From: James Kinsey

To: Hung Le Date: December 09, 2019

Subject: Request for Info - File # 0972-EX-CN-2019

## Message:

In response to the question about necessary bandwidth, because Humatics is using ultrawideband equipment, emission designators and necessary bandwidth are not generally representative of how ultrawideband equipment works (would note that equipment authorizations for ultrawideband equipment do not have emission designators).

Humatics during its testing will have pulses modulated in position/phase throughout the entire 2 GHz of spectrum requested.