

## Appendix B – System Check Plots

Test Date : 2025-01-03 | Ambient Temp : 22.0 °C | Tissue Temp : 21.8 °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	7.09	1.85	38.5

**Hardware Setup**

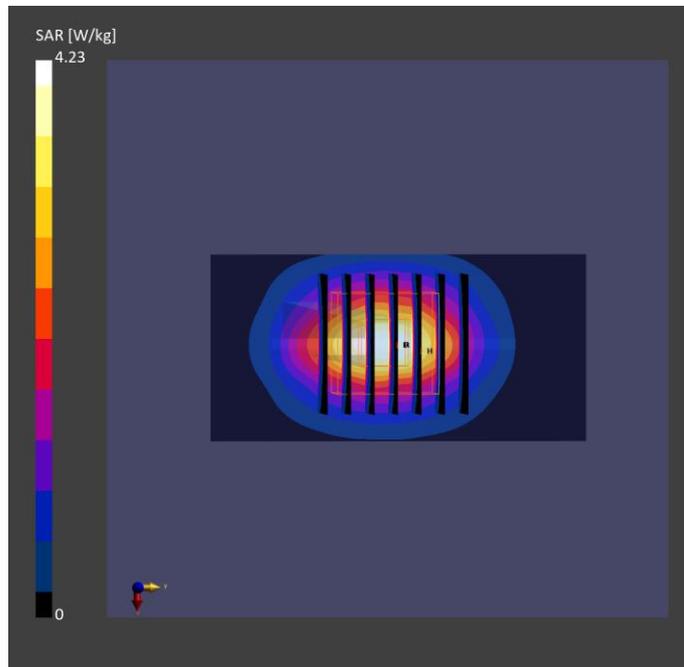
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7756 / 2024-09-04	DAE4 Sn1669 / 2024-05-16

**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]	2.59	<b>2.57</b>
psSAR-10g [W/kg]	1.20	<b>1.21</b>
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2025-01-23 | Ambient Temp : 22.5 °C | Tissue Temp : 21.2 °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	6.96	1.72	37.6

**Hardware Setup**

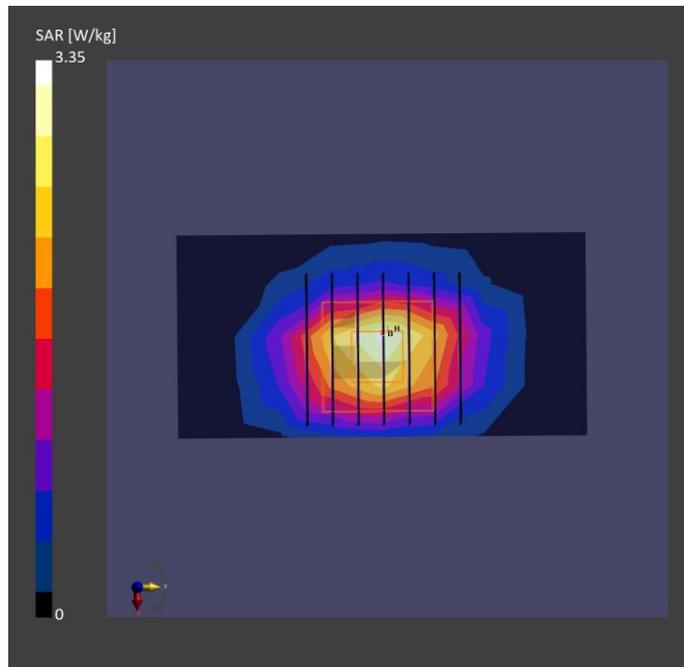
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7650 / 2024-06-04	DAE4 Sn1742 / 2024-08-15

**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]	2.61	<b>2.54</b>
psSAR-10g [W/kg]	1.20	<b>1.17</b>
Power Drift [dB]		0.13
TSL Correction	Positive only	Positive only



Test Date : 2025-01-03 | Ambient Temp : 22.0 °C | Tissue Temp : 21.8 °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	5.27	4.86	36.2

**Hardware Setup**

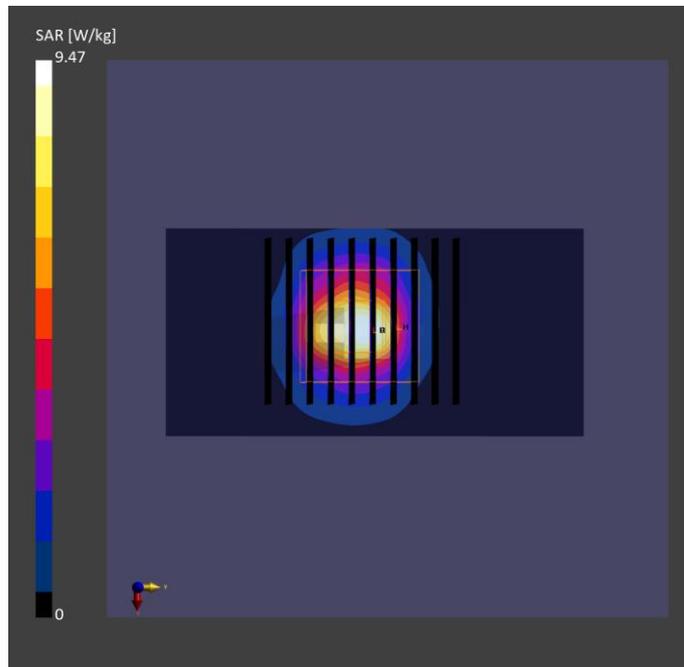
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7756 / 2024-09-04	DAE4 Sn1669 / 2024-05-16

**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]	3.28	<b>3.69</b>
psSAR-10g [W/kg]	1.00	<b>1.05</b>
Power Drift [dB]		0.04
TSL Correction	Positive only	Positive only



Test Date : 2025-01-03 | Ambient Temp : 22.0 °C | Tissue Temp : 21.8 °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	4.7	5.33	35.8

**Hardware Setup**

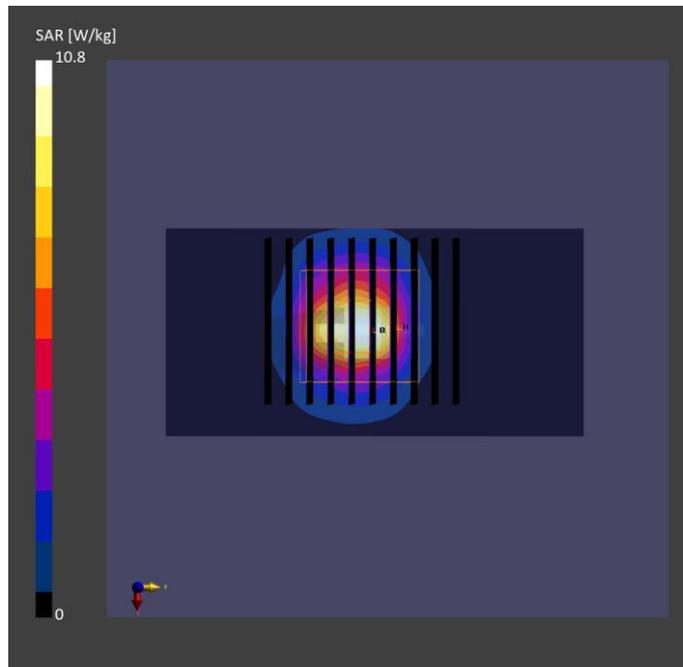
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7756 / 2024-09-04	DAE4 Sn1669 / 2024-05-16

**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]	3.53	<b>4.03</b>
psSAR-10g [W/kg]	1.06	<b>1.14</b>
Power Drift [dB]		-0.01
TSL Correction	Positive only	Positive only



Test Date : 2025-01-03 | Ambient Temp : 22.0 °C | Tissue Temp : 21.8 °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	4.73	5.23	36.3

**Hardware Setup**

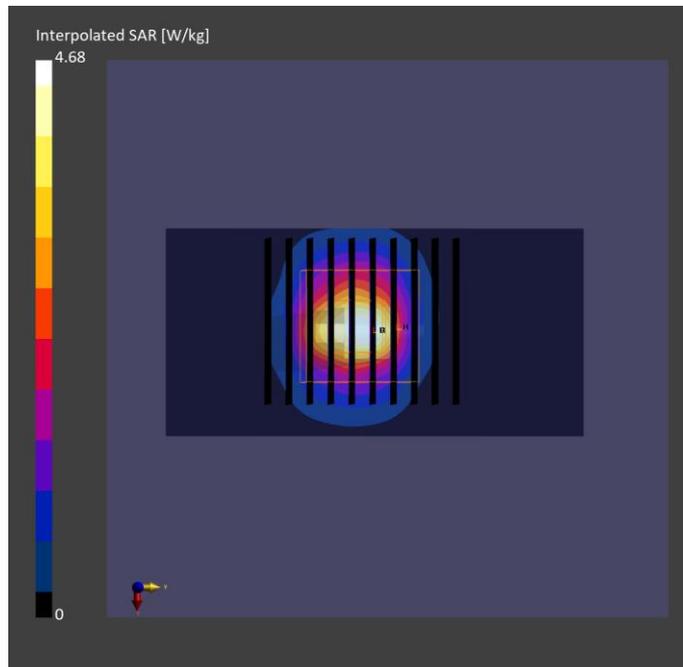
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7756 / 2024-09-04	DAE4 Sn1669 / 2024-05-16

**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]	3.28	<b>3.77</b>
psSAR-10g [W/kg]	0.989	<b>1.07</b>
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2025-01-03 | Ambient Temp : 22.0 °C | Tissue Temp : 21.8 °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	4.64	6.3	34.5

**Hardware Setup**

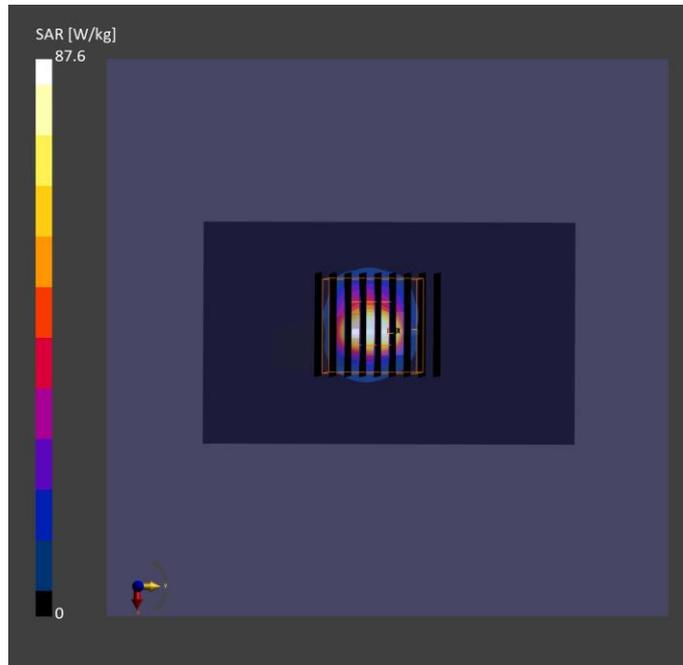
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7756 / 2024-09-04	DAE4 Sn1669 / 2024-05-16

**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]	20.6	<b>26.3</b>
psSAR-8g [W/kg]	5.44	<b>5.93</b>
psSAR-10g [W/kg]	4.51	<b>4.87</b>
psAPD (1.0 cm <sup>2</sup> , sq) [W/m <sup>2</sup> ]		<b>263</b>
psAPD (4.0 cm <sup>2</sup> , sq) [W/m <sup>2</sup> ]		<b>119</b>
Power Drift [dB]		0.04
TSL Correction	Positive only	Positive only



Test Date : 2025-01-04 | Ambient Temp : 22.2 °C

**System Performance Check**

**System Performance Check at 10 GHz**

**Verification Source Properties**

Manufacturer	Model No.	Serial No.
SPEAG	5G Verification Source 10GHz	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	EUmmWV4 - 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]	10.0

**Measurement Results**

	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPD n+ [W/m <sup>2</sup> ]	<b>51.9</b>
psPD tot+ [W/m <sup>2</sup> ]	<b>52.2</b>
psPD mod+ [W/m <sup>2</sup> ]	52.6
E max [V/m]	148
Power Drift [dB]	0.09

