

EMI Test System

EMI-9KA/EMI-9KB/EMI-9KC

EMI-9K is an automatic EMI receiver. It is a main test system for EMI (Electro Magnetic Interference) testing. The EMI-9K is produced by the full closure structure and strong electro-conductibility material, which make sure high shielding effect. Due to the new technology for the EMI Test System, it solved the instrument self-EMI problem. The test results are according to the international format test report. The EMI Test System EMI-9K fully meets CISPR16-1, CISPR15:2018, GB17743, FCC, EN55015 and EN55022

These versions are available:

EMI-9KA – 9 kHz – 30 MHz

EMI-9KB – 9 kHz – 300 MHz

EMI-9KC – 9 kHz – 1 GHz



The EMI-9KA/EMI-9KB System were used to test the 9K-300MHz Electro Magnetic Interference for **Lighting Luminaries, Mobile and Networks, Automotive Electronics and Home Applications**

1、 System Configurations

EMI-9KB Test System includes: EMI-9KB 9K-300MHz Receiver, LISN-A 5A Artificial Network Power, CDNE-M316 Coupling/Decoupling Network for Emission, 3pcs Isolation Transformers, Attenuator and cables.

EMI-9KA Test System includes: EMI-9KA 9K-30MHz Receiver, LISN-A 5A Artificial Network Power, 3pcs Isolation Transformers, Attenuator and cables.

EMI-9KA Test System includes: EMI-9KA 9K-1 GHz Receiver, LISN-A 5A Artificial Network Power, 3pcs Isolation Transformers, Attenuator and cables.

Option instruments to work with the EMI-9KA/EMI-9KB/EMI9KC:

- LSP-500 VAR / LSP 1KVAR pure sine wave AC Power source for EUT
- SDR 2000B Magnetic Shielding Cabinet for the EMI system
- VVLA 30M Three Loop Antenna to test 9K – 30 MHZ radiation
- AB-CLP Absorbing Clamp to test the home Applications & motor tools

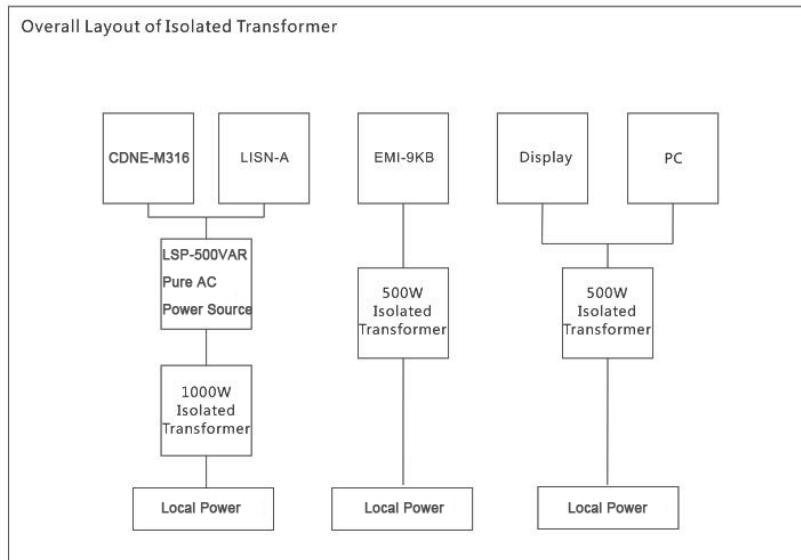
3、 Requirements of test environment

- Square meter of the room should be bigger than 3*3*2.5M (L*W*H), no other equipment in same room which could have radio interference.
- Recommend work with LISUN SDR-4000 or SDR2000B magnetic shielding cabinet to test. If don't have shielding cabinet, the best location of test room is in ground floor, which makes minimum earth resistance possible.
- Big metal plate basis is required. Metal plate can be 1mm or 2mm thick copper plate with minimum 2 square meters.
- Metal plate shall be well earthed. Dig a more than 2 meters depth hole in humid area, put a copper stick with diameter more than 20mm and length more than
- 1m into ground as basis connection of copper stick and cable must be soldered or connected by screw, no loose is permitted.

4、 Installation



- Test Table A: Install the PC/Printer/EMI Receiver on the desk. Put the Isolated Transformer on the bottom with table E. (Can add a LSP-500VAR Pure AC power source on the bottom with the table D.)
- EUT Table B: Install the LISN-A/LISN-B on the table, and prepare the EUT on the table B when did Conduction Emission testing 9KHZ~30MHZ. Install the
- CDNE-M316/M216 on bottom of the table B.
- EUT Table C: When did Radiation test 30MHZ-300MHZ, install the EUT on the table C and connect to the CDNE-M316/M216.



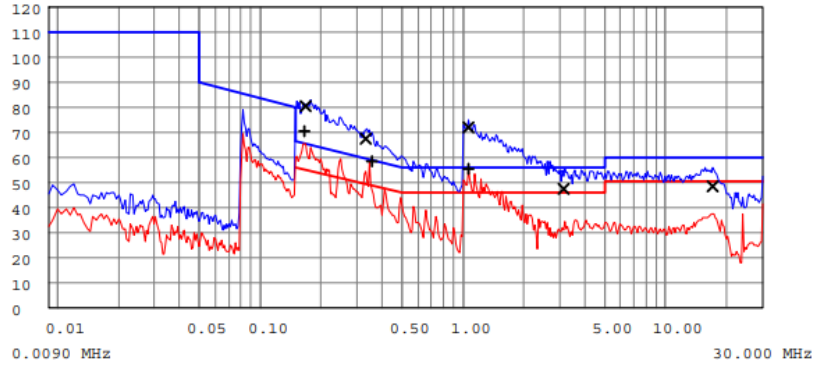
P.S. According to CISPR 15:2018, CDNE-M216/M316 replaces the previous CDN-M23 since 2019 year

EMI TEST REPORT

OrganizatioAsmetec	Operator: BFR	EUT: parameter
Place:	Time: 2019/2/1/9:54	Test equipmenKH3962
Detector: PK+AV	Test-time (ms)30	SN: 143962505
Limit: EN55015	Transductor (PK/A'PK / AV	JZ: 2,13,1273
Remark: 101077-7116		

Start (MHz)	End (MHz)	Step (MHz)
0.009	0.150	0.001
0.150	2.000	0.002
2.000	10.000	0.010
10.000	30.000	0.025

scan result



(QP)	freq (MHz)	lev (dBuV)	Lim (dBuV)	i+ (lev-Lim)
	0.168	80.3	65.5	14.9
	0.333	67.0	60.8	6.3
	1.059	71.9	56.0	15.9
	3.165	47.2	56.0	-8.8
	17.136	48.5	60.0	-11.5

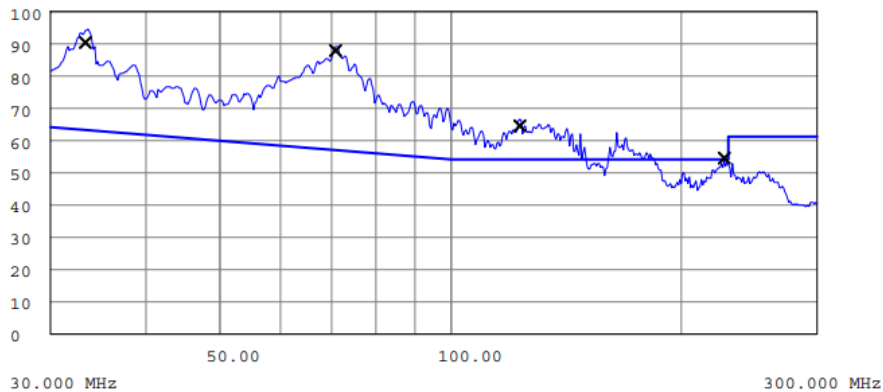
(AV)	freq (MHz)	lev (dBuV)	Lim (dBuV)	i+ (lev-Lim)
	0.166	70.2	55.5	14.7
	0.356	58.2	50.1	8.1
	1.063	55.3	46.0	9.3

EMI TEST REPORT

OrganizatioAsmetec	Operator: BFR	EUT: parameter
Place:	Time: 2019/2/25/12:30	Test equipmenKH3962
Detector: QP	Test-time (ms)30	SN: 143962505
Limit: EN55015CDN	Transductor (PK/ACDN / CDN	JZ: 2,13,1124
Remark: LEDtub-102268-909		

Start (MHz)	End (MHz)	Step (MHz)
30.000	100.000	0.100
100.000	230.000	0.200
230.000	300.000	0.200

scan result



(QP)	freq (MHz)	lev (dBuV)	Lim (dBuV)	i+ (lev-Lim)
	33.400	90.4	63.5	26.9
	70.700	87.7	58.2	29.5
	123.230	64.5	54.0	10.5
	227.410	54.4	54.0	0.4