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# **Appendix for the Report**

## **Dosimetric Assessment of the Portable Device KX-TGDA20 (FCC ID: ACJ96NKX-TGDA20)**

### **According to the FCC Requirements SAR Distribution Plots**

December 12, 2013

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**Customer**  
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The test results only relate to the items tested. This report shall not be reproduced except in full without the written approval of the testing laboratory. This version supersedes all previous versions of this report.

## 1 SAR Distribution Plots, Head Measurement

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [TGDA20\\_yplm\\_1.da4](#)

DUT: Panasonic; Type: KX-TGDA20;

Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 40.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.05, 5.05, 5.05); Calibrated: 19.02.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.09.2013
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Cheek Left/Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.041 mW/g

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

Reference Value = 4.59 V/m; Power Drift = 0.115 dB

Peak SAR (extrapolated) = 0.084 W/kg

**SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.024 mW/g**

Maximum value of SAR (measured) = 0.047 mW/g

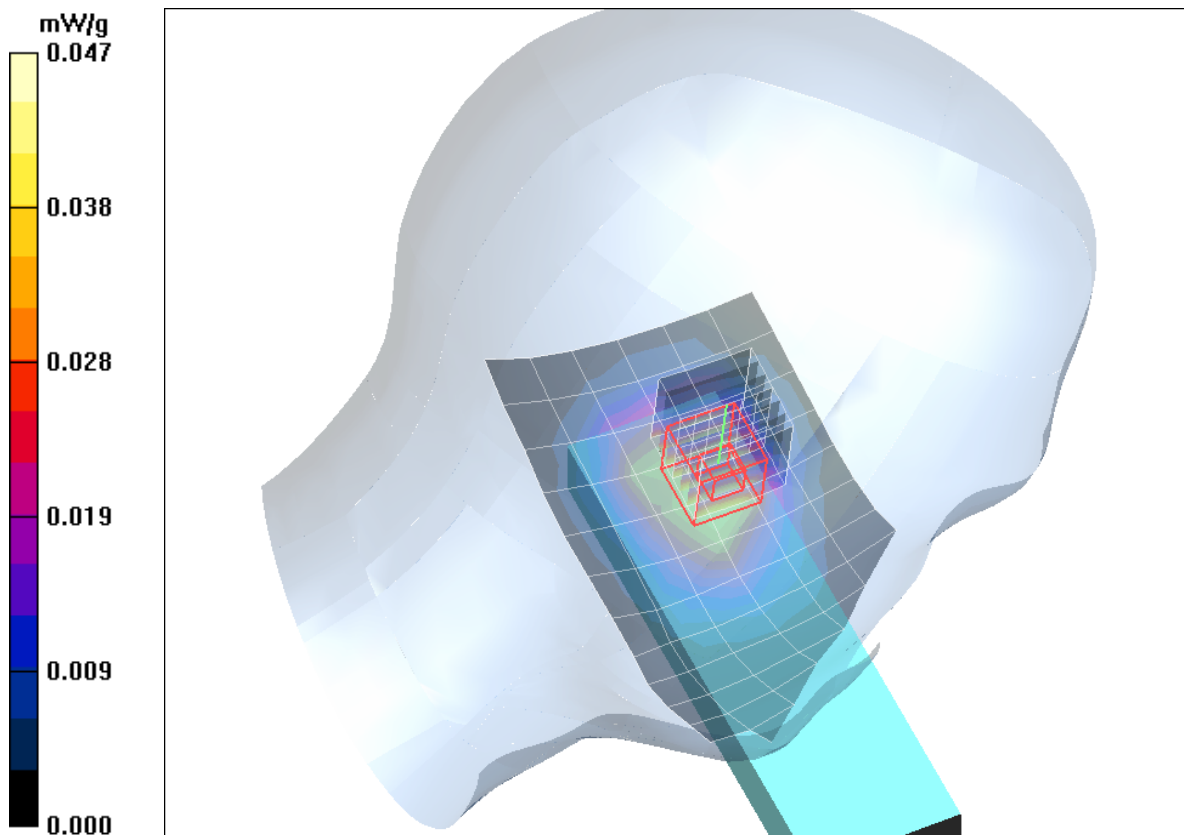


Fig. 1: SAR distribution for DECT US, channel 2, cheek position, left side of head, (December 06, 2013).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [TGDA20\\_yplm\\_2.da4](#)

DUT: Panasonic; Type: KX-TGDA20;

Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 40.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.05, 5.05, 5.05); Calibrated: 19.02.2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn631; Calibrated: 23.09.2013

- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Tilted Left/Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.030 mW/g

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

Reference Value = 4.94 V/m; Power Drift = -0.166 dB

Peak SAR (extrapolated) = 0.051 W/kg

**SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.018 mW/g**

Maximum value of SAR (measured) = 0.033 mW/g

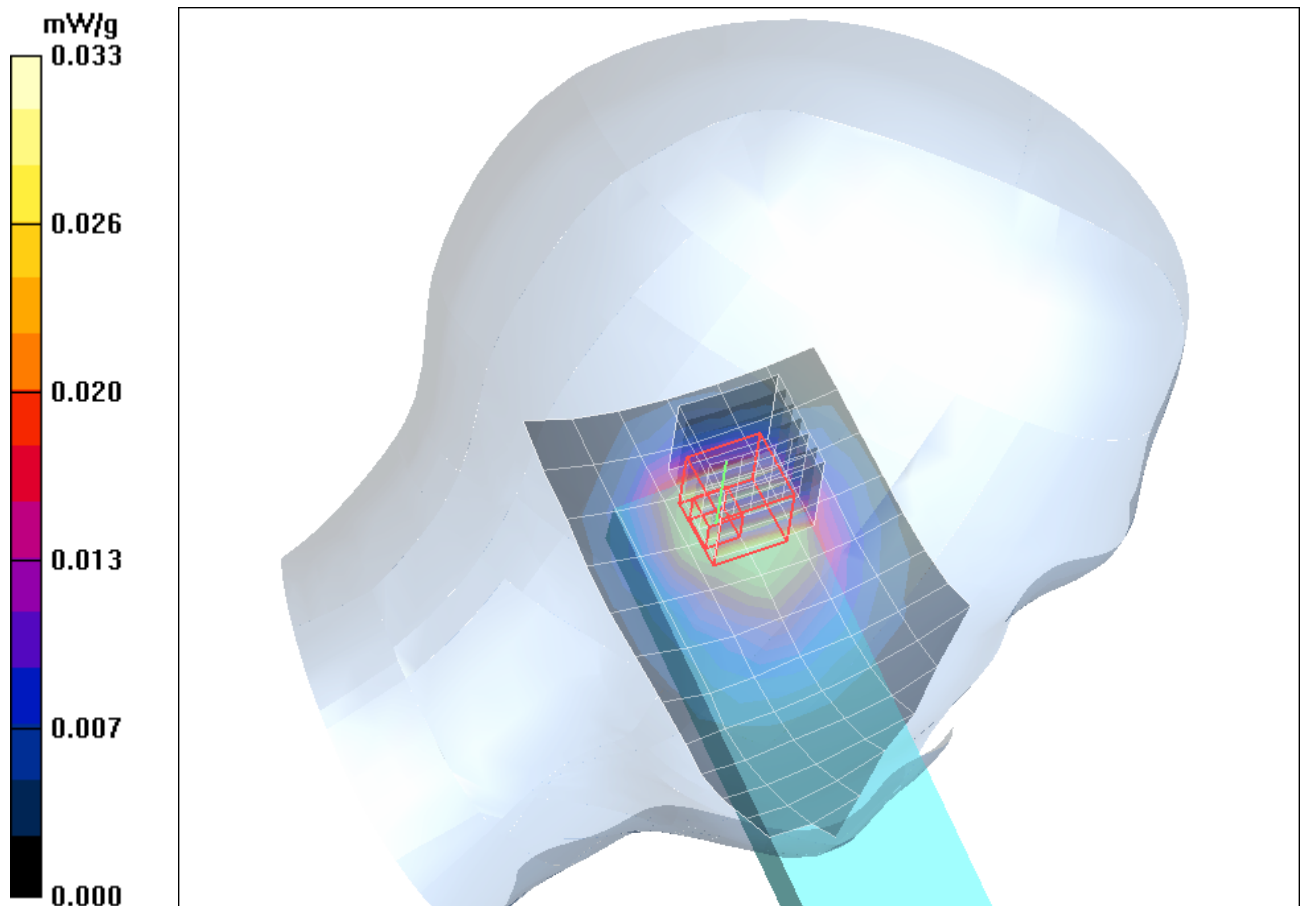


Fig. 2: SAR distribution for DECT US, channel 2, tilted position, left side of head, (December 06, 2013).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [TGDA20\\_yprm\\_1.da4](#)

DUT: Panasonic; Type: KX-TGDA20;

Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 40.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.05, 5.05, 5.05); Calibrated: 19.02.2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn631; Calibrated: 23.09.2013

- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Cheek Right/Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.039 mW/g

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

Reference Value = 5.31 V/m; Power Drift = -0.108 dB

Peak SAR (extrapolated) = 0.067 W/kg

**SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.024 mW/g**

Maximum value of SAR (measured) = 0.046 mW/g

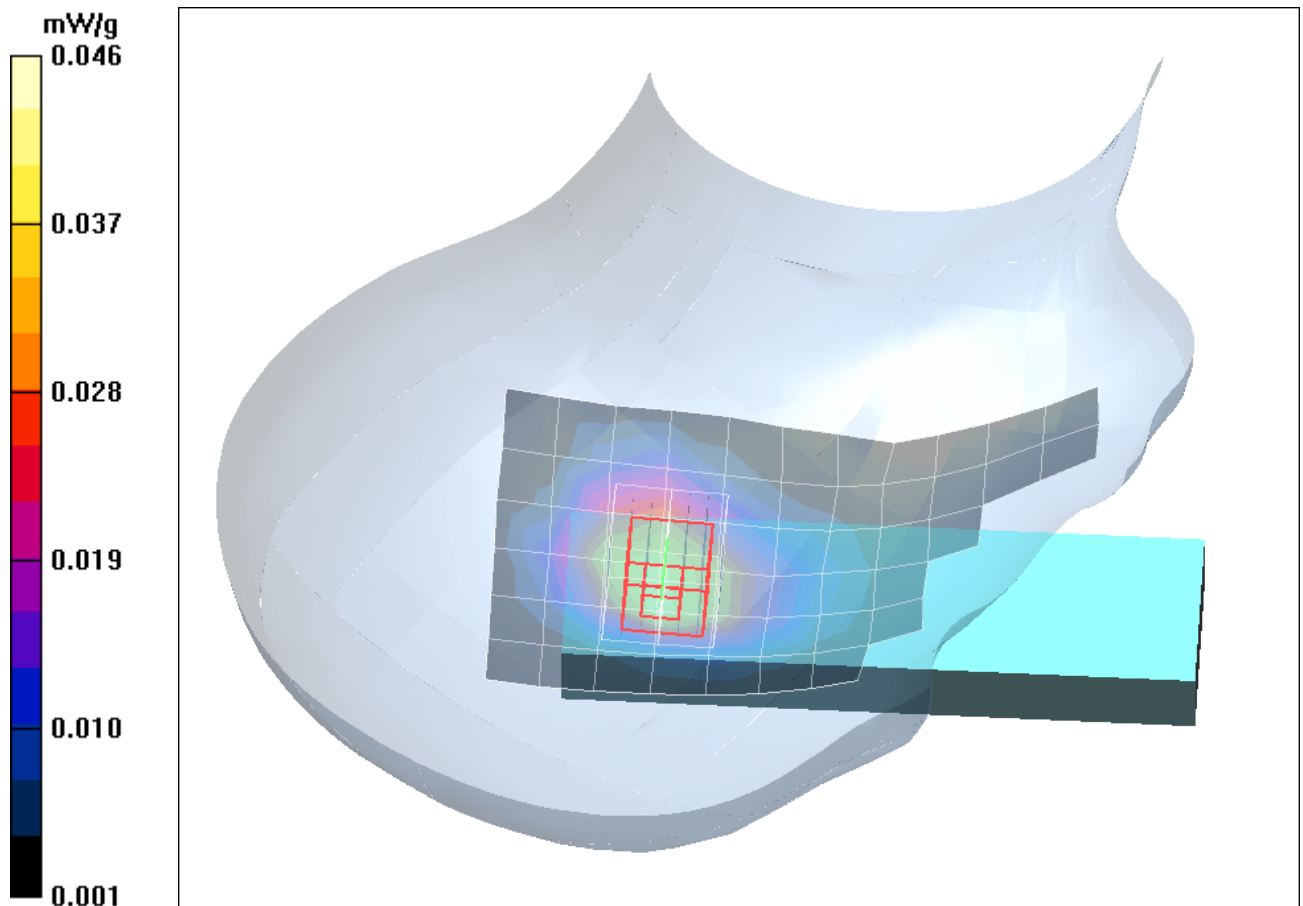


Fig. 3: SAR distribution for DECT US, channel 2, cheek position, right side of head, (December 06, 2013).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [TGDA20\\_yprm\\_2.da4](#)

DUT: Panasonic; Type: KX-TGDA20;

Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 40.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.05, 5.05, 5.05); Calibrated: 19.02.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.09.2013
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Tilted Right/Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.033 mW/g

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

Reference Value = 5.11 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 0.053 W/kg

**SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.018 mW/g**

Maximum value of SAR (measured) = 0.035 mW/g

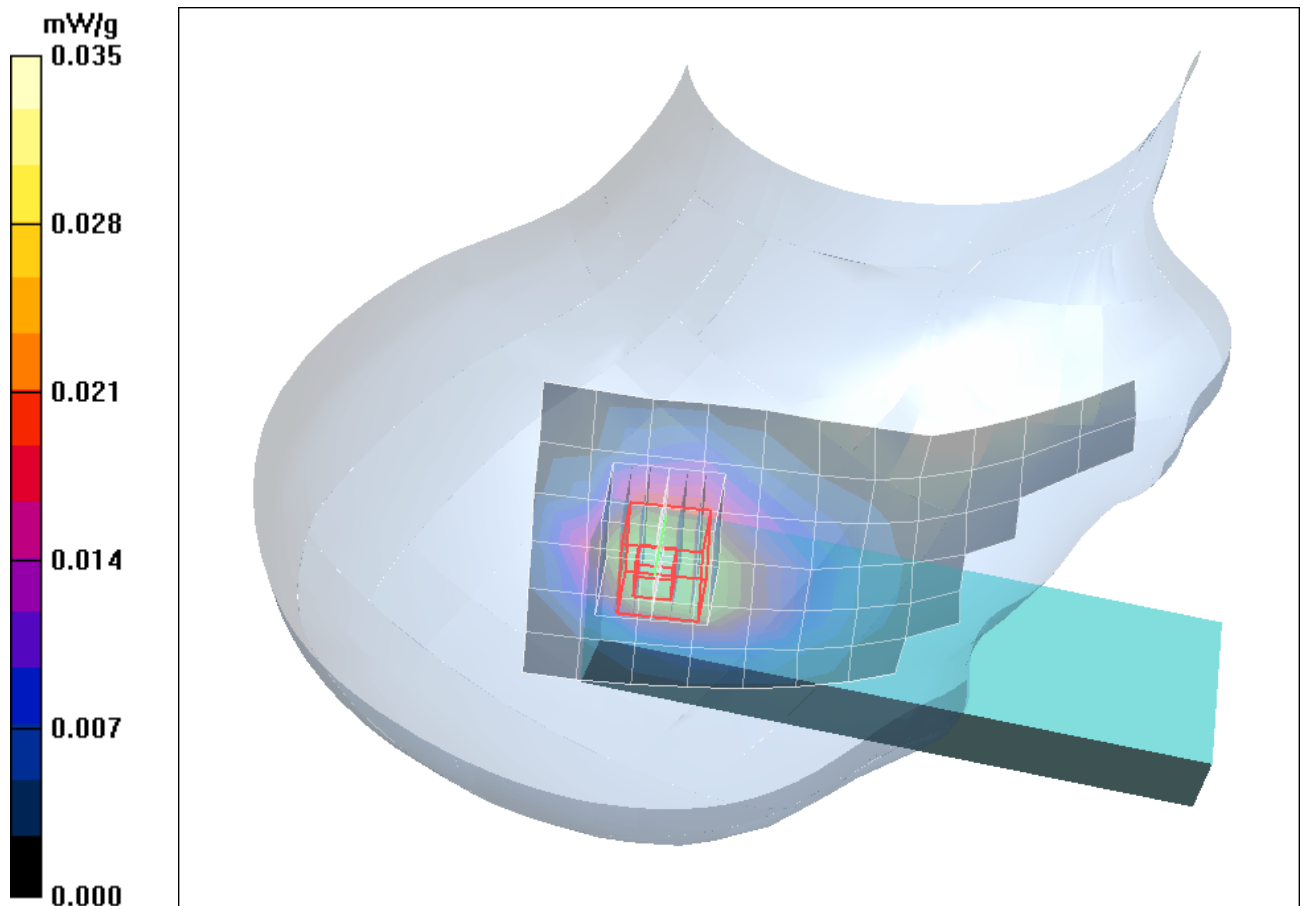


Fig. 4: SAR distribution for DECT US, channel 2, tilted position, right side of head, (December 06, 2013)