

NANP25X7AUW2R442G2F

2.4 /4.9 GHz WIFI PCB Antenna



Description

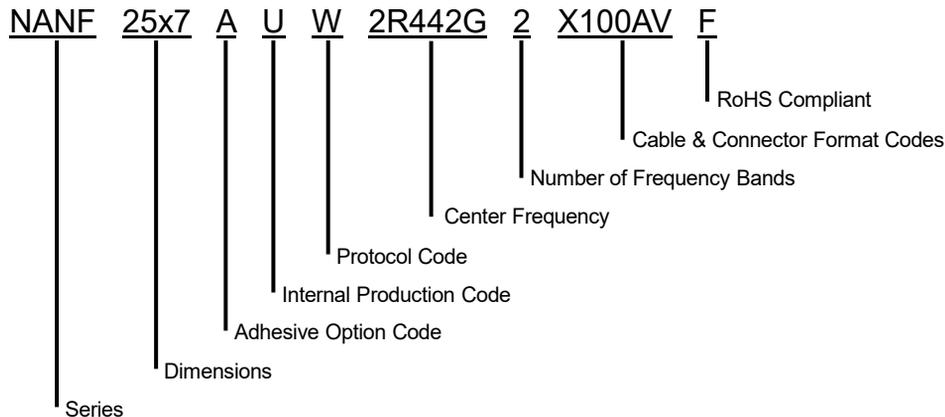
The NANP25X7AUW2R442G2F is a Rigid PCB antenna designed for WIFI applications. It operates within the frequency ranges of 2400~2500 MHz and 4900 ~ 5900 MHz making it perfect to Support IEEE802.11 (a/b/g/n/ac) and Hand-held devices



Features

- 2.4 /4.9 GHz WIFI Protocols
- Compact Size
- Customizable cable type and cable length
- RoHS compliant

Part Number Breakdown



Standard Part Number Listing

Part Number	Connector	Cable Length	Cable Type	Cable Orientation
NANP25X7AUW2R442G2X100AVF	IPEX MHF	100 mm	RF1.13	Vertical

The table represents assembled part numbers available on www.niccomp.com from standard connector and cable options. For options not listed above please contact NIC”

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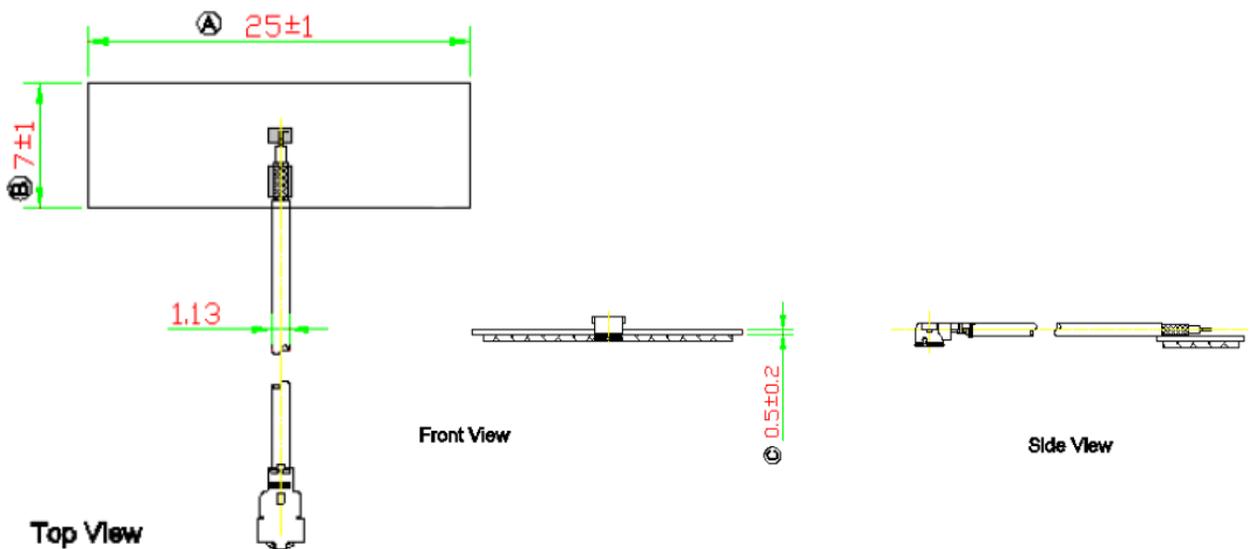
698 / 1710 MHz LTE FPC Antenna



Specifications

Frequency Ranges	2400~2500 MHz	4900 ~ 5900 MHz
Center Frequency	2442 MHz	5400 MHz
Bandwidth	90 (min) MHz	1000 (min) MHz
Peak Gain	0.9 dBi (typ.)	3.8 dBi (typ.)
Efficiency	56% (typ.)	89% (typ.)
V.S.W.R	2.0 Max.	
Polarization	Linear	
Impedance	50Ω	
Operating Temperature Range	-40°C ~ 85°C	
Humidity	10 ~ 95% RH	
Storage Temperature	-40°C ~ 85°C	
Storage Humidity	10 ~ 95% RH	
Mounting Method	Adhesive	
RoHS Compliant	Yes	

Dimensions

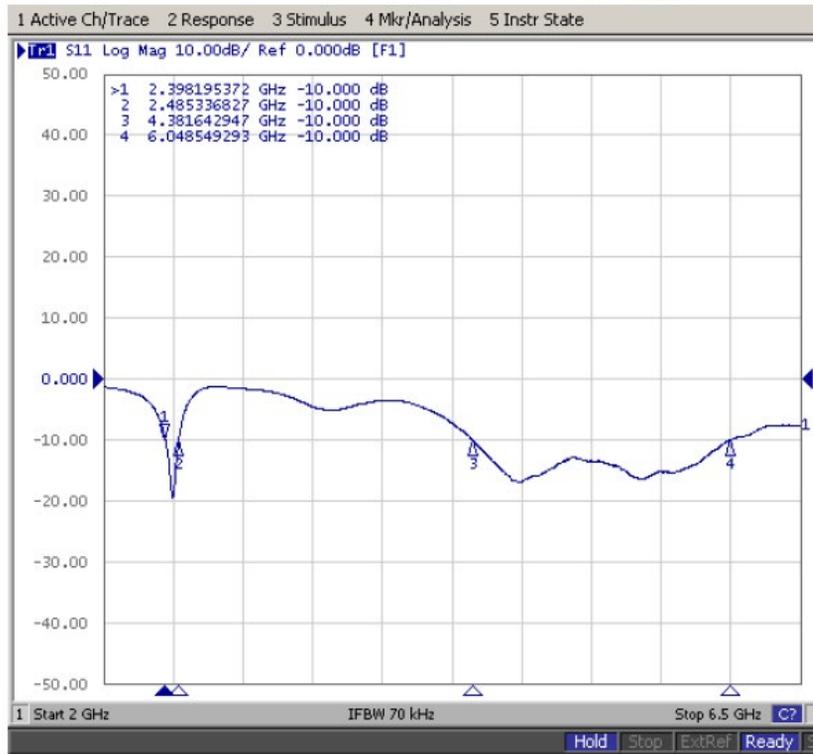


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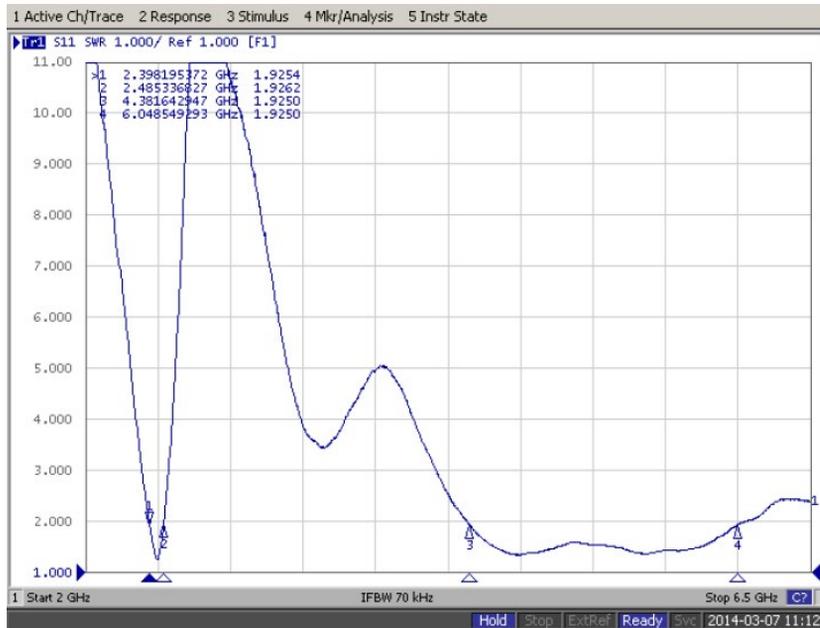
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Return Loss



VSWR



Performance Passives By Design

NIC Components Corp.
One Huntington Quadrangle, Suite 1C10, Melville, NY 11747

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www.niccomp.com

Last Updated 2/17/2026. Specification subject to change without notice. Please check web site or contact NIC for latest information

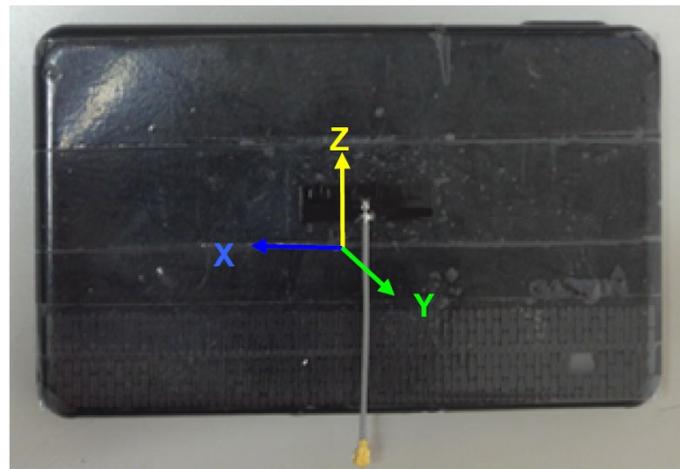
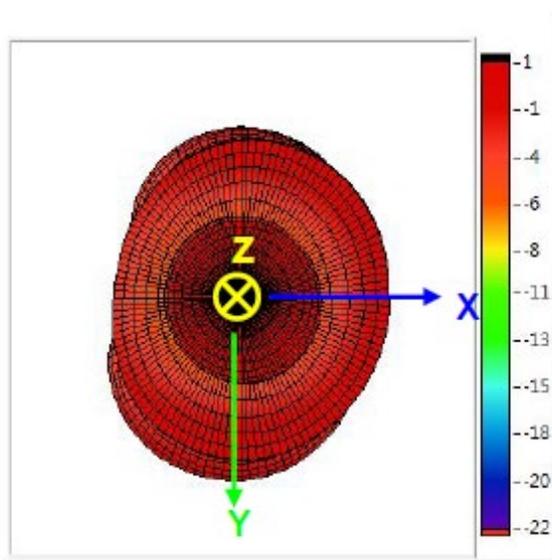
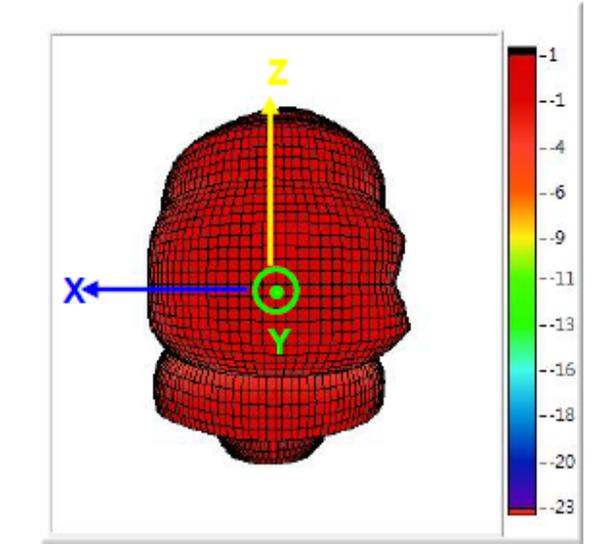
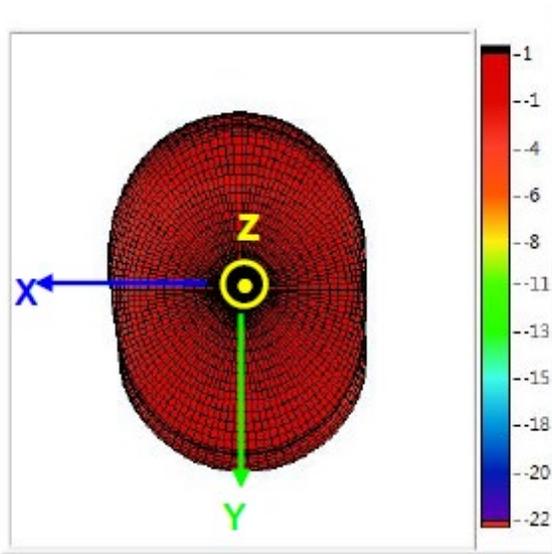
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Radiation Patterns

3D Gain Patterns @ 2442 MHz



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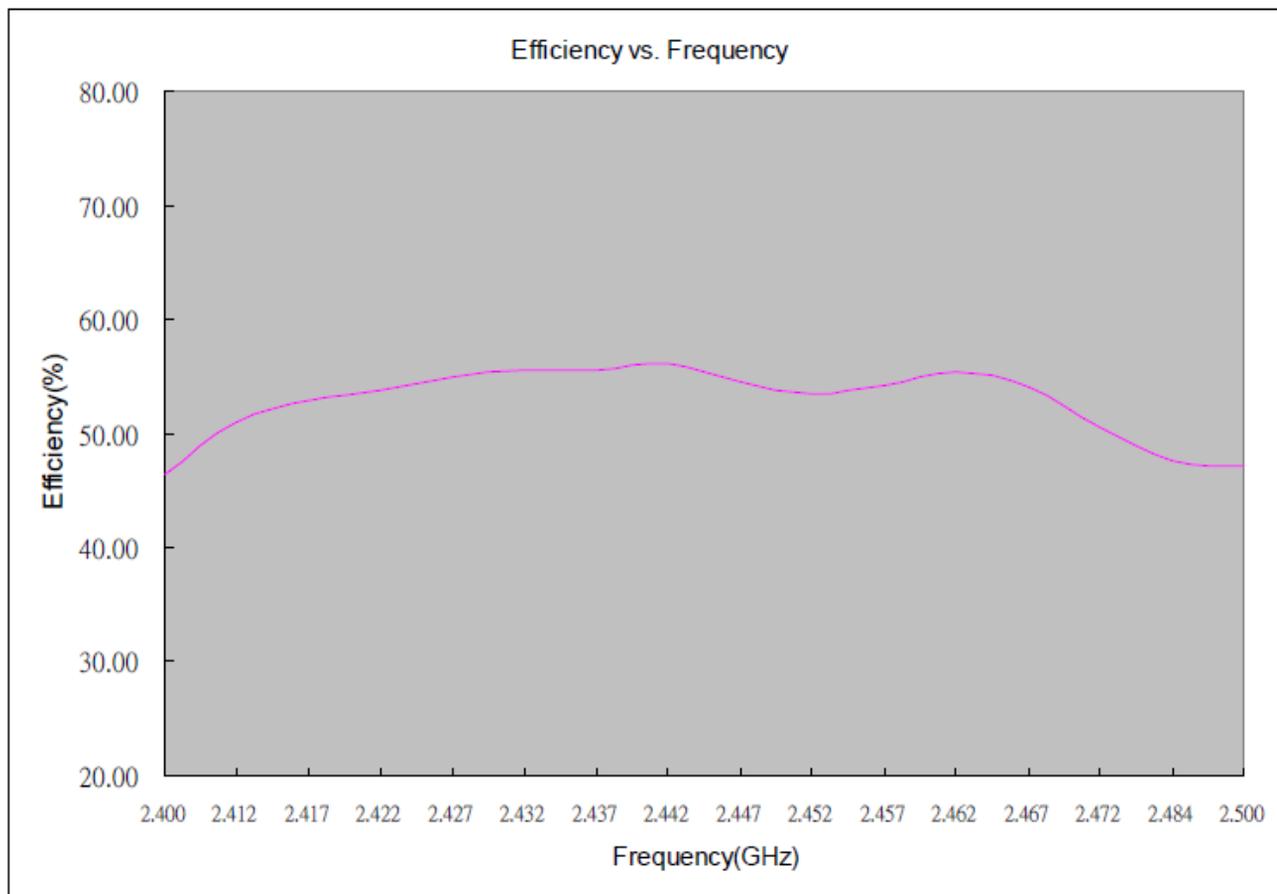
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Efficiency Table

Frequency(GHz)	2.400	2.412	2.417	2.422	2.427	2.432	2.437	2.442	2.447	2.452	2.457	2.462	2.467	2.472	2.484	2.500
Efficiency(dB)	-3.34	-2.93	-2.77	-2.69	-2.60	-2.56	-2.55	-2.51	-2.64	-2.72	-2.66	-2.57	-2.67	-2.96	-3.22	-3.27
Efficiency(%)	46.34	50.93	52.84	53.83	54.95	55.46	55.59	56.10	54.45	53.46	54.20	55.34	54.08	50.58	47.64	47.10
Gain(dBi)	-0.13	0.34	0.45	0.66	0.77	0.86	0.96	0.97	0.79	0.66	0.61	0.77	0.73	0.49	0.23	0.26

Efficiency Vs Frequency



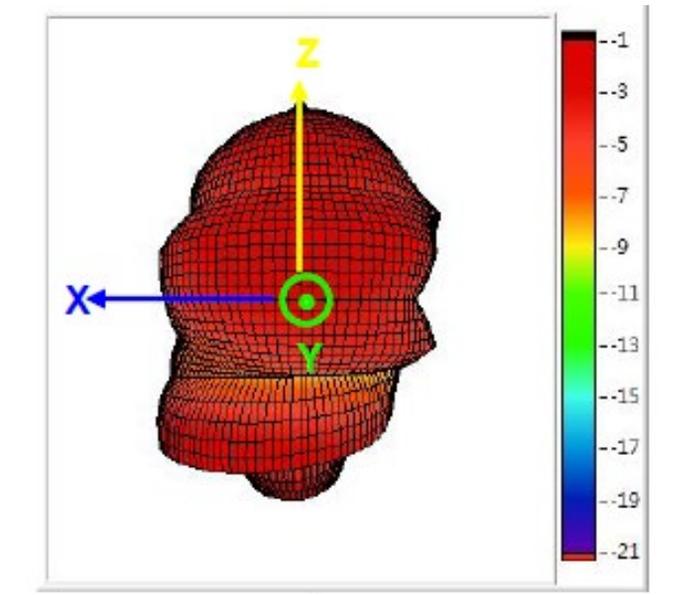
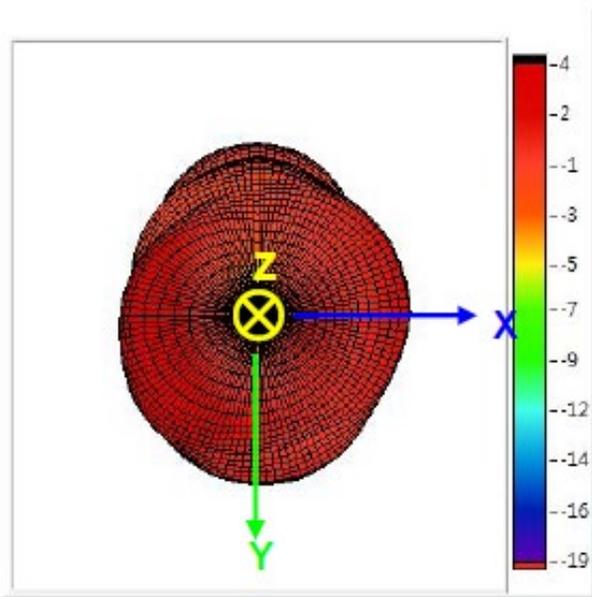
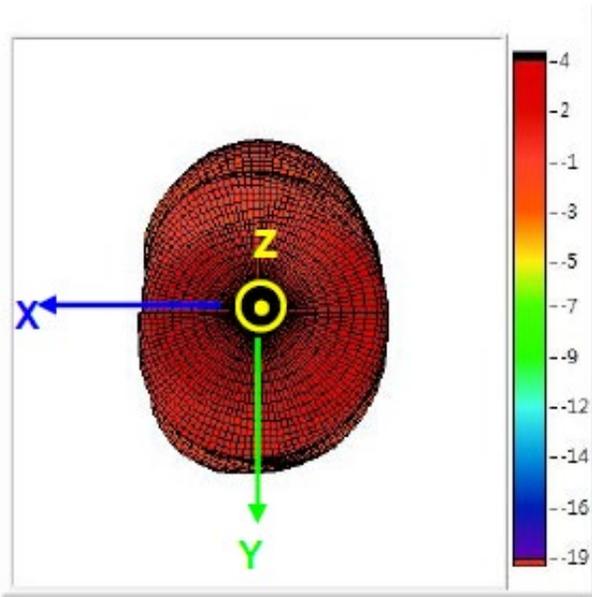
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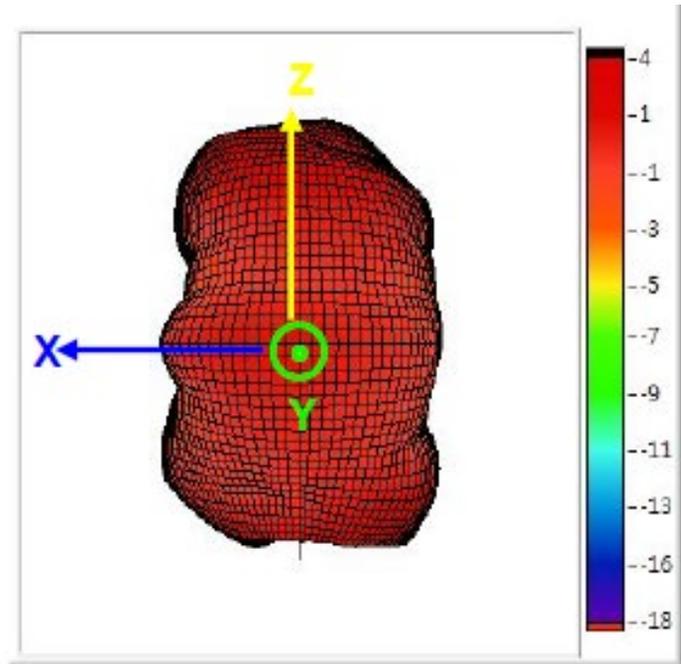
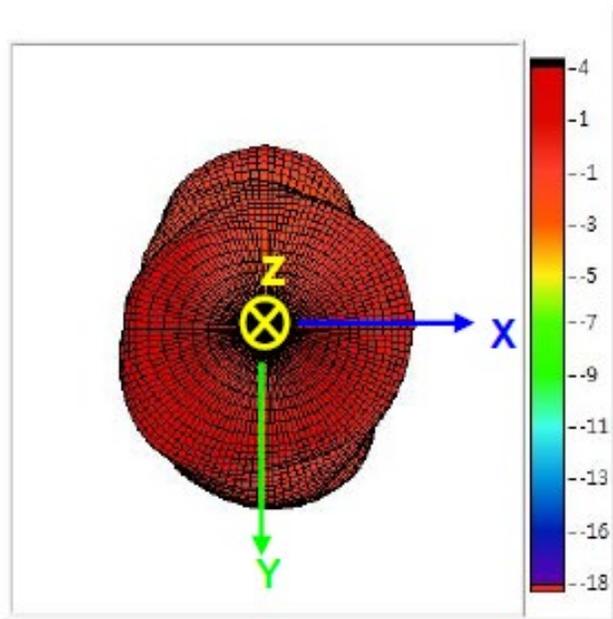
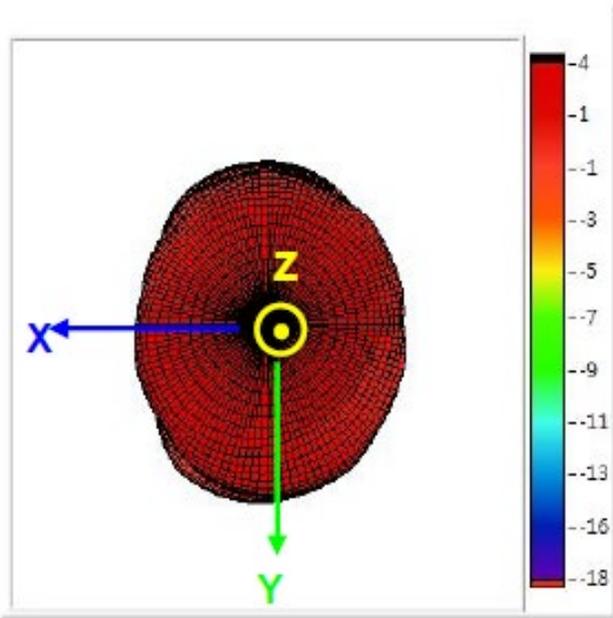
Radiation Patterns

3D Gain Patterns @ 4900 MHz



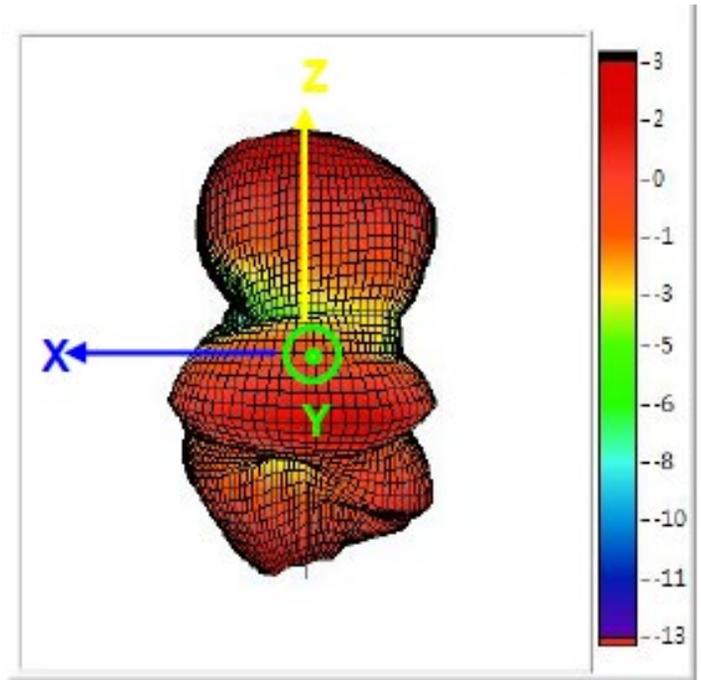
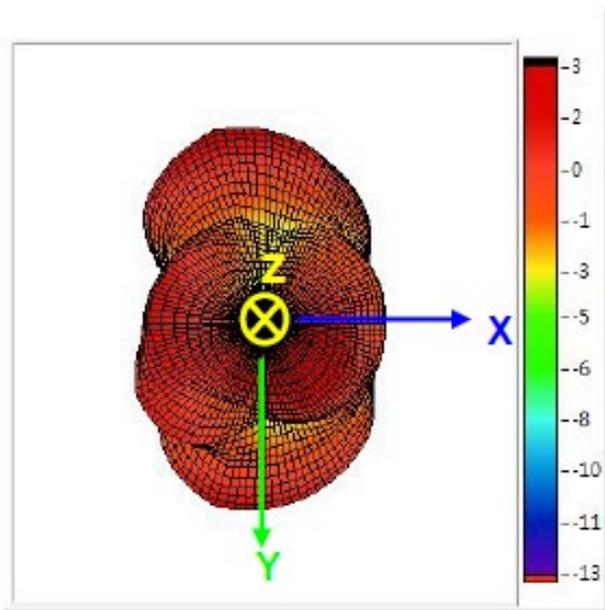
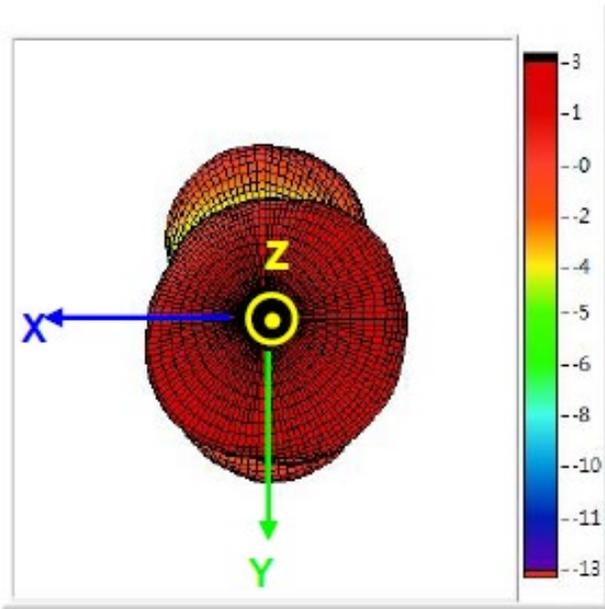
Radiation Patterns

3D Gain Patterns @ 5150 MHz



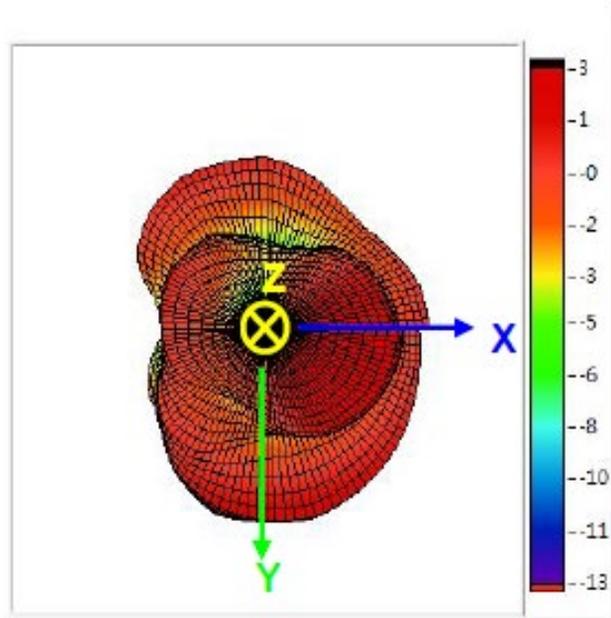
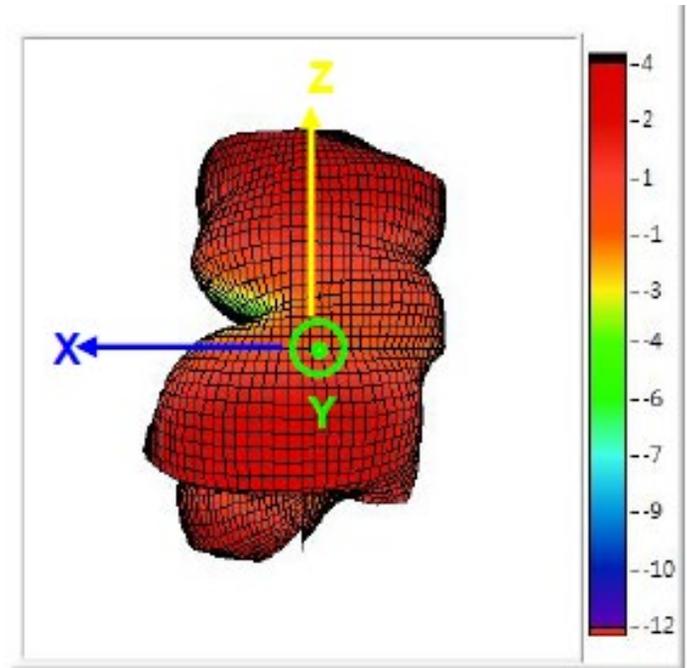
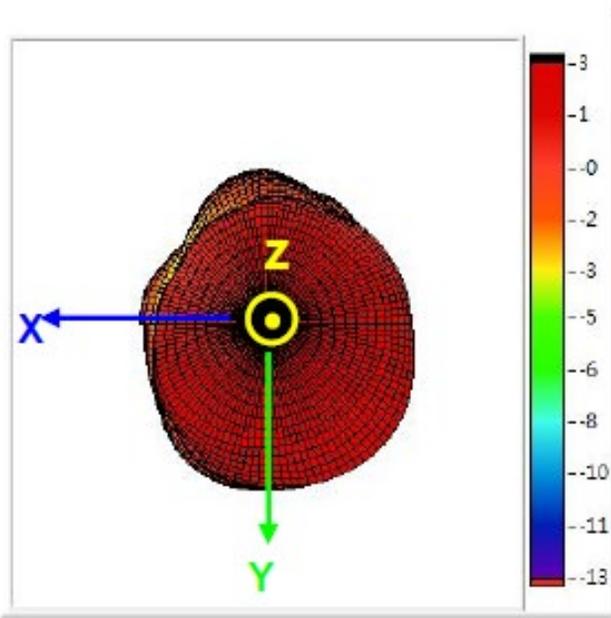
Radiation Patterns

3D Gain Patterns @ 5500 MHz



Radiation Patterns

3D Gain Patterns @ 5850 MHz





Efficiency Table

Frequency(GHz)	4.900	4.950	5.000	5.050	5.100	5.150	5.200	5.250	5.300	5.350	5.400
Efficiency(dB)	-0.87	-0.56	-1.12	-1.11	-1.14	-0.84	-0.47	-0.51	-0.52	-0.71	-1.12
Efficiency(%)	81.85	87.9	77.27	77.45	76.91	82.41	89.74	88.92	88.72	84.84	77.27
Gain(dBi)	4.07	4.41	3.84	3.69	3.36	3.58	3.81	3.65	3.53	3.60	3.19

Frequency(GHz)	5.450	5.500	5.550	5.600	5.650	5.700	5.750	5.800	5.850	5.900
Efficiency(dB)	-1.61	-1.19	-1.00	-0.74	-0.96	-1.00	-1.04	-0.98	-0.93	-0.90
Efficiency(%)	69.02	76.03	79.43	84.33	80.17	79.43	78.7	79.8	80.76	81.28
Gain(dBi)	2.66	3.46	3.92	3.58	3.26	3.36	3.43	3.09	3.30	3.75

Efficiency Vs Frequency

