

Applicant	FLIR Commercial Systems, Inc.	
FCC ID	IWK-EX850	
Frequency Hopping system filing requirements		
Requirements	EUT Condition	Comply
<b>Pseudorandom Frequency Hopping Sequence</b>  Describe how the hopping sequence is generated. Provide an example of the hopping sequence channels, in order to demonstrate that the sequence meets the requirement specified in the definition of a frequency hopping spread spectrum system, found in Section 2.1.	<p>The channel is represented by a pseudo-random hopping sequence hopping through the 79 RF channels.</p> <p>The hopping sequence is unique for the piconet and is determined by the Bluetooth device address of the master; the phase in the hopping sequence is determined by the Bluetooth clock of the master. The channel is divided into time slots where each slot corresponds to an RF hop frequency. Consecutive hops correspond to different RF hop frequencies. The nominal hop rate is 1 600 hops/s.</p> <p>Example of a 79 hopping sequence in data mode: 40, 21, 45, 23, 42, 53, 46, 55, 48, 31, 51, 35, 50, 65, 54, 67, 56, 37, 60, 39, 58, 69, 62, 77, 64, 25, 68, 27, 66, 57, 70, 59, 72, 29, 76, 33, 74, 61, 78, 63, 01, 41, 05, 43, 03, 73, 07, 75, 09, 44, 15, 47, 11, 71, 13, 00, 64, 49, 66, 53, 68, 02, 70, 06, 01, 52, 03, 55, 05, 04</p>	Y
<b>Equal Hopping Frequency Use</b>  Describe how each individual EUT meets the requirement that each of its hopping channels is used equally on average (e.g., that each new transmission event begins on the next channel in the hopping sequence after the final channel used in the previous	<p>All Bluetooth units participating in the piconet are time and hop-synchronized to the channel.</p>	Y

transmission event).		
<b>System Receiver Input Bandwidth</b>  Describe how the associated receiver(s) complies with the requirement that its input bandwidth (either RF or IF) matches the bandwidth of the transmitted signal.	Each channel bandwidth is 1 MHz	Y
<b>Equipment Description</b>	15.247(a)(1) that the rx input bandwidths shift frequencies in synchronization with the transmitted  15.247(g): In accordance with the Bluetooth Industry Standard, the system is designed to comply with all of the regulations in Section 15.247 when the transmitter is presented with a continuous data (or information) system.  15.247(h): In accordance with the Bluetooth Industry Standard, the system does not coordinate its channels selection/ hopping sequence with other frequency hopping systems for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters.	Y