

Application for FCC Certificate  
On Behalf of  
Ricoh Company Ltd

Printer

Model No.: SP C250SF/SP C252SF

FCC ID : BBP-MFSPC252SF1

Prepared For : Ricoh Company Ltd  
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Report No. : ACI-F13190  
Date of Test : Oct 28 – Nov 11, 2013  
Date of Report : Nov 14, 2013

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## TEST REPORT FOR FCC CERTIFICATE

Applicant : Ricoh Company Ltd  
 Manufacturer : Ricoh Company Ltd  
 Factory : Shanghai Ricoh Digital Equipment Co., Ltd.  
 EUT Description : Printer  
                   (A) Model No. : SP C250SF/SP C252SF  
                   (B) Power Supply : 120V/60Hz

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B OCTOBER 2012  
AND ANSI C63.4-2003*

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B (Class B) limits both radiated and conducted emissions.


The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. This report shows that the EUT (M/N: Refer to Sec2.1) which was tested in 3m anechoic chamber Oct 28 – Nov 11, 2013 is technically compliance with the FCC official limits also.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.


This report contains data that are not covered by the NVLAP accreditation.

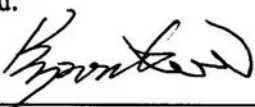
This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Oct 28 – Nov 11, 2013      Date of Report : Nov 14, 2013

Producer :   
                   KATHY WANG / Supervisor

Review :   
                   DIO YANG / Assistant Manager

 For and on behalf of  
 Audix Technology (Shanghai) Co., Ltd.

Signatory :   
 Authorized Signature EMC      BYRON KWO / Assistant General Manager

# 1 SUMMARY OF STANDARDS AND RESULTS

## 1.1 Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below:

Description of Test Item	Standard	Limits	Results
<b>EMISSION</b>			
Conducted Disturbance at the Mains Terminal	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2012 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2012 AND ANSI C63.4-2003	15.109(a) Class B	Pass

## 2 GENERAL INFORMATION

### 2.1 Description of Equipment Under Test

Description	:	Printer
Type of EUT	:	<input type="checkbox"/> Production <input checked="" type="checkbox"/> Pre-product <input type="checkbox"/> Pro-type
Model No.	:	SP C250SF/SP C252SF
Note	:	The above two models are all the same except for the capacity of the carbon dust. SP C252SF model (Serial No.: X113P817008) was tested and recorded in the report.
Highest working Frequency	:	532MHz (Except for Wi-Fi module)
Bank Unit (TK1010)	:	Model Number : G849-27 Serial Number : Q9438500393
Applicant	:	Ricoh Company Ltd 810, Shimoimaizumi Ebina-shi, Kanagawa, 43-0460 Japan
Manufacturer	:	Ricoh Company Ltd 810, Shimoimaizumi Ebina-shi, Kanagawa, 43-0460 Japan
Factory	:	Shanghai Ricoh Digital Equipment Co., Ltd. No.887 Jinggang Road, Jinqiao Export Processing Zone, Pudong New Area, Shanghai, China

#### Remark:

The EUT is a Printer which input/output ports as follows:

- (1) One LAN Port : Connected with PC
- (2) One USB Port : Connected with PC
- (3) One USB Port : Connected with Digital Camera or U-Disk
- (4) One RJ12 Port : Connected with Telephone
- (5) One RJ12 Port : Connected with PROGRAM-CONTROL  
TELEPHONE EXCHANGE

## 2.2 Peripherals

### 2.2.1 Notebook PC

Manufacturer : LENOVO  
 Model Number : ThinkPad X220i  
 Serial Number : R9-NZEBP  
 Certificate : CCC, FCC DoC, CE/EMC, VCCI

### 2.2.2 Digital Camera

Manufacturer : Panasonic  
 Model Number : DMC-FHIGK  
 Serial Number : WJ0HA001877  
 Data Cable : Shielded, Undetachable, 1.5m

### 2.2.3 U-Disk

Manufacturer : TOSHIBA  
 Model Number : UHYBS-016GH  
 Serial Number : 1327DB1395L2UMK

### 2.2.4 Telephone

Manufacturer : SIEMENS  
 Model Number : HA8000  
 Serial Number : 0296978

### 2.2.5 PROGRAM-CONTROL TELTPHONE EXCHANGE

Manufacturer : BAIXIN  
 Model Number : TC-208  
 Data Cable : Unshielded, Undetachable, 0.1m

### 2.2.6 Printer (Link to PROGRAM-CONTROL TELTPHONE EXCHANGE)

Manufacturer : Ricoh Co., Ltd.  
 Model Number : SP C252  
 Serial Number : X113P827005

## 2.3 Cable list

No.	Name	Length (m)	Cable Shield	Connector Shield	Remark
1	USB Cable	1.5	Shielded	Shielded	-
2	Mini USB Cable	1.2	Shielded	Shielded	-
3	LAN Cable	1.6	Unshielded	Unshielded	
4	Telephone Cable	1.5	Unshielded	Unshielded	connect to telephone-exchange
5	Telephone Cable	1.2	Unshielded	Unshielded	connect to telephone
6	AC Input Cable	1.9	Unshielded	Unshielded	-

## 2.4 Description of Test Facility

Site Description (No.3 3m Chamber)	:	Sept. 17, 1998 file on Mar 16, 2012 Renewed Federal Communications Commission FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046, USA
Name of Firm	:	Audix Technology (Shanghai) Co., Ltd.
Site Location	:	3F 34Bldg 680 Guiping Rd, Caohejing Hi-Tech Park, Shanghai 200233, China
NVLAP Lab Code	:	200371-0

## 2.5 Measurement Uncertainty

Conducted Emission Expanded Uncertainty:	U = 3.02 dB
Radiated Emission Expanded Uncertainty (30-200MHz):	U = 4.17 dB (Horizontal) U = 4.02 dB (Vertical)
Radiated Emission Expanded Uncertainty (200M-1GHz):	U = 3.38 dB (Horizontal) U = 3.28 dB (Vertical)
Radiated Emission Expanded Uncertainty (Above 1GHz):	U = 4.68 dB (Horizontal) U = 4.87 dB (Vertical)

### 3 CONDUCTED EMISSION TEST

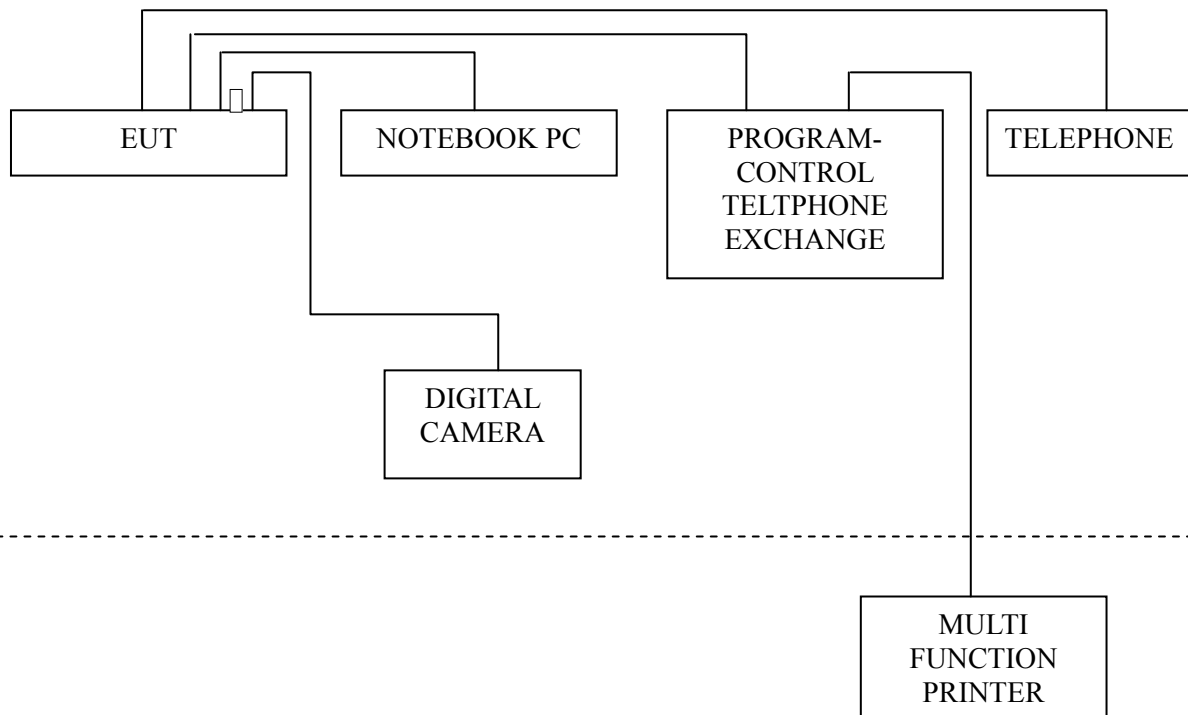
#### 3.1 Test Equipment

The following test equipments are used during the conducted emission test in a shielded room:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	100841	Mar 20, 2013	Mar 19, 2014
2.	Artificial Mains Network (AMN)	R&S	ESH2-Z5	843890/011	Feb 25, 2013	Feb 24, 2014
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Mar 20, 2013	Mar 19, 2014
4.	50Ω Coaxial Switch	Anritsu	MP59B	6200426389	Sep 18, 2013	Mar 17, 2014
5.	50Ω Terminator	Anritsu	BNC	001	Mar 20, 2013	Mar 19, 2014
6.	Software	Audix	E3	6.2009-1-15	--	--

#### 3.2 Block Diagram of Test Setup

##### 3.2.1 EUT & Peripherals

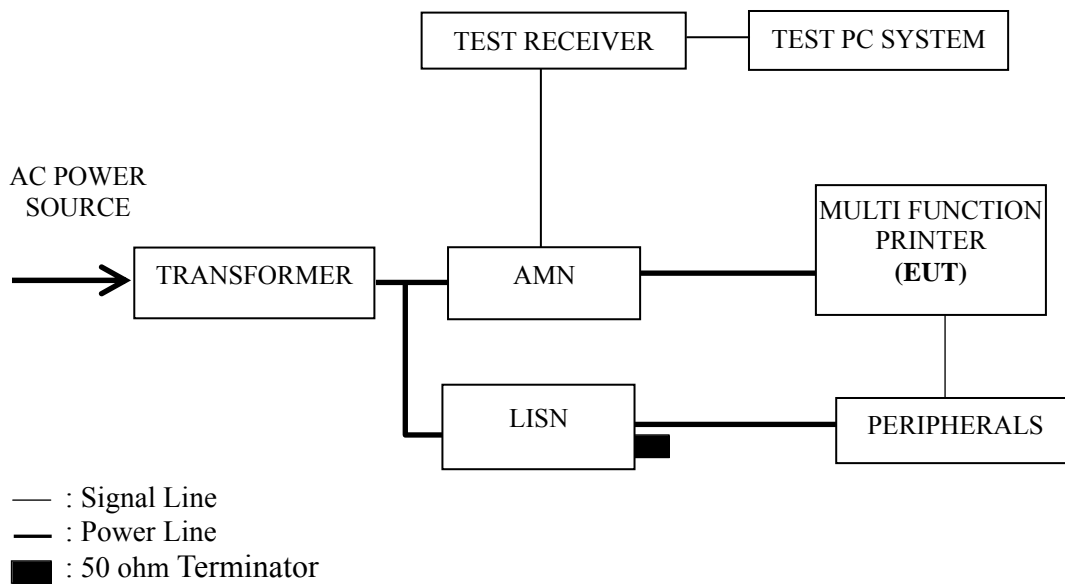


□ : U-Disk

Note: The U-Disk and Digital Camera were connected separately for different test mode.



### 3.2.2 Conducted Disturbance Test Setup



### 3.3 Conducted Emission Limit [FCC Part 15 Subpart B 15.107(a)]

Frequency Range (MHz)	Limits dB ( $\mu$ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66~56	56~46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE 1 – The lower limit shall apply at the transition frequencies.  
 NOTE 2 – The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz~0.50 MHz

### 3.4 Test Configuration

The EUT (listed in Sec.2.1) and the peripherals (listed in Sec 2.2) were installed as shown on Sec.3.2 to meet FCC requirement and operating in a manner that tends to maximize its emission level in a normal application.

### 3.5 Operating Condition of EUT

3.5.1 Setup the EUT and peripherals as shown in Sec. 3.2.

3.5.2 Turn on the power of all equipments and the EUT.

3.5.3 Set the EUT on the test mode and then test.

### 3.6 Test Procedures

The EUT and peripherals were connected to the power mains through an Artificial Mains Network (AMN). This provided a 50 ohm coupling impedance for the measuring equipment.

Both sides of AC line (Line & Neutral) were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed or manipulated according to ANSI C63.4:2003 during conducted emission test.

The bandwidth of R&S Test Receiver ESCI was set at 9 kHz.

The frequency range from 150 kHz to 30 MHz was checked.

The test modes were done on conducted disturbance test and all the test results are listed in Sec. 3.7.

### 3.7 Test Results

< **PASS** >

The frequency and amplitude of the highest conducted emission relative to the limit is reported. All emissions not reported below are too low against the prescribed limits.

Test Mode	Data Page
LAN Scan+USB Print	P11
USB Scan+LAN Print	P12
Color Copy	P13
<b>Pictbridge Print</b>	<b>P14</b>
Scan to USB	P15
FAX Tx	P16
FAX Rx	P17
Wifi Print	P18
Wifi Scan	P19
Standby	P20

NOTE 1 – Factor = Cable Loss + AMN Factor.

NOTE 2 – Emission Level = Meter Reading + Factor.

NOTE 3 – “QP” means “Quasi-Peak” values, “AV” means “Average” values.

NOTE 4 – The worst case is for Pictbridge Print test mode. The worst emission is detected at 0.150 MHz (Average Value) with corrected signal level of 50.65 dB ( $\mu$ V) (limit is 56.00 dB ( $\mu$ V)), when the Neutral of the EUT is connected to AMN.

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 48%RH

Test Mode : LAN Scan+USB Print Date of Test : Oct 28, 2013

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.175	50.71	0.13	50.84	64.71	13.87	QP
	0.235	37.45	0.09	37.54	62.27	24.73	
	0.618	32.10	0.05	32.15	56.00	23.85	
	0.995	26.40	0.05	26.45	56.00	29.55	
	4.329	36.00	0.18	36.18	56.00	19.82	
	7.490	45.80	0.26	46.06	60.00	13.94	
	0.175	45.91	0.13	46.04	54.71	8.67	AV
	0.235	35.50	0.09	35.59	52.27	16.68	
	0.618	30.60	0.05	30.65	46.00	15.35	
	0.995	20.00	0.05	20.05	46.00	25.95	
	4.329	30.70	0.18	30.88	46.00	15.12	
<b>7.490</b>	<b>43.90</b>	<b>0.26</b>	<b>44.16</b>	<b>50.00</b>	<b>5.84</b>		
Neutral	0.157	56.50	0.16	56.66	65.60	8.94	QP
	0.176	50.11	0.17	50.28	64.70	14.42	
	0.411	30.39	0.22	30.61	57.64	27.03	
	1.344	33.11	0.16	33.27	56.00	22.73	
	3.802	34.40	0.20	34.60	56.00	21.40	
	7.486	45.40	0.36	45.76	60.00	14.24	
	0.157	32.00	0.16	32.16	55.60	23.44	AV
	0.176	38.91	0.17	39.08	54.70	15.62	
	0.411	25.59	0.22	25.81	47.64	21.83	
	1.344	22.41	0.16	22.57	46.00	23.43	
	3.802	33.00	0.20	33.20	46.00	12.80	
	7.486	43.50	0.36	43.86	50.00	6.14	

TEST ENGINEER: ERIC TANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 48%RH

Test Mode : USB Scan + LAN Print Date of Test : Oct 28, 2013

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.155	56.10	0.15	56.25	65.72	9.47	QP
	0.177	50.50	0.13	50.63	64.65	14.02	
	0.621	32.17	0.05	32.22	56.00	23.78	
	1.858	28.52	0.07	28.59	56.00	27.41	
	5.005	40.00	0.21	40.21	60.00	19.79	
	7.430	44.60	0.26	44.86	60.00	15.14	
	0.155	30.70	0.15	30.85	55.72	24.87	AV
	0.177	45.70	0.13	45.83	54.65	8.82	
	0.621	30.14	0.05	30.19	46.00	15.81	
	1.858	26.12	0.07	26.19	46.00	19.81	
	5.005	39.84	0.21	40.05	50.00	9.95	
	7.430	42.50	0.26	42.76	50.00	7.24	
Neutral	0.176	41.61	0.17	41.78	64.66	22.88	QP
	0.203	41.60	0.20	41.80	63.49	21.69	
	0.233	30.91	0.20	31.11	62.35	31.24	
	2.448	23.98	0.16	24.14	56.00	31.86	
	4.622	38.23	0.22	38.45	56.00	17.55	
	7.430	45.79	0.36	46.15	60.00	13.85	
	0.176	36.21	0.17	36.38	54.66	18.28	AV
	0.203	17.80	0.20	18.00	53.49	35.49	
	0.233	25.68	0.20	25.88	52.35	26.47	
	2.448	22.54	0.16	22.70	46.00	23.30	
	4.622	35.61	0.22	35.83	46.00	10.17	
	<b>7.430</b>	<b>43.29</b>	<b>0.36</b>	<b>43.65</b>	<b>50.00</b>	<b>6.35</b>	

TEST ENGINEER: ERIC TANG

EUT : Printer Temperature : 22°C  
 Model No. : SP C252SF Humidity : 48%RH  
 Test Mode : Color Copy Date of Test : Oct 28, 2013

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.154	56.00	0.15	56.15	65.79	9.64	QP
	0.174	48.81	0.13	48.94	64.75	15.81	
	0.293	34.90	0.06	34.96	60.43	25.47	
	0.927	27.29	0.07	27.36	56.00	28.64	
	4.084	32.40	0.17	32.57	56.00	23.43	
	7.432	45.90	0.26	46.16	60.00	13.84	
	0.154	30.30	0.15	30.45	55.79	25.34	AV
	0.174	45.81	0.13	45.94	54.75	8.81	
	0.293	33.50	0.06	33.56	50.43	16.87	
	0.927	27.59	0.07	27.66	46.00	18.34	
	4.084	25.90	0.17	26.07	46.00	19.93	
	<b>7.432</b>	<b>43.80</b>	<b>0.26</b>	<b>44.06</b>	<b>50.00</b>	<b>5.94</b>	
Neutral	0.152	58.10	0.15	58.25	65.91	7.66	QP
	0.233	38.91	0.20	39.11	62.34	23.23	
	0.585	27.99	0.17	28.16	56.00	27.84	
	1.290	25.70	0.17	25.87	56.00	30.13	
	3.804	34.00	0.20	34.20	56.00	21.80	
	9.013	41.40	0.43	41.83	60.00	18.17	
	0.152	32.10	0.15	32.25	55.91	23.66	AV
	0.233	27.31	0.20	27.51	52.34	24.83	
	0.585	25.49	0.17	25.66	46.00	20.34	
	1.290	17.80	0.17	17.97	46.00	28.03	
	3.804	32.20	0.20	32.40	46.00	13.60	
	9.013	37.70	0.43	38.13	50.00	11.87	

TEST ENGINEER: ERIC TANG

EUT : Printer Temperature : 22°C  
 Model No. : SP C252SF Humidity : 48%RH  
 Test Mode : Pictbridge Print Date of Test : Oct 28, 2013

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.177	48.00	0.13	48.13	64.65	16.52	QP
	0.230	38.44	0.09	38.53	62.44	23.91	
	0.293	33.50	0.06	33.56	60.43	26.87	
	0.923	29.14	0.07	29.21	56.00	26.79	
	1.858	27.79	0.07	27.86	56.00	28.14	
	7.428	44.40	0.26	44.66	60.00	15.34	
	0.177	44.50	0.13	44.63	54.65	10.02	AV
	0.230	34.13	0.09	34.22	52.44	18.22	
	0.293	32.90	0.06	32.96	50.43	17.47	
	0.923	25.12	0.07	25.19	46.00	20.81	
	1.858	23.98	0.07	24.05	46.00	21.95	
	7.428	42.80	0.26	43.06	50.00	6.94	
Neutral	0.150	59.40	0.15	59.55	66.00	6.45	QP
	0.178	47.91	0.17	48.08	64.56	16.48	
	0.297	27.09	0.22	27.31	60.32	33.01	
	0.524	30.79	0.19	30.98	56.00	25.02	
	4.315	34.16	0.21	34.37	56.00	21.63	
	7.431	45.29	0.36	45.65	60.00	14.35	
	<b>0.150</b>	<b>50.50</b>	<b>0.15</b>	<b>50.65</b>	<b>56.00</b>	<b>5.35</b>	AV
	0.178	36.01	0.17	36.18	54.56	18.38	
	0.297	25.64	0.22	25.86	50.32	24.46	
	0.524	24.35	0.19	24.54	46.00	21.46	
	4.315	30.32	0.21	30.53	46.00	15.47	
	7.431	42.89	0.36	43.25	50.00	6.75	

TEST ENGINEER: ERIC TANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 48%RH

Test Mode : Scan to USB Date of Test : Oct 28, 2013

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.175	47.71	0.13	47.84	64.71	16.87	QP
	0.234	38.10	0.09	38.19	62.31	24.12	
	0.586	27.09	0.03	27.12	56.00	28.88	
	1.861	27.30	0.07	27.37	56.00	28.63	
	3.996	29.60	0.17	29.77	56.00	26.23	
	7.487	36.90	0.26	37.16	60.00	22.84	
	<b>0.175</b>	<b>45.51</b>	<b>0.13</b>	<b>45.64</b>	<b>54.71</b>	<b>9.07</b>	AV
	0.234	37.30	0.09	37.39	52.31	14.92	
	0.586	26.69	0.03	26.72	46.00	19.28	
	1.861	28.00	0.07	28.07	46.00	17.93	
	3.996	21.00	0.17	21.17	46.00	24.83	
	7.487	33.70	0.26	33.96	50.00	16.04	
Neutral	0.175	37.61	0.17	37.78	54.73	16.95	QP
	0.236	26.21	0.20	26.41	52.24	25.83	
	0.585	28.99	0.17	29.16	46.00	16.84	
	2.457	19.00	0.16	19.16	46.00	26.84	
	4.343	32.21	0.21	32.42	46.00	13.58	
	9.523	34.60	0.41	35.01	50.00	14.99	
	0.175	41.31	0.17	41.48	64.73	23.25	AV
	0.236	32.61	0.20	32.81	62.24	29.43	
	0.585	28.89	0.17	29.06	56.00	26.94	
	2.457	23.20	0.16	23.36	56.00	32.64	
	4.343	32.31	0.21	32.52	56.00	23.48	
	9.523	36.20	0.41	36.61	60.00	23.39	

TEST ENGINEER: ERIC TANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 48%RH

Test Mode : FAX Tx Date of Test : Oct 28, 2013

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark	
Line	0.177	49.20	0.13	49.33	64.63	15.30	QP	
	0.235	40.00	0.09	40.09	62.29	22.20		
	0.525	25.90	-0.03	25.87	56.00	30.13		
	3.407	29.80	0.14	29.94	56.00	26.06		
	7.255	40.20	0.26	40.46	60.00	19.54		
	15.800	26.50	-0.02	26.48	60.00	33.52		
		<b>0.177</b>	<b>46.10</b>	<b>0.13</b>	<b>46.23</b>	<b>54.63</b>	<b>8.40</b>	AV
		0.235	38.20	0.09	38.29	52.29	14.00	
		0.525	23.90	-0.03	23.87	46.00	22.13	
		3.407	29.80	0.14	29.94	46.00	16.06	
		7.255	36.30	0.26	36.56	50.00	13.44	
		15.800	22.70	-0.02	22.68	50.00	27.32	
Neutral	0.175	42.51	0.17	42.68	64.71	22.03	QP	
	0.235	29.91	0.20	30.11	62.29	32.18		
	0.583	30.70	0.17	30.87	56.00	25.13		
	4.337	33.91	0.21	34.12	56.00	21.88		
	9.486	34.91	0.41	35.32	60.00	24.68		
	21.020	22.30	0.82	23.12	60.00	36.88		
		0.175	37.91	0.17	38.08	54.71	16.63	AV
		0.235	26.71	0.20	26.91	52.29	25.38	
		0.583	30.70	0.17	30.87	46.00	15.13	
		4.337	32.61	0.21	32.82	46.00	13.18	
		9.486	30.81	0.41	31.22	50.00	18.78	
		21.020	17.80	0.82	18.62	50.00	31.38	

TEST ENGINEER: ERIC TANG



EUT : Printer Temperature : 22°C  
 Model No. : SP C252SF Humidity : 48%RH  
 Test Mode : FAX Rx Date of Test : Oct 28, 2013

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.153	57.60	0.15	57.75	65.82	8.07	QP
	0.176	52.11	0.13	52.24	64.68	12.44	
	0.234	37.64	0.09	37.73	62.30	24.57	
	0.923	31.73	0.07	31.80	56.00	24.20	
	3.901	33.21	0.17	33.38	56.00	22.62	
	10.660	38.30	0.16	38.46	60.00	21.54	
	0.153	30.40	0.15	30.55	55.82	25.27	AV
	<b>0.176</b>	<b>47.01</b>	<b>0.13</b>	<b>47.14</b>	<b>54.68</b>	<b>7.54</b>	
	0.234	35.61	0.09	35.70	52.30	16.60	
	0.923	28.66	0.07	28.73	46.00	17.27	
	3.901	30.34	0.17	30.51	46.00	15.49	
	10.660	35.30	0.16	35.46	50.00	14.54	
Neutral	0.155	55.60	0.15	55.75	65.74	9.99	QP
	0.174	51.70	0.17	51.87	64.76	12.89	
	0.643	30.90	0.14	31.04	56.00	24.96	
	4.315	35.93	0.21	36.14	56.00	19.86	
	6.963	38.70	0.33	39.03	60.00	20.97	
	10.660	36.40	0.42	36.82	60.00	23.18	
	0.155	25.90	0.15	26.05	55.74	29.69	AV
	0.174	40.30	0.17	40.47	54.76	14.29	
	0.643	28.20	0.14	28.34	46.00	17.66	
	4.315	34.62	0.21	34.83	46.00	11.17	
	6.963	35.70	0.33	36.03	50.00	13.97	
	10.660	33.80	0.42	34.22	50.00	15.78	

TEST ENGINEER: ERIC TANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 48%RH

Test Mode : Wifi Print Date of Test : Oct 28, 2013

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.152	55.10	0.15	55.25	65.91	10.66	QP
	0.175	51.81	0.13	51.94	64.71	12.77	
	0.234	37.56	0.09	37.65	62.30	24.65	
	0.614	31.59	0.05	31.64	56.00	24.36	
	4.027	35.13	0.17	35.30	56.00	20.70	
	7.434	43.70	0.26	43.96	60.00	16.04	
	0.152	25.90	0.15	26.05	55.91	29.86	AV
	0.175	45.01	0.13	45.14	54.71	9.57	
	0.234	33.51	0.09	33.60	52.30	18.70	
	0.614	28.65	0.05	28.70	46.00	17.30	
	4.027	33.71	0.17	33.88	46.00	12.12	
	7.434	42.10	0.26	42.36	50.00	7.64	
Neutral	0.153	56.40	0.15	56.55	65.82	9.27	QP
	0.175	52.01	0.17	52.18	64.74	12.56	
	0.230	36.99	0.20	37.19	62.44	25.25	
	0.641	31.78	0.14	31.92	56.00	24.08	
	4.315	35.92	0.21	36.13	56.00	19.87	
	7.431	45.09	0.36	45.45	60.00	14.55	
	0.153	26.50	0.15	26.65	55.82	29.17	AV
	0.175	37.01	0.17	37.18	54.74	17.56	
	0.230	24.85	0.20	25.05	52.44	27.39	
	0.641	21.54	0.14	21.68	46.00	24.32	
	4.315	33.13	0.21	33.34	46.00	12.66	
	<b>7.431</b>	<b>43.49</b>	<b>0.36</b>	<b>43.85</b>	<b>50.00</b>	<b>6.15</b>	

TEST ENGINEER: ERIC TANG

EUT : Printer Temperature : 22°C  
 Model No. : SP C252SF Humidity : 48%RH  
 Test Mode : Wifi Scan Date of Test : Nov 11, 2013

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark	
Line	0.176	48.51	0.13	48.64	64.70	16.06	QP	
	0.234	38.41	0.09	38.50	62.32	23.82		
	1.813	21.20	0.07	21.27	56.00	34.73		
	3.378	25.40	0.14	25.54	56.00	30.46		
	9.537	37.20	0.22	37.42	60.00	22.58		
	17.860	29.70	-0.03	29.67	60.00	30.33		
		<b>0.176</b>	<b>46.11</b>	<b>0.13</b>	<b>46.24</b>	<b>54.70</b>	<b>8.46</b>	AV
		0.234	37.11	0.09	37.20	52.32	15.12	
		1.813	18.00	0.07	18.07	46.00	27.93	
		3.378	25.30	0.14	25.44	46.00	20.56	
		9.537	33.30	0.22	33.52	50.00	16.48	
		17.860	20.90	-0.03	20.87	50.00	29.13	
Neutral	0.177	41.41	0.17	41.58	64.65	23.07	QP	
	0.293	28.40	0.22	28.62	60.44	31.82		
	0.584	29.70	0.17	29.87	56.00	26.13		
	4.509	25.60	0.22	25.82	56.00	30.18		
	9.968	23.30	0.40	23.70	60.00	36.30		
	16.600	36.70	0.63	37.33	60.00	22.67		
		0.177	38.01	0.17	38.18	54.65	16.47	AV
		0.293	26.10	0.22	26.32	50.44	24.12	
		0.584	29.50	0.17	29.67	46.00	16.33	
		4.509	20.00	0.22	20.22	46.00	25.78	
		9.968	14.20	0.40	14.60	50.00	35.40	
		16.600	35.90	0.63	36.53	50.00	13.47	

TEST ENGINEER: ERIC TANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 48%RH

Test Mode : Standby Date of Test : Oct 28, 2013

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark	
Line	0.176	48.51	0.13	48.64	64.68	16.04	QP	
	0.233	39.11	0.09	39.20	62.33	23.13		
	0.585	27.69	0.03	27.72	56.00	28.28		
	1.695	20.31	0.06	20.37	56.00	35.63		
	4.209	34.80	0.18	34.98	56.00	21.02		
	8.609	33.30	0.26	33.56	60.00	26.44		
		<b>0.176</b>	<b>45.61</b>	<b>0.13</b>	<b>45.74</b>	<b>54.68</b>	<b>8.94</b>	AV
		0.233	36.21	0.09	36.30	52.33	16.03	
		0.585	26.49	0.03	26.52	46.00	19.48	
		1.695	18.31	0.06	18.37	46.00	27.63	
	4.209	28.12	0.18	28.30	46.00	17.70		
	8.609	24.90	0.26	25.16	50.00	24.84		
Neutral	0.174	44.30	0.17	44.47	64.77	20.30	QP	
	0.348	40.41	0.21	40.62	59.00	18.38		
	0.585	29.69	0.17	29.86	56.00	26.14		
	1.319	16.10	0.17	16.27	56.00	39.73		
	4.062	36.40	0.21	36.61	56.00	19.39		
	8.720	30.31	0.41	30.72	60.00	29.28		
		0.174	37.80	0.17	37.97	54.77	16.80	AV
		0.348	37.11	0.21	37.32	49.00	11.68	
		0.585	29.39	0.17	29.56	46.00	16.44	
		1.319	9.90	0.17	10.07	46.00	35.93	
	4.062	29.70	0.21	29.91	46.00	16.09		
	8.720	22.91	0.41	23.32	50.00	26.68		

TEST ENGINEER: ERIC TANG

## 4 RADIATED EMISSION TEST

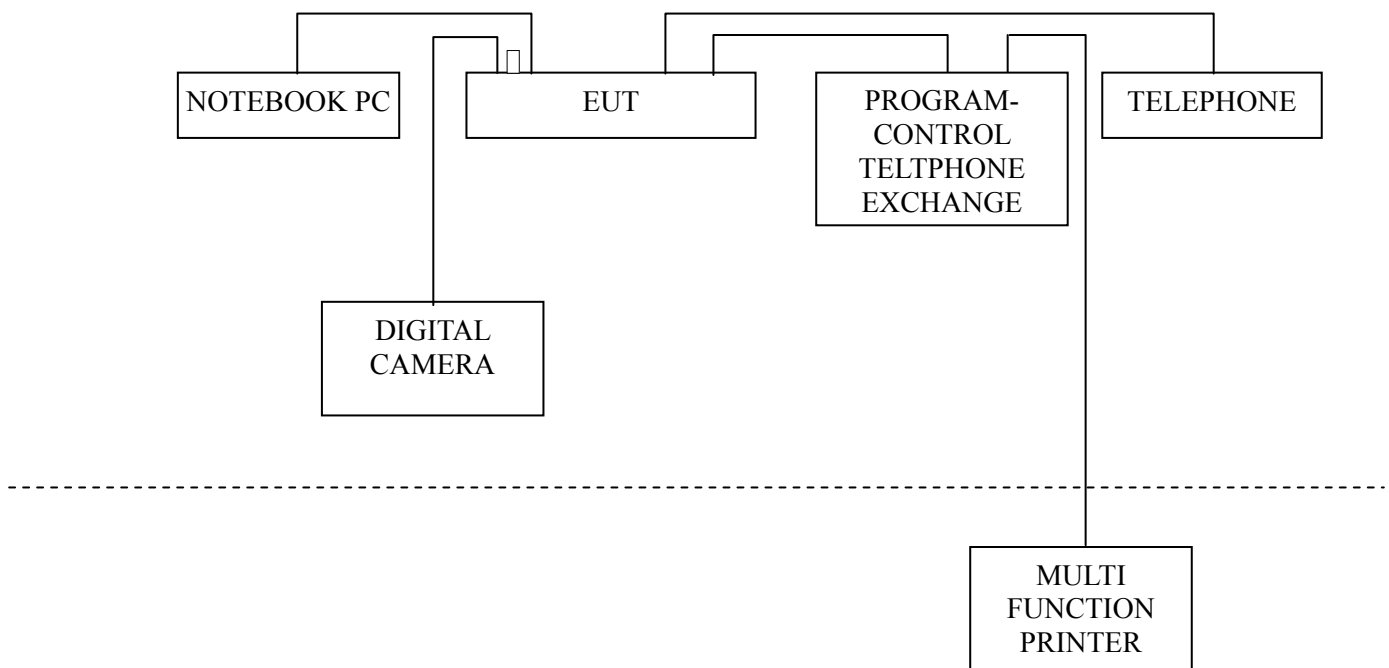
### 4.1 Test Equipment

The following test equipments are used during the radiated emission test in a semi-anechoic chamber:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101302	Sep 03, 2013	Sep 02, 2014
2.	Preamplifier	Agilent	8447D	2944A10548	Sep 18, 2013	Mar 17, 2014
3.	Preamplifier	HP	8449B	3008A00864	Mar 20, 2013	Mar 19, 2014
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 03, 2013	May 02, 2014
5.	Horn Antenna	EMCO	3115	9607-4878	May 11, 2013	May 10, 2014
6.	Spectrum	Agilent	E7405A	MY45106600	Dec 17, 2012	Dec 16, 2013
7.	50Ω Coaxial Switch	Anritsu	MP59B	6200426390	Sep 18, 2013	Mar 17, 2014
8.	Software	Audix	E3	6.2007-9-10	--	--

### 4.2 Block Diagram of Test Setup

#### 4.2.1 EUT & Peripherals

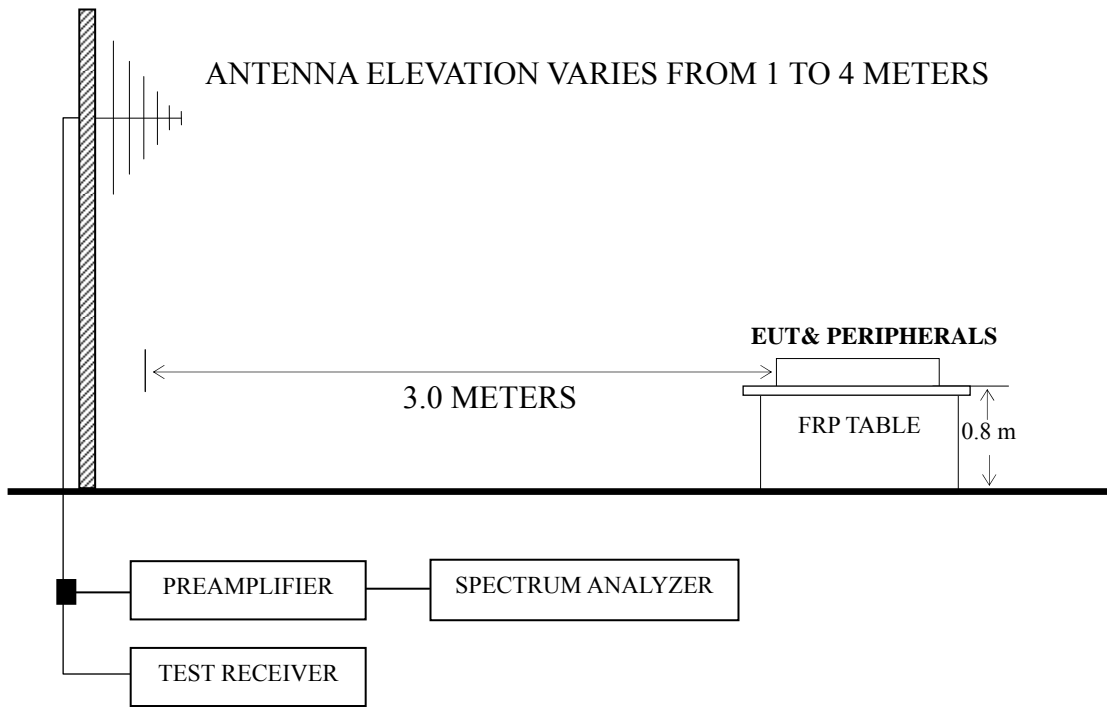


□ : U-Disk

Note: The U-Disk and Digital Camera were connected separately for different test mode.

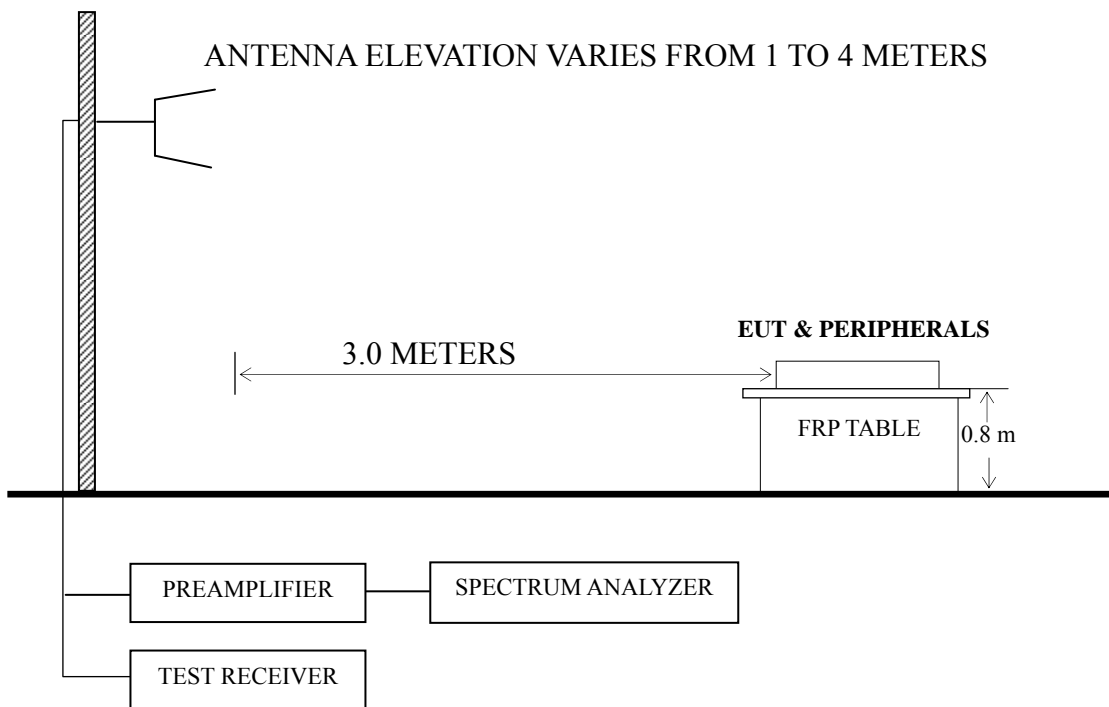
### 4.2.2 Radiated emission test setup

#### 4.2.2.1 Below 1GHz



■ : 50 ohm Coaxial Switch

#### 4.2.2.2 Above 1GHz



### 4.3 Radiated Emission Limit [FCC Part 15 Subpart B 15.109(a)]

Frequency (MHz)	Distance (m)	Field strength limits	
		( $\mu\text{V}/\text{m}$ )	dB ( $\mu\text{V}/\text{m}$ )
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0

NOTE 1 - Emission Level dB ( $\mu\text{V}/\text{m}$ ) = 20 log Emission Level ( $\mu\text{V}/\text{m}$ )  
 NOTE 2 - The tighter limit applies at the band edges.  
 NOTE 3 - Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.  
 NOTE 4 - The limits shown are based on Quasi-peak value detector.  
 NOTE 5 - Above 1 GHz, the limit on peak emission is 20 dB above the maximum permitted average emission limit applicable to the EUT.

### 4.4 Test Configuration

The configuration of the EUT and peripherals are same as those used in conducted emission test.

Please refer to Sec.3.4.

### 4.5 Operating Condition of EUT

Same as conducted emission test which is listed in Sec.3.5, except for the test setup replaced by Sec.4.2.

### 4.6 Test Procedures

The EUT and peripherals were placed on a FRP turntable that is 0.8 meter above ground. The FRP turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna, which was mounted on an antenna tower. Broadband antenna (Calibrated Bilog Antenna) was used as receiving antenna. The antenna moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarizations of the antenna were set on measurement. In order to find the maximum emission, all of the interference cables were manipulated according to ANSI C63.4:2003 requirements during radiated emission test.

The I.F. bandwidth of Test Receiver R&S ESCI was set at 120 kHz and The Spectrum Agilent E7405A was set at 1MHz above 1GHz.

The frequency range from 30 MHz to 12.5 GHz (Up to 5th harmonics of the EUT's 2.4GHz WIFI function fundamental frequency) was checked.

The test modes were done on radiated disturbance test and all the test results are listed in Sec.4.7.

## 4.7 Test Results

<PASS>

The frequency and amplitude of the highest radiated emission relative the limit is reported. All the emissions not reported below are too low against the FCC limit.

Test Mode	Data Page
LAN Scan+USB Print	P25 – P26
USB Scan+LAN Print	P27 – P28
Color Copy	P29 – P30
Pictbridge Print	P31 – P32
Scan to USB	P33 – P34
FAX Tx	P35 – P36
FAX Rx	P37 – P38
<b>Wifi Print</b>	<b>P39 – P40</b>
Wifi Scan	P41 – P42
Standby	P43 – P44

NOTE 1 – Emission Level = Antenna Factor + Cable Loss + Meter Reading. (< 1GHz);

Emission Level = Antenna Factor + Cable Loss – Preamp Factor + Meter Reading. (> 1GHz)

NOTE 2 – All readings are Quasi-Peak values below or equal to 1GHz, Peak and Average values above 1GHz.

NOTE 3 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

NOTE 4 – The worst case is for Wifi Print test mode. The worst emission at horizontal polarization was detected at 828.200 MHz with corrected signal level of 40.38 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.30 m height and the turntable was at 38°. The worst emission at vertical polarization was detected at 857.149 MHz with corrected signal level of 41.70 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 203°.



EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : LAN Scan + USB Print Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	35.820	4.60	15.35	0.71	--	20.66	40.00	19.34	QP
	45.520	11.76	8.97	0.81	--	21.54	40.00	18.46	
	100.810	17.40	10.78	1.24	--	29.42	43.50	14.08	
	152.220	15.67	10.05	1.53	--	27.25	43.50	16.25	
	503.820	14.40	18.25	2.92	--	35.57	46.00	10.43	
	<b>821.690</b>	<b>15.50</b>	<b>20.40</b>	<b>3.79</b>	--	<b>39.69</b>	<b>46.00</b>	<b>6.31</b>	
	1225.000	48.75	25.10	3.59	36.80	40.64	74.00	33.36	PK
	1655.000	51.11	27.79	4.05	36.17	46.78	74.00	27.22	
	1955.000	46.82	30.68	4.35	35.93	45.92	74.00	28.08	
	2250.000	48.44	29.47	4.64	35.93	46.62	74.00	27.38	
	3320.000	44.89	30.72	6.00	35.80	45.81	74.00	28.19	
	4040.000	41.64	33.32	5.93	35.41	45.48	74.00	28.52	
	1225.000	31.25	25.10	3.59	36.80	23.14	54.00	30.86	AV
	1655.000	31.48	27.79	4.05	36.17	27.15	54.00	26.85	
	1955.000	31.86	30.68	4.35	35.93	30.96	54.00	23.04	
2250.000	32.46	29.47	4.64	35.93	30.64	54.00	23.36		
3320.000	26.86	30.72	6.00	35.80	27.78	54.00	26.22		
4040.000	28.46	33.32	5.93	35.41	32.30	54.00	21.70		

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : LAN Scan + USB Print Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	33.880	14.99	16.07	0.68	--	31.74	40.00	8.26	QP
	37.760	17.25	13.92	0.73	--	31.90	40.00	8.10	
	110.510	19.96	12.08	1.30	--	33.34	43.50	10.16	
	127.000	18.53	12.25	1.41	--	32.19	43.50	11.31	
	250.190	11.09	11.80	2.15	--	25.04	46.00	20.96	
	<b>869.710</b>	<b>16.80</b>	<b>20.20</b>	<b>4.19</b>	--	<b>41.19</b>	<b>46.00</b>	<b>4.81</b>	
	1220.000	50.18	25.08	3.57	36.81	42.02	74.00	31.98	PK
	1385.000	48.79	25.91	3.69	36.56	41.83	74.00	32.17	
	1640.000	48.43	27.64	4.03	36.19	43.91	74.00	30.09	
	1970.000	51.19	30.80	4.39	35.92	50.46	74.00	23.54	
	2960.000	50.95	29.41	5.74	36.00	50.10	74.00	23.90	
	3705.000	42.06	32.20	5.99	35.54	44.71	74.00	29.29	
	1220.000	32.06	25.08	3.57	36.81	23.90	54.00	30.10	AV
	1385.000	32.19	25.91	3.69	36.56	25.23	54.00	28.77	
	1640.000	32.56	27.64	4.03	36.19	28.04	54.00	25.96	
	1970.000	32.49	30.80	4.39	35.92	31.76	54.00	22.24	
	2960.000	31.38	29.41	5.74	36.00	30.53	54.00	23.47	
	3705.000	29.40	32.20	5.99	35.54	32.05	54.00	21.95	

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : USB Scan + LAN Print Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	42.610	6.30	11.14	0.78	--	18.22	40.00	21.78	QP
	55.220	11.79	6.50	0.86	--	19.15	40.00	20.85	
	98.870	19.15	10.25	1.22	--	30.62	43.50	12.88	
	137.670	13.17	10.82	1.46	--	25.45	43.50	18.05	
	232.730	14.09	9.65	2.03	--	25.77	46.00	20.23	
	<b>869.800</b>	<b>16.00</b>	<b>20.20</b>	<b>4.19</b>	--	<b>40.39</b>	<b>46.00</b>	<b>5.61</b>	
	1260.000	50.78	25.32	3.62	36.75	42.97	74.00	31.03	PK
	1695.000	48.64	28.26	4.06	36.14	44.82	74.00	29.18	
	2000.000	46.41	31.00	4.42	35.90	45.93	74.00	28.07	
	2840.000	45.81	29.14	5.53	35.99	44.49	74.00	29.51	
	3465.000	43.77	31.21	6.09	35.70	45.37	74.00	28.63	
	4080.000	41.62	33.23	6.07	35.42	45.50	74.00	28.50	
	1260.000	32.09	25.32	3.62	36.75	24.28	54.00	29.72	AV
	1695.000	33.68	28.26	4.06	36.14	29.86	54.00	24.14	
	2000.000	33.87	31.00	4.42	35.90	33.39	54.00	20.61	
	2840.000	32.47	29.14	5.53	35.99	31.15	54.00	22.85	
	3465.000	31.26	31.21	6.09	35.70	32.86	54.00	21.14	
	4080.000	29.48	33.23	6.07	35.42	33.36	54.00	20.64	

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : USB Scan + LAN Print Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	30.000	10.60	19.10	0.63	--	30.33	40.00	9.67	QP
	43.580	19.45	10.19	0.79	--	30.43	40.00	9.57	
	112.450	18.43	11.98	1.31	--	31.72	43.50	11.78	
	126.030	17.66	12.33	1.40	--	31.39	43.50	12.11	
	253.100	7.68	12.00	2.17	--	21.85	46.00	24.15	
	<b>883.810</b>	<b>16.20</b>	<b>19.75</b>	<b>4.30</b>	--	<b>40.25</b>	<b>46.00</b>	<b>5.75</b>	
	1225.000	49.22	25.10	3.59	36.80	41.11	74.00	32.89	PK
	1515.000	50.81	26.46	3.82	36.34	44.75	74.00	29.25	
	1665.000	48.41	27.89	4.05	36.16	44.19	74.00	29.81	
	1840.000	48.05	29.75	4.21	36.01	46.00	74.00	28.00	
	2300.000	45.32	29.19	4.67	35.93	43.25	74.00	30.75	
	2790.000	45.62	29.01	5.46	35.98	44.11	74.00	29.89	
	1225.000	31.82	25.10	3.59	36.80	23.71	54.00	30.29	AV
	1515.000	31.91	26.46	3.82	36.34	25.85	54.00	28.15	
	1665.000	32.05	27.89	4.05	36.16	27.83	54.00	26.17	
	1840.000	32.19	29.75	4.21	36.01	30.14	54.00	23.86	
	2300.000	33.09	29.19	4.67	35.93	31.02	54.00	22.98	
	2790.000	30.68	29.01	5.46	35.98	29.17	54.00	24.83	

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : Color Copy Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	31.940	1.46	17.10	0.65	--	19.21	40.00	20.79	QP
	51.625	12.70	7.04	0.85	--	20.59	40.00	19.41	
	<b>97.900</b>	<b>19.24</b>	<b>10.08</b>	<b>1.22</b>	--	<b>30.54</b>	<b>43.50</b>	<b>12.96</b>	
	110.510	15.93	12.08	1.30	--	29.31	43.50	14.19	
	206.540	19.70	8.55	1.85	--	30.10	43.50	13.40	
	244.370	15.62	10.48	2.13	--	28.23	46.00	17.77	
	1275.000	51.26	25.40	3.63	36.73	43.56	74.00	30.44	PK
	1450.000	56.79	26.15	3.76	36.44	50.26	74.00	23.74	
	1645.000	58.96	27.69	4.03	36.19	54.49	74.00	19.51	
	1915.000	49.35	30.39	4.32	35.96	48.10	74.00	25.90	
	3255.000	44.28	30.47	5.97	35.84	44.88	74.00	29.12	
	4030.000	42.82	33.34	5.93	35.41	46.68	74.00	27.32	
	1275.000	31.13	25.40	3.63	36.73	23.43	54.00	30.57	AV
	1450.000	31.52	26.15	3.76	36.44	24.99	54.00	29.01	
	1645.000	32.63	27.69	4.03	36.19	28.16	54.00	25.84	
	1915.000	32.94	30.39	4.32	35.96	31.69	54.00	22.31	
3255.000	31.78	30.47	5.97	35.84	32.38	54.00	21.62		
4030.000	30.24	33.34	5.93	35.41	34.10	54.00	19.90		

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : Color Copy Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	38.730	18.31	13.01	0.74	--	32.06	40.00	7.94	QP
	42.610	20.46	11.14	0.78	--	32.38	40.00	7.62	
	112.450	19.23	11.98	1.31	--	32.52	43.50	10.98	
	128.940	17.78	12.16	1.42	--	31.36	43.50	12.14	
	482.910	14.10	17.75	2.87	--	34.72	46.00	11.28	
	<b>865.520</b>	<b>15.50</b>	<b>20.03</b>	<b>4.19</b>	--	<b>39.72</b>	<b>46.00</b>	<b>6.28</b>	
	1245.000	50.48	25.23	3.60	36.77	42.54	74.00	31.46	PK
	1460.000	48.71	26.18	3.78	36.43	42.24	74.00	31.76	
	1665.000	48.95	27.89	4.05	36.16	44.73	74.00	29.27	
	2010.000	48.94	30.94	4.42	35.90	48.40	74.00	25.60	
	2955.000	48.86	29.41	5.67	36.00	47.94	74.00	26.06	
	3820.000	42.15	32.73	5.92	35.48	45.32	74.00	28.68	
	AV	1245.000	32.10	25.23	3.60	36.77	24.16	54.00	29.84
		1460.000	32.64	26.18	3.78	36.43	26.17	54.00	27.83
		1665.000	32.94	27.89	4.05	36.16	28.72	54.00	25.28
		2010.000	33.20	30.94	4.42	35.90	32.66	54.00	21.34
2955.000		30.56	29.41	5.67	36.00	29.64	54.00	24.36	
3820.000		30.62	32.73	5.92	35.48	33.79	54.00	20.21	

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : Pictbridge Print Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	35.820	2.85	15.35	0.71	--	18.91	40.00	21.09	QP
	53.280	13.74	6.80	0.86	--	21.40	40.00	18.60	
	103.720	15.79	11.56	1.26	--	28.61	43.50	14.89	
	197.810	14.08	8.35	1.80	--	24.23	43.50	19.27	
	587.700	15.01	18.67	3.18	--	36.86	46.00	9.14	
	<b>853.600</b>	<b>15.50</b>	<b>20.37</b>	<b>4.07</b>	--	<b>39.94</b>	<b>46.00</b>	<b>6.06</b>	
	1285.000	62.13	25.46	3.63	36.71	54.51	74.00	19.49	PK
	1410.000	51.30	26.00	3.70	36.51	44.49	74.00	29.51	
	1645.000	51.88	27.69	4.03	36.19	47.41	74.00	26.59	
	2015.000	55.03	30.94	4.42	35.90	54.49	74.00	19.51	
	2825.000	52.29	29.09	5.46	35.99	50.85	74.00	23.15	
	3415.000	43.26	31.06	6.06	35.73	44.65	74.00	29.35	
	1285.000	30.15	25.46	3.63	36.71	22.53	54.00	31.47	AV
	1410.000	30.29	26.00	3.70	36.51	23.48	54.00	30.52	
	1645.000	30.45	27.69	4.03	36.19	25.98	54.00	28.02	
	2015.000	30.76	30.94	4.42	35.90	30.22	54.00	23.78	
	2825.000	30.97	29.09	5.46	35.99	29.53	54.00	24.47	
	3415.000	28.64	31.06	6.06	35.73	30.03	54.00	23.97	

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : Pictbridge Print Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	30.000	8.16	19.10	0.63	--	27.89	40.00	12.11	QP
	<b>53.280</b>	<b>21.31</b>	<b>6.80</b>	<b>0.86</b>	--	<b>28.97</b>	<b>40.00</b>	<b>11.03</b>	
	118.270	16.90	11.97	1.35	--	30.22	43.50	13.28	
	127.970	17.72	12.22	1.41	--	31.35	43.50	12.15	
	212.360	11.13	8.35	1.89	--	21.37	43.50	22.13	
	480.600	14.10	17.90	2.86	--	34.86	46.00	11.14	
	1230.000	50.38	25.14	3.59	36.80	42.31	74.00	31.69	PK
	1295.000	56.88	25.49	3.64	36.70	49.31	74.00	24.69	
	1510.000	52.72	26.42	3.82	36.35	46.61	74.00	27.39	
	2045.000	46.60	30.74	4.45	35.90	45.89	74.00	28.11	
	2595.000	46.42	28.45	5.06	35.97	43.96	74.00	30.04	
	3670.000	43.18	32.05	6.02	35.56	45.69	74.00	28.31	
	1230.000	30.80	25.14	3.59	36.80	22.73	54.00	31.27	AV
	1295.000	30.99	25.49	3.64	36.70	23.42	54.00	30.58	
	1510.000	31.12	26.42	3.82	36.35	25.01	54.00	28.99	
	2045.000	31.36	30.74	4.45	35.90	30.65	54.00	23.35	
	2595.000	31.42	28.45	5.06	35.97	28.96	54.00	25.04	
	3670.000	29.30	32.05	6.02	35.56	31.81	54.00	22.19	

TEST ENGINEER: NEAL WANG



EUT : Printer Temperature : 22°C  
 Model No. : SP C252SF Humidity : 60%RH  
 Test Mode : Scan to USB Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	47.460	11.28	8.28	0.82	--	20.38	40.00	19.62	QP
	79.470	8.01	7.09	1.03	--	16.13	40.00	23.87	
	124.090	8.69	12.32	1.39	--	22.40	43.50	21.10	
	187.900	16.31	7.97	1.75	--	26.03	43.50	17.47	
	238.550	8.55	10.05	2.08	--	20.68	46.00	25.32	
	<b>898.300</b>	<b>15.59</b>	<b>19.07</b>	<b>4.42</b>	--	<b>39.08</b>	<b>46.00</b>	<b>6.92</b>	
	1390.000	46.97	25.92	3.69	36.55	40.03	74.00	33.97	PK
	1645.000	46.55	27.69	4.03	36.19	42.08	74.00	31.92	
	1890.000	51.00	30.17	4.28	35.98	49.47	74.00	24.53	
	2880.000	47.25	29.24	5.60	35.99	46.10	74.00	27.90	
	3505.000	43.42	31.34	6.12	35.67	45.21	74.00	28.79	
	3975.000	43.49	33.28	5.80	35.41	47.16	74.00	26.84	
	1390.000	33.26	25.92	3.69	36.55	26.32	54.00	27.68	AV
	1645.000	33.46	27.69	4.03	36.19	28.99	54.00	25.01	
	1890.000	34.10	30.17	4.28	35.98	32.57	54.00	21.43	
	2880.000	31.24	29.24	5.60	35.99	30.09	54.00	23.91	
	3505.000	30.30	31.34	6.12	35.67	32.09	54.00	21.91	
	3975.000	28.70	33.28	5.80	35.41	32.37	54.00	21.63	

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : Scan to USB Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	34.850	9.31	15.65	0.69	--	25.65	40.00	14.35	QP
	41.640	6.45	11.82	0.77	--	19.04	40.00	20.96	
	99.840	12.45	10.42	1.23	--	24.10	43.50	19.40	
	130.880	15.64	11.88	1.43	--	28.95	43.50	14.55	
	<b>543.000</b>	<b>14.20</b>	<b>19.70</b>	<b>3.04</b>	--	<b>36.94</b>	<b>46.00</b>	<b>9.06</b>	
	768.100	15.00	18.00	3.59	--	36.59	46.00	9.41	
	1175.000	49.10	24.80	3.66	36.87	40.69	74.00	33.31	PK
	1590.000	48.79	27.13	4.00	36.24	43.68	74.00	30.32	
	1900.000	51.30	30.26	4.28	35.97	49.87	74.00	24.13	
	2855.000	46.89	29.18	5.53	35.99	45.61	74.00	28.39	
	3720.000	43.84	32.30	5.99	35.54	46.59	74.00	27.41	
	4475.000	42.92	32.26	6.89	35.55	46.52	74.00	27.48	
	1175.000	32.23	24.80	3.66	36.87	23.82	54.00	30.18	AV
	1590.000	32.38	27.13	4.00	36.24	27.27	54.00	26.73	
	1900.000	32.48	30.26	4.28	35.97	31.05	54.00	22.95	
	2855.000	32.51	29.18	5.53	35.99	31.23	54.00	22.77	
	3720.000	29.88	32.30	5.99	35.54	32.63	54.00	21.37	
	4475.000	28.76	32.26	6.89	35.55	32.36	54.00	21.64	

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : FAX Tx Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	34.850	2.51	15.65	0.69	--	18.85	40.00	21.15	QP
	45.520	8.60	8.97	0.81	--	18.38	40.00	21.62	
	97.900	12.41	10.08	1.22	--	23.71	43.50	19.79	
	<b>115.360</b>	<b>11.13</b>	<b>11.91</b>	<b>1.33</b>	--	<b>24.37</b>	<b>43.50</b>	<b>19.13</b>	
	196.840	7.96	8.30	1.80	--	18.06	43.50	25.44	
	350.100	7.40	15.00	2.60	--	25.00	46.00	21.00	
	1130.000	46.89	24.54	3.97	36.94	38.46	74.00	35.54	PK
	1365.000	46.40	25.83	3.68	36.59	39.32	74.00	34.68	
	1710.000	46.15	28.42	4.08	36.12	42.53	74.00	31.47	
	2290.000	48.85	29.23	4.67	35.93	46.82	74.00	27.18	
	3280.000	43.98	30.58	6.00	35.83	44.73	74.00	29.27	
	4035.000	42.47	33.32	5.93	35.41	46.31	74.00	27.69	AV
	1130.000	33.06	24.54	3.97	36.94	24.63	54.00	29.37	
	1365.000	33.46	25.83	3.68	36.59	26.38	54.00	27.62	
	1710.000	30.67	28.42	4.08	36.12	27.05	54.00	26.95	
	2290.000	34.25	29.23	4.67	35.93	32.22	54.00	21.78	
3280.000	30.69	30.58	6.00	35.83	31.44	54.00	22.56		
4035.000	28.79	33.32	5.93	35.41	32.63	54.00	21.37		

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : FAX Tx Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	<b>31.940</b>	<b>13.24</b>	<b>17.10</b>	<b>0.65</b>	--	<b>30.99</b>	<b>40.00</b>	<b>9.01</b>	QP
	41.640	12.46	11.82	0.77	--	25.05	40.00	14.95	
	54.250	12.08	6.74	0.86	--	19.68	40.00	20.32	
	114.390	14.08	11.92	1.32	--	27.32	43.50	16.18	
	130.880	14.57	11.88	1.43	--	27.88	43.50	15.62	
	424.790	7.43	17.40	2.74	--	27.57	46.00	18.43	
	1170.000	47.46	24.76	3.66	36.88	39.00	74.00	35.00	PK
	1405.000	50.36	25.99	3.70	36.52	43.53	74.00	30.47	
	1660.000	49.53	27.84	4.05	36.17	45.25	74.00	28.75	
	2165.000	51.45	30.05	4.56	35.92	50.14	74.00	23.86	
	3520.000	43.87	31.38	6.09	35.66	45.68	74.00	28.32	
	3830.000	44.18	32.77	5.92	35.48	47.39	74.00	26.61	
	1170.000	32.61	24.76	3.66	36.88	24.15	54.00	29.85	AV
	1405.000	33.03	25.99	3.70	36.52	26.20	54.00	27.80	
	1660.000	33.64	27.84	4.05	36.17	29.36	54.00	24.64	
	2165.000	34.01	30.05	4.56	35.92	32.70	54.00	21.30	
	3520.000	29.37	31.38	6.09	35.66	31.18	54.00	22.82	
	3830.000	23.60	32.77	5.92	35.48	26.81	54.00	27.19	

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : FAX Rx Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	35.820	2.76	15.35	0.71	--	18.82	40.00	21.18	QP
	55.220	12.08	6.50	0.86	--	19.44	40.00	20.56	
	100.810	16.45	10.78	1.24	--	28.47	43.50	15.03	
	113.420	14.26	11.95	1.32	--	27.53	43.50	15.97	
	550.600	14.30	19.90	3.07	--	37.27	46.00	8.73	
	<b>822.800</b>	<b>15.50</b>	<b>20.50</b>	<b>3.79</b>	--	<b>39.79</b>	<b>46.00</b>	<b>6.21</b>	
	1285.000	51.37	25.46	3.63	36.71	43.75	74.00	30.25	PK
	1500.000	58.50	26.30	3.82	36.36	52.26	74.00	21.74	
	1670.000	61.05	27.94	4.05	36.16	56.88	74.00	17.12	
	1900.000	48.83	30.26	4.28	35.97	47.40	74.00	26.60	
	2905.000	48.12	29.30	5.60	35.99	47.03	74.00	26.97	
	3715.000	47.15	32.25	5.99	35.54	49.85	74.00	24.15	
	1285.000	32.29	25.46	3.63	36.71	24.67	54.00	29.33	AV
	1500.000	32.60	26.30	3.82	36.36	26.36	54.00	27.64	
	1670.000	32.79	27.94	4.05	36.16	28.62	54.00	25.38	
	1900.000	33.10	30.26	4.28	35.97	31.67	54.00	22.33	
	2905.000	29.59	29.30	5.60	35.99	28.50	54.00	25.50	
	3715.000	28.50	32.25	5.99	35.54	31.20	54.00	22.80	

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : FAX Rx Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	31.940	12.56	17.10	0.65	--	30.31	40.00	9.69	QP
	42.610	16.15	11.14	0.78	--	28.07	40.00	11.93	
	110.510	16.56	12.08	1.30	--	29.94	43.50	13.56	
	134.760	18.17	11.00	1.45	--	30.62	43.50	12.88	
	517.700	14.50	17.72	2.95	--	35.17	46.00	10.83	
	<b>890.200</b>	<b>15.50</b>	<b>19.20</b>	<b>4.42</b>	--	<b>39.12</b>	<b>46.00</b>	<b>6.88</b>	
	1230.000	60.61	25.14	3.59	36.80	52.54	74.00	21.46	PK
	1540.000	56.79	26.66	3.91	36.31	51.05	74.00	22.95	
	2035.000	54.30	30.81	4.45	35.90	53.66	74.00	20.34	
	2830.000	51.41	29.12	5.46	35.99	50.00	74.00	24.00	
	3155.000	48.57	30.10	5.90	35.90	48.67	74.00	25.33	
	3945.000	42.44	33.20	5.84	35.42	46.06	74.00	27.94	
	1230.000	33.61	25.14	3.59	36.80	25.54	54.00	28.46	AV
	1540.000	33.90	26.66	3.91	36.31	28.16	54.00	25.84	
	2035.000	30.29	30.81	4.45	35.90	29.65	54.00	24.35	
	2830.000	30.39	29.12	5.46	35.99	28.98	54.00	25.02	
	3155.000	27.60	30.10	5.90	35.90	27.70	54.00	26.30	
	3945.000	31.20	33.20	5.84	35.42	34.82	54.00	19.18	

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : Wifi Print Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	34.850	3.20	15.65	0.69	--	19.54	40.00	20.46	QP
	55.220	9.18	6.50	0.86	--	16.54	40.00	23.46	
	103.720	16.64	11.56	1.26	--	29.46	43.50	14.04	
	142.520	14.30	10.50	1.48	--	26.28	43.50	17.22	
	400.040	14.00	15.50	2.69	--	32.19	46.00	13.81	
	<b>828.200</b>	<b>15.90</b>	<b>20.60</b>	<b>3.88</b>	--	<b>40.38</b>	<b>46.00</b>	<b>5.62</b>	
	1285.000	59.52	25.46	3.63	36.71	51.90	74.00	22.10	PK
	1415.000	61.97	26.02	3.73	36.50	55.22	74.00	18.78	
	1640.000	59.91	27.64	4.03	36.19	55.39	74.00	18.61	
	2005.000	57.79	30.97	4.42	35.90	57.28	74.00	16.72	
	2710.000	58.65	28.78	5.22	35.98	56.67	74.00	17.33	
	3380.000	43.86	30.93	6.06	35.76	45.09	74.00	28.91	
	1285.000	30.85	25.46	3.63	36.71	23.23	54.00	30.77	AV
	1415.000	30.97	26.02	3.73	36.50	24.22	54.00	29.78	
	1640.000	31.09	27.64	4.03	36.19	26.57	54.00	27.43	
	2005.000	31.16	30.97	4.42	35.90	30.65	54.00	23.35	
2710.000	31.60	28.78	5.22	35.98	29.62	54.00	24.38		
3380.000	29.76	30.93	6.06	35.76	30.99	54.00	23.01		

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : Wifi Print Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	30.000	9.81	19.10	0.63	--	29.54	40.00	10.46	QP
	49.400	19.72	8.03	0.83	--	28.58	40.00	11.42	
	99.840	16.72	10.42	1.23	--	28.37	43.50	15.13	
	125.060	17.28	12.40	1.39	--	31.07	43.50	12.43	
	483.440	16.00	17.75	2.87	--	36.62	46.00	9.38	
	<b>857.149</b>	<b>17.60</b>	<b>20.03</b>	<b>4.07</b>	--	<b>41.70</b>	<b>46.00</b>	<b>4.30</b>	
	1240.000	60.48	25.19	3.60	36.78	52.49	74.00	21.51	PK
	1275.000	55.72	25.40	3.63	36.73	48.02	74.00	25.98	
	1580.000	57.88	27.04	3.96	36.26	52.62	74.00	21.38	
	1905.000	57.86	30.30	4.28	35.96	56.48	74.00	17.52	
	2275.000	45.04	29.35	4.64	35.93	43.10	74.00	30.90	
	3445.000	42.29	31.15	6.09	35.72	43.81	74.00	30.19	
	1240.000	30.46	25.19	3.60	36.78	22.47	54.00	31.53	AV
	1275.000	30.76	25.40	3.63	36.73	23.06	54.00	30.94	
	1580.000	31.09	27.04	3.96	36.26	25.83	54.00	28.17	
	1905.000	31.29	30.30	4.28	35.96	29.91	54.00	24.09	
	2275.000	31.41	29.35	4.64	35.93	29.47	54.00	24.53	
	3445.000	26.80	31.15	6.09	35.72	28.32	54.00	25.68	

TEST ENGINEER: NEAL WANG



EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : Wifi Scan Date of Test : Nov 09, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	30.970	2.30	18.10	0.64	--	21.04	40.00	18.96	QP
	99.840	16.58	10.42	1.23	--	28.23	43.50	15.27	
	127.970	17.19	12.22	1.41	--	30.82	43.50	12.68	
	188.110	16.59	7.97	1.75	--	26.31	43.50	17.19	
	237.580	15.15	10.00	2.08	--	27.23	46.00	18.77	
	<b>514.030</b>	<b>13.89</b>	<b>18.18</b>	<b>2.95</b>	--	<b>35.02</b>	<b>46.00</b>	<b>10.98</b>	
	1215.000	47.98	25.03	3.57	36.82	39.76	74.00	34.24	PK
	1370.000	48.17	25.84	3.68	36.58	41.11	74.00	32.89	
	1590.000	52.20	27.13	4.00	36.24	47.09	74.00	26.91	
	1900.000	55.44	30.26	4.28	35.97	54.01	74.00	19.99	
	2165.000	49.00	30.05	4.56	35.92	47.69	74.00	26.31	
	2880.000	47.59	29.24	5.60	35.99	46.44	74.00	27.56	
	1215.000	27.46	25.03	3.57	36.82	19.24	54.00	34.76	AV
	1370.000	27.68	25.84	3.68	36.58	20.62	54.00	33.38	
	1590.000	28.15	27.13	4.00	36.24	23.04	54.00	30.96	
	1900.000	28.64	30.26	4.28	35.97	27.21	54.00	26.79	
	2165.000	28.92	30.05	4.56	35.92	27.61	54.00	26.39	
	2880.000	27.99	29.24	5.60	35.99	26.84	54.00	27.16	

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : Wifi Scan Date of Test : Nov 09, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	<b>33.880</b>	<b>15.27</b>	<b>16.07</b>	<b>0.68</b>	--	<b>32.02</b>	<b>40.00</b>	<b>7.98</b>	QP
	42.610	19.04	11.14	0.78	--	30.96	40.00	9.04	
	99.840	17.06	10.42	1.23	--	28.71	43.50	14.79	
	130.880	17.10	11.88	1.43	--	30.41	43.50	13.09	
	514.030	13.85	18.18	2.95	--	34.98	46.00	11.02	
	859.350	10.05	19.70	4.07	--	33.82	46.00	12.18	
	1130.000	49.53	24.54	3.97	36.94	41.10	74.00	32.90	PK
	1365.000	47.84	25.83	3.68	36.59	40.76	74.00	33.24	
	1575.000	47.88	27.00	3.96	36.26	42.58	74.00	31.42	
	1870.000	51.72	30.04	4.24	35.99	50.01	74.00	23.99	
	2075.000	53.90	30.57	4.47	35.91	53.03	74.00	20.97	
	2840.000	46.95	29.14	5.53	35.99	45.63	74.00	28.37	
	1130.000	27.61	24.54	3.97	36.94	19.18	54.00	34.82	AV
	1365.000	27.96	25.83	3.68	36.59	20.88	54.00	33.12	
	1575.000	28.05	27.00	3.96	36.26	22.75	54.00	31.25	
	1870.000	28.37	30.04	4.24	35.99	26.66	54.00	27.34	
	2075.000	28.63	30.57	4.47	35.91	27.76	54.00	26.24	
	2840.000	28.13	29.14	5.53	35.99	26.81	54.00	27.19	

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : Standby Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	35.820	1.86	15.35	0.71	--	17.92	40.00	22.08	QP
	45.520	11.01	8.97	0.81	--	20.79	40.00	19.21	
	71.710	14.29	6.45	0.94	--	21.68	40.00	18.32	
	<b>107.600</b>	<b>15.71</b>	<b>12.00</b>	<b>1.28</b>	--	<b>28.99</b>	<b>43.50</b>	<b>14.51</b>	
	151.250	13.64	10.33	1.53	--	25.50	43.50	18.00	
	224.970	13.73	8.30	1.98	--	24.01	46.00	21.99	
	1045.000	48.93	24.11	4.49	37.05	40.48	74.00	33.52	PK
	1215.000	47.33	25.03	3.57	36.82	39.11	74.00	34.89	
	1590.000	47.60	27.13	4.00	36.24	42.49	74.00	31.51	
	2005.000	46.55	30.97	4.42	35.90	46.04	74.00	27.96	
	2790.000	46.37	29.01	5.46	35.98	44.86	74.00	29.14	AV
	3725.000	43.37	32.30	5.99	35.54	46.12	74.00	27.88	
	1045.000	30.57	24.11	4.49	37.05	22.12	54.00	31.88	
	1215.000	30.69	25.03	3.57	36.82	22.47	54.00	31.53	
	1590.000	30.90	27.13	4.00	36.24	25.79	54.00	28.21	
	2005.000	31.26	30.97	4.42	35.90	30.75	54.00	23.25	
2790.000	32.20	29.01	5.46	35.98	30.69	54.00	23.31	AV	
3725.000	28.64	32.30	5.99	35.54	31.39	54.00	22.61		

TEST ENGINEER: NEAL WANG

EUT : Printer Temperature : 22°C

Model No. : SP C252SF Humidity : 60%RH

Test Mode : Standby Date of Test : Nov 01, 2013

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	38.730	15.35	13.01	0.74	--	29.10	40.00	10.90	QP
	<b>42.610</b>	<b>17.43</b>	<b>11.14</b>	<b>0.78</b>	--	<b>29.35</b>	<b>40.00</b>	<b>10.65</b>	
	98.870	15.08	10.25	1.22	--	26.55	43.50	16.95	
	107.600	12.93	12.00	1.28	--	26.21	43.50	17.29	
	130.880	16.89	11.88	1.43	--	30.20	43.50	13.30	
	288.990	13.19	12.80	2.41	--	28.40	46.00	17.60	
	1295.000	46.94	25.49	3.64	36.70	39.37	74.00	34.63	PK
	1555.000	46.94	26.83	3.91	36.29	41.39	74.00	32.61	
	1900.000	48.99	30.26	4.28	35.97	47.56	74.00	26.44	
	2165.000	47.74	30.05	4.56	35.92	46.43	74.00	27.57	
	2990.000	46.64	29.48	5.74	36.00	45.86	74.00	28.14	
	3660.000	43.33	32.01	6.02	35.57	45.79	74.00	28.21	
	1295.000	32.07	25.49	3.64	36.70	24.50	54.00	29.50	AV
	1555.000	32.62	26.83	3.91	36.29	27.07	54.00	26.93	
	1900.000	33.06	30.26	4.28	35.97	31.63	54.00	22.37	
	2165.000	33.12	30.05	4.56	35.92	31.81	54.00	22.19	
	2990.000	32.78	29.48	5.74	36.00	32.00	54.00	22.00	
	3660.000	30.55	32.01	6.02	35.57	33.01	54.00	20.99	

TEST ENGINEER: NEAL WANG

## 5 DEBUG DESCRIPTION

The following components are used during the countermeasure procedures:

Name	Specifications (mm)	Manufacturer	Location
Ferrite core	K3 T16.00*13.00*8.00	Ferrico Corporation	See Internal Photos Figure 26
Ferrite core	F10 FS 33.5*6.5*20	RRITE CORPORATION	See Internal Photos Figure 27
Tape	55*35	Dongguan Lanxin Industrial Co.,Ltd.	See Internal Photos Figure 27

Note: We had required the applicant and manufacturer that all electrical and mechanical devices employed for spurious radiation suppression, including any modifications made during certification testing, must be incorporated in each unit marked

TEST ENGINEER:

*Neal Wang*

**(NEAL WANG)**

## **6 DEVIATION TO TEST SPECIFICATIONS**

None.