

Appendix C - Highest Measurement Plots

1_WCDMA Band II_RMC12.2K_Ch9262_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 2	WCDMA, 10011-CAC	1907.600, 9538	7.7	1.44	39.6

Hardware Setup

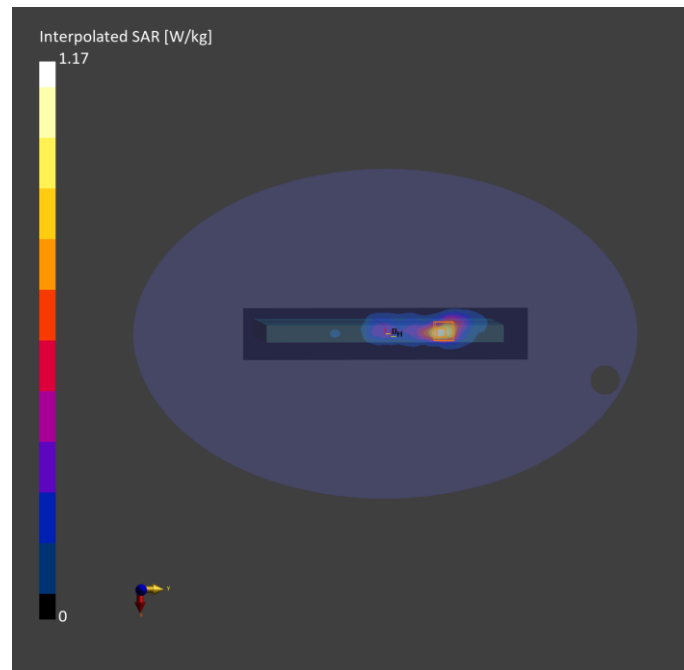
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-29	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-29	2023-06-29
psSAR1g [W/Kg]	0.920	1.01
psSAR10g [W/Kg]	0.465	0.483
Power Drift [dB]	-0.03	-0.11
TSL Correction	Positive only	Positive only
M2/M1 [%]		82.8
Dist 3dB Peak [mm]		8.1



2_WCDMA Band IV_RMC12.2K_Ch1413_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 4	WCDMA, 10011-CAC	1732.600, 1413	8.03	1.35	39.9

Hardware Setup

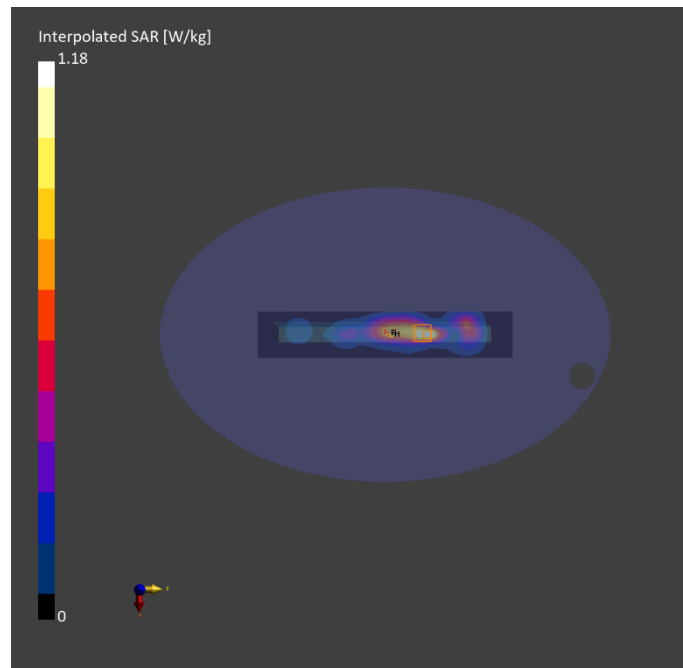
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-29	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-29	2023-06-29
psSAR1g [W/Kg]	0.926	1.04
psSAR10g [W/Kg]	0.485	0.525
Power Drift [dB]	0.07	0.07
TSL Correction	Positive only	Positive only
M2/M1 [%]		84.9
Dist 3dB Peak [mm]		7.3



3_WCDMA Band V_RMC12.2K_Ch4132_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 5	WCDMA, 10011-CAC	826.400, 4132	9.12	0.943	41.8

Hardware Setup

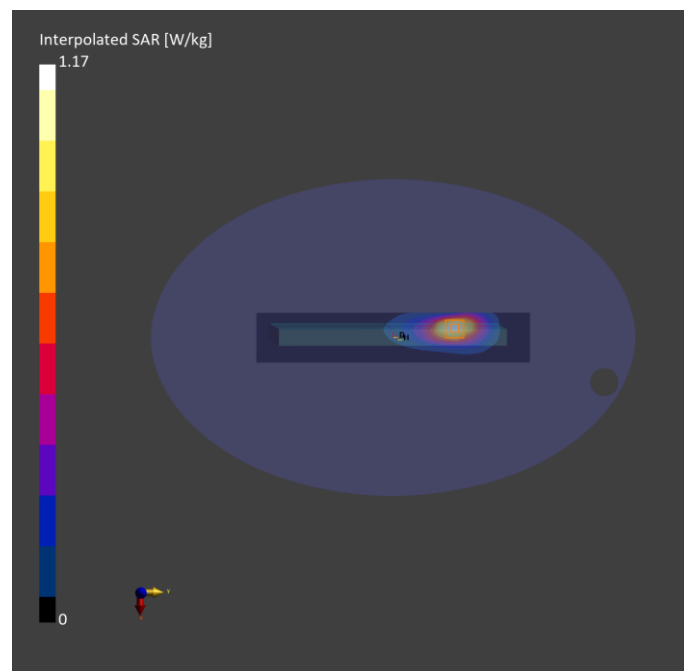
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-29	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-29	2023-06-29
psSAR1g [W/Kg]	0.985	1.07
psSAR10g [W/Kg]	0.624	0.610
Power Drift [dB]	0.01	-0.02
TSL Correction	Positive only	Positive only
M2/M1 [%]		82.6
Dist 3dB Peak [mm]		9.6



4_LTE Band 2_QPSK_Ch19100_20M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 2	LTE-FDD, 10169-CAF	1900.000, 19100	7.7	1.43	39.6

Hardware Setup

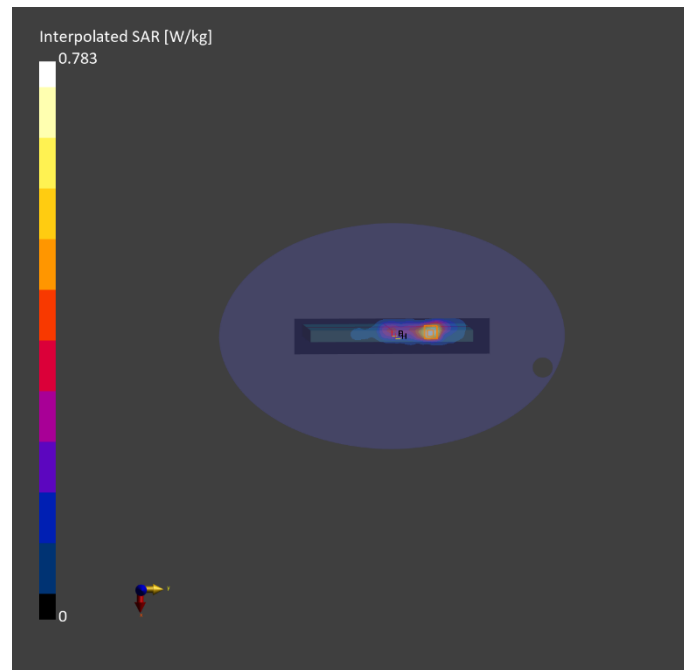
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-29	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-29	2023-06-29
psSAR1g [W/Kg]	0.659	0.910
psSAR10g [W/Kg]	0.368	0.430
Power Drift [dB]	-0.01	0.03
TSL Correction	Positive only	Positive only
M2/M1 [%]		81.7
Dist 3dB Peak [mm]		7.2



5_LTE Band 4_QPSK_Ch20300_20M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 4	LTE-FDD, 10169-CAF	1745.000, 20300	8.03	1.36	39.9

Hardware Setup

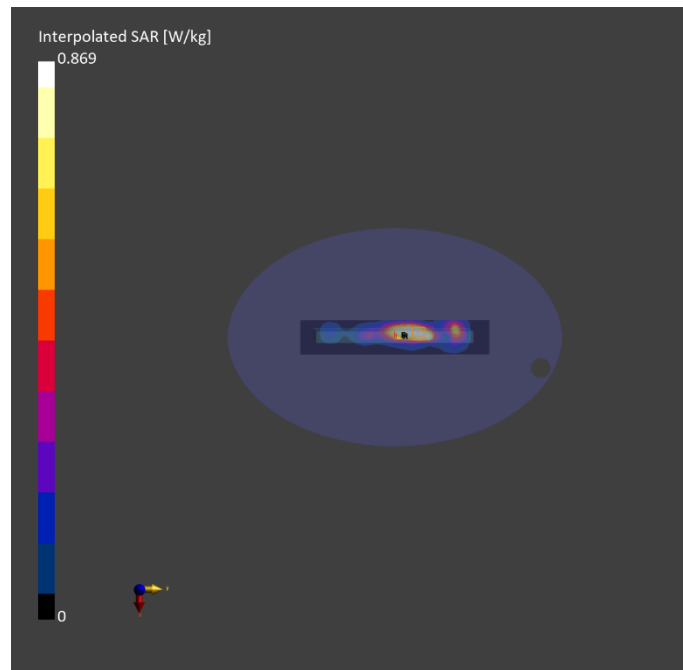
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-29	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-29	2023-06-29
psSAR1g [W/Kg]	0.738	0.540
psSAR10g [W/Kg]	0.438	0.305
Power Drift [dB]	-0.02	-0.02
TSL Correction	Positive only	Positive only
M2/M1 [%]		86.4
Dist 3dB Peak [mm]		11.9



6_LTE Band 5_QPSK_Ch20600_10M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 5	LTE-FDD, 10175-CAH	844.000, 20600	9.12	0.950	41.7

Hardware Setup

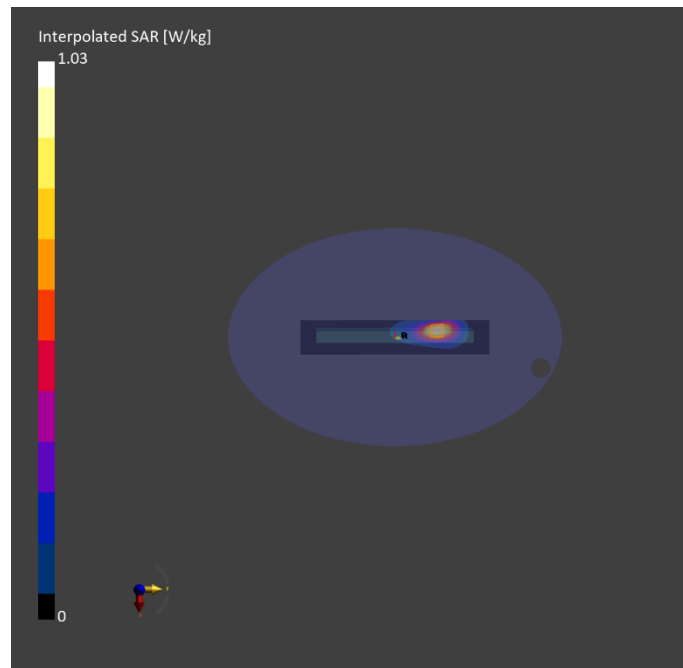
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-29	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-29	2023-06-29
psSAR1g [W/Kg]	0.868	0.932
psSAR10g [W/Kg]	0.545	0.527
Power Drift [dB]	-0.01	0.06
TSL Correction	Positive only	Positive only
M2/M1 [%]		82.6
Dist 3dB Peak [mm]		10.8



7_LTE Band 7_QPSK_Ch21350_20M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 7	LTE-FDD, 10169-CAF	2560.000, 21350	7.17	1.88	38.7

Hardware Setup

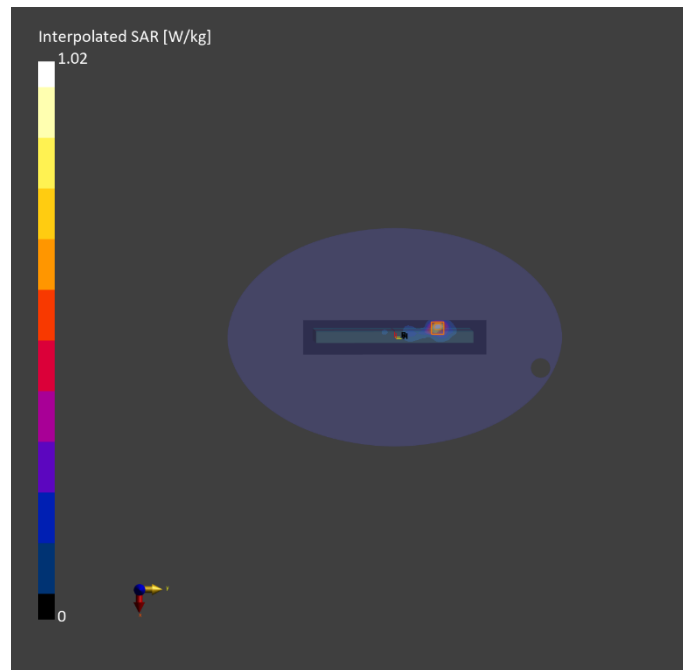
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-29	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 320.0	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

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-29	2023-06-29
psSAR1g [W/Kg]	0.786	0.851
psSAR10g [W/Kg]	0.353	0.346
Power Drift [dB]	0.05	-0.05
TSL Correction	Positive only	Positive only
M2/M1 [%]		73.6
Dist 3dB Peak [mm]		6.8



8_LTE Band 12_QPSK_Ch23130_10M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 12	LTE-FDD, 10175-CAH	711.000, 23130	9.22	0.902	42.2

Hardware Setup

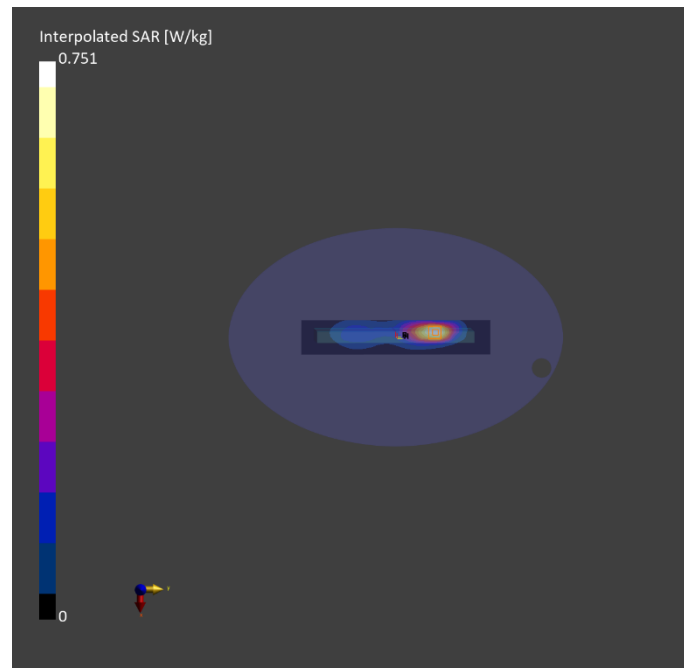
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-29	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-29	2023-06-29
psSAR1g [W/Kg]	0.653	0.729
psSAR10g [W/Kg]	0.429	0.426
Power Drift [dB]	-0.00	0.02
TSL Correction	Positive only	Positive only
M2/M1 [%]		80.8
Dist 3dB Peak [mm]		9.9



9_LTE Band 13_QPSK_Ch23230_10M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 13	LTE-FDD, 10175-CAH	782.000, 23230	9.22	0.926	42.0

Hardware Setup

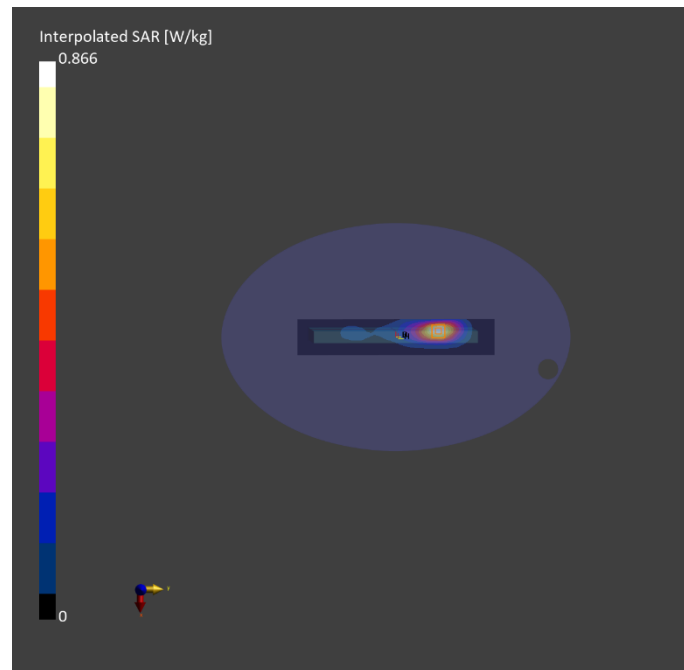
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-29	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-29	2023-06-29
psSAR1g [W/Kg]	0.743	0.804
psSAR10g [W/Kg]	0.479	0.460
Power Drift [dB]	-0.07	-0.04
TSL Correction	Positive only	Positive only
M2/M1 [%]		81.8
Dist 3dB Peak [mm]		10.8



10_LTE Band 14_QPSK_Ch23330_10M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 14	LTE-FDD, 10175-CAH	793.000, 23330	9.22	0.930	41.9

Hardware Setup

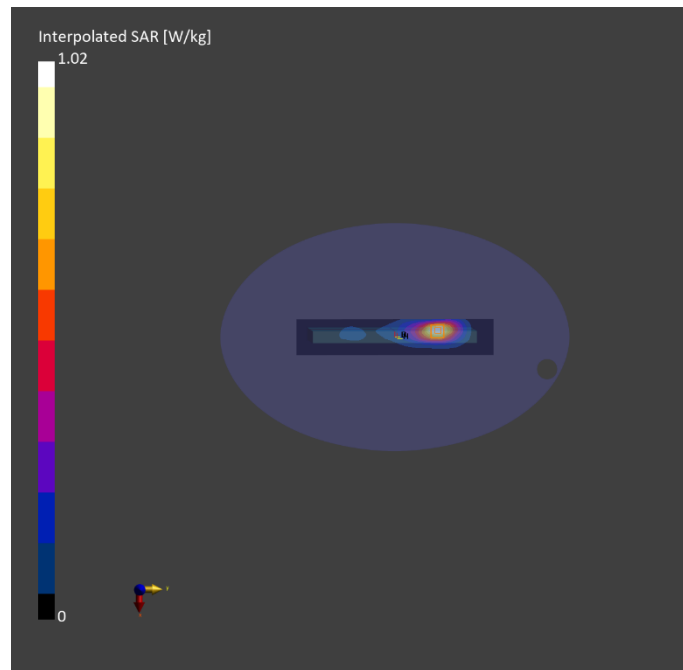
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-29	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-29	2023-06-29
psSAR1g [W/Kg]	0.876	0.950
psSAR10g [W/Kg]	0.561	0.543
Power Drift [dB]	-0.01	-0.02
TSL Correction	Positive only	Positive only
M2/M1 [%]		83.4
Dist 3dB Peak [mm]		10.8



11_LTE Band 17_QPSK_Ch23800_10M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 17	LTE-FDD, 10175-CAH	711.000, 23800	9.22	0.902	42.2

Hardware Setup

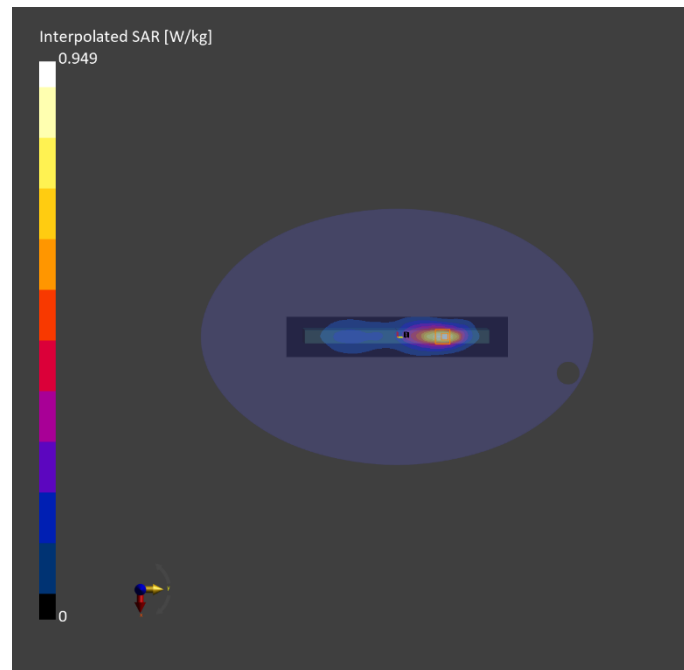
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-29	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-29	2023-06-29
psSAR1g [W/Kg]	0.798	0.748
psSAR10g [W/Kg]	0.480	0.436
Power Drift [dB]	-0.07	-0.05
TSL Correction	Positive only	Positive only
M2/M1 [%]		80.4
Dist 3dB Peak [mm]		9.6



12_LTE Band 25_QPSK_Ch26590_20M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 25	LTE-FDD, 10169-CAF	1905.000, 26590	7.7	1.45	41.9

Hardware Setup

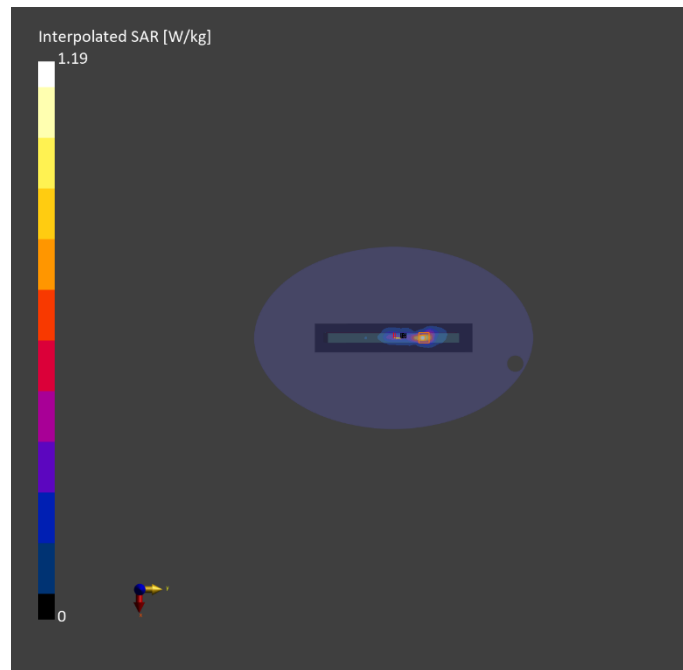
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.891	0.891
psSAR10g [W/Kg]	0.422	0.422
Power Drift [dB]	-0.02	0.04
TSL Correction	Positive only	Positive only
M2/M1 [%]		81.6
Dist 3dB Peak [mm]		7.6



13_LTE Band 26_QPSK_Ch26965_15M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 26	LTE-FDD, 10181-CAF	841.500, 26965	9.12	0.934	43.8

Hardware Setup

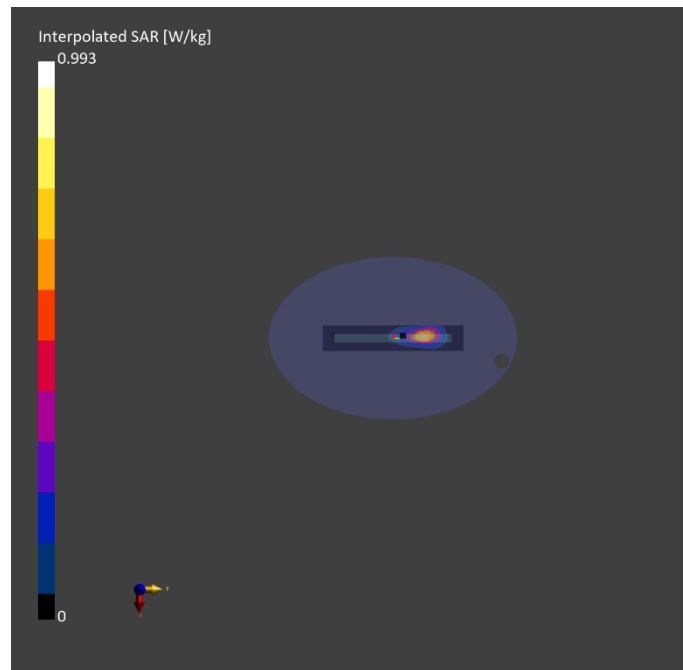
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.851	0.928
psSAR10g [W/Kg]	0.532	0.527
Power Drift [dB]	N/A	-0.09
TSL Correction	Positive only	Positive only
M2/M1 [%]		82.7
Dist 3dB Peak [mm]		10.8



14_LTE Band 38_QPSK_Ch38150_20M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 38	LTE-TDD, 10172-CAH	2610.000, 38150	7.17	1.97	40.9

Hardware Setup

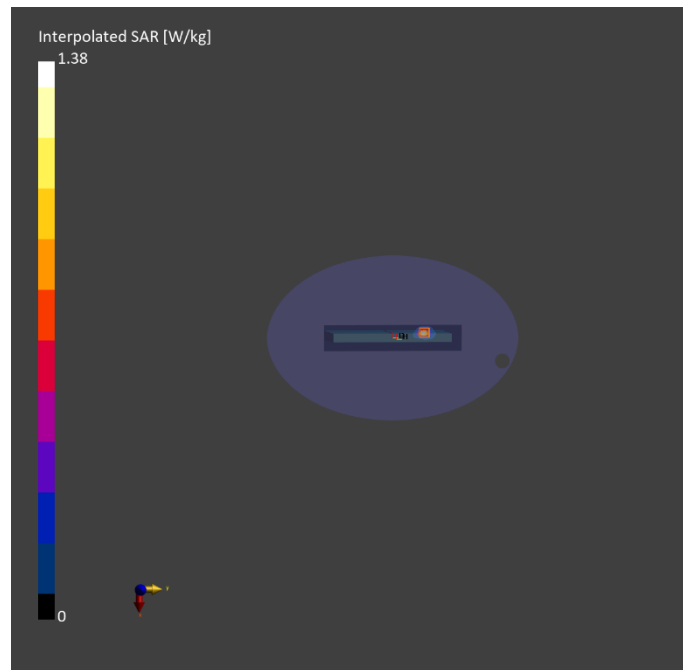
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 320.0	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

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.986	1.01
psSAR10g [W/Kg]	0.393	0.387
Power Drift [dB]	0.03	0.04
TSL Correction	Positive only	Positive only
M2/M1 [%]		74.2
Dist 3dB Peak [mm]		6.8



15_LTE Band 41_QPSK_Ch40620_20M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 41	LTE-TDD, 10172-CAH	2593.000, 40620	7.17	1.96	41.0

Hardware Setup

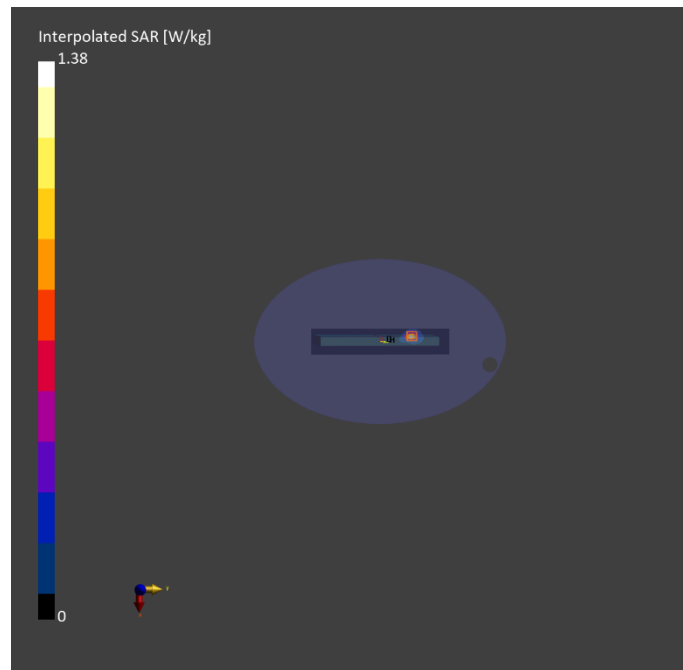
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 320.0	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

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.992	1.02
psSAR10g [W/Kg]	0.402	0.396
Power Drift [dB]	0.00	0.01
TSL Correction	Positive only	Positive only
M2/M1 [%]		74.1
Dist 3dB Peak [mm]		6.8



16_LTE Band 42_QPSK_Ch43340_20M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 42	LTE-TDD, 10172-CAH	3575.000, 43340	6.87	2.71	37.8

Hardware Setup

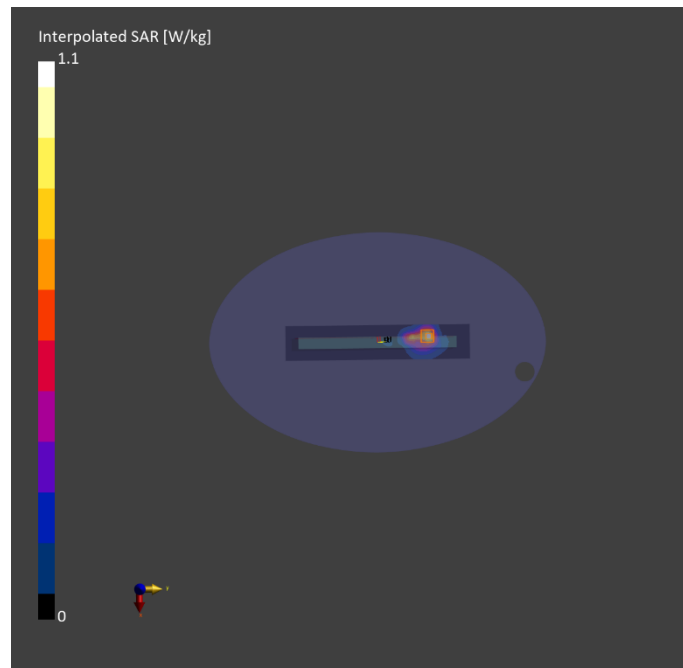
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 320.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.796	0.815
psSAR10g [W/Kg]	0.339	0.323
Power Drift [dB]	0.06	-0.02
TSL Correction	Positive only	Positive only
M2/M1 [%]		76.7
Dist 3dB Peak [mm]		9.5



17_LTE Band 48_QPSK_Ch56207_20M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 48	LTE-TDD, 10172-CAH	3646.700, 56207	6.87	2.70	37.9

Hardware Setup

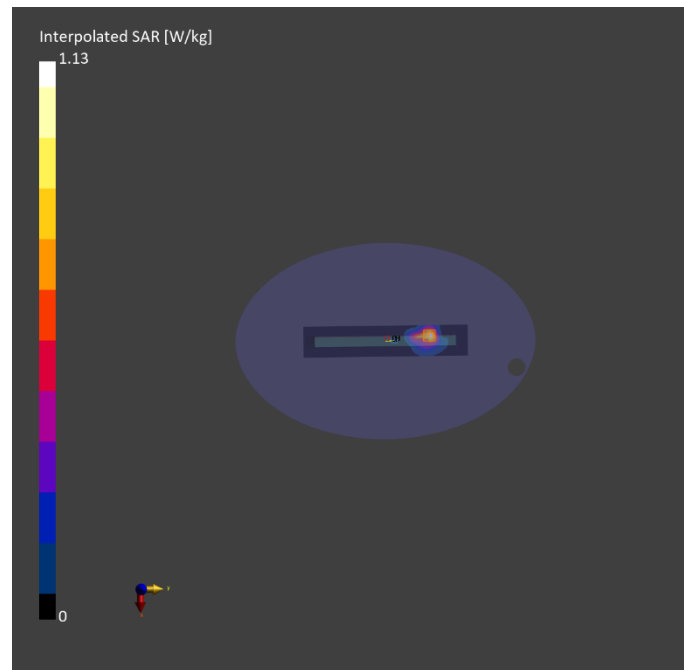
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 320.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.828	0.852
psSAR10g [W/Kg]	0.355	0.356
Power Drift [dB]	-0.01	0.05
TSL Correction	Positive only	Positive only
M2/M1 [%]		75.9
Dist 3dB Peak [mm]		10.3



18_LTE Band 66_QPSK_Ch132322_20M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 66	LTE-FDD, 10169-CAF	1745.000, 132322	8.03	1.37	42.1

Hardware Setup

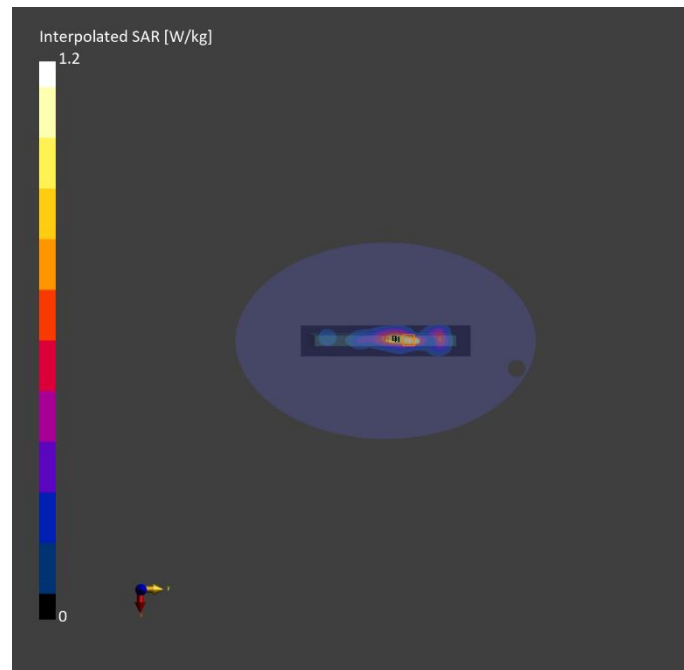
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.973	1.07
psSAR10g [W/Kg]	0.501	0.538
Power Drift [dB]	0.07	0.01
TSL Correction	Positive only	Positive only
M2/M1 [%]		83.6
Dist 3dB Peak [mm]		7.2



19_LTE Band 71_QPSK_Ch133372_20M_1RB_0offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band 71	LTE-FDD, 10169-CAF	688.000, 133372	9.22	0.878	44.3

Hardware Setup

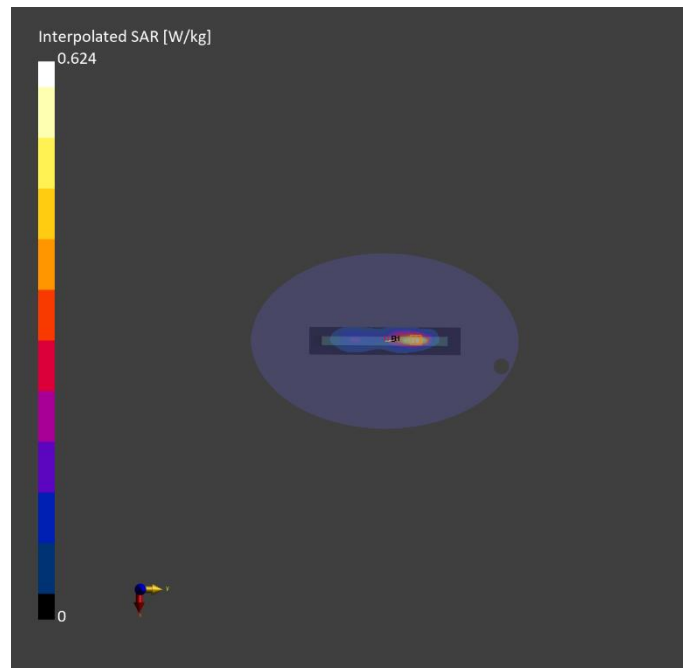
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.536	0.535
psSAR10g [W/Kg]	0.325	0.309
Power Drift [dB]	-0.00	-0.01
TSL Correction	Positive only	Positive only
M2/M1 [%]		80.3
Dist 3dB Peak [mm]		9.6



20_NR_Band 2_DFT-S QPSK_Ch380000_20M_1RB_1offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band n2	5G NR FR1 FDD, 10931-AAC	1900.000, 380000	7.7	1.45	41.9

Hardware Setup

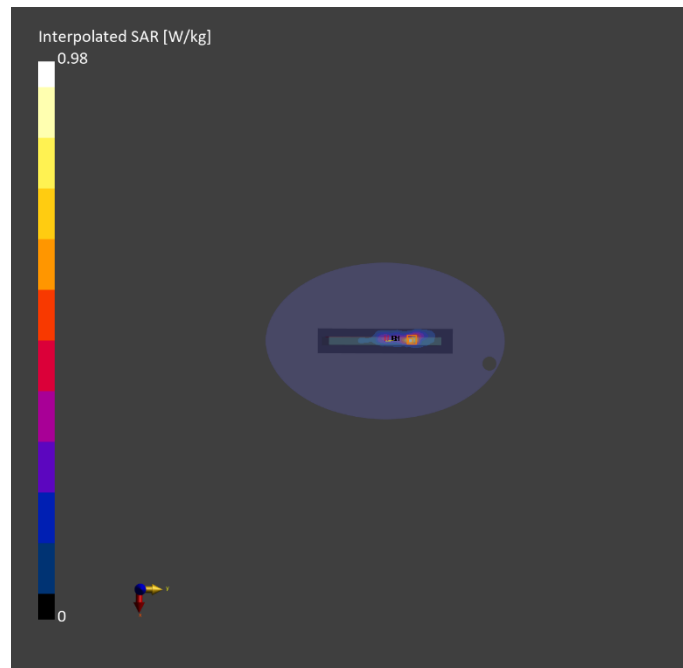
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.758	0.903
psSAR10g [W/Kg]	0.384	0.427
Power Drift [dB]	0.04	-0.03
TSL Correction	Positive only	Positive only
M2/M1 [%]		81.7
Dist 3dB Peak [mm]		8.1



21_NR_Band 5_DFT-S QPSK_Ch166800_20M_1RB_1offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band n5	5G NR FR1 FDD, 10931-AAC	834.000, 166800	9.12	0.932	43.8

Hardware Setup

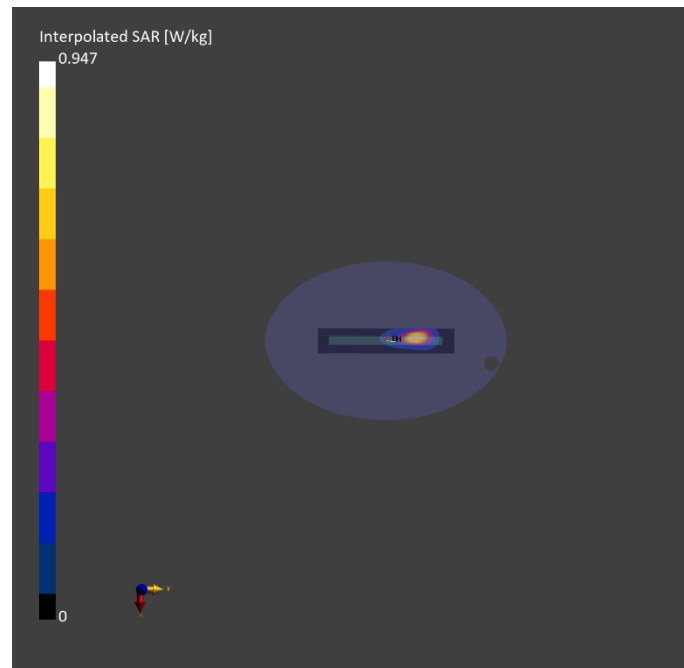
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.827	0.944
psSAR10g [W/Kg]	0.536	0.535
Power Drift [dB]	0.00	-0.02
TSL Correction	Positive only	Positive only
M2/M1 [%]		82.5
Dist 3dB Peak [mm]		9.6



22_NR_Band 66_DFT-S QPSK_Ch349000_40M_1RB_1offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band n66	5G NR FR1 FDD, 10934-AAC	1745.000, 349000	8.03	1.37	42.1

Hardware Setup

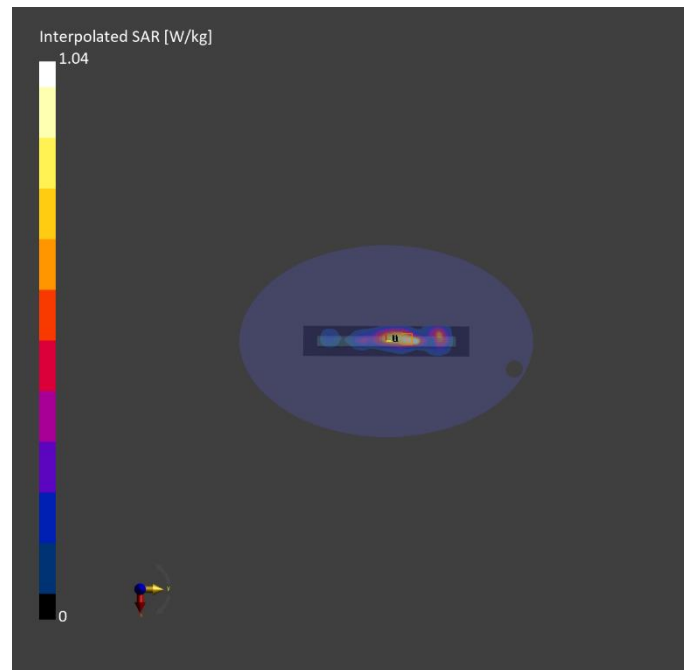
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.857	1.02
psSAR10g [W/Kg]	0.472	0.522
Power Drift [dB]	0.03	0.07
TSL Correction	Positive only	Positive only
M2/M1 [%]		83.3
Dist 3dB Peak [mm]		7.3



23_NR_Band 71_DFT-S QPSK_Ch136100_20M_1RB_1offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band n71	5G NR FR1 FDD, 10931-AAC	680.500, 136100	9.22	0.876	44.4

Hardware Setup

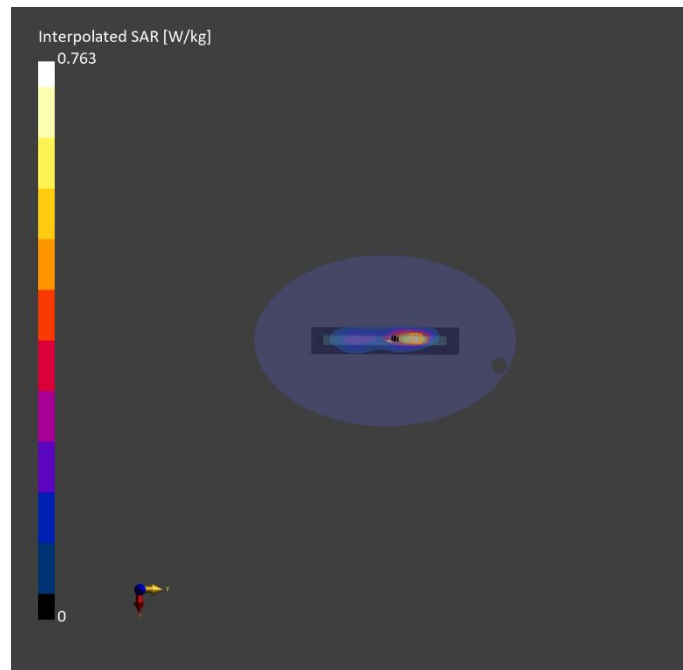
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 330.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.675	0.737
psSAR10g [W/Kg]	0.430	0.425
Power Drift [dB]	0.02	0.01
TSL Correction	Positive only	Positive only
M2/M1 [%]		78.8
Dist 3dB Peak [mm]		8.5



24_NR_Band 48_DFT-S QPSK_Ch642888_40M_1RB_1offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band n48	5G NR FR1 TDD, 10903-AAD	3643.315, 642888	6.8	2.81	36.7

Hardware Setup

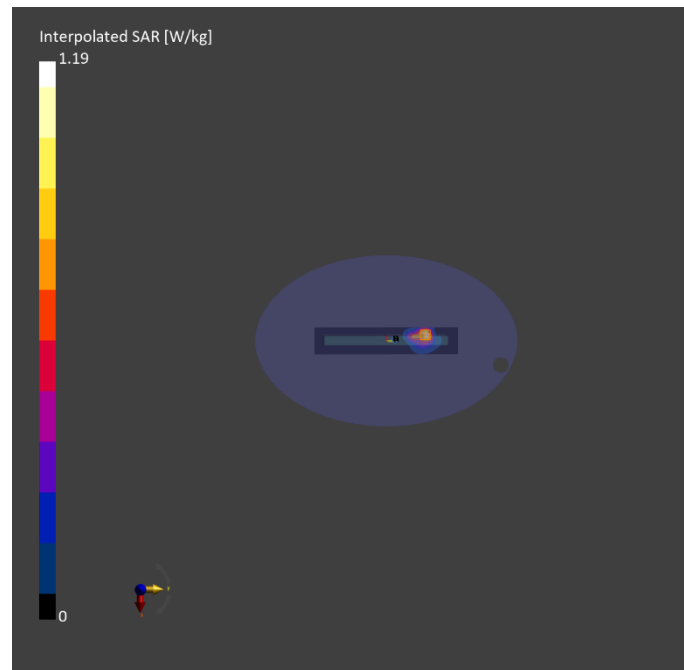
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 320.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.873	0.948
psSAR10g [W/Kg]	0.383	0.397
Power Drift [dB]	0.05	0.04
TSL Correction	Positive only	Positive only
M2/M1 [%]		77.2
Dist 3dB Peak [mm]		10.7



25_NR_Band 77_DFT-S QPSK_Ch650000_100M_1RB_1offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band n77	5G NR FR1 TDD, 10866-AAF	3750.000, 650000	6.8	2.90	36.6

Hardware Setup

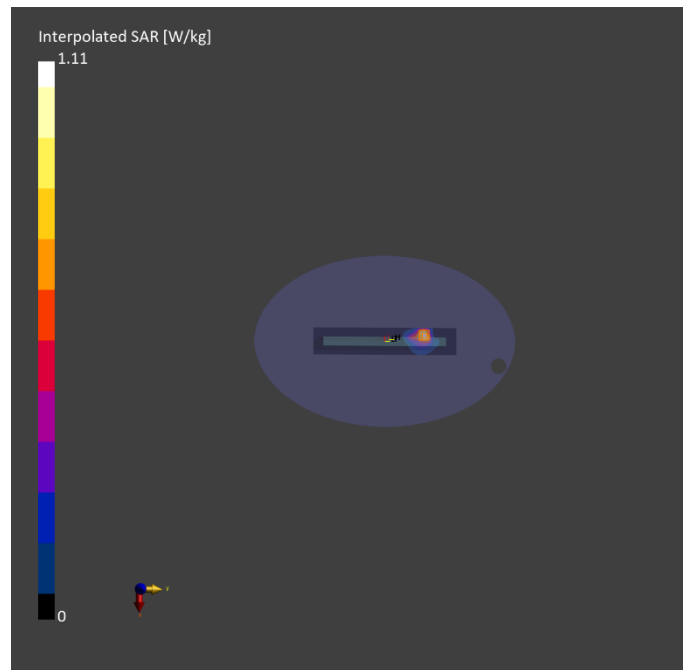
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 320.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.821	0.925
psSAR10g [W/Kg]	0.358	0.386
Power Drift [dB]	0.06	-0.01
TSL Correction	Positive only	Positive only
M2/M1 [%]		74.7
Dist 3dB Peak [mm]		9.9



26_NR_Band 77_DFT-S QPSK_Ch638334_100M_1RB_1offset_Side 1_0mm

Device under Test Properties

Model: EM9190U

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	Band n77	5G NR FR1 TDD, 10866-AAF	3575.010, 638334	6.87	2.76	36.8

Hardware Setup

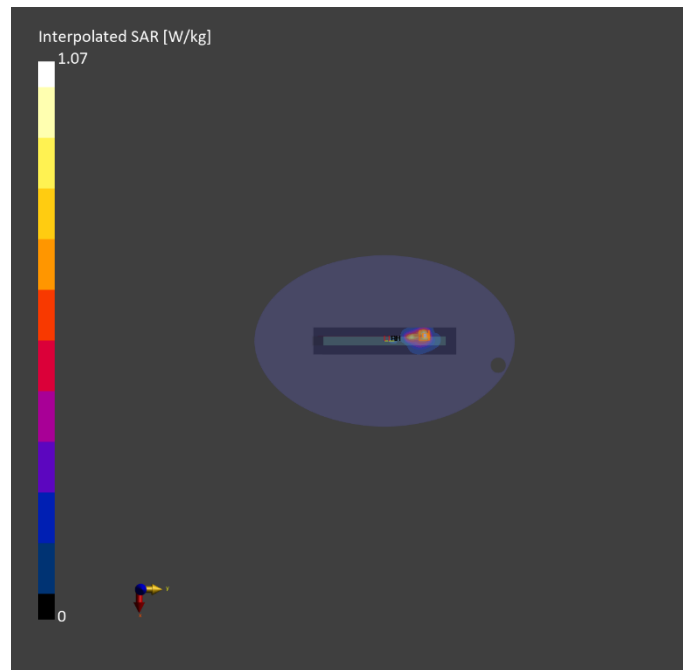
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2176	HBBL-600-10000 , 2023-Jun-30	EX3DV4 - SN7737, 2023-06-05	DAE4 Sn1742, 2022-08-31

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 320.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-30	2023-06-30
psSAR1g [W/Kg]	0.786	0.664
psSAR10g [W/Kg]	0.343	0.285
Power Drift [dB]	0.07	0.06
TSL Correction	Positive only	Positive only
M2/M1 [%]		76.4
Dist 3dB Peak [mm]		8.6



27_WLAN 2.4 GHz_802.11b_Ch6_Side2_0 mm_ANT Aux

Device under Test Properties

Model: AX211NGW

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	WLAN 2.4GHz	WLAN, 10012-CAB	2437.000, 6	7.25	1.83	40.8

Hardware Setup

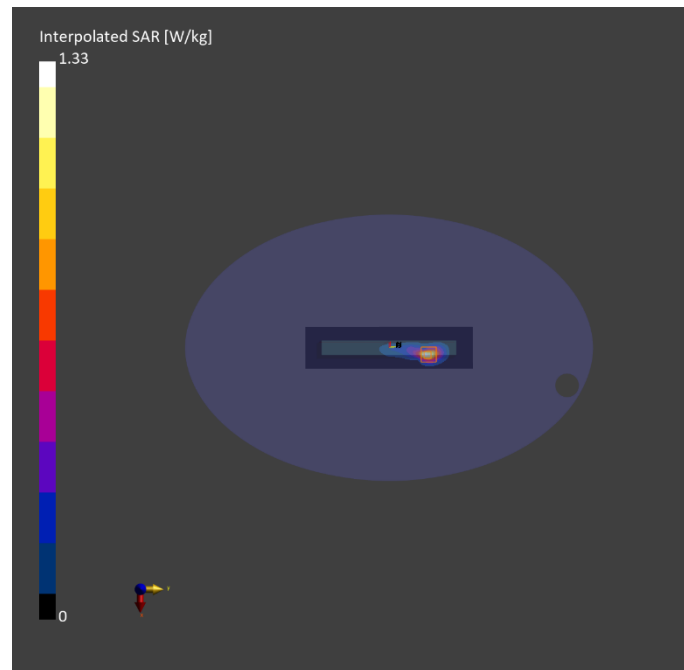
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000 , 2023-Jul-04	EX3DV4 - SN7757, 2022-09-02	DAE4 Sn1743, 2022-08-25

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 240.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	2.6 x 2.6 x 1.2
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-07-04	2023-07-04
psSAR1g [W/Kg]	0.956	0.989
psSAR10g [W/Kg]	0.399	0.387
Power Drift [dB]	-0.01	-0.01
TSL Correction	Positive only	Positive only
M2/M1 [%]		71.1
Dist 3dB Peak [mm]		4.7



28_WLAN 5 GHz_802.11n HT40_Ch54_Side2_0 mm_ANT Aux

Device under Test Properties

Model: AX211NGW

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	WLAN 5GHz	WLAN, 10114-CAE	5270.000, 54	4.89	4.63	35.7

Hardware Setup

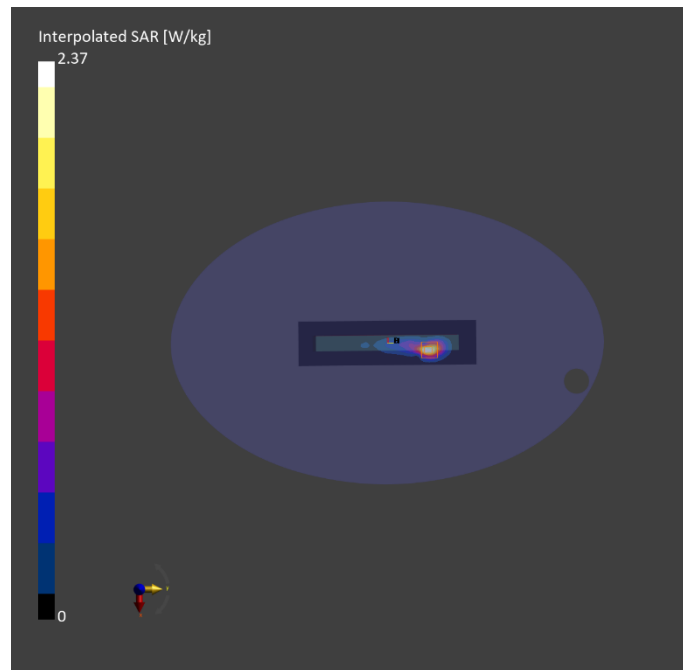
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000 , 2023-Jun-28	EX3DV4 - SN7757, 2022-09-02	DAE4 Sn1743, 2022-08-25

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 240.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	3.8 x 3.8 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-28	2023-06-28
psSAR1g [W/Kg]	0.793	0.972
psSAR10g [W/Kg]	0.232	0.230
Power Drift [dB]	-0.04	0.05
TSL Correction	Positive only	Positive only
M2/M1 [%]		60.7
Dist 3dB Peak [mm]		3.8



29_WLAN 5 GHz_802.11ac VHT80_Ch106_Side1_0 mm_ANT Main

Device under Test Properties

Model: AX211NGW

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	WLAN 5GHz	WLAN, 10402-AAF	5530.000, 106	4.27	4.92	35.6

Hardware Setup

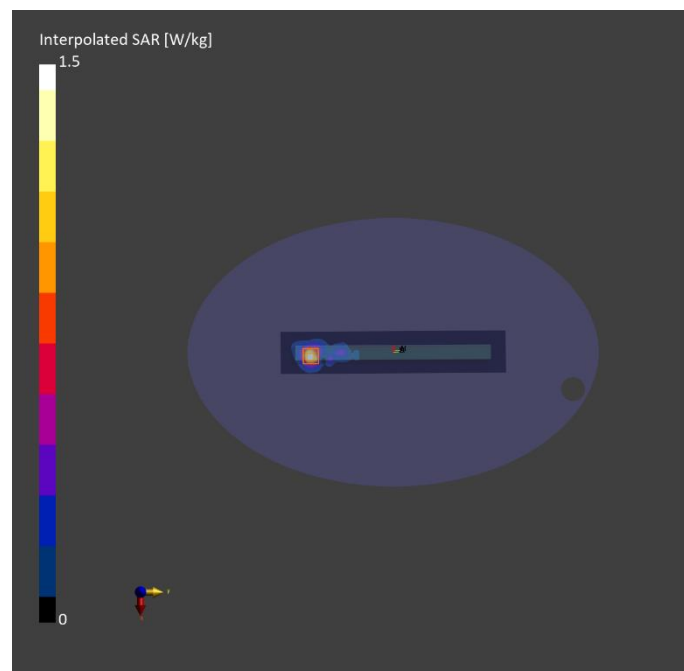
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000 , 2023-Jun-28	EX3DV4 - SN7757, 2022-09-02	DAE4 Sn1743, 2022-08-25

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 320.0	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

Measurement Results

	Area Scan	Zoom Scan
Date	2023-06-28	2023-06-28
psSAR1g [W/Kg]	1.10	1.13
psSAR10g [W/Kg]	0.384	0.367
Power Drift [dB]	-0.14	0.00
TSL Correction	Positive only	Positive only
M2/M1 [%]		62.3
Dist 3dB Peak [mm]		7.4



30_WLAN 5 GHz_802.11n HT40_Ch151_Side2_0 mm_ANT Aux

Device under Test Properties

Model: AX211NGW

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	WLAN 5GHz	WLAN, 10114-CAE	5755.000, 151	4.3	5.19	34.8

Hardware Setup

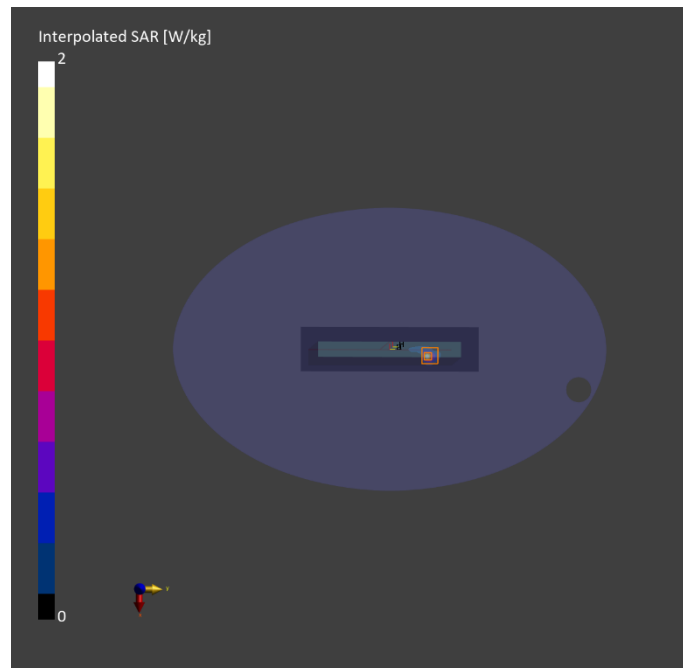
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000 , 2023-Jul-04	EX3DV4 - SN7757, 2022-09-02	DAE4 Sn1743, 2022-08-25

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 240.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	2.6 x 2.6 x 1.2
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-07-04	2023-07-04
psSAR1g [W/Kg]	1.03	1.14
psSAR10g [W/Kg]	0.228	0.218
Power Drift [dB]	-0.08	-0.05
TSL Correction	Positive only	Positive only
M2/M1 [%]		63.1
Dist 3dB Peak [mm]		4.2



31_Bluetooth_GFSK_Ch39_Side1_0 mm_ANT Aux

Device under Test Properties

Model: AX211NGW

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2441.000, 39	7.25	1.84	41.1

Hardware Setup

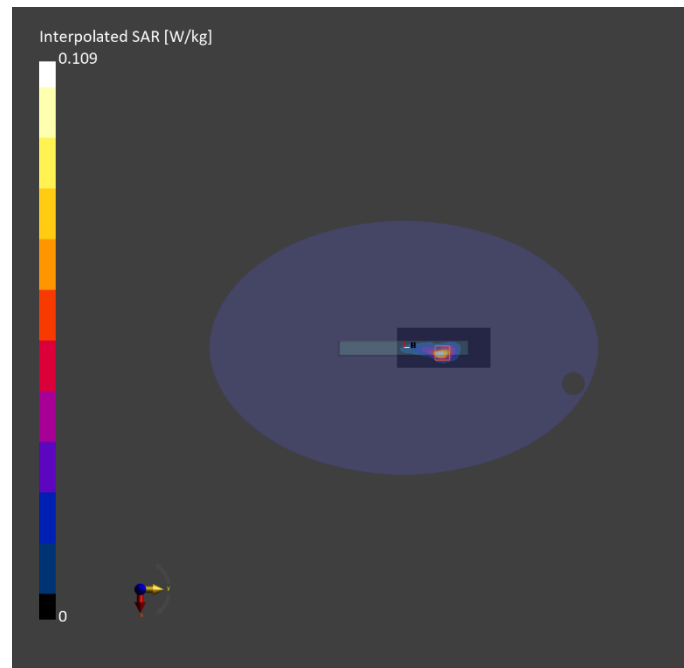
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000 , 2023-Jul-07	EX3DV4 - SN7757, 2022-09-02	DAE4 Sn1743, 2022-08-25

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 140.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2023-07-07	2023-07-07
psSAR1g [W/Kg]	0.079	0.073
psSAR10g [W/Kg]	0.032	0.027
Power Drift [dB]	0.05	-0.02
TSL Correction	Positive only	Positive only
M2/M1 [%]		71.1
Dist 3dB Peak [mm]		4.9



32_WLAN 6 GHz_802.11ax HE160_Ch15_Side2_0 mm_ANT Aux

Device under Test Properties

Model: AX211NGW

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 0.00	U-NII-5	WLAN, 10743-AAC	6025.000, 15	4.5	5.51	35.3

Hardware Setup

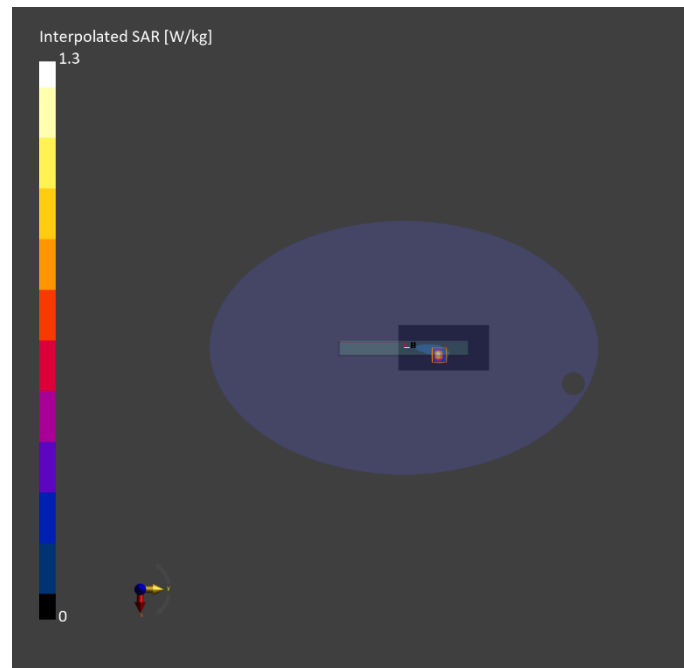
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2180	HBBL-600-10000 , 2023-Jul-07	EX3DV4 - SN7757, 2022-09-02	DAE4 Sn1743, 2022-08-25

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	68.0 x 136.0	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

Measurement Results

	Area Scan	Zoom Scan
Date	2023-07-07	2023-07-07
psSAR1g [W/Kg]	0.723	0.967
psSAR10g [W/Kg]	0.170	0.193
Power Drift [dB]	-0.11	-0.11
TSL Correction	Positive only	Positive only
M2/M1 [%]		53.2
Dist 3dB Peak [mm]		4.0



33_WLAN 6 GHz_802.11ax HE160_Ch15_Side1_0 mm_ANT Main

Device under Test Properties

Model: AX211NGW

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	EDGE TOP, 2.00	U-NII-5	WLAN, 10755-AAC	6025.0, 15	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 1102	---Air	EUmmWV4 - SN9639_F1-55GHz, 2022-08-24	DAE4 Sn1669, 2023-05-23

Scan Setup

	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.0502 x 0.0502
Sensor Surface [mm]	2.0
MAIA	Y

Measurement Results

	5G Scan
Date	2023-07-20
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	2.22
psPDtot+ [W/m ²]	2.41
psPDmod+ [W/m ²]	2.66
E _{max} [V/m]	47.0
H _{max} [A/m]	
Power Drift [dB]	-0.04

