

# Test report

**Number:** T251-0868/20  
**Project file:** C20200253  
**Date:** 2020-11-25  
**Pages:** 3

**Product:** LONG NECK SANDER

**Type reference:** LHS 2 225 EQI

**Ratings:** 120 V~; 60 Hz; 400 W  
Protection class: II

**Trademark:** FESTOOL

**Applicant:** FESTOOL GmbH  
Wertstrasse 20, DE-73240 Wendlingen, Germany

**Manufacturer:** FESTOOL GmbH  
Wertstrasse 20, DE-73240 Wendlingen, Germany

**Place of manufacture:** FESTOOL GmbH  
Wertstrasse 20, DE-73240 Wendlingen, Germany

## Summary of testing

**Testing method:** 47 CFR FCC Part 2.1093,  
KDB 447498 D01 General RF Exposure Guidance v06

**Testing location:** SIQ Ljubljana, Mašera-Spasičeva ulica 10, SI-1000 Ljubljana, Slovenia

**Remarks:** Date of receipt of test items: 2019-12-12  
Number of items tested: 1  
Date of performance of tests: 2020-10-29  
The test results presented in this report relate only to the items tested.  
The product complies with the requirements of the testing methods.

**Tested by:** Luka Tosetto

**Approved by:** Marjan Mak

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## 1 GENERAL

History sheet			
Date	Report No.	Change	Revision
2020-11-25	T251-0868/20	Initial Test Report issued.	--

### 1.1 Equipment under test

**LONG NECK SANDER**

Type: **LHS 2 225 EQI**

Environment: Uncontrolled / General Public

Assessment distance: 5 mm

Device usage: Hand

FCC ID: **2AL2E-PLANEX**

## 2 LIMITS

According to 47 CFR FCC Part 2.1093 and KDB 447498 D01 General RF Exposure Guidance v06, evaluation assessment is not required if maximum threshold exclusion for 1-g SAR or 10-g extremity SAR is fulfilled.

1-g SAR Threshold exclusion is  $\leq 3$  (body worn devices)

10-g extremity SAR Threshold exclusion is  $\leq 10$  (i.e., hands, wrists, feet and ankles)

## 3 ASSESSMENT PROCEDURE

### MPE EVALUATION OF PORTABLE DEVICES

Human exposure to RF emissions from mobile devices (47 CFR §2.1093) may be evaluated based on the General SAR exclusion under clause 4.3.1 of KDB 447498 D01 General RF Exposure Guidance v06.

For 100 MHz to 6 GHz and test separation distances  $\leq 50$  mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$$\text{Threshold} = \sqrt{f} * \frac{P_{\max(\text{CH})_T}}{R}$$

**Where:**

f = channel frequency in GHz

$P_{\max(\text{CH})_T}$  = maximum tuned up power of a channel in mW

R = Evaluation distance

## 4 MEASUREMENTS

Measured values for each configuration are listed in the following table:

Frequency (GHz)	Maximum* Power with antenna gain (dBm)	Maximum* Power with antenna gain (mW)	Test distance (mm)	Threshold	Exclusion threshold
2.440	2.9	1.95	5	0,61	3 (1-g SAR) 7.5 (10-g SAR)

\* Gated power with Duty Cycle calculated in

Conclusion: SAR Evaluation is not required