

GEN 2400 SERIES EMI TEST DATA

DWG:		
APPD	CHK	DWG
<i>h</i> August-2008	21/08/08 <i>J</i>	<i>Dina</i> 21/08/08

 **NEMIC-LAMBDA LTD**

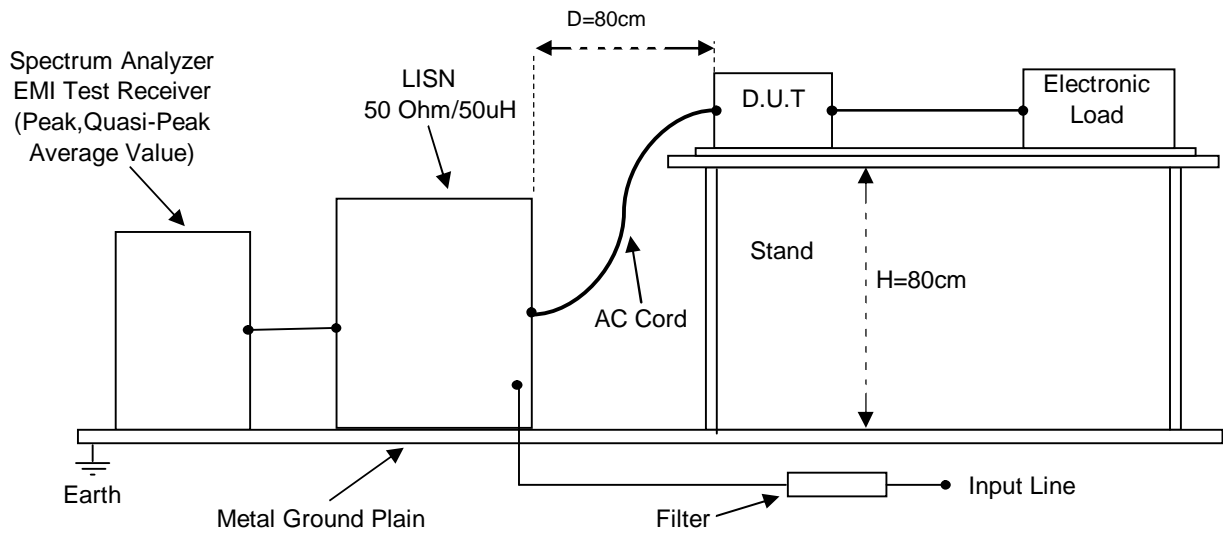
INDEX	PAGE
1. TEST METHOD	R-1
2. TEST DATA	
2-1. Conducted emission	R2
2-2. Radiated emission	R18

The above data is typical value data.
The values are considered to be actual capability data.

1. Test Method

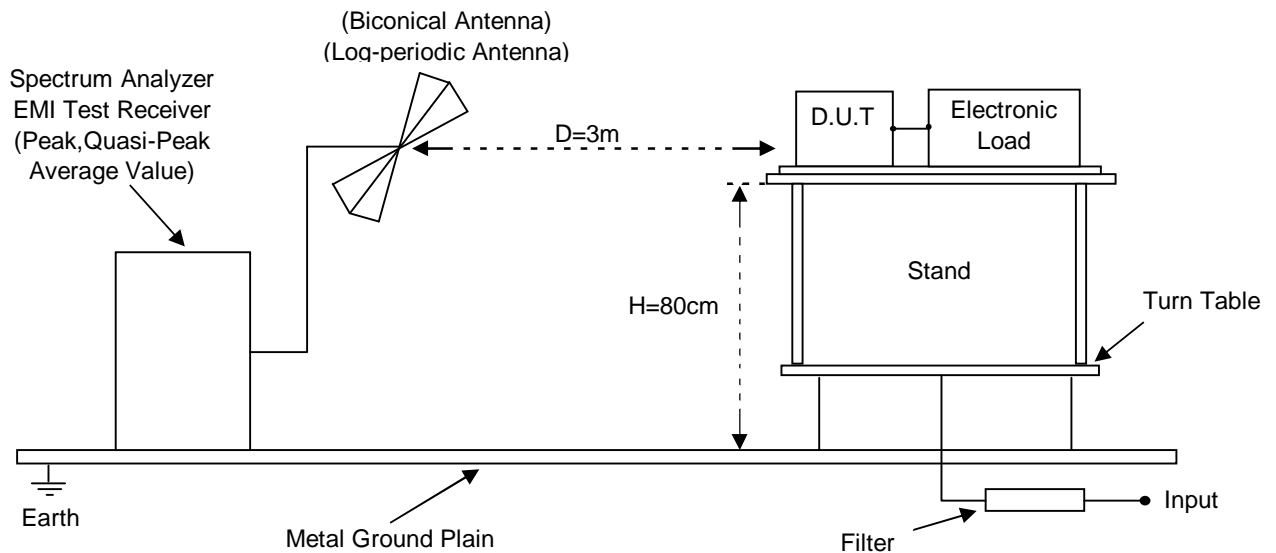
GEN 2400W

(1) Conducted Emission



SPECTRUM ANALYZER	8567A	(HEWLETT. PACKARD)
EMI TEST RECEIVER	ESS	(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

GEN 2400W

2.1 Conducted Emission

Model: GEN 8-300 1P200

(1) Test condition

Input voltage/frequency: 230VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC Class A, EN55022-A

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

EN55022-A, FCC Class A							
PHASE	FREQ	RESULT		LIMIT		MARGIN	
		QP	AV	QP	AV	QP	AV
	MHz	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V
L	0.18649	62.86	55.33	79.00	66.00	16.14	10.67
	18.69126	47.76	42.57	73.00	60.00	25.24	17.43
N	0.18687	63.74	56.12	79.00	66.00	15.26	9.88
	19.18311	48.18	43.11	73.00	60.00	24.82	16.89

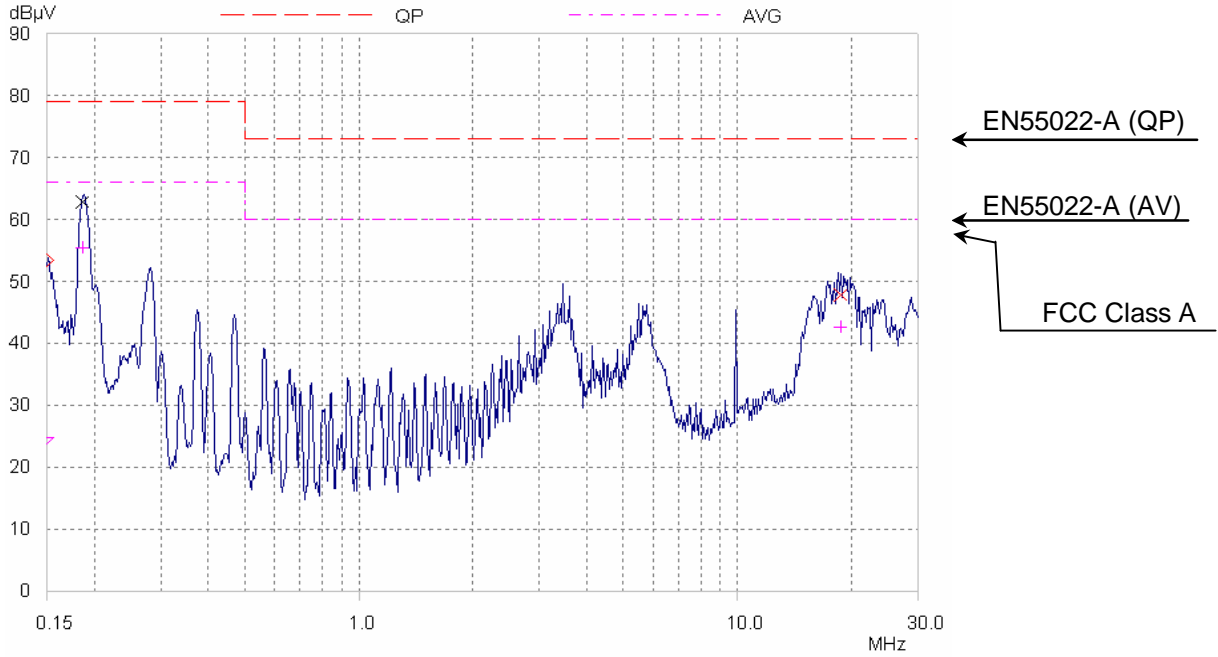
GEN 2400W

EMI
Electro-Magnetic Interference characteristics

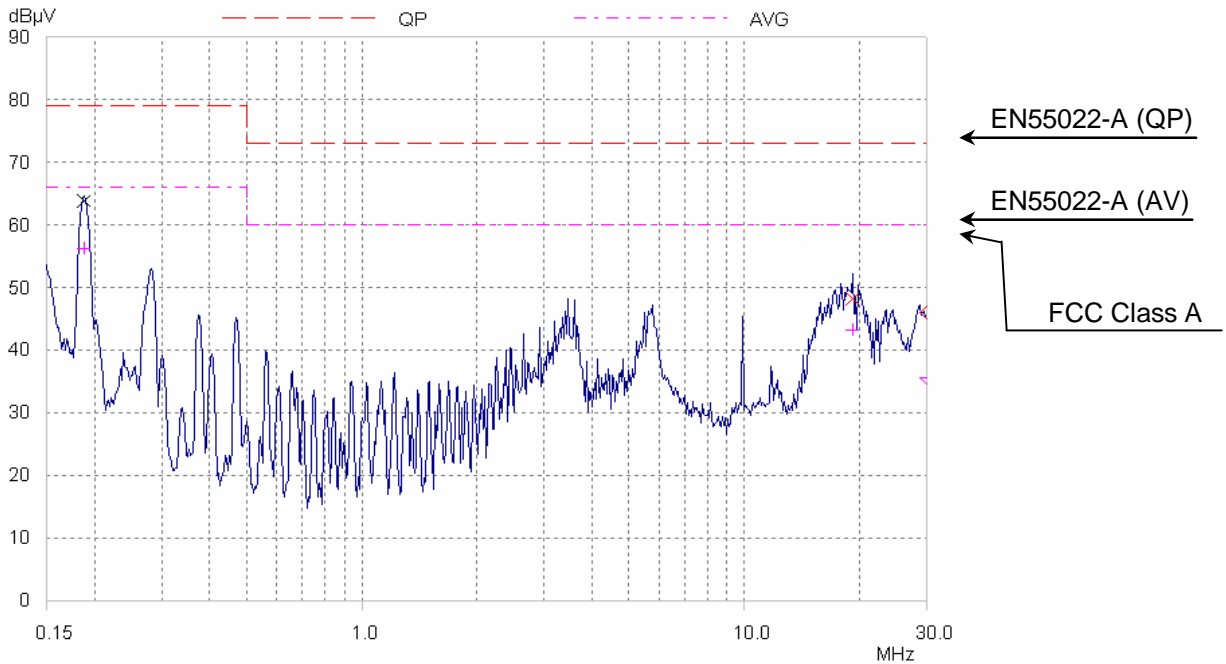
Model: GEN 8-300 1P200

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

Phase L



Phase N



2. Test Data

GEN 2400W

2.1 Conducted Emission

MODEL: GEN 8-300 3P200

(1) Test condition

Input voltage/frequency: 3PHASE 230VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC Class A, EN55022-A

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

EN55022-A, FCC Class A							
PHASE	FREQ	RESULT		LIMIT		MARGIN	
		QP	AV	QP	AV	QP	AV
	MHz	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V
L1	0.18799	60	56.07	79.00	66.00	19.00	9.93
	3.44783	52.98	51.43	73.00	60.00	20.02	8.57
	19.57024	52.44	49.76	73.00	60.00	20.56	10.24
L2	0.18776	60.68	55.66	79.00	66.00	18.32	10.34
	3.44783	47.70	45.88	73.00	60.00	25.30	14.12
						0.00	0.00
L3	0.18724	59.86	55.42	79.00	66.00	19.14	10.58
	3.44783	48.42	46.61	73.00	60.00	24.58	13.39
						0.00	0.00

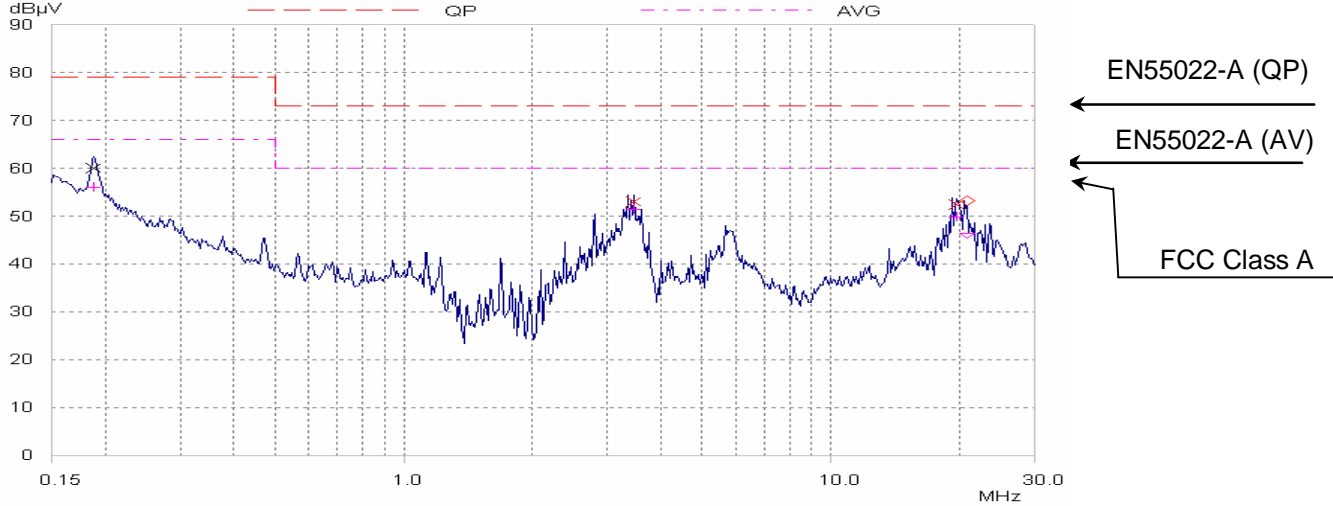
GEN 2400W

EMI
Electro-Magnetic Interference characteristics

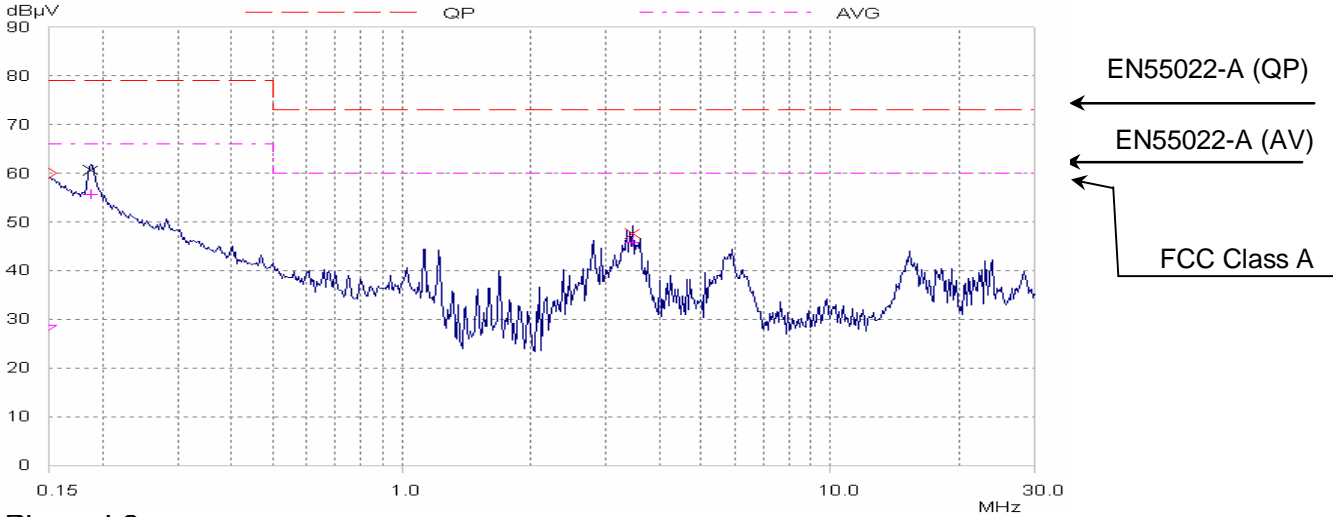
MODEL: GEN 8-300 3P200

Conditions: Vin: 3PHASE 230VAC
Iout: 100%
Vout: 100%
Ta: 25°C

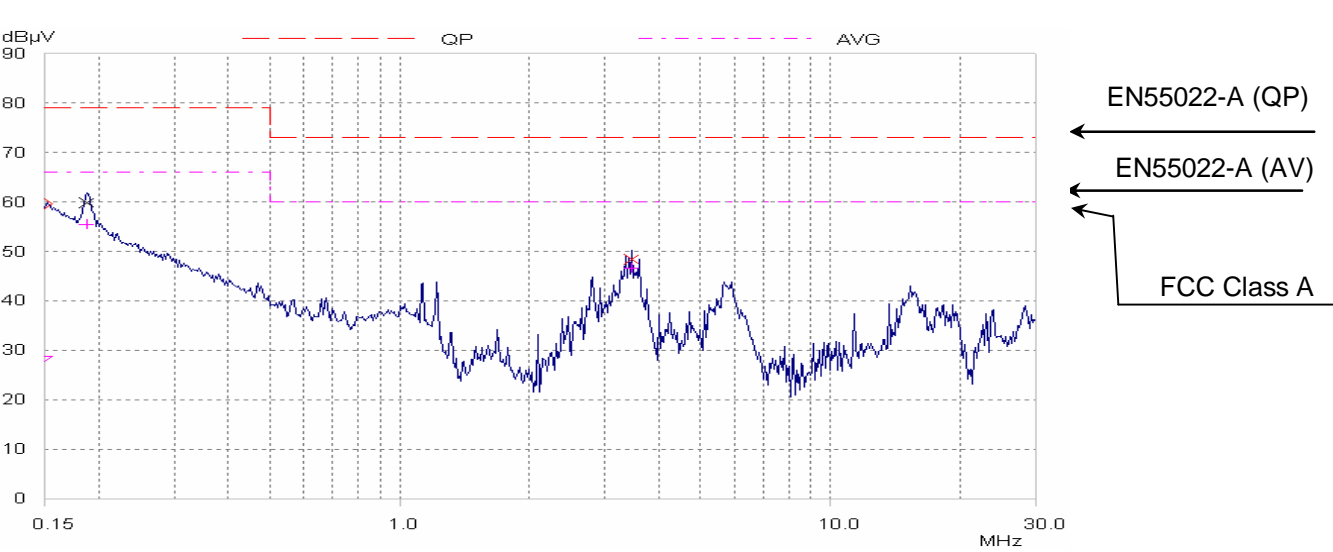
Phase L1



Phase L2



Phase L3



2. Test Data

GEN 2400W

2.1 Conducted Emission

MODEL: GEN 60-40 1P200

(1) Test condition

Input voltage/frequency: 230VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC Class A, EN55022-A

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

EN55022-A, FCC Class A							
PHASE	FREQ	RESULT		LIMIT		MARGIN	
		QP	AV	QP	AV	QP	AV
	MHz	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V
L	0.18244	63.24	55.33	79.00	66.00	15.76	10.67
N	0.18244	62.50	54.60	79.00	66.00	16.50	11.40

GEN 2400W

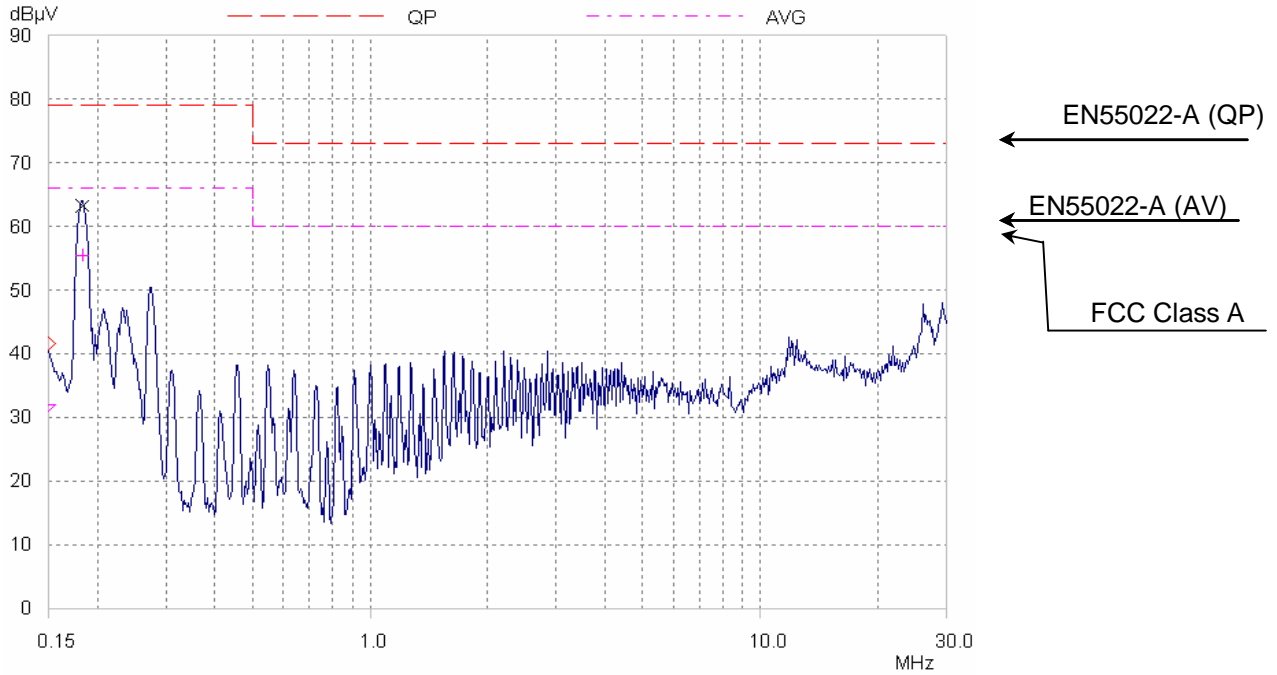
EMI
Electro-Magnetic Interference characteristics

MODEL: GEN 60-40 1P200

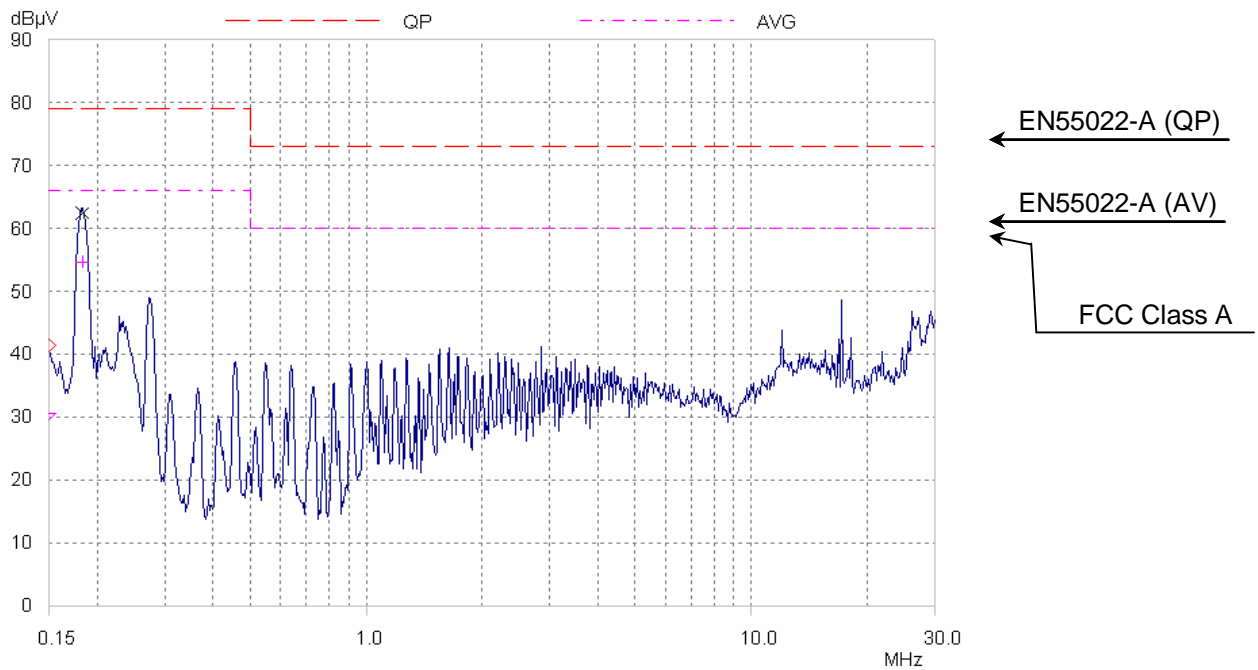
Conditions:

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

Phase L



Phase N



2. Test Data

GEN 2400W

2.1 Conducted Emission

MODEL: GEN 60-40 3P200

(1) Test condition

Input voltage/frequency: 3PHASE 230VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC Class A, EN55022-A

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

EN55022-A, FCC Class A							
PHASE	FREQ	RESULT		LIMIT		MARGIN	
		QP	AV	QP	AV	QP	AV
	MHz	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V
L1	0.18244	60.02	56.88	79.00	66.00	18.98	9.12
L2	0.18244	60.76	56.35	79.00	66.00	18.24	9.65
	1.26965	46.02	41.99	73.00	60.00	26.98	18.01
L3	0.18244	60.54	56.28	79.00	66.00	18.46	9.72
	1.27473	44.16	37.70	73.00	60.00	28.84	22.30

GEN 2400W

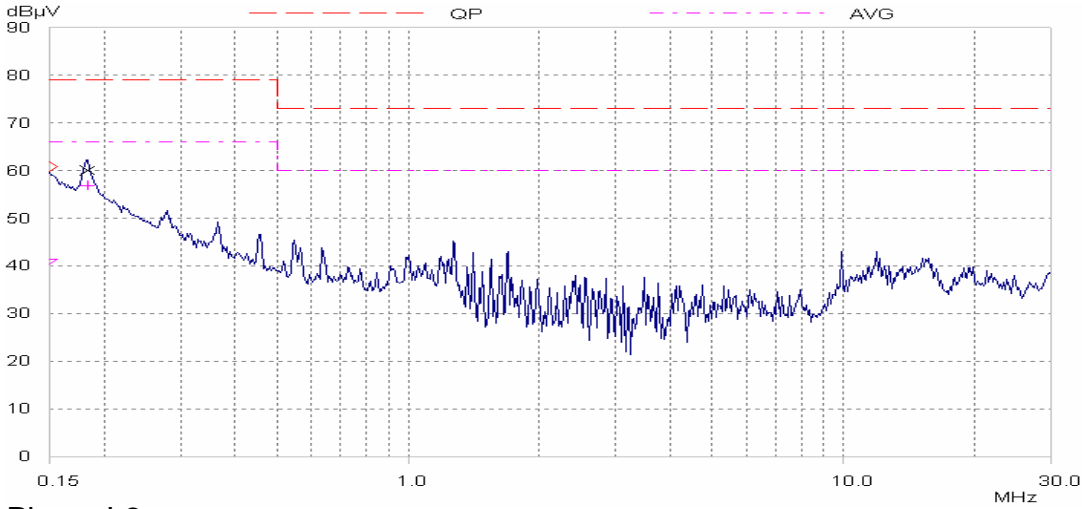
EMI
Electro-Magnetic Interference characteristics

MODEL: GEN 60-40 3P200

Conditions:

Vin: 3PHASE 230VAC
Iout: 100%
Vout: 100%
Ta: 25°C

Phase L1



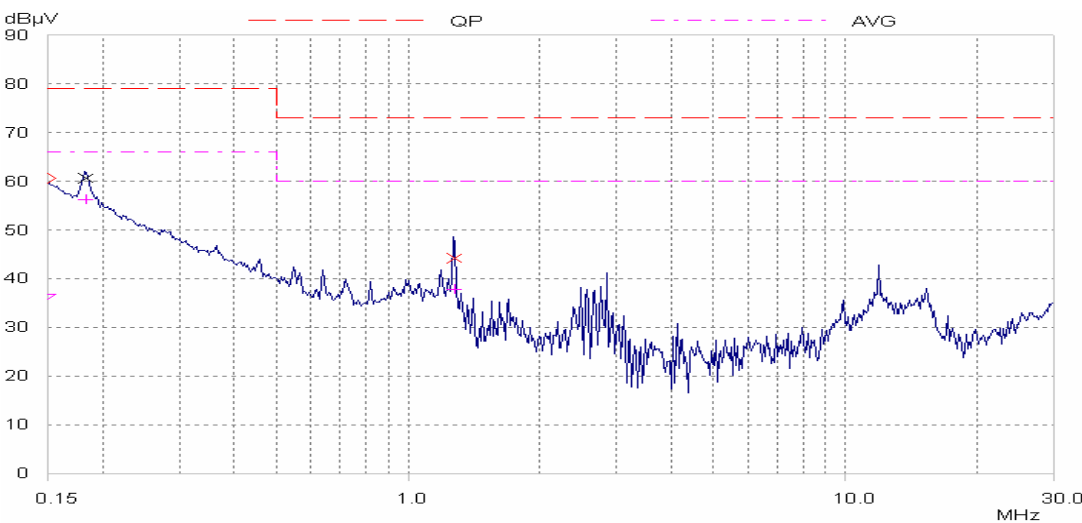
← EN55022-A (QP)
← EN55022-A (AV)
← FCC Class A

Phase L2



← EN55022-A (QP)
← EN55022-A (AV)
← FCC Class A

Phase L3



← EN55022-A (QP)
← EN55022-A (AV)
← FCC Class A

2. Test Data

GEN 2400W

2.1 Conducted Emission

MODEL: GEN 150-16 1P200

(1) Test condition

Input voltage/frequency: 230VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC Class A, EN55022-A

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

EN55022-A, FCC Class A							
PHASE	FREQ	RESULT		LIMIT		MARGIN	
		QP	AV	QP	AV	QP	AV
	MHz	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V
L	0.18280	62.28	57.20	79.00	66.00	16.72	8.80
	12.53413	39.6	33.59	73.00	60.00	33.40	26.41
N	0.18280	63.24	57.98	79.00	66.00	15.76	8.02
	12.53413	48.24	45.98	73.00	60.00	24.76	14.02

GEN 2400W

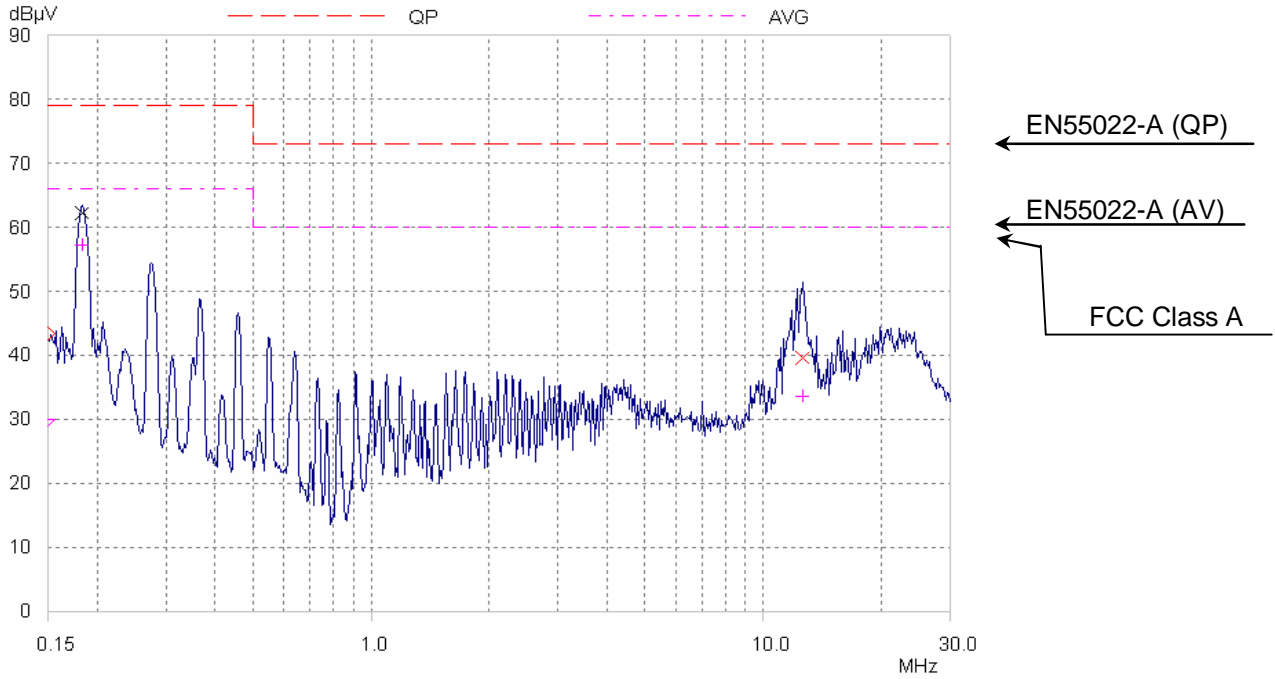
EMI
Electro-Magnetic Interference characteristics

MODEL: GEN 150-16 1P200

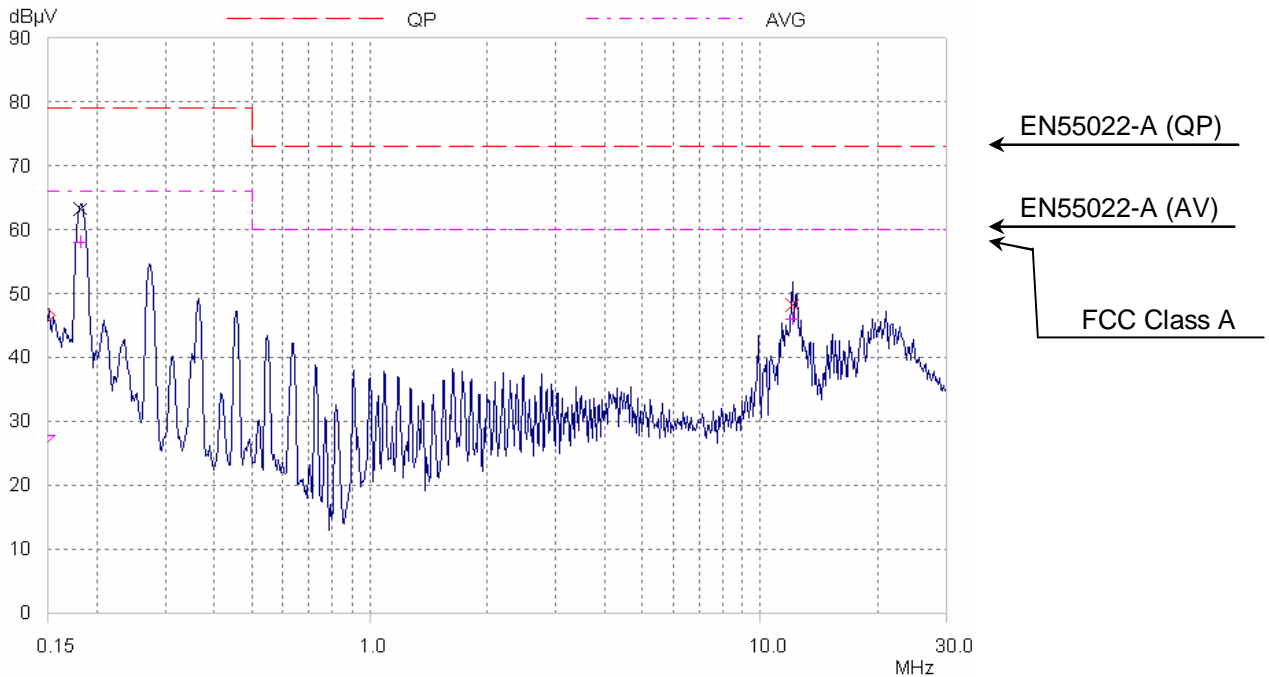
Conditions:

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

Phase L



Phase N



2. Test Data

GEN 2400W

2.1 Conducted Emission

MODEL: GEN 150-16 3P200

(1) Test condition

Input voltage/frequency: 3PHASE 230VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC Class A, EN55022-A

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Interference wave list

EN55022-A, FCC Class A							
PHASE	FREQ	RESULT		LIMIT		MARGIN	
		QP	AV	QP	AV	QP	AV
	MHz	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V
L1	0.18135	60.5	57.05	79.00	66.00	18.50	8.95
L2	0.18099	60.68	56.29	79.00	66.00	18.32	9.71
L3	0.18171	60.82	56.38	79.00	66.00	18.18	9.62

GEN 2400W

EMI
Electro-Magnetic Interference characteristics

MODEL: GEN 150-16 3P200

Conditions:

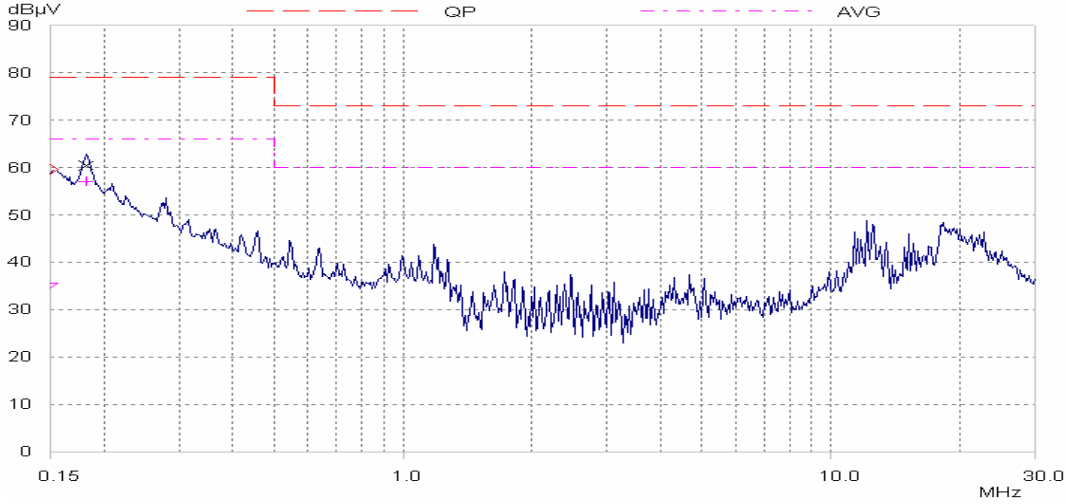
Vin: 3PHASE 230VAC

Iout: 100%

Vout: 100%

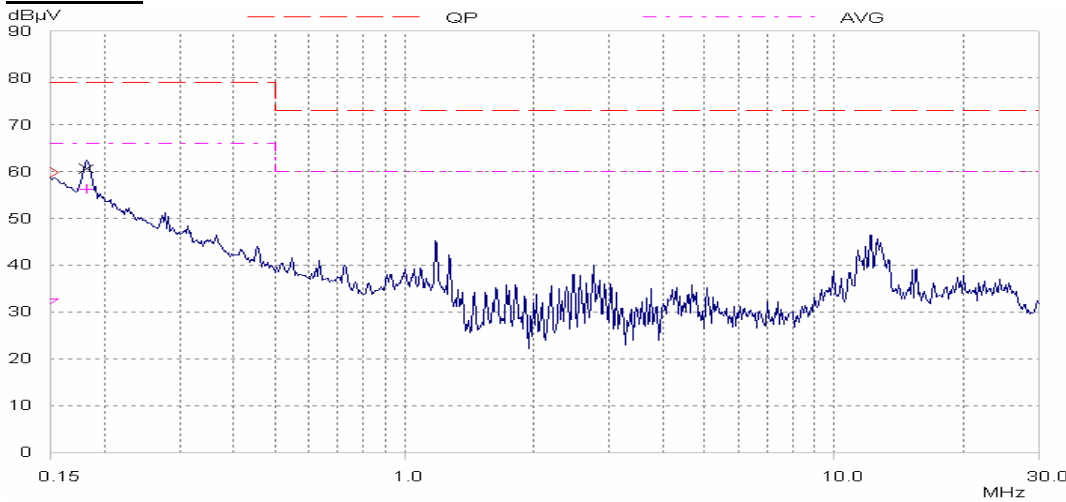
Ta: 25°C

Phase L1



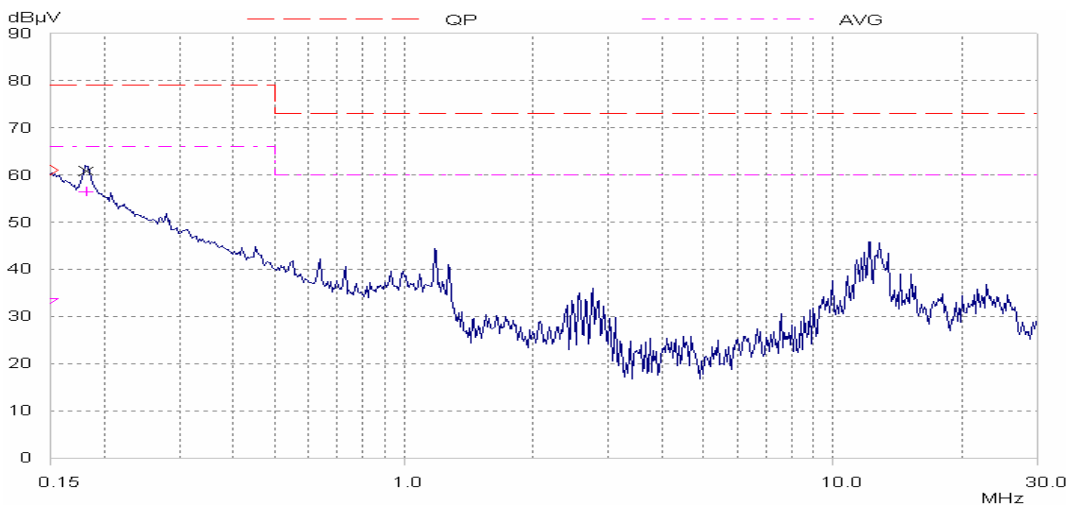
← EN55022-A (QP)
← EN55022-A (AV)
← FCC Class A

Phase L2



← EN55022-A (QP)
← EN55022-A (AV)
← FCC Class A

Phase L3



← EN55022-A (QP)
← EN55022-A (AV)
← FCC Class A

2. Test Data

GEN 2400W

2.1 Conducted Emission

MODEL: GEN 600-4 1P200

(1) Test condition

Input voltage/frequency: 230VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC Class A, EN55022-A

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

EN55022-A, FCC Class A							
PHASE	FREQ	RESULT		LIMIT		MARGIN	
		QP	AV	QP	AV	QP	AV
		MHz	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V
L	0.18354	63.56	56.28	79.00	66.00	15.44	9.72
	0.27534	59.26	56.44	79.00	66.00	19.74	9.56
	23.05417	51.36	47.46	73.00	60.00	21.64	12.54
N	0.18354	64.10	56.58	79.00	66.00	14.90	9.42
	0.27589	56.36	51.61	79.00	66.00	22.64	14.39
	22.96223	48.74	44.08	73.00	60.00	24.26	15.92

GEN 2400W

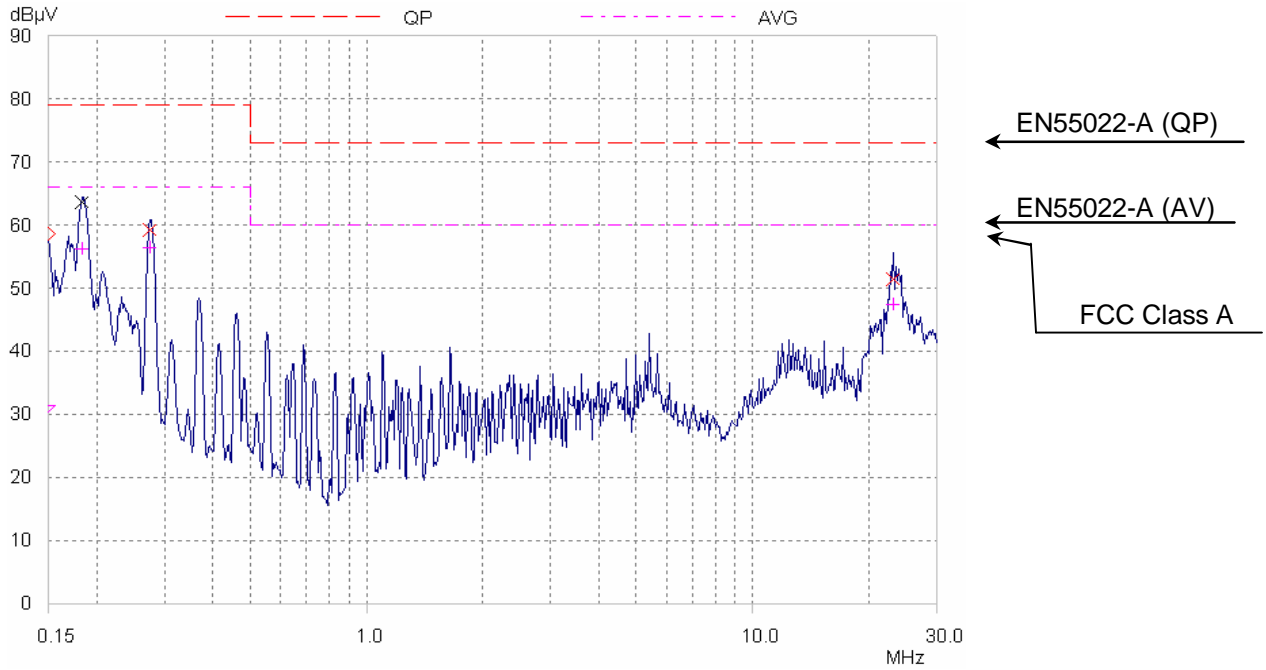
EMI
Electro-Magnetic Interference characteristics

MODEL: GEN 600-4 1P200

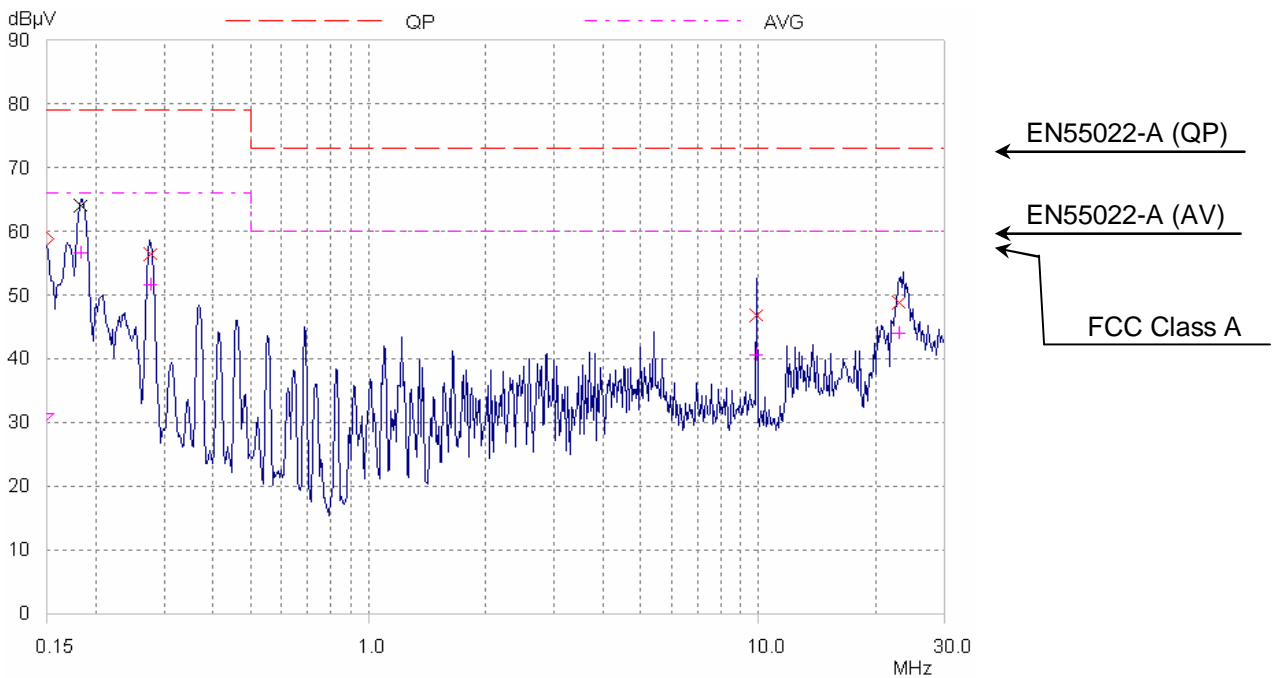
Conditions:

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

Phase L



Phase N



2. Test Data

GEN 2400W

2.1 Conducted Emission

MODEL: GEN 600-4 3P200

(1) Test condition

Input voltage/frequency: 3PHASE 230VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC Class A, EN55022-A

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

EN55022-A, FCC Class A							
PHASE	FREQ	RESULT		LIMIT		MARGIN	
		QP	AV	QP	AV	QP	AV
	MHz	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V	dB μ V
L1	0.18427	60.5	55.99	79.00	66.00	18.50	10.01
L2	0.18501	61.04	55.79	79.00	66.00	17.96	10.21
L3	0.18501	59.72	55.52	79.00	66.00	19.28	10.48

GEN 2400W

EMI Electro-Magnetic Interference characteristics

MODEL: GEN 600-4 3P200

Conditions:

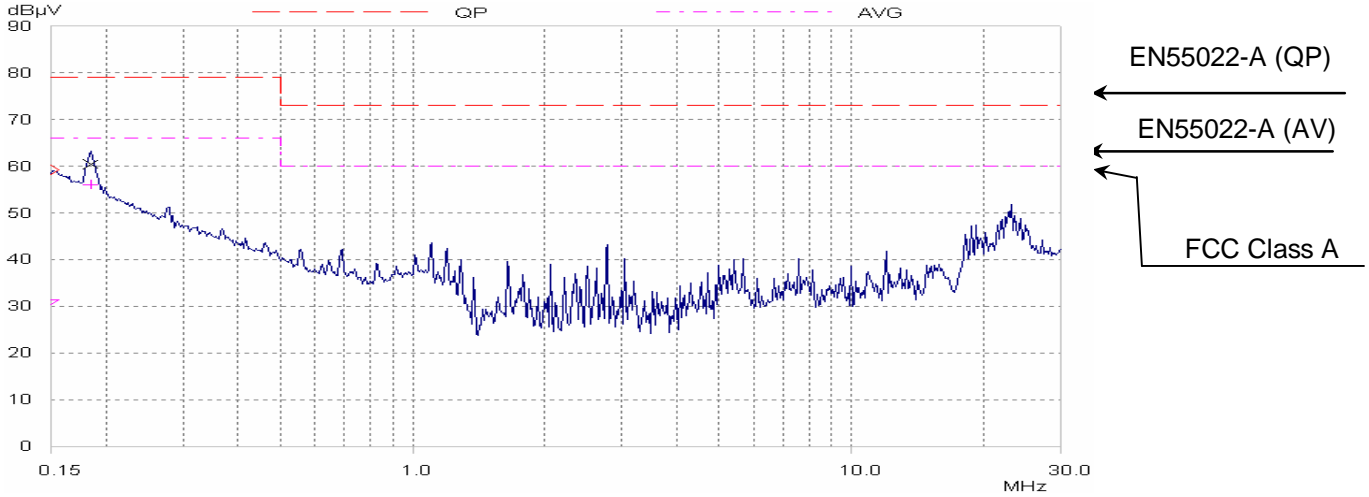
Vin: 3PHASE 230VAC

Iout: 100%

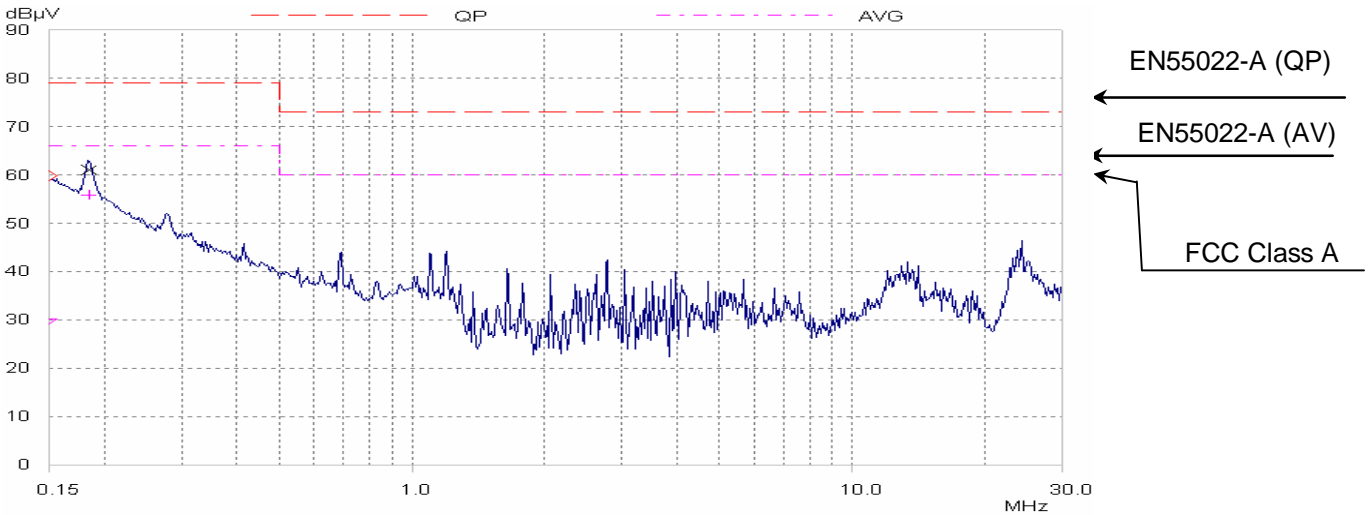
Vout: 100%

Ta: 25°C

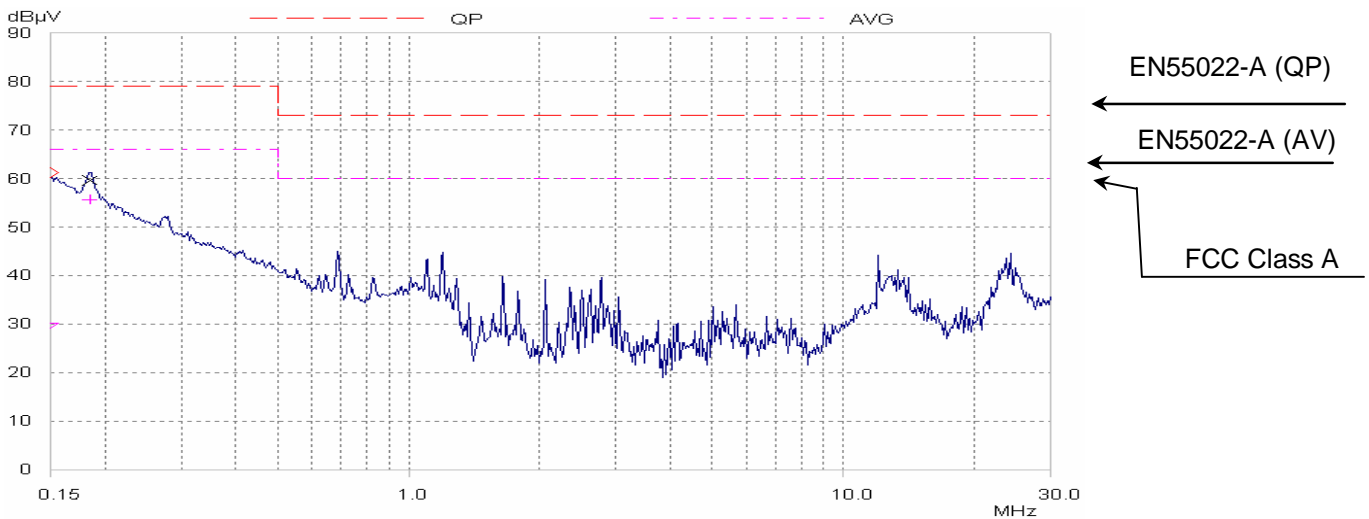
Phase L1



Phase L2



Phase L3

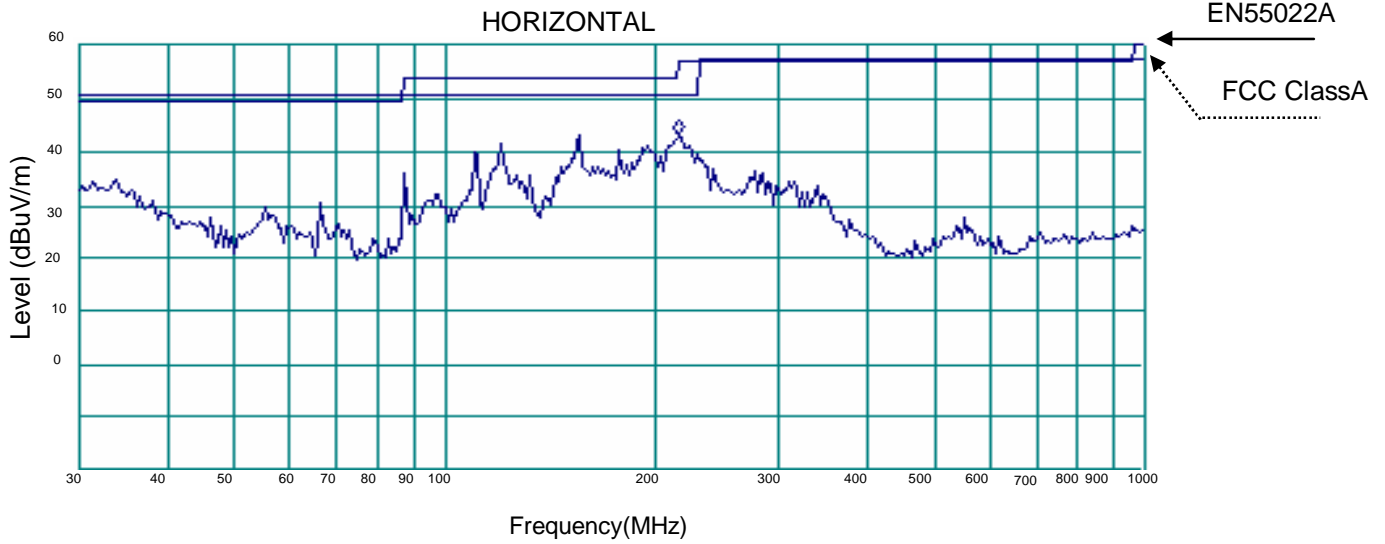


GEN 2400W

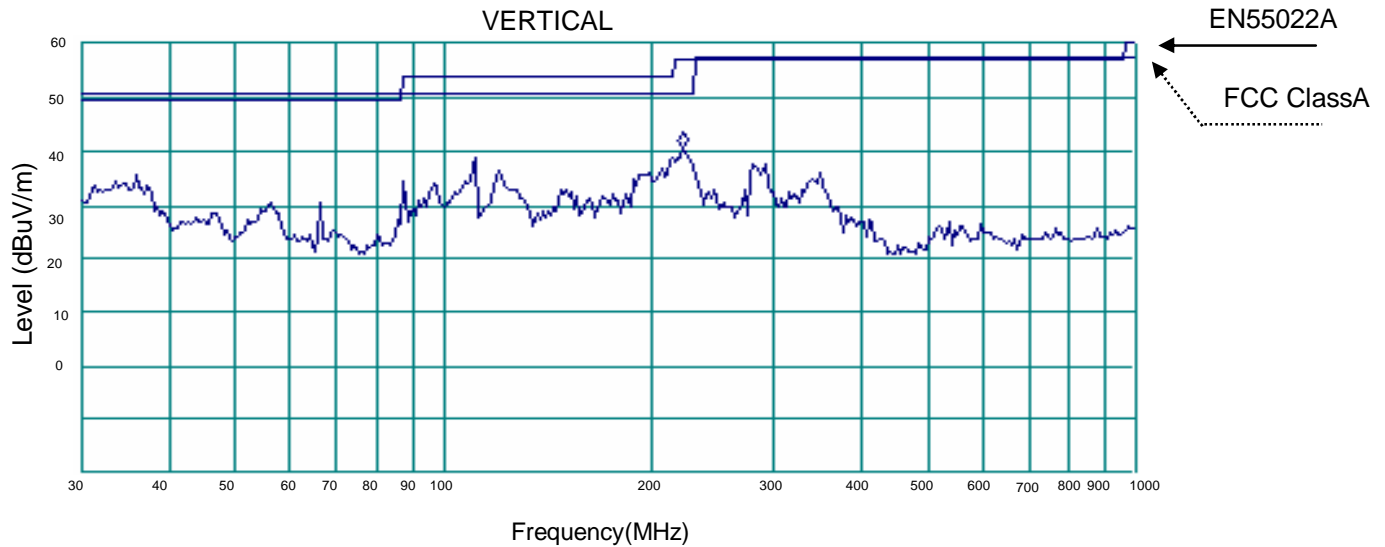
EMI
Electro-Magnetic interference characteristics

MODEL: GEN 8-300 1P200

Conditions: Vin: 230Vac (L-N)
Vout: 100%
Iout: 100%
Ta: 25°C



Freq(MHz)	Peak Amp.(dBuV/m)	QPAmP (dBuV/m)	Limit linedBuV/m	Margin(dB)
216.1	43.14	38.97	50.5	11.53



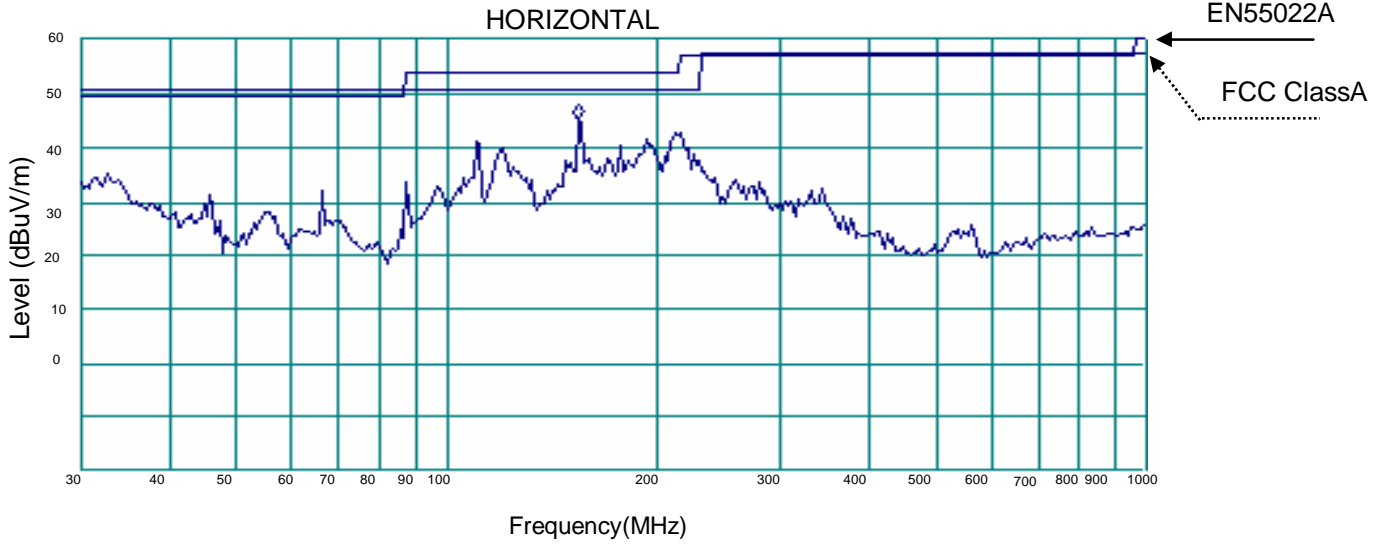
Freq(MHz)	Peak Amp.(dBuV/m)	QPAmP (dBuV/m)	Limit linedBuV/m	Margin(dB)
222.5	40.56	36.47	50.5	14.03

GEN 2400W

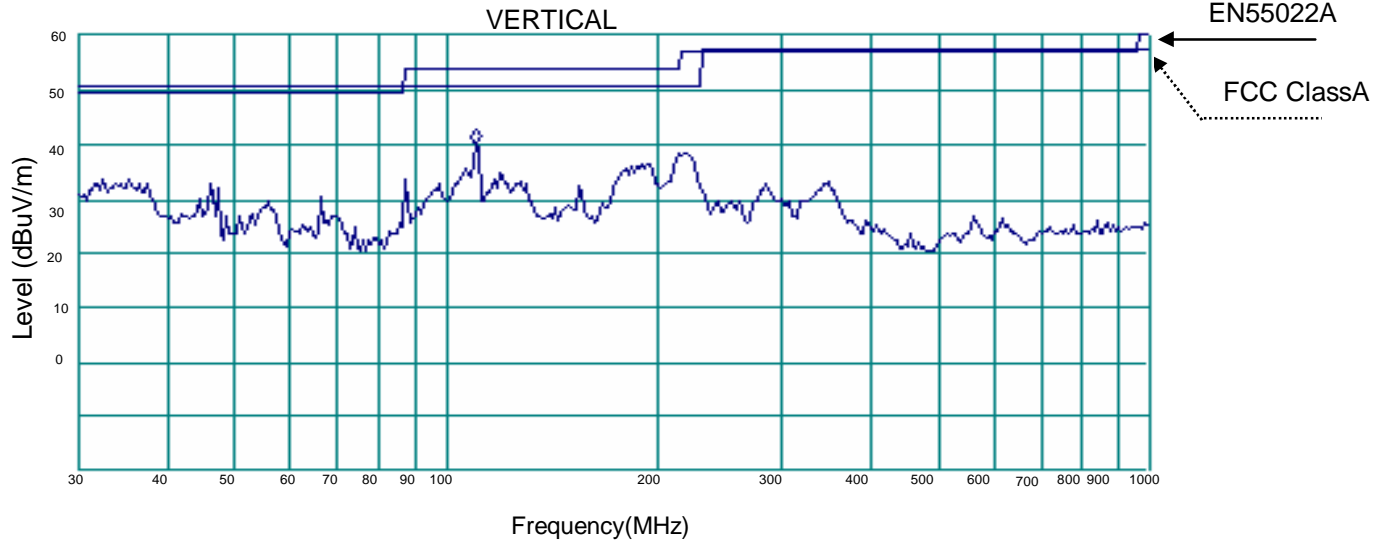
EMI
Electro-Magnetic interference characteristics

MODEL: GEN 8-300 3P200

Conditions: Vin: 230Vac (L-L)
Vout: 100%
Iout: 100%
Ta: 25°C



Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
154.7	45.29	41.21	50.5	9.29



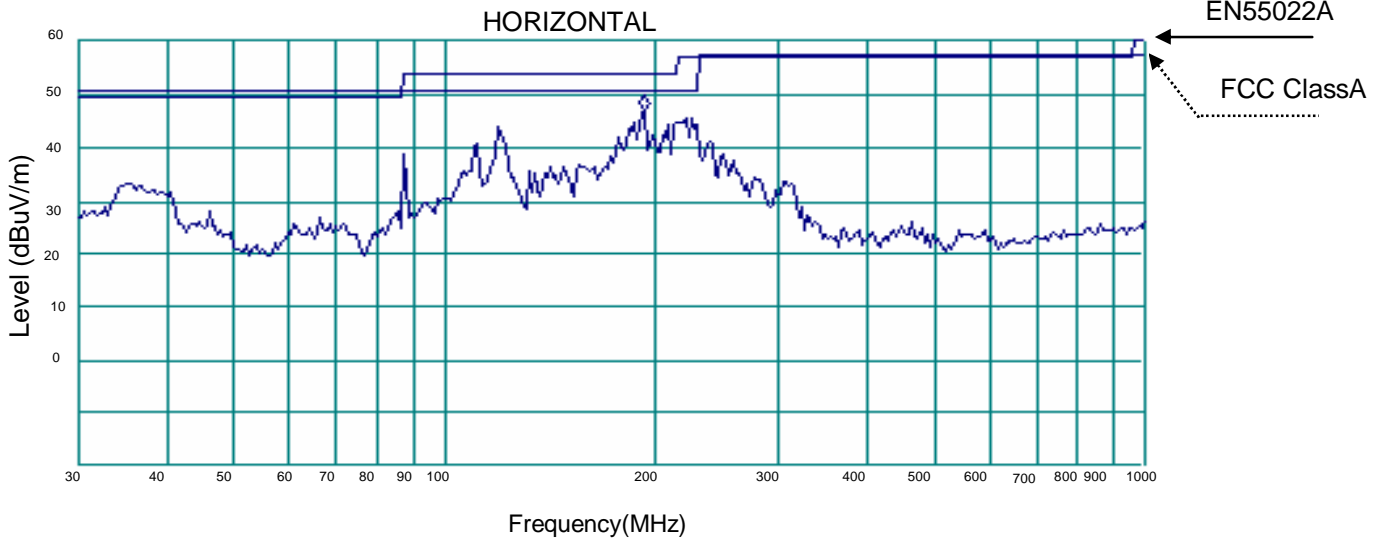
Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
110.3	40.1	36.2	50.5	14.3

GEN 2400W

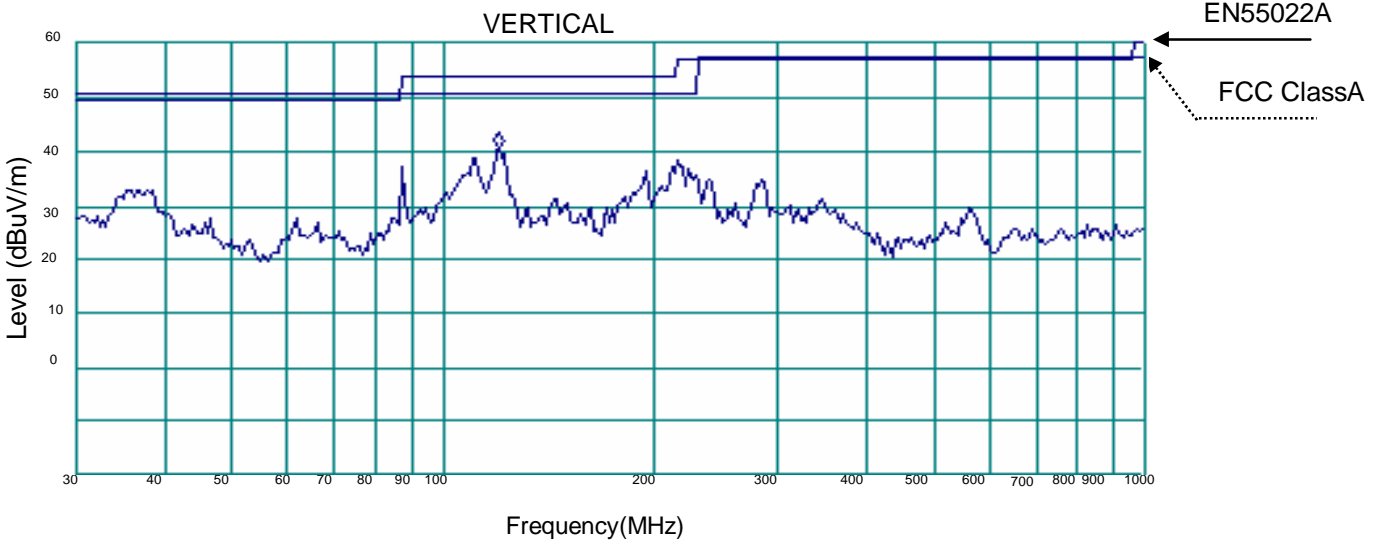
EMI
Electro-Magnetic interference characteristics

MODEL: GEN 60-40 1P200

Conditions: Vin: 230Vac (L-N)
Vout: 100%
Iout: 100%
Ta: 25°C



Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
192.6	46.82	42.64	50.5	7.86



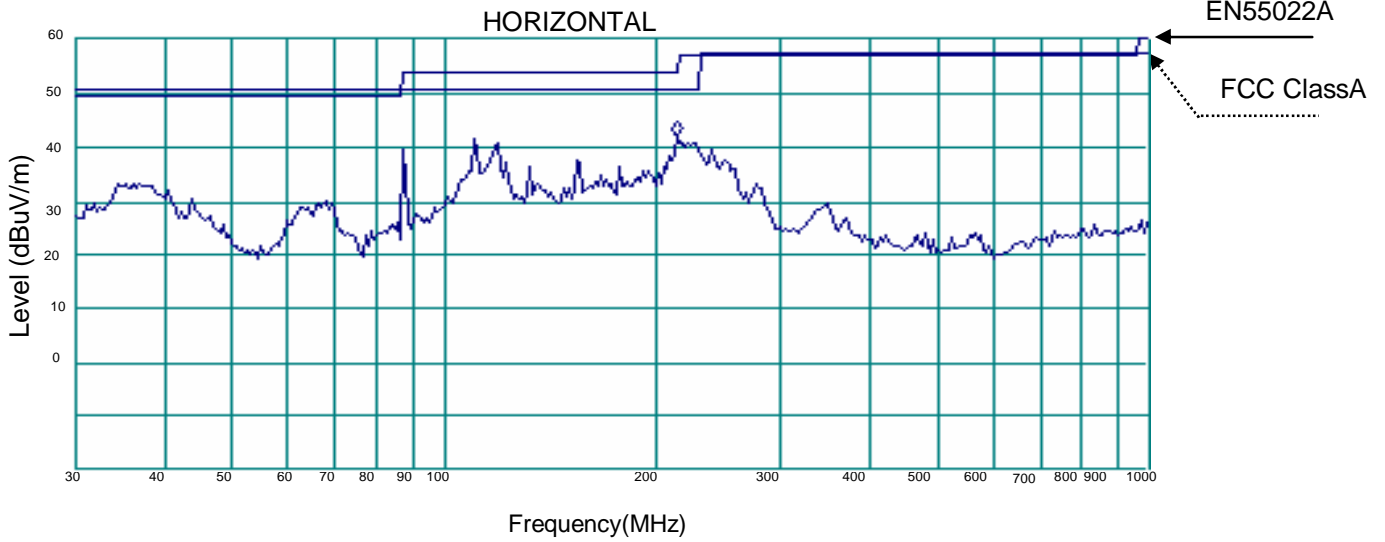
Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
120.8	40.47	36.38	50.5	14.12

GEN 2400W

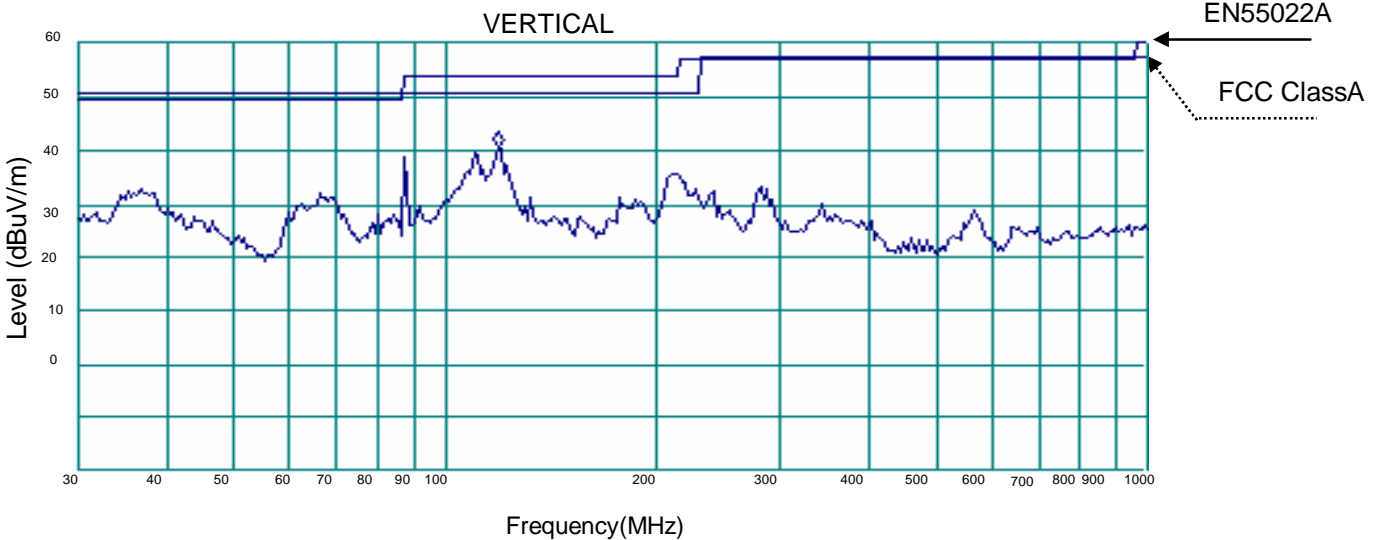
EMI
Electro-Magnetic interference characteristics

MODEL: GEN 60-40 3P200

Conditions: Vin: 230Vac (L-N)
Vout: 100%
Iout: 100%
Ta: 25°C



Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
214	42.03	37.57	50.5	12.93



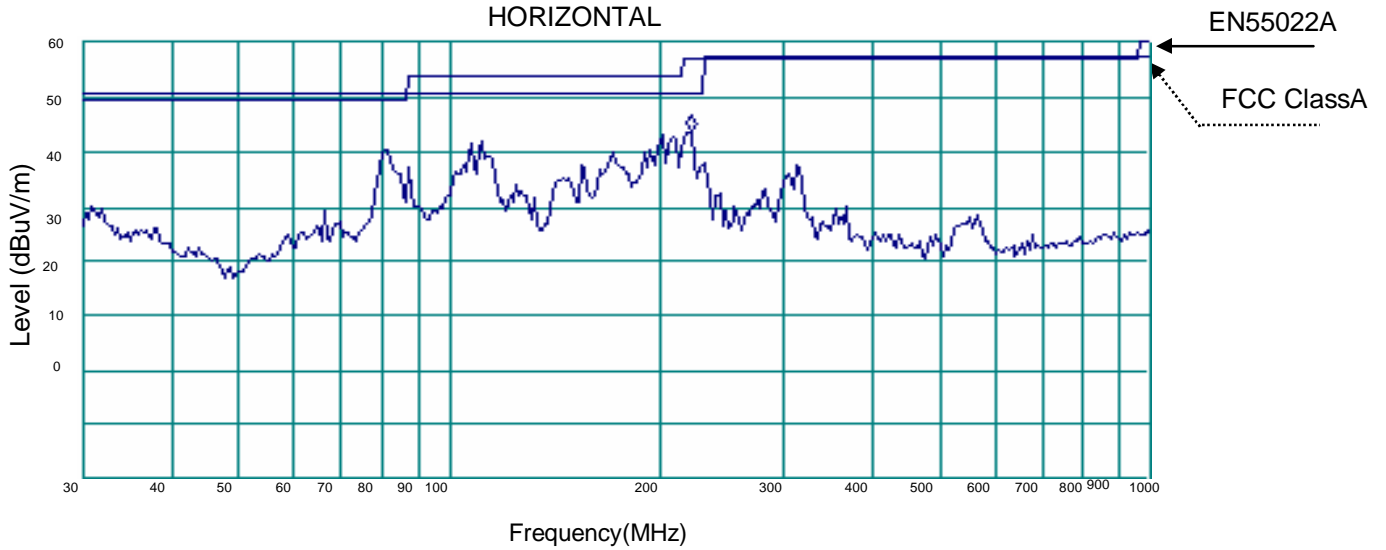
Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
119.6	40.54	35.8	50.5	14.7

GEN 2400W

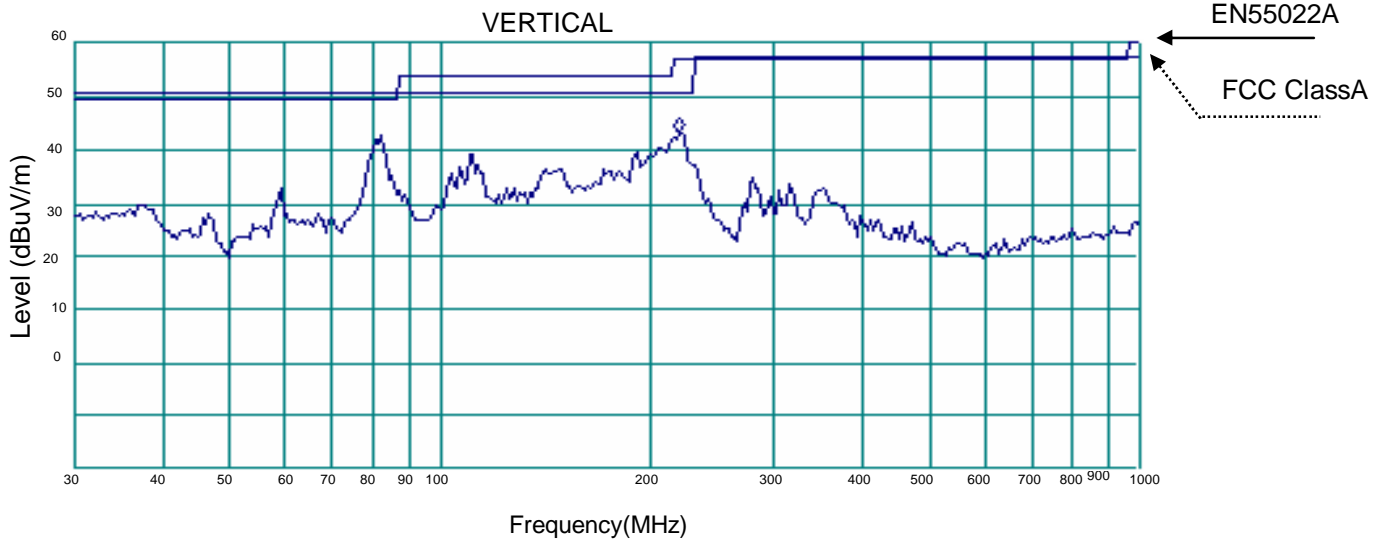
EMI
Electro-Magnetic interference characteristics

MODEL: GEN 150-16 1P200

Conditions: Vin: 230Vac (L-N)
Vout: 100%
Iout: 100%
Ta: 25°C



Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
222.5	43.78	39.3	50.5	11.2



Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
220.4	43.13	38.81	50.5	11.69

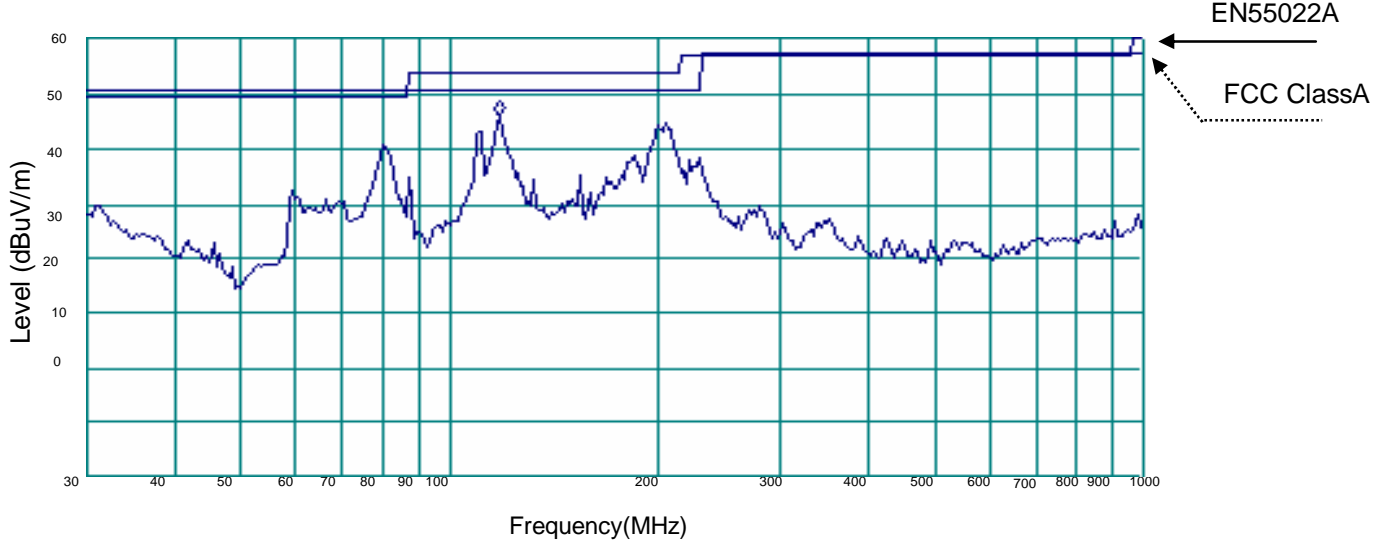
GEN 2400W

EMI
Electro-Magnetic interference characteristics

MODEL: GEN 150-16 3P200

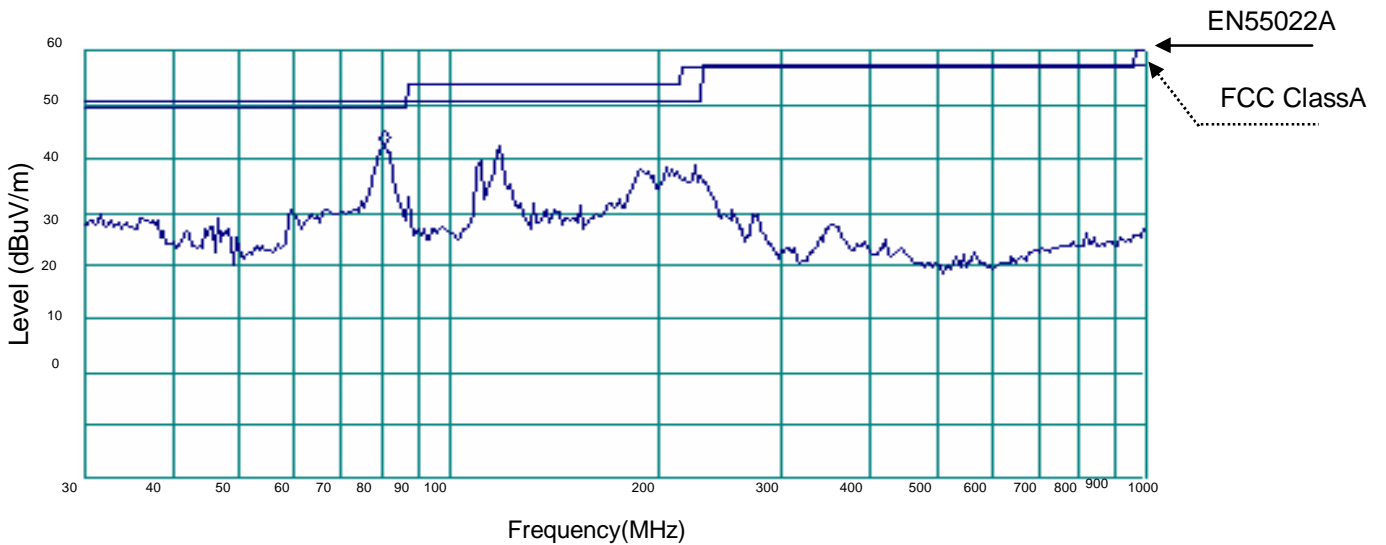
Conditions: Vin: 230Vac (L-L)
Vout: 100%
Iout: 100%
Ta: 25°C

HORIZONTAL



Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
118.5	46.08	42.4	50.5	8.1

VERTICAL



Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
81	42.25	37.6	50.5	12.9

NEMIC-LAMBDA

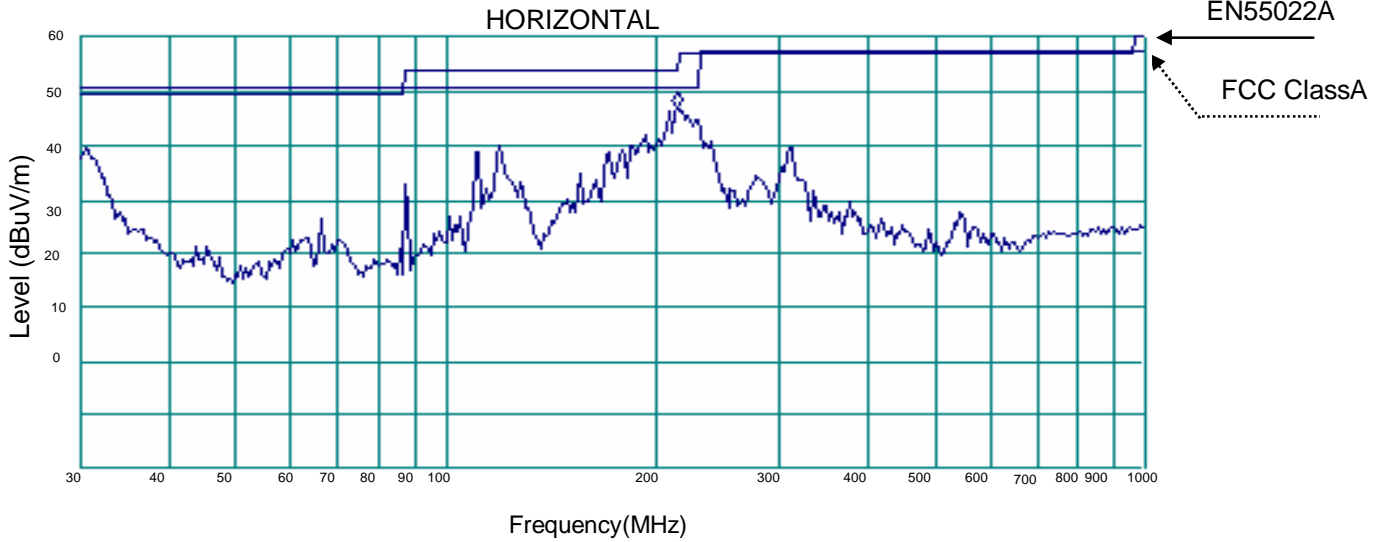
R-23

GEN 2400W

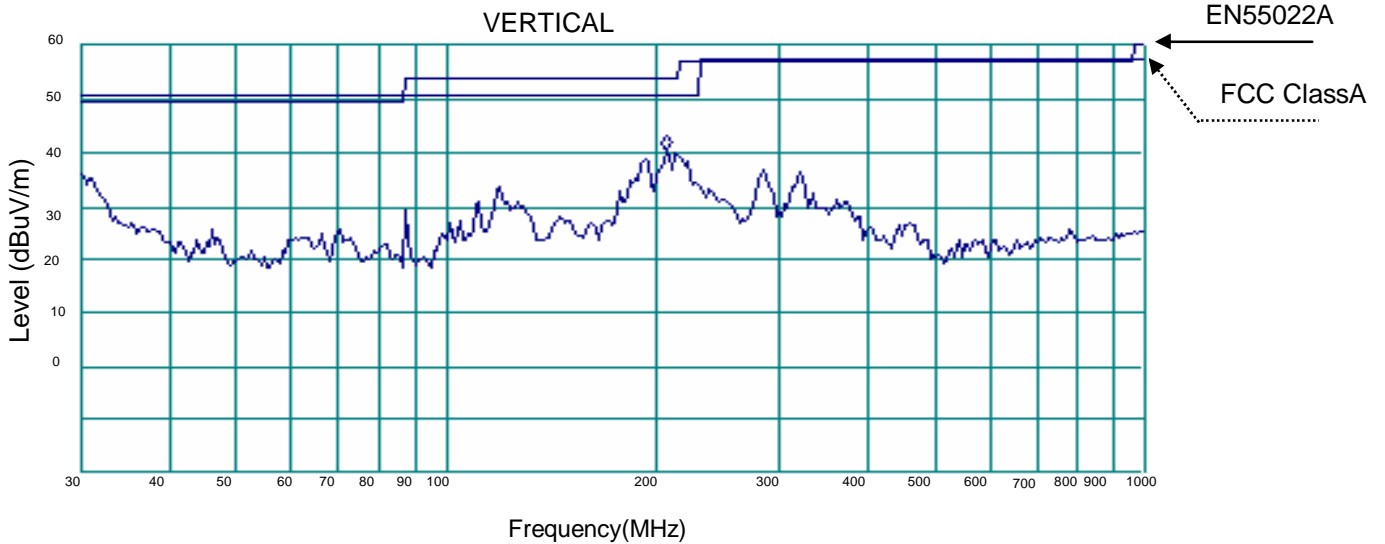
EMI
Electro-Magnetic interference characteristics

MODEL: GEN 600-4 1P200

Conditions: Vin: 230Vac (L-N)
Vout: 100%
Iout: 100%
Ta: 25°C



Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
214	47.08	42.83	50.5	7.67



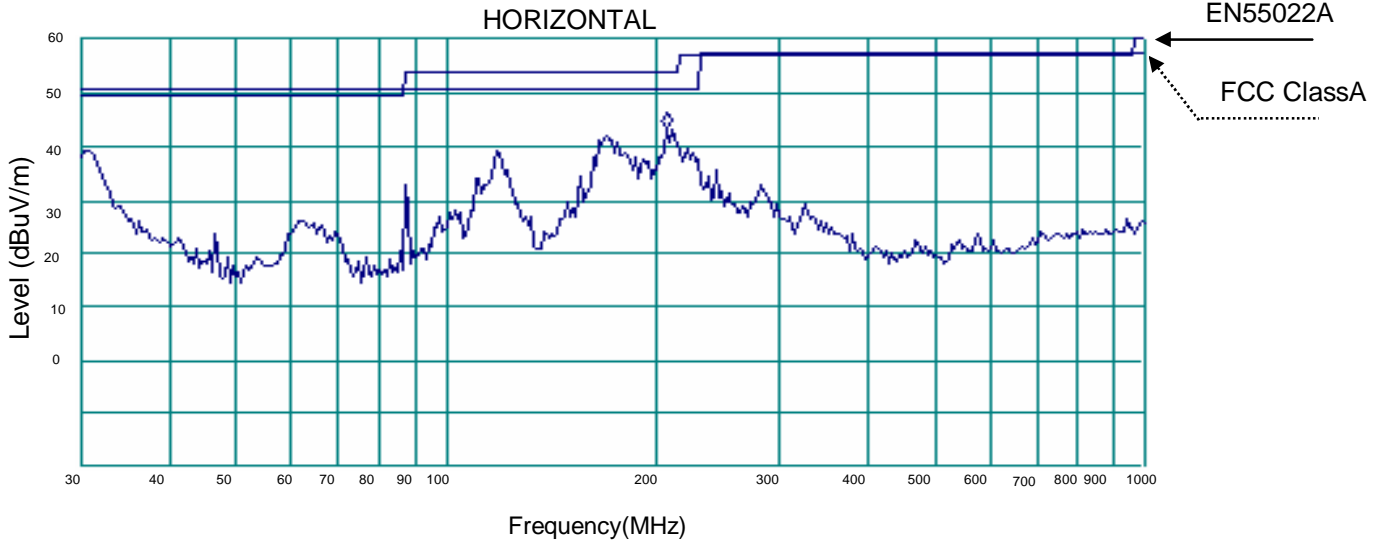
Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
205.5	40.28	36.01	50.5	14.49

GEN 2400W

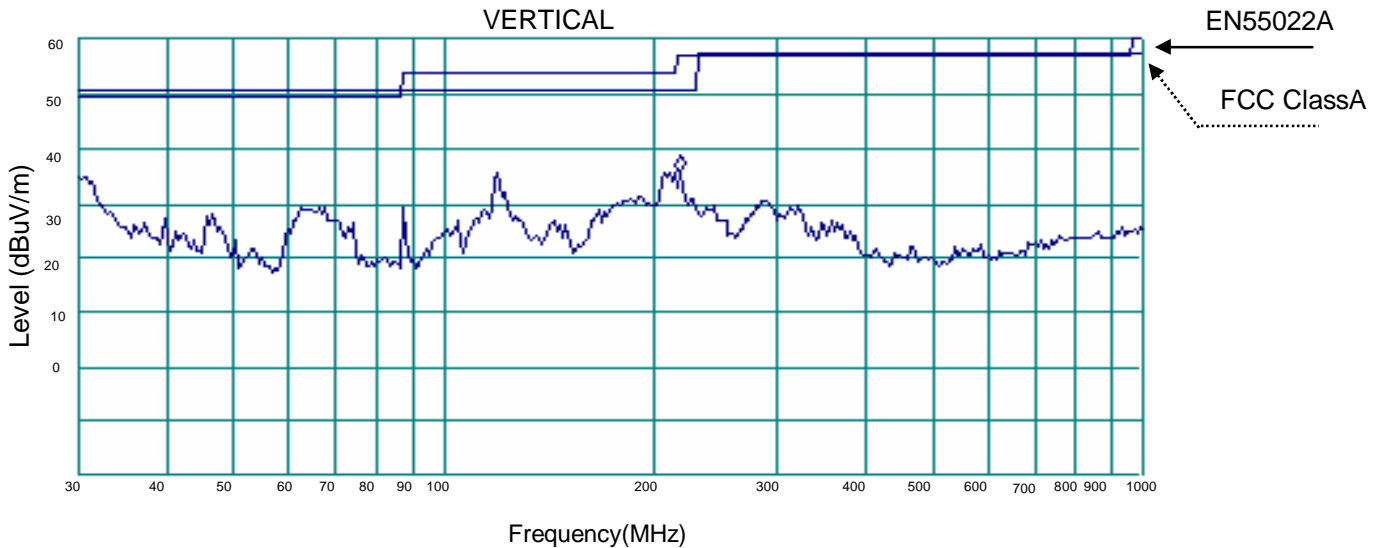
EMI
Electro-Magnetic interference characteristics

MODEL: GEN 600-4 3P200

Conditions: Vin: 230Vac (L-L)
Vout: 100%
Iout: 100%
Ta: 25°C



Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
205.5	43.57	38.71	50.5	11.79



Freq(MHz)	Peak Amp.(dBuV/m)	QP Amp (dBuV/m)	Limit linedBuV/m	Margin(dB)
218.3	35.8	31.6	50.5	18.9