Jabra Elite 65t claim verification

1) Summary

FORCE Technology verified the following claim, made by Jabra, for their newly updated true wireless headset; the Jabra Elite 65t.

The claim was verified through independent measurement and subjective testing.

<table>
<thead>
<tr>
<th>Product</th>
<th>Claim</th>
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</thead>
<tbody>
<tr>
<td>Jabra Elite 65t</td>
<td>“Engineered for the best true wireless voice and music experience”</td>
</tr>
</tbody>
</table>

The claim is considered to be accurate as of the 12th of February 2018. Details of associated disclaimers are given in section 5.

2) Method

Jabra Elite 65t was tested against the 10 main competitors, using standardized model based estimates (ITU.T P.863 “POLQA”), as well as perceptual testing with 21 subjects. Each subject was a trained expert listener, and performed a double-blind listening test, using SenseLabOnline 4 as test platform.

The subjective tests were carried out at FORCE Technology. Each product was rated on three different musical excerpts, on a continuous Basic Audio Quality scale, ranging from Bad to Excellent, using recordings of the headset. Recordings were performed by Jabra. The recording method was approved by FORCE Technology. Recordings were compensated for recording chain, for the reproduction headphone used in the listening test, and loudness aligned by FORCE Technology.

Measures, used as base for this claim are:

<table>
<thead>
<tr>
<th>Measure</th>
<th>Weighting</th>
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</thead>
<tbody>
<tr>
<td>POLQA.RxTQL (Speech)</td>
<td>25%</td>
</tr>
<tr>
<td>POLQA.TxTQL (Speech)</td>
<td>25%</td>
</tr>
<tr>
<td>Subjective evaluation score of music playback</td>
<td>50%</td>
</tr>
</tbody>
</table>
Based on these measures, an overall score was calculated, assuming 50% music playback use, and 50% speech use. The highest scoring products, on average, though not significantly different from; Bose Sound Sport Free, Bragi The Dash and Sony WF-1000X, were Jabra Elite 65t, and Samsung Gear Icon X.

3) Definitions

**ITU-T P.863 “POLQA”** - Perceptual Objective Listening Quality Analysis – ITU-T Standard that covers a model to predict speech quality by means of analyzing digital speech signals.

**TQL** – Property of the ITU-T P.863 standard. In this case, TQL covers an average measurement of 20 sentences, in a silent condition. No background noise was present during this measurement.

**Tx** – *Uplink/Transmit*, meaning the signal which is captured by the device’s microphone.

**Rx** – *Downlink/Receive*, meaning the signal which is reproduced by the device’s loudspeaker (in this case the headphones)

**SenseLabOnline 4** – is a professional subjective test administration software tool, developed by Force Technology, which handles stimuli presentation, randomisation, data collection, and statistical data analysis.

4) Disclaimers:

*At the time of validating, 12th of February 2018, Jabra Elite 65t was the best voice and music experience true wireless headphone. Measured and validated by FORCE Technology, up against the 10 main competitors in market, Jabra Elite 65t and Samsung Gear Icon X obtained highest perceptually measured mean scores for music and speech quality.

5) Document Authorization

FORCE Technology confirms that on the 12th of February 2018 the claim within this document for the Jabra Elite 65t is correct

**Authorized by FORCE Technology**