### Ans19:

- (a) The version number of the DASY system is V4.7 we used, this version can accept +/- 100 MHz range to refer in the probe calibration.
- (b) Please see below table about tissue parameter between 824 848 MHz. you can see these value form our report page17~19.

  We used tissue measurement equipment to detect the value before perform SAR testing every time.

| Frequency(MHz) | Channel | Target (follow 1528) | Permittivity  Measurement  Date | Variation | Target (follow P1528) | Conductivity  Measurement  Date | Variation |
|----------------|---------|----------------------|---------------------------------|-----------|-----------------------|---------------------------------|-----------|
| Low(824.2)     | 128     |                      | 42                              | 1.1%      |                       | 0.873                           | 3%        |
| Mid(836.6)     | 190     | 41.5                 | 41.6                            | 0.24%     | 0.9                   | 0.877                           | 2.5%      |
| High(8/18/8)   | 251     | ]                    | /11 3                           | 0.48%     | 1                     | 0.805                           | 0.55%     |

### Ans20:

This phone can't send the data while voice mode active, so SAR testing is not necessary in head position.

### Ans21:

in previous mail you notice < Report was updated for this>.

So I will not answer in this time.

## Ans22:

Please see below table, I added % rate this time.

If follow manufacture target value for each dipole

| Validation Kit        | Frequency<br>(MHz) | Target SAR<br>(1g)<br>(Pin=250mW) | Measured<br>SAR<br>(1g) | Variation | Measured<br>Date |
|-----------------------|--------------------|-----------------------------------|-------------------------|-----------|------------------|
| D900V2<br>S/N: 178    | 900 MHz<br>(Head)  | 2.66 m W/g                        | 2.68 m W/g              | 0.75%     | 2007/7/26        |
| D900V2<br>S/N: 178    | 900 MHz<br>(Body)  | 2.69 m W/g                        | 2.70 m W/g              | 0.37%     | 2007/7/29        |
| D1900V2<br>S/N: 5d027 | 1900 MHz<br>(Head) | 9.28 m W/g                        | 9.91 m W/g              | 6.78%     | 2007/7/24        |
| D1900V2<br>S/N: 5d027 | 1900 MHz<br>(Body) | 9.67 m W/g                        | 9.42 m W/g              | 2.58%     | 2007/7/29        |

# If follow P1528 target value:

| Validation Kit        | Frequency<br>(MHz) | Target SAR<br>(1g)<br>(Pin=250mW) | Measured<br>SAR<br>(1g) | Variation | Measured<br>Date |
|-----------------------|--------------------|-----------------------------------|-------------------------|-----------|------------------|
| D900V2<br>S/N: 178    | 900 MHz<br>(Head)  | 2.7 m W/g                         | 2.68 m W/g              | 0.74%     | 2007/7/26        |
| D900V2<br>S/N: 178    | 900 MHz<br>(Body)  | 2.7 m W/g                         | 2.70 m W/g              | 0%        | 2007/7/29        |
| D1900V2<br>S/N: 5d027 | 1900 MHz<br>(Head) | 9.92 m W/g                        | 9.91 m W/g              | 0.1%      | 2007/7/24        |
| D1900V2<br>S/N: 5d027 | 1900 MHz<br>(Body) | 9.92 m W/g                        | 9.42 m W/g              | 5.0%      | 2007/7/29        |

Since this project SAR value is "very low" and not approached the limit line, we hope you can accept validation value this time.

Next time we will follow standard and will not over 5% again.

Ans23 (a~f):

Please see below information.

If this time is right, I will put this in our report in the future. Thank you~~

The entire evaluation of the spatial peak values is performed within the Post-processing engine (SEMCAD). The system always gives the maximum values for the 1 g and 10 g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

- 1. The extraction of the measured data (grid and values) from the Zoom Scan.
- 2. The calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
- 3. The generation of a high-resolution mesh within the measured volume
- 4. The interpolation of all measured values from the measurement grid to the high-resolution
- 5. The extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
- 6. The calculation of the averaged SAR within masses of 1g and 10g.

The probe is calibrated at the center of the dipole sensors that is located 1 to 2.7mm away from the probe tip. During measurements, the probe stops shortly above the phantom surface, depending on the probe and the surface detecting system. Both distances are included as parameters in the probe configuration file. The software always knows exactly how far away the measured point is from the surface. As the probe cannot directly measure at the surface, the values between the deepest measured point and the surface must be extrapolated. The angle between the probe axis and the surface normal line is less than 30 degree.

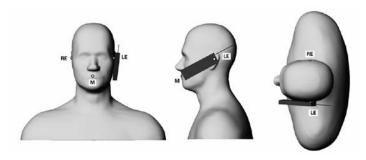
In the Area Scan, the gradient of the interpolation function is evaluated to find all the extreme of the SAR distribution. The uncertainty on the locations of the extreme is less than 1/20 of the grid size. Only local maximum within –2 dB of the global maximum are searched and passed for the Cube Scan measurement. In the Cube Scan, the interpolation function is used to extrapolate the Peak SAR from the lowest measurement points to the inner phantom surface (the extrapolation distance). The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5mm.

The maximum search is automatically performed after each area scan measurement. It is based on splines in two or three dimensions. The procedure can find the maximum for most SAR distributions even with relatively large grid spacing. After the area scanning measurement, the probe is automatically moved to a position at the interpolated maximum. The following scan can directly use this position for reference, e.g., for a finer resolution grid or the cube evaluations. The 1g and 10g peak evaluations are only available for the predefined cube 7x7x7scans. The routines are verified and optimized for the grid dimensions used in these cube measurements. The measured volume of 30x30x30mm contains about 30g of tissue. The first procedure is an extrapolation (incl. Boundary correction) to get the points between the lowest measured plane and the surface. The next step uses 3D interpolation to get all points within the measured volume. In the last step, a 1g cube is placed numerically into the volume and its averaged SAR is calculated. This cube is the moved around until the highest averaged SAR is found. If the highest SAR is found at the edge of the measured volume, the system will issue a warning: higher SAR values might be found outside of the measured volume. In that case the cube measurement can be repeated, using the new interpolated maximum as the center

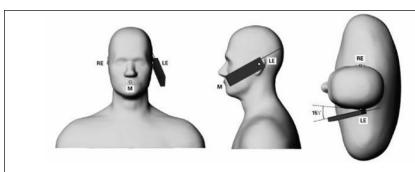
Ans23 (h):

Sorry I misunderstand in previous mail, I already revised the answer as below, please check it.

If this time is right, I will put this in our report in the future. Thank you~~



Phone position 1, "cheek" or "touch" position. The reference points for the right ear (RE), left ear (LE) and mouth (M), which define the reference plane for phone positioning



Phone position 2, "tilted position." The reference points for the right ear (RE), left ear (LE) and mouth (M), which define the reference plane for phone positioning

Cheek/Touch Position: the handset was brought toward the mouth of the head phantom by pivoting against the ear reference point until any point of the mouthpiece or keypad touched the phantom.

Ear/Tilt Position: With the phone aligned in the Cheek/Touch position, the handset was tilted away from the mouth with respect to the test device reference point by 15 degrees.

### Ans24 (a):

The distance between probe and phantom surface is 4mm and set in the measurement file.

Please see below table, I copy it from our DASY4 system.

