

#### 4G/5G 4x4 MiMo Antenna

- Provides 4x4 MiMo function for 5G/4G
- Ultra Wideband: 617-960/1427-6000MHz
- · Desk, window or wall mount
  - Highly portable features integral desk stand and suction mount
  - Screw and adhesive pad mounting options also provided
- Supplied with 4x 2m (6') of RG174 coaxial cable, fitted with SMA,

#### FAKRA D or TS9 connectors.

The DMM4 antenna is a future proof solution for Cat 18/20 4G and 5G devices

Incorporating four separately fed, ultra wide band elements for 617-960/1427-6000MHz in a single housing, the DMM4 provides a 4x4 MiMo function. It can also provide 2x 2x2 MiMo function for a router with dual modems, each requiring a 2x2 antenna system.

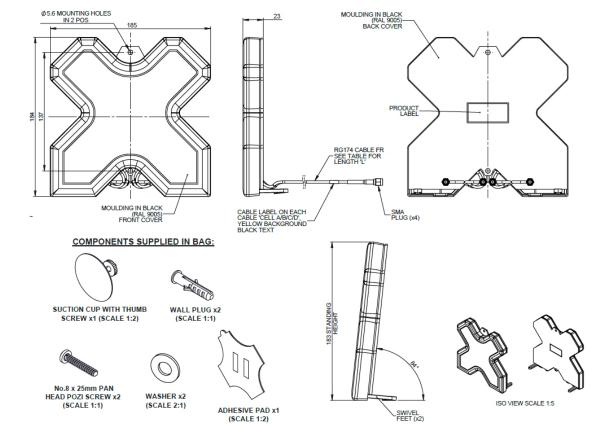
The DMM4 is highly portable and features desk mount feet which fold out for use, and flat for transport. A suction window mount enables the user to optimise their signal in multiple locations, with instant installation and easy removal. For more permanent use, screw and adhesive pad mounting options are also provided.

The antenna is supplied with two twinned 2m (6') length coaxial cables, with the option of SMA, TS9 or FAKRA D connectors.

The DMM4 is a cost effective value added product for network operators and service providers ensuring a stable link with improved data rates for subscribers, thereby improving satisfaction and retention.

#### **Technical Drawing**

DMM4-6-60-2SP Shown



Waiver: The data given above is indicative of the

# 4G/5G Desk Mount 4x4 MiMo Antenna

DMM4-6-60[-VAR]



				Product Data			
Part No.							
		DMM4-6-60-2SP	DMM4-6-60-2TS9	DMM4-6-60-2FDJ			
Electrical Data							
Frequency Range (MHz) Antennas 1-4			617-960 / 1710-6000				
Operational Bands		5G / 4G					
Radiation Pattern		Omni-directional					
Typical VSWR*		< 2.5:1					
Peak Gain <del>ı</del>	617-960MHz		2.7dBi				
	1427-4200MHz		5.5dBi				
	4400-6000MHz		4.5dBi				
Typical Efficiency +	617-960MHz		56%				
	1427-4200MHz		61%				
	4400-6000MHz		43%				
Worst Case Element Isolation*			>10dB				
Max Input Power (W)		2 Watts					
Impedance		50Ω					
Mechanical Data							
Dimensions (mm)	Height		185 (7.3")				
	Width		184 (7.2")				
	Depth		23 (0.9")				
Operating Temp (°C)		-40° / +80°C (-40° /180°F)					
Material		U.V. Stabilised ASA					
Colour			Black				
Mounting Data							
Fixing		Desk mount / screw mount / window mount / adhesive mount					
Cable Data							
Туре			4 x RG174				
Diameter (mm)		2.8 (0.1")					
Length (m)		2 (6.5')					

4× TS9 (m)

4× SMA (m)

Termination

4x Fakra D Jack

<sup>+</sup> Peak gain and efficiency measured in free space with 0.5m (1.64') of RG174 cable.

<sup>\*</sup> Typical VSWR measured in free space with 0.5m (1.64') of RG174 cable.

<sup>\*\*</sup> Worst case element isolation measured in free space between adjacent elements with 0.5m (1.64') of RG174 cable

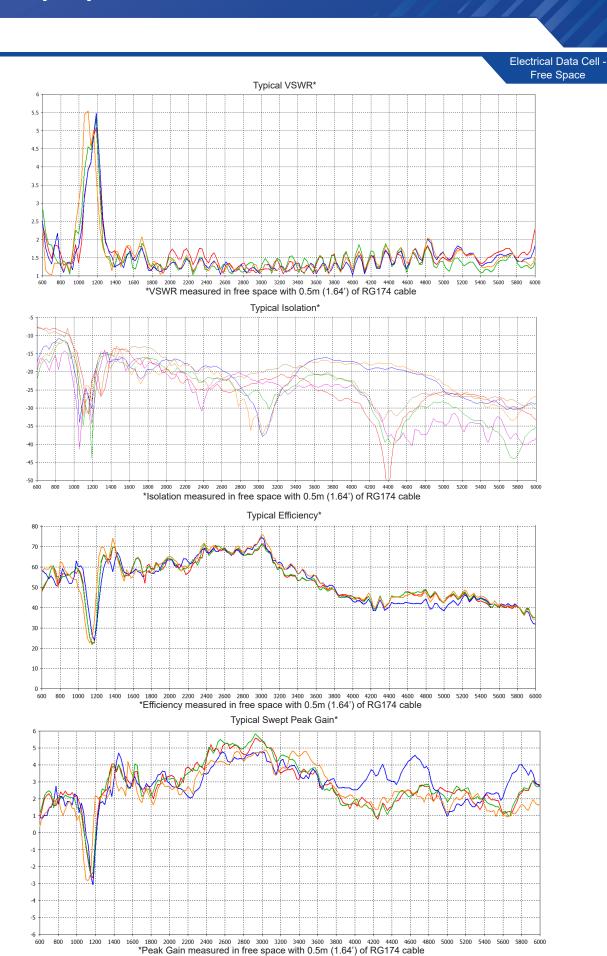
# 4G/5G Desk Mount 4x4 MiMo Antenna





#### Electrical Data Cell -Free Space

Assessment Conditions								
Measurement Conditions	4G/5G Antennas							
DMM4-6-60[-VAR] measured in free space with 0.5m (1.64') of RG174 Cable	Frequency Range (MHz)	LTE /NR Bands	Antenna Element	Peak Gain (dBi)	Efficiency (%)			
	617-698	71, 105	Cell A	2.3	53			
	017 000	71, 100	Cell B	2.5	53			
			Cell C	1.5	56			
			Cell D	1.5	59			
	699-798	12,13, 14 17,28	Cell A	2.3	56			
			Cell B	2.5	57			
			Cell C	2.7	53			
			Cell D	2.1	57			
	807- 862	5,19,20,26,27	Cell A	2.4	56			
			Cell B	2.2	55			
			Cell C	2.2	56			
SCIONA MARKET			Cell D	2.1	60			
	880-960	8	Cell A	2.4	57			
EARN COAS			Cell B	2.2	57			
			Cell C	2.3	55			
			Cell D	1.9	55			
	1427-1518	11, 21, 74,75,76	Cell A	4.0	59			
AT IN THE RESERVE OF			Cell B	4.0	60			
			Cell C	4.7	62			
			Cell D Cell A	2.9 3.5	59 59			
	1710-1920	2,3,4,9,25,35,39,66	Cell B	3.2	60			
			Cell C	3.6	58			
			Cell D	3.0	59			
			Cell A	3.8	61			
	1920-2170	1,23	Cell B	3.4	61			
			Cell C	3.6	62			
			Cell D	3.0	62			
	2300-2400	30,40	Cell A	4.4	66			
			Cell B	4.5	67			
			Cell C	3.5	68			
			Cell D	3.9	69			
			Cell A	5.3	68			
	2496-2690	7,38,41	Cell B	5.5	69			
			Cell C	4.8	68			
			Cell D	4.7	68			
	2200 4200	22,42,43,48,77,78	Cell A	3.8	49			
	3300-4200		Cell B	4.3	49			
			Cell C	4.0	50			
			Cell D	4.8	51			
	4400-5000	79	Cell A	2.8	46			
	<del>-4</del> 00-3000	13	Cell B	2.9	46			
			Cell C	4.5	42			
			Cell D	2.5	45			
	5000-6000	96, 102, 104	Cell A	3.1	42			
	5000 0000	50, 102, 107	Cell B	3.0	42			
			Cell C	4.0	41			
			Cell D	2.4	43			

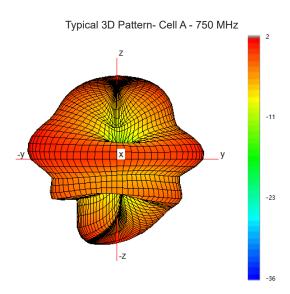


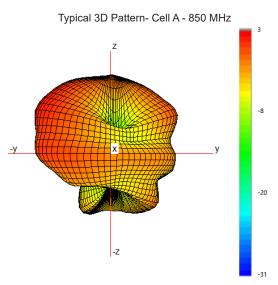
Typical 3D Pattern- Cell A - 650 MHz

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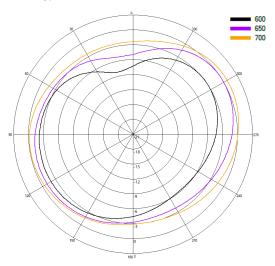
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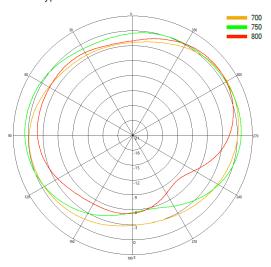




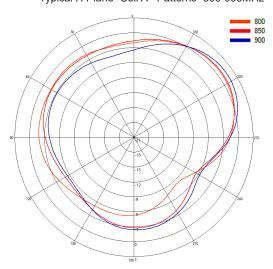
Typical H Plane- Cell A - Patterns- 600-700MHz

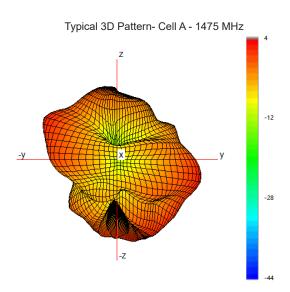


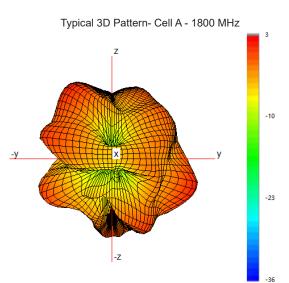
Typical H Plane- Cell A - Patterns- 700-800MHz

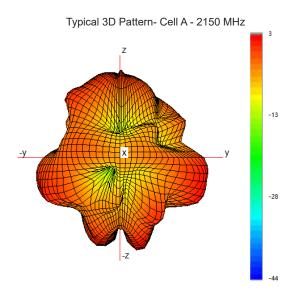


Typical H Plane- Cell A - Patterns- 800-900MHz





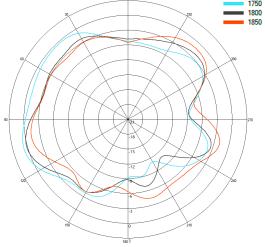




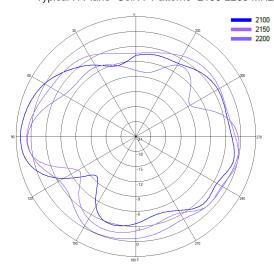
Typical H Plane- Cell A- Patterns- 1450-1500 MHz

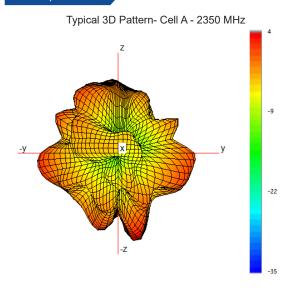
1450
1475
1500

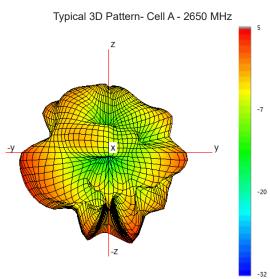
Typical H Plane- Cell A- Patterns- 1750-1850 MHz

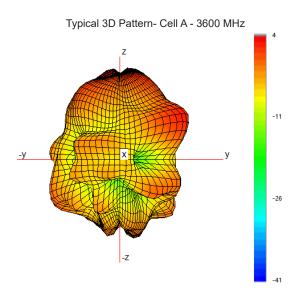


Typical H Plane- Cell A- Patterns- 2100-2200 MHz

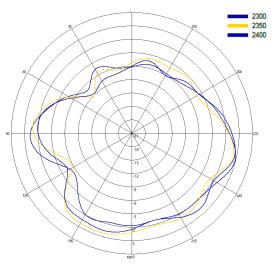




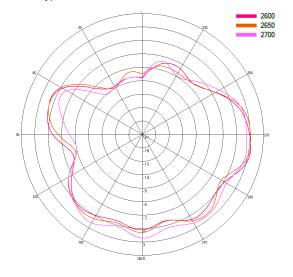




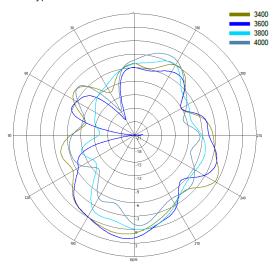
Typical H Plane- Cell A - Patterns- 2300-2400 MHz

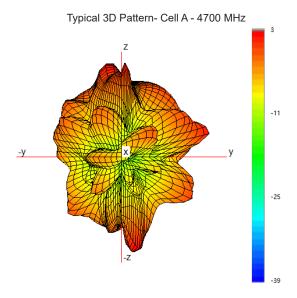


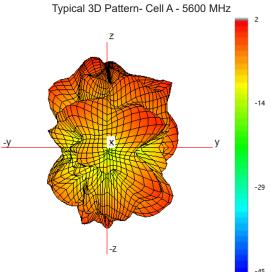
Typical H Plane- Cell A - Patterns- 2600-2700 MHz

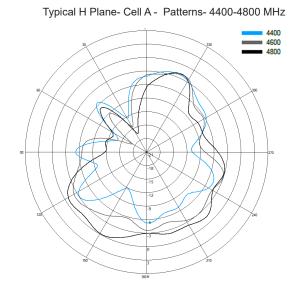


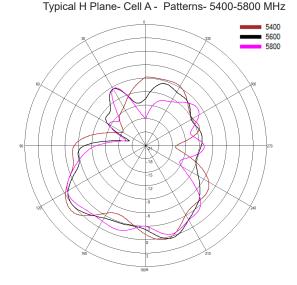
Typical H Plane- Cell A - Patterns- 3400-4000 MHz

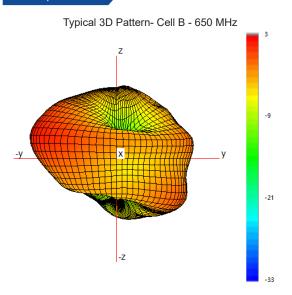


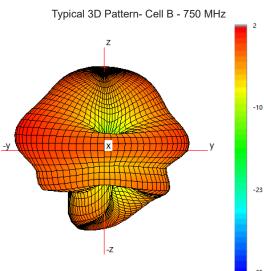


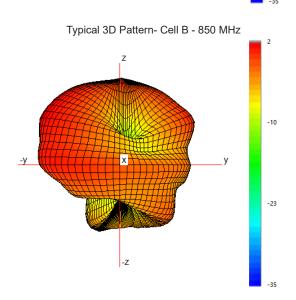


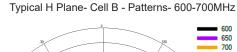


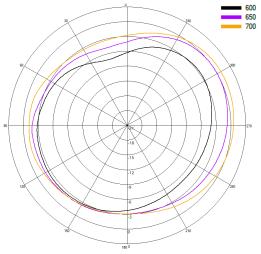




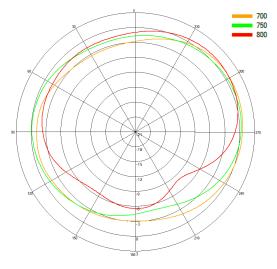




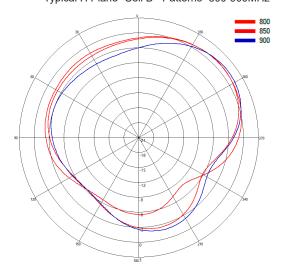




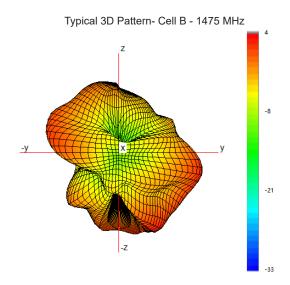
Typical H Plane- Cell B - Patterns- 700-800MHz

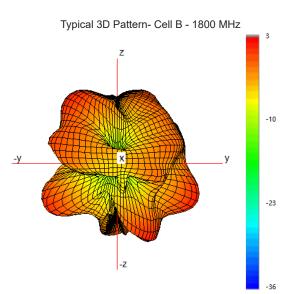


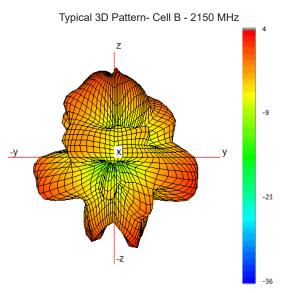
Typical H Plane- Cell B - Patterns- 800-900MHz

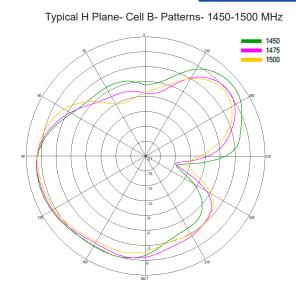


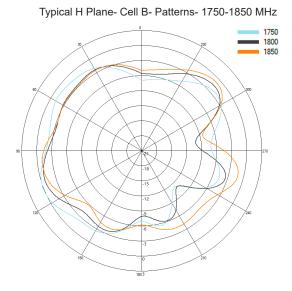
3D Pattern Data in Free Space Cell B

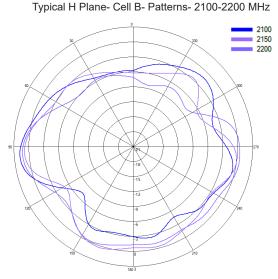




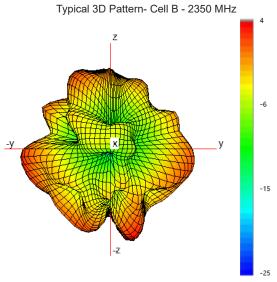


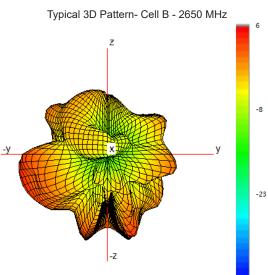


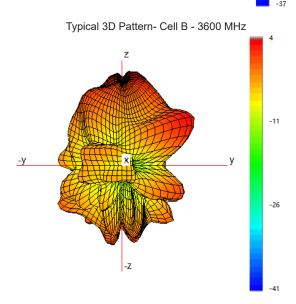


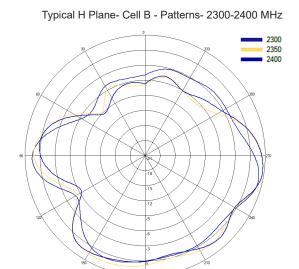


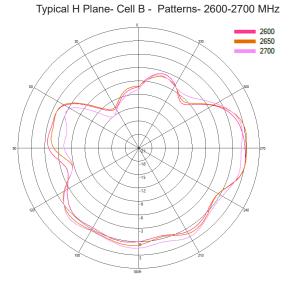
Panorama Antennas Ltd Frogmore, London, SW18 1HF, United Kingdom T: +44 (0)20 8877 4444 | F: +44 (0)20 8877 4477 E: sales@panorama-antennas.com W: www.panorama-antennas.com

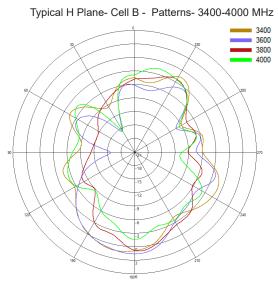


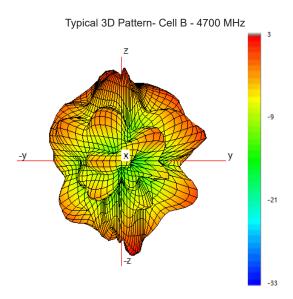


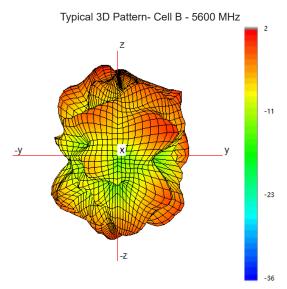


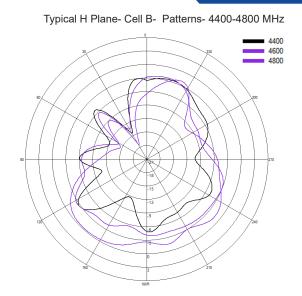


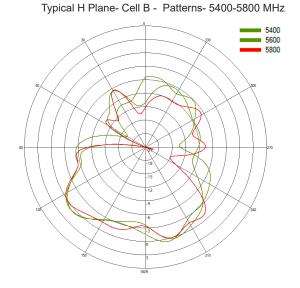




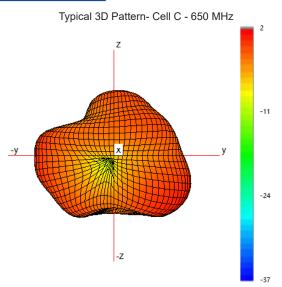


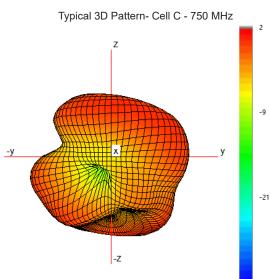


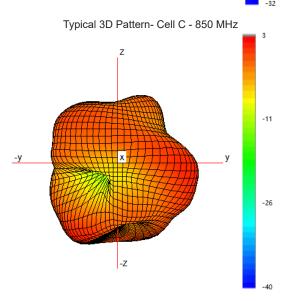




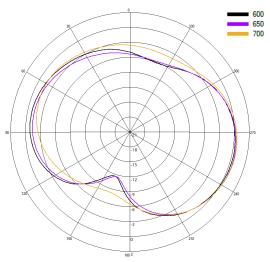
## 3D Pattern Data in Free Space Cell C



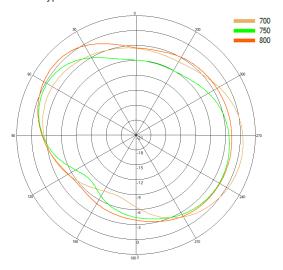




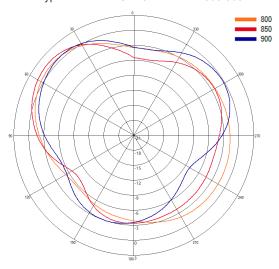
### Typical H Plane- Cell C - Patterns- 600-700MHz

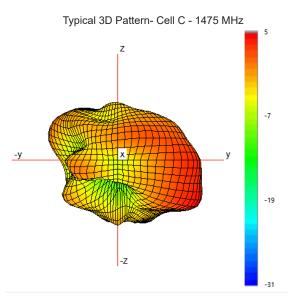


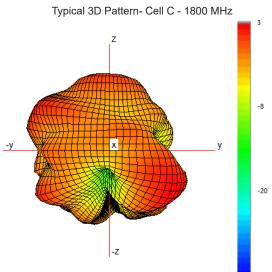
Typical H Plane- Cell C - Patterns- 700-800MHz

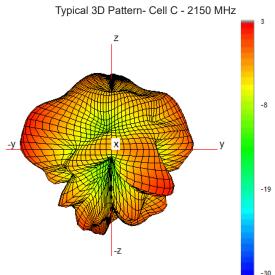


Typical H Plane- Cell C - Patterns- 800-900MHz

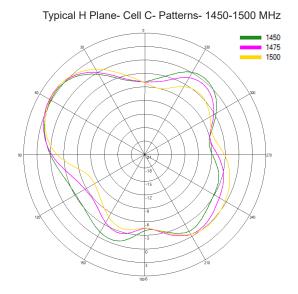


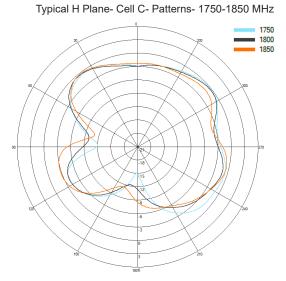


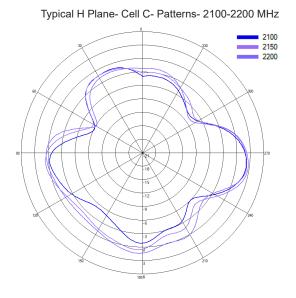




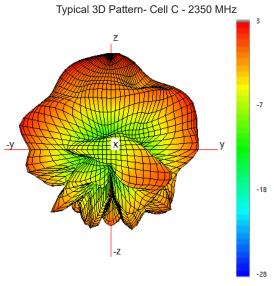


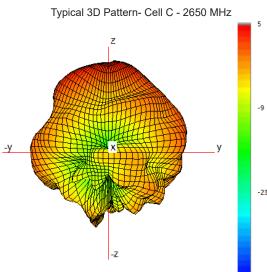


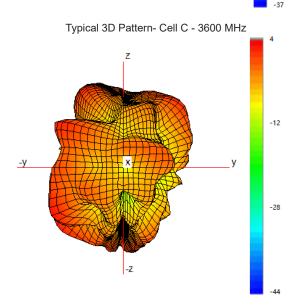




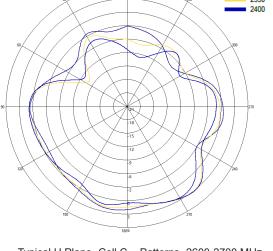
#### 3D Pattern Data in Free Space Cell C

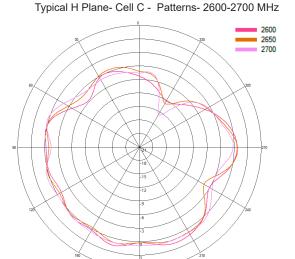


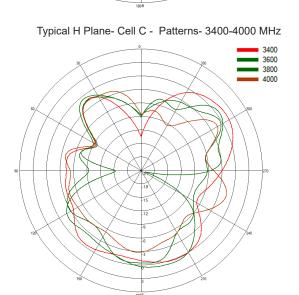


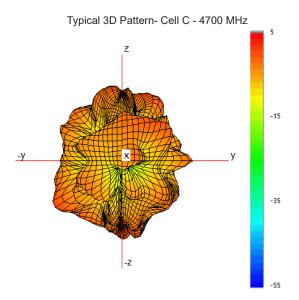


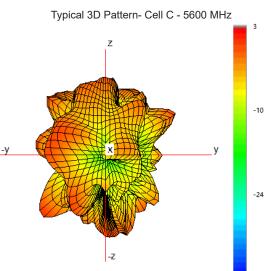
# Typical H Plane- Cell C - Patterns- 2300-2400 MHz 2350 2400

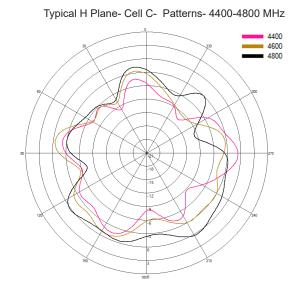


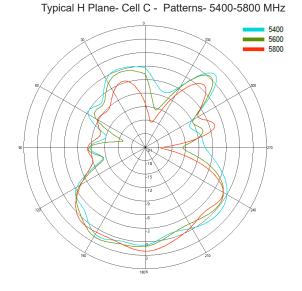




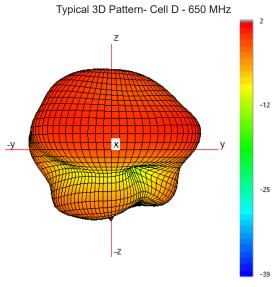


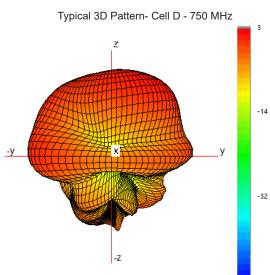


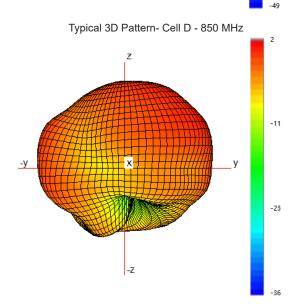




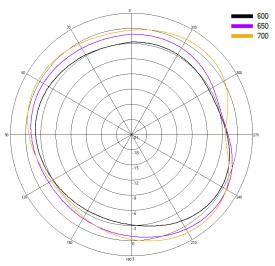
## 3D Pattern Data in Free Space Cell D



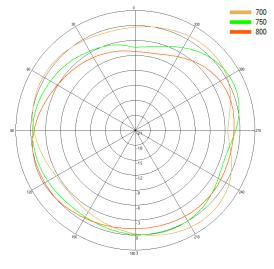




#### Typical H Plane- Cell D - Patterns- 600-700MHz



Typical H Plane- Cell D - Patterns- 700-800MHz



Typical H Plane- Cell D- Patterns- 800-900MHz

