



Shenzhen Certification Technology Service Co., Ltd.  
2F, Building B, East Area of Nanchang Second Industrial  
Zone, Gushu 2<sup>nd</sup> Road, Bao'an District, Shenzhen  
518126, P.R. China

---

# TEST REPORT

**FCC ID: 2ACMLPN41827**

Applicant : Condec Co Ltd

Address : 8th Floor, Exchange Tower, 2 Harbour Exchange Square,  
London E14 9GE, UK

Equipment Under Test (EUT):

Name : Condec 10.1" Touch Screen

Model : PN41827

In Accordance with: FCC CFR47 Part 15 Section 15C: 2013

Report No : CST-TCB140609024

Date of Test : June 16, 2014 to June 24, 2014

Date of Issue : June 24, 2014

Test Result: **PASS**

In the configuration tested, the EUT complied with the standards specified above

Authorized Signature

A handwritten signature in black ink, appearing to read "Mark Zhu", is written over a horizontal line.

(Mark Zhu)

General Manager

The manufacture should ensure that all the products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of Shenzhen Certification Technology Service Co., Ltd. Or test done by Shenzhen Certification Technology Service Co., Ltd. Approvals in connection with, distribution or use of the product described in this report must be approved by Shenzhen Certification Technology Service Co., Ltd. Approvals in writing.

---

## Contents

<b>1. General Information .....</b>	<b>3</b>
1.1. Description of Device (EUT) .....	3
1.2. Accessories of device (EUT) .....	3
1.3. Test Lab information .....	3
<b>2. Summary of test .....</b>	<b>4</b>
2.1. Summary of test result .....	4
2.2. Assistant equipment used for test.....	4
2.3. Block Diagram .....	4
2.4. Test mode .....	4
2.5. Test Conditions .....	5
2.6. Measurement Uncertainty (95% confidence levels, k=2) .....	5
2.7. Test Equipment .....	6
<b>3. 20dB bandwidth .....</b>	<b>7</b>
3.1. Limit.....	7
3.2. Test Procedure.....	7
3.3. Test Setup.....	7
3.4. Test Result.....	7
<b>4. Radiated emissions.....</b>	<b>9</b>
4.1. Limit(FCC 15.209).....	9
4.2. Block Diagram of Test setup.....	9
4.3. Test Procedure.....	10
4.4. Test Result.....	11
<b>5. Frequency stability.....</b>	<b>17</b>
5.1. Test limit .....	17
5.2. Test Procedure.....	17
5.3. Test Setup.....	17
5.4. Test Results .....	17
<b>6. Power Line Conducted Emissions .....</b>	<b>19</b>
6.1. Block Diagram of Test Setup .....	19
6.2. Limit.....	19
6.3. Test Procedure.....	19
6.4. Test Result.....	20
<b>7. Antenna Requirements .....</b>	<b>22</b>
7.1. Limit.....	22
7.2. Result .....	22
<b>8. Test setup photo .....</b>	<b>23</b>
8.1. Photographs-Radiated Emission Test Setup in Chamber .....	23
8.2. Photographs-Conducted Emission Test Setup.....	24
<b>9. Photos of EUT .....</b>	<b>25</b>

## 1. General Information

### 1.1. Description of Device (EUT)

EUT	:	Condeco 10.1" Touch Screen
Model No.	:	PN41827
Trade mark	:	Condeco
Power supply	:	DC 12V from adapter DC 48V from POE
Radio Technology	:	RFID
Operation frequency	:	13.56MHz
Antenna Type and Gain	:	Integrated loop antenna, PK Gain: 0dBi
Applicant	:	Condeco Ltd
Address	:	8th Floor, Exchange Tower, 2 Harbour Exchange Square, London E14 9GE, UK
Manufacturer	:	NOTE Electronics (Dongguan) Ltd
Address	:	6 Lindong Third Road, Lincun Industrial Center, Tangxia, Dongguan 523710, P. R. China

#### Accessories of device (EUT)

Accessories 1	:	Adapter
M/N	:	UP0121A-112PE
Accessories 2	:	Adapter (POE)
M/N	:	RA4800N01

### 1.2. Test Lab information

Shenzhen Certification Technology Service Co., Ltd.  
2F, Building B, East Area of Nanchang Second Industrial Zone,  
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China  
FCC Registered No.:197647

## 2. Summary of test

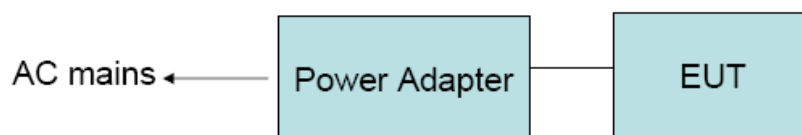
### 2.1. Summary of test result

Description of Test Item	Standard	Results
20dB Bandwidth	FCC Part 15: 15.225 ANSI C63.4 :2003	PASS
Radiated Emission (9KHz-1GHz)	FCC Part 15: 15. 225&209 ANSI C63.4 :2003	PASS
Power Line Conducted Emissions (150KHz-30MHz)	FCC Part 15: 15.207 ANSI C63.4 :2003	PASS
Frequency stability	FCC Part 15: 15.225 ANSI C63.4 :2003	PASS
Antenna Requirement	FCC Part 15: 15.203	PASS

### 2.2. Assistant equipment used for test

N/A

### 2.3. Block Diagram



### 2.4. Test mode

Tested mode, channel, and data rate information		
Mode	Channel	Frequency (MHz)
1	CH1	13.56
Note: EUT could be supplied by DC 12V from adapter and DC 48V from POE, two voltage have been tested, but only show the test data of the worst case in this report, and we found the worst case is DC 48V from POE.		

## 2.5. Test Conditions

Temperature range	21-25℃
Humidity range	40-75%
Pressure range	86-106kPa

## 2.6. Measurement Uncertainty (95% confidence levels, k=2)

Item	MU	Remark
Uncertainty for Power point Conducted Emissions Test	2.42dB	
Uncertainty for Radiation Emission test in 3m chamber (below 30MHz)	2.13 dB	Polarize: V
	2.57dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.54dB	Polarize: V
	4.1dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	2.08dB	Polarize: H
	2.56dB	Polarize: V
Uncertainty for radio frequency	1×10 <sup>-9</sup>	
Uncertainty for conducted RF Power	0.65dB	
Uncertainty for temperature	0.2℃	
Uncertainty for humidity	1%	
Uncertainty for DC and low frequency voltages	0.06%	

## 2.7. Test Equipment

Equipment	Manufacture	Model No.	Serial No.	Last cal.	Cal Interval
3m Semi-Anechoic	ETS-LINDGREN	N/A	SEL0017	Nov. 16, 13	1 Year
Spectrum analyzer	Agilent	E4407B	MY49510055	Oct. 30, 13	1 Year
Spectrum analyzer	Agilent	N9010A	MY8030494	Mar. 28, 14	1 Year
Receiver	R&S	ESCI	101165	Oct. 30, 13	1 Year
Receiver	R&S	ESCI	101202	Oct. 30, 13	1 Year
Bilog Antenna	SCHWARZBECK	VULB 9168	9168-438	Mar.11, 14	1 Year
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D(1201)	Mar.11, 14	1 Year
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170 D(1432)	Mar.11, 14	1 Year
Active Loop Antenna	Beijing Daze	ZN30900A	SEL0097	Mar.11, 14	1 Year
L.I.S.N.	SCHWARZBECK	NSLK8126	8126466	Oct. 30, 13	1 Year
Cable	Resenberger	N/A	No.1	Oct. 30, 13	1 Year
Cable	SCHWARZBECK	N/A	No.2	Oct. 30, 13	1 Year
Cable	SCHWARZBECK	N/A	No.3	Oct. 30, 13	1 Year
Power Meter	Anritsu	ML2487A	6K00001491	Oct. 30, 13	1 Year
Power sensor	Anritsu	ML2491A	32516	Oct. 30, 13	1 Year
Pre-amplifier	SCHWARZBECK	BBV9743	9743-019	Oct. 30, 13	1 Year
Pre-amplifier	Quietek	AP-180C	CHM-0602012	Oct. 30, 13	1 Year

### 3. 20dB bandwidth

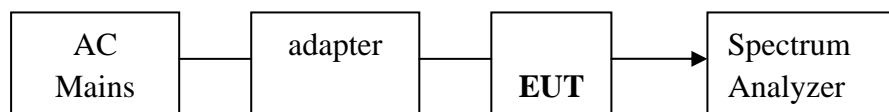
#### 3.1. Limit

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.

#### 3.2. Test Procedure

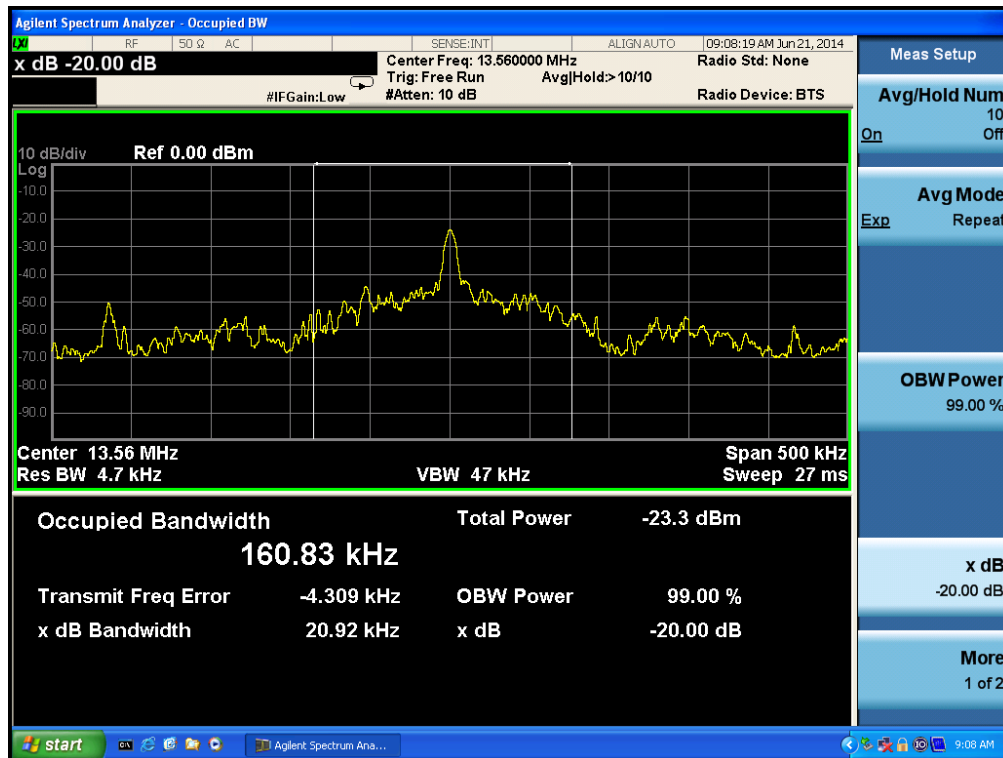
The transmitter output was coupled to a spectrum analyzer via a antenna. The bandwidth of the fundamental frequency was measured by spectrum analyzer with RBW 1% of BW, The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

#### 3.3. Test Setup



#### 3.4. Test Result

EUT: Condeco 4.3" Touch Screen      M/N: PN41734				
Test date: 2014-06-21		Test site: RF site		Tested by: Joe
Mode	Freq (MHz)	20dB Bandwidth (KHz)	Limit (kHz)	Conclusion
Tx Mode	13.56	20.92	/	PASS





## 4. Radiated emissions

### 4.1. Limit(FCC 15.209)

Frequency (MHz)	Field Strength		Field Strength Limit at 3m Measurement Dist	
	uV/m	Distance (m)	uV/m	dBuV/m
0.009 ~ 0.490	2400/F(kHz)	300	10000 * 2400/F(kHz)	$20\log^{(2400/F(kHz))} + 80$
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	$20\log^{(24000/F(kHz))} + 40$
1.705 ~ 30	30	30	100 * 30	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

Note:

- a) The tighter limit applies at the band edges.

For example: F.S limit at 88MHz is 100uV/m

- b) If measurement is made at 3m distance, then F.S Limit at 3m distance is adjusted by using the formula of  $L_{d1} = L_{d2} * (d2/d1)^2$ .

For example:

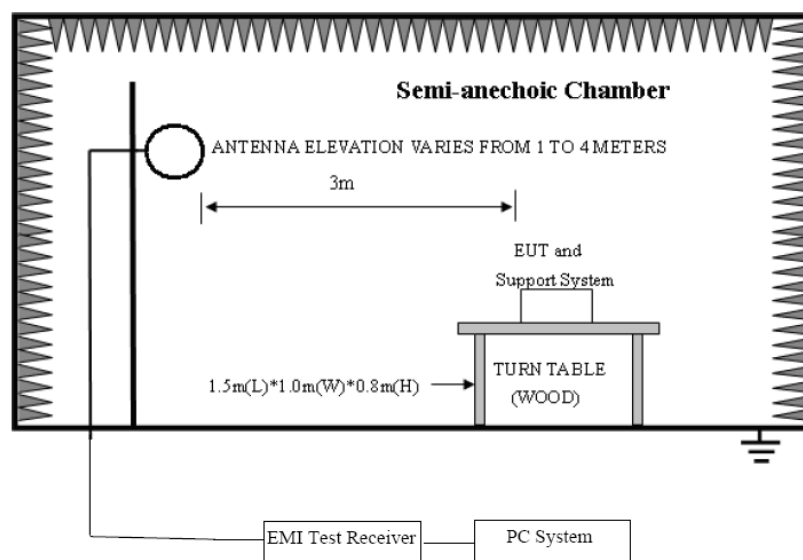
F.S Limit at 30m(d2) distance is 30uV/m( $L_{d2}$ ), then F.S Limit at 3m(d1) distance is

$$L_{d1} = 30\text{uV/m} * (30/3)^2 = 100 * 30\text{uV/m} = 69.54 \text{ dBuV/m}$$

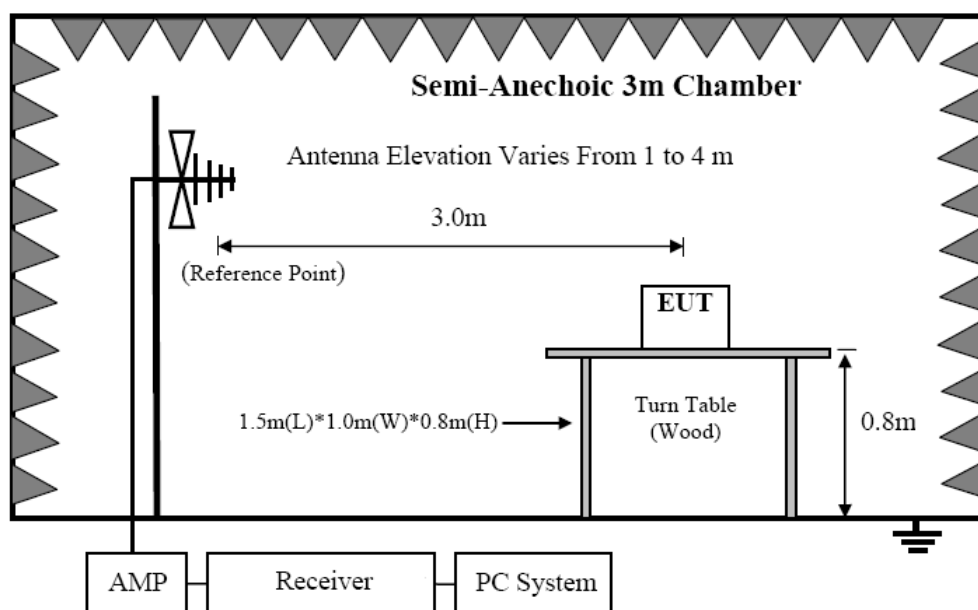
### 4.2. Block Diagram of Test setup

In 3m Anechoic Chamber Test Setup Diagram for below 30MHz

#### 4.2. Block diagram of test setup



In 3m Anechoic Chamber Test Setup Diagram for frequency 30MHz-1GHz



### 4.3. Test Procedure

#### Procedure of Preliminary Test

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 4.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4:2003.

Mains cables, telephone lines or other connections to auxiliary equipment located outside the test are shall drape to the floor, be fitted with ferrite clamps or ferrite tubes placed on the floor at the point where the cable reaches the floor and then routed to the place where they leave the turntable. No extension cords shall be used to mains receptacle.

The antenna was placed at 3 meter away from the EUT as stated in ANSI C63.10:2009. The antenna connected to the Spectrum Analyzer via a cable and at times a pre-amplifier would be used.

The Receiver quickly scanned from 9 KHz to 30 MHz and 30MHz to 1GH, The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.

The test mode(s) described in clause 2.4 were scanned during the preliminary test:

After the preliminary scan, we found the test mode producing the highest emission level. The EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for the final test.

#### Procedure of Final Test

EUT and support equipment were set up on the turntable as per the configuration with highest emission level in the preliminary test.

The Receiver scanned from 9KHz to 30MHz and 30MHz to 1GHz. Emissions were scanned and

measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.

Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and only Q.P. reading is presented.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 200Hz for 9 KHz to 150 KHz measure, 10 KHz for 150 KHz to 30 MHz measure and 120 KHz for 30 MHz to 1GHz measure.

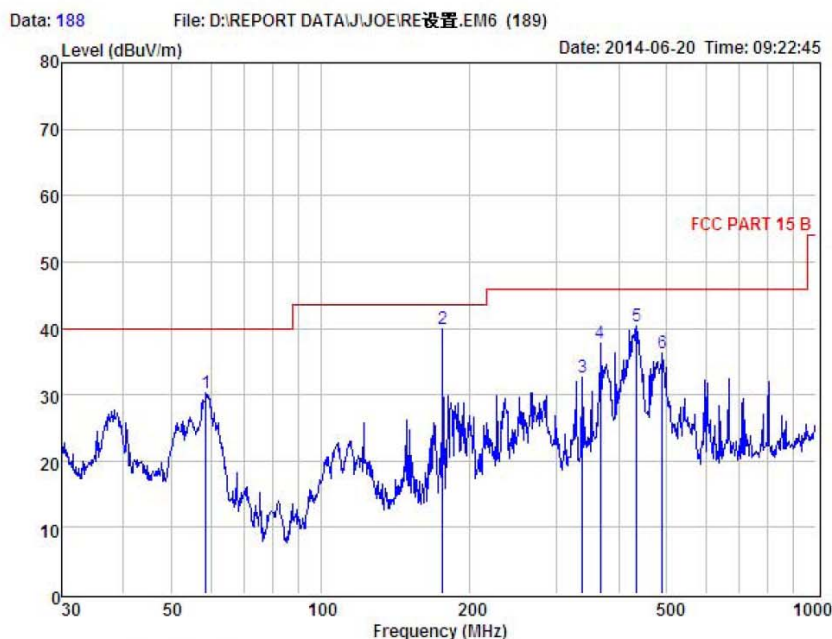
#### 4.4. Test Result

**Remark: Outside of 13.110~14.010MHz band is too lower to not show in this report, it complies with 15.209 requirement.**

**PASS. (See below detailed test result)**



Shenzhen Certification Technology Service Co., Ltd.  
 2F, Building B, East Area of Nanchang Second Industrial Zone,  
 Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China  
 Tel: 4006786199 FAX: +86-755-26736857  
 Website: <http://www.cessz.com> Email: [Service@cessz.com](mailto:Service@cessz.com)



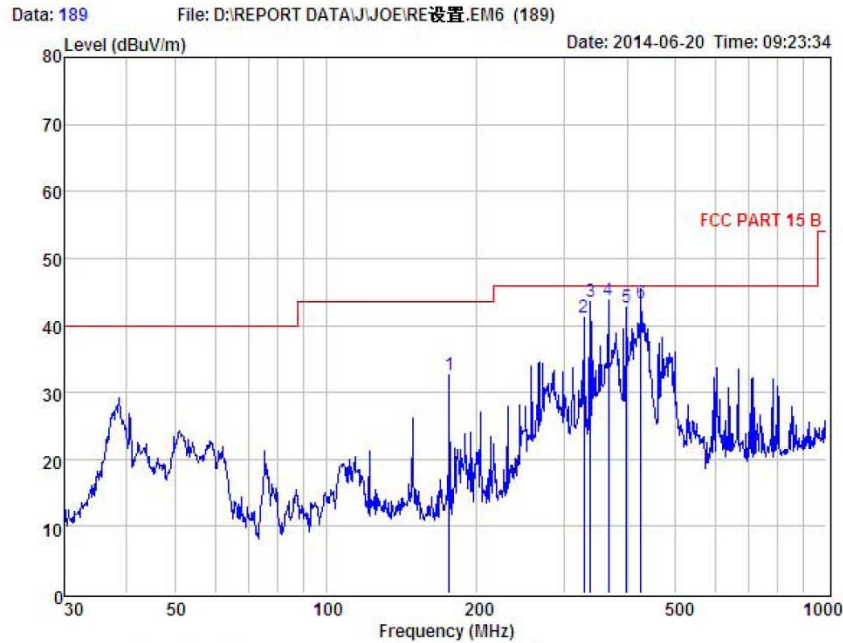
Condition : FCC PART 15 B 3m POL: VERTICAL  
 EUT : Condeco 10.1" Touch Screen  
 Model No : FN41827  
 Test Mode : TX mode  
 Power : DC 48V  
 Test Engineer : Joe  
 Remark :  
 Temp : 24.2°C  
 Hum : 54%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamplifier Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	58.61	45.11	12.75	27.87	0.23	30.22	40.00	-9.78	QP
2	176.27	54.03	12.28	26.93	0.59	39.97	43.50	-3.53	QP
3	337.22	42.43	13.61	24.25	0.71	32.50	46.00	-13.50	QP
4	366.82	46.96	14.16	24.32	0.87	37.67	46.00	-8.33	QP
5	434.07	48.64	15.58	24.47	0.59	40.34	46.00	-5.66	QP
6	489.03	43.55	16.38	24.59	0.96	36.30	46.00	-9.70	QP

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss



Shenzhen Certification Technology Service Co., Ltd.  
 2F, Building B, East Area of Nanchang Second Industrial Zone,  
 Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China  
 Tel: 4006786199 FAX: +86-755-26736857  
 Website: <http://www.cessz.com> Email: [Service@cessz.com](mailto:Service@cessz.com)



Condition : FCC PART 15 B 3m POL: HORIZONTAL  
 EUT : Condeco 10.1'' Touch Screen  
 Model No : PN41827  
 Test Mode : TX mode  
 Power : DC 48V  
 Test Engineer : Joe  
 Remark :  
 Temp : 24.2℃  
 Hum : 54%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamplifier Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	176.27	46.62	12.28	26.93	0.59	32.56	43.50	-10.94	QP
2	327.89	51.17	13.46	24.23	0.72	41.12	46.00	-4.88	QP
3	337.22	53.44	13.61	24.25	0.71	43.51	46.00	-2.49	QP
4	366.82	53.12	14.16	24.32	0.87	43.83	46.00	-2.17	QP
5	399.03	51.63	14.71	24.42	0.66	42.58	46.00	-3.42	QP
6	426.52	51.83	15.38	24.46	0.67	43.42	46.00	-2.58	QP

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

## 4.5. Field strength

<b>EUT</b>	Condeco 10.1" Touch Screen	<b>Model Name</b>	PN41827
<b>Temperature</b>	26°C	<b>Relative Humidity</b>	58%
<b>Pressure</b>	960hPa	<b>Test voltage</b>	DC 48V from adapter with AC 120V/60Hz
<b>Test Mode</b>	TX	<b>Antenna polarization</b>	X/Y/Z
<b>Distance</b>	3m		

Channel (13.56MHZ)									
Fre. MHz	Position X/Y/Z	Reading dBuV	Antenna Factor dB	Cable Loss dB	Amplifier Gain dB	Correct Factor dB	Measure Result dBuV/m	Limit dBuV/m	Margin dB
13.56	X	122.46 (PK)	10.6	0.33	24.65	-13.72	108.74	124	-15.45
13.56	Y	113.45 (PK)	10.6	0.33	24.65	-13.72	99.73	124	-24.49
13.56	Z	104.43 (PK)	10.6	0.33	24.65	-13.72	90.71	124	-33.51

Notes: --Means other frequency and mode comply with standard requirements and at least have 20dB margin.

Correct Factor=Cable Loss+ Antenna Factor- Amplifier Gain

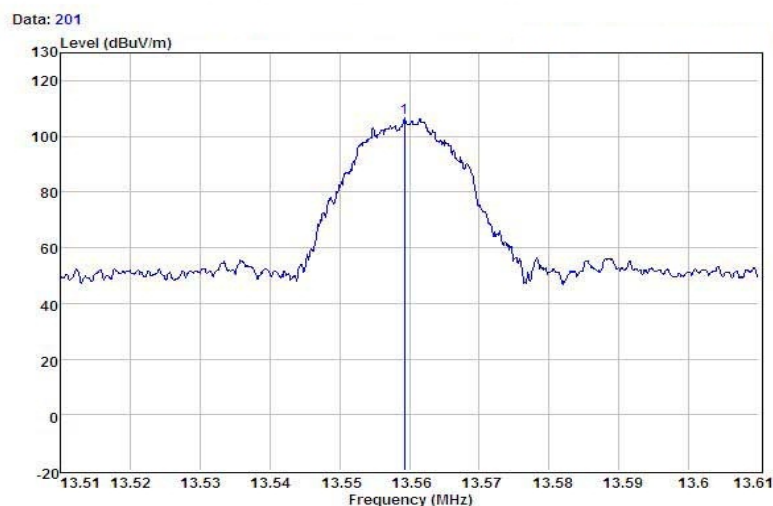
Measurement Result=Reading + Correct Factor

Margin=Measurement Result-Limit

Test plot: worst case



Shenzhen Certification Technology Service Co., Ltd.  
2F, Building B, East Area of Nanchang Second Industrial Zone,  
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China  
Tel: 4006786199 FAX: +86-755-26736857  
Website: <http://www.cessz.com> Email: [Service@cessz.com](mailto:Service@cessz.com)



## 4.6. Radiated Emissions Result of Inside band (13.56MHZ)

### 4.6.1. Limit

Please see the section 15.225(b) and 15.225(c)

15.225(b): Within the bands 13.410–13.553 MHz and 13.567–13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter (50.5dBuV/m) at 30 meters

15.225(c): Within the bands 13.110–13.410 MHz and 13.710–14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter (40.5dBuV/m) at 30 meters

Note: 30m to 3m correction factor calculation:

$$40 * \log(30\text{m}/3\text{m}) = 40$$

### 4.6.2. Test Result:

<b>EUT</b>	Condeco 10.1" Touch Screen	<b>Model Name</b>	PN41827
<b>Temperature</b>	26°C	<b>Relative Humidity</b>	56%
<b>Pressure</b>	960hPa	<b>Test voltage</b>	DC 48V From adapter with AC 120V/60Hz
<b>Test Mode</b>	TX	<b>Distance</b>	3m

<b>Freq. (MHz)</b>	<b>Position X/Y/Z</b>	<b>Detector Mode (PK/QP)</b>	<b>Reading (dBuV)</b>	<b>Factor (dB)</b>	<b>Actual FS (dBuV/m)</b>	<b>Limits 3m (dBuV/m)</b>	<b>Margin (dBuV/m)</b>
13.233	X	Peak	45.43	-13.94	31.49	80.50	-49.01
13.434	X	Peak	46.44	-13.94	32.5	90.50	-58.00
13.495	X	Peak	45.74	-13.94	31.80	90.50	-58.70
13.604	X	Peak	48.75	-13.93	34.82	90.50	-55.68
13.816	X	Peak	46.74	-13.93	32.81	80.50	-47.69
13.934	X	Peak	47.47	-13.93	33.54	80.50	-46.96

Freq. (MHz)	Position X/Y/Z	Detector Mode (PK/QP)	Reading (dBuV)	Factor (dB)	Actual FS (dBuV/m)	Limits 3m (dBuV/m)	Margin (dBuV/m)
13.133	Y	Peak	45.47	-13.94	31.53	80.50	-48.97
13.346	Y	Peak	48.53	-13.94	34.59	80.50	-45.91
13.434	Y	Peak	46.87	-13.94	32.93	90.50	-57.57
13.517	Y	Peak	45.84	-13.94	31.9	90.50	-58.60
13.654	Y	Peak	46.65	-13.93	32.72	90.50	-57.78
13.816	Y	Peak	47.56	-13.93	33.63	80.50	-46.87

Freq. (MHz)	Position X/Y/Z	Detector Mode (PK/QP)	Reading (dBuV)	Factor (dB)	Actual FS (dBuV/m)	Limits 3m (dBuV/m)	Margin (dBuV/m)
13.204	Z	Peak	44.53	-13.94	30.59	80.50	-49.91
13.383	Z	Peak	46.56	-13.94	32.62	80.50	-47.88
13.436	Z	Peak	45.55	-13.94	31.61	90.50	-58.89
13.594	Z	Peak	46.64	-13.93	32.71	90.50	-57.79
13.727	Z	Peak	47.57	-13.93	33.64	80.50	-46.86
13.856	Z	Peak	45.57	-13.93	31.64	80.50	-48.86



## 5. Frequency stability

### 5.1. Test limit

Please refer section 15.225e.

Regulation 15.225(e) The frequency tolerance of the carrier signal shall be maintained within  $\pm 0.01\%$  ( $\pm 100$  ppm) of the operating frequency over a temperature variation of  $-20$  degrees to  $+50$  degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

### 5.2. Test Procedure

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 5.3. Test Setup



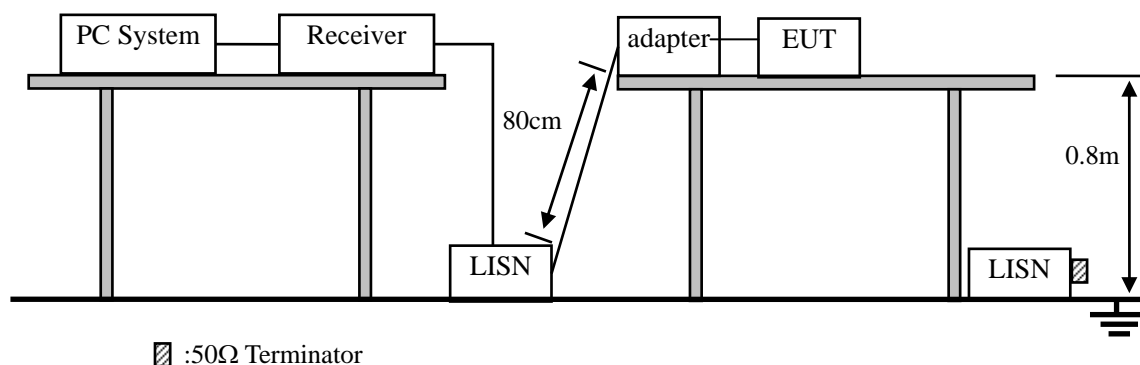
### 5.4. Test Results

**PASS.**

Detailed information please see the following page.

Assigned Frequency(MHz): 13.56MHz				
Voltage: AC 120V				
Voltage	Temperature	Measured Frequency (MHz)	Frequency stability	Limit
Low 102V	+20°C	13.56054	0.00054	±100 ppm
Normal 120V	-20°C	13.56057	0.00057	
	-10°C	13.55974	-0.00026	
	0°C	13.56058	0.00058	
	+10°C	13.55965	-0.00035	
	+20°C	13.56047	0.00047	
	+30°C	13.56068	0.00068	
	+40°C	13.55965	-0.00035	
	+50°C	13.55955	-0.00045	
High 138V	+20°C	13.56057	0.00057	

### 6.1. Block Diagram of Test Setup



## 6.2. Limit

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

2. The lower limit shall apply at the transition frequencies.

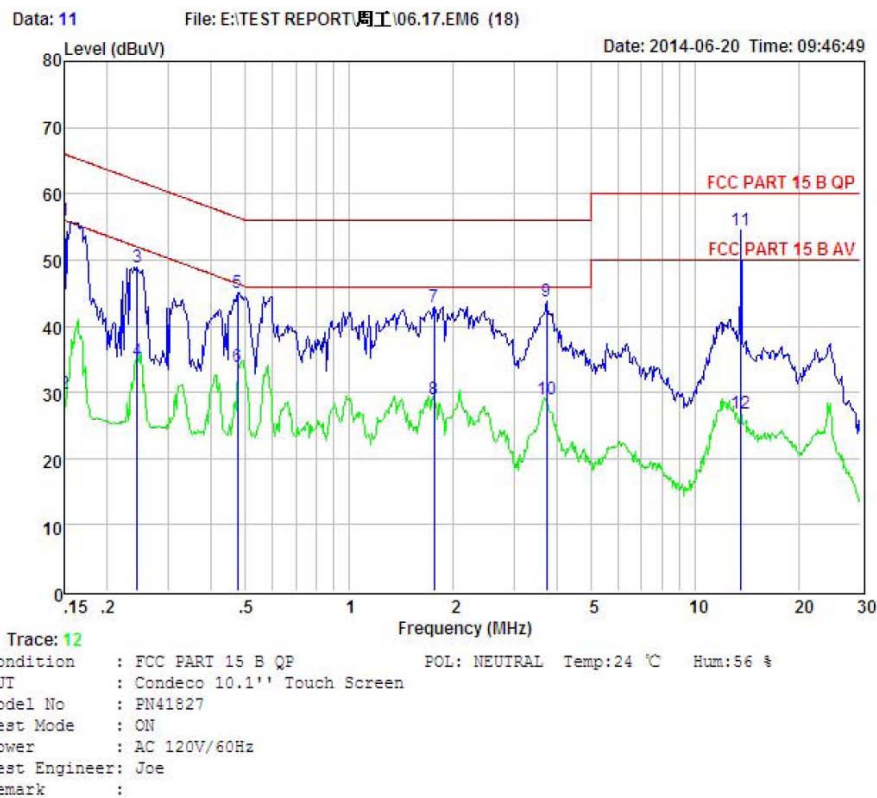
### 6.3. Test Procedure

- (1) The EUT was placed on a non-metallic table, 80cm above the ground plane.
- (2) Setup the EUT and simulator as shown in 10.1
- (3) The EUT Power connected to the power mains through a power adapter and a line impedance stabilization network (L.I.S.N1). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N1), this provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4 2009 and ANSI C64.10:2009 on conducted Emission test.
- (4) The bandwidth of test receiver is set at 10 KHz.
- (5) The frequency range from 150 KHz to 30MHz is checked.

## 6.4. Test Result

**PASS.** (See below detailed test data)

Shenzhen Certification Technology Service Co., Ltd.  
 2F, Building B, East Area of Nanchang Second Industrial Zone,  
 Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China  
 Tel: 4006786199 Fax: +86-755-26736857  
 Website: <http://www.cessz.com> Email: [Service@cessz.com](mailto:Service@cessz.com)



Item	Freq MHz	Read dBuV	LISN Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	0.150	46.07	0.03	-9.72	0.10	55.92	66.00	-10.08	QP
2	0.150	20.00	0.03	-9.72	0.10	29.85	56.00	-26.15	Average
3	0.244	39.16	0.03	-9.72	0.10	49.01	61.95	-12.94	QP
4	0.244	25.00	0.03	-9.72	0.10	34.85	51.95	-17.10	Average
5	0.476	35.30	0.03	-9.72	0.10	45.15	56.41	-11.26	QP
6	0.476	24.00	0.03	-9.72	0.10	33.85	46.41	-12.56	Average
7	1.762	33.13	0.05	-9.70	0.10	42.98	56.00	-13.02	QP
8	1.762	19.00	0.05	-9.70	0.10	28.85	46.00	-17.15	Average
9	3.720	33.85	0.08	-9.69	0.12	43.74	56.00	-12.26	QP
10	3.720	19.00	0.08	-9.69	0.12	28.89	46.00	-17.11	Average
11	13.551	44.61	0.23	-9.42	0.23	54.49	60.00	-5.51	QP
12	13.551	17.00	0.23	-9.42	0.23	26.88	50.00	-23.12	Average

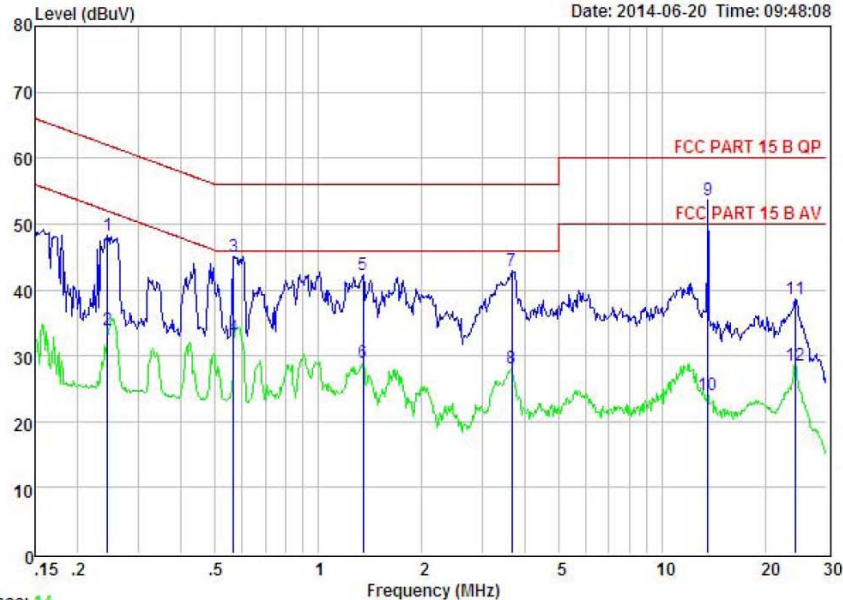
Remarks: Level = Read + LISN Factor - Preamp Factor + Cable loss



Shenzhen Certification Technology Service Co., Ltd.  
2F, Building B, East Area of Nanchang Second Industrial Zone,  
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China  
Tel: 4006786199 Fax: +86-755-26736857  
Website: <http://www.cessz.com> Email: [Service@cessz.com](mailto:Service@cessz.com)

Data: 13 File: E:\TEST REPORT\周工\06.17.EM6 (18)

Date: 2014-06-20 Time: 09:48:08



Trace: 14

Condition : FCC PART 15 B QP POL: LINE Temp: 24 °C Hum: 56 %  
EUT : Condeco 10.1" Touch Screen  
Model No : PN41827  
Test Mode : ON  
Power : AC 120V/60Hz  
Test Engineer: Joe  
Remark :

Item	Freq MHz	Read dBuV	LISN Factor dB	Preamplifier Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	0.244	38.43	0.03	-9.72	0.10	48.28	61.95	-13.67	QP
2	0.244	24.00	0.03	-9.72	0.10	33.85	51.95	-18.10	Average
3	0.567	35.16	0.03	-9.72	0.10	45.01	56.00	-10.99	QP
4	0.567	23.00	0.03	-9.72	0.10	32.85	46.00	-13.15	Average
5	1.352	32.38	0.05	-9.71	0.10	42.24	56.00	-13.76	QP
6	1.352	19.00	0.05	-9.71	0.10	28.86	46.00	-17.14	Average
7	3.642	32.90	0.08	-9.69	0.12	42.79	56.00	-13.21	QP
8	3.642	18.11	0.08	-9.69	0.12	28.00	46.00	-18.00	Average
9	13.551	43.81	0.23	-9.42	0.23	53.69	60.00	-6.31	QP
10	13.551	14.12	0.23	-9.42	0.23	24.00	50.00	-26.00	Average
11	24.400	28.04	0.45	-9.58	0.46	38.53	60.00	-21.47	QP
12	24.400	18.00	0.45	-9.58	0.46	28.49	50.00	-21.51	Average

Remarks: Level = Read + LISN Factor - Preamp Factor + Cable loss

Remark: ON mode is at TX mode

## **7. Antenna Requirements**

### **7.1. Limit**

For intentional device, according to FCC 47 CFR Section 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. And according to FCC 47 CFR Section 15.209, if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

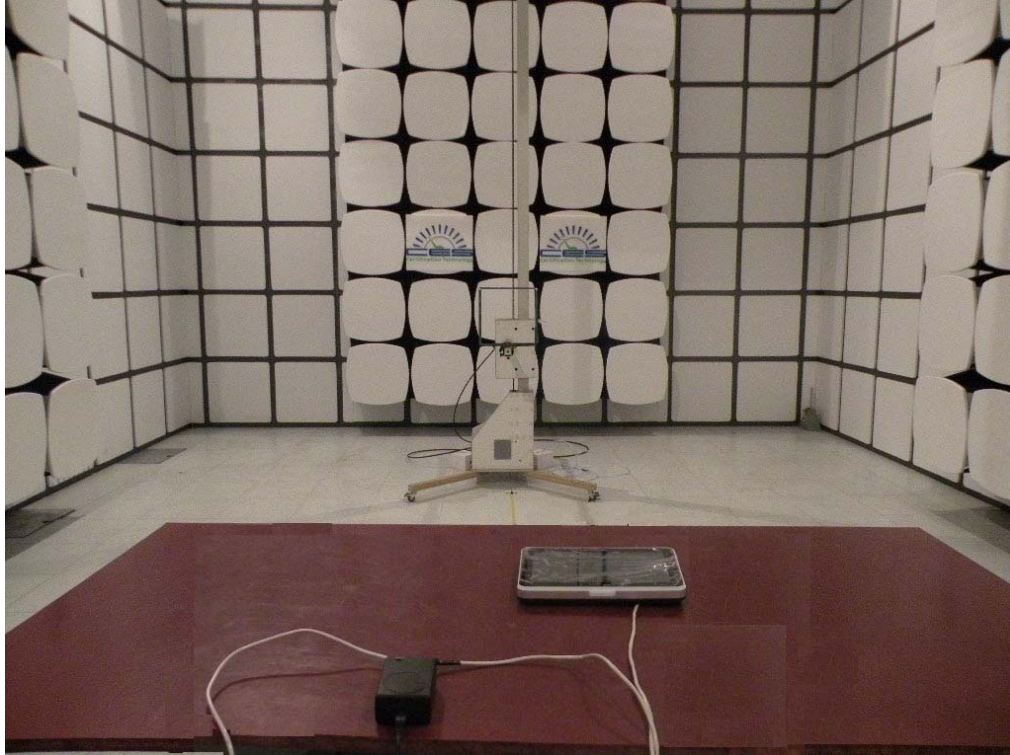
### **7.2. Result**

The antennas used for this product are integral Loop Antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 0dBi.

## 8. Test setup photo

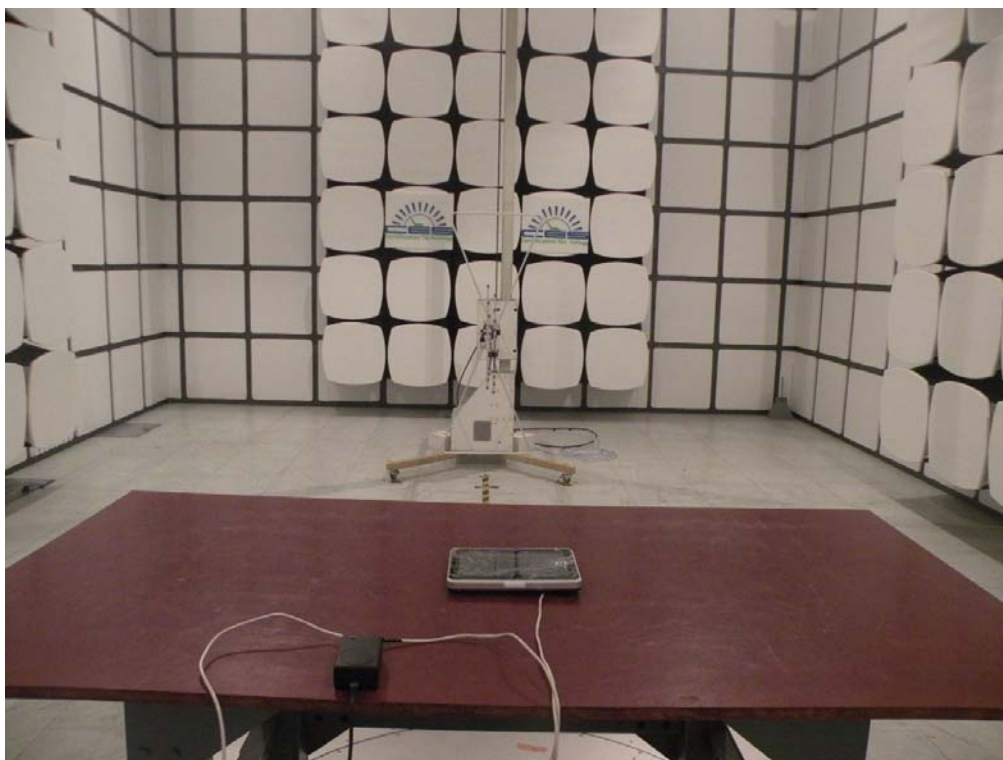
### 8.1. Photographs-Radiated Emission Test Setup in Chamber

Below 30M





## Below 30M-1G



### 8.2. Photographs-Conducted Emission Test Setup





## 9. Photos of EUT

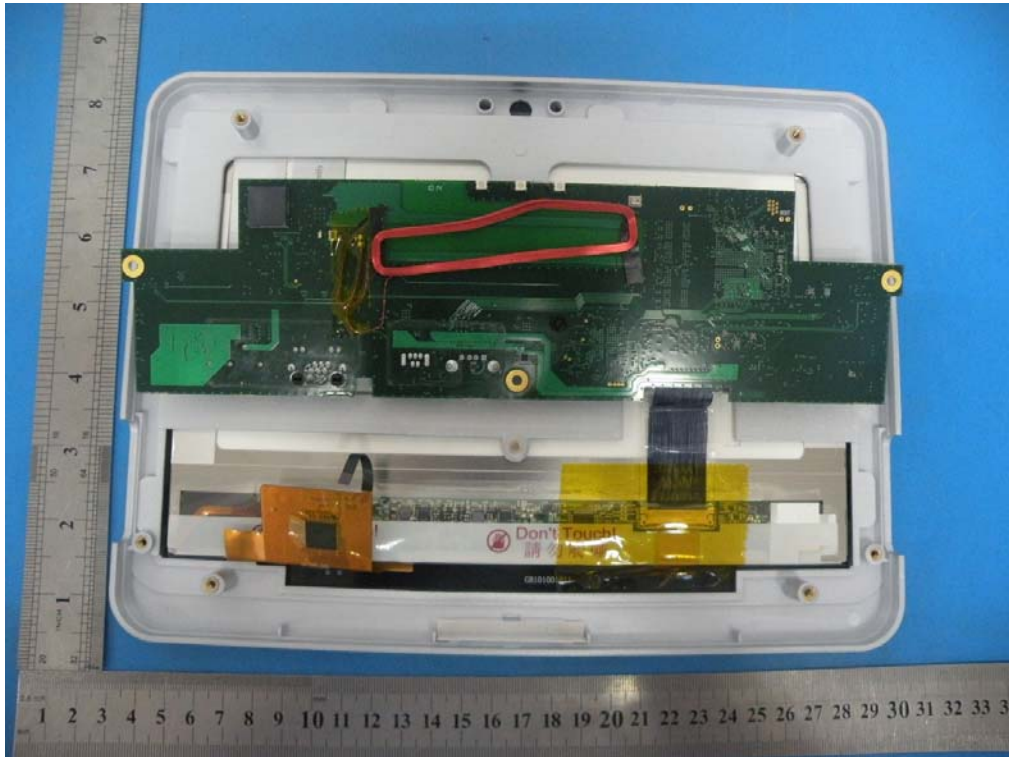


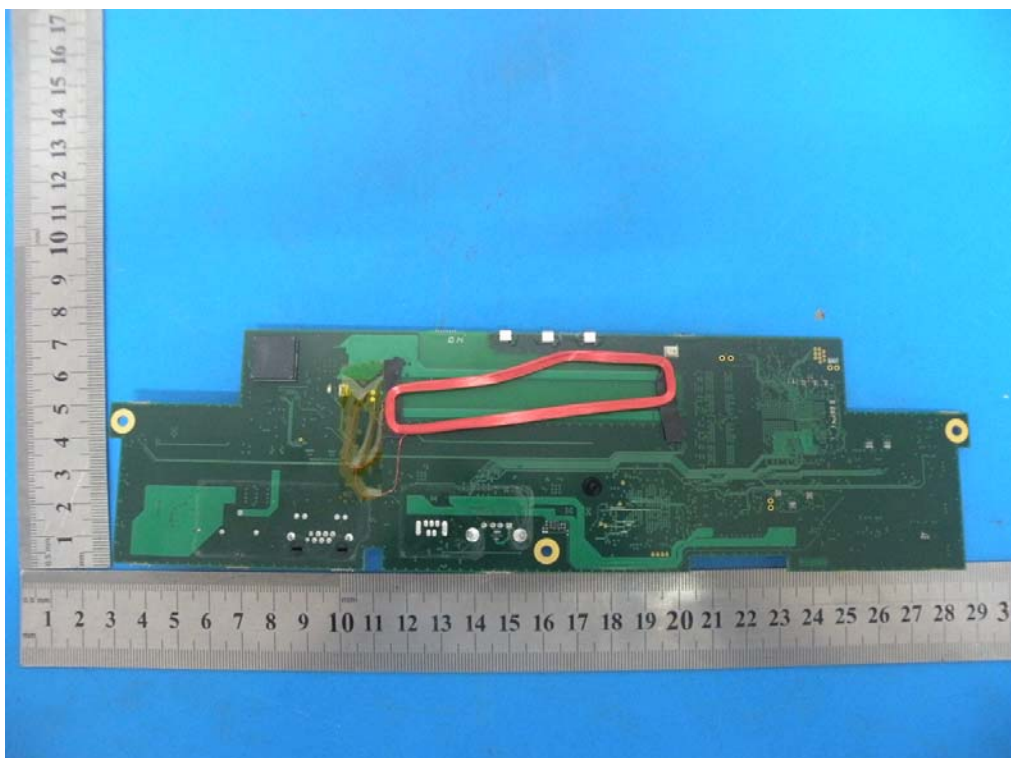






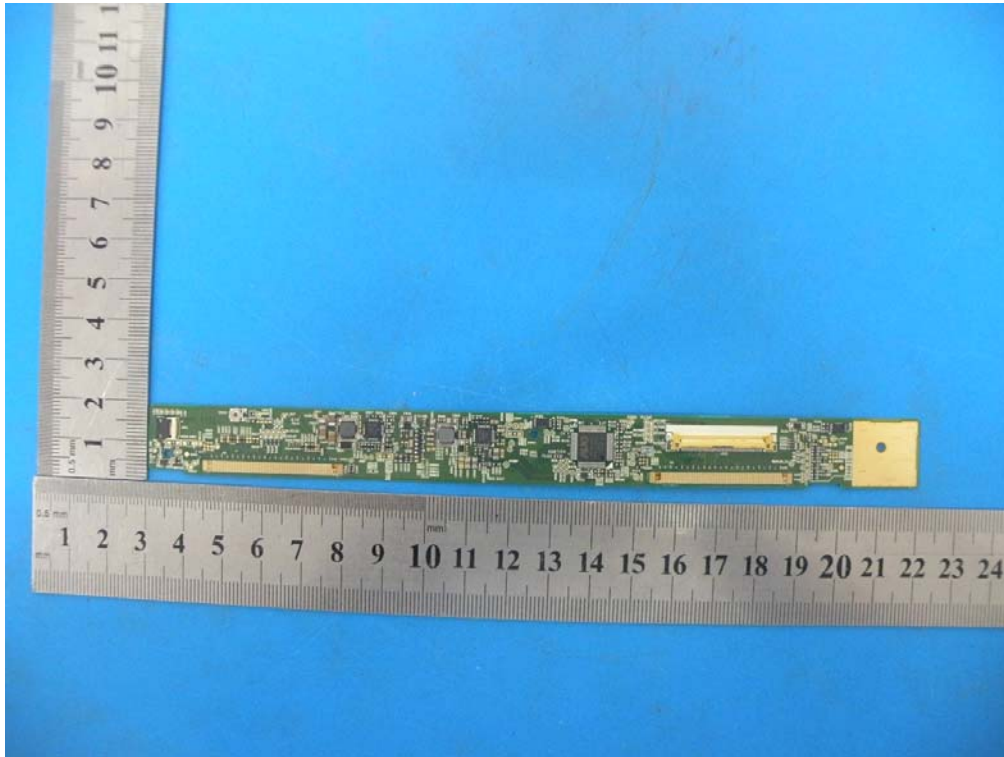












-----END OF THE REPORT-----