Modulation signal verification for EX3DV4 SN:3873

Frequency (MHz)	Modulation	Conductivity (σ)	Permittivity (εr)	Conductivity Target (σ)	Permittivity Target (εr)	Delta (σ) (%)	Delta (εr) (%)	Measured SAR (W/kg)	Input Power (W)	1W Normalized SAR (W/kg)	1W Target SAR (W/kg)	Deviation (%)	Probe S/N
835	GMSK	0.9	40.574	0.90	41.5	0.00	-2.23	1.53	0.154	9.95	9.53	4.38	3873
835	QPSK	0.9	40.574	0.90	41.5	0.00	-2.23	1.51	0.166	9.08	9.53	-4.75	3873
1750	QPSK	1.384	38.482	1.37	40.10	1.02	-4.03	1.56	0.042	36.99	36.40	1.63	3873
1900	GMSK	1.443	40.23	1.40	40.0	3.07	0.57	1.66	0.042	39.52	39.00	1.34	3873
1900	QPSK	1.443	40.23	1.40	40.0	3.07	0.57	1.68	0.044	38.13	39.00	-2.22	3873
2600	QPSK	2.039	38.932	1.96	39.00	4.03	-0.17	1.62	0.030	54.00	56.30	-4.09	3873

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2020/03/17

System Check_Head_835MHz_200317_GMSK

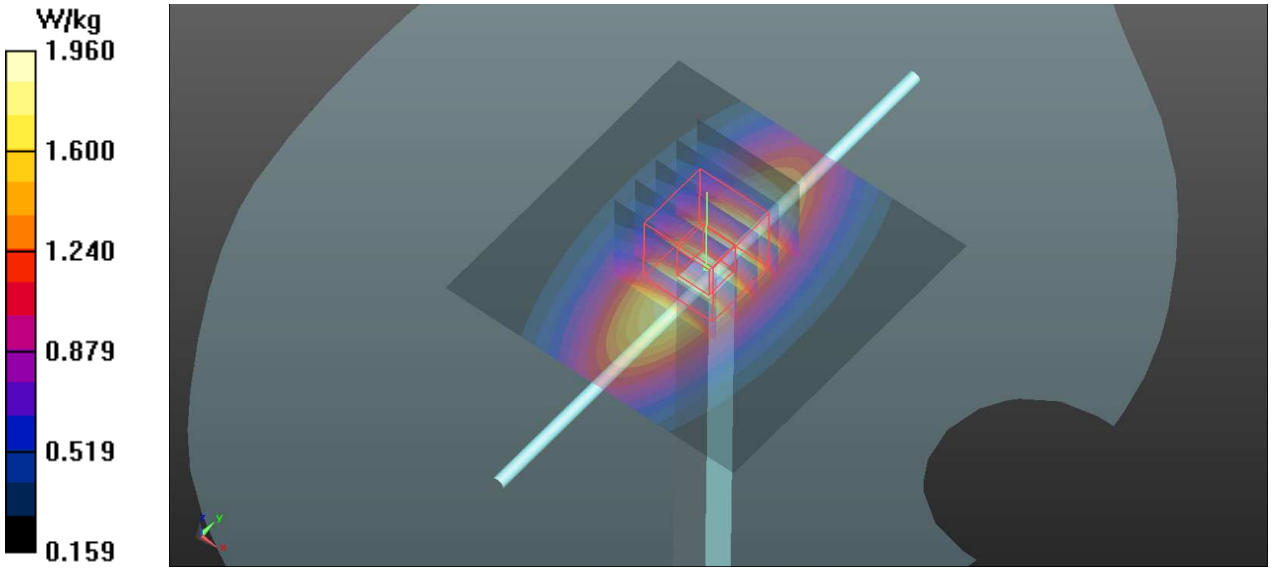
DUT: Dipole:835 MHz;Type:D835V2

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL835_0317 Medium parameters used: f = 835 MHz; σ = 0.9 S/m; ε_r = 40.574; ρ = 1000 kg/m^3
Ambient Temperature：23.5℃； Liquid Temperature：22.3℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3873; ConvF(9.59, 9.59, 9.59); Calibrated: 2019/08/30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1341; Calibrated: 2019/08/28
- Phantom: Front Phantom with CRP v5.0; Type: QD000P40CD; Serial: TP:1695
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

-Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.96 W/kg

-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 43.00 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 2.32 W/kg
SAR(1 g) = 1.53 W/kg; SAR(10 g) = 0.993 W/kg
Maximum value of SAR (measured) = 1.96 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2020/03/17

System Check_Head_835MHz_200317_QPSK

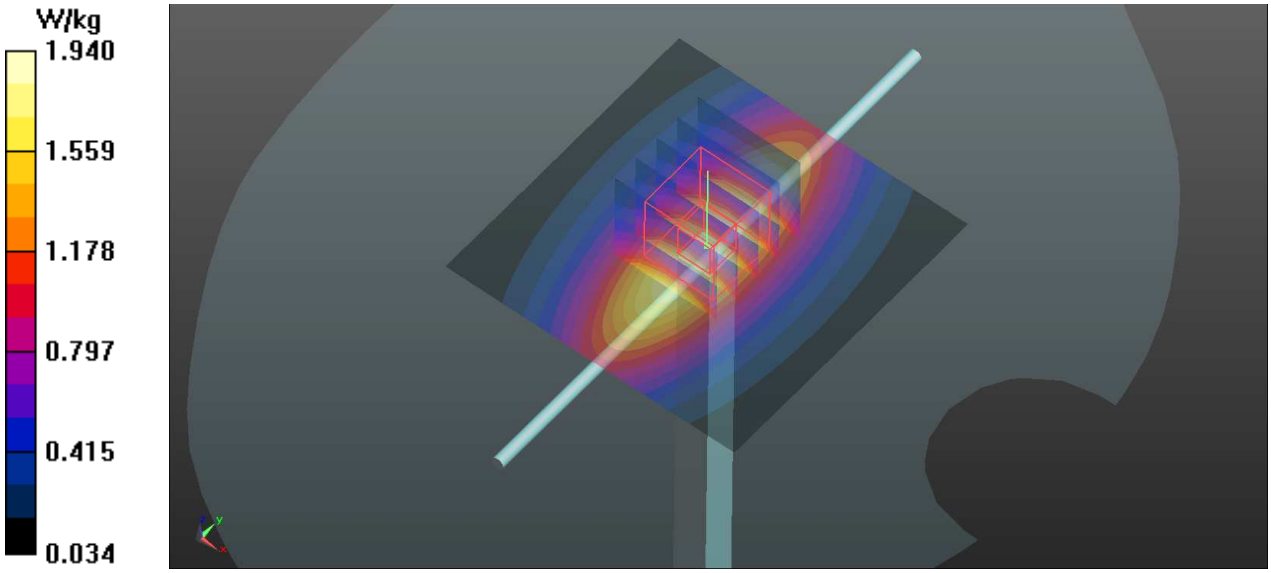
DUT: Dipole:835 MHz;Type:D835V2

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL835_0317 Medium parameters used: f = 835 MHz; σ = 0.9 S/m; ε_r = 40.574; ρ = 1000 kg/m^3
Ambient Temperature：23.5℃； Liquid Temperature：22.3℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3873; ConvF(9.59, 9.59, 9.59); Calibrated: 2019/08/30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1341; Calibrated: 2019/08/28
- Phantom: Front Phantom with CRP v5.0; Type: QD000P40CD; Serial: TP:1695
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

-Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.94 W/kg

-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 42.85 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.29 W/kg
SAR(1 g) = 1.51 W/kg; SAR(10 g) = 0.983 W/kg
Maximum value of SAR (measured) = 1.94 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2020/03/19

System Check_Head_1750MHz_200319_QPSK

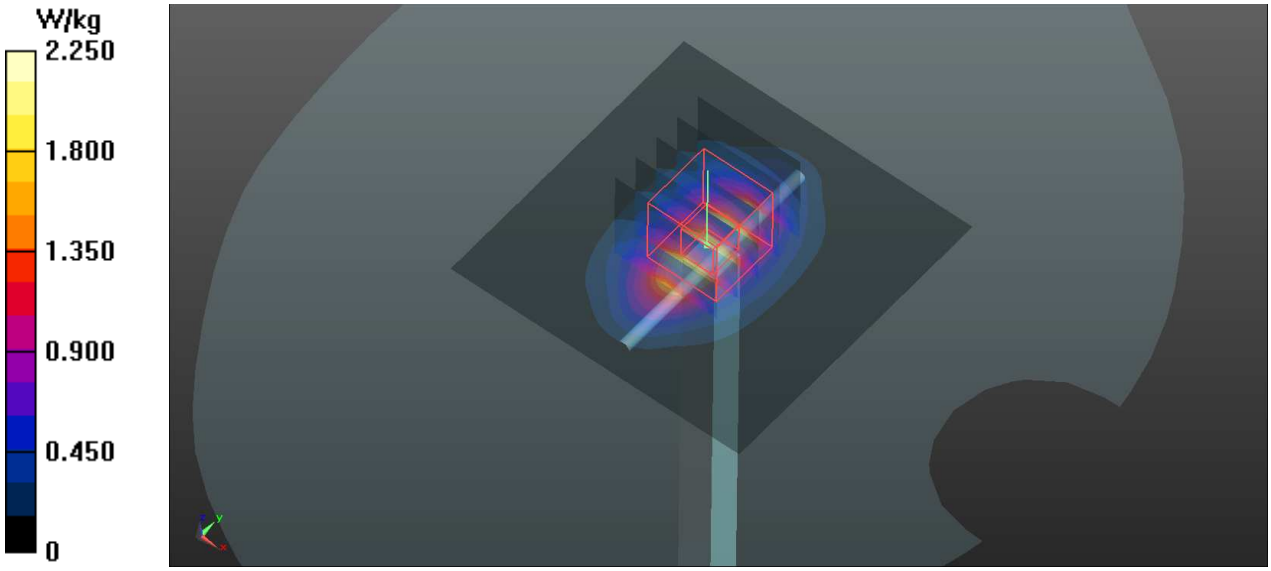
DUT: Dipole:1750 MHz;Type:D1750V2

Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: HSL1750_0319 Medium parameters used: f = 1750 MHz; σ = 1.384 S/m; ε_r = 38.482; ρ = 1000 kg/m^3
Ambient Temperature：23.2℃； Liquid Temperature：22.1℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3873; ConvF(8.25, 8.25, 8.25); Calibrated: 2019/08/30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1341; Calibrated: 2019/08/28
- Phantom: Front Phantom with CRP v5.0; Type: QD000P40CD; Serial: TP:1695
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

-Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.25 W/kg

-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 35.54 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 2.89 W/kg
SAR(1 g) = 1.56 W/kg; SAR(10 g) = 0.810 W/kg
Maximum value of SAR (measured) = 2.26 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2020/03/21

System Check_Head_1900MHz_200321_GMSK

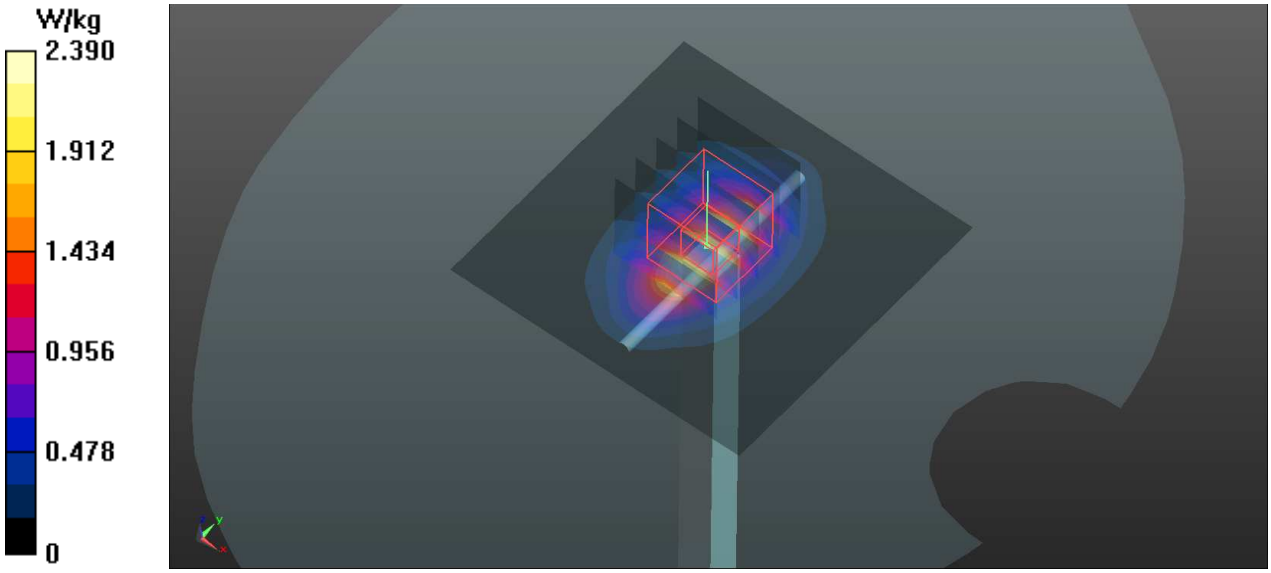
DUT: Dipole:1900MHz;Type:D1900V2

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL1900_0321 Medium parameters used: f = 1900 MHz; σ = 1.443 S/m; ε_r = 40.23; ρ = 1000 kg/m^3
Ambient Temperature：23.6℃； Liquid Temperature：22.2℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3873; ConvF(7.96, 7.96, 7.96); Calibrated: 2019/08/30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1341; Calibrated: 2019/08/28
- Phantom: Front Phantom with CRP v5.0; Type: QD000P40CD; Serial: TP:1695
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

-Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.39 W/kg

-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 35.88 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.08 W/kg
SAR(1 g) = 1.66 W/kg; SAR(10 g) = 0.860 W/kg
Maximum value of SAR (measured) = 2.41 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2020/03/21

System Check_Head_1900MHz_200321_QPSK

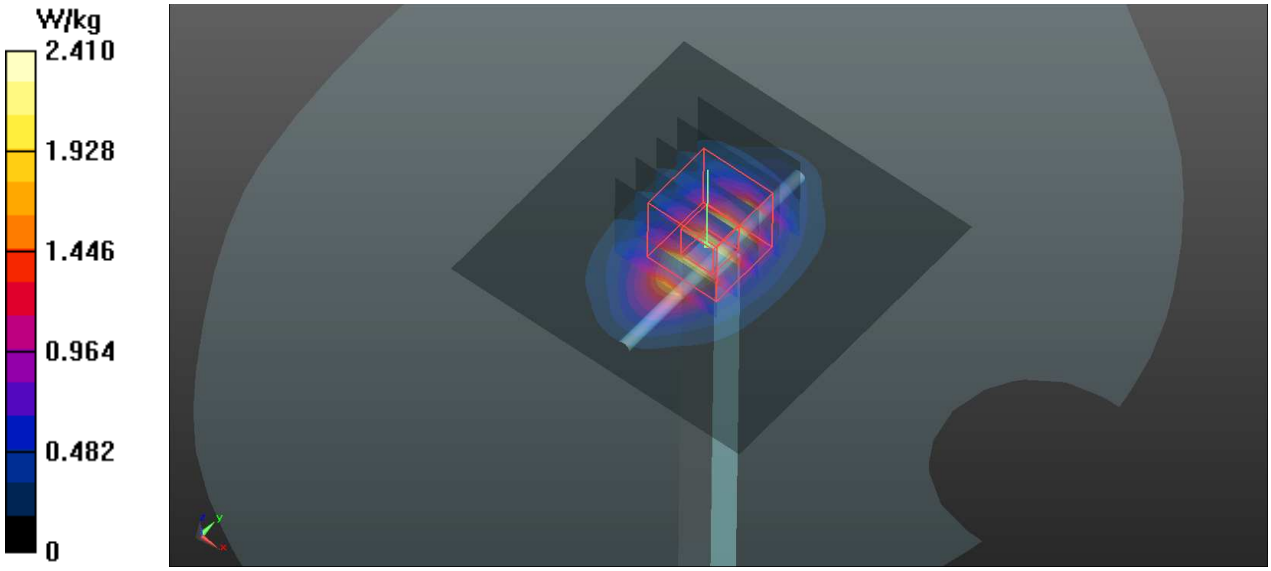
DUT: Dipole:1900MHz;Type:D1900V2

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL_1900 Medium parameters used: f = 1900 MHz; σ = 1.443 S/m; ε_r = 40.23; ρ = 1000 kg/m^3
Ambient Temperature：23.6℃； Liquid Temperature：22.2℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3873; ConvF(7.96, 7.96, 7.96); Calibrated: 2019/08/30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1341; Calibrated: 2019/08/28
- Phantom: Front Phantom with CRP v5.0; Type: QD000P40CD; Serial: TP:1695
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

-Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.41 W/kg

-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 35.96 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 3.11 W/kg
SAR(1 g) = 1.68 W/kg; SAR(10 g) = 0.868 W/kg
Maximum value of SAR (measured) = 2.43 W/kg



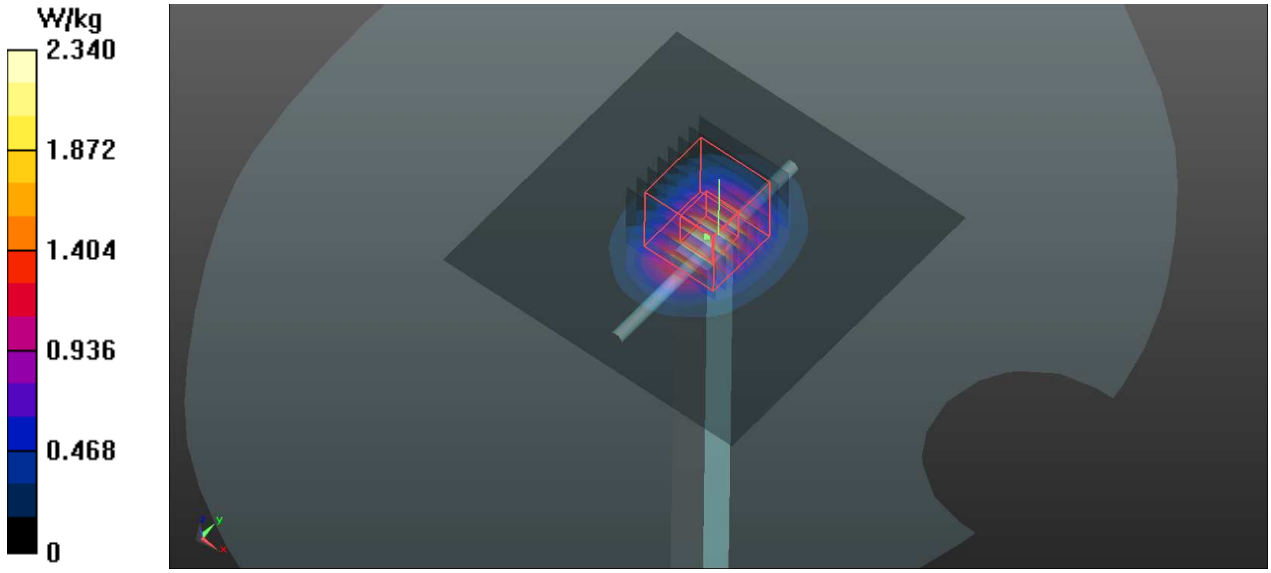
Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2020/03/23

System Check_Head_2600MHz_200323_QPSK

DUT: Dipole:2600 MHz;Type:D2600V2

Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: HSL2600_0323 Medium parameters used: f = 2600 MHz; σ = 2.039 S/m; ε_r = 38.932; ρ = 1000 kg/m^3
Ambient Temperature：23.4℃； Liquid Temperature：22.5℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3873; ConvF(7.12, 7.12, 7.12); Calibrated: 2019/08/30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1341; Calibrated: 2019/08/28
- Phantom: Front Phantom with CRP v5.0; Type: QD000P40CD; Serial: TP:1695
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

-Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.34 W/kg

-Zoom Scan (8x8x10)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 36.91 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 3.01 W/kg
SAR(1 g) = 1.62 W/kg; SAR(10 g) = 0.841 W/kg
Maximum value of SAR (measured) = 2.35 W/kg