

High Frequency Ceramic Solutions

(Tri-Band) WiMax Antenna

P/N 2500AT52M3555

Detail Specification: 08/11/06

Page 1 of 9

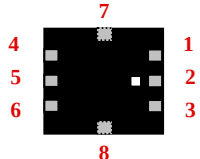
General Specifications

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

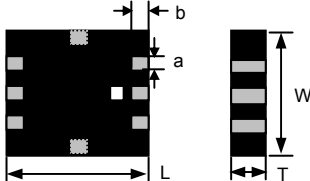
P/N Suffix	Packaging Style	Bulk	Suffix = S	Eg. 2500AT52M3555S
		T & R	Suffix = E	Eg. 2500AT52M3555E
Termination Style		100% Tin	Suffix = None	Eg. 2500AT52M3555(E or S)
		Tin / Lead	Suffix = /Pb	Eg. 2500AT52M3555(E or S)/Pb

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



Mechanical Dimensions

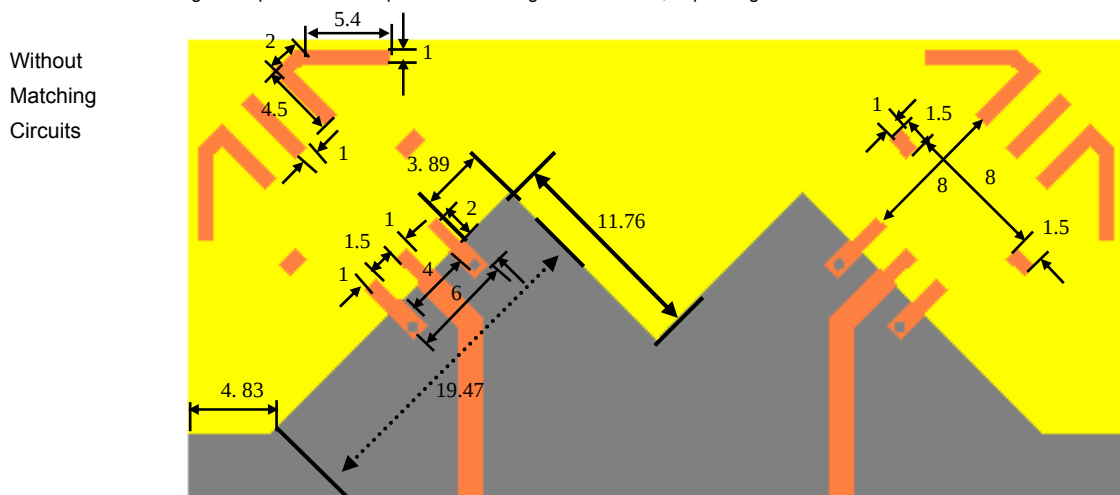
	In	mm
L	0.394 $\pm$ 0.012	10.00 $\pm$ 0.30
W	0.394 $\pm$ 0.012	10.00 $\pm$ 0.30
T	0.037 $\pm$ 0.010	0.95 $\pm$ 0.25
a	0.039 $\pm$ 0.012	1.00 $\pm$ 0.30
b	0.039 $\pm$ 0.012	1.00 $\pm$ 0.30



Mounting Considerations

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

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



Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2003 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

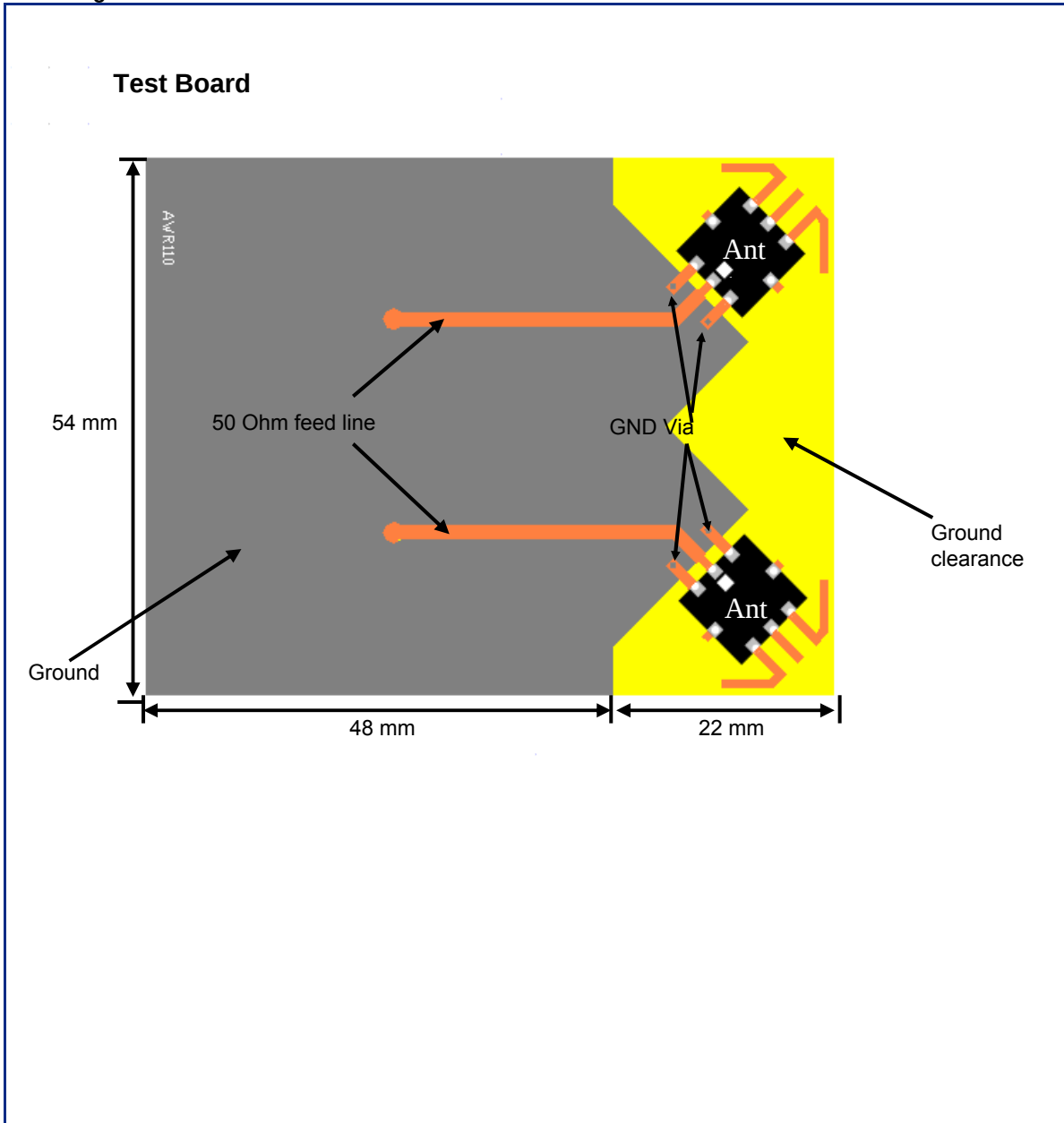
(Tri-Band) WiMax Antenna

P/N 2500AT52M3555

Detail Specification: 08/11/06

Page 2 of 9

Mounting Considerations



Johanson Technology, Inc. reserves the right to make design changes without notice.
All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2003 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

(Tri-Band) WiMax Antenna

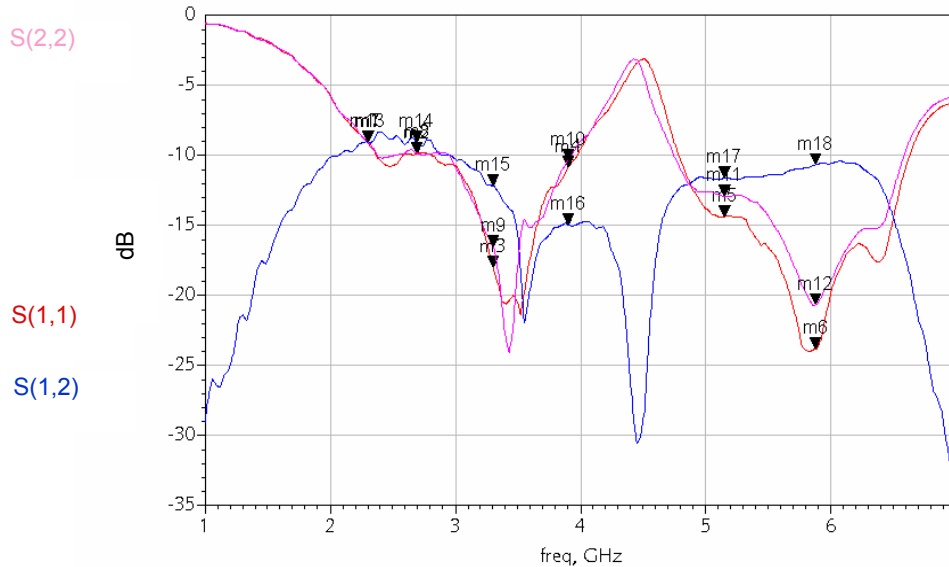
P/N 2500AT52M3555

Detail Specification: 08/11/06

Page 3 of 9

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2003 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

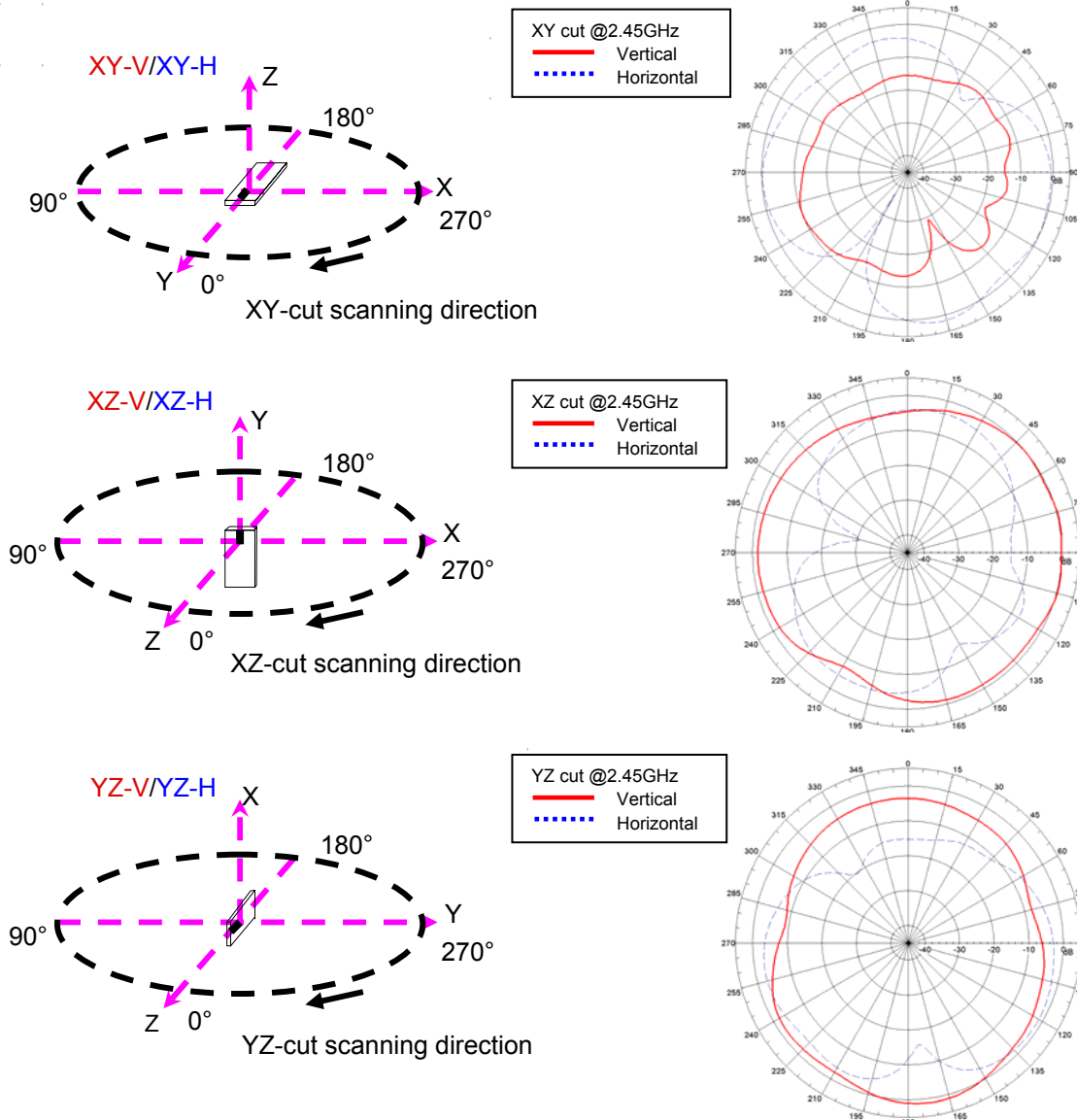
(Tri-Band) WiMax Antenna

P/N 2500AT52M3555

Detail Specification: 08/11/06

Page 4 of 9

Ant1 Radiation Patterns



Johanson Technology, Inc. reserves the right to make design changes without notice.
 All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2003 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

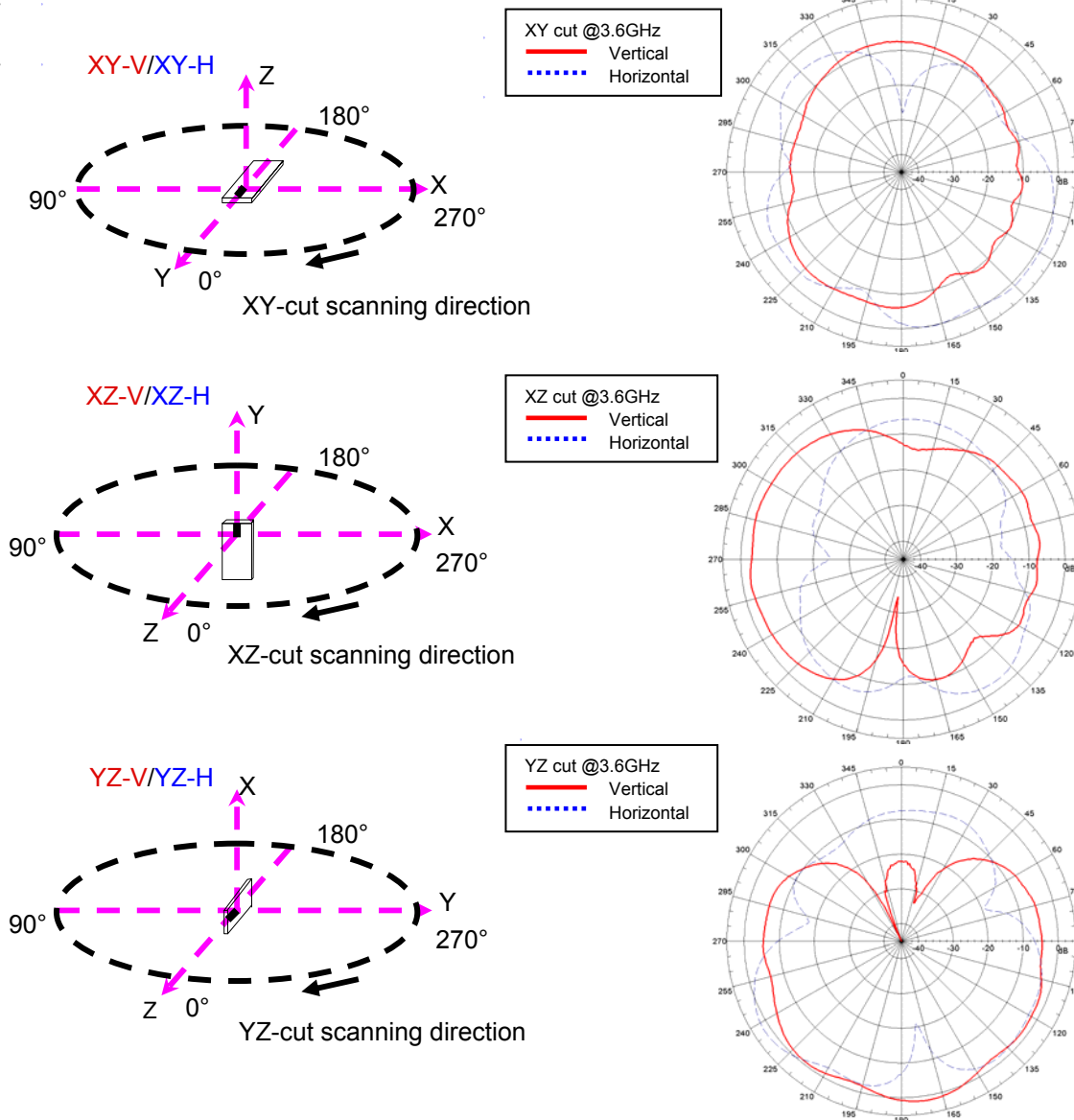
(Tri-Band) WiMax Antenna

Detail Specification: 08/11/06

P/N 2500AT52M3555

Page 5 of 9

Ant1 Radiation Patterns



Johanson Technology, Inc. reserves the right to make design changes without notice.
All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2003 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

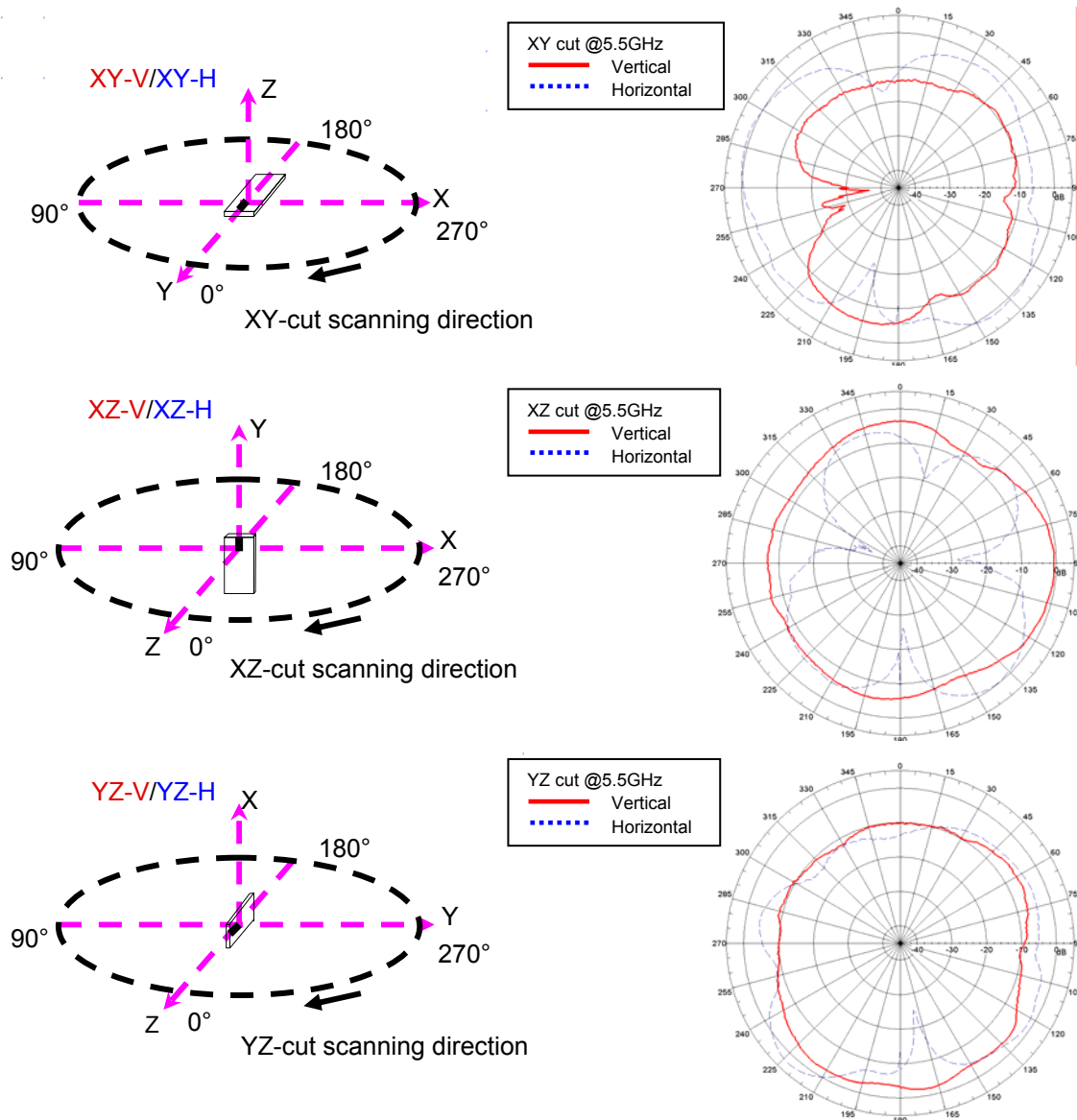
(Tri-Band) WiMax Antenna

Detail Specification: 08/11/06

P/N 2500AT52M3555

Page 6 of 9

Ant1 Radiation Patterns



Johanson Technology, Inc. reserves the right to make design changes without notice.
All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2003 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

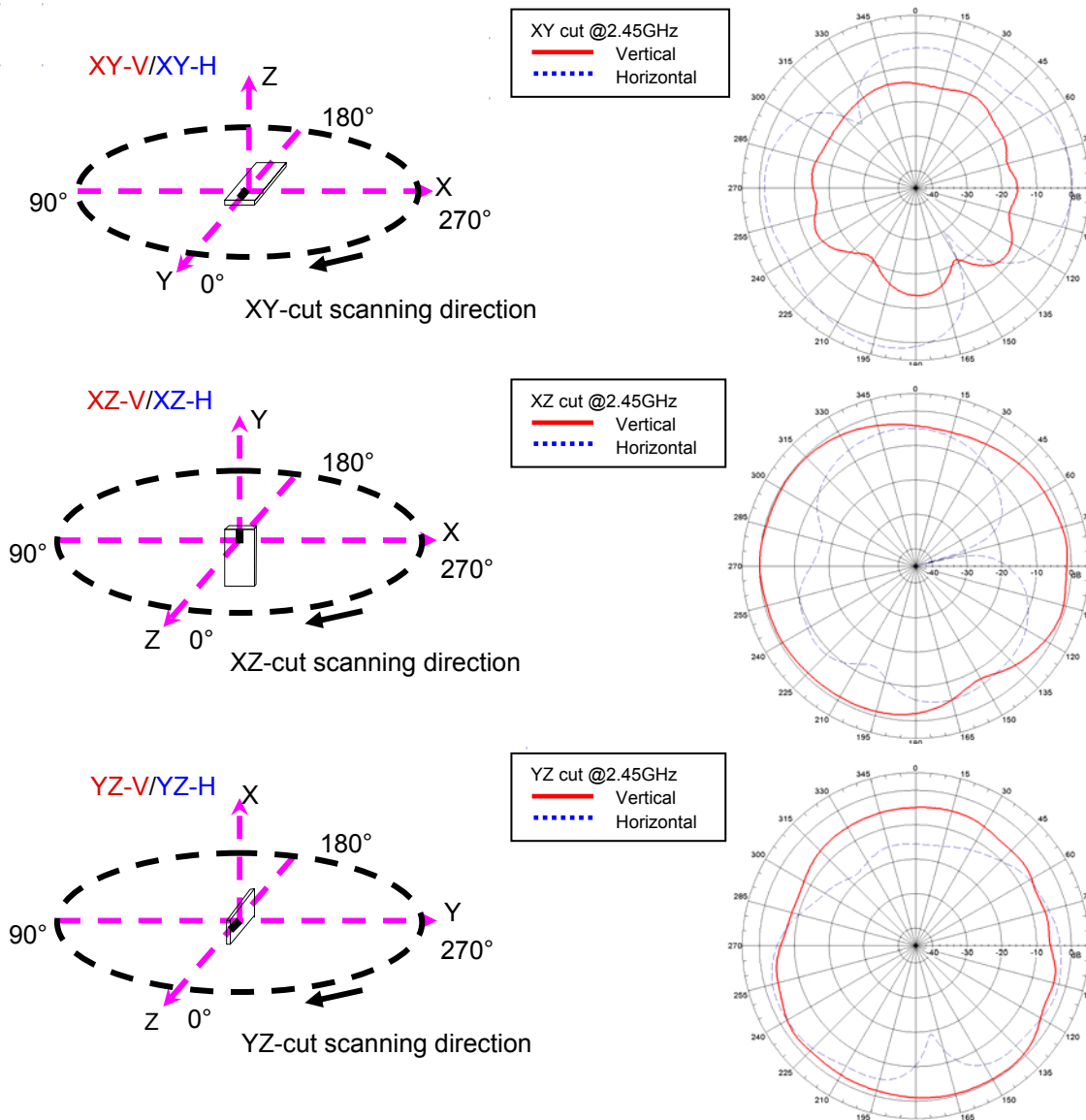
(Tri-Band) WiMax Antenna

Detail Specification: 08/11/06

P/N 2500AT52M3555

Page 7 of 9

Ant2 Radiation Patterns



Johanson Technology, Inc. reserves the right to make design changes without notice.
 All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2003 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

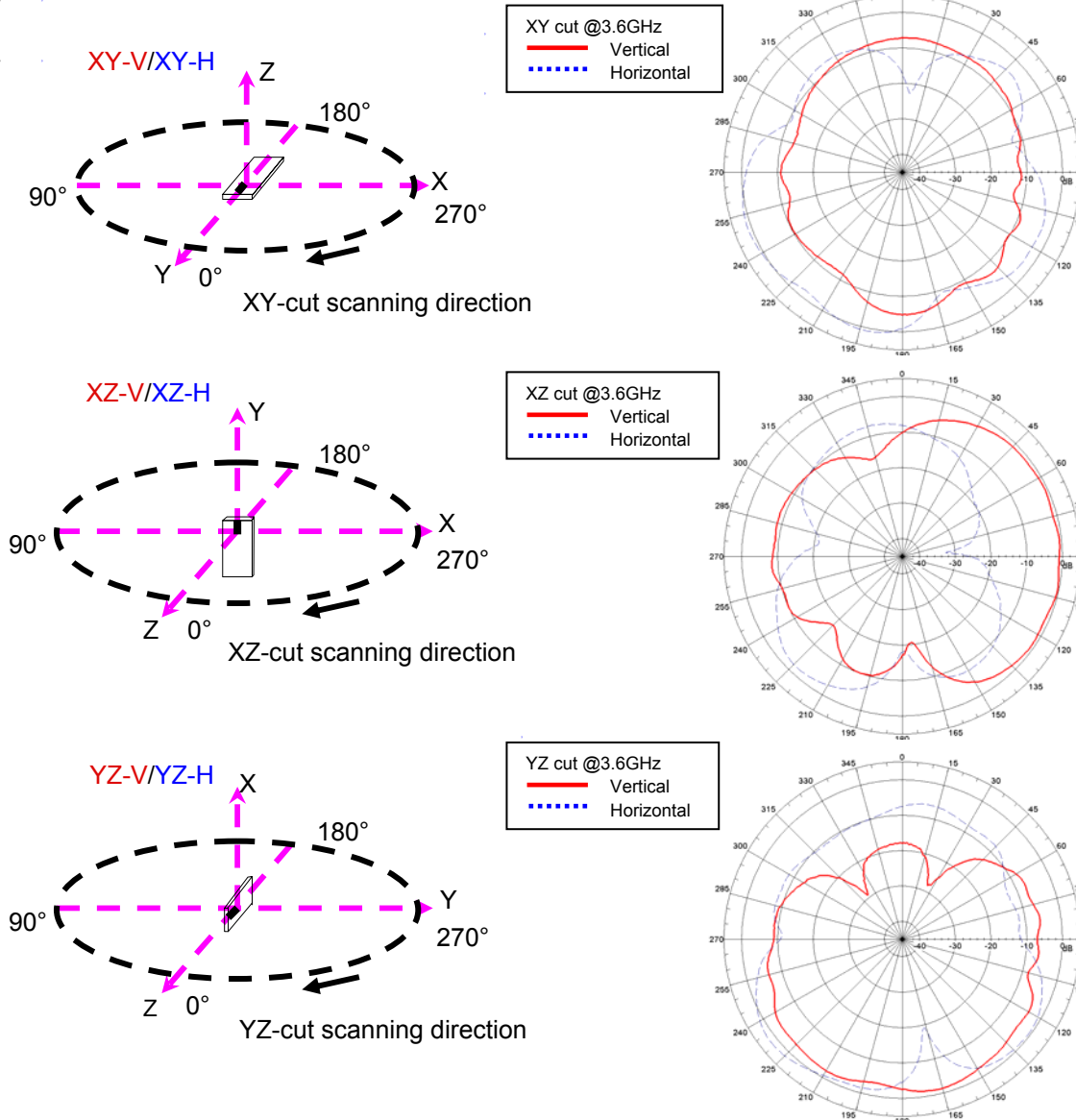
(Tri-Band) WiMax Antenna

Detail Specification: 08/11/06

P/N 2500AT52M3555

Page 8 of 9

Ant2 Radiation Patterns



Johanson Technology, Inc. reserves the right to make design changes without notice.
 All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com
 4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2003 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

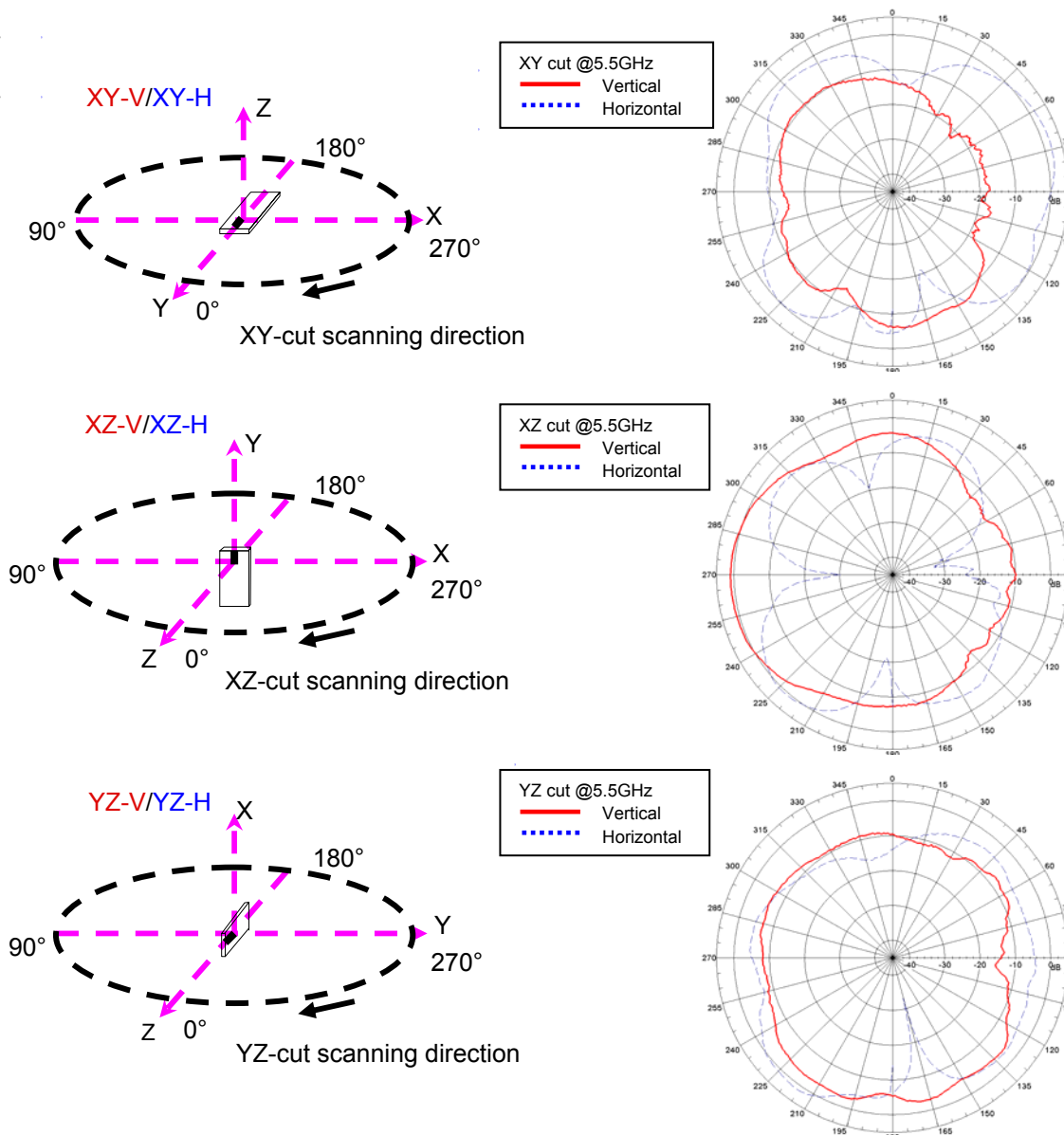
(Tri-Band) WiMax Antenna

Detail Specification: 08/11/06

P/N 2500AT52M3555

Page 9 of 9

Ant2 Radiation Patterns



Johanson Technology, Inc. reserves the right to make design changes without notice.
All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2003 Johanson Technology, Inc. All Rights Reserved