



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.: TRE13030019 R/C:57593

FCC ID: BBP-MFSP112SF1

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Wenliang Li

Date of issue: May 10, 2013

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	<input checked="" type="checkbox"/>
Partial application of Harmonised standards	<input type="checkbox"/>
Other standard testing methods	<input type="checkbox"/>

Applicant's name: RICOH Co., LTD.

Address: 810 Shimoimaizumi, Ebina City, Kanagawa-Pref., 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

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Test item description: Laser Printer

Trade Mark: Ricoh

Model/Type reference: SP 112SF / SP 112SU / SP 111SU / SP 111SF

Listed Model: /

Ratings: 120V AC 50/60Hz 6A 680W

Result: Positive

EMC -- TEST REPORT

Test Report No. : TRE13030019	May 10, 2013 Date of issue
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Equipment under Test : Laser Printer

Model / Type : SP 112SF / SP 112SU / SP 111SU/ SP 111SF

Listed Model : /

Applicant : RICOH Co., LTD.

Address : 810 Shimoimaizumi, Ebina City, Kanagawa-Pref., 243-0460 Japan

Manufacturer : RICOH Co., LTD.

Address : 3-6, Naka-magome 1-Chome Ohta-ku, Tokyo 143-8555 Japan

Test Result according to the standards on page 4:	Positive
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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 : Mar 13, 2013
 Testing commenced on : Mar 13, 2013
 Testing concluded on : May 10, 2013

2.2. Equipment under Test

Power supply system utilised

Power supply voltage	:	<input type="radio"/> 230V / 50 Hz	<input type="radio"/> 115V / 60Hz
		<input type="radio"/> 12 V DC	<input type="radio"/> 24 V DC
		<input checked="" type="radio"/> Other (specified in blank below)	

AC 120V/60Hz

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

The EUT is a multifunction digital printer with copier, scanner and fax.
 Model Difference, Please refer to the table.

Mode name	ADF	FAX	Toner refill
SP 112SU	×	×	×
SP 112SF	○	○	×
SP 111SU	×	×	○
SP 111SF	○	○	○

Unless otherwise indicated, all tests were conducted on SP 112SF.
 Tests performed on SP 112SF were considered to be representative of SP 112SU SP 111SU SP 111SF
 There are two kinds of main motor, one is DC motor, the other is stepping motor. DC motor is spaced.

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
(1)EUT	RICOH	SP 112SF	NB130100009	/

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

Kind of equipment	Mode name	Operates Frequency	Remark
EUT	SP 112SF	480MHz	USB

3) Supporting equipment

Kind of equipment	Manufacturer	Model name	Serial number	Remarks
Notebook 1	LENOVO	ThinkPad X201i	R8-7DYTX 10/11	For EMI
G3 Exchanger	TENDA	PABX	—	
FAX Machine	RICOH	Aficio SP 100SF	T292M910181	

4) Cables Used

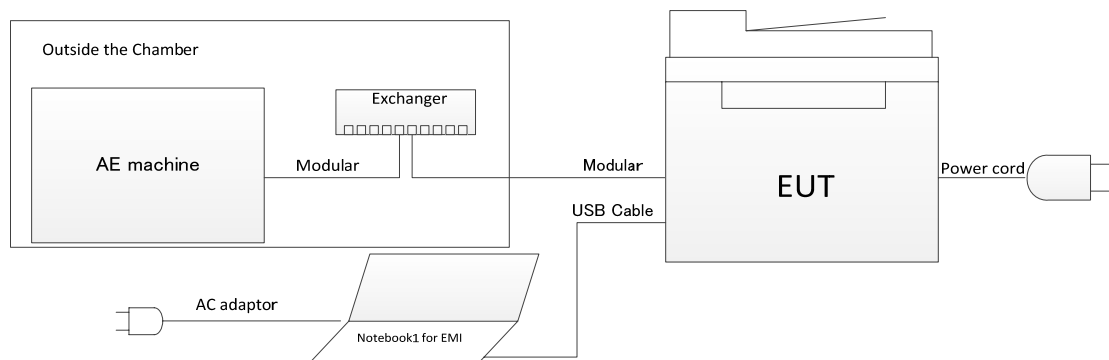
	Cable Name	Length	Shielded	Maker	Remarks
1	USB Cable	2.0m	Yes	-	
2	Power Cable	1.8m	No	Long well	
4	Modular Cable	2.0m	No	-	

5)Operating modes:

No.	Operating modes	RE	CE	Remarks
1	Standby	○	○	Stepping motor
2	Print	○	○	Stepping motor
3	ADF Copy	○	○	Stepping motor
4	Scan	○	○	Stepping motor
5	FAX Tx	○	○	Stepping motor
6	FAX Rx	○	○	Stepping motor
7	Standby	×	×	DC motor
8	Print	○	○	DC motor
9	ADF Copy	○	○	DC motor
10	Scan	○	○	DC motor
11	FAX Tx	○	○	DC motor
12	FAX Rx	○	○	DC motor

6)EUT Setup:

Meihua-MF2 machine system config



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. 01, 2012. Valid time is until Feb. 28, 2015.

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 June. 01, 2012, valid time is until Jun. 01, 2015.

IC-Registration No.: 5377A

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. 5377A 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 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.: G-292. Date of Registration: Dec. 24, 2012. Valid time is until Dec. 23, 2015.

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: Dec. 20, 2012. Valid time is until Dec. 19, 2015.

Telecommunication 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.: T-1837. Date of Registration: May 07, 2013. Valid time is until May 06, 2016.

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	4.65dB	(1)
Radiated Emission	1G~2G	5.16dB	(1)
Conducted Disturbance	0.15~30 MHz	3.42dB	(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	2012/10/27
2	EMI TEST RECEIVER	Rohde & Schwarz	ESI 26	100009	2012/10/27
3	RF TEST PANEL	Rohde & Schwarz	TS / RSP	335015/ 0017	2012/10/27
4	TURNTABLE	ETS	2088	2149	2012/10/27
5	ANTENNA MAST	ETS	2075	2346	2012/10/27
6	EMI TEST SOFTWARE	Rohde & Schwarz	ESK1	N/A	2012/10/27
7	Double-Ridged-Waveguide Horn Antenna	Rohde & Schwarz	HF906	100039	2012/10/27
8	Semi-anechoic chamber	ETS-LINDGREN	AJ 593 HTW	N/A	2012/10/27

Conducted Disturbance					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	EMI Test Receiver	Rohde & Schwarz	ESCS30	100038	2012/10/27
2	Artificial Mains	Rohde & Schwarz	ESH2-Z5	100028	2012/10/27
3	Artificial Mains	Rohde & Schwarz	ESH3-Z5	100040	2012/10/27
4	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100044	2012/10/27
5	EMI Test Software	Rohde & Schwarz	ESK1	N/A	2012/10/27
6	3# shielded room	ETS-LINDGREN	RFD-100	2406	N/A

The Cal.Interval was one year.

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 (dB μ V/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 480MHz, so the measurement was made up to 2 GHz.

4.1.3. Description of the test set-up

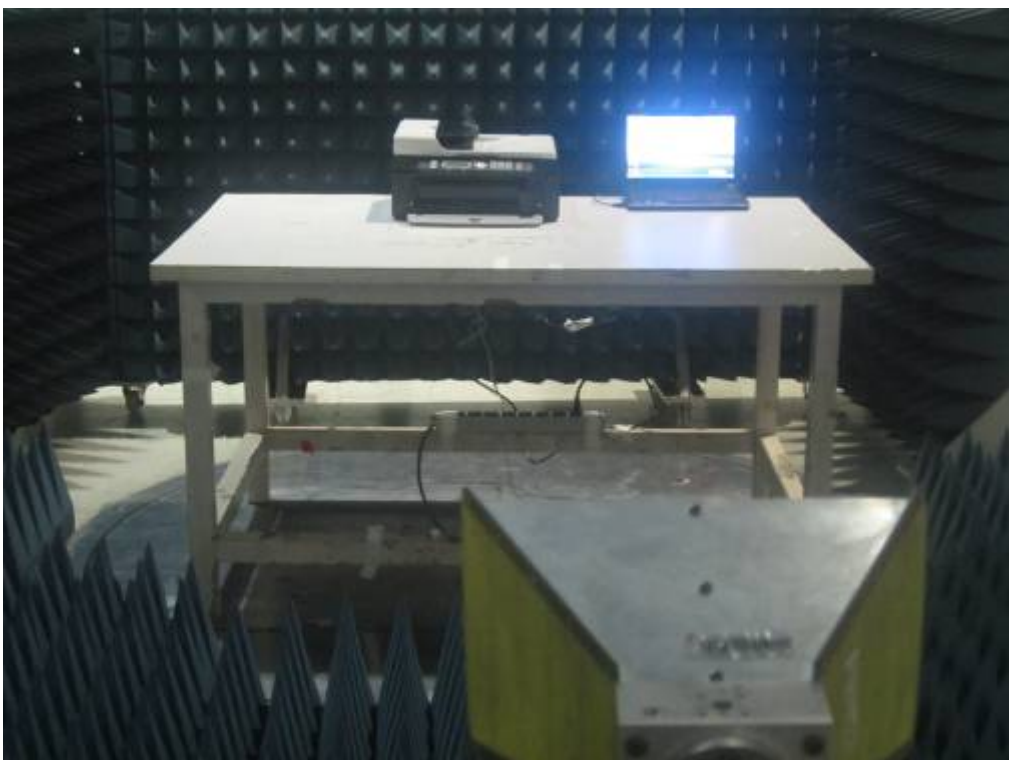
4.1.3.1. Operating Condition

The EUT is set to work that shall be carried out respectively Standby, Print, ADF Copy, Scan, FAX Tx, FAX Rx modes on different motor, Stepping motor and DC motor 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

Band Width: 1MHz

Frequency Range: 1G-2G

The average measurement was not performed when the peak measured data under the limit of average detection.

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

Margin=limit-level

Level=read value+transducer

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

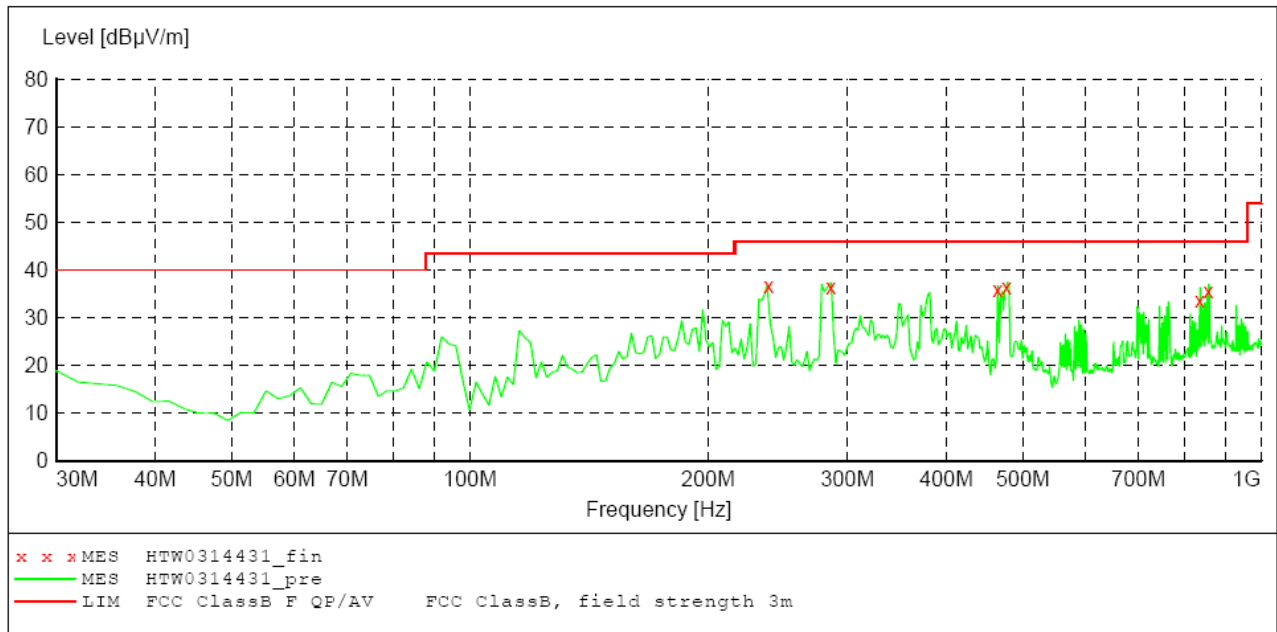
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: Standby
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 12:48:20PM

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 201106



MEASUREMENT RESULT: "HTW0314431_fin"

3/14/2013 1:04PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
238.600000	36.60	-15.9	46.0	9.4	QP	100.0	126.00	HORIZONTAL
286.140000	36.30	-14.8	46.0	9.7	QP	100.0	91.00	HORIZONTAL
464.920000	35.90	-10.8	46.0	10.1	QP	101.0	335.00	HORIZONTAL
477.000000	36.30	-10.6	46.0	9.7	QP	100.0	323.00	HORIZONTAL
836.920000	33.60	-4.4	46.0	12.4	QP	99.0	230.00	HORIZONTAL
858.560000	35.50	-4.2	46.0	10.5	QP	100.0	138.00	HORIZONTAL

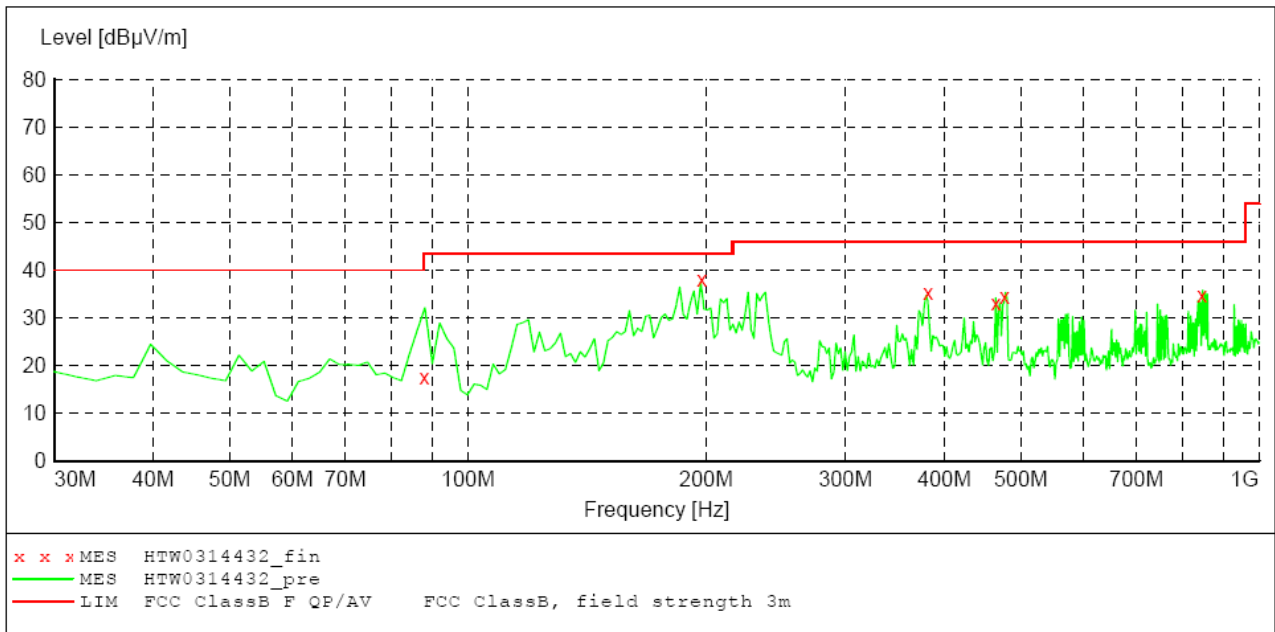
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO., LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: Standby
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 1:06:01PM

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 201106



MEASUREMENT RESULT: "HTW0314432_fin"

3/14/2013 1:22PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
88.080000	17.50	-17.4	43.5	26.0	QP	303.0	353.00	VERTICAL
197.560000	38.00	-18.5	43.5	5.5	QP	98.0	111.00	VERTICAL
381.660000	35.20	-13.1	46.0	10.8	QP	123.0	191.00	VERTICAL
464.980000	33.10	-10.8	46.0	12.9	QP	100.0	293.00	VERTICAL
477.000000	34.40	-10.6	46.0	11.6	QP	100.0	300.00	VERTICAL
847.600000	34.70	-4.1	46.0	11.3	QP	114.0	148.00	VERTICAL

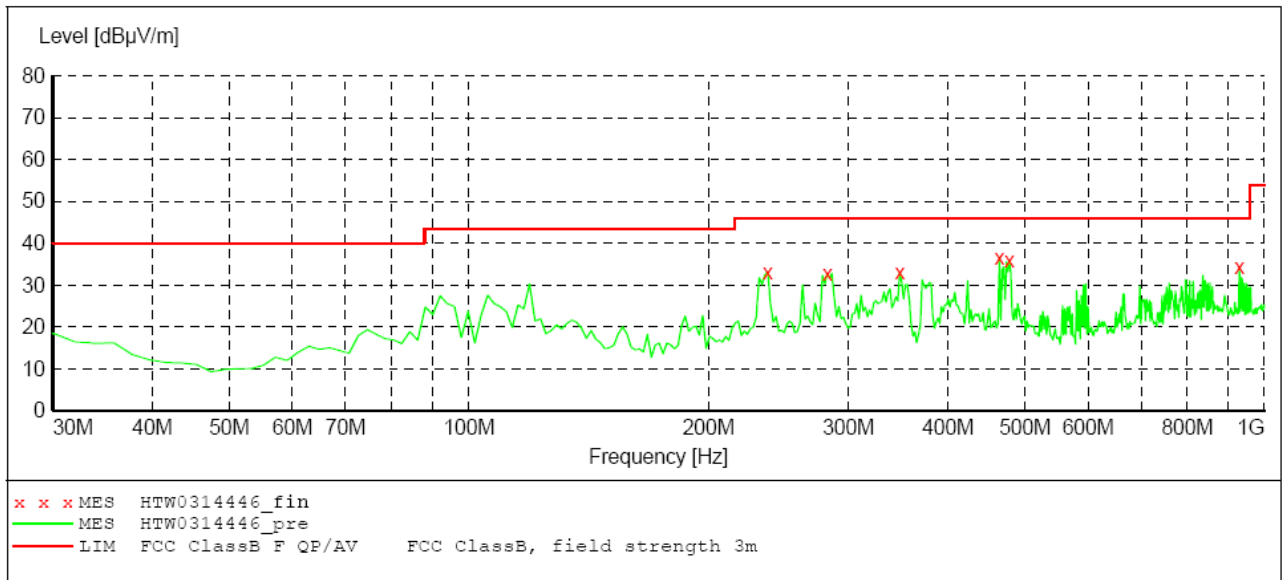
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: Print
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 3:20:24PM

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

Short Description:		Field Strength(30M-1G)				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
30.0 MHz	1.0 GHz	60.0 kHz	MaxPeak	1.0 ms	120 kHz	HL562 201106



MEASUREMENT RESULT: "HTW0314446_fin"

3/14/2013 3:32PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
237.580000	33.20	-16.0	46.0	12.8	QP	100.0	119.00	HORIZONTAL
282.200000	32.80	-14.9	46.0	13.2	QP	100.0	88.00	HORIZONTAL
348.160000	33.00	-13.8	46.0	13.0	QP	100.0	88.00	HORIZONTAL
464.560000	36.70	-10.8	46.0	9.3	QP	100.0	322.00	HORIZONTAL
478.140000	35.80	-10.6	46.0	10.2	QP	100.0	310.00	HORIZONTAL
930.160000	34.40	-3.8	46.0	11.6	QP	100.0	241.00	HORIZONTAL

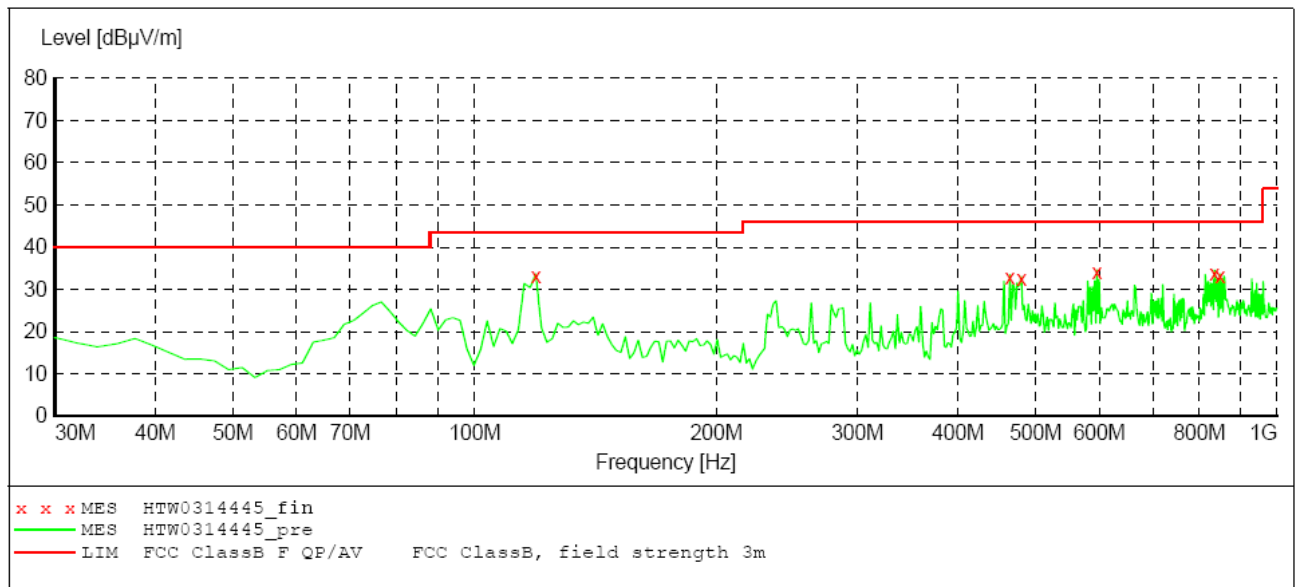
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: Print
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 3:18:41PM

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

Short Description:		Field Strength(30M-1G)					
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer	
Frequency	Frequency	Width					
30.0 MHz	1.0 GHz	60.0 kHz	MaxPeak	1.0 ms	120 kHz	HL562	201106



MEASUREMENT RESULT: "HTW0314445_fin"

3/14/2013 3:28PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
119.240000	33.70	-16.3	43.5	9.8	QP	100.0	182.00	VERTICAL
464.560000	33.50	-10.8	46.0	12.5	QP	100.0	289.00	VERTICAL
480.080000	33.00	-10.5	46.0	13.0	QP	100.0	152.00	VERTICAL
596.480000	34.60	-9.5	46.0	11.4	QP	100.0	303.00	VERTICAL
835.100000	34.50	-4.4	46.0	11.5	QP	100.0	289.00	VERTICAL
848.680000	33.70	-4.1	46.0	12.3	QP	100.0	232.00	VERTICAL

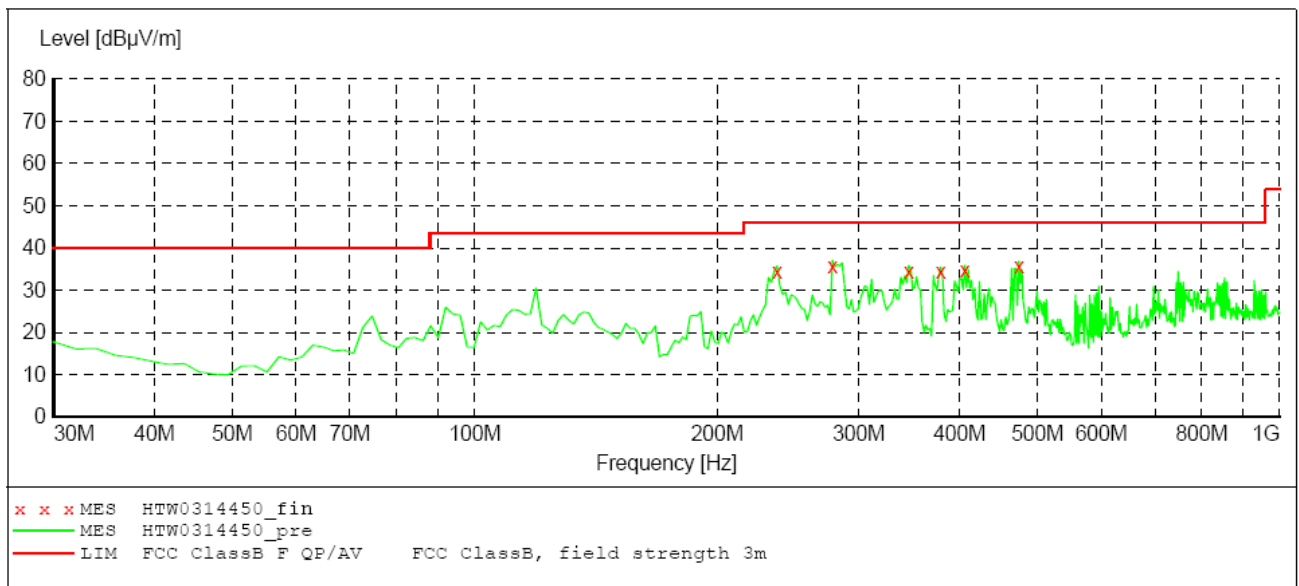
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: ADF COPY
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 3:27:07PM

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

Short Description:		Field Strength(30M-1G)				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
30.0 MHz	1.0 GHz	60.0 kHz	MaxPeak	1.0 ms	120 kHz	HL562 201106



MEASUREMENT RESULT: "HTW0314450_fin"

3/14/2013 3:39PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
237.580000	35.80	-16.0	46.0	10.2	QP	100.0	89.00	HORIZONTAL
278.320000	37.10	-14.9	46.0	8.9	QP	100.0	75.00	HORIZONTAL
346.220000	35.80	-13.7	46.0	10.2	QP	100.0	283.00	HORIZONTAL
379.200000	35.50	-13.3	46.0	10.5	QP	100.0	214.00	HORIZONTAL
406.360000	36.00	-12.0	46.0	10.0	QP	100.0	289.00	HORIZONTAL
474.260000	36.90	-10.6	46.0	9.1	QP	100.0	331.00	HORIZONTAL

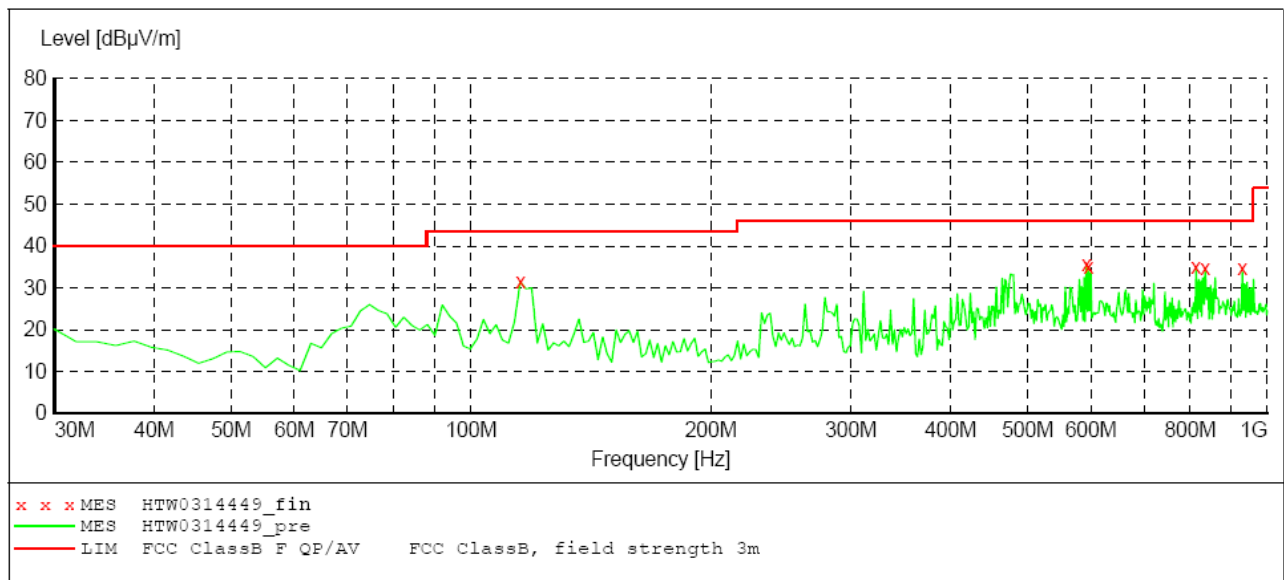
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: ADF COPY
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 3:30:29PM

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

Short Description:		Field Strength(30M-1G)				
Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	60.0 kHz	MaxPeak	1.0 ms	120 kHz	HL562 201106



MEASUREMENT RESULT: "HTW0314449_fin"

3/14/2013 3:36PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
115.360000	31.40	-16.5	43.5	12.1	QP	100.0	142.00	VERTICAL
592.600000	35.60	-9.7	46.0	10.4	QP	100.0	282.00	VERTICAL
596.480000	35.10	-9.5	46.0	10.9	QP	100.0	276.00	VERTICAL
813.760000	35.10	-4.6	46.0	10.9	QP	100.0	282.00	VERTICAL
835.100000	34.70	-4.4	46.0	11.3	QP	100.0	297.00	VERTICAL
930.160000	34.60	-3.8	46.0	11.4	QP	100.0	142.00	VERTICAL

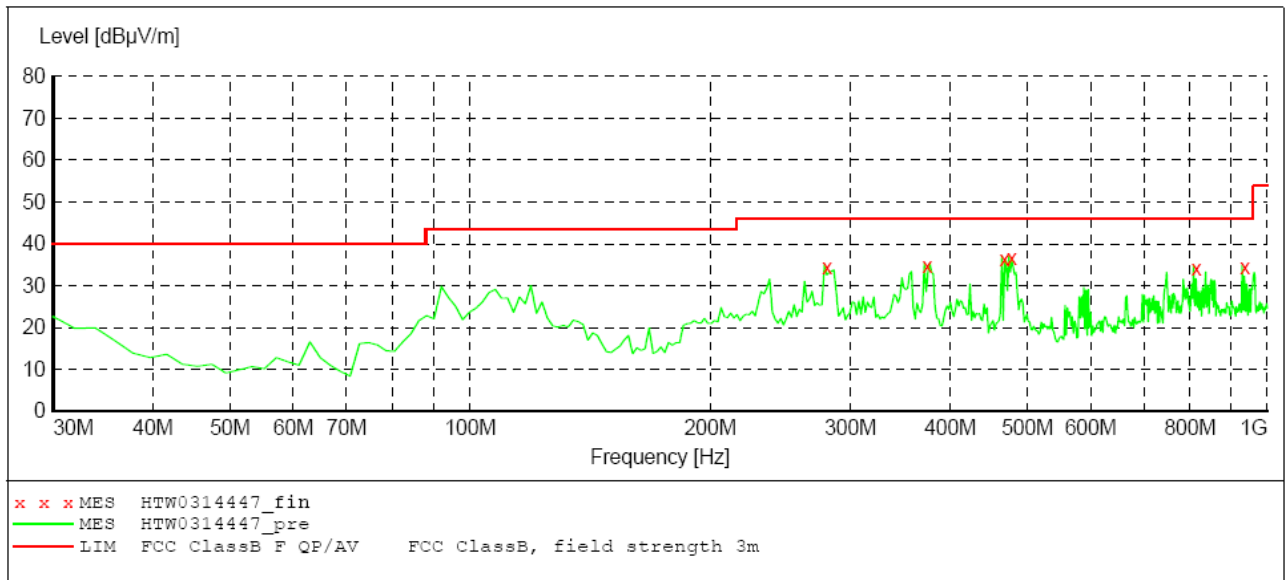
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: SCAN
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 3:18:02PM

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

Short Description:		Field Strength(30M-1G)				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
30.0 MHz	1.0 GHz	60.0 kHz	MaxPeak	1.0 ms	120 kHz	HL562 201106



MEASUREMENT RESULT: "HTW0314447_fin"

3/14/2013 3:30PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
278.320000	35.00	-14.9	46.0	11.0	QP	100.0	98.00	HORIZONTAL
371.440000	35.40	-13.9	46.0	10.6	QP	100.0	289.00	HORIZONTAL
464.560000	37.10	-10.8	46.0	8.9	QP	100.0	315.00	HORIZONTAL
474.260000	37.20	-10.6	46.0	8.8	QP	100.0	315.00	HORIZONTAL
807.940000	34.80	-4.8	46.0	11.2	QP	100.0	193.00	HORIZONTAL
930.160000	34.90	-3.8	46.0	11.1	QP	100.0	238.00	HORIZONTAL

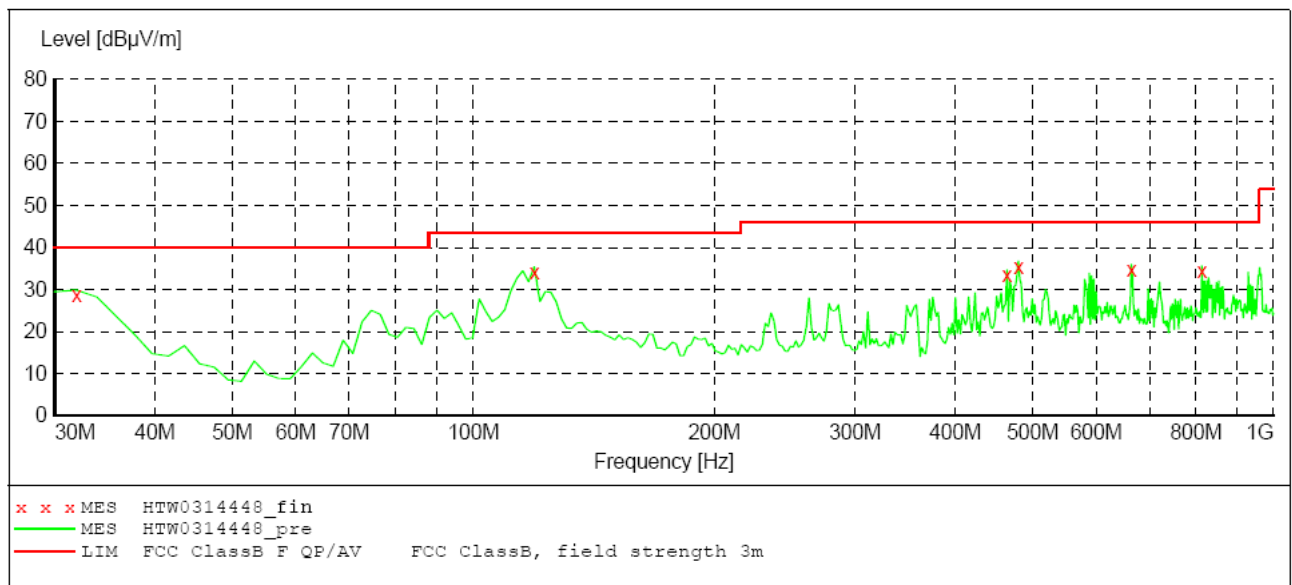
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: SCAN
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 3:10:17PM

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

Short Description:		Field Strength(30M-1G)					
Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer	
30.0 MHz	1.0 GHz	60.0 kHz	MaxPeak	1.0 ms	120 kHz	HL562 201106	



MEASUREMENT RESULT: "HTW0314448_fin"

3/14/2013 3:31PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
31.940000	29.80	-8.9	40.0	10.2	QP	100.0	143.00	VERTICAL
119.240000	35.40	-16.3	43.5	8.1	QP	100.0	188.00	VERTICAL
464.560000	34.70	-10.8	46.0	11.3	QP	100.0	281.00	VERTICAL
480.080000	36.80	-10.5	46.0	9.2	QP	100.0	158.00	VERTICAL
664.380000	36.00	-6.6	46.0	10.0	QP	100.0	188.00	VERTICAL
813.760000	35.60	-4.6	46.0	10.4	QP	100.0	290.00	VERTICAL

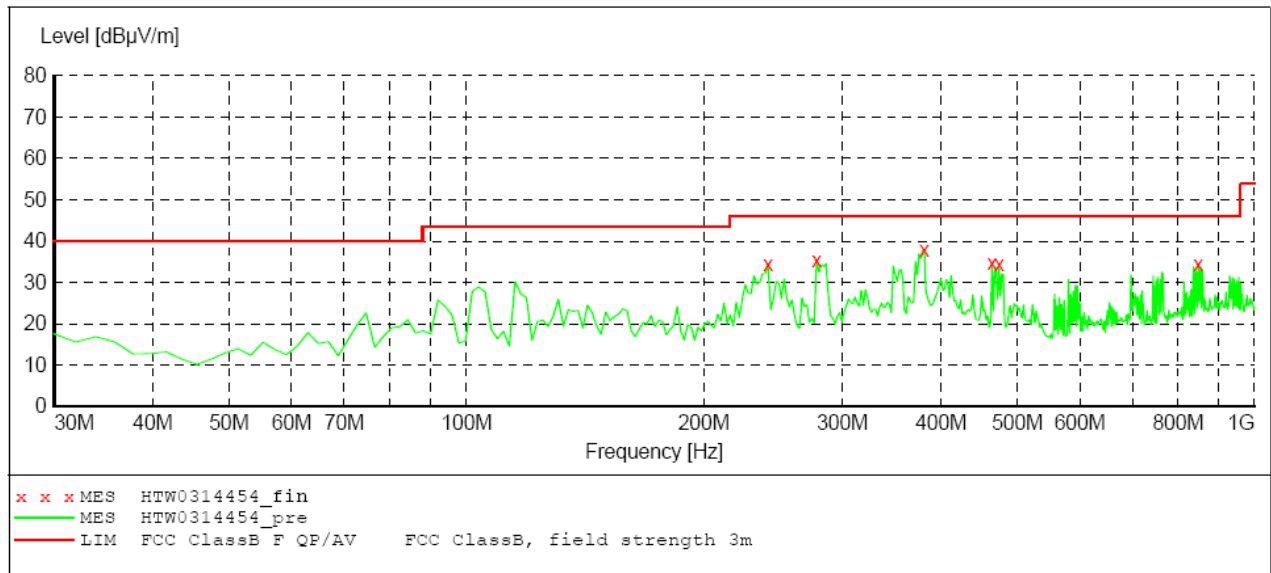
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: FAX TX
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 4:04:06PM

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

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 MaxPeak 1.0 ms 120 kHz HL562 201106



MEASUREMENT RESULT: "HTW0314454_fin"

3/14/2013 4:16PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
241.460000	34.30	-15.8	46.0	11.7	QP	300.0	61.00	HORIZONTAL
278.320000	35.40	-14.9	46.0	10.6	QP	100.0	143.00	HORIZONTAL
381.140000	37.90	-13.1	46.0	8.1	QP	100.0	84.00	HORIZONTAL
464.560000	34.70	-10.8	46.0	11.3	QP	100.0	333.00	HORIZONTAL
474.260000	34.20	-10.6	46.0	11.8	QP	100.0	333.00	HORIZONTAL
848.680000	34.20	-4.1	46.0	11.8	QP	100.0	134.00	HORIZONTAL

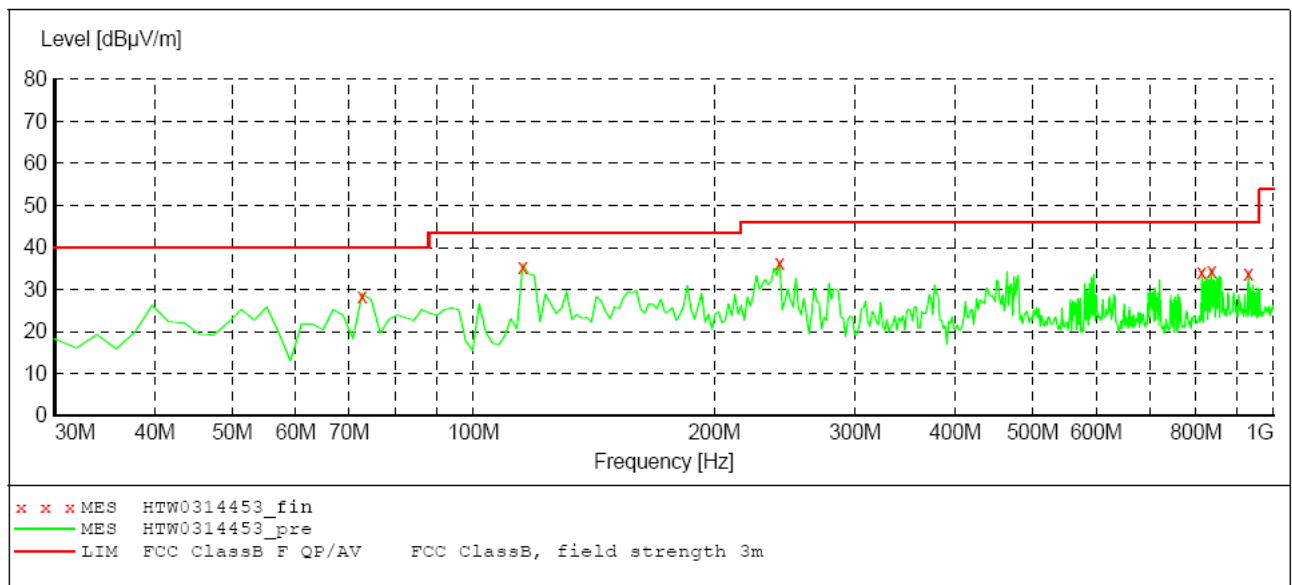
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: FAX TX
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 4:01:19PM

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

Short Description: Field Strength
 Unit: dBµV/m
 Detector: Mode:



MEASUREMENT RESULT: "HTW0314453_fin"

3/14/2013 4:12PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
72.680000	29.00	-19.9	40.0	11.0	QP	100.0	245.00	VERTICAL
115.360000	36.00	-16.5	43.5	7.5	QP	100.0	83.00	VERTICAL
241.460000	36.80	-15.8	46.0	9.2	QP	100.0	302.00	VERTICAL
813.760000	34.70	-4.6	46.0	11.3	QP	100.0	281.00	VERTICAL
837.040000	35.00	-4.4	46.0	11.0	QP	100.0	239.00	VERTICAL
930.160000	34.40	-3.8	46.0	11.6	QP	100.0	83.00	VERTICAL

SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: FAX RX
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 3:44:25PM

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

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	MaxPeak	1.0 ms	120 kHz	HL562 201106



MEASUREMENT RESULT: "HTW0314451_fin"

3/14/2013 3:56PM

Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBµV/m	dB	dBµV/m	dB		cm	deg	
101.780000	35.30	-16.7	43.5	8.2	QP	300.0	306.00	HORIZONTAL
237.580000	35.10	-16.0	46.0	10.9	QP	100.0	134.00	HORIZONTAL
348.160000	34.20	-13.8	46.0	11.8	QP	100.0	78.00	HORIZONTAL
377.260000	34.30	-13.4	46.0	11.7	QP	100.0	206.00	HORIZONTAL
474.260000	34.80	-10.6	46.0	11.2	QP	100.0	322.00	HORIZONTAL
854.500000	34.80	-4.2	46.0	11.2	QP	100.0	114.00	HORIZONTAL

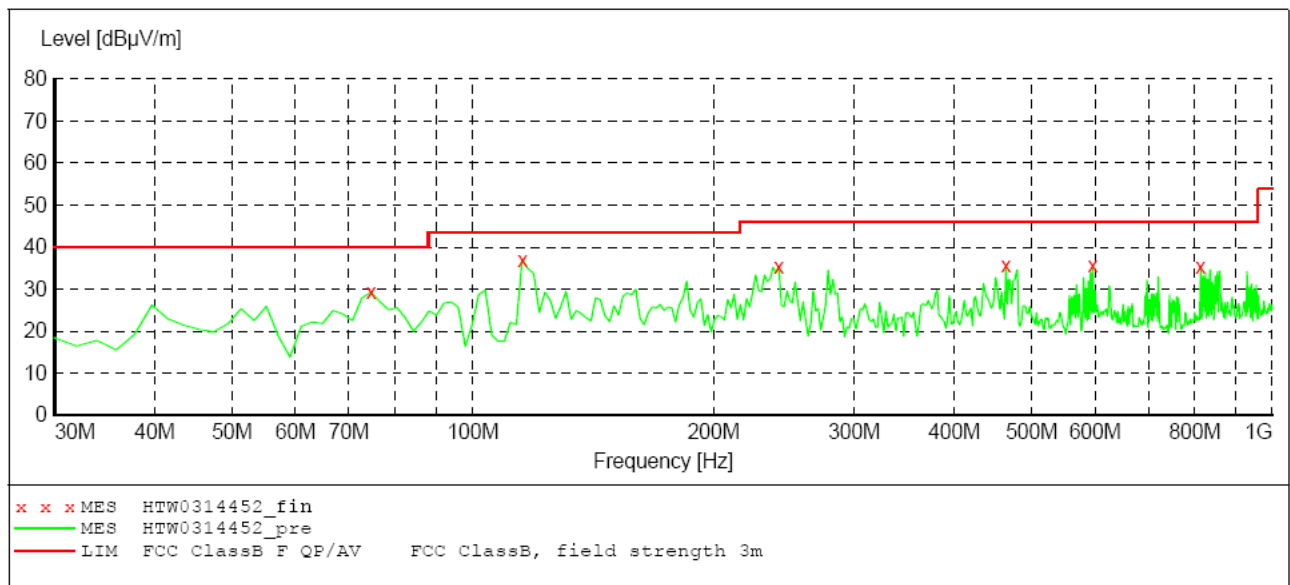
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: FAX RX
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 3:36:51PM

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

Short Description:		Field Strength(30M-1G)				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
30.0 MHz	1.0 GHz	60.0 kHz	MaxPeak	1.0 ms	120 kHz	HL562 201106



MEASUREMENT RESULT: "HTW0314452_fin"

3/14/2013 3:58PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
74.620000	29.20	-19.5	40.0	10.8	QP	100.0	306.00	VERTICAL
115.360000	37.10	-16.5	43.5	6.4	QP	100.0	75.00	VERTICAL
241.460000	35.40	-15.8	46.0	10.6	QP	100.0	306.00	VERTICAL
464.560000	35.80	-10.8	46.0	10.2	QP	100.0	277.00	VERTICAL
596.480000	35.60	-9.5	46.0	10.4	QP	100.0	283.00	VERTICAL
813.760000	35.20	-4.6	46.0	10.8	QP	100.0	297.00	VERTICAL

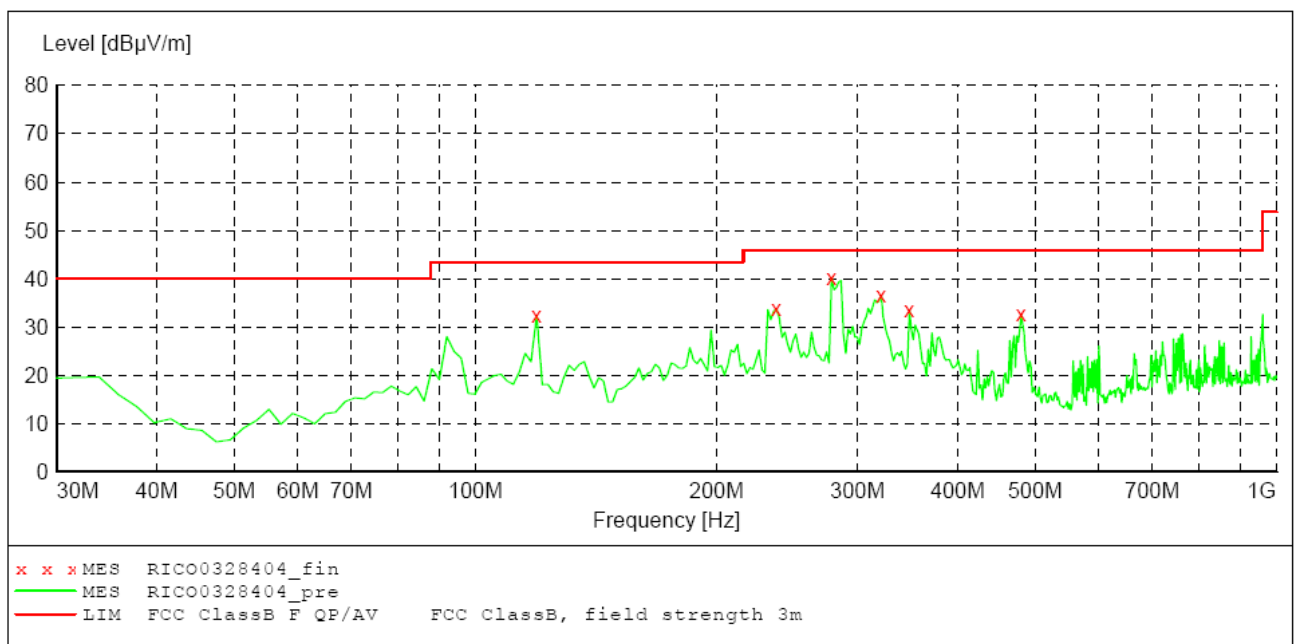
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: Print
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 09:53:15AM

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

Short Description:		Field Strength(30M-1G)				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
30.0 MHz	1.0 GHz	60.0 kHz	QuasiPeak	1.0 s	120 kHz	HL562 201106



MEASUREMENT RESULT: "RICO0328404_fin"

3/28/2013 10:05AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
119.240000	32.50	-19.9	43.5	11.0	QP	300.0	208.00	HORIZONTAL
237.580000	33.80	-19.9	46.0	12.2	QP	100.0	137.00	HORIZONTAL
278.320000	40.30	-18.9	46.0	5.7	QP	100.0	169.00	HORIZONTAL
321.000000	36.50	-17.2	46.0	9.5	QP	100.0	292.00	HORIZONTAL
348.160000	33.60	-17.6	46.0	12.4	QP	100.0	48.00	HORIZONTAL
480.080000	32.70	-14.9	46.0	13.3	QP	100.0	292.00	HORIZONTAL

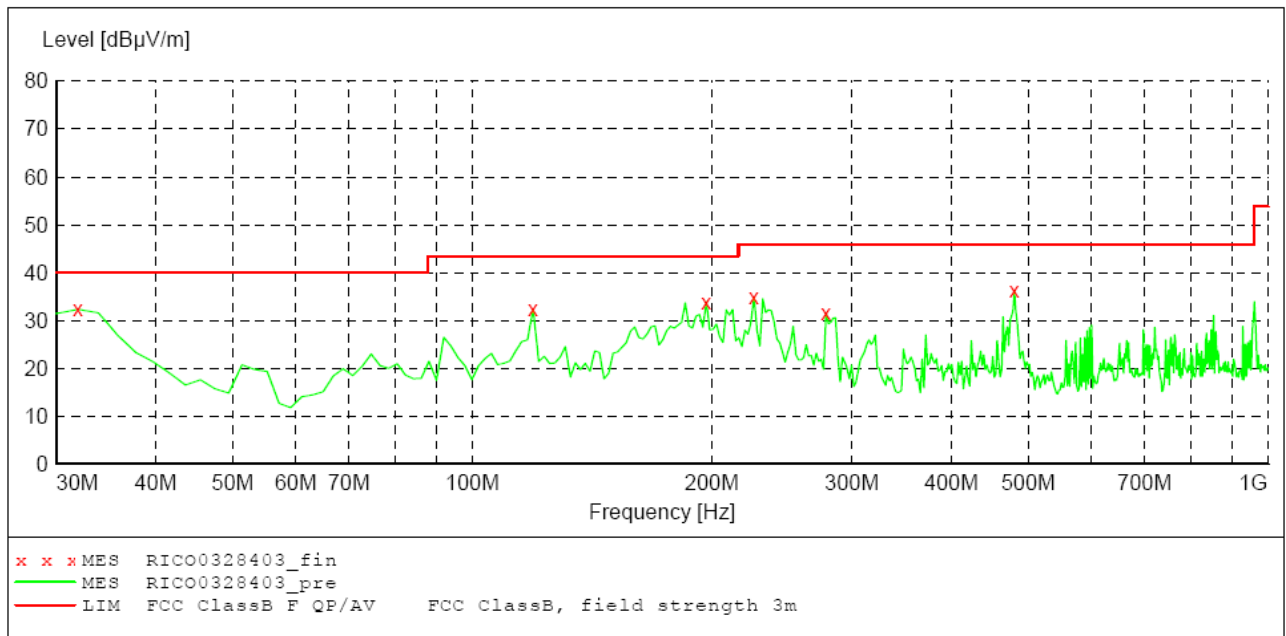
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: Print
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 09:01:24AM

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

Short Description:		Field Strength(30M-1G)				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
30.0 MHz	1.0 GHz	60.0 kHz	QuasiPeak	1.0 s	120 kHz	HL562 201106



MEASUREMENT RESULT: "RICO0328403_fin"

3/28/2013 09:22AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
31.940000	32.30	-12.6	40.0	7.7	QP	100.0	139.00	VERTICAL
119.240000	32.50	-19.9	43.5	11.0	QP	100.0	261.00	VERTICAL
196.840000	33.90	-22.4	43.5	9.6	QP	100.0	139.00	VERTICAL
225.940000	35.00	-20.9	46.0	11.0	QP	100.0	294.00	VERTICAL
278.320000	31.70	-18.9	46.0	14.3	QP	100.0	125.00	VERTICAL
480.080000	36.40	-14.9	46.0	9.6	QP	100.0	172.00	VERTICAL

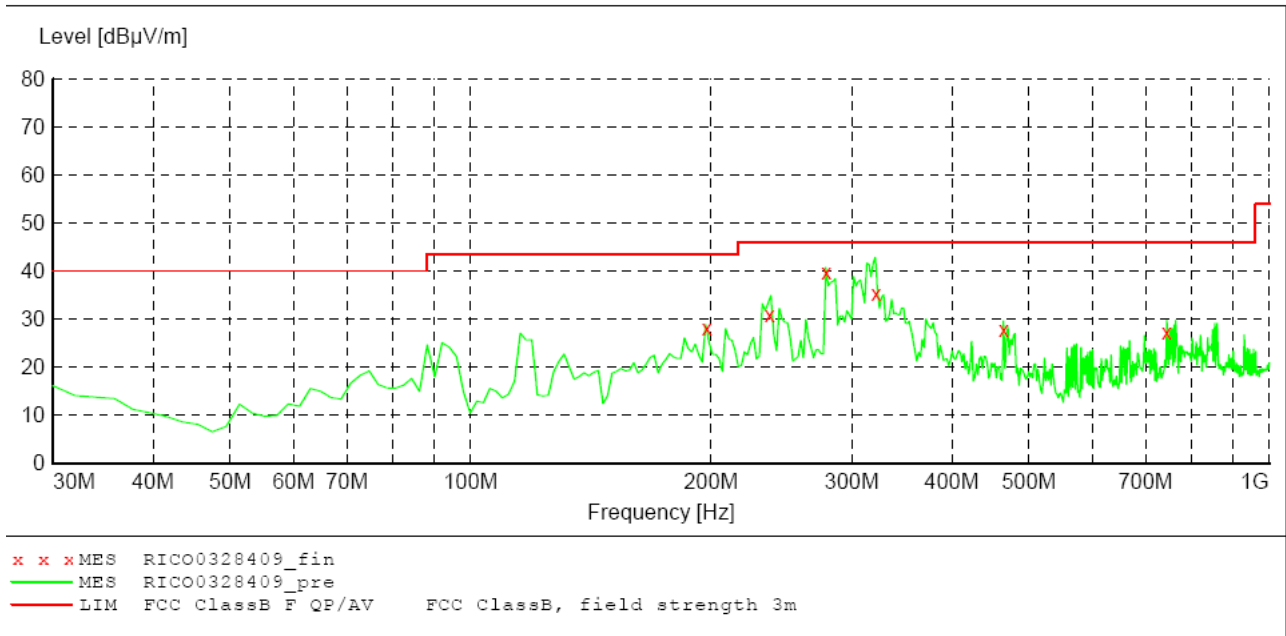
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO., LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: ADF COPY
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 10:16:24AM

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 201106



MEASUREMENT RESULT: "RICO0328409_fin"

3/28/2013 10:33AM

Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
197.580000	28.10	-21.9	43.5	15.4	QP	150.0	191.00	HORIZONTAL
236.940000	30.70	-19.5	46.0	15.3	QP	100.0	283.00	HORIZONTAL
278.940000	39.60	-18.5	46.0	6.4	QP	100.0	175.00	HORIZONTAL
321.960000	35.30	-16.8	46.0	10.7	QP	100.0	145.00	HORIZONTAL
464.940000	27.80	-14.6	46.0	18.2	QP	100.0	161.00	HORIZONTAL
743.940000	27.30	-10.5	46.0	18.7	QP	100.0	191.00	HORIZONTAL

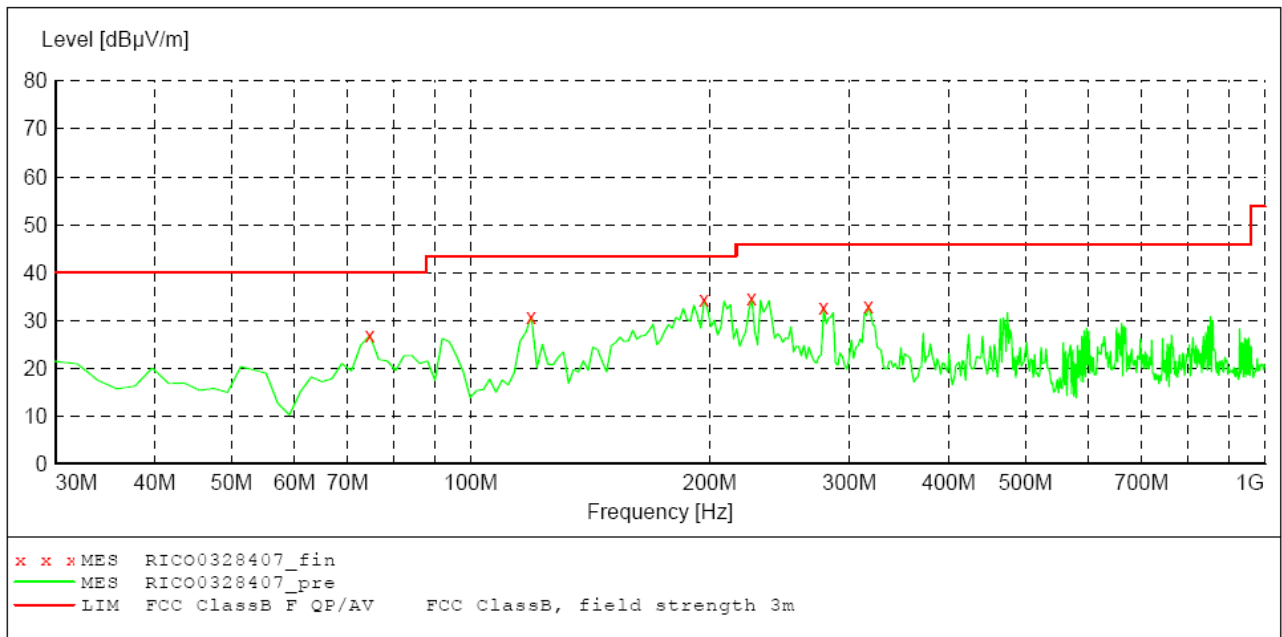
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: ADF COPY
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 10:15:21AM

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

Short Description:		Field Strength(30M-1G)				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
30.0 MHz	1.0 GHz	60.0 kHz	QuasiPeak	1.0 s	120 kHz	HL562 201106



MEASUREMENT RESULT: "RICO0328407_fin"

3/28/2013 10:16AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
74.620000	26.90	-22.8	40.0	13.1	QP	100.0	277.00	VERTICAL
119.240000	30.80	-19.9	43.5	12.7	QP	100.0	294.00	VERTICAL
196.840000	34.40	-22.4	43.5	9.1	QP	100.0	135.00	VERTICAL
225.940000	34.60	-20.9	46.0	11.4	QP	100.0	327.00	VERTICAL
278.320000	32.60	-18.9	46.0	13.4	QP	100.0	118.00	VERTICAL
317.120000	33.10	-17.3	46.0	12.9	QP	100.0	216.00	VERTICAL

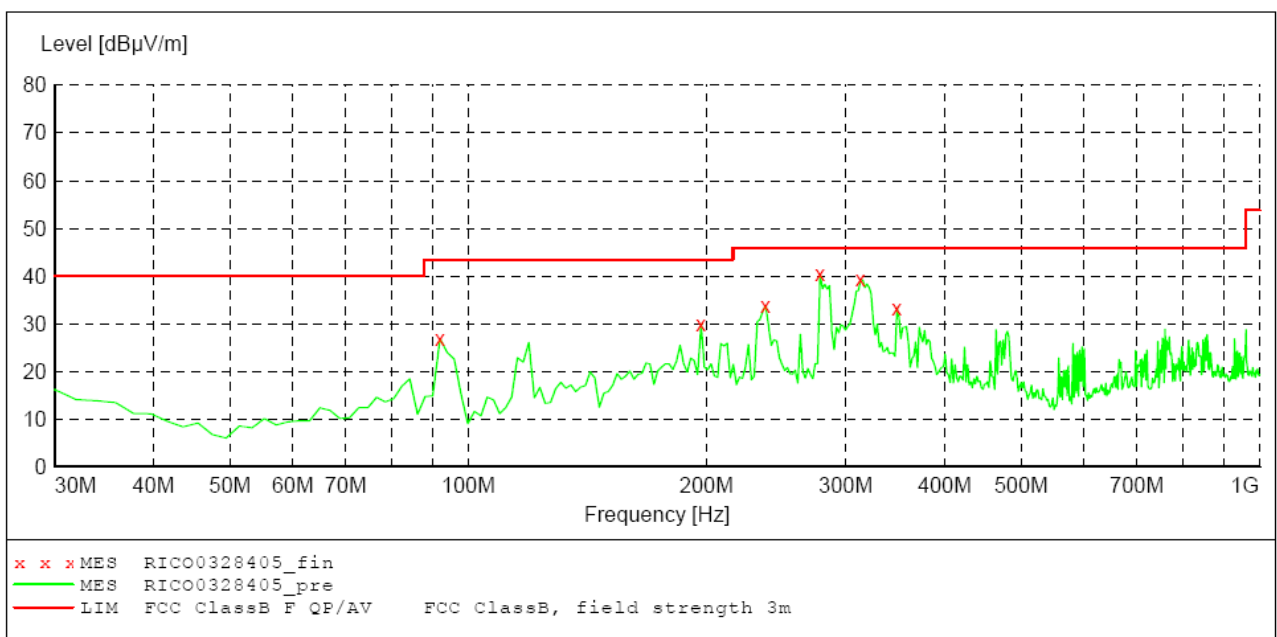
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: SCAN
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 10:08:56AM

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

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 201106



MEASUREMENT RESULT: "RICO0328405_fin"

3/28/2013 10:20AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
92.080000	26.90	-20.6	43.5	16.6	QP	300.0	253.00	HORIZONTAL
196.840000	30.00	-22.4	43.5	13.5	QP	100.0	294.00	HORIZONTAL
237.580000	33.90	-19.9	46.0	12.1	QP	100.0	119.00	HORIZONTAL
278.320000	40.40	-18.9	46.0	5.6	QP	100.0	195.00	HORIZONTAL
313.240000	39.30	-17.3	46.0	6.7	QP	100.0	294.00	HORIZONTAL
348.160000	33.40	-17.6	46.0	12.6	QP	100.0	48.00	HORIZONTAL

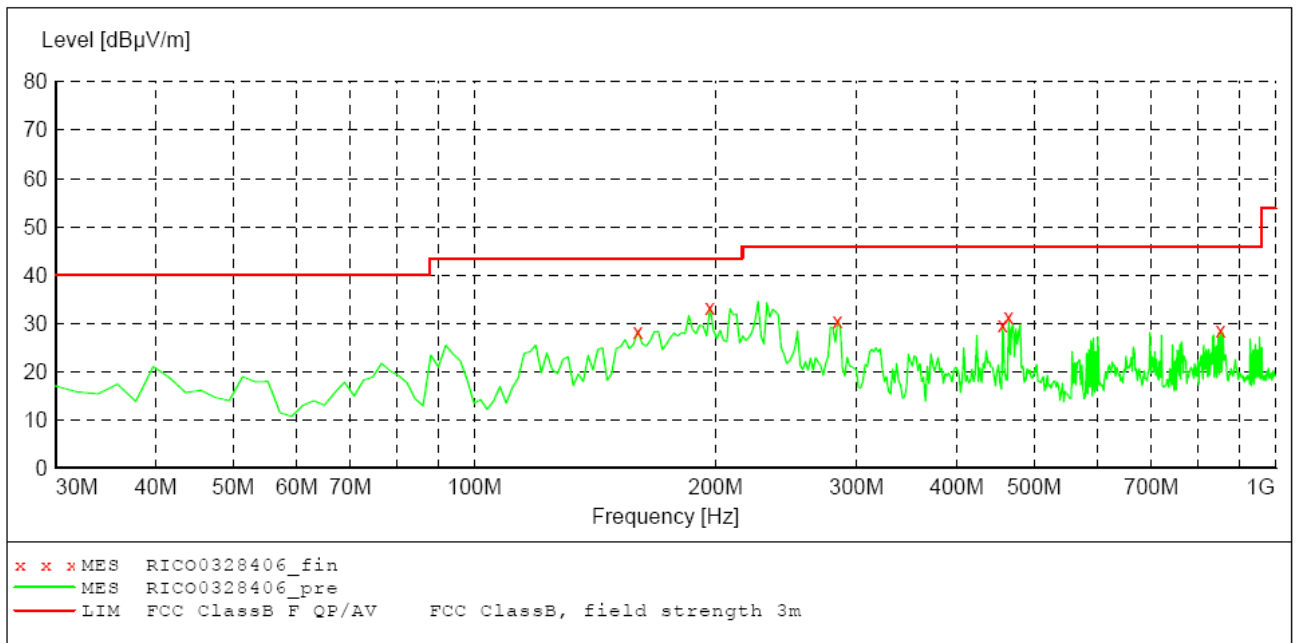
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: SCAN
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 10:00:29AM

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

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 201106



MEASUREMENT RESULT: "RICO0328406_fin"

3/28/2013 10:13AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
159.980000	28.40	-23.6	43.5	15.1	QP	100.0	251.00	VERTICAL
196.840000	33.40	-22.4	43.5	10.1	QP	100.0	135.00	VERTICAL
284.140000	30.60	-18.9	46.0	15.4	QP	100.0	122.00	VERTICAL
456.800000	29.60	-15.4	46.0	16.4	QP	100.0	167.00	VERTICAL
464.560000	31.30	-15.2	46.0	14.7	QP	100.0	305.00	VERTICAL
854.500000	28.50	-9.3	46.0	17.5	QP	100.0	234.00	VERTICAL

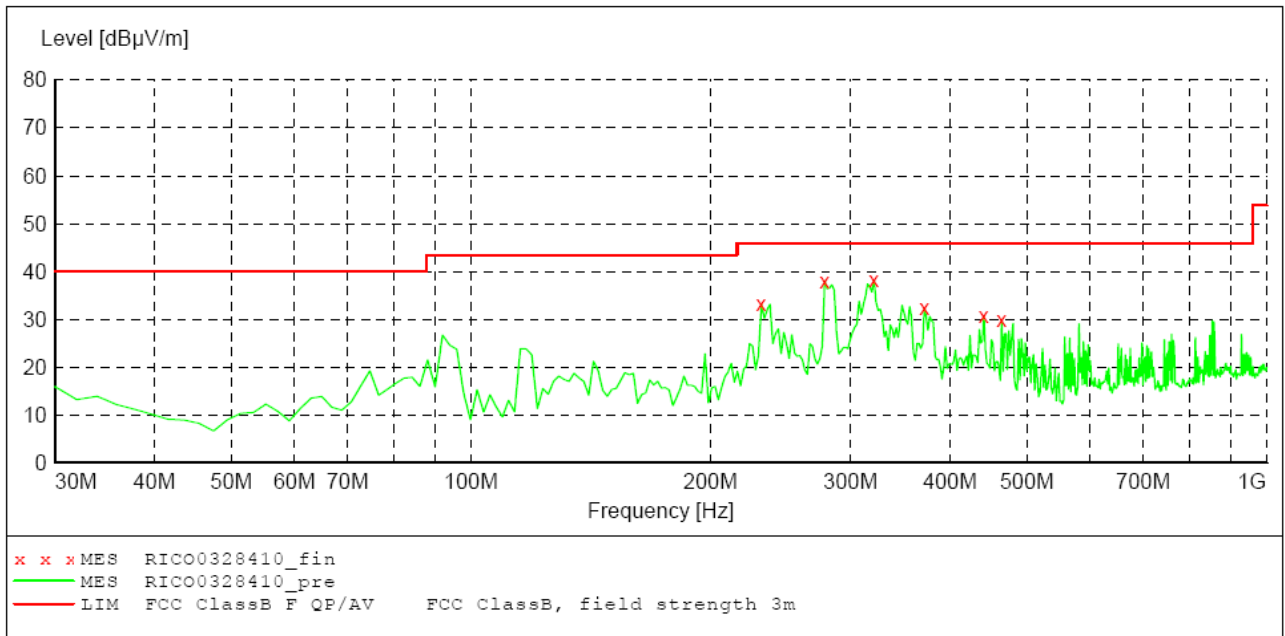
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX TX
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 10:19:21AM

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

Short Description:		Field Strength(30M-1G)					
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer	
Frequency	Frequency	Width					
30.0 MHz	1.0 GHz	60.0 kHz	QuasiPeak	1.0 s	120 kHz	HL562 201106	



MEASUREMENT RESULT: "RICO0328410_fin"

3/28/2013 10:41AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
231.760000	33.30	-20.3	46.0	12.7	QP	100.0	89.00	HORIZONTAL
278.320000	38.10	-18.9	46.0	7.9	QP	100.0	197.00	HORIZONTAL
321.000000	38.20	-17.2	46.0	7.8	QP	100.0	271.00	HORIZONTAL
371.440000	32.30	-18.0	46.0	13.7	QP	100.0	78.00	HORIZONTAL
441.280000	30.80	-16.2	46.0	15.2	QP	100.0	310.00	HORIZONTAL
464.560000	30.00	-15.2	46.0	16.0	QP	100.0	310.00	HORIZONTAL

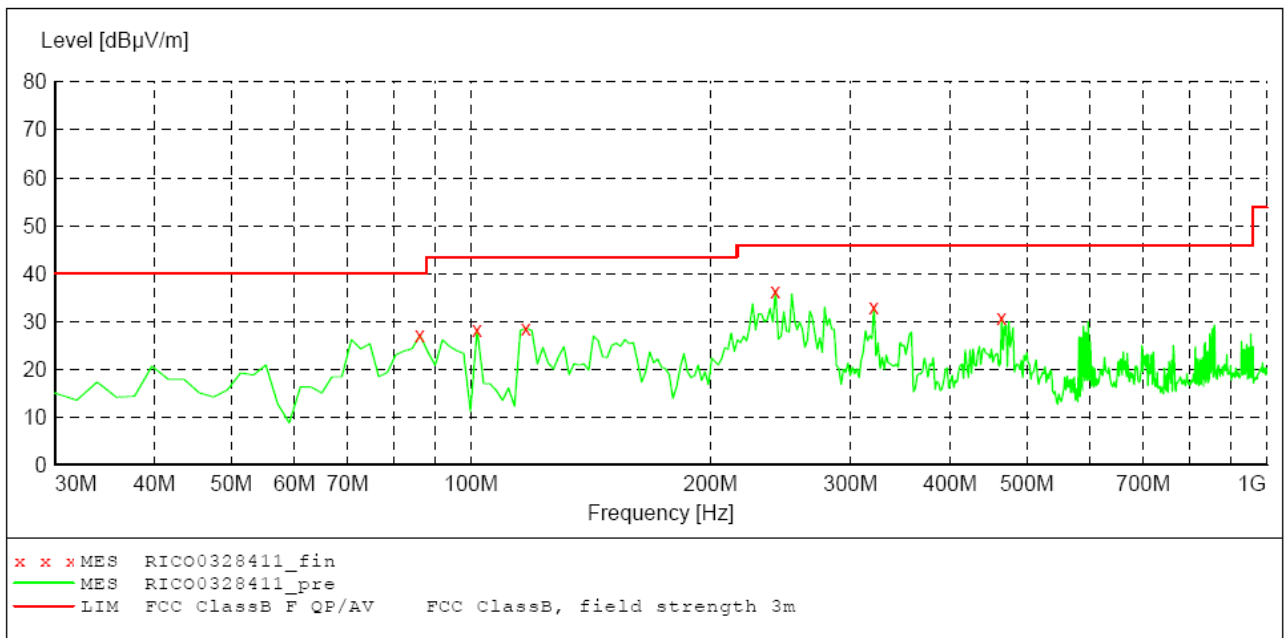
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX TX
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 10:41:48AM

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 201106



MEASUREMENT RESULT: "RICO0328411_fin"

3/28/2013 11:13AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
86.260000	27.10	-21.3	40.0	12.9	QP	100.0	225.00	VERTICAL
101.780000	28.40	-20.3	43.5	15.1	QP	100.0	89.00	VERTICAL
117.300000	28.60	-20.0	43.5	14.9	QP	100.0	101.00	VERTICAL
241.460000	36.40	-19.7	46.0	9.6	QP	100.0	297.00	VERTICAL
321.000000	33.10	-17.2	46.0	12.9	QP	100.0	161.00	VERTICAL
464.560000	30.90	-15.2	46.0	15.1	QP	100.0	44.00	VERTICAL

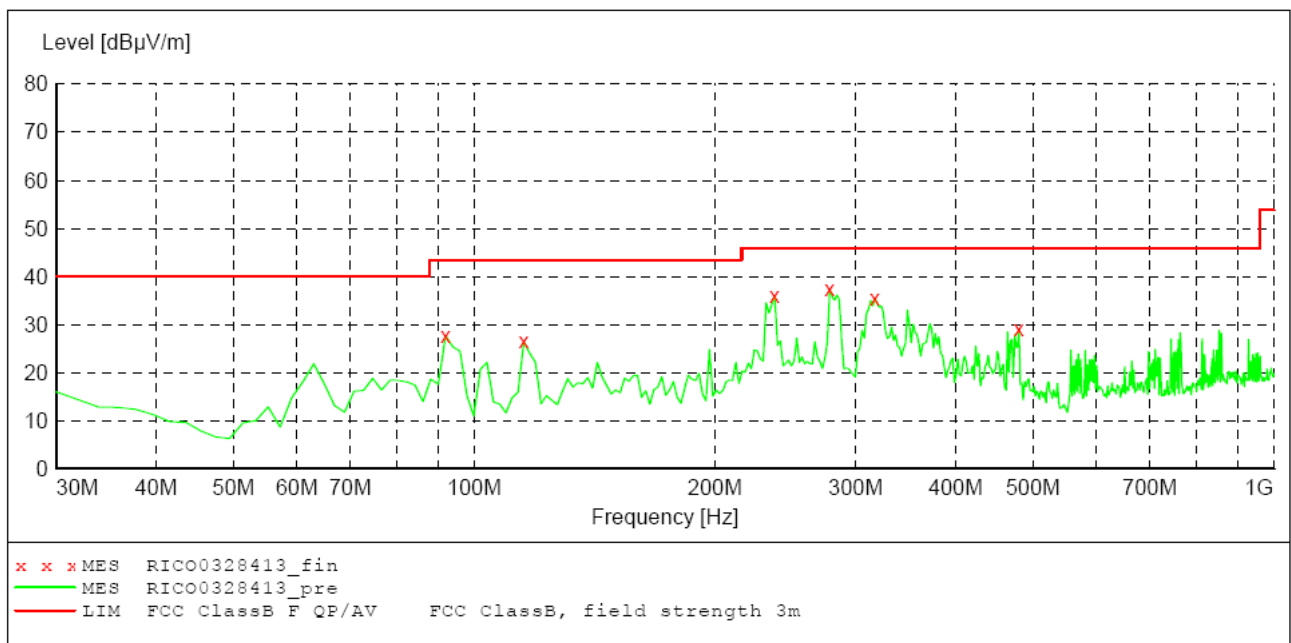
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX RX
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 10:40:41AM

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

Short Description:		Field Strength(30M-1G)				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
30.0 MHz	1.0 GHz	60.0 kHz	QuasiPeak	1.0 s	120 kHz	HL562 201106



MEASUREMENT RESULT: "RICO0328413_fin"

3/28/2013 10:56AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
92.080000	27.70	-20.6	43.5	15.8	QP	300.0	80.00	HORIZONTAL
115.360000	26.50	-20.1	43.5	17.0	QP	300.0	181.00	HORIZONTAL
237.580000	36.00	-19.9	46.0	10.0	QP	100.0	91.00	HORIZONTAL
278.320000	37.30	-18.9	46.0	8.7	QP	100.0	175.00	HORIZONTAL
317.120000	35.50	-17.3	46.0	10.5	QP	100.0	294.00	HORIZONTAL
480.080000	29.20	-14.9	46.0	16.8	QP	100.0	136.00	HORIZONTAL

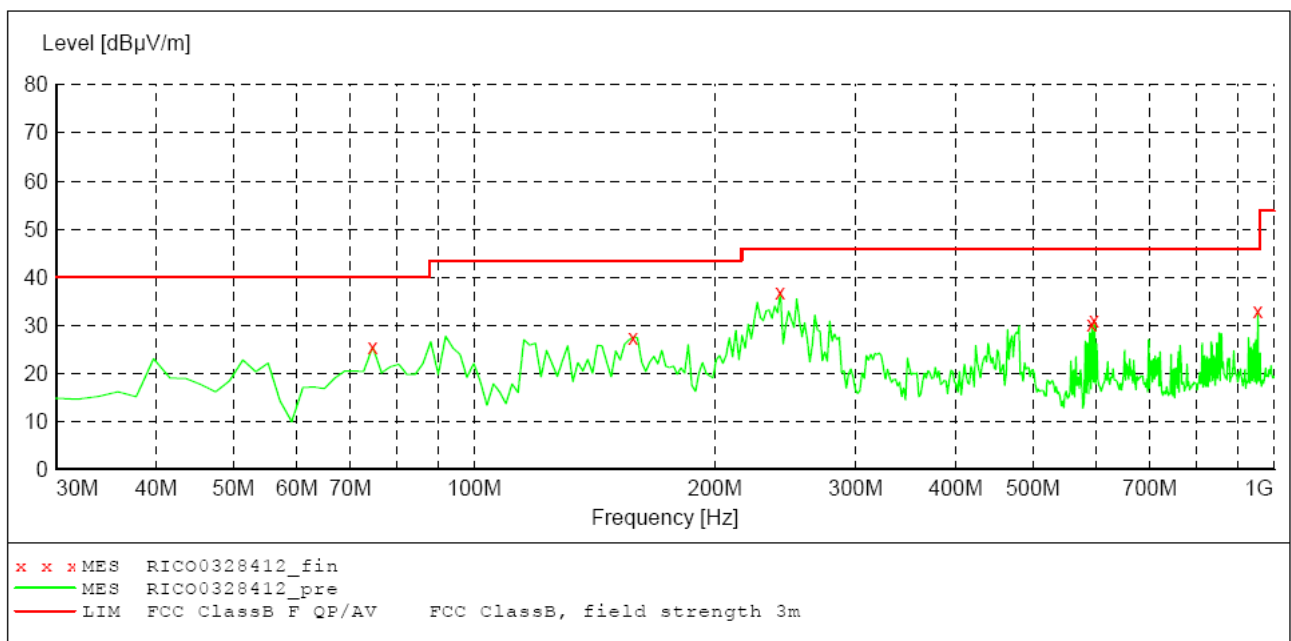
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX RX
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 11:05:51AM

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

Short Description:		Field Strength(30M-1G)				
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
30.0 MHz	1.0 GHz	60.0 kHz	QuasiPeak	1.0 s	120 kHz	HL562 201106



MEASUREMENT RESULT: "RICO0328412_fin"

3/28/2013 11:27AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
74.620000	25.50	-22.8	40.0	14.5	QP	100.0	92.00	VERTICAL
158.040000	27.60	-23.5	43.5	15.9	QP	100.0	235.00	VERTICAL
241.460000	36.90	-19.7	46.0	9.1	QP	100.0	324.00	VERTICAL
592.600000	30.30	-14.3	46.0	15.7	QP	100.0	277.00	VERTICAL
596.480000	31.00	-14.1	46.0	15.0	QP	100.0	277.00	VERTICAL
955.380000	32.90	-9.0	46.0	13.1	QP	100.0	53.00	VERTICAL

Above 1G

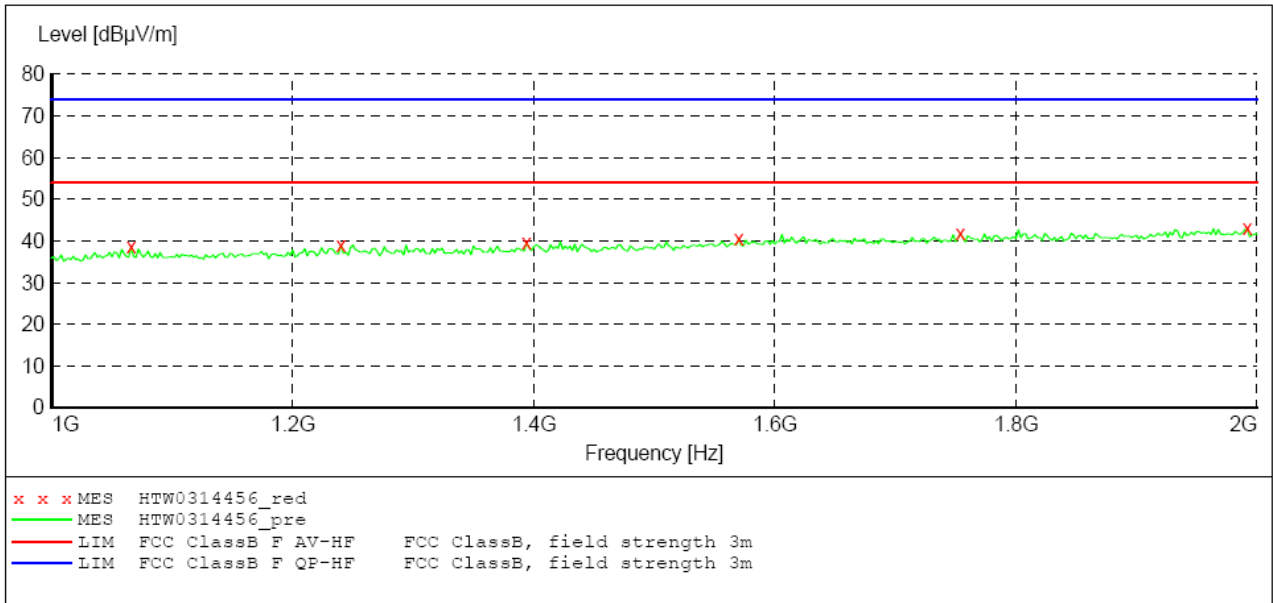
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: STANDBY
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 4:31:50PM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0314456_red"

3/14/2013 4:33PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1066.000000	38.60	-0.1	54.0	15.4	PK	100.0	174.00	HORIZONTAL
1240.000000	39.10	1.1	54.0	14.9	PK	100.0	156.00	HORIZONTAL
1394.000000	39.60	2.0	54.0	14.4	PK	100.0	239.00	HORIZONTAL
1570.000000	40.50	3.2	54.0	13.5	PK	100.0	267.00	HORIZONTAL
1754.000000	41.80	4.6	54.0	12.2	PK	100.0	267.00	HORIZONTAL
1992.000000	43.00	6.2	54.0	11.0	PK	100.0	46.00	HORIZONTAL

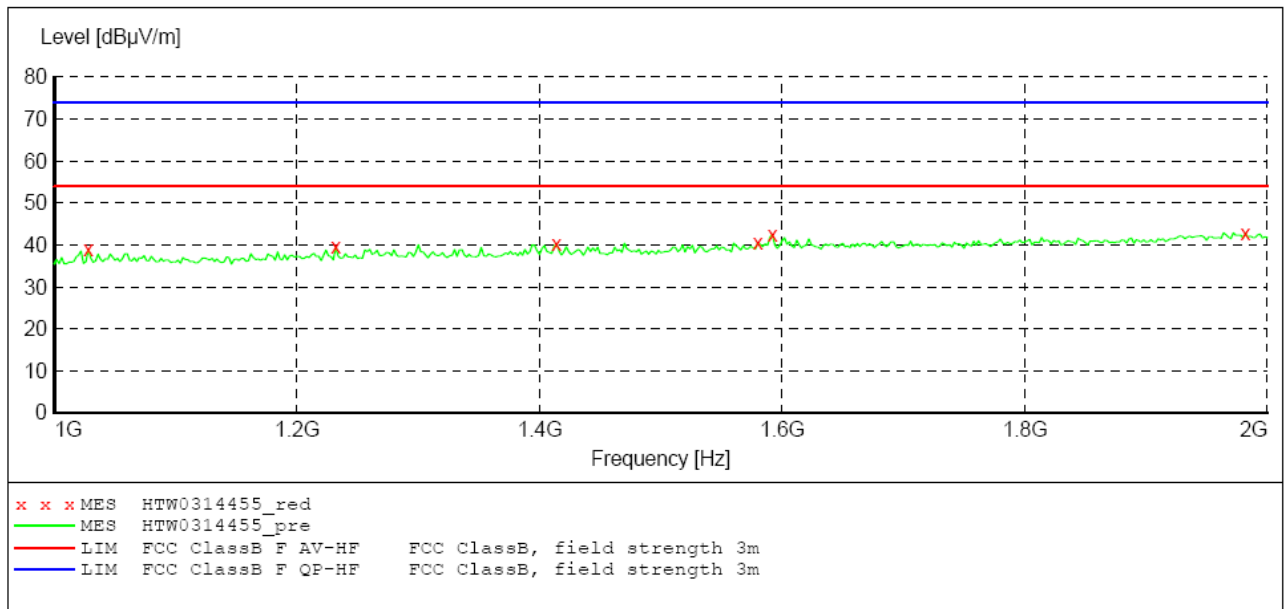
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: STANDBY
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 4:30:05PM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency				
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0314455_red"

3/14/2013 4:31PM

Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1028.000000	39.00	-0.4	54.0	15.0	PK	100.0	191.00	VERTICAL
1232.000000	39.60	1.0	54.0	14.4	PK	100.0	116.00	VERTICAL
1414.000000	40.40	2.1	54.0	13.6	PK	100.0	116.00	VERTICAL
1580.000000	40.70	3.2	54.0	13.3	PK	100.0	149.00	VERTICAL
1592.000000	42.60	3.3	54.0	11.4	PK	100.0	104.00	VERTICAL
1982.000000	42.90	6.1	54.0	11.1	PK	100.0	0.00	VERTICAL

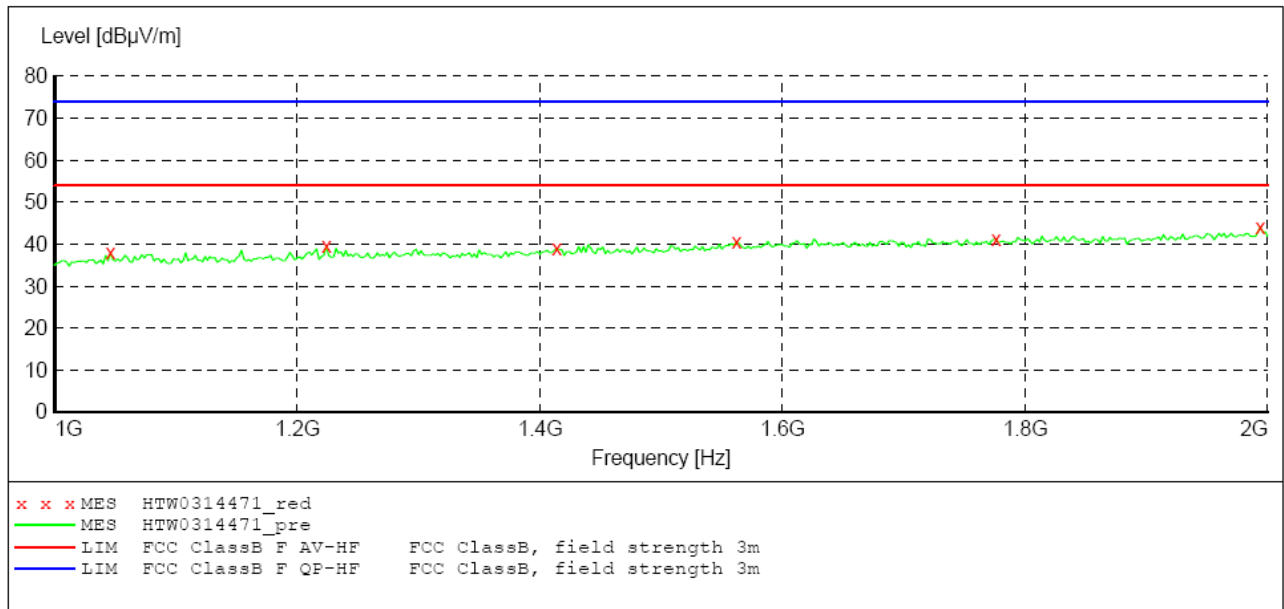
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: PRINT
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 5:16:05PM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0314471_red"

3/14/2013 5:17PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1046.000000	38.00	-0.3	54.0	16.0	PK	100.0	179.00	HORIZONTAL
1224.000000	39.60	1.0	54.0	14.4	PK	100.0	224.00	HORIZONTAL
1414.000000	39.00	2.1	54.0	15.0	PK	100.0	197.00	HORIZONTAL
1562.000000	40.70	3.1	54.0	13.3	PK	100.0	14.00	HORIZONTAL
1776.000000	41.30	4.7	54.0	12.7	PK	100.0	14.00	HORIZONTAL
1994.000000	44.20	6.2	54.0	9.8	PK	100.0	287.00	HORIZONTAL

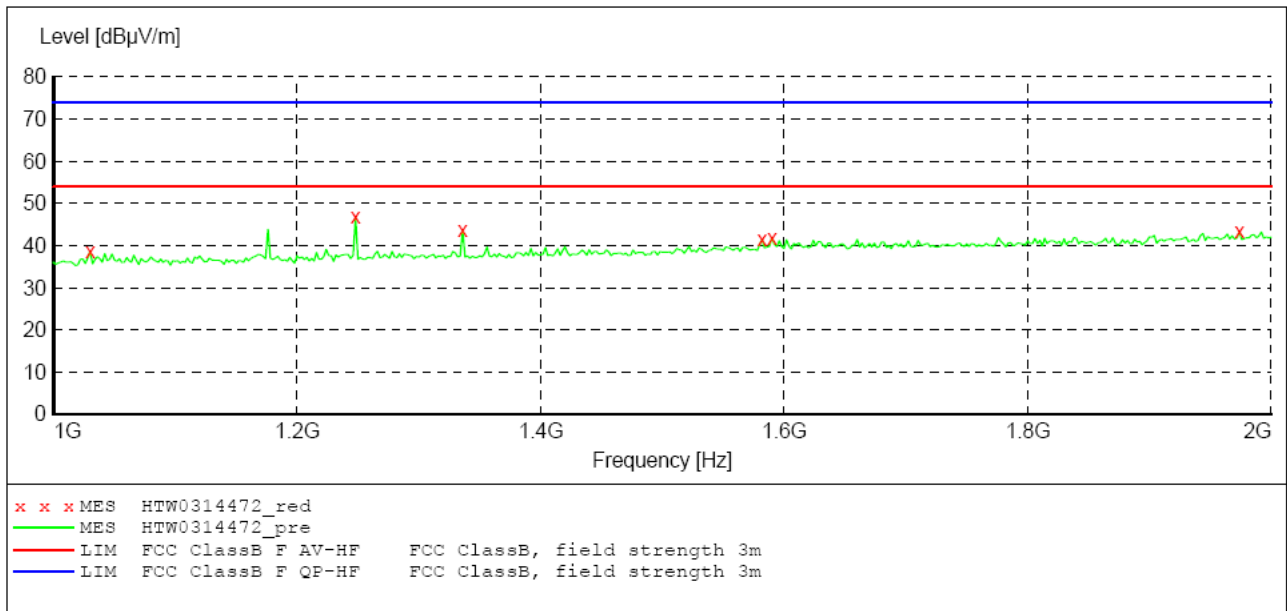
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: PRINT
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 5:21:26PM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency				
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0314472_red"

3/14/2013 5:22PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1030.000000	38.60	-0.4	54.0	15.4	PK	100.0	268.00	VERTICAL
1248.000000	46.90	1.1	54.0	7.1	PK	100.0	328.00	VERTICAL
1336.000000	43.60	1.7	54.0	10.4	PK	100.0	83.00	VERTICAL
1582.000000	41.50	3.3	54.0	12.5	PK	100.0	154.00	VERTICAL
1590.000000	41.90	3.3	54.0	12.1	PK	100.0	161.00	VERTICAL
1974.000000	43.30	6.0	54.0	10.7	PK	100.0	5.00	VERTICAL

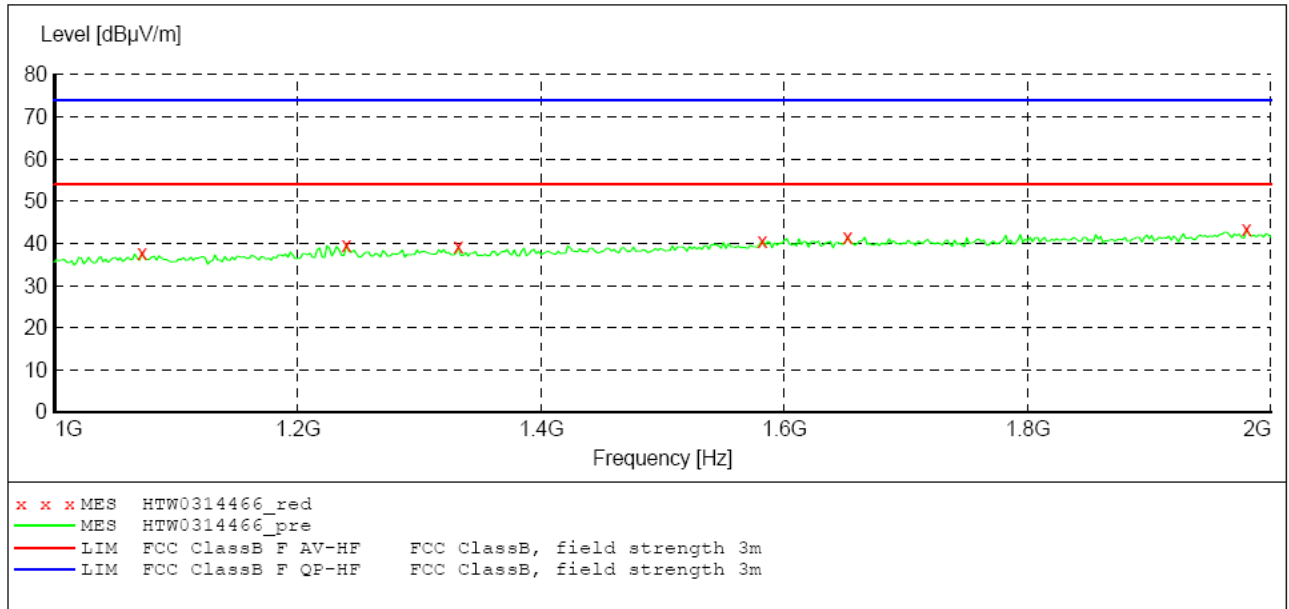
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO., LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: ADF COPY
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 5:01:56PM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0314466_red"

3/14/2013 5:03PM

Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBµV/m	dB	dBµV/m	dB		cm	deg	
1072.000000	37.90	-0.1	54.0	16.1	PK	100.0	174.00	HORIZONTAL
1240.000000	39.70	1.1	54.0	14.3	PK	100.0	150.00	HORIZONTAL
1332.000000	39.20	1.6	54.0	14.8	PK	100.0	156.00	HORIZONTAL
1582.000000	40.70	3.3	54.0	13.3	PK	100.0	132.00	HORIZONTAL
1652.000000	41.60	3.8	54.0	12.4	PK	100.0	156.00	HORIZONTAL
1980.000000	43.40	6.1	54.0	10.6	PK	100.0	144.00	HORIZONTAL

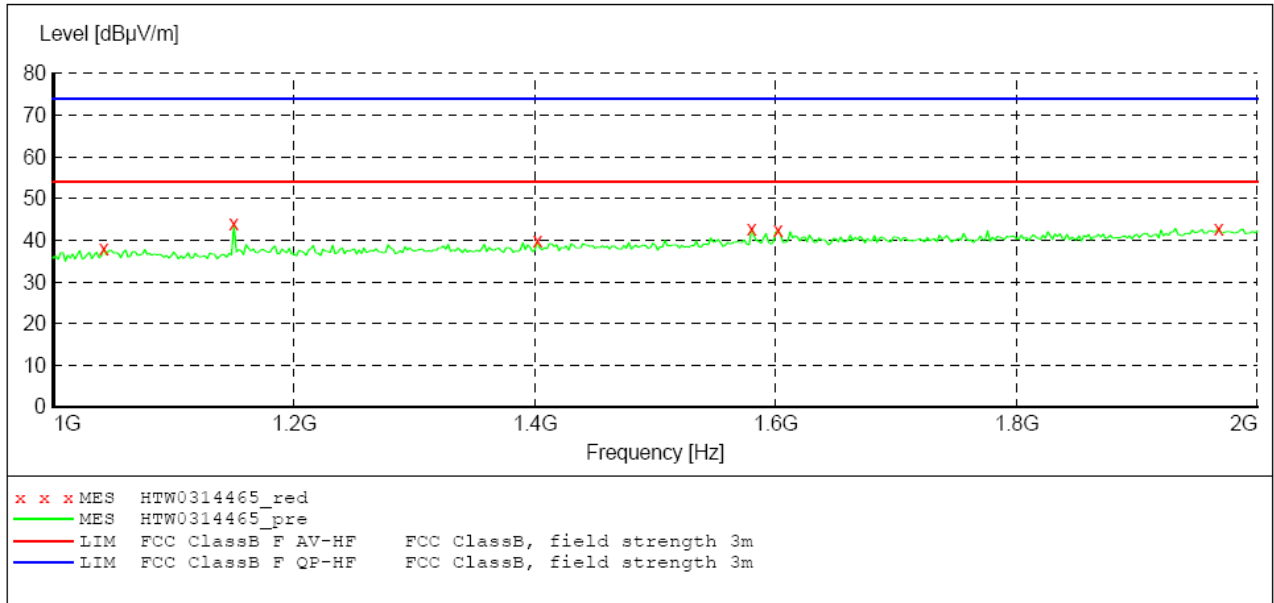
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: ADF COPY
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 5:00:12PM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0314465_red"

3/14/2013 5:01PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1042.000000	38.00	-0.3	54.0	16.0	PK	100.0	235.00	VERTICAL
1150.000000	44.10	0.5	54.0	9.9	PK	100.0	107.00	VERTICAL
1402.000000	39.80	2.1	54.0	14.2	PK	100.0	122.00	VERTICAL
1580.000000	42.80	3.2	54.0	11.2	PK	100.0	151.00	VERTICAL
1602.000000	42.40	3.4	54.0	11.6	PK	100.0	146.00	VERTICAL
1968.000000	42.90	6.0	54.0	11.1	PK	100.0	304.00	VERTICAL

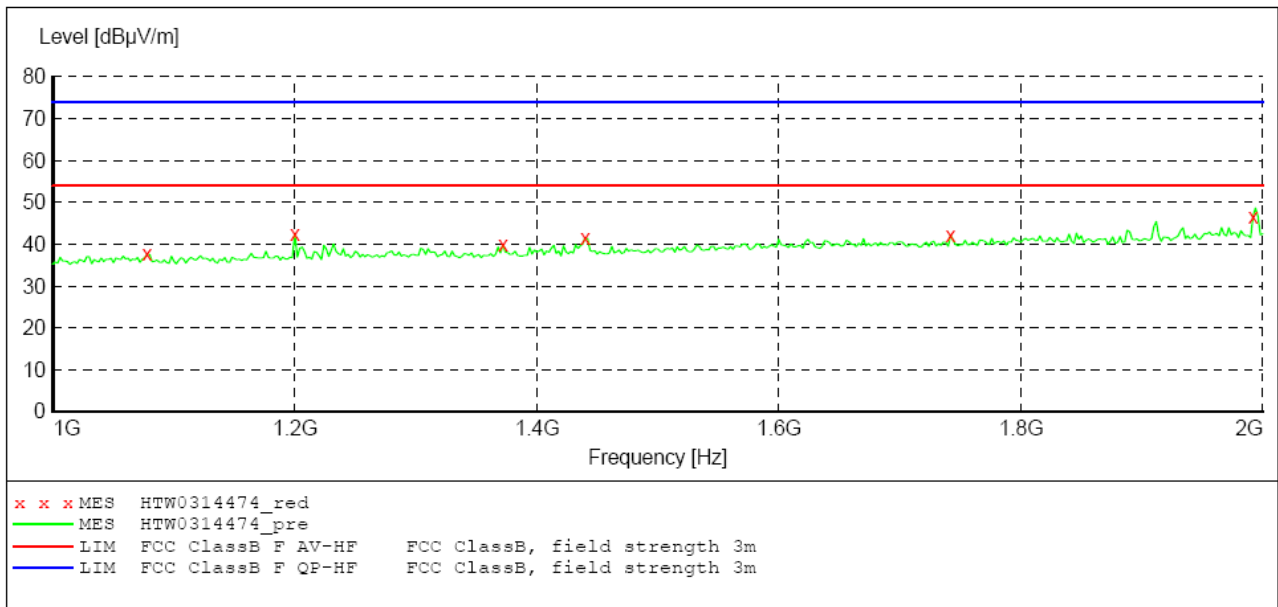
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: SCAN
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 5:27:56PM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency				
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0314474_red"

3/14/2013 5:30PM

Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1078.000000	37.60	0.0	54.0	16.4	PK	100.0	93.00	HORIZONTAL
1200.000000	42.60	0.8	54.0	11.4	PK	100.0	191.00	HORIZONTAL
1372.000000	39.90	1.9	54.0	14.1	PK	100.0	197.00	HORIZONTAL
1440.000000	41.60	2.3	54.0	12.4	PK	100.0	191.00	HORIZONTAL
1742.000000	42.30	4.5	54.0	11.7	PK	100.0	215.00	HORIZONTAL
1992.000000	46.70	6.2	54.0	7.3	PK	100.0	209.00	HORIZONTAL

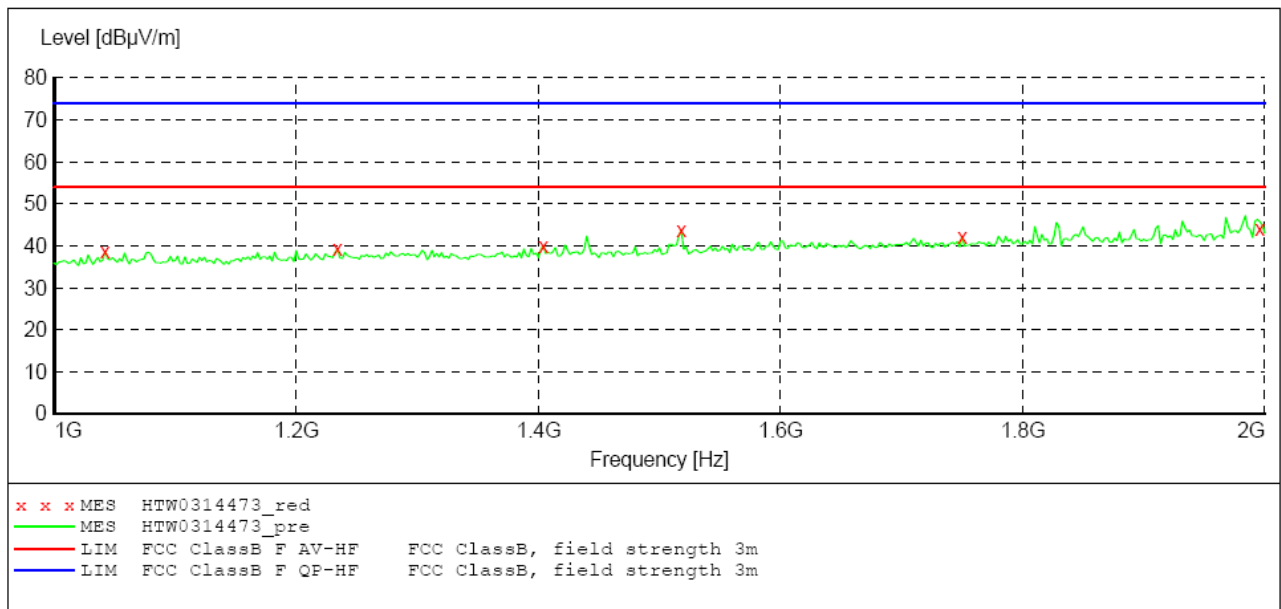
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: SCAN
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 5:24:33PM

SWEEP TABLE: "test (1G-18G) P"

Short Description:	Start	Stop	Detector	Meas. Time	Field Strength IF Bandw.	Transducer
	1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0314473_red"

3/14/2013 5:27PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1042.000000	38.70	-0.3	54.0	15.3	PK	100.0	266.00	VERTICAL
1234.000000	39.30	1.0	54.0	14.7	PK	100.0	305.00	VERTICAL
1404.000000	40.10	2.1	54.0	13.9	PK	100.0	111.00	VERTICAL
1518.000000	43.70	2.7	54.0	10.3	PK	100.0	360.00	VERTICAL
1750.000000	42.30	4.5	54.0	11.7	PK	100.0	358.00	VERTICAL
1996.000000	44.00	6.2	54.0	10.0	PK	100.0	131.00	VERTICAL

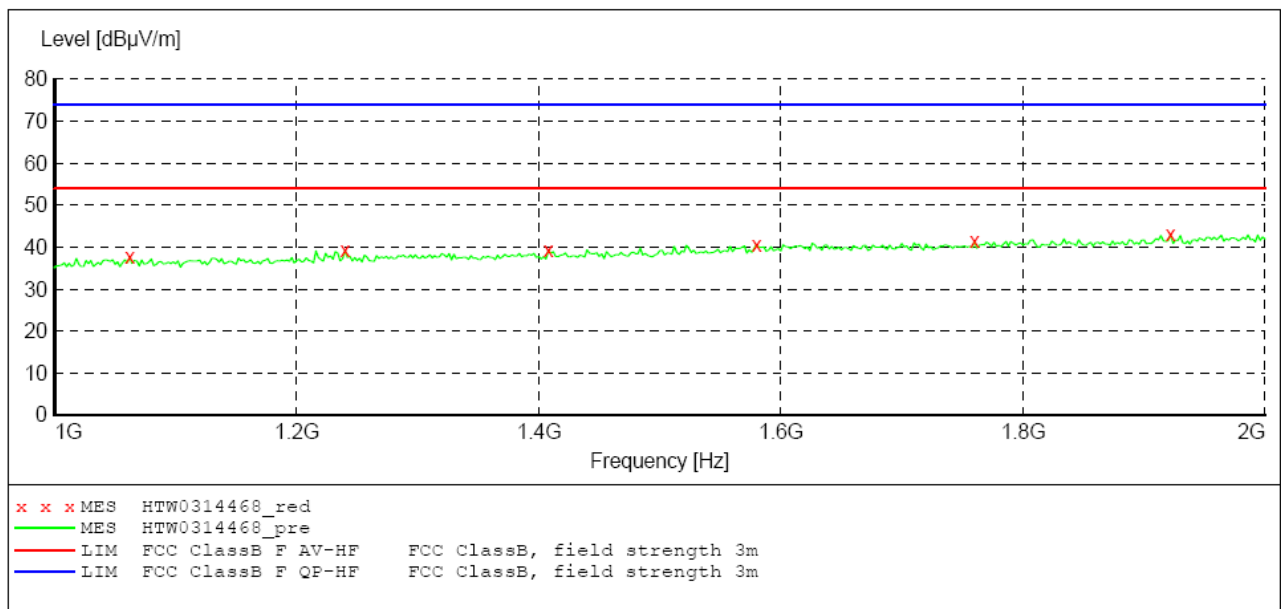
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO., LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: FAX TX
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 5:05:08PM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency				
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0314468_red"

3/14/2013 5:06PM

Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBuV/m	dB	dBuV/m	dB		cm	deg	
1062.000000	37.60	-0.2	54.0	16.4	PK	100.0	223.00	HORIZONTAL
1240.000000	39.20	1.1	54.0	14.8	PK	100.0	149.00	HORIZONTAL
1408.000000	39.20	2.1	54.0	14.8	PK	100.0	257.00	HORIZONTAL
1580.000000	40.70	3.2	54.0	13.3	PK	100.0	0.00	HORIZONTAL
1760.000000	41.40	4.6	54.0	12.6	PK	100.0	217.00	HORIZONTAL
1922.000000	43.00	5.7	54.0	11.0	PK	100.0	280.00	HORIZONTAL

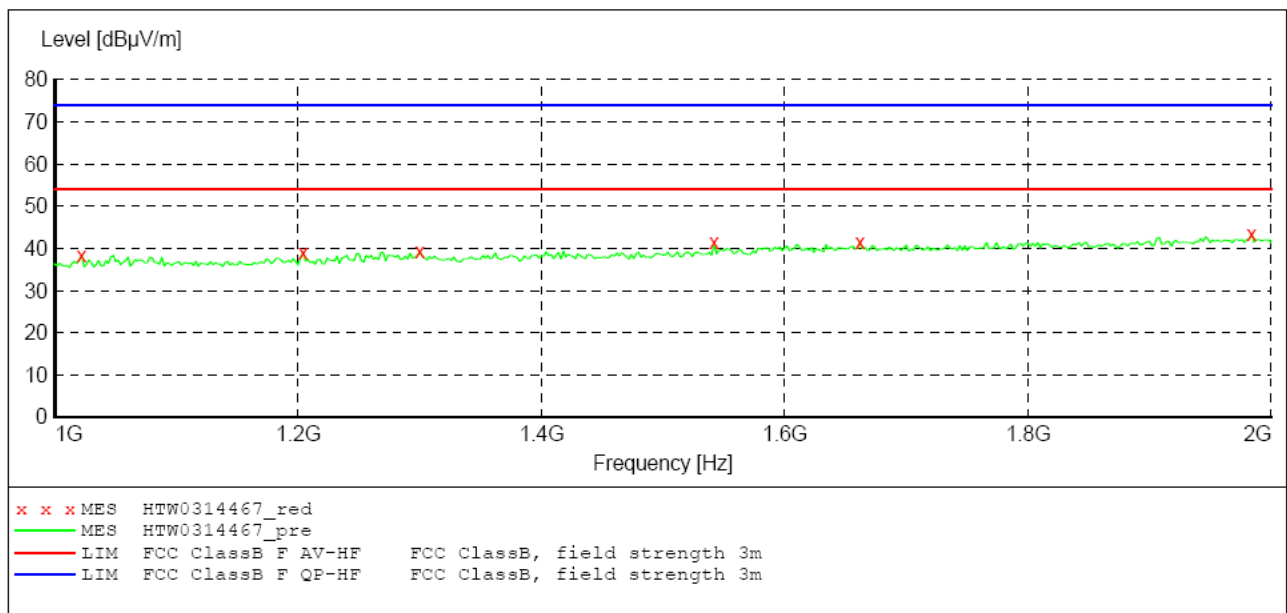
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: FAX TX
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 5:07:00PM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0314467_red"

3/14/2013 5:08PM

Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBuV/m	dB	dBuV/m	dB		cm	deg	
1022.000000	38.50	-0.5	54.0	15.5	PK	100.0	197.00	VERTICAL
1204.000000	39.10	0.8	54.0	14.9	PK	100.0	299.00	VERTICAL
1300.000000	39.30	1.4	54.0	14.7	PK	100.0	299.00	VERTICAL
1542.000000	41.40	2.9	54.0	12.6	PK	100.0	360.00	VERTICAL
1662.000000	41.50	3.9	54.0	12.5	PK	100.0	24.00	VERTICAL
1984.000000	43.40	6.1	54.0	10.6	PK	100.0	294.00	VERTICAL

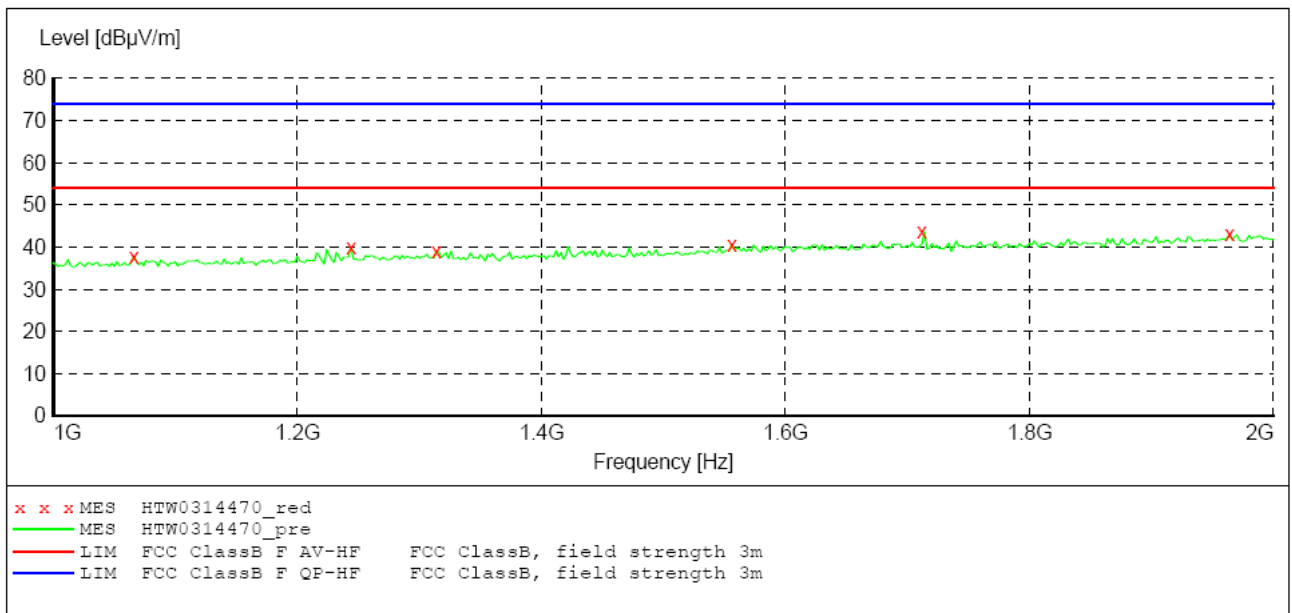
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: FAX RX
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 5:11:08PM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0314470_red"

3/14/2013 5:14PM

Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1066.000000	37.80	-0.1	54.0	16.2	PK	100.0	168.00	HORIZONTAL
1244.000000	40.00	1.1	54.0	14.0	PK	100.0	174.00	HORIZONTAL
1314.000000	39.10	1.5	54.0	14.9	PK	100.0	270.00	HORIZONTAL
1556.000000	40.70	3.1	54.0	13.3	PK	100.0	185.00	HORIZONTAL
1712.000000	43.80	4.3	54.0	20.2	PK	100.0	315.00	HORIZONTAL
1964.000000	43.10	6.0	54.0	10.9	PK	100.0	162.00	HORIZONTAL

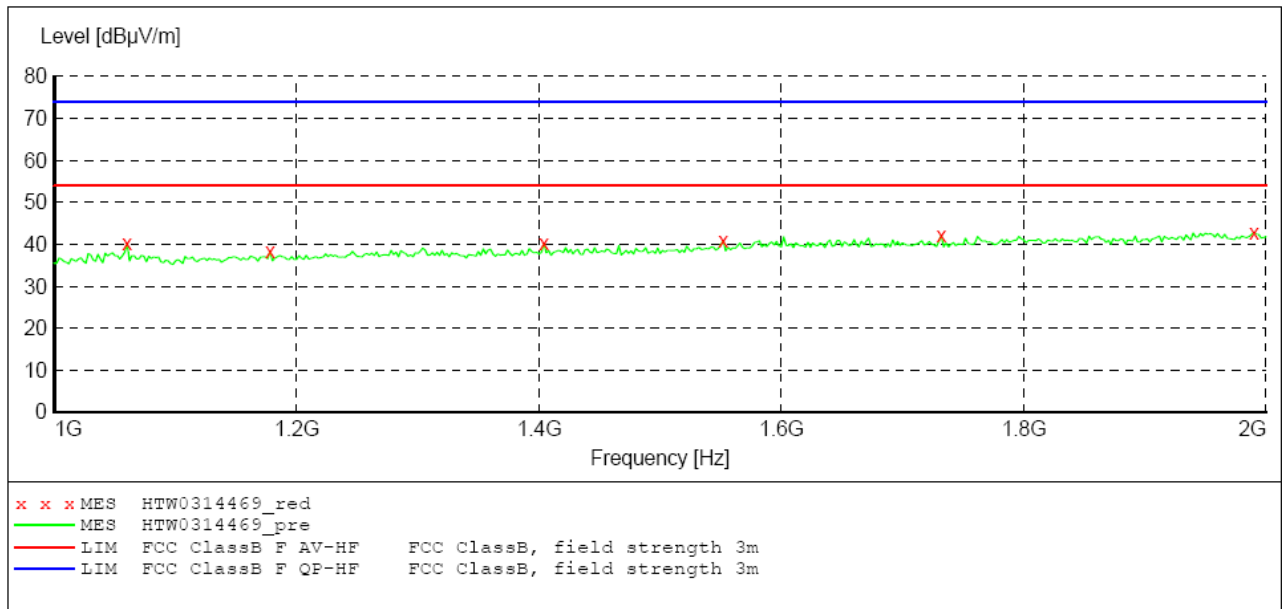
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC PART15

EUT: SP 112SF
 Manufacturer: Ricoh
 Operating Condition: FAX RX
 Test Site: 3M CHAMBER
 Operator: FENG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/14/2013 / 5:09:28PM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0314469_red"

3/14/2013 5:10PM

Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBµV/m	dB	dBµV/m	dB		cm	deg	
1060.000000	40.30	-0.2	54.0	13.7	PK	100.0	161.00	VERTICAL
1178.000000	38.40	0.7	54.0	15.6	PK	100.0	42.00	VERTICAL
1404.000000	40.30	2.1	54.0	13.7	PK	100.0	119.00	VERTICAL
1552.000000	41.00	3.0	54.0	13.0	PK	100.0	155.00	VERTICAL
1732.000000	42.20	4.4	54.0	11.8	PK	100.0	250.00	VERTICAL
1990.000000	42.90	6.1	54.0	11.1	PK	100.0	12.00	VERTICAL

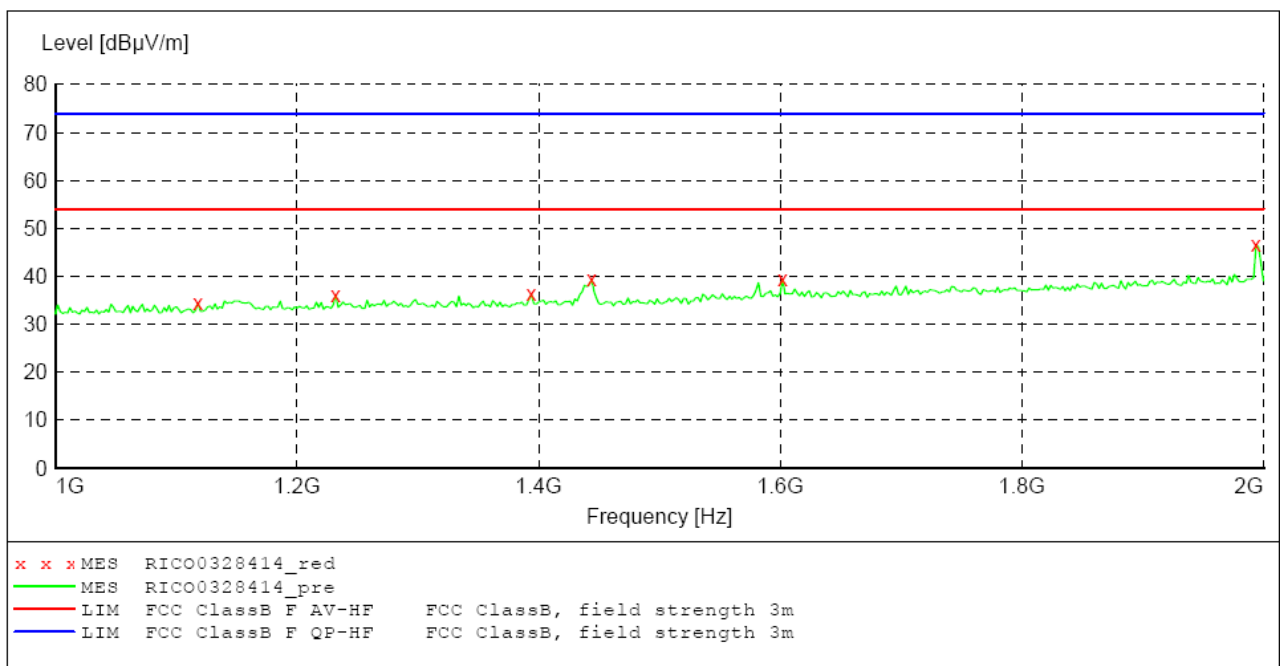
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: Print
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 11:10:57AM

SWEEP TABLE: "test (1G-18G) P"

Short Description: Field Strength
 Start Stop Detector Meas. IF Transducer
 Frequency Frequency Time Bandw.
 1.0 GHz 2.0 GHz MaxPeak Coupled 1 MHz HF906 2011



MEASUREMENT RESULT: "RICO0328414_red"

3/28/2013 11:12AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1118.000000	34.50	-3.3	54.0	19.5	PK	100.0	144.00	HORIZONTAL
1232.000000	36.20	-2.6	54.0	17.8	PK	100.0	222.00	HORIZONTAL
1394.000000	36.30	-1.8	54.0	17.7	PK	100.0	204.00	HORIZONTAL
1444.000000	39.30	-1.5	54.0	14.7	PK	100.0	180.00	HORIZONTAL
1602.000000	39.40	-0.4	54.0	14.6	PK	100.0	150.00	HORIZONTAL
1994.000000	46.60	2.8	54.0	7.4	PK	100.0	59.00	HORIZONTAL

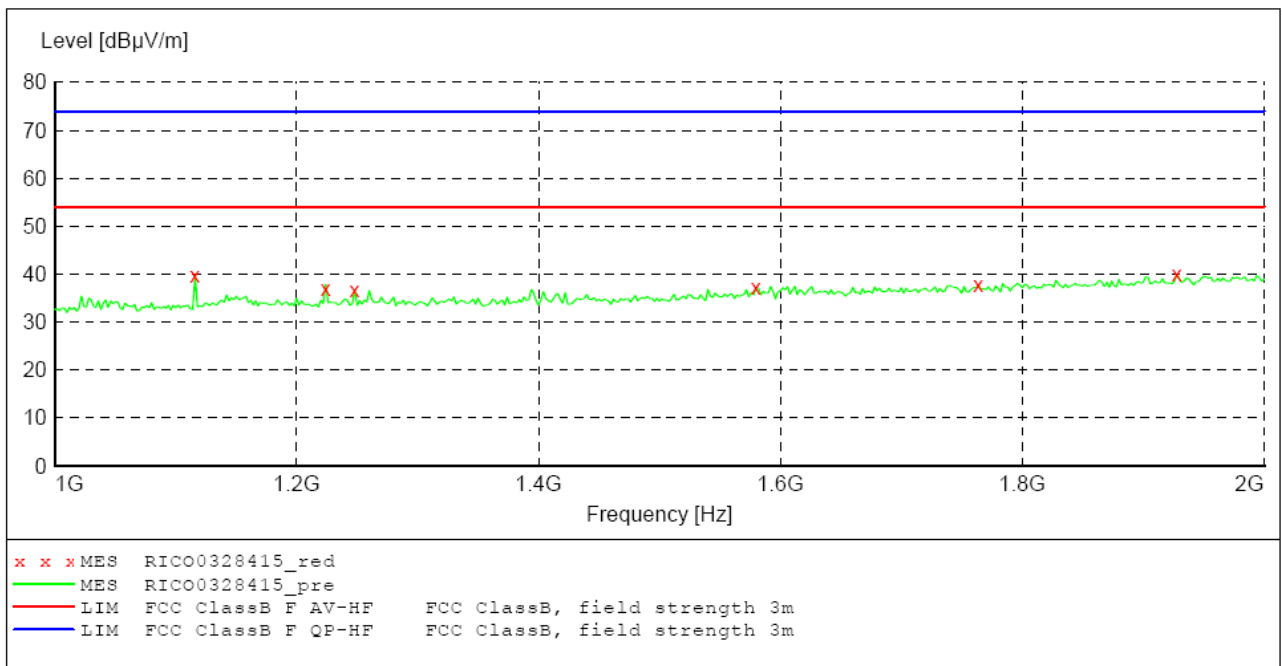
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: Print
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 11:14:12AM

SWEEP TABLE: "test (1G-18G) P"

Short Description: Field Strength
 Start Stop Detector Meas. IF Transducer
 Frequency Frequency Time Bandw.
 1.0 GHz 2.0 GHz MaxPeak Coupled 1 MHz HF906 2011



MEASUREMENT RESULT: "RICO0328415_red"

3/28/2013 11:53AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1116.000000	39.80	-3.3	54.0	14.2	PK	100.0	0.00	VERTICAL
1224.000000	36.90	-2.7	54.0	17.1	PK	100.0	14.00	VERTICAL
1248.000000	36.70	-2.5	54.0	17.3	PK	100.0	255.00	VERTICAL
1580.000000	37.20	-0.5	54.0	16.8	PK	100.0	244.00	VERTICAL
1764.000000	37.70	1.0	54.0	16.3	PK	100.0	192.00	VERTICAL
1928.000000	40.10	2.3	54.0	13.9	PK	100.0	69.00	VERTICAL

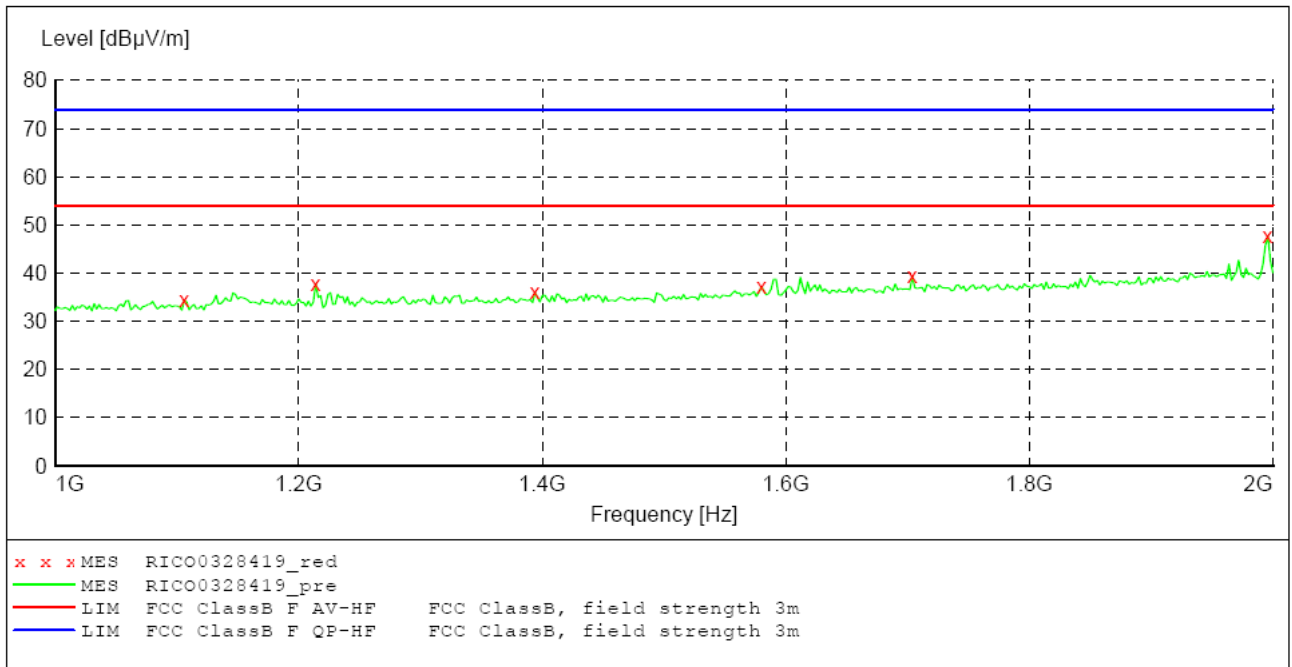
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: ADF COPY
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 11:25:28AM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "RICO0328419_red"

3/28/2013 11:27AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1106.000000	34.40	-3.3	54.0	19.6	PK	100.0	360.00	HORIZONTAL
1214.000000	37.80	-2.7	54.0	16.2	PK	100.0	345.00	HORIZONTAL
1394.000000	36.00	-1.8	54.0	18.0	PK	100.0	206.00	HORIZONTAL
1580.000000	37.20	-0.5	54.0	16.8	PK	100.0	153.00	HORIZONTAL
1704.000000	39.30	0.5	54.0	14.7	PK	100.0	57.00	HORIZONTAL
1996.000000	47.70	2.8	54.0	6.3	PK	100.0	63.00	HORIZONTAL

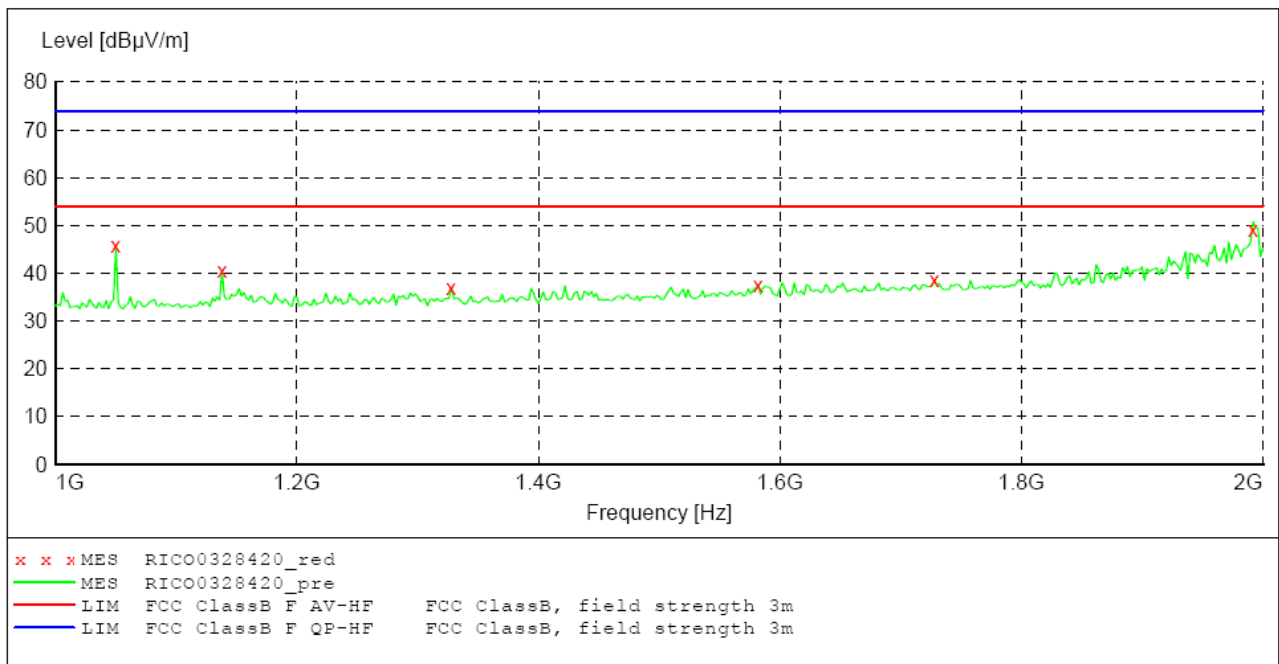
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO., LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: ADF COPY
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 11:28:52AM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency				
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "RICO0328420_red"

3/28/2013 11:31AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1050.000000	45.80	-3.7	54.0	8.2	PK	100.0	27.00	VERTICAL
1138.000000	40.50	-3.1	54.0	13.5	PK	100.0	104.00	VERTICAL
1328.000000	37.00	-2.1	54.0	17.0	PK	100.0	0.00	VERTICAL
1582.000000	37.50	-0.5	54.0	16.5	PK	100.0	234.00	VERTICAL
1728.000000	38.50	0.7	54.0	15.5	PK	100.0	69.00	VERTICAL
1992.000000	49.10	2.8	54.0	4.9	PK	100.0	0.00	VERTICAL

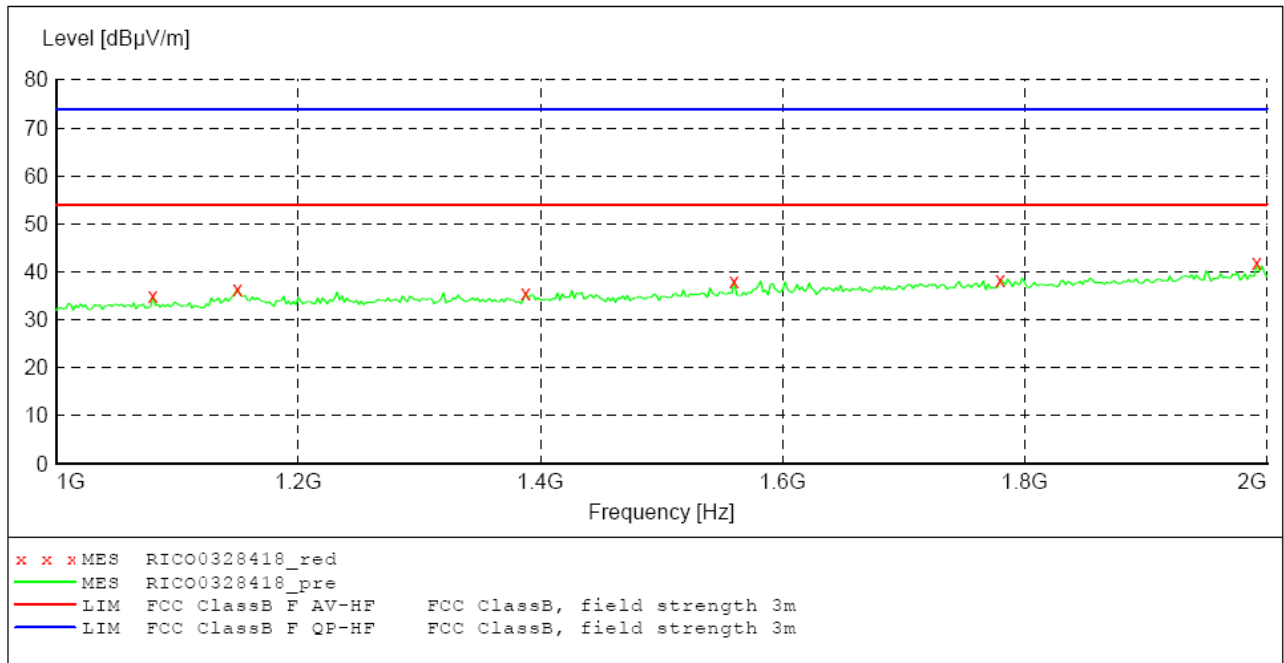
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: SCAN
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 11:22:24AM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "RICO0328418_red"

3/28/2013 11:23AM

Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1080.000000	34.90	-3.5	54.0	19.1	PK	100.0	184.00	HORIZONTAL
1150.000000	36.40	-3.1	54.0	17.6	PK	100.0	344.00	HORIZONTAL
1388.000000	35.70	-1.8	54.0	18.3	PK	100.0	285.00	HORIZONTAL
1560.000000	38.20	-0.7	54.0	15.8	PK	100.0	308.00	HORIZONTAL
1780.000000	38.40	1.2	54.0	15.6	PK	100.0	337.00	HORIZONTAL
1992.000000	41.90	2.8	54.0	12.1	PK	100.0	224.00	HORIZONTAL

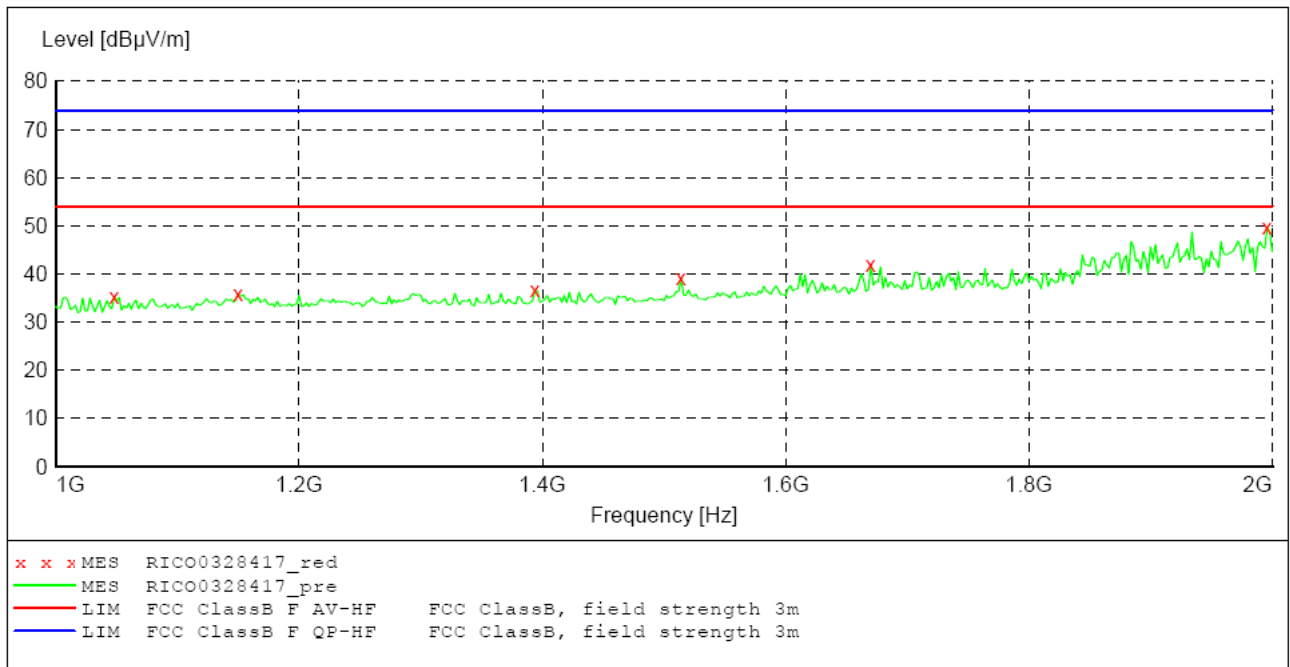
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: SCAN
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 11:18:05AM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
Frequency 1.0 GHz	Frequency 2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "RICO0328417_red"

3/28/2013 11:21AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1048.000000	35.30	-3.7	54.0	18.7	PK	100.0	271.00	VERTICAL
1150.000000	35.80	-3.1	54.0	18.2	PK	100.0	5.00	VERTICAL
1394.000000	36.80	-1.8	54.0	17.2	PK	100.0	223.00	VERTICAL
1514.000000	39.10	-1.2	54.0	14.9	PK	100.0	33.00	VERTICAL
1670.000000	41.80	0.2	54.0	12.2	PK	100.0	21.00	VERTICAL
1996.000000	49.80	2.8	54.0	4.2	PK	100.0	104.00	VERTICAL

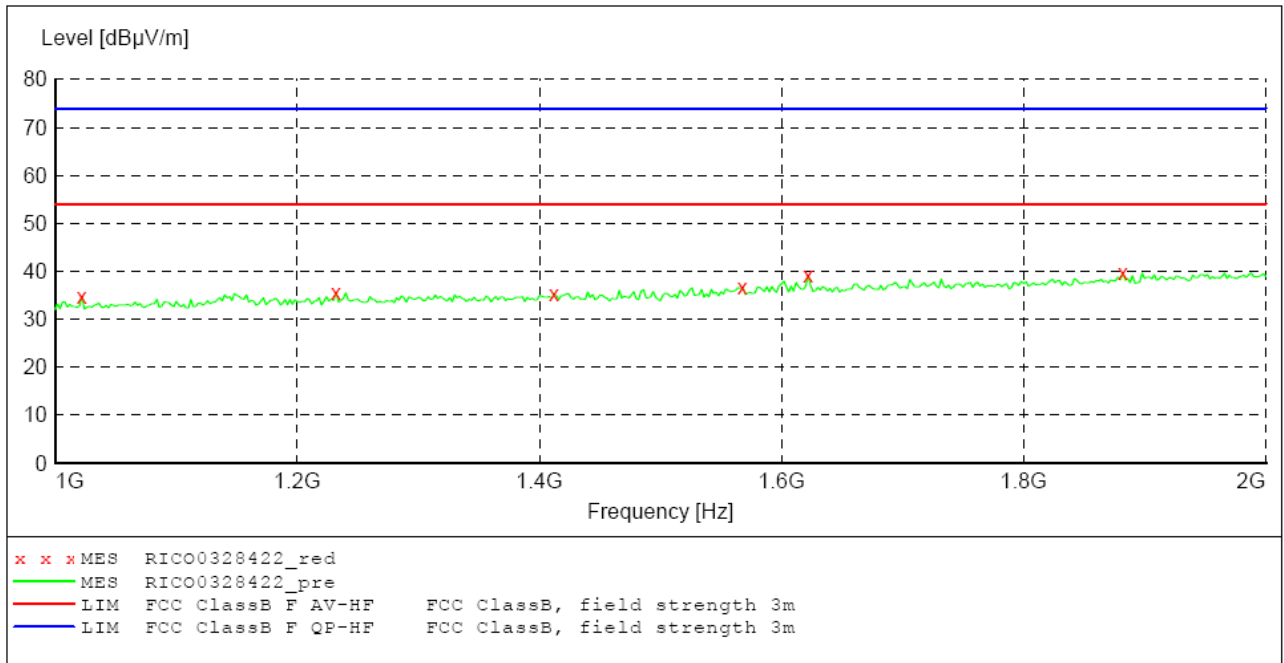
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX TX
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 11:34:50AM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "RICO0328422_red"

3/28/2013 11:36AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1022.000000	34.80	-3.9	54.0	19.2	PK	100.0	178.00	HORIZONTAL
1232.000000	35.60	-2.6	54.0	18.4	PK	100.0	113.00	HORIZONTAL
1412.000000	35.20	-1.7	54.0	18.8	PK	100.0	201.00	HORIZONTAL
1568.000000	36.70	-0.7	54.0	17.3	PK	100.0	166.00	HORIZONTAL
1622.000000	39.10	-0.2	54.0	14.9	PK	100.0	136.00	HORIZONTAL
1882.000000	39.70	2.0	54.0	14.3	PK	100.0	71.00	HORIZONTAL

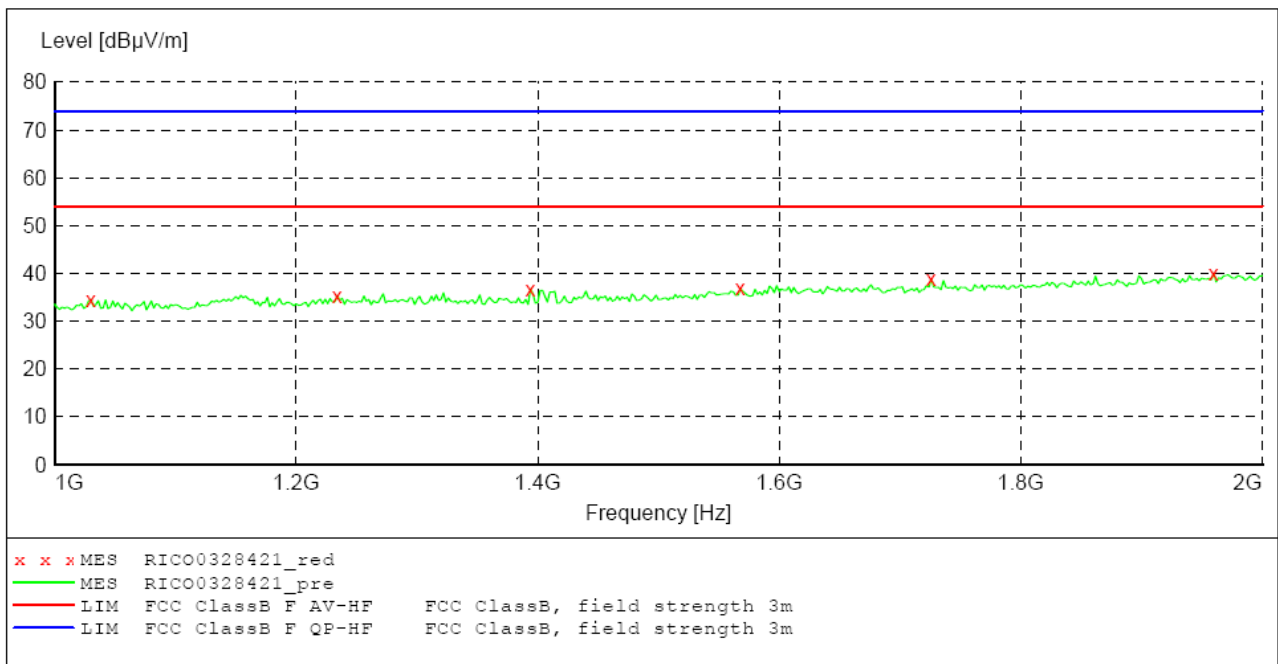
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX TX
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 11:32:31AM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency				
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "RICO0328421_red"

3/28/2013 11:34AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1030.000000	34.60	-3.8	54.0	19.4	PK	100.0	275.00	VERTICAL
1234.000000	35.40	-2.6	54.0	18.6	PK	100.0	135.00	VERTICAL
1394.000000	36.80	-1.8	54.0	17.2	PK	100.0	111.00	VERTICAL
1568.000000	36.90	-0.7	54.0	17.1	PK	100.0	251.00	VERTICAL
1726.000000	38.80	0.7	54.0	15.2	PK	100.0	341.00	VERTICAL
1960.000000	40.10	2.5	54.0	13.9	PK	100.0	311.00	VERTICAL

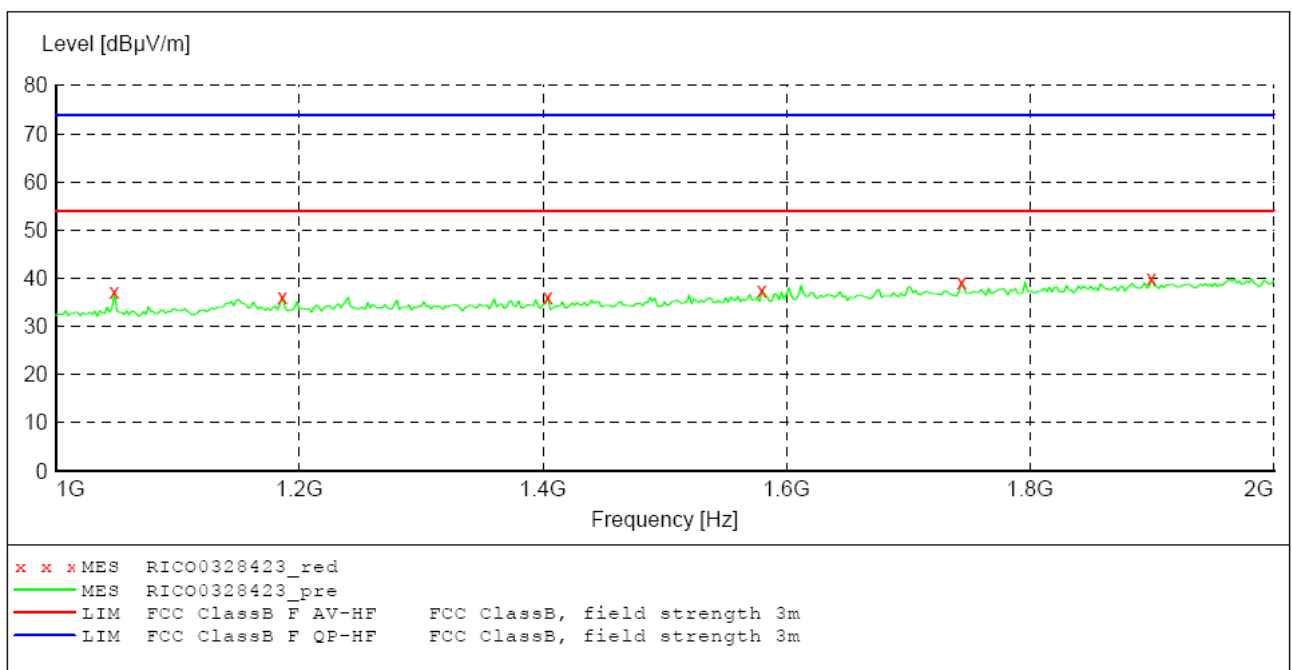
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX RX
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 11:38:10AM

SWEEP TABLE: "test (1G-18G) P"

Short Description: Field Strength
 Start Stop Detector Meas. IF Transducer
 Frequency Frequency Time Bandw.
 1.0 GHz 2.0 GHz MaxPeak Coupled 1 MHz HF906 2011



MEASUREMENT RESULT: "RICO0328423_red"

3/28/2013 11:39AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1048.000000	37.10	-3.7	54.0	16.9	PK	100.0	270.00	HORIZONTAL
1186.000000	36.10	-2.9	54.0	17.9	PK	100.0	117.00	HORIZONTAL
1404.000000	36.10	-1.7	54.0	17.9	PK	100.0	206.00	HORIZONTAL
1580.000000	37.40	-0.5	54.0	16.6	PK	100.0	152.00	HORIZONTAL
1744.000000	39.10	0.9	54.0	14.9	PK	100.0	57.00	HORIZONTAL
1900.000000	39.90	2.1	54.0	14.1	PK	100.0	229.00	HORIZONTAL

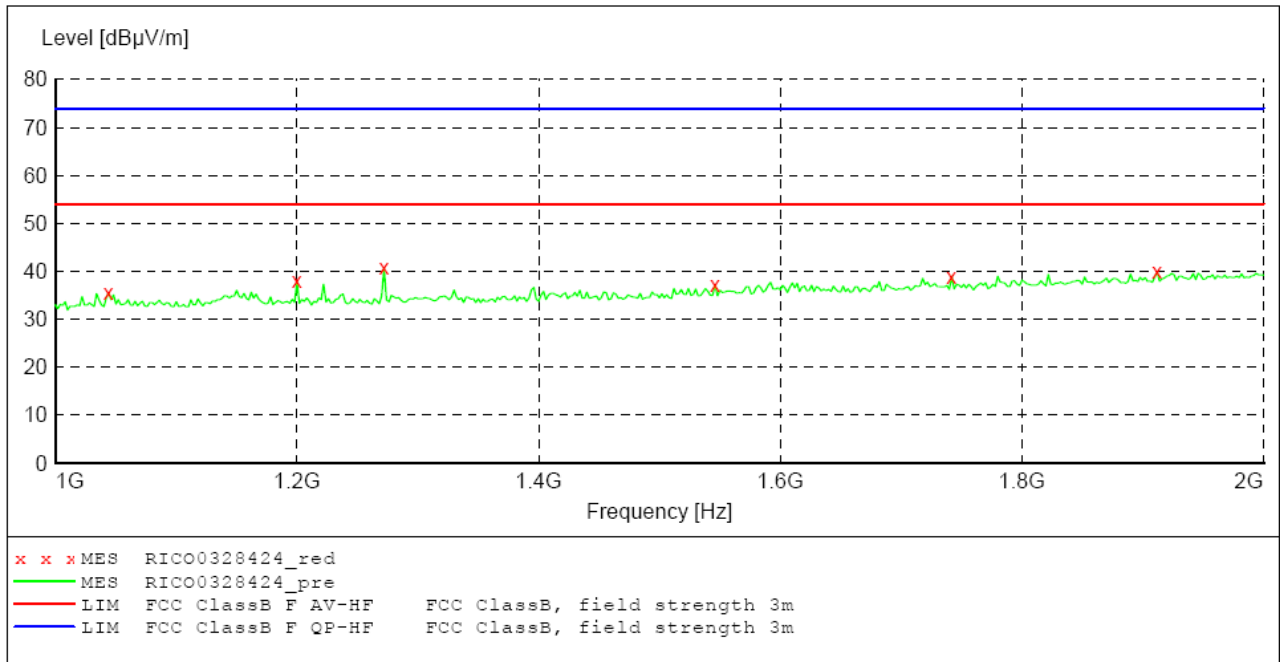
SHENZHEN HUATONGWEI INTERNATIONAL INSPECTION CO.,LTD

RADIATED EMISSION TEST FCC Part15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX RX
 Test Site: 3M CHAMBER
 Operator: JONY
 Test Specification: AC 120V/60Hz
 Comment: DC Motor
 Start of Test: 3/28/2013 / 11:40:30AM

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	2.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "RICO0328424_red"

3/28/2013 11:44AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1044.000000	35.60	-3.7	54.0	18.4	PK	100.0	156.00	VERTICAL
1200.000000	38.00	-2.8	54.0	16.0	PK	100.0	317.00	VERTICAL
1272.000000	40.80	-2.4	54.0	13.2	PK	100.0	97.00	VERTICAL
1546.000000	37.20	-0.9	54.0	16.8	PK	100.0	168.00	VERTICAL
1742.000000	39.00	0.8	54.0	15.0	PK	100.0	192.00	VERTICAL
1912.000000	39.90	2.2	54.0	14.1	PK	100.0	282.00	VERTICAL

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, Print, ADF Copy, Scan, FAX Tx, FAX Rx modes during the test and the results of the maximum emanation 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 value+transducer

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

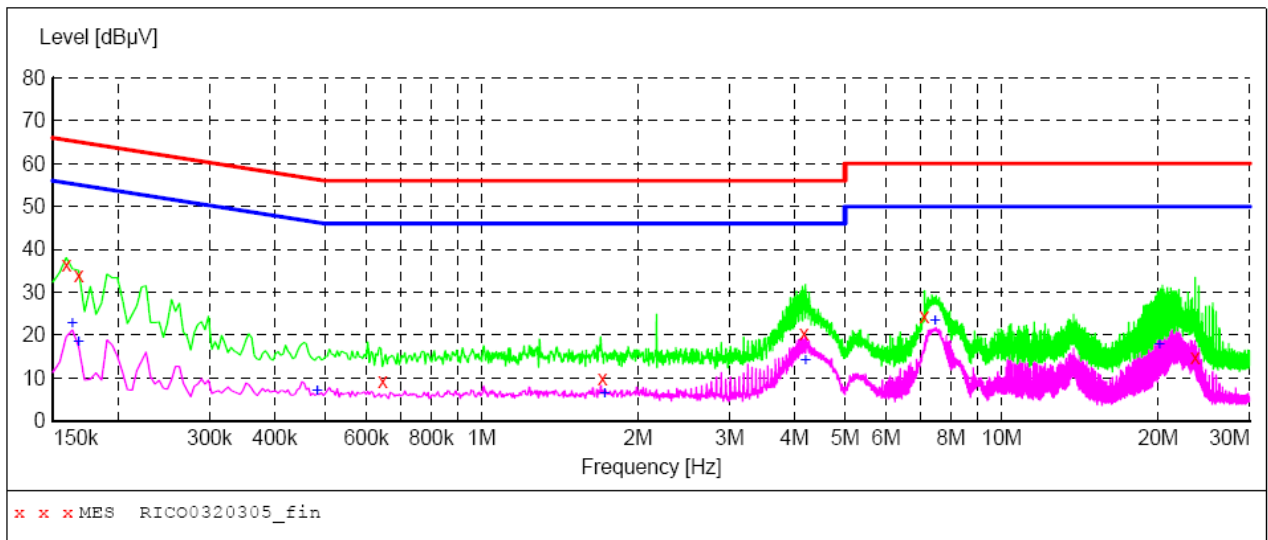
Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: Standby
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: Stepping motor
 Start of Test: 3/20/2013 / 2:21:05PM

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO0320305_fin"

3/20/2013 2:23PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.159000	36.40	10.2	66	29.1	QP	N	GND
0.168000	34.00	10.2	65	31.1	QP	N	GND
0.645000	9.20	10.2	56	46.8	QP	N	GND
1.707000	10.00	10.2	56	46.0	QP	N	GND
4.164000	20.40	10.2	56	35.6	QP	N	GND
7.102500	24.50	10.2	60	35.5	QP	N	GND
23.527500	14.80	10.5	60	45.2	QP	N	GND

MEASUREMENT RESULT: "RICO0320305_fin2"

3/20/2013 2:23PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.163500	22.80	10.2	55	32.5	AV	N	GND
0.168000	18.50	10.2	55	36.6	AV	N	GND
0.483000	7.10	10.4	46	39.2	AV	N	GND
1.725000	6.40	10.2	46	39.6	AV	N	GND
4.200000	14.10	10.2	46	31.9	AV	N	GND
7.453500	23.40	10.3	50	26.6	AV	N	GND
20.112000	17.80	10.4	50	32.2	AV	N	GND

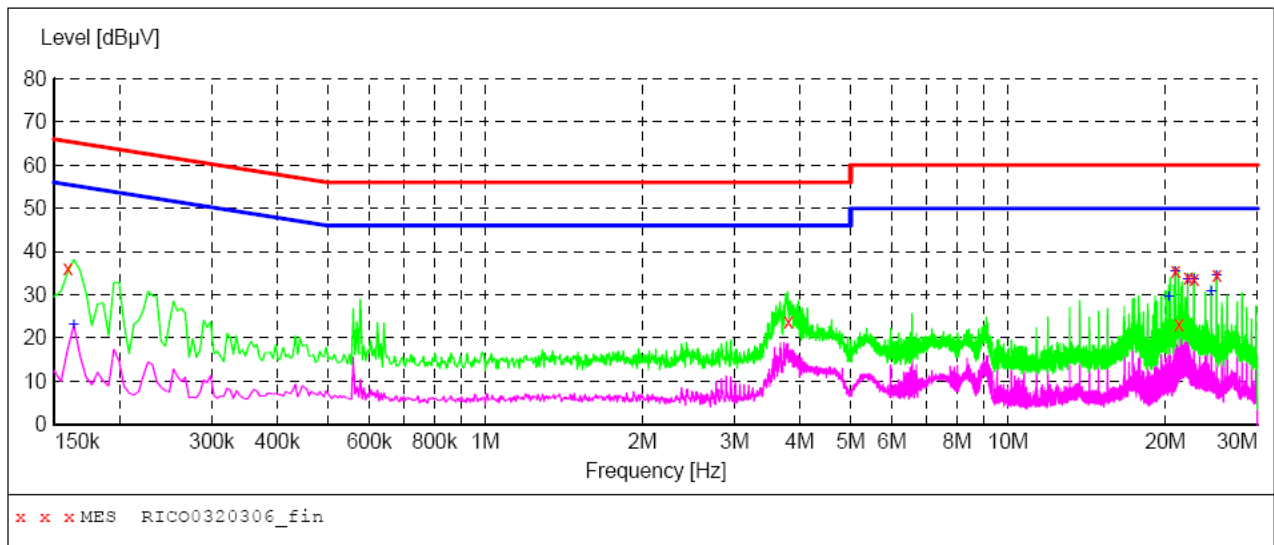
Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: Standby
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: Stepping motor
 Start of Test: 3/20/2013 / 2:24:03PM

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO0320306_fin"

3/20/2013 2:26PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.159000	36.00	10.2	66	29.5	QP	L1	GND
3.795000	23.90	10.2	56	32.1	QP	L1	GND
20.881500	35.40	10.4	60	24.6	QP	L1	GND
21.196500	23.10	10.4	60	36.9	QP	L1	GND
22.074000	33.90	10.5	60	26.1	QP	L1	GND
22.672500	33.60	10.5	60	26.4	QP	L1	GND
25.057500	34.60	10.6	60	25.4	QP	L1	GND

MEASUREMENT RESULT: "RICO0320306_fin2"

3/20/2013 2:26PM

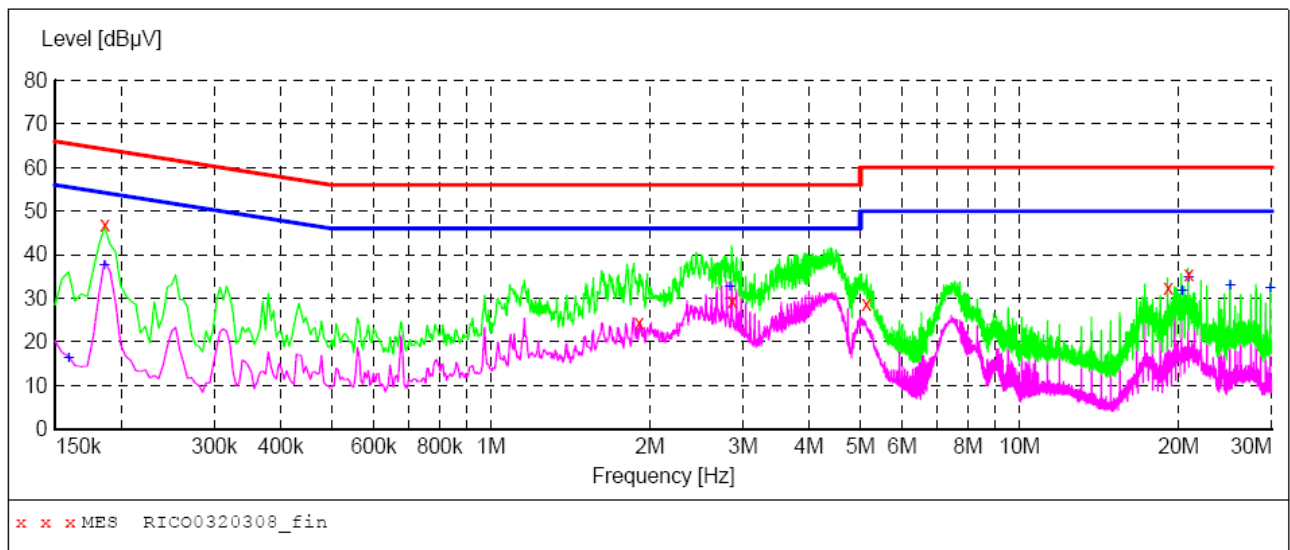
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.163500	23.30	10.2	55	32.0	AV	L1	GND
20.287500	29.60	10.4	50	20.4	AV	L1	GND
20.881500	35.50	10.4	50	14.5	AV	L1	GND
22.074000	33.80	10.5	50	16.2	AV	L1	GND
22.672500	33.60	10.5	50	16.4	AV	L1	GND
24.463500	30.80	10.5	50	19.2	AV	L1	GND
25.057500	34.60	10.6	50	15.4	AV	L1	GND

Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: Print
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/20/2013 / 2:30:20PM

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



MEASUREMENT RESULT: "RICO0320308_fin"

3/20/2013 2:33PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	47.00	10.2	64	17.2	QP	N	GND
1.905000	24.50	10.2	56	31.5	QP	N	GND
2.859000	29.30	10.2	56	26.7	QP	N	GND
5.127000	28.70	10.2	60	31.3	QP	N	GND
19.090500	32.50	10.4	60	27.5	QP	N	GND
20.881500	35.40	10.4	60	24.6	QP	N	GND

MEASUREMENT RESULT: "RICO0320308_fin2"

3/20/2013 2:33PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.159000	16.30	10.2	56	39.2	AV	N	GND
0.186000	37.50	10.2	54	16.7	AV	N	GND
2.832000	32.70	10.2	46	13.3	AV	N	GND
20.287500	31.90	10.4	50	18.1	AV	N	GND
20.881500	34.90	10.4	50	15.1	AV	N	GND
25.057500	32.90	10.6	50	17.1	AV	N	GND
29.832000	32.30	10.6	50	17.7	AV	N	GND

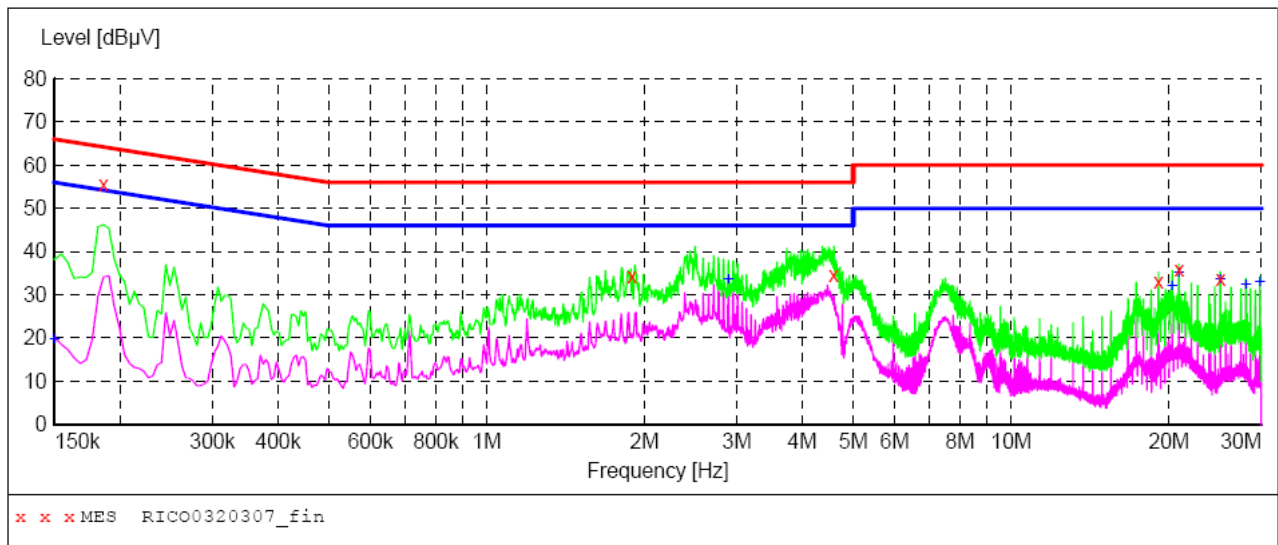
Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: Print
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/20/2013 / 2:27:37PM

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO0320307_fin"

3/20/2013 2:29PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	55.60	10.2	64	8.6	QP	L1	GND
1.891500	34.30	10.2	56	21.7	QP	L1	GND
4.582500	34.70	10.2	56	21.3	QP	L1	GND
19.090500	32.90	10.4	60	27.1	QP	L1	GND
20.881500	35.80	10.4	60	24.2	QP	L1	GND
25.057500	33.80	10.6	60	26.2	QP	L1	GND

MEASUREMENT RESULT: "RICO0320307_fin2"

3/20/2013 2:29PM

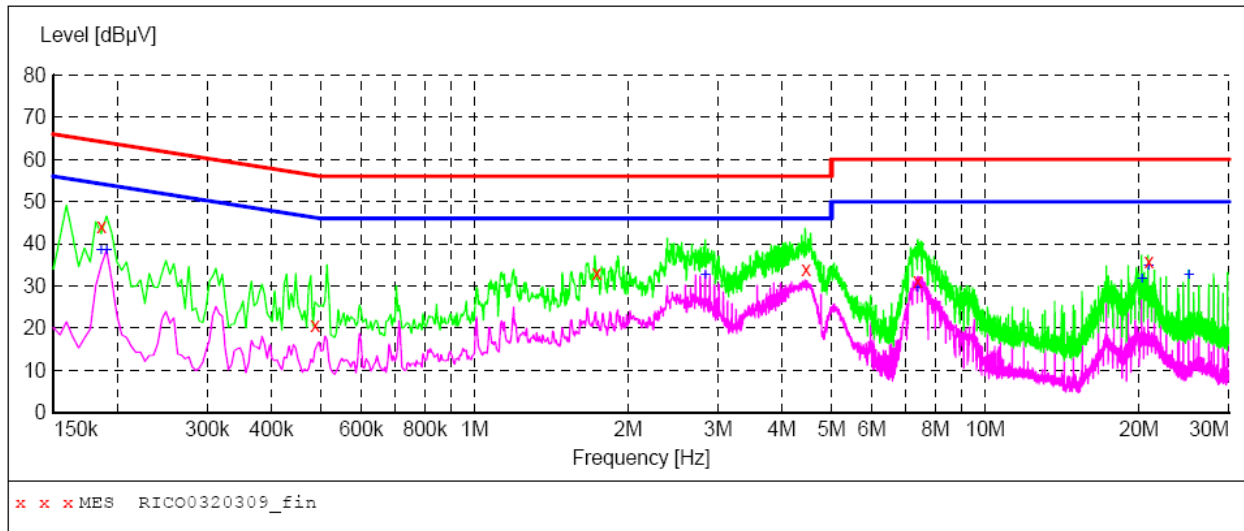
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	19.80	10.2	56	36.2	AV	L1	GND
2.890500	33.60	10.2	46	12.4	AV	L1	GND
20.287500	32.00	10.4	50	18.0	AV	L1	GND
20.881500	35.10	10.4	50	14.9	AV	L1	GND
25.057500	33.60	10.6	50	16.4	AV	L1	GND
28.041000	32.40	10.6	50	17.6	AV	L1	GND
29.832000	33.00	10.6	50	17.0	AV	L1	GND

Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: ADF COPY
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/20/2013 / 2:34:12PM

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



MEASUREMENT RESULT: "RICO0320309_fin"

3/20/2013 2:36PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	44.00	10.2	64	20.2	QP	N	GND
0.487500	20.60	10.4	56	35.6	QP	N	GND
1.734000	33.00	10.2	56	23.0	QP	N	GND
4.456500	34.00	10.2	56	22.0	QP	N	GND
7.372500	31.10	10.3	60	28.9	QP	N	GND
20.881500	35.80	10.4	60	24.2	QP	N	GND

MEASUREMENT RESULT: "RICO0320309_fin2"

3/20/2013 2:36PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	38.60	10.2	54	15.6	AV	N	GND
0.190500	38.50	10.2	54	15.5	AV	N	GND
2.832000	32.60	10.2	46	13.4	AV	N	GND
7.372500	29.60	10.3	50	20.4	AV	N	GND
20.287500	31.90	10.4	50	18.1	AV	N	GND
20.881500	34.90	10.4	50	15.1	AV	N	GND
25.057500	32.80	10.6	50	17.2	AV	N	GND

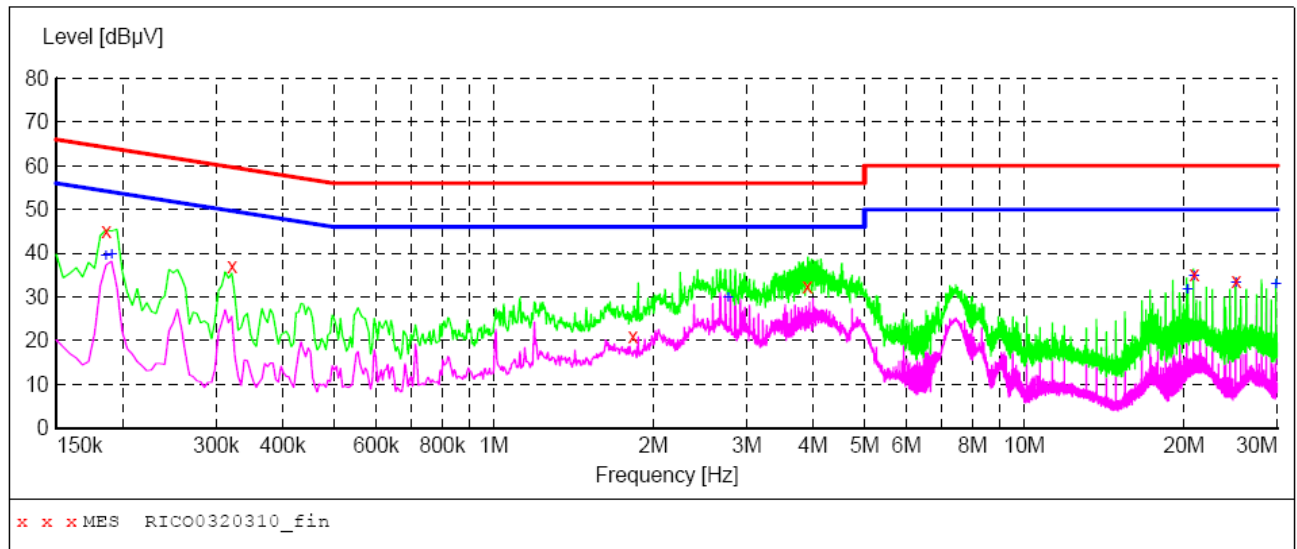
Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: ADF COPY
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/20/2013 / 2:37:07PM

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO0320310_fin"

3/20/2013 2:40PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	45.20	10.2	64	19.0	QP	L1	GND
0.321000	36.90	10.3	60	22.8	QP	L1	GND
1.828500	21.10	10.2	56	34.9	QP	L1	GND
3.898500	32.50	10.2	56	23.5	QP	L1	GND
20.881500	35.30	10.4	60	24.7	QP	L1	GND
25.057500	33.50	10.6	60	26.5	QP	L1	GND

MEASUREMENT RESULT: "RICO0320310_fin2"

3/20/2013 2:40PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	39.60	10.2	54	14.6	AV	L1	GND
0.190500	39.70	10.2	54	14.3	AV	L1	GND
2.769000	29.90	10.2	46	16.1	AV	L1	GND
20.287500	31.90	10.4	50	18.1	AV	L1	GND
20.881500	35.00	10.4	50	15.0	AV	L1	GND
25.057500	33.40	10.6	50	16.6	AV	L1	GND
29.832000	32.90	10.6	50	17.1	AV	L1	GND

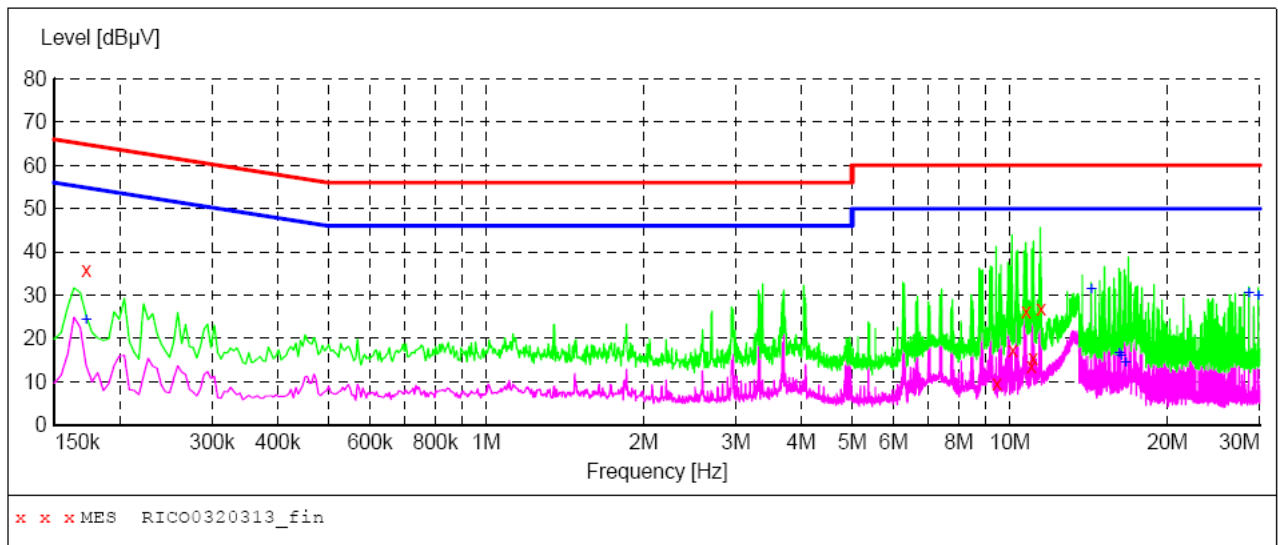
Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: SCAN
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/20/2013 / 2:55:22PM

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO0320313_fin"

3/20/2013 3:00PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.172500	35.80	10.2	65	29.0	QP	N	GND
9.438000	9.50	10.3	60	50.5	QP	N	GND
10.117500	17.20	10.3	60	42.8	QP	N	GND
10.738500	26.40	10.3	60	33.6	QP	N	GND
10.986000	13.50	10.3	60	46.5	QP	N	GND
11.076000	15.50	10.3	60	44.5	QP	N	GND
11.458500	26.80	10.3	60	33.2	QP	N	GND

MEASUREMENT RESULT: "RICO0320313_fin2"

3/20/2013 3:00PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.172500	24.40	10.2	55	30.4	AV	N	GND
14.320500	31.50	10.3	50	18.5	AV	N	GND
16.192500	16.70	10.4	50	33.3	AV	N	GND
16.300500	16.20	10.4	50	33.8	AV	N	GND
16.656000	14.60	10.4	50	35.4	AV	N	GND
28.639500	30.60	10.6	50	19.4	AV	N	GND
29.832000	29.80	10.6	50	20.2	AV	N	GND

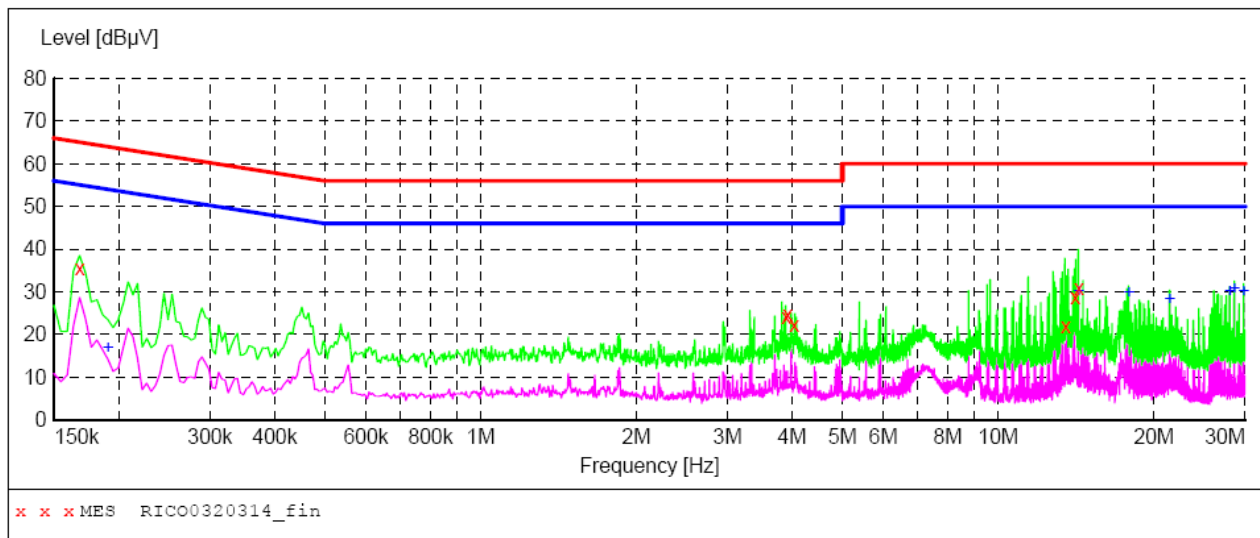
Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: SCAN
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/20/2013 / 3:00:57PM

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO0320314_fin"

3/20/2013 4:05PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.168000	35.60	10.2	65	29.5	QP	L1	GND
3.894000	24.20	10.2	56	31.8	QP	L1	GND
3.916500	24.70	10.2	56	31.3	QP	L1	GND
4.029000	22.10	10.2	56	33.9	QP	L1	GND
13.488000	22.00	10.3	60	38.0	QP	L1	GND
14.082000	28.60	10.3	60	31.4	QP	L1	GND
14.320500	30.80	10.3	60	29.2	QP	L1	GND

MEASUREMENT RESULT: "RICO0320314_fin2"

3/20/2013 3:03PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500	17.10	10.2	54	36.9	AV	L1	GND
14.320500	30.30	10.3	50	19.7	AV	L1	GND
17.898000	30.00	10.4	50	20.0	AV	L1	GND
21.480000	28.40	10.4	50	21.6	AV	L1	GND
28.041000	30.20	10.6	50	19.8	AV	L1	GND
28.639500	31.00	10.6	50	19.0	AV	L1	GND
29.832000	30.10	10.6	50	19.9	AV	L1	GND

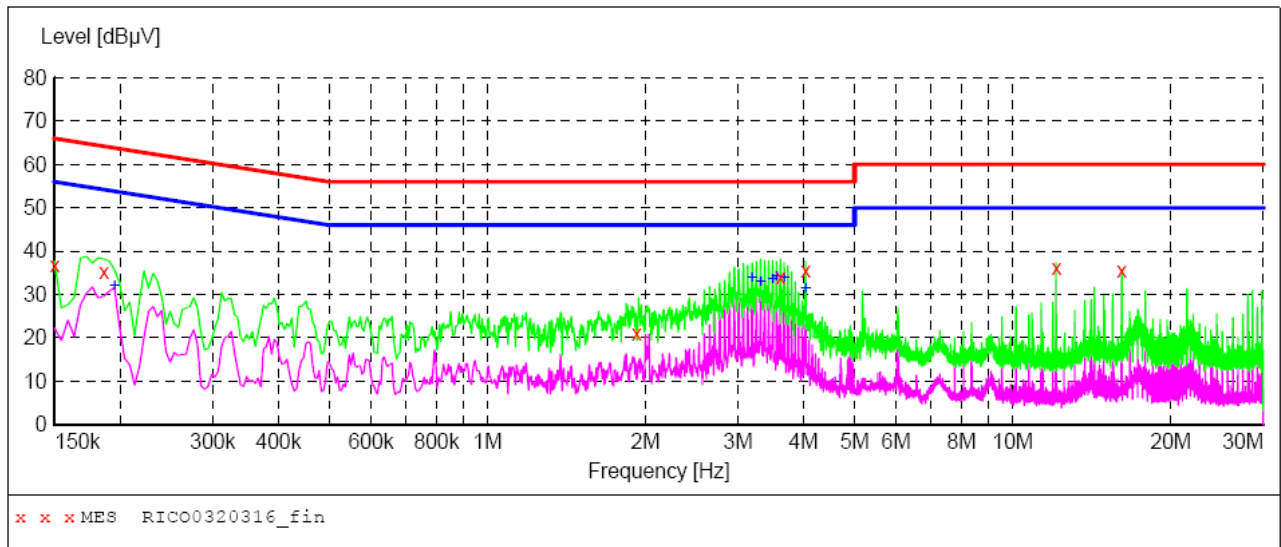
Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX TX
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/20/2013 / 3:08:43PM

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO0320316_fin"

3/20/2013 3:11PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	36.80	10.2	66	29.2	QP	N	GND
0.186000	35.30	10.2	64	28.9	QP	N	GND
1.923000	21.10	10.2	56	34.9	QP	N	GND
3.610500	34.10	10.2	56	21.9	QP	N	GND
4.033500	35.60	10.2	56	20.4	QP	N	GND
12.097500	36.20	10.3	60	23.8	QP	N	GND
16.129500	35.60	10.4	60	24.4	QP	N	GND

MEASUREMENT RESULT: "RICO0320316_fin2"

3/20/2013 3:11PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.195000	32.20	10.2	54	21.6	AV	N	GND
3.192000	34.00	10.2	46	12.0	AV	N	GND
3.313500	33.00	10.2	46	13.0	AV	N	GND
3.493500	33.60	10.2	46	12.4	AV	N	GND
3.552000	34.20	10.2	46	11.8	AV	N	GND
3.673500	33.90	10.2	46	12.1	AV	N	GND
4.033500	31.60	10.2	46	14.4	AV	N	GND

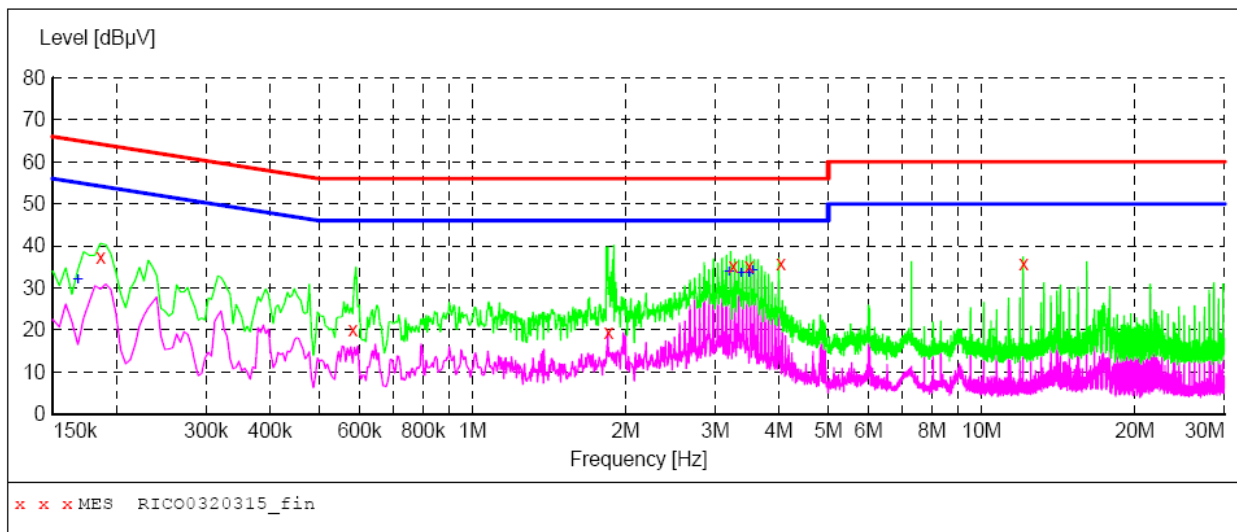
Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX TX
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/20/2013 / 3:05:08PM

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO0320315_fin"

3/20/2013 3:07PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	37.30	10.2	64	26.9	QP	L1	GND
0.582000	20.10	10.3	56	35.9	QP	L1	GND
1.851000	19.50	10.2	56	36.5	QP	L1	GND
3.250500	35.30	10.2	56	20.7	QP	L1	GND
3.493500	35.20	10.2	56	20.8	QP	L1	GND
4.033500	35.80	10.2	56	20.2	QP	L1	GND
12.097500	35.90	10.3	60	24.1	QP	L1	GND

MEASUREMENT RESULT: "RICO0320315_fin2"

3/20/2013 3:07PM

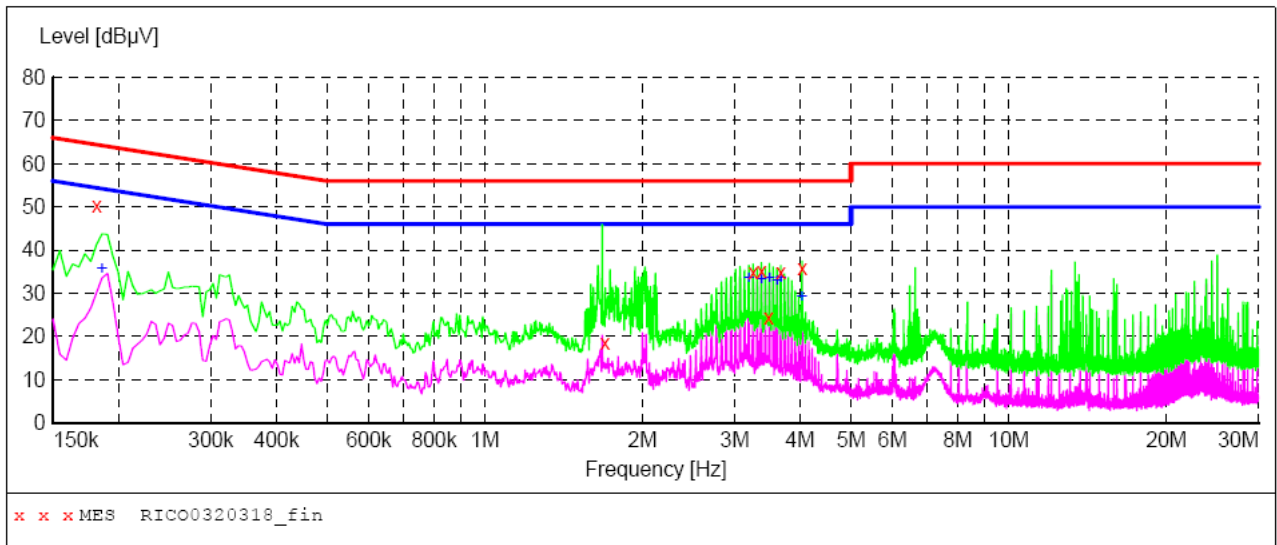
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.168000	32.00	10.2	55	23.1	AV	L1	GND
3.192000	34.10	10.2	46	11.9	AV	L1	GND
3.372000	33.80	10.2	46	12.2	AV	L1	GND
3.493500	33.70	10.2	46	12.3	AV	L1	GND
3.552000	34.30	10.2	46	11.7	AV	L1	GND

Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX RX
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/20/2013 / 3:19:02PM

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



MEASUREMENT RESULT: "RICO0320318_fin"

3/20/2013 3:21PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.181500	50.30	10.2	64	14.1	QP	N	GND
1.693500	18.50	10.2	56	37.5	QP	N	GND
3.250500	34.90	10.2	56	21.1	QP	N	GND
3.372000	35.10	10.2	56	20.9	QP	N	GND
3.480000	24.30	10.2	56	31.7	QP	N	GND
3.673500	34.80	10.2	56	21.2	QP	N	GND
4.033500	35.80	10.2	56	20.2	QP	N	GND

MEASUREMENT RESULT: "RICO0320318_fin2"

3/20/2013 3:21PM

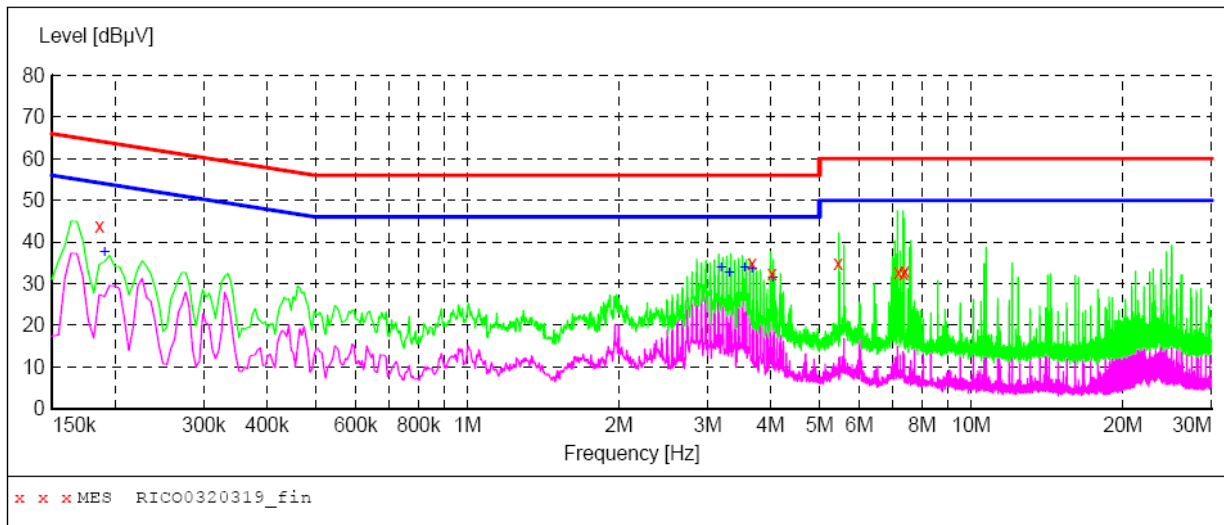
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	35.90	10.2	54	18.3	AV	N	GND
3.192000	33.80	10.2	46	12.2	AV	N	GND
3.372000	33.40	10.2	46	12.6	AV	N	GND
3.493500	33.50	10.2	46	12.5	AV	N	GND
3.615000	32.90	10.2	46	13.1	AV	N	GND
3.673500	33.80	10.2	46	12.2	AV	N	GND
4.029000	29.20	10.2	46	16.8	AV	N	GND

Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX RX
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: stepping motor
 Start of Test: 3/20/2013 / 3:22:05PM

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



MEASUREMENT RESULT: "RICO0320319_fin"

3/20/2013 3:57PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	43.80	10.2	64	20.4	QP	L1	GND
3.673500	34.90	10.2	56	21.1	QP	L1	GND
4.020000	32.30	10.2	56	23.7	QP	L1	GND
5.442000	35.00	10.2	60	25.0	QP	L1	GND
7.156500	32.60	10.2	60	27.4	QP	L1	GND
7.332000	32.30	10.2	60	27.7	QP	L1	GND
7.381500	32.90	10.3	60	27.1	QP	L1	GND

MEASUREMENT RESULT: "RICO0320319_fin2"

3/20/2013 3:30PM

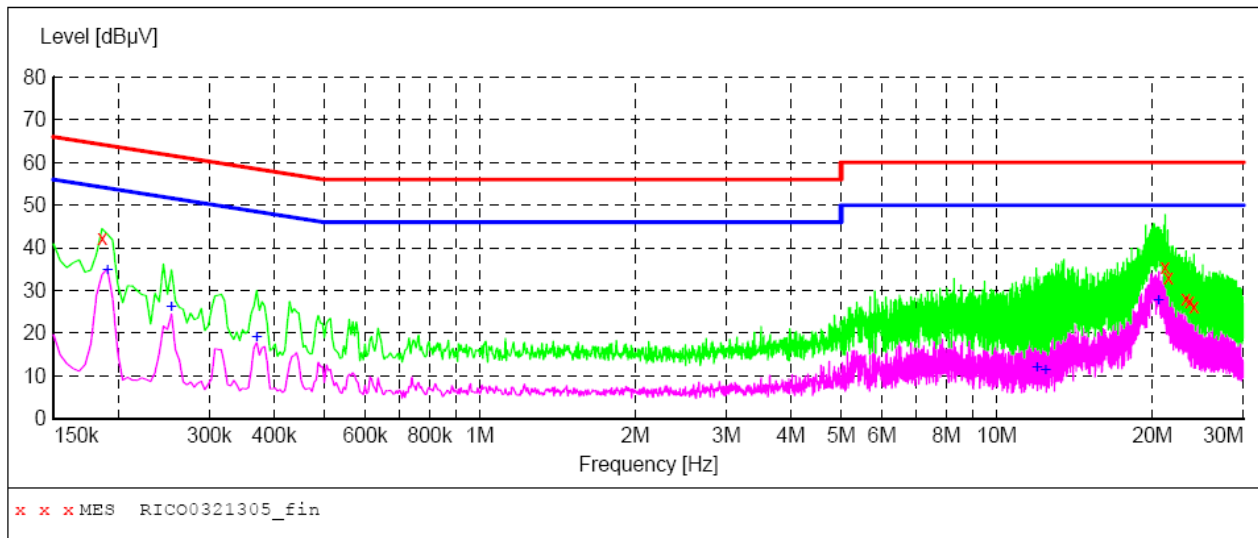
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500	37.50	10.2	54	16.5	AV	L1	GND
3.192000	34.00	10.2	46	12.0	AV	L1	GND
3.313500	32.70	10.2	46	13.3	AV	L1	GND
3.552000	34.10	10.2	46	11.9	AV	L1	GND
3.673500	33.70	10.2	46	12.3	AV	L1	GND
4.033500	31.40	10.2	46	14.6	AV	L1	GND

Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: Print
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: DC motor
 Start of Test: 3/21/2013 / 10:41:09AM

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



MEASUREMENT RESULT: "RICO0321305_fin"

3/21/2013 10:44AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	42.20	10.2	64	22.0	QP	N	GND
21.160500	35.40	10.4	60	24.6	QP	N	GND
21.448500	33.00	10.4	60	27.0	QP	N	GND
23.212500	28.20	10.5	60	31.8	QP	N	GND
23.622000	27.60	10.5	60	32.4	QP	N	GND
24.067500	26.20	10.5	60	33.8	QP	N	GND

MEASUREMENT RESULT: "RICO0321305_fin2"

3/21/2013 10:44AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500	34.90	10.2	54	19.1	AV	N	GND
0.253500	26.20	10.2	52	25.4	AV	N	GND
0.370500	19.00	10.3	49	29.5	AV	N	GND
11.976000	12.10	10.3	50	37.9	AV	N	GND
12.444000	11.30	10.3	50	38.7	AV	N	GND
20.580000	27.70	10.4	50	22.3	AV	N	GND

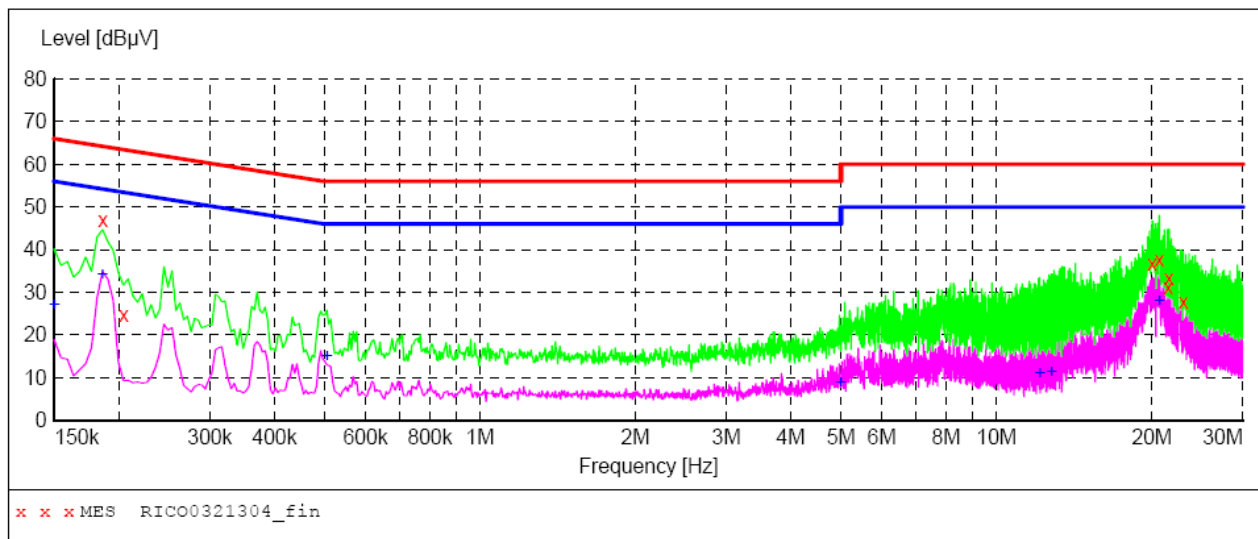
Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: Print
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: DC motor
 Start of Test: 3/21/2013 / 10:38:20AM

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO0321304_fin"

3/21/2013 10:40AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	46.80	10.2	64	17.4	QP	L1	GND
0.204000	24.80	10.2	63	38.6	QP	L1	GND
19.999500	36.60	10.4	60	23.4	QP	L1	GND
20.638500	37.60	10.4	60	22.4	QP	L1	GND
21.480000	31.20	10.4	60	28.8	QP	L1	GND
21.561000	33.40	10.4	60	26.6	QP	L1	GND
22.992000	27.80	10.5	60	32.2	QP	L1	GND

MEASUREMENT RESULT: "RICO0321304_fin2"

3/21/2013 10:40AM

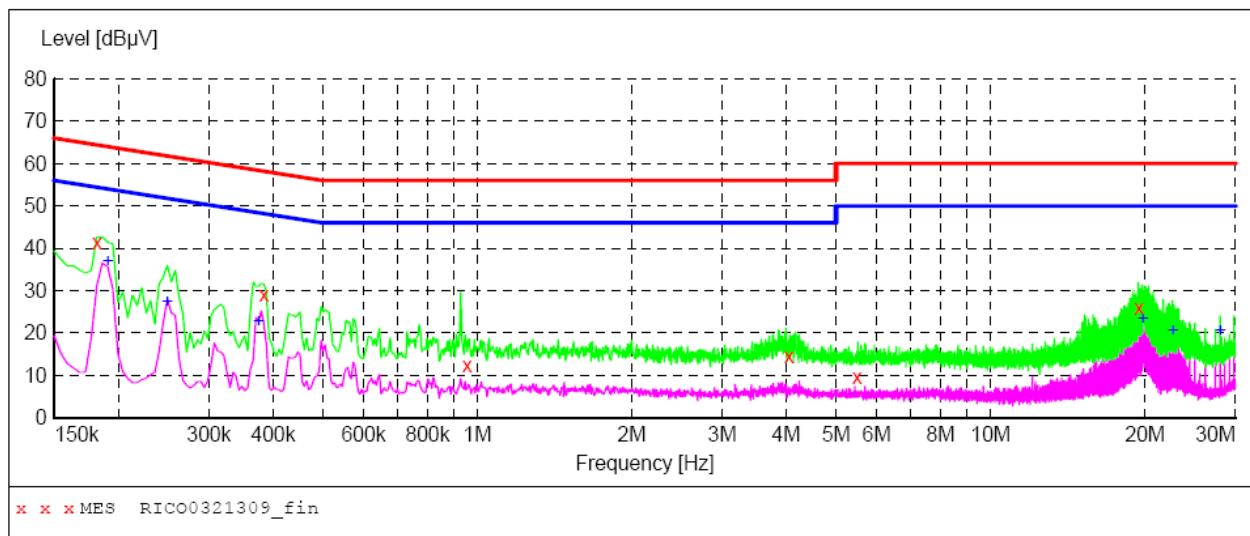
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	27.20	10.2	56	28.8	AV	L1	GND
0.186000	34.20	10.2	54	20.0	AV	L1	GND
0.505500	15.20	10.4	46	30.8	AV	L1	GND
4.996500	9.10	10.2	46	36.9	AV	L1	GND
12.138000	11.10	10.3	50	38.9	AV	L1	GND
12.790500	11.50	10.3	50	38.5	AV	L1	GND
20.701500	28.00	10.4	50	22.0	AV	L1	GND

Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: ADF Copy
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: DC motor
 Start of Test: 3/21/2013 / 10:55:06AM

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



MEASUREMENT RESULT: "RICO0321309_fin"

3/21/2013 10:57AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.181500	41.50	10.2	64	22.9	QP	N	GND
0.384000	29.00	10.3	58	29.2	QP	N	GND
0.955500	12.50	10.1	56	43.5	QP	N	GND
4.042500	14.50	10.2	56	41.5	QP	N	GND
5.487000	9.60	10.2	60	50.4	QP	N	GND
19.446000	25.90	10.4	60	34.1	QP	N	GND

MEASUREMENT RESULT: "RICO0321309_fin2"

3/21/2013 10:57AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500	36.90	10.2	54	17.1	AV	N	GND
0.249000	27.50	10.2	52	24.3	AV	N	GND
0.375000	23.00	10.3	48	25.4	AV	N	GND
19.810500	23.60	10.4	50	26.4	AV	N	GND
22.672500	20.80	10.5	50	29.2	AV	N	GND
28.041000	20.70	10.6	50	29.3	AV	N	GND

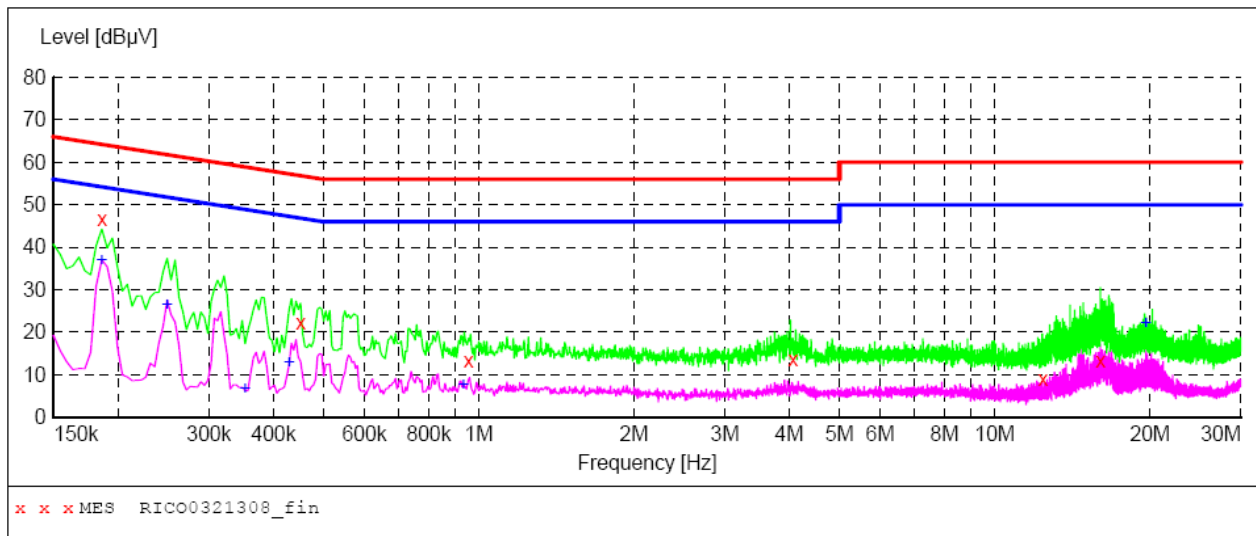
Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: ADF Copy
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: DC motor
 Start of Test: 3/21/2013 / 10:52:13AM

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO0321308_fin"

3/21/2013 11:15AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	46.60	10.2	64	17.4	QP	L1	GND
0.451500	22.30	10.4	57	34.5	QP	L1	GND
0.955500	13.30	10.1	56	42.7	QP	L1	GND
4.065000	13.50	10.2	56	42.5	QP	L1	GND
12.394500	9.10	10.3	60	50.9	QP	L1	GND
16.012500	13.30	10.4	60	46.7	QP	L1	GND

MEASUREMENT RESULT: "RICO0321308_fin2"

3/21/2013 10:54AM

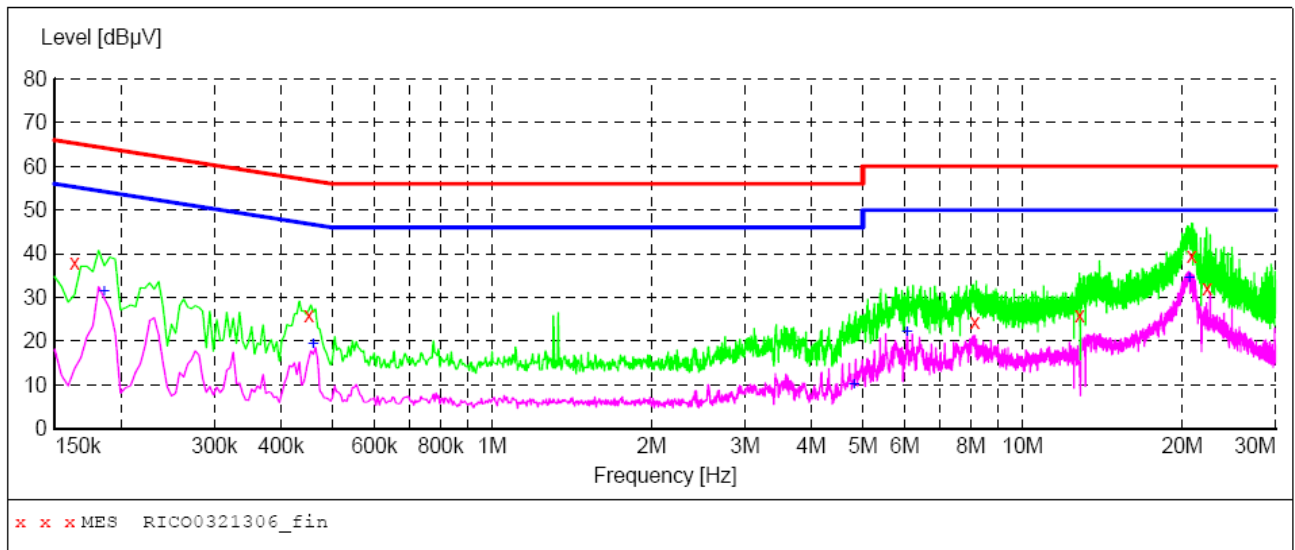
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	36.90	10.2	54	17.3	AV	L1	GND
0.249000	26.60	10.2	52	25.2	AV	L1	GND
0.352500	6.90	10.3	49	42.0	AV	L1	GND
0.429000	13.00	10.4	47	34.3	AV	L1	GND
0.933000	7.90	10.1	46	38.1	AV	L1	GND
19.630500	22.20	10.4	50	27.8	AV	L1	GND

Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: Scan
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: DC motor
 Start of Test: 3/21/2013 / 10:45:25AM

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



MEASUREMENT RESULT: "RICO0321306_fin"

3/21/2013 10:58AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.163500	38.00	10.2	65	27.0	QP	N	GND
0.451500	26.00	10.4	57	30.8	QP	N	GND
8.133000	24.40	10.3	60	35.6	QP	N	GND
12.808500	25.80	10.3	60	34.2	QP	N	GND
20.796000	39.60	10.4	60	20.4	QP	N	GND
22.258500	32.10	10.5	60	27.9	QP	N	GND

MEASUREMENT RESULT: "RICO0321306_fin2"

3/21/2013 10:48AM

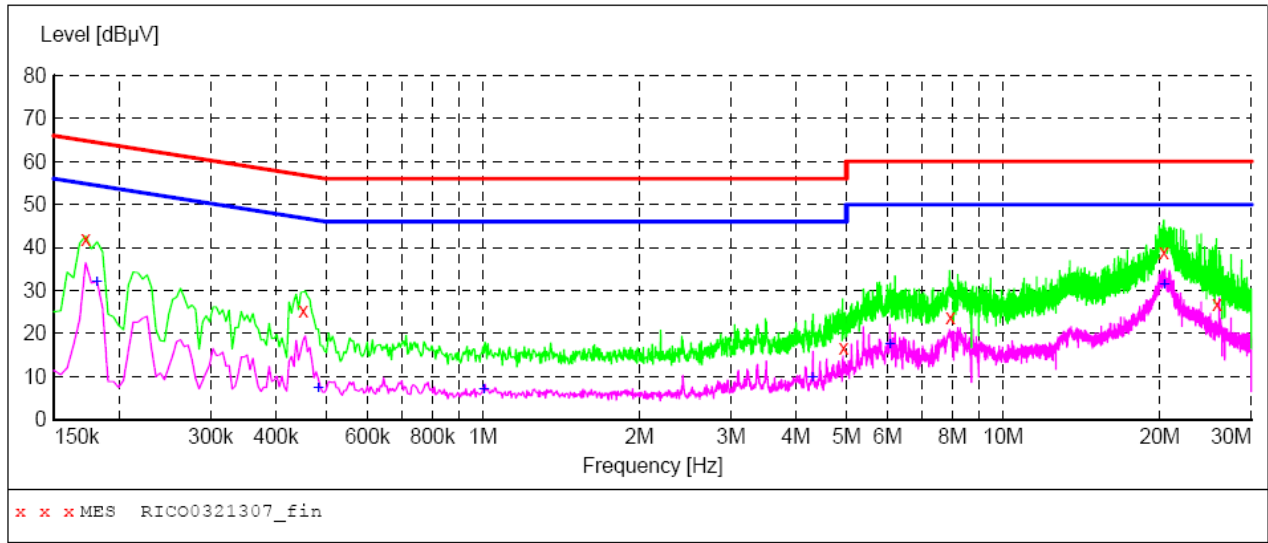
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	31.60	10.2	54	22.6	AV	N	GND
0.460500	19.40	10.4	47	27.3	AV	N	GND
4.807500	10.30	10.2	46	35.7	AV	N	GND
6.058500	22.20	10.2	50	27.8	AV	N	GND
20.634000	34.60	10.4	50	15.4	AV	N	GND

Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: Scan
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: DC motor
 Start of Test: 3/21/2013 / 10:48:32AM

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



MEASUREMENT RESULT: "RICO0321307_fin"

3/21/2013 10:51AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.172500	41.90	10.2	65	23.1	QP	L1	GND
0.451500	25.30	10.4	57	31.5	QP	L1	GND
4.924500	16.70	10.2	56	39.3	QP	L1	GND
7.903500	23.70	10.3	60	36.3	QP	L1	GND
20.364000	38.90	10.4	60	21.1	QP	L1	GND
25.732500	26.90	10.6	60	33.1	QP	L1	GND

MEASUREMENT RESULT: "RICO0321307_fin2"

3/21/2013 10:50AM

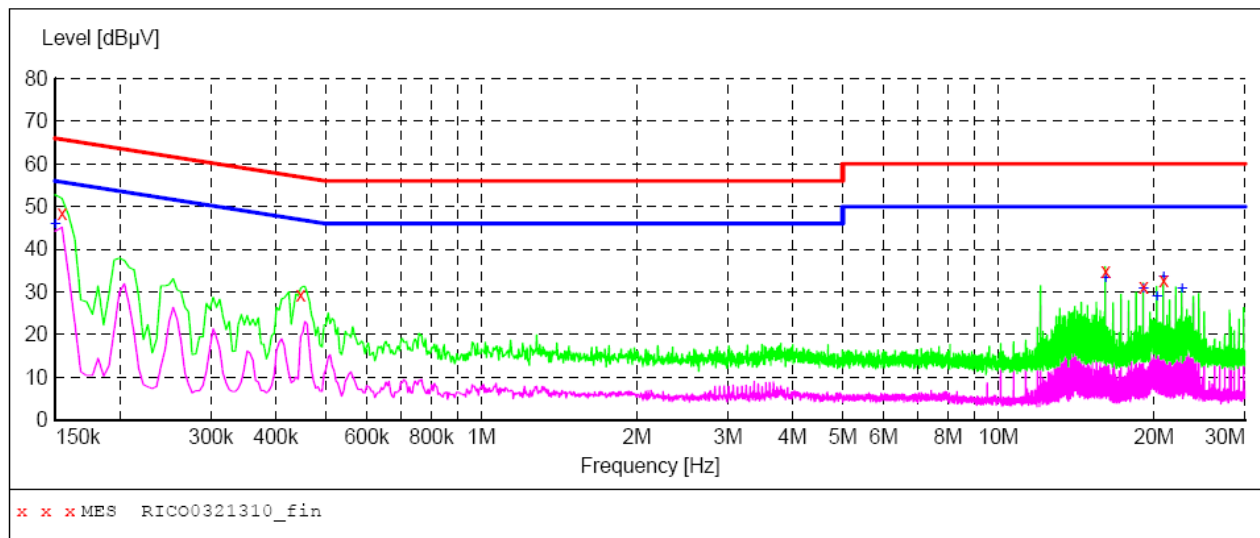
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.181500	32.00	10.2	54	22.4	AV	L1	GND
0.483000	7.40	10.4	46	38.9	AV	L1	GND
1.005000	7.00	10.2	46	39.0	AV	L1	GND
4.303500	9.90	10.2	46	36.1	AV	L1	GND
6.067500	17.60	10.2	50	32.4	AV	L1	GND
20.422500	31.50	10.4	50	18.5	AV	L1	GND

Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX TX
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: DC motor
 Start of Test: 3/21/2013 / 10:59:10AM

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



MEASUREMENT RESULT: "RICO0321310_fin"

3/21/2013 11:01AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.154500	48.30	10.2	66	17.5	QP	N	GND
0.447000	29.20	10.4	57	27.7	QP	N	GND
16.129500	34.90	10.4	60	25.1	QP	N	GND
19.090500	31.20	10.4	60	28.8	QP	N	GND
20.881500	32.70	10.4	60	27.3	QP	N	GND

MEASUREMENT RESULT: "RICO0321310_fin2"

3/21/2013 11:01AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	45.90	10.2	56	10.1	AV	N	GND
16.129500	33.30	10.4	50	16.7	AV	N	GND
19.090500	30.90	10.4	50	19.1	AV	N	GND
20.287500	29.10	10.4	50	20.9	AV	N	GND
20.881500	33.60	10.4	50	16.4	AV	N	GND
22.672500	30.90	10.5	50	19.1	AV	N	GND

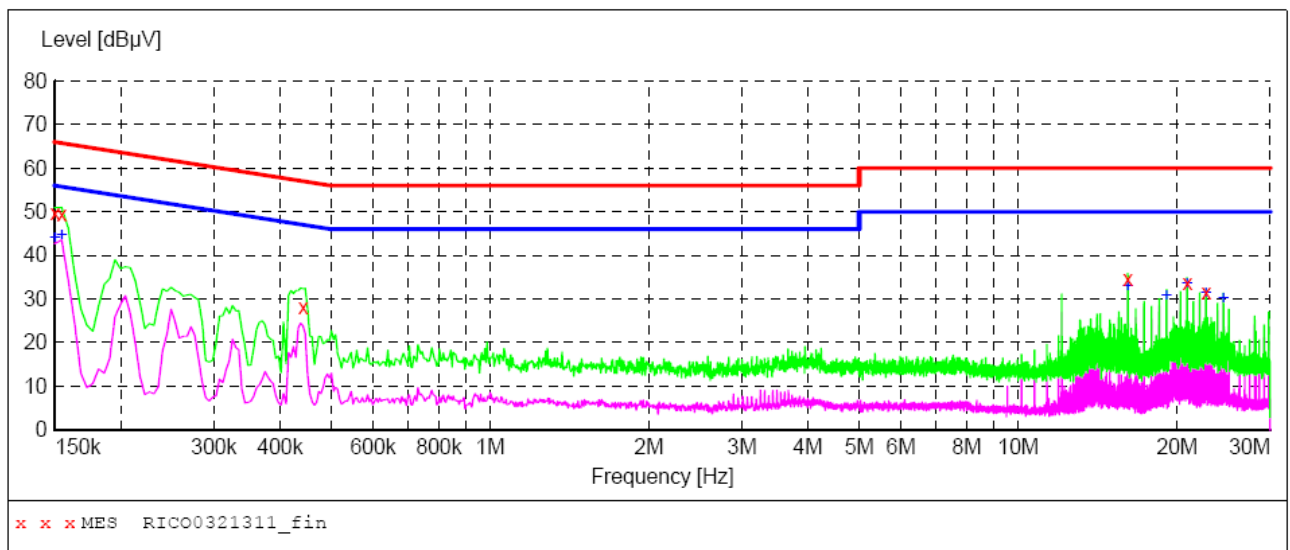
Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX TX
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: DC motor
 Start of Test: 3/21/2013 / 11:02:34AM

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO0321311_fin"

3/21/2013 11:04AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	49.70	10.2	66	16.3	QP	L1	GND
0.154500	49.30	10.2	66	16.5	QP	L1	GND
0.442500	28.10	10.4	57	28.9	QP	L1	GND
16.129500	34.60	10.4	60	25.4	QP	L1	GND
20.881500	33.70	10.4	60	26.3	QP	L1	GND
22.672500	31.60	10.5	60	28.4	QP	L1	GND

MEASUREMENT RESULT: "RICO0321311_fin2"

3/21/2013 11:04AM

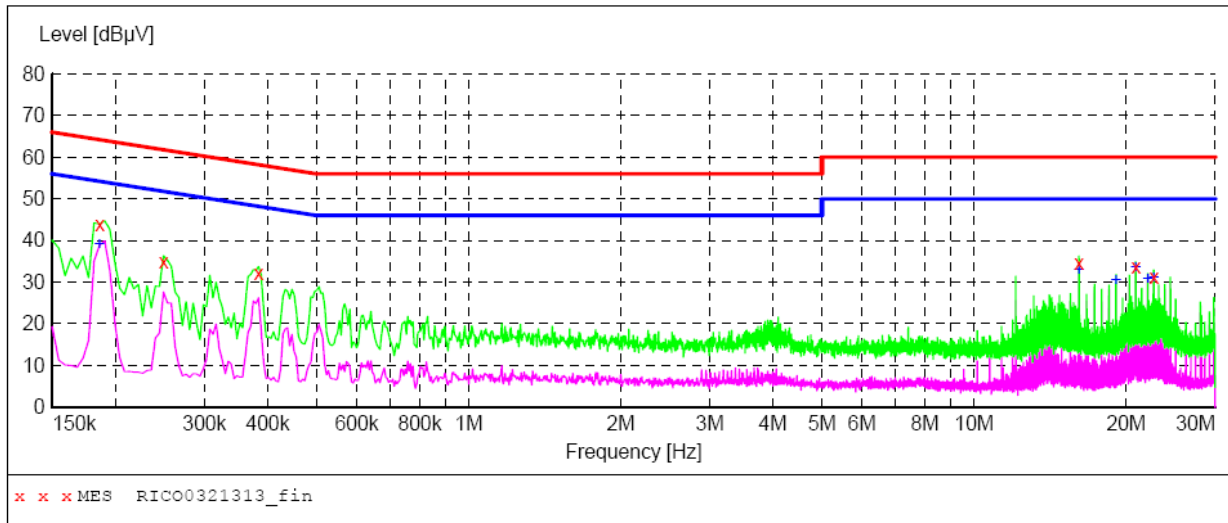
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	44.20	10.2	56	11.8	AV	L1	GND
0.154500	44.90	10.2	56	10.9	AV	L1	GND
16.129500	33.10	10.4	50	16.9	AV	L1	GND
19.090500	30.90	10.4	50	19.1	AV	L1	GND
20.881500	33.70	10.4	50	16.3	AV	L1	GND
22.672500	31.50	10.5	50	18.5	AV	L1	GND
24.463500	30.20	10.5	50	19.8	AV	L1	GND

Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX RX
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: DC motor
 Start of Test: 3/21/2013 / 11:11:14AM

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



MEASUREMENT RESULT: "RICO0321313_fin"

3/21/2013 11:14AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	43.80	10.2	64	20.2	QP	N	GND
0.249000	34.80	10.2	62	27.0	QP	N	GND
0.384000	32.10	10.3	58	26.1	QP	N	GND
16.129500	34.50	10.4	60	25.5	QP	N	GND
20.881500	33.70	10.4	60	26.3	QP	N	GND
22.672500	31.30	10.5	60	28.7	QP	N	GND

MEASUREMENT RESULT: "RICO0321313_fin2"

3/21/2013 11:13AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	39.20	10.2	54	15.0	AV	N	GND
16.129500	33.00	10.4	50	17.0	AV	N	GND
19.090500	30.70	10.4	50	19.3	AV	N	GND
20.881500	33.70	10.4	50	16.3	AV	N	GND
22.074000	31.00	10.5	50	19.0	AV	N	GND
22.672500	31.10	10.5	50	18.9	AV	N	GND

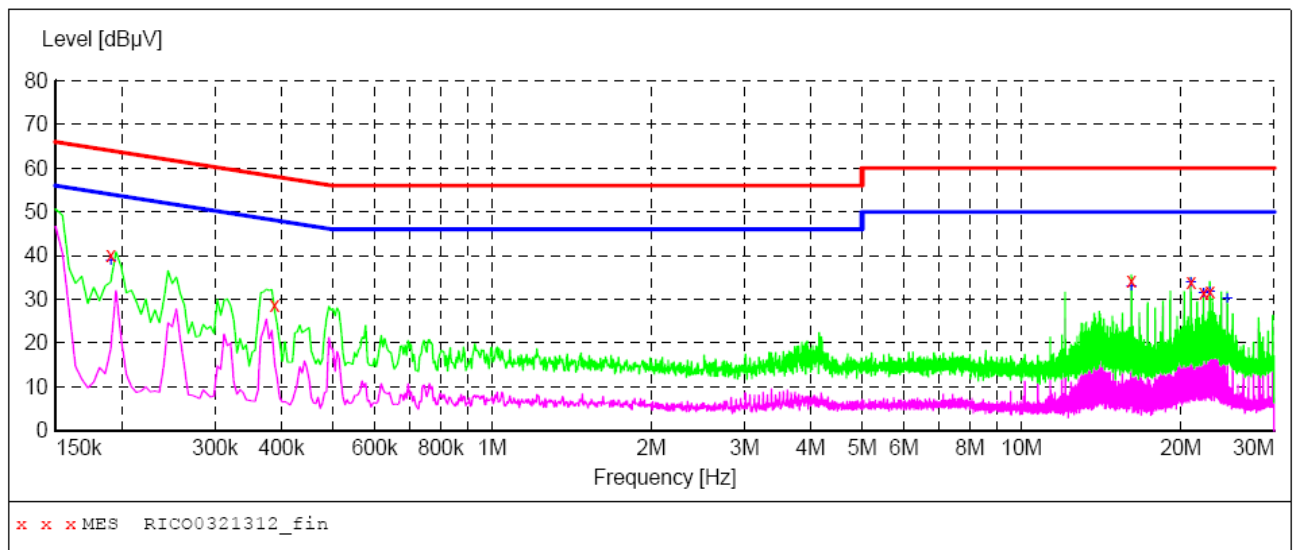
Shenzhen Huatongwei International Inspection CO.,Ltd

Voltage Mains Test FCC PART 15

EUT: SP 112SF
 Manufacturer: RICOH
 Operating Condition: FAX RX
 Test Site: 3# SHIELDED ROOM
 Operator: WANG
 Test Specification: AC 120V/60Hz
 Comment: DC motor
 Start of Test: 3/21/2013 / 11:10:02AM

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "RICO0321312_fin"

3/21/2013 11:15AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500	40.20	10.2	64	23.8	QP	L1	GND
0.388500	28.80	10.3	58	29.3	QP	L1	GND
16.129500	34.40	10.4	60	25.6	QP	L1	GND
20.881500	33.90	10.4	60	26.1	QP	L1	GND
22.074000	31.50	10.5	60	28.5	QP	L1	GND
22.672500	31.80	10.5	60	28.2	QP	L1	GND

MEASUREMENT RESULT: "RICO0321312_fin2"

3/21/2013 11:10AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190500	39.00	10.2	54	15.0	AV	L1	GND
16.129500	32.90	10.4	50	17.1	AV	L1	GND
20.881500	33.90	10.4	50	16.1	AV	L1	GND
22.074000	31.40	10.5	50	18.6	AV	L1	GND
22.672500	31.70	10.5	50	18.3	AV	L1	GND
24.463500	30.30	10.5	50	19.7	AV	L1	GND

5. External and Internal Photos of the EUT

5.1. External photos of the EUT

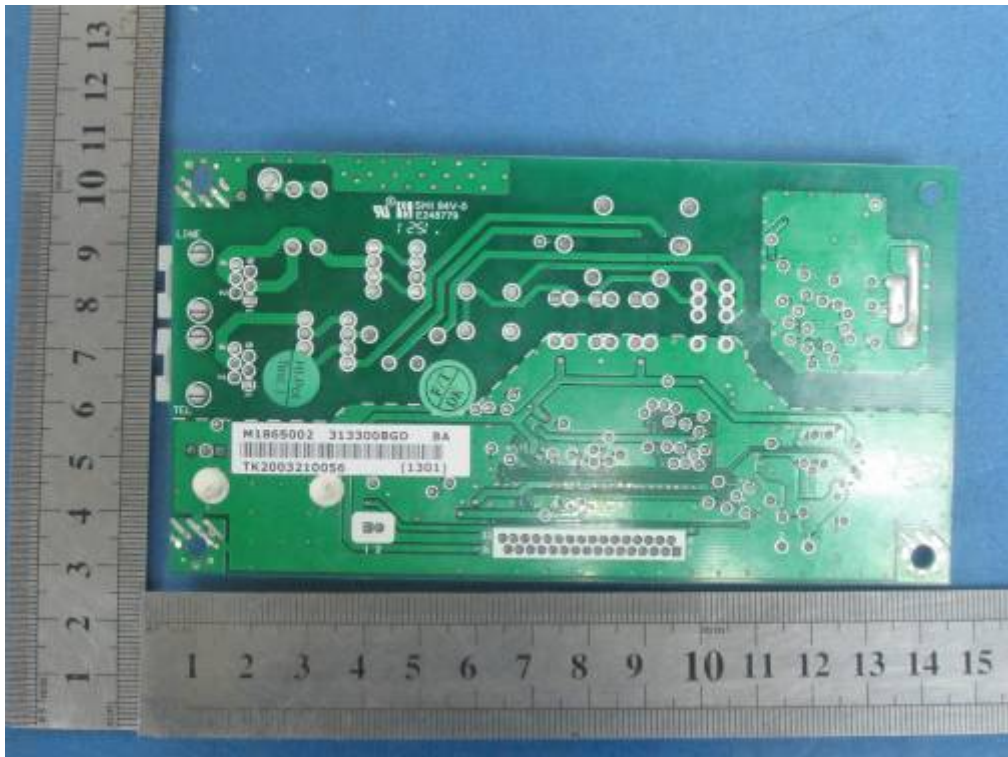




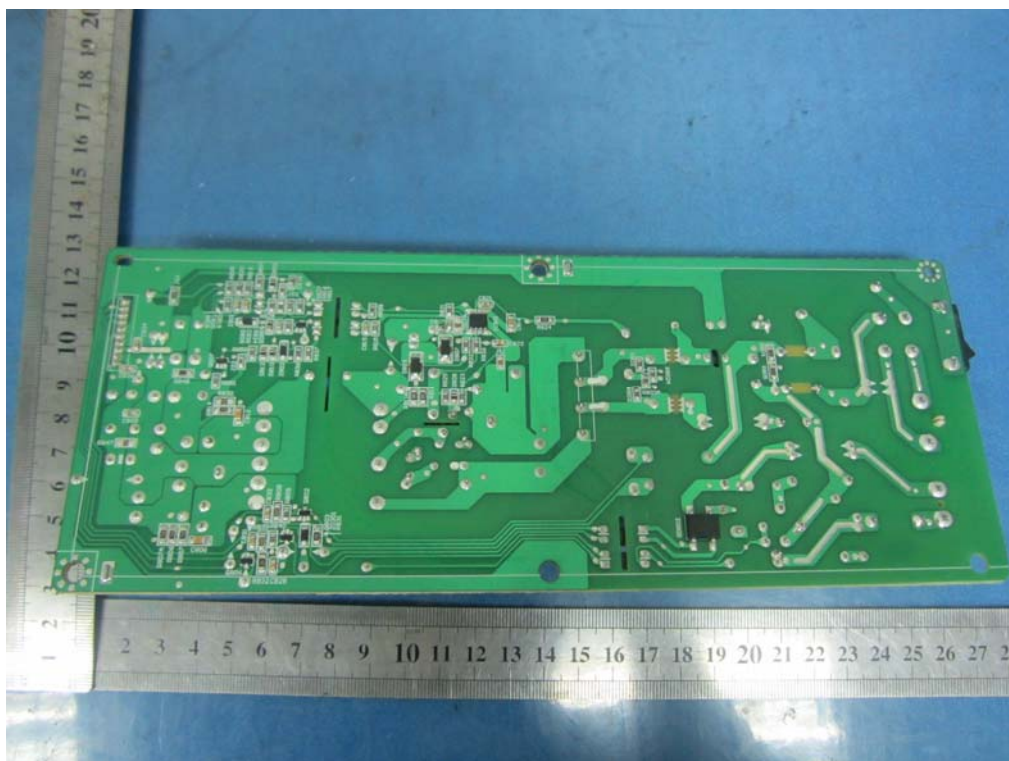


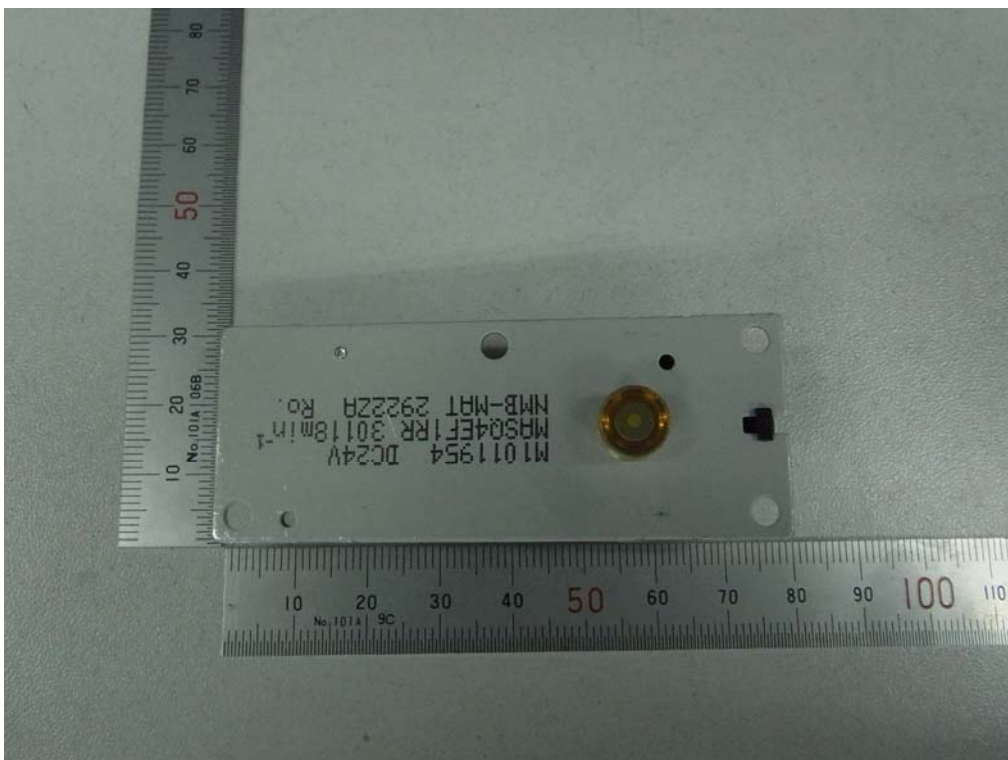
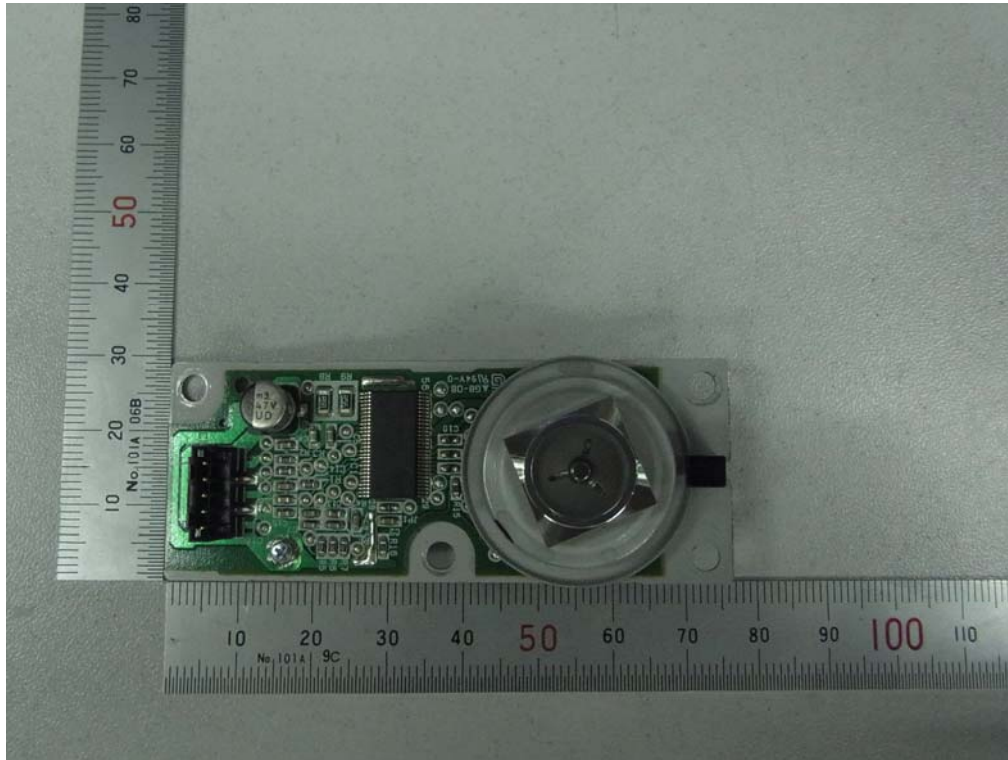
5.2. Internal photos of the EUT

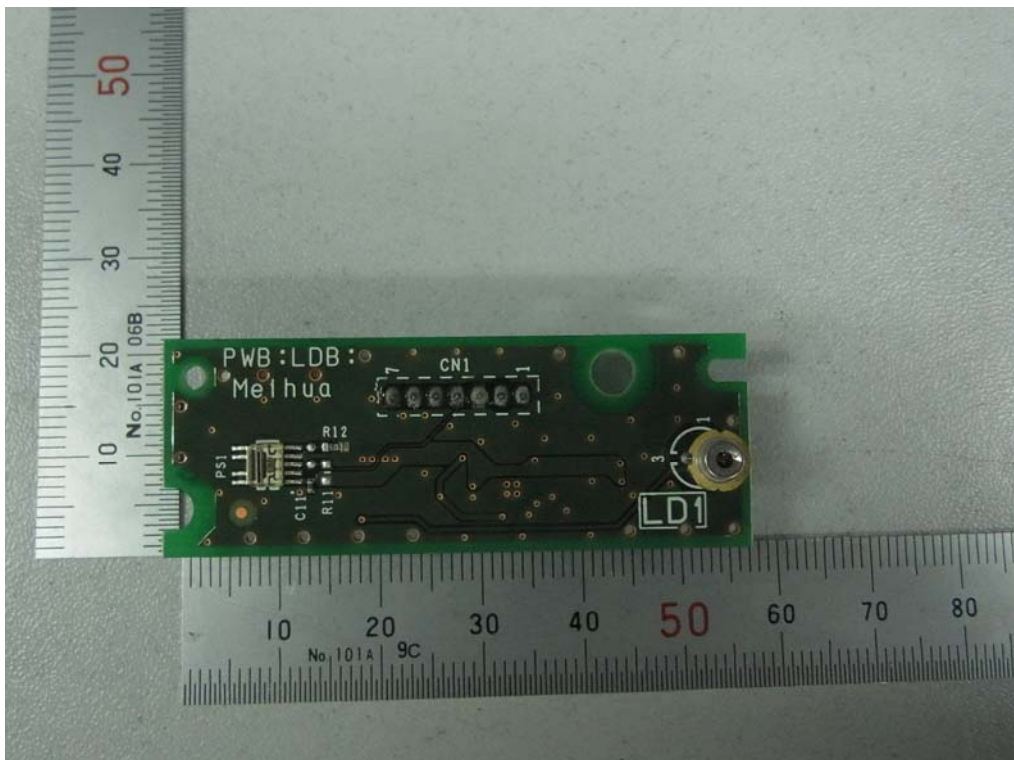
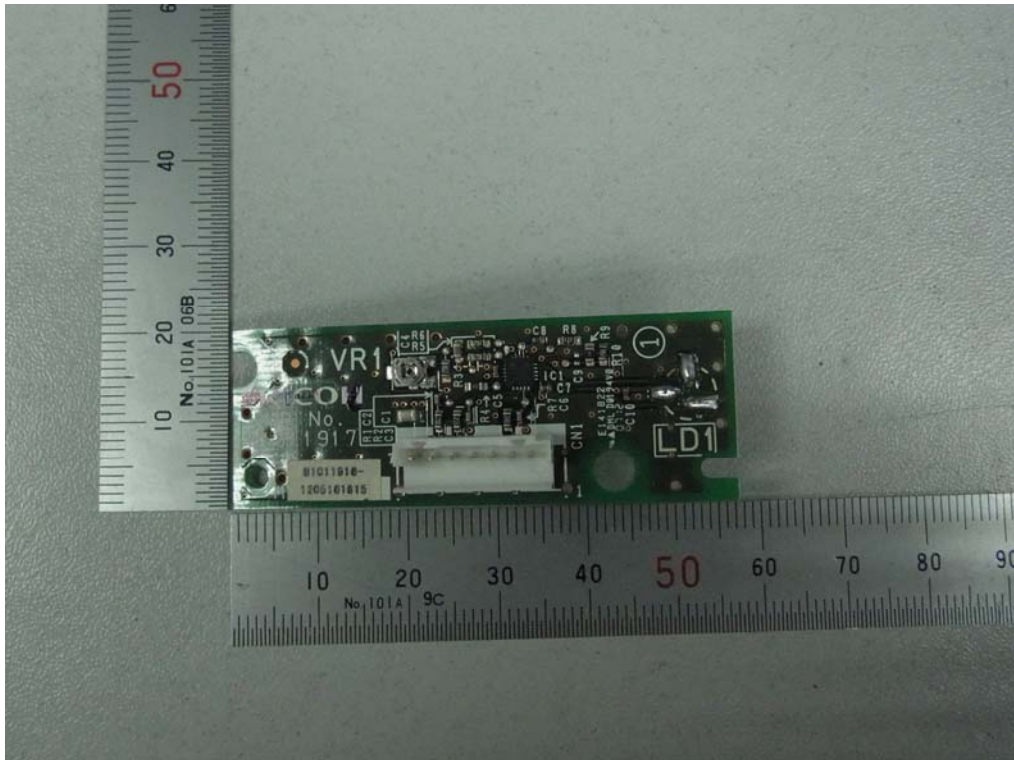


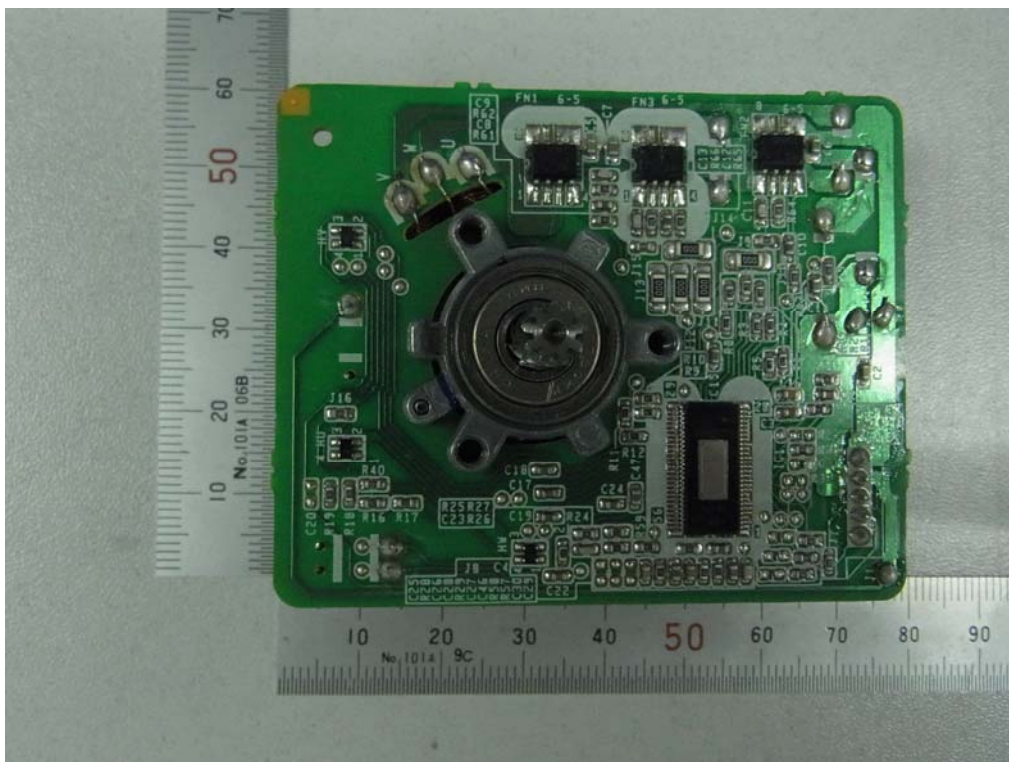
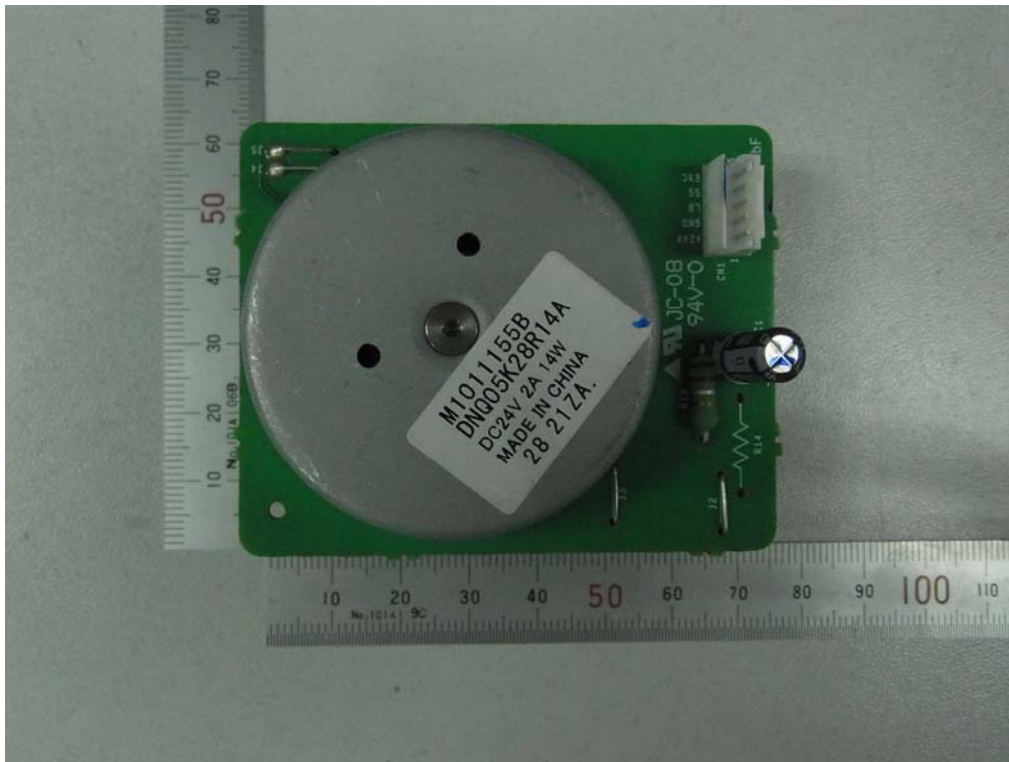


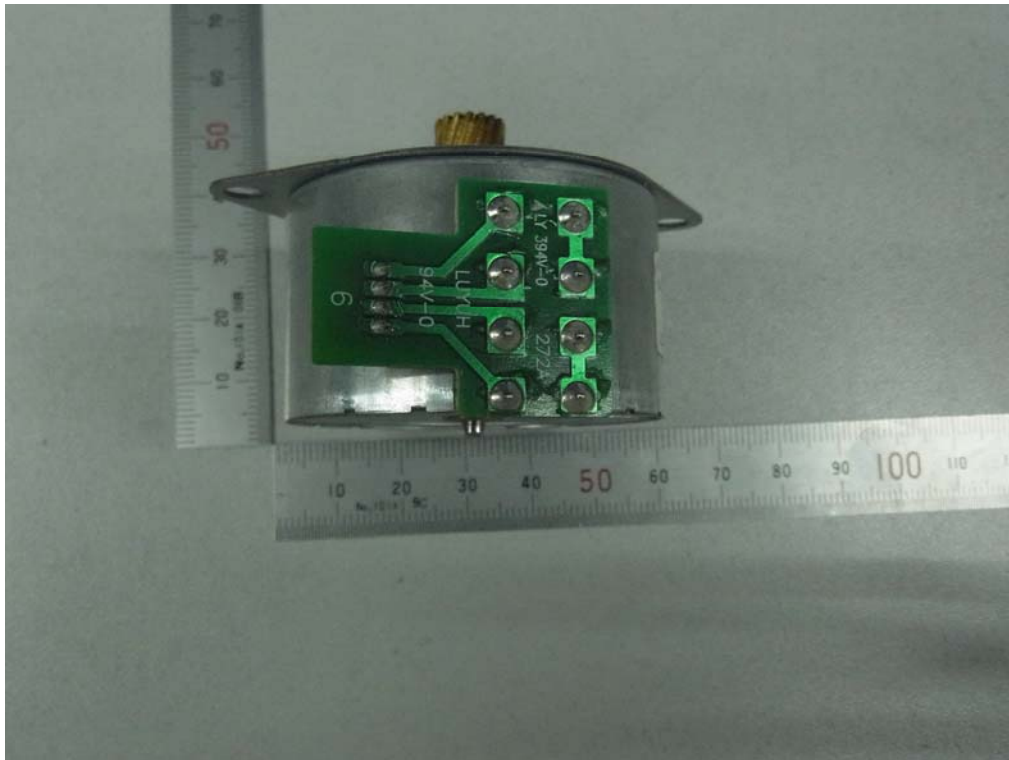












.....End of Report.....