
FCC Test Report

Report No.: AGC00747130703FE08

FCC ID : RW9EUTB-785

APPLICATION PURPOSE : Original Equipment

PRODUCT DESIGNATION : TABLET PC

BRAND NAME : EUROCASE, VIXX, EUROTECHNOLOGIE

TEST MODEL : EUTB-785,EUTB-785+,EUTB-785A,EUTB-788,VI-785,
VI-777,VI-783,OET781,OET785,OET783,OET787

CLIENT : EUROTEnologie Co., Ltd

DATE OF ISSUE : Jul.19,2013

STANDARD(S) : FCC Part 15 Rules

REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

CAUTION:

This report shall not be reproduced except in full without the written permission of the test laboratory and shall not be quoted out of context.

REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jul.19,2013	Valid	Original Report

TABLE OF CONTENTS

1. VERIFICATION OF COMPLIANCE	5
2. PRODUCT INFORMATION	6
3. TEST FACILITY	7
4. SUPPORT EQUIPMENT LIST	8
5. SYSTEM DESCRIPTION	8
6 SUMMARY OF TEST RESULTS	9
7. FCC LINE CONDUCTED EMISSION TEST	10
7.1. TEST EQUIPMENT OF LINE CONDUCTED EMISSION TEST	10
7.2 .LIMITS OF LINE CONDUCTED EMISSION TEST	10
7.3. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST	10
7.4. PROCEDURE OF LINE CONDUCTED EMISSION TEST	11
7.5 TEST RESULT OF LINE CONDUCTED EMISSION TEST	12
8. FCC RADIATED EMISSION TEST	14
8.1. TEST EQUIPMENT OF RADIATED EMISSION	14
8.2. LIMITS OF RADIATED EMISSION TEST	14
8.3 BLOCK DIAGRAM OF RADIATED EMISSION TEST	14
8.4 PROCEDURE OF RADIATED EMISSION TEST	15
8.5 TEST RESULT OF RADIATED EMISSION TEST	16
APPENDIX 1	18
PHOTOGRAPHS OF TEST SETUP	18
APPENDIX 2	19
PHOTOGRAPHS OF EUT	19

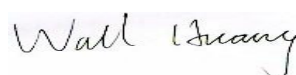
1. VERIFICATION OF COMPLIANCE

Applicant	EUROTECHnologie Co., Ltd
Address	Room 1510, 15/F, Metro Centre II, 21 Lam Hing Street, Kowloon Bay, Kowloon, Hong Kong
Manufacturer	EUROTECHnologie Co., Ltd
Address	Room 1510, 15/F, Metro Centre II, 21 Lam Hing Street, Kowloon Bay, Kowloon, Hong Kong
Product Designation	TABLET PC
Brand name:	EUROCASE, VIXX, EUROTECHNOLOGIE
Test Model	EUTB-785
Series Model	EUTB-785+, EUTB-785A, EUTB-788, VI-785, VI-777, VI-783, OET781, OET785, OET783, OET787
Difference description	All the same except for the appearance.
Measurement Procedure	ANSI C63.4: 2003
Date of test:	Jul.12~Jul.16, 2013
Deviation:	None
Condition of Test Sample	Normal

The above equipment was tested by Attestation Of Global Compliance Co., Ltd. for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, the measurement procedure according to ANSI C63.4:2003. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

Test By:



Wall Huang

Jul.19,2013

Reviewed By:



Forrest Lei

Jul.19,2013

Authorized By:



Solger Zhang

Jul.19,2013

2. PRODUCT INFORMATION

Housing Type: Plastic

EUT Rating Voltage: DC 3.7V by battery or USB Operated

I/O Port Information (☒Applicable ☐Not Applicable)

I/O Port of EUT			
I/O Port Type	Q'TY	Cable	Tested with
USB Port	1	1.0 m Unshielded	1
HDMI Port	1	0	1
AUX Port	1	0	1
DC Input Port	1	1.0 m Unshielded	1
TF Port	1	0	1

3. TEST FACILITY

Facility

Attestation of Global Compliance (Shenzhen) Co., Ltd

Location:

2/F., Building 2, No.1-No.4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Bao'an District, Shenzhen, Guangdong, China

Description:

The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2003.

Site Filing:

The FCC Registration Number is 259865

Instrument Tolerance:

All measuring equipment is in accord with ANSI C63.4 requirements that meet industry regulatory agency and accreditation agency requirement.

4. SUPPORT EQUIPMENT LIST

Device Type	Manufacturer	Model Name	Serial No.	Data Cable	Power Cable
PC	Dell	INSPIRON	N/A	N/A	1.5m unshielded

****Note:** All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

5. SYSTEM DESCRIPTION

EUT test procedure:

1. Connect EUT and peripheral devices.
2. Power on the EUT, the EUT begins to work.
3. Running data transmission and make sure the EUT normal working.

Test Mode

1. USB (Data transmitting)

NOTE: Other modes have reflected in VOC program.

6. SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§15.107	Conduction Emission	Compliant
§15.109	Radiated Emission	Compliant

7. FCC LINE CONDUCTED EMISSION TEST

7.1. TEST EQUIPMENT OF LINE CONDUCTED EMISSION TEST

Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	Agilent	E4440A	US41421290	07/18/2013	07/17/2014
EMI Test Receiver	Rohde & Schwarz	ESCI	100694	07/18/2013	07/17/2014
LISN	Rohde & Schwarz	ESH2-Z5	862060/020	07/18/2013	07/17/2014

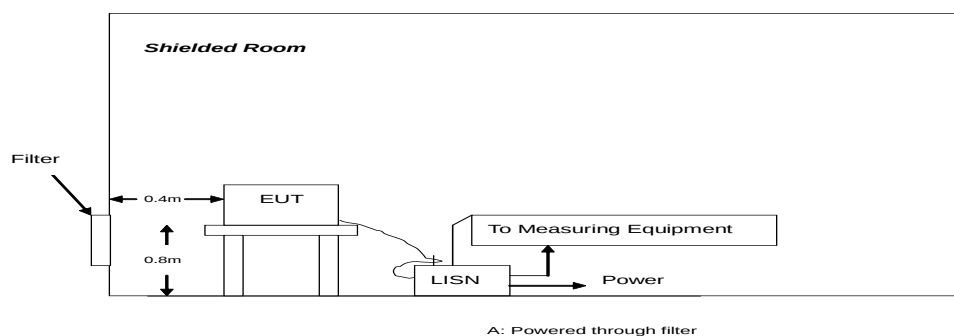
7.2 .LIMITS OF LINE CONDUCTED EMISSION TEST

Frequency	Maximum RF Line Voltage	
	Q.P.(dBuV)	Average(dBuV)
150kHz~500kHz	66-56	56-46
500kHz~5MHz	56	46
5MHz~30MHz	60	50

****Note: 1. The lower limit shall apply at the transition frequency.**

2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz

7.3. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST

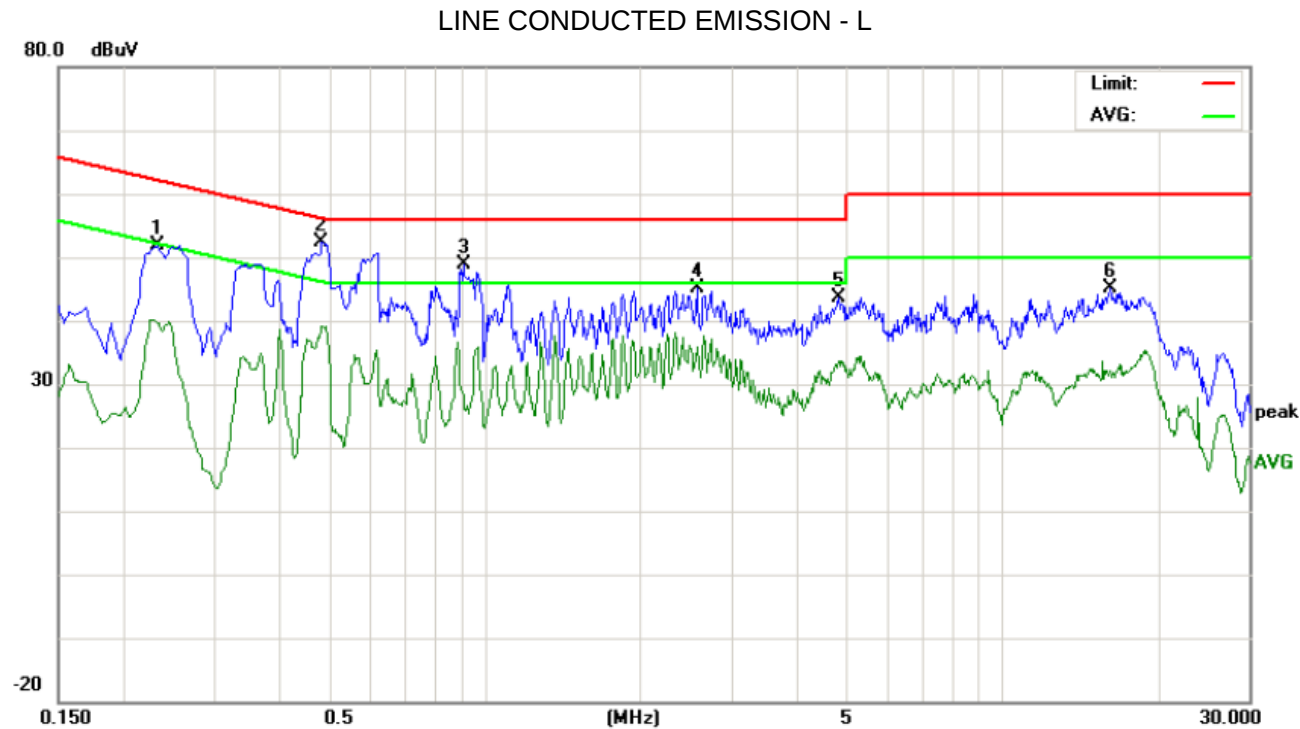


7.4. PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received DC 5V power by PC. All support equipments received AC 120V/60Hz power from socket under the turntable, if any.
- 5) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 6) Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 7) During the above scans, the emissions were maximized by cable manipulation.
- 8) A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions.
- 9) Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less -2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.

The test data of the worst case condition(mode 2) was reported on the following Data page.

7.5 TEST RESULT OF LINE CONDUCTED EMISSION TEST



Site: Conduction

Limit: FCC Class B Conduction(QP)

EUT: TABLET PC

M/N: EUTB-785

Mode: USB

Note:

Phase: L1

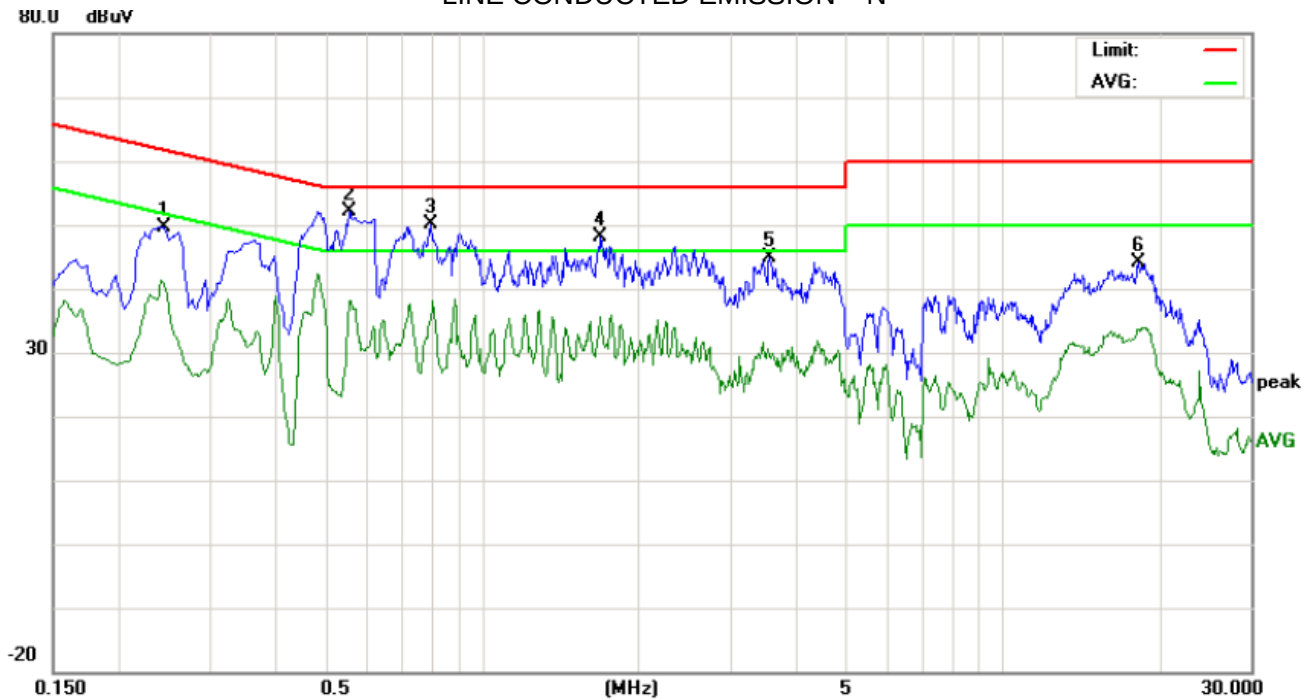
Power:

Temperature: 26

Humidity: 60 %

No.	Freq. (MHz)	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.2340	41.53		29.35	10.25	51.78		39.60	62.30	52.30	-10.52	-12.70	P	
2	0.4860	41.97		28.74	10.39	52.36		39.13	56.24	46.24	-3.88	-7.11	P	
3	0.9100	38.36		17.79	10.41	48.77		28.20	56.00	46.00	-7.23	-17.80	P	
4	2.5780	34.67		25.41	10.45	45.12		35.86	56.00	46.00	-10.88	-10.14	P	
5	4.8460	33.43		23.28	10.23	43.66		33.51	56.00	46.00	-12.34	-12.49	P	
6	16.2139	35.06		22.01	10.11	45.17		32.12	60.00	50.00	-14.83	-17.88	P	

LINE CONDUCTED EMISSION – N



Site: Conduction

Phase: **N**

Temperature: 26

Limit: FCC Class B Conduction(QP)

Power:

Humidity: 60 %

EUT: TABLET PC

M/N: EUTB-785

Mode: USB

Note:

No.	Freq. (MHz)	Reading_Level (dBuV)			Correct Factor dB	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.2460	39.40		30.39	10.27	49.67		40.66	61.89	51.89	-12.22	-11.23	P	
2	0.5580	41.84		27.70	10.35	52.19		38.05	56.00	46.00	-3.81	-7.95	P	
3	0.7980	39.96		24.90	10.28	50.24		35.18	56.00	46.00	-5.76	-10.82	P	
4	1.6900	37.83		24.54	10.32	48.15		34.86	56.00	46.00	-7.85	-11.14	P	
5	3.5700	34.34		19.00	10.50	44.84		29.50	56.00	46.00	-11.16	-16.50	P	
6	18.2860	34.05		23.41	10.12	44.17		33.53	60.00	50.00	-15.83	-16.47	P	

8. FCC RADIATED EMISSION TEST

8.1. TEST EQUIPMENT OF RADIATED EMISSION

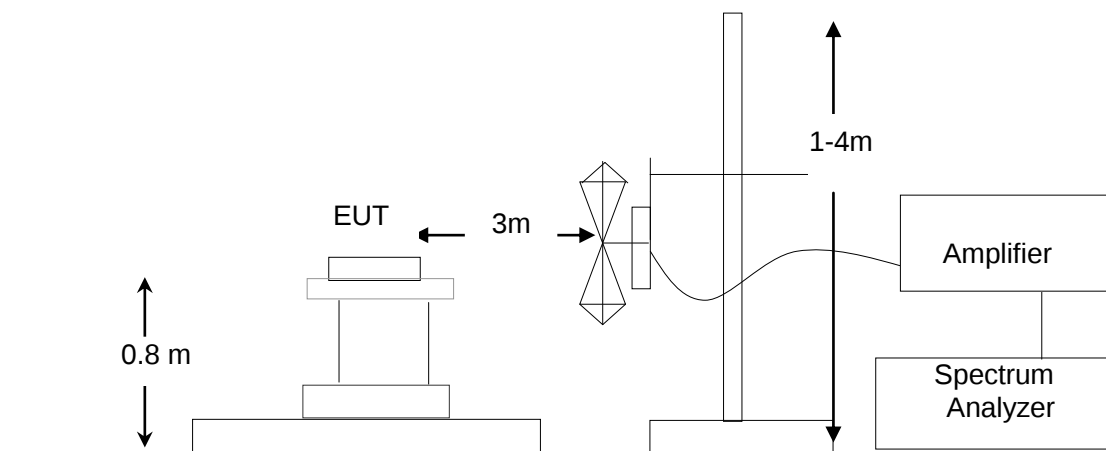
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
PSA SERIES SPECTRUM ANALYZER	AGILENT	E4440A	US41421290	07/18/2013	07/17/2014
ANTENNA	A.H.	SAS-521-4	26	07/18/2013	07/17/2014
HORN ANTENNA	EM	EM-AH-10180	67	04/21/2013	04/20/2014
AMPLIFIER	EM	EM30180	0607030	07/18/2013	07/17/2014
POSITIONING CONTROLLER	MF	MF-7802	MF780208147	07/18/2013	07/17/2014

8.2. LIMITS OF RADIATED EMISSION TEST

Frequency (MHz)	Distance (m)	Maximum Field Strength Limit (dBuV/m/ Q.P.)
30~88	3	40.0
88~216	3	43.5
216~960	3	46.0
Above 960	3	54.0

**Note: The lower limit shall apply at the transition frequency.

8.3 BLOCK DIAGRAM OF RADIATED EMISSION TEST



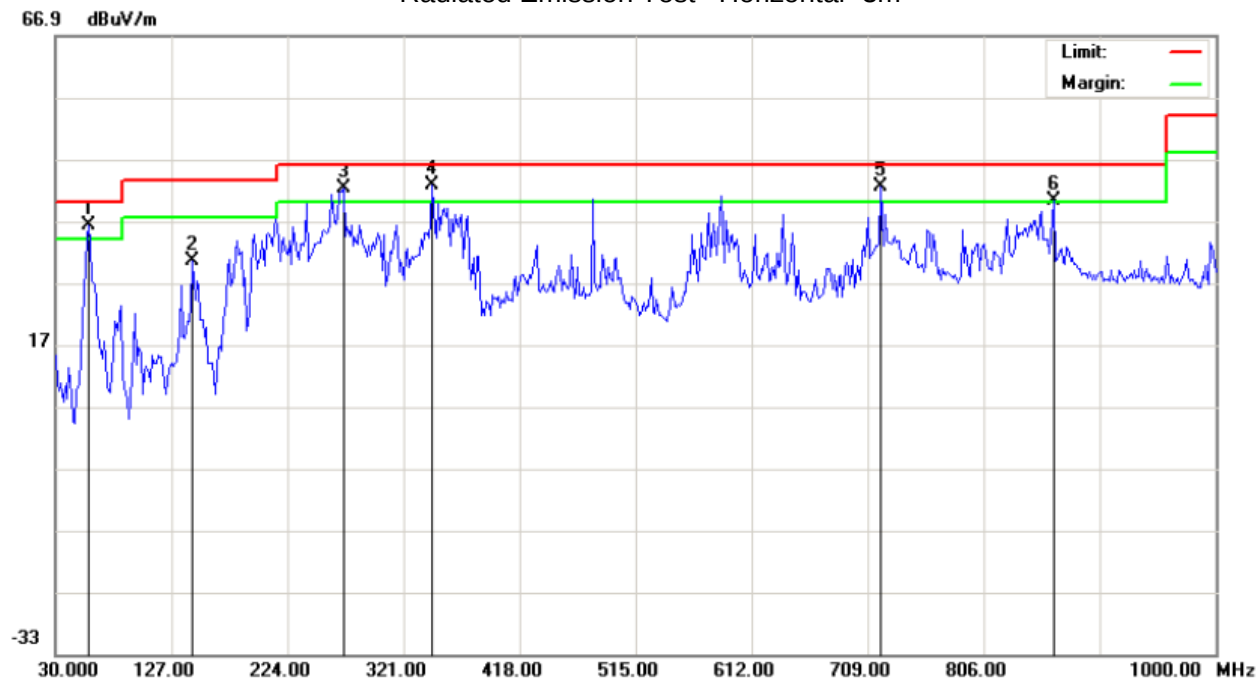
8.4 PROCEDURE OF RADIATED EMISSION TEST

- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received DC 5V by PC. All support equipments received AC 120V/60Hz power from socket under the turntable, if any.
- 5) The antenna was placed at 3 meter away from the EUT as stated in FCC Part 15. The antenna connected to the Analyzer via a cable and at times a pre-amplifier would be used.
- 6) The Analyzer / Receiver quickly scanned from 30MHz to 1000MHz. 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.
- 7) The test mode(s) were scanned during the test:
- 8) 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 Q.P./Peak reading is presented.

The test data of the worst case condition(mode 1) was reported on the following Data page

8.5 TEST RESULT OF RADIATED EMISSION TEST

Radiated Emission Test –Horizontal -3m



Site: site #1

Limit: FCC Class B 3M Radiation

EUT: TABLET PC

M/N: EUTB-785

Mode: USB

Note:

Polarization: **Horizontal**

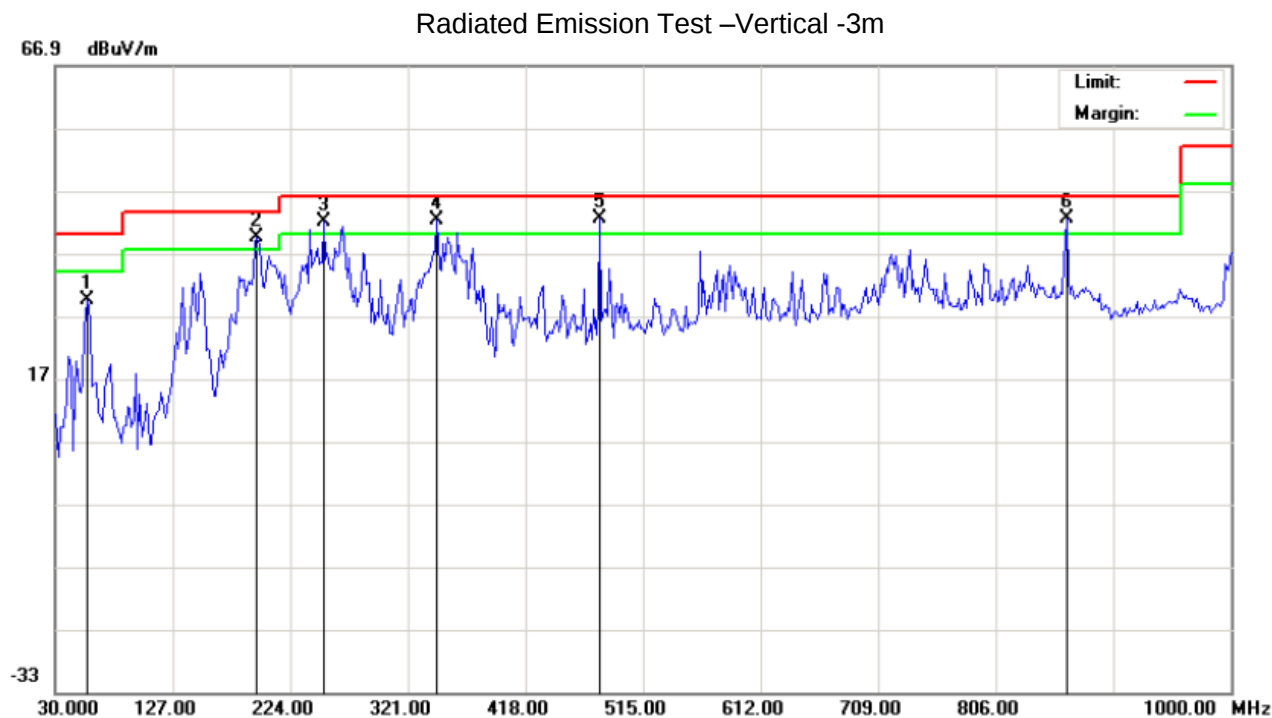
Power:

Distance:

Temperature: 26

Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	!	57.4833	33.13	3.14	36.27	40.00	-3.73	peak			
2		144.7833	24.90	5.52	30.42	43.50	-13.08	peak			
3	!	270.8833	25.17	17.04	42.21	46.00	-3.79	peak			
4	*	345.2500	22.49	20.31	42.80	46.00	-3.20	peak			
5	!	720.3167	17.05	25.55	42.60	46.00	-3.40	peak			
6	!	864.2000	10.19	29.98	40.17	46.00	-5.83	peak			



Site: site #1	Polarization: Vertical	Temperature: 26
Limit: FCC Class B 3M Radiation	Power:	Humidity: 60 %
EUT: TABLET PC	Distance:	
M/N: EUTB-785		
Mode: USB		
Note:		

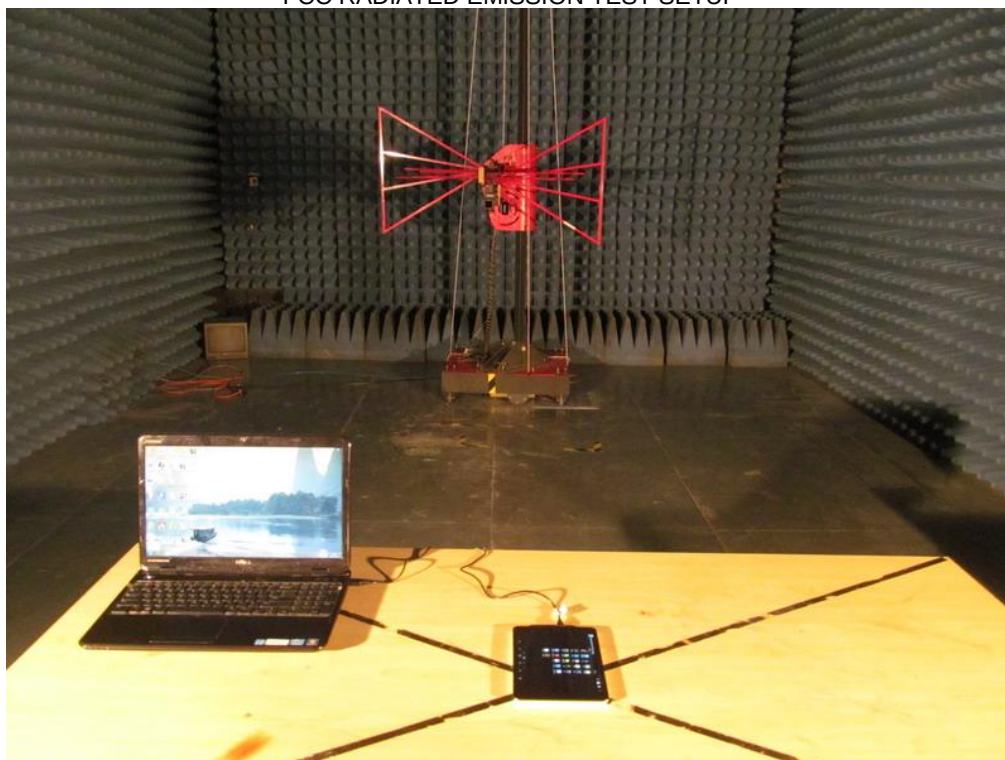
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		55.8667	25.85	3.61	29.46	40.00	-10.54	peak			
2	!	196.5167	32.19	7.25	39.44	43.50	-4.06	peak			
3	!	251.4833	29.62	12.53	42.15	46.00	-3.85	peak			
4	!	345.2500	21.99	20.31	42.30	46.00	-3.70	peak			
5	!	479.4333	20.76	21.67	42.43	46.00	-3.57	peak			
6	*	864.2000	12.27	30.24	42.51	46.00	-3.49	peak			

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

FCC LINE CONDUCTED EMISSION TEST SETUP



FCC RADIATED EMISSION TEST SETUP



APPENDIX 2 PHOTOGRAPHS OF EUT

TOTAL VIEW OF EUT



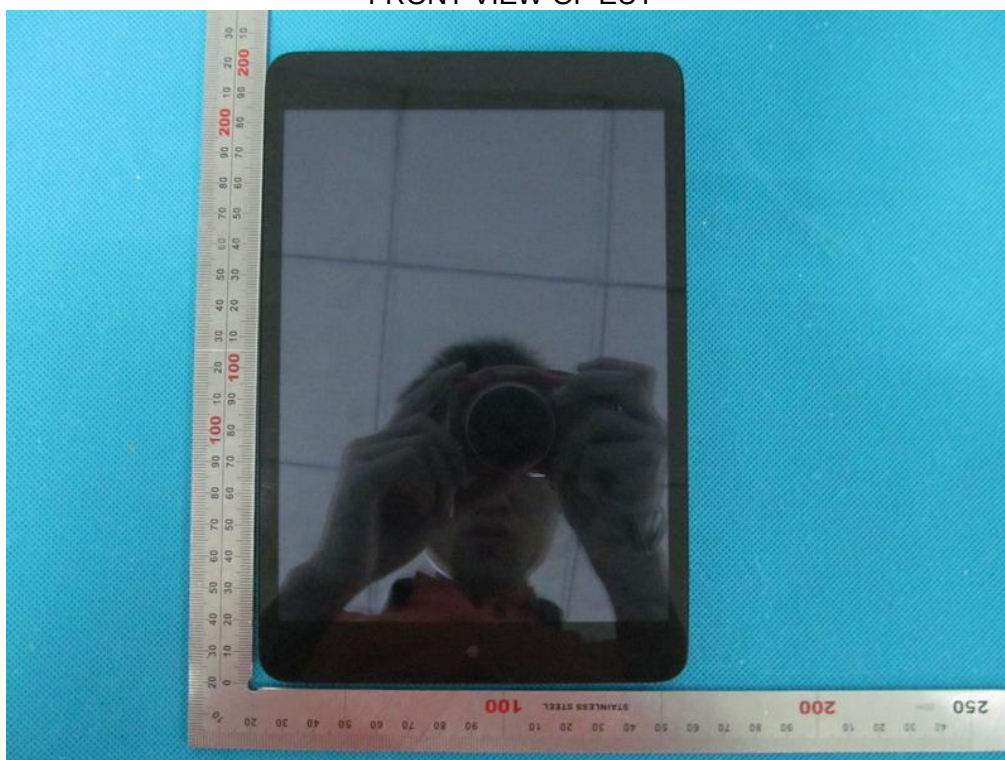
TOP VIEW OF EUT



BOTTOM VIEW OF EUT



FRONT VIEW OF EUT



BACK VIEW OF EUT



LEFT VIEW OF EUT



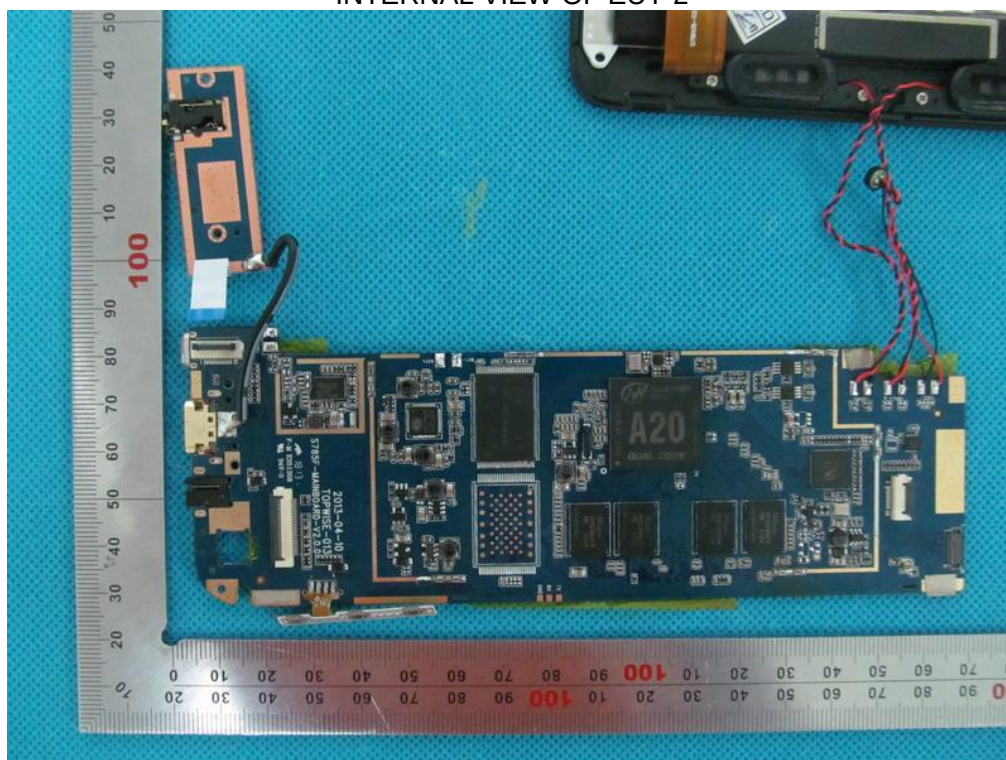
RIGHT VIEW OF EUT



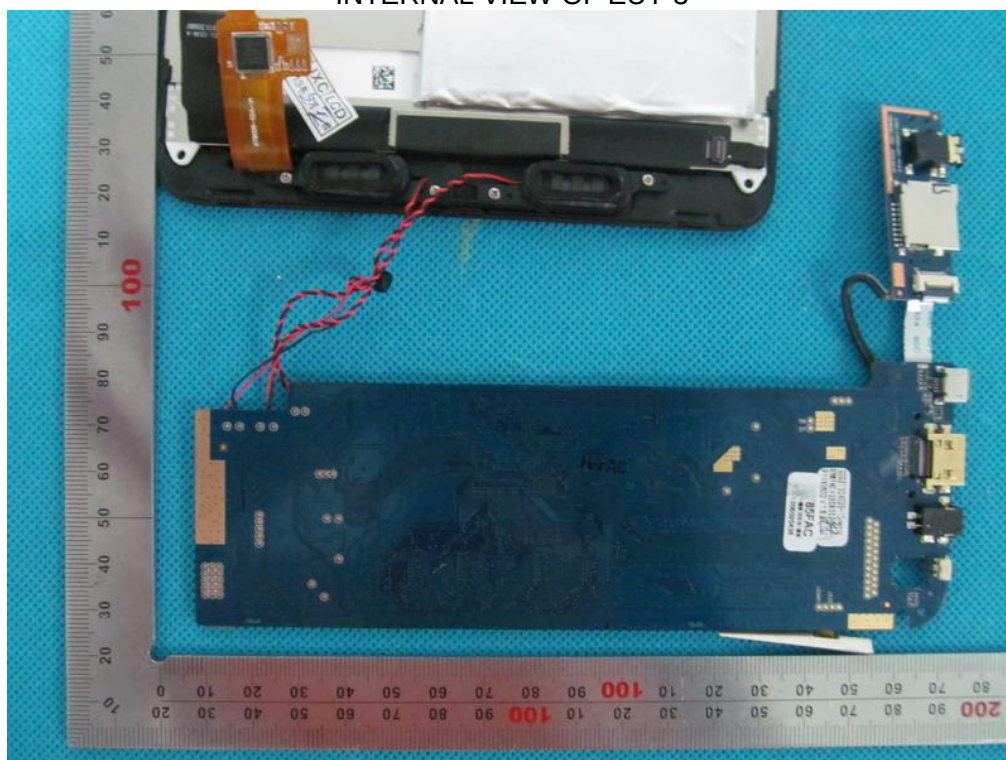
INTERNAL VIEW OF EUT-1



INTERNAL VIEW OF EUT-2



INTERNAL VIEW OF EUT-3



----END OF REPORT----