

Date: **Mar. 10, 2014**

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**RF exposure analysis for the equipment CB2-BLUE15M-TCU
(FCC ID: CB2-BLUE15M-TCU; IC: 279B-BLUE15M-TCU)**

The output power of the device is extremely low and far below:

1. The FCC SAR test exclusion threshold as stated in KDB 447498 D01 General RF Exposure Guidance v05r02 Clause 4.3.1-1):

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

Modulation	Frequency (GHz)	Maximum output power (dBm)	Maximum output power (mW)	Evaluation distance (mm)	Power (mW)/Distance (mm) * $\sqrt{f(\text{GHz})}$	Threshold	COMPLIANCE: [Power (mW)/Distance (mm) * $\sqrt{f(\text{GHz})}] \leq$ Threshold
GFSK	2,402	-2,80	0,525	5	0,163	3,000	COMPLIANT
	2,441	-1,75	0,668	5	0,209	3,000	COMPLIANT
	2,480	-1,78	0,664	5	0,209	3,000	COMPLIANT
PI/4-DQPSK	2,402	-3,26	0,472	5	0,146	3,000	COMPLIANT
	2,441	-2,18	0,605	5	0,189	3,000	COMPLIANT
	2,480	-2,23	0,598	5	0,188	3,000	COMPLIANT
8-DPSK	2,402	-3,04	0,497	5	0,154	3,000	COMPLIANT
	2,441	-2,15	0,610	5	0,190	3,000	COMPLIANT
	2,480	-2,22	0,600	5	0,189	3,000	COMPLIANT

Therefore, the device meets the FCC SAR exemption requirements.

2. The IC SAR test exclusion threshold as stated in RSS-102 Issue 4 Clause 2.5.1:

above 2.2 GHz and up to 3 GHz inclusively, and with output power (i.e. the higher of the conducted or radiated (e.i.r.p.) source-based, time-averaged output power) that is less than or equal to 20 mW for general public use and 100 mW for controlled use;

Max. conducted: 0,668 mW $\leq$ 20 mW

Max eirp: 0,841 mW $\leq$ 20 mW

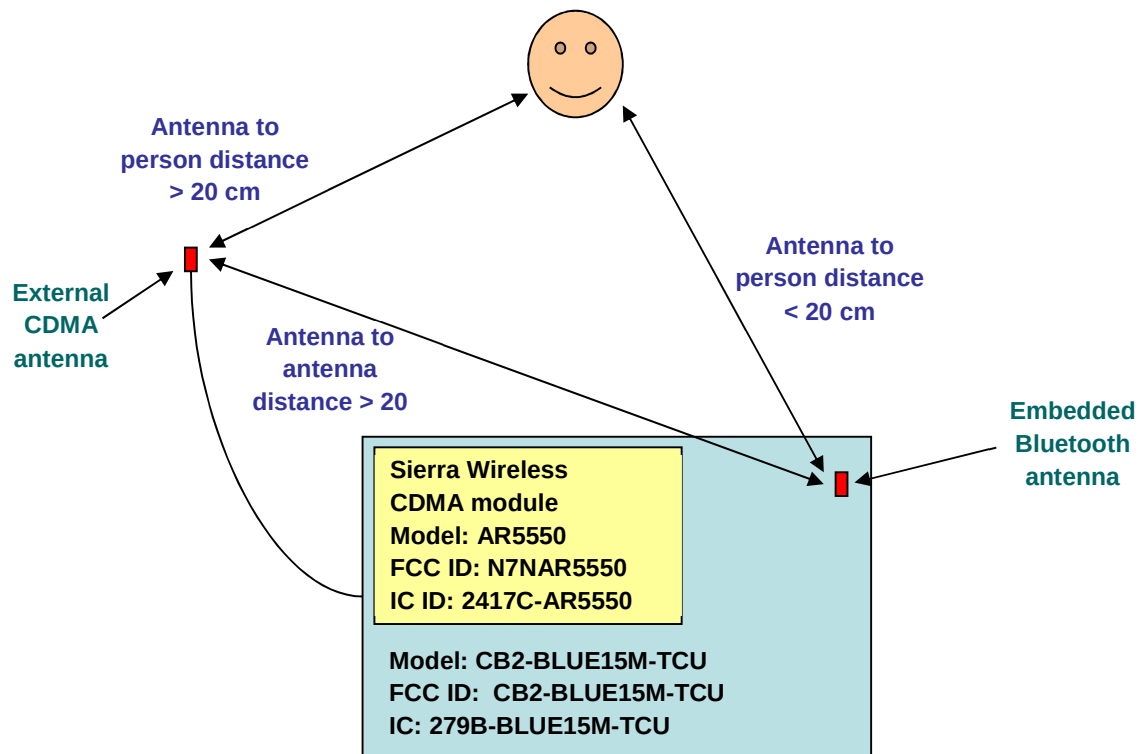
Therefore, the device meets the IC SAR exemption requirements.

For that reason the equipment is categorically excluded from routine environmental evaluation for RF exposure and it is deemed to comply with FCC and IC limits for exposure to electromagnetic fields.

This product also integrates an AR5550 CDMA modem (FCC ID: N7NAR5550, IC: 2417C-AR5550. The AR5550 modem is granted with a modular approval for mobile applications. Integration has been done meeting the following conditions:

1. At least 20cm separation distance between the antenna and any person body is maintained at all times.
2. To comply with FCC/IC regulations limiting both maximum RF output power and human exposure to RF radiation, the maximum antenna gain including cable loss in a mobile only exposure condition does not exceed 4.25dBi for CDMA 800 band and 6.1dBi for CDMA PCS band.
3. The AR5550 antenna is not co-located with any other antennas.

Product configuration is as follows:



Signed on behalf of **Johnson Controls Interiors L.L.C.** in **Holland** on **Mar. 10, 2014**

By:

____ p.a.

Scott Keller

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