

2JW0183z-C868B
(Alpha Micro Part No. AMC2JW0183z-C868B)
5G NR connector mount antenna

Features

- 5G NR:
 - 617 – 960MHz
 - 1427 – 2690MHz
 - 3300 – 5000MHz
 - 5150 – 5925MHz
- Connector mount
- Ultra wide band antenna
- High performance
- Ground plane independent
- Hinged connector
- Dimensions: 171 x 38 x 13.8mm



This versatile antenna combines high performance with full bandwidth coverage for 5G New Radio, 4G LTE and 3G/2G/CDMA cellular spectrums (617-5925 MHz). Available in black or white, the innovative hinged swivel design allows the antenna to be positioned in a straight, right or 45-degree angle so it can be rotated into the direction with the most signal strength and reduce interference with other antennas nearby.

The 2JW0183z-C868B has an omni-directional radiation pattern giving it a 360-degree uninterrupted signal quality with a maximum efficiency of ~68.4% and peak gains ranging between ~0 dBi and ~1.7 dBi across all frequencies.



1. Antenna and Electrical Specifications

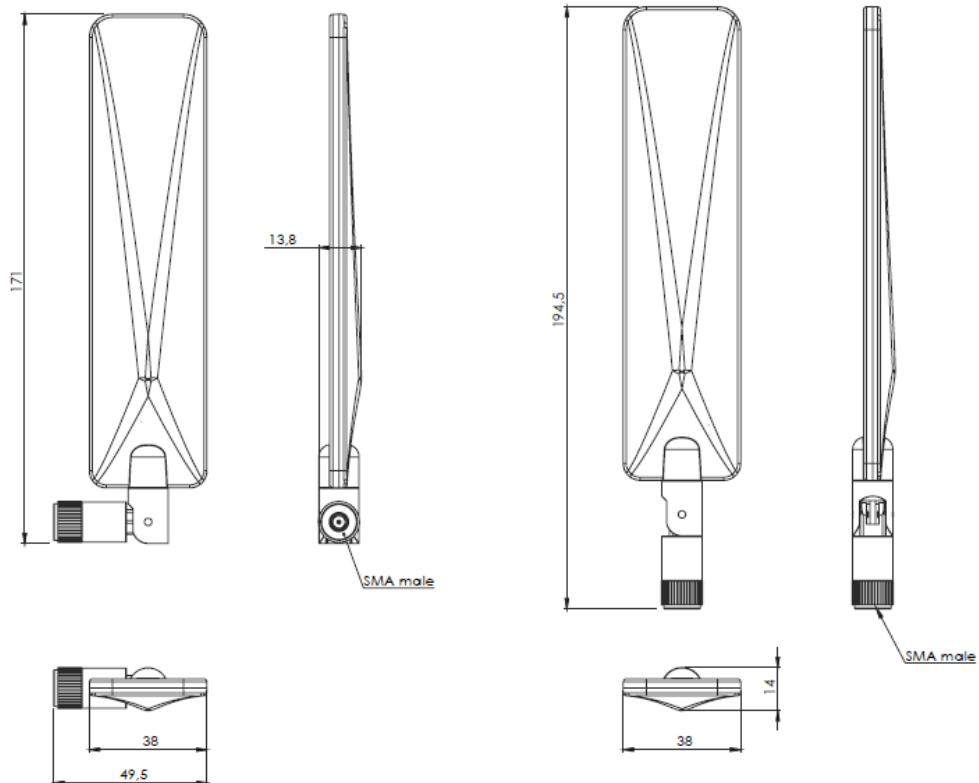
Parameters	5G NR Antenna			
Technologies	5G, 4G, 3G, 2G			
Standards	5G NR/4G LTE/FirstNet/CBRS/LPWA/CAT-X/Cat-Mx/CAT-NBx/NB-IoT/3G/2G			
Frequency (MHz)	617 - 960	1427 - 2690	3300 -5000	5150 - 5925
Band (MHz)	600, 700, 850, 900	1500, 1600, 1700, 1800, 1900, 2000, 2100, 2300, 2500, 2600	3300, 3500, 3600, 3700, 4500	5200, 5500, 5800
5G NR Bands	N5, n8, n12, n20, n28, n71, n81, n83	n1, n2, n3, n7,n25, n34, n38, n40, n41, n50, n51, n66, n70, n74, n75, n76, n80, n84, n86	n77,n78, n79	
4G LTE Bands	B5, B6, B8, B12, B13, B14, B17, B18, B19, B20, B26, B27, B28, B29, B44, B67, B68, B71, B85	B1, B2, B3, B4, B7, B9, B10, B11, B21, B23, B24, B25, B30, B32, B33, B34, B35, B36, B37, B38, B39, B40, B41, B45, B50, B51, B65, B66, B69, B70, B74, B75, B76	B22, B42, 43, B48, B49, B52	B46, B47, B252, B255
3G CELL Bands	B5, B6, B8, B12, B13, B14, B19, B20, B26	B1, B2, B3, B4, B7, B9, B10, B11, B21, B25, B32, B33, B34, B35, B36, B37, B38, B39, B40	B22	
2G CELL Bands	710, 750, 810T, 850, 900P, 900E, 900R	1800DCS, 1900PCS		
CDMA CELL Bands	BC0, BC2, BC3, BC7, BC9, BC10, BC12, BC18, BC19	BC1, BC4, BC6, BC8, BC13, BC14, BC15, BC16, BC20, BC21		
Return Loss (dB)	~-8.3	~-8.5	~-4.7	~-7.3
VSWR	~2.8:1	~2.5:1	~5.1:1	~3.9:1
Efficiency (%)	~51.9	~68.4	~40.0	~38.3
Peak Gain (dBi)	~0.0	~1.7	~0.3	~1.6
Average Gain (dBi)	~-3.0	~-1.7	~-4.3	~-4.4
Impedance (Ohms)	50			
Polarisation	Linear			
Radiation Pattern	Omni-directional			
Max Input Power (W)	25			
Connector Type	SMA male			

Measurement Conditions:

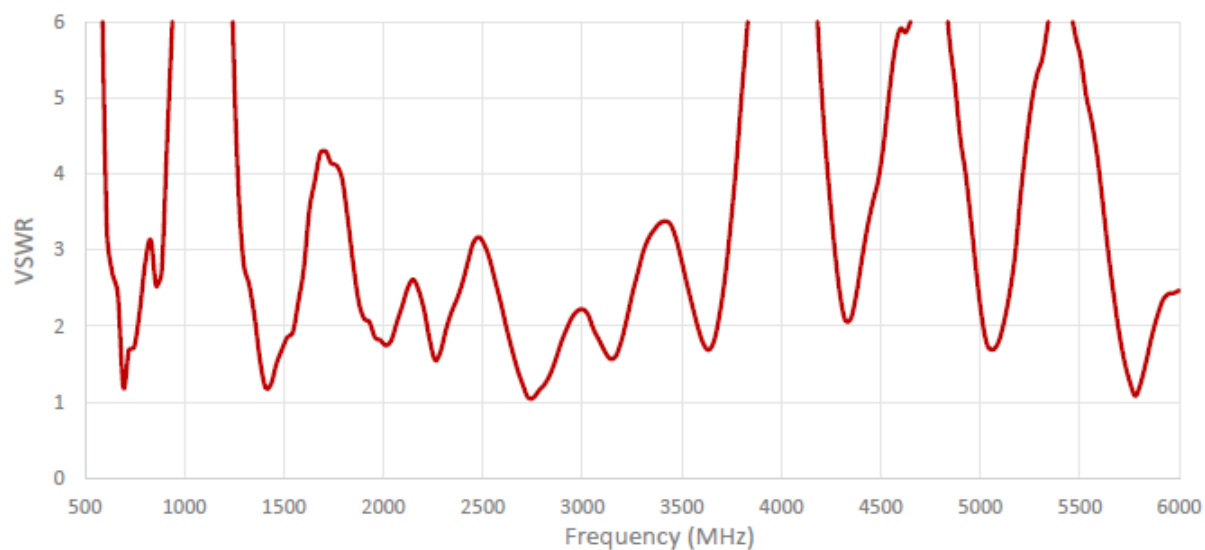
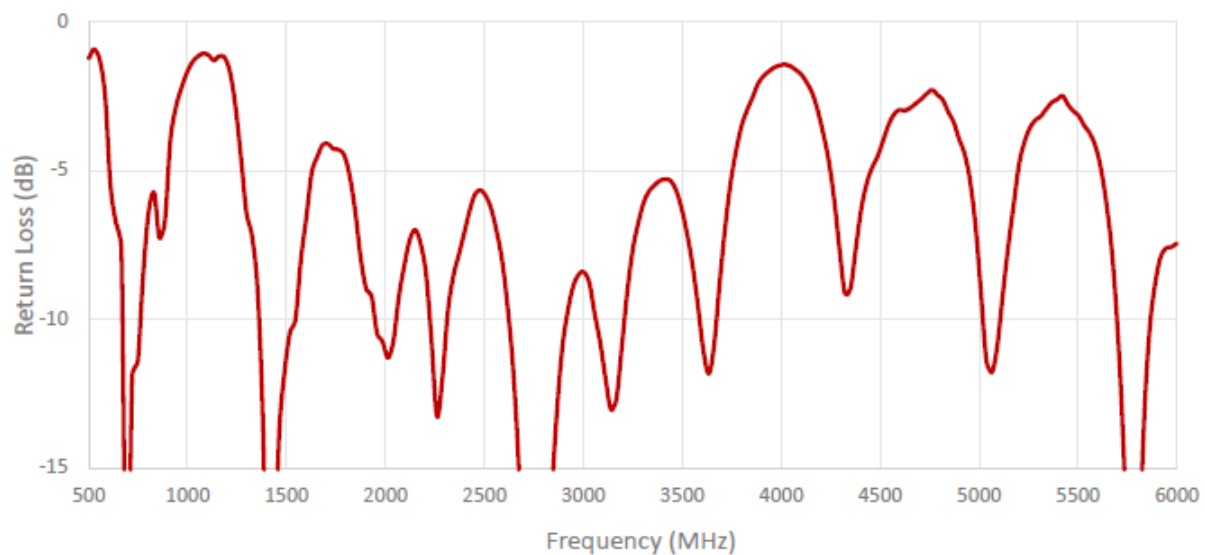
- Free space
- Measured in certified CTIA 3D Anechoic chamber

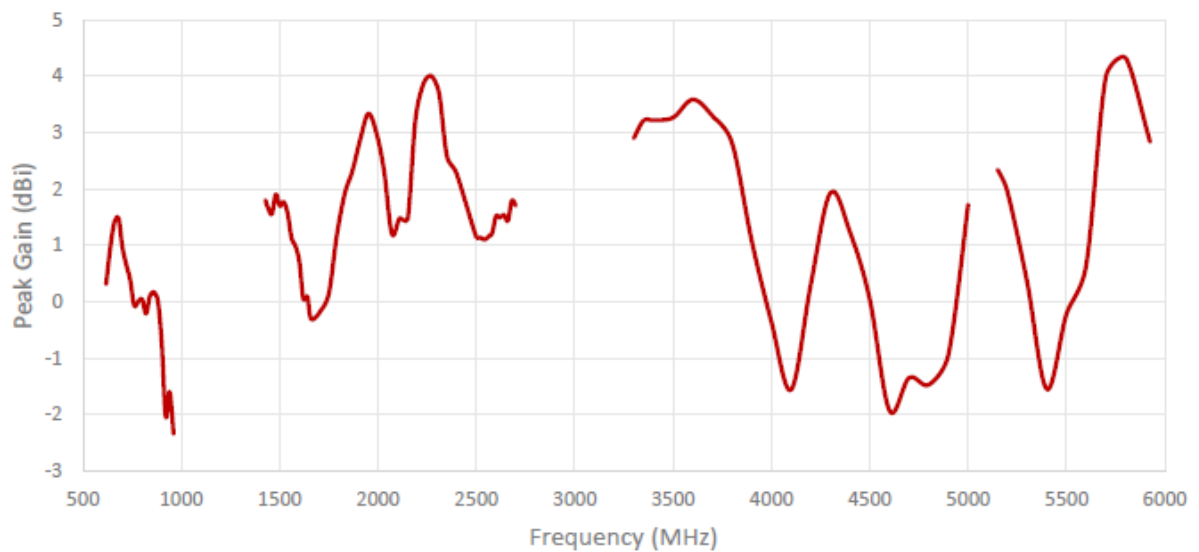
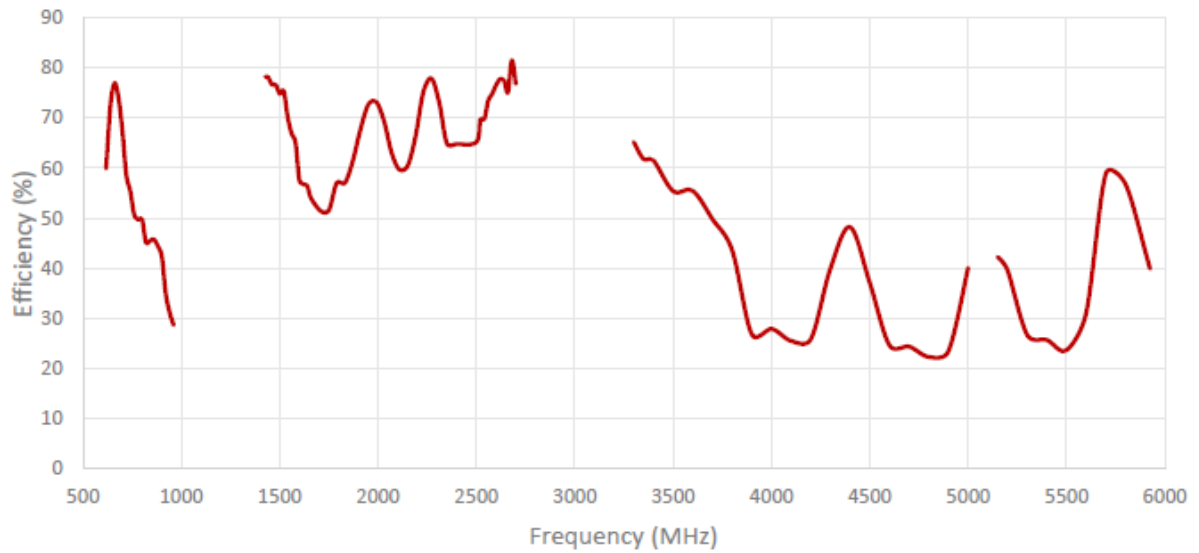
2. Mechanical and Environmental Specifications

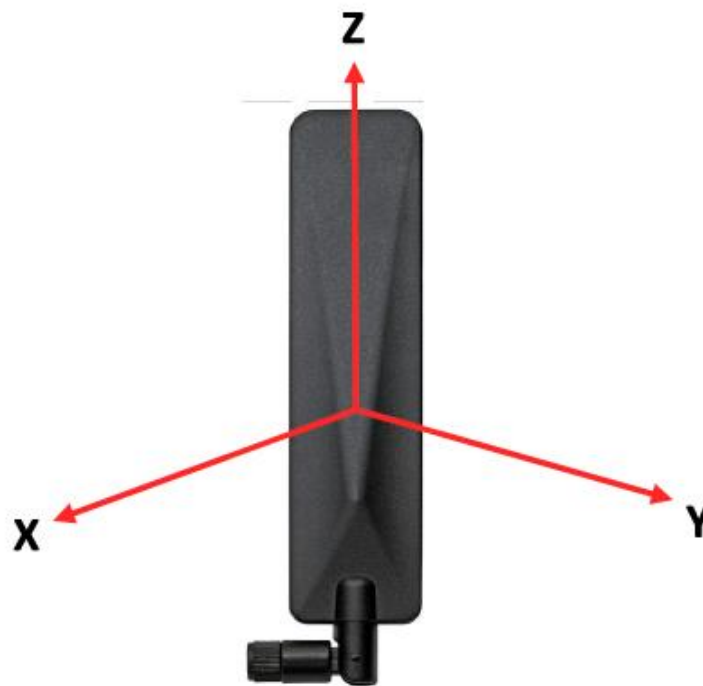
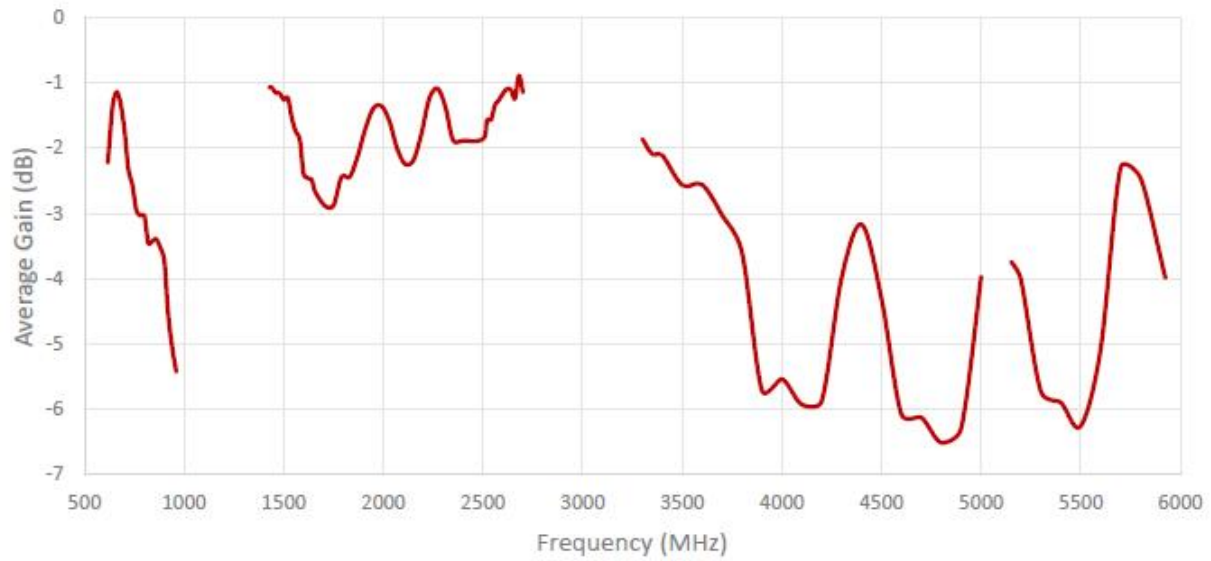
Mounting Type	Connector mount
Dimensions (mm)	171 x 38 x 13.8
Radome Type	PC/ABS UV stable
Radome Color	Black or white
Connector Feature	Hinged
Operating Temperature (°C)	-40 to +85
Storage Temperature (°C)	-40 to +85
Substance Compliance	RoHS, REACH



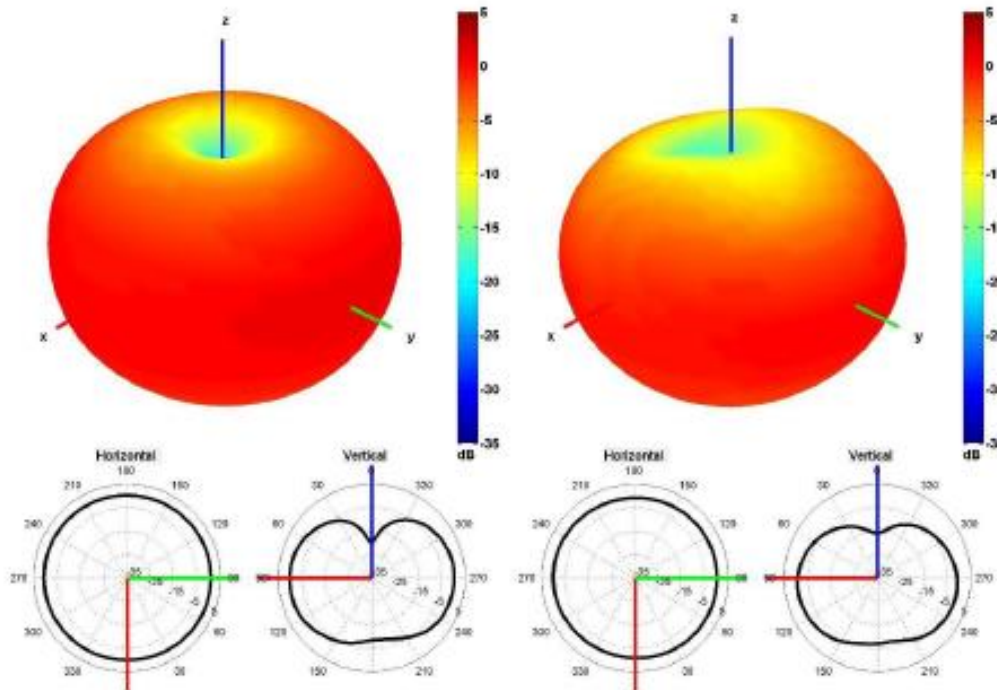
3. Antenna Parameters



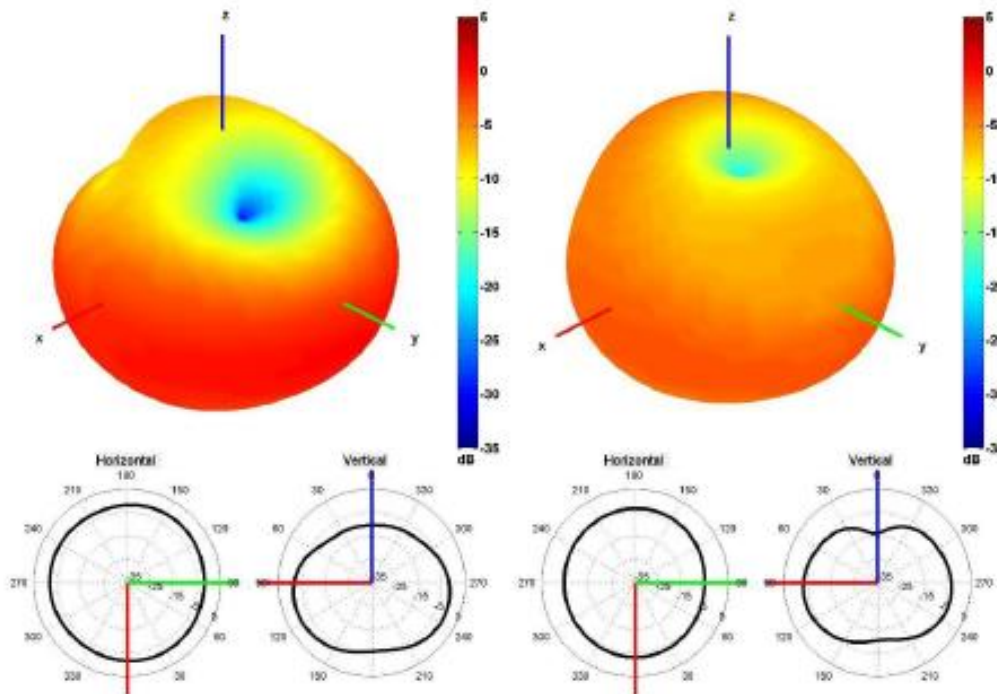




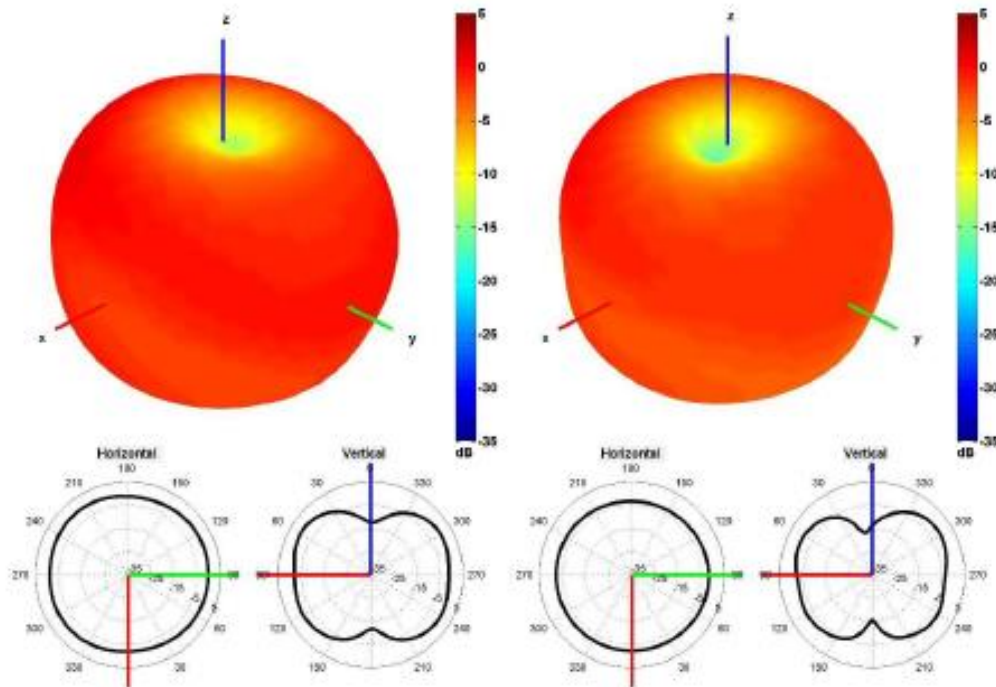
Radiation pattern reference



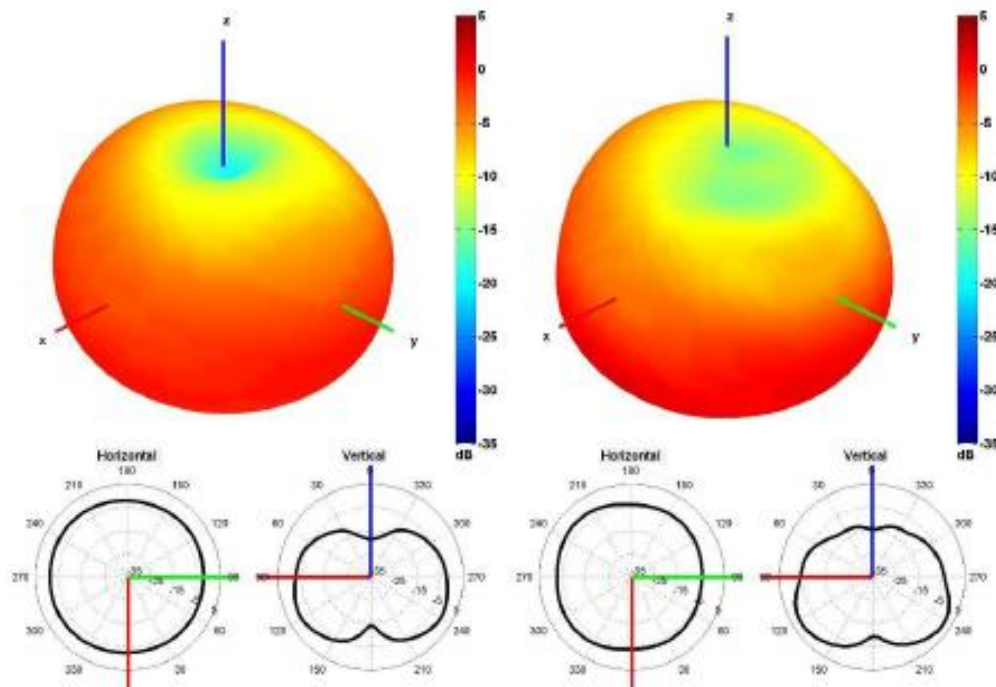
650 and 750 MHz Radiation pattern



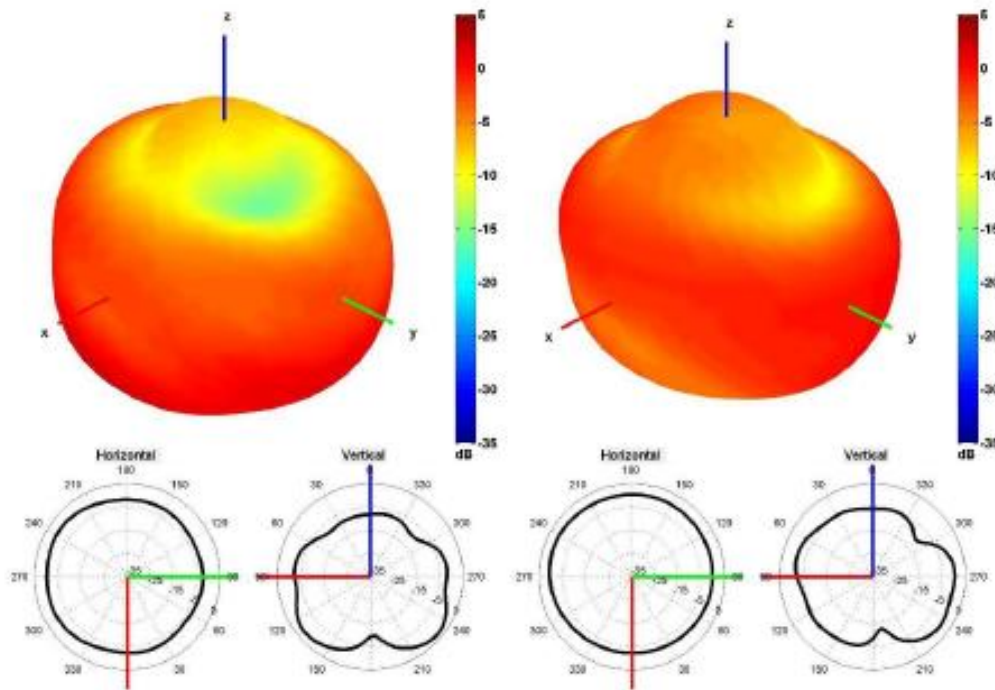
850 and 940 MHz Radiation pattern



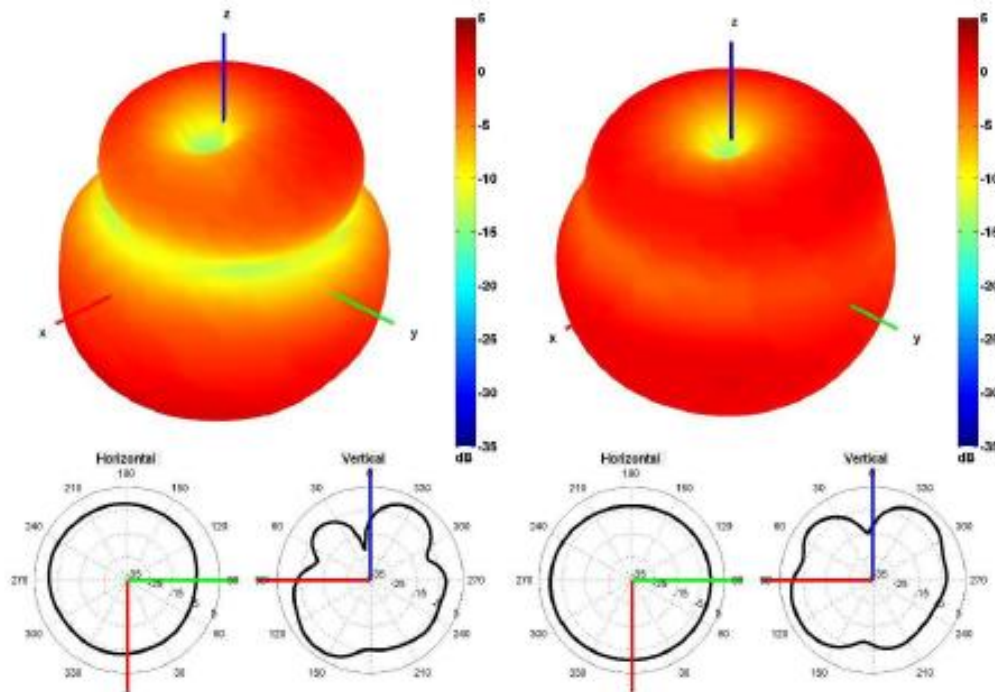
1500 and 1600 MHz Radiation pattern



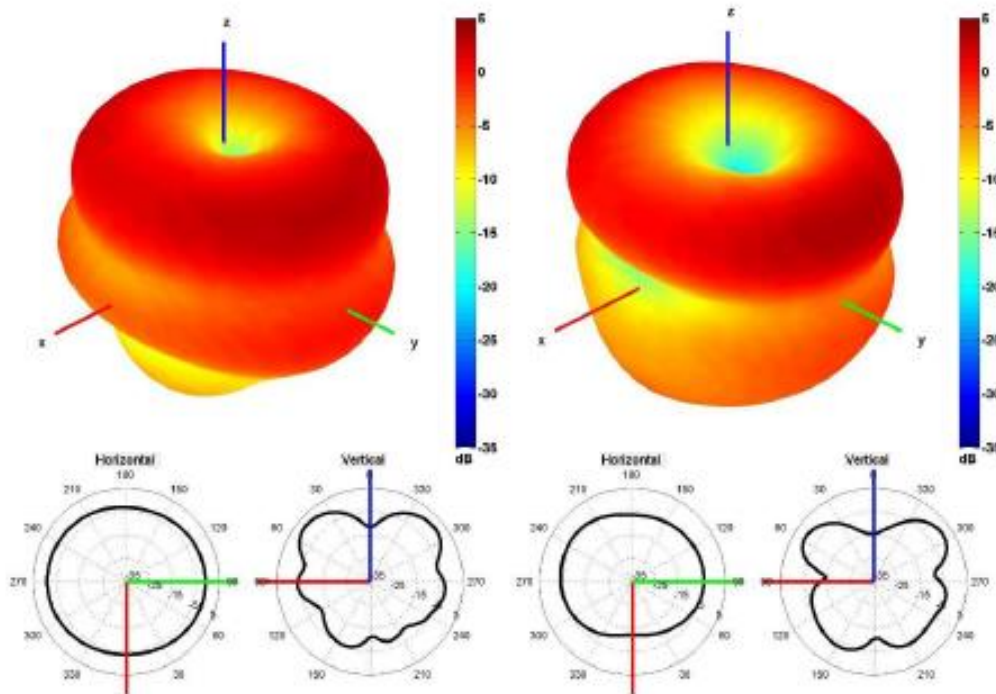
1750 and 1850 MHz Radiation pattern



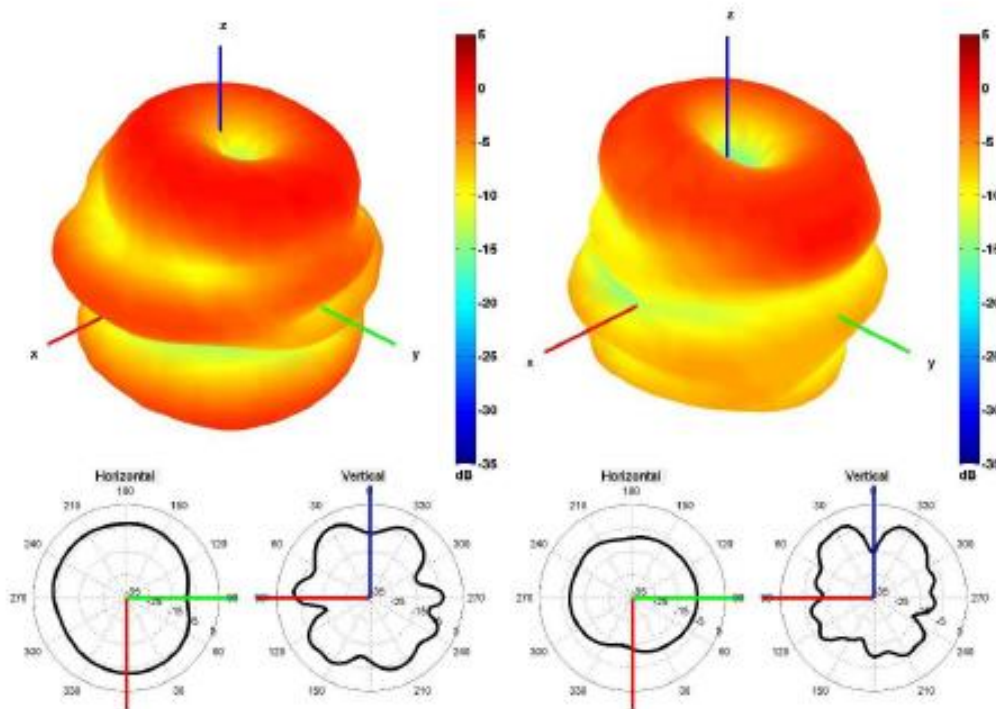
1950 and 2100 MHz Radiation pattern



2350 and 2600 MHz Radiation pattern



3350 and 3600 MHz Radiation pattern



4500 and 5500 MHz Radiation pattern