



FCC PART 15.247 TEST REPORT

For

INGENICO

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FCC ID: XKB-L2500CLBT

Report Type: Original Report	Product Name: Link/2500
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Report Number: <u>RXM160831052A</u>	
Report Date: <u>2016-11-12</u>	
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The **INGENICO**'s product, model number: **Link/2500 CL/BT (FCC ID: XKB-L2500CLBT)** (the "EUT") in this report was a **Link/2500**, which was measured approximately: 12.9 cm (L) x 7.0 cm (W) x 1.7 cm (H), rated input voltage: DC3.7V rechargeable Li-ion battery or DC5V charging from adapter.

Adapter Information:

Model : PSAI05R-050QL6

PART NO: 192049533

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

OUTPUT: DC5V, 1.0A MAX

**All measurement and test data in this report was gathered from final production sample, serial number: 160831052 (assigned by the BACL, Chengdu). It may have deviation from any other sample. The EUT supplied by the applicant was received on 2016-08-31, 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, B 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 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-L2500CLBT.

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 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 uncertainty of any RF tests which use conducted method measurement is ± 3.17 dB, the uncertainty of any radiation on emissions measurement is:

30M~200MHz: ± 4.7 dB;

200M~1GHz: ± 6.0 dB;

1G~6GHz: ± 5.13 dB;

6G~25GHz: ± 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 5040, HuiLongWan Plaza, No. 1, ShaWan Road, JinNiu District, ChengDu, 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.

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.

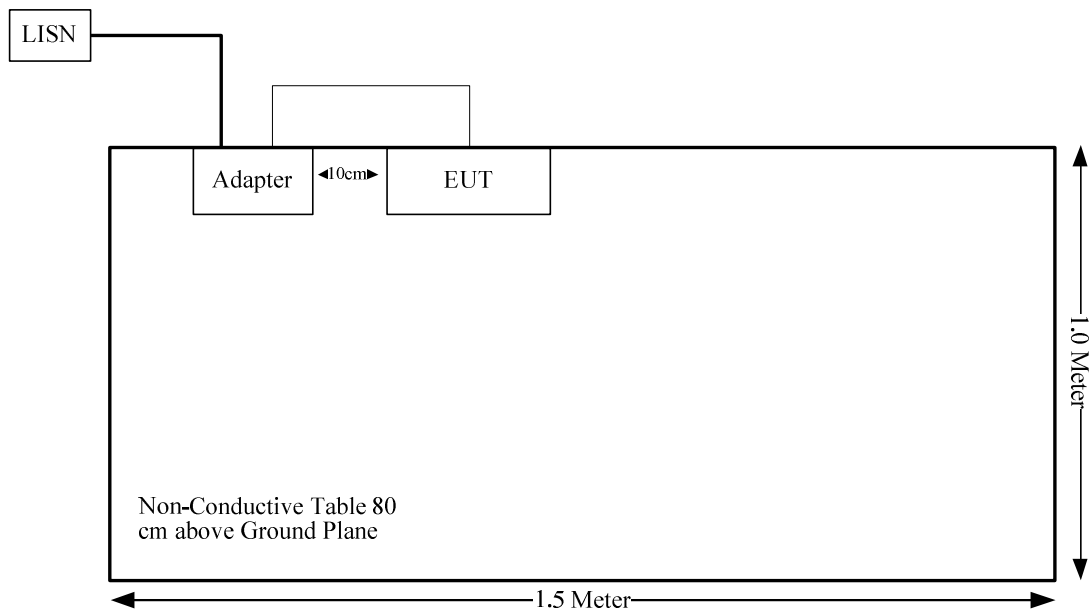
Equipment Modifications

No modification was made to the EUT.

External Cable

Cable Description	Shielding Type	Ferrite Core	Length (cm)	From Port	To
USB Cable	No	No	1.08	Adapter	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)	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 are remove the 2G/3G and Wifi related materials, related circuit and antenna components, SIM card slot , RF cable and depress the Audio function, what's more, battery capacity also change from 1250mAh (model:P0750-LF) to 630mAh (model:EVE285639). The test items Please refer to the report: RXM160823052-00C, which was granted on 2016-09-27 by Bay Area Compliance Laboratories Corp. (Dongguan).

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 v05r02:

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 2.2 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

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 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_{cispr} of Table 1, then:

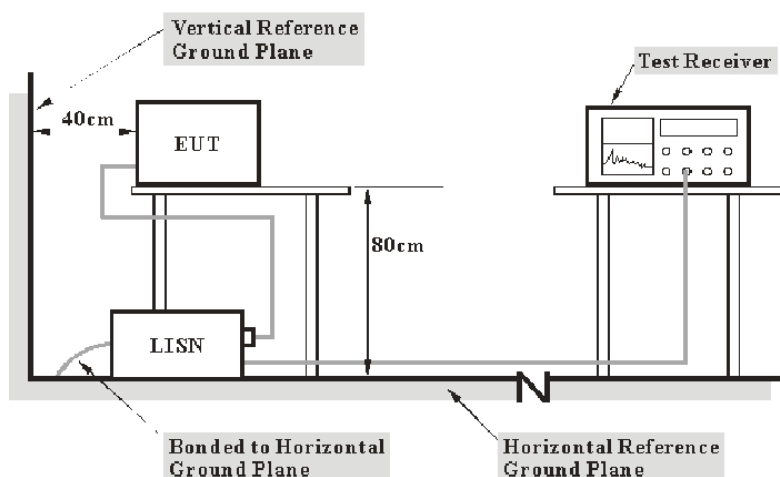
- compliance is deemed to occur if no measured disturbance level, increased by $(U_{lab} - U_{cispr})$, exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by $(U_{lab} - U_{cispr})$, exceeds the disturbance limit.

Based on CISPR 16-4-2:2011, measurement uncertainty of conducted disturbance at mains port using AMN at Bay Area Compliance Laboratories Corp. (Chengdu) is ± 3.17 dB (150 kHz to 30 MHz).

Table 1 – Values of U_{cispr}

Measurement	U_{cispr}
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 adapter was connected to a 120 V/60 Hz AC 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	2015-12-02	2016-12-01
Rohde & Schwarz	L.I.S.N.	ENV216	3560.6550.06	2015-12-02	2016-12-01
N/A	Conducted Cable	NO.5	N/A	2015-11-10	2016-11-09
Rohde & Schwarz	PULSE LIMITER	ESH3Z2	357.8810.52	2016-10-31	2017-10-30
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A

* **Statement of Traceability:** BAACL (Chengdu) attested 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

Test Data

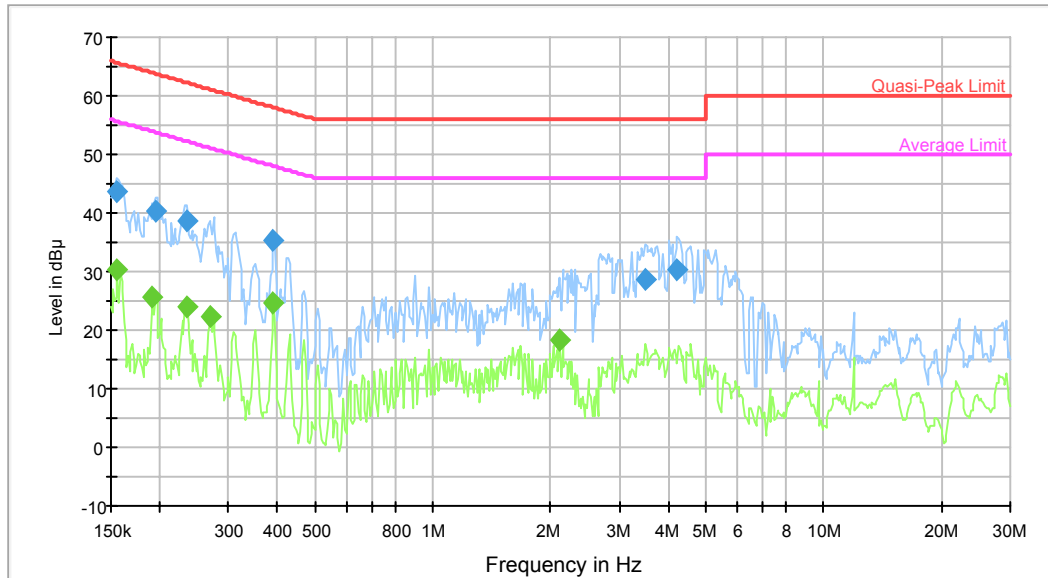
Environmental Conditions

Temperature:	30 °C
Relative Humidity:	54 %
ATM Pressure:	101 kPa

The testing was performed by Lorin Bian on 2016-10-25.

Test Mode: Transmitting

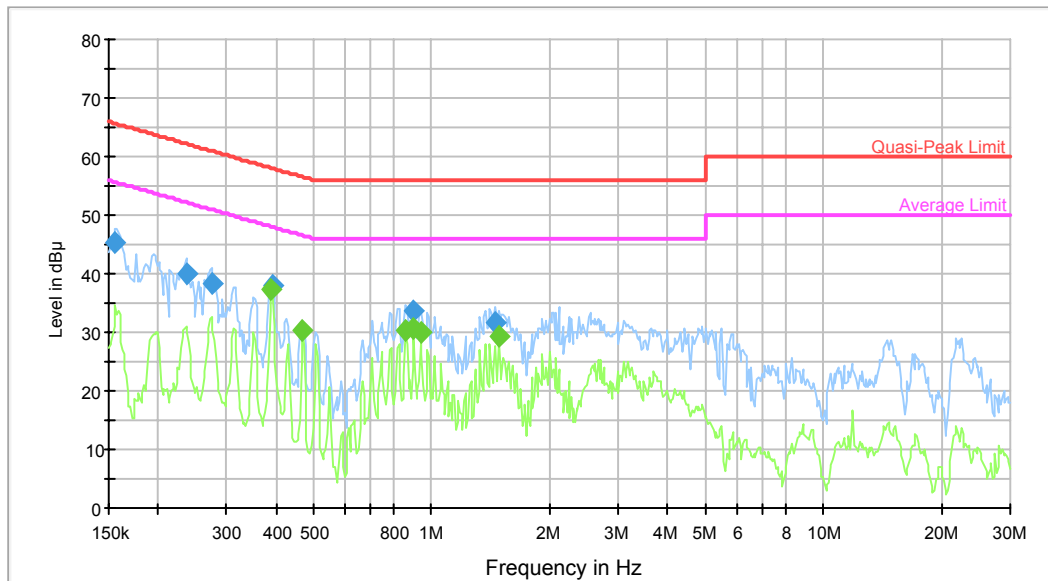
AC120 V, 60 Hz, Line:



Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.156097	43.8	9.000	L1	19.73	21.9	65.7	Compliance
0.195114	40.3	9.000	L1	19.67	23.5	63.8	Compliance
0.234359	38.7	9.000	L1	19.67	23.6	62.3	Compliance
0.390261	35.2	9.000	L1	19.75	22.9	58.1	Compliance
3.491417	28.8	9.000	L1	19.71	27.2	56.0	Compliance
4.227217	30.5	9.000	L1	19.72	25.5	56.0	Compliance

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.156097	30.4	9.000	L1	19.73	25.3	55.7	Compliance
0.192030	25.6	9.000	L1	19.68	28.4	54.0	Compliance
0.234359	23.8	9.000	L1	19.67	28.5	52.3	Compliance
0.270502	22.3	9.000	L1	19.69	28.8	51.1	Compliance
0.390261	24.7	9.000	L1	19.75	23.4	48.1	Compliance
2.113432	18.3	9.000	L1	19.77	27.7	46.0	Compliance

AC120 V, 60 Hz, Neutral:



Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.156097	45.4	9.000	N	19.71	20.3	65.7	Compliance
0.236234	39.9	9.000	N	19.6	22.3	62.2	Compliance
0.274848	38.4	9.000	N	19.61	22.6	61.0	Compliance
0.393383	37.9	9.000	N	19.63	20.1	58.0	Compliance
0.900972	33.8	9.000	N	19.65	22.2	56.0	Compliance
1.453260	31.6	9.000	N	19.65	24.4	56.0	Compliance

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.390261	37.2	9.000	N	19.63	10.9	48.1	Compliance
0.468757	30.5	9.000	N	19.63	16.0	46.5	Compliance
0.858911	30.4	9.000	N	19.64	15.6	46.0	Compliance
0.900972	30.7	9.000	N	19.65	15.3	46.0	Compliance
0.937592	30.0	9.000	N	19.65	16.0	46.0	Compliance
1.488418	29.2	9.000	N	19.65	16.8	46.0	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 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_{cispr} of Table 1, 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 $(U_{lab} - U_{cispr})$, 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. (Chengdu) is:

30M~200MHz: ±4.7 dB ;

200M~1GHz: ±6.0 dB ;

1G~6GHz: ±5.13dB;

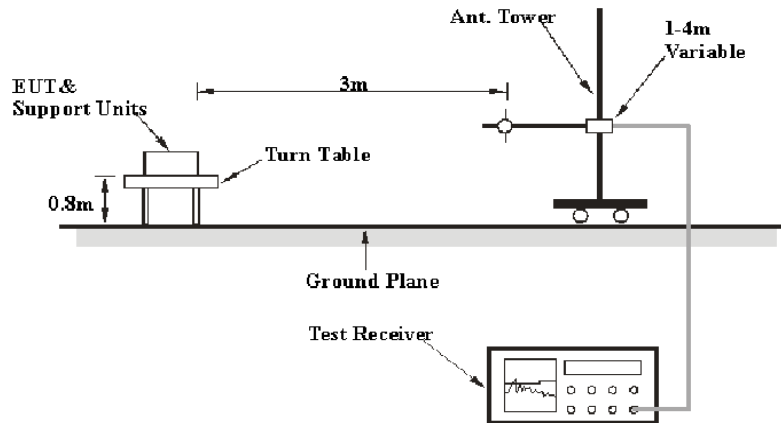
6G~25GHz: ±5.47 dB;

Table 1 – Values of U_{cispr}

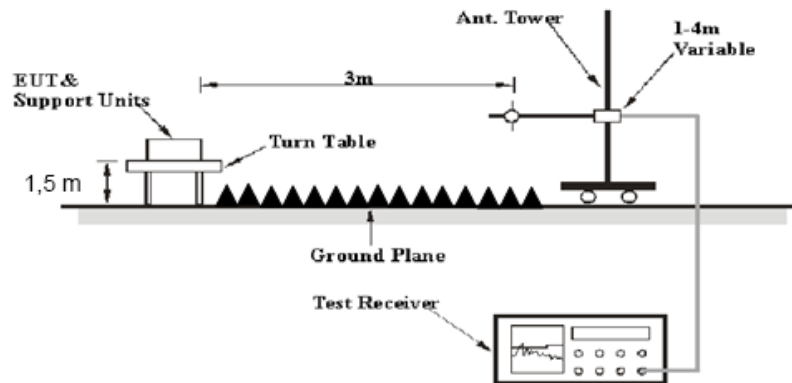
Measurement	U_{cispr}
Radiated disturbance (electric field strength at an OATS or in a SAC) (30 MHz to 1000 MHz)	6.3 dB
Radiated disturbance (electric field strength in a FAR) (1 GHz to 6 GHz)	5.2 dB
Radiated disturbance (electric field strength in a FAR) (6 GHz to 18 GHz)	5.5 dB

EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emission tests were performed in the 3 meters 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.

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	2015-12-02	2016-12-01
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2015-12-02	2016-12-01
Sunol Sciences	Broadband Antenna	JB3	A101808	2016-04-10	2019-04-09
Rohde & Schwarz	Spectrum Analyzer	FSEM30	100018	2015-12-02	2016-12-01
ETS	Horn Antenna	3115	003-6076	2015-12-02	2016-12-01
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	2015-12-02	2016-12-01
EMCT	Semi-Anechoic Chamber	966	N/A	2015-04-24	2018-04-23
N/A	RF Cable (below 1GHz)	NO.1	N/A	2015-11-10	2016-11-09
N/A	RF Cable (below 1GHz)	NO.4	N/A	2015-11-10	2016-11-09
N/A	RF Cable (above 1GHz)	NO.2	N/A	2015-11-10	2016-11-09

* **Statement of Traceability:** BACL (Chengdu) attested that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

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:	25.8 °C
Relative Humidity:	38 %
ATM Pressure:	101.1 kPa

The testing was performed by Lorin Bian on 2016-10-26.

Test mode: Transmitting

30MHz- 25 GHz:

BDR Mode (GFSK):

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	FCC 15.247	
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB)				Limit (dBµV/m)	Margin (dB)
Low Channel: 2402 MHz									
2402	63.92	PK	H	23.53	3.00	0.00	90.45	N/A	N/A
2402	53.49	AV	H	23.53	3.00	0.00	80.02	N/A	N/A
2402	64.17	PK	V	23.53	3.00	0.00	90.70	N/A	N/A
2402	54.01	AV	V	23.53	3.00	0.00	80.54	N/A	N/A
2400	26.85	PK	V	23.54	3.00	0.00	53.39	74.00	20.61
2400	14.23	AV	V	23.54	3.00	0.00	40.77	54.00	13.23
4804	33.46	PK	V	30.77	5.12	26.87	42.48	74.00	31.52
4804	22.08	AV	V	30.77	5.12	26.87	31.10	54.00	22.90
7206	32.63	PK	V	34.71	6.16	26.35	47.15	74.00	26.85
7206	21.29	AV	V	34.71	6.16	26.35	35.81	54.00	18.19
3435	35.5	PK	V	26.64	4.08	26.57	39.65	74.00	34.35
3435	23.09	AV	V	26.64	4.08	26.57	27.24	54.00	26.76
197.81	49.66	QP	H	13.15	0.92	27.77	35.96	43.50	7.54
229.82	54.03	QP	H	11.89	1.16	27.58	39.50	46.00	6.50
Middle Channel: 2441 MHz									
2441	66.28	PK	H	23.40	3.00	0.00	92.68	N/A	N/A
2441	56.75	AV	H	23.40	3.00	0.00	83.15	N/A	N/A
2441	67.42	PK	V	23.40	3.00	0.00	93.82	N/A	N/A
2441	57.08	AV	V	23.40	3.00	0.00	83.48	N/A	N/A
4882	34.05	PK	V	31.02	5.09	26.87	43.29	74.00	30.71
4882	21.82	AV	V	31.02	5.09	26.87	31.06	54.00	22.94
7323	33.64	PK	V	34.95	6.22	26.40	48.41	74.00	25.59
7323	22.16	AV	V	34.95	6.22	26.40	36.93	54.00	17.07
3048	35.71	PK	V	24.47	3.50	26.43	37.25	74.00	36.75
3048	23.58	AV	V	24.47	3.50	26.43	25.12	54.00	28.88
3190	32.91	PK	V	25.26	3.72	26.48	35.41	74.00	38.59
3190	21.25	AV	V	25.26	3.72	26.48	23.75	54.00	30.25
197.81	48.77	QP	H	13.15	0.92	27.77	35.07	43.50	8.43
229.82	53.69	QP	H	11.89	1.16	27.58	39.16	46.00	6.84
High Channel: 2480 MHz									
2480	67.4	PK	H	23.27	2.99	0.00	93.66	N/A	N/A
2480	57.46	AV	H	23.27	2.99	0.00	83.72	N/A	N/A
2480	68.63	PK	V	23.27	2.99	0.00	94.89	N/A	N/A
2480	58.69	AV	V	23.27	2.99	0.00	84.95	N/A	N/A
2483.5	26.14	PK	V	23.26	2.99	0.00	52.39	74.00	21.61
2483.5	14.06	AV	V	23.26	2.99	0.00	40.31	54.00	13.69
4960	34.38	PK	V	31.27	5.05	26.88	43.82	74.00	30.18
4960	23.4	AV	V	31.27	5.05	26.88	32.84	54.00	21.16
7440	33.47	PK	V	35.18	6.27	26.45	48.47	74.00	25.53
7440	22.24	AV	V	35.18	6.27	26.45	37.24	54.00	16.76
3120	35.82	PK	V	24.87	3.61	26.45	37.85	74.00	36.15
3120	23.5	AV	V	24.87	3.61	26.45	25.53	54.00	28.47
197.81	48.77	QP	H	13.15	0.92	27.77	35.07	43.50	8.43
229.82	54.39	QP	H	11.89	1.16	27.58	39.86	46.00	6.14

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

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	FCC 15.247	
	Reading (dB μ V)	Detector	Polar (H/V)	Factor (dB)				Limit (dB μ V/m)	Margin (dB)
Low Channel: 2402 MHz									
2402	64.19	PK	H	23.53	3.00	0.00	90.72	N/A	N/A
2402	54.94	AV	H	23.53	3.00	0.00	81.47	N/A	N/A
2402	67.92	PK	V	23.53	3.00	0.00	94.45	N/A	N/A
2402	57.47	AV	V	23.53	3.00	0.00	84.00	N/A	N/A
2400	29.66	PK	V	23.54	3.00	0.00	56.20	74.00	17.80
2400	15.97	AV	V	23.54	3.00	0.00	42.51	54.00	11.49
4804	33.52	PK	V	30.77	5.12	26.87	42.54	74.00	31.46
4804	20.97	AV	V	30.77	5.12	26.87	29.99	54.00	24.01
7206	31.08	PK	V	34.71	6.16	26.35	45.60	74.00	28.40
7206	20.59	AV	V	34.71	6.16	26.35	35.11	54.00	18.89
3792	35.91	PK	V	28.17	4.61	26.57	42.12	74.00	31.88
3792	23.06	AV	V	28.17	4.61	26.57	29.27	54.00	24.73
197.81	47.49	QP	H	13.15	0.92	27.77	33.79	43.50	9.71
229.82	53.71	QP	H	11.89	1.16	27.58	39.18	46.00	6.82
Middle Channel: 2441 MHz									
2441	64.48	PK	H	23.40	3.00	0.00	90.88	N/A	N/A
2441	52.42	AV	H	23.40	3.00	0.00	78.82	N/A	N/A
2441	66.79	PK	V	23.40	3.00	0.00	93.19	N/A	N/A
2441	54.86	AV	V	23.40	3.00	0.00	81.26	N/A	N/A
4882	34.53	PK	V	31.02	5.09	26.87	43.77	74.00	30.23
4882	22.75	AV	V	31.02	5.09	26.87	31.99	54.00	22.01
7323	32.08	PK	V	34.95	6.22	26.40	46.85	74.00	27.15
7323	21.53	AV	V	34.95	6.22	26.40	36.30	54.00	17.70
2945	31.81	PK	V	24.09	3.38	26.46	32.82	74.00	41.18
2945	20.49	AV	V	24.09	3.38	26.46	21.50	54.00	32.50
3520	35.74	PK	V	27.08	4.21	26.59	40.44	74.00	33.56
3520	23.26	AV	V	27.08	4.21	26.59	27.96	54.00	26.04
197.81	46.79	QP	H	13.15	0.92	27.77	33.09	43.50	10.41
229.82	54.69	QP	H	11.89	1.16	27.58	40.16	46.00	5.84
High Channel: 2480 MHz									
2480	64.44	PK	H	23.27	2.99	0.00	90.70	N/A	N/A
2480	52.48	AV	H	23.27	2.99	0.00	78.74	N/A	N/A
2480	66.81	PK	V	23.27	2.99	0.00	93.07	N/A	N/A
2480	54.74	AV	V	23.27	2.99	0.00	81.00	N/A	N/A
2483.5	34.72	PK	V	23.26	2.99	0.00	60.97	74.00	13.03
2483.5	22.6	AV	V	23.26	2.99	0.00	48.85	54.00	5.15
4960	31.91	PK	V	31.27	5.05	26.88	41.35	74.00	32.65
4960	21.43	AV	V	31.27	5.05	26.88	30.87	54.00	23.13
7440	31.77	PK	V	35.18	6.27	26.45	46.77	74.00	27.23
7440	20.59	AV	V	35.18	6.27	26.45	35.59	54.00	18.41
3138	35.64	PK	V	24.97	3.64	26.46	37.79	74.00	36.21
3138	23.38	AV	V	24.97	3.64	26.46	25.53	54.00	28.47
197.81	47.55	QP	H	13.15	0.92	27.77	33.85	43.50	9.65
229.82	53.68	QP	H	11.89	1.16	27.58	39.15	46.00	6.85

EDR Mode (8-DPSK):

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	FCC 15.247	
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB)				Limit (dBµV/m)	Margin (dB)
Low Channel: 2402 MHz									
2402	62.6	PK	H	23.53	3.00	0.00	89.13	N/A	N/A
2402	50.12	AV	H	23.53	3.00	0.00	76.65	N/A	N/A
2402	64.94	PK	V	23.53	3.00	0.00	91.47	N/A	N/A
2402	52.96	AV	V	23.53	3.00	0.00	79.49	N/A	N/A
2400	29.2	PK	V	23.54	3.00	0.00	55.74	74.00	18.26
2400	14.26	AV	V	23.54	3.00	0.00	40.80	54.00	13.20
4804	32.93	PK	V	30.77	5.12	26.87	41.95	74.00	32.05
4804	21.61	AV	V	30.77	5.12	26.87	30.63	54.00	23.37
7206	32.37	PK	V	34.71	6.16	26.35	46.89	74.00	27.11
7206	21.24	AV	V	34.71	6.16	26.35	35.76	54.00	18.24
3085	35.36	PK	V	24.68	3.56	26.44	37.16	74.00	36.84
3085	23.54	AV	V	24.68	3.56	26.44	25.34	54.00	28.66
197.81	48.52	QP	H	13.15	0.92	27.77	34.82	43.50	8.68
229.82	52.64	QP	H	11.89	1.16	27.58	38.11	46.00	7.89
Middle Channel: 2441 MHz									
2441	65.51	PK	H	23.40	3.00	0.00	91.91	N/A	N/A
2441	54.69	AV	H	23.40	3.00	0.00	81.09	N/A	N/A
2441	67.05	PK	V	23.40	3.00	0.00	93.45	N/A	N/A
2441	55.42	AV	V	23.40	3.00	0.00	81.82	N/A	N/A
4882	34.4	PK	V	31.02	5.09	26.87	43.64	74.00	30.36
4882	21.93	AV	V	31.02	5.09	26.87	31.17	54.00	22.83
7323	32.67	PK	V	34.95	6.22	26.40	47.44	74.00	26.56
7323	21.41	AV	V	34.95	6.22	26.40	36.18	54.00	17.82
3208	32.34	PK	V	25.36	3.74	26.48	34.96	74.00	39.04
3208	20.86	AV	V	25.36	3.74	26.48	23.48	54.00	30.52
3310	35.73	PK	V	25.94	3.90	26.52	39.05	74.00	34.95
3310	23	AV	V	25.94	3.90	26.52	26.32	54.00	27.68
197.81	47.51	QP	H	13.15	0.92	27.77	33.81	43.50	9.69
229.82	53.69	QP	H	11.89	1.16	27.58	39.16	46.00	6.84
High Channel: 2480 MHz									
2480	65.83	PK	H	23.27	2.99	0.00	92.09	N/A	N/A
2480	53.7	AV	H	23.27	2.99	0.00	79.96	N/A	N/A
2480	68.85	PK	V	23.27	2.99	0.00	95.11	N/A	N/A
2480	56.89	AV	V	23.27	2.99	0.00	83.15	N/A	N/A
2483.5	26.53	PK	V	23.26	2.99	0.00	52.78	74.00	21.22
2483.5	14.55	AV	V	23.26	2.99	0.00	40.80	54.00	13.20
4960	36	PK	V	31.27	5.05	26.88	45.44	74.00	28.56
4960	24.13	AV	V	31.27	5.05	26.88	33.57	54.00	20.43
7440	33.29	PK	V	35.18	6.27	26.45	48.29	74.00	25.71
7440	22.84	AV	V	35.18	6.27	26.45	37.84	54.00	16.16
3080	35.58	PK	V	24.65	3.55	26.44	37.34	74.00	36.66
3080	23.25	AV	V	24.65	3.55	26.44	25.01	54.00	28.99
197.81	47.88	QP	H	13.15	0.92	27.77	34.18	43.50	9.32
229.82	54.27	QP	H	11.89	1.16	27.58	39.74	46.00	6.26

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