

# FCC PART 15.247

# TEST REPORT

For

# SZ DJI TECHNOLOGY CO., LTD

14th floor, West Wing, Skyworth Semiconductor Design Building NO.18 Gaoxin South 4th Ave, Nanshan, Shenzhen, Guangdong, China

<b>Report Type:</b> Original Report	<b>Product Type:</b> Remote Controller
Test Engineer:	Allen Qiao Allen Gious
<b>Report Number:</b>	RDG150107008-00A
Report Date:	2015-04-02
Reviewed By:	Sula Huang RF Leader
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Dongguan) No.69 Pulongcun, Puxinhu Industrial Zone, Tangxia, Dongguan, Guangdong, China Tel: +86-769-86858888 Fax: +86-769-86858891 www.baclcorp.com.cn

**Note:** This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Dongguan). This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

# **TABLE OF CONTENTS**

GENERAL INFORMATION	4
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	4
OBJECTIVE	
Test Methodology Test Facility	
SYSTEM TEST CONFIGURATION	
DESCRIPTION OF TEST CONFIGURATION	
EUT Exercise Software Equipment Modifications	
BLOCK DIAGRAM OF TEST SETUP	
SUMMARY OF TEST RESULTS	
FCC §1.1310 & §2.1093 - RF EXPOSURE	
Applicable Standard	
TEST RESULT	
FCC §15.203 - ANTENNA REQUIREMENT	
APPLICABLE STANDARD	9
APPLICABLE STANDARD	9
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS	
Applicable Standard	10
MEASUREMENT UNCERTAINTY	
EUT SETUP	10
EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP	
Test Procedure Corrected Amplitude & Margin Calculation	
TEST EQUIPMENT LIST AND DETAILS	
Test Results Summary	
TEST DATA	12
FCC §15.247(a) (2) – 6dB BANDWIDTH	17
Applicable Standard	17
Test Procedure	
Test Equipment List and Details Test Data	
FCC §15.247(b) (3) - MAXIMUM PEAK CONDUCTED OUTPUT POWER	
Applicable Standard	
TEST PROCEDURE	
TEST EQUIPMENT LIST AND DETAILS	
TEST DATA	20
FCC §15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE	
APPLICABLE STANDARD	
TEST PROCEDURE	
Test Equipment List and Details Test Data	
FCC §15.247(e) - POWER SPECTRAL DENSITY	24

FCC Part 15.247

Page 2 of 28

# Report No.: RDG150107008-00A

Applicable Standard Test Procedure	
TEST EQUIPMENT LIST AND DETAILS	24
DECLARATION LETTER	



FCC Part 15.247

Page 3 of 28

# **GENERAL INFORMATION**

#### **Product Description for Equipment under Test (EUT)**

The *SZ DJI TECHNOLOGY CO., LTD*'s product, model number: *GL300A (FCC ID: SS3-GL3001501)* (the "EUT") in this report was a Remote Controller (called as *C1)*, which was measured approximately: 18.2cm (L) x 17.14 cm (W) x 10.52 cm (H), rated input voltage: DC 7.4V from battery, DC 17.5V from P3X adapter and DC 17.4V from P3S adapter.

P3X Adapter information: Model: ADE019 Input: AC 100-240V, 50/60Hz, 1.4A Output: DC 17.5V, 5.7A

P3S Adapter information: Model: A14-057N1A Input: AC 100-240V, 50/60Hz, 1.8A Output: DC 17.4V, 3.3A

Note: The series product, model GL300A and GL300B are electrically identical, the difference between them please refer declaration letter, we selected GL300A for fully testing and selected GL300B for Radiation emission test, the details was explained in the attached declaration letter.

\* All measurement and test data in this report was gathered from production sample serial number: GL300A: 150107008-1. GL300B: 150107008-2(Assigned by BACL.Dongguan). The EUT was received on 2015-01-15.

#### Objective

This report is prepared on behalf of *SZ DJI TECHNOLOGY CO., LTD* in accordance with Part 2, Subpart J, Part 15, Subparts A, B and C of the Federal Communications Commission's rules

The tests were performed in order to determine the compliance of the EUT with FCC Part 15-Subpart C, section 15.203, 15.205, 15.209 and 15.247 rules.

#### **Test Methodology**

All measurements contained in this report were conducted with ANSI C63.4-2009, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Dongguan).

#### **Test Facility**

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industrial Zone, Tangxia, Dongguan, Guangdong, China

Test site at Bay Area Compliance Laboratories Corp. (Dongguan) has been fully described in reports submitted to the Federal Communications Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February 06, 2015. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 273710. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

# SYSTEM TEST CONFIGURATION

# **Description of Test Configuration**

The system was configured for testing in Engineering Mode, which was provided by the manufacturer.

For 2.4G band, 39 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2404	21	2444
2	2406		
	•••		
			2478
20	2442	39	2480

3channels were tested: 2404MHz, 2442MHz, 2480 MHz

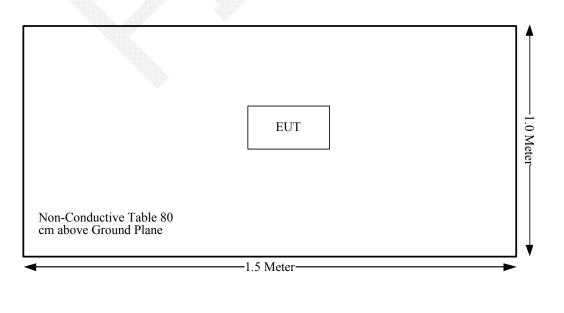
# **EUT Exercise Software**

No software was used in test, the system configured maximum power and switched the channel by keys.

# **Equipment Modifications**

No modification was made to the EUT.

# **Block Diagram of Test Setup**



# SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §15.247 (i) & §1.1310 & §2.1093	RF EXPOSURE	Compliance
§15.203	Antenna Requirement	Compliance
§15.207 (a)	AC Line Conducted Emissions	Not Applicable
§15.247(d)	Spurious Emissions at Antenna Port	Compliance
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247 (a)(2)	6 dB Bandwidth	Compliance
§15.247(b)(3)	Maximum Peak Conducted Output Power	Compliance
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliance
§15.247(e)	Power Spectral Density	Compliance

Not Applicable: The EUT powered by lithium battery in normal operation.

# FCC §1.1310 & §2.1093 - RF EXPOSURE

# Applicable Standard

FCC§1.1310 and §2.1093.

# **Test Result**

Compliance, please refer to the SAR report: RDG150107008-20A.

# FCC §15.203 - ANTENNA REQUIREMENT

## **Applicable Standard**

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.
- c. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

#### **Antenna Connector Construction**

The EUT has an integral antenna arrangement for transmitting, the antenna gain is 3.5dBi, and another antenna only for receiving, fulfill the requirement of the item. Please refer to the internal photos.

Result: Compliance.

# FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

#### **Applicable Standard**

FCC §15.247 (d); §15.209; §15.205;

#### **Measurement Uncertainty**

Compliance or non- compliance with a disturbance limit shall be determined in the following manner:

If  $U_{lab}$  is less than or equal to  $U_{cispr}$  of Table 2, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;

- non - compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit. If  $U_{lab}$  is greater than  $U_{cispr}$  of Table 2, then:

- compliance is deemed to occur if no measured disturbance level, increased by  $(U_{lab} - U_{cispr})$ , exceeds the disturbance limit;

- non - compliance is deemed to occur if any measured disturbance level, increased by  $(U_{\text{lab}} - U_{\text{cispr}})$ , exceeds the disturbance limit.

Based on CISPR 16-4-2-2011, measurement uncertainty of radiated emission at a distance of 3m at Bay Area Compliance Laboratories Corp. (Dongguan) is:

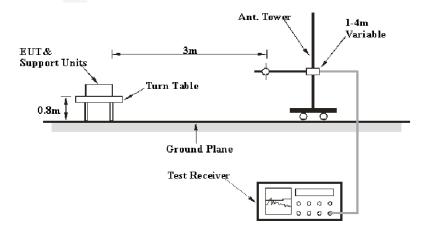
30M~200MHz: 5.0 dB 200M~1GHz: 6.2 dB 1G~6GHz: 4.45 dB 6G~18GHz: 5.23 dB

# Table 2 – Values of $U_{\text{cispr}}$

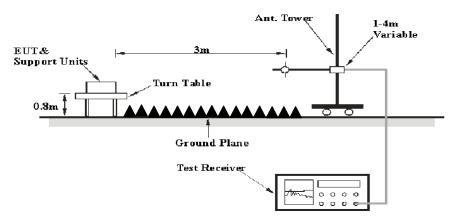
Measurement				
Radiated disturbance (electric field strength at an OATS or in a SAC) (30 MHz to 1000 MHz)	6.3 dB			
Radiated disturbance (electric field strength in a FAR) (1 GHz to 6 GHz)	5.2 dB			
Radiated disturbance (electric field strength in a FAR) (6 GHz to 18 GHz)	5.5 dB			

#### **EUT Setup**

#### **Below 1GHz:**



# Above 1GHz:



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2009. The specification used was the FCC 15.209, and FCC 15.247 limits.

The spacing between the peripherals was 10 cm.

# EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30MHz – 1000 MHz	120 kHz	300 kHz	120kHz	QP
Above 1 GHz	1MHz	3 MHz	/	РК
Above I GHZ	1MHz	10 Hz	/	Ave.

## **Test Procedure**

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1 GHz, peak and Average detection modes for frequencies above 1 GHz.

### **Corrected Amplitude & Margin Calculation**

The Corrected Amplitude is calculated by adding the Antenna Loss and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Meter Reading + Antenna Loss + Cable Loss - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

Manufacturer	Description	Description Model N		Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCI	100224	2014-05-09	2015-05-09
Sunol Sciences	Antenna	JB3	A060611-3	2014-07-28	2017-07-27
HP	Amplifier	Amplifier 8447E 2434A0		2014-09-01	2015-09-01
R&S	Spectrum Analyzer	FSEM	DE31388	2014-05-09	2015-05-09
ETS LINDGREN	Horn Antenna	3115	000 527 35	2012-09-06	2015-09-06
Mini-Circuit	Amplifier	ZVA-213-S+	054201245	2015-02-19	2016-02-19
R&S	Spectrum Analyzer	FSP 38	100478	2014-05-09	2015-05-09
Ducommun Technolagies	Horn Antenna	ARH-4223-02	1007726-01 1304	2014-06-16	2017-06-15
Quinstar	Amplifier	QLW- 18405536-JO	15964001001	2014-09-06	2015-09-06

#### **Test Equipment List and Details**

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

#### **Test Results Summary**

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Section 15.205, 15.209 and 15.247, with the worst margin reading of:

#### 3.32 dB at 215.27MHz in the Vertical polarization

#### **Test Data**

#### **Environmental Conditions**

Temperature:	22.4 °C
<b>Relative Humidity:</b>	62 %
ATM Pressure:	100.8 kPa

The testing was performed by Allen Qiao on 2015-03-19.

#### Report No.: RDG150107008-00A

Engling	Receiver		Rx Antenna		Cable	Cable Amplifier	Corrected	<b>.</b>	
Frequency MHz	Reading dBµV	Detector PK/QP/AV	Polar H/V	Factor dB(1/m)	loss dB	Gain dB	Amplitude dBµV/m	Limit dBµV/m	Margin dB
			I	Frequency:2	2404MHz	Z			
2404	86.11	PK	Н	25.65	4.42	0.00	116.18	N/A	N/A
2404	62.38	AV	Н	25.65	4.42	0.00	92.45	N/A	N/A
2404	91.35	PK	V	25.65	4.42	0.00	121.42	N/A	N/A
2404	67.11	AV	V	25.65	4.42	0.00	97.18	N/A	N/A
2390	29.22	PK	V	25.61	4.39	0.00	59.22	74.00	14.78
2390	17.28	AV	V	25.61	4.39	0.00	47.28	54.00	6.72
4808	38.98	PK	V	30.60	5.99	27.41	48.16	74.00	25.84
4808	20.37	AV	V	30.60	5.99	27.41	29.55	54.00	24.45
7212	42	PK	V	34.11	7.45	25.91	57.65	74.00	16.35
7212	21.38	AV	V	34.11	7.45	25.91	37.03	54.00	16.97
9616	33.14	РК	V	35.98	8.80	27.53	50.39	74.00	23.61
9616	18.37	AV	V	35.98	8.80	27.53	35.62	54.00	18.38
3096	33.94	РК	V	27.51	7.35	27.45	41.35	74.00	32.65
3096	20.13	AV	V	27.51	7.35	27.45	27.54	54.00	26.46
215.27	48.2	QP	V	11.38	1.77	21.47	39.88	43.50	3.62*
		•	I	Frequency:2	2442MHz	L			
2442	88.37	PK	Н	25.75	4.40	0.00	118.52	N/A	N/A
2442	64.25	AV	Н	25.75	4.40	0.00	94.40	N/A	N/A
2442	93.43	PK	V	25.75	4.40	0.00	123.58	N/A	N/A
2442	69.91	AV	V	25.75	4.40	0.00	100.06	N/A	N/A
4884	38.51	PK	V	30.80	6.08	27.42	47.97	74.00	26.03
4884	20.03	AV	V	30.80	6.08	27.42	29.49	54.00	24.51
7326	43.36	PK	V	34.38	7.52	25.88	59.38	74.00	14.62
7326	31.58	AV	V	34.38	7.52	25.88	47.60	54.00	6.40
9768	33.42	PK	V	36.34	8.83	27.19	51.40	74.00	22.60
9768	18.47	AV	V	36.34	8.83	27.19	36.45	54.00	17.55
3096	33.16	РК	V	27.51	7.35	27.45	40.57	74.00	33.43
3096	20.17	AV	V	27.51	7.35	27.45	27.58	54.00	26.42
1424	33.38	PK	V	23.40	3.12	27.10	32.80	74.00	41.20
1424	20.84	AV	V	23.40	3.12	27.10	20.26	54.00	33.74
215.27	48.5	QP	V	11.38	1.77	21.47	40.18	43.50	3.32*

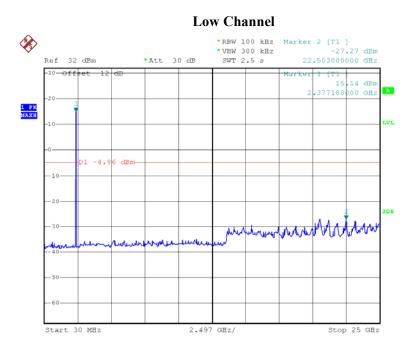
Mode: Transmitting (model GL300A, GL300B were pretested, the worse case is GL300A and record in report)

\*Within measurement uncertainty!

# Report No.: RDG150107008-00A

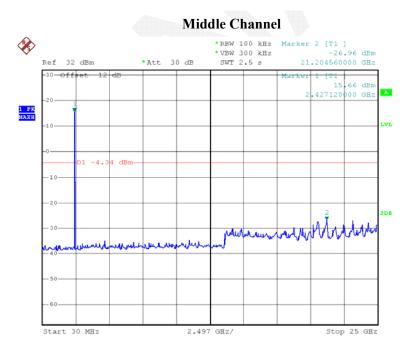
	Re	ceiver	Rx Ai	ntenna	Cable	Amplifier	Corrected	<b>T</b> ••	Manala
Frequency MHz	Reading dBµV	Detector PK/QP/AV	Polar H/V	Factor dB(1/m)	loss dB	Gain dB	Amplitude dBµV/m	Limit dBµV/m	Margin dB
			F	requency:2	2480MHz	Z			
2480	89.16	PK	Н	25.85	4.48	0.00	119.49	N/A	N/A
2480	65.84	AV	Н	25.85	4.48	0.00	96.17	N/A	N/A
2480	95.39	PK	V	25.85	4.48	0.00	125.72	N/A	N/A
2480	71.67	AV	V	25.85	4.48	0.00	102.00	N/A	N/A
2483.5	39.7	PK	V	25.86	4.49	0.00	70.05	74.00	3.95*
2483.5	18.32	AV	V	25.86	4.49	0.00	48.67	54.00	5.33
4960	38.04	PK	V	31.00	5.90	27.43	47.51	74.00	26.49
4960	20.39	AV	V	31.00	5.90	27.43	29.86	54.00	24.14
7440	48.32	PK	V	34.66	7.58	25.97	64.59	74.00	9.41
7440	23.13	AV	V	34.66	7.58	25.97	39.40	54.00	14.60
9920	34.65	PK	V	36.71	8.87	26.66	53.57	74.00	20.43
9920	19.2	AV	V	36.71	8.87	26.66	38.12	54.00	15.88
3096	34.25	PK	V	27.51	7.35	27.45	41.66	74.00	32.34
3096	21.21	AV	V	27.51	7.35	27.45	28.62	54.00	25.38
215.27	48	QP	V	11.38	1.77	21.47	39.68	43.50	3.82*

\*Within measurement uncertainty!



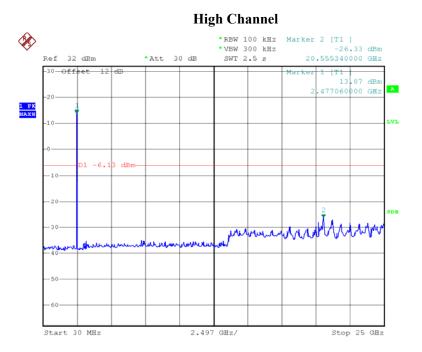
#### **Conducted Spurious Emissions at Antenna Port**

Date: 19.MAR.2015 17:27:42



Date: 19.MAR.2015 17:29:33

#### Report No.: RDG150107008-00A



Date: 19.MAR.2015 17:30:54

FCC Part 15.247

Page 16 of 28

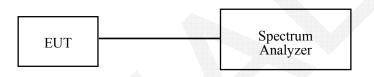
# FCC §15.247(a) (2) – 6dB BANDWIDTH

# **Applicable Standard**

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

# **Test Procedure**

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- 3. Measure the frequency difference of two frequencies that were attenuated 6 dB from the reference level. Record the frequency difference as the emission bandwidth.
- 4. Repeat above procedures until all frequencies measured were complete.



## **Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2014-05-09	2015-05-09

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

## **Test Data**

#### **Environmental Conditions**

Temperature:	25 °C
<b>Relative Humidity:</b>	63 %
ATM Pressure:	100.8 kPa

The testing was performed by Allen Qiao on 2015-03-19.

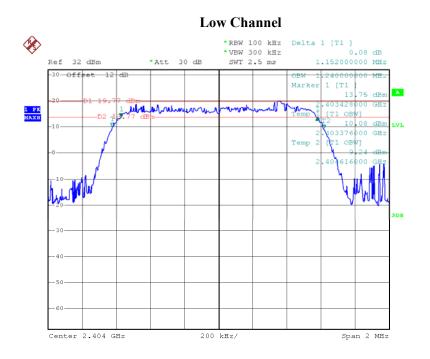
Test Result: Pass.

Please refer to the following tables and plots.

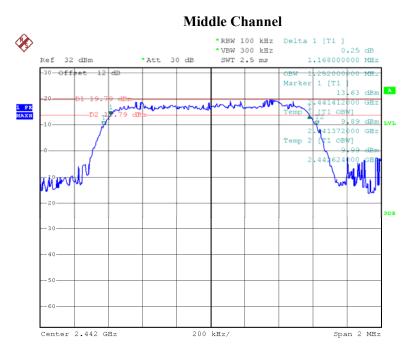
#### Report No.: RDG150107008-00A

#### Test Mode: Transmitting

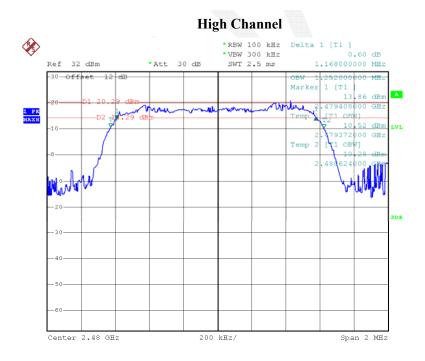
Channel	Frequency	6 dB Bandwidth
	(MHz)	(MHz)
Low	2404	1.152
Middle	2442	1.168
High	2480	1.168



Date: 19.MAR.2015 17:07:43



Date: 19.MAR.2015 17:08:39



Date: 19.MAR.2015 17:09:35

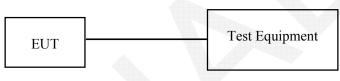
# FCC §15.247(b) (3) - MAXIMUM PEAK CONDUCTED OUTPUT POWER

## **Applicable Standard**

According to FCC §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

# **Test Procedure**

- 1. According to KDB 558074 D01 DTS Meas Guidance v03r02, place the EUT on a bench and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to a Test Equipment.



# Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	Wideband Power Sensor	N1921A	MY54210016	2014-11-03	2015-11-03
Agilent	Wideband Power Sensor	N1921A	MY54170013	2014-11-03	2015-11-03
Agilent	P-Series Power Meter	N1912A	MY5000448	2014-11-03	2015-11-03

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to National Primary Standards and International System of Units (SI).

## **Test Data**

#### **Environmental Conditions**

Temperature:	25 °C
<b>Relative Humidity:</b>	63 %
ATM Pressure:	100.8 kPa

The testing was performed by Allen Qiao on 2015-03-19.

# Test Mode: Transmitting

Channel	Frequency	Max Conducted Peak Output Power	Max Conducted Average Output Power	Limit	Result
	(MHz)	(dBm)	(dBm)	(dBm)	
Low	2404	27.09	15.17	30	Pass
Middle	2442	27.35	15.62	30	Pass
High	2480	27.58	15.84	30	Pass

# FCC §15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE

# **Applicable Standard**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

# **Test Procedure**

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- 3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
- 4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- 5. Repeat above procedures until all measured frequencies were complete.

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2014-05-09	2015-05-09

## **Test Equipment List and Details**

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to National Primary Standards and International System of Units (SI).

## Test Data

#### **Environmental Conditions**

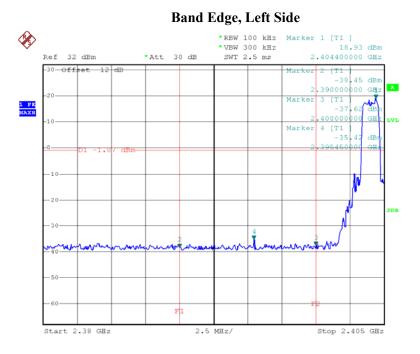
Temperature:	25 °C
<b>Relative Humidity:</b>	63 %
<b>ATM Pressure:</b>	100.8 kPa

The testing was performed by Allen Qiao on 2015-03-19.

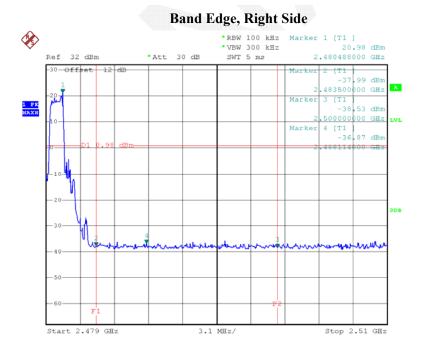
#### Test Result: Compliance

Report No.: RDG150107008-00A

Please refer to following plots.



Date: 19.MAR.2015 17:12:47



Date: 19.MAR.2015 17:11:29

# FCC §15.247(e) - POWER SPECTRAL DENSITY

## **Applicable Standard**

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

## **Test Procedure**

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT was set without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- 3. Set the RBW = 3 kHz, VBW = 10 kHz, Set the span to 1.5 times the DTS bandwidth.
- 4. Use the peak marker function to determine the maximum amplitude level.

## **Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2014-05-09	2015-05-09

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to National Primary Standards and International System of Units (SI).

## **Test Data**

#### **Environmental Conditions**

Temperature:	25 °C
<b>Relative Humidity:</b>	63 %
ATM Pressure:	100.8 kPa

The testing was performed by Allen Qiao on 2015-03-19.

Test Mode: Transmitting

# Test Result: Pass

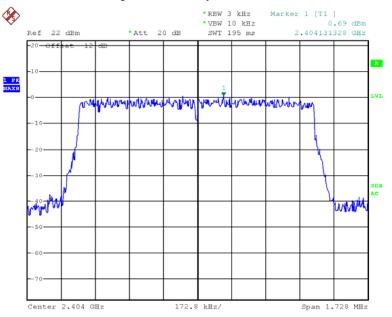
Test Mode: Transmitting

Channel	Frequency	Power Spectral Density	Limits	Result
	MHz	dBm/MHz	dBm/3kHz	
Low	2404	0.69	8	Pass
Middle	2442	1.36	8	Pass
High	2480	1.67	8	Pass

Please refer to the following plots

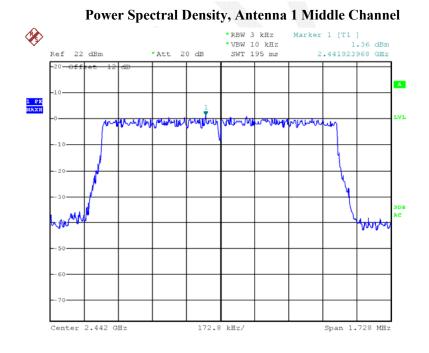
FCC Part 15.247

Page 25 of 28

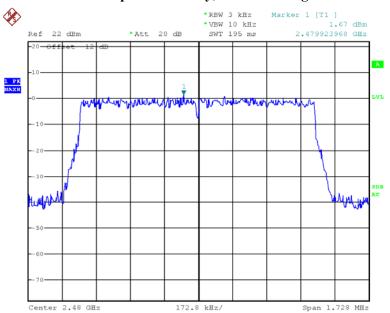


#### Power Spectral Density, Antenna 1 Low Channel

Date: 19.MAR.2015 12:15:20



Date: 19.MAR.2015 12:16:52



#### Power Spectral Density, Antenna 1 High Channel

Date: 19.MAR.2015 12:17:49

FCC Part 15.247

Page 27 of 28

# **DECLARATION LETTER**

#### **Declaration of Alteration**

To Whom It May Concern,

We, SZ DJI TECHNOLOGY CO., LTD, hereby declare that there are some differences between our Multiple Models and testing products. Details as below:

(This is for your reference only.)

	Name	9	C1	
	Brand	1	DJI	
Products	Manu	facturer	SZ DJI TECHNOLO	GY CO., LTD
Description	Proje	ct No.		G150107008,RDG150107009,
			RDG150107010,RD	G150107011,RDG150107012,
			R2DG150107007-03	, RDG150107008-20
		Diffe	erences Description	
Testing Pro	ducts	Multiple Models	Differences Items	Details
GL300A		GL300B	1.GL300B delete	1&2:GL300B delete DM368 and
			DM368 and its	CY7C68013,add CYUSB2014
			additional circuit.	instand.They have the same
			2.GL300B delete	
				3.GL300B adds fuel guage IC
				CW2015CWAD for accurate
			3.GL300B add	power estimating.
			CW2015CWAD	
			fuel guage IC	
			circuit.	

Notes: Testing products-the products tested by BACL

Multiple Model- have the same or similar appearance, structure, PCB, Material and function to the testing products, and only are different for little parameters.

Besides the differences in the table above, we declare the products are identical We guarantee all the information provided above is true, and notice that we'll bear all the consequences caused by any false information or concealing

Best Regards,

Signature: Print Name: Lisa Li Title: Certification Supervisor

ADD: 14th floor, West Wing, Skyworth Semiconductor Design Building NO.18 Gaoxin South 4th Ave, Nanshan, Shenzhen, Guangdong, China Tel: 0755-86152250 Fax: 0755-86965903 Email: lisa.li@dji.com

QPDG004R32 Version1.0 (20140717)

#### \*\*\*\*\* END OF REPORT \*\*\*\*\*

FCC Part 15.247

Page 28 of 28