

FCC PART 15.249

TEST REPORT

For

SZ DJI TECHNOLOGY CO., LTD

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Shenzhen, Guangdong, China

FCC ID: SS3-GL3581511

Report Type: Original Report		Product Type: Remote Controller	
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Report Number:	RDG151112003-00B		
Report Date:	2015-11-24		
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TABLE OF CONTENTS

GENERAL INFORMATION.....	3
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	3
OBJECTIVE	3
RELATED SUBMITTAL(S)/GRANT(S).....	3
TEST METHODOLOGY	3
TEST FACILITY	3
SYSTEM TEST CONFIGURATION.....	4
JUSTIFICATION	4
EUT EXERCISE SOFTWARE	4
BLOCK DIAGRAM OF TEST SETUP	4
SUMMARY OF TEST RESULTS.....	5
FCC§15.203 - ANTENNA REQUIREMENT.....	6
APPLICABLE STANDARD	6
ANTENNA CONNECTOR CONSTRUCTION	6
FCC §15.207 (A) – AC LINE CONDUCTED EMISSIONS	7
APPLICABLE STANDARD	7
MEASUREMENT UNCERTAINTY.....	7
EUT SETUP	7
EMI TEST RECEIVER SETUP.....	8
TEST PROCEDURE	8
CORRECTED AMPLITUDE & MARGIN CALCULATION	8
TEST EQUIPMENT LIST AND DETAILS.....	9
TEST RESULTS SUMMARY	9
TEST DATA	9
FCC§15.205, §15.209&§15.249- RADIATED EMISSIONS	12
APPLICABLE STANDARD	12
MEASUREMENT UNCERTAINTY.....	12
EUT SETUP	13
TEST EQUIPMENT SETUP.....	14
TEST PROCEDURE	14
CORRECTED AMPLITUDE & MARGIN CALCULATION	14
TEST EQUIPMENT LIST AND DETAILS.....	15
TEST RESULTS SUMMARY	15
TEST DATA	15
FCC §15.215(C) – 20 DB BANDWIDTH TESTING.....	19
APPLICABLE STANDARD	19
TEST PROCEDURE	19
TEST EQUIPMENT LIST AND DETAILS.....	19
TEST DATA	19
FCC§15.249(D) - OUT OF BAND EMISSION (50 DB ATTENUATION)	22
APPLICABLE STANDARD	22
TEST PROCEDURE	22
TEST EQUIPMENT LIST AND DETAILS.....	22
TEST DATA	22

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *SZ DJI TECHNOLOGY CO., LTD*'s product, model number: *GL358wB (FCC ID: SS3-GL3581511)* (the "EUT") in this report was a *Remote Controller* (Called C1 by applicant), which measures approximately: 16.6 cm (L) x15.8 cm (W) x 8.9 cm(H), rated input voltage: DC 7.2V from lithium rechargeable battery or DC 17.4V from adapter.

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

** All measurement and test data in this report was gathered from production sample serial number: 151112003. (Assigned by BACL.Dongguan). The EUT was received on 2015-11-13.*

Objective

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

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.249 rules.

Related Submittal(s)/Grant(s)

FCC Part 15C DTS submissions with FCC ID: SS3-GL3581511
Submitted with the Part of a system with ID: SS3-WM3251511

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

All radiated and conducted emissions measurement was performed at 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 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

Justification

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

The system employed 16 channels in the frequency range 5738-5813MHz, which were provided by the manufacturer:

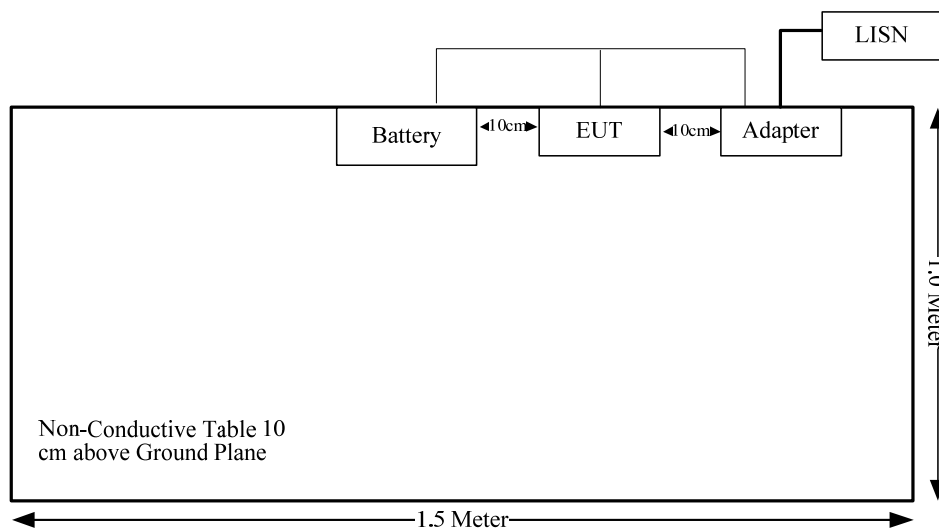
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5738	5	5758	9	5778	13	5798
2	5743	6	5763	10	5783	14	5803
3	5748	7	5768	11	5788	15	5808
4	5753	8	5773	12	5793	16	5813

EUT was tested with Channel 5738 MHz, 5773 MHz and 5813 MHz

EUT Exercise Software

The software “DJI-RF Certification” was used in the test. The system configured maximum power as default setting.

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliance
§15.207(a)	Conduction Emissions	Compliance
15.205, §15.209, §15.249	Radiated Emissions	Compliance
§15.215 (c)	20 dB Bandwidth	Compliance
§15.249(d)	Outside of Band Emission (50dB attenuation)	Compliance

FCC§15.203 - ANTENNA REQUIREMENT

Applicable Standard

For intentional device, 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.

Antenna Connector Construction

The EUT has 2 internal antennas arrangement, the left antenna gain is 2.95dBi for 2.4G, the right antenna gain is 3.16dBi for 2.4G and 2.38dBi for 5.8G, fulfill the requirement of the item. Please refer to the internal photos.

Result: Compliant.

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC§15.207

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_{cisp} of Table 1, 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_{cisp} of Table 1, then:

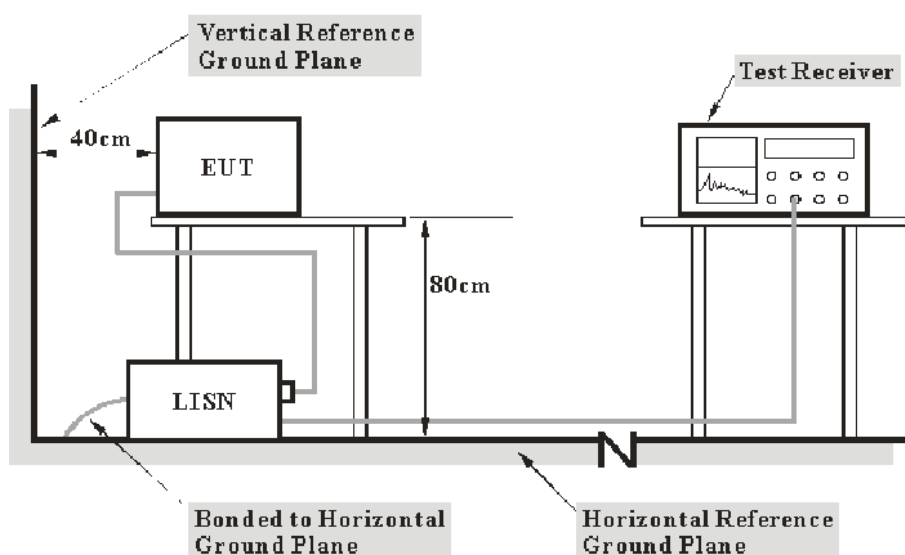
- compliance is deemed to occur if no measured disturbance level, increased by $(U_{lab} - U_{cisp})$, exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by $(U_{lab} - U_{cisp})$, exceeds the disturbance limit.

Based on CISPR 16-4-2-2011, measurement uncertainty of conducted disturbance at mains port using AMN at Bay Area Compliance Laboratories Corp. (Dongguan) is 3.46 dB (150 kHz to 30 MHz).

Table 1 – Values of U_{cisp}

Measurement	U_{cisp}
Conducted disturbance at mains port using AMN (150 kHz to 30 MHz)	3.4 dB

EUT Setup



Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

The adapter of laptop was connected to a 120 VAC/60 Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter of laptop was connected to the first LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Corrected Amplitude & Margin Calculation

The basic equation is as follows:

$$V_C = V_R + A_C + VDF$$

$$C_f = A_C + VDF$$

Herein,

V_C (cord. Reading): corrected voltage amplitude

V_R : reading voltage amplitude

A_C : attenuation caused by cable loss

VDF: voltage division factor of AMN

C_f : Correction Factor

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

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCS 30	830245/006	2015-10-20	2016-10-20
R&S	L.I.S.N	ESH3-Z5	892107/021	2015-07-16	2016-07-15
R&S	Two-line V-network	ENV 216	3560.6550.12	2014-12-11	2015-12-11
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A

* **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 Part 15.207, with the worst margin reading of:

14.4 dB at 13.529825 MHz in the **Neutral** conducted mode

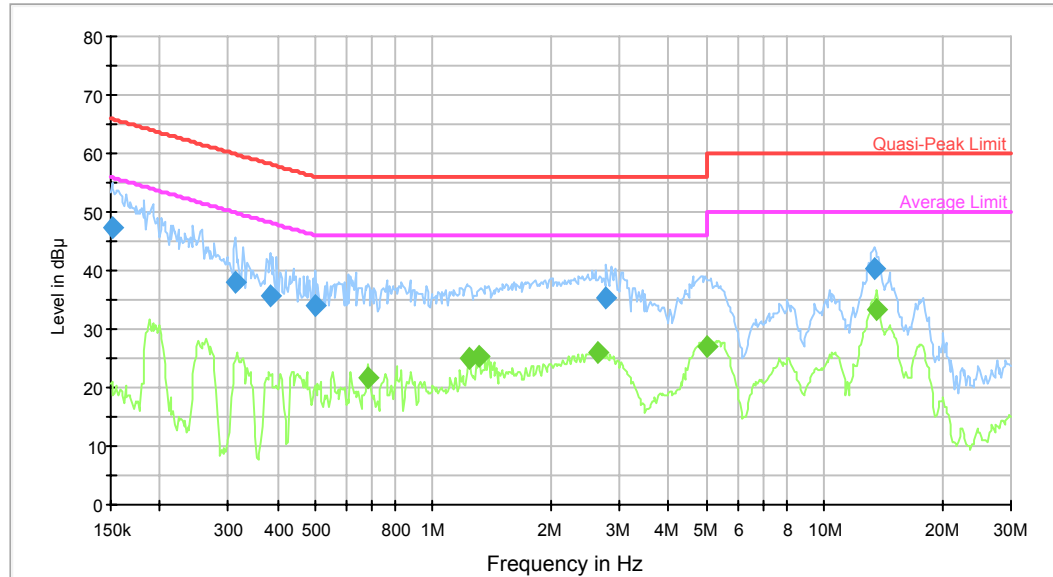
Test Data**Environmental Conditions**

Temperature:	27°C
Relative Humidity:	53 %
ATM Pressure:	100.6kPa

The testing was performed by Allen Qiao on 2015-11-13

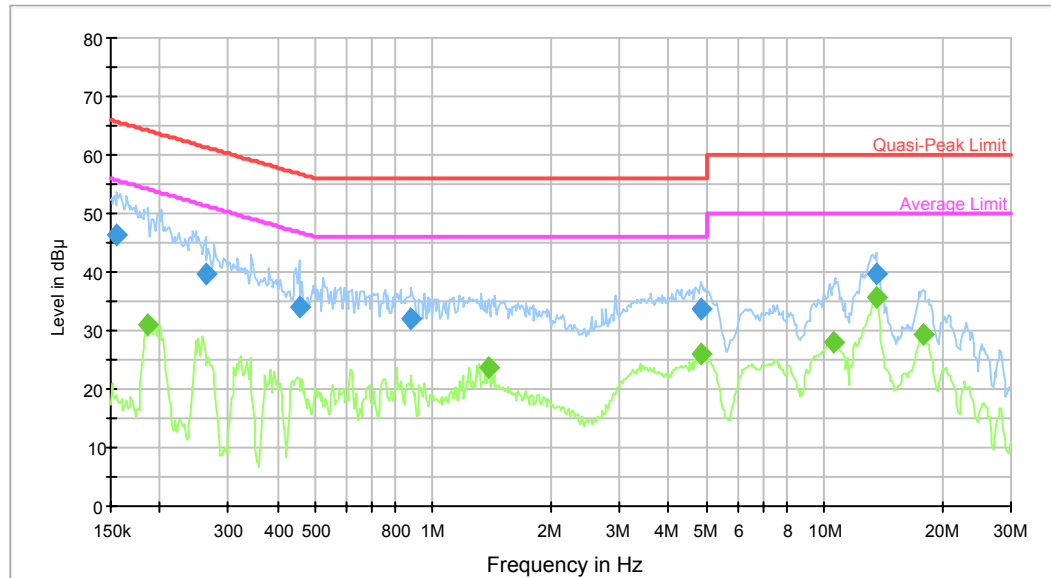
Test Mode: Transmitting

AC120 V, 60 Hz, Line:



Frequency (MHz)	Quasi Peak (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.151200	47.3	9.000	L1	0.2	18.6	65.9	Compliance
0.312220	38.0	9.000	L1	0.2	21.9	59.9	Compliance
0.384091	35.7	9.000	L1	0.2	22.5	58.2	Compliance
0.499611	33.8	9.000	L1	0.2	22.2	56.0	Compliance
2.771062	35.4	9.000	L1	0.2	20.6	56.0	Compliance
13.422446	40.5	9.000	L1	0.7	19.5	60.0	Compliance

Frequency (MHz)	Average (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.681699	21.7	9.000	L1	0.2	24.3	46.0	Compliance
1.239175	25.1	9.000	L1	0.2	20.9	46.0	Compliance
1.310256	25.4	9.000	L1	0.2	20.6	46.0	Compliance
2.641698	26.0	9.000	L1	0.2	20.0	46.0	Compliance
4.997188	27.1	9.000	L1	0.3	18.9	46.0	Compliance
13.638064	33.5	9.000	L1	0.7	16.5	50.0	Compliance

AC120 V, 60 Hz, Neutral:

Frequency (MHz)	Quasi Peak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.156097	46.5	9.000	N	0.2	19.2	65.7	Compliance
0.262017	39.7	9.000	N	0.2	21.7	61.4	Compliance
0.454052	34.1	9.000	N	0.2	22.7	56.8	Compliance
0.879690	31.9	9.000	N	0.2	24.1	56.0	Compliance
4.840426	33.8	9.000	N	0.3	22.2	56.0	Compliance
13.529825	39.6	9.000	N	0.7	20.4	60.0	Compliance

Frequency (MHz)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.187494	31.1	9.000	N	0.2	23.0	54.1	Compliance
1.385415	23.8	9.000	N	0.3	22.2	46.0	Compliance
4.840426	25.9	9.000	N	0.3	20.1	46.0	Compliance
10.568557	28.0	9.000	N	0.4	22.0	50.0	Compliance
13.529825	35.6	9.000	N	0.7	14.4	50.0	Compliance
17.881783	29.3	9.000	N	1.2	20.7	50.0	Compliance

FCC§15.205, §15.209&§15.249- RADIATED EMISSIONS

Applicable Standard

As per FCC§15.249 (a), except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24.0–24.25 GHz	250	2500

As per FCC§15.249 (c), Field strength limits are specified at a distance of 3 meters.

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

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_{cisprr} of Table 1, 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_{cisprr} of Table 1, then:

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

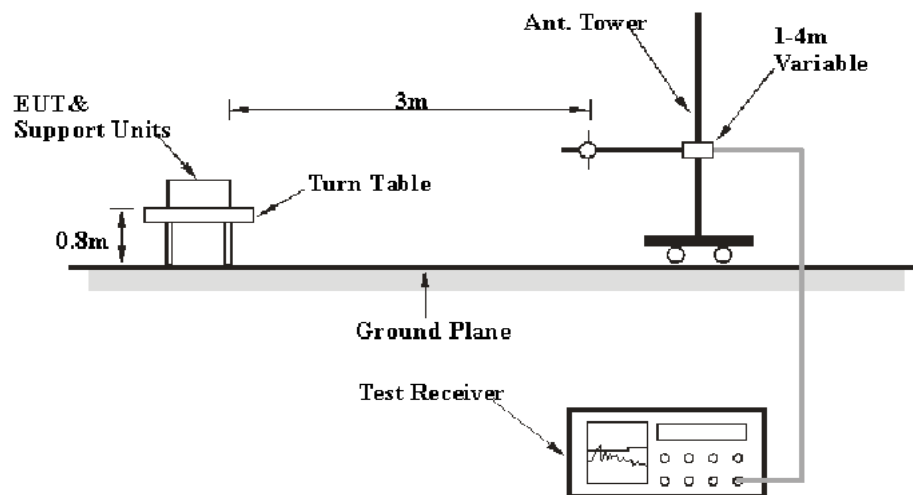
6G~18GHz: 5.23 dB

Table 1 – Values of U_{cispr}

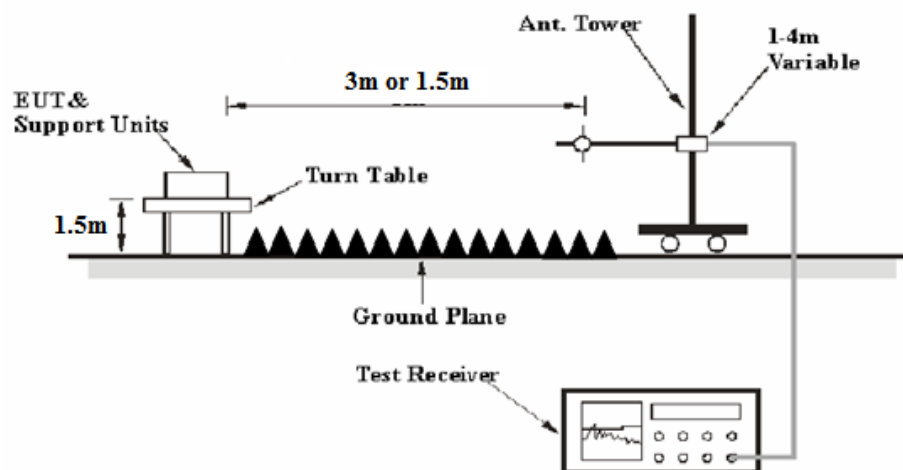
Measurement	U_{cispr}
Radiated disturbance (electric field strength at an OATS or in a SAC) (30 MHz to 1000 MHz)	6.3 dB
Radiated disturbance (electric field strength in a FAR) (1 GHz to 6 GHz)	5.2 dB
Radiated disturbance (electric field strength in a FAR) (6 GHz to 18 GHz)	5.5 dB

EUT Setup

Below 1 GHz:



Above 1 GHz:



The radiated emission and out of band emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209/15.205 and FCC 15.249 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

Test Equipment Setup

The system was investigated from 30 MHz to 40 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
30 MHz – 1000 MHz	120 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1MHz	3 MHz	/	PK
	1MHz	10 Hz	/	Ave.

Test Procedure

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

All data was recorded in the Quasi-peak detection mode from 30MHz to 1GHz, Peak and average detection mode above 1 GHz.

The above 1G test result shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade from 3m to 1.5m

Distance extrapolation factor = $20 \log(\text{specific distance [3m]}/\text{test distance [1.5m]})$ dB

Extrapolation result = Corrected Amplitude (dB μ V/m) - distance extrapolation factor (6dB)

Corrected Amplitude & Margin Calculation

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

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

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:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCI	100224	2015-08-03	2016-08-02
Sunol Sciences	Antenna	JB3	A060611-3	2014-11-06	2017-11-05
HP	Amplifier	8447E	2434A02181	2015-09-01	2016-09-01
R&S	Spectrum Analyzer	E4440A	SG43360054	2014-12-04	2015-12-04
ETS-Lindgren	Horn Antenna	3115	9808-5557	2015-09-06	2018-09-06
Mini-Circuit	Amplifier	ZVA-213-S+	054201245	2015-02-19	2016-02-19
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-01 1304	2014-06-16	2017-06-15
Ducommun Technologies	Horn Antenna	ARH-2823-02	1007726-01 1302	2014-06-16	2017-06-15
Quinstar	Amplifier	QLW-18405536-JO	15964001001	2015-09-06	2016-09-06

* **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 data in the following table, the EUT complied with the FCC Part 15.209 & 15.205 & 15.249, with the worst margin reading of:

1.44 dB at 5773 MHz in the Vertical polarization

Test Data**Environmental Conditions**

Temperature:	26.1°C
Relative Humidity:	54 %
ATM Pressure:	101kPa

The testing was performed by Allen Qiao on 2015-11-24.

Test Mode: Transmitting (the test distance is 1.5m for above 1GHz, 3m for below 1GHz)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB(1/m))						
Frequency: 5738MHz										
5738	72.60	PK	H	32.15	5.55	0.00	110.30	104.30	114.00	9.70
5738	80.30	PK	V	32.15	5.55	0.00	118.00	112.00	114.00	2.00
5725	34.11	PK	V	32.15	5.60	0.00	71.86	65.86	74.00	8.14
11476	29.33	PK	V	37.88	8.92	26.15	49.98	43.98	74.00	30.02
17214	29.45	PK	V	40.78	13.81	25.63	58.41	52.41	74.00	21.59
4625	32.32	PK	V	30.13	5.23	27.34	40.34	34.34	74.00	39.66
4625	19.14	AV	V	30.13	5.23	27.34	27.16	21.16	54.00	32.84
7475	31.83	PK	V	34.74	6.93	26.07	47.43	41.43	74.00	32.57
7475	17.62	AV	V	34.74	6.93	26.07	33.22	27.22	54.00	26.78
514.6	29.30	QP	V	18.08	2.78	22.06	28.10	28.10	46.00	17.90
Frequency: 5773MHz										
5773	73.21	PK	H	32.15	5.48	0.00	110.84	104.84	114.00	9.16
5773	80.93	PK	V	32.15	5.48	0.00	118.56	112.56	114.00	1.44
11546	29.53	PK	V	37.90	8.93	26.09	50.27	44.27	74.00	29.73
17319	29.77	PK	V	41.41	13.20	25.63	58.75	52.75	74.00	21.25
4625	32.70	PK	V	30.13	5.23	27.34	40.72	34.72	74.00	39.28
4625	19.56	AV	V	30.13	5.23	27.34	27.58	21.58	54.00	32.42
5365	32.89	PK	V	31.83	5.58	27.01	43.29	37.29	74.00	36.71
5365	19.23	AV	V	31.83	5.58	27.01	29.63	23.63	54.00	30.37
7475	32.27	PK	V	34.74	6.93	26.07	47.87	41.87	74.00	32.13
7475	18.09	AV	V	34.74	6.93	26.07	33.69	27.69	54.00	26.31
514.6	29.10	QP	V	18.08	2.78	22.06	27.90	27.90	46.00	18.10
Frequency: 5813MHz										
5813	72.29	PK	H	32.16	5.61	0.00	110.06	104.06	114.00	9.94
5813	80.03	PK	V	32.16	5.61	0.00	117.80	111.80	114.00	2.20
5875	32.42	PK	V	32.18	5.97	0.00	70.57	64.57	74.00	9.43
11626	29.27	PK	V	37.90	8.90	25.89	50.18	44.18	74.00	29.82
17439	29.36	PK	V	42.13	12.50	25.51	58.48	52.48	74.00	21.52
4625	32.02	PK	V	30.13	5.23	27.34	40.04	34.04	74.00	39.96
4625	19.06	AV	V	30.13	5.23	27.34	27.08	21.08	54.00	32.92
7475	31.94	PK	V	34.74	6.93	26.07	47.54	41.54	74.00	32.46
7475	17.67	AV	V	34.74	6.93	26.07	33.27	27.27	54.00	26.73
514.6	29.70	QP	V	18.08	2.78	22.06	28.50	28.50	46.00	17.50

*Within measurement uncertainty!

Field Strength (Average)

Frequency (MHz)	Peak Measurement @ 3m (dBμV/m)	Polar (H/V)	Duty Cycle Correction Factor (dB)	Average Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Operating Frequency:5738 MHz						
5738	104.30	H	-22.63	81.67	94.00	12.33
5738	112.00	V	-22.63	89.37	94.00	4.63
5725	65.86	V	-22.63	43.23	54.00	10.77
11476	43.98	V	-22.63	21.35	54.00	32.65
17214	52.41	V	-22.63	29.78	54.00	24.22
Operating Frequency:5773 MHz						
5773	104.84	H	-22.63	82.21	94.00	11.79
5773	112.56	V	-22.63	89.93	94.00	4.07
11546	44.27	V	-22.63	21.64	54.00	32.36
17319	52.75	V	-22.63	30.12	54.00	23.88
Operating Frequency:5813 MHz						
5813	104.06	H	-22.63	81.43	94.00	12.57
5813	111.80	V	-22.63	89.17	94.00	4.83
5875	64.57	V	-22.63	41.94	54.00	12.06
11626	44.18	V	-22.63	21.55	54.00	32.45
17439	52.48	V	-22.63	29.85	54.00	24.15

Note:

Calculate Average value based on duty cycle correction factor:

Duty cycle correction factor= $20 \times \log(\text{duty cycle}) = 20 \times \log(0.0739) = -22.63\text{dB}$

Frequency (MHz)	Conducted Peak Output Power (dBm)	Conducted Average Output Power (dBm)
5738	20.46	9.14
5773	19.55	8.23
5813	18.17	6.85

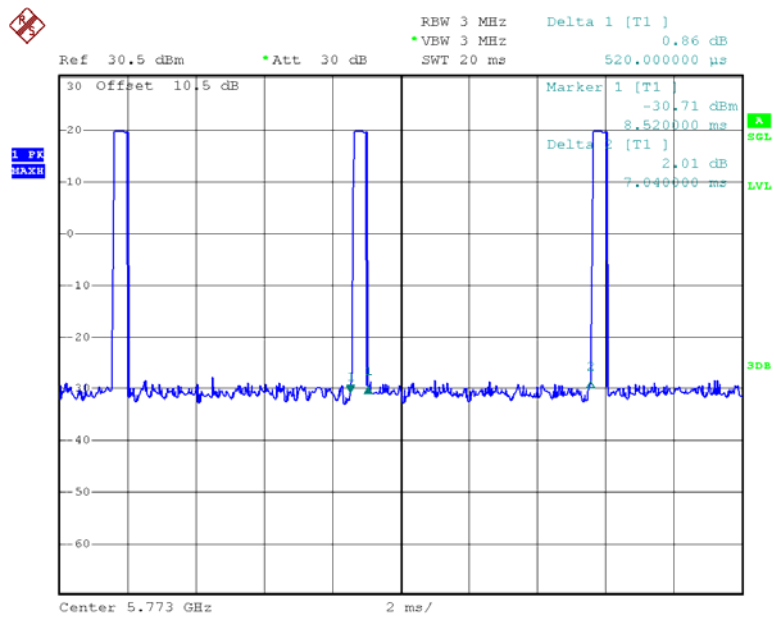
Note:

Calculate Average value based on duty cycle correction factor:

Duty cycle correction factor= $10 \times \log(\text{duty cycle}) = 10 \times \log(0.0739) = -11.31\text{dB}$

T _{on}	T _{on} + T _{off}	Duty Cycle
ms	ms	%
0.52	7.04	7.39

Duty Cycle



Date: 24.NOV.2015 14:56:25

FCC §15.215(c) – 20 dB BANDWIDTH TESTING**Applicable Standard**

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

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 on the test table without connection to measurement instrument. Turn on the EUT. 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 20 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	2015-05-09	2016-05-09

* **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:	27.4 °C
Relative Humidity:	59 %
ATM Pressure:	100.8kPa

* The testing was performed by Allen Qiao on 2015-11-14.

Test Result: Compliant.

Please refer to following tables and plots

Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
Low	5738	1.242
Middle	5773	1.242
High	5813	1.200

DELTA MARKER 1
1.242 MHz
Ref 30.5 dBm Att 30 dB SWT 20 ms 1.242000000 MHz

• RBW 30 kHz Delta 1 [T1] -0.82 dB
• VBW 100 kHz

30 Offset 101.5 dB

1 PK MAX

D1 20.33 dBm

D2 0.33 dBm

T1

T2

OBW 1.182000000 MHz
Marker 1 [T1] 0.29 dBm
5.737310000 GHz
Temp 1 [T1 OBW] 2.69 dBm
5.737352000 GHz
Temp 2 [T1 OBW] 2.47 dBm
5.738534000 GHz

A

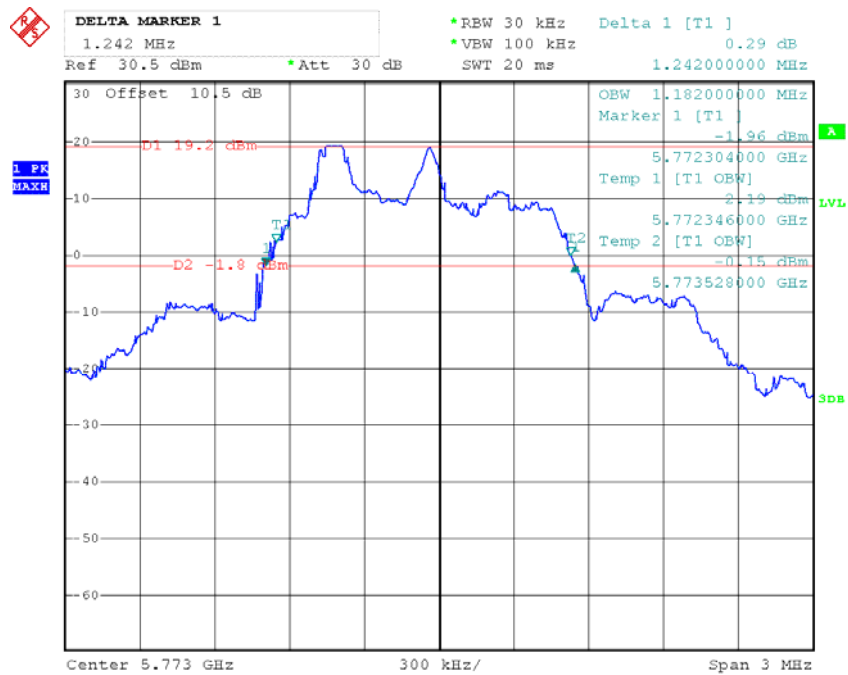
LVL

3dB

Center 5.738 GHz 300 kHz/ Span 3 MHz

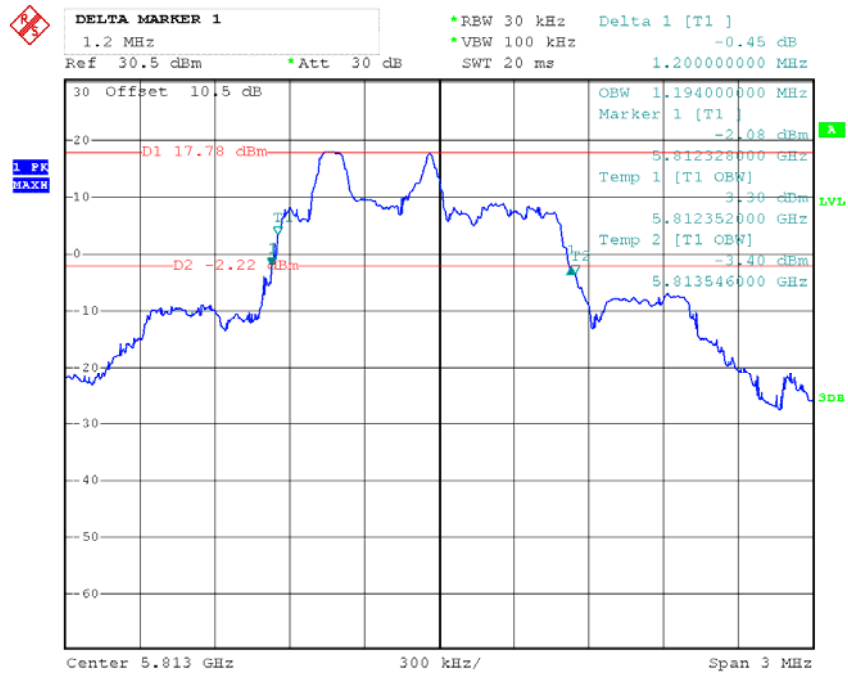
Page 20 of 23

Middle Channel



Date: 14.NOV.2015 10:02:52

High Channel



Date: 14.NOV.2015 10:00:47

FCC§15.249(d) - OUT OF BAND EMISSION (50 dB ATTENUATION)

Applicable Standard

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation

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.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09

* **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:	28.3 °C
Relative Humidity:	59 %
ATM Pressure:	101.1kPa

* The testing was performed by Allen Qiao on 2015-11-20.

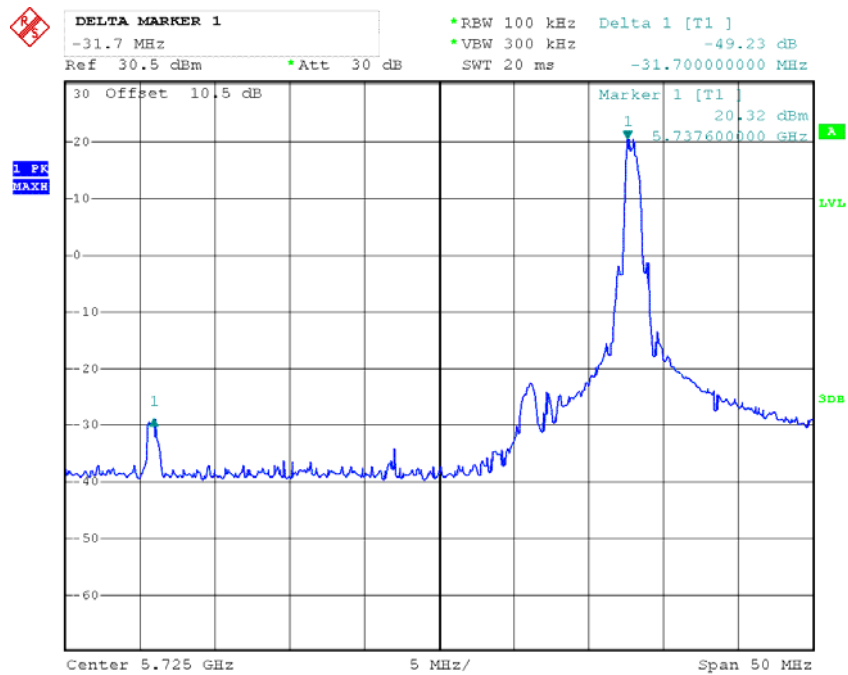
Test Result: Compliant.

Please refer to the following table and plots:

Band Edge	Delta Peak to Band Emission (dBc)	Delta Limit (dBc)
Left	49.23	50
Right	56.06	50

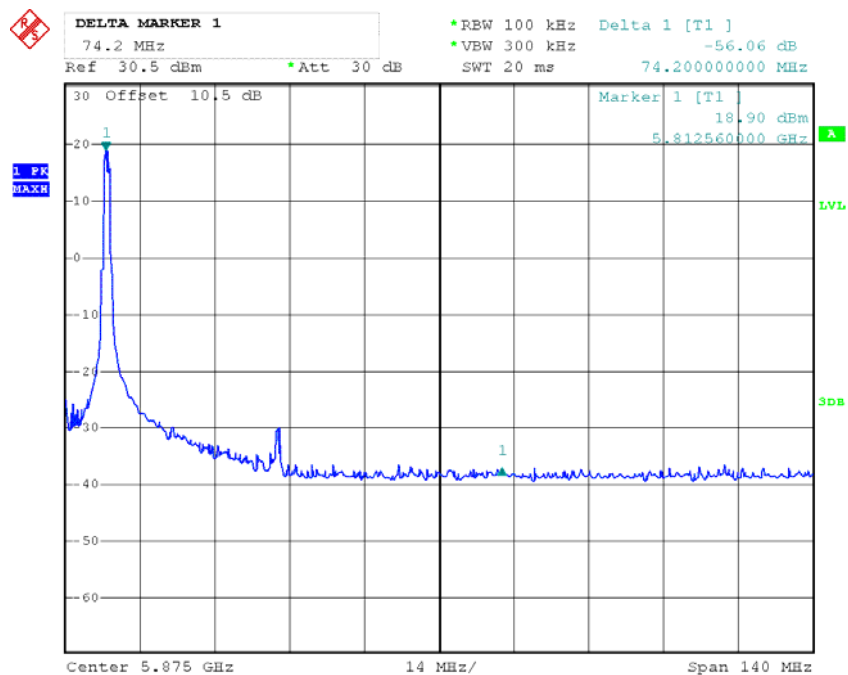
Note: The band edge emission compliant with the general radiated emission limits in §15.209, please refer to radiated emissions test section.

Band Edge, Left Side



Date: 20.NOV.2015 13:23:58

Band Edge, Right Side



Date: 20.NOV.2015 13:28:09

***** END OF REPORT *****