

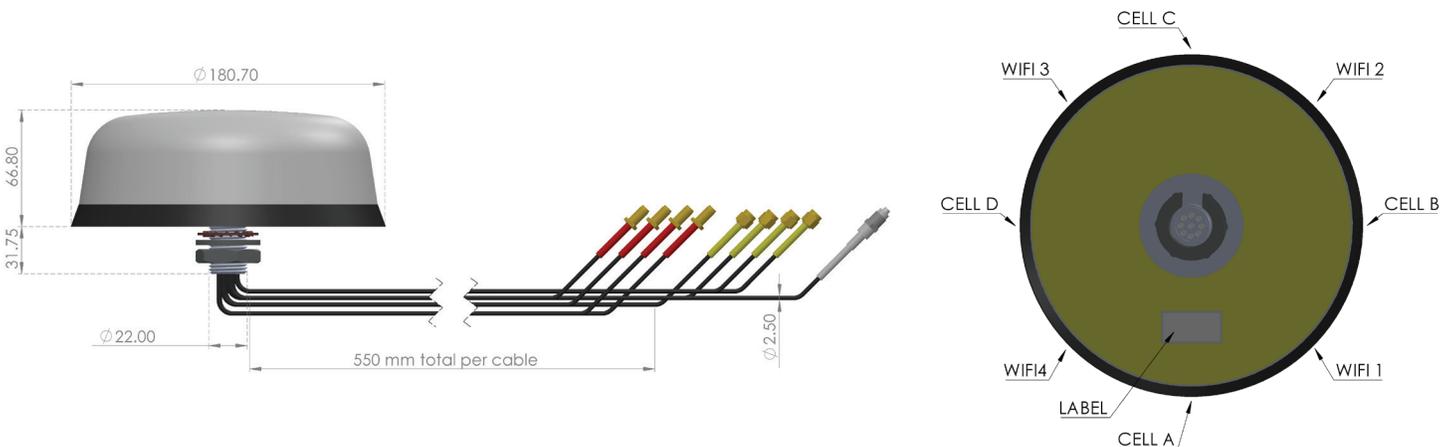
9-IN-1 DOME ANTENNA TECHNICAL DATA SHEET



This datasheet provides a detailed technical breakdown of Lind Electronics' 9-in-1 Dome Antenna, engineered to deliver reliable, multi-network connectivity in demanding vehicle environments. Designed for fleet, public safety, industrial, and mobile applications, the antenna combines cellular, Wi-Fi, and GPS performance into a single low-profile housing—reducing roof clutter while maximizing signal efficiency.

Inside, you'll find comprehensive charts, graphs, and specifications that illustrate antenna gain, radiation patterns, frequency coverage, and overall performance characteristics across all supported bands. This datasheet is intended as a technical supplement to the product manual and sell sheet, offering engineers, integrators, and system designers the deeper insights needed to evaluate performance, validate system design, and ensure optimal deployment in real-world installations.

9-IN-1 ANTENNA: TECHNICAL DRAWING



9-IN-1 ANTENNA: PRODUCT DATA

CELLULAR SPECIFICATIONS

Frequency	698-960 MHz	1710-2690 MHz	3300-4200 MHz
VSWR	<4.0	<3.0	<3.0
Peak Gain	>2 dBi	>4 dBi	>4 dBi
Polarization	Linear		
Impedance	50 Ohm		
Operational Bands	5G / 4G / 3G / 2G		

WIFI SPECIFICATIONS

Frequency	2400-2500 MHz	4900-5875 MHz
VSWR	<2.0	<2.0
Peak Gain	>3 dBi	>4 dBi
Polarization	Linear	
Impedance	50 Ohm	
Operational Bands	IEEE 802.11a/b/g/n/ac / 4.9 GHz Public Safety	

GPS SPECIFICATIONS

Frequency Range	L1 (1164-1189 MHz) / L5 (1559-1610 MHz)
Polarization	Right Hand Circular Polarized (RHCP)
Gain	>0.5 dBi (1164-1189 MHz) / >2.0 dBi (1559-1610 MHz)
Antenna VSWR	<2.0
DC Voltage¹	3-5 V
LNA Gain	28 +/- 3 dB
Rejection	>40 dB
Output VSWR (Antenna and LNA)	<2.0
LNA Noise Figure	<3.0 dB
DC Current	20 +/- 5 mA
Impedance	50 Ω

¹For use with Class 1 Power Supply

MECHANICAL INFORMATION

Dimensions (mm)	180.7 Dia / 66.8 Height
Operating Temperature	-30°C - 70°C
Radome Material	ASA Anti-UV
Color	Black or White
Weight (g)	663g
Ingress Protection	IP69K

MOUNTING INFORMATION

Fixing	Mounting Type: Panel Mount	Mounting Bolt Size: M22 x 2.0	Bolt Length (mm): 31.75 (1.25")
Hole Size (mm)	22 (7/8")		

ANTENNA PIGTAIL INFORMATION *

Cable Type (All)	RG316 Black		
Dimensions (mm)	Diameter	2.5	
	Length	550	
Termination, Heat Shrink Color	Cellular A, B, C, D	SMA-Male, Yellow	
	WiFi 1, 2, 3, 4	SMA-Female, Red	
	GPS/GNSS	FME-Female, White	

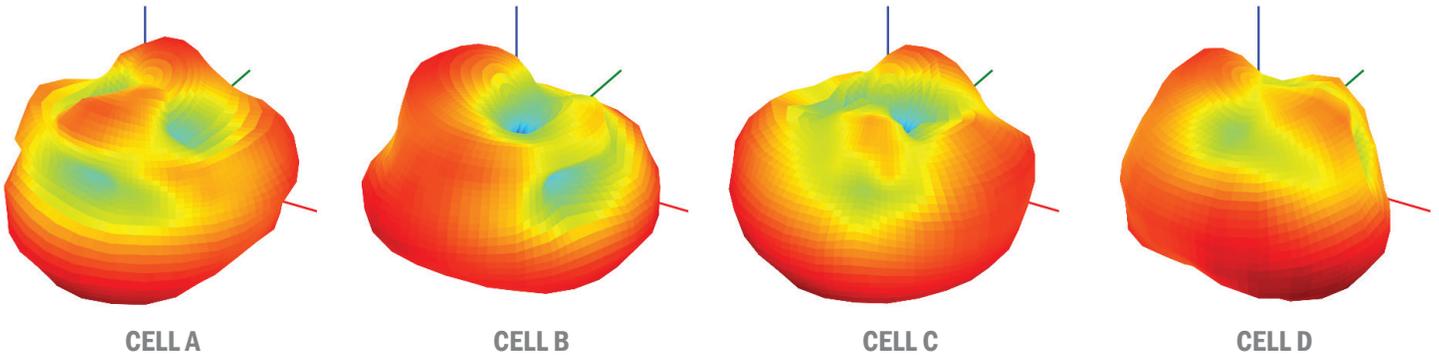
*ECE-R118 compliant cable

9-IN-1 ANTENNA: TYPICAL RADIATION

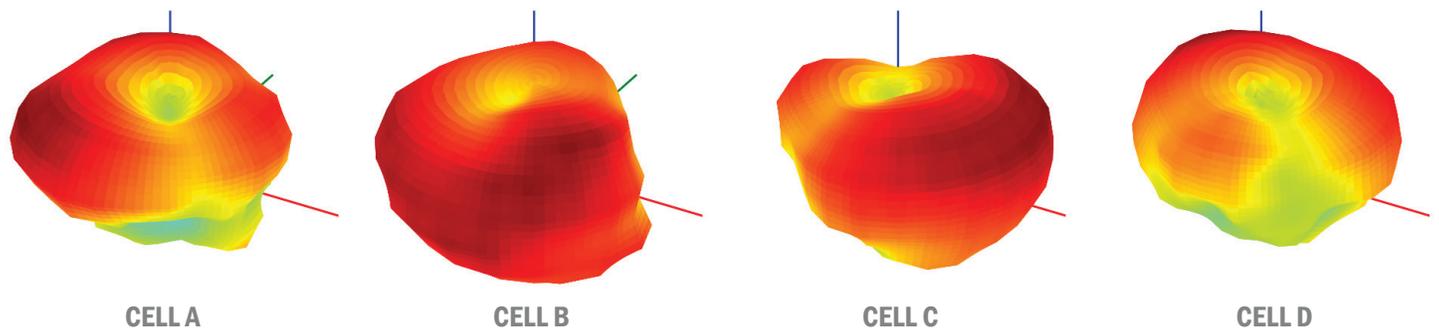


The following radiation pattern plots illustrate the 9-in-1 Dome Antenna's performance across the supported frequency bands, providing a clear view of gain and coverage characteristics at key MHz ranges. These patterns highlight the antenna's ability to deliver reliable, omnidirectional performance for cellular, Wi-Fi, and GNSS applications in mobile environments. All radiation testing was conducted with the antenna mounted in its standard upright orientation (see image to left) on a representative ground plane to accurately reflect real-world vehicle roof installations and ensure meaningful, repeatable performance data.

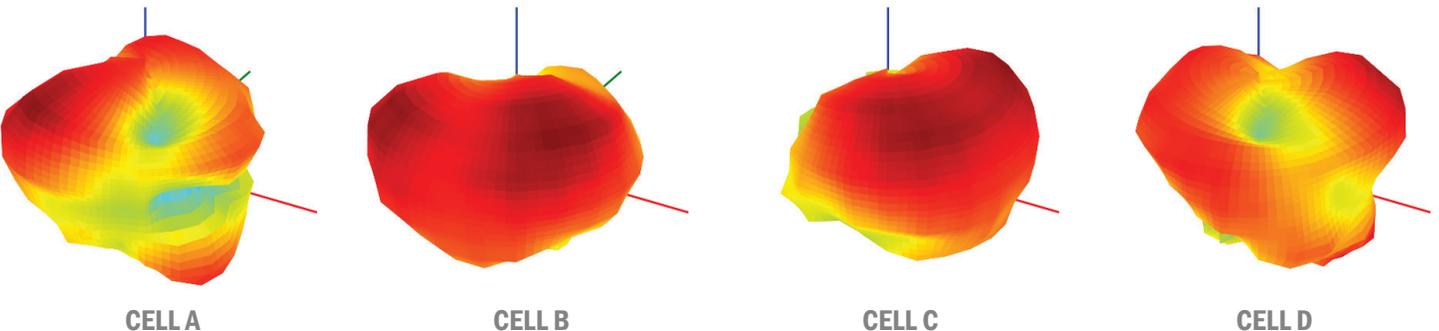
CELLULAR RADIATION: 698 MHZ



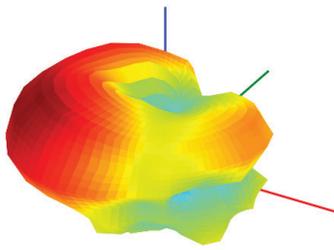
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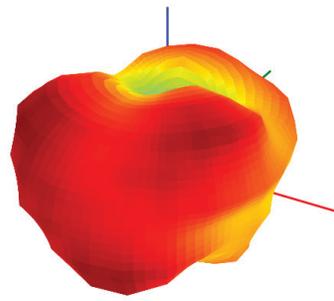
CELLULAR RADIATION: 915 MHZ



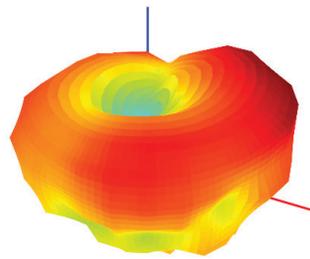
CELLULAR RADIATION: 960 MHZ



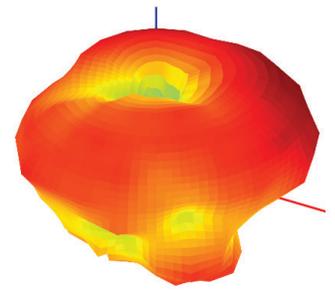
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CELL B

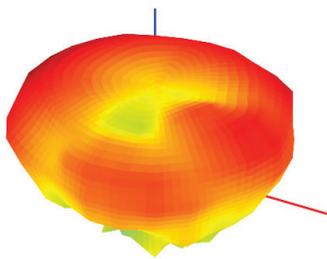


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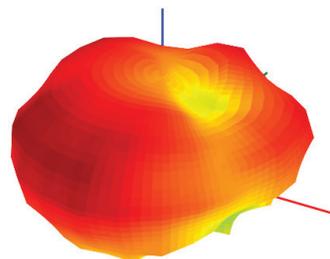


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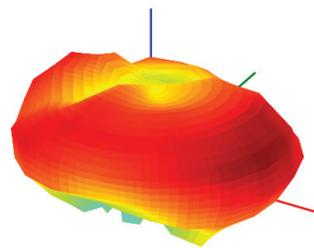
CELLULAR RADIATION: 1710 MHZ



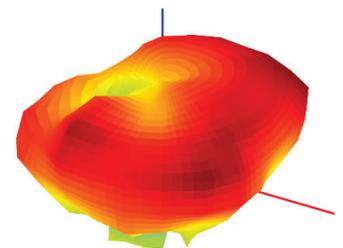
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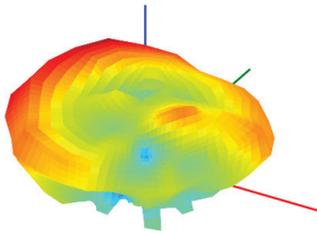


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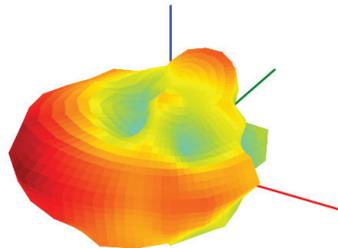


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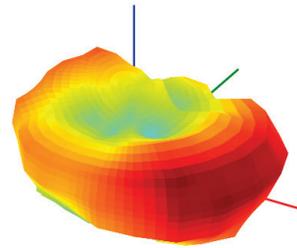
CELLULAR RADIATION: 2170 MHZ



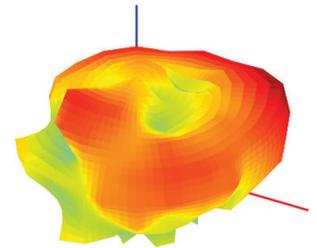
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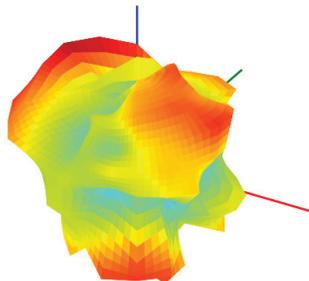


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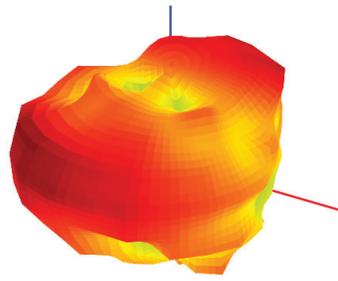


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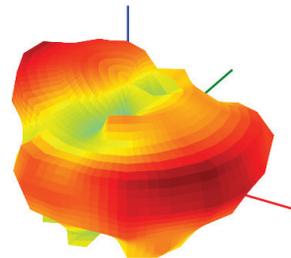
CELLULAR RADIATION: 2500 MHZ



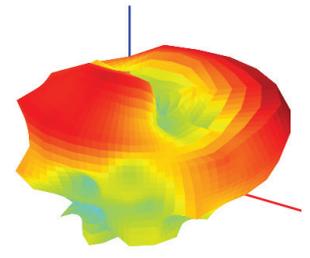
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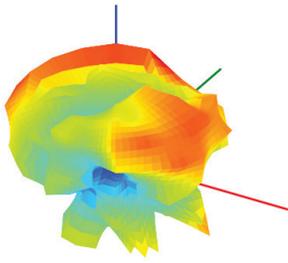


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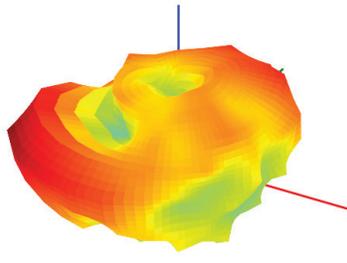


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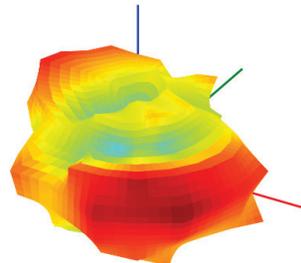
CELLULAR RADIATION: 2690 MHZ



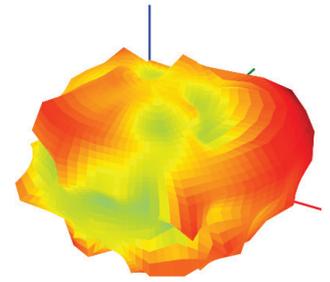
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CELL B

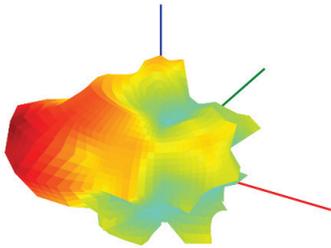


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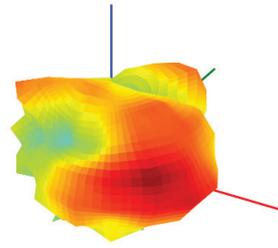


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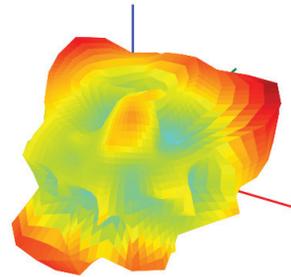
CELLULAR RADIATION: 3300 MHZ



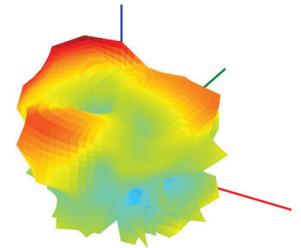
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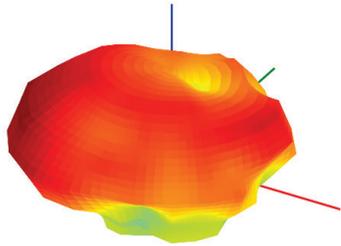


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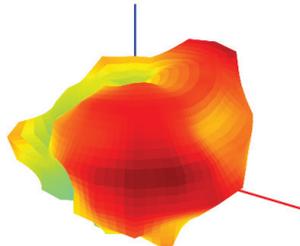


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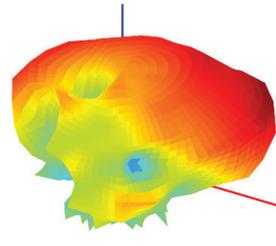
CELLULAR RADIATION: 3600 MHZ



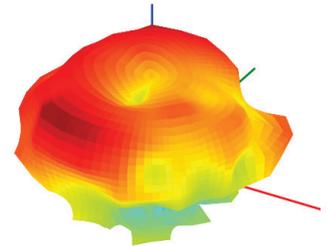
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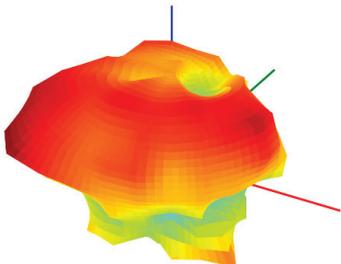


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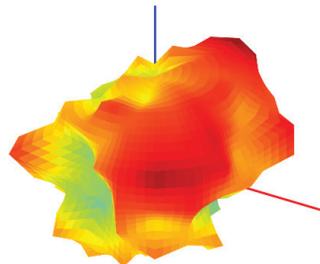


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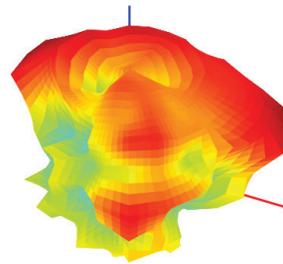
CELLULAR RADIATION: 3800 MHZ



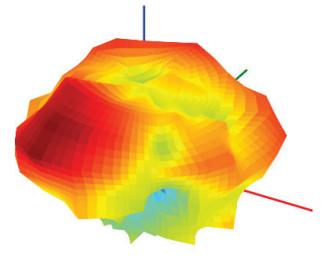
CELL A



CELL B

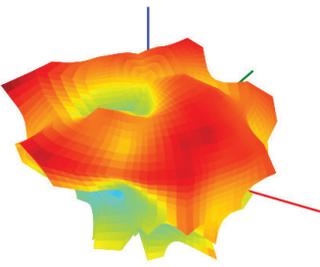


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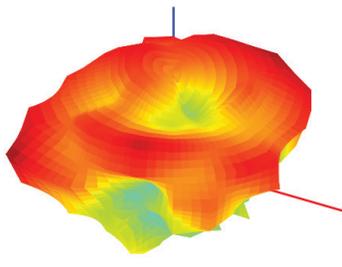


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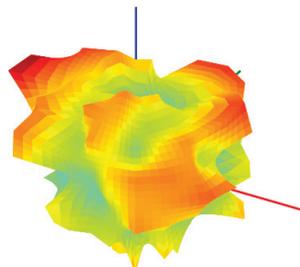
CELLULAR RADIATION: 4200 MHZ



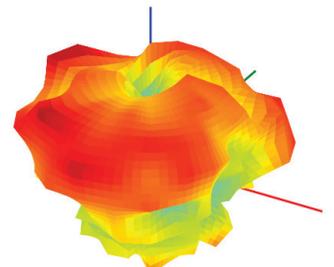
CELL A



CELL B

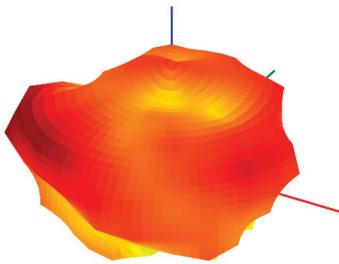


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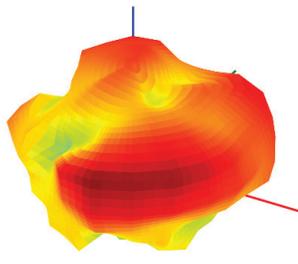


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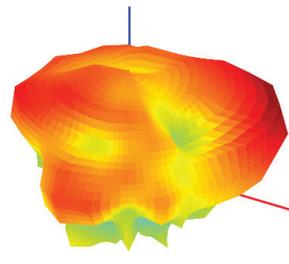
WIFI RADIATION: 2400 MHZ



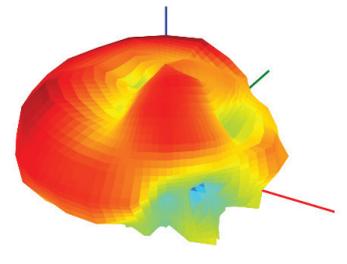
WIFI 1



WIFI 2

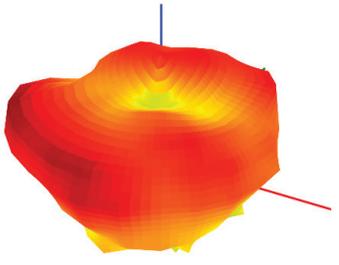


WIFI 3

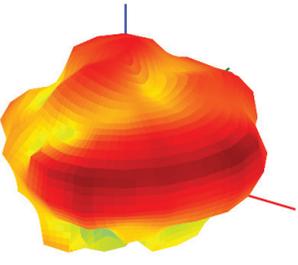


WIFI 4

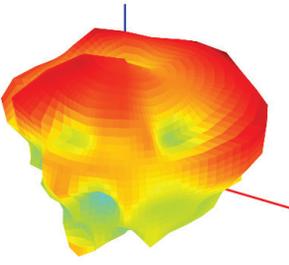
WIFI RADIATION: 2450 MHZ



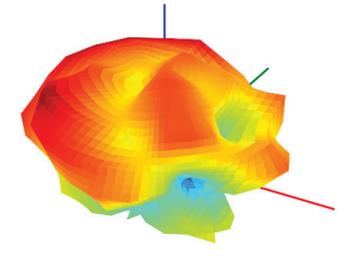
WIFI 1



WIFI 2

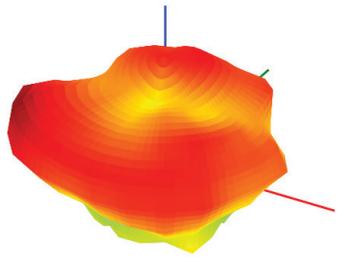


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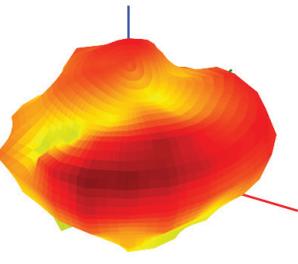


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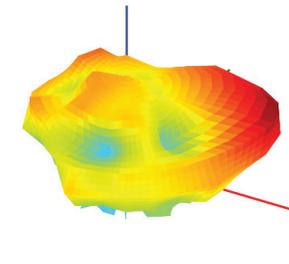
WIFI RADIATION: 2500 MHZ



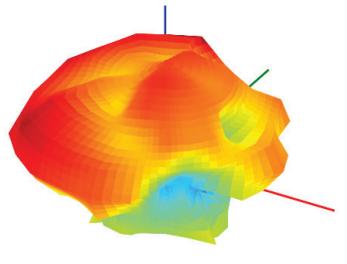
WIFI 1



WIFI 2

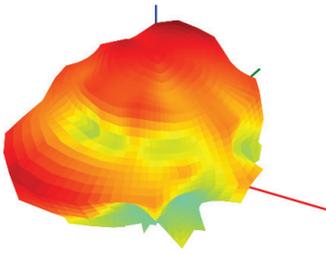


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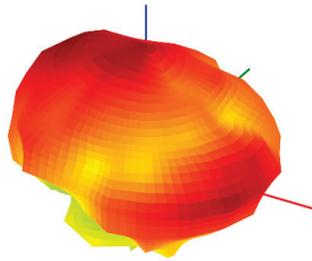


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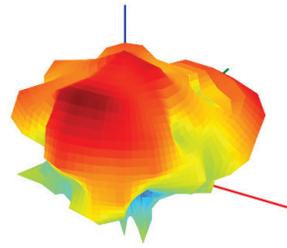
WIFI RADIATION: 4900 MHZ



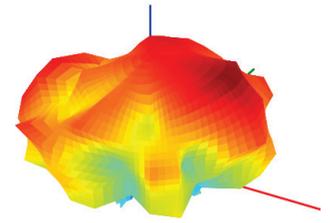
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WIFI 2

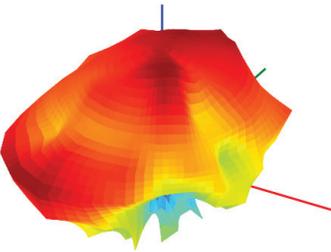


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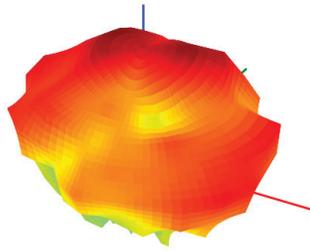


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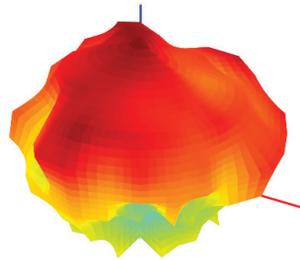
WIFI RADIATION: 5150 MHZ



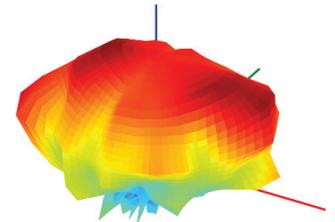
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WIFI 2

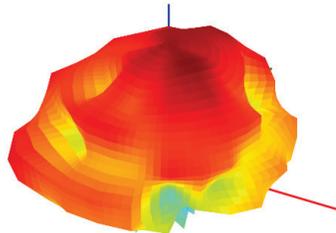


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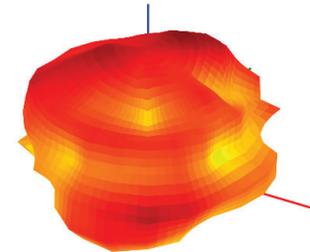


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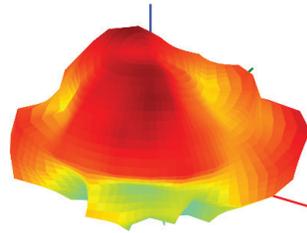
WIFI RADIATION: 5500 MHZ



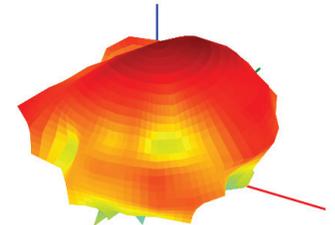
WIFI 1



WIFI 2

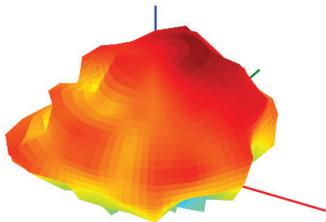


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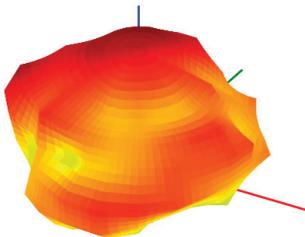


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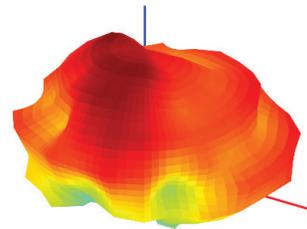
WIFI RADIATION: 5875 MHZ



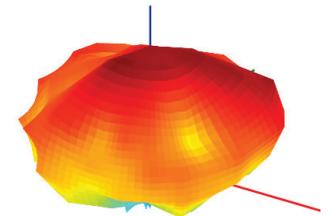
WIFI 1



WIFI 2



WIFI 3

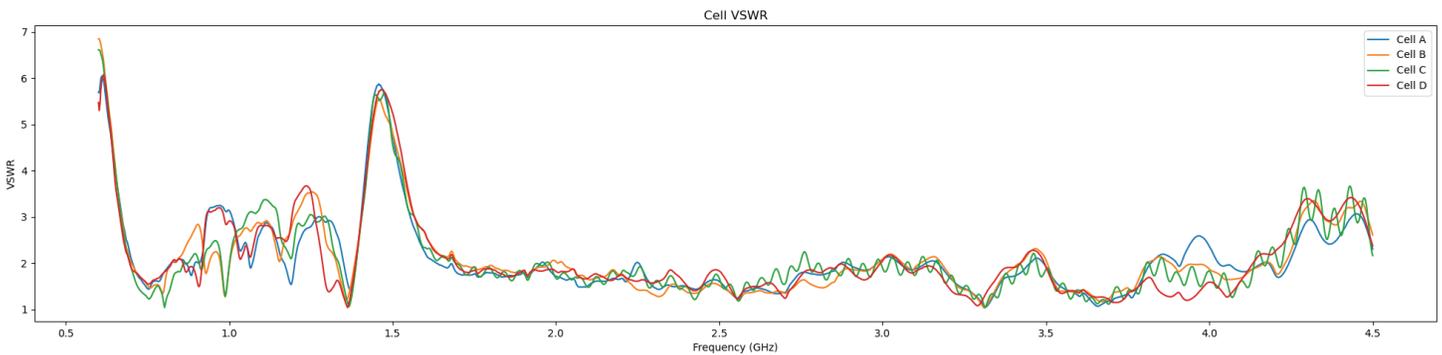


WIFI 4

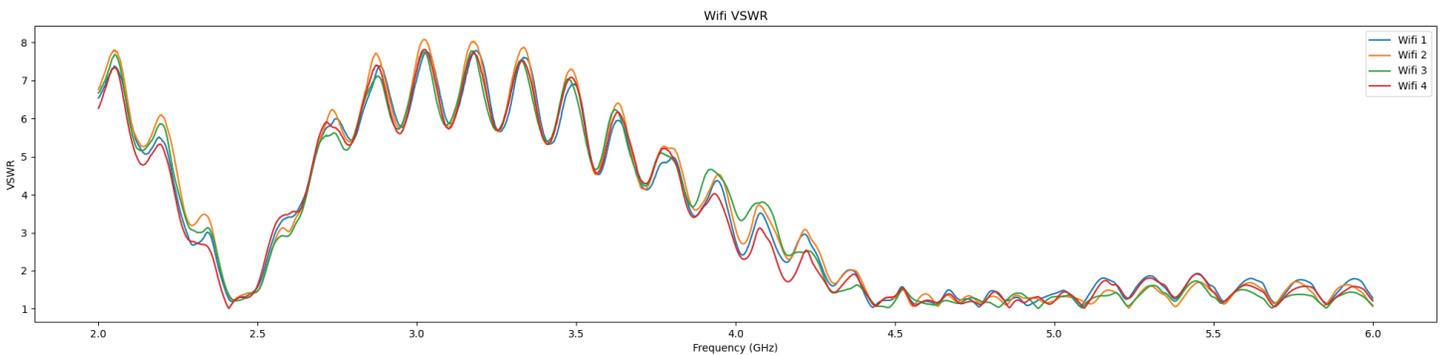
9-IN-1 ANTENNA: TYPICAL VSWR

The Typical VSWR charts illustrate the antenna’s impedance matching performance across the supported cellular and Wi-Fi frequency bands. Low VSWR values indicate efficient power transfer between the antenna and connected radios, helping minimize signal reflection and maximize overall system performance. The Cellular VSWR chart demonstrates stable matching across key LTE and 5G frequency ranges, while the Wi-Fi VSWR chart highlights consistent performance throughout the 2.4 GHz and 5 GHz bands. Together, these plots confirm the antenna’s ability to maintain reliable, broadband operation for multi-network vehicle connectivity.

CELLULAR A, B, C, D



WIFI 1, 2, 3, 4



9-IN-1 ANTENNA: LIND IS HERE

This datasheet provides a comprehensive technical overview of the Lind 9-in-1 Dome Antenna, detailing its multi-band radiation performance, VSWR characteristics, and overall RF behavior across cellular, Wi-Fi, and GNSS frequencies. Designed for reliable connectivity in demanding mobile environments, the antenna’s performance data helps engineers and installers confidently evaluate integration, placement, and system compatibility. If additional clarification is needed or application-specific questions arise, Lind Electronics’ technical support team is available to assist at:



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