

## RF Exposure Report

**Report No.:** SA170206E06

**FCC ID:** 2AHKM-CGNV22

**Test Model:** CGNV22

**Received Date:** Feb. 06, 2017

**Test Date:** Mar. 02, 2017

**Issued Date:** May 19, 2017

**Applicant:** HitronTechnologies

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TAIWAN.

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Hsin Chu Laboratory

**Lab Address:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,  
Taiwan R.O.C.

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### Release Control Record

Issue No.	Description	Date Issued
SA170206E06	Original release.	May 19, 2017

## 1 Certificate of Conformity

**Product:** DOCSIS 3.0 eMTA

**Brand:** Movistar

**Test Model:** CGNV22

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** HitronTechnologies

**Test Date:** Mar. 02, 2017

**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**Prepared by :** Wendy Wu , **Date:** May 19, 2017  
Wendy Wu / Specialist

**Approved by :** May Chen , **Date:** May 19, 2017  
May Chen / Manager

## 2 RF Exposure

### 2.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	...	...	f/1500	30
1500-100,000	...	...	1.0	30

f = Frequency in MHz ; \*Plane-wave equivalent power density

### 2.2 MPE Calculation Formula

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$R$  = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.  
So, this device is classified as **Mobile Device**.

### 2.4 Antenna Gain

Antenna No.	Antenna Net Gain (dBi)	Frequency range (GHz)	Antenna Type	Connector Type	Cable Length (mm)
1	4.4	2.4~2.4835	PIFA	-	-
2	3.7	2.4~2.4835	Dipole	i-pex(MHF)	170

## 2.5 Calculation Result of Maximum Conducted Power

Frequency (MHz)	Max. Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	723.501	7.07	20	0.73311	1

NOTE:

Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.07\text{dBi}$

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