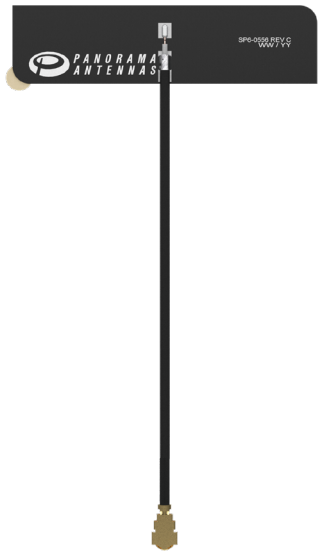
WiFi Embedded Antenna

TFD-24-58-72[-X]



TFD-24-58-72

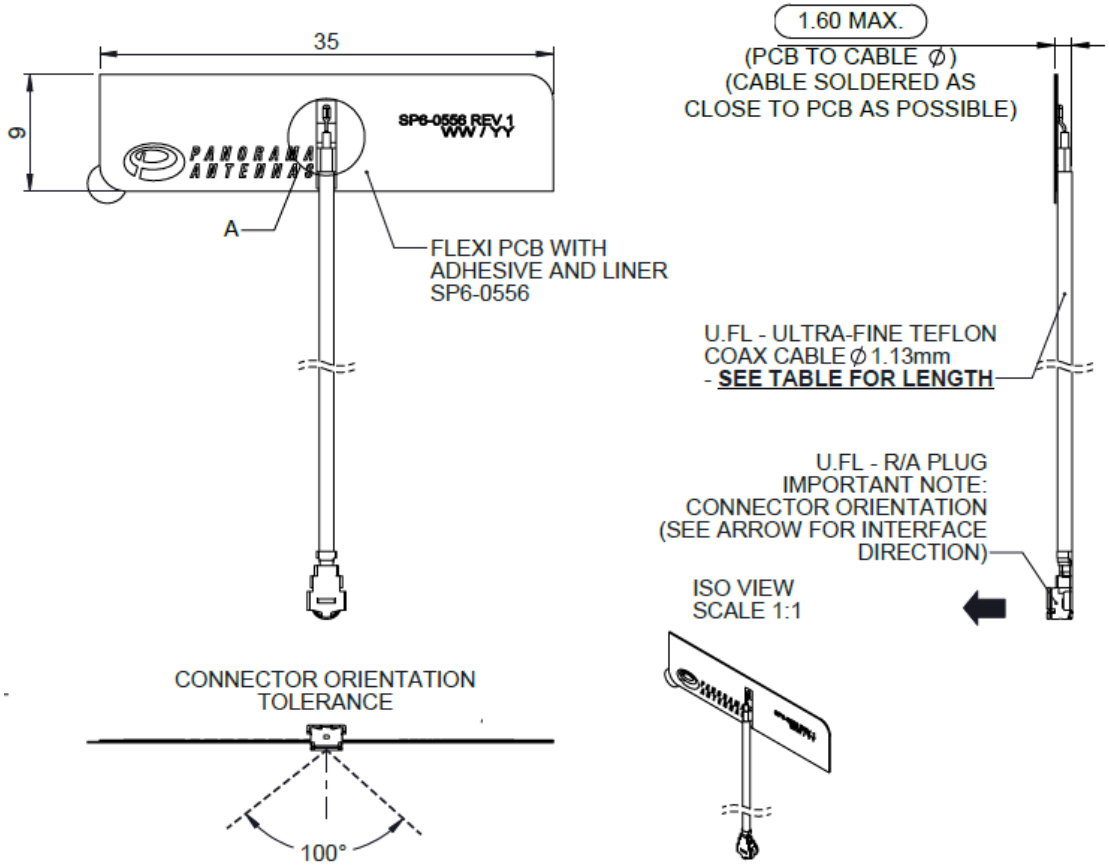
- SiSo WiFi 6e/7 FPCB dipole antenna
- Supports WiFi 2.4/5.0/7.2GHz
- Ultra-flexible adhesive mount antenna
- Fitted 1.13 coax cable with UFL plug

The TFD-24-58-72 antenna is a ground plane independent flexible PCB (FPCB) dipole antenna covering WiFi 6e/7 (2400-2485/5150-7125MHz) developed for embedded applications.

Designed for mounting on non-conductive surfaces the TFD-24-58-72 range is installed via a high performance adhesive backing layer and is supplied with integrated C113 cable fitted with a right angle UFL plug.

Technical Drawing

TFD-24-58-72 Shown



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WiFi Embedded Antenna

TFD-24-58-72[-X]

PANORAMA ANTENNAS

Product Data

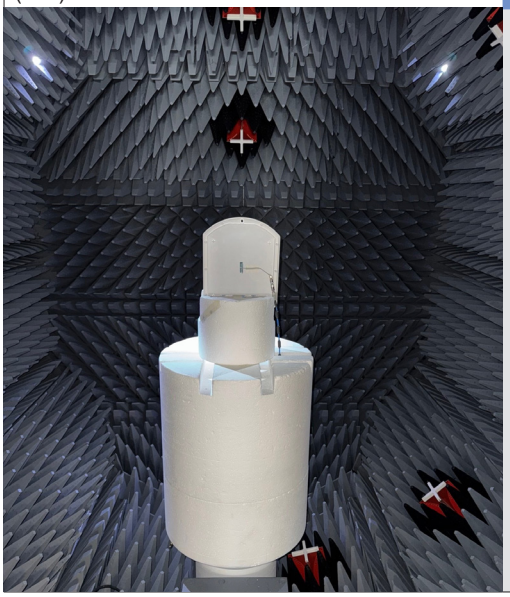
Part No.	TFD-24-58-72-005UFL	TFD-24-58-72-01UFL	TFD-24-58-72-02UFL
Electrical Data			
Frequency Range (MHz)		2400-2485/5150-7125	
Typical VSWR		≤2:1	
Typical Peak Gain		2.9 (2400-2485MHz) / 5.9 (5150-7125MHz)	
Typical Efficiency		80% (2400-2485MHz) / 65% (5150-7125MHz)	
Polarisation		Vertical	
Pattern		Omni-directional	
Impedance		50Ω	
Max Input Power (W)		5	
Mechanical Data			
Dimensions (mm) – Length		35 (1.37”)	
Dimensions (mm) – Width		9 (0.35”)	
Dimensions (mm) – Thickness		1.1 (0.04”)	
Material		Flexible PCB substrate with adhesive backing	
Operating Temp (°C)		-40°/ 176°F (-40° / +80°C)	
Colour		Black	
Cable Data			
Type		C113	
Diameter (mm)		1.13 (0.04”)	
Length (mm)	50 (2”)	100 (4”)	200 (8”)
Termination		R/A UFL Plug	

*VSWR, peak gain and efficiency measured on 2.5mm (0.1”) ABS sheet with 100mm (4”) cable. Efficiency is average across stated bands.

Electrical Data in Free Space - WiFi 1

Measurement Conditions

Measured in 3D anechoic chamber on a 2.5mm (0.1”) ABS sheet



WiFi Antennas

Frequency Range (MHz)	WiFi Bands	Antenna Element	Peak Gain (dBi)	Efficiency (%)
2396-2485	2.4GHz	WiFi 1	2.9	80
5150-5250	UNII-1	WiFi 1	4.9	60
5250-5350	UNII-2A	WiFi 1	5.2	61
5350-5470	UNII-2B	WiFi 1	5.5	65
5470-5725	UNII-2C	WiFi 1	5.5	69
5725-5850	UNII-3	WiFi 1	5.0	68
5850-5925	UNII-4	WiFi 1	4.5	66
5925-6425	UNII-5	WiFi 1	5.6	65
6425-6525	UNII-6	WiFi 1	5.8	64
6525-6875	UNII-7	WiFi 1	5.9	65
6875-7125	UNII-8	WiFi 1	5.5	63

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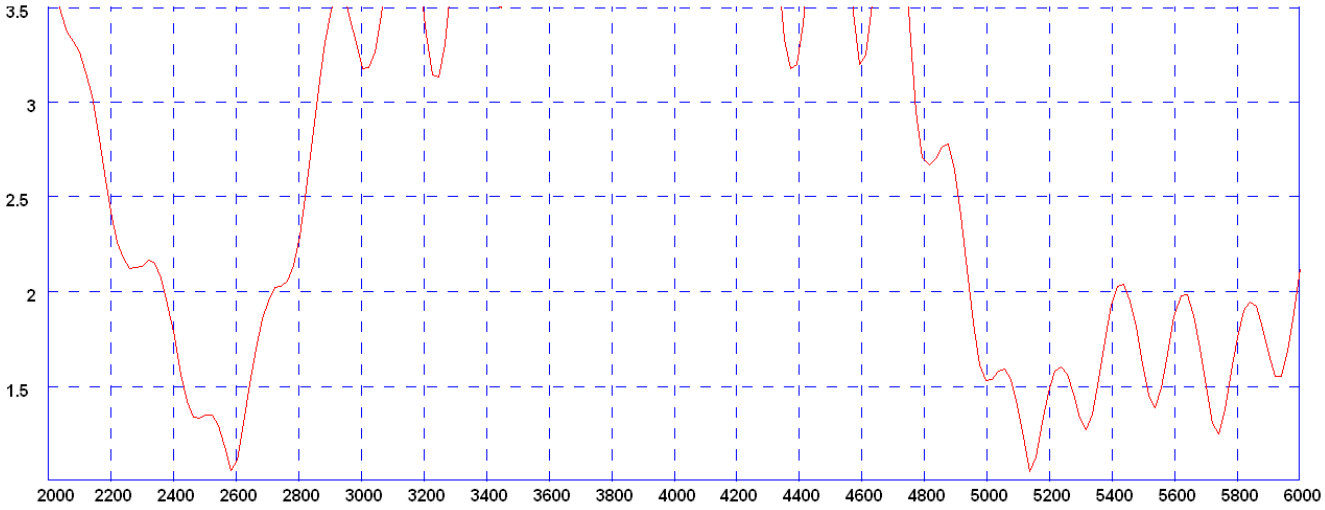
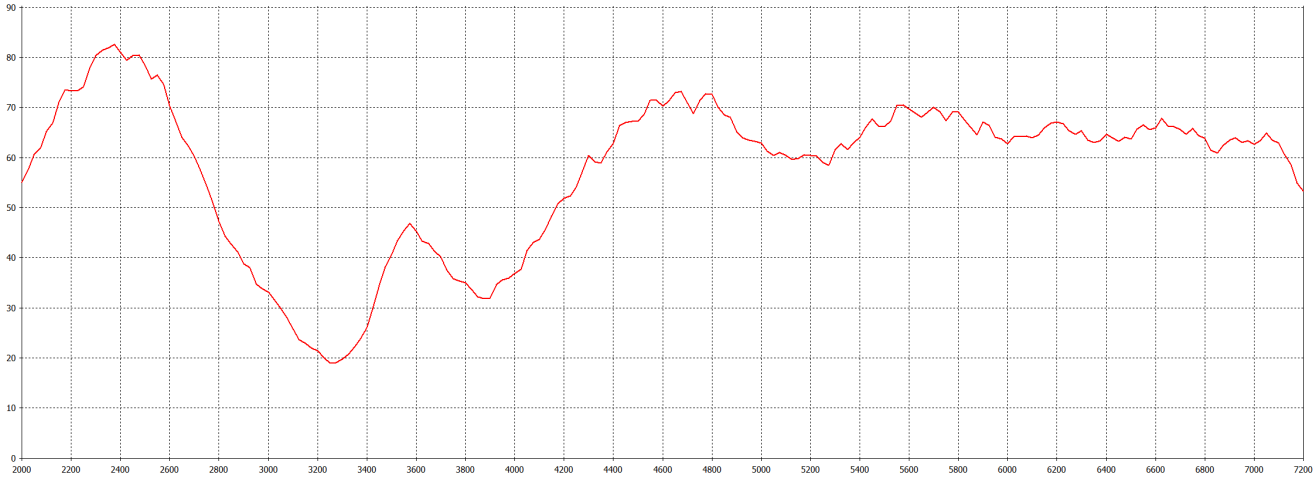
Electrical Data in Free Space - WiFi 1

Typical VSWR*



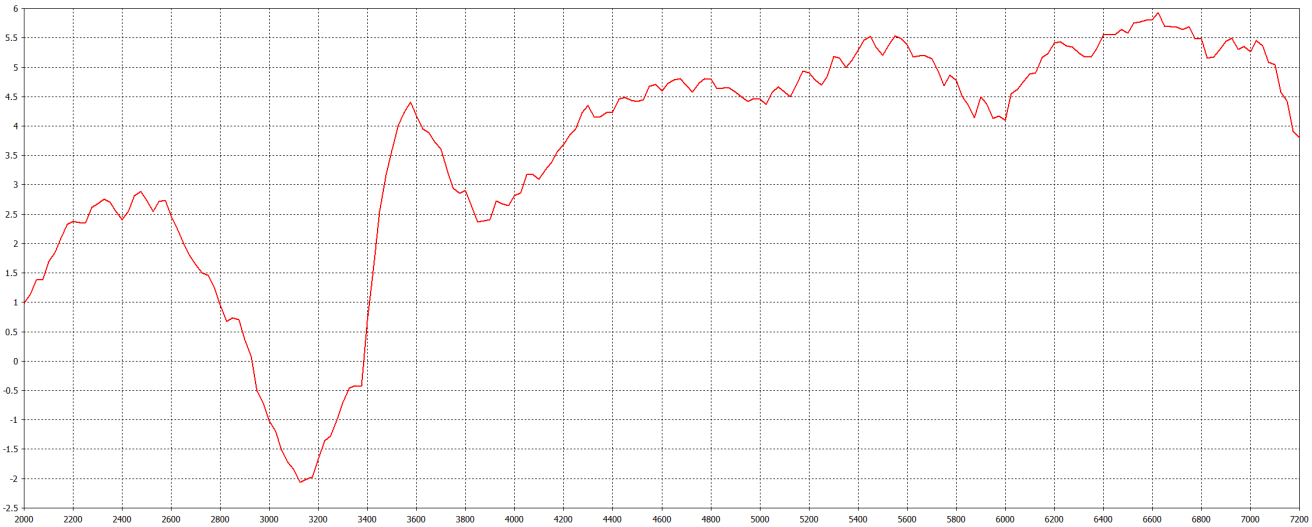
*VSWR measured on 2.5mm (0.1") ABS sheet.

Typical Efficiency*



*Efficiency measured on 2.5mm (0.1") ABS sheet.

Typical Peak Gain*



*Peak gain measured on 2.5mm (0.1") ABS sheet.

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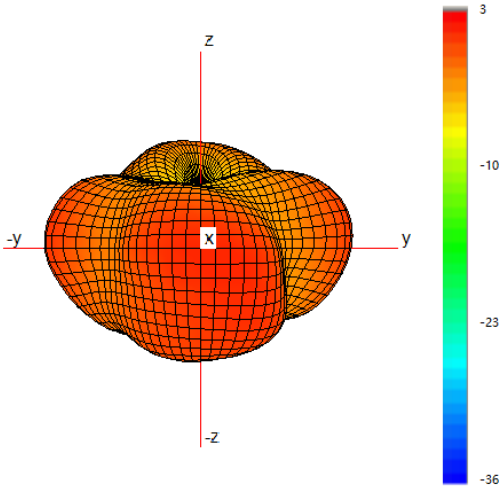
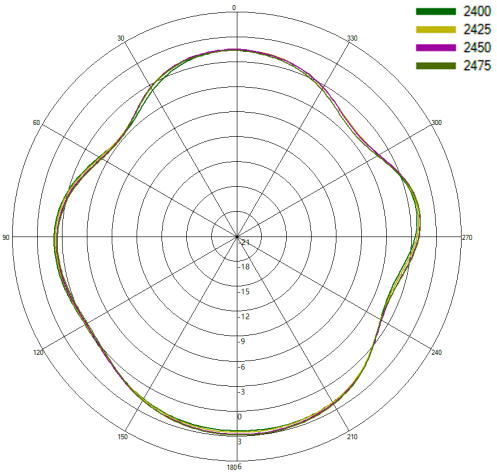
3D Pattern Data in Free sapce - WiFi 1

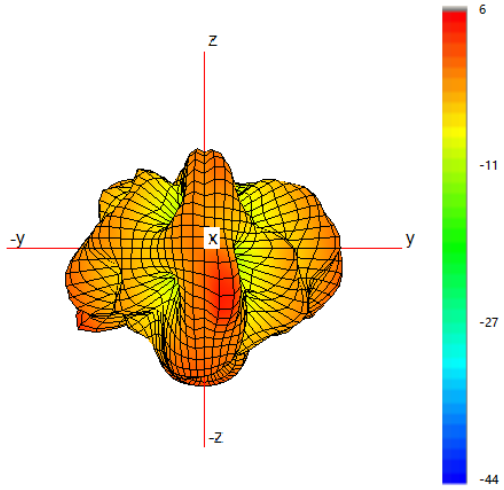
Typical 3D Pattern - 2450 MHz



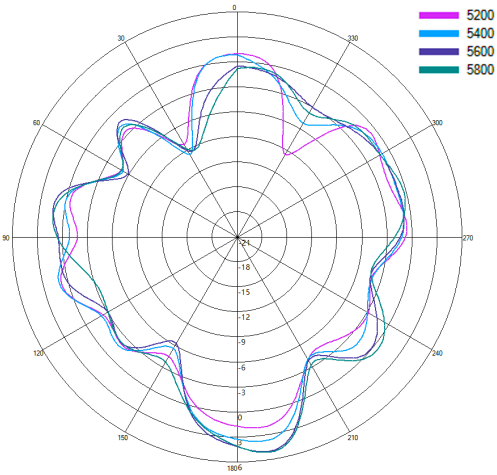
Typical H Plane Patterns- 2400-2500MHz



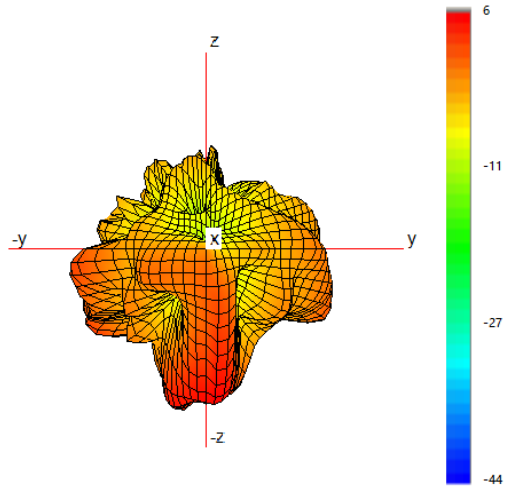
Typical 3D Pattern - 5500 MHz



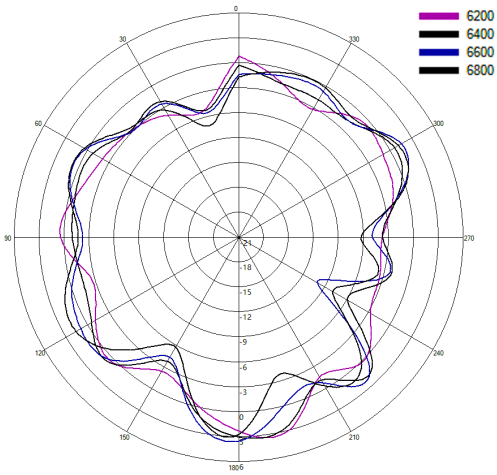
Typical H Plane Patterns- 5200-5800MHz



Typical 3D Pattern - 6500 MHz



Typical H Plane Patterns- 6200-6800MHz



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