

NANF66X20AUCG0R824G4F

GPS/4G LTE/5G NR FPC Antenna



Features

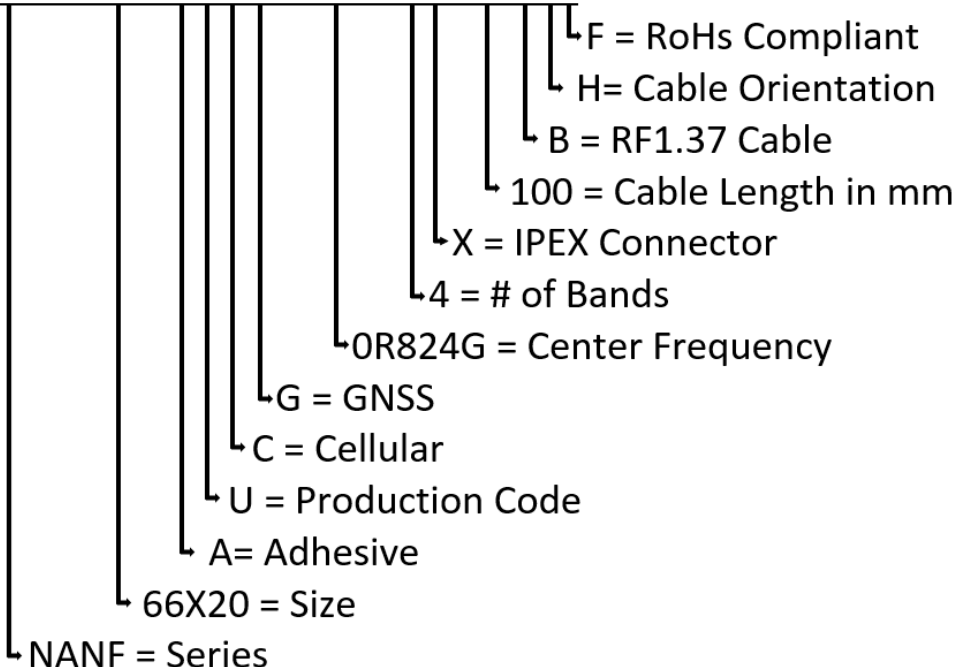
- Support 4G LTE/5G NR 698-2690MHz, 3500-3800MHz
- Support GPS L1:1575.42MHz Customizable Cable Length and Type
- RoHS & REACH Compliant

Applications

- Miniature IOT Sensors and Trackers
- Electric Vehicle Charging Station
- Remote Monitoring

Part Number Breakdown

NANF66X20AUCG0R824G4X100BHF



Standard Part Number Breakdowns

Part Numbers	Connector Type	Cable Length	Cable Type
NANF66X20AUCG0R824G4X100BHF	IPEX MHF (X)	100 mm	RF1.37 (B)

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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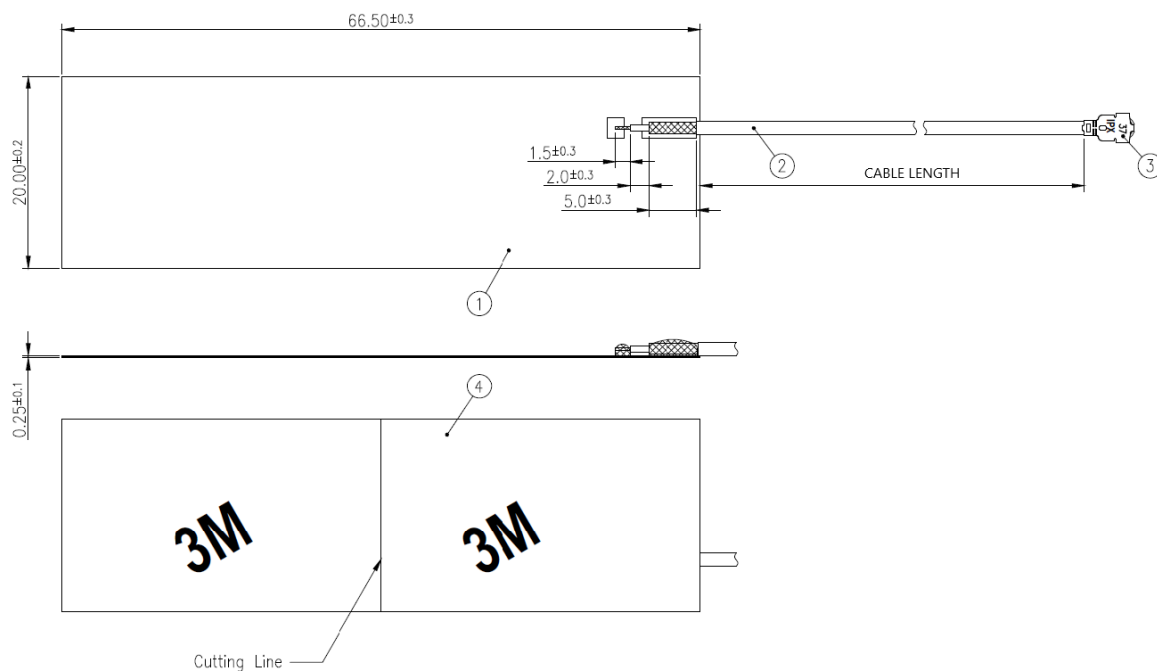
GPS/4G LTE/5G NR FPC Antenna



Specifications

Electrical								
Application Bands	LTE 700	GSM 850/900	GPS L1	DCS	PCS	UMTS1	LTE2600	5G NR Band
Frequency Range (MHz)	698~824	824 ~960	1575.42	1710 ~ 1880	1850 ~ 1990	1920 ~ 2170	2300 ~ 2690	3300 ~ 3500
Efficiency (%)	33.46	40.13	57.41	68.27	60.57	59.99	61.18	46.24
Average Gain (dBi)	-4.76	-3.97	-2.41	-1.66	-2.18	-2.22	-2.13	-3.35
Peak Gain (dBi)	1.24	1.86	1.17	4.84	6.34	6.34	3.38	5.27
V.S.W.R	< 3.5							
Return loss (dB)	< -5							
Polarization	Linear							
Impedance	50Ω							
Environmental								
Operating Temperature	-40°C~~+85°C							
Storage Temperature	-40°C~~+85°C							
Relative Humidity	95% non-condensing							
RoHS Compliant	Yes							

Dimension Drawing



Dimensions (mm) & Mechanical

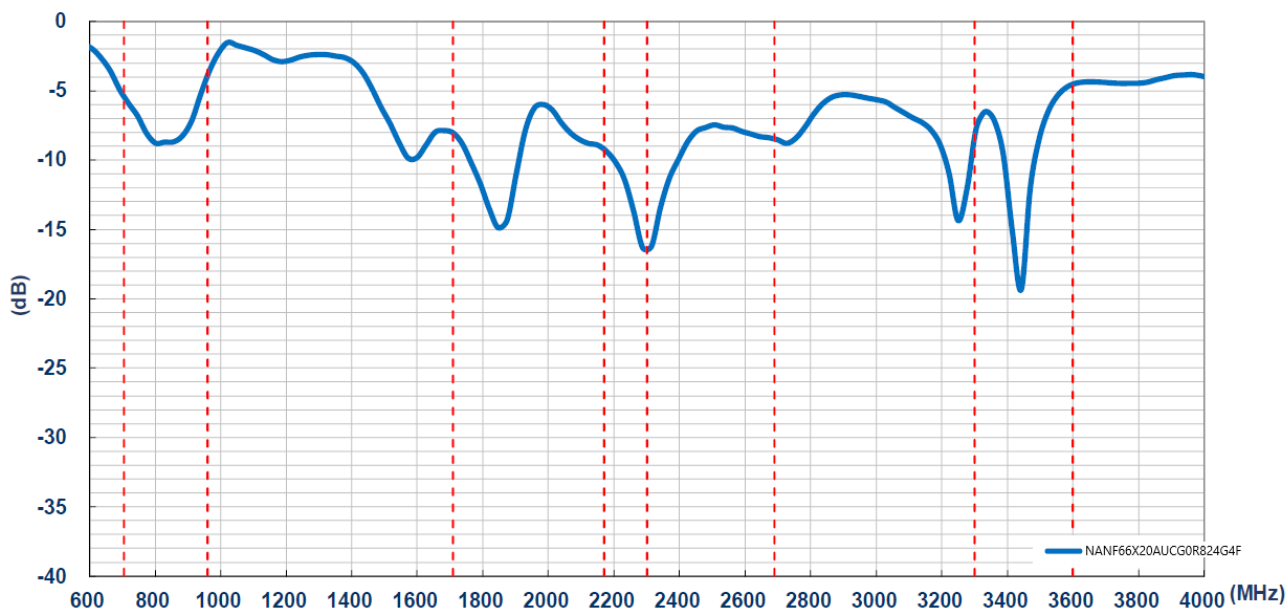
Length	66.5 ± 0.3
Width	20 ± 0.2
Thickness	0.25 ± 0.1
Mounting	Double- Sided Adhesive
Marking	

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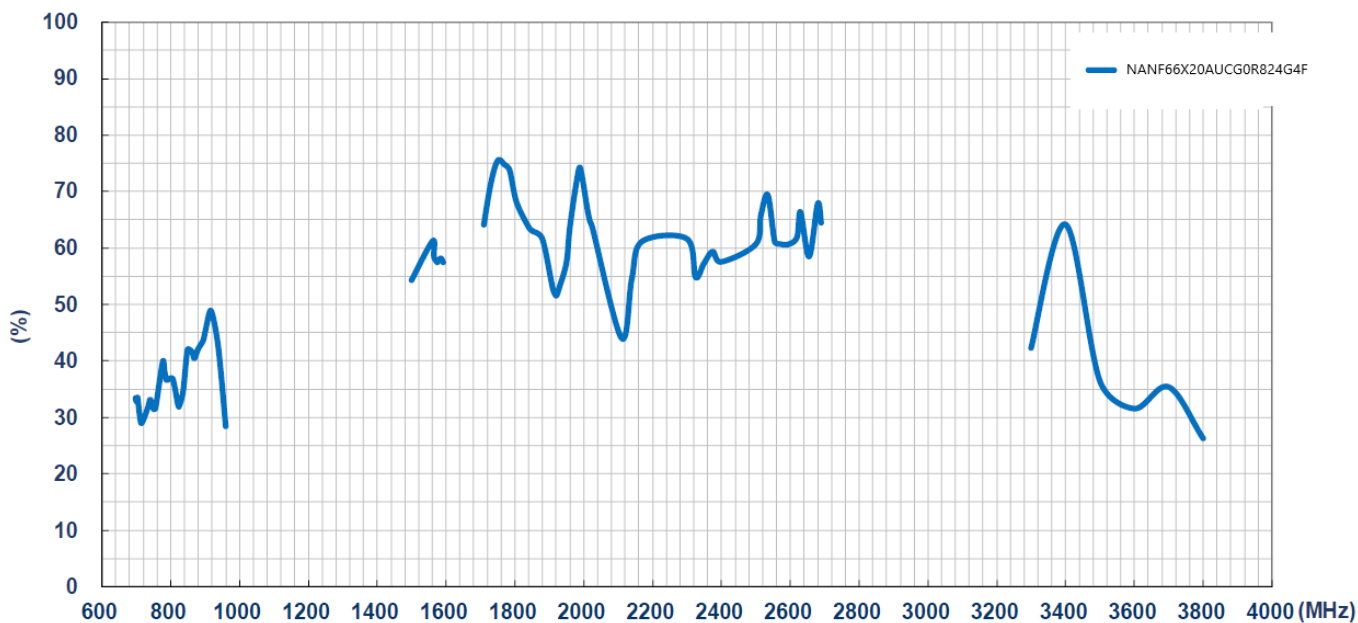
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S11 (dB)



Efficiency (%)

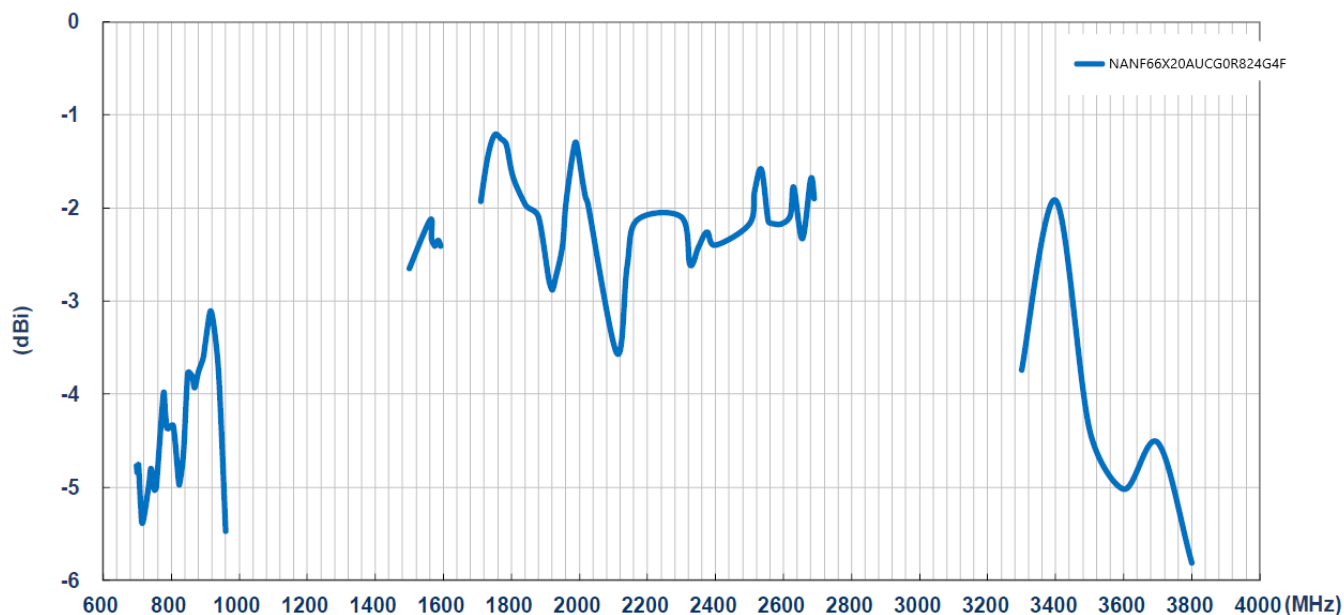


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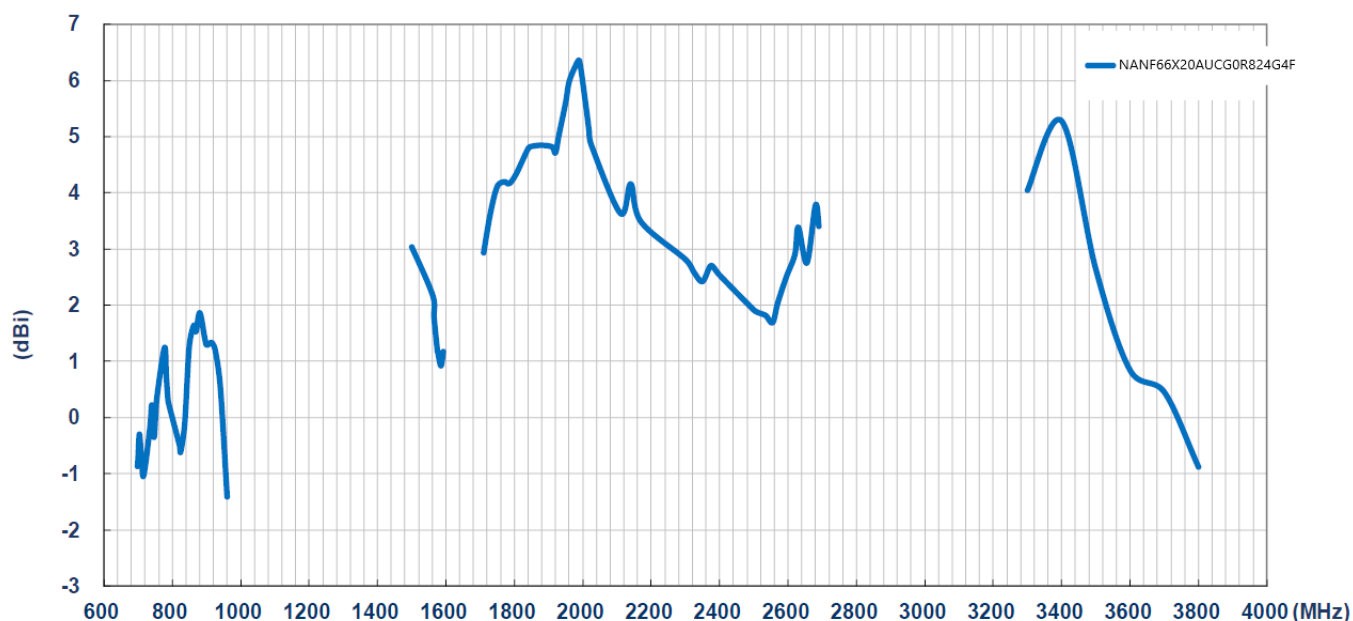
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Average Gain (dBi)

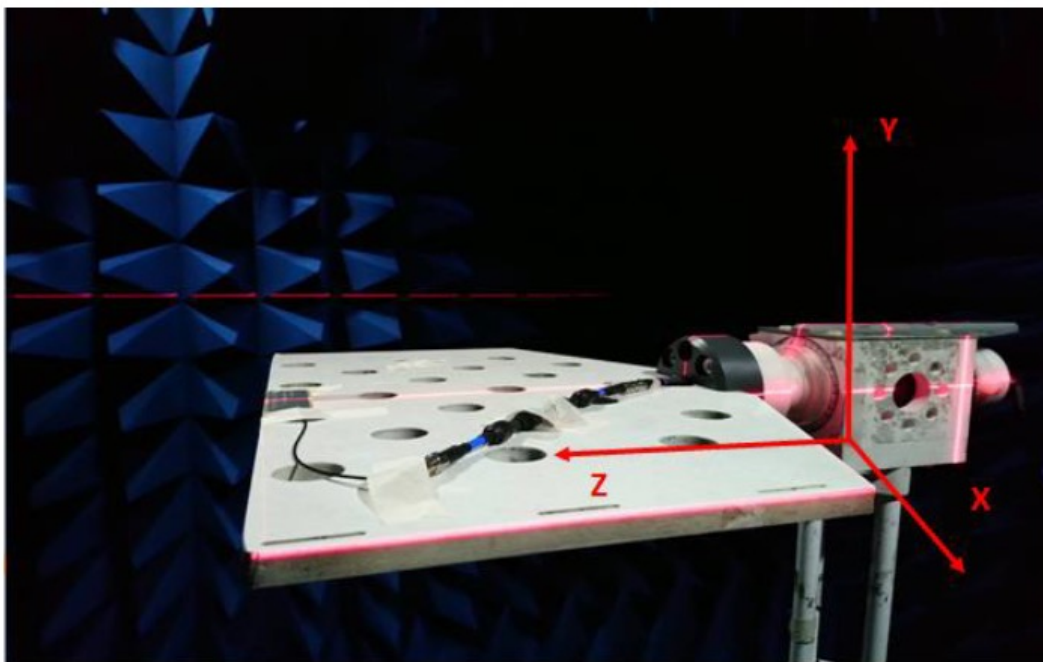


Peak Gain (dBi)



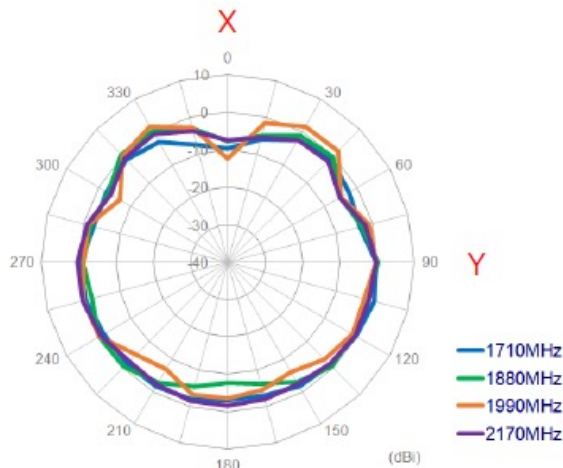
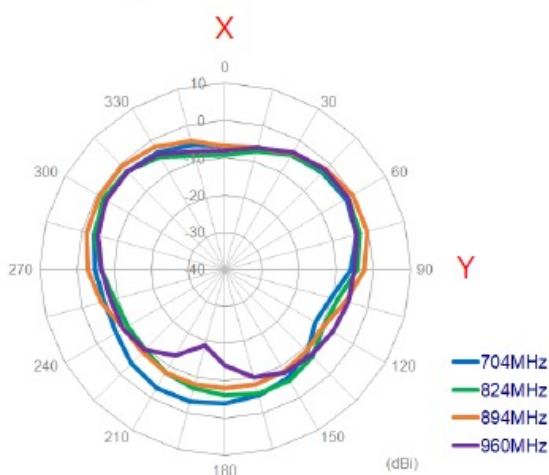
Radiation Patterns

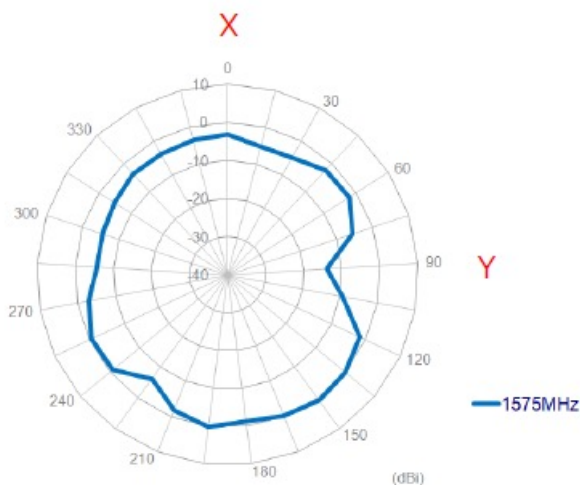
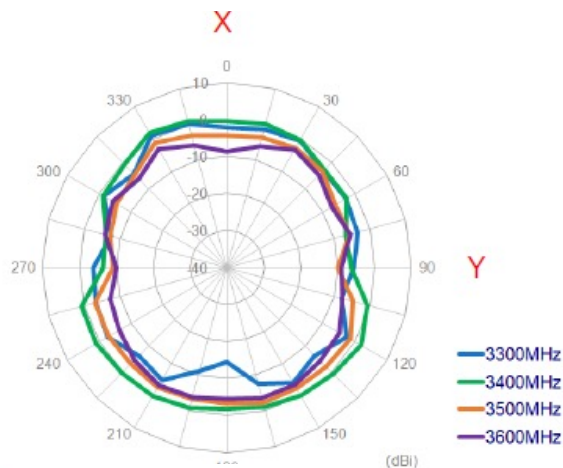
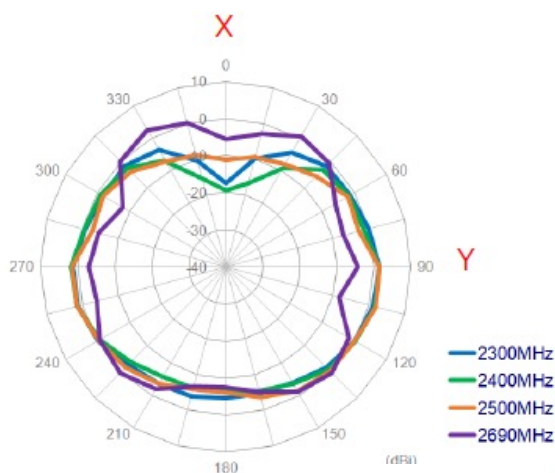
The antenna radiation patterns are measured in 3D Anechoic Chamber. The measurement setup is as shown below:



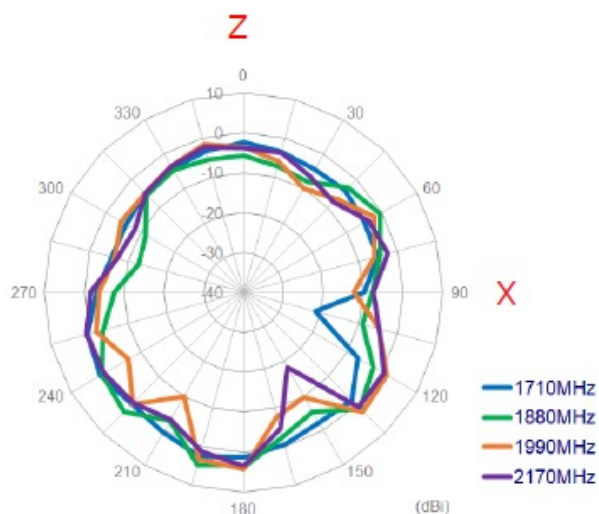
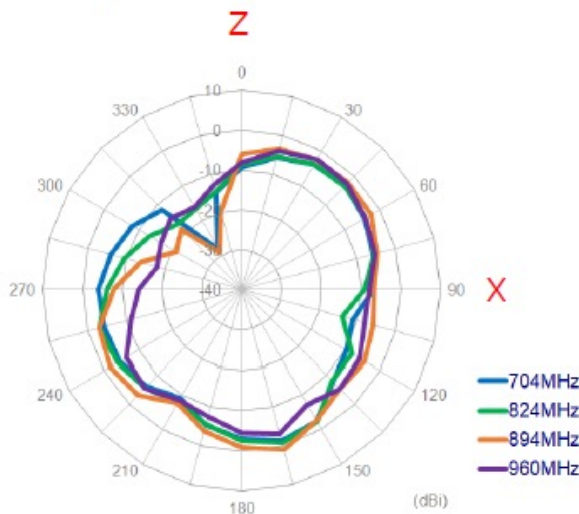
2D Radiation Patterns:

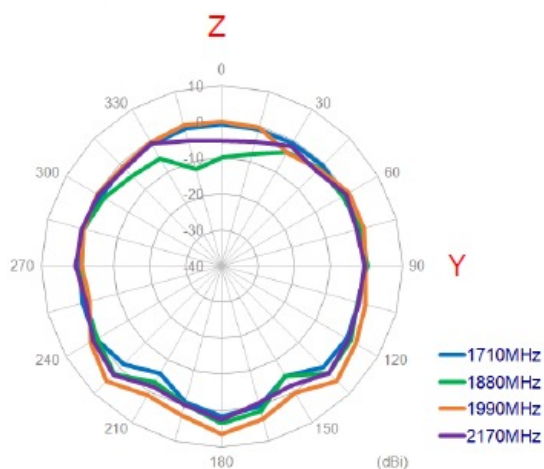
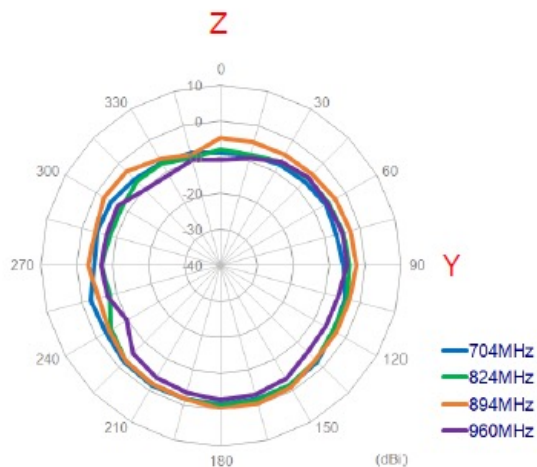
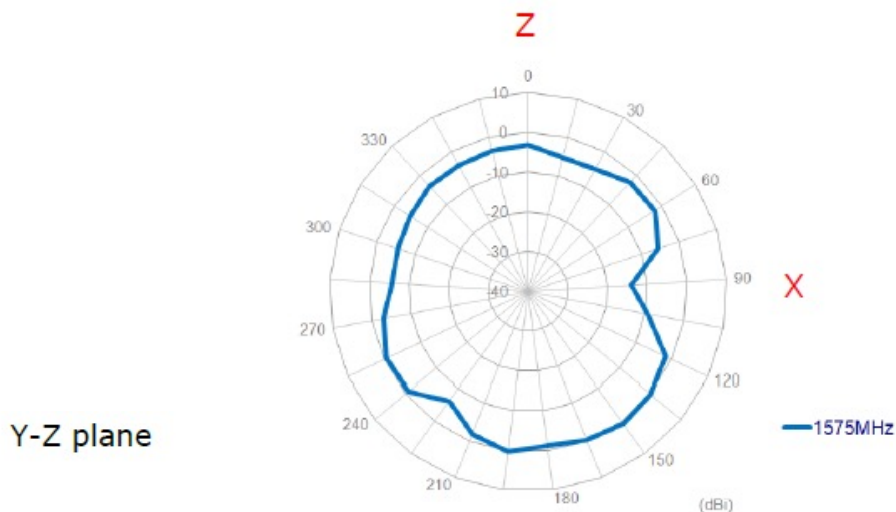
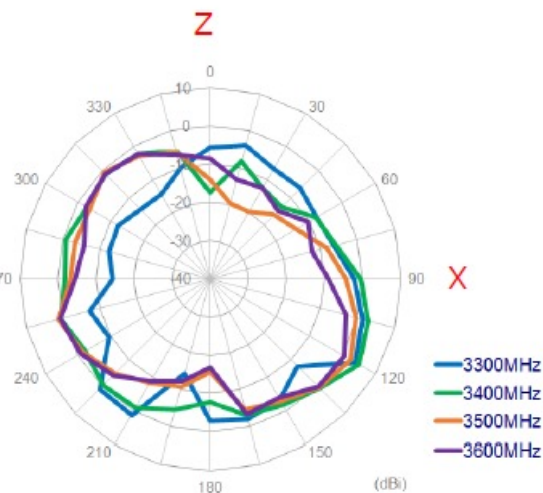
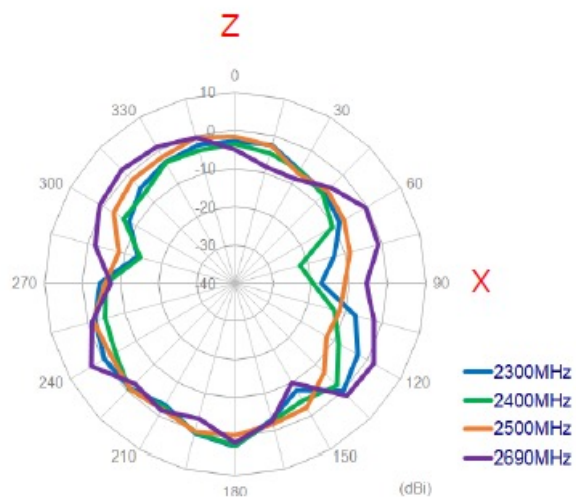
X-Y plane

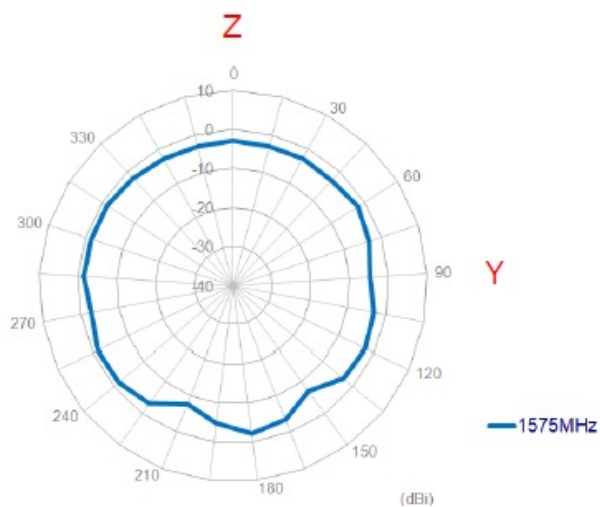
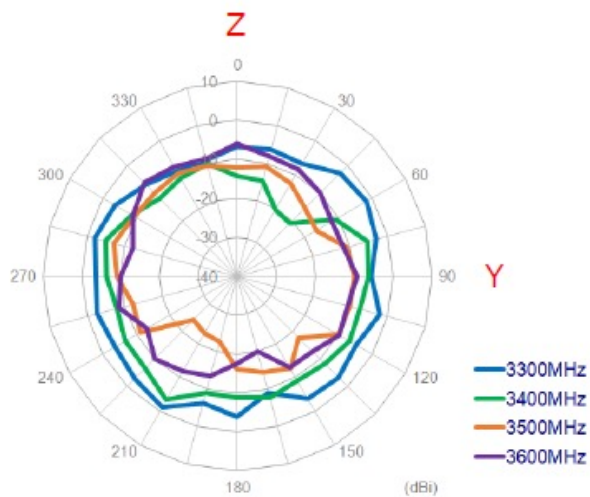
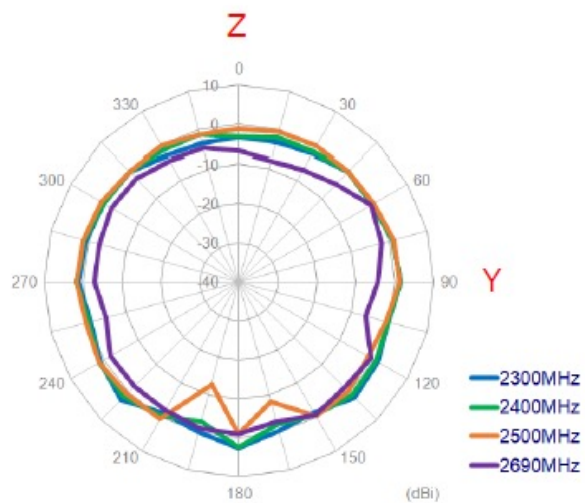




X-Z plane

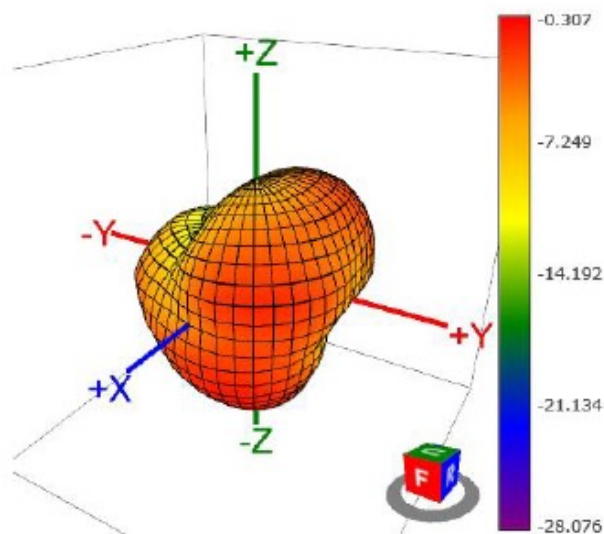




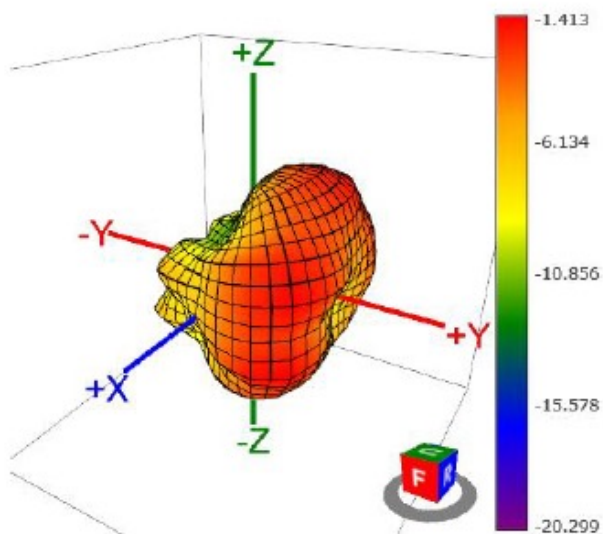


3D Radiation Patterns:

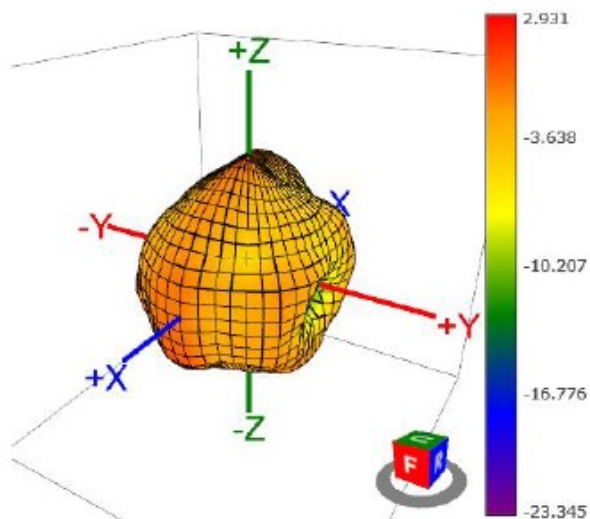
704MHz



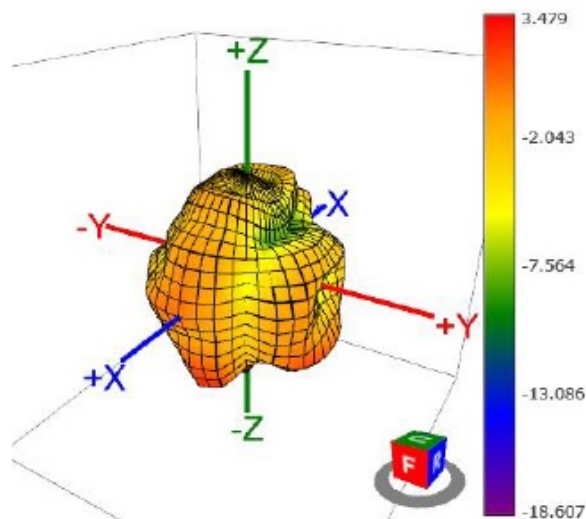
960MHz



1710MHz

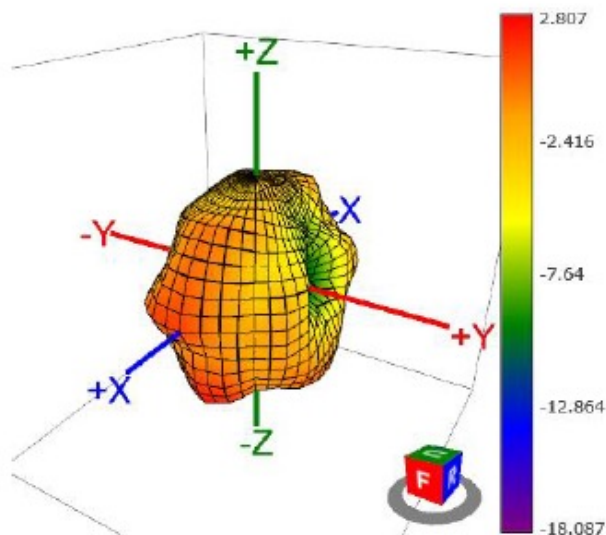


2170MHz

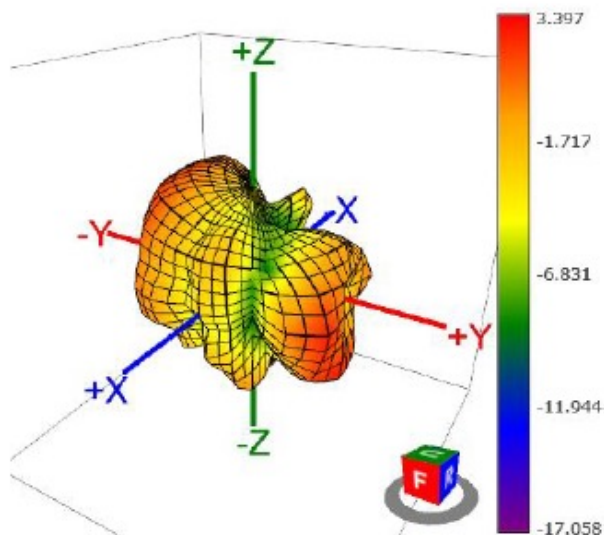


3D Radiation Patterns:

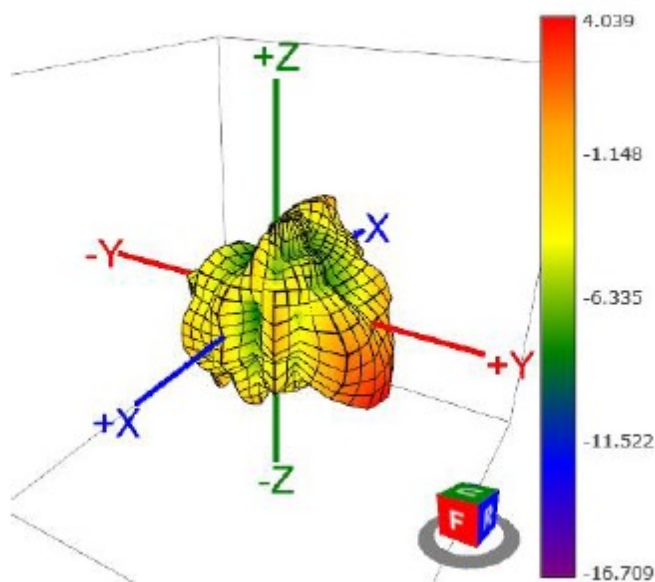
2300MHz



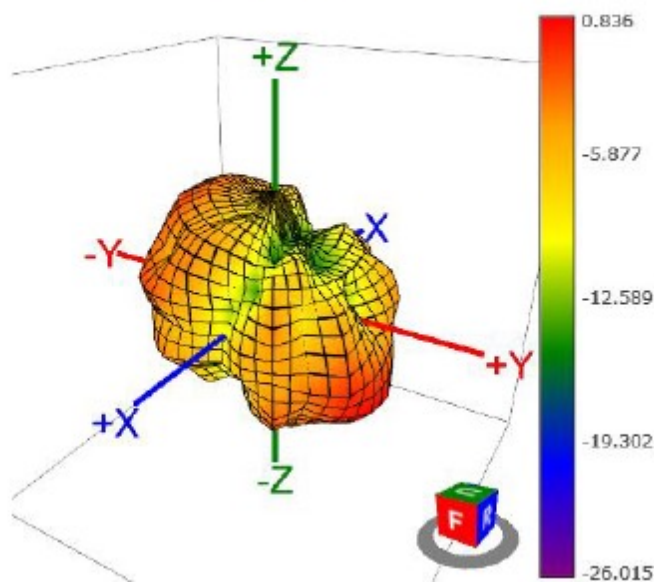
2690MHz



3300MHz



3600MHz



3D Radiation Patterns:

