

Date: January 15, 2025

FCC ID: 2A4O3-ORION

Model Number: ORION ONE GNSS Receiver, Z1, E3, L1, L1 PRO, Orion ONE Lite Laser, Orion ONE Lite AR

To: Federal Communication Commission
Authorization and Evaluation Division 7435 Oakland Mills Road
Columbia, MD 21048

Subject: Extend Frequencies Justification Original Application **FCC ID: 2A4O3-ORION**

To Whom It May Concern,

We, **SingularXYZ Intelligent Technology Ltd.** declares that the GNSS Receiver meets 47 CFR Section 90.203(j)(4) and 90.203(j)(5) spectrum efficiency requirement;

The GNSS Receiver is support 12.5 KHz for GMSK (Digital modulation; Emission Designator: 7K60G1D for data mode), also the GNSS Receiver designed in accordance with ETSI TS 102 361-1 requirement, will at least support 9600 bits per second in a 12.5 KHz channel bandwidth in a 12.5 KHz channel bandwidth, GMSK will use 2 times slots in one 12.5 KHz bandwidth accordance to ETSI TS 102 361-1, which equal with $9600/2 = 4800$ bits per second in one 6.25 KHz channel bandwidth;

We, **SingularXYZ Intelligent Technology Ltd.** declares that the GNSS Receiver capable of operating on the nationwide public safety interoperability calling channel (453.2125 MHz), meets 47CFR Section 90.203(j)(1) requirement;

Should you have any questions or comments regarding this matter, please have my best attention.

Sincerely,



(Signed)

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