

NANE24X136WTMC617M6F

5G LTE External Antenna



Description

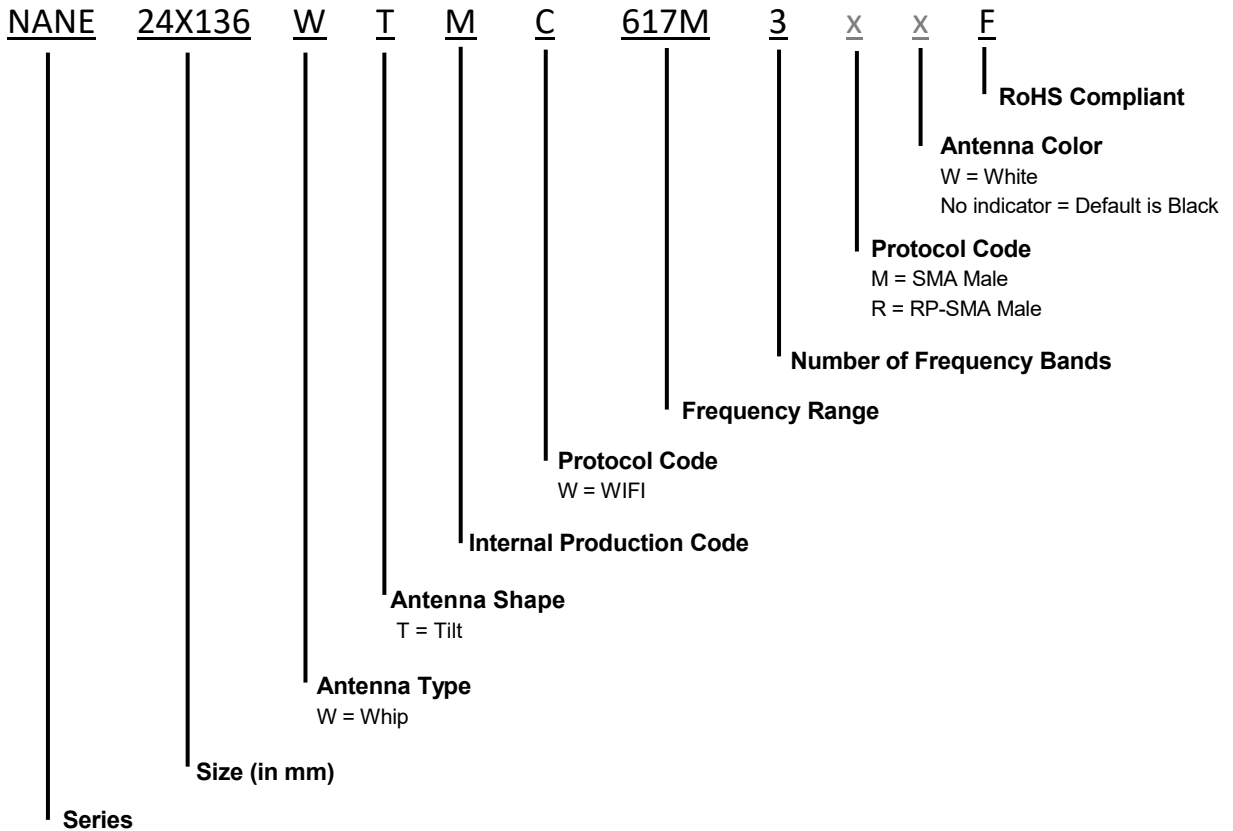
NANE24X136WTMC617M6F is an External Whip antenna designed for LTE/Cellular applications. It operates within the frequency ranges of 617 MHz - 7125MHz and making it perfect for IoT, CBRS Private networks, Router, Gateways, Public Safety networks and C-Band applications

Features

- Supports Wide LTE Bandwidth: 617 ~ 7125 MHz
- Up to 90° flexibility
- RoHs Complaint



Part Number Breakdown



NANE24X136WTMC617M6F

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Part Number Options

Part Number	Protocol	Connector	Antenna Color
NANE24X136WTMC617M6MWF	LTE/Cellular	SMA Male	White
NANE24X136WTMC617M6MF	LTE/Cellular	SMA Male	Black
NANE24X136WTMC617M6RF	LTE/Cellular	RP-SMA Male	Black

The table represents assembled part numbers available on www.niccomp.com. For options not listed above please contact NIC

Specifications

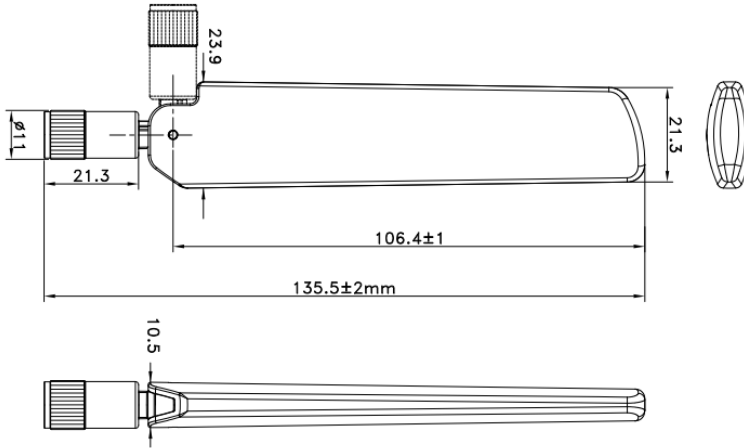
Electrical						
Frequency Range (MHz)	617 ~ 960	1710~2690	3300~4200	4400~5000	5150~5850	5925~7125
Peak Gain (dBi)	2.7	3.8	3.0	3.2	2.8	3.5
Average Gain (dBi)	-2.7	-1.8	-2.2	-3.0	-3.0	-3.4
Efficiency (%)	54	67	62	52	50	46
VSWR	2.5	2.1	1.6	1.8	1.9	2.0
Polarization	Linear					
Radiation	Omni directional					
Max Power	1 W					
Electrical Type	Dipole					
Impedance	50Ω					
Environmental						
Operating Temperature -	-30°C~+70°C					
Weight	18 g					
Antenna Color	Black					
RoHS Compliant	Yes					

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Dimensions



Antenna Orientation

This antenna is characterized in 90 degrees bent antenna orientations as shown below. The antenna orientation characterizes use of an antenna attached to enclosure-mounted connector which is connected by cable to the VNA. The 90 degree bent orientations represent the most common end-product use cases. The charts on the following pages represent data taken with the antenna in free space without ground plane.



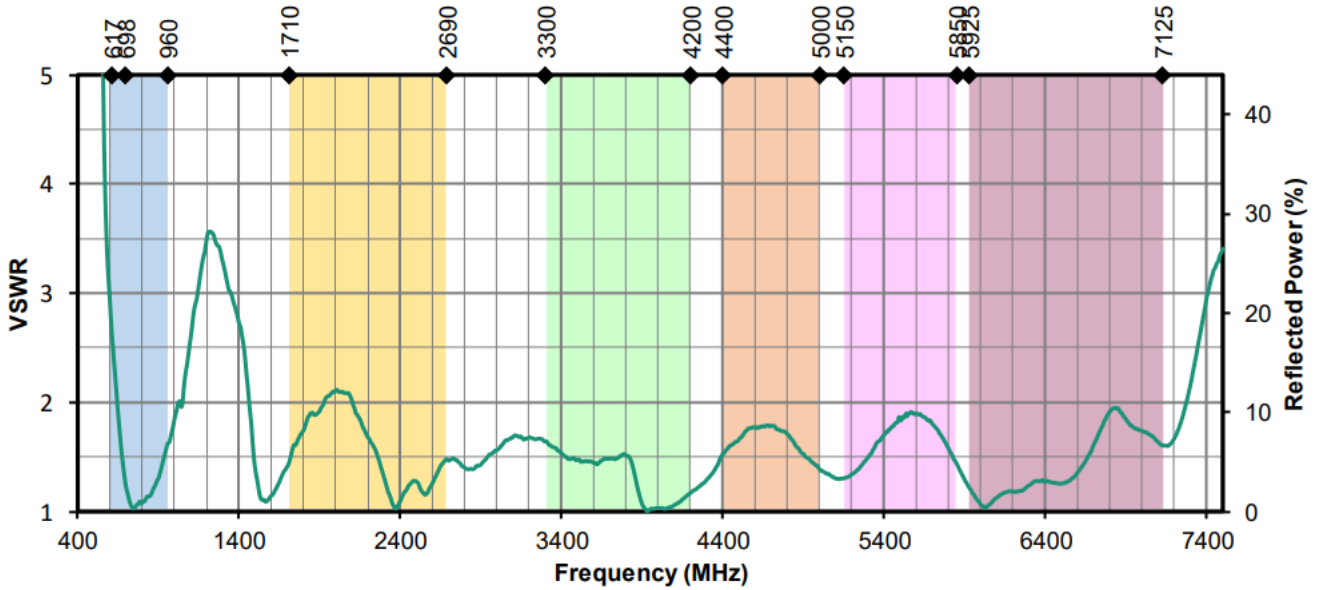
Bent 90 degrees, without ground plane

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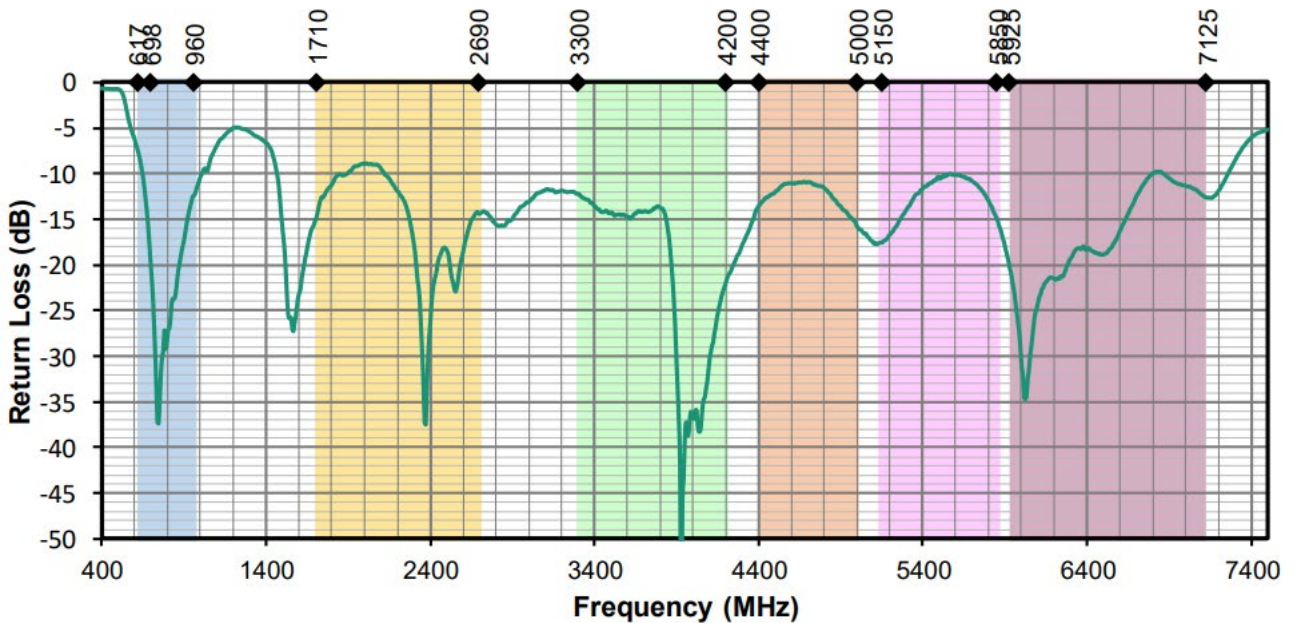
5G LTE External Antenna



VSWR



Return Loss

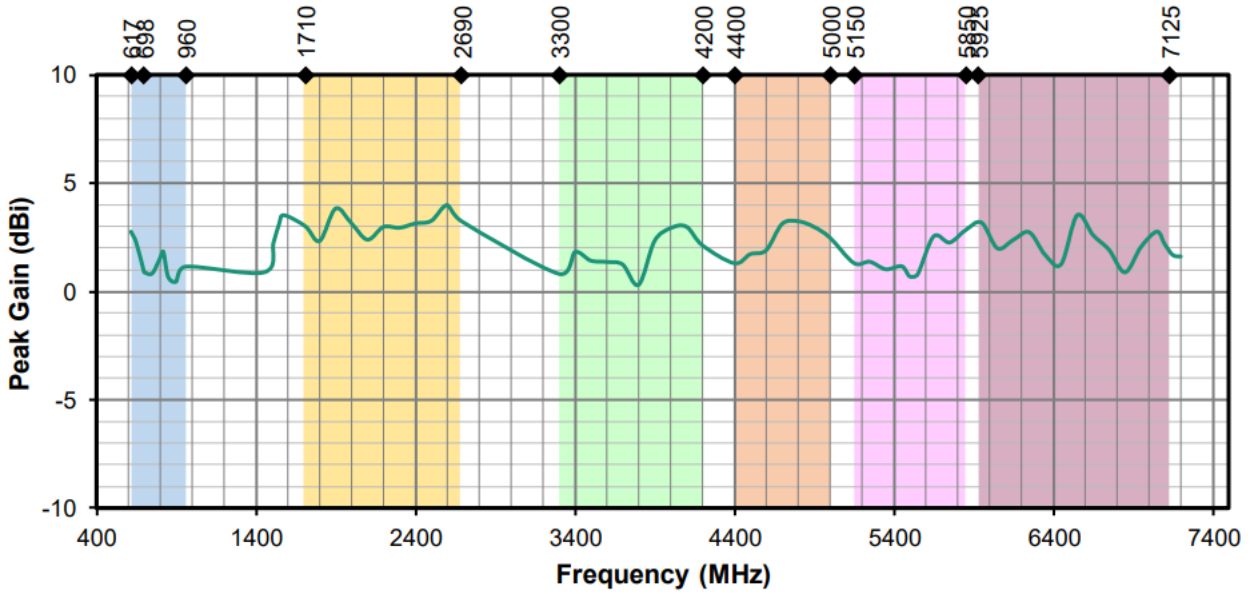


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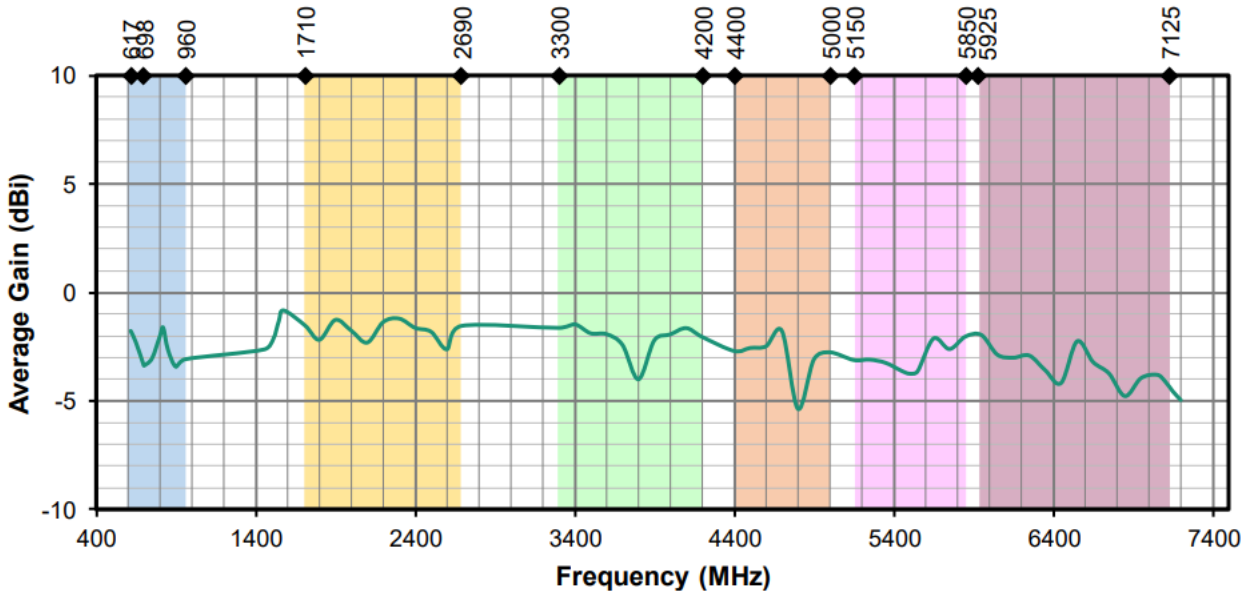
5G LTE External Antenna



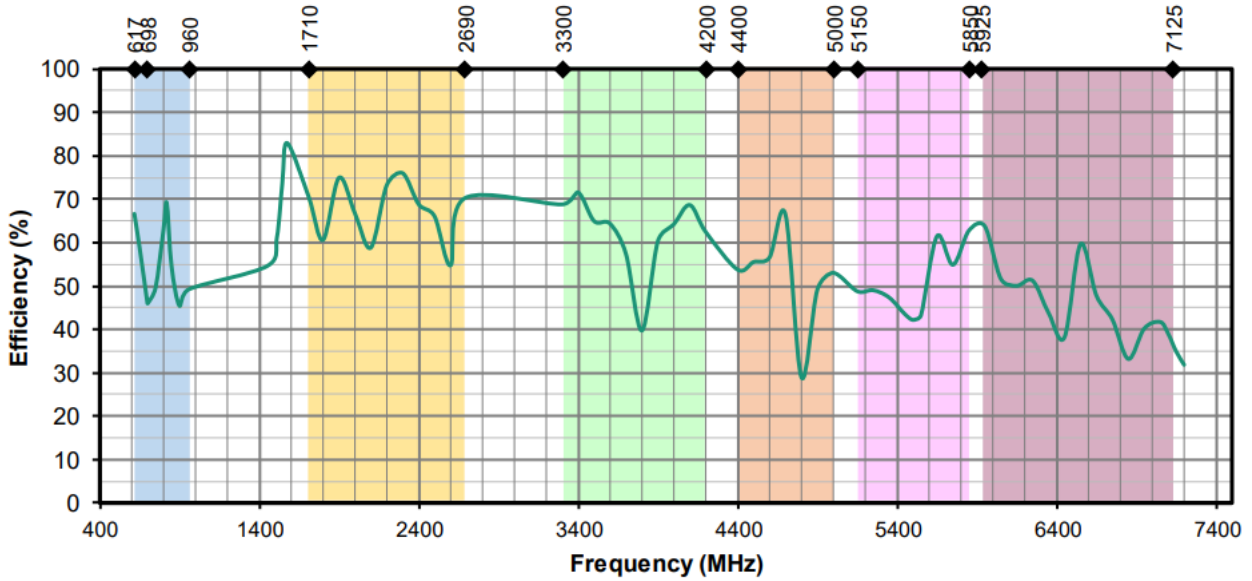
Peak Gain



Average Gain



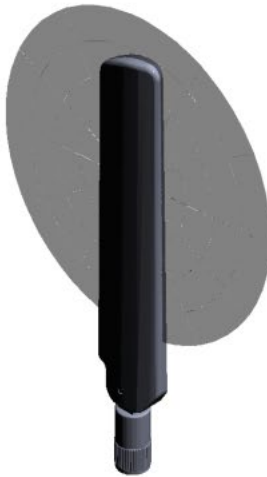
Radiation Efficiency



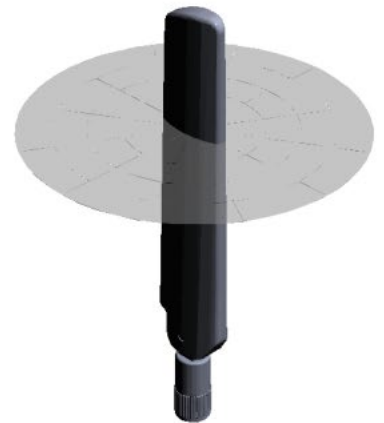
Radiation Patterns



XZ-Plane Gain



YZ-Plane Gain



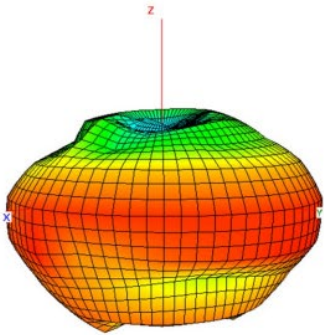
XY-Plane Gain

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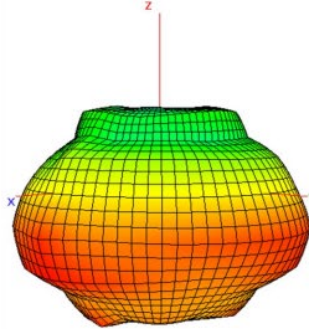
5G LTE External Antenna



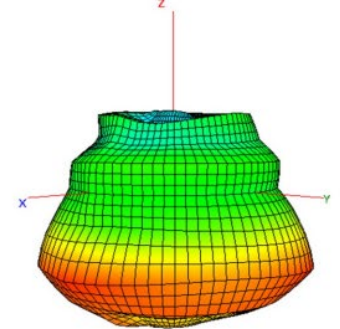
617 MHz ~ 960 MHz (778 MHz)



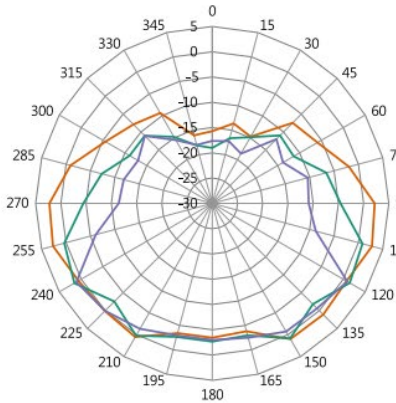
617 MHz



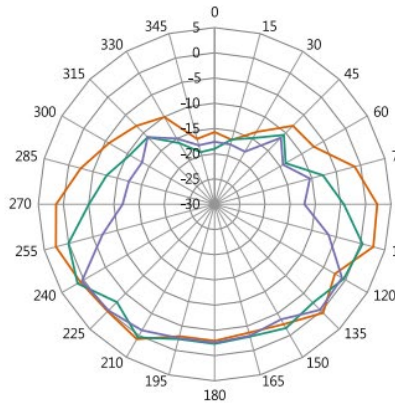
778 MHz



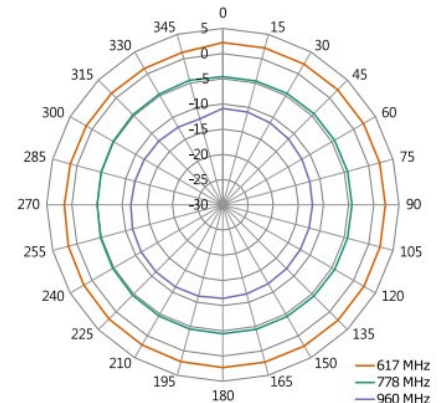
960MHz



XZ-Plane Gain



YZ-Plane Gain



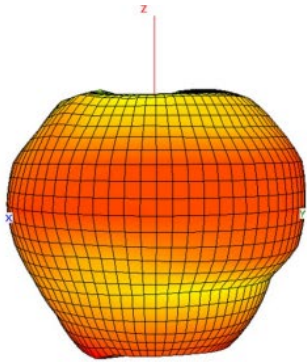
XY-Plane Gain

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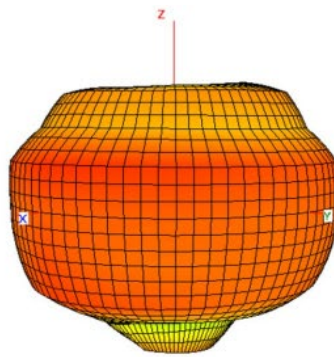
5G LTE External Antenna



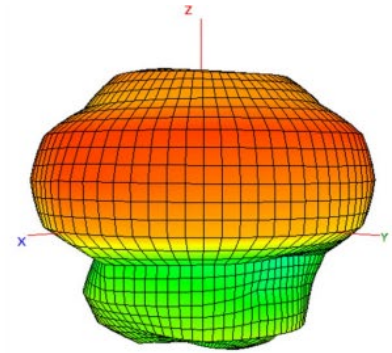
1710 MHz ~ 5000 MHz (3355 MHz)



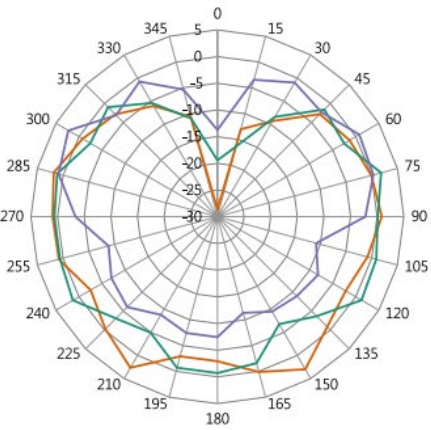
1710 MHz



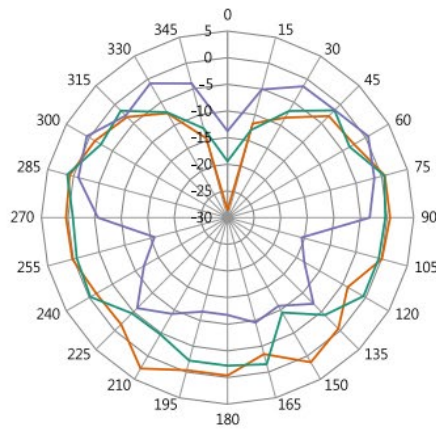
3355 MHz



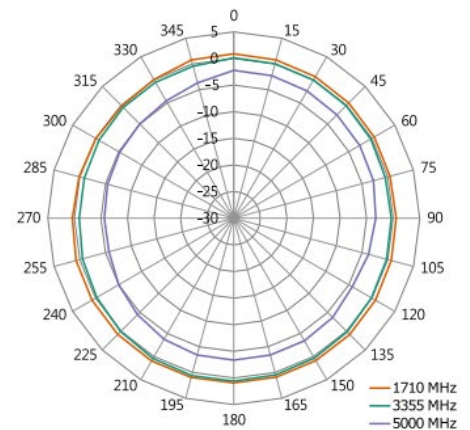
5000 MHz



XZ-Plane Gain



YZ-Plane Gain



XY-Plane Gain

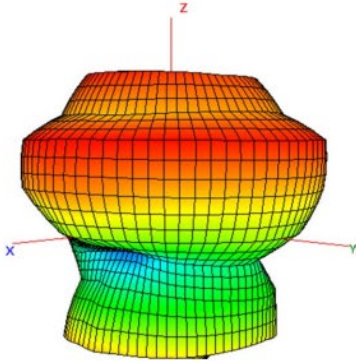
— 1710 MHz
— 3355 MHz
— 5000 MHz

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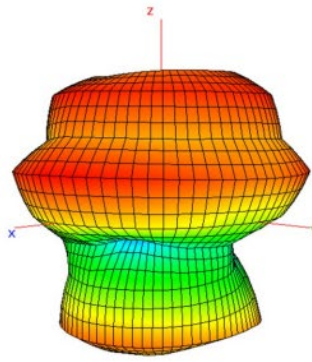
5G LTE External Antenna



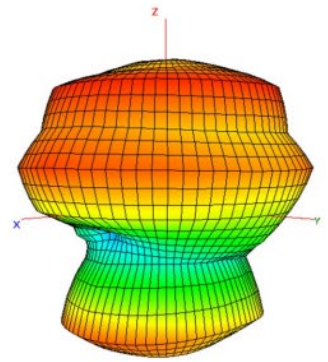
5150 MHz ~ 5850 MHz (5550 MHz)



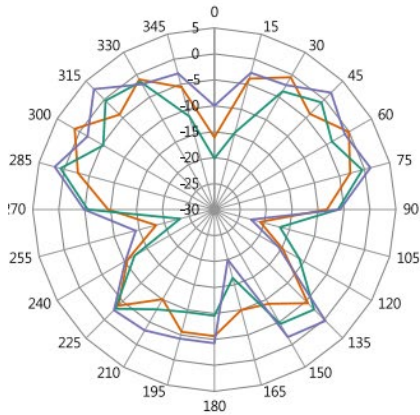
5150 MHz



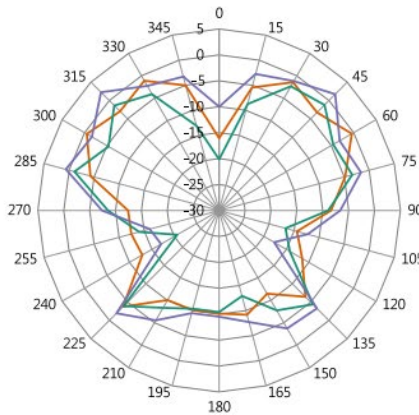
5550 MHz



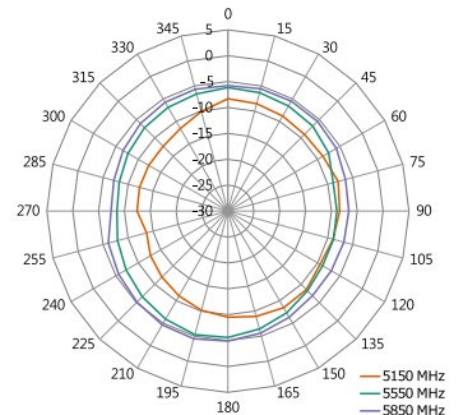
5850 MHz



XZ-Plane Gain



YZ-Plane Gain



XY-Plane Gain

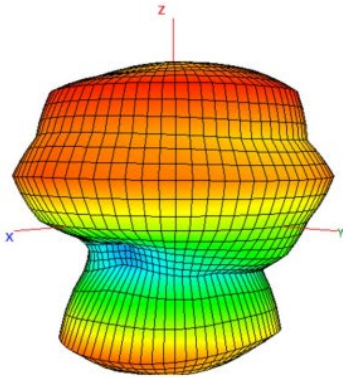
— 5150 MHz
— 5550 MHz
— 5850 MHz

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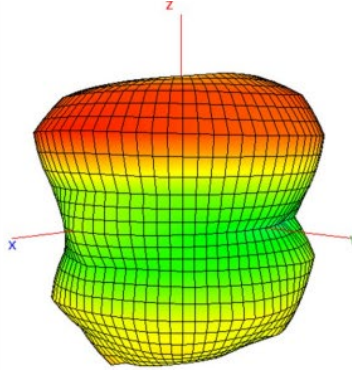
5G LTE External Antenna



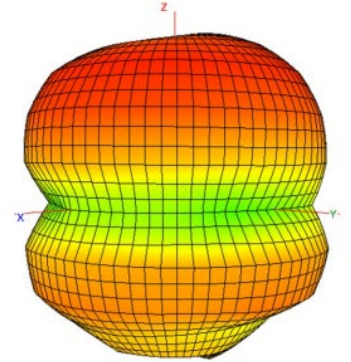
5925 MHz ~ 7125 MHz (6525 MHz)



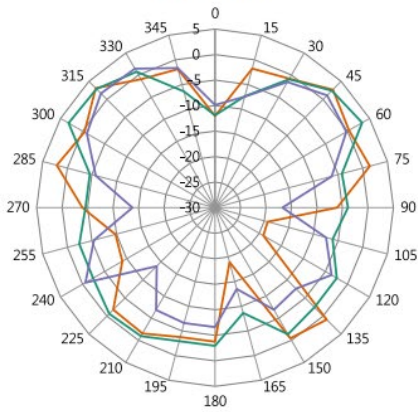
5925 MHz



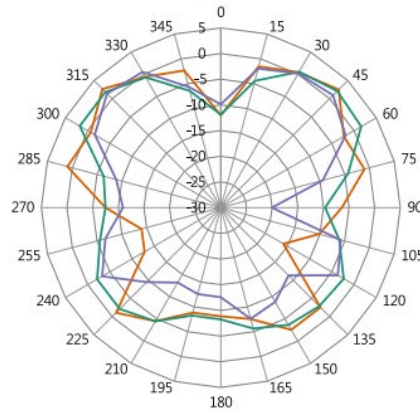
6525 MHz



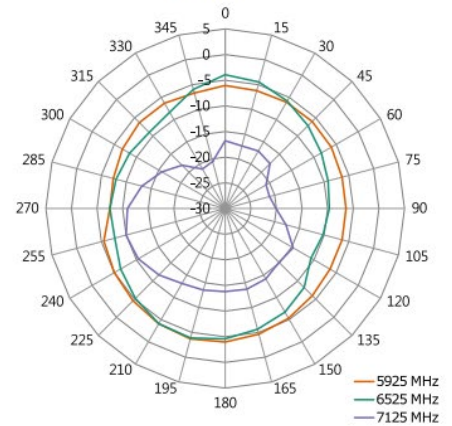
7125 MHz



XZ-Plane Gain



YZ-Plane Gain



XY-Plane Gain