

SBO Hearing A/S

Antenna Specification

The product module KE_AU5_NXTCIC is designed containing three radio interfaces:

1. A Bluetooth Low Energy transceiver operating in the band from 2402 MHz to 2480 MHz.
2. A Near Field Magnetic Induction (NFMI) transceiver operating at 3.84 MHz
3. A RFID receiver only operates in the range from 865 MHz to 928 MHz.

The two transceivers are located in two different areas on the KE_AU5_NXTCIC PCB and the RFID is a received field strength powered chip glued to the PCB.

The 2.4 GHz antenna for Bluetooth LE connections is a soldered monopole antenna. The radiation patterns are shown in annex A.

The gain is measured in Cetecom Advanced GmbH test report **1-9159-24-02-19_TR1-R01** with the following gain results measured at 1 Mbps data rate:

T _{nom}	V _{nom}	2402 MHz	2440 MHz	2480 MHz
Conducted power [dBm] Measured with GFSK modulation (1 Msps)		3.7	5.0	3.8
Radiated power [dBm] Measured with GFSK modulation (1 Msps)		2.6	3.2	3.6
Gain [dBi] Calculated		-1.1	-1.8	-0.2

The maximum conducted TX power is measured to 7.50 dBm when operating at 2 Mbps, see Cetecom Advanced GmbH test report **1-9159-24-02-03_TR1-R01**.

The NFMI antenna is a coil antenna with 62 windings on a 1.1 mm x 1.1 mm x 4.8 mm ferrite core that is characterized in the operational description exhibit. The NFMI antenna is mounted on the PCB as a component.

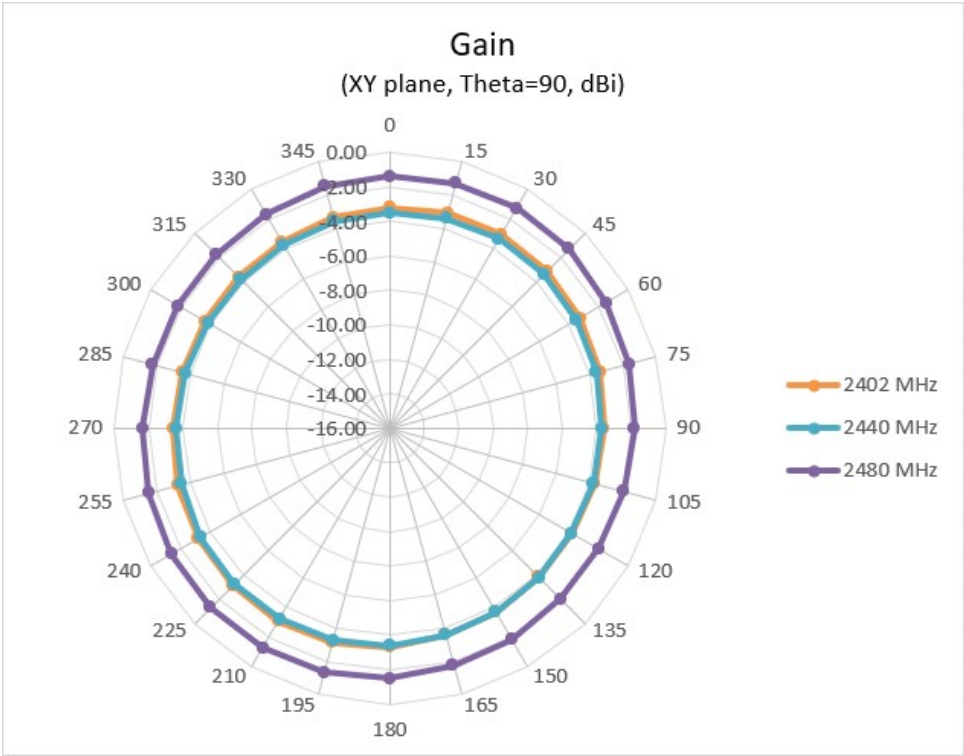
Signed on behalf of SBO Hearing A/S, July 21st - 2025



Per Klaus Nielsen / Principal Certification Specialist, RA
Phone: +45 3917 7100
E-Mail: pkni@sbohearing.com

SBO Hearing A/S

Annex A: 2D radiation pattern for the Bluetooth LE antenna.



SBO Hearing A/S

