

## Jabra Elite 45h claim verification

### 1. Summary

FORCE Technology has verified the measurements which contribute towards substantiating parts of the following claim. The claim wording is created by Jabra, for their newly released wireless headset, Jabra Elite 45h.

Product	Claim
Jabra Elite 45h	"Engineered to be the best in class on-ear wireless headphones"

### 2. Method

Jabra Elite 45h was tested against the largest market leading manufacturers in the business, using 5 major competing products on the market.

Each product was measured on several parameters, and a weighted average score was calculated. The measurements cover a wide range of product characteristics that are relevant to wireless headset usage, user experience and performance. Specialists from FORCE Technology conducted all measurements, to ensure that all products were measured correctly, in the same way and under identical conditions.

The included measures, which are used as base for this claim are:

- **Battery time (Full charge)**
- **Charge time (with 15 minute charge from complete discharge)**
- **Loudspeaker diameter**
- **Number of microphones**
- **Headband material (core)**
- **Weight**

Table 1 below shows the overall weighting of each parameter when the average is calculated. All parameters were selected by Jabra. Weightings are mutually agreed by Jabra and FORCE Technology.

Measure	Weighting
<b>Battery time (full charge)</b>	<b>16,67%</b>
<b>Charge time (15 minute charge from complete discharge)</b>	<b>16,67%</b>
<b>Loudspeaker diameter</b>	<b>16,67%</b>
<b>Number of microphones</b>	<b>16,67%</b>
<b>Headband core material</b>	<b>16,67%</b>
<b>Product weight</b>	<b>16,67%</b>

Based on a ranking on each of these measures, an overall score was calculated for the weighted parameters.

Jabra Elite 45h scored highest.

### **3. Methods**

#### **Battery time (Full charge)**

1. Device is charged fully.
2. Device is connected to a Bluetooth dongle, playing an audio loop.
3. Device playback level is adjusted using the same method for all products.
4. Device is exposed to ITU P.50 artificial speech.
5. Device playback time until automatic turn-off is used as final score.

#### **Charge time (with 15 minute charge from complete discharge)**

1. Device is discharged completely (unable to turn on or turns off immediately after turn-on).
2. Device is charged for 15 minutes, using a 10W USB power supply.
3. Procedure from battery time is followed, with the exception of fully charging the device.

#### **Loudspeaker diameter**

1. The device is dismantled, and the loudspeaker diameter is measured.

#### **Number of microphones**

1. The device is dismantled, and the amount of microphones (for speech) are counted.
  - a. Microphones specifically for hear-through are not counted.

#### **Headband material (core)**

1. The device is dismantled, and the headband material is investigated.
  - a. Metal counts higher than plastic.

#### **Weight**

1. The device is weighed without USB cable.

### **4. Document validation**

FORCE Technology confirms the correct performance of measurements and calculations stated in this document.

FORCE Technology confirms that on the 10<sup>th</sup> of March 2020 the claim within this document for the Jabra Elite 45h is accurate, in terms of validity of measurements and calculations it is based upon.

**Authorized by FORCE Technology**