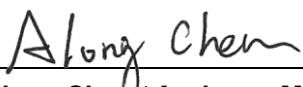


# FCC RF Exposure Report

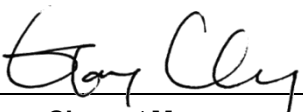
**FCC ID** : 2ACKD-WIM1200-20  
**Equipment** : Wireless access point module  
**Model No.** : WIM1200-20  
**Brand Name** : SKSPRUCE  
**Applicant** : SKSpruce Technologies Inc.  
**Address** : 1885 Lundy Ave. Suite 270, San Jose, CA,  
United States, 95131  
**Standard** : 47 CFR FCC Part 2.1091  
**Received Date** : Nov. 07, 2016  
**Tested Date** : Nov. 07 ~ Dec. 05, 2016

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

  
Along Chen / Assistant Manager

Approved by:

  
Gary Chang / Manager



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## Release Record

| Report No. | Version | Description   | Issued Date   |
|------------|---------|---------------|---------------|
| FA6N2101   | Rev. 01 | Initial issue | Dec. 13, 2016 |

# 1 General Description

## 1.1 Information

5GHz Power amplifier component has 2 sources as below

| Sample               | Brand    | Model      |
|----------------------|----------|------------|
| 5GHz Power amplifier | SKYWORKS | SK85726-11 |
| 5GHz Power amplifier | SKYWORKS | SK85712-11 |

### 1.1.1 Specification of the Equipment under Test (EUT)

|                            |                                                                                                    |
|----------------------------|----------------------------------------------------------------------------------------------------|
| <b>Operating Frequency</b> | 802.11b/g/n: 2412 MHz ~ 2462 MHz<br>802.11a/n/ac: 5180 MHz ~ 5240 MHz, 5745 ~ 5825                 |
| <b>Modulation Type</b>     | 802.11b: DSSS (DBPSK / DQPSK / CCK)<br>802.11a/g/n/ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) |

### 1.1.2 Antenna Details

| Ant. No. | Brand | Model     | Type   | Gain (dBi) |      | Connector | Remark |
|----------|-------|-----------|--------|------------|------|-----------|--------|
|          |       |           |        | 2.4GHz     | 5GHz |           |        |
| 1        | ALPHA | AW3509-11 | Dipole | 2          |      | UFL       | ---    |

## 2 MPE EVALUATION OF MOBILE DEVICES

Human exposure to RF emissions from mobile devices (47 CFR §2.1091) may be evaluated based on the MPE limits adopted by the FCC for electric and magnetic field strength and/or power density, as appropriate, since exposures are assumed to occur at distances of 20 cm or more from persons.

### 2.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

| Frequency Range (MHz) | Power Density (mW /cm <sup>2</sup> ) | Averaging Time (minutes) |
|-----------------------|--------------------------------------|--------------------------|
| 300~1500              | F/1500                               | 30                       |
| 1500~100000           | 1.0                                  | 30                       |

### 2.2 MPE EVALUATION FORMULA

$$Pd = \frac{Pt}{4 * \pi * R^2}$$

Where

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

Pt= EIRP in mW

π= 3.1416

R= Measurement distance

### 2.3 MPE EVALUATION RESULTS

| Frequency Range (MHz) | Maximum Conducted Power (dBm) | Antenna Gain (dBi) | Distance (cm) | Power Density (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) |
|-----------------------|-------------------------------|--------------------|---------------|-------------------------------------|-----------------------------|
| 2412~2462             | 21.34                         | 2                  | 20            | 0.043                               | 1                           |
| 5180~5240             | 19.68                         | 2                  | 20            | 0.029                               | 1                           |
| 5745~5825             | 18.13                         | 2                  | 20            | 0.020                               | 1                           |

### 3 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

#### **Linkou**

Tel: 886-2-2601-1640

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Kou District, New Taipei City,  
Taiwan, R.O.C.

#### **Kwei Shan**

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Kwei Shan District, Tao Yuan City  
333, Taiwan, R.O.C.

#### **Kwei Shan Site II**

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St., Kwei Shan District, Tao Yuan  
City 333, Taiwan, R.O.C.

If you have any suggestion, please feel free to contact us as below information.

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==END==