



SAR Exclusion Report

FOR:

Manufacturer: Verizon Telematics Inc.
Model Number: AT-660
FCC ID: ZOQAT-660

Test Report #: SAR_VERIT-010-15001_SAREx

Date of Report: November 5, 2015



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1. Assessment

The following device was evaluated against the limits for general population uncontrolled exposure specified in FCC 2.1093 according to SAR evaluation exclusion requirements specified in FCC regulation as listed in KDB 447498 and no deviations were ascertained during the course of the assessment.

Manufacturer	Description	Model #
Verizon Telematics Inc.	Bluetooth Hands-free Device	AT-660

Responsible for Testing Laboratory:

November 5, 2015	Compliance	Josie Sabado (Test Lab Manager)	
Date	Section	Name	Signature

Responsible for the Report:

November 5, 2015	Compliance	James Donnellan (Sr. EMC Engineer)	
Date	Section	Name	Signature

The test results of this test report relate exclusively to the test item specified in Section 3.

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2. Administrative Data

2.1. Identification of the Testing Laboratory Issuing the SAR Test Report

Company Name	CETECOM Inc.
Department	Compliance
Address	411 Dixon Landing Road Milpitas, CA 95035 U.S.A.
Telephone	+1 (408) 586 6200
Fax	+1 (408) 586 6299
Test Lab Manager	Josie Sabado
Responsible Project Manager	Cathy Palacios

2.2. Identification of the Client and Manufacturer

	Client	Manufacturer
Company	Verizon Telematics Inc.	Same as client
Street Address	2002 Summit Blvd #1800	
City/Zip Code	Atlanta, GA 30319	
Country	USA	

3. Equipment under Test (EUT)

3.1. General Specification of the Equipment under Test

Model No:	AT-660
FCC ID:	ZOQAT-660
Product Type:	Portable, Vehicular
RF Exposure Environment:	General / Uncontrolled
Exposure Conditions:	Used near the body
Supported Radios:	Bluetooth v2.1 + EDR, Class 2
Simultaneous Transmission Configurations:	None

3.2. Antenna Information

Antenna	Type	Internal / External	Frequency (MHz)	Manufacturer Stated Max Peak Gain (dBi)
Bluetooth	Chip	Internal	2400 – 2483.5	1.3

3.3. Technical Specification of Supported Radios

Signal Type	Duty Cycle	Type(s) of Modulation	Band	Uplink Transmit Frequency Range (MHz)	Declared Maximum Conducted Output Power (dBm)
Bluetooth 2.1 + EDR	46%	GFSK, $\pi/4$ DQPSK, 8DPSK	N/A	2400 – 2483.5	9

4. Subject of Investigation

The objective of the evaluation done by CETECOM Inc. was to assess the applicability of SAR evaluation exclusion according to methods described in applicable standards.

4.1. The FCC Exposure Criteria

The FCC SAR test exclusions are set by FCC KDB 447498 section 4.3.

5. Stand-Alone SAR Evaluation Exclusion

According to KDB 447498, SAR evaluation can be excluded if the following equation is satisfied:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$$

The maximum power of is 7.9 mW (9 dBm). A minimum test separation distance of 5 mm is used for this calculation because the minimum test separation distance is less than 5 mm. Using the above equation:

$$[(7.9 \text{ mW})/(5 \text{ mm})] \cdot [\sqrt{2.48}] = 2.5$$

SAR testing is excluded because the exclusion threshold of 2.5 is less than 3.0

6. Report History

Date	Report Name – Changes to Report	Report prepared by
November 5, 2015	SAR_VERIT-010-15001_SAREx 1. First Version	J. Donnellan