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MPE TEST REPORT

FCC Per 47 CFR 2.1091(b)

Report Reference No.....: CTL1407291808-WM

FCC ID.....:

Compiled by

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(position+printed name+signature)...: Manager Tracy Qi

Tracy Qi

Date of issue.....: Sept. 13, 2014

Test Firm.....: Shenzhen CTL Testing Technology Co., Ltd.

Address.....: Floor 1-A, Baisha Technology Park, No.3011, Shahexi Road, Nanshan District, Shenzhen, China 518055

Applicant's name.....: UOVision Technology (HONGKONG) Co., Ltd

Address.....: UNIT A3, 9/F SILVER INTERNATIONAL TOWER, 707-713 NATHAN ROAD, MONGKOK, KOWLOON, HONG KONG

Test specification:

Standard: FCC Per 47 CFR 2.1091(b)

TRF Originator.....: Shenzhen CTL Testing Technology Co., Ltd.

Master TRF: Dated 2011-01

Shenzhen CTL Testing Technology Co., Ltd.

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Test item description: Wireless Infrared Scouting Camera: Code Black (UM565-3G)

FCC ID.....: 2AC8CUM565-3G

Trade Mark: UOVision

Model/Type reference.....: Code Black (UM565-3G)

GPRS /WCDMA

Transmit: 2G:GPRS 850: 824~849MHz, GPRS 1900: 1850~1910MHz
3G:WCDMA Band II: 1850-1910MHz,
WCDMA Band V: 824~849MHz

Receive: 2G:GPRS 850: 869~894MHz, GPRS 1900: 1930~1990MHz
3G:WCDMA Band II: 1930~1990MHz,
WCDMA Band V: 869~894MHz

Release Version: 2G:R99

3G:UMTS FDD: Rel-5

Type of modulation	2G: GMSK for GPRS, 8PSK for EDGE 3G: QPSK
GPRS Type	Class B
GPRS Class	Class 12
Antenna Gain	2.0 dBi for GPRS 850 and WCDMA Band V 2.5 dBi for GPRS 1900 and WCDMA Band II
Antenna type	External
IMEI	012813002121335
Result.....	Positive



Test Report

Test Report No. : CTL1407291808-WM	Sept. 13, 2014 Date of issue
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Equipment under Test : **Wireless Infrared Scouting Camera: Code Black (UM565-3G)**

Model /Type : Code Black (UM565-3G)

Applicant : **UOVision Technology (HONGKONG) Co., Ltd**

Address : UNIT A3, 9/F SILVER INTERNATIONAL TOWER, 707-713
NATHAN ROAD, MONGKOK, KOWLOON, HONG KONG

Manufacturer **UOVision Technology (Shenzhen) Co., Ltd.**

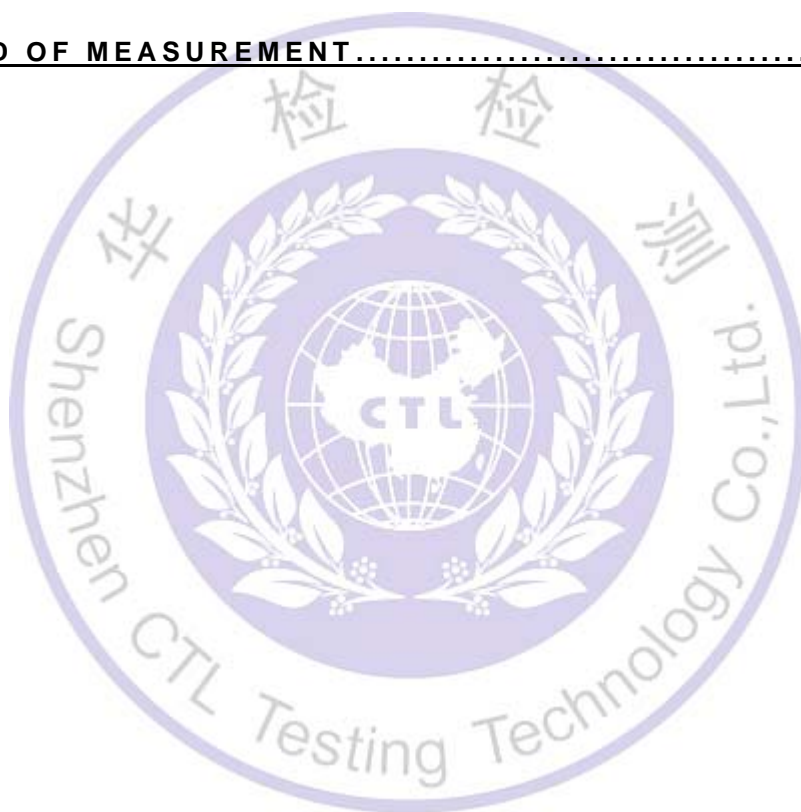
Address 3rd Floor, East Wing, the 4th Building, ZhongGuan
HongHualing Industrial Zone, 1268# Liuxian BLVD,
Nanshan District, Shenzhen, China 518055

Test Result:	Positive
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The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1. SUMMARY

1.1. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

- - supplied by the manufacturer
- o - supplied by the lab

1.2. Equipment Under Test

Power supply system utilised

Power supply voltage : o 120V / 60 Hz o 115V / 60Hz
 o 12 V DC o 24 V DC
 ■ Other (specified in blank below)
 DC 6.0 V from battery

1.3. Description of the test mode

Test Mode
Mode 1: GPRS850
Mode 2: GPRS1900
Mode 3: EDGE 850
Mode 4: EDGE 1900
Mode 5: WCDMA Band II
Mode 6: WCDMA Band V
Mode 7: HSDPA Band II
Mode 8: HSDPA Band V

Note:

1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. For the ERP/EIRP and radiated emission test, every axis (X, Y, Z) was verified, and show the worst result on this report.
3. Radiated power output working at WCDMA link was higher than that working at HSDPA link, so all of test items were done working at WCDMA mode reported in the report. Refer to peak power output for more details.

2. TEST ENVIRONMENT

2.1. Address of the test laboratory

Shenzhen CTL Testing Technology Co., Ltd.

Floor 1-A, Baisha Technology Park, No.3011, Shahexi Road, Nanshan District, Shenzhen, China 518055

There is one 3m semi-anechoic chamber and two line conducted labs for final test. The Test Sites meet the requirements in documents ANSI C63.4 and CISPR 22/EN 55022 requirements

2.2. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature: 15-35 ° C

Humidity: 30-60 %

Atmospheric pressure: 950-1050mbar

2.3. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 „Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements“ and is documented in the Shenzhen CTL Testing Technology Co., Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for CTL laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.10dB	(1)
Radiated Emission	Above 1GHz	4.32dB	(1)
Conducted Disturbance	0.15~30MHz	3.20dB	(1)

- (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3. Method of measurement

3.1. Applicable Standard

According to §1.1307(b)(1), 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 level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated.

3.2. Limit

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
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

Limits for Maximum Permissible Exposure (MPE)/Uncontrolled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	30
3.0 – 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

F=frequency in MHz

*=Plane-wave equivalent power density

3.3. MPE Calculation Method

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

Where: S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna is 2.0 dBi for GPRS850/WCDMA Band V and 2.5 dBi for PCS1900/WCDMA Band II, the RF power density can be obtained.

TEST RESULTS

For GPRS/EDGE 850

Test Frequency (MHz)	Minimum Separation Distance (cm)	Output Power (dBm)	Output Power (mW)	Antenna Gain (Nemeric)	Power Density Limit (W/m ²)	Power Density At 20 cm (W/m ²)	Test Results
824.2	20.00	32.36	1721.8686	1.5849	5.49	5.4292	Pass
836.4	20.00	31.89	1545.2544	1.5849	5.58	4.8723	Pass
848.8	20.00	32.04	1599.5580	1.5849	5.66	5.0435	Pass

For GPRS/EDGE 1900

Test Frequency (MHz)	Minimum Separation Distance (cm)	Output Power (dBm)	Output Power (mW)	Antenna Gain (Nemeric)	Power Density Limit (W/m ²)	Power Density At 20 cm (W/m ²)	Test Results
1850.2	20.00	30.16	1037.5284	1.7783	10	3.6706	Pass
1880.0	20.00	30.04	1009.2529	1.7783	10	3.5706	Pass
1909.8	20.00	29.98	995.4054	1.7783	10	3.5216	Pass

For WCDMA/HSDPA BAND II

Test Frequency (MHz)	Minimum Separation Distance (cm)	Output Power (dBm)	Output Power (mW)	Antenna Gain (Nemeric)	Power Density Limit (W/m ²)	Power Density At 20 cm (W/m ²)	Test Results
1852.4	20.00	22.87	193.6422	1.5849	10	0.6106	Pass
1880.0	20.00	22.72	187.0682	1.5849	10	0.5898	Pass
1907.6	20.00	22.63	183.2314	1.5849	10	0.5777	Pass

For WCDMA/HSDPA BAND V

Test Frequency (MHz)	Minimum Separation Distance (cm)	Output Power (dBm)	Output Power (mW)	Antenna Gain (Nemeric)	Power Density Limit (W/m ²)	Power Density At 20 cm (W/m ²)	Test Results
826.4	20.00	23.60	229.0868	1.7783	5.51	0.8105	Pass
836.4	20.00	23.36	216.7704	1.7783	5.58	0.7669	Pass
846.6	20.00	23.32	214.7830	1.7783	5.64	0.7599	Pass

4. Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1091 (b) for the controlled RF Exposure.

.....End of Report.....