

Project name JPlay
Project number 03
Sub project / Part V2.x - PCB based

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Version 1.0
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NFC antenna specification Joué Play V2.x - PCB based

Revision History

Version	Date	Description
1.0	10/10/2023	Initial version

Manufacturer: Joue Music Instruments
address: 87 Quai des Queyries, Joue Music Instruments, Bordeaux, France.

Antenna specifications

Antenna model	Magnetic loop antenna
Model name	JOUE NFC Antenna v301
Antenna electric gain (E/V)	-65 dBi
Antenna magnetic gain (H/I)	35 dB
Frequency range	13.56 MHz $\pm$ 500 kHz
Connector type	ZIF connector
Location of measurements	ALWAYS WIRELESS France

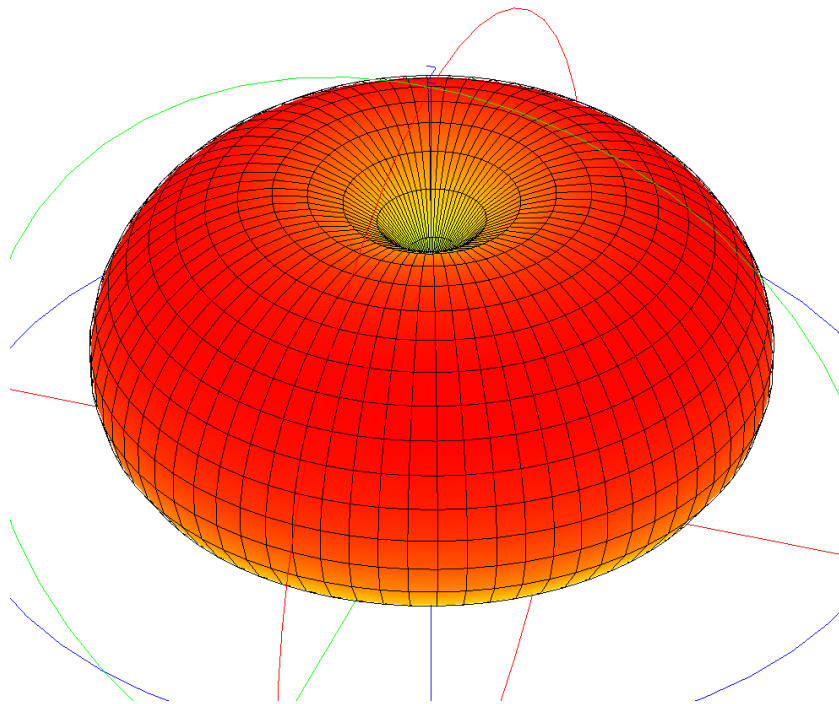
Radiation patterns

Magnetic radiation pattern @ 13.56 MHz (± 2 dB constant over Phi) :

Teta (°)	0	45	90	135	180
Gain (dB)	35	18	-32	6	12

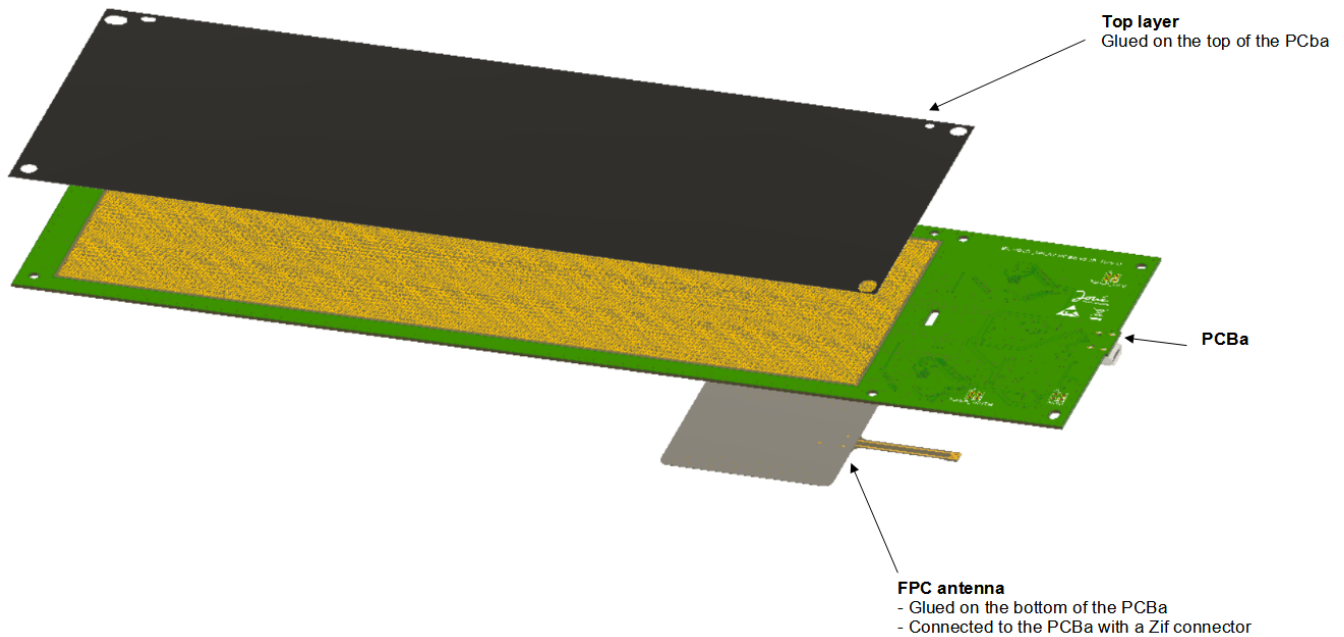
Electric radiation pattern @ 13.56 MHz, but not significant.

Phi (°)	0	45	90	135	180	225	270	315
Gain (dB)	-65	-66	-67	-64	-66	-66	-67	-65



Mechanical implementation

PCBa assembly exploded view (ME-0340)



FPC antenna drawing (ME-0328 / EL-0024 / Antenna v301)

