APPAREO

1810 NDSU Research Circle North
Fargo, ND 58102
|701|356-2200

September 30th, 2020

SUBJECT: Test Configuration Justification

The Galeo device was tested in an unmounted configuration, as the performance and radiated emissions are not expected to be meaningfully changed by the mount enclosure.

The top and bottom of the bike mount enclosure are composed of MAKROLON 2407-550115, which has a relative permittivity of 3.0 and a dissipation factor of 90 x 10-4 at 1 MHz per the manufacturer's datasheet. This is very similar to the enclosure material of the inner "tag", which is composed of Bayblend T85 XF. The manufacturer's datasheet lists the relative permittivity as 3.0 and a dissipation factor of 85 x 10-4 at 1 MHz. There will be some air between the interface of the two materials, but there should not be significant reflections.

Very Respectfully,

Nathan Schneck
Director, Test and Certification
Appareo Systems, LLC.