

# GEN1500 SERIES EMI TEST DATA

DWG: IA575-58-02		
APPD	CHK	DWG
Dorow P.	Alex Ch.	Michael G.
Nov-2-2004	Sep-27-2004	3.02.2004

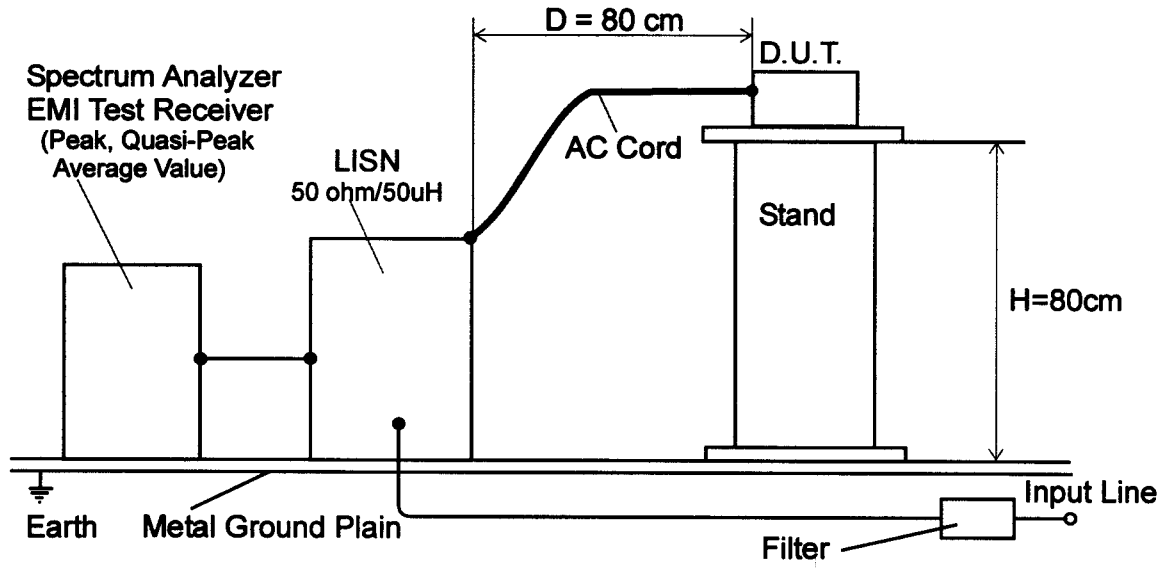
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The above data is typical value data.  
The values are considered to be actual capability data.

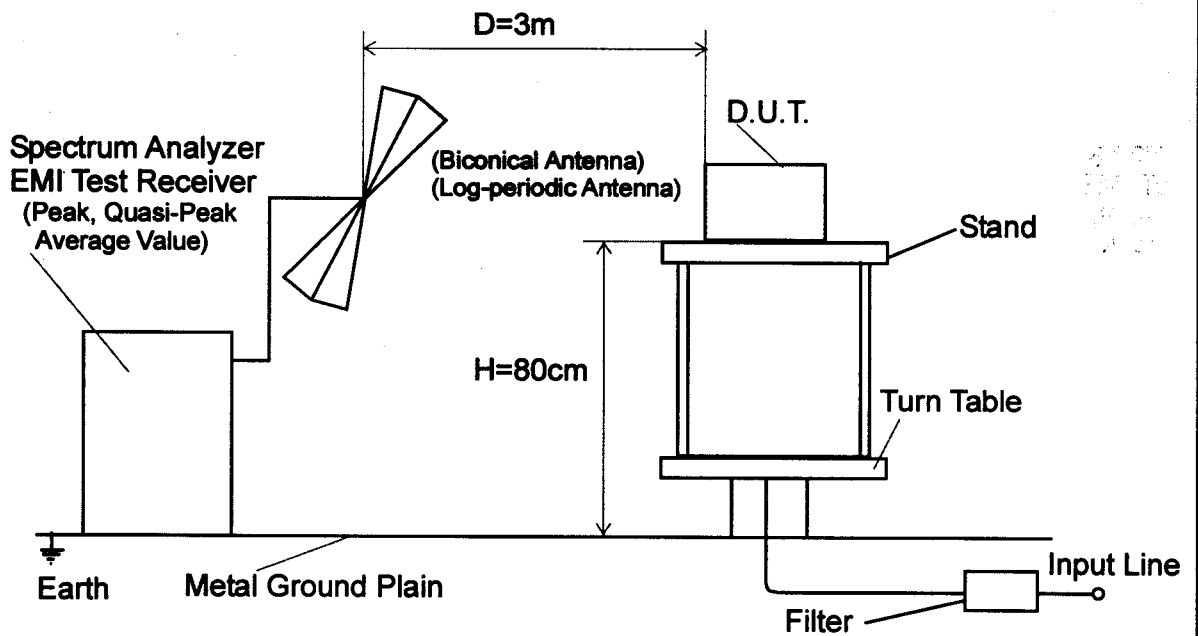
1. Test Method

(1) Conducted Emission



SPECTRUM ANALYZER	8567A	(HEWLETT.PACKARD)
EMI TEST RECEIVER	ESS	(ROHDE & SCHWARZ)
LISN	3825/2	(EMCO)

(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****Model: GEN6-200****(1) Test condition**

Input voltage/Frequency: 115VAC/50Hz  
 Output current: 100%  
 Ambient Temperature: 25°C  
 Regulation: FCC Class B; VCCI Class 2

**(2) Test results**

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

**Interference wave list**

PHASE	FREQ	RESULT		VCCI Class 2				FCC Class B	
				LIMIT		MARGIN		LIMIT	MARGIN
				QP	AV	QP	AV	QP	AV
	MHz	dBuV	dBuV	dBuV	dBuV	dB	dB	dBuV	dB
L	1.0756	38.90	37.72	56.00	46.00	17.10	8.28	-	-
L	1.4779	37.40	36.78	56.00	46.00	18.60	9.22	-	-
L	26.6210	39.76	33.91	60.00	50.00	20.24	16.09	-	-
N	0.2683	43.92	42.36	61.17	51.17	17.25	8.81	-	-
N	1.0756	37.00	37.46	56.00	46.00	19.00	8.54	-	-
N	24.4780	43.52	36.18	60.00	50.00	16.48	13.82	-	-

# EMI

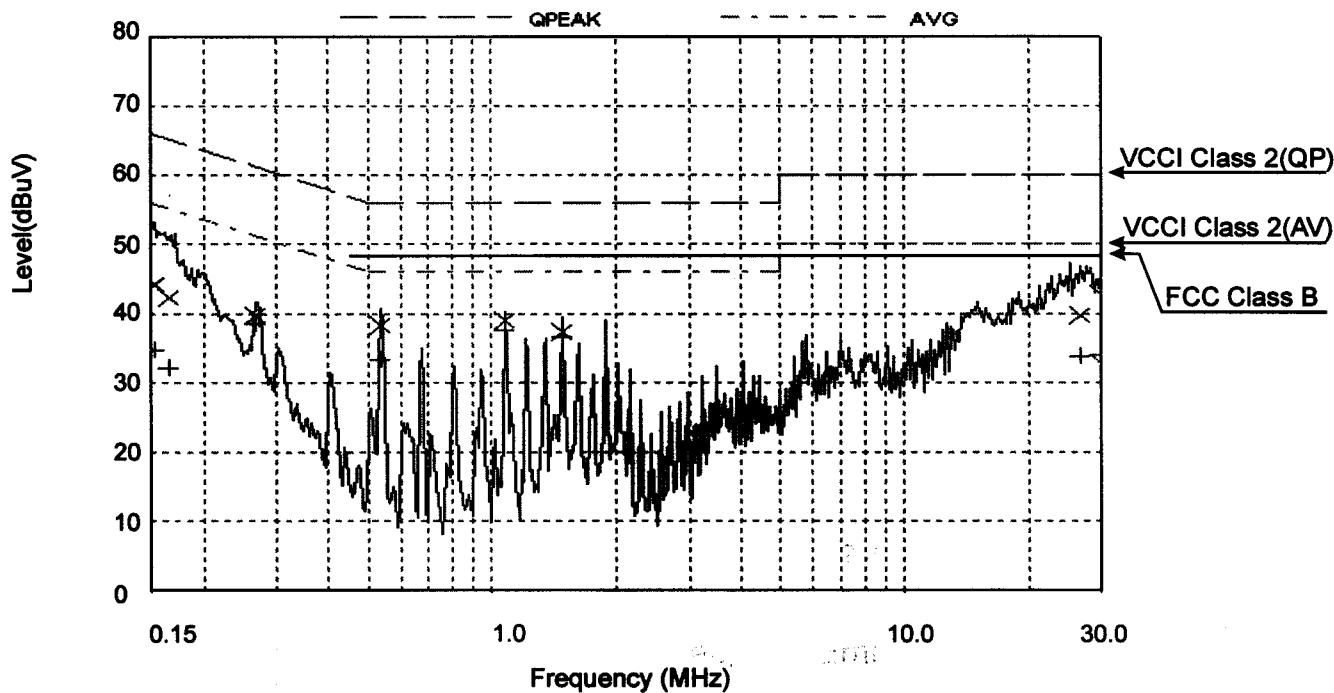
Electro-Magnetic Interference characteristics.

**GEN1500**

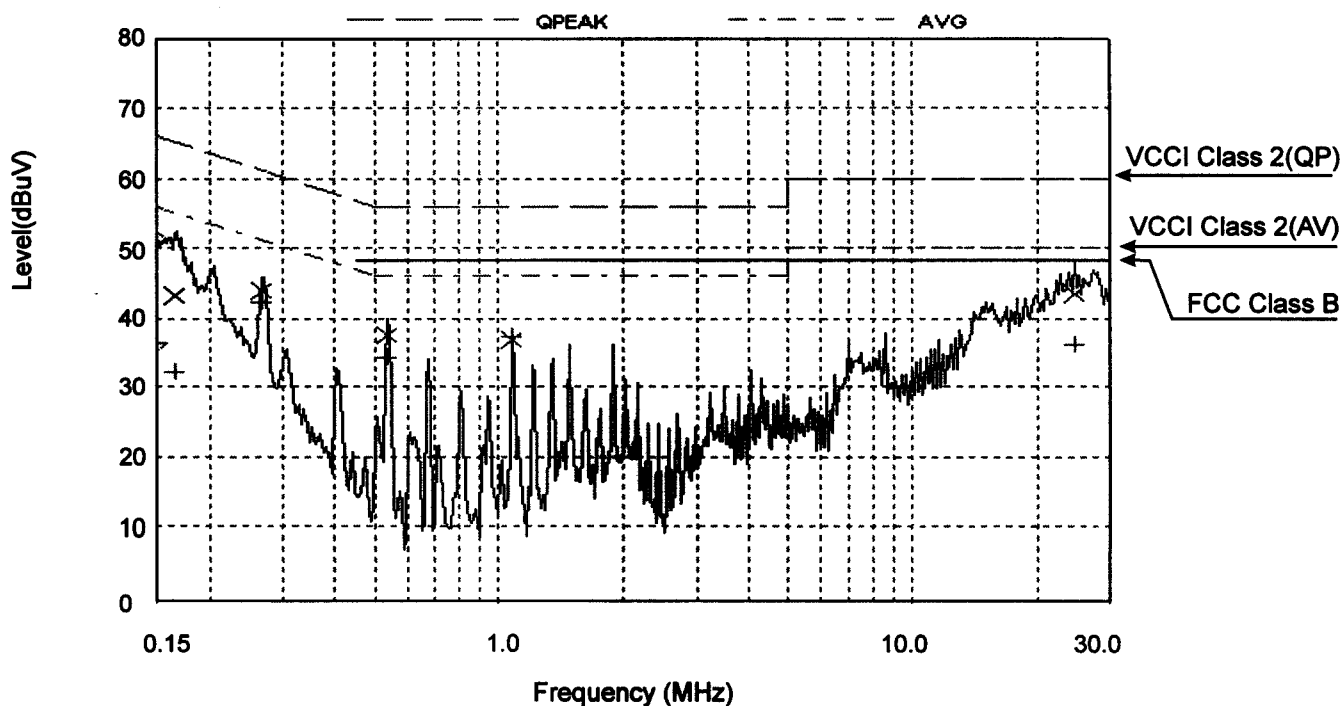
Conditions: Vin: 115VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

Phase: L

**GEN6-200**



Phase: N



Limits of EN55022-B are same as its VCCI class 2

**Model: GEN6-200****(1) Test condition**

Input voltage/Frequency: 230VAC/50Hz  
 Output current: 100%  
 Ambient Temperature: 25°C  
 Regulation: EN55022 ClassB(\*1)

\*1: The limit of VCCI Class2 is the same as EN55022 Class B

**(2) Test results**

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

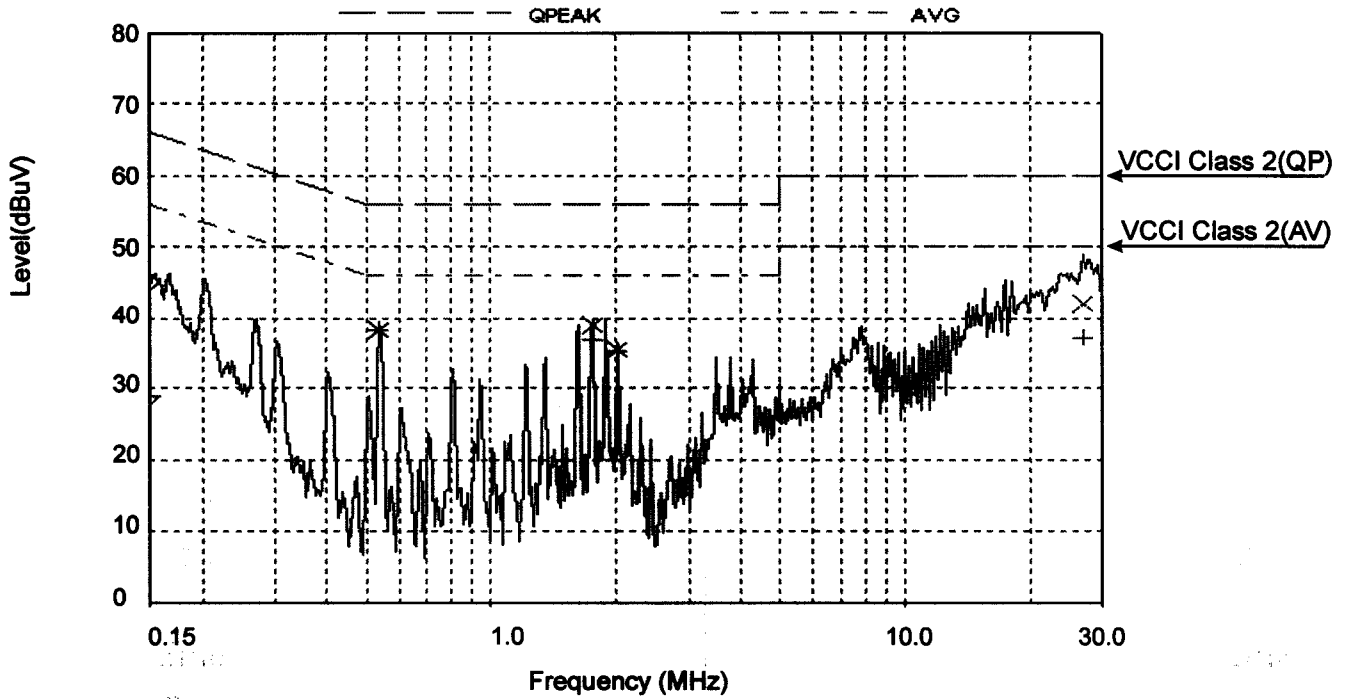
**Interference wave list**

PHASE	FREQ	RESULT		LIMIT		MARGIN	
		QP	AV	QP	AV	QP	AV
		MHz	dBuV	dBuV	dBuV	dBuV	dB
L	0.5388	38.34	38.25	56.00	46.00	17.66	7.75
L	1.7479	39.08	36.90	56.00	46.00	16.92	9.10
N	0.2694	41.13	40.88	61.14	51.14	20.01	10.26
N	0.5367	37.16	36.83	56.00	46.00	18.84	9.17

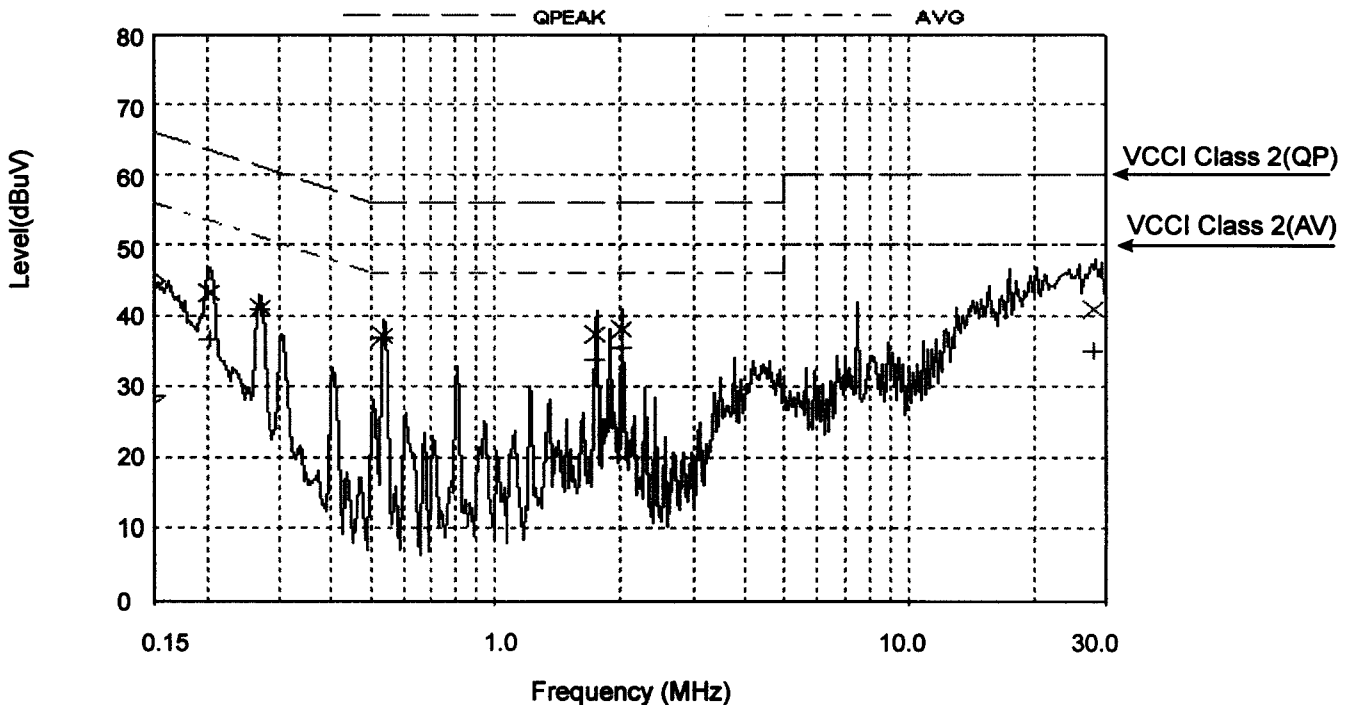
Conditions: Vin: 230VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

Phase: L

**GEN6-200**



Phase: N



Limits of EN55022-B are same as its VCCI class 2

**Model: GEN60-25****(1) Test condition**

Input voltage/Frequency: 115VAC/50Hz  
 Output current: 100%  
 Ambient Temperature: 25°C  
 Regulation: FCC Class B; VCCI Class 2

**(2) Test results**

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

**Interference wave list**

PHASE	FREQ	RESULT		VCCI Class 2				FCC Class B	
				LIMIT		MARGIN		LIMIT	MARGIN
				QP	AV	QP	AV	QP	QP
	MHz	dBuV	dBuV	dBuV	dBuV	dB	dB	dBuV	dB
L	0.1506	50.85	38.73	65.97	55.97	15.12	17.24	-	-
L	4.5516	38.42	35.82	56.00	46.00	17.58	10.18	-	-
N	0.1518	49.96	37.91	65.90	55.90	15.94	17.99	-	-
N	4.8812	37.77	33.64	56.00	46.00	18.23	12.36	-	-



# EMI

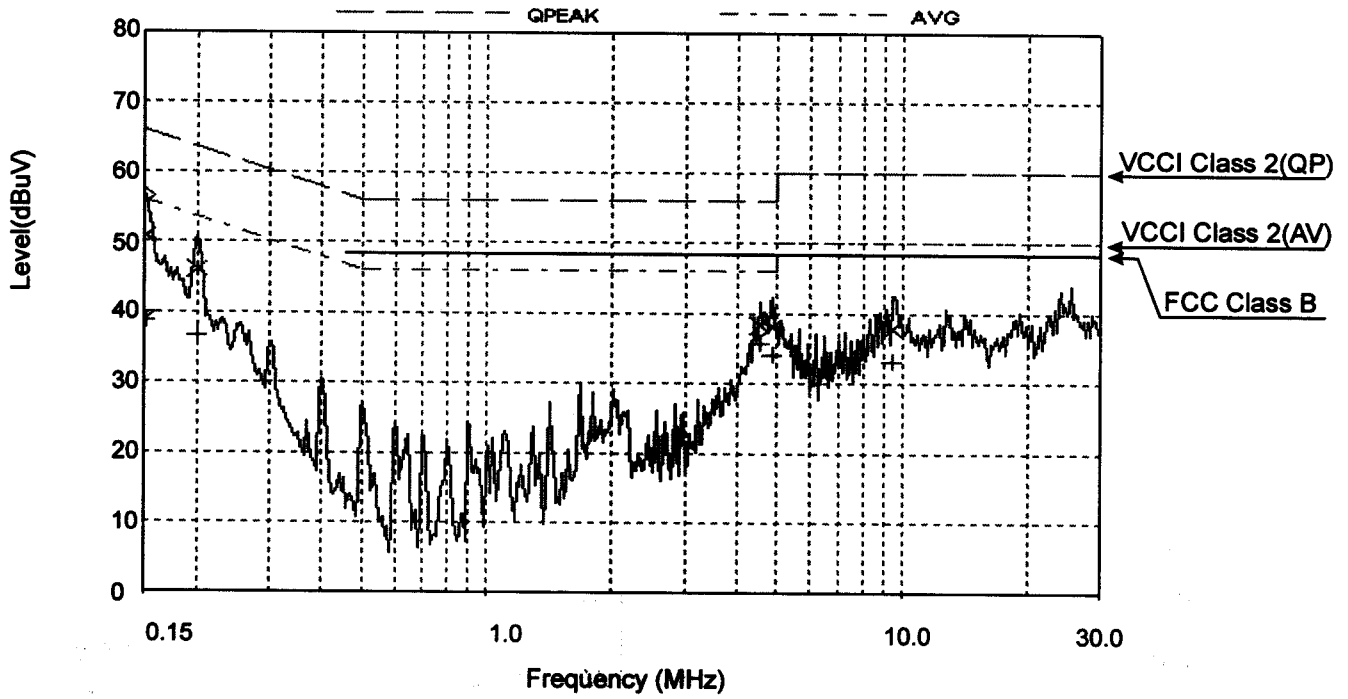
Electro-Magnetic Interference characteristics.

**GEN1500**

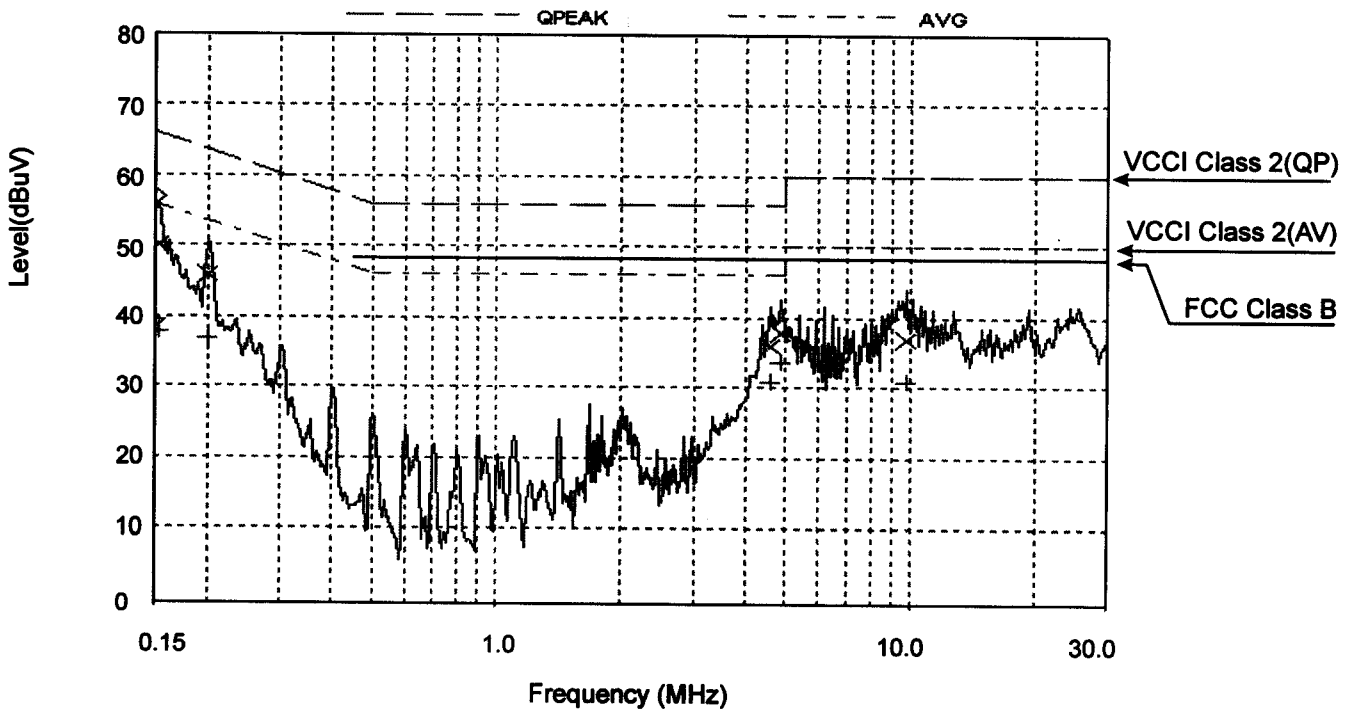
Conditions: Vin: 115VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

Phase: L

**GEN60-25**



Phase: N



Limits of EN55022-B are same as its VCCI class 2

**NEMIC-LAMBDA**

# E M I

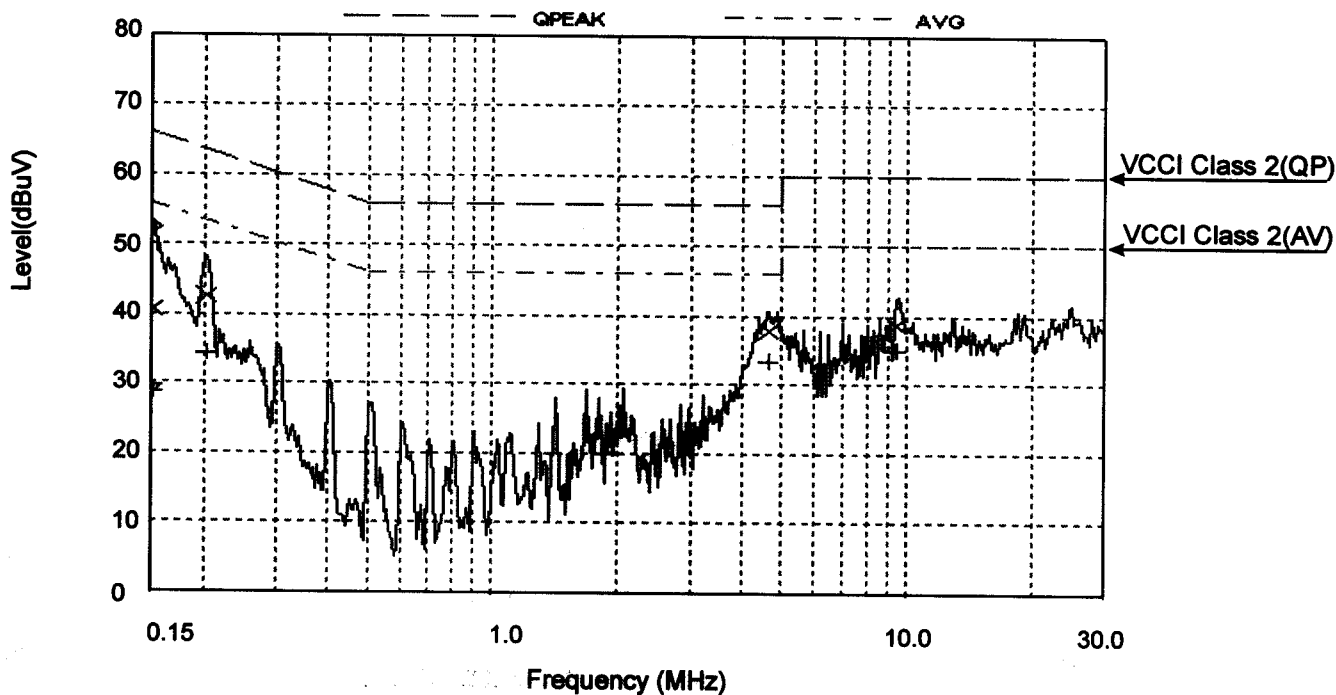
Electro-Magnetic Interference characteristics.

**GEN1500**

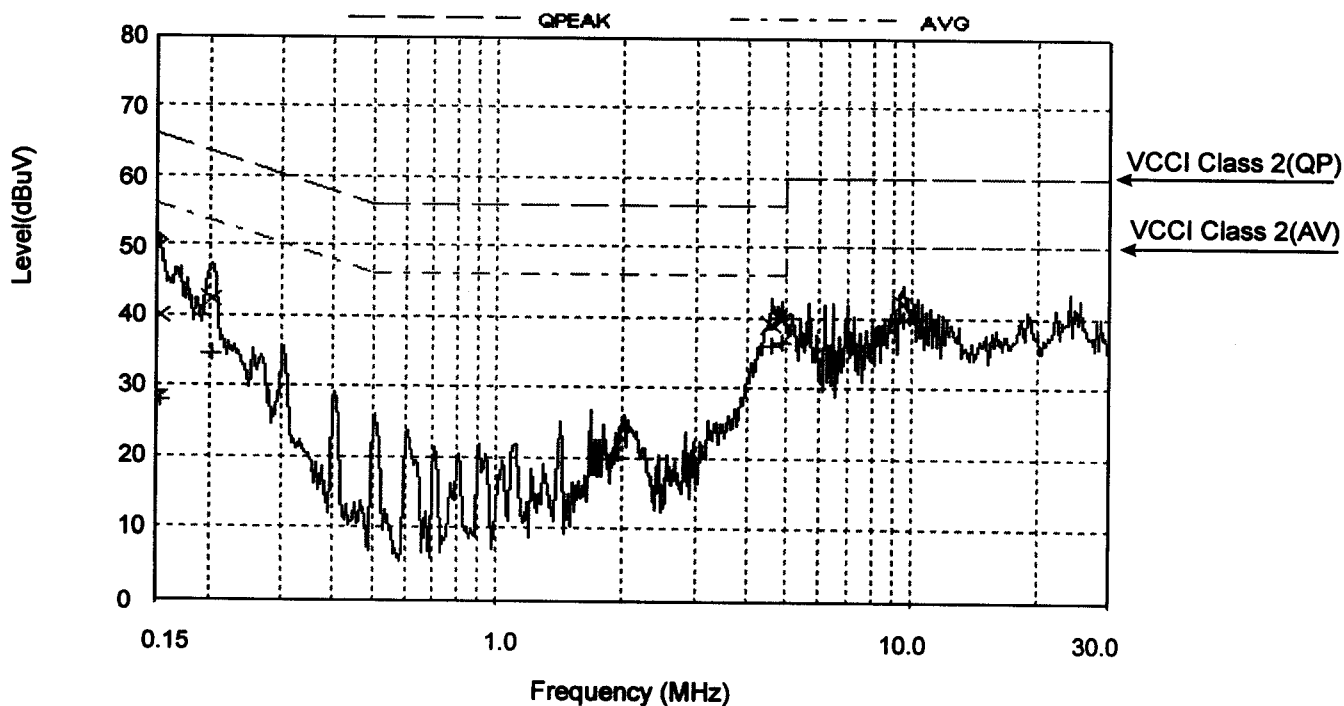
Conditions: Vin: 230VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

Phase: L

**GEN60-25**



Phase: N



Limits of EN55022-B are same as its VCCI class 2

**NEMIC-LAMBDA**

**Model: GEN100-15****(1) Test condition**

Input voltage/Frequency: 115VAC/50Hz  
 Output current: 100%  
 Ambient Temperature: 25°C  
 Regulation: FCC Class B; VCCI Class 2

**(2) Test results**

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

**Interference wave list**

PHASE	FREQ	RESULT		VCCI Class 2				FCC Class B	
				LIMIT		MARGIN		LIMIT	MARGIN
				QP	AV	QP	AV	QP	QP
	MHz	dBuV	dBuV	dBuV	dBuV	dB	dB	dBuV	dB
L	14.5310	48.46	40.24	60.00	50.00	11.54	9.76	-	-
L	17.2211	47.62	38.95	60.00	50.00	12.38	11.05	-	-
L	19.3757	48.01	38.00	60.00	50.00	11.99	12.00	-	-
L	24.2349	41.81	35.83	60.00	50.00	18.19	14.17	-	-
N	15.0936	41.68	36.12	60.00	50.00	18.32	13.88	-	-
N	17.4986	46.42	38.31	60.00	50.00	13.58	11.69	-	-
N	24.5273	39.51	33.83	60.00	50.00	20.49	16.17	-	-
N	26.9421	41.35	35.43	60.00	50.00	18.65	14.57	-	-

# EMI

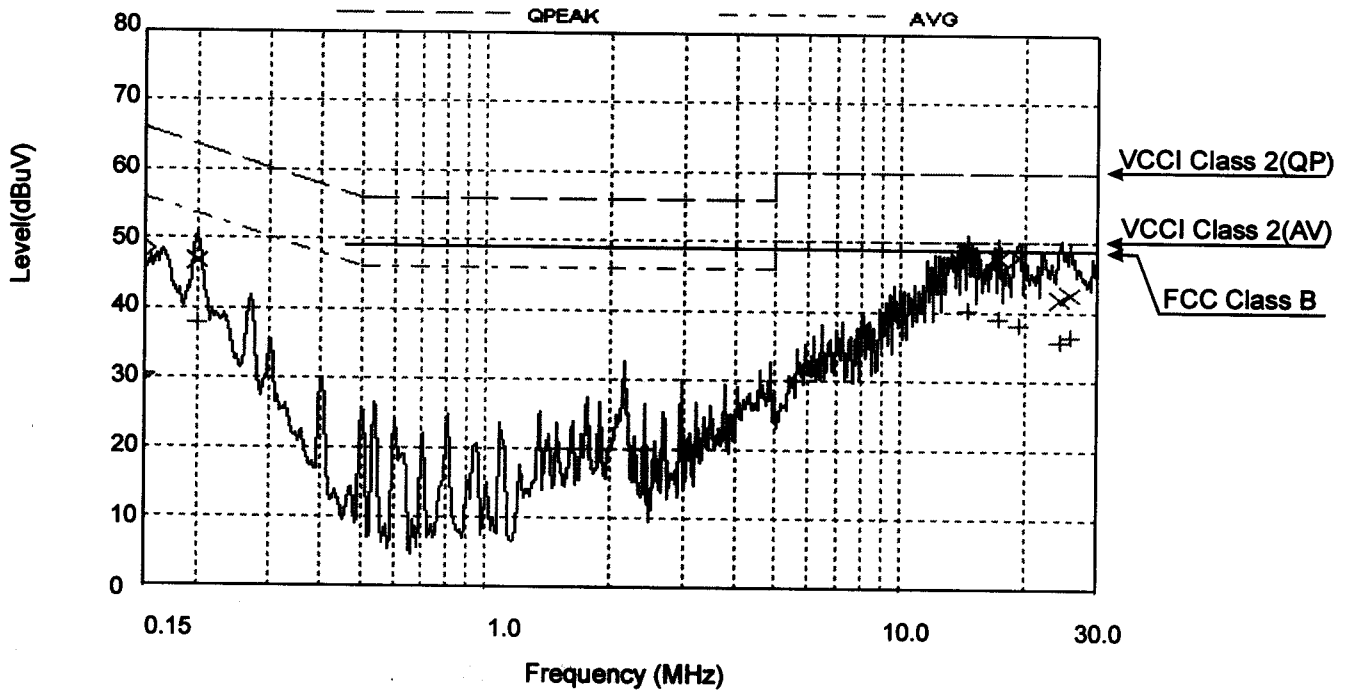
Electro-Magnetic Interference characteristics.

**GEN1500**

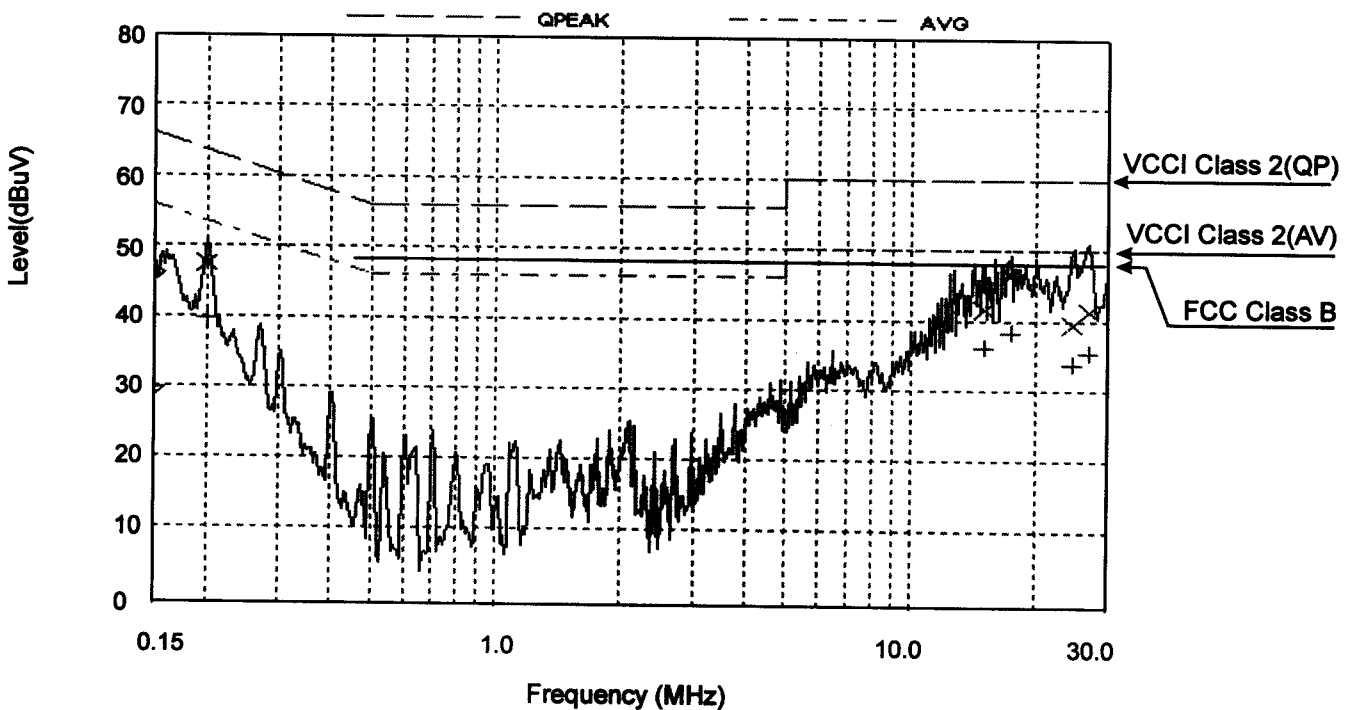
Conditions: Vin: 115VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

Phase: L

**GEN100-15**



Phase: N



Limits of EN55022-B are same as its VCCI class 2

**Model: GEN100-15****(1) Test condition**

Input voltage/Frequency: 230VAC/50Hz  
 Output current: 100%  
 Ambient Temperature: 25°C  
 Regulation: EN55022 ClassB(\*1)

\*1: The limit of VCCI Class2 is the same as EN55022 Class B

**(2) Test results**

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

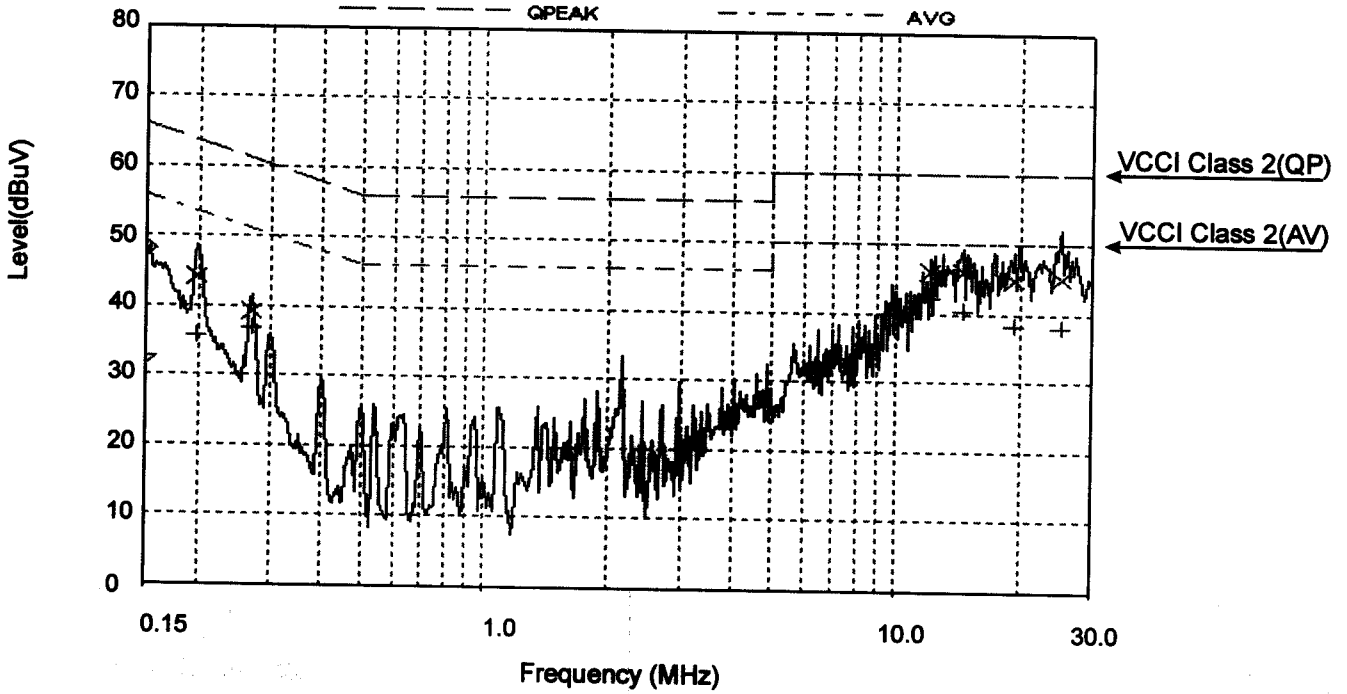
**Interference wave list**

PHASE	FREQ	RESULT		LIMIT		MARGIN	
		QP	AV	QP	AV	QP	AV
		MHz	dBuV	dBuV	dBuV	dBuV	dB
L	12.1398	45.99	42.26	60.00	50.00	14.01	7.74
L	14.5604	46.03	40.46	60.00	50.00	13.97	9.54
L	19.4145	44.81	38.30	60.00	50.00	15.19	11.70
L	25.0723	45.21	38.18	60.00	50.00	14.79	11.82
N	17.5336	47.32	41.53	60.00	50.00	12.68	8.47
N	19.6879	46.42	39.49	60.00	50.00	13.58	10.51
N	24.2834	44.38	38.32	60.00	50.00	15.62	11.68
N	24.8231	46.25	39.44	60.00	50.00	13.75	10.56

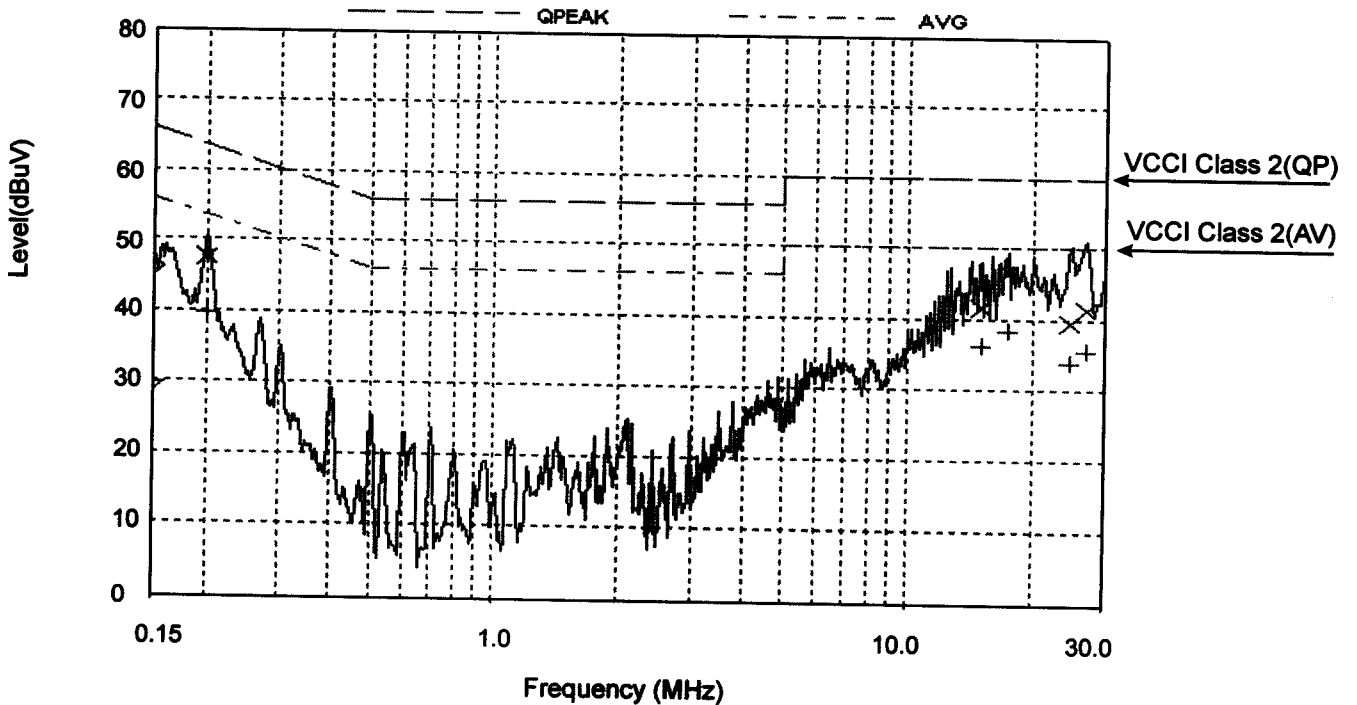
Conditions: Vin: 230VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

Phase: L

**GEN100-15**



Phase: N



Limits of EN55022-B are same as its VCCI class 2

**Model: GEN600-2.6****(1) Test condition**

Input voltage/Frequency: 115VAC/50Hz  
 Output current: 100%  
 Ambient Temperature: 25°C  
 Regulation: FCC Class B; VCCI Class 2

**(2) Test results**

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

## Interference wave list

PHASE	FREQ	RESULT		VCCI Class 2				FCC Class B	
				LIMIT		MARGIN		LIMIT	MARGIN
				QP	AV	QP	AV	QP	AV
	MHz	dBuV	dBuV	dBuV	dBuV	dB	dB	dBuV	dB
L	0.2694	44.78	43.76	61.14	51.14	16.36	7.38	-	-
L	13.4958	48.80	36.03	60.00	50.00	11.20	13.97	-	-
L	15.0034	49.55	37.86	60.00	50.00	10.45	12.14	-	-
L	16.4477	49.05	38.62	60.00	50.00	10.95	11.38	-	-
N	12.6853	48.39	39.06	60.00	50.00	11.61	10.94	-	-
N	13.7682	48.89	36.46	60.00	50.00	11.11	13.54	-	-
N	15.1238	49.41	37.05	60.00	50.00	10.59	12.95	-	-
N	16.4806	47.10	37.83	60.00	50.00	12.90	12.17	-	-

# EMI

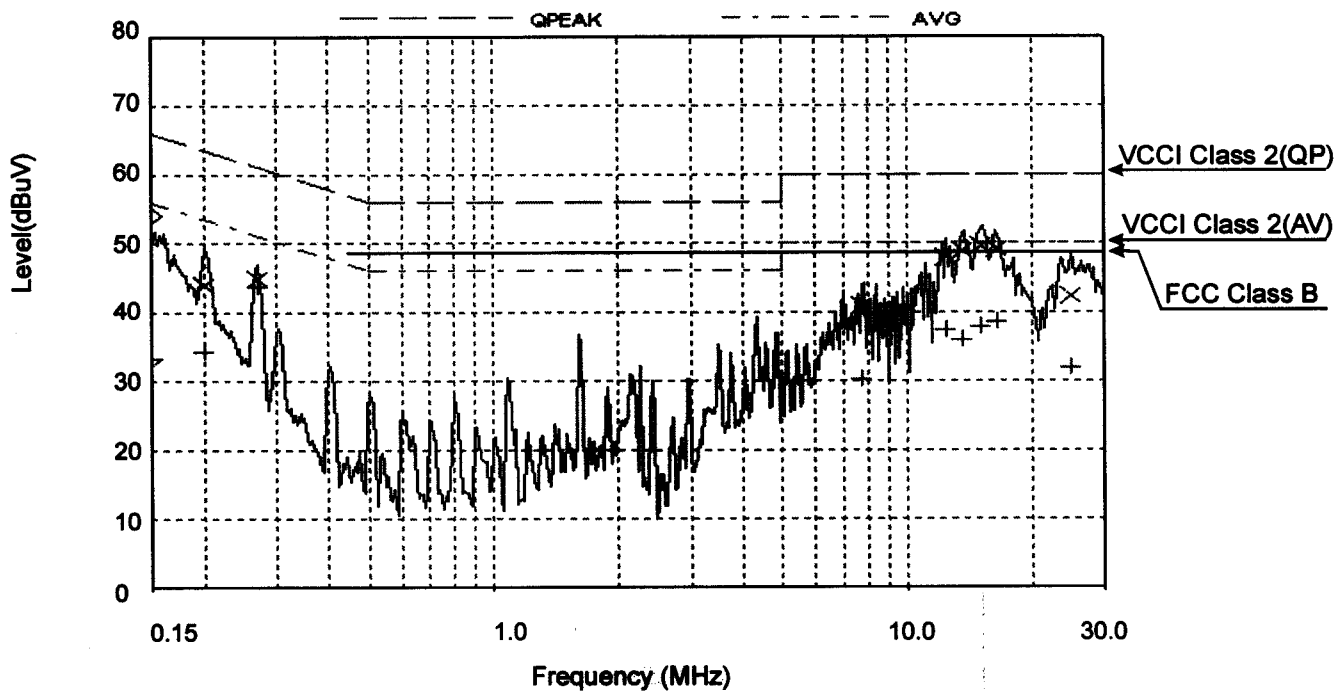
Electro-Magnetic Interference characteristics.

**GEN1500**

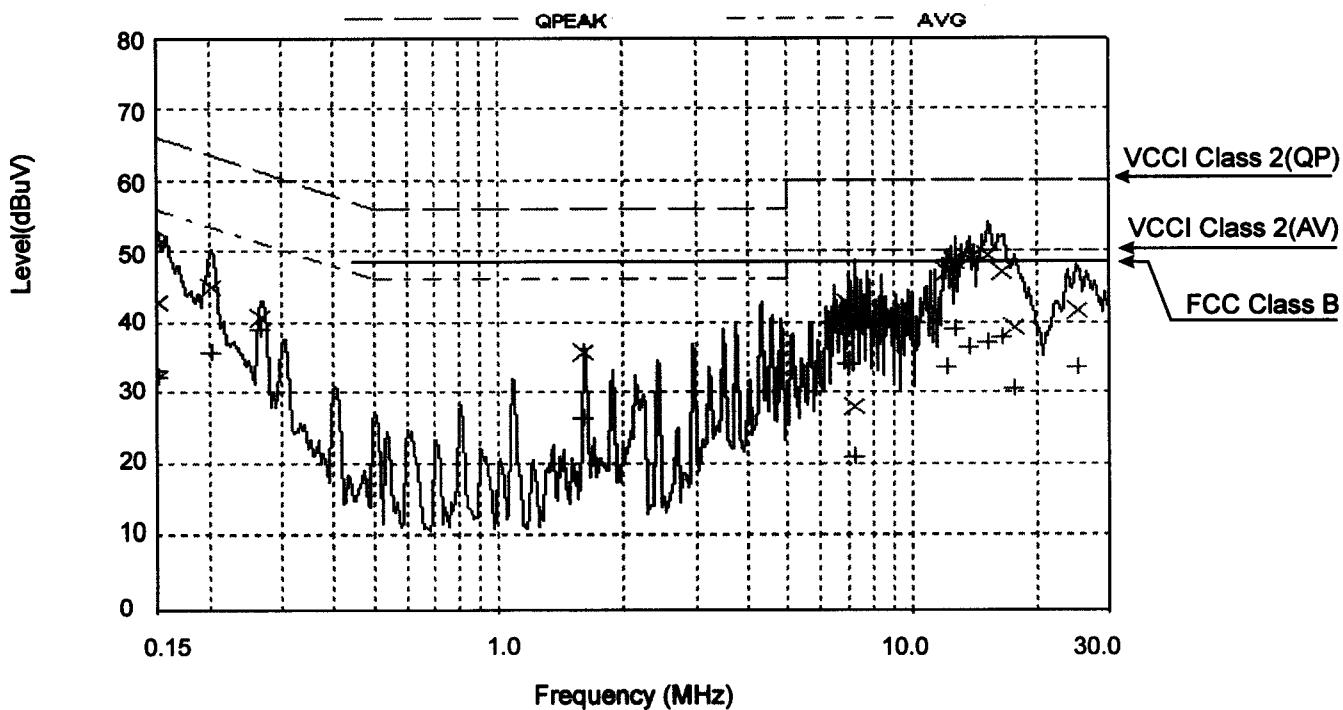
Conditions: Vin: 115VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

## Phase: L

**GEN600-2.6**



## Phase: N



Limits of EN55022-B are same as its VCCI class 2



**Model: GEN600-2.6****(1) Test condition**

**Input voltage/Frequency:** 230VAC/50Hz  
**Output current:** 100%  
**Ambient Temperature:** 25°C  
**Regulation:** EN55022 ClassB(\*1)

\*1: The limit of VCCI Class2 is the same as EN55022 Class B

**(2) Test results**

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

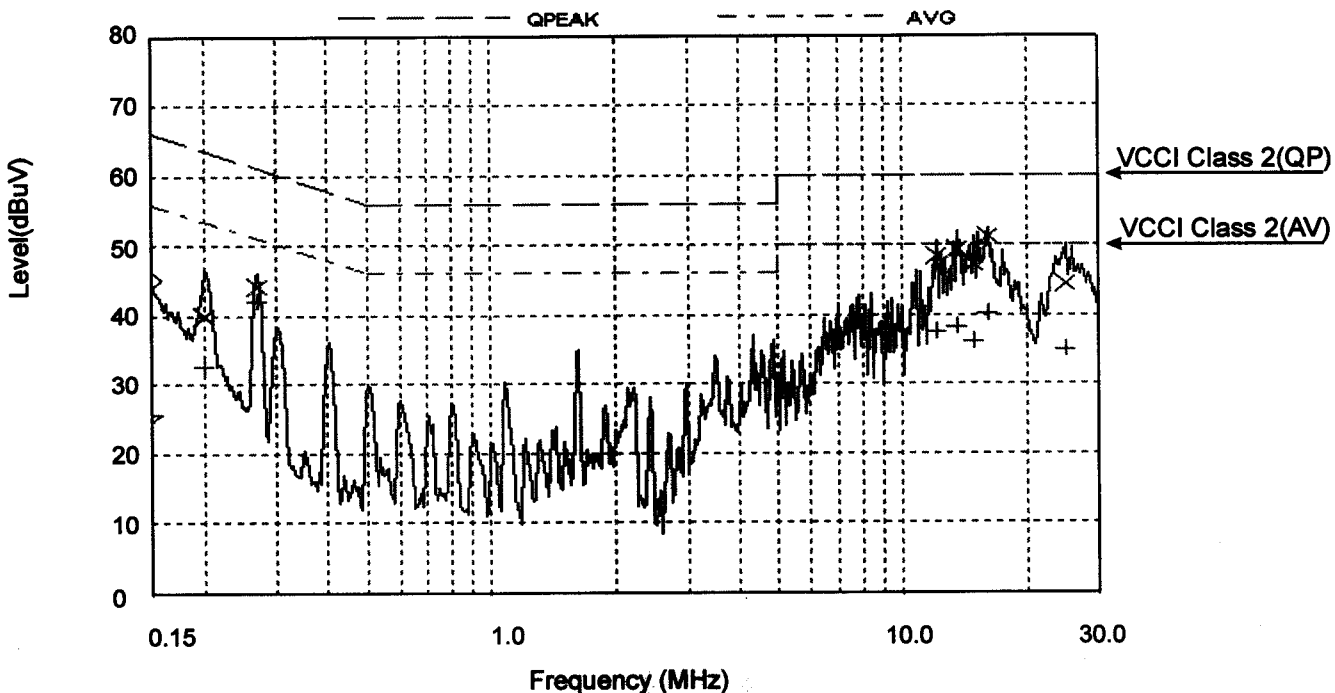
**Interference wave list**

PHASE	FREQ	RESULT		LIMIT		MARGIN	
		QP	AV	QP	AV	QP	AV
	MHz	dBuV	dBuV	dBuV	dBuV	dB	dB
L	0.2694	44.30	42.05	61.14	51.14	16.84	9.09
L	12.1398	48.32	37.58	60.00	50.00	11.68	12.42
L	13.4958	49.44	38.38	60.00	50.00	10.56	11.62
L	14.8543	47.24	36.20	60.00	50.00	12.76	13.80
L	16.1869	51.29	40.29	60.00	50.00	8.71	9.71
N	0.1860	40.80	33.90	64.20	54.20	23.40	20.30
N	0.1831	39.00	30.10	64.40	54.40	25.40	24.30
N	0.1860	40.80	33.90	64.20	54.20	23.40	20.30
N	0.1831	39.00	30.10	64.40	54.40	25.40	24.30
N	0.1860	40.80	33.90	64.20	54.20	23.40	20.30

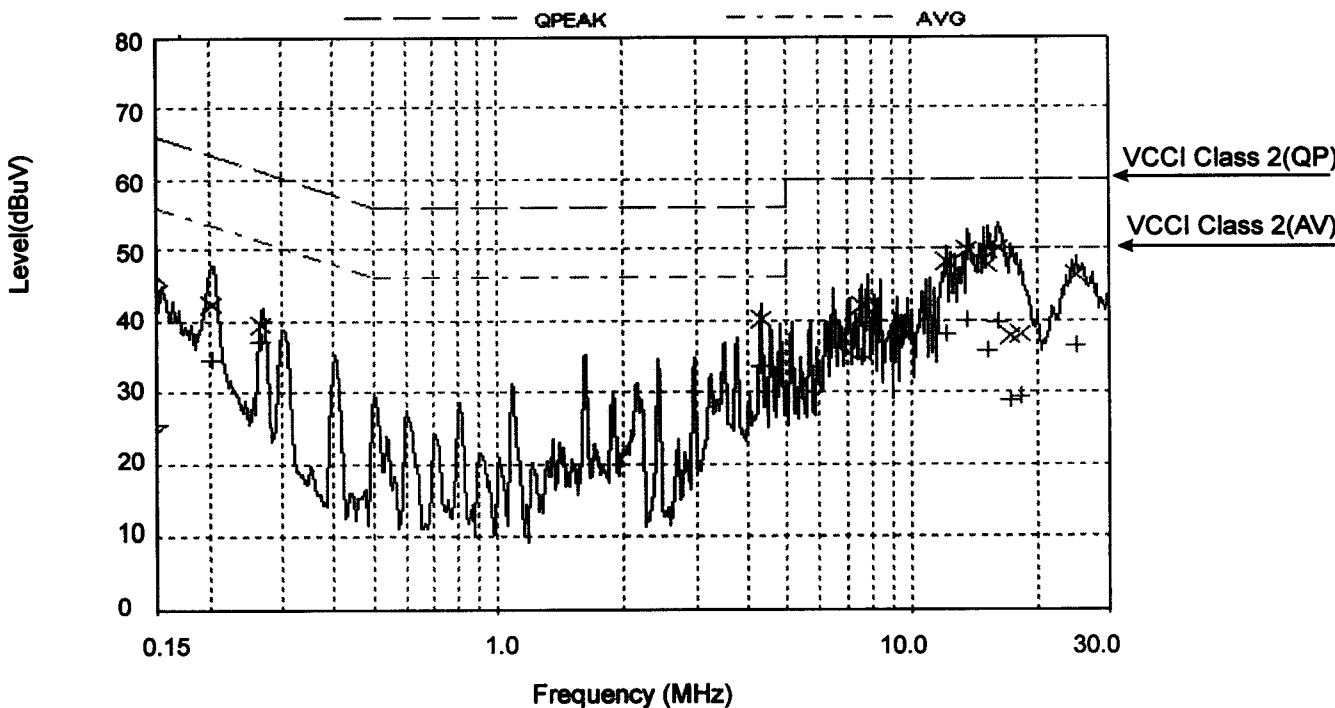
Conditions: Vin: 230VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

Phase: L

**GEN600-2.6**



Phase: N



Limits of EN55022-B are same as its VCCI class 2

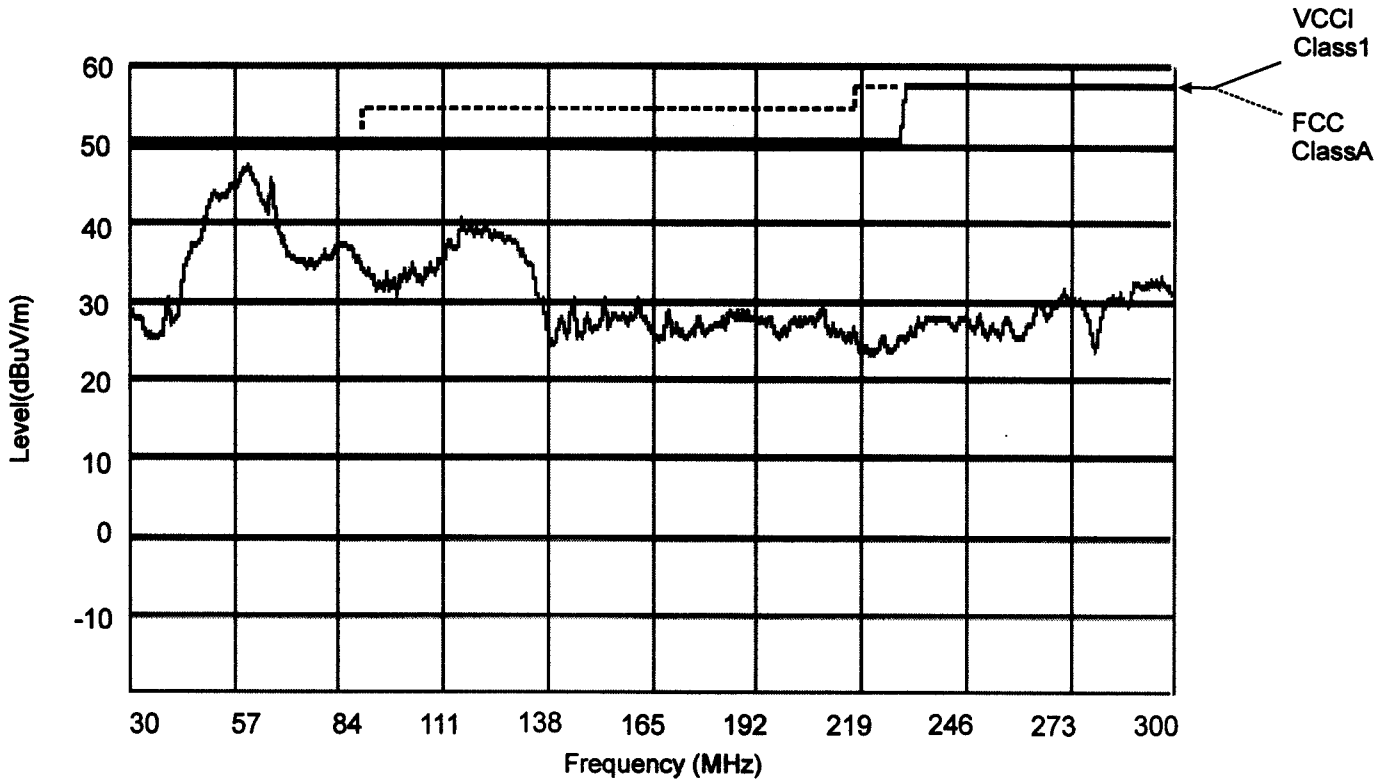
## 2-2 Radiated emission

**GEN1500**

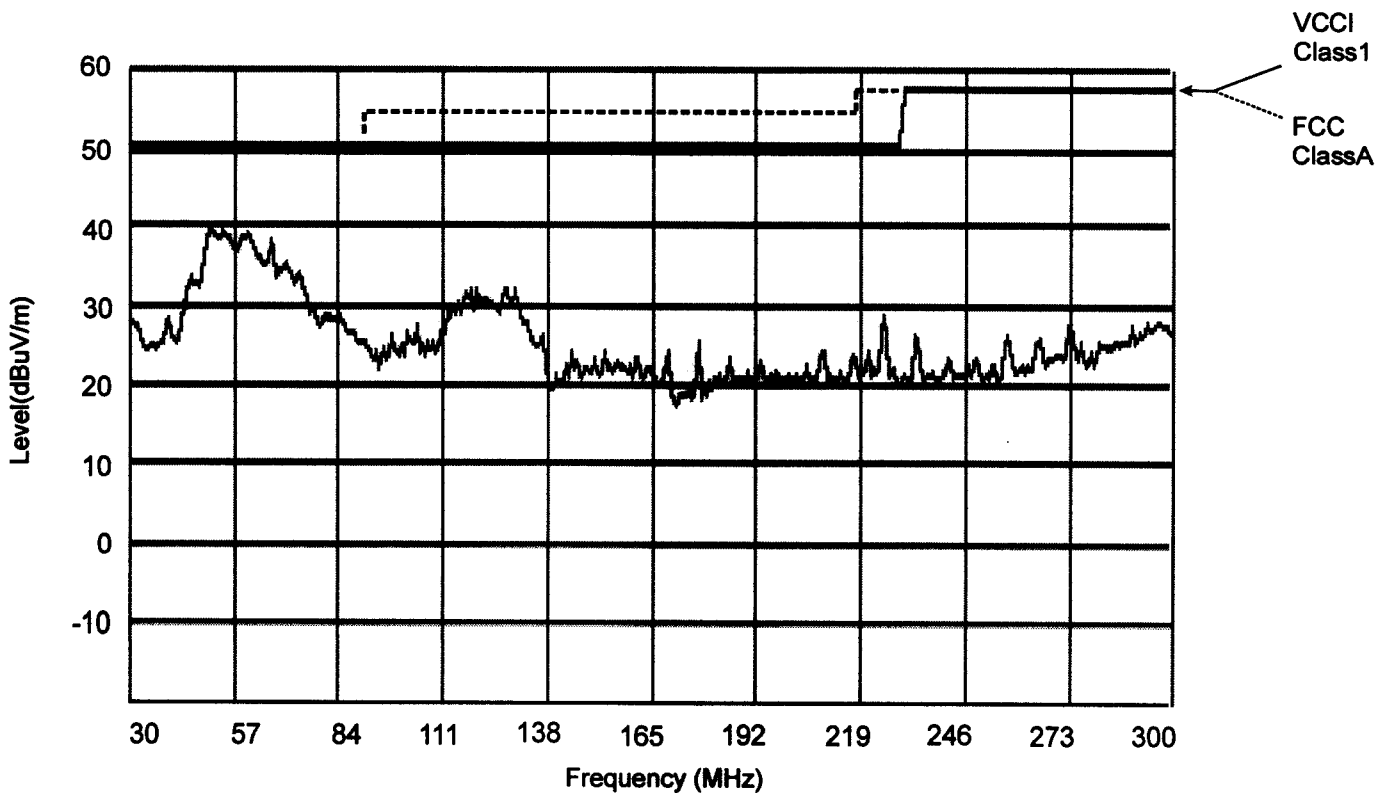
Conditions: Vin: 115VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

**GEN6-200**

### Horizontal



### Vertical



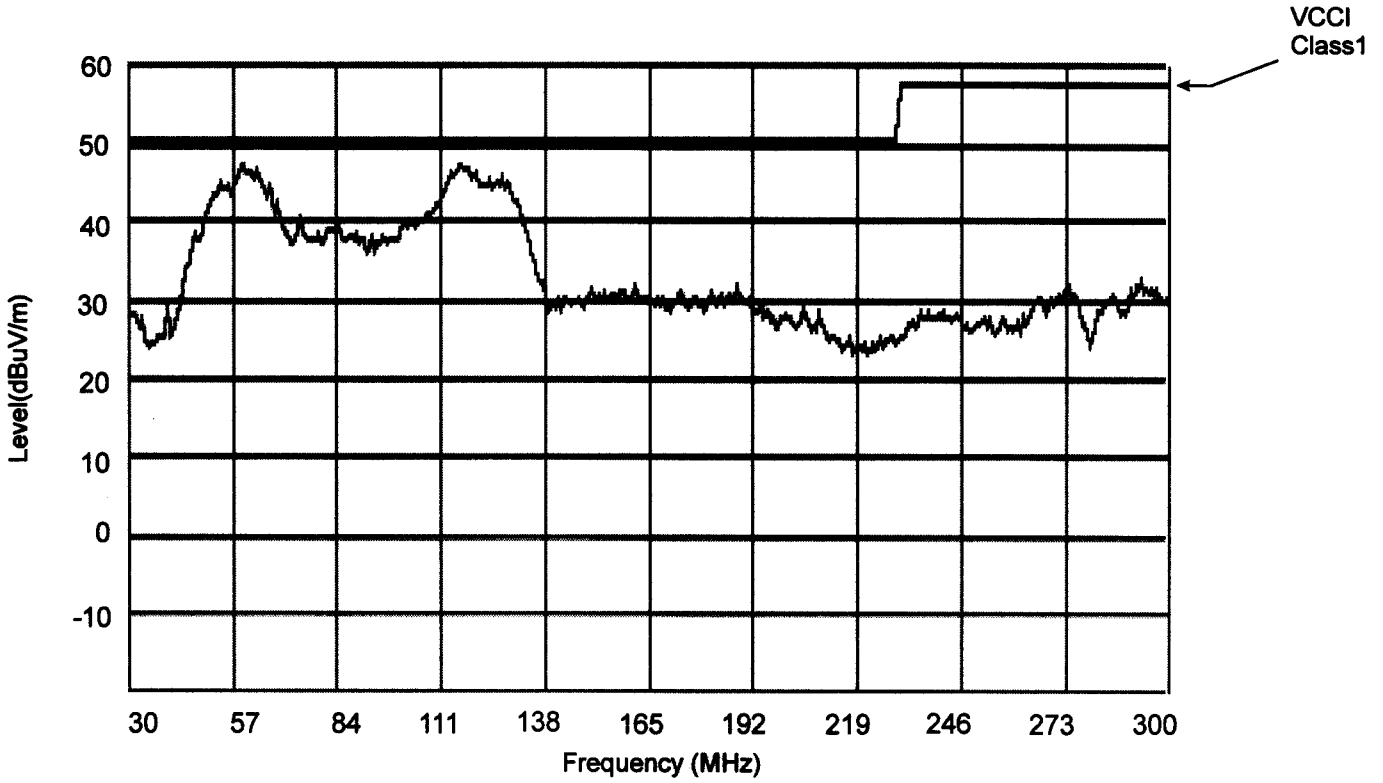
Limits of EN55022-A are same as its VCCI class 1

**NEMIC-LAMBDA**

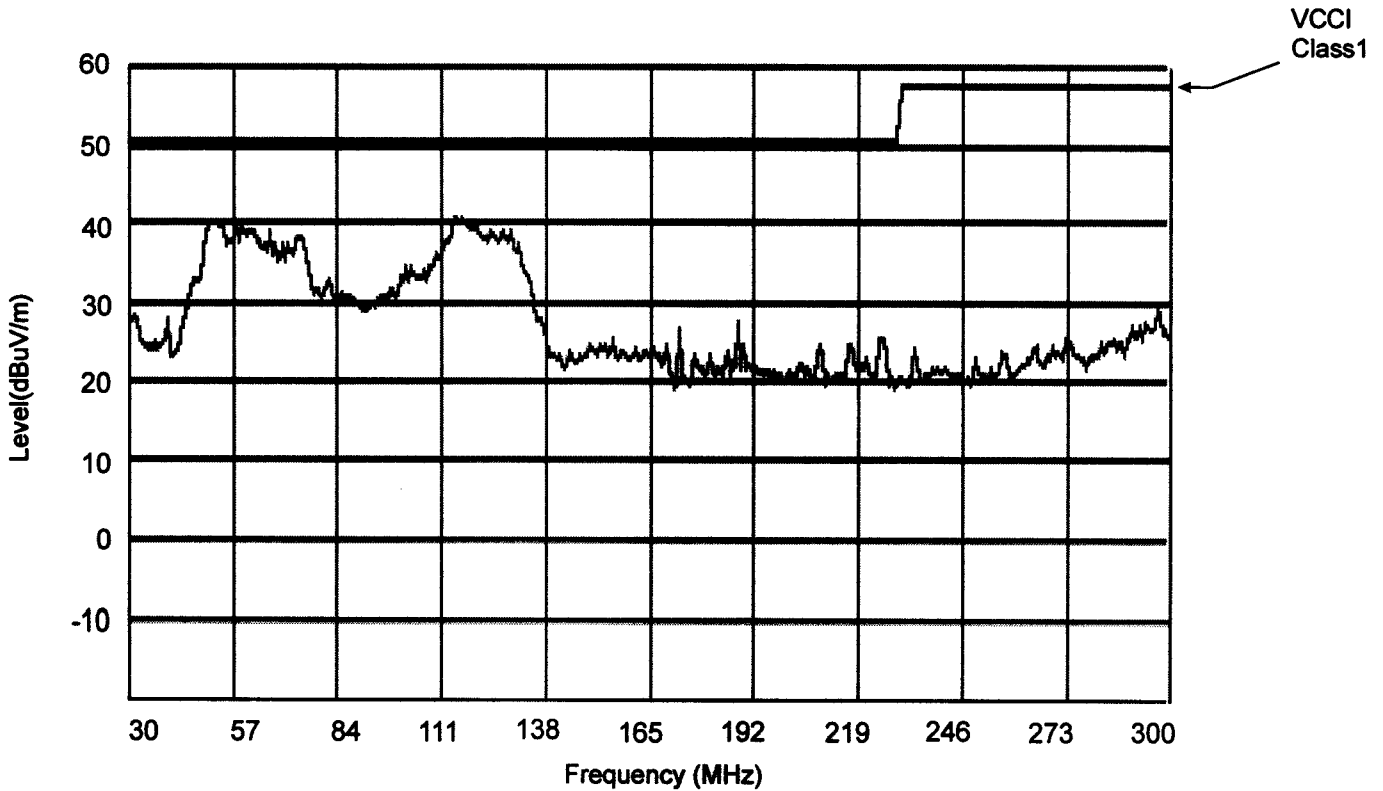
Conditions: Vin: 230VAC  
Vout: 100%  
Iout: 100%  
Ta : 25 °C

**GEN6-200**

**Horizontal**



**Vertical**



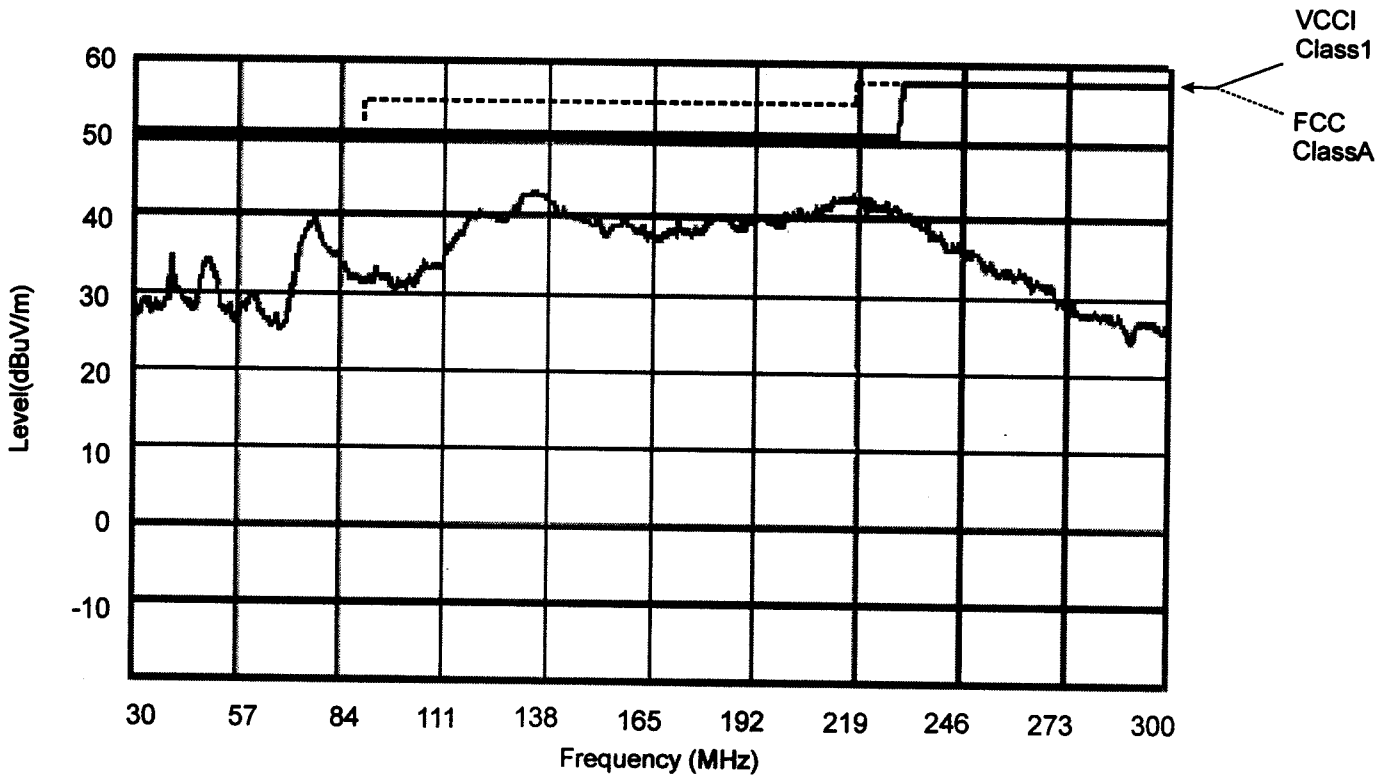
Limits of EN55022-A are same as its VCCI class 1

# GEN1500

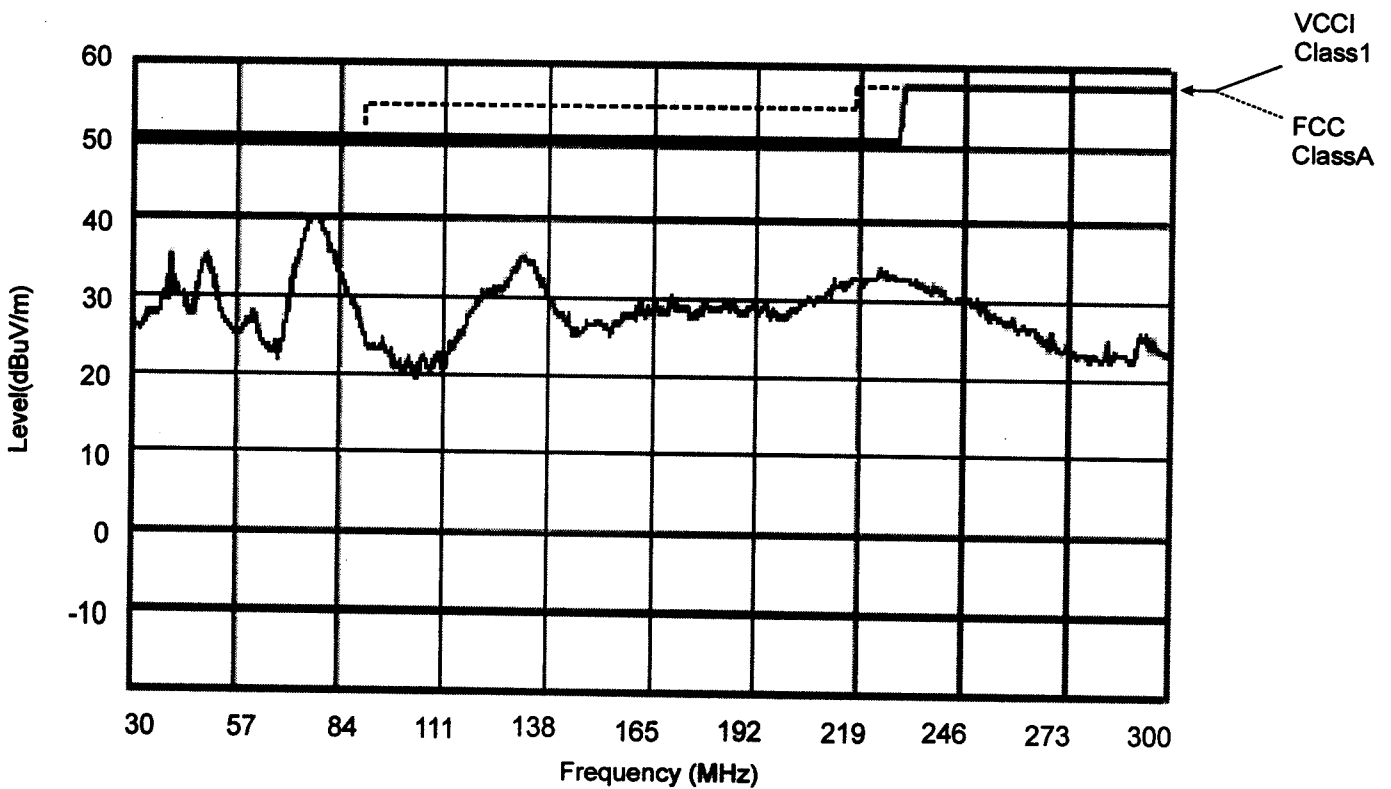
Conditions: Vin: 115VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

GEN60-25

## Horizontal



## Vertical



Limits of EN55022-A are same as its VCCI class 1

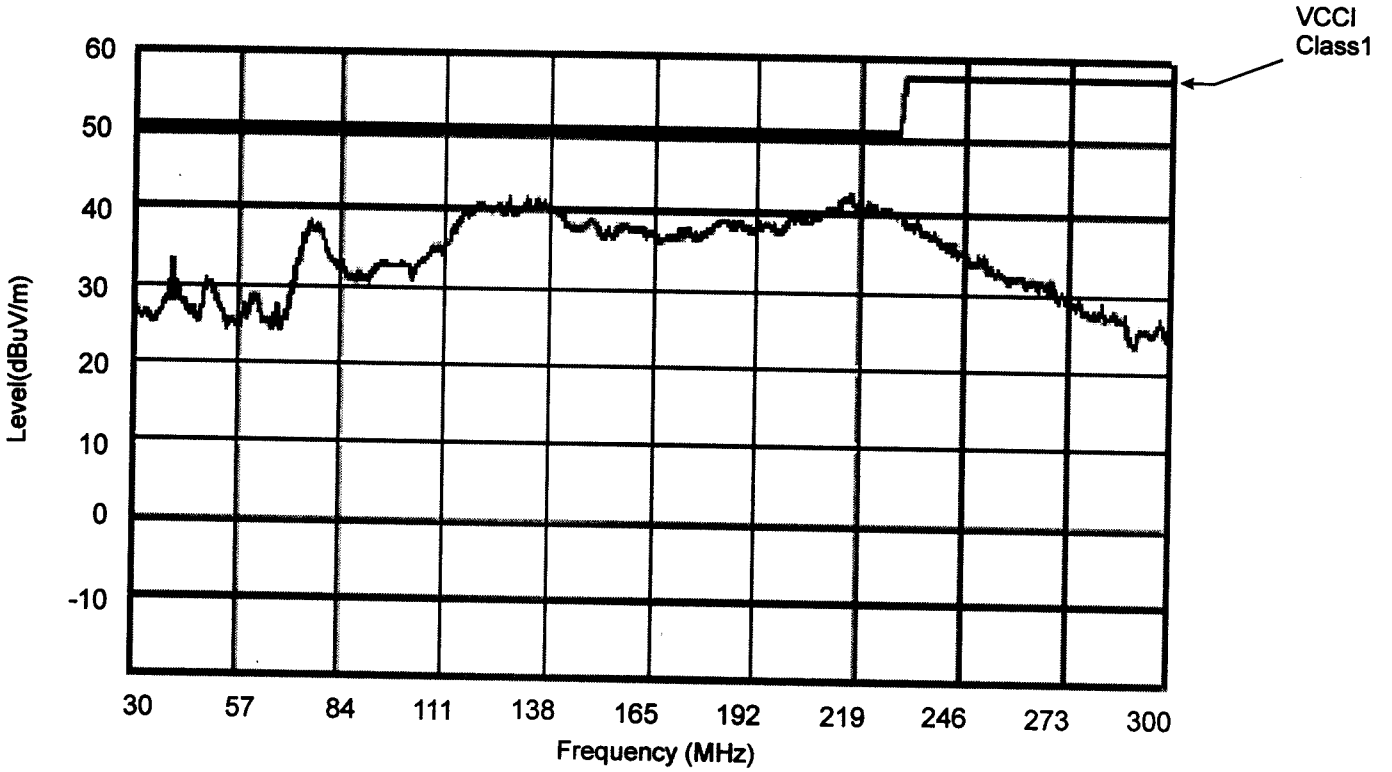
**NEMIC-LAMBDA**

# GEN1500

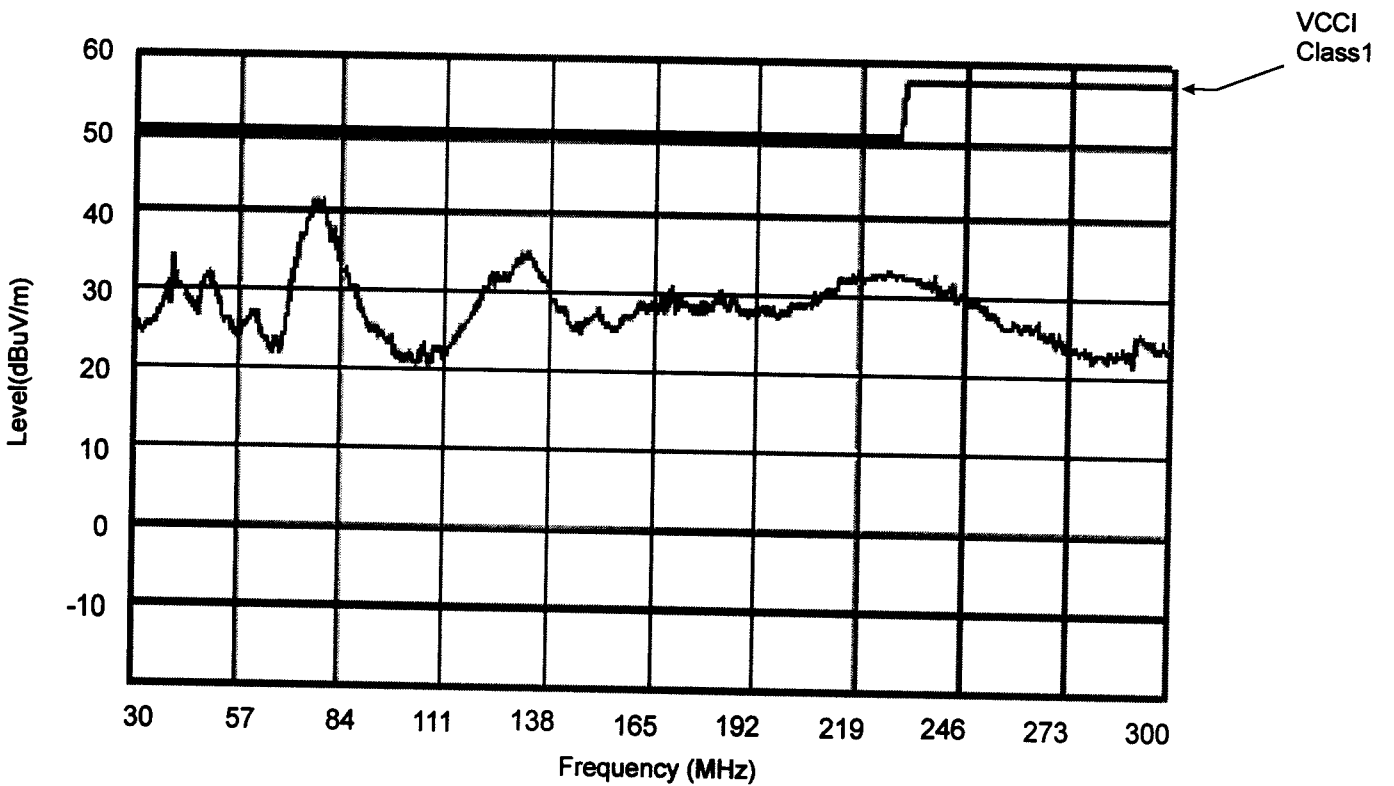
Conditions: Vin: 230VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

GEN60-25

## Horizontal



## Vertical



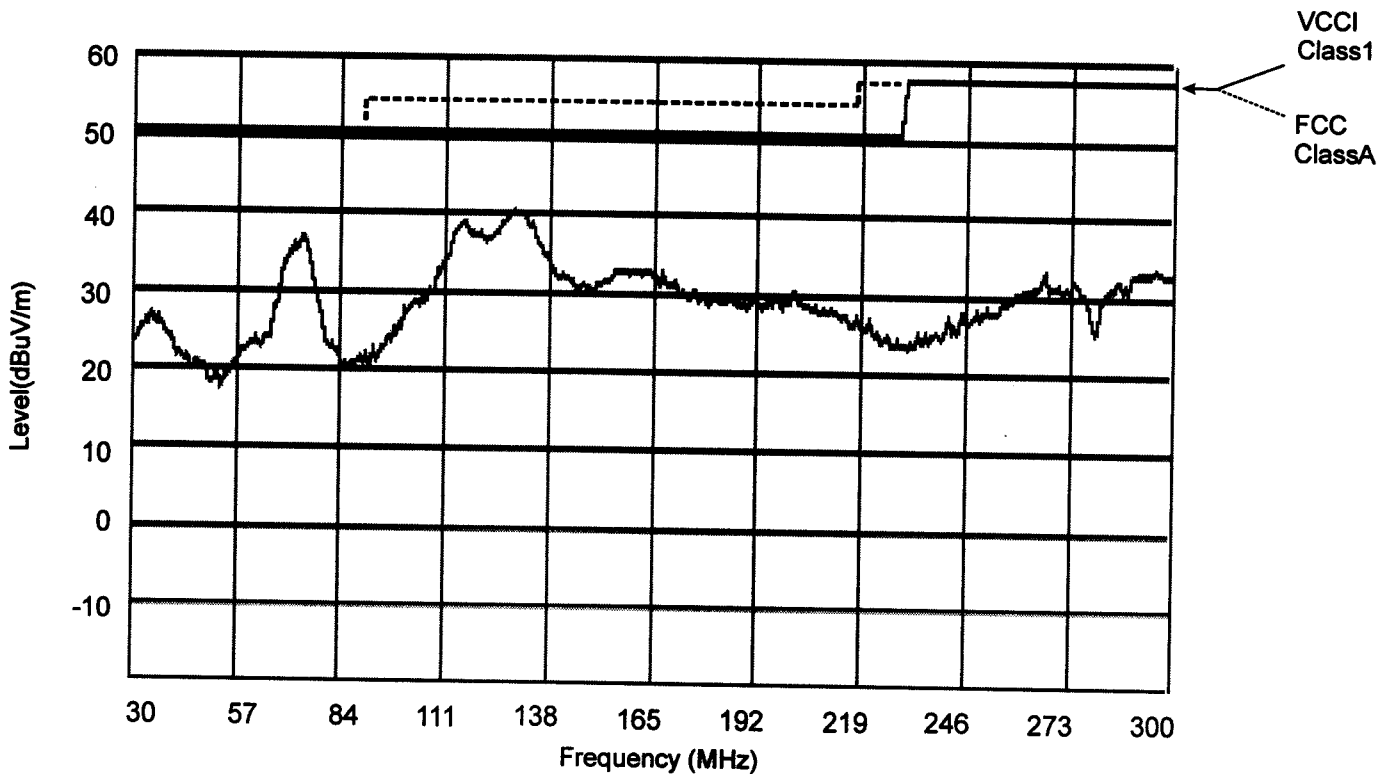
Limits of EN55022-A are same as its VCCI class 1

**NEMIC-LAMBDA**

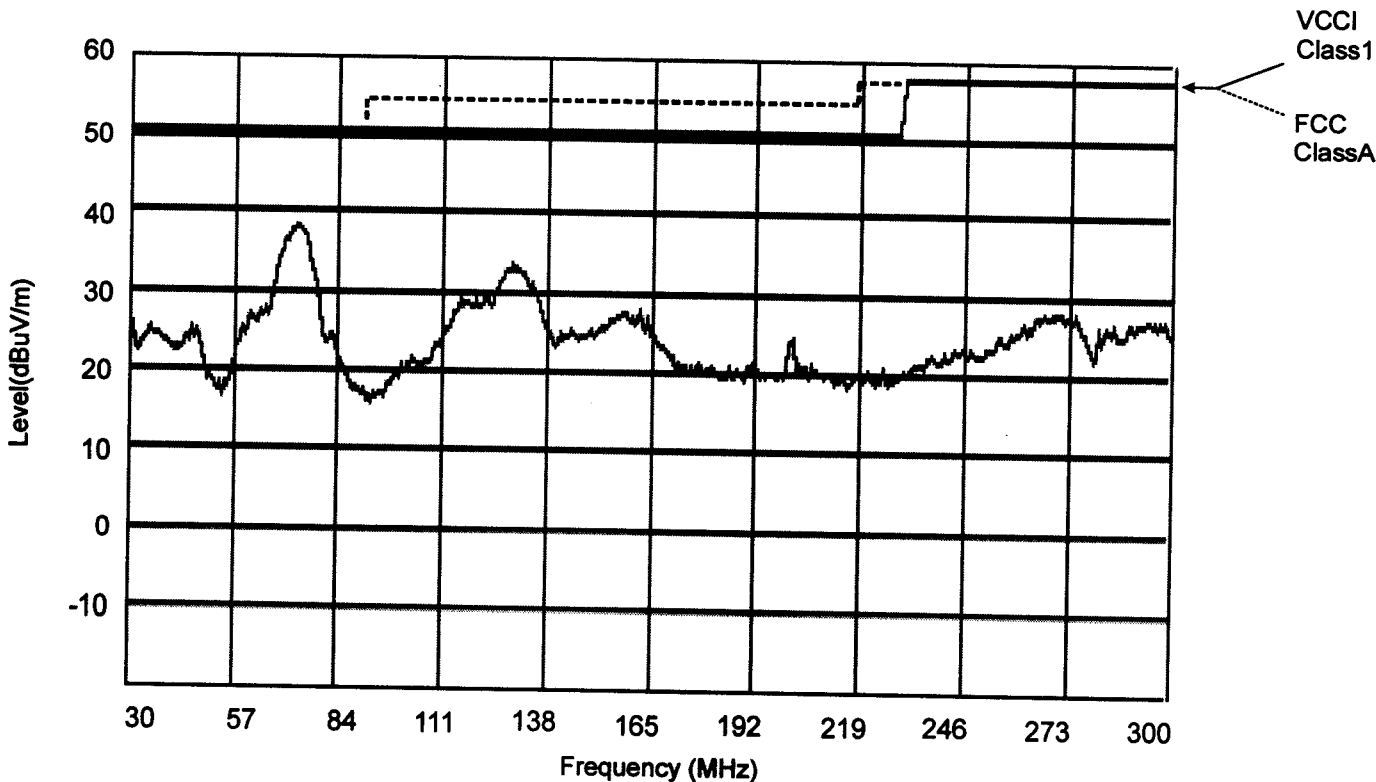
Conditions: Vin: 115VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

**GEN100-15**

**Horizontal**



**Vertical**

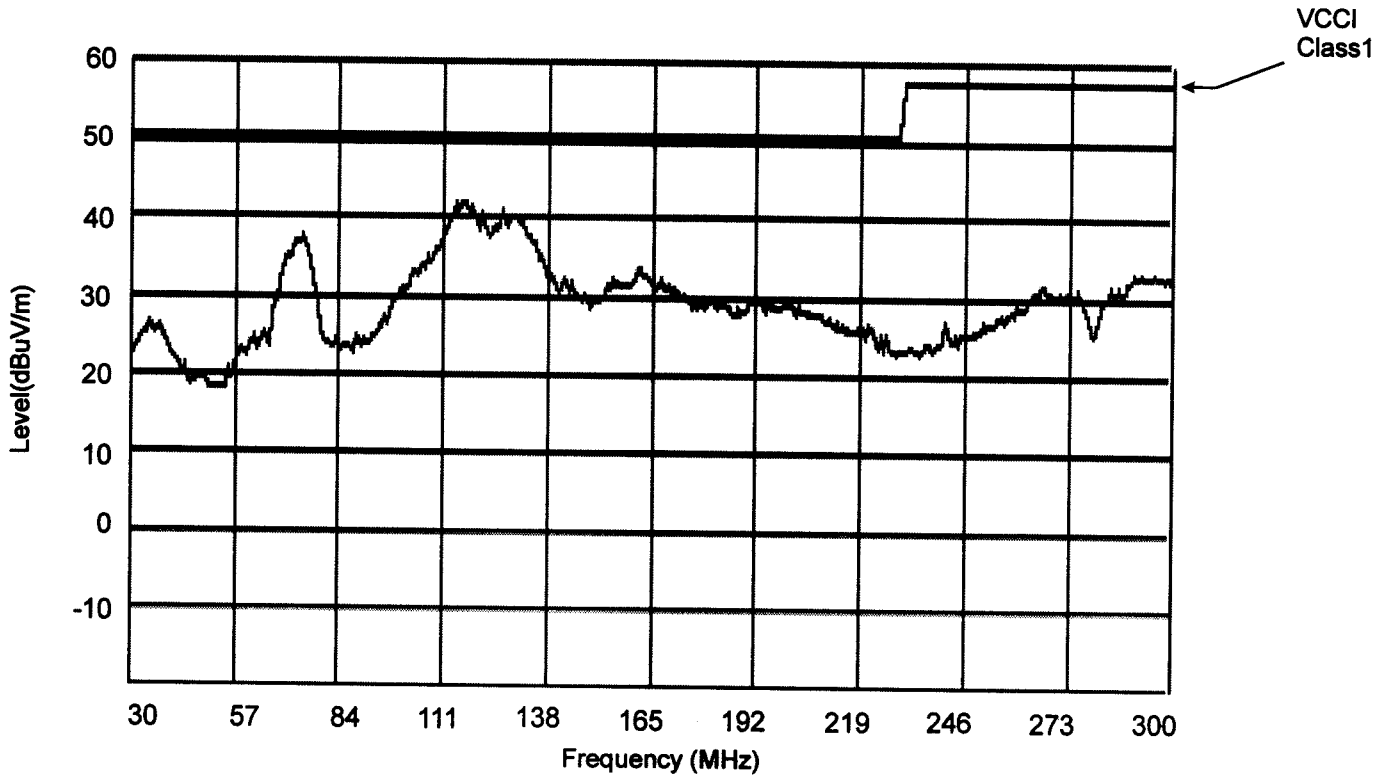


Limits of EN55022-A are same as its VCCI class 1

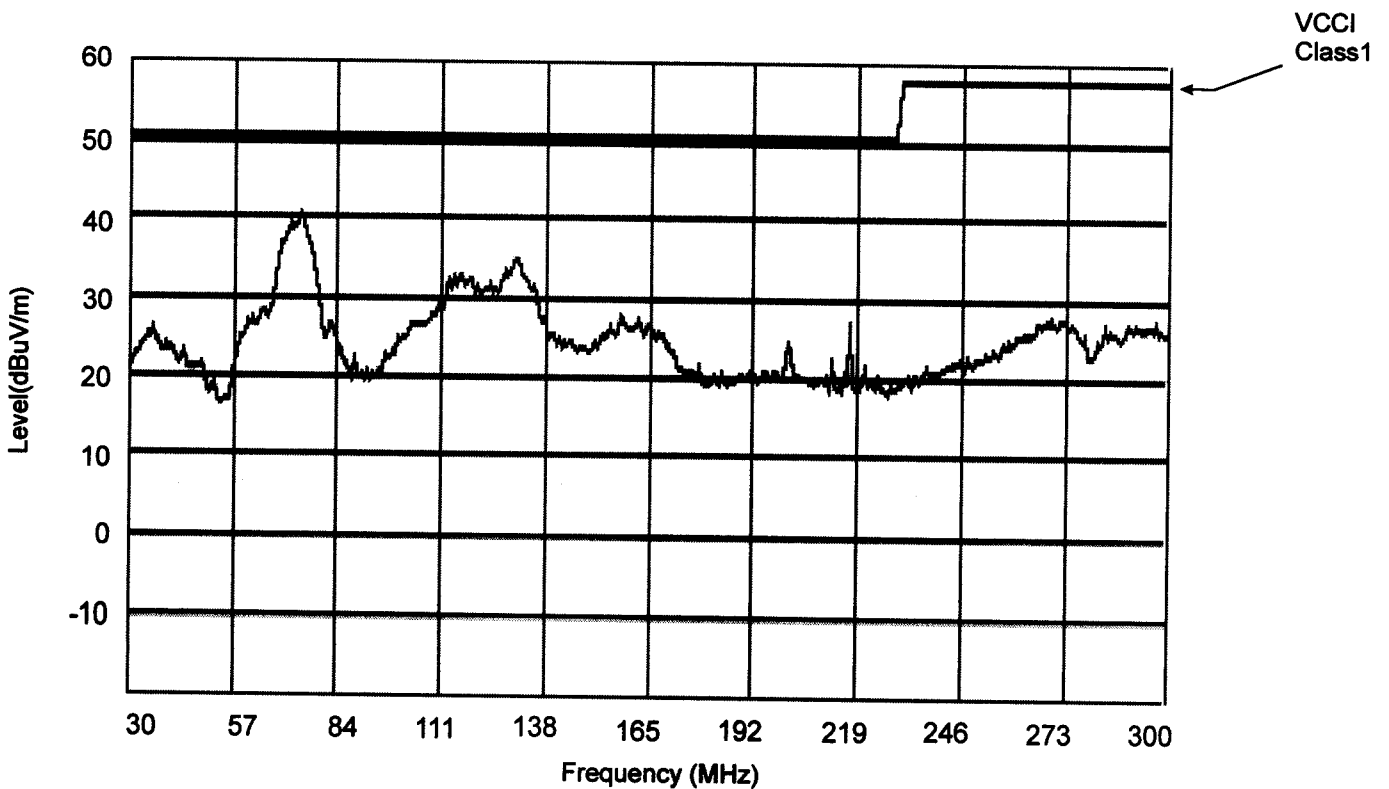
Conditions: Vin: 230VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

**GEN100-15**

**Horizontal**



**Vertical**



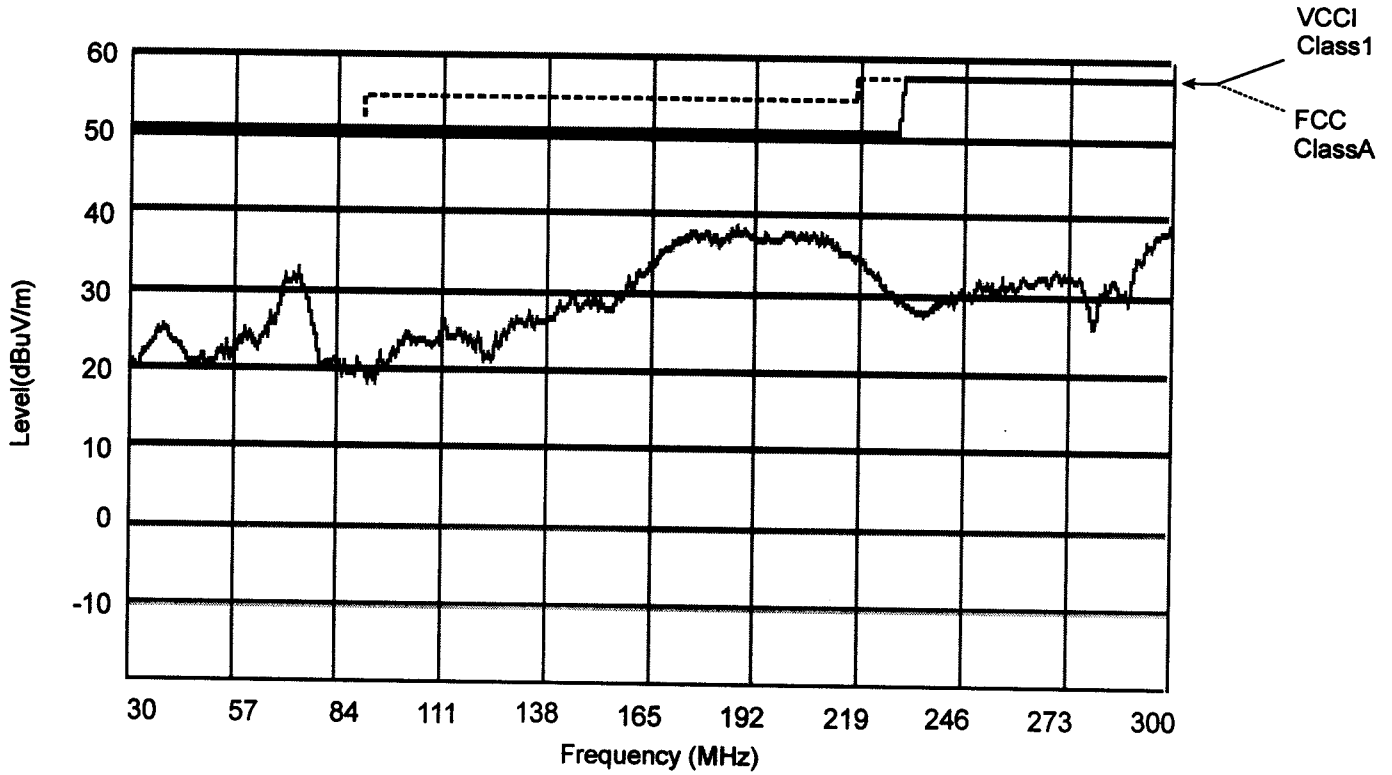
Limits of EN55022-A are same as its VCCI class 1



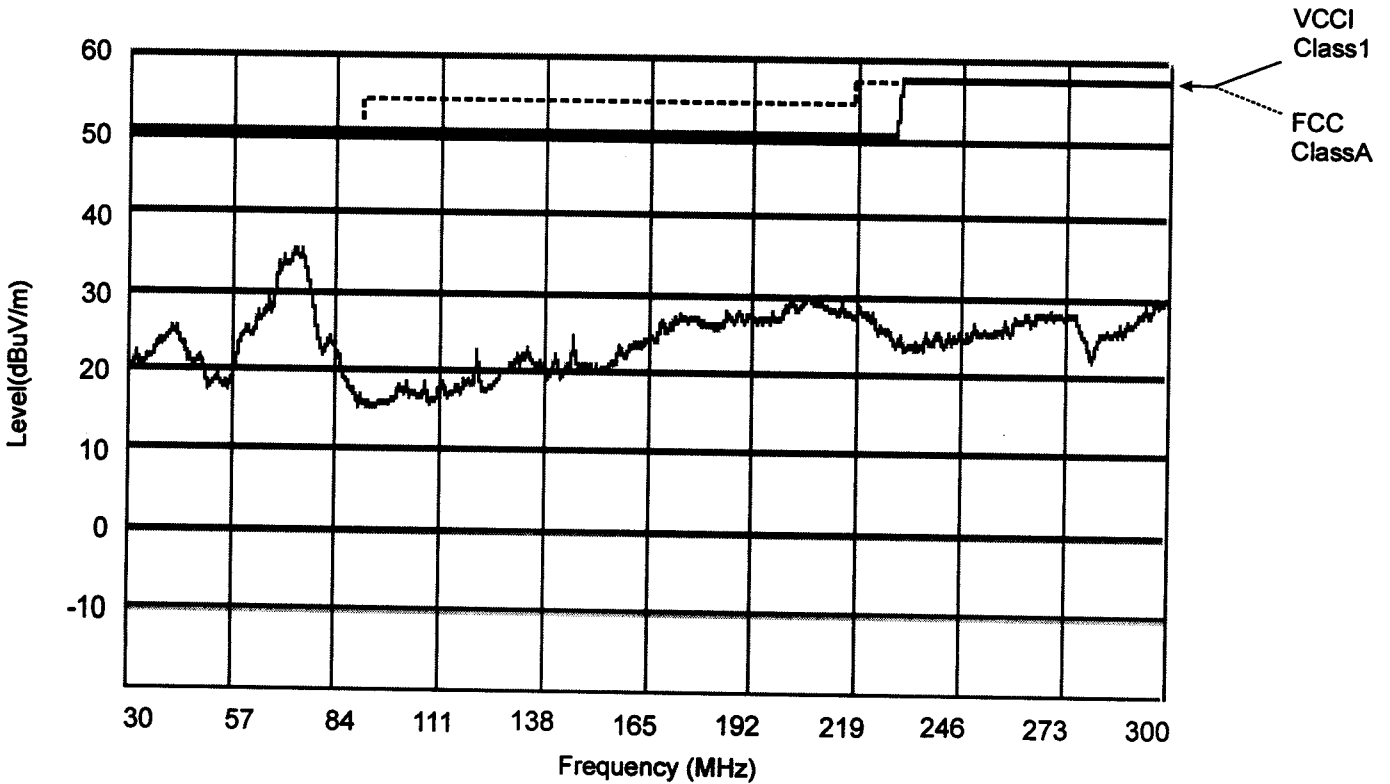
Conditions: Vin: 115VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

**GEN600-2.6**

**Horizontal**



**Vertical**



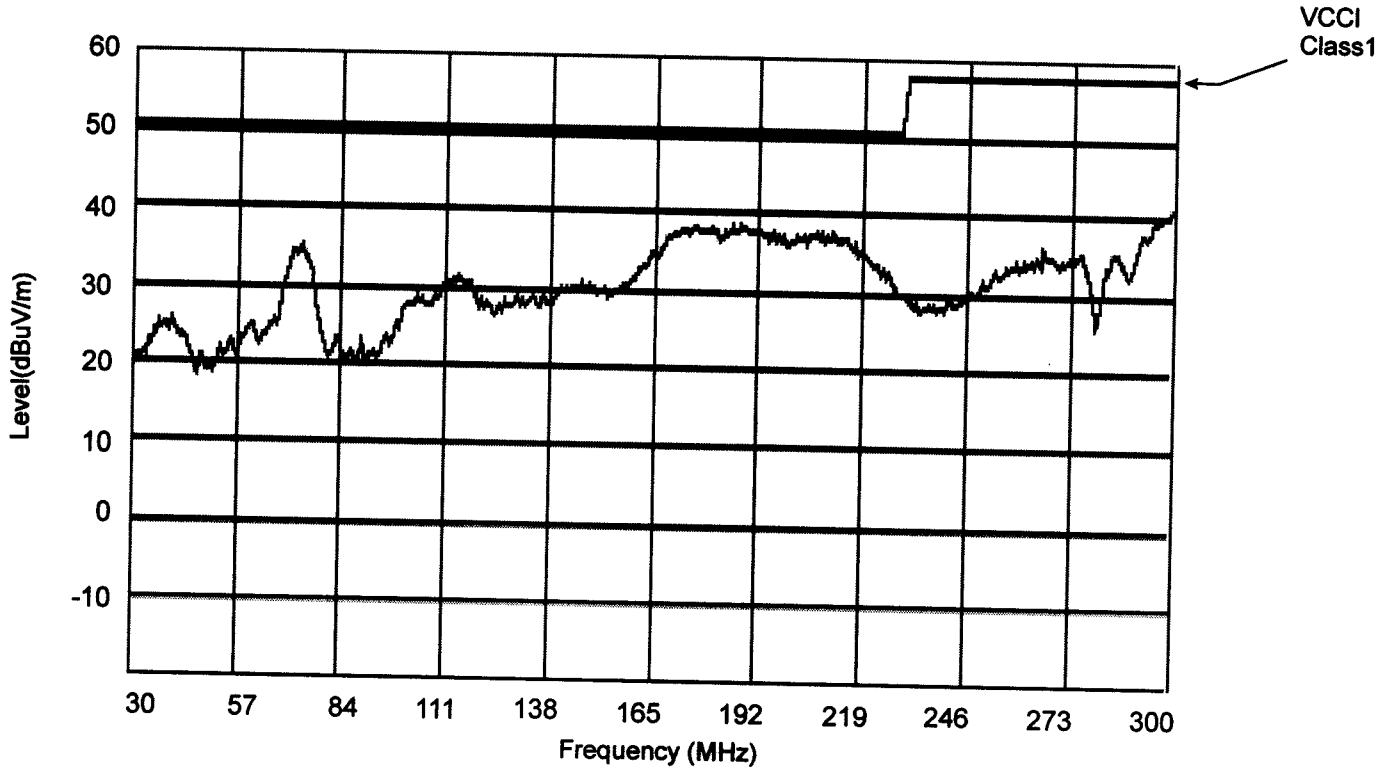
Limits of EN55022-A are same as its VCCI class 1

# GEN1500

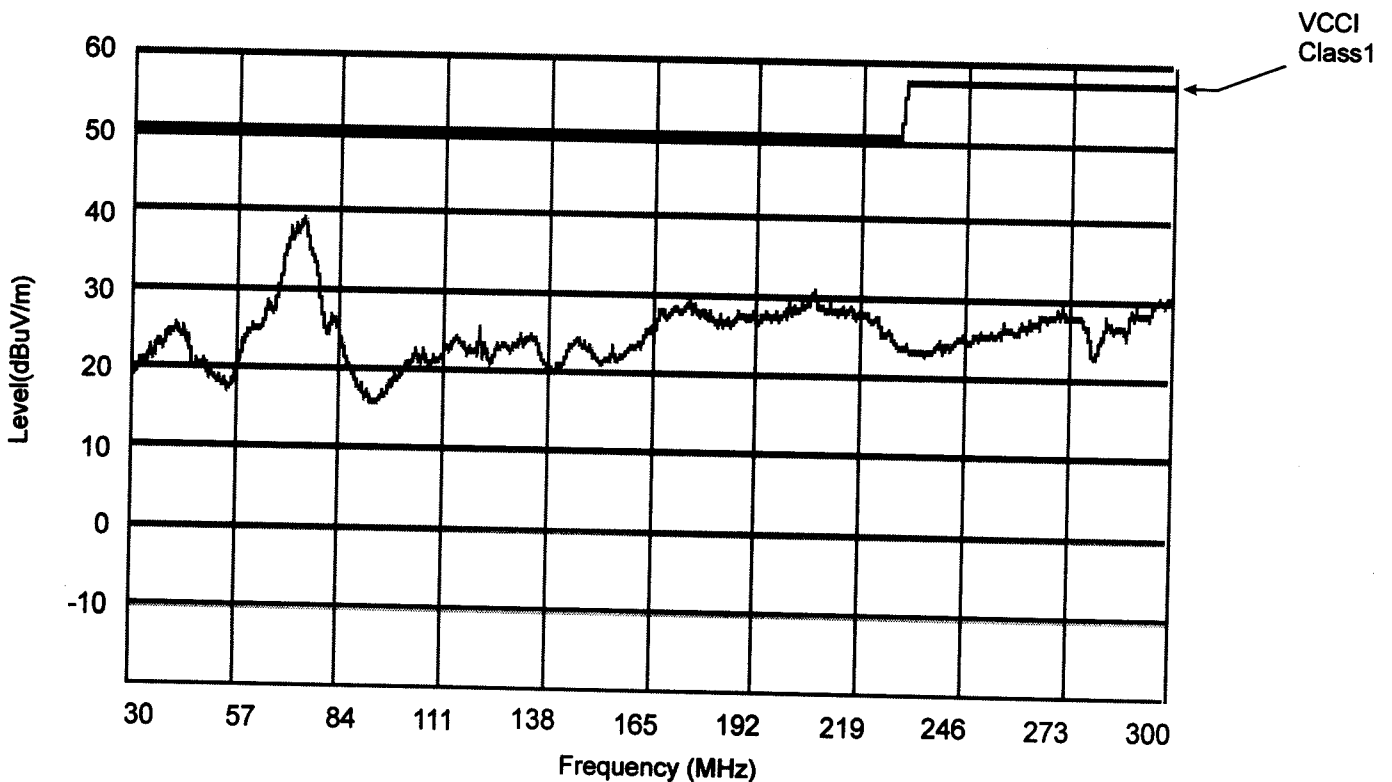
Conditions: Vin: 230VAC  
Vout: 100%  
Iout: 100%  
Ta : 25°C

GEN600-2.6

## Horizontal



## Vertical



Limits of EN55022-A are same as its VCCI class 1

**NEMIC-LAMBDA**