



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Features:

- 2xMiMo 698-960/1710-2690MHz
- WiFi 2400-2500/4900-5900MHz
- Active GNSS:
 - GPS, Galileo, Glonass, Beidou
 - LNA Gain 30dB
- Size 145x135x25mm
- Adhesive mount on plastic and glass fiber surfaces
- Mounting accessory for metallic surfaces

Applications:

- Vehicle mount multiband antenna
- High Speed LTE data and WiFi
- Tracking, Navigation
- Fleet management
- Utility Vans (Gas, Water, Electricity)

All dimensions are in mm / inches

Issue: 1720

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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Herrenberg, Germany
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Pulse (Suzhou) Wireless Products Co, Inc.
99 Huo Ju Road(#29 Bldg,4th Phase
Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998



Series: Jaguar

Description: 2xLTE, WiFi, GNSS Multiband
Vehicular Antenna

PART NUMBER: GPSPMB401

ELECTRICAL SPECIFICATIONS

LTE

Frequency	698-960/1710-2690	MHz
Nominal Impedance	50	Ω
VSWR	2.2	Max
Average Efficiency(698-960MHz)	72	%
Average Efficiency(1710-2690MHz)	68	%
Peak Gain (698-960MHz)	4.4	dBi
Peak Gain (1710-2690MHz)	5.4	dBi

WIFI

Frequency	2400-2500/4900-5900	MHz
Nominal Impedance	50	Ω
VSWR @2400-2500MHz	4	Max
VSWR @4900-5900MHz	3	Max
Average Efficiency(2400-2500MHz)	46	%
Average Efficiency(4900-5900MHz)	64	%
Peak Gain (2400-2500MHz)	4.5	dBi
Peak Gain (4900-5900MHz)	6.7	dBi

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Description: 2xLTE, WiFi, GNSS Multiband
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ELECTRICAL SPECIFICATIONS

GPS

Frequency 1561.098±2.046/ 1575.42±1.023/ 1602.5625±4 MHz

Nominal Impedance 50 Ω

VSWR 2:1

Gain (Radiating element) 1 dBic +/- 1 dB

Gain (LNA gain) 30 dB +/- 2 dB

Polarization RHCP

Out of Band Rejection

698 MHz >70 dB

960MHz >65 dB

1710MHz >60 dB

2170MHz >65 dB

2400MHz >65 dB

Noise Figure <2.4 dB

Operating Voltage 3.3-5 Vdc±0.5V

Current Consumption <11 mA

Description: 2xLTE, WiFi, GNSS Multiband
Vehicular Antenna

Series: Jaguar

PART NUMBER: GPSLPMB401

ELECTRICAL SPECIFICATIONS

Cable and Connector type

Item	GPSLPMB403 RF Cables	Cable Type	Cable Length	Connector
1	LTE-1	LMR195	3 meters [118.11"]	SMA Male
2	WiFi	LMR195		RP-SMA Male
3	GPS	LMR100		SMA Male
4	LTE-2	LMR195		SMA Male

Series: Jaguar

Description: 2xLTE, WiFi, GNSS Multiband
Vehicular Antenna

PART NUMBER: GPSPMB401

MECHANICAL SPECIFICATIONS

Plastic radome	SABIC PC943
Color	Black
Ingress Protection	IP67
Weight	400 g
Cable retention: Pull off	30N mini
Fixing system	3M VHB4959 (T=3mm)

ENVIRONMENTAL SPECIFICATIONS

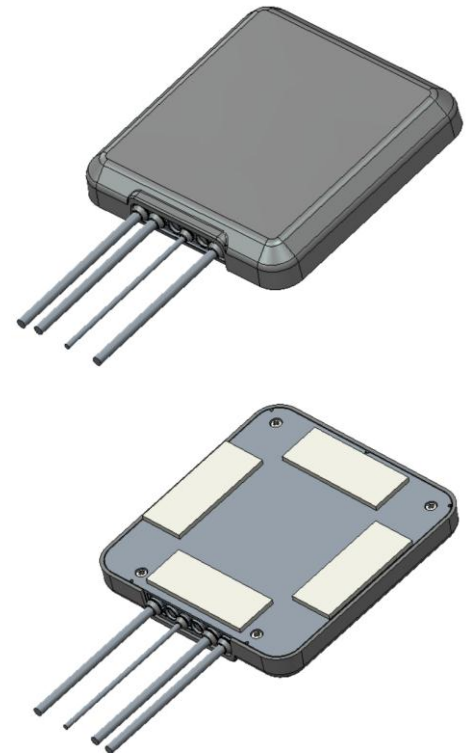
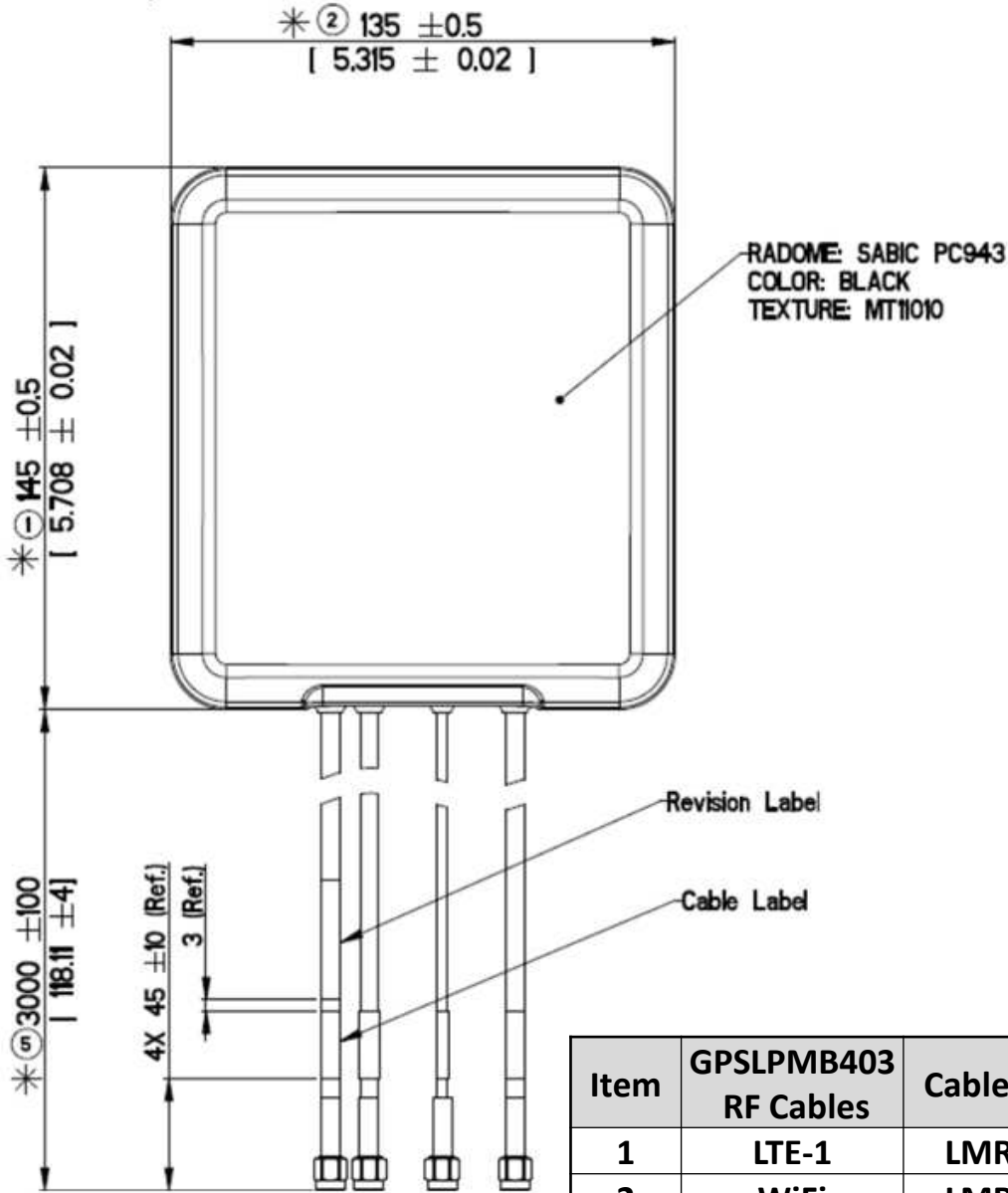
Operating temperature	-40 ~ +85 ° C
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Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Jaguar

PART NUMBER: GPSPMB401

MECHANICAL DRAWING



Item	GPSPMB403 RF Cables	Cable Type	Cable Length	Connector
1	LTE-1	LMR195	3 meters [118.11"]	SMA Male
2	WiFi	LMR195		RP-SMA Male
3	GPS	LMR100		SMA Male
4	LTE-2	LMR195		SMA Male

Issue: 1720

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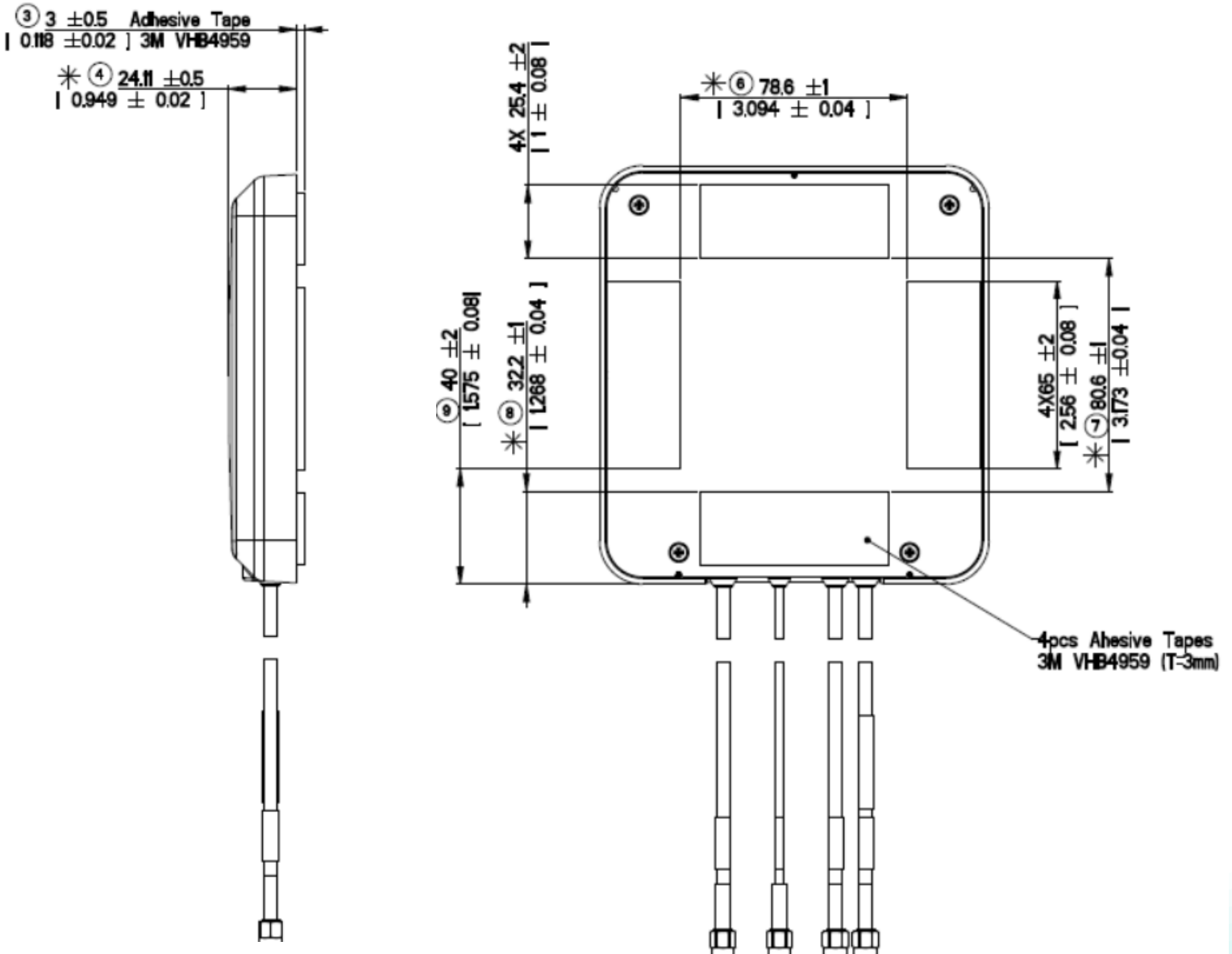
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Vehicular Antenna

Series: Jaguar

PART NUMBER: GPSPMB401

MECHANICAL DRAWING



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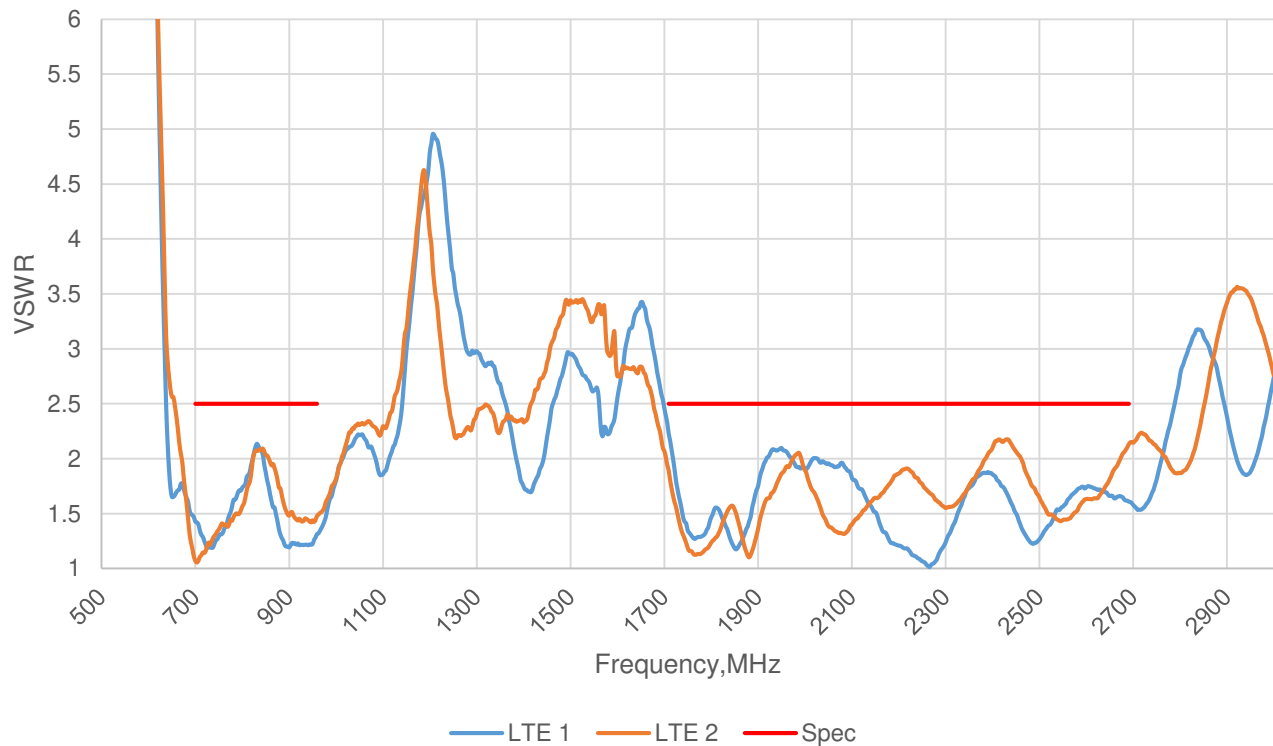
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CHARTS

LTE 1 and LTE2 VSWR

VSWR VS Frequency measured in free space



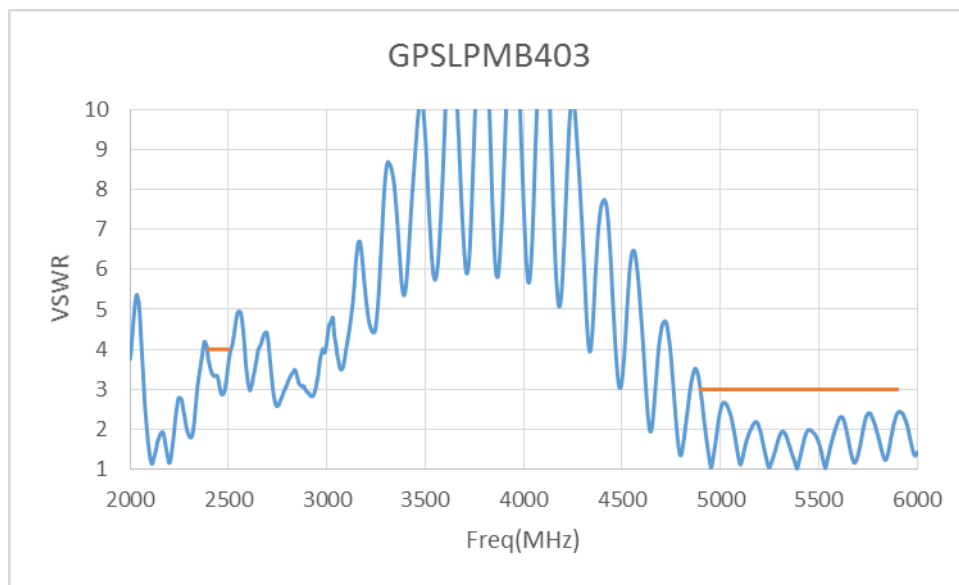
Series: Jaguar

Description: 2xLTE, WiFi, GNSS Multiband
Vehicular Antenna

PART NUMBER: GPSPMB401

CHARTS

WiFi VSWR*



* Test on bracket and diameter is 500mm ground plane

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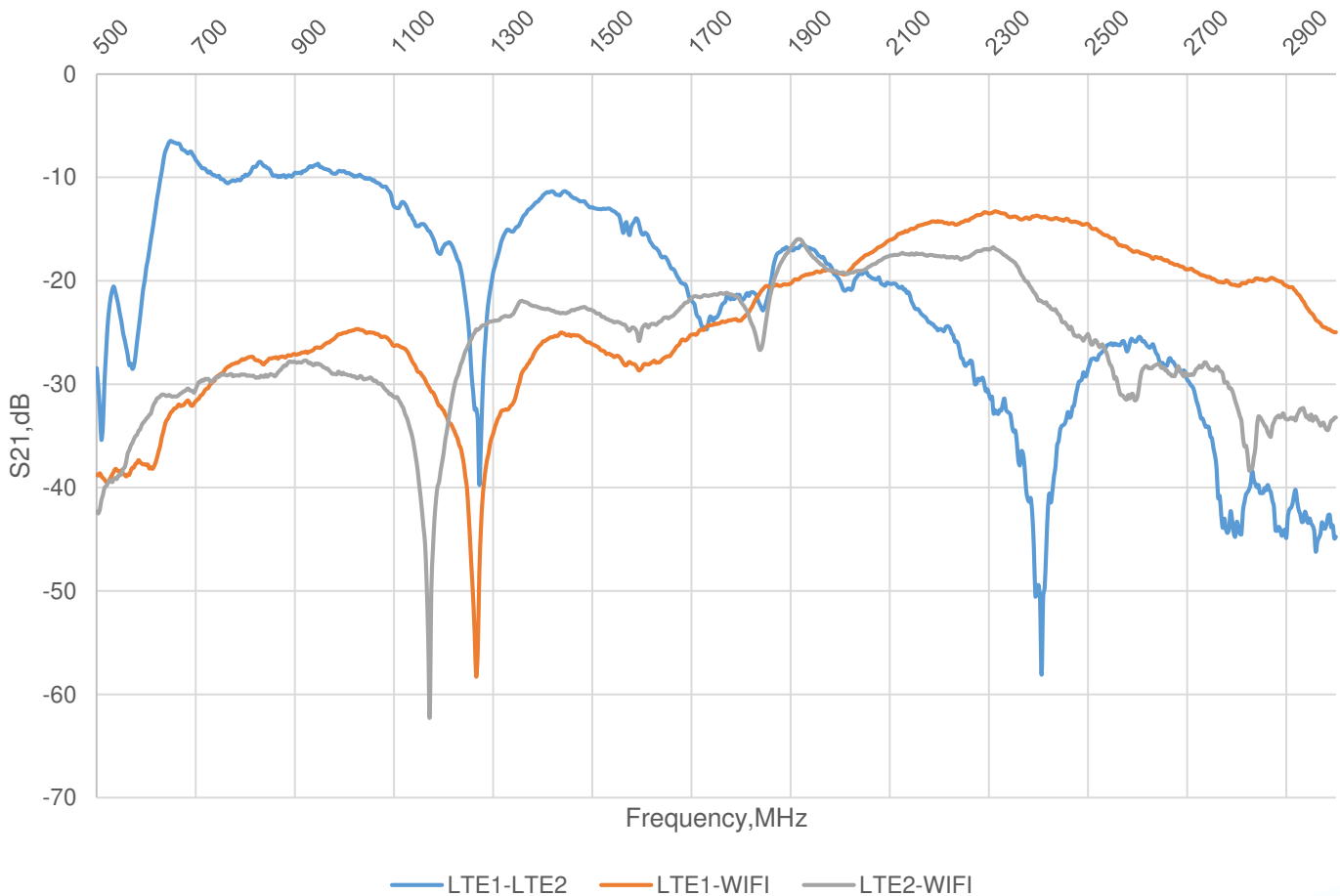
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CHARTS

Isolation

Isolation vs Frequency measured in free space



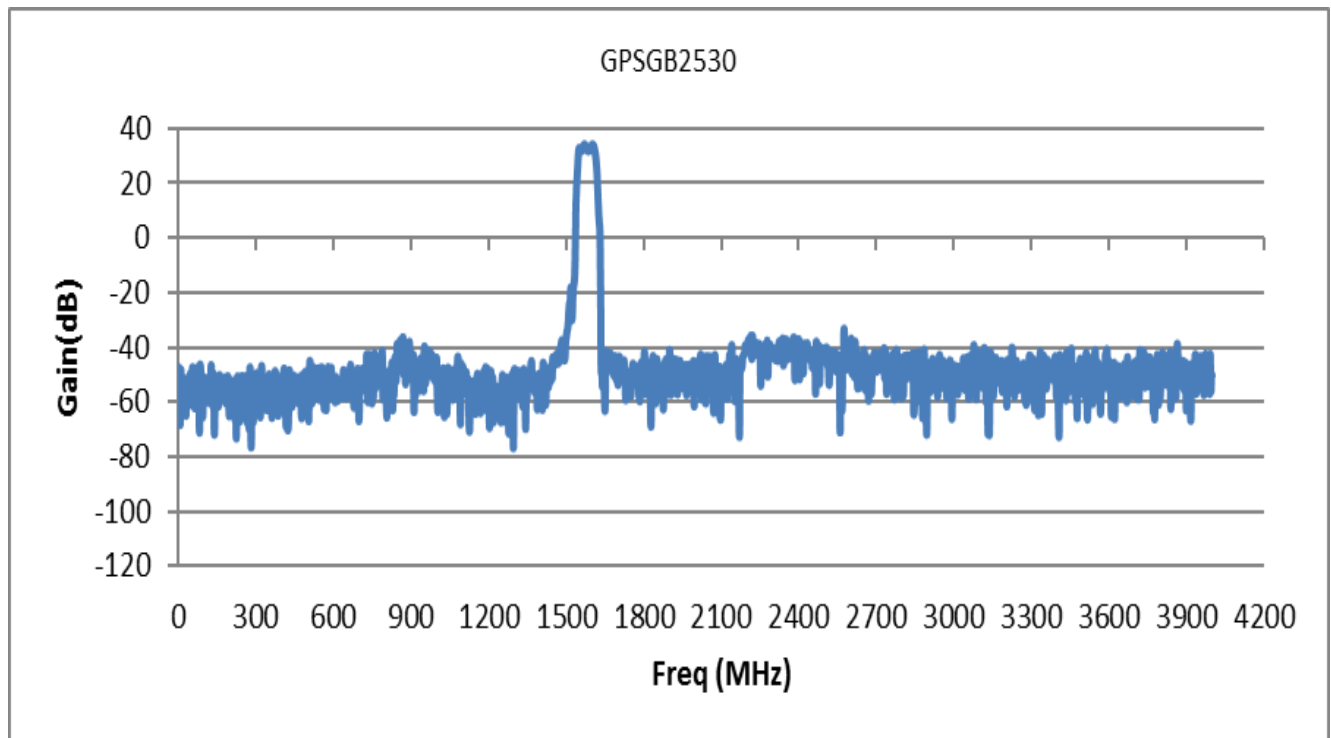
Series: Jaguar

Description: 2xLTE, WiFi, GNSS Multiband
Vehicular Antenna

PART NUMBER: GPSPMB401

CHARTS

GPS LNA Gain and out-of-band rejection



Issue: 1720

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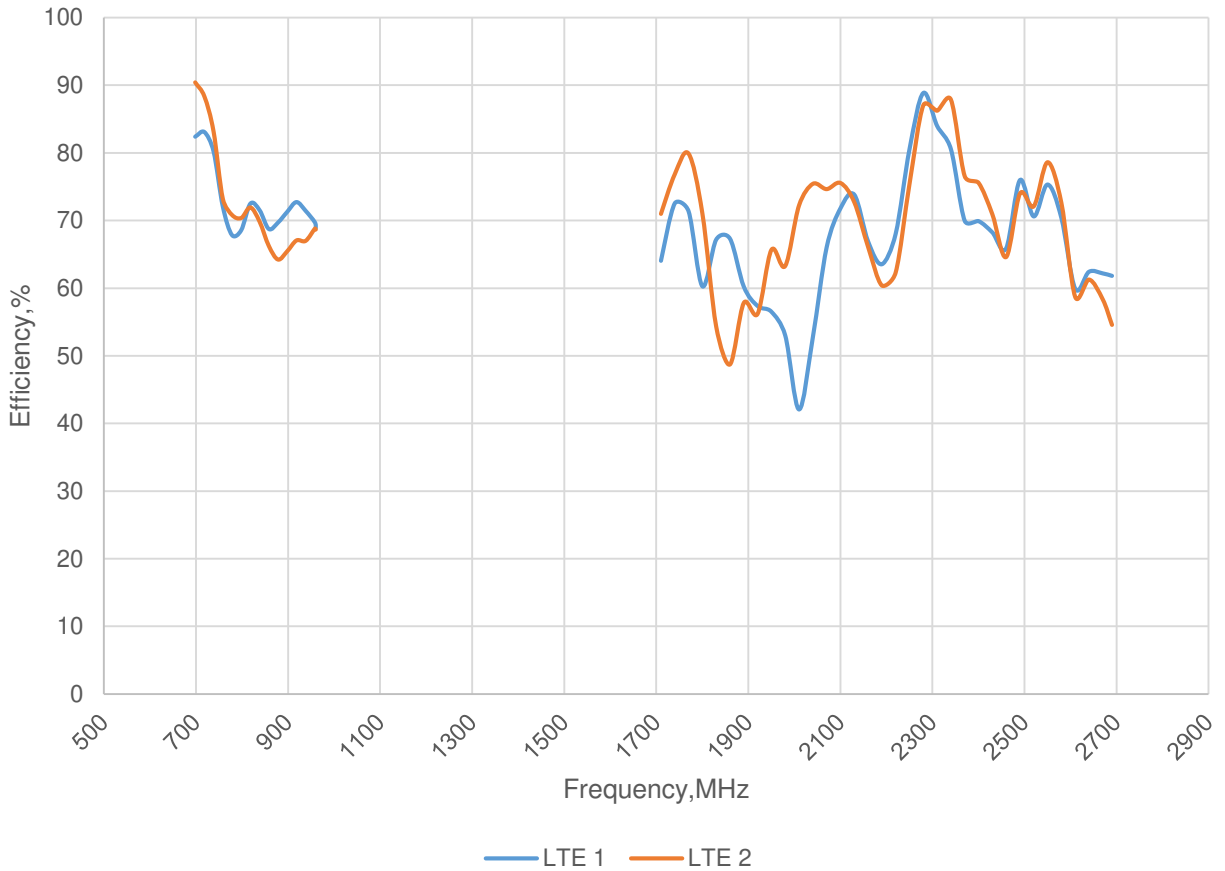
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CHARTS

LTE 1 and LTE2 Efficiency

Efficiency vs Frequency measured in free space



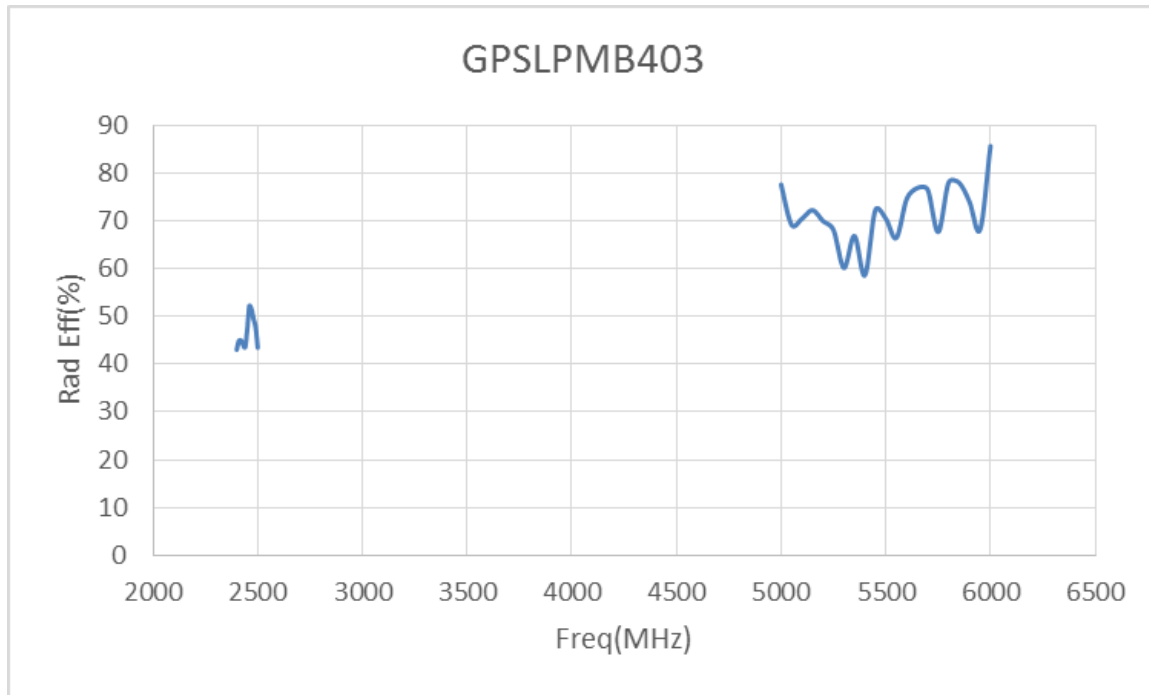
Series: Jaguar

Description: 2xLTE, WiFi, GNSS Multiband
Vehicular Antenna

PART NUMBER: GPSPMB401

CHARTS

WiFi Efficiency*



* Test on bracket and diameter is 500mm ground plane

Description: 2xLTE, WiFi, GNSS Multiband
Vehicular Antenna

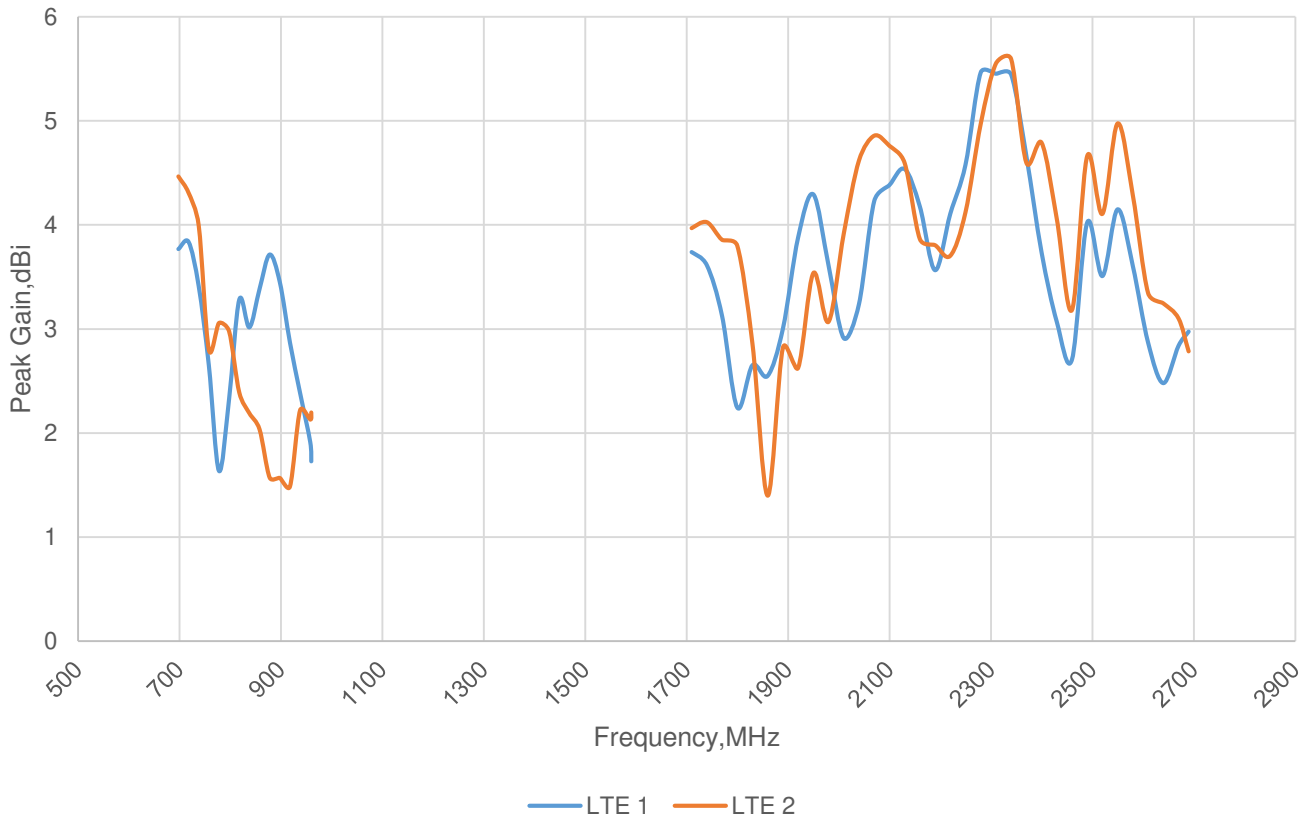
Series: Jaguar

PART NUMBER: GPSPMB401

CHARTS

LTE1 and LTE2 Peak Gain

Peak Gain vs Frequency measured in free space



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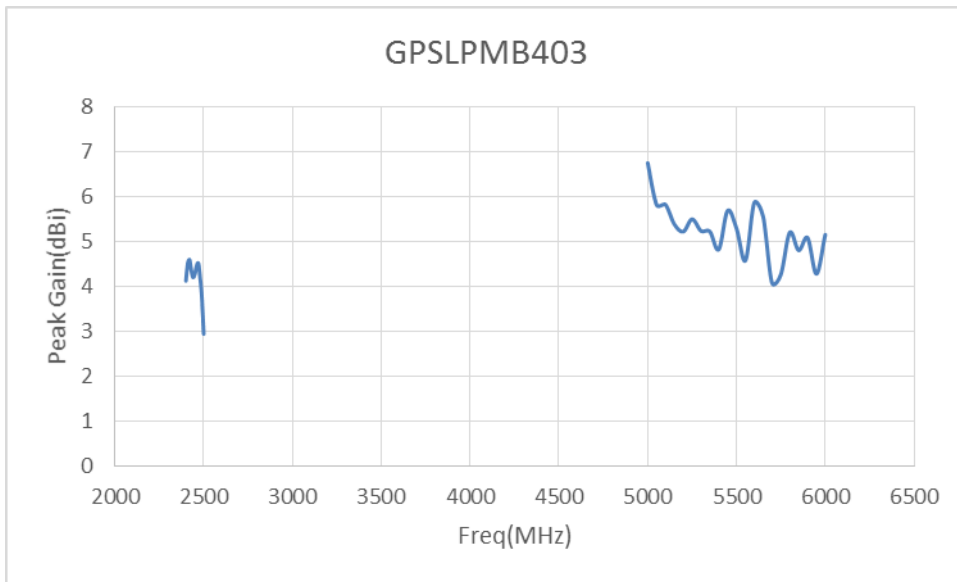
Series: Jaguar

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CHARTS

WiFi Peak Gain*



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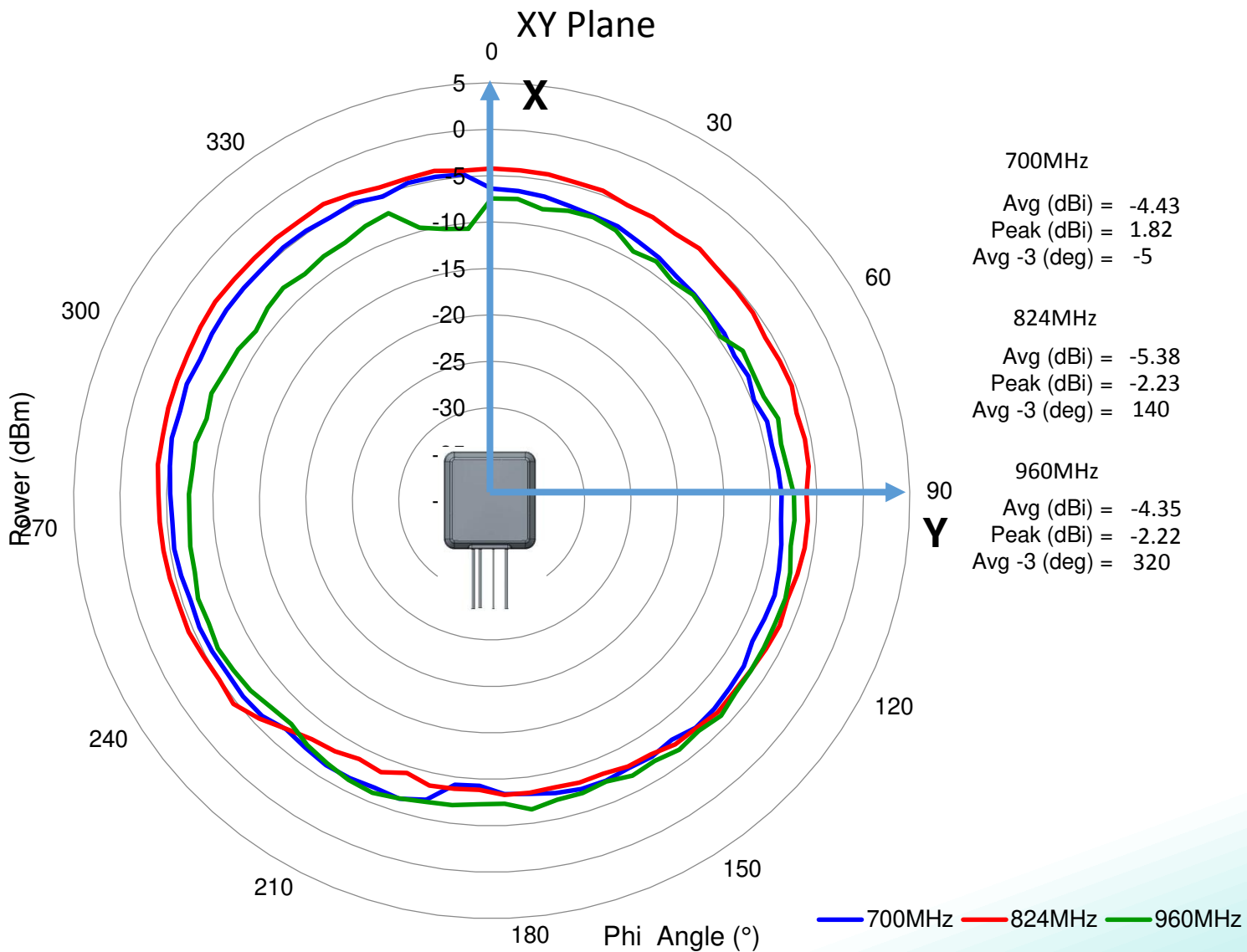
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CHARTS

Gain Plots LTE1



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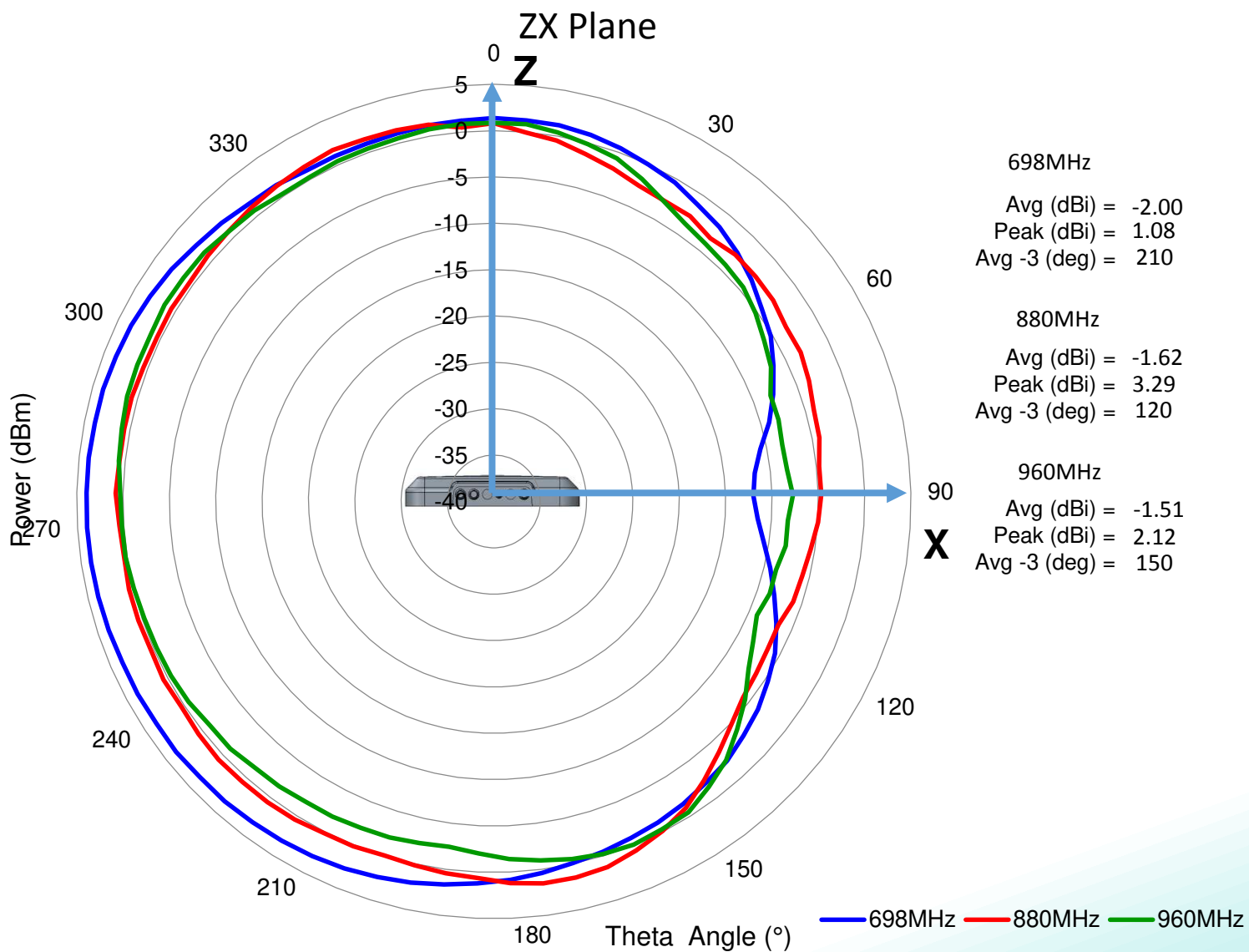
Series: Jaguar

Description: 2xLTE, WiFi, GNSS Multiband
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PART NUMBER: GPSPMB401

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Gain Plots LTE1



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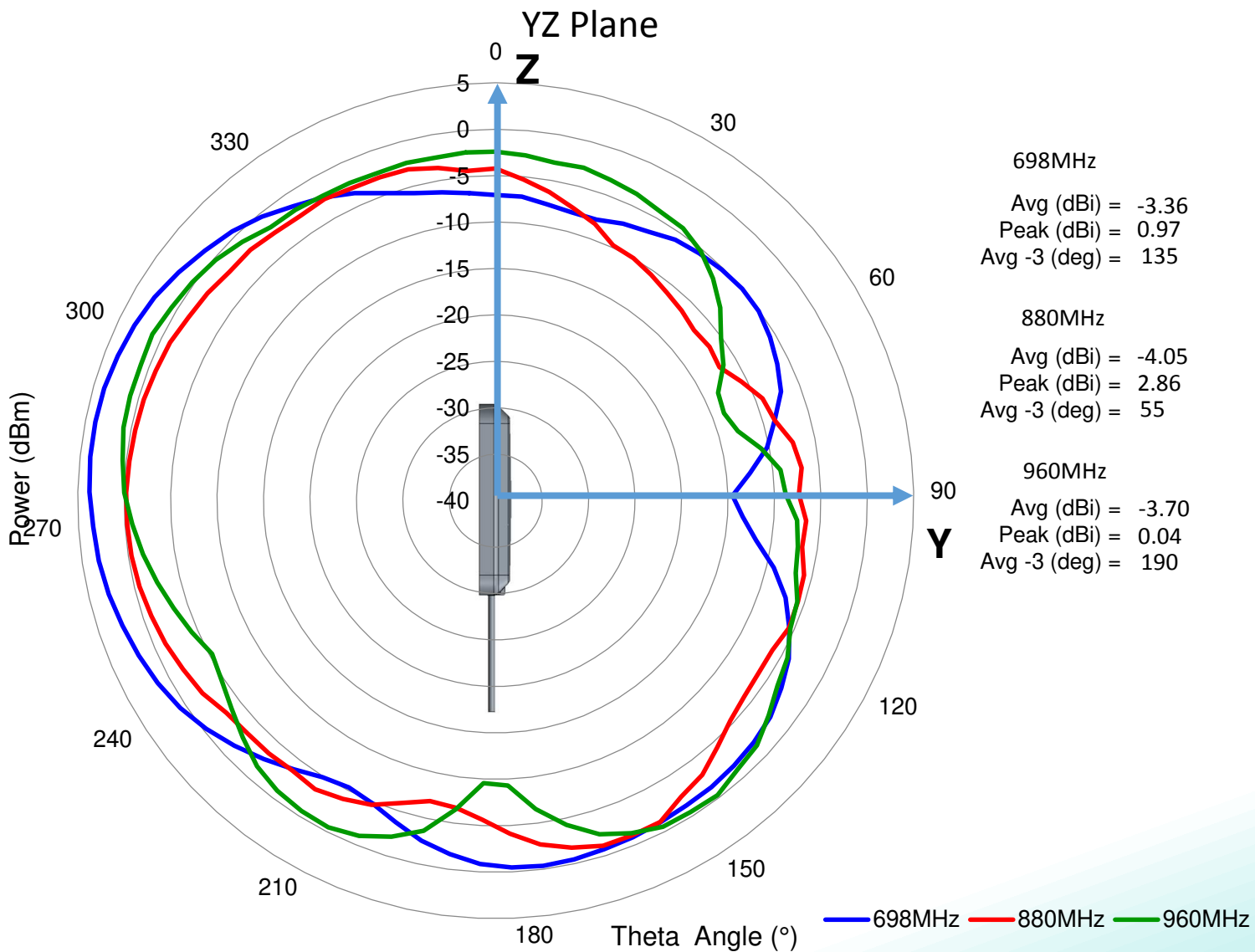
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Vehicular Antenna

Series: Jaguar

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Gain Plots LTE1



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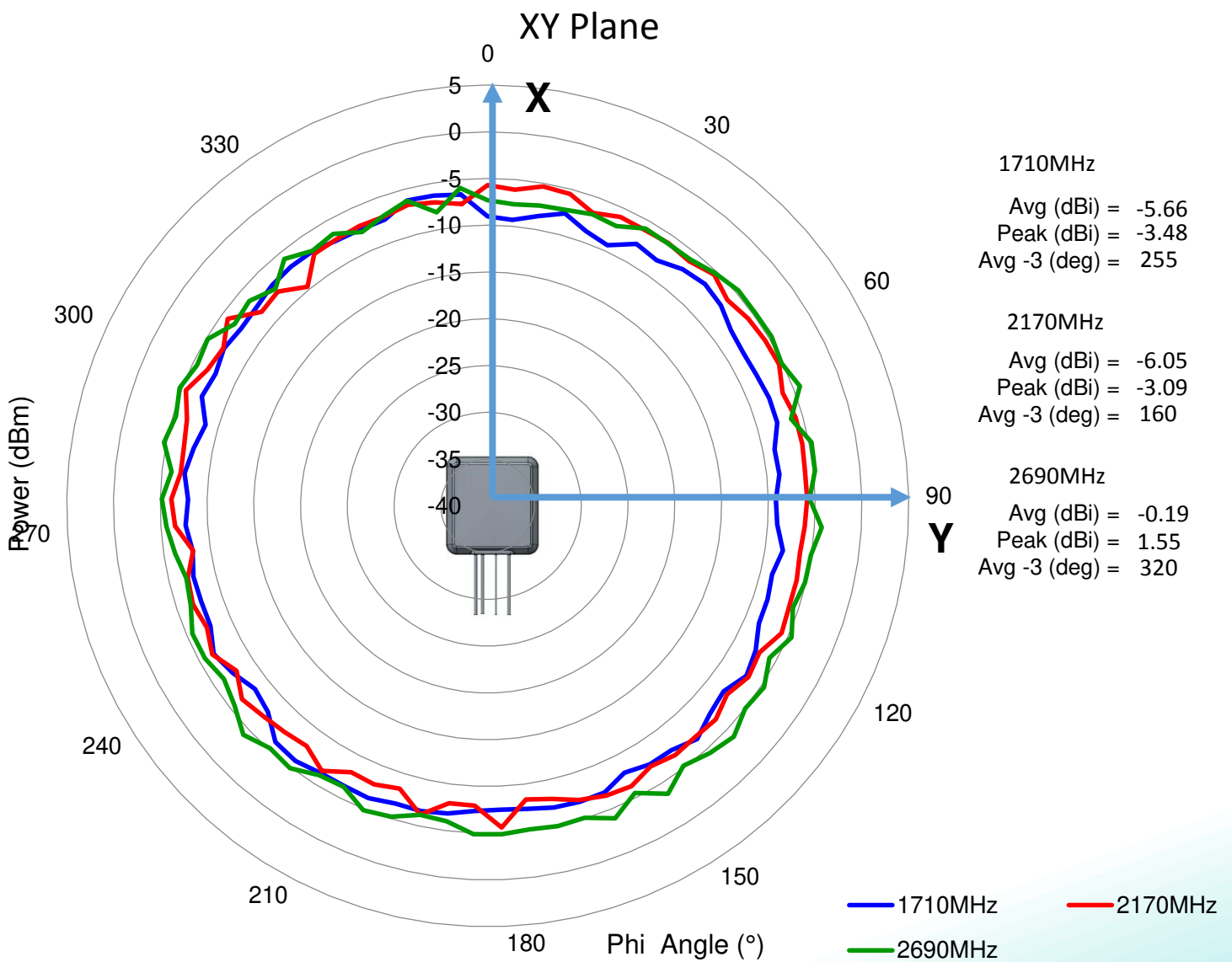
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CHARTS

Gain Plots LTE1



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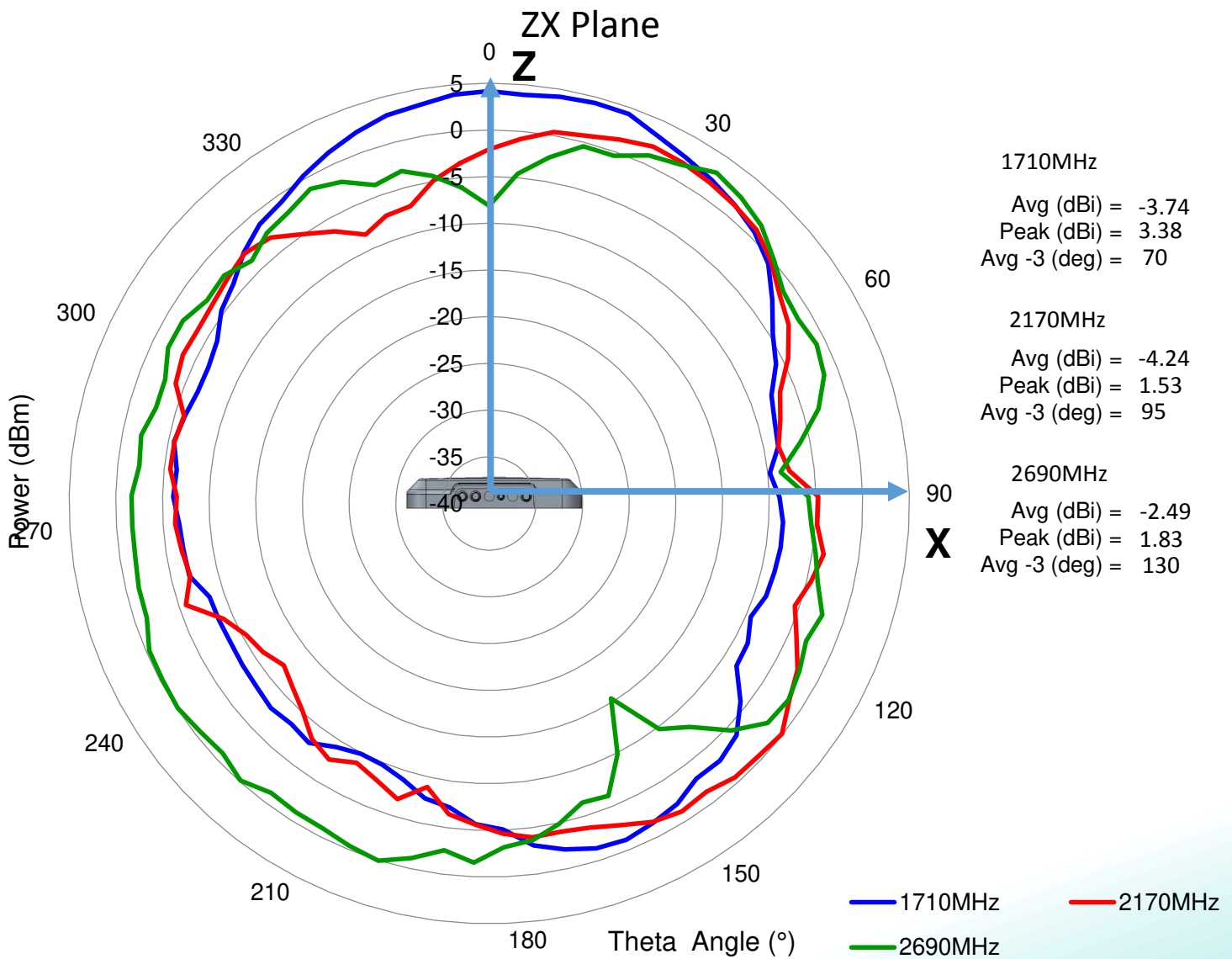
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Gain Plots LTE1



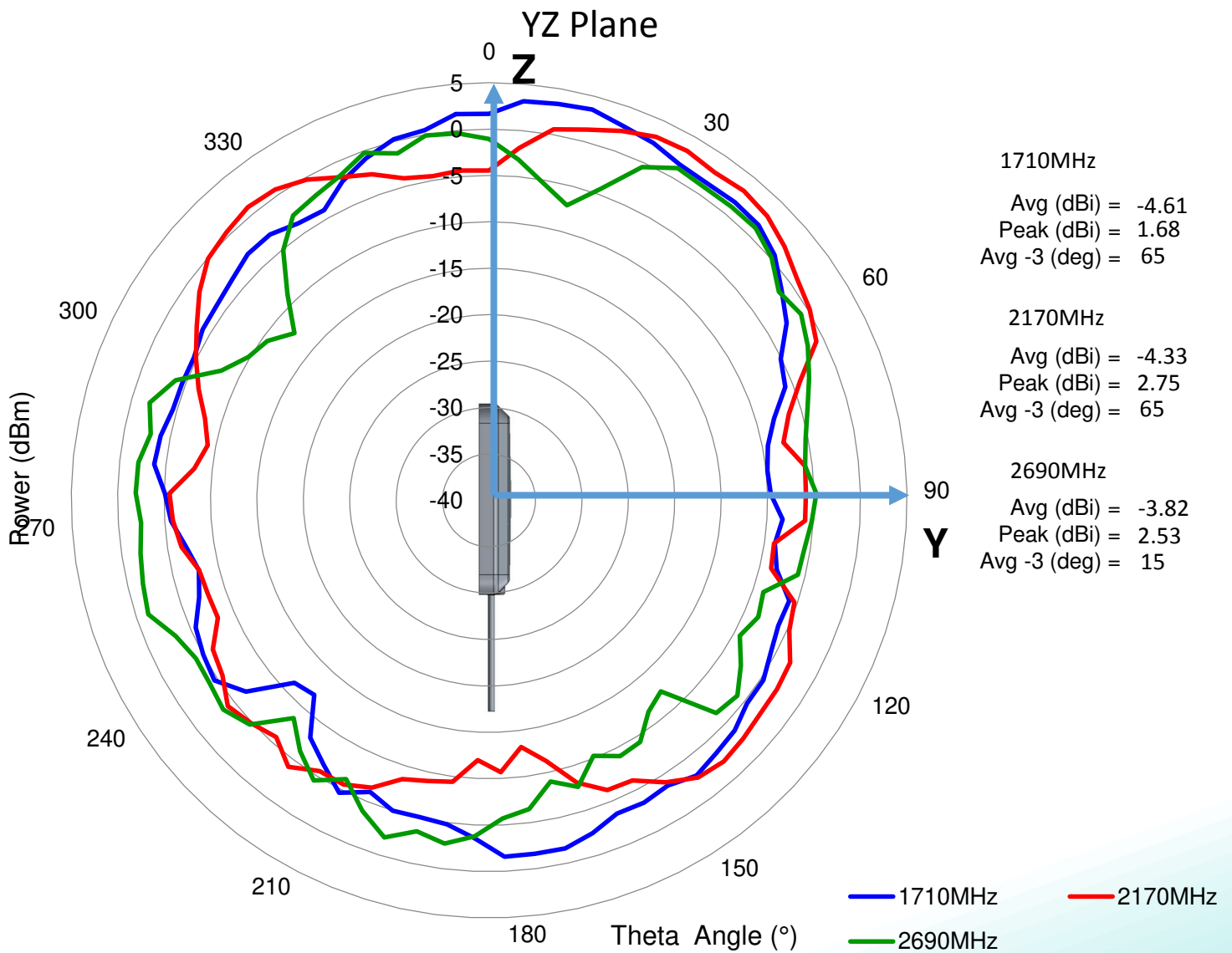
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Gain Plots LTE1



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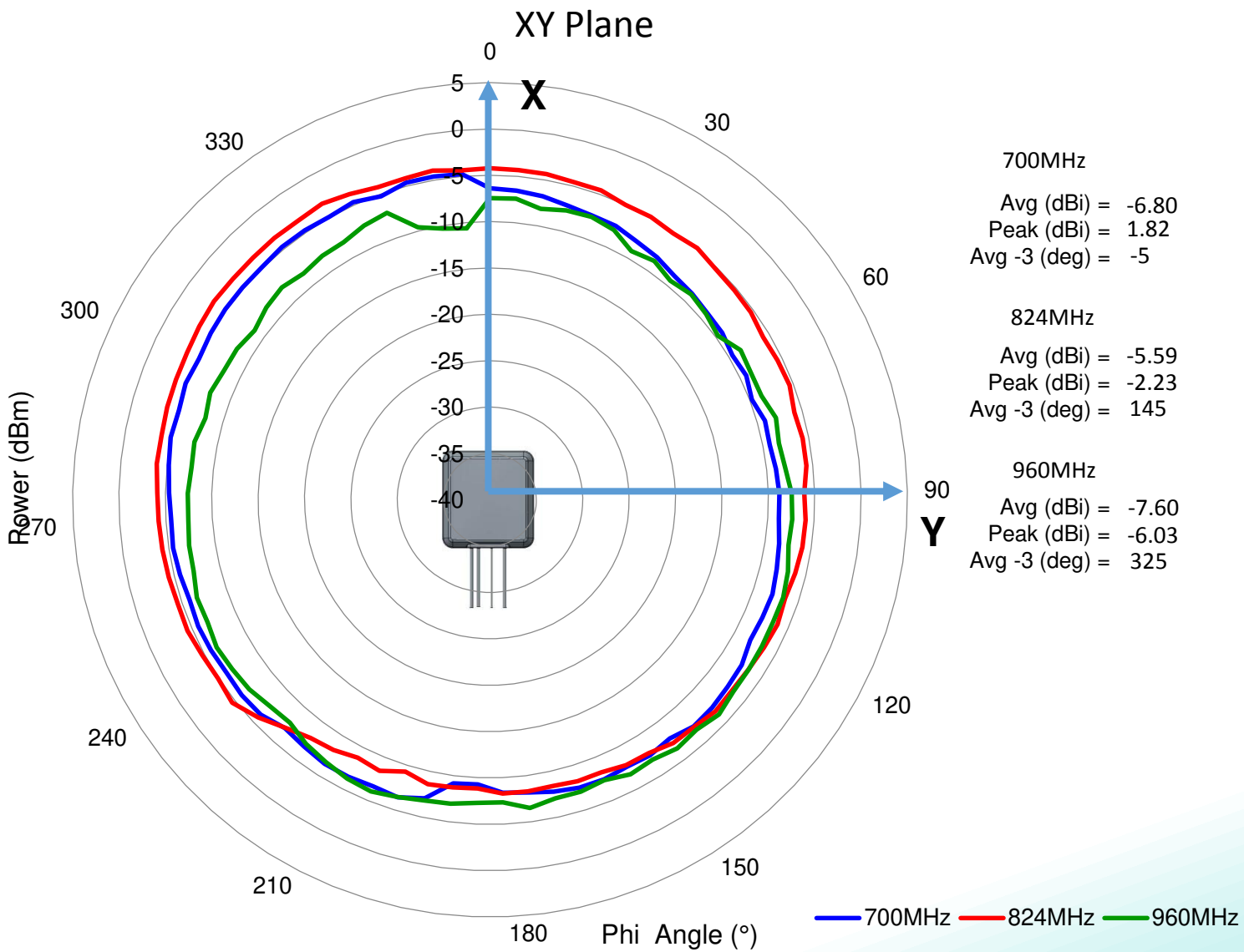
Description: 2xLTE, WiFi, GNSS Multiband
Vehicular Antenna

Series: Jaguar

PART NUMBER: GPSPMB401

CHARTS

Gain Plots LTE2



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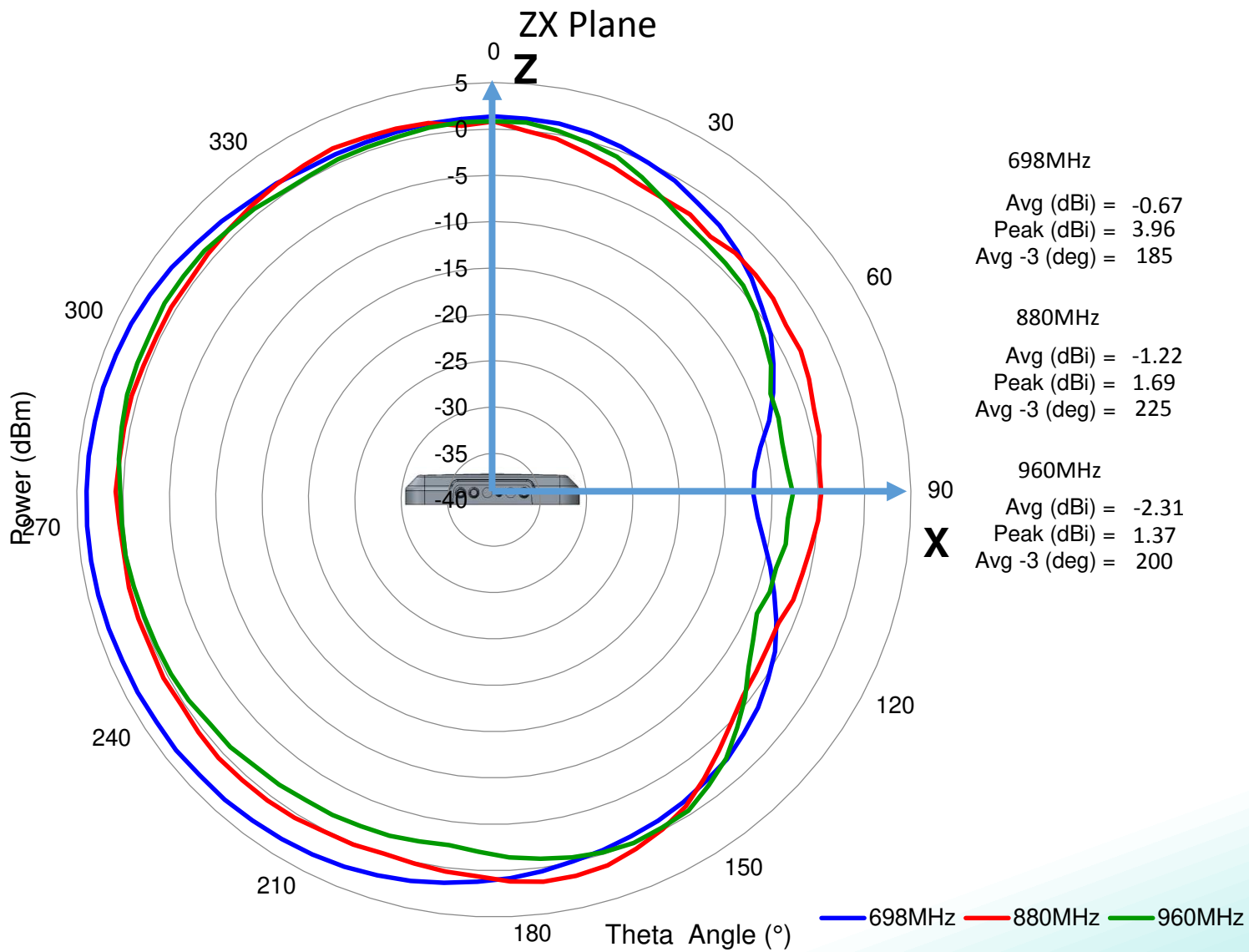
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Series: Jaguar

PART NUMBER: GPSPMB401

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Gain Plots LTE2



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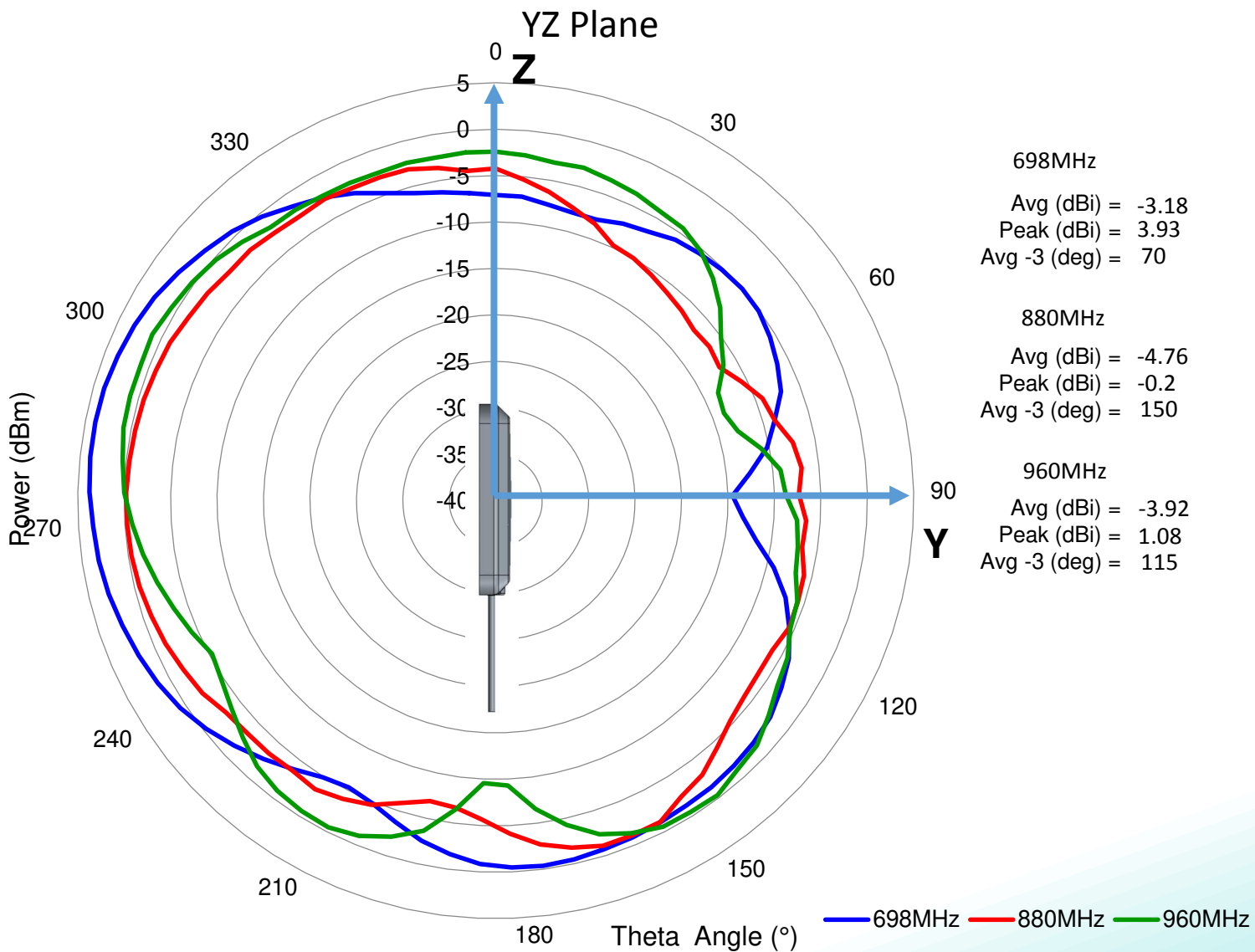
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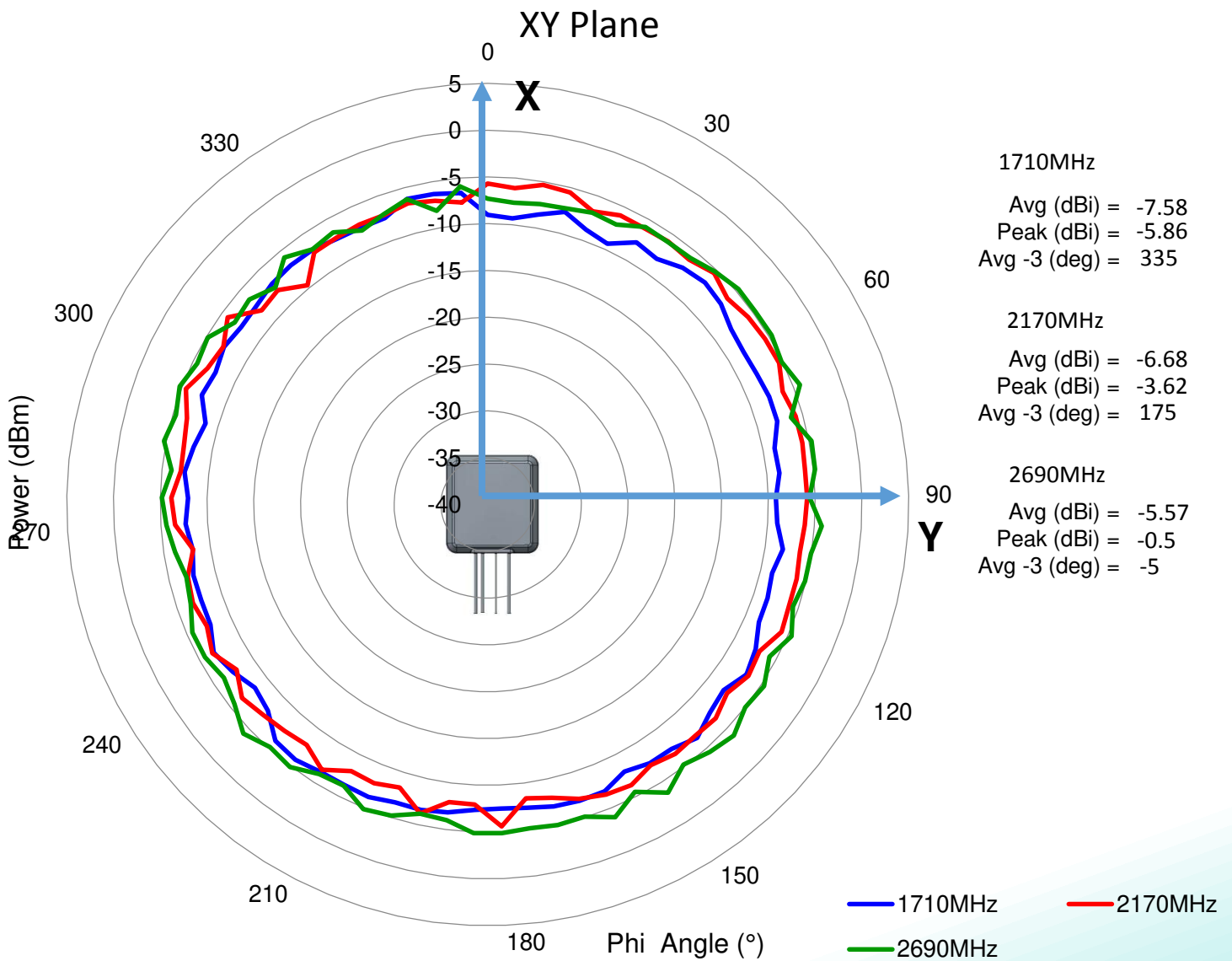
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