
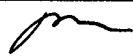



# FPS1000 - 12

## TEST DATA

### EN61000

DWG: IA659-58-01		
APPD	CHK	DWG
 27.05.07	 27.05.07	 21.05.07

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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: -,+

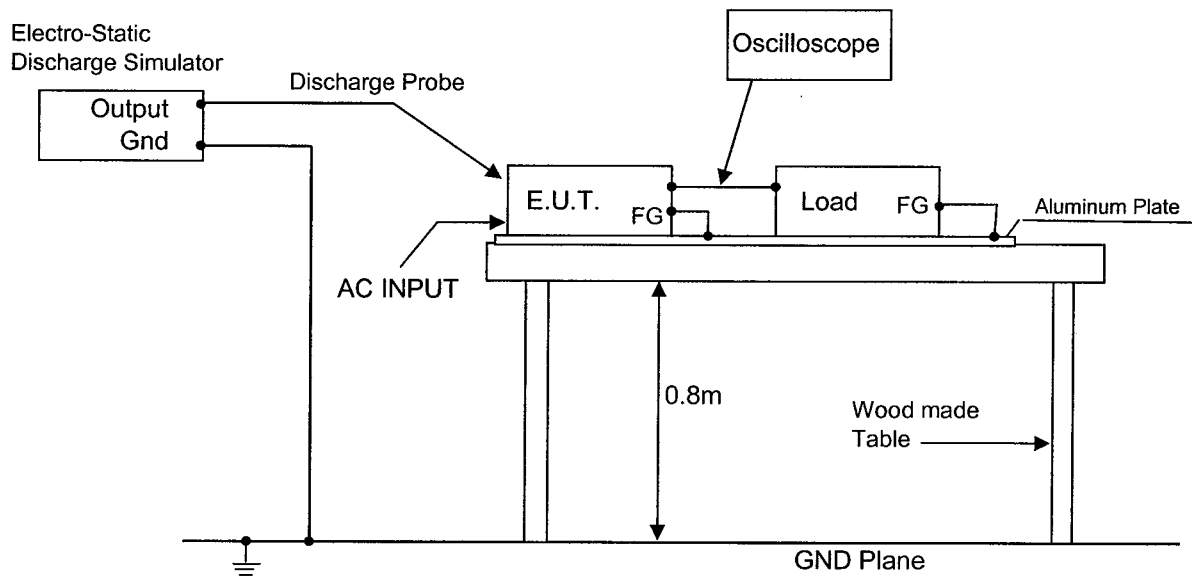
Number of tests: 10 times

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)	FPS1000-12	Air Discharge (Kv)	FPS1000-12
4	PASS	8	PASS

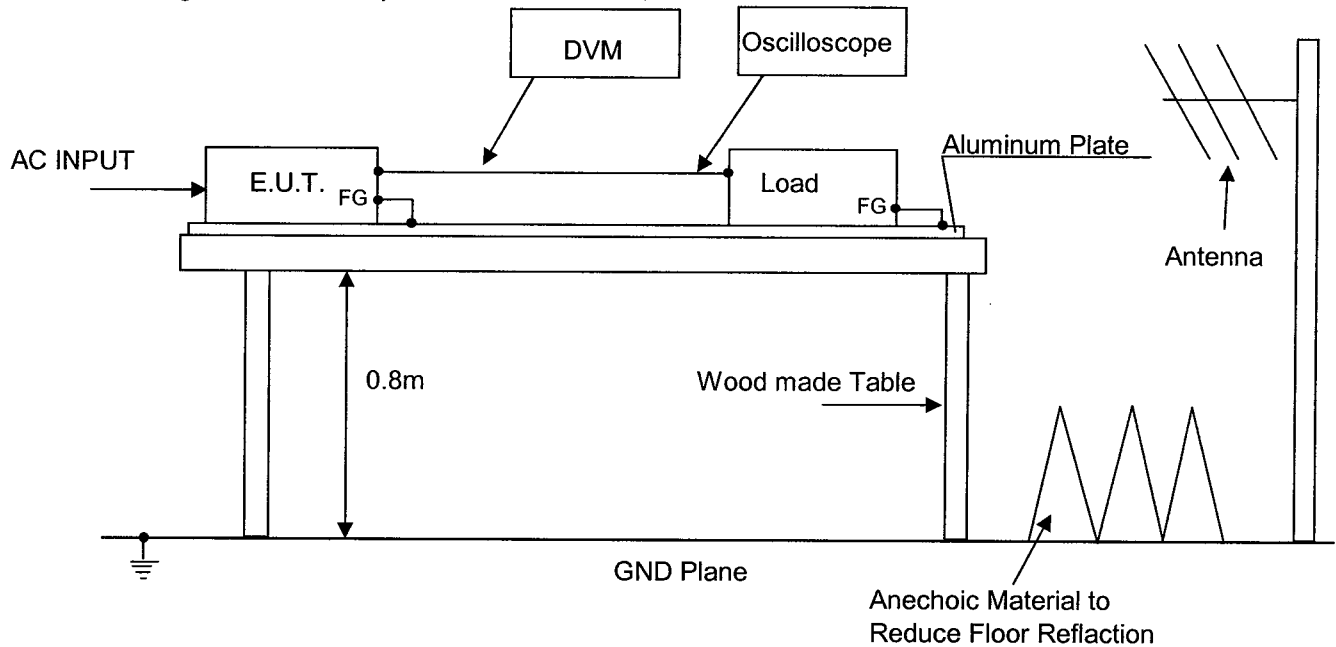
**2.RADIATED SUSCEPTIBILITY TEST**  
(EN61000-4-3)

(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)	FPS1000-12
3	PASS

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

(1)Equipment used

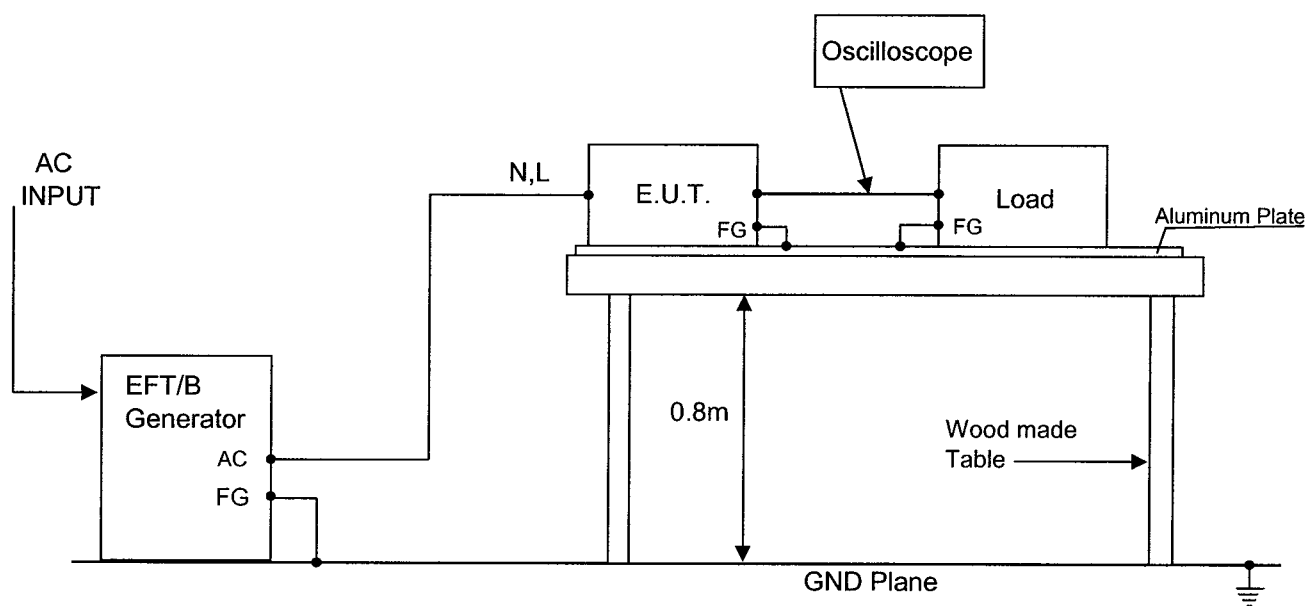
EFT/B Generator: SCHAFFNER NSG2025

(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 - 12
1	5	PASS
2	5	PASS

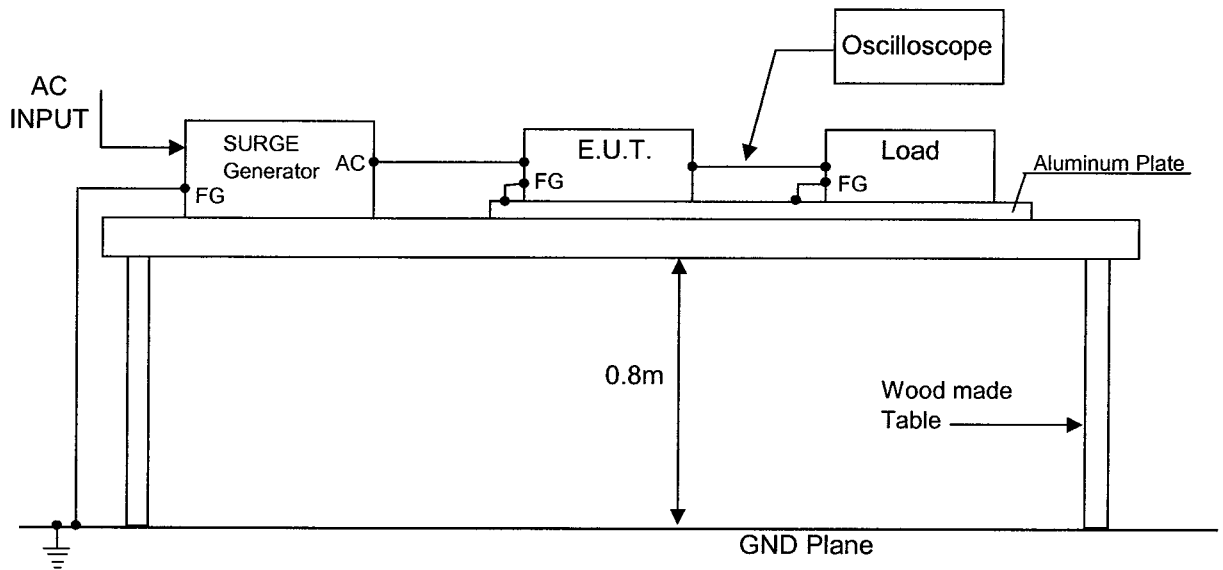
**4.SURGE TEST**  
(EN61000-4-5)

(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	FPS1000-12	Test Voltage (kV) Normal	FPS1000-12
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

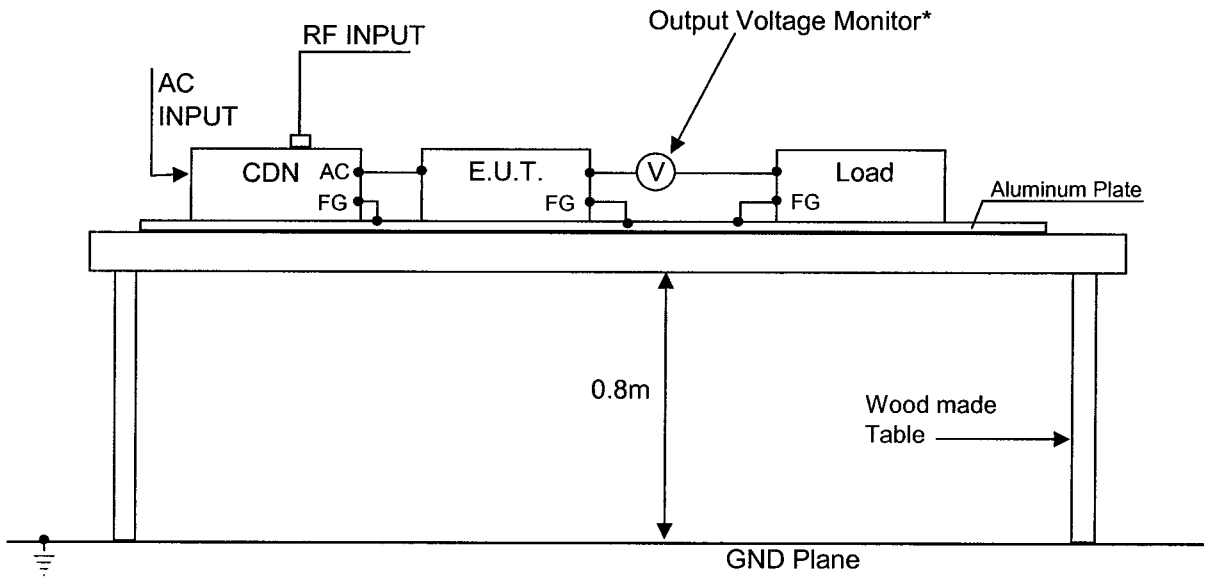
(2)Test Condition:

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

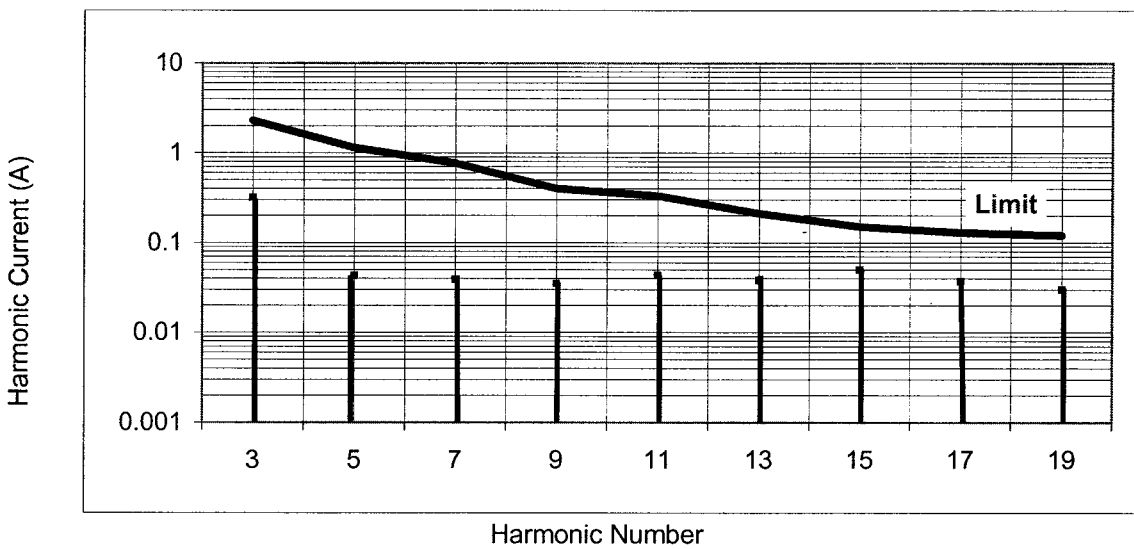
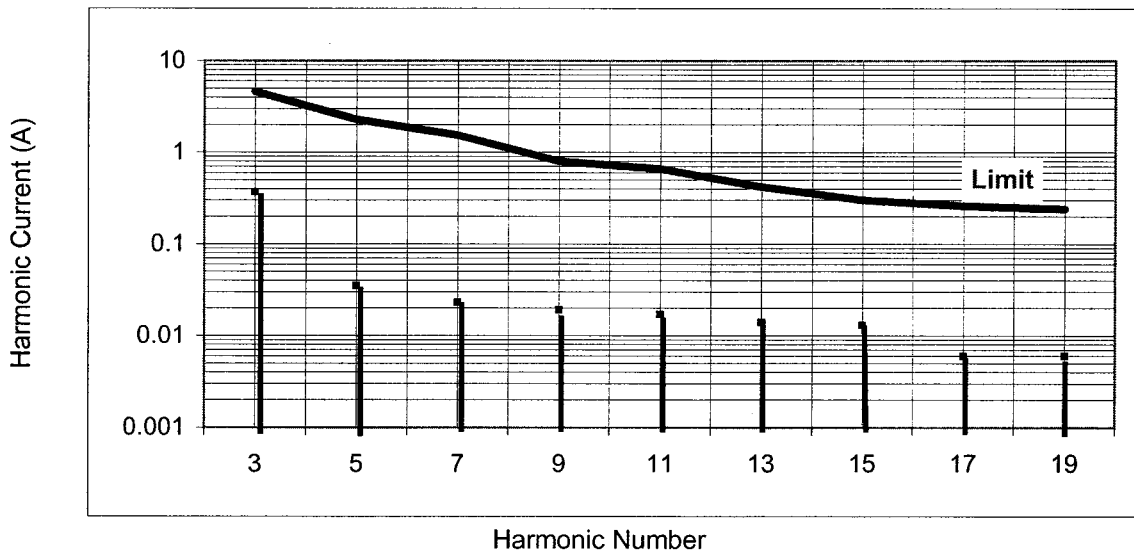
Voltage Level (V)	FPS1000-12
1	PASS
2	PASS
3	PASS

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

(1)Equipment used:  
AC Power Analyser:  
PACS-1(California Instruments)  
AC Source:  
5001 IX (California Instraments)

(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	4.6	2.28	1.54	0.8	0.66	0.42	0.3	0.26	0.24
VAC	0.369	0.035	0.023	0.019	0.017	0.014	0.013	0.006	0.006
230	2.3	1.14	0.77	0.4	0.33	0.21	0.15	0.13	0.12
VAC	0.317	0.043	0.039	0.035	0.043	0.038	0.050	0.037	0.030

Input Current Harmonics EN61000-3-2 Limit

Input Current Harmonics-Measurement