

UWB15F PAG Checklist (Subpart 15F and KDB 393764 D01) TCBC Workshop (April 27, 2022) and 15.521

Model Name : FOB-4F61U43

FCC ID : TQ8-FOB-4F61U43

UWB operation mode : Handheld UWB systems (Rule Part : 15.519)

Common Requirements		Check lists	Remarks
P3	Technical	Bandwidth: 10 dB BW ≥ 500 MHz, or Fractional BW ≥ .2 (15.503(a))	Refer to the page on 22 of the test report(F690501-RF-RTL003257-4). -The 10dB bandwidth is 563 MHz.
		Frequency of highest emission occurs within the UWB bandwidth (15.521(e))	Refer to the page on 14 of the test report(F690501-RF-RTL003257-4). -The frequency of highest emission is 6427.77 HMz.
		Digital circuitry are subject limits as specified in (15.521(c))	Refer to the page on 9 and 10 of the test report(F690501-RF-RTL003257-4).
		General Part 15 (15.209) limits apply below 960 MHz	Refer to the page on 9 and 16 of the test report(F690501-RF-RTL003257-4).
		15.505 Cross Reference (15.521(a))	Refer to the page on 3 of the test report(F690501-RF-RTL003257-4) and the page on 1 of the user manual. -This product(FOB-4F61U43) is a handheld device as Remote Keyless System or FOB Smart Key.
		Unwanted emissions must be measured over the frequency ranges as specified in 15.521(h)	Refer to the page on 8, 17 and 19 of the test report(F690501-RF-RTL003257-4).
	Grant Restriction	UWB devices may not be employed for the operation of toys.	Refer to the page on 6 of test report(F690501-RF-RTL003257-4) and the page on 3 of the user manual.
		Operation onboard an aircraft, a ship or a satellite is prohibited (15.521(a)).	Refer to the page on 6 of test report(F690501-RF-RTL003257-4) and the page on 3 of the user manual.
Handheld UWB		Check lists	Remarks

Systems			
P11	Technical Requirements	Must be primarily handheld while being operated (15.519(a)) - Per 393764 D01 Q5, if handheld operation is not practical, operator must be able to exercise control over the device, or the object to which the device is affixed – Evaluated on a case-by-case basis.	Refer to the page on 3 of test report(F690501-RF-RTL003257-4). -This product(FOB-4F61U43) is a handheld device as FOB Smart Key.
		Transmit only when it is sending information to an associated receiver and cease transmission unless it receives acknowledgement from an associated receiver at least every 10 seconds (15.519(a)(1))	Refer to the page on 26 of the test report(F690501-RF-RTL003257-4). -The transmission time is 173.91 ms.
		The use of antennas mounted on outdoor structures prohibited (15.519(a)(2))	Refer to the page on 6 of the test report(F690501-RF-RTL003257-4).
		The use of antennas mounted on outdoor structures prohibited (15.519(a)(2)) - Antennas may be mounted only on the handheld UWB device	Refer to the page on 27 of the test report(F690501-RF-RTL003257-4) and the page on 4 of the internal photos. -The antenna used in this product is a chip antenna.
		Handheld UWB devices may operate indoors or outdoors (15.519(a)(3))	Refer to the page on 6 of test report(F690501-RF-RTL003257-4) and the page on 1 of the user manual. -This product(FOB-4F61U43) is a handheld device.
		The UWB bandwidth shall be contained between 3100 MHz and 10,600 MHz (15.519(b))	Refer to the page on 3 of the test report(F690501-RF-RTL003257-4). -The center frequency of this product is 6489.6 MHz.
		Radiated emissions above 960 MHz shall conform to the mask specified in 15.519(c)	Refer to the page on 10 and 18 to 19 of the test report(F690501-RF-RTL003257-4).
		Peak EIRP limit of 0 dBm/50 MHz applies (15.519(e))	Refer to the page on 9 and 14 to 15 of the test report(F690501-RF-RTL003257-4).
		Radiated emissions in the 1164-1240 MHz and 1559-1610 MHz bands limits as specified in 15.519(d)	Refer to the page on 10 and 17 to 18 of the test report(F690501-RF-RTL003257-4).

	Grant Restrictions	Antennas mounted on outdoor structures such, as antennas mounted on the outside of a building or on a telephone pole, or any fixed outdoors infrastructure are prohibited for use with this device.	Refer to the page on 6 of test report(F690501-RF-RTL003257-4) and the page on 3 of the user manual.
	Rule Part	Check lists	Remarks
15.521	(a)	Grant Restriction	Refer to the page on 6 of test report(F690501-RF-RTL003257-4) and the page on 3 of the user manual.
	(b)	Antenna requirement for Part 15. 203 and 15. 204	Refer to the page on 27 of the test report(F690501-RF-RTL003257-4). -The antenna used in this product is a chip antenna.
	(c)	Radiated spurious emission limit for part 15.209	Refer to the page on 9 and 10 of the test report(F690501-RF-RTL003257-4).
	(d)	Radiated spurious emission & test measured condition for part 15. 509 and 15. 519.	Refer to the page on 9 and 16 of the test report(F690501-RF-RTL003257-4). Refer to the page on 10 and 18 to 19 of the test report(F690501-RF-RTL003257-4).
	(e)	Max peak power test for UWB.	Refer to the page on 14 of the test report(F690501-RF-RTL003257-4). -The frequency of highest emission is 6427.77MHz.
	(f)	Imaging systems may be employed only for the type of information exchange described in their specific definitions contained in § 15.503. The detection of tags or the transfer of data or voice information is not permitted under the standards for imaging systems.	N/A(This is a handheld device.)
	(g)	Max peak power test measurement condition for UWB with RBW.	Refer to the page on 9 and 14 to 15 of the test report(F690501-RF-RTL003257-4).
	(h)	Radiated spurious emission measured condition for part 15.33	Refer to the page on 10 and 18 to 19 of the test report(F690501-RF-RTL003257-4).

	(i)	The prohibition in § 2.201(f) and 15.5(d) of this chapter against Class B (damped wave) emissions does not apply to UWB devices operating under this subpart.	N/A
	(j)	Responsible parties are reminded of the other standards and requirements cross referenced in § 15.505, such as a limit on emissions conducted onto the AC power lines.	N/A(This device uses a coin battery.)