



ADA1000F EMI/EMS Test result

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Design engineering dep.

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No.	Test item	Conditions	Conditions of Acceptability	Result
1	Line conduction	(1) Rated input(AC100V,120V,230V) (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$	(1)Meets the undermentioned standard. FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B	OK
2	Radiated emission	(1) Rated input(AC100V,120V,230V) (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$	(1)Meets the undermentioned standard. FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B	OK
3	Harmonic current (EN61000-3-2)	(1) Rated input (AC100V,230V) (2) Load - 0 - Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$	(1)Meets the undermentioned standard. EN61000-3-2 classA	OK
4	Static electricity immunity test (EN61000-4-2)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ (4) Contact discharge voltage 8[kV] (Level 4)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
5	Radiated, radio-frequency, electromagnetic field immunity test (EN61000-4-3)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ (4)Testing field strength 10[V/m] (Level 3)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
6	Electrical fast transient/ burst immunity test (EN61000-4-4)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ (4) Test peak voltage 4[kV] (Level 4)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
7	Surge immunity test (EN61000-4-5)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ (4) Test voltage Line to line 2[kV] (Level 3) Line to earth 4[kV] (Level 4)	(1)The power supply is not stop (2)Circuit does not malfunction. (3)No abnormality of the insulation destruction etc. (4)Parts are no damaged.	OK
8	Immunity to conducted disturbances, induced by radio-frequency fields (EN61000-4-6)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ (4) Voltage level (e.m.f.) 10[V] (Level 3)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
9	Power frequency magnetic field immunity test (EN61000-4-8)	(1) Rated input (AC230V) (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ (4) Magnetic field 30A/m (Level 4)	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
10	Voltage dips, short interruptions and voltage variations immunity test (EN61000-4-11)	(1) Rated input (AC230V) -30% reduction at 10mS min. -60% reduction at 100mS min -95% reduction at 5S min. - $\pm 10\%$ variation at 15 minutes (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK



RADIATED EMISSION

Model Name : ADA1000F-36

Model No. :

Serial No. :

Points : 3

Detector : PEAK/QP

Polarization : Hori. & Vert.

Power Supply : 230V(1Phase) 50Hz

Limit: [EN 55022] Class B<3m>

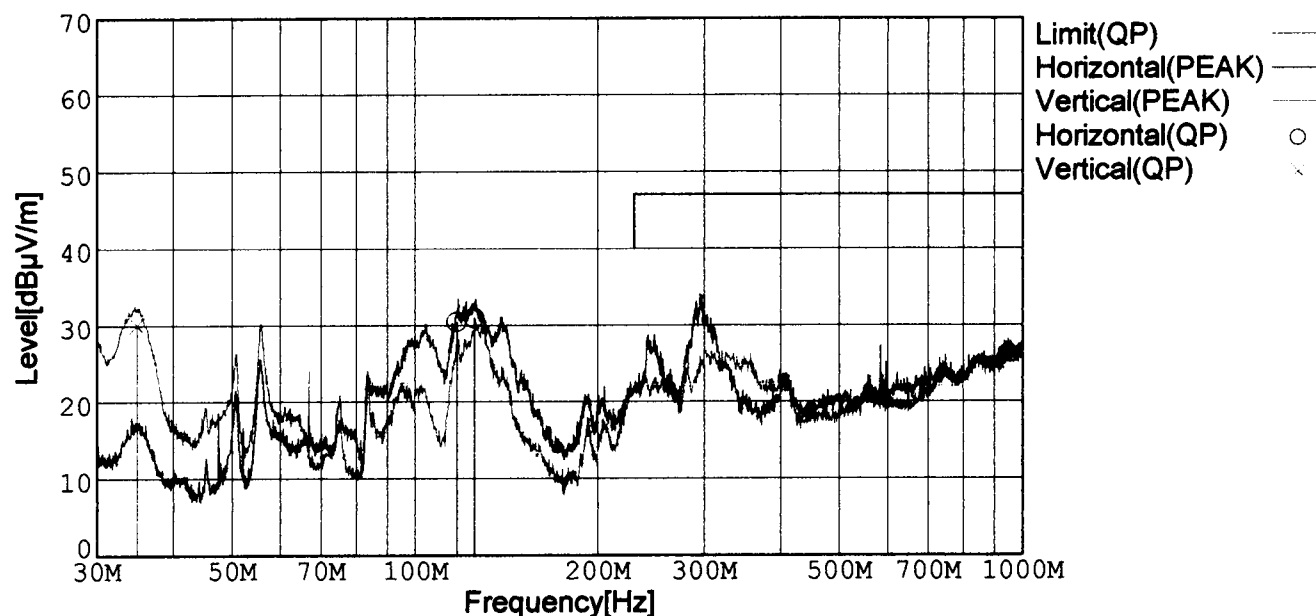
Temp. : 25deg C

Humi. : 45%

Date : 2002/11/11 18:22

Test Equip. : R3132,ESPC

Comment : Load100%(+36V28A)



Frequency [MHz]	Meter Reading (QP) [dBμV]	Ant. Type	Antenna Factor [dB/m]	Cable & Preamp [dB]	Level (QP) [dBμV/m]	Angle[°]	Height [cm]	Polar.	Limit [dBμV/m]	Margin [dB]
34.966	42.5	BL	15.3	-27.8	30.0	11	104	Vert.	40.0	10.0
117.382	44.7	BL	10.8	-25.1	30.4	228	129	Hori.	40.0	9.6
125.491	44.8	BL	11.2	-25.1	30.9	176	160	Hori.	40.0	9.1

BL: Biconi-Log



LINE CONDUCTION

Model Name : ADA1000F-36

Model No. :

Serial No. :

Points : 7

Detector : PEAK/QP/Ave.

Line Mode : VA/VB

Power Supply : 230V(1Phase) 50Hz

Limit1: [EN 55022] Class B(QP)

Limit2: [EN 55022] Class B(Ave.)

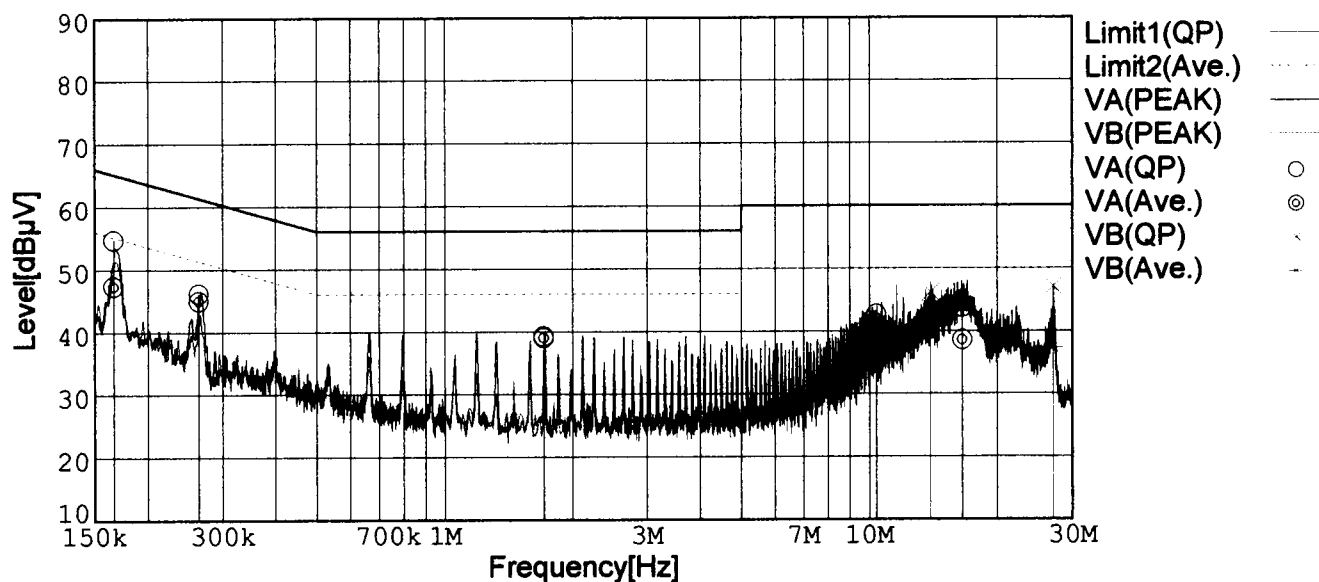
Temp. : 25deg C

Humi. : 45%

Date : 2002/11/7 21:36

Test Equip. : R3132,ESPC

Comment : Load100%(+36V28A)



Frequency [MHz]	Meter Reading (QP) [dBμV]	Meter Reading (Ave.) [dBμV]	Factor [dB]	Level (QP) [dBμV]	Level (Ave.) [dBμV]	Line	Limit (QP) [dBμV]	Limit (Ave.) [dBμV]	Margin (QP)[dB]	Margin (Ave.) [dB]
0.1662	44.7	37.3	10.0	54.7	47.3	VA	65.2	55.2	10.5	7.9
0.2637	36.1	35.0	10.0	46.1	45.0	VA	61.3	51.3	15.2	6.3
1.7107	29.1	28.8	10.2	39.3	39.0	VA	56.0	46.0	16.7	7.0
10.3917	32.1	30.6	10.5	42.6	41.1	VA	60.0	50.0	17.4	8.9
16.5663	33.1	27.9	10.7	43.8	38.6	VA	60.0	50.0	16.2	11.4
13.9417	35.5	28.6	10.7	46.2	39.3	VB	60.0	50.0	13.8	10.7
27.0815	36.0	26.4	11.0	47.0	37.4	VB	60.0	50.0	13.0	12.6