

# 4G/5G Low Profile Antenna

PANORAMA  ANTENNAS

B4BE[W]-6-60-[X]



- Cost effective 4G/5G antenna solution
- Wall, mast or cabinet/enclosure installation
- Integrated low loss coaxial cable
- Also available with white cover (B4BEW-6-60)

The B4BE[W]-6-60 antenna is a cost effective omni-directional broadband antenna range for 4G and 5G devices. It covers 617-960/1427-6000MHz and is suitable for external or internal installation.

The mounting bracket enables simple wall/panel mounting using the supplied screws & wall plugs or mast mounting using a pipe clip or cable ties (not supplied).

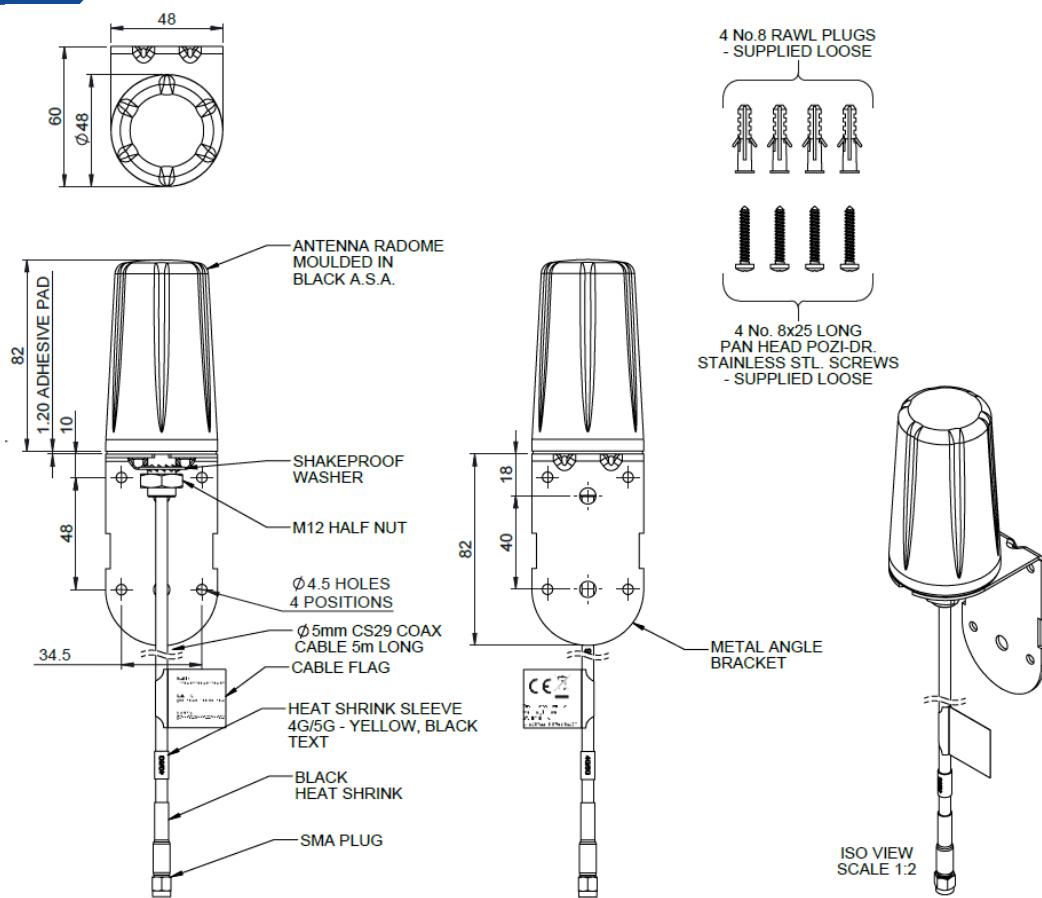
The omni-directional radiation pattern allows easy placement of the antenna in an elevated position, without requiring directional alignment.

The B4BE-6-60 antenna is supplied with integrated ultra-low loss CS29 (CS32 for B4BEW-6-60) coaxial cable, of various lengths, and a fitted SMA plug. Other connectors are available.

This antenna is an ideal solution for IoT use in industrial and domestic environments for cellular modems/routers and Machine to Machine (M2M) wireless connectivity applications.

Technical Drawing

B4BE-6-60-5SP Shown



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B4BE[W]-6-60-[X]

## Product Data

Part No.	B4BE[W]-6-60-05SP	B4BE[W]-6-60-2SP	B4BE[W]-6-60-5SP	B4BE[W]-6-60-10SP
<b>Electrical Data</b>				
Frequency Range (MHz)				617-960 / 1427-6000
Operational Band				4G / 5G
Typical VSWR*				<3:1
Peak Gain* (dBi)	617-960MHz	2.8		
	1427-2700MHz	3.6		
	3300-6000MHz	5.5		
Typical Efficiency	617-960MHz	72%		
	1427-2700MHz	71%		
	3300-6000MHz	70%		
Polarisation				Vertical
Pattern				Omni-directional
Impedance				50Ω
Max Input Power (W)				30
<b>Mechanical Data</b>				
Dimensions	Height	82mm (3.2") (excluding bracket)		
	Diameter	48mm (1.89")		
Operating Temp (°C)				-40° / +85°C ( -40° / 185°F )
Material				ASA, aluminium, zinc plated steel
Material Approvals				Radome UV Stable ASA Material - UL 746C F1, UL 94-HB
Colour				Black (B4BE-6-60) or White (B4BEW-6-60)
Ingress Protection				IP66
<b>Mounting Data</b>				
Fixing				Panel mount or bracket mount
Panel Mounting Hole Diameter				12mm (1/2")
Bracket Screw Hole Diameter				4mm (0.16")
<b>Cable Data</b>				
Type				CS29 / ( CS32 for B4BEW-6-60)
Diameter				5mm (0.2")
Length	0.5m (1.5')	2m (6.6')	5m (16.4')	10m (32.5)
Termination				SMA Plug (m)

\*VSWR, peak gain and efficiency measured in free space on bracket with 0.5m (1.6') of CS29 cable. Efficiency is average across stated bands.

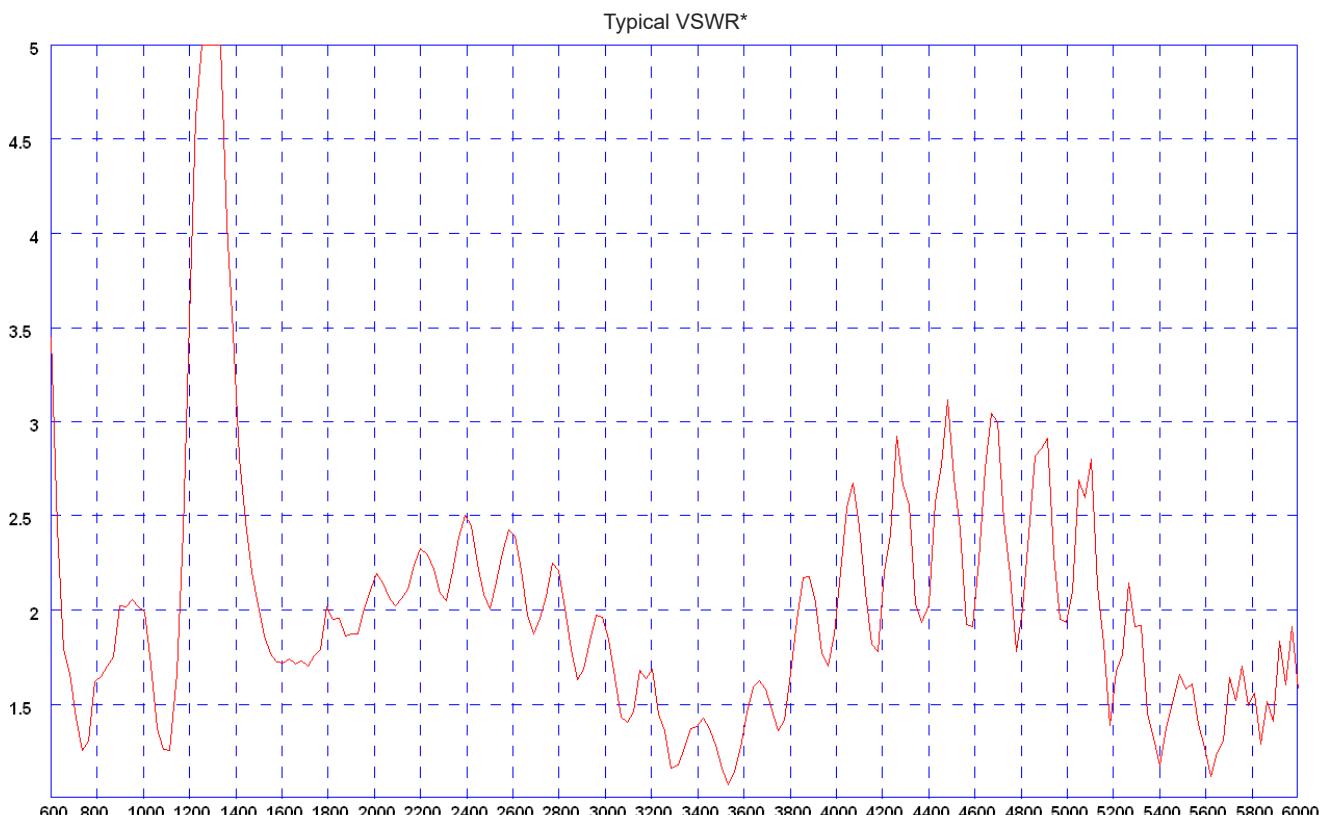
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B4BE[W]-6-60-[X]

Electrical Data Cell-  
Free Space on bracket

Measurement Conditions	4G/5G Antenna			
	Frequency Range (MHz)	LTE/NR Bands	Peak Gain (dBi)	Efficiency (%)
B4BE-6-60 measured in free space on bracket with 0.5m (1.6') of CS29 cable	617-698	71, 105	2.0	75
	699-798	12,13, 14 17,28	2.4	77
	807- 862	5,19,20,26,27	2.4	71
	880-960	8	2.8	64
	1427-1518	11, 21, 74,75,76	3.6	72
	1710-1920	2,3,4,9,25,35,39,66	2.6	71
	1920-2170	1,23	2.6	71
	2300-2400	30,40	3.0	70
	2496-2690	7,38,41	3.4	72
	3300-4200	22,42,43,48,77,78	5.5	78
	4400-5000	79	4.9	62



\*VSWR measured in free space on bracket with 0.5m (1.6') of CS29 cable

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B4BE[W]-6-60-[X]

Electrical Data Cell-  
Free Space on bracket

Typical Efficiency\*



\*Efficiency measured in free space on bracket with 0.5m (1.6') of CS29 cable

Typical Swept Peak Gain\*



\*Peak Gain measured in free space on bracket with 0.5m (1.6') of CS29 cable

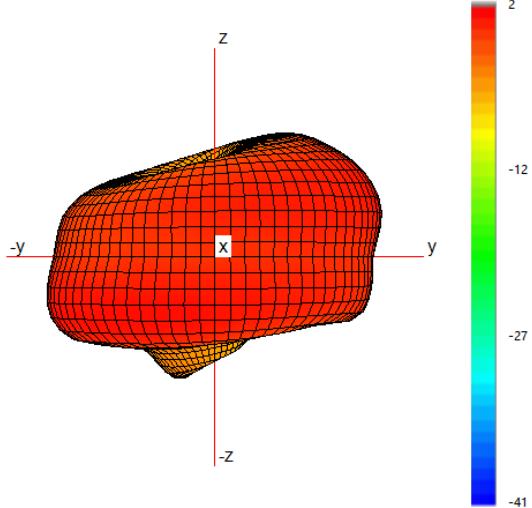
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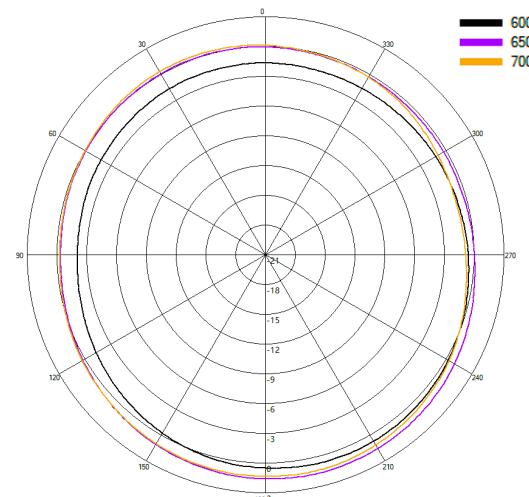
B4BE[W]-6-60-[X]

3D Pattern Data in Free Space on bracket Cell

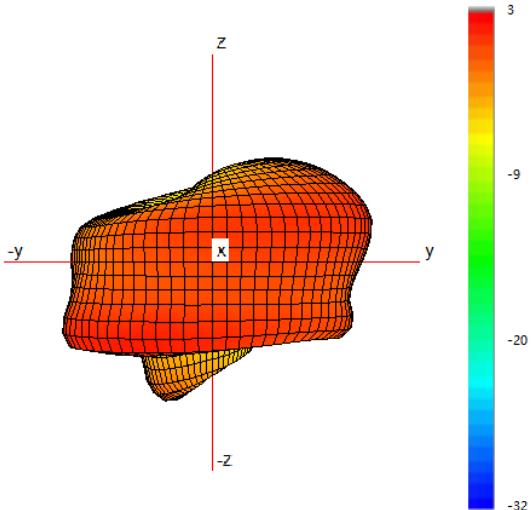
Typical 3D Pattern- Cell - 650 MHz



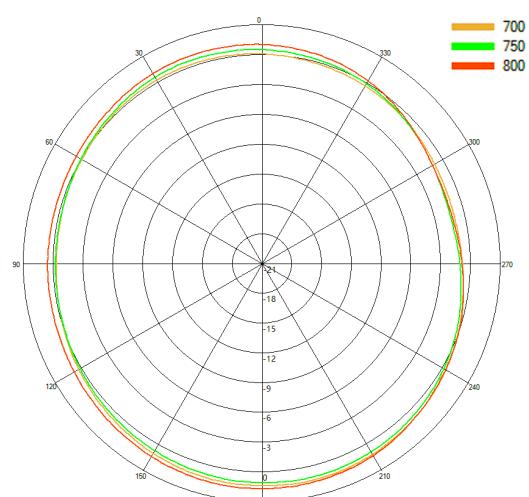
Typical H Plane- Cell - Patterns- 600-700MHz



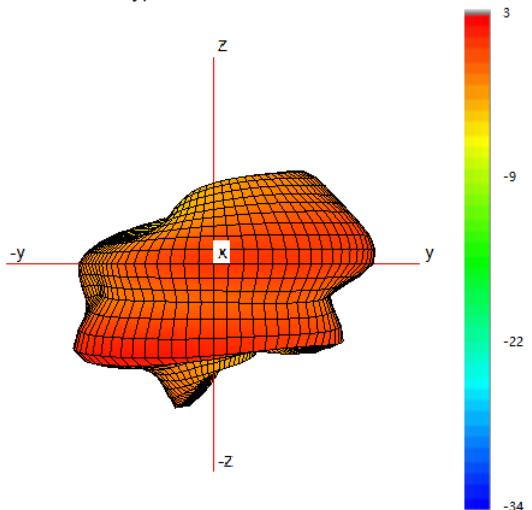
Typical 3D Pattern- Cell - 750 MHz



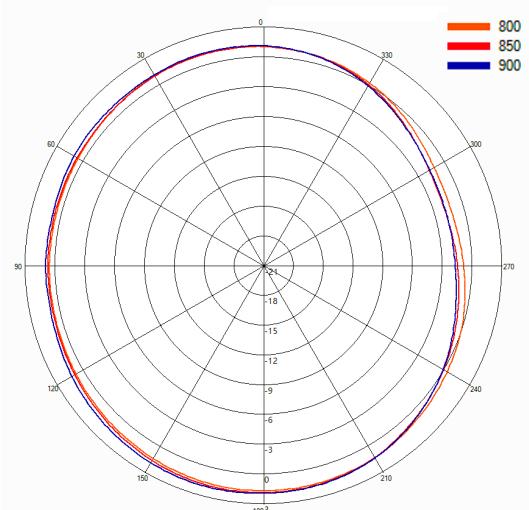
Typical H Plane- Cell - Patterns- 700-800MHz



Typical 3D Pattern- Cell - 850 MHz



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



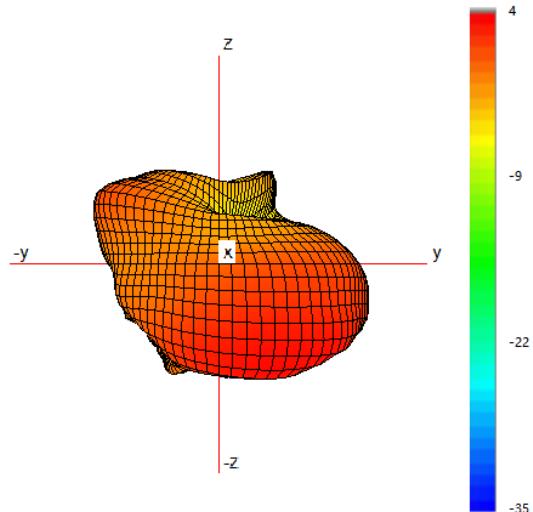
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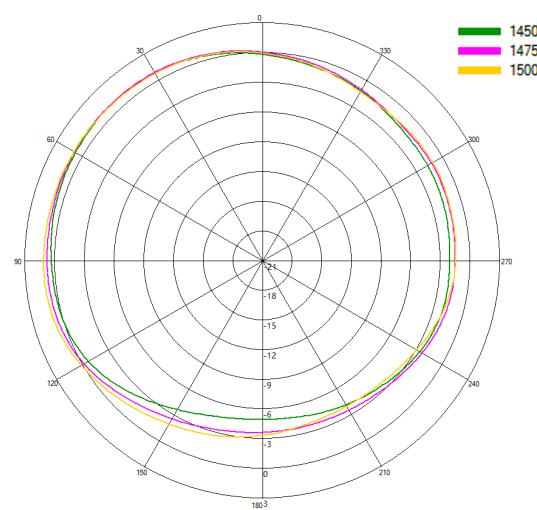
B4BE[W]-6-60-[X]

3D Pattern Data in Free Space on bracket Cell

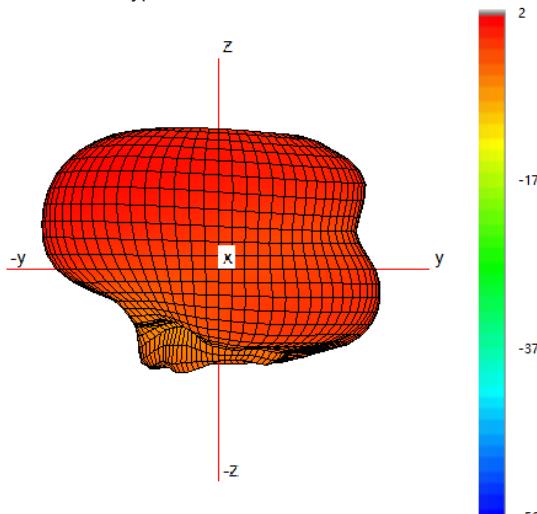
Typical 3D Pattern- Cell - 1475 MHz



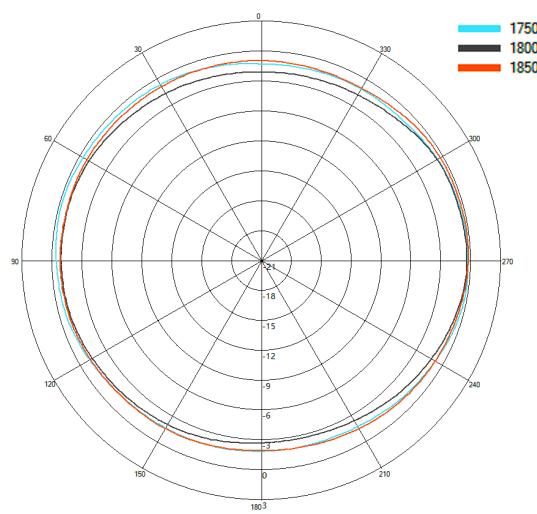
Typical H Plane- Cell- Patterns- 1450-1500 MHz



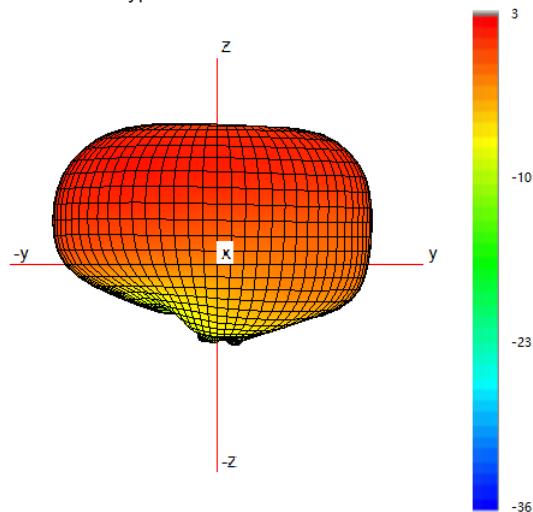
Typical 3D Pattern- Cell - 1800 MHz



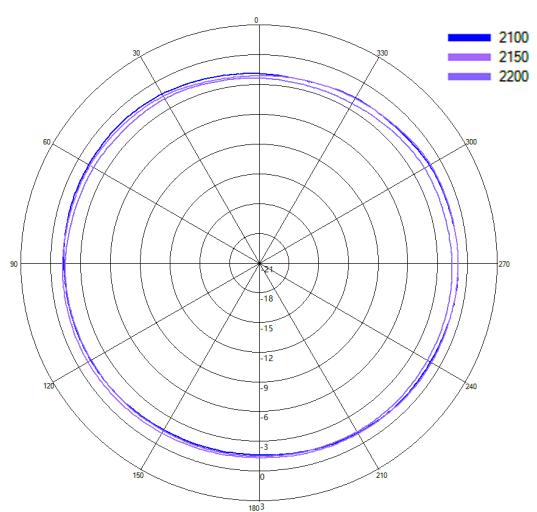
Typical H Plane- Cell- Patterns- 1750-1850 MHz



Typical 3D Pattern- Cell - 2150 MHz



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



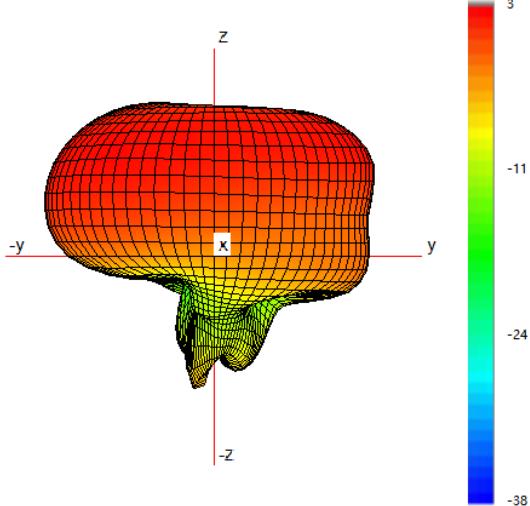
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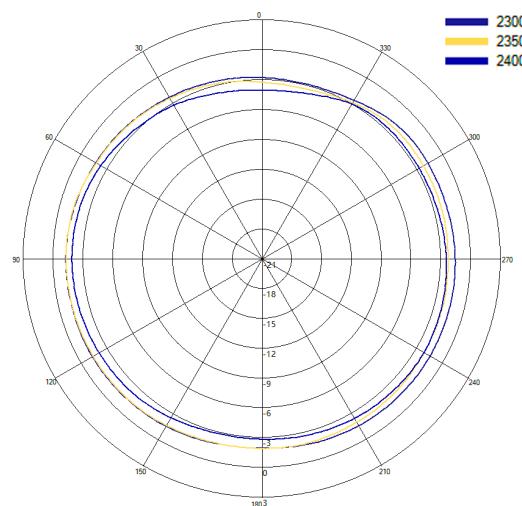
B4BE[W]-6-60-[X]

3D Pattern Data in Free Space on bracket Cell

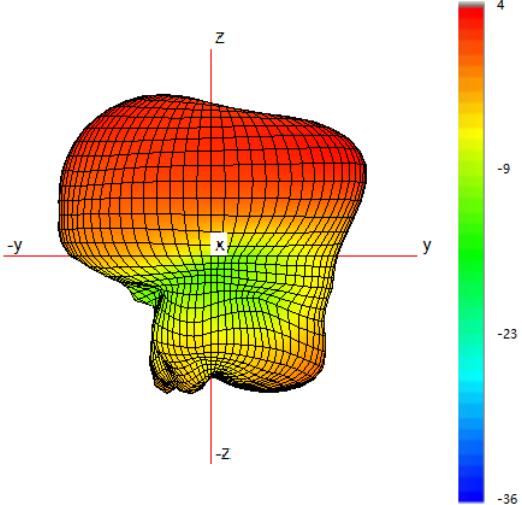
Typical 3D Pattern- Cell - 2350 MHz



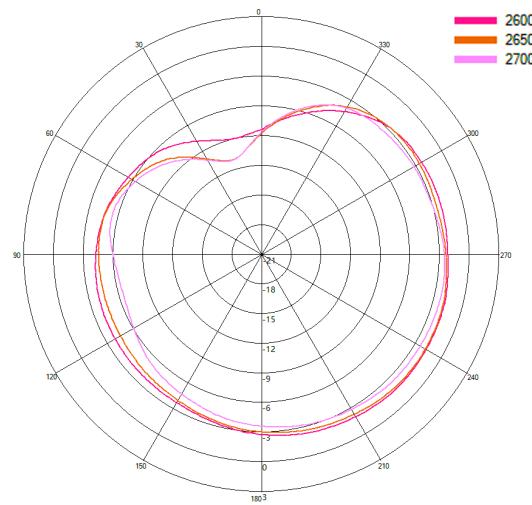
Typical H Plane- Cell - Patterns- 2300-2400 MHz



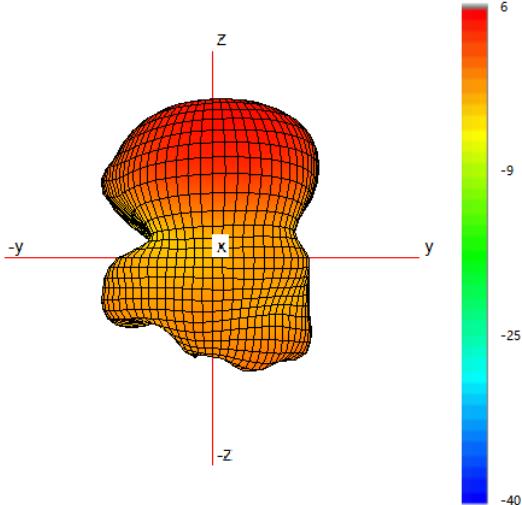
Typical 3D Pattern- Cell - 2650 MHz



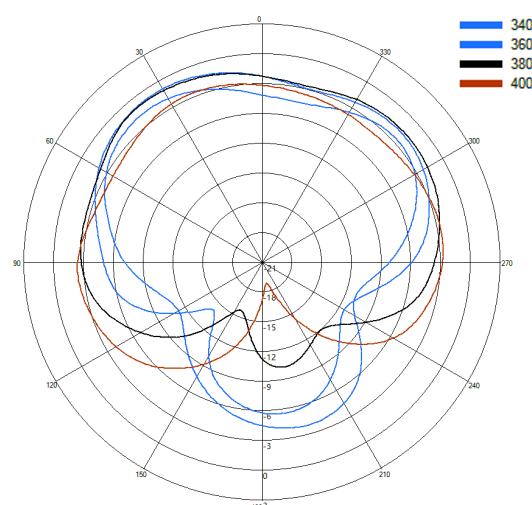
Typical H Plane- Cell - Patterns- 2600-2700 MHz



Typical 3D Pattern- Cell - 3600 MHz



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



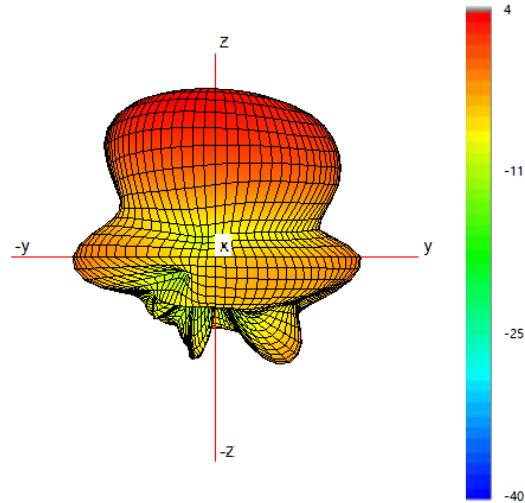
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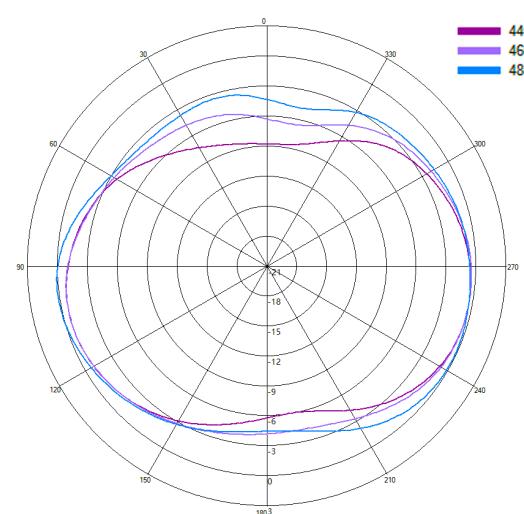
B4BE[W]-6-60-[X]

3D Pattern Data in Free  
Space on bracket Cell

Typical 3D Pattern- Cell - 4700 MHz



Typical H Plane- Cell - Patterns- 4400-4800 MHz

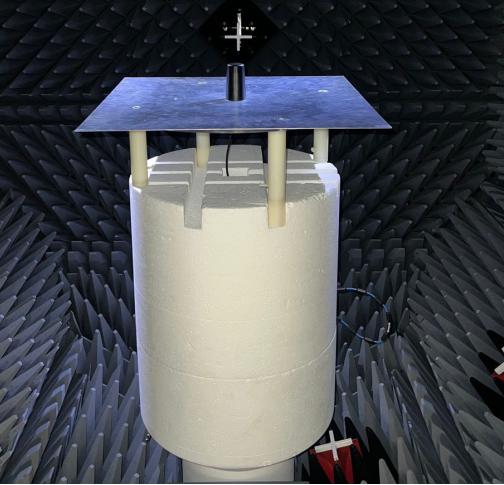


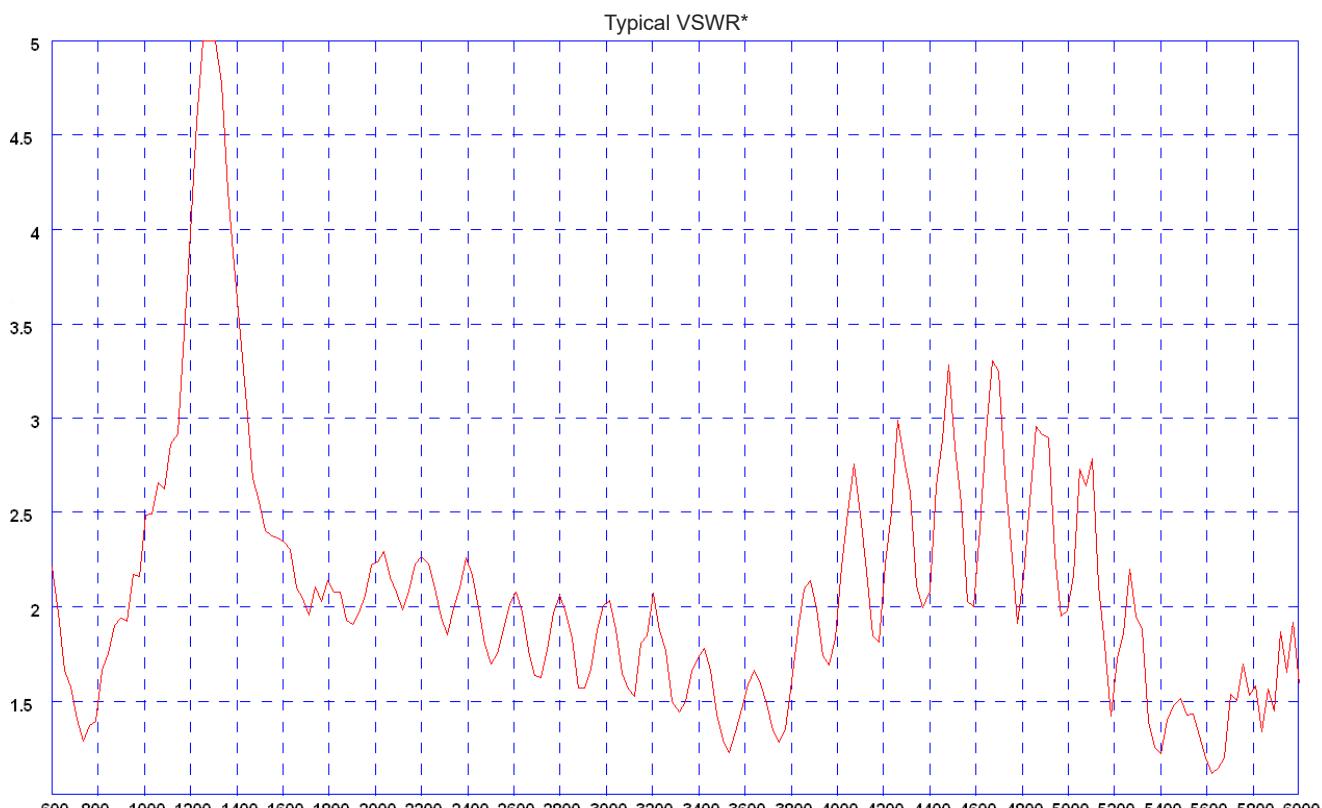
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B4BE[W]-6-60-[X]

Electrical Data Cell -  
Ground Plane

Measurement Conditions	4G/5G Antenna			
	Frequency Range (MHz)	LTE/NR Bands	Peak Gain (dBi)	Efficiency (%)
B4BE-6-60 measured on 600x600mm (2'x2') ground plane with 0.5m (1.6') of CS29 cable	617-698	71, 105	3.8	71
	699-798	12,13, 14 17,28	3.1	59
	807- 862	5,19,20,26,27	3.5	69
	880-960	8	3.9	75
	1427-1518	11, 21, 74,75,76	4.1	54
	1710-1920	2,3,4,9,25,35,39,66	4.7	67
	1920-2170	1,23	4.6	69
	2300-2400	30,40	4.1	73
	2496-2690	7,38,41	4.7	80
	3300-4200	22,42,43,48,77,78	6.7	74
	4400-5000	79	5.6	57



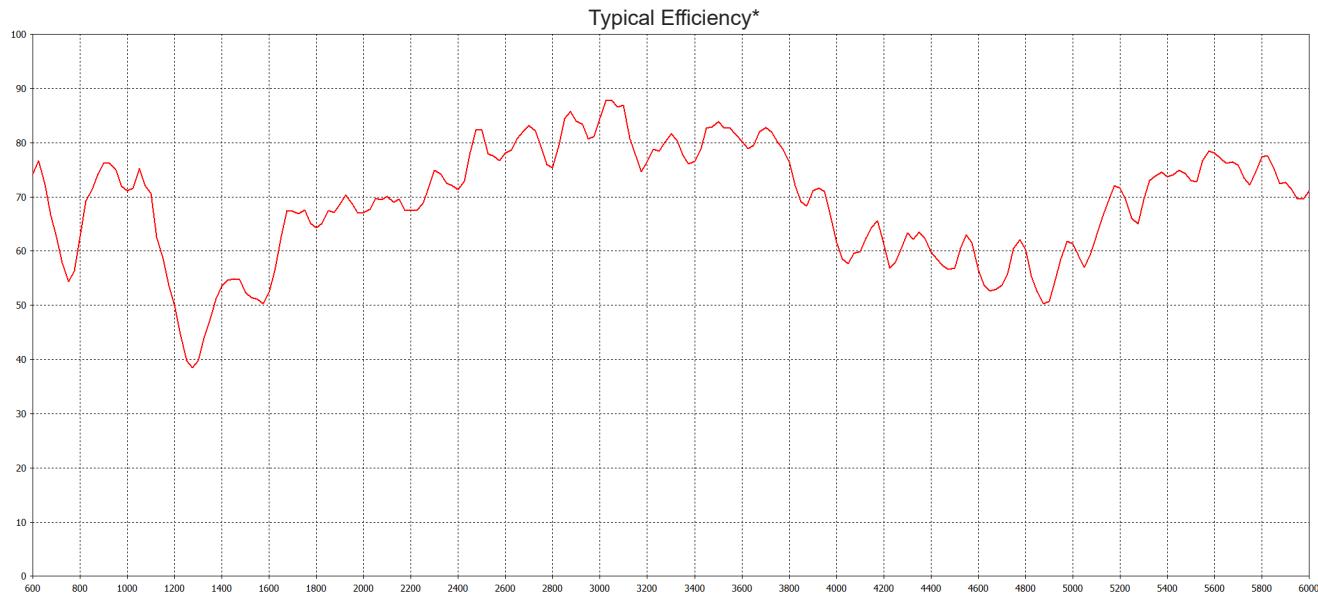
\*VSWR measured on 600x600mm (2'x2') ground plane with 0.5m (1.6') of CS29 cable

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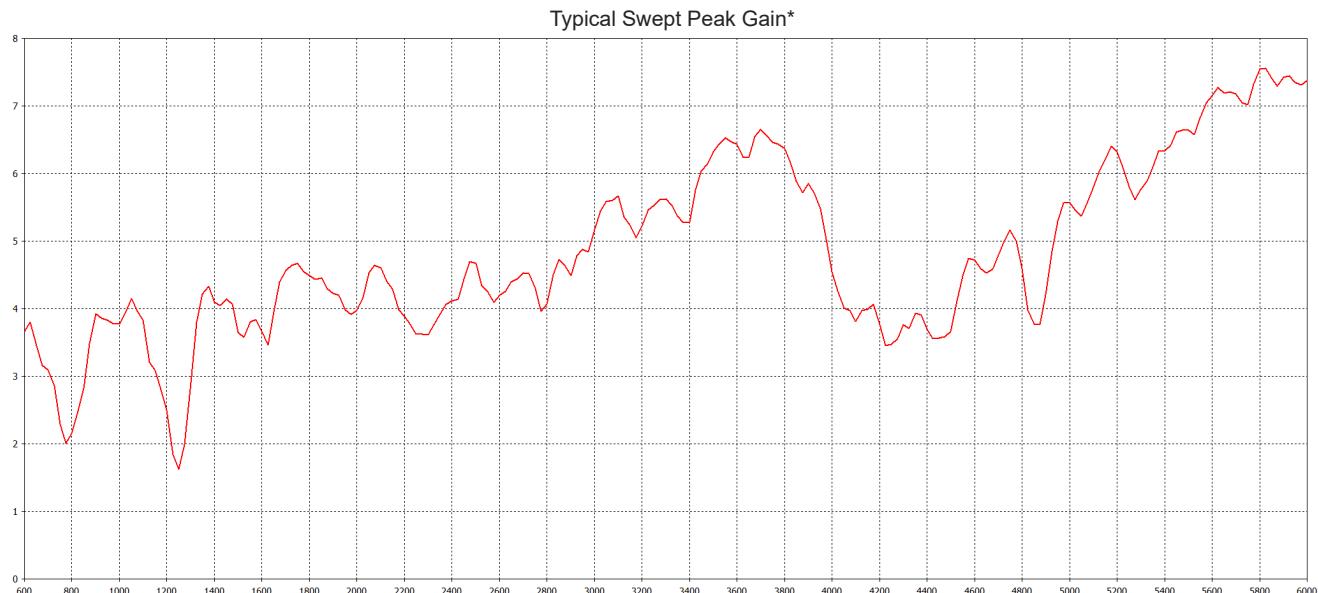
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Electrical Data Cell -  
Ground Plane



\*Efficiency measured on 600x600mm (2'x2') ground plane with 0.5m (1.6') of CS29 cable



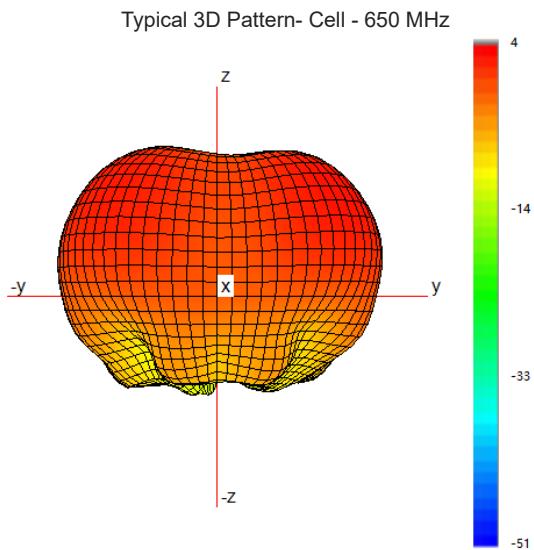
\*Peak Gain measured on 600x600mm (2'x2') ground plane with 0.5m (1.6') of CS29 cable

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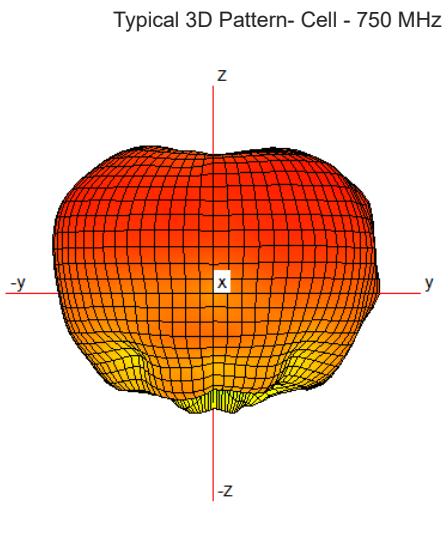
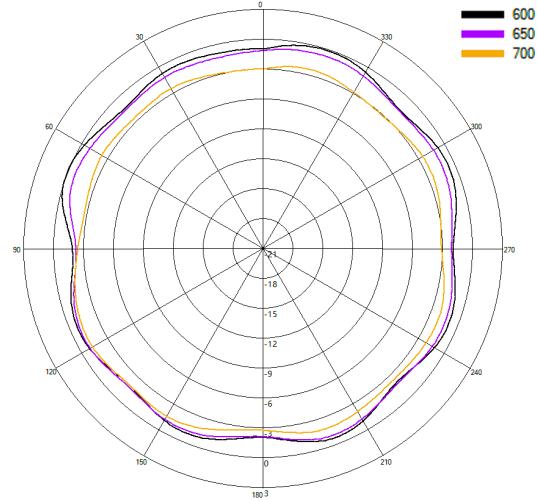
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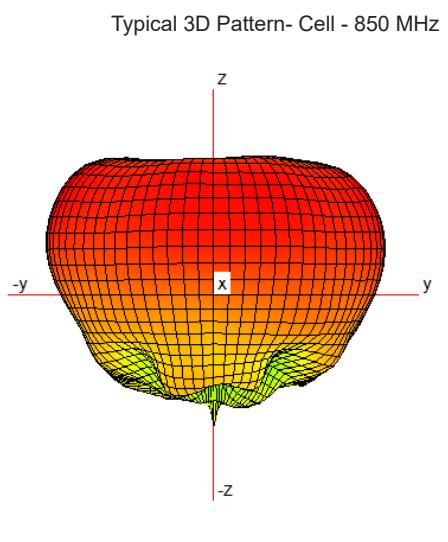
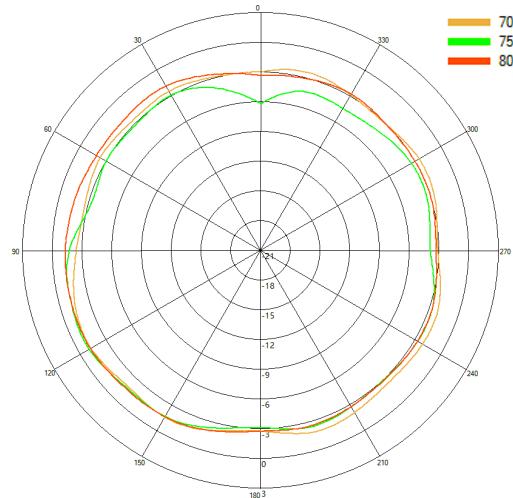
3D Pattern Data on  
Ground Plane Cell



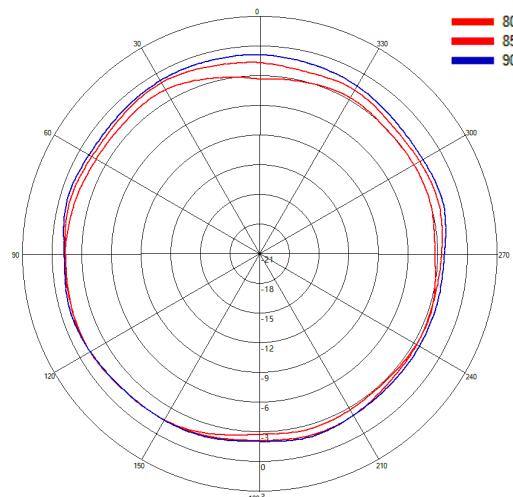
Typical H Plane- Cell - Patterns- 600-700MHz



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



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



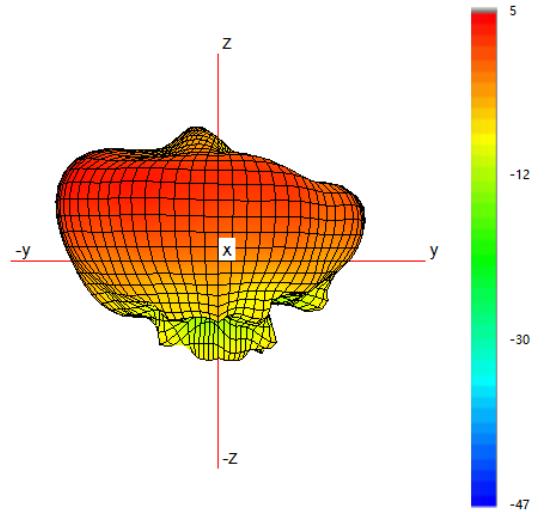
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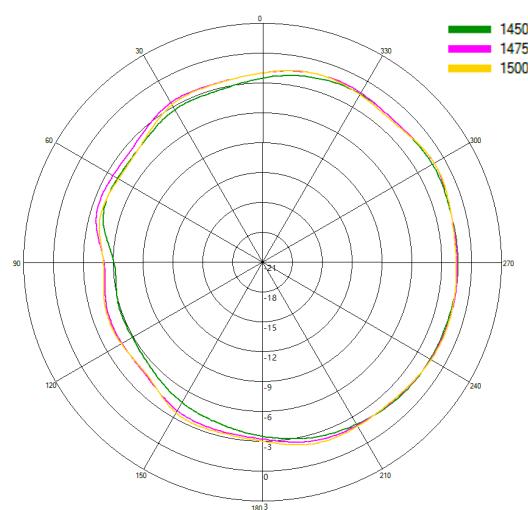
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3D Pattern Data on  
Ground Plane Cell

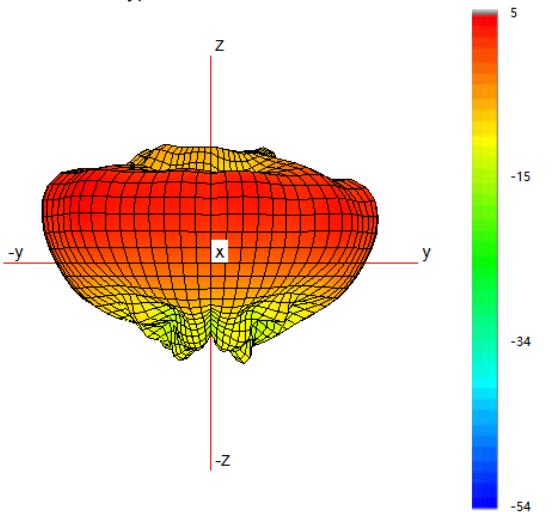
Typical 3D Pattern- Cell - 1475 MHz



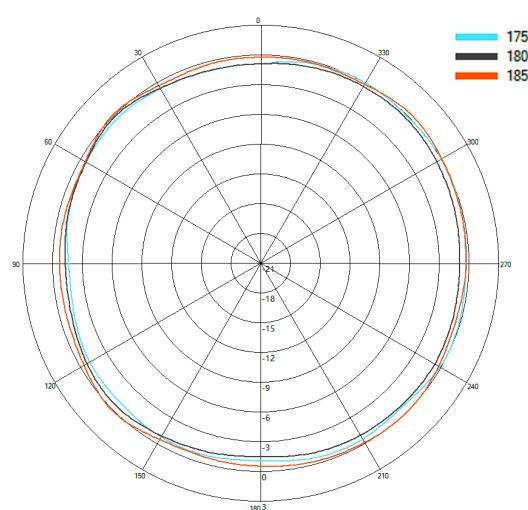
Typical H Plane- Cell- Patterns- 1450-1500 MHz



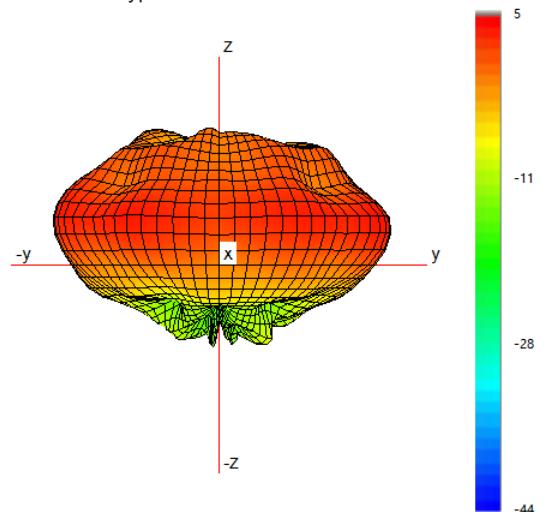
Typical 3D Pattern- Cell - 1800 MHz



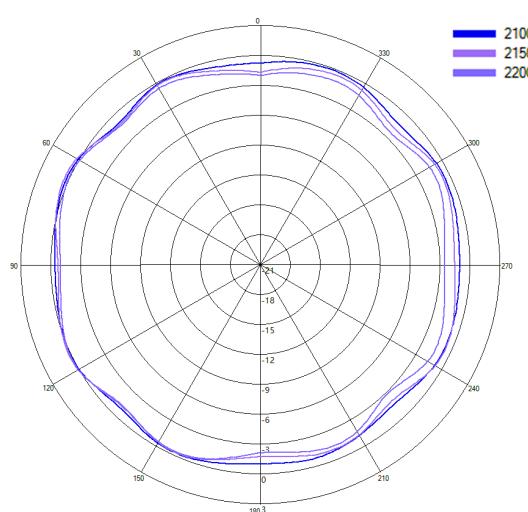
Typical H Plane- Cell- Patterns- 1750-1850 MHz



Typical 3D Pattern- Cell - 2150 MHz



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



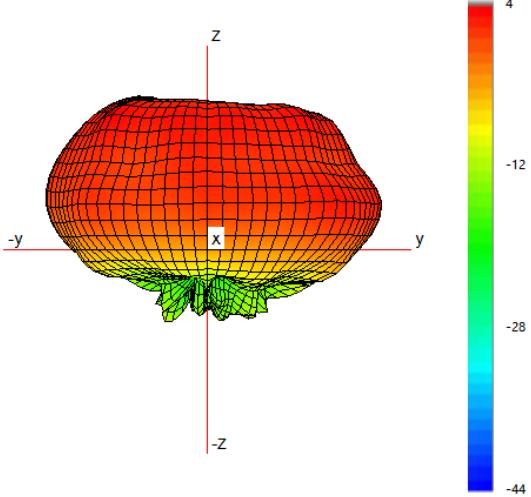
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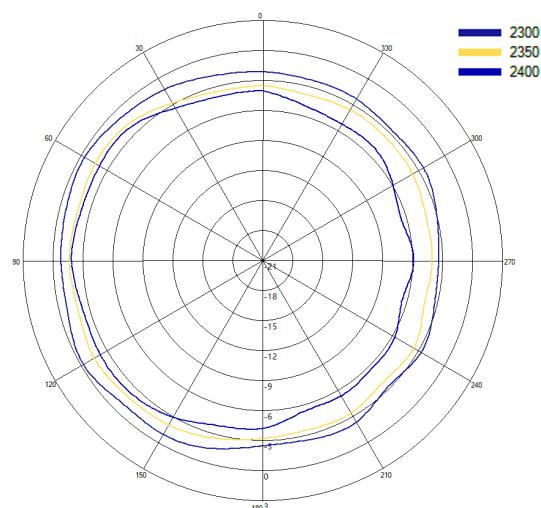
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3D Pattern Data on  
Ground Plane Cell

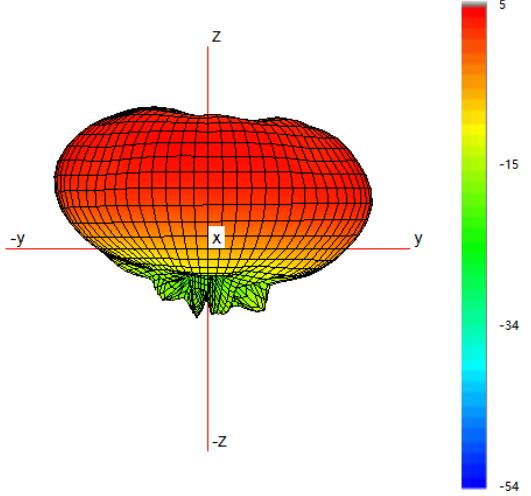
Typical 3D Pattern- Cell - 2350 MHz



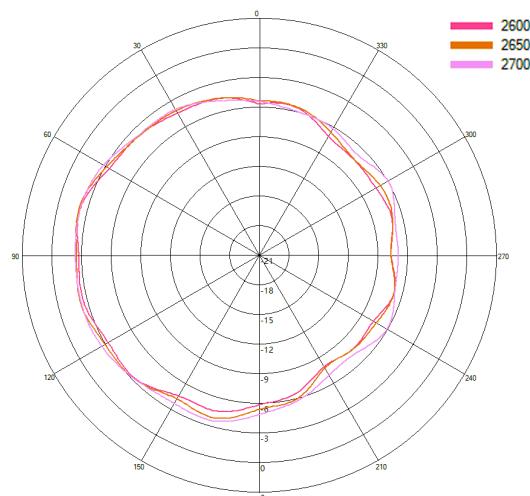
Typical H Plane- Cell - Patterns- 2300-2400 MHz



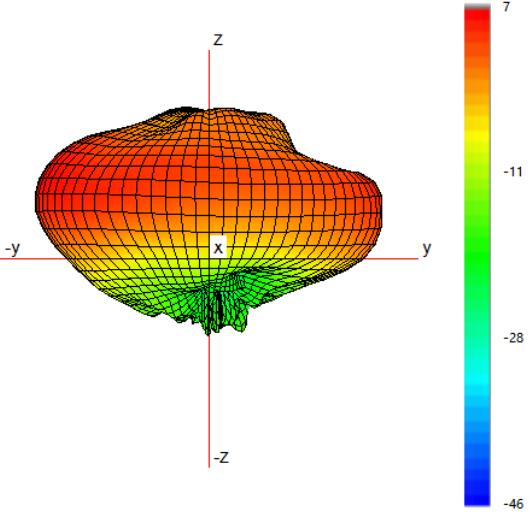
Typical 3D Pattern- Cell - 2650 MHz



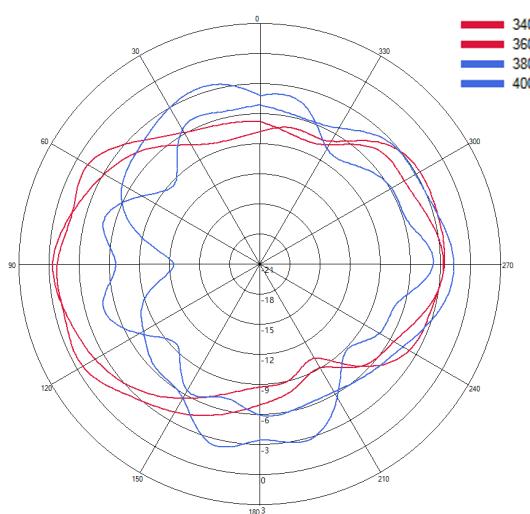
Typical H Plane- Cell - Patterns- 2600-2700 MHz



Typical 3D Pattern- Cell - 3600 MHz



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



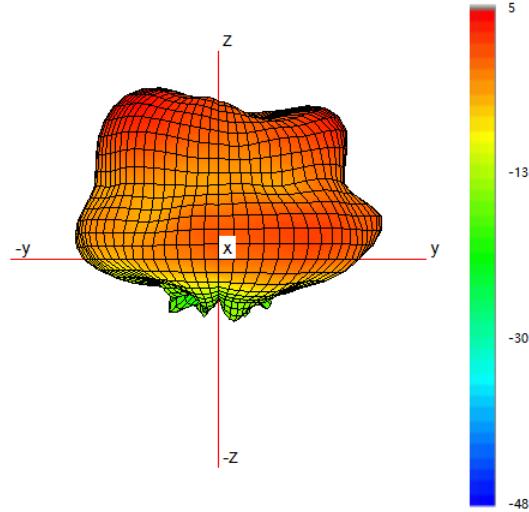
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3D Pattern Data on  
Ground Plane Cell

Typical 3D Pattern- Cell - 4700 MHz



Typical H Plane- Cell - Patterns- 4400-4800 MHz

