

Date/Time: 2015-08-20 AM 10:42:10

Test Laboratory: KES Co., Ltd.

System verification_450_HSL

DUT: Dipole 450 MHz; Type: D450V3; Serial: D450V3 - SN:1081

Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.835 \text{ mho/m}$; $\epsilon_r = 43.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3315; ConvF(6.91, 6.91, 6.91); Calibrated: 2015-05-27
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1344; Calibrated: 2014-11-12
- Phantom: ELI v5.0_2013_01_23; Type: QDOVA002AA; Serial: TP:1190
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat-Section_HSL_450/Area Scan (41x201x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.20 mW/g

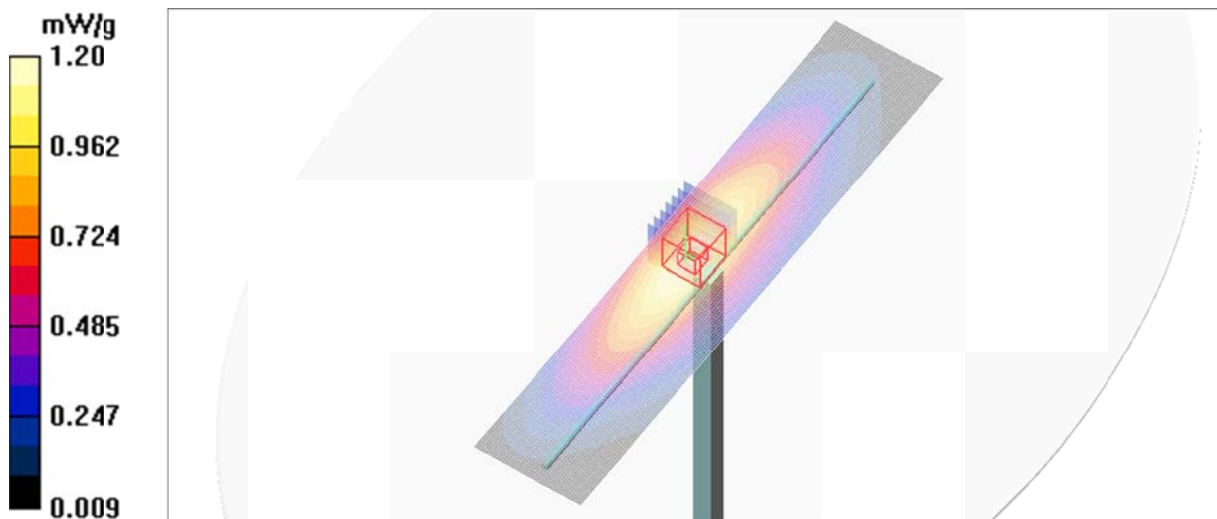
Flat-Section_HSL_450/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 36.7 V/m ; Power Drift = -0.063 dB

Peak SAR (extrapolated) = 1.72 W/kg

SAR(1 g) = 1.15 mW/g ; SAR(10 g) = 0.810 mW/g

Maximum value of SAR (measured) = 1.22 mW/g



Test Laboratory: KES Co., Ltd.

System verification_450_MSL

DUT: Dipole 450 MHz; Type: D450V3; Serial: D450V3 - SN:1081

Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 58.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3315; ConvF(6.99, 6.99, 6.99); Calibrated: 2015-05-27
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1344; Calibrated: 2014-11-12
- Phantom: ELI v5.0_2013_01_23; Type: QDOVA002AA; Serial: TP:1190
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat-Section_MSL_450/Area Scan (41x201x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.13 mW/g

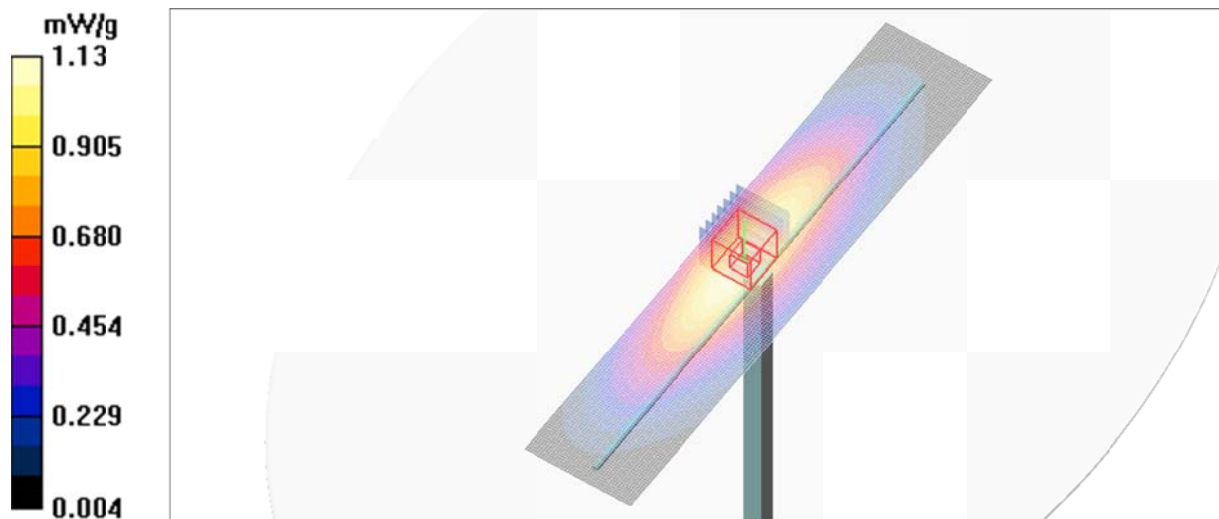
Flat-Section_MSL_450/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.8 V/m ; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 1.07 mW/g ; SAR(10 g) = 0.734 mW/g

Maximum value of SAR (measured) = 1.14 mW/g



Plot 1

Date/Time: 2015-08-20 AM 11:48:14

Test Laboratory: KES Co., Ltd.

Face_GMRS_Analog_25mm Gap_462.6375

DUT: T55A; Type: Bar; Serial: N/A

Communication System: CW; Frequency: 462.637 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 462.637$ MHz; $\sigma = 0.854$ mho/m; $\epsilon_r = 43.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3315; ConvF(6.91, 6.91, 6.91); Calibrated: 2015-05-27
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1344; Calibrated: 2014-11-12
- Phantom: ELI v5.0_2013_01_23; Type: QDOVA002AA; Serial: TP:1190
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Face_GMRS_Analog_25mm Gap_462.6375/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.228 mW/g

Face_GMRS_Analog_25mm Gap_462.6375/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

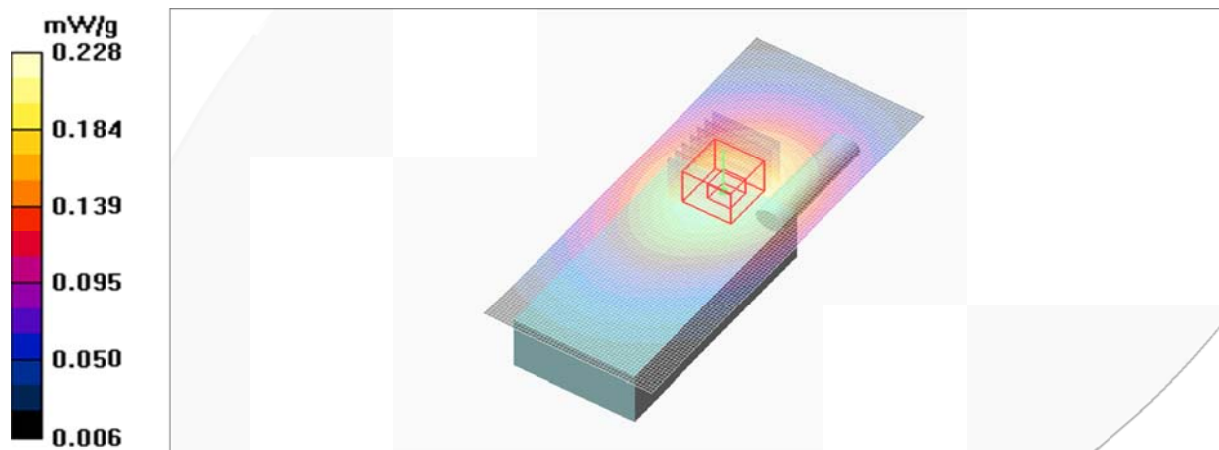
Reference Value = 15.9 V/m; Power Drift = 0.068 dB

Peak SAR (extrapolated) = 0.276 W/kg

SAR(1 g) = 0.214 mW/g; SAR(10 g) = 0.169 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.223 mW/g



Test Laboratory: KES Co., Ltd.

Face_FRS_Analog_25mm Gap_467.6375

DUT: T55A; Type: Bar; Serial: N/A

Communication System: CW; Frequency: 467.637 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 467.637$ MHz; $\sigma = 0.864$ mho/m; $\epsilon_r = 43.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3315; ConvF(6.91, 6.91, 6.91); Calibrated: 2015-05-27
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1344; Calibrated: 2014-11-12
- Phantom: ELI v5.0_2013_01_23; Type: QDOVA002AA; Serial: TP:1190
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Face_FRS_Analog_25mm Gap_467.6375/Area Scan (51x121x1): Measurement grid:
dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.365 mW/g

Face_FRS_Analog_25mm Gap_467.6375/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm

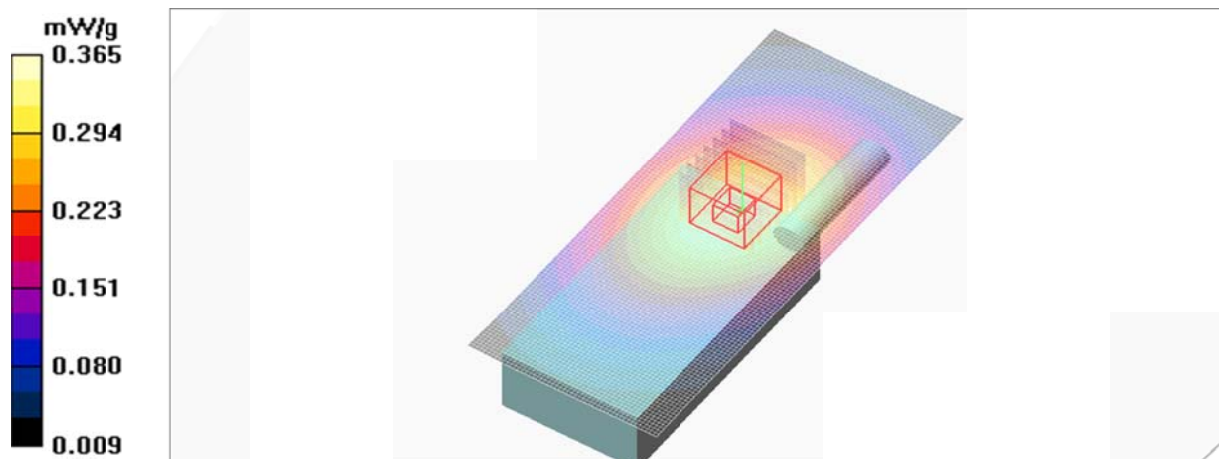
Reference Value = 20.6 V/m; Power Drift = 0.088 dB

Peak SAR (extrapolated) = 0.453 W/kg

SAR(1 g) = 0.342 mW/g; SAR(10 g) = 0.268 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.353 mW/g



Test Laboratory: KES Co., Ltd.

Body_GMRS_Analog_Touch_462.6375

DUT: T55A; Type: Bar; Serial: N/A

Communication System: CW; Frequency: 462.637 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 462.637$ MHz; $\sigma = 0.927$ mho/m; $\epsilon_r = 58.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3315; ConvF(6.99, 6.99, 6.99); Calibrated: 2015-05-27
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1344; Calibrated: 2014-11-12
- Phantom: ELI v5.0_2013_01_23; Type: QDOVA002AA; Serial: TP:1190
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body_GMRS_Analog_Touch_462.6375/Area Scan (51x121x1): Measurement grid:
dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.555 mW/g

Body_GMRS_Analog_Touch_462.6375/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm

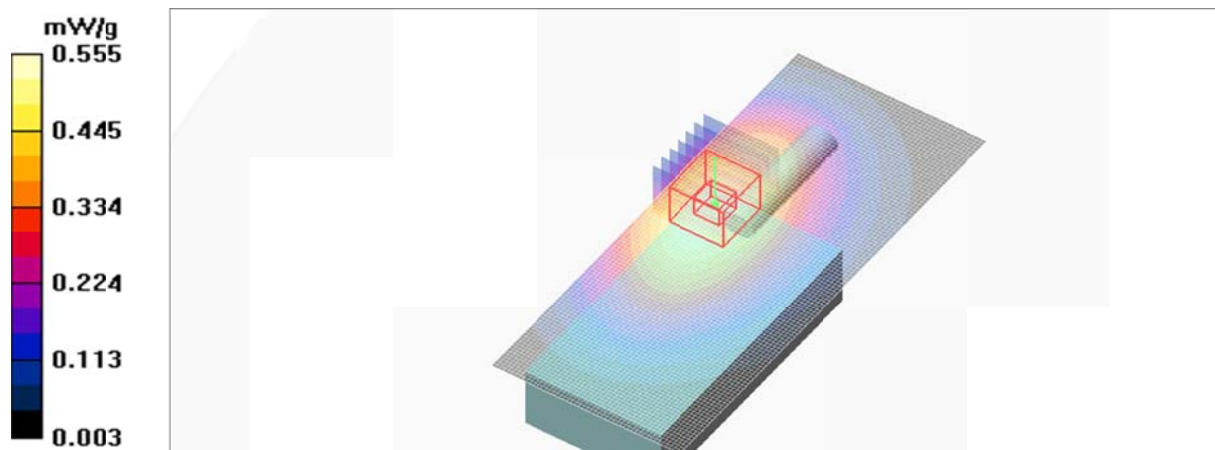
Reference Value = 20.7 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 0.709 W/kg

SAR(1 g) = 0.514 mW/g; SAR(10 g) = 0.376 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.543 mW/g



Test Laboratory: KES Co., Ltd.

Body_FRS_Analog_Touch_467.6375

DUT: T55A; Type: Bar; Serial: N/A

Communication System: CW; Frequency: 467.637 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 467.637$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 58.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3315; ConvF(6.99, 6.99, 6.99); Calibrated: 2015-05-27
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1344; Calibrated: 2014-11-12
- Phantom: ELI v5.0_2013_01_23; Type: QDOVA002AA; Serial: TP:1190
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body_FRS_Analog_Touch_467.6375/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.443 mW/g

Body_FRS_Analog_Touch_467.6375/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.3 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 0.563 W/kg

SAR(1 g) = 0.406 mW/g; SAR(10 g) = 0.295 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.429 mW/g

