8.3.27 Use of Fixed Devices That Re-Radiate Signals Received From the Global Positioning System

a. **Individual authorization is for indoor use only, and is required for each device at a specific site.**

This request is for 12 systems. All are located inside the facility located at 1794 Winthrop Drive, Des Plaines IL 60018. They are separated into production rooms, testing rooms, engineering rooms and one conference room for product demonstration.

b. **Applications for frequency assignment should be applied for as an XT station class with a note indicating the device is to be used as an "Experimental RNSS Test Equipment for the purpose of testing GPS receivers" and describing how the device will be used.**

Each repeater unit will only be used to test GPS receivers.

c. **Approved applications for frequency assignment will be entered in the GMF.**

Expected.

d. **The maximum length of the assignment will be two years, with possible renewal.**

It is understood that this license will require review and renewal after 2 years.

e. **The area of potential interference to GPS reception (e.g., military or contractor facility) has to be under the control of the user. Areas beyond the range for potential interference are protected by the maximum power calculation described in f. below, and thus no further record notes are required for frequency assignments.**

All GPS test equipment will be located within 1794 Winthrop Drive Des Plaines IL 60018, which is a facility under full control of Kranze Technology Solutions Inc.

f. **The equivalent isotropically radiated power (EIRP) must be such that the emissions are no greater than - 140 dBm/24 MHz as received by an isotropic antenna at a distance of 100 feet (30 meters) from the building where the test is being conducted. The calculation for maximum EIRP shall be based on free space propagation with no allowance for additional attenuation.**

The calculated range of the EIRP for the repeaters is attached as *Exhibit 2 EIRP Range for the repeaters.*

g. **GPS users in the area of potential interference to GPS reception must be notified that GPS information may be impacted for periods of time.**

All GPS users within the interference risk area will be fully informed of the operation of local GPS re-radiation systems.

h. **The use is limited to activity for the purpose of testing RNSS equipment/systems.**

Yes

i. **A "Stop Buzzer" point of contact for the authorized device must be identified and available at all times during GPS re-radiator operations.**

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