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|    |                                     |  |            |    |
|    |                                     |  |            |    |



## 1. Test Certification

| Product:                 | 2.4G 4.5ch drone w  | vith camera   |  |  |   |
|--------------------------|---|---|--|--|---|
| Model No.:               | DRC376R   | $(\mathcal{S})$   |  |  |   |
| Additional<br>Model:     | DRW607, SG-F48,<br>SG-F33, SGF35, S<br>SG-F36, SG-F37, S<br>SG-F52, SG-F53, S<br>SG-F60, SG-F61, S<br>SG-F68,SG-F69, S<br>SG-F68,SG-F69, S<br>SG-F76, SG-F78, S<br>SG-F85, SG-F86, S<br>SG-F92, SG-F93, S | G-F25, SG-F26,<br>SG-F38, SG-F39,<br>SG-F55, SG-F56,<br>SG-F62, SG-F65,<br>G-F70, SG-F71,<br>SG-F79, SG-F80,<br>SG-F87, SG-F88, | SG-F27, SG-F2<br>SG-F50, SG-F<br>SG-F57, SG-F<br>SG-F66, SG-F<br>SG-F72, SG-F7<br>SG-F81, SG-F<br>SG-F89, SG-F | 28, SG-F29,<br>63, SG-F51,<br>58, SG-59,<br>67,<br>73, SG-F75,<br>82, SG-F83,<br>90, SG-F91, |   |
| Applicant:               | Weccan Industrial L   | _imited   |  |  |   |
| Address:                 | Rm209, 2/F, Buildir<br>Industrial Park, Nar   | · · · · · · · · · · · · · · · · · · ·   |  |  |   |
| Manufacturer:            | Dongguan Adoree   | Industrial Limited  |  |  |   |
| Address:                 | Building 10, Fuxing<br>Changan Town, Do   |   | •  | • • •  | , |
| Date of Test:            | May 23 – May 27, 2  | 2016  | 3  |  |   |
| Applicable<br>Standards: | FCC CFR Title 47 F  | Part 15 Subpart C   | Section 15.24  | 9  |   |

The above equipment has been tested by Shenzhen Tongce Testing Lab. and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

| Tested By:      | Bory that             | Date:              | May 27, 2016 | $(\mathbf{C}^{\mathbf{A}})$ |
|-----------------|-----------------------|--------------------|--------------|-----------------------------|
| Reviewed By:    | Beryl Zhao<br>Zon thm | Date:              | May 30, 2016 |                             |
| Approved By:    | Joe Zhou<br>Tomsin    | Date:              | May 30, 2016 | _                           |
|                 | Tomsin                |                    |              |                             |
| e: 400-6611-140 | Tel: 86-755-27673339  | Fax: 86-755-276733 | _            | 3 of 26                     |



# 2. Test Result Summary

| AC Power L<br>Em | Requirement                                     |     |                          | ction |   | Result |     |
|------------------|---|-----|--------------------------|-------|---|--------|-----|
| Em               |   |     | §15.20                   | 3     |   | PASS   |     |
|                  | ine Conducted                                   |     | §15.20                   | 7     |   | N/A    |     |
|                  | Strength of lamental                            |     | §15.249                  | (a)   |   | PASS   |     |
| Spurious         | s Emissions                                     | §15 | §2.105<br>5.249 (a) (d)  |       | S | PASS   | N.  |
| Ban              | d Edge  | §1  | §2.105<br>إ /(15.249 (d) |       |   | PASS   |     |
| 20dB Occu        | pied Bandwidth                                  |     | §2.104<br>§15.215        |       |   | PASS   |     |
|                  | item meets the requi                            |     | Ś                        |       | Ś |        | (C) |
|                  | ase does not apply to<br>sult judgment is decid |     |                          |       |   |        |     |
|                  |   |     |                          |       |   |        |     |
|                  |   |     |                          |       |   |        |     |
|                  |   |     |                          |       |   |        |     |
|                  |   |     |                          |       |   |        |     |
|                  |   |     |                          |       |   |        |     |

# 3. EUT Description

| Product Name:          | 2.4G 4.5ch drone with camera   |
|------------------------|--|
| Froudet Name.          |  |
| Model :                | DRC376R  |
| Additional Model:      | DRW607, SG-F48, SG-F49, SG-F18, SG-F30, SG-F31,<br>SG-F32, SG-F33, SGF35, SG-F25, SG-F26, SG-F27,<br>SG-F28, SG-F29, SG-F36, SG-F37, SG-F38, SG-F39,<br>SG-F50, SG-F63, SG-F51, SG-F52, SG-F53, SG-F55,<br>SG-F56, SG-F57, SG-F58, SG-59, SG-F60, SG-F61,<br>SG-F62, SG-F65, SG-F66, SG-F67, SG-F68, SG-F69,<br>SG-F70, SG-F71, SG-F72, SG-F73, SG-F75, SG-F76,<br>SG-F78, SG-F79, SG-F80, SG-F81, SG-F82, SG-F83,<br>SG-F85, SG-F86, SG-F87, SG-F88, SG-F89, SG-F90,<br>SG-F91, SG-F92, SG-F93, SG-F95, SG-F96, SG-F97,<br>SG-F98, SG-F99 |
| Trade Mark:            | N/A  |
| Operation Frequency:   | 2453-2475MHz   |
| Number of Channel:     | 6  |
| Modulation Technology: | GFSK   |
| Antenna Type:          | Integral Antenna   |
| Antenna Gain:          | 0dBi   |
| Power Supply:          | DC 9V from 6*AA battery  |
| Remark:                | All models above are identical in interior structure, electrical circuits and components, and just model names are different for the marketing requirement.  |

#### **Operation Frequency Each of Channel**

| Channel | Frequency | Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|---------|-----------|
| 1       | 2453MHz   | 3       | 2460 MHz  | 5       | 2470 MHz  |
| 2       | 2457MHz   | 4       | 2465 MHz  | 6       | 2475MHz   |

#### Note:

In section 15.31(*m*), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

| Channel             | Frequency |
|---------------------|-----------|
| The lowest channel  | 2453MHz   |
| The middle channel  | 2465MHz   |
| The Highest channel | 2475MHz   |

| Operating Environment: |           |  |  |  |  |  |
|------------------------|-----------|--|--|--|--|--|
| Temperature:           | 25.0 °C   |  |  |  |  |  |
| Humidity:              | 54 % RH   |  |  |  |  |  |
| Atmospheric Pressure:  | 1010 mbar |  |  |  |  |  |
| Test Mode:             |           |  |  |  |  |  |

| Engineering mode: | Keep the EUT in continuous transmitting by select channel |
|-------------------|---|
|                   |   |

The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

# 4.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Equipment | Model No. | Serial No. | FCC ID | Trade Name |
|-----------|-----------|------------|--------|------------|
| 1         |           | ) /        |        |            |

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.



4.

# 5. Facilities and Accreditations

## 5.1.Facilities

The test facility is recognized, certified, or accredited by the following organizations:

• FCC - Registration No.: 572331

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Shenzhen Tongce Testing Lab

The 3m Semi-anechoic chamber has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

• IC - Registration No.: 10668A-1

The 3m Semi-anechoic chamber of Shenzhen TCT Testing Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

• CNAS - Registration No.: CNAS L6165

Shenzhen TCT Testing Technology Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6165.

# 5.2. Location

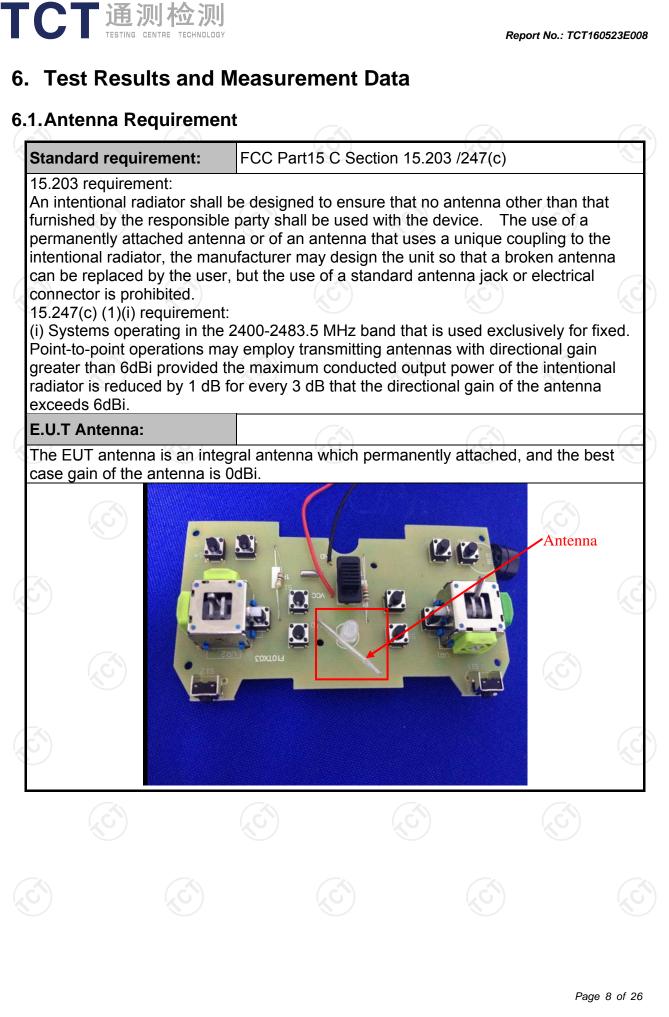
Shenzhen Tongce Testing Lab

Address: 1F, Leinuo Watch Building, Fuyong Town, Baoan Dist, Shenzhen, China Tel: 86-755-36638142

## 5.3. Measurement Uncertainty

The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

| No. | Item                           | MU      |
|-----|--------------------------------|---------|
| 1   | Conducted Emission             | ±2.56dB |
| 2   | RF power, conducted            | ±0.12dB |
| 3   | Spurious emissions, conducted  | ±0.11dB |
| 4   | All emissions, radiated(<1GHz) | ±3.92dB |
| 5   | All emissions, radiated(>1GHz) | ±4.28dB |
| 6   | Temperature                    | ±0.1°C  |
| 7   | Humidity                       | ±1.0%   |



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**6.2.Conducted Emission** 

| Test Requirement: | FCC Part15 C Section   | 15.207  | K.  |  |
|-------------------|--|---|---|--|
| Test Method:      | ANSI C63.10:2013   |   |   |  |
| Frequency Range:  | 150 kHz to 30 MHz  |   | $(\mathbf{c})$                            |  |
| Receiver setup:   | RBW=9 kHz, VBW=30  | kHz, Sweep time   | e=auto                                    |  |
| Limits:           | Frequency range<br>(MHz)<br>0.15-0.5<br>0.5-5<br>5-30  | Limit (<br>Quasi-peak<br>66 to 56*<br>56<br>60  | dBuV)<br>Average<br>56 to 46*<br>46<br>50 |  |
| Test Setup:       | Remark:<br>E.U.T: Equipment Under Test<br>LISN: Line Impedence Stabilizatio  | U.T<br>EMI<br>Receiver  | Iter — AC power                           |  |
| Test Mode:        | Test table height=0.8m Transmitting mode with  | h modulation  | Ć   |  |
| Test Procedure:   | <ul> <li>power through a line<br/>(L.I.S.N.). This pro-<br/>impedance for the m</li> <li>2. The peripheral device<br/>power through a LI<br/>coupling impedance<br/>refer to the block<br/>photographs).</li> <li>3. Both sides of A.C.<br/>conducted interferen-<br/>emission, the relative<br/>the interface cables</li> </ul> | <ol> <li>The E.U.T and simulators are connected to the main<br/>power through a line impedance stabilization network<br/>(L.I.S.N.). This provides a 50ohm/50uH coupling<br/>impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main<br/>power through a LISN that provides a 50ohm/50uH<br/>coupling impedance with 50ohm termination. (Please<br/>refer to the block diagram of the test setup and</li> </ol> |   |  |
| Test Result:      | The EUT is powered b<br>this test item is not app  | •   | AA batteries, so                          |  |

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## 6.3. Radiated Emission Measurement

#### 6.3.1. Test Specification

| Test Requirement:           | FCC Part15  | C Section  | 15.209/  | Part 2 J                                     | Section 2.1053  |  |  |
|-----------------------------|---|--|--|--|---|--|--|
| Test Method:                | ANSI C63.4  | 1: 2014 and  | ANSI C   | 63.10:20                                     | 13  |  |  |
| Frequency Range:            | 9 kHz to 25   | GHz  |  |  |   |  |  |
| Measurement Distance:       | 3 m   | K  | 9  |  | S C   |  |  |
| Antenna Polarization:       | Horizontal &  | & Vertical   |  |  |   |  |  |
|                             | Frequency   | Detector   | RBW VBW  |  | Remark  |  |  |
|                             | 9kHz- 150kHz  | Quasi-peak   | 200Hz  | 1kHz   | Quasi-peak Value                                      |  |  |
| Receiver Setup:             | 150kHz-<br>30MHz  | Quasi-peak   | 9kHz   | 30kHz  | Quasi-peak Value                                      |  |  |
|                             | 30MHz-1GHz  | Quasi-peak   | 120kHz   | 300kHz                                       | Quasi-peak Value                                      |  |  |
|                             | Above 1GHz  | Peak   | 1MHz   | 3MHz   | Peak Value  |  |  |
|                             | Above 10112   | Peak   | 1MHz   | 10Hz   | Average Value   |  |  |
|                             | Freque  | ency   | Limit (dBu)  | //m <i>@</i> 3m)                             | Remark  |  |  |
| Limit(Field strength of the |   |  | 94.  |  | Average Value   |  |  |
| fundamental signal):        | 2400MHz-2483.5MHz   |  | 114  |  | Peak Value  |  |  |
|                             | 2   |  |  |  | C.  |  |  |
|                             | Frequency   |  | Limit (dBuV/m @3m)                                 |  | Remark  |  |  |
|                             | 0.009-0   | 0.490  | 2400/F(KHz)  |  | Quasi-peak Value                                      |  |  |
|                             | 0.490-1   | .705   | 24000/F(KHz)                                       |  | Quasi-peak Value                                      |  |  |
|                             | 1.705   |  | 3  | -  | Quasi-peak Value                                      |  |  |
| Limit(Spurious Emissions):  | 30MHz-8   |  | 40   |  | Quasi-peak Value                                      |  |  |
|                             | 88MHz-2   |  | 43   |  | Quasi-peak Value                                      |  |  |
|                             | 216MHz-9  |  | 46   |  | Quasi-peak Value                                      |  |  |
|                             | 960MHz-1GHz   |  | 54.0   |  | Quasi-peak Value                                      |  |  |
|                             | Above ?   | 1GHz   | 54   |  | Average Value   |  |  |
|                             | Emissiona   | radiated a   | 74.0<br>Dutside of the spe                         |  | Peak Value  |  |  |
| Limit (band edge) :         | bands, exce<br>least 50 dB<br>general rae<br>whichever i  | ept for han<br>below the<br>diated em<br>s the lesse | monics, s<br>level of t<br>ission lir<br>r attenua | shall be a<br>he funda<br>nits in S<br>tion. | attenuated by a<br>mental or to the<br>Section 15.209 |  |  |
| Test Procedure:             | <ol> <li>The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber in below 1GHz, 1.5m above the ground in above 1GHz. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> </ol> |  |  |  |   |  |  |

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|                        | <b>到检测</b><br>ING CENTRE TECHNOLOGY | Report No.: TCT160523E008   |
|------------------------|-------------------------------------|---|
|                        |                                     | <ol> <li>For each suspected emission, the EUT was arranged<br/>to its worst case and then the antenna was tuned to<br/>heights from 1 meter to 4 meters and the rotatable<br/>table was turned from 0 degrees to 360 degrees to<br/>find the maximum reading.</li> <li>The test-receiver system was set to Peak Detect<br/>Function and Specified Bandwidth with Maximum<br/>Hold Mode.</li> <li>If the emission level of the EUT in peak mode was<br/>10dB lower than the limit specified, then testing could<br/>be stopped and the peak values of the EUT would be<br/>reported. Otherwise the emissions that did not have<br/>10dB margin would be re-tested one by one using<br/>peak, quasi-peak or average method as specified and<br/>then reported in a data sheet.</li> </ol> |
|                        |                                     | For radiated emissions below 30MHz<br>Distance = 3m<br>Computer<br>Pre - Amplifier<br>FUT<br>Turn table<br>Ground Plane   |
| Test setup:            |                                     | 30MHz to 1GHz   |
|                        | Ś                                   | Above 1GHz  |
| <u>Hotline: 400-66</u> | 611-140 Tel: 86-                    | Page 11 of 26<br><b>755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com</b>  |

# Extra Extre Extra Extr

#### 6.3.2. Test Instruments

| J.Z. Test matument | ( ( )                                    |            |            |               |
|--------------------|--|------------|------------|---------------|
| ESPI Test Receiver | ROHDE&SCHW<br>ARZ                        | ESVD       | 100008     | Sep. 11, 2016 |
| Spectrum Analyzer  | ROHDE&SCHW<br>ARZ                        | FSEM       | 848597/001 | Sep. 11, 2016 |
| Spectrum Analyzer  | Agilent                                  | N9020A     | MY49100060 | Sep. 12, 2016 |
| Pre-amplifier      | EM Electronics<br>Corporation<br>CO.,LTD | EM30265    | 07032613   | Sep. 11, 2016 |
| Pre-amplifier      | HP                                       | 8447D      | 2727A05017 | Sep. 11, 2016 |
| Loop antenna       | ZHINAN                                   | ZN30900A   | 12024      | Sep. 13, 2016 |
| Broadband Antenna  | Schwarzbeck                              | VULB9163   | 340        | Sep. 13, 2016 |
| Horn Antenna       | Schwarzbeck                              | BBHA 9120D | 631        | Sep. 13, 2016 |
| Horn Antenna       | Schwarzbeck                              | BBHA 9170  | 373        | Sep. 13, 2016 |
| Coax cable         | ТСТ                                      | RE-low-01  | N/A        | Sep. 11, 2016 |
| Coax cable         | тст                                      | RE-high-02 | N/A        | Sep. 11, 2016 |
| Coax cable         | тст                                      | RE-low-03  | N/A        | Sep. 11, 2016 |
| Coax cable         | тст                                      | RE-high-04 | N/A        | Sep. 11, 2016 |
| Antenna Mast       | CCS                                      | CC-A-4M    | N/A        | N/A           |
| EMI Test Software  | Shurple<br>Technology                    | EZ-EMC     | N/A        | N/A           |

**Note:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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#### 6.3.3. Test Data

#### **Field Strength of Fundamental**

| Frequency<br>(MHz) | Emission PK/AV<br>(dBuV/m) | Horizontal<br>/Vertical | Limits PK/AV<br>(dBuV/m) | Margin<br>(dB) |
|--------------------|----------------------------|-------------------------|--------------------------|----------------|
| 2453               | 84.13(PK)                  | Н                       | 114/94                   | -29.87         |
| 2453               | 79.36(AV)                  | H G                     | 114/94                   | -14.64         |
| 2465               | 83.55(PK)                  | Н                       | 114/94                   | -30.45         |
| 2465               | 78.29(AV)                  | Н                       | 114/94                   | -15.71         |
| 2475               | 83.03(PK)                  | (C)H                    | 114/94                   | -30.97         |
| 2475               | 77.96(AV)                  | Н                       | 114/94                   | -16.04         |
| 2453               | 79.57(PK)                  | V                       | 114/94                   | -34.43         |
| 2453               | 74.68(AV)                  | V                       | 114/94                   | -19.32         |
| 2465               | 79.36(PK)                  | V                       | 114/94                   | -34.64         |
| 2465               | 74.28(AV)                  | V                       | 114/94                   | -19.72         |
| 2475               | 79.47(PK)                  | V                       | 114/94                   | -34.53         |
| 2475               | 74.55 (AV)                 | V                       | 114/94                   | -19.45         |
|                    |                            |                         |                          |                |

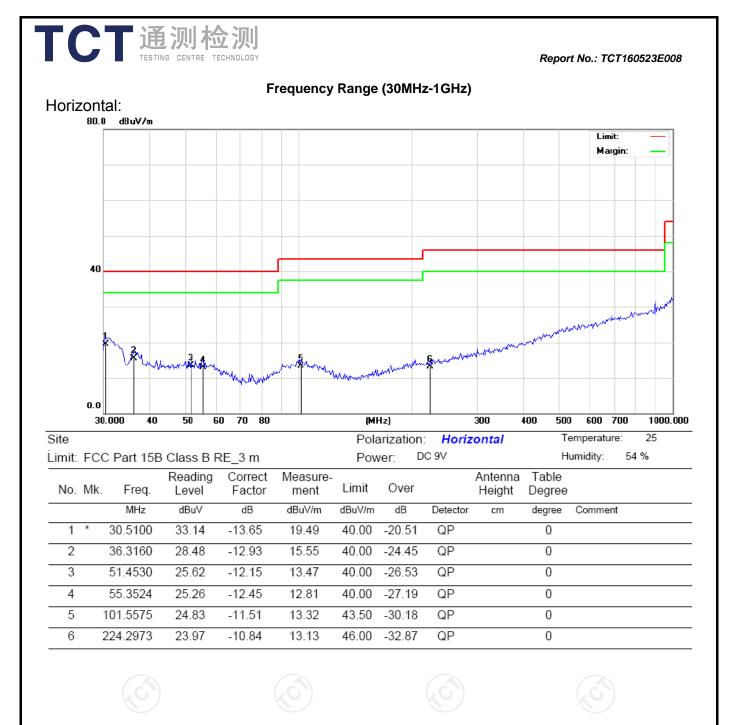
#### **Spurious Emissions**

#### Frequency Range (9 kHz-30MHz)

| Frequency (MHz)                  | Level@3r | m (dBµV/m) | Limit@3m (dBµV/m) |  |  |
|----------------------------------|----------|------------|-------------------|--|--|
|                                  |          |            |                   |  |  |
|                                  |          |            |                   |  |  |
|                                  |          | -          |                   |  |  |
| $\left( \mathcal{C} \right)^{-}$ | (G)      | - (6)      | -                 |  |  |
|                                  |          |            |                   |  |  |

Note: 1. Emission Level=Reading+ Cable loss-Antenna factor-Amp factor

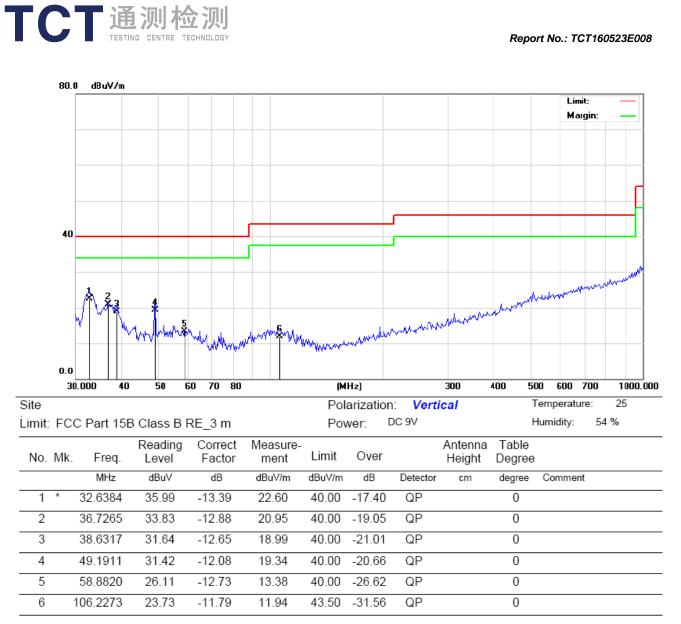
2. The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement



Vertical:

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**Note:** Measurements were conducted in all channels (high, middle, low), and the worst case (low channel) was submitted only.

|                    |                  |                           |                         |                                | 1GHz       |                           |                        |                      |                |
|--------------------|------------------|---------------------------|-------------------------|--------------------------------|------------|---------------------------|------------------------|----------------------|----------------|
|                    |                  |                           |                         | Low channe                     | el: 2453MH | lz                        |                        |                      |                |
| Frequency<br>(MHz) | Ant. Pol.<br>H/V | Peak<br>reading<br>(dBµV) | AV<br>reading<br>(dBuV) | Correction<br>Factor<br>(dB/m) | Peak       | n Level<br>AV<br>(dBµV/m) | Peak limit<br>(dBµV/m) | AV limit<br>(dBµV/m) | Margin<br>(dB) |
| 2387.50            | Н                | 53.48                     |                         | -4.20                          | 49.28      |                           | 74.00                  | 54.00                | -4.72          |
| 2387.50            | Н                |                           | 49.23                   | -4.20                          | J          | 45.03                     | 74.00                  | 54.00                | -8.97          |
| 2390.00            | Н                | 52.67                     |                         | -4.20                          | 48.47      |                           | 74.00                  | 54.00                | -5.53          |
| 2390.00            | Н                |                           | 48.55                   | -4.20                          |            | 44.35                     | 74.00                  | 54.00                | -9.65          |
| 4906.00            | H                | 53.96                     |                         | -3.94                          | 50.02      | ~                         | 74.00                  | 54.00                | -3.98          |
| 7359.00            | XCH)             | 49.02                     | -420                    | 0.52                           | 49.54      | <u>G</u> ]-               | 74.00                  | 54.00                | -4.46          |
|                    |                  |                           |                         |                                | `          | <u> </u>                  |                        | <u>.</u>             |                |
| 2387.50            | V                | 53.35                     |                         | -4.20                          | 49.15      |                           | 74.00                  | 54.00                | -4.85          |
| 2387.50            | V                |                           | 52.31                   | -4.20                          |            | 48.11                     | 74.00                  | 54.00                | -5.89          |
| 4906.00            | V                | 49.15                     |                         | -3.94                          | 45.21      |                           | 74.00                  | 54.00                | -8.79          |
| 7359.00            | V                | 39.03                     |                         | 0.52                           | 48.85      |                           | 74.00                  | 54.00                | -5.15          |
|                    |                  |                           |                         |                                |            |                           |                        |                      |                |

|           |         |         | N       | liddle chann | nel: 2465M | Hz       |            |           |        |
|-----------|---------|---------|---------|--------------|------------|----------|------------|-----------|--------|
| Frequency | Ant Dol | Peak    | AV      | Correction   | Emissic    | on Level | Peak limit | A\/ limit | Margin |
| (MHz)     | H/V     | reading | reading | Factor       | Peak       | AV       |            | (dRu)//m) | (dB)   |
| (11112)   | 1 I/ V  | (dBµV)  | (dBµV)  | (dB/m)       | (dBµV/m)   | (dBµV/m) | (uphy/iii) | (dBµV/m)  | (UD)   |
| 4930.00   | Н       | 54.18   |         | -3.98        | 50.2       |          | 74.00      | 54.00     | -3.80  |
| 7395.00   | Н       | 48.46   |         | 0.57         | 49.03      |          | 74.00      | 54.00     | -4.97  |
|           |         |         |         |              | /          |          |            |           |        |
|           |         |         |         |              |            |          |            |           |        |
|           |         |         |         |              |            |          |            |           |        |
|           |         |         |         |              |            |          |            |           |        |
| 4930.00   | V       | 53.12   |         | -3.98        | 49.14      |          | 74.00      | 54.00     | -4.86  |
| 7395.00   | V       | 49.14   |         | 0.57         | 49.71      |          | 74.00      | 54.00     | -4.29  |
|           |         |         |         |              |            |          |            |           |        |
|           |         |         |         |              |            |          |            |           |        |
|           |         |         |         | ( c          | <u> </u>   |          |            |           |        |

|                    |                  |                           |                         | High channe                    | el: 2475MF                  | Ηz                         |                           |                      |                |
|--------------------|------------------|---------------------------|-------------------------|--------------------------------|-----------------------------|----------------------------|---------------------------|----------------------|----------------|
| Frequency<br>(MHz) | Ant. Pol.<br>H/V | Peak<br>reading<br>(dBµV) | AV<br>reading<br>(dBµV) | Correction<br>Factor<br>(dB/m) | Emissio<br>Peak<br>(dBµV/m) | on Level<br>AV<br>(dBµV/m) | Peak<br>limit<br>(dBµV/m) | AV limit<br>(dBµV/m) | Margin<br>(dB) |
| 2486.58            | Н                | 51.95                     |                         | -2.38                          | 49.57                       | -                          | 74.00                     | 54.00                | -4.43          |
| 2486.58            | Н                |                           | 41.07                   | -2.38                          |                             | 38.69                      | 74.00                     | 54.00                | -15.31         |
| 4950.00            | Н                | 53.44                     |                         | -3.98                          | 49.46                       |                            | 74.00                     | 54.00                | -4.54          |
| 7425.00            | Н                | 48.81                     |                         | 0.57                           | 49.38                       |                            | 74.00                     | 54.00                | -4.62          |
| <u> </u>           |                  | (6_`)                     |                         | (                              | 5)                          |                            | (. <del></del>            |                      |                |
|                    |                  |                           |                         | J.                             |                             |                            |                           |                      | J.             |
| 2483.51            | V                | 51.47                     |                         | -2.38                          | 49.09                       |                            | 74.00                     | 54.00                | -4.91          |
| 2483.51            | V                |                           | 42.34                   | -2.38                          |                             | 39.96                      | 74.00                     | 54.00                | -14.04         |
| 4950.00            | V                | 53.55                     |                         | -3.98                          | 49.57                       |                            | 74.00                     | 54.00                | -4.43          |
| 7425.00            | V                | 48.48                     |                         | 0.57                           | 49.05                       |                            | 74.00                     | 54.00                | -4.95          |
|                    |                  |                           |                         |                                |                             | <u> </u>                   |                           |                      |                |

#### Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dBµV/m)-Average limit (dBµV/m)

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency.

5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

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#### **Band Edge Requirement**

| Low chann          | el: 2453 N       | 1Hz                       |                         |                                |       |                            |                        |                      |                |
|--------------------|------------------|---------------------------|-------------------------|--------------------------------|-------|----------------------------|------------------------|----------------------|----------------|
| Frequency<br>(MHz) | Ant. Pol.<br>H/V | Peak<br>reading<br>(dBµV) | AV<br>reading<br>(dBuV) | Correction<br>Factor<br>(dB/m) | Peak  | on Level<br>AV<br>(dBµV/m) | Peak limit<br>(dBµV/m) | AV limit<br>(dBµV/m) | Margin<br>(dB) |
| 2400               | Н                | 50.16                     |                         | -4.2                           | 45.96 |                            | 74.00                  |                      | -28.04         |
| 2400               | Н                |                           | 40.29                   | -4.2                           |       | 36.09                      |                        | 54.00                | -17.91         |
|                    |                  |                           | /                       | N                              |       | +                          |                        |                      |                |
|                    |                  |                           | ×                       | G)                             |       |                            |                        | 5                    | Ť)             |
| 2400               | V                | 48.62                     |                         | -4.2                           | 44.42 |                            | 74.00                  |                      | -29.58         |
| 2400               | V                |                           | 39.57                   | -4.2                           |       | 35.37                      |                        | 54.00                | -18.63         |
|                    |                  |                           |                         |                                |       |                            | -                      |                      |                |
|                    |                  |                           |                         |                                |       |                            |                        |                      |                |

#### High channel: 2475MHz

| <sup>=</sup> requency<br>(MHz) | Ant. Pol.<br>H/V | Peak<br>reading<br>(dBµV) | AV<br>reading<br>(dBuV) | Correction<br>Factor<br>(dB/m) | Emissic<br>Peak<br>(dBµV/m) | AV                    | Peak limit<br>(dBµV/m) | AV limit<br>(dBµV/m) | Margin<br>(dB) |
|--------------------------------|------------------|---------------------------|-------------------------|--------------------------------|-----------------------------|-----------------------|------------------------|----------------------|----------------|
| 2483.5                         | KH /             | 51.27                     |                         | -4.2                           | 47.07                       | <u>(abµv/iii)</u><br> | 74.00                  |                      | -26.93         |
| 2483.5                         | Н                |                           | 41.05                   | -4.2                           |                             | 36.85                 |                        | 54.00                | -17.15         |
|                                |                  |                           |                         |                                |                             |                       |                        |                      |                |
|                                |                  |                           |                         |                                |                             |                       |                        |                      |                |
| 2483.5                         | V                | 52.36                     | )                       | -4.2                           | 48.16                       |                       | 74.00                  |                      | -25.84         |
| 2483.5                         | V                |                           | 42.19                   | -4.2                           |                             | 37.15                 |                        | 54.00                | -16.01         |
|                                |                  |                           |                         |                                |                             |                       |                        |                      |                |

#### Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak/Average)(dBµV/m)-(Peak/Average) limit (dBµV/m)

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency.

5. Data of measurement shown "--- "in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

## 6.4.20dB Occupied Bandwidth

#### 6.4.1. Test Specification

TCT通测检测 TECTING CENTRE TECHNOLOGY

| Test Method:       ANSI C63.10: 2013         Limit:       N/A         1. According to the follow Test-setup, keep the position between the artificial antenna and the position between the artificial antenna and the position between the artificial antenna and the position between the maximum power setting and energia EUT transmit continuously.         3. Use the following spectrum analyzer set 20dB Bandwidth measurement. Span = approximately 2 to 3 times the bandwidth, centered on a hopping channel; RBW≥1% of dB bandwidth; VBW≥RBW; Sweep = auto; Detector fun peak; Trace = max hold.         Test setup:       Image: Content of the test representation of the test representation. | ction  |  |  |  |  |
|--|--|--|--|--|--|
| <ul> <li>1. According to the follow Test-setup, keep the position between the artificial antenna and the setup of the maximum power setting and energy of the following spectrum analyzer set 20dB Bandwidth measurement. Span = approximately 2 to 3 times the bandwidth, centered on a hopping channel; RBW≥1% of dB bandwidth; VBW≥RBW; Sweep = auto; Detector full peak; Trace = max hold.</li> <li>Test setup:</li> </ul>   |  |  |  |  |  |
| <ul> <li>position between the artificial antenna and th</li> <li>2. Set to the maximum power setting and en EUT transmit continuously.</li> <li>3. Use the following spectrum analyzer set 20dB Bandwidth measurement. Span = approximately 2 to 3 times the bandwidth, centered on a hopping channel; RBW≥1% of dB bandwidth; VBW≥RBW; Sweep = auto; Detector ful peak; Trace = max hold.</li> <li>4. Measure and record the results in the test results in the test results.</li> </ul>  |  |  |  |  |  |
| Test setup:  | d the EUT.<br>enable the<br>ettings for<br>he 20 dB<br>6 of the 20<br>function = |  |  |  |  |
|  |  |  |  |  |  |
| Test Mode: Transmitting mode with modulation   | Transmitting mode with modulation  |  |  |  |  |
| Test results: PASS   |  |  |  |  |  |

#### 6.4.2. Test Instruments

| ( |                   | RI           | F Test Room |               |                 |  |  |  |
|---|-------------------|--------------|-------------|---------------|-----------------|--|--|--|
| 0 | Equipment         | Manufacturer | Model       | Serial Number | Calibration Due |  |  |  |
|   | Spectrum Analyzer | Agilent      | N9020A      | MY49100060    | Sep. 12, 2016   |  |  |  |

**Note:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

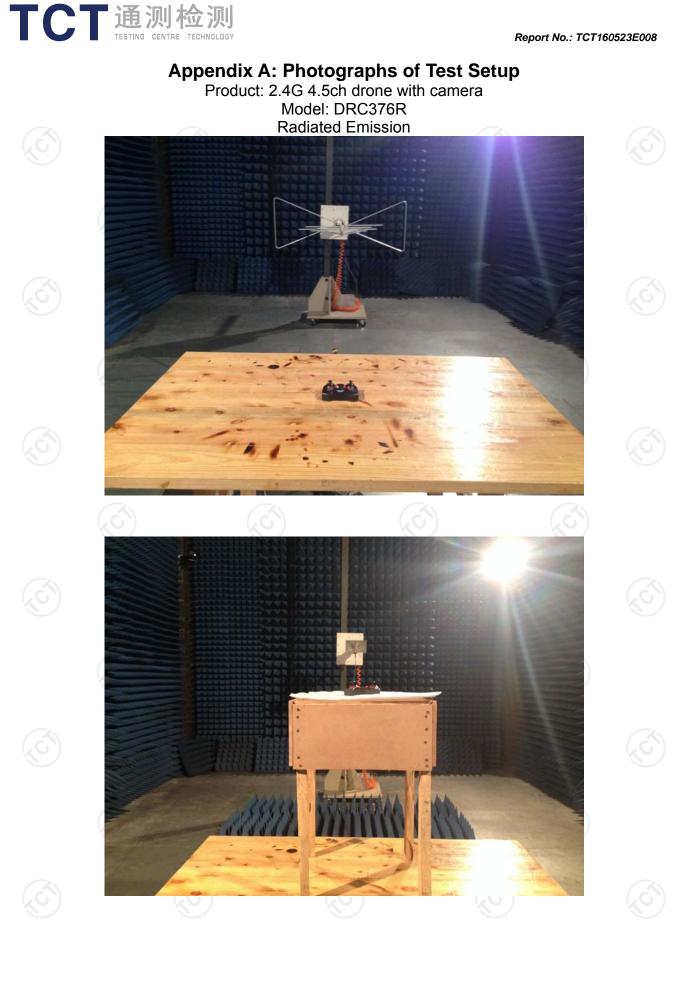


#### 6.4.3. Test data

|   | Test Channel | 20dB Occupy<br>Bandwidth (kHz) | Limit | Conclusion |  |
|---|--------------|--------------------------------|-------|------------|--|
| K | Lowest       | 1143                           | -     | PASS       |  |
|   | Middle       | 1149                           |       | PASS       |  |
|   | Highest      | 1149                           |       | PASS       |  |
|   |              |                                |       |            |  |

| Test plots as follows:   |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |
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| Page 19 of 26<br><u>Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com</u> |  |  |  |  |  |  |  |  |  |





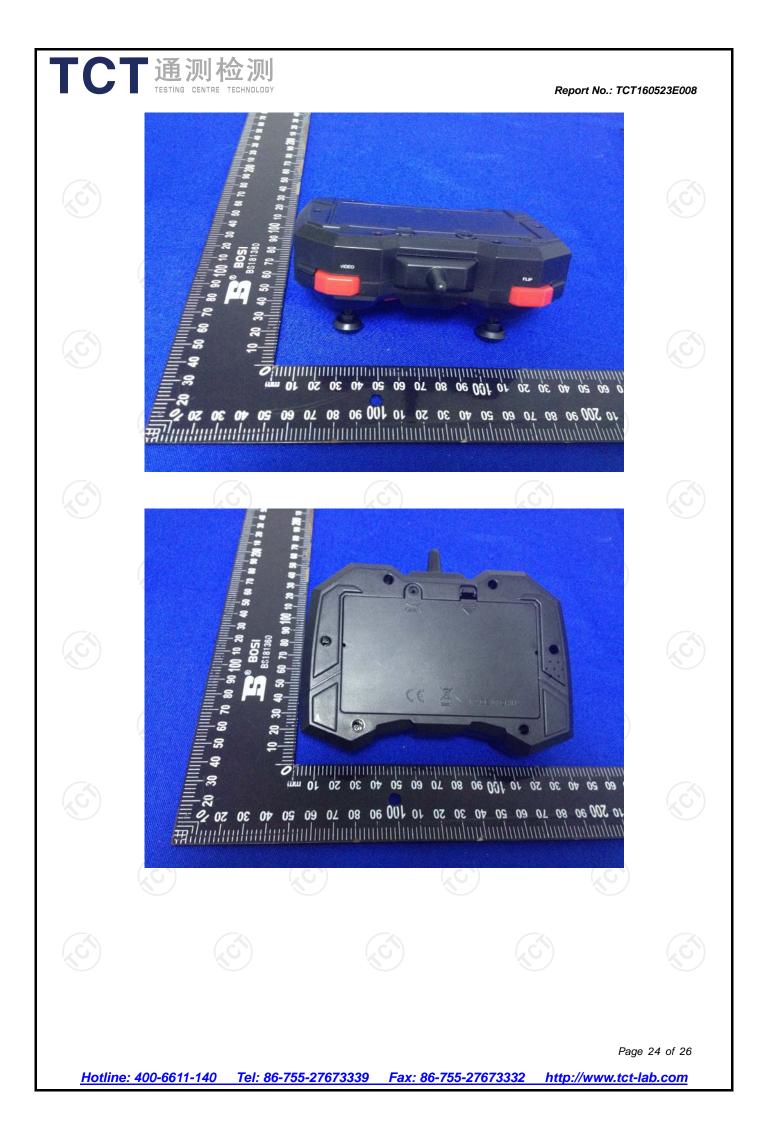
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### Product: 2.4G 4.5ch drone with camera Model: DRC376R Internal Photos





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