Interference Resolution

A tier-1 carrier detected significant interference in a sector of its 4G LTE wireless network. Internal reports showed an increased noise floor on the uplink band. UL interference causes significantly lower throughput, jeopardizing Quality of Service for customers.



The carrier's engineers narrowed down the location of the interference using traditional spectrum analyzer tools, but were unable to track the exact location and identify the source.

PCTEL was invited to help with the search. Within 20 minutes of arriving to the sector in question, SeeWave® interference locating system pinpointed the source to a specific corner of a large retail store.

Although there was no initial visual confirmation from outside the building, the carrier's engineers inquired with the property's management. They confirmed active Bi-Directional Amplifiers were on the roof, exactly where SeeWave had calculated.



"The combination of our internal data and the directional capabilities of PCTEL's SeeWave gave us an efficient method to find the interferer," said a Senior RF Engineer from the carrier. "We recommended adjustments to the store's BDA. The issue was resolved and network stats returned to optimal levels."

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Rev A September 2017