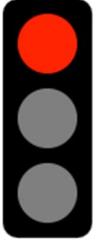


## 10 Tips for a Successful In-Building RF Design

### Know your Site

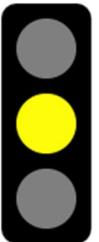
1. **Collect** clear drawings and layouts of your indoor site
2. **Study** drawings to identify different propagation environments in your site. I.E. different clutter type. (Open area, offices, residential, etc). Identify locations where you want to do a CW test.
3. **Identify** candidate equipment room locations. Specify electrical and space requirements for your equipment. Identify cable risers locations. You can also identify possible antenna locations.



Now you are ready for a site Survey.

### Know your propagation environment

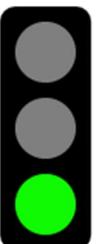
4. **Visit** your site to perform a CW for each different type of propagaion environments you identified earlier. User your CW Test Transmitter \*, Receiver, and software tools to identify pathloss parameters.
5. **Check** candidate equipment rooms for your Electrical power requirments, AC conditioning and Space. Check cable routes into these rooms and through the risers.
6. **Investigate** for special Aesthetic requirements for your site. i.e. if a type of the antenna will affect the aesthetics of your site or If a special hidden or camouflaged antenna is required. Any requirements for decoration and painting of antenna after installation.



Now you are ready to start your design.

### Start your Design

7. **Create** a checklist of Customer's requirements, KPIs and deliverables.
8. **Build up** your design with your preferred Link budget and simulation tools based on the information collected from CW tests and Survey. Start with one location, modify propagation parameters till you get consistent simulations with the results obtained from the walk test. Once you get the correct propagation parameters you can start designing for the whole building.
9. **Verify** simulations are consistent with CW test for the complete coverage area.
10. Finally, **produce** the required documentation according to your checklist.



\* For more information about Consultix' line of single and multiband Transmitters and receivers, visit <http://www.consultix-egypt.com>