

Appendix B – Necessary Bandwidth

Attach as a text document ...how the necessary bandwidth was calculated

Our system will have the on-the-air signature of have two clusters of multi-tone RF signals spaced about 100 kHz apart. Each cluster of RF tones is contained within 5 KHz of bandwidth and is centered on either 6822.5 kHz or 6922.5 kHz. We anticipate that the tone spacing within a cluster for the actual product will be on the order of about 100 Hz which allows us enough bandwidth for the potential of 50 beacons (note our experimental testing will be with 4 or less beacons – most likely 3 beacons). Our occupied bandwidth in each cluster of RF tones is deterministic and is controlled by placement of the transmit frequency. It will not exceed our stated cluster bandwidth of 5 kHz. The figure below shows our spectrum for 3 beacons with 500 Hz tone spacing.

