Annex C. Test System Plots

1. GSM850, Voice 1UL, CH128 / Head Right Touch

A. Experimental conditions

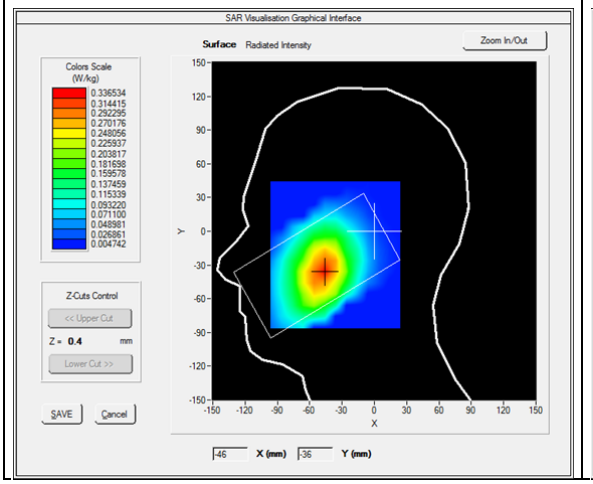
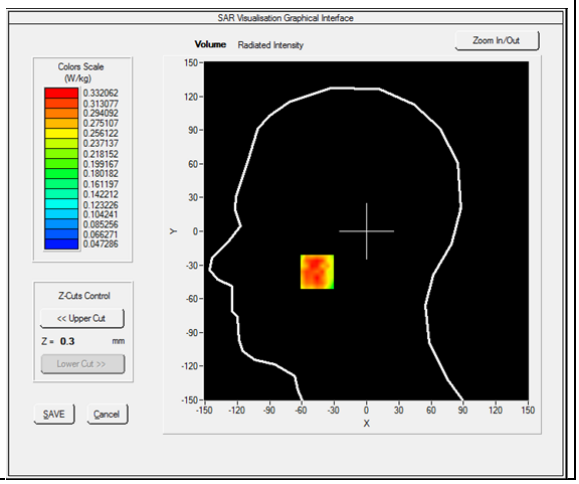
Date	16/09/2014
Area Scan	dx=10mm dy=10mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=10mm dy=10mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	TDMA (Crest factor: 8.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.99	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	824.200000
Relative permittivity (real part)	43.339764
Relative permittivity (imaginary part)	18.564976
Conductivity (S/m)	0.850070

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-46.00, Y=-36.00
SAR Peak: 0.48 W/kg

SAR 10g (W/kg)	0.231925
SAR 1g (W/kg)	0.321923
Power Drift (%)	-3.440000

2. GSM850, Voice 1UL, CH128 / Body Back Face

A. Experimental conditions

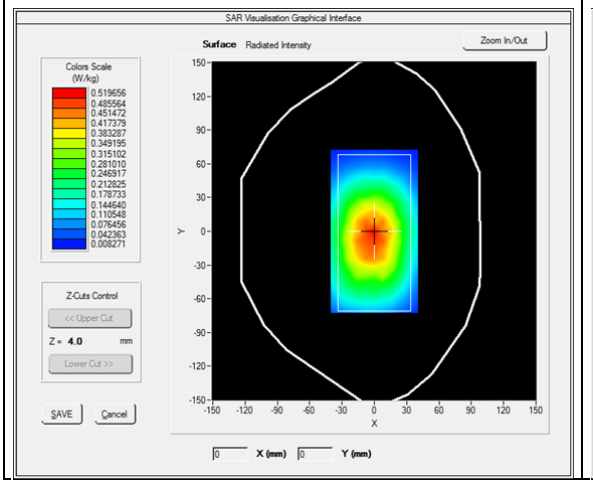
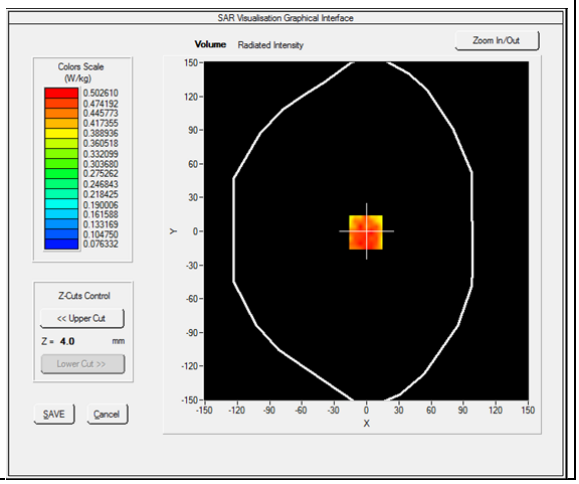
Date	25/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Back Face
Band	GSM850
Channels	Low
Signal	TDMA (Crest factor: 8.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 5.16	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	824.200000
Relative permittivity (real part)	55.940022
Relative permittivity (imaginary part)	20.988636
Conductivity (S/m)	0.961046

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-1.00, Y=-1.00
SAR Peak: 0.8 W/kg

SAR 10g (W/kg)	0.396538
SAR 1g (W/kg)	0.539169
Power Drift (%)	-1.200000

3. GSM1900, Voice 1UL, CH810 / Head Left Touch

A. Experimental conditions

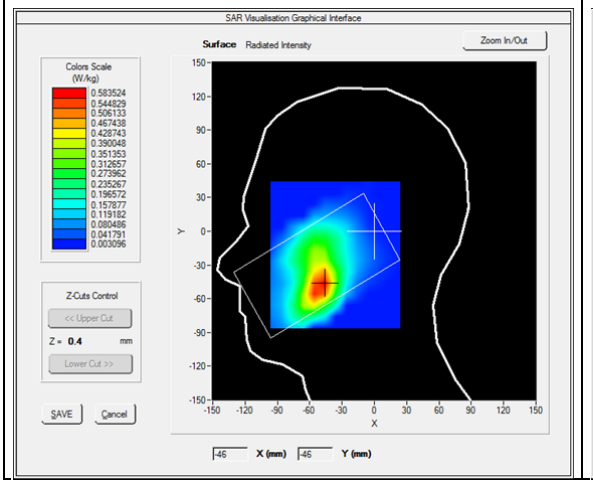
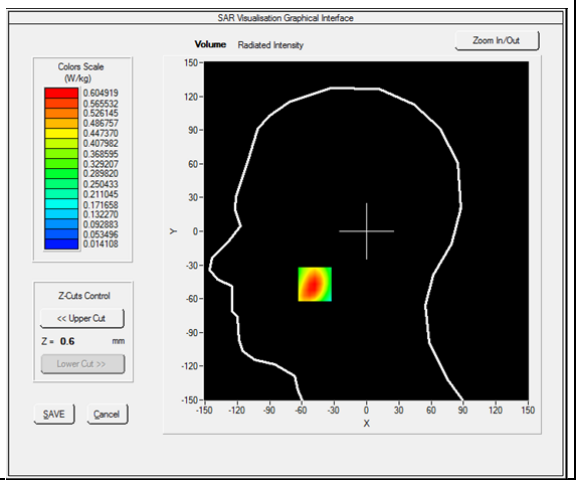
Date	02/09/2014
Area Scan	dx=10mm dy=10mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=10mm dy=10mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	High
Signal	TDMA (Crest factor: 8.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_2713_EP184 / nCF: 4.84	09/2013	09/2014
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1909.800000
Relative permittivity (real part)	38.127214
Relative permittivity (imaginary part)	14.047202
Conductivity (S/m)	1.492440

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-66.00, Y=-66.00
SAR Peak: 0.35 W/kg

SAR 10g (W/kg)	0.113347
SAR 1g (W/kg)	0.226637
Power Drift (%)	-3.020000

4. GSM1900, Voice 1UL, CH810 / Body Front Face

A. Experimental conditions

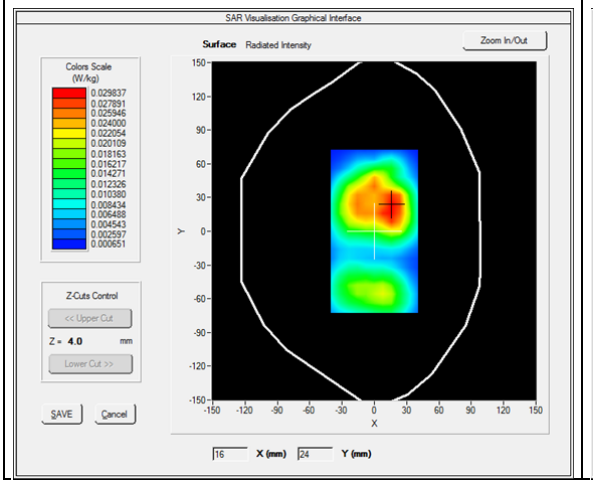
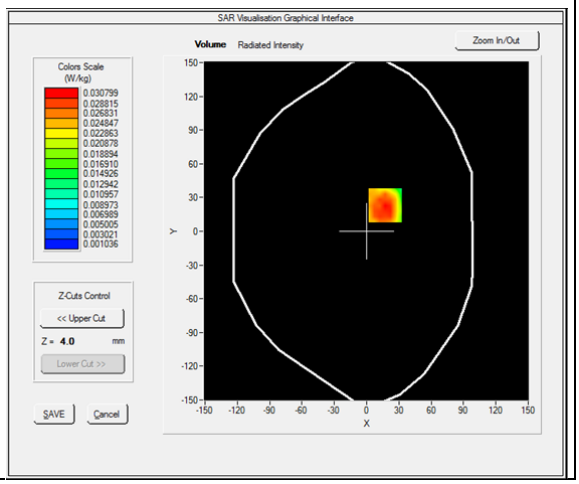
Date	22/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Front Face
Band	GSM1900
Channels	High
Signal	TDMA (Crest factor: 8.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.92	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1909.800000
Relative permittivity (real part)	52.535294
Relative permittivity (imaginary part)	15.307894
Conductivity (S/m)	1.624168

SURFACE SAR	VOLUME SAR
	

Maximum location: X=17.00, Y=23.00
SAR Peak: 0.05 W/kg

SAR 10g (W/kg)	0.019789
SAR 1g (W/kg)	0.031710
Power Drift (%)	-1.630000

5. WCDMA FDD II, 12.2kbps RMC, CH9538 / Head Left Touch

A. Experimental conditions

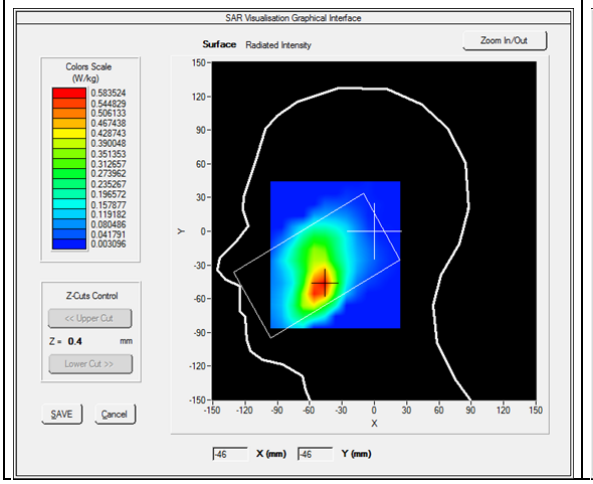
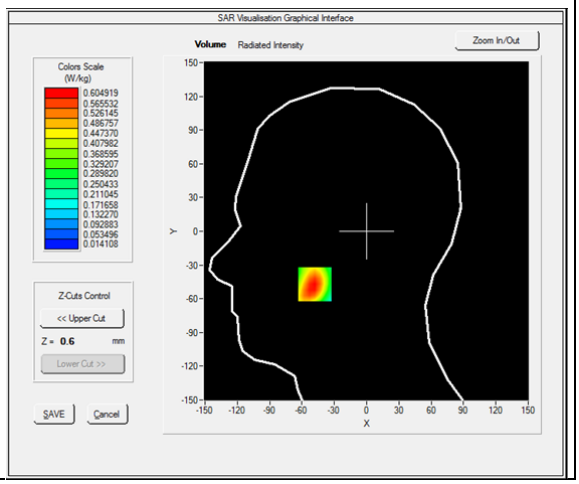
Date	02/09/2014
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	WCDMA FDD II
Channels	High
Signal	WCDMA (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_2713_EP184 / nCF: 4.84	09/2013	09/2014
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1907.600000
Relative permittivity (real part)	38.114168
Relative permittivity (imaginary part)	14.069224
Conductivity (S/m)	1.493048

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-48.00, Y=-47.00
SAR Peak: 0.87 W/kg

SAR 10g (W/kg)	0.336829
SAR 1g (W/kg)	0.574053
Power Drift (%)	-0.120000

6. WCDMA FDD II, 12.2kbps RMC, CH9538 / Body Front Face

A. Experimental conditions

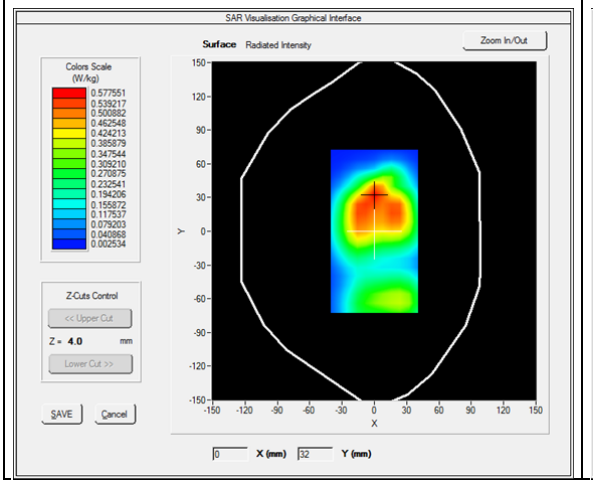
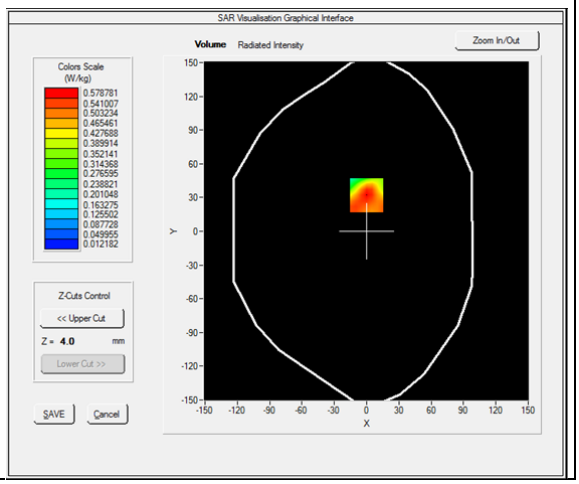
Date	22/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Front Face
Band	WCDMA FDD II
Channels	High
Signal	WCDMA (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.92	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1907.600000
Relative permittivity (real part)	52.526779
Relative permittivity (imaginary part)	15.309210
Conductivity (S/m)	1.621926

SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=32.00
SAR Peak: 0.90 W/kg

SAR 10g (W/kg)	0.326255
SAR 1g (W/kg)	0.572846
Power Drift (%)	-1.020000

7. WCDMA FDD IV, 12.2kbps RMC, CH1413 / Head Left Touch

A. Experimental conditions

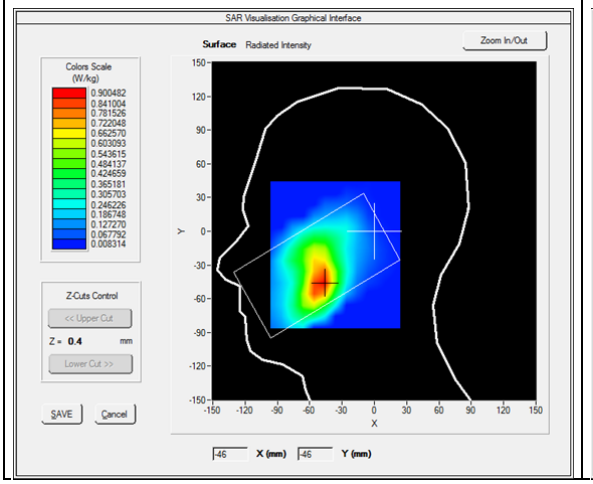
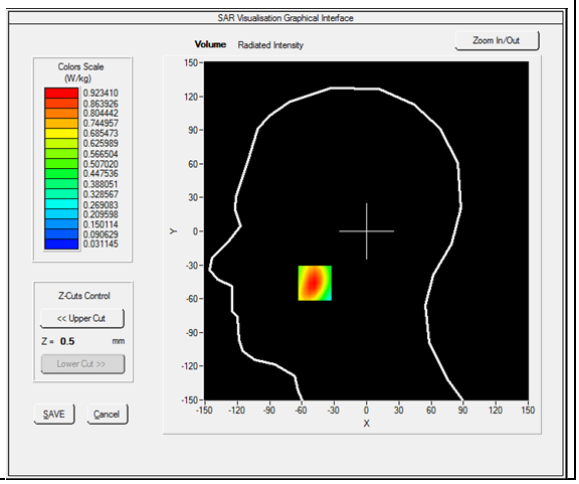
Date	28/08/2014
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	WCDMA FDD IV
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_2713_EP184 / nCF: 4.41	09/2013	09/2014
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1732.600000
Relative permittivity (real part)	37.529999
Relative permittivity (imaginary part)	13.878640
Conductivity (S/m)	1.335434

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-48.00, Y=-46.00
SAR Peak: 1.29 W/kg

SAR 10g (W/kg)	0.537770
SAR 1g (W/kg)	0.875258
Power Drift (%)	-0.810000

8. WCDMA FDD IV, 12.2kbps RMC, CH1312 / Body Back Face

A. Experimental conditions

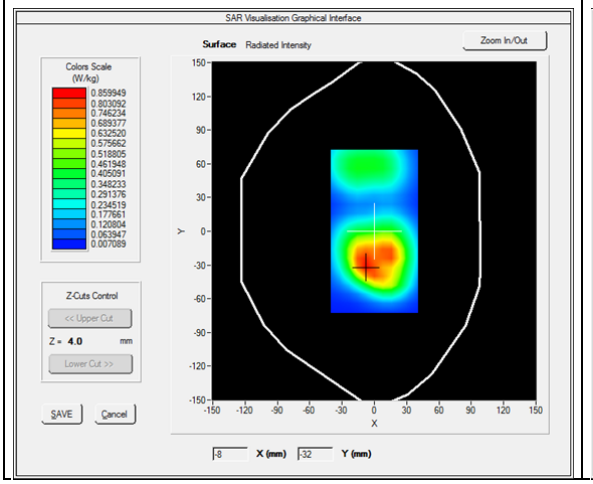
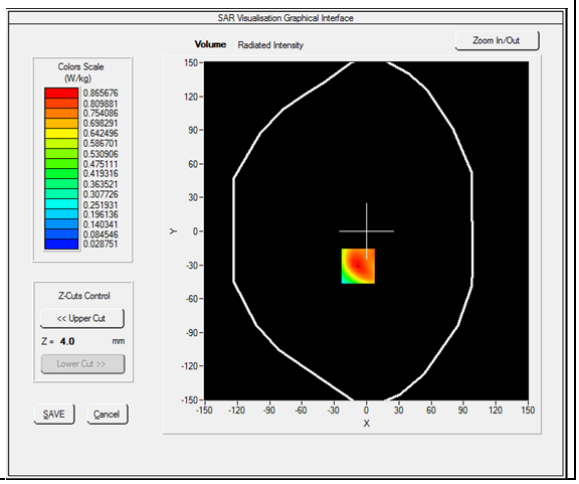
Date	19/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Back Face
Band	WCDMA FDD IV
Channels	Low
Signal	WCDMA (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.42	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1712.400000
Relative permittivity (real part)	53.432224
Relative permittivity (imaginary part)	15.047968
Conductivity (S/m)	1.433519

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-8.00, Y=-31.00
SAR Peak: 1.37 W/kg

SAR 10g (W/kg)	0.554913
SAR 1g (W/kg)	0.902149
Power Drift (%)	-0.280000

9. WCDMA FDD V, 12.2kbps RMC, CH4233 / Head Right Touch

A. Experimental conditions

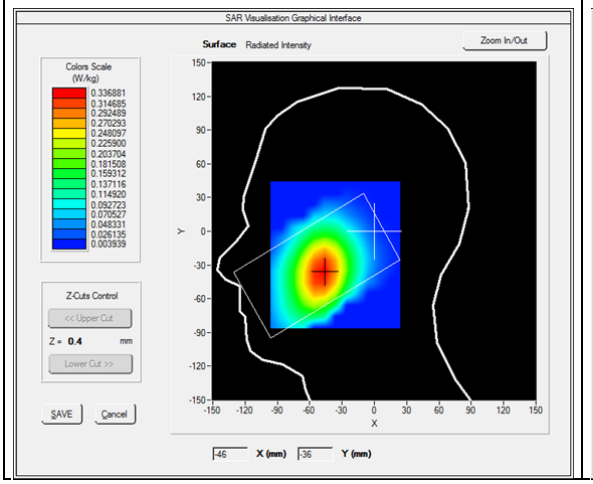
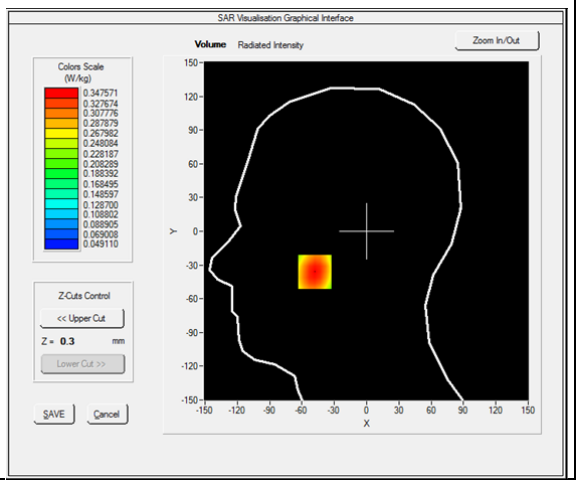
Date	16/09/2014
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	WCDMA FDD V
Channels	High
Signal	WCDMA (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.99	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	846.600000
Relative permittivity (real part)	42.914101
Relative permittivity (imaginary part)	18.810181
Conductivity (S/m)	0.884078

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-48.00, Y=-36.00
SAR Peak: 0.42 W/kg

SAR 10g (W/kg)	0.248770
SAR 1g (W/kg)	0.334003
Power Drift (%)	-0.660000

10. WCDMA FDD V, 12.2kbps RMC, CH4233 / Body Back Face

A. Experimental conditions

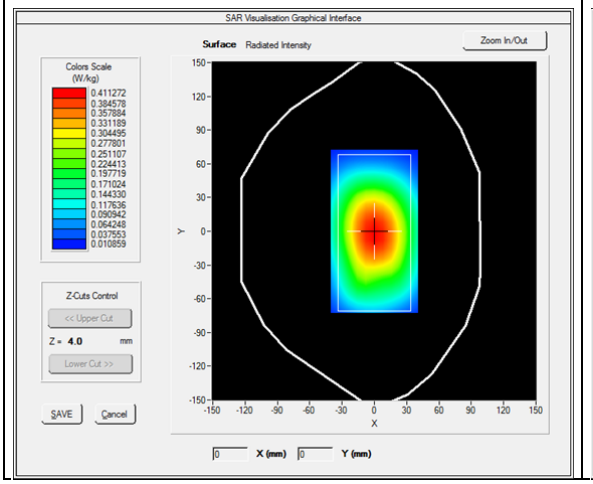
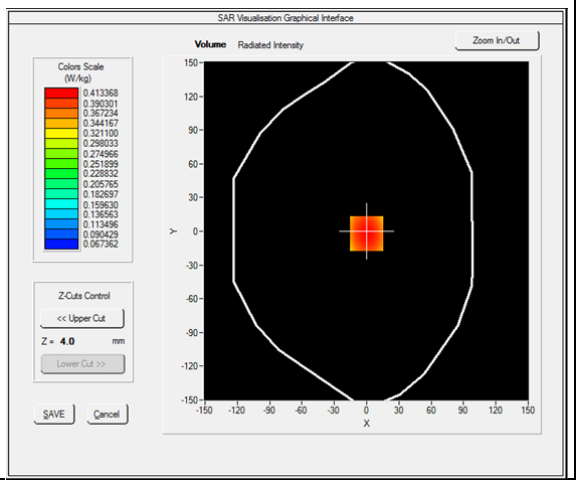
Date	25/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Back Face
Band	WCDMA FDD V
Channels	High
Signal	WCDMA (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 5.16	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	846.600000
Relative permittivity (real part)	55.603802
Relative permittivity (imaginary part)	21.108101
Conductivity (S/m)	0.992081

SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=-2.00
SAR Peak: 0.56 W/kg

SAR 10g (W/kg)	0.341453
SAR 1g (W/kg)	0.450359
Power Drift (%)	0.070000

11. LTE Band 2, 1RB Low @ QPSK - 20MHz, CH18900 / Head Left Touch

A. Experimental conditions

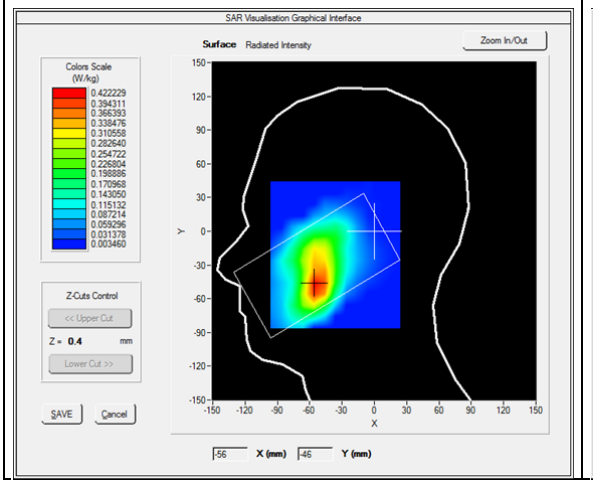
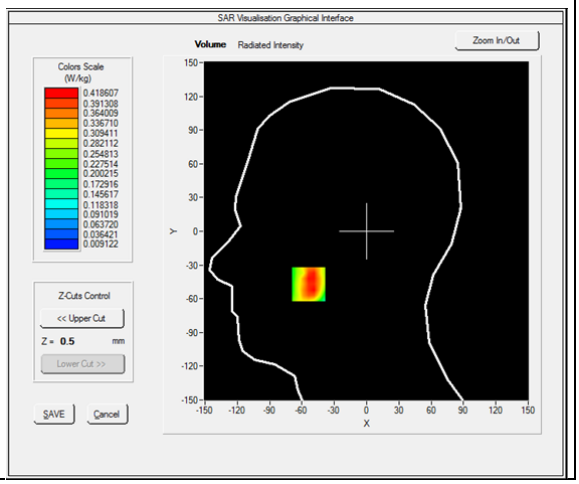
Date	02/09/2014
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	LTE B2
Channels	Middle
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_2713_EP184 / nCF: 4.84	09/2013	09/2014
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.074250
Relative permittivity (imaginary part)	14.184650
Conductivity (S/m)	1.483133

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-54.00, Y=-47.00
SAR Peak: 0.64 W/kg

SAR 10g (W/kg)	0.242825
SAR 1g (W/kg)	0.413748
Power Drift (%)	-1.240000

12. LTE Band 2, 1RB Low @ QPSK - 20MHz, CH18900 / Body Front Face

A. Experimental conditions

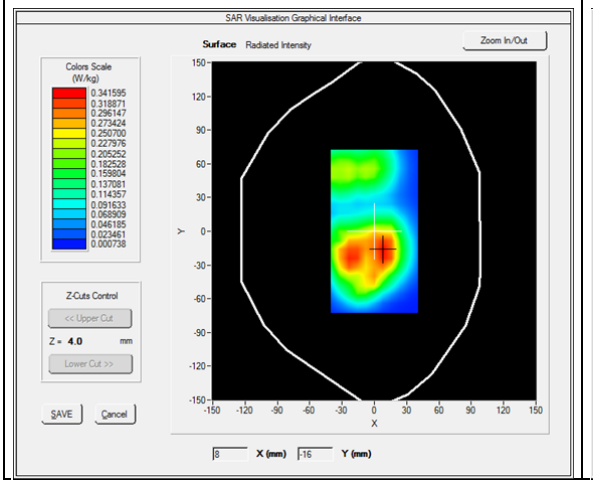
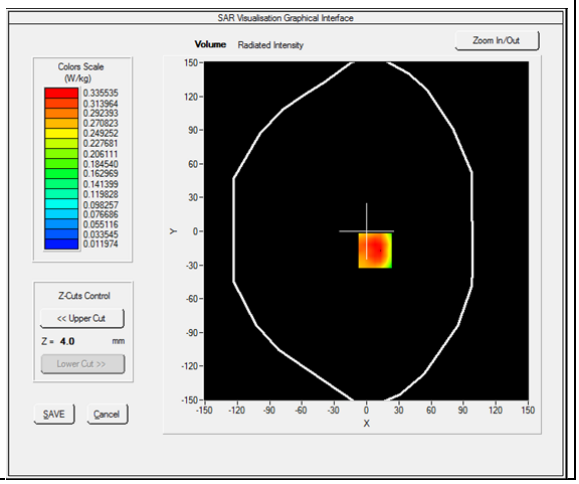
Date	22/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Front Face
Band	LTE B2
Channels	Middle
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.92	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1880.000000
Relative permittivity (real part)	52.580807
Relative permittivity (imaginary part)	15.303575
Conductivity (S/m)	1.597948

SURFACE SAR	VOLUME SAR
	

Maximum location: X=8.00, Y=-17.00
SAR Peak: 0.49 W/kg

SAR 10g (W/kg)	0.219967
SAR 1g (W/kg)	0.348417
Power Drift (%)	-1.780000

13. LTE Band 4, 1RB Low @ QPSK - 20MHz, CH20300 / Head Right Touch

A. Experimental conditions

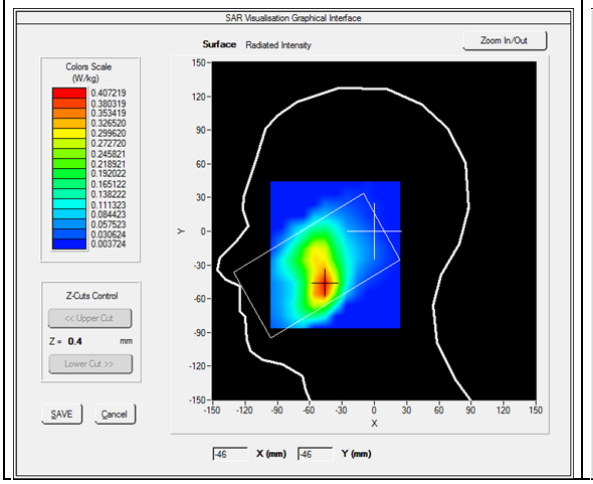
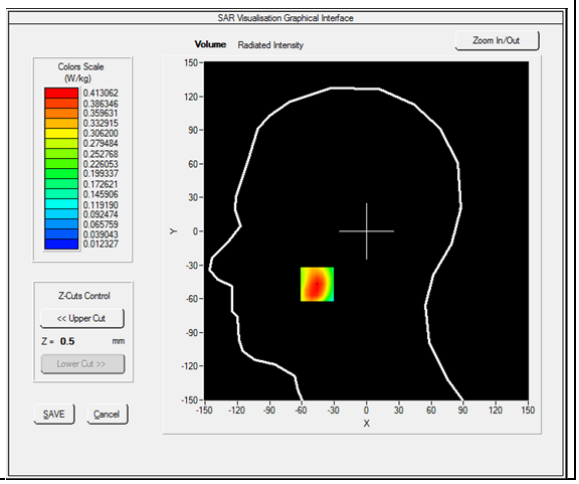
Date	28/08/2014
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	LTE B4
Channels	High
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_2713_EP184 / nCF: 4.41	09/2013	09/2014
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1745.000000
Relative permittivity (real part)	37.492550
Relative permittivity (imaginary part)	13.871075
Conductivity (S/m)	1.346560

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-46.00, Y=-47.00
SAR Peak: 0.60 W/kg

SAR 10g (W/kg)	0.246975
SAR 1g (W/kg)	0.400082
Power Drift (%)	1.630000

14. LTE Band 4, 1RB Low @ QPSK - 20MHz, CH20300 / Body Front Face

A. Experimental conditions

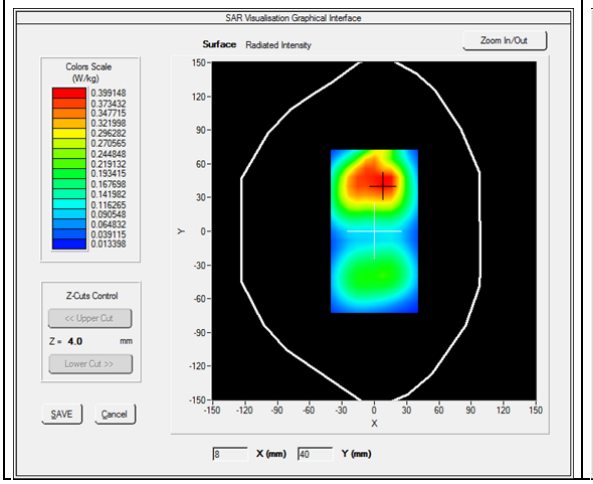
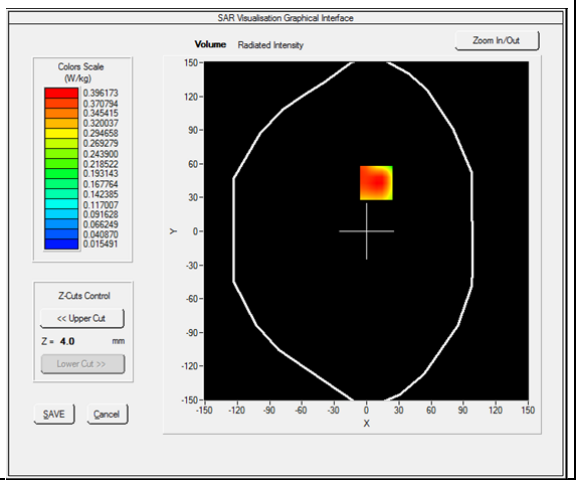
Date	19/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Front Face
Band	LTE B4
Channels	High
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.42	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1745.000000
Relative permittivity (real part)	53.329300
Relative permittivity (imaginary part)	15.234150
Conductivity (S/m)	1.478895

SURFACE SAR	VOLUME SAR
	

Maximum location: X=9.00, Y=43.00
SAR Peak: 0.60 W/kg

SAR 10g (W/kg)	0.261145
SAR 1g (W/kg)	0.403218
Power Drift (%)	-0.850000

15. LTE Band 5, 1RB Low @ QPSK - 10MHz, CH20450 / Head Right Touch

A. Experimental conditions

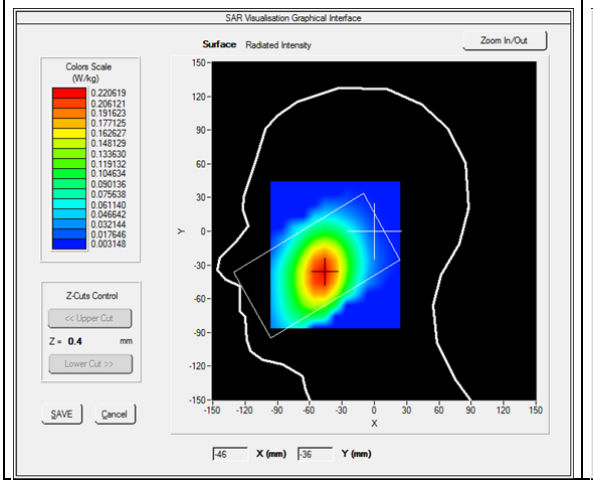
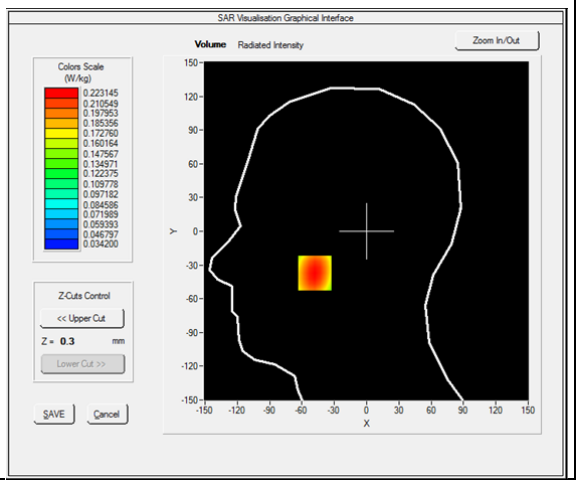
Date	16/09/2014
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	LTE B5
Channels	Low
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.99	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	829.00000
Relative permittivity (real part)	43.210500
Relative permittivity (imaginary part)	18.646000
Conductivity (S/m)	0.859927

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-48.00, Y=-37.00
SAR Peak: 0.27 W/kg

SAR 10g (W/kg)	0.163781
SAR 1g (W/kg)	0.215078
Power Drift (%)	0.460000

16. LTE Band 5, 1RB Low @ QPSK - 10MHz, CH20450 / Body Back Face

A. Experimental conditions

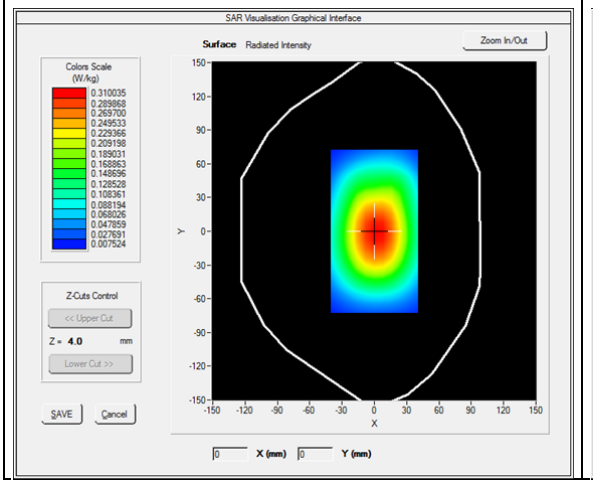
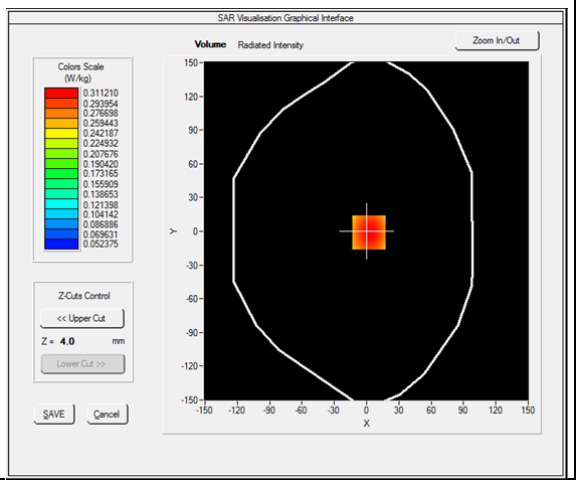
Date	25/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Back Face
Band	LTE B5
Channels	Low
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 5.16	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	829.000000
Relative permittivity (real part)	55.829060
Relative permittivity (imaginary part)	21.010700
Conductivity (S/m)	0.968981

SURFACE SAR	VOLUME SAR
	

Maximum location: X=2.00, Y=-1.00
SAR Peak: 0.42 W/kg

SAR 10g (W/kg)	0.257943
SAR 1g (W/kg)	0.340039
Power Drift (%)	-1.320000

17. LTE Band 7, 1RB Low @ QPSK - 20MHz, CH21350 / Head Right Touch

A. Experimental conditions

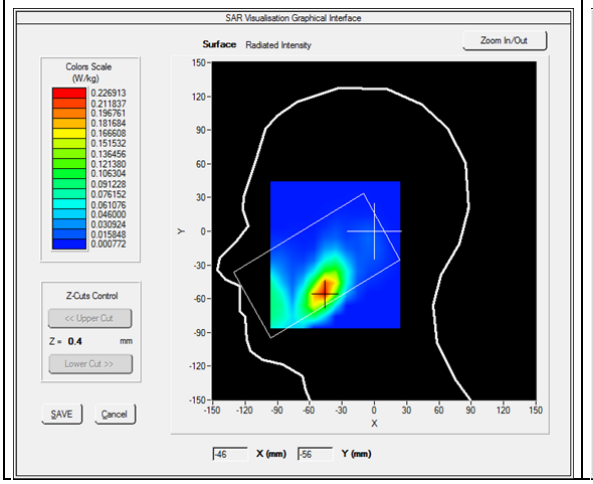
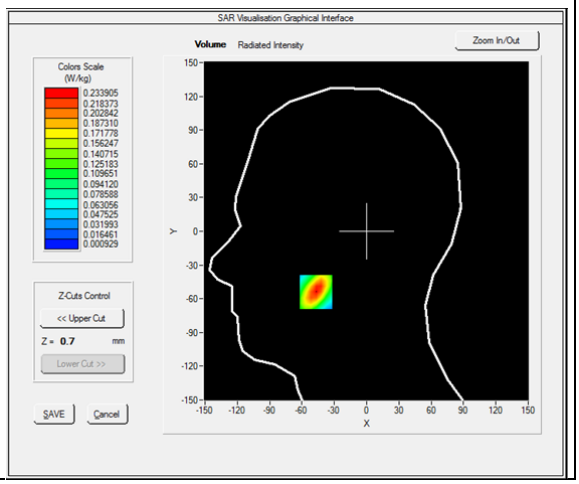
Date	18/09/2014
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	LTE B7
Channels	High
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.10	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	2560.000000
Relative permittivity (real part)	38.463100
Relative permittivity (imaginary part)	13.894200
Conductivity (S/m)	1.978759

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-47.00, Y=-54.00
SAR Peak: 0.38 W/kg

SAR 10g (W/kg)	0.108943
SAR 1g (W/kg)	0.221066
Power Drift (%)	1.230000

18. LTE Band 7, 1RB Low @ QPSK - 20MHz, CH21300 / Body Bottom Edge

A. Experimental conditions

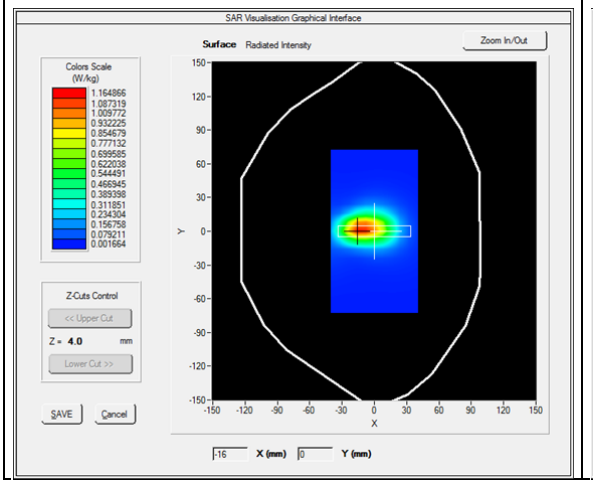
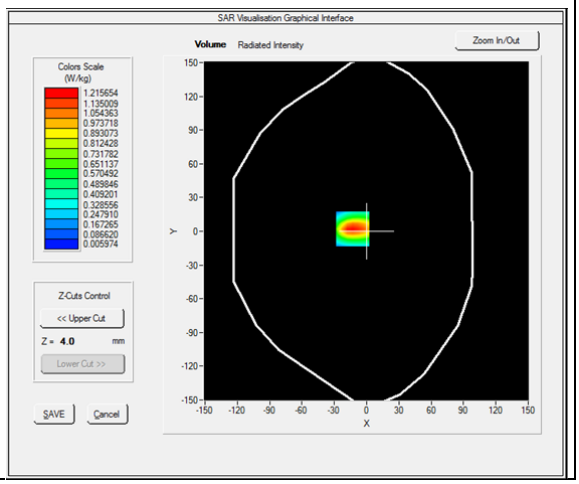
Date	26/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Bottom Edge
Band	LTE B7
Channels	High
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.18	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	2560.000000
Relative permittivity (real part)	51.438000
Relative permittivity (imaginary part)	14.846200
Conductivity (S/m)	2.114339

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-13.00, Y=2.00
SAR Peak: 2.04 W/kg

SAR 10g (W/kg)	0.578908
SAR 1g (W/kg)	1.181987
Power Drift (%)	-0.490000

19. LTE Band 13, 1RB Low @ QPSK - 10MHz, CH23230 / Head Right Touch

A. Experimental conditions

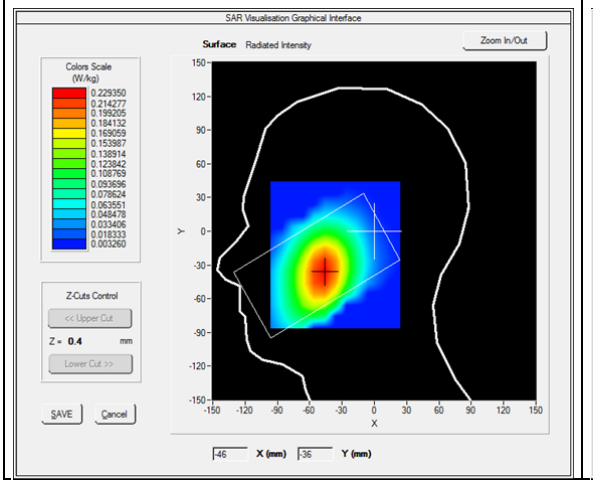
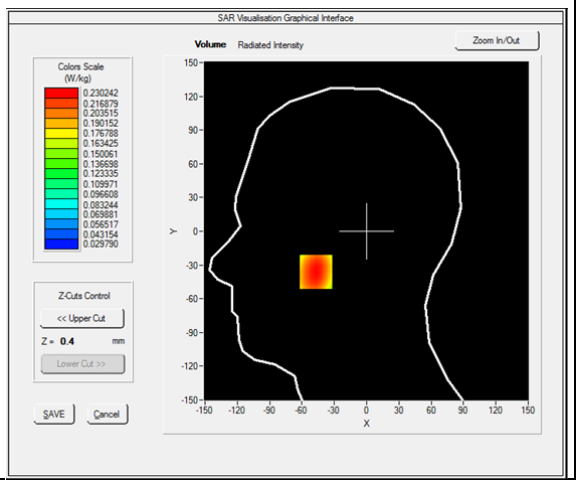
Date	17/09/2014
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	LTE B13
Channels	Middle
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.71	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	782.000000
Relative permittivity (real part)	41.809100
Relative permittivity (imaginary part)	21.796500
Conductivity (S/m)	0.948235

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-47.00, Y=-36.00
SAR Peak: 0.28 W/kg

SAR 10g (W/kg)	0.169657
SAR 1g (W/kg)	0.230490
Power Drift (%)	-0.190000

20. LTE Band 13, 1RB Low @ QPSK - 10MHz, CH23230 / Body Back Face

A. Experimental conditions

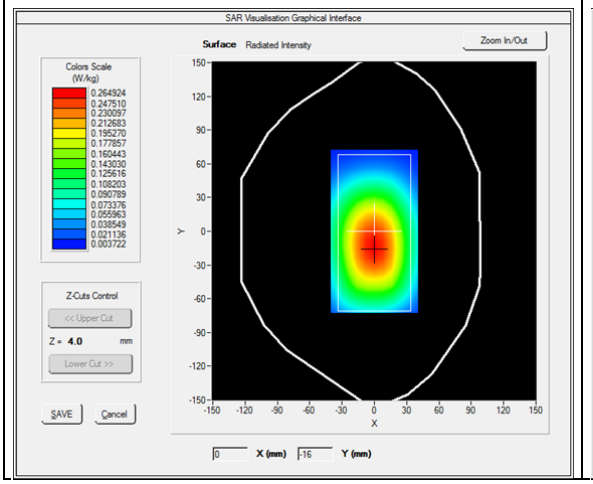
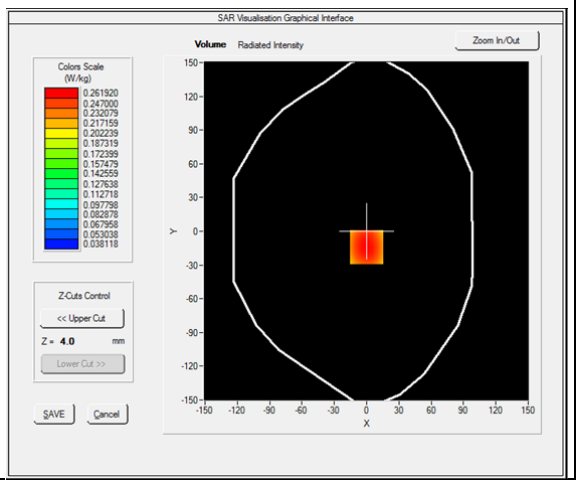
Date	24/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Back Face
Band	LTE B13
Channels	Middle
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.86	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	782.000000
Relative permittivity (real part)	58.031800
Relative permittivity (imaginary part)	23.953280
Conductivity (S/m)	1.042054

SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=-14.00
SAR Peak: 0.37 W/kg

SAR 10g (W/kg)	0.228420
SAR 1g (W/kg)	0.306555
Power Drift (%)	-1.130000

21. LTE Band 17, 1RB Low @ QPSK - 10MHz, CH23780 / Head Right Touch

A. Experimental conditions

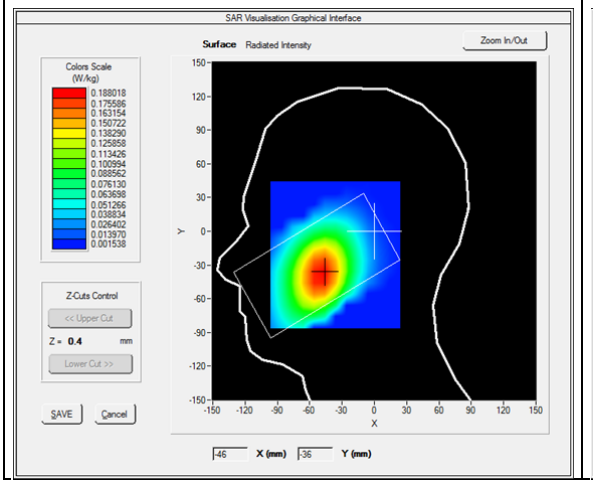
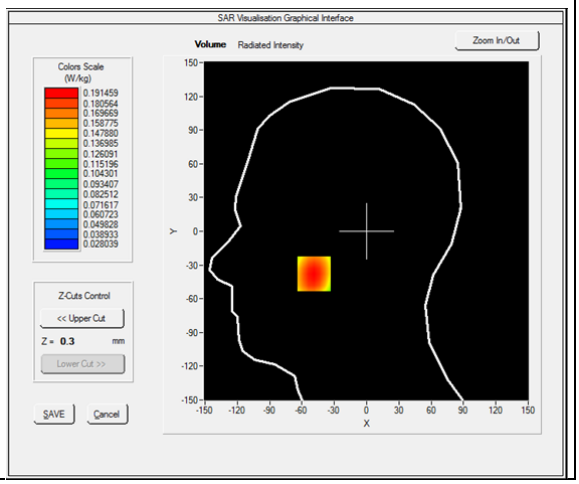
Date	17/09/2014
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	LTE B17
Channels	Low
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.71	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	709.000000
Relative permittivity (real part)	42.773810
Relative permittivity (imaginary part)	22.110240
Conductivity (S/m)	0.872084

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-49.00, Y=-38.00
SAR Peak: 0.23 W/kg

SAR 10g (W/kg)	0.139714
SAR 1g (W/kg)	0.184458
Power Drift (%)	-0.150000

22. LTE Band 17, 1RB Low @ QPSK - 10MHz, CH23780 / Body Back Face

A. Experimental conditions

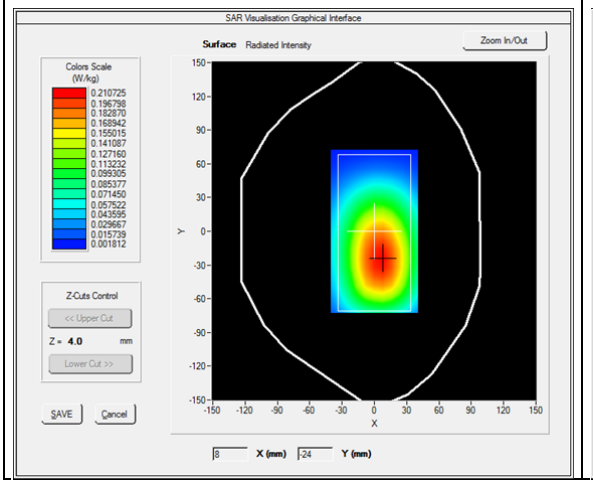
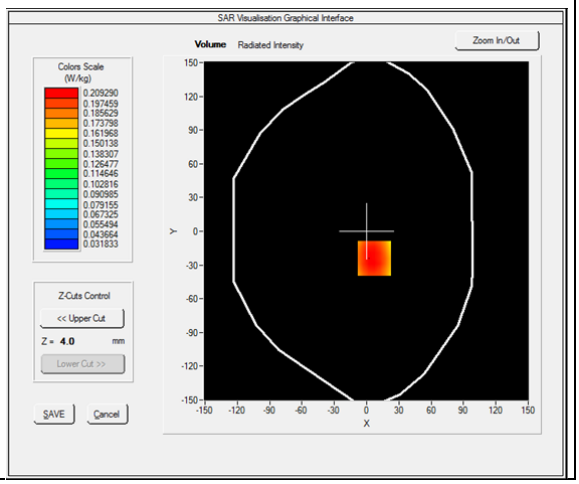
Date	24/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Back Face
Band	LTE B17
Channels	Low
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.86	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	709.000000
Relative permittivity (real part)	58.653560
Relative permittivity (imaginary part)	24.891220
Conductivity (S/m)	0.981769

SURFACE SAR	VOLUME SAR
	

Maximum location: X=7.00, Y=-24.00
SAR Peak: 0.27 W/kg

SAR 10g (W/kg)	0.163610
SAR 1g (W/kg)	0.217752
Power Drift (%)	-1.530000

23. LTE Band 25, 1RB Low @ QPSK - 20MHz, CH26365 / Head Left Touch

A. Experimental conditions

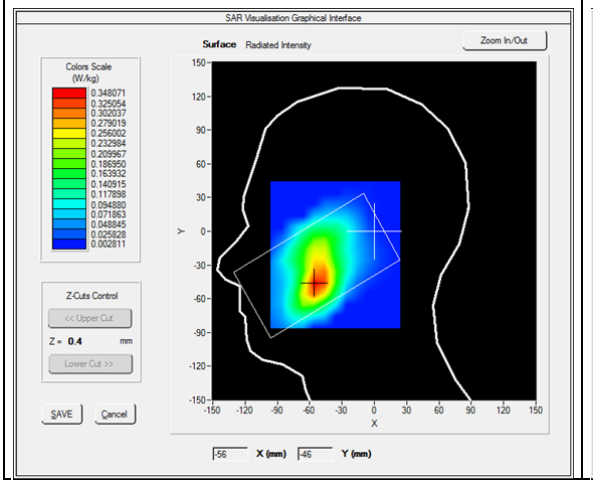
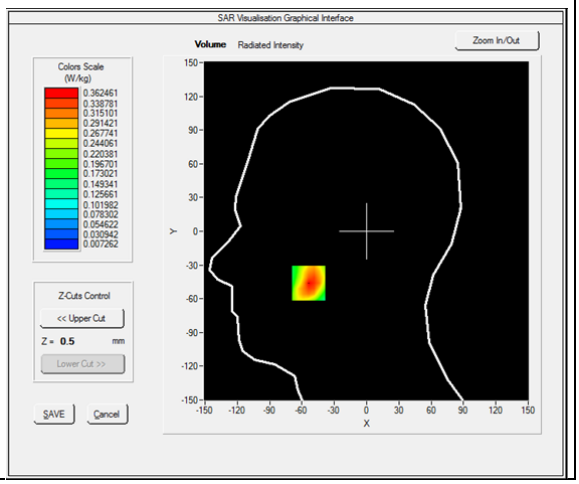
Date	02/09/2014
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	LTE B25
Channels	Middle
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_2713_EP184 / nCF: 4.84	09/2013	09/2014
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1882.500000
Relative permittivity (real part)	38.071300
Relative permittivity (imaginary part)	14.176950
Conductivity (S/m)	1.484693

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-54.00, Y=-46.00
SAR Peak: 0.53 W/kg

SAR 10g (W/kg)	0.207752
SAR 1g (W/kg)	0.351919
Power Drift (%)	-0.540000

24. LTE Band 25, 1RB Low @ QPSK - 20MHz, CH26365 / Body Front Face

A. Experimental conditions

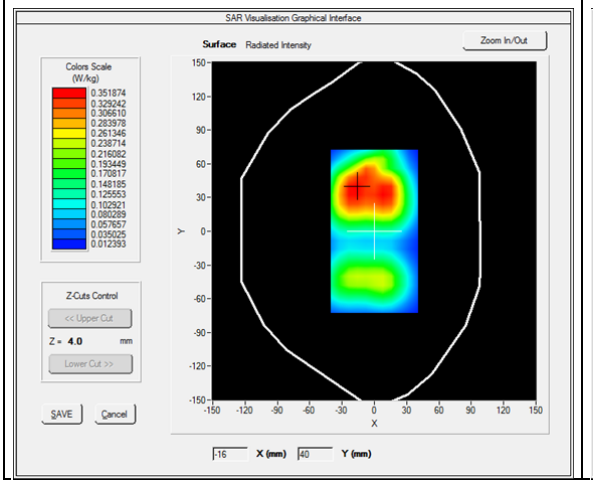
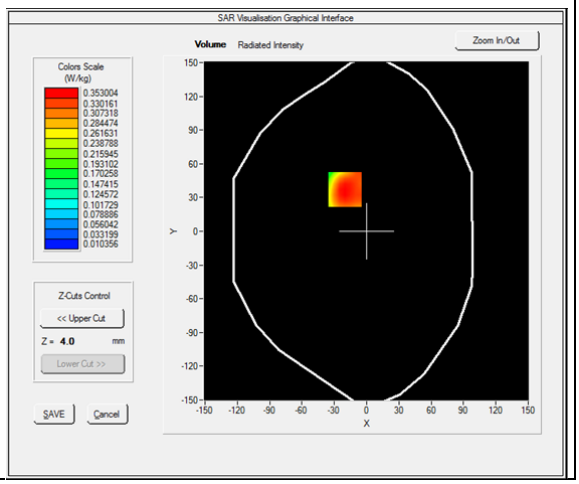
Date	22/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Front Face
Band	LTE B25
Channels	Middle
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.92	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1882.500000
Relative permittivity (real part)	52.556438
Relative permittivity (imaginary part)	15.307660
Conductivity (S/m)	1.600501

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-22.00, Y=37.00
SAR Peak: 0.55 W/kg

SAR 10g (W/kg)	0.235669
SAR 1g (W/kg)	0.369657
Power Drift (%)	-0.890000

25. LTE Band 26, 1RB Low @ QPSK - 15MHz, CH26965 / Head Left Touch

A. Experimental conditions

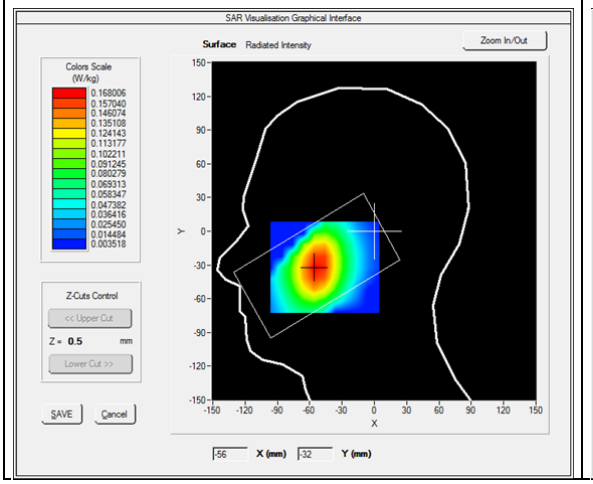
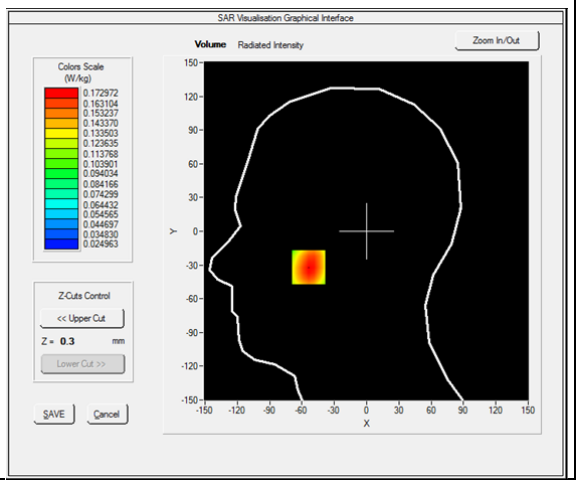
Date	16/09/2014
Area Scan	sam_direct_droit2_surf8mm.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsam_direct_droit2_surf8mm.txt, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	LTE B26
Channels	High
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.99	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	841.500000
Relative permittivity (real part)	42.982150
Relative permittivity (imaginary part)	18.770080
Conductivity (S/m)	0.878701

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-54.00, Y=-32.00
SAR Peak: 0.21 W/kg

SAR 10g (W/kg)	0.123487
SAR 1g (W/kg)	0.167010
Power Drift (%)	0.970000

26. LTE Band 26, 1RB Low @ QPSK - 15MHz, CH26965 / Body Back Face

A. Experimental conditions

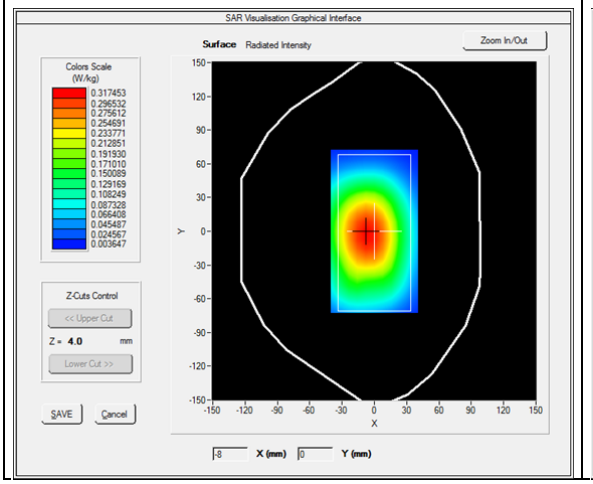
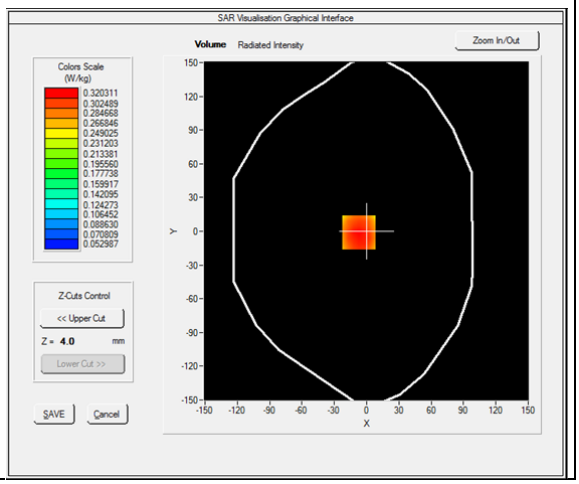
Date	25/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Back Face
Band	LTE B26
Channels	High
Signal	LTE (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 5.16	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	841.500000
Relative permittivity (real part)	55.647830
Relative permittivity (imaginary part)	21.125600
Conductivity (S/m)	0.988967

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-7.00, Y=-1.00
SAR Peak: 0.39 W/kg

SAR 10g (W/kg)	0.232884
SAR 1g (W/kg)	0.311111
Power Drift (%)	-0.120000

27. 2.4GHz - 802.11b, CH11 - Head Right Touch

Test Laboratory: Intel WRF Lab; Date/Time: 8/27/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

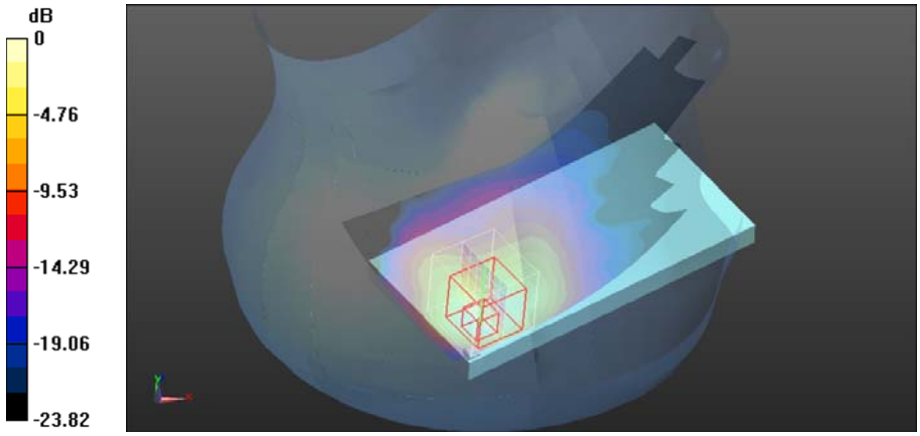
Communication System: UID 0, 802.11 (0); Communication System Band: 2.4GHz; Frequency: 2462 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 2462 MHz; σ = 1.889 S/m; ε_r = 37.661; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(6.93, 6.93, 6.93); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD;
- DASY52 52.8.8(1222);

Head Right 2400MHz/802.11b, 1Mbps, CH 11, Right Touch/Area Scan 2 (181x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.17 W/kg

Head Right 2400MHz/802.11b, 1Mbps, CH 11, Right Touch/Zoom Scan 2 (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.68 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 2.23 W/kg
SAR(1 g) = 0.955 W/kg; SAR(10 g) = 0.441 W/kg (SAR corrected for target medium)
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.07 W/kg



0 dB = 1.07 W/kg = 0.29 dBW/kg

28. 2.4GHz - 802.11b, CH1 - Body Front Face

Test Laboratory: Intel WRF Lab; Date/Time: 8/27/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

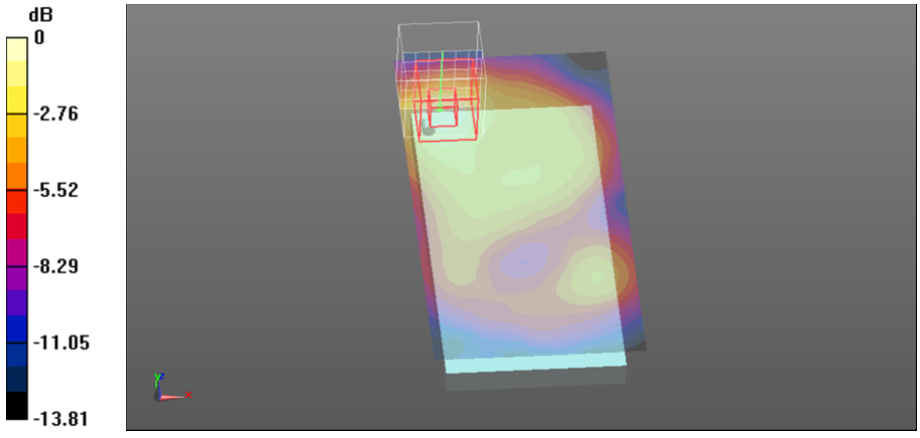
Communication System: UID 0, 802.11 (0); Communication System Band: 2.4GHz; Frequency: 2412 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.855 S/m; ε_r = 50.431; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(7.52, 7.52, 7.52); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002BA;
- DASY52 52.8.8(1222);

802.11b Body 2400MHz/802.11b, 1Mbps, CH 1, Front Face/Area Scan (191x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.177 W/kg

802.11b Body 2400MHz/802.11b, 1Mbps, CH 1, Front Face/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.492 V/m; Power Drift = 0.34 dB
Peak SAR (extrapolated) = 0.275 W/kg
SAR(1 g) = 0.159 W/kg; SAR(10 g) = 0.088 W/kg (SAR corrected for target medium)
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.174 W/kg



0 dB = 0.174 W/kg = -7.59 dBW/kg

29. 5.2GHz - 802.11a, CH48 - Head Right Tilt

Test Laboratory: Intel WRF Lab; Date/Time: 8/12/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

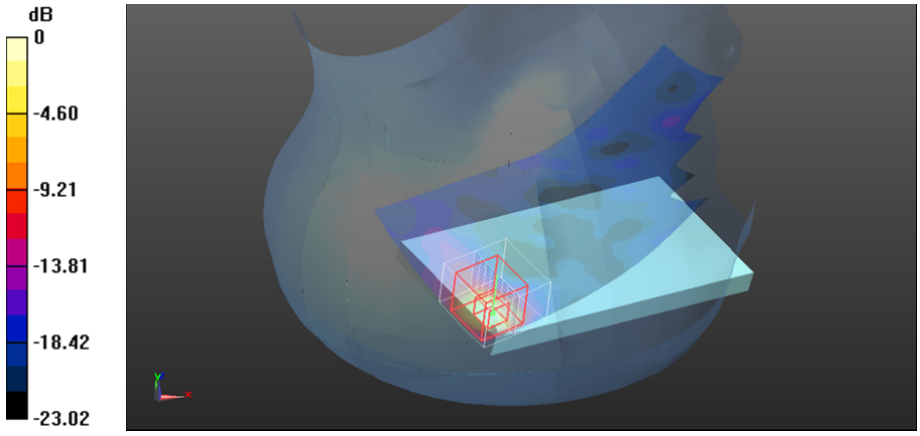
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5240 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 5240 MHz; σ = 4.41 S/m; ε_r = 36.566; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(4.89, 4.89, 4.89); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD;
- DASY52 52.8.8(1222);

Head Right/802.11a, 6Mbps, CH 48, Right Tilt/Area Scan (181x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.20 W/kg

Head Right/802.11a, 6Mbps, CH 48, Right Tilt/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 4.327 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 2.75 W/kg
SAR(1 g) = 0.621 W/kg; SAR(10 g) = 0.165 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.37 W/kg



0 dB = 1.37 W/kg = 1.37 dBW/kg

30. 5.2GHz - 802.11a, CH48 - Body Top Edge

Test Laboratory: Intel WRF Lab; Date/Time: 8/21/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

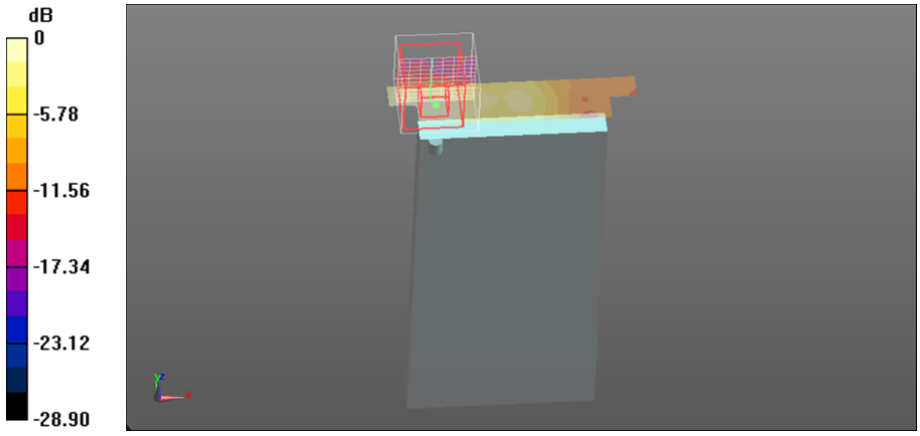
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5240 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 5240 MHz; σ = 5.503 S/m; ε_r = 48.443; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(4.4, 4.4, 4.4); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Fix Surface), Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002BA;
- DASY52 52.8.8(1222);

802.11a Body 5000MHz/802.11a, 6Mbps, CH 48, Top edge/Area Scan (81x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.272 W/kg

802.11a Body 5000MHz/802.11a, 6Mbps, CH 48, Top edge/Zoom Scan (8x8x12)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 7.098 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.441 W/kg
SAR(1 g) = 0.127 W/kg; SAR(10 g) = 0.052 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.224 W/kg



0 dB = 0.224 W/kg = -6.50 dBW/kg

31. 5.3GHz - 802.11a, CH64 - Head Right Tilt

Test Laboratory: Intel WRF Lab; Date/Time: 8/12/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

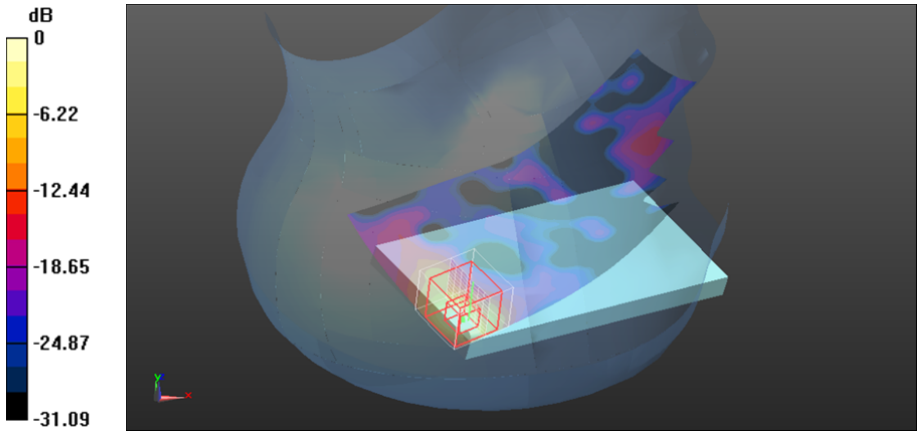
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5320 MHz; Communication System PAR: 0 dB
Medium parameters used: f = 5320 MHz; σ = 4.504 S/m; ε_r = 36.835; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(4.63, 4.63, 4.63); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD;
- DASY52 52.8.8(1222);

Head Right reported SAR 26_08_14/802.11a, 6Mbps, CH 64, Right Tilt 6/Area Scan (181x101x1):
Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.29 W/kg

Head Right reported SAR 26_08_14/802.11a, 6Mbps, CH 64, Right Tilt 6/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 19.53 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 5.09 W/kg
SAR(1 g) = 0.678 W/kg; SAR(10 g) = 0.167 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.40 W/kg



0 dB = 1.40 W/kg = 1.46 dBW/kg

32. 5.3GHz - 802.11a, CH60 - Body Top Edge

Test Laboratory: Intel WRF Lab; Date/Time: 8/21/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

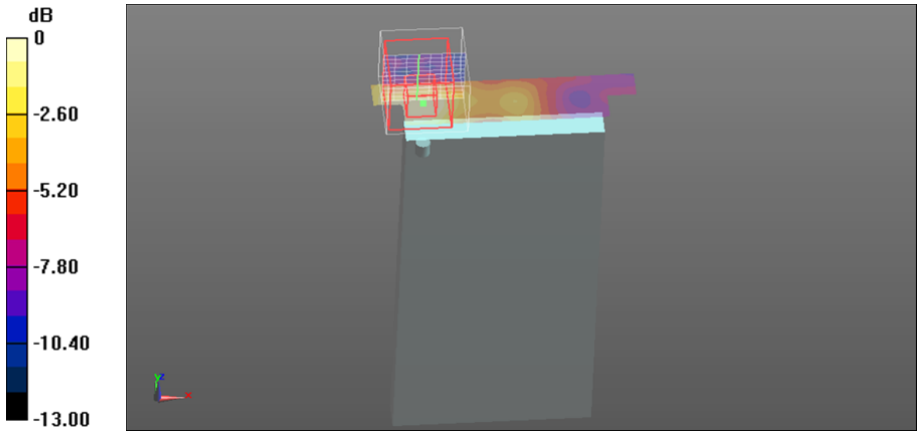
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5300 MHz; Communication System PAR: 0 dB
Medium parameters used: f = 5300 MHz; σ = 5.551 S/m; ε_r = 48.192; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(4.2, 4.2, 4.2); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Fix Surface), Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002BA;
- DASY52 52.8.8(1222);

802.11a Body 5000MHz/802.11a, 6Mbps, CH 60, Top edge/Area Scan 2 (91x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.316 W/kg

802.11a Body 5000MHz/802.11a, 6Mbps, CH 60, Top edge/Zoom Scan (8x8x12)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 7.611 V/m; Power Drift = 0.34 dB
Peak SAR (extrapolated) = 0.570 W/kg
SAR(1 g) = 0.157 W/kg; SAR(10 g) = 0.077 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.262 W/kg



0 dB = 0.262 W/kg = -5.82 dBW/kg

33. 5.6GHz - 802.11a, CH116 - Head Right Tilt

Test Laboratory: Intel WRF Lab; Date/Time: 8/19/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

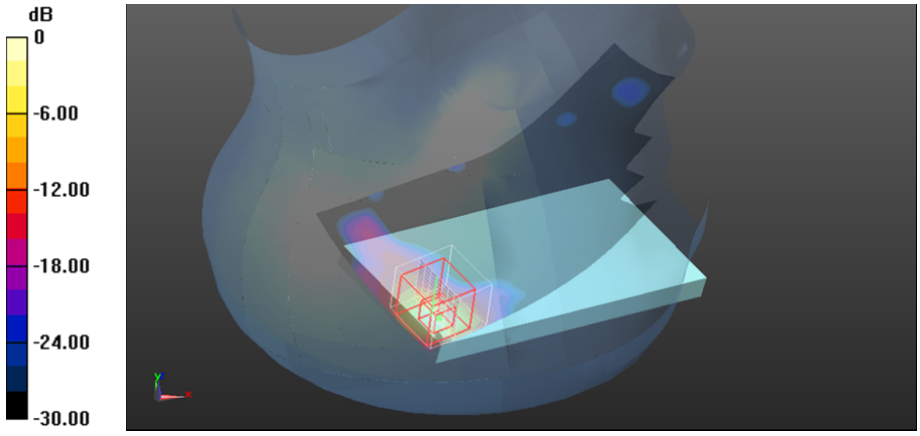
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5580 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 5580 MHz; σ = 4.706 S/m; ε_r = 36.202; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(4.25, 4.25, 4.25); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD;
- DASY52 52.8.8(1222);

Head Right/802.11a, 6Mbps, CH 116, Right Tilt/Area Scan (181x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.86 W/kg

Head Right/802.11a, 6Mbps, CH 116, Right Tilt/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 16.26 V/m; Power Drift = 0.29 dB
Peak SAR (extrapolated) = 4.20 W/kg
SAR(1 g) = 0.912 W/kg; SAR(10 g) = 0.225 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.91 W/kg



0 dB = 1.91 W/kg = 2.81 dBW/kg

34. 5.6GHz - 802.11a, CH108 - Body Top Edge

Test Laboratory: Intel WRF Lab; Date/Time: 8/22/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

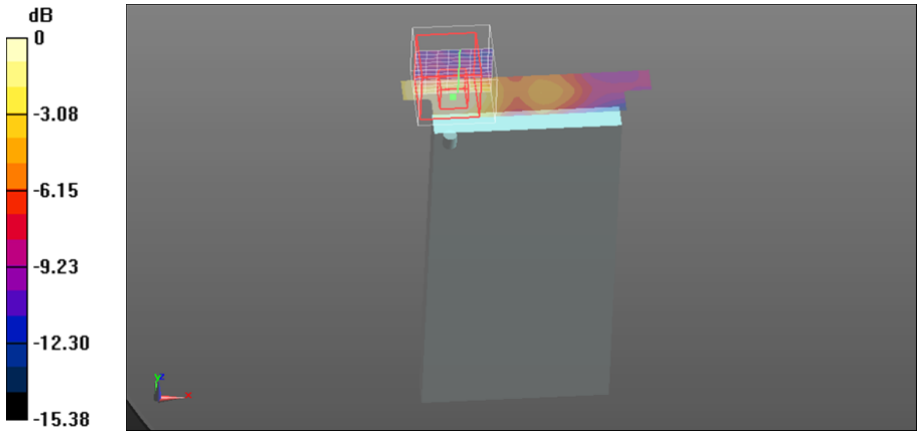
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5540 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 5540 MHz; σ = 5.853 S/m; ε_r = 48.211; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(3.86, 3.86, 3.86); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Fix Surface), Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002BA;
- DASY52 52.8.8(1222);

802.11a Body 5000MHz/802.11a, 6Mbps, CH 108, Top edge/Area Scan 2 (91x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.376 W/kg

802.11a Body 5000MHz/802.11a, 6Mbps, CH 108, Top edge/Zoom Scan (8x8x12)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 7.955 V/m; Power Drift = 0.28 dB
Peak SAR (extrapolated) = 0.588 W/kg
SAR(1 g) = 0.174 W/kg; SAR(10 g) = 0.087 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.301 W/kg



0 dB = 0.301 W/kg = -5.21 dBW/kg

35. 5.8GHz - 802.11a, CH157 - Head Right Tilt

Test Laboratory: Intel WRF Lab; Date/Time: 8/20/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

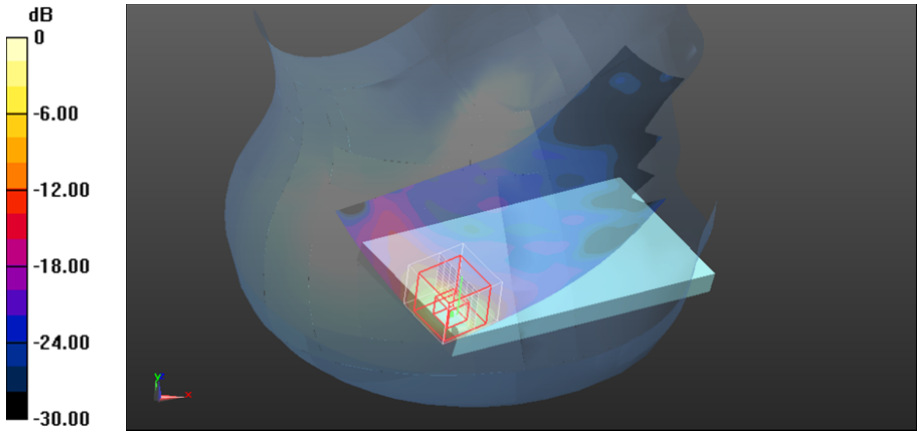
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5785 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 5785 MHz; σ = 4.761 S/m; ε_r = 36.841; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(4.3, 4.3, 4.3); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD;
- DASY52 52.8.8(1222);

Head Right/802.11a, 6Mbps, CH 157, Right Tilt/Area Scan (181x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.69 W/kg

Head Right/802.11a, 6Mbps, CH 157, Right Tilt/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 14.95 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 4.01 W/kg
SAR(1 g) = 0.833 W/kg; SAR(10 g) = 0.207 W/kg (SAR corrected for target medium)
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.73 W/kg



0 dB = 1.73 W/kg = 2.38 dBW/kg

36. 5.8GHz - 802.11a, CH157 - Body Top Edge

Test Laboratory: Intel WRF Lab; Date/Time: 8/25/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

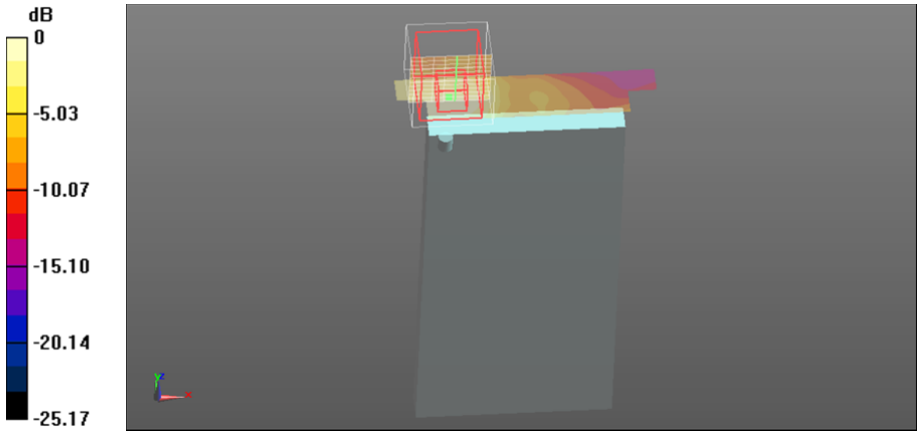
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5785 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 5785 MHz; σ = 6.106 S/m; ε_r = 47.765; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(3.96, 3.96, 3.96); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Fix Surface), Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002BA;
- DASY52 52.8.8(1222);

802.11a Body 5000MHz/802.11a, 6Mbps, CH 157, Top edge/Area Scan 2 (91x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.302 W/kg

802.11a Body 5000MHz/802.11a, 6Mbps, CH 157, Top edge/Zoom Scan (8x8x12)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 7.238 V/m; Power Drift = 0.28 dB
Peak SAR (extrapolated) = 0.562 W/kg
SAR(1 g) = 0.164 W/kg; SAR(10 g) = 0.081 W/kg (SAR corrected for target medium)
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.272 W/kg



0 dB = 0.272 W/kg = -5.65 dBW/kg

37. 5.8GHz - 802.11n40, CH159 - Head Right Tilt

Test Laboratory: Intel WRF Lab; Date/Time: 11/6/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5795 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 5795 MHz; σ = 5.039 S/m; ε_r = 35.347; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(4.3, 4.3, 4.3); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD;
- DASY52 52.8.8(1222);

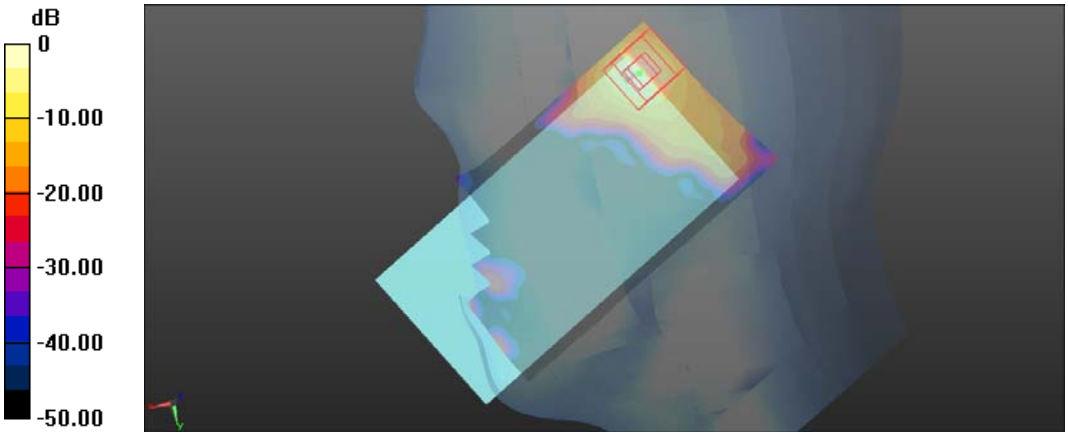
Head Rigth 5800MHz/802.11n40, MCS0, CH 159, Right Tilt/Area Scan 2 (191x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 1.55 W/kg

Head Rigth 5800MHz/802.11n40, MCS0, CH 159, Right Tilt/Zoom Scan (8x8x12)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 19.88 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 3.75 W/kg
SAR(1 g) = 0.762 W/kg; SAR(10 g) = 0.188 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.73 W/kg



0 dB = 1.73 W/kg = 2.38 dBW/kg

38. 5.8GHz - 802.11n40, CH151 – Body Top Edge

Test Laboratory: Intel WRF Lab; Date/Time: 11/5/2014

DUT: Moorefield PR2 VOL ND; Type: Smartphone; Serial: INV141401627

Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5755 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 5755 MHz; σ = 6.022 S/m; ε_r = 45.634; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

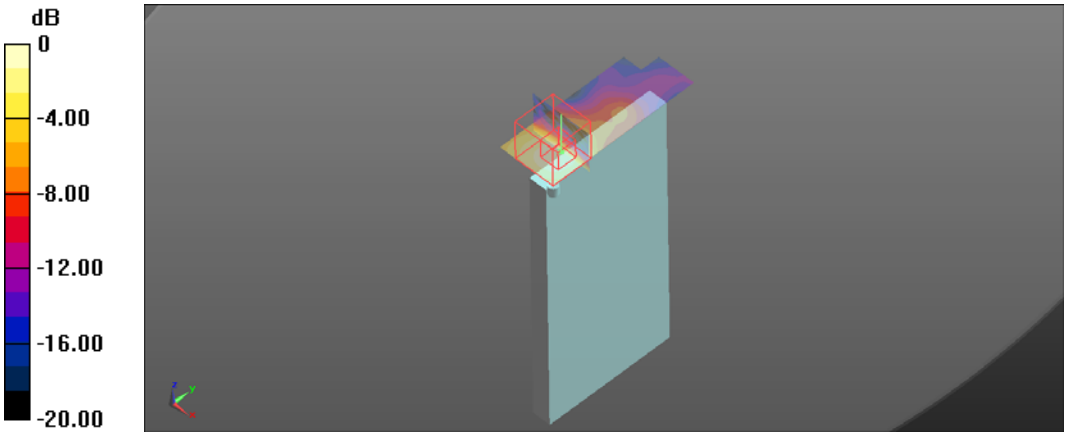
- Probe: EX3DV4 - SN3978; ConvF(3.96, 3.96, 3.96); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = -9.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002BA;
- DASY52 52.8.8(1222);

802.11a Body 5800MHz 5_11_14/802.11n40, MCS0, CH 151, Top edge/Area Scan 2 (111x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.265 W/kg

802.11a Body 5800MHz 5_11_14/802.11n40, MCS0, CH 151, Top edge/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 4.752 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.561 W/kg
SAR(1 g) = 0.144 W/kg; SAR(10 g) = 0.055 W/kg (SAR corrected for target medium)

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.267 W/kg



0 dB = 0.267 W/kg = -5.73 dBW/kg

39. 2.4GHz - 802.15, CH 0 - Head Right Tilt

Test Laboratory: Intel WRF Lab; Date/Time: 8/27/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

Communication System: UID 0, 802.15 (0); Communication System Band: 2.4GHz; Frequency: 2402 MHz;Communication System PAR: 1.133 dB
Medium parameters used (interpolated): f = 2402 MHz; σ = 1.814 S/m; ε_r = 37.175; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

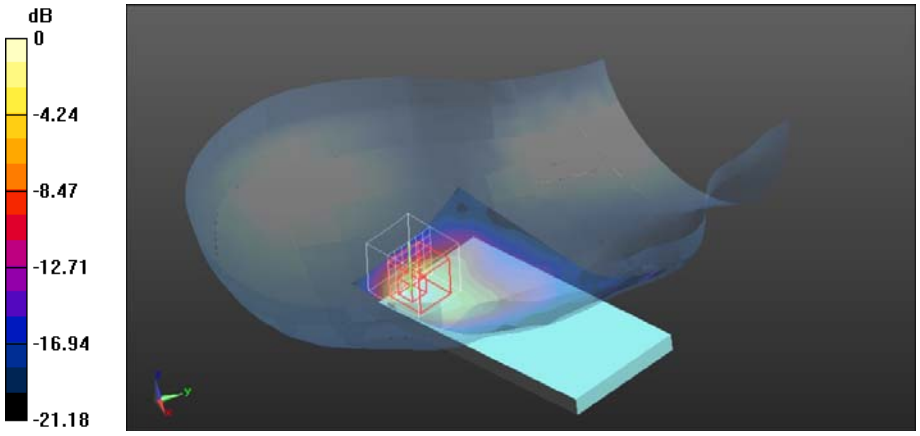
DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(6.93, 6.93, 6.93); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD;
- DASY52 52.8.8(1222);

Bluetooth Head Right/802.15, CH 0 2402MHz, Right Touch/Area Scan 2 (181x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.233 W/kg

Bluetooth Head Right/802.15, CH 0 2402MHz, Right Touch/Zoom Scan 2 (8x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.236 V/m; Power Drift = -0.22 dB
Peak SAR (extrapolated) = 0.303 W/kg
SAR(1 g) = 0.139 W/kg; SAR(10 g) = 0.066 W/kg (SAR corrected for target medium)
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.209 W/kg



0 dB = 0.209 W/kg = -6.80 dBW/kg

40. 2.4GHz – 802.15, CH0 - Body Front Face

Test Laboratory: Intel WRF Lab; Date/Time: 8/27/2014

DUT: EP110; Type: Smartphone; Serial: INV141401627

Communication System: UID 0, 802.15 (0); Communication System Band: 2.4GHz; Frequency: 2402 MHz;Communication System PAR: 1.133 dB
Medium parameters used (interpolated): f = 2402 MHz; σ = 1.834 S/m; ε_r = 49.802; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

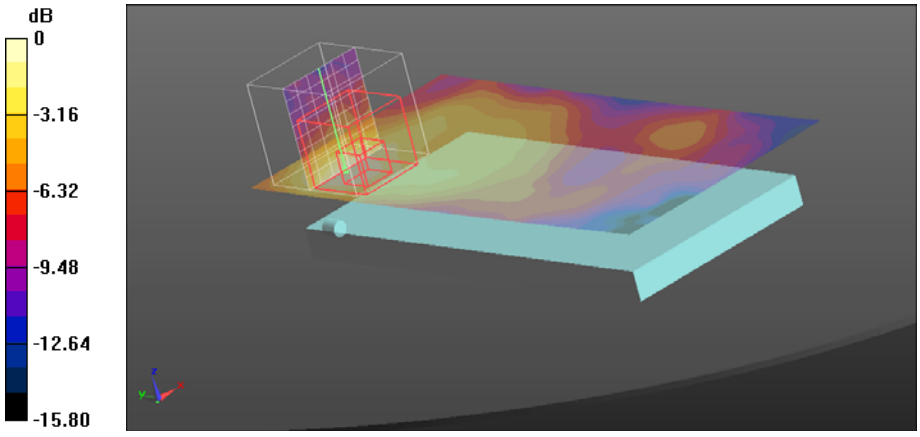
- Probe: EX3DV4 - SN3978; ConvF(7.52, 7.52, 7.52); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002BA;
- DASY52 52.8.8(1222);

Bluetooth/Bluetooth Channel 0 2402MHz , Front Face/Area Scan (191x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.0374 W/kg

Bluetooth/Bluetooth Channel 0 2402MHz , Front Face/Zoom Scan (8x7x9)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 4.153 V/m; Power Drift = 0.36 dB
Peak SAR (extrapolated) = 0.0450 W/kg
SAR(1 g) = 0.026 W/kg; SAR(10 g) = 0.016 W/kg (SAR corrected for target medium)

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.0343 W/kg



0 dB = 0.0343 W/kg = -14.65 dBW/kg

41. System Check Head Liquid 750MHz

A. Experimental conditions

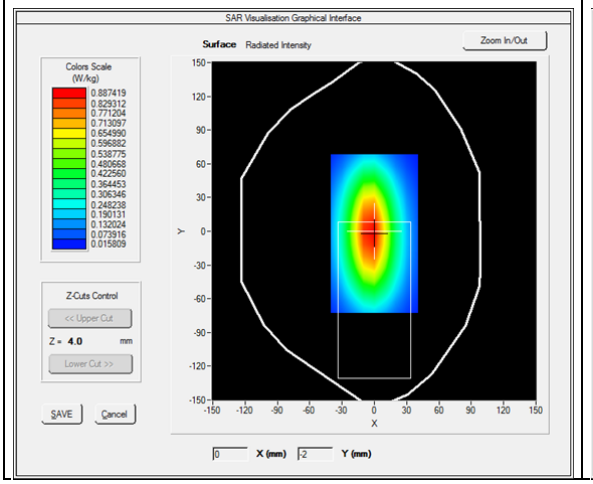
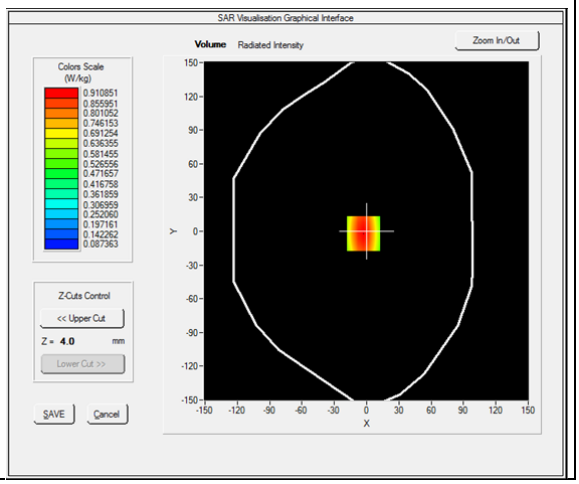
Date	17/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Dipole
Band	CW750
Channels	High
Signal	CW (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.71	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	750.000000
Relative permittivity (real part)	42.331501
Relative permittivity (imaginary part)	21.823799
Conductivity (S/m)	0.909325

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-3.00, Y=-2.00
SAR Peak: 1.26 W/kg

SAR 10g (W/kg)	0.574222
SAR 1g (W/kg)	0.879916
Power Drift (%)	0.410000

42. System Check Head Liquid 835MHz

A. Experimental conditions

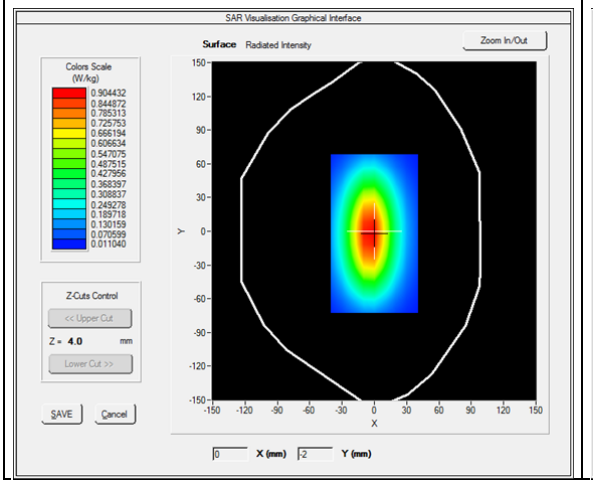
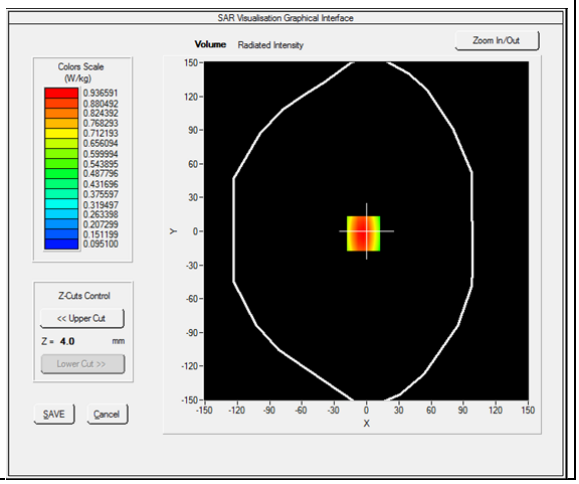
Date	16/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Dipole
Band	CW835
Channels	Middle
Signal	CW (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.99	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	835.000000
Relative permittivity (real part)	43.134700
Relative permittivity (imaginary part)	18.690600
Conductivity (S/m)	0.868219

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-3.00, Y=-2.00
SAR Peak: 1.27 W/kg

SAR 10g (W/kg)	0.594238
SAR 1g (W/kg)	0.894291
Power Drift (%)	-0.050000

43. System Check Head Liquid 1800MHz

A. Experimental conditions

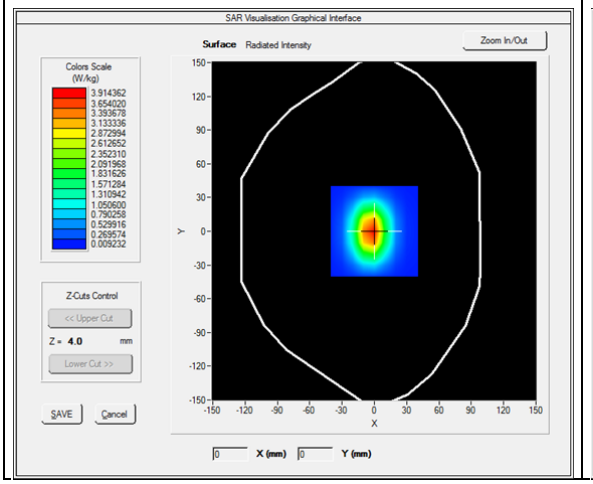
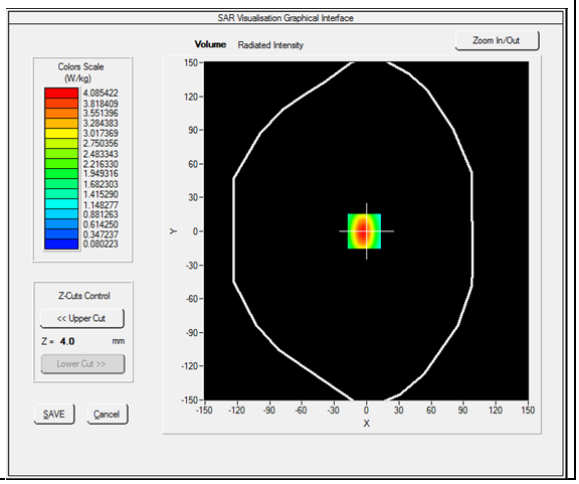
Date	28/08/2014
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Dipole
Band	CW1800
Channels	Middle
Signal	CW (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_2713_EP184 / nCF: 4.41	09/2013	09/2014
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1800.000000
Relative permittivity (real part)	37.312200
Relative permittivity (imaginary part)	13.916200
Conductivity (S/m)	1.393518

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-2.00, Y=0.00
SAR Peak: 6.41 W/kg

SAR 10g (W/kg)	2.034581
SAR 1g (W/kg)	3.818258
Power Drift (%)	0.270000

44. System Check Head Liquid 1900MHz

A. Experimental conditions

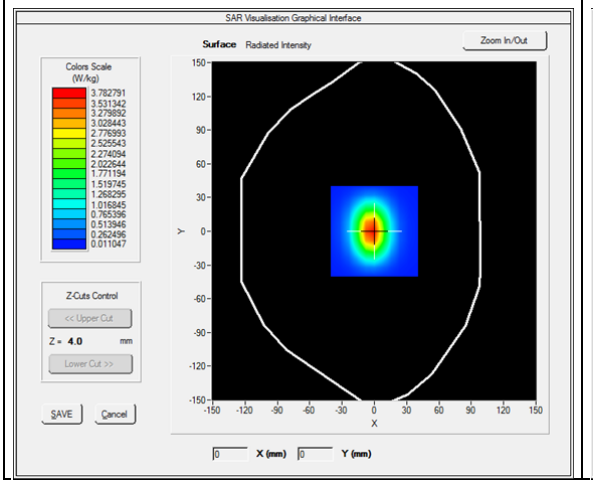
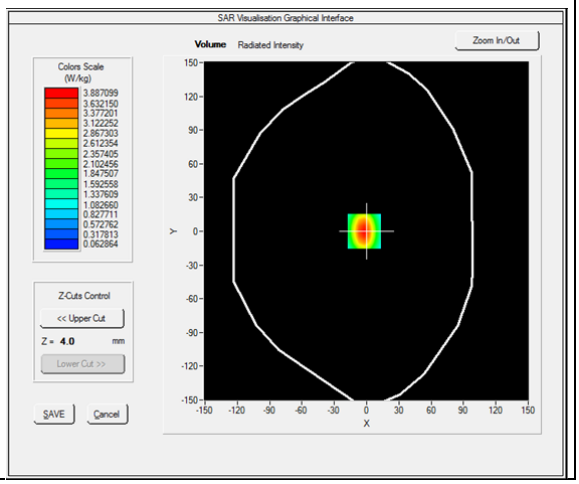
Date	02/09/2014
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Channels	Middle
Signal	CW (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_2713_EP184 / nCF: 4.84	09/2013	09/2014
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1900.000000
Relative permittivity (real part)	38.069099
Relative permittivity (imaginary part)	14.145300
Conductivity (S/m)	1.493115

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-2.00, Y=0.00
SAR Peak: 6.16 W/kg

SAR 10g (W/kg)	1.935734
SAR 1g (W/kg)	3.786725
Power Drift (%)	-0.770000

45. System Check Head Liquid 2450MHz

Test Laboratory: Intel WRF Lab; Date/Time: 8/27/2014

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

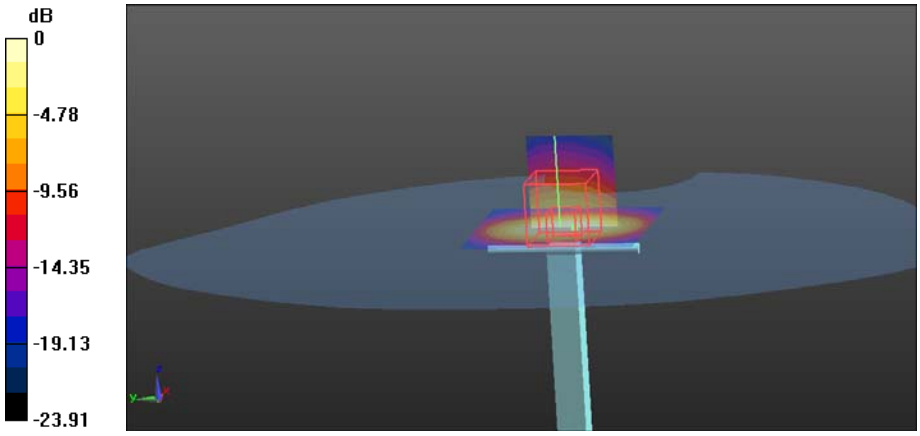
Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz);
Frequency: 2450 MHz; Communication System PAR: 0 dB
Medium parameters used: f = 2450 MHz; σ = 1.85 S/m; ε_r = 38.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(6.93, 6.93, 6.93); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD;
- DASY52 52.8.8(1222);

Validation Head 2450 MHz/Validation 2450 MHz 27/08/2014/Area Scan (61x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 5.94 W/kg

Validation Head 2450 MHz/Validation 2450 MHz 27/08/2014/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 57.44 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 11.1 W/kg
SAR(1 g) = 5.15 W/kg; SAR(10 g) = 2.37 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.80 W/kg



0 dB = 5.80 W/kg = 7.63 dBW/kg

46. System Check Head Liquid 2600MHz

A. Experimental conditions

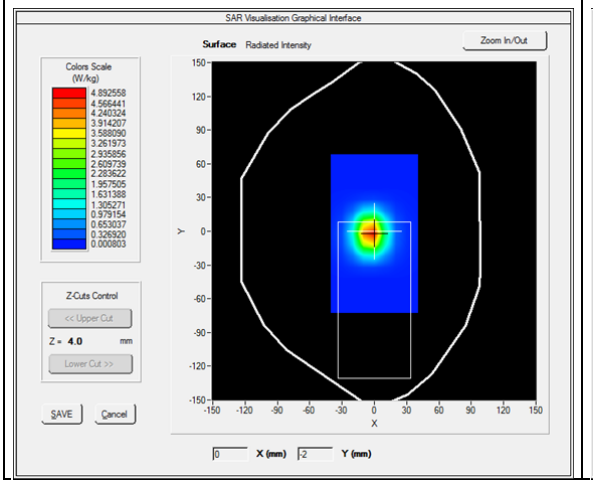
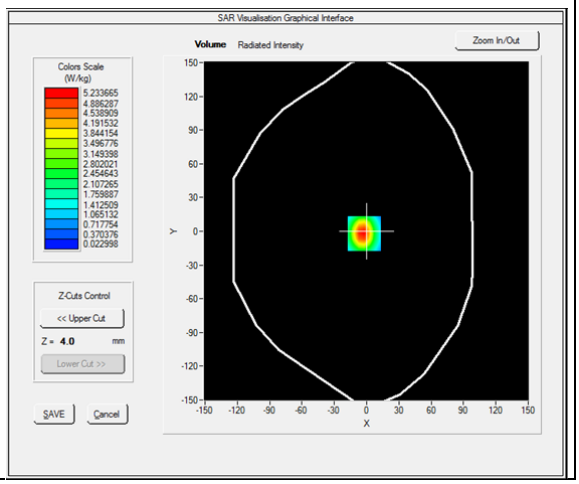
Date	18/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
Zoom Scan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Dipole
Band	CW2600
Channels	High
Signal	CW (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.10	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	2600.000000
Relative permittivity (real part)	38.348000
Relative permittivity (imaginary part)	14.093000
Conductivity (S/m)	2.035656

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-2.00, Y=-2.00
SAR Peak: 9.00 W/kg

SAR 10g (W/kg)	2.230099
SAR 1g (W/kg)	4.963134
Power Drift (%)	0.360000

47. System Check Head Liquid 5200MHz

Test Laboratory: Intel WRF Lab; Date/Time: 8/12/2014

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1164

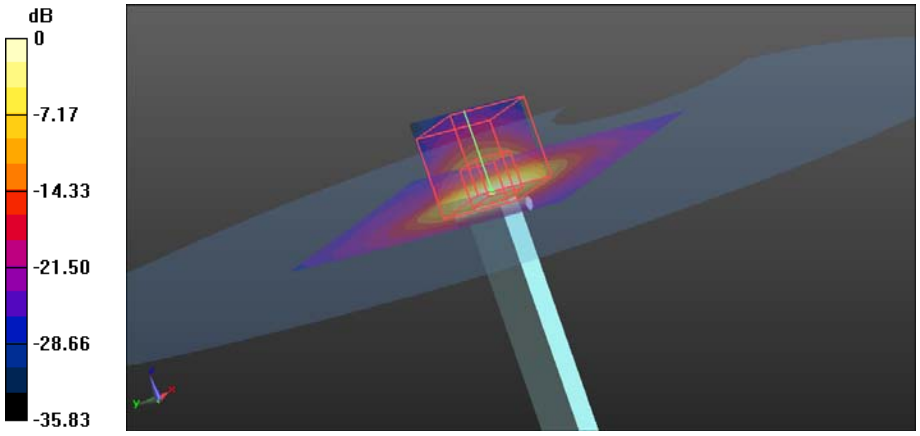
Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5200 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 5200 MHz; σ = 4.29 S/m; ε_r = 36.852; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(4.89, 4.89, 4.89); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD;
- DASY52 52.8.8(1222);

Validation Head/Validation 5200MHz 2/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 15.1 W/kg

Validation Head/Validation 5200MHz 2/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 61.06 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 30.4 W/kg
SAR(1 g) = 7.63 W/kg; SAR(10 g) = 2.21 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 15.5 W/kg



0 dB = 15.5 W/kg = 11.90 dBW/kg

48. System Check Head Liquid 5600MHz

Test Laboratory: Intel WRF Lab; Date/Time: 8/19/2014

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1164

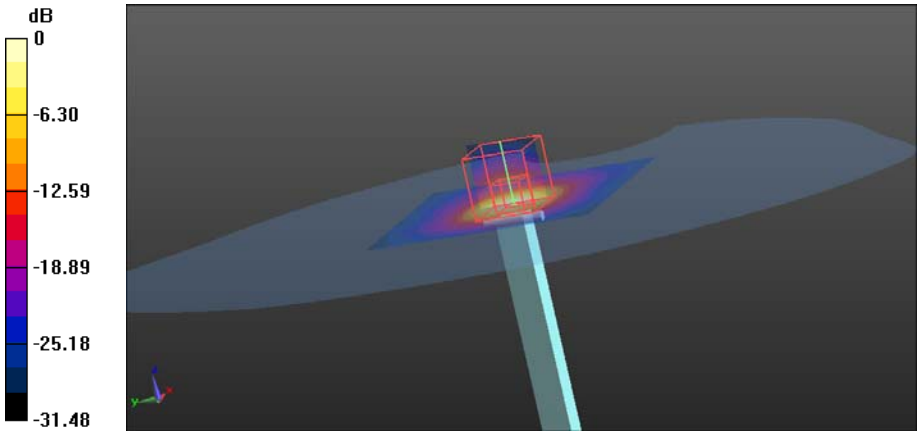
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5600 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 5600 MHz; σ = 4.668 S/m; ε_r = 36.329; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(4.25, 4.25, 4.25); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD;
- DASY52 52.8.8(1222);

Validation Head/Validation 5600MHz/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 16.6 W/kg

Validation Head/Validation 5600MHz/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 66.54 V/m; Power Drift = -0.37 dB
Peak SAR (extrapolated) = 31.2 W/kg
SAR(1 g) = 7.65 W/kg; SAR(10 g) = 2.2 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 16.0 W/kg



0 dB = 16.0 W/kg = 12.04 dBW/kg

49. System Check Head Liquid 5800MHz

Test Laboratory: Intel WRF Lab; Date/Time: 8/20/2014

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1164

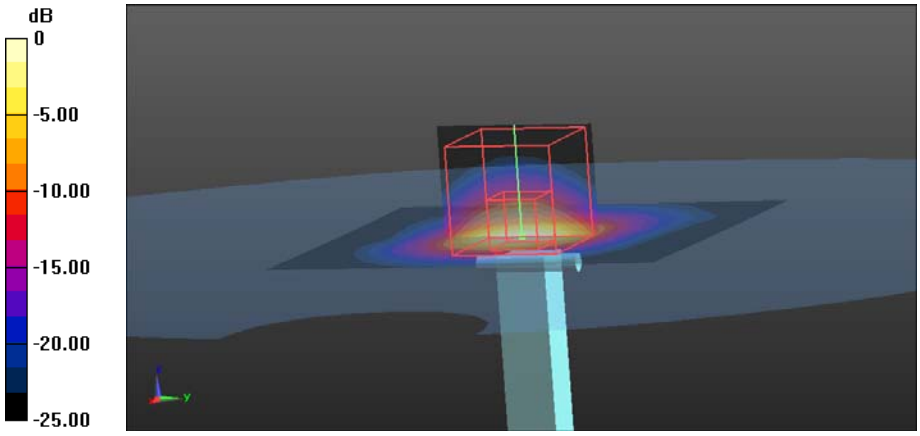
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5800 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 5800 MHz; σ = 4.783 S/m; ε_r = 36.877; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(4.3, 4.3, 4.3); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD;
- DASY52 52.8.8(1222);

Validation Head/Validation 5800MHz/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 15.6 W/kg

Validation Head/Validation 5800MHz/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 59.12 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 28.7 W/kg
SAR(1 g) = 6.68 W/kg; SAR(10 g) = 1.91 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 14.1 W/kg



0 dB = 14.1 W/kg = 11.49 dBW/kg

50. System Check Body Liquid 750MHz

A. Experimental conditions

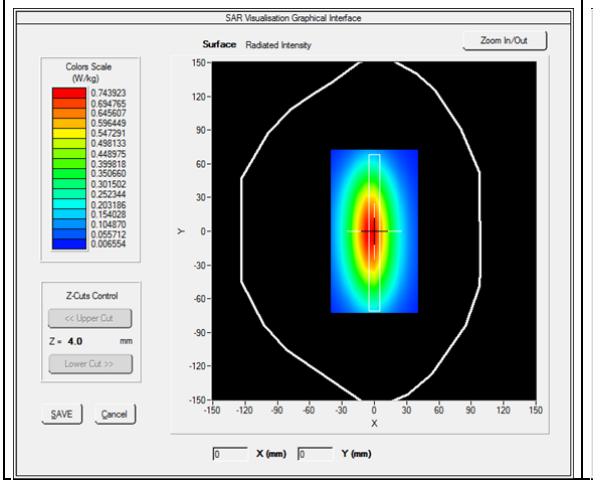
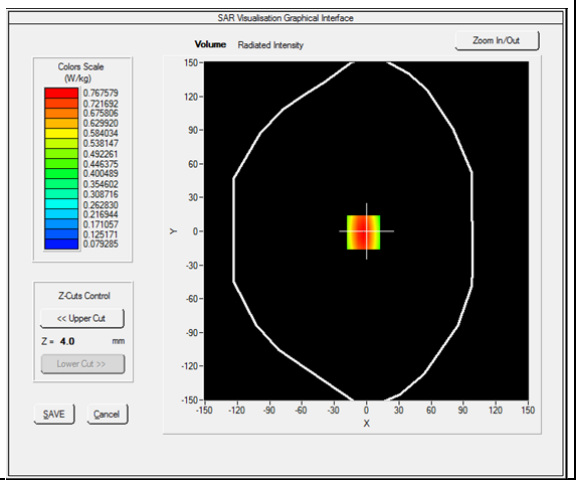
Date	24/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Body
Band	CW750
Channels	Low
Signal	CW (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.86	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	750.000000
Relative permittivity (real part)	58.299599
Relative permittivity (imaginary part)	24.210600
Conductivity (S/m)	1.008775

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-3.00, Y=-1.00
SAR Peak: 1.18 W/kg

SAR 10g (W/kg)	0.559447
SAR 1g (W/kg)	0.848974
Power Drift (%)	0.240000

51. System Check Body Liquid 835MHz

A. Experimental conditions

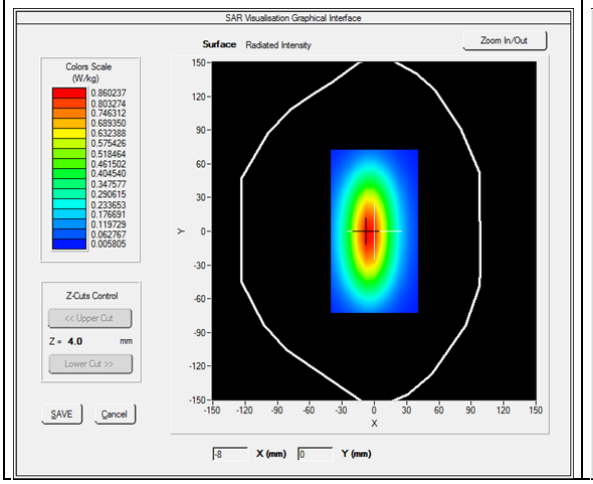
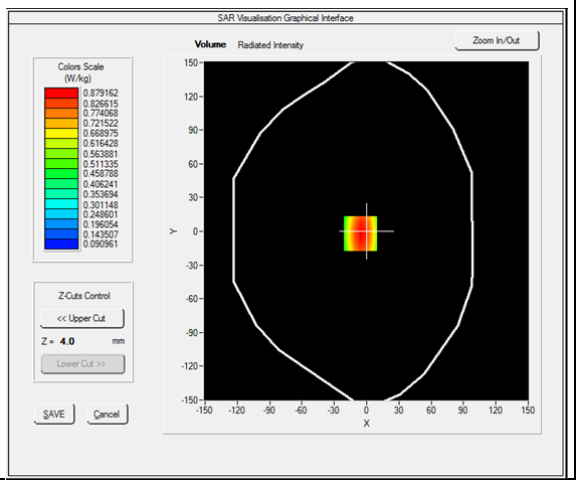
Date	25/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Dipole
Band	CW835
Channels	Low
Signal	CW (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 5.16	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	835.000000
Relative permittivity (real part)	55.755400
Relative permittivity (imaginary part)	21.056000
Conductivity (S/m)	0.978097

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-6.00, Y=-2.00
SAR Peak: 1.32 W/kg

SAR 10g (W/kg)	0.621357
SAR 1g (W/kg)	0.933005
Power Drift (%)	0.210000

52. System Check Body Liquid 1800MHz

A. Experimental conditions

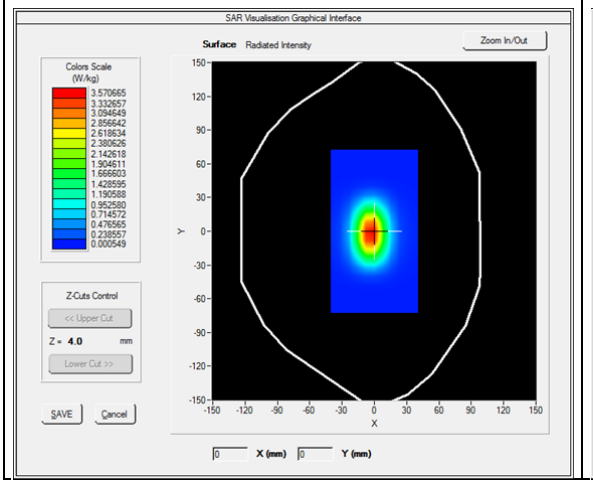
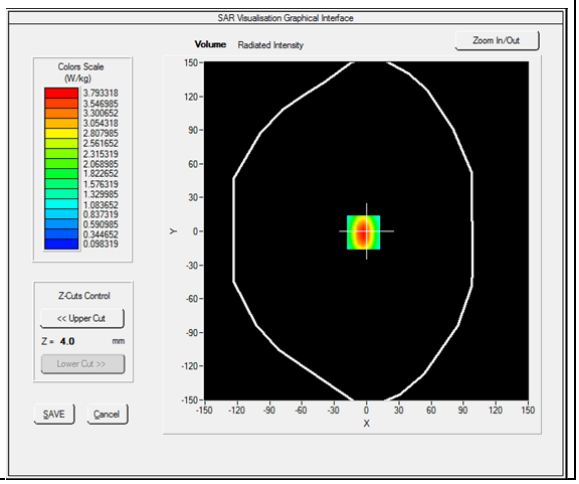
Date	19/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Dipole
Band	CW1800
Channels	Middle
Signal	CW (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.42	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1800.000000
Relative permittivity (real part)	52.953499
Relative permittivity (imaginary part)	15.427600
Conductivity (S/m)	1.542760

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-3.00, Y=-1.00
SAR Peak: 6.00 W/kg

SAR 10g (W/kg)	2.030347
SAR 1g (W/kg)	3.710539
Power Drift (%)	-0.050000

53. System Check Body Liquid 1900MHz

A. Experimental conditions

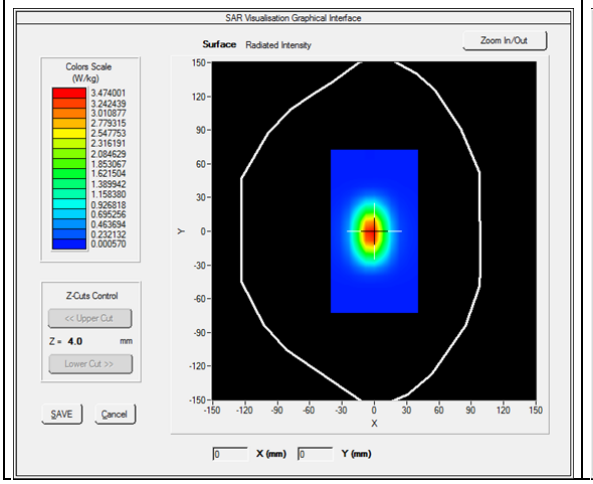
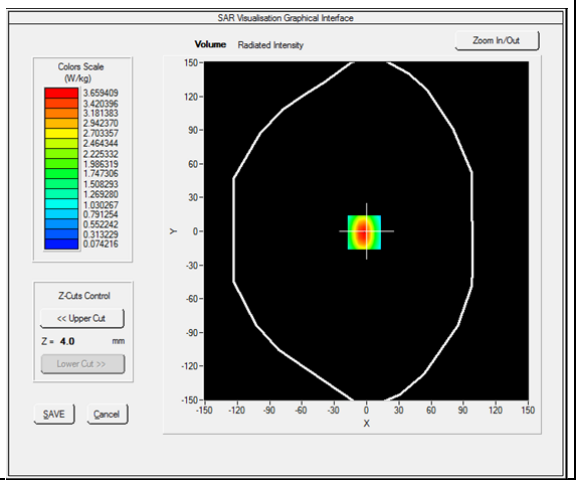
Date	22/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Channels	Middle
Signal	CW (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.92	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	1900.000000
Relative permittivity (real part)	52.505501
Relative permittivity (imaginary part)	15.312500
Conductivity (S/m)	1.616319

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-2.00, Y=-1.00
SAR Peak: 5.96 W/kg

SAR 10g (W/kg)	1.974185
SAR 1g (W/kg)	3.739502
Power Drift (%)	-0.400000

54. System Check Body Liquid 2450MHz

Test Laboratory: Intel WRF Lab; Date/Time: 8/27/2014

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz);
Frequency: 2450 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 2450 MHz; σ = 1.915 S/m; ε_r = 50.31; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

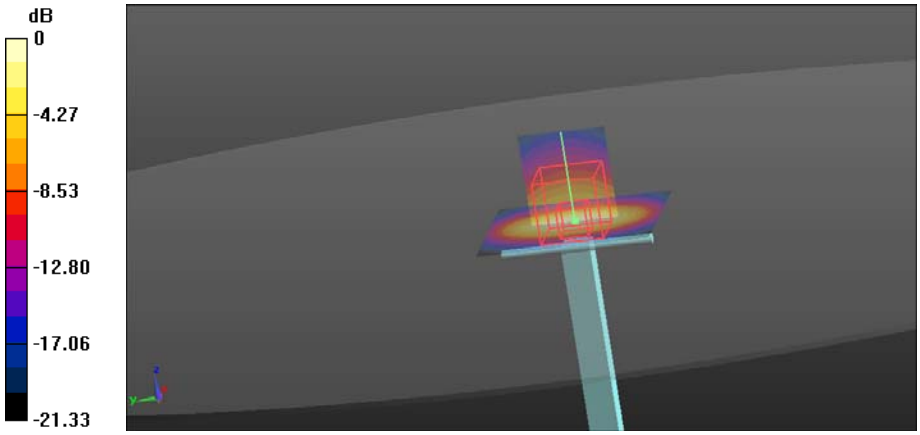
- Probe: EX3DV4 - SN3978; ConvF(7.52, 7.52, 7.52); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002BA;
- DASY52 52.8.8(1222);

Validation Body 2450 MHz/Validation 2450 MHz 27/08/2014/Area Scan (61x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 5.39 W/kg

Validation Body 2450 MHz/Validation 2450 MHz 27/08/2014/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 50.88 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 9.46 W/kg
SAR(1 g) = 4.64 W/kg; SAR(10 g) = 2.18 W/kg (SAR corrected for target medium)

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 5.33 W/kg



0 dB = 5.33 W/kg = 7.27 dBW/kg

55. System Check Body Liquid 2600MHz

A. Experimental conditions

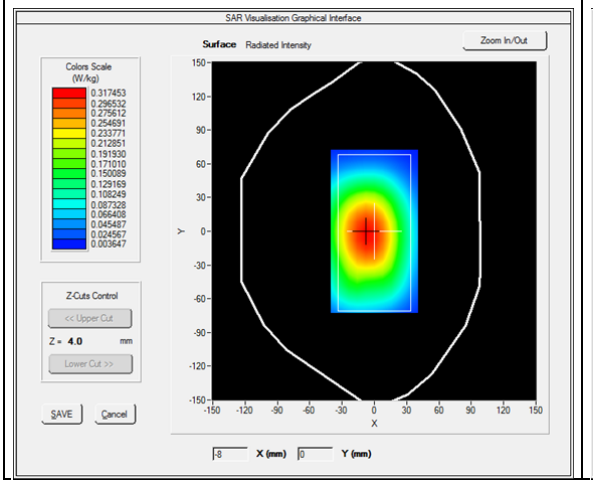
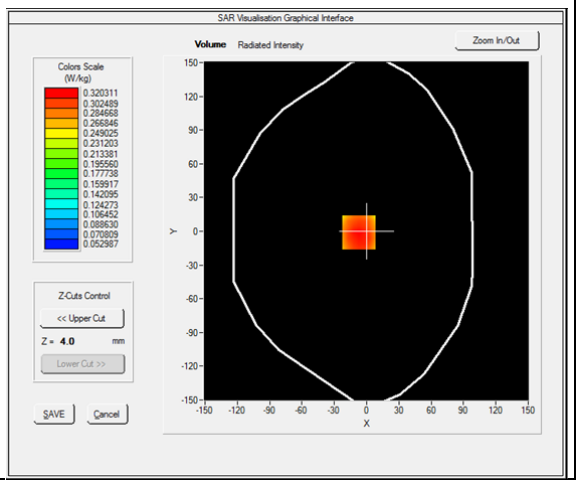
Date	26/09/2014
Area Scan	surf_sam_plan.txt, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm
Phantom	Validation plane
Device Position	Dipole
Band	CW2600
Channels	High
Signal	CW (Crest factor: 1.0)

B. Instrumentations

Equipment description	Manufacturer / Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN_1714_EP224 / nCF: 4.18	09/2014	09/2015
Phantom	SATIMO	SN_4712_SAM96	Validated. No cal required.	Validated. No cal required.

C. SAR Measurement Results

Frequency (MHz)	2600.000000
Relative permittivity (real part)	51.359300
Relative permittivity (imaginary part)	15.001300
Conductivity (S/m)	2.169810

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-2.00, Y=-2.00
SAR Peak: 9.00 W/kg

SAR 10g (W/kg)	2.361019
SAR 1g (W/kg)	5.066171
Power Drift (%)	0.470000

56. System Check Body Liquid 5200MHz

Test Laboratory: Intel WRF Lab; Date/Time: 8/21/2014

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1164

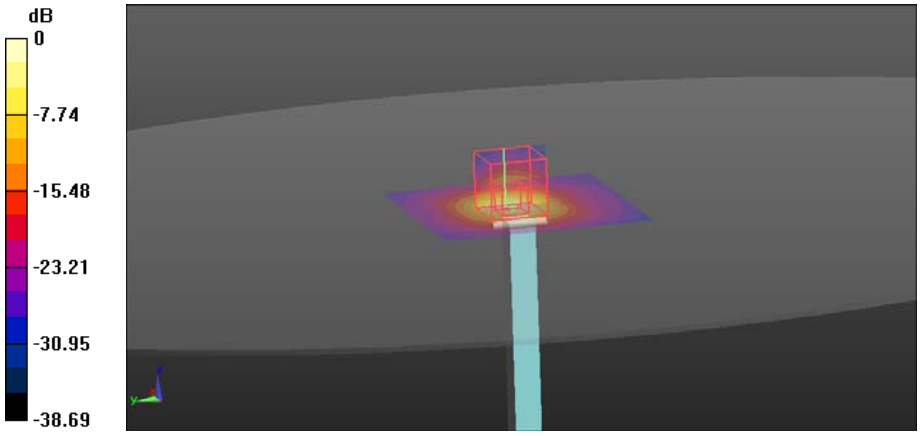
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5200 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 5200 MHz; σ = 5.389 S/m; ε_r = 48.503; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(4.4, 4.4, 4.4); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002BA;
- DASY52 52.8.8(1222);

Validation Body/Validation 5200MHz Body/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 15.3 W/kg

Validation Body/Validation 5200MHz Body/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 56.01 V/m; Power Drift = 0.35 dB
Peak SAR (extrapolated) = 30.9 W/kg
SAR(1 g) = 7.59 W/kg; SAR(10 g) = 2.15 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 14.7 W/kg



0 dB = 14.7 W/kg = 11.67 dBW/kg

57. System Check Body Liquid 5600MHz

Test Laboratory: Intel WRF Lab; Date/Time: 8/22/2014

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1164

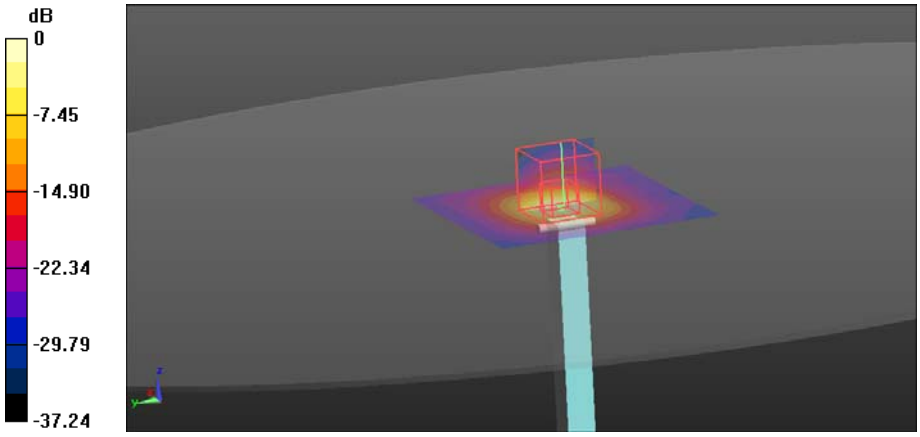
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5600 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 5600 MHz; σ = 5.948 S/m; ε_r = 47.908; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(3.86, 3.86, 3.86); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002BA;
- DASY52 52.8.8(1222);

Validation Body/Validation 5600 22/08/14/Area Scan 2 (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 16.5 W/kg

Validation Body/Validation 5600 22/08/14/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 56.62 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 35.4 W/kg
SAR(1 g) = 7.99 W/kg; SAR(10 g) = 2.24 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 15.8 W/kg



0 dB = 15.8 W/kg = 11.99 dBW/kg

58. System Check Body Liquid 5800MHz

Test Laboratory: Intel WRF Lab; Date/Time: 8/25/2014

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1164

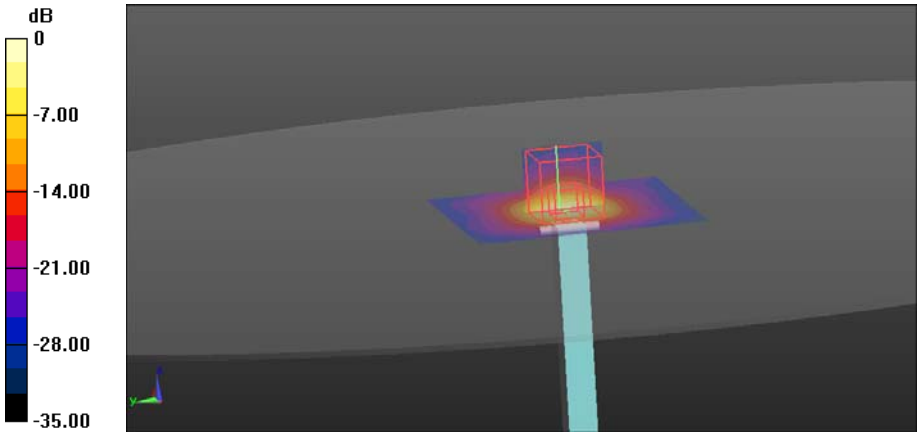
Communication System: UID 0, 802.11 (0); Communication System Band: 5GHz; Frequency: 5800 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 5800 MHz; σ = 6.103 S/m; ε_r = 47.556; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3978; ConvF(3.96, 3.96, 3.96); Calibrated: 6/24/2014;
  - Modulation Compensation:
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 23.0
- Electronics: DAE4 Sn1429; Calibrated: 6/24/2014
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002BA;
- DASY52 52.8.8(1222);

Validation Body/Validation 5800 22/08/14/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 14.9 W/kg

Validation Body/Validation 5800 22/08/14/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 52.23 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 28.5 W/kg
SAR(1 g) = 7.53 W/kg; SAR(10 g) = 2.13 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 13.1 W/kg



0 dB = 13.1 W/kg = 11.17 dBW/kg