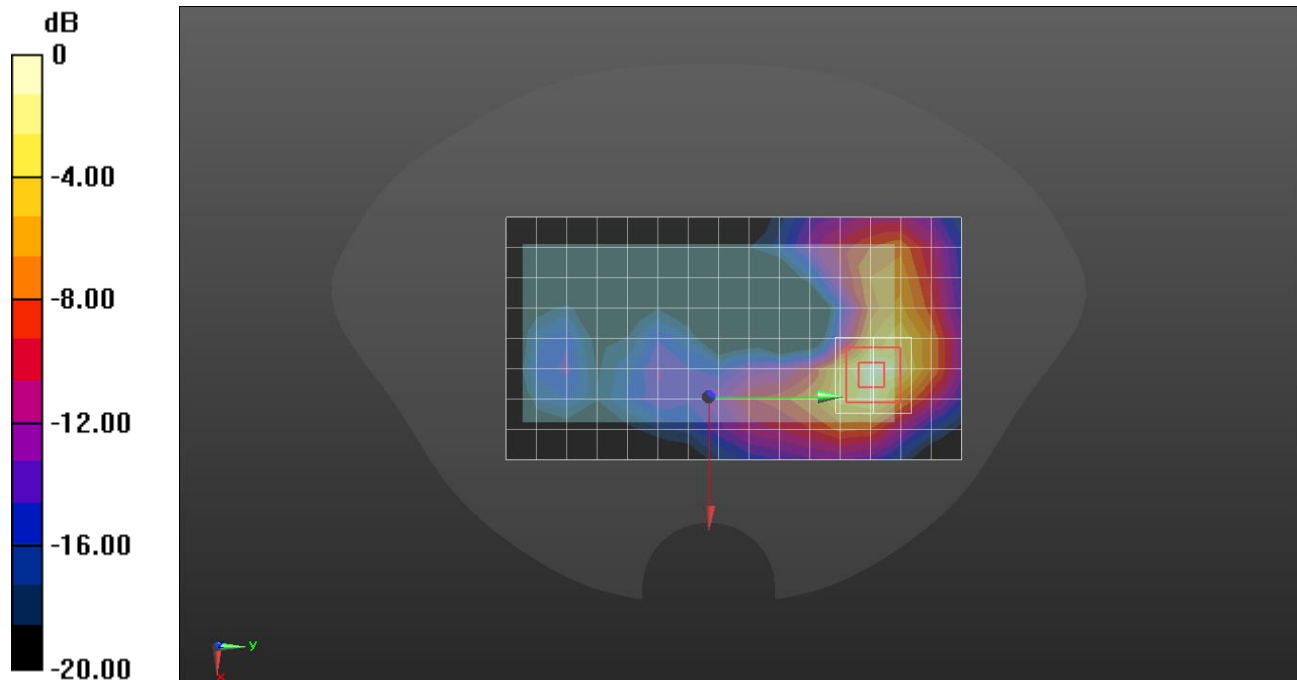
Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.729 W/kg; SAR(10 g) = 0.307 W/kg

Smallest distance from peaks to all points 3 dB below = 9.2 mm

Ratio of SAR at M2 to SAR at M1 = 79.1%

Maximum value of SAR (measured) = 1.29 W/kg



0 dB = 1.24 W/kg = 0.93 dBW/kg

Measurement Report for SM-S921U, RIGHT TOUCH, Custom Band, CW, Channel 3930000 (3930.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TOUCH, 0.00	Band n77	CW, 0--	3930.0, 3930000	6.72	3.44	38.1

Hardware Setup

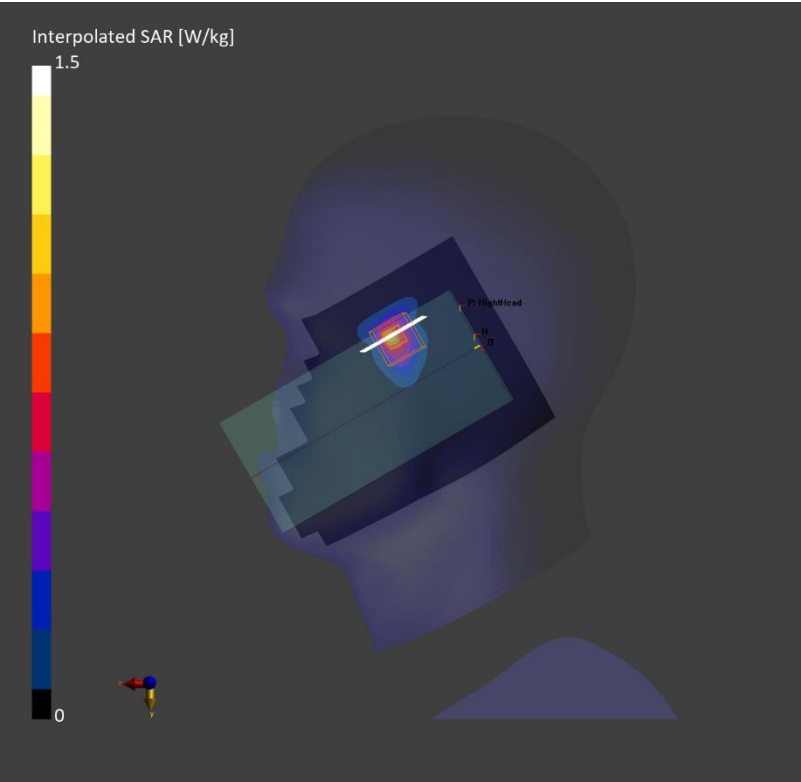
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2038	HBBL-600-10000, 2023-Oct-10	EX3DV4 - SN7314, 2023-05-26	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.684	0.776
psSAR10g [W/Kg]	0.250	0.259
Power Drift [dB]	-0.01	
M2 / M1 [%]		78.7
Dist 3dB Peak [mm]		7.0



Measurement Report for SM-S921U, REAR, Custom Band, CW, Channel 3500000 (3500.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Custom Band	CW, 0--	3500.0, 3500000	7.07	2.90	38.2

Hardware Setup

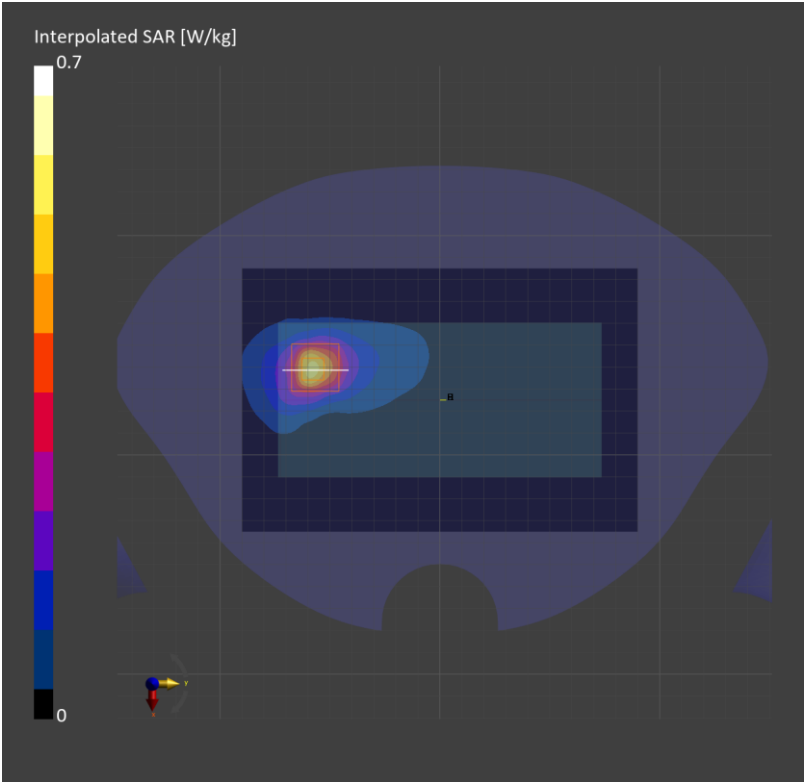
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 2038	HBBL-600-10000, 2023-Oct-12	EX3DV4 – SN7314, 2023-05-26	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.416	0.446
psSAR10g [W/Kg]	0.176	0.186
Power Drift [dB]	0.01	-0.07
M2/M1 [%]		79.9
Dist 3dB Peak [mm]		10.5



Wi-Fi 2.4 GHz

Frequency: 2437 MHz; Communication System Channel Number: 6; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.746$ S/m; $\epsilon_r = 40.421$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 7/17/2023
- Probe: EX3DV4 - SN7330; ConvF(8.04, 8.04, 8.04) @ 2437 MHz; Calibrated: 1/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Phantom section: Right Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

RHS/Touch 802.11 b mode ch.6 SISO Ant.1/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.23 W/kg

RHS/Touch 802.11 b mode ch.6 SISO Ant.1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.41 V/m; Power Drift = -0.18 dB

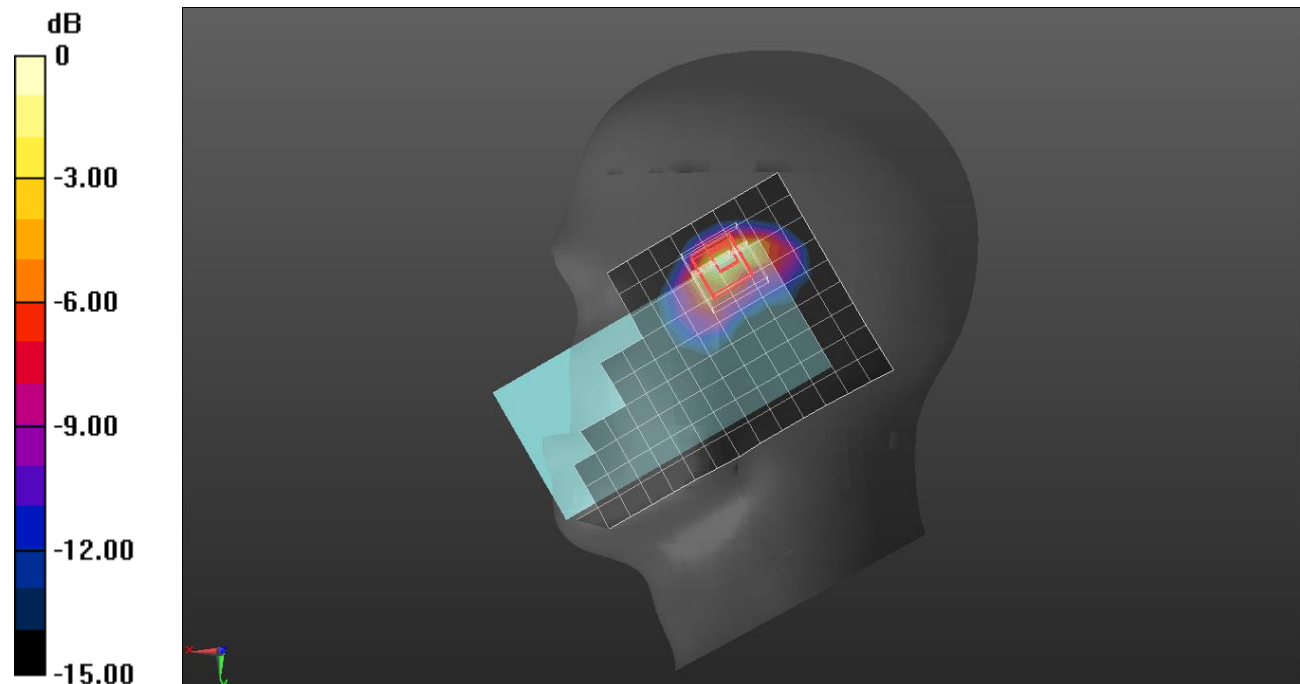
Peak SAR (extrapolated) = 1.86 W/kg

SAR(1 g) = 0.688 W/kg; SAR(10 g) = 0.278 W/kg

Smallest distance from peaks to all points 3 dB below = 5.2 mm

Ratio of SAR at M2 to SAR at M1 = 41.6%

Maximum value of SAR (measured) = 1.25 W/kg



0 dB = 1.23 W/kg = 0.90 dBW/kg

Wi-Fi 2.4 GHz

Frequency: 2437 MHz; Communication System Channel Number: 6; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.746$ S/m; $\epsilon_r = 40.421$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 7/17/2023
- Probe: EX3DV4 - SN7330; ConvF(8.04, 8.04, 8.04) @ 2437 MHz; Calibrated: 1/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Phantom section: Flat Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Right/802.11 b mode ch.6 SISO Ant.1/Area Scan (17x5x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.362 W/kg

Right/802.11 b mode ch.6 SISO Ant.1/Zoom Scan (7x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.94 V/m; Power Drift = -0.03 dB

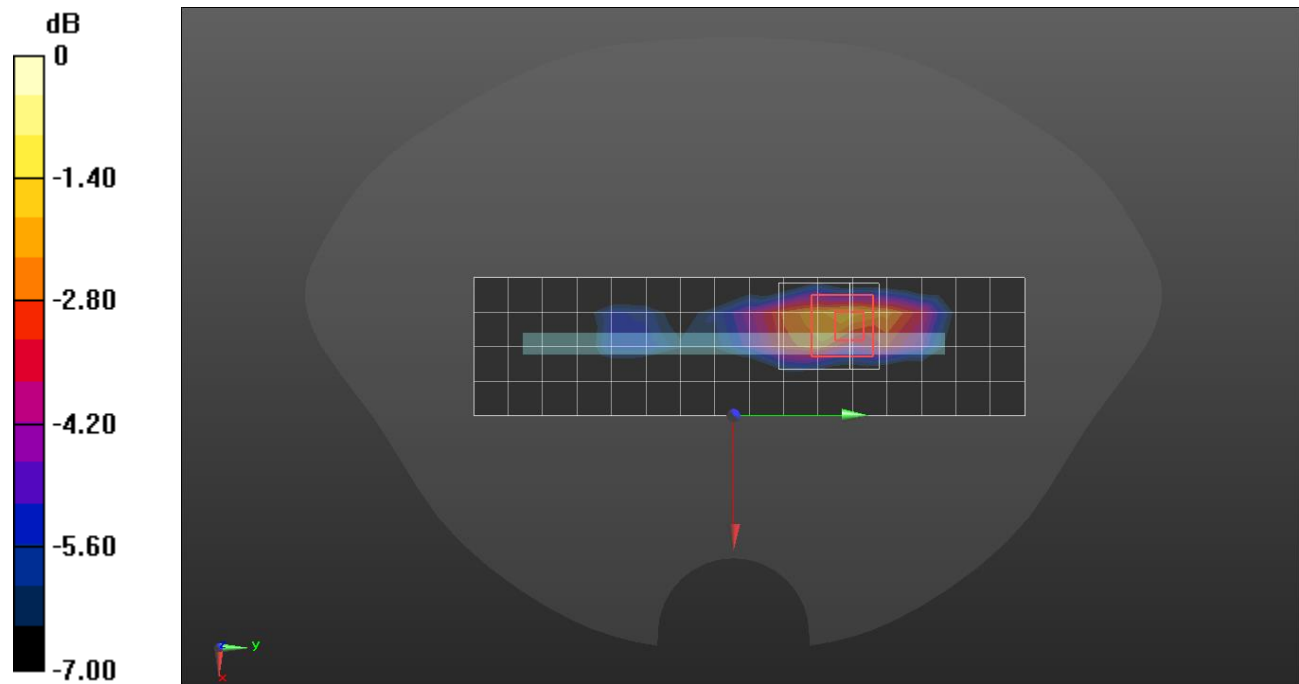
Peak SAR (extrapolated) = 0.694 W/kg

SAR(1 g) = 0.305 W/kg; SAR(10 g) = 0.150 W/kg

Smallest distance from peaks to all points 3 dB below = 8.2 mm

Ratio of SAR at M2 to SAR at M1 = 50.5%

Maximum value of SAR (measured) = 0.519 W/kg



0 dB = 0.519 W/kg = -2.85 dBW/kg

Wi-Fi 2.4 GHz

Frequency: 2412 MHz; Communication System Channel Number: 1; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.725$ S/m; $\epsilon_r = 40.454$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 7/17/2023
- Probe: EX3DV4 - SN7330; ConvF(8.04, 8.04, 8.04) @ 2412 MHz; Calibrated: 1/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Phantom section: Flat Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Right/802.11 b mode ch.1 MIMO/Area Scan (17x6x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.427 W/kg

Right/802.11 b mode ch.1 MIMO/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.84 V/m; Power Drift = 0.09 dB

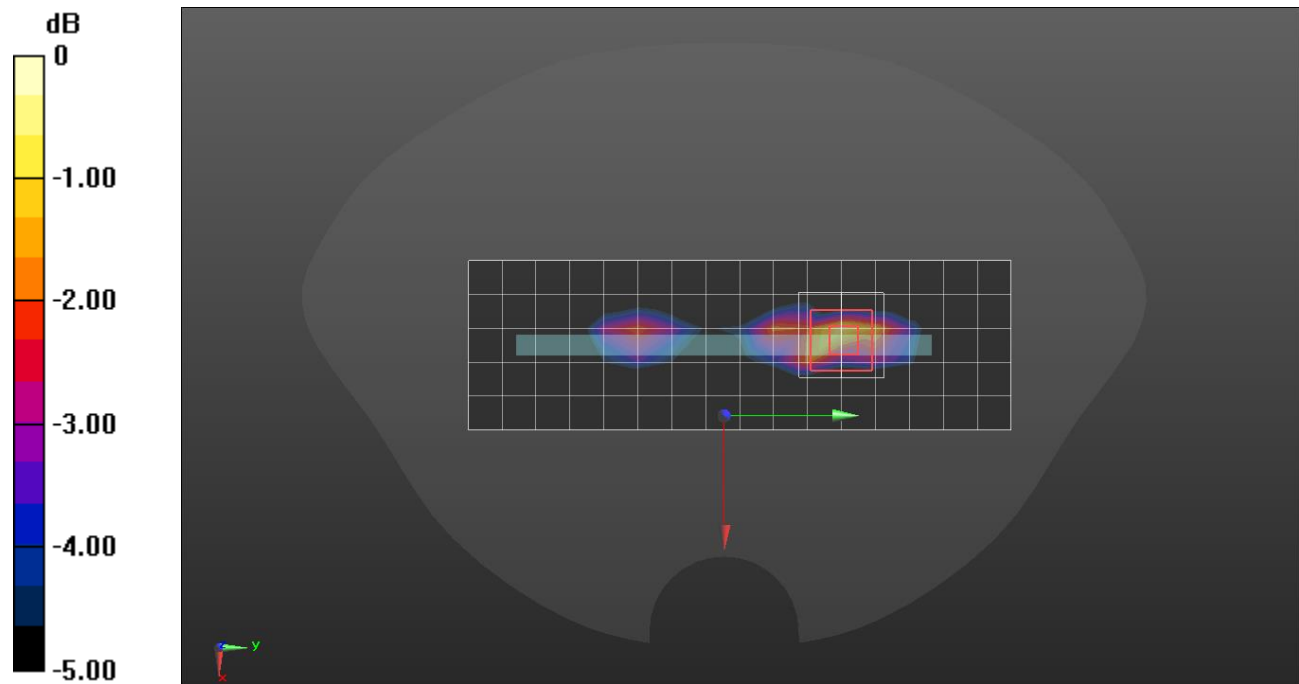
Peak SAR (extrapolated) = 0.601 W/kg

SAR(1 g) = 0.300 W/kg; SAR(10 g) = 0.146 W/kg

Smallest distance from peaks to all points 3 dB below = 8.2 mm

Ratio of SAR at M2 to SAR at M1 = 51.7%

Maximum value of SAR (measured) = 0.468 W/kg



0 dB = 0.468 W/kg = -3.30 dBW/kg

Wi-Fi 2.4 GHz

Frequency: 2437 MHz; Communication System Channel Number: 6; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.746$ S/m; $\epsilon_r = 40.421$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 7/17/2023
- Probe: EX3DV4 - SN7330; ConvF(8.04, 8.04, 8.04) @ 2437 MHz; Calibrated: 1/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Phantom section: Left Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LHS/Touch 802.11 b mode ch.6 MIMO/Area Scan (11x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.970 W/kg

LHS/Touch 802.11 b mode ch.6 MIMO/Zoom Scan (9x10x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.74 V/m; Power Drift = -0.02 dB

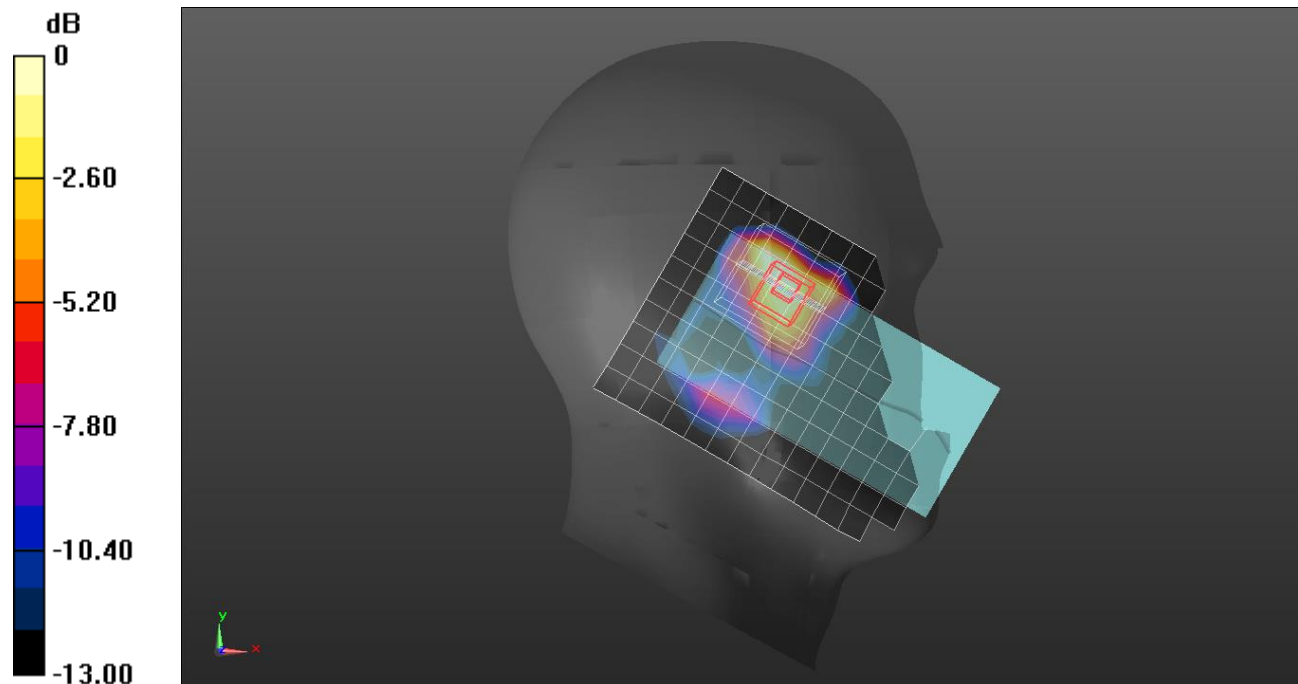
Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.798 W/kg; SAR(10 g) = 0.364 W/kg

Smallest distance from peaks to all points 3 dB below = 7.7 mm

Ratio of SAR at M2 to SAR at M1 = 58.4%

Maximum value of SAR (measured) = 1.13 W/kg



0 dB = 0.970 W/kg = -0.13 dBW/kg

Measurement Report for SM-S921U, CHEEK, U-NII-1, U-NII-2A, IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle), Channel 58 (5290.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	U-NII-1, U-NII-2A	WLAN, 10626-AAC	5290.0, 58	5.71	4.64	35.8

Hardware Setup

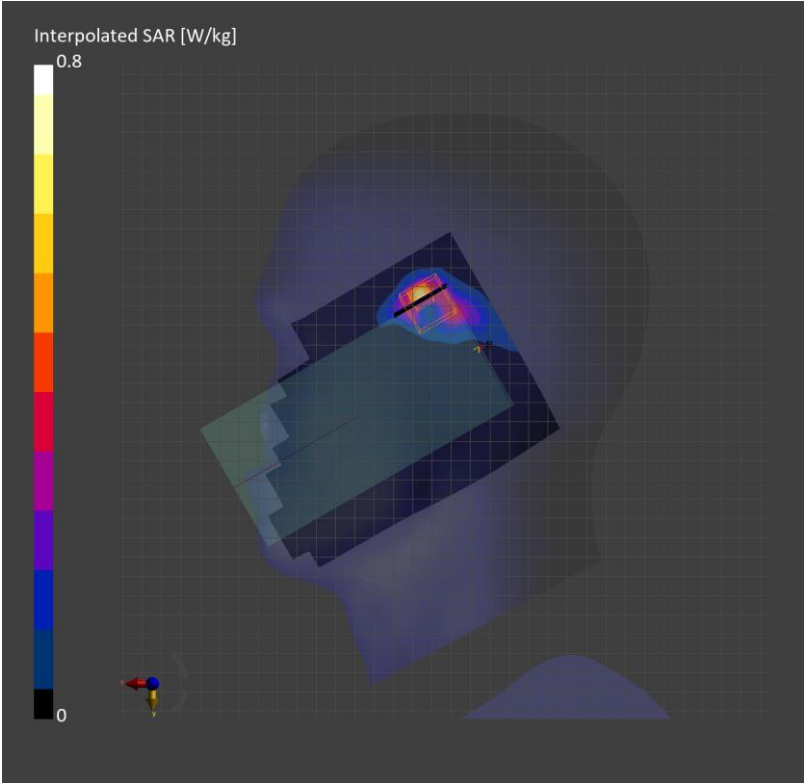
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Oct-03	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.365	0.415
psSAR10g [W/Kg]	0.121	0.137
Power Drift [dB]	0.07	
M2/M1 [%]		63.9
Dist 3dB Peak [mm]		4.0



Measurement Report for SM-S921U, REAR, U-NII-1, U-NII-2A, IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle), Channel 54 (5270.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	U-NII-1, U-NII-2A	WLAN, 10599-AAC	5270.0, 54	5.71	4.70	35.6

Hardware Setup

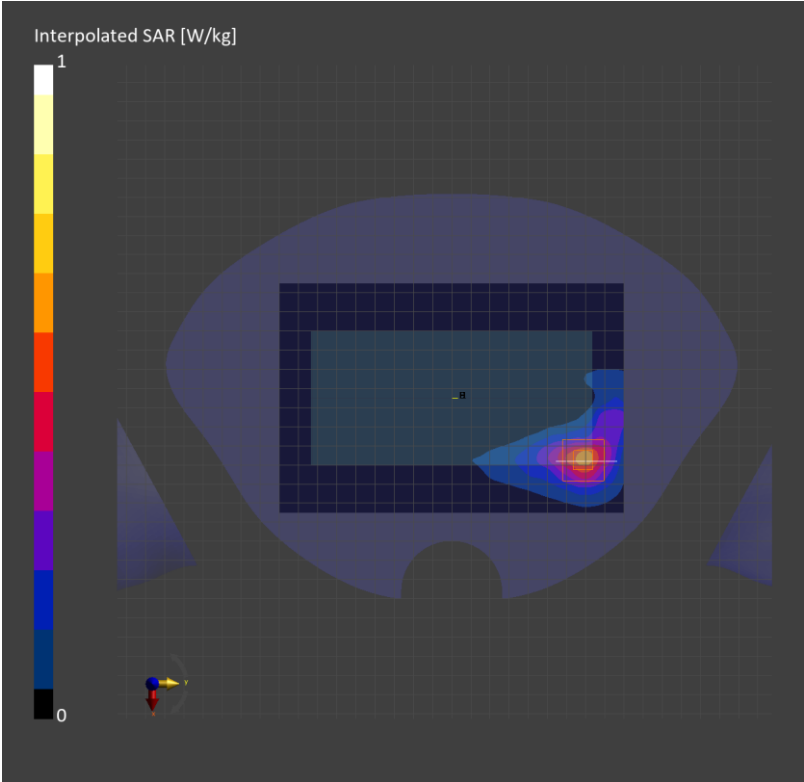
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Oct-10	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.463	0.482
psSAR10g [W/Kg]	0.175	0.183
Power Drift [dB]	-0.16	
M2/M1 [%]		72.0
Dist 3dB Peak [mm]		10.2



Measurement Report for SM-S921U, EDGE RIGHT, U-NII-1, U-NII-2A, IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle), Channel 54 (5270.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE RIGHT, 0.00	U-NII-1, U-NII-2A	WLAN, 10599-AAC	5270.0, 54	5.71	4.70	35.6

Hardware Setup

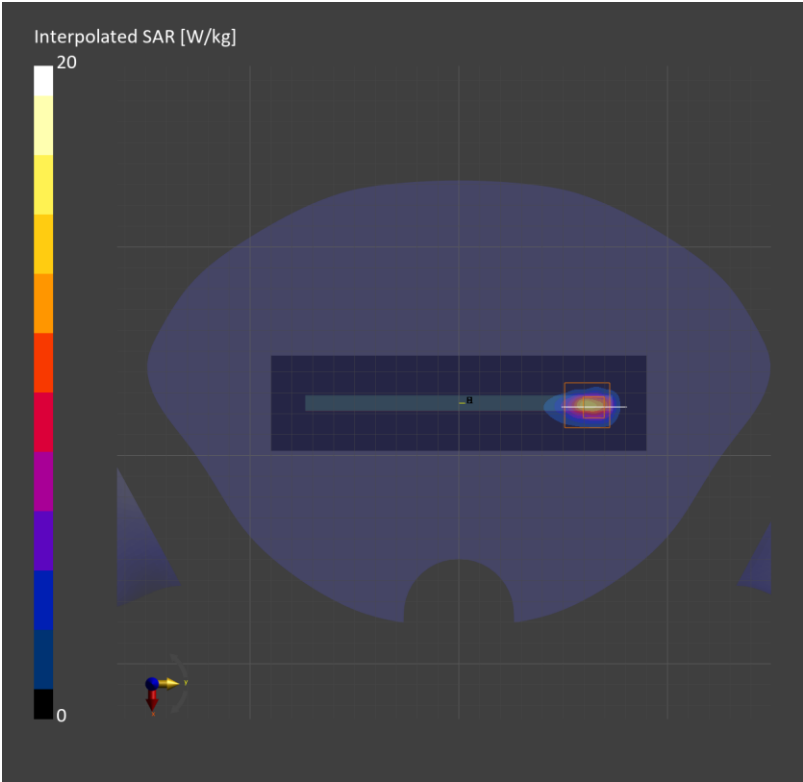
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Oct-10	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	7.61 x 10.0	2.6 x 2.6 x 1.2
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	8.95	11.0
psSAR10g [W/Kg]	2.28	2.55
Power Drift [dB]	-0.03	
M2/M1 [%]		65.0
Dist 3dB Peak [mm]		4.2



Measurement Report for SM-S921U, CHEEK, U-NII-1, U-NII-2A, IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle), Channel 58 (5290.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	U-NII-1, U-NII-2A	WLAN, 10626-AAC	5290.0, 58	5.71	4.97	35.9

Hardware Setup

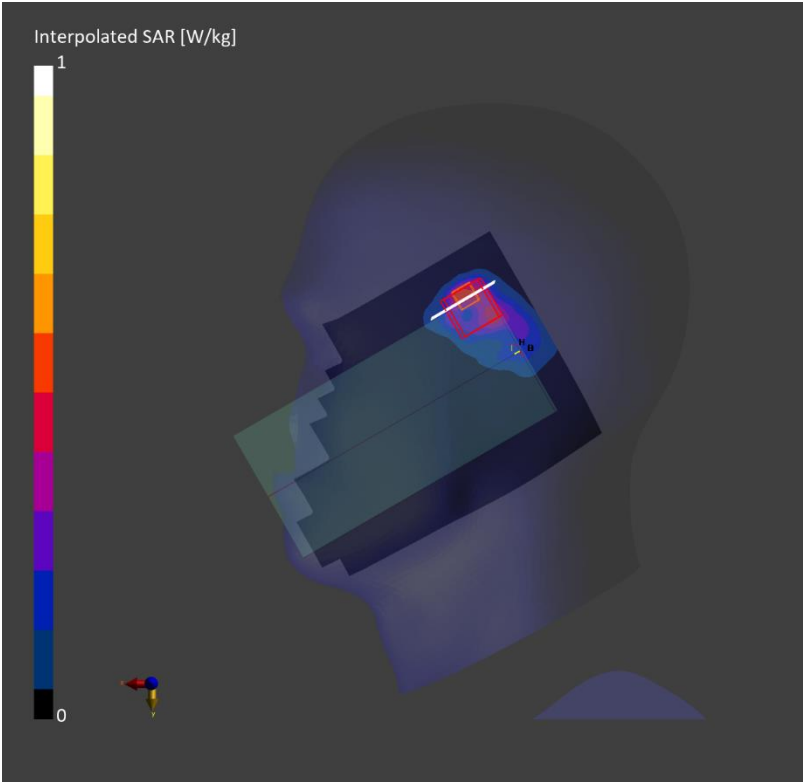
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2038	HBBL-600-10000, 2023-Oct-26	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1670, 2023-05-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	3.7 x 3.7 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.361	0.464
psSAR10g [W/Kg]	0.141	0.166
Power Drift [dB]	-0.16	
M2/M1 [%]		62.3
Dist 3dB Peak [mm]		4.5



Measurement Report for SM-S921U, REAR, U-NII-1, U-NII-2A, IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle), Channel 54 (5270.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	U-NII-1, U-NII-2A	WLAN, 10599-AAC	5270.0, 54	5.71	4.70	35.6

Hardware Setup

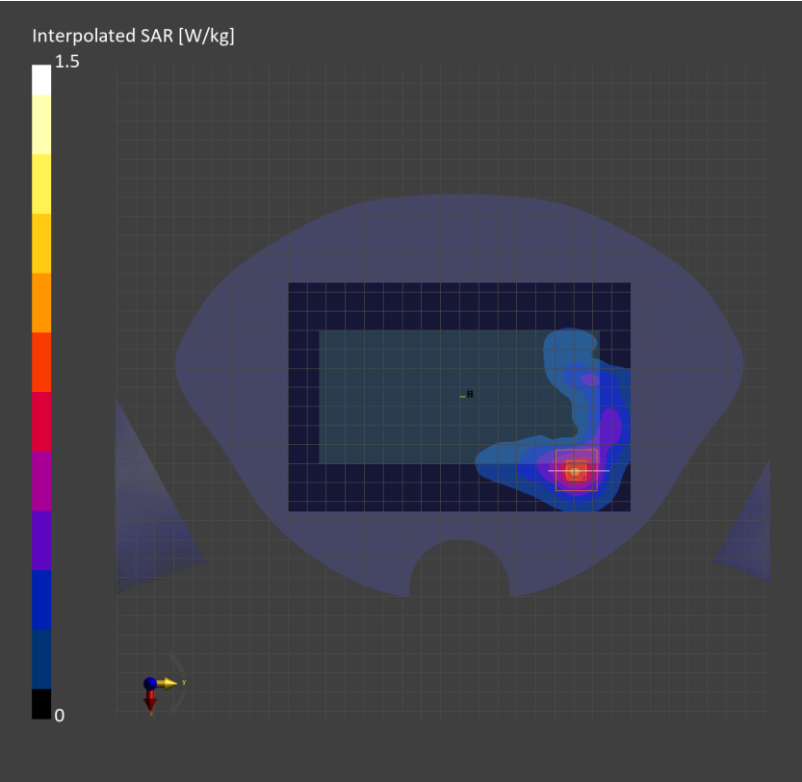
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Oct-10	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.637	0.657
psSAR10g [W/Kg]	0.240	0.247
Power Drift [dB]	-0.15	
M2/M1 [%]		71.0
Dist 3dB Peak [mm]		9.8



Measurement Report for SM-S921U, EDGE RIGHT, U-NII-1, U-NII-2A, IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle), Channel 54 (5270.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE RIGHT, 0.00	U-NII-1, U-NII-2A	WLAN, 10599-AAC	5270.0, 54	5.71	4.71	35.6

Hardware Setup

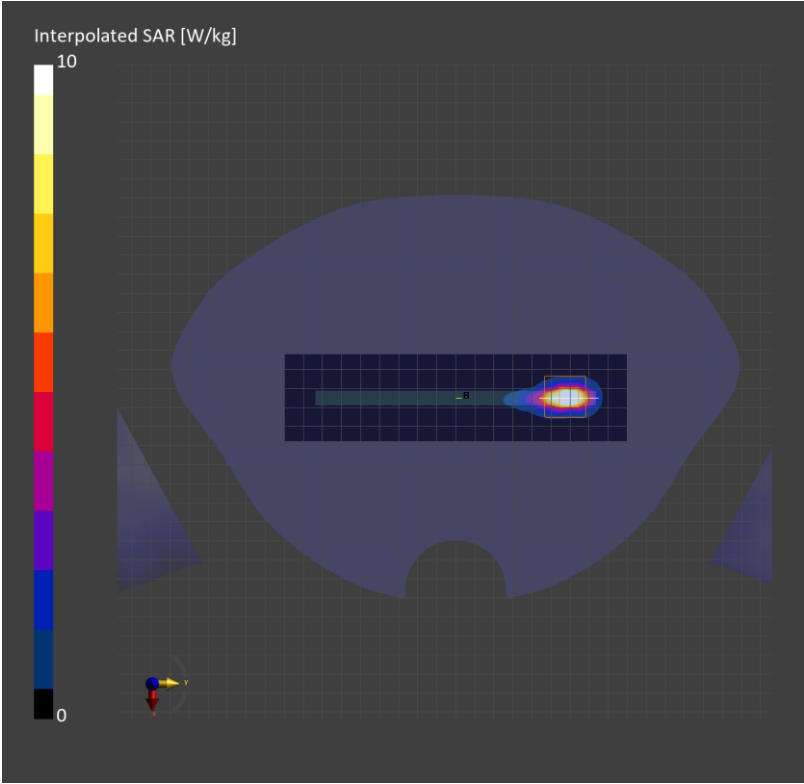
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 1991	HBBL-600-10000, 2023-Oct-14	EX3DV4 – SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.7 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	7.61 x 10.0	2.6 x 2.6 x 1.2
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	8.23	9.26
psSAR10g [W/Kg]	1.99	2.28
Power Drift [dB]	-0.08	
M2 / M1 [%]		67.5
Dist 3dB Peak [mm]		4.2



Measurement Report for SM-S921U, CHEEK, U-NII-2C < 5.65 GHz, IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle), Channel 106 (5530.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	U-NII-2C < 5.65 GHz	WLAN, 10626-AAC	5530.0, 106	4.98	4.90	35.4

Hardware Setup

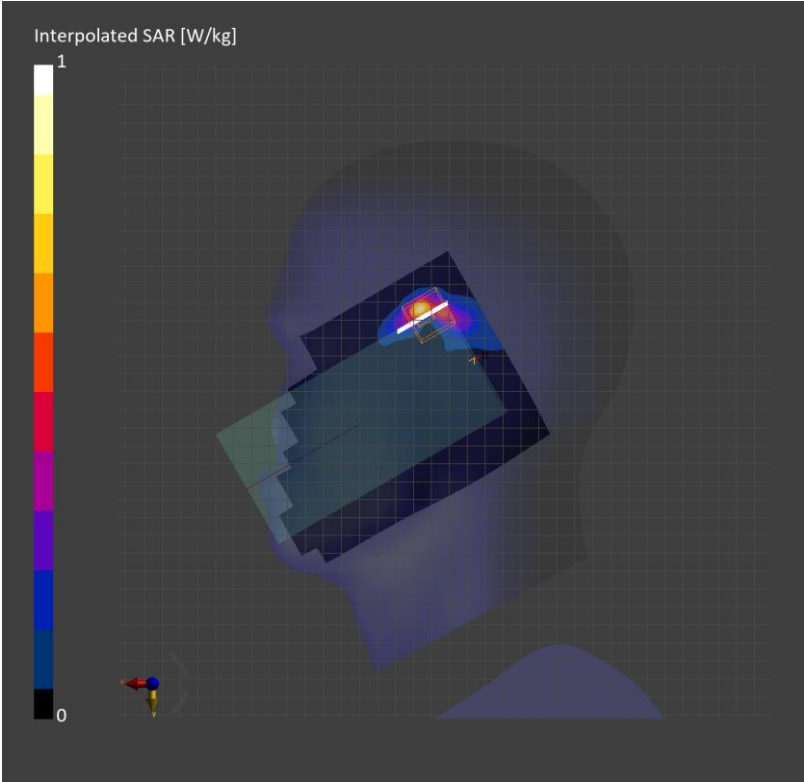
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 1991	HBBL-600-10000, 2023-Oct-03	EX3DV4 – SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	2.5 x 2.5 x 1.2
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.461	0.638
psSAR10g [W/Kg]	0.139	0.167
Power Drift [dB]	0.17	
M2/M1 [%]		66.4
Dist 3dB Peak [mm]		4.0



Wi-Fi 5.5 GHz

Frequency: 5690 MHz; Communication System Channel Number: 138; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 5690$ MHz; $\sigma = 5.025$ S/m; $\epsilon_r = 35.734$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1591; Calibrated: 3/22/2023
- Probe: EX3DV4 - SN7651; ConvF(5.16, 5.6, 4.81) @ 5690 MHz; Calibrated: 5/30/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: SAM (20deg probe tilt) with CRP v5.0(Right); Phantom section: Flat Section ; Type: QD000P40CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Rear/802.11 ac mode ch.138 SISO Ant.1/Area Scan (18x12x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.918 W/kg

Rear/802.11 ac mode ch.138 SISO Ant.1/Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 13.47 V/m; Power Drift = -0.12 dB

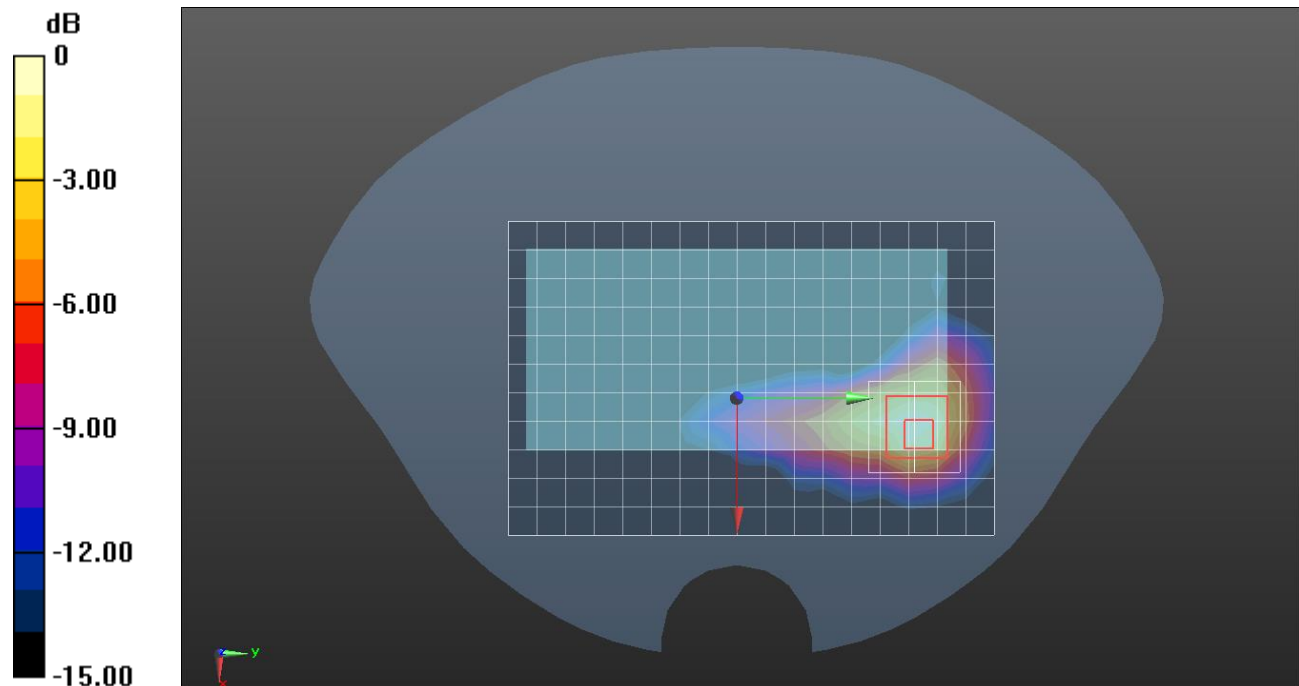
Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 0.396 W/kg; SAR(10 g) = 0.142 W/kg

Smallest distance from peaks to all points 3 dB below = 9.1 mm

Ratio of SAR at M2 to SAR at M1 = 62.2%

Maximum value of SAR (measured) = 0.914 W/kg



0 dB = 0.918 W/kg = -0.37 dBW/kg

Wi-Fi 5.5 GHz

Frequency: 5690 MHz; Communication System Channel Number: 138; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 5690$ MHz; $\sigma = 5.029$ S/m; $\epsilon_r = 36.393$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1591; Calibrated: 3/22/2023
- Probe: EX3DV4 - SN7651; ConvF(5.16, 5.6, 4.81) @ 5690 MHz; Calibrated: 5/30/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: SAM (20deg probe tilt) with CRP v5.0(Right); Phantom section: Flat Section ; Type: QD000P40CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Right/802.11 ac mode ch.138 SISO Ant.1/Area Scan (18x6x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 17.7 W/kg

Right/802.11 ac mode ch.138 SISO Ant.1/Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 57.98 V/m; Power Drift = -0.10 dB

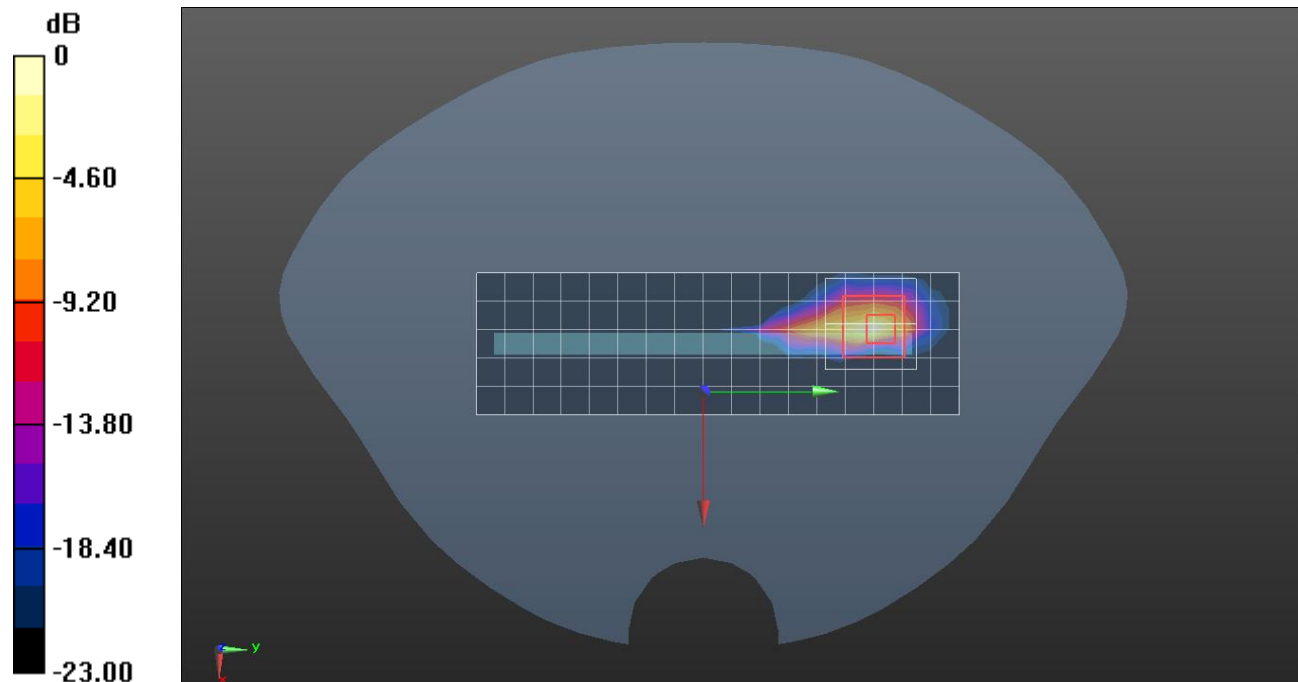
Peak SAR (extrapolated) = 32.8 W/kg

SAR(1 g) = 5.17 W/kg; SAR(10 g) = 1.21 W/kg

Smallest distance from peaks to all points 3 dB below = 4 mm

Ratio of SAR at M2 to SAR at M1 = 58.3%

Maximum value of SAR (measured) = 13.7 W/kg



0 dB = 17.7 W/kg = 12.48 dBW/kg

Wi-Fi 5.5 GHz

Frequency: 5690 MHz; Communication System Channel Number: 138; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 5690$ MHz; $\sigma = 5.029$ S/m; $\epsilon_r = 36.393$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1591; Calibrated: 3/22/2023
- Probe: EX3DV4 - SN7651; ConvF(5.16, 5.6, 4.81) @ 5690 MHz; Calibrated: 5/30/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: SAM (20deg probe tilt) with CRP v5.0(Right); Phantom section: Right Section; Type: QD000P40CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

RHS/Touch 802.11 ac mode ch.138 MIMO/Area Scan (12x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.885 W/kg

RHS/Touch 802.11 ac mode ch.138 MIMO/Zoom Scan (10x10x8)/Cube 0: Measurement grid: dx=3mm, dy=3mm, dz=1.4mm

Reference Value = 11.90 V/m; Power Drift = 0.11 dB

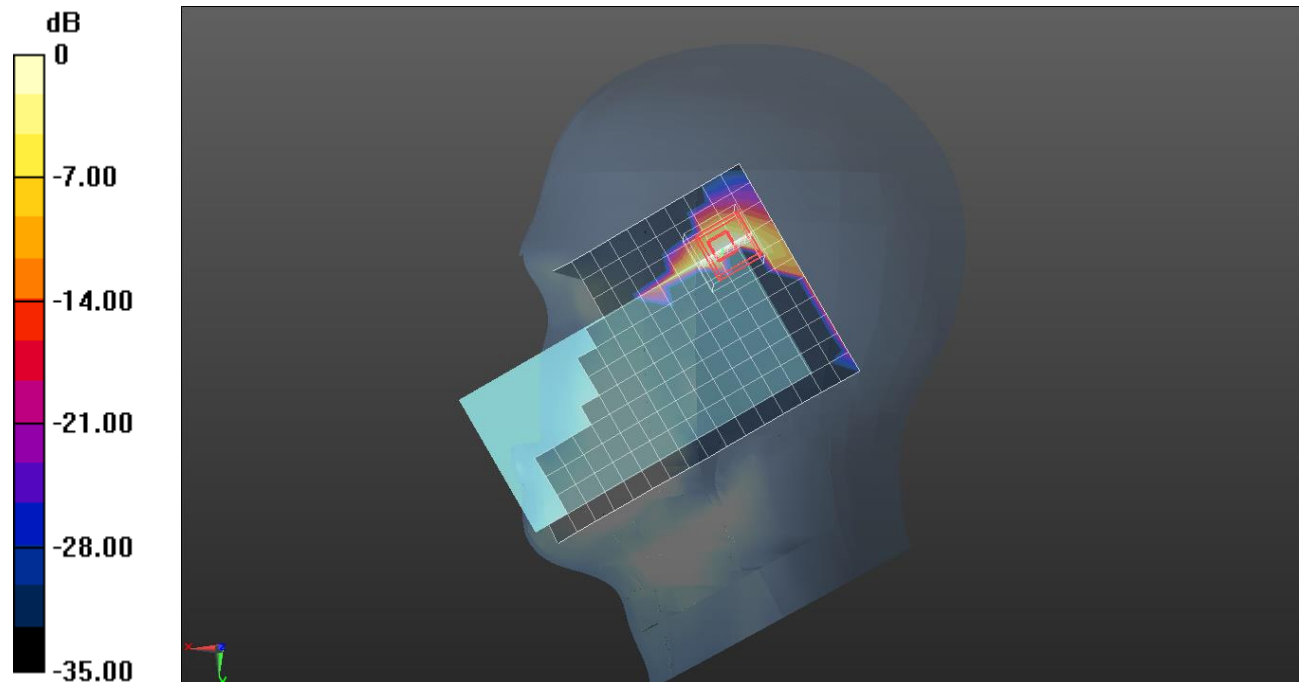
Peak SAR (extrapolated) = 1.76 W/kg

SAR(1 g) = 0.311 W/kg; SAR(10 g) = 0.063 W/kg

Smallest distance from peaks to all points 3 dB below = 3.6 mm

Ratio of SAR at M2 to SAR at M1 = 58.3%

Maximum value of SAR (measured) = 1.07 W/kg



0 dB = 0.885 W/kg = -0.53 dBW/kg

Wi-Fi 5.5 GHz

Frequency: 5690 MHz; Communication System Channel Number: 138; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used: $f = 5690$ MHz; $\sigma = 5.029$ S/m; $\epsilon_r = 36.393$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1591; Calibrated: 3/22/2023
- Probe: EX3DV4 - SN7651; ConvF(5.16, 5.6, 4.81) @ 5690 MHz; Calibrated: 5/30/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: SAM (20deg probe tilt) with CRP v5.0(Right); Phantom section: Flat Section ; Type: QD000P40CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Rear/802.11 ac mode ch.138 MIMO/Area Scan (20x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.834 W/kg

Rear/802.11 ac mode ch.138 MIMO /Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 13.91 V/m; Power Drift = -0.14 dB

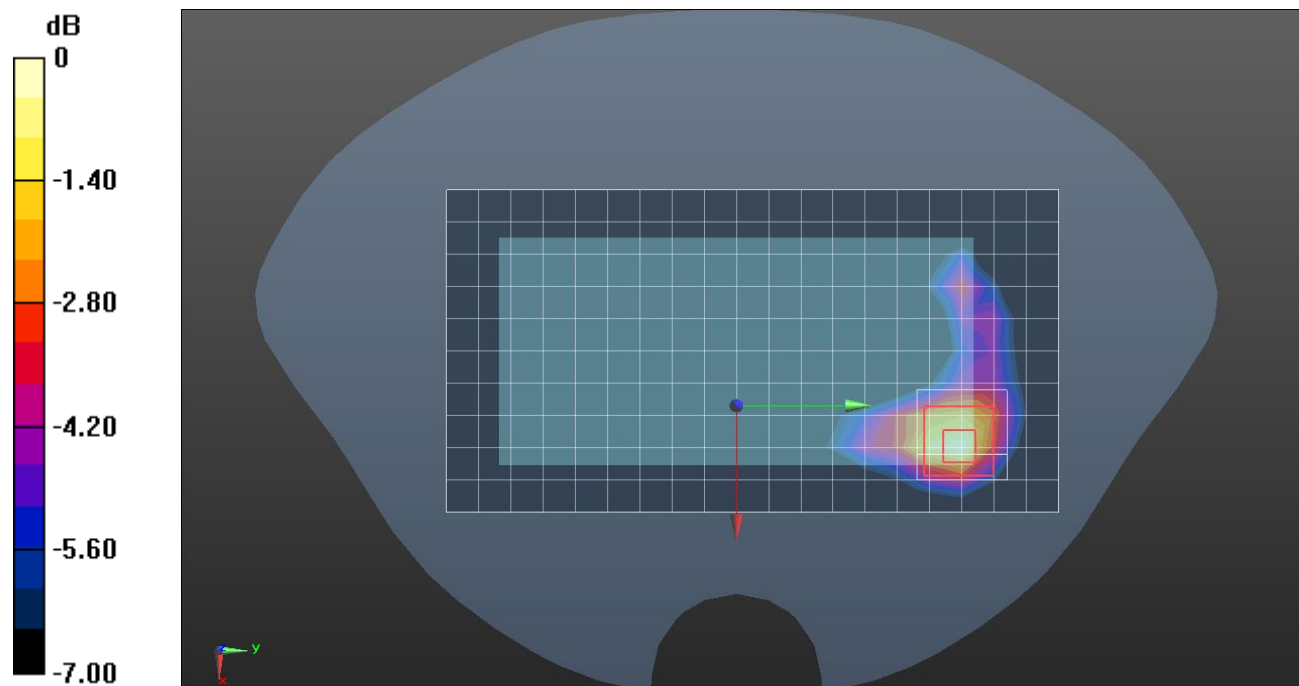
Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.350 W/kg; SAR(10 g) = 0.124 W/kg

Smallest distance from peaks to all points 3 dB below = 9.4 mm

Ratio of SAR at M2 to SAR at M1 = 62.4%

Maximum value of SAR (measured) = 0.825 W/kg



0 dB = 0.834 W/kg = -0.79 dBW/kg

Wi-Fi 5.5 GHz

Frequency: 5690 MHz; Communication System Channel Number: 138; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 5690$ MHz; $\sigma = 5.029$ S/m; $\epsilon_r = 36.393$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1591; Calibrated: 3/22/2023
- Probe: EX3DV4 - SN7651; ConvF(5.16, 5.6, 4.81) @ 5690 MHz; Calibrated: 5/30/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: SAM (20deg probe tilt) with CRP v5.0(Right); Phantom section: Flat Section ; Type: QD000P40CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Right/802.11 ac mode ch.138 MIMO/Area Scan (20x6x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 20.1 W/kg

Right/802.11 ac mode ch.138 MIMO/Zoom Scan (10x10x8)/Cube 0: Measurement grid: dx=3mm, dy=3mm, dz=1.4mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

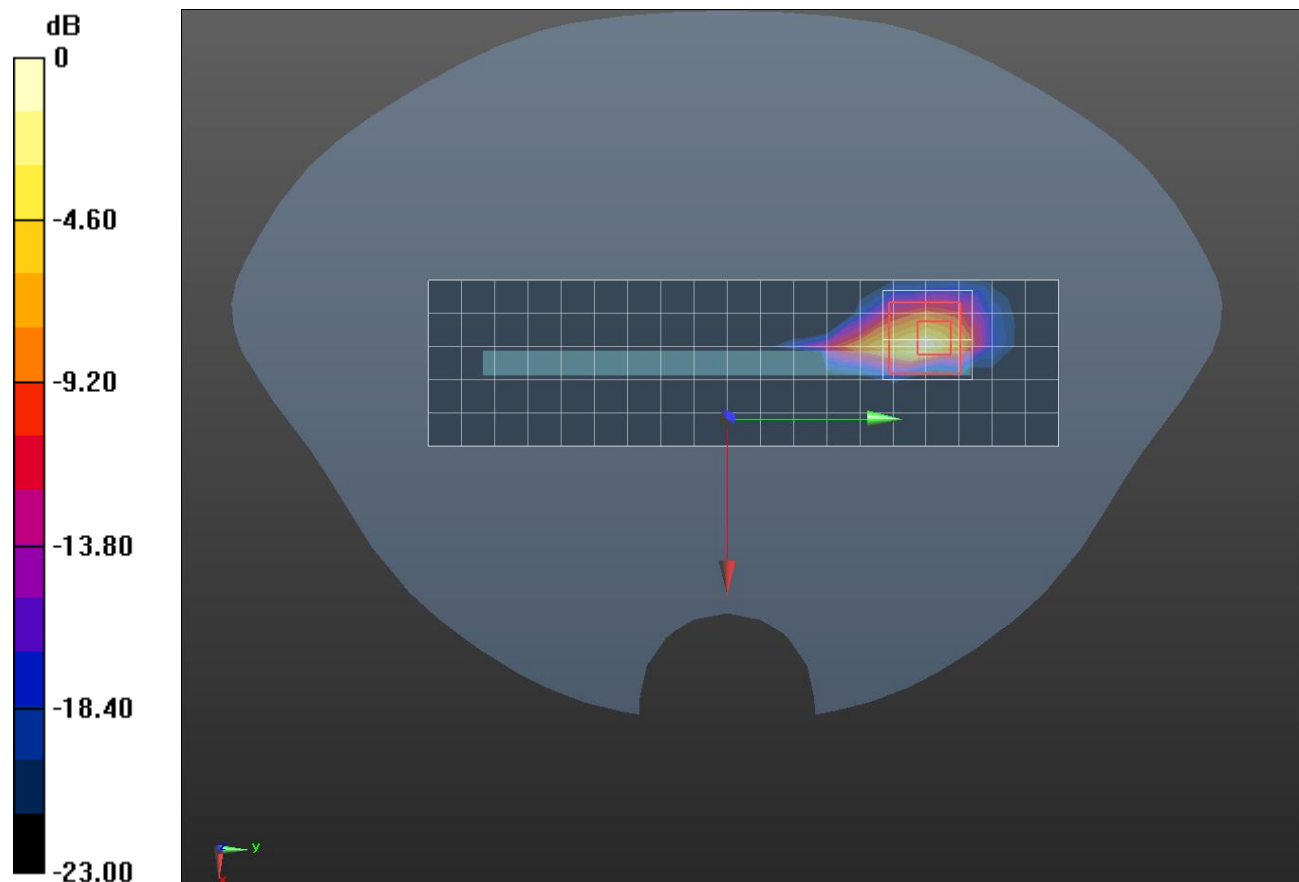
Peak SAR (extrapolated) = 60.5 W/kg

SAR(1 g) = 7.93 W/kg; SAR(10 g) = 1.7 W/kg

Smallest distance from peaks to all points 3 dB below = 3.8 mm

Ratio of SAR at M2 to SAR at M1 = 53.2%

Maximum value of SAR (measured) = 26.8 W/kg



0 dB = 20.1 W/kg = 13.03 dBW/kg

Measurement Report for SM-S921U, CHEEK, WLAN 5GHz, IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle), Channel 155 (5775.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	WLAN 5GHz	WLAN, 10626-AAC	5775.0, 155	5.03	5.18	34.9

Hardware Setup

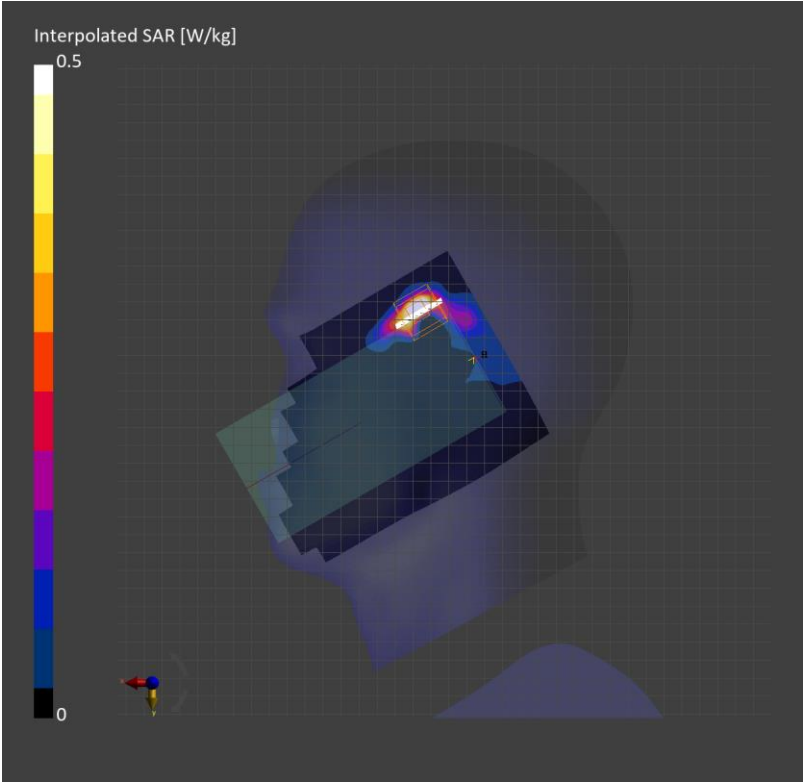
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Oct-03	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	3.7 x 3.7 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.410	0.489
psSAR10g [W/Kg]	0.105	0.117
Power Drift [dB]	0.12	
M2 / M1 [%]		64.4
Dist 3dB Peak [mm]		3.8



Measurement Report for SM-S921U, REAR, WLAN 5GHz, IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle), Channel 155 (5775.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	WLAN 5GHz	WLAN, 10626-AAC	5775.0, 155	5.03	5.18	34.9

Hardware Setup

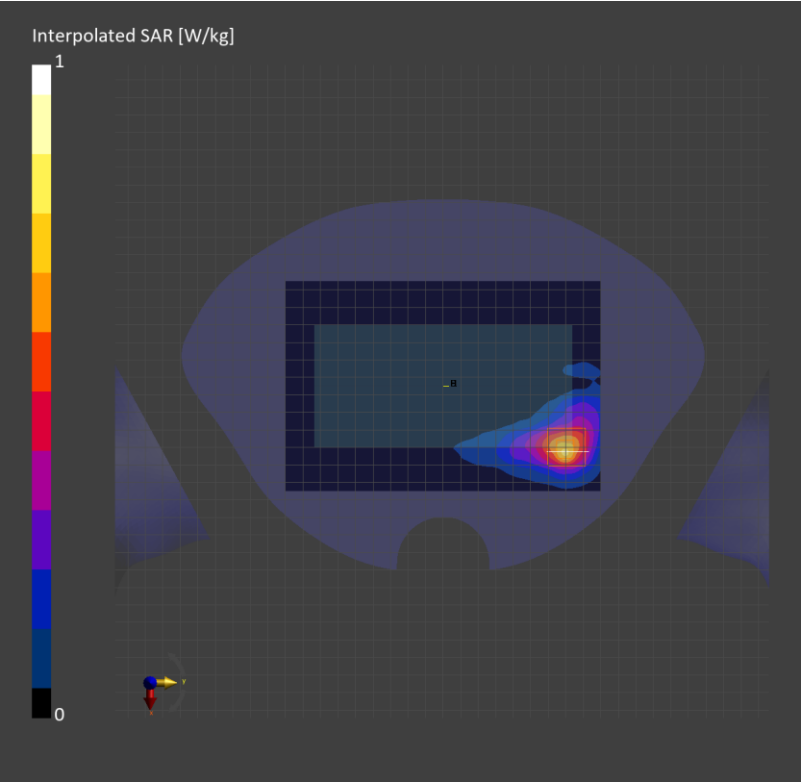
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 1991	HBBL-600-10000, 2023-Oct-03	EX3DV4 – SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.560	0.560
psSAR10g [W/Kg]	0.214	0.206
Power Drift [dB]	0.10	
M2/M1 [%]		66.6
Dist 3dB Peak [mm]		9.4



Measurement Report for SM-S921U, CHEEK, WLAN 5GHz, IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle), Channel 155 (5775.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	WLAN 5GHz	WLAN, 10626-AAC	5775.0, 155	5.03	5.18	34.9

Hardware Setup

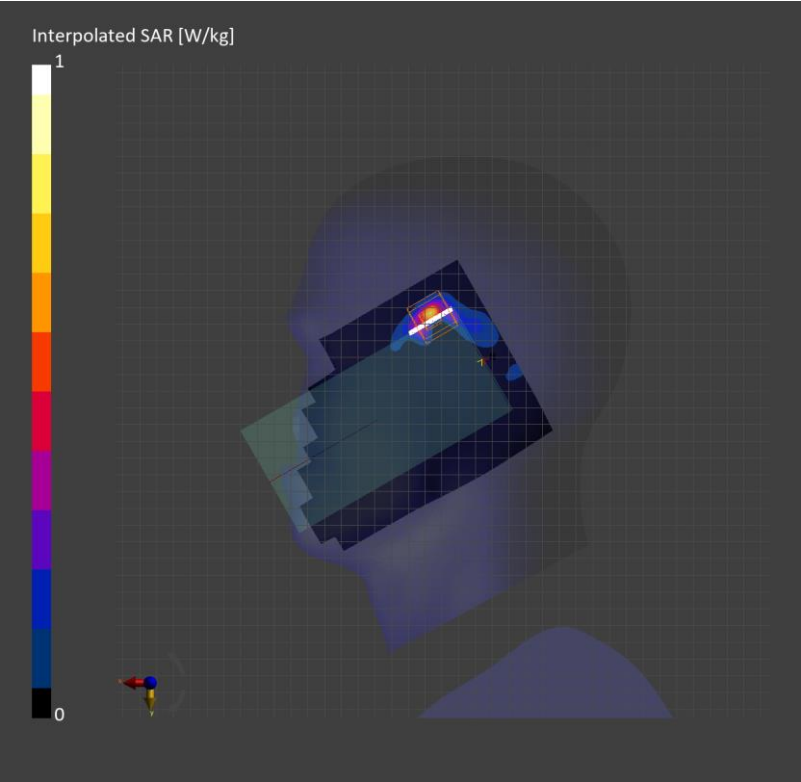
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Oct-03	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	3.7 x 3.7 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.401	0.519
psSAR10g [W/Kg]	0.112	0.132
Power Drift [dB]	0.01	
M2 / M1 [%]		64.4
Dist 3dB Peak [mm]		4.5



Measurement Report for SM-S921U, REAR, WLAN 5GHz, IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle), Channel 155 (5775.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	WLAN 5GHz	WLAN, 10626-AAC	5775.0, 155	5.03	5.18	34.9

Hardware Setup

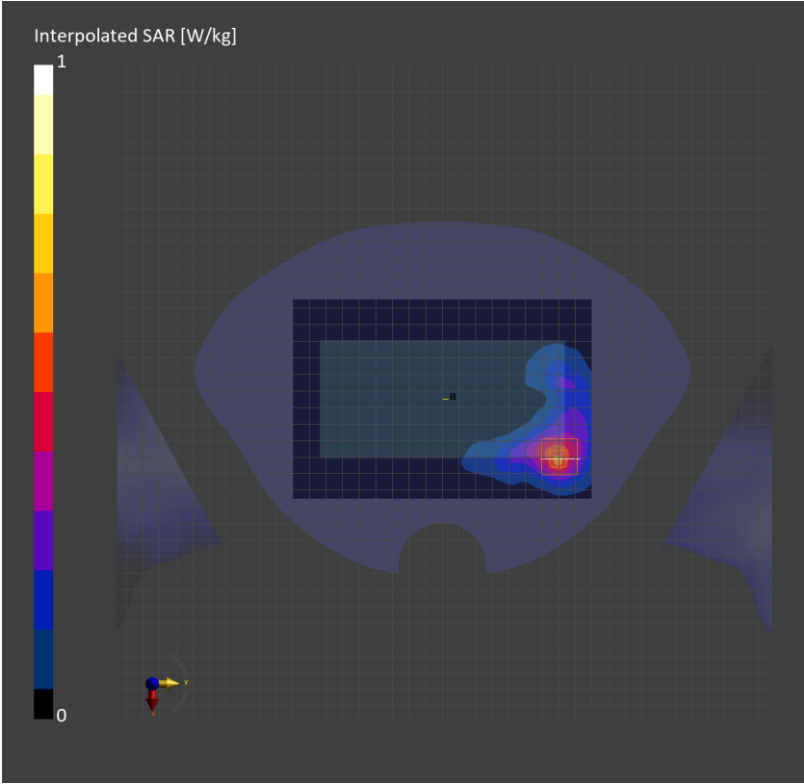
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 1991	HBBL-600-10000, 2023-Oct-03	EX3DV4 – SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.452	0.448
psSAR10g [W/Kg]	0.178	0.170
Power Drift [dB]	0.16	
M2/M1 [%]		66.1
Dist 3dB Peak [mm]		10.5



Measurement Report for SM-S921U, CHEEK, Custom Band, IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle), Channel 5855000 (5855.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	Custom Band	CW, 10626-AAC	5855.0, 5855000	5.03	5.29	34.8

Hardware Setup

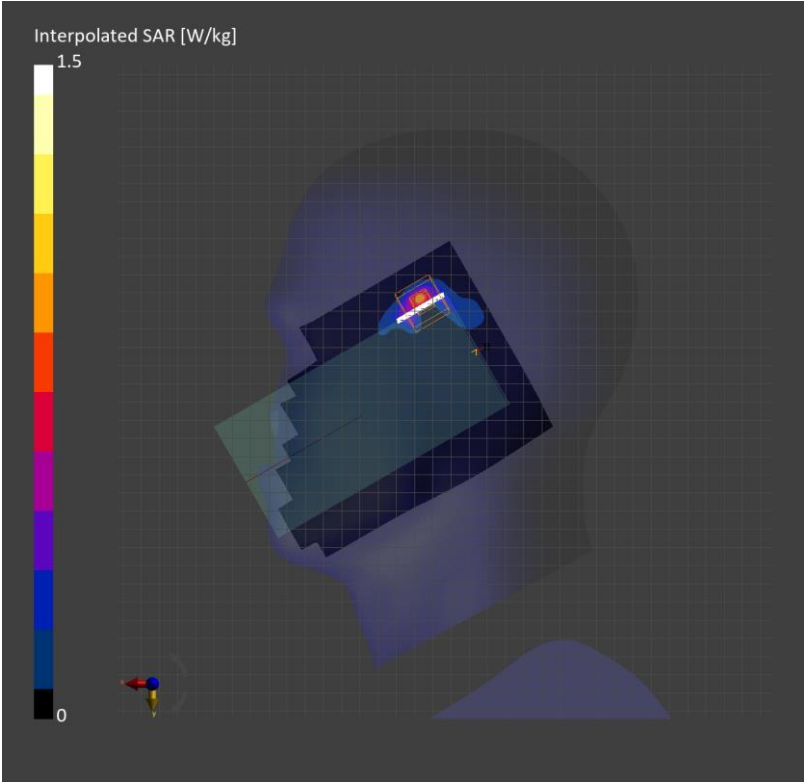
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 1991	HBBL-600-10000, 2023-Oct-03	EX3DV4 – SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	3.7 x 3.7 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.501	0.659
psSAR10g [W/Kg]	0.136	0.165
Power Drift [dB]	0.11	
M2/M1 [%]		62.7
Dist 3dB Peak [mm]		3.8



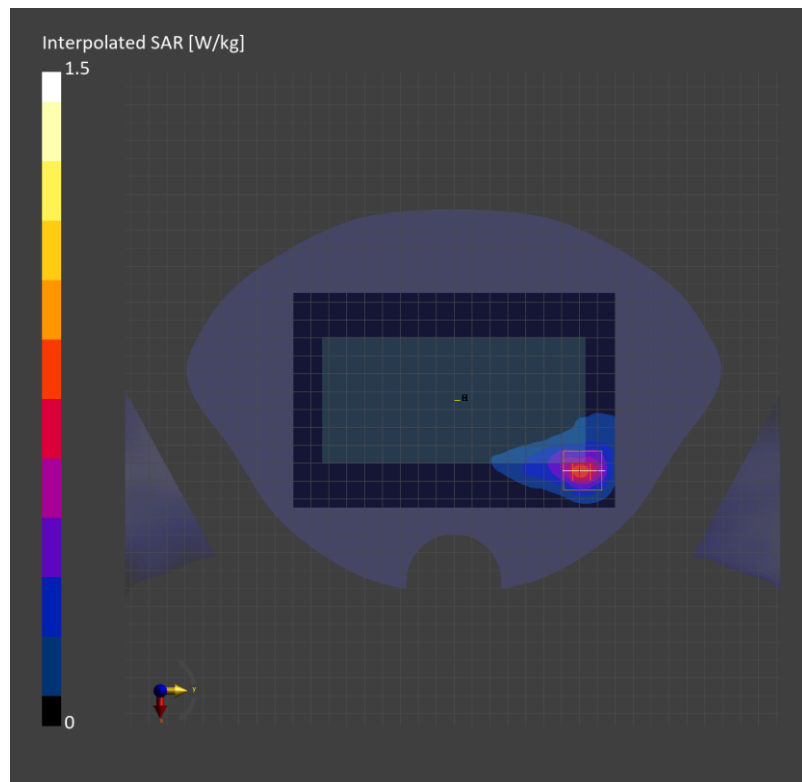
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Custom Band	CW, 10626-AAC	5855.0, 5855000	5.03	5.29	34.8

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) – 1991	HBBL-600-10000, 2023-Oct-03	EX3DV4 – SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.600	0.611
psSAR10g [W/Kg]	0.210	0.212
Power Drift [dB]	-0.06	
M2/M1 [%]		65.4
Dist 3dB Peak [mm]		8.0



Measurement Report for SM-S921U, REAR, Custom Band, IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle), Channel 5855000 (5855.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 0.00	Custom Band	CW, 10626-AAC	5855.0, 5855000	5.03	5.29	34.8

Hardware Setup

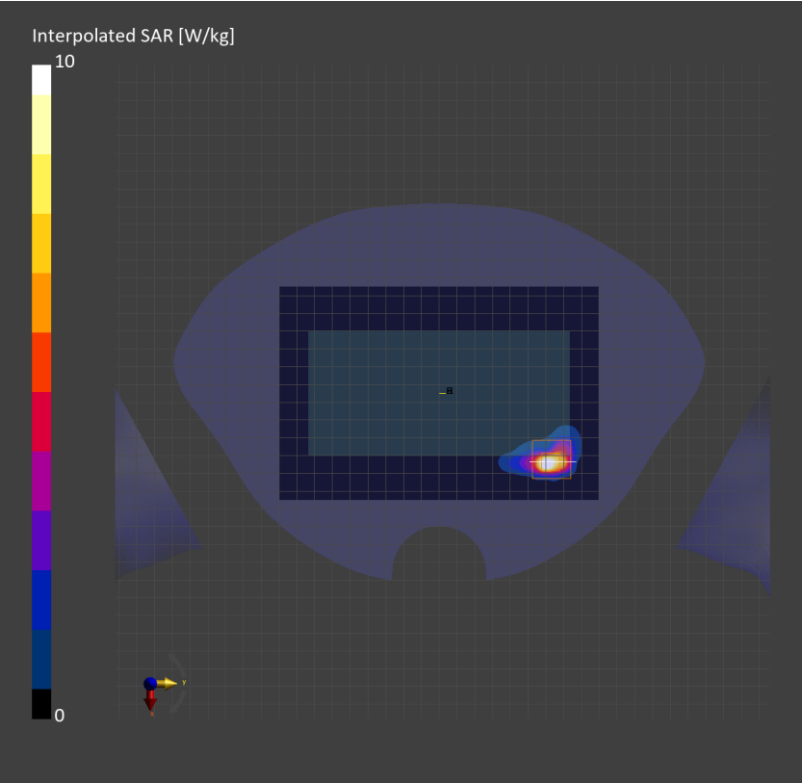
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Oct-03	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	2.6 x 2.6 x 1.2
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	6.57	6.97
psSAR10g [W/Kg]	1.76	1.79
Power Drift [dB]	0.01	
M2/M1 [%]		65.6
Dist 3dB Peak [mm]		3.7



Wi-Fi 5.9 GHz

Frequency: 5855 MHz; Communication System Channel Number: 171; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used: $f = 5855$ MHz; $\sigma = 5.221$ S/m; $\epsilon_r = 36.116$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1591; Calibrated: 3/22/2023
- Probe: EX3DV4 - SN7651; ConvF(5.01, 5.42, 4.65) @ 5855 MHz; Calibrated: 5/30/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: SAM (20deg probe tilt) with CRP v5.0(Right); Phantom section: Right Section ; Type: QD000P40CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

RHS/Tilt 802.11 ac mode ch.171 MIMO/Area Scan (11x18x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.983 W/kg

RHS/Tilt 802.11 ac mode ch.171 MIMO/Zoom Scan (11x11x8)/Cube 0: Measurement grid: dx=3mm, dy=3mm, dz=1.4mm

Reference Value = 14.45 V/m; Power Drift = -0.19 dB

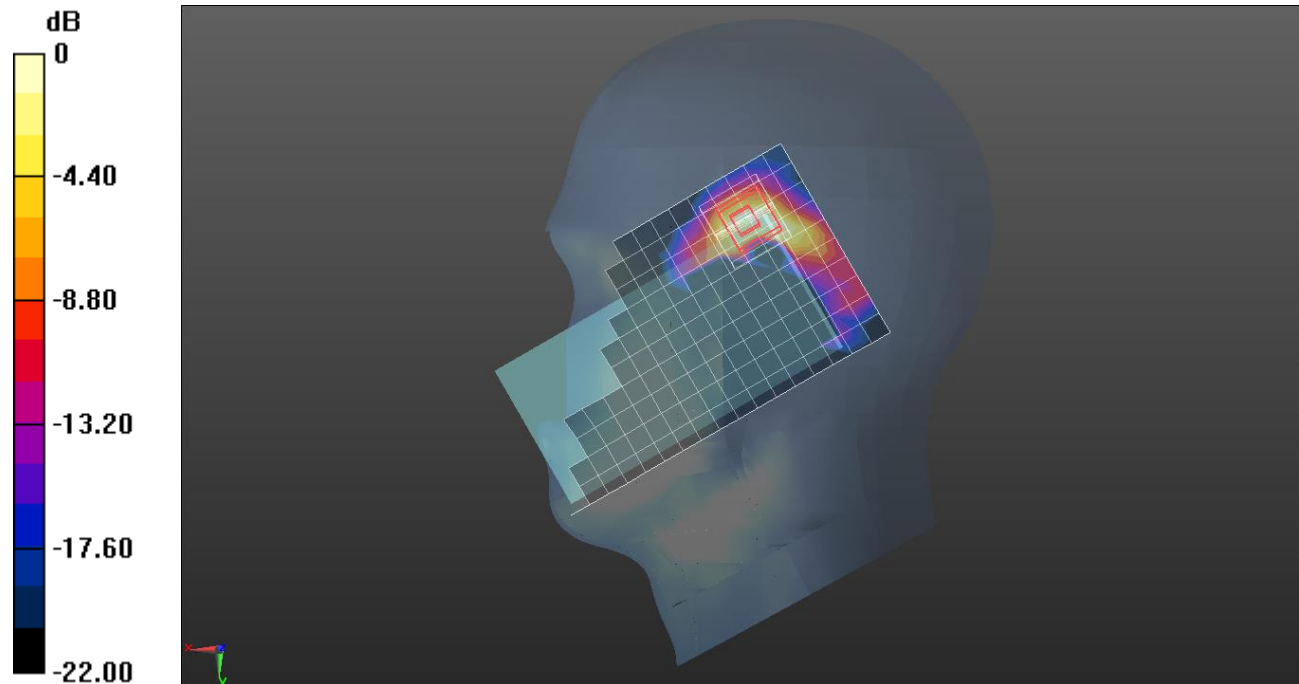
Peak SAR (extrapolated) = 2.29 W/kg

SAR(1 g) = 0.508 W/kg; SAR(10 g) = 0.136 W/kg

Smallest distance from peaks to all points 3 dB below = 4.2 mm

Ratio of SAR at M2 to SAR at M1 = 63.4%

Maximum value of SAR (measured) = 1.35 W/kg



0 dB = 0.983 W/kg = -0.07 dBW/kg

Measurement Report for SM-S921U, REAR, Custom Band, IEEE 802.11ac WIFI (80MHz, MCS0, 90pc duty cycle), Channel 5855000 (5855.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 10.00	Custom Band	CW, 10626-AAC	5855.0, 5855000	5.03	5.29	34.8

Hardware Setup

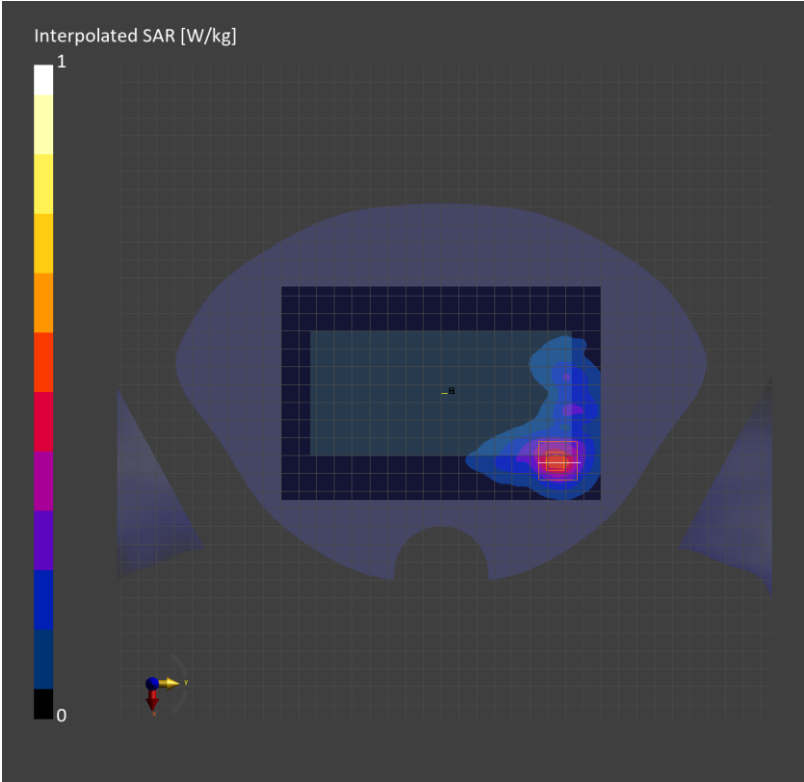
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000, 2023-Oct-03	EX3DV4 - SN7376, 2023-07-25	DAE4 Sn1667, 2023-04-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.416	0.396
psSAR10g [W/Kg]	0.157	0.141
Power Drift [dB]	0.05	
M2/M1 [%]		67.2
Dist 3dB Peak [mm]		9.7



Wi-Fi 5.9 GHz

Frequency: 5855 MHz; Communication System Channel Number: 171; Duty Cycle: 1:1

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used: $f = 5855$ MHz; $\sigma = 5.221$ S/m; $\epsilon_r = 36.116$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1591; Calibrated: 3/22/2023
- Probe: EX3DV4 - SN7651; ConvF(5.01, 5.42, 4.65) @ 5855 MHz; Calibrated: 5/30/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: SAM (20deg probe tilt) with CRP v5.0(Right); Phantom section: Flat Section ; Type: QD000P40CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Rear/802.11 ac mode ch.171 MIMO/Area Scan 2 (20x12x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 15.1 W/kg

Rear/802.11 ac mode ch.171 MIMO /Zoom Scan (10x10x8)/Cube 0: Measurement grid: dx=3mm, dy=3mm, dz=1.4mm

Reference Value = 56.23 V/m; Power Drift = 0.15 dB

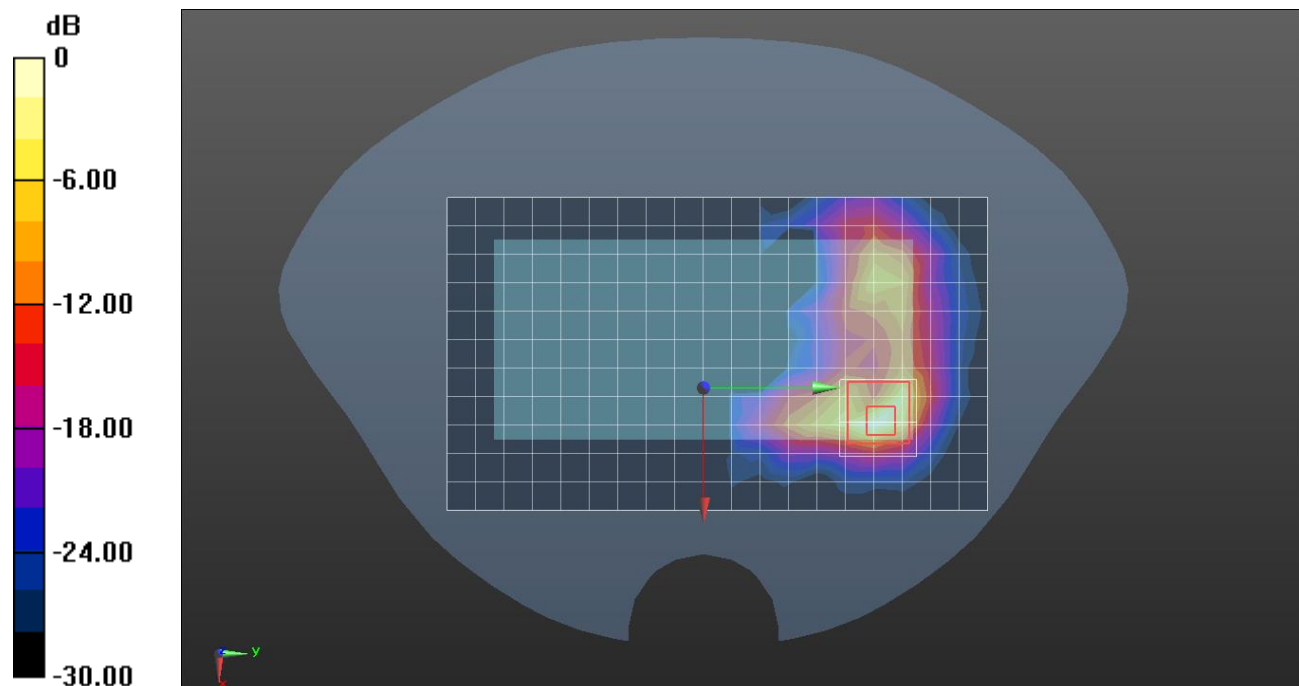
Peak SAR (extrapolated) = 33.8 W/kg

SAR(1 g) = 5.22 W/kg; SAR(10 g) = 1.3 W/kg

Smallest distance from peaks to all points 3 dB below = 3.5 mm

Ratio of SAR at M2 to SAR at M1 = 58.2%

Maximum value of SAR (measured) = 16.7 W/kg



0 dB = 15.1 W/kg = 11.79 dBW/kg

Bluetooth

Frequency: 2440 MHz; Communication System Channel Number: 19; Duty Cycle: 1:1.65653

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

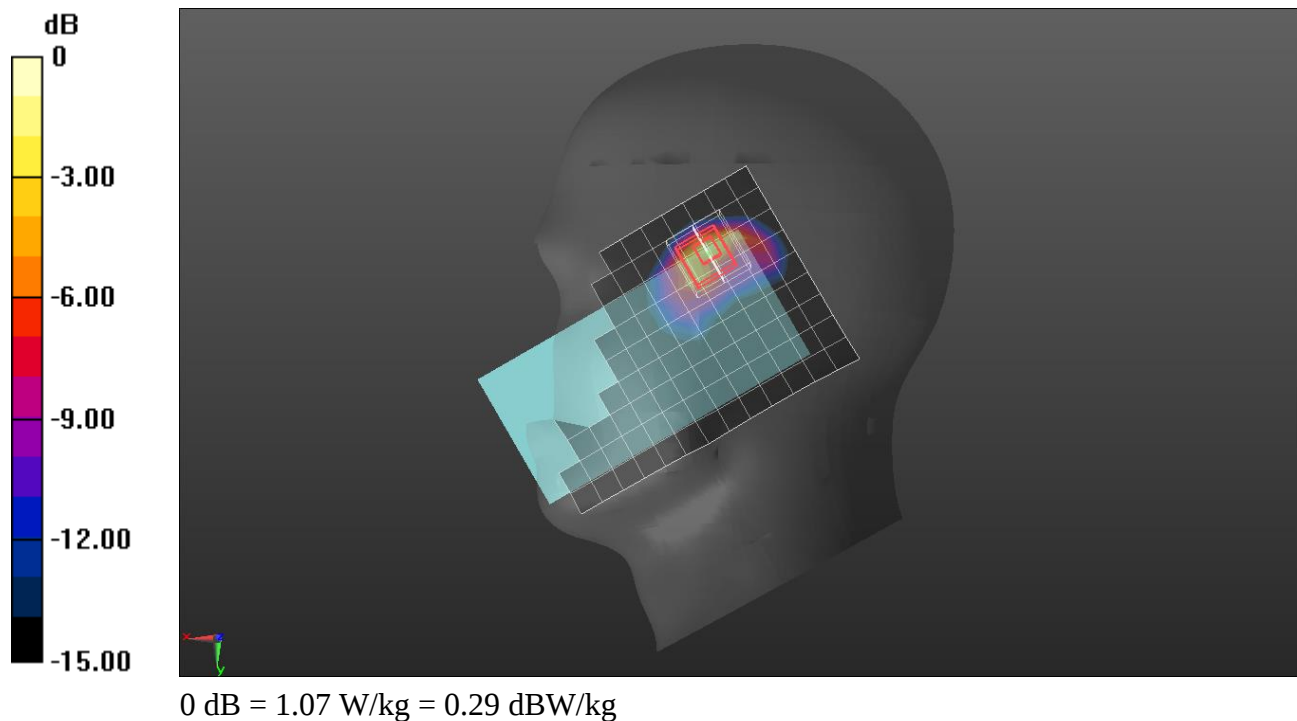
Medium parameters used: $f = 2440$ MHz; $\sigma = 1.813$ S/m; $\epsilon_r = 39.501$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 7/17/2023
- Probe: EX3DV4 - SN7330; ConvF(8.04, 8.04, 8.04) @ 2440 MHz; Calibrated: 1/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Phantom section: Right Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

RHS/Touch Bluetooth LE ch.0 Ant.1/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.879 W/kg

RHS/Touch Bluetooth LE ch.0 Ant.1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.12 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 1.37 W/kg
SAR(1 g) = 0.520 W/kg; SAR(10 g) = 0.219 W/kg
Smallest distance from peaks to all points 3 dB below = 5 mm
Ratio of SAR at M2 to SAR at M1 = 40.1%
Maximum value of SAR (measured) = 1.07 W/kg



Bluetooth

Frequency: 2402 MHz; Communication System Channel Number: 0; Duty Cycle: 1:1.65653

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2402$ MHz; $\sigma = 1.783$ S/m; $\epsilon_r = 39.004$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 7/17/2023
- Probe: EX3DV4 - SN7330; ConvF(8.04, 8.04, 8.04) @ 2402 MHz; Calibrated: 1/24/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Phantom section: Flat Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Right/Bluetooth LE ch.0 Ant.1/Area Scan (17x6x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.613 W/kg

Right/Bluetooth LE ch.0 Ant.1/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.39 V/m; Power Drift = -0.14 dB

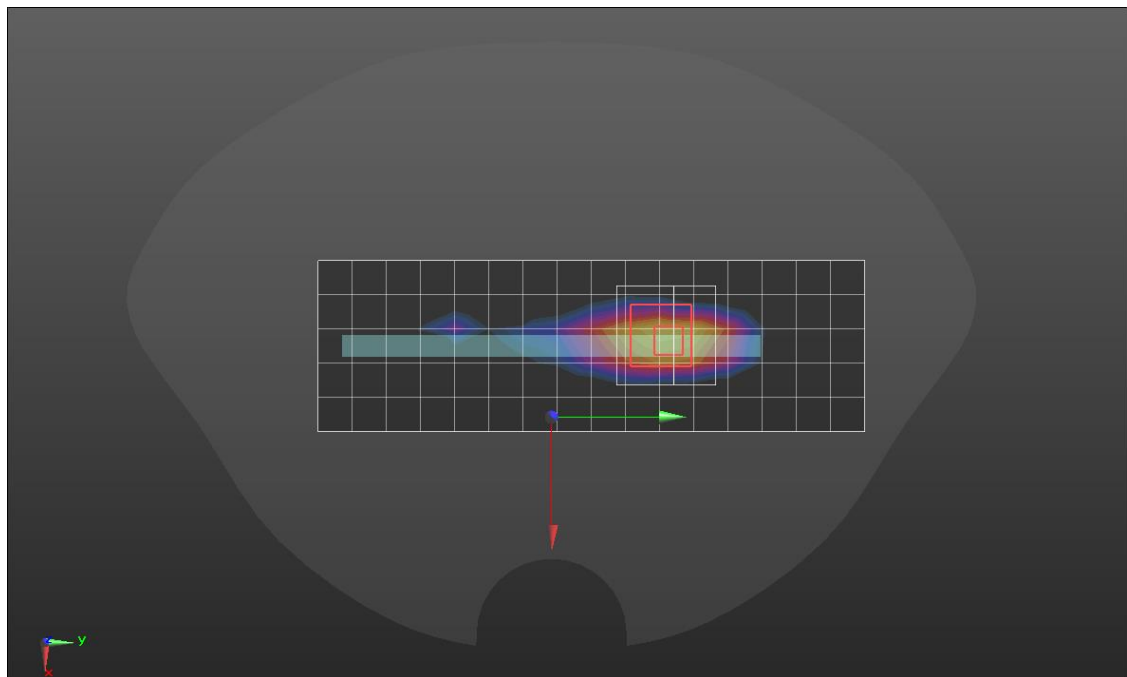
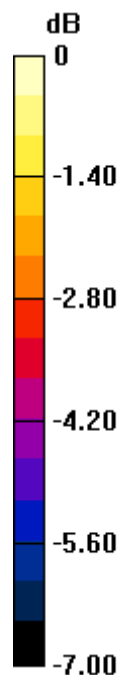
Peak SAR (extrapolated) = 0.926 W/kg

SAR(1 g) = 0.503 W/kg; SAR(10 g) = 0.246 W/kg

Smallest distance from peaks to all points 3 dB below = 4 mm

Ratio of SAR at M2 to SAR at M1 = 58.3%

Maximum value of SAR (measured) = 0.750 W/kg



0 dB = 0.750 W/kg = -1.25 dBW/kg

Bluetooth

Frequency: 2402 MHz; Communication System Channel Number: 0; Duty Cycle: 1:1.65653

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2402$ MHz; $\sigma = 1.696$ S/m; $\epsilon_r = 38.058$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1591; Calibrated: 3/22/2023
- Probe: EX3DV4 - SN7651; ConvF(7.64, 8.24, 7.08) @ 2402 MHz; Calibrated: 5/30/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: SAM (20deg probe tilt) with CRP v5.0(Right); Phantom section: Left Section ; Type: QD000P40CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LHS/Touch Bluetooth LE ch.0 Ant.2/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.453 W/kg

LHS/Touch Bluetooth LE ch.0 Ant.2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.46 V/m; Power Drift = -0.02 dB

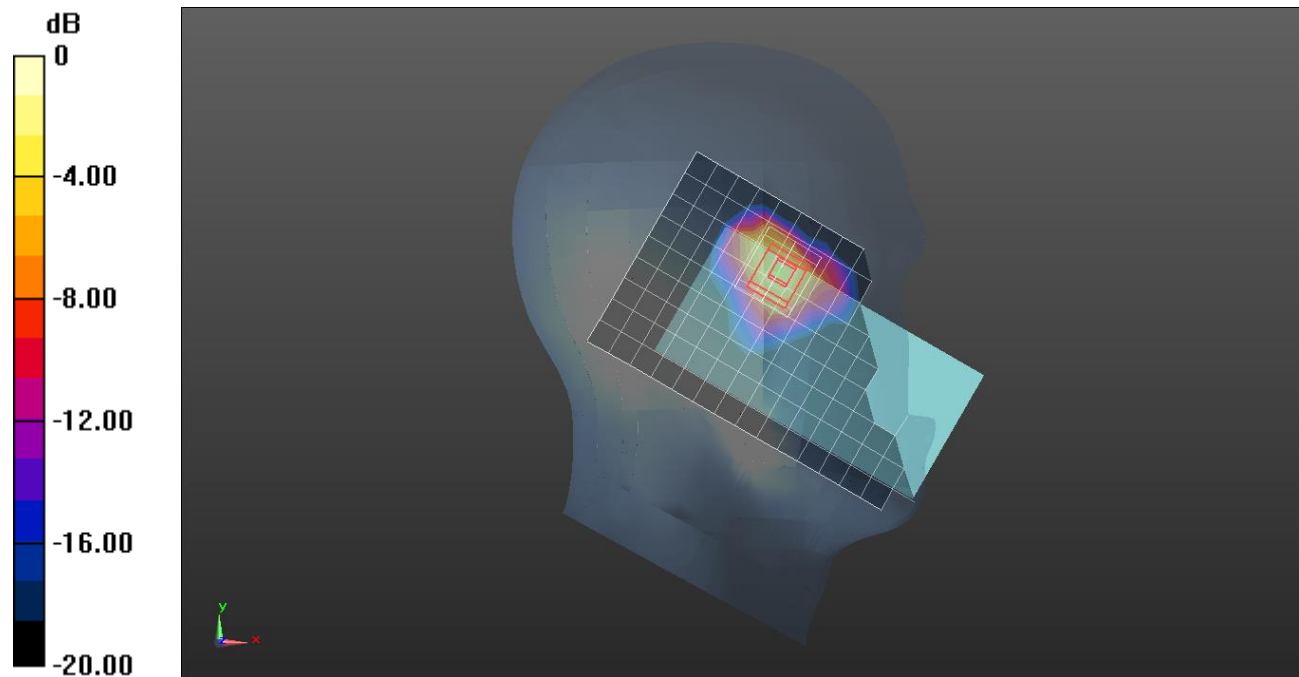
Peak SAR (extrapolated) = 0.997 W/kg

SAR(1 g) = 0.465 W/kg; SAR(10 g) = 0.192 W/kg

Smallest distance from peaks to all points 3 dB below = 7.1 mm

Ratio of SAR at M2 to SAR at M1 = 52.3%

Maximum value of SAR (measured) = 0.787 W/kg



0 dB = 0.787 W/kg = -1.04 dBW/kg

Measurement Report for SM-S921U, CHEEK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 39 (2441.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2441.0, 39	7.52	1.82	39.2

Hardware Setup

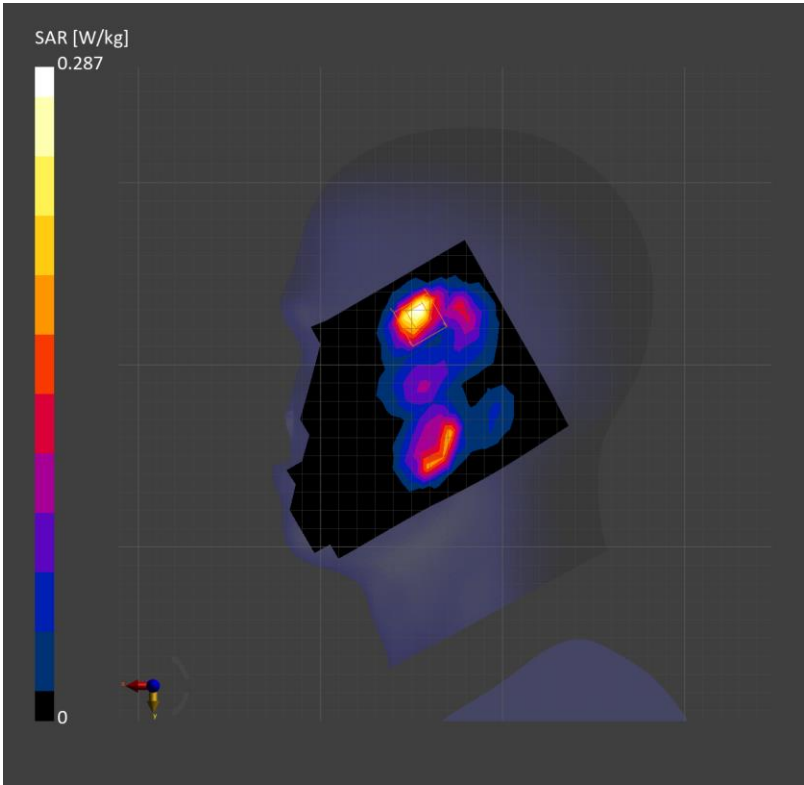
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000 Charge:xxxx, 2023-Nov-03	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.219	0.242
psSAR10g [W/Kg]	0.094	0.096
Power Drift [dB]	-0.04	-0.02
M2 / M1 [%]		73.2
Dist 3dB Peak [mm]		6.3



Bluetooth MIMO

Frequency: 2441 MHz; Communication System Channel Number: 39; Duty Cycle: 1:1.17625

Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C

Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.765$ S/m; $\epsilon_r = 37.673$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1591; Calibrated: 3/22/2023
- Probe: EX3DV4 - SN7651; ConvF(7.64, 8.24, 7.08) @ 2441 MHz; Calibrated: 5/30/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: SAM (20deg probe tilt) with CRP v5.0(Right); Phantom section: Flat Section ; Type: QD000P40CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Rear Right/Bluetooth GFSK_ch.39 MIMO 10mm 2/Area Scan (16x8x1): Measurement grid:

dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.176 W/kg

Rear Right/Bluetooth GFSK_ch.39 MIMO 10mm 2/Zoom Scan (7x8x7)/Cube 0: Measurement

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

Reference Value = 9.918 V/m; Power Drift = 0.02 dB

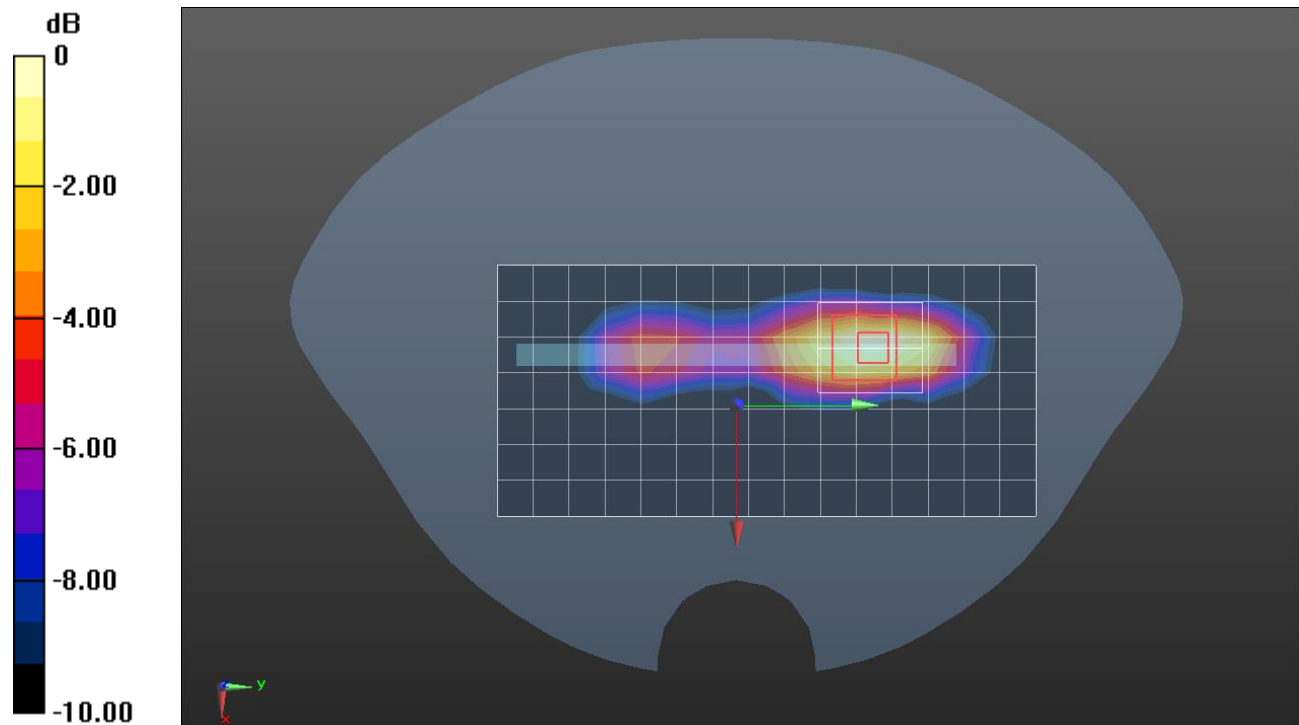
Peak SAR (extrapolated) = 0.232 W/kg

SAR(1 g) = 0.124 W/kg; SAR(10 g) = 0.062 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 54.2%

Maximum value of SAR (measured) = 0.195 W/kg



0 dB = 0.176 W/kg = -7.54 dBW/kg

Measurement Report for SM-S921U, CHEEK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 39 (2441.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	CHEEK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2441.0, 39	7.52	1.82	39.2

Hardware Setup

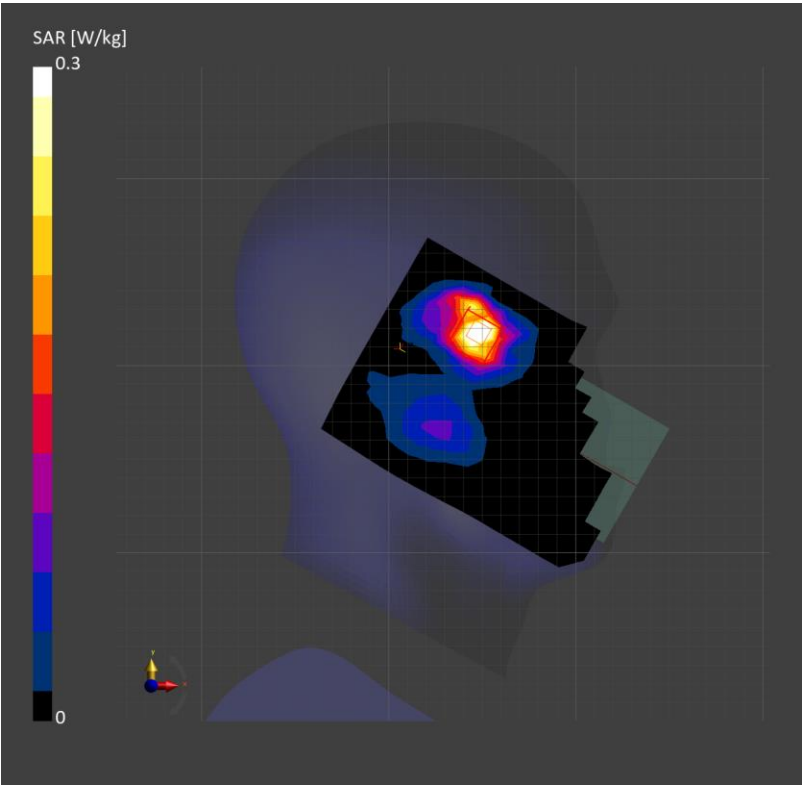
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2037	HBBL-600-10000 Charge:xxxx, 2023-Nov-03	EX3DV4 - SN7545, 2023-08-25	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	4.9 x 4.9 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.304	0.344
psSAR10g [W/Kg]	0.133	0.150
Power Drift [dB]	0.30	0.00
M2 / M1 [%]		80.1
Dist 3dB Peak [mm]		7.1



Measurement Report for Device, REAR, Custom Band, CW, Channel 13600 (13.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	REAR, 0.00	Custom Band	CW, 0--	13.6, 13600	17.89	0.741	56.0

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V6.0 (20deg probe tilt) - 2005	HBBL-600-10000, 2023-Oct-17	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	36.0 x 36.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.041	0.043
psSAR10g [W/Kg]	0.027	0.016
Power Drift [dB]		0.08
M2/M1 [%]		54.4
Dist 3dB Peak [mm]		5.4

