

High Frequency Ceramic Solutions

LTE Multi-Band Ceramic Antenna, SMD

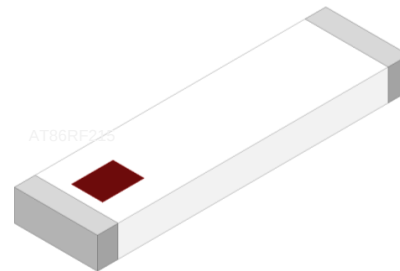
P/N: 0830AT54A2200

Detail Specification: 2/19/2018

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General Specifications

Part Number	0830AT54A2200	
Antenna Matching*	Tuning Version 1	Tuning Version 2
Frequency (MHz)	700 - 800	824 - 960
	1700 - 2100	1710 - 2690
Return Loss (dB)	3.5 min.	4.5 min.
Peak Gain (dBi)	2.0 typ.	2.0 typ.
Average Gain (dBi)	-1.6 typ.	-1.0 typ.
Power Capacity (W)	3 max. (CW)	
Quantity/Reel	500	
Operating Temperature	-40°C to +85°C	
Storage Temperature	-40°C to +85°C	
Storage Conditions for unused product on T&R and max shelf period	+5 ~ +35 °C Humidity 45~75%RH 18 mos. Max	



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*Versions 1 and 2 represent impedance matches optimized for different frequency bands

Part Number Explanation

P/N Suffix	Packing Style	Bulk	Suffix = S	eg. 0830AT54A2200S
		T & R	Suffix = E	eg. 0830AT54A2200E
		100% Tin	Suffix = None	eg. 0830AT54A2200(E or S)
	Evaluation Board	(Version 1) 0830AT54A2200-EB1SMA, (Version 2) 0830AT54A2200-EB2SMA		

Mechanical Dimensions

	In	mm	
L	0.591 ± 0.008	15.00 ± 0.2	
W	0.157 ± 0.008	4.00 ± 0.2	
T	0.059 ± 0.008	1.50 ± 0.2	
a	0.039 ± 0.012	1.00 ± 0.3	
			Top View
			Side View
			Bottom View

Terminal Configuration

No.	Function
1	FEED
2	NC
Pin 2 must be soldered onto the PCB for mechanical stability	

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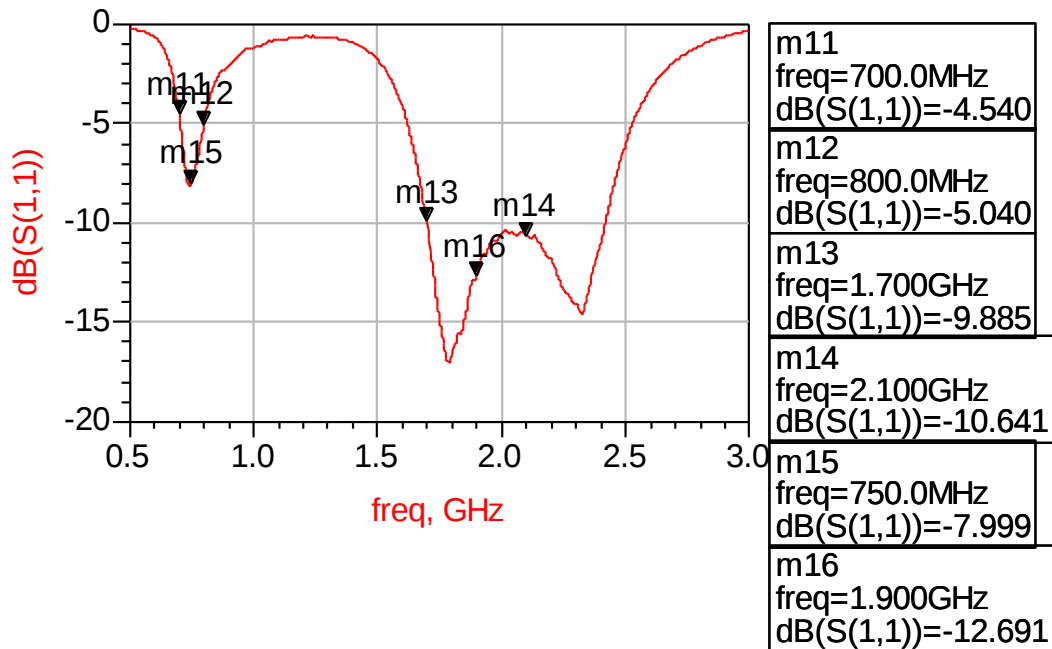
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Typical Electrical Characteristics (T=25°C)

"Version 1" Evaluation PCB 0830AT54A2200-EB1SMA



To order a pre-tuned 50Ω EVB with a female SMA connector for "Tuning Version 1" click here: www.johansontechnology.com/request-a-sample
Reference p/n: 0830AT54A2200-EB1SMA

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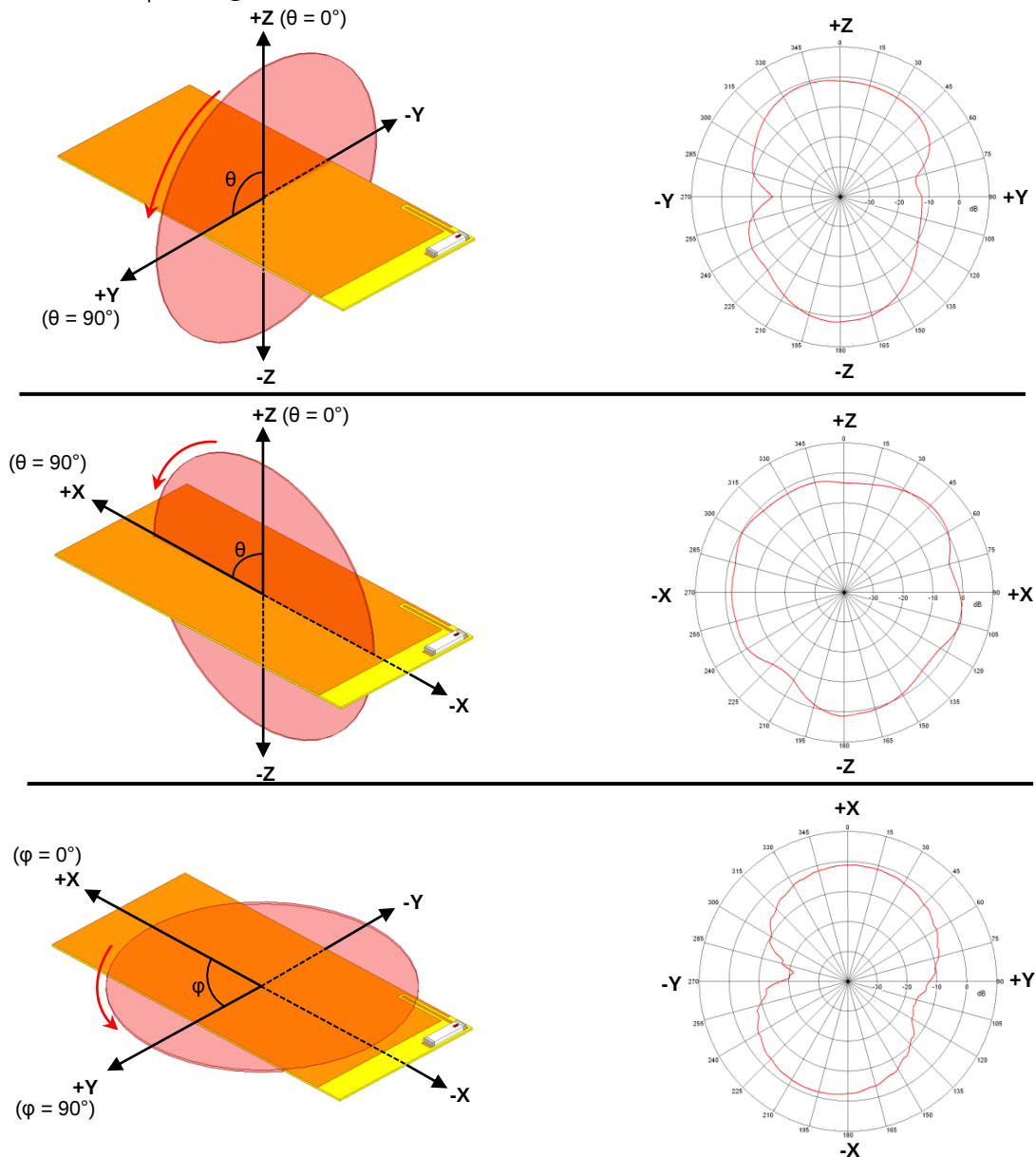
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Mounting Consideration: Evaluation PCB "Version 1" P/N 0830AT54A2200-EB1SMA

Typical 2D radiation patterns @ 750MHz



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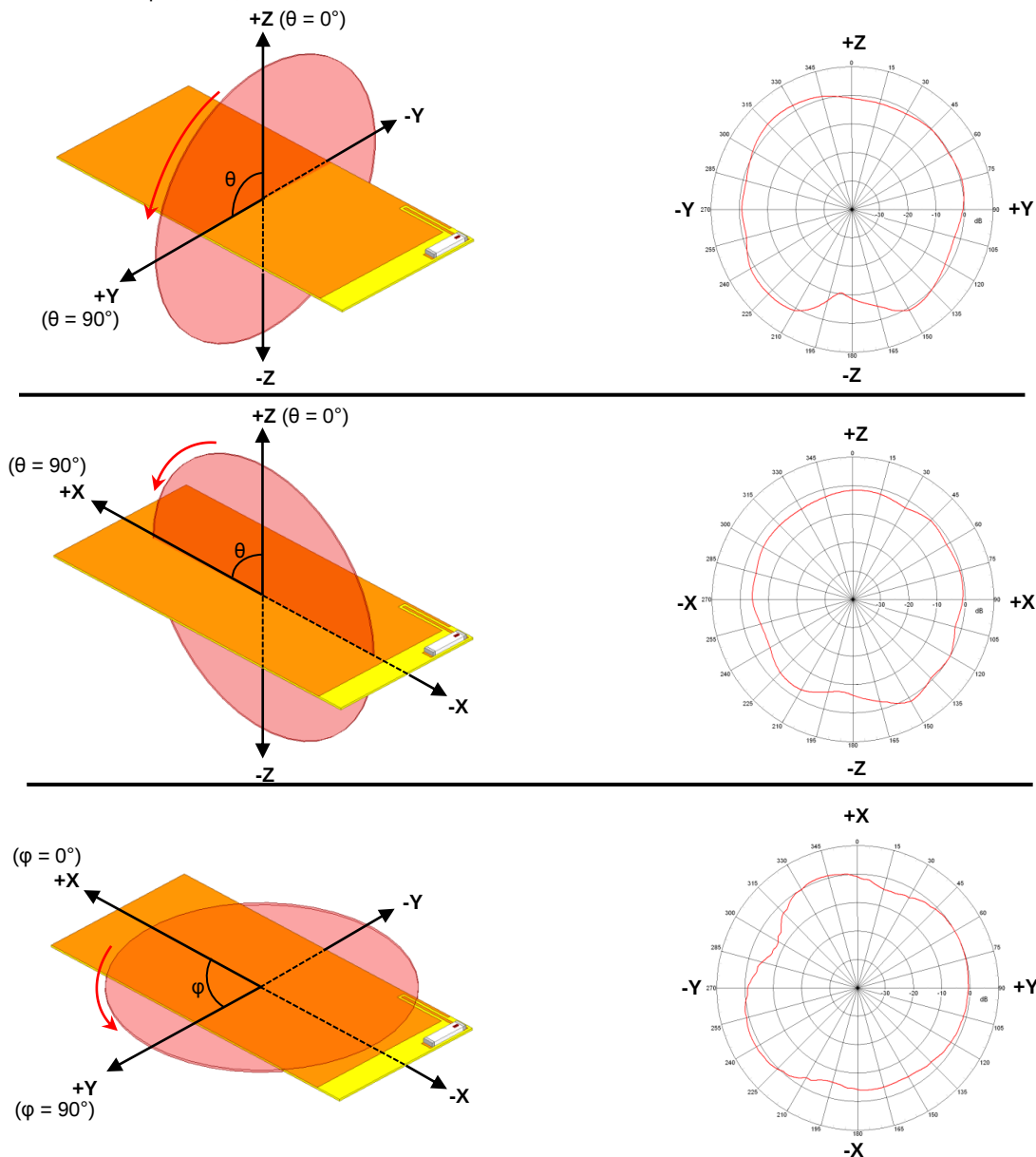
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Mounting Consideration: Evaluation PCB "Version 1" P/N 0830AT54A2200-EB1SMA

Typical 2D radiation patterns @ 1900MHz



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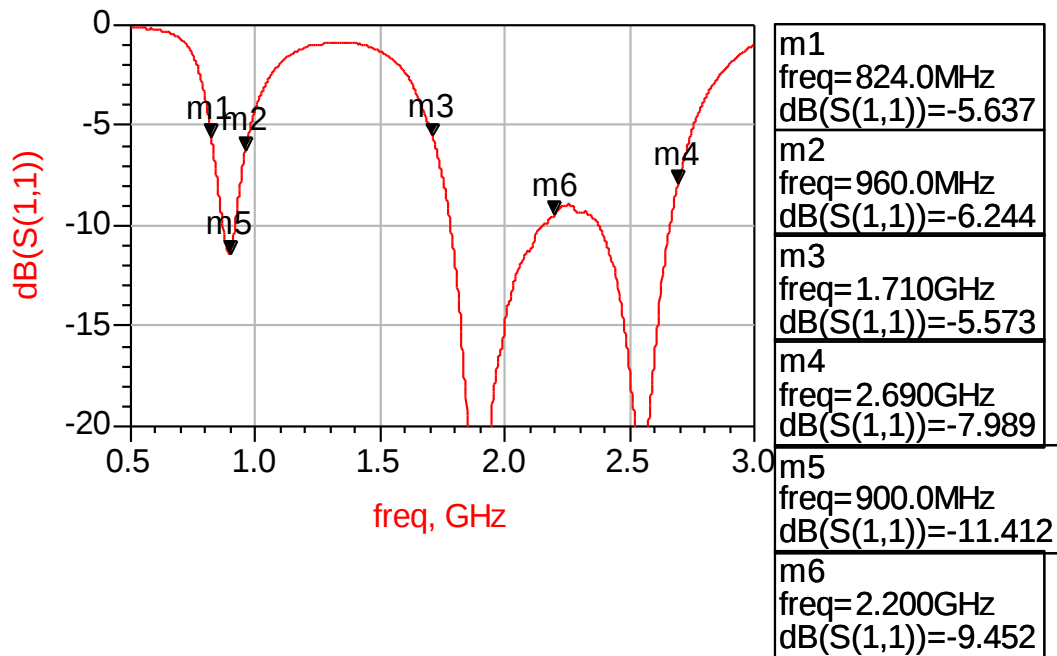
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Typical Electrical Characteristics (T=25°C)

"Version 2" Evaluation Board 0830AT54A2200-EB2SMA



To order a pre-tuned 50Ω EVB with a female SMA connector for "Tuning Version 2" click here: www.johansontechnology.com/request-a-sample
Reference p/n: 0830AT54A2200-EB2SMA

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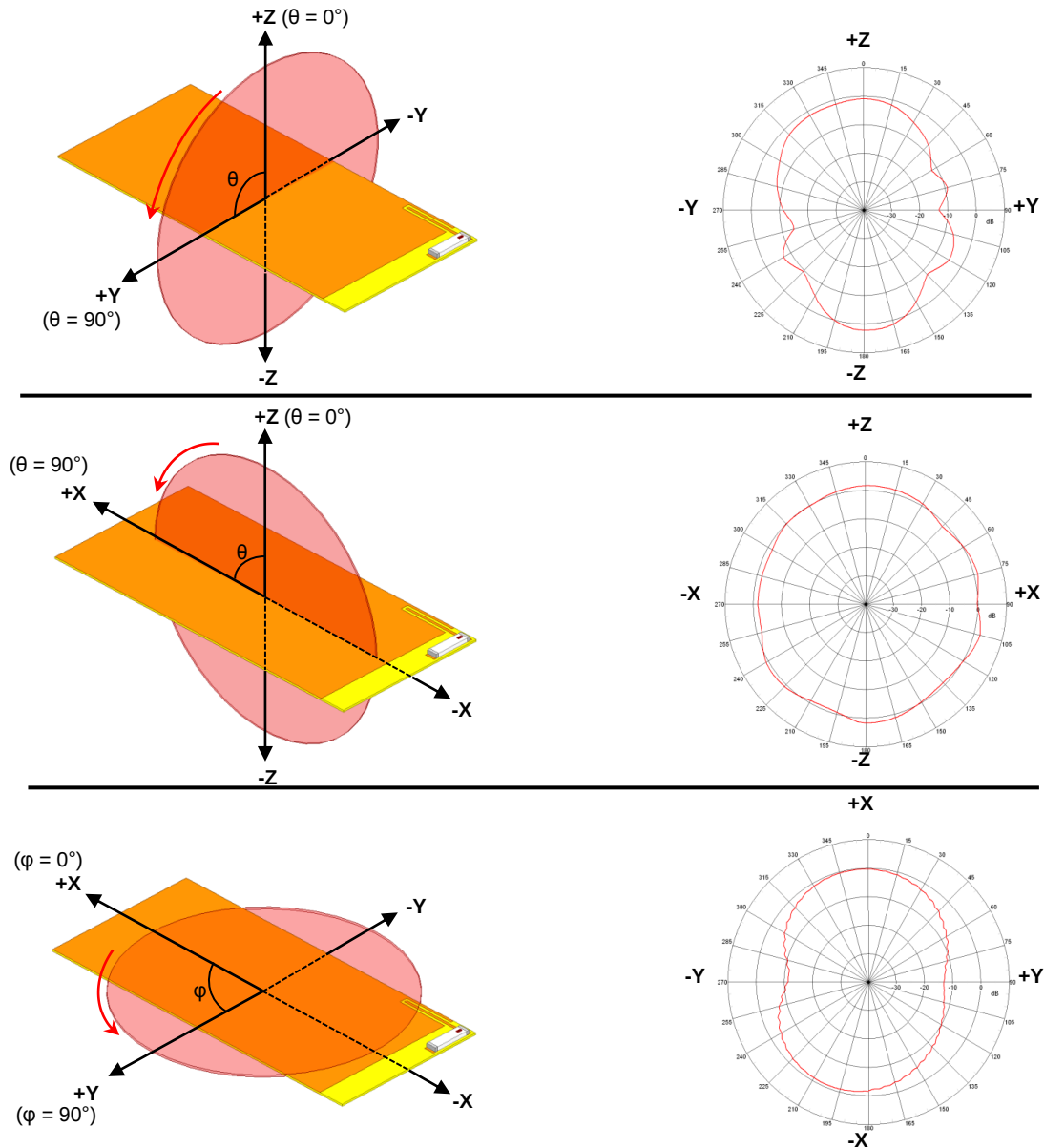
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Mounting Consideration: Evaluation PCB "Version 2" P/N 0830AT54A2200-EB2SMA

Typical 2D radiation patterns @ 900MHz



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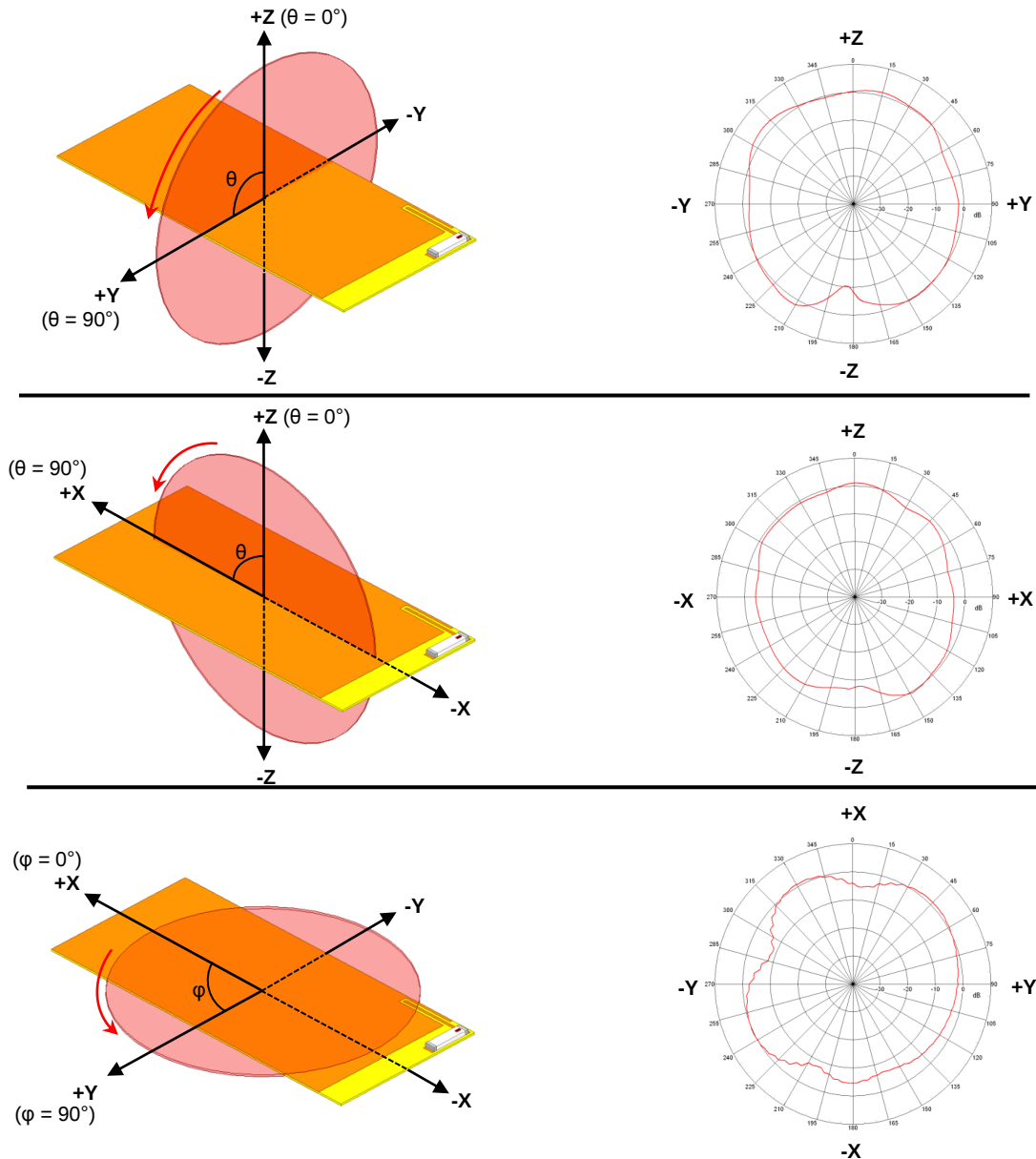
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Mounting Consideration: Evaluation PCB "Version 2" P/N 0830AT54A2200-EB2SMA

Typical 2D radiation patterns @ 2200MHz



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Antenna tuning, optimization, and validation services:

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For more antennas and to download measured S-parameters, go to:

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