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SOS Panic Button Antenna datasheet (Public document)



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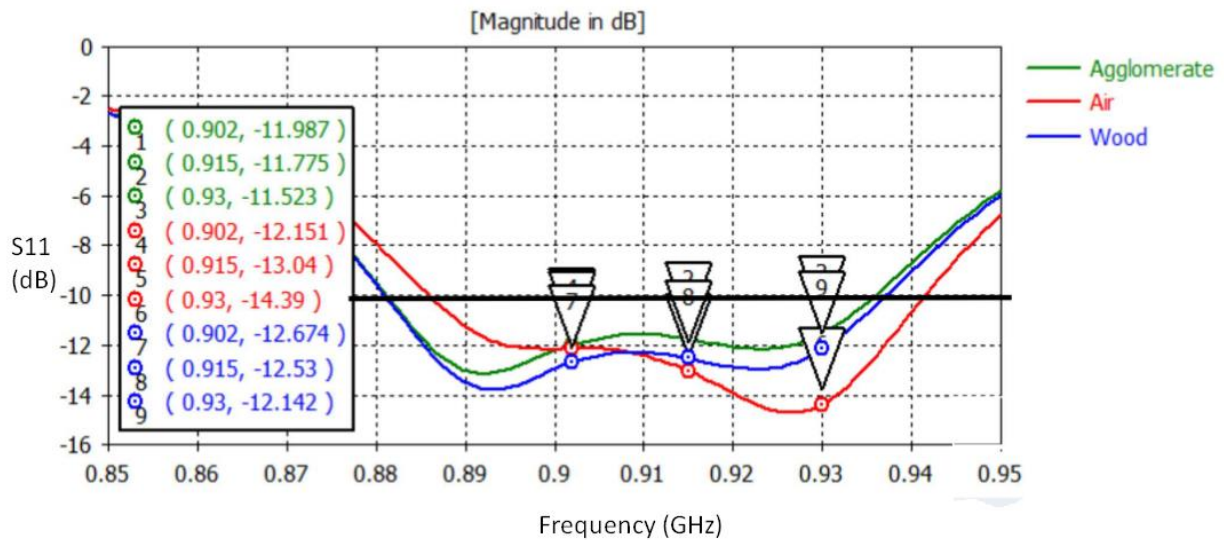
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1. Antenna performance

The antenna operates in the ISM 915 MHz band (915 – 928 MHz).

1.1. Antenna parameters

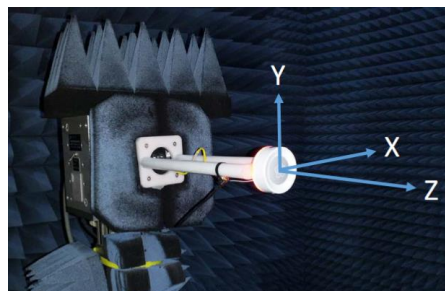
Antenna return loss (S11) including matching network:



The measurement set includes the effect of mounting the device over different surface materials.

Antenna radiation pattern (2D and 3D):

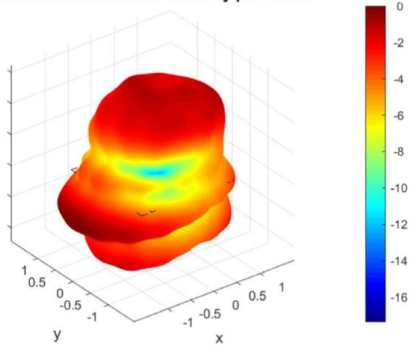
The radiation patterns have been measured at free space in two different frequencies (915 & 928 MHz). Find below 3D shapes and 2D cuts.



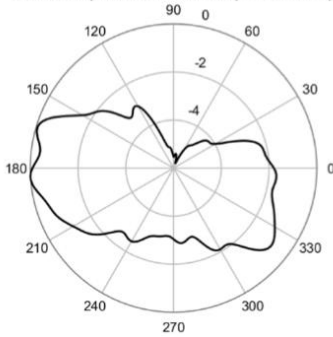
915 MHz:

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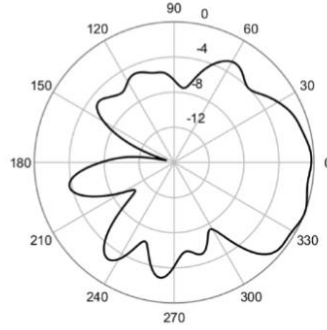
Campo eléctrico total 3D (dB)
Posición máximo: theta=101.00° y phi=175.00°



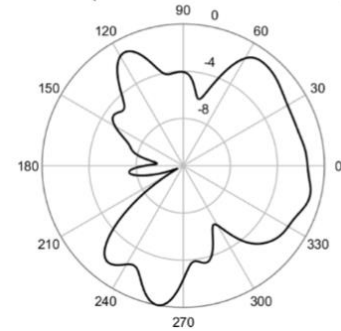
Campo eléctrico total Plano XY (Posición máximo: phi=-176.20°)



Campo eléctrico total Plano YZ (Posición máximo: theta=-21.10°)

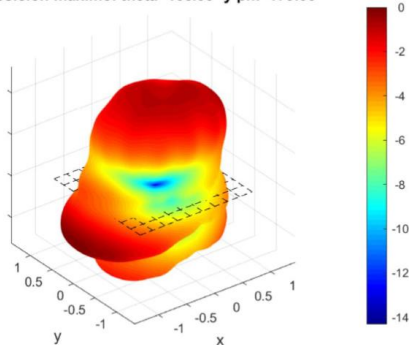


Campo eléctrico total Plano XZ (Posición máximo: theta=-100.50°)

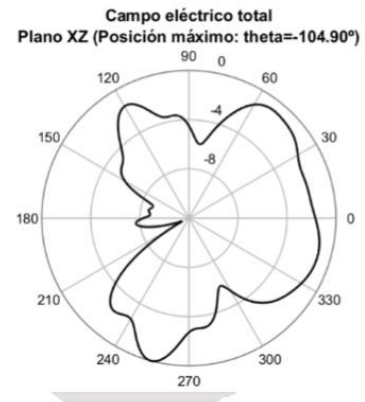
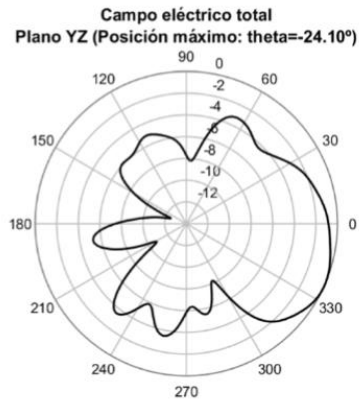
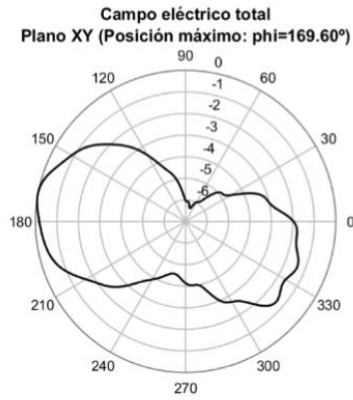


928 MHz:

Campo eléctrico total 3D (dB)
Posición máximo: theta=105.00° y phi=179.00°



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Maximum levels of antenna gain, efficiency, and directivity:

Frequency range (MHz)	Directivity (dBi)	Gain (dBi)
915 - 928	4	-0,8

2. Antenna manufacturer

Antenna Manufacturer
Verisure Securitas Direct

3. Antenna model number

The SPB antenna is an aerial wire monopole with capacitive load. It is included in the eBOM as

Antenna part number
000685-2D-A



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Photos of this antenna and where it is included in the PCB can be found in the confidential version of this document: *SOS Panic Button Antenna Datasheet – Confidential.pdf*.