



Z⁺600 Series

EMI DATA

DWG No.: IA712-58-02		
APPD	CHK	DWG
 10/3/13	 10/3/13	<i>Yanin</i> 10/03/13

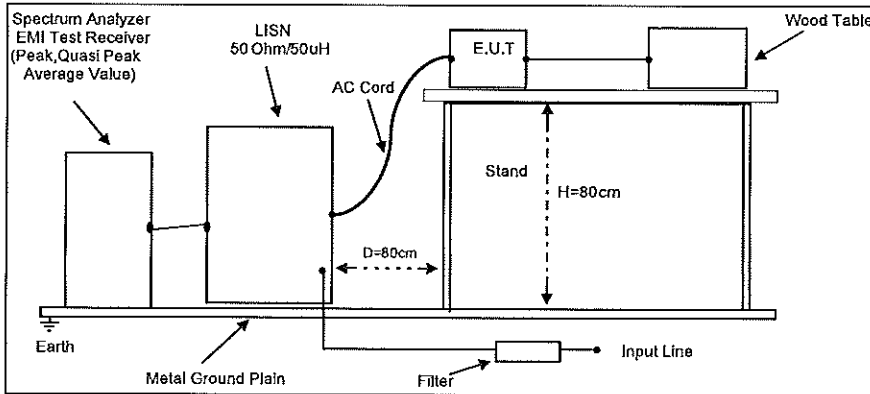
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The above data is typical value data.

The values are considered to be actual capability data.

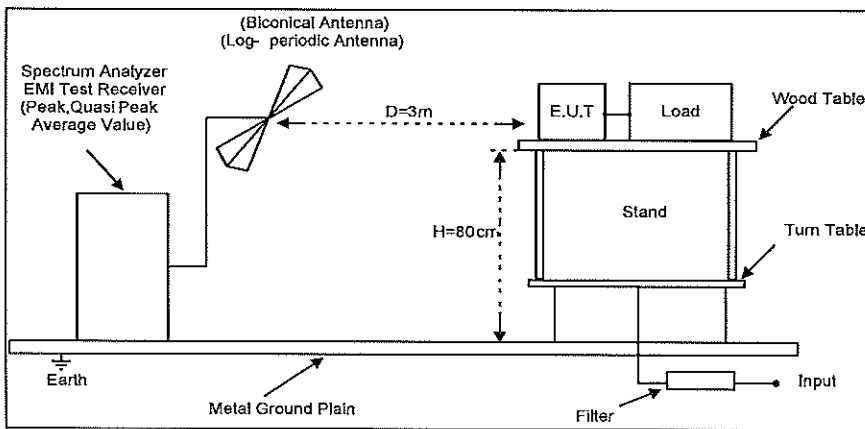
1. Test Method

(1) Conducted Emission



SPECTRUM ANALYZER	8567A	(HEWLETT. PACKARD)
EMI TEST RECEIVER	ESPI	(ROHDE & SCHWARZ)
LISN	ENV4200	(ROHDE & SCHWARZ)

(2) Radiated Emission



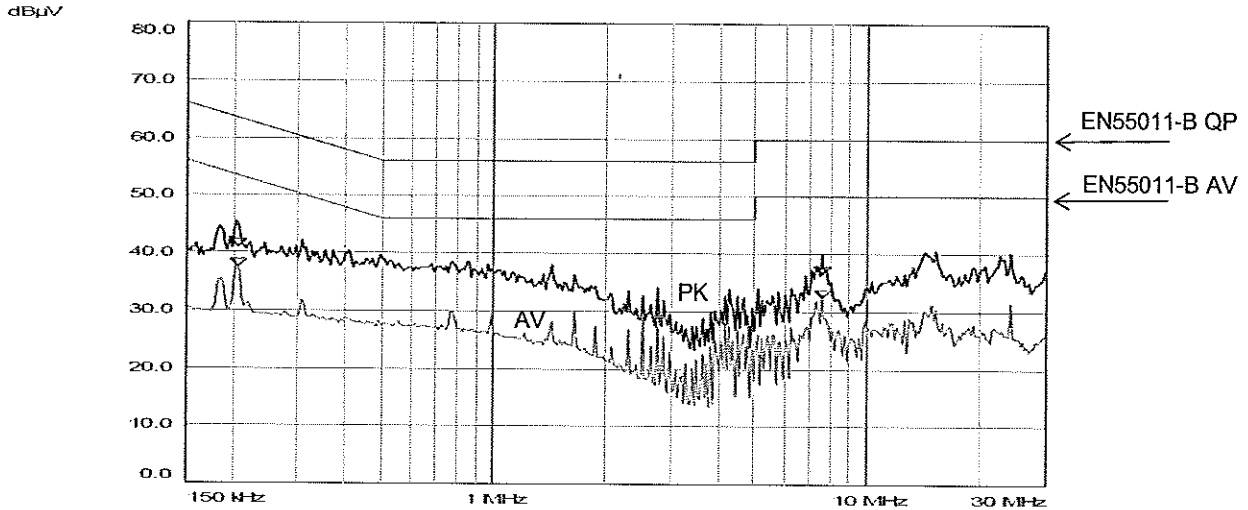
SPECTRUM ANALYZER	MS2601A	(ANRITSU)
EMI TEST RECEIVER	85462A	(HEWLETT. PACKARD)
BICONICAL ANTENNA	3110BA30/200	(EMCO)
LOG-PERIODIC ANTENNA	LP200000	(ELECTROMETRIX)
	LPA2530	(ELECTROMETRIX)

2. Test Data

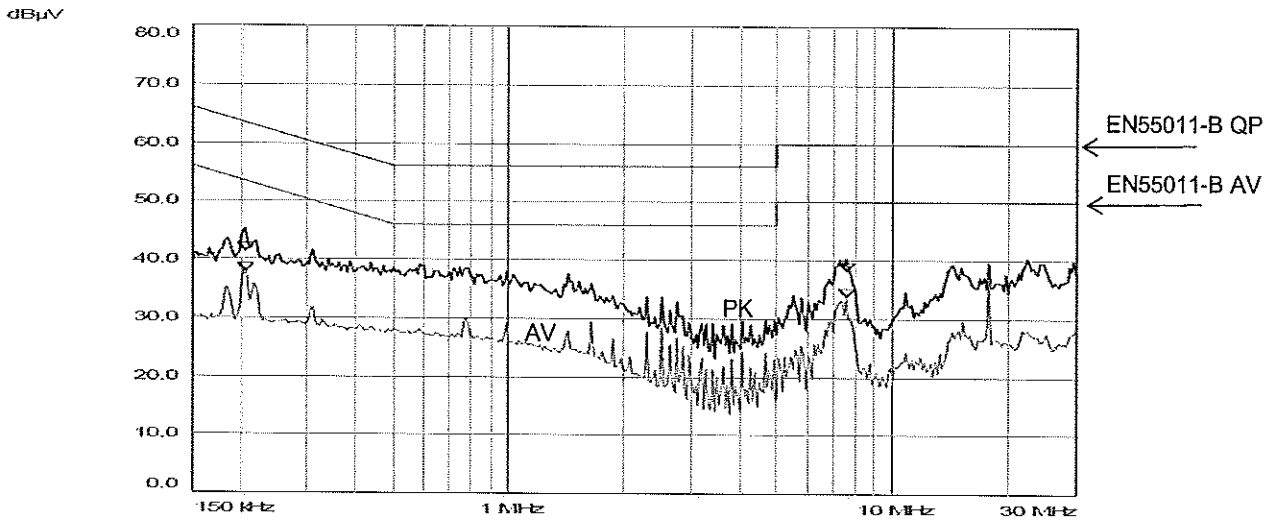
2.1 Conducted Emission

Conditions: Vin:115Vac
 Vout: 100%
 Iout: 100%
 Ta = 25°C

Z10-60



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
L	0.21	41.1	37.5	63.4	53.4	-22.3	-15.9
	7.53	36.5	32.5	60.0	50.0	-23.6	-17.5



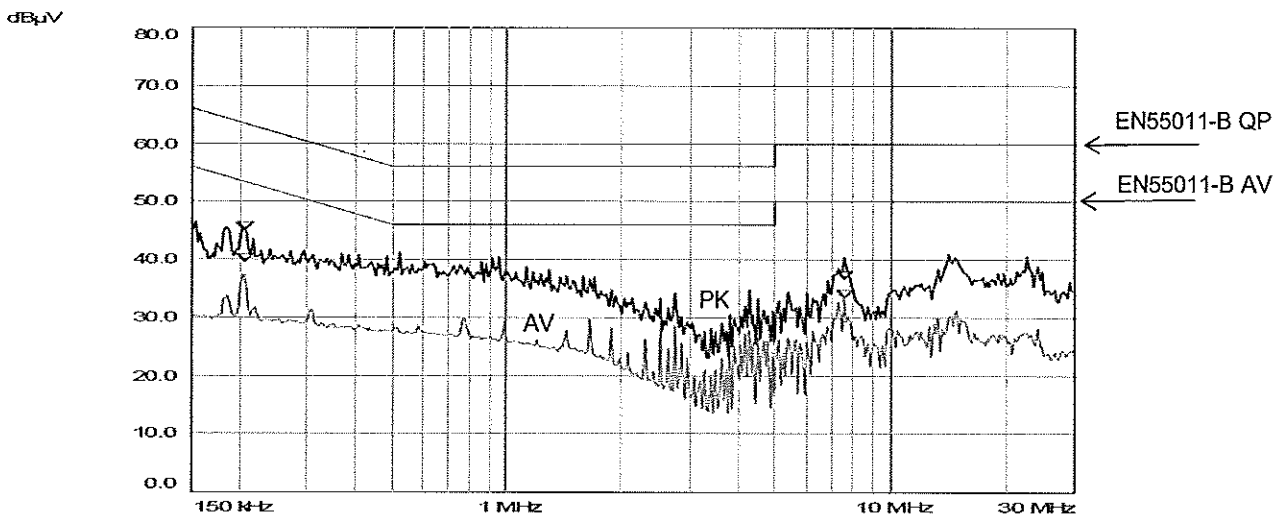
PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
N	0.21	41.3	37.8	63.4	53.4	-22.1	-15.6
	7.54	38.3	33.8	60.0	50.0	-21.7	-16.2

Limit of EN55011-B, EN55022-B are the same

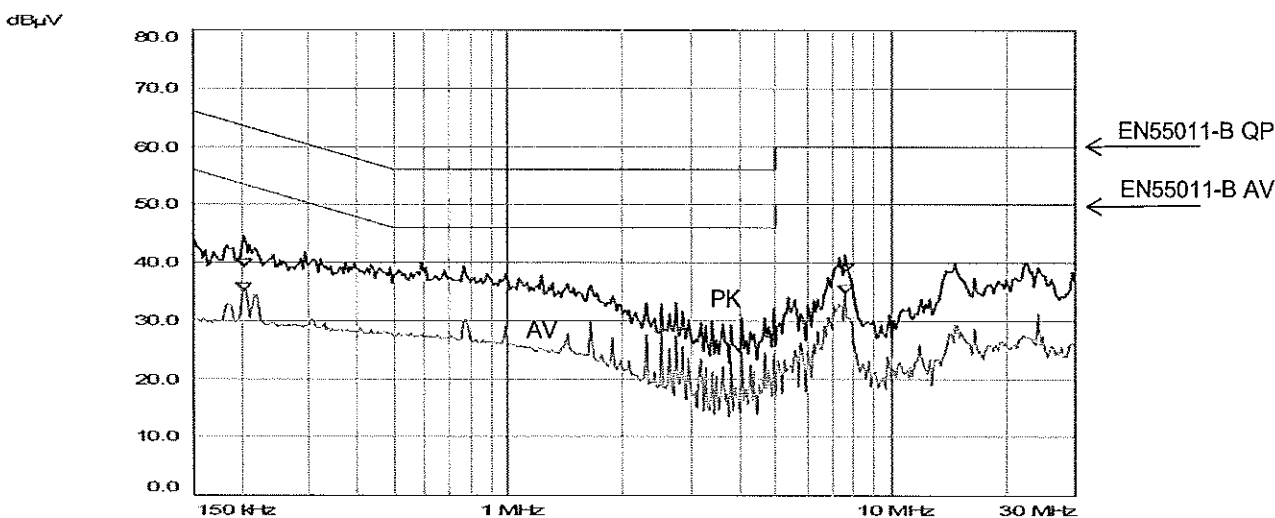
2.1 Conducted Emission

Conditions: Vin:230Vac
 Vout: 100%
 Iout: 100%
 Ta = 25°C

Z10-60



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
L	0.21	45.1	39.6	63.4	53.4	-18.3	-13.8
	7.54	36.6	33.4	60.0	50.0	-23.4	-16.6



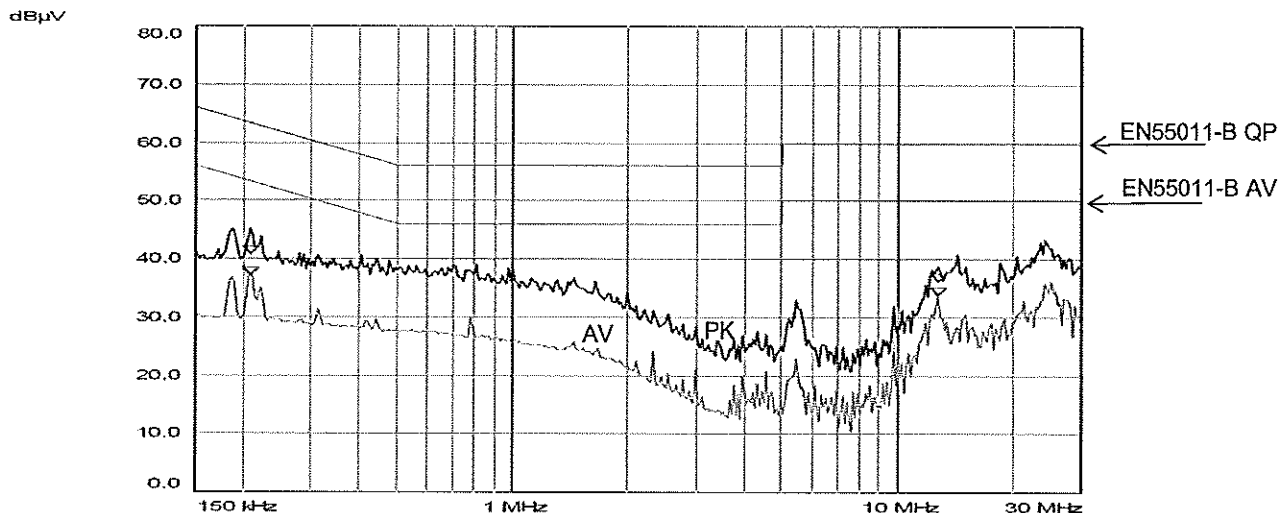
PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
N	0.20	39.2	35.1	63.4	53.4	-24.2	-18.3
	7.54	38.5	34.9	60.0	50.0	-21.5	-15.1

Limit of EN55011-B, EN55022-B are the same

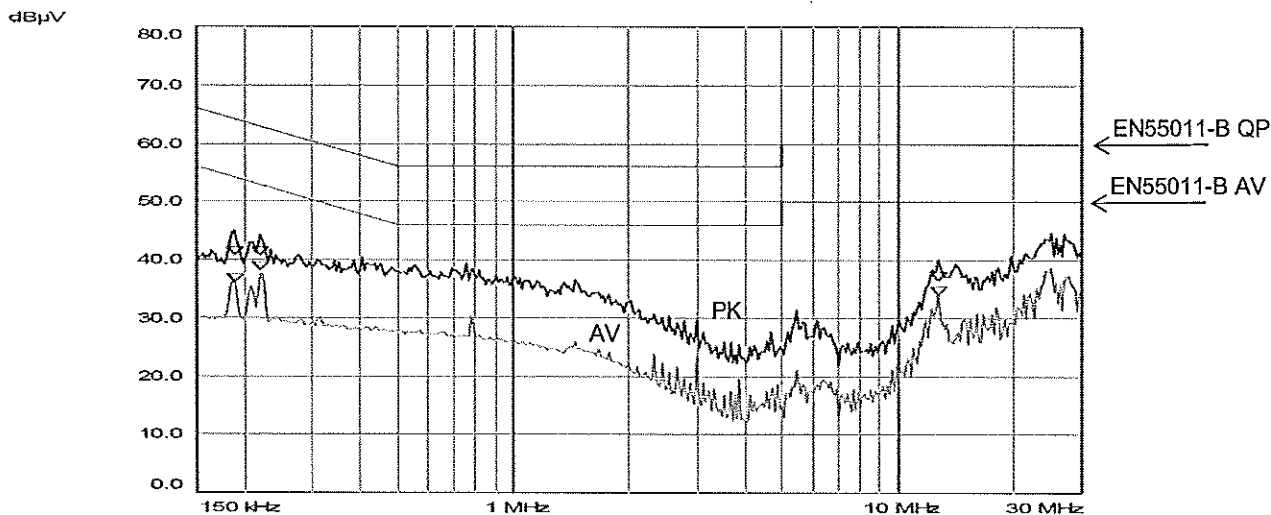
2.1 Conducted Emission

Conditions: Vin:115Vac
 Vout: 100%
 Iout: 100%
 Ta = 25°C

Z36-18



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
L	0.21	40.7	37.0	63.3	53.3	-22.6	-16.3
	12.74	36.1	33.8	60.0	50.0	-24.0	-16.3



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
N	0.22	40.8	38.4	62.8	52.8	-22.0	-14.4
	12.74	36.5	34.1	60.0	50.0	-23.6	-16.0

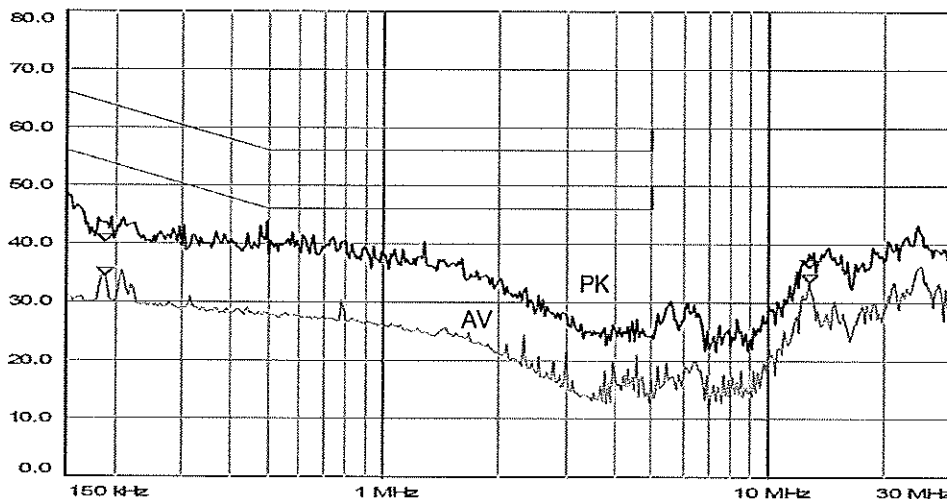
Limit of EN55011-B, EN55022-B are the same

2.1 Conducted Emission

Conditions: Vin:230Vac
 Vout: 100%
 Iout: 100%
 Ta = 25°C

Z36-18

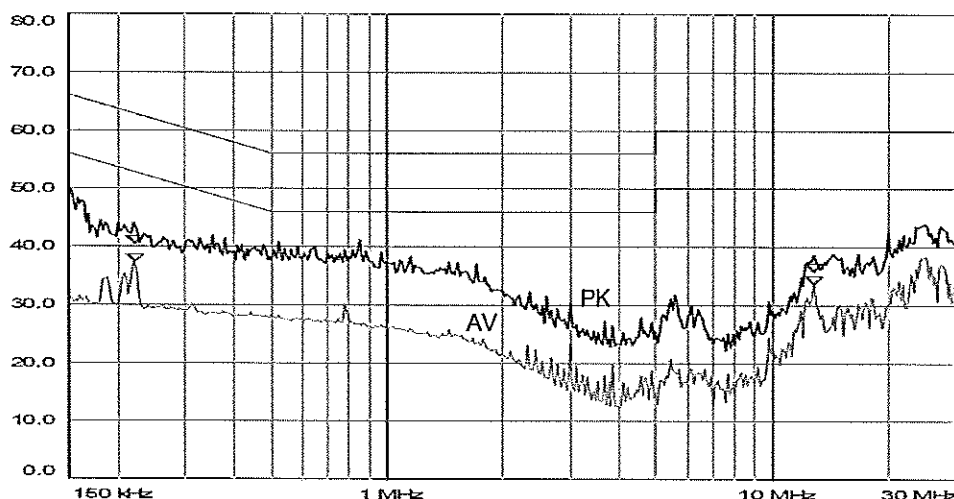
dB μ V



← EN55011-B QP
 ← EN55011-B AV

PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dB μ V	AV dB μ V	QP dB μ V	AV dB μ V	QP dB μ V	AV dB μ V
L	0.19	40.2	34.5	64.1	54.1	-23.9	-19.7
	12.74	36.0	33.5	60.0	50.0	-24.1	-16.5

dB μ V



← EN55011-B QP
 ← EN55011-B AV

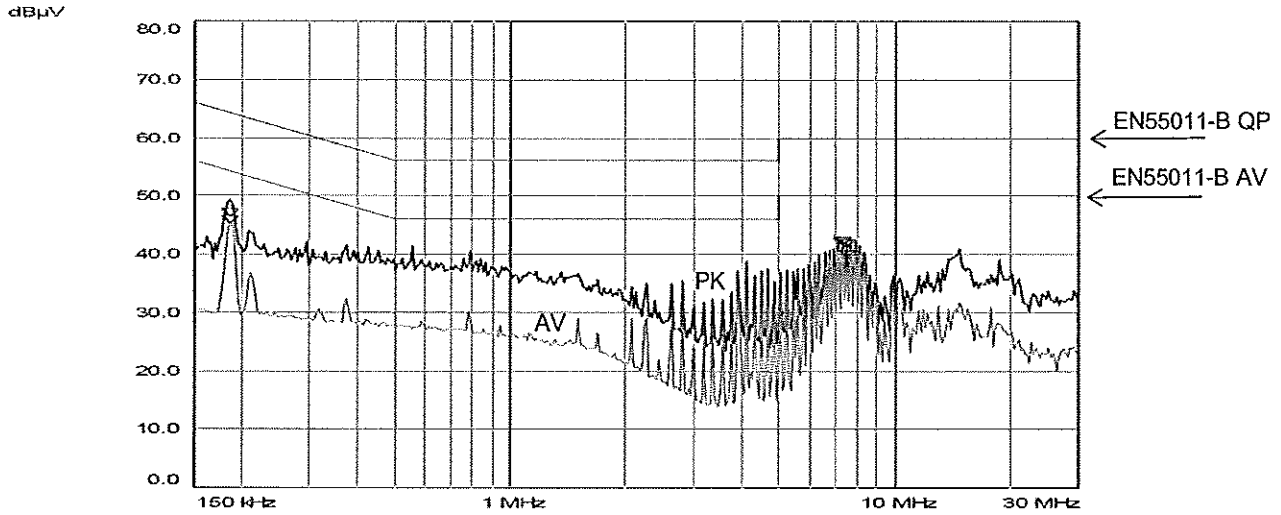
PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dB μ V	AV dB μ V	QP dB μ V	AV dB μ V	QP dB μ V	AV dB μ V
N	0.22	40.3	37.3	60.0	50.0	-19.7	-12.8
	12.74	35.8	33.6	60.0	50.0	-24.2	-16.4

Limit of EN55011-B, EN55022-B are the same

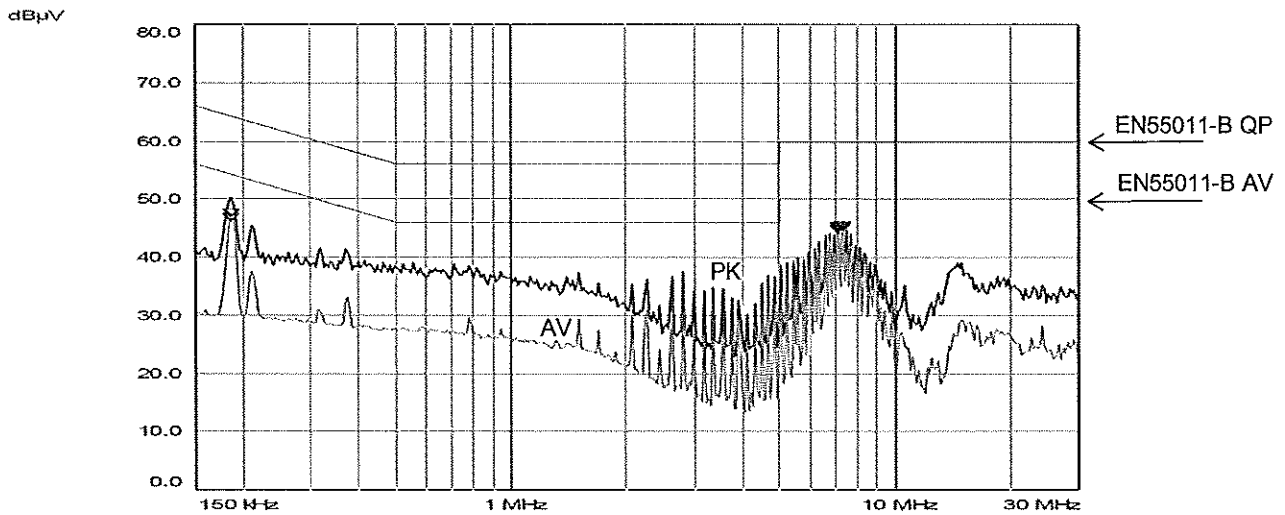
2.1 Conducted Emission

Conditions: Vin:115Vac
 Vout: 100%
 Iout: 100%
 Ta = 25°C

Z100-6



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
L	0.19	46.4	45.3	64.2	54.2	-17.8	-8.9
	7.30	41.1	39.4	60.0	50.0	-18.9	-10.6



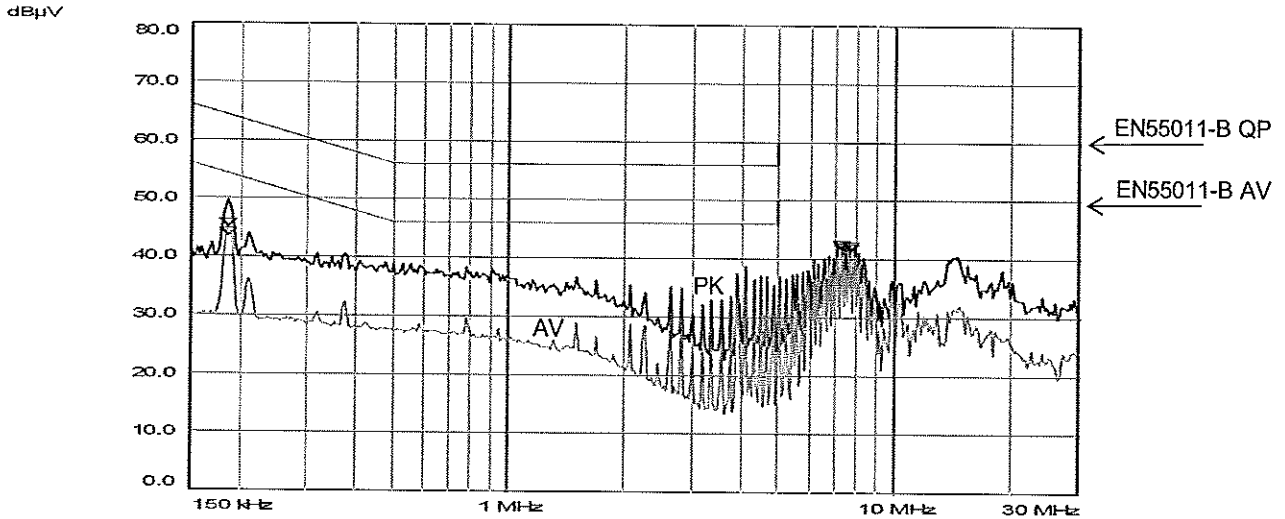
PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
N	0.19	47.0	46.1	64.2	54.2	-17.2	-8.1
	7.30	44.9	44.5	60.0	50.0	-15.1	-5.5

Limit of EN55011-B, EN55022-B are the same

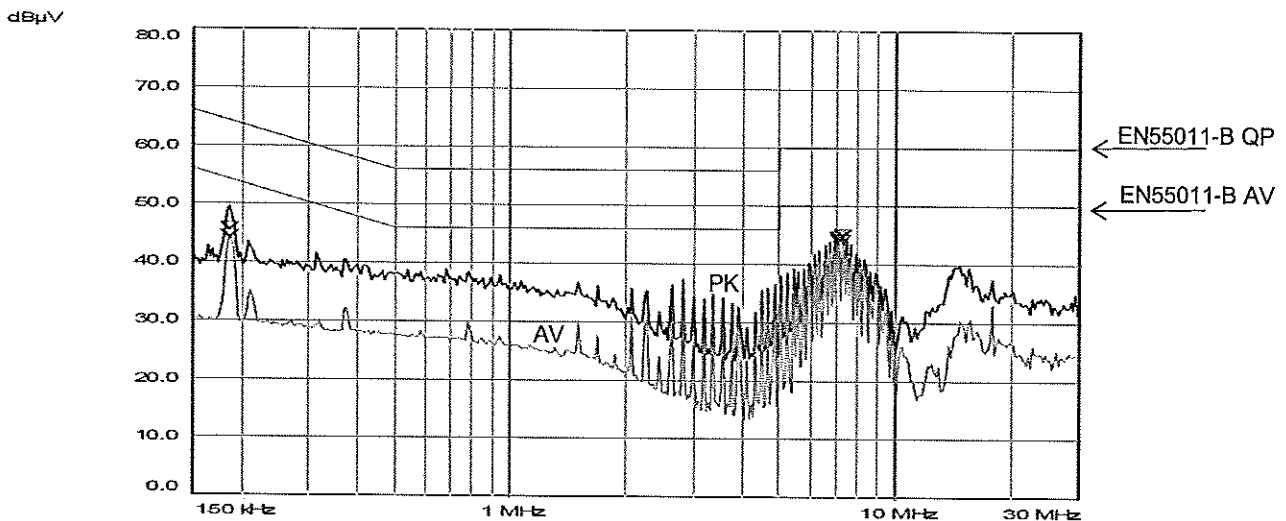
2.1 Conducted Emission

Conditions: Vin:230Vac
 Vout: 100%
 Iout: 100%
 Ta = 25°C

Z100-6



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
L	0.18	45.1	43.4	64.3	54.2	-19.2	-10.7
	7.30	41.7	41.4	60.0	50.0	-18.3	-8.6



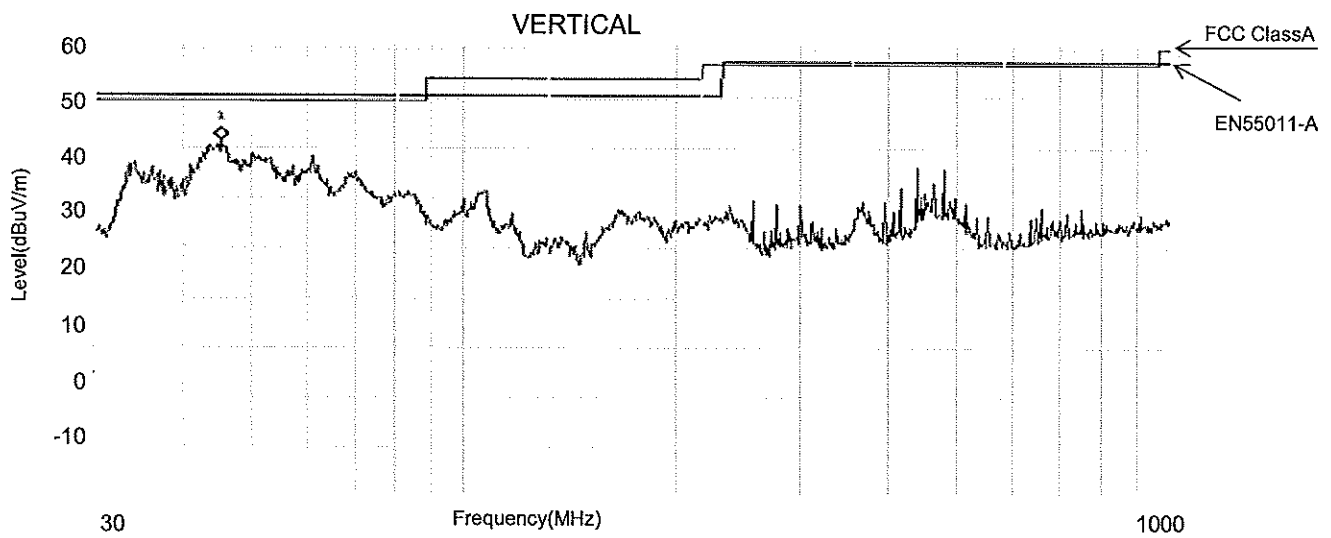
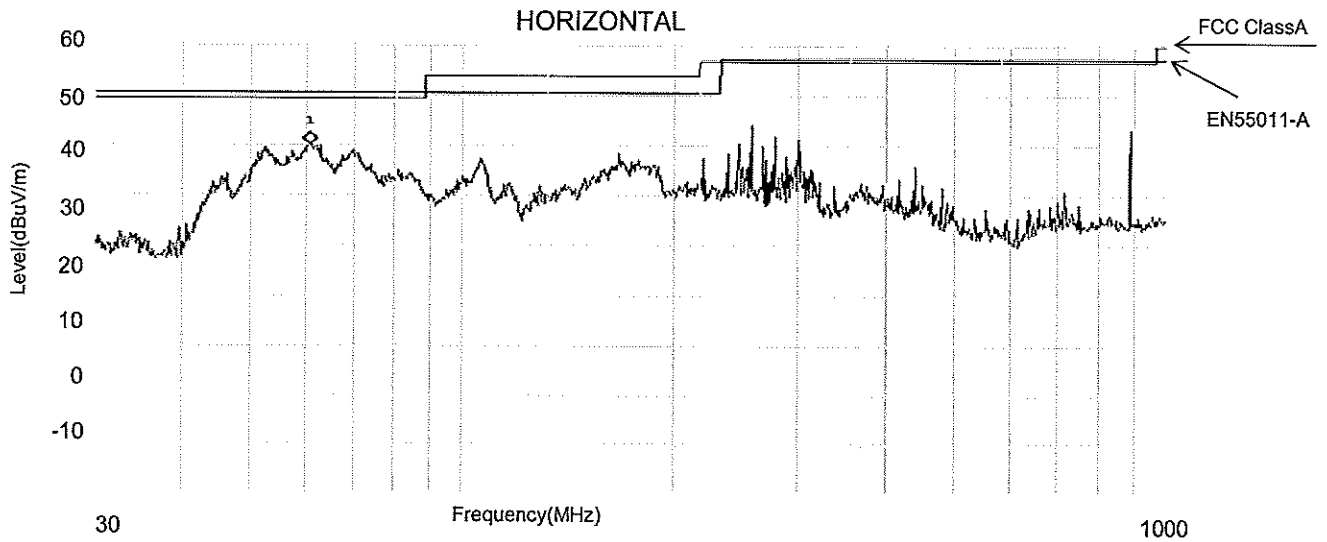
PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
N	0.19	45.5	44.0	64.2	54.2	-18.7	-10.2
	7.30	44.6	43.9	60.0	50.0	-15.4	-6.1

Limit of EN55011-B, EN55022-B are the same

2.2 Radiated Emission

Z10-60

Conditions: Vin: 115VAC
 Vout: 100%
 Iout: 100%
 Ta: 25°C



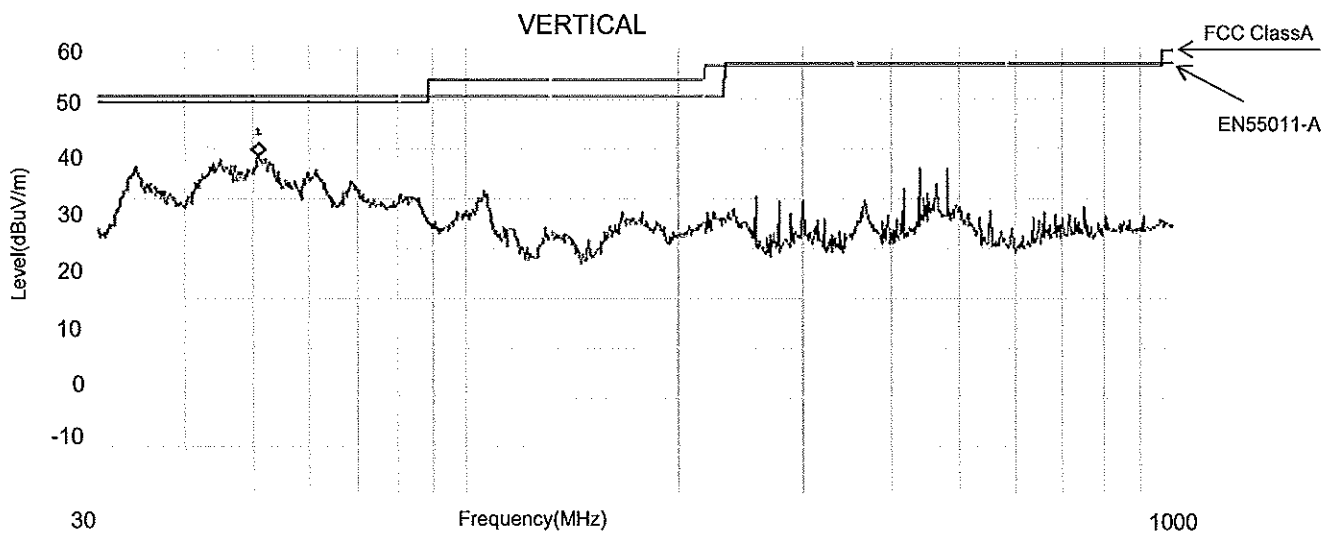
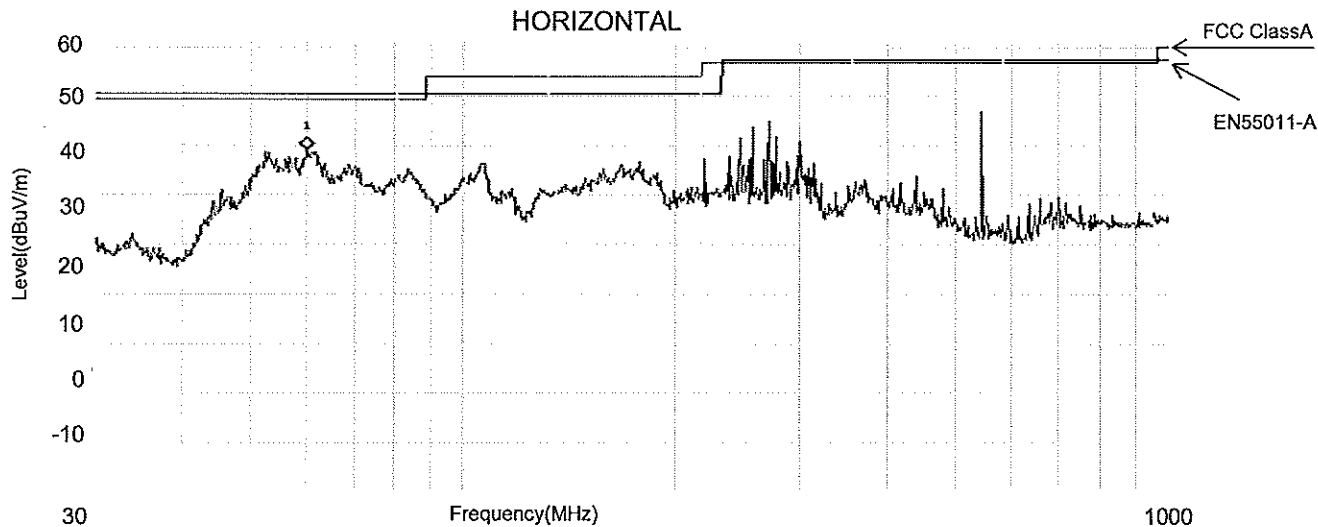
Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
45.0	41.3	39.1	49.5(FCC)	10.4	Vertical
45.0	41.3	39.1	50.5(EN)	11.4	Vertical
60.6	40.1	38.0	49.5(FCC)	11.5	Horizontal
60.6	40.1	38.0	50.5(EN)	12.5	Horizontal

Limit of EN55011-A, EN55022-A are the same

2.2 Radiated Emission

Z10-60

Conditions: Vin: 230VAC
 Vout: 100%
 Iout: 100%
 Ta: 25°C



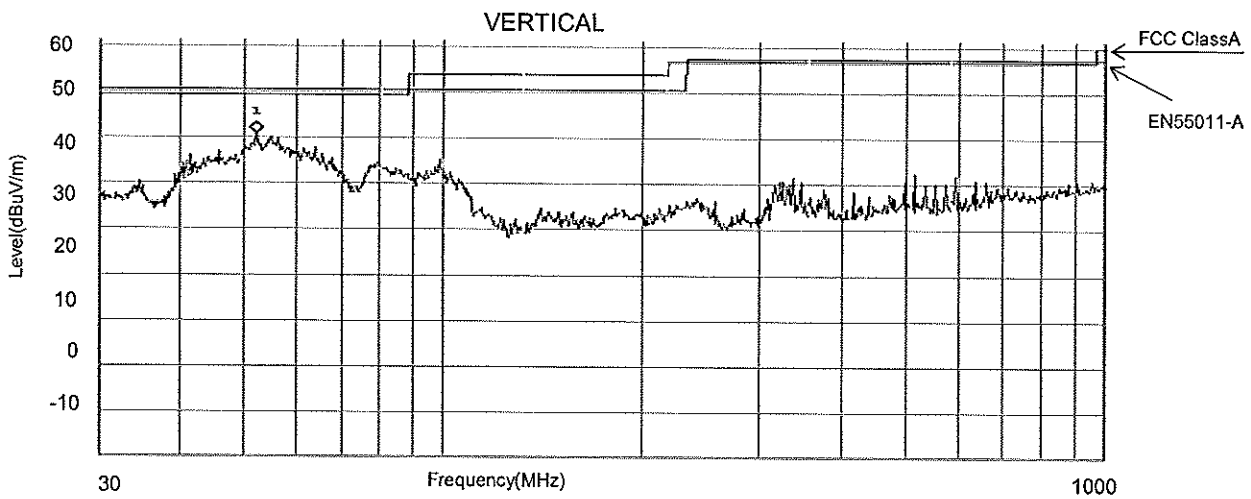
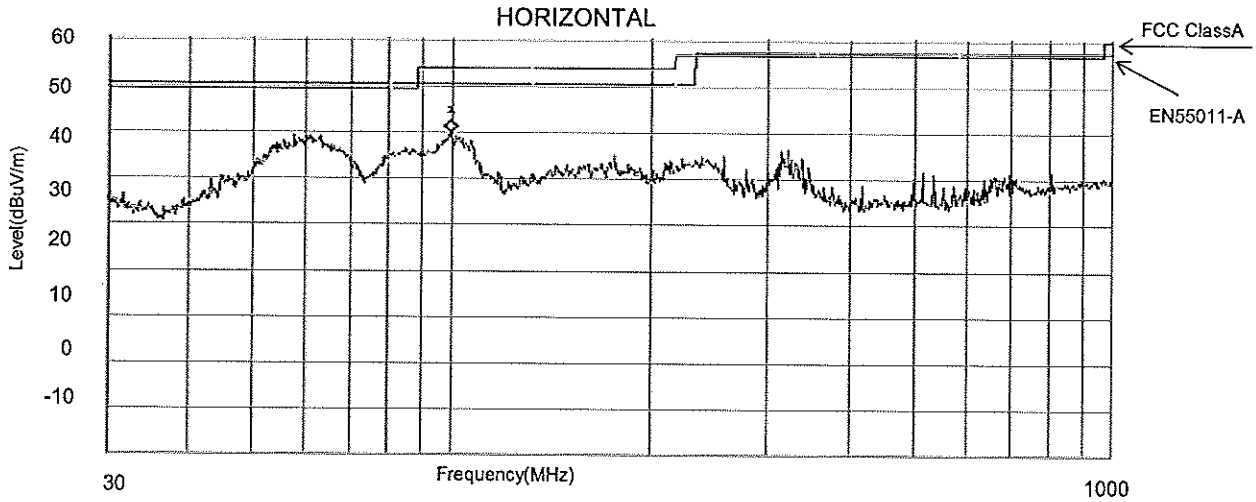
Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
50.7	38.4	36.1	49.5(FCC)	13.4	Vertical
50.7	38.4	36.1	50.5(EN)	14.4	Vertical
59.9	39.1	37.3	49.5(FCC)	12.2	Horizontal
59.9	39.1	37.3	50.5(EN)	13.2	Horizontal

Limit of EN55011-A, EN55022-A are the same

2.2 Radiated Emission

Z36-18

Conditions: Vin: 115VAC
 Vout: 100%
 Iout: 100%
 Ta: 25°C



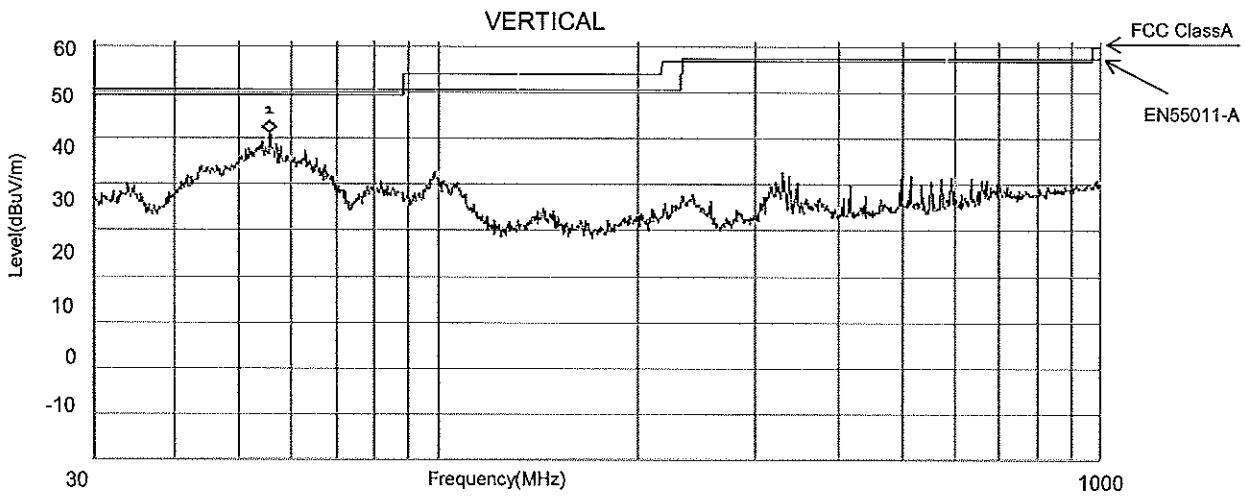
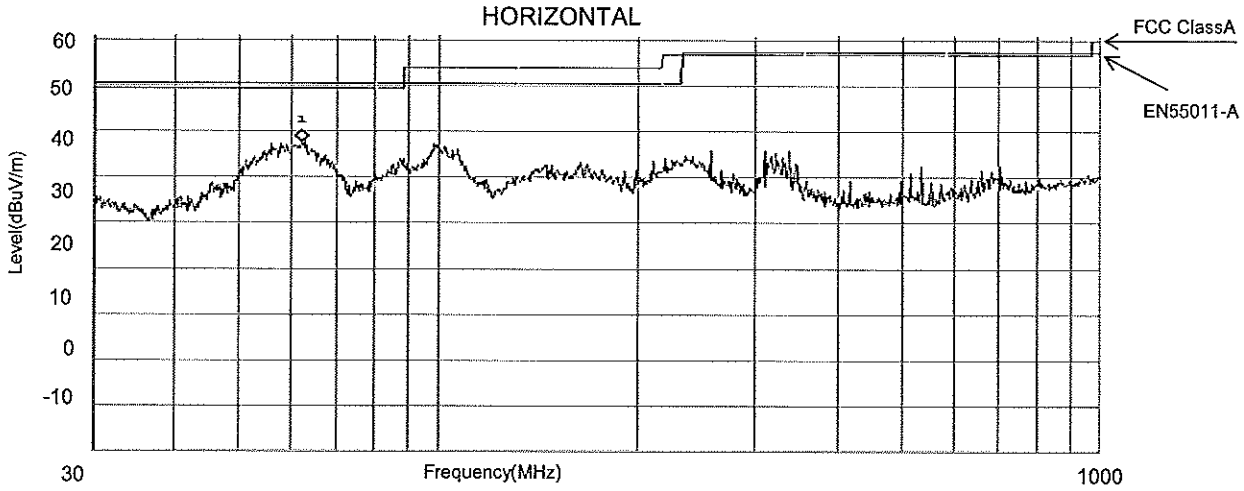
Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
51.9	40.8	38.4	49.5(FCC)	11.1	Vertical
51.9	40.8	38.4	50.5(EN)	12.1	Vertical
99.3	40.1	37.8	54(FCC)	16.2	Horizontal
99.3	40.1	37.8	50.5(EN)	12.7	Horizontal

Limit of EN55011-A, EN55022-A are the same

2.2 Radiated Emission

Z36-18

Conditions: Vin: 230VAC
 Vout: 100%
 Iout: 100%
 Ta: 25°C



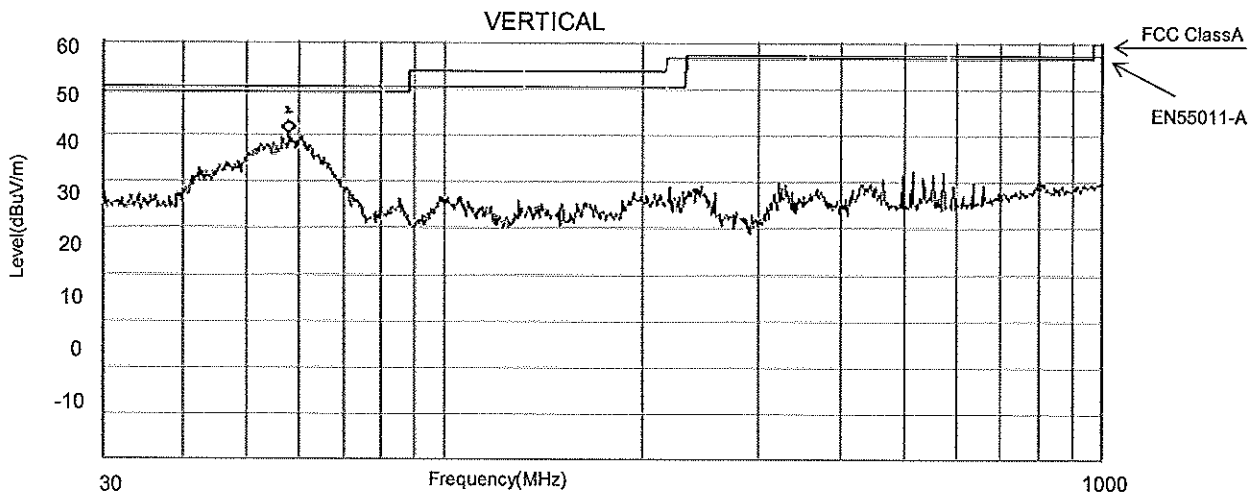
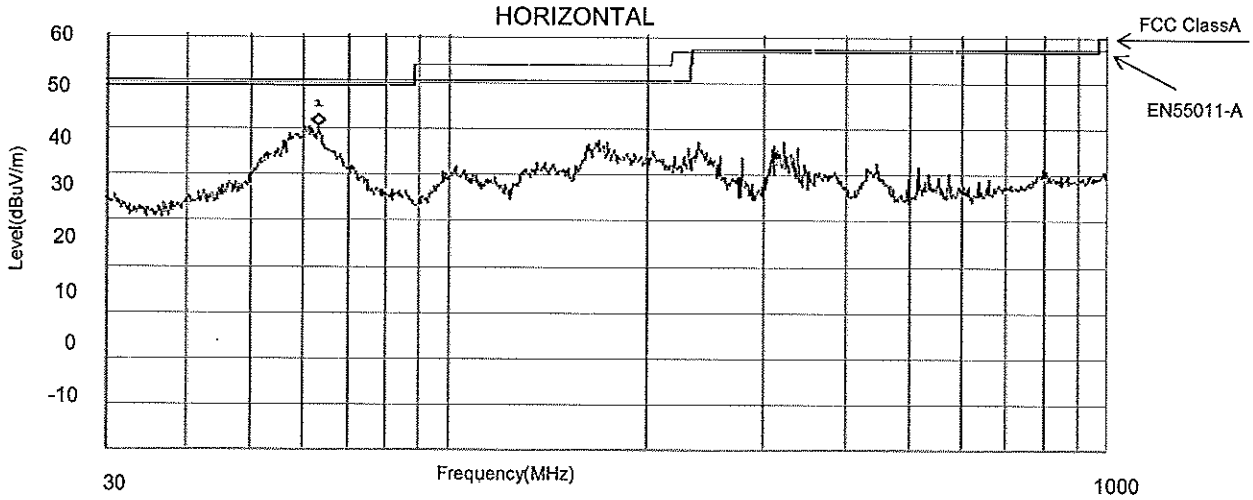
Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
55.4	41.1	38.6	49.5(FCC)	10.9	Vertical
55.4	41.1	38.6	50.5(EN)	11.9	Vertical
61.8	37.8	35.6	49.5(FCC)	13.9	Horizontal
61.8	37.8	35.6	50.5(EN)	14.9	Horizontal

Limit of EN55011-A, EN55022-A are the same

2.2 Radiated Emission

Z100-6

Conditions: Vin: 115VAC
 Vout: 100%
 Iout: 100%
 Ta: 25°C



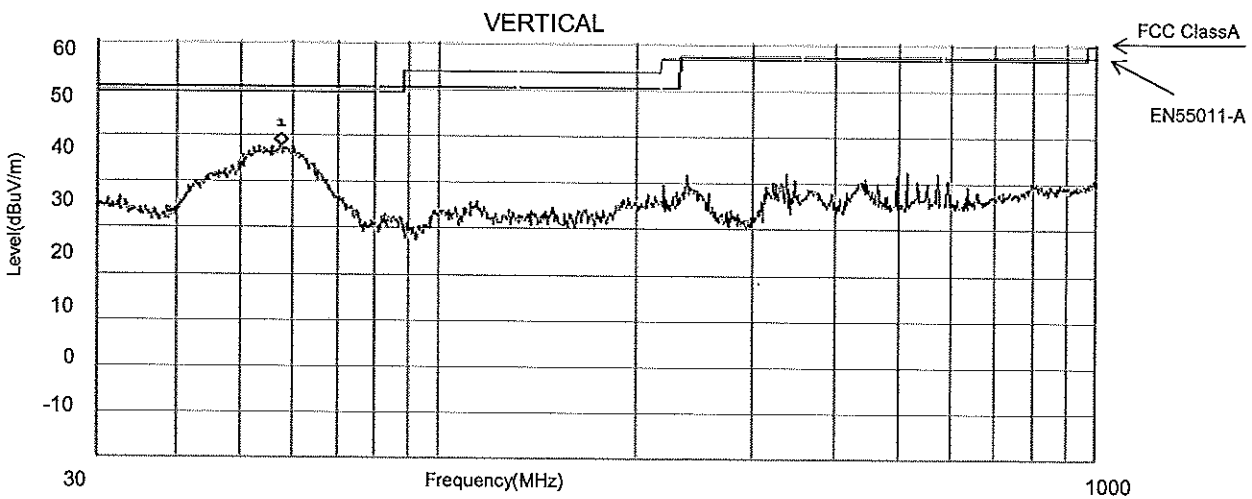
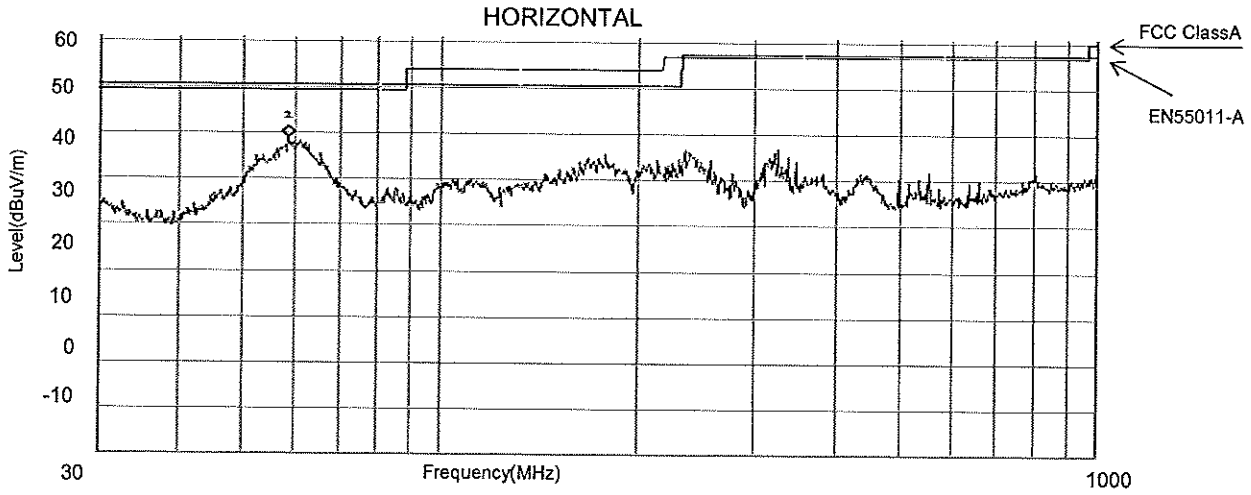
Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
57.8	40.5	38.1	49.5(FCC)	11.4	Vertical
57.8	40.5	38.1	50.5(EN)	12.4	Vertical
63.0	40.5	38.3	54(FCC)	15.7	Horizontal
63.0	40.5	38.3	50.5(EN)	12.2	Horizontal

Limit of EN55011-A, EN55022-A are the same

2.2 Radiated Emission

Z100-6

Conditions: Vin: 230VAC
 Vout: 100%
 Iout: 100%
 Ta: 25°C



Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
57.4	37.7	35.2	49.5(FCC)	14.3	Vertical
57.4	37.7	35.2	50.5(EN)	15.3	Vertical
58.3	38.9	36.8	49.5(FCC)	12.7	Horizontal
58.3	38.9	36.8	50.5(EN)	13.7	Horizontal

Limit of EN55011-A, EN55022-A are the same