

Feb 8, 2022 Cosel Co., Ltd. US Design Dept.

Tetsukazu Okamoto

EMI/EMS Test Result

Model Name : LHA10F series

The EUT is operated with following condition during EMI/EMS test.

Input Voltage : 230VAC / 50Hz

Output Current : Rated Current Prepared : Kyouhei Yamamoto

Approved:

Ambient Temperature : $25^{\circ}\text{C} \pm 10^{\circ}\text{C}$

No	Subje	et	Reference standard	Test Condition	Criteria *1	Result
1	EMI	Conducted Emission		EN55011, EN55032 Class B CISPR11 CISPR 32 Class B FCC Part15 Class B VCCI Class B	-	Pass
2		Radiated Emission		EN55011, EN55032 Class B CISPR11 CISPR 32 Class B FCC Part15 Class B VCCI Class B	-	Pass
3		Harmonic Current	IEC61000- 3-2	Class A	-	Pass
4		Electrostatic discharge immunity test	IEC61000- 4-2	Contact Discharge : Level 4 (8kV) Air Discharge : Level 4 (15kV)	А	Pass
5	EMS	Radiated, radio-frequency, electromagnetic field immunity test	IEC61000- 4-3	10V/m : (80MHz~1.0GHz) 3V/m : (1.4 ~ 2.0GHz) 1V/m : (2.0 ~ 2.7GHz) 80% Amplitude modulated	A	Pass
6		Electrical fast transient / Burst immunity test	IEC61000- 4-4	Level 4 (4kV) Repetition Rate : 5kHz and 100kHz	A	Pass
7		Surge immunity test	IEC61000- 4-5	Line to Line : Level 4 (2kV) Line to Earth : Level 4 (4kV)	A	Pass
8		Immunity to conducted disturbances, induced by radio-frequency fields	IEC61000- 4-6	Voltage Level (e.m.f.) : Level 3 (10Vrms)	A	Pass
9		Power frequency magnetic field Immunity test	IEC61000- 4-8	Magnetic Field Strength : Level 4 (30A/m)	A	Pass
10		Voltage dips, short interruptions and voltage variations immunity test	IEC61000- 4-11	(1) 100% dip for 20ms (2) 60% dip for 200ms (3) 30% dip for 500ms (4) 100% dip for 5 seconds (short interruption)	A B A B	Pass Pass Pass Pass

*1 Definition of Criteria

Criteria A: (1) No output voltage drop with control circuit failure.

(2) No protection circuit and other circuit malfunction.

Criteria B: (1) The output voltage is temporary degradation of performance.

It recovers its normal performance without operator intervention.

(2) No protection circuit and other circuit failure.

<Notes>

Power supply shall not determine the final equipment performance against EMS test. Therefore we confirmed the output voltage performance only. EMS test should be performed as a final product.