FCC TEST REPORT
for
Shandong Welltek Petroleum Equipment CO., LTD.

Parameter Calibration Instrument
Model No.: TG-D

Prepared for	:	Shandong Welltek Petroleum Equipment CO., LTD.
Address	:	Yulan Road, No. 618, High and New Technology Industry Development Zone, Qufu City, Shandong Province, China

Prepared By	:	Shenzhen Anbotek Compliance Laboratory Limited
Address	:	1/F., Building 1, SEC Industrial Park, No.0409 Qianhai Road, Nanshan District, Shenzhen, Guangdong, China Tel: (86) 755-26066544 Fax: (86) 755-26014772

Report Number	:	R011412290E
Date of Test	:	Dec. 16, 2014~ Mar. 26, 2015
Date of Report	:	Mar. 27, 2015

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Test Report

TEST REPORT

Applicant	:	Shandong Welltek Petroleum Equipment CO., LTD.
Manufacturer	:	Shandong Welltek Petroleum Equipment CO., LTD.
EUT	:	Parameter Calibration Instrument
Model No.	:	TG-D
Serial No.	:	N.A.
Trade Mark	:	WELLTEK
Rating	:	DC 7.2V, 200mA

Measurement Procedure Used:
FCC Part15 Subpart C, Paragraph 15.247

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part 15 Subpart C requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Test : Dec. 16, 2014~ Mar. 26, 2015

Prepared by : Kebo Zhang
(Tested Engineer / Kebo Zhang)

Reviewer : Amy Ding
(Project Manager / Amy Ding)

Approved & Authorized Signer : Tom Chen
(Manager / Tom Chen)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	:	Parameter Calibration Instrument
Model Number	:	TG-D
Test Power Supply	:	AC 120V, 60Hz for adapter / DC 7.2V
RF Transmission Frequency	:	Zigbee: 2405-2480MHz
No. of Channels	:	16
Channel Space	:	5MHz
Modulation	:	DSSS
Antenna Gain:	:	0 dBi
Applicant	:	Shandong Welltek Petroleum Equipment CO., LTD.
Address	:	Yulan Road, No. 618, High and New Technology Industry Development Zone, Qufu City, Shandong Province, China
Manufacturer	:	Shandong Welltek Petroleum Equipment CO., LTD.
Address	:	Yulan Road, No. 618, High and New Technology Industry Development Zone, Qufu City, Shandong Province, China
Factory	:	Shandong Welltek Petroleum Equipment CO., LTD.
Address	:	Yulan Road, No. 618, High and New Technology Industry Development Zone, Qufu City, Shandong Province, China
Date of receipt	:	Dec. 08, 2014
Date of Test	:	Dec. 16, 2014~ Mar. 26, 2015

1.2. Auxiliary Equipment Used during Test

N/A

1.3. Description of Test Facility

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

CNAS - LAB Code: L3503
Shenzhen Anbotek Compliance Laboratory Limited., Laboratory has been assessed and in compliance with CNAS/CL01: 2006 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

FCC-Registration No.: 752021
Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registed and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 752021, July 10, 2013.

IC-Registration No.: 8058A-1
Shenzhen Anbotek Compliance Laboratory Limited., EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration 8058A, February 22, 2013.

Test Location
All Emissions tests were performed at
Shenzhen Anbotek Compliance Laboratory Limited. at 1/F., Building 1, SEC Industrial Park, No.0409 Qianhai Road, Nanshan District, Shenzhen, Guangdong, China

1.4. Measurement Uncertainty

Radiation Uncertainty	:	Ur = 4.1 dB (Horizontal) Ur = 4.3 dB (Vertical)
Conduction Uncertainty	:	Uc = 3.4dB

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4: 2009 and FCC Part 15, Paragraph 15.247.

2.1. Summary of Test Results

The EUT has been tested according to the following specifications:

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.107, 15.207	Conducted Emission Test	PASS	Complies
FCC Part 15, Paragraph 15.247(b)(1)	Peak Output Power	PASS	Complies
FCC Part 15, Paragraph 15.247(a)(2)	6dB Bandwidth	PASS	Complies
FCC Part 15, Paragraph 15.247(c)	100kHz Bandwidth of Frequency Band Edges	PASS	Complies
FCC Part 15, Paragraph 15.209(a)(f)	Spurious Emission	PASS	Complies
FCC Part 15, Paragraph 15.247(a)(1)	Frequency Separation	-	N/A
FCC Part 15, Paragraph 15.247(a)(1)(iii)	Number of Hopping Frequency	-	N/A
FCC Part 15, Paragraph 15.247(a)(1)(iii)	Time of Occupancy	-	N/A
FCC Part 15, Paragraph 15.247(c)	Peak Power Density	PASS	Complies

2.2. Description of Test Modes

The EUT has been tested under operating condition.
Software used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2405	7	2435	13	2465
2	2410	8	2440	14	2470
3	2415	9	2445	15	2475
4	2420	10	2450	16	2480
5	2425	11	2455	--	--
6	2430	12	2460		

Channel 1(2405MHz), Channel 8(2440MHz) and Channel 16(2480MHz) are chosen for the final testing.

3. POWER LINE CONDUCTED MEASUREMENT

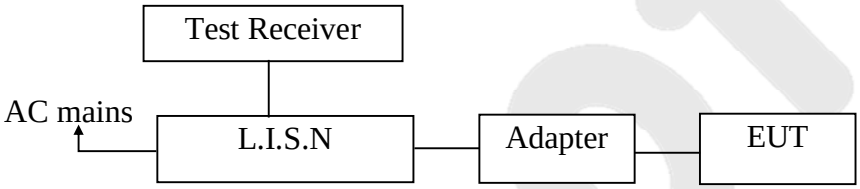
3.1. Test Equipment

The following test equipments are used during the power line conducted measurement:

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Two-Line V-network	Rohde & Schwarz	ENV216	100055	Apr. 22, 2014	1 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Apr. 22, 2014	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Apr. 22, 2014	1 Year

3.2. Block Diagram of Test Setup

3.2.1. Block diagram of connection between the EUT and simulators



3.3. Power Line Conducted Emission Measurement Limits (FCC Part 15 Class B)

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.4. Configuration of EUT on Measurement

The following equipments are installed on power line conducted emission measurement to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turn on the power of all equipment.

3.5.3. Let the EUT work in test mode (Charging to adapter) and measure it.

3.6. Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC ANSI C63.4-2009 on Conducted Emission Measurement.

The bandwidth of test receiver (ESCI) set at 9KHz.

The frequency range from 150KHz to 30MHz is checked.

The test result are reported on Section 3.7.

3.7. Power Line Conducted Emission Measurement Results

PASS.

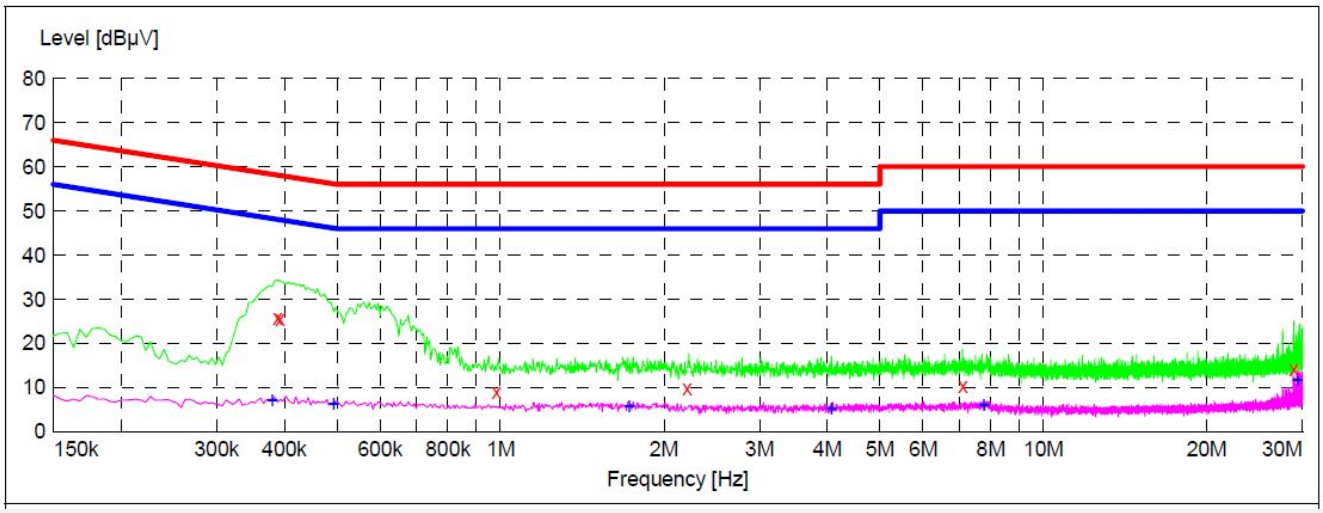
The frequency range from 150KHz to 30 MHz is investigated.

The test curves are shown in the following pages.

CONDUCTED EMISSION TEST DATA

Test Site:	1# Shielded Room
Operating Condition:	Charging to adapter
Test Specification:	AC 120V, 60Hz for adapter
Comment:	L
	Tem:25℃ Hum:50%

SCAN TABLE: "Voltage(150K~30M)FIN"
Short Description: 150K-30M Disturbance Voltages



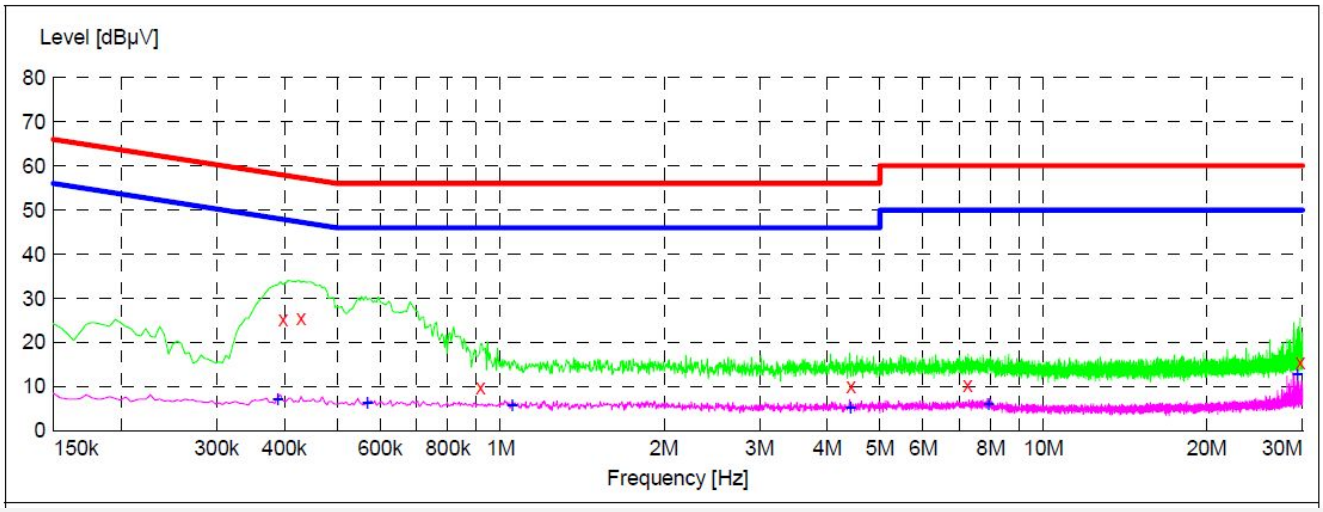
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.388500	25.80	20.1	58	32.3	QP	L1	GND
0.393000	25.70	20.1	58	32.3	QP	L1	GND
0.982500	9.00	20.2	56	47.0	QP	L1	GND
2.206000	9.90	20.3	56	46.1	QP	L1	GND
7.106500	10.50	20.5	60	49.5	QP	L1	GND
28.931500	14.20	20.9	60	45.8	QP	L1	GND

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.379500	7.20	20.1	48	41.1	AV	L1	GND
0.492000	6.40	20.1	46	39.7	AV	L1	GND
1.724500	5.80	20.3	46	40.2	AV	L1	GND
4.064500	5.30	20.5	46	40.7	AV	L1	GND
7.763500	6.00	20.5	50	44.0	AV	L1	GND
29.363500	11.70	20.9	50	38.3	AV	L1	GND

CONDUCTED EMISSION TEST DATA

Test Site:	1# Shielded Room
Operating Condition:	Charging to adapter
Test Specification:	AC 120V, 60Hz for adapter
Comment:	N
	Tem:25℃ Hum:50%

SCAN TABLE: "Voltage(150K~30M)FIN"
Short Description: 150K-30M Disturbance Voltages

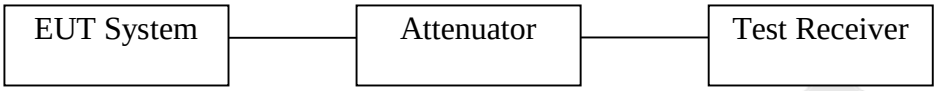


Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.397500	25.30	20.1	58	32.6	QP	N	GND
0.429000	25.60	20.1	57	31.7	QP	N	GND
0.919500	9.80	20.1	56	46.2	QP	N	GND
4.424500	10.10	20.5	56	45.9	QP	N	GND
7.241500	10.40	20.5	60	49.6	QP	N	GND
29.705500	15.50	20.9	60	44.5	QP	N	GND

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.388500	7.10	20.1	48	41.0	AV	N	GND
0.568500	6.40	20.1	46	39.6	AV	N	GND
1.049500	5.70	20.2	46	40.3	AV	N	GND
4.411000	5.30	20.5	46	40.7	AV	N	GND
7.907500	6.00	20.5	50	44.0	AV	N	GND
29.363500	12.90	20.9	50	37.1	AV	N	GND

4. FCC Part 15.247 Requirements for DSSS & OFDM Modulation

4.1 Test Setup



4.2 6dB Bandwidth

a. Limit

For the direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz.

b.Test Procedure

1. Place the EUT on the table and set it in the transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as:
   RBW = 100kHz, VBW≥3*RBW =300kHz,
   Detector= Peak
   Trace mode= Max hold.
   Sweep- auto couple.
4. Mark the peak frequency and –6dB (upper and lower) frequency.
5. Repeat until all the rest channels are investigated.

c. Test Setup See 4.1

d. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analysis	Agilent	E4407B	US39390582	Aug. 08, 2014	1 Year
2.	Preamplifier	Instruments corporation	EMC011830	980100	Aug. 08, 2014	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESPI	101604	Apr. 22, 2014	1 Year
4.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Apr. 04, 2014	1 Year
5.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Apr. 24, 2014	1 Year
6.	Pre-amplifier	SONOMA	310N	186860	Aug. 08, 2014	1 Year
7.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A

e. Test Results

Pass.

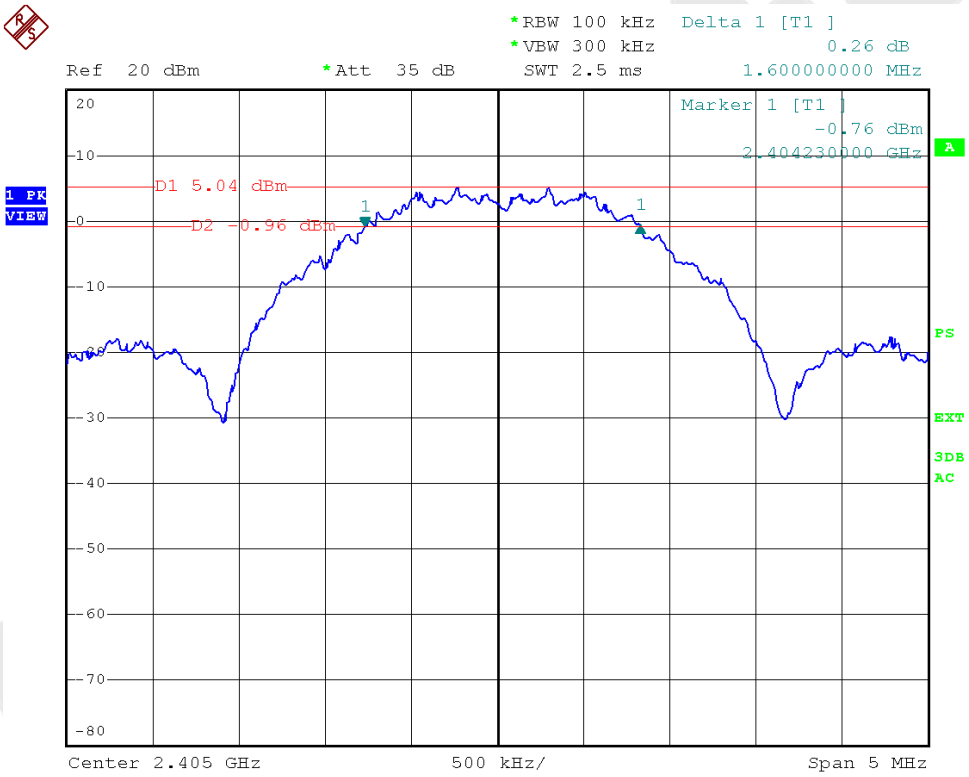
f. Test Data

Test mode: IEEE 802.15.4

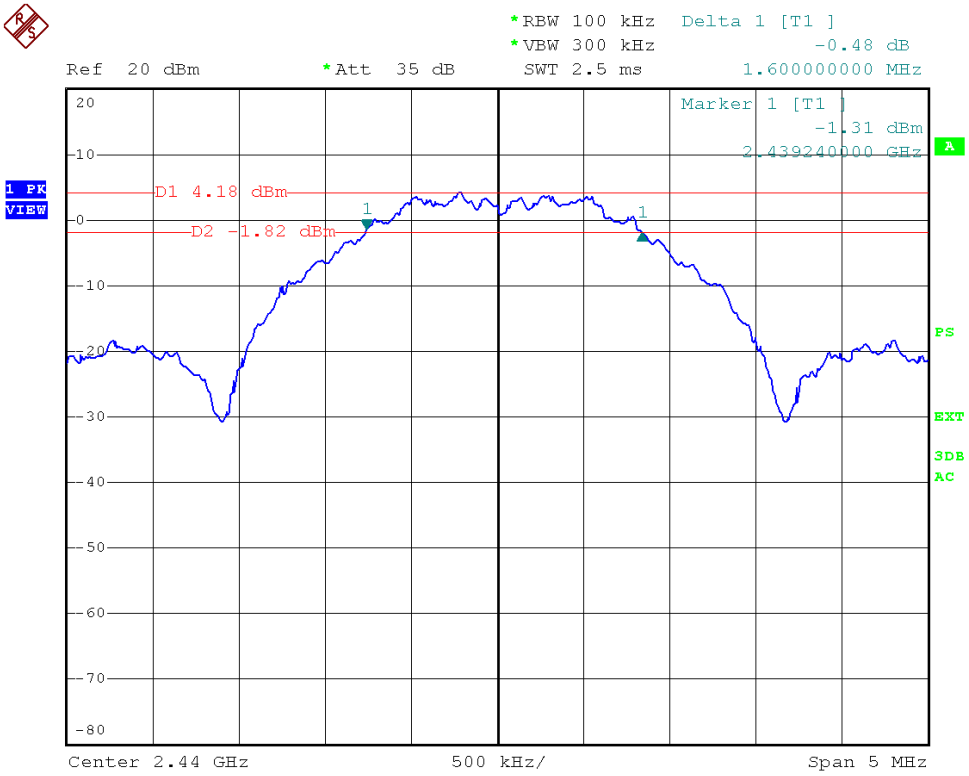
Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Results
Low	2405	1600.00		Pass
Mid	2440	1600.00	>500	Pass
High	2480	1600.00		Pass

Test Plots See the following page.

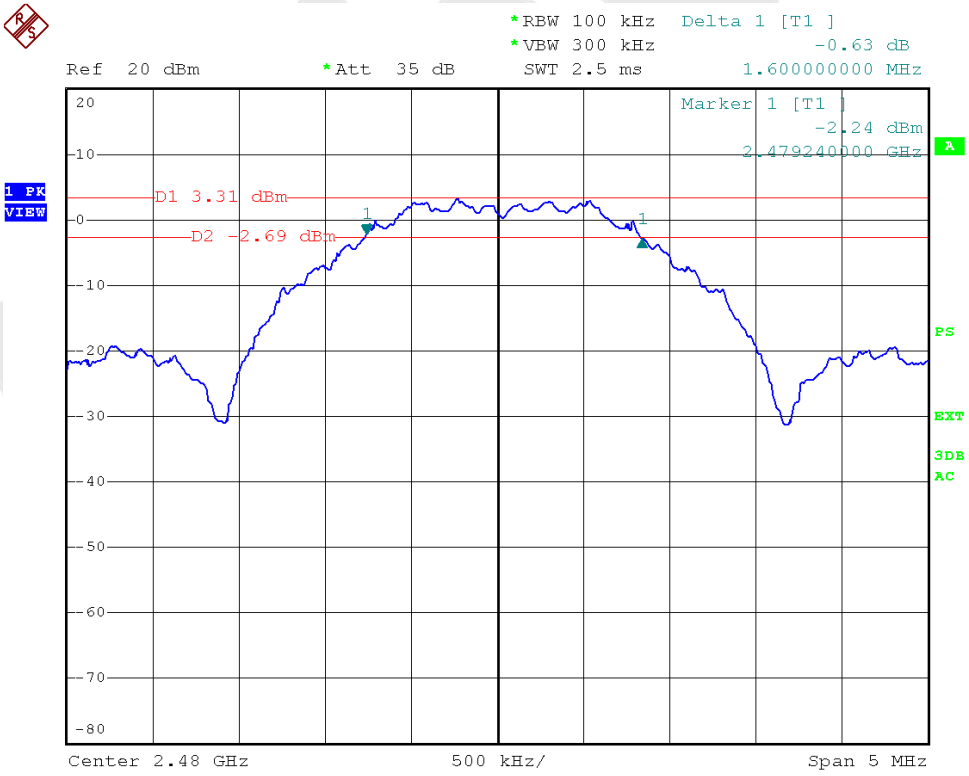
2405MHz:



2440MHz:



2480MHz:

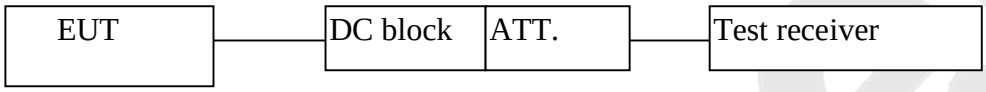


4.3. Maximum Peak output power test

a. Limit

The maximum peak output power of the intentional radiator shall not exceed the following:
1. For systems using digital modulation in the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz: 1 watt (30dBm).
2. Except as shown in paragraphs (b)(3) (i), (ii) and (iii) of this section, if transmitting antenna of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

b. Configuration of Measurement



c. Test Procedure

This test was according the kDB 558074 9.2.2:
1. This procedure may be used when the maximum available RBW of the measurement instrument is great than the DTS bandwidth.
2. Set the RBW = 3 MHz.
3. Set the VBW≥3*RBW = 10 MHz.
4. Set the span≥3*RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some instruments, this may require a manual override to select peak detector). If the instrument does not have a band power function, sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the DTS bandwidth.

d. Test Equipment

Same as the equipment listed in 4.2.

e. Test Results

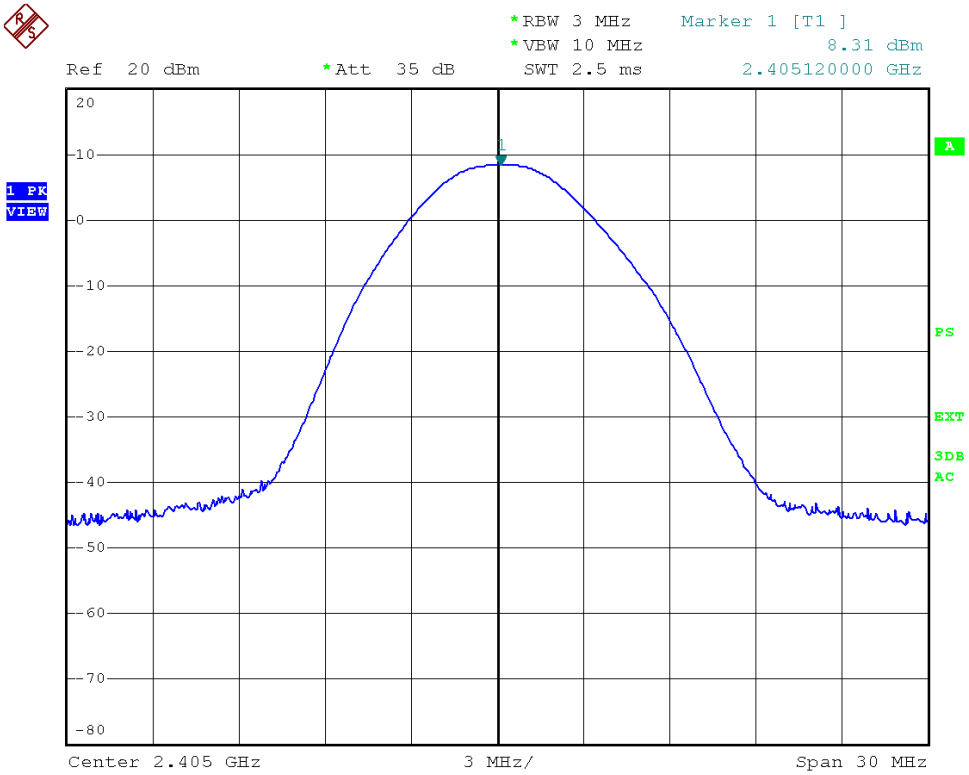
Pass.

f. Test Data

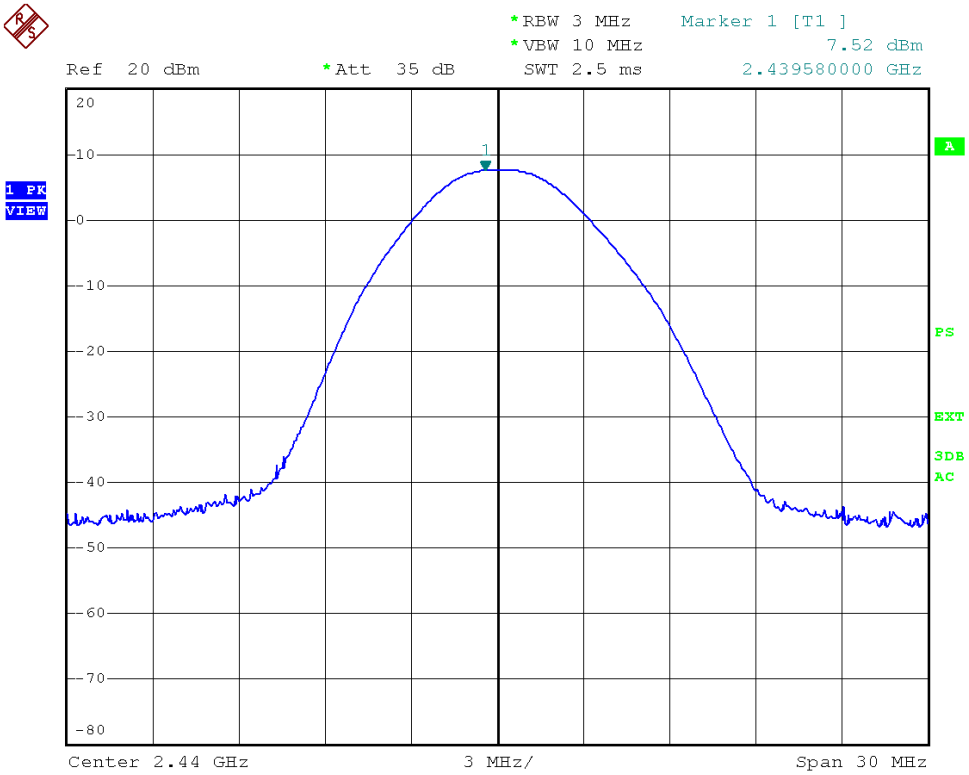
Test mode: IEEE 802.15.4

Channel	Frequency (MHz)	Maximum transmit power (dBm)	Limit		Result
			(dBm)	(watts)	
Low	2405	8.31	30	1	Pass
Mid	2440	7.52			Pass
High	2480	6.60			Pass

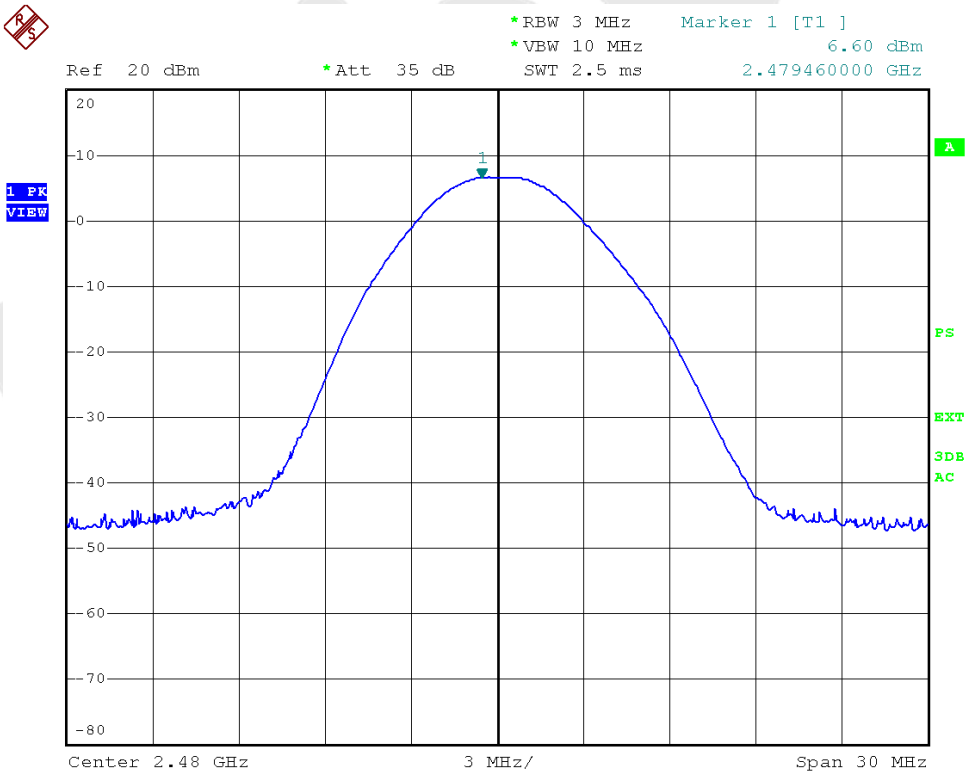
2405MHz:



2440MHz:



2480MHz:



4.4. Band Edges Measurement

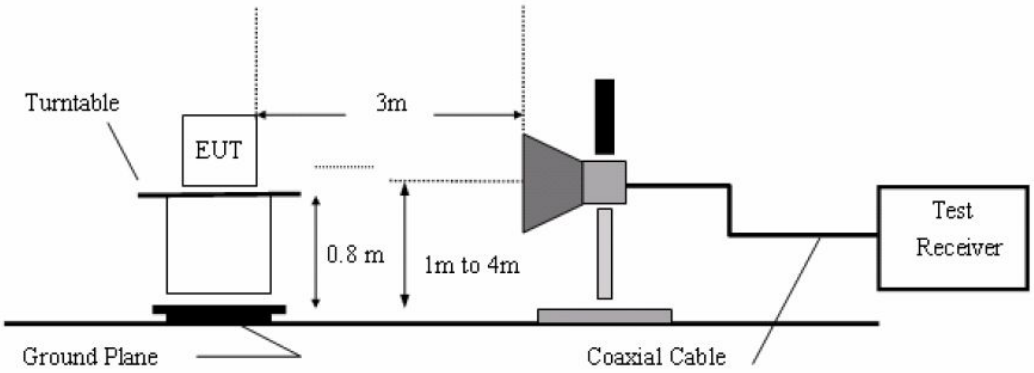
a. Limit

According to §15.247(c), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, 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 in15.209(a).

b. Test Procedure

1. Conducted Method:
1) Set RBW=100KHz, VBW=300KHz
2) Detector=peak
3) Sweep time= auto
4) Trace mode=max hold.

2. Radiated Method:
1) The EUT is placed on a turntable, which is 0.8m above the ground plane.
2) The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3) EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4) Peak detector: RBW=1MHz, VBW=3MHz, SWT=AUTO
Average detector: RBW=1MHz, VBW=10Hz, SWT=AUTO
The EUT is tested in 9*6*6 Chamber.
5) Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are measured.



c. Test Equipment

Same as the equipment listed in 4.2.

d. Test Results

Pass.

e. Test Plots

See the following page.

Test Item	:	Band eadge	Test Mode	:	CH Low ~ CH High
Test Voltage	:	DC 7.2V	Temperature	:	24℃
Test Result	:	PASS	Humidity	:	55%RH

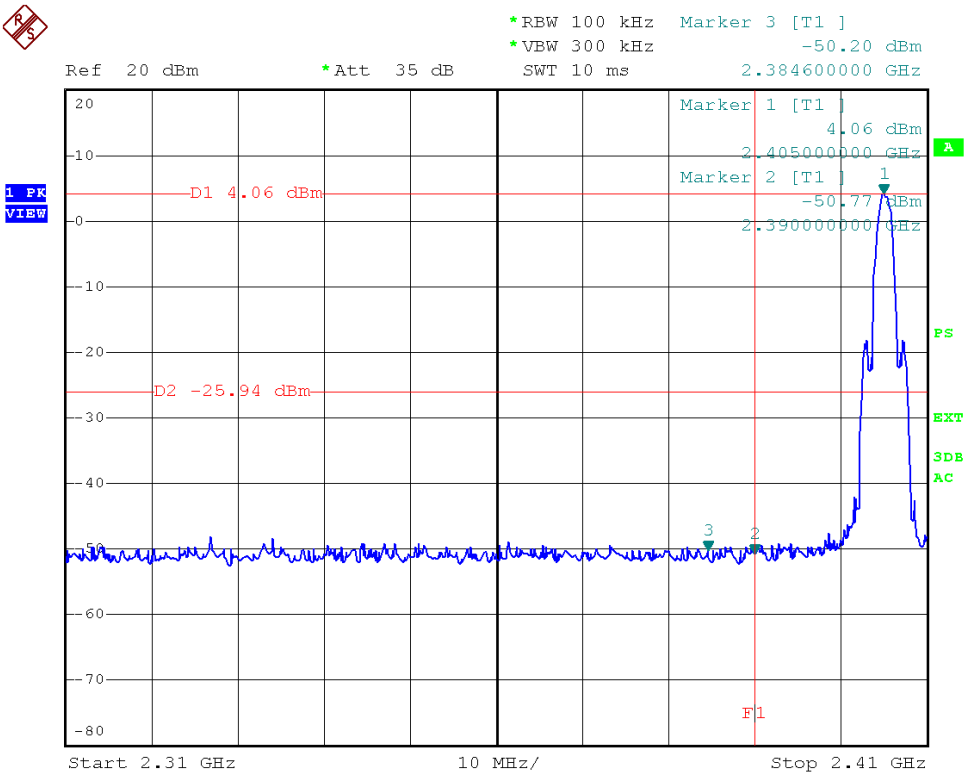
1. Conducted Test

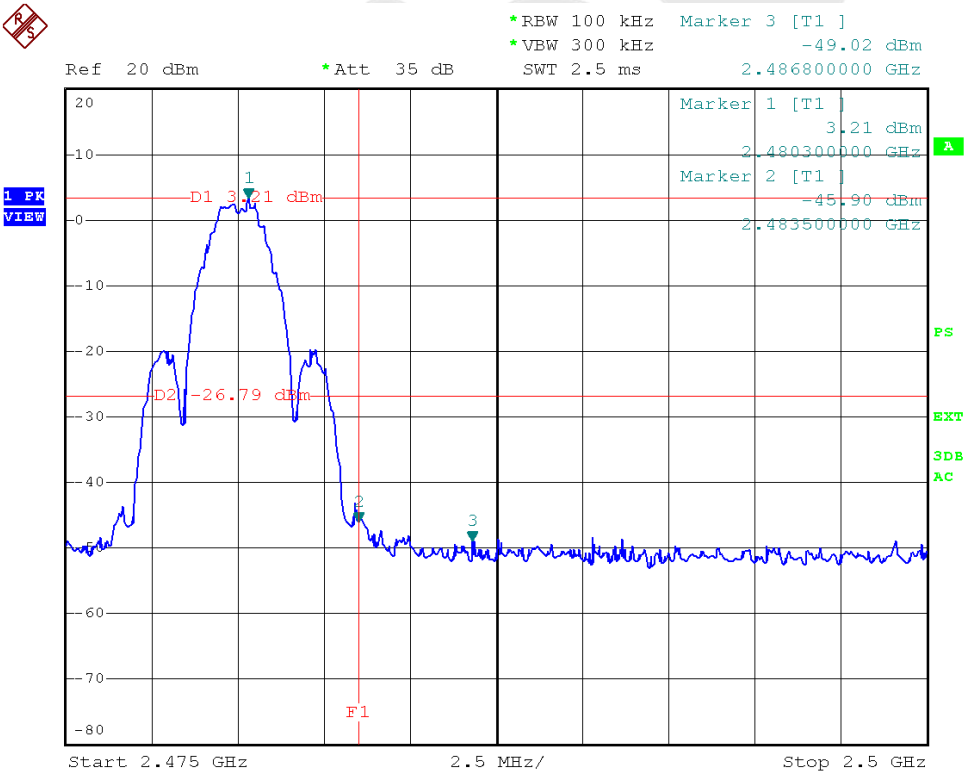
Frequency (MHz)	Peak Power Output(dBm)	Emission read Value(dBm)	Result of Band edge(dBc)	Band edge Limit(dBc)
<2400	4.06	-50.20	54.26	>30dBc
>2483.5	3.21	-45.90	49.11	>30dBc

2. Radiated emission Test

Frequency (MHz)	Antenna polarization (H/V)	Emission (dBuV/m)		Band edge Limit (dBuV/m)	
		PK	AV	PK	AV
<2400	V	56.98	35.89	74.00	54.00
	H	54.25	38.02	74.00	54.00
>2483.5	V	52.36	38.84	74.00	54.00
	H	55.62	36.22	74.00	54.00

Test Mode: IEEE 802.15.4





4.5. Peak Power Spectral Density

a. Limit

1. For direct sequence systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.
2. The direct sequence operating of the hybrid system, with the frequency hopping operation turned off, shall comply with the power density requirements of paragraph (d) of this section.

b. Test Procedure

1. Place the EUT on the table and set it in transmitting mode. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set the spectrum analyzer as RBW = 3kHz, VBW = 10kHz, Span = 1.5 times the DTS Bandwidth, Sweep=500s
3. Record the max. reading.
4. Repeat the above procedure until the measurements for all frequencies are completed.

c. Test Equipment

Same as the equipment listed in 4.2.

d. Test Setup

See 3.1

e. Test Results

Pass

f. Test Data

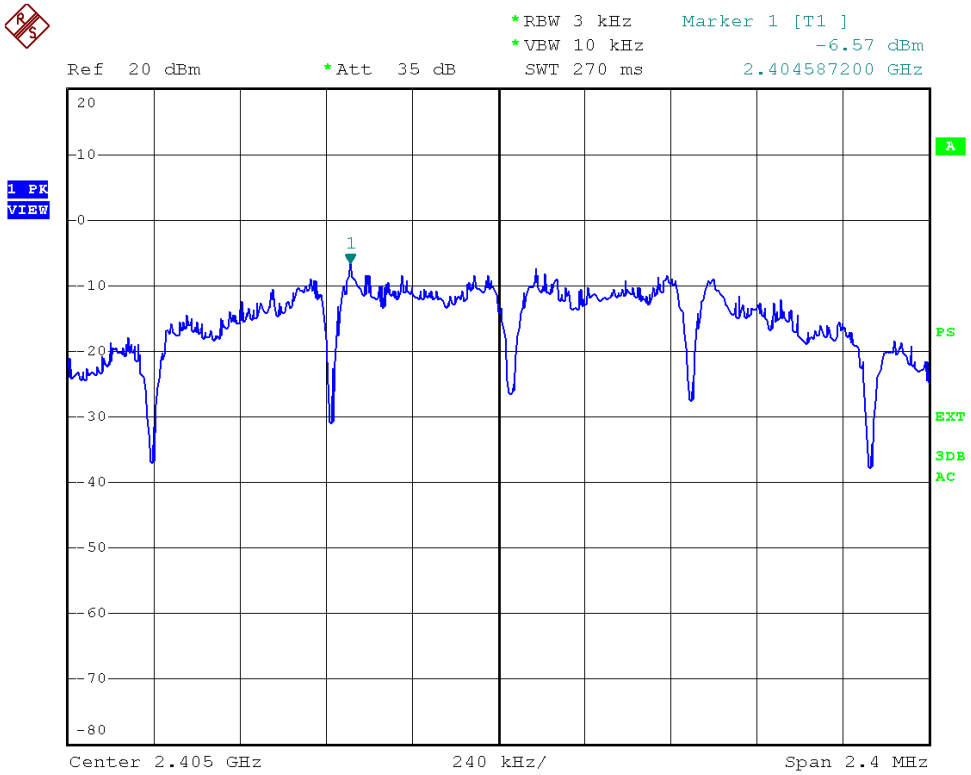
Please refer to the following data.

g. Test Plot See the following pages

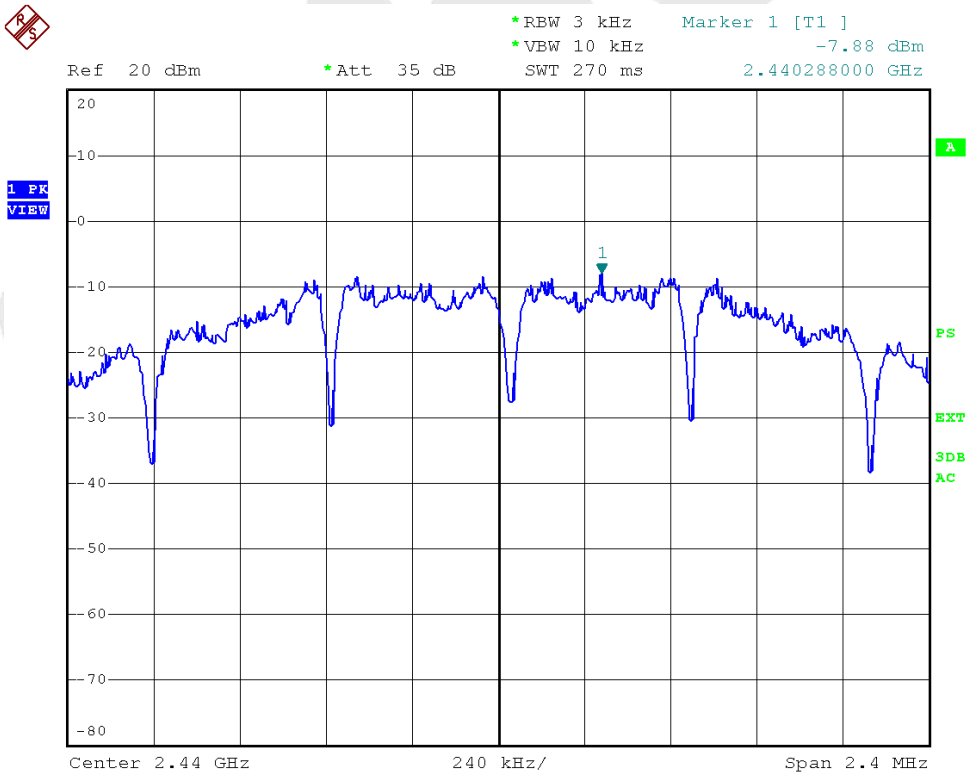
Test mode: IEEE 802.15.4

Channel	Frequency (MHz)	PPSD (dBm/3KHz)	∑PPSD (dBm/3KHz)	Limit (dBm)	Result
Low	2405	-6.57	-		Pass
Mid	2440	-7.88	-	8.00	Pass
High	2480	-9.18	-		Pass

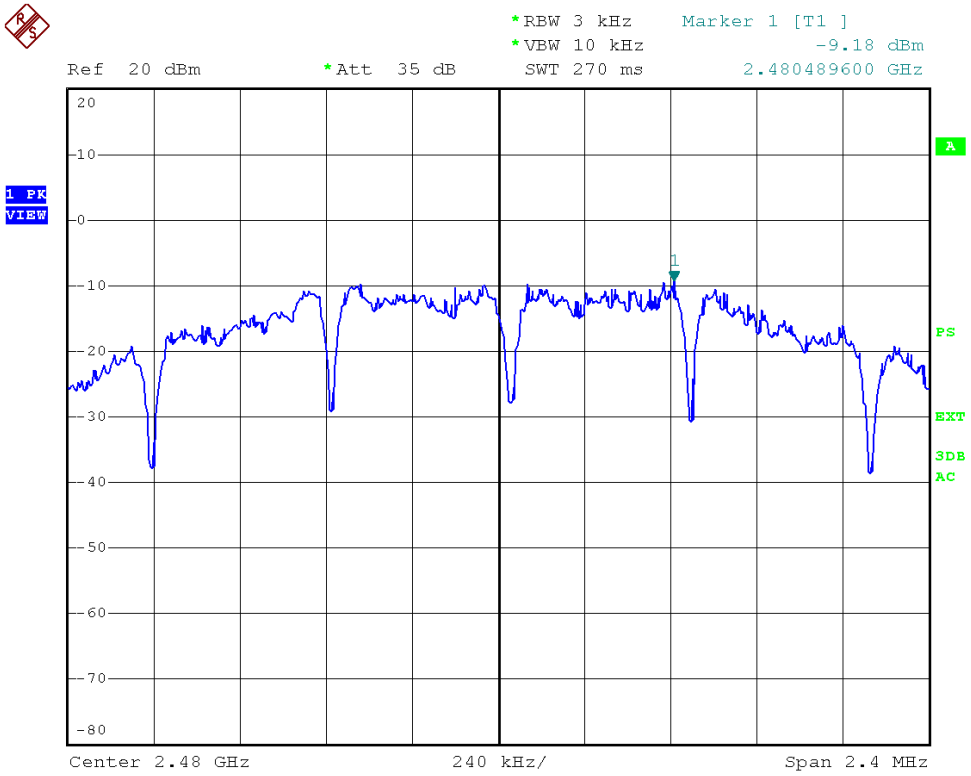
2405MHz:



2440MHz:



2480MHz:


*RBW 3 kHz
*VBW 10 kHz
SWT 270 ms
Marker 1 [T1]
-9.18 dBm
2.480489600 GHz
Ref 20 dBm
*Att 35 dB
1 PK
VIEW
A
PS
EXT
3DB
AC
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.48 GHz
240 kHz/
Span 2.4 MHz

4.6. Radiated Emissions

4.6.1.1. Test Limits (< 30 MHZ)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30

4.6.1.2. Test Limits (≥ 30 MHZ)

FIELD STRENGTH of Fundamental: @3M	FIELD STRENGTH of Harmonics	S15.209 30 - 88 MHz	40 dBuV/m
902-928 MHZ		88 - 216 MHz	43.5
2.4-2.4835 GHz		216 - 960 MHz	46
94 dBμV/m @3m	54 dBμV/m @3m	ABOVE 960 MHz	54dBuV/m

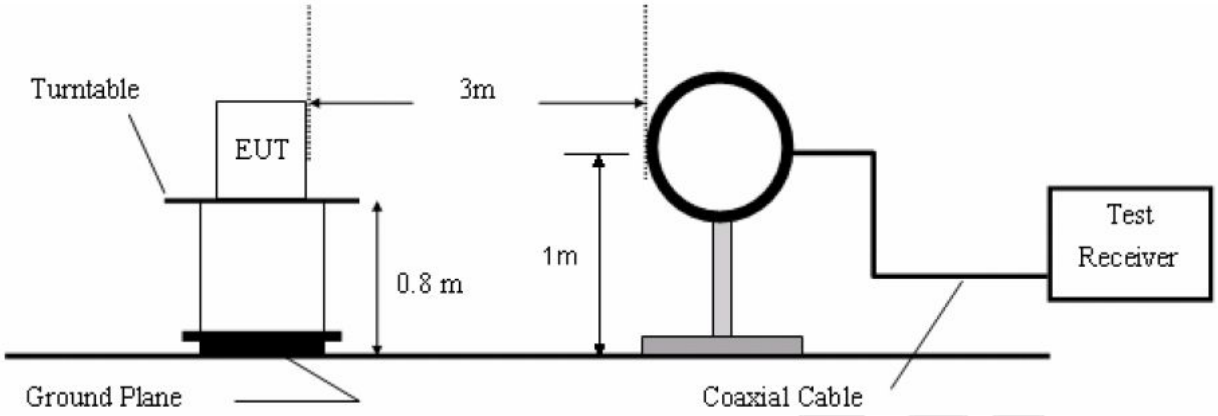
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

Test Equipment

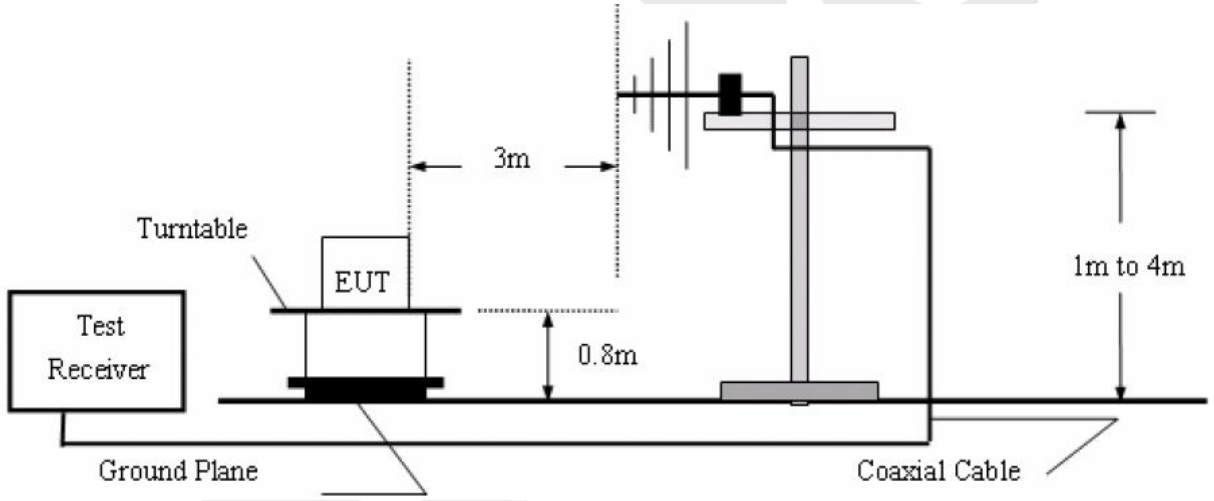
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analysis	Agilent	E4407B	US39390582	Aug. 08, 2014	1 Year
2.	Preamplifier	Instruments corporation	EMC011830	980100	Aug. 08, 2014	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESPI	101604	Apr. 22, 2014	1 Year
4.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Apr. 04, 2014	1 Year
5.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Apr. 24, 2014	1 Year
6.	Pre-amplifier	SONOMA	310N	186860	Aug. 08, 2014	1 Year
7.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A

4.6.2. Test Configuration:

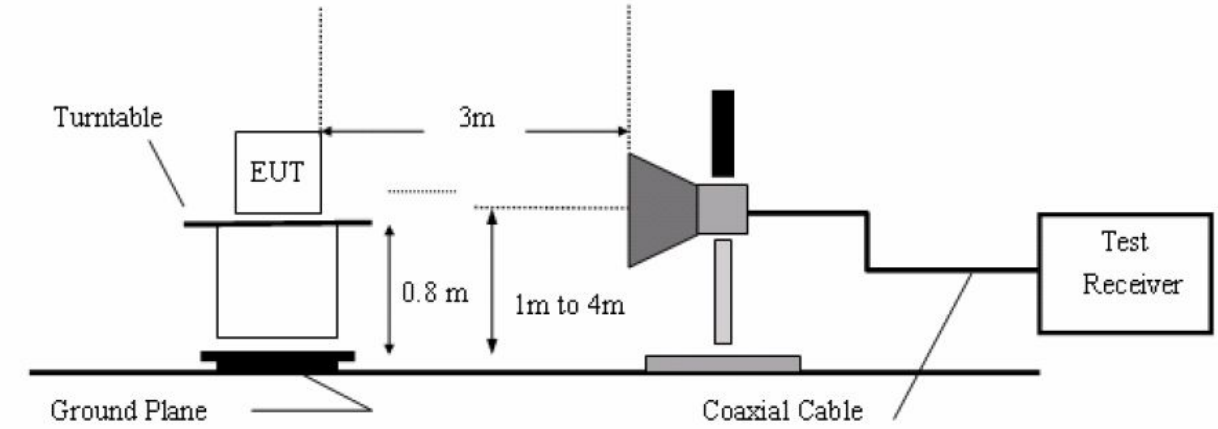
4.6.2.1. 9k to 30MHz emissions:



4.6.2.2. 30M to 1G emissions:



4.6.2.3. 1G to 40G emissions:



4.6.3. Test Procedure

The EUT is placed on a turn table which is 0.8 meter high above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

Measurements are made on 9KHz to 30MHz and 30MHz to 26GHz range with the transmitter set to the lowest, middle, and highest channels.

All readings from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120kHz. All reading are above 1GHz, peak & average values with a resolution bandwidth of 1MHz.
The EUT is tested in 9*6*6 Chamber.

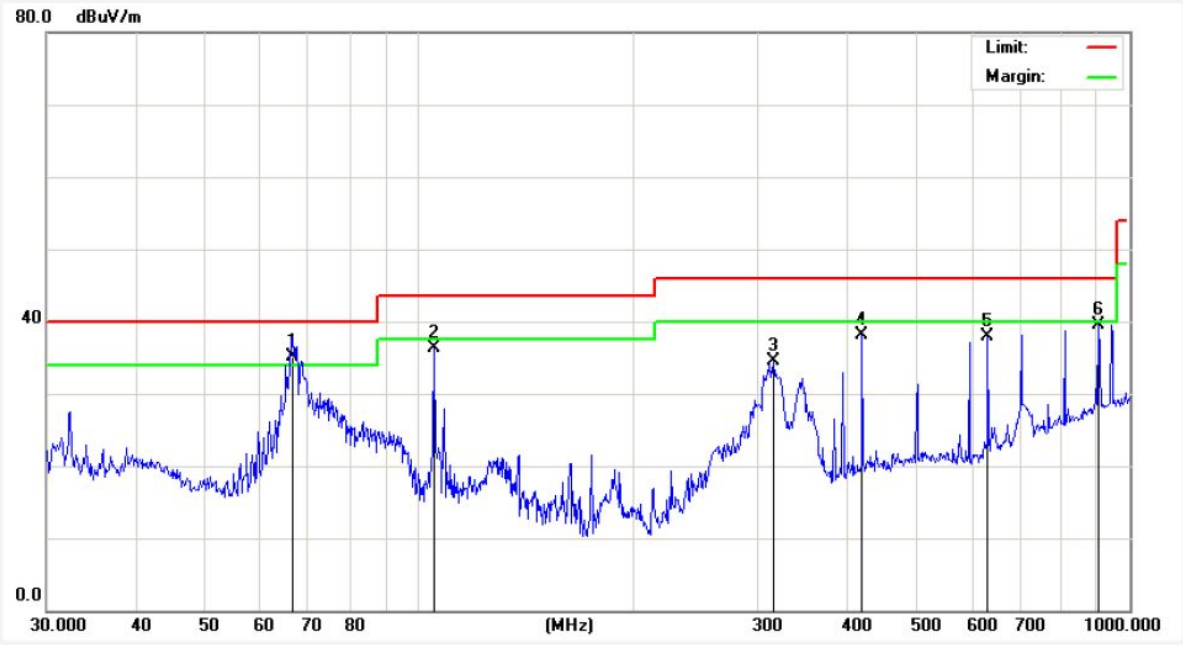
The test results are listed in Section 4.6.4.

4.6.4. Test Results

PASS.

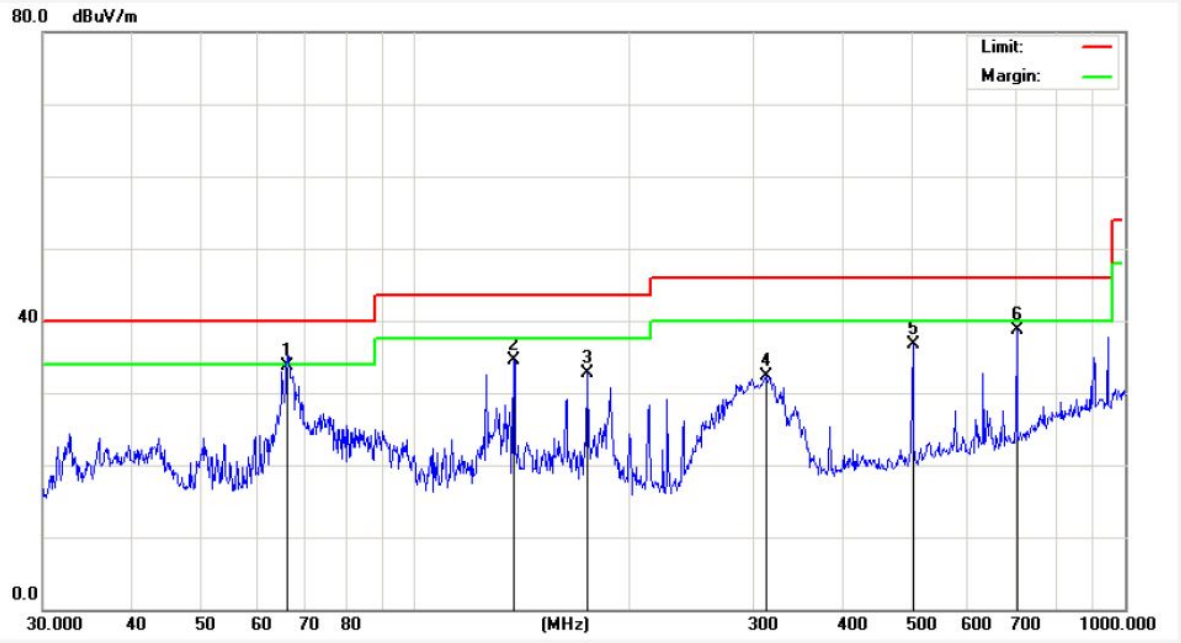
The EUT was tested on (Charging to adapter, On) modes, only the worst data of (On) are attached in the following pages.

Job No.:	**011412290E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 7.2V**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Test Mode:	**On**	**Distance:**	**3m**



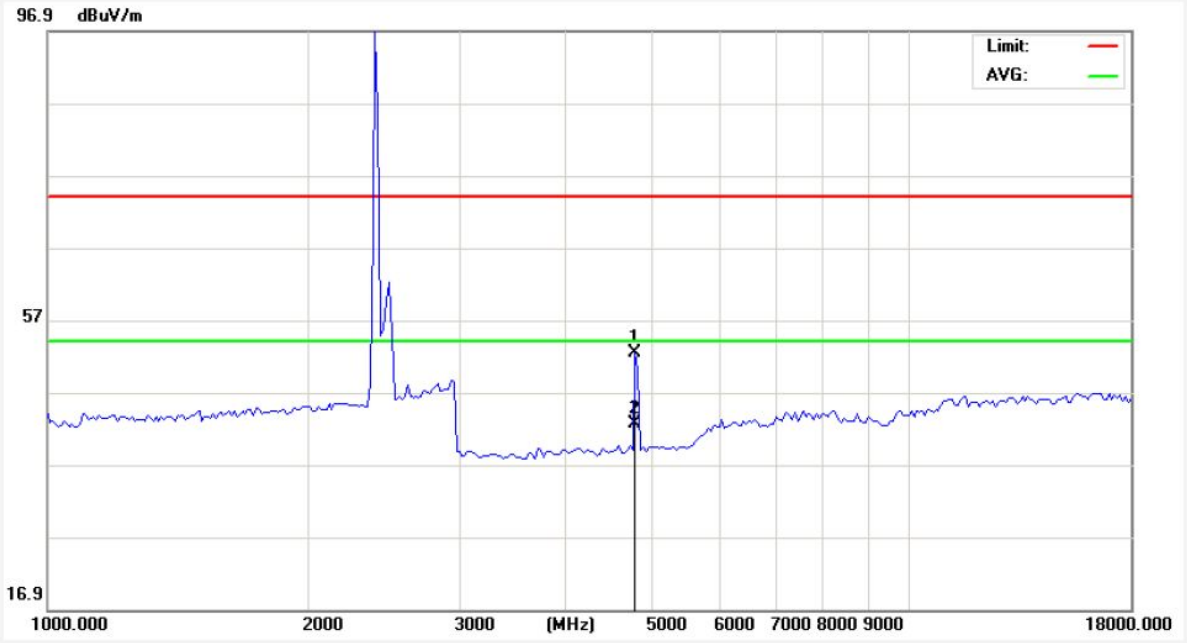
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	66.4989	53.26	-18.12	35.14	40.00	-4.86	QP	300	360	
2	105.2717	56.92	-20.70	36.22	43.50	-7.28	peak			
3	315.4806	50.27	-15.80	34.47	46.00	-11.53	peak			
4	420.5803	50.43	-12.38	38.05	46.00	-7.95	peak			
5	631.6884	48.17	-10.36	37.81	46.00	-8.19	peak			
6	903.3093	44.12	-4.71	39.41	46.00	-6.59	peak			

Job No.:	**011412290E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 7.2V**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Test Mode:	**On**	**Distance:**	**3m**



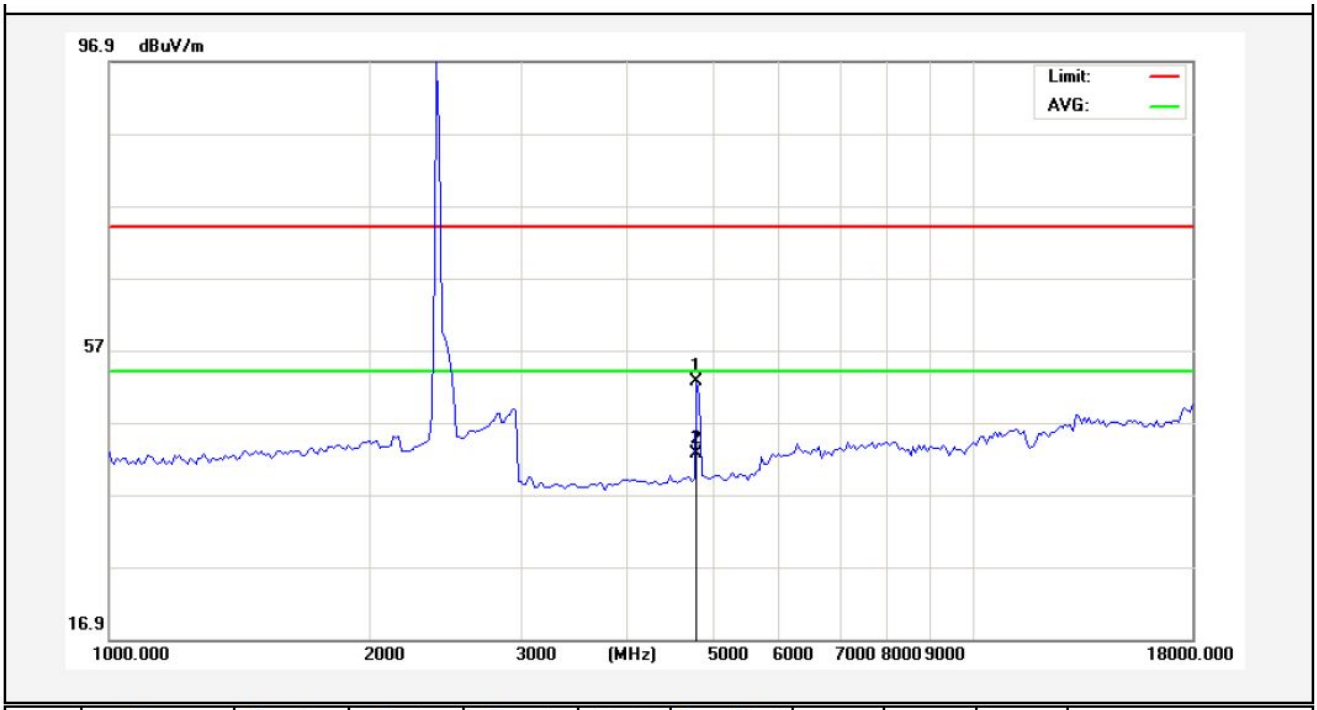
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	66.2661	51.70	-18.01	33.69	40.00	-6.31	QP	100	0	
2	137.9028	52.77	-18.35	34.42	43.50	-9.08	peak			
3	175.0365	50.00	-17.20	32.80	43.50	-10.70	peak			
4	312.1792	46.65	-14.43	32.22	46.00	-13.78	peak			
5	502.9395	47.71	-10.91	36.80	46.00	-9.20	peak			
6	704.2259	47.03	-8.35	38.68	46.00	-7.32	peak			

Job No.:	**011412290E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 7.2V**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**2405MHz**	**Distance:**	**3m**



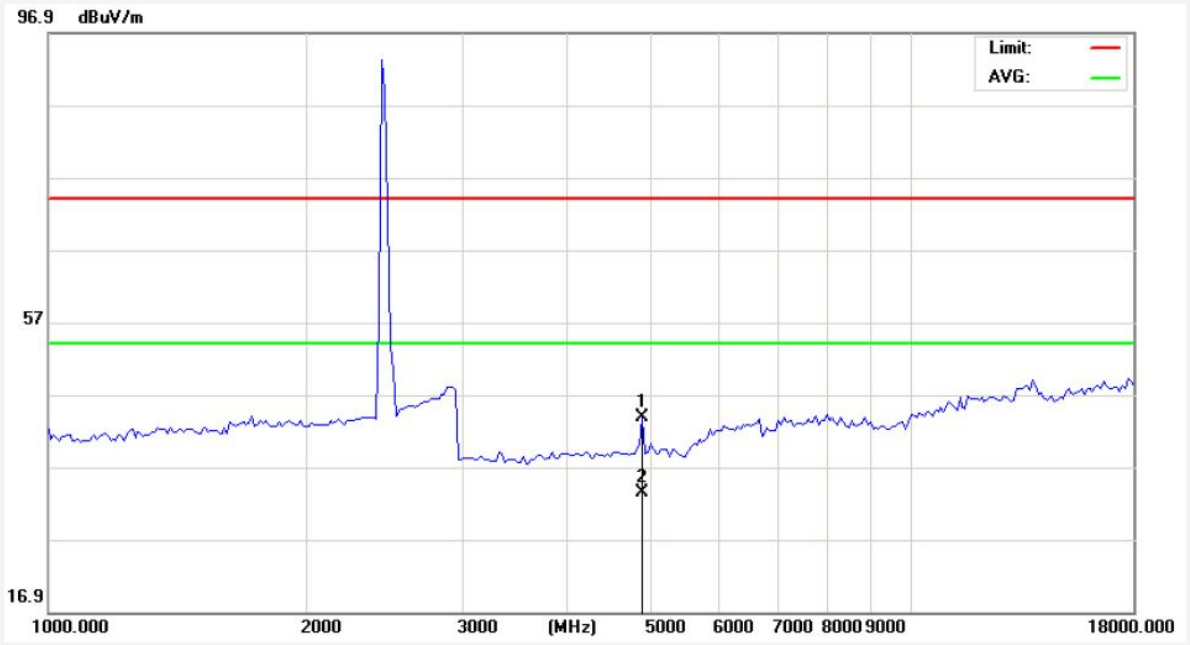
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4825.000	49.15	3.34	52.49	74.00	-21.51	peak			
2	4825.000	39.34	3.34	42.68	54.00	-11.32	AVG			

Job No.:	**011412290E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 7.2V**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**2405MHz**	**Distance:**	**3m**



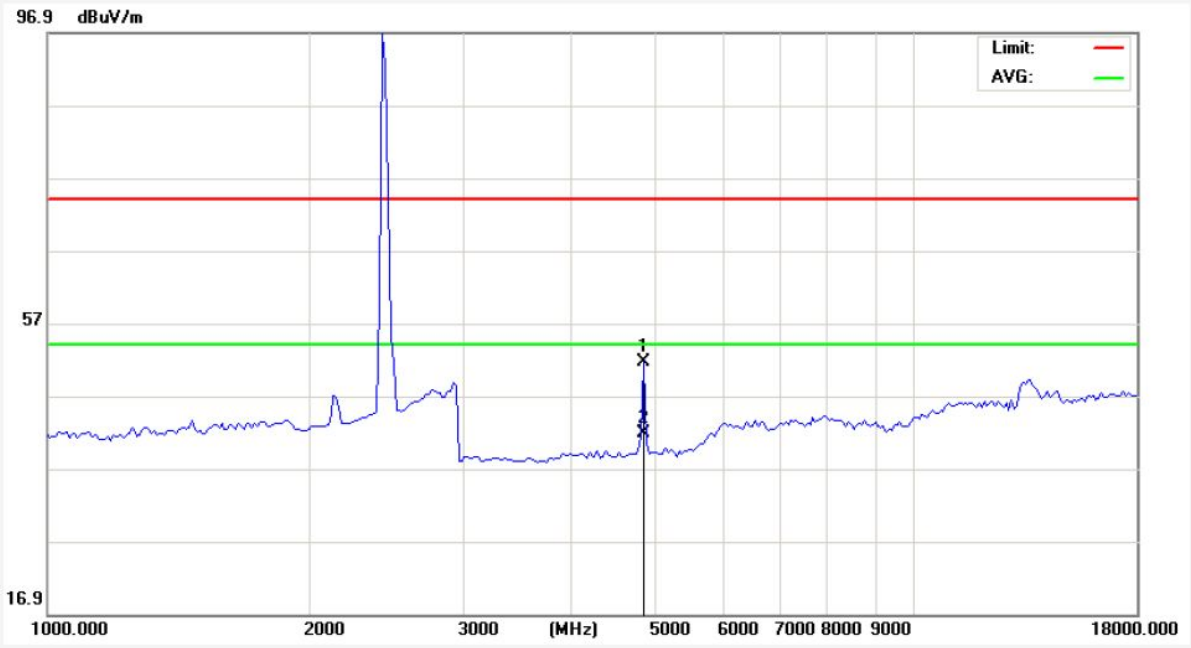
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4825.000	49.35	3.34	52.69	74.00	-21.31	peak			
2	4825.000	39.31	3.34	42.65	54.00	-11.35	AVG			

Job No.:	**011412290E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 7.2V**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**2440MHz**	**Distance:**	**3m**



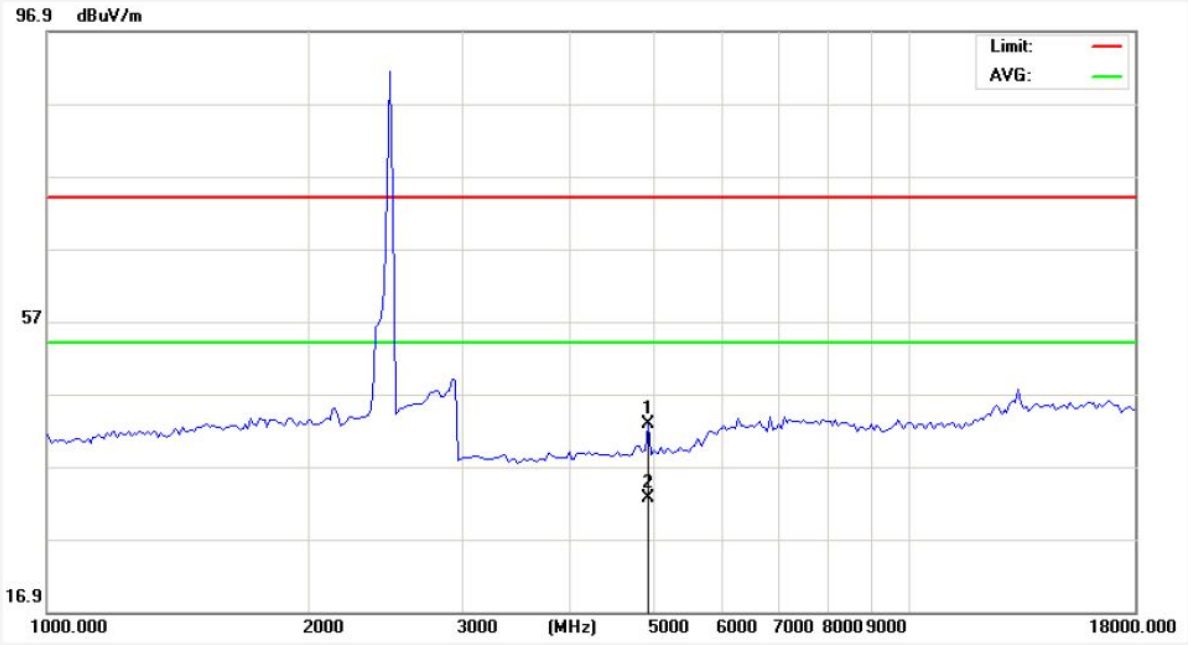
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4867.500	40.47	3.41	43.88	74.00	-30.12	peak			
2	4867.500	30.07	3.41	33.48	54.00	-20.52	AVG			

Job No.:	**011412290E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 7.2V**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**2440MHz**	**Distance:**	**3m**



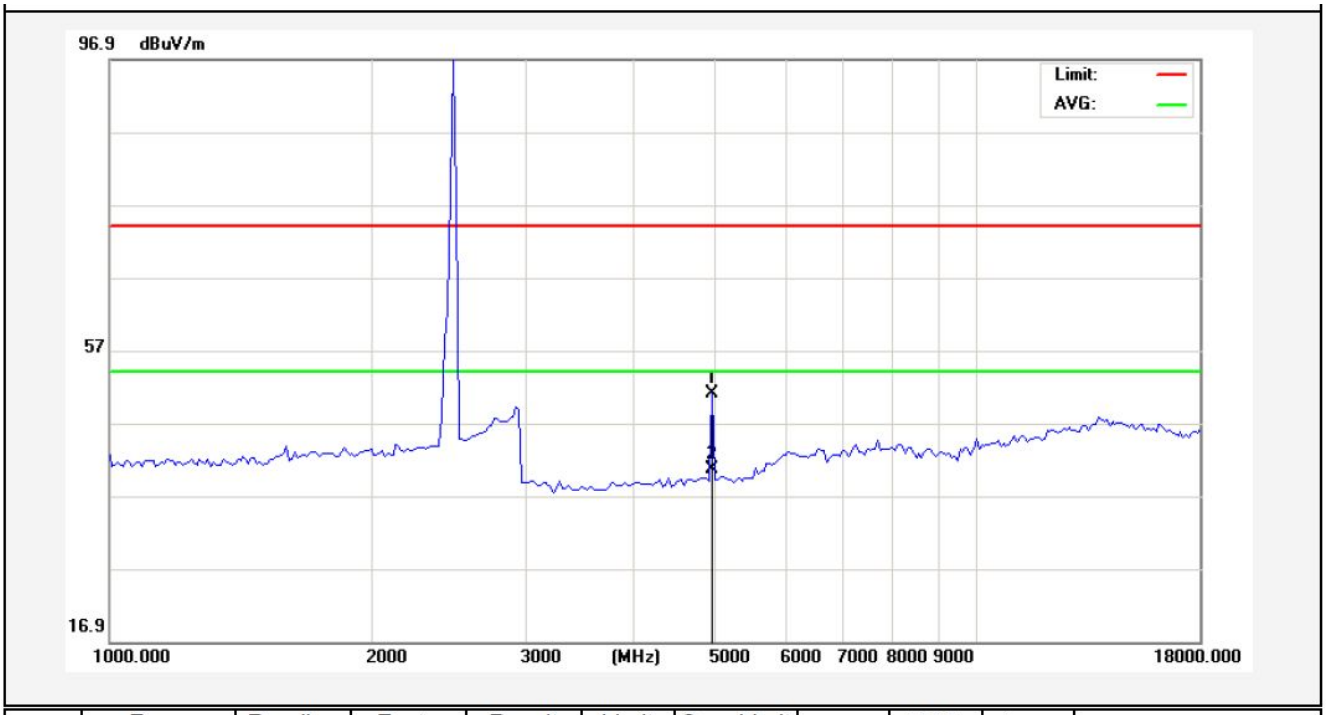
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4867.500	48.15	3.41	51.56	74.00	-22.44	peak			
2	4867.500	38.35	3.41	41.76	54.00	-12.24	AVG			

Job No.:	**011412290E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 7.2V**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**2480MHz**	**Distance:**	**3m**



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4952.500	39.23	3.57	42.80	74.00	-31.20	peak			
2	4952.500	29.07	3.57	32.64	54.00	-21.36	AVG			

Job No.:	**011412290E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**DC 7.2V**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**2480MHz**	**Distance:**	**3m**

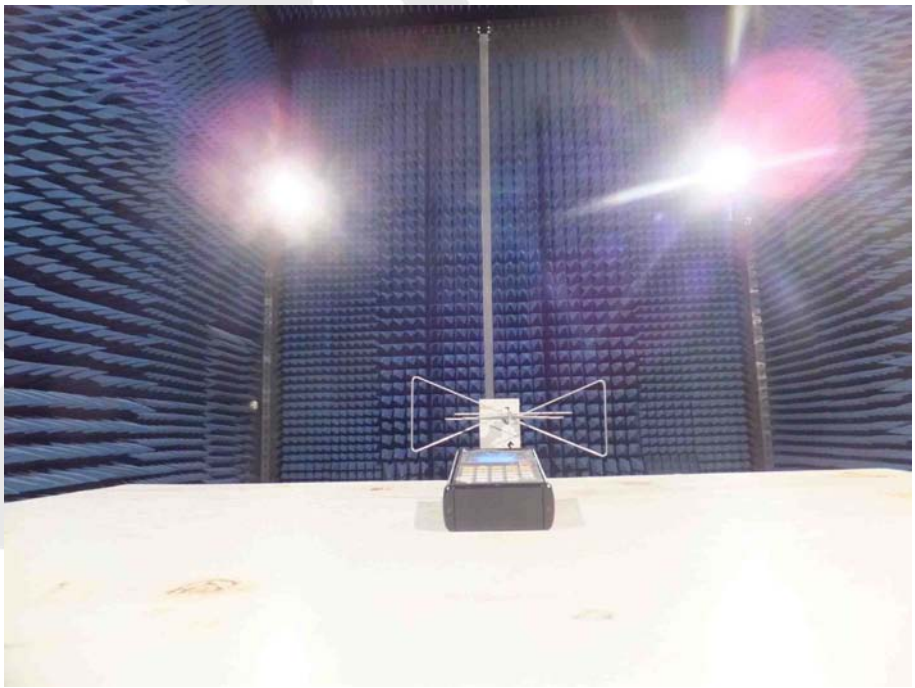


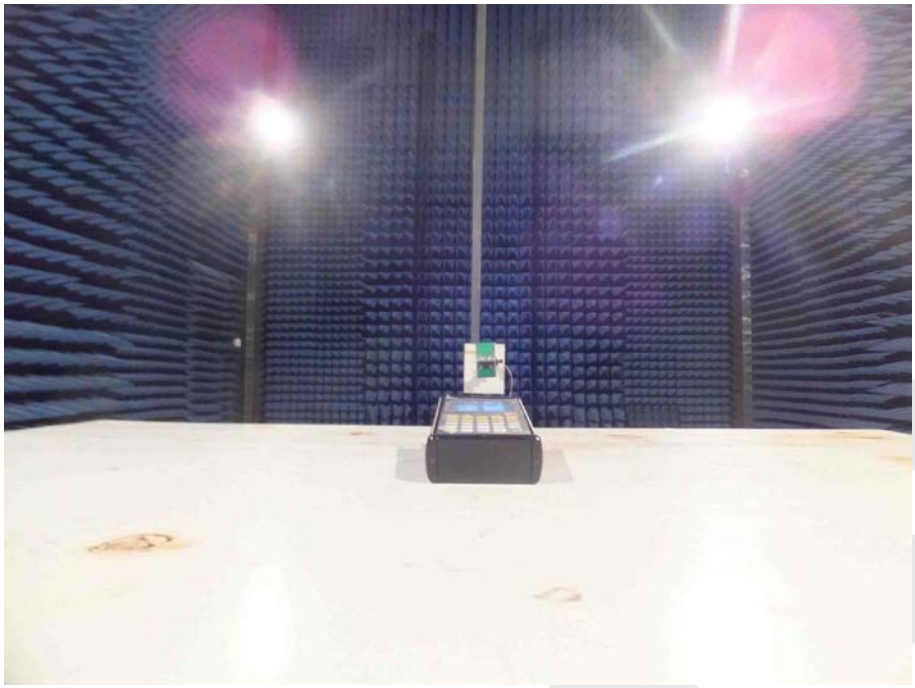
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4952.500	47.34	3.57	50.91	74.00	-23.09	peak			
2	4952.500	37.07	3.57	40.64	54.00	-13.36	AVG			

5. PHOTOGRAPH

5.1. Photo of Conducted Emission Measurement

5.2. Photo of Radiation Emission Test





APPENDIX I (EXTERNAL PHOTOS)

Figure 1
The EUT-Overall View

Figure 2
The EUT-Top View

Figure 3
The EUT- Top View

Figure 4
The EUT- Bottom View

Figure 5
The EUT-Front View

Figure 6
The EUT-Back View

Figure 7
The EUT-Left View

Figure 8
The EUT-Right View

APPENDIX Ⅱ(INTERNAL PHOTOS)

Figure 9
PCB of the EUT-Front View

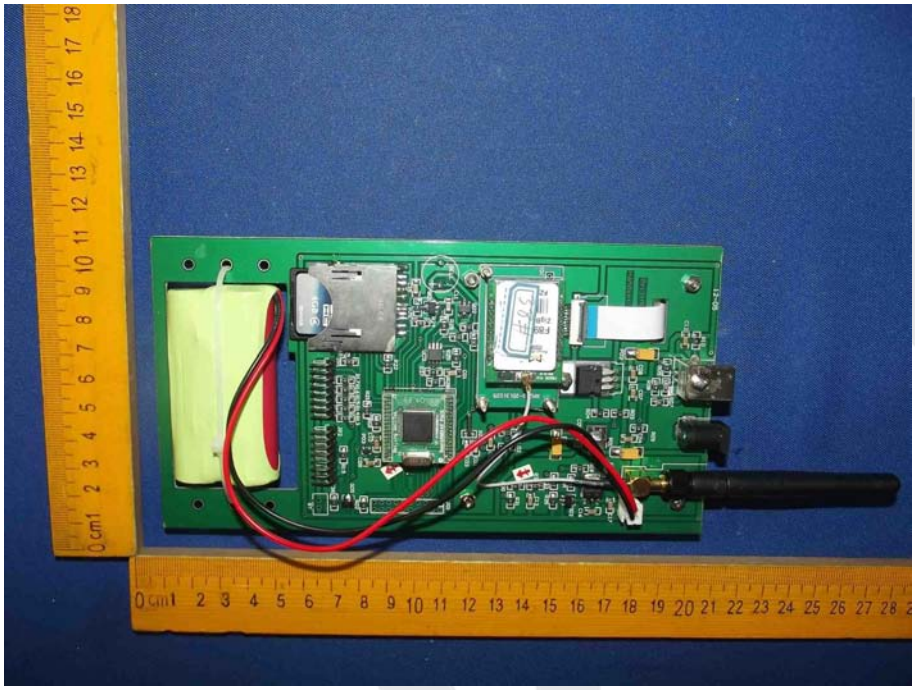


Figure 10
PCB of the EUT-Front View

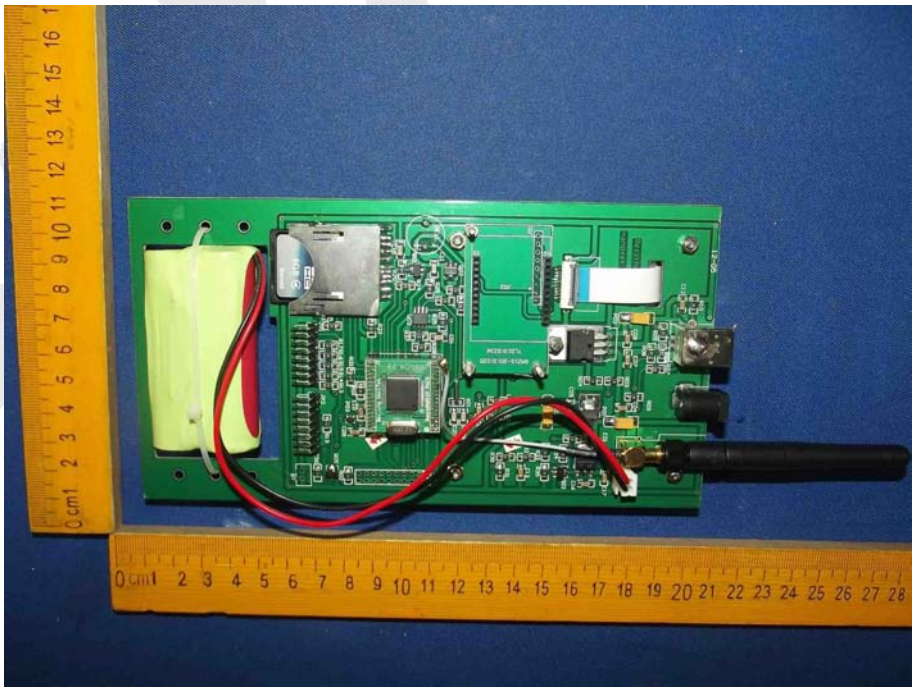


Figure 11
PCB of the EUT-Back View

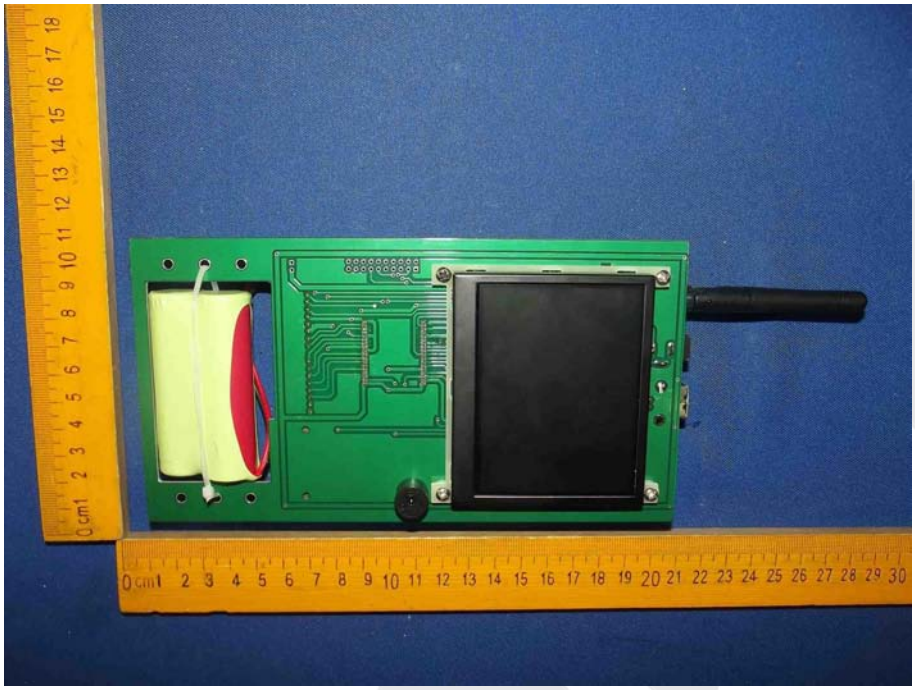


Figure 12
PCB of the EUT-Front View

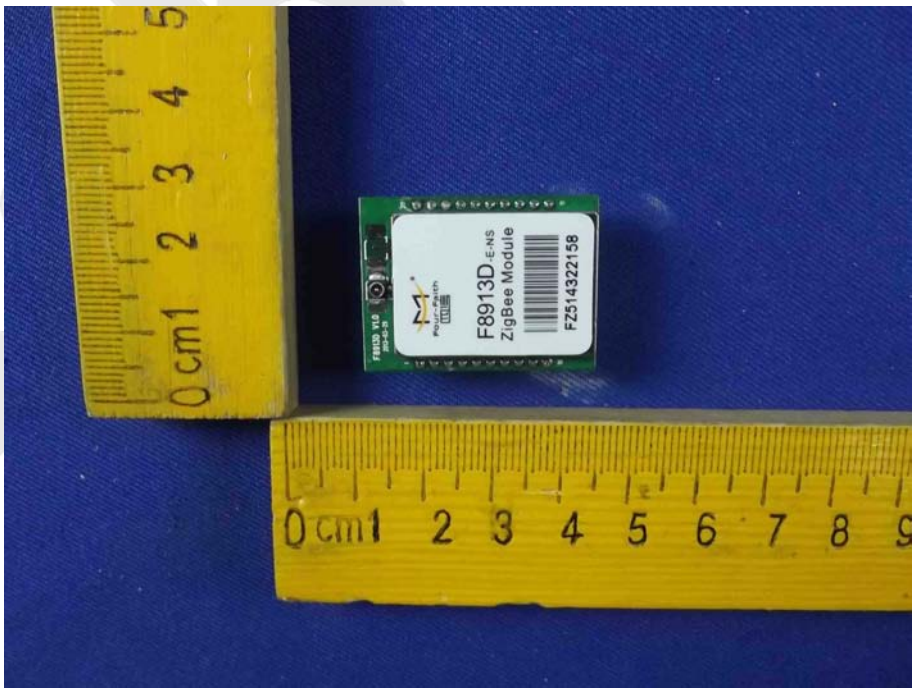


Figure 13
PCB of the EUT-Back View

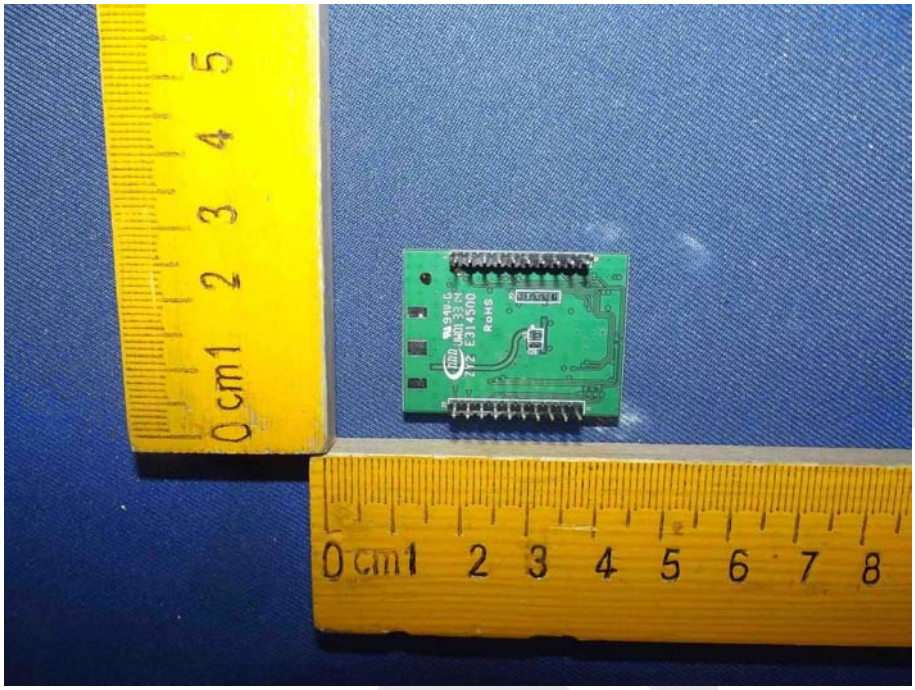


Figure 14
PCB of the EUT-Front View

Figure 15
PCB of the EUT-Back View