

Statement of compliance to SAR

No. 180200074SHA-002

Applicant : TDC USA, INC.
5 Industrial Road Fairfield, NJ 07004 U.S.A.

Manufacturer : TDC USA, INC.
5 Industrial Road Fairfield, NJ 07004 U.S.A.

Product Name : Licensed Mercedes G63 AMG Ride-On

Type/Model : G63 (JJ263)

TEST RESULT : PASS

Date of issue: February 26, 2018

Prepared by:



Nemo Li

Reviewed by:



Daniel Zhao

Antenna Type: External integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 78.97dBuV/m at 3m

Maximum allowed field strength of production tolerance: +/- 3dB

According to KDB 447498D01(v06), the following exclusion for portable devices:

The 1g and 10g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \{\sqrt{f(\text{GHz})}\}$$

$$\leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR,}$$

Where:

- 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;

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Based on the Maximum allowed field strength of production tolerance was 81.97dBuV/m at 3m in frequency 27.145MHz, thus:

$$\begin{aligned} \text{The EIRP} &= 81.97\text{dBuV/m} - 95.3 \\ &= -13.33\text{dBm} \\ &= 0.0465\text{mW} \end{aligned}$$

The SAR Exclusion Threshold Level for 27.145MHz when the minimum test separation distance is < 50 mm:

$$\begin{aligned} &= [474 * (1 + \log_{10}(100/f(\text{MHz})))]/2 \\ &= 371.2\text{mW} \end{aligned}$$

Since the above max power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.