

2) Details of the procedures used to control the EUT and establish maximum power transmission during the tests.

AMPS mode was tested with a build-in test mode, which makes it possible to activate transmitter to operate in maximum power level at desired channel. TDMA modes were activated through base-station simulator Rohde&Schwartz CMU200. Simulator was set to command EUT into maximum output power level on desired channels.

3) Physical description of the probe.

Isotropic E-Field Probe ET3DV6

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	Calibration certificate in Appendix C
Frequency	10 MHz to 3 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 3 GHz)
Optical Surface Detection	± 0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces
Directivity	± 0.2 dB in HSL (rotation around probe axis) ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic Range	5 μ W/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 330 mm Tip length: 16 mm Body diameter: 12 mm Tip diameter: 6.8 mm Distance from probe tip to dipole centers: 2.
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms



4) Additional system verification information. Please discuss the source antenna, positioning. Also please provide manufacturer SAR verification plots.

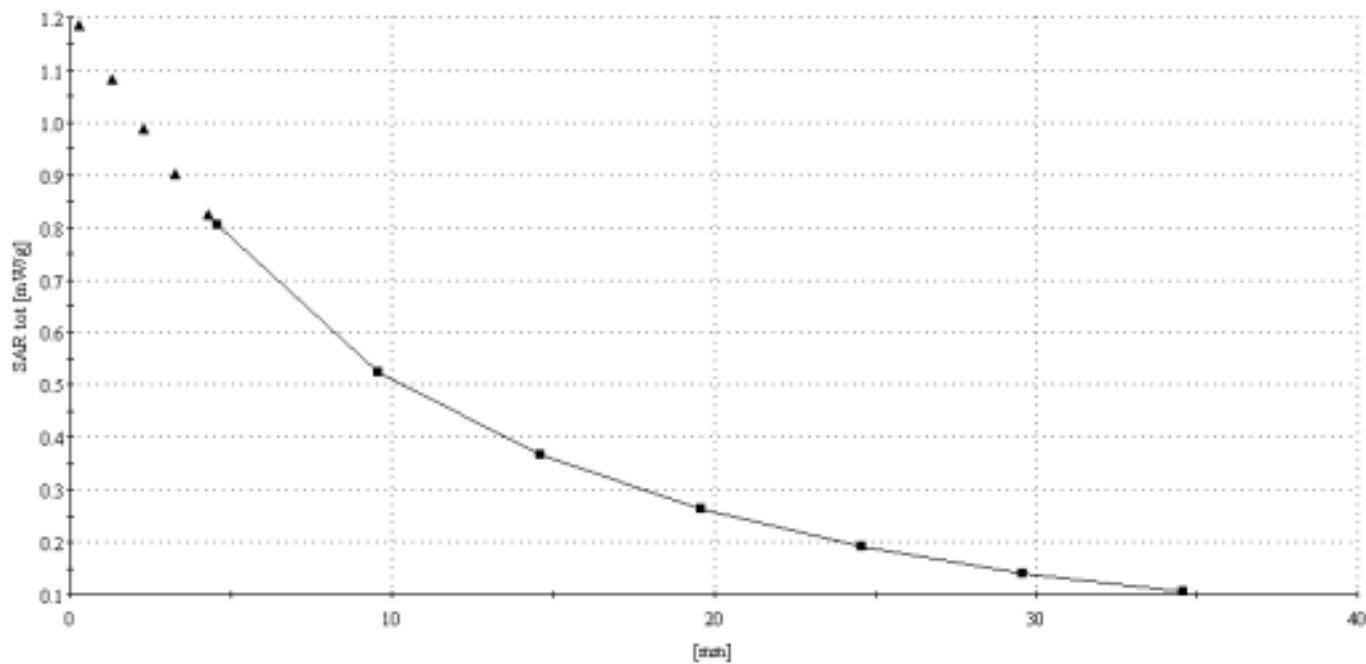
Two dipole antennas were used for system verification. These antennas are matched for use near flat phantoms filled with tissue simulating solution. They are manufactured by Schmid & Partner Engineering AG. Length of 835 MHz dipole antenna is 161mm with overall height of 330mm. Dipole length for 1900 MHz is 68 mm with overall height of 300mm. Both antennas were placed below the flat phantom with specific distance holders to ensure correct spacing between the phantom and the dipole.

5) Photographs of the liquid demonstrating a 15 cm depth, or z-axis scan plots at the highest SAR points.

Z-axis scan at the highest SAR point in the body worn configuration.

GMLNPW-3, CSL-22

SAM Phantom; Flat Section; Position: body worn; Frequency: 834 MHz
Probe: ET3D76 - SN1381; ConvF(6.04,6.04,6.04); Crest factor: 1.0; Muscle 836 MHz: $\sigma = 0.95 \text{ mho/m}$, $\epsilon_r = 57.4$, $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR(1g): 1.29 mW/g, SAR(10g): 0.910 mW/g
Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0



Z-axis scan at the highest SAR point in the Head configuration.

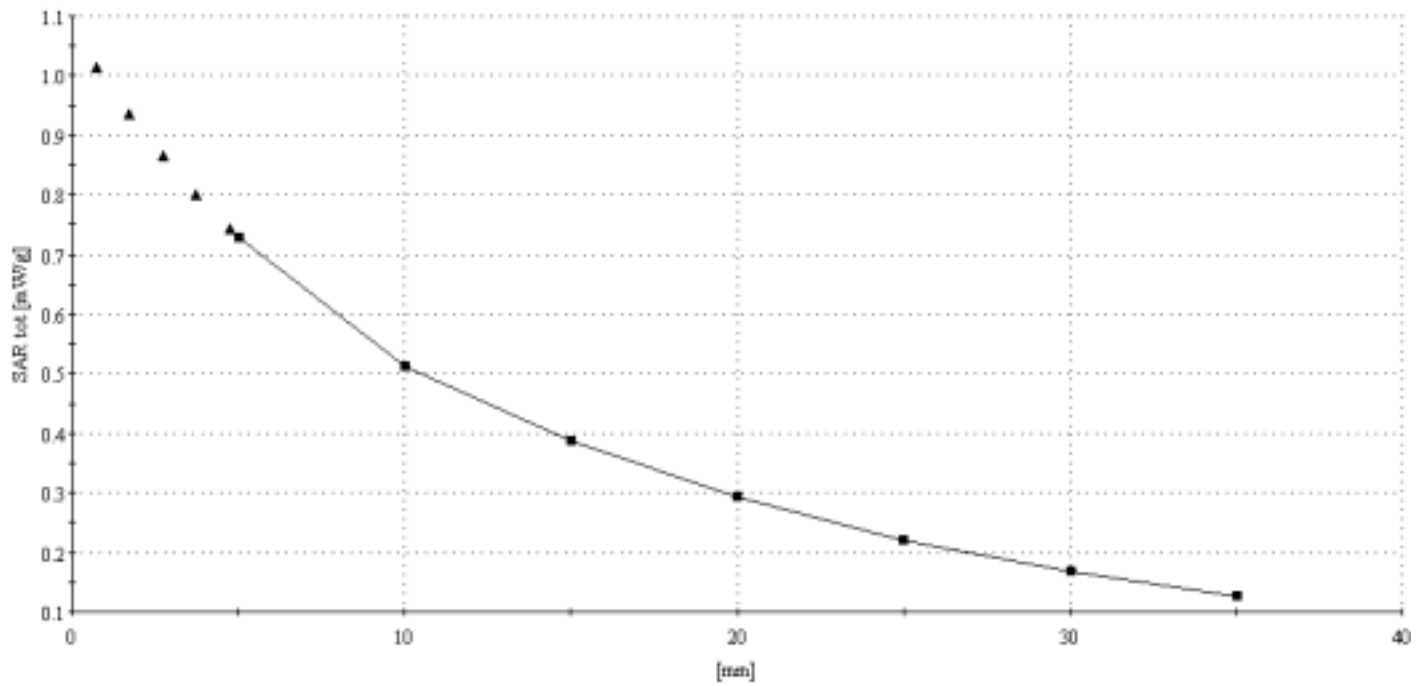
GMLNPW-3

SAM Phantom; Right Hand Section; Position: Cheek; Frequency: 849 MHz

Probe: ET3DV6 - SN1381; ConvR(6.20,6.20,6.20); Crest factor: 1.0; Brain 836 MHz SCC34: $\sigma = 0.90 \text{ mho/m}$, $\epsilon_r = 39.6$ $\rho = 1.00 \text{ g/cm}^3$

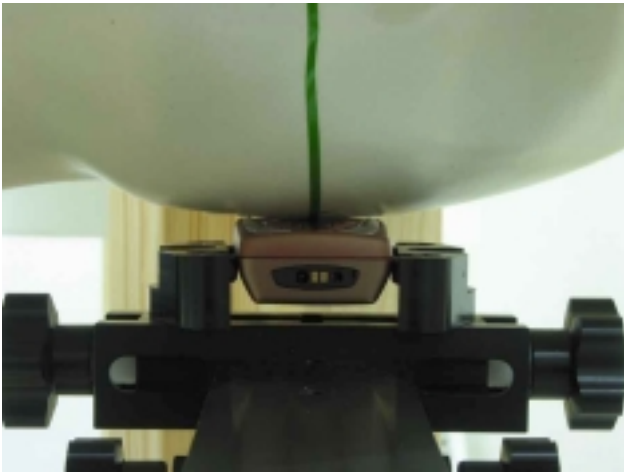
Cube 5x5x7: SAR(1g): 1.19 mW/g, SAR(10g): 0.820 mW/g

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

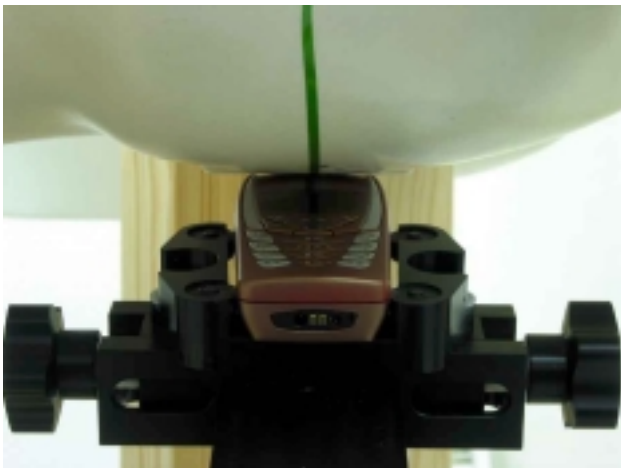


6) Photographs of the test setup and all test positions.

Cheek position.



Tilt position.



7) Justification of provided uncertainty calculation or an updated calculation. The FCC feels that a probe cal. contribution of 9.5% is more appropriate than the value of 3.6% shown in 6.1.1.

Attached is updated uncertainty calculation. Given values are for k=1 conditions, and just combined extended uncertainty is made for k=2. Proposed 9.5% would be more closer to k=2 value.

Uncertainty description	Uncert. value %	Probability distribution	Div.	c_i^{-1} 1g	Stand. uncert. (1g) %	v_i^2 or v_{eff}
Measurement System						
Probe calibration	± 4.4	normal	1	1	± 4.4	∞
Axial isotropy of the probe	± 4.7	rectangular	√3	$(1 - c_p)^{1/2}$	± 1.9	∞
Sph. Isotropy of the probe	± 9.6	rectangular	√3	$(c_p)^{1/2}$	± 3.9	∞
Spatial resolution	± 0.0	rectangular	√3	1	± 0.0	∞
Boundary effects	± 5.5	rectangular	√3	1	± 3.2	∞
Probe linearity	± 4.7	rectangular	√3	1	± 2.7	∞
Detection limit	± 1.0	rectangular	√3	1	± 0.6	∞
Readout electronics	± 1.0	normal	1	1	± 1.0	∞
Response time	± 0.8	rectangular	√3	1	± 0.5	∞
Integration time	± 1.4	rectangular	√3	1	± 0.8	∞
RF ambient conditions	± 3.0	rectangular	√3	1	± 1.7	∞
Mech. constrains of robot	± 0.4	rectangular	√3	1	± 0.2	∞
Probe positioning	± 2.9	rectangular	√3	1	± 1.7	∞
Extrap. and integration	± 3.9	rectangular	√3	1	± 2.3	∞
Test Sample Related						
Device positioning	± 6.0	normal	0.89	1	± 6.7	12
Device holder uncertainty	± 5.0	normal	0.84	1	± 5.9	8
Power drift	± 5.0	rectangular	√3	1	± 2.9	∞
Phantom and Setup						
Phantom uncertainty	± 4.0	rectangular	√3	1	± 2.3	∞
Liquid conductivity (target)	± 5.0	rectangular	√3	0.6	± 1.7	∞
Liquid	± 10.0	rectangular	√3	0.6	± 3.5	∞

conductivity (meas.)		ar				
Liquid permittivity (target)	± 5.0	rectangul ar	$\sqrt{3}$	0.6	± 1.7	∞
Liquid permittivity (meas.)	± 5.0	rectangul ar	$\sqrt{3}$	0.6	± 1.7	∞
Combined Standard Uncertainty					± 13.6	
Extended Standard Uncertainty (k=2)					± 27.1	