



RF EXPOSURE REPORT

REPORT NO.: SA131128E01

MODEL NO.: F7C031

FCC ID: K7SF7C031

RECEIVED: Nov. 28, 2013

TESTED: Apr. 01 and May 02, 2014

ISSUED: June 12, 2014

APPLICANT: Belkin, International Inc.,

ADDRESS: 12045 East Waterfront Drive Playa Vista,
California 90094 United States

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

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA131128E01	Original release	June 12, 2014



1. CERTIFICATION

PRODUCT: WeMo Link
BRAND NAME: Belkin
MODEL NO.: F7C031
TEST SAMPLE: ENGINEERING SAMPLE
APPLICANT: Belkin, International Inc.,
TESTED DATE: Apr. 01 and May 02, 2014
STANDARDS: FCC Part 2 (Section 2.1091)
FCC OET Bulletin 65, Supplement C (01-01)
IEEE C95.1

The above equipment (Model: F7C031) 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:** June 12, 2014
(Lori Chung, Specialist)

APPROVED BY : , **DATE:** June 12, 2014
(May Chen, Manager)

2. RF EXPOSURE LIMIT

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

3. MPE CALCULATION FORMULA

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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 antennas provided to the EUT, please refer to the following table:

Zigbee Antenna Spec.				
Brand	Antenna Type	Antenna Connector	Gain(dBi)	Frequency range (MHz)
WNC	PIFA	i-pex(MHF)	2.17	2400 – 2483.5
WLAN Antenna Spec.				
Brand	Antenna Type	Antenna Connector	Gain(dBi)	Frequency range (MHz)
WNC	PIFA	i-pex(MHF)	1.40	2400 – 2483.5

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

For WLAN

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2412-2462	399.025	1.40	20	0.10958	1

For Zigbee

FREQUENCY BAND (MHz)	CONDUCTED POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2405 - 2475	95.719	2.17	20	0.03139	1.00

CONCLUSION:

Both of the WLAN and Zigbee can transmit simultaneously, the formula of calculated the MPE is:

$$CPD_1 / LPD_1 + CPD_2 / LPD_2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

Therefore, the worst-case situation is $0.10958 / 1 + 0.03139 / 1 = 0.141$, which is less than "1". This confirmed that the device comply with FCC 1.1310 MPE limit.

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