



Date: 20 December 2023

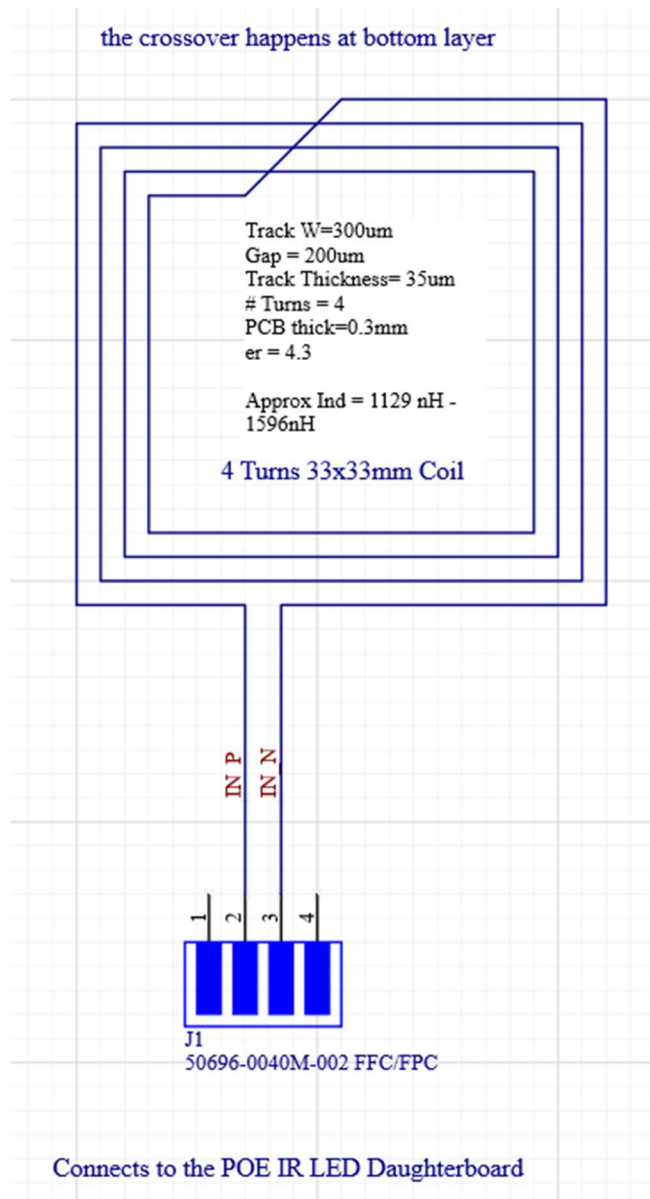
Nemko North America, Inc.

Subject: **NFC Antenna**
Product Name: PoE Video Doorbell; FCC ID: YL6VDB755P

To whom it may concern:

The ADC-VDB755P uses a custom NFC antenna that has the following characteristics:

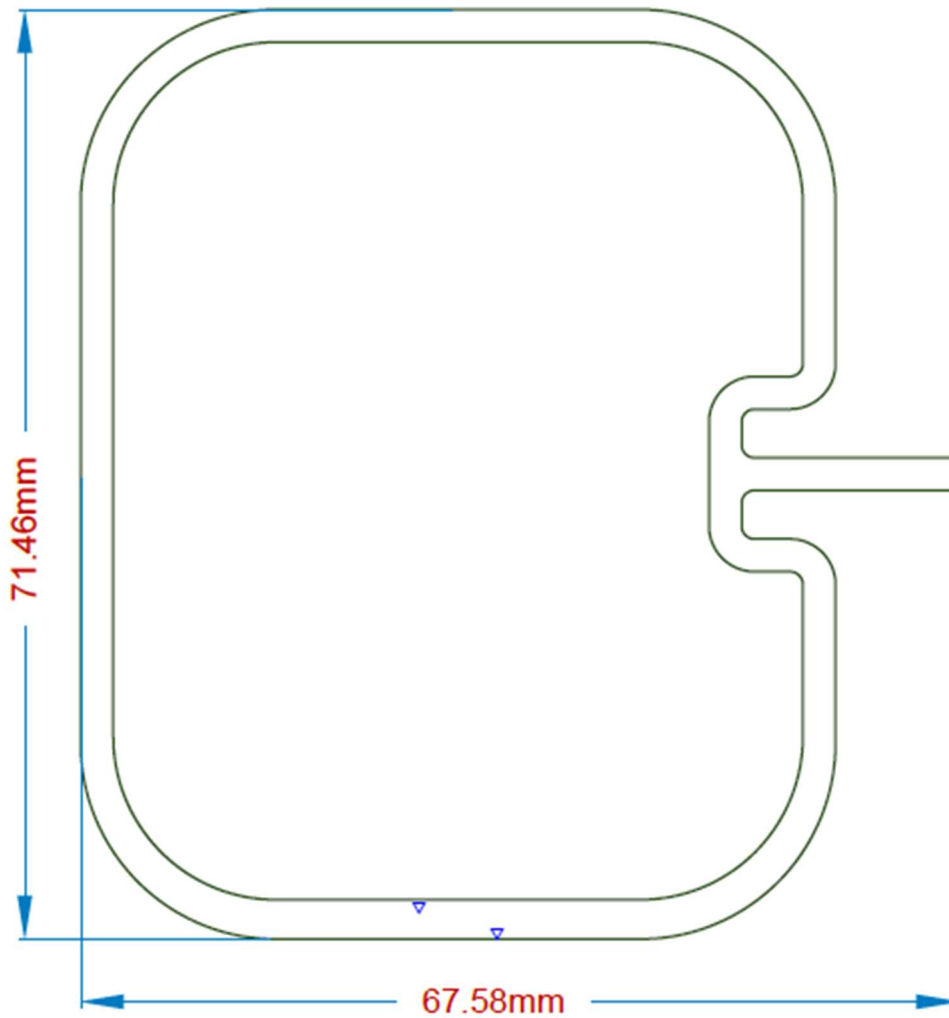
Antenna Design and Diagram



The ADC-VDB755P NFC antenna has a design with the above parameters. The parameters are presented in a graphical way, such that the reader can understand a little bit about it's geometry when reading about it's parameters and characteristics.

Antenna Dimensions

Drill Drawing View (Scale 1:1)



The dimensions of the NFC antenna are as above

Antenna Material

The antenna is made with materials outlined below in this stackup:

Double-sided ZIF FPC Stack-up			
Section A THK (μm)		Section B THK (μm)	
Coverlay	Coverlay PI (/Kapton) 25	Coverlay Opening of ZIF Contacts or Fingers	
	Coverlay Adhesive 25		
	Copper Plating 18	Copper	18
Adhesive FCCL	Initial Copper 18	Adhesive	18
	Adhesive 25	PI Base	25
	PI (/Kapton) Base 25	Adhesive	25
	Adhesive 25	Initial Copper	18
	Initial Copper 18	Copper	18
	Copper Plating 18	Copper	18
Coverlay	Coverlay Adhesive 20	Coverlay Adhesive	20
	Coverlay PI (/Kapton) 25	Coverlay PI (/Kapton)	25
242+/-30μm		Stiffener Adhesive	25
		PI ZIF Stiffener	80
		297+/-30μm	

Antenna RF performance

The NFC module has an operating frequency of 13.56MHz with an external, custom antenna. The custom antenna gain is 1.5dBi with an operating range of 13.41 to 13.71MHz