

RF Exposure Report

Report No.: SA151021E09

FCC ID: H8NTCG220

Test Model: TCG220-TdP

Series Model: TCG220XXXX (X can be 0-9, A-Z, a-z, “-”, “.” or blank for marketing)

Received Date: Oct. 21, 2015

Test Date: Nov. 03, 2015

Issued Date: Nov. 12, 2015

Applicant: ASKEY COMPUTER CORP.

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

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Test Location (1): No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan R.O.C.

Test Location (2): No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan R.O.C.

Test Location (3): E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.

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A D T

Release Control Record

| Issue No. | Description | Date Issued |
|-------------|-------------------|---------------|
| SA151021E09 | Original release. | Nov. 12, 2015 |



A D T

1 Certificate of Conformity

Product: Cable Modem

Brand: ASKEY

Test Model: TCG220-TdP

Series Model: TCG220XXXX (X can be 0-9, A-Z, a-z, "-", "." or blank for marketing)

Sample Status: ENGINEERING SAMPLE

Applicant: ASKEY COMPUTER CORP.

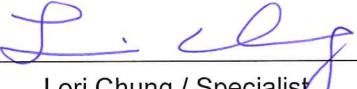
Test Date: Nov. 03, 2015

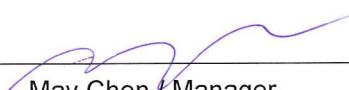
Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D03

IEEE C95.1

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 : , **Date:** Nov. 12, 2015
Lori Chung / Specialist

Approved by : , **Date:** Nov. 12, 2015
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 ²) | Average Time (minutes) |
|---|-------------------------------|-------------------------------|-------------------------------------|------------------------|
| Limits For General Population / Uncontrolled Exposure | | | | |
| 300-1500 | ... | ... | F/1500 | 30 |
| 1500-100,000 | ... | ... | 1.0 | 30 |

F = Frequency in MHz

2.2 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm²

Pout = 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

The antennas provided to the EUT, please refer to the following table:

| Antenna No | PCB Chain No. | Brand | Model | Antenna Type | Antenna Connector | Gain (dBi) | Cable Length (mm) | Frequency (GHz to GHz) |
|------------|---------------|-------------|--------------|--------------|-------------------|------------|-------------------|------------------------|
| 1 | Chain 0 | MASTER WAVE | 98P4QMIPF000 | PCB | i-pex(MHF) | 3.68 | 60 | 2.4~2.4835 |
| 2 | Chain 1 | MASTER WAVE | 98P4RMIPF000 | PCB | i-pex(MHF) | 3.36 | 54 | 2.4~2.4835 |

2.5 Calculation Result of Maximum Conducted Power

| Frequency Band (MHz) | Max Power (mW) | Antenna Gain (dBi) | Distance (cm) | Power Density (mW/cm ²) | Limit (mW/cm ²) |
|----------------------|----------------|--------------------|---------------|-------------------------------------|-----------------------------|
| 2412-2462 | 714.681 | 6.53 | 20 | 0.63950 | 1 |

NOTE:

$$\text{Directional gain} = 10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 6.53 \text{dBi}$$

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