

Antenna Information Report

Broadband UHF RFID built-in antenna
Brand: Nedap
Model: 20220823_100880202_D_01

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Status	Final

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Introduction

This document describes and specifies the internal antenna assembly of an UHF RFID antenna intended to be built-in a RFID tag reader system.

This antenna is designed to operate in the UHF RFID frequency bands of region1, region 2 and region 3.

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1. Specifications

Manufacturer	Nedap N.V.
Brand	Nedap
Year of release	2023
Model	20220823_100880202_D_01
Type	Archimedean Spiral Antenna
Polarization	Right Hand Circular
Dimensions	180mm x 180mm x 1.6mm
Base material:	FR4
Environment	Built-in
Protection	IPX0
Frequency range	850-950MHz
Max handling power	30dBm
Max Antenna Gain	-11dBi

2. Visual

2.1. PCB drawing

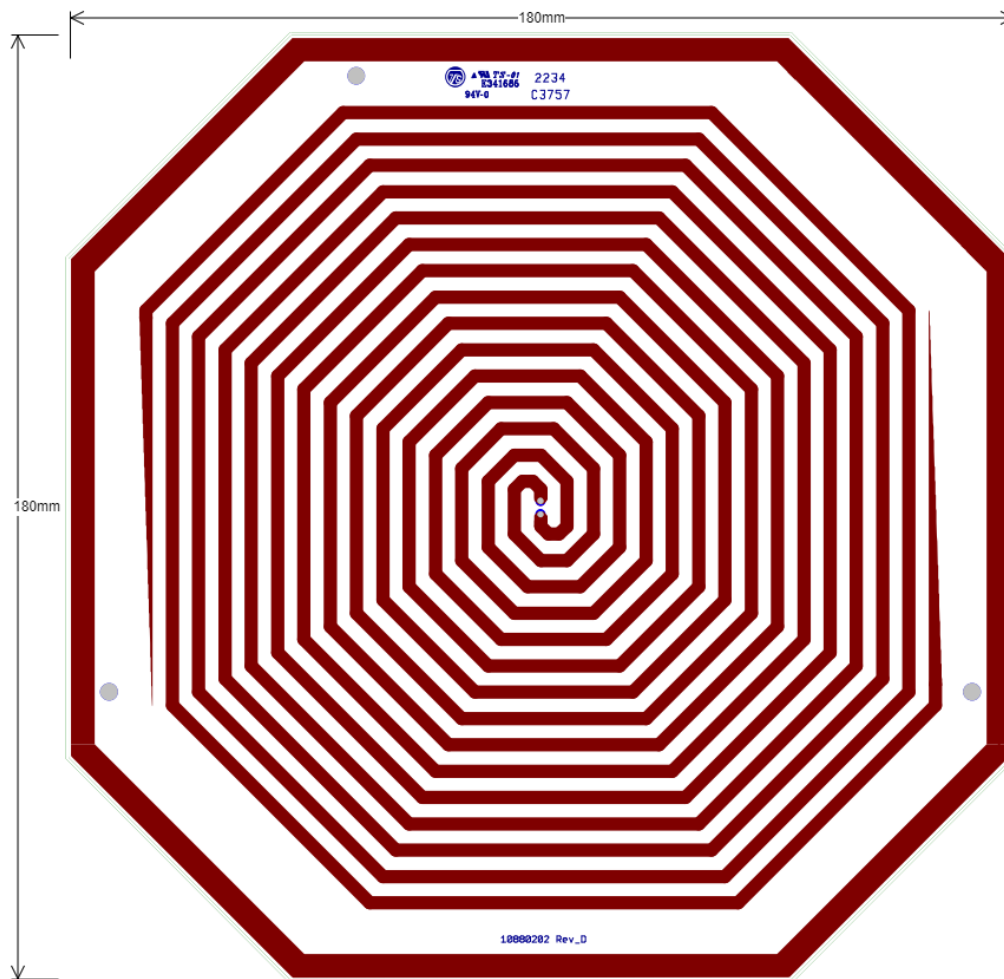


Figure 1 Antenna drawing

2.2. Radiation Pattern

Archimedean Spiral Antenna 100880202_B Mounted on RFID Reader Board Frequency 895MHz

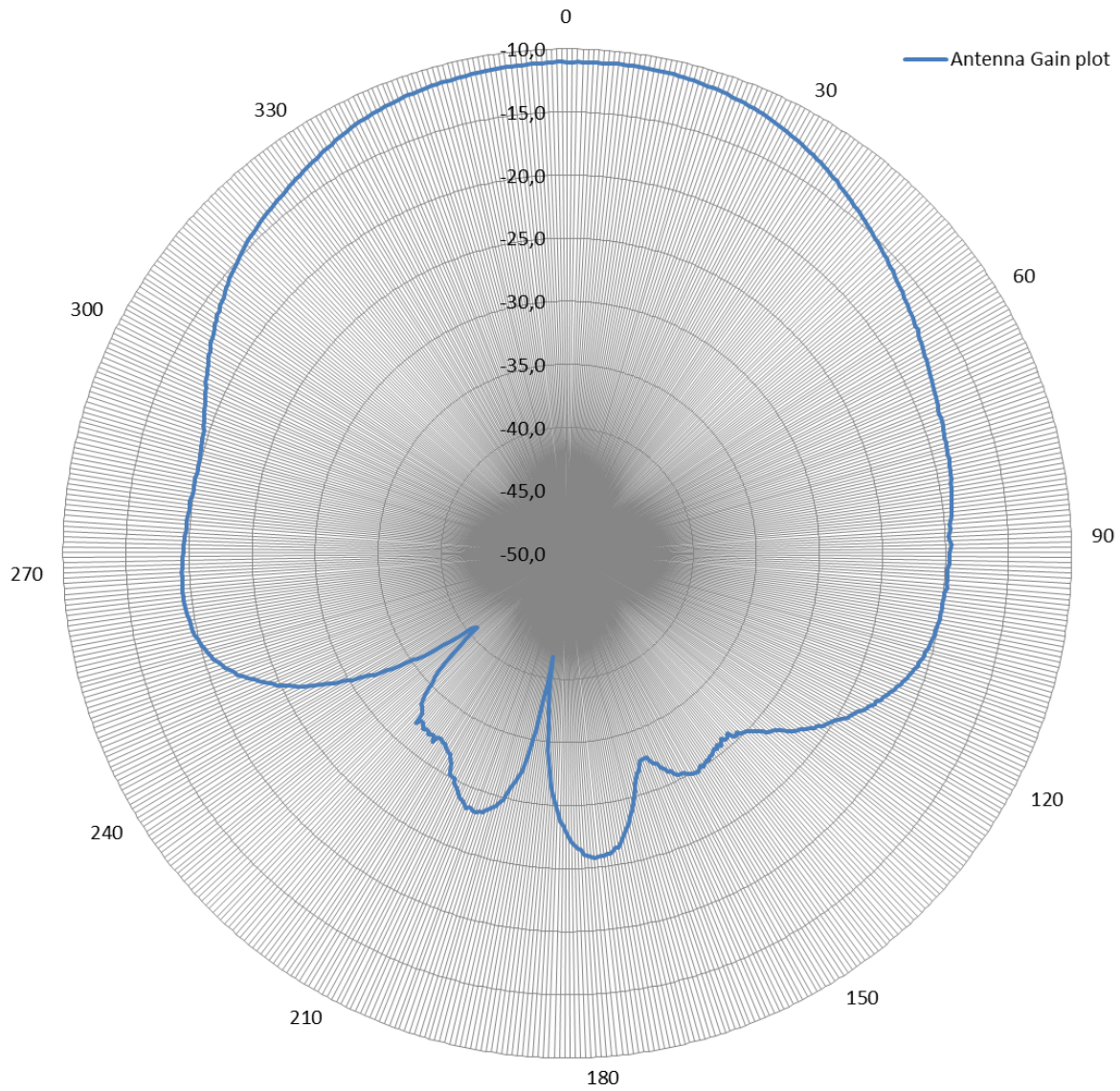


Figure 2 Radiation pattern

2.3. Photo's

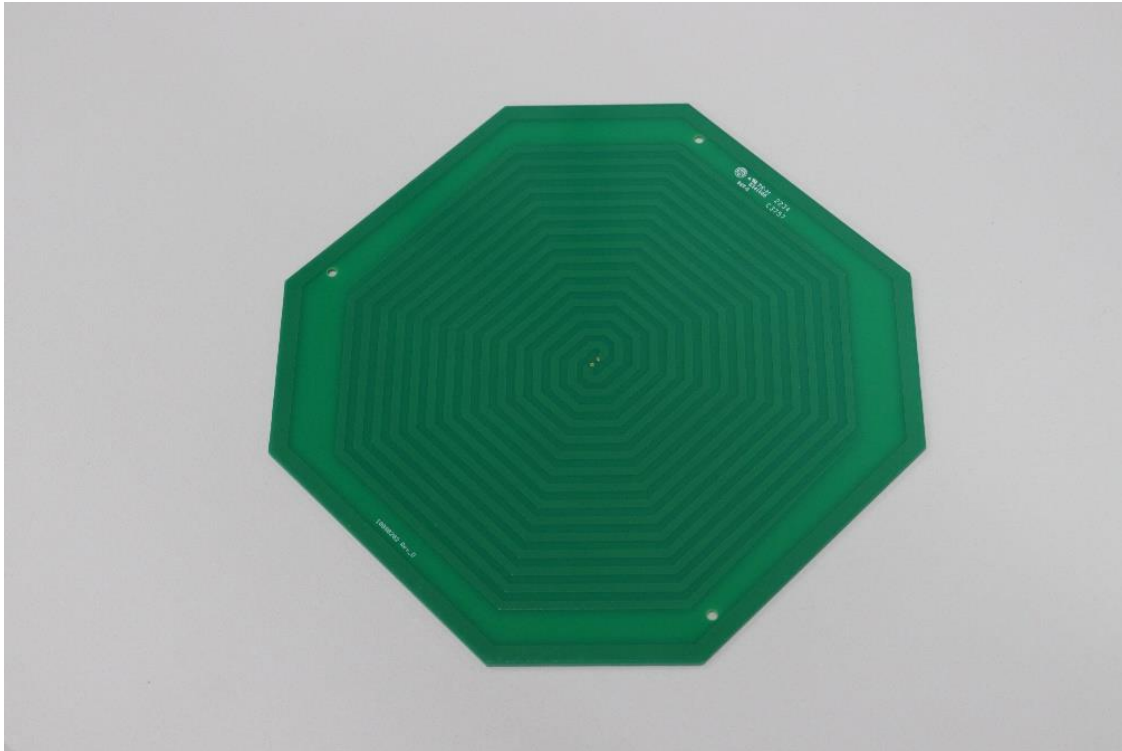


Figure 3 Antenna Picture

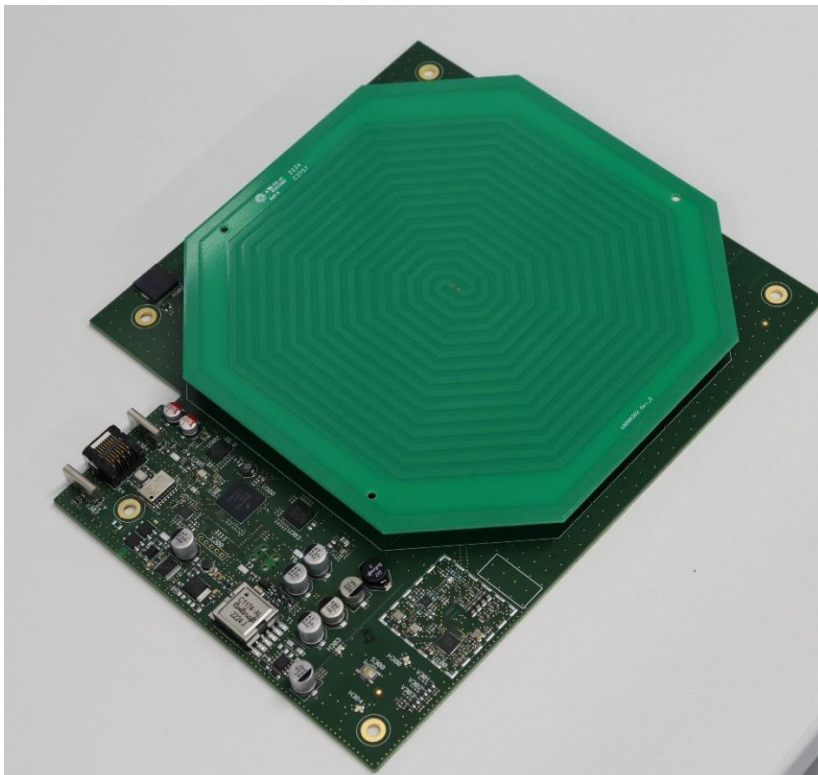


Figure 4 Antenna position without housing