

APPENDIX A: SAR TEST PLOTS

ELEMENT

DUT: AZ499FT7164/109U-99FT7164; Type: Portable Handset; Serial: BWL7-000995

Communication System: UID:10175 - CAG, LTE-FDD; MAIA: Y; Frequency: 707.5 MHz

Medium: 750 Body; Medium parameters used:

f = 707.5 MHz; cond = 0.942 S/m; perm = 55.8; density = 1000 kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 04/10/2023; Ambient Temp: 23.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7570; ConvF:(10.26,10.26,10.26); Calibrated: 2023-01-11

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1558; Calibrated: 2023-01-17

Phantom: Twin-SAM V8.0; Serial: 2060

Measurement SW: DASY Module SAR V16.2.0.1425

**Mode: LTE Band 12, Body SAR, Mount WGA00668, Back Side, Mid Ch,
10 MHz Bandwidth, QPSK, 1 RB, 25 RB Offset**

Area Scan (120.0 x 150.0): Measurement grid: dx=15.0 mm, dy=15.0 mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: dx=6.0 mm, dy=6.0 mm, dz=1.5 mm; Graded Ratio: 1.5

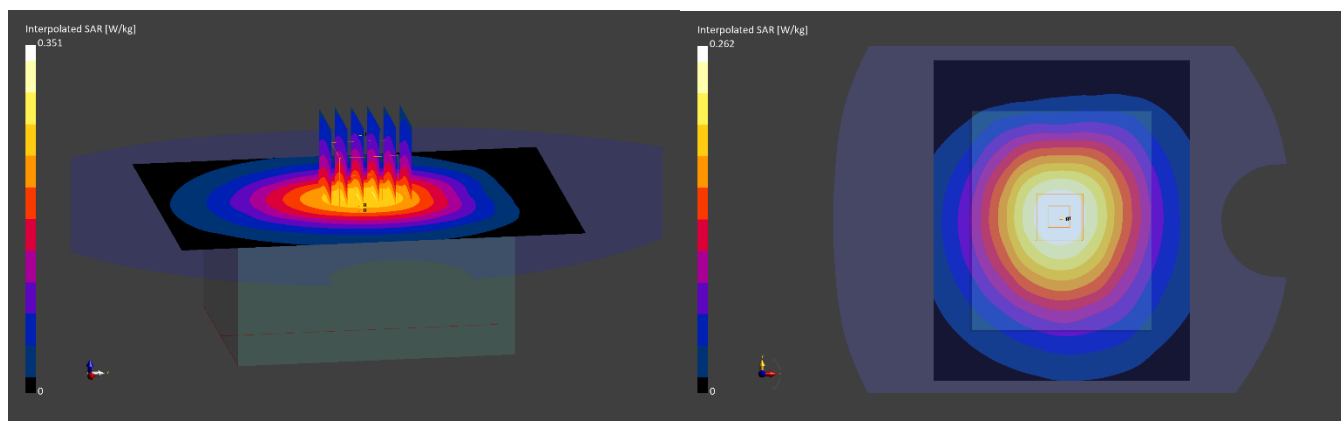
Reference Value = 0.25 W/kg; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.351 W/kg

SAR(1 g) = 0.255 W/kg

Smallest distance from peaks to all points 3 dB below is > 15.0 mm

Ratio of SAR at M2 to SAR at M1 = 89.3 %



ELEMENT

DUT: AZ499FT7164/109U-99FT7164; Type: Portable Handset; Serial: BWL7-000995

Communication System: UID:10175 - CAG, LTE-FDD; MAIA: Y; Frequency: 782.0 MHz

Medium: 750 Body; Medium parameters used:

f = 782.0 MHz; cond = 0.969 S/m; perm = 55.6; density = 1000 kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 04/10/2023; Ambient Temp: 23.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7570; ConvF:(10.26,10.26,10.26); Calibrated: 2023-01-11

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1558; Calibrated: 2023-01-17

Phantom: Twin-SAM V8.0; Serial: 2060

Measurement SW: DASY Module SAR V16.2.0.1425

**Mode: LTE Band 13, Body SAR , Mount WGA00668, Back side, Mid Ch,
10 MHz Bandwidth, QPSK, 1 RB, 25 RB Offset**

Area Scan (120.0 x 150.0): Measurement grid: dx=15.0 mm, dy=15.0 mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: dx=6.0 mm, dy=6.0 mm, dz=1.5 mm; Graded Ratio: 1.5

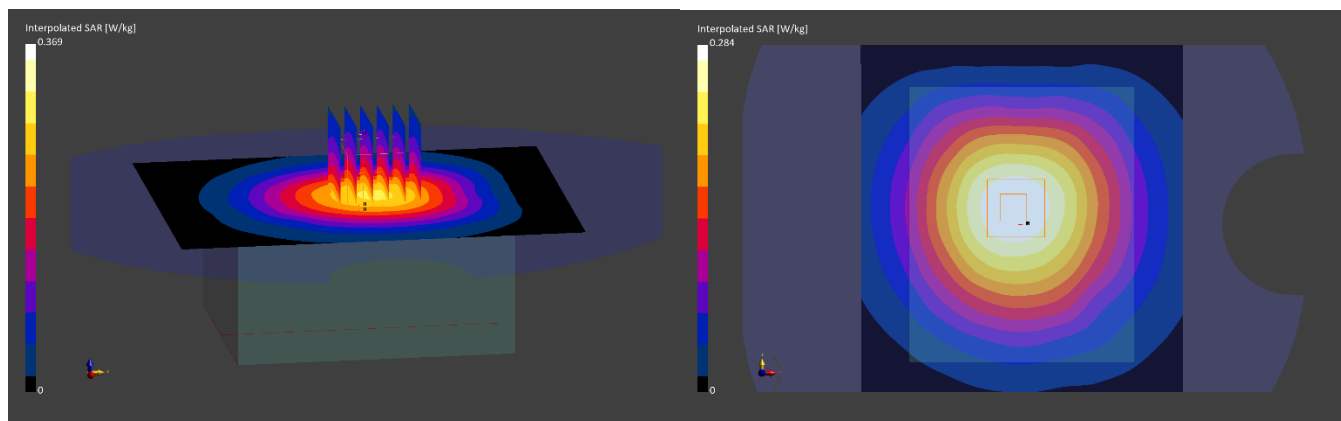
Reference Value = 0.26 W/kg; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.369 W/kg

SAR(1 g) = 0.268 W/kg

Smallest distance from peaks to all points 3 dB below is > 15.0 mm

Ratio of SAR at M2 to SAR at M1 = 88.5 %



ELEMENT

DUT: AZ499FT7164/109U-99FT7164; Type: Portable Handset; Serial: BWL7-000995

Communication System: UID:10175 - CAG, LTE-FDD; MAIA: Y; Frequency: 793.0 MHz

Medium: 750 Body; Medium parameters used:

f = 793.0 MHz; cond = 0.973 S/m; perm = 55.6; density = 1000 kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 04/10/2023; Ambient Temp: 23.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7570; ConvF:(10.26,10.26,10.26); Calibrated: 2023-01-11

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1558; Calibrated: 2023-01-17

Phantom: Twin-SAM V8.0; Serial: 2060

Measurement SW: DASY Module SAR V16.2.0.1425

**Mode: LTE Band 14, Body SAR, Mount WGA00668, Back side, Mid Ch,
10 MHz Bandwidth, QPSK, 1 RB, 25 RB Offset**

Area Scan (120.0 x 150.0): Measurement grid: dx=15.0 mm, dy=15.0 mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: dx=6.0 mm, dy=6.0 mm, dz=1.5 mm; Graded Ratio: 1.5

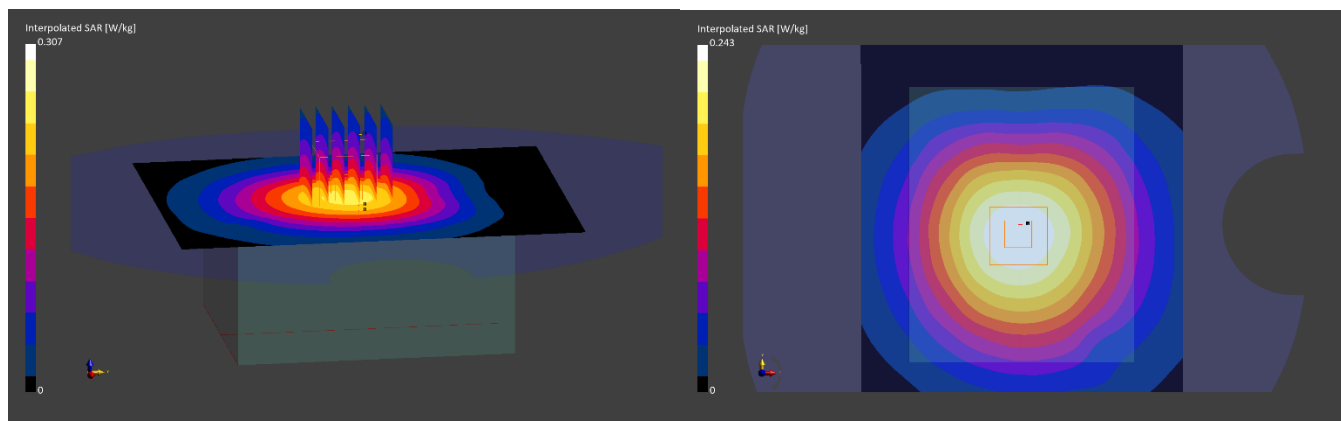
Reference Value = 0.23 W/kg; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.307 W/kg

SAR(1 g) = 0.224 W/kg

Smallest distance from peaks to all points 3 dB below is > 15.0 mm

Ratio of SAR at M2 to SAR at M1 = 89.3 %



ELEMENT

DUT: AZ499FT7164/109U-99FT7164; Type: Portable Handset; Serial: BWL7-000995

Communication System: UID:10175 - CAG, LTE-FDD; MAIA: Y; Frequency: 836.5 MHz

Medium: 835 Body; Medium parameters used:

f = 836.5 MHz; cond = 0.946 S/m; perm = 55.9; density = 1000 kg/m³

Phantom Section: Flat; Space: 15.00 mm

Test Date: 04/07/2023; Ambient Temp: 22.3°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7570; ConvF:(9.94,9.94,9.94); Calibrated: 2023-01-11

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1558; Calibrated: 2023-01-17

Phantom: Twin-SAM V8.0; Serial: 2060

Measurement SW: DASY Module SAR V16.2.0.1425

**Mode: LTE Band 5, Body SAR, Mount WGA00668, Back Side, Mid Ch,
10 MHz Bandwidth, QPSK, 1 RB, 25 RB Offset**

Area Scan (120.0 x 150.0): Measurement grid: dx=15.0 mm, dy=15.0 mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: dx=6.0 mm, dy=6.0 mm, dz=1.5 mm; Graded Ratio: 1.5

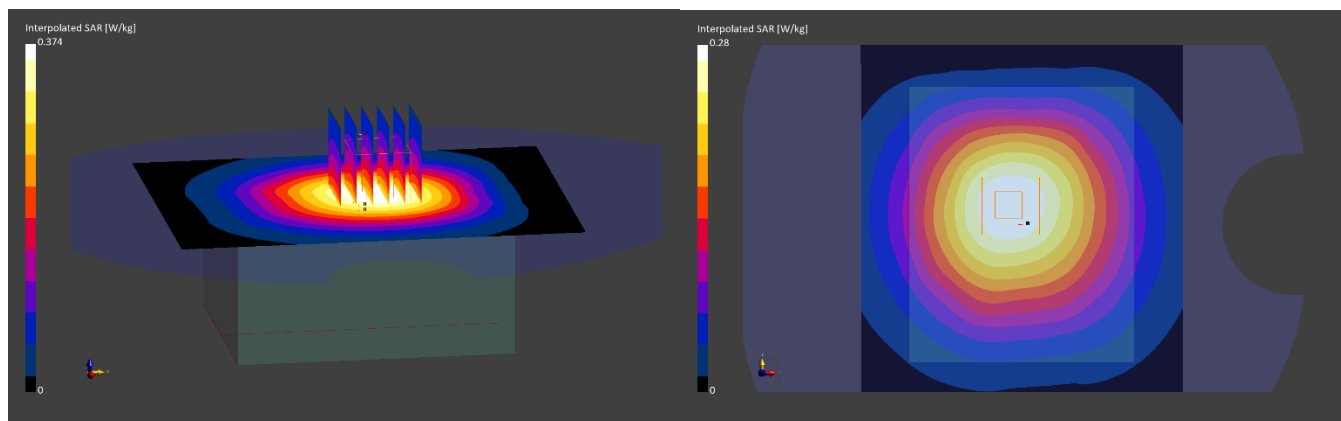
Reference Value = 0.27 W/kg; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.374 W/kg

SAR(1 g) = 0.263 W/kg

Smallest distance from peaks to all points 3 dB below is > 15.0 mm

Ratio of SAR at M2 to SAR at M1 = 87.4 %



ELEMENT

DUT: AZ499FT7164/109U-99FT7164; Type: Portable Handset; Serial: BWL7-000995

Communication System: UID:10169 - CAE, LTE-FDD; MAIA: Y; Frequency: 1720.0 MHz

Medium: 1750 Body; Medium parameters used:

f = 1720.0 MHz; cond = 1.46 S/m; perm = 52.3; density = 1000 kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 04/12/2023; Ambient Temp: 22.3°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7570; ConvF:(8.54,8.54,8.54); Calibrated: 2023-01-11

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1558; Calibrated: 2023-01-17

Phantom: Twin-SAM V8.0; Serial: 2060

Measurement SW: DASY Module SAR V16.2.0.1425

**Mode: LTE Band 66 (AWS), Body SAR, Mount WGP02697B, Back Side, Low Ch.,
20 MHz Bandwidth, QPSK, 1 RB, 50 RB Offset**

Area Scan (120.0 x 150.0): Measurement grid: dx=15.0 mm, dy=15.0 mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: dx=6.0 mm, dy=6.0 mm, dz=1.5 mm; Graded Ratio: 1.5

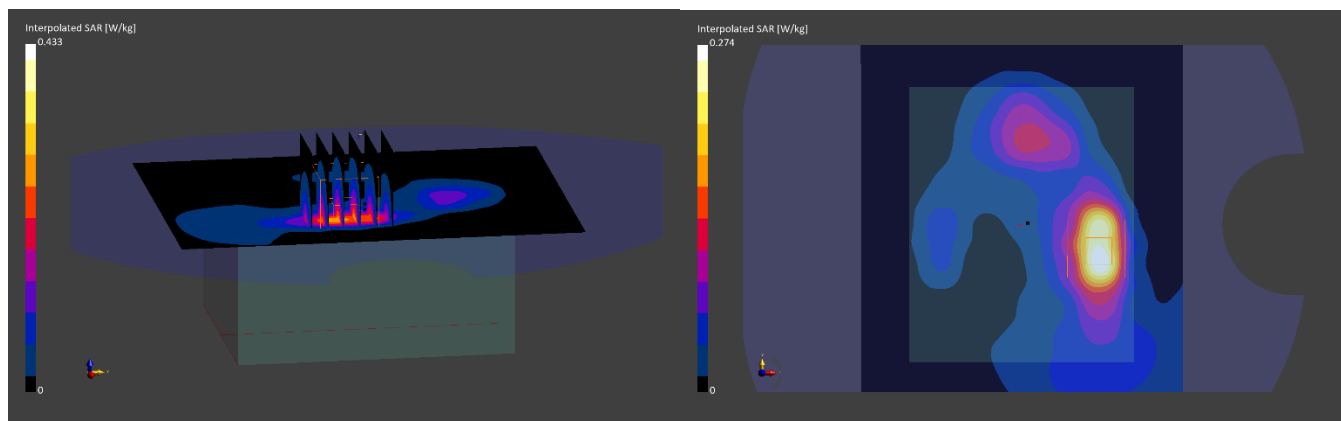
Reference Value = 0.27 W/kg; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.433 W/kg

SAR(1 g) = 0.245 W/kg

Smallest distance from peaks to all points 3 dB below is 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 83.8 %



ELEMENT

DUT: AZ499FT7164/109U-99FT7164; Type: Portable Handset; Serial: BWL7-000995

Communication System: UID:10169 - CAE, LTE-FDD; MAIA: Y; Frequency: 1860.0 MHz

Medium: 1900 Body; Medium parameters used:

f = 1860.0 MHz; cond = 1.56 S/m; perm = 52.2; density = 1000 kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 04/12/2023; Ambient Temp: 22.3°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7570; ConvF:(8.18,8.18,8.18); Calibrated: 2023-01-11

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1558; Calibrated: 2023-01-17

Phantom: Twin-SAM V8.0; Serial: 2060

Measurement SW: DASY Module SAR V16.2.0.1425

**Mode: LTE Band 25, Body SAR , Mount WGP02697B, Back side, Low Ch,
20 MHz Bandwidth, QPSK, 1 RB, 50 RB Offset**

Area Scan (120.0 x 150.0): Measurement grid: dx=15.0 mm, dy=15.0 mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: dx=6.0 mm, dy=6.0 mm, dz=1.5 mm; Graded Ratio: 1.5

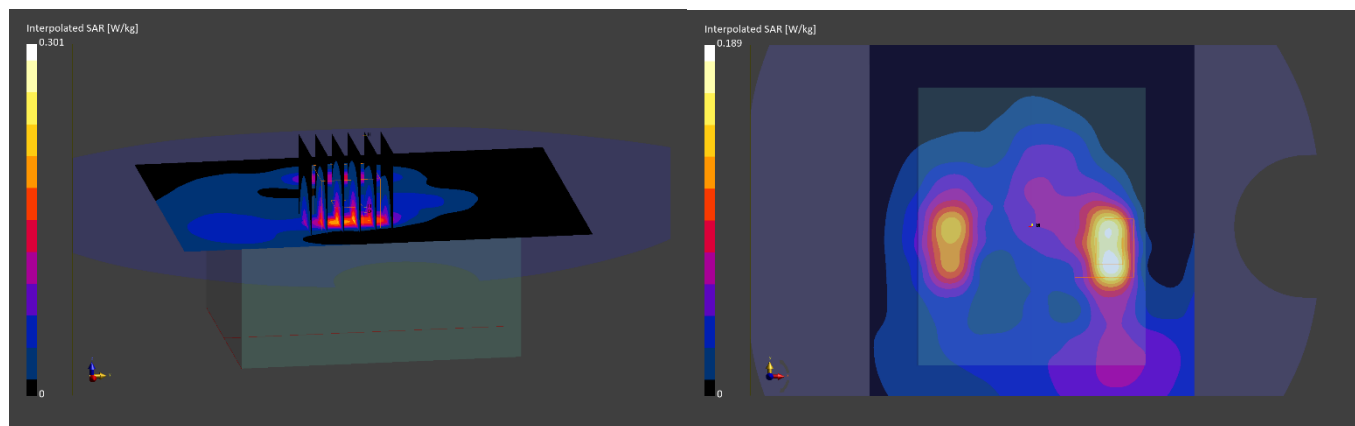
Reference Value = 0.19 W/kg; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.301 W/kg

SAR(1 g) = 0.173 W/kg

Smallest distance from peaks to all points 3 dB below is 8.8 mm

Ratio of SAR at M2 to SAR at M1 = 85.2 %



ELEMENT

DUT: AZ499FT7164/109U-99FT7164; Type: Portable Handset; Serial: BWL7-000995

Communication System: UID:10415 - AAA, WLAN; MAIA: Y; Frequency: 2412.0 MHz

Medium: 2450 Body; Medium parameters used:

$f = 2412.0$ MHz; $\text{cond} = 2.00$ S/m; $\text{perm} = 53.5$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 04/07/2023; Ambient Temp: 22.3°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7570; ConvF:(7.69,7.69,7.69); Calibrated: 2023-01-11

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1558; Calibrated: 2023-01-17

Phantom: Twin-SAM V8.0; Serial: 2060

Measurement SW: DASY Module SAR V16.2.0.1425

**Mode: IEEE 802.11b, 22 MHz Bandwidth, Body SAR, Mount WGP02798C,
Back Side, Ch. 1, 1 Mbps**

Area Scan (120.0 x 140.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

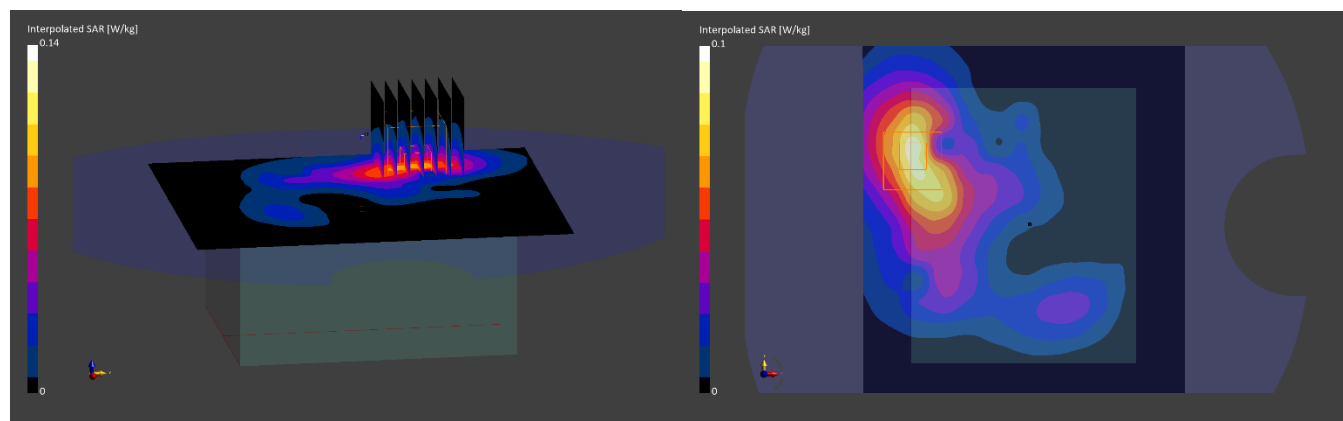
Reference Value = 0.07 W/kg; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.140 W/kg

SAR(1 g) = 0.074 W/kg

Smallest distance from peaks to all points 3 dB below is 12.1 mm

Ratio of SAR at M2 to SAR at M1 = 81.2 %



ELEMENT

DUT: AZ499FT7164/109U-99FT7164; Type: Portable Handset; Serial: BWL7-000995

Communication System: UID:10032 - CAA, Bluetooth; MAIA: Y; Frequency: 2441.0 MHz

Medium: 2450 Body; Medium parameters used:

$f = 2441.0$ MHz; $\text{cond} = 2.03$ S/m; $\text{perm} = 53.4$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 04/07/2023; Ambient Temp: 22.3°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7570; ConvF:(7.69,7.69,7.69); Calibrated: 2023-01-11

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1558; Calibrated: 2023-01-17

Phantom: Twin-SAM V8.0; Serial: 2060

Measurement SW: DASY Module SAR V16.2.0.1425

Mode: Bluetooth, Body SAR, Mount WGP02798C, Ch. 39, 1Mbps, Back Side

Area Scan (120.0 x 140.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Reference Value = 0.01 W/kg; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.014 W/kg

SAR(1 g) = 0.007 W/kg

Smallest distance from peaks to all points 3 dB below is 14.5 mm

Ratio of SAR at M2 to SAR at M1 = 76.4 %

