Prüfbericht-Nr.: *Test report No.:*	50049137 004	**Auftrags-Nr.:** *Order No.:*	164063836	Seite 1 von 3 *Page 1 of 3*
Kunden-Referenz-Nr.: *Client reference No.:*	N/A	**Auftragsdatum:** *Order date.:*	17.05.2016	
Auftraggeber: *Client:*	**Binatone Electronics International Ltd.** Floor 23A, 9 Des Voeux Road West, Sheung Wan, Hong Kong			
Prüfgegenstand: *Test item:*	Wi-Fi Baby Monitor System			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	BabyNursery7 BU (motorola)			
Auftrags-Inhalt: *Order content:*	FCC and IC approval			
Prüfgrundlage: *Test specification:*	CFR47 FCC Part 2: Section 2.1091 CFR47 FCC Part 1: Section 1.1310 FCC KDB Publication 447498 v06 FCC KDB Publication 865664 D02 v01r02 RSS-102 Issue 5 March 2015			
Wareneingangsdatum: *Date of receipt:*	24.05.2016			
Prüfmuster-Nr.: *Test sample No.:*	1601078		Please refer to photo documents	
Prüfzeitraum: *Testing period:*	12.06.2016 – 30.06.2016			
Ort der Prüfung: *Place of testing:*	Accurate Technology Co., Ltd.			
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: *Test result*:*	Pass			

geprüft von / *tested by:*			**kontrolliert von / *reviewed by:***		
03.08.2016	Ryan Yang / Senior Project Engineer		05.08.2016	Owen Tian / Technical Certifier	
Datum *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*	**Datum** *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*

Sonstiges / *Other:*

Only evaluate the RF Exposure in this test report.
FCC ID: VLJ-BN7BU
IC: 4522A-BN7BU   HVIN: BabyNursery7 BU

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery:*	**Prüfmuster vollständig und unbeschädigt** *Test item complete and undamaged:*

*	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
Legend:	1 = very good	2 = good	3 = satisfactory	4 = sufficient	5 = poor
	P(ass) = passed a.m. test specifications(s)		F(ail) = failed a.m. test specifications(s)	N/A = not applicable	N/T = not tested

1 Safety Human Exposure

1.1 Radio Frequency Exposure Compliance

1.1.1 Electromagnetic Fields

RESULT: **Pass**

Test Specification

Test standard   :   CFR47 FCC Part 2: Section 2.1091

CFR47 FCC Part 1: Section 1.1310

FCC KDB Publication 447498 v06

FCC KDB Publication 865664 D02 v01r02

OET Bulletin 65 (Edition 97-01)

RSS-102 Issue 5 March 2015

➢ **FCC requirements**

FCC requirement: Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 20cm normally can be maintained between the user and the device.

MPE Calculation Method according to OET Bulletin 65

Power Density: $S_{(mW/cm^2)} = PG/4\pi R^2$ or $EIRP/4\pi R^2$

Where:

S = power density (mW/cm^2)

P = power input to the antenna (mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (cm)

The nominal conducted output power specified:

2.4GHz wireless: 17.00 dBm (Tolerance: ± 2 dB)

802.11b/g/n(HT20): 13.00 dBm (Tolerance: ± 2 dB)

From the peak RF output power, the minimum mobile separation distance, d=20 cm, as well as the antenna gain (Max. 0.0 dBi for 2.4GHz wireless and 0.0 dBi 802.11b/g/n(HT20)), the RF power density can be calculated as below:

For 2.4GHz wireless: $S_{(mW/cm^2)} = PG/4\pi R^2 = 0.016$ mW/cm^2

For 802.11b/g/n(HT20): $S_{(mW/cm^2)} = PG/4\pi R^2 = 0.006$ mW/cm^2

Limits for Maximum Permissible Exposure (MPE) according to FCC Part 1.1310:

1.0 mW/cm^2

For Simultaneous transmitting of 2.4GHz wireless and 802.11b/g/n(HT20):
According to 865664D02 2.2 d) 1):

The sum of the ratios of the spatially averaged results to the applicable frequency dependent MPE limits = 0.016/1 + 0.006/1 = 0.022 < 1

➢ **IC requirements:** The EUT shall comply with the requirement of RSS-102 section 2.5.2.

Exemption from Routine Evaluation Limits – RF Exposure Evaluation

RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows:

at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834}$ W (adjusted for tune-up tolerance), where f is in MHz;

- RF exposure evaluation exempted power for 2.4GHz wireless: 2.676 W
- RF exposure evaluation exempted power for 802.11b/g/n(HT20): 2.684 W

The nominal conducted output power specified:

2.4GHz wireless: 17.00 dBm (Tolerance: ± 2 dB)

802.11b/g/n(HT20): 13.00 dBm (Tolerance: ± 2 dB)

Antenna Gain: 0.0 dBi for 2.4GHz wireless

Antenna Gain: 0.0 dBi for 802.11b/g/n(HT20)

The Max. e.i.r.p. for 2.4GHz wireless: 19.00 dBm = 0.079 W

The Max. e.i.r.p. for 802.11b/g/n(HT20): 15.00 dBm = 0.032 W

Both e.i.r.p. for the 2.4GHz wireless and 802.11b/g/n(HT20) are less than the RF exposure evaluation exempted power. So RF exposure evaluation is not required.

"RF Radiation Exposure Statement Caution: This Transmitter must be installed to provide a separation distance of at least 20 cm from all persons."