
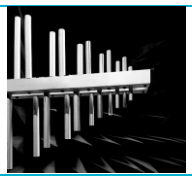
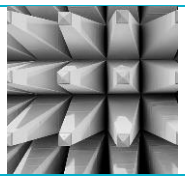

CTC advanced
member of RWTÜV group

Bundesnetzagentur

BNetzA-CAB-02/21-102

ilac-MRA DAkkS Deutsche Akkreditierungsstelle D-PL-12076-01-04

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

Report identification number: 1-3468/21-01-08 Exclusion (FCC)

contains the module with the following certification numbers	
FCC ID	XKB-L3600CL

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. declared cond. AVG Power	Max. measured EIRP @ 10m[1)]	Antenna gain
NFC 13.56 MHz	22.04 dBm	59.94 dBµV (Peak) = -24.83 dBm	< 0 dBi

NOTE:
The measured PEAK EIRP @10m proofs that the EUT antenna gain is far below 0dBi and that considering the max. declared output power of 22.04dBm (=160mW) is by far larger than the EIRP. Thus for it is correct to use the conducted value as the worst case base for the RF exposure calculation. For this consideration the duty cycle[2)] of 72.0% was not used in the observation so far as it would decrement the already very small EIRP value.

[1)] Pictures of the measurement are added in Annex A of this document.

[2)] The duty cycle can be found in Annex B of this document.

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 and tables in Annex C.

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

$0.5 \times (\text{Threshold}_{100MHz}) \times (1+\log(100/f))$

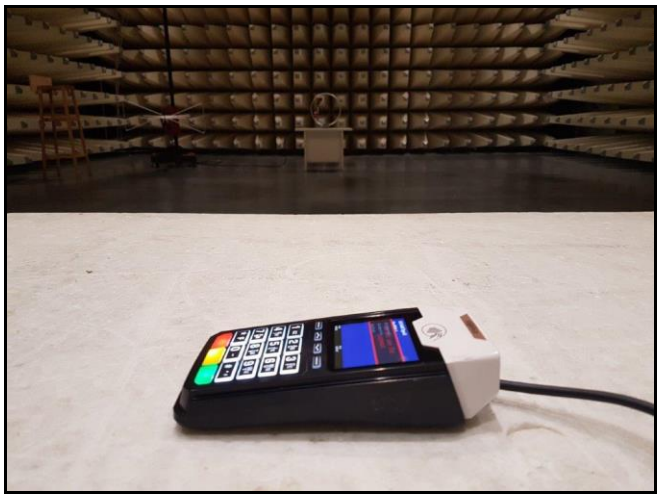
where

$\text{Threshold}_{1\text{-g;}10\text{-g}}$	is 3 for 1-g; 7.5 for 10-g
f	is the RF channel transmit frequency
$\text{Threshold}_{100MHz,50mm}$	is $\text{Threshold}_{1\text{-g;}10\text{-g}} \times d / f^{0.5}$; 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.

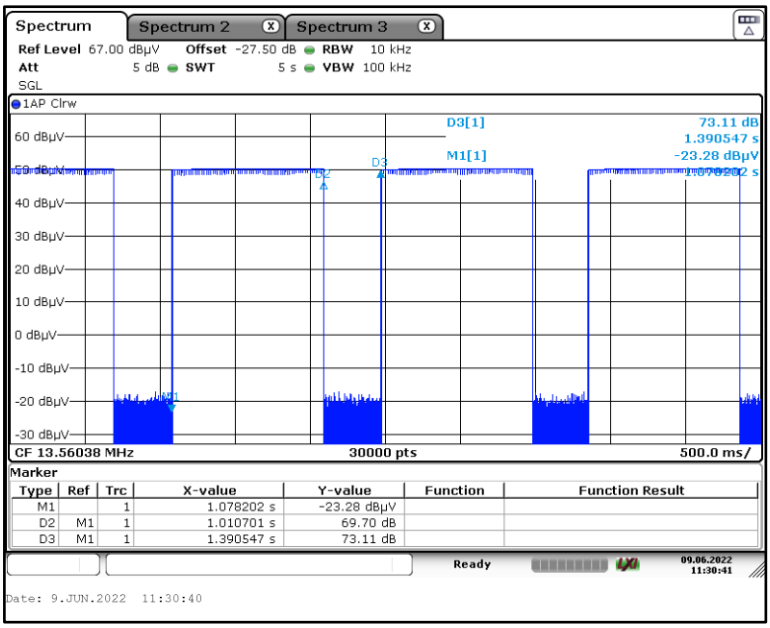
frequency [MHz]	Threshold1-g;10-g	$\text{Threshold}_{100MHz,50mm}$	Powerlimit [mW]	$P_{max\text{-}declared}$		Exclusion
				[dBm]	[mW]	
13.56	3	474.34	442.97	22.04	160.0	yes

Annex A: Pictures of the EIRP measurement for 13.56MHz with 10m distance



Loop-Antenna: EMCO 6502A (Correction factor @ 13.56MHz +9.5 dB)

Annex B: Duty cycle of the EUT in ISO 14443 TYPE B Polling mode:



Duty Cycle 72.0% polling. (No Card detected)