

15.203 Antenna requirement. (RSS-210 Issue 9 Annex C - C.2)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

Class II Permissive Change - Trace Antenna

The antenna is an integral part of the EUT. It also satisfies the requirements of FCC Part 15.203. The antenna is a trace antenna on the pcb and can not be modified by the end user. This trace antenna is for use with LTE Band 13 only. The calculated gain of this trace antenna does not exceed 1.4dBi.

For the CovertTrack StealthV product the only relevant spec for B13 Gain, which cannot exceed 3.94dBi.

The B13 IFA trace antenna BluFlux designed has the following gain across B13 as measured by TRP/TIS and datasheet typical conducted power:

Measurement	Channel	Freq (MHz)	Directivity (dBi)	Efficiency (dB)	Gain (dBi)
TIS	L	752.4	2.4	-1.3	1.1
TRP	L	778.04	2.7	-1.3	1.4
TRP	M	782.36	2.6	-1.5	1.1
TRP	H	785.96	2.6	-1.5	1.1

The last column shows that the antenna has gain < 3.94dBi (and also directivity < 3.94dBi).

Trace Antenna Specifications:

