

EMC TEST REPORT

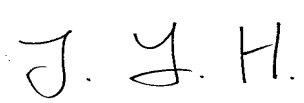
Project No.	LBE081709	Issue No.	4
Applicant	Name of organization	Samsung Electronics Co., Ltd.	
	Address	416 Maetan 3-Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do 443-742 Korea	
	Date of application	March 23, 2008	
EUT Equipment Under Test	Type of device	Class B personal computers and peripherals	
	Equipment authorization	☐ Declaration of Conformity ☒ Certification ☐ Verification	
	FCC ID	A3LP3300MFP	
	Kind of product	Laser MFP	
	Model No.	Phaser 3300MFP	
	Manufacturer	Variant Model No. - Samsung Electronics Co., Ltd. 259, Gongdan-Dong, Gumi-City, Gyeong-Buk, 730-030, Korea Place:M259 Samsung Electronics (Shandong) Digital Printing Co., Ltd. 264209, Samsung Road, Weihai Hi-Tech. IDZ, Shandong Province, P.R.China	
Applied Standards		FCC Part 15, Subpart B / ANSI C63.4-2003	
Test Period		March 25, 2008 ~ April 04, 2008	
Issue date		April 14, 2008	
Test result : Complied The equipment under test has found to be compliant with the applied standards. (Refer to the attached test result for more detail.)			
Tested by : Young Hun Cheong 		Reviewed by : No Cheon Park 	
This report is the test result about the sphere accredited by KOLAS which signed the Mutual Recognition Arrangement of International Laboratory Accreditation Cooperation. The test results in this report only apply to the tested sample. This report must not be reproduced, except in full, without written permission from SEC EMC Laboratory.			
 SEC EMC Laboratory 416 Maetan 3-Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do, 443-742 Korea Tel: 82 31 277 7752, Fax: 82 31 277 7753			

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1. Summary of test results

1.1 Emission

The EUT has been tested according to the following specifications:

Applied	Test type	Applied standard	Result	Remarks
☒	Conducted Disturbance	FCC Part 15 Subpart B	Complied	Meets Class B Limit
☒	Radiated Disturbance		Complied	Meets Class B Limit

2. General Information

2.1 Test facility

The SEC EMC Laboratory is located on Samsung Electronics Co., Ltd. at 416 Maetan 3-Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do, South Korea.

All testing are performed in Semi-anechoic chambers conforming to the site attenuation Characteristics defined by ANSI C63.4, CISPR 22, 16-1 and 16-2. and Shielded rooms.

The SEC EMC Laboratory is operated as testing laboratory in accordance with the requirements of ISO/IEC 17025:2005.

2.2 Accreditation and listing

Laboratory Qualifications		Remarks
	KOLAS(Korea Laboratory Accreditation Scheme)	Accredited : 124
	Radio Research Laboratory	Accredited : KR0004
	FCC(Federal Communications Commission)	Accredited : KR0004
	National Voluntary Laboratory Accreditation Program	Lab Code: 200623-0
	Norges Elektriske Materielkontroll	Accredited : ELA 195
	VCCI (Voluntary Control Council for Interference by Information Technology Equipment)	C-2421,R-2224
	China Quality Certification Center	5-053, 5-054
	TUV Rhineland	H9354285
	GOST(GOSTSTANDART)	ROSTEST
	Elektrotechnicky Zkusebni Ustav	Reg. No.: 001
	IC(Industry Canada)	Assigned Code: 5871

3. Test Setup configuration

3.1 Test Peripherals

The following is a listing of the EUT and supporting peripherals utilized during testing.

Description	Model No.	Serial No.	Manufacturer	FCC ID and/or DoC
Laser MFP	Phaser 3300MFP	-	Samsung	A3LP3300MFP
N PC	P29	674E93AyC00024E	Samsung	Doc
AC Adapter	AD-6019	CNBA4400238AD2VH78N3571	Li Shin	-
Telephone	SP-F209	KKAY112943T	Samsung	Doc
USB Mouse	M-UR69	LNA20715252	Logitech	Doc
Headset	Axis-202	-	Labtec	Doc
USB Memory	MD3100	-	-	Doc

3.2 EUT operating mode (selected)

Operating Mode 1	Stand-by
Operating Mode 2	ADF COPY Printing
Operating Mode 3	FAX TX
Operating Mode 4	Network Duplex Printing
Operating Mode 5	USB Printing

3.3 Details of Sampling

Customer selected, single unit.

3.4 Used cable description

The EUT is configured, installed, arranged and operated in a manner consistent with typical applications. Interface cables/loads/devices are connected to at least one of each type of interface port of the EUT, and where practical, each cable shall be terminated in a device typical of actual usage. The type(s) of interconnecting cables to be used and the interface port (of the EUT) to which these were connected;

Connected cable	Length [m]	Shielded [Y/N]	Note
Power	1.8	No	For EUT
Power	1.8	No	For Note PC
USB	1.8	Yes	From Note PC to the EUT From Note PC to USB Mouse
Headset	1.0	Yes	From headset to Note PC
TEL	2.0	No	From EUT to K/P system
TEL	2.0	No	From EUT to Telephone
LAN	1.8	No	From EUT to Hub

3.5 EUT Description

The following features describe EUT represented by this report:

Item	Specification	Remarks
Power Rating	110 ~ 127 VAC, 6.4A, 50/60 Hz	-
Power Consumption	Average :520W Power Save mode : Less than 20 W	-
Display	16 characters x 2 lines	-
Toner cartridge life	4,000 or 8,000 pages at ISO 19752 5% coverage	-
Package weight	3.5 kg	-
Memory	96 MB (max. 320 MB)	-
External dimension	466 x 435,4 x 458 mm (W x D x H)	-
Weight	18,5 Kg (including consumables)	-
Printing method	Laser Beam Printing	-
Printing speed	Up to 28 ppm in A4 (30 ppm in Letter)	-
Duplex printing speed (SCX-5530FN ONLY)	Up to 19 ipm in A4 (21 ipm in Letter)	-
Print resolution	Up to 1,200 x 1,200 dpi effective output	-
Interface	High Speed USB 2.0 Ethernet 10/100 Base TX(Embedded type)	-
Scanning method	ADF and Flat-bed Color CCD (Charge Coupled Device)	-
Scan Resolution	Optical: 600 x 1,200 dpi (mono and color) Enhanced: 4,800 x 4,800 dpi	-
Copy speed	Up to 28 ppm in A4 (30 ppm in Letter)	-
Copy resolution	Scan: up to 600 x 300 (text, text/photo) up to 600 x 600 (photo using platen) up to 600 x 300 (photo using ADF) Print: up to 600 x 600 (text, text/photo, photo)	-
Modem speed	33,6 Kbps	-
Fax Resolution	Standard:203 x 98 dpi Fine: 203 x 196 dpi Super Fine: 300 x 300 dpi Photo: 203 x 196 dpi Color: 200 x 200 dpi	-
Fax Memory	6 MB	-
Fax Data coding	MH/MR/MMR/JPEG/ECM (Error Correction Mode)	-

3.6 Clock Frequencies

Kind of Clocks	Frequency[MHz]	Kind of Clocks	Frequency[MHz]
Main	12	Video	12
USB Device	12	USB Host	6
Network	25	CPU Operation	300
SDRAM Operating	100	CCD Operating (Mono)	8.33
MODEM	28.224		

3.7 Test configuration and condition

The system was configured for testing in typical fashion use. Cables were attached to each of the available I/O Ports. Where applicable, peripherals were attached to the I/O cables. All operating mode(s) selected were tested to show compliance with relevant standard.

Power source for the EUT operating was supplied by CVCF made by the Voltech Corp.

- **Testing Voltage : AC 115 V, 60 Hz**

3.8 Measurement uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus: (According to CISPR 16-4 and UKAS Lab 34.)

3.8.1 Emission

Test type		Measurement uncertainty (C.L. 95 %, k = 2)
Conducted disturbance	Mains Port	± 3.4 dB
Radiated disturbance	Horizontal	± 4.3 dB
	Vertical	± 5.2 dB

4. Results of individual test

4.1 Conducted disturbance

Both conducted lines are measured in Quasi-Peak and Average mode, including the worst-case data points for each tested configuration.

The EUT measured in accordance with the methods described in standards.

Limits for conducted disturbance at mains ports of class A

Frequency range Limits MHz	Limits dB(μ V)	
	Quasi-peak	Average
0,15 to 0,50	79	66
0,50 to 30	73	60

Note 1: 1 μ V is regarded as 0 dB.
Note 2: If the average limit is met in the measurement with quasi-peak detector, the measurement with average detector at the same frequency is unnecessary.
Note 3: The lower limit shall apply at the transition frequency.

Limits for conducted disturbance at the mains ports of class B

Frequency range Limits MHz	Limits dB(μ V)	
	Quasi-peak	Average
0,15 to 0,50	66 to 56	56 to 46
0,50 to 5	56	46
5 to 30	60	50

Note 1: 1 μ V is regarded as 0 dB.
Note 2: The limits shall decreases linearly with the logarithm of the frequency in the range 150 - 500 kHz.
Note 3: If the average limit is met in the measurement with quasi-peak detector, the measurement with average detector is unnecessary.
Note 4: The lower limit shall apply at the transition frequency.

4.1.1 Test instrumentation

Test instrumentation used in the Conducted disturbance test was as follows:

Test instrumentation	Model name	Manufacturer	Serial or Firmware (No./Ver.)	Calibration	
				Date	Interval (Month)
Measuring receiver	ESCI	R&S	100368	2007-06-01	12
Artificial mains network	ENV216	R&S	100116	2007-09-13	12
Artificial mains network	ESH3-Z5	R&S	100262	2007-09-03	12
Artificial mains network	ESH3-Z5	R&S	100262	2007-09-03	12

4.1.2 Temperature and humidity condition

Test date	Mar 23, 2008	Test engineer		Young Hun Cheong	
Climate condition	Ambient temperature	22.0 °C	Relative humidity	51 %	
	Atmospheric pressure	100.2 kPa			
Test place	Shielded Room #1				

4.1.3 Photograph of Test Setup



Front

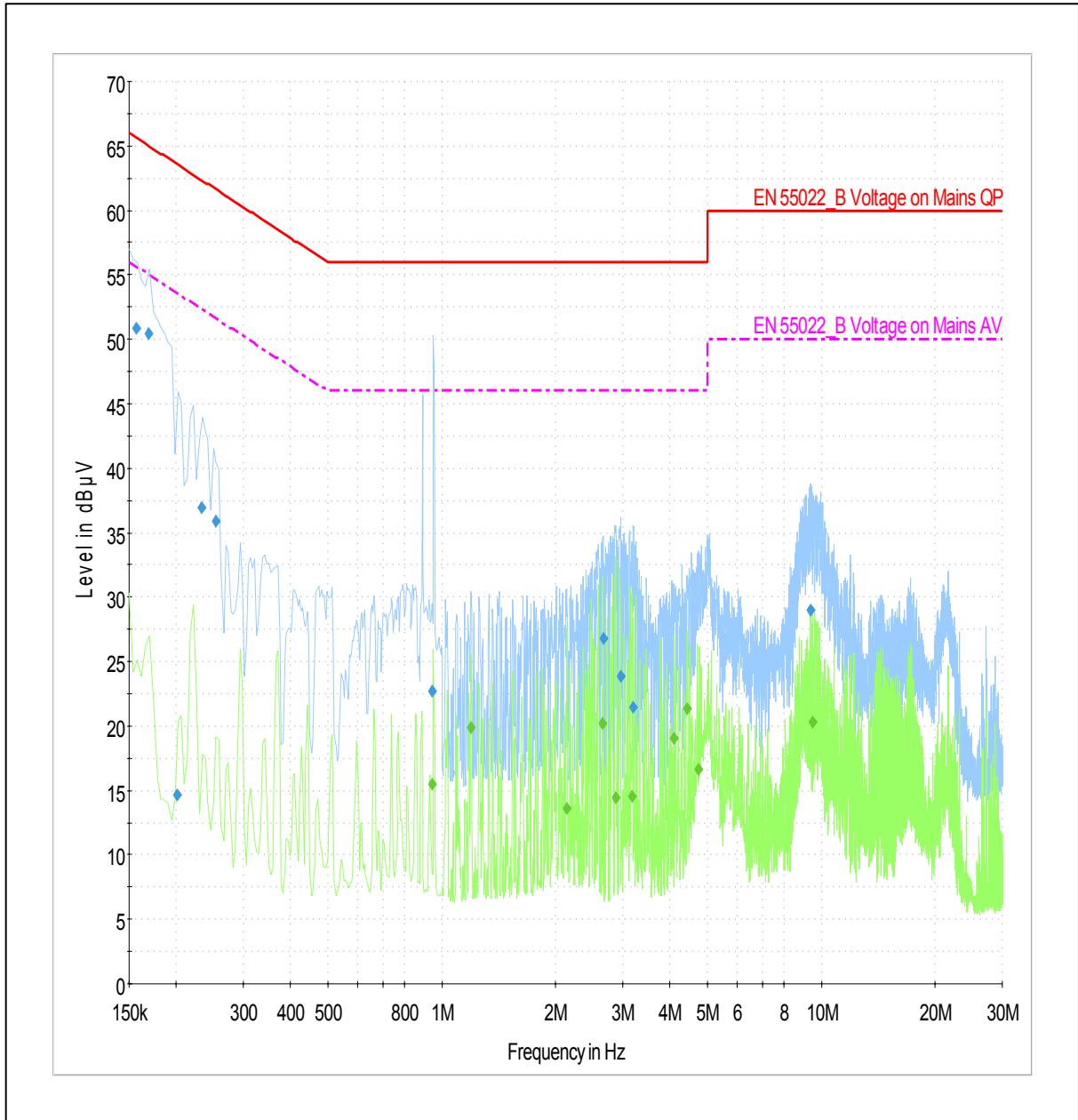


Rear

4.1.4 Test results

- Standby Mode

Test Graph



Note) Two graphs measured for both Live(L1) and Neutral(N) of the LISN are combined into one graph.

Test Results (Quasi-Peak and Average)

Frequency [MHz]	Line	Bandwidth [kHz]	Factor [dB]	Quasi-Peak [dBuV]	Margin [dB]	Limit [dBuV]
0.157	L1	9.0	9.6	50.9	14.7	65.6
0.169	N	9.0	9.6	50.5	14.6	65.0
0.201	L1	9.0	9.6	14.6	49.0	63.6
0.234	N	9.0	9.6	36.9	25.4	62.3
0.254	N	9.0	9.6	35.9	25.8	61.6
0.943	L1	9.0	9.7	22.7	33.3	56.0
2.665	L1	9.0	9.7	26.8	29.2	56.0
2.965	L1	9.0	9.8	23.8	32.2	56.0
3.190	L1	9.0	9.8	21.4	34.6	56.0
9.387	L1	9.0	9.9	29.0	31	60.0

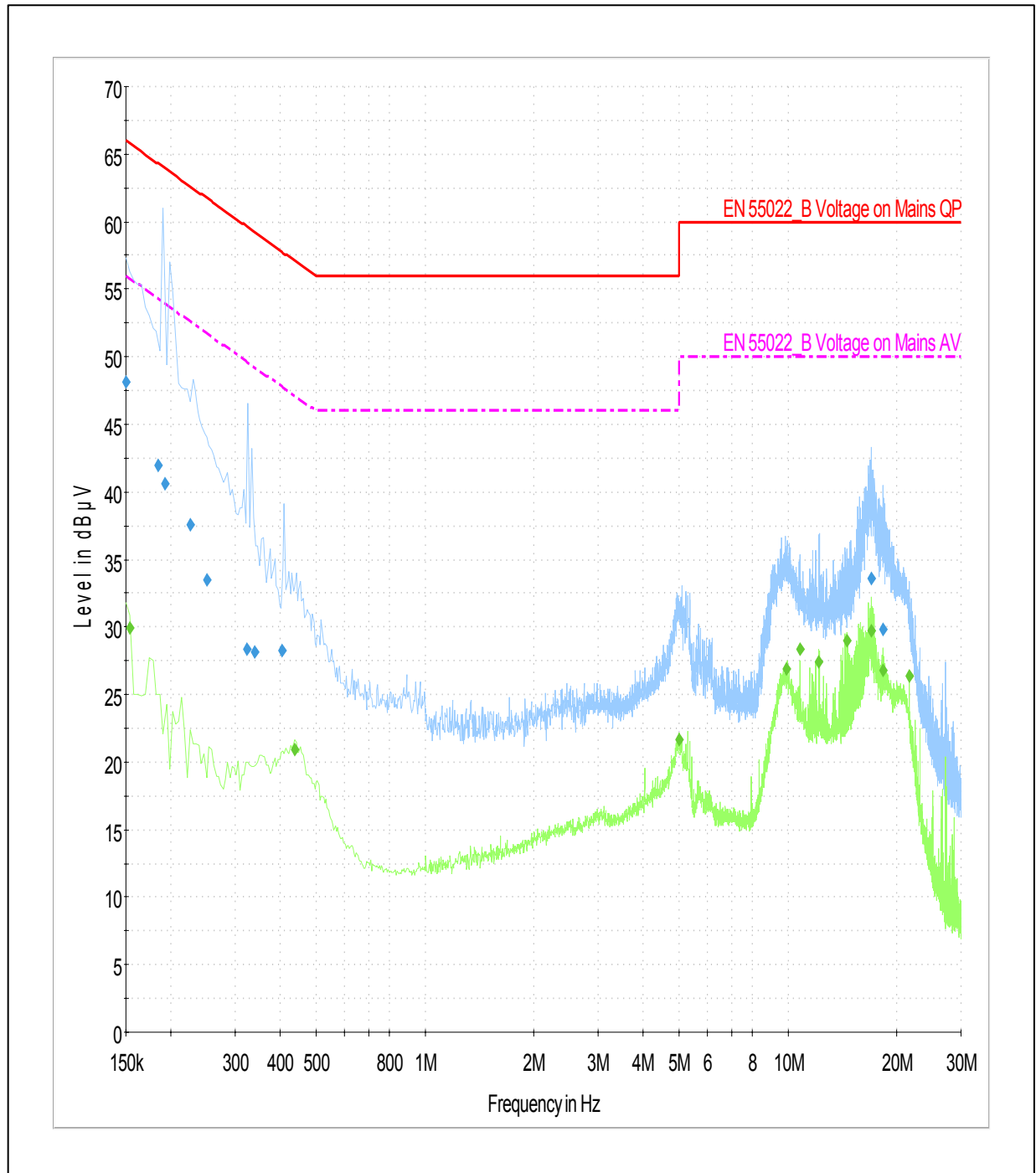
Frequency [MHz]	Line	Bandwidth [kHz]	Factor [dB]	Average [dBuV]	Margin [dB]	Limit [dBuV]
0.943	L1	9.0	9.7	15.5	30.5	46.0
1.197	N	9.0	9.7	19.9	26.1	46.0
2.134	N	9.0	9.7	13.6	32.4	46.0
2.649	L1	9.0	9.7	20.1	25.9	46.0
2.880	L1	9.0	9.8	14.5	31.5	46.0
3.165	L1	9.0	9.8	14.5	31.5	46.0
4.093	N	9.0	9.8	19.0	27.0	46.0
4.440	N	9.0	9.8	21.4	24.6	46.0
4.732	L1	9.0	9.8	16.7	29.3	46.0
9.512	L1	9.0	9.9	20.3	29.7	50.0

Note) Level (Quasi-Peak and/or Average) = Meter Reading(Quasi-Peak and/or Average) +
Factor (LISN Insertion Loss + Cable Loss)

Margin = Limit – Level (Quasi-Peak and/or Average)

- ADF COPY Printing mode

Test Graph



Note) Two graphs measured for both Live(L1) and Neutral(N) of the LISN are combined into one graph.

Test Results (Quasi-Peak and Average)

Frequency [MHz]	Line	Bandwidth [kHz]	Factor [dB]	Quasi-Peak [dBuV]	Margin [dB]	Limit [dBuV]
0.150	L1	9.0	9.6	48.1	17.9	66.0
0.184	N	9.0	9.6	42.0	22.4	64.3
0.193	N	9.0	9.6	40.6	23.3	63.9
0.226	L1	9.0	9.6	37.5	25.1	62.6
0.251	L1	9.0	9.6	33.5	28.2	61.7
0.324	L1	9.0	9.6	28.3	31.3	59.6
0.340	L1	9.0	9.6	28.1	31.1	59.2
0.404	N	9.0	9.6	28.2	29.5	57.8
17.005	L1	9.0	10.1	33.6	26.4	60.0
18.276	N	9.0	10.1	29.8	30.2	60.0

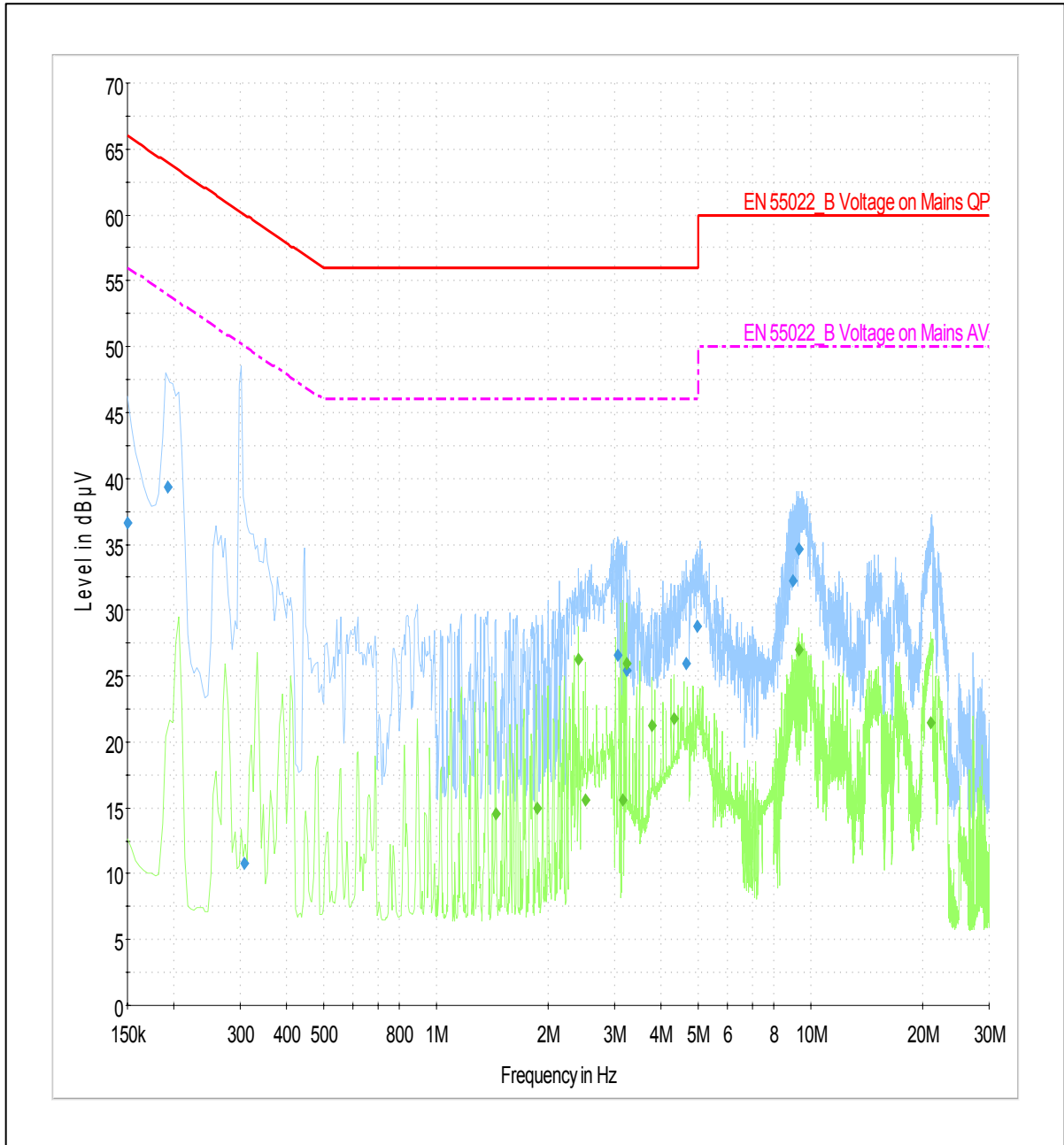
Frequency [MHz]	Line	Bandwidth [kHz]	Factor [dB]	Average [dBuV]	Margin [dB]	Limit [dBuV]
0.154	N	9.0	9.6	29.9	25.9	55.8
0.439	L1	9.0	9.6	20.9	26.2	47.1
5.000	L1	9.0	9.8	21.7	24.3	46.0
9.938	L1	9.0	9.9	26.9	23.1	50.0
10.794	L1	9.0	10.0	28.3	21.7	50.0
12.137	L1	9.0	10.0	27.4	22.6	50.0
14.505	L1	9.0	10.0	29.0	21.0	50.0
17.007	L1	9.0	10.1	29.7	20.3	50.0
18.291	N	9.0	10.1	26.8	23.2	50.0
21.664	N	9.0	10.2	26.4	23.6	50.0

Note) Level (Quasi-Peak and/or Average) = Meter Reading(Quasi-Peak and/or Average) +
Factor (LISN Insertion Loss + Cable Loss)

Margin = Limit – Level (Quasi-Peak and/or Average)

- Fax Tx mode

Test Graph



Note) Two graphs measured for both Live(L1) and Neutral(N) of the LISN are combined into one graph.

Test Results (Quasi-Peak and Average)

Frequency [MHz]	Line	Bandwidth [kHz]	Factor [dB]	Quasi-Peak [dBuV]	Margin [dB]	Limit [dBuV]
0.150	N	9.0	9.6	36.6	29.4	66.0
0.193	L1	9.0	9.6	39.3	24.6	63.9
0.309	N	9.0	9.6	10.8	49.2	60.0
3.063	L1	9.0	9.8	26.6	29.4	56.0
3.224	L1	9.0	9.8	25.4	30.6	56.0
4.663	N	9.0	9.8	26.0	30.0	56.0
4.998	N	9.0	9.8	28.8	27.2	56.0
8.988	L1	9.0	9.9	32.2	27.8	60.0
9.328	L1	9.0	9.9	34.6	25.4	60.0

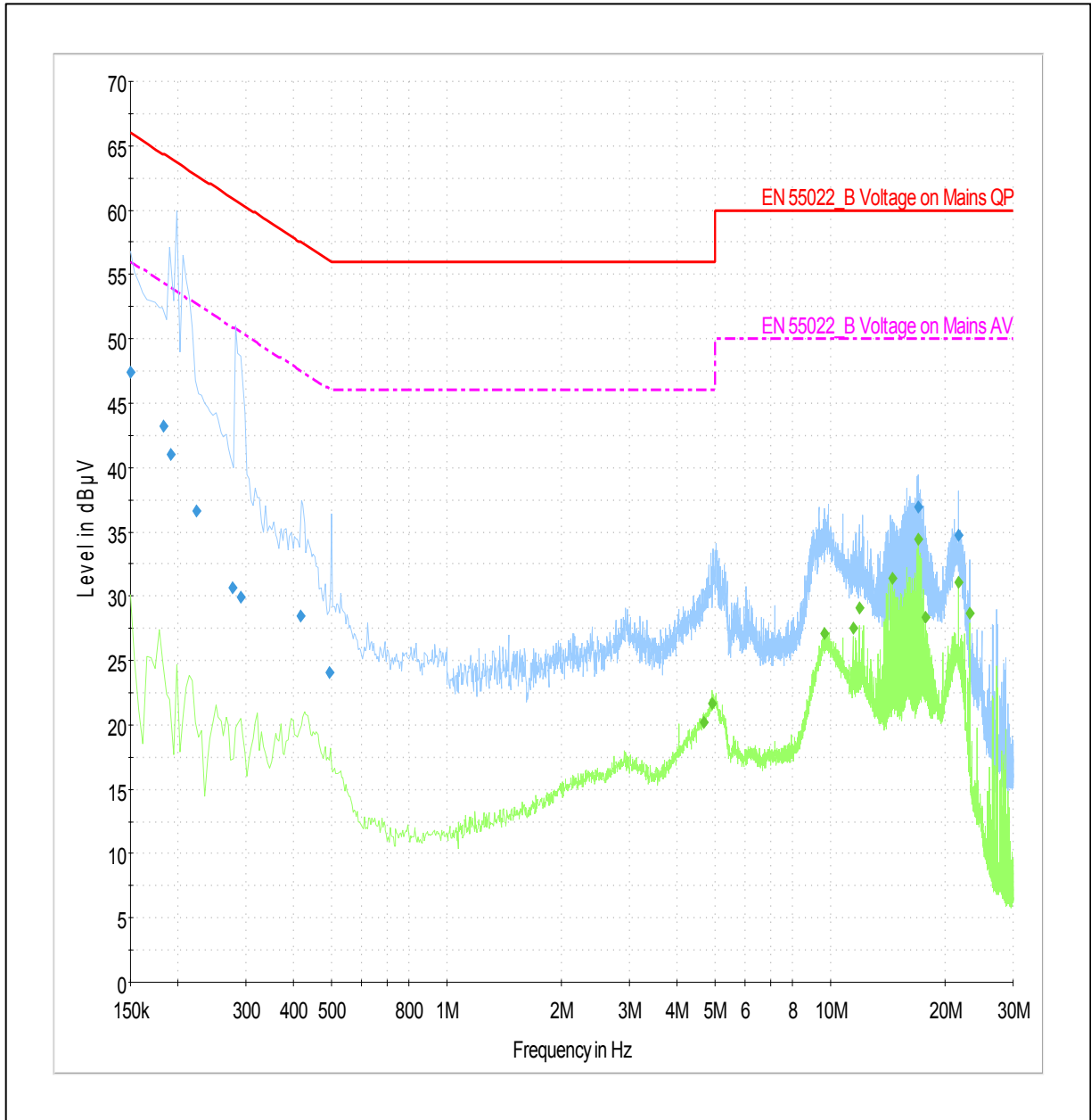
Frequency [MHz]	Line	Bandwidth [kHz]	Factor [dB]	Average [dBuV]	Margin [dB]	Limit [dBuV]
1.442	L1	9.0	9.7	14.5	31.5	46.0
1.858	L1	9.0	9.7	14.9	31.1	46.0
2.405	N	9.0	9.7	26.2	19.8	46.0
2.511	N	9.0	9.7	15.5	30.5	46.0
3.154	L1	9.0	9.8	15.6	30.4	46.0
3.229	L1	9.0	9.8	25.9	20.1	46.0
3.775	L1	9.0	9.8	21.2	24.8	46.0
4.325	L1	9.0	9.8	21.8	24.2	46.0
9.329	L1	9.0	9.9	27.0	23.0	50.0
20.992	L1	9.0	10.2	21.4	28.6	50.0

Note) Level (Quasi-Peak and/or Average) = Meter Reading(Quasi-Peak and/or Average) +
Factor (LISN Insertion Loss + Cable Loss)

Margin = Limit – Level (Quasi-Peak and/or Average)

- Network Duplex Printing Mode

Test Graph



Note) Two graphs measured for both Live(L1) and Neutral(N) of the LISN are combined into one graph.

Test Results (Quasi-Peak and Average)

Frequency [MHz]	Line	Bandwidth [kHz]	Factor [dB]	Quasi-Peak [dBuV]	Margin [dB]	Limit [dBuV]
0.150	L1	9.0	9.6	47.4	18.6	66.0
0.183	N	9.0	9.6	43.2	21.2	64.4
0.192	L1	9.0	9.6	41.0	23.0	64.0
0.223	N	9.0	9.6	36.6	26.1	62.7
0.278	N	9.0	9.6	30.7	30.2	60.9
0.291	N	9.0	9.6	29.9	30.6	60.5
0.416	L1	9.0	9.6	28.5	29.1	57.5
0.497	N	9.0	9.6	24.0	32.0	56.1
17.009	L1	9.0	10.1	36.9	23.1	60.0
21.664	N	9.0	10.2	34.8	25.2	60.0

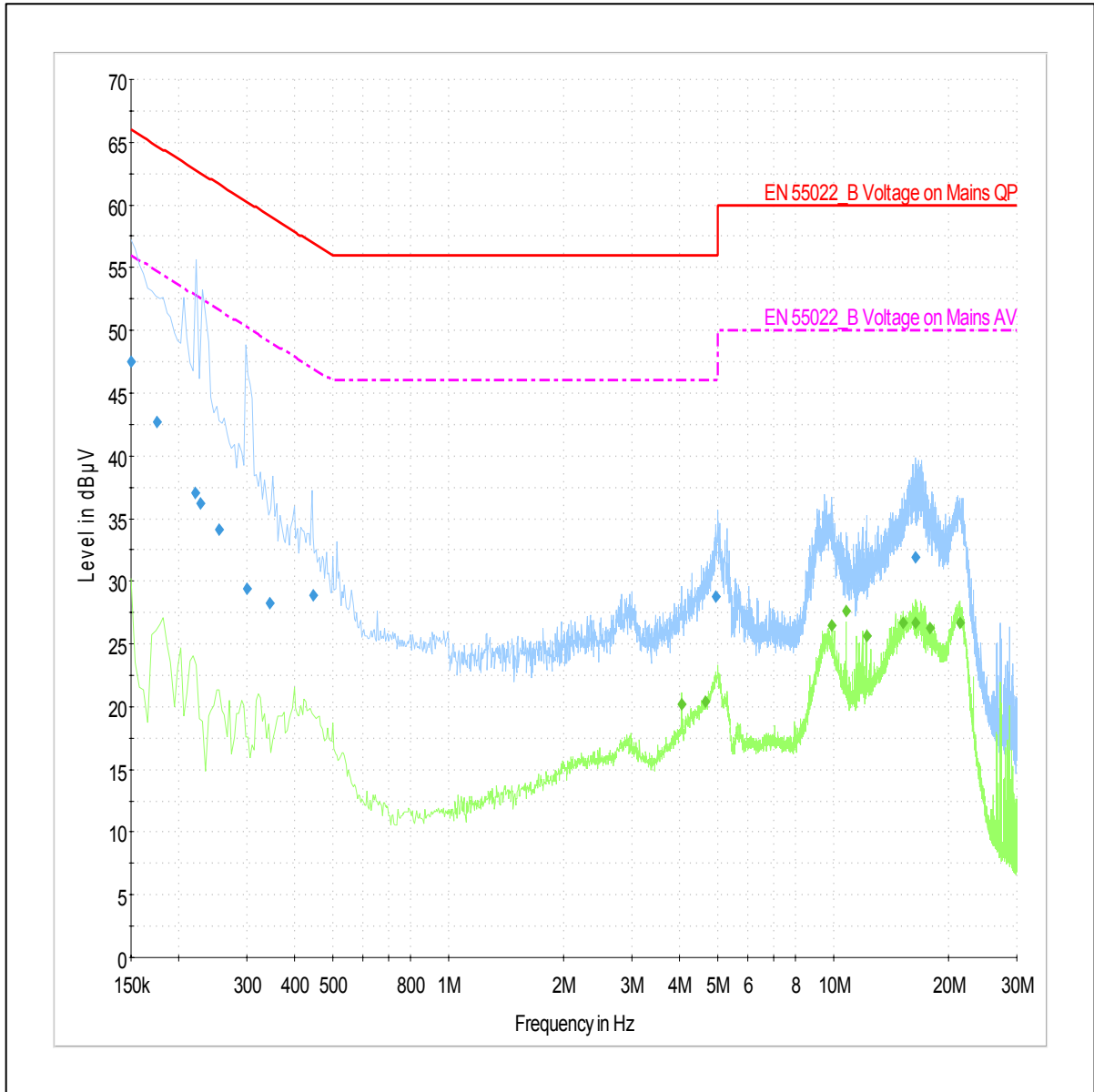
Frequency [MHz]	Line	Bandwidth [kHz]	Factor [dB]	Average [dBuV]	Margin [dB]	Limit [dBuV]
4.679	N	9.0	9.8	20.2	25.8	46.0
4.938	L1	9.0	9.8	21.7	24.3	46.0
9.695	L1	9.0	9.9	27.1	22.9	50.0
11.466	L1	9.0	10.0	27.6	22.4	50.0
11.893	L1	9.0	10.0	29.1	20.9	50.0
14.504	L1	9.0	10.0	31.4	18.6	50.0
17.008	L1	9.0	10.1	34.5	15.5	50.0
17.680	L1	9.0	10.1	28.3	21.7	50.0
21.664	N	9.0	10.2	31.0	19.0	50.0
23.130	L1	9.0	10.3	28.6	21.4	50.0

Note) Level (Quasi-Peak and/or Average) = Meter Reading(Quasi-Peak and/or Average) + Factor (LISN Insertion Loss + Cable Loss)

Margin = Limit – Level (Quasi-Peak and/or Average)

- USB Printing Mode

Test Graph



Note) Two graphs measured for both Live(L1) and Neutral(N) of the LISN are combined into one graph.

Test Results (Quasi-Peak and Average)

Frequency [MHz]	Line	Bandwidth [kHz]	Factor [dB]	Quasi-Peak [dBuV]	Margin [dB]	Limit [dBuV]
0.150	L1	9.0	9.6	47.5	18.5	66.0
0.176	N	9.0	9.6	42.7	22.0	64.7
0.221	L1	9.0	9.6	37.1	25.7	62.8
0.228	L1	9.0	9.6	36.2	26.3	62.5
0.255	L1	9.0	9.6	34.1	27.5	61.6
0.300	N	9.0	9.6	29.4	30.8	60.3
0.345	L1	9.0	9.6	28.2	30.9	59.1
0.445	L1	9.0	9.6	28.9	28.1	57.0
4.966	L1	9.0	9.8	28.8	27.2	56.0
16.399	L1	9.0	10.1	31.9	28.1	60.0

Frequency [MHz]	Line	Bandwidth [kHz]	Factor [dB]	Average [dBuV]	Margin [dB]	Limit [dBuV]
4.032	N	9.0	9.8	20.2	25.8	46.0
4.662	L1	9.0	9.8	20.5	25.5	46.0
9.938	L1	9.0	9.9	26.4	23.6	50.0
10.794	L1	9.0	10.0	27.7	22.3	50.0
12.199	N	9.0	10.0	25.7	24.3	50.0
15.176	L1	9.0	10.1	26.7	23.3	50.0
16.397	L1	9.0	10.1	26.7	23.3	50.0
17.863	L1	9.0	10.1	26.2	23.8	50.0
21.308	L1	9.0	10.2	26.7	23.3	50.0

Note) Level (Quasi-Peak and/or Average) = Meter Reading(Quasi-Peak and/or Average) + Factor (LISN Insertion Loss + Cable Loss)

Margin = Limit – Level (Quasi-Peak and/or Average)

4.2 Radiated disturbance

Of those disturbances above ($L - 20\text{dB}$), where L is the limit level in logarithmic units, record at least the disturbance levels and the frequencies of the six highest disturbances.

The following data lists the significant emission frequencies, measured levels, correction factors (for antenna and cables), orientation of table, polarization and height of antenna, the corrected reading, the limit, and the amount of margin. All measurements were taken utilizing quasi-peak detection unless stated otherwise.

Measurements were performed at an antenna to EUT distance of 10 meters and elevated between 1 and 4 meters. Both vertical and horizontal antenna polarizations were measured.

Limits for radiated disturbance of ITE at a measuring distance of 10 m

Frequency range Limits MHz	Quasi-peak Limits dB dB($\mu\text{V}/\text{m}$)	
	Class A	Class B
30 to 230	40	30
230 to 1000	47	37
Note 1: The lower limit shall apply at the transition frequency. Note 2: Additional provisions may be required for cases where interference occurs. Note 3: 1 $\mu\text{V}/\text{m}$ is regarded as 0 dB.		

4.2.1 Test instrumentation

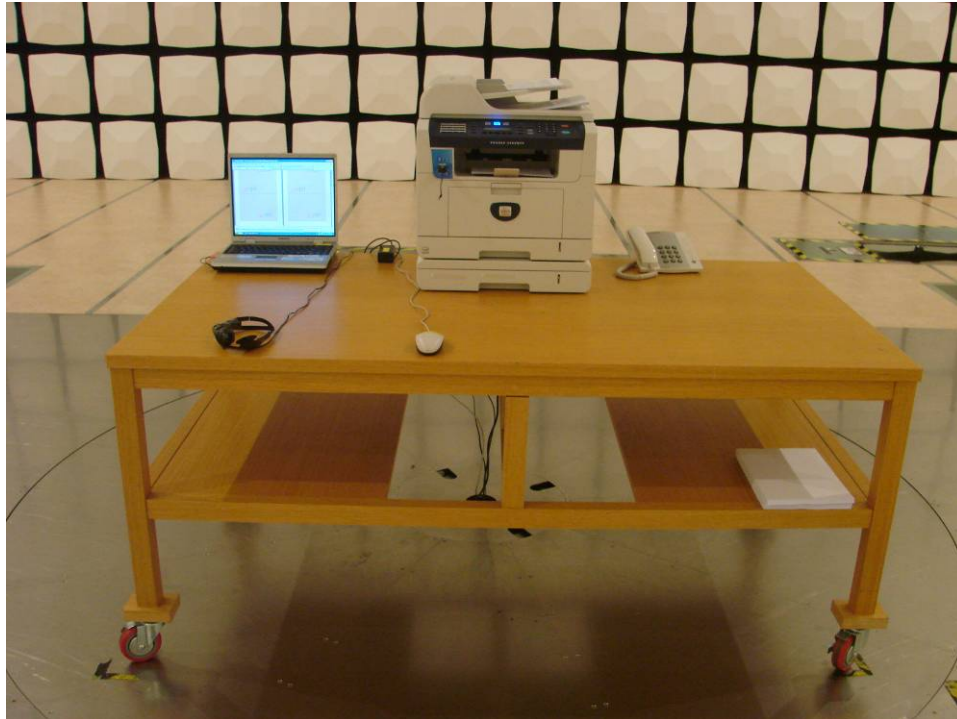
Test instrumentations used in the Radiated disturbance test were as follows:

Test instrumentation	Model name	Manufacturer	Serial or Firmware (No./Ver.)	Calibration	
				Date	Interval (Month)
Bi-con Antenna	CBL6112D	Schaffner	22601	2007-04-02	24
Bi-con Antenna	CBL6112B	Schaffner	2804	2007-04-16	24
EMI Receiver	ESIB-26	R&S	100289	2008-04-25	12
EMI Receiver	ESIB-26	R&S	100147	2007-06-15	12
Amplifier	310N	SONOMA	185061	2007-12-04	12
Amplifier	310N	SONOMA	251676	2008-03-13	12
Amplifier	TPA0108-40	TOYO	0433	N/A	N/A
Antenna Mast	MA4000	INN CO	-	N/A	N/A
Antenna Mast	MA4000	INN CO	-	N/A	N/A
Antenna Mast	MA2000	INN CO	-	N/A	N/A
Mast Controller	CO2000	INN CO	-	N/A	N/A
Test software	EP5/RE	TOYO	VER 3.1.20	N/A	N/A
RF Selector	NS4900	TOYO	-	N/A	N/A

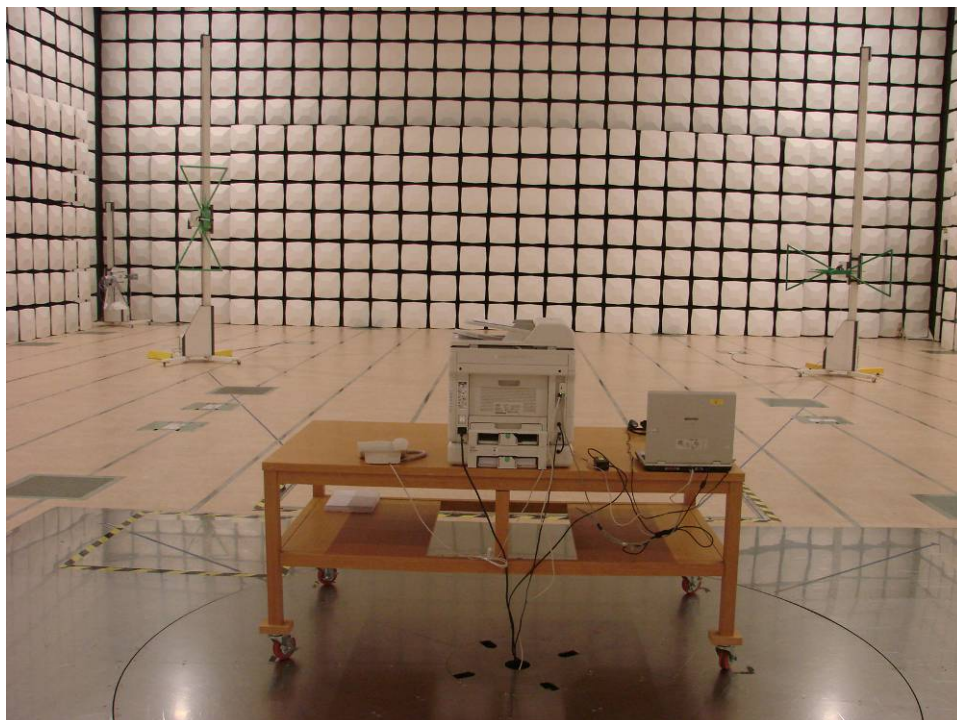
4.2.2 Temperature and humidity condition

Test date	May 24, 2008	Test engineer	Young Hun Cheong	
Climate condition	Ambient temperature	23.0 ℃	Relative humidity	33 %
	Atmospheric pressure	100.8 kPa		
Test place	Semi-Anechoic Chamber			

4.2.3 Photograph of Test setup



Front

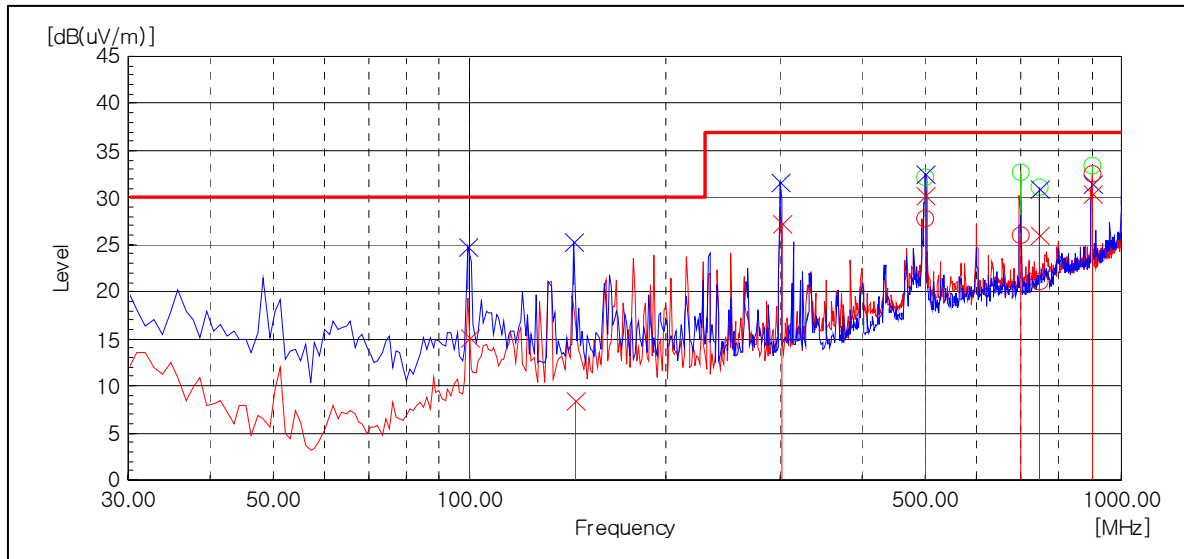


Rear

4.2.4 Test results (30 MHz ~ 1 GHz)

- Standby Mode

Test Graph and Results



Frequency [MHz]	Pol.	Reading QP [dB(uV)]	Factor [dB(1/m)]	Level QP [dB(uV/m)]	Limit [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
100.04	V	34.2	-19.0	15.2	30.0	14.8	101	248.9
145.34	V	26.5	-18.1	8.4	30.0	21.6	102	345.3
300.88	V	41.1	-13.8	27.3	37.0	9.7	125	282.6
500.24	H	35.9	-8.1	27.8	37.0	9.2	201	347.7
500.63	V	39.3	-9.0	30.3	37.0	6.7	325	249.9
700.78	H	33.0	-6.9	26.1	37.0	10.9	224	319.2
750.00	H	25.8	-4.7	21.1	37.0	15.9	224	112.6
750.01	V	31.9	-5.9	26.0	37.0	11.0	332	110
900.79	H	35.0	-2.5	32.5	37.0	4.5	397	354.1
901.06	V	33.4	-3.0	30.4	37.0	6.6	332	269.5

Note) Receiving antenna polarization : Horizontal and/or Vertical

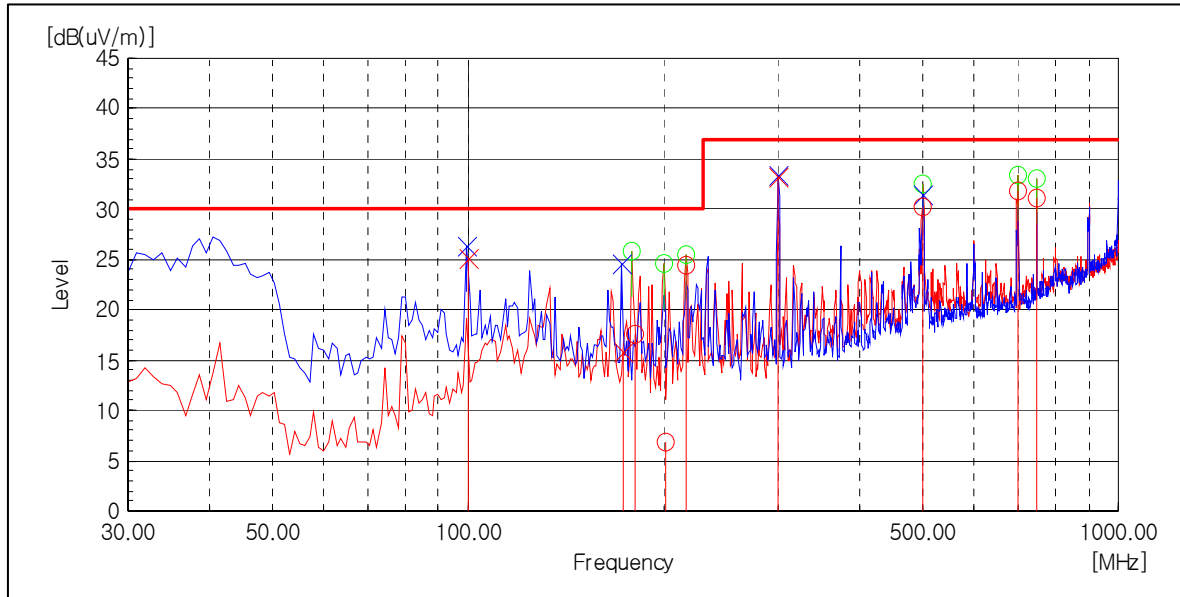
Test Distance : 10m, Antenna Height : 1 to 4 meters

Level QP(Quasi-Peak) = Reading QP + Factor(Antenna Factor+Cable Loss-Amp. Gain)

Margin QP(Quasi-Peak) = Limit - Level QP

- ADF COPY Printing Mode

Test Graph and Results



Frequency [MHz]	Pol.	Reading QP [dB(uV)]	Factor [dB(1/m)]	Level QP [dB(uV/m)]	Limit [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
100.04	V	44.1	-19.0	25.1	30.0	4.9	100.0	238.2
172.73	V	34.9	-19.0	15.9	30.0	14.1	100.0	356.7
180.18	H	36.6	-18.9	17.7	30.0	12.3	330.0	359.6
201.39	H	26.5	-19.6	6.9	30.0	23.1	400.0	197.4
216.86	H	43.3	-18.8	24.5	30.0	5.5	321.0	207.6
300.32	V	47.1	-13.8	33.3	37.0	3.7	100.0	282.4
500.57	H	38.4	-8.1	30.3	37.0	6.7	138.0	336.4
700.60	H	38.8	-6.9	31.9	37.0	5.1	113	3.8
750.00	H	35.8	-4.7	31.1	37.0	5.9	160	203.5
100.04	V	44.1	-19.0	25.1	30.0	4.9	100.0	238.2

Note) Receiving antenna polarization : Horizontal and/or Vertical

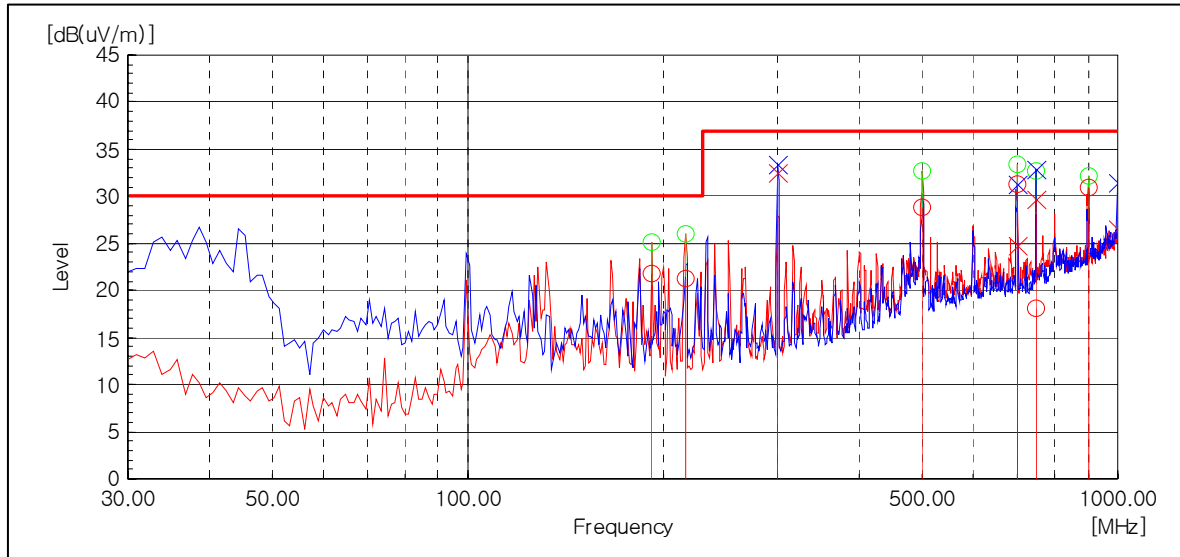
Test Distance : 10m, Antenna Height : 1 to 4 meters

Level QP(Quasi-Peak) = Reading QP + Factor(Antenna Factor+Cable Loss-Amp. Gain)

Margin QP(Quasi-Peak) = Limit - Level QP

- FAX TX mode

Test Graph and Results



Frequency [MHz]	Pol.	Reading QP [dB(uV)]	Factor [dB(1/m)]	Level QP [dB(uV/m)]	Limit [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
191.96	H	40.8	-19.0	21.8	30.0	8.2	400	97.1
216.02	H	40.0	-18.8	21.2	30.0	8.8	265	236.5
300.29	V	46.3	-13.8	32.5	37.0	4.5	108	258.8
499.93	H	36.9	-8.1	28.8	37.0	8.2	100	0.3
699.92	V	31.5	-6.7	24.8	37.0	12.2	283	309.6
700.63	H	38.2	-6.9	31.3	37.0	5.7	106	7.1
749.72	H	22.9	-4.8	18.1	37.0	18.9	107	339.5
750.02	V	35.6	-5.9	29.7	37.0	7.3	241	134.5
900.66	H	33.4	-2.5	30.9	37.0	6.1	350	349
997.26	V	26.8	-0.2	26.6	37.0	10.4	239	277.4

Note) Receiving antenna polarization : Horizontal and/or Vertical

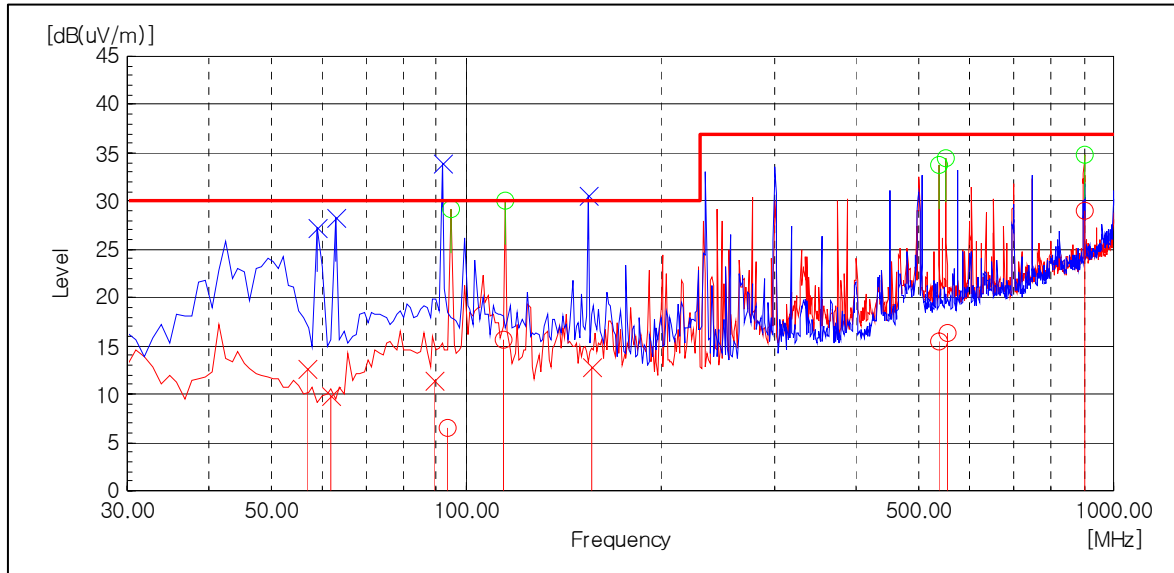
Test Distance : 10m, Antenna Height : 1 to 4 meters

Level QP(Quasi-Peak) = Reading QP + Factor(Antenna Factor+Cable Loss-Amp. Gain)

Margin QP(Quasi-Peak) = Limit - Level QP

- Network Duplex Printing Mode

Test Graph and Results



Frequency [MHz]	Pol.	Reading QP [dB(uV)]	Factor [dB(1/m)]	Level QP [dB(uV/m)]	Limit [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
56.72	V	37.1	-24.4	12.7	30.0	17.3	200	212.6
61.82	V	34.5	-24.6	9.9	30.0	20.1	400	359
89.48	V	32.5	-21.1	11.4	30.0	18.6	100	253.4
93.78	H	26.3	-19.8	6.5	30.0	23.5	400	258
114.54	H	32.8	-17.1	15.7	30.0	14.3	400	106.2
156.70	V	31.5	-18.7	12.8	30.0	17.2	200	263.9
536.55	H	22.6	-7.1	15.5	37.0	21.5	150	9.7
553.47	H	22.8	-6.5	16.3	37.0	20.7	150	338.7
900.92	H	31.6	-2.5	29.1	37.0	7.9	350	9.8

Note) Receiving antenna polarization : Horizontal and/or Vertical

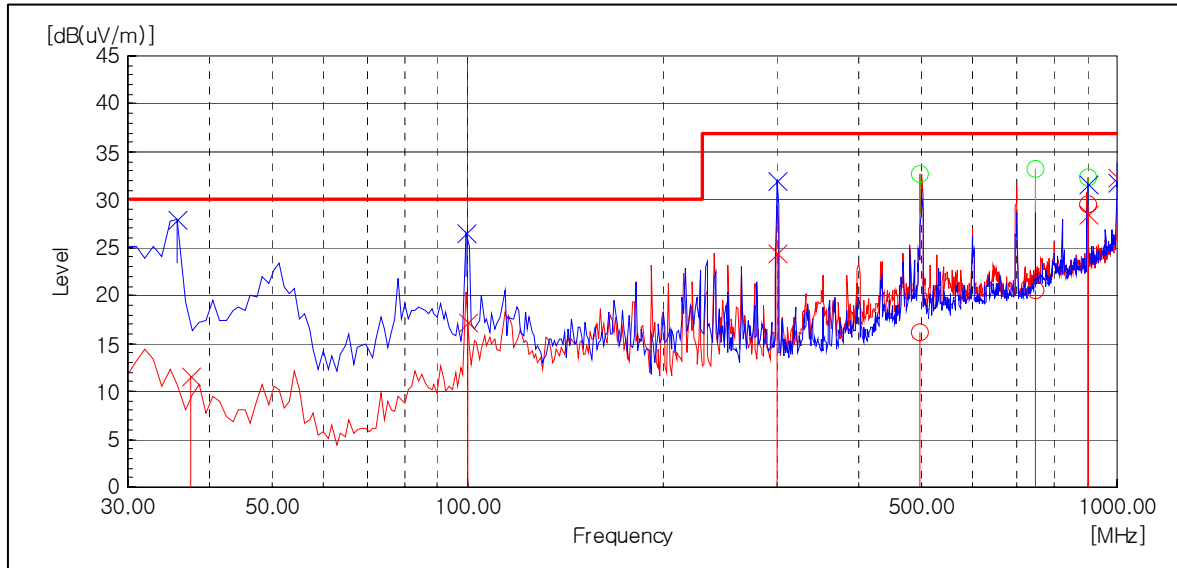
Test Distance : 10m, Antenna Height : 1 to 4 meters

Level QP(Quasi-Peak) = Reading QP + Factor(Antenna Factor+Cable Loss-Amp. Gain)

Margin QP(Quasi-Peak) = Limit - Level QP

- USB Printing Mode

Test Graph and Results



Frequency [MHz]	Pol.	Reading QP [dB(uV)]	Factor [dB(1/m)]	Level QP [dB(uV/m)]	Limit [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
37.59	V	27.7	-16.1	11.6	30.0	18.4	200	297.4
100.06	V	36.2	-19.0	17.2	30.0	12.8	198	211.5
300.33	V	38.3	-13.8	24.5	37.0	12.5	398	359.5
496.23	H	24.3	-8.2	16.1	37.0	20.9	305	297.7
750.00	H	25.3	-4.7	20.6	37.0	16.4	345	9.8
900.99	V	31.4	-3.0	28.4	37.0	8.6	252	254.3
901.13	H	32.0	-2.5	29.5	37.0	7.5	332	352.5
999.91	V	32.5	-0.1	32.4	37.0	4.6	150	268.9

Note) Receiving antenna polarization : Horizontal and/or Vertical

Test Distance : 10m, Antenna Height : 1 to 4 meters

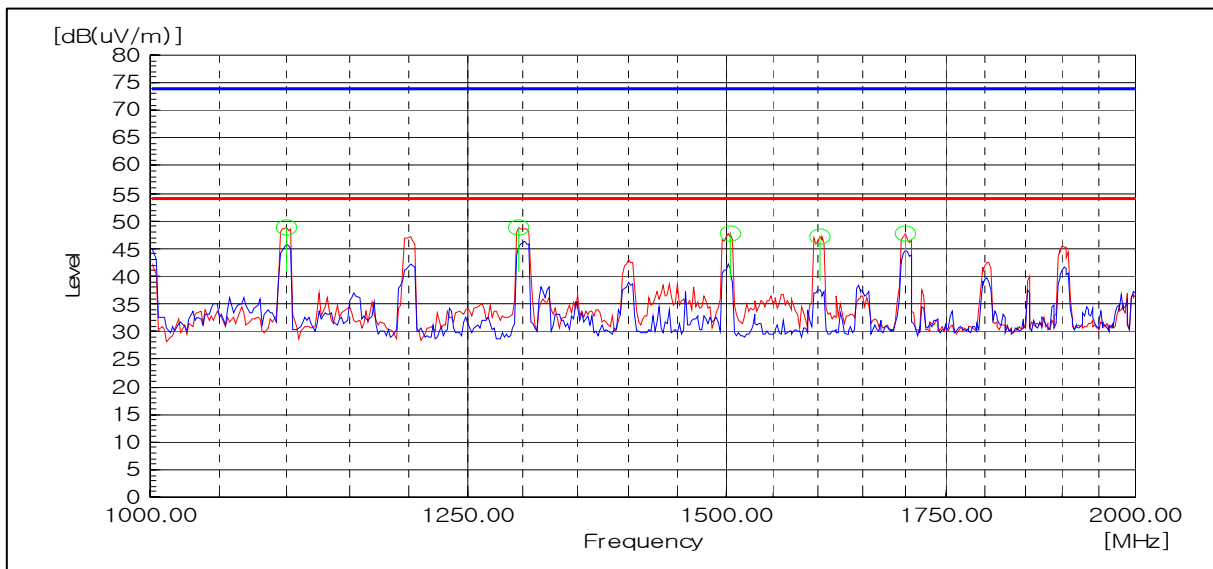
Level QP(Quasi-Peak) = Reading QP + Factor(Antenna Factor+Cable Loss-Amp. Gain)

Margin QP(Quasi-Peak) = Limit - Level QP

4.2.5 Test results (1 GHz ~ 2 GHz)

- Standby Mode

Test Graph and Results



Frequency [MHz]	Pol.	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level PK [dB(uV/m)]	Limit [dB(uV/m)]	Margin PK [dB]	Height [cm]	Angle [deg]
1100.20	H	60.8	-12.1	48.7	74.0	25.3	100	271.4
1296.59	H	60.1	-11.2	48.9	74.0	25.1	200	0.3
1505.01	H	58.0	-10.2	47.8	74.0	26.2	100	3.1
1601.20	H	57.0	-9.8	47.2	74.0	26.8	100	346.6
1701.40	H	56.8	-9.2	47.6	74.0	26.4	100	28.3

Note1) Representative operating mode having minimum margin below 1GHz were selected for radiated emission test above 1GHz, and any emissions that do NOT exceed Average limit were not tested with average detector mode.

Note2) Receiving antenna polarization : Horizontal and/or Vertical

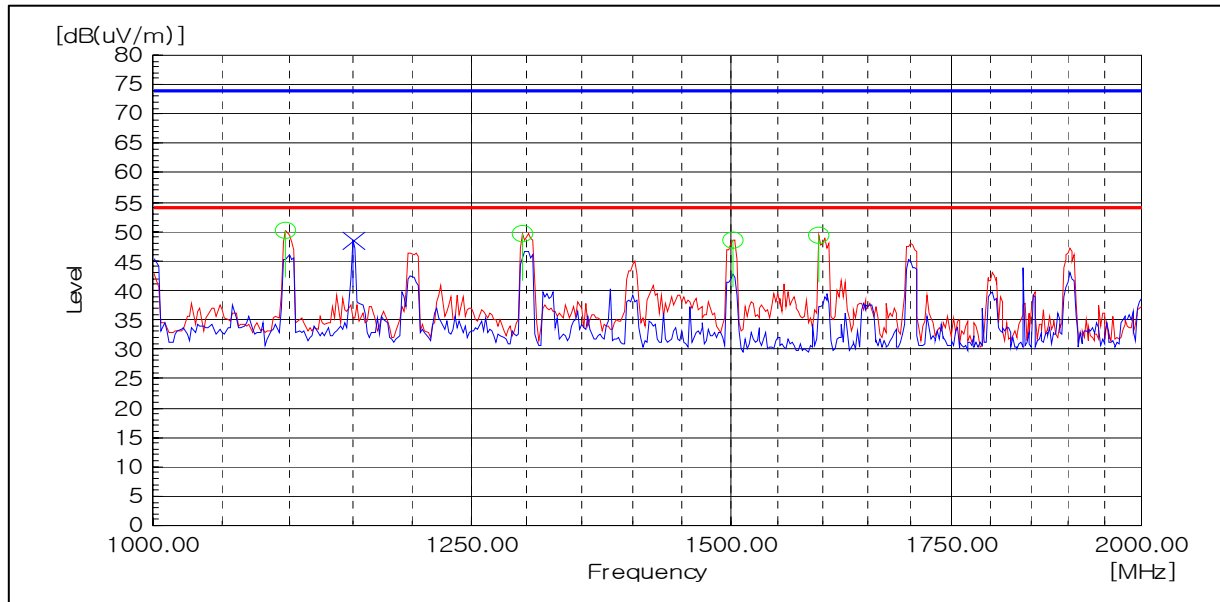
Test Distance : 3m, Antenna Height : 1 to 2 meters

Level PK(Peak) = Reading PK(Peak) + Factor(Antenna Factor + Cable Loss - Amp. Gain)

Margin PK(Peak) = Limit – Level PK(Peak)

- ADF COPY Printing Mode

Test Graph and Results



Frequency [MHz]	Pol.	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level PK [dB(uV/m)]	Limit [dB(uV/m)]	Margin PK [dB]	Height [cm]	Angle [deg]
1100.20	H	60.8	-12.1	48.7	74.0	25.3	100	271.4
1296.59	H	60.1	-11.2	48.9	74.0	25.1	200	0.3
1505.01	H	58.0	-10.2	47.8	74.0	26.2	100	3.1
1601.20	H	57.0	-9.8	47.2	74.0	26.8	100	346.6
1701.40	H	56.8	-9.2	47.6	74.0	26.4	100	28.3

Note1) Representative operating mode having minimum margin below 1GHz were selected for radiated emission test above 1GHz, and any emissions that do NOT exceed Average limit were not tested with average detector mode.

Note2) Receiving antenna polarization : Horizontal and/or Vertical

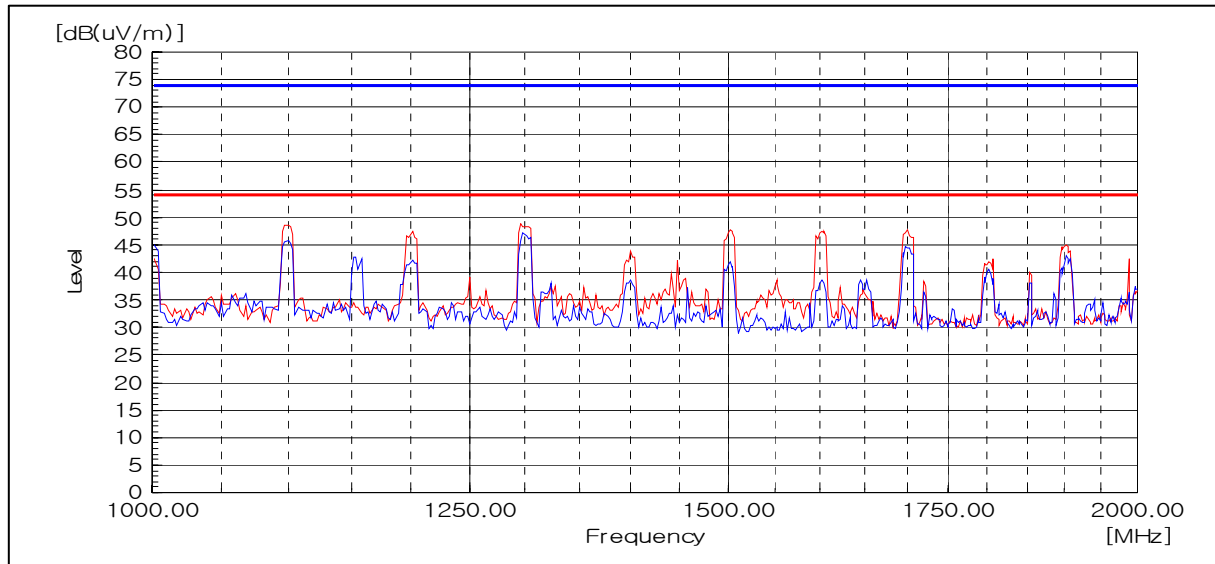
Test Distance : 3m, Antenna Height : 1 to 2 meters

Level PK(Peak) = Reading PK(Peak) + Factor(Antenna Factor + Cable Loss - Amp. Gain)

Margin PK(Peak) = Limit – Level PK(Peak)

- FAX TX mode

Test Graph and Results



Frequency [MHz]	Pol.	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level PK [dB(uV/m)]	Limit [dB(uV/m)]	Margin PK [dB]	Height [cm]	Angle [deg]
1098.20	H	60.7	-12.1	48.6	74.0	25.4	100	269.9
1296.59	H	60.1	-11.2	48.9	74.0	25.1	200	9.8
1501.00	H	57.9	-10.2	47.7	74.0	26.3	100	3
1605.21	H	57.1	-9.7	47.4	74.0	26.6	100	359.6
1701.40	H	56.8	-9.2	47.6	74.0	26.4	100	350.2

Note1) Representative operating mode having minimum margin below 1GHz were selected for radiated emission test above 1GHz, and any emissions that do NOT exceed Average limit were not tested with average detector mode.

Note2) Receiving antenna polarization : Horizontal and/or Vertical

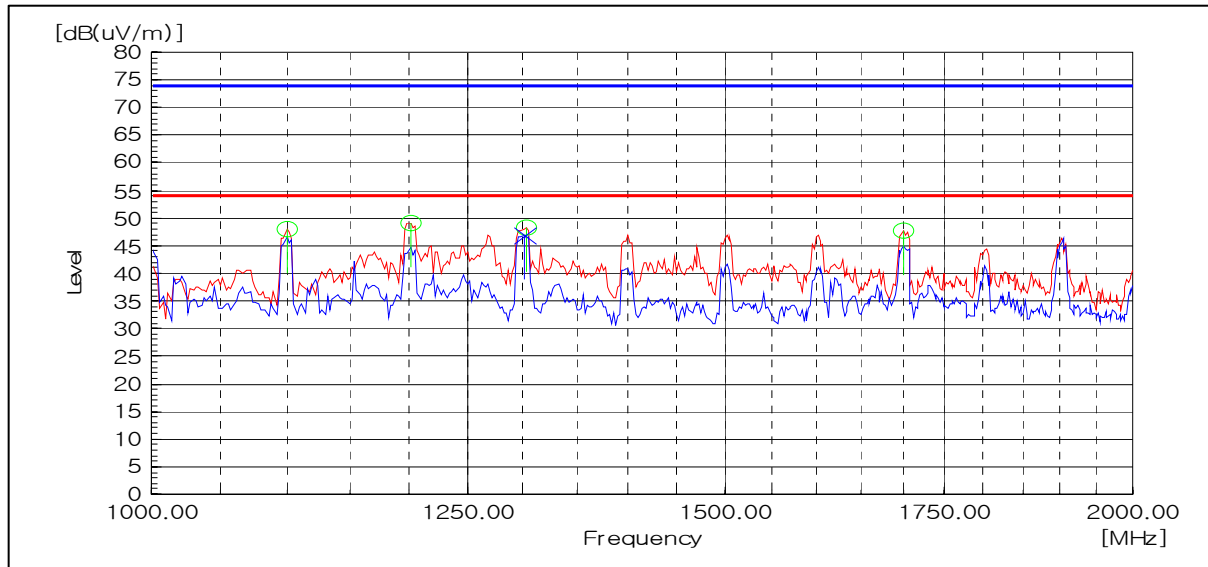
Test Distance : 3m, Antenna Height : 1 to 2 meters

Level PK(Peak) = Reading PK(Peak) + Factor(Antenna Factor + Cable Loss - Amp. Gain)

Margin PK(Peak) = Limit – Level PK(Peak)

- Network Duplex Printing Mode

Test Graph and Results



Frequency [MHz]	Pol.	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level PK [dB(uV/m)]	Limit [dB(uV/m)]	Margin PK [dB]	Height [cm]	Angle [deg]
1100.20	H	60.1	-12.1	48.0	74.0	26.0	100	290.4
1200.40	H	60.8	-11.6	49.2	74.0	24.8	100	286.1
1300.60	V	58.2	-11.2	47.0	74.0	27.0	100	332.6
1302.61	H	59.2	-11.1	48.1	74.0	25.9	100	273.6
1701.40	H	56.8	-9.2	47.6	74.0	26.4	100	25

Note1) Representative operating mode having minimum margin below 1GHz were selected for radiated emission test above 1GHz, and any emissions that do NOT exceed Average limit were not tested with average detector mode.

Note2) Receiving antenna polarization : Horizontal and/or Vertical

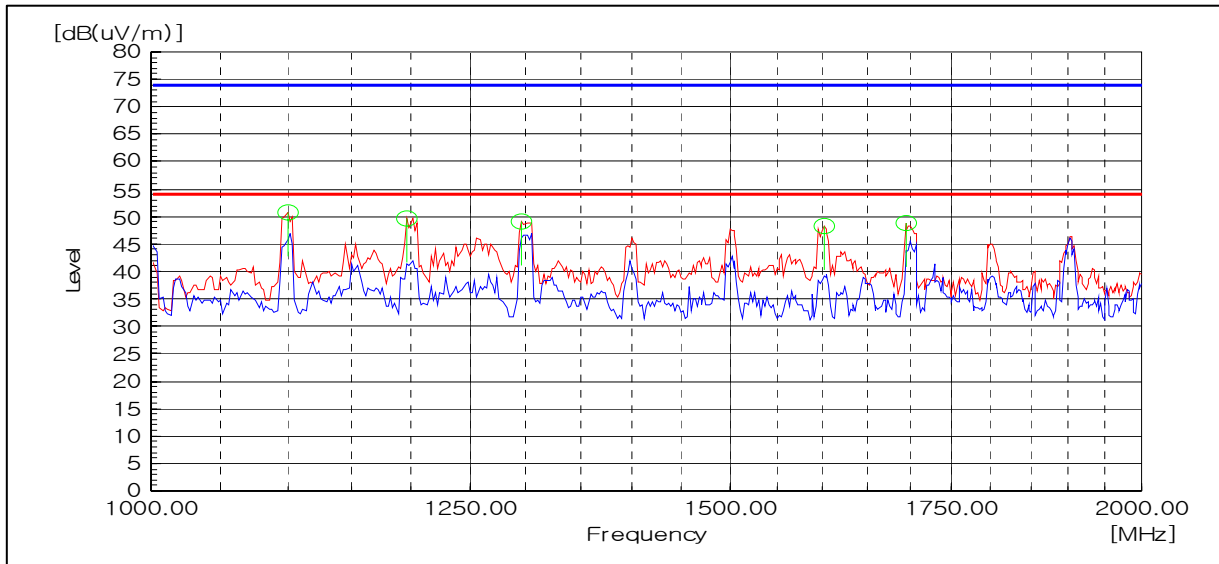
Test Distance : 3m, Antenna Height : 1 to 2 meters

Level PK(Peak) = Reading PK(Peak) + Factor(Antenna Factor + Cable Loss - Amp. Gain)

Margin PK(Peak) = Limit – Level PK(Peak)

- USB Printing Mode

Test Graph and Results



Frequency [MHz]	Pol.	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level PK [dB(uV/m)]	Limit [dB(uV/m)]	Margin PK [dB]	Height [cm]	Angle [deg]
1100.20	H	63.0	-12.1	50.9	74.0	23.1	100	271.8
1196.39	H	61.3	-11.6	49.7	74.0	24.3	100	265.5
1296.59	H	60.3	-11.2	49.1	74.0	24.9	200	15.5
1601.20	H	58.0	-9.8	48.2	74.0	25.8	100	350
1695.39	H	57.9	-9.2	48.7	74.0	25.3	100	24.2

Note1) Representative operating mode having minimum margin below 1GHz were selected for radiated emission test above 1GHz, and any emissions that do NOT exceed Average limit were not tested with average detector mode.

Note2) Receiving antenna polarization : Horizontal and/or Vertical

Test Distance : 3m, Antenna Height : 1 to 2 meters

Level PK(Peak) = Reading PK(Peak) + Factor(Antenna Factor + Cable Loss - Amp. Gain)

Margin PK(Peak) = Limit - Level PK(Peak)

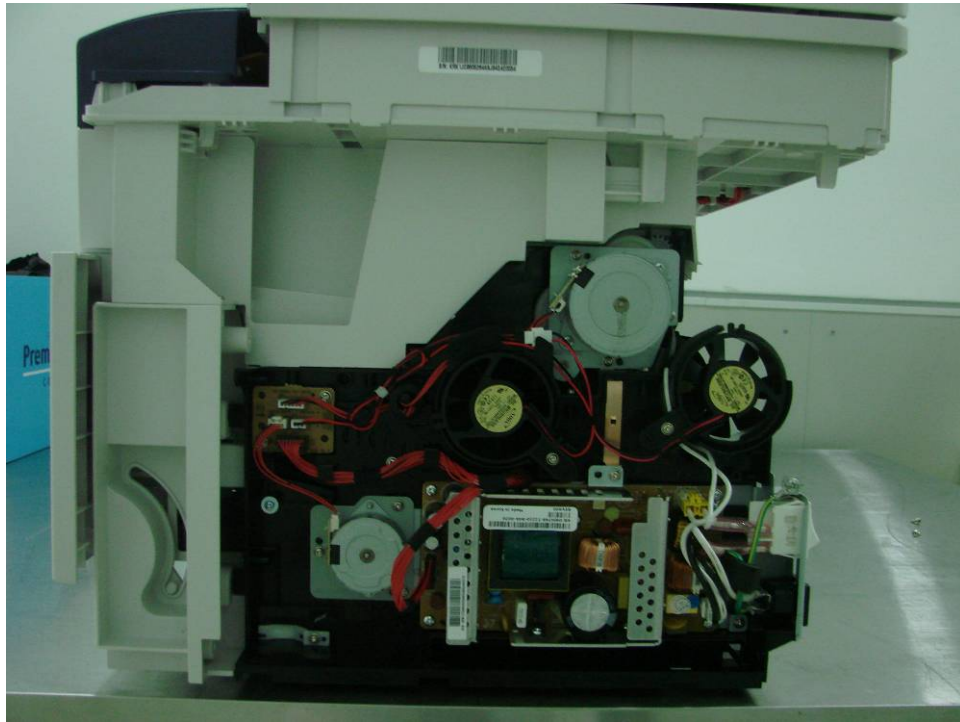
Appendix – EUT photography



Front View



Rear View



Internal View 1



Internal View 2



Label Location

XEROX Xerox Corporation Webster, NY 14580 Made in China USOC Jack Type: RJ11C Complies with Part 68, FCC Rules. FCC Certification No.: US: A3LFA05BP3300MFP This product complies with FDA performance Standards for laser products except for Deviations pursuant to laser notice No 50, Dated June 24, 2007 Place: M264	Phaser™ 3300MFP Volts: AC 110-127V Hertz: 50/60Hz Amps: 6.4A Ringer Equivalence: 0.5B Manufactured:	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: i) This device may not cause harmful interference, and ii) This device must accept any interference received, including interference that may cause undesired operation. FCC ID: A3LP3300MFP This Class B digital apparatus complies with Canadian ICES-003 Cet appareil numérique de la classe "B" est conforme à la norme NMB-003 du Canada. IC: 649E-P3300MFP
Serial No.:	 51Y7 E149091 I.T.E.	CLASS 1 LASER PRODUCT "Lamp(s) contains mercury, dispose according to local, state or federal laws" REV.00 (A)

Phaser 3300MFP(XEROX)

Rating Label