

# High Frequency Ceramic Solutions

## (Tri-Band) WiMax Antenna

P/N 2500AT52M3555

Detail Specification: 08/11/06

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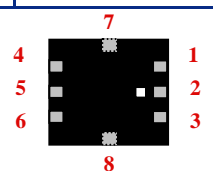
### General Specifications

Part Number	2500AT52M3555		
Freq. Range (GHz)	2.3 - 2.69	3.3 - 3.9	5.15 - 5.875
Peak Gain (XZ-V)	2.0 dBi typ.	2.0 dBi typ.	2.0 dBi typ.
Average Gain (XZ-V)	-2.0 dBi typ.	-4.0 dBi typ.	-3.0 dBi typ.
Return Loss	8.5 dB min.	9.5 dB min.	9.5 dB min.

Input Power	5W max.
Impedance	50 Ω
Operating Temp.	-40 to +85°C
Reel Quantity	300

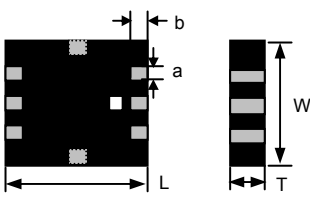
P/N Suffix	Packaging Style	Bulk	Suffix = S	Eg. 2500AT52M3555S
		T & R		Suffix = E
Termination Style	100% Tin		Suffix = None	Eg. 2500AT52M3555(E or S)
	Tin / Lead		Suffix = /Pb	Eg. 2500AT52M3555(E or S)/Pb

Terminal Configuration	
No.	Function
1	GND
2	Feeding Point
3	GND
4	NC
5	NC
6	NC
7	NC
8	NC



### Mechanical Dimensions

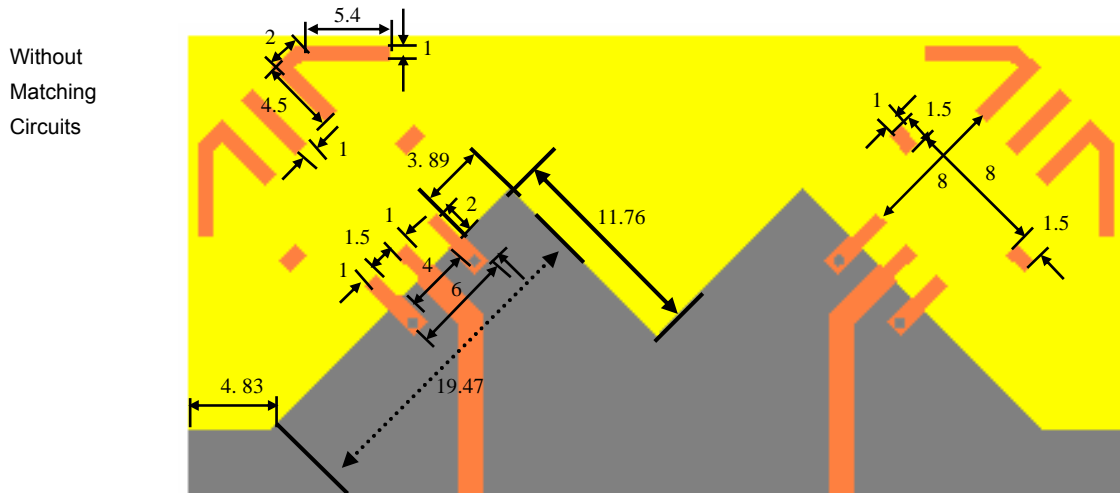
	In	mm
L	0.394 ± 0.012	10.00 ± 0.30
W	0.394 ± 0.012	10.00 ± 0.30
T	0.037 ± 0.010	0.95 ± 0.25
a	0.039 ± 0.012	1.00 ± 0.30
b	0.039 ± 0.012	1.00 ± 0.30



### Mounting Considerations

Mount these devices with white mark facing up. Units: mm

\* Line width should be designed to provide 50Ω impedance matching characteristics, depending on PCB material and thickness.



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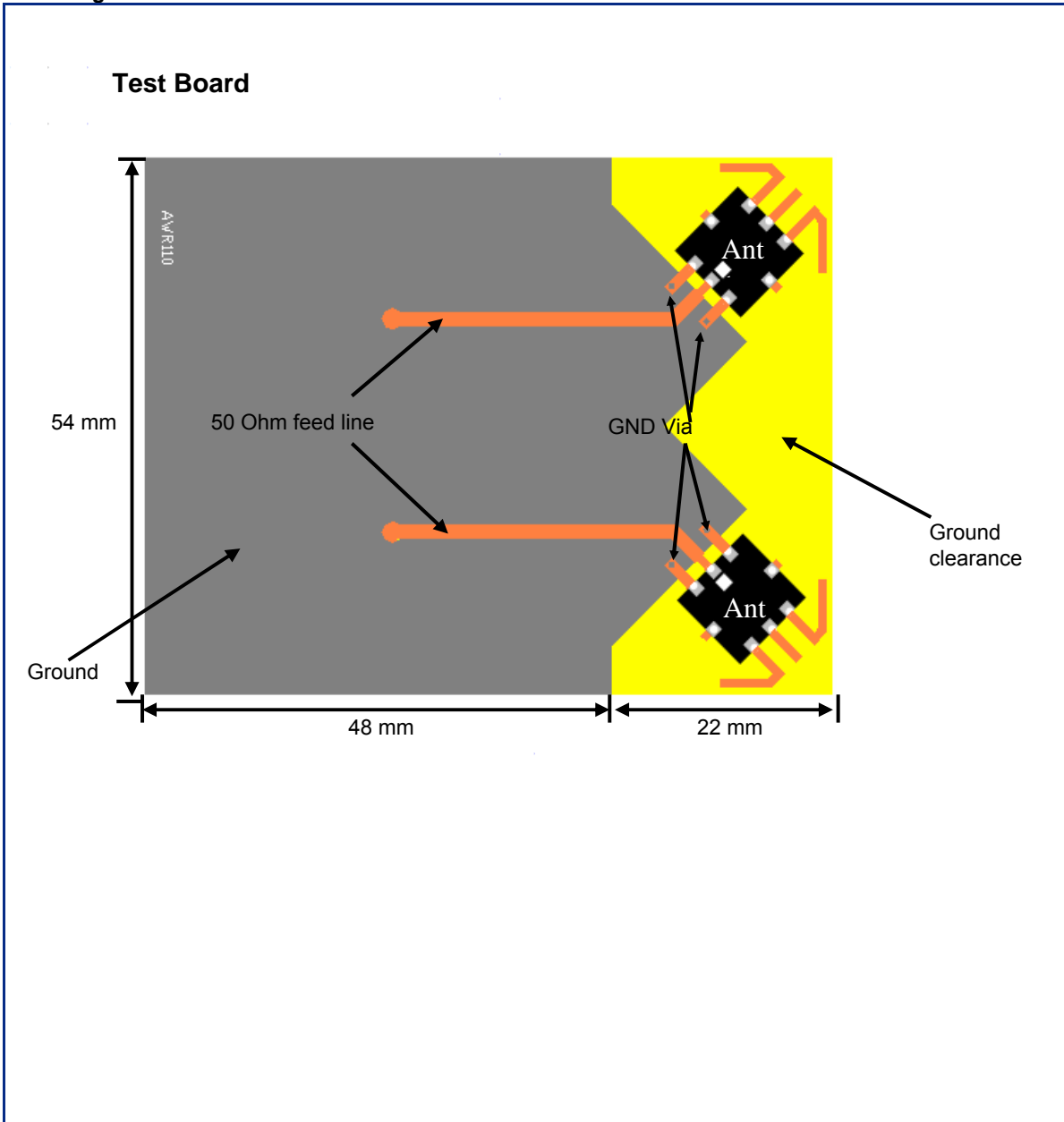
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## Mounting Considerations



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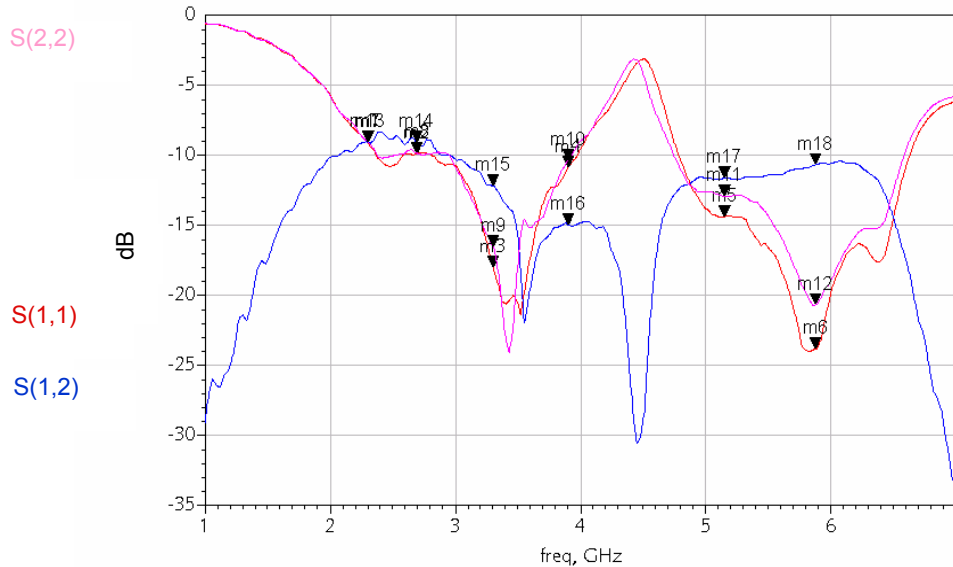
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## Mounting Considerations

### Return Loss & Isolation (Without Matching Circuits)



Ant1 return loss \_ S(1,1)  
Ant2 return loss \_ S(2,2)  
Ant1 & Ant2 isolation \_ S(1,2)

m1  
freq=2.300GHz  
dB(S(1,1))=-9.072

m7  
freq=2.300GHz  
dB(S(2,2))=-9.065

m13  
freq=2.300GHz  
dB(S(1,2))=-9.068

m2  
freq=2.690GHz  
dB(S(1,1))=-9.901

m8  
freq=2.690GHz  
dB(S(2,2))=-9.849

m14  
freq=2.690GHz  
dB(S(1,2))=-9.085

m3  
freq=3.300GHz  
dB(S(1,1))=-18.019

m9  
freq=3.300GHz  
dB(S(2,2))=-16.521

m15  
freq=3.300GHz  
dB(S(1,2))=-12.188

m4  
freq=3.900GHz  
dB(S(1,1))=-10.890

m10  
freq=3.900GHz  
dB(S(2,2))=-10.368

m16  
freq=3.900GHz  
dB(S(1,2))=-14.939

m5  
freq=5.150GHz  
dB(S(1,1))=-14.393

m11  
freq=5.150GHz  
dB(S(2,2))=-12.929

m17  
freq=5.150GHz  
dB(S(1,2))=-11.630

m6  
freq=5.875GHz  
dB(S(1,1))=-23.835

m12  
freq=5.875GHz  
dB(S(2,2))=-20.665

m18  
freq=5.875GHz  
dB(S(1,2))=-10.668

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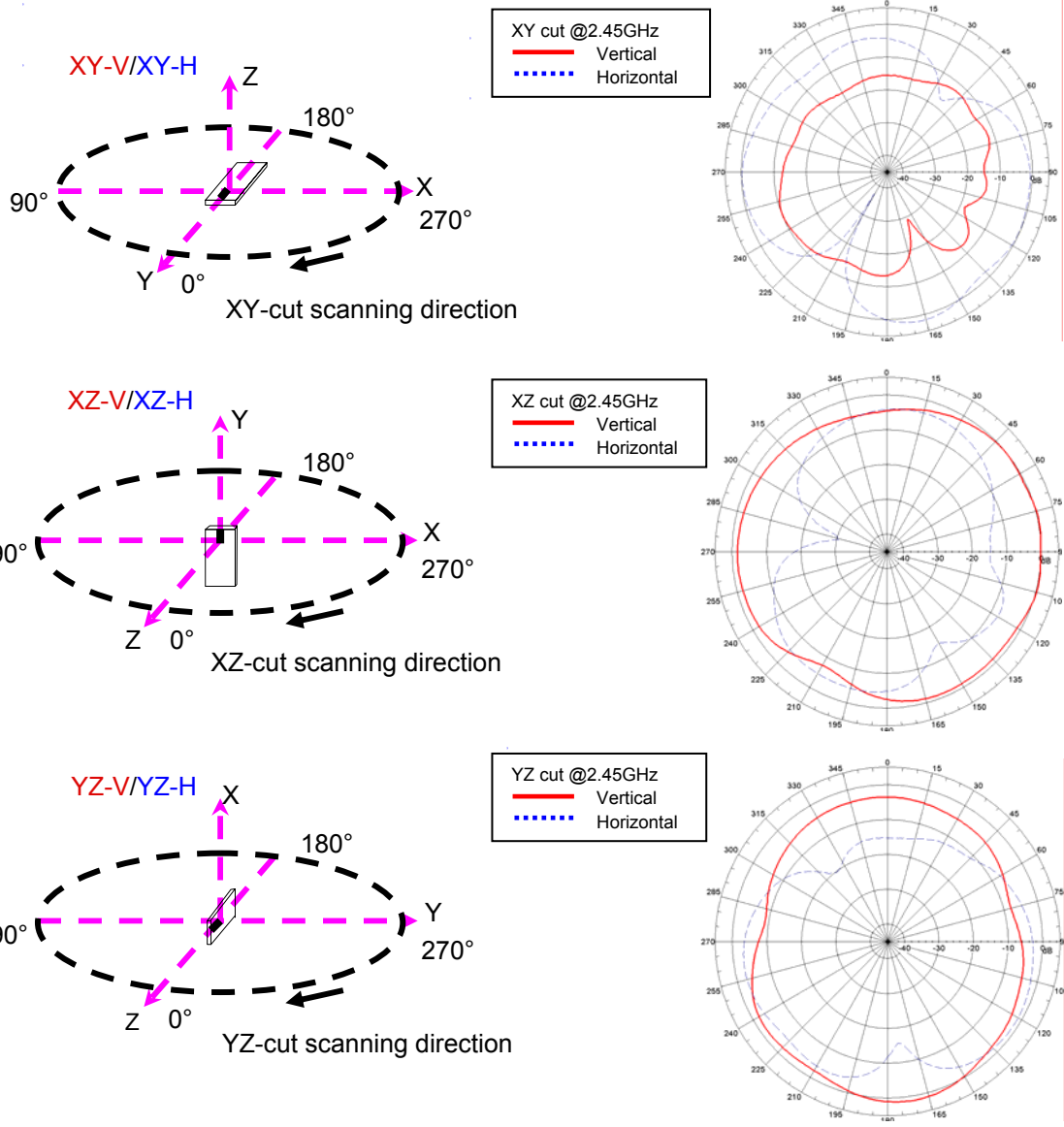
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## Ant1 Radiation Patterns



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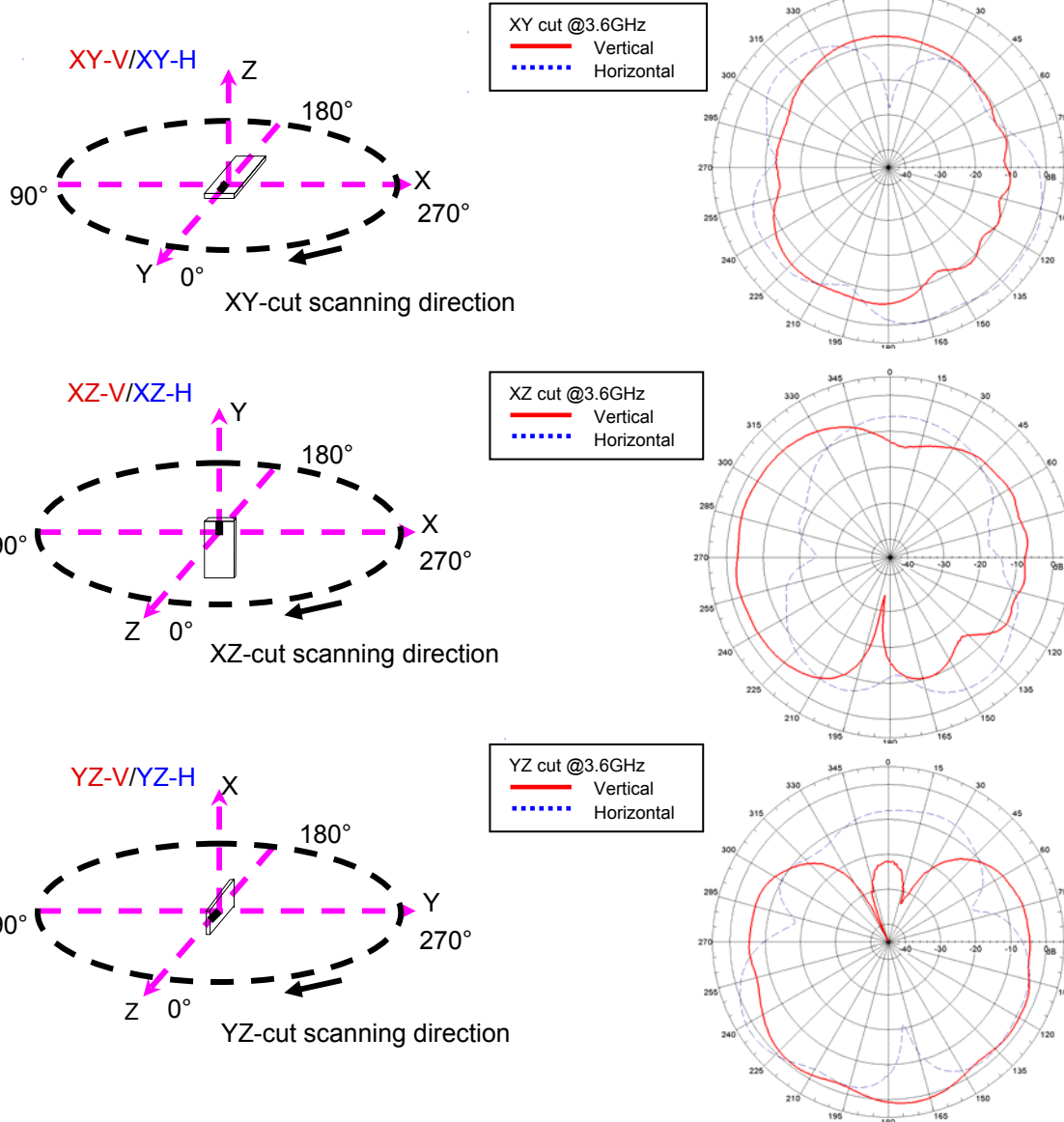
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## Ant1 Radiation Patterns



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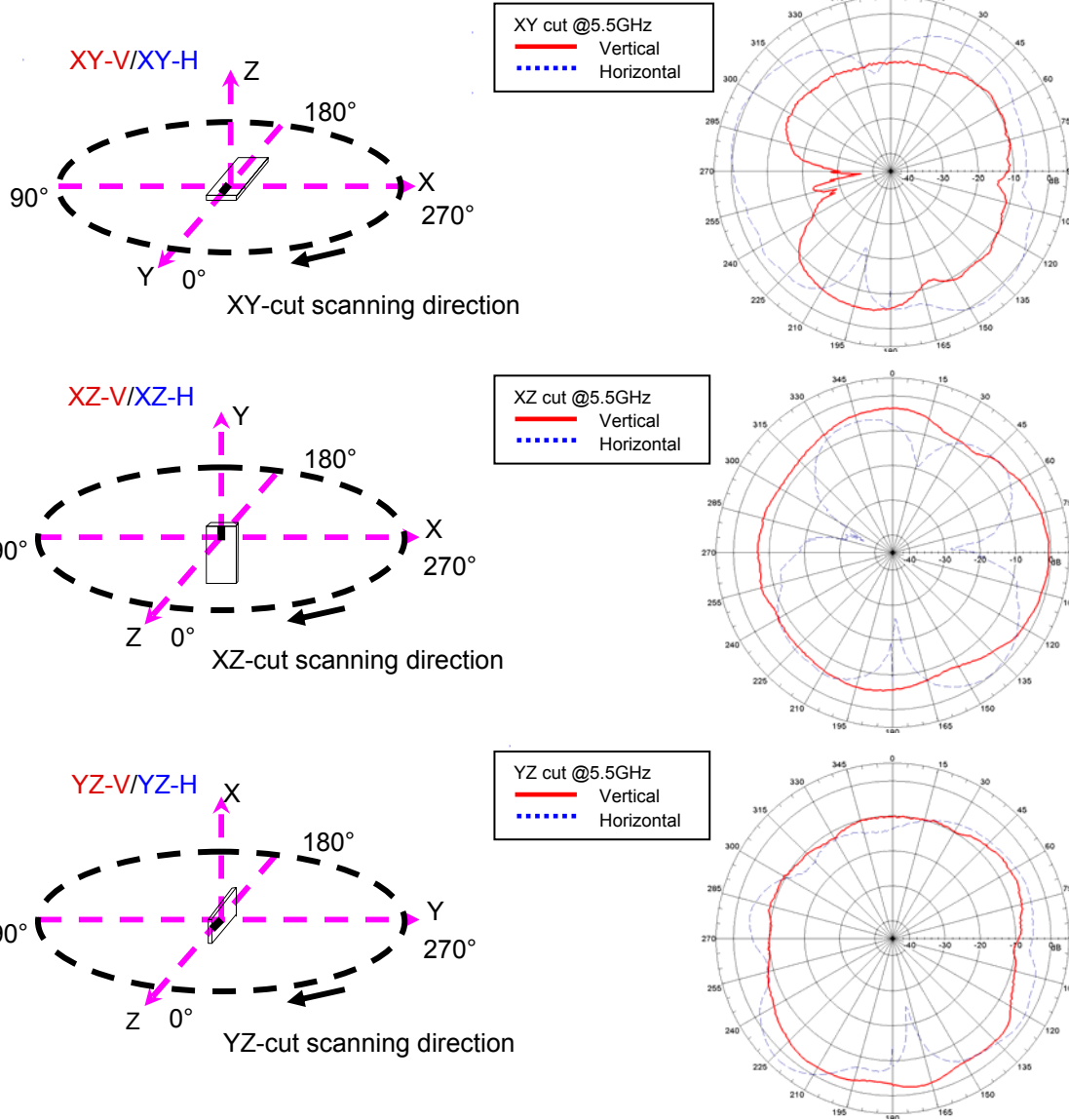
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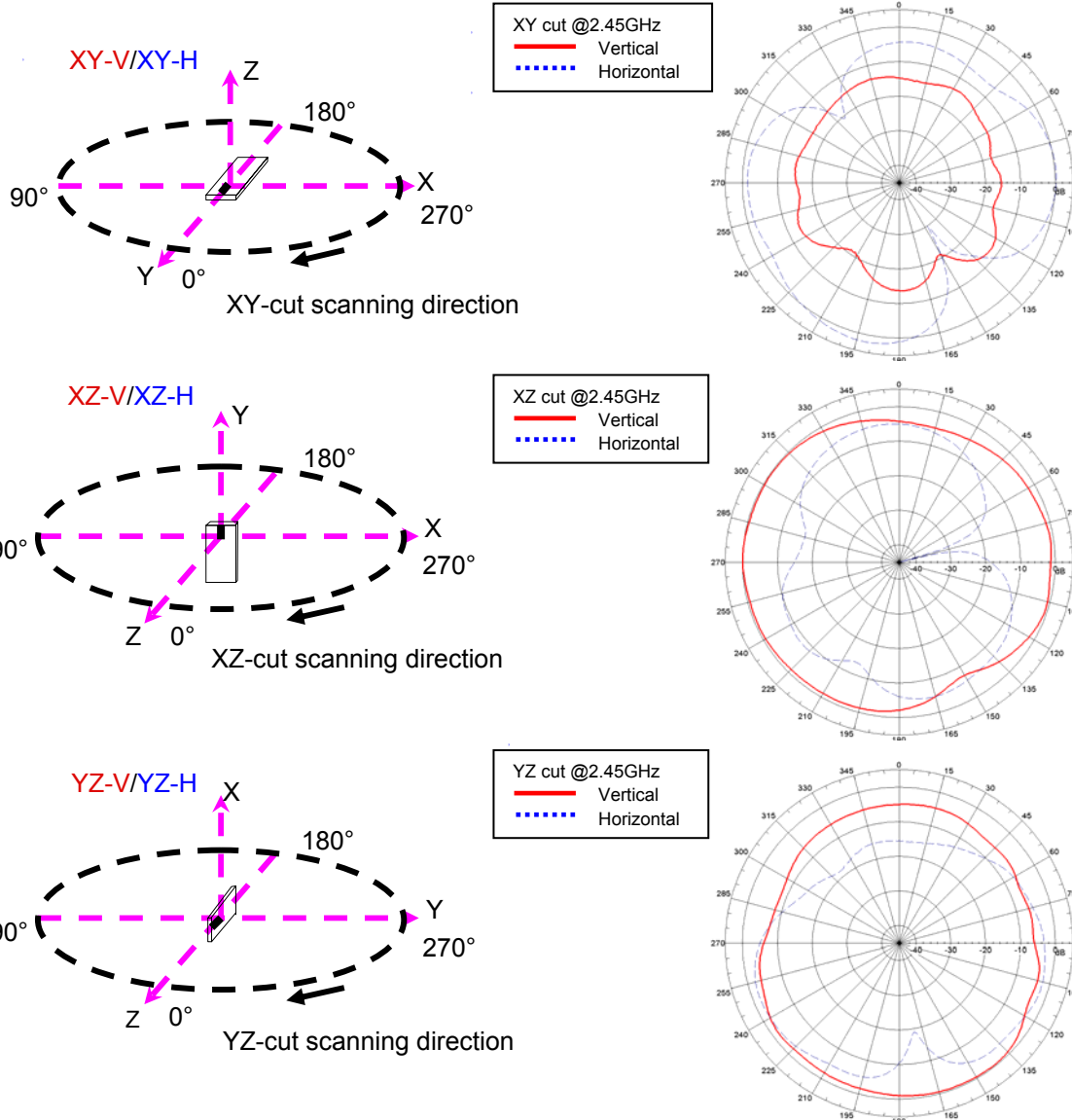
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## Ant2 Radiation Patterns



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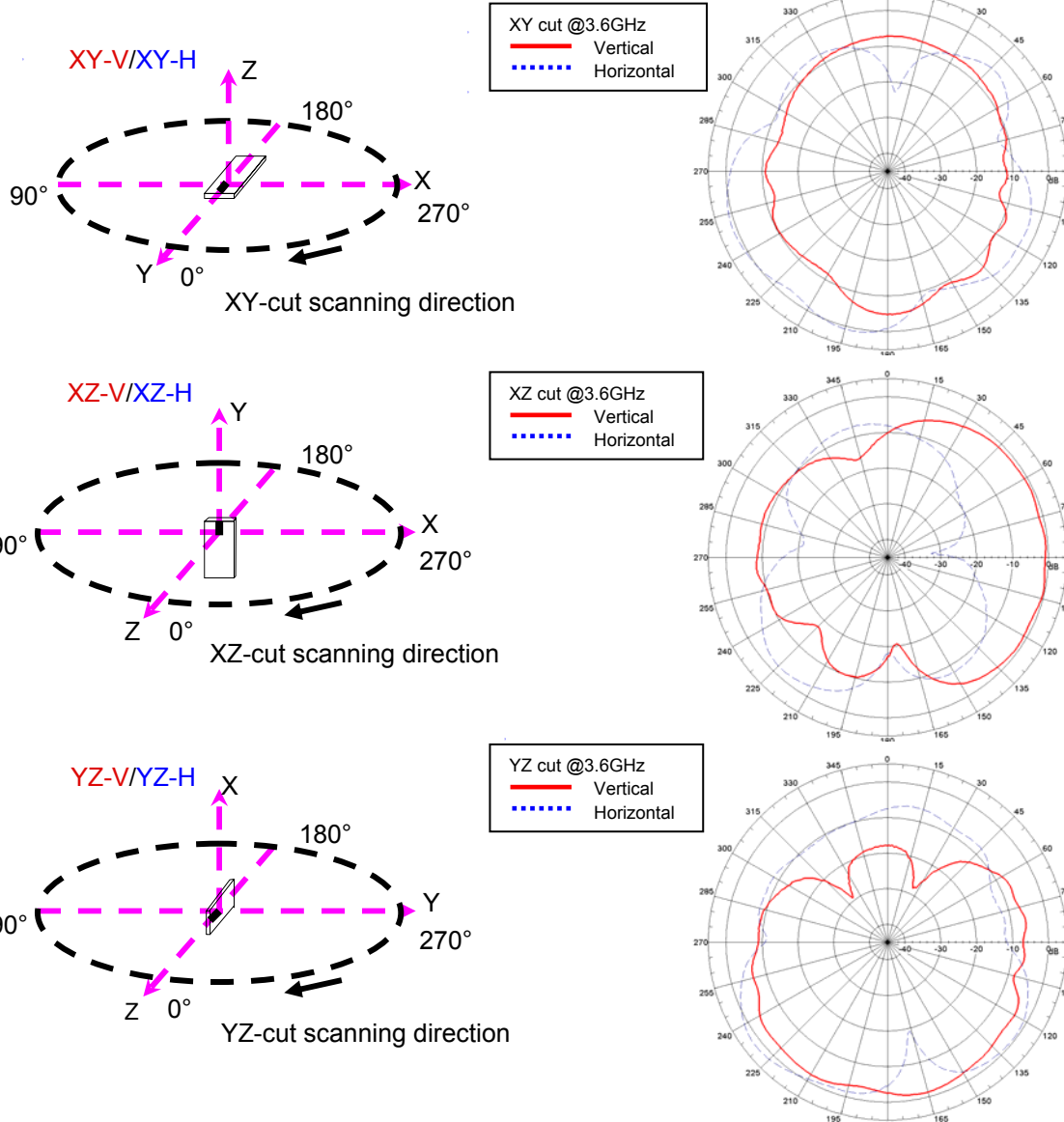
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## Ant2 Radiation Patterns



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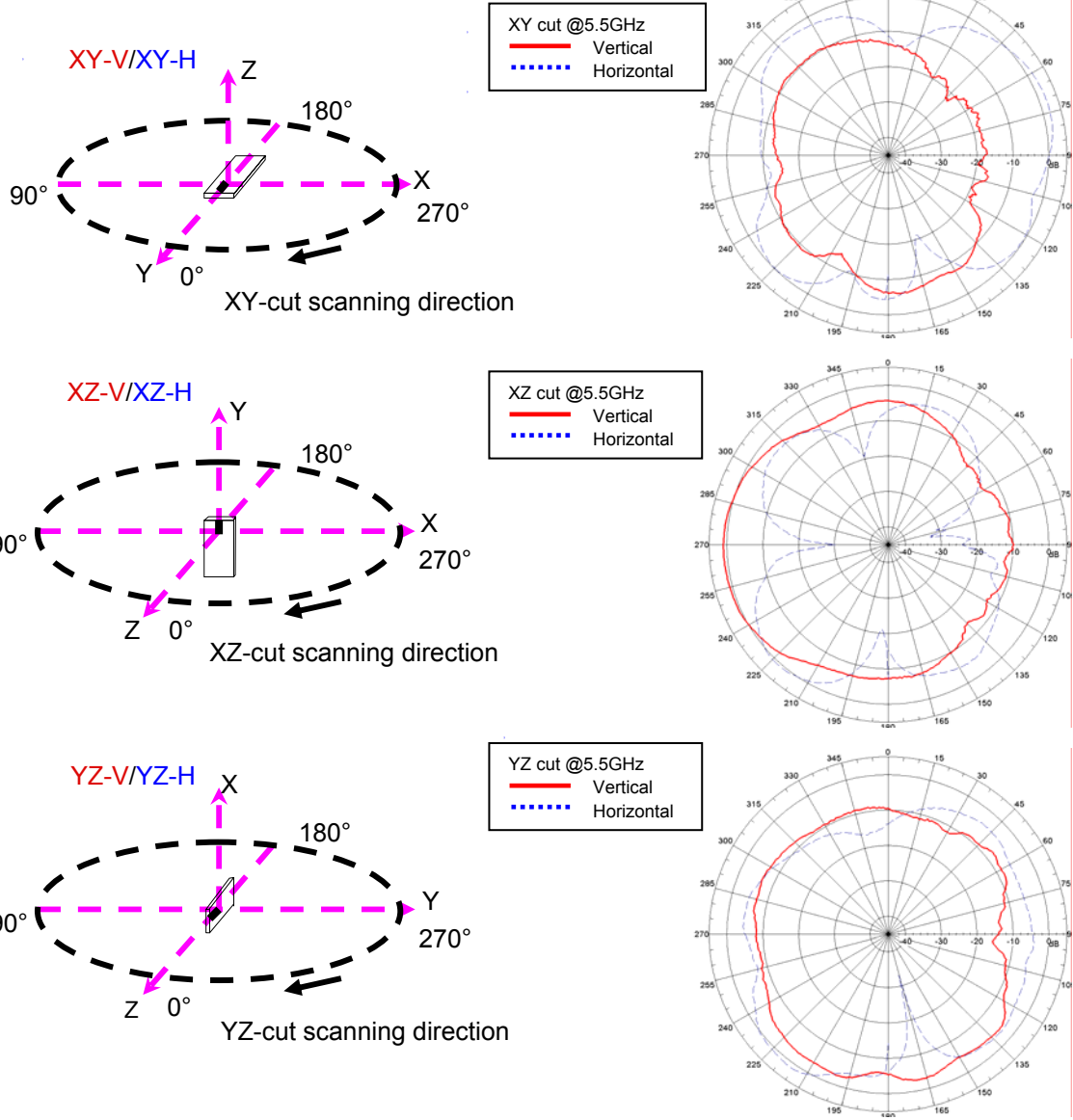
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