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Series: Low Profile MB

TECHNICAL DATA SHEET

Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

PART NUMBER: GPSLPMB403



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

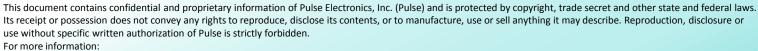
Applications:

- · 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: 1717

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Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

ELECTRICAL SPECIFICATIONS

LTE			
Frequency	698-960/1710-2690	MHz	
Nominal Impedance	50	Ω	
VSWR	2.2	Max	
Average Efficiency(698-960M	1Hz) 72	%	
Average Efficiency(1710-269	0MHz) 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(2400-250	0MHz) 46	%	
Average Efficiency(4900-590	0MHz) 64	%	
Peak Gain (2400-2500MHz)	4.5	dBi	
Peak Gain (4900-5900MHz)	6.7	dBi	
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Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

ELECTRICAL SPECIFICATIONS

GPS

Frequency	1561.098±2.046/ 1575.42±1.023	3/ 1602.5625	±4 MHz	
Nominal Impedance		50	Ω	
VSWR		2:1		
Gain (Radiating elem	ent)	1 dBio	: +/- 1 dB	
Gain (LNA gain) 30 d	B +/- 2 dB			
Polarization		RHCP)	
Out of Band Rejectio	n			
		698 N	lHz >70 dB	
		960N	IHz >65 dB	
		1710N	IHz >60 dB	
		2170N	IHz >65 dB	
		2400MHz >65 dB		
Noise Figure		<2.4	dB	
Operating Voltage		3.3-5	Vdc±0.5V	
Current Consumption	ı	<11	mA	
	ve the right to make changes judged to be necessary		R	

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Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

ELECTRICAL SPECIFICATIONS

Cable and Connector type

ltem	GPSLPMB403 RF Cables	Text on Label	Cable Type	Cable Length	Connector
1	LTE-1	Cell - 1	LMR195	600mm [23.622"]	TNC Male
2	WiFi	WiFi	LMR195		RP-TNC Male
3	GPS	GNSS	LMR100		SMA Male
4	LTE-2	Cell - 2	LMR195		RP-SMA Male

Issue: 1717

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Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

MECHANICAL SPECIFICATIONS

Plastic radome	SABIC PC943
Color	Black
Ingress Protection	IP67
Weight	310 g
Cable retention: Pull off	30N mini
Fixing system	3M VHB4959 (T=3mm)

ENVIRONMENTAL SPECIFICATIONS

Operating temperature

-40 ~ +85 ° C

Issue: 1717

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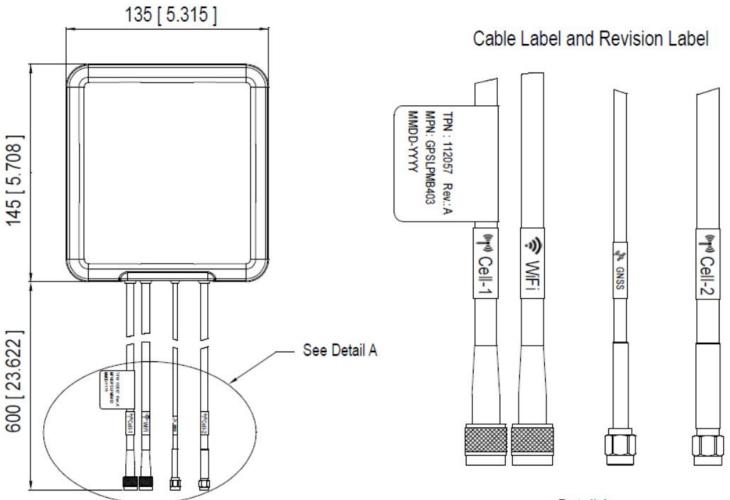


Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

MECHANICAL DRAWING



Detail A

ltem	GPSLPMB403 RF Cables	Text on Label	Cable Type	Cable Length	Connector
1	LTE-1	Cell - 1	LMR195		TNC Male
2	WiFi	WiFi	LMR195	600mm	RP-TNC Male
3	GPS	GNSS	LMR100	[23.622"]	SMA Male
4	LTE-2	Cell - 2	LMR195		RP-SMA Male

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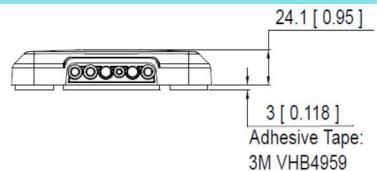


Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

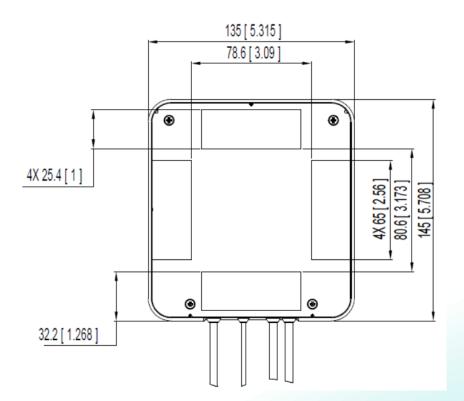
Series: Low Profile MB

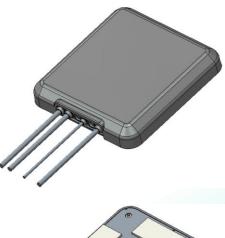
PART NUMBER: GPSLPMB403

MECHANICAL DRAWING



Adhesive Tape Placement







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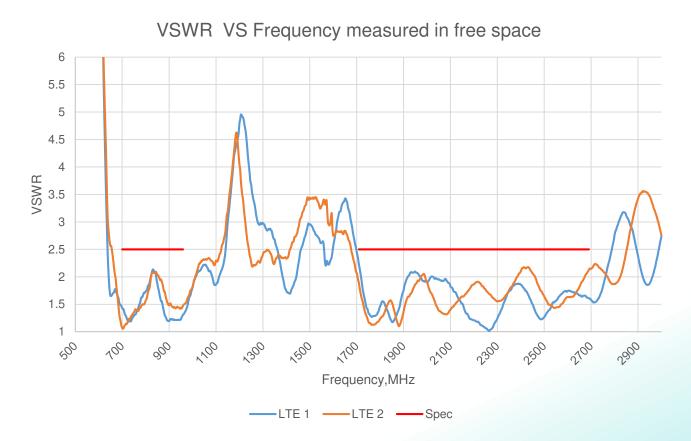
Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

CHARTS

LTE 1 and LTE2 VSWR



Issue: 1717

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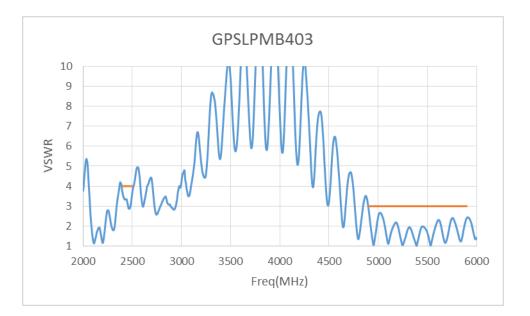
Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

CHARTS

WiFi VSWR*



* Test on bracket and diameter is 500mm ground plane

Issue: 1717

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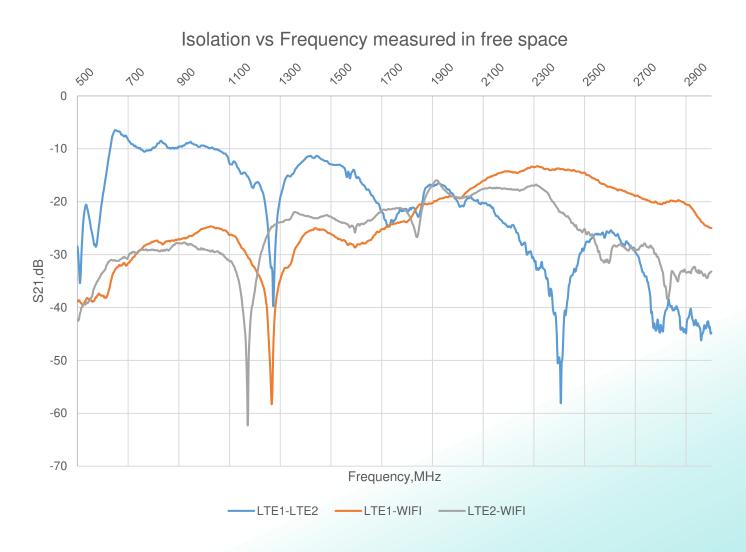
Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

CHARTS

Isolation



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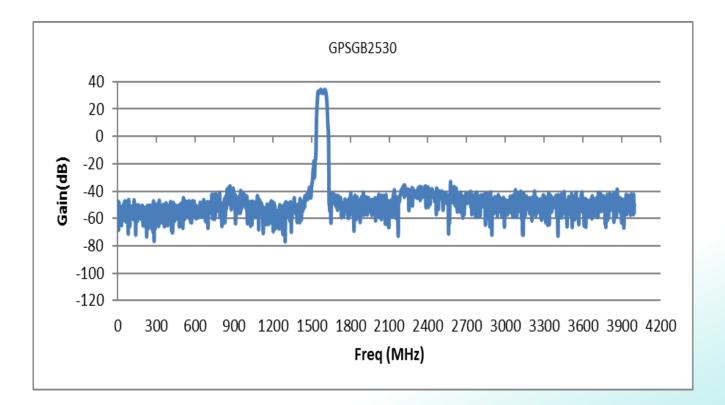
Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

CHARTS

GPS LNA Gain and out-of-band rejection



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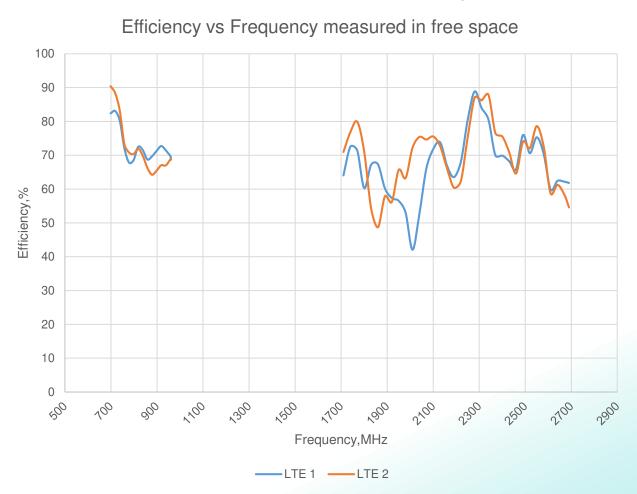
Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

CHARTS

LTE 1 and LTE2 Efficiency



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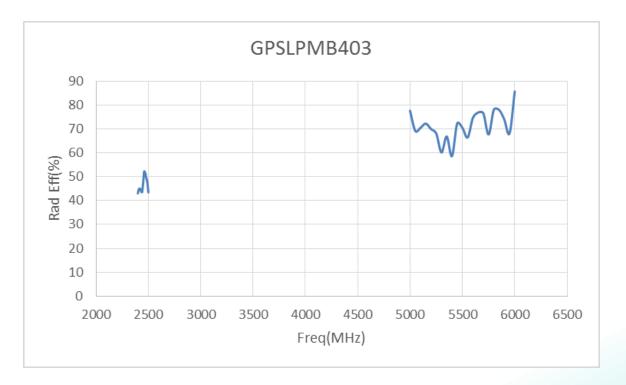
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CHARTS

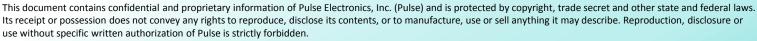
WiFi Efficiency*



* Test on bracket and diameter is 500mm ground plane

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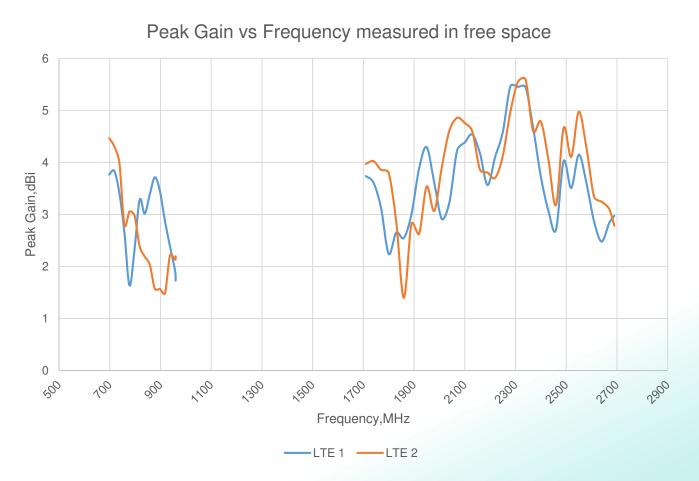
Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

CHARTS

LTE1 and LTE2 Peak Gain



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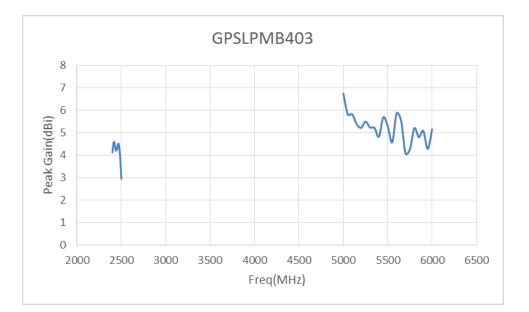
Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

CHARTS

WiFi Peak Gain*



* Test on bracket and diameter is 500mm ground plane

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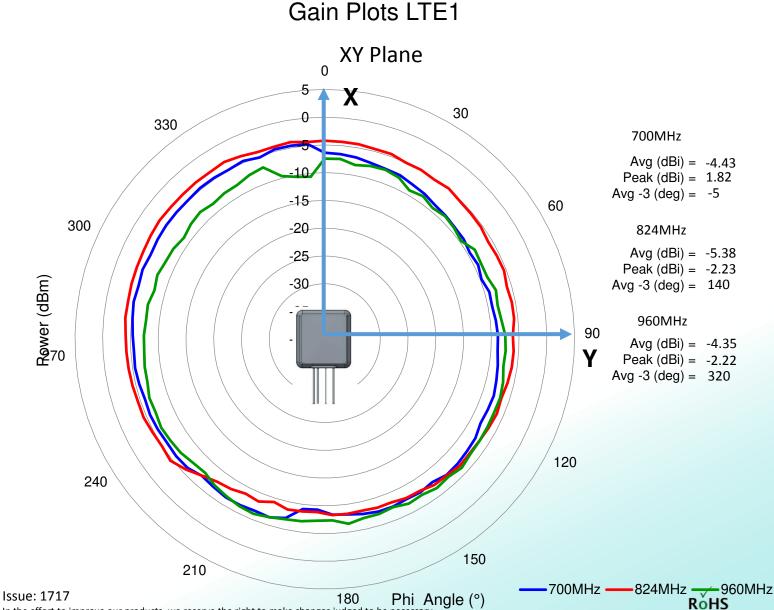


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CHARTS



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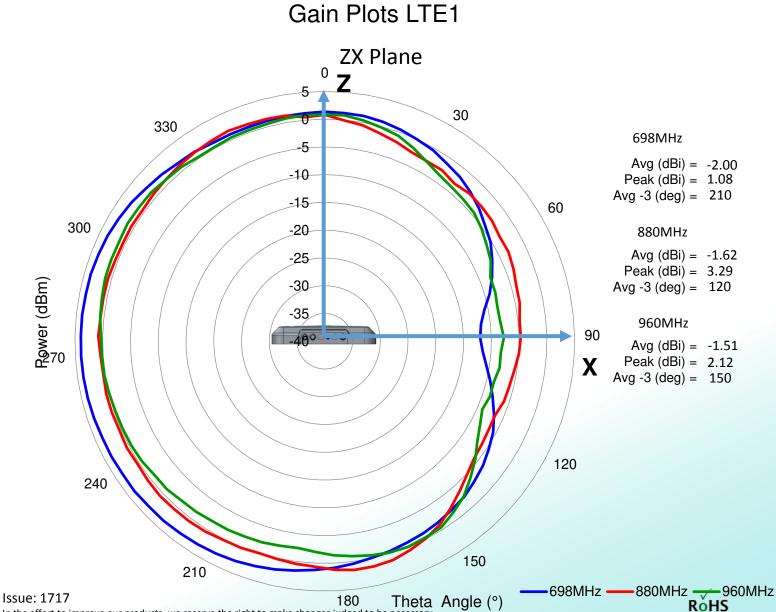


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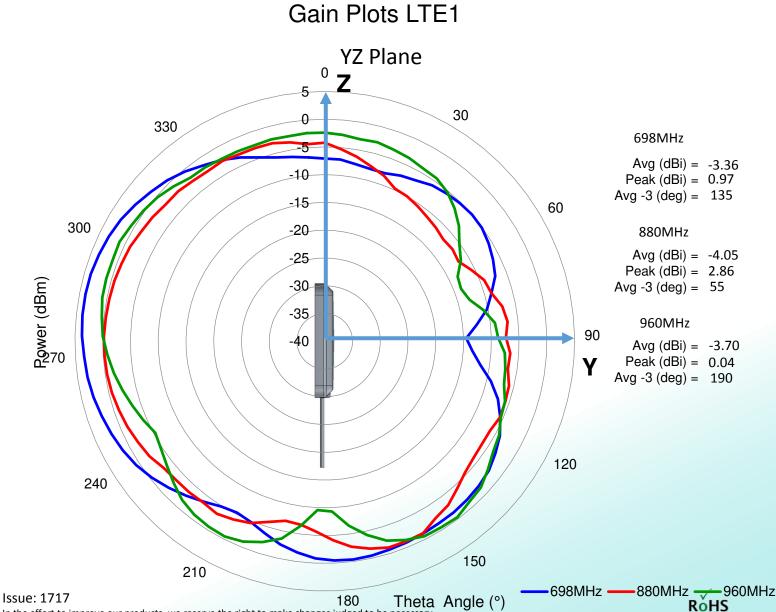


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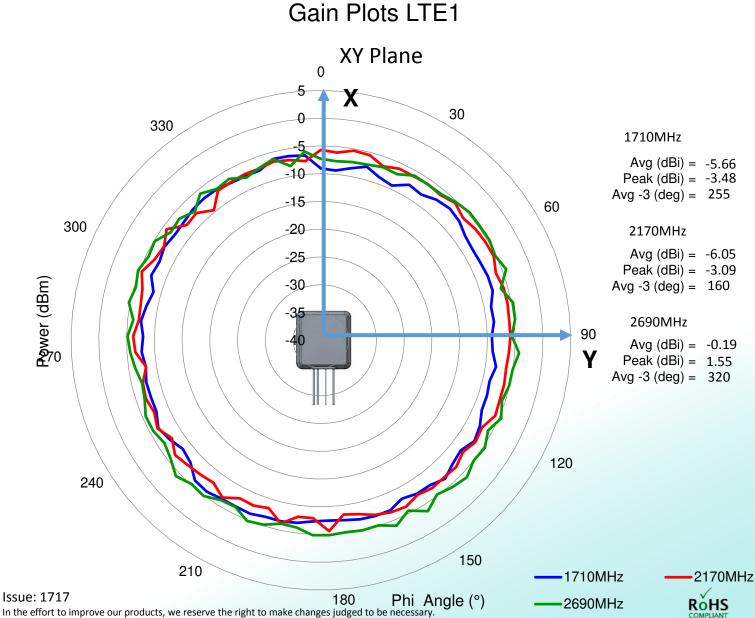


Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

Series: Low Profile MB

PART NUMBER: GPSLPMB403

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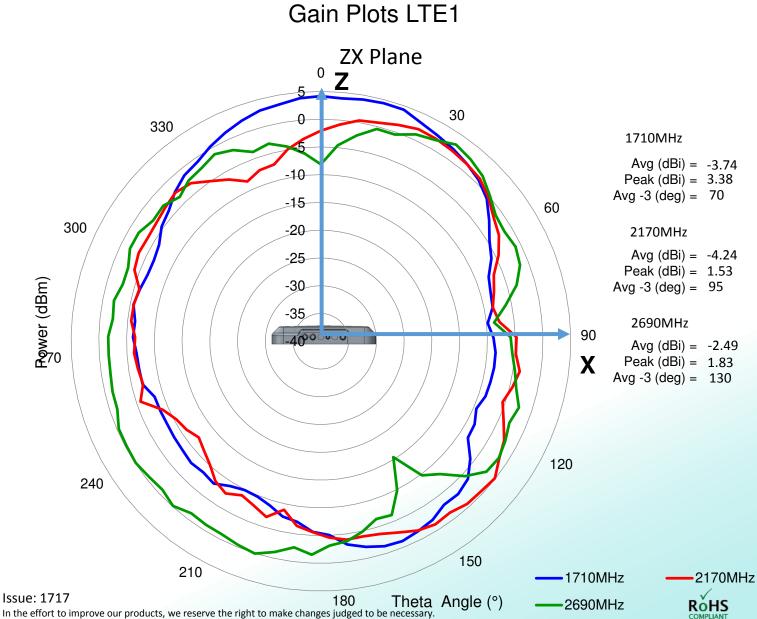


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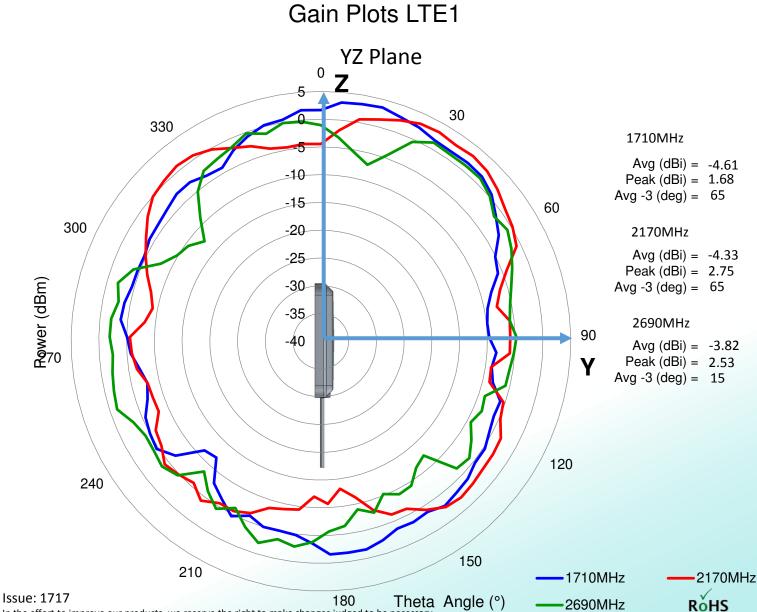


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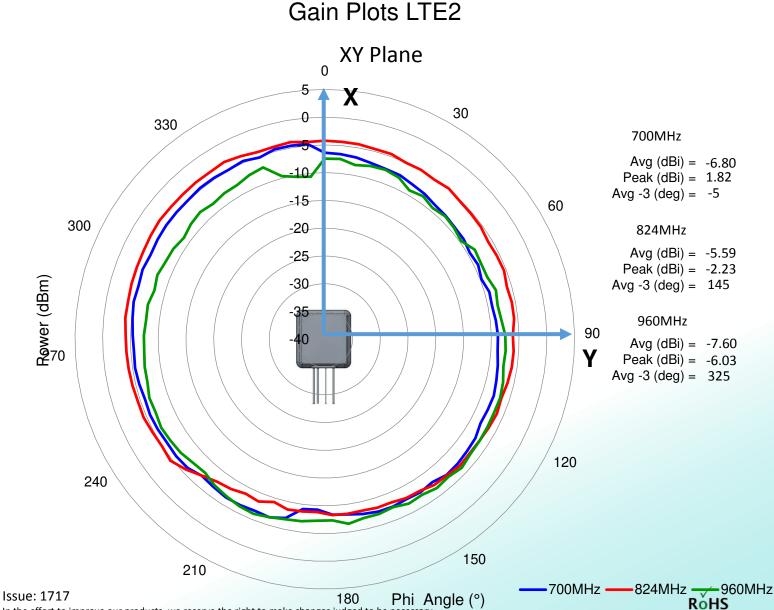


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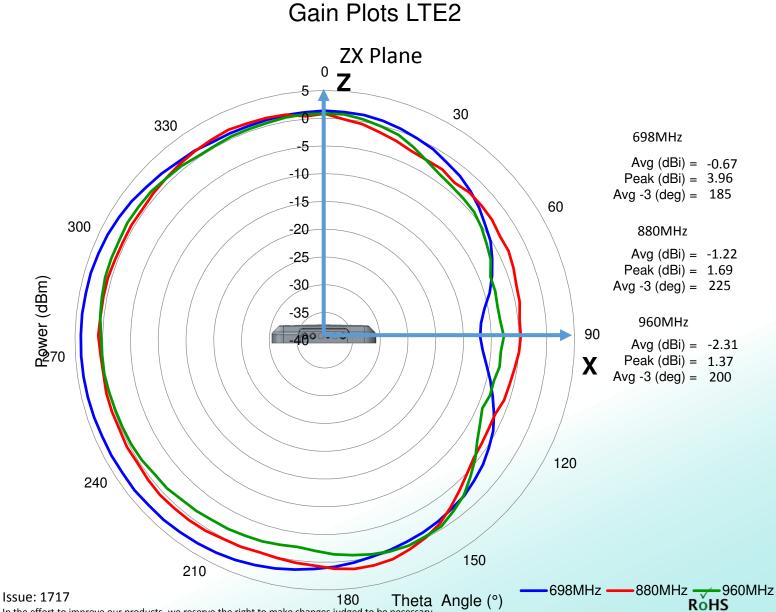


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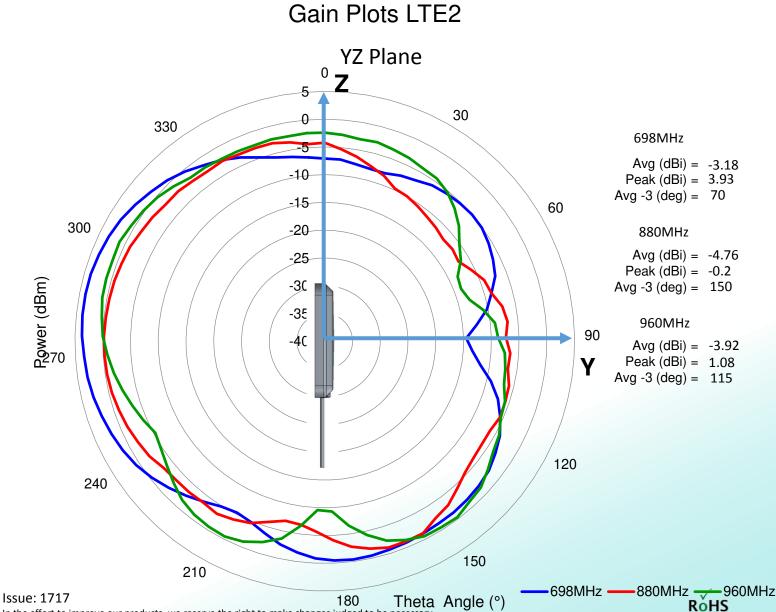


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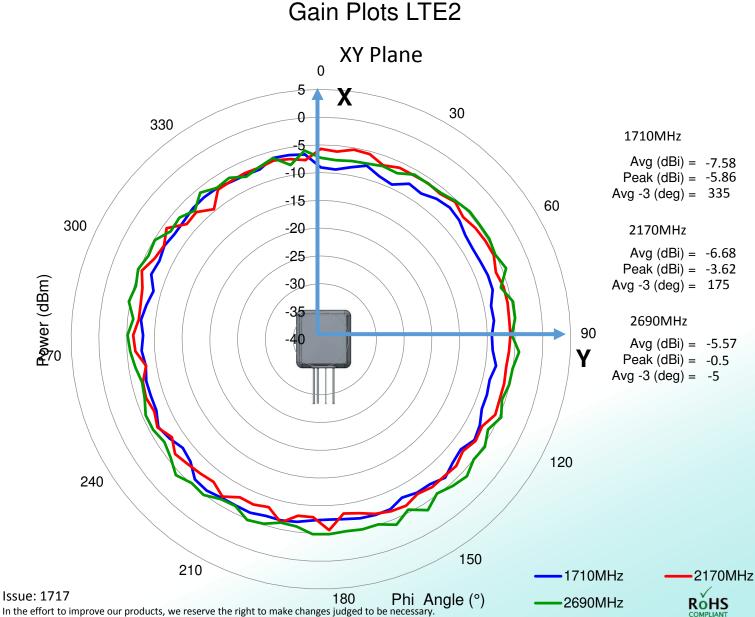


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