

### 16.3 SAR test plots for Repeat Measurement

#### UHF-RFID Edge3 tilt 902.75MHz Repeat 1st

Communication System: UID 0, UHF-RFID (0); Communication System Band: UHF; Frequency: 902.75 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 902.75$  MHz;  $\sigma = 1.019$  S/m;  $\epsilon_r = 55.088$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.95, 9.95, 9.95); Calibrated: 2018/05/23;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2018/05/23

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

Measurement SW: DASYS5, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

**UHF-RFID/Edge3 tilt/Area Scan (121x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 2.75 W/kg

**UHF-RFID/Edge3 tilt/Zoom Scan (7x7x7) 3 2 2 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.26 V/m; Power Drift = 0.00 dB

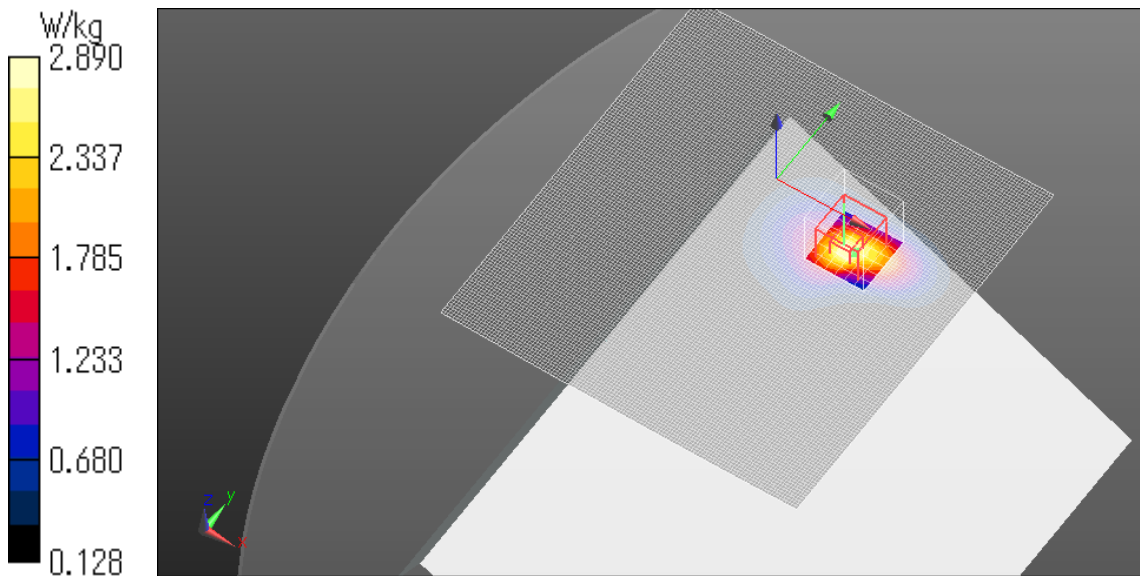
Peak SAR (extrapolated) = 3.54 W/kg

**SAR(1 g) = 2.01 W/kg; SAR(10 g) = 1.15 W/kg**

Maximum value of SAR (measured) = 2.89 W/kg

Date: 2018/09/13

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



### UHF-RFID Edge3 tilt 902.75MHz Repeat 2nd

Communication System: UID 0, UHF-RFID (0); Communication System Band: UHF; Frequency: 902.75 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 902.75$  MHz;  $\sigma = 1.019$  S/m;  $\epsilon_r = 55.088$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.95, 9.95, 9.95); Calibrated: 2018/05/23;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2018/05/23

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

Measurement SW: DASYS2, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

**UHF-RFID/Edge3 tilt/Area Scan (121x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 2.73 W/kg

**UHF-RFID/Edge3 tilt/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.33 V/m; Power Drift = -0.01 dB

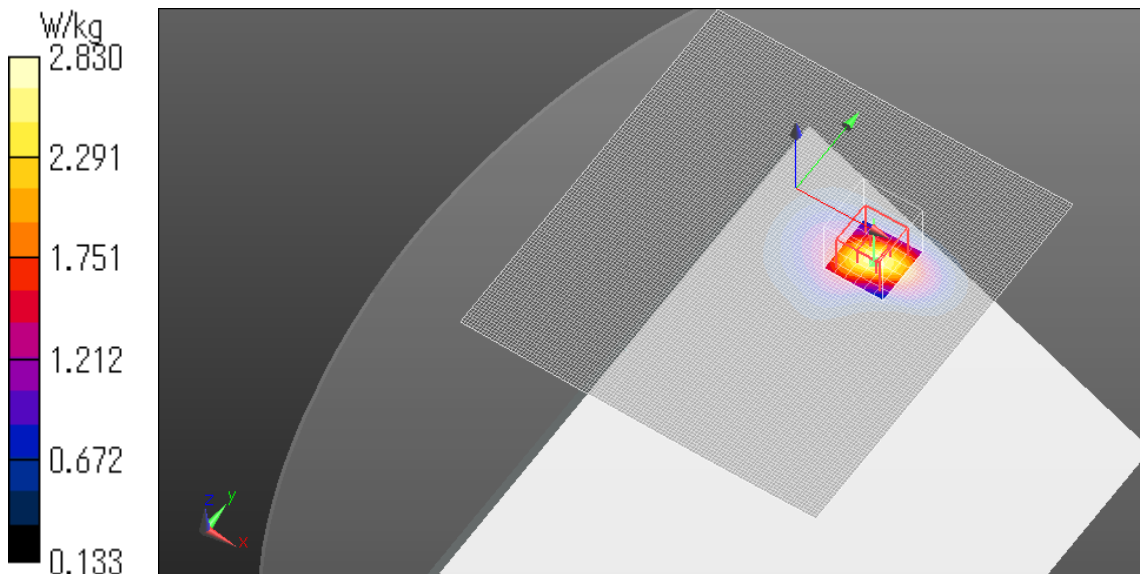
Peak SAR (extrapolated) = 3.37 W/kg

**SAR(1 g) = 1.91 W/kg; SAR(10 g) = 1.12 W/kg**

Maximum value of SAR (measured) = 2.83 W/kg

Date: 2018/09/13

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



### UHF-RFID Edge3 tilt 902.75MHz Repeat 3rd

Communication System: UID 0, UHF-RFID (0); Communication System Band: UHF; Frequency: 902.75 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 902.75$  MHz;  $\sigma = 1.019$  S/m;  $\epsilon_r = 55.088$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.95, 9.95, 9.95); Calibrated: 2018/05/23;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2018/05/23

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

Measurement SW: DASYS2, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

**UHF-RFID/Edge3 tilt/Area Scan (121x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 2.66 W/kg

**UHF-RFID/Edge3 tilt/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.24 V/m; Power Drift = -0.01 dB

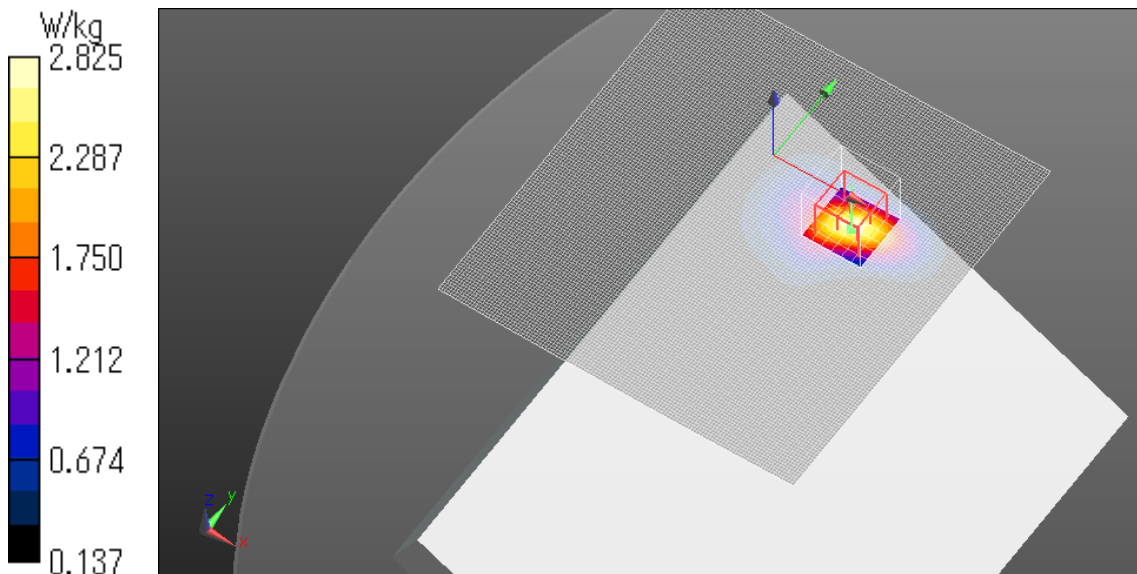
Peak SAR (extrapolated) = 3.40 W/kg

**SAR(1 g) = 1.93 W/kg; SAR(10 g) = 1.13 W/kg**

Maximum value of SAR (measured) = 2.83 W/kg

Date: 2018/09/13

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



**WCDMA Band2 Reduced Power RMC 12.2k 1852.4MHz Edge1 tilt 0mm**

Communication System: UID 0, WCDMA (0); Communication System Band: Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.478$  S/m;  $\epsilon_r = 51.469$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917\_20180523; ConvF(7.87, 7.87, 7.87); Calibrated: 2018/05/23;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369\_20180523; Calibrated: 2018/05/23

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

**WCDMA B2/Edge1 tilt 0mm/Area Scan (71x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 1.30 W/kg

**WCDMA B2/Edge1 tilt 0mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 30.04 V/m; Power Drift = -0.04 dB

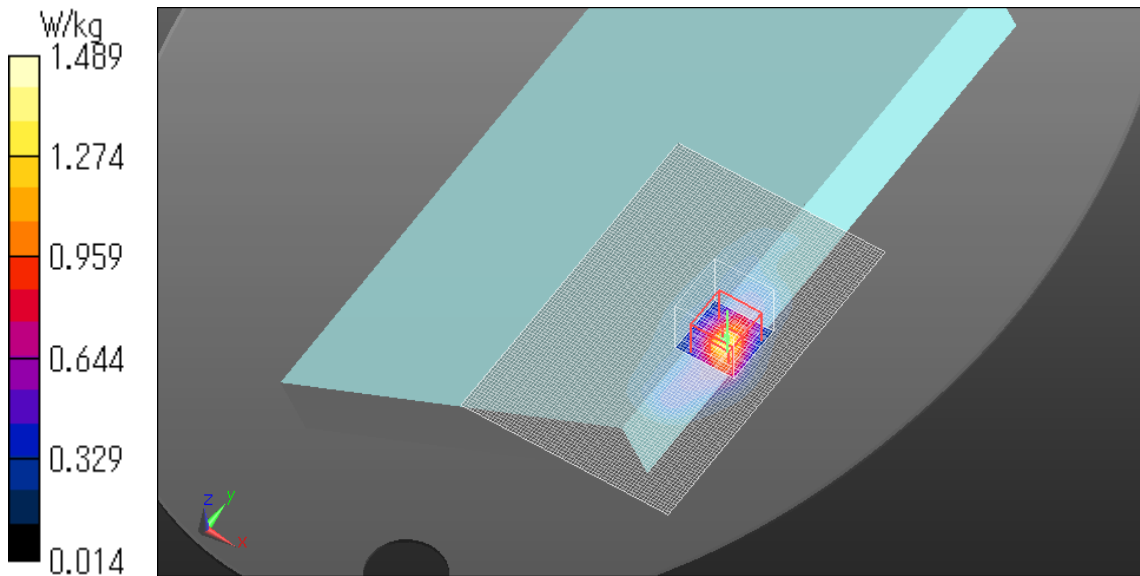
Peak SAR (extrapolated) = 1.86 W/kg

**SAR(1 g) = 0.871 W/kg; SAR(10 g) = 0.419 W/kg**

Maximum value of SAR (measured) = 1.49 W/kg

Date: 2018/09/25

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



**LTE Band 5 Reduced Power Edge1 tilt 0mm QPSK 844MHz RB Allocation 25 RB Start 0 Repeat**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 844$  MHz;  $\sigma = 0.976$  S/m;  $\epsilon_r = 55.87$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.95, 9.95, 9.95); Calibrated: 2018/05/23;

Sensor-Surface: 1.4mm (Mechanical Surface Detection (Locations From Previous Scan Used)),

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2018/05/23

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

Measurement SW: DASYS52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

**LTE B5/Edge1 tilt 0mm/Area Scan (71x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.25 W/kg

**LTE B5/Edge1 tilt 0mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 38.19 V/m; Power Drift = -0.01 dB

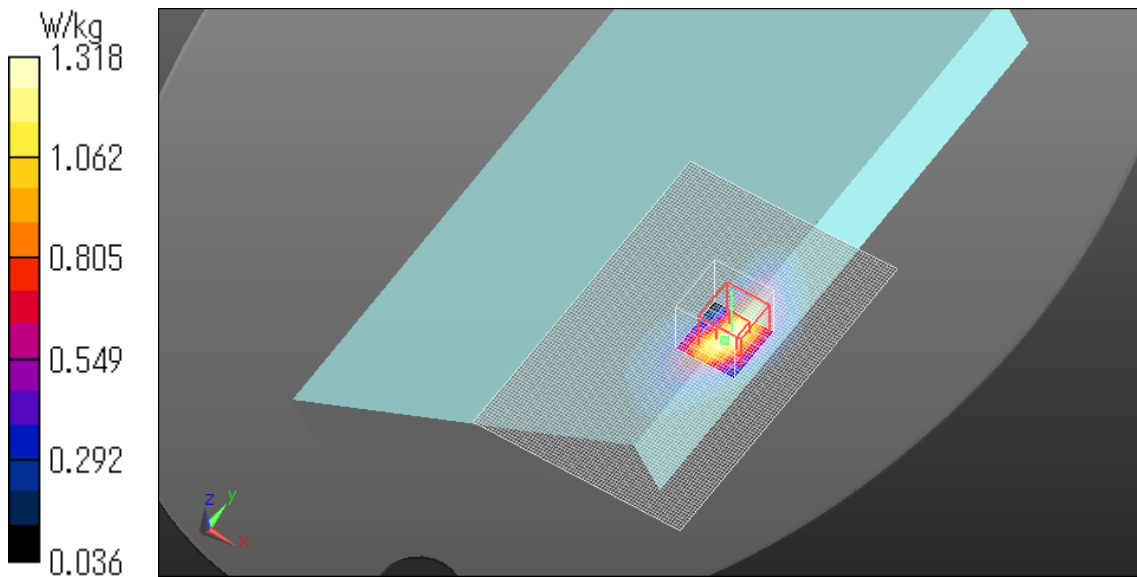
Peak SAR (extrapolated) = 1.67 W/kg

**SAR(1 g) = 0.860 W/kg; SAR(10 g) = 0.480 W/kg**

Maximum value of SAR (measured) = 1.32 W/kg

Date: 2018/09/16

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



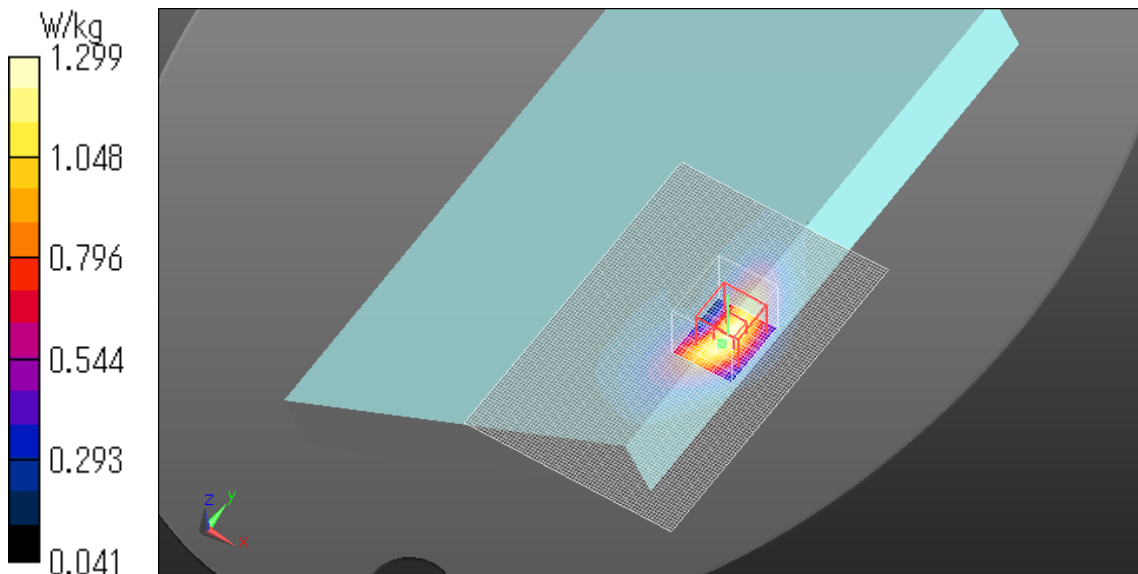
**LTE Band 12 Reduced Power Edge1 tilt 0mm QPSK 711MHz RB Allocation 25 RB Start 0 Repeat**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 12,  
E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 711 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 711$  MHz;  $\sigma = 0.955$  S/m;  $\epsilon_r = 55.711$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)  
DASY5 Configuration  
Probe: EX3DV4 - SN3917; ConvF(10.22, 10.22, 10.22); Calibrated: 2018/05/23;  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1369; Calibrated: 2018/05/23  
Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203  
Measurement SW: DASYS2, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

**LTE B12/Edge1 tilt 0mm/Area Scan (71x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 1.12 W/kg

**LTE B12/Edge1 tilt 0mm/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 38.41 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 1.61 W/kg  
**SAR(1 g) = 0.844 W/kg; SAR(10 g) = 0.472 W/kg**  
Maximum value of SAR (measured) = 1.30 W/kg

Date: 2018/09/20  
Ambient Temp. : 24.0 degree.C.    Liquid Temp.; 23.5 degree.C.



**LTE Band 13 Reduced Power Edge1 tilt 0mm QPSK 782MHz RB Allocation 50 RB Start 0 Repeat**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 13,  
E-UTRA/FDD (777.0 - 787.0 MHz); Frequency: 782 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 782$  MHz;  $\sigma = 0.965$  S/m;  $\epsilon_r = 56.23$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)  
DASY5 Configuration  
Probe: EX3DV4 - SN3917; ConvF(10.22, 10.22, 10.22); Calibrated: 2018/05/23;  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1369; Calibrated: 2018/05/23  
Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

**LTE B13/Edge1 tilt 0mm/Area Scan (71x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 1.49 W/kg

**LTE B13/Edge1 tilt 0mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 40.20 V/m; Power Drift = -0.09 dB  
Peak SAR (extrapolated) = 1.77 W/kg  
**SAR(1 g) = 0.906 W/kg; SAR(10 g) = 0.504 W/kg**  
Maximum value of SAR (measured) = 1.41 W/kg

Date: 2018/09/19  
Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.

