

To: **Andy Leimer** aleimer@fcc.gov
From: **Linda Grose** linda.grose@tait.co.nz

Re: **FCCID: CASTEL0032**
Applicant: **Tait Electronics Ltd**
Correspondence Reference Number: **19932**
731 Confirmation Number: **EA101141**

Dear Mr Leimer

Please find following a reply to your inquiry from Chris Zombolas, Technical Director of EMC Technologies Ltd, the Laboratory that performed the SAR testing on our product.

Kind regards
Linda Grose
Compliance Co-ordinator
Tait Electronics Ltd

Dear Sir

The "Body Worn" position was tested with and without the microphone connected as part of the explorative process. This is explained in section 6.3 of the SAR report.

Quote: "Note: These tests were part of the explorative process, therefore these results are ignored for compliance purposes. The Belt-Clip without the Lapel Speaker Microphone connected does not represent a user configuration. It will not be operated in continuous transmit mode without the Lapel Speaker microphone connected."

The only explanation we can offer for the large difference in the results is that the antenna was being loaded by the close proximity of the "Lapel Speaker Mic Cable".

The SAR measurements were all performed at least twice and in some case three times, to ensure that they were repeatable. The photos in the report (Appendix A7 and A8) show that the setup was identical in every other respect.

1. We checked the SAR drift from the DASY3 results and there was only an insignificant difference. (0.09mW/g versus 0.12mW/g).
2. We checked the conducted RF output power drift at the antenna port. The values were 0.14 Watts versus 0.13 Watts.
3. We checked the RF Output power, which may vary due to the use of a different battery, and the only difference was 2.95 Watts versus 2.73 watts. (7.45% difference)
4. We checked the location of the point of maximum SAR and it was unchanged for both set-ups.

We thoroughly explored this effect and we can only conclude that it was caused by the close proximity of the cable. The higher value was only obtained with an unlikely user configuration; ie waist position with no "Lapel Mic" connected. This would represent a worst case scenario. It is pertinent to note that the device still complies with the SAR limit.

Please contact me if you need further information.

Best Regards
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