

Table 14.31: SAR Values (WCDMA 850 MHz Band - Head) – AP OFF

Frequency		Side	Test Position	Figure No.	Ambient Temperature: 22.6 °C		Liquid Temperature: 22.1 °C			Power Drift (dB)
MHz	Ch.				Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
846.6	4233	Left	Touch	Fig.6	24.54	0.392	0.41	0.500	0.52	0.17

Table 14.32: SAR Values (WCDMA 850 MHz Band - Body) – AP OFF

Frequency		Test Position	Figure No.	Ambient Temperature: 22.6 °C		Liquid Temperature: 22.1 °C			Power Drift (dB)
MHz	Ch.			Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
826.4	4132	Front	Fig.7	24.66	0.541	0.55	0.685	0.69	0.03

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table 14.33: SAR Values (WCDMA 1900 MHz Band - Head) – AP OFF

Frequency		Side	Test Position	Figure No.	Ambient Temperature: 22.7 °C		Liquid Temperature: 22.2 °C			Power Drift (dB)
MHz	Ch.				Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
1907.6	9538	Left	Touch	Fig.8	23.68	0.327	0.33	0.521	0.52	0.17

Table 14.34: SAR Values (WCDMA 1900 MHz Band - Body) – AP ON

Frequency		Test Position	Figure No.	Ambient Temperature: 22.7 °C		Liquid Temperature: 22.2 °C			Power Drift (dB)
MHz	Ch.			Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
1907.6	9538	Bottom	Fig.9	19.39	0.541	0.55	1.03	1.06	-0.04

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table 14.35: SAR Values (WCDMA 1900 MHz Band - Body) – AP OFF

Frequency		Test Position	Figure No.	Ambient Temperature: 22.7 °C		Liquid Temperature: 22.2 °C			Power Drift (dB)
MHz	Ch.			Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
1907.6	9538	Front	Fig.10	23.68	0.767	0.77	1.32	1.33	-0.09
1907.6	9538	Front (Headset)	Fig.11	23.68	0.766	0.77	1.3	1.31	-0.00

Note1: The distance between the EUT and the phantom bottom is 15mm.

Note2: The type of Headset1 is MH410c

Table 14.36: SAR Values (LTE Band2 - Head) – AP OFF

Ambient Temperature: 22.7°C						Liquid Temperature: 22.2°C					
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
1880	18900	1RB_Middle	Right	Touch	Fig.12	22.88	0.214	0.23	0.371	0.40	-0.12

Note1: The LTE mode is QPSK_20MHz.

Table 14.37: SAR Values (LTE Band2 - Body) – AP ON

Ambient Temperature: 22.7°C						Liquid Temperature: 22.2°C				
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.									
1860	18700	50RB_Low	Front	Fig.13	18.91	0.534	0.61	1	1.15	0.10

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.38: SAR Values (LTE Band2 - Body) – AP OFF

Ambient Temperature: 22.7°C						Liquid Temperature: 22.2°C				
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.									
1860	18700	1RB_Midle	Front	Fig.14	22.77	0.669	0.74	1.12	1.24	-0.00

Note1: The distance between the EUT and the phantom bottom is 15mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.39: SAR Values (LTE Band4 - Head) – AP OFF

Ambient Temperature: 22.8°C						Liquid Temperature: 22.3°C					
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
1732.5	20175	1RB_Middle	Right	Touch	Fig.15	24.00	0.384	0.38	0.656	0.66	-0.12

Note1: The LTE mode is QPSK_20MHz.

Table 14.40: SAR Values (LTE Band4 - Body) – AP ON

Ambient Temperature: 22.8°C						Liquid Temperature: 22.3°C				
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.									
1745	20300	1RB_Low	Front	Fig.16	19.81	0.588	0.61	1.1	1.15	0.01

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.41: SAR Values (LTE Band4 - Body) – AP OFF

Ambient Temperature: 22.8 °C					Liquid Temperature: 22.3 °C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.									
1732.5	20175	1RB_Middle	Front	Fig.17	24.00	0.554	0.55	0.880	0.88	0.12

Note1: The distance between the EUT and the phantom bottom is 15mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.42: SAR Values (LTE Band5 - Head) – AP OFF

Ambient Temperature: 22.6 °C					Liquid Temperature: 22.1 °C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
836.5	20525	1RB_High	Left	Touch	Fig.18	23.81	0.364	0.38	0.460	0.48	-0.10

Note1: The LTE mode is QPSK_10MHz.

Table 14.43: SAR Values (LTE Band5 - Body) – AP OFF

Ambient Temperature: 22.6 °C					Liquid Temperature: 22.1 °C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.									
836.5	20525	1RB_High	Front	Fig.19	23.81	0.392	0.41	0.503	0.53	-0.04

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

Table 14.44: SAR Values (Wi-Fi 802.11b - Head) – AP OFF

Ambient Temperature: 22.5 °C					Liquid Temperature: 22.0 °C					
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.									
2437	6	Right	Touch	Fig.20	14.95	0.088	0.11	0.177	0.23	-0.03

Table 14.45: SAR Values (Wi-Fi 802.11b - Body) – AP OFF

Ambient Temperature: 22.5 °C					Liquid Temperature: 22.0 °C					
Frequency		Test Position	Figure No.	Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)	
MHz	Ch.									
2462	11	Rear	Fig.21	15.08	0.039	0.05	0.104	0.13	-0.18	

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table 14.46: SAR Values (Wi-Fi 802.11a - Head) – AP OFF

Frequency		Side	Test Position	Figure No.	Ambient Temperature: 22.5 °C		Liquid Temperature: 22.0 °C			Power Drift (dB)
MHz	Ch.				Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
5765	153	Left	Touch	Fig.22	12.90	0.014	0.01	0.050	0.05	0.18

Table 14.47: SAR Values (Wi-Fi 802.11a - Body) – AP OFF

Frequency		Test Position	Figure No.	Ambient Temperature: 22.5 °C		Liquid Temperature: 22.0 °C			Power Drift (dB)
MHz	Ch.			Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
5765	153	Rear	Fig.23	12.90	0.027	0.03	0.097	0.10	0.06

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table 14.48: SAR Values (Wi-Fi 802.11n - Head) – AP OFF

Frequency		Side	Test Position	Figure No.	Ambient Temperature: 22.5 °C		Liquid Temperature: 22.0 °C			Power Drift (dB)
MHz	Ch.				Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
5580	116	Left	Touch	Fig.24	12.78	0.014	0.01	0.038	0.04	0.18

Table 14.49: SAR Values (Wi-Fi 802.11n - Body) – AP OFF

Frequency		Test Position	Figure No.	Ambient Temperature: 22.5 °C		Liquid Temperature: 22.0 °C			Power Drift (dB)
MHz	Ch.			Conducted Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
5580	116	Rear	Fig.25	12.78	0.029	0.03	0.07	0.07	0.18

Note1: The distance between the EUT and the phantom bottom is 10mm.

15 SAR Measurement Variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

Table 15.1: SAR Measurement Variability for Body GSM 1900 (1g) – AP ON

Frequency		Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
MHz	Ch.						
1880	661	Bottom	10	0.809	0.782	1.03	/

Table 15.2: SAR Measurement Variability for Body WCDMA 1900 (1g) – AP ON

Frequency		Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
MHz	Ch.						
1907.6	9538	Bottom	10	1.03	1.03	1.00	/

Table 15.3: SAR Measurement Variability for Body WCDMA 1900 (1g) – AP OFF

Frequency		Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
MHz	Ch.						
1907.6	9538	Front	15	1.32	1.29	1.02	/

Table 15.4: SAR Measurement Variability for Body LTE Band2 (1g) – AP ON

Frequency		Mode	Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
MHz	Ch.							
1860	18700	50RB_Low	Front	10	1	0.997	1.00	/

Table 15.5: SAR Measurement Variability for Body LTE Band2 (1g) – AP OFF

Frequency		Mode	Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
MHz	Ch.							
1860	18700	1RB_Middle	Front	15	1.12	1.09	1.03	/

Table 15.6: SAR Measurement Variability for Body LTE Band4 (1g) – AP ON

Frequency		Mode	Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
MHz	Ch.							
1745	20300	1RB_Low	Front	10	1.1	1.08	1.02	/

Table 15.7: SAR Measurement Variability for Body LTE Band4 (1g) – AP OFF

Frequency		Mode	Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
MHz	Ch.							
1732.5	20175	1RB_Middle	Front	15	0.880	0.822	1.07	/

16 Measurement Uncertainty

16.1 Measurement Uncertainty for Normal SAR Tests (300MHz~3GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	5.5	N	1	1	1	5.5	5.5	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RF ambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. restrictions	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞
12	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
17	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521

Combined standard uncertainty	$u_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$					9.25	9.12	257
Expanded uncertainty (confidence interval of 95 %)	$u_e = 2u_c$					18.5	18.2	

16.2 Measurement Uncertainty for Normal SAR Tests (3~6GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.5	N	1	1	1	6.5	6.5	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	2.0	R	$\sqrt{3}$	1	1	1.2	1.2	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RF ambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. restrictions	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
12	Probe positioning with respect to phantom shell	B	6.7	R	$\sqrt{3}$	1	1	3.9	3.9	∞
13	Post-processing	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
Test sample related										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
17	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43

20	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$						10.8	10.7	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						21.6	21.4	

16.3 Measurement Uncertainty for Fast SAR Tests (300MHz~3GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	5.5	N	1	1	1	5.5	5.5	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RF ambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. Restrictions	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞
12	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
14	Fast SAR z-Approximation	B	7.0	R	$\sqrt{3}$	1	1	4.0	4.0	∞
Test sample related										
15	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
16	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
17	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞

Phantom and set-up										
18	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
19	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
20	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
21	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						10.1	9.95	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						20.2	19.9	

16.4 Measurement Uncertainty for Fast SAR Tests (3~6GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.5	N	1	1	1	6.5	6.5	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	2.0	R	$\sqrt{3}$	1	1	1.2	1.2	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RF ambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. Restrictions	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
12	Probe positioning with respect to phantom shell	B	6.7	R	$\sqrt{3}$	1	1	3.9	3.9	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
14	Fast SAR z-Approximation	B	14.0	R	$\sqrt{3}$	1	1	8.1	8.1	∞

Test sample related										
15	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
16	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
17	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
18	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
19	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
20	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
21	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						13.3	13.2	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						26.6	26.4	

17 MAIN TEST INSTRUMENTS

Table 17.1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46110673	February 15, 2013	One year
02	Power meter	NRVD	102083	September 11, 2012	One year
03	Power sensor	NRV-Z5	100542		
04	Signal Generator	E4438C	MY49070393	November 13, 2012	One Year
05	Amplifier	VTL5400	0505	No Calibration Requested	
06	BTS	E5515C	MY48363198	July 11, 2012	One year
07	E-field Probe	SPEAG ES3DV3	3149	April 24, 2012	One year
08	E-field Probe	SPEAG EX3DV4	3846	December 20, 2012	One year
09	DAE	SPEAG DAE4	771	November 20, 2012	One year
10	Dipole Validation Kit	SPEAG D835V2	443	May 03, 2012	One year
11	Dipole Validation Kit	SPEAG D1750V2	1003	May 08, 2012	One year
12	Dipole Validation Kit	SPEAG D1900V2	541	May 09, 2012	One year
13	Dipole Validation Kit	SPEAG D2450V2	853	May 02, 2012	One year
14	Dipole Validation Kit	SPEAG D5GHzV2	1040	June 19, 2012	One year

END OF REPORT BODY

ANNEX A Graph Results

850 Left Cheek Middle – AP OFF

Date: 2013-3-16

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.886$ mho/m; $\epsilon_r = 40.735$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C

Communication System: GSM 850 Frequency: 836.6 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(6.26, 6.26, 6.26)

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.607 W/kg

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.470 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.666 W/kg

SAR(1 g) = 0.567 W/kg; SAR(10 g) = 0.391 W/kg

Maximum value of SAR (measured) = 0.603 W/kg

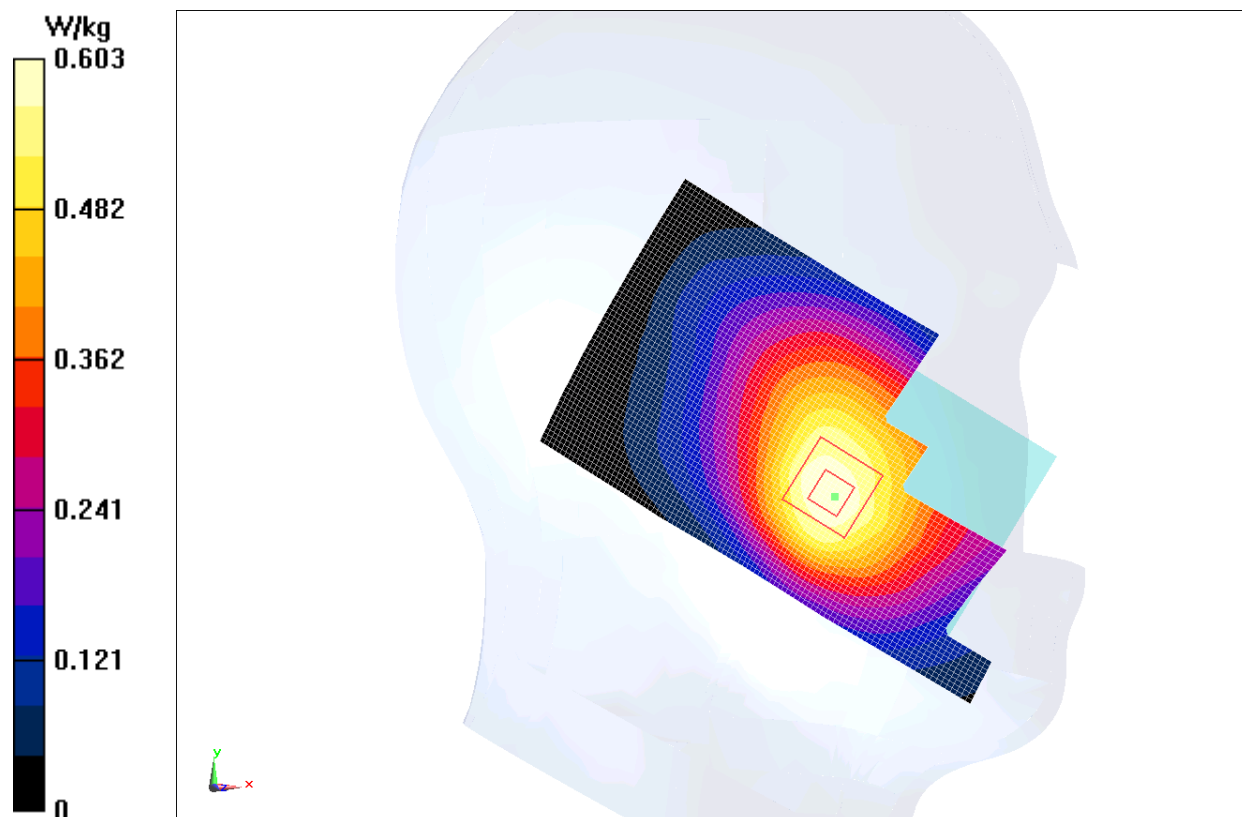


Fig.1 850MHz CH190

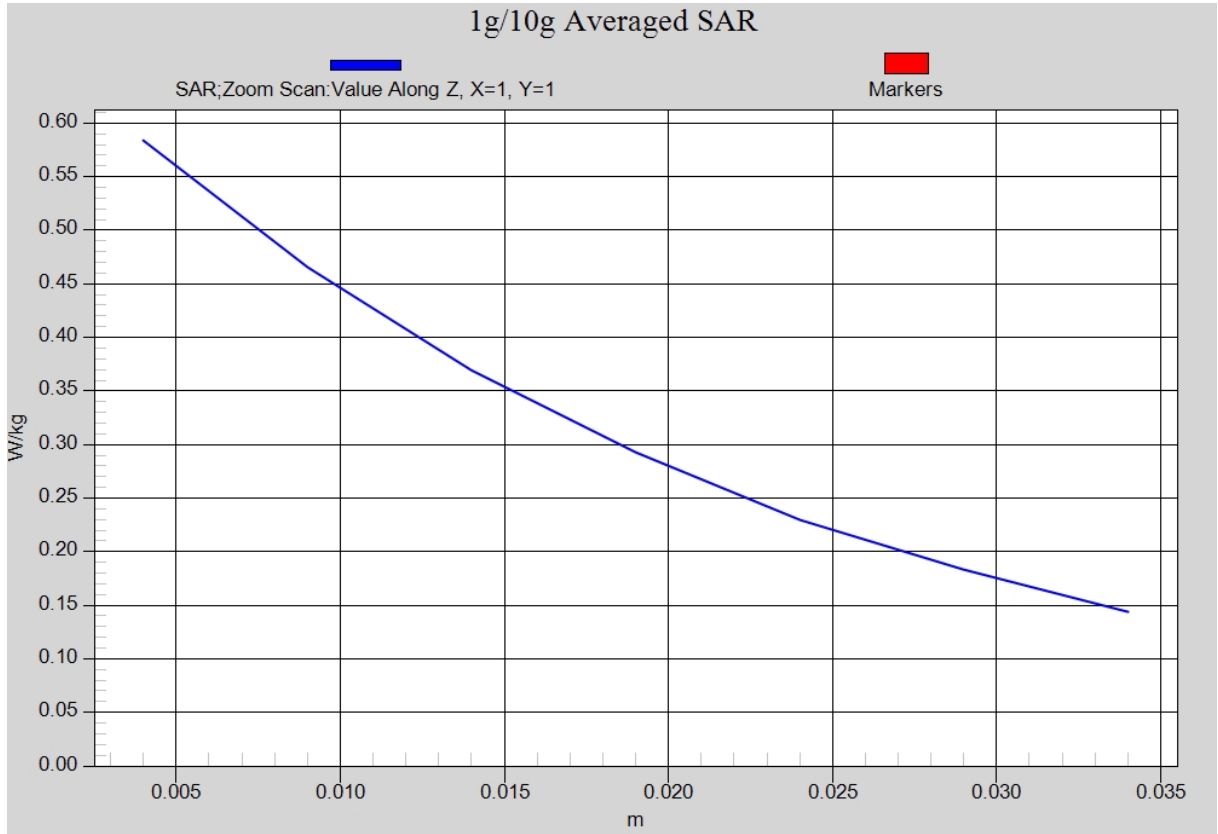


Fig. 1-1 Z-Scan at power reference point (850 MHz CH190)

850 Body Front Middle – AP OFF

Date: 2013-3-16

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.987$ mho/m; $\epsilon_r = 56.403$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C

Communication System: GSM 850 GPRS Frequency: 836.6 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Front Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.817 W/kg

Front Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.327 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.937 W/kg

SAR(1 g) = 0.770 W/kg; SAR(10 g) = 0.594 W/kg

Maximum value of SAR (measured) = 0.811 W/kg

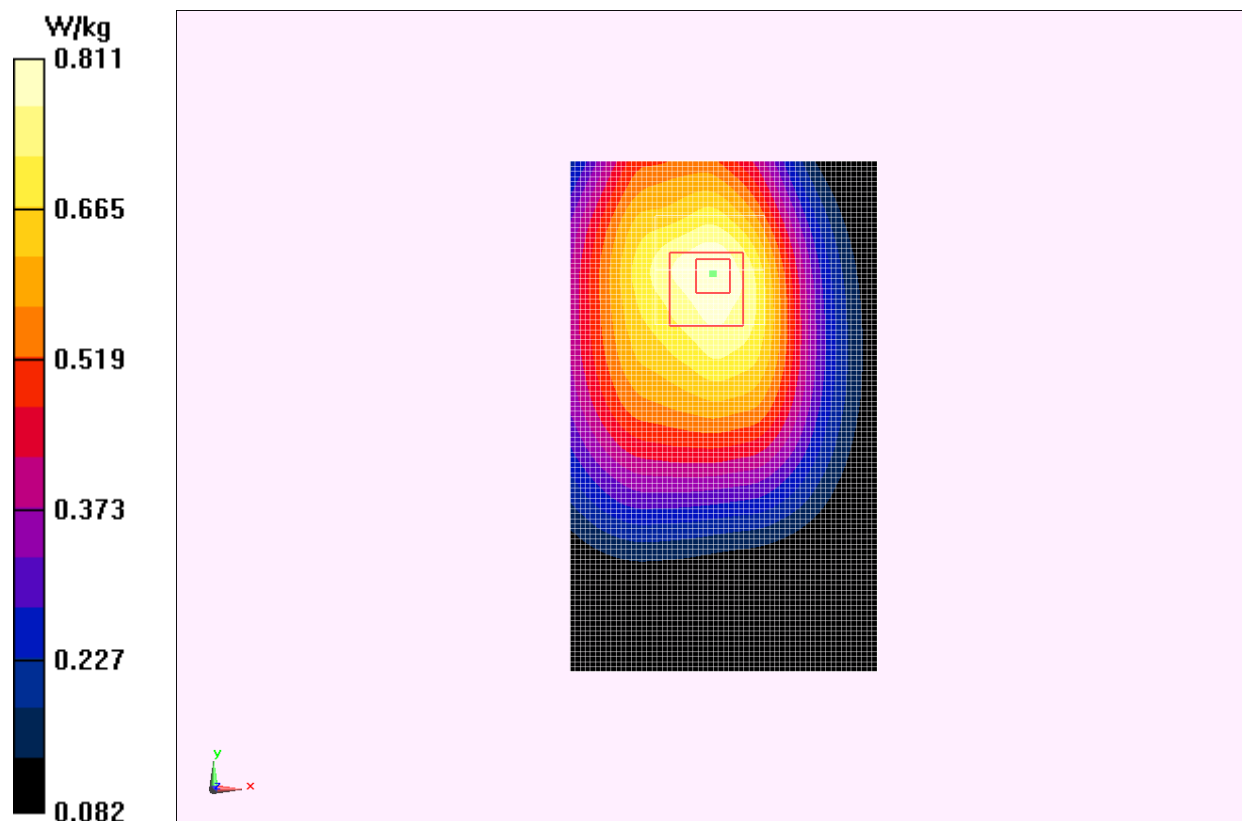


Fig.2 850 MHz CH190

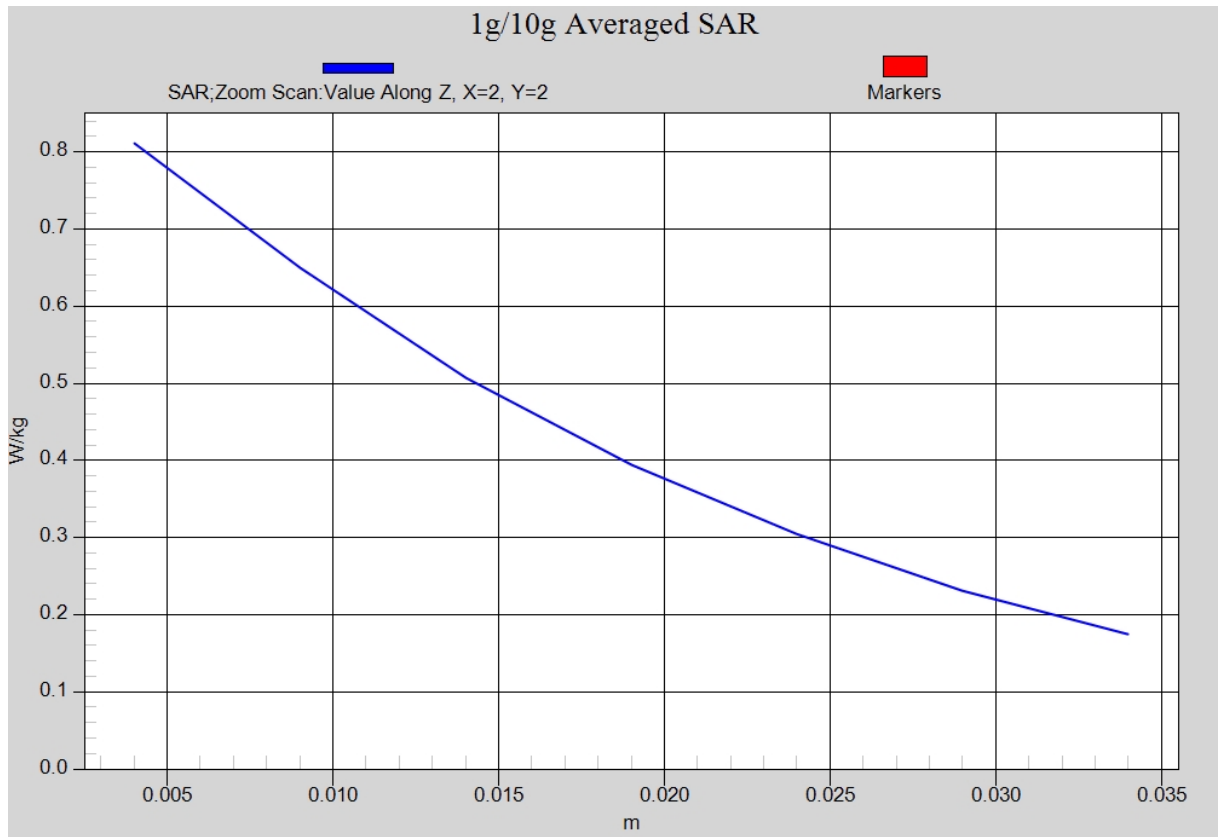


Fig. 2-1 Z-Scan at power reference point (850 MHz CH190)

1900 Left Cheek Low – AP OFF

Date: 2013-3-17

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.378$ mho/m; $\epsilon_r = 39.757$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.310 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.686 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.417 mW/g

SAR(1 g) = 0.278 mW/g; SAR(10 g) = 0.175 mW/g

Maximum value of SAR (measured) = 0.305 mW/g

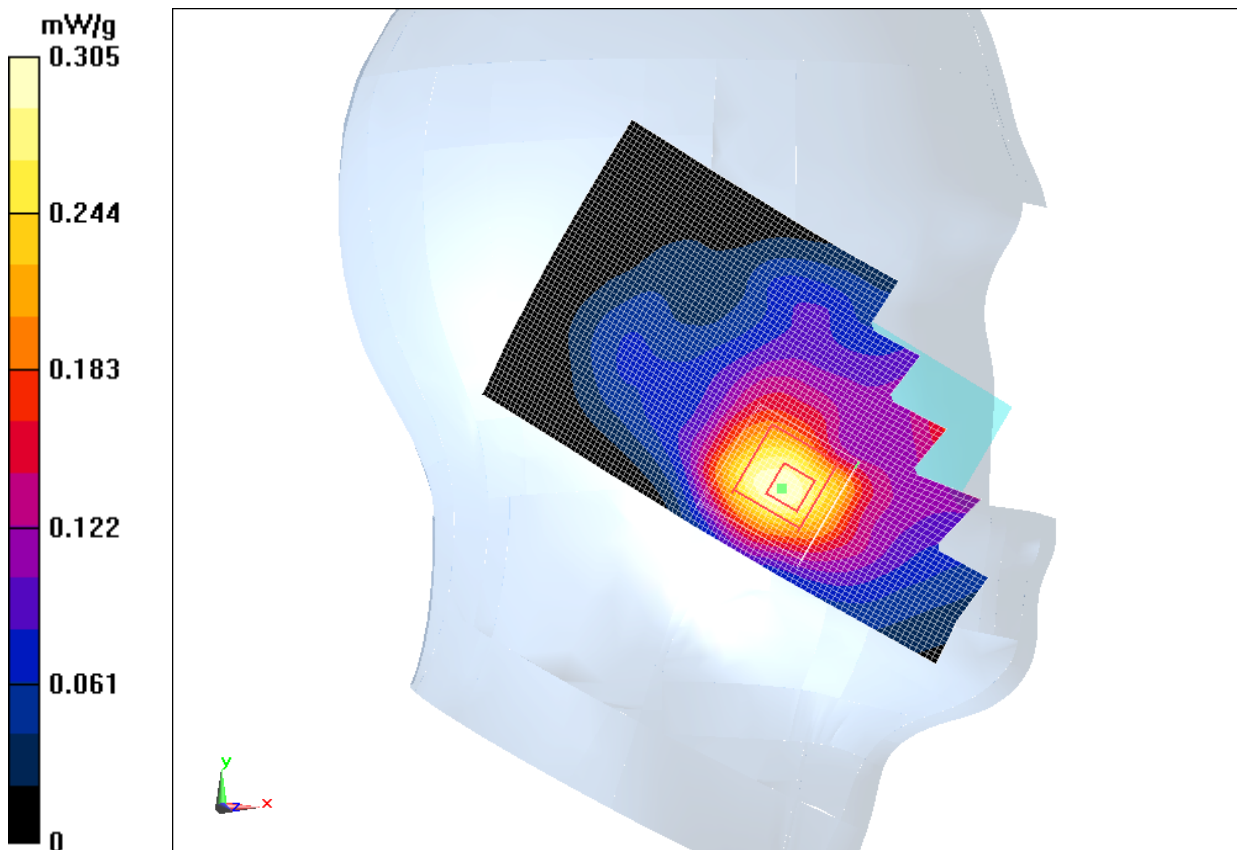


Fig.3 1900 MHz CH512

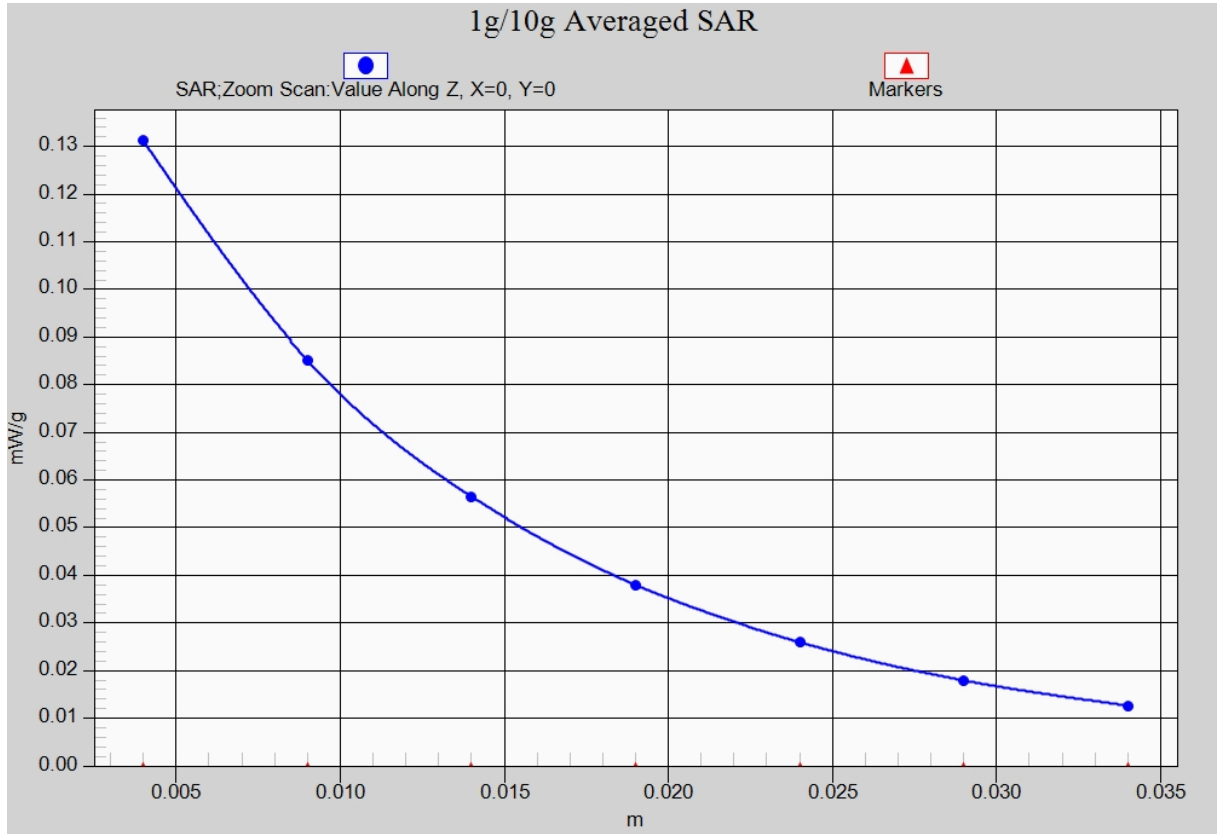


Fig. 3-1 Z-Scan at power reference point (1900 MHz CH512)

1900 Body Bottom Edge Middle with EGPRS – AP ON

Date: 2013-3-17

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.506$ mho/m; $\epsilon_r = 52.683$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C

Communication System: GSM 1900MHz GPRS Frequency: 1880 MHz Duty Cycle: 1:2

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Bottom Edge Middle/Area Scan (71x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.882 mW/g

Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.226 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.346 mW/g

SAR(1 g) = 0.809 mW/g; SAR(10 g) = 0.429 mW/g

Maximum value of SAR (measured) = 0.922 mW/g

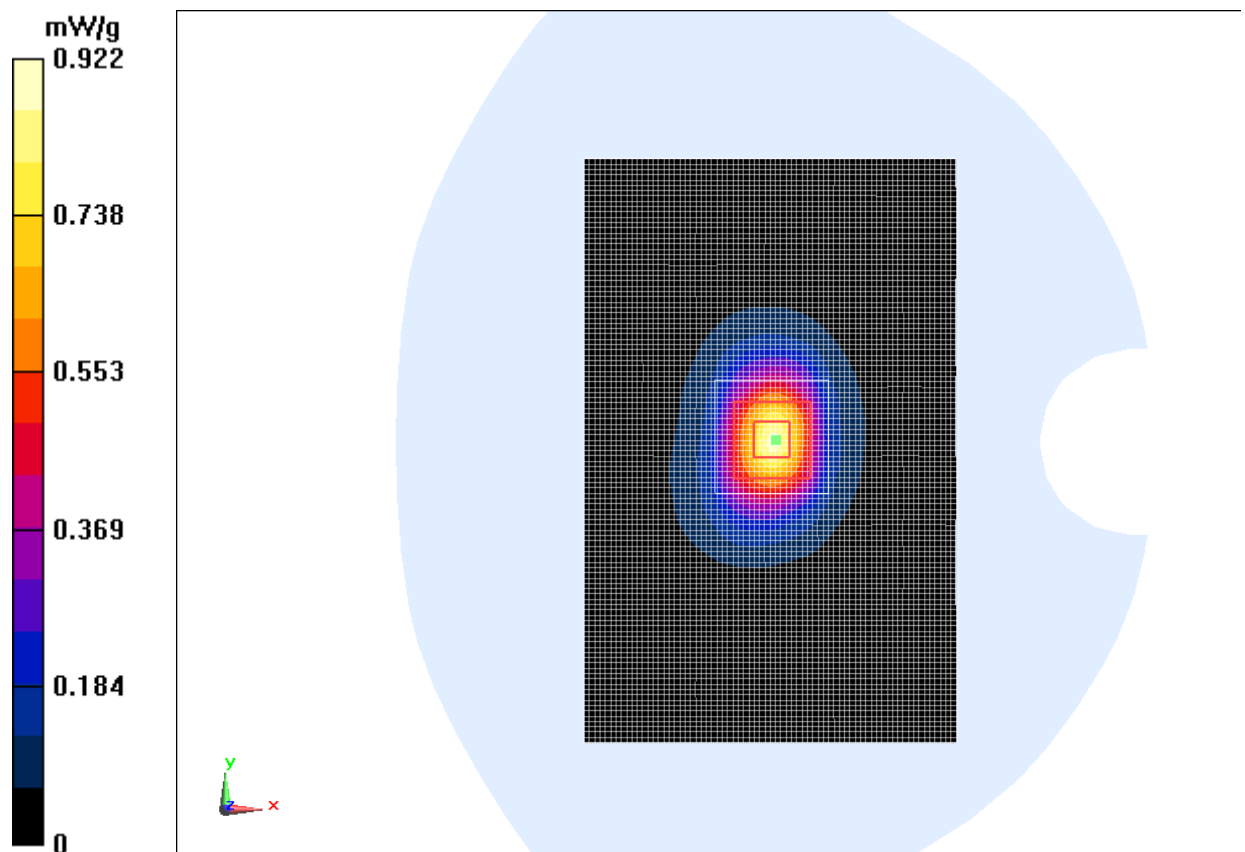


Fig.4 1900 MHz CH661

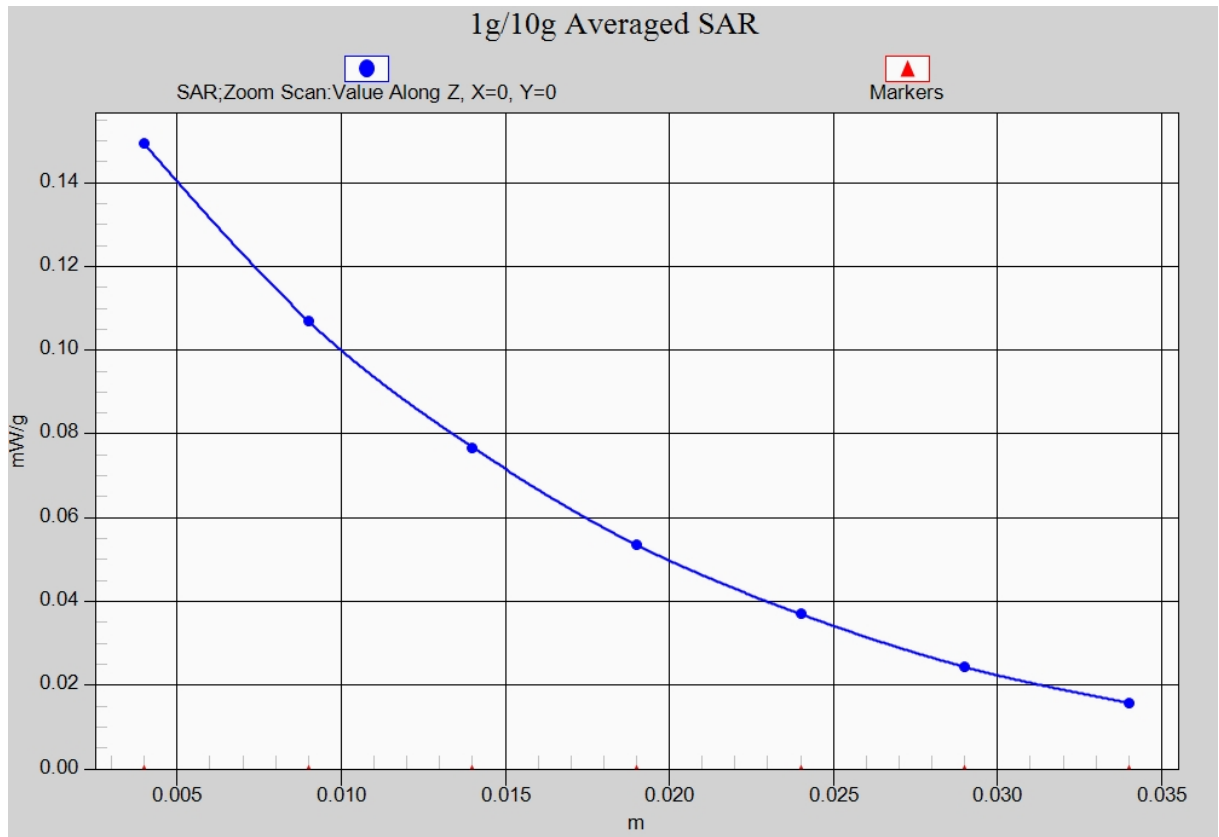


Fig.4-1 Z-Scan at power reference point (1900 MHz CH661)

1900 Body Front High – AP OFF

Date: 2013-3-17

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.544$ mho/m; $\epsilon_r = 52.627$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C

Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Front High/Area Scan (71x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.781 mW/g

Front High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.187 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.099 mW/g

SAR(1 g) = 0.704 mW/g; SAR(10 g) = 0.411 mW/g

Maximum value of SAR (measured) = 0.774 mW/g

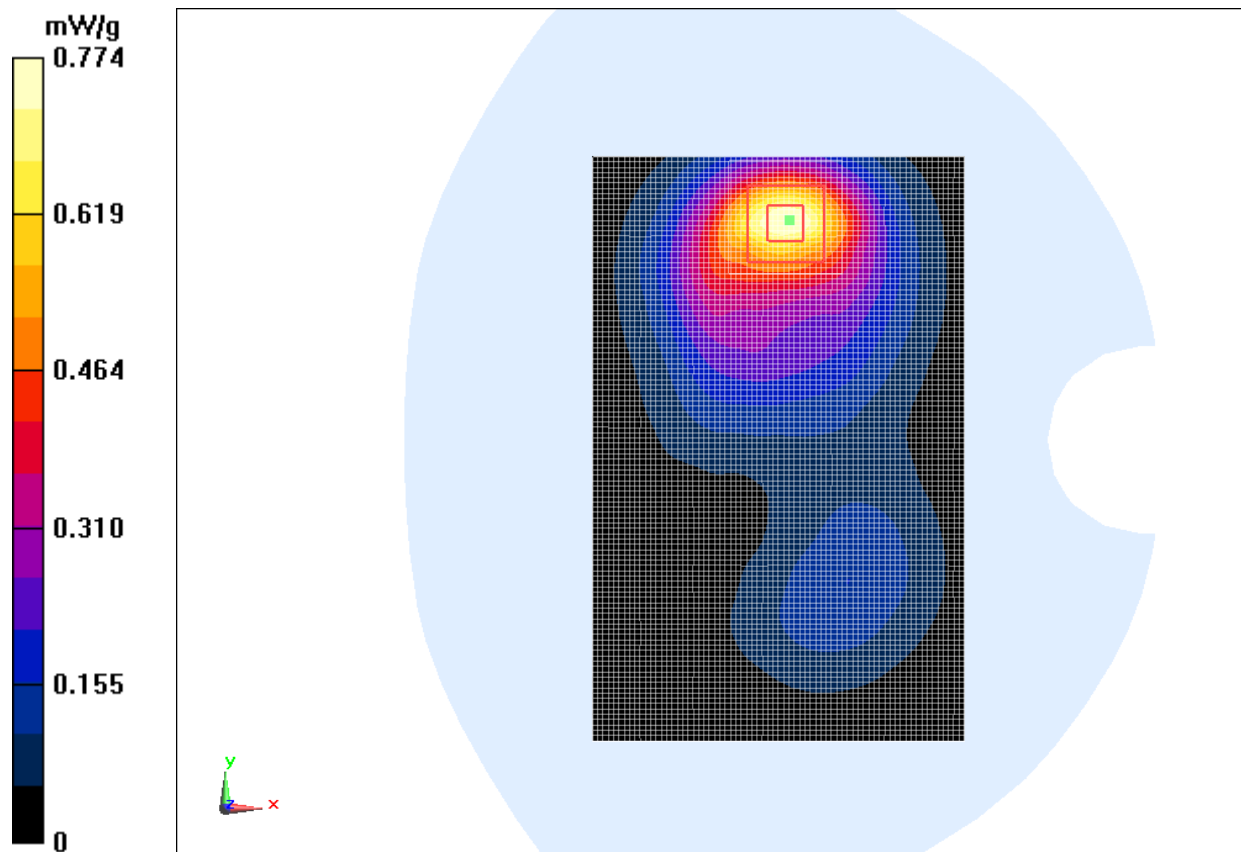


Fig.5 1900 MHz CH810

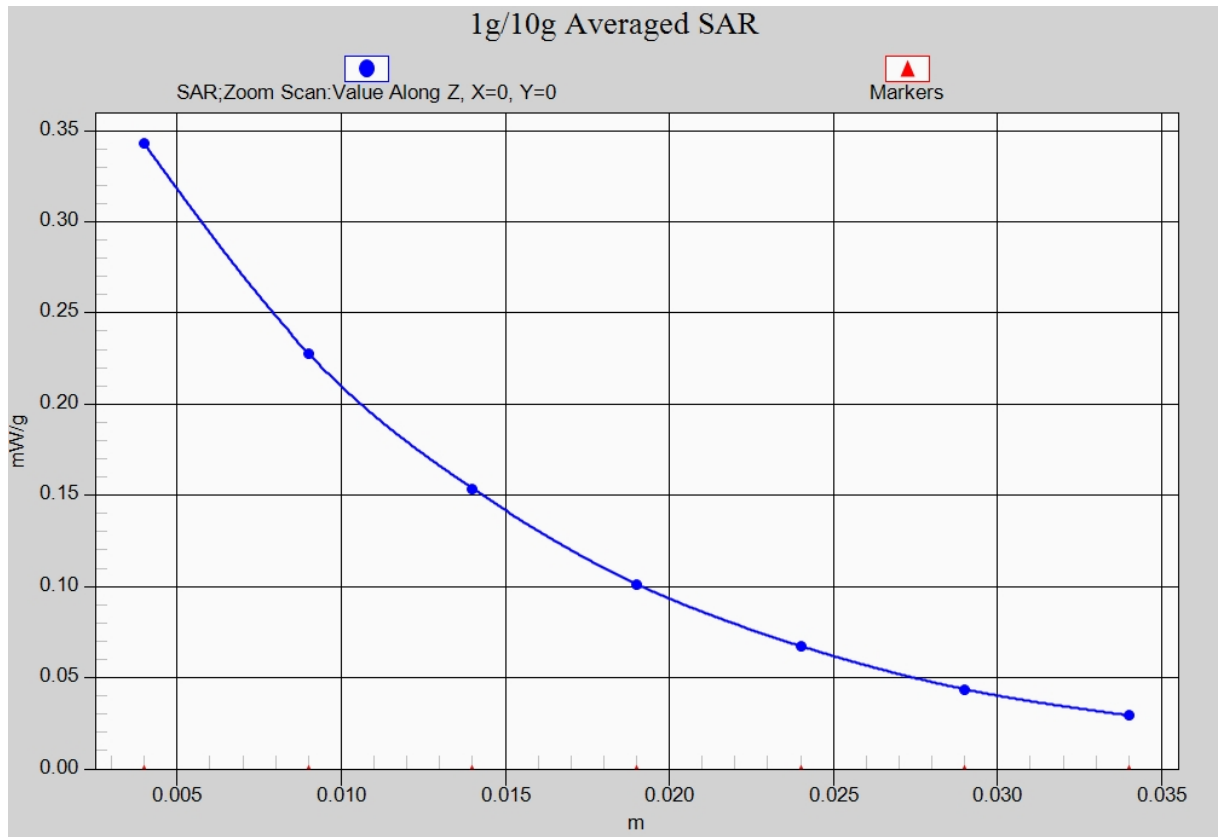


Fig.5-1 Z-Scan at power reference point (1900 MHz CH810)

WCDMA 850 Left Cheek High – AP OFF

Date: 2013-3-16

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.897$ mho/m; $\epsilon_r = 40.593$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C

Communication System: WCDMA; Frequency: 846.6 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.26, 6.26, 6.26)

Cheek High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.528 W/kg

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.685 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.607 W/kg

SAR(1 g) = 0.500 W/kg; SAR(10 g) = 0.392 W/kg

Maximum value of SAR (measured) = 0.522 W/kg

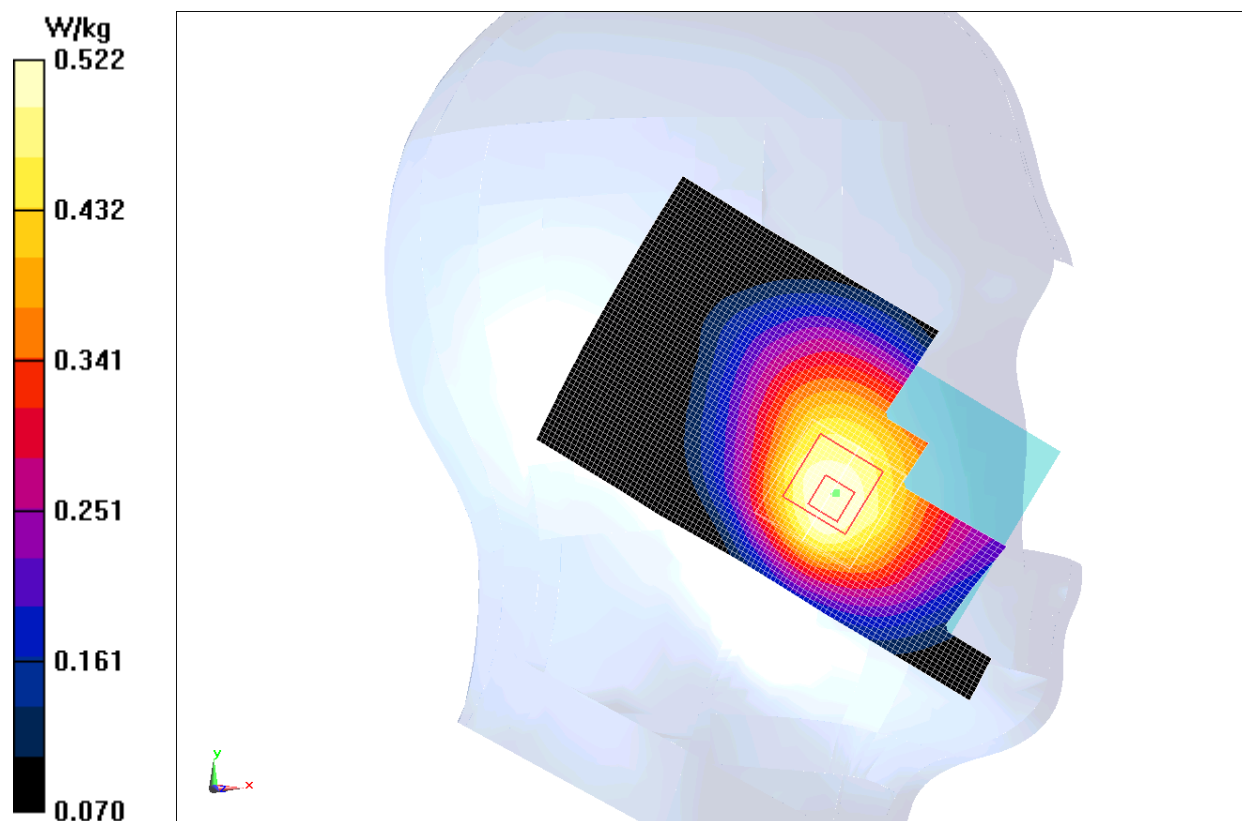


Fig.6 WCDMA 850 CH4233

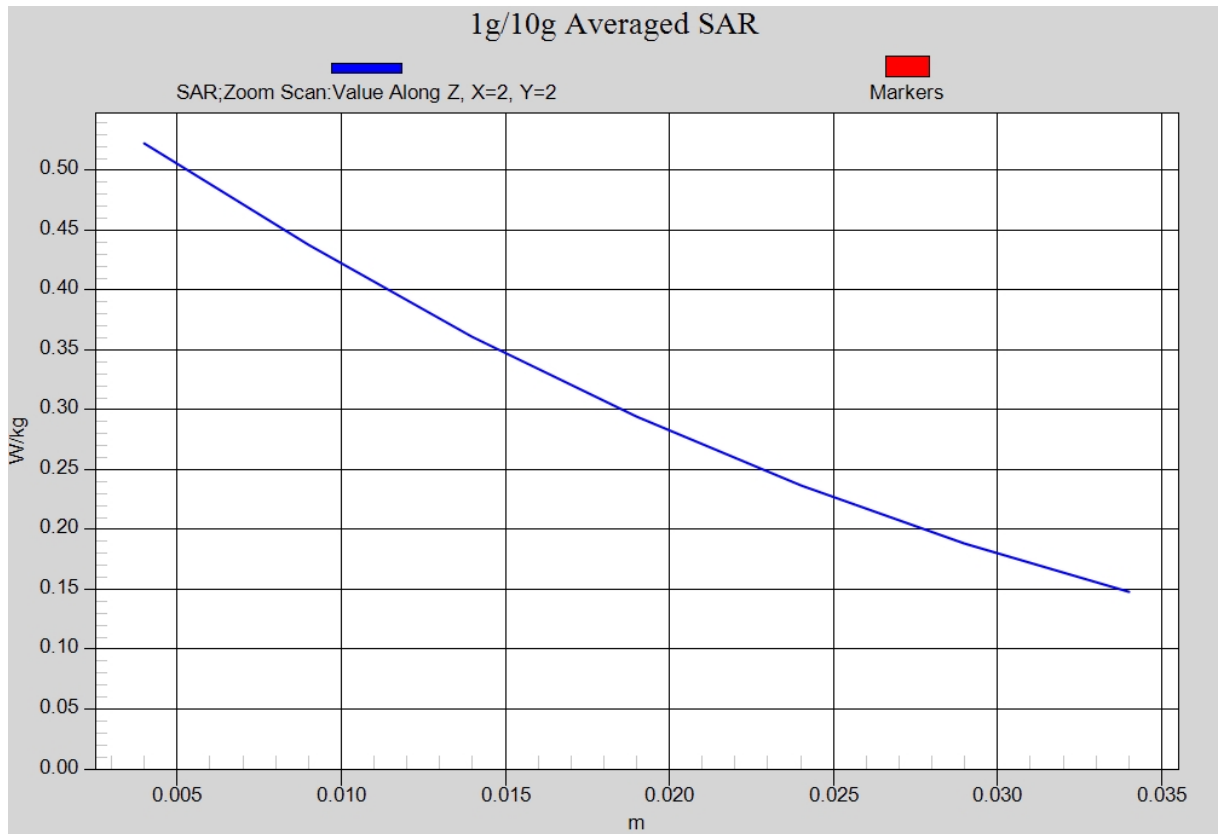


Fig. 6-1 Z-Scan at power reference point (WCDMA 850 CH4233)

WCDMA 850 Body Front Low – AP OFF

Date: 2013-3-16

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.975$ mho/m; $\epsilon_r = 56.517$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C

Communication System: WCDMA; Frequency: 826.4 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Front Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.712 W/kg

Front Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.219 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.826 W/kg

SAR(1 g) = 0.685 W/kg; SAR(10 g) = 0.541 W/kg

Maximum value of SAR (measured) = 0.711 W/kg

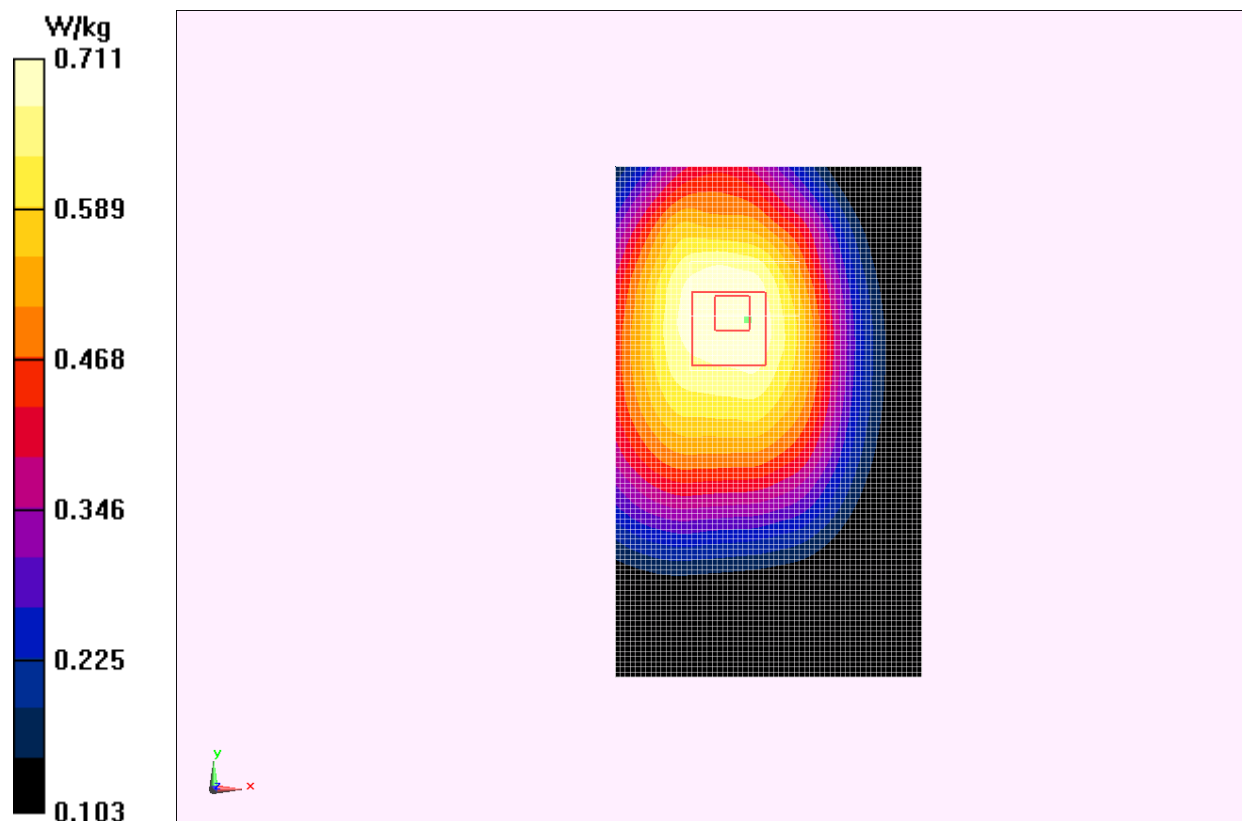


Fig.7 WCDMA 850 CH4132

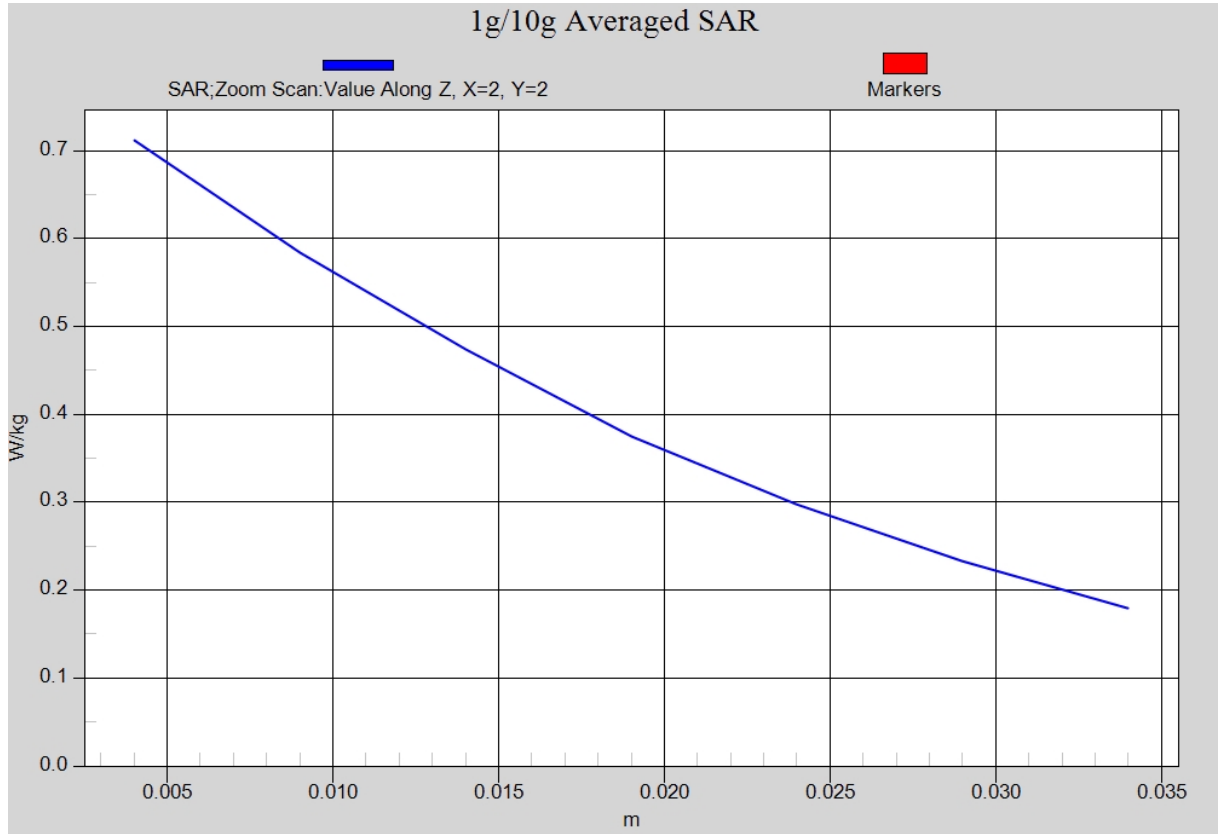


Fig. 7-1 Z-Scan at power reference point (WCDMA850 CH4132)

WCDMA 1900 Left Cheek High – AP OFF

Date: 2013-3-17

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.428$ mho/m; $\epsilon_r = 39.597$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Cheek High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.578 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.347 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.769 mW/g

SAR(1 g) = 0.521 mW/g; SAR(10 g) = 0.327 mW/g

Maximum value of SAR (measured) = 0.568 mW/g

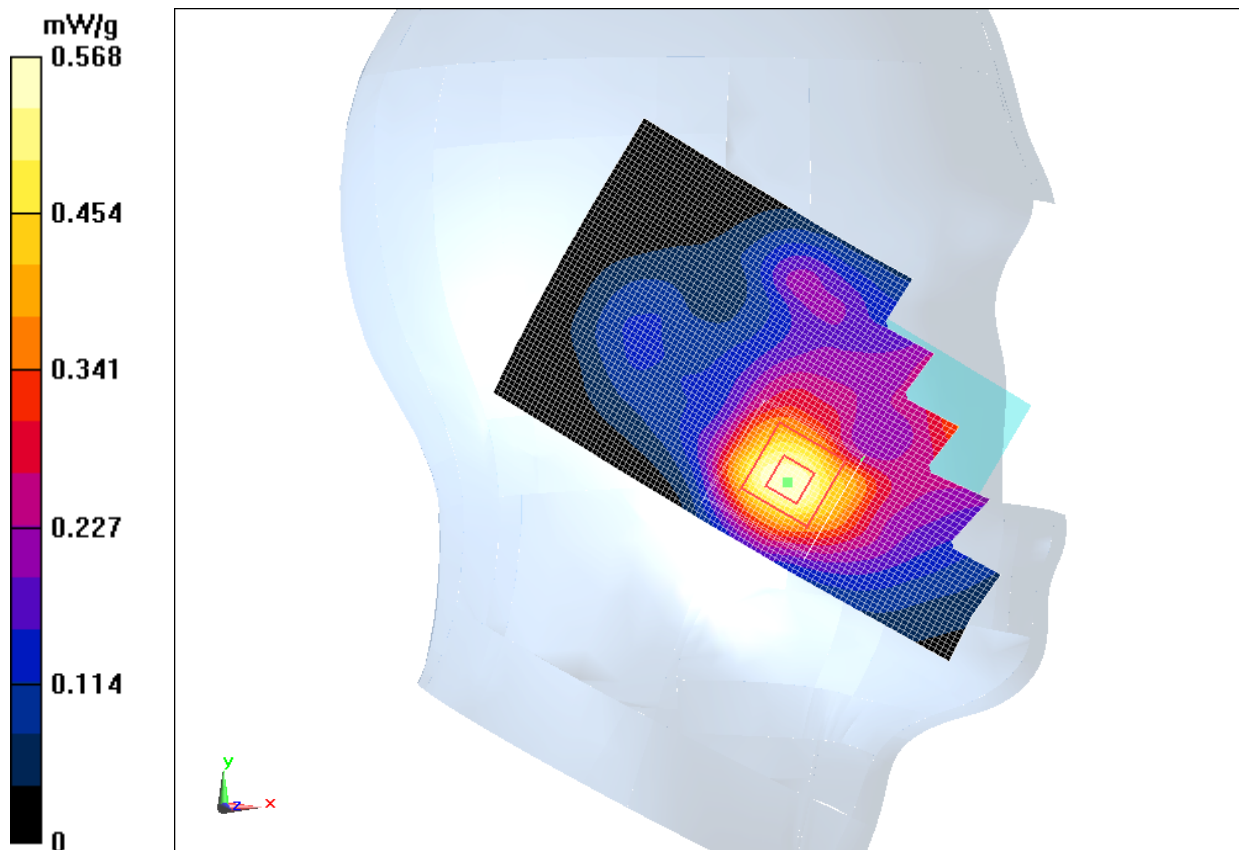


Fig.8 WCDMA1900 CH9538

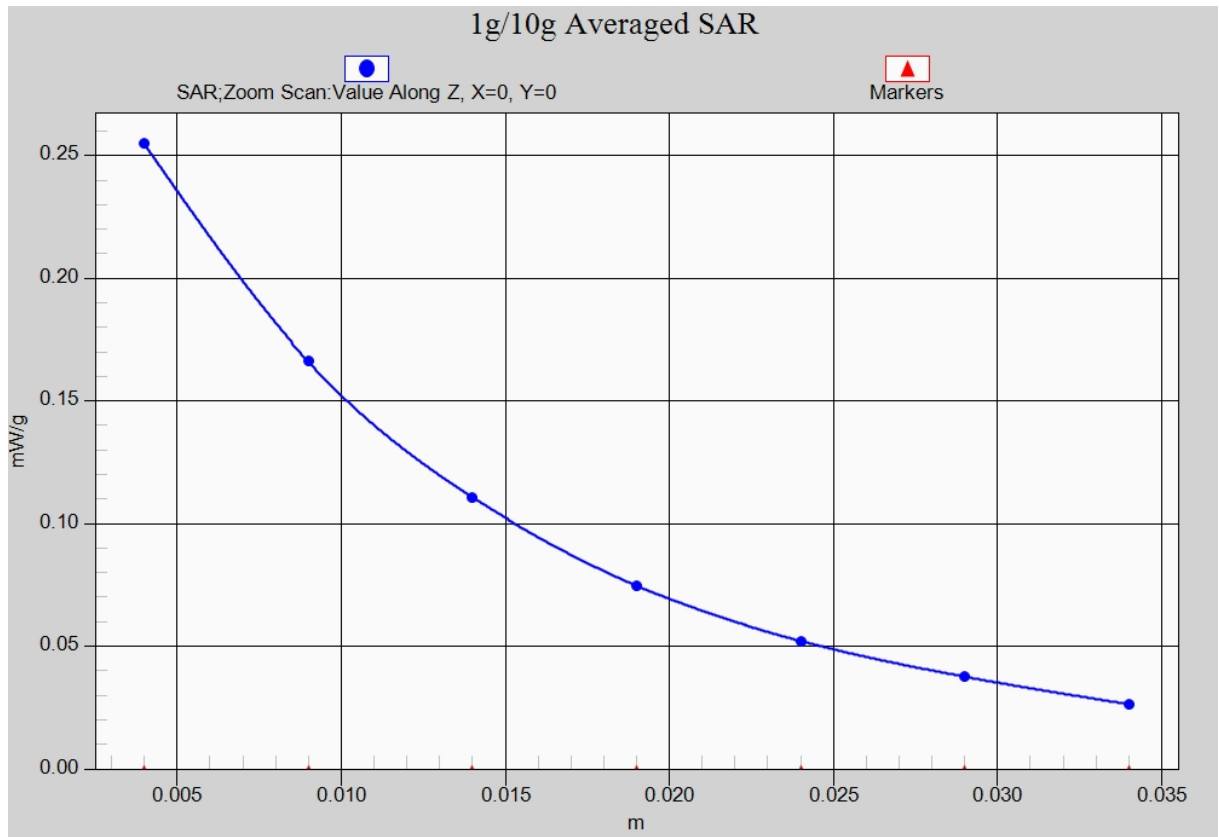


Fig. 8-1 Z-Scan at power reference point (WCDMA1900 CH9538)

WCDMA 1900 Body Bottom Edge High – AP ON

Date: 2013-3-17

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.541$ mho/m; $\epsilon_r = 52.632$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Bottom Edge High/Area Scan (71x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.11 mW/g

Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.040 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.744 mW/g

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.541 mW/g

Maximum value of SAR (measured) = 1.16 mW/g

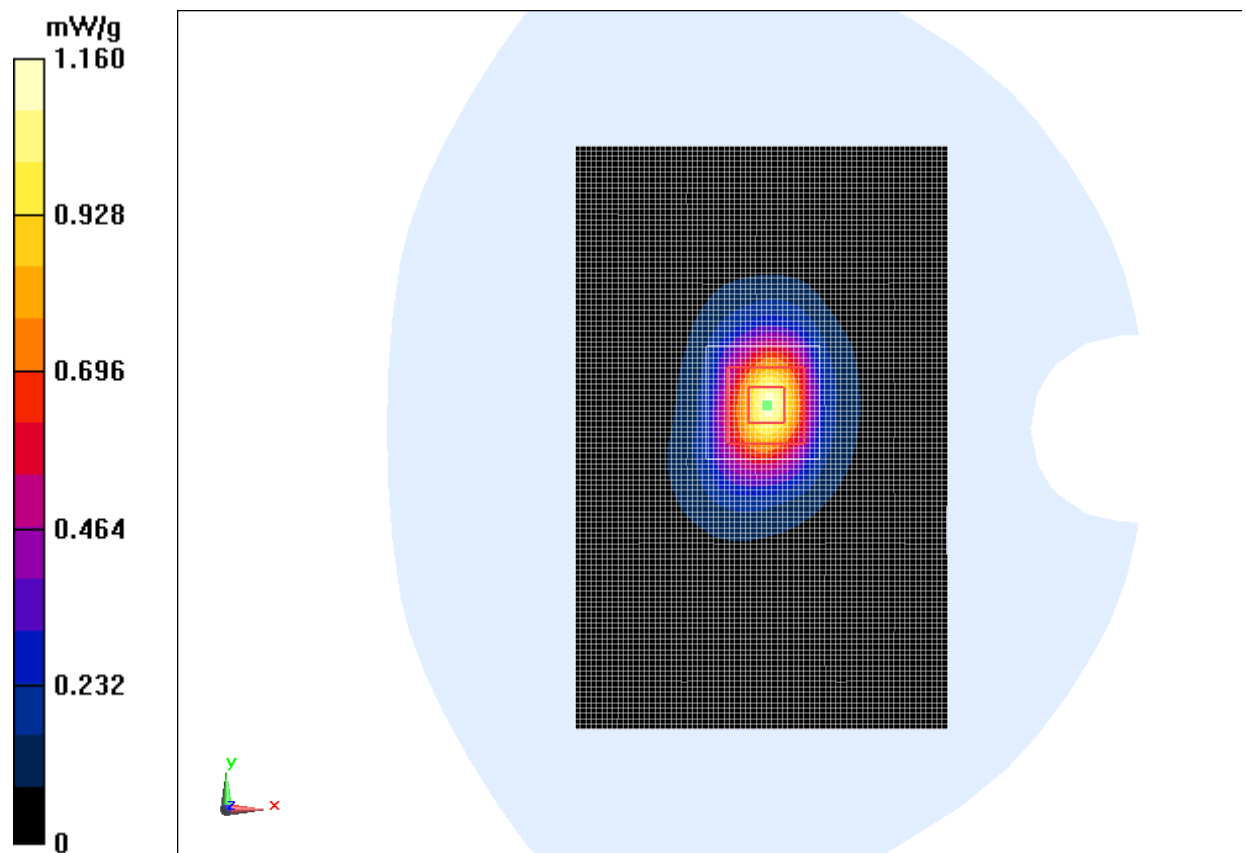


Fig.9 WCDMA1900 CH9538

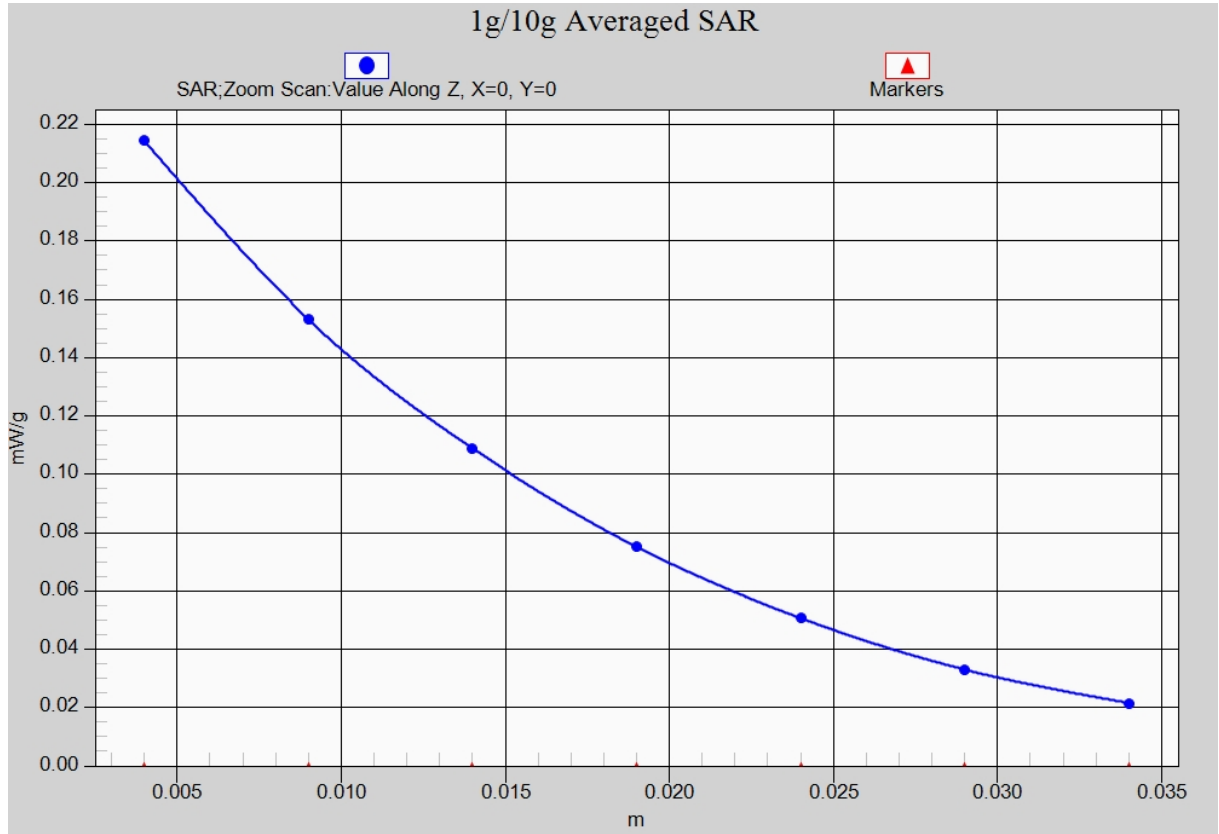


Fig. 9-1 Z-Scan at power reference point (WCDMA1900 CH9538)

WCDMA 1900 Body Front High – AP OFF

Date: 2013-3-17

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.541$ mho/m; $\epsilon_r = 52.632$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Front High/Area Scan (71x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.48 mW/g

Front High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.352 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 2.040 mW/g

SAR(1 g) = 1.32 mW/g; SAR(10 g) = 0.767 mW/g

Maximum value of SAR (measured) = 1.45 mW/g

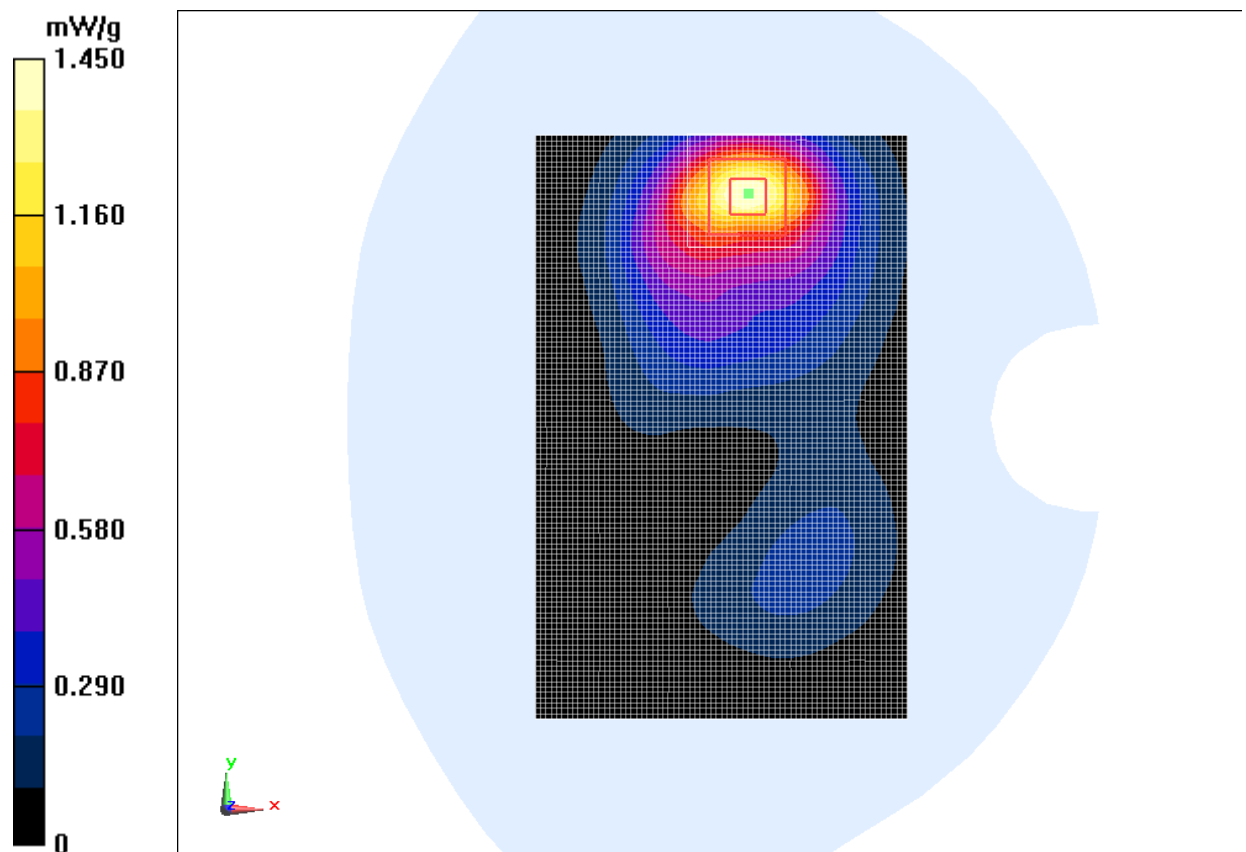


Fig.10 WCDMA1900 CH9538

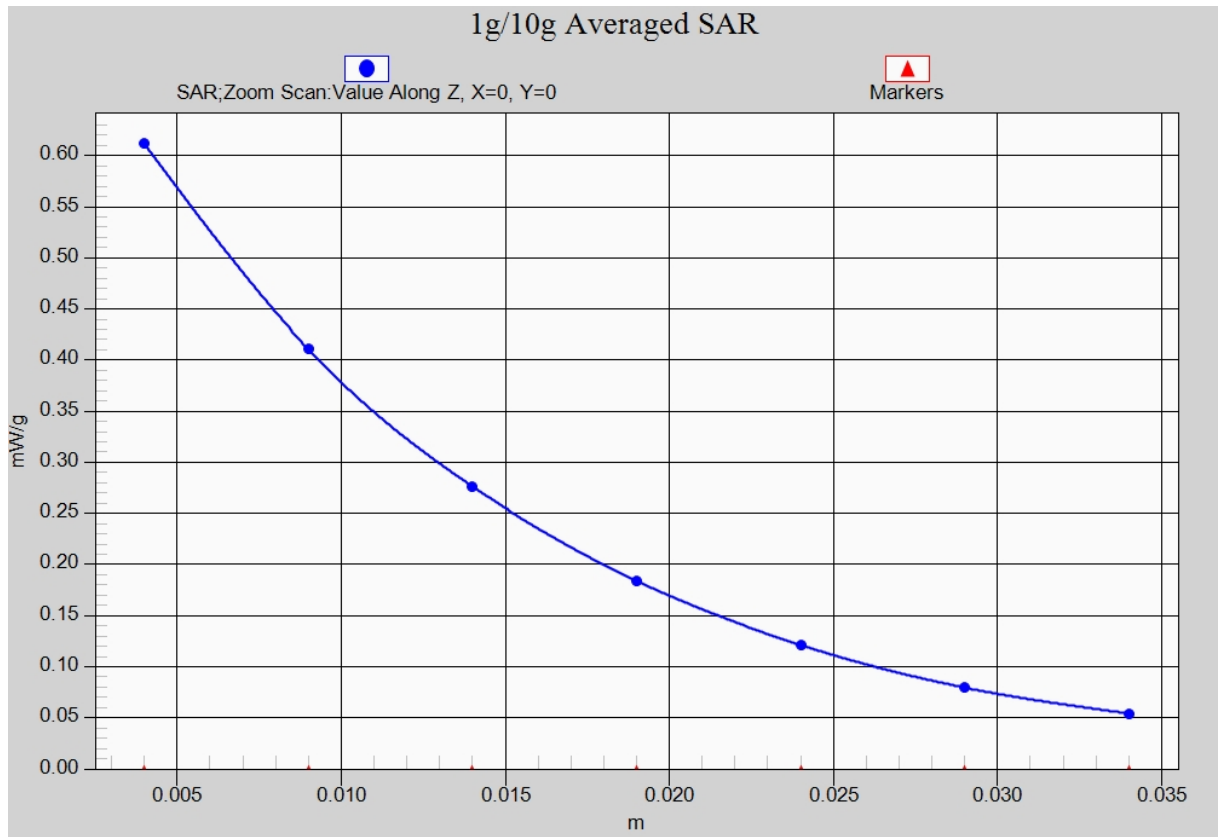


Fig. 10-1 Z-Scan at power reference point (WCDMA1900 CH9538)

WCDMA 1900 Body Front High with Headset – AP OFF

Date: 2013-3-17

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.541$ mho/m; $\epsilon_r = 52.632$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Front High/Area Scan (71x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.39 mW/g

Front High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.382 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 2.018 mW/g

SAR(1 g) = 1.3 mW/g; SAR(10 g) = 0.766 mW/g

Maximum value of SAR (measured) = 1.41 mW/g

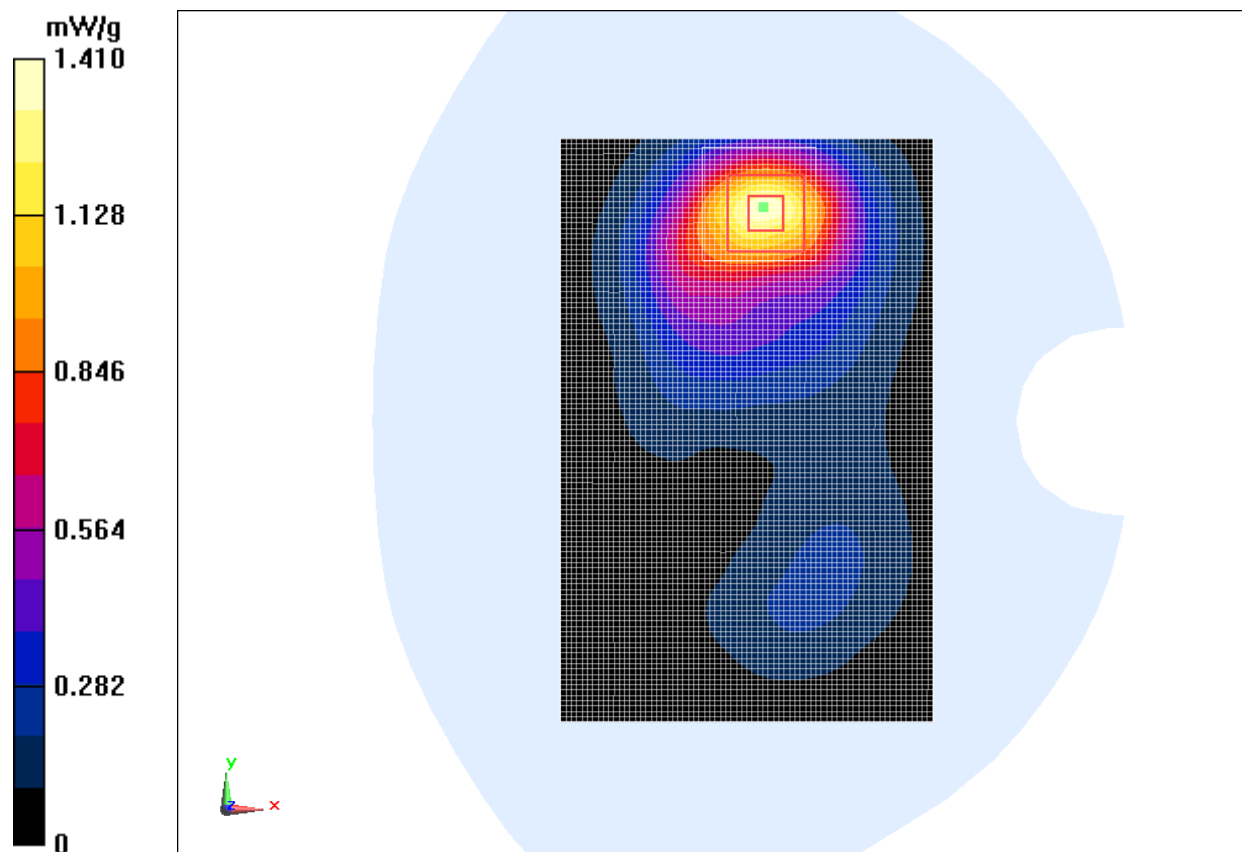


Fig.11 WCDMA1900 CH9538

LTE Band2 Right Cheek Middle with QPSK_20M_1RB_Middle – AP OFF

Date: 2013-3-17

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 39.638$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C

Communication System: LTE Band2 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.367 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.068 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.600 mW/g

SAR(1 g) = 0.371 mW/g; SAR(10 g) = 0.214 mW/g

Maximum value of SAR (measured) = 0.407 mW/g

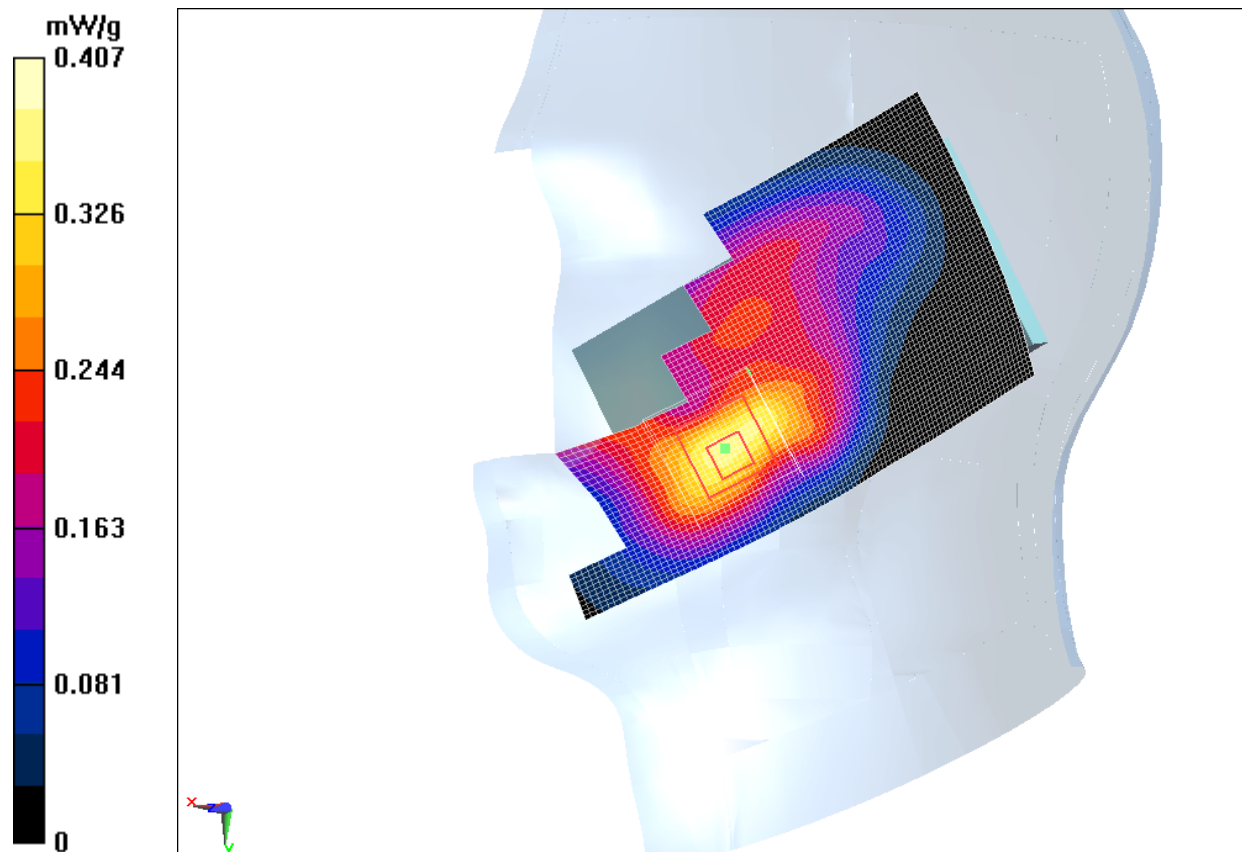


Fig.12 LTE Band2 CH18900

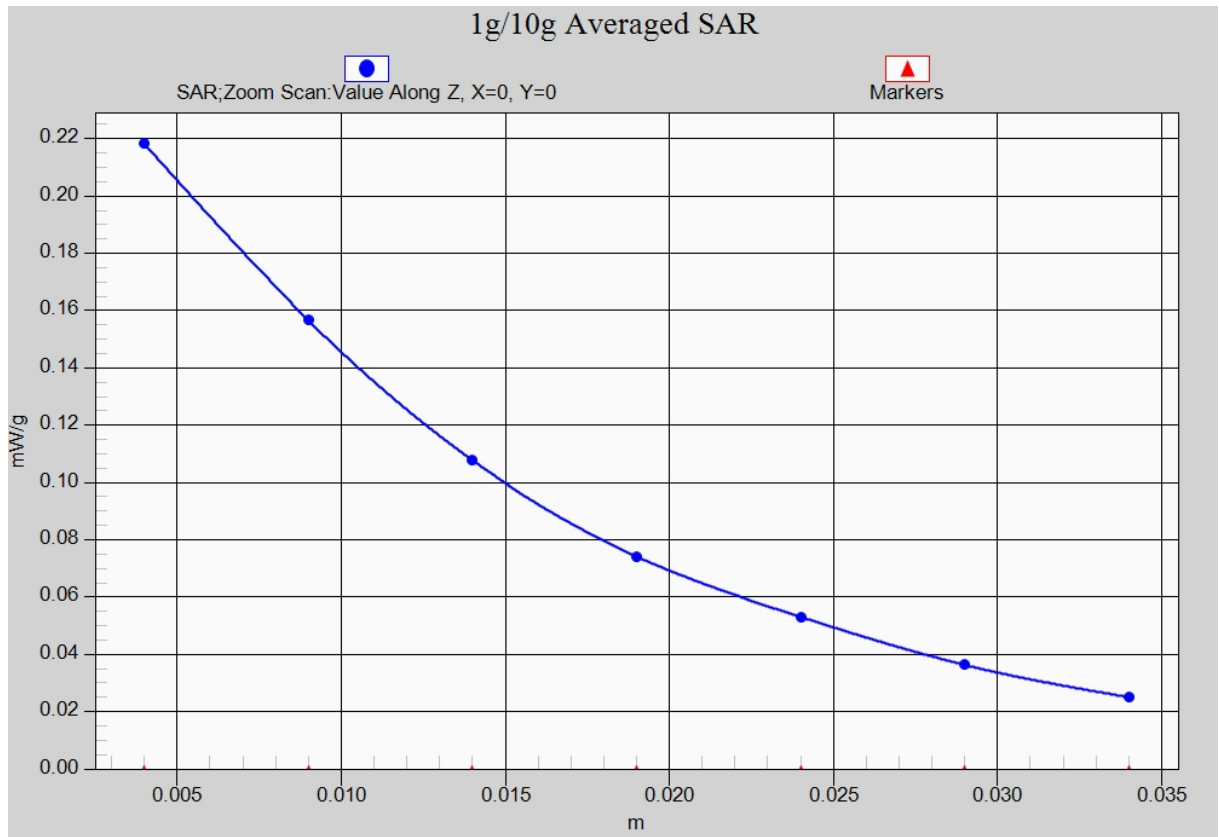


Fig. 12-1 Z-Scan at power reference point (LTE Band2 CH18900)

LTE Band2 Body Front Low with QPSK_20M_50RB_Low – AP ON

Date: 2013-3-17

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.489$ mho/m; $\epsilon_r = 52.797$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C

Communication System: LTE Band2 Frequency: 1860 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Front Low/Area Scan (71x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.12 mW/g

Front Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.182 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.728 mW/g

SAR(1 g) = 1 mW/g; SAR(10 g) = 0.534 mW/g

Maximum value of SAR (measured) = 1.05 mW/g

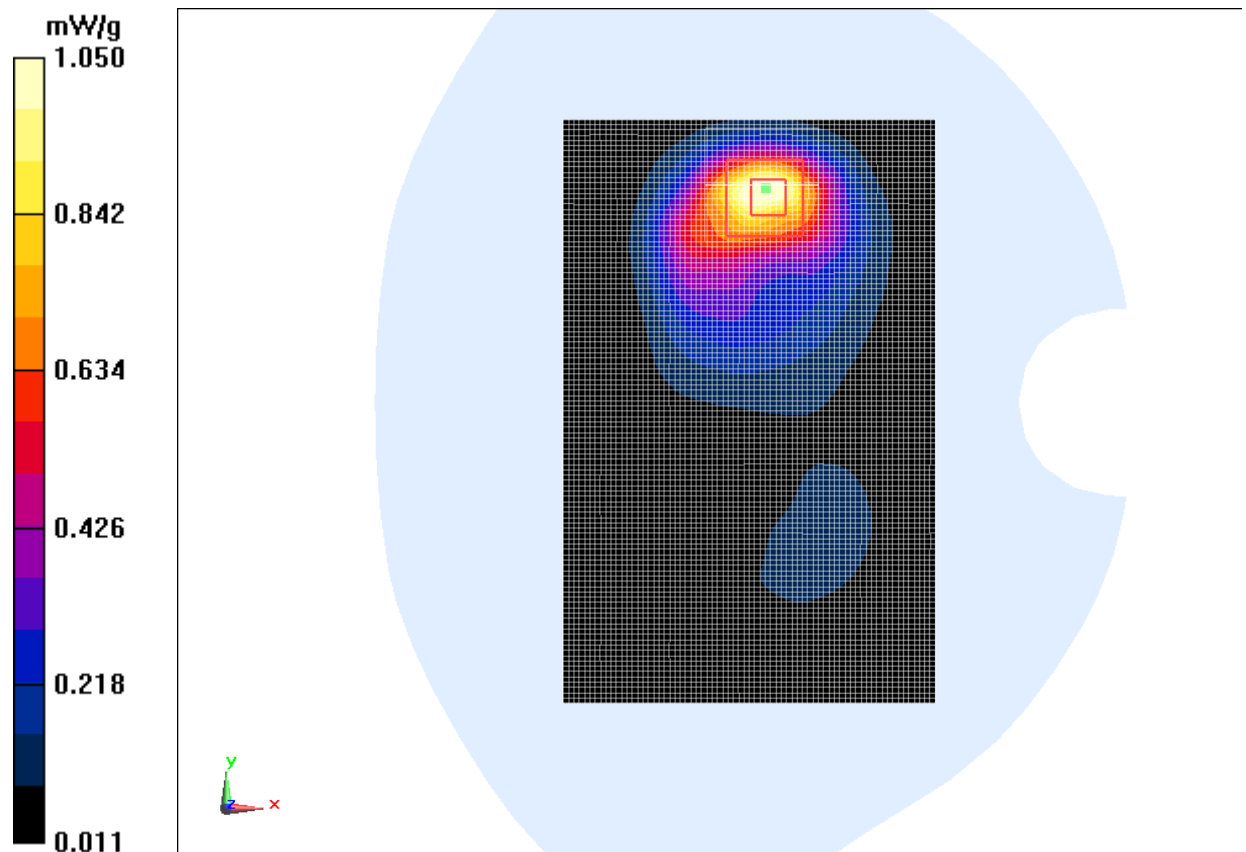


Fig.13 LTE Band2 CH18700

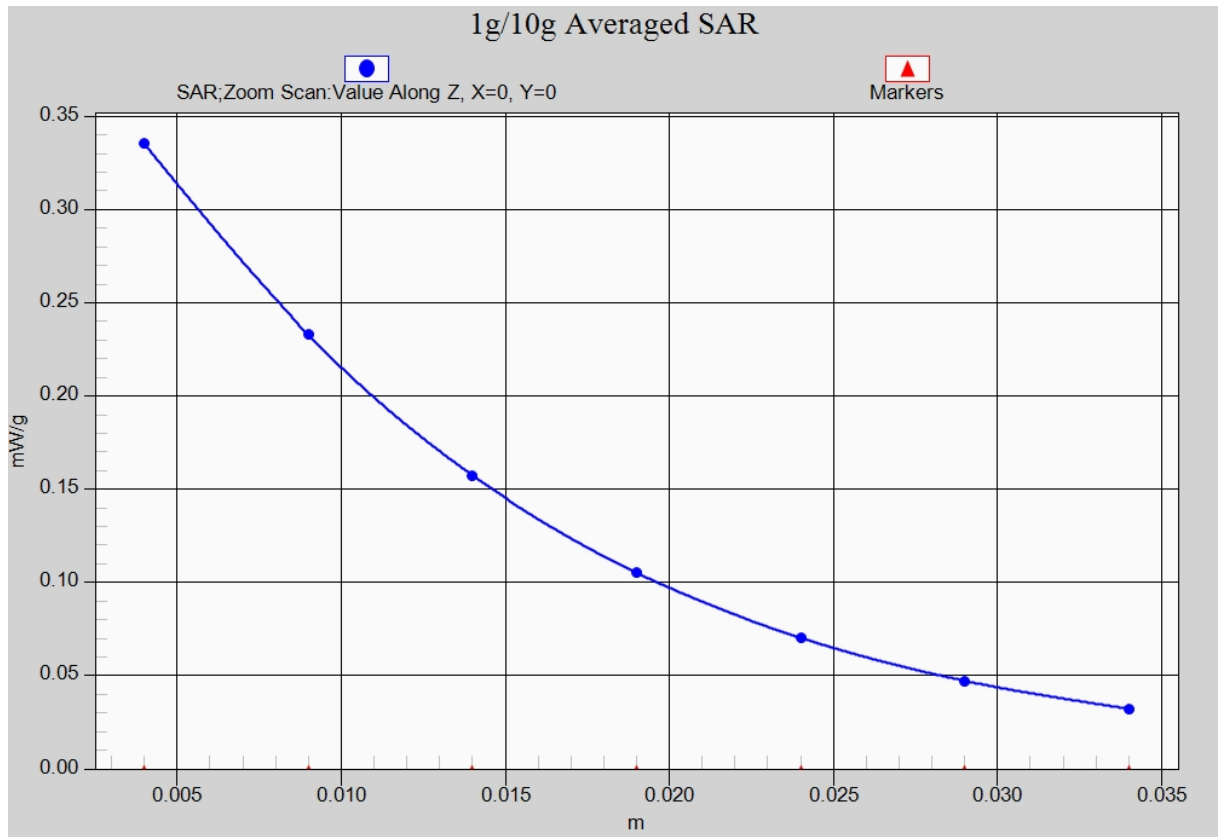


Fig. 13-1 Z-Scan at power reference point (LTE Band2 CH18700)

LTE Band2 Body Front Low with QPSK_20M_1RB_Middle – AP OFF

Date: 2013-3-17

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.489$ mho/m; $\epsilon_r = 52.797$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C

Communication System: LTE Band2 Frequency: 1860 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Front Low/Area Scan (71x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.19 mW/g

Front Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.196 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.691 mW/g

SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.669 mW/g

Maximum value of SAR (measured) = 1.21 mW/g

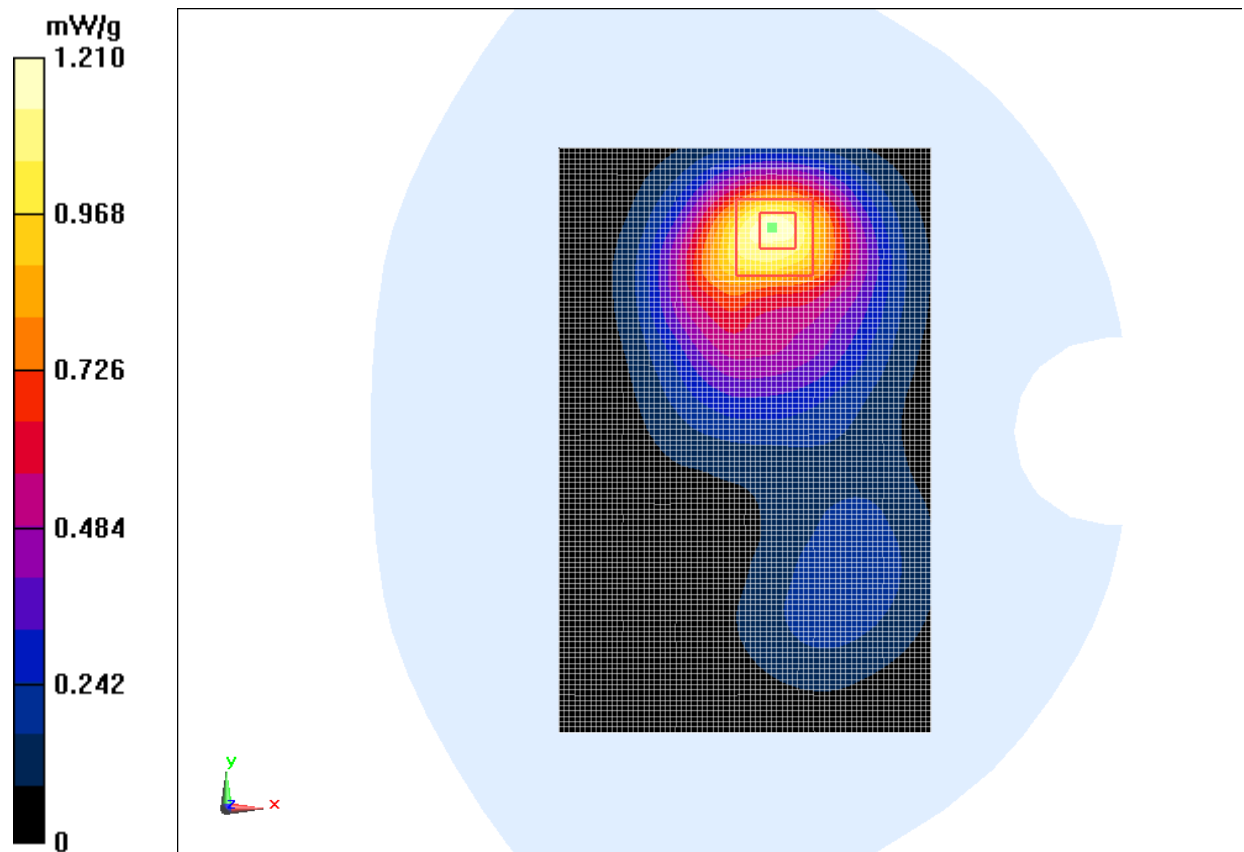


Fig.14 LTE Band2 CH18700

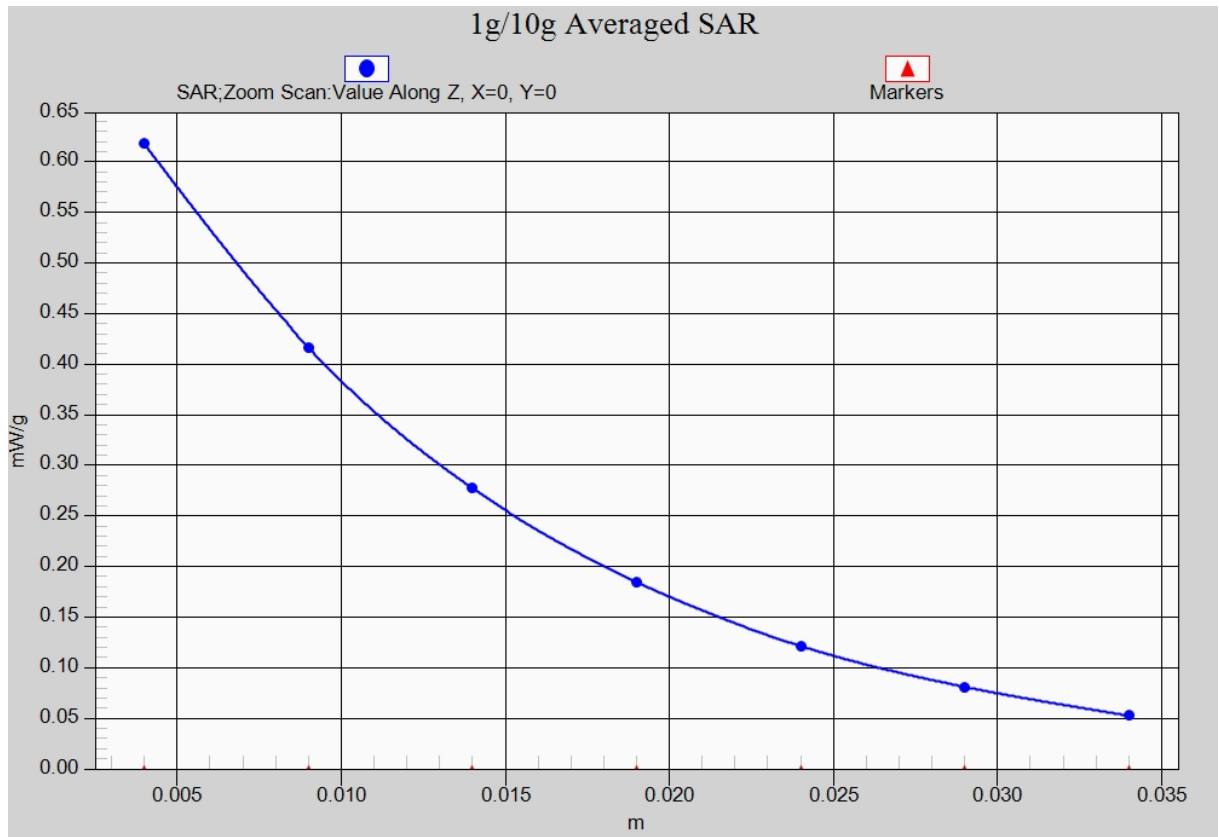


Fig. 14-1 Z-Scan at power reference point (LTE Band2 CH18700)

LTE Band4 Right Cheek Middle with QPSK_20M_1RB_Middle – AP OFF

Date: 2013-3-19

Electronics: DAE4 Sn771

Medium: Head 1750 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.365$ mho/m; $\epsilon_r = 39.398$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.8°C Liquid Temperature: 22.3°C

Communication System: LTE Band4 Frequency: 1732.5 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.23, 5.23, 5.23)

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.752 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.071 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.085 mW/g

SAR(1 g) = 0.656 mW/g; SAR(10 g) = 0.384 mW/g

Maximum value of SAR (measured) = 0.729 mW/g

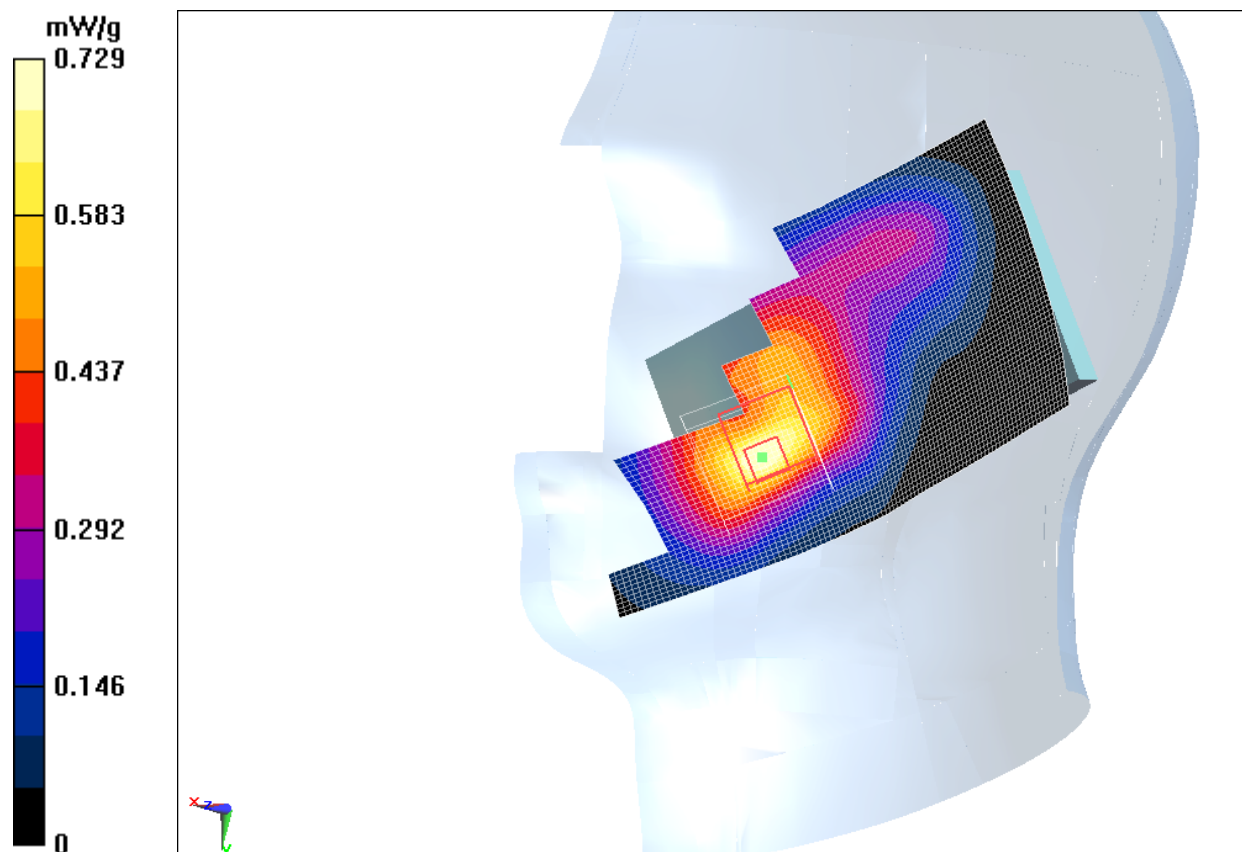


Fig.15 LTE Band4 CH20175

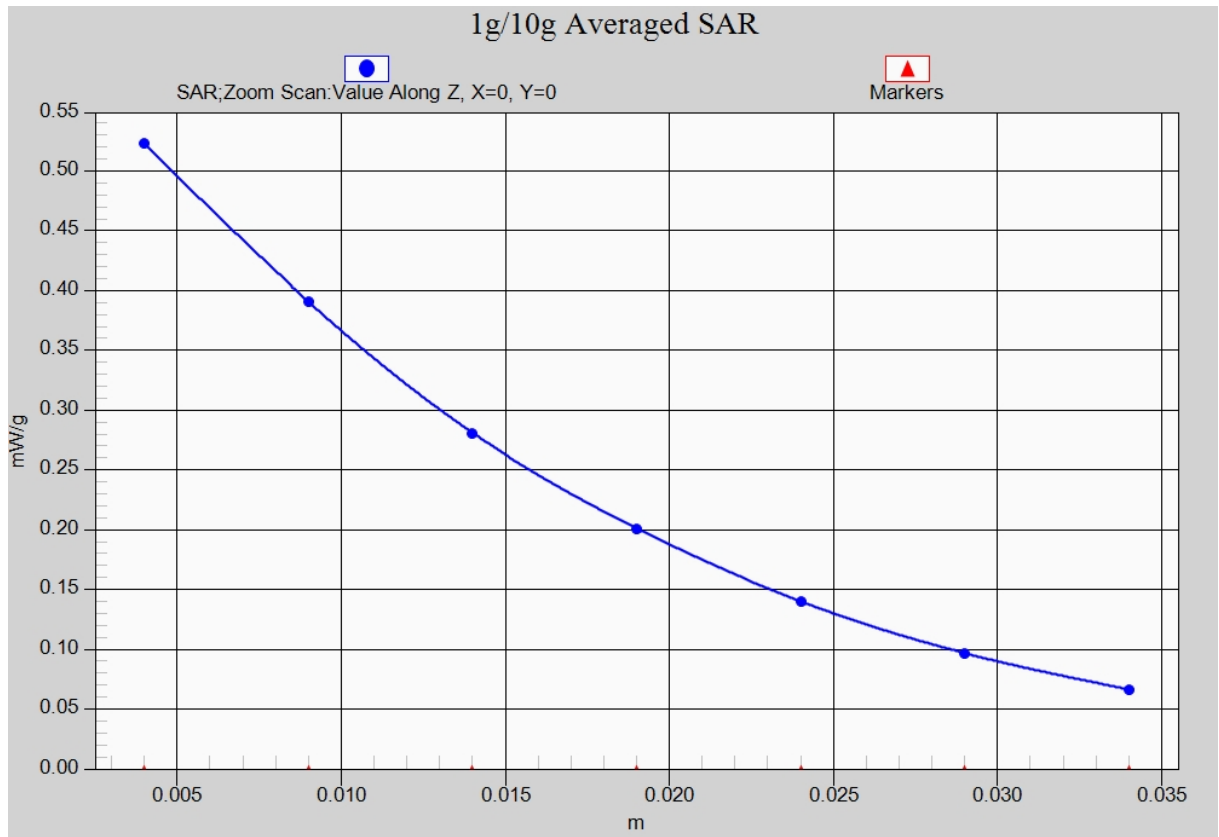


Fig. 15-1 Z-Scan at power reference point (LTE Band4 CH20175)

LTE Band4 Body Front High with QPSK_20M_1RB_Low – AP ON

Date: 2013-3-19

Electronics: DAE4 Sn771

Medium: Body 1750 MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.523$ mho/m; $\epsilon_r = 54.601$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.8°C Liquid Temperature: 22.3°C

Communication System: LTE Band4 Frequency: 1745 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.84, 4.84, 4.84)

Front High/Area Scan (71x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.27 mW/g

Front High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.186 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.758 mW/g

SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.588 mW/g

Maximum value of SAR (measured) = 1.29 mW/g

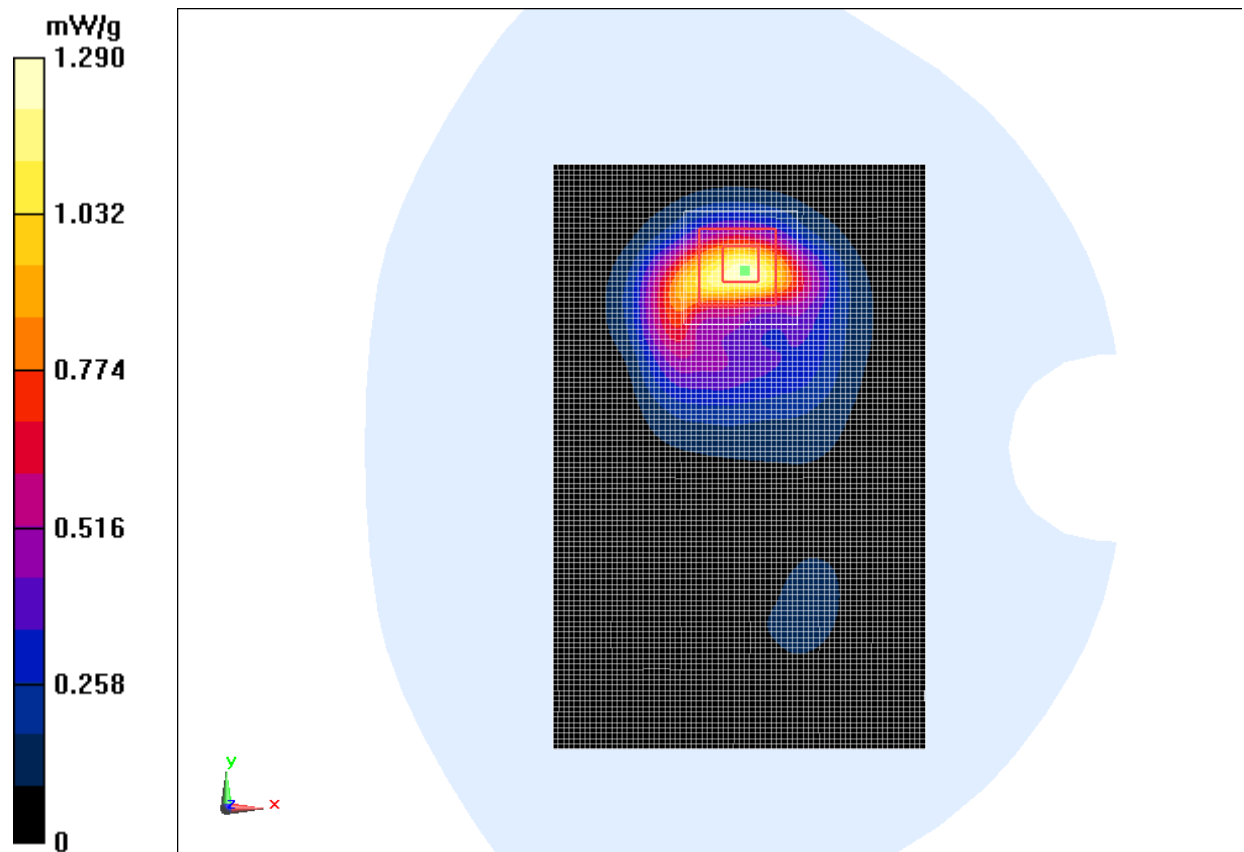


Fig.16 LTE Band4 CH20300

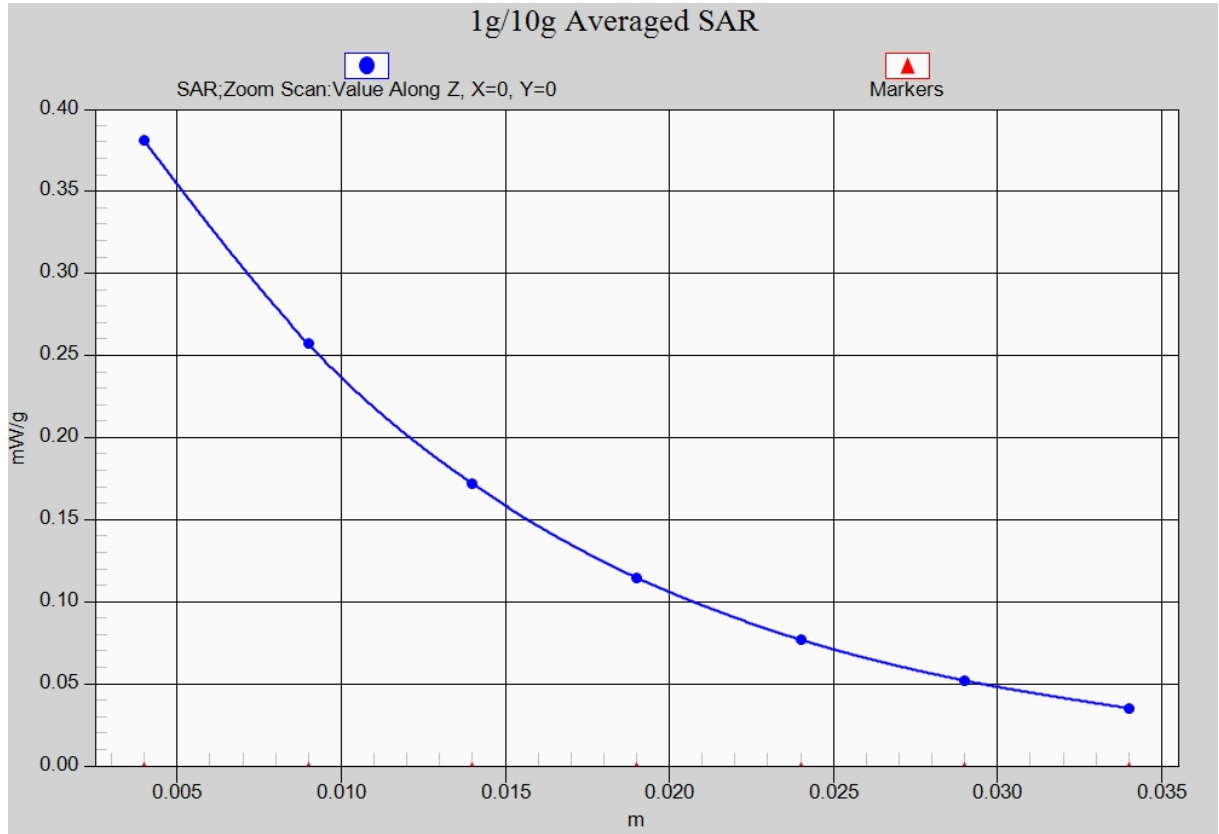


Fig. 16-1 Z-Scan at power reference point (LTE Band4 CH20300)

LTE Band4 Body Front Middle with QPSK_20M_1RB_Middle – AP OFF

Date: 2013-3-19

Electronics: DAE4 Sn771

Medium: Body 1750 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.513$ mho/m; $\epsilon_r = 54.644$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.8°C Liquid Temperature: 22.3°C

Communication System: LTE Band4 Frequency: 1732.5 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.84, 4.84, 4.84)

Front Middle/Area Scan (71x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.930 mW/g

Front Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.194 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.232 mW/g

SAR(1 g) = 0.880 mW/g; SAR(10 g) = 0.554 mW/g

Maximum value of SAR (measured) = 0.946 mW/g

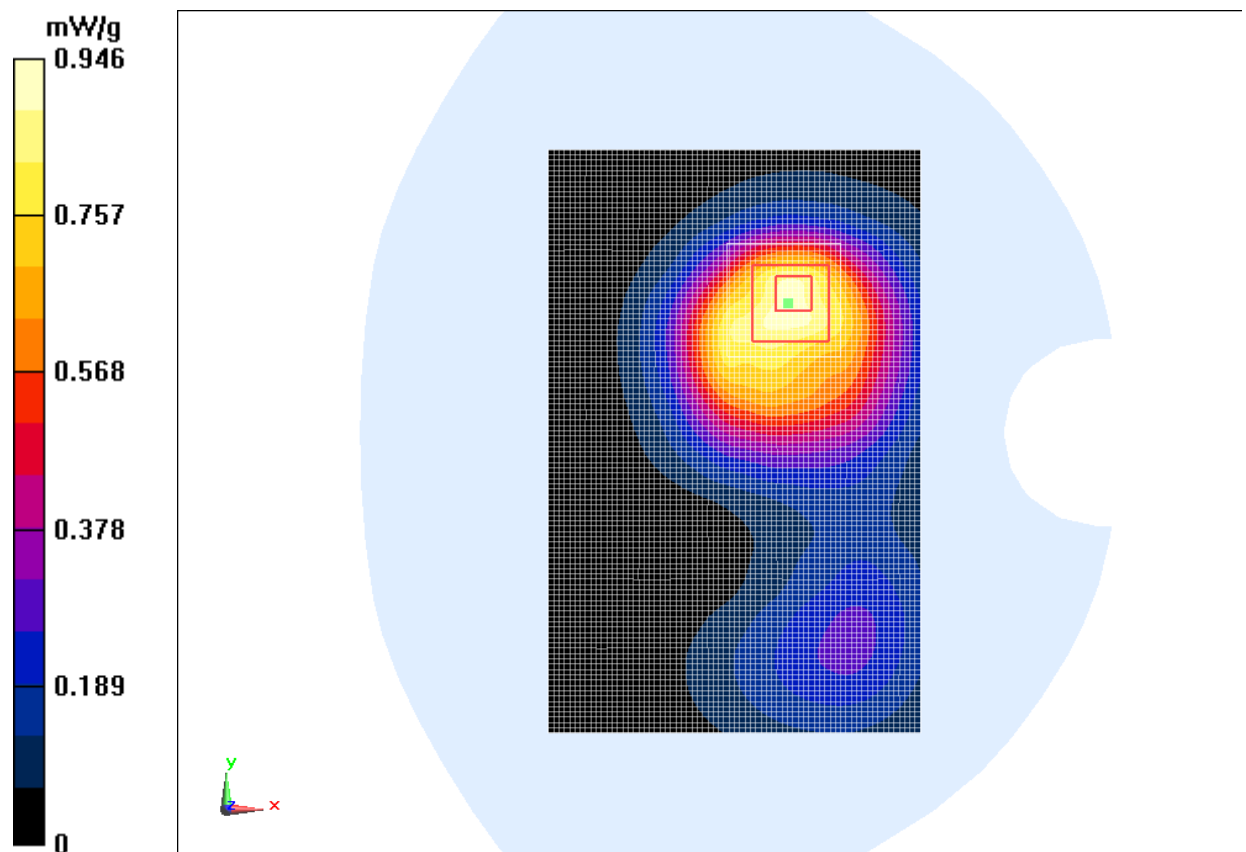


Fig.17 LTE Band4 CH20175

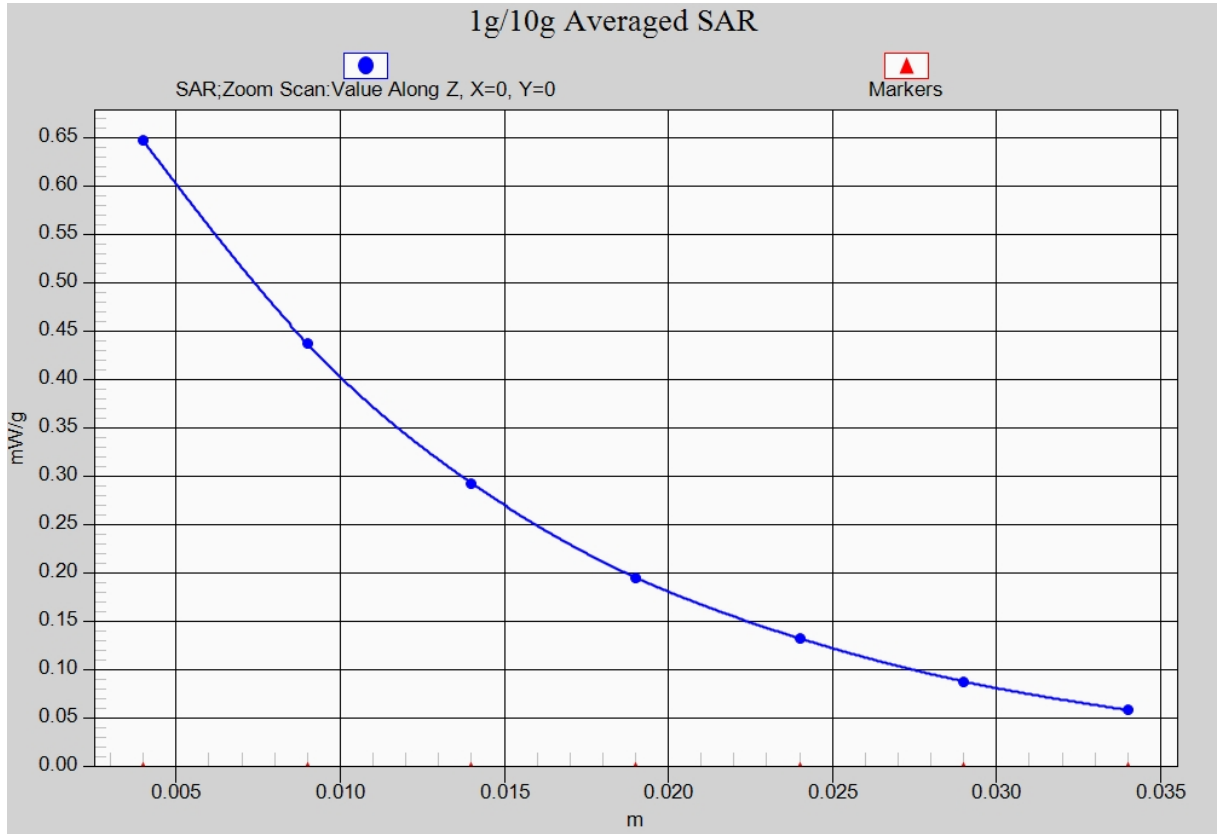


Fig. 17-1 Z-Scan at power reference point (LTE Band4 CH20175)

LTE Band5 Left Cheek Middle with QPSK_10M_1RB_High – AP OFF

Date: 2013-3-16

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.886$ mho/m; $\epsilon_r = 40.735$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C

Communication System: LTE Band5 Frequency: 836.5 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.26, 6.26, 6.26)

Cheek Middle/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.493 W/kg

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.089 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.546 W/kg

SAR(1 g) = 0.460 W/kg; SAR(10 g) = 0.364 W/kg

Maximum value of SAR (measured) = 0.478 W/kg

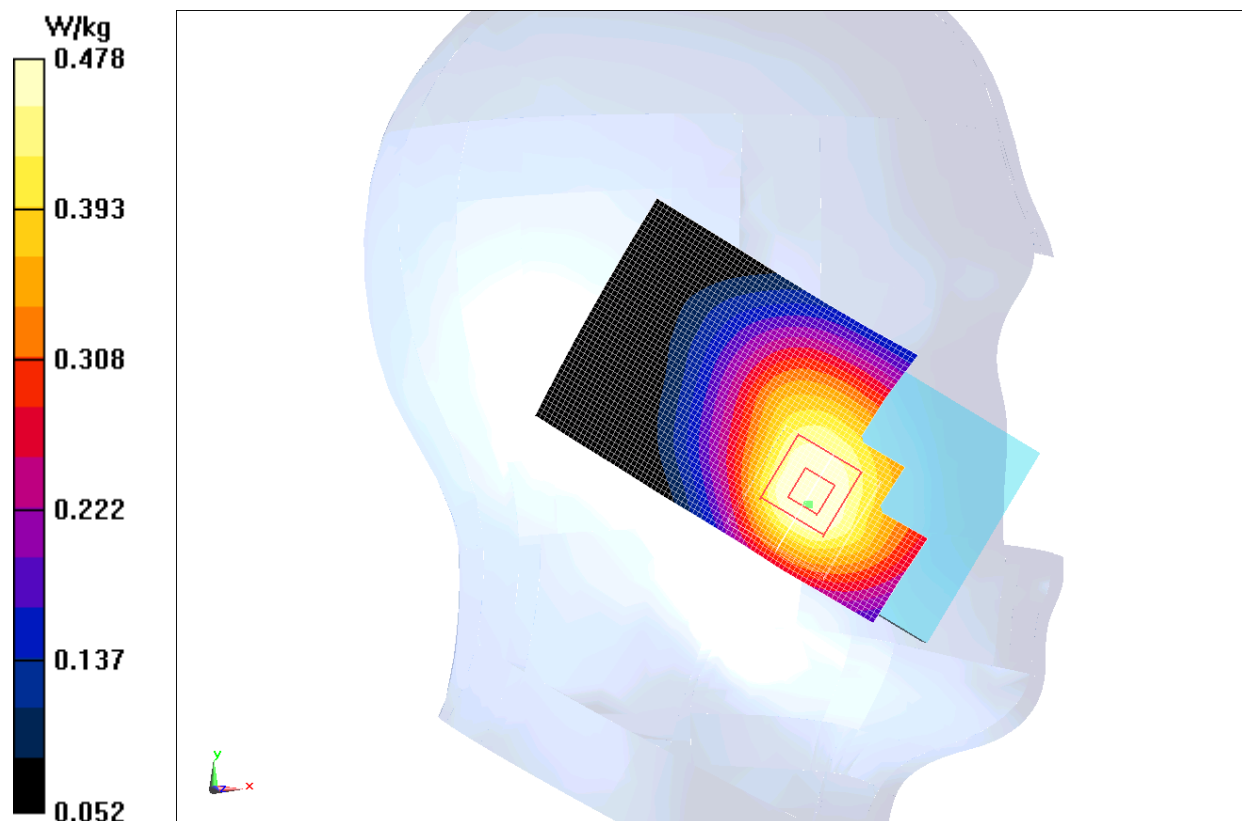


Fig.18 LTE Band5 CH20525

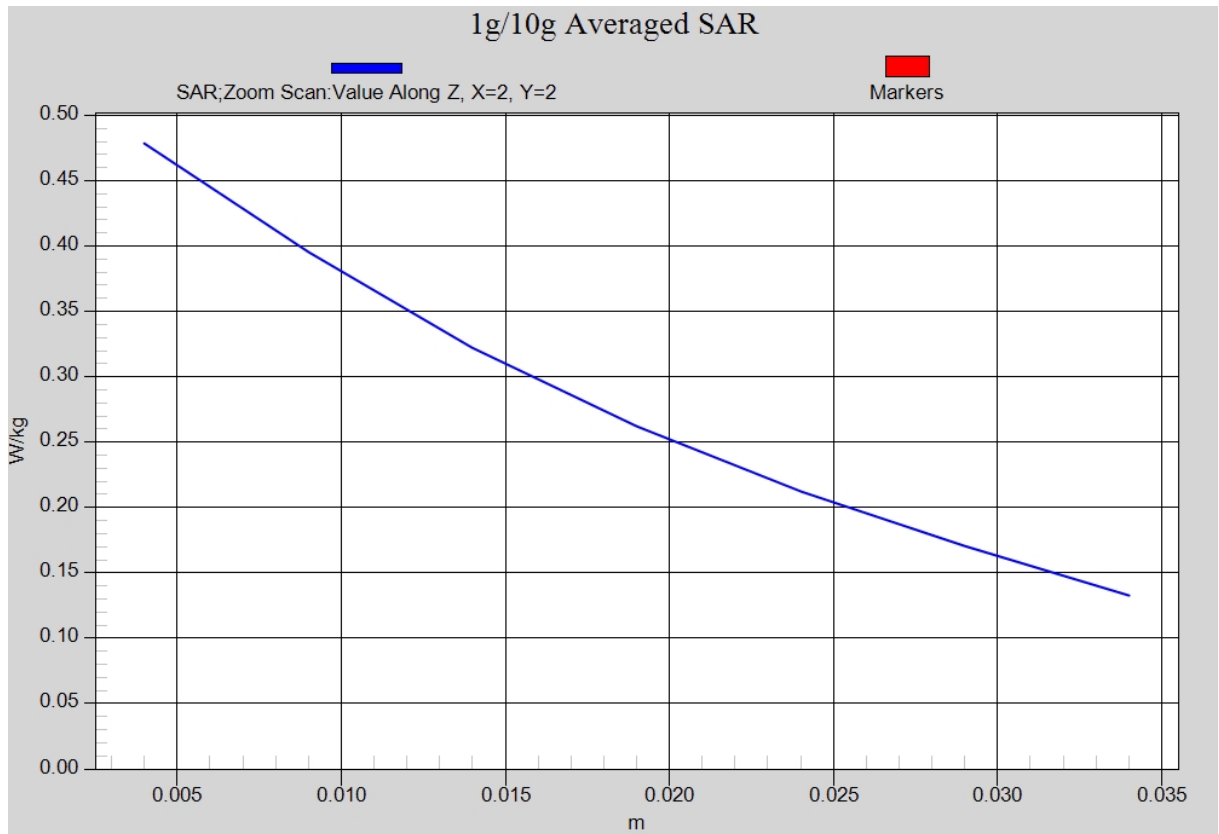


Fig. 18-1 Z-Scan at power reference point (LTE Band5 CH20525)

LTE Band5 Body Front Middle with QPSK_10M_1RB_High – AP OFF

Date: 2013-3-16

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.987$ mho/m; $\epsilon_r = 56.403$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C

Communication System: LTE Band5 Frequency: 836.5 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Front Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.531 W/kg

Front Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.546 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.629 W/kg

SAR(1 g) = 0.503 W/kg; SAR(10 g) = 0.392 W/kg

Maximum value of SAR (measured) = 0.525 W/kg

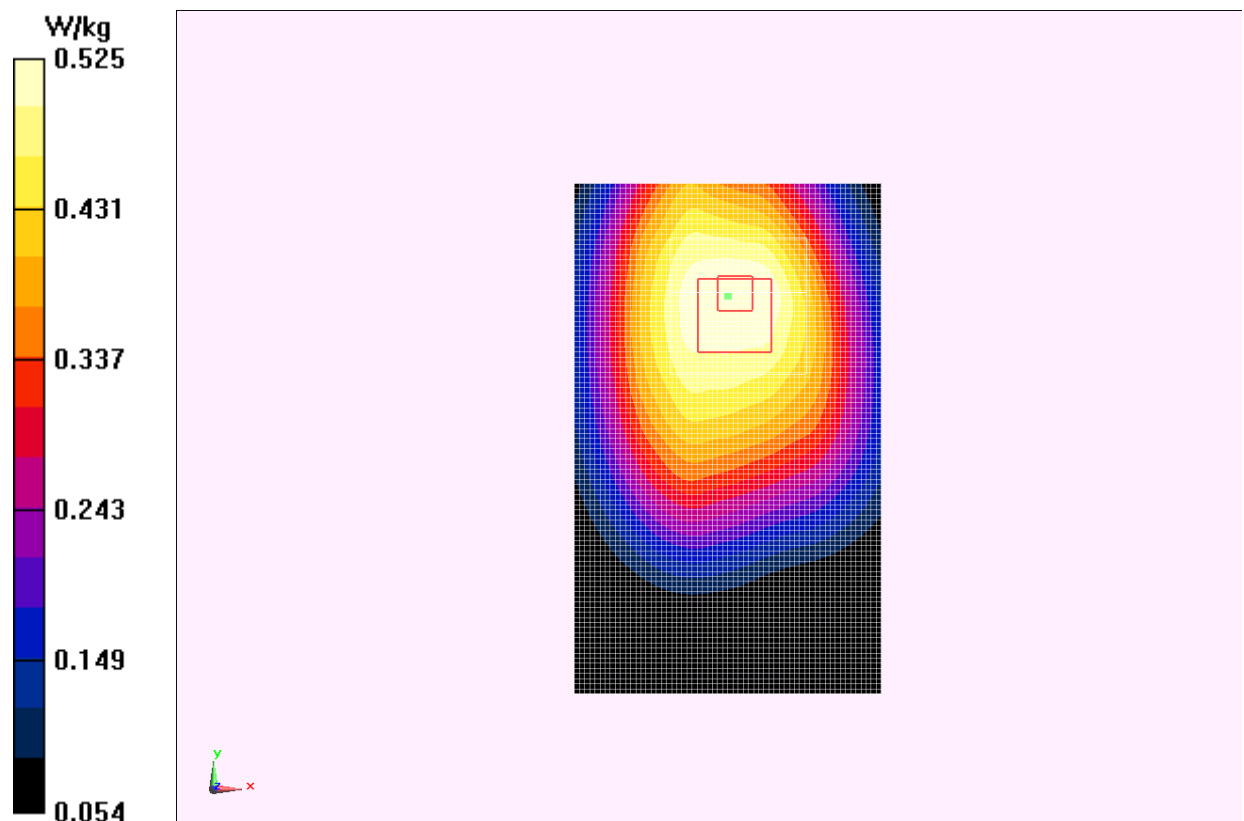


Fig.19 LTE Band5 CH20525

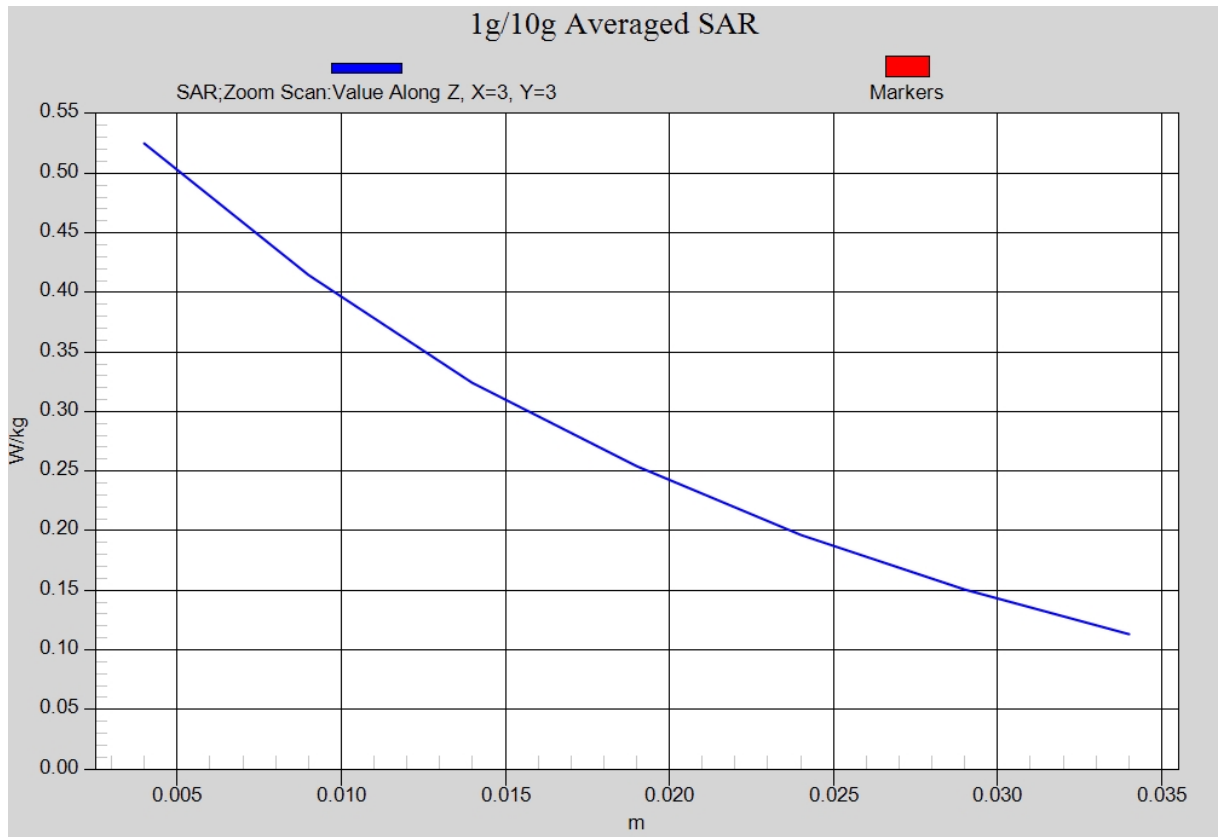


Fig. 19-1 Z-Scan at power reference point (LTE Band5 CH20525)