

## Appendix B – System Check Plots

Test Date : 2024-04-30 | Ambient Temp : 22.7 °C | Tissue Temp : 21.5 °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	8.2	1.81	39.3

**Hardware Setup**

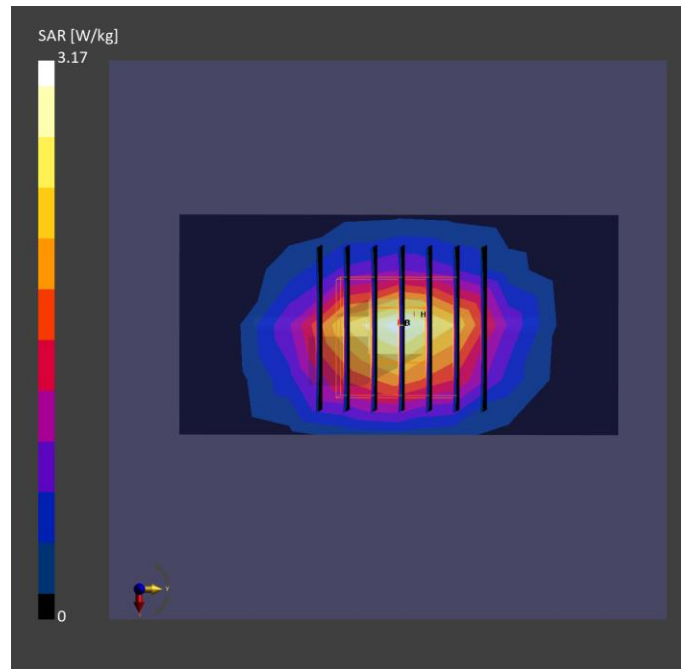
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7650 / 2023-05-22	DAE4 Sn1741 / 2023-08-23

**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]	2.41	<b>2.45</b>
psSAR-10g [W/kg]	1.13	<b>1.14</b>
Power Drift [dB]		0.02
TSL Correction	Positive only	Positive only



Test Date : 2024-05-01 | Ambient Temp : 22.5 °C | Tissue Temp : 21.3 °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	5.91	4.45	35.7

**Hardware Setup**

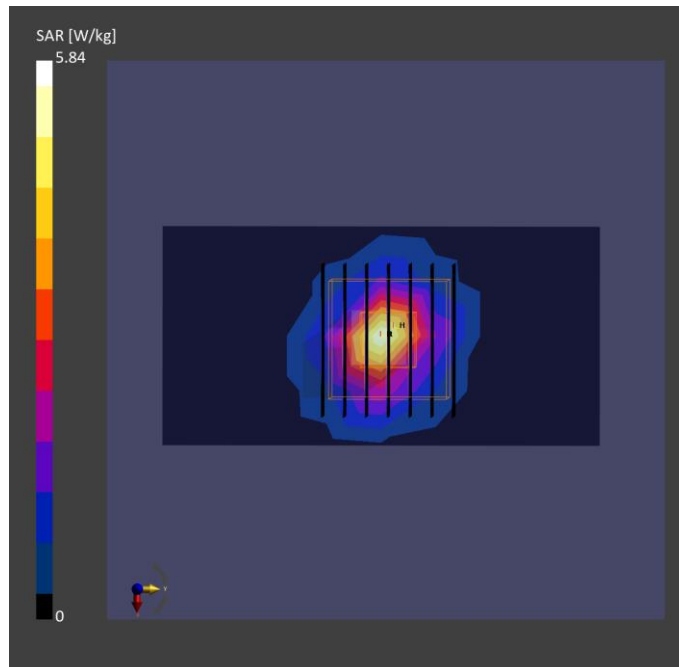
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7650 / 2023-05-22	DAE4 Sn1741 / 2023-08-23

**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]	3.46	<b>3.67</b>
psSAR-10g [W/kg]	1.04	<b>1.08</b>
Power Drift [dB]		0.03
TSL Correction	Positive only	Positive only



Test Date : 2024-05-02 | Ambient Temp : 22.3 °C | Tissue Temp : 21.1 °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	5.25	4.95	36.0

**Hardware Setup**

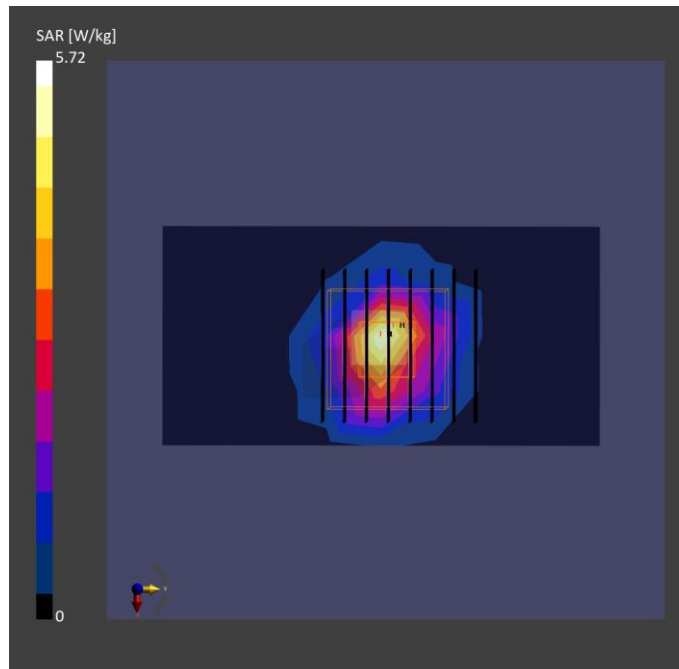
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7650 / 2023-05-22	DAE4 Sn1741 / 2023-08-23

**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	<b>3.79</b>
psSAR-10g [W/kg]	1.04	<b>1.08</b>
Power Drift [dB]		-0.14
TSL Correction	Positive only	Positive only



Test Date : 2024-05-03 | Ambient Temp : 22.8 °C | Tissue Temp : 21.4 °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	5.28	5.16	35.1

**Hardware Setup**

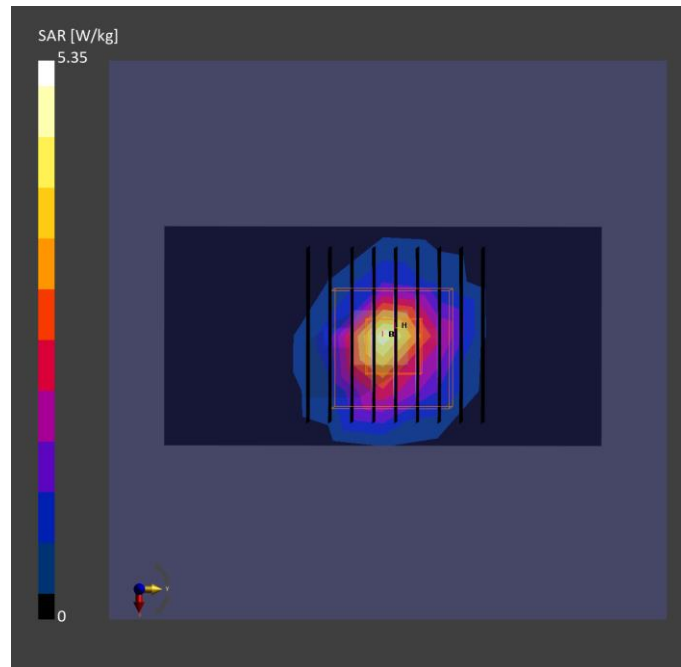
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7650 / 2023-05-22	DAE4 Sn1741 / 2023-08-23

**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]	3.39	<b>3.79</b>
psSAR-10g [W/kg]	1.01	<b>1.13</b>
Power Drift [dB]		-0.03
TSL Correction	Positive only	Positive only



Test Date : 2024-04-30 | Ambient Temp : 22.7 °C | Tissue Temp : 21.5 °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	5.4	6.09	33.5

**Hardware Setup**

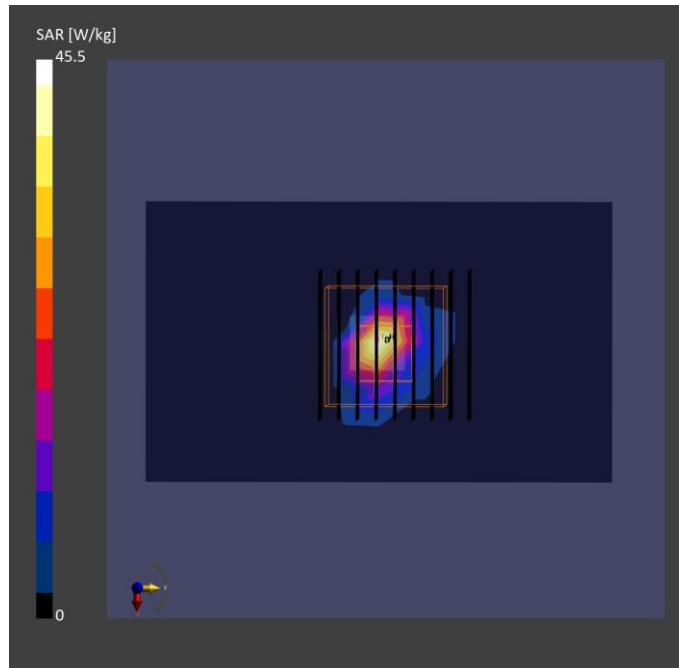
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V8.0 (20deg probe tilt) - 2179	HBBL-600-10000	EX3DV4 - SN7650 / 2023-05-22	DAE4 Sn1741 / 2023-08-23

**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]	23.9	<b>26.5</b>
psSAR-8g [W/kg]	5.74	<b>6.05</b>
psSAR-10g [W/kg]	4.69	<b>4.99</b>
psAPD (1.0 cm <sup>2</sup> , sq) [W/m <sup>2</sup> ]		<b>264</b>
psAPD (4.0 cm <sup>2</sup> , sq) [W/m <sup>2</sup> ]		<b>124</b>
Power Drift [dB]		0.03
TSL Correction	Positive only	Positive only



Test Date : 2024-05-06 | Ambient Temp : 22.5 °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 / 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]	10.0

**Measurement Results**

	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPD n+ [W/m <sup>2</sup> ]	<b>57.6</b>
psPD tot+ [W/m <sup>2</sup> ]	<b>57.8</b>
psPD mod+ [W/m <sup>2</sup> ]	58.1
E max [V/m]	153
Power Drift [dB]	0.13

