TEST REPORT

Reference No.	:	WTD23D02024586W003
FCC ID	:	2BADD-R4GLITE
Applicant	:	Black Gate Hunting Products, LLC
Address	:	8200 Canthy Circle, Garner, NC 27529, United States
Manufacturer	:	HuaRui Technology(ShenZhen)CO.,Ltd
Address	:	401, Building 3, No.32, Dafu Road, Zhangge Community, Fucheng Street, Longhua District, Shenzhen, China
Product	:	Wireless Trail camera
Model(s)	:	R4G-Lite
Standards	:	FCC 1.1307
Date of Receipt sample	:	2023-01-21
Date of Test	:	2023-01-21 to 2023-03-02
Date of Issue	:	2023-06-15
Test Result	:	**Pass**

Remarks:
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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Approved by:

Deval Qin

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2 Contents

3 Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTD23D02024586W003	2023-01-21	2023-01-21 to 2023-03-02	2023-06-15	Original	-	Valid

4 General Information

4.1 General Description of E.U.T.

Product:	Wireless Trail camera
Model(s):	R4G-Lite
Model Description:	N/A
WCDMA Band(s):	FDD Band II/IV/V
LTE Band(s):	FDD Band 2/4/5/12/13/25/26
Hardware Version:	R4GLMV02
Software Version:	R4G_Lite_015
Highest frequency (Exclude Radio):	24MHz
Storage Location:	Internal Storage

4.2 Details of E.U.T.

Operation Frequency:	WCDMA Band II: 1850~1910MHz WCDMA Band V: 824~849MHz WCDMA Band IV:1710~1755MHz LTE Band 2: 1850~1910MHz LTE Band 4: 1710~1755MHz LTE Band 5: 824~849MHz LTE Band 12: 699~716MHz LTE Band 13: 777~787MHz LTE Band 25 1850~1915MHz LTE Band 26: 814~849MHz
Type of Modulation:	BPSK, QPSK, 16QAM
Antenna installation:	External antenna
Antenna Gain:	WCDMA Band II: 3.0dBi WCDMA Band V: -0.2dBi WCDMA Band IV: 3.0dBi LTE Band 2: 3.0dBi LTE Band 4: 3.0dBi LTE Band 5: -0.2dBi LTE Band 12: -0.9dBi LTE Band 13: -0.9dBi LTE Band 25: 3.0dBi LTE Band 26: -0.2dBi
Ratings:	DC 12V

4.3 Test Facility

The test facility has a test site registered with the following organizations:

ISED CAB identifier: CN0013. Test Firm Registration No.: 7760A.

Waltek Testing Group Co., Ltd. Has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration number 7760A, October 15, 2016.

FCC Designation No.: CN1201. Test Firm Registration No.: 523476.

Waltek Testing Group Co., Ltd. EMC Laboratory `has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration number 523476, September 10, 2019.

5 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307(b)(1)	PASS

6 RF Exposure

Test Requirement: FCC Part 1.1307

Test Mode: The EUT work in test mode(Tx).

6.1 Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2m normally can be maintained between the user and the device.

6.2 The procedures / limit

FCC Part 1.1307:

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm^2)	Averaging Time $\|E\|^2$,$\|H\|^2$or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm^2)	Averaging Time $\|E\|^2$,$\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ;

*Plane-wave equivalent power density

6.3 MPE Calculation Method

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. mW/cm^2)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

From the peak EUT RF output power, the minimum mobile separation distance, d=20cm, as well as the gain of the used antenna, the RF power density can be obtained

Remark:

FCC Part 1.1307:

Mode	Antenna Gain (dBi)	Antenna Gain (numeric)	Max.Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (mW/cm^2)	Limit of Power Density (mW/cm^2)
WCDMA (Band II)	3.00	1.995	22.17	164.82	0.065421	1
WCDMA (Band IV)	3.00	1.995	22.47	176.60	0.070100	1
WCDMA (Band V)	-0.2	0.955	22.10	162.18	0.030812	0.55
LTE (Band 2)	3.00	1.995	23.20	208.93	0.082932	1
LTE (Band 4)	3.00	1.995	22.71	186.64	0.074083	1
LTE (Band 5)	-0.2	0.955	22.63	183.23	0.034811	0.55
LTE (Band 12)	-0.9	0.813	22.34	171.40	0.027715	0.47
LTE (Band 13)	-0.9	0.813	22.23	167.11	0.027022	0.52
LTE (Band25)	3.00	1.995	22.93	196.34	0.077933	1
LTE (Band 26)	-0.2	0.955	23.41	219.28	0.041682	0.56

======End of Report======