



Harman Becker Automotive Systems GmbH | Postfach 2260 | 76303 Karlsbad
Telecommunication Certification Body
UL VS Ltd
Unit 3, Horizon
Wade Road; Kingsland Business Park
Basingstoke
Hampshire RG24 8AH
United Kingdom

Karlsbad, 2018-11-21

RF Exposure Analysis: WLAN 2.4GHz

FCC ID: T8GAUS4STD

Analysis for FCC portable use

Standalone SAR test exclusion considerations are defined in KDB 447498D01 (v06) Chapter 4.3.1 where the 1-g head or body and 10-g extremity SAR exclusion threshold is defined by the following formula:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})]^* [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

For the Scania AUS4 STANDARD, the maximum conducted output power is 10.5dBm (11.2mW).

Applying the above data using the given KDB 447498 D01 formula, and minimum separation distance of 5mm, the following results:

$$(11.2\text{mW} / 5 \text{ mm}) \times \sqrt{2.45 \text{ GHz}} = 3.5 \text{ (i.e.: } \leq 7.5 \text{ for 10-g extremity SAR)}$$

This demonstrates the Scania AUS4 STANDARD meets the criteria for 10-g extremity SAR test exemption.

Conclusion

The Scania AUS4 STANDARD WLAN 2.4GHz Radio Functionality meets SAR test exemption for Portable extremity conditions.

Yours faithfully,

Mr. Stefan Blaschek, Regulatory Compliance Expert

Karlsbad 10.09.2018
(Place) (Date)

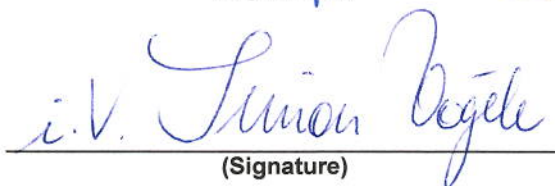
HARMAN AUTOMOTIVE DIVISION
Harman Becker Automotive Systems GmbH
Becker-Göring-Straße 16
76307 Karlsbad, Germany



(Signature)

Mr. Simon Voegele, Regulatory Compliance Expert

Karlsbad 10.09.2018
(Place) (Date)



(Signature)