

Z⁺200 Series

EMI

DATA

DWG No.: IA709-58-02		
APPD	CHK	DWG
<i>F</i> <i>22/5/12</i>	<i>Ron B.</i> <i>14/5/12</i>	<i>Gavin</i> <i>08.01.2012</i>

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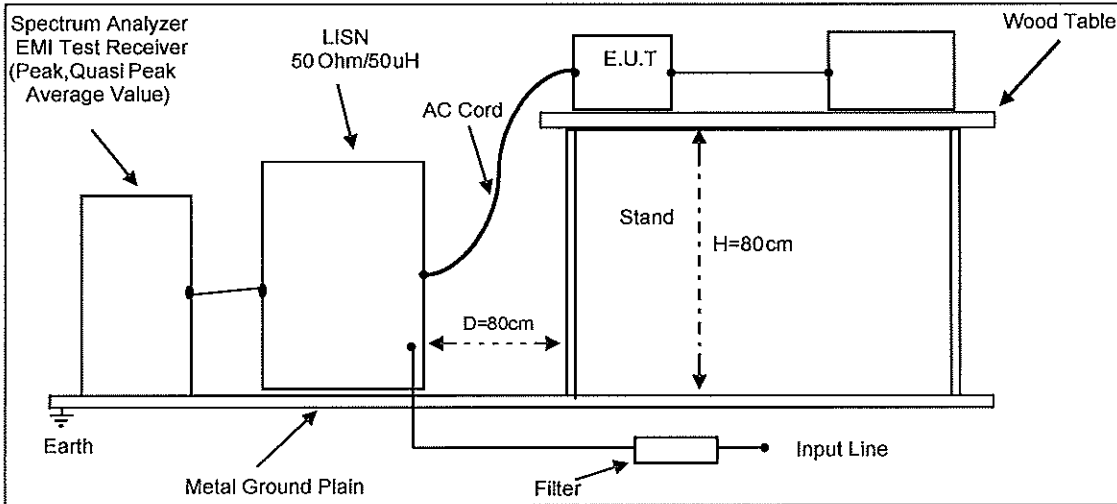
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The above data is typical value data.

The values are considered to be actual capability data.

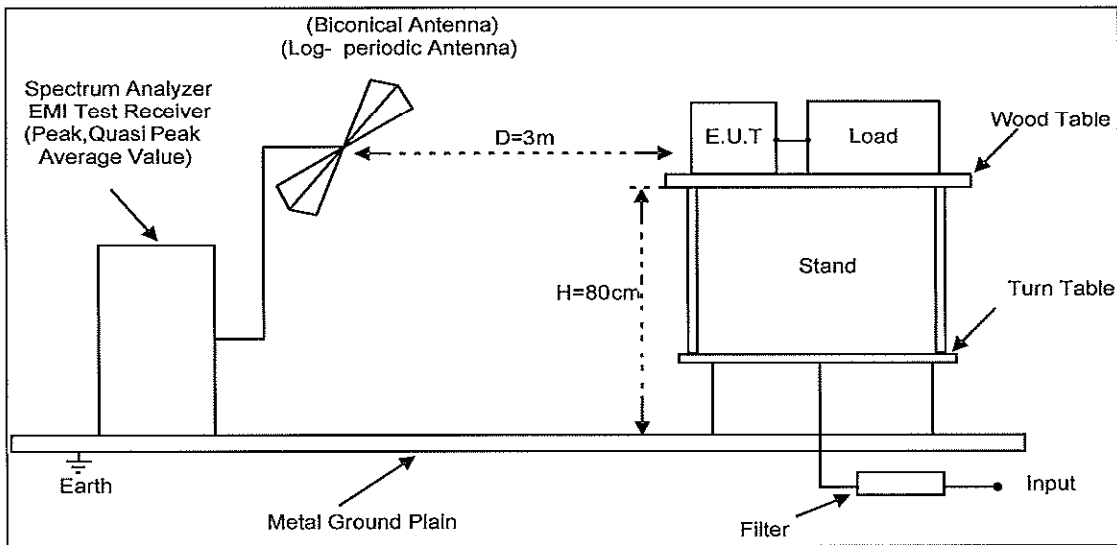
1. Test Method

(1) Conducted Emission



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

(2) Radiated Emission



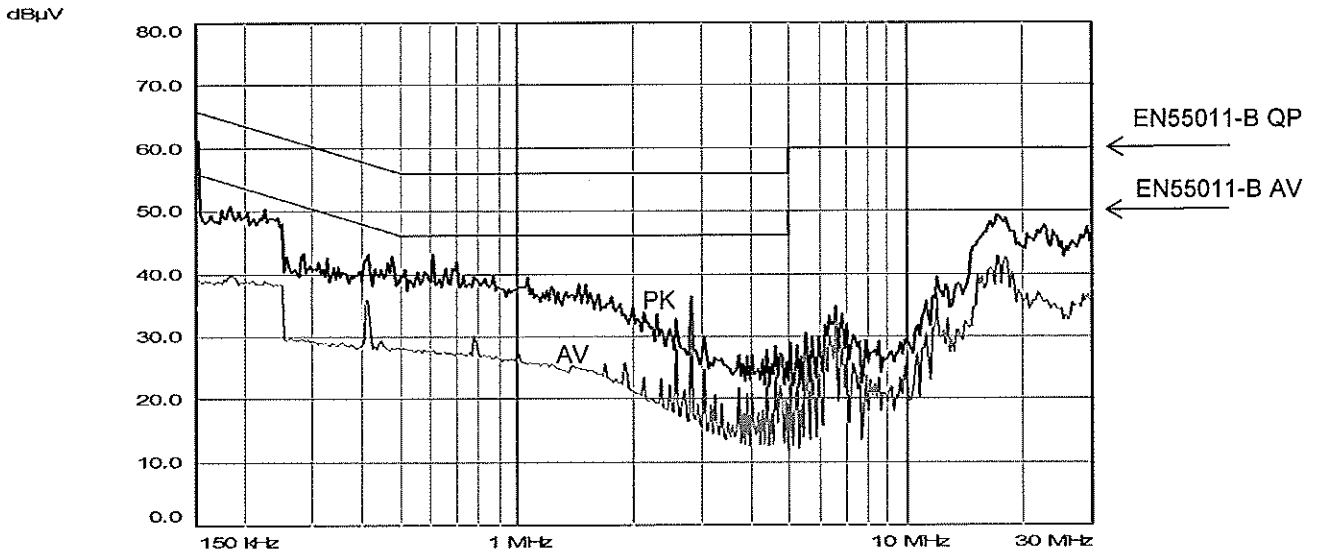
SPECTRUM ANALYZER	MS2601A	(ANRITSU)
EMI TEST RECEIVER	85462A	(HEWLETT. PACKARD)
BICONICAL ANTENNA	3110BA30/200	(EMCO)
LOG-PERIODIC ANTENNA	LP200000	(ELECTROMETRIX)
	LPA2530	(ELECTROMETRIX)

2. Test Data

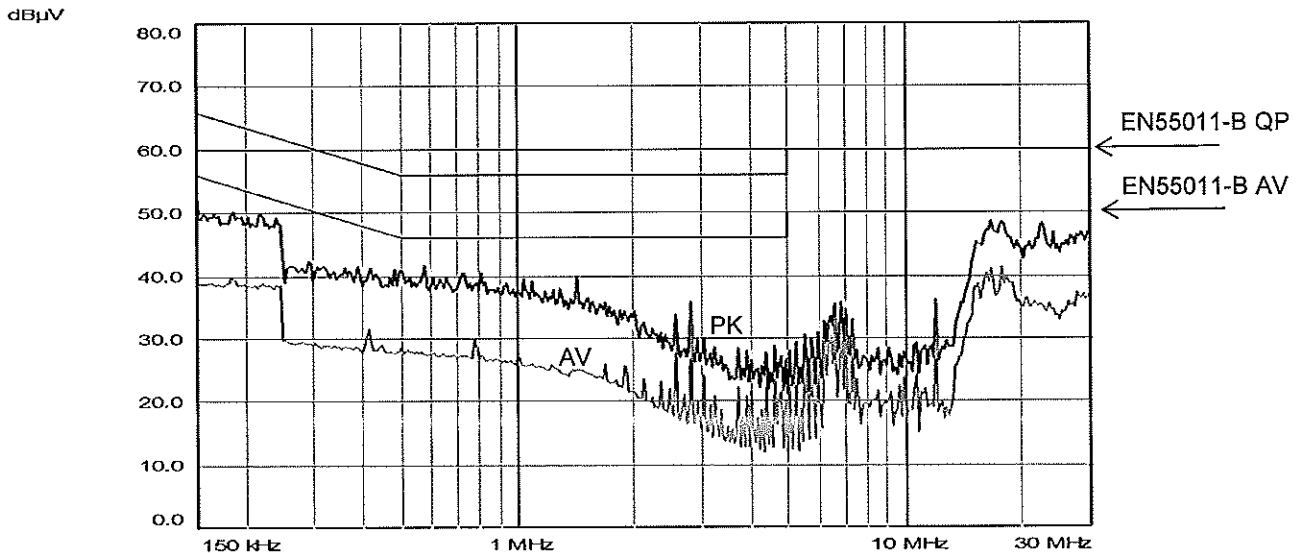
2.1 Conducted Emission

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

Z10-20



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
L	17.18	45.6	39.2	65.9	55.9	-20.3	-16.7
	0.15	43.4	38.4	60.0	50.0	-16.6	-11.6



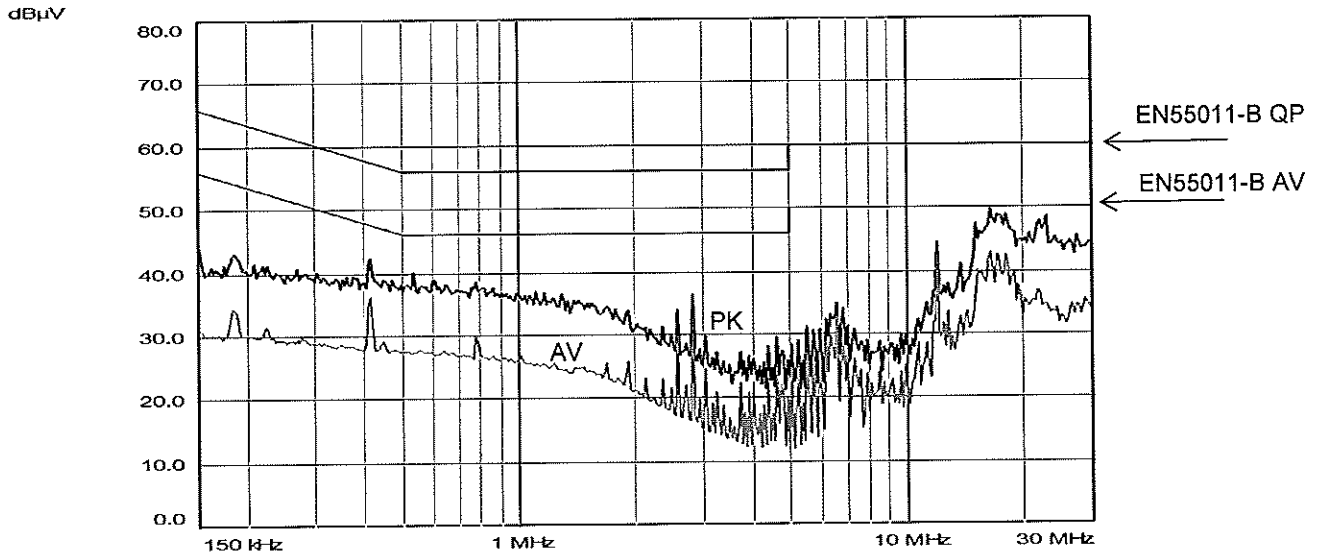
PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
N	2.79	34.2	32.4	56.0	46.0	-21.8	-13.7
	16.78	45.9	41.4	60.0	50.0	-14.1	-8.6

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

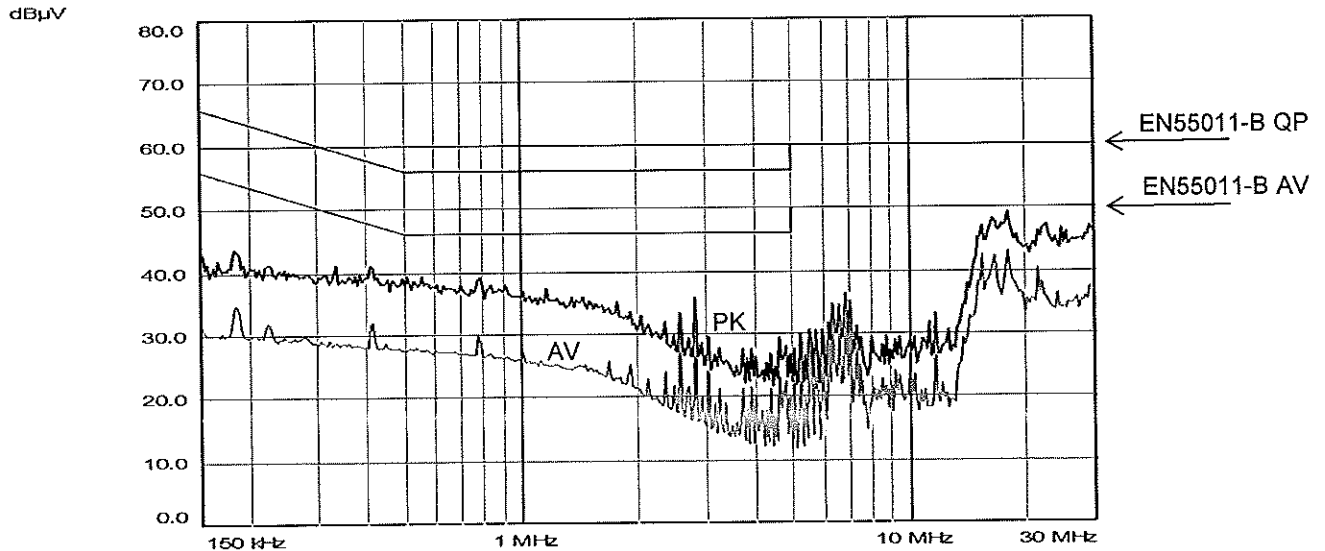
2.1 Conducted Emission

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

Z10-20



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
L	2.80	34.3	32.5	56.0	46.0	-21.7	-13.5
	16.57	47.9	43.1	60.0	50.0	-12.1	-6.9



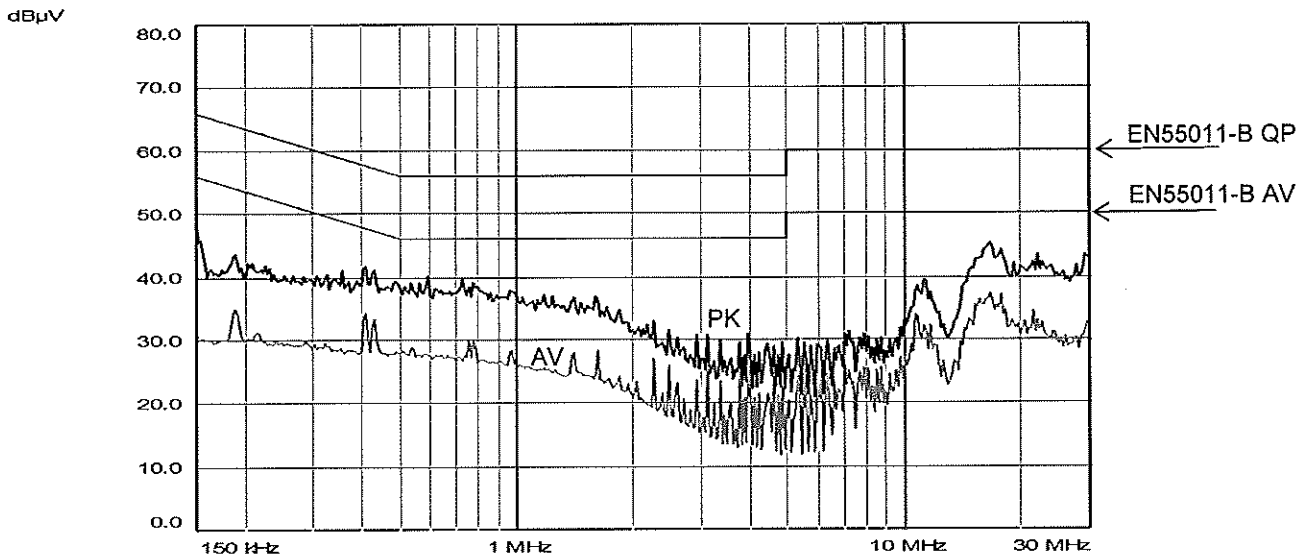
PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
N	2.80	34.3	33.4	56.0	46.0	-21.8	-12.6
	16.77	44.6	37.5	60.0	50.0	-15.4	-12.5

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

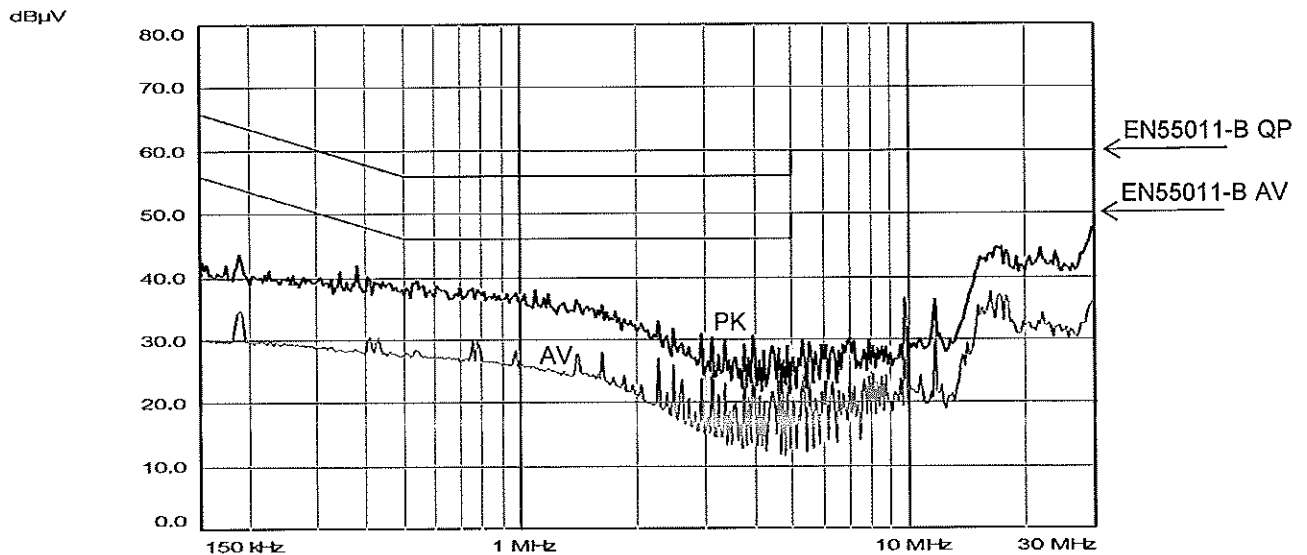
2.1 Conducted Emission

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

Z36-6



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
L	16.67	42.1	36.9	60.0	50.0	-17.9	-13.1
	22.18	39.5	33.8	60.0	50.0	-20.5	-16.2



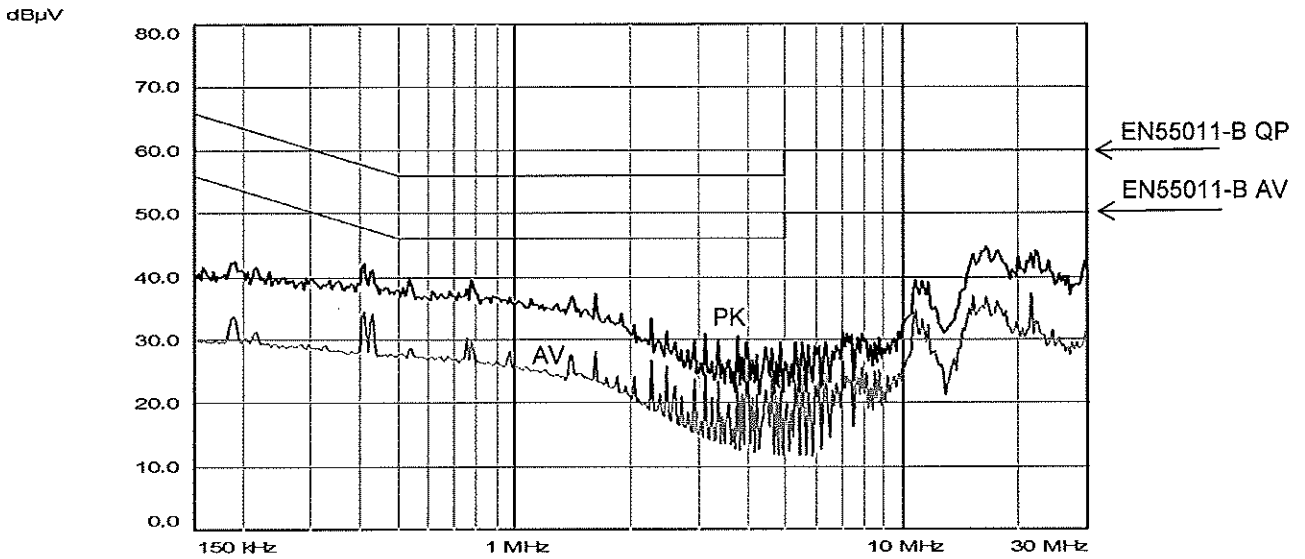
PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
N	17.07	41.7	36.5	60.0	50.0	-18.3	-13.5
	29.76	42.9	35.8	60.0	50.0	-17.1	-14.2

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

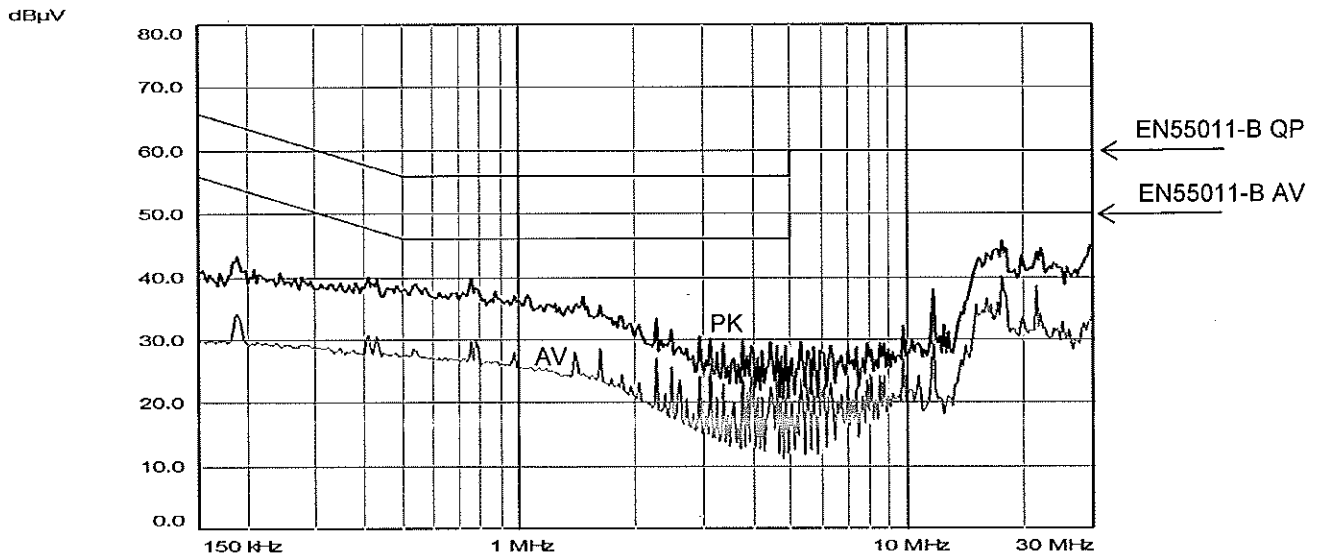
2.1 Conducted Emission

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

Z36-6



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
L	15.34	39.9	35.4	60.0	50.0	-20.1	-14.6
	16.57	41.5	36.8	60.0	50.0	-18.5	-13.2



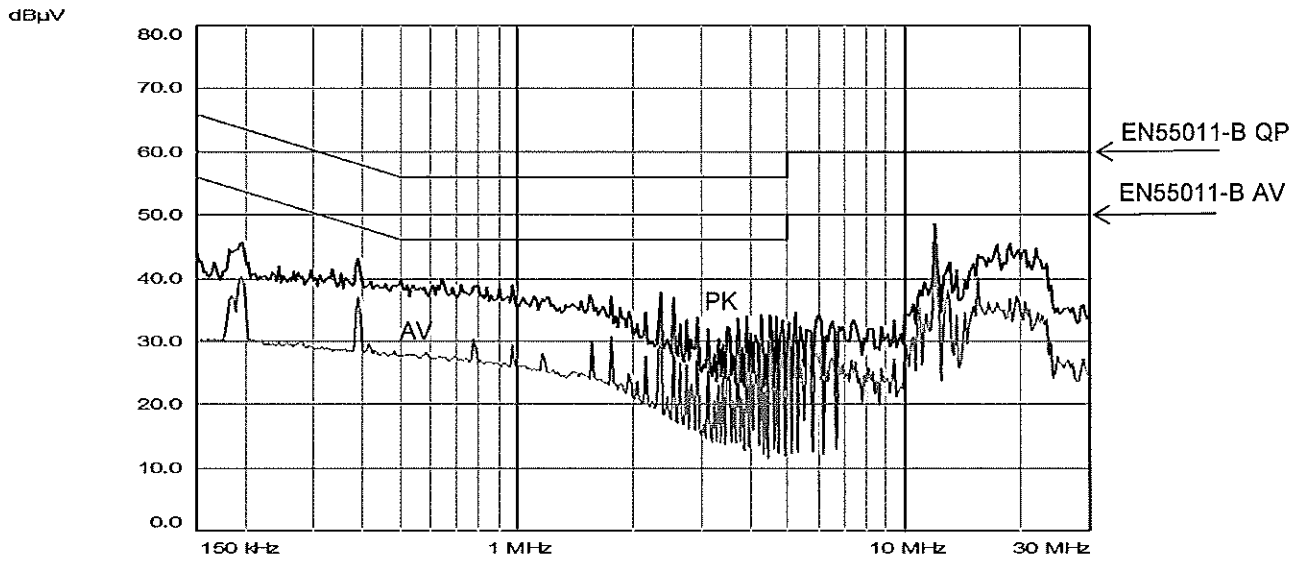
PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
N	17.89	40.5	35.3	60.0	50.0	-19.5	-14.7
	21.55	34.4	28.9	60.0	50.0	-25.6	-21.1

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

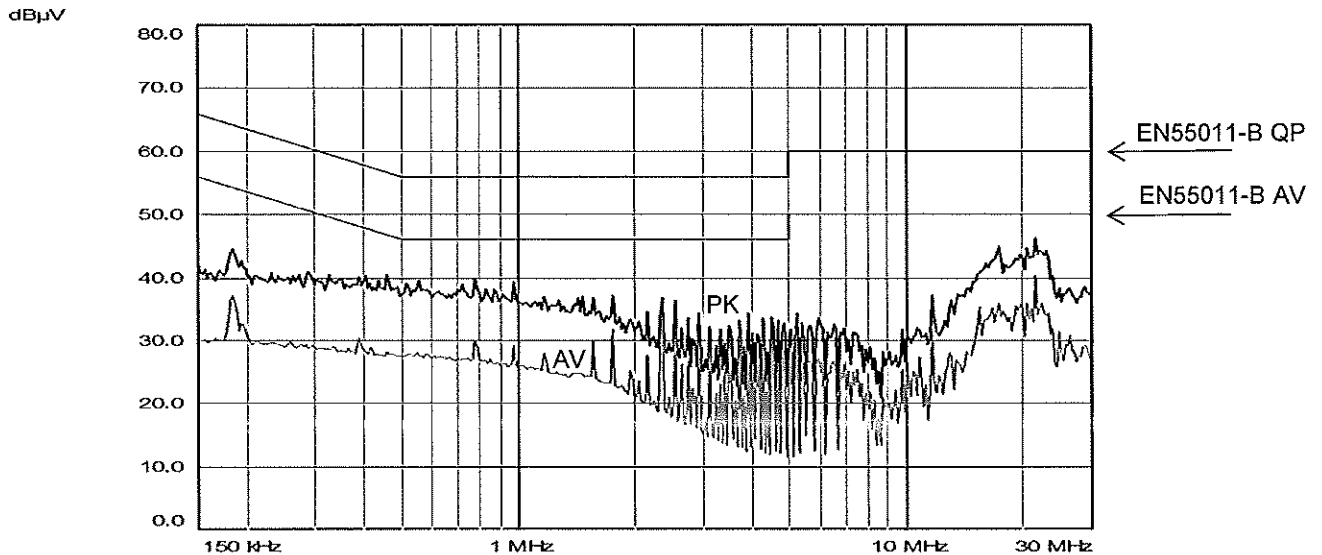
2.1 Conducted Emission

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

Z100-2



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
L	0.20	42.1	39.9	63.8	53.8	-21.7	-13.9
	11.94	46.5	36.6	60.0	50.0	-13.5	-13.4



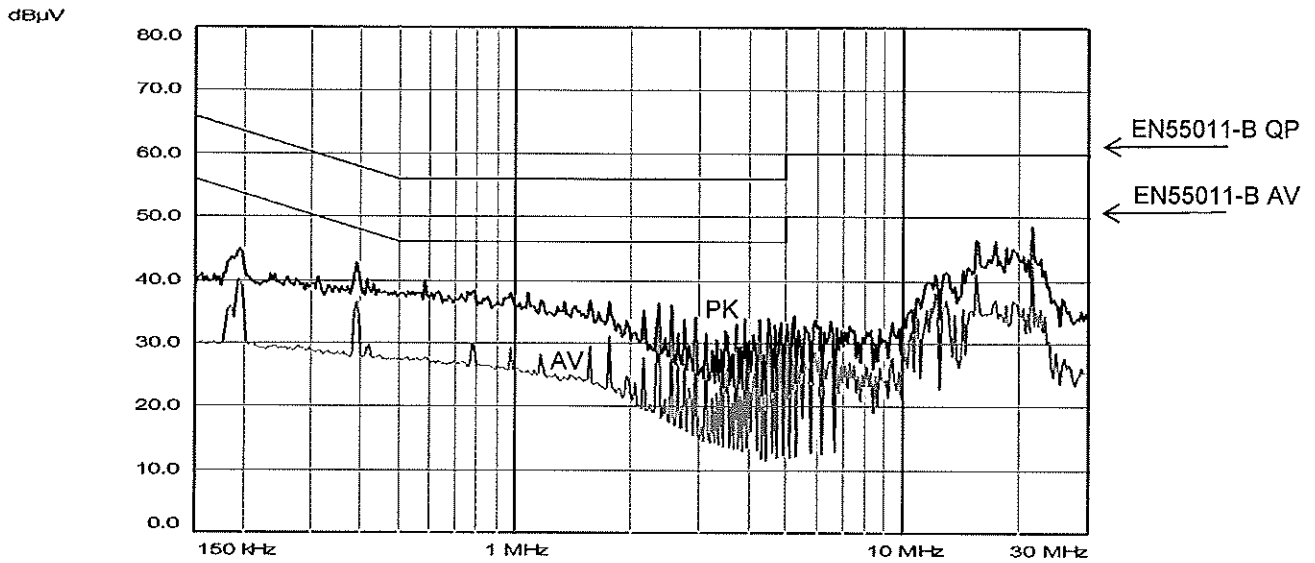
PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
N	0.18	40.6	36.8	60.0	50.0	-19.4	-13.2
	17.24	42.7	37.0	60.0	50.0	-17.3	-13.0

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

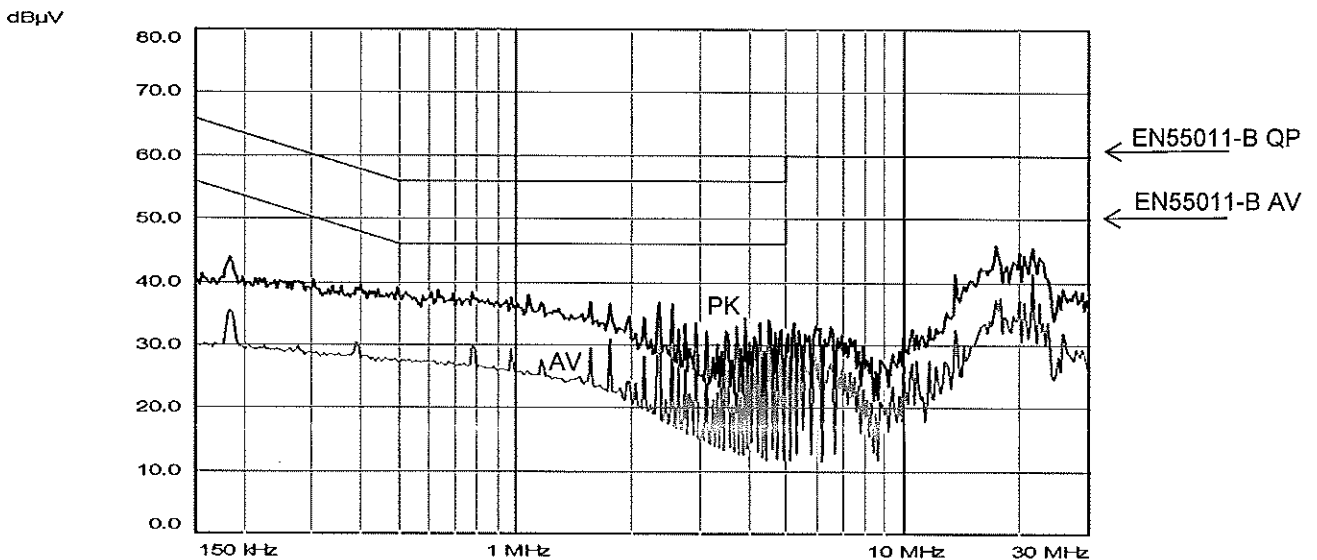
2.1 Conducted Emission

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

Z100-2



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
L	0.19	42.0	63.9	63.9	53.9	-21.9	10.0
	15.48	32.0	25.3	60.0	50.0	-28.0	-24.7



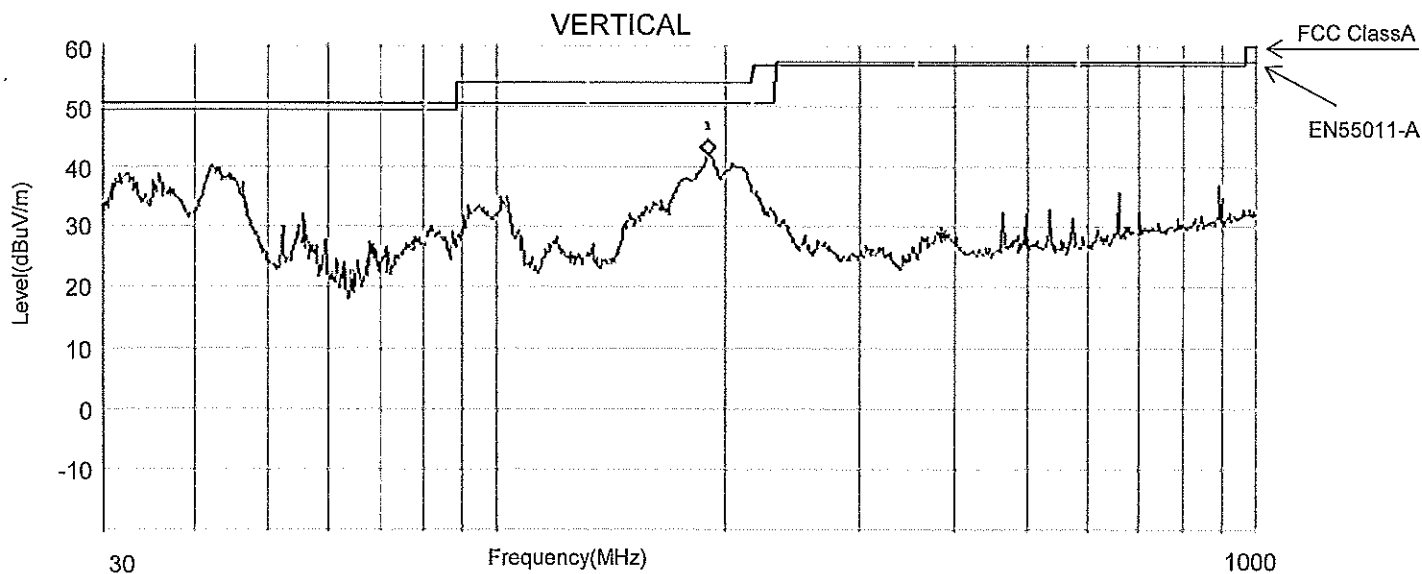
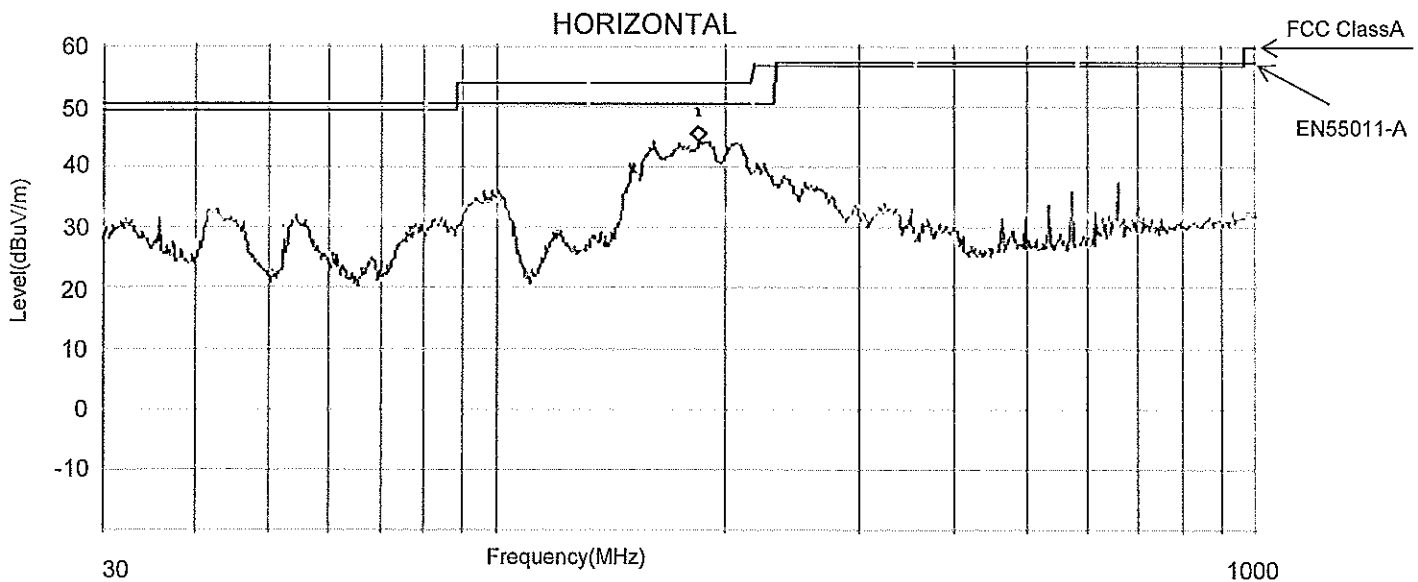
PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
N	0.18	39.9	35.4	60.0	50.0	-20.1	-14.6
	17.24	43.2	37.4	60.0	50.0	-16.8	-12.6

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

2.2 Radiated Emission

Z10-20

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



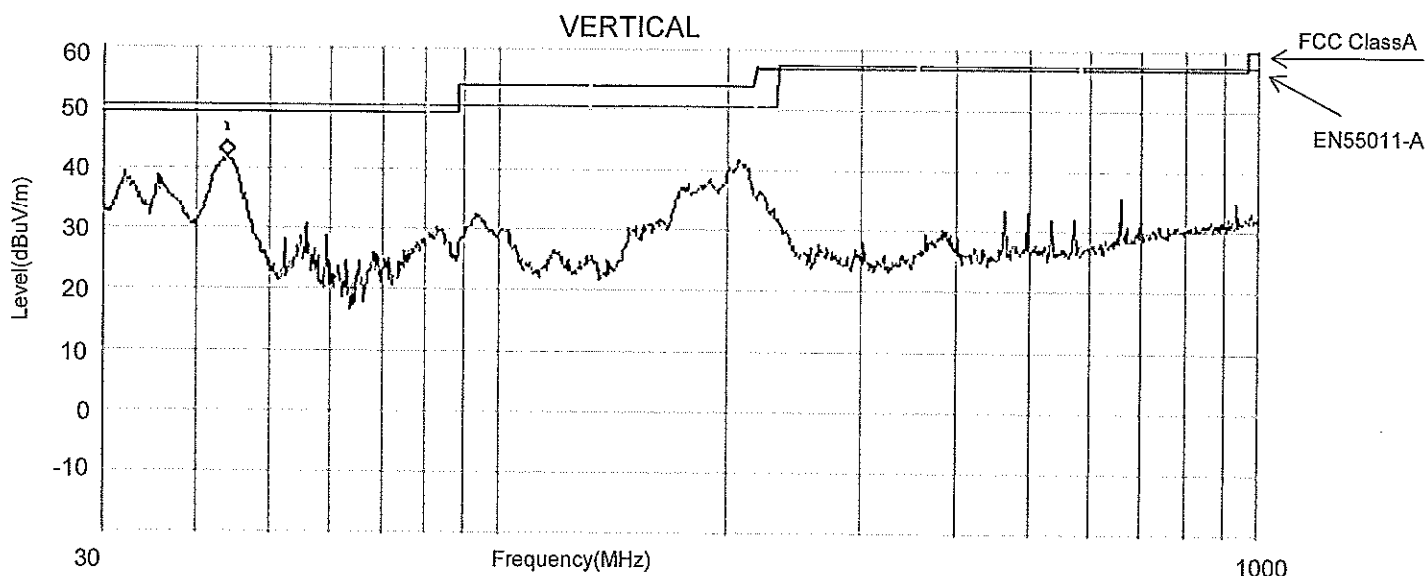
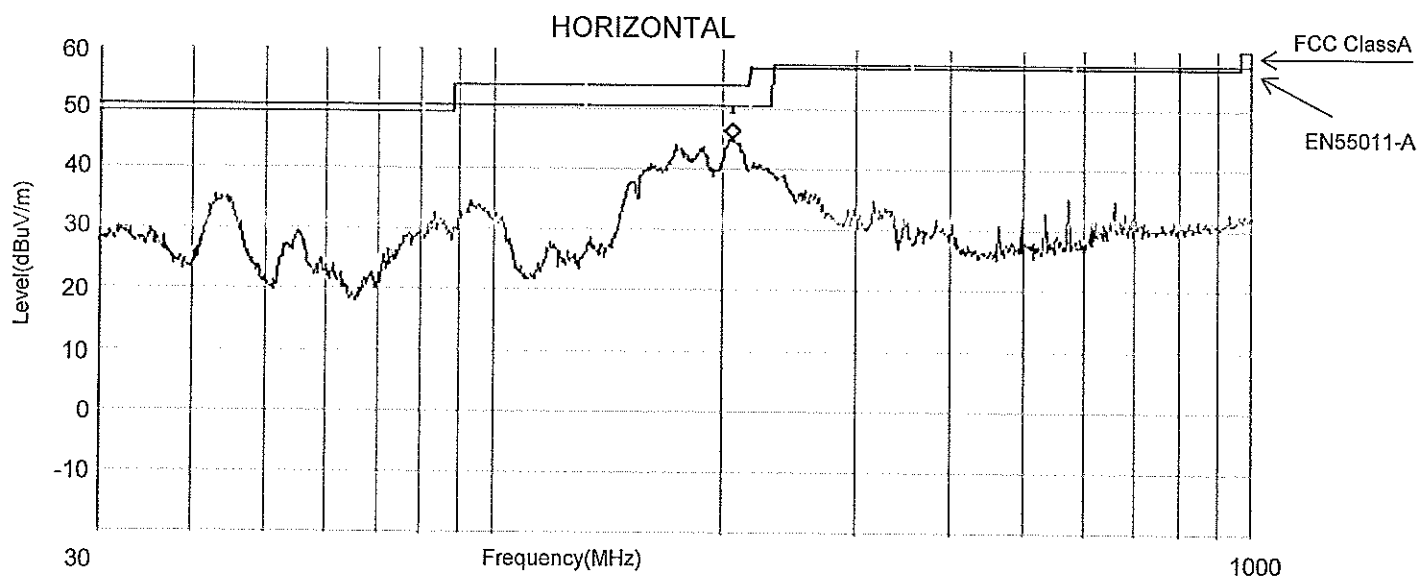
Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
188.6	42.1	38.0	54(FCC)	-16.0	Vertical
188.6	42.1	38.0	50.5(EN)	-12.5	Vertical
183.5	44.3	40.2	54(FCC)	-13.8	Horizontal
183.5	44.3	40.2	50.5(EN)	-10.3	Horizontal

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

2.2 Radiated Emission

Z10-20

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



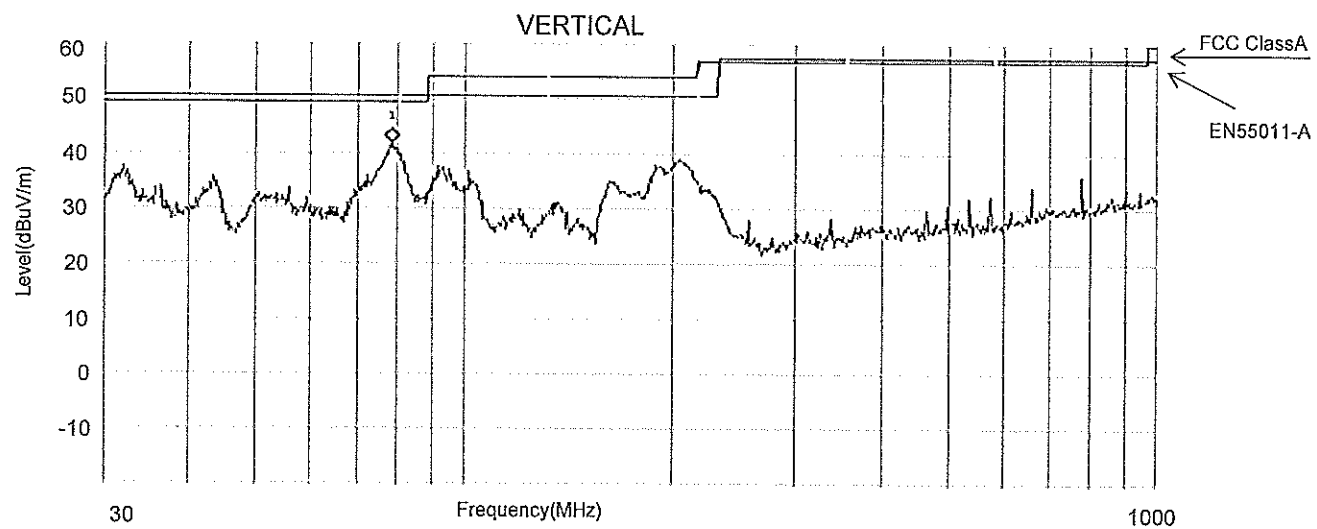
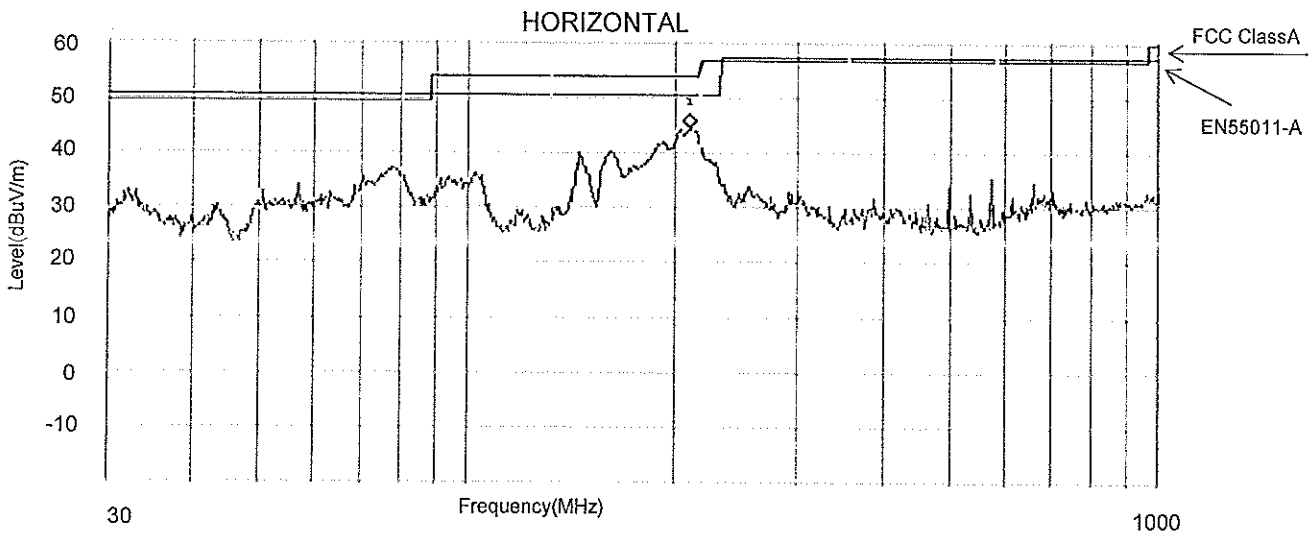
Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
43.8	42.0	37.7	49.5(FCC)	-14.1	Vertical
43.8	42.0	37.7	50.5(EN)	-15.1	Vertical
204.5	45.2	40.8	54(FCC)	-18.7	Horizontal
204.5	45.2	40.8	50.5(EN)	-15.2	Horizontal

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

2.2 Radiated Emission

Z36-6

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



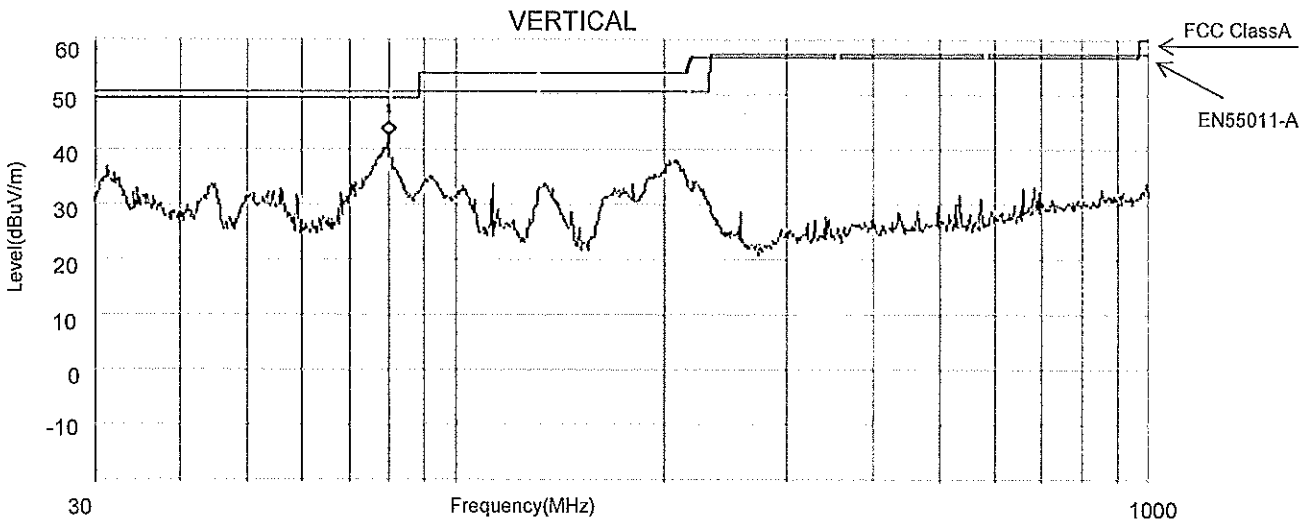
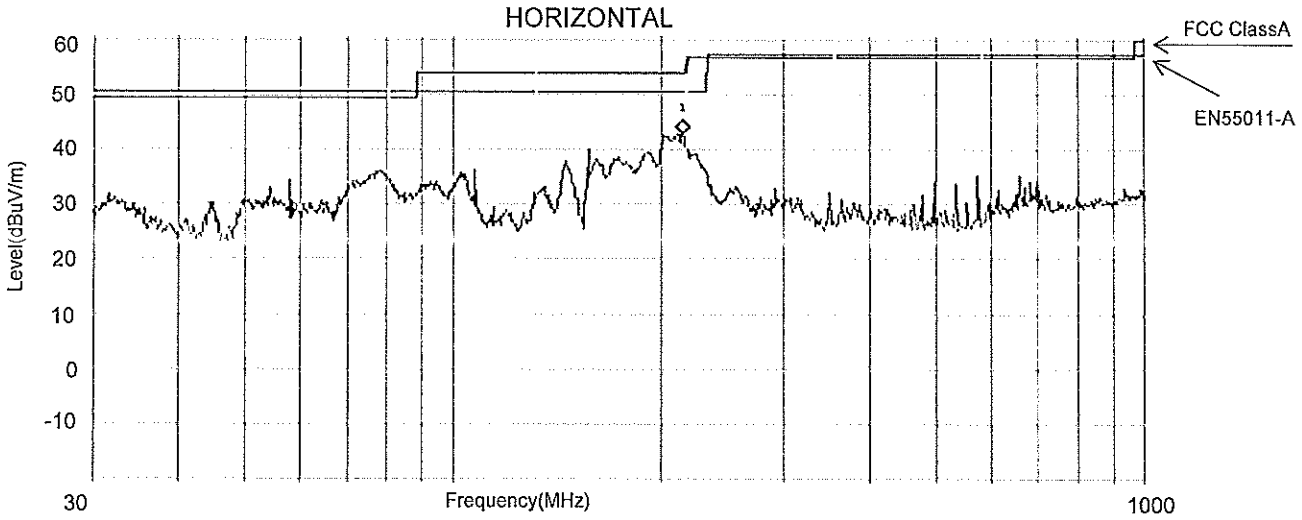
Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
74.5	41.9	37.7	49.5(FCC)	-11.8	Vertical
74.5	41.9	37.7	50.5(EN)	-12.8	Vertical
208.5	44.6	40.5	54(FCC)	-13.5	Horizontal
208.5	44.6	40.5	50.5(EN)	-10.0	Horizontal

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

2.2 Radiated Emission

Z36-6

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



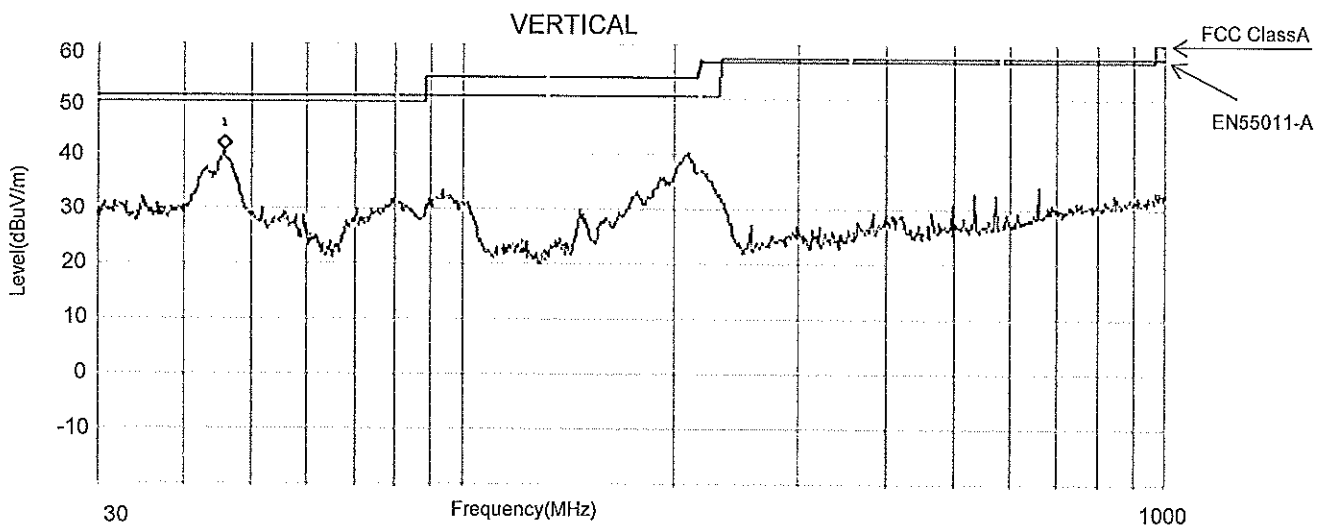
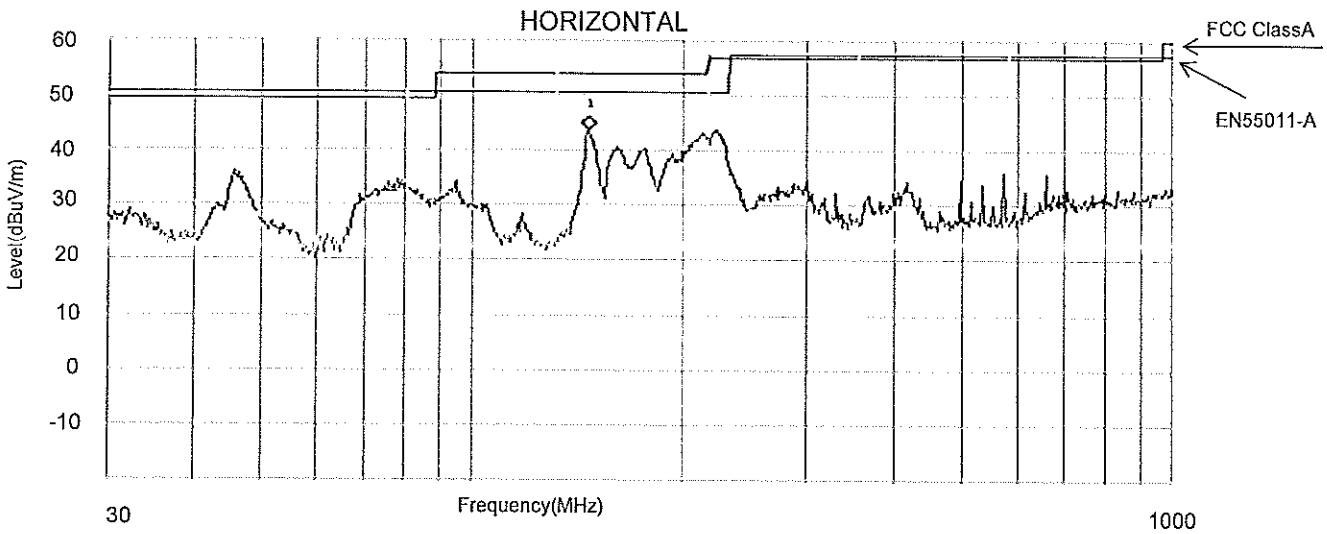
Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
79.7	42.5	38.3	49.5(FCC)	-11.2	Vertical
79.7	42.5	38.3	50.5(EN)	-12.2	Vertical
213.4	42.8	38.9	54(FCC)	-15.1	Horizontal
213.4	42.8	38.9	50.5(EN)	-11.6	Horizontal

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

2.2 Radiated Emission

Z100-2

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



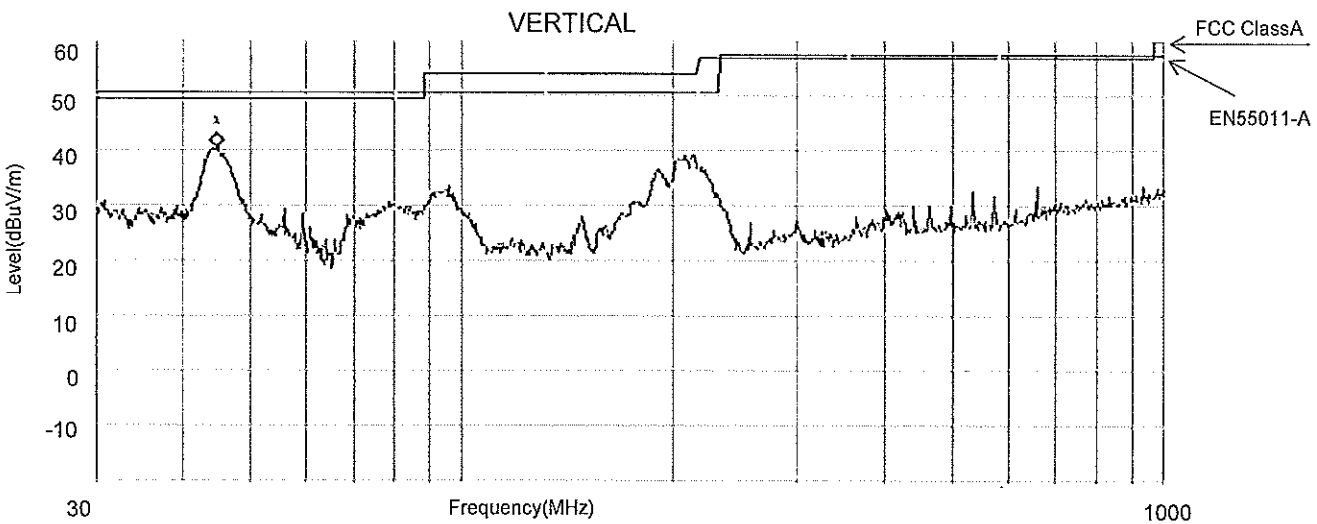
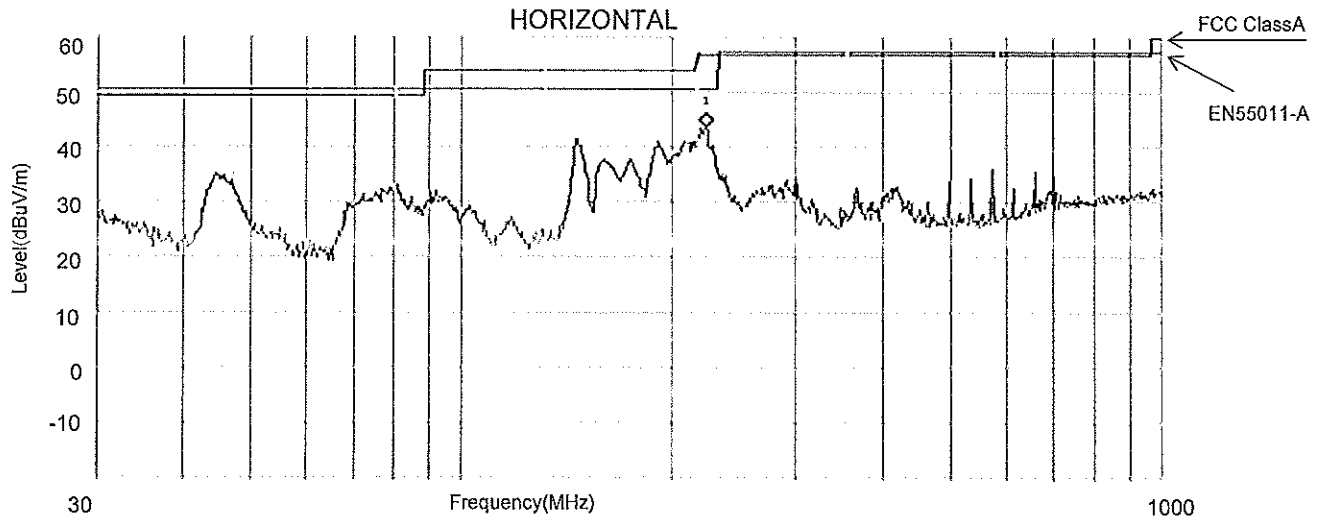
Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
45.5	40.5	36.3	49.5(FCC)	-13.2	Vertical
45.5	40.5	36.3	50.5(EN)	-14.2	Vertical
146.1	43.8	39.4	54(FCC)	-14.7	Horizontal
146.1	43.8	39.4	50.5(EN)	-11.2	Horizontal

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

2.2 Radiated Emission

Z100-2

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.
44.5	40.7	36.4	49.5(FCC)	-13.1	Vertical
44.5	40.7	36.4	50.5(EN)	-14.1	Vertical
222.6	43.6	39.4	56.9(FCC)	-17.5	Horizontal
222.6	43.6	39.4	50.5(EN)	-11.1	Horizontal

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