


**SK TECH CO., LTD.**

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## Certificate of Compliance

<b>Test Report No.:</b>	<b>SKTTRT-060223-004-A1</b>		
<b>NVLAP CODE:</b>	<b>200220-0</b>		
<b>Applicant:</b>	<b>Pantech Co Ltd</b>		
<b>Applicant Address:</b>	6F. Shinsong Center Bldg. 25-12, Yeouido-dong, Youngdeungpo-gu, Seoul 150-711 Korea		
<b>Manufacturer:</b>	<b>HASSNET Inc.</b>		
<b>Manufacturer Address:</b>	6fl. Techno complex Bldg. Korea Univ. 126-16, Anam-Dong 5-Ka, Seongbuk-Ku, Seoul, 136-701 South Korea		
<b>Device Under Test:</b>	<b>Pantech Mono Headset with Bluetooth</b>		
<b>FCC ID:</b>	<b>JYCPM3</b>	<b>Model No.:</b>	<b>PM3</b>
<b>Receipt No.:</b>	<b>SKTEU06-0080</b>	<b>Date of receipt:</b>	February 13, 2006
<b>Date of Issue:</b>	February 23, 2006	<b>Date of revised:</b> <b>(NOTE 1)</b>	April 25, 2006
<b>Location of Testing:</b>	<b>SK TECH CO., LTD.</b> 820-2, Wolmoon-Ri, Wabu-Up, Namyangju-Si, Kyunggi-Do, Korea		
<b>Test Procedure:</b>	<b>ANSI C63.4, FCC Public Notice DA 00-705 (March 2000)</b>		
<b>Test Specification:</b>	<b>47CFR, Part 15 Rules</b>		
<b>Equipment Class:</b>	<b>DSS - Part 15 Spread Spectrum Transmitter</b>		
<b>Test Result:</b>	The above-mentioned device has been tested and passed.		

Tested &amp; Reported by: Jong-Soo, Yoon

Approved by: Jae-Kyung, Bae

2006.04.25

2006.04.25

Signature

Date

Signature

Date

<b>Other Aspects:</b>	<b>NOTE 1: Application for FCC Class II permissive change (SKTEU06-0211)</b> No electrical or mechanical modifications were made to the transmitter from the time of their original FCC submissions. The AC power line conducted emissions were measured, because the additional AC/DC adaptors for charging the battery will be marketed.
<b>Abbreviations:</b>	· OK, Pass = passed · Fail = failed · N/A = not applicable

- This test report is not permitted to copy partly without our permission.
- This test result is dependent on only equipment to be used.
- This test result is based on a single evaluation of one sample of the above mentioned.
- This test report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
- We certify that this test report has been based on the measurement standards that is traceable to the national or International standards.

NVLAP Lab. Code: 200220-0

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## **1. GENERAL**

These tests were performed using the test procedure outlined in ANSI C63.4, 2003 for intentional radiators, and in accordance with the limits set forth in FCC Part 15.247 for Spread Spectrum Transmitter. The EUT (Equipment Under Test) has been shown to be capable of compliance with the applicable technical standards.

We attest to the accuracy of data. All measurements reported herein were performed by SK Tech Co., Ltd. and were made under Chief Engineer's supervision.

We assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

## **2. TEST SITE**

SK TECH Co., Ltd.

### **2.1 Location**

820-2, Wolmoon Ri, Wabu-Up, Namyangju-Si, Kyunggi-Do, Korea

This test site is in compliance with ISO/IEC 17025 for general requirements for the competence of testing and calibration laboratories.

This laboratory is accredited by NVLAP for NVLAP Lab. Code: 200220-0 and DATech for DAR-Registration No.: DAT-P-076/97-01



## 2.2 List of Test and Measurement Instruments

Description	Manufacturer	Model #	Serial #	
Spectrum Analyzer	Agilent	E4405B	US40520856	<input checked="" type="checkbox"/>
EMC Spectrum Analyzer	Agilent	E7405A	US40240203	
EMI Test Receiver	Rohde&Schwarz	ESIB40	100277	
EMI Test Receiver	Rohde&Schwarz	ESVS10	825120/008	
EMI Test Receiver	Rohde&Schwarz	ESVS10	834468/013	
EMI Test Receiver	Rohde&Schwarz	ESHS10	835871/002	
EMI Test Receiver	Rohde&Schwarz	ESHS10	862970/019	<input checked="" type="checkbox"/>
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	836679/018	<input checked="" type="checkbox"/>
Pre-amplifier	HP	8447F	3113A05153	
Pre-amplifier	MITEQ	AFS44	1116321	
Pre-amplifier	MITEQ	AFS44	1116322	
Power Meter	Agilent	E4418B	US39402179	
Power Sensor	HP	8485A	3318A13916	
Oscilloscope	Agilent	54820A	US40240160	
Diode detector	Agilent	8473C	1882A03173	
VHF Precision Dipole Antenna (TX/RX)	Schwarzbeck	VHAP	1014 / 1015	
UHF Precision Dipole Antenna (TX/RX)	Schwarzbeck	UHAP	989 / 990	
Loop Antenna	Schwarzbeck	HFH2-Z2	863048/019	
TRILOG Broadband Antenna	Schwarzbeck	VULB9160	3141	
Biconical Antenna	Schwarzbeck	VHA9103	2265	
Log-Periodic Antenna	Schwarzbeck	UHALP9107	1819	
Horn Antenna	AH Systems	SAS-200/571	304	
Horn Antenna	EMCO	3115	00040723	
Horn Antenna	EMCO	3115	00056768	
Vector Signal Generator	Agilent	E4438C	MY42080359	
PSG analog signal generator	Agilent	E8257D-520	MY45141255	
DC Power Supply	HP	6634A	2926A-01078	
DC Power Supply	HP	6268B	2542A-07856	
Digital Multimeter	HP	HP3458A	2328A14389	
PCS Interface	HP	83236B	3711J00881	
CDMA Mobile Test Set	HP	8924C	US35360253	
Hygro/Thermo Graph	SATO	PC-5000TRH-II	-	<input checked="" type="checkbox"/>
Temperature/Humidity Chamber	All Three	ATH-50M	20030425	

## 2.3 Test Date

Date of Application : February 13, 2006

Date of Test : February 16, 2006 ~ February 16, 2006

## 2.4 Test Environment

See each test item's description.



### 3. DESCRIPTION OF THE EQUIPMENT UNDER TEST

The product specification described herein was obtained from the product data sheet or user's manual.

#### 3.1 Rating and Physical Characteristics

Type of EUT	Bluetooth Device
Type designation	Pantech Mono Headset with Bluetooth
FCC ID	JYCPM3
Power source	DC 3.7V
Local Oscillator or X-Tal	X-Tal: 13 MHz, 32.768 kHz
Transmit Frequency	2402 ~ 2480 MHz (1MHz step, 79 channels)
Antenna Type	Integral (SMD chip antenna, Model ALA931C4, Gain: 0.8 dBi)
Type of Modulation	FHSS (GFSK)
RF Output power	< 4dBm
External Ports	DC charging jack**

\*\* This test report was issued for FCC Class II permissive change; No electrical or mechanical modifications were made to the transmitter from the time of their original FCC submissions. The AC power line conducted emissions were measured for additional AC/DC adaptors.

#### 3.2 Equipment Modifications

None

#### 3.3 Submitted Documents

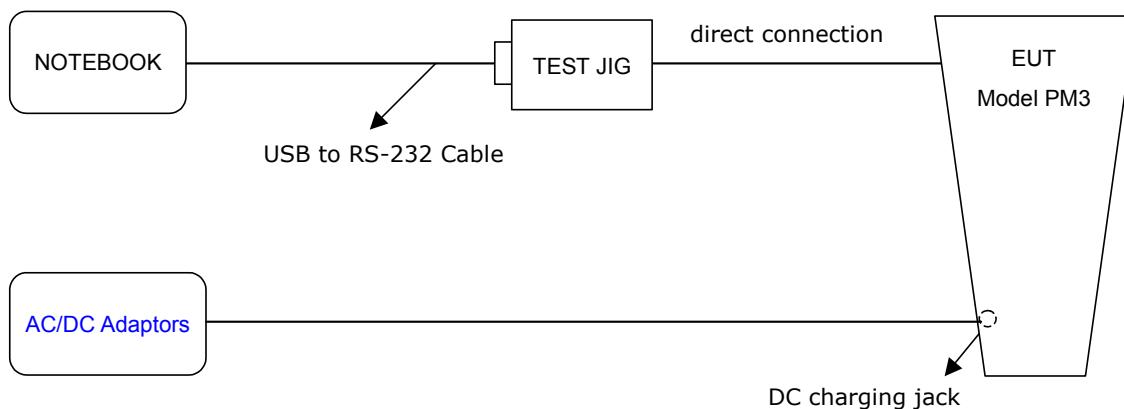
None



## 4. MEASUREMENT CONDITIONS

### 4.1 Description of test configuration

The measurements were taken in continuous transmitting mode using the TEST JIG provided by the applicant for controlling the EUT via UART interface so that the operating frequency of the EUT could be changed with the frequency hopping turned off.



### 4.2 List of Peripherals

Equipment Type	Manufacturer	Model	Cable Description
Notebook PC **	Trigem	Dreambook	1.8m, Shielded, USB to RS-232 Cable
TEST JIG **	Supplied by the applicant	-	0.2 m, direct connection
AC/DC Adaptor 1	MCS ELECTRONICS CO LTD	5265C2-US	1.8m, Unshielded
AC/DC Adaptor 2	MCS CHANG SUNG ELECTRONICS CO LTD	PTA-5010DUS	1.8m, Unshielded
AC/DC Adaptor 3	Macroway Technologies, Inc.	MCW4401-US	1.8m, Unshielded
AC/DC Adaptor 4	Namkyung Electronics Communication Co	CNR4	1.8m, Unshielded
AC/DC Adaptor 5	Chang Shung International Co Ltd	CNR4	1.8m, Unshielded

\*\* For control of RF module via UART interface in the EUT.

This test report was issued for FCC Class II permissive change; No electrical or mechanical modifications were made to the transmitter from the time of their original FCC submissions. The AC power line conducted emissions were measured for additional AC/DC adaptors.

### 4.3 Uncertainty

Measurement Item	Combined Standard Uncertainty $U_c$	Expanded Uncertainty $U = KU_c (K = 2)$
Radiated disturbance	$\pm 2.30$ dB	$\pm 4.60$ dB
Conducted disturbance	$\pm 1.96$ dB	$\pm 3.92$ dB



## 5. TEST AND MEASUREMENTS

### Summary of Test Results

Requirement	CFR 47 Section	Report Section	Test Result
Antenna Requirement	15.203, 15.247(b)(4)	-	N/A **
Maximum Peak Output Power	15.247(b)(1), (4)	-	N/A **
Carrier Frequency Separation	15.247(a)(1)	-	N/A **
20dB Channel Bandwidth	15.247(a)(1)	-	N/A **
Number of Hopping Channels	15.247(a)(iii), 15.247(b)(1)	-	N/A **
Time of Occupancy (Dwell Time)	15.247(a)(iii)	-	N/A **
Spurious Emission, Band Edge, and Restricted bands	15.247(d), 15.205(a), 15.209(a)	-	N/A **
Peak Power Spectral Density	15.247(e)	-	N/A **
Conducted Emissions	15.207(a)	5.1	PASS
RF Exposure	15.247(i), 1.1307(b)(1)	-	N/A **

\*\* This test report was issued for FCC Class II permissive change; No electrical or mechanical modifications were made to the transmitter from the time of their original FCC submissions. The original test results were applicable and representative of the transmitter.



## 5.1 CONDUCTED EMISSIONS

### 5.1.1 Regulation

According to §15.207(a), for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 $\mu$ H/50 $\Omega$  line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56 *	56 to 46 *
0.5 – 5	56	46
5 – 30	60	50

\* Decreases with the logarithm of the frequency.

According to §15.107(a), for unintentional device, except for Class A digital devices, line conducted emission limits are the same as the above table.

### 5.1.2 Test Procedure

1. The EUT was placed on a wooden table of size, 1 m by 1.5 m, raised 80 cm in which is located 40 cm away from the vertical wall and 1.5m away from the side wall of the shielded room.
2. Each current-carrying conductor of the EUT power cord was individually connected through a 50 $\Omega$ /50 $\mu$ H LISN, which is an input transducer to a Spectrum Analyzer or an EMI/Field Intensity Meter, to the input power source.
3. Exploratory measurements were made to identify the frequency of the emission that had the highest amplitude relative to the limit by operating the EUT in a range of typical modes of operation, cable position, and with a typical system equipment configuration and arrangement. Based on the exploratory tests of the EUT, the one EUT cable configuration and arrangement and mode of operation that had produced the emission with the highest amplitude relative to the limit was selected for the final measurement.
4. The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment is the system) was then performed over the frequency range of 0.15 MHz to 30 MHz.
5. The measurements were made with the detector set to PEAK amplitude within a bandwidth of 10 kHz or to QUASI-PEAK and AVERAGE within a bandwidth of 9 kHz. The EUT was in transmitting mode during the measurements.


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**5.1.3 Test Results:**
**PASS**
**Table 1: Measured values of the Conducted Emissions**

AC/DC Adaptor #1 - Model 5265C2-US, Manufacturer: MCS ELECTRONICS CO LTD

Frequency [MHz]	Reading [dB $\mu$ V]		CF/CL [dB]	Actual [dB $\mu$ V]		Limit [dB $\mu$ V]		Margin [dB]	
	Qp	Ave		Qp	Ave	Qp	Ave	Qp	Ave
<b>LINE – PE</b>									
0.185	56.37	34.43	0.13/0.01	56.51	34.57	64.26	54.26	7.75	19.69
0.245	52.17	31.60	0.13/0.02	52.32	31.75	61.92	51.92	9.60	20.17
0.310	50.21	30.27	0.13/0.04	50.38	30.44	59.97	49.97	9.59	19.53
0.330	41.32	22.44	0.13/0.04	41.49	22.61	59.45	49.45	17.96	26.84
0.370	46.63	29.44	0.13/0.04	46.80	29.61	58.50	48.50	11.70	18.89
0.430	42.66	26.39	0.13/0.04	42.83	26.56	57.25	47.25	14.42	20.69
1.175	36.24	22.73	0.15/0.07	36.46	22.95	56.00	46.00	19.54	23.05
6.920	40.55	27.04	0.34/0.19	41.08	27.57	60.00	50.00	18.92	22.43
7.295	40.71	26.52	0.34/0.19	41.24	27.05	60.00	50.00	18.76	22.95
7.400	40.96	27.02	0.34/0.19	41.49	27.55	60.00	50.00	18.51	22.45
<b>NEUTRAL – PE</b>									
0.185	56.59	37.16	0.12/0.01	56.72	37.29	64.26	54.26	7.54	16.97
0.245	52.53	35.87	0.12/0.02	52.67	36.01	61.92	51.92	9.25	15.91
0.310	49.92	35.93	0.12/0.04	50.08	36.09	59.97	49.97	9.89	13.88
0.370	48.30	36.84	0.12/0.04	48.46	37.00	58.50	48.50	10.04	11.50
0.865	43.44	31.45	0.13/0.06	43.63	31.64	56.00	46.00	12.37	14.36
1.050	45.59	34.29	0.14/0.07	45.80	34.50	56.00	46.00	10.20	11.50
1.355	41.63	27.40	0.14/0.07	41.84	27.61	56.00	46.00	14.16	18.39
1.420	41.36	27.16	0.14/0.07	41.57	27.37	56.00	46.00	14.43	18.63
6.590	44.83	33.55	0.29/0.19	45.31	34.03	60.00	50.00	14.69	15.97
7.420	46.84	36.97	0.29/0.19	47.32	37.45	60.00	50.00	12.68	12.55

**Margin (dB) = Limit – Actual****[Actual = Reading + CF + CL]**

1. Remark “---” means the level is undetectable or the Quasi-peak value is lower than the limit of Average.

2. CF/CL = Correction Factor and Cable Loss

3. Qp = Quasi-peak, Ave = Average value

NOTE: The frequency range was scanned from 150 kHz to 30 MHz. All emissions not reported were more than 20 dB below the specified limit.


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**Table 1: Measured values of the Conducted Emissions (Continued)**

AC/DC Adaptor #2 - Model PTA-5010DUS, Manufacturer: MCS CHANG SUNG ELECTRONICS CO LTD

Frequency [MHz]	Reading [dB $\mu$ V]		CF/CL [dB]	Actual [dB $\mu$ V]		Limit [dB $\mu$ V]		Margin [dB]	
	Qp	Ave		Qp	Ave	Qp	Ave	Qp	Ave
<b>LINE – PE</b>									
6.200	41.28	27.31	0.34/0.19	41.81	27.84	60.00	50.00	18.19	22.16
6.210	42.98	28.59	0.34/0.19	43.51	29.12	60.00	50.00	16.49	20.88
6.235	44.79	29.52	0.34/0.19	45.32	30.05	60.00	50.00	14.68	19.95
6.415	43.17	29.21	0.34/0.19	43.70	29.74	60.00	50.00	16.30	20.26
6.440	45.30	30.17	0.34/0.19	45.83	30.70	60.00	50.00	14.17	19.30
6.585	47.72	33.70	0.34/0.19	48.25	34.23	60.00	50.00	11.75	15.77
6.605	42.66	29.22	0.34/0.19	43.19	29.75	60.00	50.00	16.81	20.25
6.615	42.88	29.62	0.34/0.19	43.41	30.15	60.00	50.00	16.59	19.85
6.635	43.54	30.12	0.34/0.19	44.07	30.65	60.00	50.00	15.93	19.35
7.405	40.88	25.77	0.34/0.19	41.41	26.30	60.00	50.00	18.59	23.70
<b>NEUTRAL – PE</b>									
2.415	42.28	17.77	0.15/0.11	42.54	18.03	56.00	46.00	13.46	27.97
2.615	41.15	16.83	0.15/0.11	41.41	17.09	56.00	46.00	14.59	28.91
4.120	44.63	35.29	0.21/0.16	45.00	35.66	56.00	46.00	11.00	10.34
4.945	45.66	36.61	0.21/0.16	46.03	36.98	56.00	46.00	9.97	9.02
5.765	47.34	37.36	0.21/0.16	47.71	37.73	60.00	50.00	12.29	12.27
6.045	44.69	26.12	0.29/0.19	45.17	26.60	60.00	50.00	14.83	23.40
6.245	46.09	27.41	0.29/0.19	46.57	27.89	60.00	50.00	13.43	22.11
6.450	45.36	28.11	0.29/0.19	45.84	28.59	60.00	50.00	14.16	21.41
6.590	48.60	38.39	0.29/0.19	49.08	38.87	60.00	50.00	10.92	11.13
6.650	43.63	28.30	0.29/0.19	44.11	28.78	60.00	50.00	15.89	21.22
7.005	42.47	30.81	0.29/0.19	42.95	31.29	60.00	50.00	17.05	18.71
7.415	47.38	38.12	0.29/0.19	47.86	38.60	60.00	50.00	12.14	11.40

**Margin (dB) = Limit – Actual****[Actual = Reading + CF + CL]**

1. Remark “---” means the level is undetectable or the Quasi-peak value is lower than the limit of Average.

2. CF/CL = Correction Factor and Cable Loss

3. Qp = Quasi-peak, Ave = Average value

NOTE: The frequency range was scanned from 150 kHz to 30 MHz. All emissions not reported were more than 20 dB below the specified limit.


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**Table 1: Measured values of the Conducted Emissions (Continued)**

AC/DC Adaptor #3 - Model MCW4401-US, Manufacturer: Macroway Technologies, Inc.

Frequency [MHz]	Reading [dB $\mu$ V]		CF/CL [dB]	Actual [dB $\mu$ V]		Limit [dB $\mu$ V]		Margin [dB]	
	Qp	Ave		Qp	Ave	Qp	Ave	Qp	Ave
<b>LINE – PE</b>									
0.175	41.68	24.84	0.13/0.01	41.82	24.98	64.72	54.72	22.90	29.74
0.350	42.78	27.56	0.13/0.04	42.95	27.73	58.96	48.96	16.01	21.23
0.415	46.57	29.76	0.13/0.04	46.74	29.93	57.55	47.55	10.81	17.62
0.465	40.34	25.18	0.13/0.04	40.51	25.35	56.60	46.60	16.09	21.25
0.520	36.61	22.39	0.13/0.04	36.78	22.56	56.00	46.00	19.22	23.44
0.640	36.75	20.44	0.14/0.05	36.94	20.63	56.00	46.00	19.06	25.37
0.690	37.05	20.77	0.14/0.05	37.24	20.96	56.00	46.00	18.76	25.04
0.995	37.03	22.48	0.15/0.07	37.25	22.70	56.00	46.00	18.75	23.30
1.050	36.97	22.3	0.15/0.07	37.19	22.52	56.00	46.00	18.81	23.48
24.000	41.08	38.46	1.18/0.41	42.67	40.05	60.00	50.00	17.33	9.95
<b>NEUTRAL – PE</b>									
0.345	46.74	32.12	0.12/0.04	46.90	32.28	59.08	49.08	12.18	16.80
0.405	47.02	35.25	0.12/0.04	47.18	35.41	57.75	47.75	10.57	12.34
0.415	50.09	35.62	0.12/0.04	50.25	35.78	57.55	47.55	7.30	11.77
0.465	45.83	32.48	0.12/0.04	45.99	32.64	56.60	46.60	10.61	13.96
0.525	42.04	29.60	0.12/0.04	42.20	29.76	56.00	46.00	13.80	16.24
0.585	42.60	27.46	0.12/0.04	42.76	27.62	56.00	46.00	13.24	18.38
0.750	38.84	23.53	0.12/0.05	39.01	23.70	56.00	46.00	16.99	22.30
0.810	39.43	24.84	0.13/0.06	39.62	25.03	56.00	46.00	16.38	20.97
0.930	40.30	27.41	0.13/0.06	40.49	27.60	56.00	46.00	15.51	18.40
0.990	42.54	29.28	0.13/0.06	42.73	29.47	56.00	46.00	13.27	16.53

**Margin (dB) = Limit – Actual****[Actual = Reading + CF + CL]**

1. Remark “---” means the level is undetectable or the Quasi-peak value is lower than the limit of Average.

2. CF/CL = Correction Factor and Cable Loss

3. Qp = Quasi-peak, Ave = Average value

NOTE: The frequency range was scanned from 150 kHz to 30 MHz. All emissions not reported were more than 20 dB below the specified limit.


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**Table 1: Measured values of the Conducted Emissions (Continued)**

AC/DC Adaptor #4 - Model CNR4, Manufacturer: Namkyung Electronics Communication Co

Frequency [MHz]	Reading [dB $\mu$ V]		CF/CL [dB]	Actual [dB $\mu$ V]		Limit [dB $\mu$ V]		Margin [dB]	
	Qp	Ave		Qp	Ave	Qp	Ave	Qp	Ave
<b>LINE – PE</b>									
0.400	37.98	26.28	0.13/0.04	38.15	26.45	57.85	47.85	19.70	21.40
0.465	38.42	26.46	0.13/0.04	38.59	26.63	56.60	46.60	18.01	19.97
0.530	37.90	26.39	0.13/0.04	38.07	26.56	56.00	46.00	17.93	19.44
0.625	27.07	11.19	0.14/0.05	27.26	11.38	56.00	46.00	28.74	34.62
0.665	35.62	23.99	0.14/0.05	35.81	24.18	56.00	46.00	20.19	21.82
1.270	27.33	13.69	0.15/0.07	27.55	13.91	56.00	46.00	28.45	32.09
2.260	26.64	15.96	0.18/0.11	26.93	16.25	56.00	46.00	29.07	29.75
7.415	38.40	30.35	0.34/0.19	38.93	30.88	60.00	50.00	21.07	19.12
18.125	39.18	31.59	0.94/0.35	40.47	32.88	60.00	50.00	19.53	17.12
24.000	44.25	38.42	1.18/0.41	45.84	40.01	60.00	50.00	14.16	9.99
<b>NEUTRAL – PE</b>									
0.215	36.10	15.81	0.12/0.02	36.24	15.95	63.01	53.01	26.77	37.06
0.330	33.69	20.88	0.12/0.04	33.85	21.04	59.45	49.45	25.60	28.41
0.425	36.10	16.74	0.12/0.04	36.26	16.90	57.35	47.35	21.09	30.45
0.460	37.31	23.45	0.12/0.04	37.47	23.61	56.69	46.69	19.22	23.08
0.530	38.50	26.39	0.12/0.04	38.66	26.55	56.00	46.00	17.34	19.45
1.065	34.27	22.52	0.14/0.07	34.48	22.73	56.00	46.00	21.52	23.27
2.130	31.39	14.51	0.15/0.11	31.65	14.77	56.00	46.00	24.35	31.23
2.965	29.89	12.83	0.15/0.11	30.15	13.09	56.00	46.00	25.85	32.91
4.115	36.40	27.54	0.21/0.16	36.77	27.91	56.00	46.00	19.23	18.09
18.12	38.61	31.08	0.71/0.35	39.67	32.14	60.00	50.00	20.33	17.86
24.000	43.50	37.77	0.89/0.41	44.80	39.07	60.00	50.00	15.20	10.93

**Margin (dB) = Limit – Actual****[Actual = Reading + CF + CL]**

1. Remark “---” means the level is undetectable or the Quasi-peak value is lower than the limit of Average.

2. CF/CL = Correction Factor and Cable Loss

3. Qp = Quasi-peak, Ave = Average value

NOTE: The frequency range was scanned from 150 kHz to 30 MHz. All emissions not reported were more than 20 dB below the specified limit.


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**Table 1: Measured values of the Conducted Emissions (Continued)**

AC/DC Adaptor #5 - Model CNR4, Manufacturer: Chang Shung International Co Ltd

Frequency [MHz]	Reading [dB $\mu$ V]		CF/CL [dB]	Actual [dB $\mu$ V]		Limit [dB $\mu$ V]		Margin [dB]	
	Qp	Ave		Qp	Ave	Qp	Ave	Qp	Ave
<b>LINE – PE</b>									
0.325	39.80	21.09	0.13/0.04	39.97	21.26	59.58	49.58	19.61	28.32
0.345	43.12	21.89	0.13/0.04	43.29	22.06	59.08	49.08	15.79	27.02
0.425	43.99	24.57	0.13/0.04	44.16	24.74	57.35	47.35	13.19	22.61
0.440	45.49	24.64	0.13/0.04	45.66	24.81	57.06	47.06	11.40	22.25
0.450	44.35	22.21	0.13/0.04	44.52	22.38	56.88	46.88	12.36	24.50
0.490	41.36	21.25	0.13/0.04	41.53	21.42	56.17	46.17	14.64	24.75
0.600	40.72	25.62	0.14/0.05	40.91	25.81	56.00	46.00	15.09	20.19
0.625	43.28	23.13	0.14/0.05	43.47	23.32	56.00	46.00	12.53	22.68
0.655	42.66	22.71	0.14/0.05	42.85	22.90	56.00	46.00	13.15	23.10
0.690	44.39	24.36	0.14/0.05	44.58	24.55	56.00	46.00	11.42	21.45
2.740	37.09	17.25	0.18/0.11	37.38	17.54	56.00	46.00	18.62	28.46
<b>NEUTRAL – PE</b>									
0.395	41.90	27.66	0.12/0.04	42.06	27.82	57.96	47.96	15.90	20.14
0.595	44.41	29.28	0.12/0.05	44.58	29.45	56.00	46.00	11.42	16.55
0.935	38.06	22.12	0.13/0.06	38.25	22.31	56.00	46.00	17.75	23.69
0.945	37.45	21.30	0.13/0.06	37.64	21.49	56.00	46.00	18.36	24.51
0.955	37.49	21.98	0.13/0.06	37.68	22.17	56.00	46.00	18.32	23.83
0.970	36.99	20.88	0.13/0.06	37.18	21.07	56.00	46.00	18.82	24.93
0.980	37.01	22.17	0.13/0.06	37.20	22.36	56.00	46.00	18.80	23.64
0.995	41.32	28.10	0.14/0.07	41.53	28.31	56.00	46.00	14.47	17.69
1.010	38.32	21.70	0.14/0.07	38.53	21.91	56.00	46.00	17.47	24.09
1.745	38.99	20.97	0.14/0.07	39.20	21.18	56.00	46.00	16.80	24.82
2.700	39.76	18.91	0.15/0.11	40.02	19.17	56.00	46.00	15.98	26.83

**Margin (dB) = Limit – Actual****[Actual = Reading + CF + CL]**

1. Remark “---” means the level is undetectable or the Quasi-peak value is lower than the limit of Average.

2. CF/CL = Correction Factor and Cable Loss

3. Qp = Quasi-peak, Ave = Average value

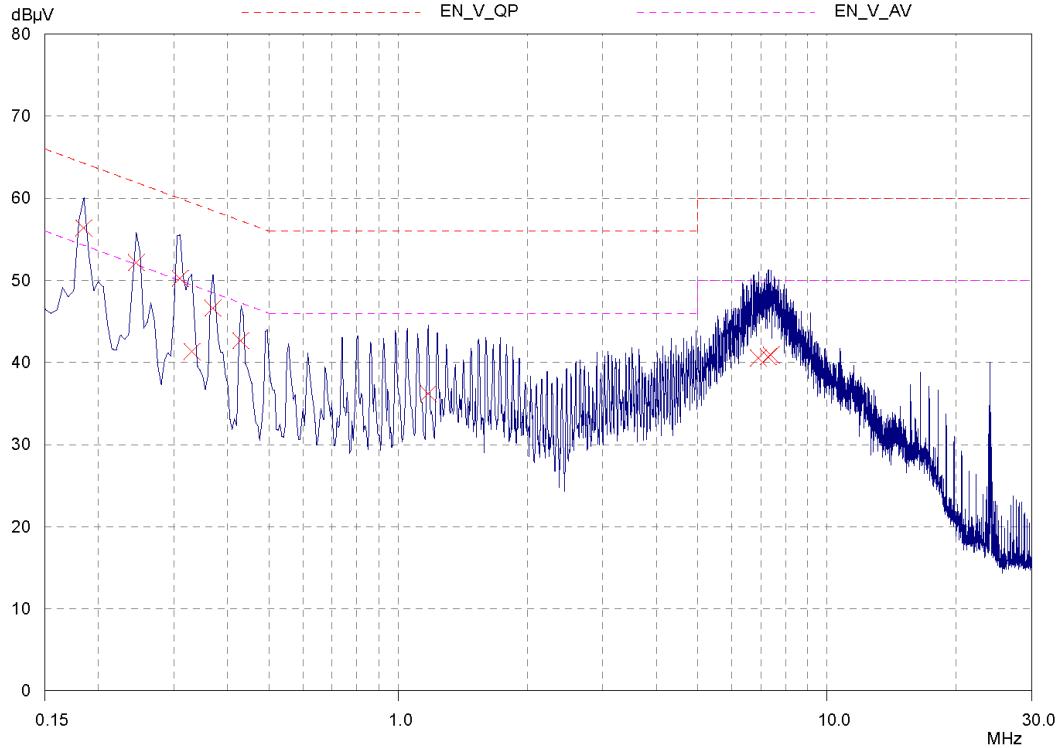
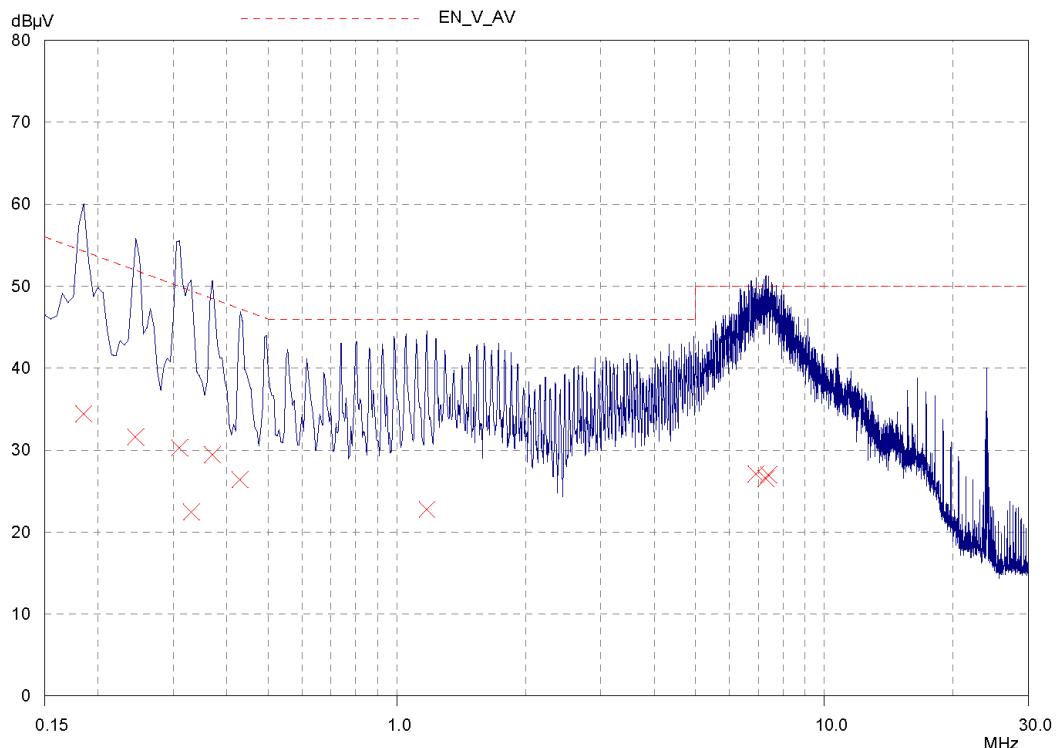
NOTE: The frequency range was scanned from 150 kHz to 30 MHz. All emissions not reported were more than 20 dB below the specified limit.

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**Figure 1. Plot of the Conducted Emissions**

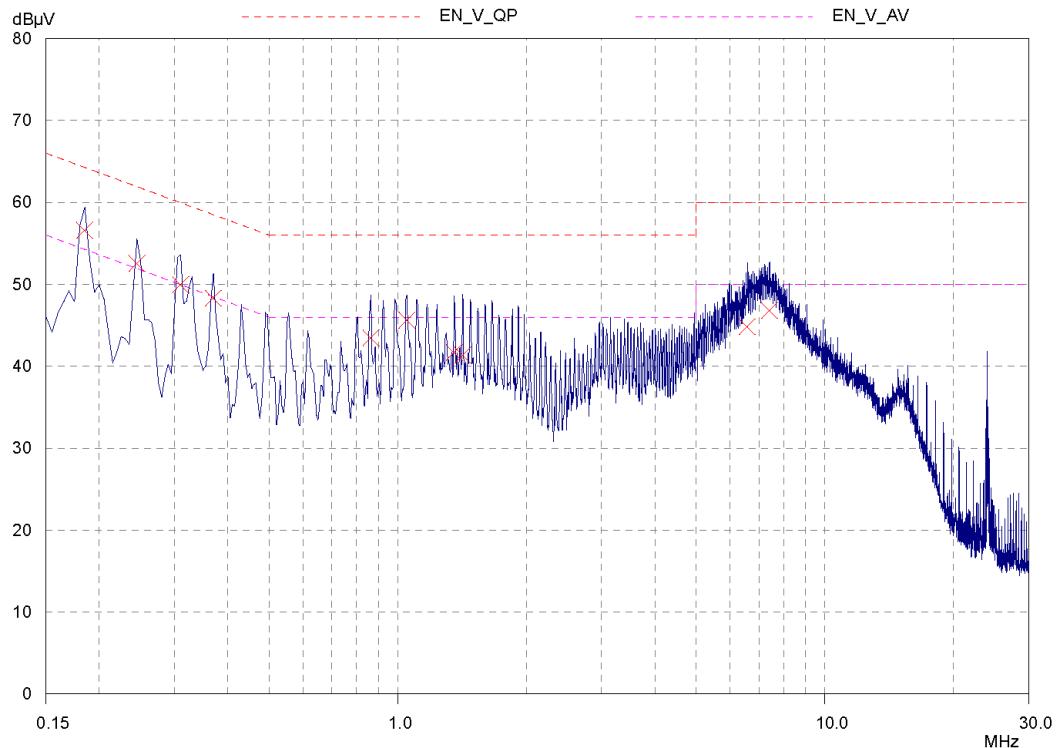
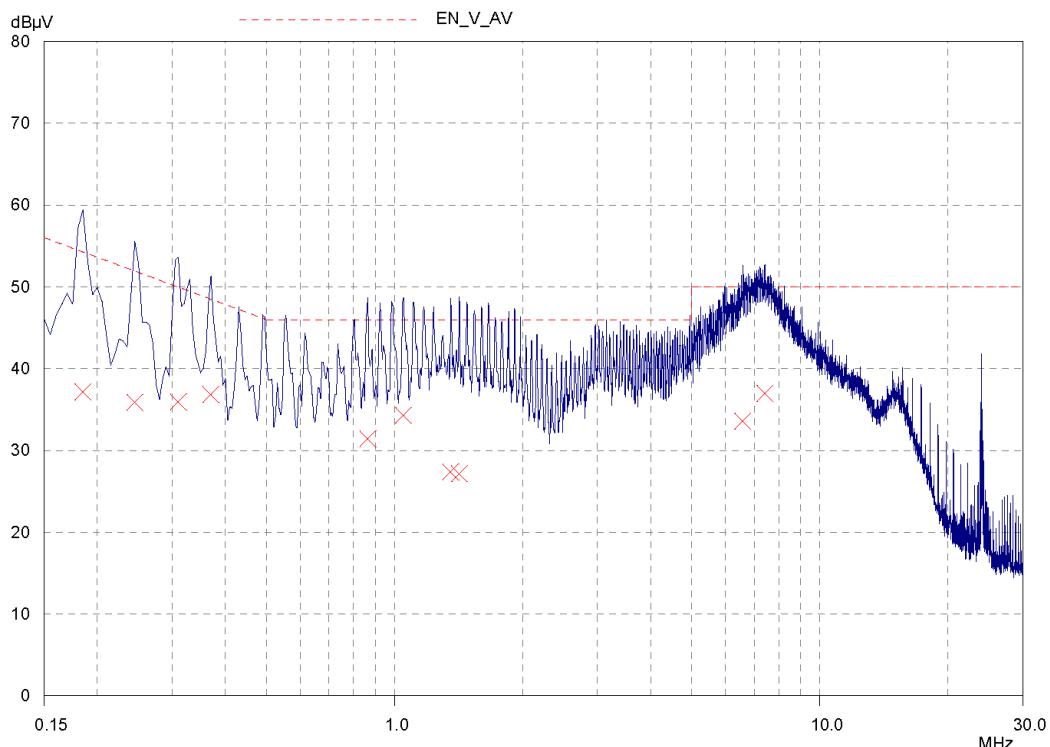
AC/DC Adaptor #1 - Model 5265C2-US, Manufacturer: MCS ELECTRONICS CO LTD

**Line – PE (Quasi-Peak reading: 'x' mark)****Line – PE (Average reading: 'x' mark)**

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AC/DC Adaptor #1 - Model 5265C2-US, Manufacturer: MCS ELECTRONICS CO LTD

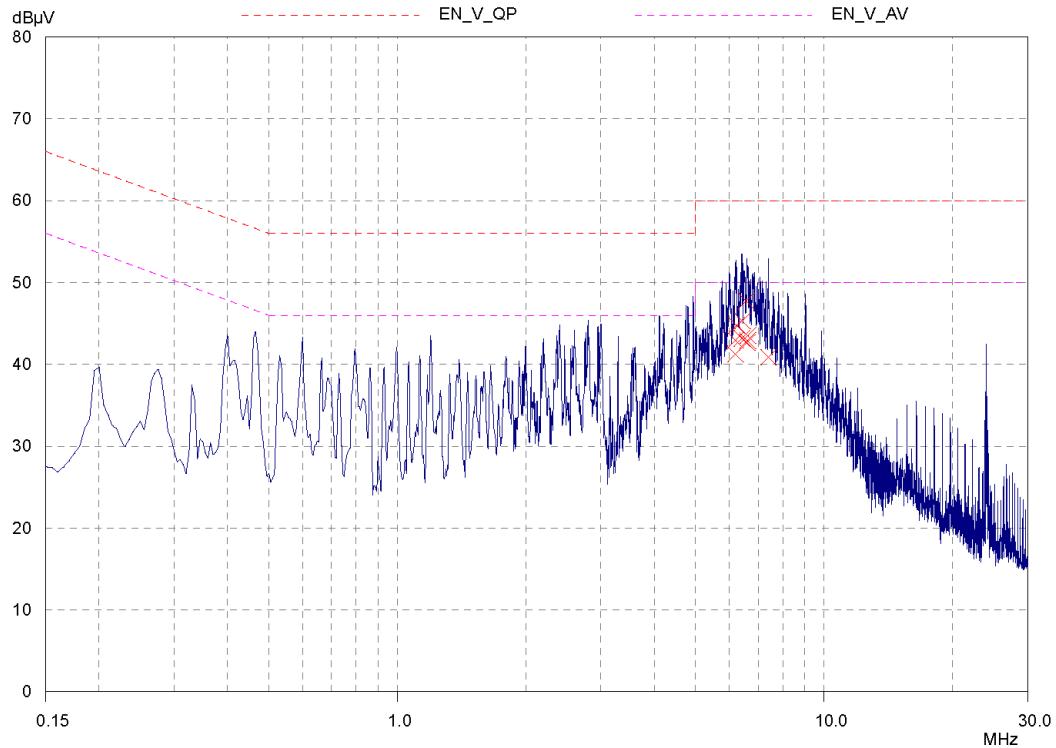
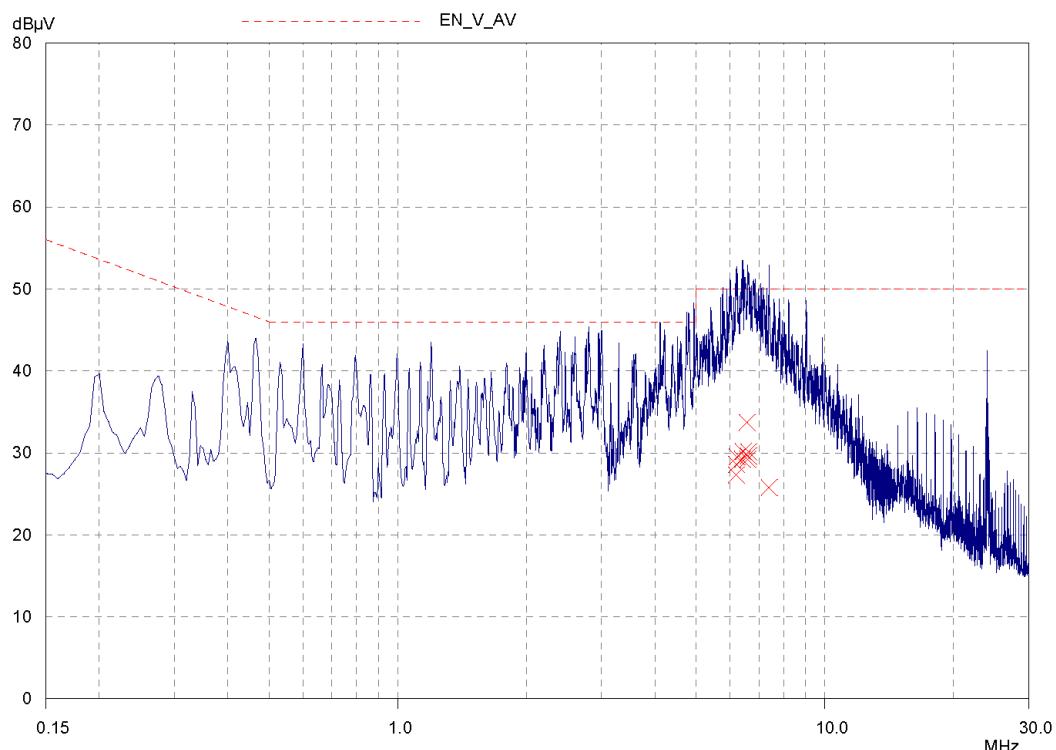
**Neutral - PE (Quasi-Peak reading: 'x' mark)****Neutral - PE (Average reading: 'x' mark)**

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**Figure 1. Plot of the Conducted Emissions (Continued)**

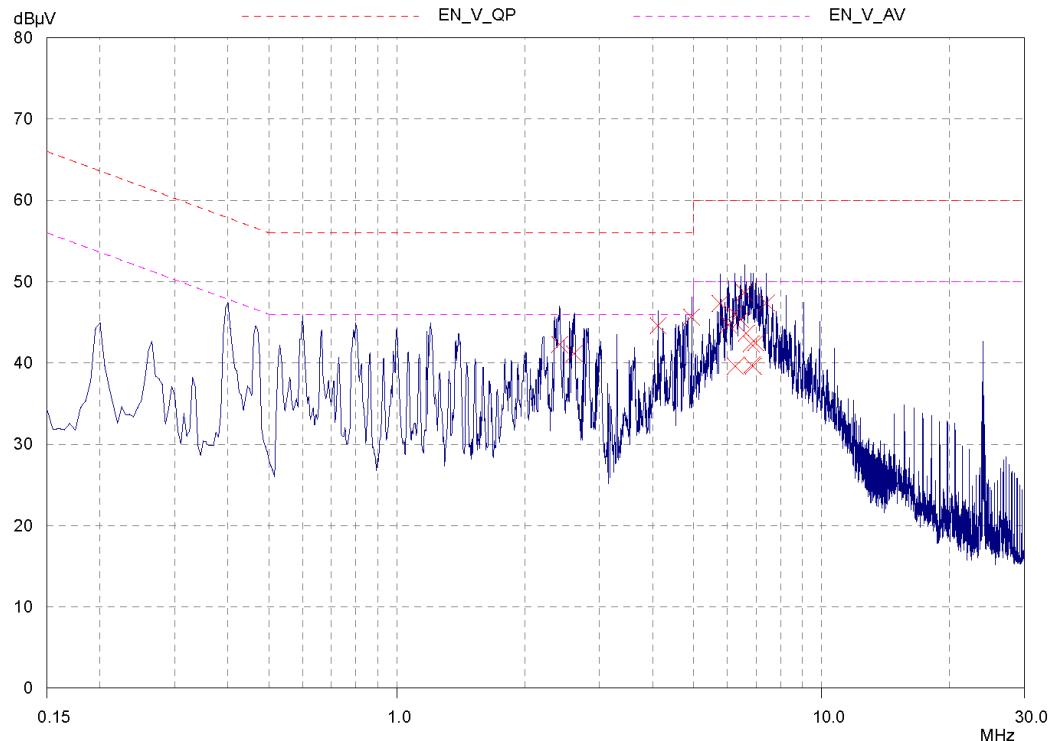
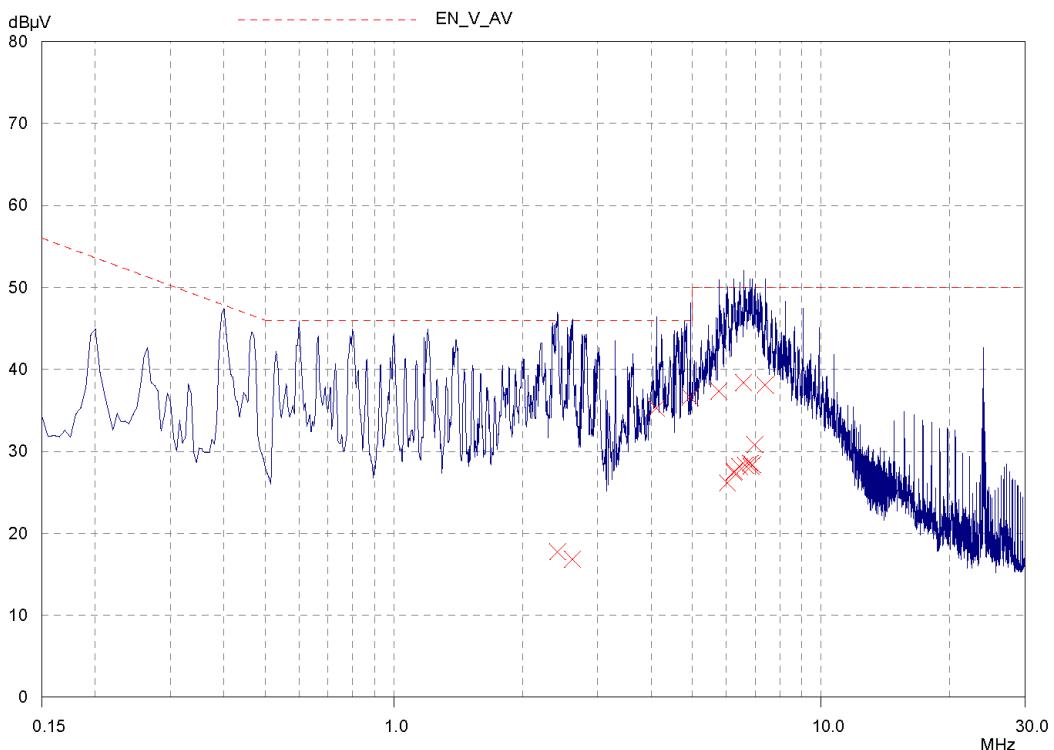
AC/DC Adaptor #2 - Model PTA-5010DUS, Manufacturer: MCS CHANG SUNG ELECTRONICS CO LTD

**Line – PE (Quasi-Peak reading: 'x' mark)****Line – PE (Average reading: 'x' mark)**

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AC/DC Adaptor #2 - Model PTA-5010DUS, Manufacturer: MCS CHANG SUNG ELECTRONICS CO LTD

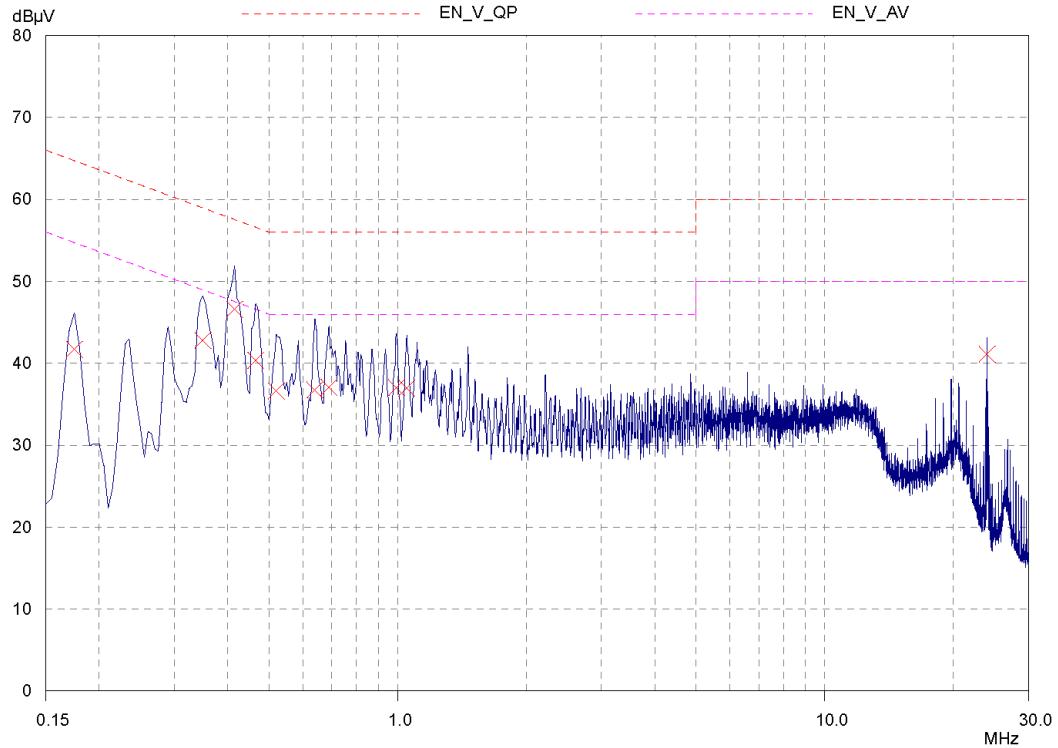
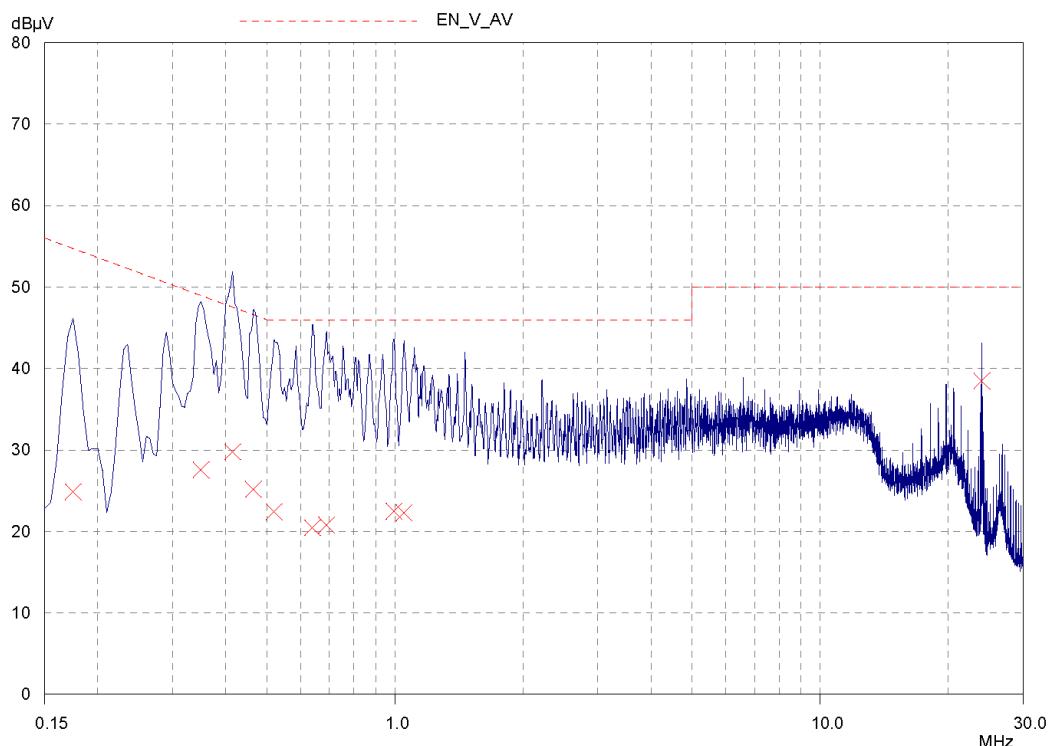
**Neutral - PE (Quasi-Peak reading: 'x' mark)****Neutral - PE (Average reading: 'x' mark)**

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**Figure 1. Plot of the Conducted Emissions (Continued)**

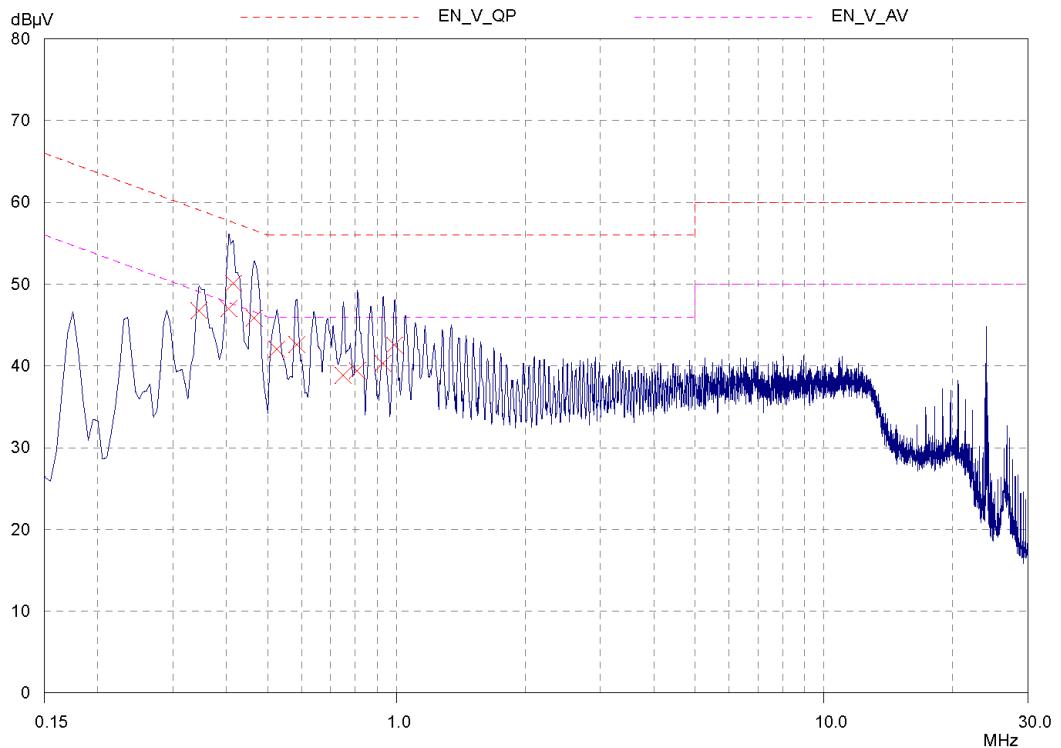
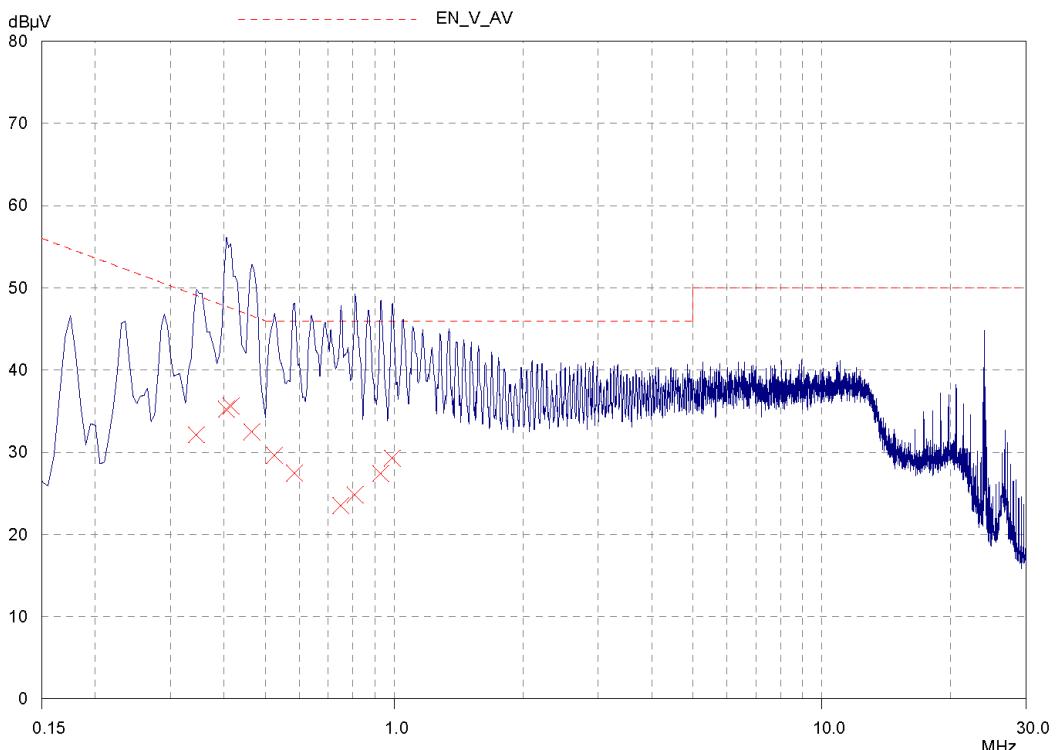
AC/DC Adaptor #3 - Model MCW4401-US, Manufacturer: Macroway Technologies, Inc.

**Line – PE (Quasi-Peak reading: 'x' mark)****Line – PE (Average reading: 'x' mark)**

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AC/DC Adaptor #3 - Model MCW4401-US, Manufacturer: Macroway Technologies, Inc.

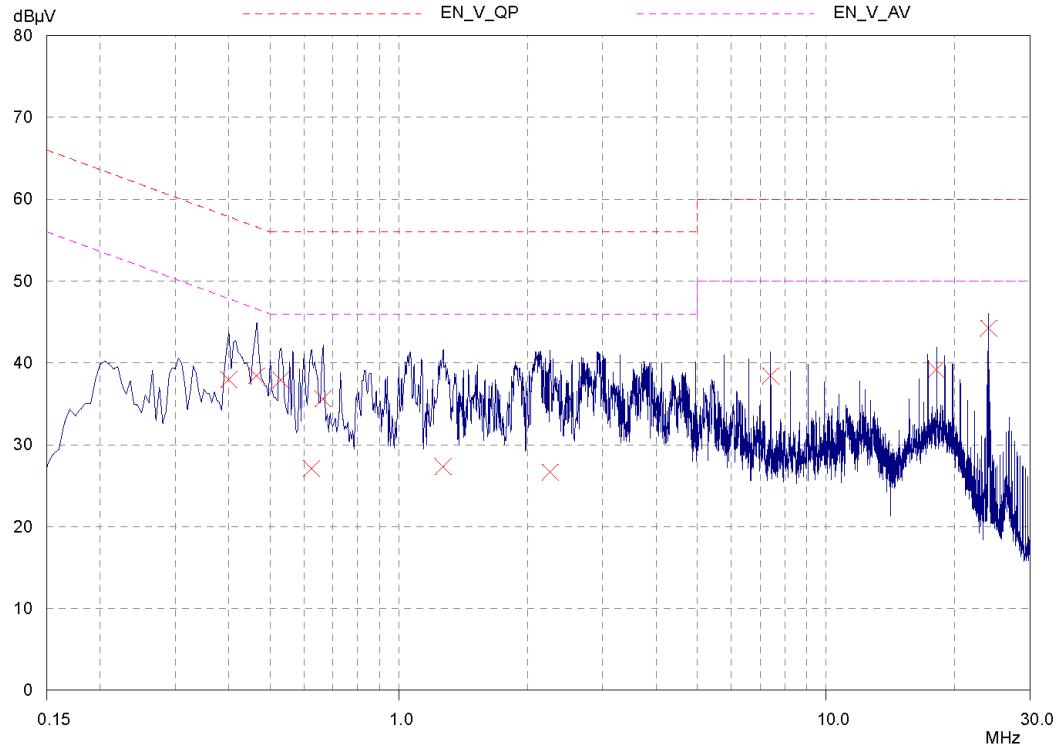
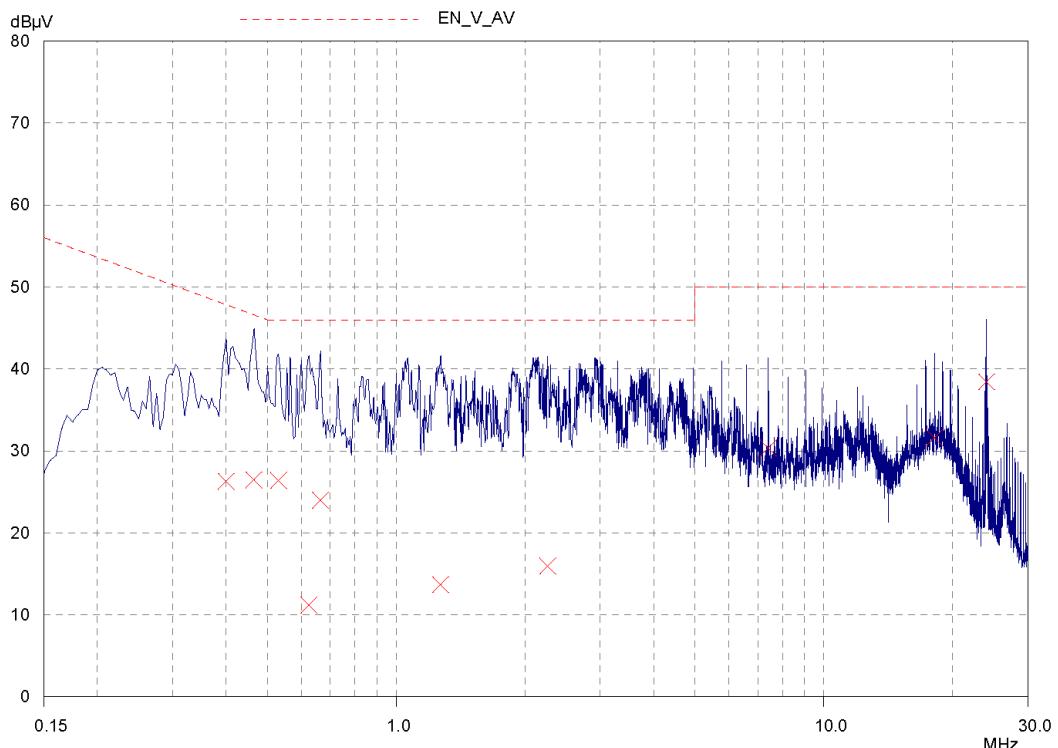
**Neutral - PE (Quasi-Peak reading: 'x' mark)****Neutral - PE (Average reading: 'x' mark)**

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**Figure 1. Plot of the Conducted Emissions (Continued)**

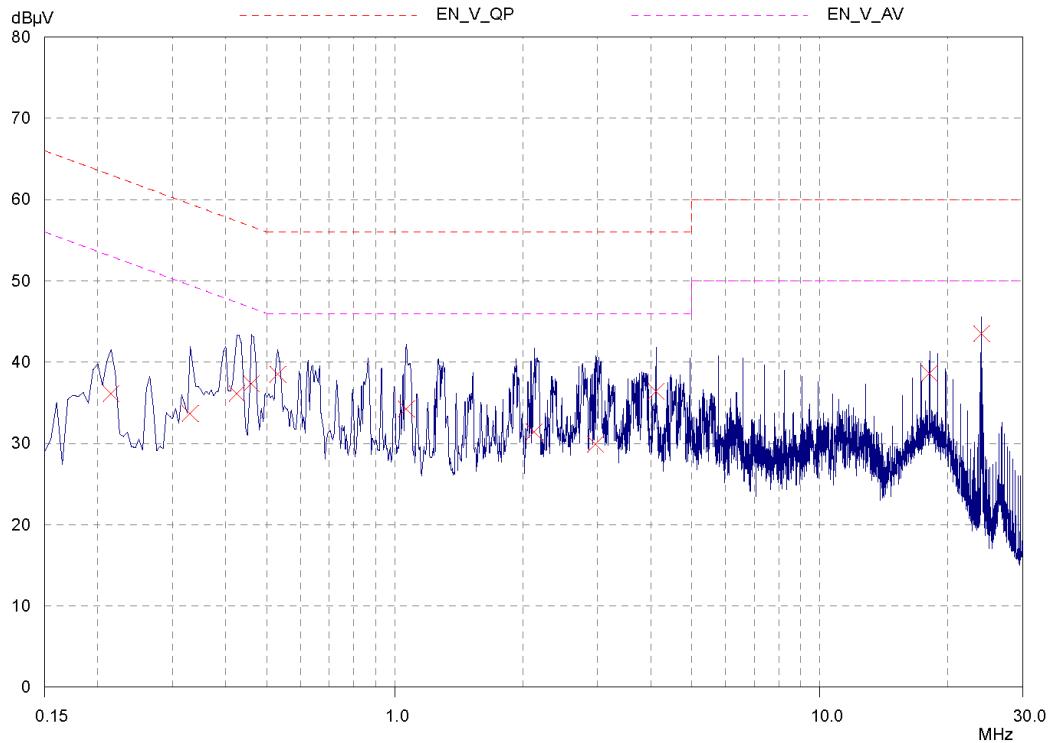
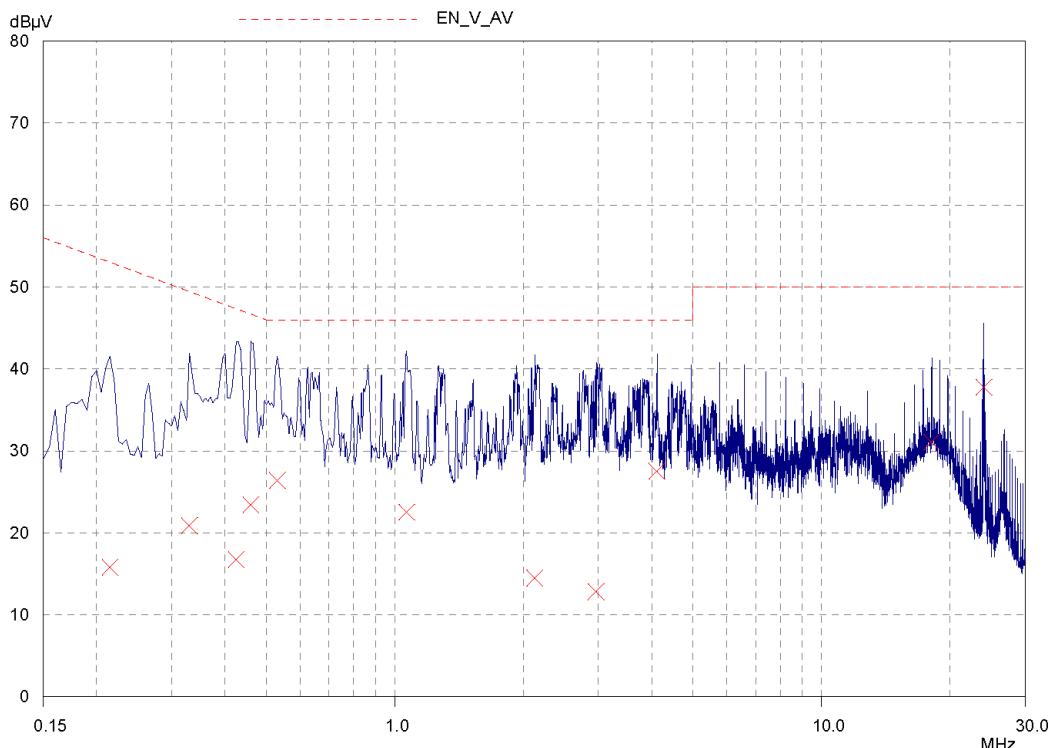
AC/DC Adaptor #4 - Model CNR4, Manufacturer: Namkyung Electronics Communication Co

**Line – PE (Quasi-Peak reading: 'x' mark)****Line – PE (Average reading: 'x' mark)**

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AC/DC Adaptor #4 - Model CNR4, Manufacturer: Namkyung Electronics Communication Co

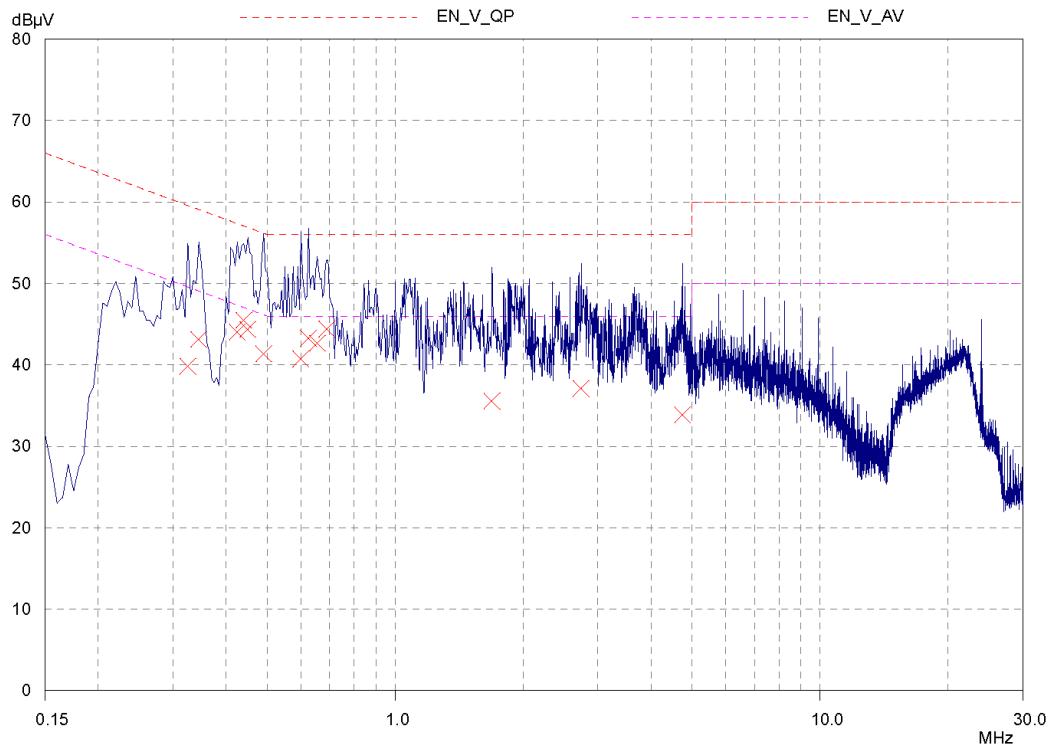
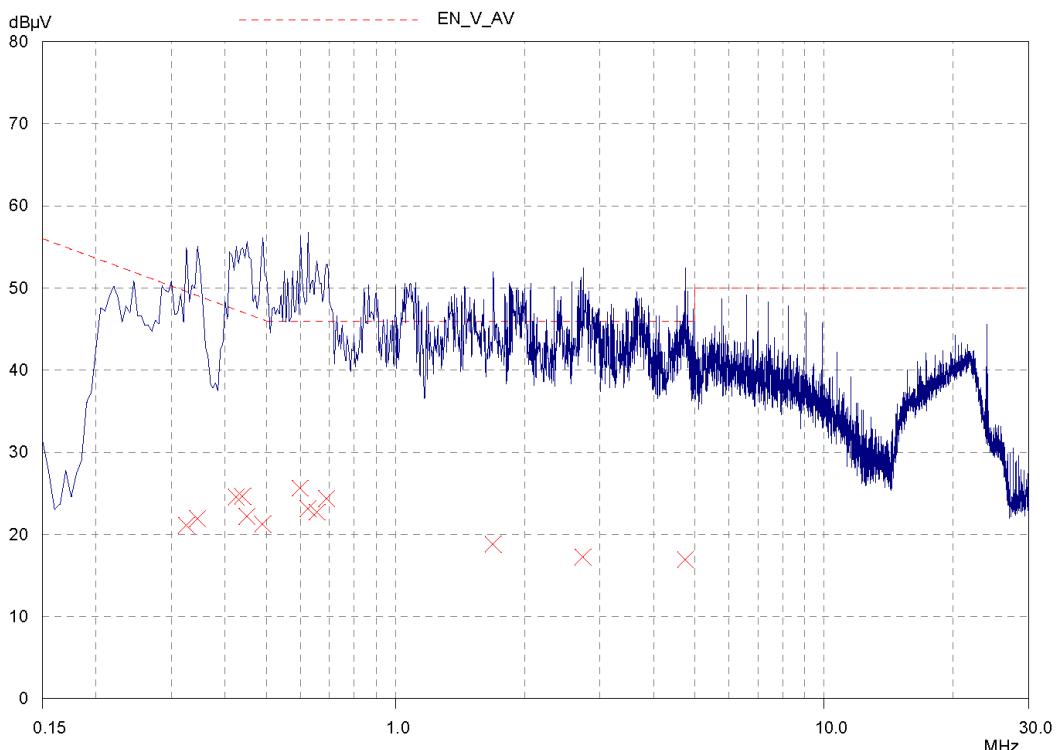
**Neutral – PE (Quasi-Peak reading: 'x' mark)****Neutral – PE (Average reading: 'x' mark)**

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**Figure 1. Plot of the Conducted Emissions (Continued)**

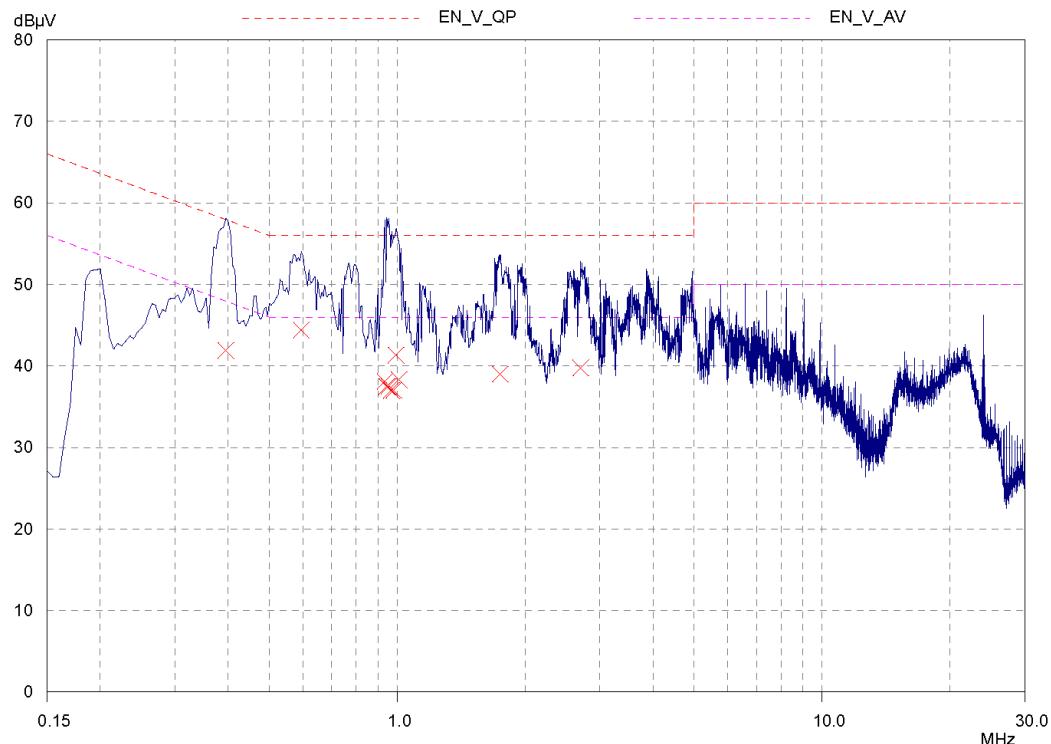
AC/DC Adaptor #5 - Model CNR4, Manufacturer: Chang Shung International Co Ltd

**Line – PE (Quasi-Peak reading: 'x' mark)****Line – PE (Average reading: 'x' mark)**

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AC/DC Adaptor #5 - Model CNR4, Manufacturer: Chang Shung International Co Ltd

**Neutral - PE (Quasi-Peak reading: 'x' mark)****Neutral - PE (Average reading: 'x' mark)**