Test Report

Applicant:	Shenzhen Firstview Electronic Co., Ltd.
Product Name:	10.1 inch notebook
FCC ID Number:	FCC ID: YW5-MI1041R
Brand Name:	N/A
Model No.:	MI1041R
Date of Receipt :	Oct. 12, 2016
Date of Test:	Oct. 12 -Oct. 24, 2016
Date of Report:	Oct. 24, 2016
Prepared by:	Most Technology Service Co., Limited

The testing has been performed on the submitted samples and found in compliance with the council FCC Rules and Regulations Part 15 Subpart B.

Most Technology Service Co., Limited
Flat 32 Adventures Court, 12 Newport Avenue ,London E14 2DN

TABLE OF CONTENTS

TEST REPORT VERIFICATION

Report Number	MTE/TYW/S16112382	
Applicant	Shenzhen Firstview Electronic Co., Ltd.	
	F3, Block B, Huafeng 1st Technology Zone, Baoan Main Road, Baoan District, Shenzhen, P.R.C	
Manufacturer	Shenzhen Firstview Electronic Co., Ltd.	
	F3, Block B, Huafeng 1st Technology Zone, Baoan Main Road, Baoan District, Shenzhen, P.R.C	
Product	Product Name	10.1 inch notebook
	Model No.	MI1041R
	Power Supply	DC 5V by Adapter
Test Result	The EUT was found compliant with the requirement(s) of the standards.	
Standard	FCC Rules and Regulations Part 15 Subpart B Class B.	

*Note

The above device has been tested by Most Technology Service Co., 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 test record, data evaluation & Equipment Under Test (EUT) configurations represented are contained in this test report and Most Technology Service Co., Limited Is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced except in full, without written approval of Most Technology Service Co., Limited, this document may be altered or revised by Most Technology Service Co., Limited, personal only, and shall be noted in the revision of the document.

Prepared by	Tammy
	Tammy Wang
Reviewed by	Henry
	Henry Chen
Approved by	
	Yvette Zhou(Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	10.1 inch notebook
Model Number	:	MI1041R
Remark	:	N/A

1.2. Operational Mode(s) of EUT

Order Number	:	Test Mode(s)
1	:	Running PC System +Ping
	:	

1.3. Test Voltage(s) of EUT

Order Number	:	Test Voltage(s)
1	:	DC 5V by Adapter
	:	

1.4. Supporting System Details

1.4.1.Monitor

EMC CODE	:	Test Monitor B
M/N	:	HEW8220Q
S/N	:	CJ2A07270
Manufacturer	:	PHILIPS
Data cord	:	Shielded, detachable, 1.8m
Power cord	:	Unshielded, detachable, 1.8m
FCC ID	:	
BSMI ID	:	N/A

1.4.2.Keyboard

EMC CODE	:	Test Keyboard
M/N	:	SK-2880
S/N	:	BC34C0CJ6UZ888
Manufacturer	:	Hp
Data cord	:	Unshielded, detachable , 1.5m
FCC ID	:	
BSMI ID	:	N/A

1.4.3.Mouse

EMC CODE	:	Test Mouse
M/N	:	M-UAE58
S/N	:	LZ4537H064N
Manufacturer	:	LENOVO
Data cord	:	Unshielded, detachable , 1.5m
FCC ID	:	
BSMI ID	:	N/A

1.4.4.Headphone

EMC CODE	:	Test Headphone
M/N	:	SM-906
S/N	:	692739990369884
Manufacturer	:	SOMC
Data cord	:	Unshielded, detachable , 2.5m
FCC ID	:	
BSMI ID	:	N/A

2. LABORATORY INFORMATION

2.1. Laboratory Name

Most Technology Service Co., Limited

2.2. Location

No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China

2.3. Test facility

3m Anechoic Chamber	:	Nov. 28, 2012 File on Federal Communication Commission Registration Number:490827
Shielding Room	:	Nov. 28, 2012 File on Federal Communication Commission Registration Number:490827
EMC Lab.	:	Accredited by TUV Rheinland Shenzhen Audit Report: UA 50149851 Mar. 12, 2009 Accredited by Industry Canada Registration Number: 7103A-1 Oct. 22, 2012 Accredited by TIMCO Registration Number: Q1460 March 28, 2010

2.4. Measurement Uncertainty

No.	Item	Uncertainty
1.	Uncertainty for Conducted Disturbance Test	1.25dB
2.	Uncertainty for Radiated Disturbance Test	3.15dB

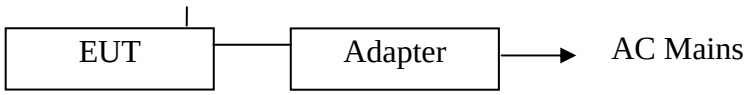
3. SUMMARY OF TEST RESULTS

EMISSION			
Test Item	**Standard**	**Limits**	**Results**
Conducted disturbance at mains terminals	FCC Subpart 15 B Section 15.107	Class B	PASS
Radiated disturbance	FCC Subpart 15 B Section 15.109	Class B	PASS
N/A is an abbreviation for Not Applicable.			

4. BLOCK DIAGRAM OF TEST SETUP

The equipments are installed test to meet ANSI C63.4:2014 requirement and operating in a manner which tends to maximize its emission characteristics in a normal application. EUT was tested in normal configuration (Please See following Block diagrams)

4.1. Block Diagram of connection between EUT and simulation-EMI



(EUT: 10.1 inch notebook)

5. TEST INSTRUMENT USED

5.1. For Conducted Disturbance at Mains Terminals Emission Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	100492	Mar. 10, 16	1 Year
2.	L.I.S.N.	Rohde & Schwarz	ENV216	100093	Mar. 10, 16	1 Year
3.	Coaxial Switch	Anritsu Corp	MP59B	6200283933	Mar. 07, 16	1 Year
4.	Terminator	Hubersuhner	50Ω	No.1	Mar. 07, 16	1 Year
5.	RF Cable	SchwarzBeck	N/A	No.1	Mar. 07, 16	1 Year

5.2. For Radiation Test (In Anechoic Chamber) (Below 1000MHz)

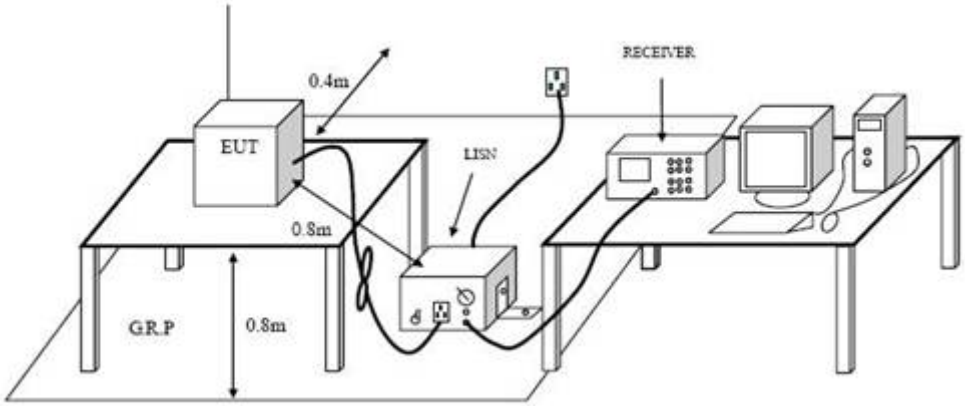
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESPI	101202	Mar. 10, 16	1 Year
2.	Bilog Antenna	Sunol	JB3	A121206	Mar. 14, 16	1 Year
3.	Cable	Resenberger	N/A	NO.1	Mar. 07, 16	1 Year
4.	Cable	SchwarzBeck	N/A	NO.2	Mar. 07, 16	1 Year
5.	Cable	SchwarzBeck	N/A	NO.3	Mar. 07, 16	1 Year
6.	DC Power Filter	DuoJi	DL2×30B	N/A	N/A	N/A
7.	Single Phase Power Line Filter	DuoJi	FNF 202B30	N/A	N/A	N/A
8.	3 Phase Power Line Filter	DuoJi	FNF 402B30	N/A	N/A	N/A

5.3 For Radiation Test (In Anechoic Chamber) (Above 1000MHz)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4408B	MY414400460	Mar. 14, 16	1 Year
2	Pre-Amplifier	DCS	PAP-0118	24001	Mar. 14, 16	1 Year
3	Horn Antenna	Schwarzback	BBHA9120 D	D69250	Mar. 14, 16	1 Year
4	RF Cable	Schwarzback	LL142-10	RF Cable No.1	Mar. 07, 16	1 Year
5	RF Cable	Schwarzback	LL142-0.05	RF Cable No.2	Mar. 07, 16	1 Year
6	DC Power Filter	DuoJi	DL2×30B	N/A	N/A	N/A
7	Single Phase Power Line Filter	DuoJi	FNF 202B30	N/A	N/A	N/A
8	3 Phase Power Line Filter	DuoJi	FNF 402B30	N/A	N/A	N/A

6. CONDUCTED DISTURBANCE AT MAINS TERMINALS TEST

6.1. Configuration of Test System



6.2. Test Standard

FCC Subpart 15 B Section 15.107

6.3. Power Line Conducted Disturbance at Mains Terminals Limit

Frequency (MHz)	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
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.

6.4. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). 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 C63.4:2014 on conducted Disturbance test.

The bandwidth of test receiver is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked. The test result are reported on Section 6.5.

6.5. Conducted Disturbance at Mains Terminals Test Results

6.5.1.Test Results: PASS

6.5.2.If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

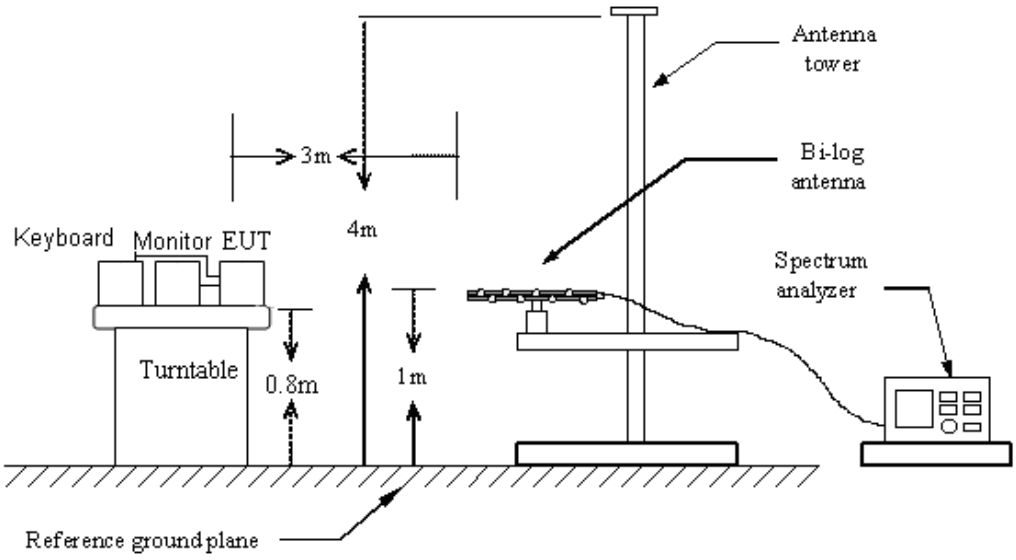
6.5.3.Emission Level= Correct Factor + Reading Level.

6.5.4.The test data and the scanning waveform are attached within Appendix I.

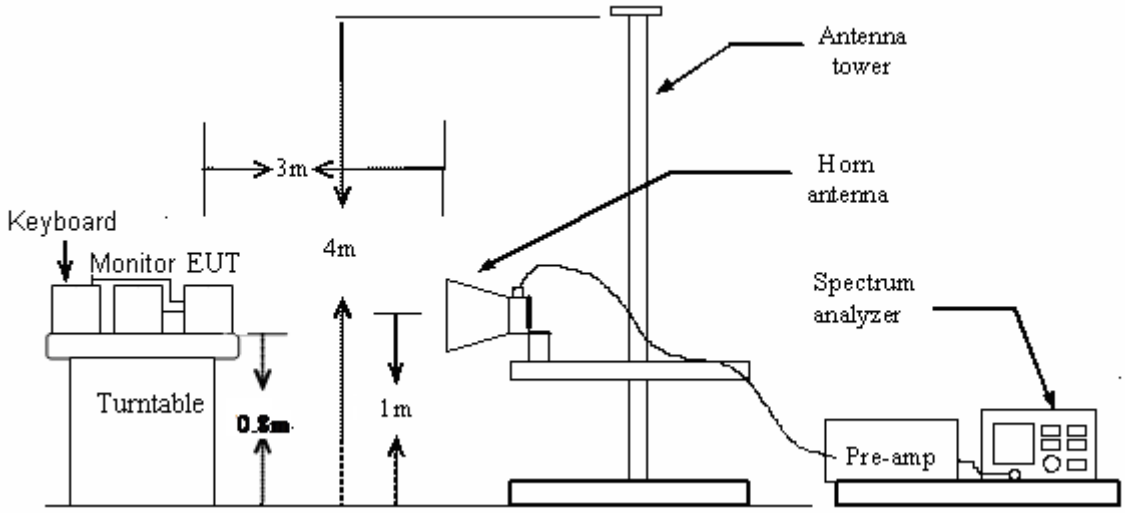
12 RADIATED DISTURBANCE TEST

12Configuration of Test System

2) For radiated emissions from 30MHz to1GHz



3) For radiated emissions above 1GHz



13Test Standard

FCC Subpart 15 B Section 15.109

13Radiated Disturbance Limit

Frequency (MHz)	Distance (Meters)	Field Strengths Limits (dBμV/m)	
30 ~ 88	3	40.0	
88~216	3	43.5	
216~960	3	46.0	
960 ~ 1000	3	54.0	
1000-25000	3	74(Peak)	54(AV)

Note: 1. Emission level (dB)μV = 20 log Emission level μV/m
2.The lower limit shall apply at the transition frequencies.
3. Distance refers to the distance in meters between the test antenna and the closed point of any part of the EUT.

13Test Procedure

1. The EUT was placed on the top of a wooden table 0.8 meters (for measurement at frequency below 1GHz) and a wooden table 0.8 meters (for measurement at frequency above 1GHz) above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.

2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter, for the test frequency of above 1GHz, horn antenna opening in the test would have been facing the EUT when rise or fall) and the table was turned from 0 degrees to 360 degrees to find the maximum reading.

5. Set the spectrum analyzer in the following setting as:
Below 1GHz: PEAK: RBW=100 kHz / VBW=300 kHz / Sweep=AUTO QP: RBW=120 kHz / Sweep=AUTO
Above 1GHz: (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
(b)AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the

emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

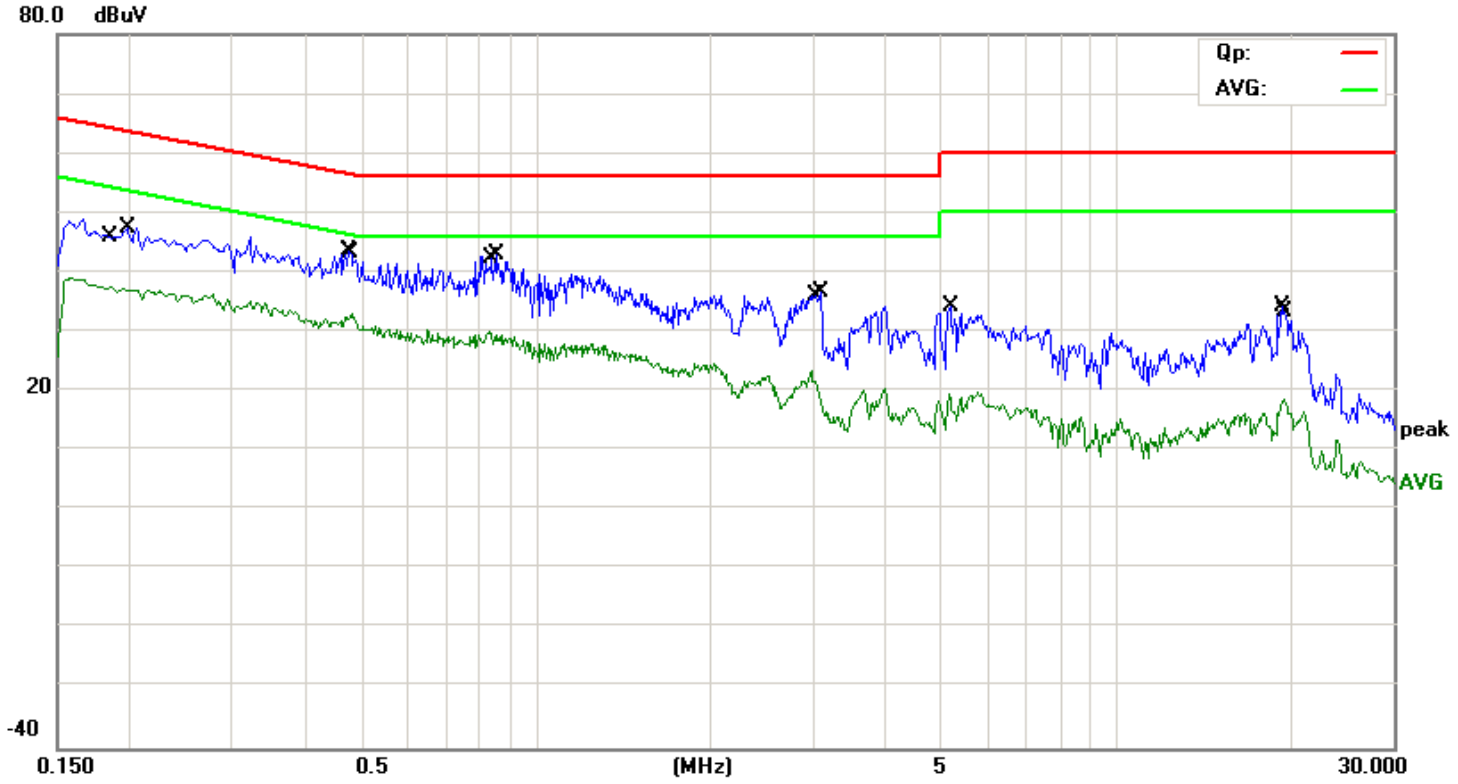
14 Radiated Disturbance Test Results

Test Results: PASS

Emission Level= Correct Factor + Reading Level.
All reading are Quasi-Peak values.
The test data and the scanning waveform are attached within Appendix II.

APPENDIX I

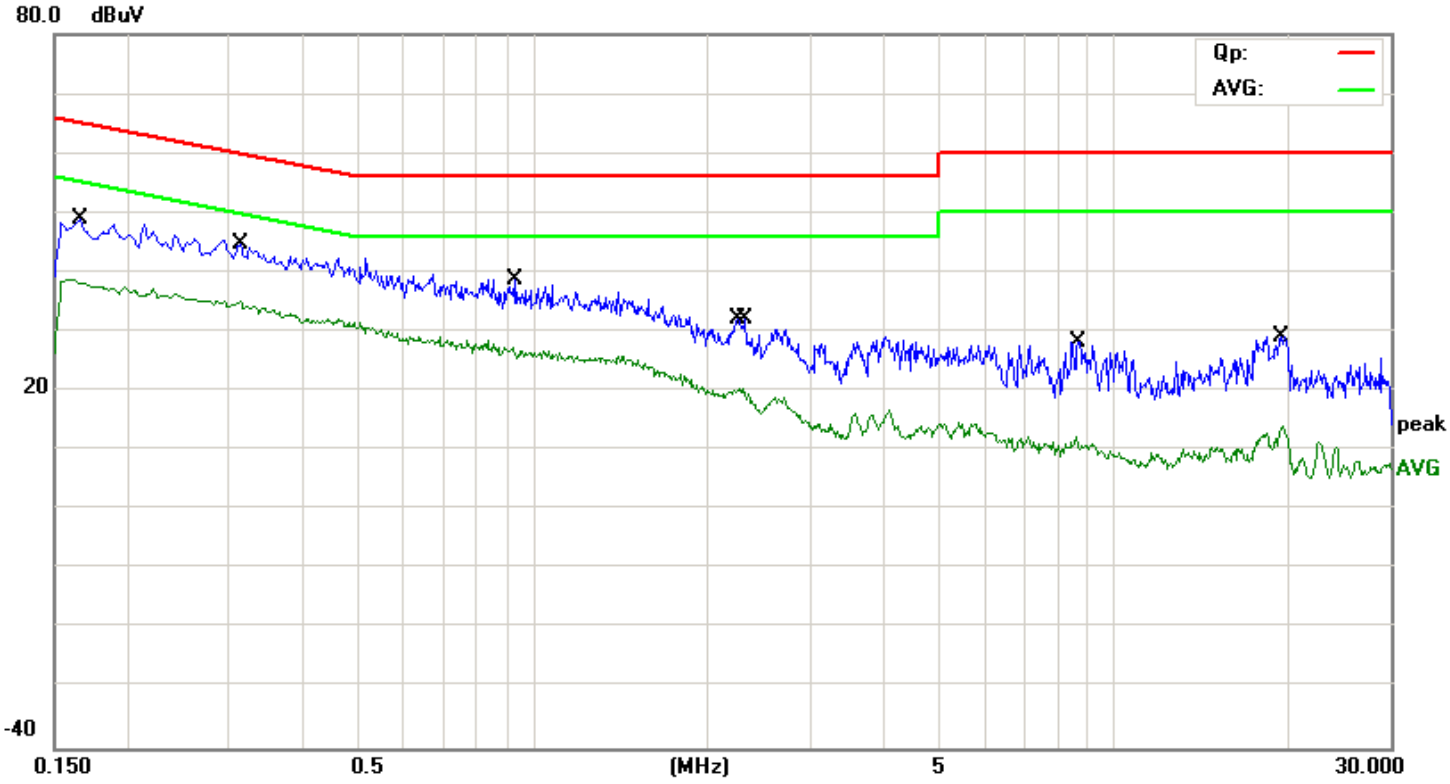
EUT:	10.1 inch notebook	M/N:	MI1041R
Mode:	Running PC System+ping	Phase:	L
Test by:	hzy	Power:	DC 5V by Adapter
Temperature: / Humidity	25.5℃/ 52.5%	Test date:	2016-10-28



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1860	27.99	9.60	37.59	54.21	-16.62	AVG	
2		0.1980	37.99	9.60	47.59	63.69	-16.10	QP	
3	*	0.4780	34.08	9.59	43.67	56.37	-12.70	QP	
4		0.4820	23.39	9.59	32.98	46.30	-13.32	AVG	
5		0.8340	20.38	9.60	29.98	46.00	-16.02	AVG	
6		0.8580	33.38	9.60	42.98	56.00	-13.02	QP	
7		2.9780	13.76	9.61	23.37	46.00	-22.63	AVG	
8		3.0940	27.16	9.61	36.77	56.00	-19.23	QP	
9		5.1620	9.79	9.63	19.42	50.00	-30.58	AVG	
10		5.1700	24.50	9.63	34.13	60.00	-25.87	QP	
11		19.2620	24.64	9.73	34.37	60.00	-25.63	QP	
12		19.5060	8.91	9.73	18.64	50.00	-31.36	AVG	

*:Maximum data x:Over limit !:over margin

EUT:	10.1 inch notebook	M/N:	MI1041R
Mode:	Running PC System+ping	Phase:	N
Test by:	hzy	Power:	DC 5V by Adapter
Temperature: / Humidity	25.5℃/ 52.5%	Test date:	2016-10-28

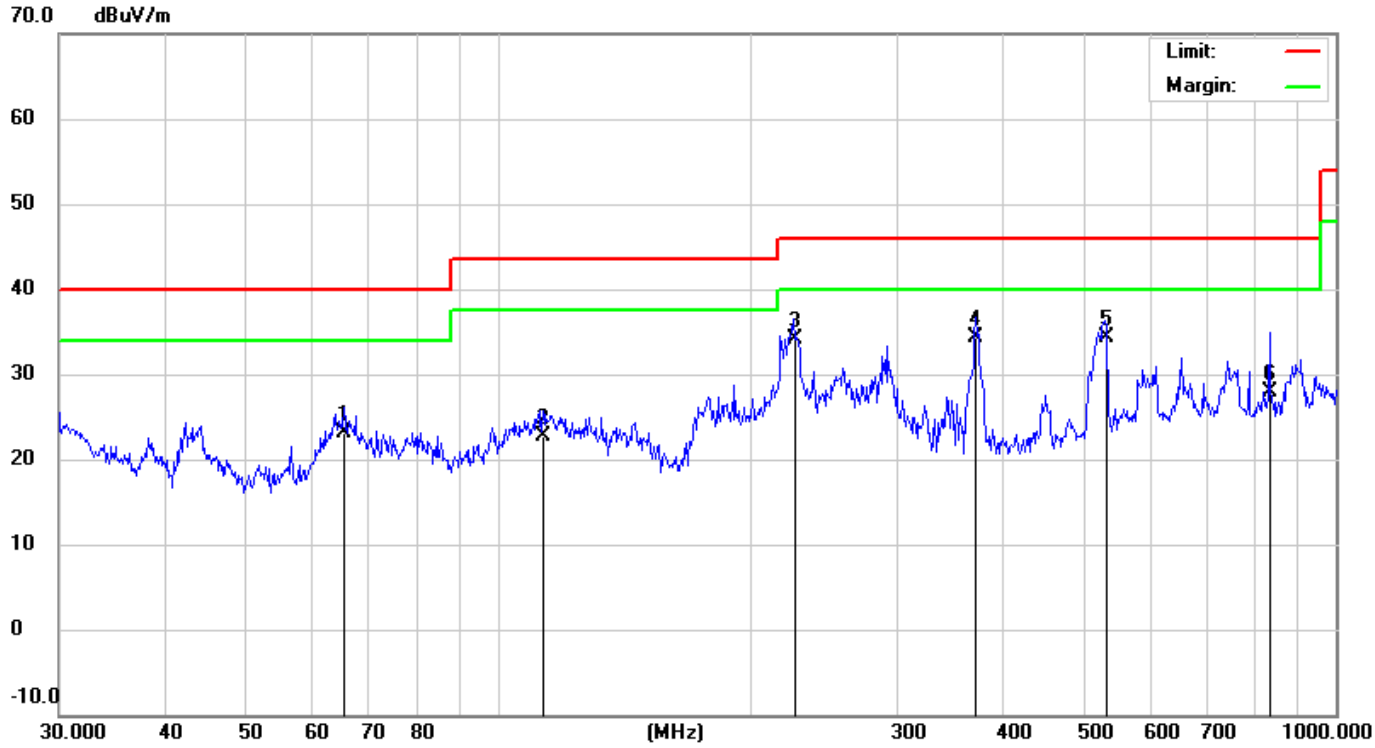


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1641	28.72	9.61	38.33	55.25	-16.92	AVG	
2		0.1660	39.29	9.61	48.90	65.16	-16.26	QP	
3		0.3140	35.07	9.59	44.66	59.86	-15.20	QP	
4	*	0.3140	25.54	9.59	35.13	49.86	-14.73	AVG	
5		0.9260	17.82	9.60	27.42	46.00	-18.58	AVG	
6		0.9340	29.26	9.60	38.86	56.00	-17.14	QP	
7		2.2500	22.67	9.61	32.28	56.00	-23.72	QP	
8		2.2980	10.77	9.61	20.38	46.00	-25.62	AVG	
9		8.6580	2.80	9.67	12.47	50.00	-37.53	AVG	
10		8.7020	18.65	9.67	28.32	60.00	-31.68	QP	
11		19.4980	19.46	9.73	29.19	60.00	-30.81	QP	
12		19.6140	4.28	9.73	14.01	50.00	-35.99	AVG	

*:Maximum data x:Over limit !:over margin

APPENDIX II

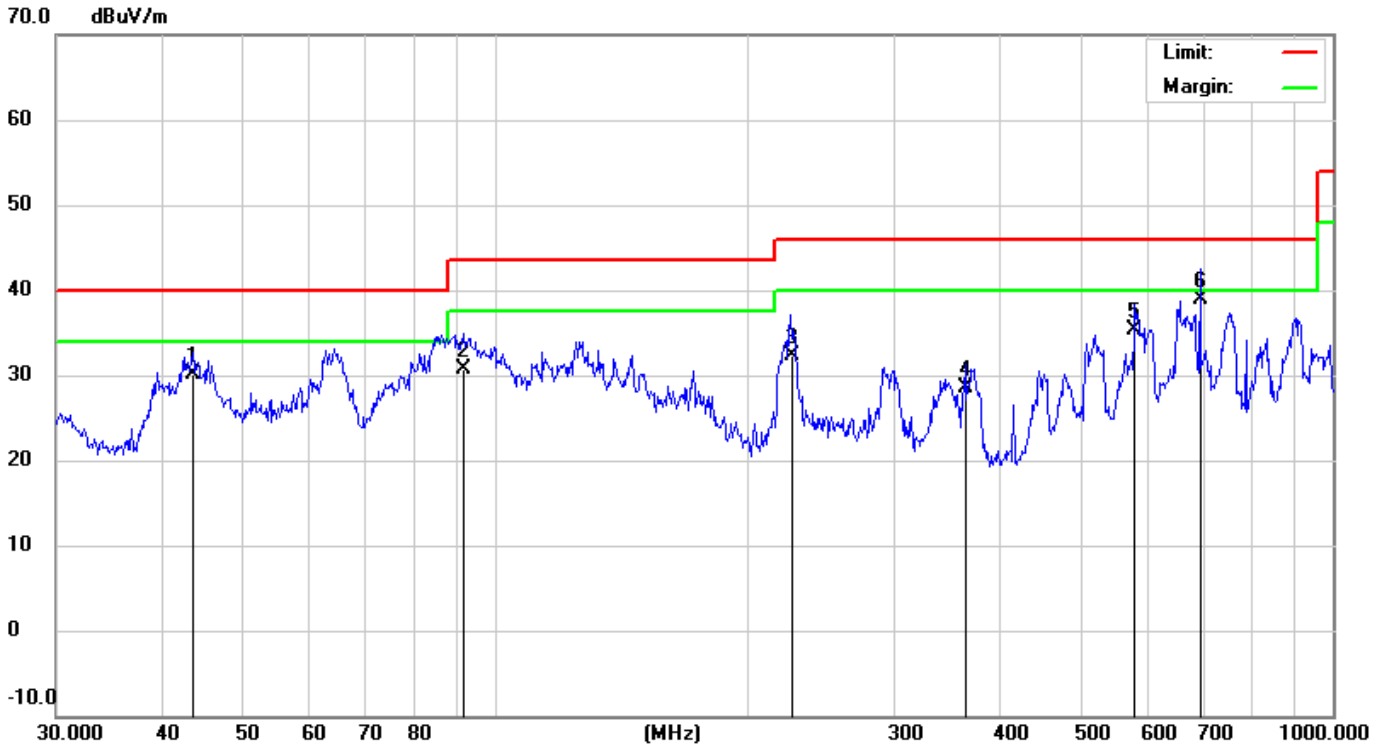
EUT:	10.1 inch notebook	M/N:	MI1041R
Mode:	Running PC System+ping	Polarization:	Horizontal
Test by:	hzy	Power:	DC 5V by Adapter
Temperature: / Humidity	25.5℃/ 52.5%	Test date:	2016-10-28



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		65.5726	15.20	7.99	23.19	40.00	-16.81	QP			
2		113.3162	10.30	12.40	22.70	43.50	-20.80	QP			
3		225.3080	22.10	12.00	34.10	46.00	-11.90	QP			
4	*	372.0045	19.40	14.87	34.27	46.00	-11.73	QP			
5		530.1014	16.20	18.03	34.23	46.00	-11.77	QP			
6		833.3171	6.70	21.27	27.97	46.00	-18.03	QP			

*:Maximum data x:Over limit !:over margin

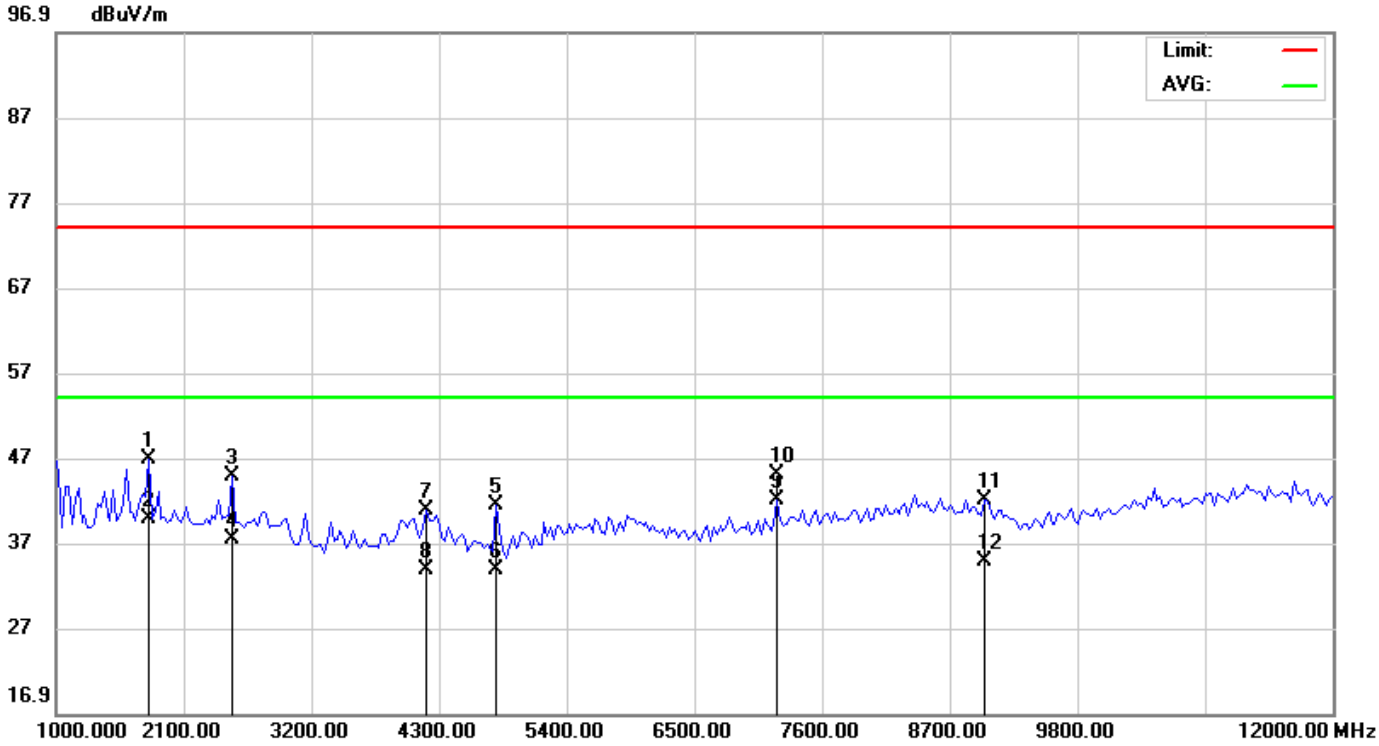
EUT:	10.1 inch notebook	M/N:	MI1041R
Mode:	Running PC System+ping	Polarization:	Vertical
Test by:	hzy	Power:	DC 5V by Adapter
Temperature: / Humidity	25.5℃/ 52.5%	Test date:	2016-10-28



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		43.6584	18.70	11.39	30.09	40.00	-9.91	QP			
2		91.8162	22.40	8.21	30.61	43.50	-12.89	QP			
3		225.3080	20.40	12.00	32.40	46.00	-13.60	QP			
4		364.2595	13.70	14.72	28.42	46.00	-17.58	QP			
5		580.7026	16.70	18.59	35.29	46.00	-10.71	QP			
6	*	694.4174	18.90	20.03	38.93	46.00	-7.07	QP			

*:Maximum data x:Over limit !:over margin

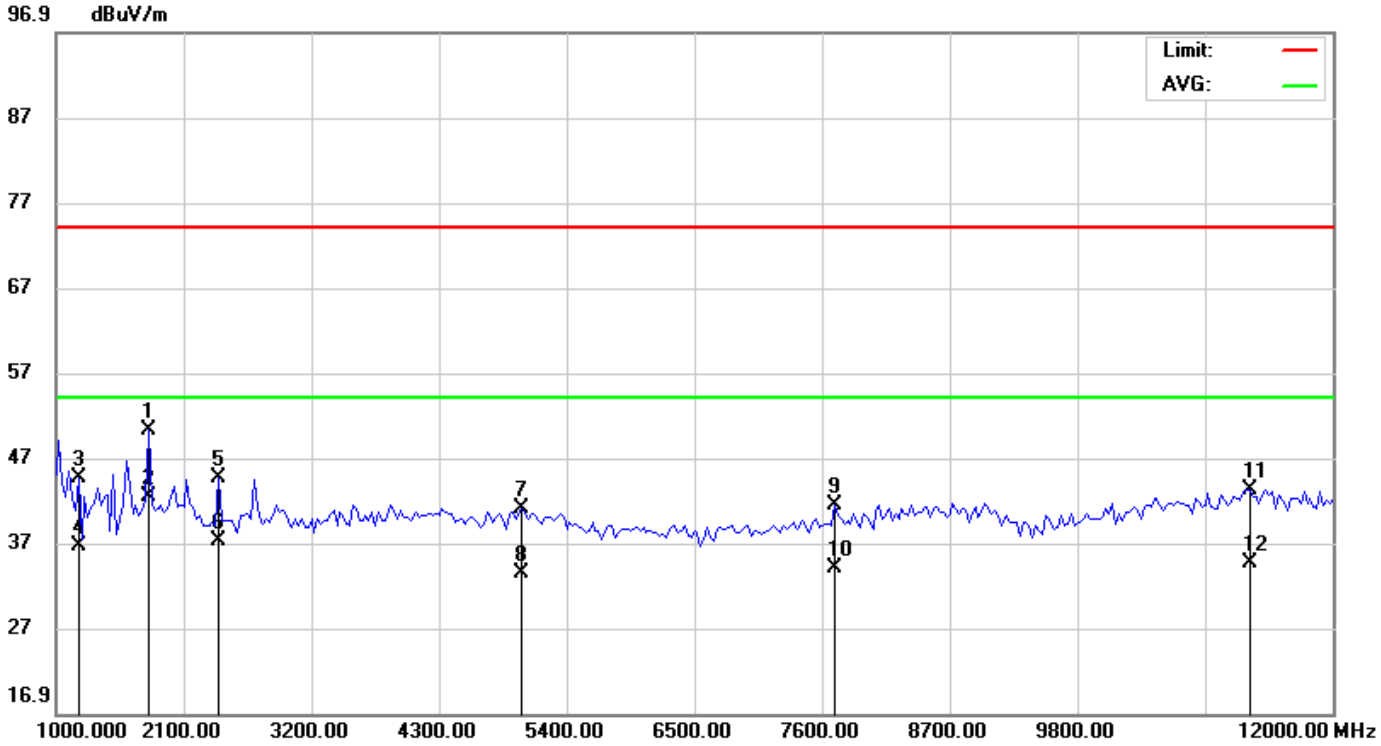
EUT:	10.1 inch notebook	M/N:	MI1041R
Mode:	Running PC System+ping	Polarization:	Vertical
Test by:	hzy	Power:	DC 5V by Adapter
Temperature: / Humidity	25.5℃/ 52.5%	Test date:	2016-10-28



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1797.500	54.45	-7.60	46.85	74.00	-27.15	peak			
2		1797.500	47.50	-7.60	39.90	54.00	-14.10	AVG			
3		2512.500	52.96	-8.24	44.72	74.00	-29.28	peak			
4		2512.500	45.60	-8.24	37.36	54.00	-16.64	AVG			
5		4795.000	47.66	-6.22	41.44	74.00	-32.56	peak			
6		4795.000	40.10	-6.22	33.88	54.00	-20.12	AVG			
7		4190.000	47.31	-6.52	40.79	74.00	-33.21	peak			
8		4190.000	40.30	-6.52	33.78	54.00	-20.22	AVG			
9		7215.000	45.19	-3.24	41.95	74.00	-32.05	peak			
10	*	7215.000	48.20	-3.24	44.96	54.00	-9.04	AVG			
11		9002.500	42.57	-0.66	41.91	74.00	-32.09	peak			
12		9002.500	35.50	-0.66	34.84	54.00	-19.16	AVG			

*:Maximum data x:Over limit !:over margin

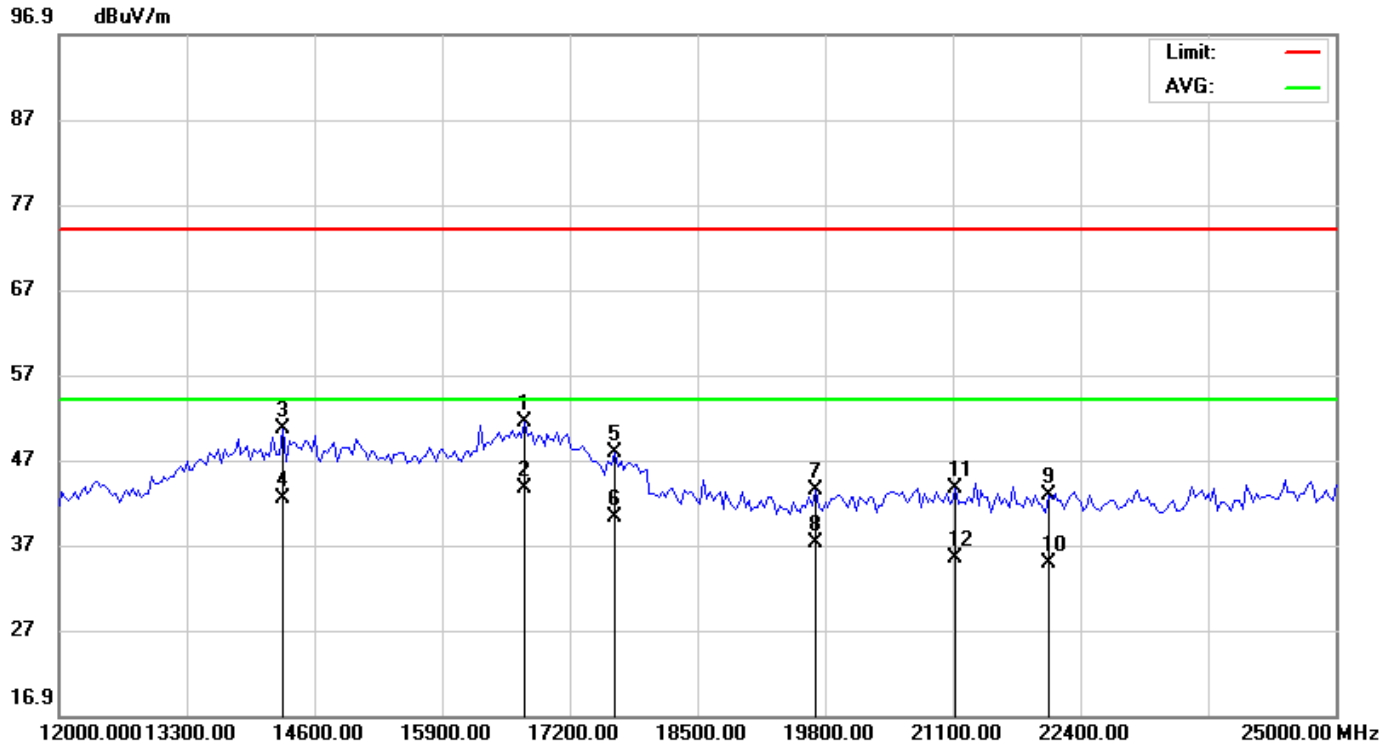
EUT:	10.1 inch notebook	M/N:	MI1041R
Mode:	Running PC System+ping	Polarization:	Horizontal
Test by:	hzy	Power:	DC 5V by Adapter
Temperature: / Humidity	25.5℃/ 52.5%	Test date:	2016-10-28



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1797.500	57.72	-7.60	50.12	74.00	-23.88	peak			
2	*	1797.500	50.10	-7.60	42.50	54.00	-11.50	AVG			
3		1192.500	53.35	-8.73	44.62	74.00	-29.38	peak			
4		1192.500	45.40	-8.73	36.67	54.00	-17.33	AVG			
5		2402.500	53.00	-8.43	44.57	74.00	-29.43	peak			
6		2402.500	45.60	-8.43	37.17	54.00	-16.83	AVG			
7		5015.000	44.85	-3.84	41.01	74.00	-32.99	peak			
8		5015.000	37.20	-3.84	33.36	54.00	-20.64	AVG			
9		7710.000	43.67	-2.35	41.32	74.00	-32.68	peak			
10		7710.000	36.40	-2.35	34.05	54.00	-19.95	AVG			
11		11285.00	44.17	-0.96	43.21	74.00	-30.79	peak			
12		11285.00	35.60	-0.96	34.64	54.00	-19.36	AVG			

*:Maximum data x:Over limit !:over margin

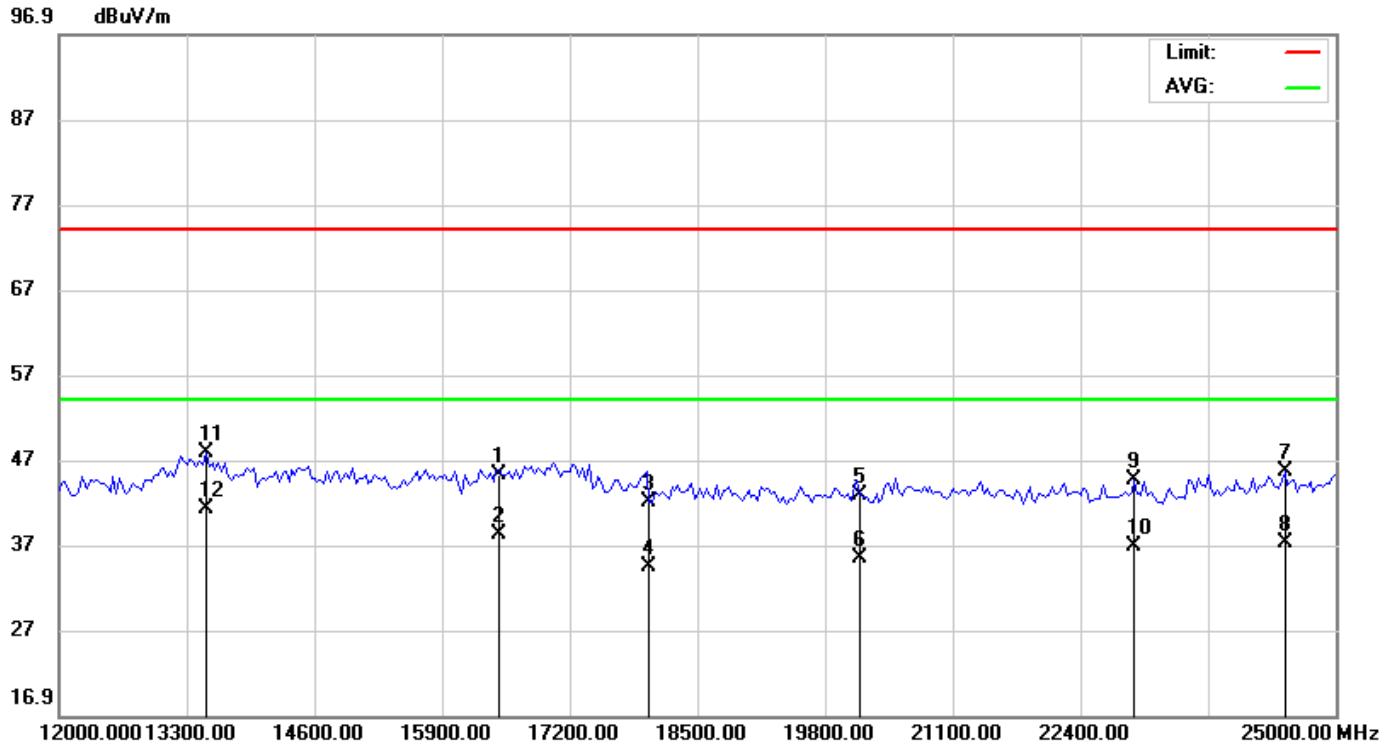
EUT:	10.1 inch notebook	M/N:	MI1041R
Mode:	Running PC System+ping	Polarization:	Vertical
Test by:	hzy	Power:	DC 5V by Adapter
Temperature: / Humidity	25.5℃/ 52.5%	Test date:	2016-10-28



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		16745.00	45.27	6.08	51.35	74.00	-22.65	peak			
2	*	16745.00	37.45	6.08	43.53	54.00	-10.47	AVG			
3		14275.00	46.67	3.84	50.51	74.00	-23.49	peak			
4		14275.00	38.60	3.84	42.44	54.00	-11.56	AVG			
5		17655.00	44.06	3.78	47.84	74.00	-26.16	peak			
6		17655.00	36.40	3.78	40.18	54.00	-13.82	AVG			
7		19702.50	43.44	0.00	43.44	74.00	-30.56	peak			
8		19702.50	37.20	0.00	37.20	54.00	-16.80	AVG			
9		22075.00	42.90	0.00	42.90	74.00	-31.10	peak			
10		22075.00	34.90	0.00	34.90	54.00	-19.10	AVG			
11		21132.50	43.62	0.00	43.62	74.00	-30.38	peak			
12		21132.50	35.50	0.00	35.50	54.00	-18.50	AVG			

*:Maximum data x:Over limit !:over margin

EUT:	10.1 inch notebook	M/N:	MI1041R
Mode:	Running PC System+ping	Polarization:	Horizontal
Test by:	hzy	Power:	DC 5V by Adapter
Temperature: / Humidity	25.5℃/ 52.5%	Test date:	2016-10-28



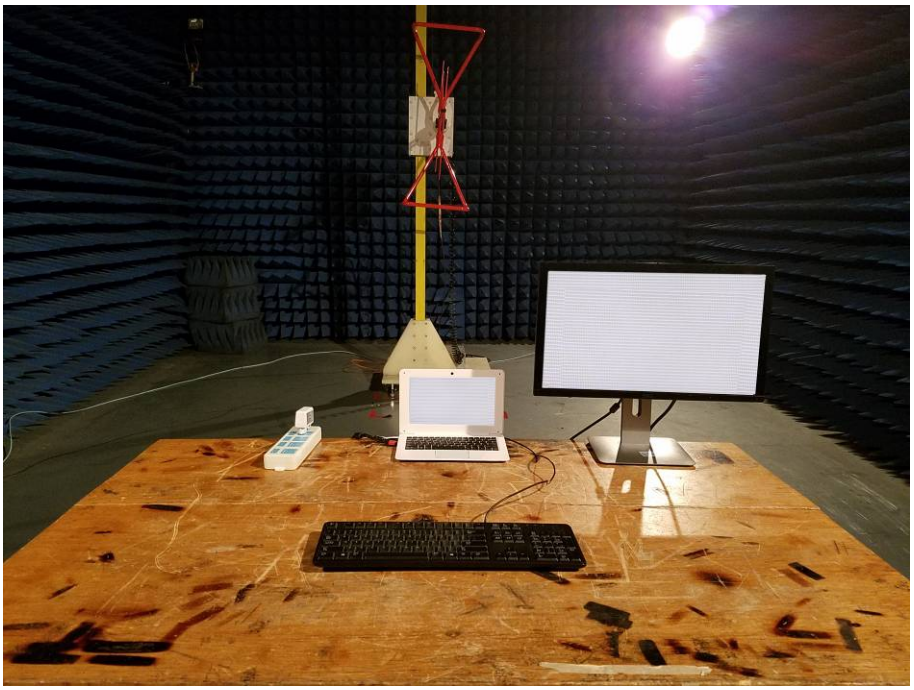
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		16485.00	40.00	5.19	45.19	74.00	-28.81	peak			
2		16485.00	33.00	5.19	38.19	54.00	-15.81	AVG			
3		18012.50	41.99	0.00	41.99	74.00	-32.01	peak			
4		18012.50	34.50	0.00	34.50	54.00	-19.50	AVG			
5		20157.50	42.73	0.00	42.73	74.00	-31.27	peak			
6		20157.50	35.40	0.00	35.40	54.00	-18.60	AVG			
7		24480.00	45.68	0.00	45.68	74.00	-28.32	peak			
8		24480.00	37.20	0.00	37.20	54.00	-16.80	AVG			
9		22952.50	44.52	0.00	44.52	74.00	-29.48	peak			
10		22952.50	36.90	0.00	36.90	54.00	-17.10	AVG			
11		13495.00	44.46	3.42	47.88	74.00	-26.12	peak			
12	*	13495.00	37.70	3.42	41.12	54.00	-12.88	AVG			

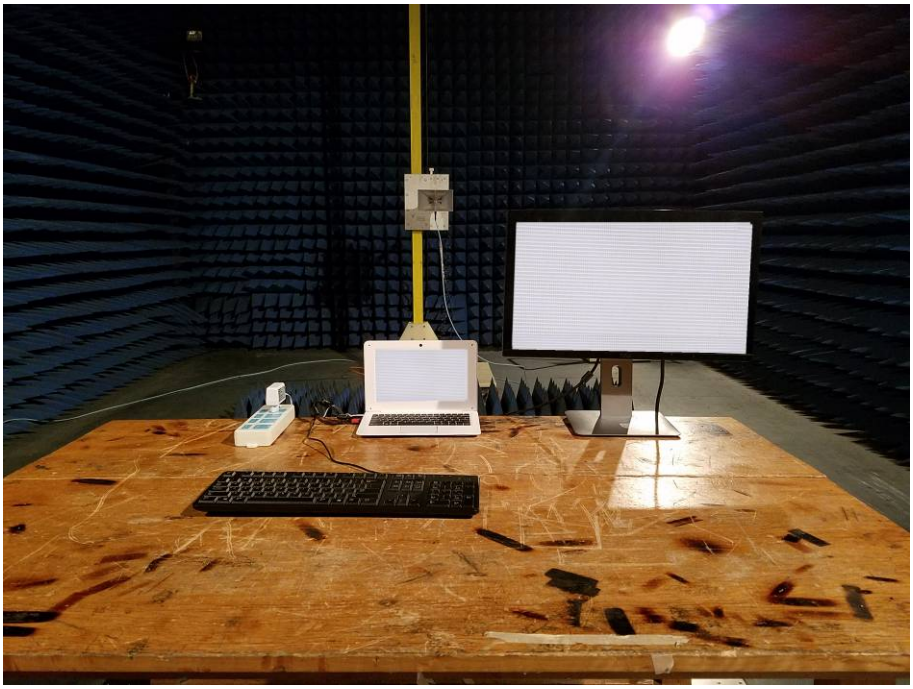
*:Maximum data x:Over limit !:over margin

APPENDIX III
(Test Photos)

Conducted Test Setup Photograph

Radiated Test Setup Photograph





APPENDIX IV
(Photos of the EUT)

Figure 1
General Appearance of the EUT

Figure 2
General Appearance of the EUT

Figure 3
General Appearance of the EUT

Figure 4
General Appearance of the EUT

Figure 5
Components Side of the PCB

Figure 6
Components Side of the PCB

Figure 7
Components Side of the PCB

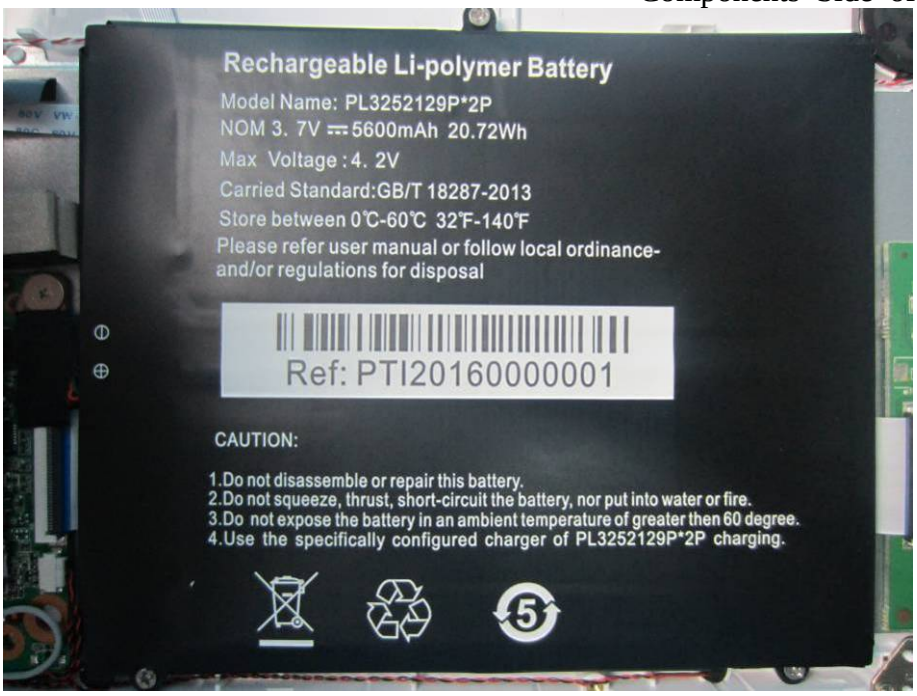


Figure 8
Components Side of the PCB

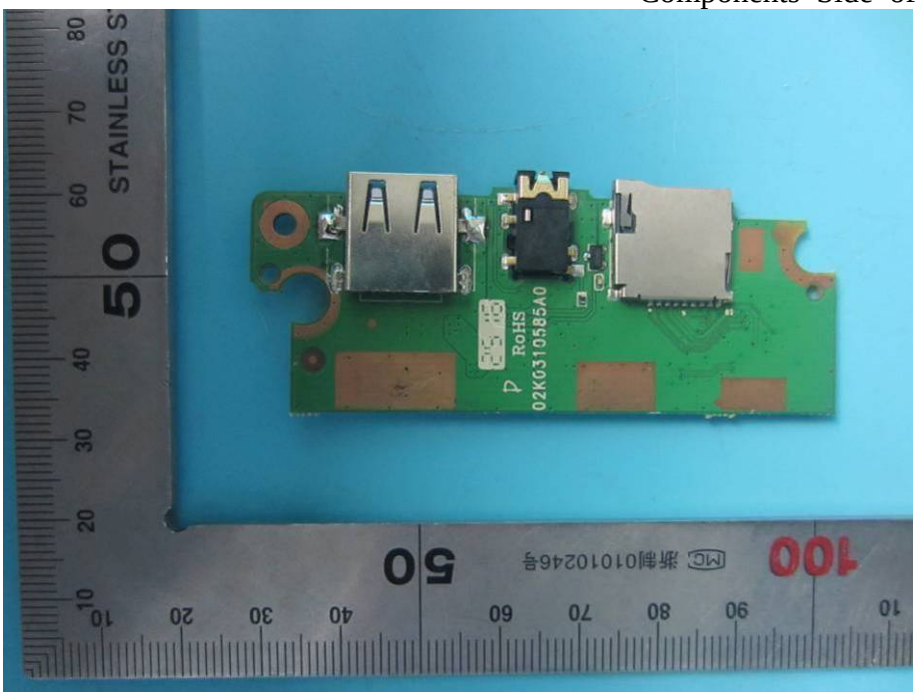


Figure 9
Components Side of the PCB

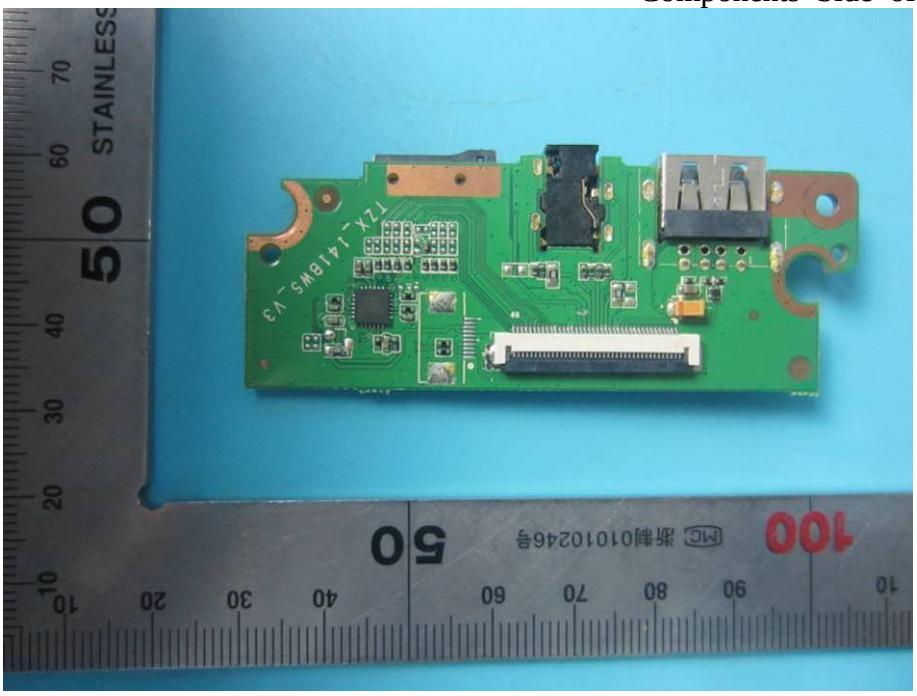


Figure 10
Components Side of the PCB

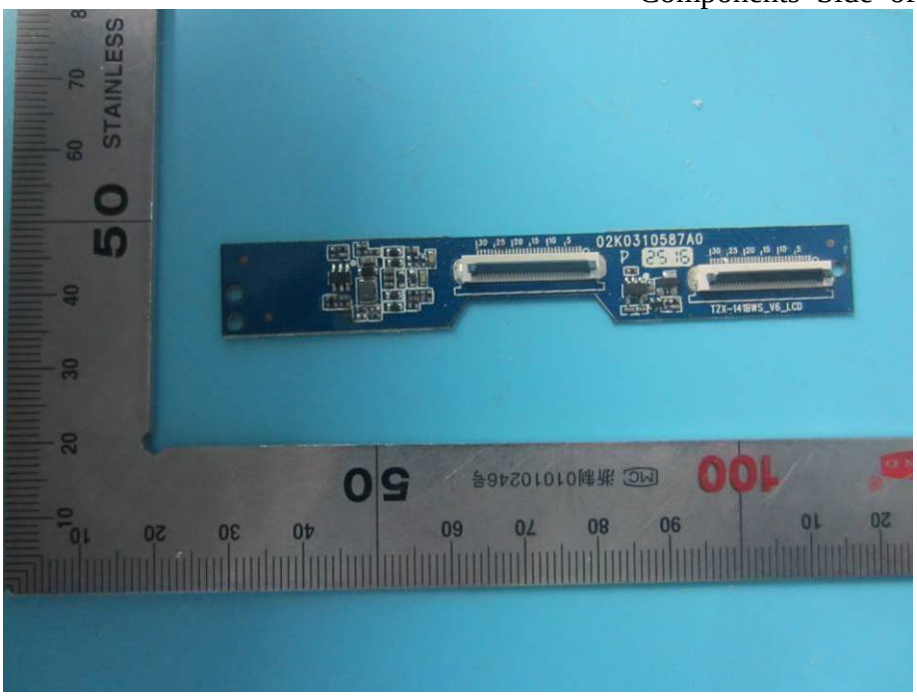


Figure 11
Components Side of the PCB

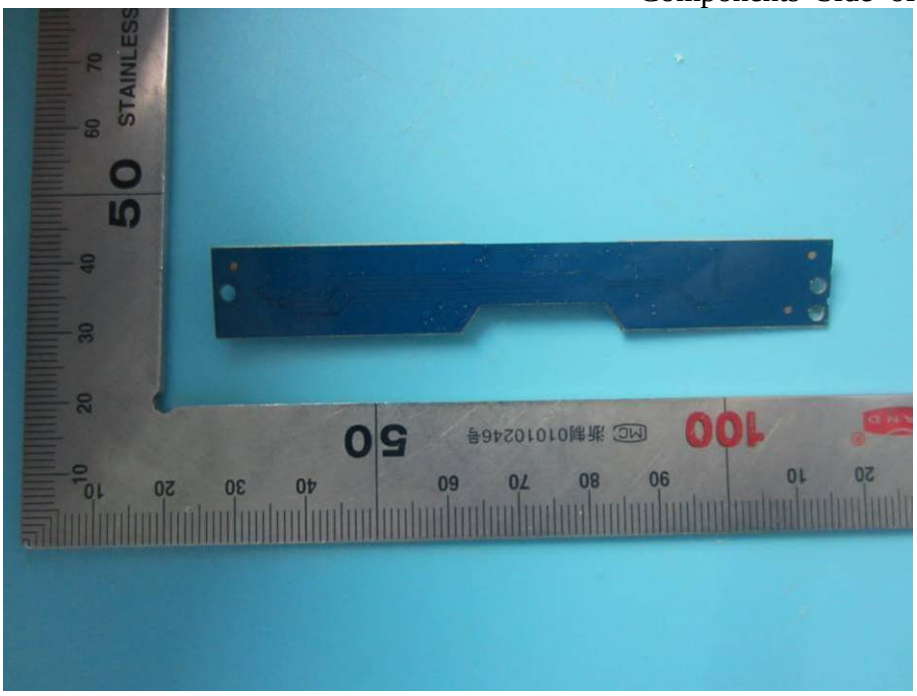


Figure 12
Components Side of the PCB

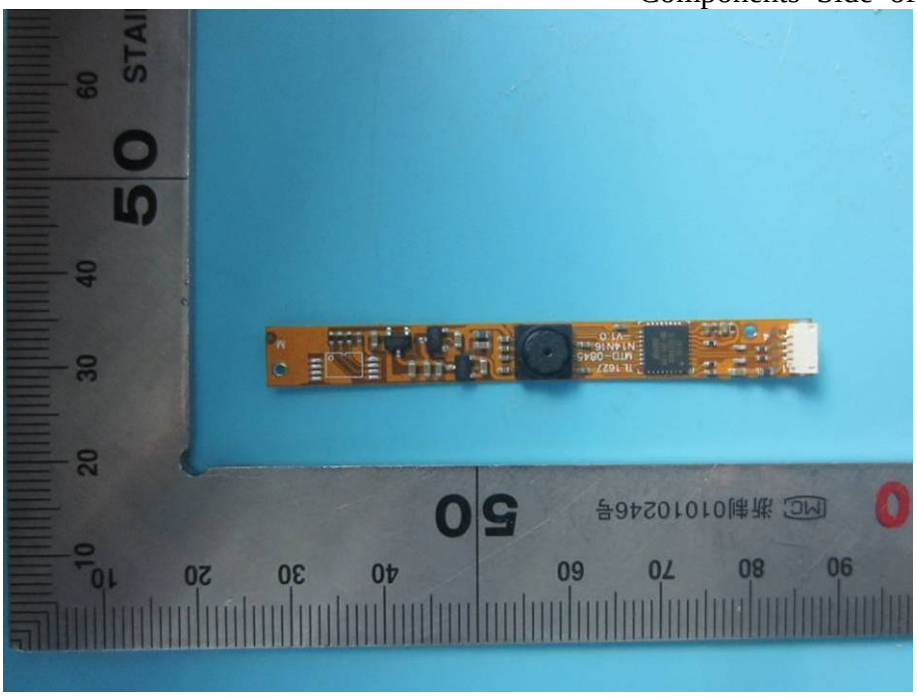


Figure 13
Components Side of the PCB

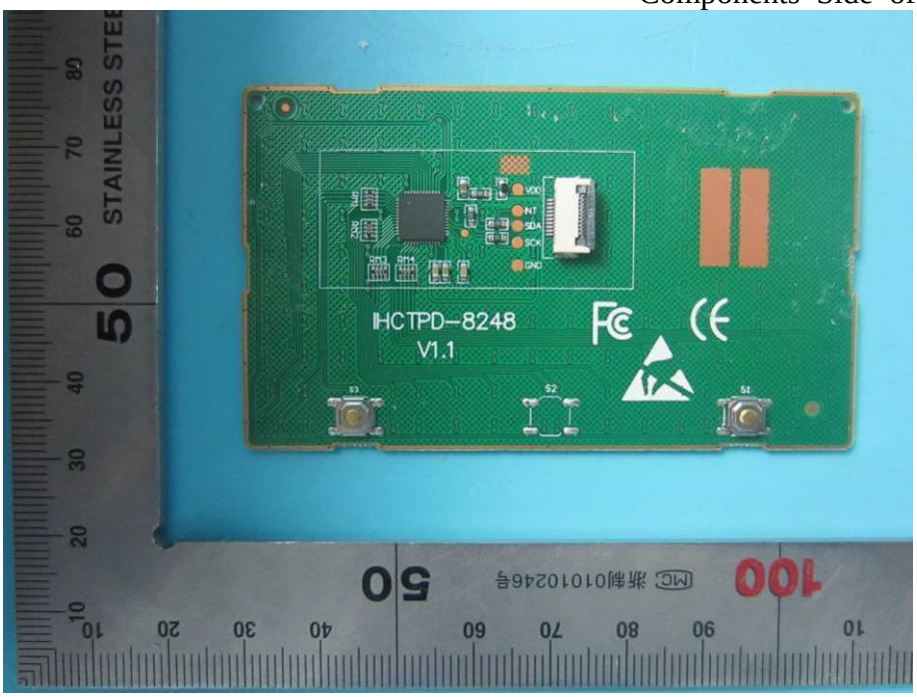


Figure 14
Components Side of the PCB

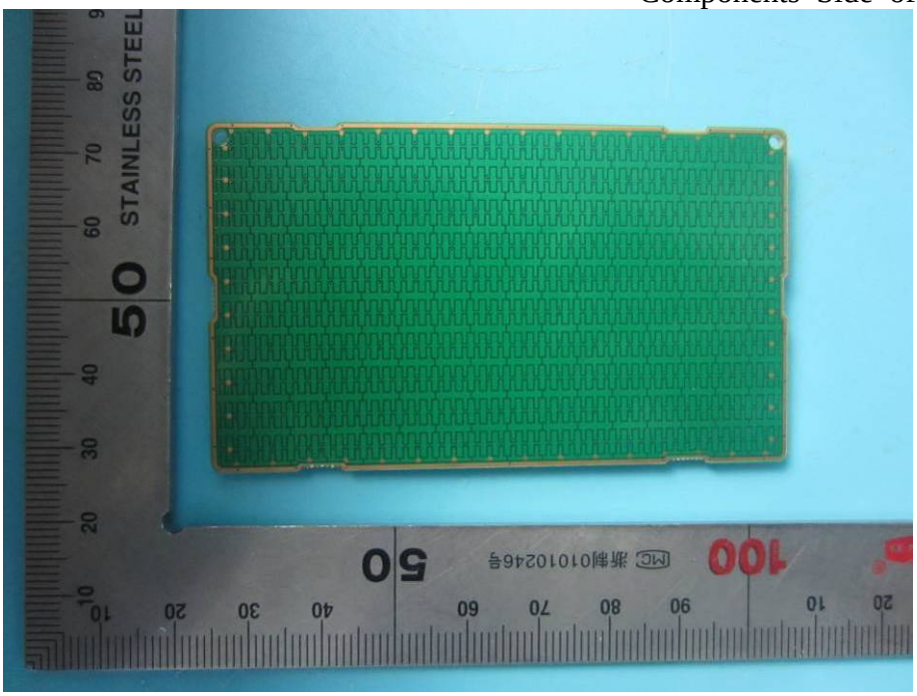


Figure 15
Components Side of the PCB

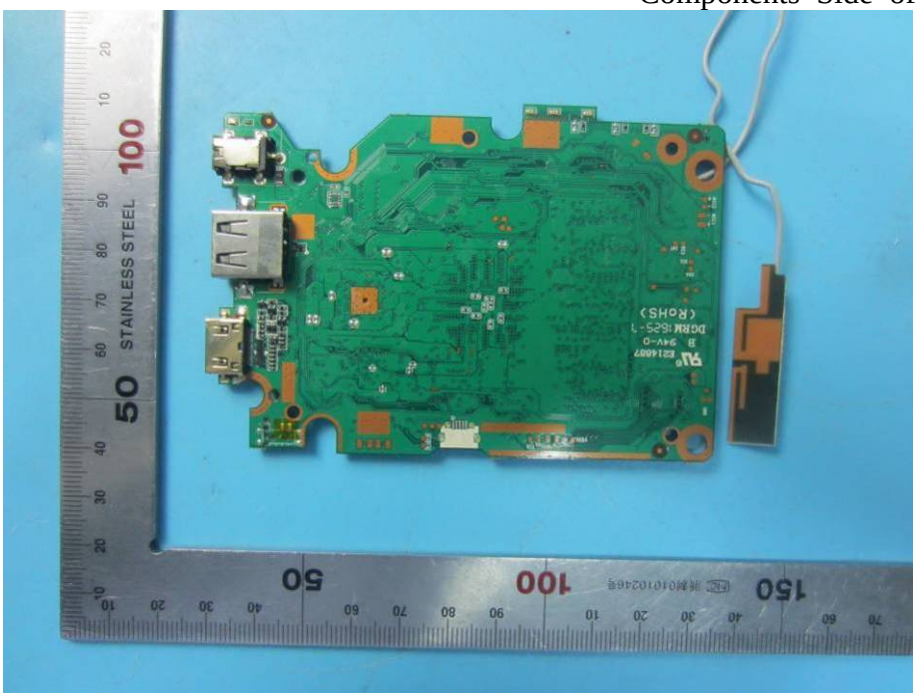


Figure 16
Components Side of the PCB

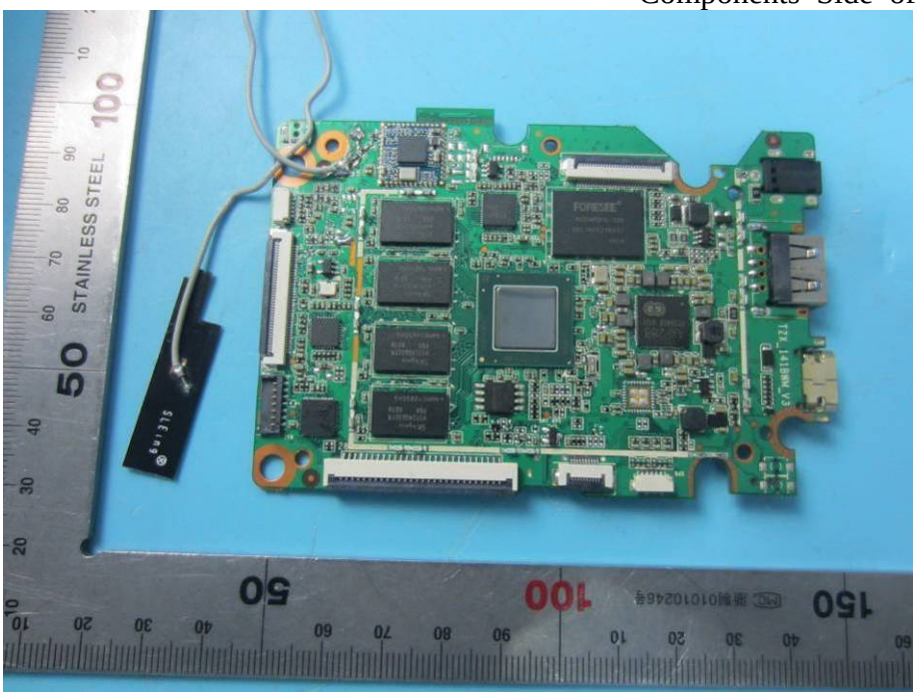


Figure 17
Components Side of the PCB

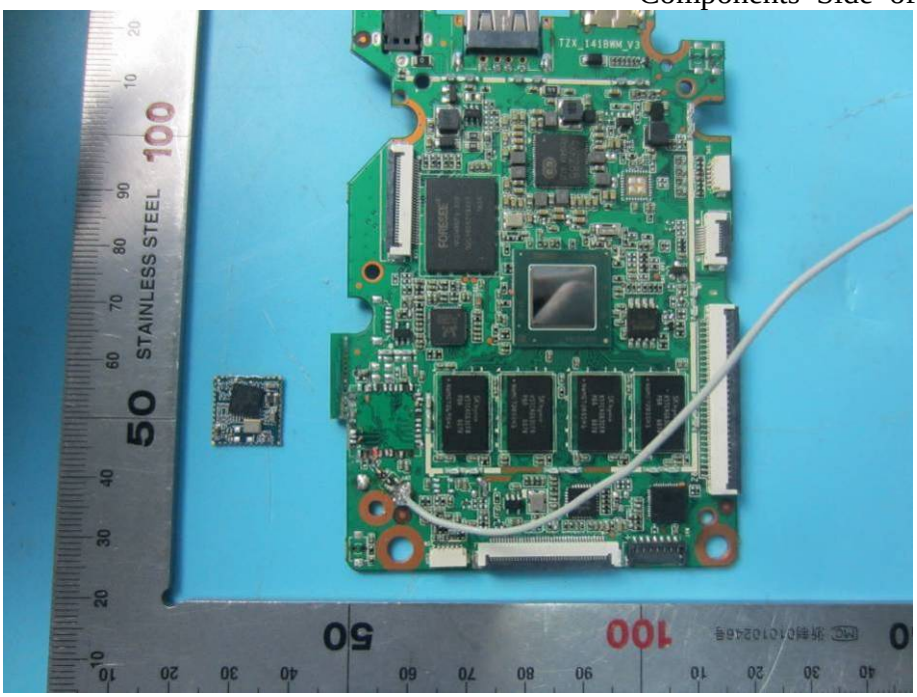


Figure 18
Components Side of the PCB

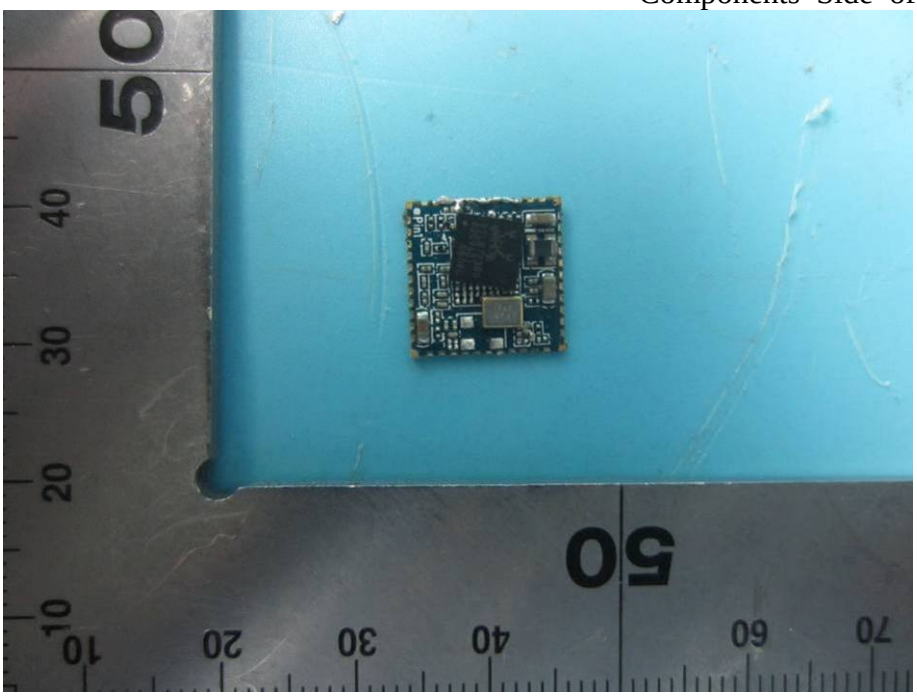


Figure 19
Components Side of the PCB