FCC RF Exposure Report

FCC ID	:	**ACQ-VIP5662W**
Equipment	:	**WiFi STB**
Model No.	:	**VIP5662W**
Brand Name	:	**ARRIS**
Applicant	:	**ARRIS Group, Inc.**
Address	:	**101 Tournament Drive, Horsham, Pennsylvania, United States, 19044**
Standard	:	**47 CFR FCC Part 2.1091**
Received Date	:	**Oct. 02, 2015**
Tested Date	:	**Oct. 14 ~ Nov. 13, 2015**

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.

Approved & Reviewed by:

Gary Chang / Manager

Testing Laboratory
2732

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Release Record

Report No.	Version	Description	Issued Date
FA5O0204	Rev. 01	Initial issue	Dec. 08, 2015

1 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.

1.1 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

1.2 MPE EVALUATION FORMULA

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

Where

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

1.3 MPE EVALUATION RESULTS

MPE Evaluation of Single Transmission

Bluetooth

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
2402~2480(EDR)	2.3	2	20	0.001	1
2402~2480(LE)	2.3	2	20	0.001	1

Wi-Fi

Non-beamforming mode

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
5180~5240	26.37	0.5	20	0.097	1
5260-5320	23.87	0.5	20	0.054	1
5500-5720	23.60	0.5	20	0.051	1
5745~5825	23.62	0.6	20	0.053	1

Beamforming mode

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
5180~5240	25.94	6.52	20	0.351	1
5260-5320	23.42	6.52	20	0.196	1
5500-5720	23.41	6.52	20	0.196	1
5745~5825	23.46	6.62	20	0.203	1

Note:

1. For 5150-5250 MHz band, Directional gain = 0.5+10* log(4/1) = 6.52 dBi
   For 5250-5350 MHz band, Directional gain = 0.5+10* log(4/1) = 6.52 dBi
   For 5470-5725 MHz band, Directional gain = 0.5+10* log(4/1) = 6.52 dBi
   For 5725-5850 MHz band, Directional gain = 0.6+10* log(4/1) = 6.62 dBi

MPE Evaluation of Simultaneous Transmission

BT and Wi-Fi can transmit at the same time, MPE evaluation is as below formula
PD1 / Limit1 + PD2 / Limit 2 + ….. < 1, PD = Power density

MPE Evaluation = Maximum MPE of BT + Maximum MPE of Wi-Fi = 0.001 / 1 + 0.351 / 1 = 0.352 < 1

Conclusion

MPE evaluations of single and simultaneous transmission meet the requirement of standard.

2 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, 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 Hsiang. 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 Hsiang, Tao Yuan Hsien 333, Taiwan, R.O.C.	No. 14-1, Lane 19, Wen San 3rd St., Kwei Shan Hsiang, Tao Yuan Hsien 333, Taiwan, R.O.C.

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

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