

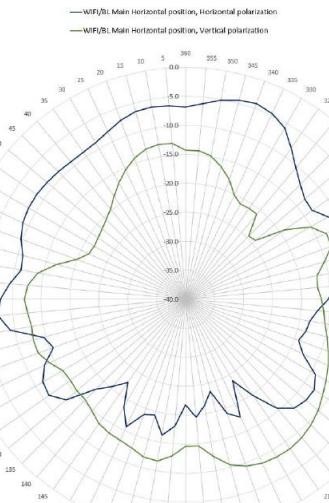
WiFi and Bluetooth antenna comparison

25th of August 2021

This document compares Q Display antenna to Intel reference antenna.

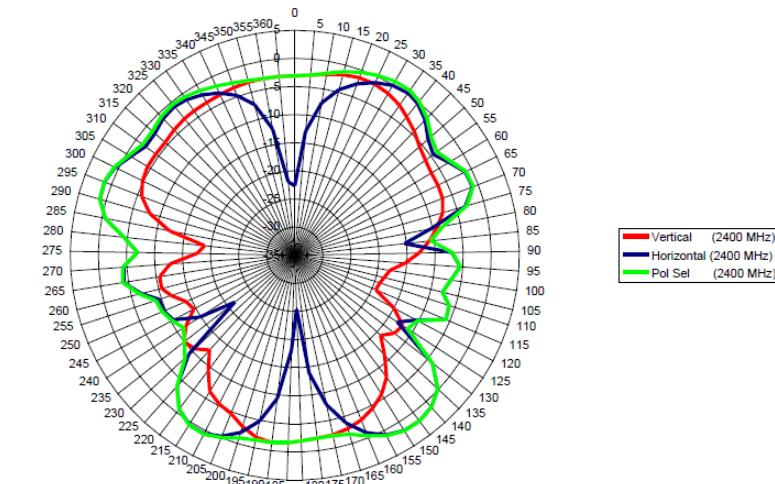
Q Display antenna should be considered as equivalent to Intel reference antenna. Q Display antenna fulfills KDB 178919 D01 requirements for equivalent antenna: same type, equal or less gain and similar in- and out-of-band characteristics. Reference antenna “SkyCross WIMAX/WLAN” is a planar inverted-F antenna. The antenna “Q Display” uses is an inverted-F antenna (LDS technology). Antenna manufacturer is Molex and part number is 146175000. Parameter comparison can be found in this document.

Parameter	Intel reference	Q Display
Type	PIFA	IFA
Peak gain 2.4 GHz 2400-2500 MHz	3.24 dBi	-4.1dBi

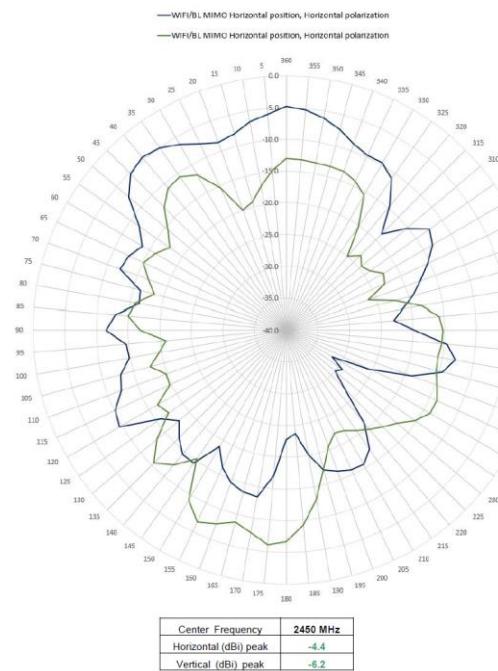


Center Frequency	2400 MHz
Horizontal (dBi) peak	-4.1
Vertical (dBi) peak	-8.5

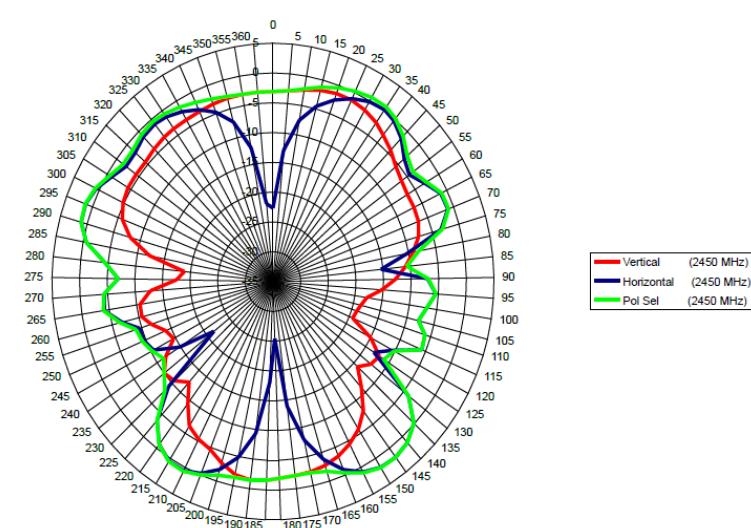
Picture 1 Q antenna radiation pattern, 2400 MHz



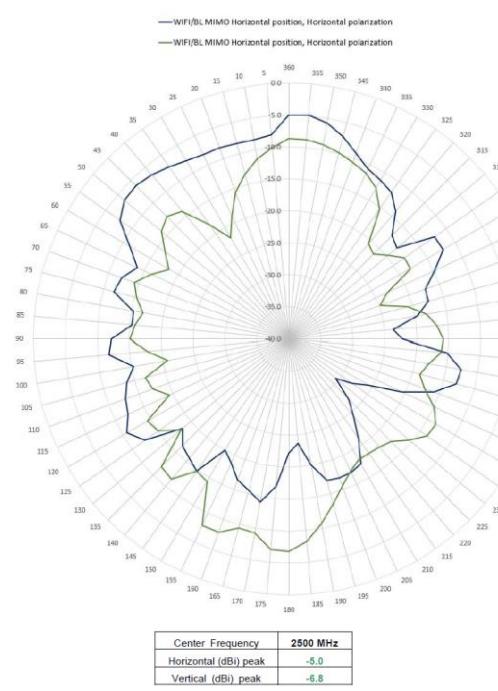
Picture 2 Intel reference radiation pattern, 2400 MHz



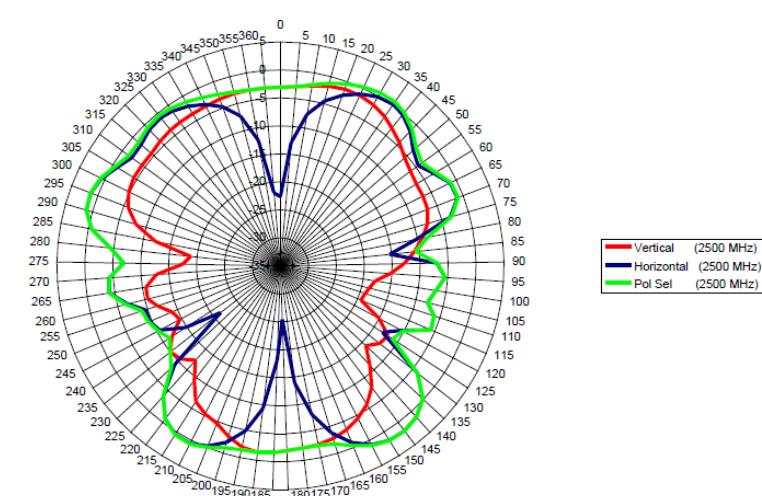
Picture 3 Q antenna radiation pattern, 2450 MHz



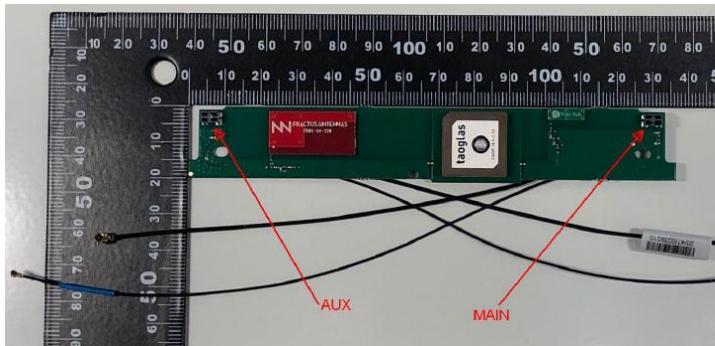
Picture 4 Intel reference radiation pattern, 2450 MHz



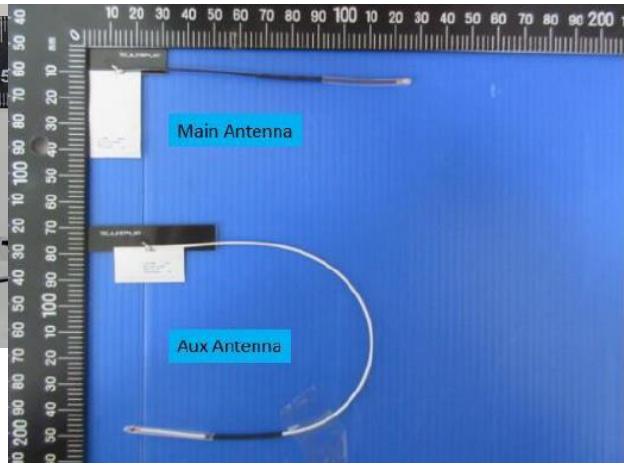
Picture 5 Q antenna radiation pattern, 2500 MHz



Picture 6 Intel reference radiation pattern, 2500 MHz



Picture 7 Q antenna photo



Picture 8 Intel reference antenna photo

Sincerely,

Ville Keskilohko
R&D Manager
Nextfour Solutions Oy
Voimakatu 18
20520 Turku
FINLAND
Tel. +358 50 516 5322