Shenzhen Huatongwei International Inspection Co., Ltd.
Keji S,12th , Road, Hi-tech Industrial Park, Shenzhen, Guangdong, China
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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.....:	**TRE11100073**
FCC ID.....:	**BBP-PRSP1001**
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 .....:	Laser Printer
Trade Mark .....:	/
Manufacturer .....:	Ricoh Asia Industry (Shenzhen) Ltd.
Model/Type reference.....:	SP 100/Aficio SP 100
Listed Model….. .....:	/
Ratings .....:	120V 60Hz 6A 600W
Result.....:	**Positive**

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

Test Report No. :	TRE11100073	Nov 11, 2011 Date of issue

Equipment under Test	:	Laser Printer
Model / Type	:	SP 100/Aficio SP 100
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.

Contents

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

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 100/Aficio SP 100	M1011700020	

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 100/Aficio SP 100	96MHz	SDRAM

3）Operating modes:

No.	Operating mdoes	Remarks
1	Standby	
2	USB Print	

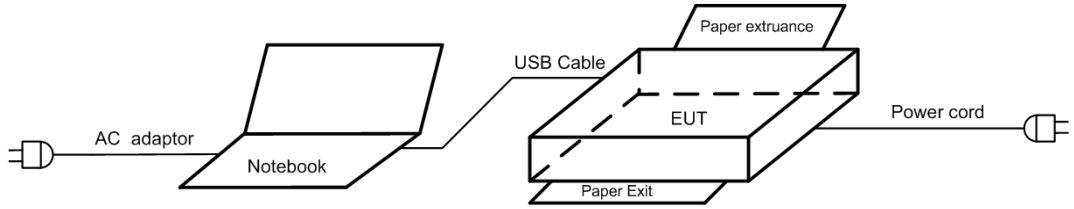
4）Supporting equipment

Kind of equipment	Manufacturer	Model name	Serial number	Remarks
Notebook	Lenovo	ThinkPad X201i	R8-7DYTX 10/11	

5）Cables used

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

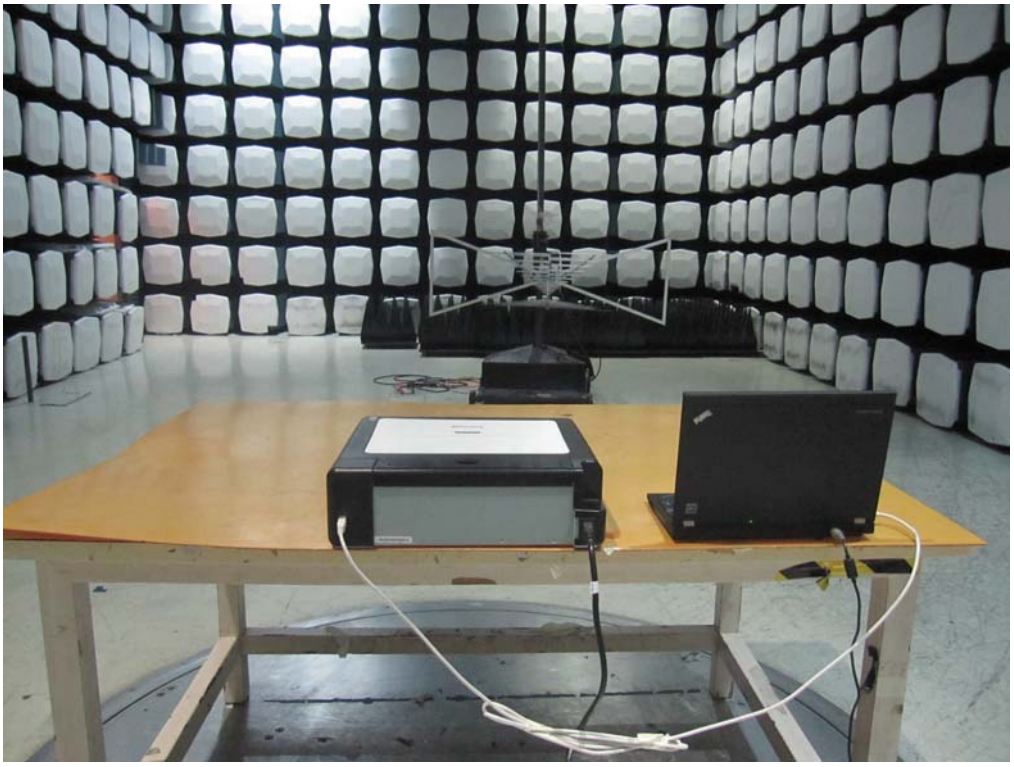
4.1.3.1. Operating Condition

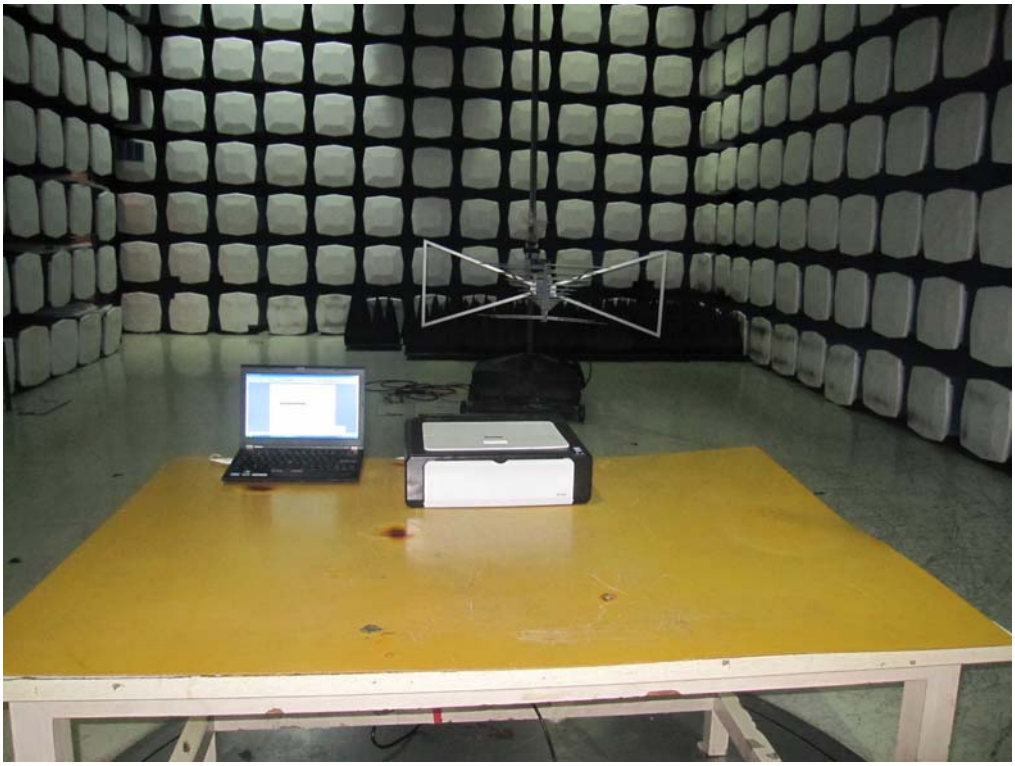
The EUT is set to work that shall be carried out respectively standby and USB printing modes during the test and the results of the maximum emanation are recorded.

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

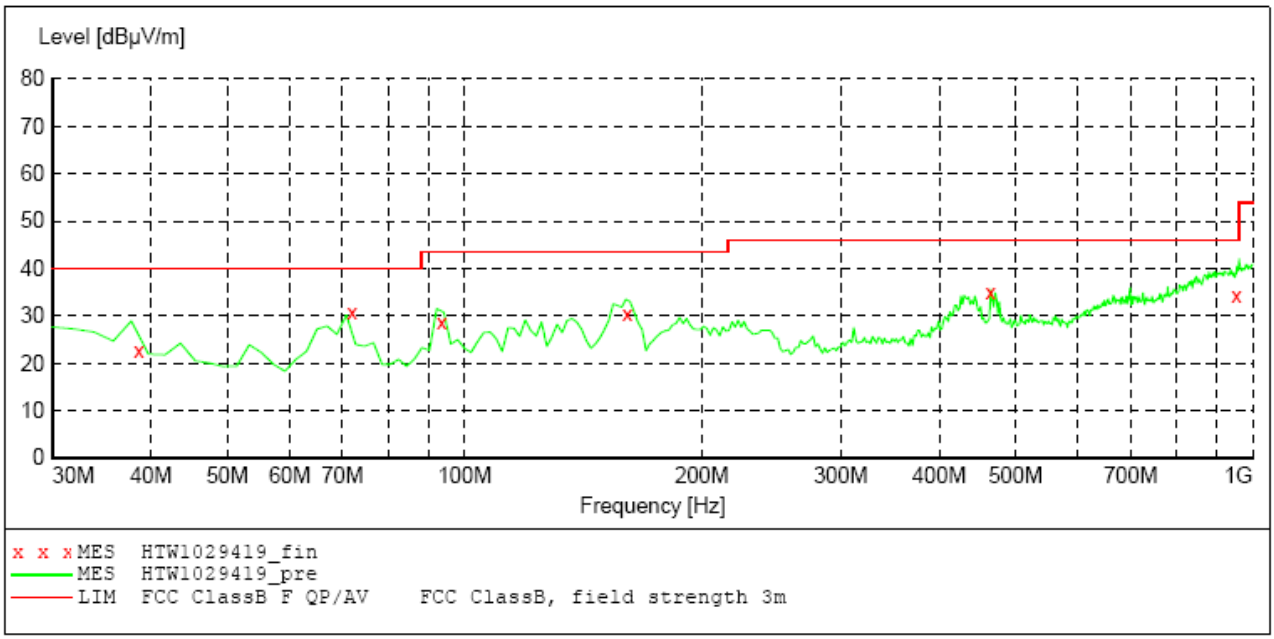
Transducer=antenna factor+pre-amplifier factor+cable loss (with 6db attenuator)

For 30MHz-1000MHz

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
Standby	72.00	30.9	Vertical	40.00	9.1	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: "HTW1029419_fin"

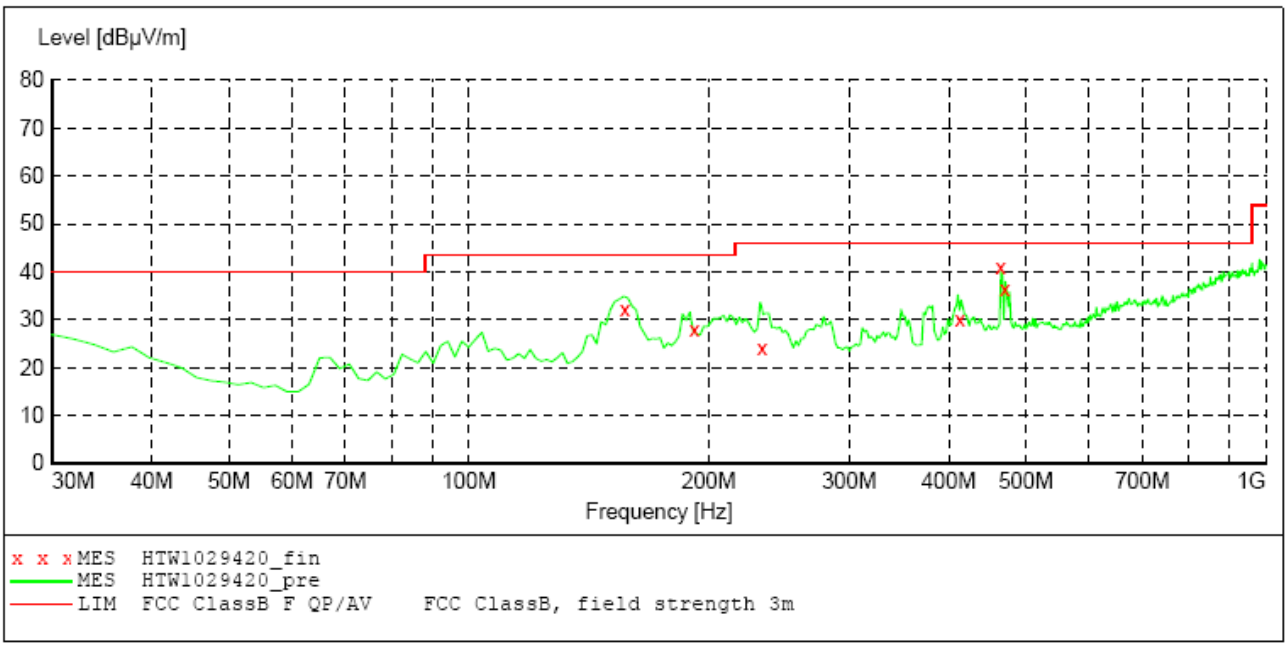
10/29/2011 4:48PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
38.640000	22.80	-7.8	40.0	17.2	QP	100.0	199.00	VERTICAL
72.000000	30.90	-15.2	40.0	9.1	QP	139.0	262.00	VERTICAL
93.540000	28.60	-11.9	43.5	14.9	QP	100.0	35.00	VERTICAL
161.040000	30.30	-15.0	43.5	13.2	QP	131.0	227.00	VERTICAL
464.940000	35.00	-3.9	46.0	11.0	QP	114.0	284.00	VERTICAL
953.940000	34.30	6.1	46.0	11.7	QP	135.0	69.00	VERTICAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
Standby	464.94	40.90	Horizontal	46.00	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: "HTW1029420_fin"

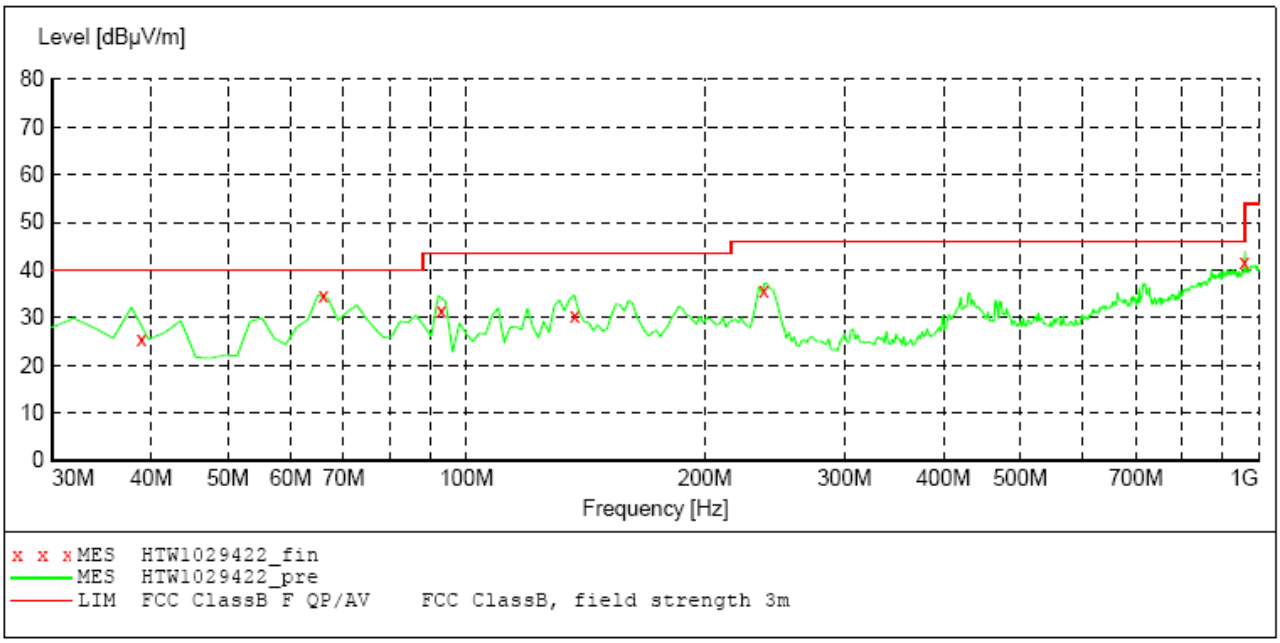
10/29/2011 5:05PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
157.080000	32.10	-14.8	43.5	11.4	QP	233.0	294.00	HORIZONTAL
192.000000	28.00	-14.5	43.5	15.5	QP	151.0	320.00	HORIZONTAL
233.460000	24.10	-11.3	46.0	21.9	QP	151.0	294.00	HORIZONTAL
413.340000	30.10	-5.5	46.0	15.9	QP	100.0	223.00	HORIZONTAL
464.940000	40.90	-3.9	46.0	5.1	QP	100.0	124.00	HORIZONTAL
470.880000	36.40	-3.8	46.0	9.6	QP	100.0	116.00	HORIZONTAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
USB Printing	960.00	41.70	Vertical	46.00	4.3	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: "HTW1029422_fin"

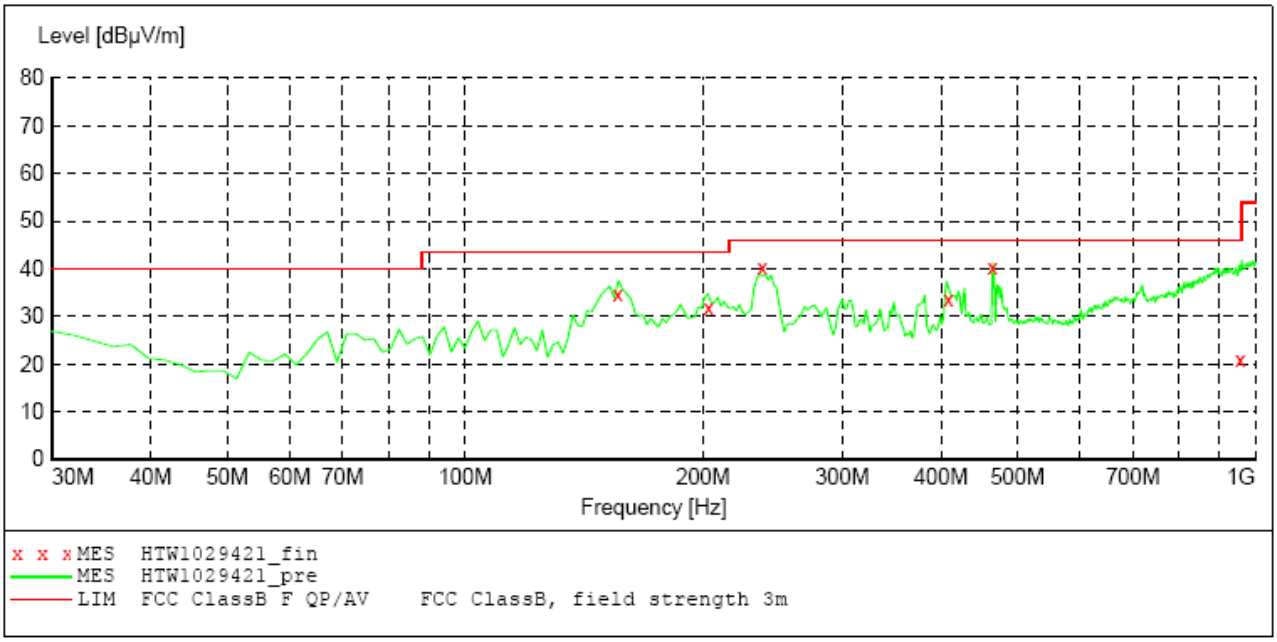
10/29/2011 5:37PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
38.940000	25.40	-8.0	40.0	14.6	QP	100.0	196.00	VERTICAL
66.060000	34.60	-15.9	40.0	5.4	QP	167.0	209.00	VERTICAL
93.000000	31.50	-11.9	43.5	12.0	QP	100.0	49.00	VERTICAL
137.040000	30.60	-13.0	43.5	12.9	QP	100.0	188.00	VERTICAL
237.300000	35.80	-11.0	46.0	10.2	QP	100.0	281.00	VERTICAL
960.000000	41.70	6.4	46.0	4.3	QP	100.0	204.00	VERTICAL

Test Condition	Maximum Radiated Emissions		Polariza-tion	Limit (dBuV/m)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV/m)				
USB Printing	464.94	40.20	Horizontal	46.00	5.8	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: "HTW1029421_fin"

10/29/2011 5:22PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
156.060000	34.80	-14.7	43.5	8.7	QP	262.0	288.00	HORIZONTAL
203.460000	31.90	-13.7	43.5	11.6	QP	183.0	325.00	HORIZONTAL
237.960000	40.20	-10.9	46.0	5.8	QP	138.0	293.00	HORIZONTAL
409.200000	33.50	-5.5	46.0	12.5	QP	100.0	223.00	HORIZONTAL
464.940000	40.20	-3.9	46.0	5.8	QP	100.0	113.00	HORIZONTAL
957.300000	20.80	6.3	46.0	25.2	QP	397.0	250.00	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

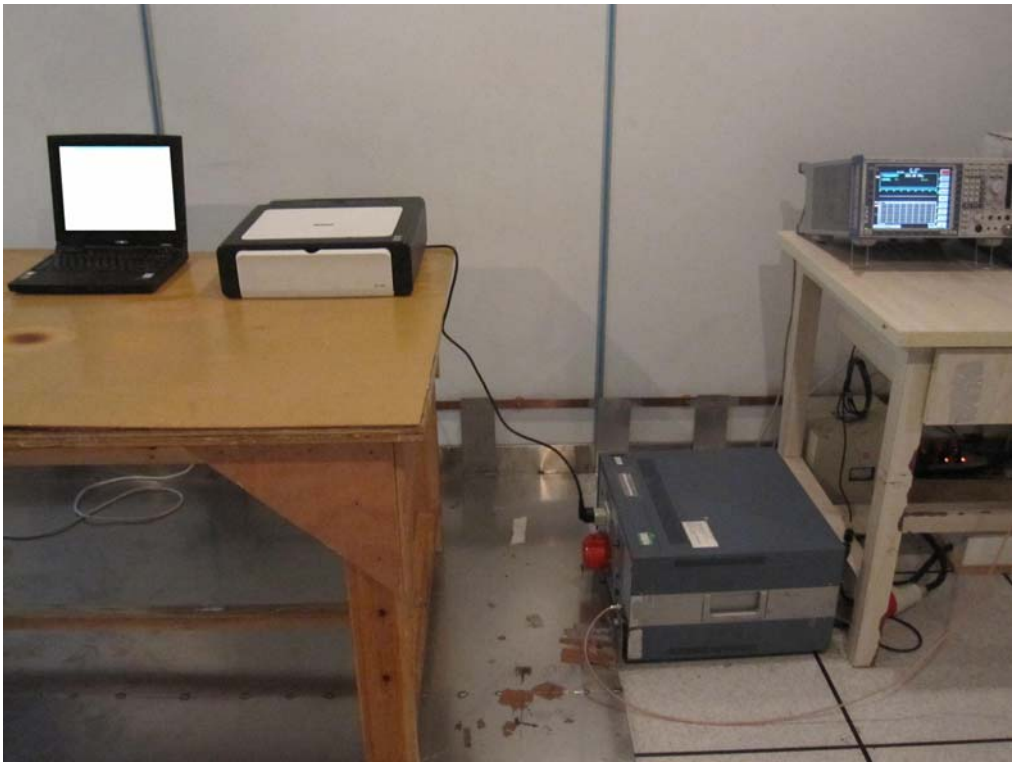
4.2.3.1. Operating Condition

The EUT is set to work that shall be carried out respectively standby and USB printing 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

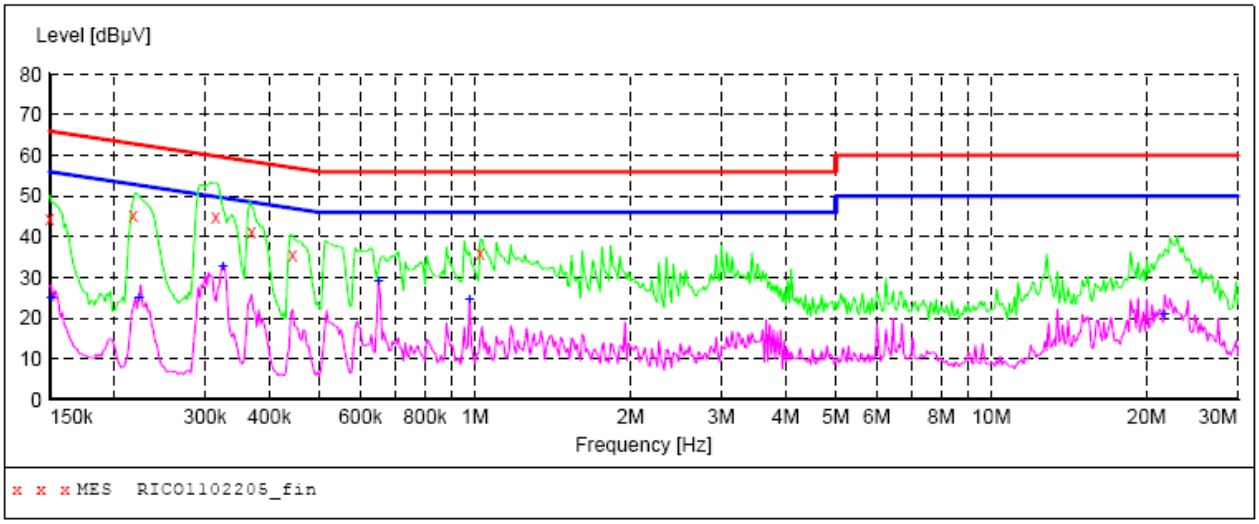
Level=read valus+transducer

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	0.315	45.00	L	60.00	10.20	14.80	QP
	0.325	32.90	L	50.00	10.20	16.70	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102205_fin"

11/2/2011 3:02PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	44.40	10.1	66	21.6	QP	L1	GND
0.218140	45.30	10.2	63	17.6	QP	L1	GND
0.314708	45.00	10.2	60	14.8	QP	L1	GND
0.369080	41.40	10.2	59	17.1	QP	L1	GND
0.443319	35.50	10.2	57	21.5	QP	L1	GND
1.023480	36.00	10.2	56	20.0	QP	L1	GND

MEASUREMENT RESULT: "RICO1102205_fin2"

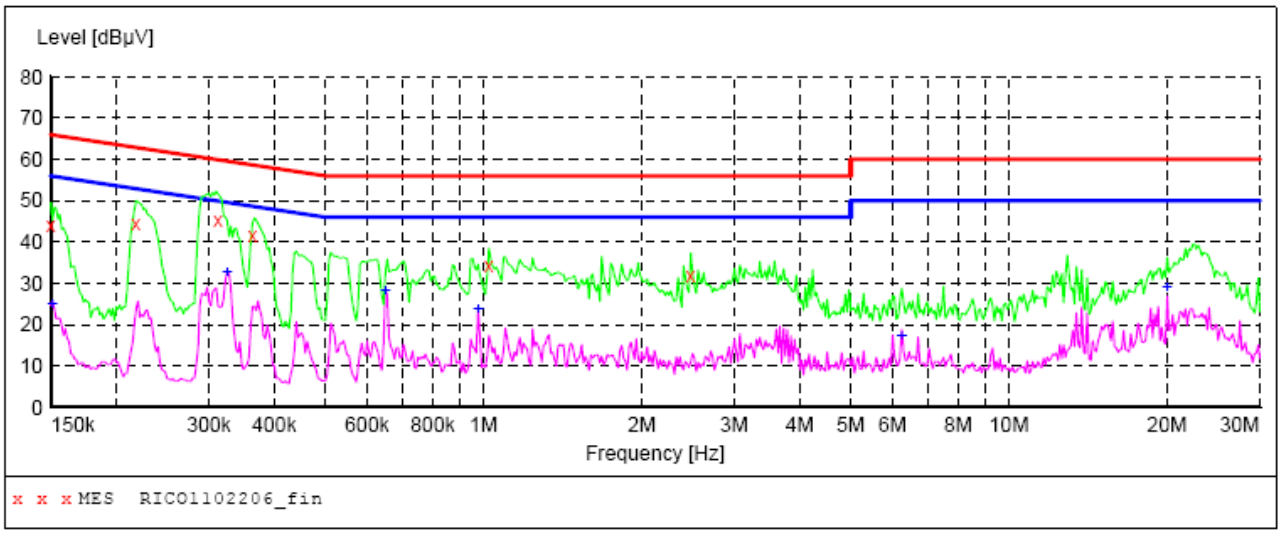
11/2/2011 3:02PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	25.00	10.1	56	30.9	AV	L1	GND
0.223410	24.90	10.2	53	27.8	AV	L1	GND
0.324909	32.90	10.2	50	16.7	AV	L1	GND
0.649868	29.00	10.2	46	17.0	AV	L1	GND
0.975694	24.70	10.2	46	21.3	AV	L1	GND
21.650268	20.90	10.6	50	29.1	AV	L1	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
Standby	0.312	45.20	N	60.00	10.20	14.70	QP
	0.325	32.60	N	50.00	10.20	17.00	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102206_fin"

11/2/2011 3:10PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	44.10	10.1	66	21.9	QP	N	GND
0.218131	44.50	10.2	63	18.4	QP	N	GND
0.312210	45.20	10.2	60	14.7	QP	N	GND
0.363250	41.80	10.2	59	16.9	QP	N	GND
1.023473	34.50	10.2	56	21.5	QP	N	GND
2.478551	31.90	10.3	56	24.1	QP	N	GND

MEASUREMENT RESULT: "RICO1102206_fin2"

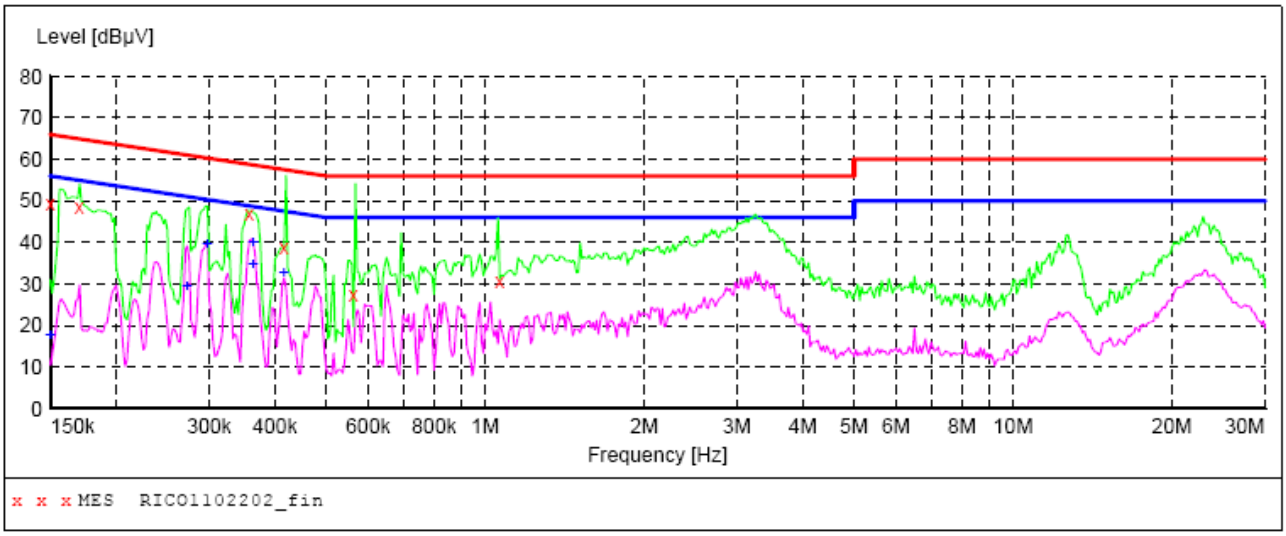
11/2/2011 3:10PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	25.00	10.1	56	30.9	AV	N	GND
0.324909	32.60	10.2	50	17.0	AV	N	GND
0.649868	28.30	10.2	46	17.7	AV	N	GND
0.975694	23.80	10.2	46	22.2	AV	N	GND
6.246253	17.20	10.4	50	32.8	AV	N	GND
19.992077	29.20	10.5	50	20.8	AV	N	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
USB Printing	0.358	47.00	N	59.00	10.20	11.80	QP
	0.363	40.00	N	49.00	10.20	8.70	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102202_fin"

11/2/2011 2:39PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	49.30	10.1	66	16.7	QP	N	GND
0.170392	48.40	10.1	65	16.5	QP	N	GND
0.357510	47.00	10.2	59	11.8	QP	N	GND
0.415940	38.80	10.2	58	18.7	QP	N	GND
0.563040	27.30	10.2	56	28.7	QP	N	GND
1.065070	30.60	10.2	56	25.4	QP	N	GND

MEASUREMENT RESULT: "RICO1102202_fin2"

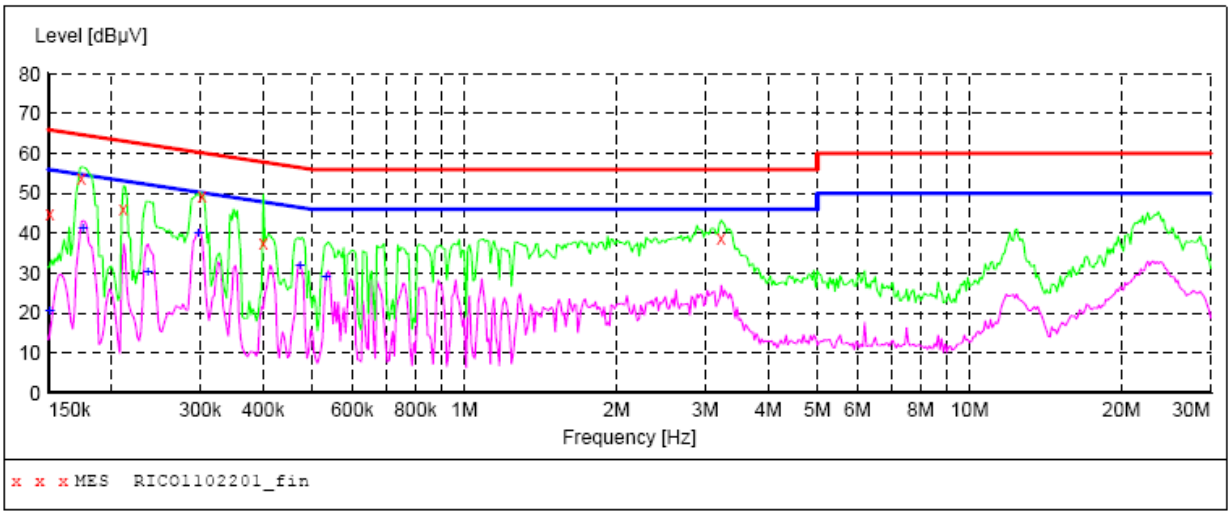
11/2/2011 2:39PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	17.70	10.1	56	38.3	AV	N	GND
0.272664	29.30	10.2	51	21.7	AV	N	GND
0.297642	39.70	10.2	50	10.6	AV	N	GND
0.363250	34.60	10.2	49	14.1	AV	N	GND
0.363253	40.00	10.2	49	8.7	AV	N	GND
0.415941	32.50	10.2	48	15.0	AV	N	GND

Test Condition	Maximum Conducted Emissions		Line	Limit (dBuV)	Transd (dB)	Margin (dB)	Detector
	Frequency (MHz)	Datum (dBuV)					
USB Printing	0.175	53.80	L	65.00	10.10	10.90	QP
	0.298	39.90	L	50.00	10.20	10.40	AV
Test Results			Pass				

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO1102201_fin"

11/2/2011 2:30PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	44.70	10.1	66	21.2	QP	L1	GND
0.174515	53.80	10.1	65	10.9	QP	L1	GND
0.211297	46.20	10.2	63	17.0	QP	L1	GND
0.302420	49.30	10.2	60	10.9	QP	L1	GND
0.399702	37.50	10.2	58	20.4	QP	L1	GND
3.224007	39.00	10.3	56	17.0	QP	L1	GND

MEASUREMENT RESULT: "RICO1102201_fin2"

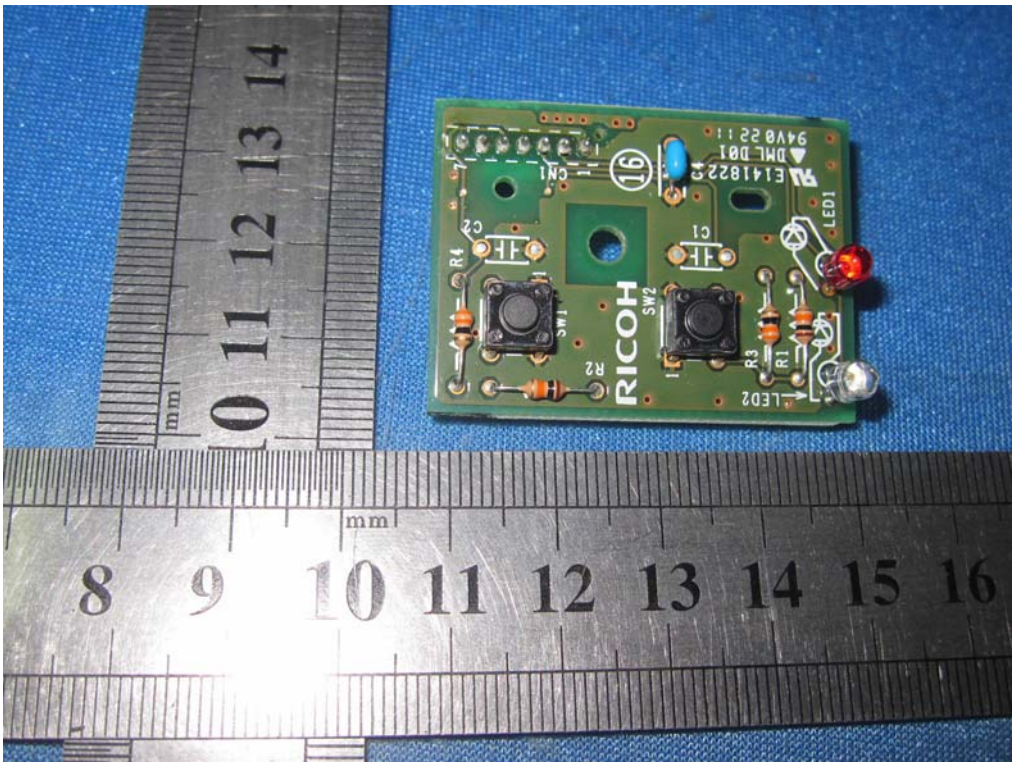
11/2/2011 2:30PM

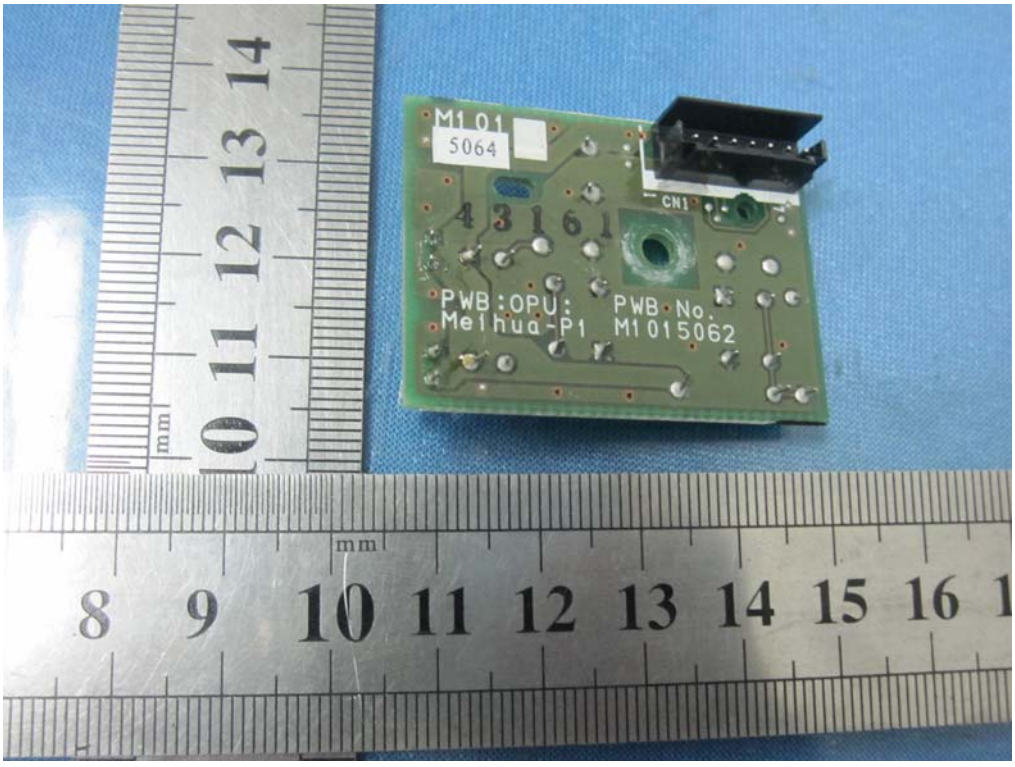
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.151200	20.70	10.1	56	35.2	AV	L1	GND
0.175906	41.20	10.1	55	13.5	AV	L1	GND
0.236225	30.40	10.2	52	21.8	AV	L1	GND
0.297640	39.90	10.2	50	10.4	AV	L1	GND
0.472500	31.90	10.2	47	14.6	AV	L1	GND
0.532490	29.00	10.2	46	17.0	AV	L1	GND

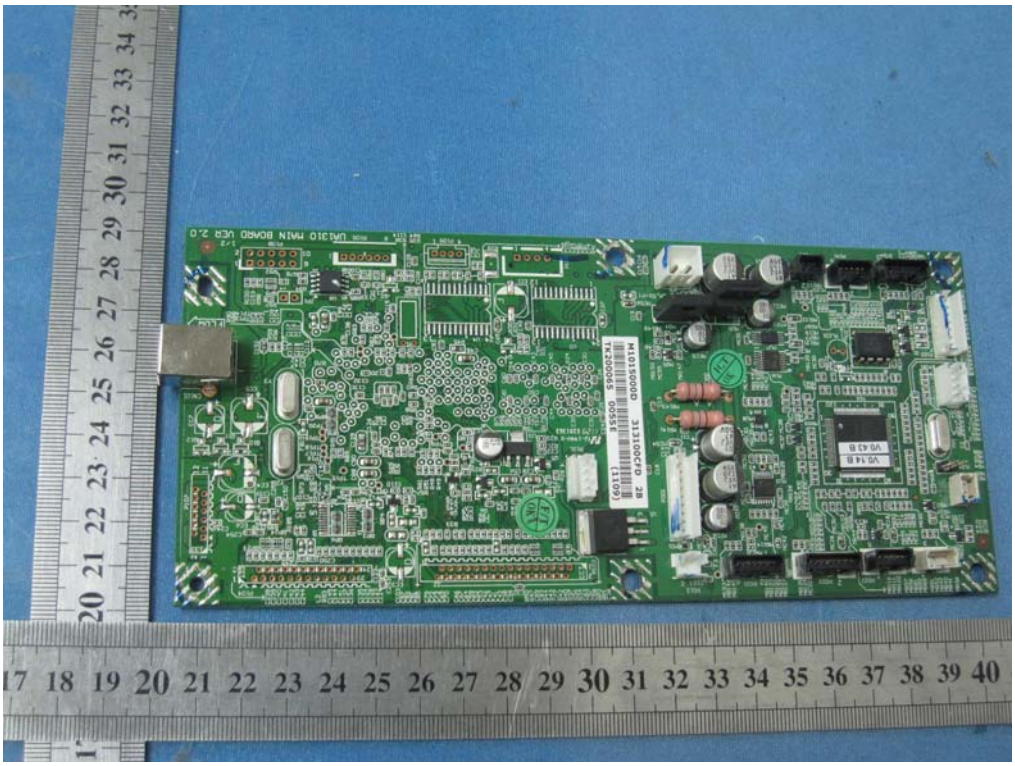
5. External and Internal Photos of the EUT

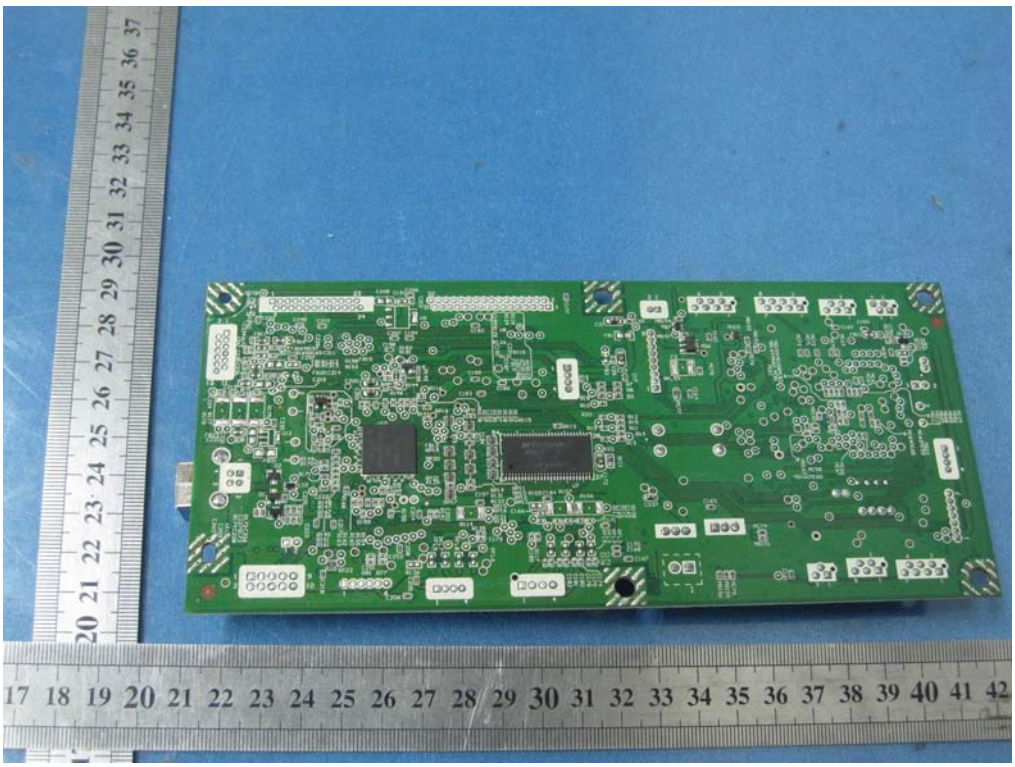
5.1. External photos of the EUT

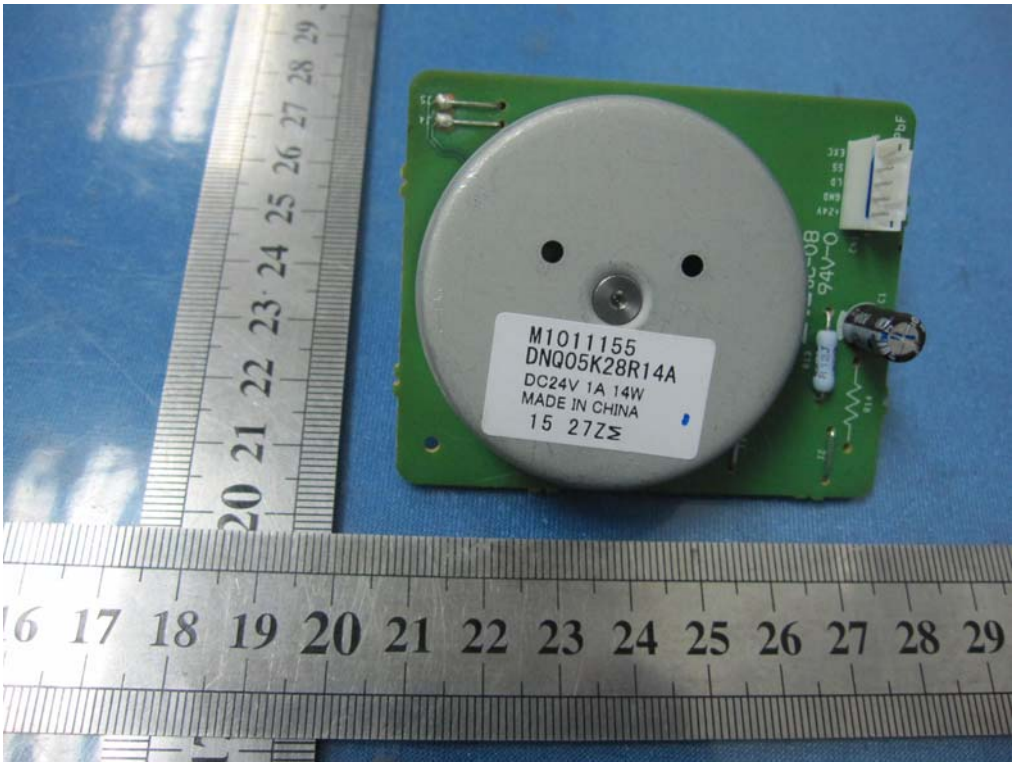
5.2. Internal photos of the EUT

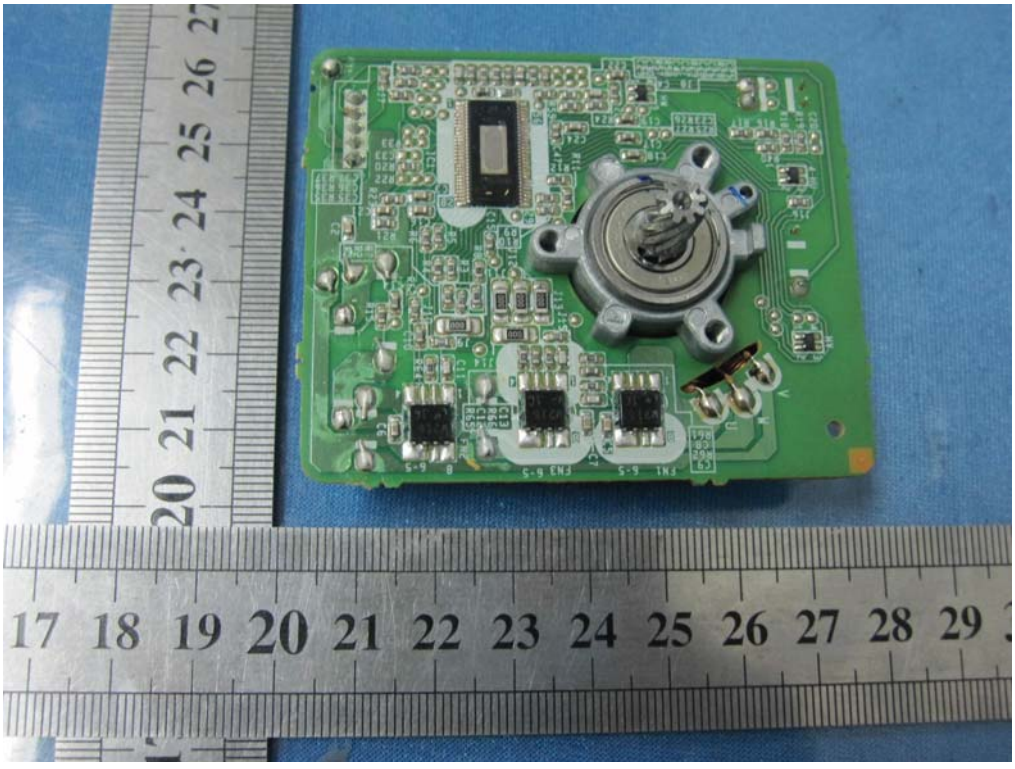

RICOH
SW1
SW2
LED1
LED2
CN1
R1
R2
R3
R4
C1
C2

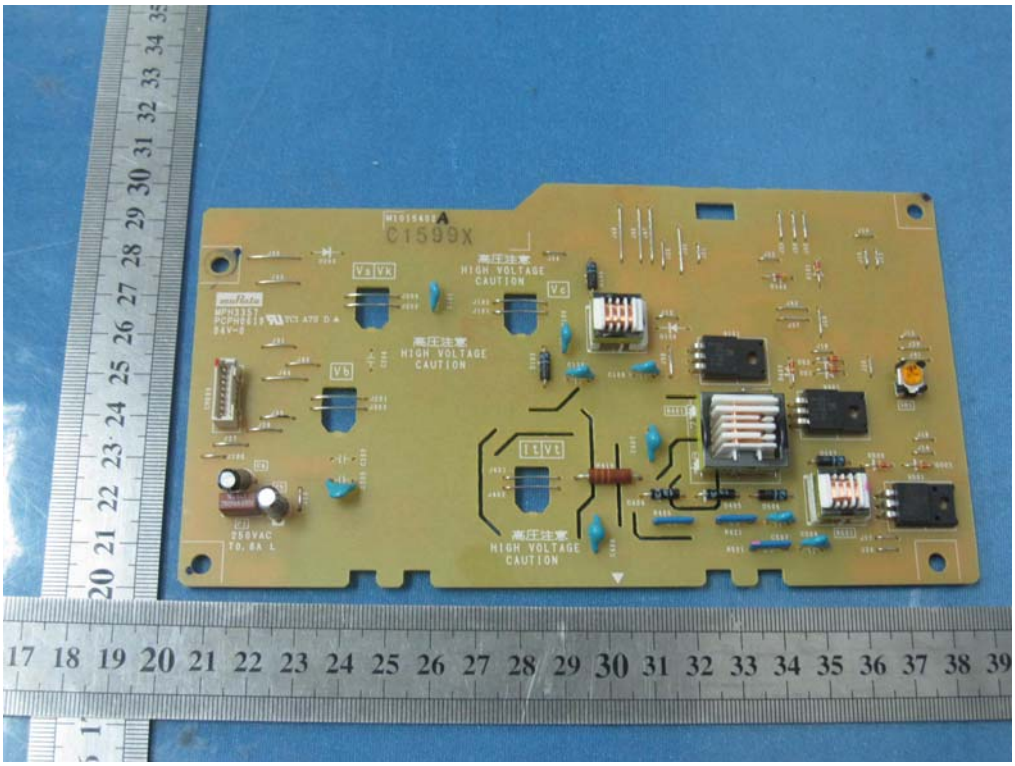

M1 01
5064
CN1
PWB:OPU:
Meihua-P1
PWB No.
M1015062

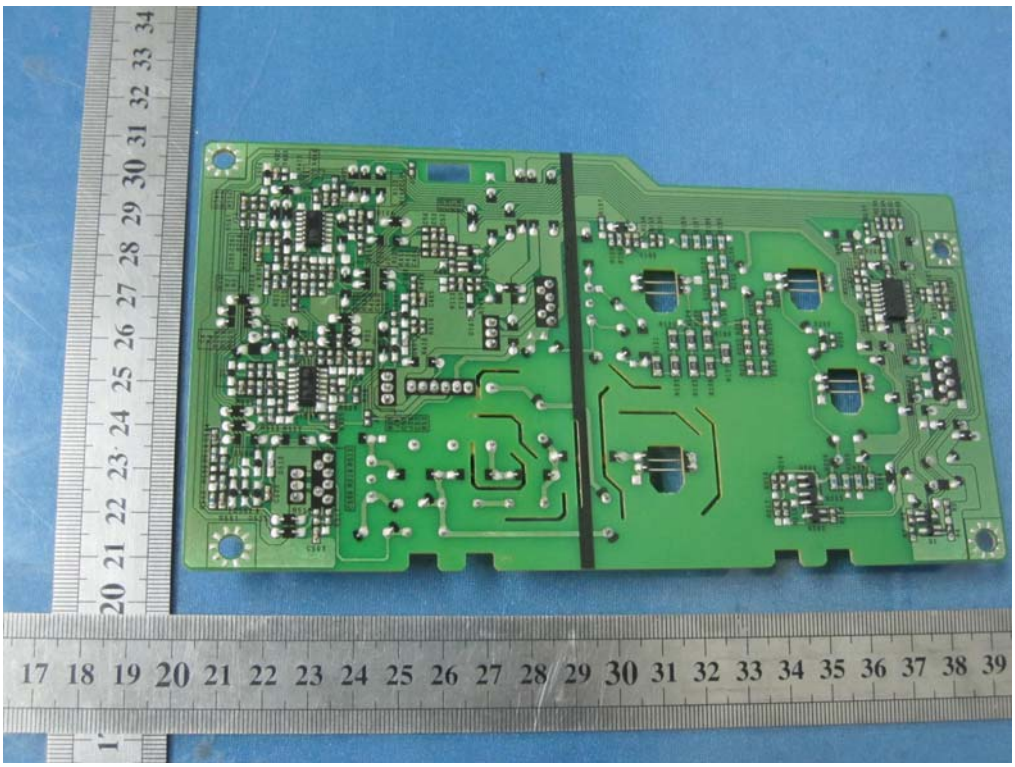


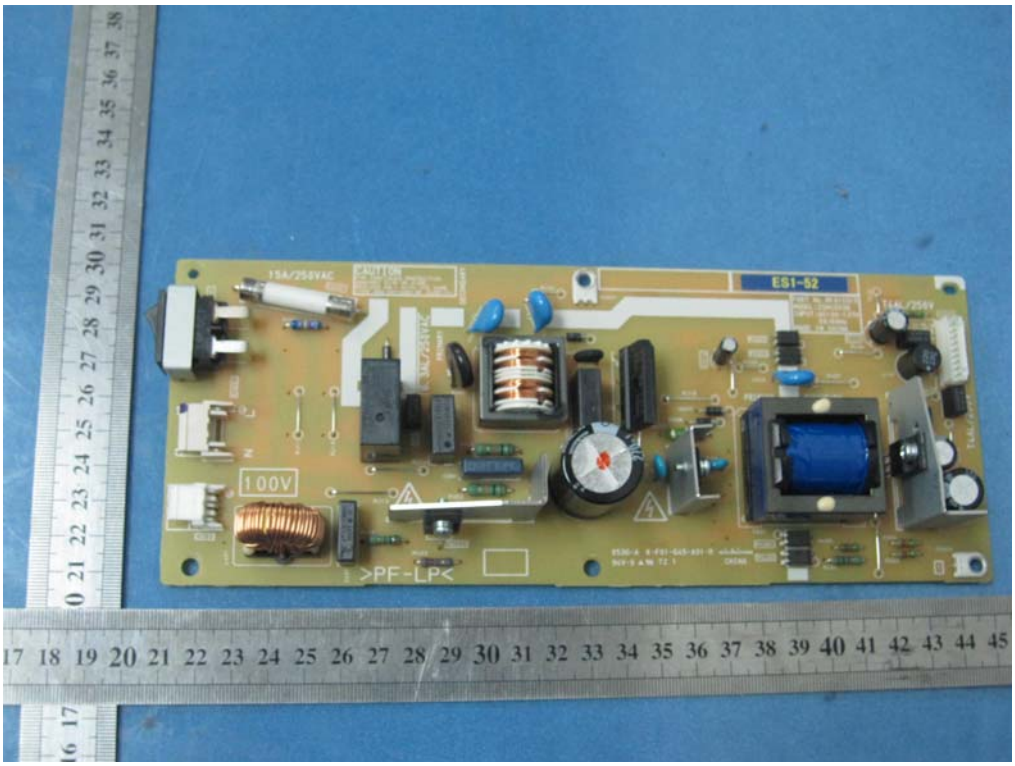


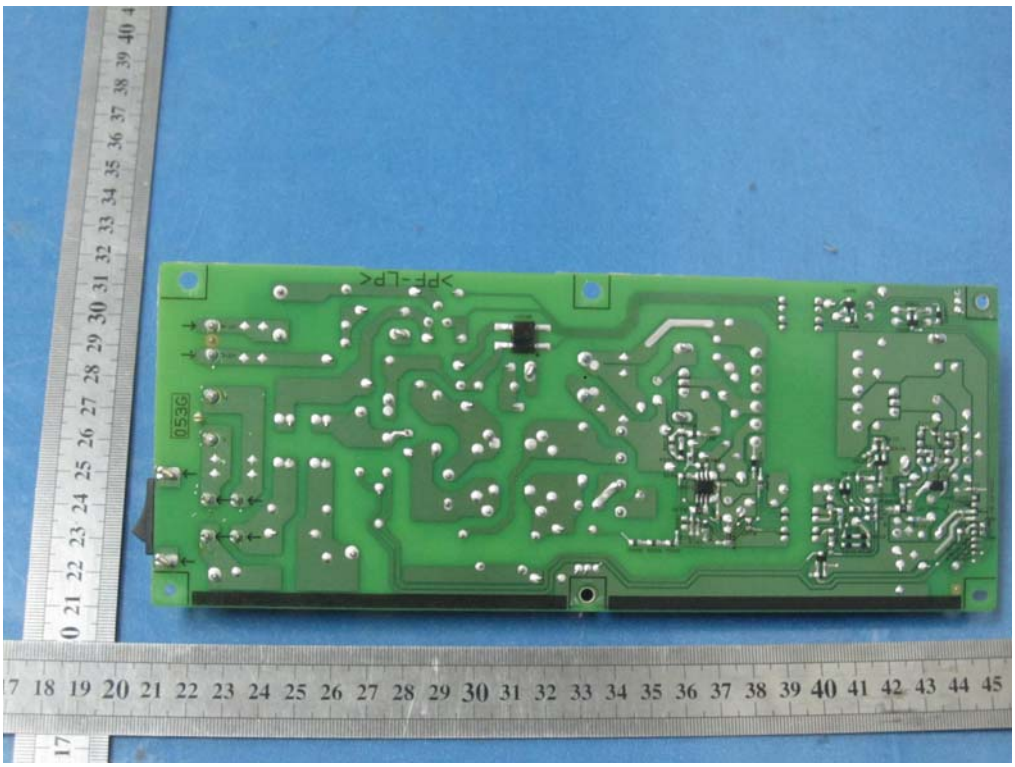

M1011155
DNQ05K28R14A
DC24V 1A 14W
MADE IN CHINA

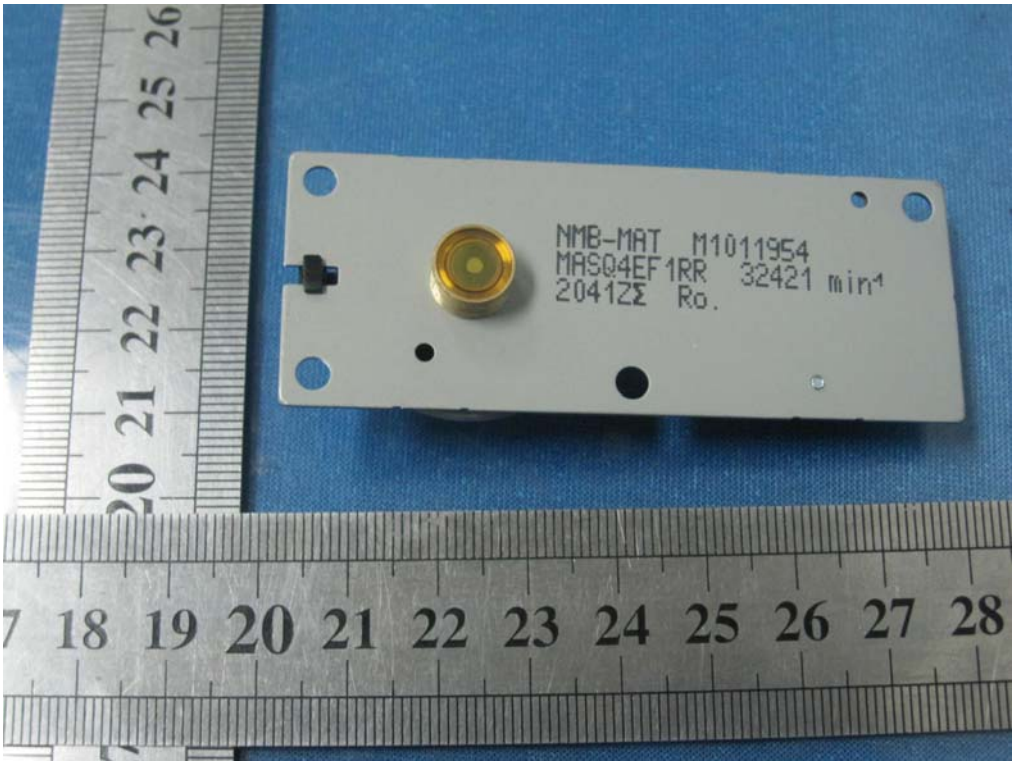


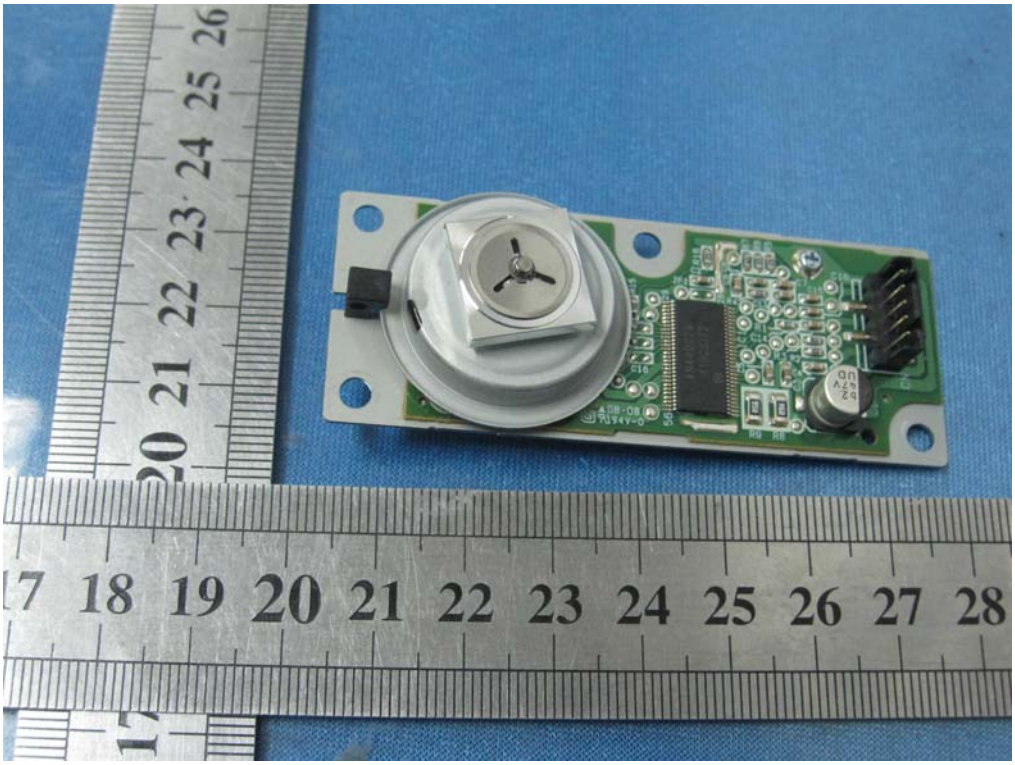

C1599X
HIGH VOLTAGE CAUTION
HIGH VOLTAGE CAUTION
HIGH VOLTAGE CAUTION
250VAC




ES1-52
100V
>PF-LP<


053G





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