Appendix B – System Check Plots

Date: 2024/7/30

System Check_13MHz

DUT: CLA-13 MHz ;Type: CLA-13 ;SN: 1018

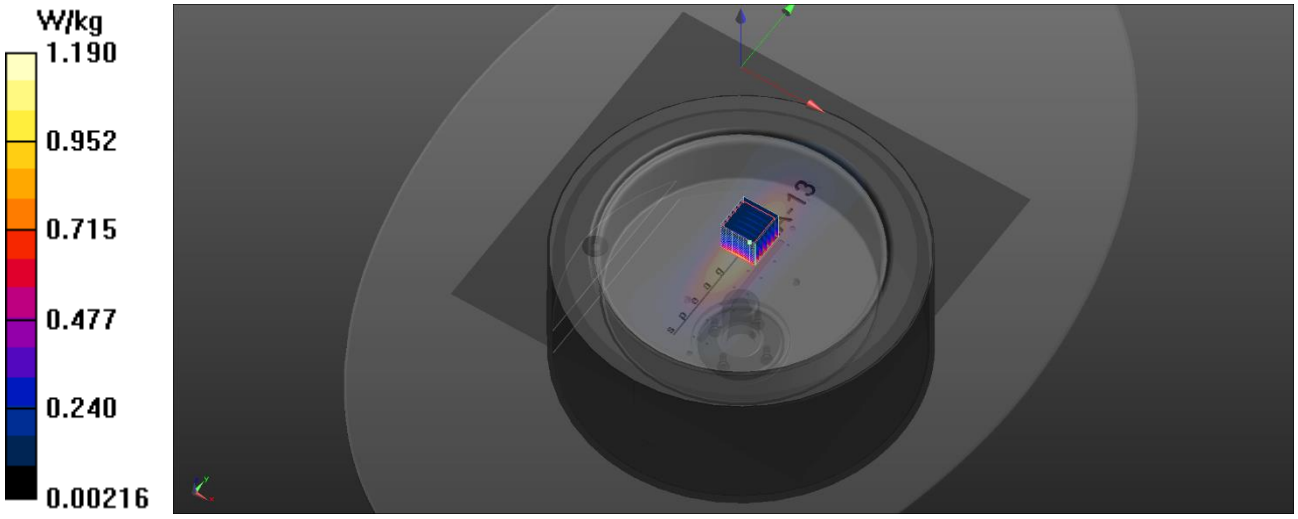
Communication System: UID 10453 - AAD, Validation (Square, 10ms, 1ms); Frequency: 13 MHz;Duty Cycle: 1:10
Medium parameters used (interpolated): f = 13 MHz; σ = 0.731 S/m; ε_r = 55.277; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7650; ConvF(17.02, 18.46, 16.04) @ 13 MHz; Calibrated: 2024/6/4
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2024/3/11
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (121x121x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

Zoom Scan (7x7x16)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 39.55 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 2.02 W/kg
SAR(1 g) = 0.543 W/kg; SAR(10 g) = 0.351 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 12 mm)
Ratio of SAR at M2 to SAR at M1 = 68.6%
Maximum value of SAR (measured) = 0.993 W/kg



Test Date : 2024-08-06 | Ambient Temp : 22.5 °C | Tissue Temp : 21.3 °C

System Performance Check

System Performance Check at 750 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D750V3	1222	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	750.000	9.37	0.929	42.8

Hardware Setup

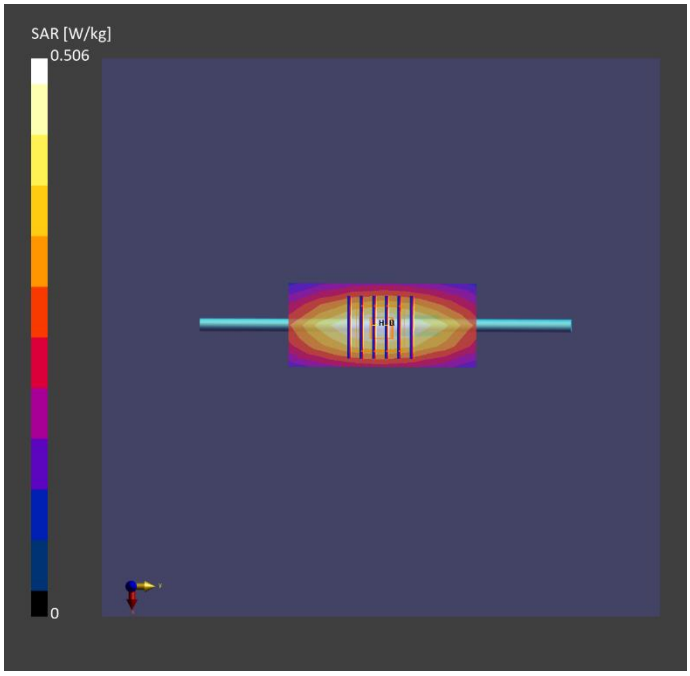
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	0.438	**0.434**
psSAR-*10g* [W/kg]	0.291	**0.286**
Power Drift [dB]		0.02
TSL Correction	Positive only	Positive only



Test Date : 2024-09-10 | Ambient Temp : 22.9 °C | Tissue Temp : 21.8 °C

System Performance Check

System Performance Check at 750 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D750V3	1222	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	750.000	9.37	0.907	42.7

Hardware Setup

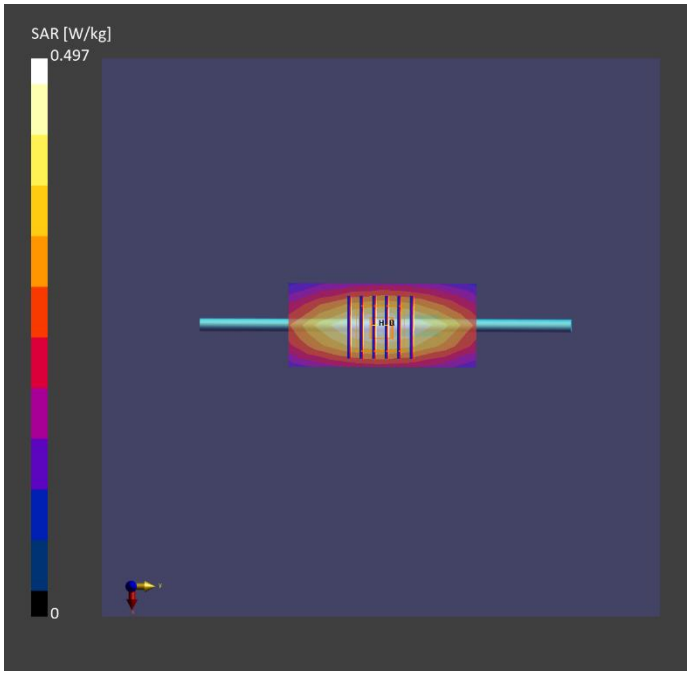
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	0.431	**0.426**
psSAR-*10g* [W/kg]	0.287	**0.281**
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-08-07 | Ambient Temp : 22.6 °C | Tissue Temp : 21.3 °C

System Performance Check

System Performance Check at 835 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D835V2	4d291	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	835.000	9.15	0.961	42.6

Hardware Setup

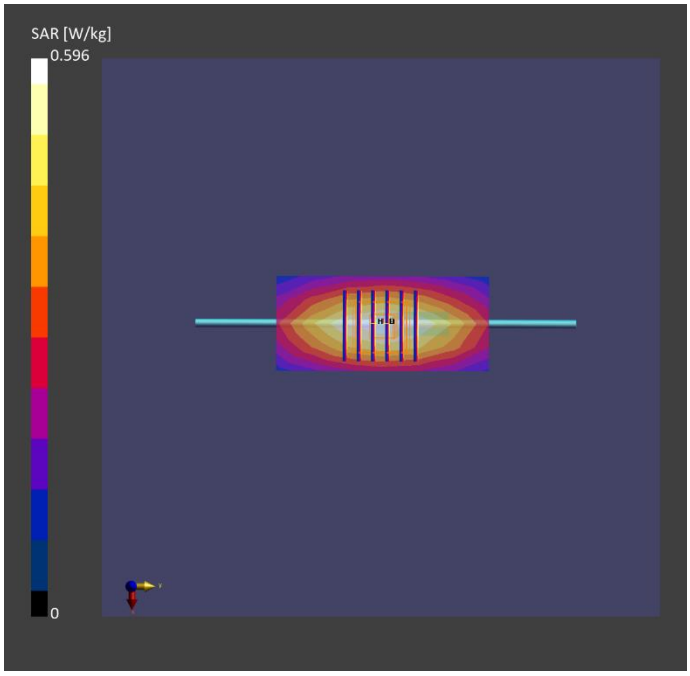
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	0.515	**0.510**
psSAR-*10g* [W/kg]	0.338	**0.333**
Power Drift [dB]		-0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-09-10 | Ambient Temp : 22.9 °C | Tissue Temp : 21.8 °C

System Performance Check

System Performance Check at 835 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D835V2	4d291	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	835.000	9.15	0.940	42.5

Hardware Setup

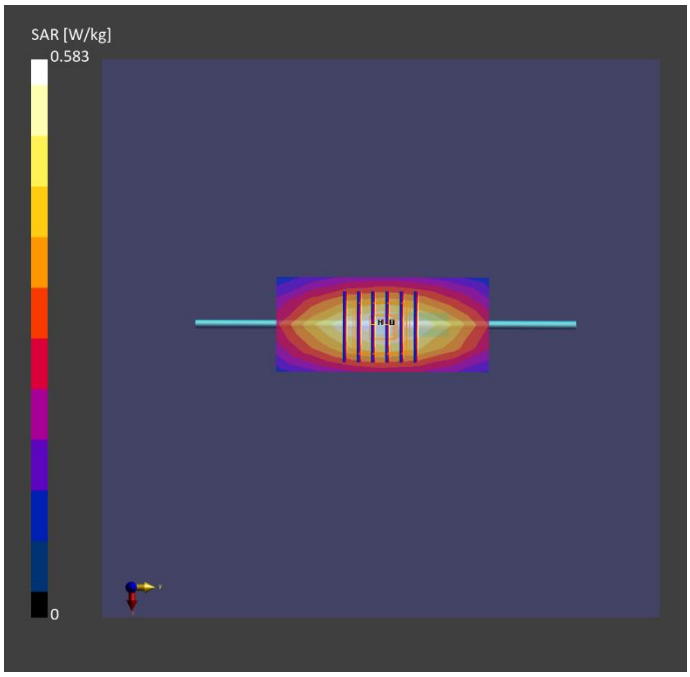
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	0.504	**0.499**
psSAR-*10g* [W/kg]	0.331	**0.325**
Power Drift [dB]		0.00
TSL Correction	Positive only	Positive only



Test Date : 2024-08-08 | Ambient Temp : 22.7 °C | Tissue Temp : 21.5 °C

System Performance Check

System Performance Check at 1800 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D1800V2	2d167	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	1800.000	7.9	1.41	39.6

Hardware Setup

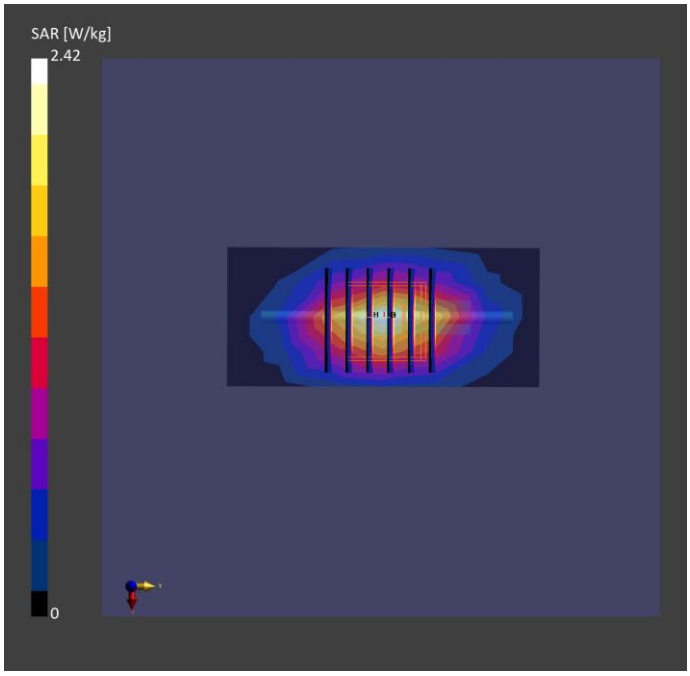
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	1.94	**1.90**
psSAR-*10g* [W/kg]	1.02	**1.00**
Power Drift [dB]		-0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-08-06 | Ambient Temp : 22.5 °C | Tissue Temp : 21.3 °C

System Performance Check

System Performance Check at 1900 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D1900V2	5d111	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	1900.000	7.69	1.48	40.2

Hardware Setup

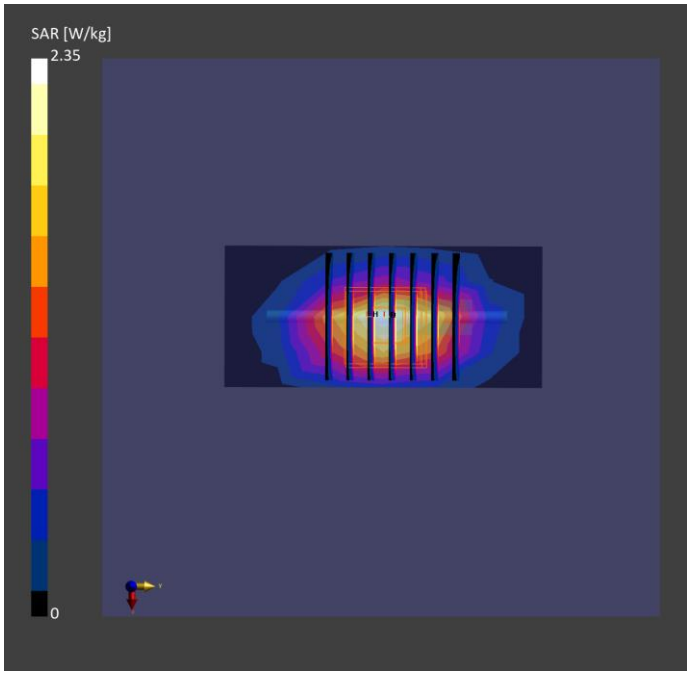
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	1.83	**1.84**
psSAR-*10g* [W/kg]	0.948	**0.974**
Power Drift [dB]		-0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-08-08 | Ambient Temp : 22.7 °C | Tissue Temp : 21.5 °C

System Performance Check

System Performance Check at 1900 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D1900V2	5d111	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	1900.000	7.69	1.46	39.5

Hardware Setup

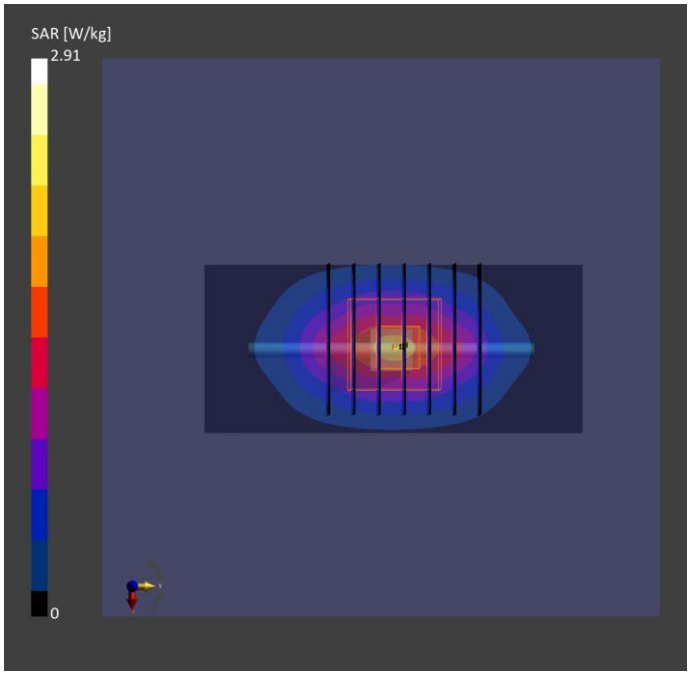
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	1.83	**1.86**
psSAR-*10g* [W/kg]	0.948	**0.977**
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-07-31 | Ambient Temp : 21.9 °C | Tissue Temp : 20.9 °C

System Performance Check

System Performance Check at 2450 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D2450V2	1087	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	2450.000	7.05	1.79	39.8

Hardware Setup

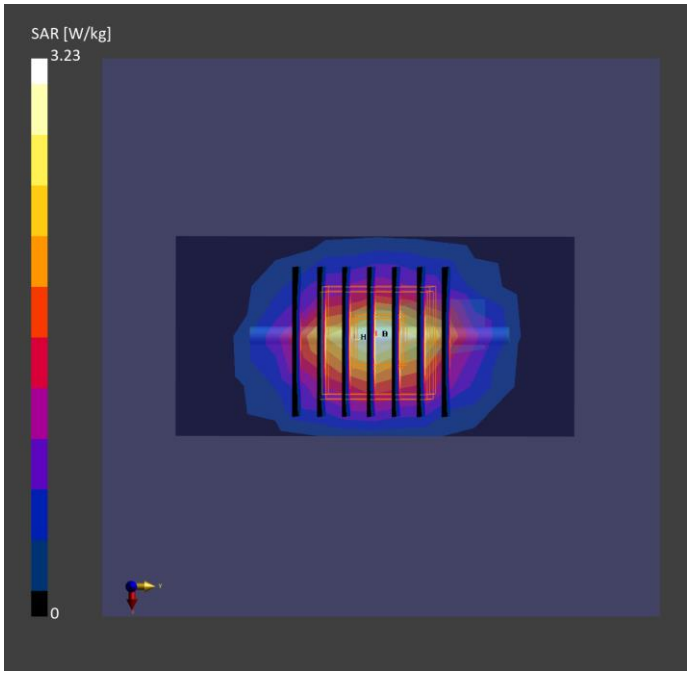
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000	EX3DV4 - SN7757 / 2023-08-22	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	2.47	**2.44**
psSAR-*10g* [W/kg]	1.15	**1.14**
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-08-11 | Ambient Temp : 22.8 °C | Tissue Temp : 21.4 °C

System Performance Check

System Performance Check at 2600 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D2600V2	1197	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	2600.000	7.11	1.96	40.0

Hardware Setup

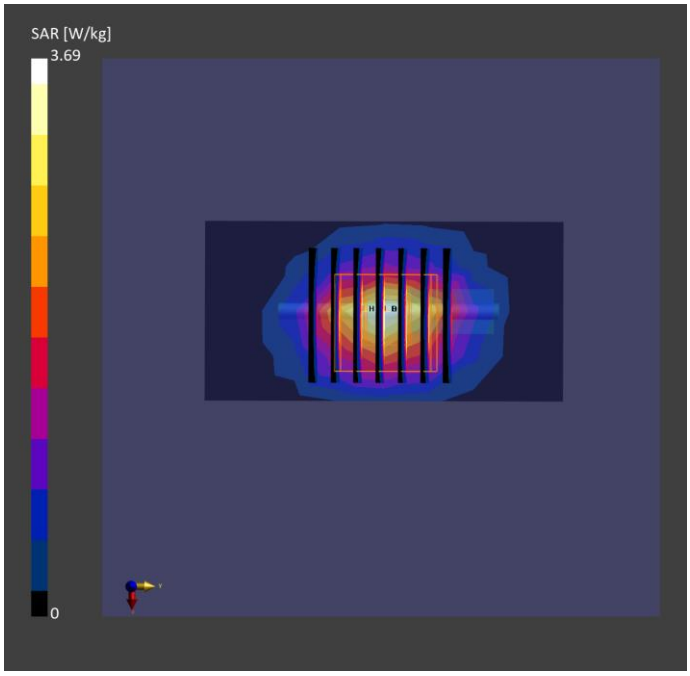
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	2.80	**2.74**
psSAR-*10g* [W/kg]	1.26	**1.23**
Power Drift [dB]		0.00
TSL Correction	Positive only	Positive only



Test Date : 2024-09-10 | Ambient Temp : 22.9 °C | Tissue Temp : 21.8 °C

System Performance Check

System Performance Check at 2600 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D2600V2	1197	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	2600.000	7.11	2.04	39.0

Hardware Setup

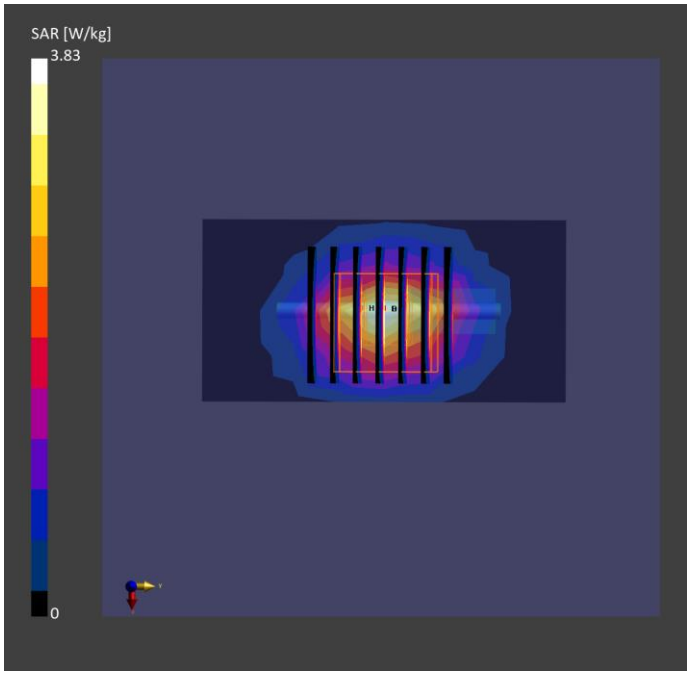
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	2.89	**2.84**
psSAR-*10g* [W/kg]	1.30	**1.28**
Power Drift [dB]		-0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-08-09 | Ambient Temp : 22.4 °C | Tissue Temp : 21.2 °C

System Performance Check

System Performance Check at 3500 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D3500V2	1013	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	3500.000	6.64	2.76	37.9

Hardware Setup

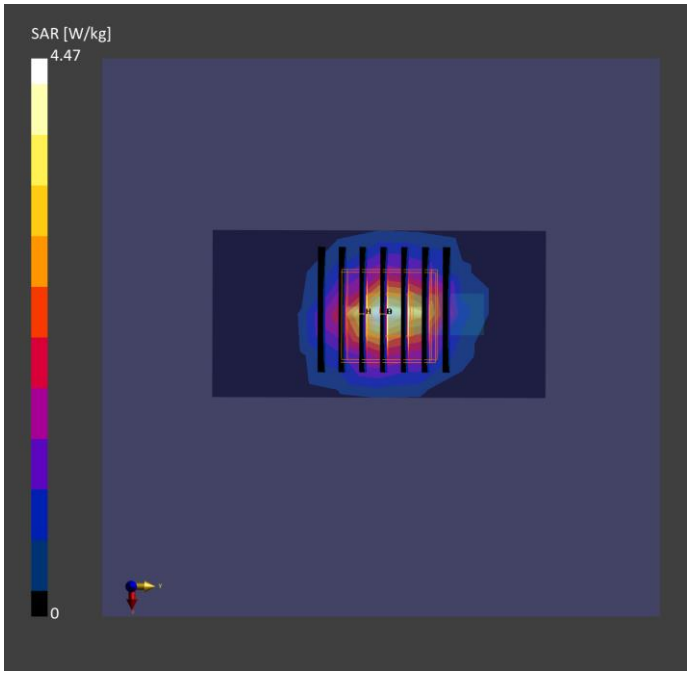
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	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
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	3.23	**3.16**
psSAR-*10g* [W/kg]	1.22	**1.20**
Power Drift [dB]		-0.04
TSL Correction	Positive only	Positive only



Test Date : 2024-09-09 | Ambient Temp : 22.6 °C | Tissue Temp : 21.5 °C

System Performance Check

System Performance Check at 3500 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D3500V2	1013	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	3500.000	6.64	2.78	38.5

Hardware Setup

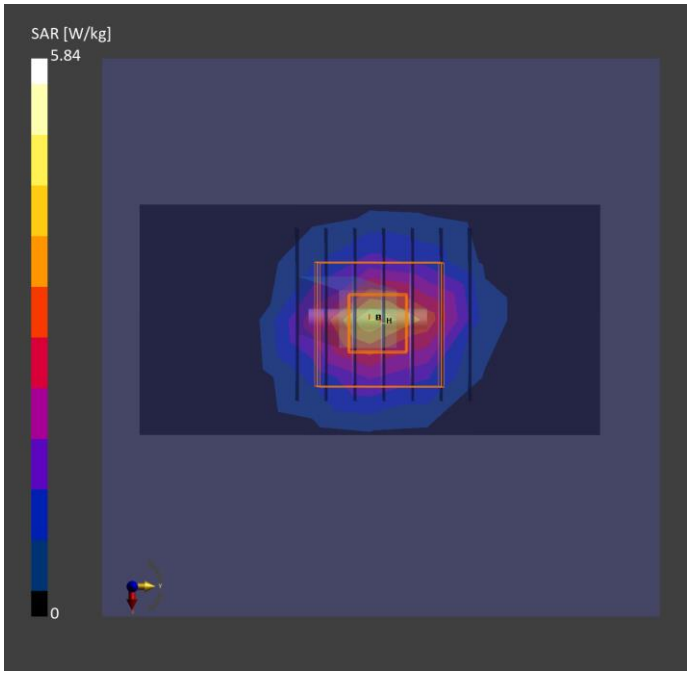
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	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
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	3.19	**3.16**
psSAR-*10g* [W/kg]	1.20	**1.20**
Power Drift [dB]		-0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-08-09 | Ambient Temp : 22.4 °C | Tissue Temp : 21.2 °C

System Performance Check

System Performance Check at 3700 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D3700V2	1034	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	3700.000	6.58	2.94	37.6

Hardware Setup

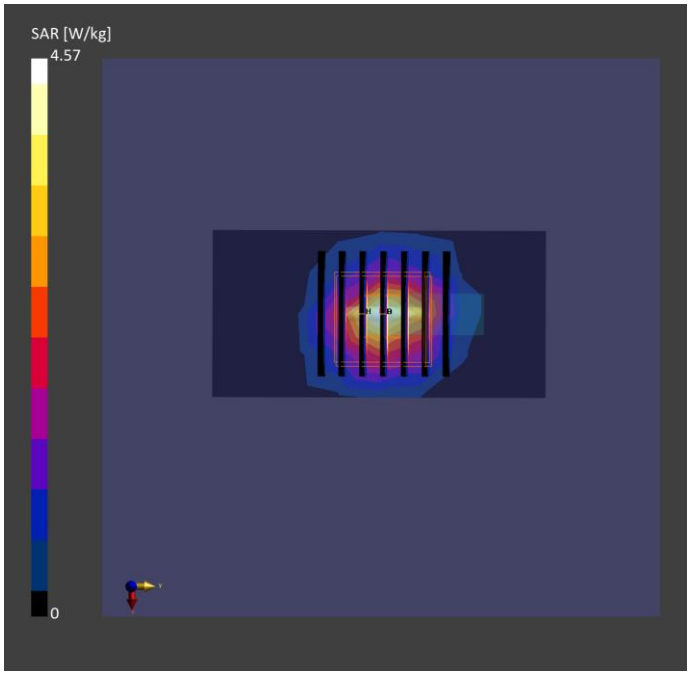
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	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
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	3.23	**3.23**
psSAR-*10g* [W/kg]	1.19	**1.19**
Power Drift [dB]		0.00
TSL Correction	Positive only	Positive only



Test Date : 2024-09-05 | Ambient Temp : 22.7 °C | Tissue Temp : 21.5 °C

System Performance Check

System Performance Check at 3700 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D3700V2	1034	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	3700.000	6.58	3.03	37.5

Hardware Setup

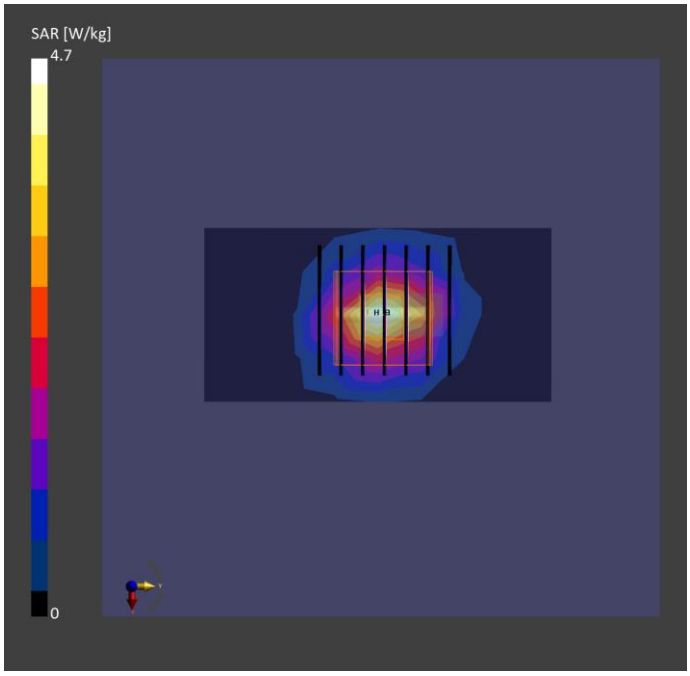
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	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
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	3.27	**3.28**
psSAR-*10g* [W/kg]	1.20	**1.23**
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-09-09 | Ambient Temp : 22.6 °C | Tissue Temp : 21.5 °C

System Performance Check

System Performance Check at 3700 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D3700V2	1034	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	3700.000	6.58	3.02	37.4

Hardware Setup

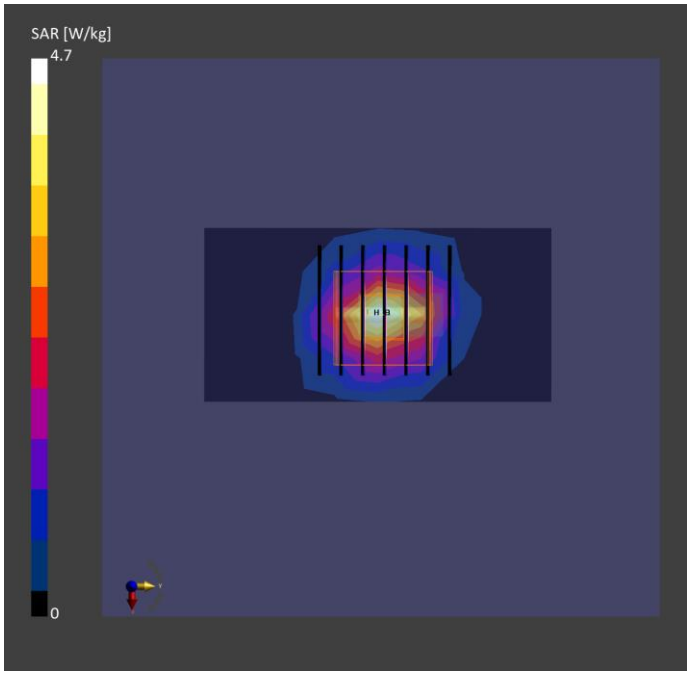
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	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
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	3.27	**3.27**
psSAR-*10g* [W/kg]	1.20	**1.21**
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-09-05 | Ambient Temp : 22.7 °C | Tissue Temp : 21.5 °C

System Performance Check

System Performance Check at 3900 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D3900V2	1014	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	3900.000	6.49	3.04	38.3

Hardware Setup

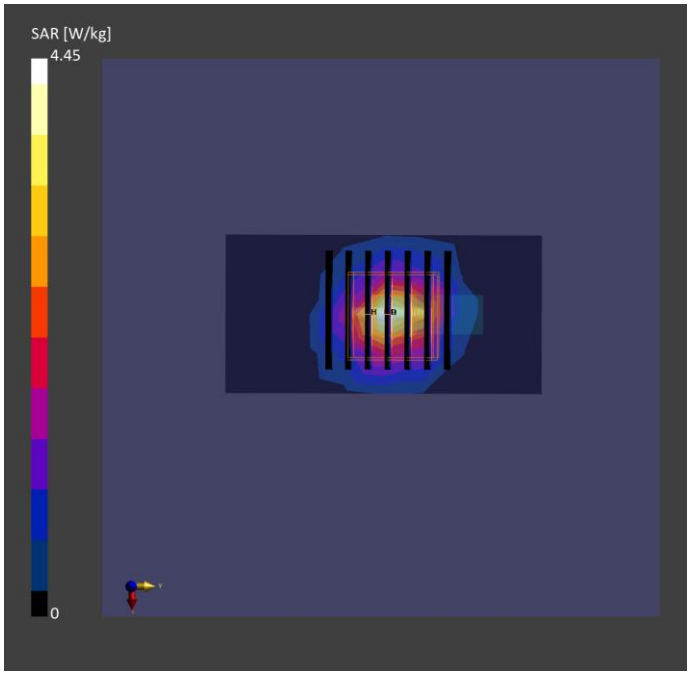
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000	EX3DV4 - SN7737 / 2024-07-31	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	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
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	3.12	**3.12**
psSAR-*10g* [W/kg]	1.10	**1.10**
Power Drift [dB]		-0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-08-01 | Ambient Temp : 22.1 °C | Tissue Temp : 21.2 °C

System Performance Check

System Performance Check at 5250 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D5GHzV2	1358	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	5250.000	5.02	4.53	36.2

Hardware Setup

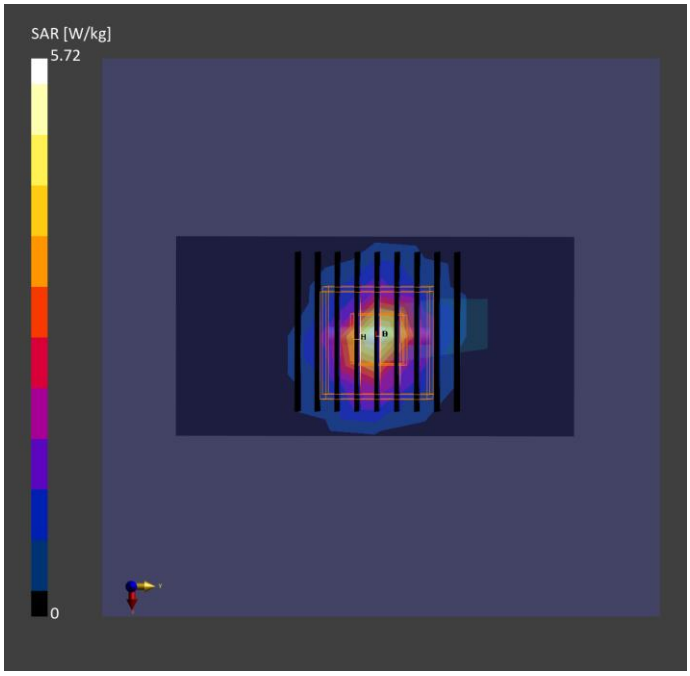
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000	EX3DV4 - SN7757 / 2023-08-22	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	3.49	**3.58**
psSAR-*10g* [W/kg]	0.995	**1.03**
Power Drift [dB]		0.02
TSL Correction	Positive only	Positive only



Test Date : 2024-08-01 | Ambient Temp : 22.1 °C | Tissue Temp : 21.2 °C

System Performance Check

System Performance Check at 5600 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D5GHzV2	1358	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	5600.000	4.29	4.92	35.6

Hardware Setup

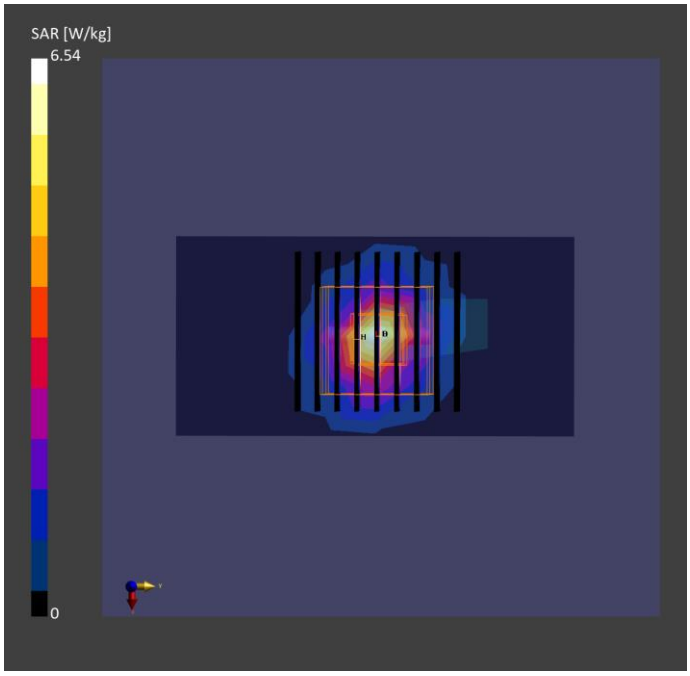
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000	EX3DV4 - SN7757 / 2023-08-22	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	4.05	**4.12**
psSAR-*10g* [W/kg]	1.14	**1.17**
Power Drift [dB]		0.02
TSL Correction	Positive only	Positive only



Test Date : 2024-08-01 | Ambient Temp : 22.1 °C | Tissue Temp : 21.2 °C

System Performance Check

System Performance Check at 5800 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D5GHzV2	1358	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	5800.000	4.36	5.15	35.3

Hardware Setup

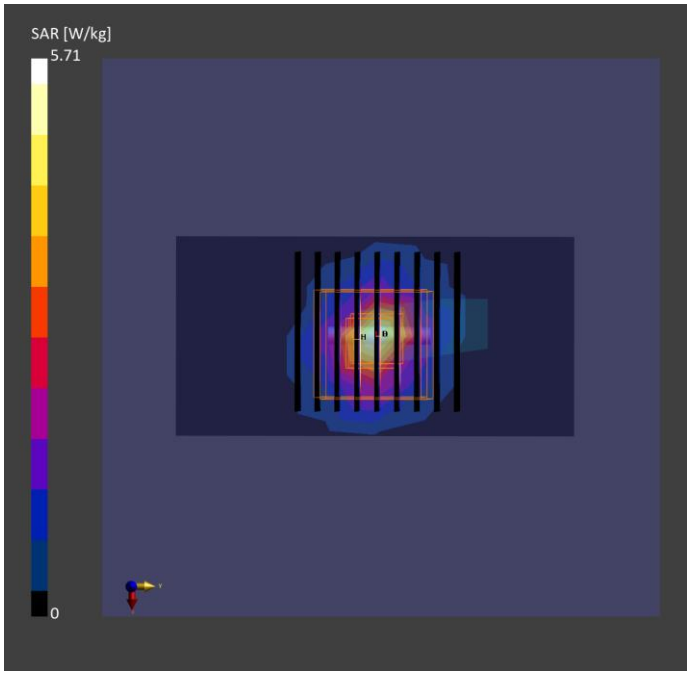
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000	EX3DV4 - SN7757 / 2023-08-22	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	3.56	**3.62**
psSAR-*10g* [W/kg]	1.00	**1.03**
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-07-31 | Ambient Temp : 21.9 °C | Tissue Temp : 20.9 °C

System Performance Check

System Performance Check at 6500 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D6.5GHz	1081	20.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	6500.000	4.47	6.05	33.3

Hardware Setup

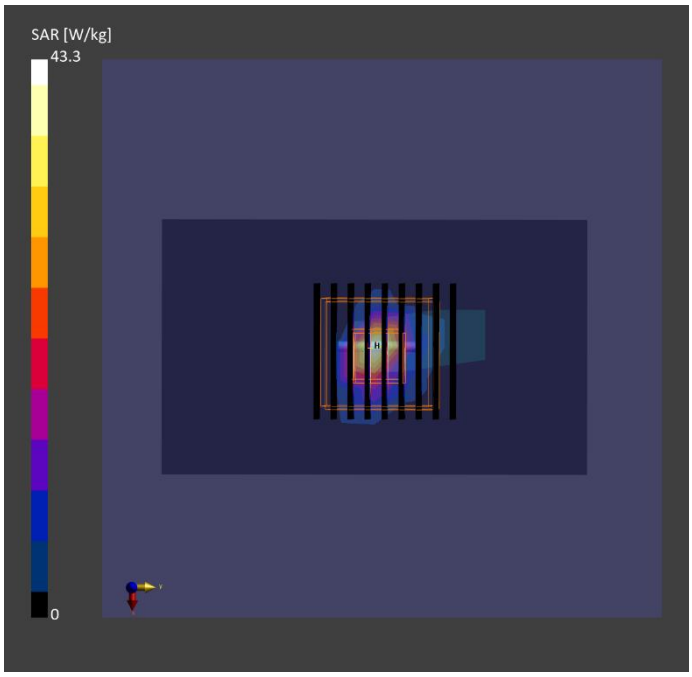
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000	EX3DV4 - SN7757 / 2023-08-22	DAE4 Sn1669 / 2024-05-16

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	51.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR-*1g* [W/kg]	22.9	**26.3**
psSAR-*8g* [W/kg]	5.54	**6.01**
psSAR-*10g* [W/kg]	4.59	**4.98**
psAPD (*1.0 cm²*, sq) [W/m²]		**263**
psAPD (*4.0 cm²*, sq) [W/m²]		**120**
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-08-05 | Ambient Temp : 22.5 °C

System Performance Check

System Performance Check at 10 GHz

Verification Source Properties

Manufacturer	Model No.	Serial No.
SPEAG	5G Verification Source 10 GHz	1060

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor
5G	CW	10000.0	1.0

Hardware Setup

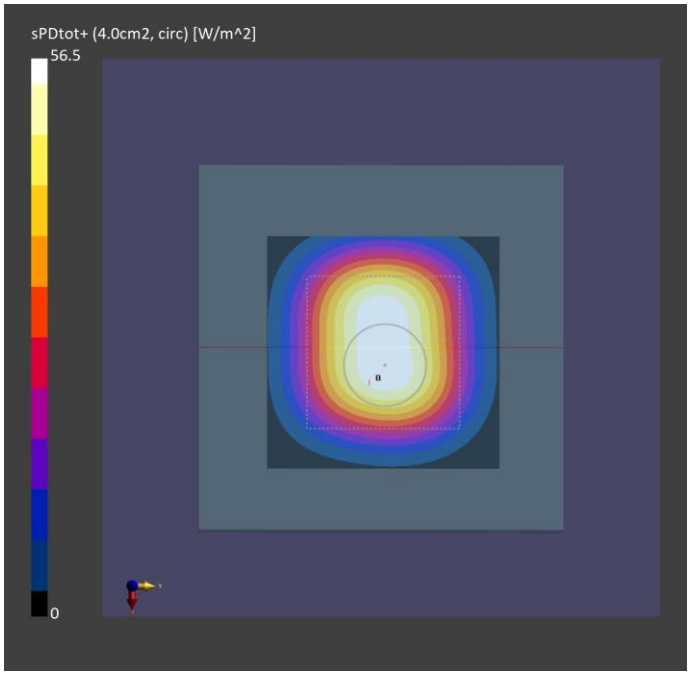
Phantom	Medium	Probe | Calibration Date	DAE | Calibration Date
mmWave - 1102	Air	EUmmWV3 - SN9403_F1-55GHz / 2023-12-05	DAE4 Sn1742 / 2024-08-15

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [mm]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

	5G Scan
Avg. Area [cm²]	4.00
psPD n+ [W/m²]	**56.4**
psPD tot+ [W/m²]	**56.5**
psPD mod+ [W/m²]	56.9
E max [V/m]	153
Power Drift [dB]	0.05



Test Date : 2024-08-06 | Ambient Temp : 22.5 °C

System Performance Check

System Performance Check at 10 GHz

Verification Source Properties

Manufacturer	Model No.	Serial No.
SPEAG	5G Verification Source 10 GHz	2003

Exposure Conditions

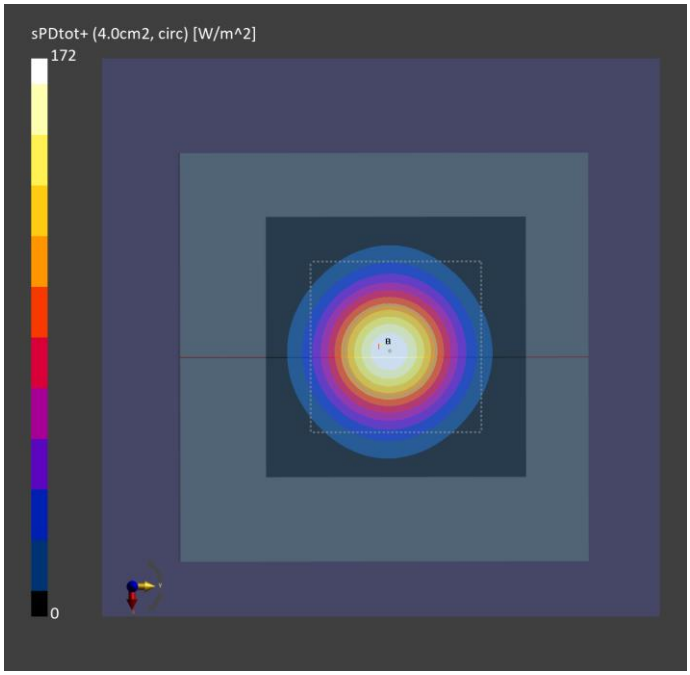
Phantom Section	Group	Frequency [MHz]	Conversion Factor
5G	CW	10000.0	1.0

Hardware Setup

Phantom	Medium	Probe | Calibration Date	DAE | Calibration Date
mmWave - 1102	Air	EUmmWV3 - SN9403_F1-55GHz / 2023-12-05	DAE4 Sn1742 / 2024-08-15

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [mm]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

	5G Scan
Avg. Area [cm²]	4.00
psPD n+ [W/m²]	**171**
psPD tot+ [W/m²]	**172**
psPD mod+ [W/m²]	177
E max [V/m]	291
Power Drift [dB]	0.12