

Z⁺400 H.V Series

EMI DATA

DWG No.: IA779-58-02		
APPD	CHK	DWG
<i>Z</i> 2/1/14	<i>Por B.</i> 17/12/13	<i>Gantr</i> 24/11/13

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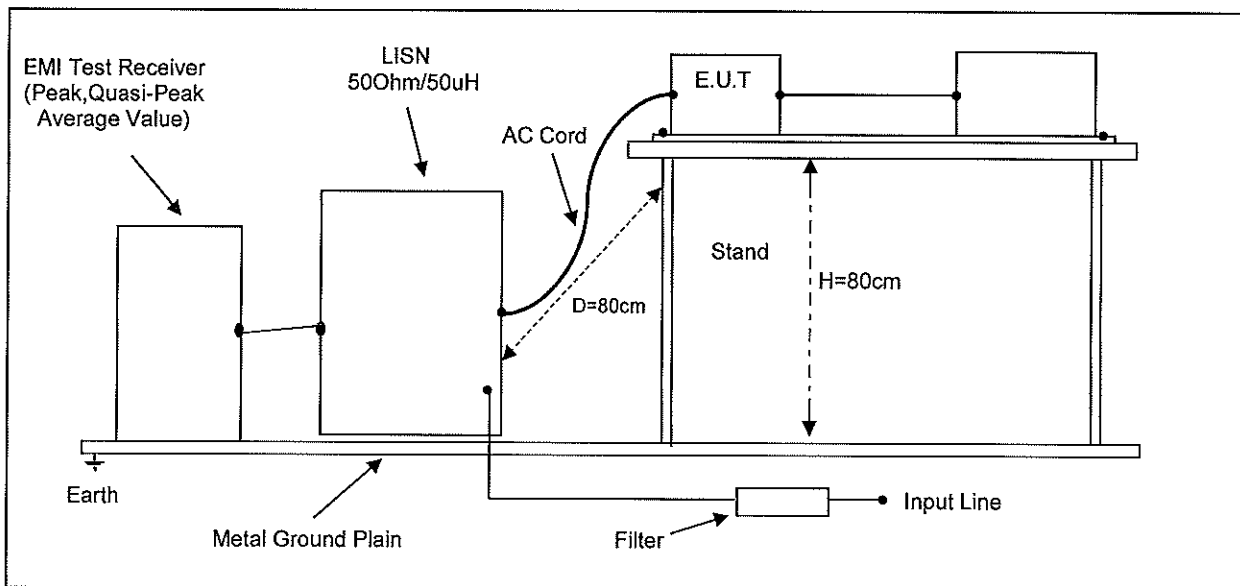
2.2 Radiated emission

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The above data is typical value data.

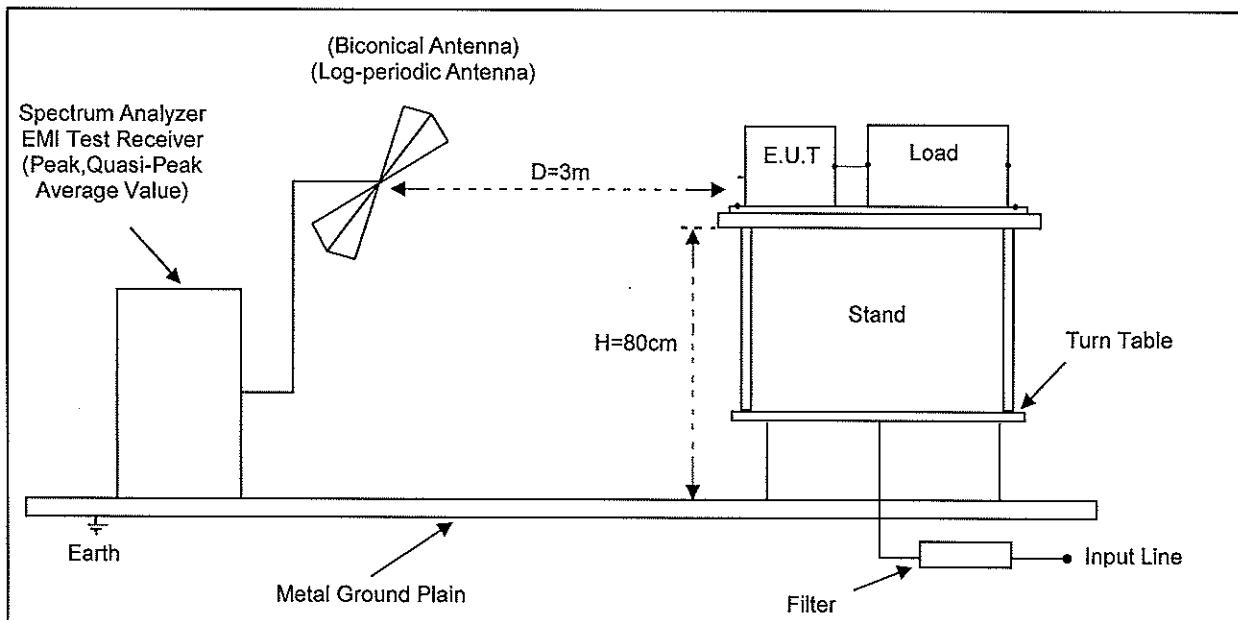
The values are considered to be actual capability data.

(1) Conducted Emission



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)

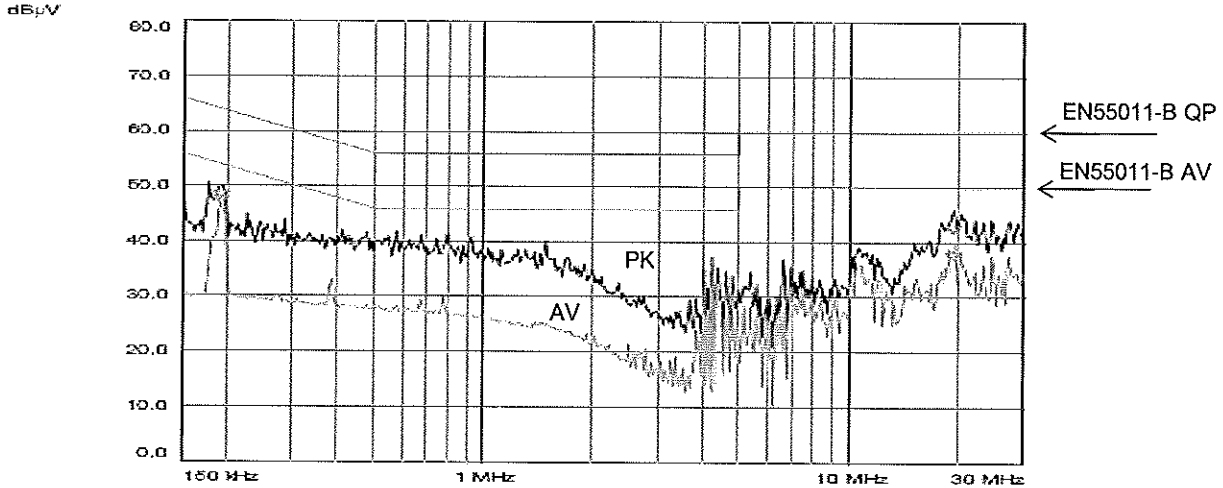
2. Test Data

Z400 H.V

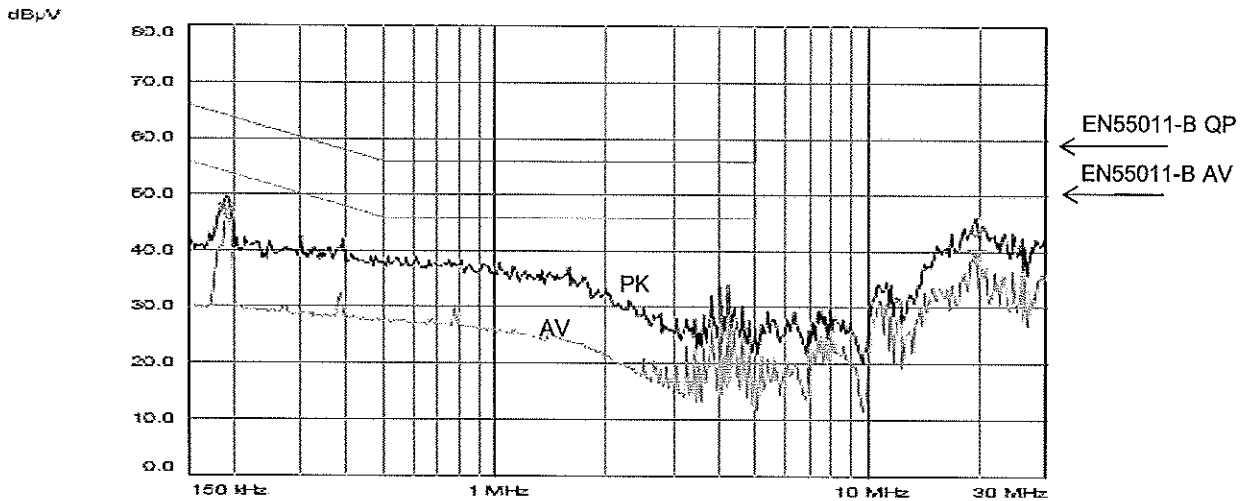
2.1 Conducted Emission

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

Z160-2.6



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
L	0.19	47.5	46.6	64.0	54.0	-16.5	-7.4
	19.17	41.7	36.9	60.0	50.0	-18.3	-13.1



PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dBµV	AV dBµV	QP dBµV	AV dBµV	QP dBµV	AV dBµV
N	0.19	47.0	46.0	64.0	54.0	-17.0	-8.0
	19.36	42.6	39.1	60.0	50.0	-17.4	-10.9

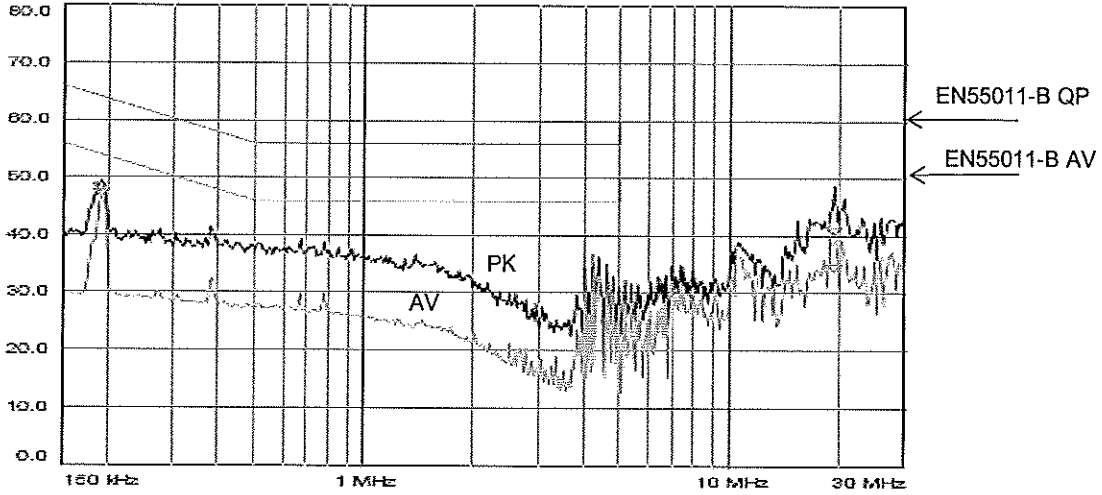
Limit of EN55011-B, EN55022-B are the same

2.1 Conducted Emission

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

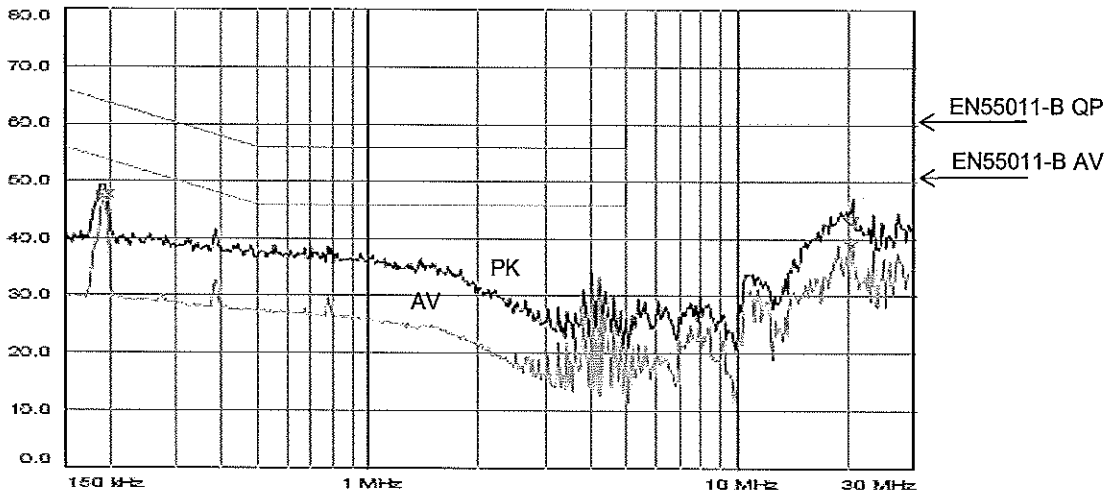
Z160-2.6

dB μ V



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	47.4	46.6	64.0	54.0	-16.6	-7.4
	19.17	40.1	33.8	60.0	50.0	-19.9	-16.2

dB μ V



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	0.19	47.0	46.0	63.9	53.9	-16.9	-7.9
	20.13	42.6	38.7	60.0	50.0	-17.4	-11.3

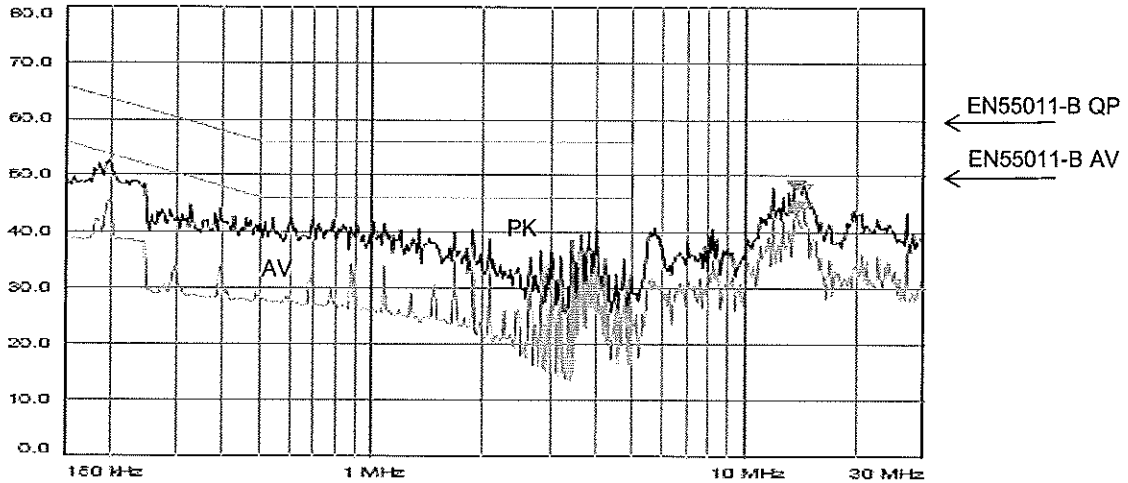
Limit of EN55011-B, EN55022-B is the same

2.1 Conducted Emission

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

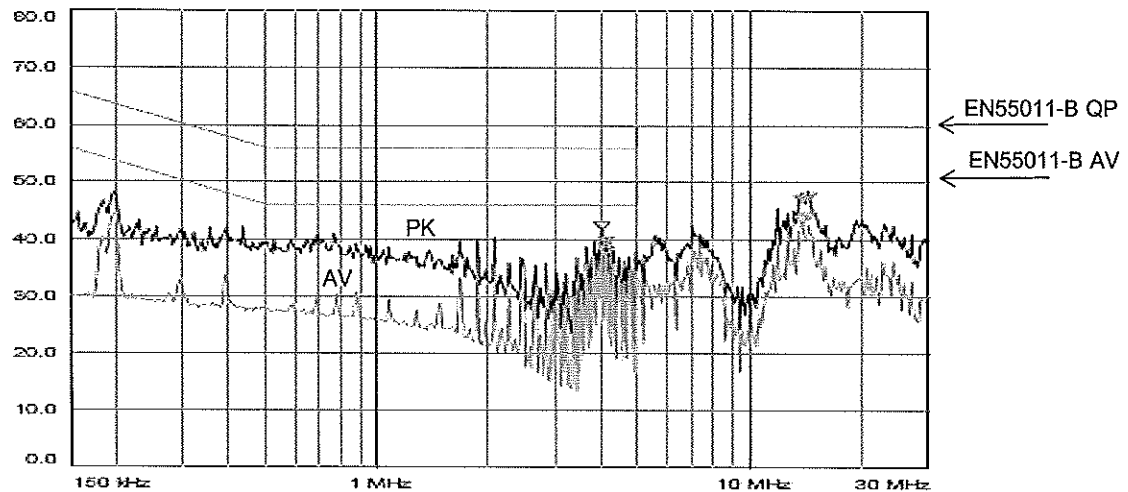
Z650-0.64

dB μ V



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	13.66	47.6	43.2	60.0	50.0	-12.4	-6.8
	14.24	47.1	43.9	60.0	50.0	-13.0	-6.1

dB μ V



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	4.02	41.7	38.5	56.0	46.0	-14.3	-7.5
	14.24	46.9	43.5	60.0	50.0	-13.1	-6.5

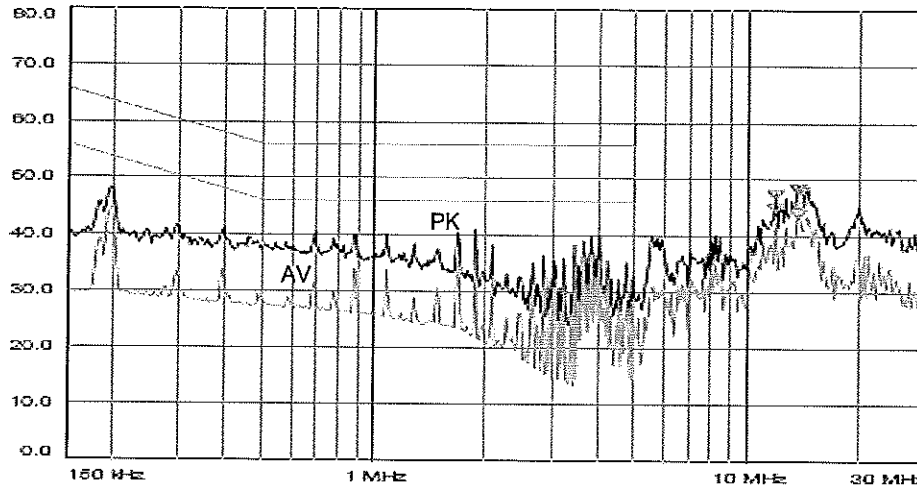
Limit of EN55011-B, EN55022-B are the same

2.1 Conducted Emission

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

Z650-0.64

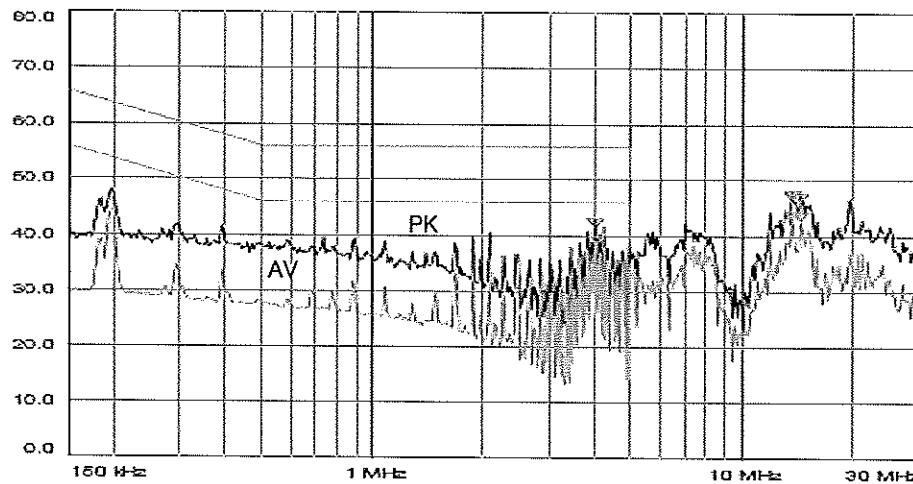
dB μ V



← 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	11.88	46.7	44.2	60.0	50.0	-13.3	-5.8
	13.85	47.3	44.6	60.0	50.0	-12.7	-5.4

dB μ V



← EN55011-B QP
 ← EN55011-B AV

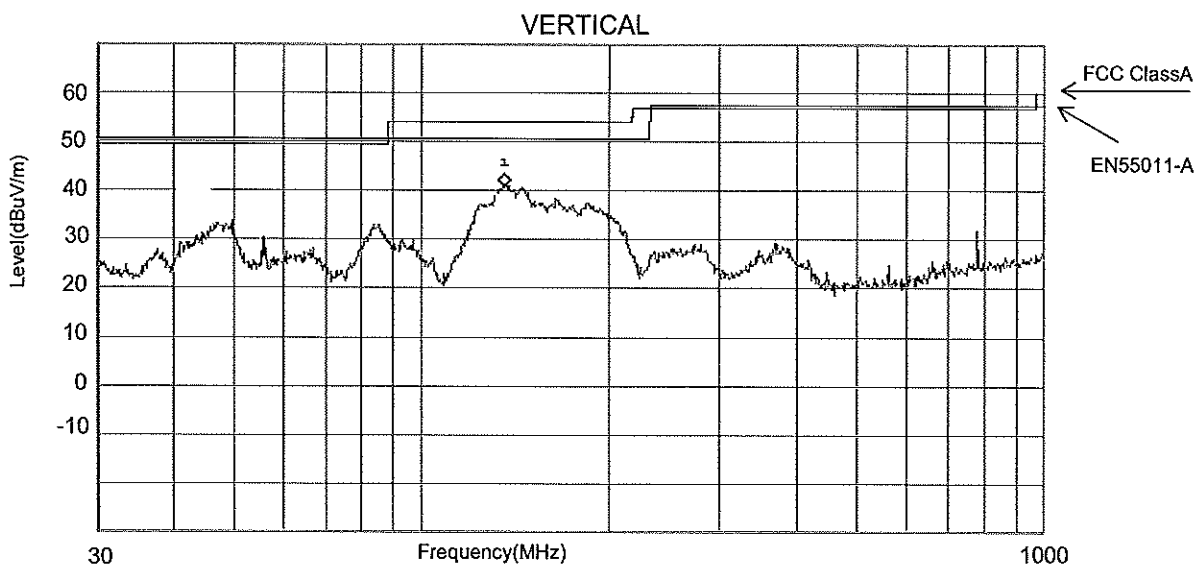
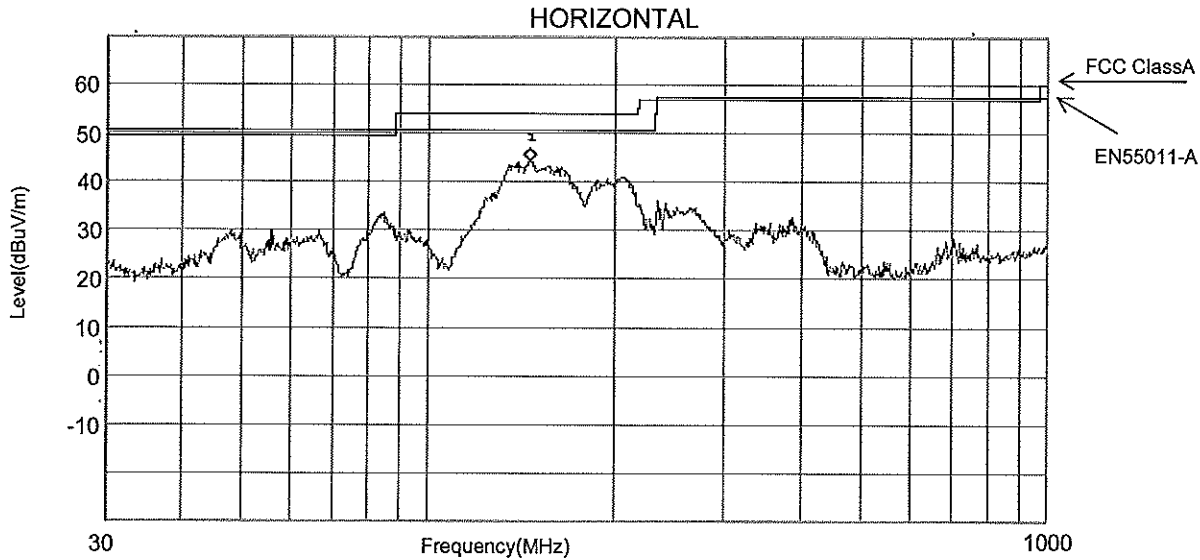
PHASE	FREQ MHz	RESULT		LIMIT		MARGIN	
		QP dB μ V	AV dB μ V	QP dB μ V	AV dB μ V	QP dB μ V	AV dB μ V
N	4.03	41.7	38.6	56.0	46.0	-14.4	-7.4
	14.24	46.4	42.8	60.0	50.0	-13.7	-7.2

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

2.2 Radiated Emission

Z160-2.6

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



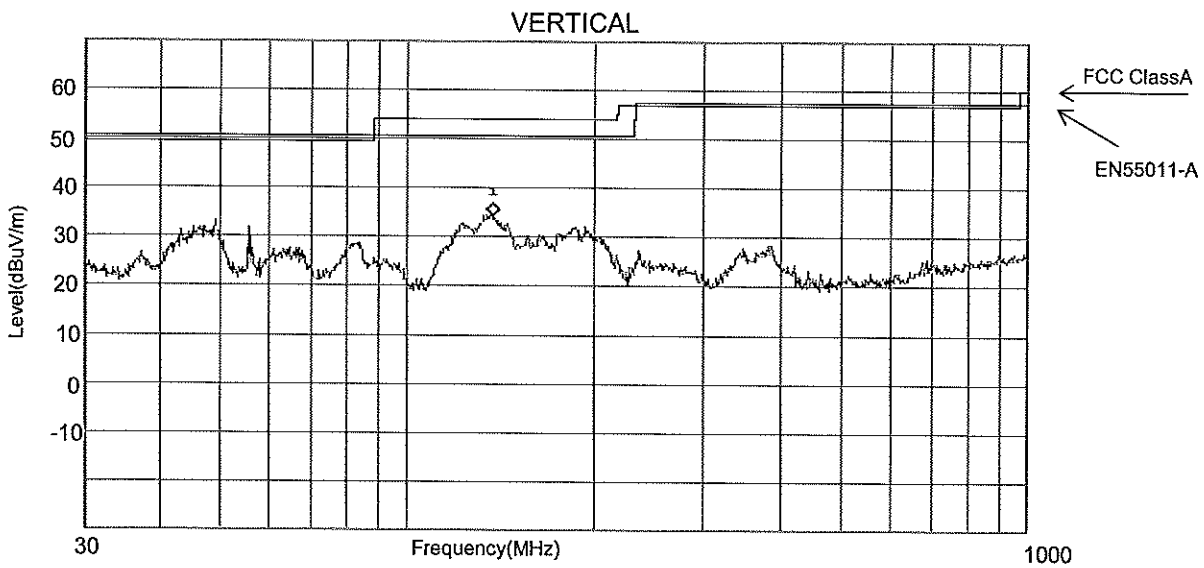
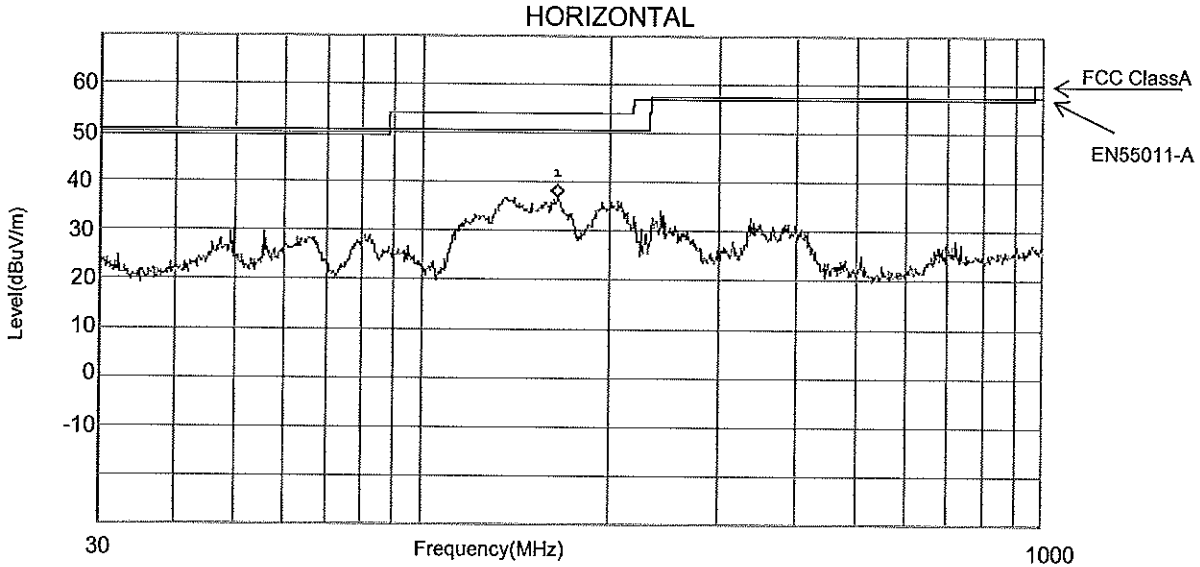
Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
135.3	40.9	36.4	54(FCC)	17.6	Vertical
135.3	40.9	36.4	50.7(EN)	14.3	Vertical
145.6	44.3	40.2	54(FCC)	11.5	Horizontal
145.6	44.3	40.2	50.7(EN)	12.5	Horizontal

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

2.2 Radiated Emission

Z160-2.6

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.
136.9	34.5	30.3	54(FCC)	23.7	Vertical
136.9	34.5	30.3	50.7(EN)	20.4	Vertical
164.1	36.7	32.3	54(FCC)	21.7	Horizontal
164.1	36.7	32.3	50.7(EN)	18.4	Horizontal

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

2.2 Radiated Emission

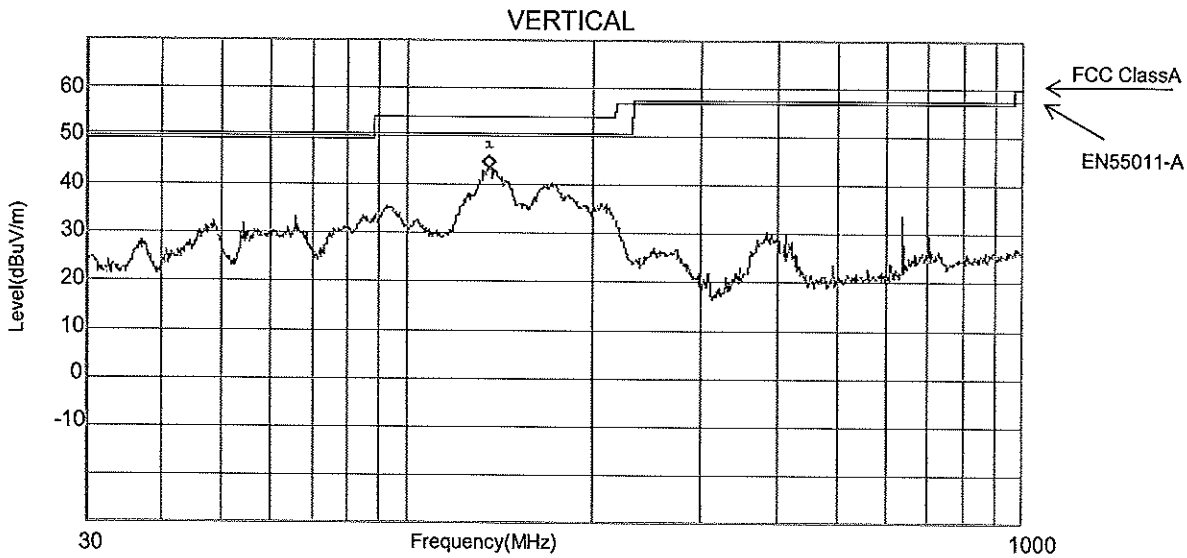
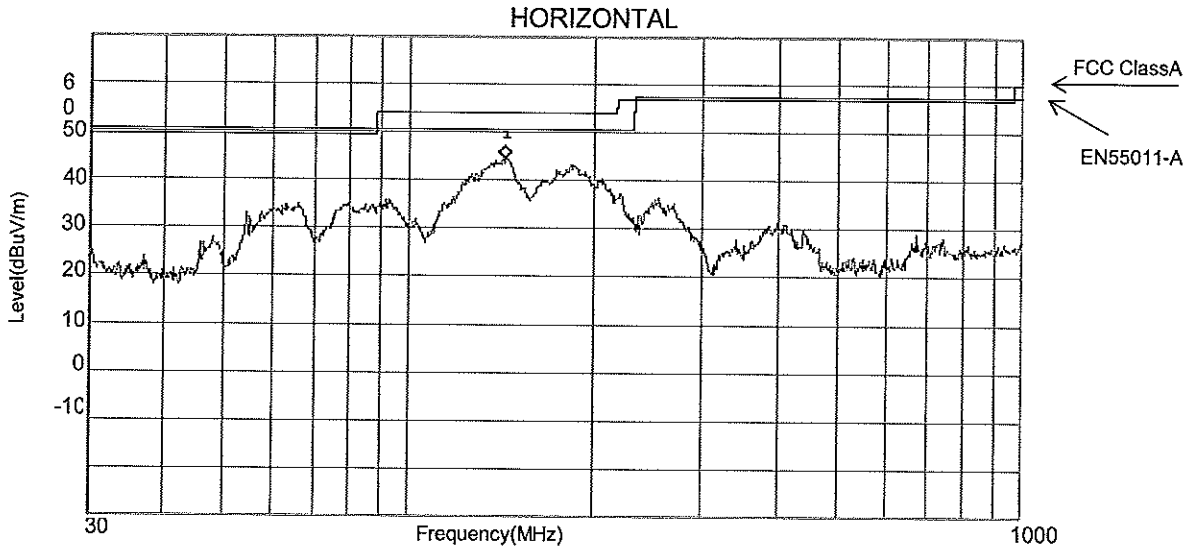
Z650-0.64

Conditions: Vin: 115VAC

Vout: 100%

Iout: 100%

Ta: 25°C



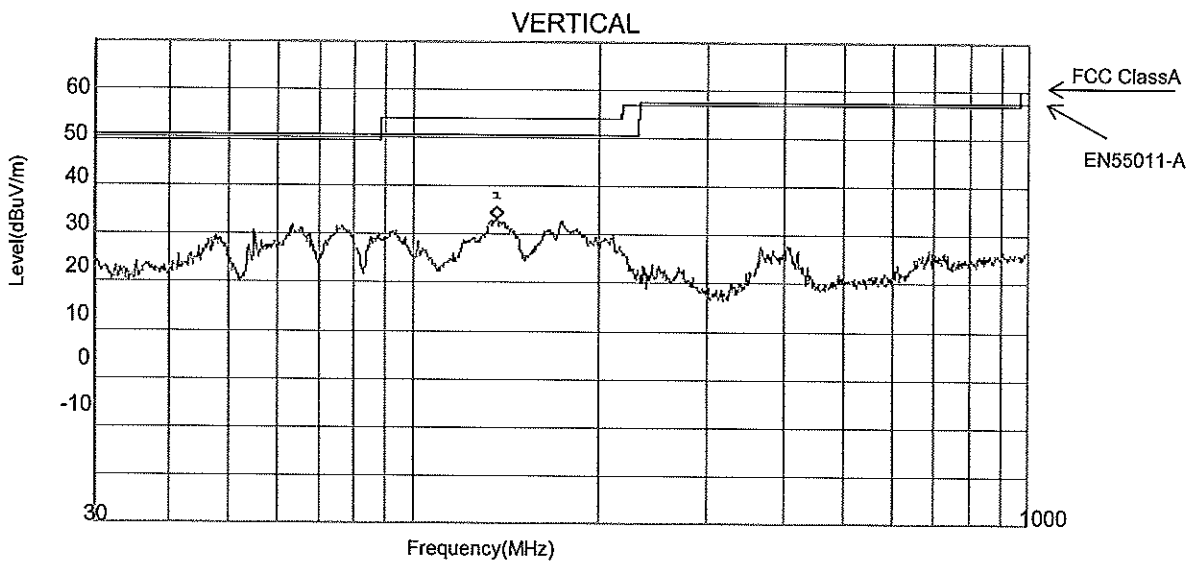
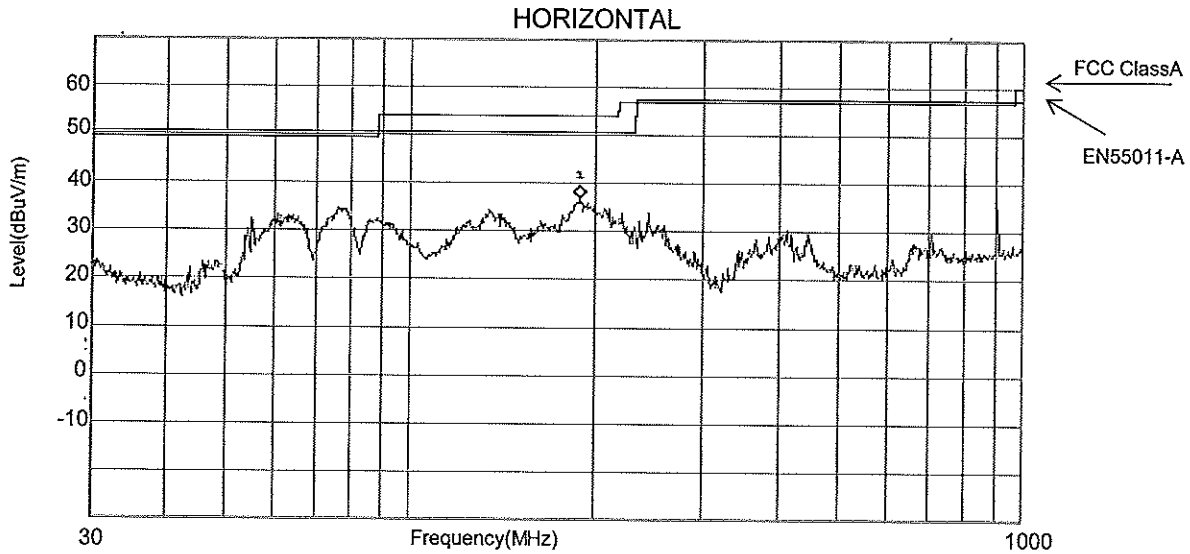
Freq (MHz)	Peak Amp (dBuV/m)	QP Amp (dBuV/m)	Limit (dBuV/m)	QP margin (dB)	Polariz.
135.3	43.5	39.5	54(FCC)	14.5	Vertical
135.3	43.5	39.5	50.5(EN)	11.0	Vertical
142.8	44.7	40.7	54(FCC)	13.3	Horizontal
142.8	44.7	40.7	50.5(EN)	9.8	Horizontal

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

2.2 Radiated Emission

Z650-0.64

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.
136.3	33.0	29.2	54(FCC)	24.8	Vertical
136.3	33.0	29.2	50.5(EN)	21.3	Vertical
187.8	36.8	32.8	54(FCC)	21.2	Horizontal
187.8	36.8	32.8	50.5(EN)	17.7	Horizontal

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