2020-02-13

OEM-MF-M890-TTL-3V3

Complaints Processing

# Procedure

Take reference values from 9 new OEM-MF-M890-TTL-3V3:

* Read range with several RFID tags
* Current consumption at this operating conditions:
* Idle without antenna
* Idle with antenna
* Idle with antenna and RFID tag 1 at maximum changing of current consumption
* Idle with antenna and RFID tag 2 at maximum changing of current consumption

# Recording of Reference Values

## Reference Devices/Serial Numbers

MF-M890-BU-198119

MF-M890-BU-198121

MF-M890-BU-198122

MF-M890-BU-198123

MF-M890-BU-198124

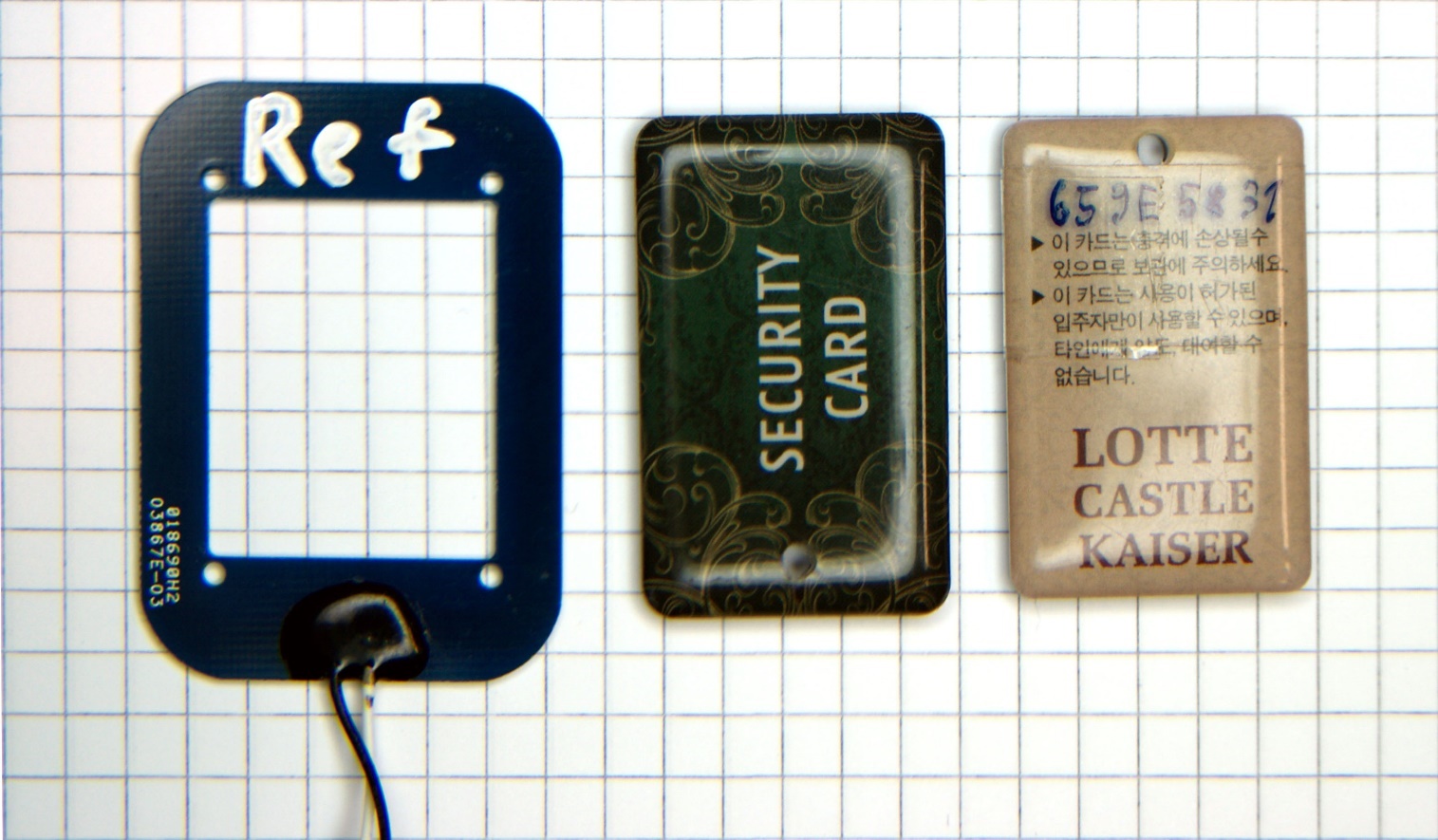
MF-M890-BU-198125

MF-M890-BU-198126

MF-M890-BU-198127

MF-M890-BU-198128

## Reference Antenna + Data Tags



## Test Command

For read range test, sent with repetitions every 300 ms: AA 00 03 25 26 00 00 BB

## Reference Values

Current Consumption

Without antenna: 40…47 mA

With antenna: 16…17 mA

With RFID tag #1 (Security Card): 25…27 mA

With RFID tag #2 (Lotte Castle Kaiser: 22…23 mA

Read Range

With RFID tag #1 (Security Card): 32…40 mm

With RFID tag #2 (Lotte Castle Kaiser: 28…32 mm

# Complaint as of 2020-02-13

## Complaints to be examined

Number 6, S/N: MF-M890-BU-1805255, no reaction to RFID tag

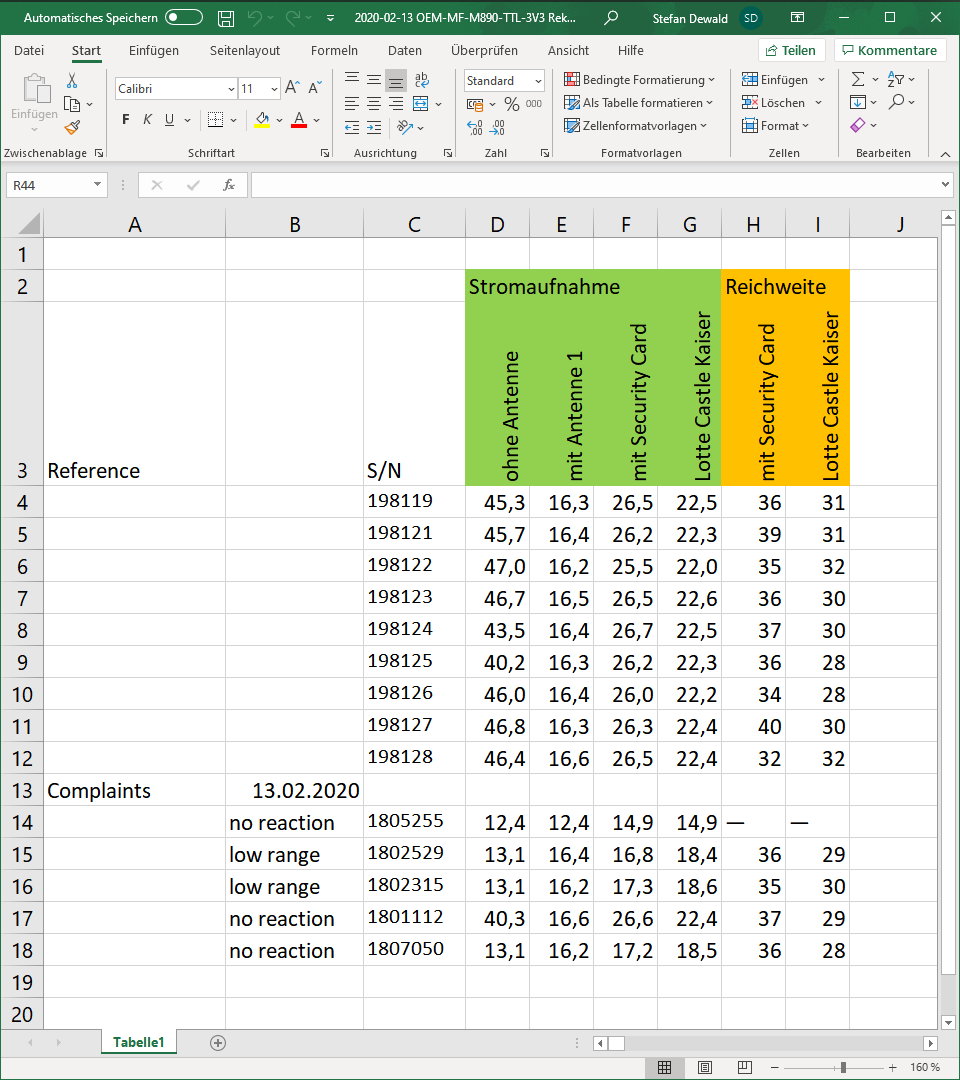
Number 14, S/N: MF-M890-BU-1802529, low range, not every RFID tag works

Number 19, S/N: MF-M890-BU-1802315, low range, not every RFID tag works

Number 22, S/N: MF-M890-BU-1801112, no reaction to RFID tag

Number 30, S/N: MF-M890-BU-1807050, no reaction to RFID tag

## Results



Although the MF-M890-BU-1805255 board reacts to the approach of a data carrier, RFID commands (UID capture) are not successful. The error message "Data carrier cannot be found" is displayed.

The current consumption is different (WHY), except for the MF-M890-BU-1801112 module. The ranges are all within the reference range.