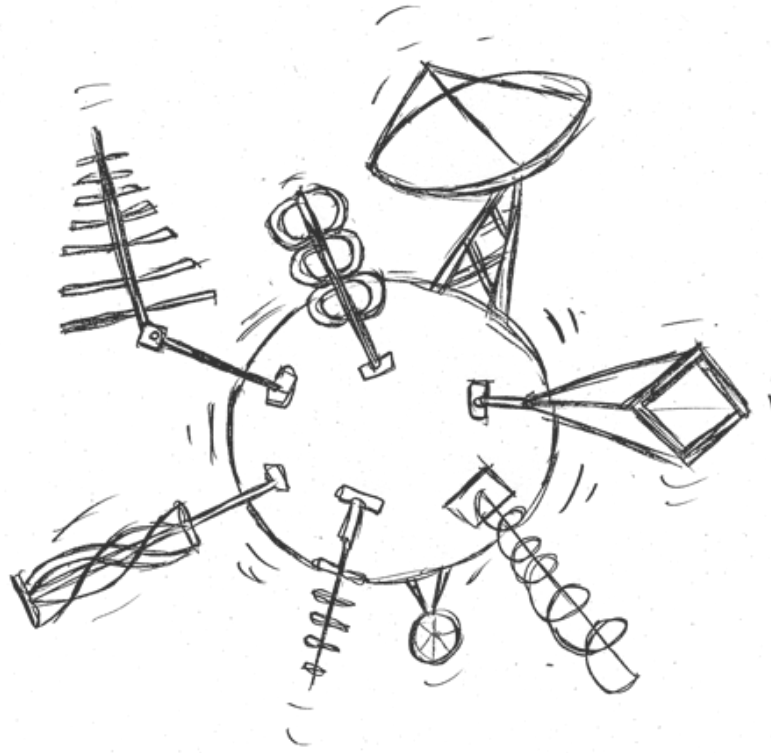




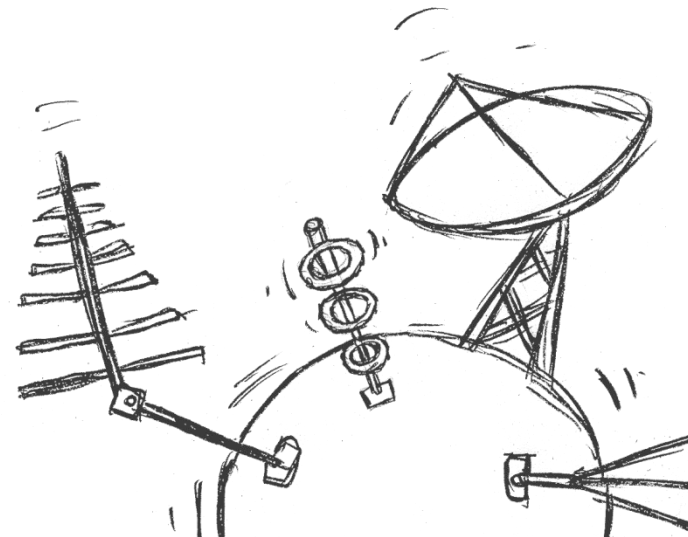
AntennaMagus

The leading antenna design tool

Inverted-F (IFA)

Antenna 7 : Results

AntennaMagus
The leading antenna design tool



Inverted-F (IFA)

Antenna 7 : sketches, objectives and parameters



Antenna Structure: Antenna Parameters

Name	Description
f_0	Centre frequency
L	Element length
H	Element height
S	Feed spacing
D	Feed diameter
X	Device X-dimension
Y	Device Y-dimension
Z	Device Z-dimension

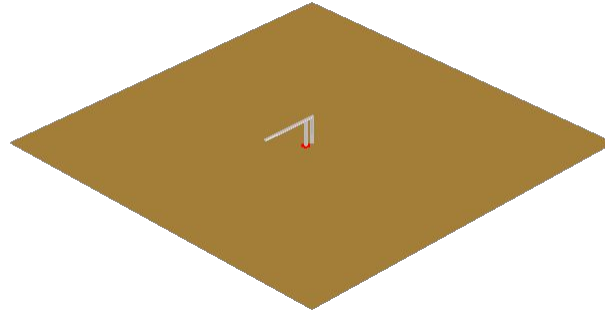
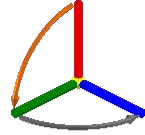


Sketches

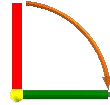
Side view



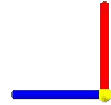
Design 1: Preview



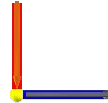
Design 1: Front Side Preview



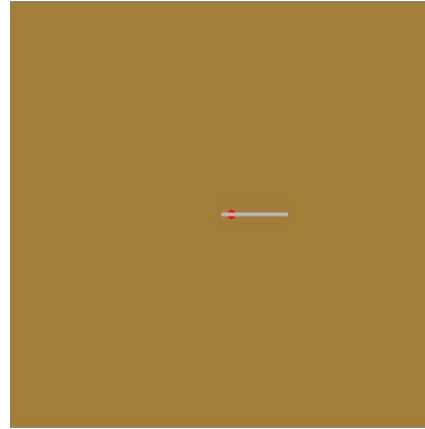
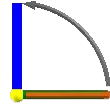
Design 1: Left Side Preview



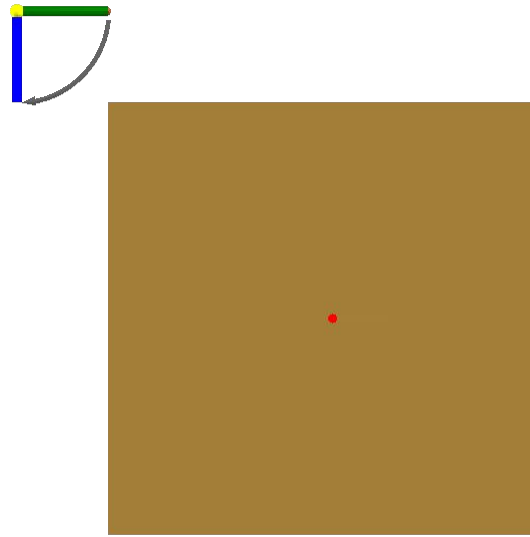
Design 1: Right Side Preview



Design 1: Top Side Preview



Design 1: Bottom Side Preview



Design 1: Design Objectives

Objective Group: operating frequency

Name	Description	Value
f_0	Centre frequency	405.5 MHz



Design 1: Physical Parameters

Name	Description	Value
L	Element length	145.3 mm
H	Element height	66.58 mm
S	Feed spacing	19.26 mm
D	Feed diameter	7.4 mm



Design 1: Derived Quantities

Name	Description	Value
X	Device X-dimension	149.0 mm
Y	Device Y-dimension	7.4 mm
Z	Device Z-dimension	70.28 mm

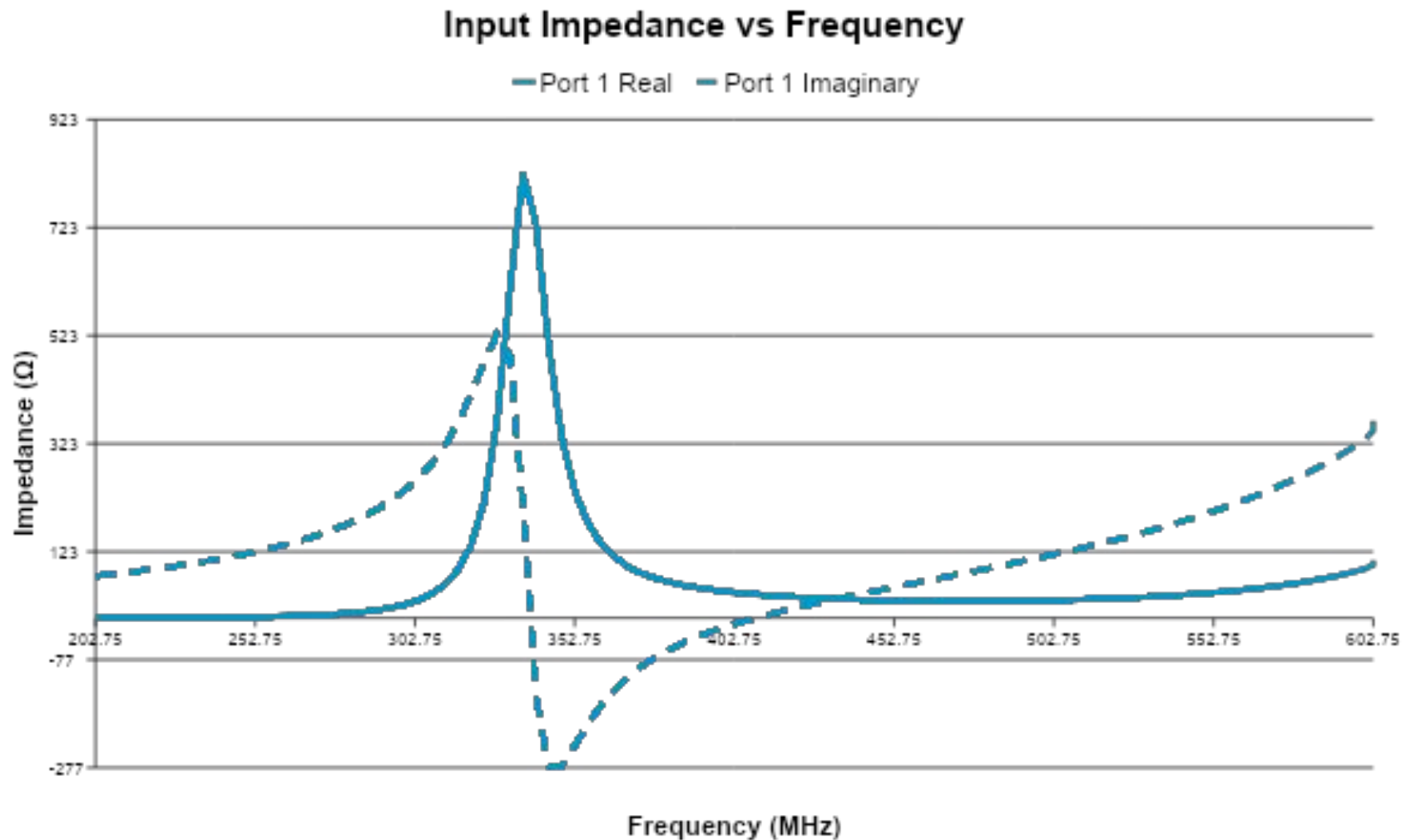


Inverted-F (IFA)

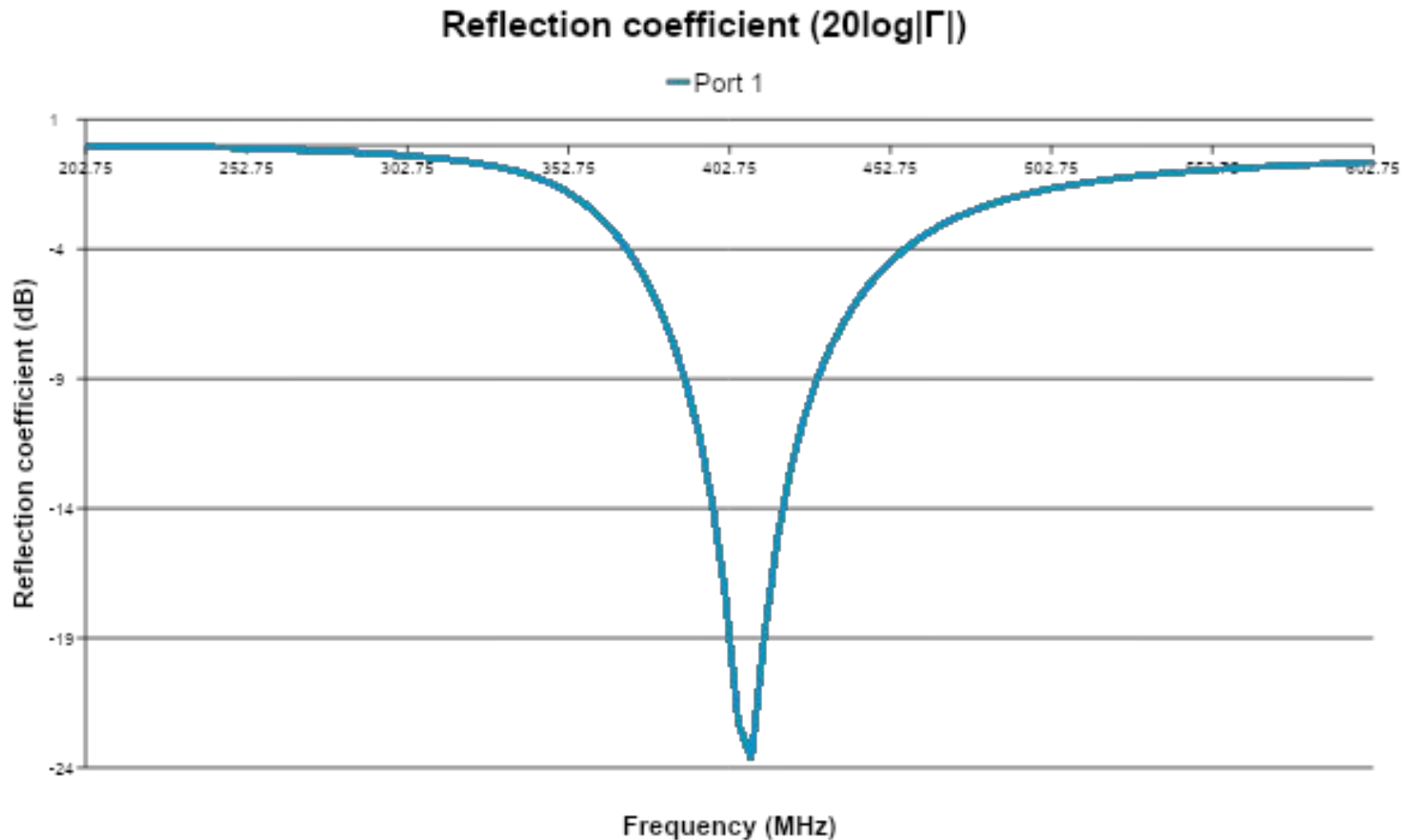
Antenna 7 : estimated performance charts



Impedance vs Frequency



Impedance vs Frequency



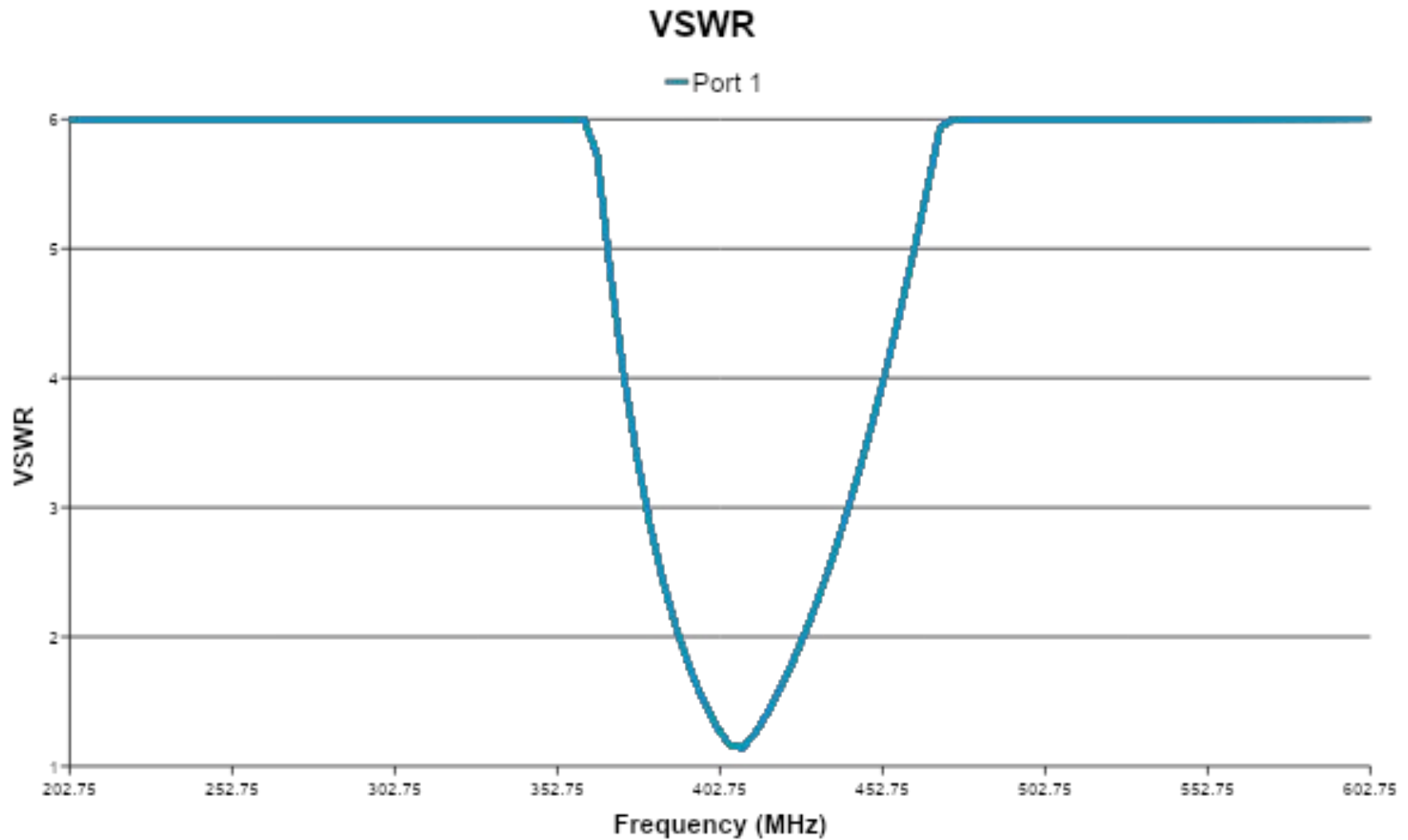
Impedance vs Frequency

Reflection coefficient ($20\log|\Gamma|$)

	Design 1
Reference impedance @ port 1	(50+0j) Ω



Impedance vs Frequency



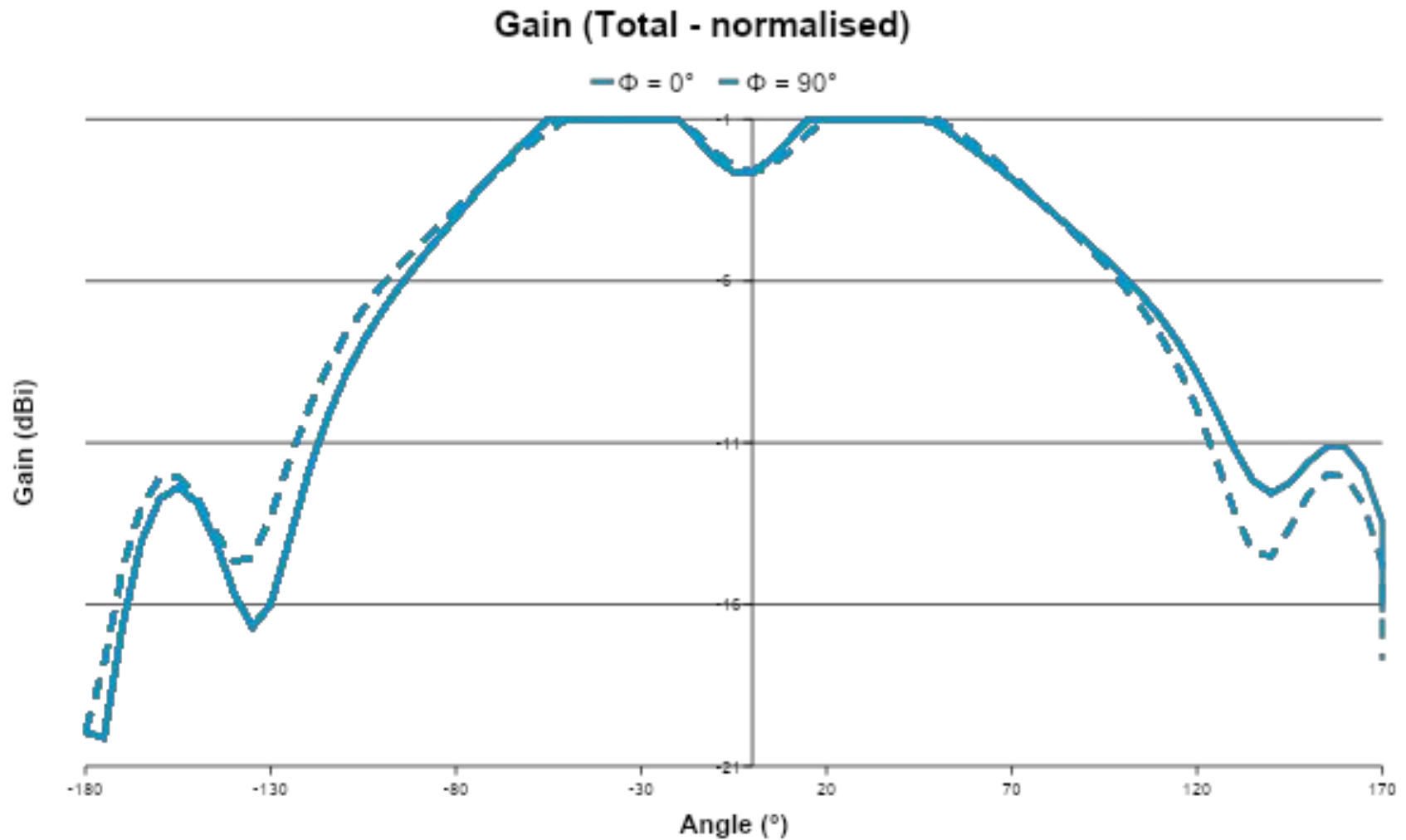
Impedance vs Frequency

VSWR

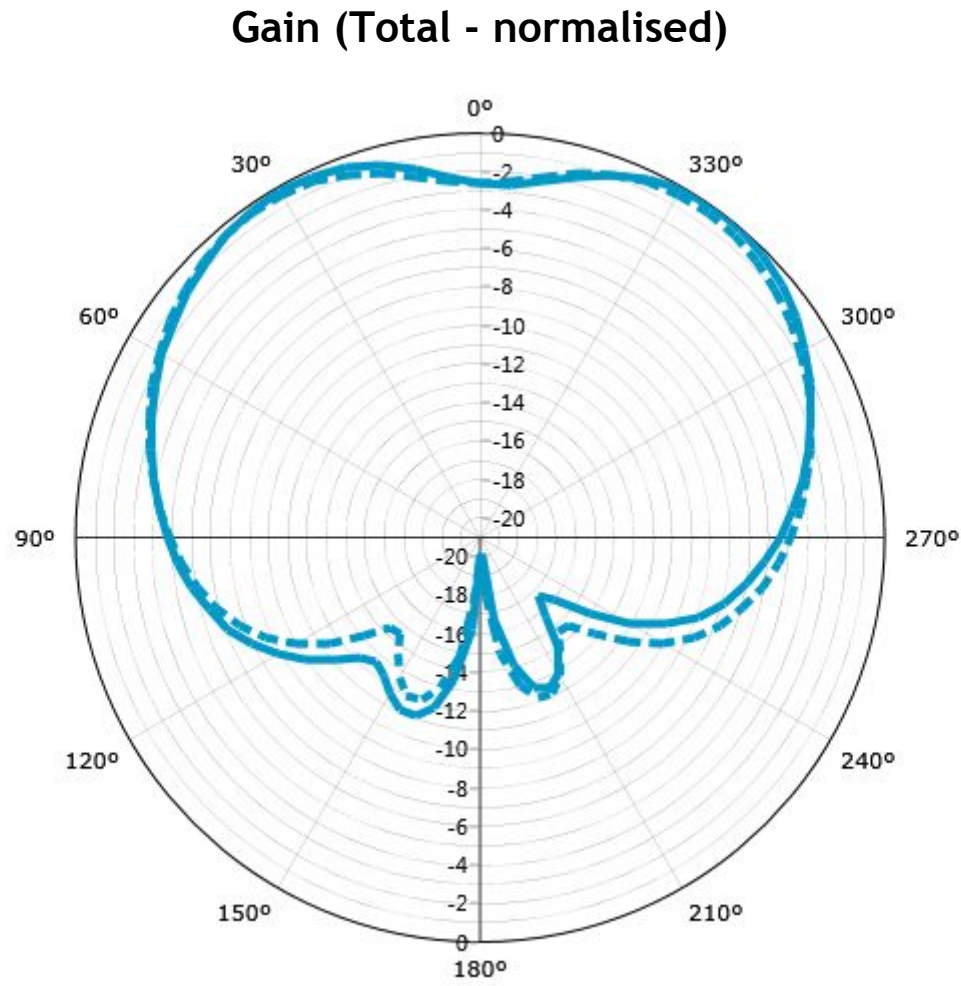
	Design 1
Reference impedance @ port 1	$(50+0j) \Omega$



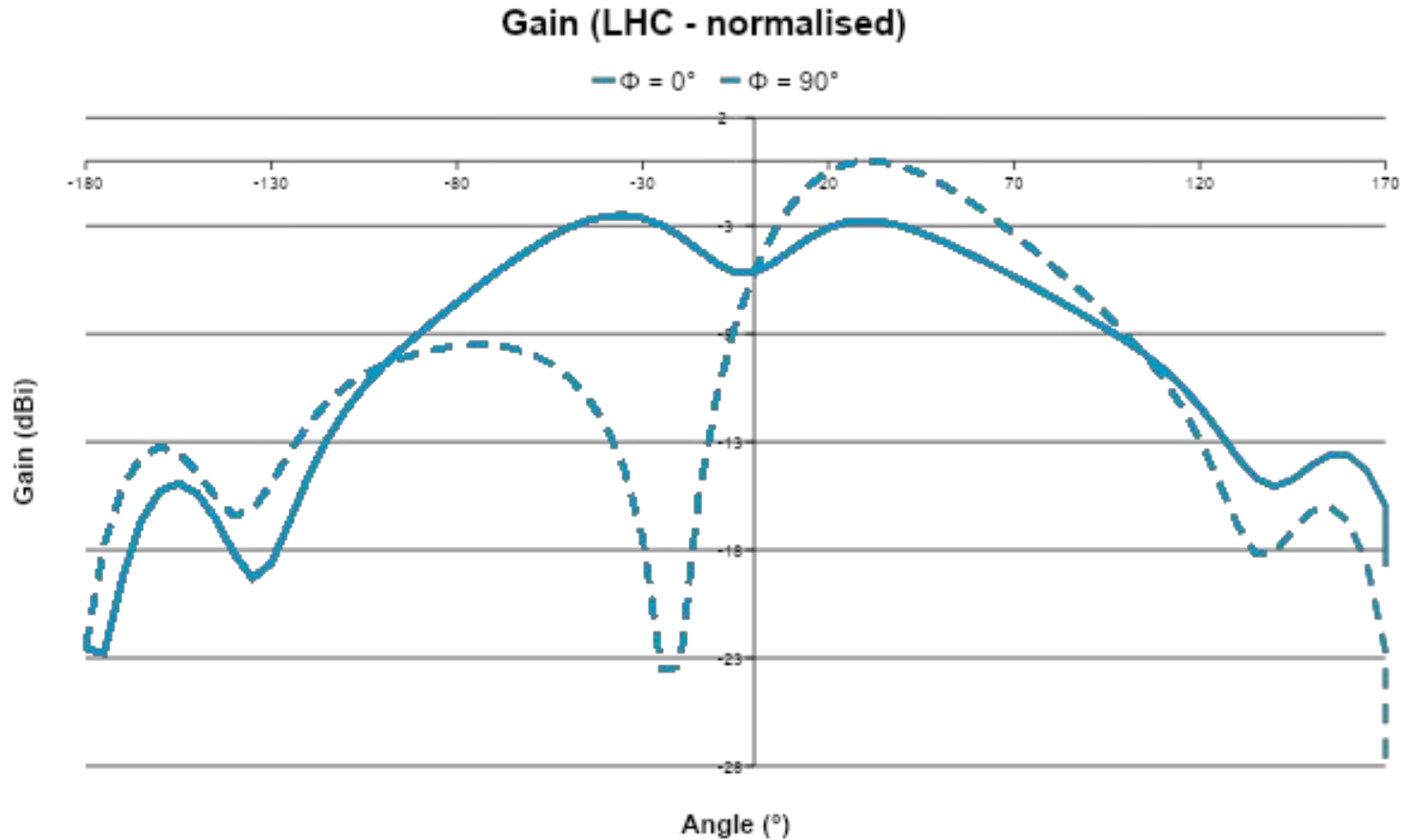
Far Field vs Angle @ f0



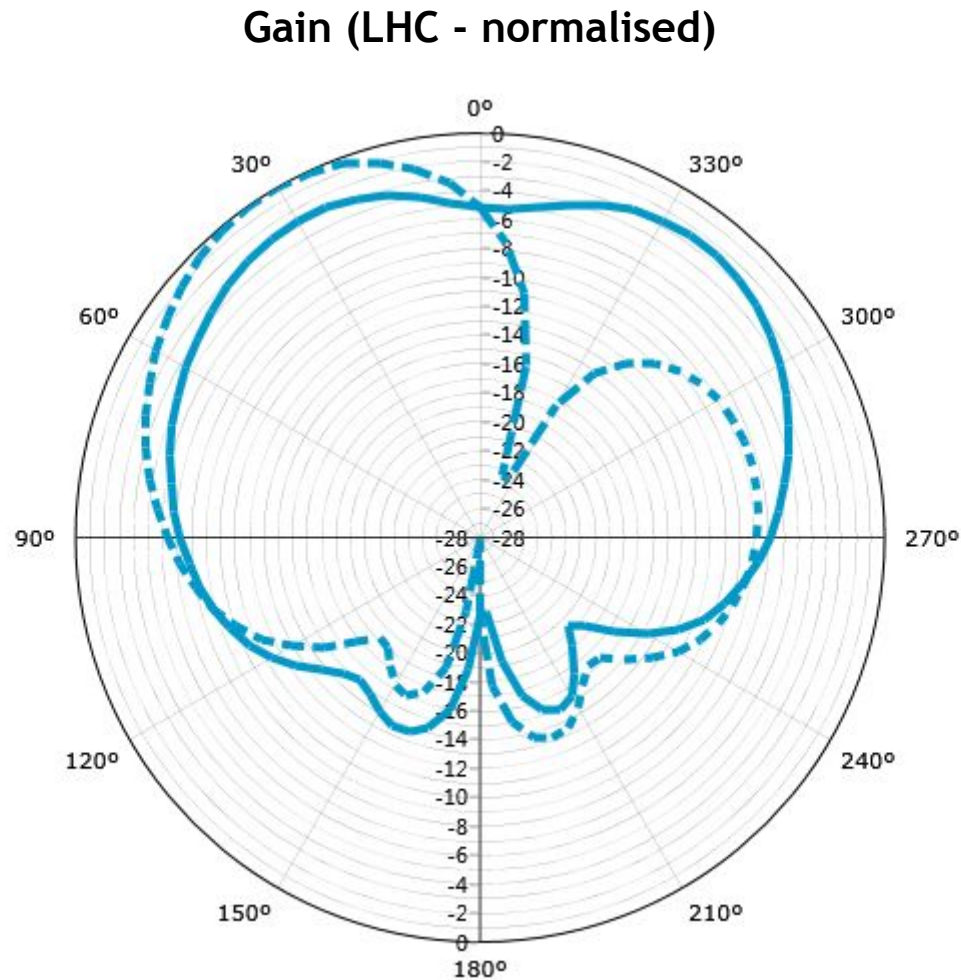
Far Field vs Angle @ f0



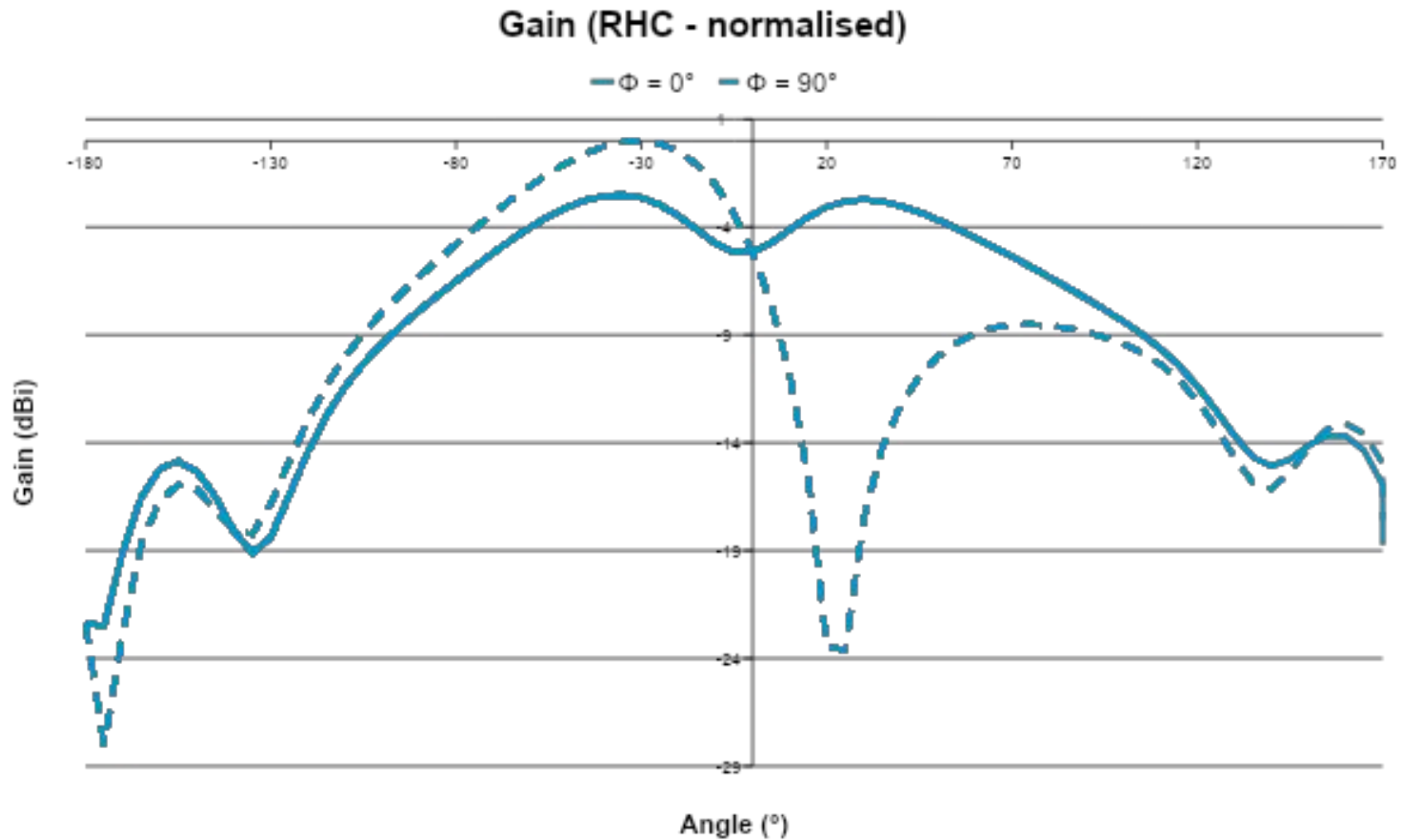
Far Field vs Angle @ f0



Far Field vs Angle @ f0

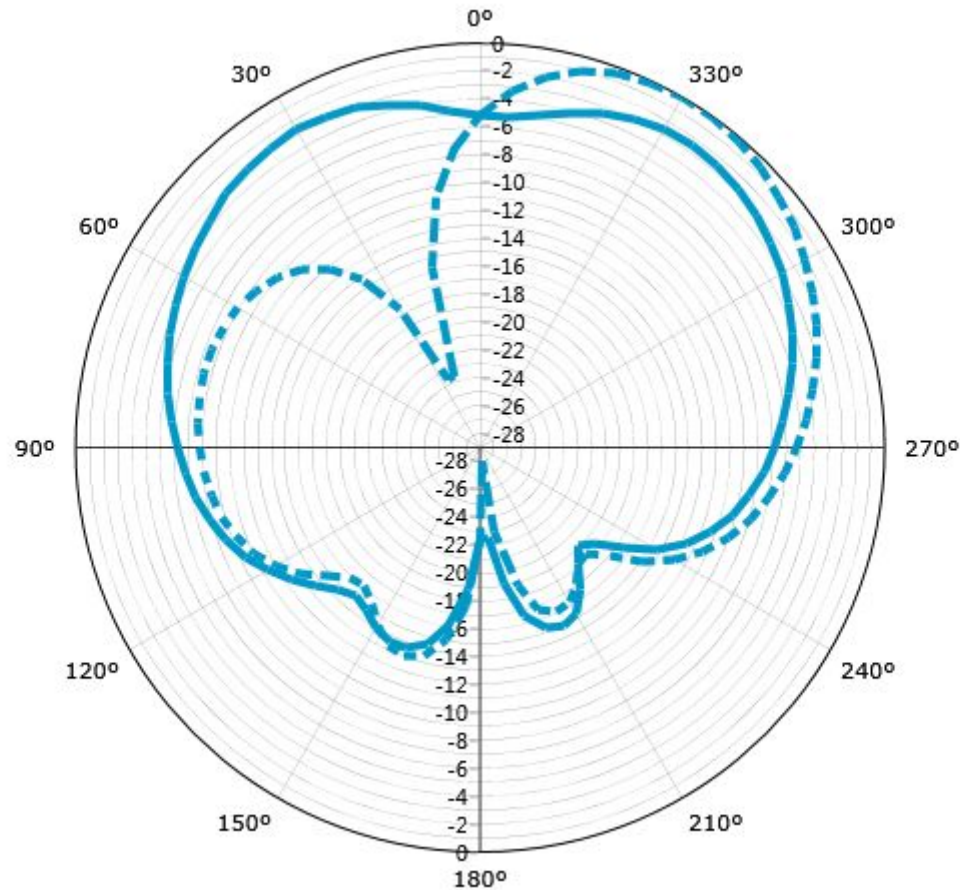


Far Field vs Angle @ f0

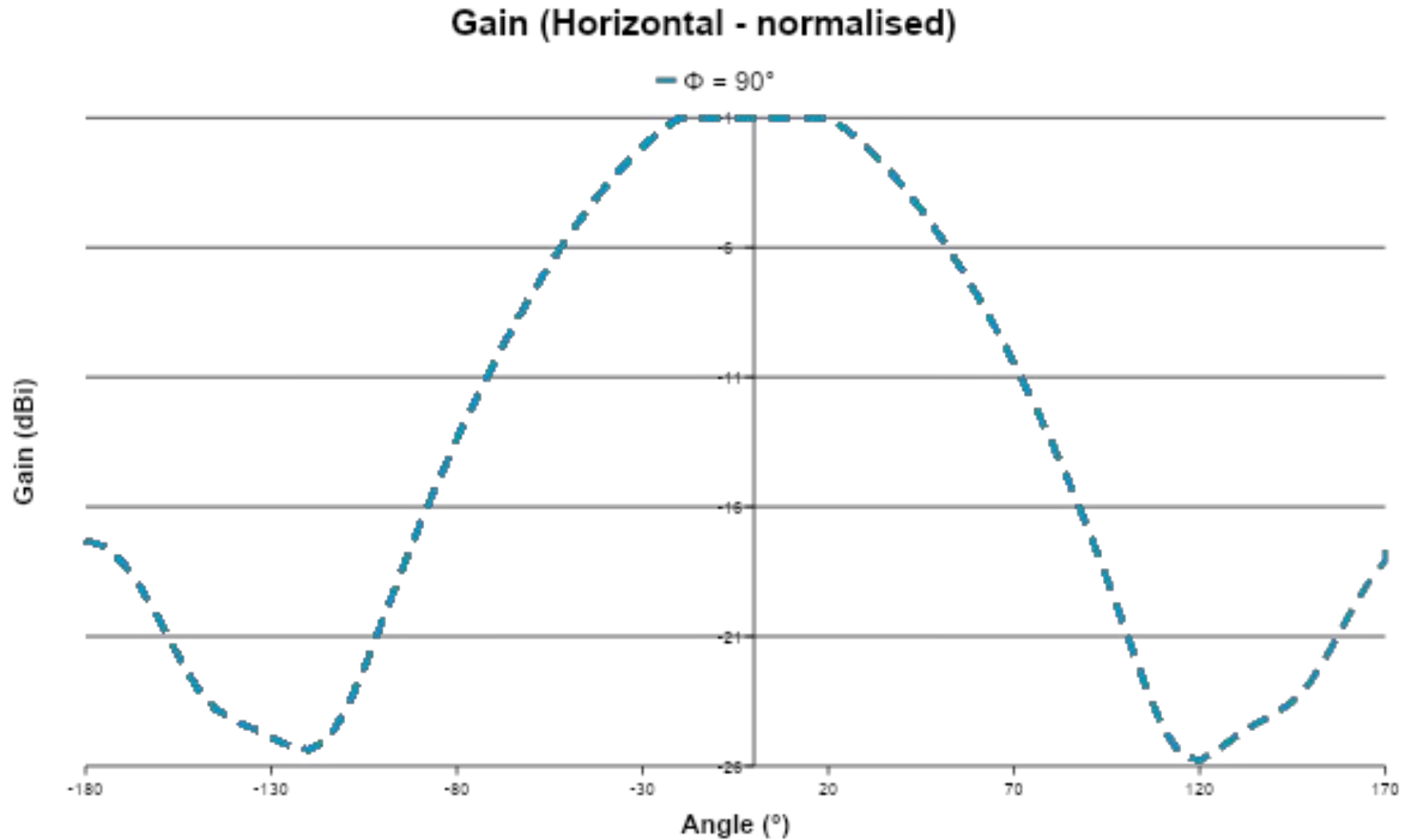


Far Field vs Angle @ f0

Gain (RHC - normalised)

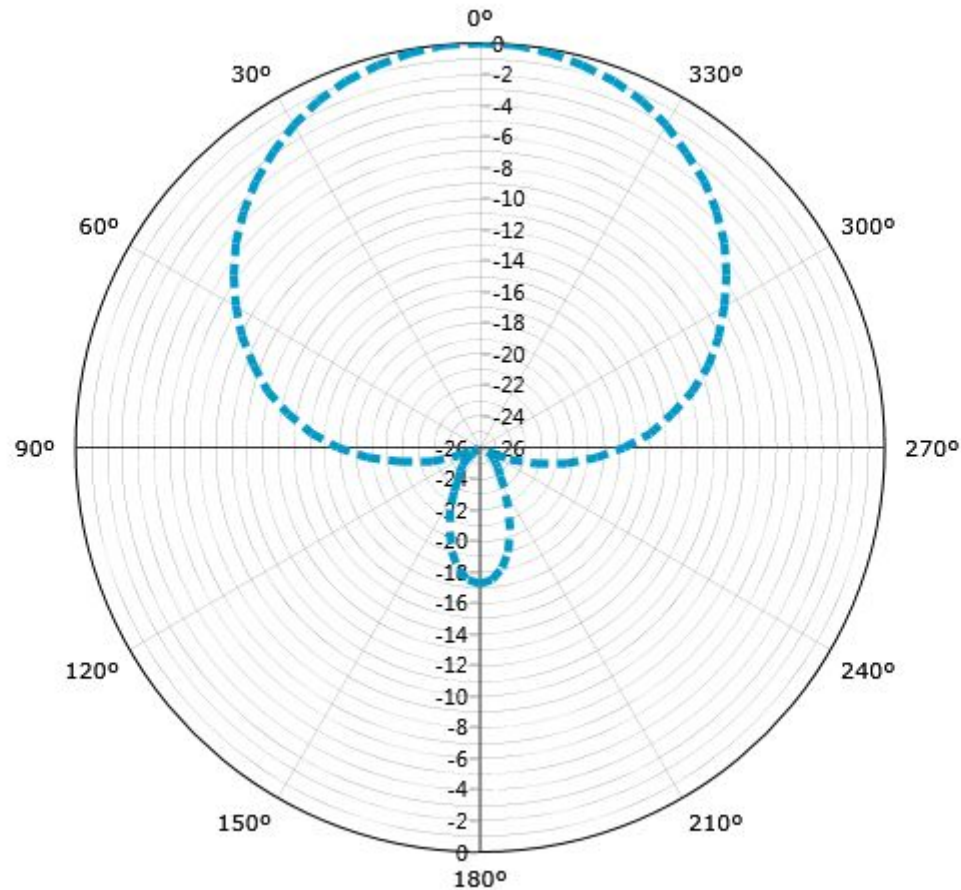


Far Field vs Angle @ f0

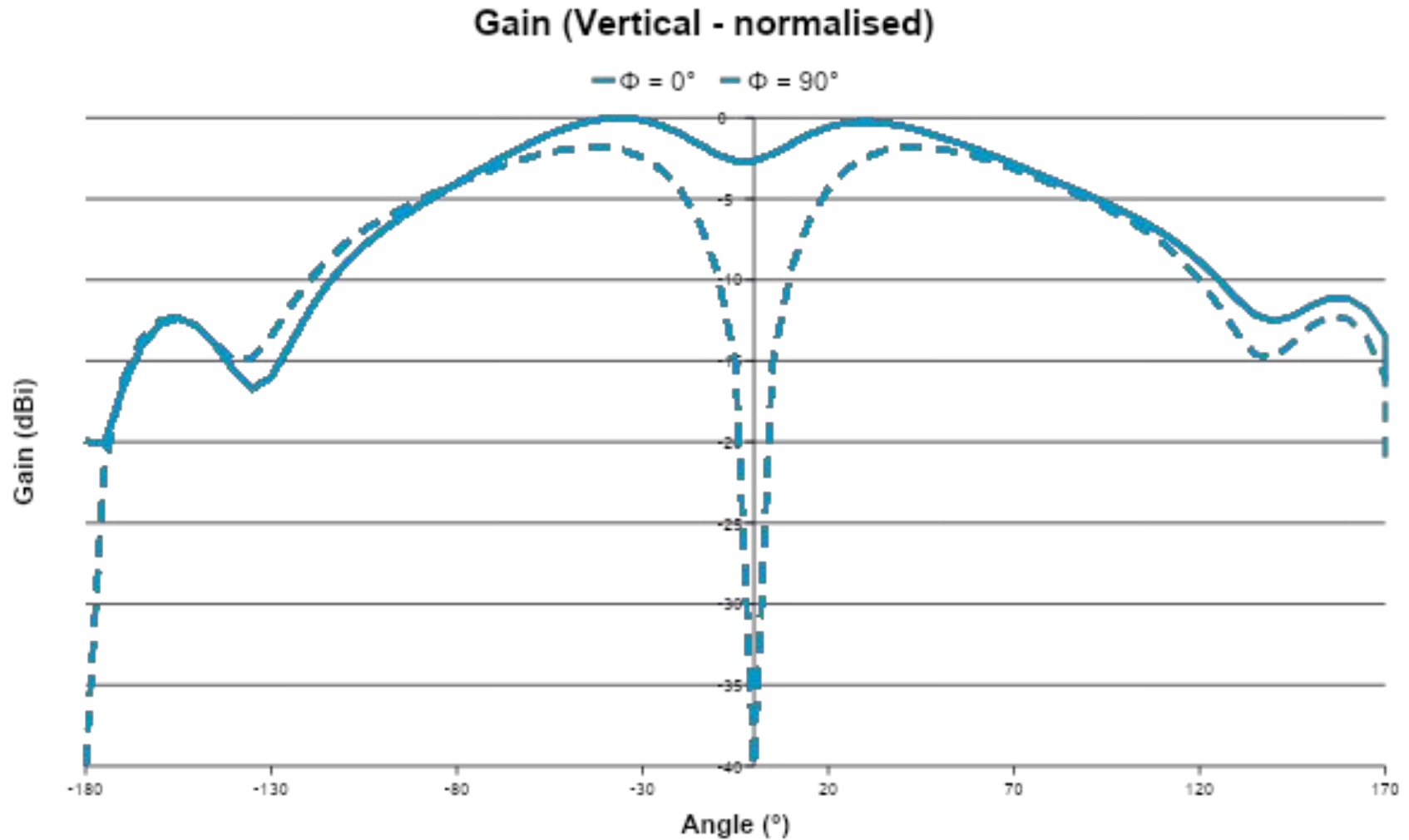


Far Field vs Angle @ f0

Gain (Horizontal - normalised)

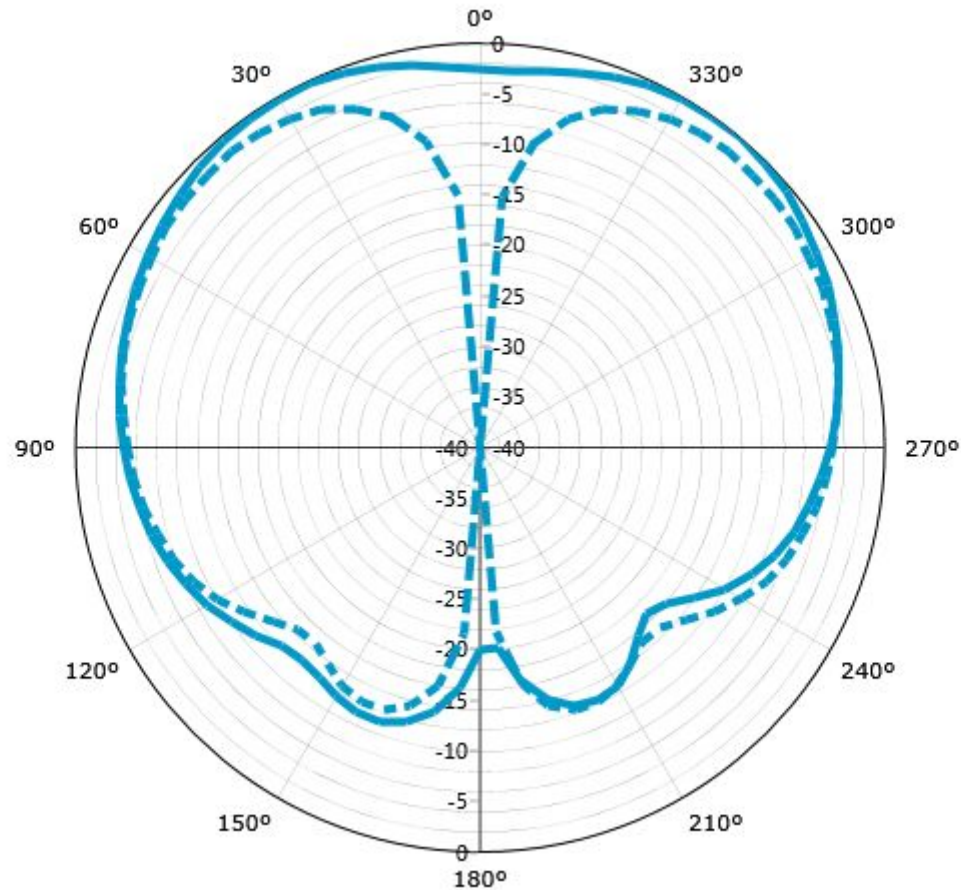


Far Field vs Angle @ f0

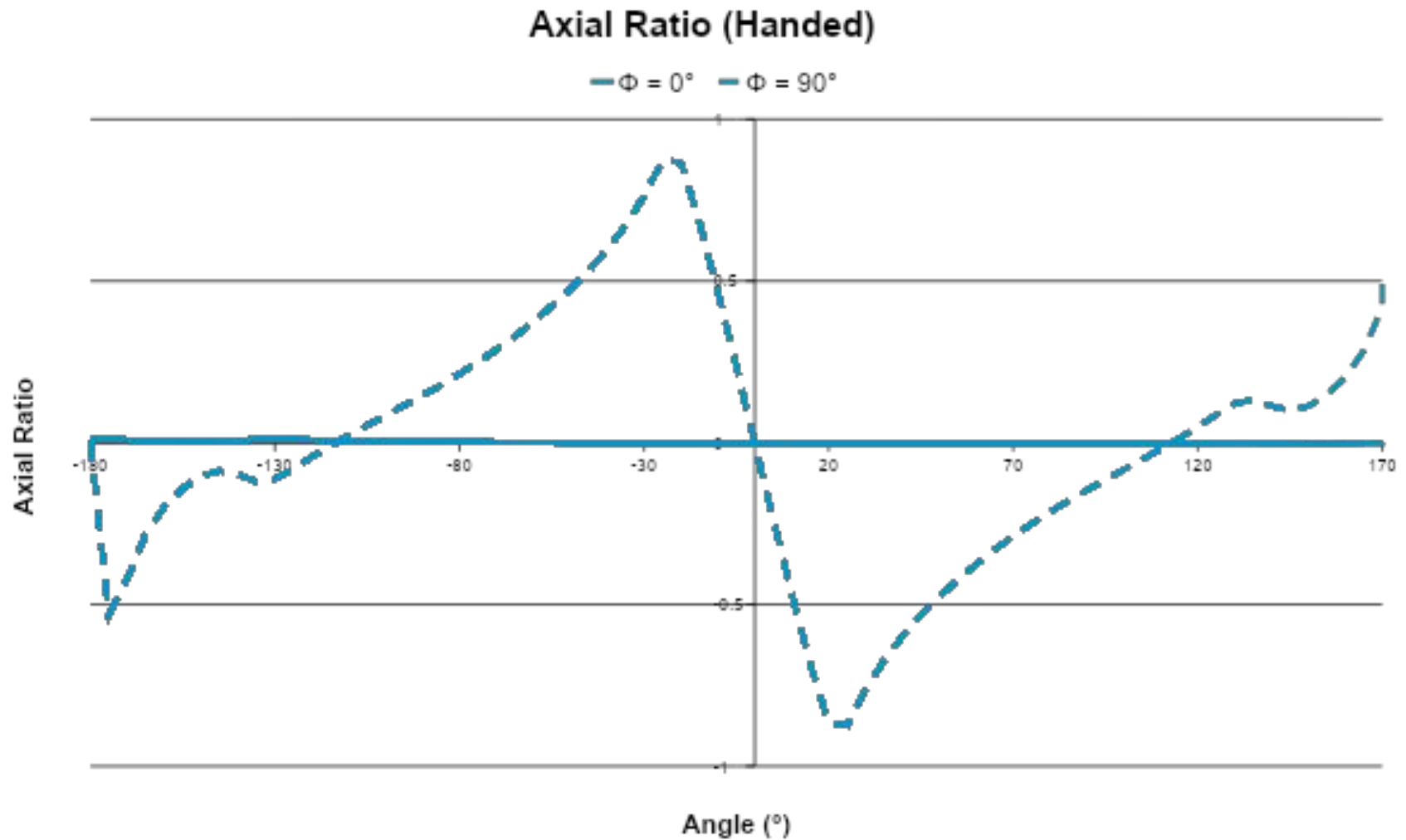


Far Field vs Angle @ f0

Gain (Vertical - normalised)

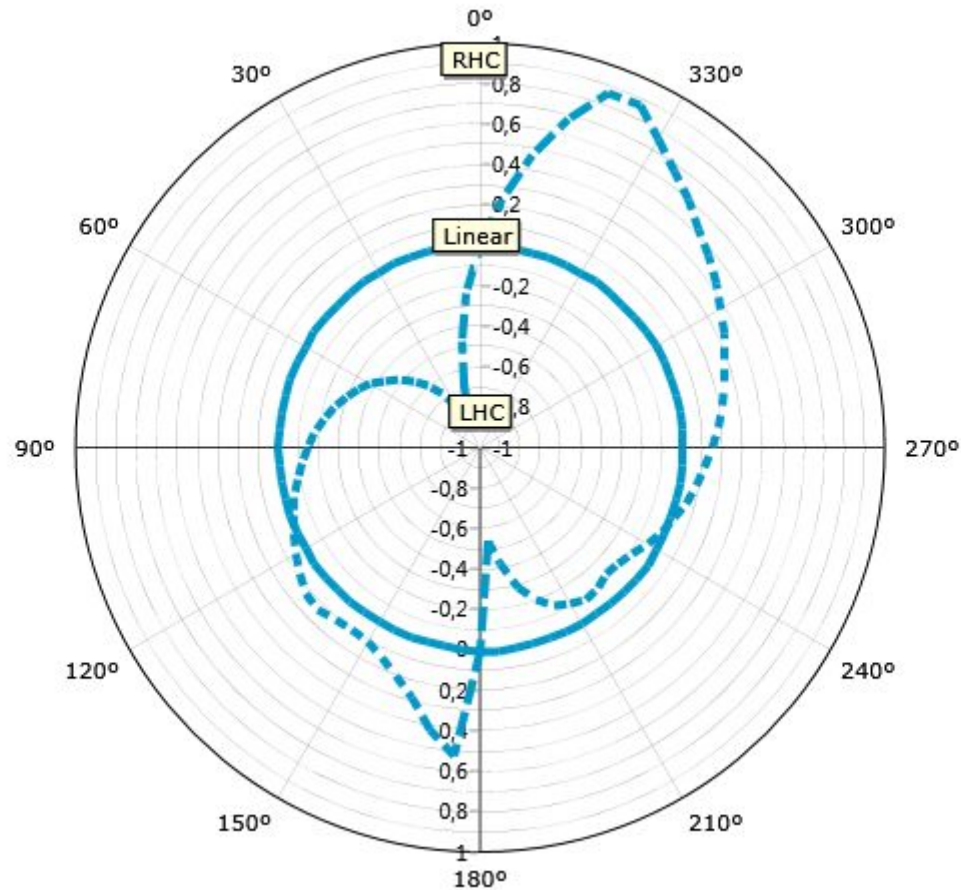


Far Field vs Angle @ f0

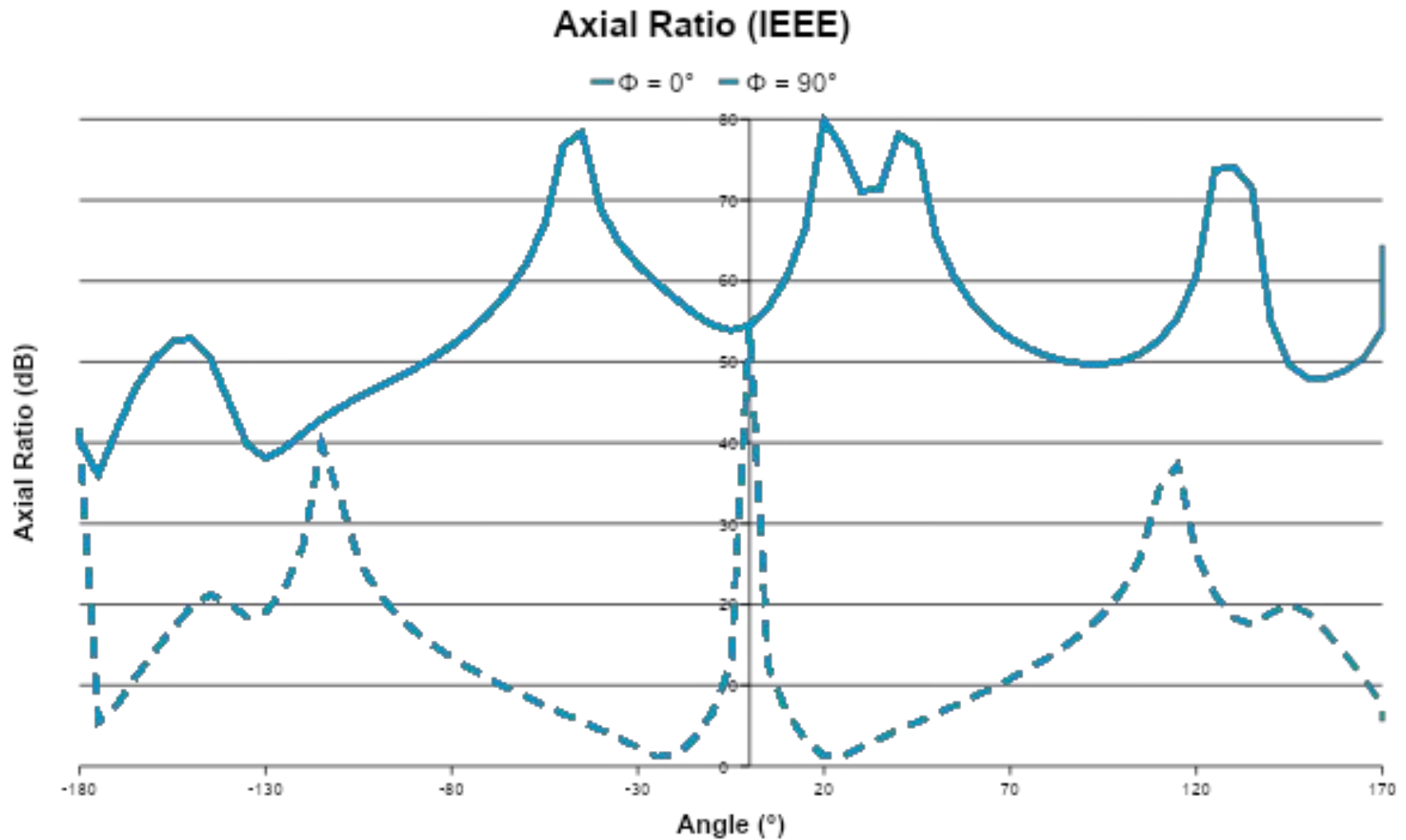


Far Field vs Angle @ f0

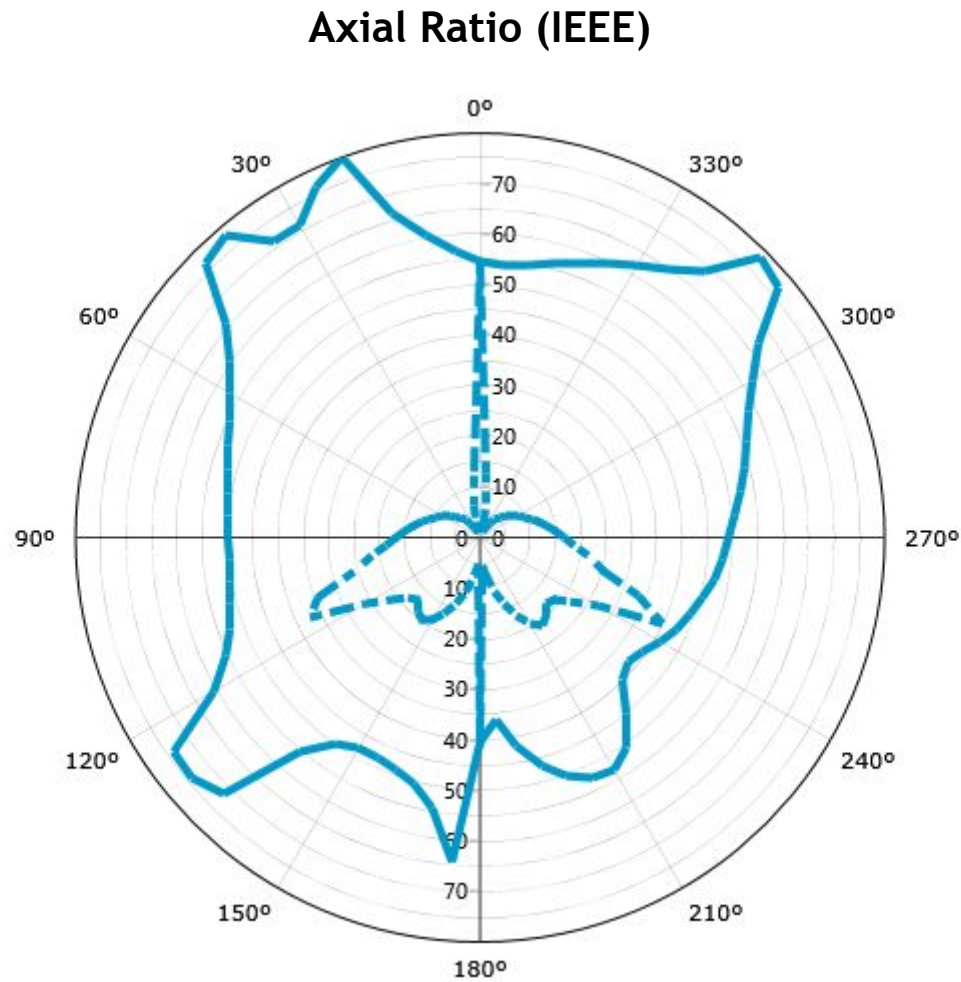
Axial Ratio (Handed)



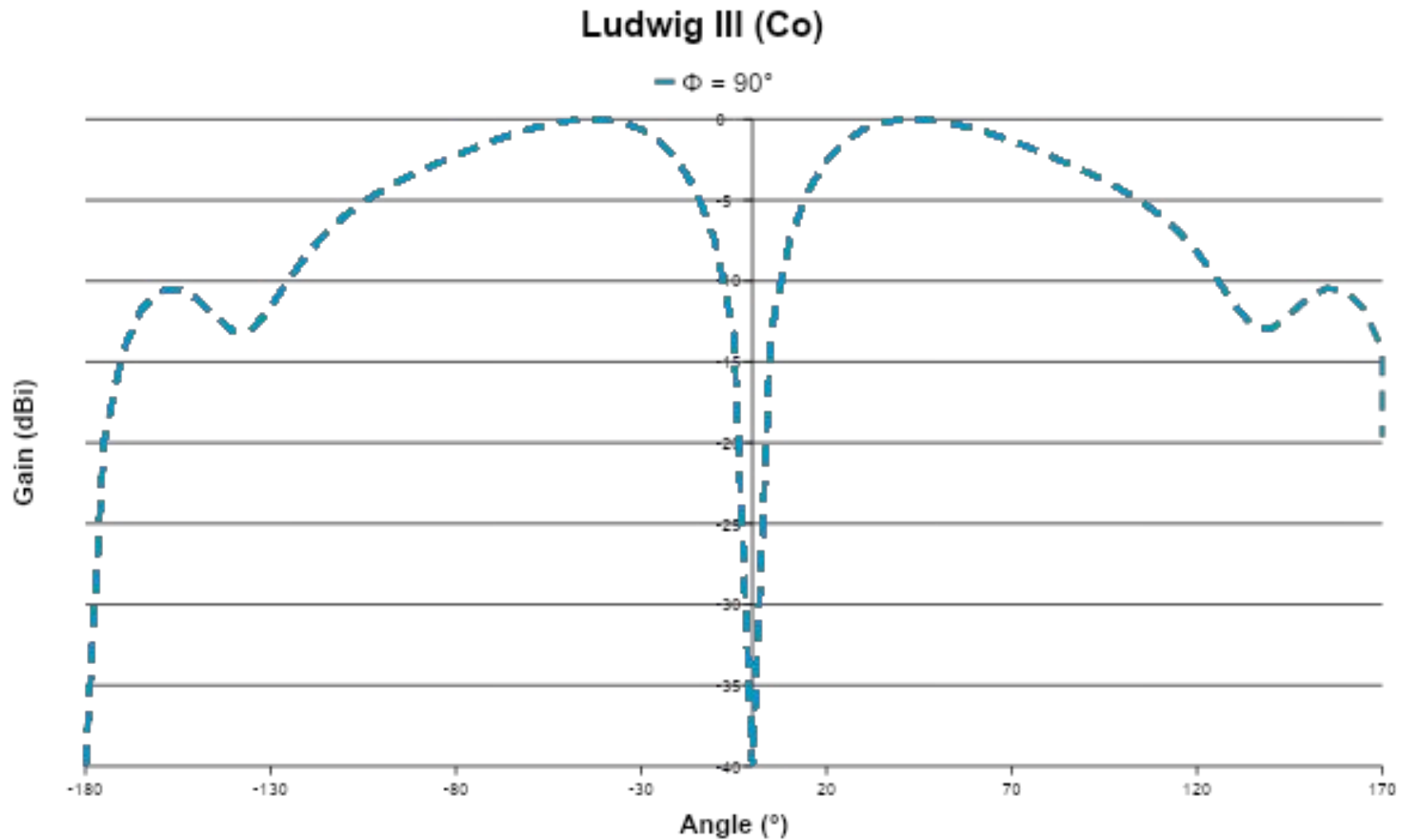
Far Field vs Angle @ f0



Far Field vs Angle @ f0

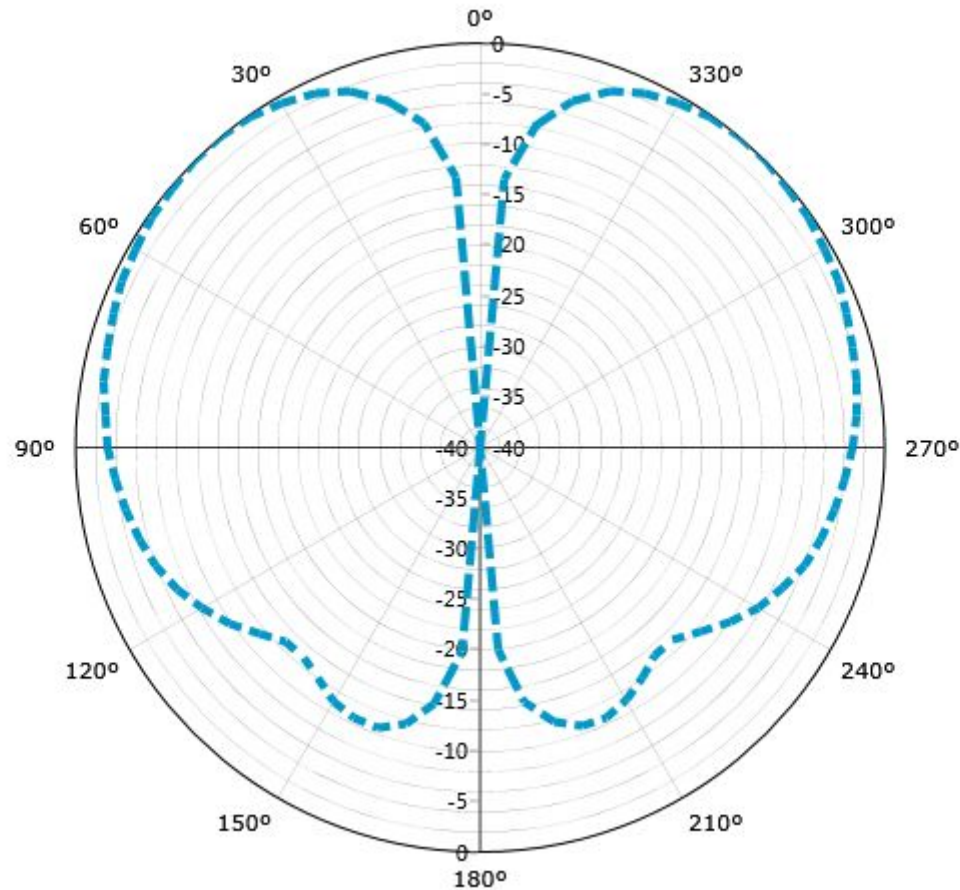


Far Field vs Angle @ f0

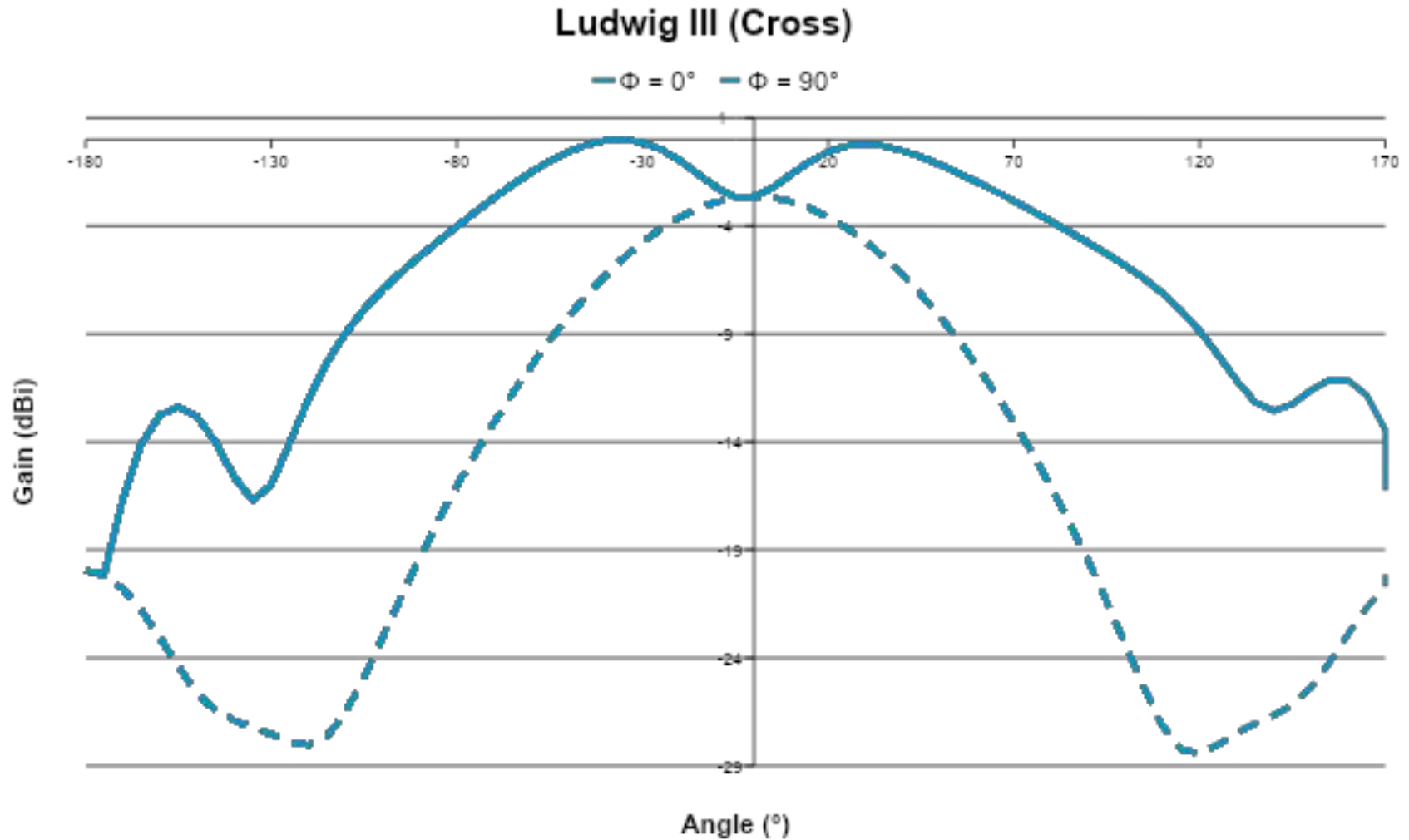


Far Field vs Angle @ f0

Ludwig III (Co)



Far Field vs Angle @ f0



Far Field vs Angle @ f₀

Ludwig III (Cross)

