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Responsible	Oystein Moldsvor
Classification	Confidential

DISRUPTIVE TECHNOLOGIES

Revision History Table		
Named revision	**Date**	**Comment:**
01	2024-02-12	First version
02	2024-02-13	Added test results and moved images to operational description

Antenna Details

The antenna in 102737 Door and Window Sensor US is an integrated PCB antenna. It is designed using a rigid flex solution where the antenna part of the PCB is separated from the main PCB with a flexible PCB area to allow it to be mounted at an angle.

The main characteristics of the antenna are:

- Antenna Type: Integrated PCB Antenna
- Antenna structure: Helix
- Total copper length: 105 mm
- Radiation pattern: Similar to dipole antenna
- Antenna Details : Product PCB, part number 102697
- Design: Disruptive Technologies Research AS
- Antenna gain: < -4 dBd

The PCB thickness is 1.62 mm and the area of the antenna on the PCB is 19 mm x 5.6 mm.

Test results

The antenna gain was measured at the top, middle and bottom frequencies of the band in the RF test report “RF Test Report - PRJ0039553 Door and Window Sensor US - Nemko TRF FCC Part 15.247 DTS REP016409.pdf”. The results are shown in the table below.

Carrier Frequency	Peak Conducted Power	Peak ERP	Antenna Gain
	dBm	dBm	dBd
903.25 MHz	12.6	3.5	-9.1
915.00 MHz	12.5	6.5	-5.9
926.75 MHz	12.4	8.2	-4.2