

Appendix B – System Check Plots

Test Date : 2024-03-29 | Ambient Temp : 22.6 °C | Tissue Temp : 22.2 °C

System Performance Check

System Performance Check at 2450 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D2450	1087	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	2450.000	7.05	1.81	40.4

Hardware Setup

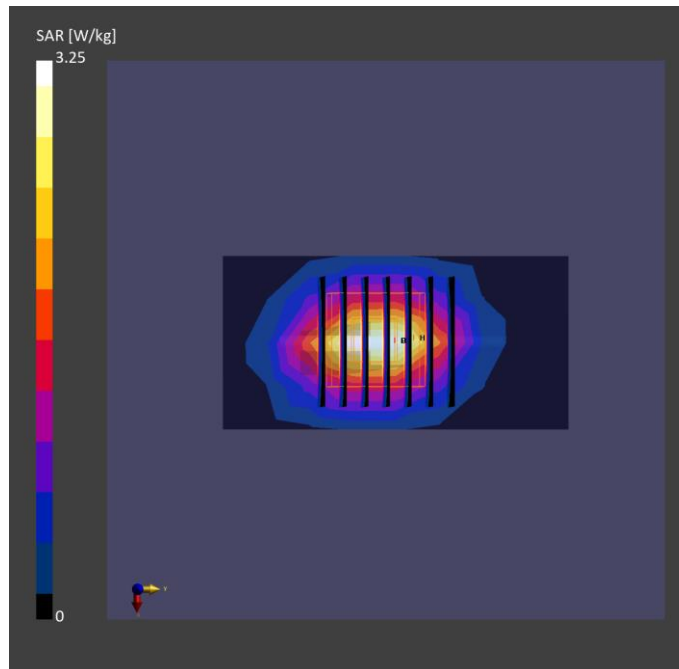
Phantom	Tissue Simulating Liquid	Probe Calibration Date	DAE Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	06T27N4	EX3DV4 - SN7737 / 2023-06-05	DAE4 Sn1743 / 2023-08-17

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]	2.58	2.57
psSAR-10g [W/kg]	1.20	1.21
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-03-29 | Ambient Temp : 22.6 °C | Tissue Temp : 22.2 °C

System Performance Check

System Performance Check at 5250 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D5GHz	1358	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	5250.000	5.58	4.53	36.0

Hardware Setup

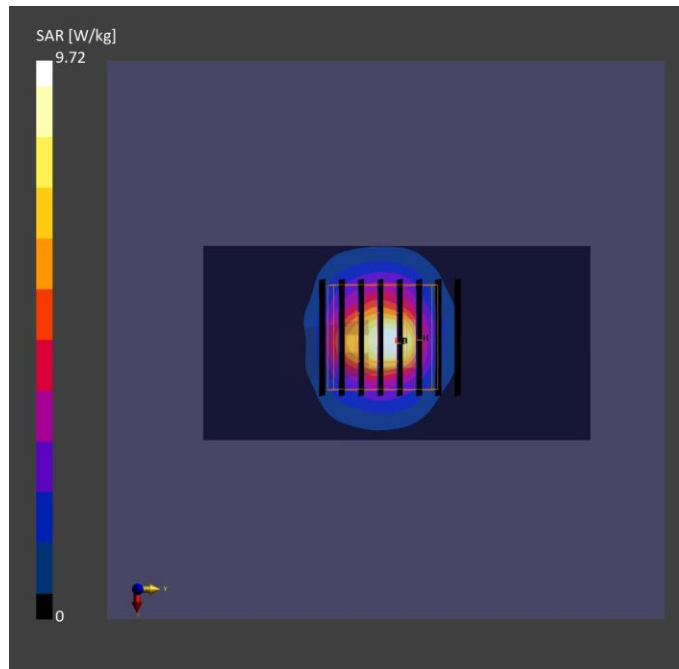
Phantom	Tissue Simulating Liquid	Probe Calibration Date	DAE Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	51T72N4	EX3DV4 - SN7737 / 2023-06-05	DAE4 Sn1743 / 2023-08-17

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]	3.44	3.83
psSAR-10g [W/kg]	1.03	1.10
Power Drift [dB]		0.00
TSL Correction	Positive only	Positive only



Test Date : 2024-03-29 | Ambient Temp : 22.6 °C | Tissue Temp : 22.2 °C

System Performance Check

System Performance Check at 5600 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D5GHz	1358	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	5600.000	4.83	4.97	35.8

Hardware Setup

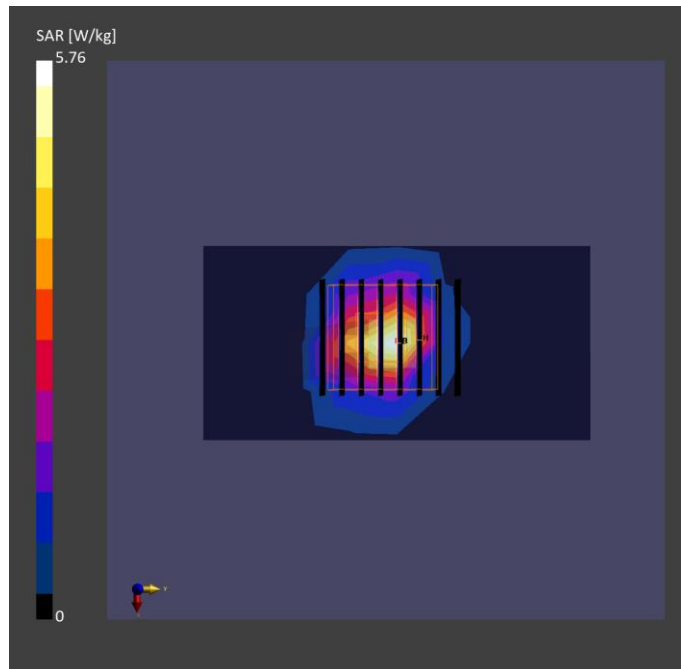
Phantom	Tissue Simulating Liquid	Probe Calibration Date	DAE Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	51T72N4	EX3DV4 - SN7737 / 2023-06-05	DAE4 Sn1743 / 2023-08-17

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]	3.90	4.30
psSAR-10g [W/kg]	1.16	1.22
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-03-29 | Ambient Temp : 22.6 °C | Tissue Temp : 22.2 °C

System Performance Check

System Performance Check at 5800 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D5GHz	1358	17.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	5800.000	4.9	4.89	36.3

Hardware Setup

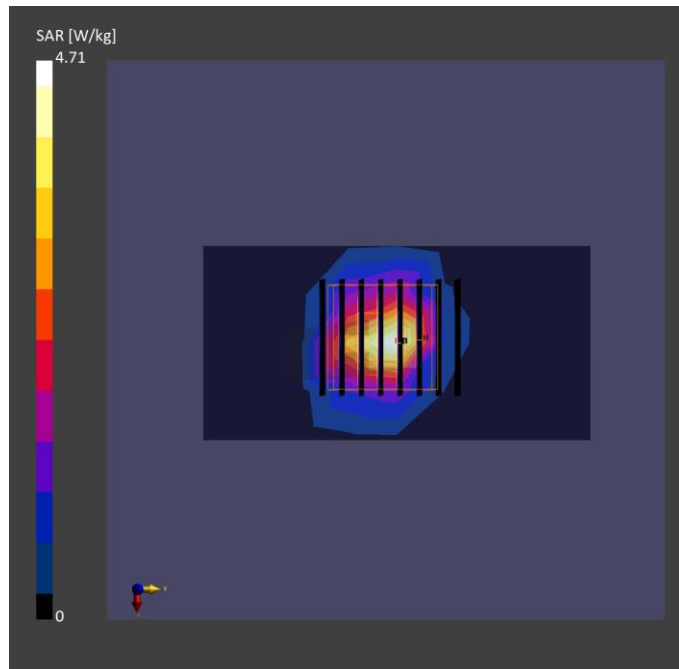
Phantom	Tissue Simulating Liquid	Probe Calibration Date	DAE Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	51T72N4	EX3DV4 - SN7737 / 2023-06-05	DAE4 Sn1743 / 2023-08-17

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]	3.45	3.68
psSAR-10g [W/kg]	0.965	1.08
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-03-29 | Ambient Temp : 22.6 °C | Tissue Temp : 22.2 °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	5.0	5.91	34.7

Hardware Setup

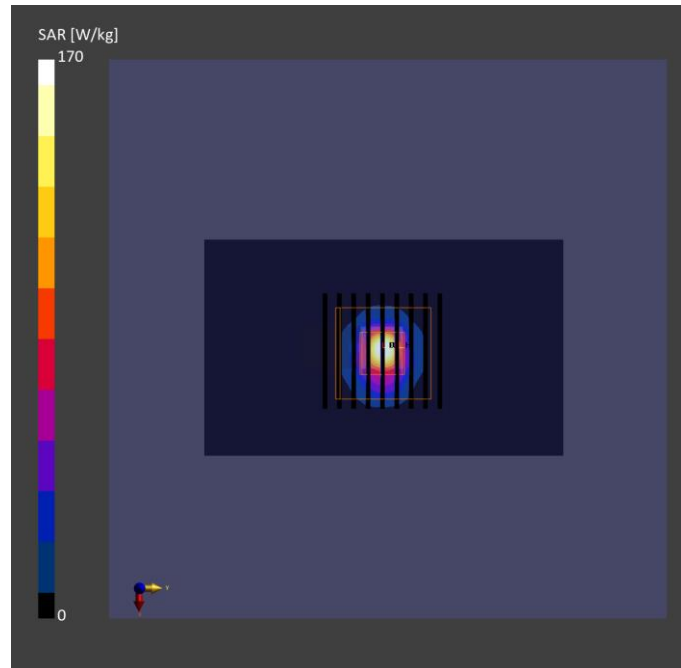
Phantom	Tissue Simulating Liquid	Probe Calibration Date	DAE Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	51T72N4	EX3DV4 - SN7737 / 2023-06-05	DAE4 Sn1743 / 2023-08-17

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]	25.2	26.6
psSAR-8g [W/kg]	5.95	6.03
psSAR-10g [W/kg]	4.66	4.94
psAPD (1.0 cm ² , sq) [W/m ²]		266
psAPD (4.0 cm ² , sq) [W/m ²]		123
Power Drift [dB]		0.04
TSL Correction	Positive only	Positive only



Test Date : 2024-03-30 | Ambient Temp : 22.6 °C

System Performance Check

System Performance Check at 10 GHz

Verification Source Properties

Manufacturer	Model No.	Serial No.
SPEAG	10G Verification Source	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 Sn1741 / 2022-08-11

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 [cm ²]	4.00
psPD n+ [W/m ²]	57.3
psPD tot+ [W/m ²]	57.4
psPD mod+ [W/m ²]	57.7
E max [V/m]	153
Power Drift [dB]	0.13

