RE: Mitac Technology Corp.
FCC: MAU021

Dear Tim,
Here are our answers,

EMC/SAR
1) FYI….In future application, please note that if average power techniques are used for 15.247, then the limits on page 21,45 & 69 should also cite >30 dB.
ANS: Thanks for the information.
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2) FYI…While the beginning of each SAR plot section showed the test date, please note that the FCC expects test dates to be provided on all SAR plots. Please consider this in the future.
ANS: Thanks for the information

3) FYI….Conductivity for > 5 GHz should been < 2.5%, not 5% as the limits show. Note the data shows compliance to 2.5% for body tissues, but please adjust the limits in the future.
ANS: Thanks for the information. But according SAR measurement requirements you mailed on page 4. Is there any change in FCC?

Tissue-Equivalent Media

The head and body tissue dielectric parameters specified in Supplement C 01-01 for 3.0 and 5.8 GHz should be linearly interpolated to the center frequency of a transmission band or measurement channels to determine the appropriate dielectric parameters required for SAR testing.[9] The dielectric constant (ε_r) and conductivity (σ) of the tissue-equivalent media used in SAR measurements should be within ±10 % and ±5 % respectively of the target parameters specified in Supplement C.[10] The tissue properties used in the SAR measurements must also be within the range of dielectric parameters specified for each probe calibration point.[11] Until standardized tissue recipes are identified and verified; for example, through the IEC 62209-2 projects or other reliable sources, information on temperature sensitivity and short term stability of the tissue

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[6] The more conservative parameters should be used.
[7] IEC 62209-2 has discussed in 2006 to use a nominal value of $\varepsilon_r = 3.7$ with an asymmetrical tolerance.
[8] The measurement region is typically 1 – 2 cm larger than the projected areas of a transmitter.
[9] The center frequency of measurement channels is the average frequency of the highest and lowest frequency channels within a transmission band of the test device covered by a probe calibration point.
[10] Target value uncertainty and measurement uncertainty for tissue dielectric parameters are separate uncertainty components.
[11] Tissue dielectric parameters should be within tolerance for the entire frequency range covered by a calibration point for both probe calibration and routine measurements.

4) Section 3.2 of the SAR report cites a 5 mm scan height. However 5 GHz typically requires closer measurements of 2.5 mm and closest 2 points are < 5 mm for > 4.5 GHz. This information could not be found in the report. Please comment.
ANS: We have modified the report on 3.1.5 & 3.1.6 , please refer the updated SAR report.

5) As part of the SAR validation > 5 GHz, the FCC asks that the extrapolated peak SAR value at the phantom surface above the dipole feed-point should be within 15% of the calibrated target value. Information on this was not found.
ANS: We have modified the report on 3.1.5 & 3.1.6 , please refer the updated SAR report.

DFS Related:
6) While we understand you response to item 11, please note that the request for a expanded plot (not have a sweep greater than 600 ms) for the channel transmission closing time demonstrating that the device vacates the channel in the required 200 ms is a new requirement from the FCC. We have recently received RT' s on all DFS results shown similar to those provided asking for this. Additionally, training on February from the FCC requires it. See the following:
NOTE: Please ensure or label which signals are from the master and which are from the client as levels were not clearly distinguishable. Note the FCC gave the following as an example below which clearly shows 2 levels. The current plot is hard to determine these.

ANS: (This DFS report is performed by ADT. They ask their TCB and got the following information. I am very sorry if this is not what you want.) This comment is unreasonable. There is no document require test report label the traffic signal from Master or Client. And, Master already got FCC certificate and then the traffic signal shall all comply the requirements.