



RFoG "OBI safe" by EMC

Looking for highest competences in Docsis Technology, we contacted one of Europe's most competent Test Labs in Belgium called "Excentis", that certifies cable modem and CMTS equipment for "Cable Europe".

Our main goal was to test the "interoperability" of RFoG in a DOCSIS 3.0 environment. Specially interested to test our own "OBI safe" solution, we were also interested to know, how a "classic" RFoG System with "burst" technology will react in different situations.

- 95'000 measurements
- 57 different configurations
- 5 days intensive testing
- 0 % "Interferences"



EXCENTIS

RF over Glass (RFoG) Testing

With Radio Frequency over Glass (RFoG) solutions cable operators can directly deploy fiber to the premise while leveraging their existing back-office HFC equipment and applications.

In the Excentis test labs RF over Glass can be compared with their coax counterparts. Some example tests:

Measurement of Noise Power Ratio (NPR) in function of the input power to quantify the **intermodulation distortion** and to determine the dynamic range of the optical transmitter.

Measurement of **signal clipping** caused by ONT laser switch-on delay and its effect on the DOCSIS preamble

Long term stability testing (data, voice) showing distribution over time of **packet loss, voice quality**,...

Checking for differences in service (from customer perspective) between coax and RFoG solutions, by for example running data performance/**throughput tests**, testing of voice quality, **latency and jitter**.