

APPENDIX A: TEST CONFIGURATIONS AND TEST DATA

A1: TEST CONFIGURATION

Mode 1



Mode 2



Mode 1-a



Mode 2-b



Mode 1-I

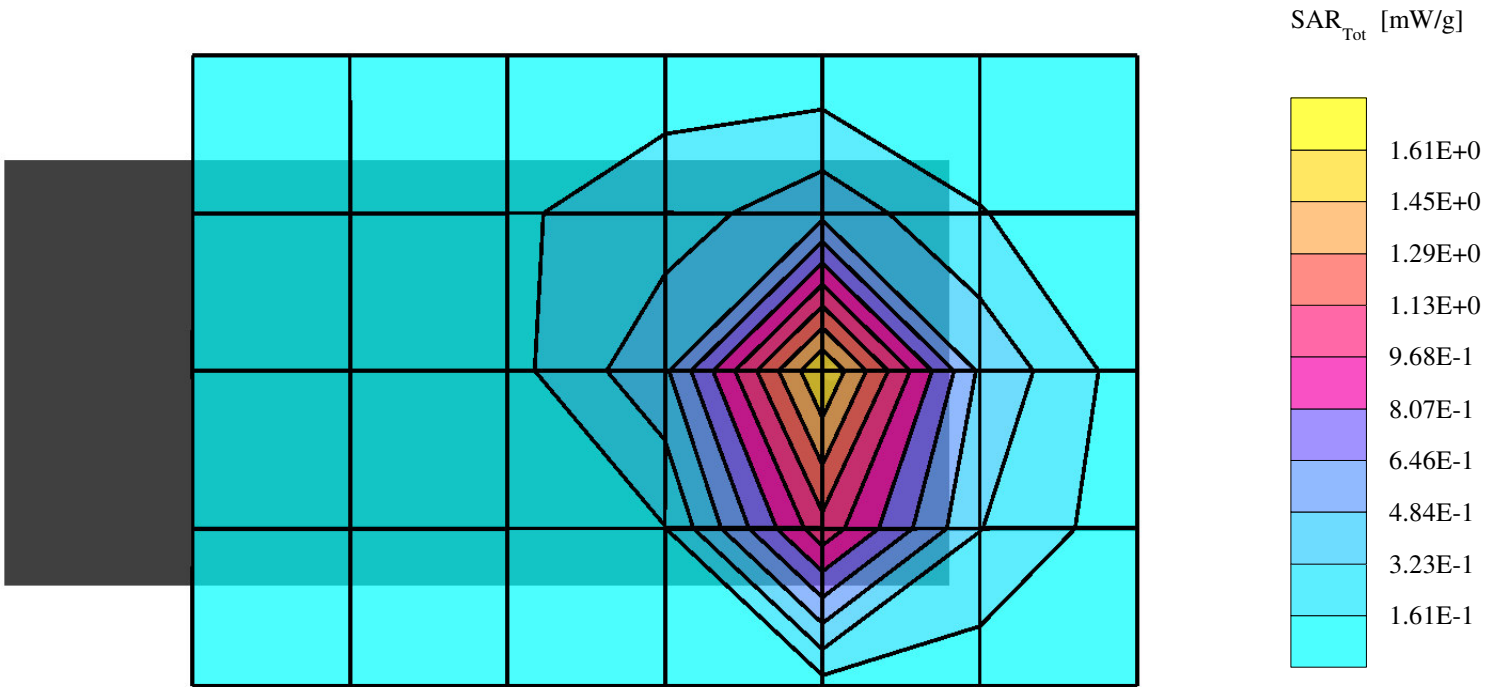
Mode 2-II



A2: TEST DATA

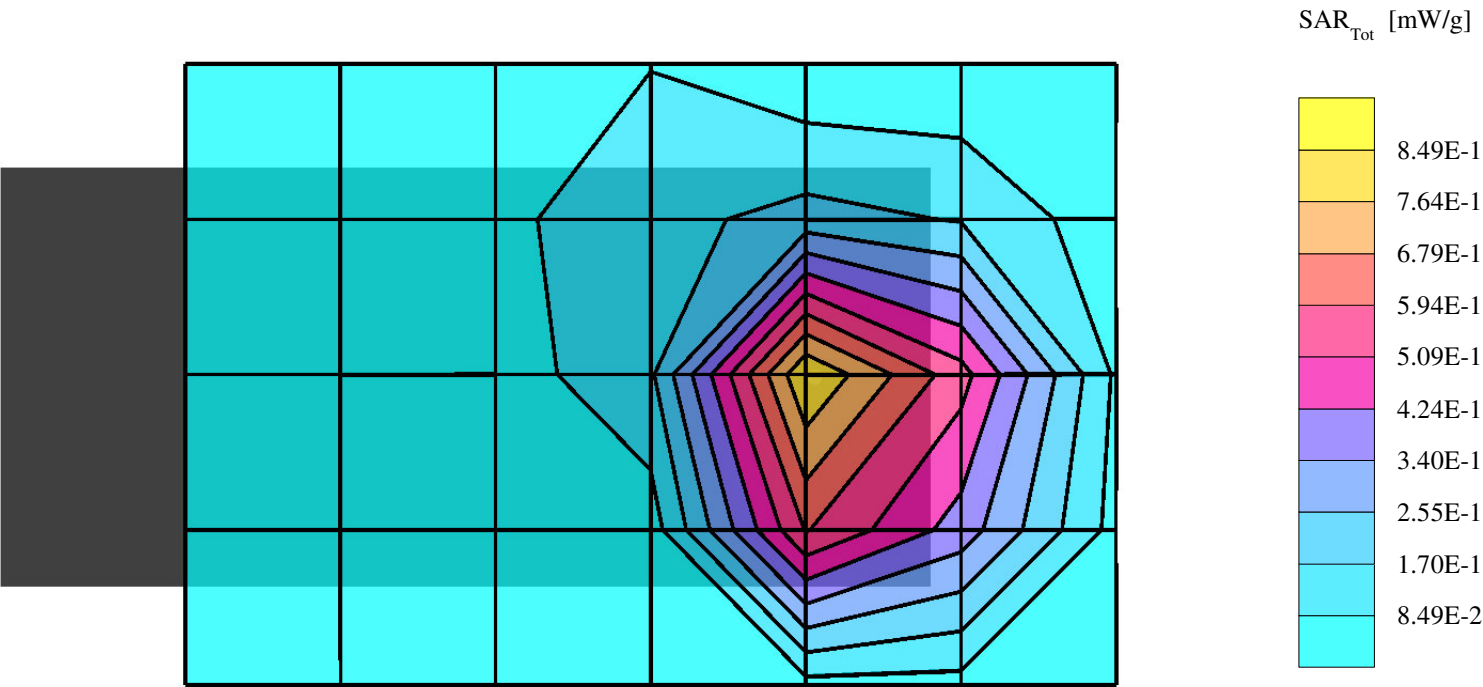
Wireless LAN Card Mode 1

Distance=0mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,180°); Frequency: 2412 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2412 MHz: $\sigma = 1.91 \text{ mho/m}$ $\epsilon_r = 53.0$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 1.55 mW/g, SAR (10g): 0.818 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.12 dB



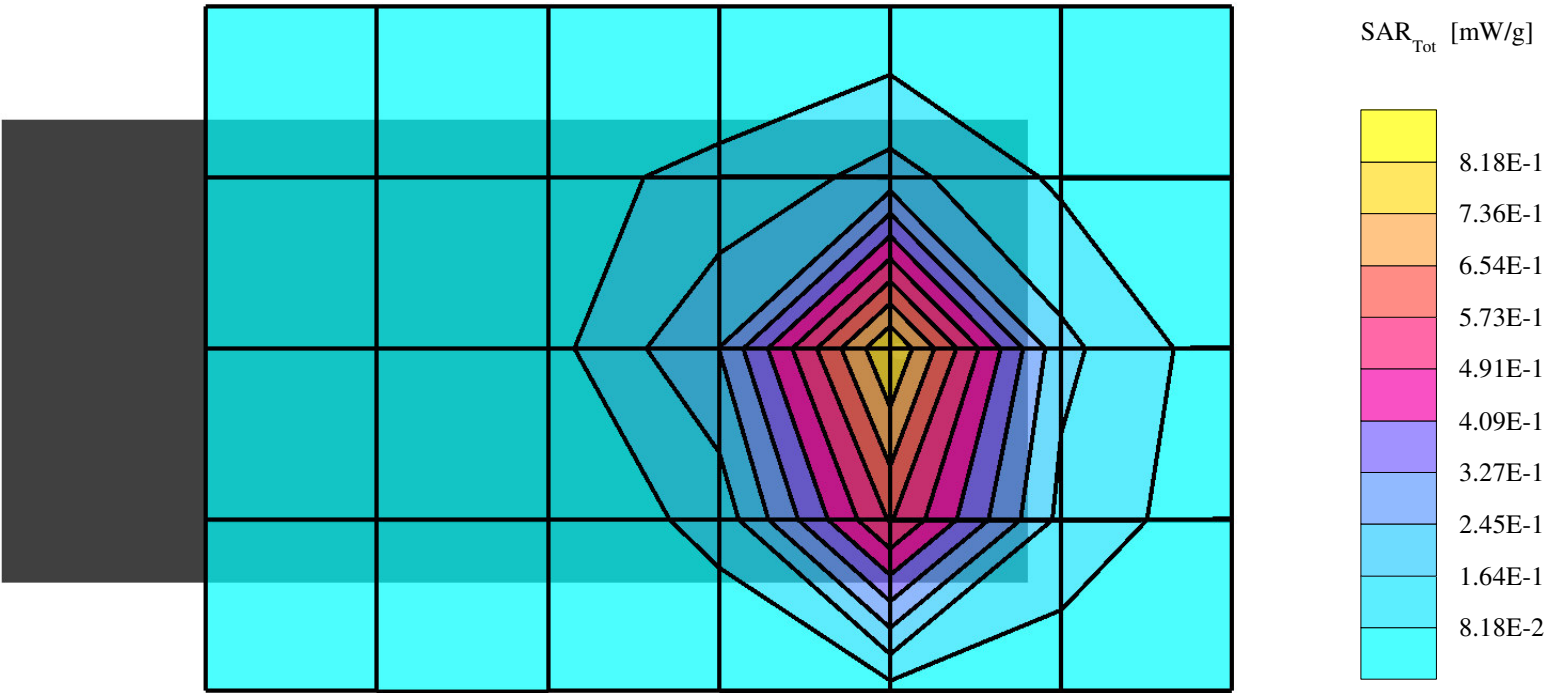
Wireless LAN Card Mode 1

Distance=0mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,180°); Frequency: 2437 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2437 MHz: $\sigma = 1.95 \text{ mho/m}$ $\epsilon_r = 52.9$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 1.01 mW/g, SAR (10g): 0.540 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.02 dB



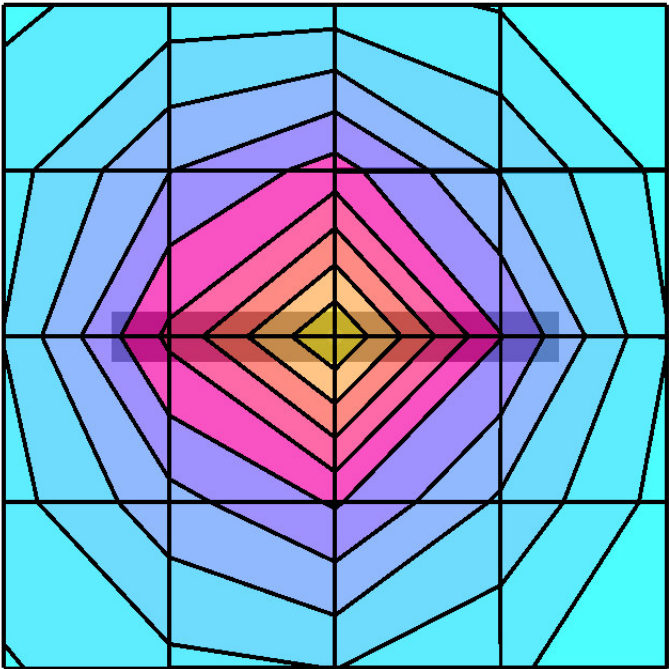
Wireless LAN Card Mode 1

Distance=0mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,180°); Frequency: 2462 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2462 MHz: $\sigma = 1.98 \text{ mho/m}$ $\epsilon_r = 52.9$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 0.852 mW/g, SAR (10g): 0.447 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.05 dB

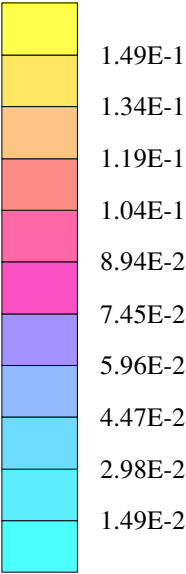


WLAN CardBus Mode 2

Distance=15mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2412 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2412 MHz: $\sigma = 1.91 \text{ mho/m}$ $\epsilon_r = 53.0$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 0.144 mW/g, SAR (10g): 0.0829 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.10 dB

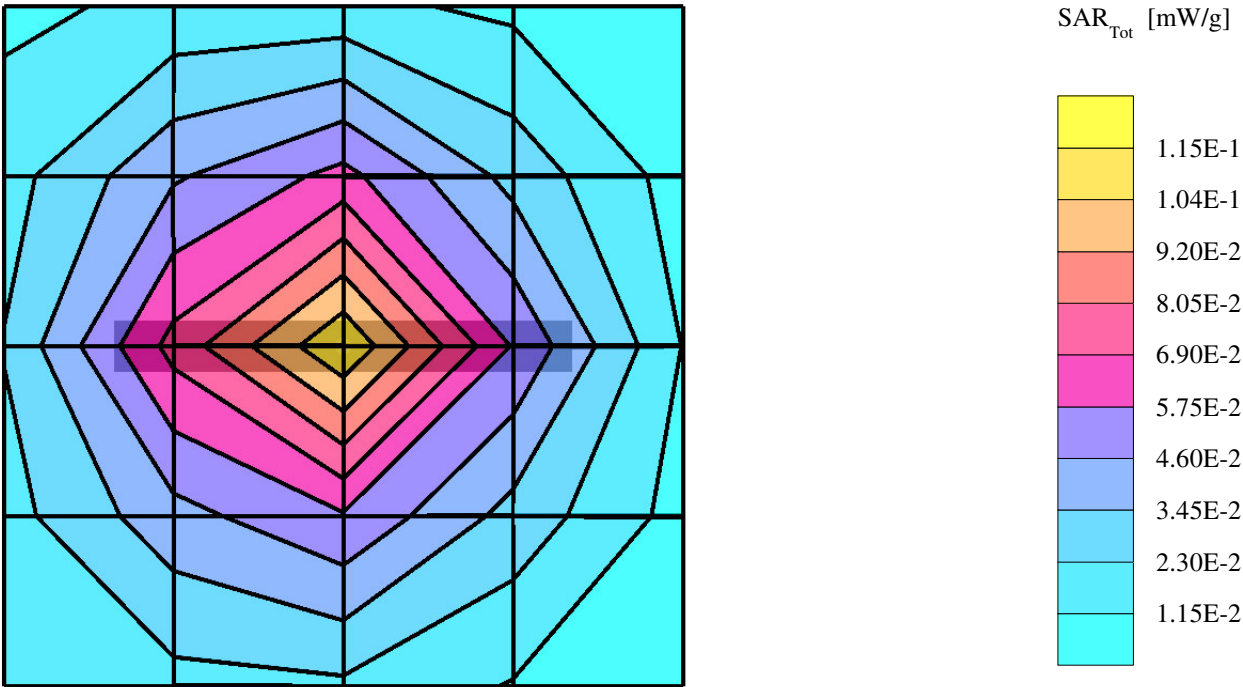


SAR_{Tot} [mW/g]



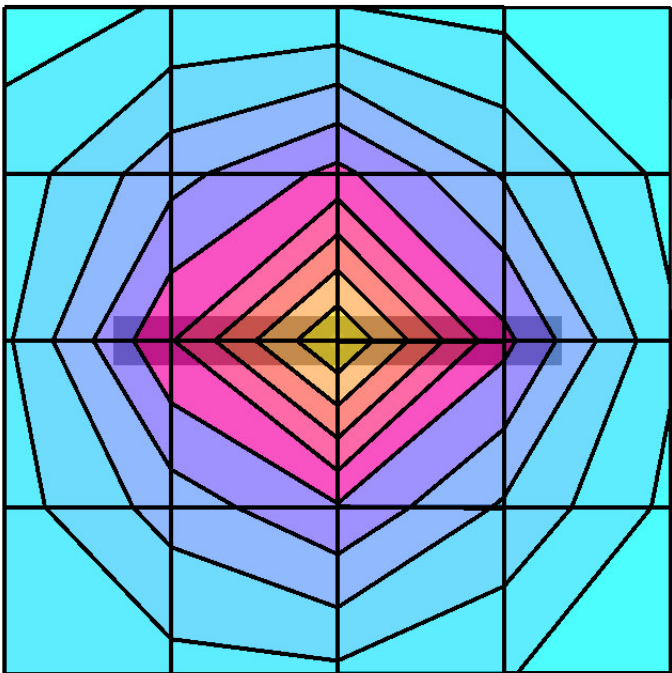
Wireless LAN Card Mode 2

Distance=15mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2437 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2437 MHz: $\sigma = 1.95 \text{ mho/m}$ $\epsilon_r = 52.9$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 0.105 mW/g, SAR (10g): 0.0598 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.03 dB

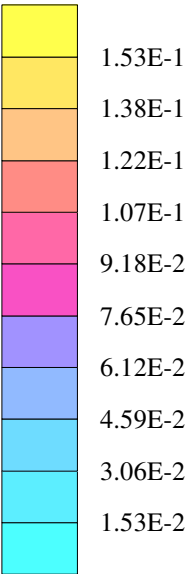


Wireless LAN Card Mode 2

Distance=15mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2462 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2462 MHz: $\sigma = 1.98$ mho/m $\epsilon_r = 52.9$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 0.146 mW/g, SAR (10g): 0.0822 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.10 dB

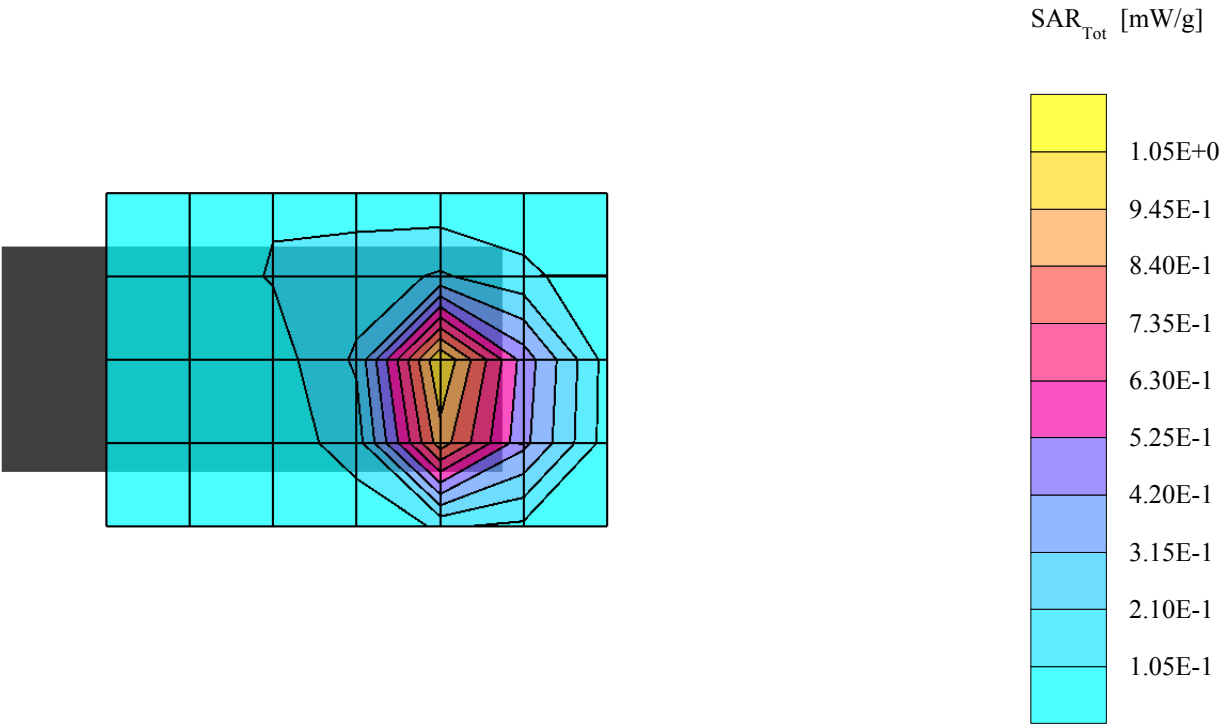


SAR_{Tot} [mW/g]



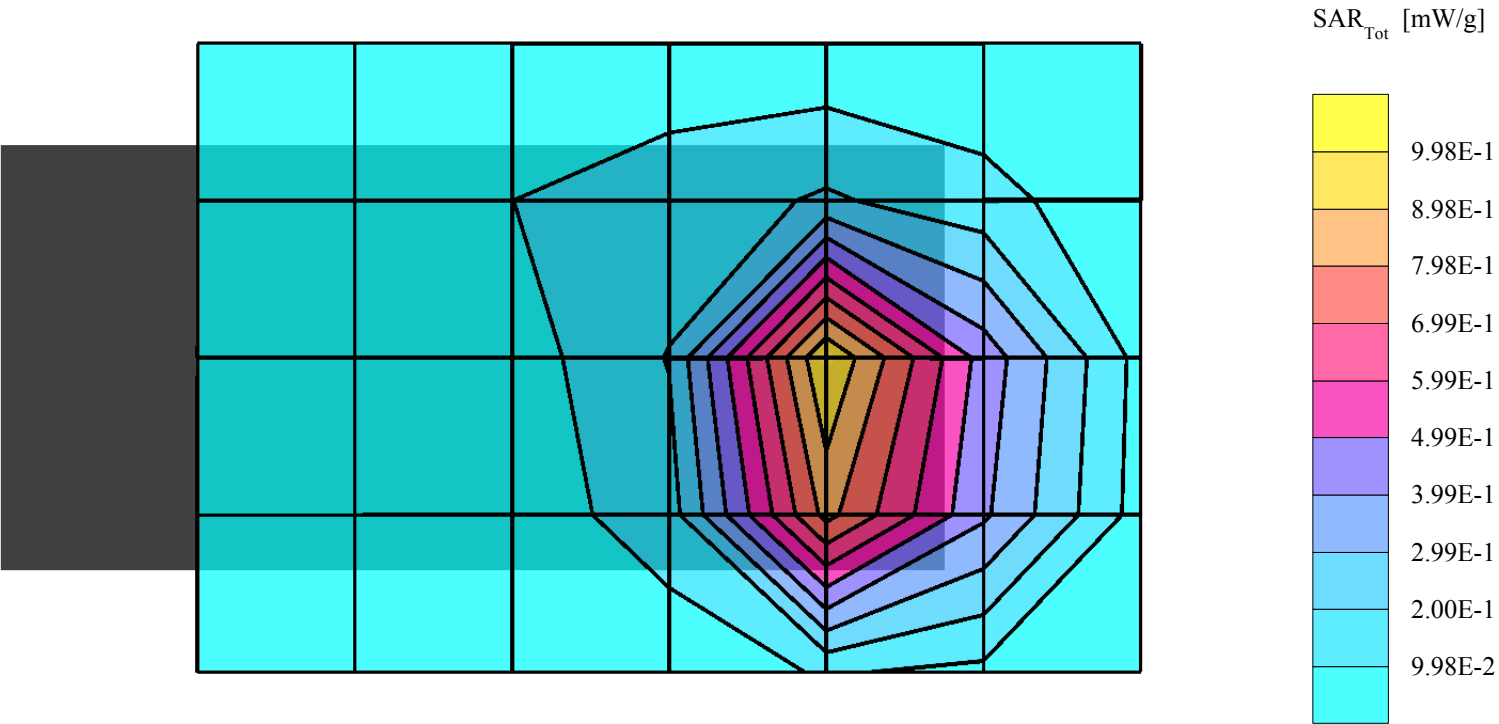
Wireless LAN Card Mode 1-a

Distance=0mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2412 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2412 MHz: $\sigma = 1.91$ mho/m $\epsilon_r = 53.0$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 1.20 mW/g, SAR (10g): 0.642 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.00 dB



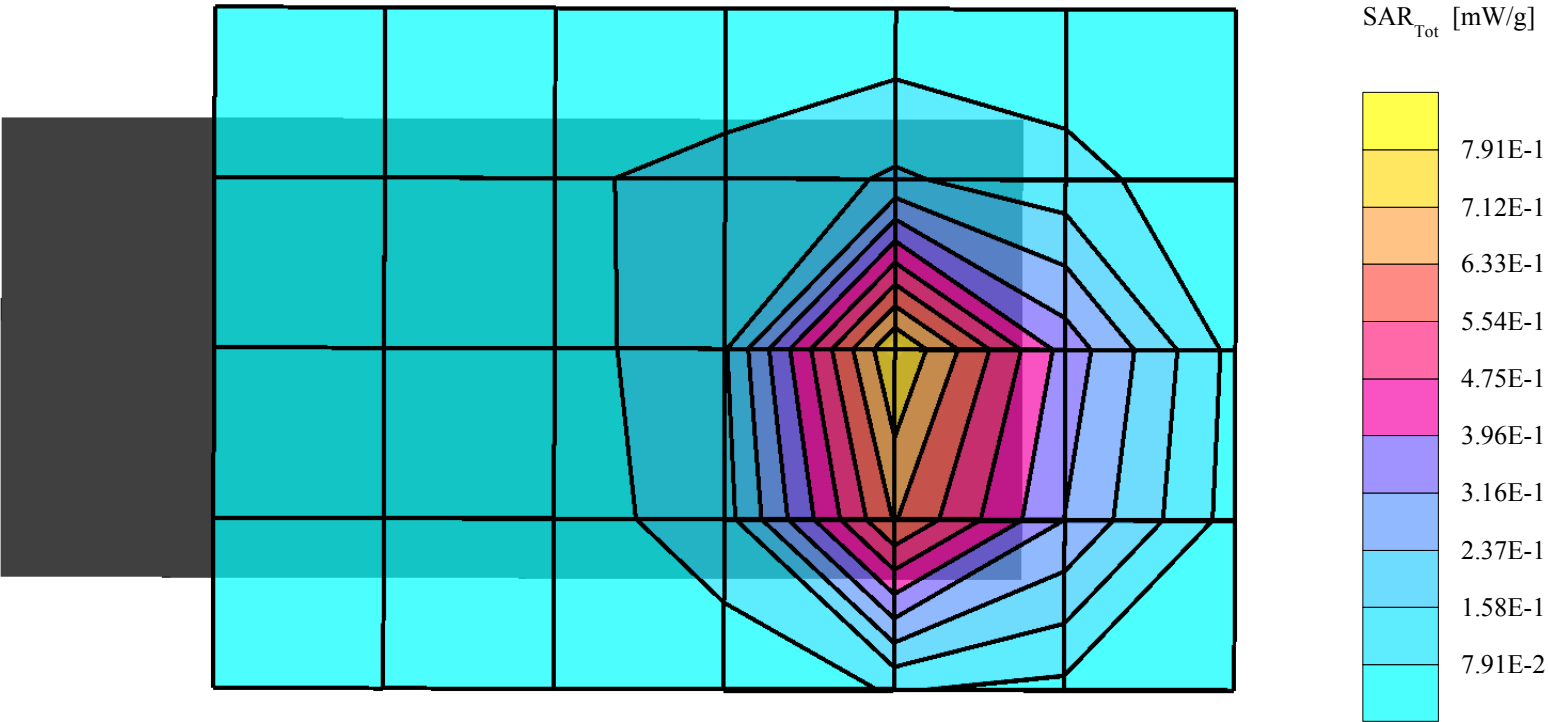
Wireless LAN Card Mode 1-a

Distance=0mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2437 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2437 MHz: $\sigma = 1.95 \text{ mho/m}$ $\epsilon_r = 52.9$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 1.13 mW/g, SAR (10g): 0.604 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.00 dB



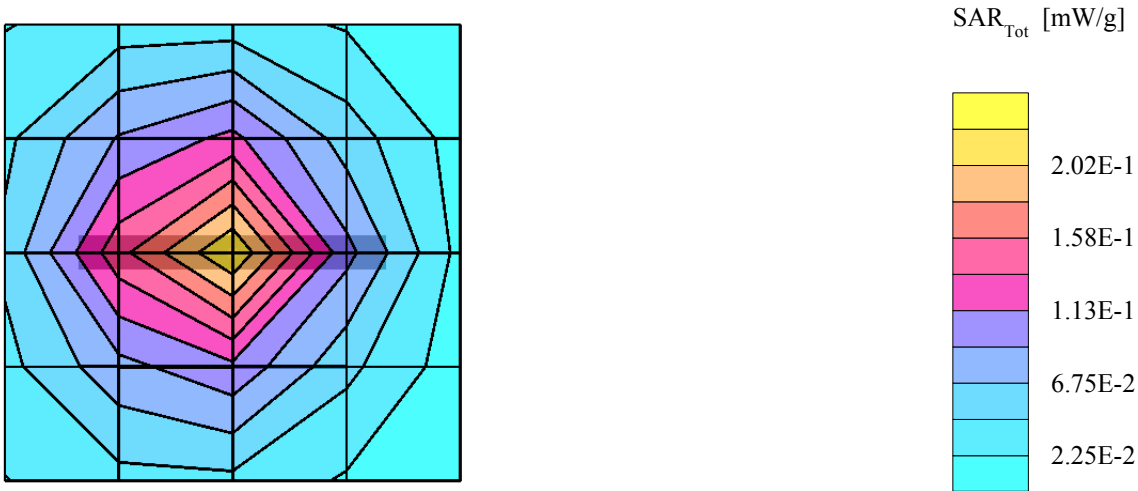
Wireless LAN Card Mode 1-a

Distance=0mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2462 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2462 MHz: $\sigma = 1.98 \text{ mho/m}$ $\epsilon_r = 52.9$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 0.888 mW/g, SAR (10g): 0.470 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.08 dB



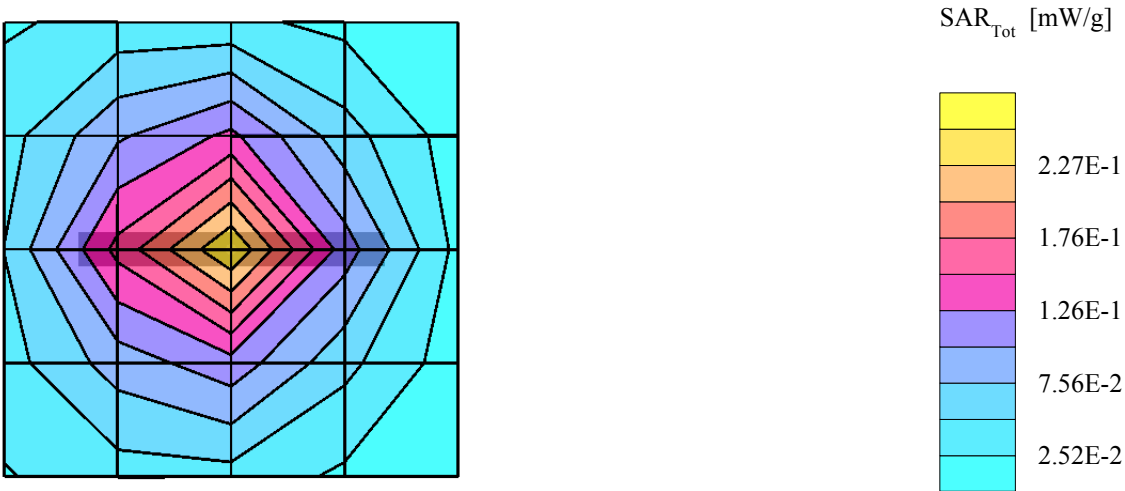
Wireless LAN Card Mode 2-b

Distance=15mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2412 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2412 MHz: $\sigma = 1.91 \text{ mho/m}$ $\epsilon_r = 53.0$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 0.213 mW/g, SAR (10g): 0.121 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: 0.01 dB



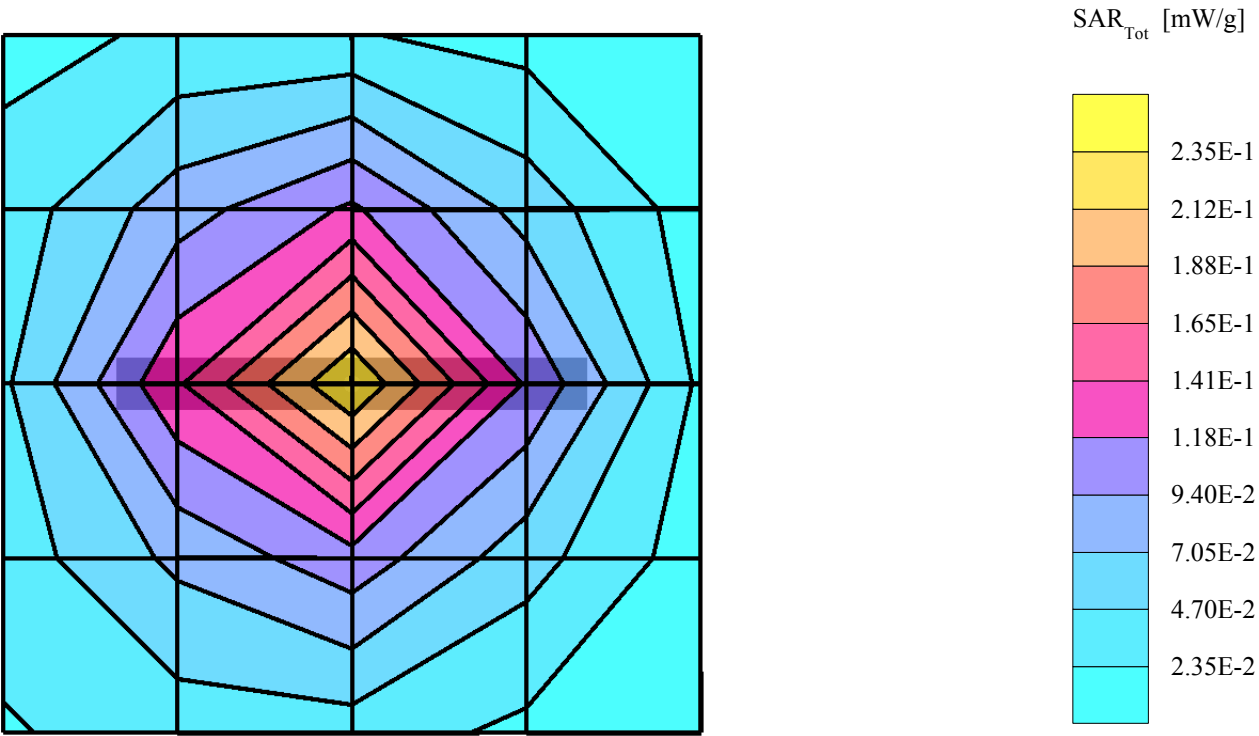
Wireless LAN Card Mode 2-b

Distance=15mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2437 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2437 MHz: $\sigma = 1.95 \text{ mho/m}$ $\epsilon_r = 52.9$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 0.237 mW/g, SAR (10g): 0.133 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.05 dB



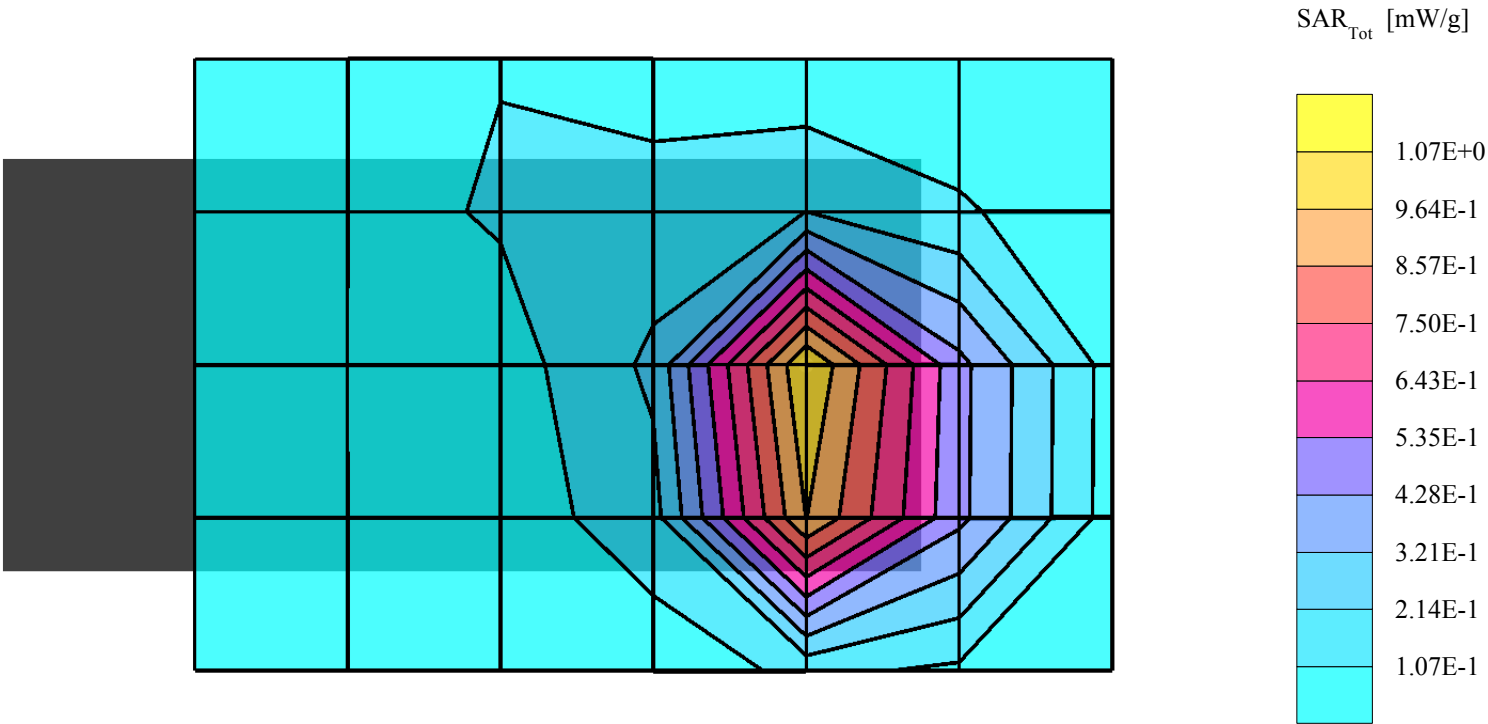
Wireless LAN Card Mode 2-b

Distance=15mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2462 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2462 MHz: $\sigma = 1.98 \text{ mho/m}$ $\epsilon_r = 52.9$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 0.219 mW/g, SAR (10g): 0.124 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.05 dB



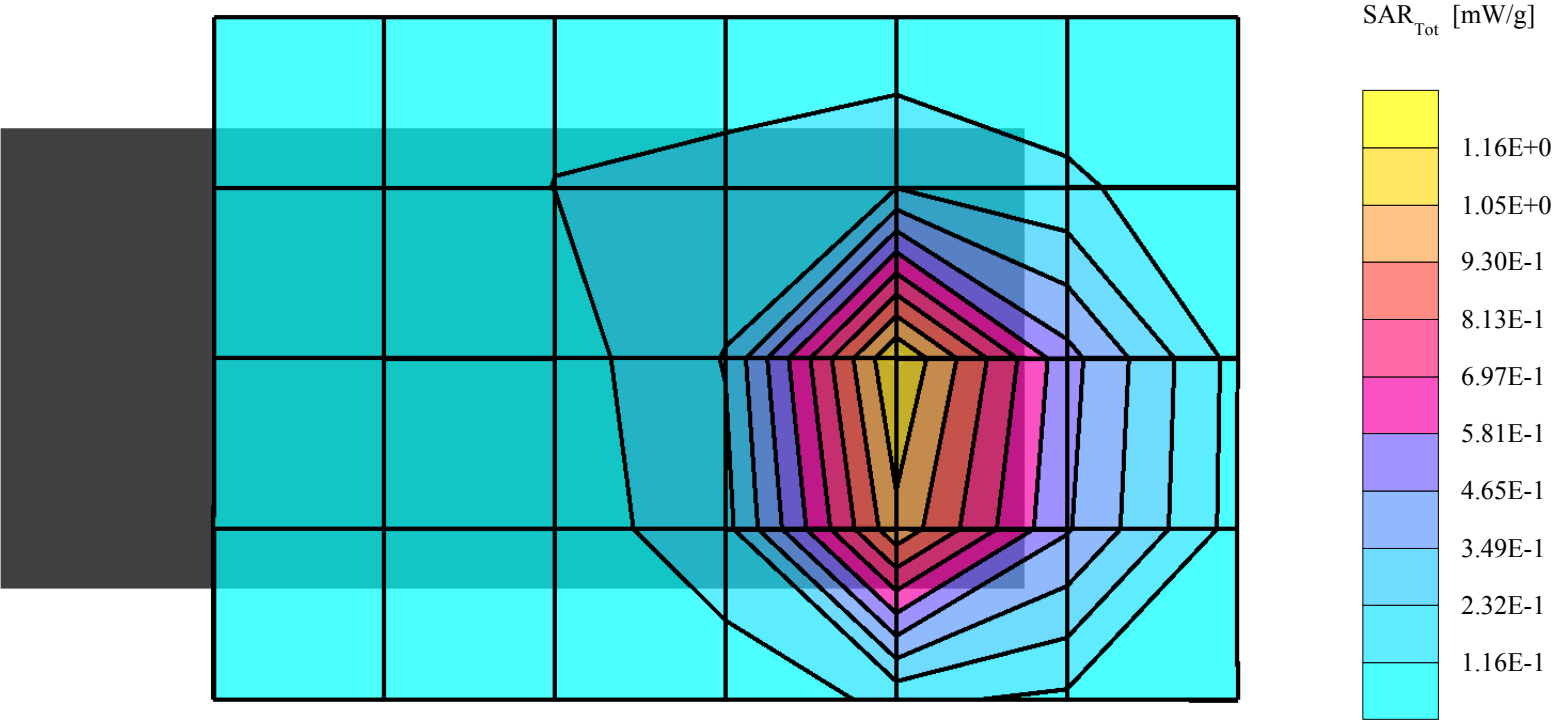
Wireless LAN Card Mode 1-I

Distance=0mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2412 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2412 MHz: $\sigma = 1.91 \text{ mho/m}$ $\epsilon_r = 53.0$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 1.25 mW/g, SAR (10g): 0.665 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.06 dB



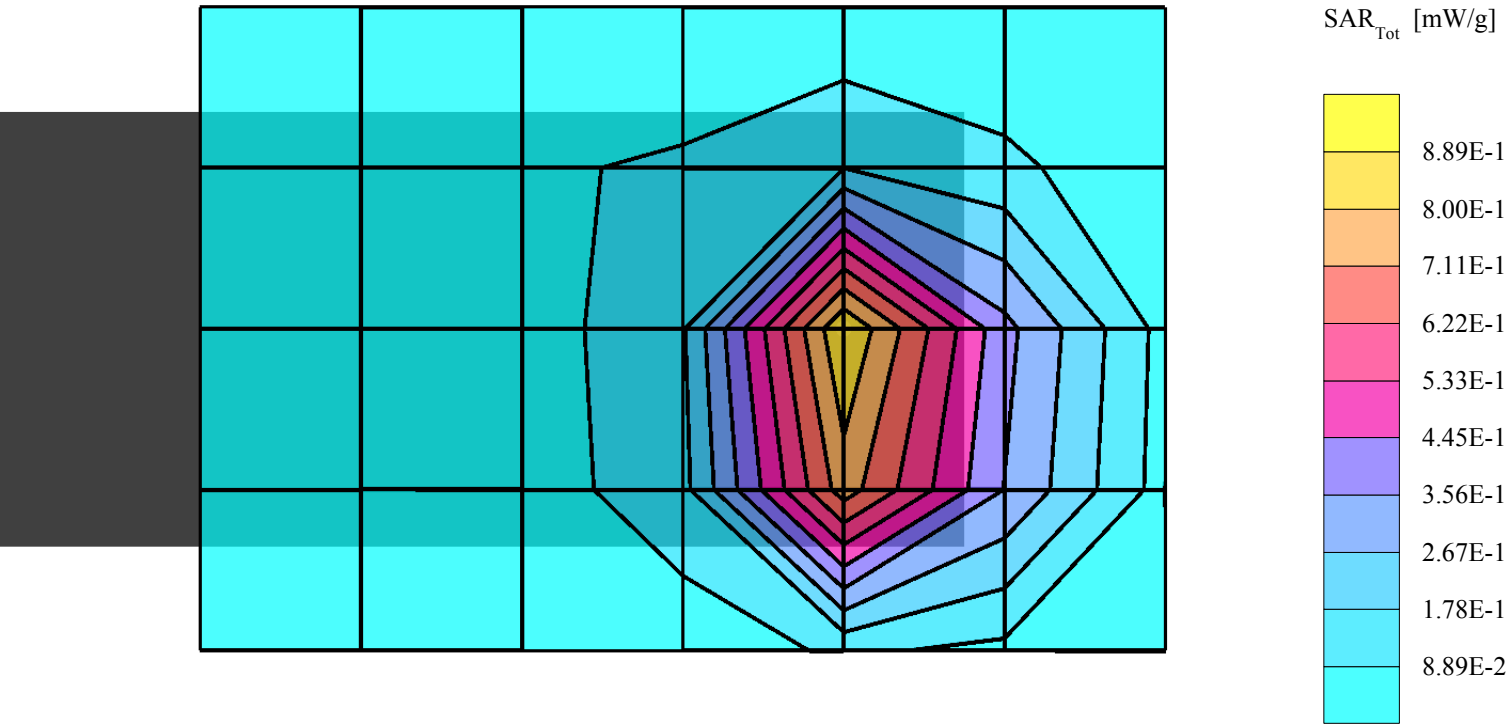
Wireless LAN Card Mode 1-I

Distance=0mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2437 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2437 MHz: $\sigma = 1.95 \text{ mho/m}$ $\epsilon_r = 52.9$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 1.34 mW/g, SAR (10g): 0.707 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.09 dB



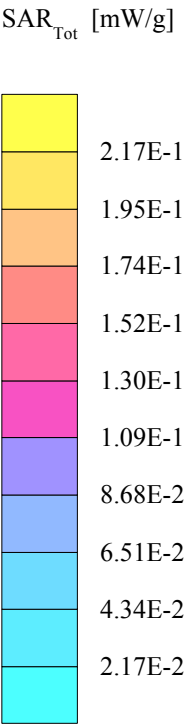
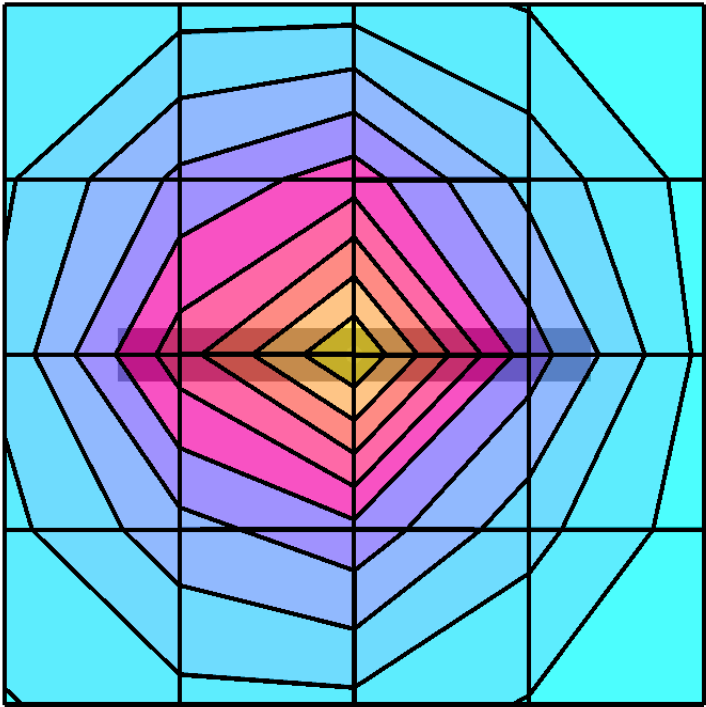
Wireless LAN Card Mode 1-I

Distance=0mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2462 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2462 MHz: $\sigma = 1.98 \text{ mho/m}$ $\epsilon_r = 52.9$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 1.01 mW/g, SAR (10g): 0.535 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.05 dB



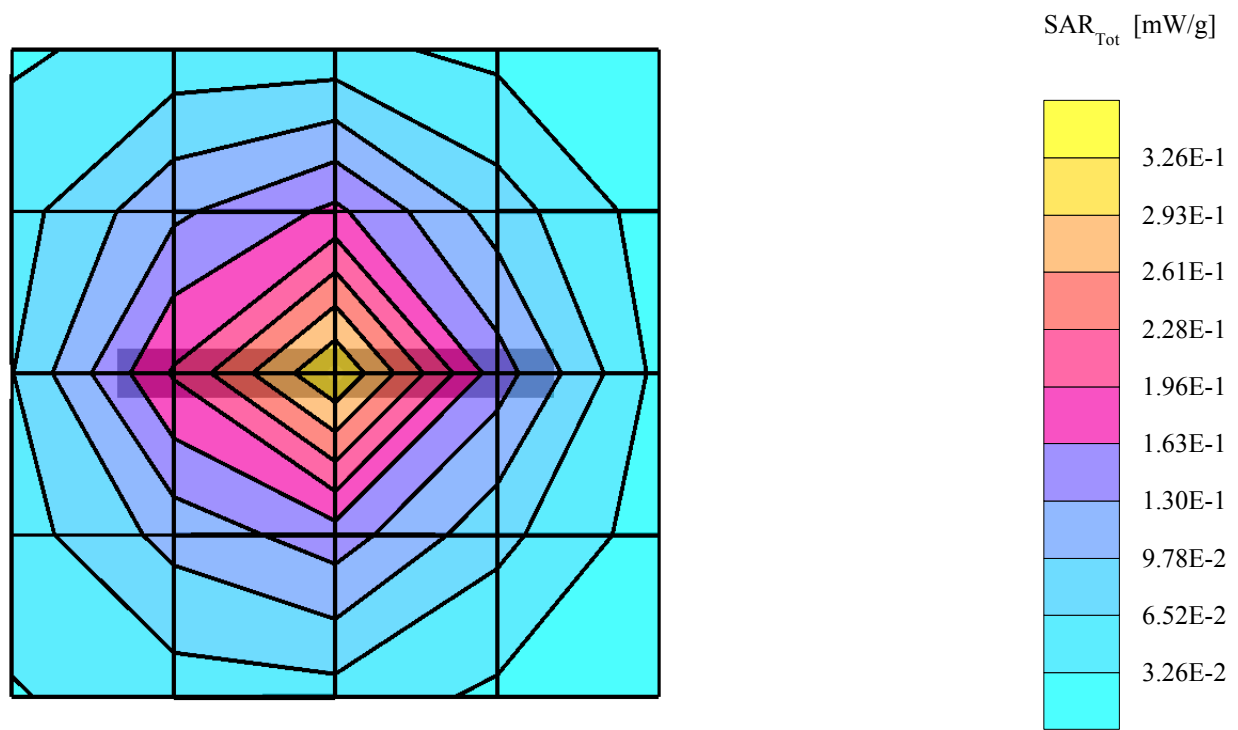
Wireless LAN Card Mode 2-II

Distance=15mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2412 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2412 MHz: $\sigma = 1.91$ mho/m $\epsilon_r = 53.0$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 0.205 mW/g, SAR (10g): 0.116 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.10 dB



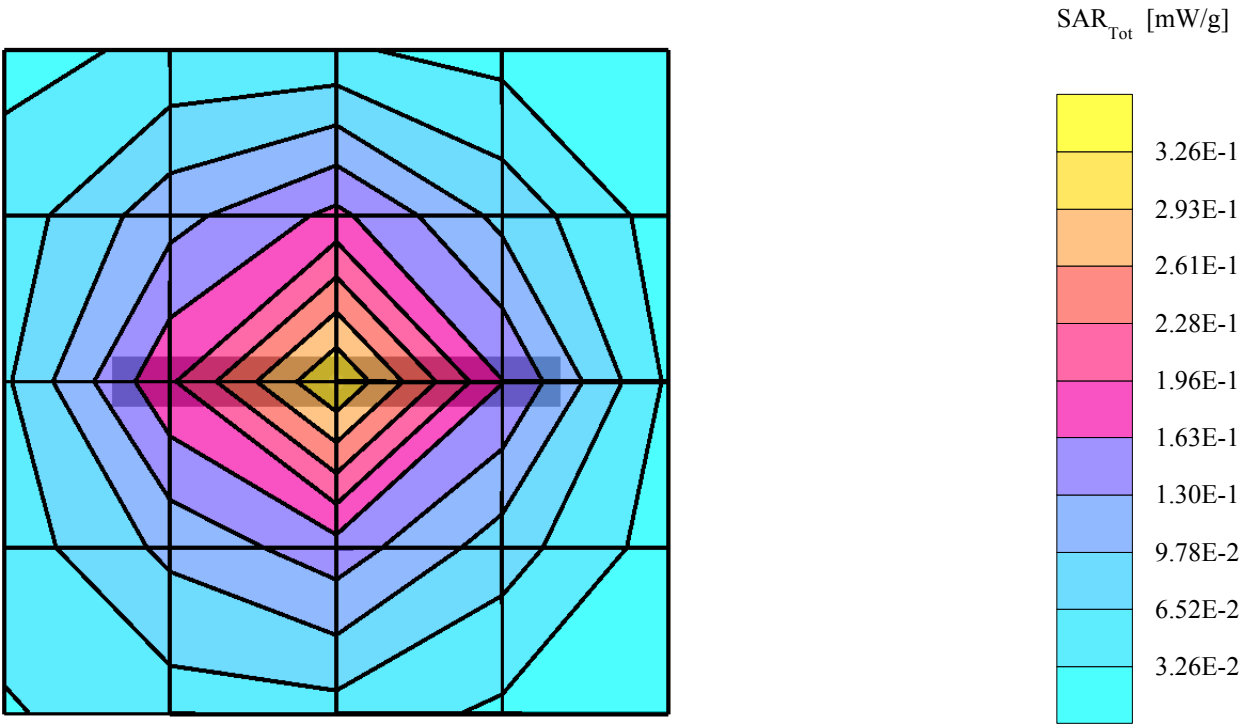
Wireless LAN Card Mode 2-II

Distance=15mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2437 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2437 MHz: $\sigma = 1.95$ mho/m $\epsilon_r = 52.9$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 0.303 mW/g, SAR (10g): 0.171 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.06 dB



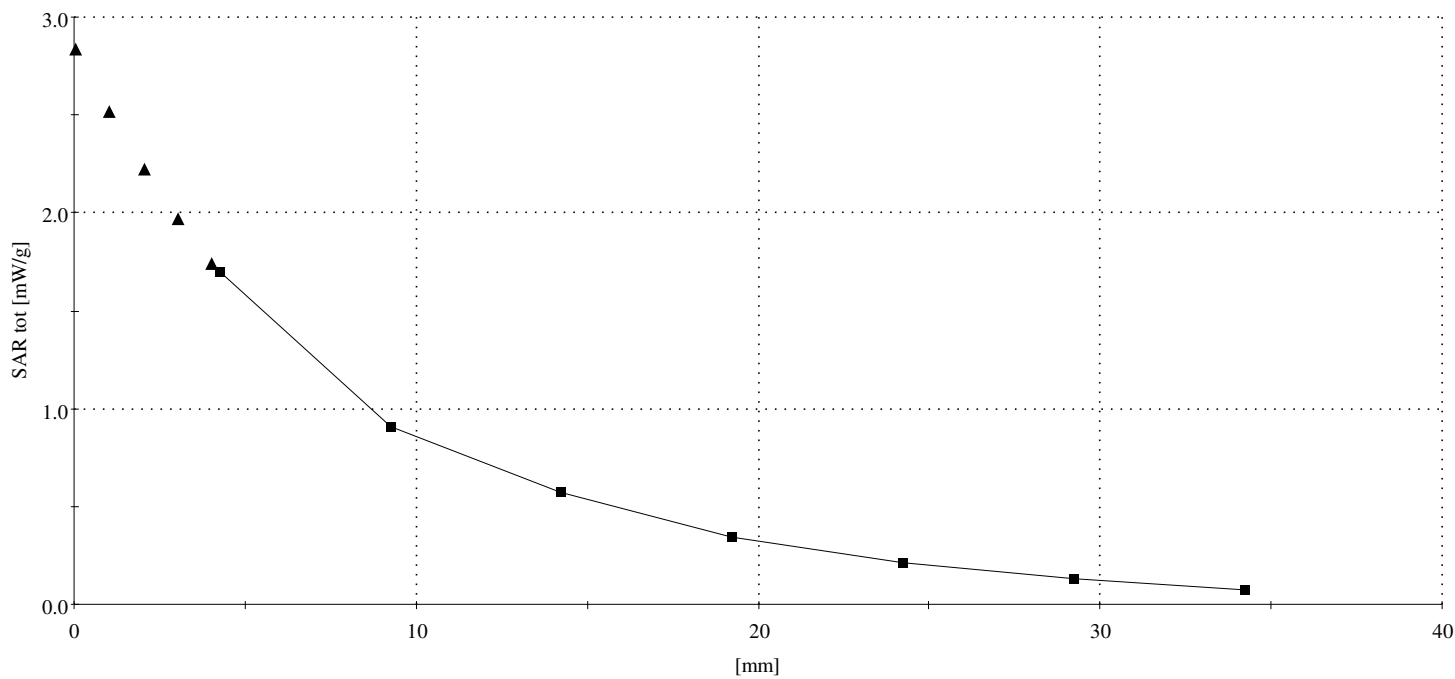
Wireless LAN Card Mode 2-II

Distance=15mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 2462 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2462 MHz: $\sigma = 1.98 \text{ mho/m}$ $\epsilon_r = 52.9$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 0.306 mW/g, SAR (10g): 0.173 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.00 dB



Wireless LAN Card Mode 1

Distance=0mm; Air temperature:24 degrees centigrade; Liquid temperature:22.8 degrees centigrade
SAM Phantom; Flat Section; Position: (90°,180°); Frequency: 2412 MHz; Antenna type: Patch
Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2412 MHz: $\sigma = 1.91 \text{ mho/m}$ $\epsilon_r = 53.0$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 1.55 mW/g, SAR (10g): 0.818 mW/g, (Worst-case extrapolation)
Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0





A3: VALIDATION TEST DATA

Dipole 2450 MHz

Antenna Input Power : 50mW

SAM; Flat

Probe: ET3DV6 - SN1687; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Body 2450 MHz: $\sigma = 1.96 \text{ mho/m}$ $\epsilon_r = 52.9$ $\rho = 1.00 \text{ g/cm}^3$

Cubes (2): Peak: $5.37 \text{ mW/g} \pm 0.14 \text{ dB}$, SAR (1g): $2.75 \text{ mW/g} \pm 0.08 \text{ dB}$, SAR (10g): $1.32 \text{ mW/g} \pm 0.02 \text{ dB}$, (Worst-case extrapolation)

Penetration depth: 8.1 (7.5, 9.3) [mm]

Powerdrift: -0.01 dB

