



Filing for Class II Permissive Changes

We are submitting a new device that we'd like to file under the original FCC grant 2AXVQ-WILIOT2SB and IC grant 26623-WILIOT2SB.


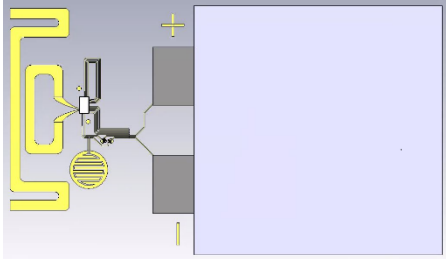
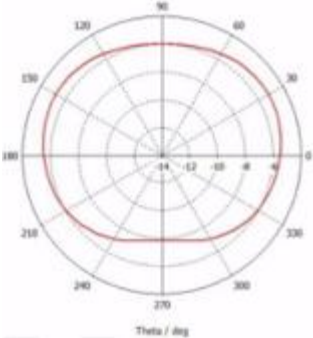
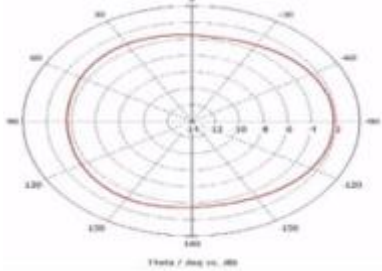
The original grant was assigned to an RF energy-harvesting device implemented as a qualified Bluetooth LE Broadcaster Transmission-only device.

The new device embeds the same Integrated Circuit (IC) and firmware, with a different antenna type. The antenna structure is the same as the original granted device – radiation pattern and gain differ from the original one.

This document summarizes the changes between the original device and the new one.

Antenna Comparison

The following table summarizes the changes between the existing certified antenna, granted under FCC: 2AXVQ-WILIOT2SB and the one we are submitting the request for Permissive Change Class II.

	Existing Granted Antenna (single-band)	New Battery Antenna
Layout		
Antenna Type	Loop coupled to meander dipole	Dipole
Pattern Type	Dipole – omni	Dipole – omni
Polarization	Vertical (Y-direction)	Vertical (Y-direction)
Radiation pattern (XZ plane)		
Peak to Peak on omni plane (XZ) [dB]	2.7	3
Mean gain on omni plane (XZ) [dBi]	-6.2	-3.6
Max gain on omni plane (XZ) [dBi]	-5.4	-2.2