

Test Laboratory: BTL Inc.

Date: 2023/12/14

System Check_H2450_1214

DUT: Dipole 24500 MHz D2450V2;SN:919;

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.798$ S/m; $\epsilon_r = 39.941$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.9 °C; Liquid Temperature : 22.6 °C

DASY Configuration:

- Probe: EX3DV4 - SN3974; ConvF(8.04, 8.04, 8.04) @ 2450 MHz; Calibrated: 2023/4/10
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1423; Calibrated: 2023/3/17
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 1128
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Area Scan (6x7x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 21.8 W/kg

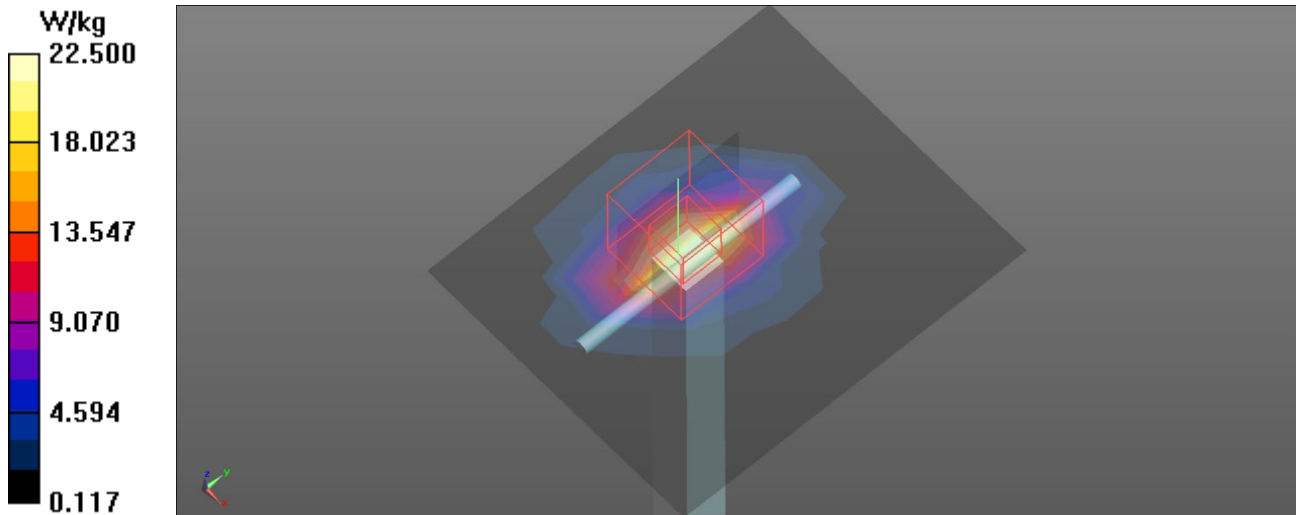
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 89.93 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 28.1 W/kg

SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.29 W/kg

Maximum value of SAR (measured) = 22.5 W/kg



Test Laboratory: BTL Inc.

Date: 2023/12/15

System Check_H5250_1215

DUT: Dipole D5GHzV2;SN:1160;

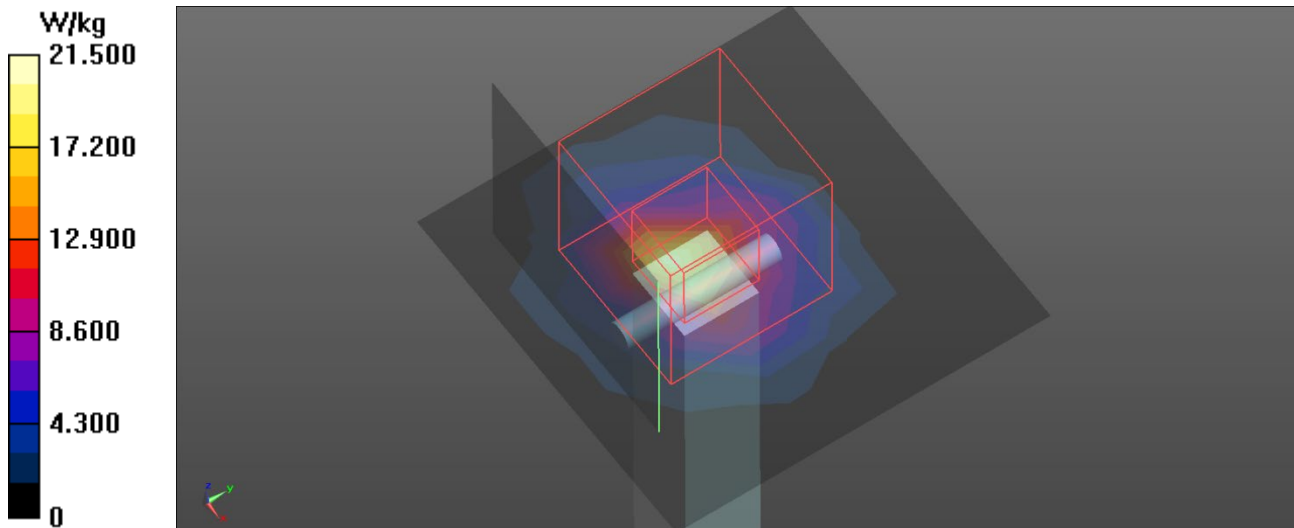
Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 5250$ MHz; $\sigma = 4.744$ S/m; $\epsilon_r = 35.502$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.0 °C; Liquid Temperature : 22.5 °C

DASY Configuration:

- Probe:EX3DV4-SN7544; ConvF(5.35, 5.35, 5.35) @ 5250 MHz; Calibrated: 2023/2/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1717; Calibrated: 2023/4/10
- Phantom: ELI V5.0; Type: QD OVA 001 BB; Serial: TP:1222
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Area Scan (6x6x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 19.8 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm
Reference Value = 66.67 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 40.0 W/kg
SAR(1 g) = 8.06 W/kg; SAR(10 g) = 2.3 W/kg
Maximum value of SAR (measured) = 21.5 W/kg



Test Laboratory: BTL Inc.

Date: 2023/12/15

System Check_H5600_1215

DUT: Dipole D5GHzV2;SN:1160;

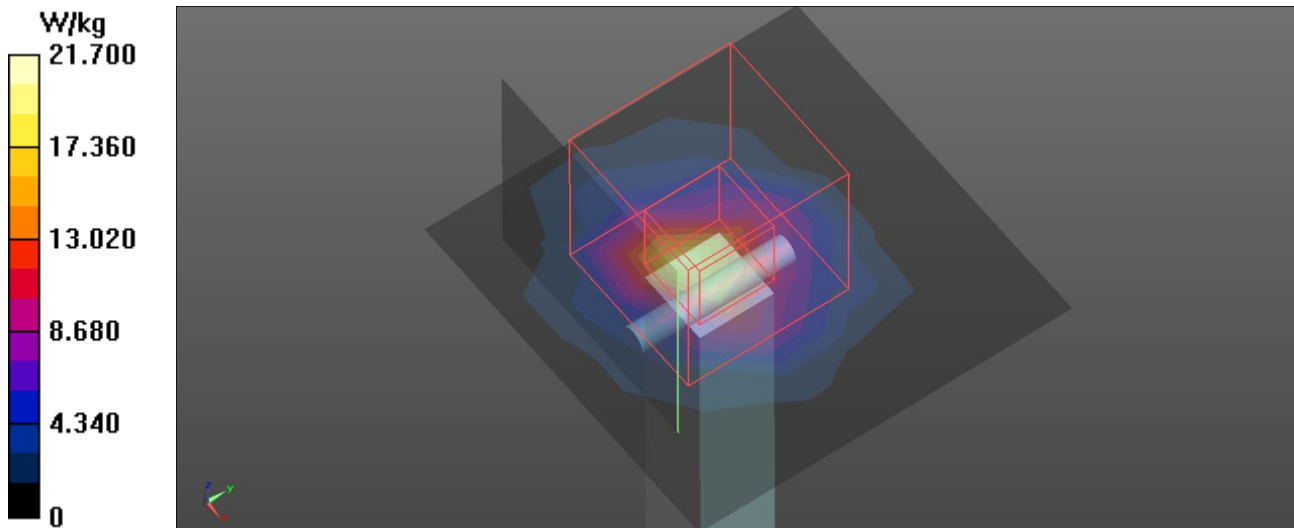
Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.125$ S/m; $\epsilon_r = 34.618$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.0 °C; Liquid Temperature : 22.5 °C

DASY Configuration:

- Probe:EX3DV4-SN7544; ConvF(4.8, 4.8, 4.8) @ 5600 MHz; Calibrated: 2023/2/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1717; Calibrated: 2023/4/10
- Phantom: ELI V5.0; Type: QD OVA 001 BB; Serial: TP:1222
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Area Scan (6x6x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 19.3 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm
Reference Value = 63.82 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 43.6 W/kg
SAR(1 g) = 7.85 W/kg; SAR(10 g) = 2.21 W/kg
Maximum value of SAR (measured) = 21.7 W/kg



Test Laboratory: BTL Inc.

Date: 2023/12/15

System Check_H5750_1215

DUT: Dipole D5GHzV2;SN:1160;

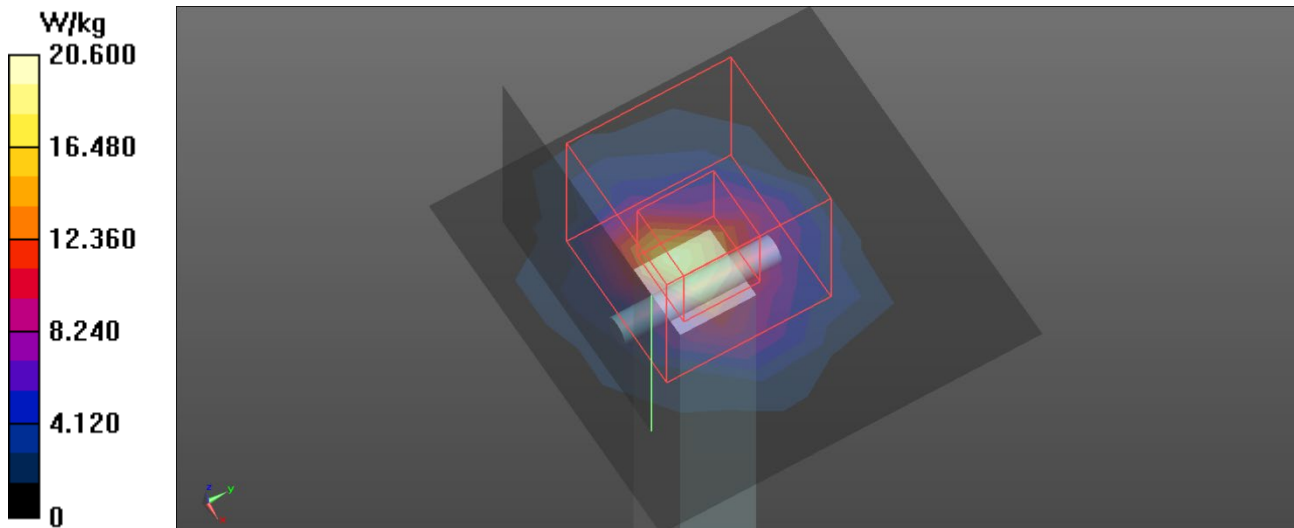
Communication System: UID 0, CW (0); Frequency: 5750 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5750$ MHz; $\sigma = 5.293$ S/m; $\epsilon_r = 34.255$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.0 °C; Liquid Temperature : 22.5 °C

DASY Configuration:

- Probe:EX3DV4-SN7544; ConvF(4.87, 4.87, 4.87) @ 5750 MHz; Calibrated: 2023/2/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1717; Calibrated: 2023/4/10
- Phantom: ELI V5.0; Type: QD OVA 001 BB; Serial: TP:1222
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Area Scan (6x6x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 18.4 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm
Reference Value = 61.43 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 43.1 W/kg
SAR(1 g) = 7.44 W/kg; SAR(10 g) = 2.09 W/kg
Maximum value of SAR (measured) = 20.6 W/kg



Test Laboratory: BTL Inc.

Date: 2023/12/15

System Check_H5800_1215

DUT: Dipole D5GHzV2;SN:1160;

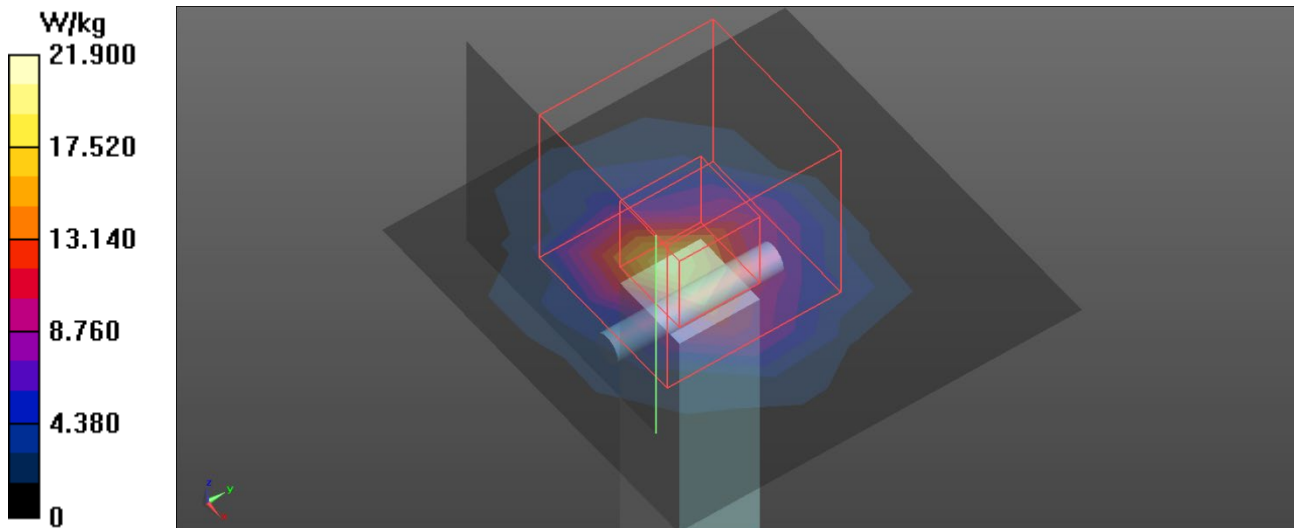
Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5800$ MHz; $\sigma = 5.346$ S/m; $\epsilon_r = 34.129$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.0 °C; Liquid Temperature : 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN7544; ConvF(4.87, 4.87, 4.87) @ 5800 MHz; Calibrated: 2023/2/16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1717; Calibrated: 2023/4/10
- Phantom: ELI V5.0; Type: QD OVA 001 BB; Serial: TP:1222
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Area Scan (6x6x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 19.4 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm
Reference Value = 62.65 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 46.7 W/kg
SAR(1 g) = 7.84 W/kg; SAR(10 g) = 2.2 W/kg
Maximum value of SAR (measured) = 21.9 W/kg



Measurement Report for Device, , UID 0 -, Channel 0 (6500.0MHz)

Device under Test Properties

Model, Manufacturer Device,	Dimensions [mm] 50.0 x 10.0 x 8.0	IMEI	DUT Type Dipole
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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	,		, 0--	6500.0, 0	5.8	5.87	33.6

Hardware Setup

Phantom Twin-SAM V8.0 (30deg probe tilt) - 2081	TSL, Measured Date HBBL-695-10000 Charge:xxxx, --	Probe, Calibration Date EX3DV4 - SN7693, 2023-10-31	DAE, Calibration Date DAE4 Sn1423, 2023-03-17
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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	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection Scan Method	VMS + 6p Measured	VMS + 6p Measured

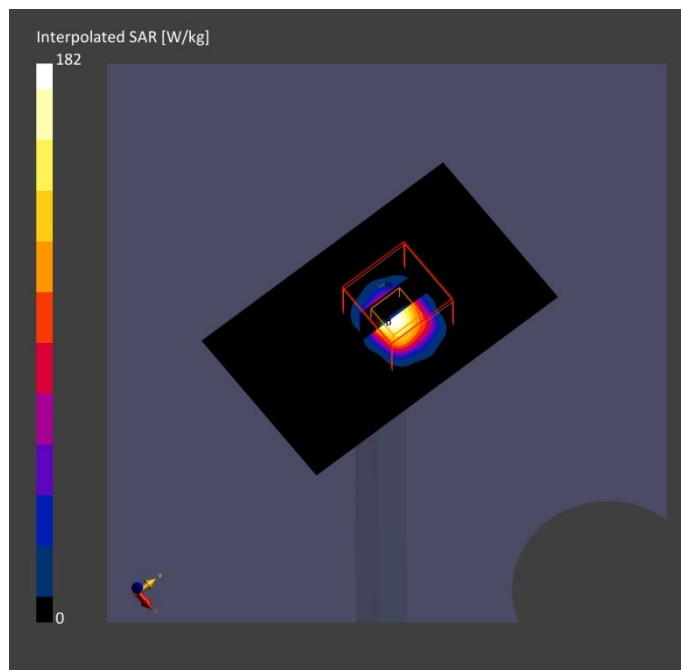
Measurement Results

	Area Scan	Zoom Scan
Date	2023-12-16	2023-12-16
psSAR1g [W/kg]	21.3	29.2
psSAR10g [W/kg]	5.06	5.56
Power Drift [dB]	0.07	0.05
Power Scaling	Enabled	Enabled
Scaling Factor		
TSL Correction [dB]	No correction	No correction
M2/M1 [%]		51.9
Dist 3dB Peak [mm]		4.8

Warning(s) / Error(s)

Details Area Scan
Warning(s)
Error(s)

Zoom Scan



Measurement Report for Device, FRONT, Validation band, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

Model, Manufacturer 1041, Device	Dimensions [mm] 100.0 x 100.0 x 172.0	IMEI	DUT Type Verification Source
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Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	FRONT, 10.00	Validation band	CW, 0--	10000.0, 10000	1.0

Hardware Setup

Phantom mmWave- xxxx	Medium ---Air	Probe, Calibration Date EUmmWV4 - SN9626_F1-55GHz, 2023-05-17	DAE, Calibration Date DAE4 Sn1423, 2023-03-17
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Scan Setup

	5G Scan	
Grid Extents [mm]	60.0 x	60.0
Grid Steps [lambda]	0.125 x	0.125
Sensor Surface [mm]		10.0
MAIA		Y

Measurement Results

	5G Scan
Date	2023-12-16
Avg. Area [cm ²]	1.00
psPDn+ [W/m ²]	55.0
psPDtot+ [W/m ²]	55.2
psPDmod+ [W/m ²]	55.6
E _{max} [V/m]	147
Power Drift [dB]	0.00

Warning(s) / Error(s)

Details 5G Scan
Warning(s)
Error(s)

