

## RF EXPOSURE REPORT

**REPORT NO.:** SA141007E05

**MODEL NO.:** F7C029V2

FCC ID: K7SF7C029V2

**RECEIVED:** Oct. 07, 2014

**TESTED:** Oct. 16, 2014

**ISSUED:** Nov. 12, 2014

**APPLICANT:** Belkin, International Inc.,

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## **RELEASE CONTROL RECORD**

| ISSUE NO. REASON FOR CHANGE |                  | DATE ISSUED   |
|-----------------------------|------------------|---------------|
| SA141007E05                 | Original release | Nov. 12, 2014 |

Report No.: SA141007E05 3 of 6 Report Format Version 5.2.1



#### 1. CERTIFICATION

**PRODUCT:** WeMo Insight

BRAND NAME: Belkin

MODEL NO.: F7C029V2

**TEST SAMPLE:** ENGINEERING SAMPLE

**APPLICANT:** Belkin, International Inc.,

**TESTED DATE:** Oct. 16, 2014

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

KDB 447498 D03

**IEEE C95.1** 

The above equipment (Model: F7C029V2) 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, 2014

(Elsie Hsu, Specialist)

(May Chen, Manager)



#### 2. RF EXPOSURE LIMIT

## LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| FREQUENCY<br>RANGE (MHz) |   | MAGNETIC FIELD<br>STRENGTH (A/m) | POWER DENSITY<br>(mW/cm²) | AVERAGE TIME (minutes) |  |  |  |  |
|--------------------------|---|----------------------------------|---------------------------|------------------------|--|--|--|--|
| LIMI                     | LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE |                                  |                           |                        |  |  |  |  |
| 300-1500                 |   |                                  | F/1500                    | 30                     |  |  |  |  |
| 1500-100,000             |   |                                  | 1.0                       | 30                     |  |  |  |  |

F = Frequency in MHz

#### 3. MPE CALCULATION FORMULA

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

where

Pd = power density in mW/cm<sup>2</sup>

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

#### 4. 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**.

#### 5. ANTENNA GAIN

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

| Gain (dBi)  | Antenna | Connecter | Frequency range | Cable Loss |
|-------------|---------|-----------|-----------------|------------|
| Gairr (GBI) | Type    | Type      | (MHz to MHz)    | (dB)       |
| 1.85        | PCB     | NA        | 2400~2483.5     | NA         |



## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

#### 802.11b

| FREQUENCY<br>(MHz) | CONDUCTED<br>POWER<br>(mW) | ANTENNA<br>GAIN<br>(dBi) | DISTANCE<br>(cm) | POWER<br>DENSITY<br>(mW/cm²) | LIMIT<br>(mW/cm²) |
|--------------------|----------------------------|--------------------------|------------------|------------------------------|-------------------|
| 2412 - 2462        | 78.705                     | 1.85                     | 20               | 0.02397                      | 1.00              |

## 802.11g

| FREQUENCY<br>(MHz) | CONDUCTED<br>POWER<br>(mW) | ANTENNA<br>GAIN<br>(dBi) | DISTANCE<br>(cm) | POWER<br>DENSITY<br>(mW/cm²) | LIMIT<br>(mW/cm²) |
|--------------------|----------------------------|--------------------------|------------------|------------------------------|-------------------|
| 2412 - 2462        | 157.036                    | 1.85                     | 20               | 0.04783                      | 1.00              |

## 802.11n (HT20)

| FREQUENCY<br>BAND<br>(MHz) | CONDUCTED<br>POWER<br>(mW) | ANTENNA<br>GAIN<br>(dBi) | DISTANCE<br>(cm) | POWER<br>DENSITY<br>(mW/cm²) | LIMIT<br>(mW/cm²) |
|----------------------------|----------------------------|--------------------------|------------------|------------------------------|-------------------|
| 2412 - 2462                | 187.068                    | 1.85                     | 20               | 0.05698                      | 1.00              |

## 802.11n (HT40)

| FREQUENCY<br>BAND<br>(MHz) | CONDUCTED<br>POWER<br>(mW) | ANTENNA<br>GAIN<br>(dBi) | DISTANCE<br>(cm) | POWER<br>DENSITY<br>(mW/cm²) | LIMIT<br>(mW/cm²) |
|----------------------------|----------------------------|--------------------------|------------------|------------------------------|-------------------|
| 2422 - 2452                | 163.682                    | 1.85                     | 20               | 0.04986                      | 1.00              |

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