

## Appendix B – System Check Plots

Test Date : 2024-03-11 | Ambient Temp : 22.9 °C | Tissue Temp : 22.3 °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	1.82	41.5

**Hardware Setup**

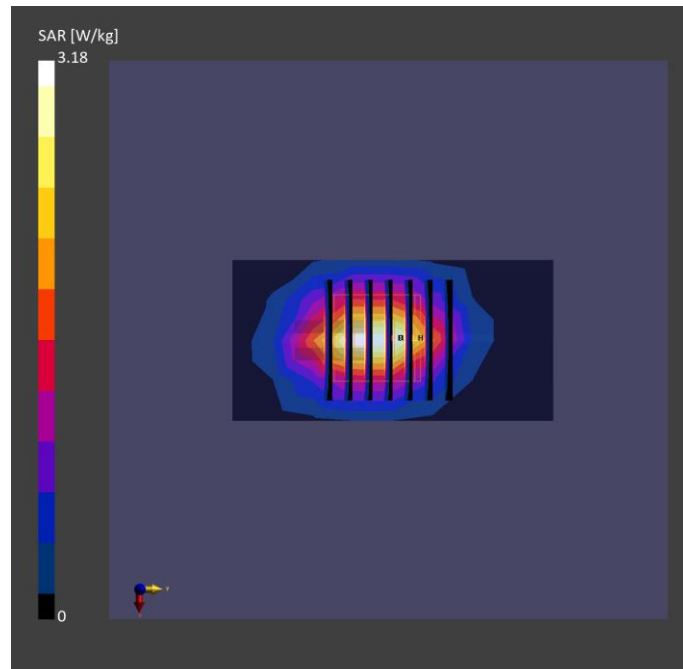
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7737 / 2023-06-05	DAE4 Sn1743 / 2023-08-17

**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]	2.55	<b>2.54</b>
psSAR-10g [W/kg]	1.18	<b>1.19</b>
Power Drift [dB]		0.00
TSL Correction	Positive only	Positive only



Test Date : 2024-03-12 | Ambient Temp : 22.3 °C | Tissue Temp : 21.9 °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	4.63	37.2

**Hardware Setup**

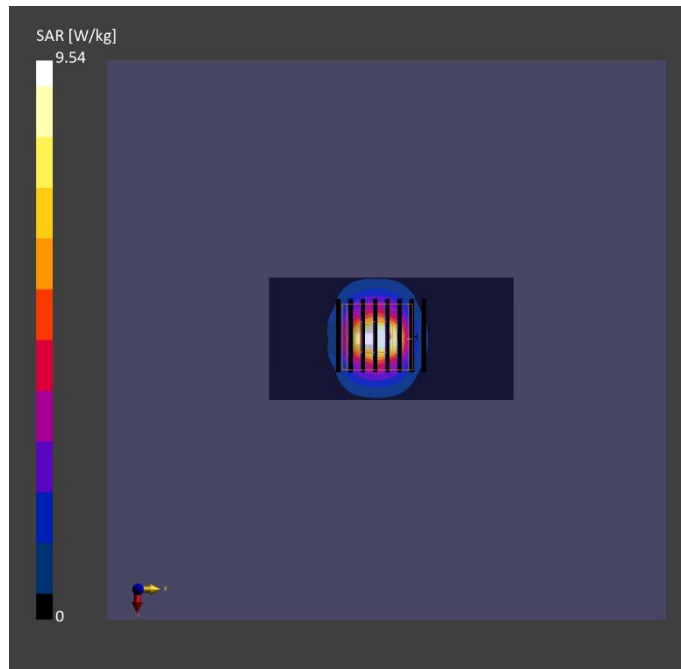
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7737 / 2023-06-05	DAE4 Sn1743 / 2023-08-17

**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]	3.43	<b>3.82</b>
psSAR-10g [W/kg]	1.05	<b>1.09</b>
Power Drift [dB]		0.01
TSL Correction	Positive only	Positive only



Test Date : 2024-03-13 | Ambient Temp : 22.2 °C | Tissue Temp : 21.7 °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	5.08	36.5

**Hardware Setup**

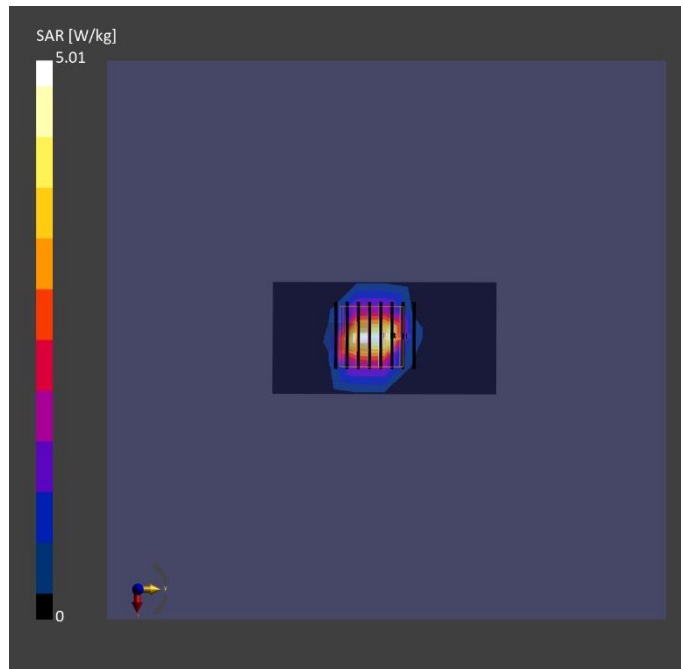
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7737 / 2023-06-05	DAE4 Sn1743 / 2023-08-17

**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]	3.85	<b>4.29</b>
psSAR-10g [W/kg]	1.16	<b>1.22</b>
Power Drift [dB]		0.00
TSL Correction	Positive only	Positive only



Test Date : 2024-03-14 | Ambient Temp : 22.2 °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	4.9	4.90	37.5

**Hardware Setup**

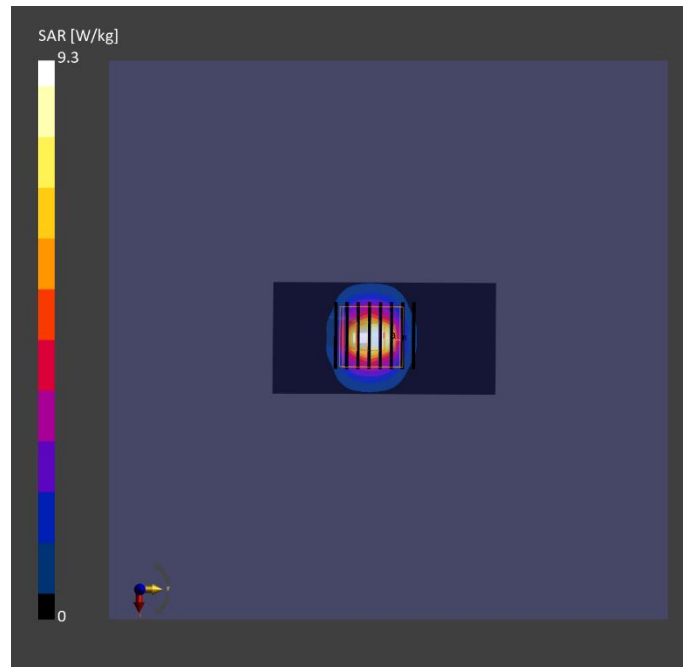
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7737 / 2023-06-05	DAE4 Sn1743 / 2023-08-17

**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]	3.17	<b>3.69</b>
psSAR-10g [W/kg]	0.952	<b>1.05</b>
Power Drift [dB]		0.00
TSL Correction	Positive only	Positive only



Test Date : 2024-03-15 | Ambient Temp : 22.6 °C | Tissue Temp : 22.1 °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	5.94	36.4

**Hardware Setup**

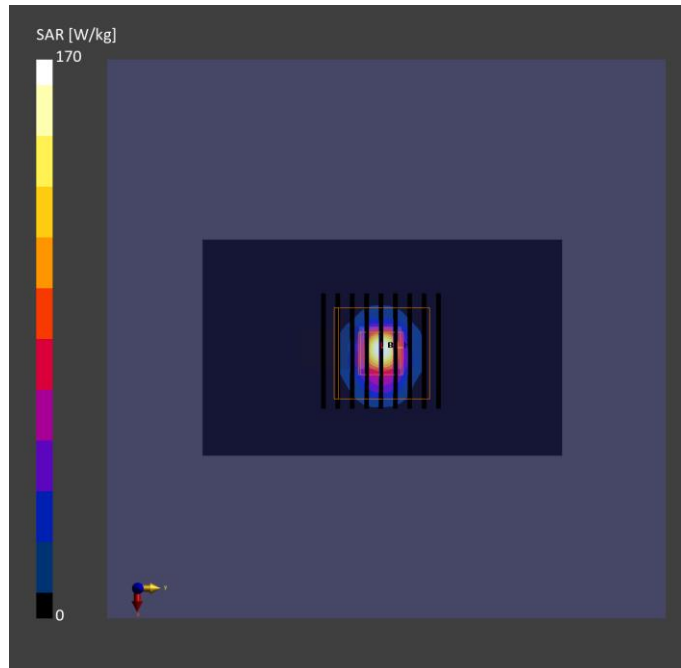
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2141	HBBL-600-10000	EX3DV4 - SN7737 / 2023-06-05	DAE4 Sn1743 / 2023-08-17

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



Test Date : 2024-03-16 | Ambient Temp : 22.2 °C

**System Performance Check**

**System Performance Check at 10GHz**

**Verification Source Properties**

Manufacturer	Model No.	Serial No.
SPEAG	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 – SN9403_F1-55GHz / 2023-12-05	DAE4 Sn1741 / 2023-08-23

**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 <sup>2</sup> ]	4.00
psPD n+ [W/m <sup>2</sup> ]	<b>55.3</b>
psPD tot+ [W/m <sup>2</sup> ]	<b>52.7</b>
psPD mod+ [W/m <sup>2</sup> ]	53.2
E max [V/m]	150
Power Drift [dB]	0.11

