

# SiSo UHF/ LTE IOT Antenna

LPA[L]-460-7-42-[X]

PANORAMA ANTENNAS



## LPA[L]-460-7-42-[X]

- Efficient antenna covering 450-466/698-960/1710-4200MHz
- Wall, panel or mast mount
- Ensure reliable connectivity for IOT devices
- 5mm (0.2") or 2.8mm (0.1") cable options

The LPA[L]-460-7-42 series is a range of efficient, omni-directional, multi-band antennas for IOT devices suitable for external or internal installation.

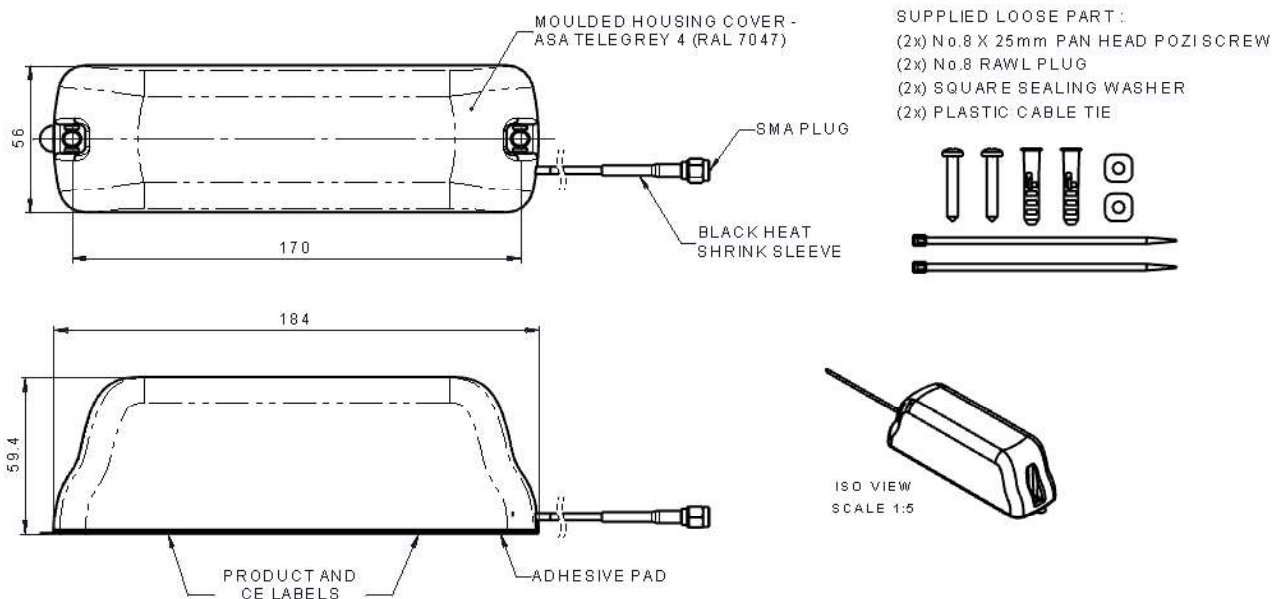
The design of the antenna enables simple panel or wall mounting using the supplied screws and wall plugs, adhesive pad mounting or mast mounting using the supplied cable ties. The omni-directional radiation pattern allows easy placement and flexible installation.

These antennas are an ideal solution for use in industrial and domestic environments with cellular modems/routers for IoT and Machine to Machine (M2M) wireless connectivity applications. The high performance of the antenna helps maximise first time connection rates and minimise revisits and communication issues after installation thereby reducing lifetime costs.

The antennas are fitted with integrated RG174 or CS29 cable and a variety of connectors.

### Technical Drawing

LPA-460-7-42-2SP shown



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## Product Data

Part No.	LPAL-460-7-42-5SP	LPAL-460-7-42-5RFDJ	LPA-460-7-42-2SP	LPA-460-7-42-2RFDJ
<b>Electrical Data</b>				
Frequency Range (MHz)	450-466 / 698-960 / 1710-4200			
Peak Gain:	450-466		0dBi	
Isotropic+	698-960MHz		4dBi	
	1710-4200 MHz		6dBi	
Typical VSWR	<3:1			
Polarisation	Vertical			
Pattern	Omni-directional			
Impedance	50Ω			
Max Input Power (W)	5			
<b>Mechanical Data</b>				
Dimensions (mm)	Length	184 (7.24")		
	Width	56 (2.2")		
	Height	59 (2.32")		
Operating Temp (°C)	-40° / +85°C ( -40° / 185°F )			
Material	ASA			
Colour	Telegray RAL 7047			
Relative Humidity	95%			
Ingress Protection	IP65			
Regulatory Compliance	RoHS 2 (exemption 6.c applied)   REACH			
<b>Mounting Data</b>				
Fixing	Wall /panel - screw / adhesive / cable tie pole mount			
Mounting Screw Diameter (mm)	4 (0.16")			
<b>Cable Data</b>				
Type	CS29		RG174	
Diameter (mm)	5 (0.2")		2.8 (0.1")	
Length (m)	5 (16'4")		2 (6'6")	
Voltage Withstand	1000 V DC		500 V DC	
Jacket Spark	3000 V RMS		2000 V RMS	
Termination	SMA Plug (m)	Right Angle FAKRA D Jack	SMA Plug (m)	Right Angle FAKRA D Jack

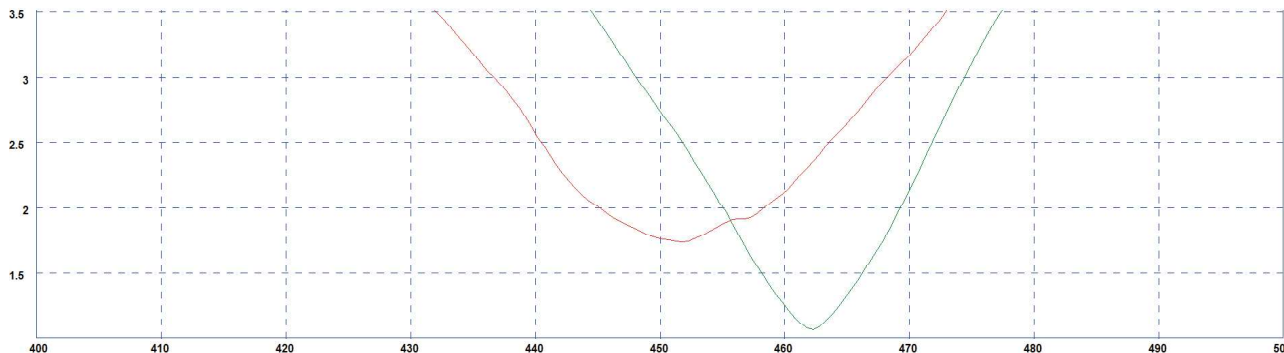
+ Swept peak gain measured with 0.5m (1.6') of cable on a 400x400mm (1.3'x1.3') ground plane.

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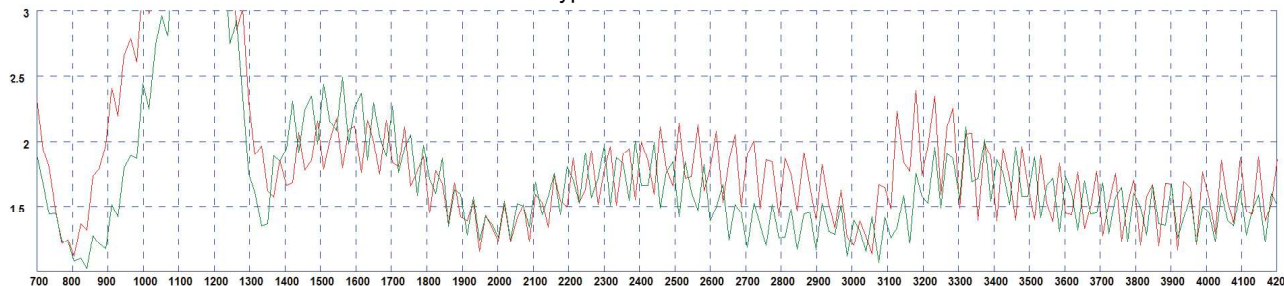
## Electrical Data

Typical VSWR- UHF\*



\* Red trace measured on 400x400mm (1.3' x 1.3') groundplane with 2m (6'6") RG174 cable Green plot measured in free space with 2m (6'6") RG174 cable

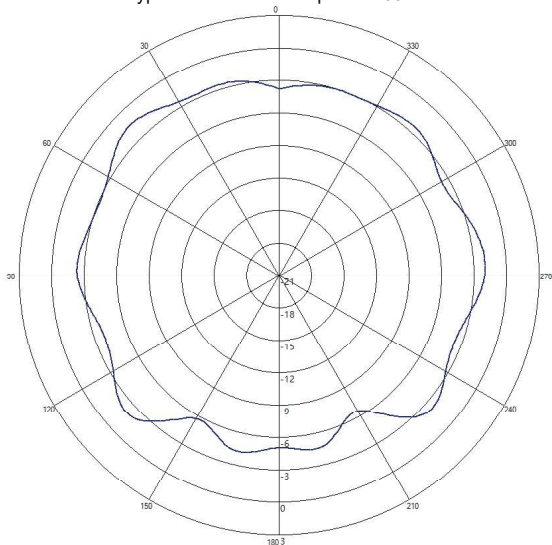
Typical VSWR- Cell\*



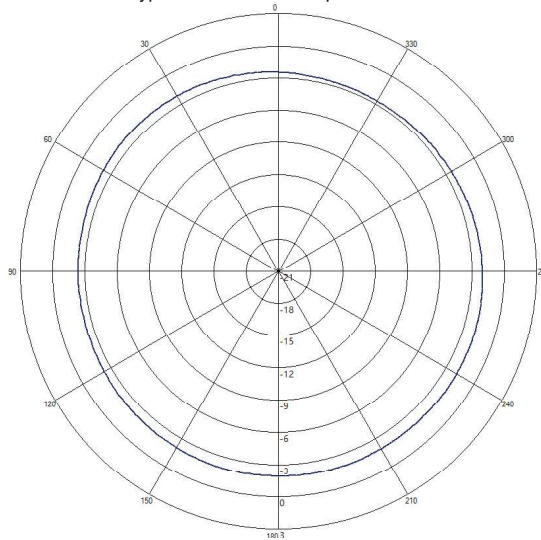
\* Red trace measured on 400x400mm (1.3' x 1.3') groundplane with 2m (6'6") RG174 cable Green plot measured in free space with 2m (6'6") RG174 cable

## Patterns Free Space

Typical E Plane- Free Space - 460 MHz



Typical H Plane - Free Space 460MHz

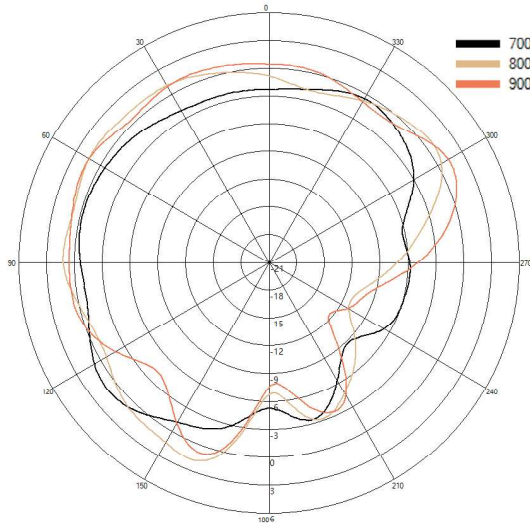


# SiSo UHF/ LTE IOT Antenna

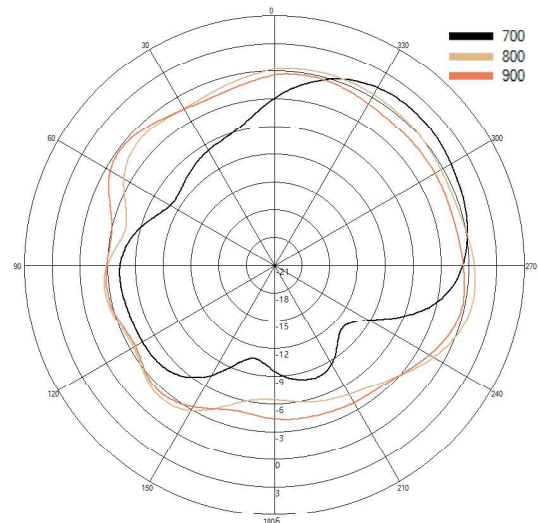
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Patterns Free Space

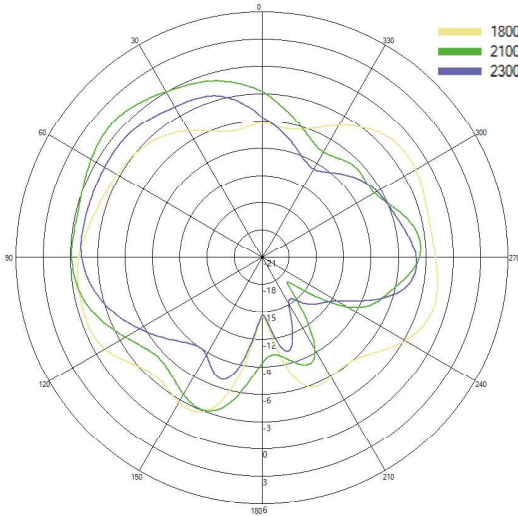
Typical E Plane - Free Space - 7/8/900 MHz



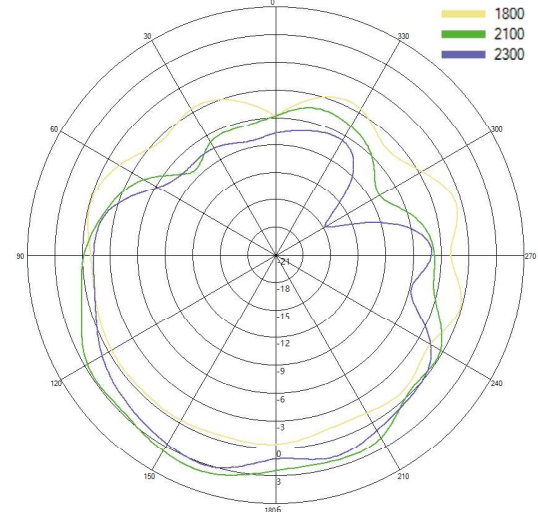
Typical H Plane - Free Space - 7/8/900 MHz



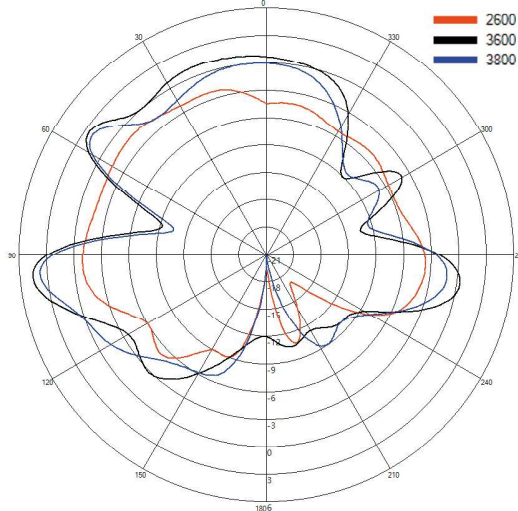
Typical E Plane - Free Space - 18/21/2300 MHz



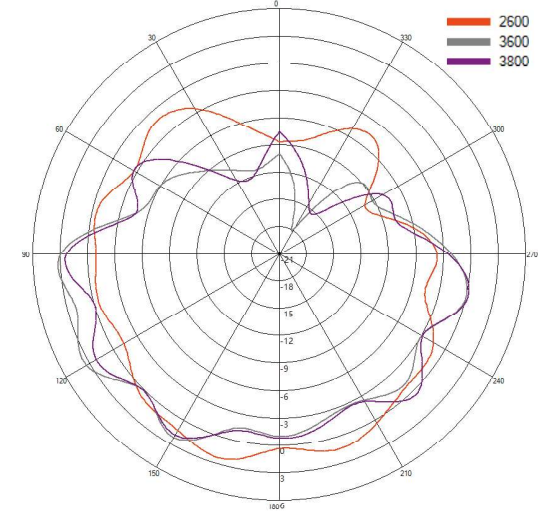
Typical H Plane - Free Space - 18/21/2300 MHz



Typical E Plane - Free Space - 26/36/3800 MHz



Typical H Plane - Free Space - 26/36/3800 MHz

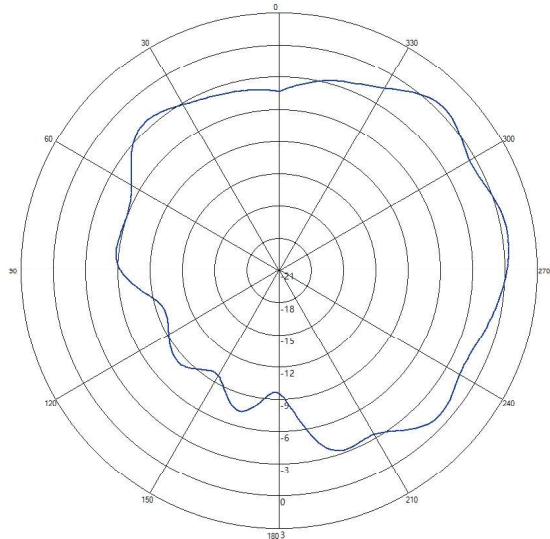


# SiSo UHF/ LTE IOT Antenna

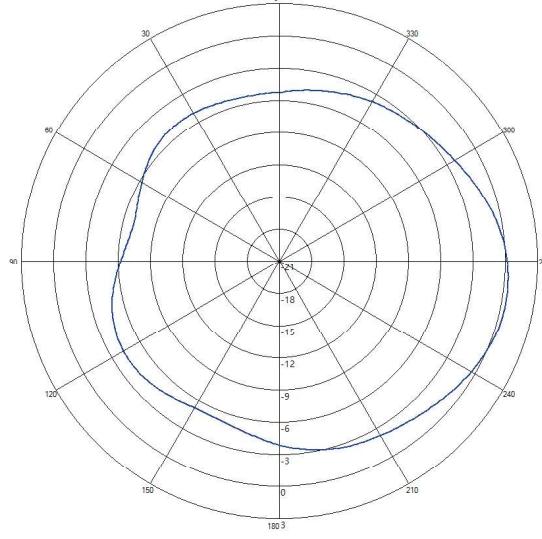
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## Patterns Ground Plane

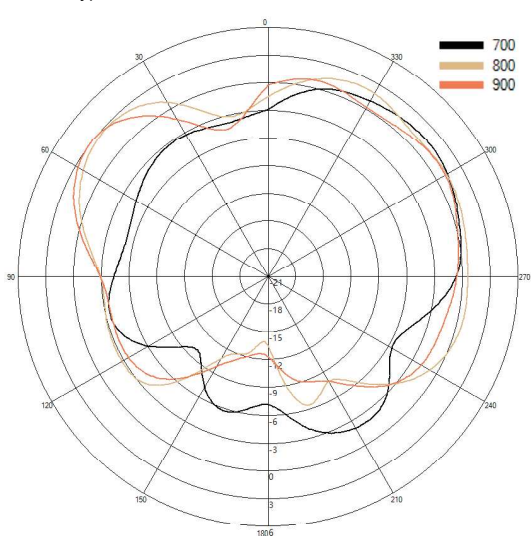
Typical E Plane- 400x400 Ground Plane - 460 MHz



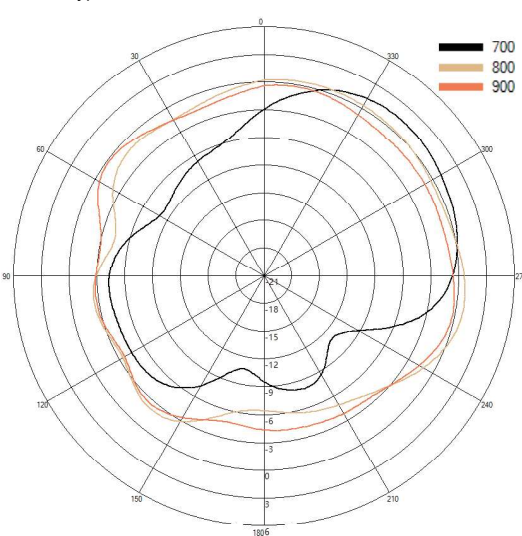
Typical H Plane- 400x400 Ground Plane - 460 MHz



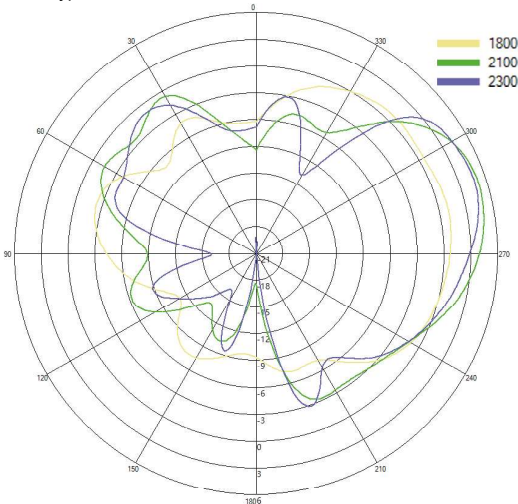
Typical E Plane- 400x400 Ground Plane - 7/8/900 MHz



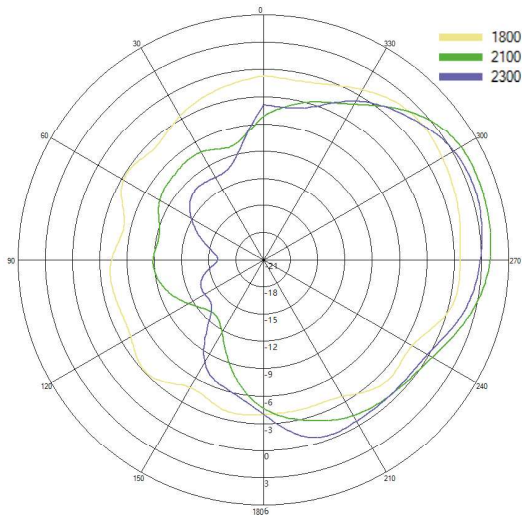
Typical H Plane- 400x400 Ground Plane - 7/8/900 MHz



Typical E Plane- 400x400 Ground Plane - 18/21/2300 MHz



Typical H Plane - 400x400 Ground Plane - 18/21/2300 MHz

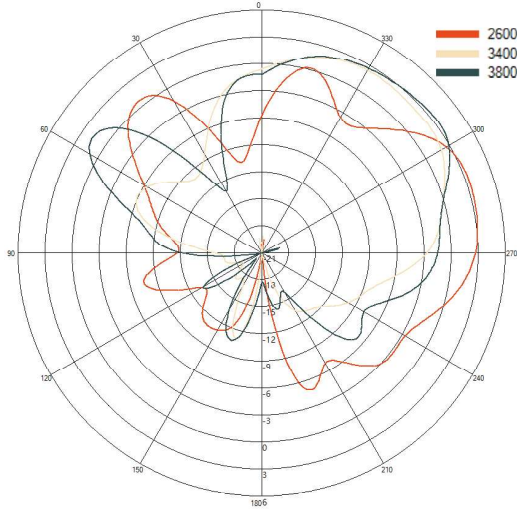


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## Patterns Ground Plane

Typical E Plane - 400x400 Ground Plane - 26/34/3800 MHz



Typical H Plane - 400x400 Ground Plane - 26/34/3800 MHz

