


FPS1000 - 24

TEST DATA

EN61000

DWG: IA599-58-02		
APPD	CHK	DWG
Doron P. Apr-13-05	Doron P. Apr-13-05	

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The above data is typical value.

The values are considered to be actual capability data.

**1.ELECTRO-STATIC DISCHARGE TEST
(EN61000-4-2)**

(1)Equipment used

SCHAFFNER NSG435

Discharge resistance: 330 Ohm Capacity: 150pF

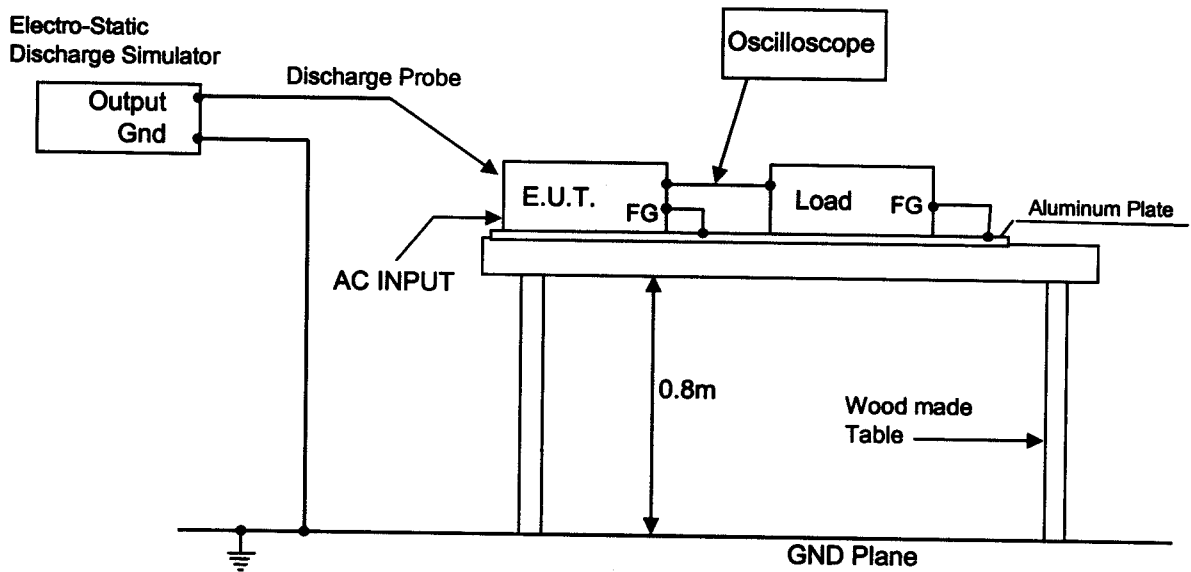
(2)Test conditions

Input voltage:	Rated	Output voltage:	Rated
Output current:	100%	Polarity:	-,+
Number of tests:	10 times	Discharge interval:	>1 Second

(3)Test method and Device test point

Contact discharge: FG,Case screw

Air discharge: Input and Output terminal



(4)Acceptable conditions

- 1.Output voltage regulation not to exceed $\pm 5\%$ of initial (before test) value during test.
- 2.Output voltage to be within regulation specification after the test.
- 3.Along with 1 and 2, no discharge of fire or smoke, as well as no output failure.

(3)Test Result

Contact Discharge (Kv)	FPS1000-24	Air Discharge (Kv)	FPS1000-24
4	PASS	8	PASS

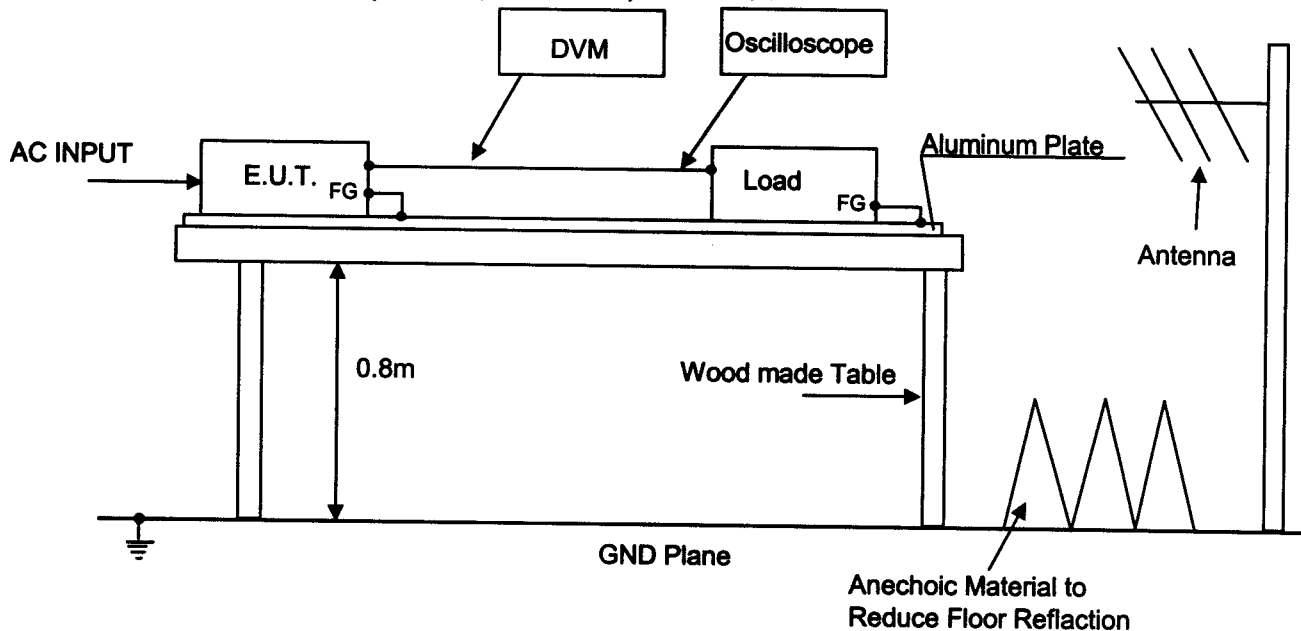
**2.RADIATED SUSCEPTIBILITY TEST
(EN61000-4-3)**

(1)Equipment used

Synthesized RF signal generator 10 kHz- 1.05GHz: Fluke 6061A;Field Monitor: Amplifier Research FM1000; RF amplifier: Amplifier Research 150L; Antenna, biconical, high power 20-300 MHz: A.H. Systems Inc. SAS-200/543; Amplifier RF, 500MHz to 1000MHz: Hermon Labs A-120; Power sensor: Boonton 51075; Amplifier 1 to 4GHz: AS 0104-55/55B; Coupling-decoupling network: Hermon Lab. 50141S1; Power meter, RF: Boonton 4200; Antenna, double-ridged waveguide horn: EMC Test System 3115;

(2)Test conditions

Input voltage:	Rated	Output voltage:	Rated
Output current:	100%	Amplitude Modulated:	80%,1kHz
Electromagnetic Frequency:	80~1000MHz	Ambient temperature:	25°C
Distance:	2.4m	Wave Angel:	Horizontal and Vertical
Sweep condition:	1.0% Step Up,2.0 second Hold		
Test Angle:	Top/Botton,Both Sides,Front/Back		



(3)Acceptable conditions

- 1.Output voltage regulation not to exceed $\pm 5\%$ of initial (before test) value during test.
- 2.Output voltage to be within regulation specification after the test.
- 3.Along with 1 and 2, no discharge of fire or smoke, as well as no output failure.

(4)Test Result

Radiated Field Strength (V/m)	FPS1000-24
3	PASS

**3.ELECTRICAL FAST TRANSIENT BURST TEST
(EN61000-4-4)**

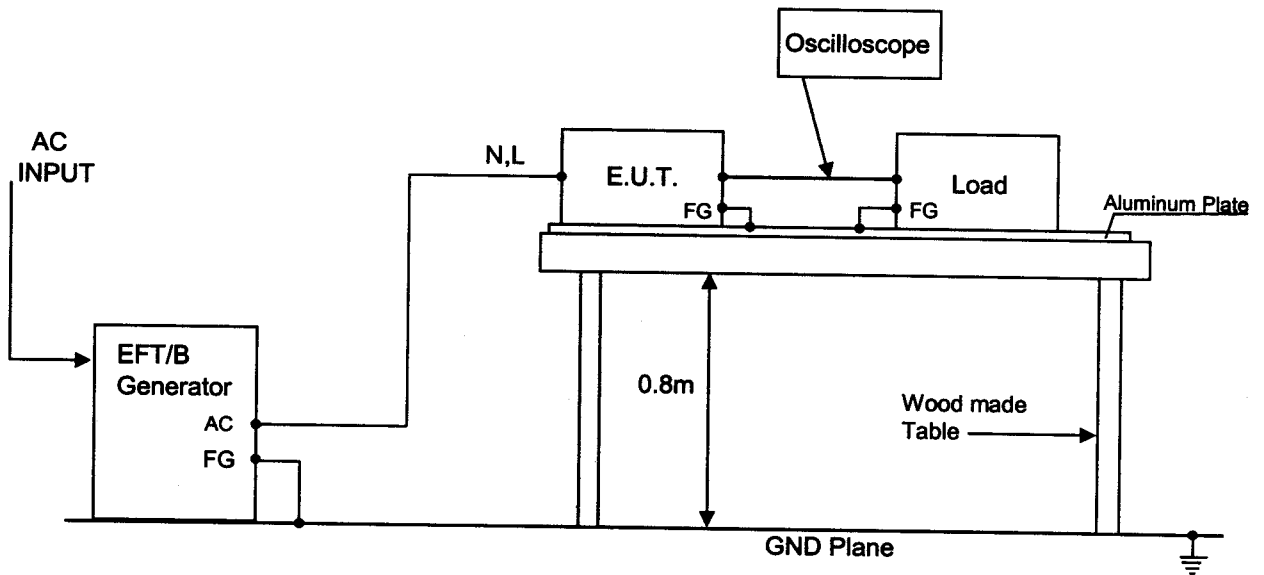
(1)Equipment used

EFT/B Generator: SCHAFFNER NSG2025

(2)Test conditions

Input voltage:	Rated	Output voltage:	Rated
Output current:	100%	Test time:	1 minute
Polarity:	-,+	Ambient temperature:	25°C
Number of tests:	3 times		

(3)Test method and Device test point: Neutral (N),Line (L), Ground (FG)
Apply to N,L,FG separately,as well as,all at the same time.



(4)Acceptable conditions

- 1.Output voltage regulation not to exceed $\pm 5\%$ of initial (before test) value during test.
- 2.Output voltage to be within regulation specification after the test.
- 3.Along with 1 and 2, no discharge of fire or smoke, as well as no output failure.

(5)Test Result

Test Voltage (kV)	Repetition Rate (kHz)	FPS1000 - 24
1	5	PASS
2	5	PASS

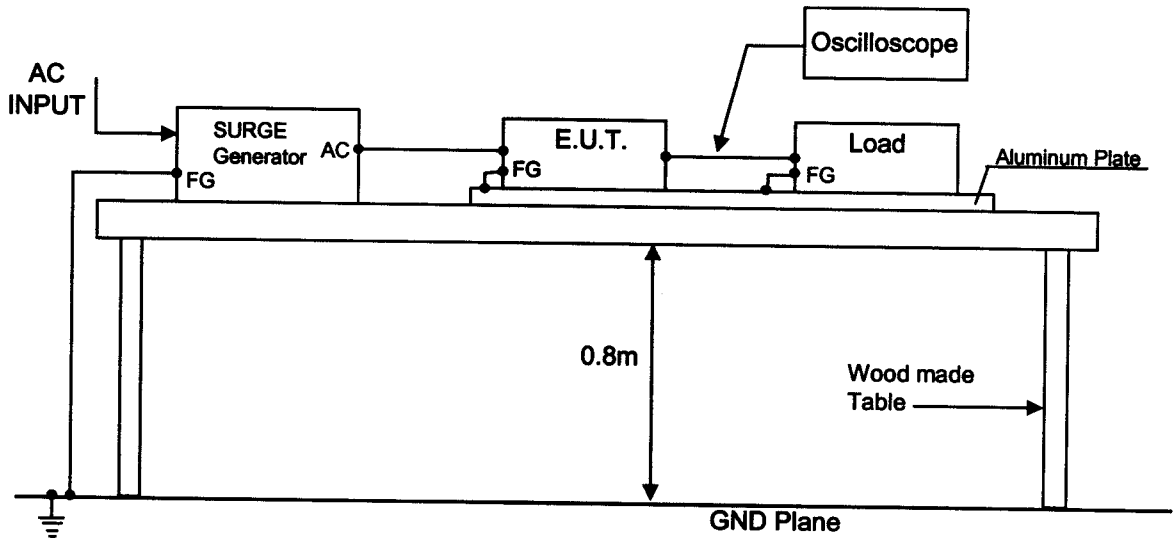
**4.SURGE TEST
(EN61000-4-5)**

(1)Equipment used

Surge Generator: SCHAFFNER-NSG651
 Coupling impedance: Common - 12 OHm
 Normal - 2 OHm
 Coupling capacitance: Common - 9 uF
 Normal - 18 uF
 Coupling network: SCHAFFNER-CDN110

(2)Test method and devise test point

Input voltage:	Rated	Output voltage:	Rated
Output current:	100%	Number of tests:	5 times
Polarity:	-,+	Mode:	Common, Normal
Phase:	0,90 DEG.	Ambient temperature:	25°C



(4)Acceptable conditions

- 1.Output voltage regulation not to exceed $\pm 5\%$ of initial (before test) value during test.
- 2.Output voltage to be within regulation specification after the test.
- 3.Along with 1 and 2, no discharge of fire or smoke, as well as no output failure.

(5)Test Result

Test Voltage (kV) Common	FPS1000-24	Test Voltage (kV) Normal	FPS1000-24
1.0	PASS	1.0	PASS
2.0	PASS	2.0	PASS
4.0	PASS		

**5.CONDUCTED SUSCEPTIBILITY TEST
(EN61000-4-6)**

(1)Equipment used

RF Signal Generator 10kHz-1050MHz:

Fluke,6061A

RF Amplifier 10kHz-220MHz,150W:

Amplifier Research,150L

Coupling/Decoupling Network:

HL CDN 801-M3

(2)Test Condition:

Input voltage: Rated

Output voltage: Rated

Output current: 100%

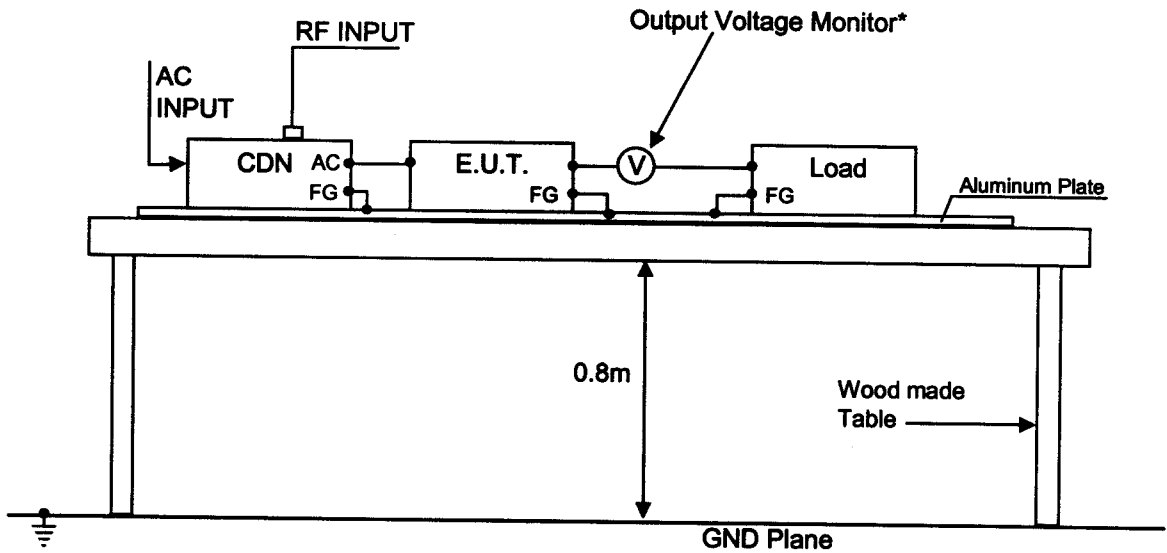
Electromagnetic

Frequency: 150kHz~80MHz

Sweep Condition: 1.0% Step Up, 2.0 Seconds Hold

Ambient temperature:25°C

(2)Test Method:



*Used Analog Voltage Meter

(4)Acceptable conditions

1. Output voltage regulation not to exceed $\pm 5\%$ of initial (before test) value during test.
2. Output voltage to be within regulation specification after the test.
3. Along with 1 and 2, no discharge of fire or smoke, as well as no output failure.

(5)Test Result

Voltage Level (V)	FPS1000-24
1	PASS
2	PASS
3	PASS

6.INPUT CURRENT HARMONICS TEST
(EN61000-3-2,ClassA)

Model:

(1)Equipment used

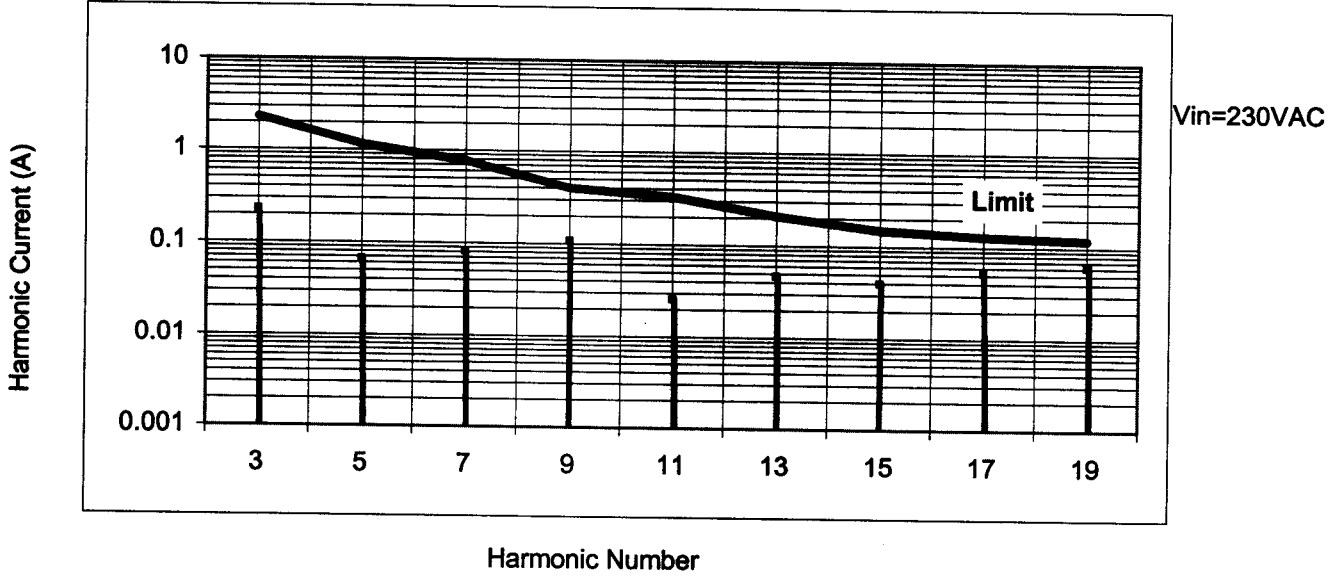
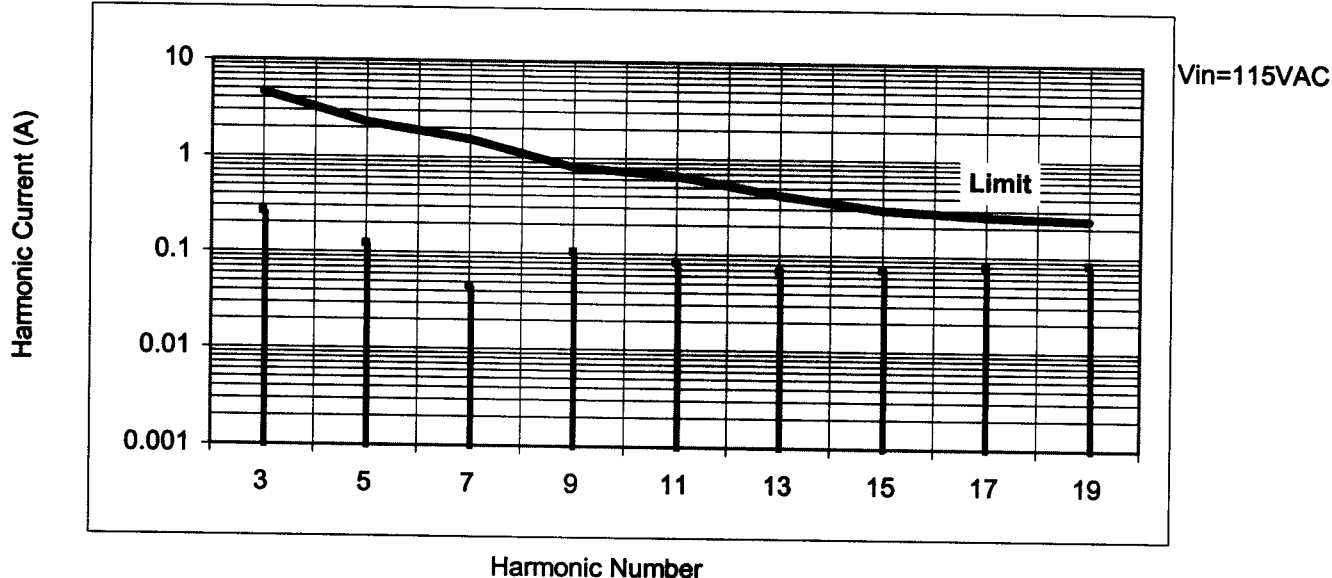
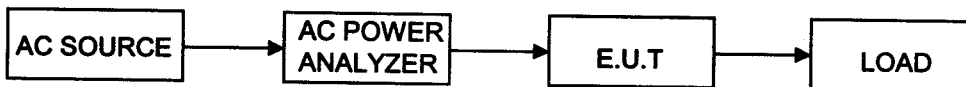
AC Power Analyser:
PACS-1(California Instruments)

AC Source:
5001 IX (California Instruments)

(2)Test conditions:

Input voltage: 115VAC;230VAC
Output current: 100%

(3)Test Method:



Vin	HARMONICS								
	3	5	7	9	11	13	15	17	19
115 VAC	0.26	0.12	0.05	0.11	0.08	0.07	0.07	0.08	0.08
230 VAC	0.23	0.07	0.08	0.11	0.03	0.05	0.04	0.05	0.06

Input Current Harmonics EN61000-3-2 Limit
 Input Current Harmonics-Measurement