

Appendix B – System Check Plots

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	6.96	1.76	37.5

Hardware Setup

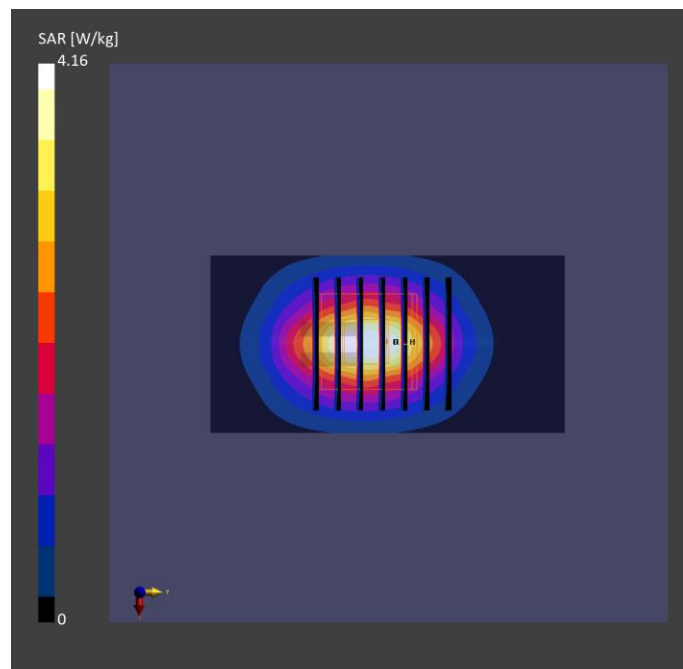
Phantom	Tissue Simulating Liquid	Probe Calibration Date	DAE Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7650 / 2024-06-04	DAE4 Sn1741 / 2024-07-16

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]	2.59	2.55
psSAR-10g [W/kg]	1.20	1.19
Power Drift [dB]		0.03
TSL Correction	Positive only	Positive only



Test Date : 2024-10-24 | Ambient Temp : 22.8 °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	5.45	4.34	34.2

Hardware Setup

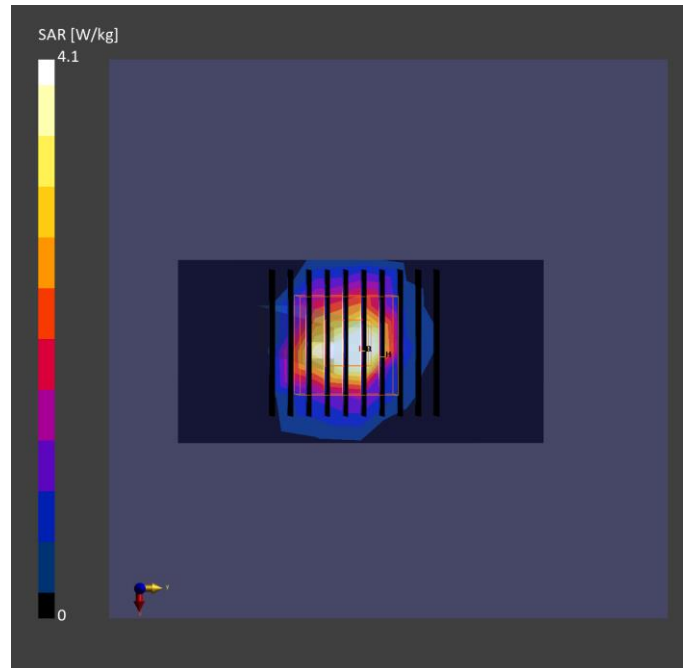
Phantom	Tissue Simulating Liquid	Probe Calibration Date	DAE Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7650 / 2024-06-04	DAE4 Sn1741 / 2024-07-16

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	3.98
psSAR-10g [W/kg]	1.07	1.14
Power Drift [dB]		0.04
TSL Correction	Positive only	Positive only



Test Date : 2024-10-24 | Ambient Temp : 22.8 °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	4.88	4.69	33.6

Hardware Setup

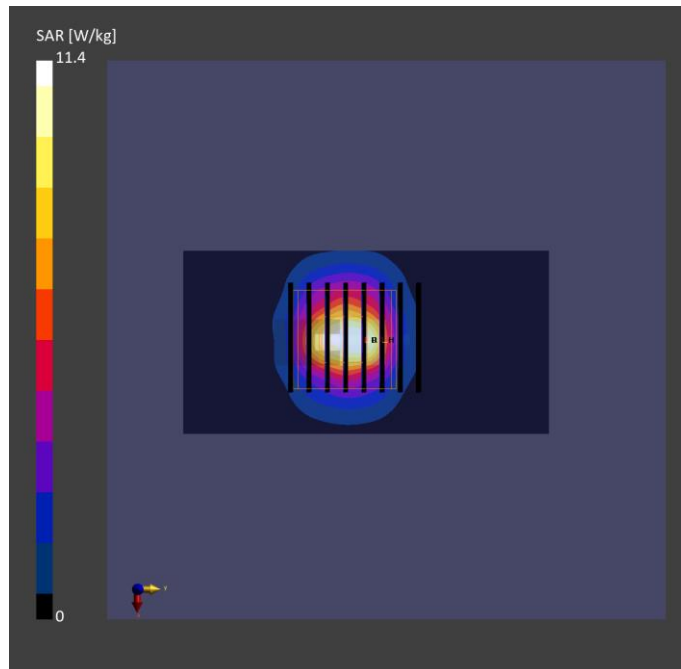
Phantom	Tissue Simulating Liquid	Probe Calibration Date	DAE Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7650 / 2024-06-04	DAE4 Sn1741 / 2024-07-16

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]	3.87	4.25
psSAR-10g [W/kg]	1.16	1.21
Power Drift [dB]		0.02
TSL Correction	Positive only	Positive only



Test Date : 2024-10-24 | Ambient Temp : 22.8 °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	5.01	4.91	33.4

Hardware Setup

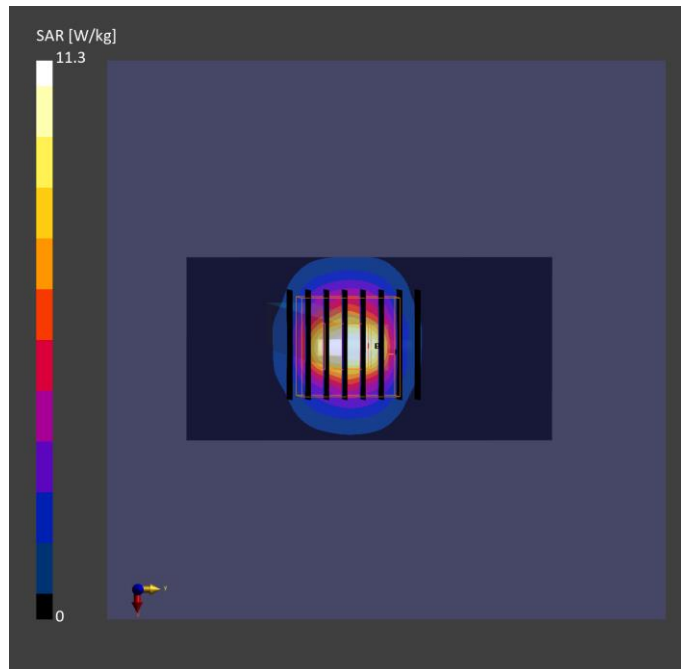
Phantom	Tissue Simulating Liquid	Probe Calibration Date	DAE Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7650 / 2024-06-04	DAE4 Sn1741 / 2024-07-16

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]	3.68	4.23
psSAR-10g [W/kg]	1.10	1.20
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-10-24 | Ambient Temp : 22.8 °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	5.37	5.68	32.3

Hardware Setup

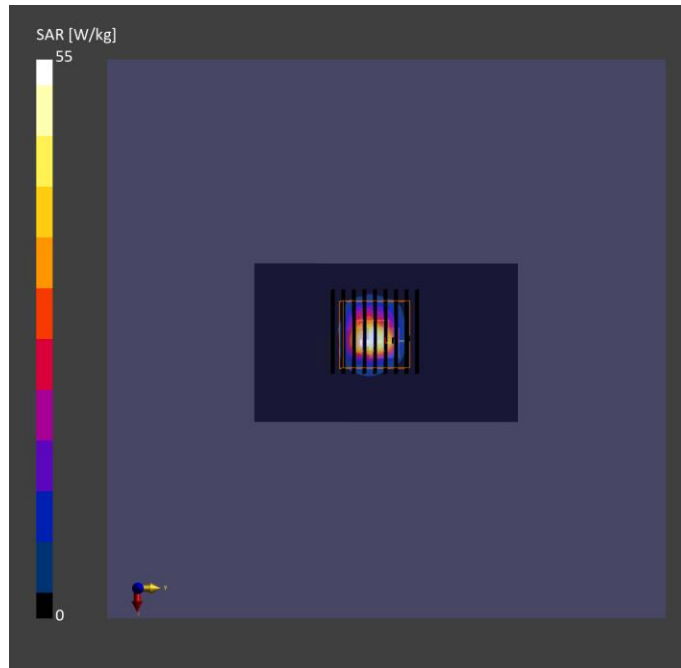
Phantom	Tissue Simulating Liquid	Probe Calibration Date	DAE Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7650 / 2024-06-04	DAE4 Sn1741 / 2024-07-16

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]	20.1	26.7
psSAR-8g [W/kg]	5.44	6.04
psSAR-10g [W/kg]	4.51	4.96
psAPD (1.0 cm ² , sq) [W/m ²]		267
psAPD (4.0 cm ² , sq) [W/m ²]		121
Power Drift [dB]		0.02
TSL Correction	Positive only	Positive only



Test Date : 2024-10-28 | Ambient Temp : 22.9 °C

System Performance Check

System Performance Check at 10GHz

Verification Source Properties

Manufacturer	Model No.	Serial No.
SPEAG	D10G	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 - SN9639_F1-55GHz / 2024-09-16	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]	2.0

Measurement Results

	5G Scan
Avg. Area [cm ²]	4.00
psPD n+ [W/m ²]	59.8
psPD tot+ [W/m ²]	60.0
psPD mod+ [W/m ²]	60.3
E max [V/m]	158
Power Drift [dB]	-0.04

