

REGULATORY COMPLIANCE REPORT

TITLE: FCC & IC Test Report for 15.249 & RSS-210 Low Power Devices;
conducted measurements

AUTHOR: William Stoner

REV	CCO	DESCRIPTION OF CHANGE	DATE	APPROVALS	
001		INITIAL RELEASE		Engineering	
				Regulatory	

REVISION HISTORY

a		initial upload	18nov11	Engineering	
				Regulatory	
b		after 1 st questions	18dec11	Engineering	
				Regulatory	
				Engineering	
				Regulatory	

NOTICE OF PROPRIETARY INFORMATION

Information contained herein is proprietary and is property of **ITRON, Inc.** where furnished with a proposal, the recipient shall use it solely to evaluate the proposal. Where furnished to a customer it shall be used solely for the purposes of inspection, installation or maintenance. Where furnished to a supplier, it shall be used solely in the performance of work contracted for this company. The information shall not be used or disclosed by the recipient for any other purpose, whatsoever.

Test Data Summary**FCC Part 15.249 / IC RSS-210 Annex 2****Field strength of low power Transmitter;** FC300 SR 908– 923.8 MHz for EUT

FCC ID: EO9FC300SR

IC: 864A-FC300SR

IC Device Models (for IC): FC300

Serial Numbers – see below

Rule	Description	Spec Limit	Max. Reading	Pass/Fail
Part 15.31(e)	Variation of Input Voltage – Conducted	n/a	-13.0	n/a

*Rule versions: FCC Part 1; FCC Part 2; FCC Part 15, RSS-102 Issue 4 (03-2010); RSS-210 Issue 8 (12-2010);, RSS-Gen Issue 3 (12-2010)**Reference docs: ANSI C63.4-2003; DA 00-705 (03-30-2000); OET65 (08-1997); OET65C (06-2001); IEEE C95.3-2002.*

Cognizant Personnel	
<u>Name</u> William Stoner	<u>Title</u> Test Engineer
<u>Name</u> Jay Holcomb	<u>Title</u> Regulatory Manager
<u>Name</u> Drew Rosenberg	<u>Title</u> Project Lead

CONDITIONS DURING TESTING

No Modifications to the EUT were necessary during the testing.

NOTE: This report contains only conducted emission measurements with the exception of AC line conducted measurements. All radiated emissions measurements and AC Line conducted emission measurements are found in the radiated emission report.

FCC 15.31(m) – IC _n/a_ ; Number of Channels

Frequency range of the transmitter is 908 MHz to 923.8 MHz. This is greater than 10 MHz, therefore this device was tested on three channels. The low channel was centered at 908 MHz, the mid-channel was centered at 916 MHz and the high channel at 923.8 MHz.

FCC 15.203 – IC _n/a_ ; Antenna Connector Requirements for detachable antennas

The antenna is removable and has a unique Reverse sex SMA connector; therefore the EUT complies with these FCC rules.

ANSI C63.4 - Temperature and Humidity During Testing

The temperature during testing was within +10° C and +40° C.

The Relative humidity was between 10% and 90%.

RSS-Gen 4.3: Tests shall be performed at ambient temperature

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

Itron declares that the EUT tested was representative of a production unit.

EQUIPMENT UNDER TEST

EUT Module

Manuf: Itron, Inc.
Model: FC300SR
Serial Number(s) FC30011242858
Power source Fully charged battery running on AC battery charger

Peripheral Devices

The EUT was tested with the following peripheral devices:

15VDC Power Supply Battery Charger

Manuf: GlobTek, Inc
Model: GT-81081-6015-T3
Serial: RoHS100187103/09

15.31(e)***Variation of Supply Voltage***

Vary the supply voltage from 85% to 115% of the nominal voltage. If the power level of the fundamental signal varies with supply voltage, record the voltage level at which the fundamental signal is at its highest and use that voltage level for all further testing.

Equipment Used	Serial Number	Cal Date	Due
Agilent 4440A	MY44022578	04/20/2011	04/20/2012
Fluke 75 Multimeter	84011050	3/23/2011	3/31/2012
Staco energy products Variac	NA	NA	NA
Date	Tested by		
11/2/2011	William Stoner		

Voltage	Level (dBm)
115V	-13.5
97.75V	-13.7
132.25V	-13.0

15.35(b)***Pulsed Operation***

Calculate the maximum duty cycle of the transmitter that will occur in any 100ms. Perform the following calculation:

$$\text{Duty Cycle } \text{dB} = |20 * \log(\text{Duty Cycle } \%)|$$

No duty cycle corrections were required to comply with emission limits, therefore this calculation does not apply.