



Antenna specification in NFT Blizzard 360AX

Datasheet

Revision 1.0
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Revision tracking

Revision	Author	Date	Changes
1.0	Mateusz M.	2025-07-22	Initial version

Introduction

NFT Blizzard 2AX uses dipol antenna arraysintegrated on one PCB AP008 working in two bands:

- 2.4GHz (two antenna arrays ANT 1 and ANT 2 in Fig.1.).
- 5-6GHz (two antenna arrays ANT 3 and ANT 4 in Fig.1.).

All ntenna arrays are fed in central point by RG178 cables ended with MCX connectors

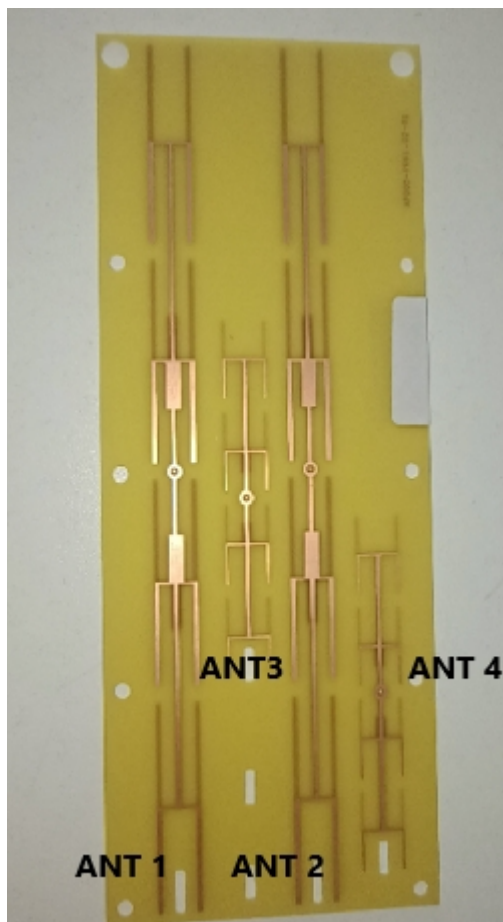


Fig.1. NFT Blizzard 360AX antenna PCB AP008

Manufacturer: ShenZhen EZL Technology Co.,Ltd

Address: Room 301-D24, Xiangjiang Financial Building, No. 3046, Xinghai Avenue,
Nanshan Street, Qianhai Shenzhen-Hong Kong Cooperation Zone, ShenzhenŸChina

Parameters

ANT_1 and ANT_2 Frequency band 2.4-2.5GHz

VSWR

VSWR_{MAX} <1.8:0 ANT_1 and VSWR_{MAX} <2:0 ANT_2

VSWR_{AWR} ≈1.4 for ANT_1

VSWR_{AWR} ≈1.5 for ANT_2

Isolation between ANT_1 and ANT_2 (transmission measured):

Isolation_{min}>22dB

Gain

Measurements were conducted in XY, XZ, and YZ planes for Vertical polarizations.

Maximum Gain achieved for these measurements

G=7.2 dBi for ANT_1

G=7.4 dBi for ANT_2

3dB beamwidth in elevation: 17°

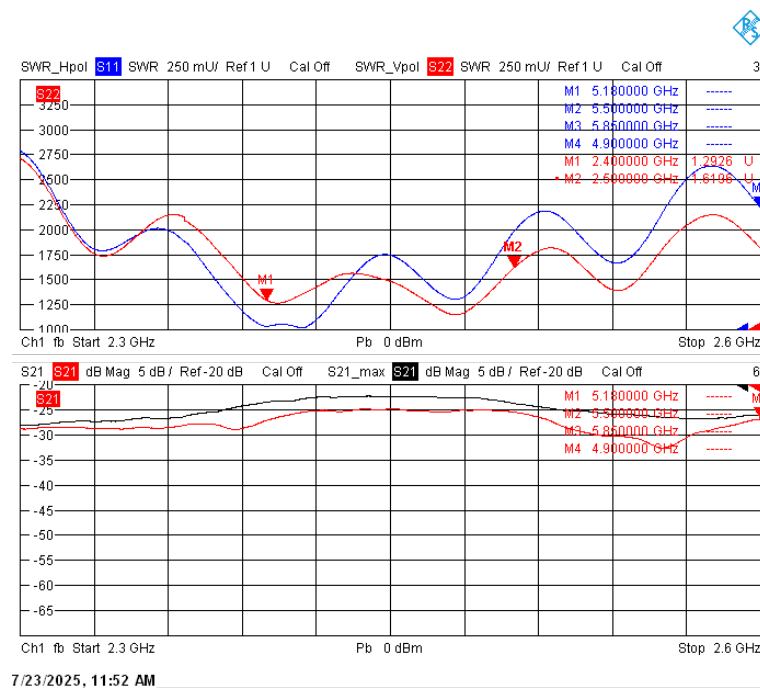


Fig.2. Measured VSWR (ANT_1 – RED and ANT_2- BBLUE at top figure) and isolation (bottom figure S21

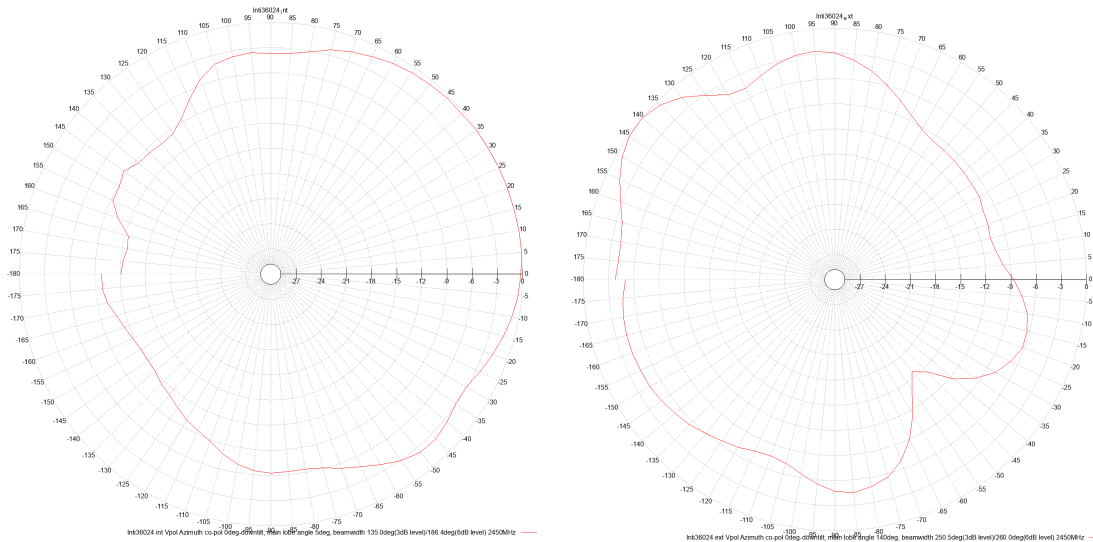


Fig.3. Antenna patterns in azimuth at $f=2.45\text{GHz}$ (ANT_1 – on the left and ANT_2- on the right)

ANT_3 and ANT_4 Frequency band 5.2-6.0GHz

VSWR

$VSWR_{MAX} < 2.3:1$ for both antennas

$VSWR_{AWR} \approx 1.8$ for both antennas

Isolation between ANT_3 and ANT_4 (transmission measured):

$Isolation_{min} > 40\text{dB}$

Gain

Measurements were conducted in XY, XZ, and YZ planes for Vertical polarizations.

Maximum Gain vs frequency achieved for these measurements

$G_{max} = 7.3\text{ dBi}$ for ANT_3

$G_{max} = 7.0\text{ dBi}$ for ANT_4

3dB beamwidth in elevation: 17°

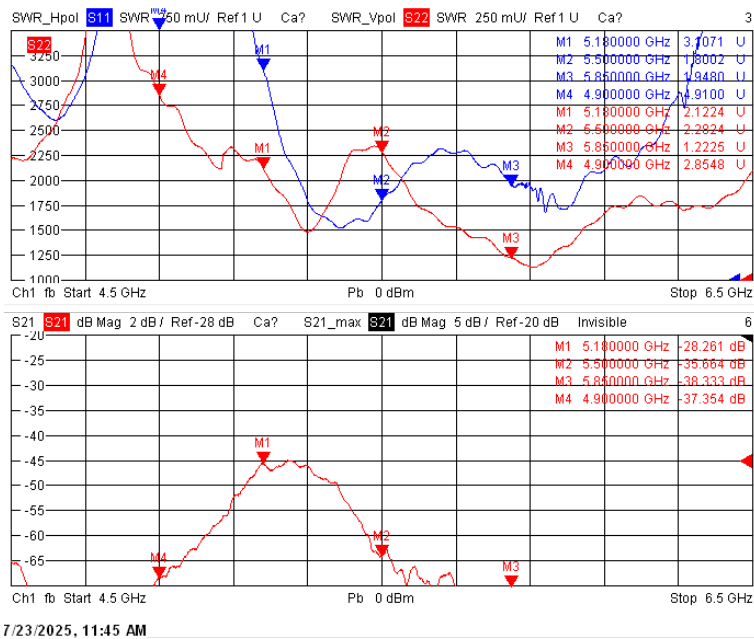


Fig.4. Measured VSWR (ANT_3 – RED and ANT_4- BBLUE at top figure) and isolation (bottom figure S21)

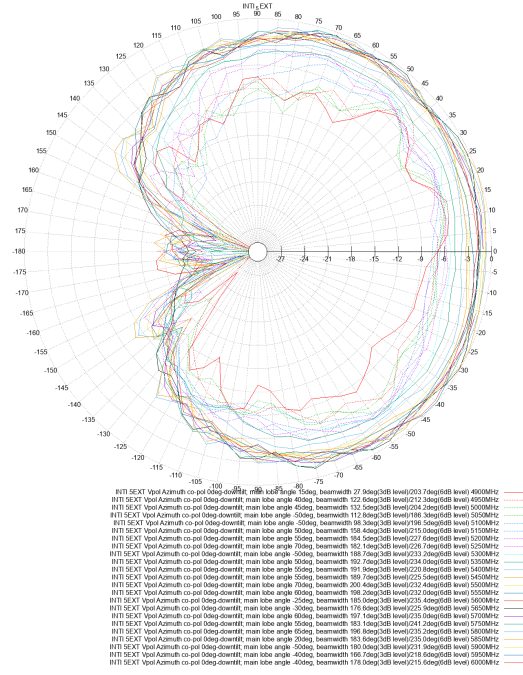
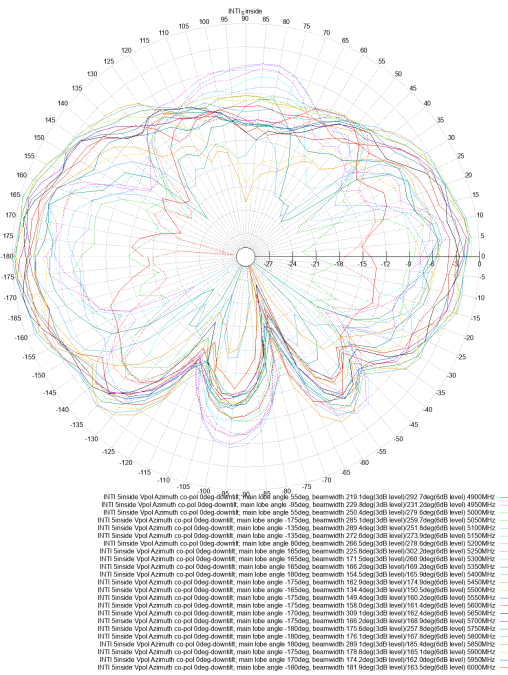


Fig.5. Antenna patterns in azimuth for f in rng 4.9-6.0GHz (ANT_3 – on the left and ANT_4- on the right)