



FCC PART 15.247 TEST REPORT

For

INGENICO

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FCC ID: XKB-L2500CLWIBT

Report Type: Original Report	Product Name: Link/2500
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Report Number: <u>RXM170217051B</u>	
Report Date: <u>2017-03-10</u>	
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The **INGENICO**'s product, model number: **Link/2500 CL/WiFi/BT (FCC ID: XKB-L2500CLWIBT)** (the "EUT") in this report was a **Link/2500**, which was measured approximately: 129 mm (L) x 70 mm (W) x 17 mm (H), rated input voltage: DC 3.7V from rechargeable Li-ion battery or DC 5V from adapter.

Adapter information:

MODEL: PSAI05R-050QL6

INPUT: 100-240V ~ 0.3A 50-60Hz 11-15VA

OUTPUT: DC 5V, 1.0A MAX.

**All measurement and test data in this report was gathered from final production sample, serial number: 170217051 (assigned by the BACL, Chengdu). It may have deviation from any other sample. The EUT supplied by the applicant was received on 2017-02-17, and EUT conformed to test requirement.*

Objective

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

The tests were performed in order to determine the Bluetooth BDR and EDR mode of EUT compliance with FCC Rules Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Related Submittal(s)/Grant(s)

FCC Part 15.225 DXX submissions with FCC ID: XKB-L2500CLWIBT.

FCC Part 15C DTS submissions with FCC ID: XKB-L2500CLWIBT.

FCC Part 15.407 NII submissions with FCC ID: XKB-L2500CLWIBT.

Test Methodology

All measurements detailed in this Test Report were performed in accordance with ANSI C63.10-2013 "American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices".

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Chengdu). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

The Bay Area Compliance Laboratories Corp. Chengdu's measurement Uncertainties (calculated for a k=2 Coverage Factor corresponding to approximately 95% Coverage) were as follows:

- For all of the AC Line Conducted Emissions Tests reported herein: ± 3.17 dB.
- For of all of the Direct Antenna Conducted Emissions Tests reported herein: ± 0.56 dB.

-For of all of the direct Radiated Emissions Tests reported herein are:

30 MHz to 200 MHz: ± 4.7 dB;
200 MHz to 1 GHz: ± 6.0 dB;
1 GHz to 6 GHz: ± 5.13 dB; and,
6 GHz to 40 GHz: ± 5.47 dB.

And the uncertainty will not be taken into consideration for all test data recorded in the report.

Test Facility

The test site used by BACL to collect test data is located in the No.5040, Huilongwan Plaza, No.1, Shawan Road, Jinniu District, Chengdu, Sichuan, China.

Test site at BACL has been fully described in reports submitted to the Federal Communication 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 April 24, 2015. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 560332. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

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)	Conducted Emissions	Compliance
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247 (a)(1)	20 dB Bandwidth	Compliance*
§15.247(a)(1)	Channel Separation Test	Compliance*
§15.247(a)(1)(iii)	Time of Occupancy (Dwell Time)	Compliance*
§15.247(a)(1)(iii)	Quantity of hopping channel Test	Compliance*
§15.247(b)(1)	Peak Output Power Measurement	Compliance*
§15.247(d)	Band Edges	Compliance*

Note:

Compliance*: the device is same PCB Layout with Model:LINK/2500 CL/3G/WiFi/BT, FCC ID: XKB L2500CL3GWIBT, the differences between the original devices is depressing WWAN (2G/3G) function and replacing SIM to SAM function. The test items, please refer to the Model:LINK/2500 CL/3G/WiFi/BT's report: RXM160823052-00C.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in an engineering mode.

EUT Exercise Software

The engineering mode configured the maximum power as default setting.

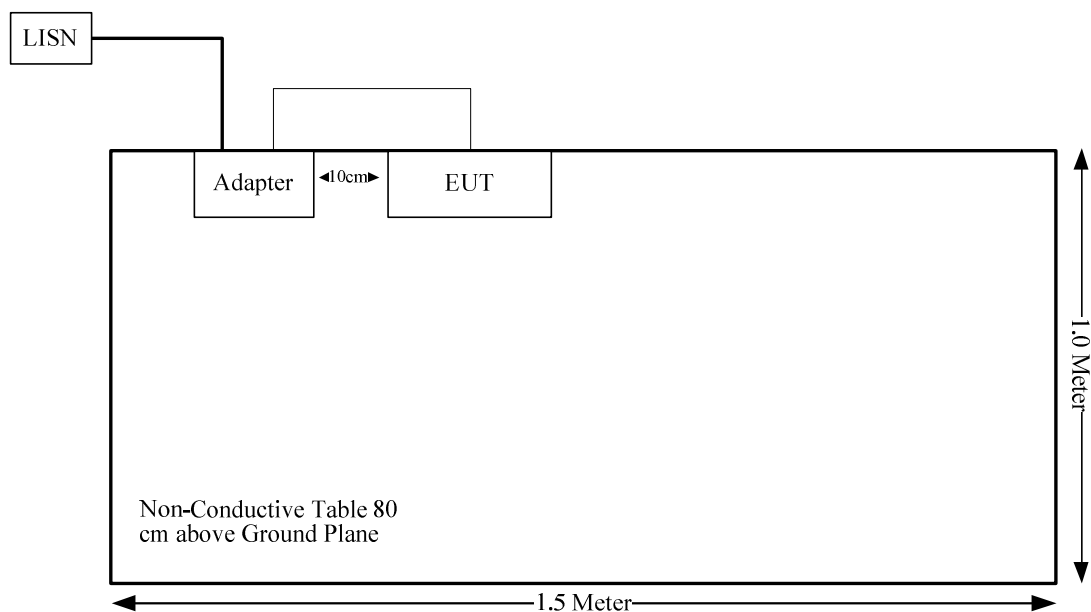
Equipment Modifications

No modification was made to the EUT.

External Cable

Cable Description	Shielding Type	Ferrite Core	Length (cm)	From Port	To
USB Cable	No	No	1.1	Adapter	EUT

Block Diagram of Test Setup



FCC §15.247 (i) & §1.1310 & §2.1093- RF EXPOSURE

Applicable Standard

According to §15.247(i) and §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB447498 D01 General RF Exposure Guidance v06:

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

Measurement Result

This device is for handheld use:

The tune-up power is 2.3 dBm (1.7mW).

$[(\text{max. power of channel, mW})/(\text{min. test separation distance, mm})][\sqrt{f(\text{GHz})}]$
 $= 1.7/5 \cdot (\sqrt{2.480}) = 0.5 < 7.5$

So the stand-alone SAR evaluation is not necessary.

FCC §15.203 - ANTENNA REQUIREMENT

Applicable Standard

According to FCC § 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 use of a standard antenna jack or electrical connector is prohibited.

Antenna Connector Construction

The EUT has one internal antenna arrangement for BT and the max antenna gain is 0 dBi, fulfill the requirement of this section, please refer to the EUT photos.

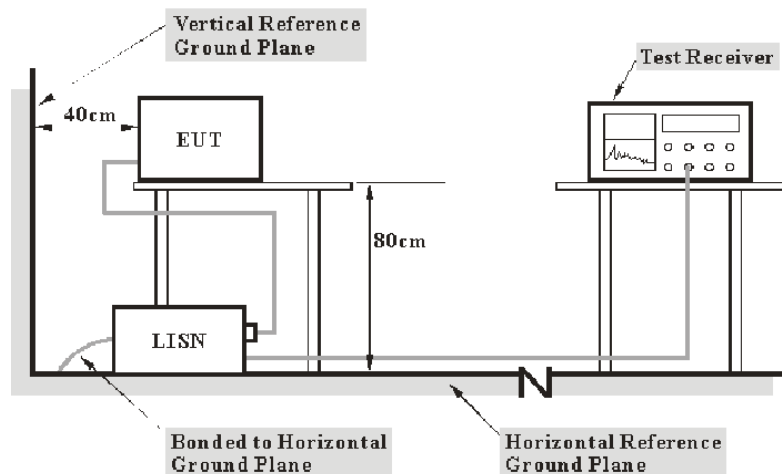
Result: Compliance

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC§15.207(a)

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 adapter was connected to the Main LISN with AC 120 V/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 was connected to the outlet of 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:

$$V_C = V_R + A_C + VDF$$

Herein,

V_C : corrected voltage amplitude

V_R : reading voltage amplitude

A_C : attenuation caused by cable loss

VDF: voltage division factor of AMN or ISN

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
Rohde & Schwarz	EMI Test Receiver	ESCS 30	836858/0016	2016-12-02	2017-12-01
Rohde & Schwarz	L.I.S.N.	ENV216	100018	2016-12-02	2017-12-01
Rohde & Schwarz	PULSE LIMITER	ESH3Z2	DE14781	2016-10-31	2017-10-30
Unknown	Conducted Cable	Unknown	NO.5	2016-11-10	2017-11-09
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A

* **Statement of Traceability:** BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B “Implementation of traceability policy in accredited laboratories”.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

Test Data

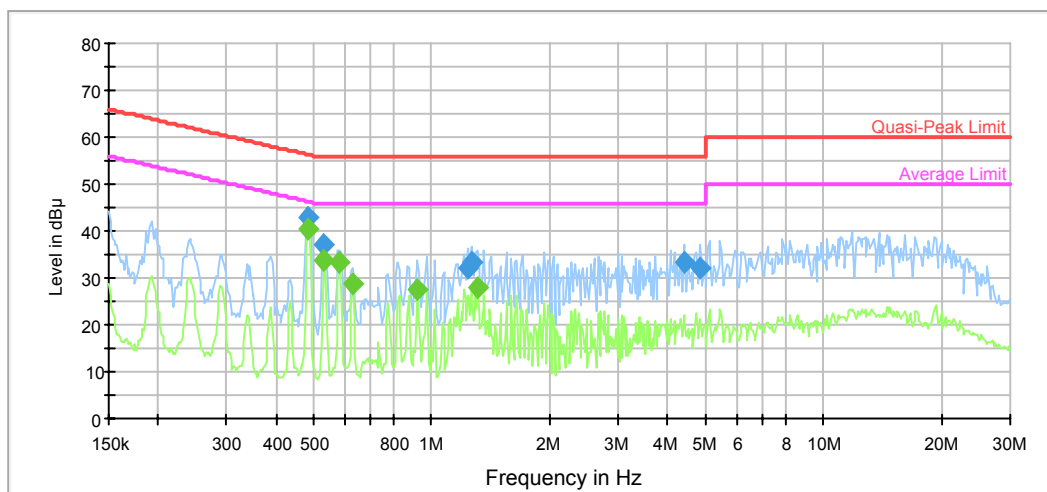
Environmental Conditions

Temperature:	20.8 °C
Relative Humidity:	31 %
ATM Pressure:	96.2 kPa

The testing was performed by Kevin Hu on 2017-03-02.

Test Mode: Transmitting

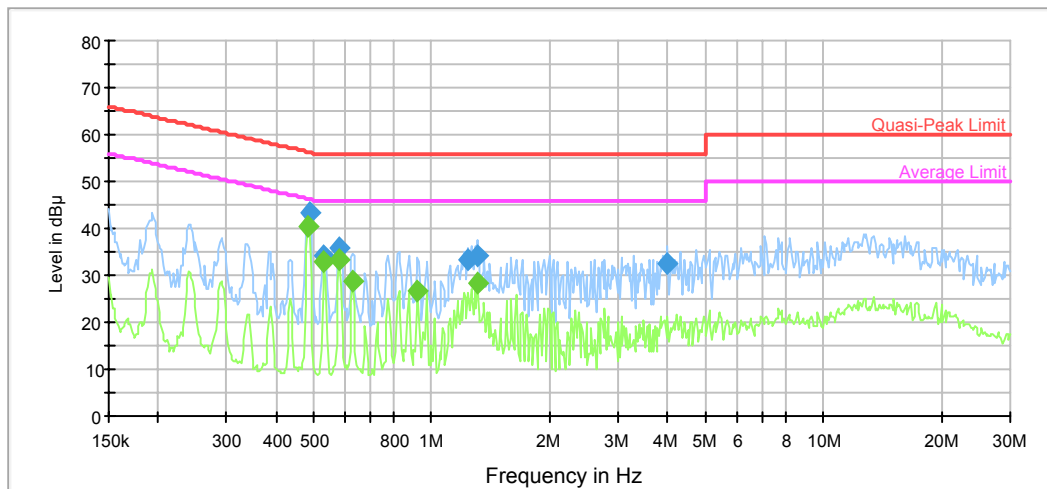
AC120 V, 60 Hz, Line:



Frequency (MHz)	QuasiPeak (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.483938	42.9	9.000	L1	19.7	13.4	56.3	Compliance
0.532496	37.0	9.000	L1	19.7	19.0	56.0	Compliance
1.239175	32.0	9.000	L1	19.7	24.0	56.0	Compliance
1.259081	33.2	9.000	L1	19.7	22.8	56.0	Compliance
4.399032	33.3	9.000	L1	19.7	22.7	56.0	Compliance
4.840426	32.2	9.000	L1	19.7	23.8	56.0	Compliance

Frequency (MHz)	Average (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.483938	40.4	9.000	L1	19.7	5.9	46.3	Compliance
0.532496	33.7	9.000	L1	19.7	12.3	46.0	Compliance
0.581275	33.3	9.000	L1	19.8	12.7	46.0	Compliance
0.629488	28.8	9.000	L1	19.7	17.2	46.0	Compliance
0.922769	27.7	9.000	L1	19.7	18.3	46.0	Compliance
1.310256	28.1	9.000	L1	19.7	17.9	46.0	Compliance

AC120 V, 60 Hz, Neutral:



Frequency (MHz)	QuasiPeak (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.487810	43.4	9.000	N	19.6	12.8	56.2	Compliance
0.528270	34.0	9.000	N	19.6	22.0	56.0	Compliance
0.581275	35.8	9.000	N	19.6	20.2	56.0	Compliance
1.239175	33.5	9.000	N	19.6	22.5	56.0	Compliance
1.310256	34.0	9.000	N	19.6	22.0	56.0	Compliance
3.997889	32.6	9.000	N	19.7	23.4	56.0	Compliance

Frequency (MHz)	Average (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.483938	40.3	9.000	N	19.6	6.0	46.3	Compliance
0.532496	32.7	9.000	N	19.6	13.3	46.0	Compliance
0.581275	33.1	9.000	N	19.6	12.9	46.0	Compliance
0.629488	28.8	9.000	N	19.6	17.2	46.0	Compliance
0.922769	26.7	9.000	N	19.7	19.3	46.0	Compliance
1.310256	28.4	9.000	N	19.6	17.6	46.0	Compliance

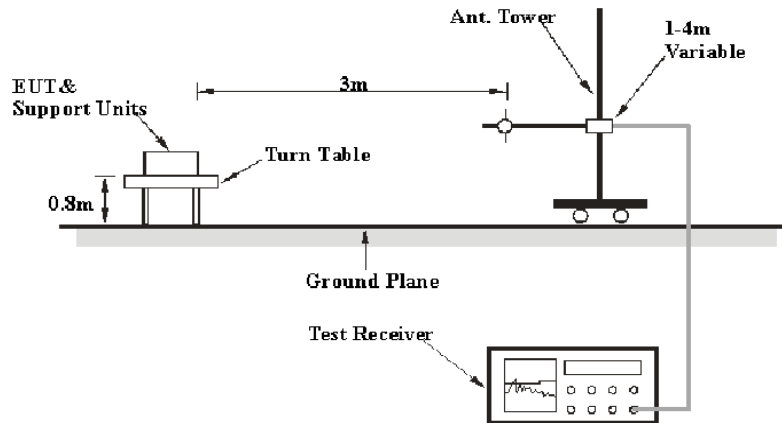
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

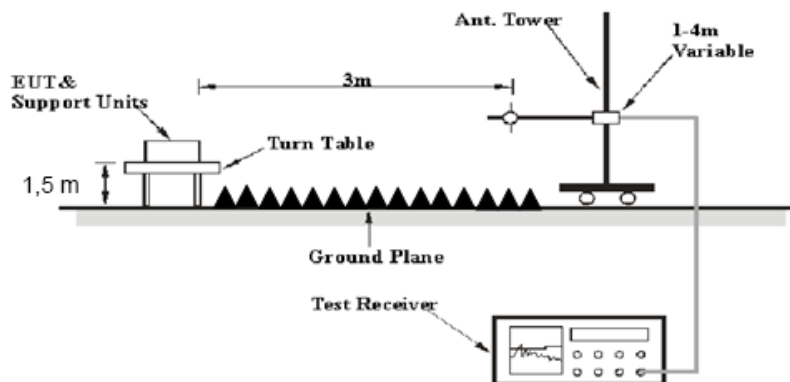
FCC §15.247 (d); §15.209; §15.205;

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 C63.10-2013. The specification used was the FCC 15.209, and FCC 15.247 limits.

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

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
30 MHz – 1000 MHz	120 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1MHz	3 MHz	/	PK
	1MHz	10 Hz	/	AV

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.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	Amplifier	8447D	2944A10442	2016-12-02	2017-12-01
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2016-12-02	2017-12-01
Sunol Sciences	Broadband Antenna	JB3	A121808	2016-04-10	2019-04-09
Rohde & Schwarz	Spectrum Analyzer	FSEM30	100018	2016-12-02	2017-12-01
ETS	Horn Antenna	3115	003-6076	2016-12-02	2017-12-01
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-0113024	2014-06-16	2017-06-15
Mini-circuits	Amplifier	ZVA-183-S+	771001215	2016-05-20	2017-05-19
HP	Amplifier	8449B	3008A00277	2016-12-02	2017-12-01
EMCT	Semi-Anechoic Chamber	966	966-1	2015-04-24	2018-04-23
Unknown	RF Cable (below 1GHz)	Unknown	NO.1	2016-11-10	2017-11-09
Unknown	RF Cable (below 1GHz)	Unknown	NO.4	2016-11-10	2017-11-09
Unknown	RF Cable (above 1GHz)	Unknown	NO.2	2016-11-10	2017-11-09

*** Statement of Traceability:** BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

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 Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, and section 15.205, 15.209 and 15.247.

Test Data

Environmental Conditions

Temperature:	21.2 °C
Relative Humidity:	32 %
ATM Pressure:	96.2 kPa

The testing was performed by Kevin Hu on 2017-03-02.

Test mode: Transmitting

30MHz- 25 GHz:

BDR Mode (GFSK):

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2402 MHz									
2402	60.02	PK	H	23.53	3.00	0.00	86.55	N/A	N/A
2402	49.54	AV	H	23.53	3.00	0.00	76.07	N/A	N/A
2402	62.81	PK	V	23.53	3.00	0.00	89.34	N/A	N/A
2402	52.23	AV	V	23.53	3.00	0.00	78.76	N/A	N/A
2390	27.72	PK	V	23.57	3.00	0.00	54.29	74.00	19.71
2390	16.1	AV	V	23.57	3.00	0.00	42.67	54.00	11.33
4804	33.48	PK	V	30.77	5.12	26.87	42.50	74.00	31.50
4804	22.46	AV	V	30.77	5.12	26.87	31.48	54.00	22.52
7206	32.91	PK	V	34.71	6.16	26.35	47.43	74.00	26.57
7206	22.16	AV	V	34.71	6.16	26.35	36.68	54.00	17.32
1462	32.91	PK	V	24.00	2.62	26.37	33.16	74.00	40.84
1462	21.69	AV	V	24.00	2.62	26.37	21.94	54.00	32.06
90.14	50.87	QP	V	8.42	0.55	28.34	31.50	43.50	12.00
152.22	39.94	QP	V	12.73	0.79	28.06	25.40	43.50	18.10
Middle Channel: 2441 MHz									
2441	63.48	PK	H	23.40	3.00	0.00	89.88	N/A	N/A
2441	51.73	AV	H	23.40	3.00	0.00	78.13	N/A	N/A
2441	65.57	PK	V	23.40	3.00	0.00	91.97	N/A	N/A
2441	54.69	AV	V	23.40	3.00	0.00	81.09	N/A	N/A
4882	33.28	PK	V	31.02	5.09	26.87	42.52	74.00	31.48
4882	22.37	AV	V	31.02	5.09	26.87	31.61	54.00	22.39
7323	33.27	PK	V	34.95	6.22	26.40	48.04	74.00	25.96
7323	21.84	AV	V	34.95	6.22	26.40	36.61	54.00	17.39
1506	32.35	PK	V	24.11	2.67	26.34	32.79	74.00	41.21
1506	21.57	AV	V	24.11	2.67	26.34	22.01	54.00	31.99
3022	34.39	PK	V	24.32	3.46	26.42	35.75	74.00	38.25
3022	23.87	AV	V	24.32	3.46	26.42	25.23	54.00	28.77
90.14	50.79	QP	V	8.42	0.55	28.34	31.42	43.50	12.08
152.22	39.81	QP	V	12.73	0.79	28.06	25.27	43.50	18.23
High Channel: 2480 MHz									
2480	63.04	PK	H	23.27	2.99	0.00	89.30	N/A	N/A
2480	52.33	AV	H	23.27	2.99	0.00	78.59	N/A	N/A
2480	65.11	PK	V	23.27	2.99	0.00	91.37	N/A	N/A
2480	54.69	AV	V	23.27	2.99	0.00	80.95	N/A	N/A
2483.5	29.63	PK	V	23.26	2.99	0.00	55.88	74.00	18.12
2483.5	17.31	AV	V	23.26	2.99	0.00	43.56	54.00	10.44
4960	33.54	PK	V	31.27	5.05	26.88	42.98	74.00	31.02
4960	23.39	AV	V	31.27	5.05	26.88	32.83	54.00	21.17
7440	33.35	PK	V	35.18	6.27	26.45	48.35	74.00	25.65
7440	22.2	AV	V	35.18	6.27	26.45	37.20	54.00	16.80
1548	32.83	PK	V	24.18	2.71	26.38	33.34	74.00	40.66
1548	21.27	AV	V	24.18	2.71	26.38	21.78	54.00	32.22
90.14	50.58	QP	V	8.42	0.55	28.34	31.21	43.50	12.29
152.22	39.75	QP	V	12.73	0.79	28.06	25.21	43.50	18.29

EDR Mode ($\pi/4$ -DQPSK):

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2402 MHz									
2402	60.6	PK	H	23.53	3.00	0.00	87.13	N/A	N/A
2402	49.23	AV	H	23.53	3.00	0.00	75.76	N/A	N/A
2402	63.32	PK	V	23.53	3.00	0.00	89.85	N/A	N/A
2402	52.16	AV	V	23.53	3.00	0.00	78.69	N/A	N/A
2390	28.03	PK	V	23.57	3.00	0.00	54.60	74.00	19.40
2390	16.12	AV	V	23.57	3.00	0.00	42.69	54.00	11.31
4804	33.48	PK	V	30.77	5.12	26.87	42.50	74.00	31.50
4804	22.76	AV	V	30.77	5.12	26.87	31.78	54.00	22.22
7206	33.05	PK	V	34.71	6.16	26.35	47.57	74.00	26.43
7206	21.92	AV	V	34.71	6.16	26.35	36.44	54.00	17.56
1462	32.27	PK	V	24.00	2.62	26.37	32.52	74.00	41.48
1462	21.03	AV	V	24.00	2.62	26.37	21.28	54.00	32.72
90.14	50.94	QP	V	8.42	0.55	28.34	31.57	43.50	11.93
152.22	39.81	QP	V	12.73	0.79	28.06	25.27	43.50	18.23
Middle Channel: 2441 MHz									
2441	63.05	PK	H	23.40	3.00	0.00	89.45	N/A	N/A
2441	51.98	AV	H	23.40	3.00	0.00	78.38	N/A	N/A
2441	65.12	PK	V	23.40	3.00	0.00	91.52	N/A	N/A
2441	54.87	AV	V	23.40	3.00	0.00	81.27	N/A	N/A
4882	34.07	PK	V	31.02	5.09	26.87	43.31	74.00	30.69
4882	22.78	AV	V	31.02	5.09	26.87	32.02	54.00	21.98
7323	33.46	PK	V	34.95	6.22	26.40	48.23	74.00	25.77
7323	21.65	AV	V	34.95	6.22	26.40	36.42	54.00	17.58
1506	32.05	PK	V	24.11	2.67	26.34	32.49	74.00	41.51
1506	20.27	AV	V	24.11	2.67	26.34	20.71	54.00	33.29
3022	34.7	PK	V	24.32	3.46	26.42	36.06	74.00	37.94
3022	23.76	AV	V	24.32	3.46	26.42	25.12	54.00	28.88
90.14	50.91	QP	V	8.42	0.55	28.34	31.54	43.50	11.96
152.22	40.23	QP	V	12.73	0.79	28.06	25.69	43.50	17.81
High Channel: 2480 MHz									
2480	63.14	PK	H	23.27	2.99	0.00	89.40	N/A	N/A
2480	51.92	AV	H	23.27	2.99	0.00	78.18	N/A	N/A
2480	65.3	PK	V	23.27	2.99	0.00	91.56	N/A	N/A
2480	54.73	AV	V	23.27	2.99	0.00	80.99	N/A	N/A
2483.5	29	PK	V	23.26	2.99	0.00	55.25	74.00	18.75
2483.5	16.93	AV	V	23.26	2.99	0.00	43.18	54.00	10.82
4960	33.77	PK	V	31.27	5.05	26.88	43.21	74.00	30.79
4960	22.94	AV	V	31.27	5.05	26.88	32.38	54.00	21.62
7440	33.66	PK	V	35.18	6.27	26.45	48.66	74.00	25.34
7440	22.43	AV	V	35.18	6.27	26.45	37.43	54.00	16.57
1548	31.83	PK	V	24.18	2.71	26.38	32.34	74.00	41.66
1548	20.59	AV	V	24.18	2.71	26.38	21.10	54.00	32.90
90.14	50.63	QP	V	8.42	0.55	28.34	31.26	43.50	12.24
152.22	39.88	QP	V	12.73	0.79	28.06	25.34	43.50	18.16

EDR Mode (8-DPSK):

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2402 MHz									
2402	60.72	PK	H	23.53	3.00	0.00	87.25	N/A	N/A
2402	49.72	AV	H	23.53	3.00	0.00	76.25	N/A	N/A
2402	63.38	PK	V	23.53	3.00	0.00	89.91	N/A	N/A
2402	52.29	AV	V	23.53	3.00	0.00	78.82	N/A	N/A
2390	28.53	PK	V	23.57	3.00	0.00	55.10	74.00	18.90
2390	15.7	AV	V	23.57	3.00	0.00	42.27	54.00	11.73
4804	33.39	PK	V	30.77	5.12	26.87	42.41	74.00	31.59
4804	22.85	AV	V	30.77	5.12	26.87	31.87	54.00	22.13
7206	33.23	PK	V	34.71	6.16	26.35	47.75	74.00	26.25
7206	22.05	AV	V	34.71	6.16	26.35	36.57	54.00	17.43
1462	33.26	PK	V	24.00	2.62	26.37	33.51	74.00	40.49
1462	21.52	AV	V	24.00	2.62	26.37	21.77	54.00	32.23
90.14	50.66	QP	V	8.42	0.55	28.34	31.29	43.50	12.21
152.22	40.03	QP	V	12.73	0.79	28.06	25.49	43.50	18.01
Middle Channel: 2441 MHz									
2441	63.31	PK	H	23.40	3.00	0.00	89.71	N/A	N/A
2441	52.14	AV	H	23.40	3.00	0.00	78.54	N/A	N/A
2441	64.77	PK	V	23.40	3.00	0.00	91.17	N/A	N/A
2441	54.18	AV	V	23.40	3.00	0.00	80.58	N/A	N/A
4882	34	PK	V	31.02	5.09	26.87	43.24	74.00	30.76
4882	22.53	AV	V	31.02	5.09	26.87	31.77	54.00	22.23
7323	32.81	PK	V	34.95	6.22	26.40	47.58	74.00	26.42
7323	22.54	AV	V	34.95	6.22	26.40	37.31	54.00	16.69
1506	31.6	PK	V	24.11	2.67	26.34	32.04	74.00	41.96
1506	20.06	AV	V	24.11	2.67	26.34	20.50	54.00	33.50
3022	34.68	PK	V	24.32	3.46	26.42	36.04	74.00	37.96
3022	23.54	AV	V	24.32	3.46	26.42	24.90	54.00	29.10
90.14	50.7	QP	V	8.42	0.55	28.34	31.33	43.50	12.17
152.22	40.2	QP	V	12.73	0.79	28.06	25.66	43.50	17.84
High Channel: 2480 MHz									
2480	62.98	PK	H	23.27	2.99	0.00	89.24	N/A	N/A
2480	51.59	AV	H	23.27	2.99	0.00	77.85	N/A	N/A
2480	64.63	PK	V	23.27	2.99	0.00	90.89	N/A	N/A
2480	54.2	AV	V	23.27	2.99	0.00	80.46	N/A	N/A
2483.5	29.15	PK	V	23.26	2.99	0.00	55.40	74.00	18.60
2483.5	17.4	AV	V	23.26	2.99	0.00	43.65	54.00	10.35
4960	33.82	PK	V	31.27	5.05	26.88	43.26	74.00	30.74
4960	23.21	AV	V	31.27	5.05	26.88	32.65	54.00	21.35
7440	33.81	PK	V	35.18	6.27	26.45	48.81	74.00	25.19
7440	22.28	AV	V	35.18	6.27	26.45	37.28	54.00	16.72
1548	31.77	PK	V	24.18	2.71	26.38	32.28	74.00	41.72
1548	20.11	AV	V	24.18	2.71	26.38	20.62	54.00	33.38
90.14	50.77	QP	V	8.42	0.55	28.34	31.40	43.50	12.10
152.22	39.68	QP	V	12.73	0.79	28.06	25.14	43.50	18.36

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