

Measurement Report for SM-A556D, Right Touch, GSM 850, GSM-FDD (TDMA, GMSK), Channel 190 (836.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	Touch, 0.00	GSM 850	GSM, 10021-DAC	836.6	8.39	0.906	42.9

Hardware Setup

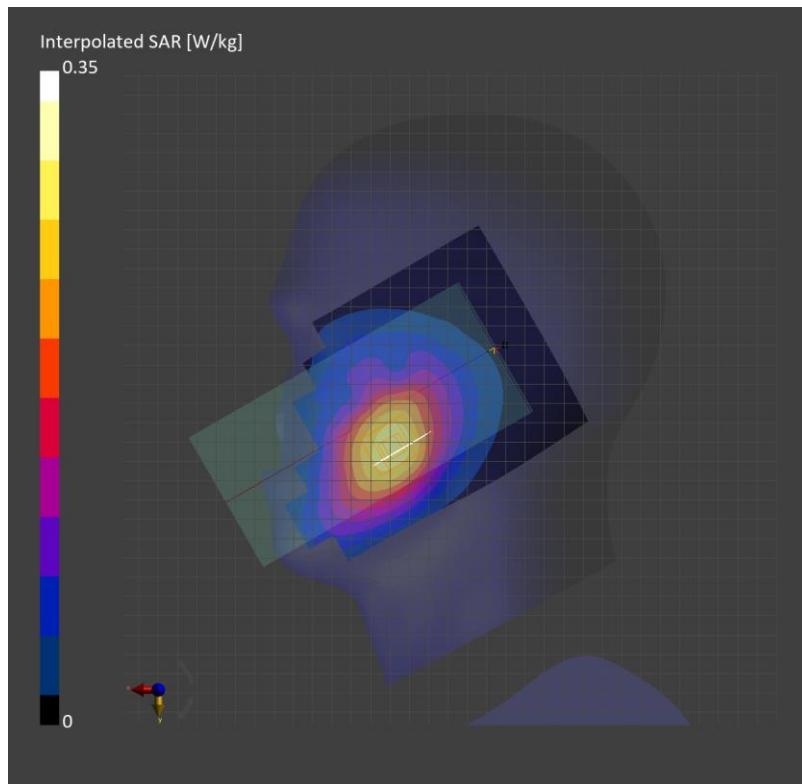
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000	EX3DV4 - SN7313, 2023-03-24	DAE4 Sn1667, 2023-04-24

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]	0.251	0.271
psSAR10g [W/Kg]	0.173	0.208
Power Drift [dB]		-0.01
M2/M1 [%]		95.8
Dist 3dB Peak [mm]		> 15.0



Measurement Report for SM-A556D, Rear, GSM 850, GPRS-FDD (TDMA, GMSK, TN 0-1-2), Channel 190 (836.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	Rear, 10.00	GSM 850	GSM, 10027-DAC	836.6	8.39	0.922	40.9

Hardware Setup

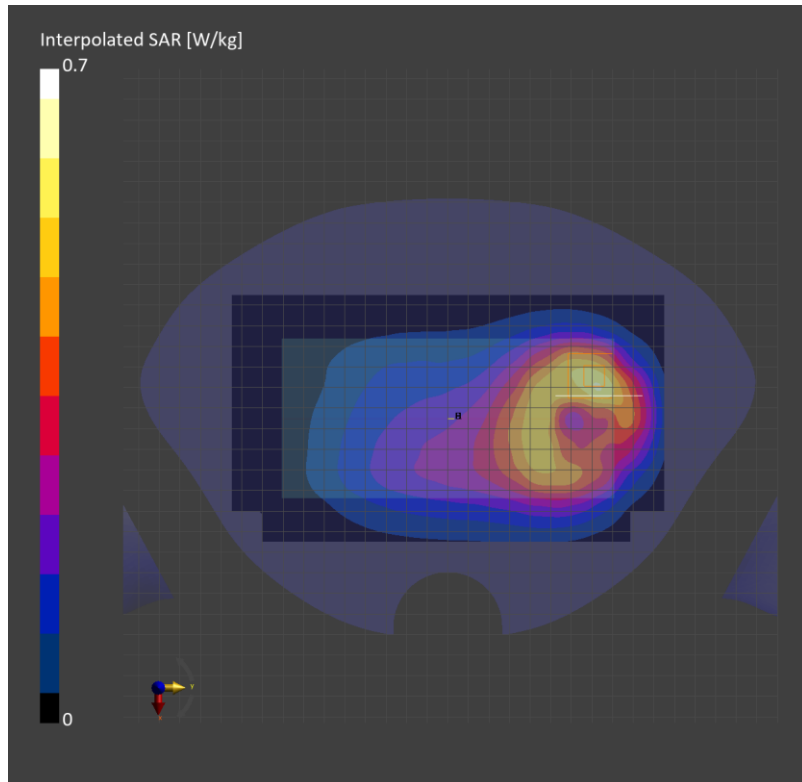
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000	EX3DV4 - SN7313, 2023-03-24	DAE4 Sn1667, 2023-04-24

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]	0.505	0.502
psSAR10g [W/Kg]	0.332	0.305
Power Drift [dB]		-0.03
M2/M1 [%]		84.5
Dist 3dB Peak [mm]		11.9



GSM 1900

Frequency: 1909.8 MHz; Communication System Channel Number: 810; Duty Cycle: 1:2.60016
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used: $f = 1910$ MHz; $\sigma = 1.394$ S/m; $\epsilon_r = 39.585$; $\rho = 1000$ 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 - SN3871; ConvF(8.31, 7.78, 8.15) @ 1909.8 MHz; Calibrated: 8/25/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (Right); 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 GPRS 3 slots ch.810/Area Scan (10x15x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.0526 W/kg

LHS/Touch GPRS 3 slots ch.810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.364 V/m; Power Drift = -0.03 dB

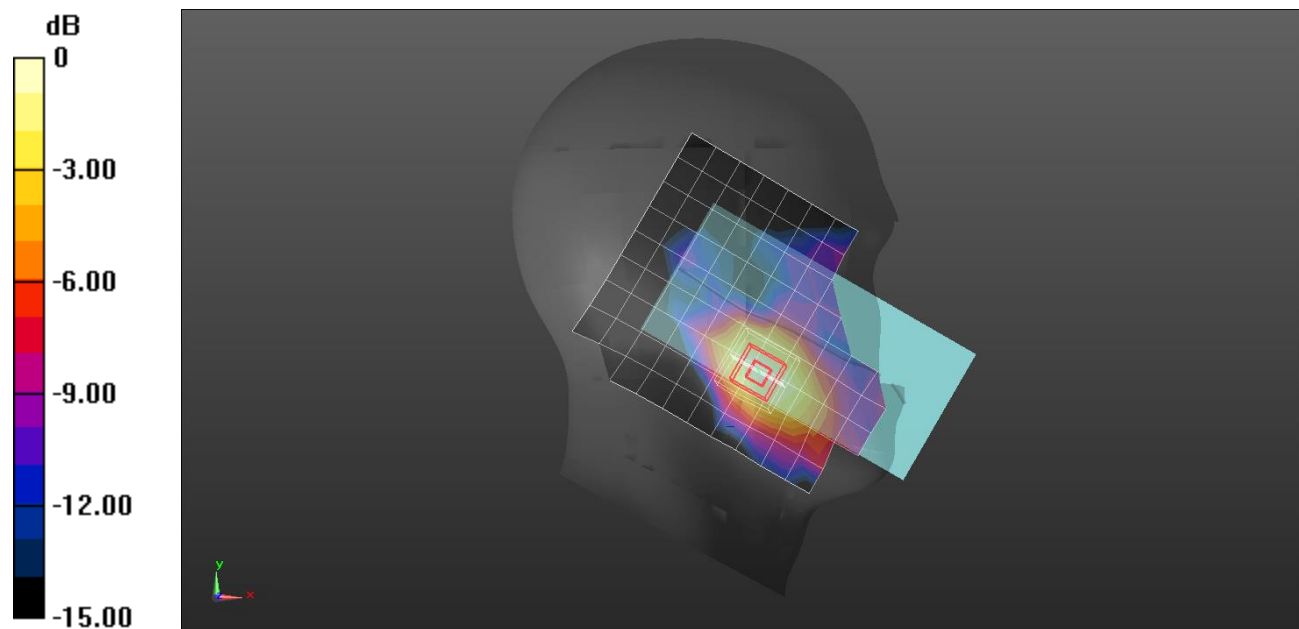
Peak SAR (extrapolated) = 0.0600 W/kg

SAR(1 g) = 0.041 W/kg; SAR(10 g) = 0.027 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)

Ratio of SAR at M2 to SAR at M1 = 70.6%

Maximum value of SAR (measured) = 0.0541 W/kg



0 dB = 0.0541 W/kg = -12.67 dBW/kg

GSM 1900

Frequency: 1909.8 MHz; Communication System Channel Number: 810; Duty Cycle: 1:4.00037

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

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.404$ S/m; $\epsilon_r = 39.636$; $\rho = 1000$ kg/m³

DASY5 Configuration:

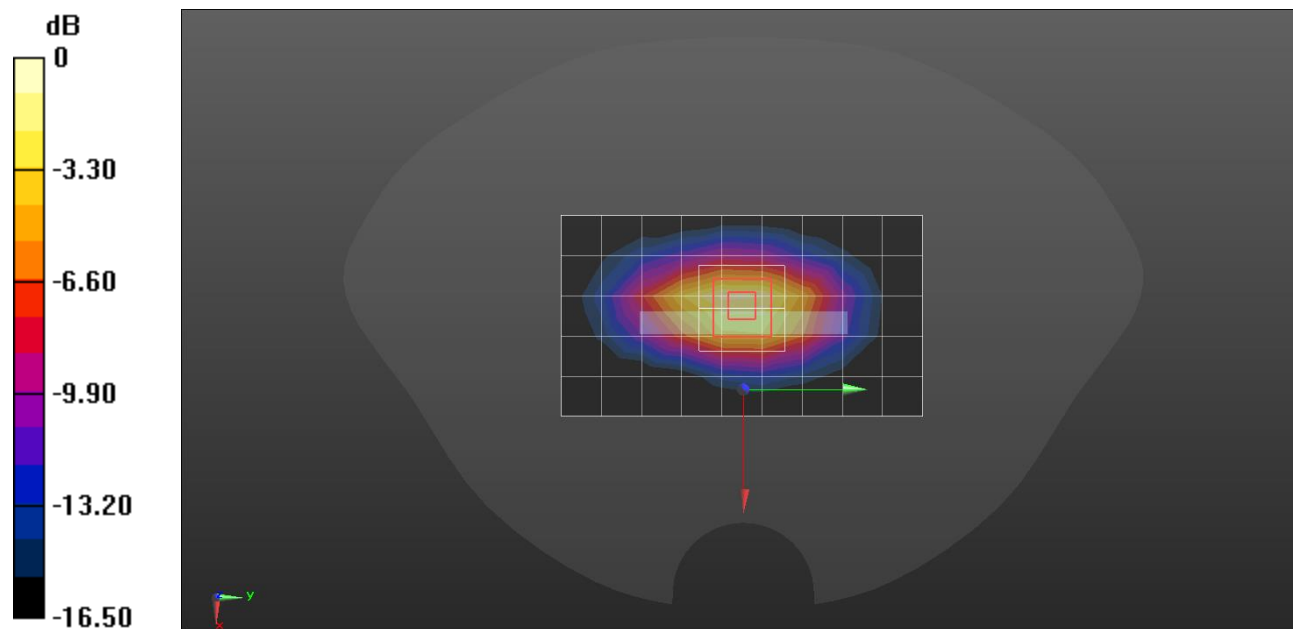
- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1668; Calibrated: 4/26/2023
- Probe: EX3DV4 - SN3871; ConvF(8.31, 7.78, 8.15) @ 1909.8 MHz; Calibrated: 8/25/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- 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 (7501)

Bottom/GPRS 2 slots ch.810/Area Scan (10x6x1):

Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.802 W/kg

Bottom/GPRS 2 slots ch.810/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 24.89 V/m; Power Drift = 0.05 dB
 Peak SAR (extrapolated) = 1.10 W/kg
SAR(1 g) = 0.672 W/kg; SAR(10 g) = 0.371 W/kg
 Smallest distance from peaks to all points 3 dB below = 10.1 mm
 Ratio of SAR at M2 to SAR at M1 = 62.1%
 Maximum value of SAR (measured) = 0.965 W/kg



0 dB = 0.965 W/kg = -0.15 dBW/kg

Measurement Report for SM-A556D, Right Touch, Band 5, UMS-FDD (WCDMA), Channel 4183 (836.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	Touch, 0.00	Band 5	WCDMA, 10011-CAC	836.6	8.39	0.907	42.4

Hardware Setup

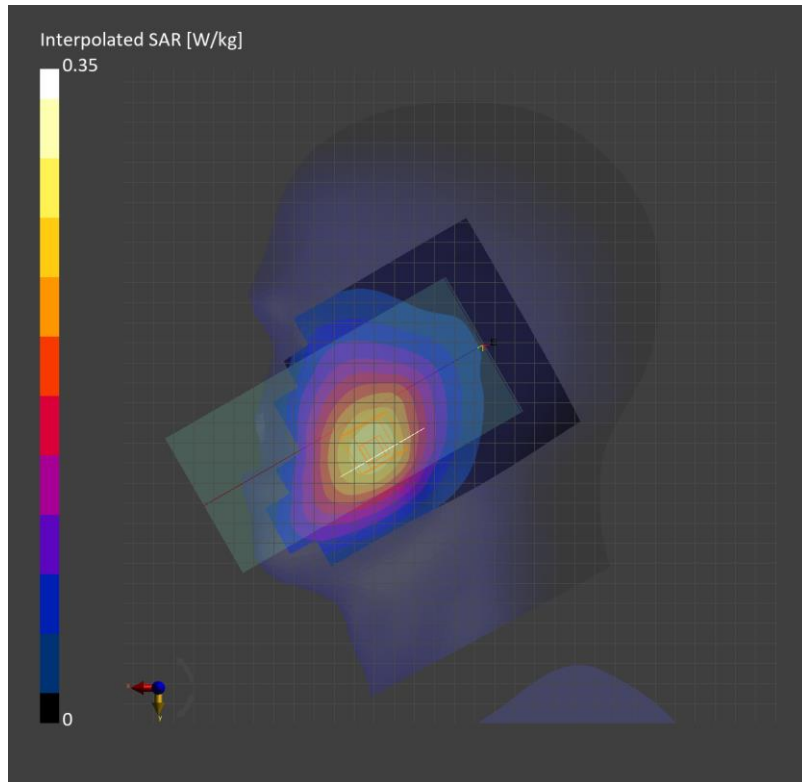
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000	EX3DV4 - SN7313, 2023-03-24	DAE4 Sn1667, 2023-04-24

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]	0.253	0.268
psSAR10g [W/Kg]	0.175	0.218
Power Drift [dB]		-0.06
M2/M1 [%]		95.0
Dist 3dB Peak [mm]		21.4



WCDMA Band V

Frequency: 836.6 MHz; Communication System Channel Number: 4183; Duty Cycle: 1:1
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.989$; $\rho = 1000$ 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 - SN3871; ConvF(9.61, 8.89, 9.47) @ 836.6 MHz; Calibrated: 8/25/2023
- 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 (7501)

Rear/Rel.99 ch.4183/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.677 W/kg

Rear/Rel.99 ch.4183/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.17 V/m; Power Drift = -0.06 dB

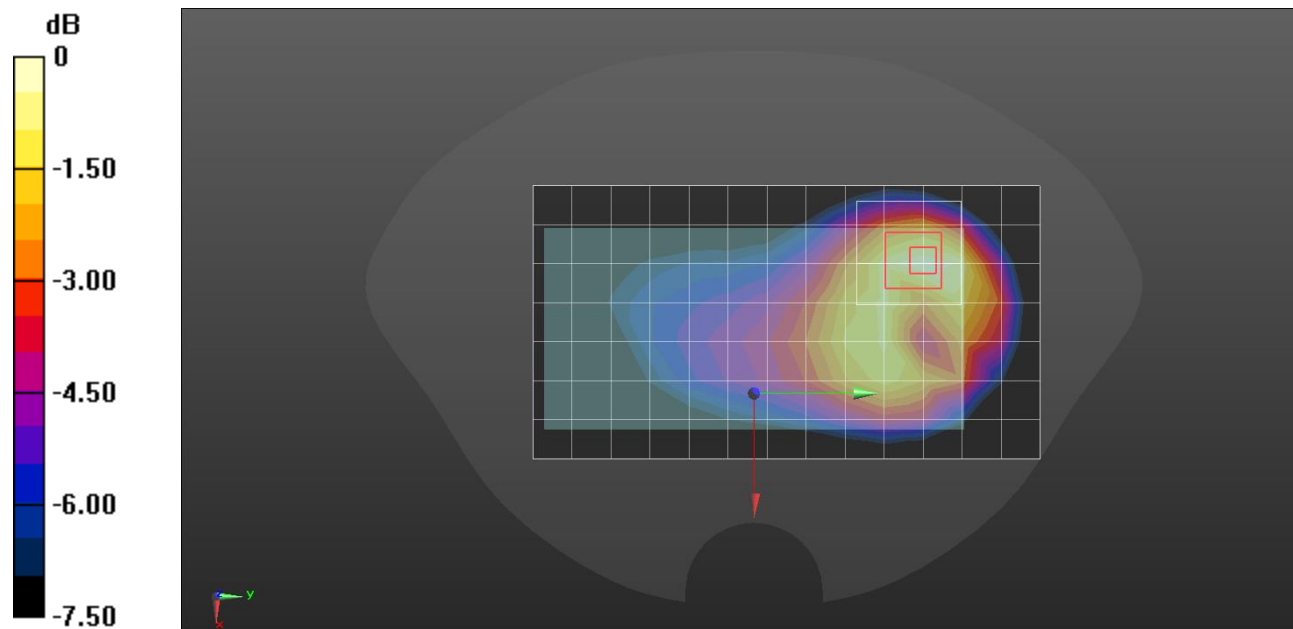
Peak SAR (extrapolated) = 0.760 W/kg

SAR(1 g) = 0.524 W/kg; SAR(10 g) = 0.339 W/kg

Smallest distance from peaks to all points 3 dB below = 16 mm

Ratio of SAR at M2 to SAR at M1 = 69.4%

Maximum value of SAR (measured) = 0.679 W/kg



0 dB = 0.679 W/kg = -1.68 dBW/kg

LTE Band 2

Frequency: 1900 MHz; Communication System Channel Number: 19100; Duty Cycle: 1:1
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.389$ S/m; $\epsilon_r = 39.593$; $\rho = 1000$ 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 - SN3871; ConvF(8.31, 7.78, 8.15) @ 1900 MHz; Calibrated: 8/25/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (Right); 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 QPSK RB 1/0 ch.19100/Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.100 W/kg

LHS/Touch QPSK RB 1/0 ch.19100/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.976 V/m; Power Drift = 0.13 dB

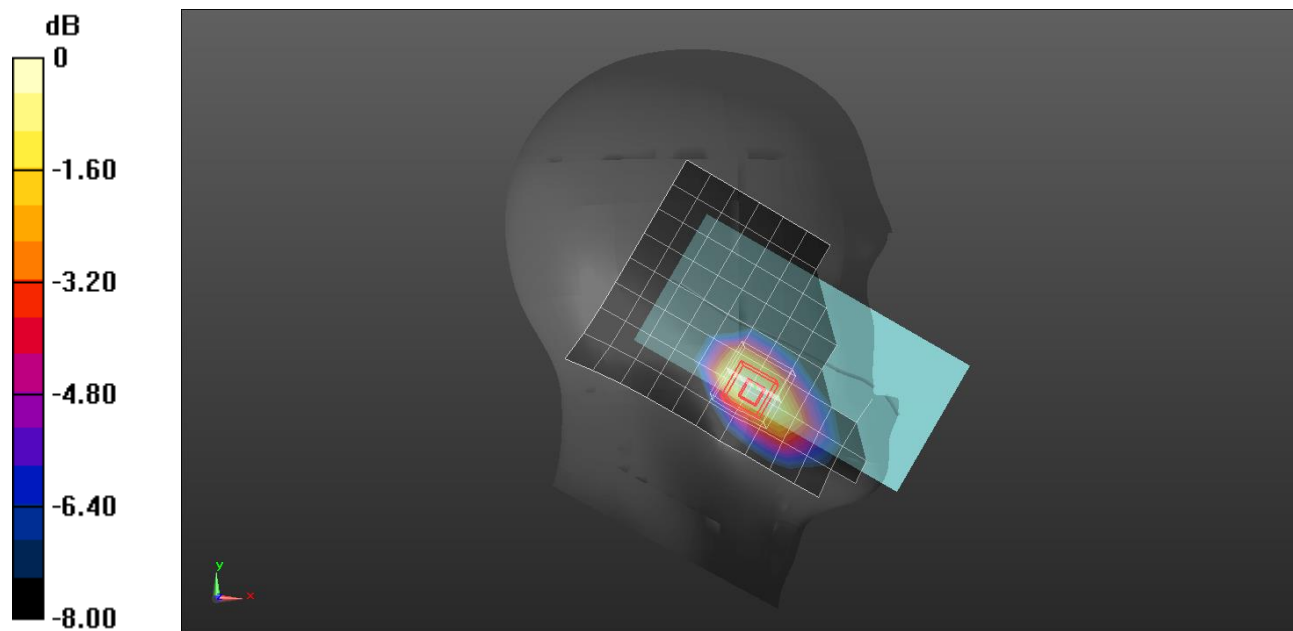
Peak SAR (extrapolated) = 0.113 W/kg

SAR(1 g) = 0.078 W/kg; SAR(10 g) = 0.051 W/kg

Smallest distance from peaks to all points 3 dB below = 10 mm

Ratio of SAR at M2 to SAR at M1 = 72.7%

Maximum value of SAR (measured) = 0.0970 W/kg



0 dB = 0.0970 W/kg = -10.13 dBW/kg

Measurement Report for SM-A556D, Bottom, Band 2, LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK) RBPosition:Low AntennaCfg:SISO, Channel 19100 (1900.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	Bottom, 10.00	Band 2	LTE-FDD, 10297-AAE	1900.0	8.14	1.43	38.6

Hardware Setup

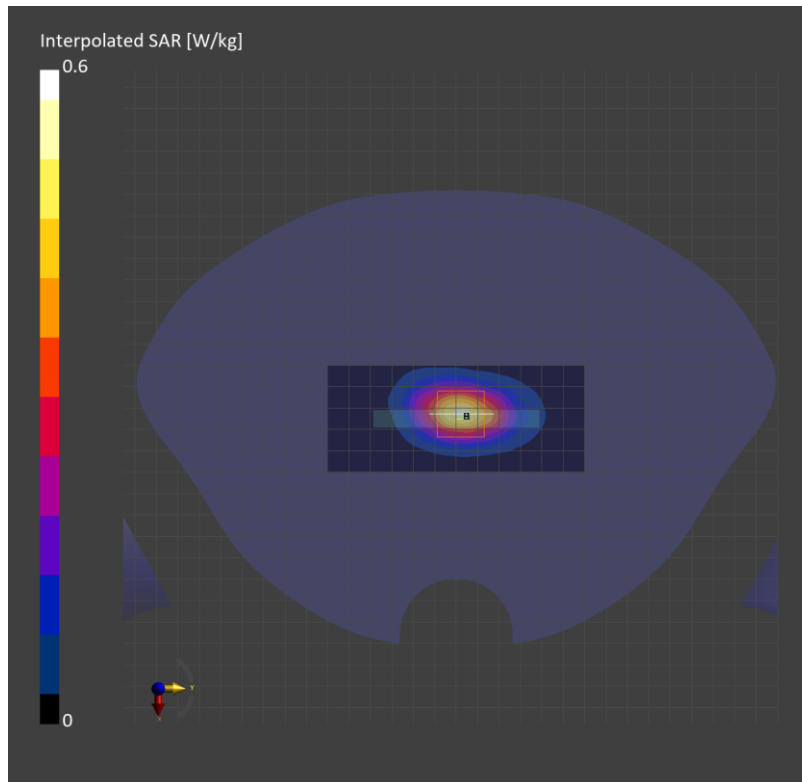
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1877	HSL1900	EX3DV4 - SN7651, 2023-05-30	DAE4 Sn1671, 2023-05-25

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	49.8 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	8.3 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]	0.411	0.423
psSAR10g [W/Kg]	0.213	0.218
Power Drift [dB]		0.01
M2/M1 [%]		82.9
Dist 3dB Peak [mm]		9.6



LTE Band 2

Frequency: 1860 MHz; Communication System Channel Number: 18700; Duty Cycle: 1:1
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used: $f = 1860$ MHz; $\sigma = 1.379$ S/m; $\epsilon_r = 39.086$; $\rho = 1000$ 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: 2023-04-26
- Probe: EX3DV4 - SN3871; ConvF(8.31, 7.78, 8.15) @ 1860 MHz; Calibrated: 2023-08-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (Right); 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 QPSK RB 1/99 ch.18700/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.968 W/kg

RHS/Touch QPSK RB 1/99 ch.18700/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.04 V/m; Power Drift = 0.06 dB

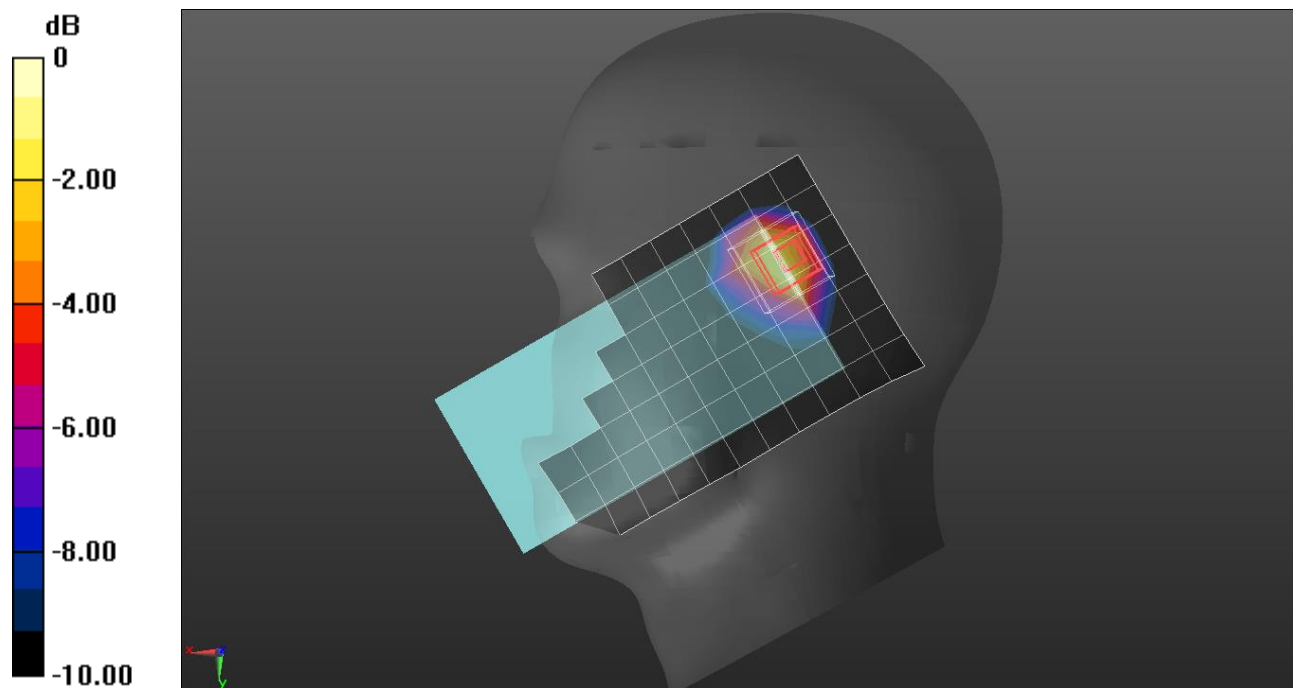
Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 0.834 W/kg; SAR(10 g) = 0.421 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 51.3%

Maximum value of SAR (measured) = 1.22 W/kg



0 dB = 1.22 W/kg = 0.86 dBW/kg

LTE Band 2

Frequency: 1900 MHz; Communication System Channel Number: 19100; Duty Cycle: 1:1

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.392$ S/m; $\epsilon_r = 39.003$; $\rho = 1000$ 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: 2023-04-26
- Probe: EX3DV4 - SN3871; ConvF(8.31, 7.78, 8.15) @ 1900 MHz; Calibrated: 2023-08-25
- 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 (7501)

Top/QPSK RB 1/99 ch.19100/Area Scan (10x6x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.420 W/kg

Top/QPSK RB 1/99 ch.19100/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm,

dz=5mm

Reference Value = 16.18 V/m; Power Drift = 0.00 dB

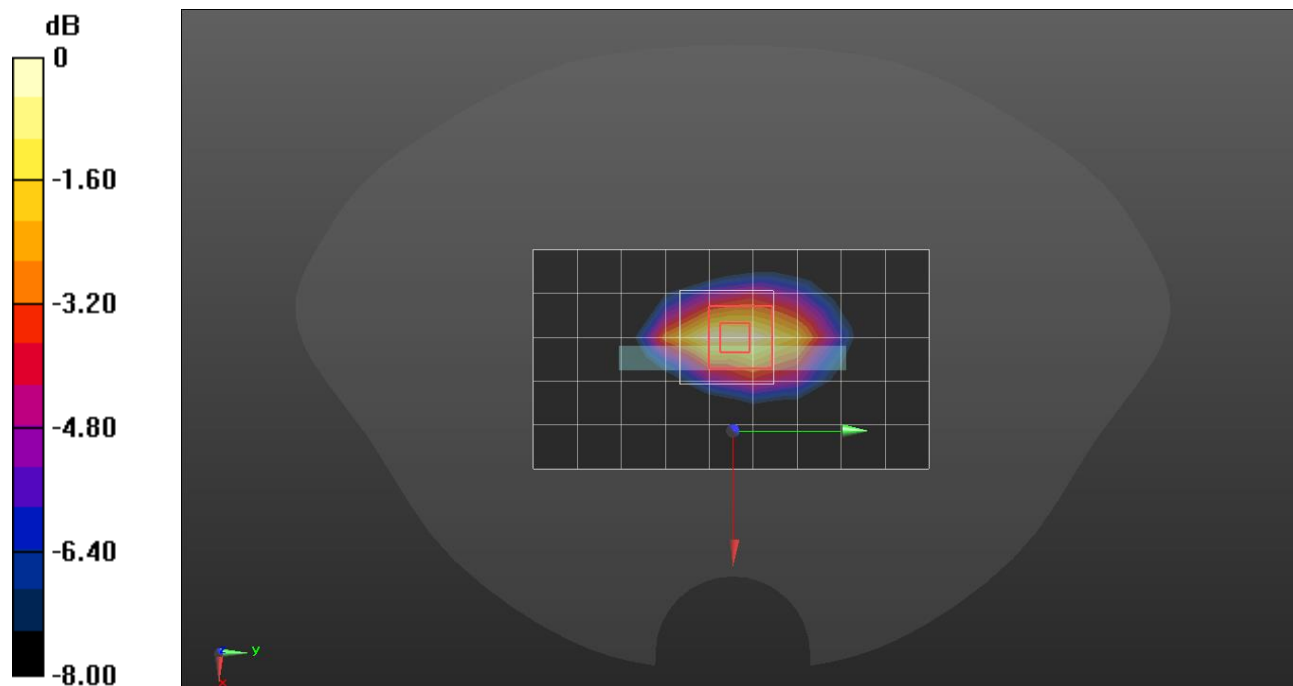
Peak SAR (extrapolated) = 0.478 W/kg

SAR(1 g) = 0.297 W/kg; SAR(10 g) = 0.175 W/kg

Smallest distance from peaks to all points 3 dB below = 12.8 mm

Ratio of SAR at M2 to SAR at M1 = 62.8%

Maximum value of SAR (measured) = 0.417 W/kg



0 dB = 0.417 W/kg = -3.80 dBW/kg

Measurement Report for SM-A556D, Right Touch, Band 5, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) RBPosition:Low AntennaCfg:SISO, Channel 20525 (836.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	Touch, 0.00	Band 5	LTE-FDD, 10175-CAH	836.5	8.39	0.906	42.9

Hardware Setup

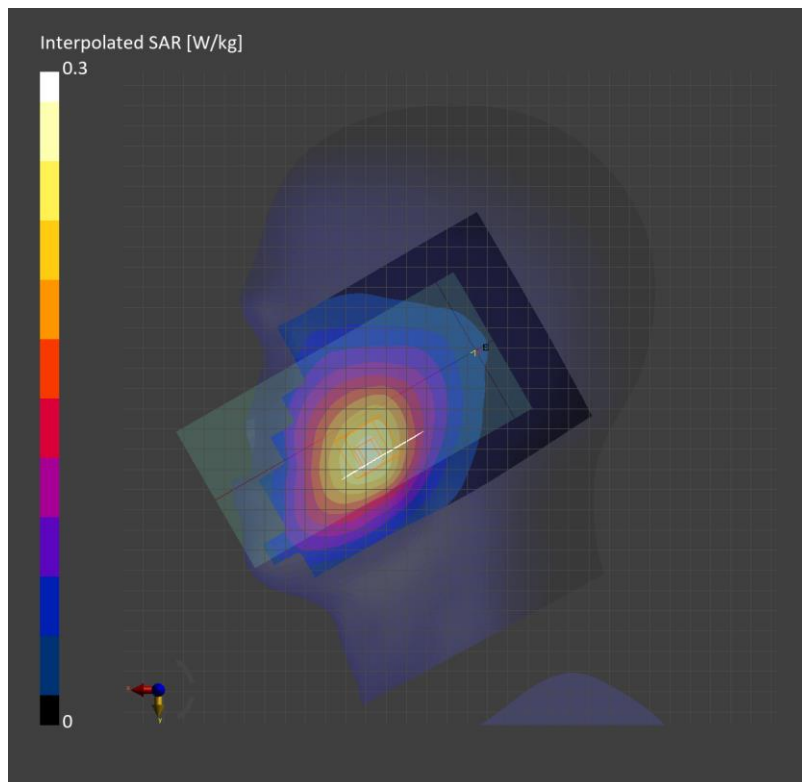
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000	EX3DV4 - SN7313, 2023-03-24	DAE4 Sn1667, 2023-04-24

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]	0.230	0.250
psSAR10g [W/Kg]	0.158	0.199
Power Drift [dB]		-0.01
M2/M1 [%]		96.2
Dist 3dB Peak [mm]		25.7



Measurement Report for SM-A556D, Rear, Band 5, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) RBPosition:Low AntennaCfg:SISO, Channel 20525 (836.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	Rear, 10.00	Band 5	LTE-FDD, 10175-CAH	836.5	8.39	0.907	42.4

Hardware Setup

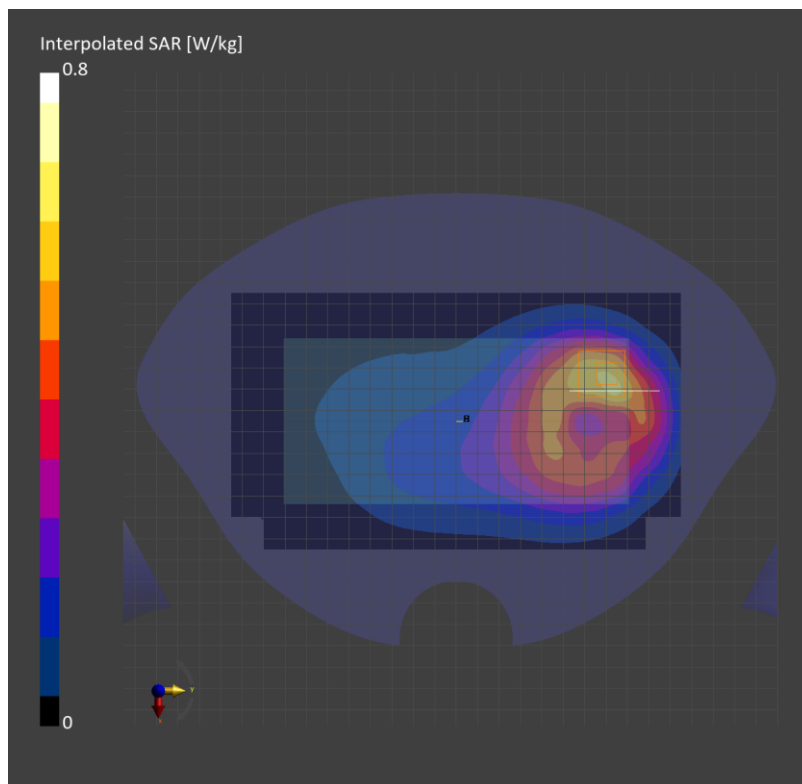
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000	EX3DV4 - SN7313, 2023-03-24	DAE4 Sn1667, 2023-04-24

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]	4.0	4.0

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.545	0.562
psSAR10g [W/Kg]	0.361	0.354
Power Drift [dB]		-0.00
M2/M1 [%]		84.9
Dist 3dB Peak [mm]		10.8



Measurement Report for SM-A556D, Right Touch, Band 12, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) RBPosition:Low AntennaCfg:SISO, Channel 23095 (707.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	Touch, 0.00	Band 12	LTE-FDD, 10175-CAH	707.5	9.21	0.869	42.8

Hardware Setup

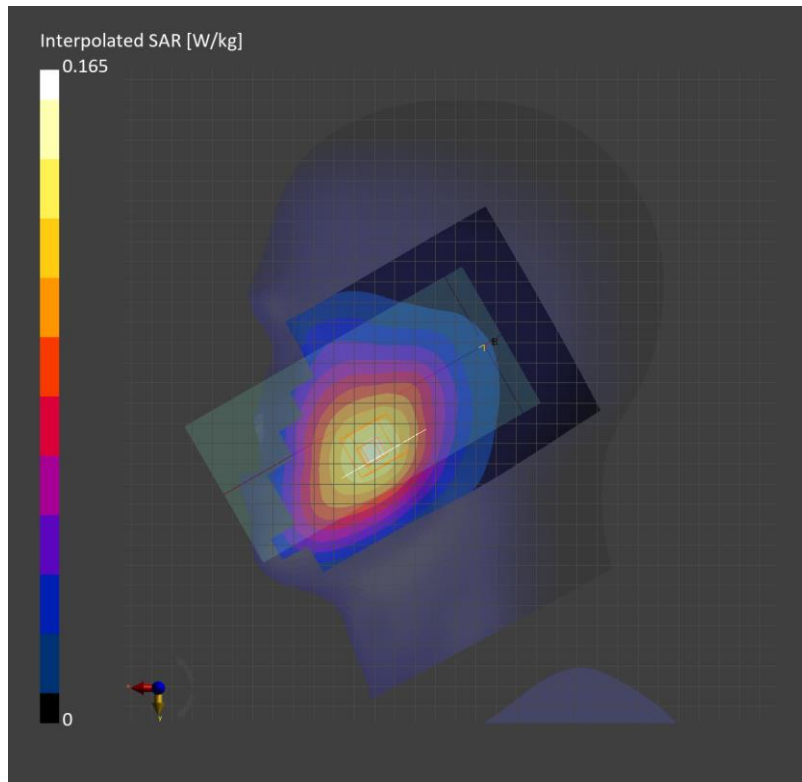
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000	EX3DV4 - SN7313, 2023-03-24	DAE4 Sn1667, 2023-04-24

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]	0.124	0.133
psSAR10g [W/Kg]	0.087	0.111
Power Drift [dB]		0.12
M2/M1 [%]		99.5
Dist 3dB Peak [mm]		> 15.0



Measurement Report for SM-A556D, Rear, Band 12, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) RBPosition:Low AntennaCfg:SISO, Channel 23095 (707.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	Rear, 10.00	Band 12	LTE-FDD, 10175-CAH	707.5	9.21	0.883	41.3

Hardware Setup

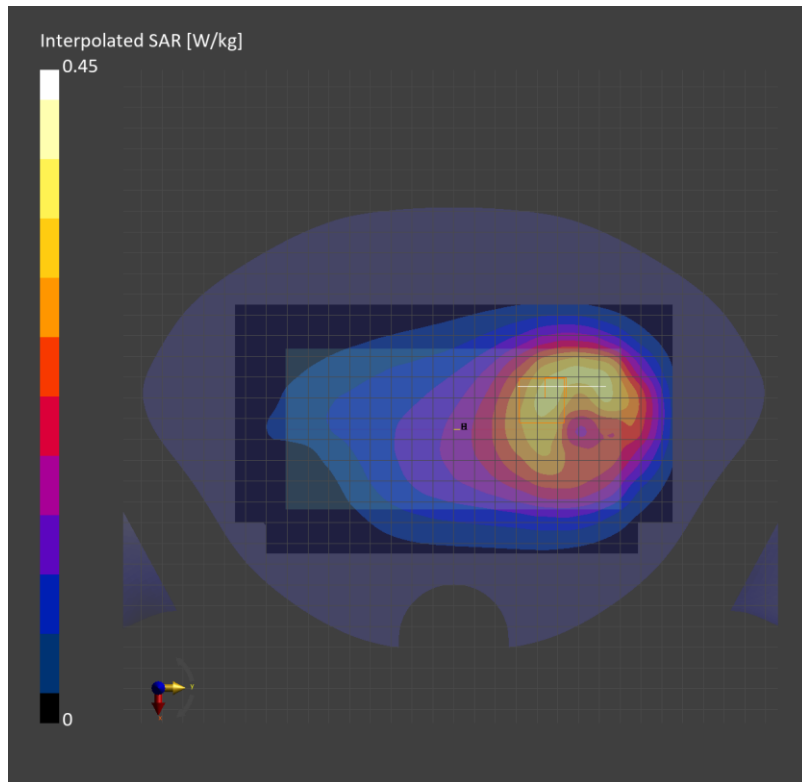
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000	EX3DV4 - SN7313, 2023-03-24	DAE4 Sn1667, 2023-04-24

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]	0.313	0.327
psSAR10g [W/Kg]	0.217	0.216
Power Drift [dB]		0.03
M2/M1 [%]		84.0
Dist 3dB Peak [mm]		14.1



LTE Band 41

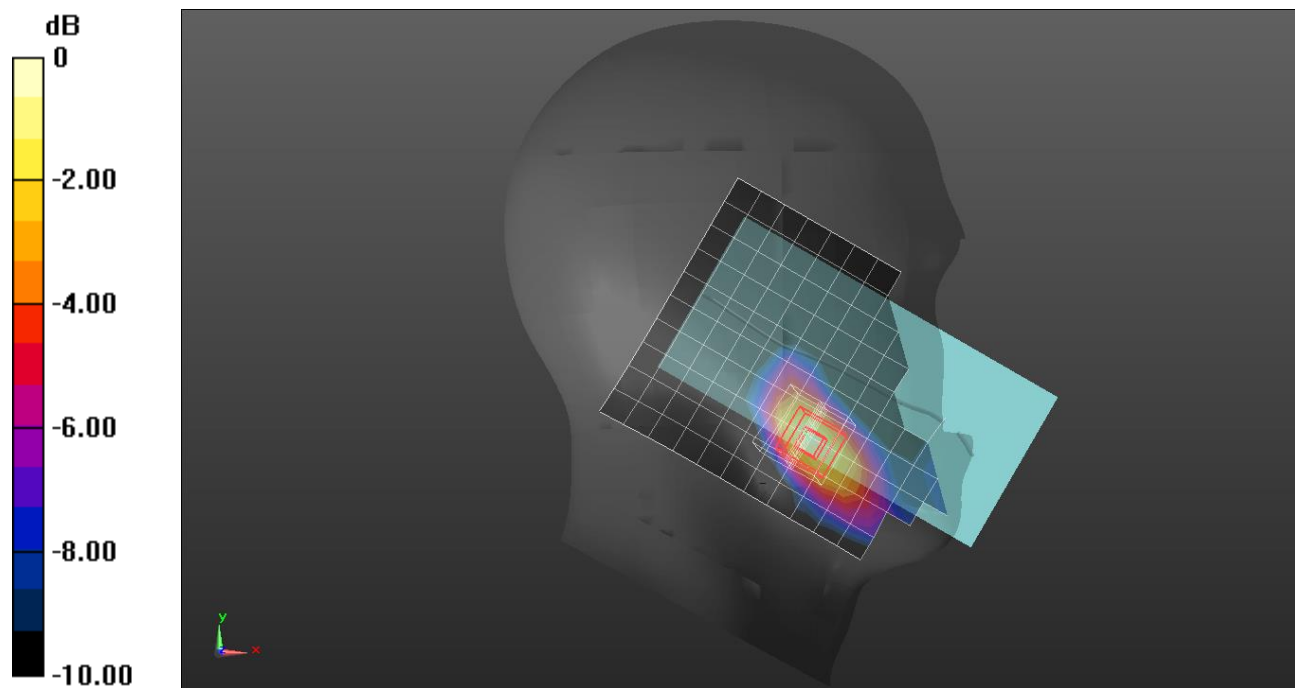
Frequency: 2593 MHz; Communication System Channel Number: 40620; Duty Cycle: 1:1.59956
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 1.915$ S/m; $\epsilon_r = 39.835$; $\rho = 1000$ kg/m³

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: 2023-03-22
- Probe: EX3DV4 - SN7545; ConvF(7.2, 7.2, 7.2) @ 2593 MHz; Calibrated: 2023-08-25
- 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 QPSK RB 1/99 ch.40620/Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 0.179 W/kg

LHS/Touch QPSK RB 1/99 ch.40620/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 9.005 V/m; Power Drift = 0.15 dB
 Peak SAR (extrapolated) = 0.228 W/kg
SAR(1 g) = 0.119 W/kg; SAR(10 g) = 0.062 W/kg
 Smallest distance from peaks to all points 3 dB below = 9.5 mm
 Ratio of SAR at M2 to SAR at M1 = 56.7%
 Maximum value of SAR (measured) = 0.182 W/kg



0 dB = 0.182 W/kg = -7.39 dBW/kg

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; $\sigma = 1.905$ S/m; $\epsilon_r = 37.743$; $\rho = 1000$ 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: 2023-03-22
- Probe: EX3DV4 - SN7545; ConvF(7.2, 7.2, 7.2) @ 2593 MHz; Calibrated: 2023-08-25
- 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 50/0 ch.40620/Area Scan (10x6x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 0.489 W/kg

Bottom/QPSK RB 50/0 ch.40620/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.34 V/m; Power Drift = -0.03 dB

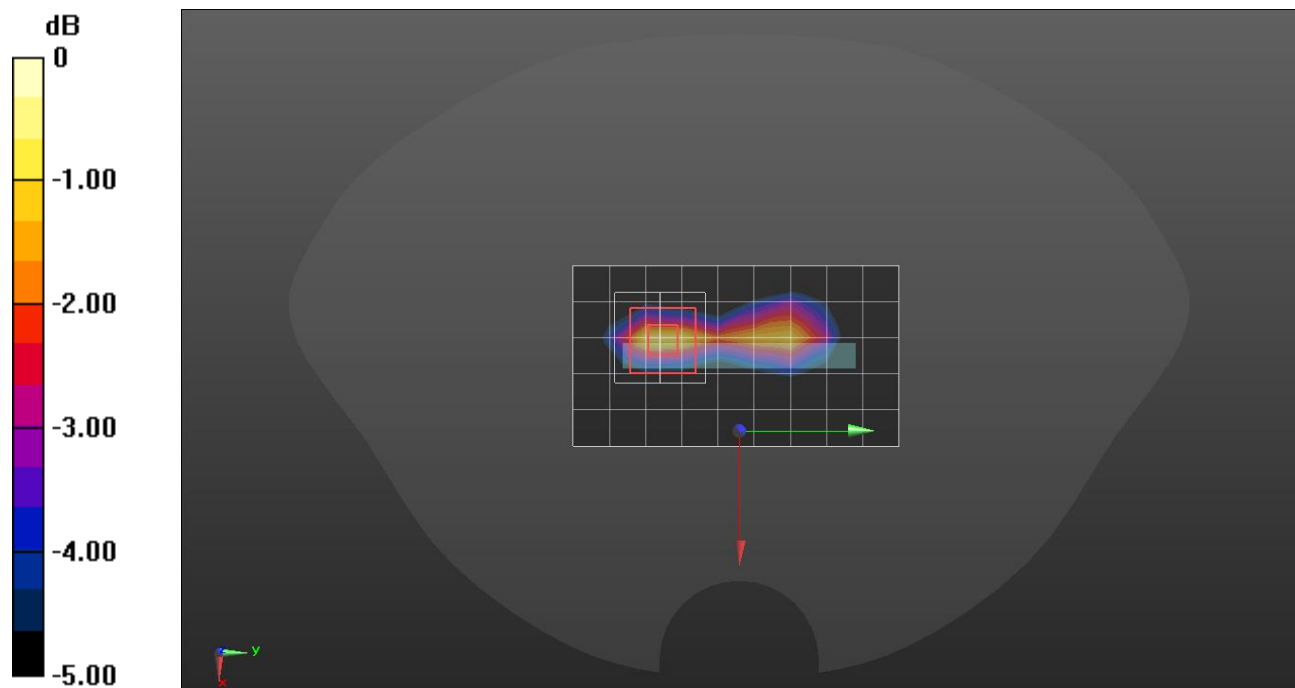
Peak SAR (extrapolated) = 0.706 W/kg

SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.145 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 46.2%

Maximum value of SAR (measured) = 0.549 W/kg



0 dB = 0.549 W/kg = -2.61 dBW/kg

LTE Band 41

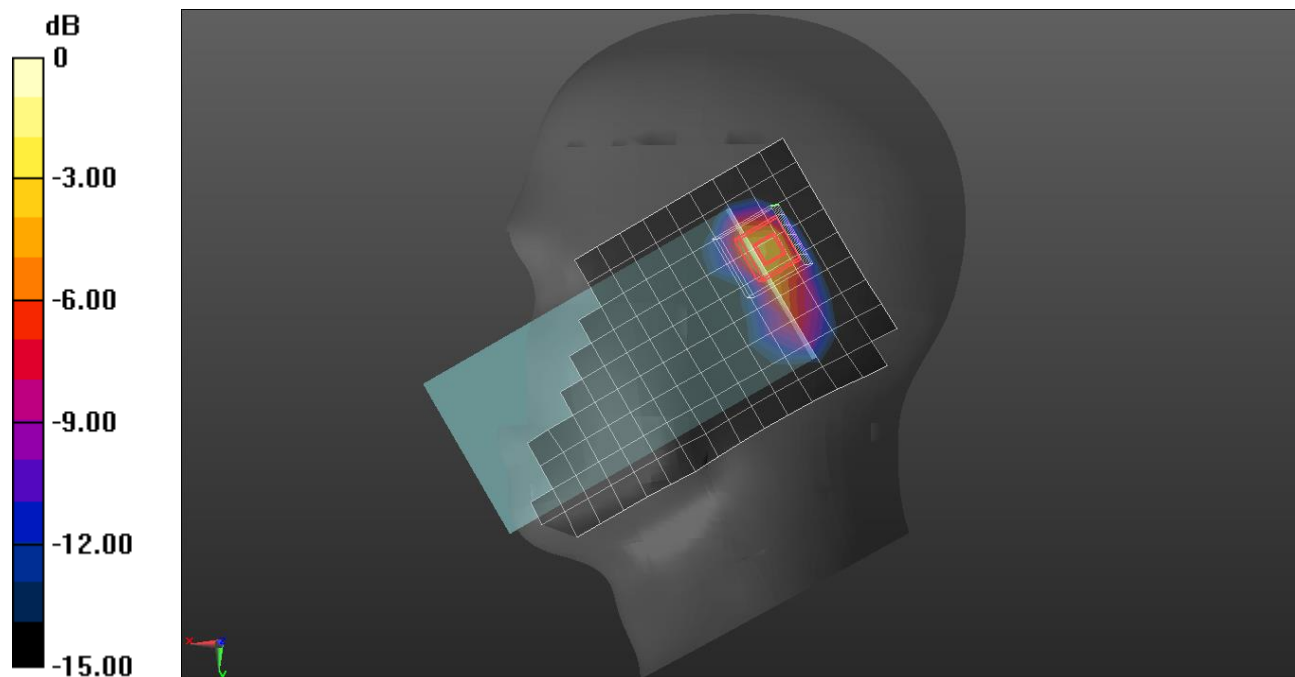
Frequency: 2549.5 MHz; Communication System Channel Number: 40185; Duty Cycle: 1:1.59956
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used: $f = 2550$ MHz; $\sigma = 1.941$ S/m; $\epsilon_r = 38.81$; $\rho = 1000$ kg/m³

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: 2023-03-22
- Probe: EX3DV4 - SN7545; ConvF(7.2, 7.2, 7.2) @ 2549.5 MHz; Calibrated: 2023-08-25
- 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/Tilt QPSK RB 50/0 ch.40185/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 1.06 W/kg

RHS/Tilt QPSK RB 50/0 ch.40185/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 26.65 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 2.39 W/kg
SAR(1 g) = 0.897 W/kg; SAR(10 g) = 0.344 W/kg
 Smallest distance from peaks to all points 3 dB below = 5 mm
 Ratio of SAR at M2 to SAR at M1 = 39.4%
 Maximum value of SAR (measured) = 1.70 W/kg



0 dB = 1.70 W/kg = 2.30 dBW/kg

LTE Band 41

Frequency: 2506 MHz; Communication System Channel Number: 39750; Duty Cycle: 1:1.59956
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used (interpolated): $f = 2506$ MHz; $\sigma = 1.833$ S/m; $\epsilon_r = 37.896$; $\rho = 1000$ 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: 2023-03-22
- Probe: EX3DV4 - SN7545; ConvF(7.2, 7.2, 7.2) @ 2506 MHz; Calibrated: 2023-08-25
- 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 50/0 ch.39750/Area Scan (11x6x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 0.317 W/kg

Top/QPSK RB 50/0 ch.39750/Zoom Scan (7x11x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.75 V/m; Power Drift = 0.06 dB

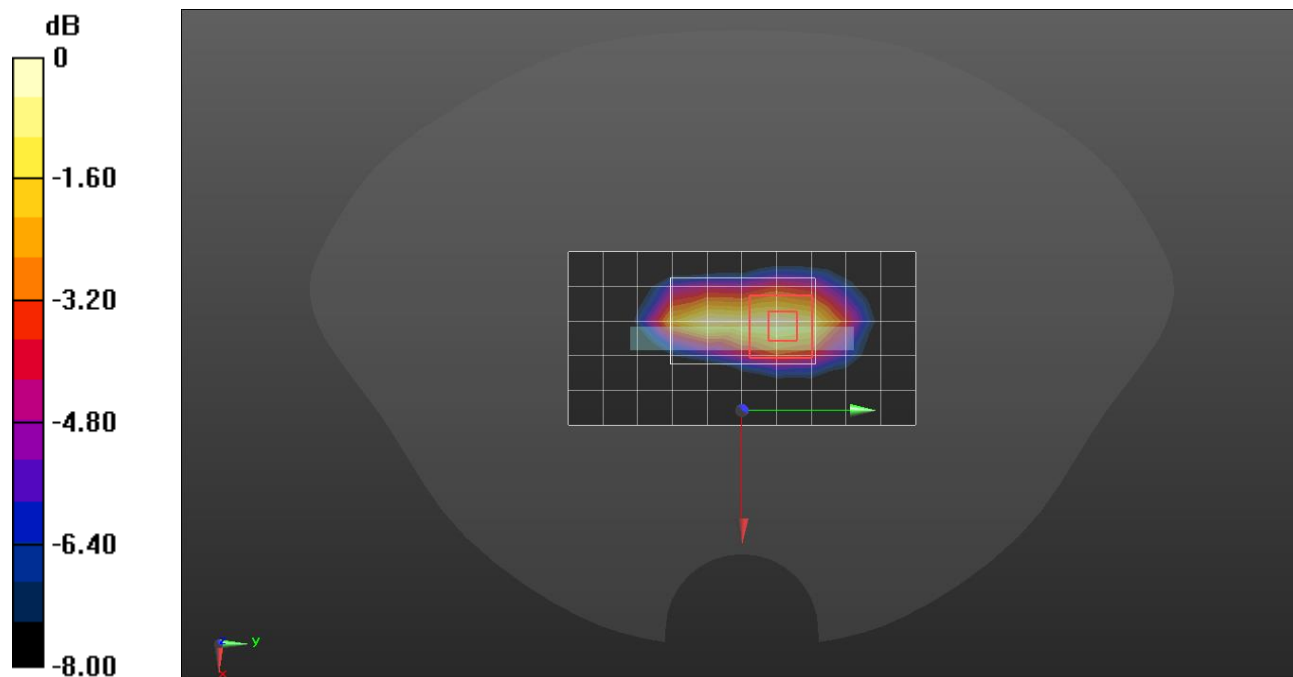
Peak SAR (extrapolated) = 0.404 W/kg

SAR(1 g) = 0.201 W/kg; SAR(10 g) = 0.102 W/kg

Smallest distance from peaks to all points 3 dB below = 10 mm

Ratio of SAR at M2 to SAR at M1 = 49.3%

Maximum value of SAR (measured) = 0.319 W/kg



0 dB = 0.319 W/kg = -4.96 dBW/kg

LTE Band 66

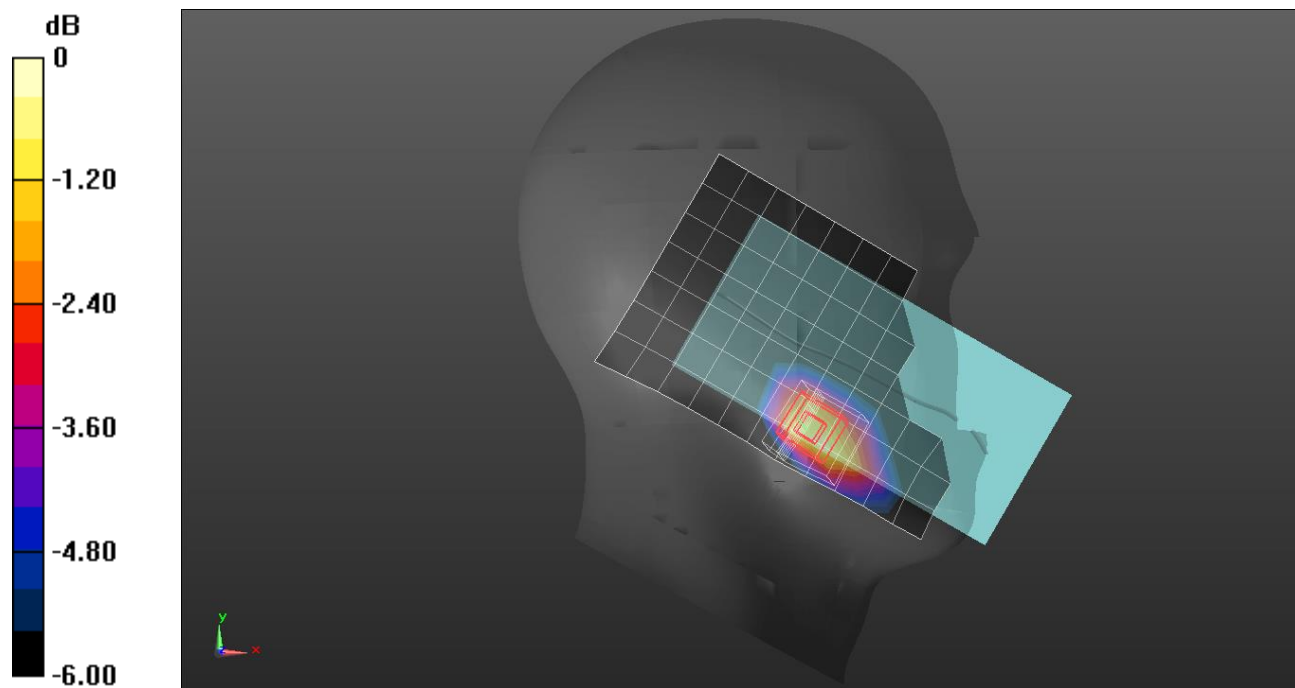
Frequency: 1720 MHz; Communication System Channel Number: 132072; Duty Cycle: 1:1
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used: $f = 1720$ MHz; $\sigma = 1.306$ S/m; $\epsilon_r = 40.234$; $\rho = 1000$ kg/m³

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: 2023-04-26
- Probe: EX3DV4 - SN3871; ConvF(8.54, 8.07, 8.45) @ 1720 MHz; Calibrated: 2023-08-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (Right); 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 QPSK RB 1/0 ch.132072/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.223 W/kg

LHS/Touch QPSK RB 1/0 ch.132072/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 12.16 V/m; Power Drift = -0.06 dB
 Peak SAR (extrapolated) = 0.268 W/kg
SAR(1 g) = 0.177 W/kg; SAR(10 g) = 0.115 W/kg
 Smallest distance from peaks to all points 3 dB below = 12 mm
 Ratio of SAR at M2 to SAR at M1 = 66.5%
 Maximum value of SAR (measured) = 0.240 W/kg



0 dB = 0.240 W/kg = -6.20 dBW/kg

LTE Band 66

Frequency: 1770 MHz; Communication System Channel Number: 132572; Duty Cycle: 1:1
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used: $f = 1770$ MHz; $\sigma = 1.326$ S/m; $\epsilon_r = 40.127$; $\rho = 1000$ 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: 2023-04-26
- Probe: EX3DV4 - SN3871; ConvF(8.54, 8.07, 8.45) @ 1770 MHz; Calibrated: 2023-08-25
- 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 (7501)

Bottom/QPSK RB 1/0 ch.132572/Area Scan (9x5x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.945 W/kg

Bottom/QPSK RB 1/0 ch.132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.66 V/m; Power Drift = -0.02 dB

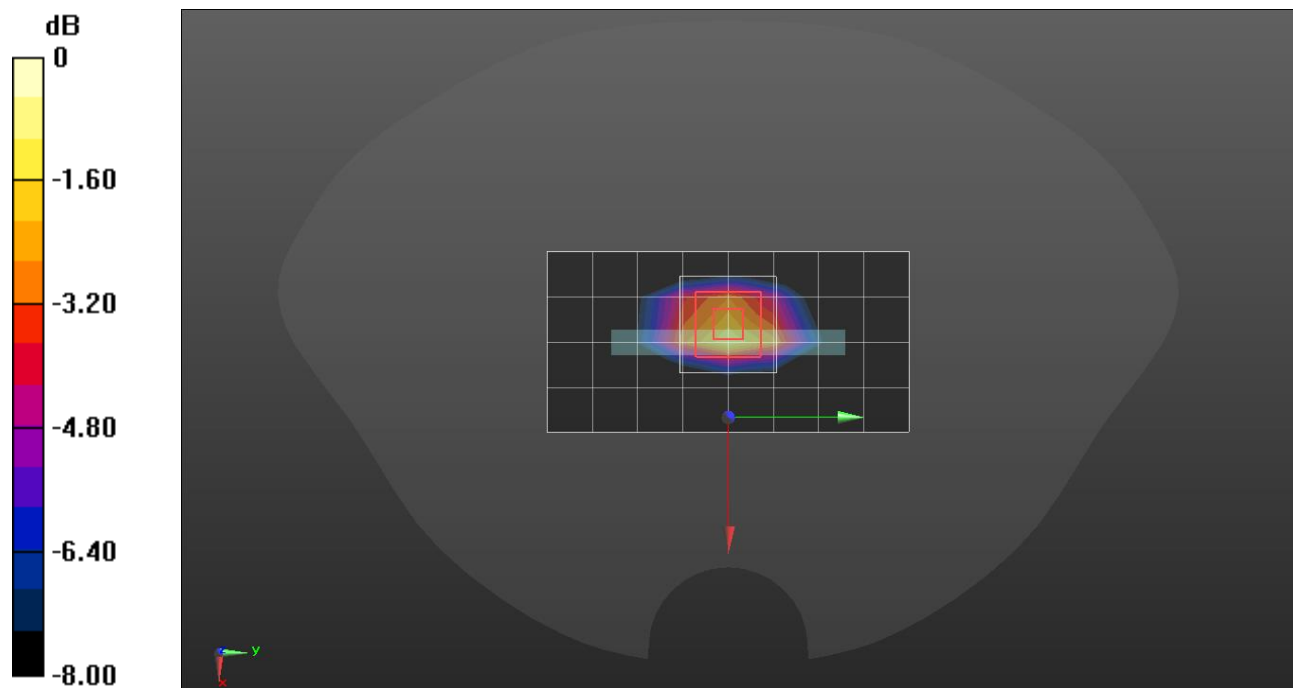
Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.800 W/kg; SAR(10 g) = 0.426 W/kg

Smallest distance from peaks to all points 3 dB below = 10.7 mm

Ratio of SAR at M2 to SAR at M1 = 57.7%

Maximum value of SAR (measured) = 1.20 W/kg



0 dB = 1.20 W/kg = 0.78 dBW/kg

LTE Band 66

Frequency: 1770 MHz; Communication System Channel Number: 132572; Duty Cycle: 1:1
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used: $f = 1770$ MHz; $\sigma = 1.337$ S/m; $\epsilon_r = 39.782$; $\rho = 1000$ 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 - SN3871; ConvF(8.54, 8.07, 8.45) @ 1770 MHz; Calibrated: 8/25/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (Right); Phantom section: Right Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

RHS/Tilt QPSK RB 1/0 ch.132572/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 1.09 W/kg

RHS/Tilt QPSK RB 1/0 ch.132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.81 V/m; Power Drift = -0.08 dB

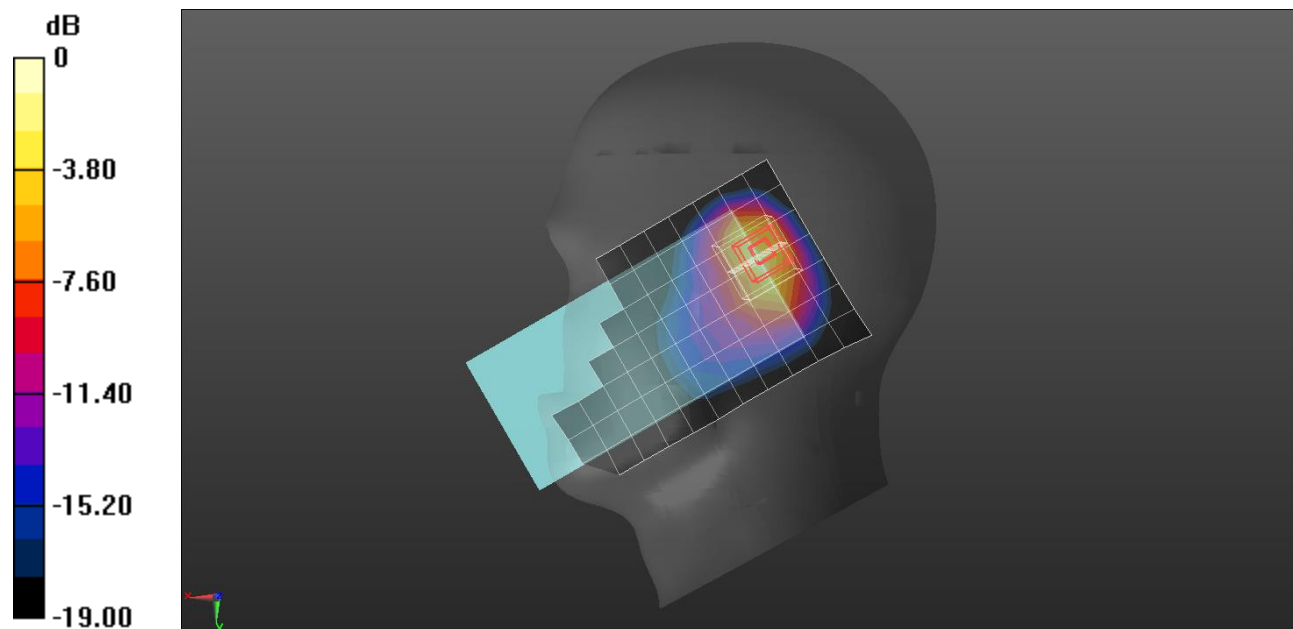
Peak SAR (extrapolated) = 1.59 W/kg

SAR(1 g) = 0.768 W/kg; SAR(10 g) = 0.376 W/kg

Smallest distance from peaks to all points 3 dB below = 6.4 mm

Ratio of SAR at M2 to SAR at M1 = 47%

Maximum value of SAR (measured) = 1.27 W/kg



0 dB = 1.27 W/kg = 1.04 dBW/kg

Measurement Report for SM-A556D, Top, Band 66, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) RBPosition:Low AntennaCfg:SISO, Channel 132572 (1770.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	Top, 10.00	Band 66	LTE-FDD, 10169-CAF	1770.0	8.57	1.37	38.7

Hardware Setup

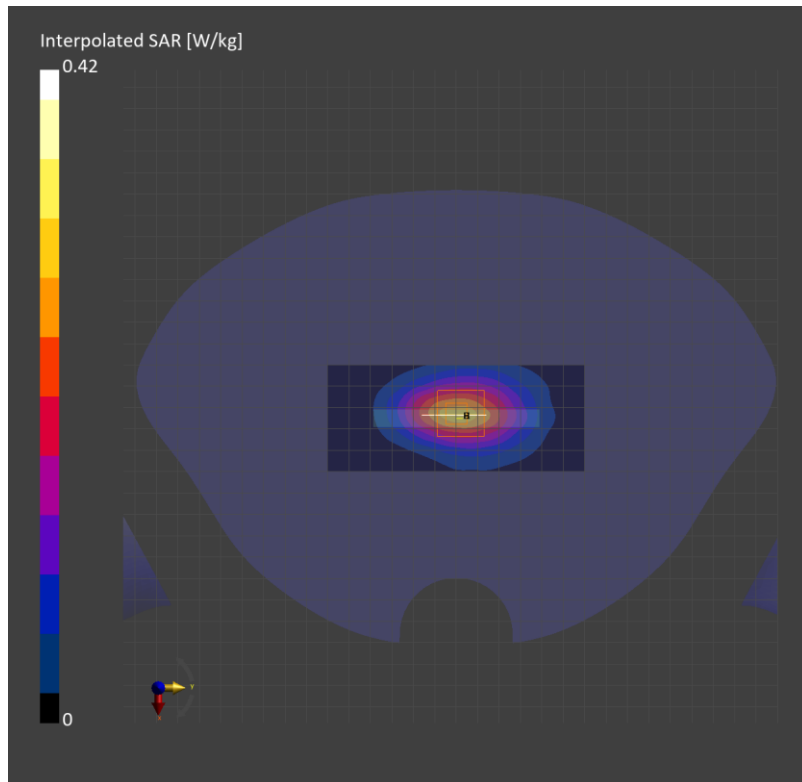
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1877	HSL1750	EX3DV4 - SN7651, 2023-05-30	DAE4 Sn1671, 2023-05-25

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	49.8 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	8.3 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]	0.246	0.250
psSAR10g [W/Kg]	0.140	0.141
Power Drift [dB]		0.02
M2/M1 [%]		85.0
Dist 3dB Peak [mm]		12.1



Measurement Report for SM-A556D, Right Touch, Band n5, 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz) RBPosition:Mid AntennaCfg:SISO, Channel 167300 (836.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	Touch, 0.00	Band n5	5G NR FR1 FDD, 10939-AAC	836.5	8.39	0.907	42.4

Hardware Setup

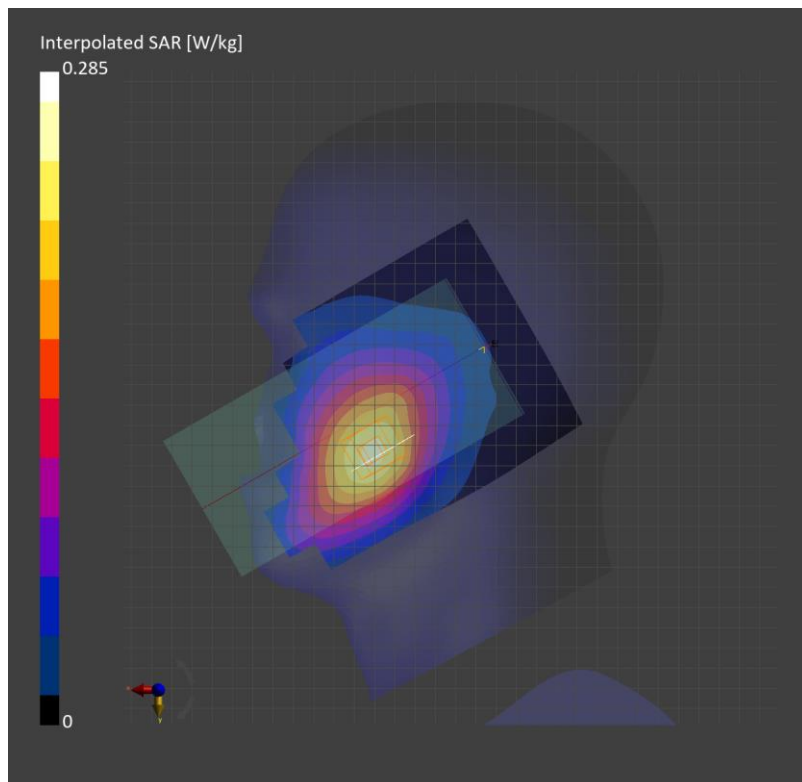
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 1991	HBBL-600-10000	EX3DV4 - SN7313, 2023-03-24	DAE4 Sn1667, 2023-04-24

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]	4.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.214	0.228
psSAR10g [W/Kg]	0.148	0.184
Power Drift [dB]		-0.03
M2/M1 [%]		95.8
Dist 3dB Peak [mm]		> 15.0



NR Band n5

Frequency: 836.5 MHz; Communication System Channel Number: 167300; Duty Cycle: 1:1
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.936$ S/m; $\epsilon_r = 41.41$; $\rho = 1000$ 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: 2023-07-17
- Probe: EX3DV4 - SN7314; ConvF(9.31, 9.31, 9.31) @ 836.5 MHz; Calibrated: 2023-05-26
- 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/QPSK RB 1/52 ch.167300/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.435 W/kg

Rear/QPSK RB 1/52 ch.167300/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.44 V/m; Power Drift = -0.02 dB

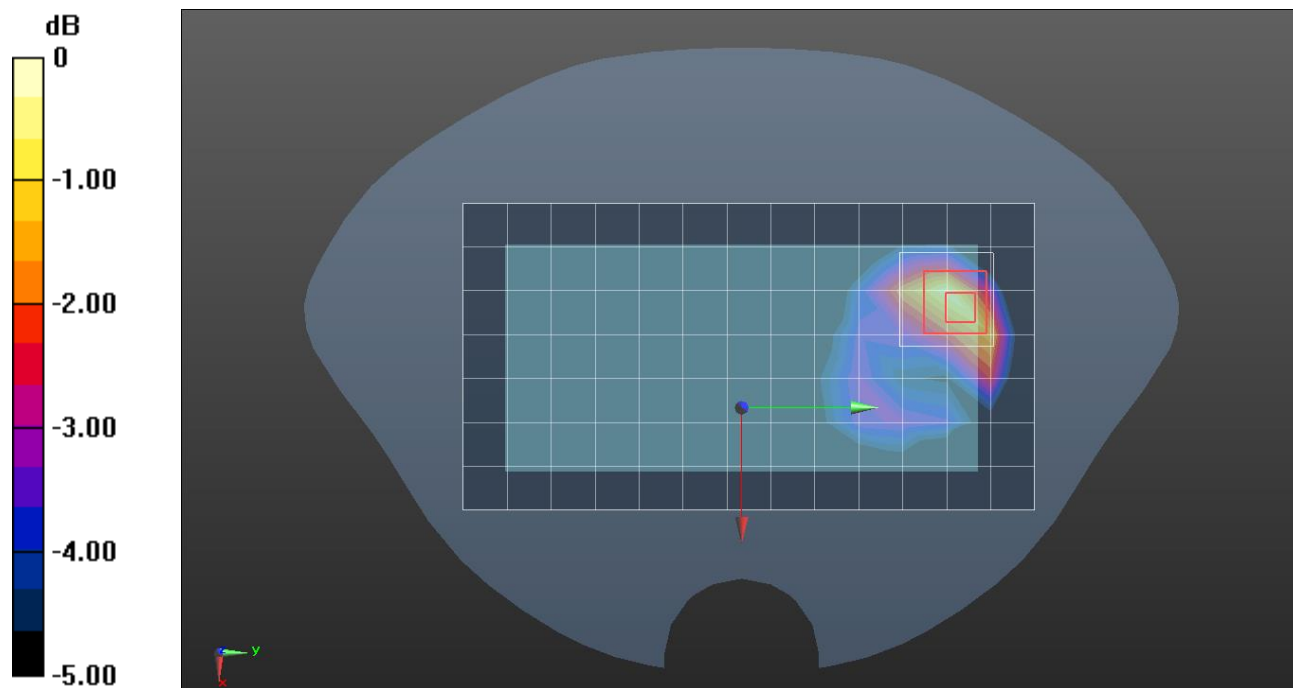
Peak SAR (extrapolated) = 0.573 W/kg

SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.186 W/kg

Smallest distance from peaks to all points 3 dB below = 10.7 mm

Ratio of SAR at M2 to SAR at M1 = 55.7%

Maximum value of SAR (measured) = 0.472 W/kg



0 dB = 0.472 W/kg = -3.26 dBW/kg

NR Band n41

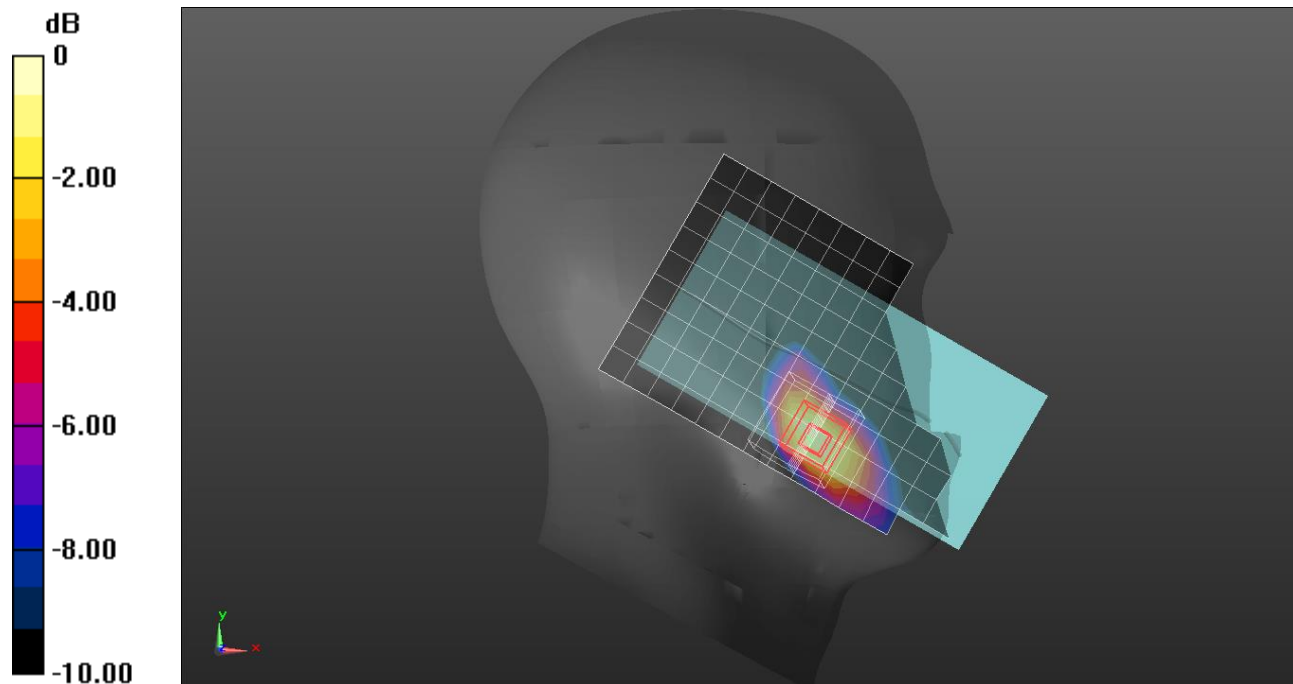
Frequency: 2592.99 MHz; Communication System Channel Number: 518598; Duty Cycle: 1:1
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used (interpolated): $f = 2592.99$ MHz; $\sigma = 1.922$ S/m; $\epsilon_r = 39.874$; $\rho = 1000$ kg/m³

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: 2023-07-17
- Probe: EX3DV4 - SN7314; ConvF(7.29, 7.29, 7.29) @ 2592.99 MHz; Calibrated: 2023-05-26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (Right); 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 QPSK RB 1/136 ch.518598/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 0.0489 W/kg

LHS/Touch QPSK RB 1/136 ch.518598/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 4.961 V/m; Power Drift = 0.11 dB
 Peak SAR (extrapolated) = 0.0700 W/kg
SAR(1 g) = 0.036 W/kg; SAR(10 g) = 0.018 W/kg
 Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 17.5 mm)
 Ratio of SAR at M2 to SAR at M1 = 52.1%
 Maximum value of SAR (measured) = 0.0572 W/kg



0 dB = 0.0572 W/kg = -12.43 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; $\sigma = 1.915$ S/m; $\epsilon_r = 39.835$; $\rho = 1000$ 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: 2023-03-22
- Probe: EX3DV4 - SN7545; ConvF(7.2, 7.2, 7.2) @ 2592.99 MHz; Calibrated: 2023-08-25
- 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 1/136 ch.518598/Area Scan (11x6x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 0.428 W/kg

Bottom/QPSK RB 1/136 ch.518598/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.62 V/m; Power Drift = -0.05 dB

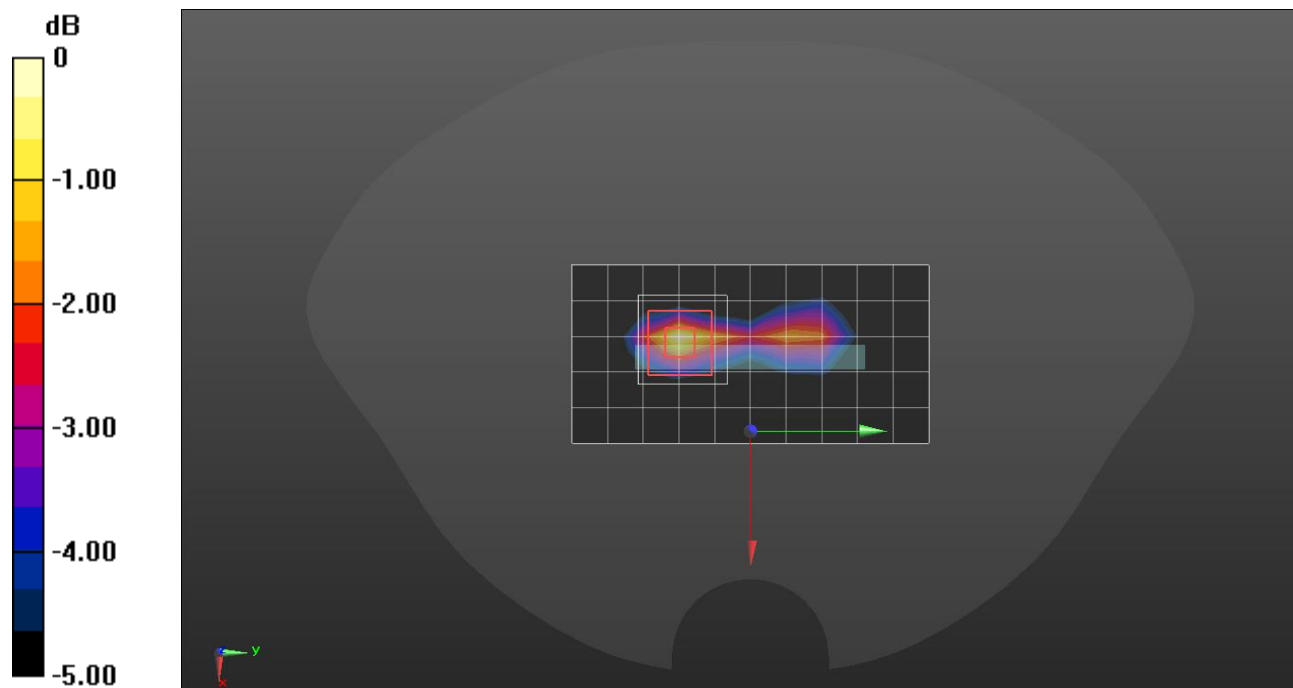
Peak SAR (extrapolated) = 0.548 W/kg

SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.116 W/kg

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 46.8%

Maximum value of SAR (measured) = 0.428 W/kg



0 dB = 0.428 W/kg = -3.69 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; $\sigma = 1.922$ S/m; $\epsilon_r = 39.874$; $\rho = 1000$ 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 - SN7314; ConvF(7.29, 7.29, 7.29) @ 2592.99 MHz; Calibrated: 5/26/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (Right); Phantom section: Right Section ; Type: QD 000 P40 CD
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

RHS/Tilt QPSK RB 135/69 ch.518598/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.55 W/kg

RHS/Tilt QPSK RB 135/69 ch.518598/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.44 V/m; Power Drift = -0.01 dB

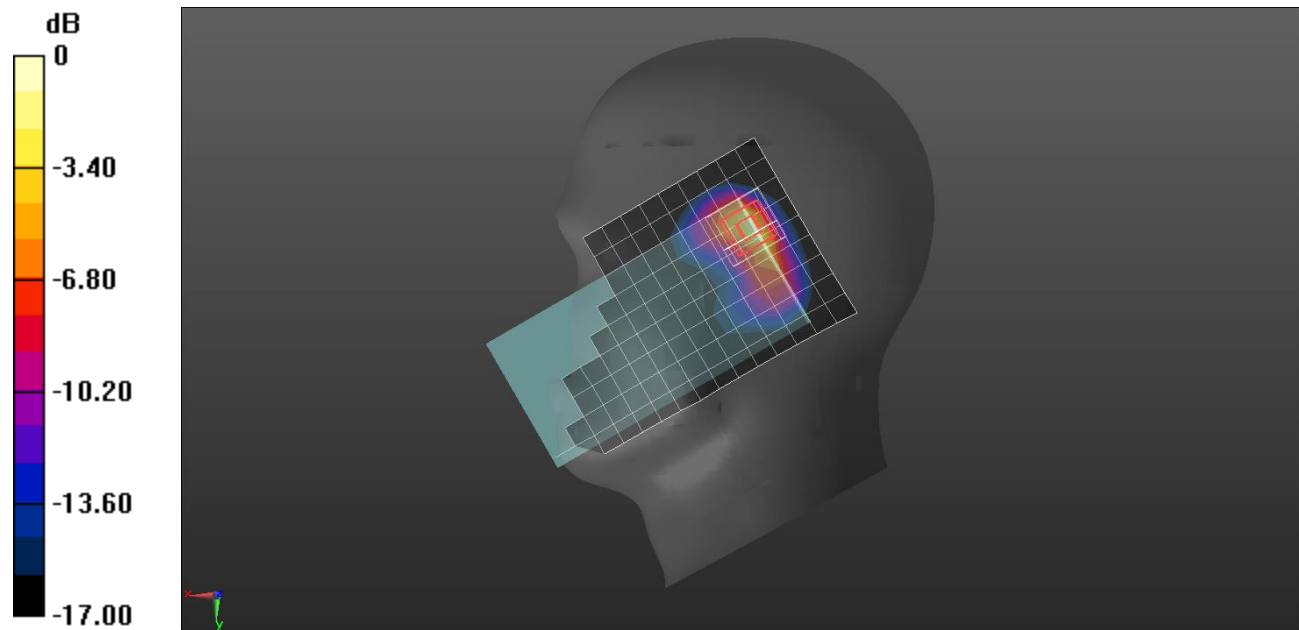
Peak SAR (extrapolated) = 2.78 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.416 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 38.3%

Maximum value of SAR (measured) = 2.09 W/kg



0 dB = 2.09 W/kg = 3.20 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; $\sigma = 1.922$ S/m; $\epsilon_r = 39.874$; $\rho = 1000$ 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 - SN7314; ConvF(7.29, 7.29, 7.29) @ 2592.99 MHz; Calibrated: 5/26/2023
- 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 (7501)

Top/QPSK RB 135/69 ch.518598/Area Scan (10x6x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 0.387 W/kg

Top/QPSK RB 135/69 ch.518598/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.65 V/m; Power Drift = -0.00 dB

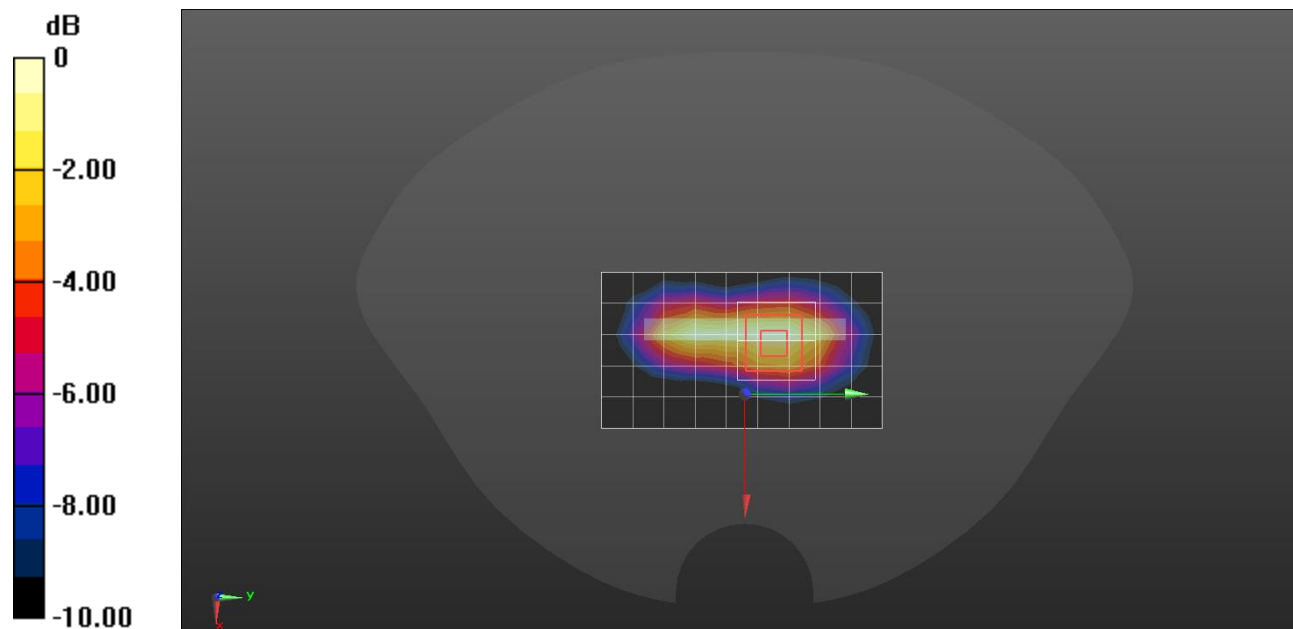
Peak SAR (extrapolated) = 0.504 W/kg

SAR(1 g) = 0.259 W/kg; SAR(10 g) = 0.130 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 51.2%

Maximum value of SAR (measured) = 0.409 W/kg



0 dB = 0.409 W/kg = -3.88 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; $\sigma = 1.802$ S/m; $\epsilon_r = 38.738$; $\rho = 1000$ 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 - SN3871; ConvF(7.74, 7.17, 7.55) @ 2412 MHz; Calibrated: 8/25/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (Right); 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.1 Sub.4/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.218 W/kg

RHS/Touch 802.11 b mode ch.1 Sub.4/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.51 V/m; Power Drift = -0.17 dB

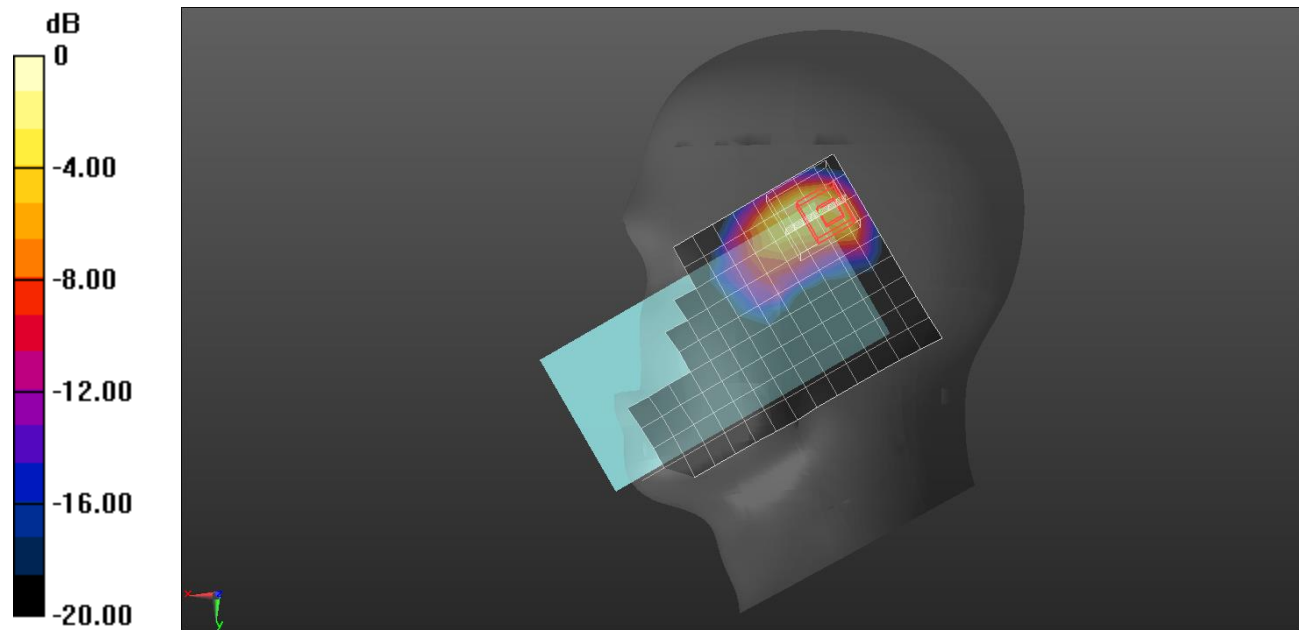
Peak SAR (extrapolated) = 0.468 W/kg

SAR(1 g) = 0.182 W/kg; SAR(10 g) = 0.076 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 39.1%

Maximum value of SAR (measured) = 0.335 W/kg



0 dB = 0.335 W/kg = -4.75 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; $\sigma = 1.811$ S/m; $\epsilon_r = 37.685$; $\rho = 1000$ 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 - SN7314; ConvF(7.47, 7.47, 7.47) @ 2437 MHz; Calibrated: 5/26/2023
- 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 (7501)

Left/802.11 b mode ch.6 Sub.4/Area Scan (16x6x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 0.958 W/kg

Left/802.11 b mode ch.6 Sub.4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.18 V/m; Power Drift = -0.04 dB

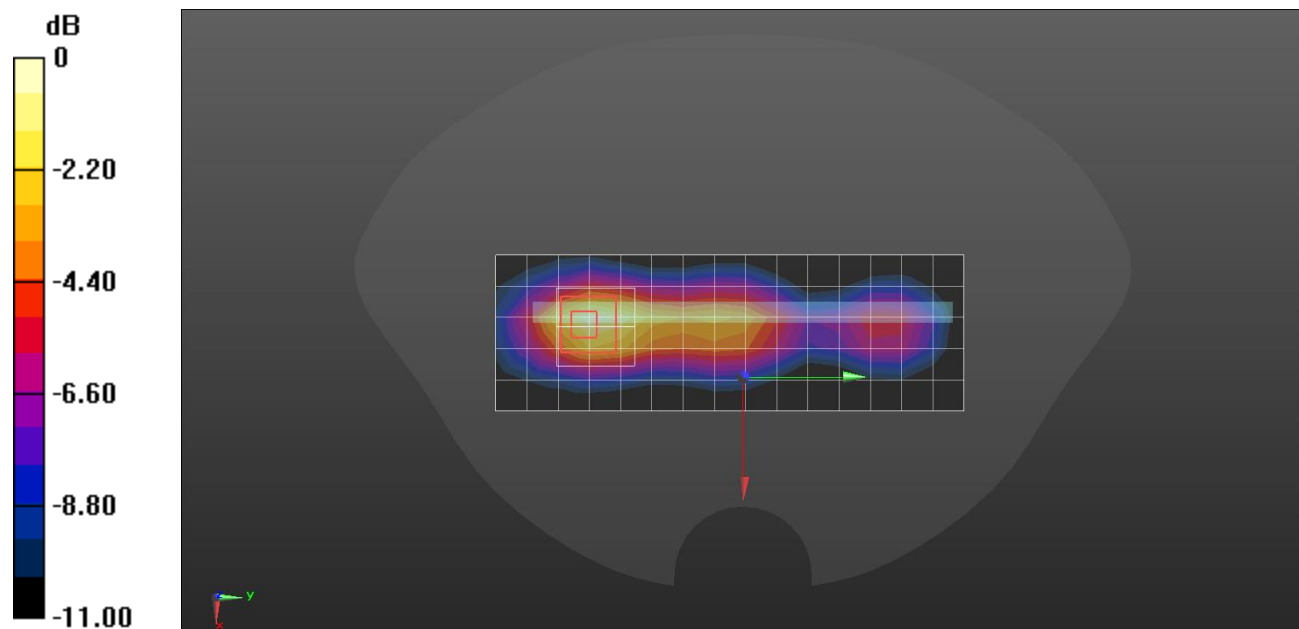
Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.614 W/kg; SAR(10 g) = 0.300 W/kg

Smallest distance from peaks to all points 3 dB below = 10.8 mm

Ratio of SAR at M2 to SAR at M1 = 49.9%

Maximum value of SAR (measured) = 0.996 W/kg



0 dB = 0.996 W/kg = -0.02 dBW/kg

Measurement Report for SM-A556D, Right Touch, 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]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	Touch, 0.00	U-NII-1, U-NII-2A	WLAN, 10599-AAC	5270.0	5.76	4.61	35.5

Hardware Setup

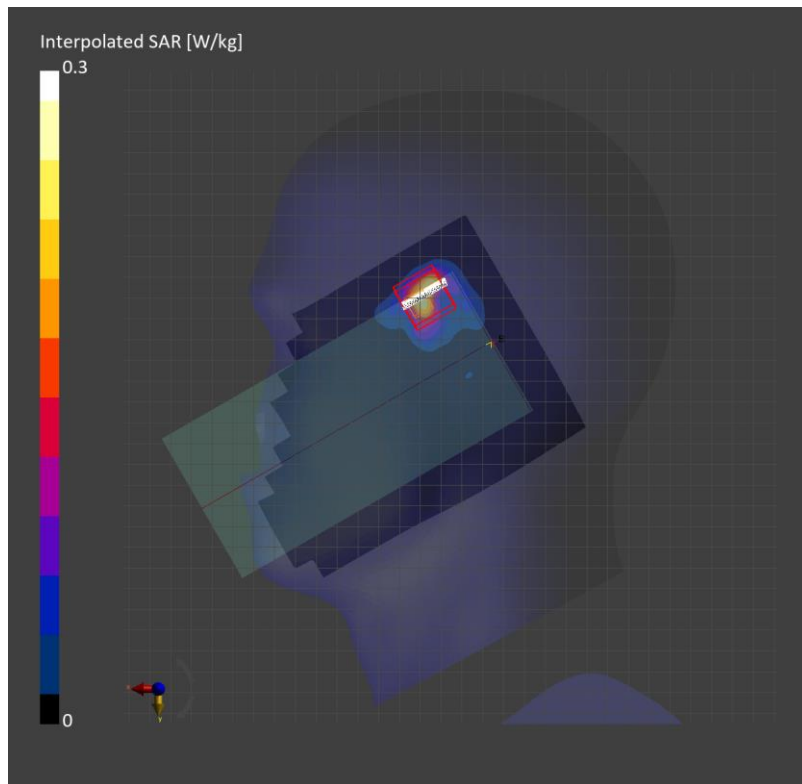
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	24.0 x 24.0 x 24.0
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]	0.165	0.187
psSAR10g [W/Kg]	0.056	0.056
Power Drift [dB]		0.14
M2/M1 [%]		64.9
Dist 3dB Peak [mm]		4.1



Measurement Report for SM-A556D, Left, 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]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	Left, 0.00	U-NII-1, U-NII-2A	WLAN, 10599-AAC	5270.0	5.12	4.67	36.6

Hardware Setup

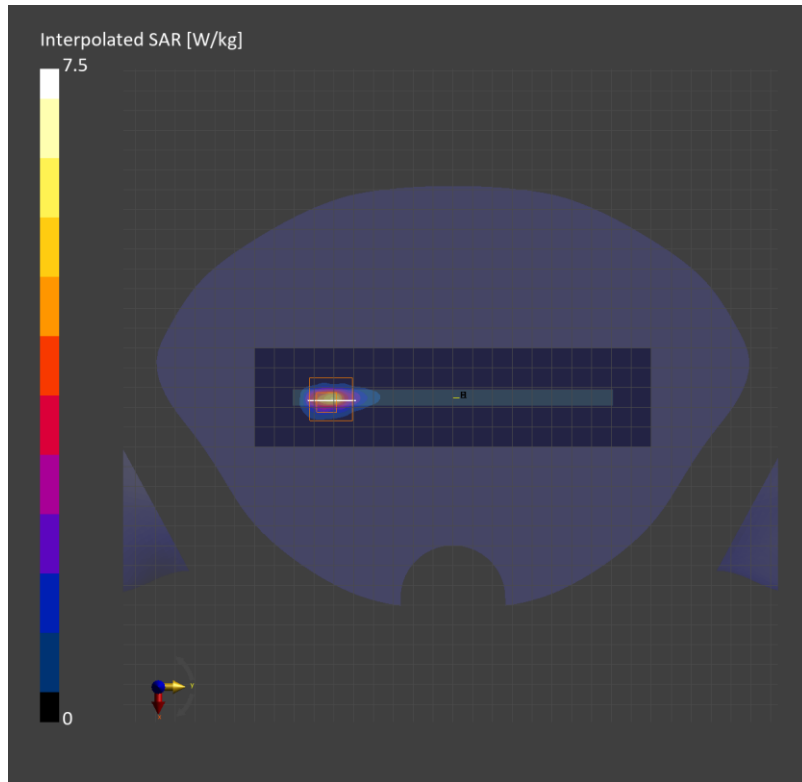
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2038	HBBL-600-10000	EX3DV4 - SN7645, 2023-09-20	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	49.8 x 200.0	24.0 x 24.0 x 24.0
Grid Steps [mm]	8.3 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]	3.26	3.94
psSAR10g [W/Kg]	0.809	0.877
Power Drift [dB]		0.00
M2/M1 [%]		60.1
Dist 3dB Peak [mm]		4.0



Measurement Report for SM-A556D, Right Touch, U-NII-2C < 5.65 GHz, IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle), Channel 122 (5610.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	Touch, 0.00	U-NII-2C < 5.65 GHz	WLAN, 10626-AAC	5610.0	5.15	5.02	34.7

Hardware Setup

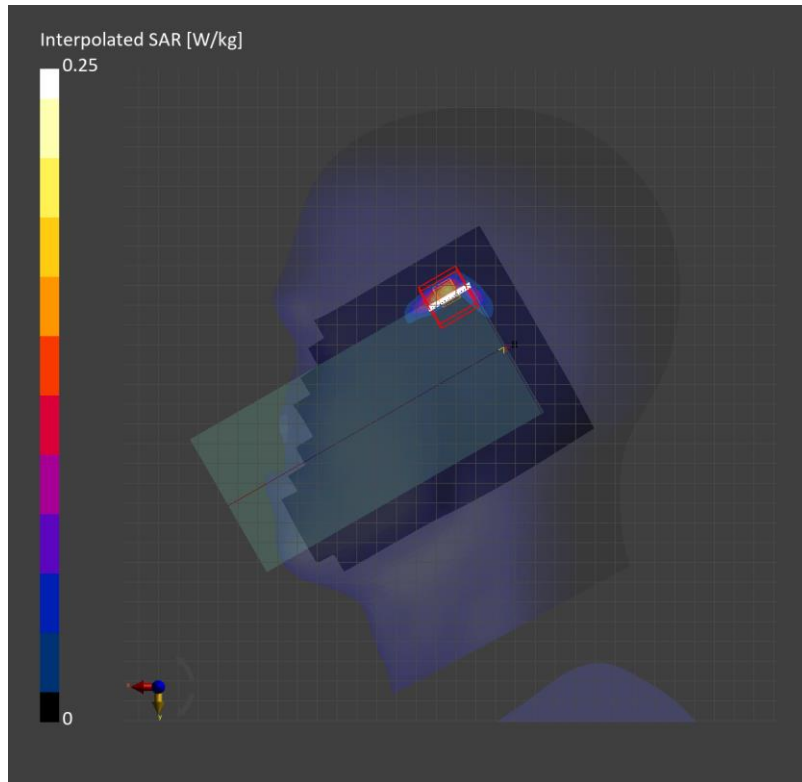
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2039	HBBL-600-10000	EX3DV4 - SN7646, 2023-03-23	DAE4 Sn1447, 2023-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	24.0 x 24.0 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]	0.086	0.144
psSAR10g [W/Kg]	0.020	0.029
Power Drift [dB]		0.18
M2/M1 [%]		66.1
Dist 3dB Peak [mm]		4.1



Measurement Report for SM-A556D, Left, U-NII-2C Standalone, IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle), Channel 118 (5590.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	Left, 0.00	U-NII-2C Standalone	WLAN, 10599-AAC	5590.0	4.57	4.96	34.6

Hardware Setup

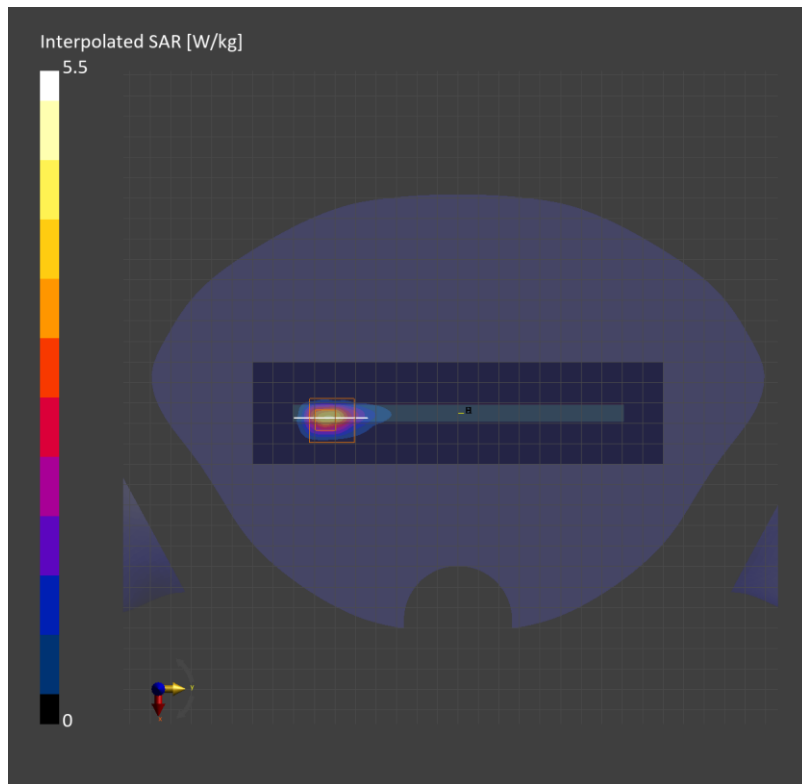
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2038	HBBL-600-10000	EX3DV4 - SN7645, 2023-09-20	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	49.8 x 200.0	24.0 x 24.0 x 24.0
Grid Steps [mm]	8.3 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]	2.70	4.14
psSAR10g [W/Kg]	0.732	0.905
Power Drift [dB]		-0.03
M2/M1 [%]		54.1
Dist 3dB Peak [mm]		4.0



Measurement Report for SM-A556D, Right Touch, Custom Band, IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle), Channel 5795000 (5795.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	Touch, 0.00	Custom Band	CW, 10599-AAC	5795.0	4.56	5.20	34.3

Hardware Setup

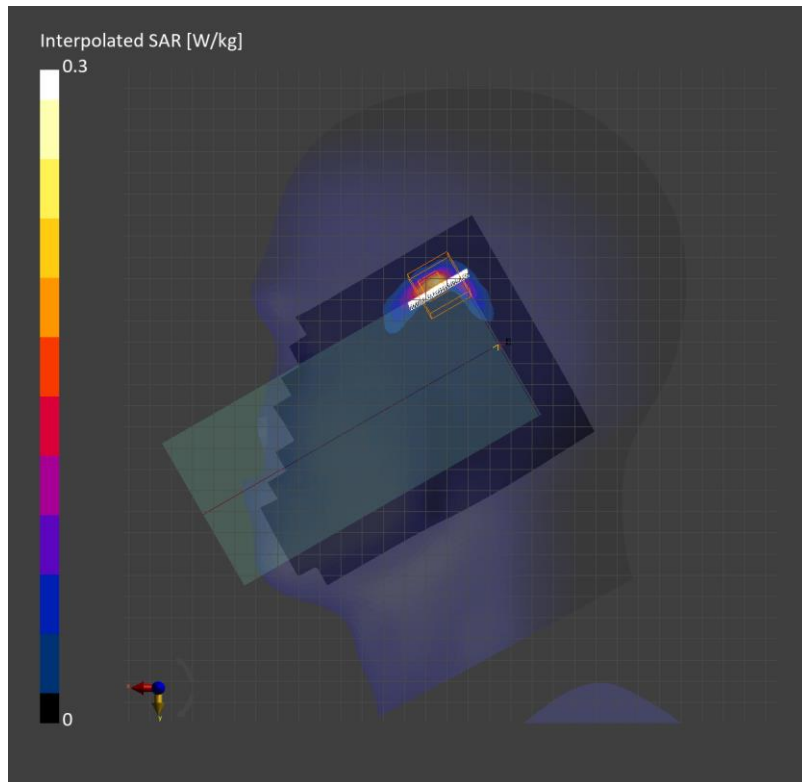
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2038	HBBL-600-10000	EX3DV4 - SN7645, 2023-09-20	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	24.0 x 24.0 x 24.0
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]	0.118	0.146
psSAR10g [W/Kg]	0.030	0.034
Power Drift [dB]		-0.05
M2/M1 [%]		57.0
Dist 3dB Peak [mm]		4.0



Measurement Report for SM-A556D, Left, U-NII-2C, U-NII-3, IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle), Channel 151 (5755.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	Left, 0.00	U-NII-2C, U-NII-3	WLAN, 10599-AAC	5755.0	4.54	5.15	34.3

Hardware Setup

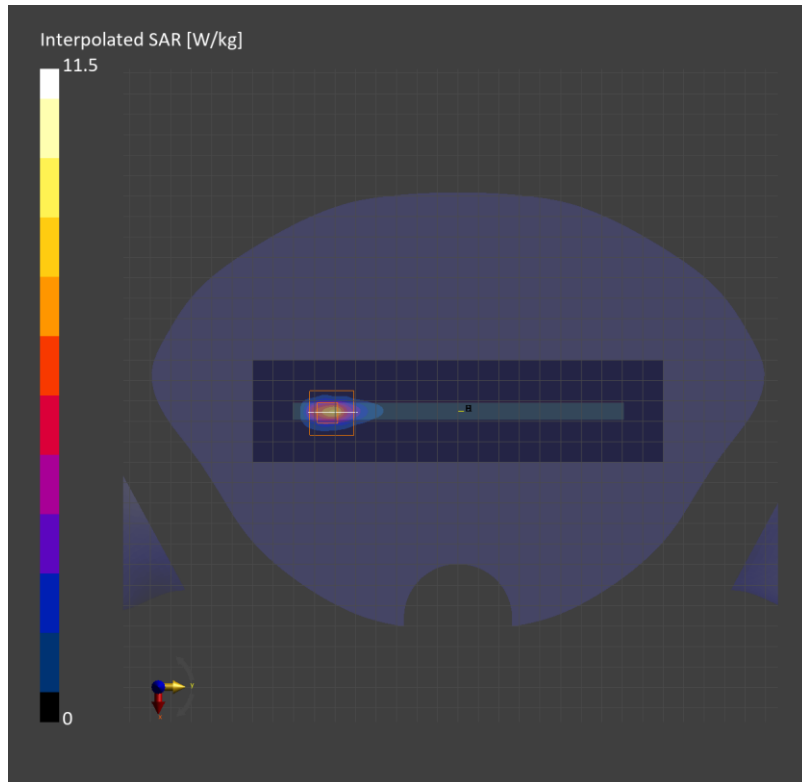
Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2038	HBBL-600-10000	EX3DV4 - SN7645, 2023-09-20	DAE4 Sn1468, 2023-08-24

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	49.8 x 200.0	24.0 x 24.0 x 24.0
Grid Steps [mm]	8.3 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]	4.64	5.54
psSAR10g [W/Kg]	1.12	1.23
Power Drift [dB]		0.01
M2/M1 [%]		54.1
Dist 3dB Peak [mm]		4.0



Bluetooth

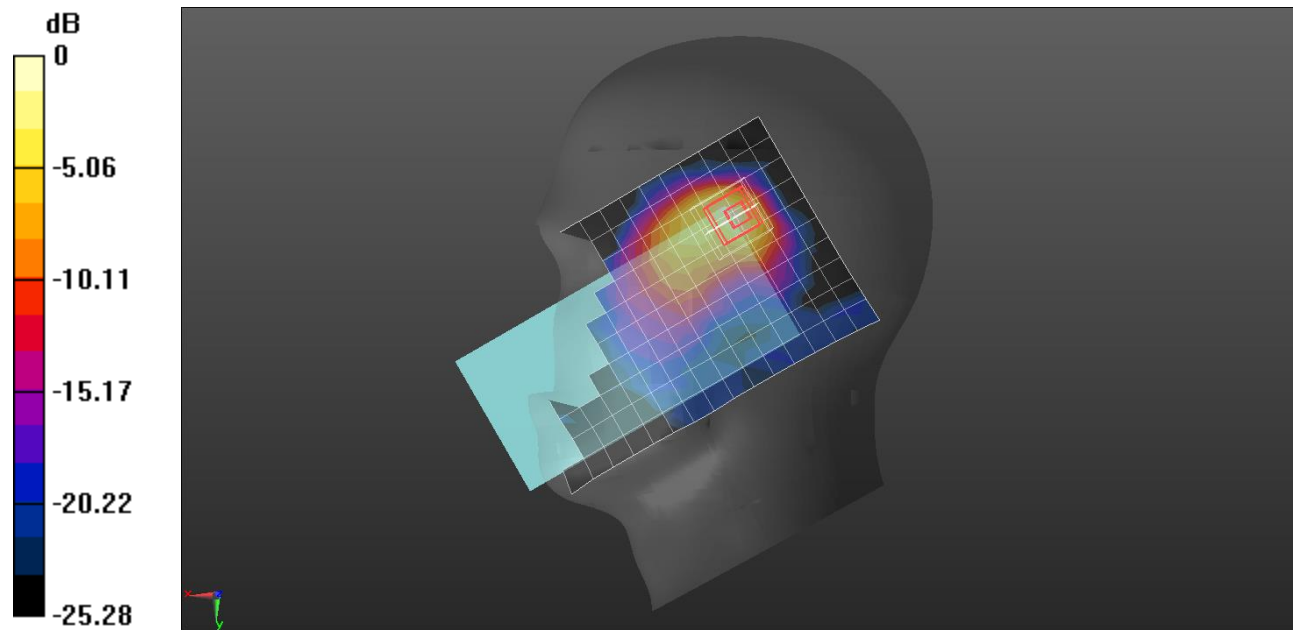
Frequency: 2402 MHz; Communication System Channel Number: 0; Duty Cycle: 1:1.17625
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used (interpolated): $f = 2402$ MHz; $\sigma = 1.798$ S/m; $\epsilon_r = 38.746$; $\rho = 1000$ kg/m³

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 - SN3871; ConvF(7.74, 7.17, 7.55) @ 2402 MHz; Calibrated: 8/25/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (Right); 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 GFSK ch.0 Sub.4/Area Scan (11x18x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 0.392 W/kg

RHS/Touch Bluetooth GFSK ch.0 Sub.4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 12.42 V/m; Power Drift = 0.15 dB
 Peak SAR (extrapolated) = 0.536 W/kg
SAR(1 g) = 0.206 W/kg; SAR(10 g) = 0.087 W/kg
 Smallest distance from peaks to all points 3 dB below = 5 mm
 Ratio of SAR at M2 to SAR at M1 = 38.1%
 Maximum value of SAR (measured) = 0.387 W/kg



0 dB = 0.387 W/kg = -4.12 dBW/kg

Bluetooth

Frequency: 2402 MHz; Communication System Channel Number: 0; Duty Cycle: 1:1.17625
 Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
 Medium parameters used (interpolated): $f = 2402$ MHz; $\sigma = 1.742$ S/m; $\epsilon_r = 38.427$; $\rho = 1000$ 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 - SN7314; ConvF(7.47, 7.47, 7.47) @ 2402 MHz; Calibrated: 5/26/2023
- 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 (7501)

Left/Bluetooth GFSK ch.0 Sub.4/Area Scan (6x17x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 0.159 W/kg

Left/Bluetooth GFSK ch.0 Sub.4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.373 V/m; Power Drift = 0.01 dB

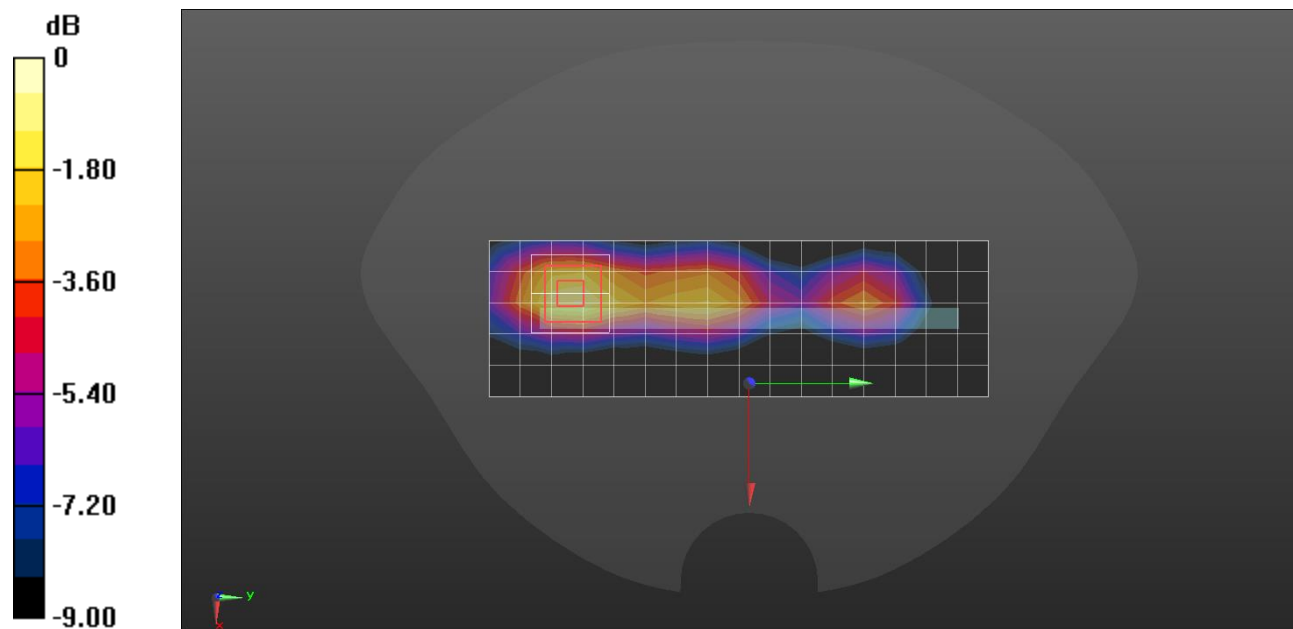
Peak SAR (extrapolated) = 0.217 W/kg

SAR(1 g) = 0.111 W/kg; SAR(10 g) = 0.056 W/kg

Smallest distance from peaks to all points 3 dB below = 12 mm

Ratio of SAR at M2 to SAR at M1 = 51.3%

Maximum value of SAR (measured) = 0.177 W/kg



0 dB = 0.177 W/kg = -7.52 dBW/kg

Measurement Report for SM-A556D, Rear, Custom Band, CW, Channel 13600 (13.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	Rear, 0.00	Custom Band	CW, 0--	13.6	17.89	0.727	54.0

Hardware Setup

Phantom	TSL (Tissue Simulating Liquid)	Probe, Calibration Date	DAE, Calibration Date
ELI V6.0 (20deg probe tilt) - 2005	HSL750	EX3DV4 - SN7646, 2023-03-23	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	3.8 x 3.8 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.052	0.060
psSAR10g [W/Kg]	0.035	0.020
Power Drift [dB]		-0.03
M2/M1 [%]		49.4
Dist 3dB Peak [mm]		3.4

