MiMo Directional 2.3-7.2GHz Antenna

WMM[X]9G-24-72-NJ

WMM[X]9G-24-72-NJ

- Supports 2x2, 3x3 or 4x4 MiMo across 2.3-7.2GHz
- Up to 4x wideband elements with gain
- Suitable for mast and rail mounting
- Supports WiFi 6e / 7 and 5G / P-LTE frequencies

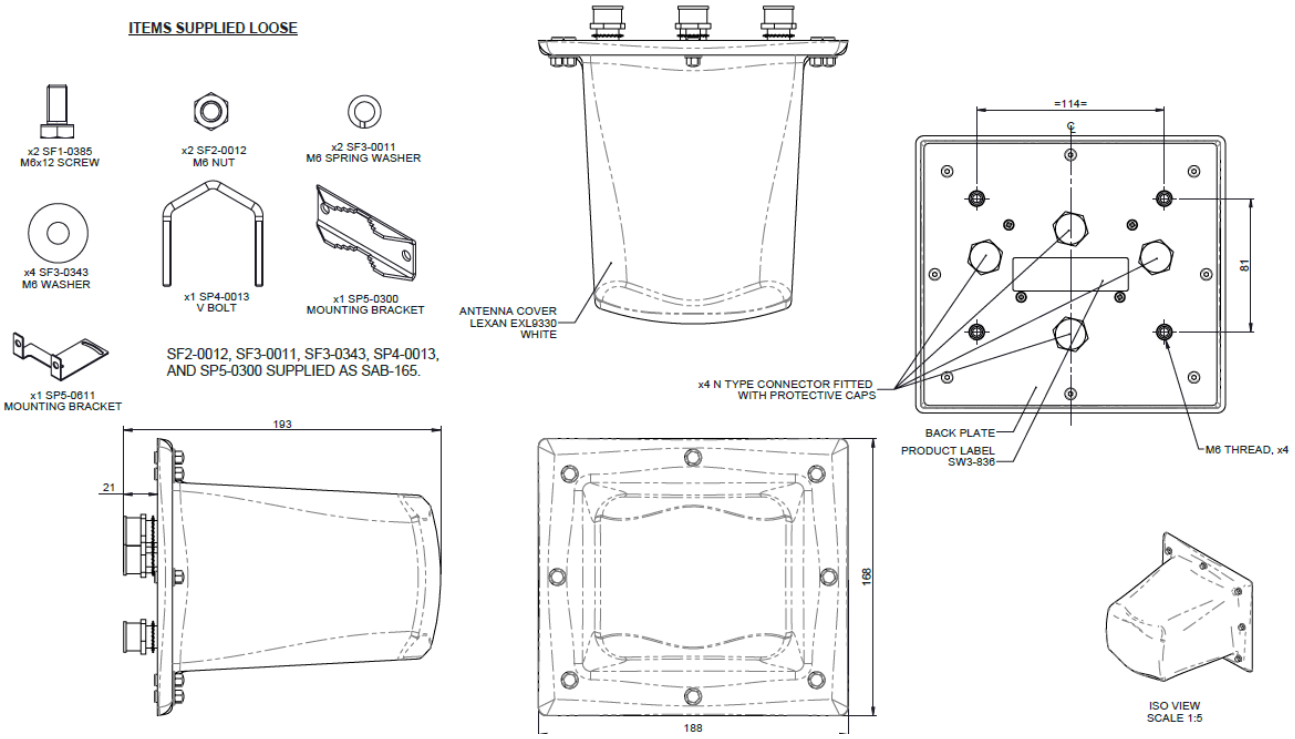
The WMM[X]9G-24-72-NJ is a high directional gain 2x2, 3x3 or 4x4 MiMo antenna for WiFi, 5G and P-LTE networks. Incorporating two, three or four separately fed gain element assemblies in a single housing the WMM[X]9G-24-72-NJ is equipped to provide client-side MiMo support for modern networks.

The weather-resistant housing is designed for rail or mast mounting. Supplied with fitted N female bulkhead connections for easy installation, the product can be fitted with a range of extension cables.

The WMM[X]9G-24-72-NJ is a cost-effective value-added product for providing MiMo WiFi, 5G or P-LTE coverage to a room, platform or other areas.

Technical Drawing

WMM49G-24-72-NJ Shown



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WMM[X]9G-24-72-NJ

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Product Data

Part No.				
		WMM49G-24-72-NJ	WMM39G-24-72-NJ	WMM29G-24-72-NJ
Electrical Data				
Frequency range (GHz)		4x 2.3-7.2	3x 2.3-7.2	2x 2.3-7.2
Radiation pattern			Directional	
Nominal polarisation		2x Horizontal 2x Vertical	1x Horizontal 2x Vertical	1x Horizontal 1x Vertical
Correlation co-efficient (all bands)			< 0.2	
Max input power (W)			20 Watts	
Nominal impedance			50Ω	
Mechanical Data				
Dimensions (mm)	Height		168 (6.6”)	
	Width		188 (7.4”)	
	Depth		193 (7.6”)	
Operating temp (°C)			-40° / +80°C (-40° / 176°F)	
Material			Lexan EXL 9330	
Colour			White	
Approvals				
Ingress Protection			IP66	
Environmental		EN 50155:2021 (Dry heat & Cooling, Damp Heat), EN61373:2010 / EN50155:2021 (Shock & Vibration)		
Mounting Data				
Fixing			Rail mount / mast mount	
Mounting bracket material			Stainless steel / Aluminium	
Pole diameter (mm)			20-50 / (0.78 - 1.96”)	
Connector Data				
Type		N female x 4	N female x 3	N female x2

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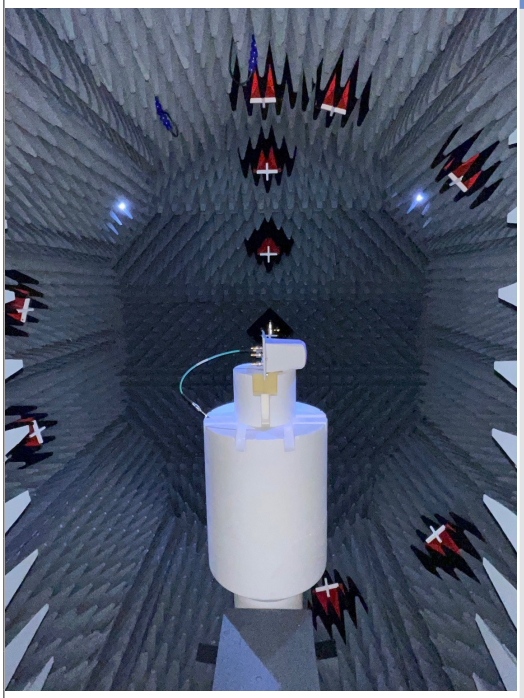
Electrical Data Iin Free Space

Measurement Conditions

Measured in free space without additional cable



Ports 1-4 Cellular Bands

Frequency Range (MHz)	LTE Bands	Antenna Element	Peak Gain (dBi)	Efficiency (%)
2300-2400	30,40	Cell A	3.6	52
		Cell B	9.3	74
		Cell C	9.2	75
		Cell D	9.6	75
2496-2690	7,38,41	Cell A	5.0	55
		Cell B	9.7	77
		Cell C	9.0	77
		Cell D	9.5	78
3300-4200	22,42,43,48,77, 78,79	Cell A	5.8	59
		Cell B	8.1	64
		Cell C	8.4	60
		Cell D	8.0	62
4400-5000	79	Cell A	6.9	58
		Cell B	10.3	61
		Cell C	10.1	64
		Cell D	11.1	61
5925-7125	96, 102,104	Cell A	7.3	54
		Cell B	11.0	75
		Cell C	11.3	71
		Cell D	11.0	76

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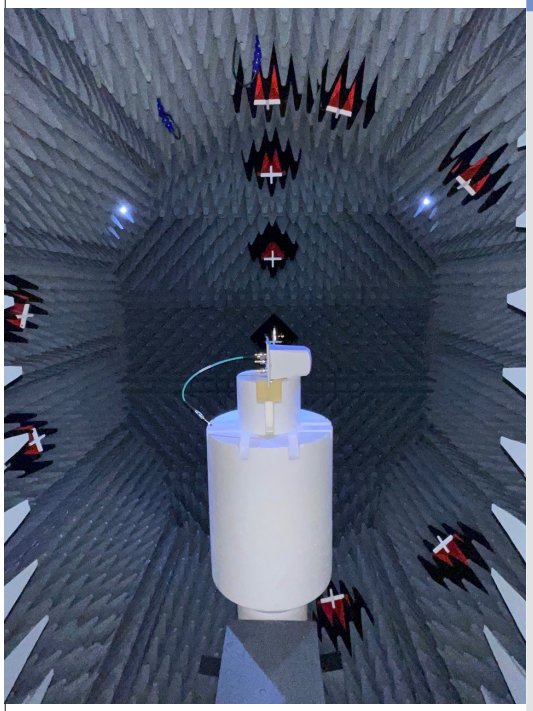
PANORAMA ANTENNAS

Electrical Data Iin Free Space

Measurement Conditions

Measured in free space without additional cable



Ports 1-4 WiFi Bands

Frequency Range (MHz)	WiFi Bands	Antenna Element	Peak Gain (dBi)	Efficiency (%)
2396-2485	2.4GHz	Cell A	9.2	77
		Cell B	9.4	76
		Cell C	8.8	77
		Cell D	9.5	77
5150-5250	UNII-1	Cell A	10.8	74
		Cell B	10.2	74
		Cell C	9.2	70
		Cell D	10.0	72
5250-5350	UNII-2A	Cell A	10.1	76
		Cell B	10.1	77
		Cell C	10.0	70
		Cell D	9.7	73
5350-5470	UNII-2B	Cell A	10.1	79
		Cell B	10.3	81
		Cell C	10.2	72
		Cell D	9.6	77
5470-5725	UNII-2C	Cell A	9.5	73
		Cell B	10.6	73
		Cell C	10.7	75
		Cell D	10.4	74
5725-5850	UNII-3	Cell A	9.9	71
		Cell B	10.5	70
		Cell C	10.5	76
		Cell D	10.2	74
5850-5925	UNII-4	Cell A	9.8	71
		Cell B	9.5	67
		Cell C	10.0	70
		Cell D	9.9	71
5925-6425	UNII-5	Cell A	10.8	75
		Cell B	11.0	84
		Cell C	11.3	74
		Cell D	11.0	83
6425-6525	UNII-6	Cell A	9.7	68
		Cell B	10.5	73
		Cell C	8.7	63
		Cell D	10.0	70
6525-6875	UNII-7	Cell A	10.4	74
		Cell B	9.4	66
		Cell C	9.3	65
		Cell D	10.4	71
6875-7125	UNII-8	Cell A	10.4	78
		Cell B	9.1	68
		Cell C	9.9	78
		Cell D	8.9	73

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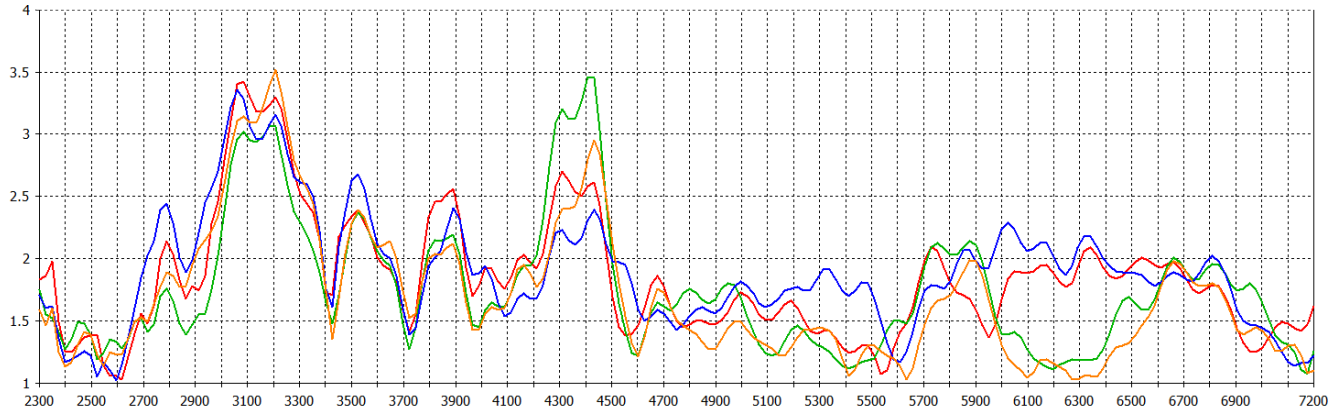
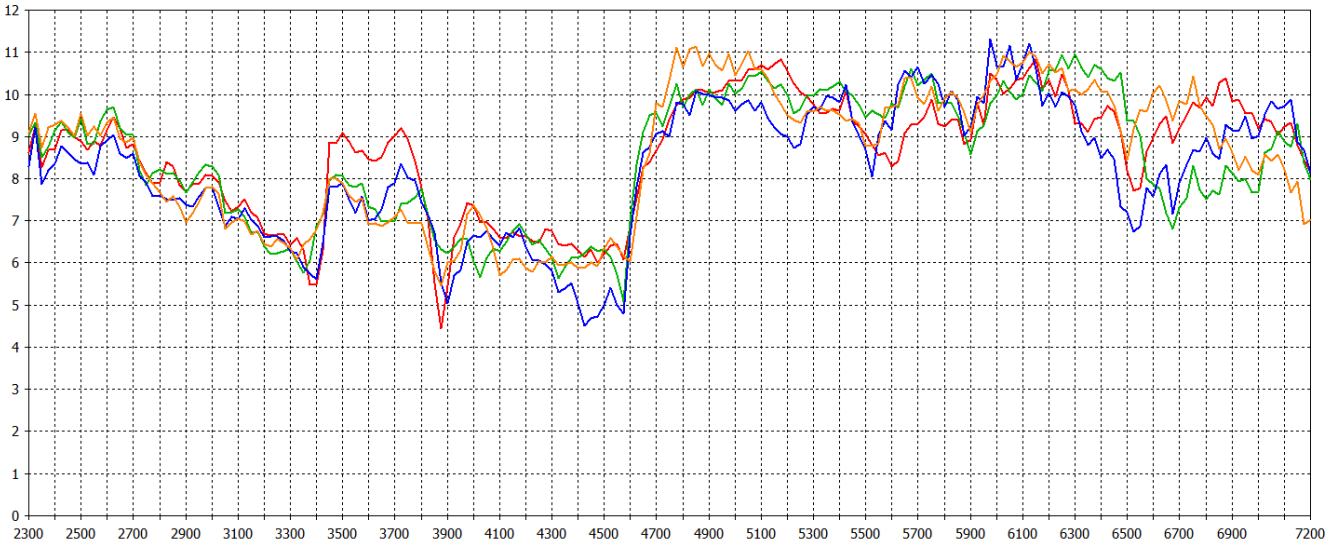
Electrical Data Iin Free Space

Typical VSWR



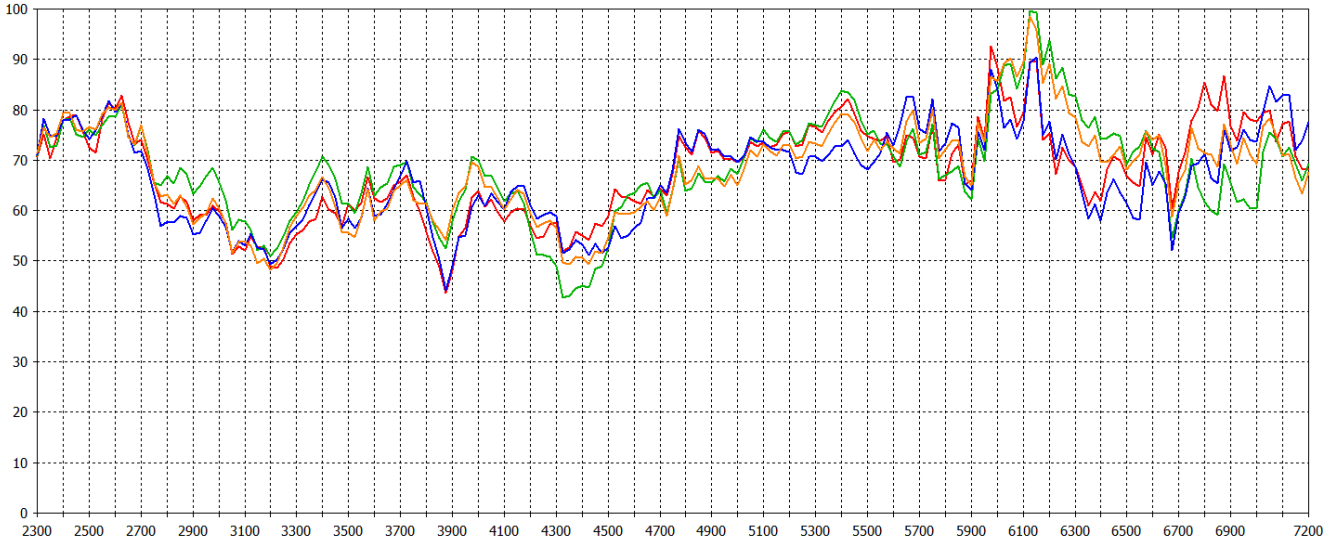
VSWR measured in free space withouth additional cable

Typical Swept Peak Gain



Peak Gain measured in free space withouth additional cable

Typical Efficiency



Efficiency measured in free space withouth additional cable

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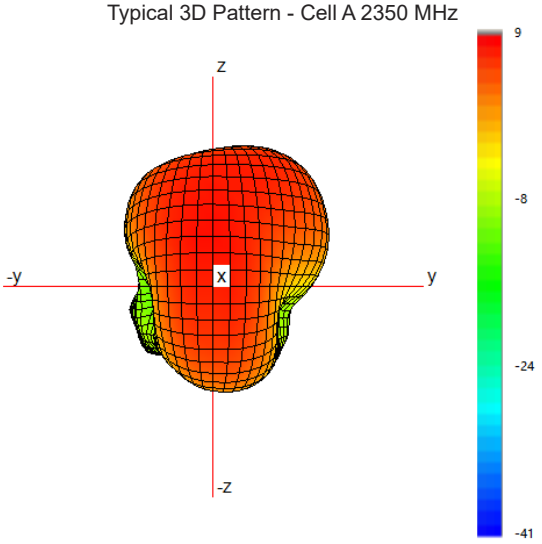
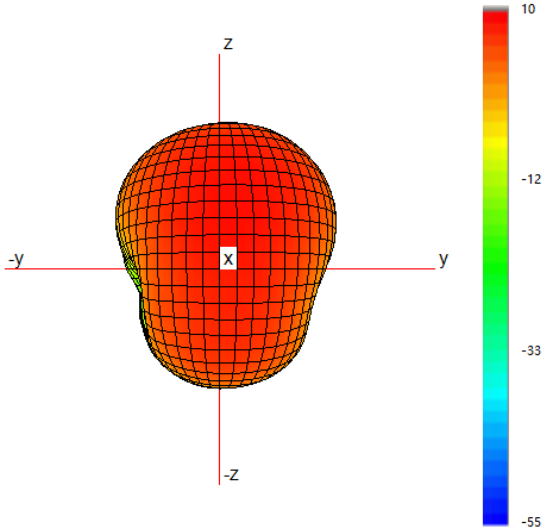
3D Pattern Data in Free Space Cell A

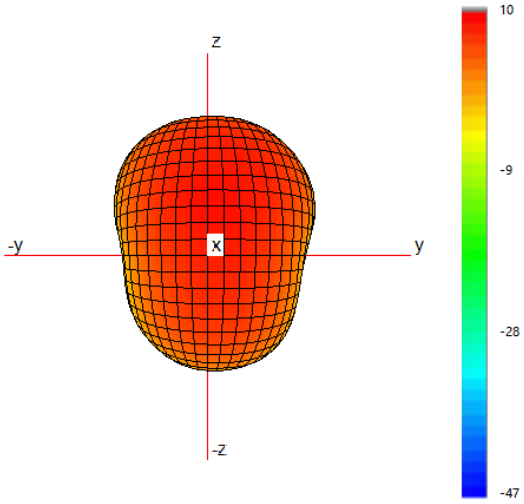
Typical 3D Pattern - Cell A 2350 MHz



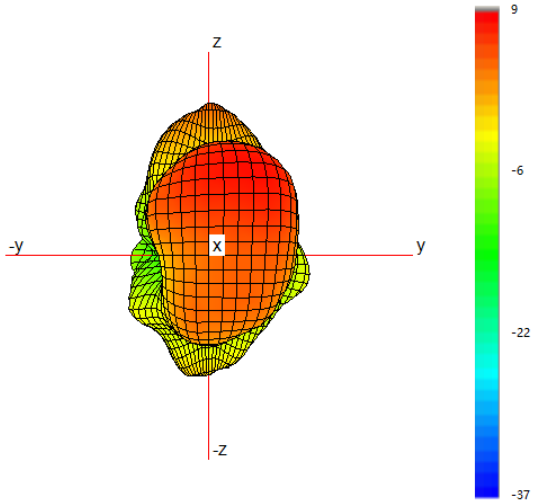
Typical 3D Pattern - Cell A 2450 MHz



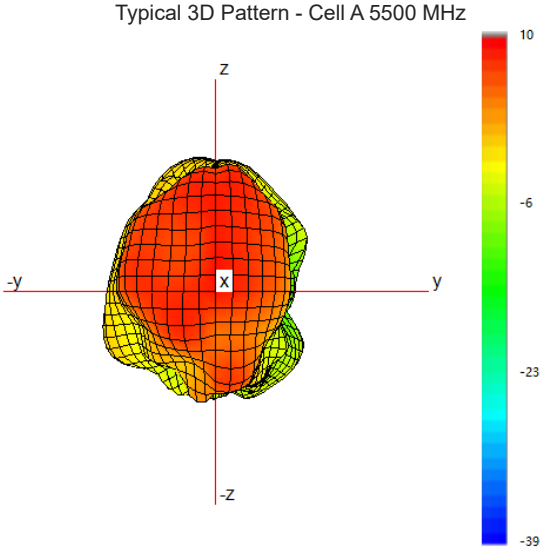
Typical 3D Pattern -Cell A 2650 MHz



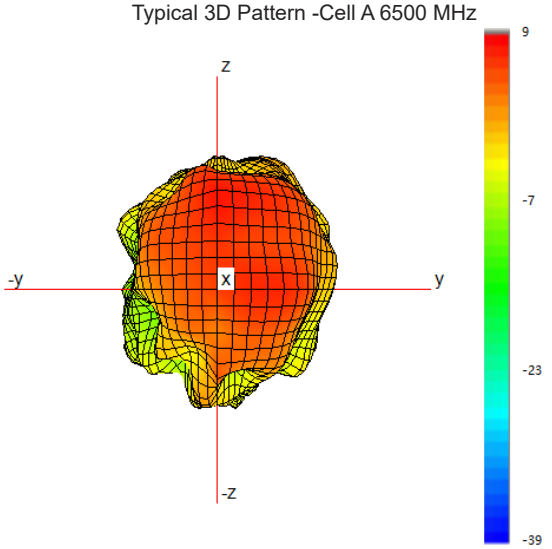
Typical 3D Pattern - Cell A 3600 MHz



Typical 3D Pattern - Cell A 5500 MHz



Typical 3D Pattern -Cell A 6500 MHz



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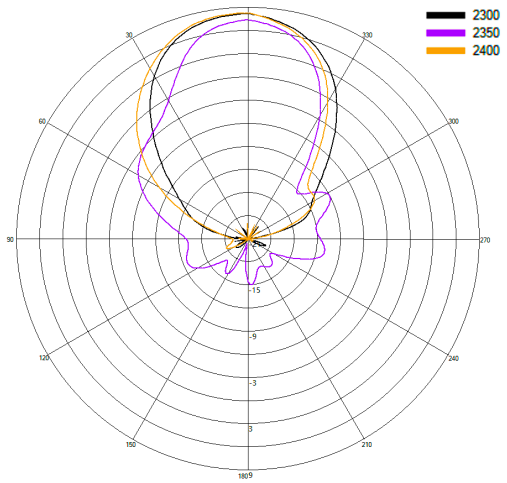
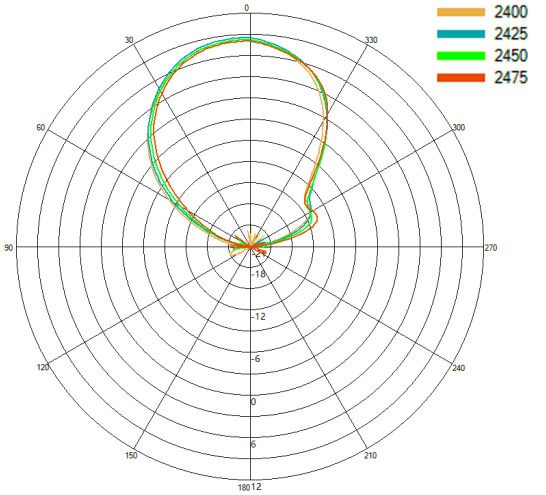
2D Pattern Data in Free Space Cell A-H Plane

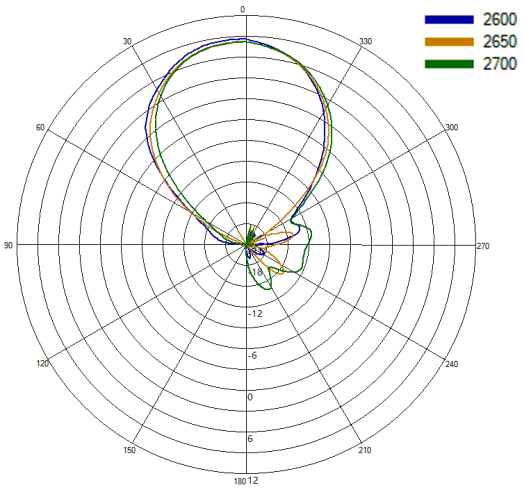
Typical H Plane Pattern - Cell A 2300-2400 MHz



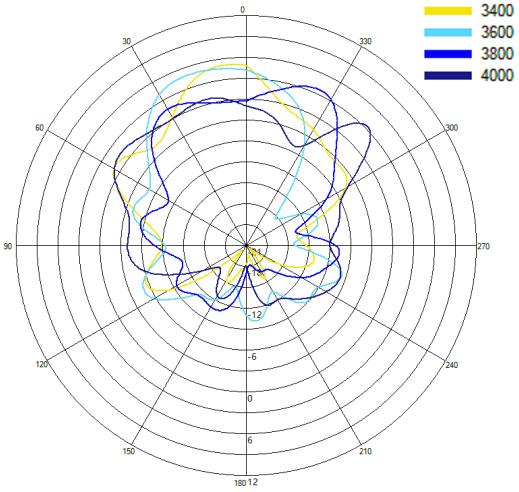
Typical H Plane Pattern - Cell A 2400-2475 MHz



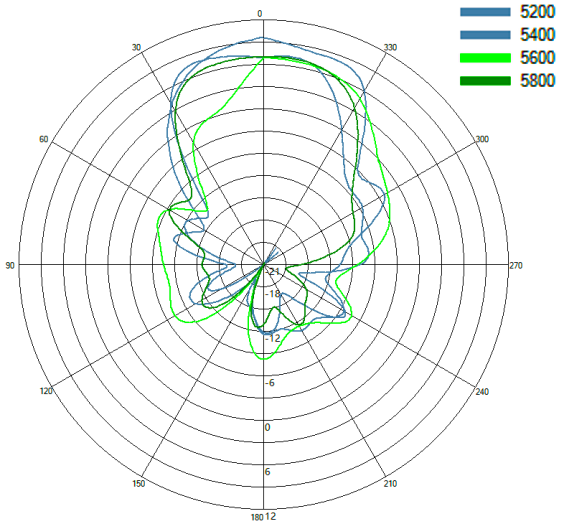
Typical H Plane Pattern - Cell A 2600-2700 MHz



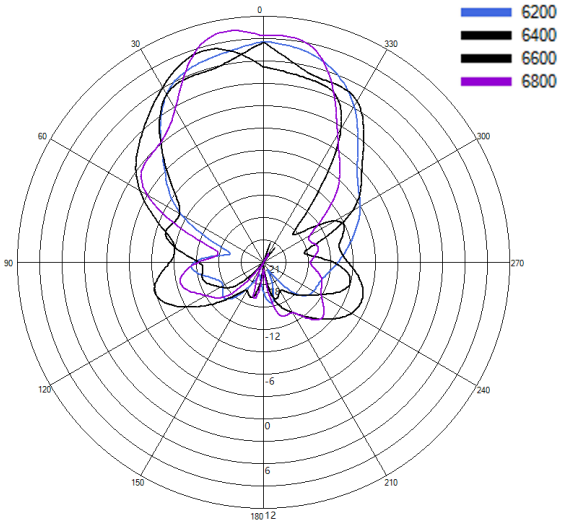
Typical H Plane Pattern - Cell A 3400-4000 MHz



Typical H Plane Pattern - Cell A 5200-5800 MHz



Typical H Plane Pattern - Cell A 6200-6800 MHz



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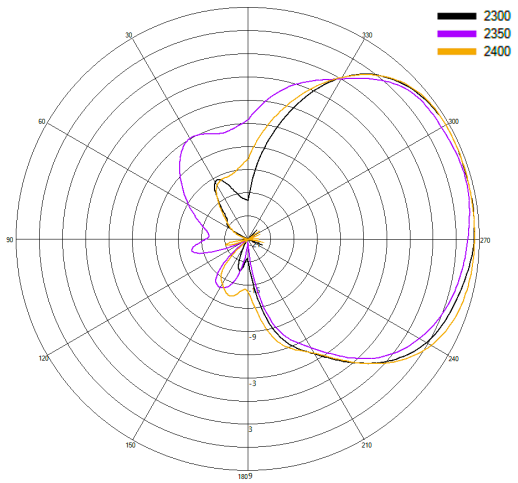
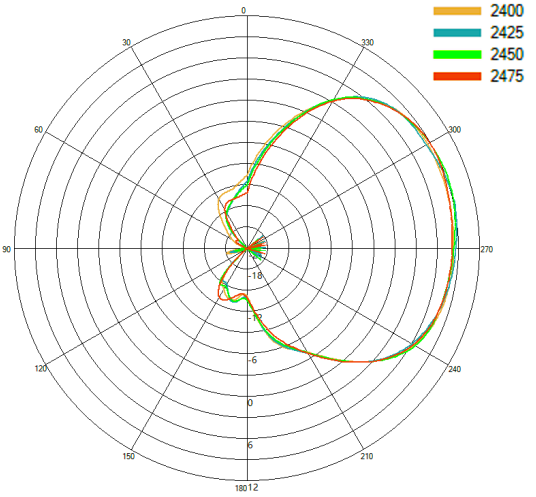
2D Pattern Data in Free Space Cell A-E Plane

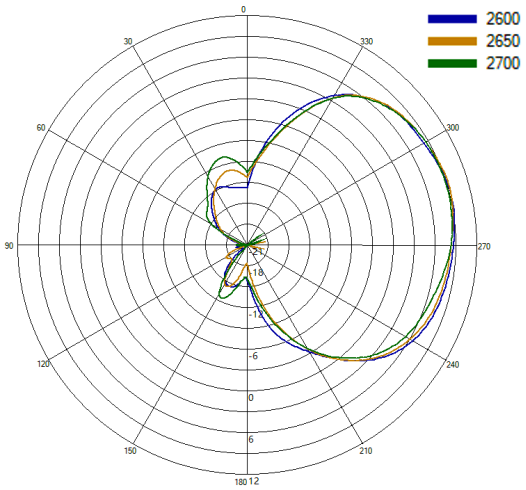
Typical E Plane Pattern - Cell A 2300-2400 MHz



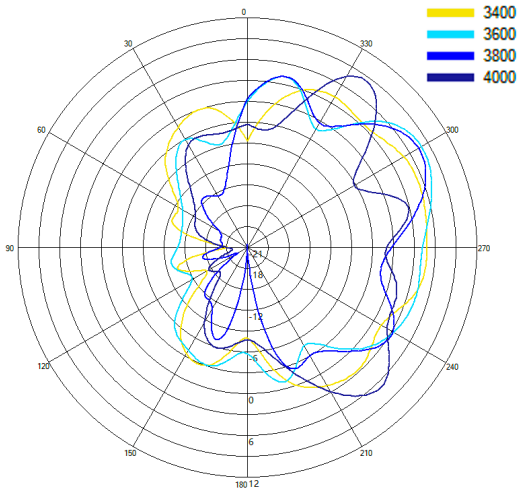
Typical E Plane Pattern - Cell A 2400-2475 MHz



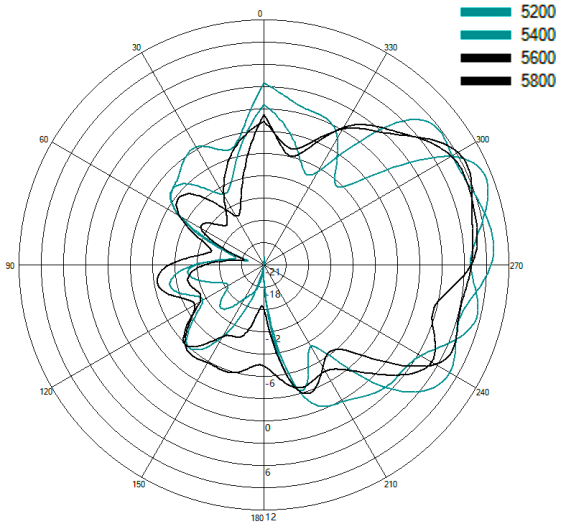
Typical E Plane Pattern - Cell A 2600-2700 MHz



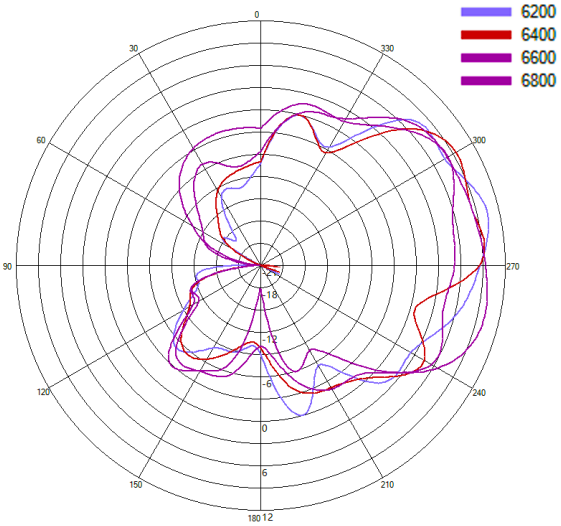
Typical E Plane Pattern - Cell A 3400-4000 MHz



Typical E Plane Pattern - Cell A 5200-5800 MHz



Typical E Plane Pattern - Cell A 6200-6800 MHz



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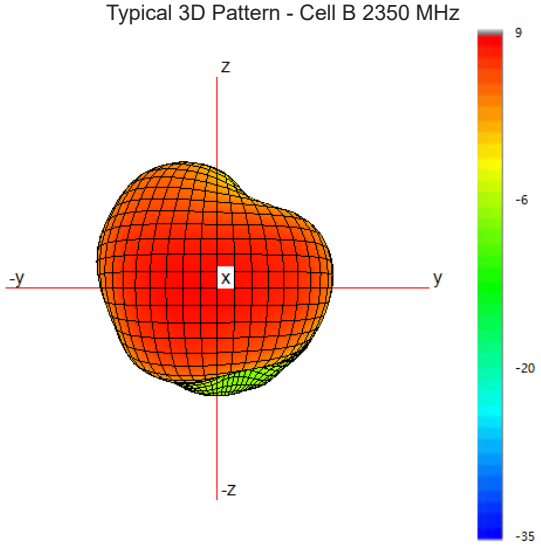
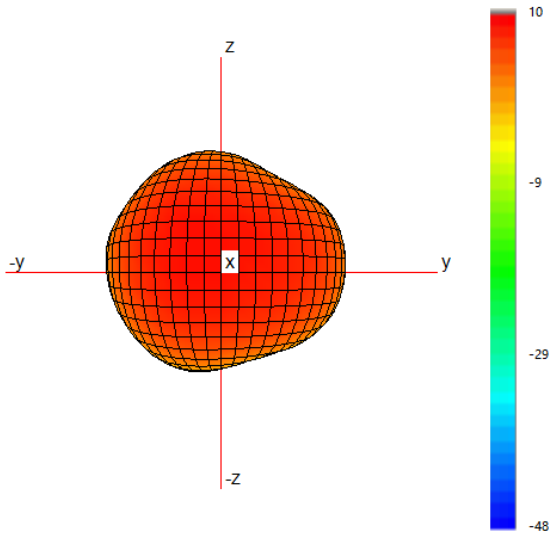
3D Pattern Data in Free Space Cell B

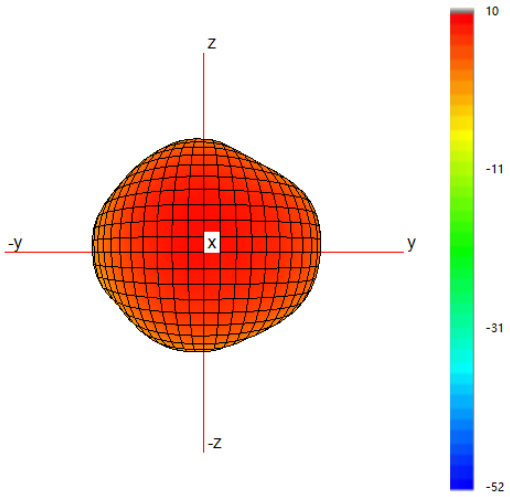
Typical 3D Pattern - Cell B 2350 MHz



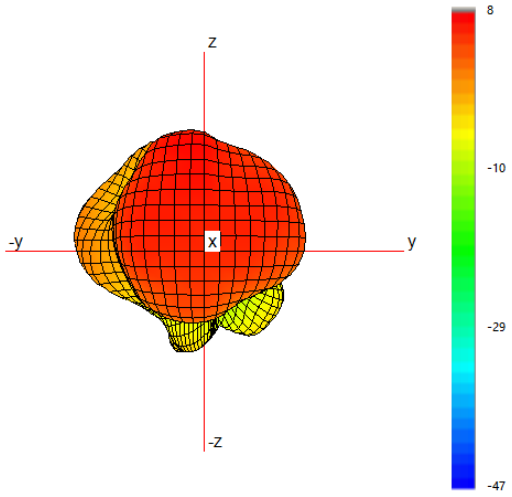
Typical 3D Pattern - Cell B 2450 MHz



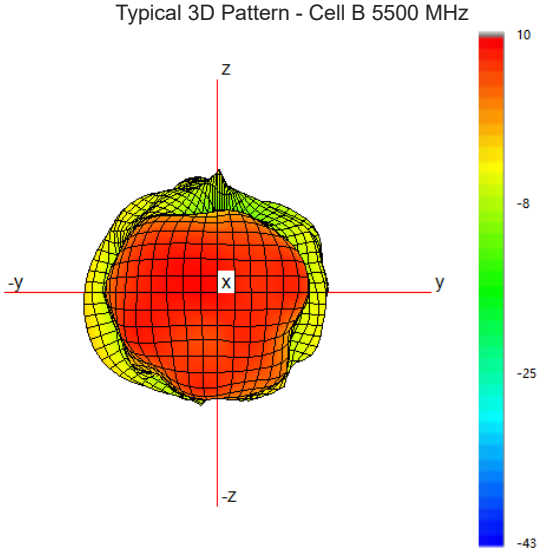
Typical 3D Pattern -Cell B 2650 MHz



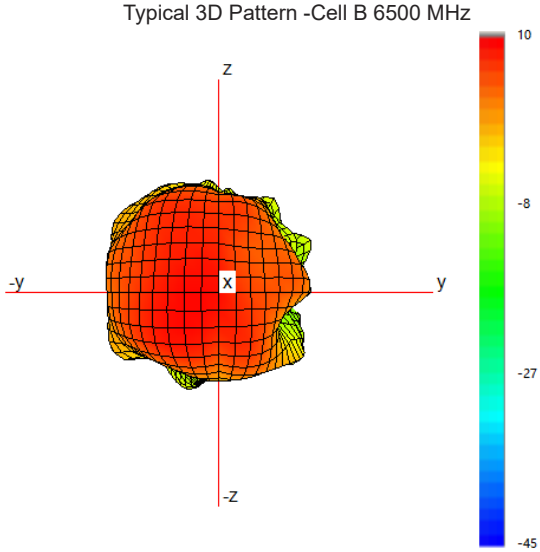
Typical 3D Pattern - Cell B 3600 MHz



Typical 3D Pattern - Cell B 5500 MHz



Typical 3D Pattern -Cell B 6500 MHz



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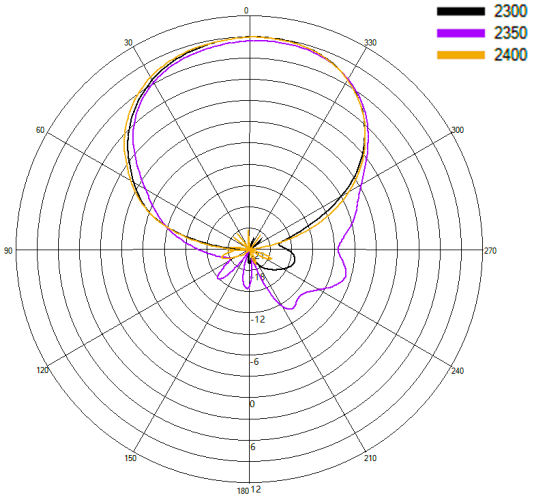
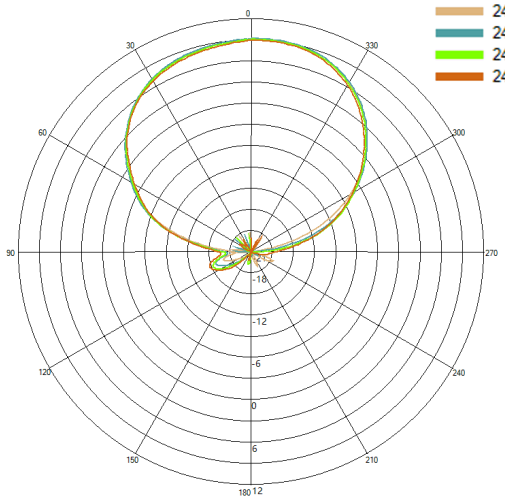
2D Pattern Data in Free Space Cell B-H Plane

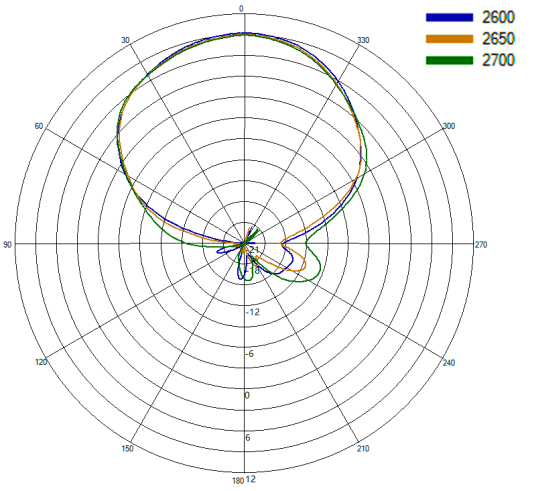
Typical H Plane Pattern - Cell B 2300-2400 MHz



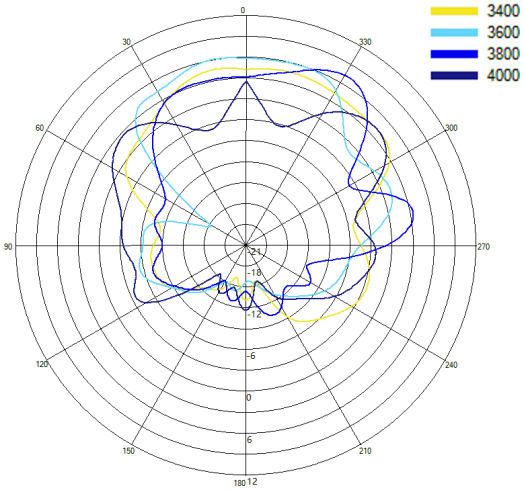
Typical H Plane Pattern - Cell B 2400-2475 MHz



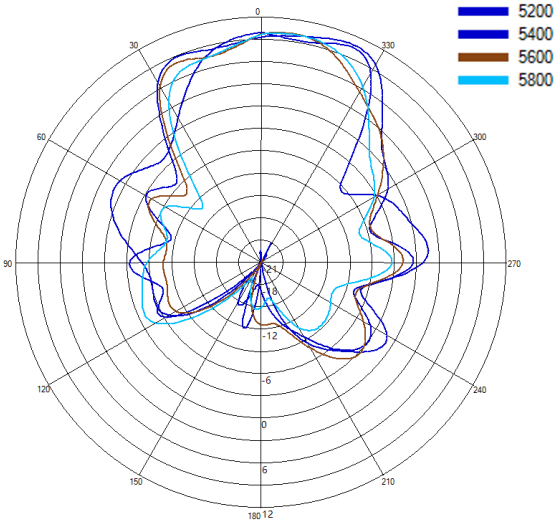
Typical H Plane Pattern - Cell B 2600-2700 MHz



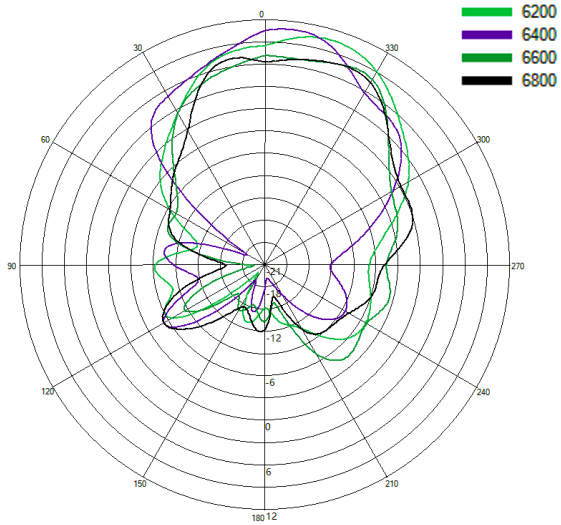
Typical H Plane Pattern - Cell B 3400-4000 MHz



Typical H Plane Pattern - Cell B 5200-5800 MHz



Typical H Plane Pattern - Cell B 6200-6800 MHz



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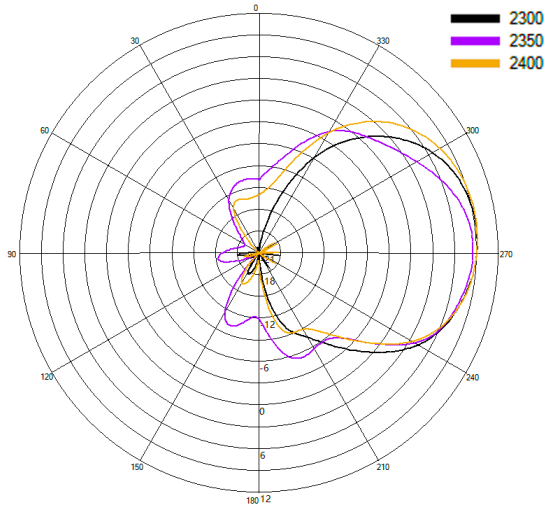
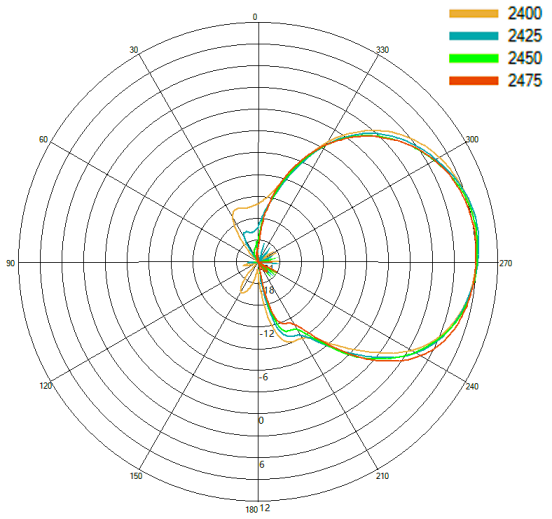
2D Pattern Data in Free Space Cell B-E Plane

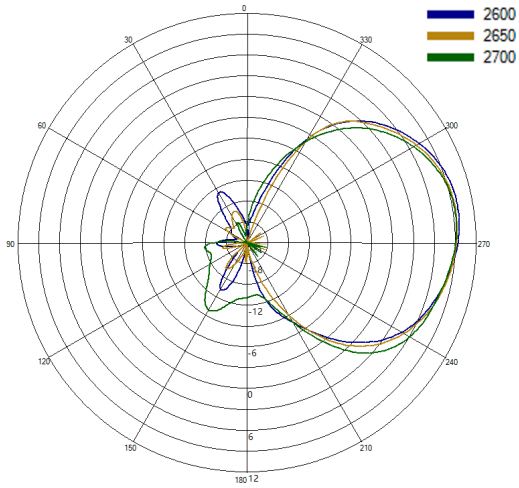
Typical E Plane Pattern - Cell B 2300-2400 MHz



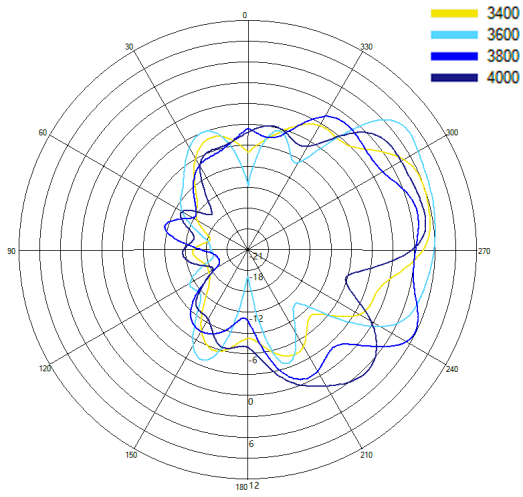
Typical E Plane Pattern - Cell B 2400-2475 MHz



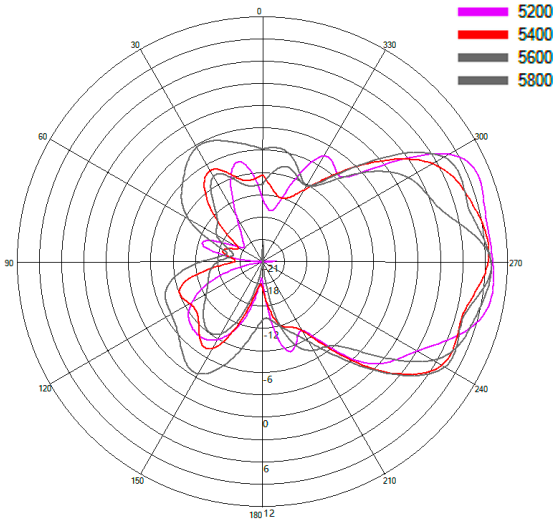
Typical E Plane Pattern - Cell B 2600-2700 MHz



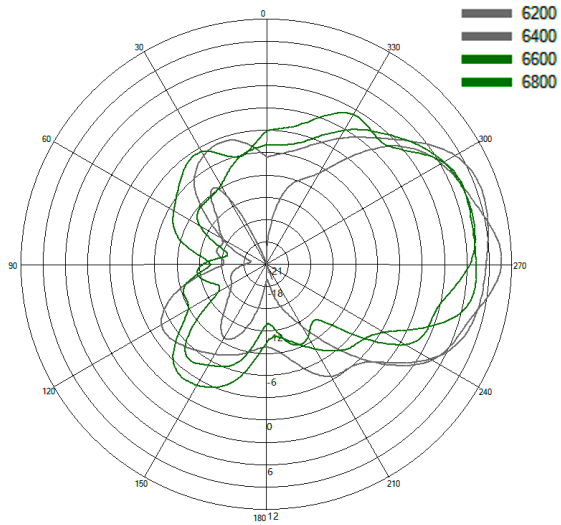
Typical E Plane Pattern - Cell B 3400-4000 MHz



Typical E Plane Pattern - Cell B 5200-5800 MHz



Typical E Plane Pattern - Cell B 6200-6800 MHz



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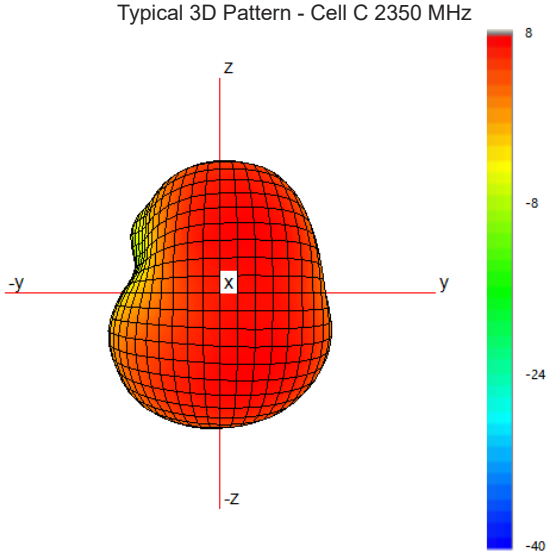
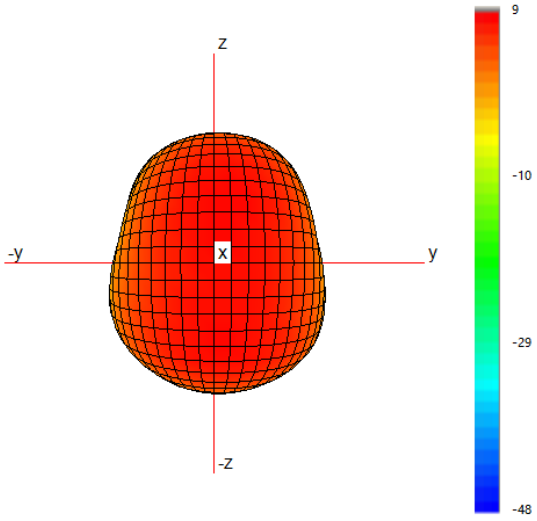
3D Pattern Data in Free Space Cell C

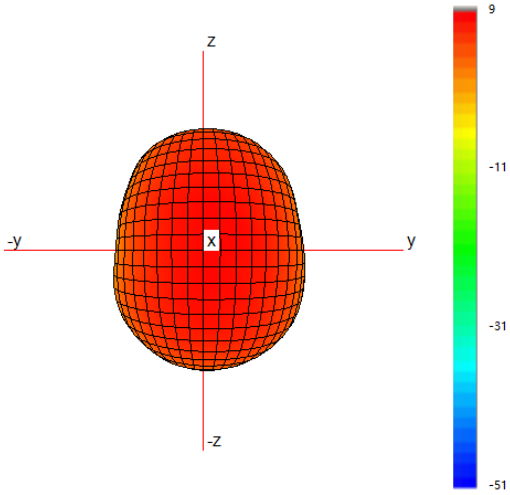
Typical 3D Pattern - Cell C 2350 MHz



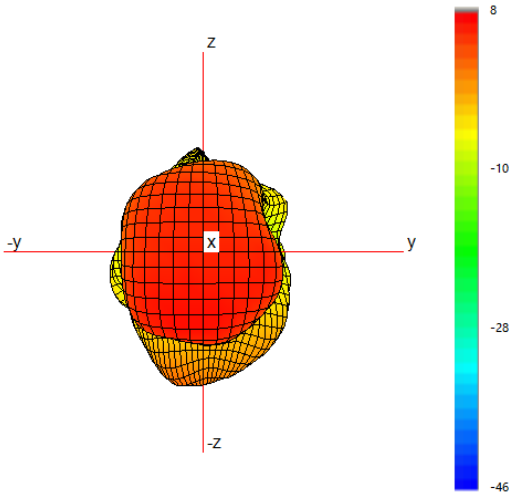
Typical 3D Pattern - Cell C 2450 MHz



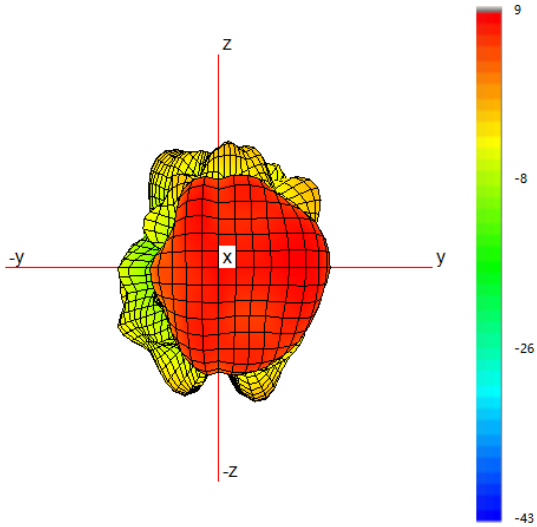
Typical 3D Pattern -Cell C 2650 MHz



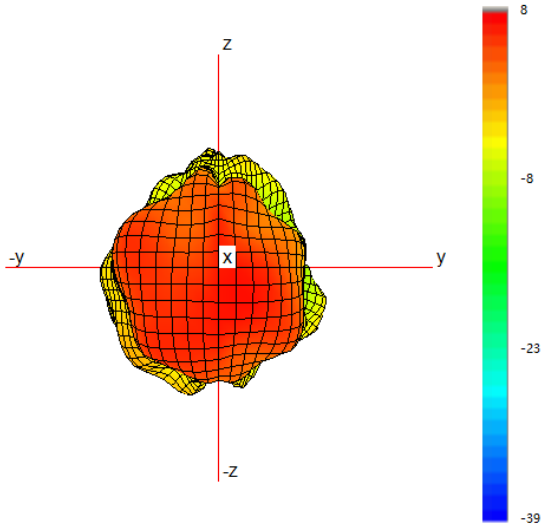
Typical 3D Pattern - Cell C 3600 MHz



Typical 3D Pattern - Cell C 5500 MHz



Typical 3D Pattern -Cell C 6500 MHz



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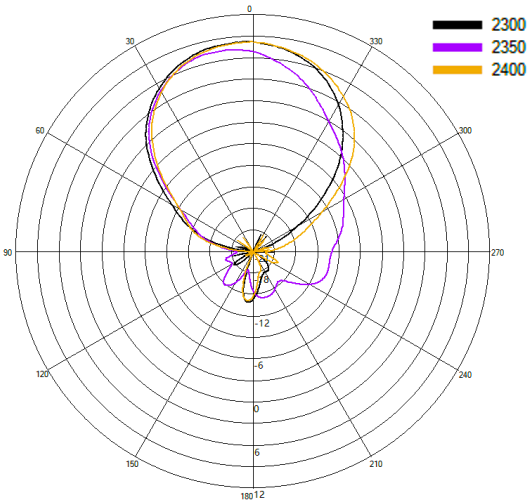
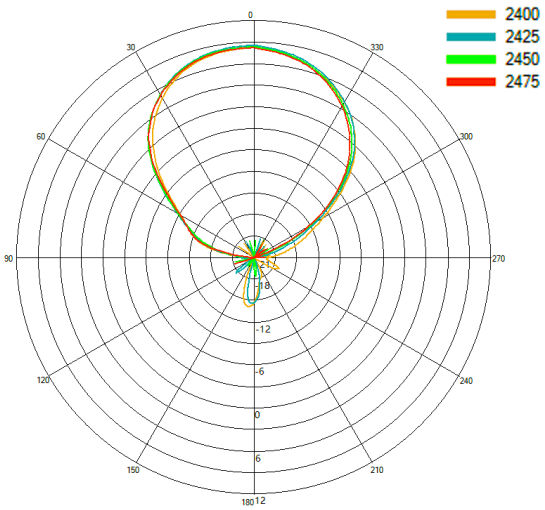
2D Pattern Data in Free Space Cell C-H Plane

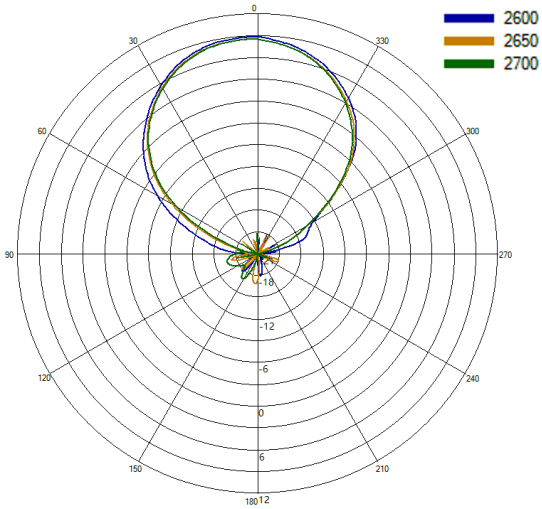
Typical H Plane Pattern - Cell C 2300-2400 MHz



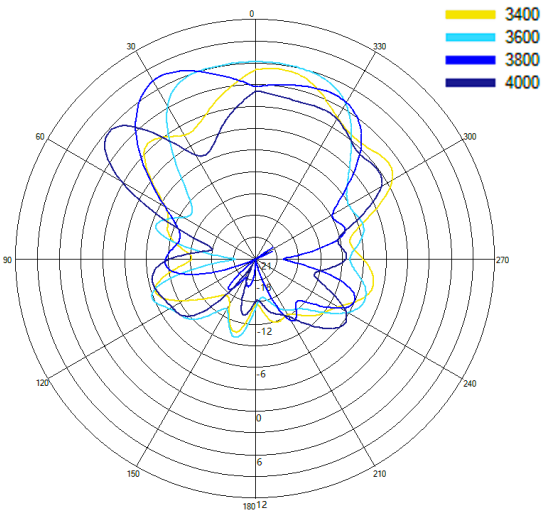
Typical H Plane Pattern - Cell C 2400-2475 MHz



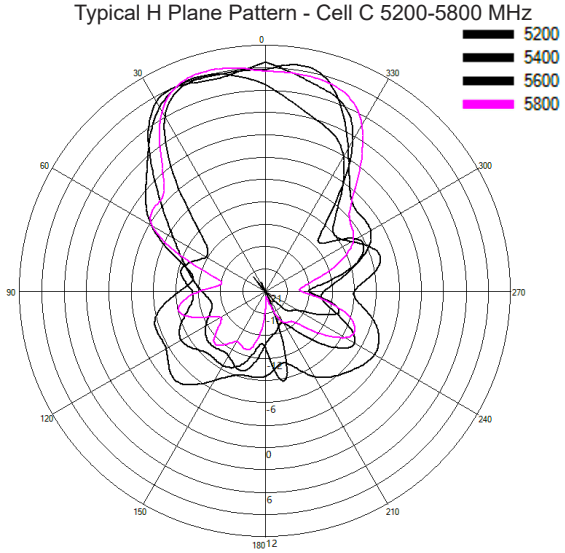
Typical H Plane Pattern - Cell C 2600-2700 MHz



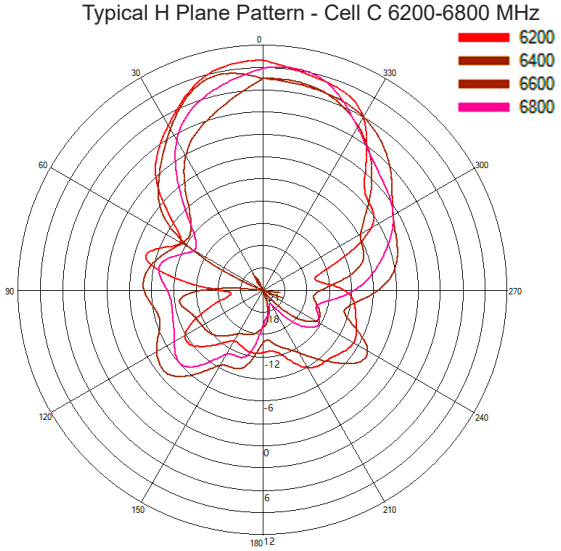
Typical H Plane Pattern - Cell C 3400-4000 MHz



Typical H Plane Pattern - Cell C 5200-5800 MHz



Typical H Plane Pattern - Cell C 6200-6800 MHz



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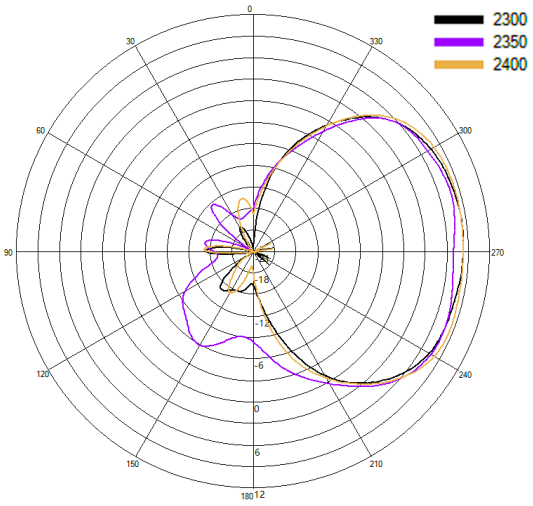
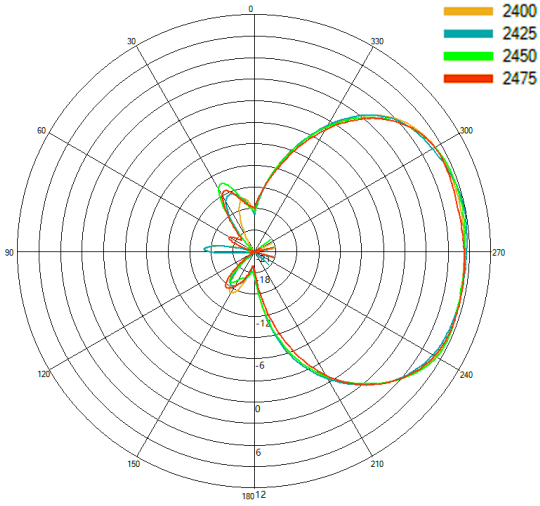
2D Pattern Data in Free Space Cell C-E Plane

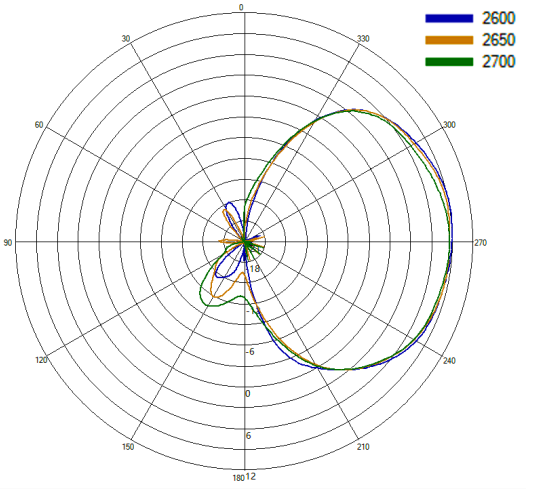
Typical E Plane Pattern - Cell C 2300-2400 MHz



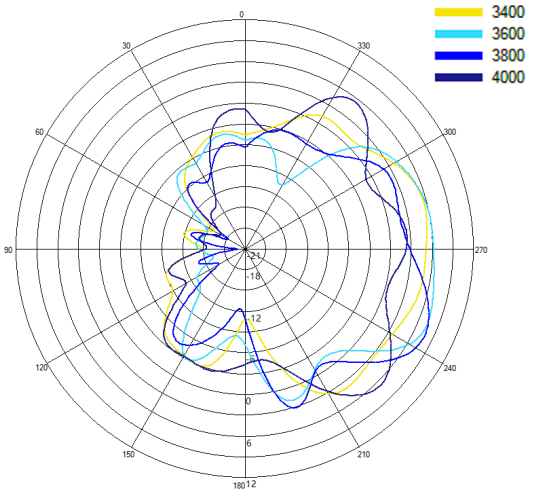
Typical E Plane Pattern - Cell C 2400-2475 MHz



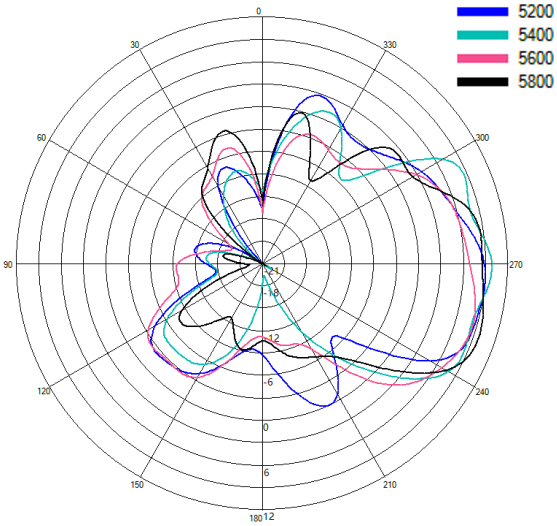
Typical E Plane Pattern - Cell C 2600-2700 MHz



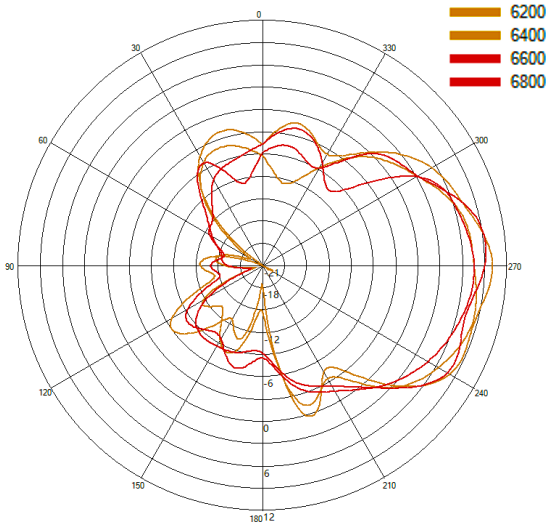
Typical E Plane Pattern - Cell C 3400-4000 MHz



Typical E Plane Pattern - Cell C 5200-5800 MHz



Typical E Plane Pattern - Cell C 6200-6800 MHz



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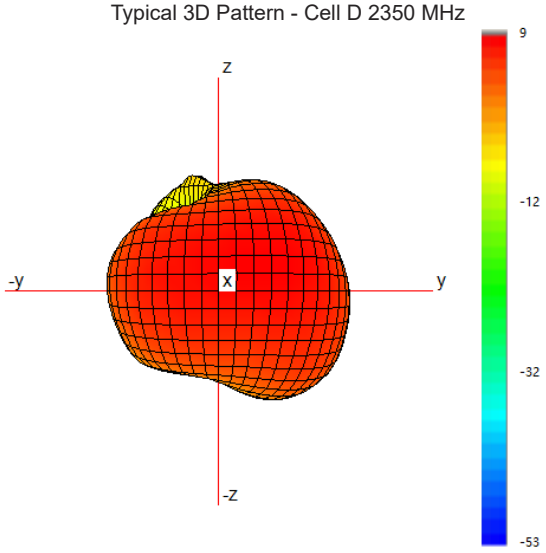
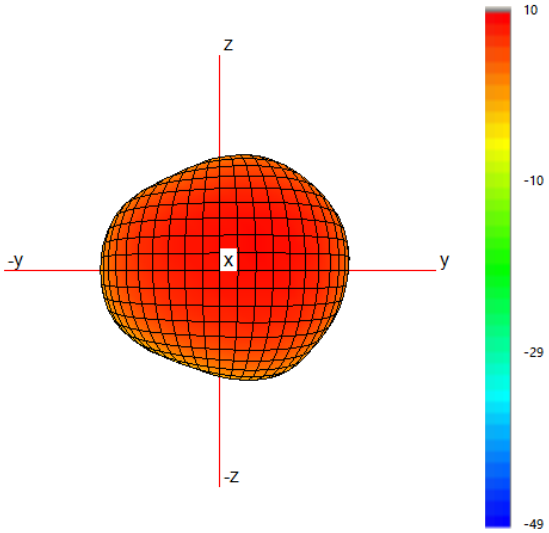
3D Pattern Data in Free Space Cell D

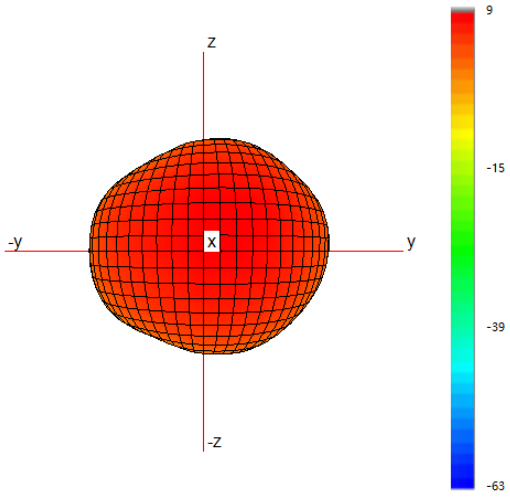
Typical 3D Pattern - Cell D 2350 MHz



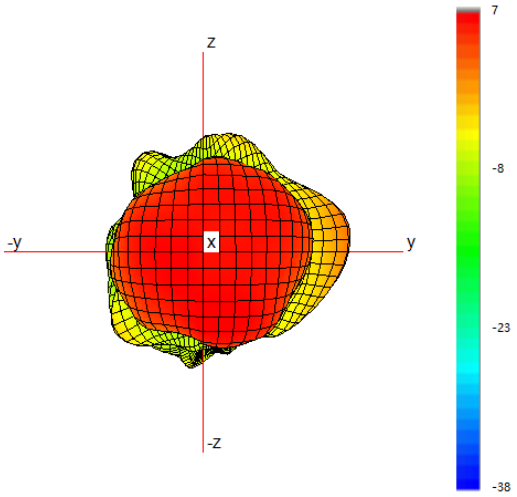
Typical 3D Pattern - Cell D 2450 MHz



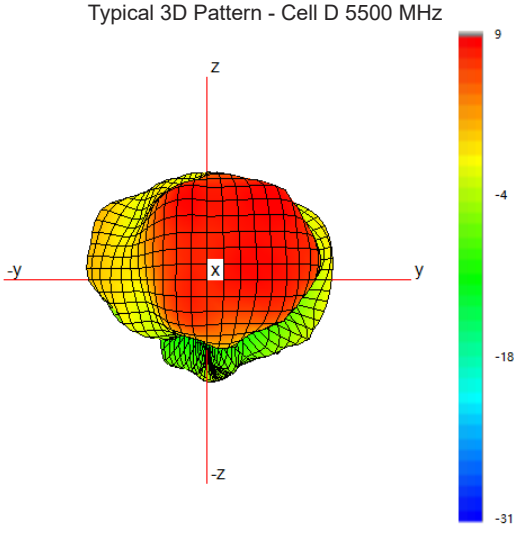
Typical 3D Pattern -Cell D 2650 MHz



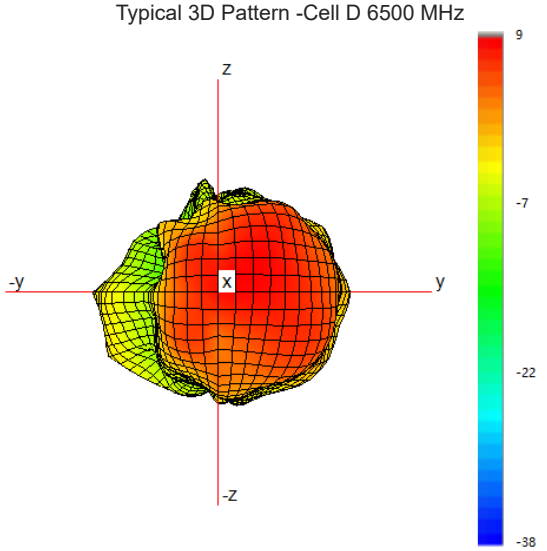
Typical 3D Pattern - Cell D 3600 MHz



Typical 3D Pattern - Cell D 5500 MHz



Typical 3D Pattern -Cell D 6500 MHz



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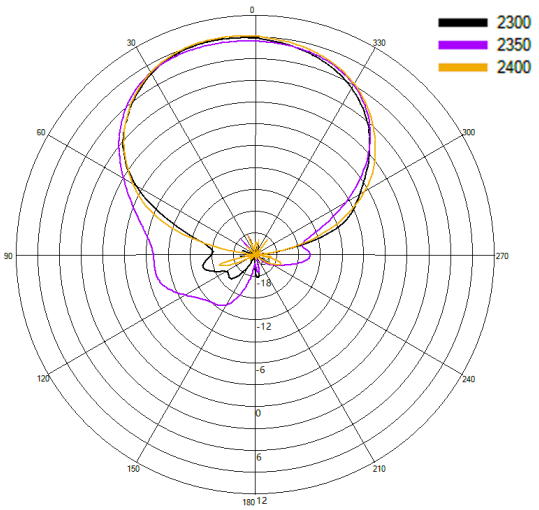
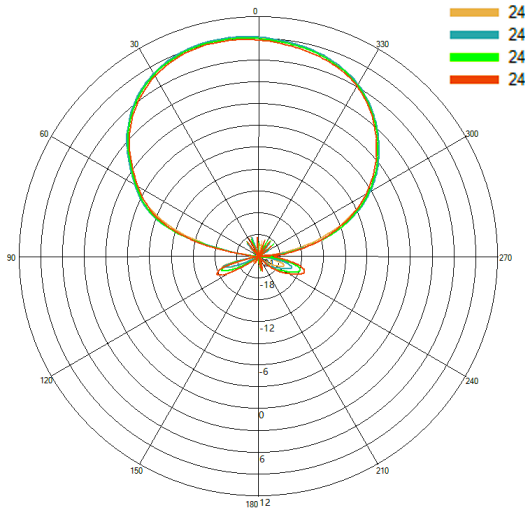
2D Pattern Data in Free Space Cell D-H Plane

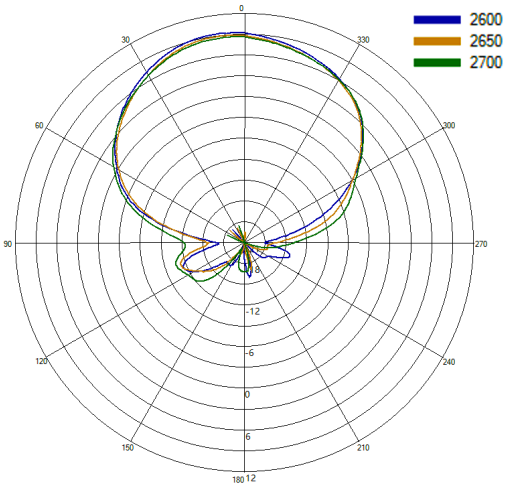
Typical H Plane Pattern - Cell D 2300-2400 MHz



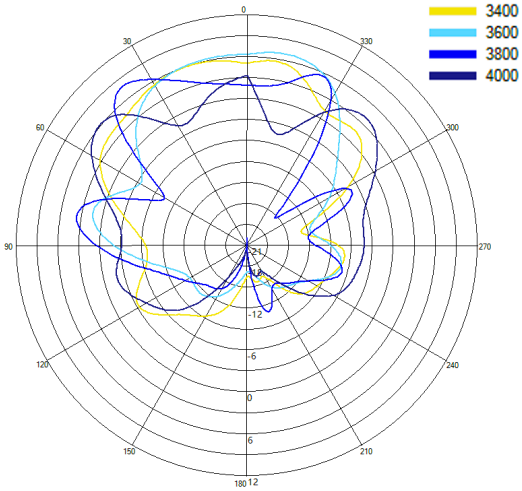
Typical H Plane Pattern - Cell D 2400-2475 MHz



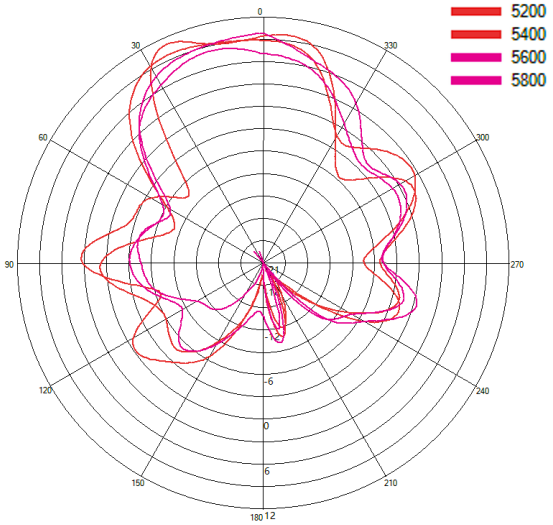
Typical H Plane Pattern - Cell D 2600-2700 MHz



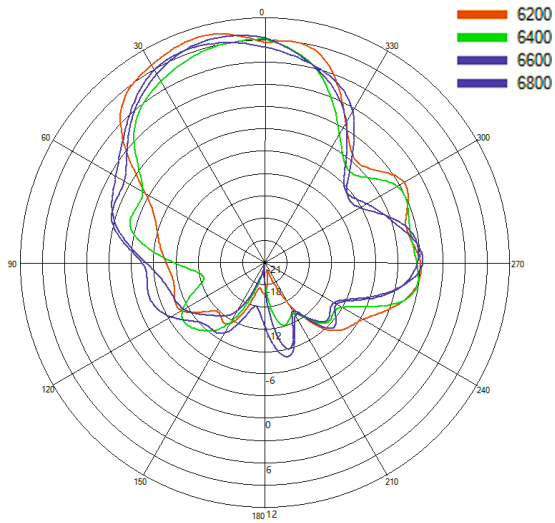
Typical H Plane Pattern - Cell D 3400-4000 MHz



Typical H Plane Pattern - Cell D 5200-5800 MHz



Typical H Plane Pattern - Cell D 6200-6800 MHz



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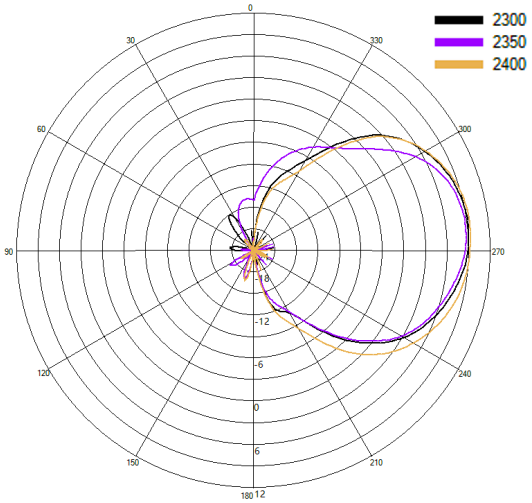
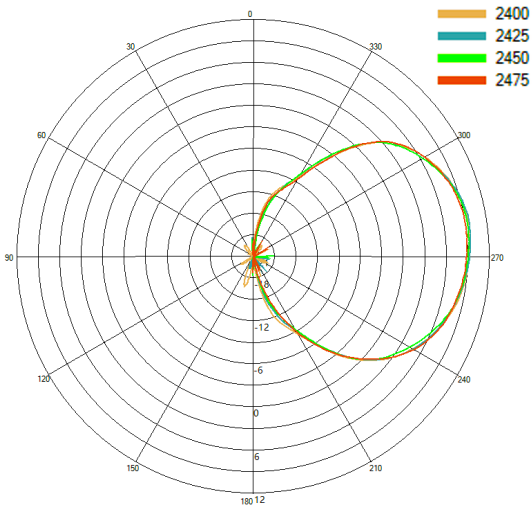
2D Pattern Data in Free Space Cell D-E Plane

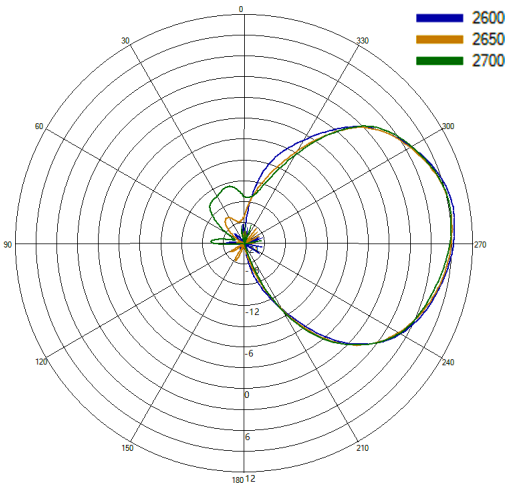
Typical E Plane Pattern - Cell D 2300-2400 MHz



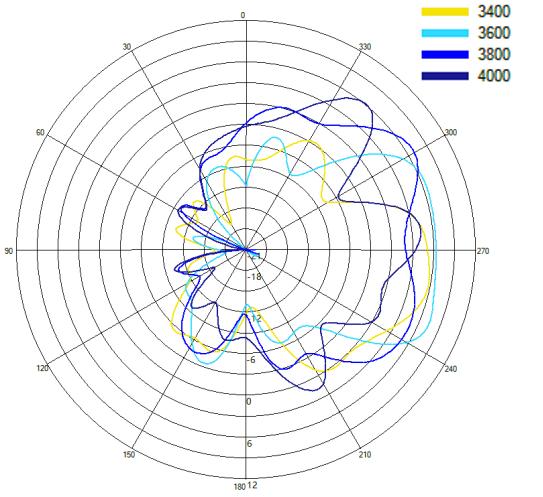
Typical E Plane Pattern - Cell D 2400-2475 MHz



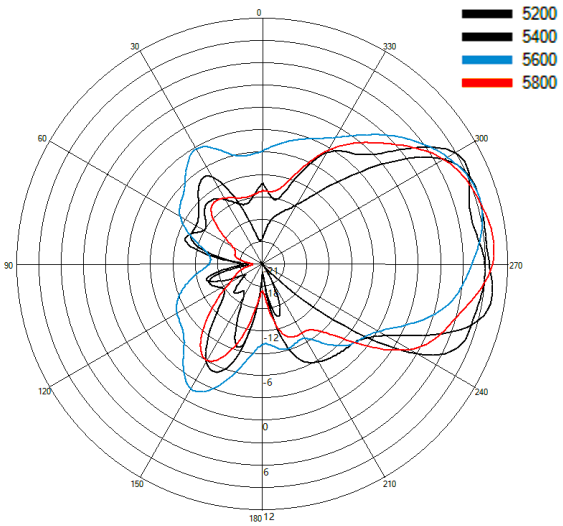
Typical E Plane Pattern - Cell D 2600-2700 MHz



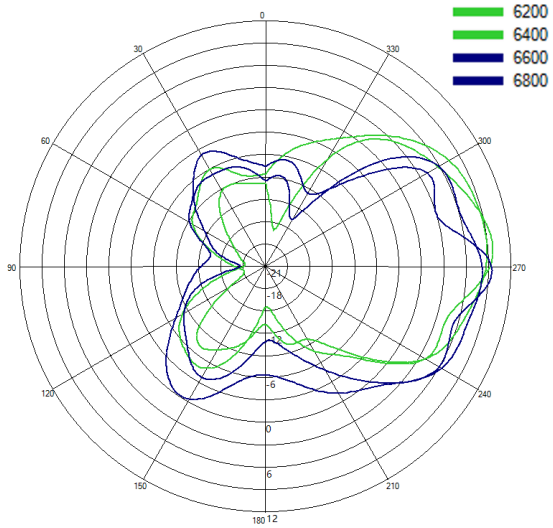
Typical E Plane Pattern - Cell D 3400-4000 MHz



Typical E Plane Pattern - Cell D 5200-5800 MHz



Typical E Plane Pattern - Cell D 6200-6800 MHz



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