

Necessary Bandwidth

The necessary bandwidth calculation under 2.202(b) for the H25LB1 beacon transmitter falls under the general FM formula:

$$BW = 2M + 2DK \quad K = 1$$

$$D = 2.5 \text{ kHz}$$

$$M = 3 \text{ kHz}$$

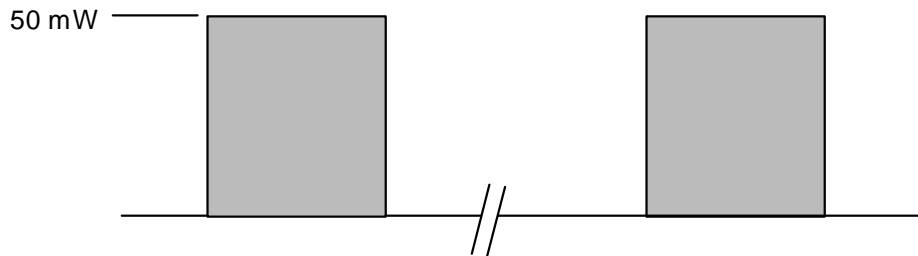
$$\text{Estimated BW} = 11 \text{ kHz}$$

Emissions Designators

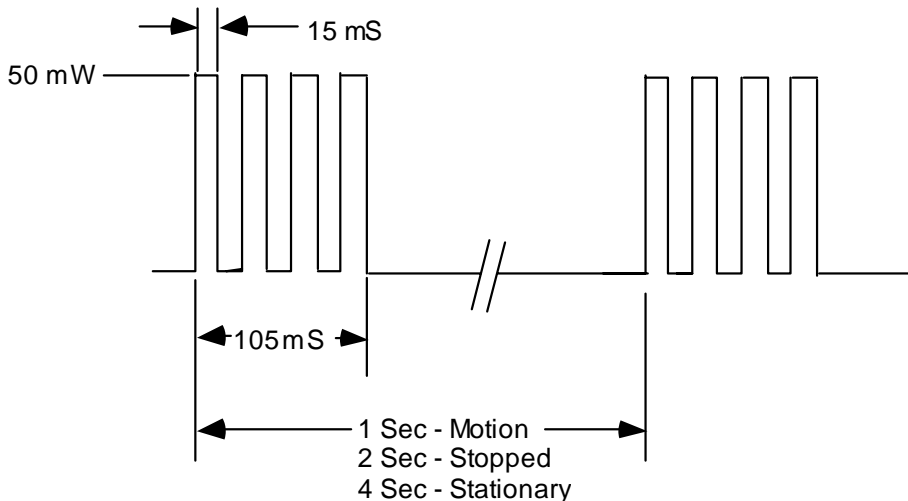
The primary emissions designator based on measurement is 11K0F3W. This emissions designator indicates that this is a NBFM audio transmitter, which sends single, multiple and DTMF analog tones for signaling and information purposes, with an occupied bandwidth of no more than 11.0 kHz.

The secondary emissions designator is based on the tracking pulse mode, which is comprised of four 15 mS pulses of CW separated by 15 mS. The occupied bandwidth is limited primarily by the rise time of the pulses which is 1 mS. Occupied bandwidth is measured at no more than 6 kHz, so the second designator is 6K00P0N.

Designator 1 - Single, multiple and DTMF tones which are sent as NBFM at low duty factors and are based on beacon pre-deployment programming options.



Designator 2 - Unmodulated tracking pulses



Intended Use

This device is intended to be used under the Police Radio Service section of the Public Safety section of Part 90 for short-term undercover surveillance operations.