Shenzhen Huaxia Testing Technology Co., Ltd

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

Telephone: +86-755-26648640
Fax: +86-755-26648637
Website: www.cqa-cert.com

Report Template Version: V03
Report Template Revision Date: Mar.1st, 2017

RF Exposure Evaluation Report

Report No. :	CQASZ20190400262E-02
Applicant:	ZAGG Inc.
Address of Applicant:	910 West Legacy Center Way, Midvale, Utah, United States, 84047
Manufacturer:	ZAGG Inc.
Address of Manufacturer:	910 West Legacy Center Way, Midvale, Utah, United States, 84047
Equipment Under Test (EUT):	
Product:	IFROGZ Airtime Pro
Model No.:	IFIETWS43
Brand Name:	IFROGZ
FCC ID:	QTG-IFASTWSP
Standards:	47 CFR Part 1.1307 47 CFR Part 2.1093 KDB447498D01 General RF Exposure Guidance v06
Date of Test:	2019-04-23 to 2019-04-29
Date of Issue:	2019-04-29
Test Result :	**PASS***

Tested By： Daisy Qin

(Daisy Qin)

Reviewed By: Aaron Ma

(Aaron Ma)

Approved By:

(Jack Ai)

SHENZHEN HUAXIA TESTING TECHNOLOGY CO., LTD 华夏准测 APPROVED

* In the configuration tested, the EUT complied with the standards specified above.

1 Version

Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20190400262E-02	Rev.01	Initial report	2019-04-29

2 Contents

3 General Information

3.1 Client Information

Applicant:	ZAGG Inc.
Address of Applicant:	910 West Legacy Center Way, Midvale, Utah, United States, 84047
Manufacturer:	ZAGG Inc.
Address of Manufacturer:	910 West Legacy Center Way, Midvale, Utah, United States, 84047

3.2 General Description of EUT

Product Name:	IFROGZ Airtime Pro
Model No.:	IFIETWS43
Trade Mark:	IFROGZ
Hardware Version:	V11
Software Version:	V4
Operation Frequency:	2402MHz~2480MHz
Bluetooth Version:	V5.0
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)
Modulation Type:	GFSK, π/4DQPSK, 8DPSK
Transfer Rate:	1Mbps/2Mbps/3Mbps
Number of Channel:	79
Hopping Channel Type:	Adaptive Frequency Hopping systems
Product Type:	☐ Mobile ☒ Portable ☐ Fix Location
Test Software of EUT:	Bluetooth RF test Tool (manufacturer declare)
Antenna Type:	Integral antenna
Antenna Gain:	2dBi
Power Supply:	lithium battery:DC3.7V, Charge by DC5V

Note:

1. EUT tested both left and right ears, but only the worst mode was reflected in the report, the worst mode is the left ear.

4 SAR Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

4.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

☐ f(GHz) is the RF channel transmit frequency in GHz
☐ Power and distance are rounded to the nearest mW and mm before calculation[17]
☐ The result is rounded to one decimal place for comparison
The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

4.1.3 EUT RF Exposure

Measurement Data

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	4.060	3.5±1	4.5	2.818
Middle(2441MHz)	3.900	3.5±1	4.5	2.818
Highest(2480MHz)	2.760	3.5±1	4.5	2.818
π/4DQPSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	3.860	3.0±1	4.0	2.512
Middle(2441MHz)	3.590	3.0±1	4.0	2.512
Highest(2480MHz)	2.200	3.0±1	4.0	2.512
8DPSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	3.880	3.0±1	4.0	2.512
Middle(2441MHz)	3.670	3.0±1	4.0	2.512
Highest(2480MHz)	2.380	3.0±1	4.0	2.512

Worst case: GFSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	4.060	3.5±1	4.5	2.818	0.87	3.0
Middle (2441MHz)	3.900	3.5±1	4.5	2.818	0.88	
Highest (2480MHz)	2.760	3.5±1	4.5	2.818	0.89	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20190400262E-01