Re:FCC ID QLAMID
Applicant: Mala GeoScience AB (publ)
Correspondence Reference Number: 24228
731 Confirmation Number: EA364767

Answers in bold.

This document answers the questions in correspondence 24228 which were left unanswered in our previous correspondence.

1) You have requested confidentiality for the Test Report and internal photo's. This is not permitted. Please submit a new letter requesting confidentiality with the Test Report and internal photo's removed.

We have received the message that our internal photos will be held confidential and we herby request that the confidentiality with the test reports shall be removed.

4) Upload an exhibit demonstrating how this device meets the definition of an UWB device as specified in Part 15.503(d) of the Rules. What are the -10 dB points as required by Part 15.503(a) of the Rules? Upload a plot and data for determining the -10 dB points. Include a test procedure. In determining the -10 dB points adjust for non-linearities in the measurement system (antenna factor and preamp gain). The emission should be maximized across the band of operation. The EUT should be rotated, the antenna height should be varied as well as the antenna polarization. We have been requiring that these bandwidth plots be of the electronic signature of the device based on the maximum radiated field strength in 1 MHz RBW from the device at each frequency when using the same detector function(preferably peak) and measured from any direction when operating the device under conditions of actual operating conditions.

With reference to a newly uploaded test report “test report 2”:

(page 12) Fractional bandwidth: 1.12
(page 12) f_H = 317 MHz
(page 12) f_L = 89 MHz

Plots and other information can be found in the test report.

5) What is the center frequency of this device? Show calculation.

With reference to a newly uploaded test report “test report 2”:

(page 12) Center frequency: 203 MHz

6) The Test Report indicates that radiated emissions were tested up to 960 MHz. There is no data for frequencies > 960 MHz. Upload data showing compliance with the limits of 15.509(d) of the Rules for frequencies up to 5 GHz. If there are no observable emissions, the noise floor of the measurement must be reported. This will require a pre-amplifier. Include the pre-amplifier calibration information (gain, calibration date, etc.) in the exhibit. Use the procedure of Part 15.521. For RMS average field strength

measurements refer to the procedure in Appendix F. All RMS measurements should include a procedure and data as necessary. Provide the test procedure used including description on maximizing emissions and EUT configuration. Also provide test setup photos.

Answers to this request can be found in the newly uploaded test report "test report 2", page 7.

Since the device showed lower than limit emissions using a peak detector, no need for RMS calculation was found.

7) Submit an exhibit showing compliance with the 50 MHz BW requirements of Part 15.509(f) of the Rules. Ensure that this is performed at the frequency containing the highest field strength.

Answers to this questions can be found in the newly uploaded test report "test report 2", page 12.