FCC RF Exposure Report

FCC ID	:	**P27IP3442M**
Equipment	:	**AC2600 Wi-Fi Mesh Router**
Model No.	:	**IP3442MXXXXXXXXXX** **(refer to item 1.1.1 for more details)**
Brand Name	:	**Sercomm**
Applicant	:	**Sercomm Corporation**
Address	:	**8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan, R.O.C.**
Standard	:	**47 CFR FCC Part 2.1091**
Received Date	:	**May 14, 2020**
Tested Date	:	**Jun. 02 ~ Jun. 17, 2020**

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.
The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

Reviewed by: **Approved by:**

Along Chen / Assistant Manager **Gary Chang / Manager**

Testing Laboratory
2732

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Release Record

Report No.	Version	Description	Issued Date
FA051403-01	Rev. 01	Initial issue	Jul. 06, 2020

1 General Description

1.1 Information

1.1.1 Product Details

The following models are provided to this EUT.

Model Name	Description
IP3442MXXXXXXXXXX	the 1st x should be "blank" or "-"; the rest x could be 0 to 9, A to Z, "blank", “-“ or "/" , for marketing purpose
✦ The above models, model **IP3442M** was selected as a representative one for the final test and only its data was recorded in this report.	

2 MPE EVALUATION OF MOBILE DEVICES

2.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

Frequency Range (MHz)	Power Density (mW /cm^2)	Averaging Time (minutes)
300~1500	F/1500	30
1500~100000	1.0	30

2.2 MPE EVALUATION FORMULA

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

Where

Pd= Power density in mW/cm^2
Pt= EIRP in mW
Pi= 3.1416
R= Measurement distance

2.3 DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE

None

2.4 MEASUREMENT UNCERTAINTY

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Parameters	Uncertainty
Conducted power	±0.808 dB

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

2.5 MPE EVALUATION RESULTS

MPE Evaluation of Single Transmission

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Rated Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)	Ratio*	Pass / Fail
Non-beamforming mode								
2412~2462[Note]	26.59	27	3.1	20	0.204	1	**0.204**	Pass
5180~5240[Note]	26.15	26.5	3.1	20	0.181	1	0.181	Pass
5745~5825[Note]	26.67	27	2.9	20	0.194	1	**0.194**	Pass
5260~5320	23.51	24	2.9	20	0.097	1	0.097	Pass
5500~5700	23.52	24	2.9	20	0.097	1	0.097	Pass
Beamforming mode								
5180~5240[Note]	24.82	25.0	8.73	20	0.470	1	0.470	Pass
5745~5825[Note]	26.41	26.5	8.50	20	0.629	1	**0.629**	Pass
5260~5320	20.93	21	8.62	20	0.182	1	0.182	Pass
5500~5700	21.02	21.5	8.60	20	0.204	1	0.204	Pass

Note:

*Ratio = Power density / Limit.

1. These 3 frequency bands are certified for original grant.
2. For beamforming mode:
   For 5250 ~ 5350 MHz
   DG = Directional Gain=10 x $\log((10^{2.8/20}+10^{2.4/20}+10^{2.3/20}+10^{2.9/20})^4/4)$ = 8.62 dBi
   For 5470 ~ 5725MHz
   DG = Directional Gain=10 x $\log((10^{2.2/20}+10^{2.5/20}+10^{2.7/20}+10^{2.9/20})^4/4)$ = 8.60 dBi

2.6 MPE EVALUATION OF SIMULTANEOUS TRANSMISSION

Non-beamforming mode

Mode	Max Ratio of Each Mode
WLAN 2.4GHz	0.204
WLAN 5GHz	0.194
Sum	0.398
Limit	1
Pass / Fail	Pass

Beamforming mode

Mode	Max Ratio of Each Mode
WLAN 2.4GHz	0.204
WLAN 5GHz	0.629
Sum	0.833
Limit	1
Pass / Fail	Pass

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	**Kwei Shan**	**Kwei Shan Site II**
Tel: 886-2-2601-1640	Tel: 886-3-271-8666	Tel: 886-3-271-8640
No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan, R.O.C.	No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.	No. 14-1, Lane 19, Wen San 3rd 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.

Tel: 886-3-271-8666
Fax: 886-3-318-0155
Email: ICC_Service@icertifi.com.tw

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