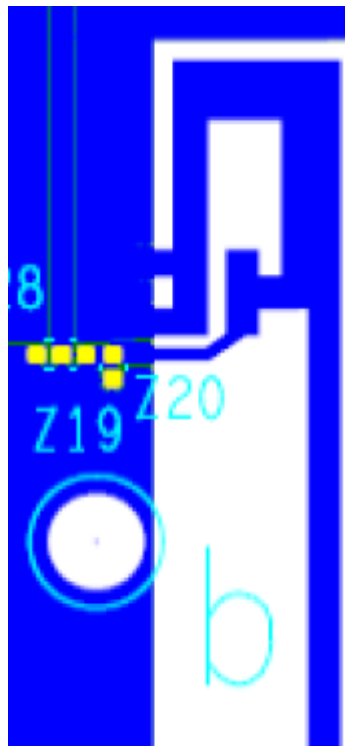


1. Company: CartaSense
2. Product name: O-Sensor
3. RF module/chip: TI - CC1352R
4. Antenna A1
 - a. Antenna description

Antenna type	PCB
Antenna manufacturer	NA
Antenna datasheet	TI - SWRA496A
Frequency range	2400MHz~2500MHz
Modulation	GFSK
Antenna gain max (peak)	1.42 dBi
Cable loss	NA
Connector type	NA
SWR	3

- b. Antenna layout



c. Antenna photo

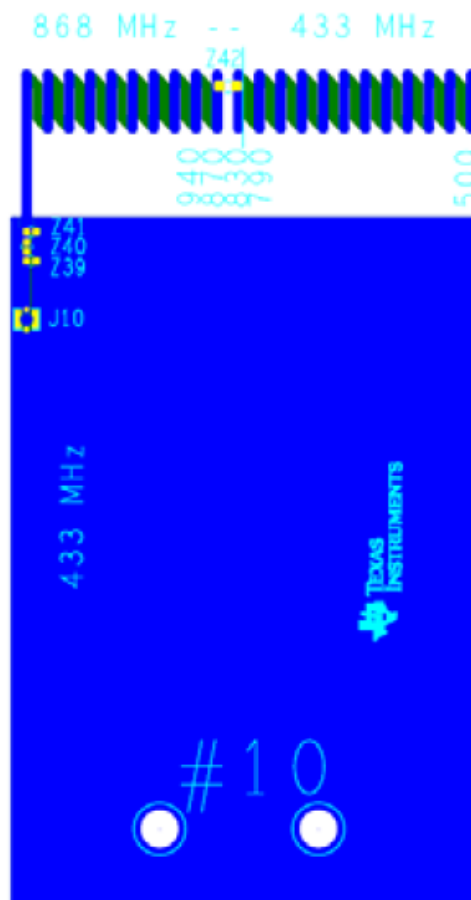


d. Antenna radiation pattern
Please refer to [appendix A >>](#)

5. Antenna A2
a. Antenna description

Antenna type	PCB
Antenna manufacturer	NA
Antenna datasheet	TI - SWRA496A
Frequency range	428.5MHz~437.5MHz
Modulation	FSK
Antenna gain max (peak)	-0.68 dBi
Cable loss	NA
Connector type	NA
SWR	2

b. Antenna layout



c. Antenna photo

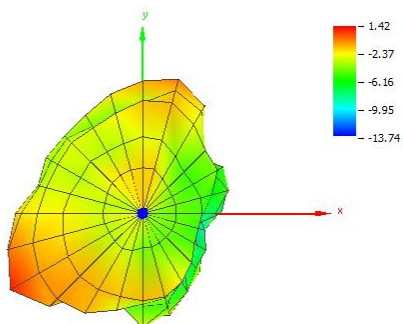


d. Antenna radiation pattern

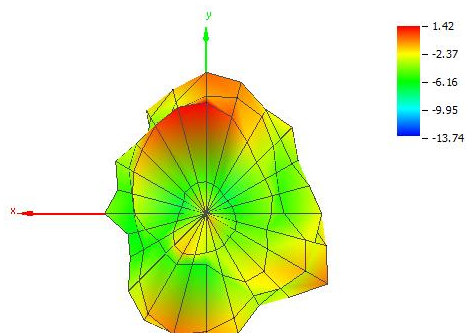
Please refer to [appendix A >>](#)

Appendix A - Radiation Pattern

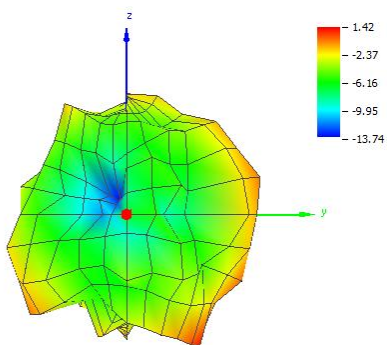
Antenna A1



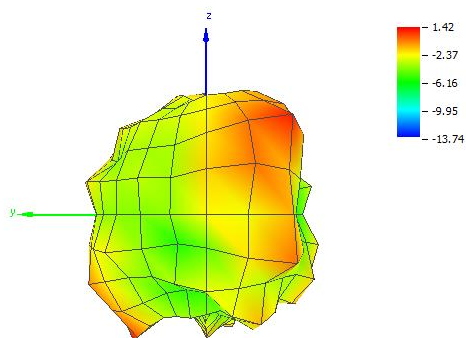
Theta = 0, Phi = 0



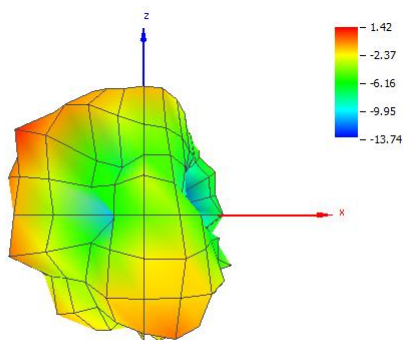
Theta = 180, Phi = 0



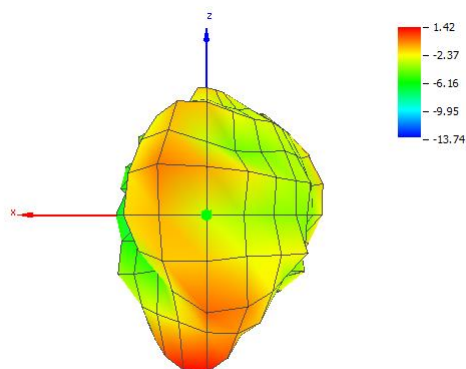
Theta = 90, Phi = 0



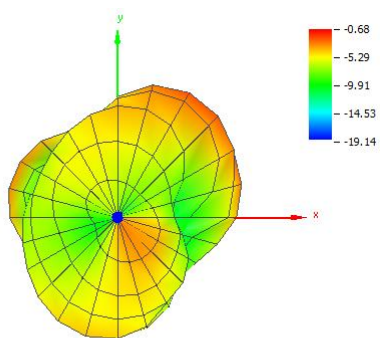
Theta = 90, Phi = 180



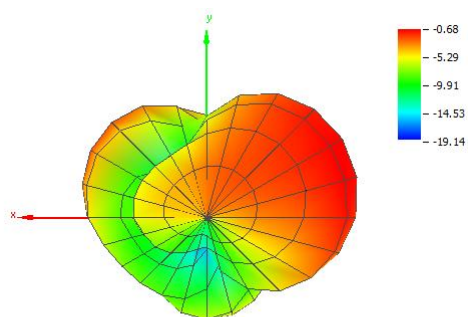
Theta = 90, Phi = 270



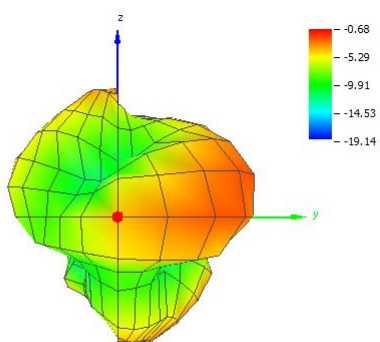
Theta = 90, Phi = 90



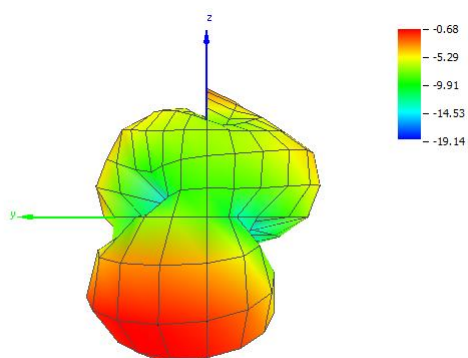
Theta = 0, Phi = 0



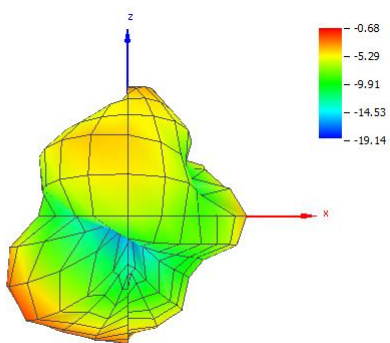
Theta = 180, Phi = 0



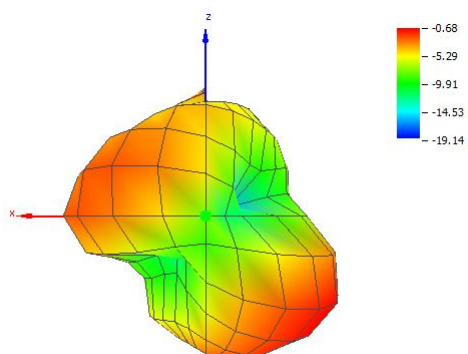
Theta = 90, Phi = 0



Theta = 90, Phi = 180



Theta = 90, Phi = 270



Theta = 90, Phi = 90