

Date: 2012-04-07

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11b_1Mbps_CH6_AUX ANT.dae

DUT: 62230ANIMW; Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.9 \text{ mho/m}$; $\epsilon_r = 53.2$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(3.94, 3.94, 3.94); Calibrated: 2011-04-14
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM MIC #2000-93 with CRP_Right; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11b_Mid_Base_AUX ANT/Area Scan (101x141x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.079 mW/g

WLAN_11b_Mid_Base_AUX ANT/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

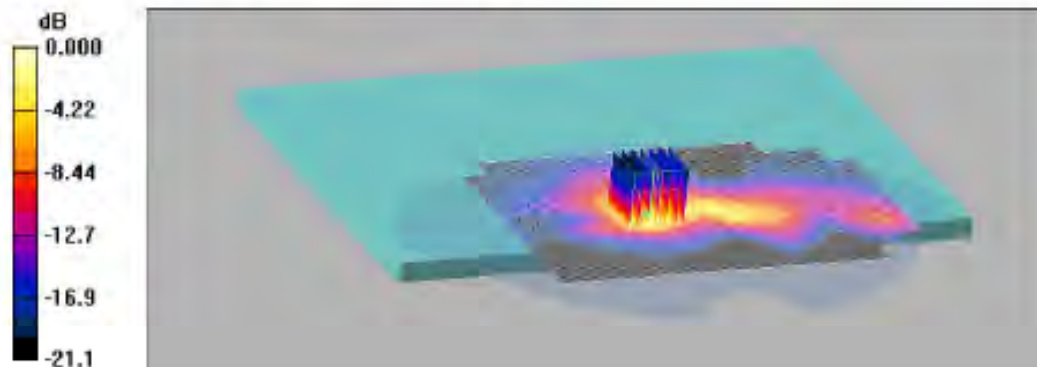
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.75 V/m; Power Drift = -0.139 dB

Peak SAR (extrapolated) = 0.250 W/kg

SAR(1 g) = 0.079 mW/g; SAR(10 g) = 0.033 mW/g

Maximum value of SAR (measured) = 0.087 mW/g



0 dB = 0.087mW/g

Date: 2012-04-07

Test Laboratory: SGS Korea (Gimpo Laboratory)

File Name: WLAN_Base_11b_1Mbps_CH11_AUX ANT.dlm

DUT: 62230ANIMW; Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 53.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(3.94, 3.94, 3.94); Calibrated: 2011-04-14
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM MIC #2000-93 with CRP_Right; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11b_High_Base_AUX ANT/Area Scan (101x141x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.096 mW/g

WLAN_11b_High_Base_AUX ANT/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

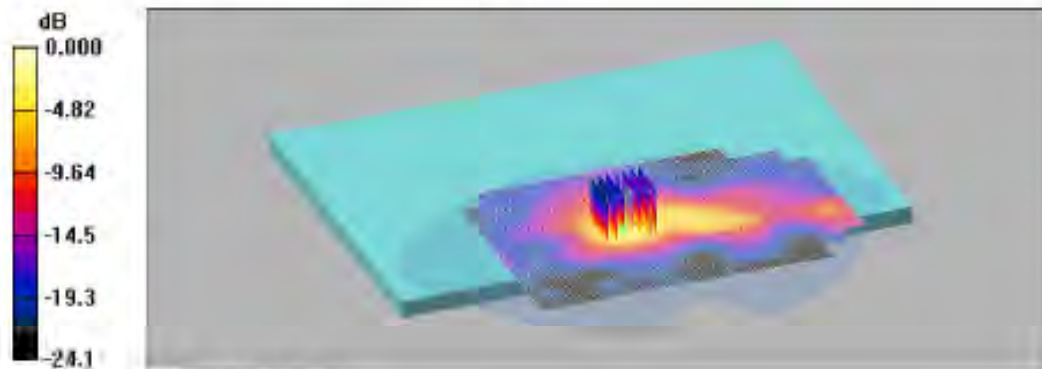
dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.04 V/m; Power Drift = -0.209 dB

Peak SAR (extrapolated) = 0.337 W/kg

SAR(1 g) = 0.103 mW/g; SAR(10 g) = 0.042 mW/g

Maximum value of SAR (measured) = 0.114 mW/g



0 dB = 0.114 mW/g

Date: 2012-04-07

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Back Screen_11b_1Mbps_CH1_Main ANT.dad

DUT: 62230ANHMW; Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

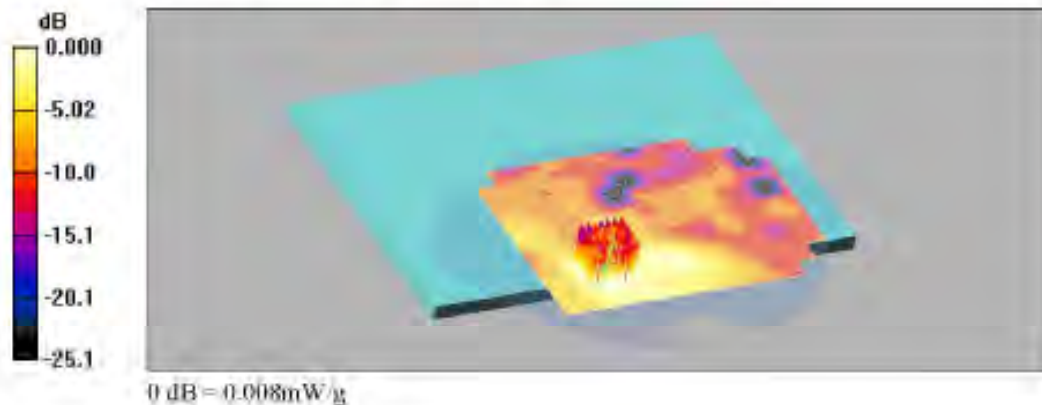
Communication System: WLAN; Frequency: 2462 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.93 \text{ mho/m}$; $\epsilon_r = 53.1$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(3.94, 3.94, 3.94); Calibrated: 2011-04-14
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM MIC #2000-93 with CRP_Right; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11b_High_Back Screen_Main ANT/Area Scan (101x141x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 0.008 mW/g

WLAN_11b_High_Back Screen_Main ANT/Zoom Scan (7x7x7)/Cube 0: Measurement
 grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 1.02 V/m; Power Drift = -0.326 dB
 Peak SAR (extrapolated) = 0.020 W/kg
SAR(1 g) = 0.00755 mW/g; SAR(10 g) = 0.00408 mW/g
 Maximum value of SAR (measured) = 0.008 mW/g



Date: 2012-04-07

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Back Screen_11b_1Mbps_CH1_AUX ANT.das

DUT: 62230ANHMW; Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

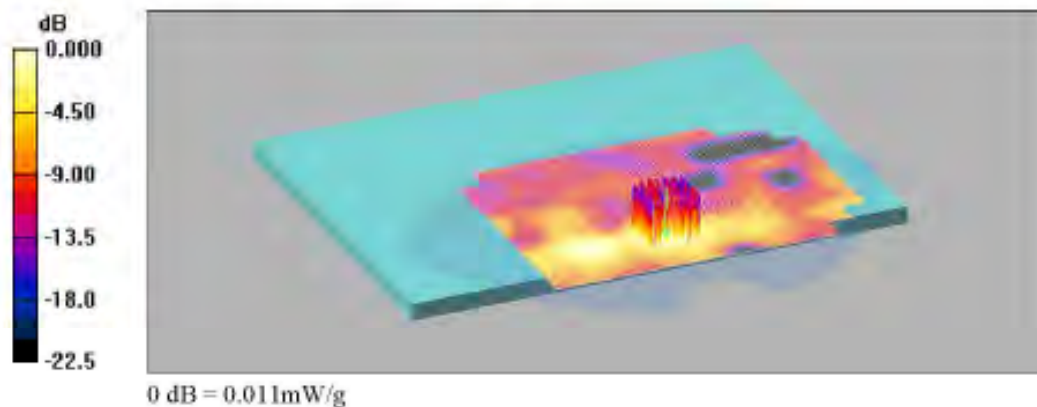
Communication System: WLAN; Frequency: 2412 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(3.94, 3.94, 3.94); Calibrated: 2011-04-14
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM MIC #2000-93 with CRP_Right; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11b_Low_Back Screen_AUX ANT/Area Scan (101x141x1): Measurement grid:
 dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.011 mW/g

WLAN_11b_Low_Back Screen_AUX ANT/Zoom Scan (7x7x7)/Cube 0: Measurement
 grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 1.17 V/m; Power Drift = -0.135 dB
 Peak SAR (extrapolated) = 0.029 W/kg
SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00542 mW/g
 Maximum value of SAR (measured) = 0.011 mW/g



Date: 2012-04-07

Test Laboratory: SGS Korea (Gimpo Laboratory)

File Name: WLAN_Base_11n20_HT8_CR6_MIMO ANT.dad

DUT: 62230ANIMW; Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.9$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(3.94, 3.94, 3.94); Calibrated: 2011-04-14
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM MIC #2000-93 with CRP_Right; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n20_HT8_Mid_Base_MIMO ANT/Area Scan (101x141x1): Measurement
 grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.256 mW/g

WLAN_11n20_HT8_Mid_Base_MIMO ANT/Zoom Scan (7x7x7)/Cube 0:

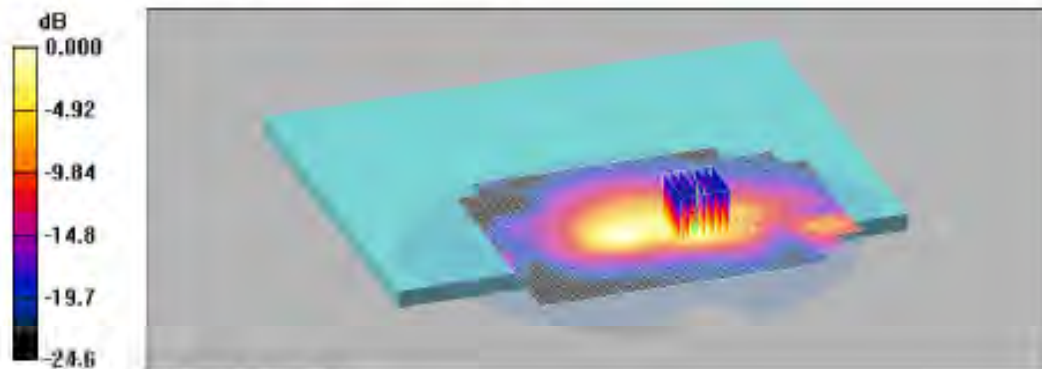
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.74 V/m; Power Drift = -0.190 dB

Peak SAR (extrapolated) = 0.704 W/kg

SAR(1 g) = 0.228 mW/g; SAR(10 g) = 0.097 mW/g

Maximum value of SAR (measured) = 0.234 mW/g



0 dB = 0.234mW/g

Date: 2012-04-07

Test Laboratory: SGS Korea (Gumpo Laboratory)

File Name: WLAN_Base_11n40_HT8_CR6_MIMO ANT.dad

DUT: 62230ANHMW; Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.9$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(3.94, 3.94, 3.94); Calibrated: 2011-04-14
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM MIC #2000-93 with CRP_Right; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n40_HT8_Mid_Base_MIMO ANT/Area Scan (101x141x1): Measurement
 grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.235 mW/g

WLAN_11n40_HT8_Mid_Base_MIMO ANT/Zoom Scan (7x7x7)/Cube 0:

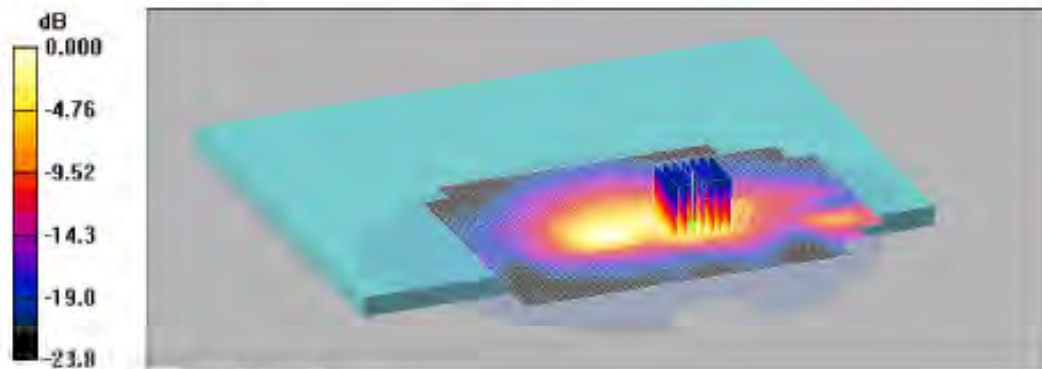
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.98 V/m; Power Drift = -0.277 dB

Peak SAR (extrapolated) = 0.615 W/kg

SAR(1 g) = 0.203 mW/g; SAR(10 g) = 0.087 mW/g

Maximum value of SAR (measured) = 0.220 mW/g



0 dB = 0.220mW/g

Date: 2012-04-07

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Back Screen_11n20_HT8_Chip_MIMO ANT.das

DUT: 62230ANHMW; Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.9 \text{ mho/m}$; $\epsilon_r = 53.2$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

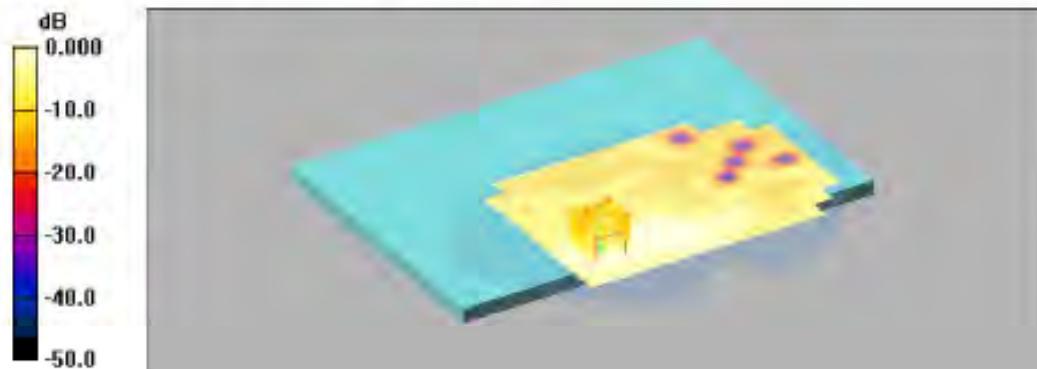
- Probe: ET3DV6 - SN1782; ConvF(3.94, 3.94, 3.94); Calibrated: 2011-04-14
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM MIC #2000-93 with CRP_Right; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n20_HT8_Mid_Back Screen_MIMO ANT/Area Scan (101x141x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 0.008 mW/g

WLAN_11n20_HT8_Mid_Back Screen_MIMO ANT/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 0.930 V/m; Power Drift = -0.390 dB
 Peak SAR (extrapolated) = 0.020 W/kg
SAR(1 g) = 0.00779 mW/g; SAR(10 g) = 0.00413 mW/g
 Maximum value of SAR (measured) = 0.008 mW/g



0 dB = 0.008mW/g

5.2GHz WLAN Body SAR

Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH36_Main ANT.dat

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN(11a U-NII Low); Frequency: 5180 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5180$ MHz; $\sigma = 5.41$ mho/m; $\epsilon_r = 48.3$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.96, 3.96, 3.96); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP 2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH36_Base_Main ANT/Area Scan (91x141x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.800 mW/g

WLAN_11a_CH36_Base_Main ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

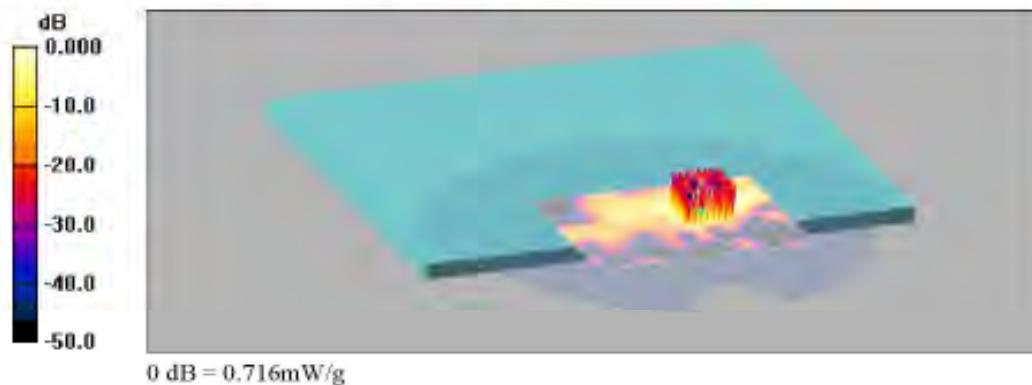
dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.86 V/m; Power Drift = 0.251 dB

Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 0.370 mW/g; SAR(10 g) = 0.113 mW/g

Maximum value of SAR (measured) = 0.716 mW/g



Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH48_Main ANT.daa

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN(11a U-NII Low); Frequency: 5240 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5240$ MHz; $\sigma = 5.5$ mho/m; $\epsilon_r = 48.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.96, 3.96, 3.96); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH48_Base_Main ANT/Area Scan (81x141x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.409 mW/g

WLAN_11a_CH48_Base_Main ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.20 V/m; Power Drift = -0.327 dB

Peak SAR (extrapolated) = 0.897 W/kg

SAR(1 g) = 0.211 mW/g; SAR(10 g) = 0.065 mW/g

Maximum value of SAR (measured) = 0.450 mW/g



Date: 2012-04-08

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH36_AUX ANT.daa4

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN(11a U-NII Low); Frequency: 5180 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 5.41 \text{ mho/m}$; $\epsilon_r = 48.3$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.96, 3.96, 3.96); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH36_Base_AUX ANT/Area Scan (81x141x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.889 mW/g

WLAN_11a_CH36_Base_AUX ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

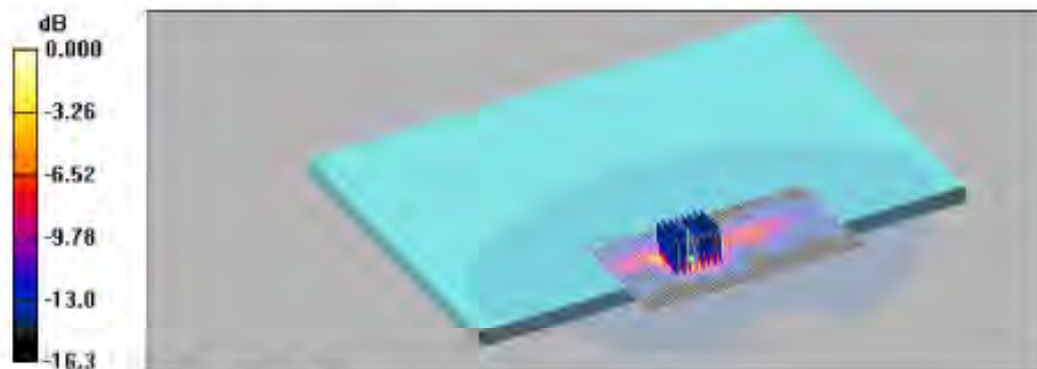
$dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 8.10 V/m; Power Drift = 0.047 dB

Peak SAR (extrapolated) = 1.88 W/kg

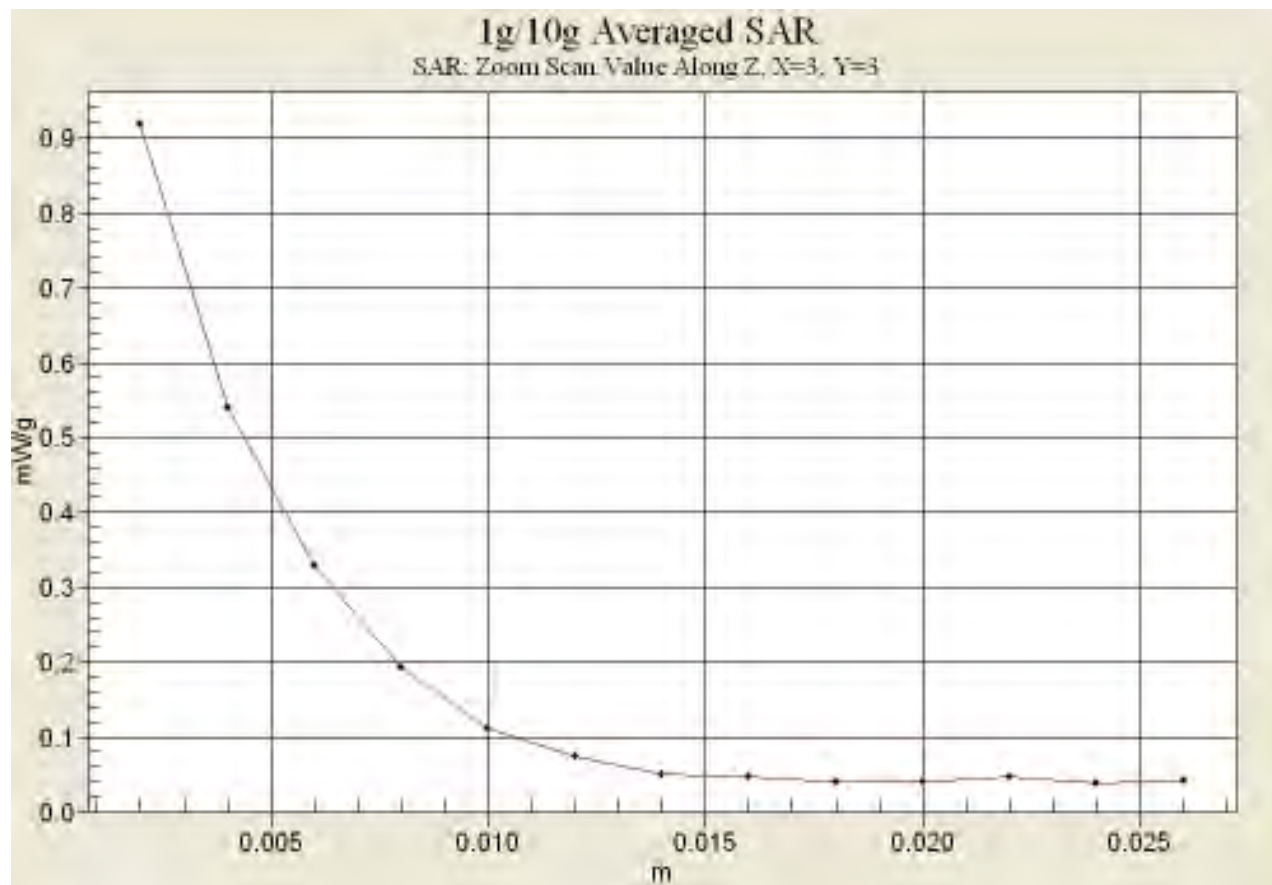
SAR(1 g) = 0.463 mW/g; SAR(10 g) = 0.168 mW/g

Maximum value of SAR (measured) = 0.918 mW/g



0 dB = 0.918mW/g

Z-Scan



Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH4_AUX_ANT.daa4

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

Communication System: WLAN(11a U-NII Low); Frequency: 5220 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5220$ MHz; $\sigma = 5.47$ mho/m; $\epsilon_r = 48.2$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.96, 3.96, 3.96); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP 2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH44_Base_AUX ANT/Area Scan (81x141x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.784 mW/g

WLAN_11a_CH44_Base_AUX ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

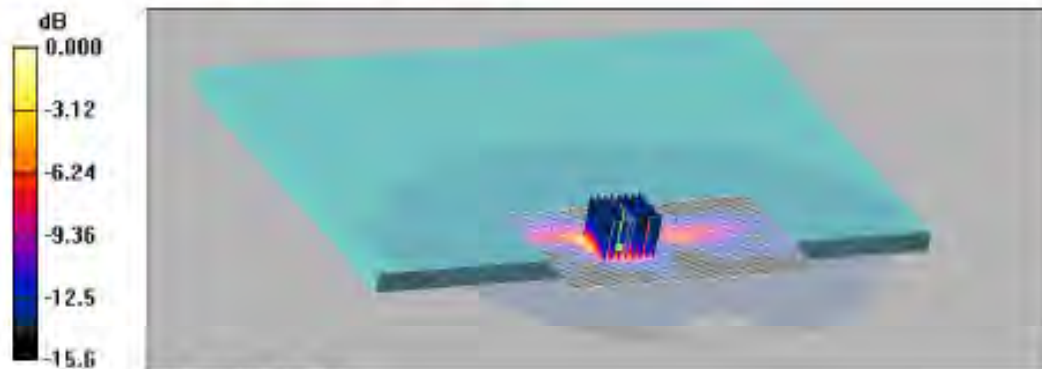
dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.59 V/m; Power Drift = 0.114 dB

Peak SAR (extrapolated) = 1.60 W/kg

SAR(1 g) = 0.431 mW/g; SAR(10 g) = 0.160 mW/g

Maximum value of SAR (measured) = 0.822 mW/g



Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Back Screen_11a_5Mbps_CH36_Main ANT.dat

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

Communication System: WLAN(11a_U-NII Low); Frequency: 5180 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 5.41 \text{ mho/m}$; $\epsilon_r = 48.3$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

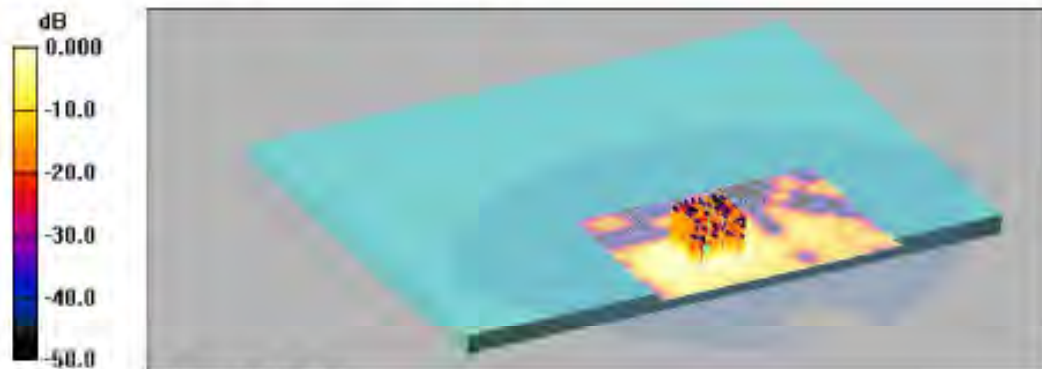
DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.96, 3.96, 3.96); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH36_Back Screen_Main ANT/Area Scan (91x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.121 mW/g

WLAN_11a_CH36_Back Screen_Main ANT/Zoom Scan (8x8x13)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm
 Reference Value = 2.95 V/m; Power Drift = 0.253 dB
 Peak SAR (extrapolated) = 0.208 W/kg
SAR(1 g) = 0.059 mW/g; SAR(10 g) = 0.021 mW/g
 Maximum value of SAR (measured) = 0.115 mW/g



0 dB = 0.115mW/g

Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Back Screen_11a_5Mbps_CH36_AUX ANT.dad

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

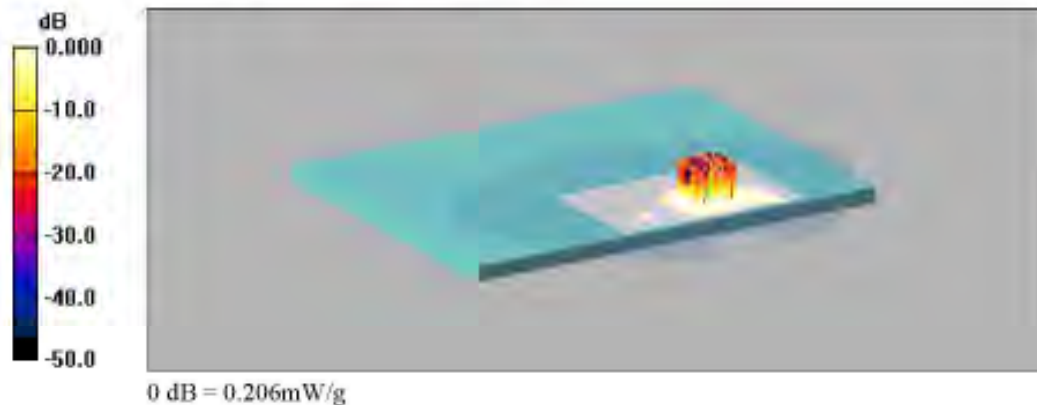
Communication System: WLAN(11a U-NII Low); Frequency: 5180 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 5.41 \text{ mho/m}$; $\epsilon_r = 48.3$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.96, 3.96, 3.96); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH36_Back Screen_AUX ANT/Area Scan (81x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.196 mW/g

WLAN_11a_CH36_Back Screen_AUX ANT/Zoom Scan (8x8x13)/Cube 0:
 Measurement grid: dx=4mm, dy=4mm, dz=2mm
 Reference Value = 2.39 V/m; Power Drift = 0.367 dB
 Peak SAR (extrapolated) = 0.920 W/kg
SAR(1 g) = 0.114 mW/g; SAR(10 g) = 0.042 mW/g
 Maximum value of SAR (measured) = 0.206 mW/g



Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11n20_CH36_MIMO ANT.dnt

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

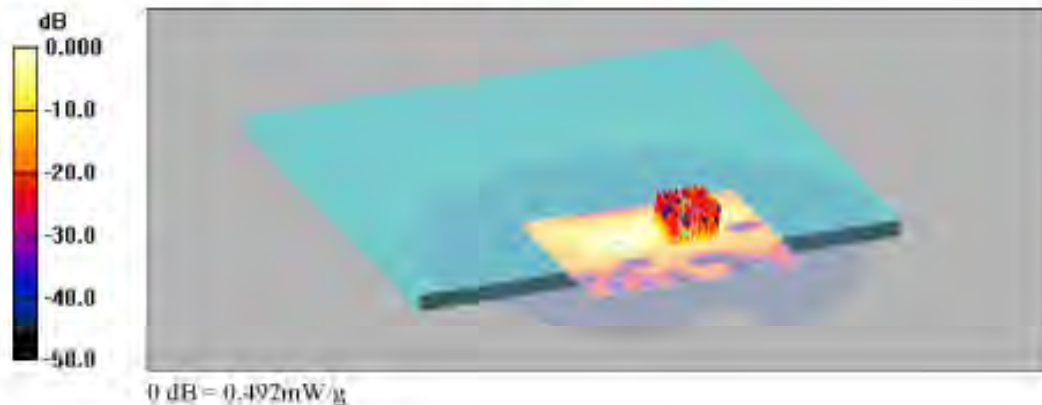
Communication System: WLAN(11a U-NII Low); Frequency: 5180 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 5.41 \text{ mho/m}$; $\epsilon_r = 48.3$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.96, 3.96, 3.96); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n20_CH36_Base_MIMO ANT/Area Scan (91x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.511 mW/g

WLAN_11n20_CH36_Base_MIMO ANT/Zoom Scan (8x8x13)/Cube 0: Measurement
 grid: dx=4mm, dy=4mm, dz=2mm
 Reference Value = 3.05 V/m; Power Drift = 0.221 dB
 Peak SAR (extrapolated) = 0.992 W/kg
SAR(1 g) = 0.241 mW/g; SAR(10 g) = 0.075 mW/g
 Maximum value of SAR (measured) = 0.492 mW/g



Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11n20_CH36_MIMO ANT.dnt

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

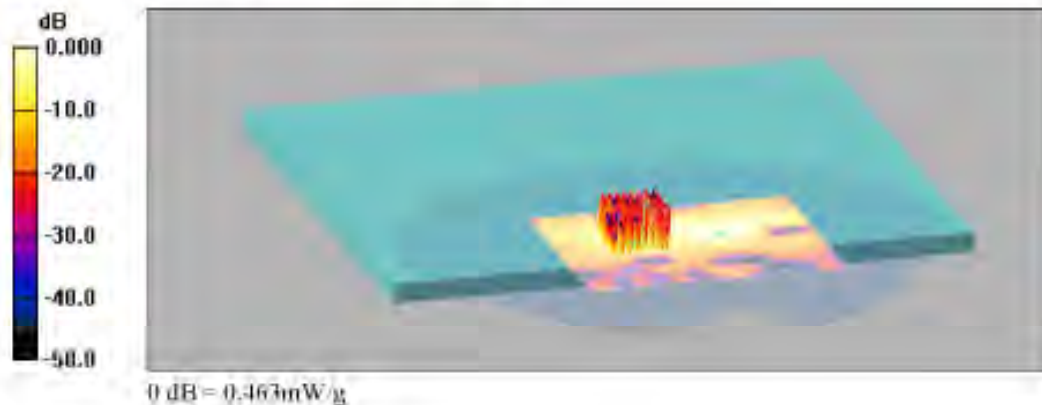
Communication System: WLAN(11a U-NII Low); Frequency: 5180 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 5.41 \text{ mho/m}$; $\epsilon_r = 48.3$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.96, 3.96, 3.96); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n20_CH36_Base_MIMO ANT/Area Scan (91x141x1): Measurement grid:
 $dx=10\text{mm}$, $dy=10\text{mm}$
 Maximum value of SAR (interpolated) = 0.511 mW/g

WLAN_11n20_CH36_Base_MIMO ANT/Zoom Scan (8x8x13)/Cube 1: Measurement
 grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$
 Reference Value = 3.05 V/m; Power Drift = 0.221 dB
 Peak SAR (extrapolated) = 0.904 W/kg
SAR(1 g) = 0.226 mW/g; SAR(10 g) = 0.074 mW/g
 Maximum value of SAR (measured) = 0.463 mW/g



Date: 2012-04-08

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11n40_JITB_CH46_MIMO ANT.dnt

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

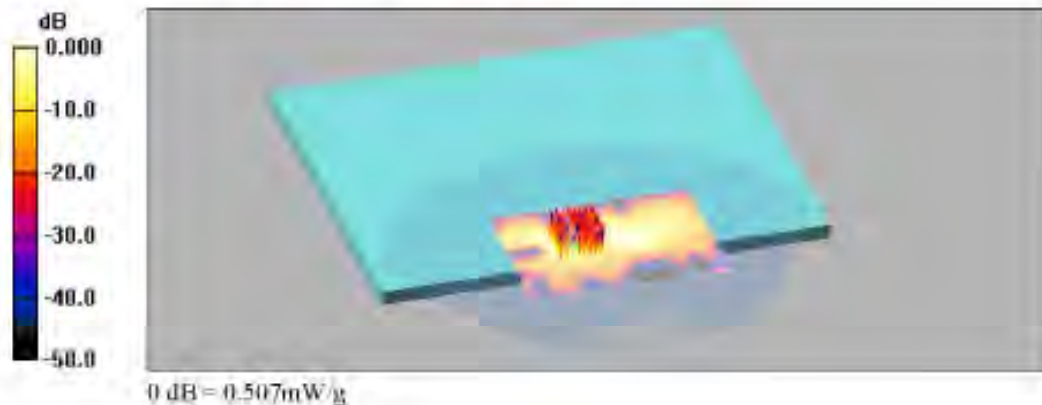
Communication System: WLAN(11a U-NII Low); Frequency: 5230 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5230$ MHz; $\sigma = 5.49$ mho/m; $\epsilon_r = 48.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.96, 3.96, 3.96); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n40_CH46_Base_MIMO ANT/Area Scan (91x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.431 mW/g

WLAN_11n40_CH46_Base_MIMO ANT/Zoom Scan (8x8x13)/Cube 0: Measurement
 grid: dx=4mm, dy=4mm, dz=2mm
 Reference Value = 3.77 V/m; Power Drift = -0.110 dB
 Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.241 mW/g; SAR(10 g) = 0.076 mW/g
 Maximum value of SAR (measured) = 0.507 mW/g



Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)

File Name: WLAN_Back Screen_11n40_HT8_CH46_MIMO ANT.dad

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

Communication System: WLAN(11a_U-NII Low); Frequency: 5230 MHz; Duty Cycle: 1/1

Medium parameters used: $f = 5230$ MHz; $\sigma = 5.49$ mho/m; $\epsilon_r = 48.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.96, 3.96, 3.96); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n40_CH46_Back Screen_MIMO ANT/Area Scan (91x141x1): Measurement
 grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.144 mW/g

WLAN_11n40_CH46_Back Screen_MIMO ANT/Zoom Scan (8x8x13)/Cube 0:

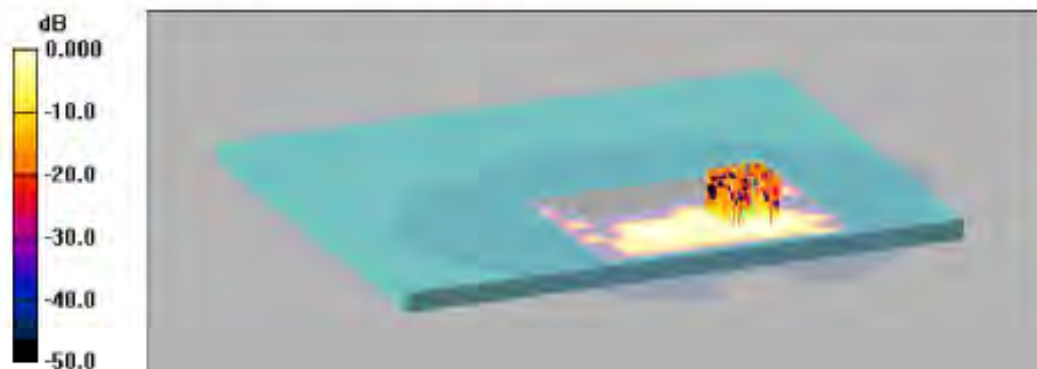
Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.17 V/m; Power Drift = 0.379 dB

Peak SAR (extrapolated) = 0.187 W/kg

SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.020 mW/g

Maximum value of SAR (measured) = 0.112 mW/g



0 dB = 0.112mW/g

5.3 GHz WLAN Body SAR

Date: 2012-04-08

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH52_Main ANT.daa

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN(11a U-NII Low); Frequency: 5260 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5260$ MHz; $\sigma = 5.53$ mho/m; $\epsilon_r = 48.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.79, 3.79, 3.79); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP 2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH52_Base_Main ANT/Area Scan (81x141x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.438 mW/g

WLAN_11a_CH52_Base_Main ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

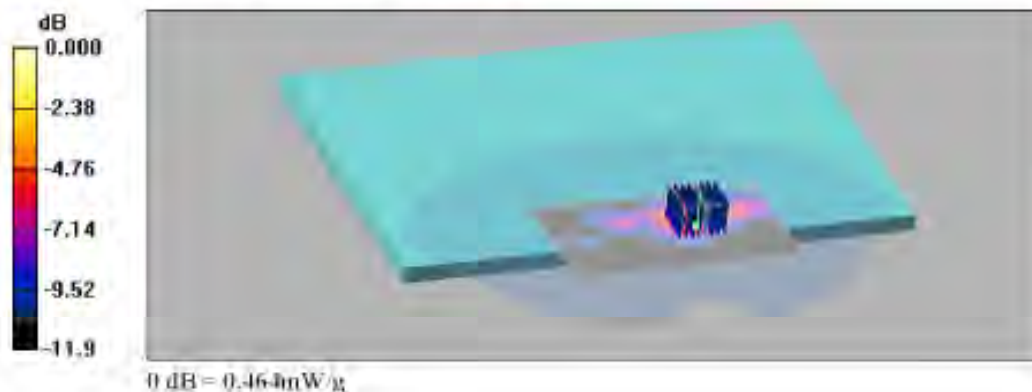
dx=4mm, dy=4mm, dz=2mm

Reference Value - 2.82 V/m; Power Drift - -0.231 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.253 mW/g; SAR(10 g) = 0.105 mW/g

Maximum value of SAR (measured) = 0.464 mW/g



Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH60_Main_ANT.dad

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

Communication System: WLAN(11a U-NII Low); Frequency: 5300 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5300$ MHz; $\sigma = 5.57$ mho/m; $\epsilon_r = 48$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.79, 3.79, 3.79); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH60_Base_Main ANT/Area Scan (81x141x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.434 mW/g

WLAN_11a_CH60_Base_Main ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

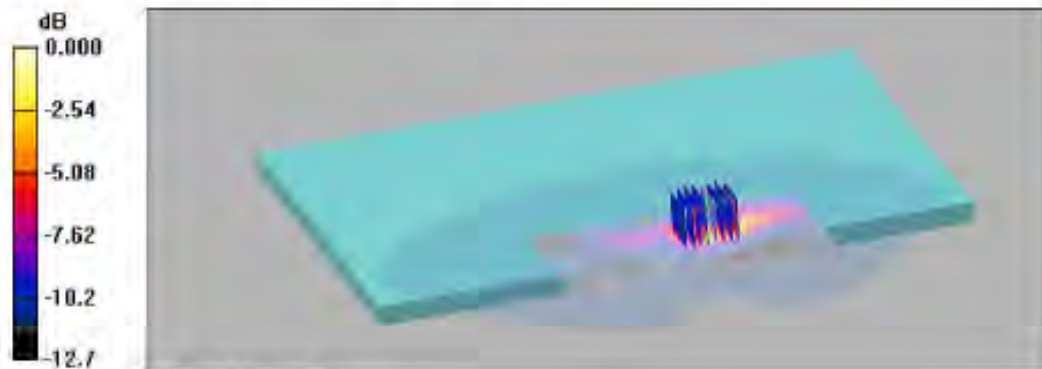
dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.60 V/m; Power Drift = -0.005 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.252 mW/g; SAR(10 g) = 0.108 mW/g

Maximum value of SAR (measured) = 0.469 mW/g



0 dB = 0.469mW/g

Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH56_AUX ANT.daa4

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN(11a U-NII Low); Frequency: 5280 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5280$ MHz; $\sigma = 5.54$ mho/m; $\epsilon_r = 48.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.79, 3.79, 3.79); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP 2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH56_Base_AUX ANT/Area Scan (81x141x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.776 mW/g

WLAN_11a_CH56_Base_AUX ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

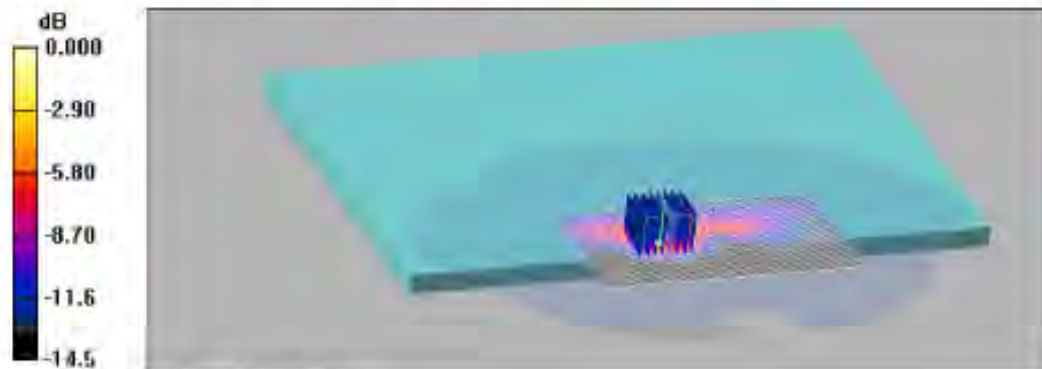
dx=4mm, dy=4mm, dz=2mm

Reference Value = 7.31 V/m; Power Drift = 0.327 dB

Peak SAR (extrapolated) = 1.64 W/kg

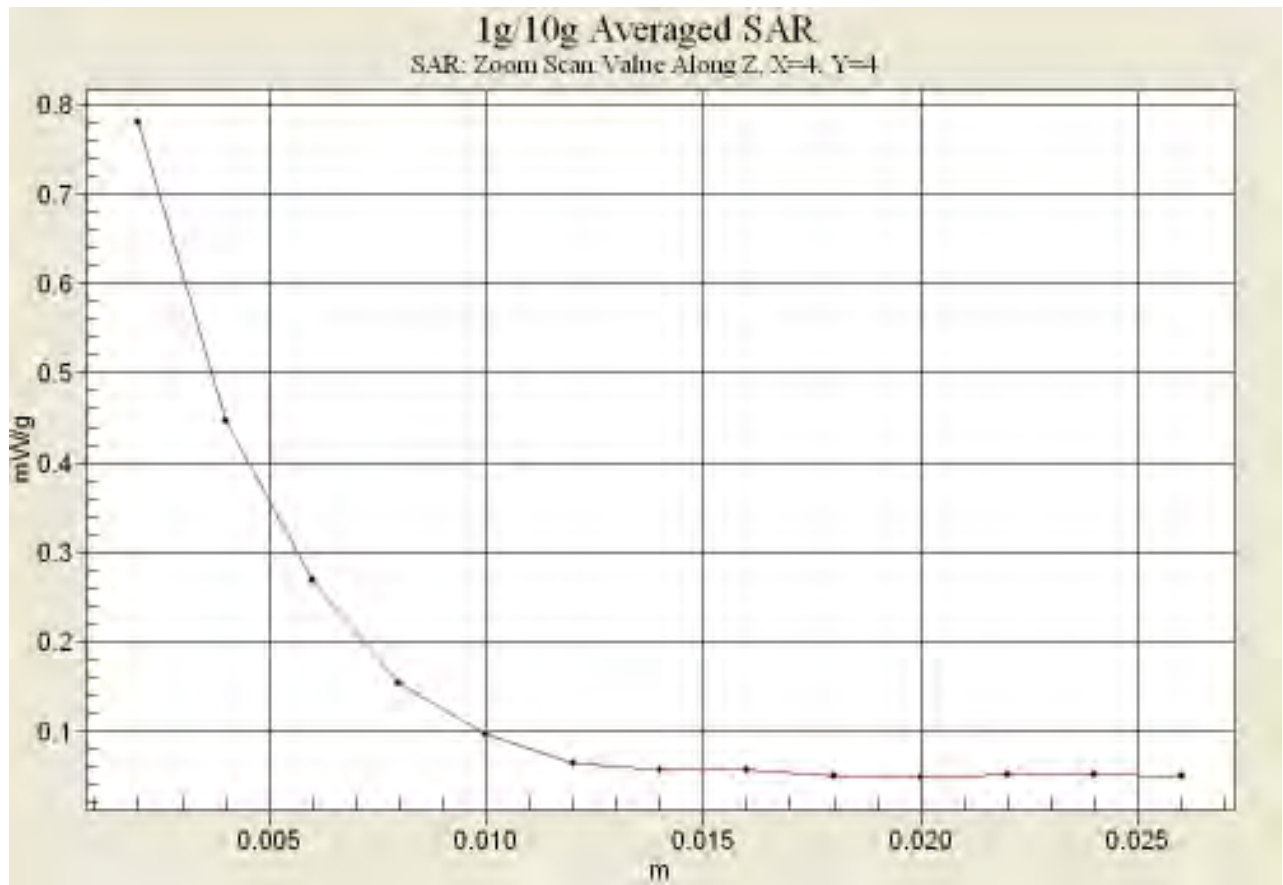
SAR(1 g) = 0.398 mW/g; SAR(10 g) = 0.152 mW/g

Maximum value of SAR (measured) = 0.780 mW/g



0 dB = 0.780mW/g

Z-Scan



Date: 2012-04-08

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH60_AUX ANT.daa4

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

Communication System: WLAN(11a U-NII Low); Frequency: 5300 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5300$ MHz; $\sigma = 5.57$ mho/m; $\epsilon_r = 48$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.79, 3.79, 3.79); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP 2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH60_Base_AUX ANT/Area Scan (81x141x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.748 mW/g

WLAN_11a_CH60_Base_AUX ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

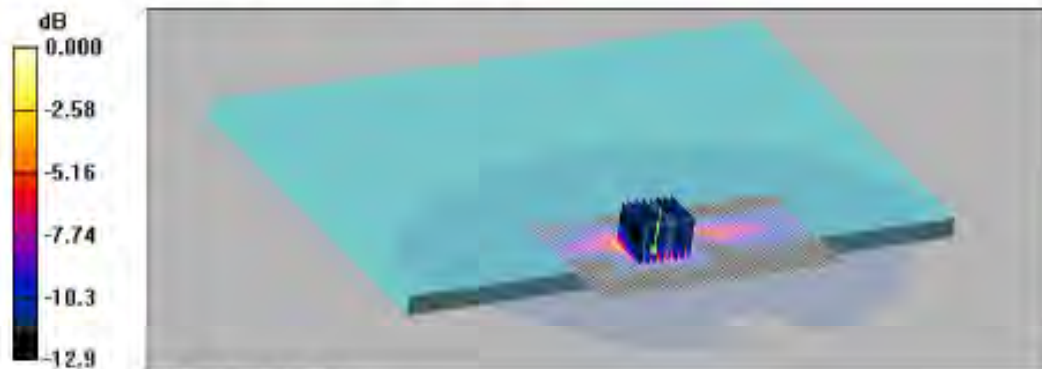
dx=4mm, dy=4mm, dz=2mm

Reference Value = 9.25 V/m; Power Drift = 0.057 dB

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.366 mW/g; SAR(10 g) = 0.146 mW/g

Maximum value of SAR (measured) = 0.682 mW/g



Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Back Screen_11a_5Mbps_CH52_Main ANT.dai

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

Communication System: WLAN(11a_U-NII Low); Frequency: 5260 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5260$ MHz; $\sigma = 5.53$ mho/m; $\epsilon_r = 48.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

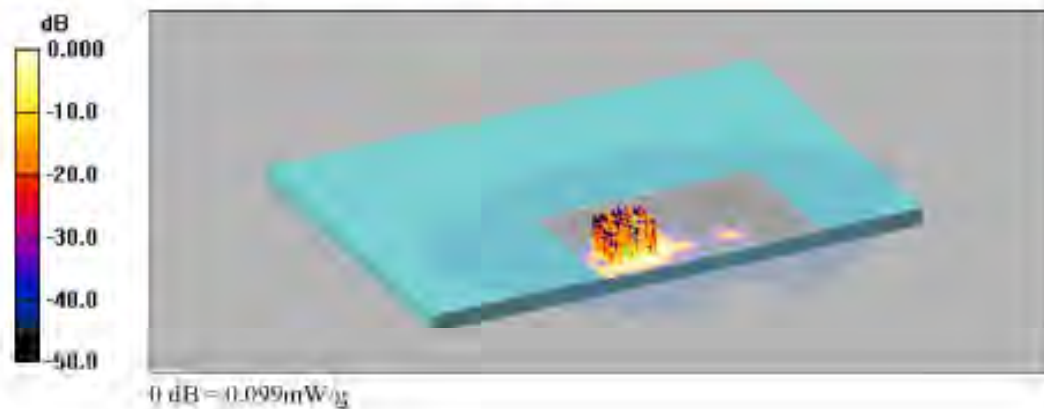
DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.79, 3.79, 3.79); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH52_Back Screen_Main ANT/Area Scan (91x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.139 mW/g

WLAN_11a_CH52_Back Screen_Main ANT/Zoom Scan (8x8x13)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm
 Reference Value = 0.967 V/m; Power Drift = -0.150 dB
 Peak SAR (extrapolated) = 0.176 W/kg
SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.017 mW/g
 Maximum value of SAR (measured) = 0.099 mW/g



Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Back Screen_11a_5Mbps_CH56_AUX ANT.dad

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

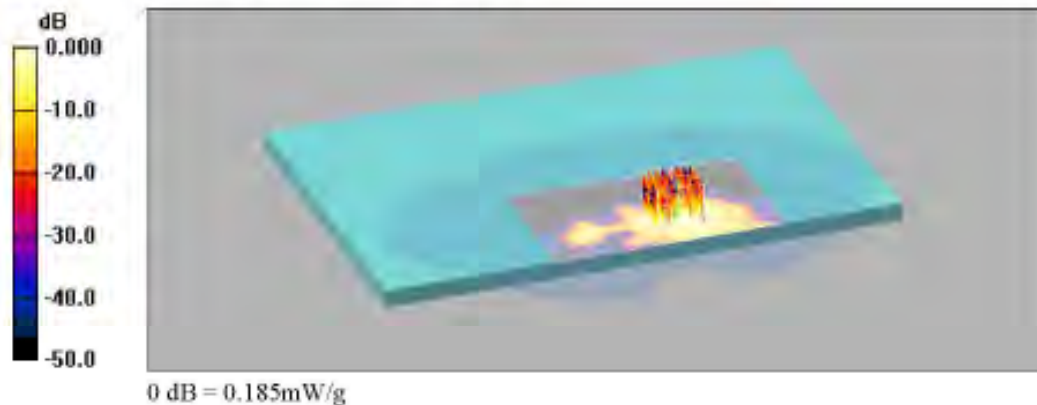
Communication System: WLAN(11a_U-NII Low); Frequency: 5280 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5280$ MHz; $\sigma = 5.54$ mho/m; $\epsilon_r = 48.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.79, 3.79, 3.79); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH56_Back Screen_AUX ANT/Area Scan (91x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.219 mW/g

WLAN_11a_CH56_Back Screen_AUX ANT/Zoom Scan (8x8x13)/Cube 0:
 Measurement grid: dx=4mm, dy=4mm, dz=2mm
 Reference Value = 1.57 V/m; Power Drift = -0.261 dB
 Peak SAR (extrapolated) = 0.368 W/kg
SAR(1 g) = 0.102 mW/g; SAR(10 g) = 0.037 mW/g
 Maximum value of SAR (measured) = 0.185 mW/g



Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11n20_CH60_MIMO ANT.dnt

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN(11a_U-NII Low); Frequency: 5300 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5300$ MHz; $\sigma = 5.57$ mho/m; $\epsilon_r = 48$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.79, 3.79, 3.79); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n20_CH60_Base_MIMO ANT/Area Scan (91x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.352 mW/g

WLAN_11n20_CH60_Base_MIMO ANT/Zoom Scan (8x8x13)/Cube 0: Measurement
 grid: dx=4mm, dy=4mm, dz=2mm
 Reference Value = 3.18 V/m; Power Drift = -0.334 dB
 Peak SAR (extrapolated) = 0.749 W/kg
SAR(1 g) = 0.167 mW/g; SAR(10 g) = 0.053 mW/g
 Maximum value of SAR (measured) = 0.363 mW/g



0 dB = 0.363mW/g

Date: 2012-04-08

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11n40_11TB_CH54_MIMO ANT.dnt

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

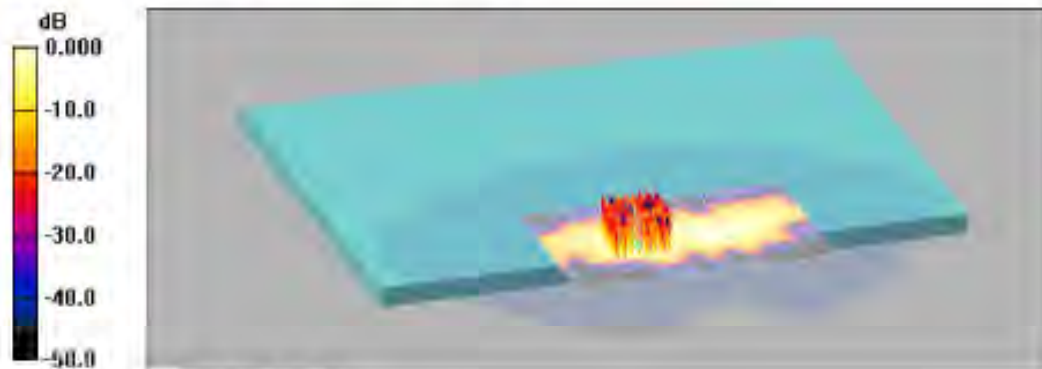
Communication System: WLAN(11a_U-NII Low); Frequency: 5270 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5270$ MHz; $\sigma = 5.54$ mho/m; $\epsilon_r = 48.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.79, 3.79, 3.79); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n40_CH54_Base_MIMO ANT/Area Scan (91x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.438 mW/g

WLAN_11n40_CH54_Base_MIMO ANT/Zoom Scan (8x8x13)/Cube 0: Measurement
 grid: dx=4mm, dy=4mm, dz=2mm
 Reference Value = 5.11 V/m; Power Drift = 0.131 dB
 Peak SAR (extrapolated) = 0.819 W/kg
SAR(1 g) = 0.201 mW/g; SAR(10 g) = 0.065 mW/g
 Maximum value of SAR (measured) = 0.407 mW/g



0 dB = 0.407mW/g

Date: 2012-04-08

Test Laboratory: SGS Korea (Gimpo Laboratory)

File Name: WLAN_Back Screen_11n40_HT8_CH54_MIMO ANT.dad

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN(11a_U-NII Low); Frequency: 5270 MHz; Duty Cycle: 1/1

Medium parameters used: $f = 5270$ MHz; $\sigma = 5.54$ mho/m; $\epsilon_r = 48.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.79, 3.79, 3.79); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n40_CH54_Back Screen_MIMO ANT/Area Scan (91x141x1): Measurement
 grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.117 mW/g

WLAN_11n40_CH54_Back Screen_MIMO ANT/Zoom Scan (8x8x13)/Cube 0:

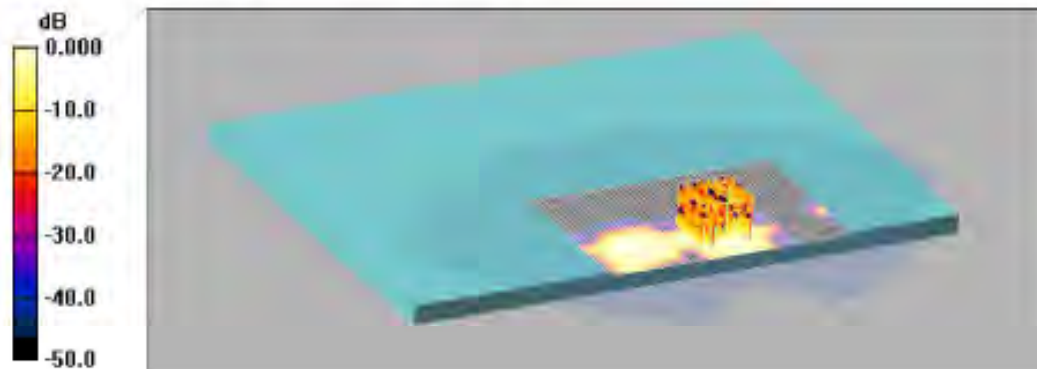
Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.19 V/m; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 0.184 W/kg

SAR(1 g) = 0.054 mW/g; SAR(10 g) = 0.020 mW/g

Maximum value of SAR (measured) = 0.101 mW/g



0 dB = 0.101mW/g

5.5GHz WLAN Body SAR

Date: 2012-04-03

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH104_Main ANT.dad

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
 Program Name: WLAN_Body

Communication System: WLAN(11a_H or CEPT); Frequency: 5520 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5520$ MHz; $\sigma = 5.44$ mho/m; $\epsilon_r = 47.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.48, 3.48, 3.48); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH104_Base_Main ANT/Area Scan (81x141x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.431 mW/g

WLAN_11a_CH104_Base_Main ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

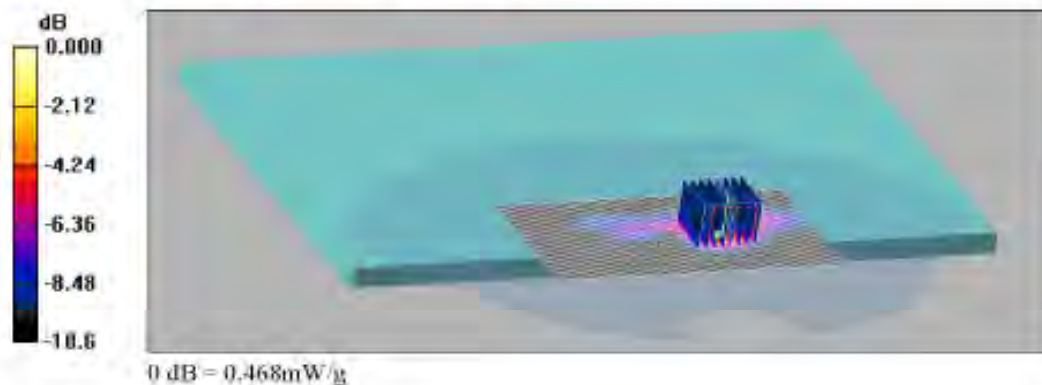
dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.08 V/m; Power Drift = -0.118 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.268 mW/g; SAR(10 g) = 0.115 mW/g

Maximum value of SAR (measured) = 0.468 mW/g



Date: 2012-04-02

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH116_Main_ANT.dad

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

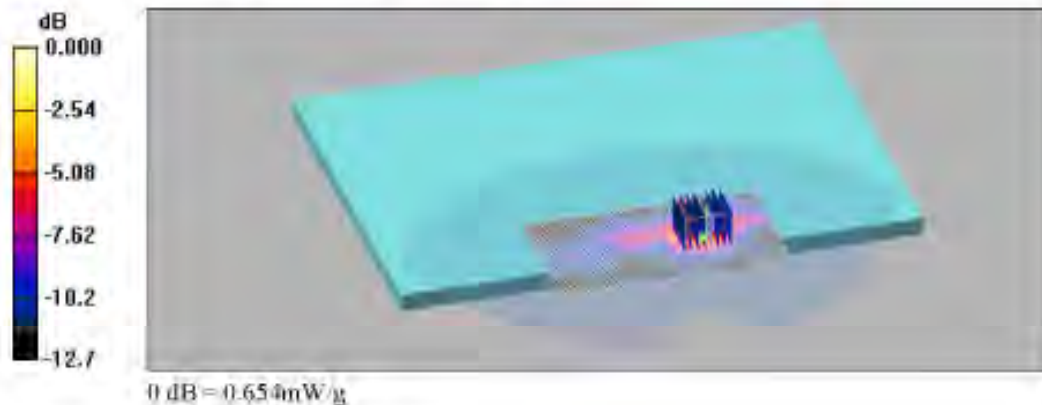
Communication System: WLAN(11a_H or CEPT); Frequency: 5580 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5580$ MHz; $\sigma = 5.51$ mho/m; $\epsilon_r = 47.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.26, 3.26, 3.26); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH116_Base_Main ANT/Area Scan (81x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.649 mW/g

WLAN_11a_CH116_Base_Main ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:
 dx=4mm, dy=4mm, dz=2mm
 Reference Value = 3.91 V/m; Power Drift = -0.131 dB
 Peak SAR (extrapolated) = 1.48 W/kg
SAR(1 g) = 0.357 mW/g; SAR(10 g) = 0.141 mW/g
 Maximum value of SAR (measured) = 0.654 mW/g



Date: 2012-04-03

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH124_Main_ANT.dad

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

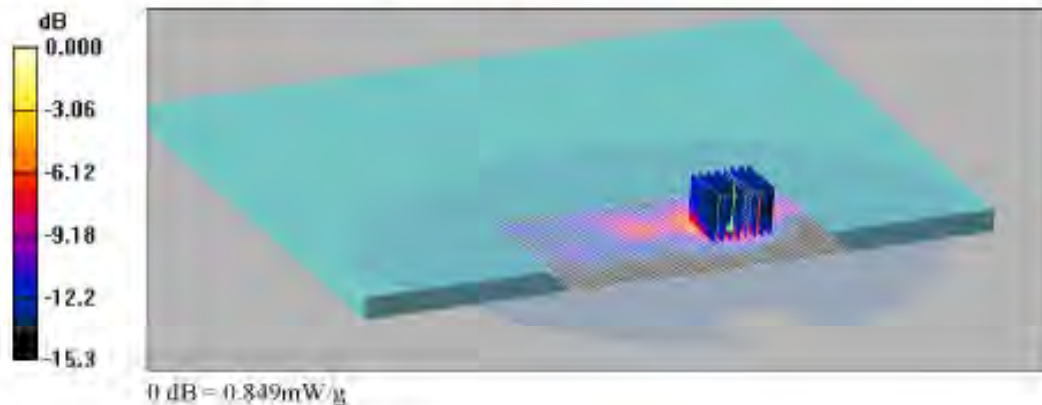
Communication System: WLAN(11a_H or CEPT); Frequency: 5620 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5620$ MHz; $\sigma = 5.55$ mho/m; $\epsilon_r = 47.3$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.26, 3.26, 3.26); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH124_Base_Main ANT/Area Scan (81x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.865 mW/g

WLAN_11a_CH124_Base_Main ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:
 dx=4mm, dy=4mm, dz=2mm
 Reference Value = 2.86 V/m; Power Drift = 0.140 dB
 Peak SAR (extrapolated) = 1.94 W/kg
SAR(1 g) = 0.424 mW/g; SAR(10 g) = 0.152 mW/g
 Maximum value of SAR (measured) = 0.849 mW/g



Date: 2012-04-03

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH132_Main_ANT.dad

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

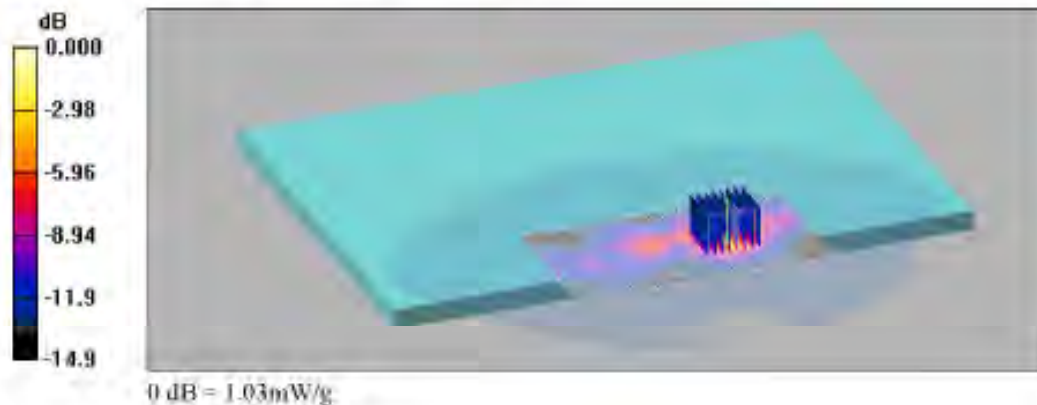
Communication System: WLAN(11a_H or CEPT); Frequency: 5660 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5660$ MHz; $\sigma = 5.64$ mho/m; $\epsilon_r = 47.2$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.26, 3.26, 3.26); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH132_Base_Main ANT/Area Scan (81x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.913 mW/g

WLAN_11a_CH132_Base_Main ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:
 dx=4mm, dy=4mm, dz=2mm
 Reference Value = 3.47 V/m; Power Drift = 0.326 dB
 Peak SAR (extrapolated) = 2.24 W/kg
SAR(1 g) = 0.529 mW/g; SAR(10 g) = 0.189 mW/g
 Maximum value of SAR (measured) = 1.03 mW/g



Date: 2012-04-03

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH140_Main_ANT.dad

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

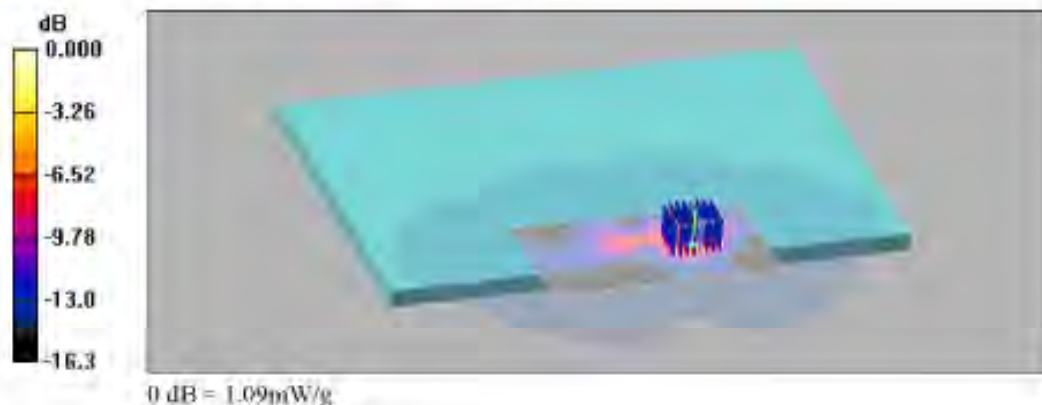
Communication System: WLAN(11a_H or CEPT); Frequency: 5700 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5700$ MHz; $\sigma = 5.65$ mho/m; $\epsilon_r = 47.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.26, 3.26, 3.26); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH140_Base_Main ANT/Area Scan (81x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 1.06 mW/g

WLAN_11a_CH140_Base_Main ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:
 dx=4mm, dy=4mm, dz=2mm
 Reference Value = 3.50 V/m; Power Drift = -0.222 dB
 Peak SAR (extrapolated) = 2.43 W/kg
SAR(1 g) = 0.543 mW/g; SAR(10 g) = 0.189 mW/g
 Maximum value of SAR (measured) = 1.09 mW/g



Date: 2012-04-03

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH104_AUX_ANT.dae

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

Communication System: WLAN(11a_H or CEPT); Frequency: 5520 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5520$ MHz; $\sigma = 5.44$ mho/m; $\epsilon_r = 47.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.48, 3.48, 3.48); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH104_Base_AUX ANT/Area Scan (81x141x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.338 mW/g

WLAN_11a_CH104_Base_AUX ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

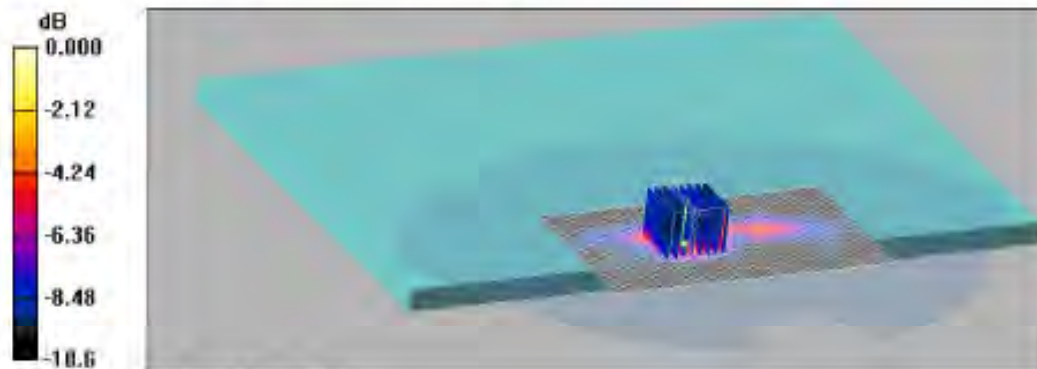
dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.91 V/m; Power Drift = 0.393 dB

Peak SAR (extrapolated) = 0.799 W/kg

SAR(1 g) = 0.193 mW/g; SAR(10 g) = 0.089 mW/g

Maximum value of SAR (measured) = 0.348 mW/g



Date: 2012-04-03

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH116_AUX ANT.dae

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

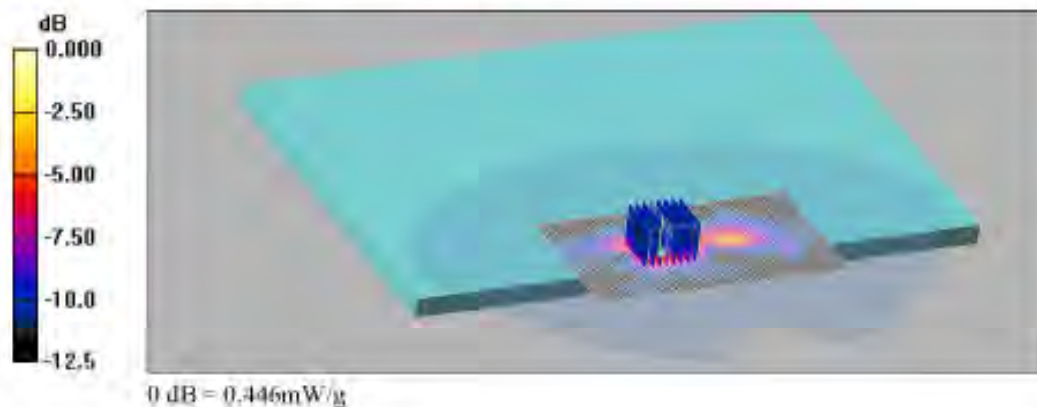
Communication System: WLAN(11a_H or CEPT); Frequency: 5580 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5580$ MHz; $\sigma = 5.51$ mho/m; $\epsilon_r = 47.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.26, 3.26, 3.26); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH116_Base_AUX ANT/Area Scan (81x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.411 mW/g

WLAN_11a_CH116_Base_AUX ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:
 dx=4mm, dy=4mm, dz=2mm
 Reference Value = 6.56 V/m; Power Drift = 0.379 dB
 Peak SAR (extrapolated) = 0.918 W/kg
SAR(1 g) = 0.236 mW/g; SAR(10 g) = 0.099 mW/g
 Maximum value of SAR (measured) = 0.446 mW/g



Date: 2012-04-03

Test Laboratory: SGS Korea (Gimpo Laboratory)

File Name: WLAN_Base_11a_5Mbps_CH124_AUX_ANT.dat

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

Communication System: WLAN(11a_H or CEPT); Frequency: 5620 MHz; Duty Cycle: 1/1

Medium parameters used: $f = 5620$ MHz; $\sigma = 5.55$ mho/m; $\epsilon_r = 47.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.26, 3.26, 3.26); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH124_Base_AUX ANT/Area Scan (81x121x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.609 mW/g

WLAN_11a_CH124_Base_AUX ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

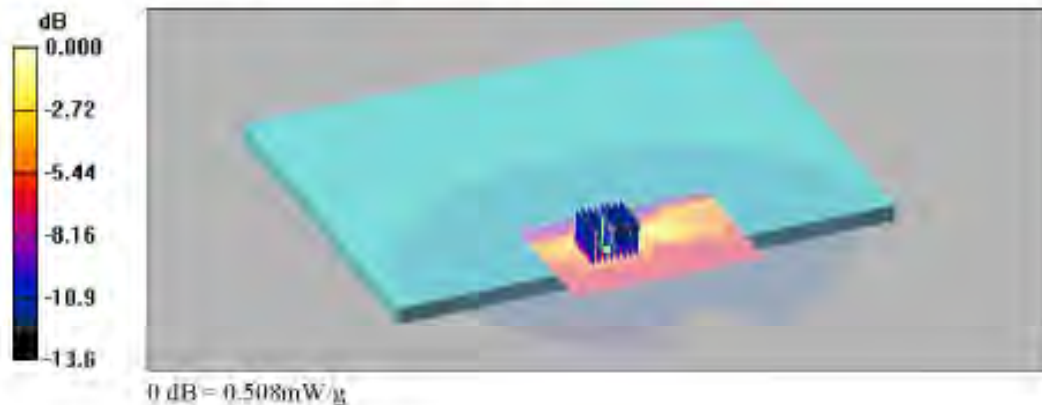
dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.98 V/m; Power Drift = -0.204 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.266 mW/g; SAR(10 g) = 0.103 mW/g

Maximum value of SAR (measured) = 0.508 mW/g



Date: 2012-04-03

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH136_AUX_ANT.dae

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

Communication System: WLAN(11a_H or CEPT); Frequency: 5680 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5680$ MHz; $\sigma = 5.68$ mho/m; $\epsilon_r = 47.2$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.26, 3.26, 3.26); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH136_Base_AUX ANT/Area Scan (81x141x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.924 mW/g

WLAN_11a_CH136_Base_AUX ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

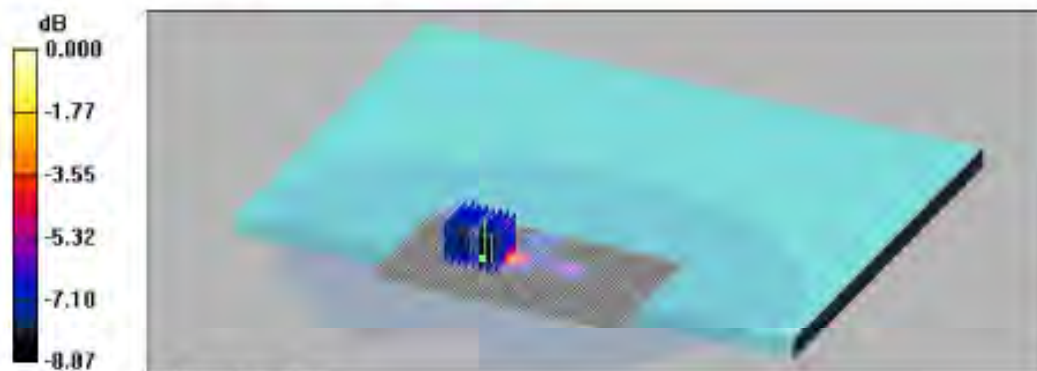
dx=4mm, dy=4mm, dz=2mm

Reference Value = 9.57 V/m; Power Drift = -0.250 dB

Peak SAR (extrapolated) = 2.35 W/kg

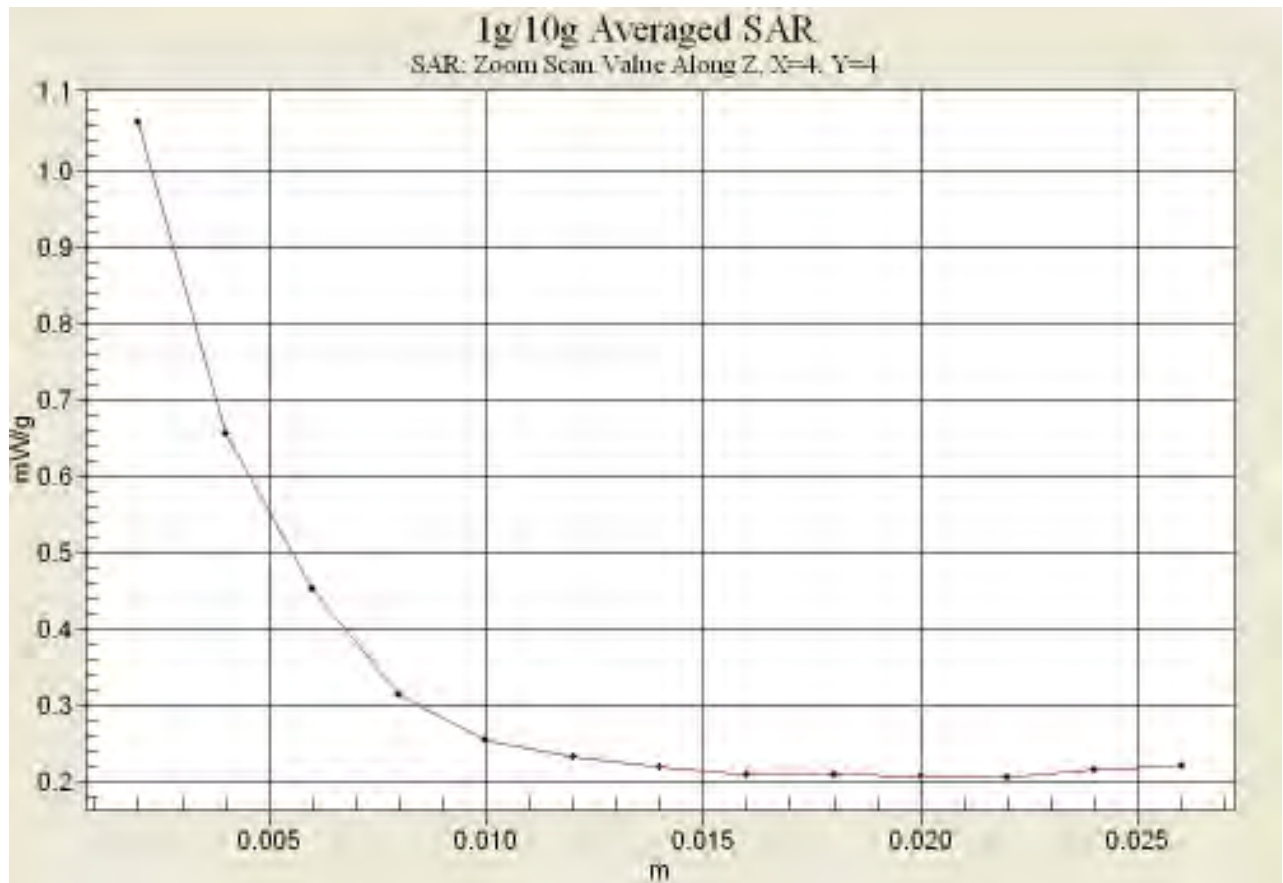
SAR(1 g) = 0.605 mW/g; SAR(10 g) = 0.311 mW/g

Maximum value of SAR (measured) = 1.06 mW/g



0 dB = 1.06mW/g

Z-Scan



Date: 2012-04-03

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Back Screen_11a_5Mbps_CH140_Main ANT.dad

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

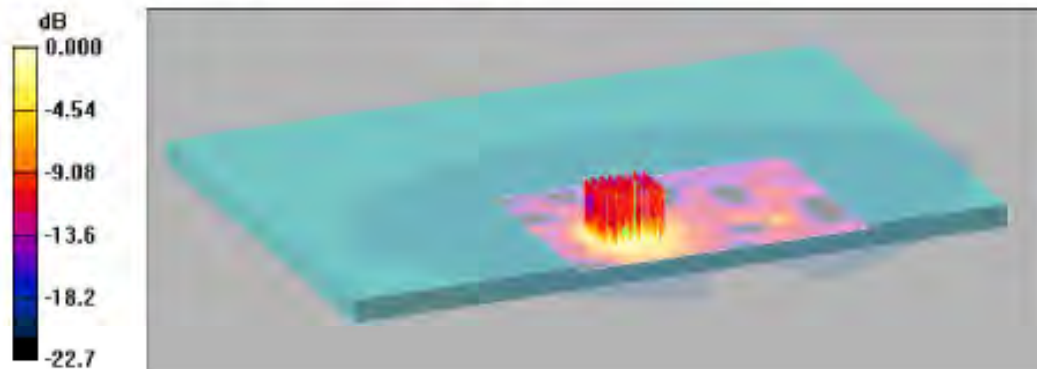
Communication System: WLAN(11a_H or CEPT); Frequency: 5700 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5700$ MHz; $\sigma = 5.65$ mho/m; $\epsilon_r = 47.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.26, 3.26, 3.26); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH140_Back Screen_Main ANT/Area Scan (101x141x1): Measurement
 grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.236 mW/g

WLAN_11a_CH140_Back Screen_Main ANT/Zoom Scan (8x8x13)/Cube 0:
 Measurement grid: dx=4mm, dy=4mm, dz=2mm
 Reference Value = 1.68 V/m; Power Drift = -0.027 dB
 Peak SAR (extrapolated) = 0.497 W/kg
SAR(1 g) = 0.133 mW/g; SAR(10 g) = 0.062 mW/g
 Maximum value of SAR (measured) = 0.226 mW/g



Date: 2012-04-03

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Back Screen_11a_5Mbps_CH136_AUX ANT.dad

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

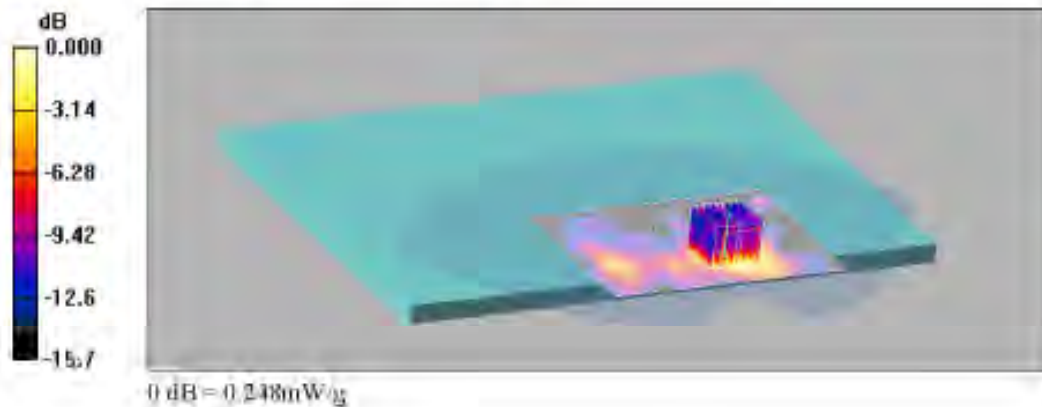
Communication System: WLAN(11a_H or CEPT); Frequency: 5680 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5680$ MHz; $\sigma = 5.68$ mho/m; $\epsilon_r = 47.2$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.26, 3.26, 3.26); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH136_Back Screen_AUX ANT/Area Scan (101x141x1): Measurement
 grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.243 mW/g

WLAN_11a_CH136_Back Screen_AUX ANT/Zoom Scan (8x8x13)/Cube 0:
 Measurement grid: dx=4mm, dy=4mm, dz=2mm
 Reference Value = 1.52 V/m; Power Drift = 0.346 dB
 Peak SAR (extrapolated) = 0.474 W/kg
SAR(1 g) = 0.142 mW/g; SAR(10 g) = 0.067 mW/g
 Maximum value of SAR (measured) = 0.248 mW/g



Date: 2012-04-03

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11n20_CH100_MIMO_ANT.das4

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

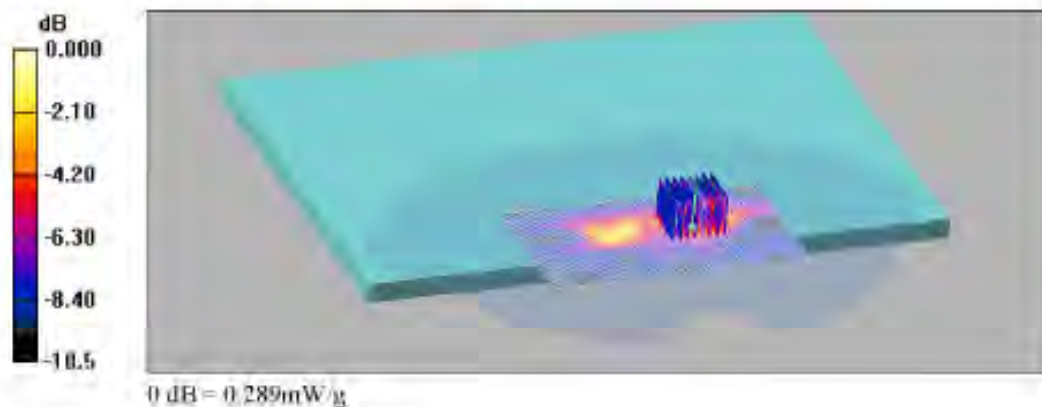
Communication System: WLAN(11a_H or CEPT); Frequency: 5500 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5500$ MHz; $\sigma = 5.43$ mho/m; $\epsilon_r = 47.5$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.48, 3.48, 3.48); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n20_CH100_Base_MIMO ANT/Area Scan (81x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.279 mW/g

WLAN_11n20_CH100_Base_MIMO ANT/Zoom Scan (8x8x13)/Cube 0: Measurement
 grid: dx=4mm, dy=4mm, dz=2mm
 Reference Value = 3.34 V/m; Power Drift = -0.179 dB
 Peak SAR (extrapolated) = 0.675 W/kg
SAR(1 g) = 0.170 mW/g; SAR(10 g) = 0.081 mW/g
 Maximum value of SAR (measured) = 0.289 mW/g



Date: 2012-04-03

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11n40_CH110_MIMO_ANT.dsa4

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

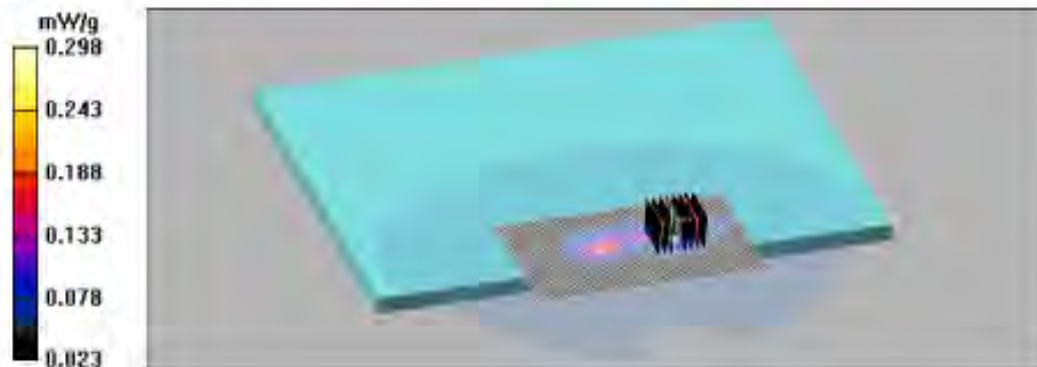
Communication System: WLAN(11a_H or CEPT); Frequency: 5550 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5550$ MHz; $\sigma = 5.48$ mho/m; $\epsilon_r = 47.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.48, 3.48, 3.48); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n40_CH110_Base_MIMO ANT/Area Scan (81x141x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.307 mW/g

WLAN_11n40_CH110_Base_MIMO ANT/Zoom Scan (8x8x13)/Cube 0: Measurement
 grid: dx=4mm, dy=4mm, dz=2mm
 Reference Value = 4.24 V/m; Power Drift = -0.342 dB
 Peak SAR (extrapolated) = 0.672 W/kg
SAR(1 g) = 0.166 mW/g; SAR(10 g) = 0.074 mW/g
 Maximum value of SAR (measured) = 0.298 mW/g



Date: 2012-04-03

Test Laboratory: SGS Korea (Gimpo Laboratory)

File Name: WLAN_Back Screen_11n20_HT8_CH100_MIMO ANT.dat

DUT: 62230ANHMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

Communication System: WLAN(11a_H or CEPT); Frequency: 5500 MHz; Duty Cycle: 1/1

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.43$ mho/m; $\epsilon_r = 47.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.48, 3.48, 3.48); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11n20_CH100_Back Screen_MIMO ANT/Area Scan (81x141x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.052 mW/g

WLAN_11n20_CH100_Back Screen_MIMO ANT/Zoom Scan (8x8x13)/Cube 0:

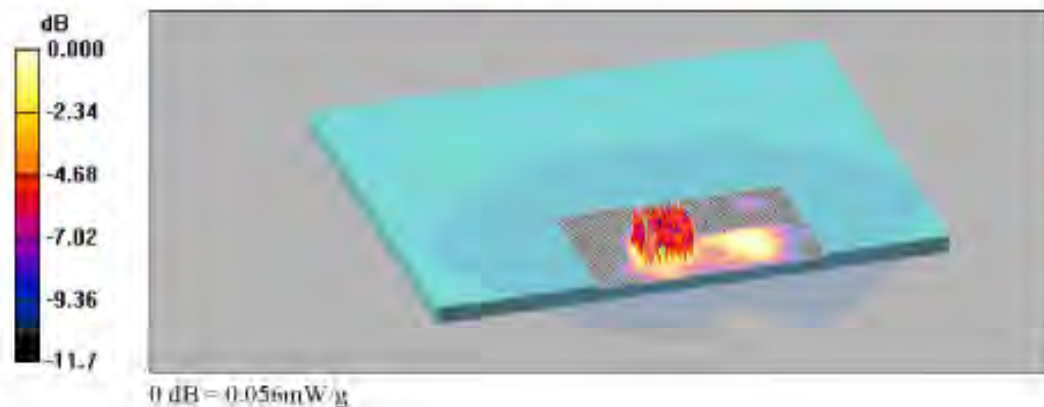
Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.20 V/m; Power Drift = -0.038 dB

Peak SAR (extrapolated) = 0.161 W/kg

SAR(1 g) = 0.038 mW/g; SAR(10 g) = 0.024 mW/g

Maximum value of SAR (measured) = 0.056 mW/g



5.8GHz Body SAR Test

Date: 2012-04-02

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH149_Main_ANT.dat

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN(11a_U-NII Upper); Frequency: 5745 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5745$ MHz; $\sigma = 6.12$ mho/m; $\epsilon_r = 47.7$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.66, 3.66, 3.66); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH149_Base_Main ANT/Area Scan (81x141x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.58 mW/g

WLAN_11a_CH149_Base_Main ANT/Zoom Scan (7x7x12)/Cube 0: Measurement grid:

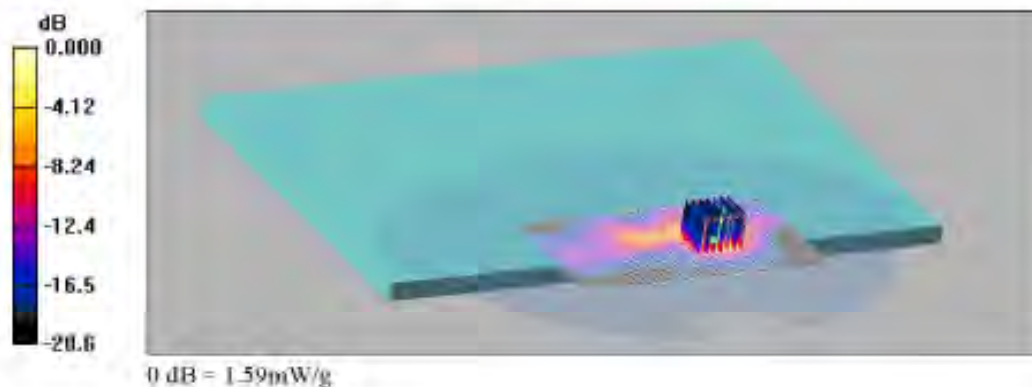
dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.61 V/m; Power Drift = 0.290 dB

Peak SAR (extrapolated) = 3.44 W/kg

SAR(1 g) = 0.783 mW/g; SAR(10 g) = 0.230 mW/g

Maximum value of SAR (measured) = 1.59 mW/g



Date: 2012-04-02

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH157_Main_ANT.dad

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

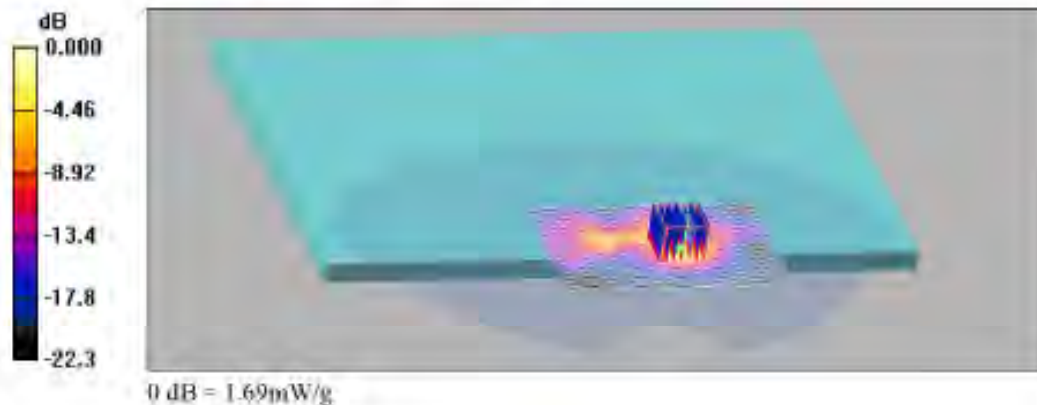
Communication System: WLAN(11a_U-NII Upper); Frequency: 5785 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 6.17 \text{ mho/m}$; $\epsilon_r = 47.6$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.66, 3.66, 3.66); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH157_Base_Main ANT/Area Scan (81x121x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 1.67 mW/g

WLAN_11a_CH157_Base_Main ANT/Zoom Scan (7x7x12)/Cube 0: Measurement grid:
 dx=4mm, dy=4mm, dz=2mm
 Reference Value = 7.18 V/m; Power Drift = -0.058 dB
 Peak SAR (extrapolated) = 4.04 W/kg
SAR(1 g) = 0.846 mW/g; SAR(10 g) = 0.247 mW/g
 Maximum value of SAR (measured) = 1.69 mW/g



Date: 2012-04-02

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH165_Main_ANT.dat

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

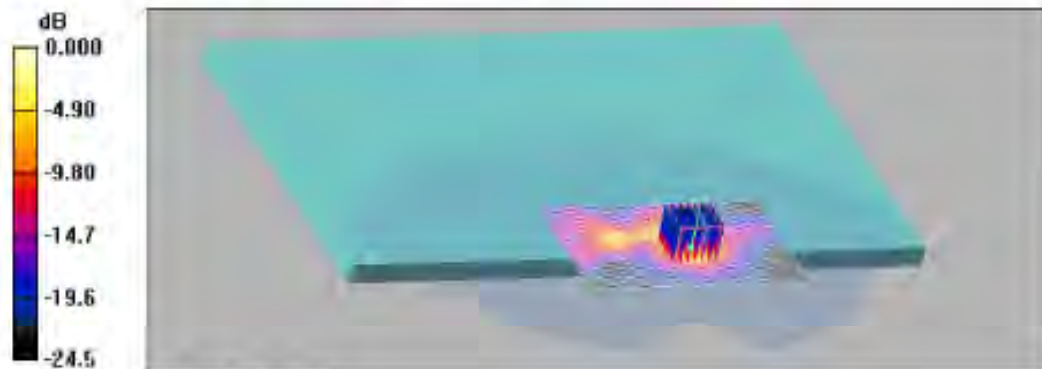
Communication System: WLAN(11a_U-NII Upper); Frequency: 5825 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5825 \text{ MHz}$; $\sigma = 6.22 \text{ mho/m}$; $\epsilon_r = 47.6$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.66, 3.66, 3.66); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH165_Base_Main ANT/Area Scan (81x121x1): Measurement grid:
 dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 1.71 mW/g

WLAN_11a_CH165_Base_Main ANT/Zoom Scan (7x7x12)/Cube 0: Measurement grid:
 dx=4mm, dy=4mm, dz=2mm
 Reference Value = 7.43 V/m; Power Drift = -0.274 dB
 Peak SAR (extrapolated) = 4.97 W/kg
SAR(1 g) = 0.975 mW/g; SAR(10 g) = 0.269 mW/g
 Maximum value of SAR (measured) = 2.03 mW/g



0 dB = 2.03mW/g

Date: 2012-04-02

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH149_AUX_ANT.das

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN(11a_U-NII Upper); Frequency: 5745 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5745 \text{ MHz}$; $\sigma = 6.12 \text{ mho/m}$; $\epsilon_r = 47.7$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.66, 3.66, 3.66); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH149_Base_AUX ANT/Area Scan (81x141x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 2.75 mW/g

WLAN_11a_CH149_Base_AUX ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:

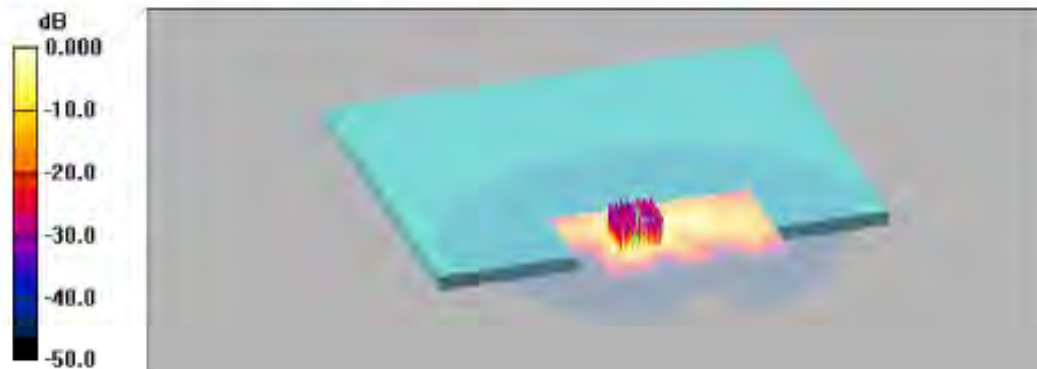
$dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 14.2 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 6.66 W/kg

SAR(1 g) = 1.4 mW/g; SAR(10 g) = 0.391 mW/g

Maximum value of SAR (measured) = 3.10 mW/g



0 dB = 3.10mW/g

Date: 2012-04-02

Test Laboratory: SGS Korea (Gumpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH153_AUX_ANT.dae

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GC200041R
Program Name: WLAN_Body

Communication System: WLAN(11a_U-NII Upper); Frequency: 5765 MHz; Duty Cycle: 1/1
 Medium parameters used: $f = 5765$ MHz; $\sigma = 6.14$ mho/m; $\epsilon_r = 47.7$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.66, 3.66, 3.66); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP_2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH153_Base_AUX ANT/Area Scan (81x141x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 2.36 mW/g

WLAN_11a_CH153_Base_AUX ANT/Zoom Scan (7x7x12)/Cube 0: Measurement grid:

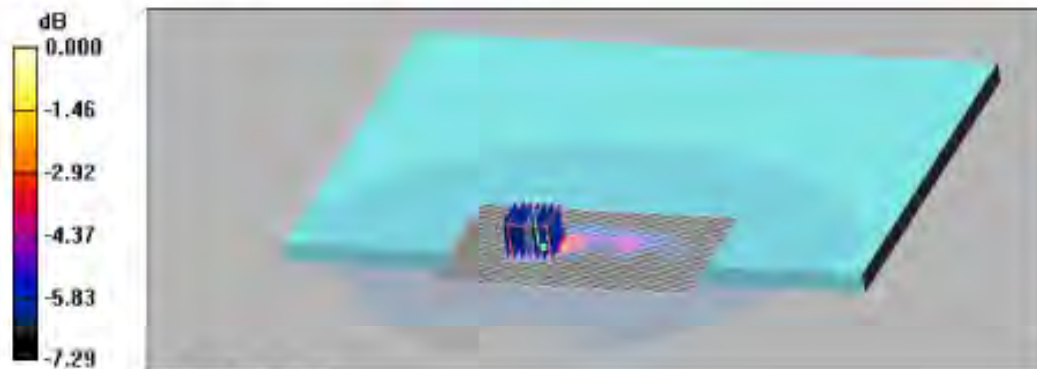
dx=4mm, dy=4mm, dz=2mm

Reference Value = 15.0 V/m; Power Drift = 0.249 dB

Peak SAR (extrapolated) = 5.59 W/kg

SAR(1 g) = 1.41 mW/g; SAR(10 g) = 0.762 mW/g

Maximum value of SAR (measured) = 2.35 mW/g



0 dB = 2.35mW/g

Date: 2012-04-02

Test Laboratory: SGS Korea (Gimpo Laboratory)
 File Name: WLAN_Base_11a_5Mbps_CH161_AUX ANT.das

DUT: 62230ANIMW(NP900X4B); Type: Module(Note PC); Serial: HSP991GCZ00041R
Program Name: WLAN_Body

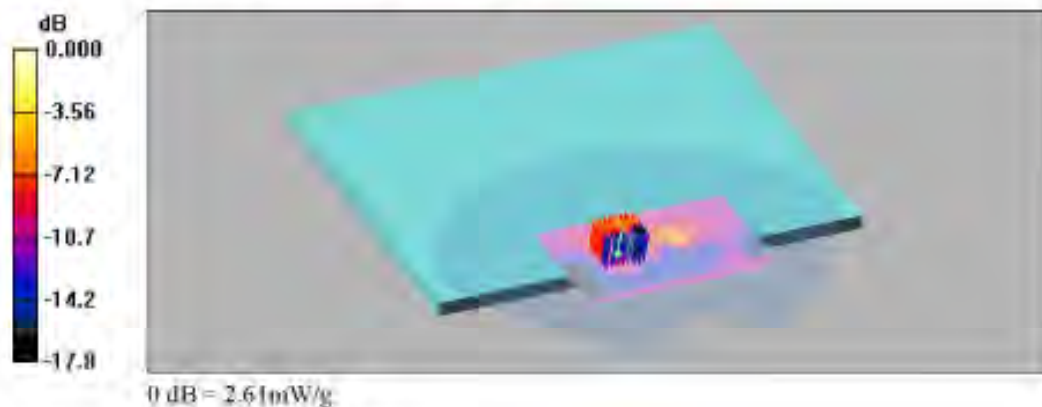
Communication System: WLAN(11a U-NII Upper); Frequency: 5805 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5805 \text{ MHz}$; $\sigma = 6.2 \text{ mho/m}$; $\epsilon_r = 47.6$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3791; ConvF(3.66, 3.66, 3.66); Calibrated: 2011-06-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2012-01-20
- Phantom: SAM with CRP 2011(left); Type: SAM; Serial: TP-1645
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_11a_CH161_Base_AUX ANT/Area Scan (81x141x1): Measurement grid:
 $dx=10\text{mm}$, $dy=10\text{mm}$
 Maximum value of SAR (interpolated) = 2.21 mW/g

WLAN_11a_CH161_Base_AUX ANT/Zoom Scan (8x8x13)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$
 Reference Value = 13.4 V/m; Power Drift = -0.122 dB
 Peak SAR (extrapolated) = 5.36 W/kg
SAR(1 g) = 1.43 mW/g; SAR(10 g) = 0.636 mW/g
 Maximum value of SAR (measured) = 2.61 mW/g



Z-Scan

