Test Report of FCC CFR 47 Part 15 Subpart B

On Behalf of

E-matic

FCC ID: XHW-ET43KDBP

Product Description: Tablet PC

Model No.: FTABMP

Supplementary Model: FTABMB (difference appearance color)

Brand Name: E-matic

Prepared for: E-matic

3435 Ocean Park Blvd. #107 PMB# 29 Santa Monica, CA 90405

Prepared by: Bontek Compliance Testing Laboratory Co., Ltd

1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East Road,

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Report No.: BCT12IR-1630E-1
Issue Date: November 6, 2012

Test Date: September 17~November 4, 2012

Test by: Reviewed By:

Vincent Jiang

Kovin Chi

TABLE OF CONTENTS

1. GENERAL INFORMATION	3
1.2 Test Standards	R TEST (EUT)
1.3 TEST FACILITY	
2. SYSTEM TEST CONFIGURATION	5
2.1 EUT CONFIGURATION	5
2.2 EUT Exercise	5
	6
3. SUMMARY OF TEST RESULTS	
4 TEST OF AC POWER LINE CONDUCTED EMI	SSION
	N 8
	Ç
4.5 Test Result	9
5 - RADIATED DISTURBANCES	
	18
5.4 Test Procedure	
	DN19
5 6 RADIATED EMISSIONS TEST RESULT	19

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	E-matic
Address of Applicant:	3435 Ocean Park Blvd. #107 PMB# 29 Santa Monica, CA 90405
Manufacturer:	Shenzhen SmartBlue Technology Limited
Address of Manufacturer:	7F, No.6 Building, Yusheng Industrial Zone, No.467 Xixiang section of 107 National Rd, Xixiang Street, Bao'an District, Shenzhen

General Description of E.U.T

Items	Description
EUT Description:	Tablet PC
Trade Name:	E-matic
Model No.:	FTABMP
Supplementary Model:	FTABMB (difference appearance color)
Frequency Band:	IEEE 802.11b/g,
	IEEE 802.11n HT20 (DTS Band) : 2412MHz∼2462MHz,
	IEEE 802.11n HT40 (DTS Band) : 2422MHz \sim 2452MHz
Channel Spacing:	IEEE 802.11b/g, 802.11n HT20/HT40: 5MHz
Number of Channels:	IEEE 802.11b/g, 802.11n HT20:11 Channels
	IEEE 802.11n HT40 :7 Channels
Transmit Data Rate:	IEEE802.11b: 11, 5.5, 2, 1 Mbps
	IEEE802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps
	IEEE802.11n HT20: 130, 117, 104, 78, 52, 39, 26, 13 Mbps
	IEEE802.11n HT40 : 270 , 243 , 216 , 162 , 108 , 81 , 54 , 27 Mbps
Type of Modulation:	IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK)
	IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)
	IEEE 802.11n HT20/40: OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna Type:	Built-in Antenna
Antenna Gain:	1dBi
Power Supply:	Input: DC3.7V 1100mAh for build-in battery
Adapter Information:	Model:FKS106HSC-0501500U
	Input:100-240V 50/60Hz 0.25A Max
	Output: 5VDC 1.5A

^{*} The test data gathered are from the production sample provided by the manufacturer.

Report No.: BCT12IR-1630E-1 Page 3 of 27 FCC ID: XHW-ET43KDBP

1.2 Test Standards

The following Declaration of Conformity report of EUT is prepared in accordance with FCC Rules and Regulations Part 15 Subpart B 2006

The objective of the manufacturer is to demonstrate compliance with the described above standards.

1.3 Test Facility

All measurement required was performed at laboratory of Bontek Compliance Testing Laboratory Ltd at 1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East Road, Nanshan, Shenzhen, China.

The test facility is recognized, certified, or accredited by the following organizations: **FCC – Registration No.: 338263**

BONTEK COMPLIANCE TESTING LABORATORY LTD. EMC Laboratory has been registered 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 338263, March 03, 2011.

IC Registration No.: 7631A

The 3m alternate test site of BONTEK COMPLIANCE TESTING LABORATORY LTD. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 7631A on January 25, 2011.

CNAS - Registration No.: L3923

BONTEK COMPLIANCE TESTING LABORATORY LTD. to ISO/IEC 17025:25 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing. The acceptance letter from the CNAS is maintained in our files: Registration: L3923, March 22, 2012.

TUV - Registration No.: UA 50203122-0001

BONTEK COMPLIANCE TESTING LABORATORY LTD. An assessment of the laboratory was conducted according to the "Procedures and Conditions for EMC Test Laboratories" with reference to EN ISO/IEC 17025 by a TUV Rheinland auditor. Audit Report NO. 17010783-002.

Report No.: BCT12IR-1630E-1 Page 4 of 27 FCC ID: XHW-ET43KDBP

2. SYSTEM TEST CONFIGURATION

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

The calibrated antennas used to sample the radiated field strength are mounted on a non-conductive, motorized antenna mast 3 or 10 meters from the leading edge of the turntable.

2.3 General Test Procedures

Conducted Emissions:The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 7.1 of ANSI C63.4-2003 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak detector mode.

Radiated Emissions: The EUT is a placed on as turntable, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4-2009.

2.4 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Parameter	Uncertainty
Power Line Conducted Emission	+/- 2.3 dB
Radiated Emission	+/- 3.4 dB

Uncertainty figures are valid to a confidence level of 95%.

Report No.: BCT12IR-1630E-1 Page 5 of 27 FCC ID: XHW-ET43KDBP

2.5 List of Measuring Equipments Used

Test equipments list of Shenzhen Bontek Compliance Testing Laboratory Co., Ltd.

No.	Equipment	Manufacturer	Model No.	S/N	Calibration date	Calibration due date
1	EMI Test Receiver	R&S	ESCI	100687	2012-4-6	2013-4-5
2	EMI Test Receiver	R&S	ESPI	100097	2012-7-25	2013-7-24
3	Amplifier	HP	8447D	1937A02492	2012-4-6	2013-4-5
4	Single Power Conductor Module	FCC	FCC-LISN-5- 50-1-01- CISPR25	07101	2012-4-6	2013-4-5
5	Single Power Conductor Module	FCC	FCC-LISN-5- 50-1-01- CISPR25	07102	2012-4-6	2013-4-5
6	Positioning Controller	C&C	CC-C-1F	MF7802113	N/A	N/A
7	Signal generator	Rhode & Schwarz	SMIQ 03HD + option SM-B1, SMIQB11, SMIQB12, SMIQB14, SMIQB17, SMIQB20	1125.5555.46	2012-4-6	2013-4-5
8	GSM system simulator	Rhode & Schwarz	CMU200 + option K20, K21, K22, K23, K24, K27, K28, K29, K42, K65, B12, B41, B52, B66, B56	1100.0008.34	2012-4-6	2013-4-5
9	GSM system simulator	Agilent	8960 Series 10 E1985A + GSM_AMPS	B.01.76 GB42450443	2012-4-6	2013-4-5
10	Spectrum Analyzer	Agilent	E4404B	US41192833	2012-4-6	2013-4-5
11	6dB Attenuator	Atten	Attenuator	DC-4GHz	2012-4-6	2013-4-5
12	Digital Multimeter	Fluke	15B	91280239	2012-4-6	2013-4-5
13	TRILOG Broadband Test-Antenna	SCHWARZBECK	VULB9163	9163-324	2012-4-10	2013-4-9
14	Horn Antenna	SCHWARZBECK	BBHA9120A	0499	2011-11-28	2012-11-27
15	Active Loop Antenna	DAZE	ZN30900A	1200	2012-4-6	2013-4-6
16	9kHz-2.4GHz signal generator 2024	MARCONI	10S/6625-99- 457-8730	112260/042	2012-4-6	2013-4-5
17	10dB attenuator	ELECTRO- METRICS	EM-7600	836	2012-4-6	2013-4-5
18	Spectrum Analyzer	R&S	FSP	100397	2012-11-2	2013-11-1
19	Broadband preamplifier	SCH WARZBECK	BBV9718	9718-182	2012-4-6	2013-4-5
20	Temperature & Humidity Chamber	TOPSTAT	TOS-831A	3438A05208	2012-4-6	2013-4-5

3. SUMMARY OF TEST RESULTS

Standard	Test Items	Result
FCC Part 15 Subpart B	Conduction Emission, 0.15MHz to 30MHz	Pass
FCC Part 15 Subpart B	Radiation Emission, 30MHz to 1000MHz	Pass

4. TEST OF AC POWER LINE CONDUCTED EMISSION

4.1 Limit of AC Power Line Conducted Emission

Frequency Range (MHz)	Limits (dBuV)				
r requericy realige (Miliz)	Quasi-Peak	Average			
0.150~0.500	66~56	56∼46			
0.500~5.000	56	46			
5.000~30.00	60	50			

4.2 EUT Setup

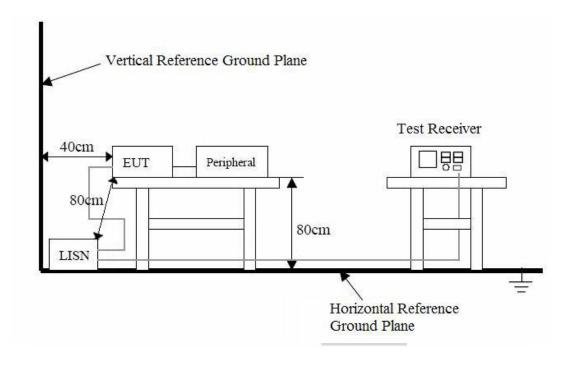
The setup of EUT is according with ANSI C63.4-2003 measurement procedure. The specification used was the FCC Rules and Regulations Part 15 Subpart B limits.

The EUT was placed center and the back edge of the test table.

The AV cables were draped along the test table and bundled to 30-40cm in the middle.

The spacing between the peripherals was 10 cm.

Maximum emission emitted from EUT was determined by manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation and the levels in the final result of the test were recorded with the EUT running in the operating mode that maximum emission was emitted.



Remark: The EUT was connected to a 120VAC/60Hz power source.

Report No.: BCT12IR-1630E-1 Page 8 of 27 FCC ID: XHW-ET43KDBP

4.3 Instrument Setup

The test receiver was set with the following configurations:

Test Receiver Setting:

4.4 Test Procedure

During the conducted emission test, the EUT power cord was connected to the auxiliary outlet of the first Artificial Mains.

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance using all installation combination.

All data was recorded in the peak detection mode. Quasi-peak and Average readings were only performed when an emission was found to be marginal (within -10 dB μ V of specification limits). Quasi-peak readings are distinguished with a "QP". Average readings are distinguished with a "AV".

4.5 Test Result

Temperature ($^{\circ}$) : 22~23	EUT: Tablet PC
Humidity (%RH): 50~54	M/N: FTABMP
Barometric Pressure (mbar): 950~1000	Operation Condition: HD Playing /TF Card Palying/Camera//connect to PC

Report No.: BCT12IR-1630E-1 Page 9 of 27 FCC ID: XHW-ET43KDBP

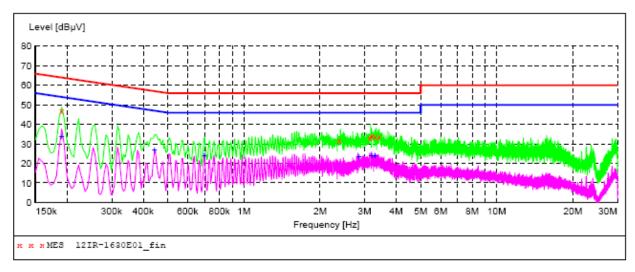
EUT: Tablet PC M/N: **FTABMP Operating Condition: HD** Playing Test Site: Shielded Room

Operator: Yang

Test Specification: AC 120V/60Hz for adapter

Comment: L Line

SCAN TABLE: "Voltage (9K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: 12IR-1630E01 fin"

9/22/2012 9:1 Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500	46.90	10.9	64	17.1	QP	L1	GND
2.382000	31.70	10.2	56	24.3	QP	L1	GND
3.142500	33.40	10.3	56	22.6	QP	L1	GND
3.205500	34.20	10.3	56	21.8	QP	L1	GND
3.300000	34.00	10.3	56	22.0	QP	L1	GND
3.426000	33.80	10.3	56	22.2	QP	L1	GND

MEASUREMENT RESULT: "12IR-1630E01 fin2"

9/22/2012 Frequenc MH	-	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.19050	0 33.90	10.9	54	20.1	AV	L1	GND
0.44250	0 26.70	10.3	47	20.3	AV	L1	GND
0.69900	0 24.20	10.2	46	21.8	AV	L1	GND
2.85450	0 23.40	10.2	46	22.6	AV	L1	GND
3.20550	0 24.20	10.3	46	21.8	AV	L1	GND
3.30000	0 24.20	10.3	46	21.8	AV	L1	GND

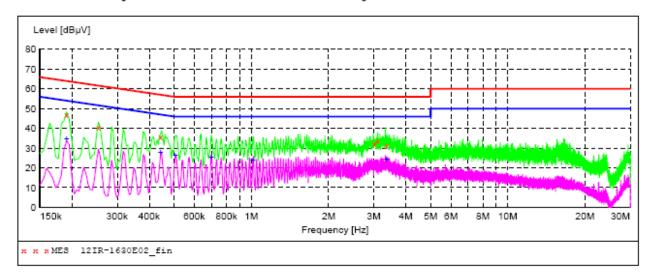
EUT: Tablet PC
M/N: FTABMP
Operating Condition: HD Playing
Test Site: Shielded Room

Operator: Yang

Test Specification: AC 120V/60Hz for adapter

Comment: N Line

SCAN TABLE: "Voltage (9K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "12IR-1630E02 fin"

9/22/2012 9:2 Frequency MHz	23PM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500	47.00	10.9	64	17.0	QP	N	GND
0.253500	40.40	10.7	62	21.2	QP	N	GND
0.442500	35.80	10.3	57	21.2	QP	N	GND
3.016500	32.20	10.2	56	23.8	QP	N	GND
3.106500	33.80	10.3	56	22.2	QP	N	GND
3.367500	31.10	10.3	56	24.9	QP	N	GND

MEASUREMENT RESULT: "12IR-1630E02 fin2"

9/22/2012 9:2 Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500	34.70	10.9	54	19.3	AV	N	GND
0.442500	28.00	10.3	47	19.0	AV	N	GND
0.505500	26.60	10.2	46	19.4	AV	N	GND
0.699000	25.60	10.2	46	20.4	AV	N	GND
1.014000	24.00	10.3	46	22.0	AV	N	GND
3.363000	24.50	10.3	46	21.5	AV	N	GND

EUT: Tablet PC M/N: FTABMP

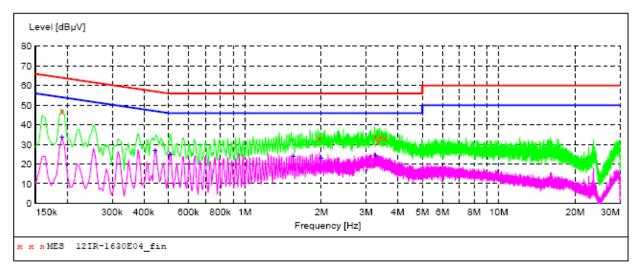
Operating Condition: TF Card Playing Test Site: Shielded Room

Operator: Yang

Test Specification: AC 120V/60Hz for adapter

Comment: L Line

SCAN TABLE: "Voltage (9K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "12IR-1630E04 fin"

9/22/2012	9:291	PM						
Freque	ency	Level	Transd	Limit	Margin	Detector	Line	PΕ
	MHz	dΒμV	dB	dΒμV	dB			
0.190	500	46.70	10.9	64	17.3	QP	L1	GND
1.968	3000	33.10	10.2	56	22.9	QP	L1	GND
3.268	3500	34.20	10.3	56	21.8	QP	L1	GND
3.336	5000	31.30	10.3	56	24.7	QP	L1	GND
3.426	5000	33.80	10.3	56	22.2	QP	L1	GND
3.552	2000	33.30	10.3	56	22.7	QP	L1	GND

MEASUREMENT RESULT: "12IR-1630E04 fin2"

9/22/2012 9: Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500	33.80	10.9	54	20.2	AV	L1	GND
0.442500	26.90	10.3	47	20.1	AV	L1	GND
0.510000	25.10	10.2	46	20.9	AV	L1	GND
1.554000	24.10	10.2	46	21.9	AV	L1	GND
1.999500	23.10	10.2	46	22.9	AV	L1	GND
3.268500	24.60	10.3	46	21.4	AV	L1	GND

EUT: Tablet PC M/N: FTABMP

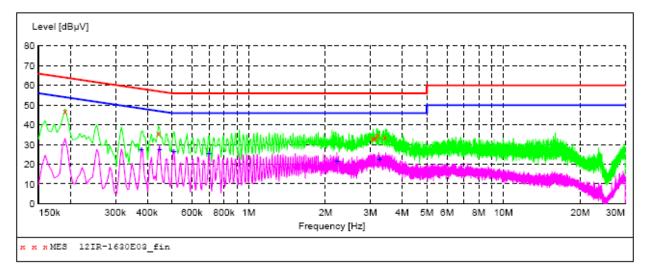
Operating Condition: TF Card Playing Test Site: Shielded Room

Operator: Yang

Test Specification: AC 120V/60Hz for adapter

Comment: N Line

SCAN TABLE: "Voltage (9K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "12IR-1630E03 fin"

9/22/2012 9:2 Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500	46.90	10.9	64	17.1	QP	N	GND
0.442500	35.70	10.3	57	21.3	QP	N	GND
3.075000	33.40	10.3	56	22.6	QP	N	GND
3.138000	33.40	10.3	56	22.6	QP	N	GND
3.205500	34.50	10.3	56	21.5	QP	N	GND
3.426000	33.60	10.3	56	22.4	QP	N	GND

MEASUREMENT RESULT: "12IR-1630E03 fin2"

9/22/2012 9:2 Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.379500 0.447000	27.50 27.40	10.4	48 47	20.8 19.5	AV AV	N N	GND GND
0.510000	26.30	10.2	46	19.7	AV	N	GND
0.699000	25.60	10.2	46	20.4	AV	N	GND
2.224500 3.273000	21.60 22.60	10.2 10.3	46 46	24.4 23.4	AV AV	N N	GND GND

EUT: Tablet PC M/N: FTABMP Operating Condition: Camera

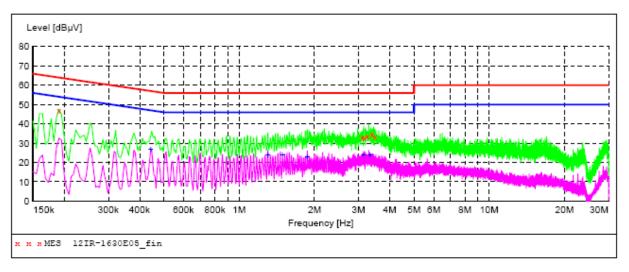
Test Site: Shielded Room

Operator: Yang

Test Specification: AC 120V/60Hz for adapter

Comment: L Line

SCAN TABLE: "Voltage (9K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "12IR-1630E05 fin"

9/22/2012 9:3 Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500	46.70	10.9	64	17.3	OP	L1	GND
3.106500	33.10	10.3	56	22.9	QP	L1	GND
3.174000	32.90	10.3	56	23.1	QP	L1	GND
3.264000	33.90	10.3	56	22.1	QP	L1	GND
3.394500	34.50	10.3	56	21.5	QP	L1	GND
3.489000	33.50	10.3	56	22.5	QP	L1	GND

MEASUREMENT RESULT: "12IR-1630E05 fin2"

9/22/2012 9: Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.442500	27.10	10.3	47	19.9	AV	L1	GND
1.302000	23.80		46	22.2	AV	L1	GND
1.491000	23.90	10.2	46	22.1	AV	L1	GND
1.873500	22.90		46	23.1	AV	L1	GND
3.142500 3.331500	23.90 24.20	10.3	46 46	22.1	AV AV	L1 L1	GND GND

EUT: **Tablet PC** M/N: **FTABMP Operating Condition:** Camera

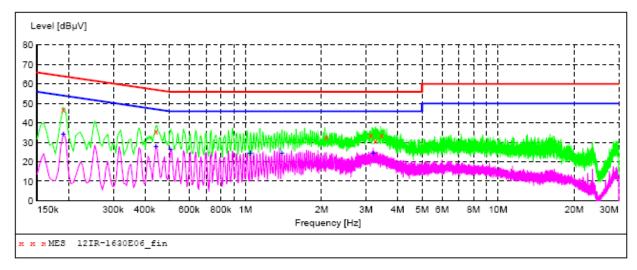
Test Site: Shielded Room

Operator: Yang

Test Specification: AC 120V/60Hz for adapter)

Comment: N Line

SCAN TABLE: "Voltage (9K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "12IR-1630E06 fin"

9/22/2012 9: Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500 0.442500 2.094000 3.138000	46.80 35.80 32.80 33.80	10.9 10.3 10.2 10.3	64 57 56 56	17.2 21.2 23.2 22.2	QP QP QP	N N N	GND GND GND GND
3.273000 3.457500	30.80 34.00	10.3 10.3	56 56	25.2 22.0	QP QP	N N	GND GND

MEASUREMENT RESULT: "12IR-1630E06 fin2"

9	/22/2012 9:3	4PM						
	Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
	0.190500	34.30	10.9	54	19.7	AV	N	GND
	0.442500	28.00	10.3	47	19.0	AV	N	GND
	0.505500	26.60	10.2	46	19.4	AV	N	GND
	1.045500	24.50	10.3	46	21.5	AV	N	GND
	1.396500	24.40	10.2	46	21.6	AV	N	GND
	3.205500	24.70	10.3	46	21.3	AV	N	GND

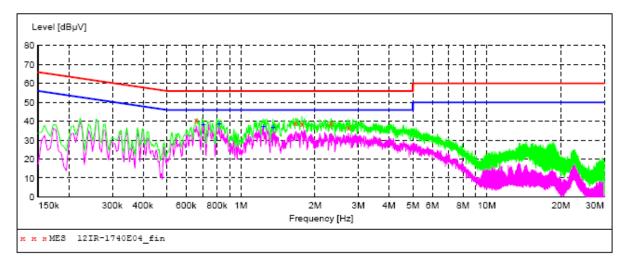
EUT: Tablet PC
M/N: FTABMP
Operating Condition: Connect to PC
Test Site: Shielded Room

Operator: Yang

Test Specification: AC 120V/60Hz for adapter

Comment: L Line

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



MEASUREMENT RESULT: "12IR-1630E04 fin"

9/22/2012 4:	52PM						
Frequency	Level	Transd	Limit	Margin	Detector	Line	PΕ
MHz	dBuV	dB	dBuV	dB			
0.658500	40.60	10.2	56	15.4	OP	L1	GND
					_		
1.666500	39.40	10.2	56	16.6	QP	L1	GND
1.774500	38.80	10.2	56	17.2	QP	L1	GND
2.319000	39.30	10.2	56	16.7	QP	L1	GND
2.742000	36.70	10.2	56	19.3	QP	L1	GND

MEASUREMENT RESULT: "12IR-1630E04 fin2"

9/22/2012							
Frequenc MF	cy Level iz dBµV		Limit dBµV	Margin dB	Detector	Line	PE
0.70350	00 38.00	10.2	46	8.0	AV	L1	GND
0.81600	00 38.80	10.2	46	7.2	AV	L1	GND
1.23450	0 37.40	10.3	46	8.6	AV	L1	GND
1.35600	00 36.80	10.2	46	9.2	AV	L1	GND

EUT: Tablet PC
M/N: FTABMP
Operating Condition: Connect to PC
Test Site: Shielded Room

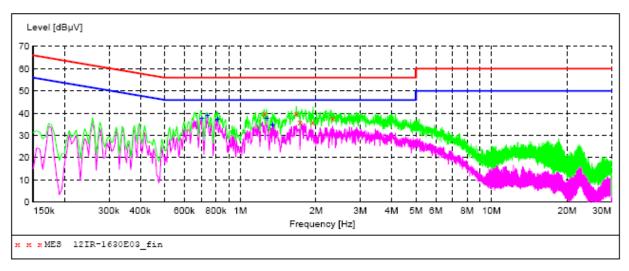
Operator: Yang

Test Specification: AC 120V/60Hz for adapter

Model: DSA-12PFA-05 FEU 050200

Comment: N Line

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



MEASUREMENT RESULT: "12IR-1630E03 fin"

9/22/2012 4: Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
1.248000 1.671000 1.725000 1.941000 2.337000	39.90 39.80 36.00 36.10 37.80	10.3 10.2 10.2 10.2 10.2	56 56 56 56	16.1 16.2 20.0 19.9 18.2	_	N N N N	GND GND GND GND GND

MEASUREMENT RESULT: "12IR-1630E03_fin2"

9/22/2012 4:4	9PM						
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.703500	37.50	10.2	46	8.5	AV	N	GND
0.739500	38.80	10.2	46	7.2	AV	N	GND
0.811500	37.30	10.2	46	8.7	AV	N	GND
1.275000	37.50	10.3	46	8.5	AV	N	GND
1.347000	34.70	10.2	46	11.3	AV	N	GND

5 - RADIATED DISTURBANCES

5.1 Limit of Radiated Disturbances

Frequency (MHz)	Distance (Meters)	Field Strengths Limits (dBμV/m)
30 ~ 88	3	40
88~216	3	43.5
216 ~ 960	3	46
960 ~ 1000	3	54

Note:

(1) The tighter limit shall apply at the edge between two frequency bands.

(2) Distance refers to the distance in meters between the test instrument antenna and the closest point of any part of the E.U.T.

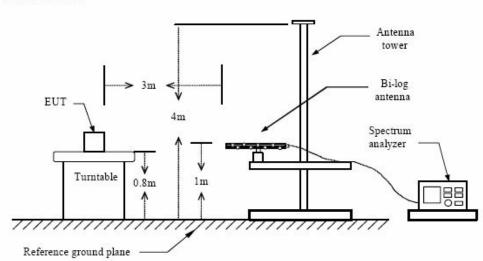
5.2 EUT Setup

The radiated emission tests were performed in the in the 3-meter anechoic chamber, using the setup accordance with the ANSI C63.4-2003. The specification used was the FCC Part 15 Subpart B limits.

The EUT was placed on the center of the test table.

Maximum emission emitted from EUT was determined by manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation and the levels in the final result of the test were recorded with the EUT running in the operating mode that maximum emission was emitted.

Below 1 GHz



Report No.: BCT12IR-1630E-1 Page 18 of 27 FCC ID: XHW-ET43KDBP

5.3 Test Receiver Setup

According to FCC Part 15 rule, the frequency was investigated from 30 to 1000 MHz. During the radiated emission test, the test receiver was set with the following configurations:

Test Receiver Setting:

Detector.....Peak & Quasi-Peak

IF Band Width......120KHz

Antenna Position:

Height......1m to 4m

Polarity......Horizontal and Vertical

5.4 Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All data was recorded in the peak detection mode. Quasi-peak readings performed only when an emission was found to be marginal (within -10 dB $_{\mu}$ V of specification limits), and are distinguished with a "QP" in the data table.

5.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - 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 μ V means the emission is 7dB μ V below the maximum limit for Subpart B. The equation for margin calculation is as follows:

Margin = Limit – Corr. Ampl.

5.6 Radiated Emissions Test Result

Temperature (°C) : 22~23	EUT: Tablet PC
Humidity (%RH): 50~54	M/N: FTABMP
Barometric Pressure (mbar): 950~1000	Operation Condition: HD Playing /TF Card Palying/Camera/connect to PC

Report No.: BCT12IR-1630E-1 Page 19 of 27 FCC ID: XHW-ET43KDBP

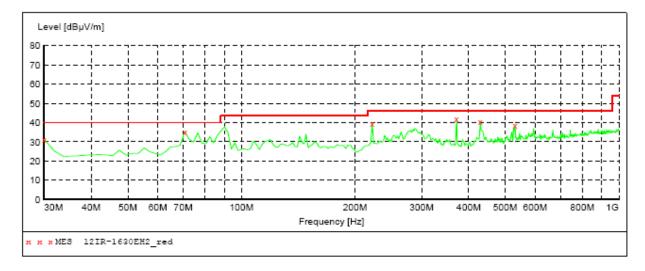
EUT: Tablet PC **FTABMP** M/N: **Operating Condition: HD Playing** Test Site: 3m CHAMBER

Operator: Chen

Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Horizontal

SWEEP TABLE: "test (30M-1G)"
Short Description: Field Strength
Start Stop Detector Meas. IF
Frequency Frequency Time Ban Transducer

Frequency Frequency Bandw. 30.0 MHz 1.0 GHz MaxPeak Coupled 100 kHz VULB9163 NEW



MEASUREMENT RESULT: "12IR-1630EH2 red"

9/20/2012 23:	22							
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	31.30	14.3	40.0	8.7	QP	300.0	0.00	HORIZONTAL
70.740000	35.30	12.4	40.0	4.7	QP	300.0	0.00	HORIZONTAL
222.060000	39.70	15.5	46.0	6.3	QP	100.0	0.00	HORIZONTAL
371.440000	42.00	20.8	46.0	4.0	QP	100.0	0.00	HORIZONTAL
429.640000	40.70	22.0	46.0	5.3	QP	100.0	0.00	HORIZONTAL
530.520000	38.80	24.6	46.0	7.2	QP	100.0	0.00	HORIZONTAL

EUT: Tablet PC **FTABMP** M/N: **Operating Condition: HD Playing** Test Site: 3m CHAMBER

Operator: Chen

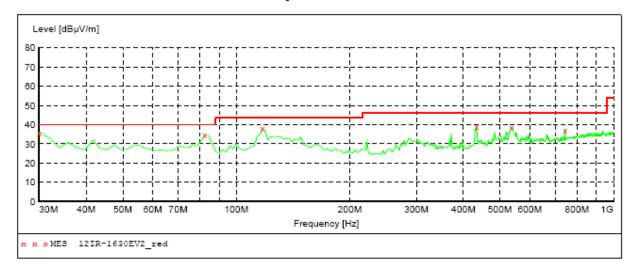
Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Vertical

SWEEP TABLE: "test (30M-1G)"
Short Description: Field Strength
Start Stop Detector Meas. IF

Detector Meas. IF Time Bandw. Transducer

Frequency Frequency 30.0 MHz 1.0 GHz

MaxPeak Coupled 100 kHz VULB9163 NEW



MEASUREMENT RESULT: "12IR-1630EV2 red"

9/20/2012 23:28									
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization	
30.000000	35.80	14.3	40.0	4.2	QP	100.0	0.00	VERTICAL	
82.380000	34.50	13.4	40.0	5.5	QP	100.0	0.00	VERTICAL	
117.300000	37.90	15.1	43.5	5.6	QP	100.0	0.00	VERTICAL	
433.520000	38.90	22.0	46.0	7.1	QP	100.0	0.00	VERTICAL	
536.340000	38.50	24.7	46.0	7.5	QP	100.0	0.00	VERTICAL	
743.920000	37.30	27.2	46.0	8.7	QP	100.0	0.00	VERTICAL	

EUT: **Tablet PC** M/N: **FTABMP**

TF Card Palying **Operating Condition:** Test Site: 3m CHAMBER

Operator: Chen

Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Horizontal

SWEEP TABLE: "test (30M-1G)"
Short Description: Fig. Start Stop Detector 1 Field Strength Detector Meas. IF

Bandw. Frequency Frequency Time 1.0 GHz 30.0 MHz MaxPeak Coupled 100 kHz VULB9163 NEW

Level [dBµV/m] 80 70 60 50 40 30 20 60M 70M 100M 200M 300M 500M 600M Frequency [Hz]

Transducer

MEASUREMENT RESULT: "12IR-1630EH03 red"

ж ж м MES 12IR-1630E03_red

9/20/2012	12:25								
Frequen	-			Limit	_	Det.	_		Polarization
M	Hz d	BµV/m	dB	dBµV/m	dB		cm	deg	
177.4400	00	38.50	13.7	43.5	5.0	QP	100.0	0.00	HORIZONTAL
214.3000	00	37.70	15.2	43.5	5.8	QP	100.0	0.00	HORIZONTAL
222.0600	00	43.00	15.5	46.0	3.0	QP	100.0	0.00	HORIZONTAL
429.6400	00	41.80	22.0	46.0	4.2	QP	100.0	0.00	HORIZONTAL
454.8600	00	39.00	22.2	46.0	7.0	QP	100.0	0.00	HORIZONTAL
503.3600	00	38.90	23.9	46.0	7.1	QP	100.0	0.00	HORIZONTAL

EUT: **Tablet PC** M/N: **FTABMP**

Operating Condition: TF Card Palying Test Site: 3m CHAMBER

Operator: Chen

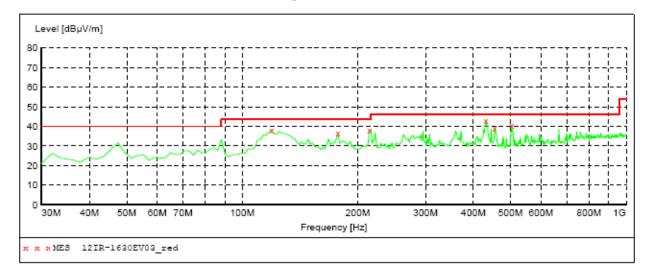
Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Vertical

SWEEP TABLE: "test (30M-1G)"
Short Description: Fig. Start Stop Detector 1 Field Strength

Detector Meas. IF Transducer

Frequency Frequency 30.0 MHz 1.0 GHz Bandw. Time

MaxPeak Coupled 100 kHz VULB9163 NEW



MEASUREMENT RESULT: "12IR-1630EV03 red"

9/20/2012 12	:31							
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
119.240000	38.00	14.8	43.5	5.5	QP	100.0	0.00	VERTICAL
177.440000	36.40	13.7	43.5	7.1	QP	100.0	0.00	VERTICAL
214.300000	38.00	15.2	43.5	5.5	QP	100.0	0.00	VERTICAL
431.580000	42.80	22.0	46.0	3.2	QP	100.0	0.00	VERTICAL
454.860000	38.90	22.2	46.0	7.1	QP	100.0	0.00	VERTICAL
503.360000	40.40	23.9	46.0	5.6	QP	100.0	0.00	VERTICAL

EUT: **Tablet PC FTABMP** M/N: Operating Condition: Camera

Test Site: 3m CHAMBER

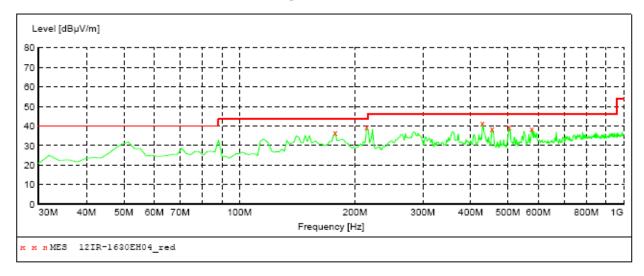
Operator: Chen

Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Horizontal

SWEEP TABLE: "test (30M-1G)" Short Description: Fi

, Field Strength Start Stop Detector Meas. IF Transducer Bandw. Time

Frequency Frequency 30.0 MHz 1.0 GHz Coupled 100 kHz MaxPeak VULB9163 NEW



MEASUREMENT RESULT: "12IR-1630EH04 red"

9/20/2012 12 Frequency MHz	:36 Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
177.440000	36.80	13.7	43.5	6.7	QP	100.0	0.00	HORIZONTAL
214.300000	39.30	15.2	43.5	4.2	QP	100.0	0.00	HORIZONTAL
429.640000	41.60	22.0	46.0	4.4	QP	100.0	0.00	HORIZONTAL
454.860000	38.80	22.2	46.0	7.2	QP	100.0	0.00	HORIZONTAL
503.360000	39.50	23.9	46.0	6.5	QP	100.0	0.00	HORIZONTAL
577.080000	38.40	25.5	46.0	7.6	QP	100.0	0.00	HORIZONTAL

EUT: Tablet PC M/N: **FTABMP** Operating Condition: Camera

Test Site: 3m CHAMBER

Operator: Chen

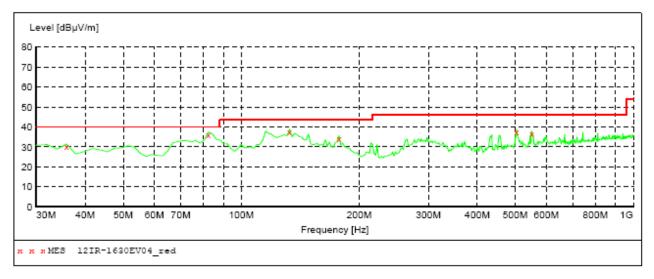
Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Vertical

SWEEP TABLE: "test (30M-1G)" Short Description: Fi

Field Strength Start Stop Detector Meas.

Frequency Frequency Bandw. Time

30.0 MHz 1.0 GHz MaxPeak Coupled 100 kHz VULB9163 NEW



Transducer

100.0 0.00 VERTICAL

0.00 VERTICAL

100.0

MEASUREMENT RESULT: "12IR-1630EV04 red"

23.9

25.0

46.0

46.0

503.360000 38.70

549.920000 37.90

9/20/2012 12:21 Frequency Level Transd Limit Margin Det. Height Azimuth Polarization dB dBµV/m MHz dBµV/m dB cm deg 35.820000 31.50 14.7 40.0 8.5 QP 100.0 0.00 VERTICAL 13.4 40.0 0.00 VERTICAL 82.380000 37.40 3.1 QP 100.0 132.820000 4.5 QP 0.00 VERTICAL 39.00 12.8 43.5 100.0 177.440000 35.70 13.7 43.5 7.8 QP 100.0 0.00 VERTICAL

7.3 QP

8.1 QP

EUT: **Tablet PC FTABMP** M/N:

Operating Condition: Connect to PC Test Site: 3m CHAMBER

Operator: Chen

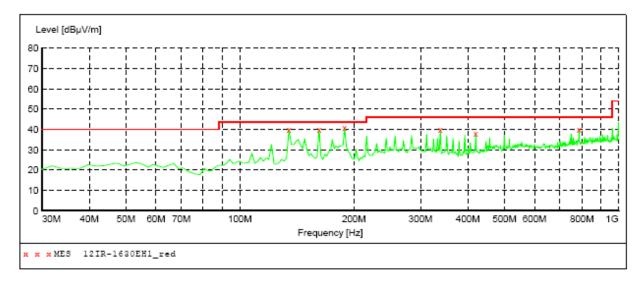
Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Horizontal

SWEEP TABLE: "test (30M-1G)"
Short Description: Fi Field Strength

Start Detector Meas. IF Transducer Stop

Time Bandw.

Frequency Frequency 30.0 MHz 1.0 GHz MaxPeak 5.0 ms 100 kHz VULB9163 NEW



MEASUREMENT RESULT: "12IR-1630EH1 red"

9/20/2012 20:29

Frequency MHz	Level dBµV/m		Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
134.760000	40.20	12.7	43.5	3.3	QP	100.0	0.00	HORIZONTAL
161.920000	40.20	12.8	43.5	3.3	QP	100.0	0.00	HORIZONTAL
189.080000	40.80	14.7	43.5	3.1	QP	100.0	0.00	HORIZONTAL
338.460000	39.80	20.1	46.0	6.2	QP	100.0	0.00	HORIZONTAL
419.940000	38.00	22.0	46.0	8.0	QP	100.0	0.00	HORIZONTAL
786.600000	39.70	27.8	46.0	6.3	QP	100.0	0.00	HORIZONTAL

EUT: Tablet PC **FTABMP** M/N:

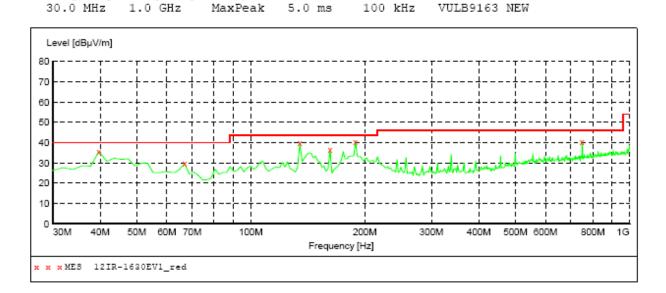
Operating Condition: Connect to PC Test Site: 3m CHAMBER

Operator: Chen

Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Vertical

SWEEP TABLE: "test (30M-1G)"
Short Description: Fi

Field Strength Detector Meas. Start Stop ΙF Transducer Frequency Frequency Bandw. Time



MEASUREMENT RESULT: "12IR-1630EV1 red"

9/20/2012 20: Frequency MHz		Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
39.700000	35.60	15.8	40.0	4.4	QP	100.0	0.00	VERTICAL
66.860000	29.70	13.1	40.0	10.3	QP	100.0	0.00	VERTICAL
134.760000	39.70	12.7	43.5	3.8	QP	100.0	0.00	VERTICAL
161.920000	36.70	12.8	43.5	6.8	QP	100.0	0.00	VERTICAL
189.080000	40.60	14.7	43.5	2.9	QP	100.0	0.00	VERTICAL
749.740000	40.50	27.3	46.0	5.5	QP	100.0	0.00	VERTICAL