Shenzhen Huatongwei International Inspection Co., Ltd.
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CNASL1225

TEST REPORT

47 CFR FCC Part 15 Subpart B (Class B)
Radio Frequency Devices – Unintentional Radiators – Limits and methods of measurement
ANSI C63.4: 2009
American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

Report Reference No.....:	**TRE11100074**
FCC ID.....:	**BBP-MFSP100SF1**
Compiled by (position+printed name+signature)..:	File administrators Tim Zhang
Supervised by (position+printed name+signature)..:	Test Engineer Eric Zhang
Approved by (position+printed name+signature)..:	Manager Wenliang Li
Date of issue.....:	Nov 11, 2011
Testing Laboratory Name.....:	**Shenzhen Huatongwei International Inspection Co., Ltd**
Address .....:	Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China
Testing location/ procedure .....:	Full application of Harmonised standards ☒ Partial application of Harmonised standards ☐ Other standard testing methods ☐
Applicant's name.....:	**Ricoh Company Ltd**
Address .....:	810, Shimoimaizum, Ebina-Shi, Kanagawa-ken, 243-0460 Japan
Test specification:	
Standard .....:	**47 CFR FCC Part 15 Subpart B (Class B) ANSI C63.4: 2009**
Non-standard test method……..:	/
Test Report Form No.....:	HTWEMCFCC_1A
TRF Originator.....:	Shenzhen Huatongwei International Inspection Co., Ltd
Master TRF.....:	Dated 2006-06

Test item description .....:	Multifunction Digital Product (Copier/Printer/Scanner/Fax)
Trade Mark .....:	/
Manufacturer .....:	Ricoh Asia Industry (Shenzhen) Ltd.
Model/Type reference.....:	SP 100SU/Aficio SP 100SU,SP 100SF/Aficio SP 100SF
Listed Model….. .....:	/
Ratings .....:	120V 60Hz 6A 600W
Result.....:	**Positive**

EMC -- T E S T R E P O R T

Test Report No. :	TRE11100074	Nov 11, 2011 Date of issue

Equipment under Test	:	Multifunction Digital Product (Copier/Printer/Scanner/Fax)
Model / Type	:	SP 100SU/Aficio SP 100SU,SP 100SF/Aficio SP 100SF
Listed Model	:	/
Applicant	:	Ricoh Company Ltd
Address	:	810, Shimoimaizum, Ebina-Shi, Kanagawa-ken, 243-0460 Japan
Manufacturer	:	Ricoh Asia Industry (Shenzhen) Ltd.
Address	:	North Huang Gang Road, Shenzhen, P.R.China

Test Result according to the standards on page 4:	**Positive**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1. TEST STANDARDS

The tests were performed according to following standards:

47 CFR FCC Part 15 Subpart B (Class B) Radio Frequency Devices – Unintentional Radiators – Limits and methods of measurement.
ANSI C63.4: 2009 American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.

2. SUMMARY

2.1. General Remarks:

Date of receipt of test sample : Nov 06, 2011

Testing commenced on : Nov 06, 2011

Testing concluded on : Nov 11, 2011

2.2. Equipment under Test

Power supply system utilised

Power supply voltage : o 230V / 50 Hz o 115V / 60Hz
o 12 V DC o 24 V DC
■ Other (specified in blank below)

AC 120V/60Hz

2.3. Short description of the Equipment under Test (EUT)

The EUT is a laser Printer, Models SP 100SF /Aficio SP 100SF were similar to Models SP 100SU /Aficio SP 100SU, except Models SP 100SU/Aficio SP 100SU unemployed ADF and FAX Board for FAX function .

2.4. EUT operation mode:

The equipment under test was operated during the measurement under the following conditions:

Test program (customer specific)

Emissions tests……..: 47 CFR FCC Part 15 Subpart B (Class B) and ANSI C63.4 2009, searching for the highest disturbance.

2.5. EUT configuration

1)Equipment under test

Kind of equipment	Manufacturer	Model name	Serial number	Remarks
Print Machine	RICOH	SP 100SF/Aficio SP 100SF	M103171600019	

2)Highest Frequency Generated or Used in The Device or on Which the Device Operates(MHz)

Kind of equipment	Model name	Operates Frequency	Remarks
Print Machine	SP 100SF/Aficio SP 100SF	96MHz	SDRAM

3)Operating modes:

No.	Operating mdoes	Remarks
1	Standby	
2	USB Print	
3	Copy	
4	Scan to PC	
5	FAX RX	
6	FAX TX	

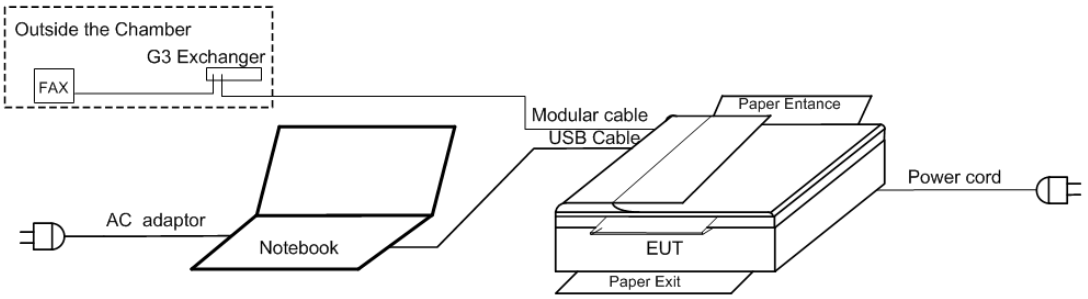
4)Supporting equipment

Kind of equipment	Manufacturer	Model name	Serial number	Remarks
Notebook	Lenovo	ThinkPad X201i	R8-7DYTX 10/11	
G3 EXchanger	TENDA	PABX	-	
FAX Machine	RICOH	Aficio SP 3510SF	JM119270019	

5)Cables used

Cable Name	Length	Shielded	Ferrite	Maker
AC cable	1.8m	No	No	Volex
USB cable	2m	Yes	No	RICOH
Modular cable	2m	No	No	RICOH

6)EUT Setup



3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Shenzhen Huatongwei International Inspection Co., Ltd
Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China
Phone: 86-755-26715686 Fax: 86-755-26748089

3.2. Test Facility

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

CNAS-Lab Code: L1225

Shenzhen Huatongwei International Inspection Co., Ltd has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories, Date of Registration: Mar 30, 2009. Valid time is until Mar 29, 2012.

A2LA-Lab Cert. No. 2243.01

Shenzhen Huatongwei International Inspection Co., Ltd, EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. Valid time is until Sept 30, 2013.

FCC-Registration No.: 662850

Shenzhen Huatongwei International Inspection Co., 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 662850, Renewal date Jun 01, 2009.

IC-Registration No.: 5377

The 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377 on Jan 25, 2011. Valid time is until Jan 24, 2014

ACA

Shenzhen Huatongwei International Inspection Co., Ltd, EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

NEMKO-Aut. No.: ELA125

Shenzhen Huatongwei International Inspection Co., Ltd has been assessed the quality assurance system, the testing facilities, qualifications and testing practices of the relevant parts of the organization. The quality assurance system of the Laboratory has been validated against ISO/IEC 17025:2005 or equivalent. The laboratory also fulfils the conditions described in Nemko Document NLA-10, the Authorization is valid through July 07, 2013.

VCCI

The 3m Semi-anechoic chamber (12.2m×7.95m×6.7m) and Shielded Room (8m×4m×3m) of Shenzhen Huatongwei International Inspection Co., Ltd has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2484. Date of Registration: December 20, 2006. Valid time is until December 20, 2012.

Main Ports Conducted Interference Measurement of Shenzhen Huatongwei International Inspection Co., Ltd has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: C-2726. Date of Registration: December 20, 2006. Valid time is until December 19, 2012.

DNV

Shenzhen Huatongwei International Inspection Co Ltd has been found to comply with the requirements of DNV towards subcontractor of EMC and safety testing services in conjunction with the EMC and Low voltage Directives and in the voluntary field. The acceptance is based on a formal quality Audit and follow-ups according to relevant parts of ISO/IEC Guide 17025(2005), in accordance with the requirements of the DNV Laboratory Quality Manual towards subcontractors. Valid time is until Aug 24, 2013.

3.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15-35 ° C
Humidity:	30-60 %
Atmospheric pressure:	950-1050mbar

3.4. Test Description

Emission Measurement		
Radiated Emission	47 CFR FCC Part 15 Subpart B Class B ANSI C63.4 2009	PASS
Conducted Disturbance	47 CFR FCC Part 15 Subpart B Class B ANSI C63.4 2009	PASS

Remark: The measurement uncertainty is not included in the test result.

3.5. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 „Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements“ and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.24dB	(1)
Conducted Disturbance	0.15~30 MHz	3.39dB	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.6. Equipments Used during the Test

Radiated Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	ULTRA-BROADBAND ANTENNA	Rohde & Schwarz	HL562	100015	2011/05/30
2	EMI TEST RECEIVER	Rohde & Schwarz	ESI 26	100009	2011/10/24
3	RF TEST PANEL	Rohde & Schwarz	TS / RSP	335015/ 0017	2011/10/24
4	TURNTABLE	ETS	2088	2149	2011/10/24
5	ANTENNA MAST	ETS	2075	2346	2011/10/24
6	EMI TEST SOFTWARE	Rohde & Schwarz	ESK1	N/A	2011/10/24
7	Double-Ridged-Waveguide Horn Antenna	Rohde & Schwarz	HF906	100039	2011/10/24
8	Semi-anechoic chamber	ETS-LINDGREN	AJ 593 HTW	N/A	2011/10/24

Conducted Disturbance					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	EMI Test Receiver	Rohde & Schwarz	ESCS30	100038	2011/10/24
2	Artificial Mains	Rohde & Schwarz	ESH2-Z5	100028	2011/10/24
3	Artificial Mains	Rohde & Schwarz	ESH3-Z5	100040	2011/10/24
4	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100044	2011/10/24
5	EMI Test Software	Rohde & Schwarz	ESK1	N/A	2011/10/24
6	3# shielded room	ETS-LINDGREN	RFD-100	2406	N/A

4. TEST CONDITIONS AND RESULTS

4.1. Radiated Emission

For test instruments and accessories used see section 3.6.

4.1.1. Description of the test location

Test location: Shielded room No. 4

4.1.2. Limits of disturbance

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	
1000-2000	3	74(PK)	54(AV)

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.

(3)The highest frequency of the internal sources of the EUT is 96MHz, so the measurement was made up to 1 GHz.

4.1.3. Description of the test set-up

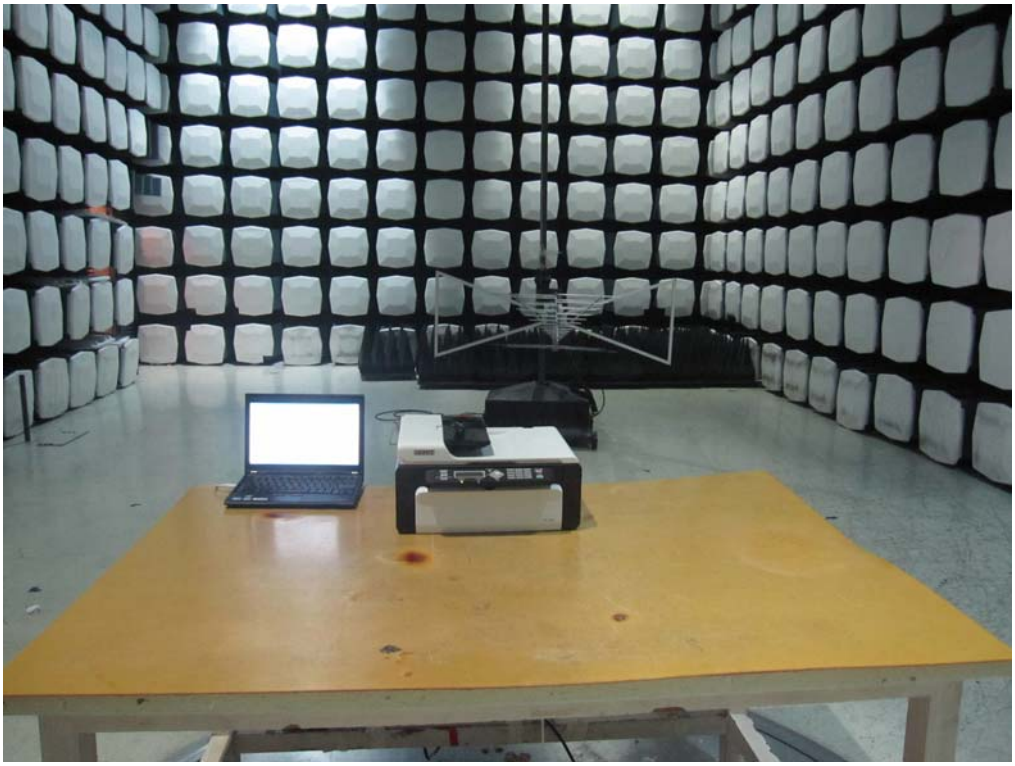
4.1.3.1. Operating Condition

The EUT is set to work that shall be carried out respectively standby, USB print, Copy, Scan to PC, FAX RX and FAX TX modes during the test and the maximum emanating results are recorded.

4.1.3.2. Test Configuration and Procedure

Test is carried out in Semi-Anechoic Chamber. EUT is placed on a nonmetal table which is 0.8 meter above a grounded turntable. EUT is set 3 meters away from the center of receiving antenna. The turntable can rotate 360 degrees to determine the azimuth of the maximum emission level and then the antenna can move up and down from 1 to 4 meter to find out the maximum emission level. Both horizontal and vertical polarizations of the antenna are set on the test.

4.1.3.3. Photos of the test set-up



4.1.4. Test result

The requirements are **Fulfilled**

Band Width: 120 KHz

Frequency Range: 30MHz to 1000MHz

Remarks: The limits are kept. For detailed results, please see the following page(s).

Margin=limit-level

Level=read valus+transducer

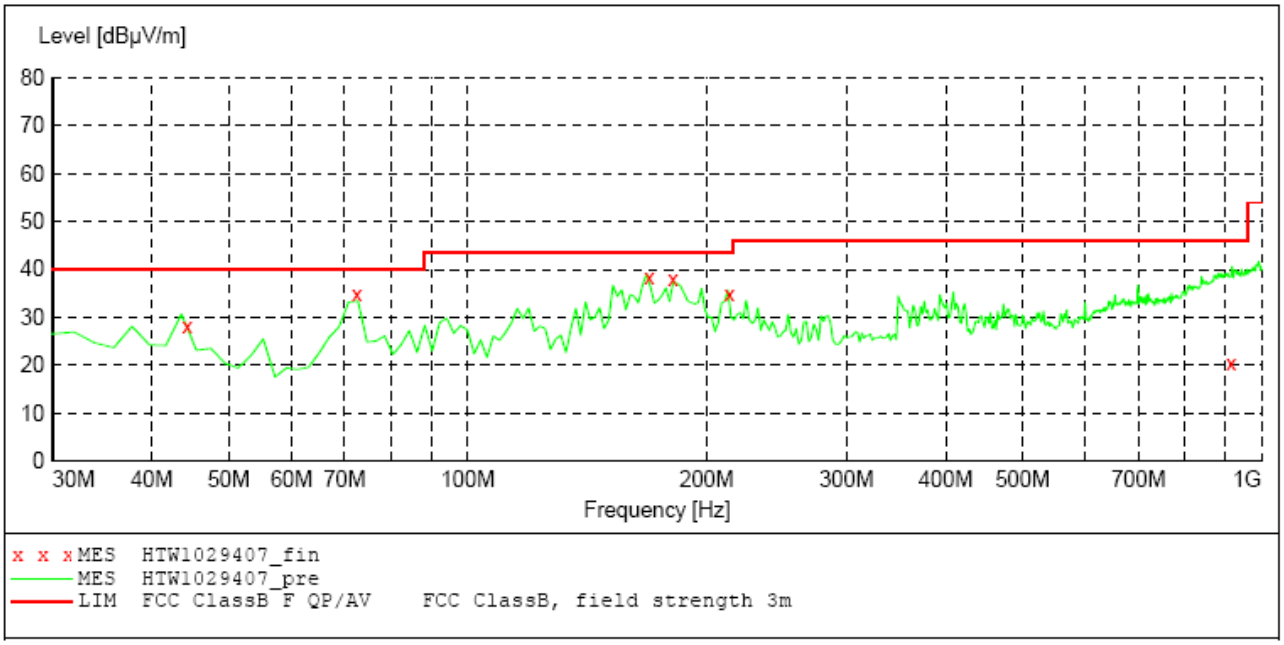
Transducer=antenna factor+pre-amplifier factor+cable loss (with 6db attenuator)

For 30MHz-1000MHz

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
Standby	169.38	38.40	Vertical	43.5	5.1	QP
Test Results				Pass		

SCAN TABLE: "test Field (30M-1G) QP"

```
Short Description:            Field Strength (30M-1G)
Start      Stop       Step       Detector  Meas.     IF       Transducer
Frequency  Frequency  Width                Time      Bandw.
30.0 MHz   1.0 GHz    60.0 kHz   QuasiPeak 1.0 s     120 kHz HL562 2011
```



MEASUREMENT RESULT: "HTW1029407_fin"

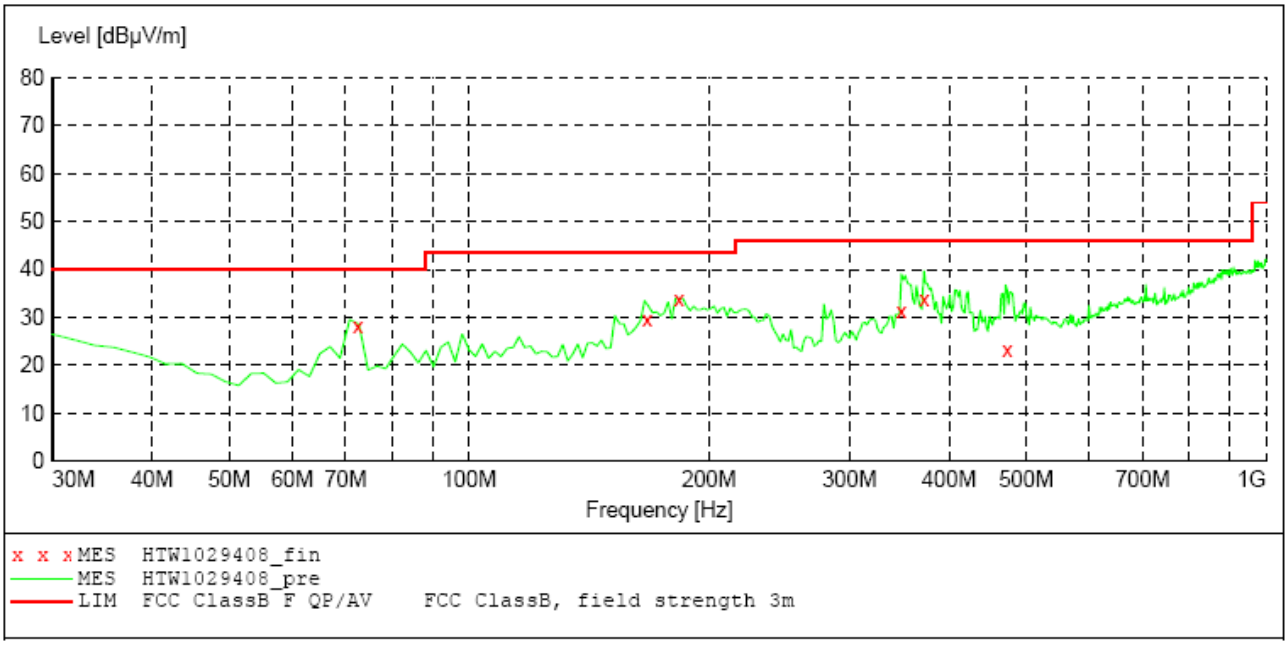
10/29/2011 12:27PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
44.340000	28.20	-10.9	40.0	11.8	QP	100.0	360.00	VERTICAL
72.600000	34.80	-15.1	40.0	5.2	QP	175.0	230.00	VERTICAL
169.380000	38.40	-15.6	43.5	5.1	QP	100.0	123.00	VERTICAL
181.440000	38.00	-14.4	43.5	5.5	QP	100.0	133.00	VERTICAL
213.720000	34.70	-13.0	43.5	8.8	QP	100.0	83.00	VERTICAL
915.480000	20.30	5.9	46.0	25.7	QP	208.0	286.00	VERTICAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
Standby	183.49	33.70	Horizontal	43.5	9.8	QP
Test Results				Pass		

SCAN TABLE: "test Field (30M-1G) QP"

```
Short Description:              Field Strength (30M-1G)
Start      Stop       Step       Detector  Meas.     IF       Transducer
Frequency  Frequency  Width                Time      Bandw.
30.0 MHz   1.0 GHz    60.0 kHz   QuasiPeak 1.0 s     120 kHz HL562 2011
```



MEASUREMENT RESULT: "HTW1029408_fin"

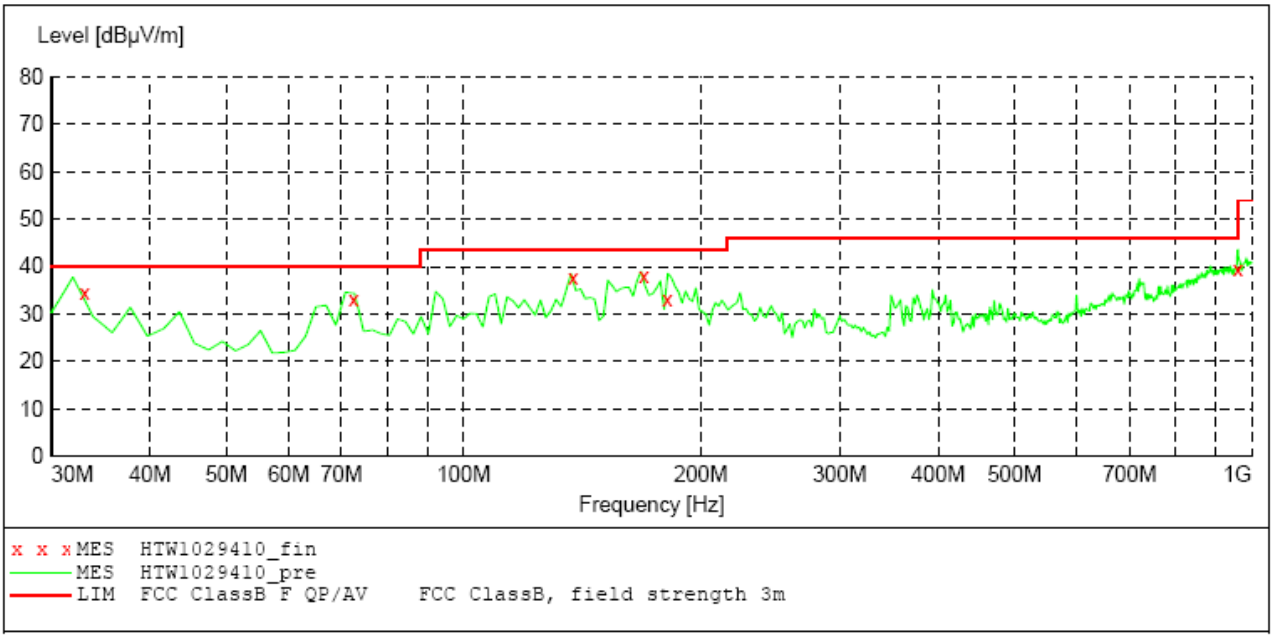
10/29/2011 12:45PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
72.600000	28.20	-15.1	40.0	11.8	QP	266.0	103.00	HORIZONTAL
167.280000	29.40	-15.5	43.5	14.1	QP	245.0	324.00	HORIZONTAL
183.480000	33.70	-14.5	43.5	9.8	QP	172.0	328.00	HORIZONTAL
348.780000	31.30	-7.4	46.0	14.7	QP	100.0	300.00	HORIZONTAL
372.960000	33.70	-7.4	46.0	12.3	QP	100.0	80.00	HORIZONTAL
473.820000	23.30	-3.7	46.0	22.7	QP	100.0	59.00	HORIZONTAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
USB Print	169.38	38.10	Vertical	43.5	5.4	QP
Test Results				Pass		

SCAN TABLE: "test Field (30M-1G) QP"

```
Short Description:              Field Strength (30M-1G)
Start      Stop       Step      Detector  Meas.     IF       Transducer
Frequency  Frequency  Width               Time      Bandw.
30.0 MHz   1.0 GHz    60.0 kHz  QuasiPeak 1.0 s     120 kHz  HL562 2011
```



MEASUREMENT RESULT: "HTW1029410_fin"

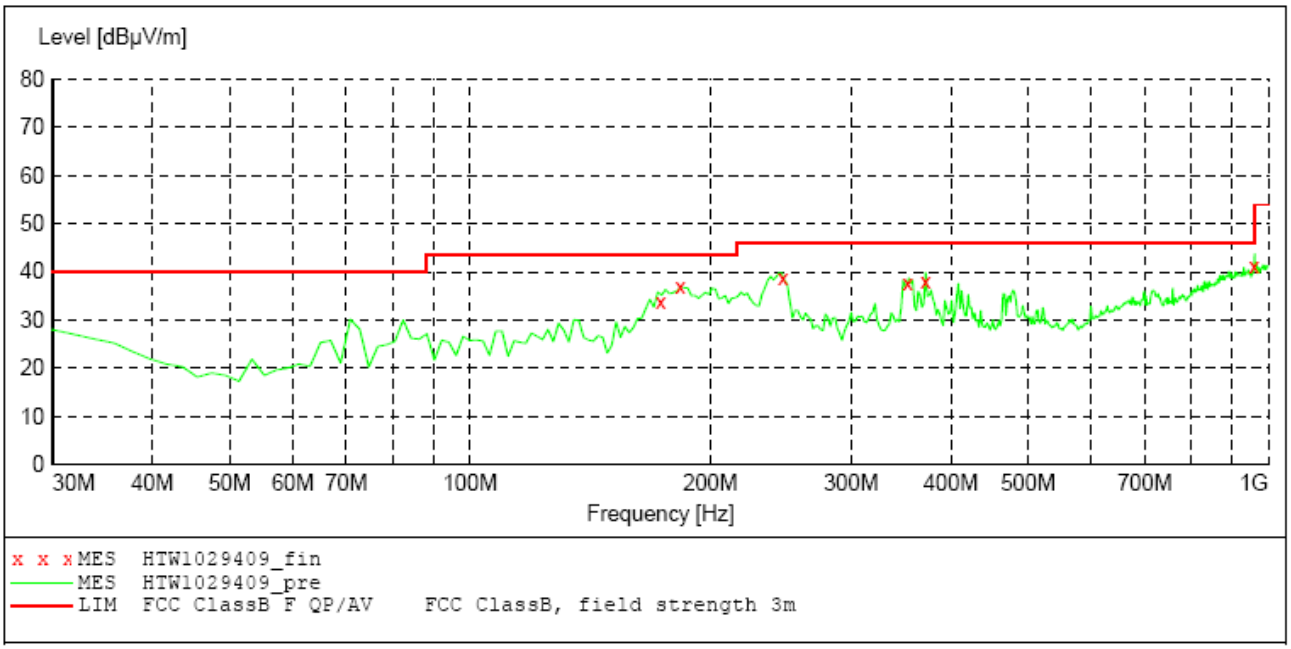
10/29/2011 1:20PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
33.060000	34.50	-4.9	40.0	5.5	QP	100.0	99.00	VERTICAL
72.600000	33.00	-15.1	40.0	7.0	QP	209.0	280.00	VERTICAL
137.760000	37.80	-13.1	43.5	5.7	QP	100.0	0.00	VERTICAL
169.380000	38.10	-15.6	43.5	5.4	QP	100.0	131.00	VERTICAL
181.440000	33.10	-14.4	43.5	10.4	QP	100.0	124.00	VERTICAL
961.380000	39.50	6.4	54.0	14.5	QP	100.0	177.00	VERTICAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
USB Print	960.00	41.10	Horizontal	46.00	4.9	QP
Test Results				Pass		

SCAN TABLE: "test Field (30M-1G) QP"

```
Short Description:            Field Strength (30M-1G)
Start      Stop       Step       Detector  Meas.     IF       Transducer
Frequency  Frequency  Width                Time      Bandw.
30.0 MHz   1.0 GHz    60.0 kHz   QuasiPeak 1.0 s     120 kHz HL562 2011
```



MEASUREMENT RESULT: "HTW1029409_fin"

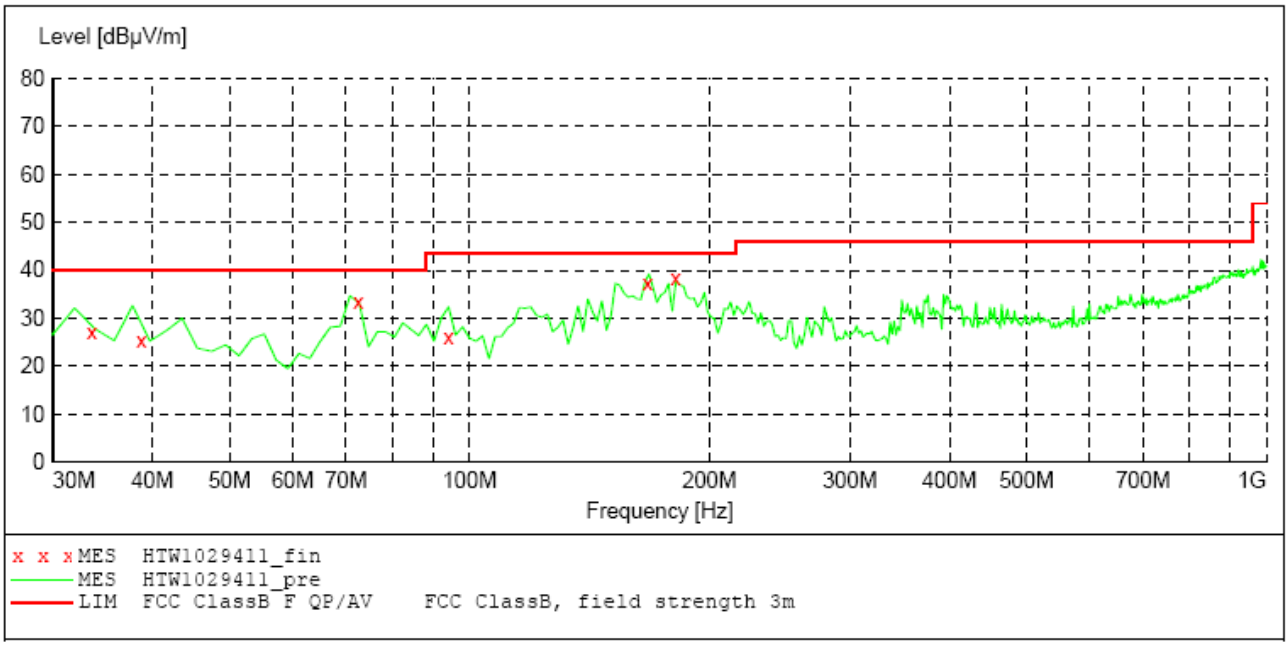
10/29/2011 1:04PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
173.400000	33.80	-15.1	43.5	9.7	QP	211.0	0.00	HORIZONTAL
183.420000	37.00	-14.5	43.5	6.5	QP	194.0	329.00	HORIZONTAL
246.780000	38.70	-10.5	46.0	7.3	QP	147.0	15.00	HORIZONTAL
353.400000	37.60	-7.4	46.0	8.4	QP	100.0	293.00	HORIZONTAL
371.940000	38.10	-7.5	46.0	7.9	QP	100.0	307.00	HORIZONTAL
960.000000	41.10	6.4	46.0	4.9	QP	100.0	236.00	HORIZONTAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
Copy	181.44	38.30	Vertical	43.5	5.2	QP
Test Results				Pass		

SCAN TABLE: "test Field (30M-1G) QP"

```
Short Description:              Field Strength (30M-1G)
Start      Stop       Step       Detector  Meas.     IF       Transducer
Frequency  Frequency  Width                Time      Bandw.
30.0 MHz   1.0 GHz    60.0 kHz   QuasiPeak 1.0 s     120 kHz HL562 2011
```



MEASUREMENT RESULT: "HTW1029411_fin"

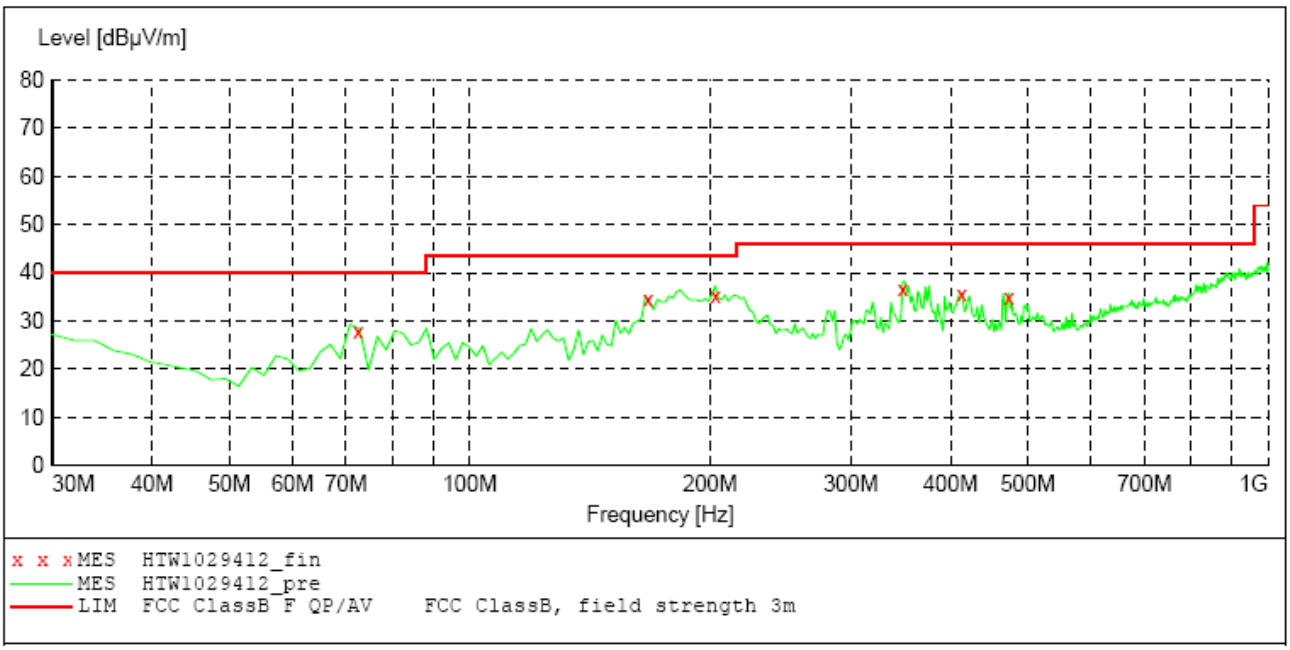
10/29/2011 1:36PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
33.600000	27.20	-5.1	40.0	12.8	QP	100.0	360.00	VERTICAL
38.760000	25.40	-7.9	40.0	14.6	QP	217.0	289.00	VERTICAL
72.600000	33.40	-15.1	40.0	6.6	QP	151.0	294.00	VERTICAL
94.200000	26.20	-11.8	43.5	17.3	QP	100.0	225.00	VERTICAL
167.340000	37.40	-15.5	43.5	6.1	QP	100.0	119.00	VERTICAL
181.440000	38.30	-14.4	43.5	5.2	QP	100.0	137.00	VERTICAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
Copy	203.28	35.2	Horizontal	43.5	8.3	QP
Test Results				Pass		

SCAN TABLE: "test Field (30M-1G) QP"

```
Short Description:            Field Strength (30M-1G)
Start      Stop       Step       Detector  Meas.     IF       Transducer
Frequency  Frequency  Width                Time      Bandw.
30.0 MHz   1.0 GHz    60.0 kHz   QuasiPeak 1.0 s     120 kHz HL562 2011
```



MEASUREMENT RESULT: "HTW1029412_fin"

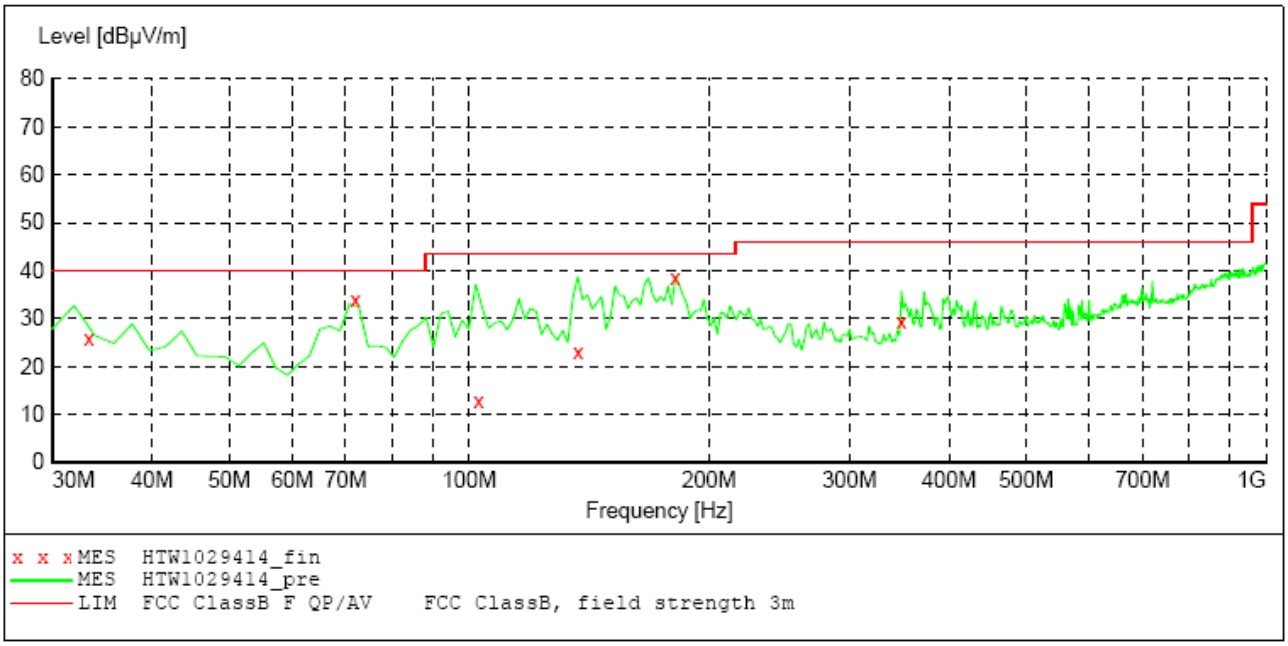
10/29/2011 1:54PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
72.600000	27.80	-15.1	40.0	12.2	QP	240.0	114.00	HORIZONTAL
167.340000	34.40	-15.5	43.5	9.1	QP	224.0	314.00	HORIZONTAL
203.280000	35.20	-13.7	43.5	8.3	QP	159.0	312.00	HORIZONTAL
348.780000	36.80	-7.4	46.0	9.2	QP	100.0	300.00	HORIZONTAL
413.280000	35.40	-5.5	46.0	10.6	QP	100.0	90.00	HORIZONTAL
473.880000	34.80	-3.7	46.0	11.2	QP	100.0	49.00	HORIZONTAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
Scan to PC	181.44	38.40	Vertical	43.5	5.1	QP
Test Results				Pass		

SCAN TABLE: "test Field (30M-1G) QP"

```
Short Description:              Field Strength (30M-1G)
Start      Stop       Step       Detector  Meas.     IF       Transducer
Frequency  Frequency  Width                Time      Bandw.
30.0 MHz   1.0 GHz    60.0 kHz   QuasiPeak 1.0 s     120 kHz HL562 2011
```



MEASUREMENT RESULT: "HTW1029414_fin"

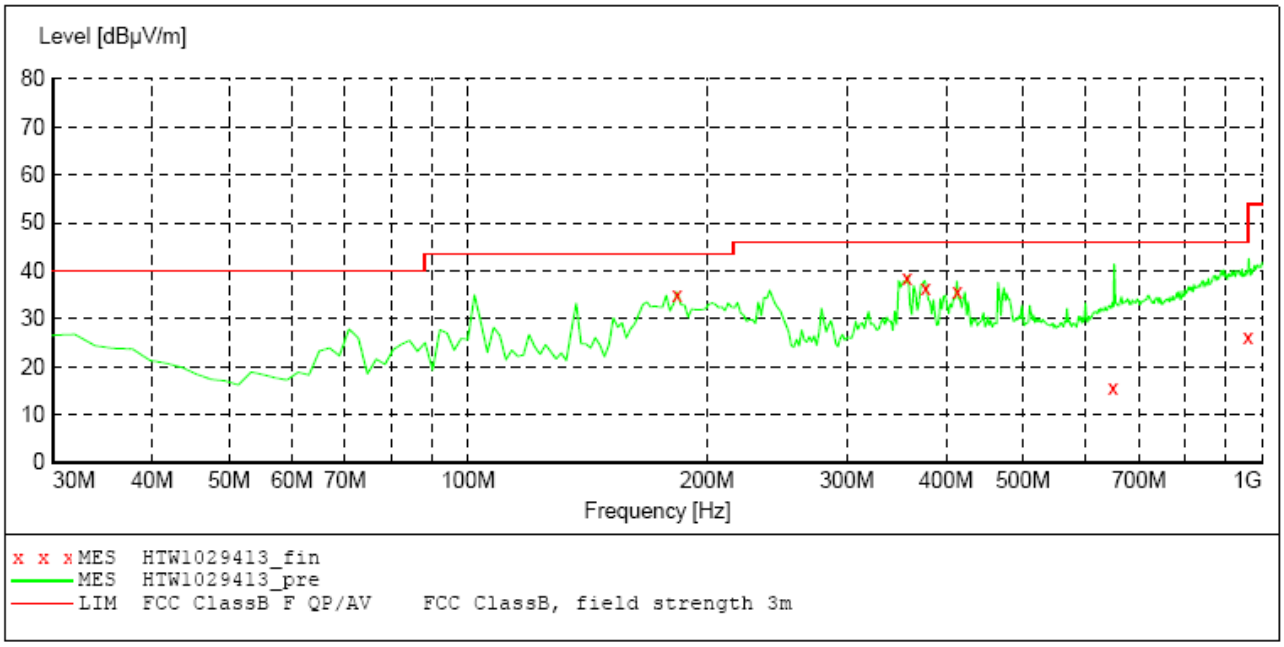
10/29/2011 2:29PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
33.360000	25.70	-5.0	40.0	14.3	QP	100.0	32.00	VERTICAL
72.000000	33.80	-15.2	40.0	6.2	QP	159.0	287.00	VERTICAL
102.900000	12.70	-11.4	43.5	30.8	QP	171.0	201.00	VERTICAL
137.160000	22.90	-13.0	43.5	20.6	QP	196.0	11.00	VERTICAL
181.440000	38.40	-14.4	43.5	5.1	QP	100.0	111.00	VERTICAL
348.720000	29.40	-7.4	46.0	16.6	QP	100.0	200.00	VERTICAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
Scan to PC	357.78	38.60	Horizontal	46.0	7.4	QP
Test Results				Pass		

SCAN TABLE: "test Field (30M-1G) QP"

```
Short Description:            Field Strength (30M-1G)
Start      Stop       Step       Detector  Meas.     IF       Transducer
Frequency  Frequency  Width                Time      Bandw.
30.0 MHz   1.0 GHz    60.0 kHz   QuasiPeak 1.0 s     120 kHz HL562 2011
```



MEASUREMENT RESULT: "HTW1029413_fin"

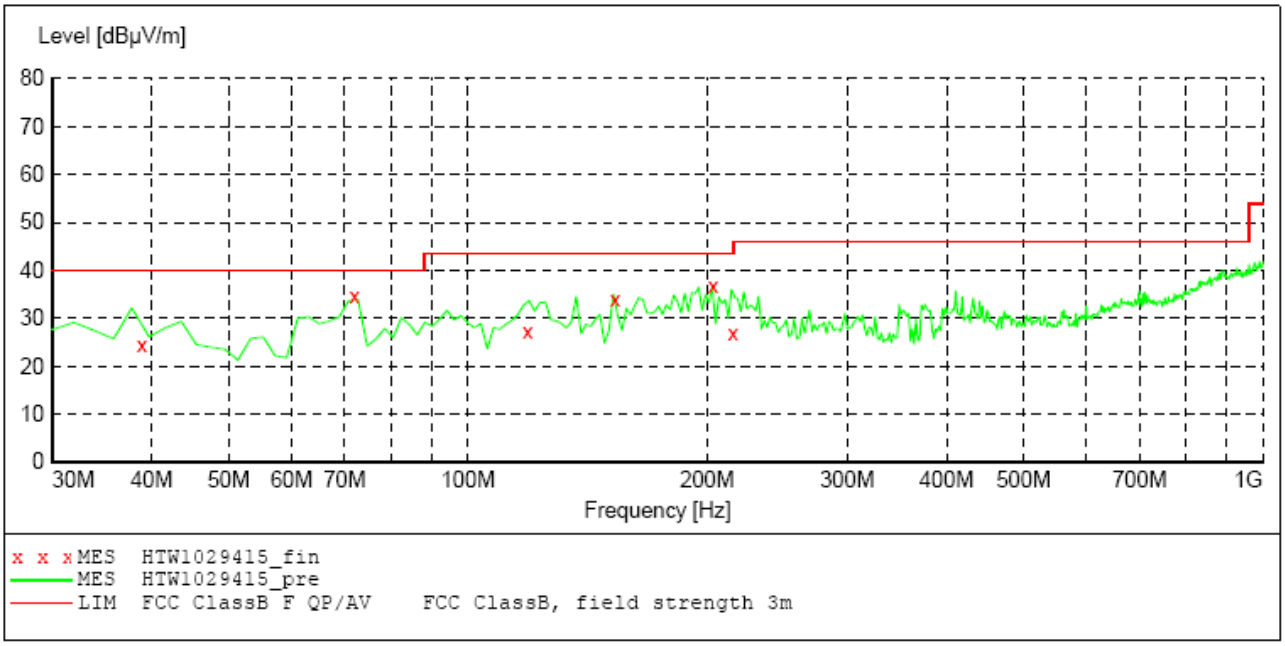
10/29/2011 2:14PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
183.480000	34.90	-14.5	43.5	8.6	QP	196.0	327.00	HORIZONTAL
357.780000	38.60	-7.5	46.0	7.4	QP	100.0	56.00	HORIZONTAL
376.980000	36.40	-7.1	46.0	9.6	QP	100.0	300.00	HORIZONTAL
413.280000	35.80	-5.5	46.0	10.2	QP	100.0	89.00	HORIZONTAL
649.080000	15.60	0.2	46.0	30.4	QP	100.0	226.00	HORIZONTAL
960.420000	26.30	6.4	54.0	27.7	QP	266.0	249.00	HORIZONTAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
FAX RX	72.00	34.60	Vertical	40.0	5.4	QP
Test Results				Pass		

SCAN TABLE: "test Field (30M-1G) QP"

```
Short Description:              Field Strength (30M-1G)
Start      Stop       Step      Detector  Meas.     IF       Transducer
Frequency  Frequency  Width               Time      Bandw.
30.0 MHz   1.0 GHz    60.0 kHz  QuasiPeak 1.0 s     120 kHz HL562 2011
```



MEASUREMENT RESULT: "HTW1029415_fin"

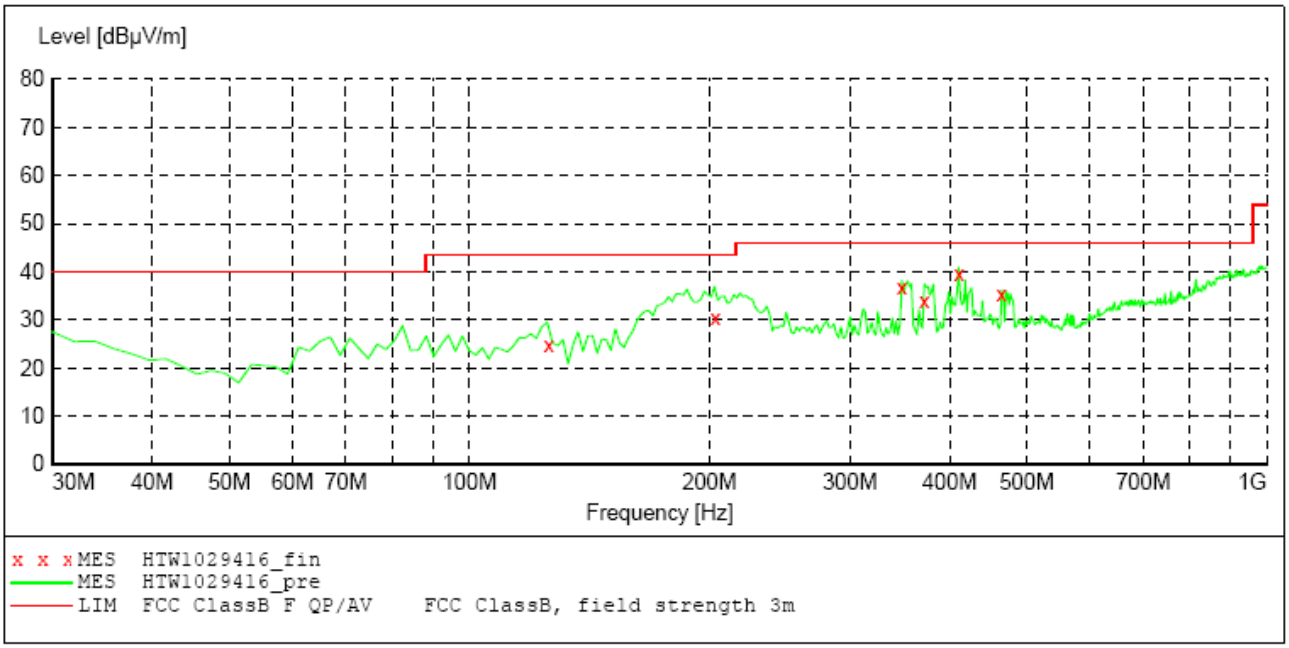
10/29/2011 2:48PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
38.940000	24.30	-8.0	40.0	15.7	QP	278.0	137.00	VERTICAL
72.000000	34.60	-15.2	40.0	5.4	QP	155.0	246.00	VERTICAL
118.920000	27.20	-11.1	43.5	16.3	QP	100.0	278.00	VERTICAL
153.240000	33.90	-14.6	43.5	9.6	QP	100.0	119.00	VERTICAL
203.640000	36.70	-13.7	43.5	6.8	QP	100.0	95.00	VERTICAL
215.700000	27.00	-12.9	43.5	16.5	QP	159.0	65.00	VERTICAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
FAX RX	411.30	39.70	Horizontal	46.00	6.3	QP
Test Results				Pass		

SCAN TABLE: "test Field (30M-1G) QP"

```
Short Description:              Field Strength (30M-1G)
Start      Stop       Step       Detector  Meas.     IF       Transducer
Frequency  Frequency  Width                Time      Bandw.
30.0 MHz   1.0 GHz    60.0 kHz   QuasiPeak 1.0 s     120 kHz HL562 2011
```



MEASUREMENT RESULT: "HTW1029416_fin"

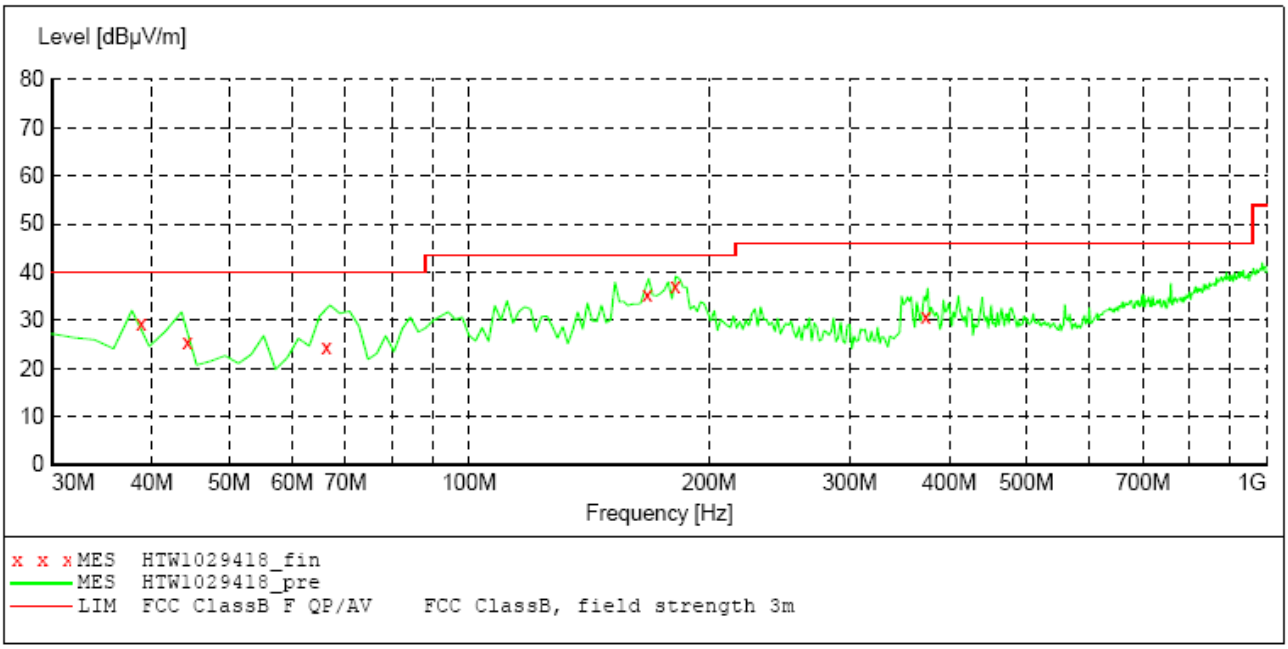
10/29/2011 3:07PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
125.880000	24.80	-11.6	43.5	18.7	QP	288.0	359.00	HORIZONTAL
203.580000	30.30	-13.7	43.5	13.2	QP	119.0	345.00	HORIZONTAL
348.720000	36.60	-7.4	46.0	9.4	QP	100.0	301.00	HORIZONTAL
371.940000	34.10	-7.5	46.0	11.9	QP	122.0	314.00	HORIZONTAL
411.300000	39.70	-5.5	46.0	6.3	QP	99.0	83.00	HORIZONTAL
464.940000	35.20	-3.9	46.0	10.8	QP	100.0	48.00	HORIZONTAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
FAX TX	181.44	37.00	Vertical	43.5	6.5	QP
Test Results				Pass		

SCAN TABLE: "test Field (30M-1G) QP"

```
Short Description:              Field Strength (30M-1G)
Start      Stop       Step       Detector  Meas.     IF       Transducer
Frequency  Frequency  Width                Time      Bandw.
30.0 MHz   1.0 GHz    60.0 kHz   QuasiPeak 1.0 s     120 kHz HL562 2011
```



MEASUREMENT RESULT: "HTW1029418_fin"

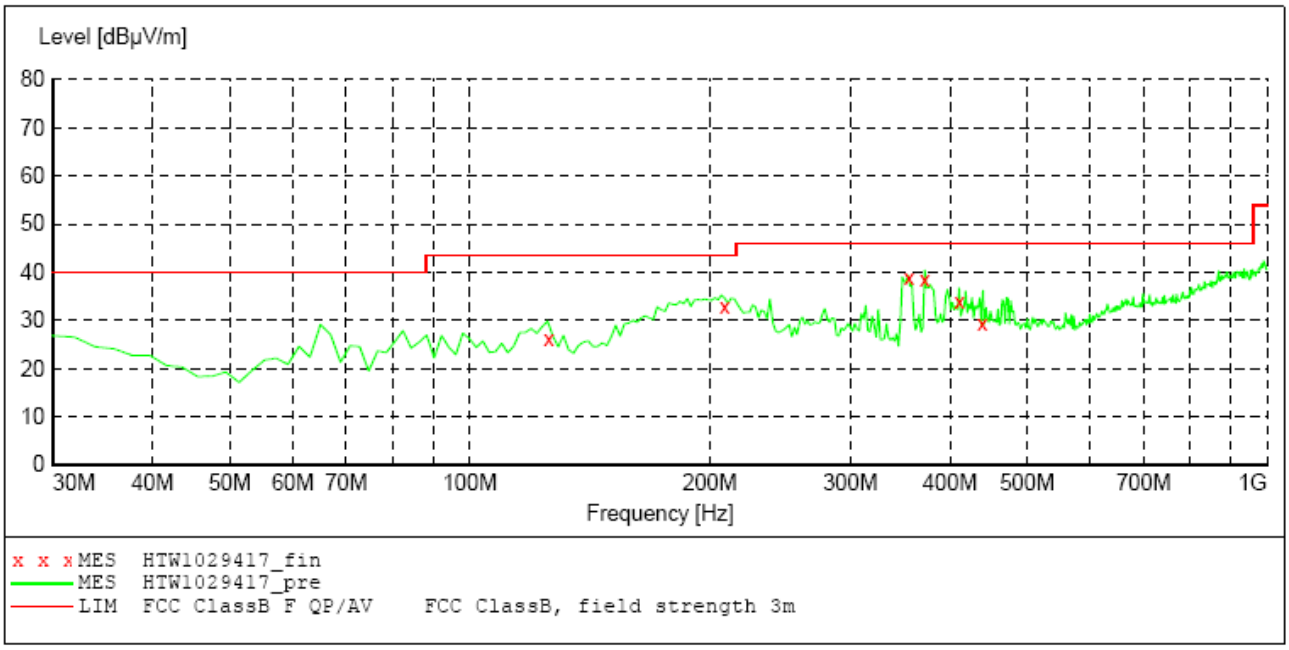
10/29/2011 4:27PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
38.820000	29.50	-7.9	40.0	10.5	QP	100.0	360.00	VERTICAL
44.340000	25.40	-10.9	40.0	14.6	QP	159.0	70.00	VERTICAL
66.300000	24.50	-15.9	40.0	15.5	QP	237.0	337.00	VERTICAL
167.340000	35.20	-15.5	43.5	8.3	QP	100.0	306.00	VERTICAL
181.440000	37.00	-14.4	43.5	6.5	QP	100.0	136.00	VERTICAL
374.280000	30.70	-7.3	46.0	15.3	QP	130.0	241.00	VERTICAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
FAX TX	355.62	38.90	Horizontal	46.00	7.1	QP
Test Results				Pass		

SCAN TABLE: "test Field (30M-1G) QP"

```
Short Description:            Field Strength (30M-1G)
Start      Stop       Step       Detector  Meas.     IF       Transducer
Frequency  Frequency  Width                Time      Bandw.
30.0 MHz   1.0 GHz    60.0 kHz   QuasiPeak 1.0 s     120 kHz HL562 2011
```



MEASUREMENT RESULT: "HTW1029417_fin"

10/29/2011 4:11PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
125.760000	26.30	-11.6	43.5	17.2	QP	279.0	342.00	HORIZONTAL
208.920000	32.90	-13.3	43.5	10.6	QP	155.0	318.00	HORIZONTAL
355.620000	38.90	-7.5	46.0	7.1	QP	100.0	307.00	HORIZONTAL
371.940000	38.50	-7.5	46.0	7.5	QP	100.0	312.00	HORIZONTAL
411.300000	34.10	-5.5	46.0	11.9	QP	100.0	112.00	HORIZONTAL
439.500000	29.50	-5.3	46.0	16.5	QP	100.0	74.00	HORIZONTAL

4.2. Conducted Disturbance

For test instruments and accessories used see section 3.6.

4.2.1. Description of the test location

Test location: Shielded room No. 3

4.2.2. Limits of disturbance

Limit of Conducted Disturbance at Mains Ports (Class B)

Frequency Range (MHz)	Limits (dBuV)	
	Quasi-Peak	Average
0.150～0.500	66~56	56~46
0.500～5.000	56	46
5.000~30.000	60	50

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

4.2.3. Description of the test set-up

4.2.3.1. Operating Condition

The EUT is set to work that shall be carried out respectively standby, USB print, Copy, Scan to PC, FAX RX and FAX TX modes during the test and the maximum emanating results are recorded.

4.2.3.2. Test Procedure

EUT is placed on a nonmetal table 0.8 meter above the grounded reference plane. The power line of the EUT is connected to the LISN which is connected to receiver by coaxial line, and then disturbance signals of the neutral line and live line can be detected by the receiver.

4.2.3.3. Photos of the test set-up

4.2.4. Test result

The requirements are **Fulfilled**

Band Width: 9 KHz

Frequency Range: 150 KHz to 30MHz

Remarks: The limits are kept. For detailed results, please see the following page(s).

Margin=limit-level

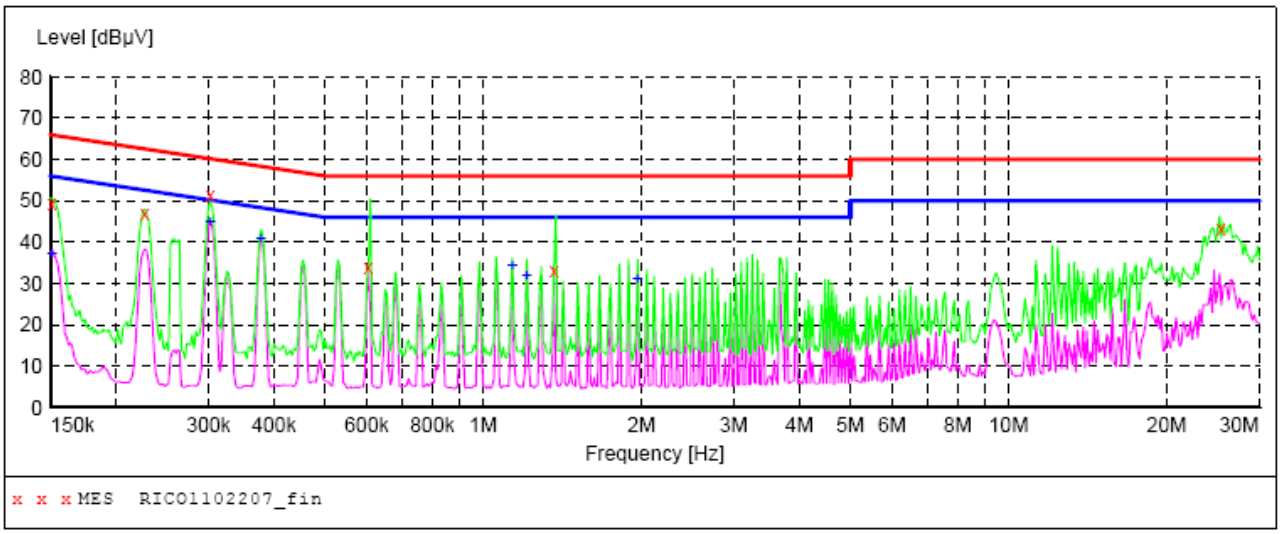
Level=read valus+transducer

Transducer=insertion loss of LISN+cable loss+insertion loss of pulse limiter

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
Standby	0.302	51.40	N	60.00	10.20	8.80	QP
	0.302	44.70	N	50.00	10.20	5.50	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102207_fin"

11/2/2011 3:25PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	49.50	10.1	66	16.4	QP	N	GND
0.227002	47.00	10.2	63	15.6	QP	N	GND
0.302420	51.40	10.2	60	8.8	QP	N	GND
0.604900	33.80	10.2	56	22.2	QP	N	GND
1.363510	33.20	10.2	56	22.8	QP	N	GND
25.390650	43.30	10.8	60	16.7	QP	N	GND

MEASUREMENT RESULT: "RICO1102207_fin2"

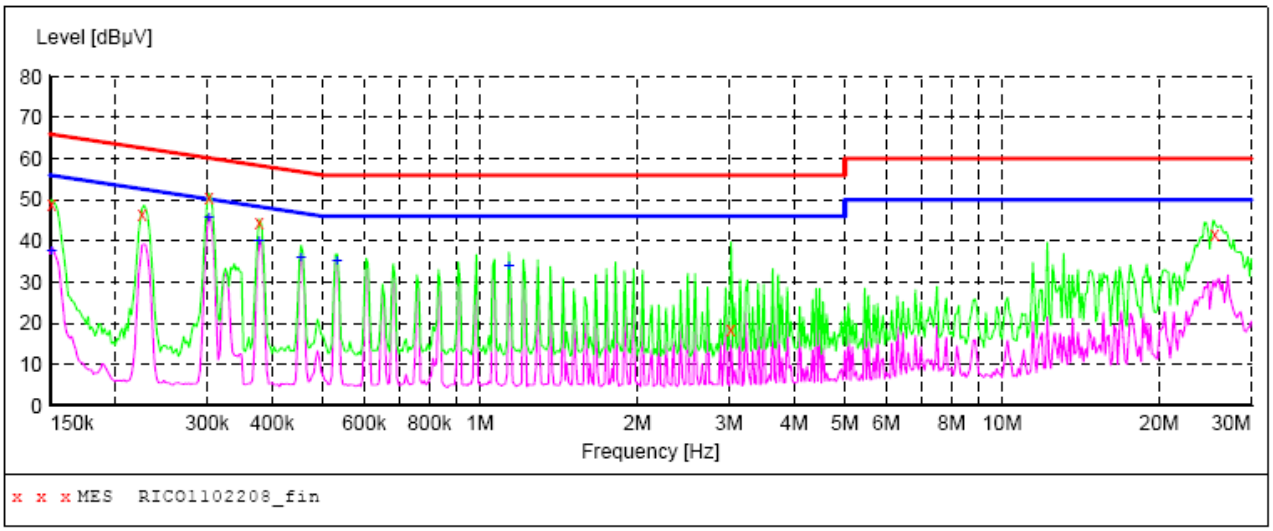
11/2/2011 3:25PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	37.30	10.1	56	18.6	AV	N	GND
0.302420	44.70	10.2	50	5.5	AV	N	GND
0.378010	41.00	10.2	48	7.3	AV	N	GND
1.135179	34.50	10.2	46	11.5	AV	N	GND
1.209902	31.90	10.2	46	14.1	AV	N	GND
1.967172	30.90	10.2	46	15.1	AV	N	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
Standby	0.302	50.50	L	60.00	10.20	9.70	QP
	0.302	45.80	L	50.00	10.20	4.40	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102208_fin"

11/2/2011 3:32PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	48.80	10.1	66	17.1	QP	L1	GND
0.225200	46.70	10.2	63	15.9	QP	L1	GND
0.302420	50.50	10.2	60	9.7	QP	L1	GND
0.378010	44.40	10.2	58	13.9	QP	L1	GND
3.024897	18.70	10.3	56	37.3	QP	L1	GND
25.593780	41.80	10.8	60	18.2	QP	L1	GND

MEASUREMENT RESULT: "RICO1102208_fin2"

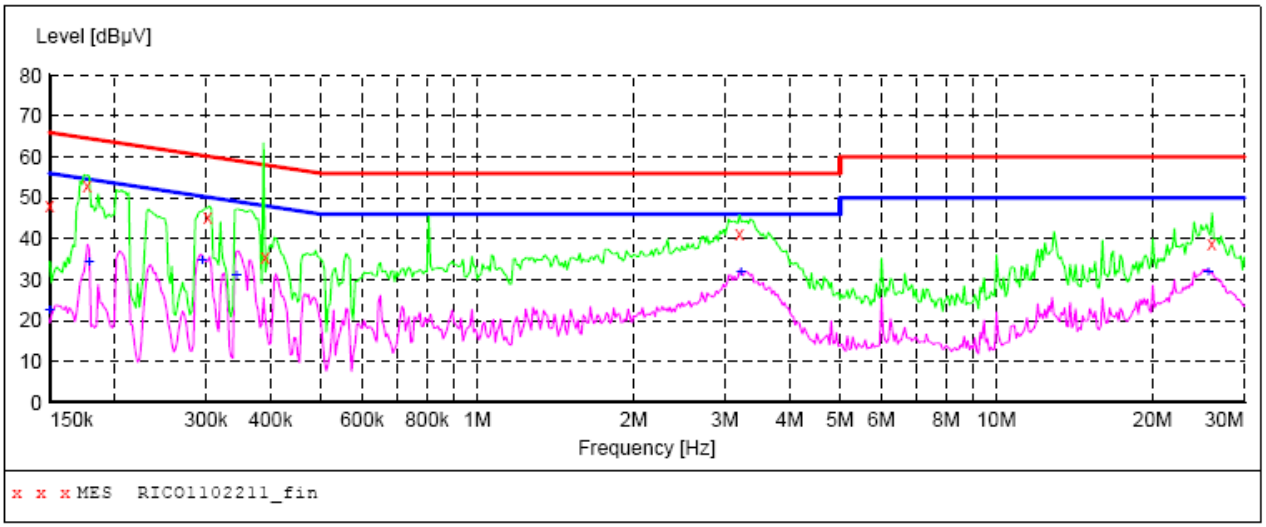
11/2/2011 3:32PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	37.50	10.1	56	18.4	AV	L1	GND
0.302420	45.80	10.2	50	4.4	AV	L1	GND
0.378010	40.00	10.2	48	8.3	AV	L1	GND
0.454044	35.90	10.2	47	10.9	AV	L1	GND
0.532486	35.30	10.2	46	10.7	AV	L1	GND
1.135179	33.80	10.2	46	12.2	AV	L1	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
USB Print	0.177	53.00	N	65.00	10.10	11.60	QP
	3.244	31.80	N	46.00	10.30	14.20	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102211_fin"

11/2/2011 4:01PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	48.10	10.1	66	17.9	QP	N	GND
0.177317	53.00	10.1	65	11.6	QP	N	GND
0.302420	45.10	10.2	60	15.1	QP	N	GND
0.390260	35.50	10.2	58	22.6	QP	N	GND
3.198414	41.40	10.3	56	14.6	QP	N	GND
26.004918	38.80	10.8	60	21.2	QP	N	GND

MEASUREMENT RESULT: "RICO1102211_fin2"

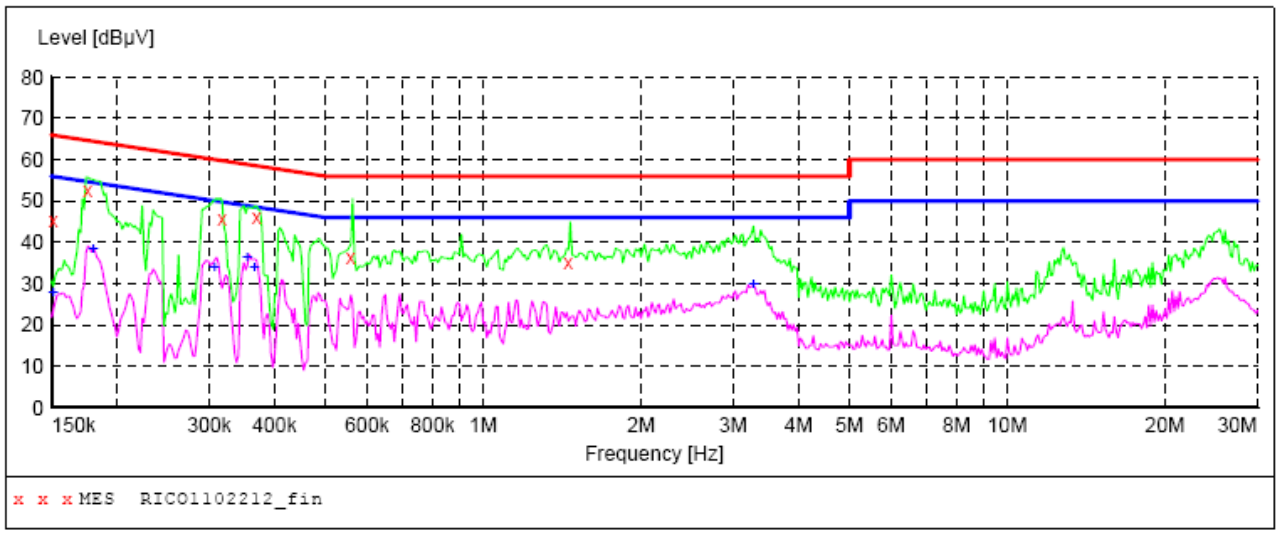
11/2/2011 4:01PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	22.40	10.1	56	33.6	AV	N	GND
0.178740	34.30	10.1	55	20.2	AV	N	GND
0.295280	34.80	10.2	50	15.6	AV	N	GND
0.343540	31.10	10.2	49	18.0	AV	N	GND
3.224000	31.80	10.3	46	14.2	AV	N	GND
25.593775	31.80	10.8	50	18.2	AV	N	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
USB Print	0.175	52.80	L	65.00	10.10	11.90	QP
	0.354	36.40	L	49.00	10.20	12.50	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102212_fin"

11/2/2011 4:08PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	45.20	10.1	66	20.7	QP	L1	GND
0.175910	52.80	10.1	65	11.9	QP	L1	GND
0.317225	45.90	10.2	60	13.9	QP	L1	GND
0.369079	46.20	10.2	59	12.3	QP	L1	GND
0.558570	36.50	10.2	56	19.5	QP	L1	GND
1.453250	35.30	10.2	56	20.7	QP	L1	GND

MEASUREMENT RESULT: "RICO1102212_fin2"

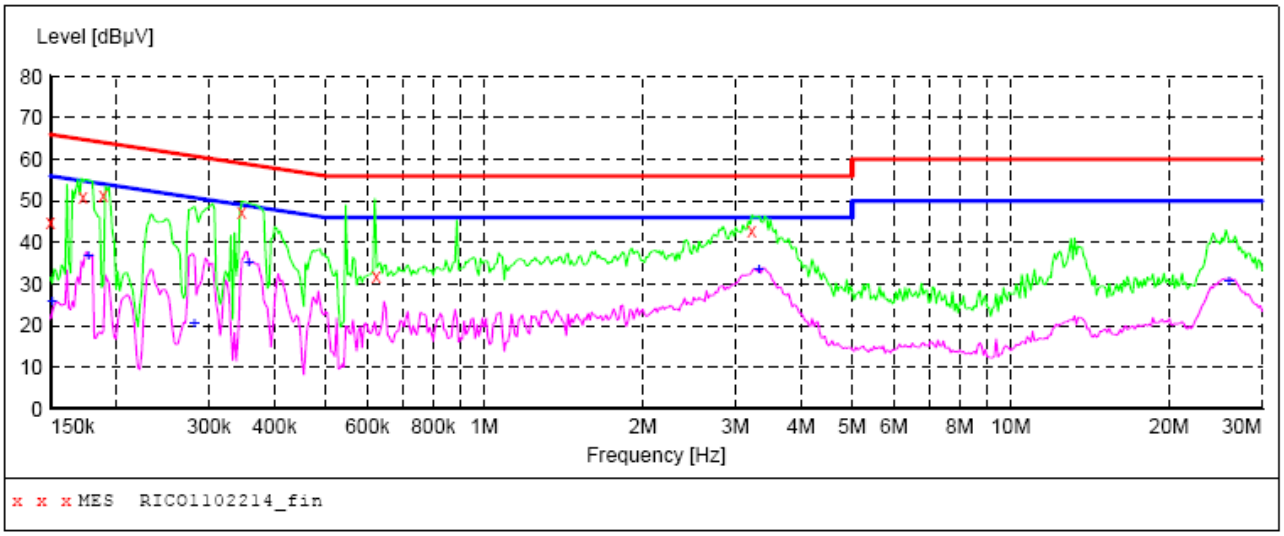
11/2/2011 4:08PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	27.80	10.1	56	28.1	AV	L1	GND
0.180170	38.30	10.1	55	16.2	AV	L1	GND
0.307280	34.10	10.2	50	15.9	AV	L1	GND
0.354670	36.40	10.2	49	12.5	AV	L1	GND
0.366156	34.10	10.2	49	14.5	AV	L1	GND
3.275798	29.70	10.3	46	16.3	AV	L1	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
Copy	0.346	47.50	N	59.00	10.20	11.60	QP
	3.328	33.60	N	46.00	10.30	12.40	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102214_fin"

11/2/2011 4:31PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	44.80	10.1	66	21.2	QP	N	GND
0.173130	50.90	10.1	65	13.9	QP	N	GND
0.188990	51.20	10.2	64	12.9	QP	N	GND
0.346290	47.50	10.2	59	11.6	QP	N	GND
0.624483	31.90	10.2	56	24.1	QP	N	GND
3.224007	42.70	10.3	56	13.3	QP	N	GND

MEASUREMENT RESULT: "RICO1102214_fin2"

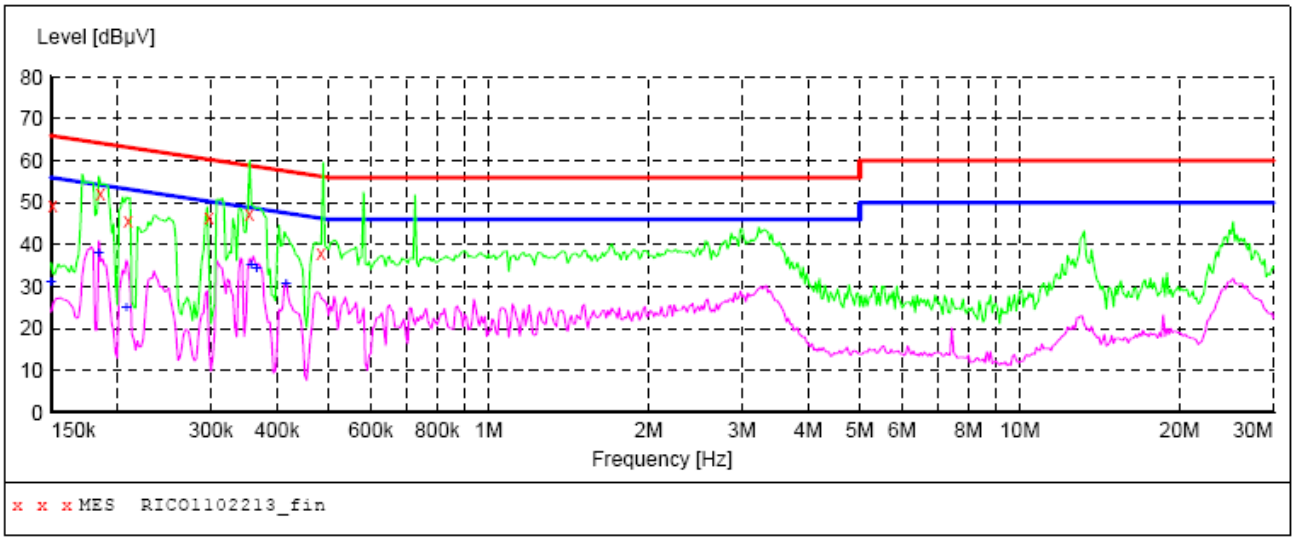
11/2/2011 4:31PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	25.80	10.1	56	30.1	AV	N	GND
0.177313	36.60	10.1	55	18.0	AV	N	GND
0.281490	20.50	10.2	51	30.3	AV	N	GND
0.357502	35.10	10.2	49	13.7	AV	N	GND
3.328416	33.60	10.3	46	12.4	AV	N	GND
26.004920	30.70	10.8	50	19.3	AV	N	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
Copy	0.354	47.30	L	59.00	10.20	11.60	QP
	0.357	35.20	L	49.00	10.20	13.60	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102213_fin"

11/2/2011 4:24PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	49.30	10.1	66	16.6	QP	L1	GND
0.186000	52.00	10.1	64	12.2	QP	L1	GND
0.209620	45.60	10.2	63	17.6	QP	L1	GND
0.297640	46.50	10.2	60	13.8	QP	L1	GND
0.354665	47.30	10.2	59	11.6	QP	L1	GND
0.483930	37.80	10.2	56	18.5	QP	L1	GND

MEASUREMENT RESULT: "RICO1102213_fin2"

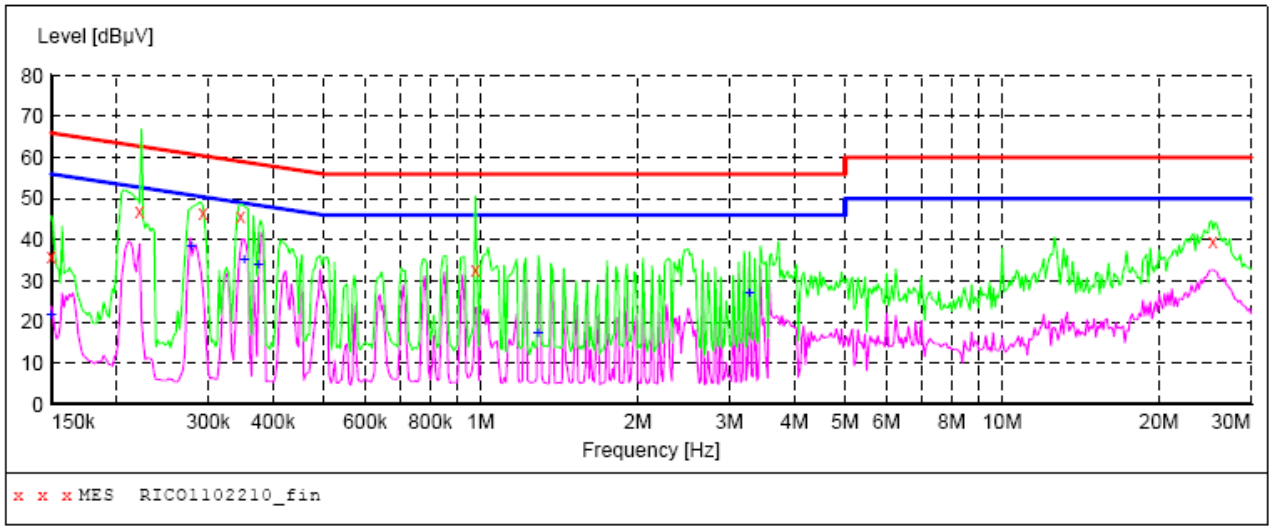
11/2/2011 4:24PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	30.90	10.1	56	25.1	AV	L1	GND
0.184524	37.80	10.1	54	16.5	AV	L1	GND
0.207950	24.80	10.2	53	28.5	AV	L1	GND
0.357510	35.20	10.2	49	13.6	AV	L1	GND
0.366150	34.30	10.2	49	14.3	AV	L1	GND
0.415941	30.60	10.2	48	16.9	AV	L1	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
Scan to PC	0.346	45.60	N	59.00	10.20	13.50	QP
	0.279	38.20	N	51.00	10.20	12.60	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102210_fin"

11/2/2011 3:52PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	36.00	10.1	66	30.0	QP	N	GND
0.221640	47.00	10.2	63	15.8	QP	N	GND
0.292930	46.30	10.2	60	14.1	QP	N	GND
0.346288	45.60	10.2	59	13.5	QP	N	GND
0.975694	32.70	10.2	56	23.3	QP	N	GND
25.390647	39.80	10.8	60	20.2	QP	N	GND

MEASUREMENT RESULT: "RICO1102210_fin2"

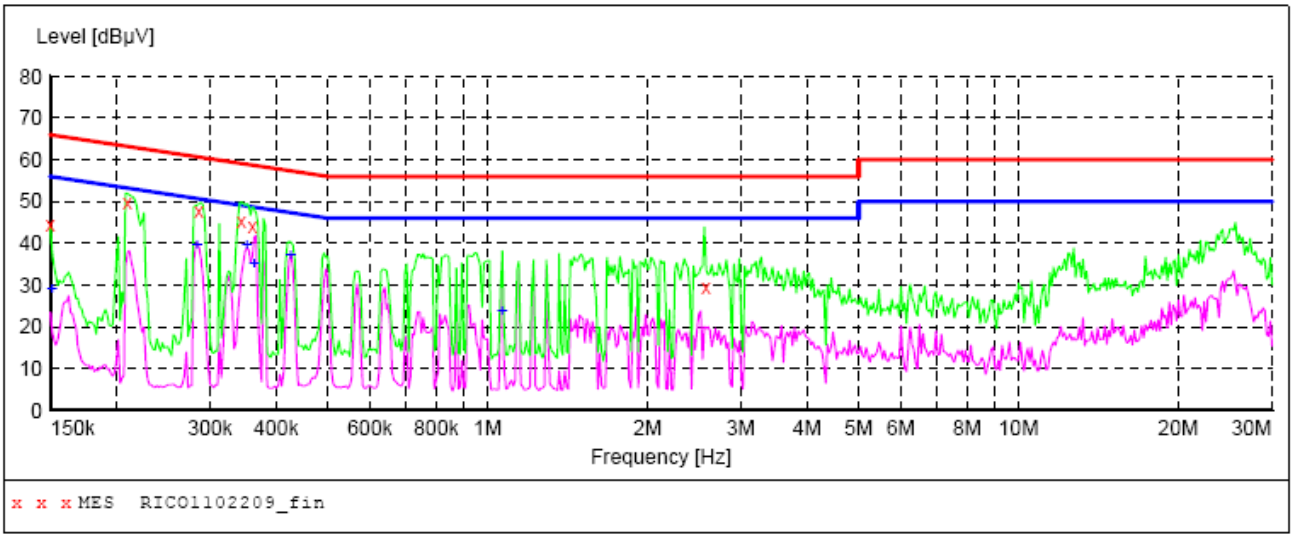
11/2/2011 3:52PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	21.90	10.1	56	34.1	AV	N	GND
0.279260	38.20	10.2	51	12.6	AV	N	GND
0.351852	35.30	10.2	49	13.6	AV	N	GND
0.375010	34.00	10.2	48	14.4	AV	N	GND
1.289534	17.30	10.2	46	28.7	AV	N	GND
3.275798	26.90	10.3	46	19.1	AV	N	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
Scan to PC	0.286	47.80	L	61.00	10.20	12.80	QP
	0.351	39.60	L	49.00	10.20	9.30	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102209_fin"

11/2/2011 3:44PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	44.60	10.1	66	21.4	QP	L1	GND
0.209614	49.90	10.2	63	13.3	QP	L1	GND
0.286010	47.80	10.2	61	12.8	QP	L1	GND
0.343547	45.30	10.2	59	13.8	QP	L1	GND
0.360370	44.00	10.2	59	14.7	QP	L1	GND
2.579290	29.40	10.3	56	26.6	QP	L1	GND

MEASUREMENT RESULT: "RICO1102209_fin2"

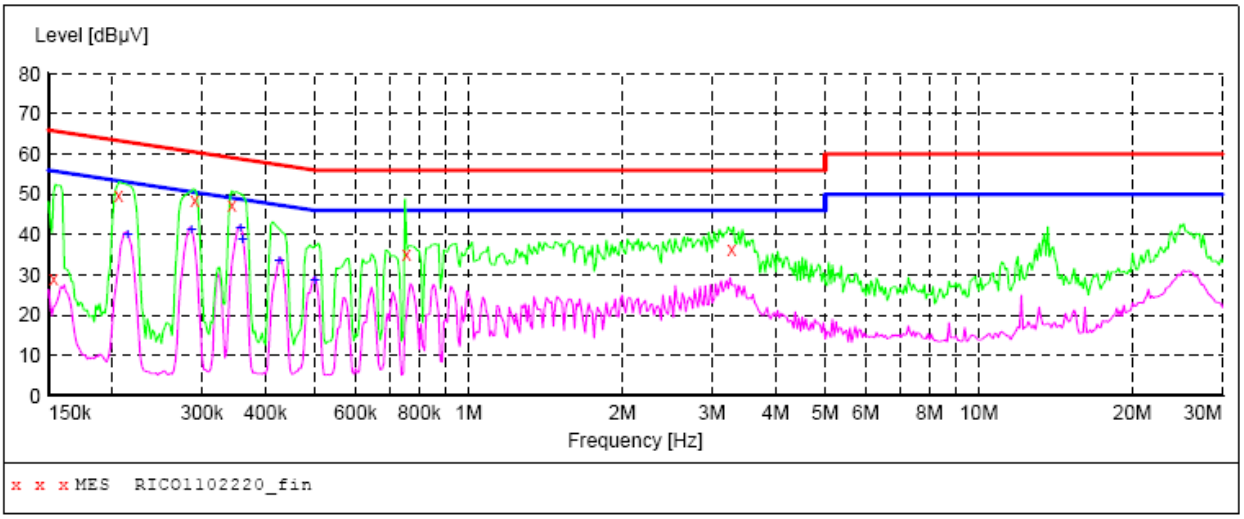
11/2/2011 3:44PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	29.10	10.1	56	26.8	AV	L1	GND
0.283742	39.40	10.2	51	11.3	AV	L1	GND
0.351852	39.60	10.2	49	9.3	AV	L1	GND
0.363250	35.20	10.2	49	13.5	AV	L1	GND
0.426011	37.30	10.2	47	10.0	AV	L1	GND
1.065073	23.90	10.2	46	22.1	AV	L1	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
FAX RX	0.343	47.20	N	59.00	10.20	11.90	QP
	0.357	41.50	N	49.00	10.20	7.30	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102220_fin"

11/2/2011 5:26PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.153620	29.00	10.1	66	36.8	QP	N	GND
0.206297	49.60	10.2	63	13.8	QP	N	GND
0.290610	48.50	10.2	61	12.0	QP	N	GND
0.343547	47.20	10.2	59	11.9	QP	N	GND
0.756100	35.30	10.2	56	20.7	QP	N	GND
3.275790	36.50	10.3	56	19.5	QP	N	GND

MEASUREMENT RESULT: "RICO1102220_fin2"

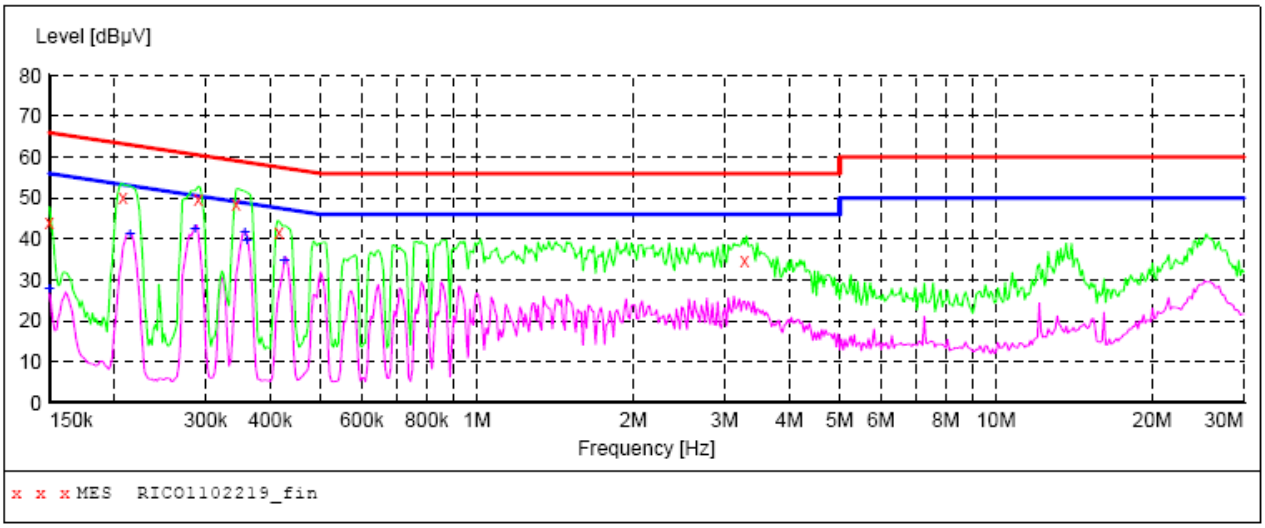
11/2/2011 5:26PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.214684	40.20	10.2	53	12.8	AV	N	GND
0.286010	41.40	10.2	51	9.2	AV	N	GND
0.357510	41.50	10.2	49	7.3	AV	N	GND
0.360370	38.70	10.2	49	10.0	AV	N	GND
0.426011	33.70	10.2	47	13.6	AV	N	GND
0.499605	28.70	10.2	46	17.3	AV	N	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
FAX RX	0.343	48.50	L	59.00	10.20	10.60	QP
	0.357	41.70	L	49.00	10.20	7.10	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102219_fin"

11/2/2011 5:20PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	43.90	10.1	66	22.1	QP	L1	GND
0.207950	50.10	10.2	63	13.2	QP	L1	GND
0.290606	49.80	10.2	61	10.7	QP	L1	GND
0.343540	48.50	10.2	59	10.6	QP	L1	GND
0.415940	41.60	10.2	58	15.9	QP	L1	GND
3.275790	34.80	10.3	56	21.2	QP	L1	GND

MEASUREMENT RESULT: "RICO1102219_fin2"

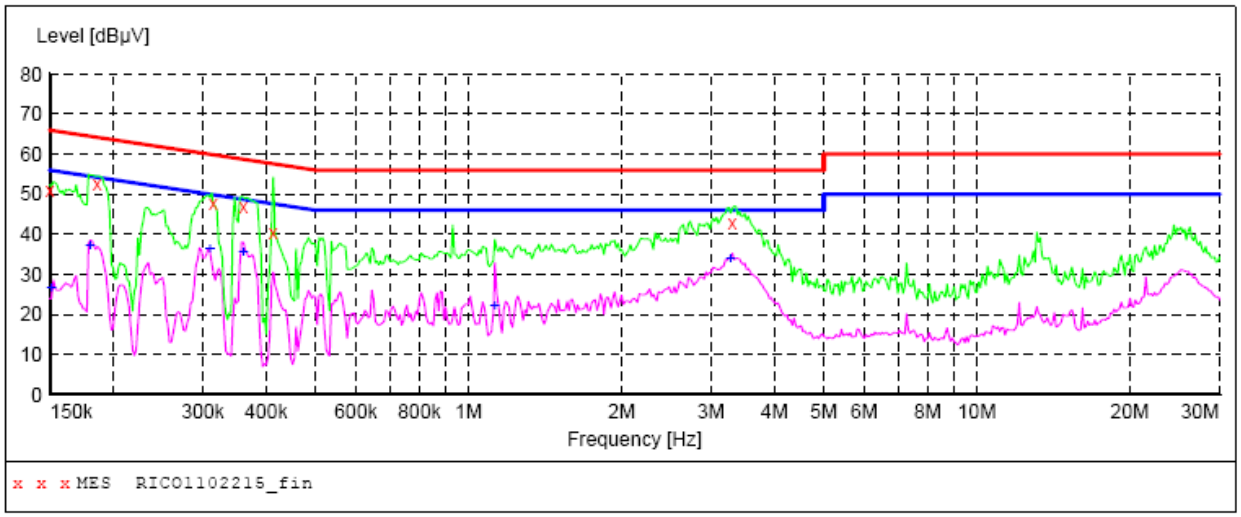
11/2/2011 5:20PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	27.80	10.1	56	28.2	AV	L1	GND
0.214690	41.40	10.2	53	11.6	AV	L1	GND
0.286010	42.40	10.2	51	8.2	AV	L1	GND
0.357502	41.70	10.2	49	7.1	AV	L1	GND
0.360370	39.80	10.2	49	8.9	AV	L1	GND
0.426011	34.80	10.2	47	12.5	AV	L1	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
FAX TX	0.186	52.40	N	64.00	10.10	11.80	QP
	3.275	33.90	N	46.00	10.30	12.10	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102215_fin"

11/2/2011 4:40PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	51.00	10.1	66	15.0	QP	N	GND
0.186000	52.40	10.1	64	11.8	QP	N	GND
0.314710	47.80	10.2	60	12.0	QP	N	GND
0.360367	46.80	10.2	59	11.9	QP	N	GND
0.412645	40.50	10.2	58	17.1	QP	N	GND
3.302000	42.80	10.3	56	13.2	QP	N	GND

MEASUREMENT RESULT: "RICO1102215_fin2"

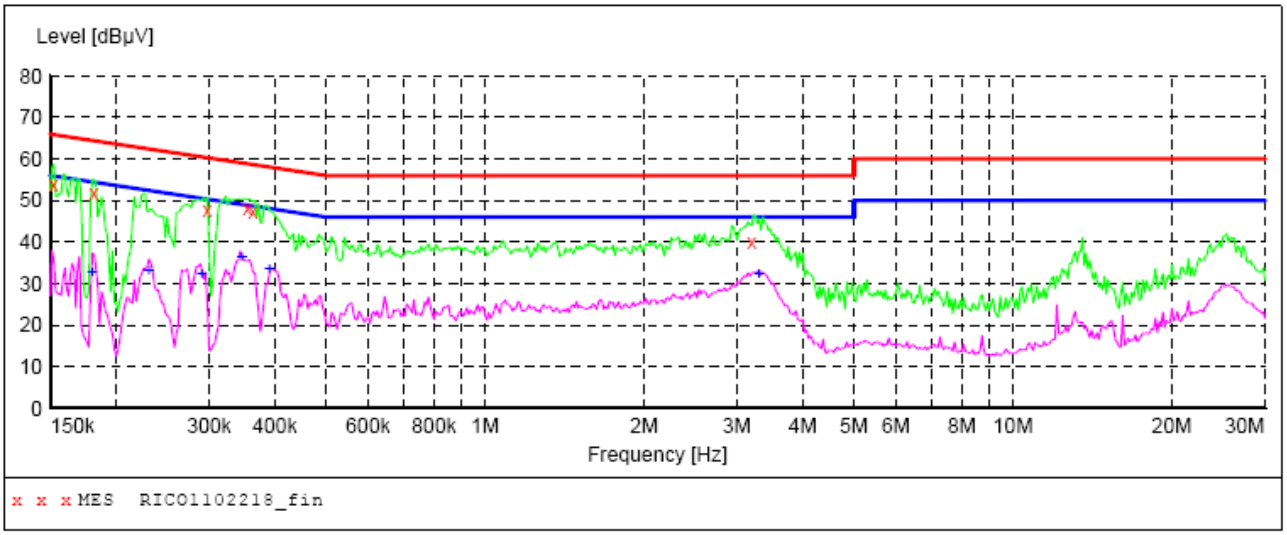
11/2/2011 4:40PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	26.60	10.1	56	29.3	AV	N	GND
0.180170	37.00	10.1	55	17.5	AV	N	GND
0.309737	36.30	10.2	50	13.7	AV	N	GND
0.360370	35.50	10.2	49	13.2	AV	N	GND
1.126168	22.00	10.2	46	24.0	AV	N	GND
3.275790	33.90	10.3	46	12.1	AV	N	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
FAX TX	0.354	48.00	L	59.00	10.20	10.90	QP
	0.346	36.30	L	49.00	10.20	12.80	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102218_fin"

11/2/2011 5:10PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.152410	54.00	10.1	66	11.9	QP	L1	GND
0.181611	51.60	10.1	64	12.8	QP	L1	GND
0.297642	47.60	10.2	60	12.7	QP	L1	GND
0.354670	48.00	10.2	59	10.9	QP	L1	GND
0.363250	47.40	10.2	59	11.3	QP	L1	GND
3.198420	40.00	10.3	56	16.0	QP	L1	GND

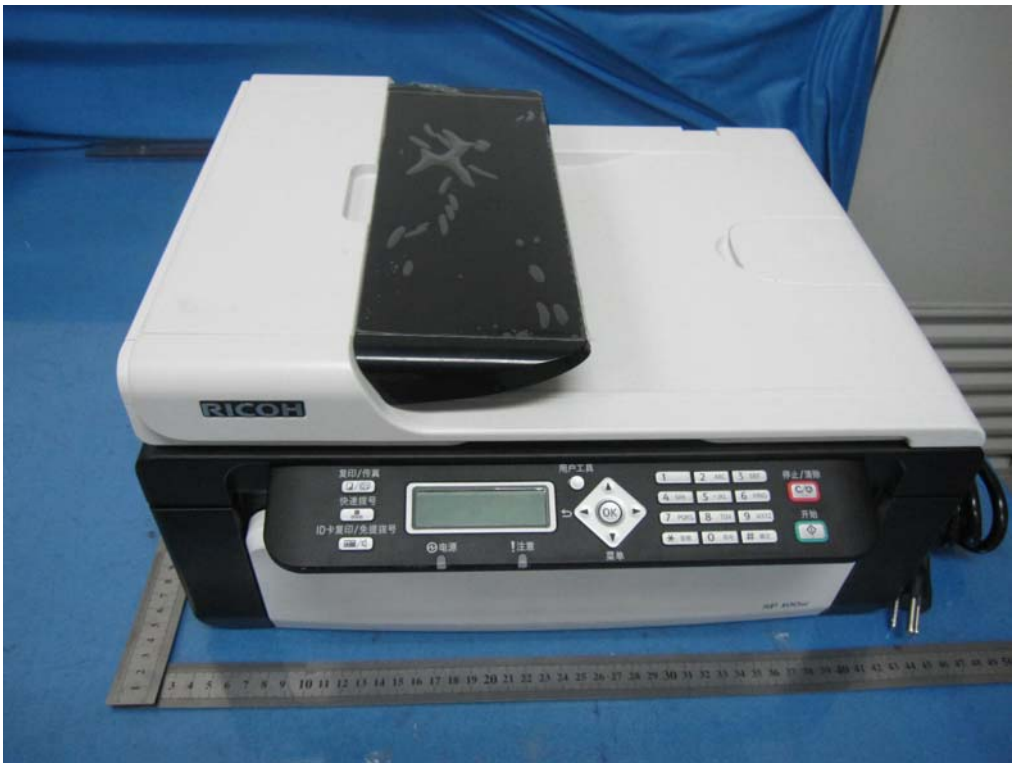
MEASUREMENT RESULT: "RICO1102218_fin2"

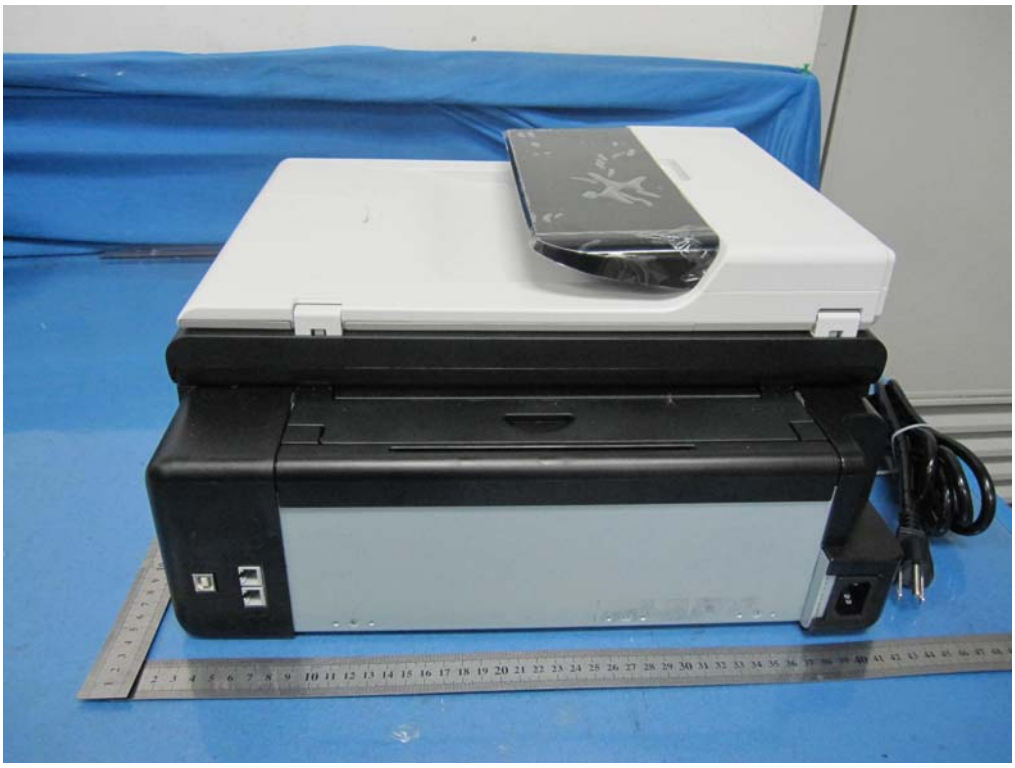
11/2/2011 5:12PM

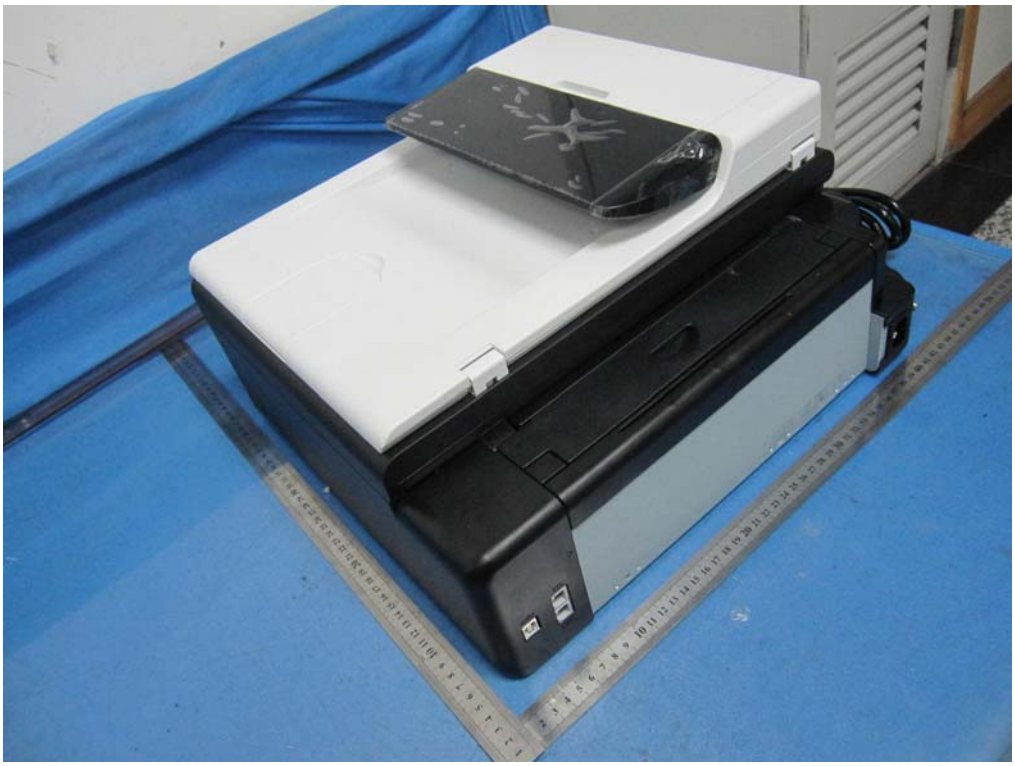
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.180170	32.90	10.1	55	21.6	AV	L1	GND
0.230651	33.10	10.2	52	19.3	AV	L1	GND
0.290604	32.40	10.2	51	18.1	AV	L1	GND
0.346290	36.30	10.2	49	12.8	AV	L1	GND
0.390260	33.50	10.2	48	14.5	AV	L1	GND
3.301996	32.20	10.3	46	13.8	AV	L1	GND

5. External and Internal Photos of the EUT

5.1. External photos of the EUT

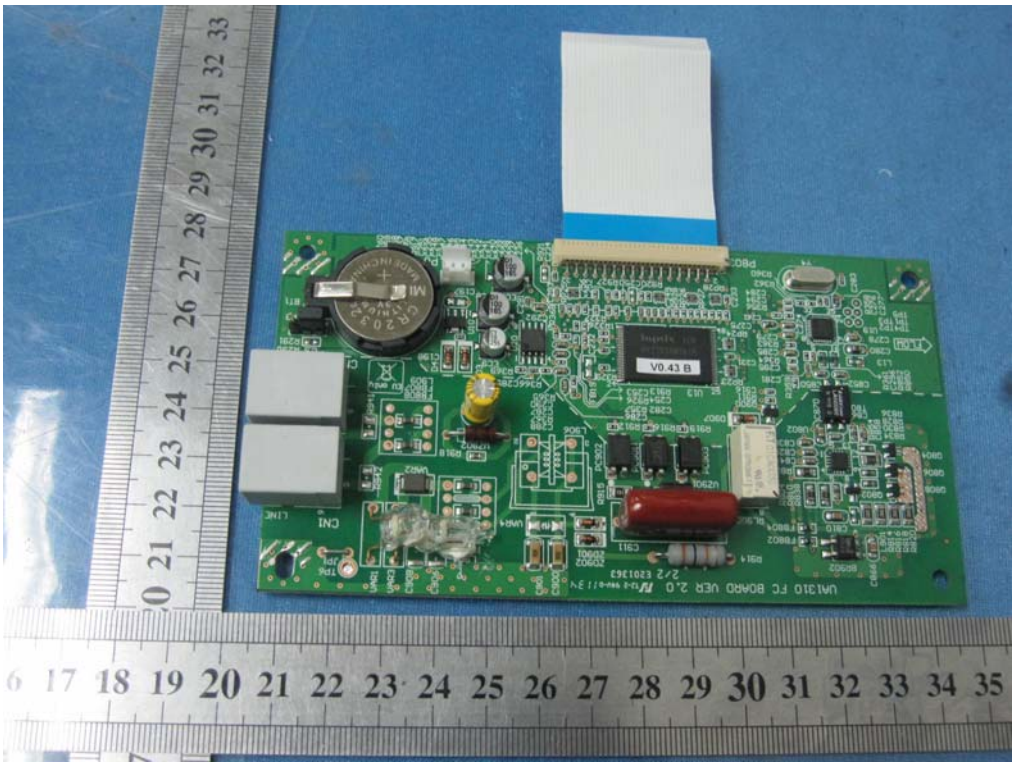


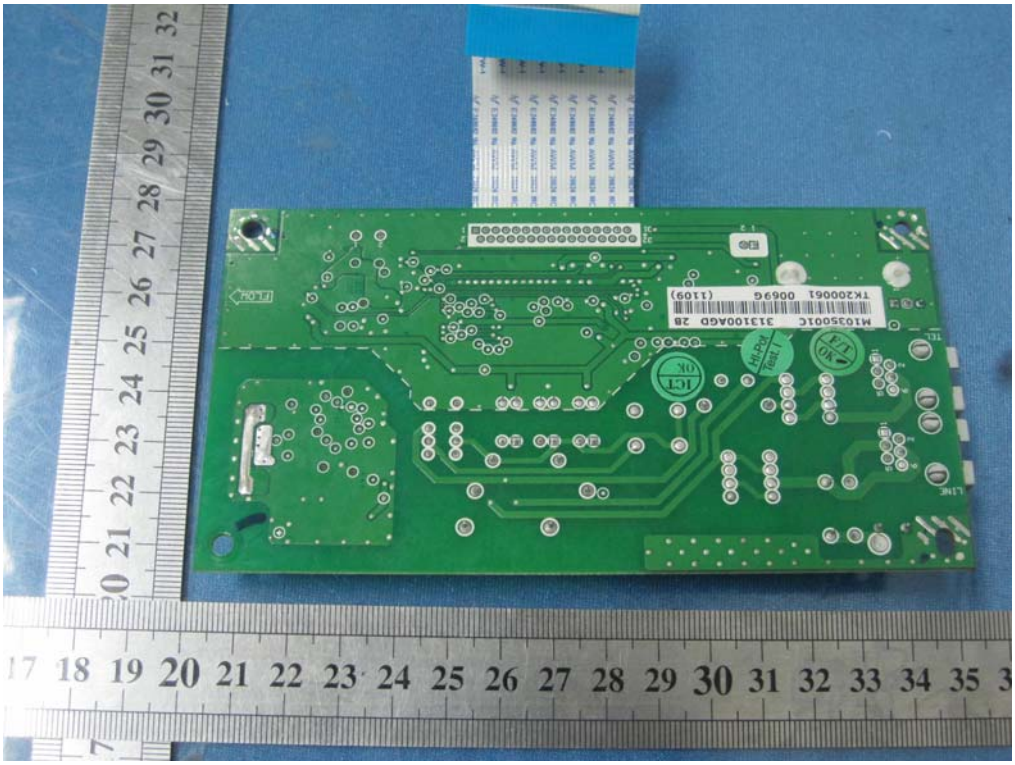


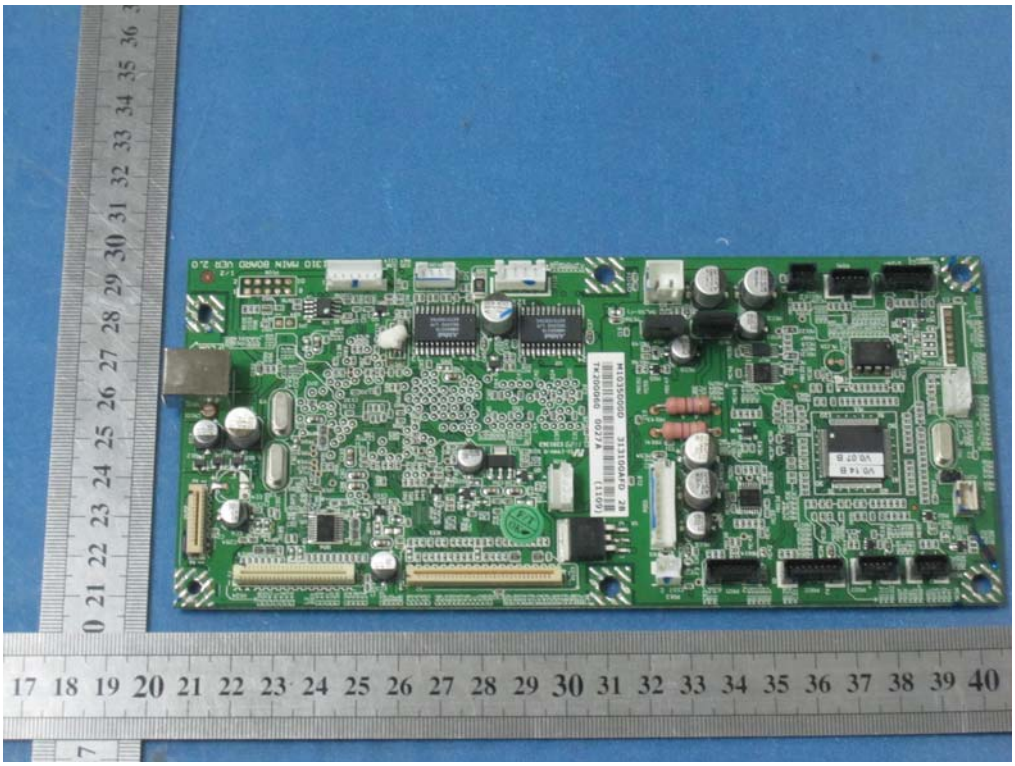


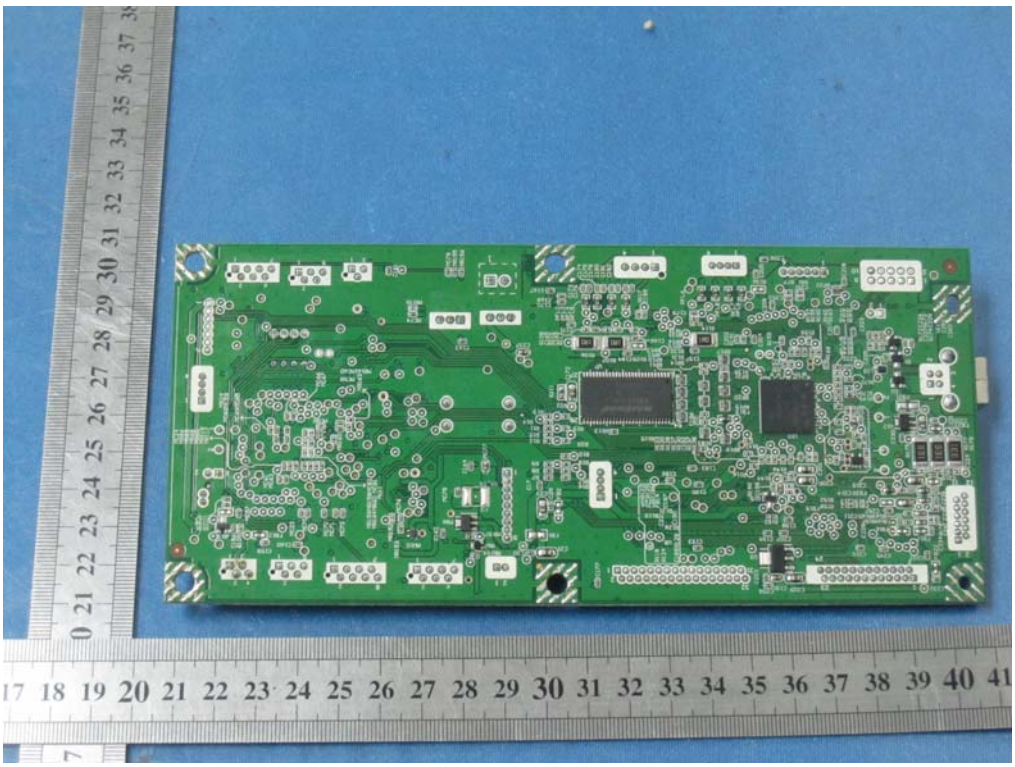

RICOH

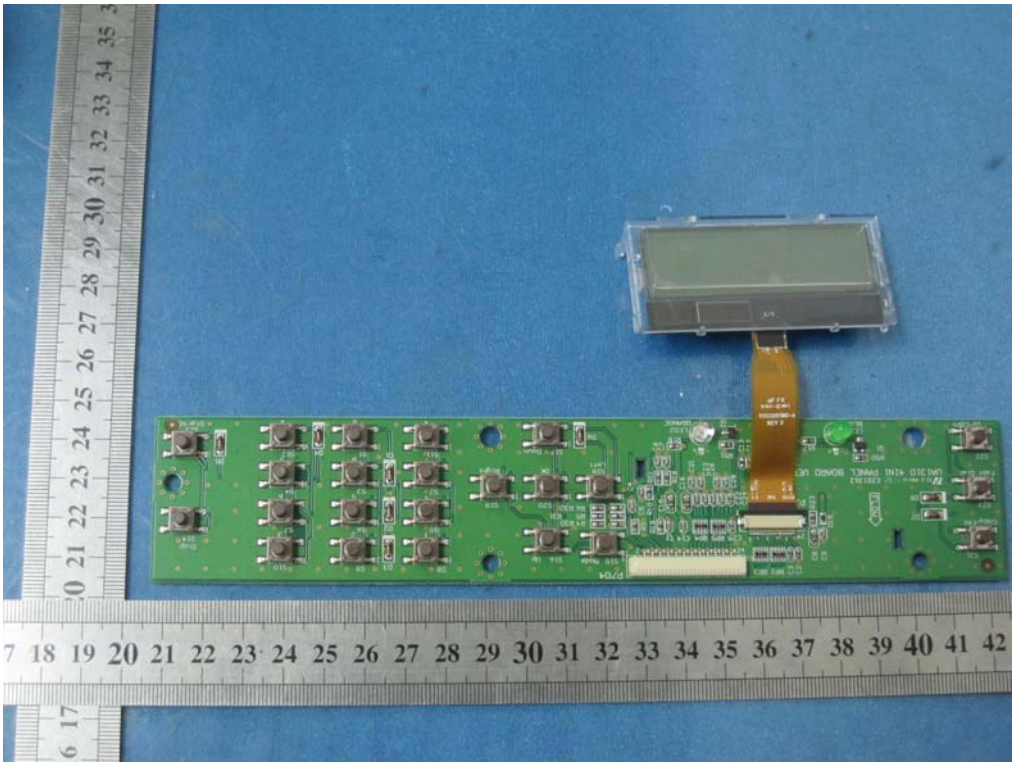
5.2. Internal photos of the EUT

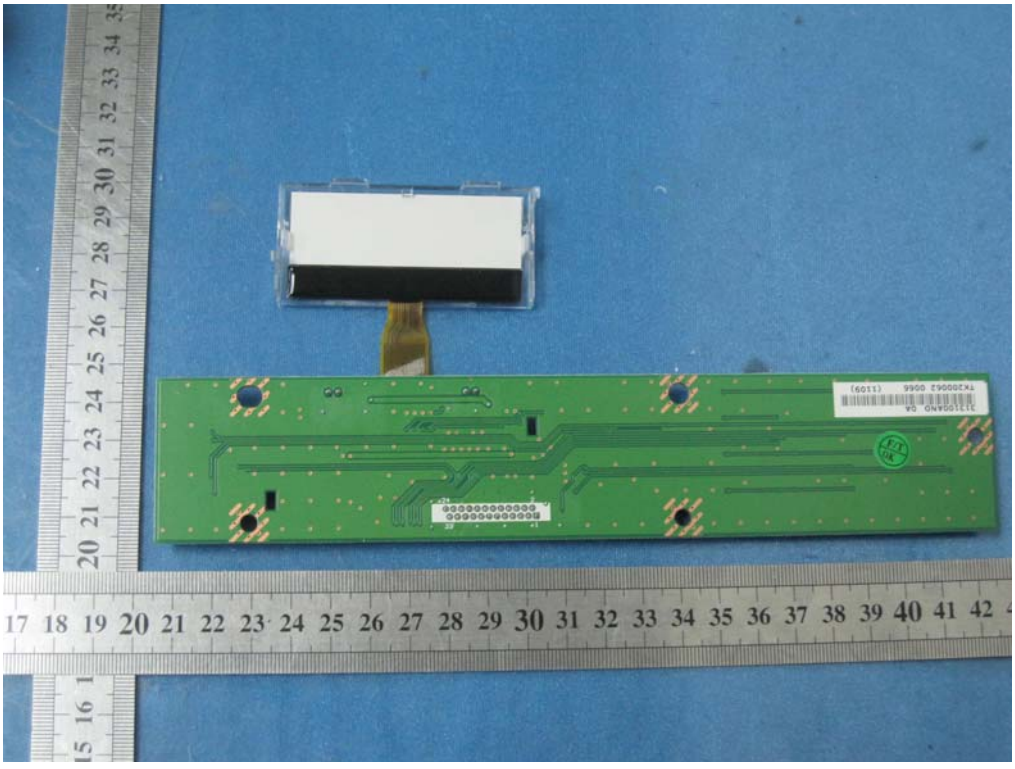

V0.43 B

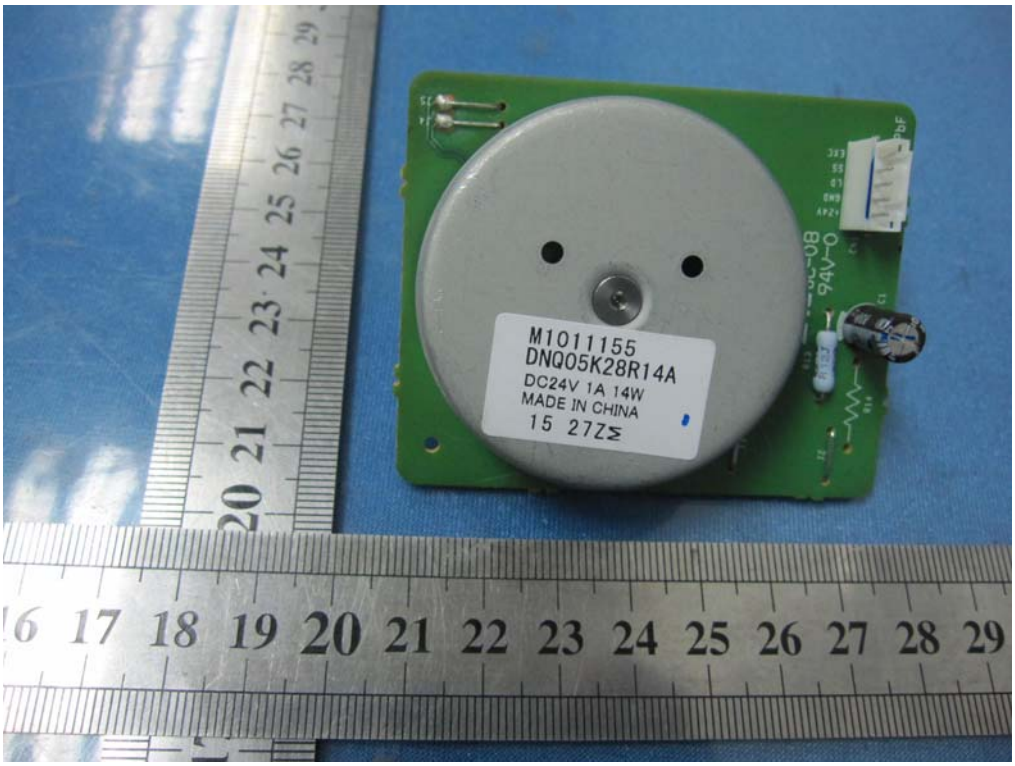


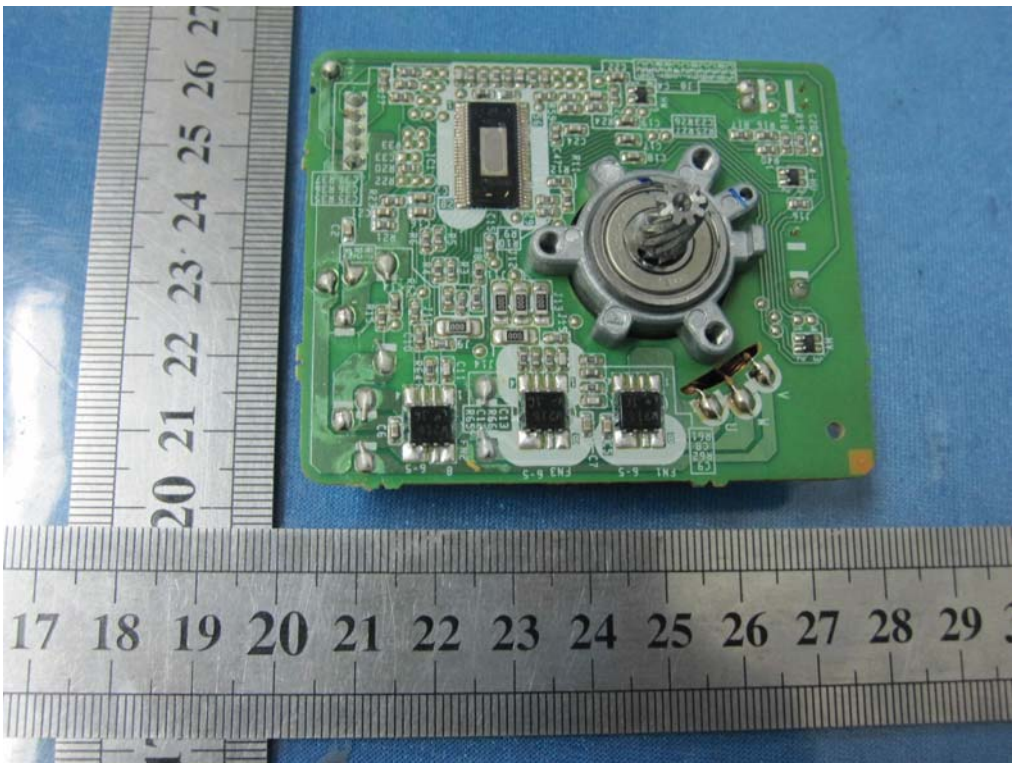


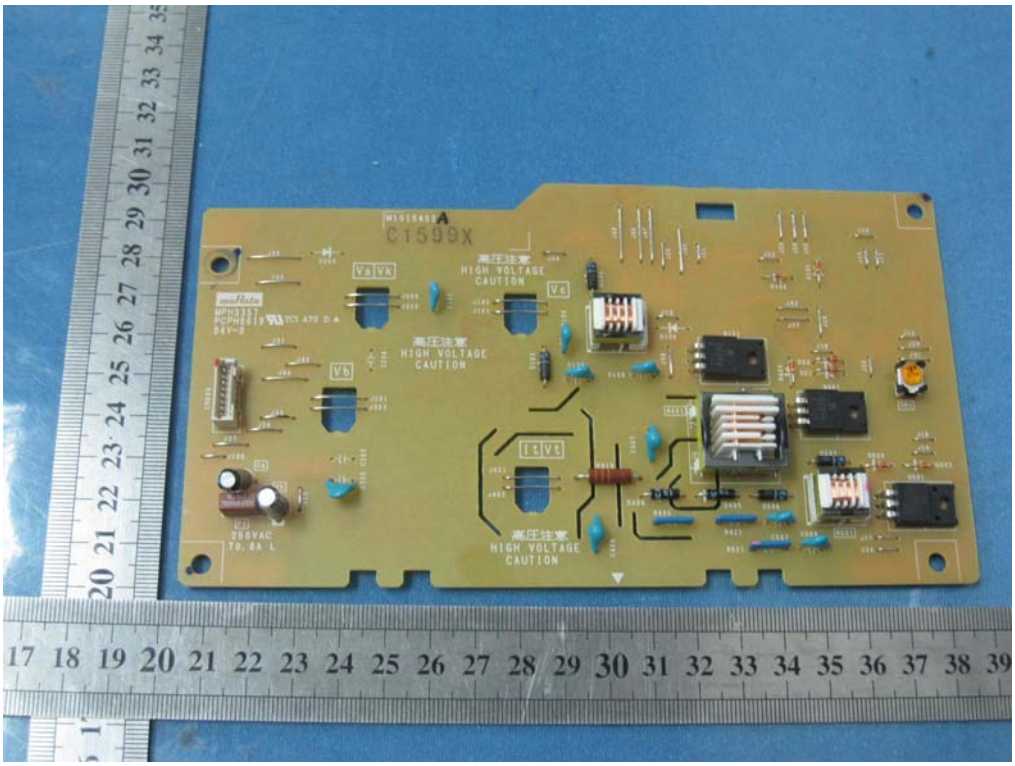


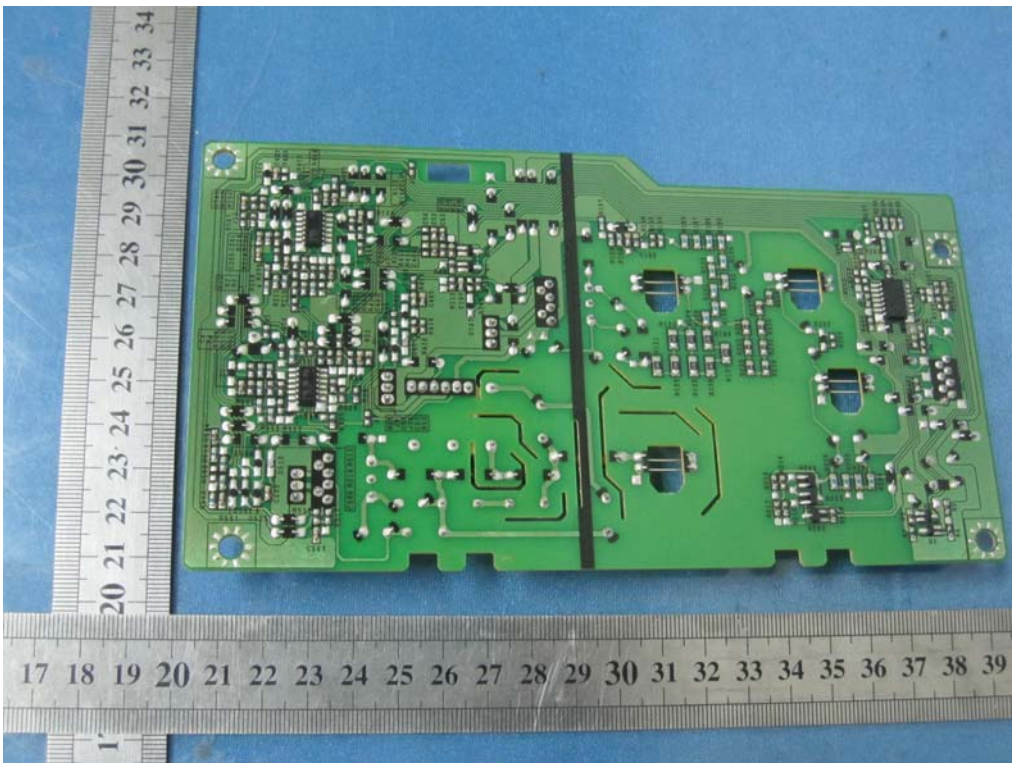


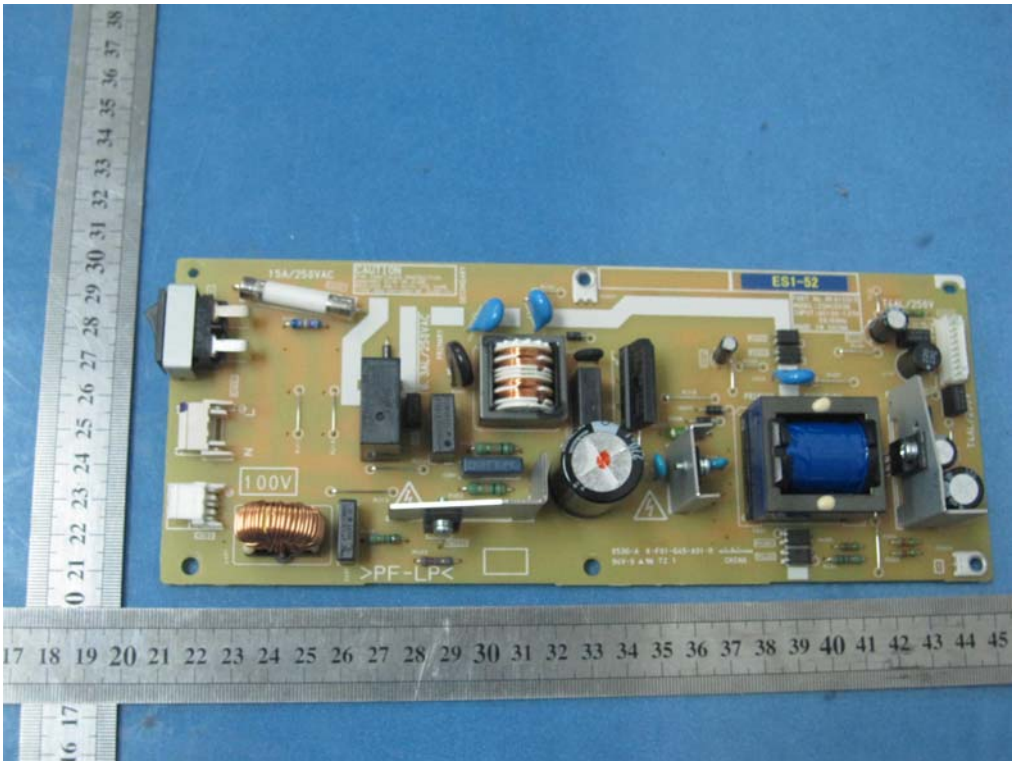


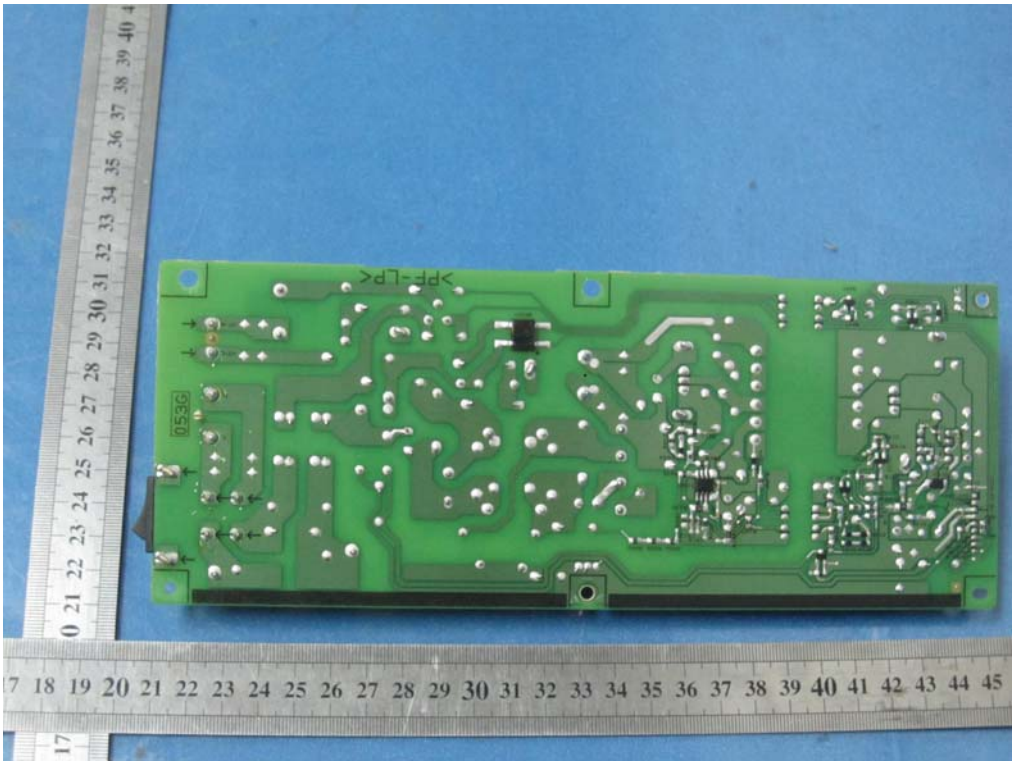

M1011155
DNQ05K28R14A
DC24V 1A 14W
MADE IN CHINA

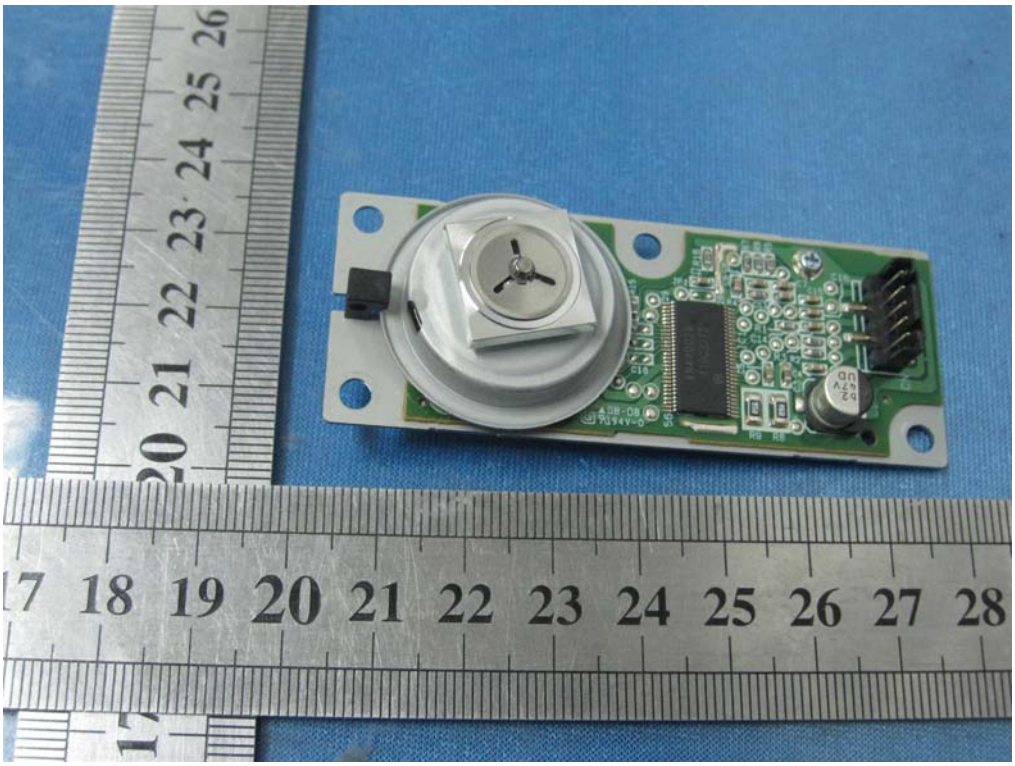


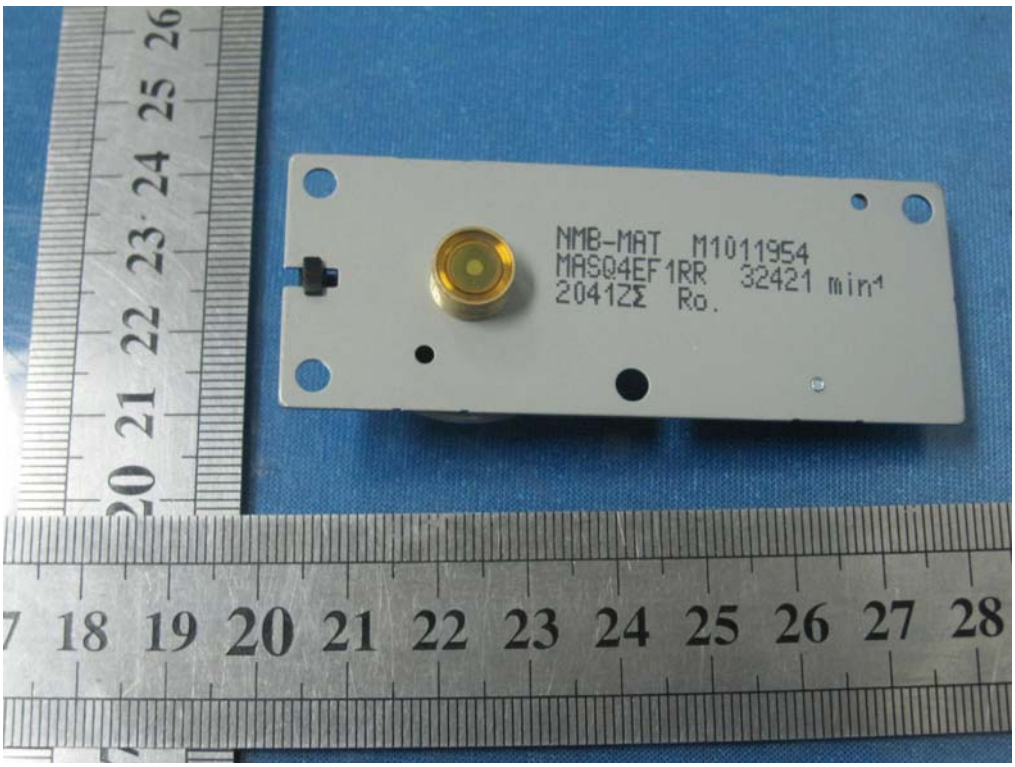

C1599X
HIGH VOLTAGE CAUTION
250VAC

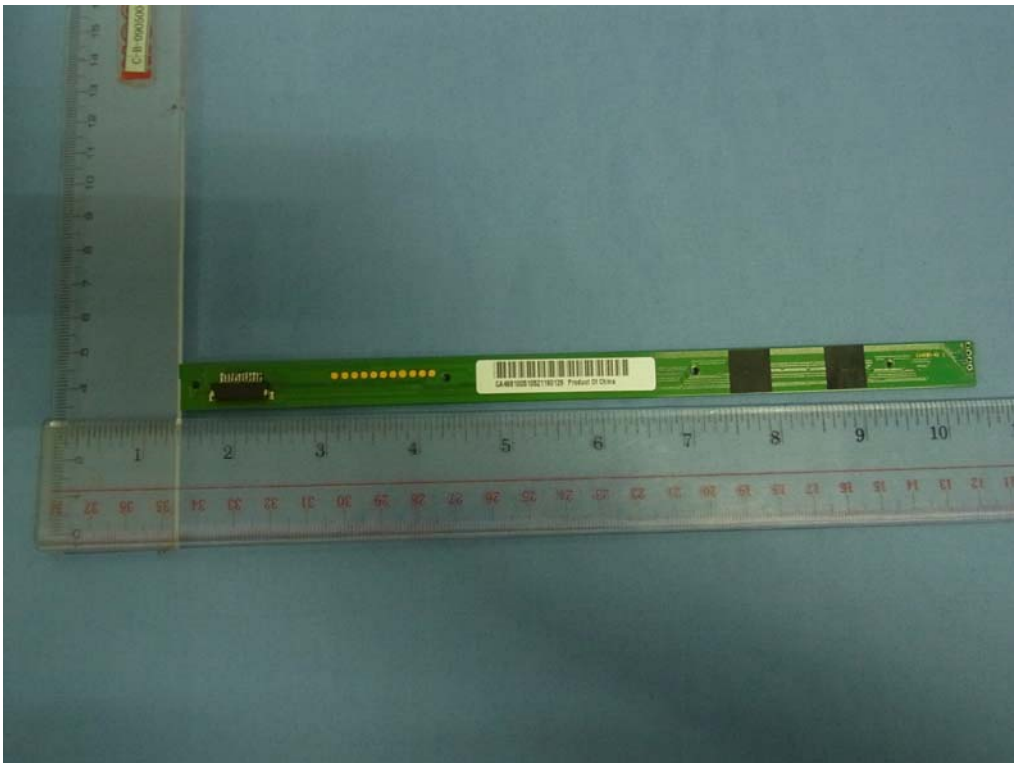


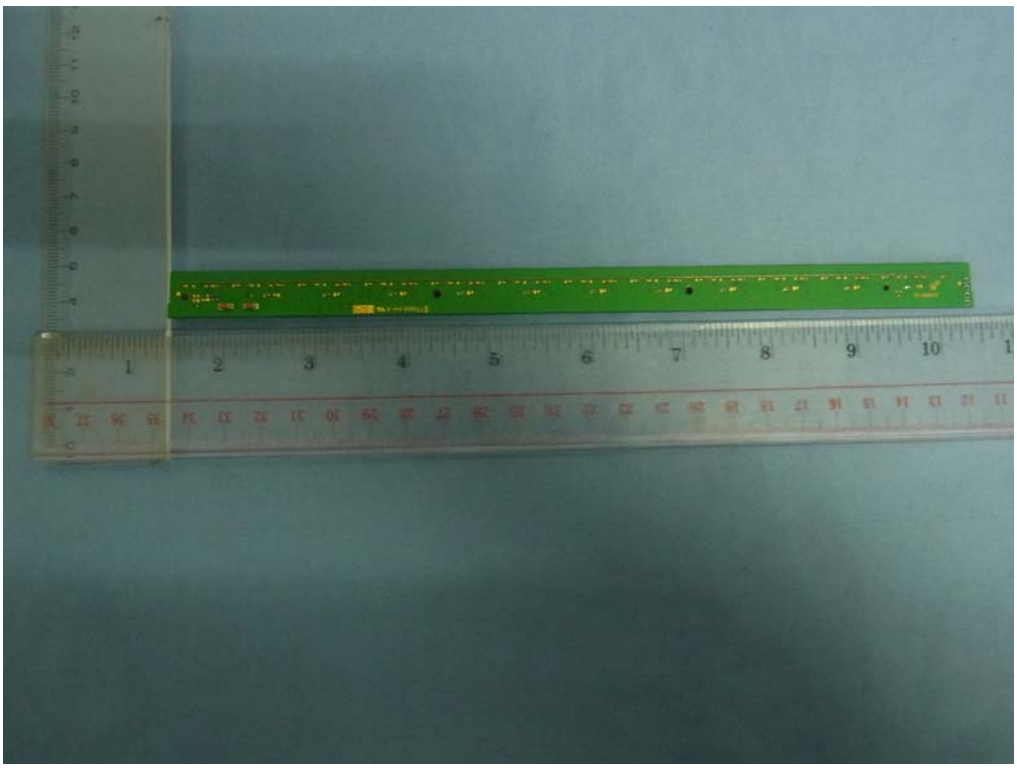

ES1-52
100V
>PF-LP<


053G




NMB-MAT M1011954
MASQ4EF1RR 32421 min-1
2041ZΣ Ro.





.....End of Report.....