



## SAR Test exclusion documentation according to FCC KDB 447498, RSS-102

**Report identification number: 1-1329/20-01-04 Exclusion (FCC\_ISED)**

| Certification numbers and labeling requirements |                                       |
|-------------------------------------------------|---------------------------------------|
| FCC ID                                          | 2AYEK-TSX                             |
| ISED number                                     | 26767-TSX                             |
| HVIN (Hardware Version Identification Number)   | TSX                                   |
| PMN (Product Marketing Name)                    | TSX<br>TSX:TE1<br>TSX:TE2<br>TSX:THE1 |
| FVIN (Firmware Version Identification Number)   | -/-                                   |
| HMN (Host Marketing Name)                       | -/-                                   |

This test report is electronically signed and valid without handwritten signature. For verification of the electronic signatures, the public keys can be requested at the testing laboratory.

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**EUT technologies:**

| Technologies:        | Max. measured output power [dBm] |      | Antenna gain max.: [dBi] | Declared by customer | # |
|----------------------|----------------------------------|------|--------------------------|----------------------|---|
|                      | conducted                        | EIRP |                          |                      |   |
| Proprietary 2450 MHz | 3.41                             | 5.45 | 2.04                     | 5 dBm +/-1 dB        | A |

Details and origins of the measurements shown in the table above:

| # | Results from:                          | Additional information                         |
|---|----------------------------------------|------------------------------------------------|
| A | 1-1329/20-01-03      CTC advanced GmbH | Antenna gain page 19,<br>Max conducted page 24 |

**SAR test exclusion according to KDB447498 (General RF Exposure Guidance v06)**

Equation from Chapter 4.3.1: Standalone SAR test exclusion considerations page 11 and ff.

(1) Standalone SAR test exclusion for 100 MHz to 6 GHz at test separation distances  $\leq 50\text{mm}$

$$(\text{Threshold}_{1\text{-g};10\text{-g}}) \times d_{\text{separation}} / f^{0.5}$$

where

Threshold<sub>1-g;10-g</sub> is 3 for 1-g; 7.5 for 10-g

d<sub>separation</sub> is the min. test separation distance; 5mm is used if the distance is less

f is the RF channel transmit frequency

The table below gives the calculated maximal power that could be used for source based time averaged conducted or radiated power, adjusted for tune up tolerance. If this is at or below the calculated value the DUT is exempted from SAR evaluation.

| frequency [MHz] | d <sub>separation</sub> [mm] | Threshold <sub>1-g</sub> | Powerlimit [mW] | P <sub>max-declared</sub> |      | Exclusion |
|-----------------|------------------------------|--------------------------|-----------------|---------------------------|------|-----------|
|                 |                              |                          |                 | [dBm]                     | [mW] |           |
| 2450.00         | 5                            | 3                        | 9.58            | 6.00                      | 3.98 | yes       |

**SAR test exclusion according to RSS-102 Issue 5 Section 2.5.1/Table 1**

The table below gives the calculated maximal power that could be used for source based time averaged conducted or radiated power, adjusted for tune up tolerance. If this is at or below the calculated value the DUT is exempted from SAR evaluation.

| frequency [MHz] | d <sub>separation</sub> [mm] | tissue volume | Powerlimit [mW] | P <sub>max-declared</sub> |      | Exclusion |
|-----------------|------------------------------|---------------|-----------------|---------------------------|------|-----------|
|                 |                              |               |                 | [dBm]                     | [mW] |           |
| 2450.00         | 5                            | 1 g           | 4.00            | 6.00                      | 3.98 | yes       |

The limits above are defined for body worn application and therefore cover all use cases.