

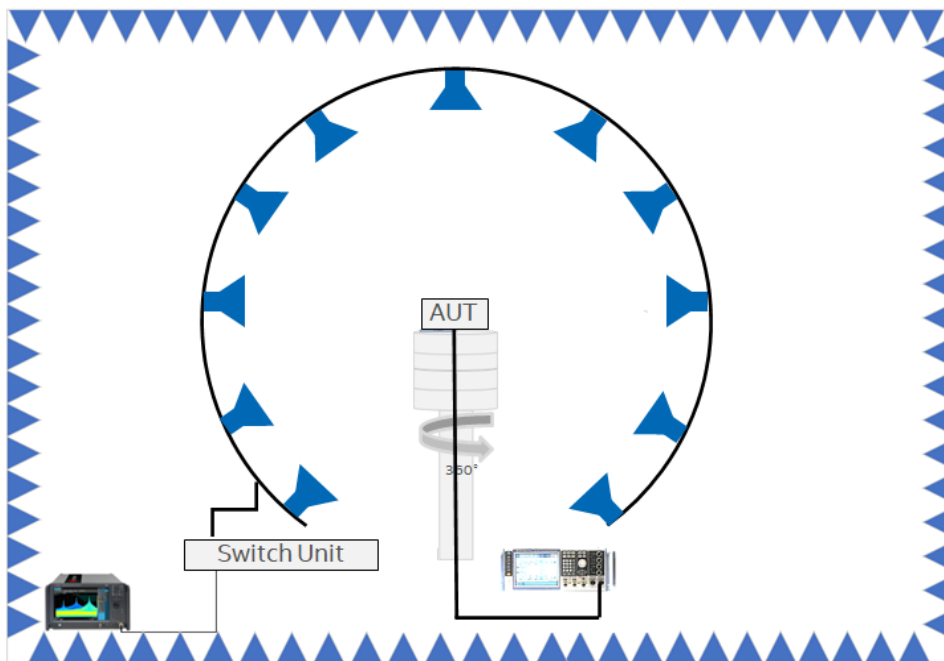
WiFi-2.4G Reference Antenna Datasheet

1. Measurement Method and System

3D spherical measurement using distributed axis system

2. Test Setup & Equipment List

2.1. Test Setup



2.2. Equipment List

ID#	Device	Type/Model	Serial #	Manufacturer
013-000	Spherical full anechoic chamber	AMS-8923-150	5719	ETS-Lindgren
013-011	Measurement Software	EMQuest v 1.14 build 31654	1404	ETS-Lindgren
013-001	Switch & Positioning Control Platform	EMCenter	00159758	ETS-Lindgren
013-003	System Amplifier Module (0.5 - 6 GHz)	SAM-01	-	ETS-Lindgren
271-000	Signal Analyzer 9kHz – 6GHz	FSL6	102143	Rohde & Schwarz
130-000	Signal generator	SMB 100A	178217	Rohde & Schwarz

3. Antenna Specification

3.1. Antenna information

Manufacturer	Type	Antenna Part number	Band	Peak Gain (dBi)	Target Peak Gain (dBi)
Intel WRF Lab	PIFA	WRF-6dBi-PIFA-2.4G	2.4GHz 2400-2500MHz	6.4	6.3

3.2. Antenna Peak Gain Table

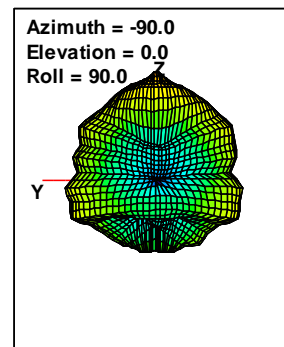
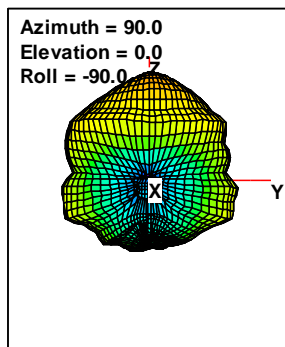
Frequency (MHz)	Peak Gain
	Total (dBi)
2400	5.99
2430	6.23
2470	6.4
2483	6.15

4. Antenna Radiation Patterns 2400 - 2483 MHz

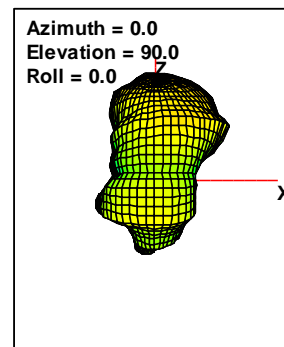
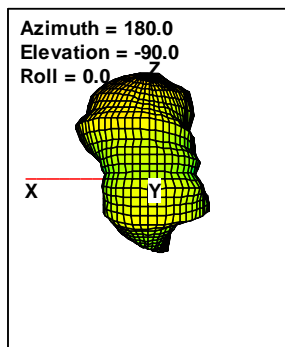
4.1. Pattern @2400MHz

Frequency (MHz)	Peak Gain
	Total
	(dBi)
2400	5.99

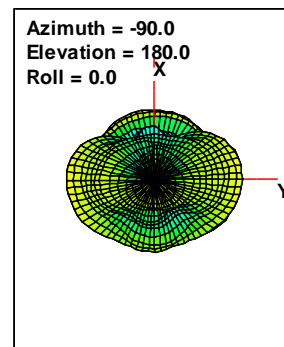
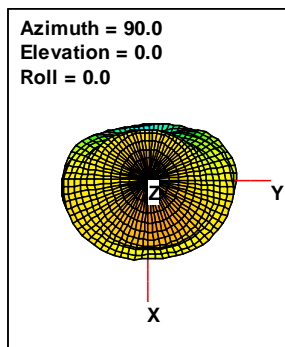
Front Total **Back Total**



Left Total **Right Total**



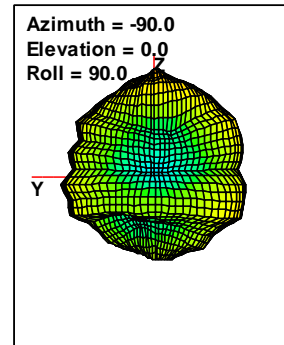
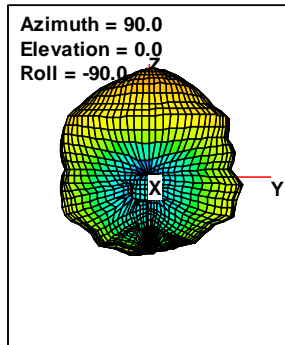
Top Total **Bottom Total**



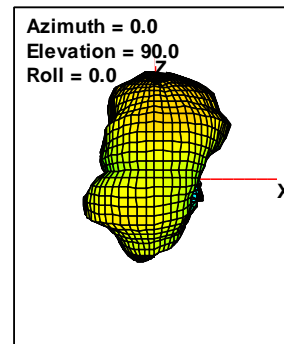
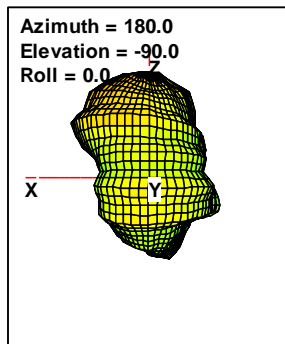
4.2. Pattern @2430MHz

Frequency (MHz)	Peak Gain
	Total
	(dBi)
2430	6.23

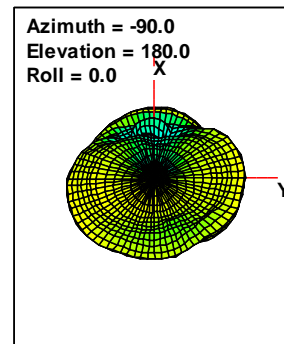
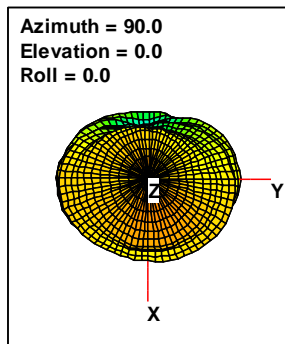
Front Total **Back Total**



Left Total **Right Total**



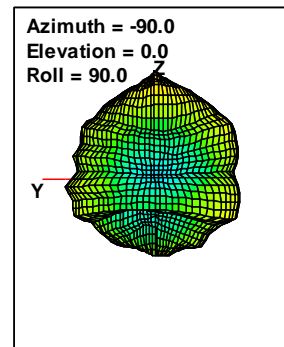
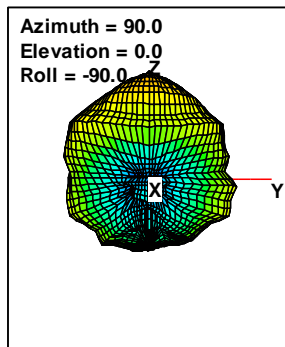
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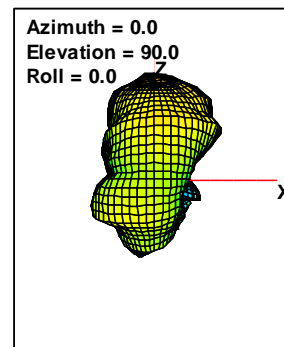
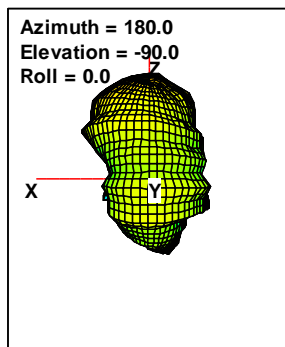
4.3. Pattern @2470MHz

Frequency (MHz)	Peak Gain
	Total
	(dBi)
2470	6.4

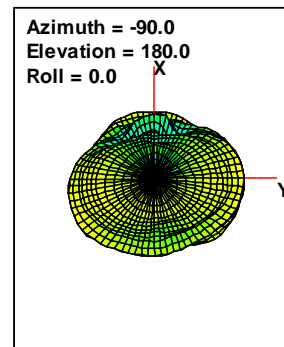
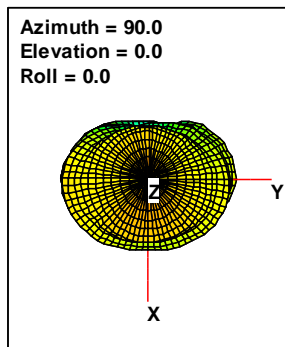
Front Total **Back Total**



Left Total **Right Total**



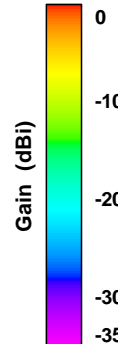
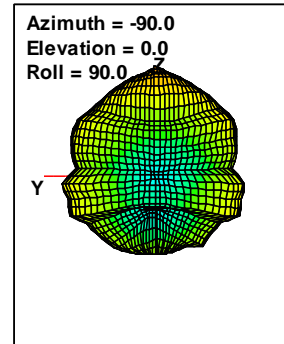
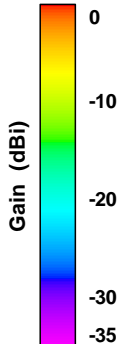
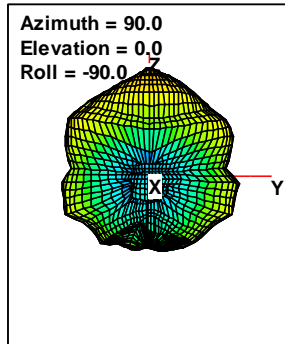
Top Total **Bottom Total**



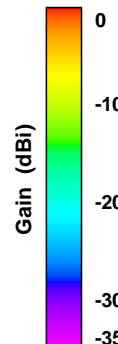
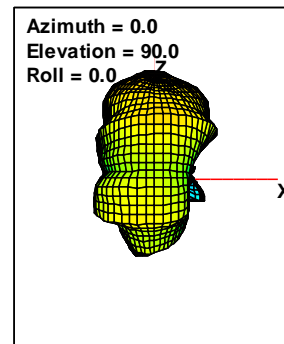
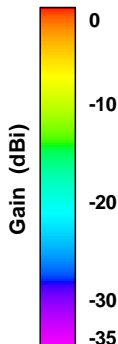
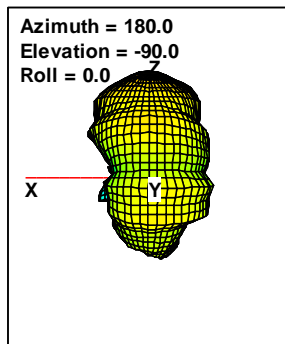
4.4. Pattern @2483MHz

Frequency (MHz)	Peak Gain
	Total
	(dBi)
2483	6.15

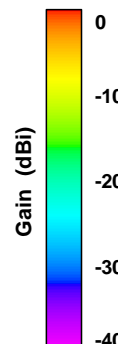
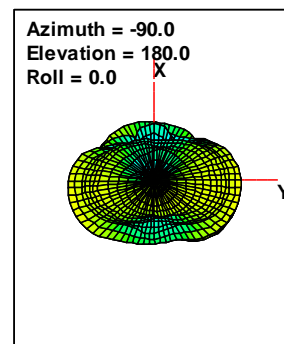
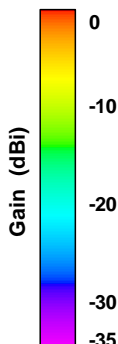
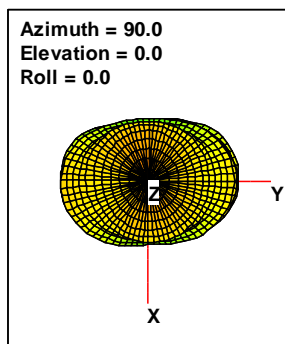
Front Total **Back Total**



Left Total **Right Total**



Top Total **Bottom Total**



5. VSWR

