

## Introduction

### FCC ID referenced

Original filing: 2AE3B-AEX-AR95X

This filing: OQ7IHNFC

### Equipment classes

DTS

NII

### Rule parts

15.247

15.407

### Frequency bands

2.4 – 2.4835 GHz

5180 – 5240 MHz

5260 – 5320 MHz

5745 – 5825 MHz

## Differences

There are no component differences between FCC ID 2AE3B-AEX-AR95X and FCC ID OQ7IHNFC. FCC ID 2AE3B-AEX-AR95X was originally certified as a Slave device. FCC ID OQ7IHNFC seeks to implement Master device functions. Therefore, only DFS testing as a Master device was performed for this filing. EMC testing was not repeated as there were no modifications to components or board layout.

In addition the antennas used in the product represented by FCC ID OQ7IHNFC are Nearson Omni-Directional Whip antennas (P/N T145AH-2.4/4.9/5.x-S). These are equivalent to the OxfordTec WAND2DBI-SMA antenna listed in the User Guide for radio module with FCC ID 2AE3B-AEX-AR95X. The peak gain of the Nearson antenna is 2 dBi in both 2.4 GHz and 5 GHz bands (see below from the Nearson datasheet).

Electrical Properties:

|                  |   |
|------------------|---|
| Frequency Range: | 2.4~2.5/4.9~5.35/5.725~5.85 GHz                       |
| Impedance:       | 50Ω nominal   |
| VSWR:            | <2.0:1  |
| Gain:            | 2 dBi @ 2.45GHz<br>2 dBi @ 5.25GHz<br>2 dBi @ 5.75GHz |
| Radiation:       | Omni  |
| Polarization:    | Vertical  |

The radio is a 3 x 3 MIMO radio.


## Spot Check Verification Data

No spot check testing was performed. EMC testing was not performed since there were no modifications made to the radio. Only DFS testing in Master mode configuration was performed. This testing is reported in Nemko test report 334805R1TRFWL (FCC-15.407 and RSS-247 DFS Master). It was verified that the radio module is in the same state of modification as in the original certification. It was determined that the data in the original test reports still accurately represents the device used in this certification.

## Reference

No cross-reference is applicable since no EMC testing was done. A completely new report was issued for the DFS testing in Master mode to demonstrate compliance of the radio to FCC requirements for DFS.

Sincerely,



Frank Hardy

Compliance/Regulatory Engineer