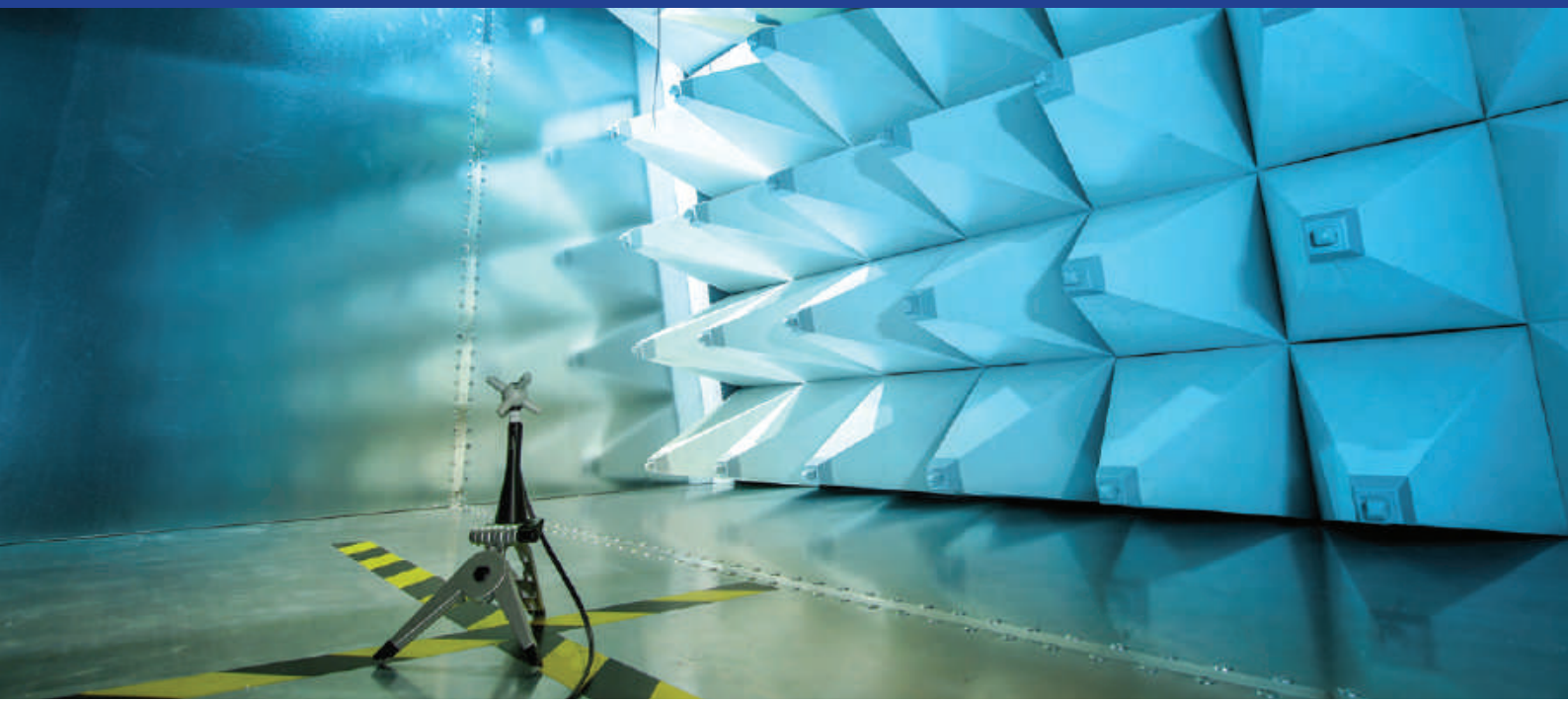
PROJECTS
DISTRIBUTION

LKH PROJECTS DISTRIBUTION PTE LTD

ELECTRO-MAGNETIC FIELD SPECIALIST
MEASUREMENT, SIMULATION & CONSULTATION
EMC SOLUTION
EMC SHIELDING



About EMF Radiation

In these modern days, electromagnetic (EMF) Radiation is everywhere. In many offices and home environments, there are many equipment that intentionally or un-intentionally generate EMF (e.g. Microwave oven, Personal Computer, Television, Modem, and Mobile Phone). All are operated by electricity, and electricity itself generates EMF. We have found high levels of EMF in our surroundings. We can identify 2 types of EMF radiation:

▶ High Frequency Electromagnetic Radiation (E-field)

Electric fields are mostly caused by the fast switching of electronic and electro-mechanical switching devices (drives, relays, motors…) and high frequency signal transmission (Radio, Mobile Phone…). The symptoms of the electric interference in any cases are identifiable in the computer rooms of the buildings.

This electric radiation can often provoke the computer network to frost. Even if the network does not have any breakdown, it can lose speed in the operation due to some transmission error, which created a lot of retransmission.

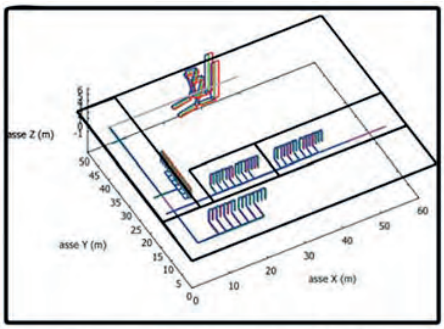
▶ Low Frequency Magnetic Radiation (H-field)

Magnetic Fields are the natural consequence of the use and distribution of electricity. The strength and area of magnetic field emitted is proportional to the amount of current being used. Magnetic fields are associated to low frequencies.

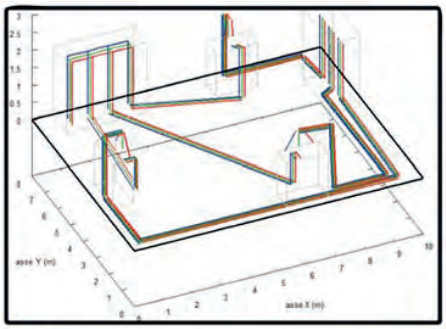
Consequently, all commercial buildings have areas with elevated fields. These areas are caused by high current carrying devices (transformer, electric panels, cables…) which are commonly found in all buildings. Wiring errors, as well, can lead to elevated magnetic field levels. This can be really dangerous because the electromagnetic radiation coming from the electrical current can provoke malfunctions in the computers (monitor flickering) and can possibly be dangerous to human health.

EMF Simulation

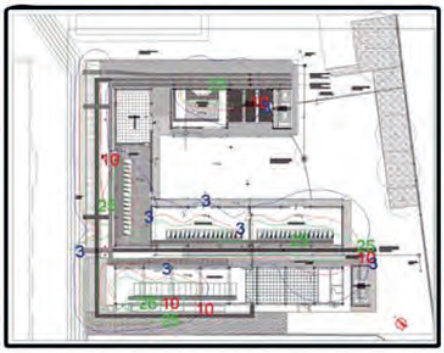
- Calculate EMF Radiation level of Power Lines and Equipment
- Simulate on drawing Radiation level and distance
- Identify potential risk from the EMF Radiation
- Recommend most Cost Effective Solution



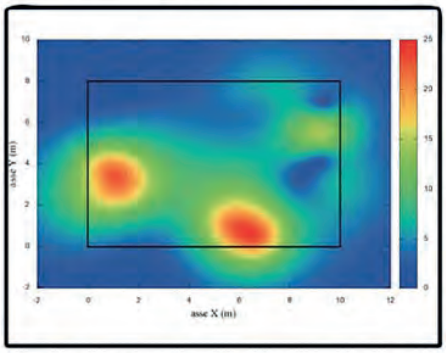
Primary Substation Model



Secondary Substation Model



Induction levels associated to the primary substation



Induction levels associated to the secondary substation

Shielding Products & Installation Services

At LKHPD, we apply the latest worldwide standards that are most relevant to the industries and the environment.

▶ Products

- Shielding Plate
- Shielding Tray

▶ Services

- EMF Calculation & Simulation
- EMF Risk Assessment
- EMF Measurement
- Solution for EMF
- Shielding Installation

Standards

▶ European Community Directive 89/336/CE, 2004/108/EC,

▶ General Industrial Emission: Norm N610000-6-4

Specific Industrial Equipment Emission: Norm EN55011 Class A
Industrial Environment) Group 1 (Non-Intentional Emission)

▶ General Industrial Immunity: Norm EN 61000-6-2

Specific Industrial Equipment Immunity:

- EN61000-4-2
- EN61000-4-3
- EN61000-4-4
- EN61000-4-5
- EN61000-4-6
- EN61000-4-8
- EN61000-4-11
- EN61000-4-12

▶ IEEE std C95.1, 1999 Edition:

IEEE Standard for safety levels with respect to Human Exposure to
Radio Frequency Electromagnetic Fields, 3KHz to 300 GHz

▶ Semi F47 Voltage Dip Immunity

▶ International Commission on Non-Ionizing Radiation Protection

LKH Projects Distribution and its supporting partners provides testing, certification and inspection services to established international standards. We believe in providing independent, accurate and reliable reports and service that can help you improve your products and processes.

PROJECTS DISTRIBUTION

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