

## ANTENNA PASSIVE TESTING

Maximise your product's wireless performance with custom antenna design solutions

The antenna is the most common point of failure in a wireless design. When designed correctly, the antenna creates a high performance wireless product this is certification ready.

Antenna design is a very complex process that requires simulation tools and experienced RF antenna designers. Digi's Wireless Design Services has a state of the art RF testing lab along with experienced engineers that design hundreds of certification ready products each year.

Passive antenna performance evaluation involves measuring the antenna return loss, gain, far-field plots, and efficiency. These parameters determine how well an antenna performs and is a very good indicator of how the device will perform. Antenna efficiency ties directly to TRP, thus is a good indicator if the device has potential to pass TRP testing for carrier approval.

Schedule time to complete is 2 weeks.

The customer should provide the following items:

1. Two devices
2. Schematics/PCB files
3. Bill of Materials
4. Device use cases
5. AT command access to the module
6. Cellular carrier(s) if applicable

The deliverables are as follows:

1. Antenna return loss
2. Antenna efficiency (if passive)
3. Antenna radiation plots
4. Antenna gain
5. Result analysis
6. Recommendations for next steps

For more information on how Digi WDS/Antenna Design can bring powerful, reliable connectivity to your assets, visit [www.digi.com/wds](http://www.digi.com/wds).

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