

NANP120X18AUC0R810G6F

5G NR LTE PCB Antenna



Description

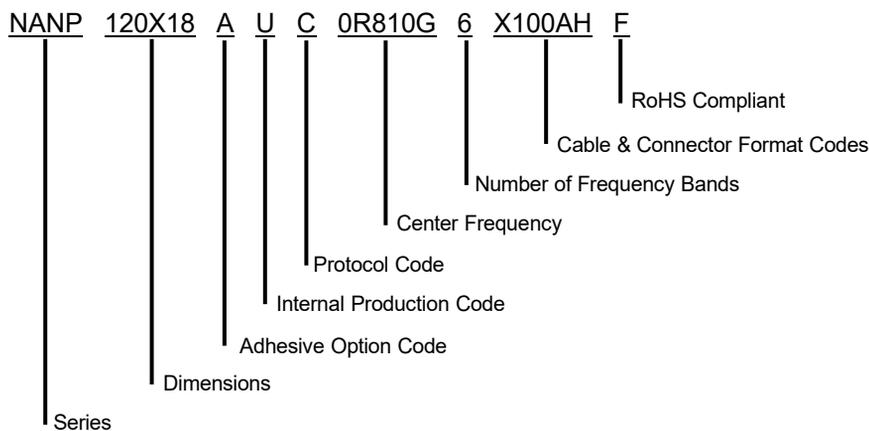
The NANP120X18AUC0R810G6F is a Rigid PCB antenna designed for LTE applications. It operates within the frequency ranges of 617 MHz ~ 5150 MHz, making it perfect for use in Transportation, Autonomous/ UAVs Industrial IoT and Trackers/CPEs



Features

- 5G NR LTE Protocol
- Customizable cable type and cable length
- Rigid PCB Type
- RoHS compliant

Part Number Breakdown



Standard Part Number Listing

Part Number	Connector	Cable Length	Cable Type	Cable Orientation
NANP120X18AUC0R810G6X100AHF	IPEX MHF	100 mm	RF1.13	Horizontal

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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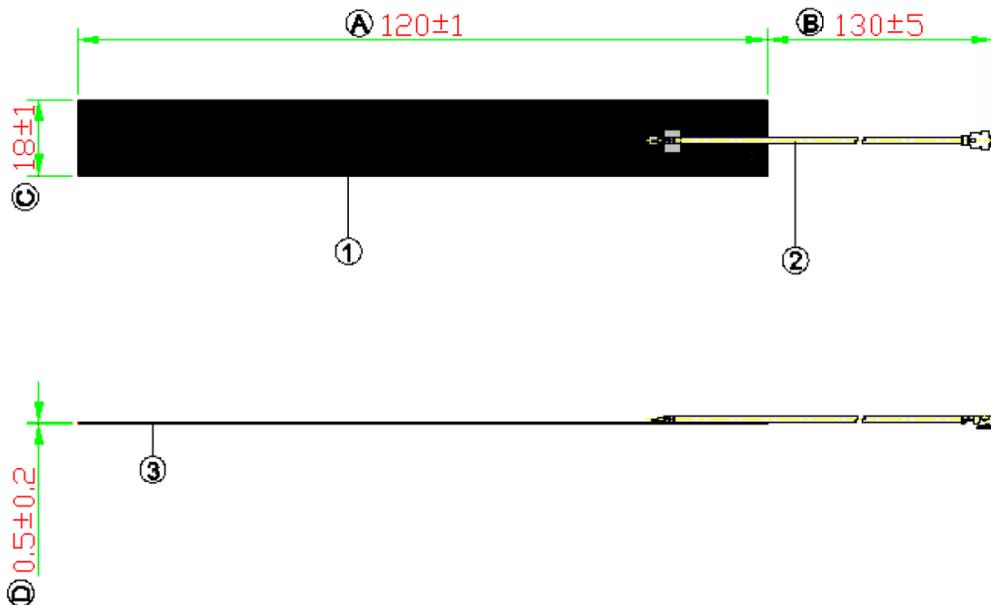
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Specifications

Electrical						
# Of Frequency Range	Frequency Range 1	Frequency Range 2	Frequency Range 3	Frequency Range 4	Frequency Range 5	Frequency Range 6
Frequency Range	617~960 MHz	1710~2170 MHz	2300~2400 MHz	2500~2700 MHz	3400~5000 MHz	5150~5925 MHz
Efficiency (%)	66	68	72	69	51	55
Average Gain (dBi)	-1.9	-1.7	-1.5	-1.6	-3.0	-2.7
Peak Gain (dBi)	2.0	2.9	3.0	2.6	2.7	2.9
Polarization	Linear					
Impedance	50Ω					
Mounting method	Adhesive					
Environmental						
Operating Temperature	-40 ~+85 °C					
Storage Temperature	-5 ~+40 °C					
Relative Humidity	10~70%					
RoHS Compliant	Yes					

Dimensions

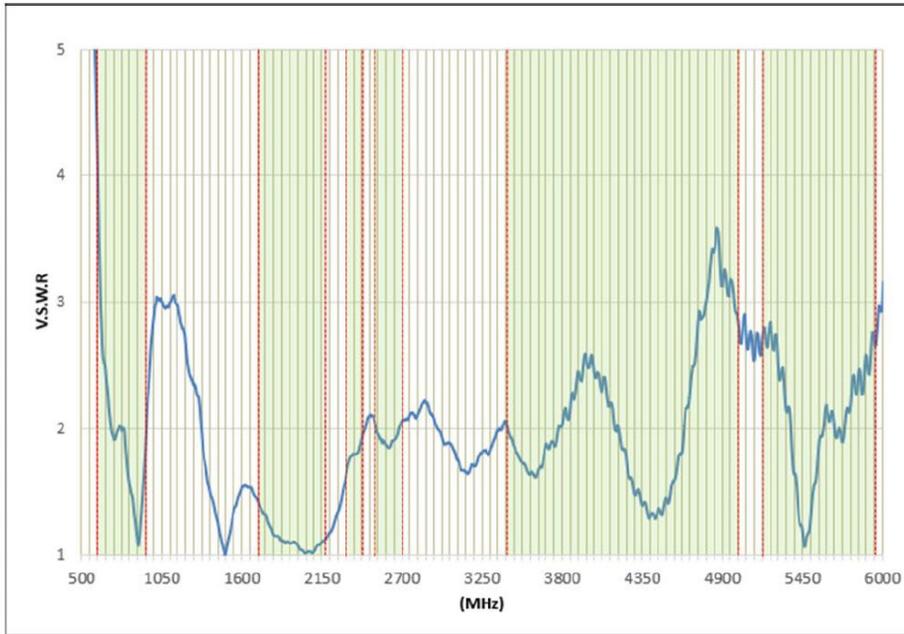


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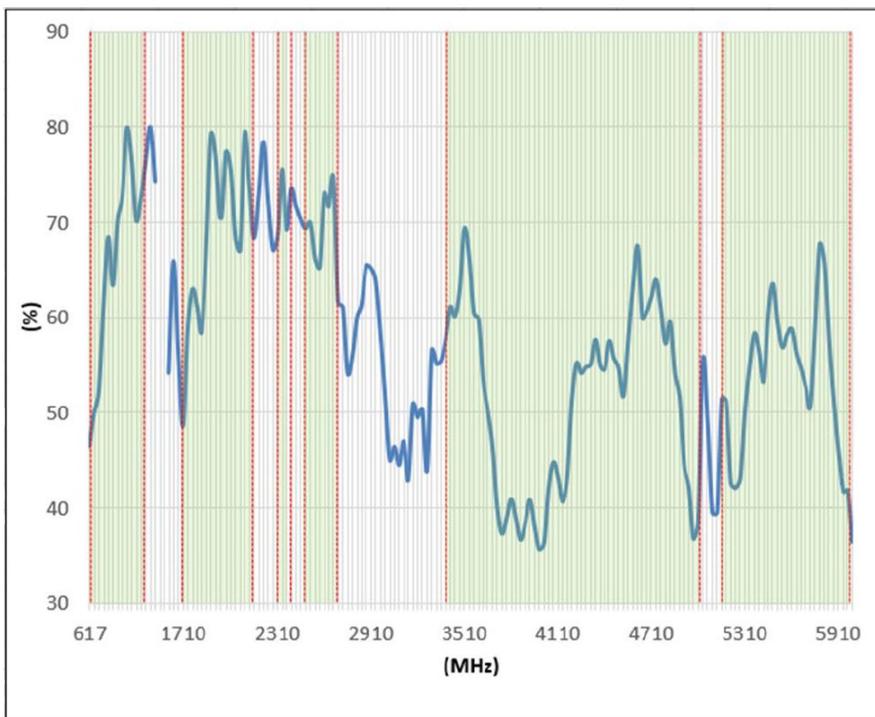
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VSWR



Efficiency %

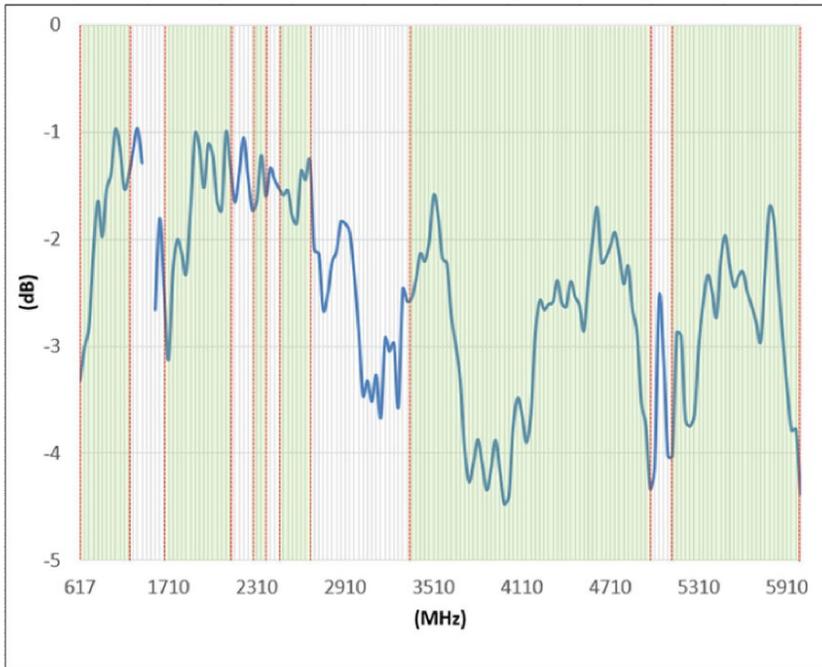


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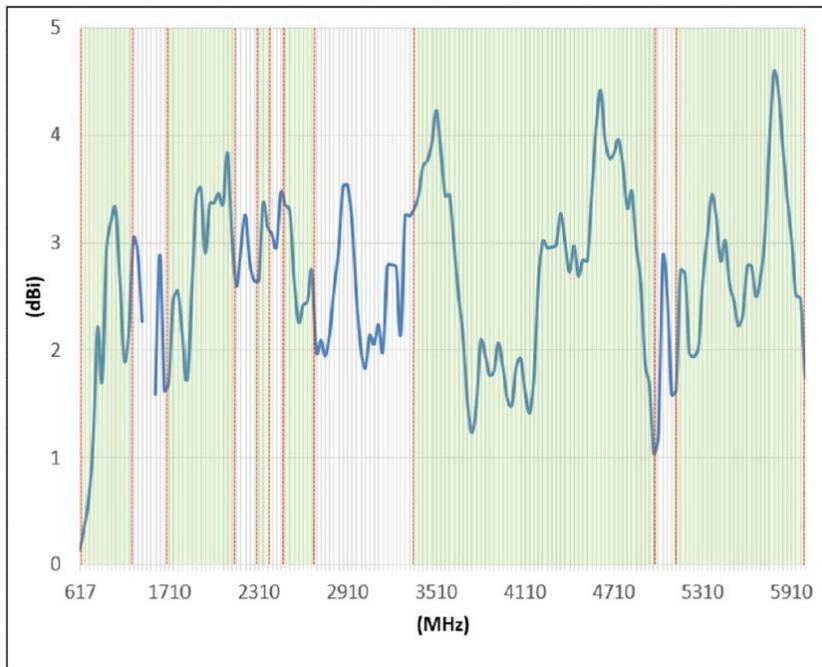
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Average Gain(dB)



Peak Gain (dBi)



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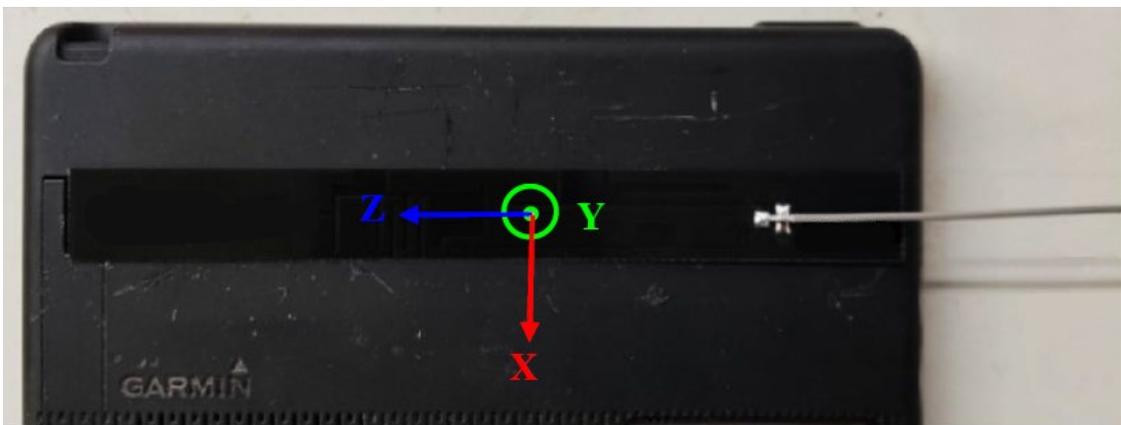


Radiation Patterns

The antenna radiation patterns are measured in a 3D Anechoic Chamber. The measurement setup is as shown below:



3D Radiation Patterns

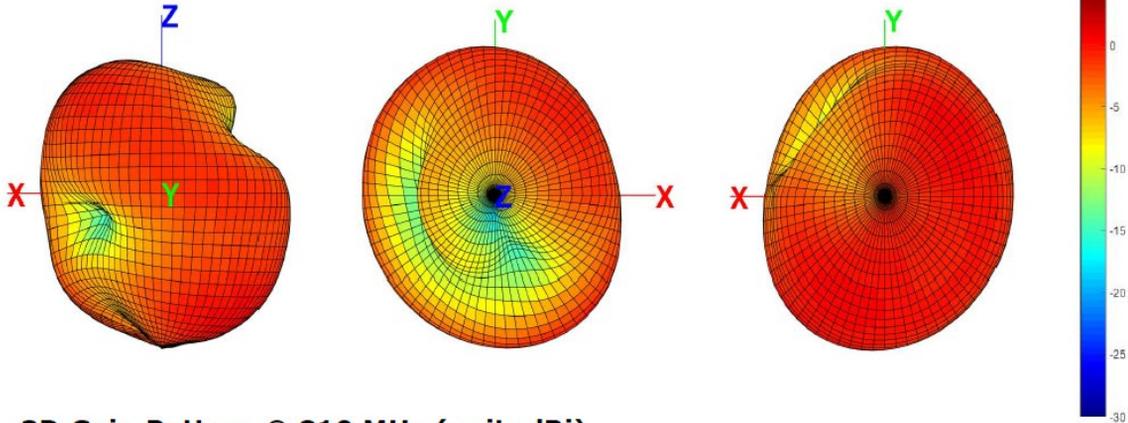


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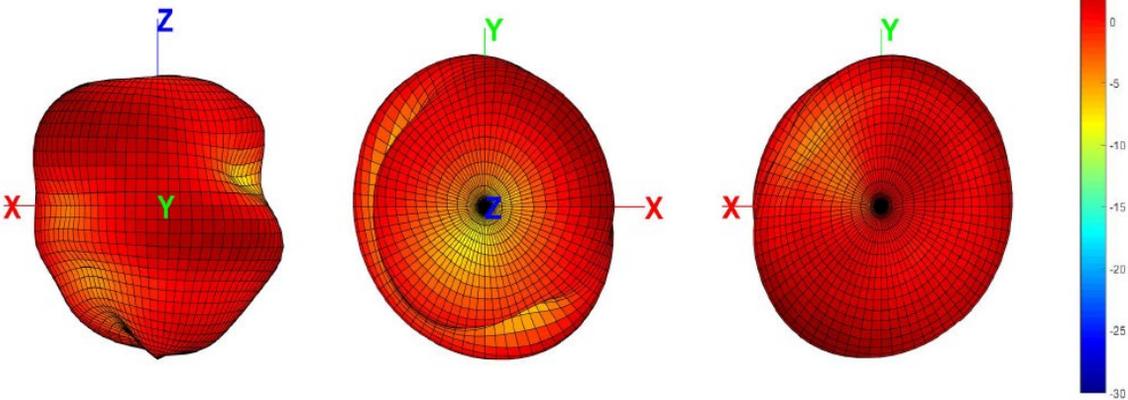
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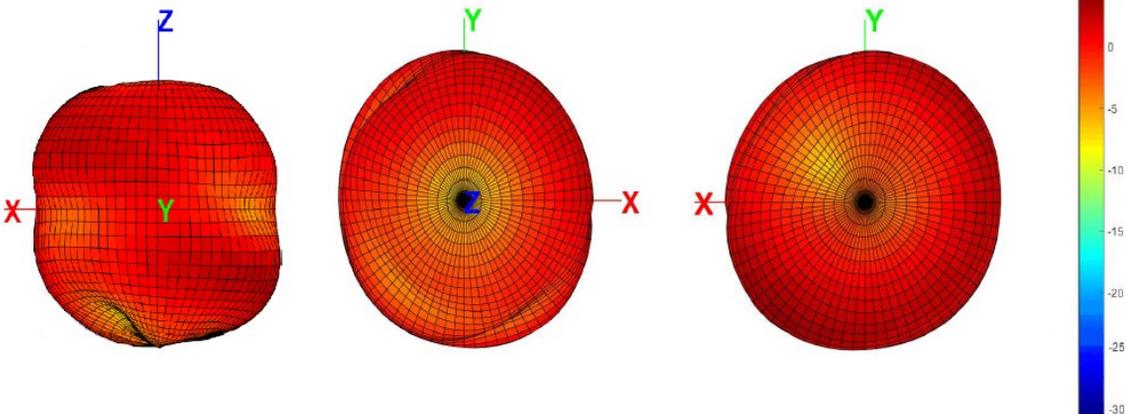
3D Gain Pattern @ 660 MHz (unit: dBi)



3D Gain Pattern @ 810 MHz (unit: dBi)



3D Gain Pattern @ 960 MHz (unit: dBi)

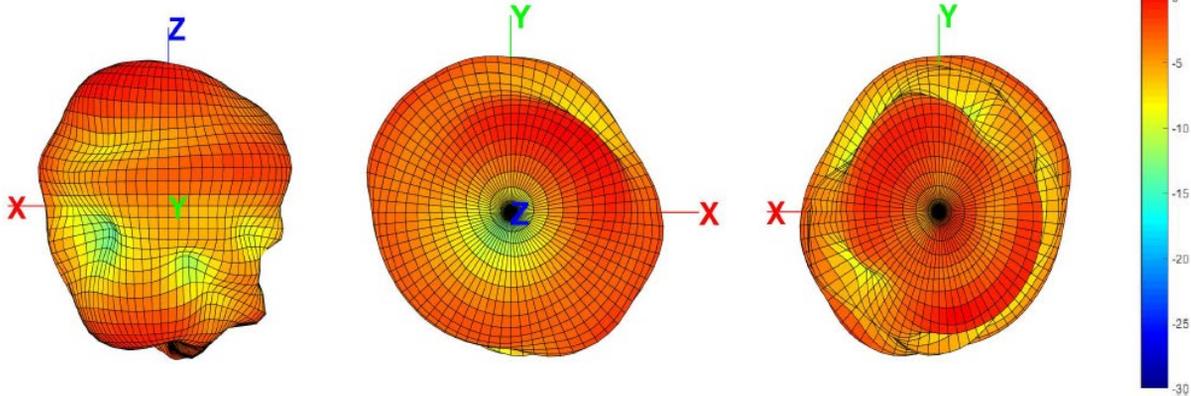


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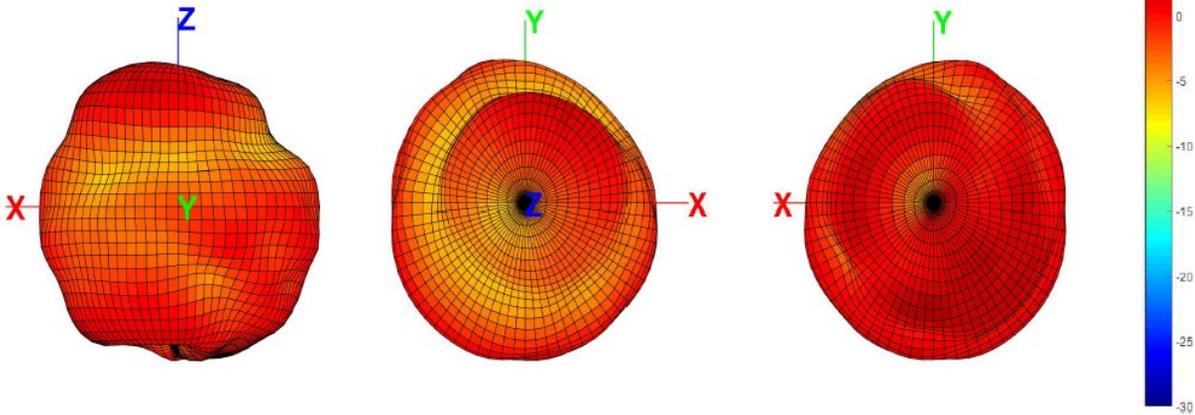
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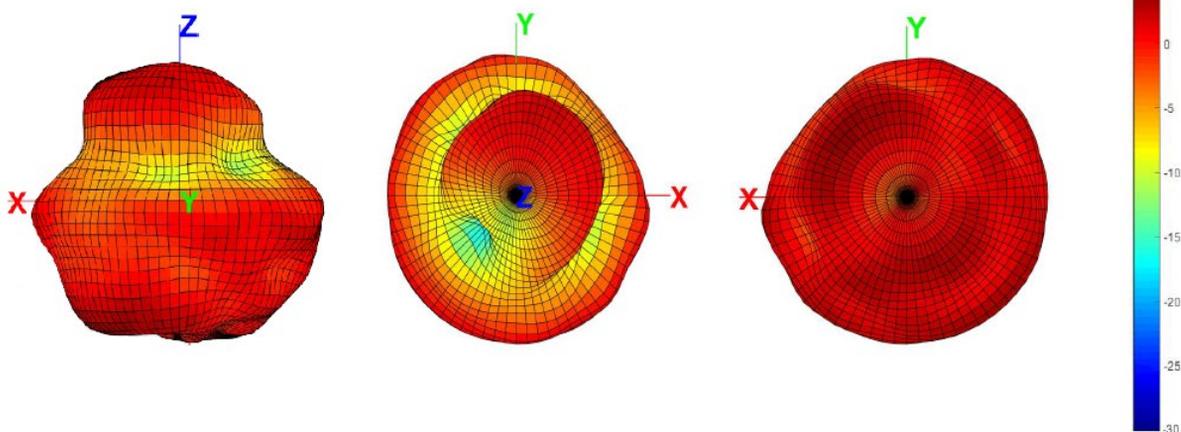
3D Gain Pattern @ 1710 MHz (unit: dBi)



3D Gain Pattern @ 1950 MHz (unit: dBi)



3D Gain Pattern @ 2160 MHz (unit: dBi)

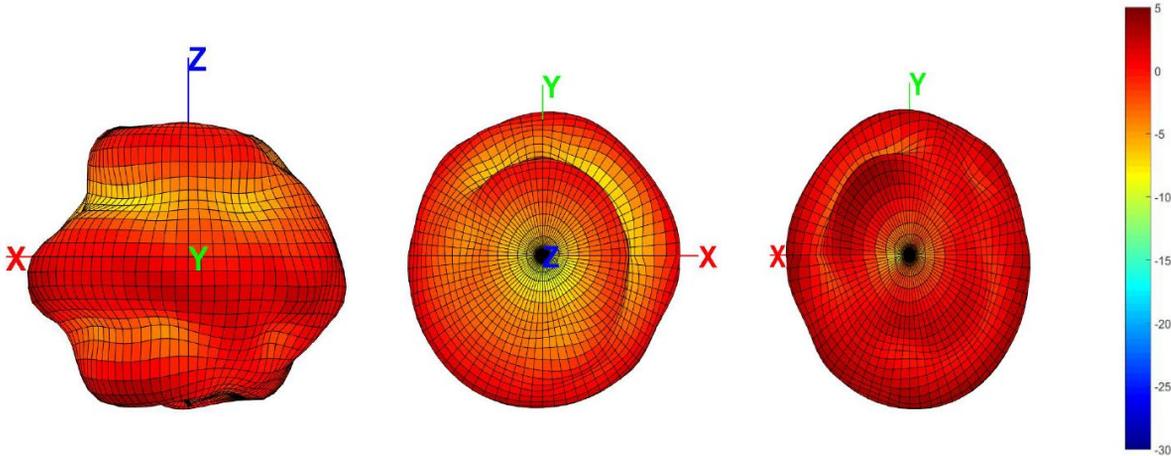


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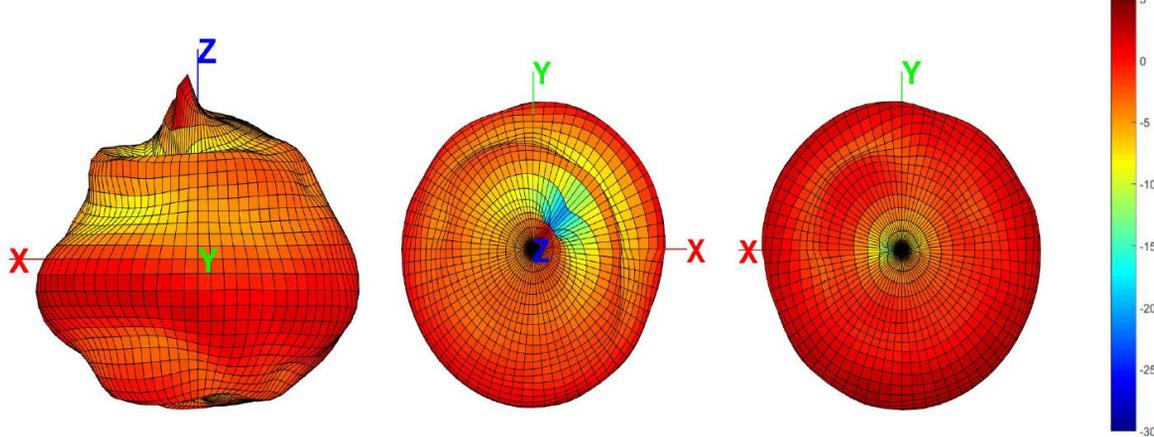
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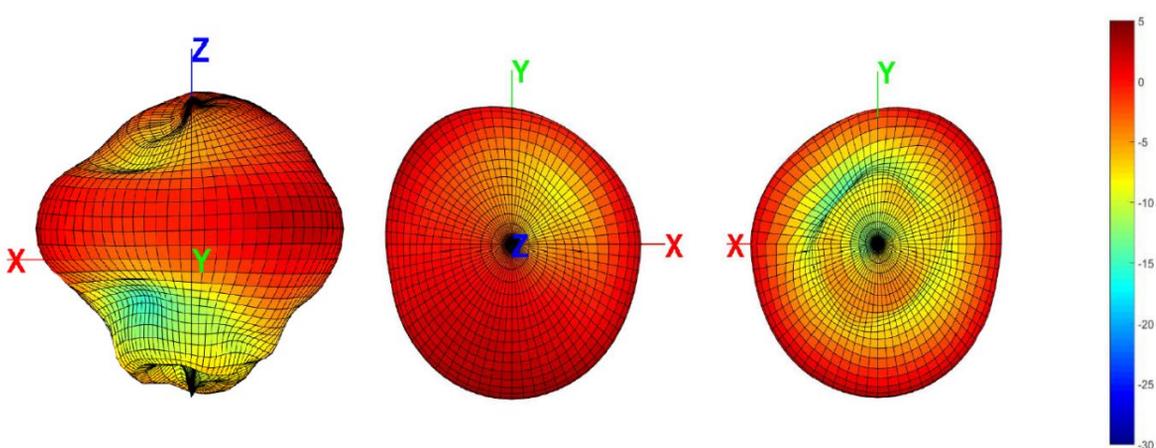
3D Gain Pattern @ 2340 MHz (unit: dBi)



3D Gain Pattern @ 2490 MHz (unit: dBi)



3D Gain Pattern @ 3600 MHz (unit: dBi)

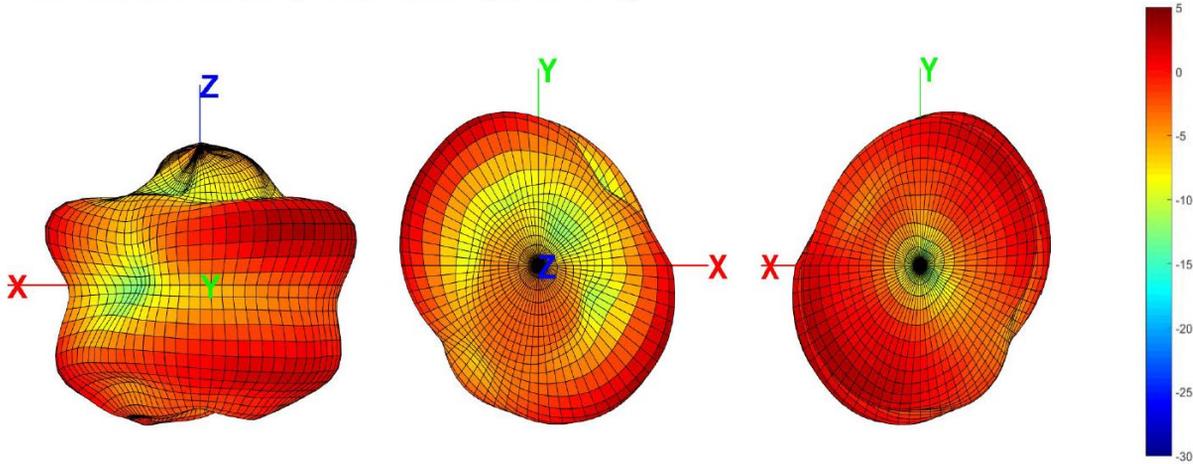


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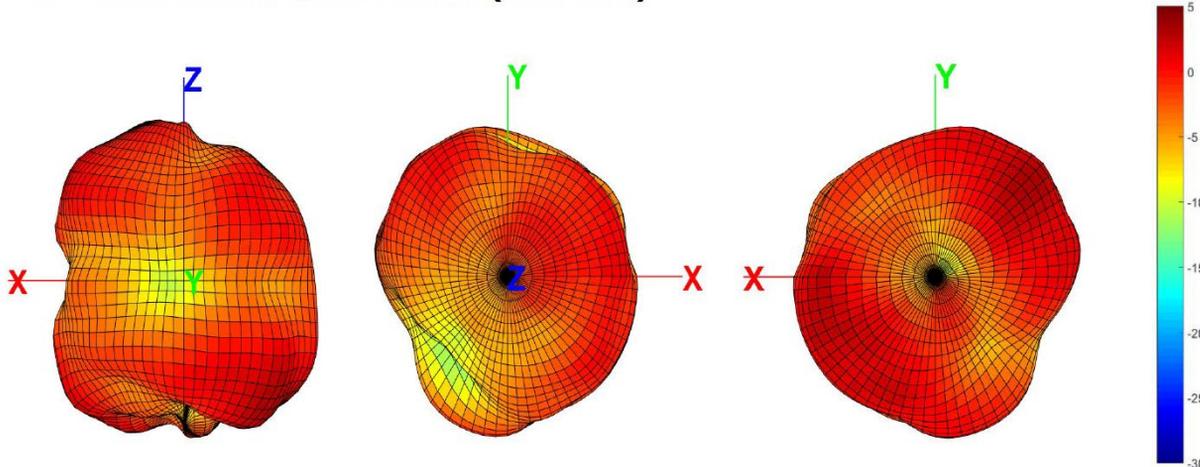
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3D Gain Pattern @ 4500 MHz (unit: dBi)



3D Gain Pattern @ 5160 MHz (unit: dBi)



3D Gain Pattern @ 5550 MHz (unit: dBi)

