







# SAR Test exclusion documentation according to FCC KDB 447498

Report identification number: 1-4929/22-01-08 Exclusion (FCC)

contains the module with the following certification numbers				
FCC ID	UN6-DTCHFGB			

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.

Document authorised:						

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## **EUT technologies:**

Technologies:	Max. declared cond. AVG Max. measured EIRP		Antenna gain
NFC	23 dBm	26.9 dBµV (Peak)@30m	< 0 dBi
13.56 MHz	(=200 mW)	= -48.5 dBm	

#### NOTE:

The measured PEAK EIRP according proofs that the EUT antenna gain is far below 0dBi and that considering the max. declared output power is by far larger than the EIRP. Conducted values will be used for the RF exposure calculation. EIRP values are for information only.

Test results for EIRP taken from CTC advanced GmbH report 1-4929/22-01-06

Max. output power for the13.56 MHz circle is 200 mW according customer declaration.

## NFC:

(c) (2) Standalone SAR test exclusion below 100 MHz < 50mm

 $0.5 \times (Threshold_{100MHz}) \times (1+log(100/f))$ 

where

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

f is the RF channel transmit frequency

Threshold<sub>100MHz,50mm</sub> is Threshold<sub>1-g;10-g</sub>  $\times$  d / f <sup>0.5</sup>; with f = 100MHz and d=50mm

The table below gives the calculated maximal power that could be used for source based time averaged conducted power, adjusted for tune up tolerance. If this is below the calculated value SAR testing is excluded.

frequency	Threshold1-g;10-g	Threshold <sub>100MHz,50mm</sub>	Powerlimit	P <sub>max-declared</sub>		Exclusion
[MHz]			[mW]	[dBm]	[mW]	Exclusion
13.56	3	474.34	442.97	23.00	199.5	yes

## This prediction demonstrates the following:

The power density levels for FCC that are larger than the minimum safety-distances stated above, are below the maximum levels allowed by regulations.