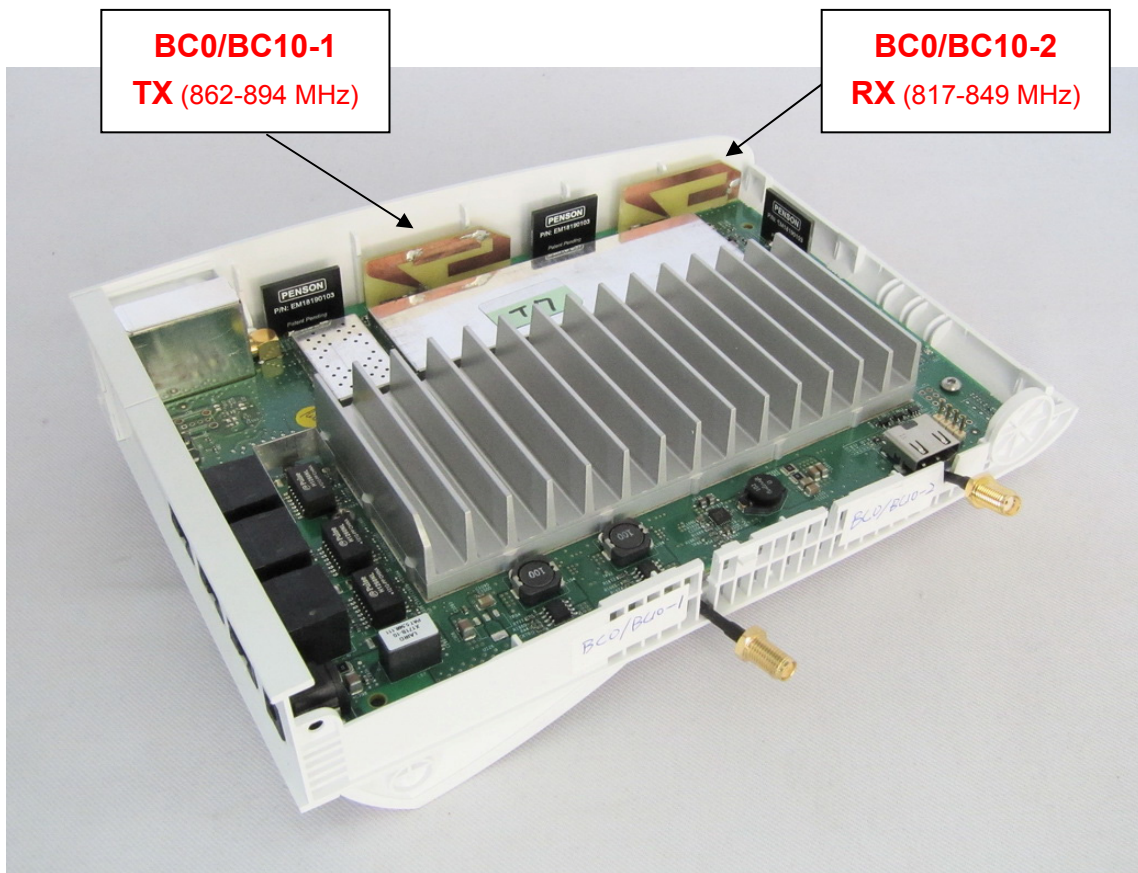


Internal BC0/BC10 Antennas (for Airvana Femetocell Train7)

Product Description:	BC0/BC10 for 817-894 MHz	
PENSON MPN:	BC0/BC10(TX): EM08080104 BC0/BC10(RX): EM08080105	
Antenna Version:	V1	
Enclosure&PCBA Updated:	2012.09.13	
Date:	2012.09.20	
Report by:	Winston Cheng	
Performance Check:	VSWR:	PASS
	Gain & Patterns:	PASS

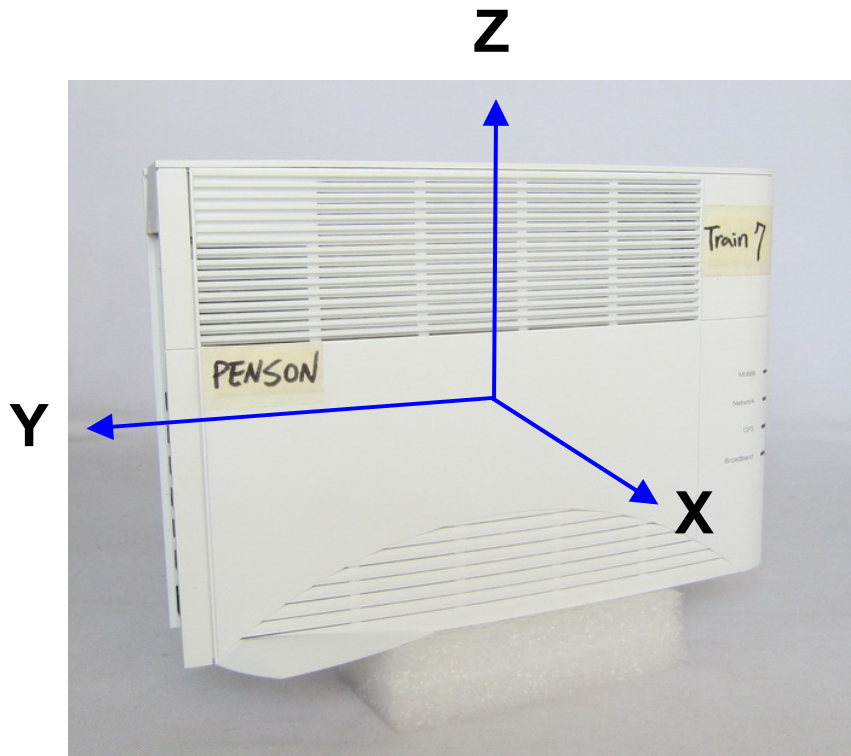
#1. ANTENNA LOCATION



Enclosure&PCBA Updated: 2012.09.13



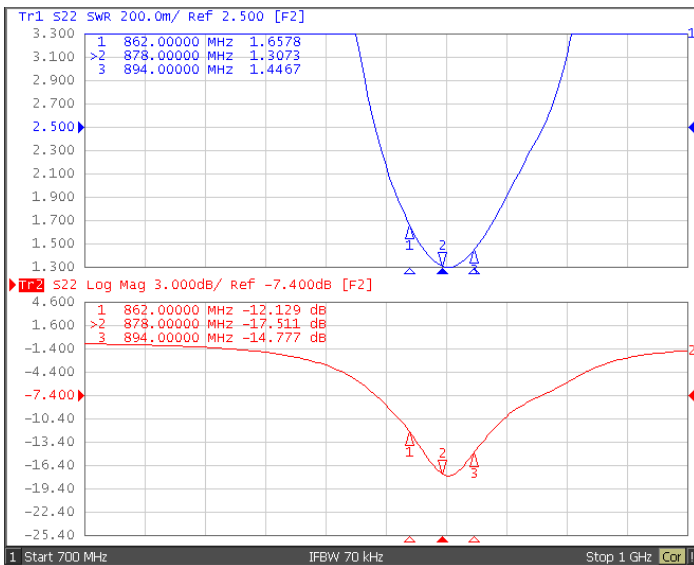
#2. MEASUREMENT ORIENTATION



#3. VSWR/RETURN LOSS MEASUREMENT RESULT

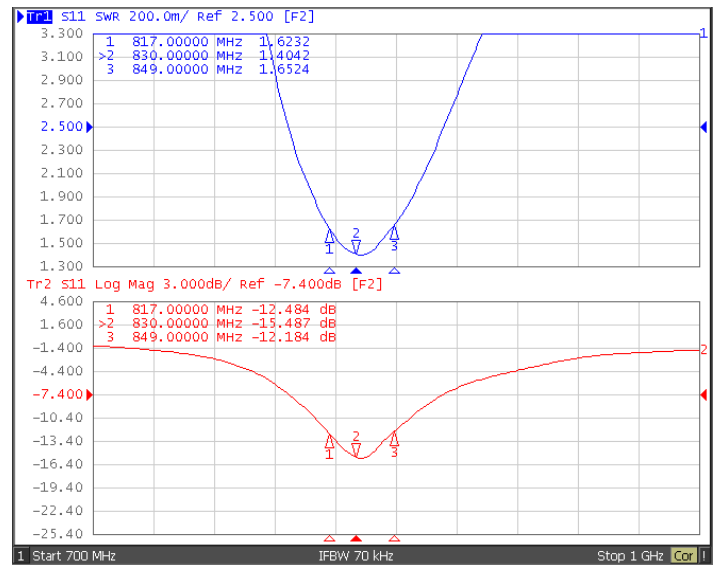
BC0/BC10-1

TX (862-894 MHz)



BC0/BC10-2

RX (817-849 MHz)



#4. GAIN & EFFICIENCY & PATTERNS MEASUREMENT RESULT

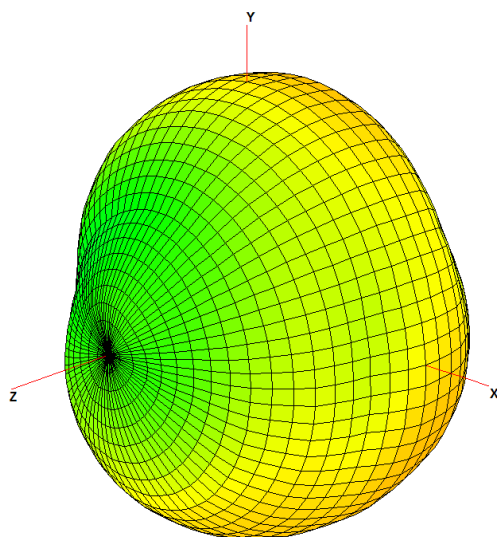
4.1. BC0/BC10-1 TX (862-894 MHz)

Frequency (MHz)	862	878	894
Peak Gain (dBi)	0.87	1.85	1.65
Avg. gain (dBi)	-1.90	-1.22	-1.39
Efficiency (%)	64.63	75.47	72.65

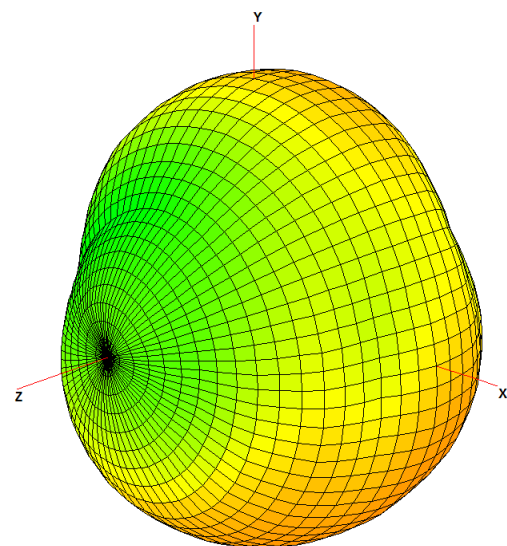
The measurement tolerance of Gain: +/-0.5dB.

3D Patterns

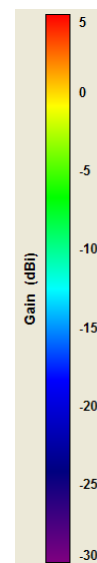
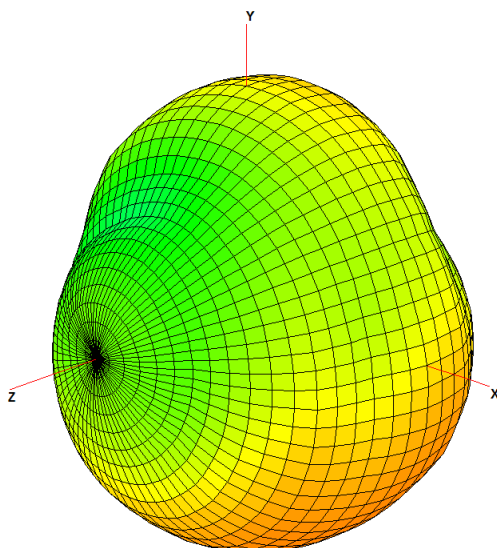
862 MHz



878 MHz

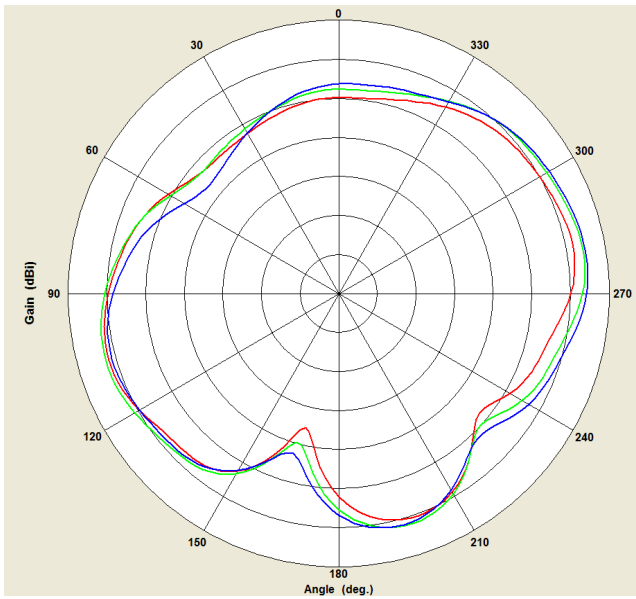


894 MHz

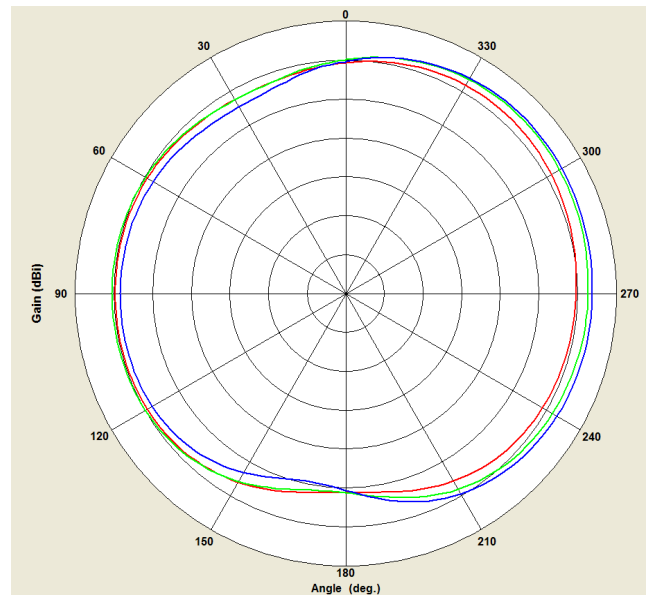


2D Patterns

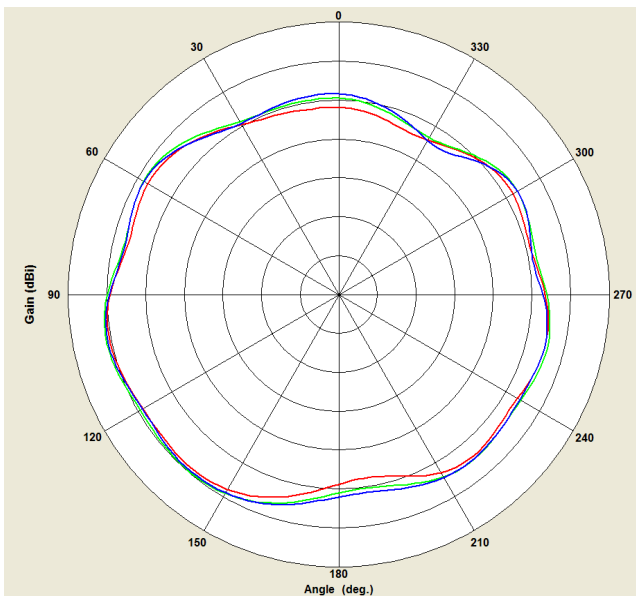
Y-Z Plane(H+V) Patterns



X-Y Plane(H+V) Patterns



Z-X Plane(H+V) Patterns



BC0/BC10-1 TX (862-894 MHz)

- 862 MHz
- 878 MHz
- 894 MHz

Graph Scale:

Max: 5
Min: -30
Step: 5

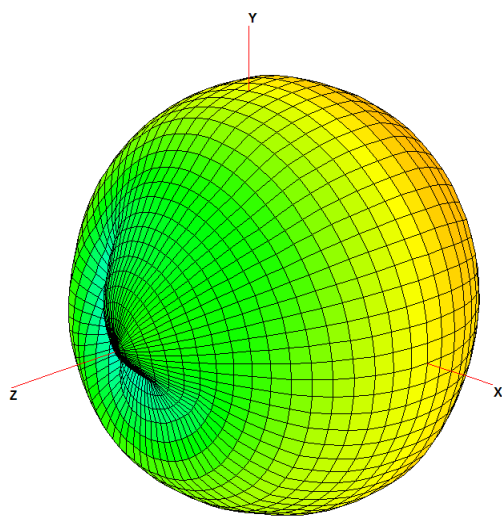
4.2. BC0/BC10-2 RX (817-849 MHz)

Frequency (MHz)	817	830	849
Peak Gain (dBi)	1.58	1.92	1.62
Avg. gain (dBi)	-1.68	-1.51	-1.74
Efficiency (%)	67.84	70.68	66.97

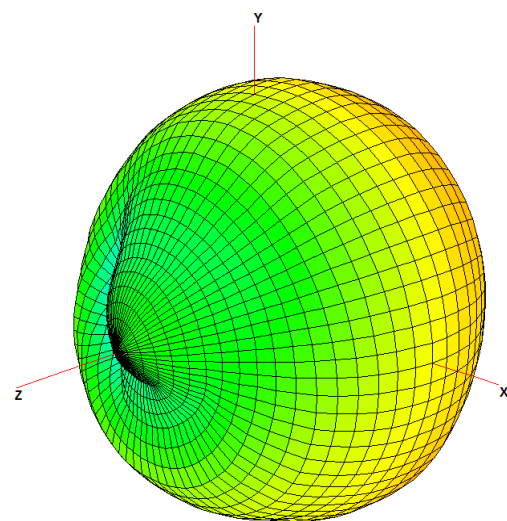
The measurement tolerance of Gain: +/-0.5dB.

3D Patterns

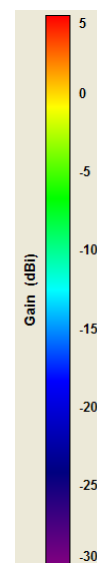
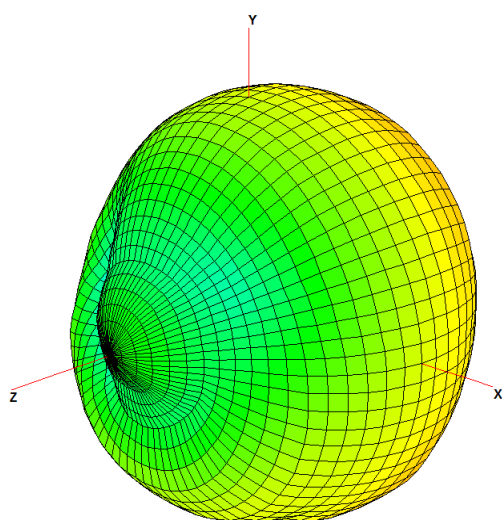
817 MHz



830 MHz

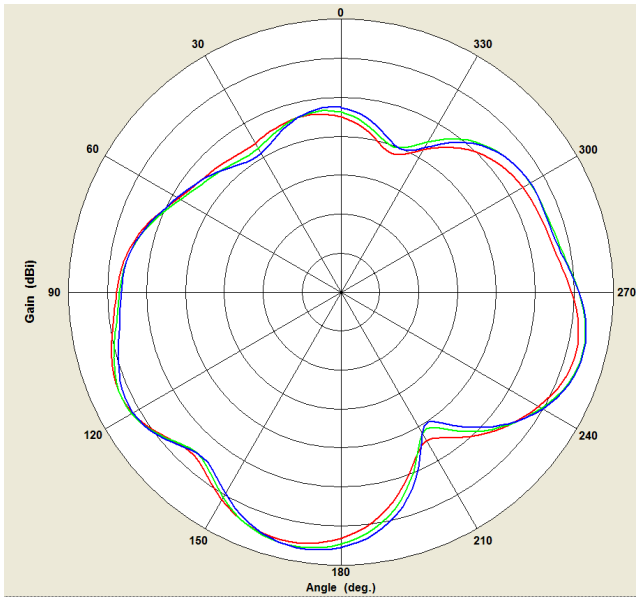


849 MHz

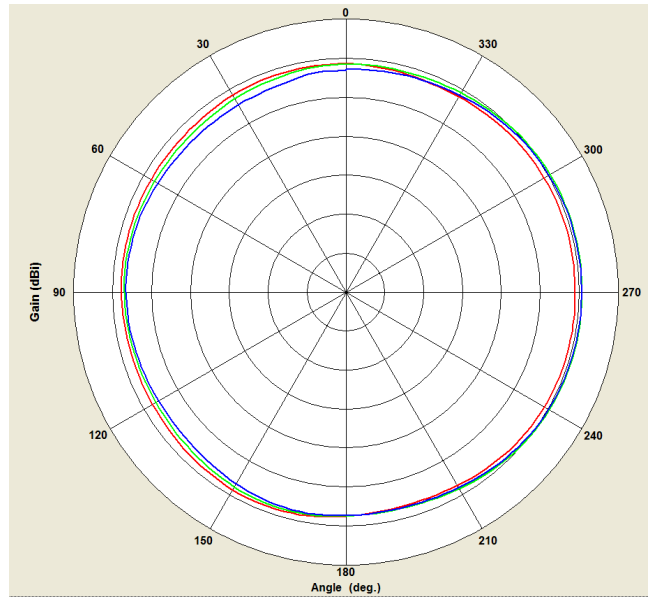


2D Patterns

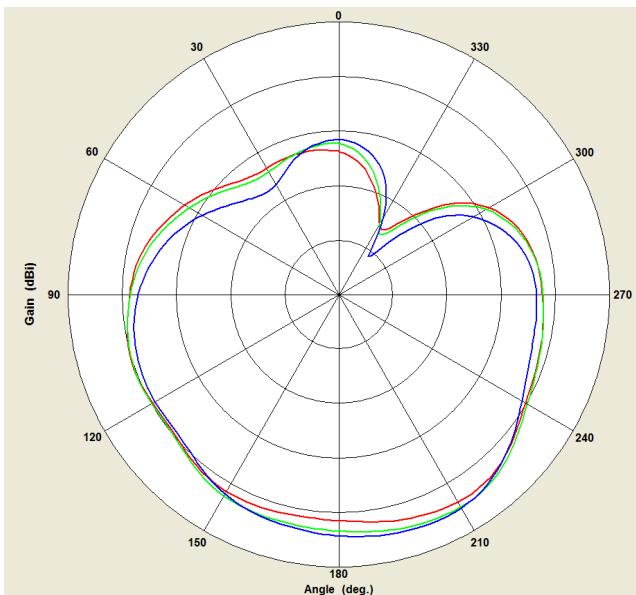
Y-Z Plane(H+V) Patterns



X-Y Plane(H+V) Patterns



Z-X Plane(H+V) Patterns



BC0/BC10-2 RX (817-849 MHz)

- 817 MHz
- 830 MHz
- 849 MHz

Graph Scale:

Max: 5
Min: -30
Step: 5

END OF REPORT