



# MEA-5G-IMG-AM

5G NR MIMO, 2.4/5.0 GHz ISM MIMO and GNSS  
Adhesive Mount

Part #: 100-00334-01

## Description

The MEA-5G-IMG-AM adhesive mount Antenna is a 5-in-1 low profile antenna solution, with a very high-performance ideal for maintaining constant network connectivity. The MEA-5G-IMG-AM covers all 5G NR, ISM, MIMO, and GPS/GLONASS/QZSS/ Galileo standard frequencies. This is an ideal antenna for telematics systems, remote surveillance, asset tracking and any IOT system applications. The high performance and low profile make this antenna ideal for the most challenging installations. This adhesive mount antenna is easy to install with maximum durability offering IP67 rated housing and anti-rotation mounting. The MEA-5G-IMG-AM have five cables with a SMA-Male standard connectors, 2m standard cable length and is fully customizable by offering additional connector types, cable lengths and cable types.

## Electrical Specifications

Parameter	Specifications			
Technology	5G, 4G, 3G and 2G			
Standards	5G NR/4G LTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G2G			
Frequency (MHz)	617-960	1427-2690	3300-5000	5150-5925
Band MHz	600, 700, 850, 900	1500, 1600, 1700, 1800, 1900, 2000, 2100, 2300, 2500, 2600	3300, 3500, 3600, 3700, 4500	5200, 5500, 5800
5G NR Bands	n5, n8, n12, n20, n28, n71, n81, n82, n83,	n1, n2, n3, n7, n25, n34, n38, n39, n40, n41, n50, n51, n66, n70, n74, n75, n76, n80, n84, n86	n77, n78, n79	
4G LTE Bands	B5, B6, B8, B12, B13, B14, B17, B18, B19, B20, B26, B27, B28, B29, B44, B67, B68, B71, B85	B1, B2, B3, B4, B7, B9, B10, B11, B21, B23, B24, B25, B30, B32, B33, B34, B35, B36, B37, B38, B39, B40, B41, B45, B50, B51, B65, B66, B69, B70, B74, B75, B76	B22, B42, B43, B48, B49, B52	B46, B47, B252, B255
3G CELL Bands	B5, B6, B8, B12, B13, B14, B19, B20, B26	B1, B2, B3, B4, B7, B9, B10, B11, B21, B25, B32, B33, B34, B35, B36, B37, B38, B39, B40	B22	
2G CELL Bands	710, 750, 810T, 850, 900P, 900E, 900R	1800DCS, 1900PCS		
CDMA CELL Bands	BC0, BC2, BC3, BC7, BC9, BC10, BC12, BC18, BC19	BC1, BC4, BC6, BC8, BC13, BC14, BC15, BC16, BC20, BC21		



## Features

- Cable 1 - 2: 5G NR
  - 617-960 MHz
  - 1427-2690 MHz
  - 3300-5000 MHz
  - 5150-5925 MHz
- Cable 3 - 4: 2.4/5.0 GHz ISM
  - 2410-2490 MHz
  - 4920-5925 MHz
- Cable 5: GPS/GLONASS/QZSS/Galileo
  - 1575-1606 MHz
- Adhesive Mount
- High Performance
- Ground Plane Independent
- Customizable Cable and Connector
- Dimensions: 61.8 x 155.6 x 17.0 mm
- IP67, IP69

## Applications

- Fleet management
- Commercial transport
- HD video monitoring
- Buses, train & commercial applications
- Smart cities



Maxtena Inc.  
 20310 Seneca Meadows Pkwy Suite A  
 Germantown, MD 20876  
 1-877-629-8362  
 info@maxtena.com  
[www.maxtena.com](http://www.maxtena.com)

Cable 1 5GNR Antenna	Parameter	Specifications			
	Frequency Range	617-960MHz	1427-2690MHz	3300-5000MHz	5150-5925MHz
	Return Loss	~-9.1	~-7.0	~-6.9	~-6.7
	VSWR	~2.7:1	~2.9:1	~2.9:1	~3.4:1
	Efficiency (%)	~45.8	~39.6	~32.2	~14.4
	Peak Gain (dBi)	~1.2	~1.3	~0.6	~2.7
	Average Gain (dB)	~-3.4	~-4.2	~-5.0	~-8.6
	Impedance (Ohm)	50			
	Polarization	Linear			
	Radiation Pattern	Omni-Directional			
	Max Input Power	35			
	Connector Type	SMA-Male Standard (Other Connectors Available)			
	Cable Length	300 cm Standard (Any Cable Length Available)			
	Cable Type	LL195 Standard (Other Cables Available)			

Cable 2 5GNR Antenna	Parameter	Specifications			
	Frequency Range	617-960MHz	1427-2690MHz	3300-5000MHz	5150-5925MHz
	Return Loss	~-7.8	~-8.8	~-5.1	~-4.3
	VSWR	~2.7:1	~2.7:1	~3.8:1	~4.2:1
	Efficiency (%)	~43.0	~40.0	~25.1	~22.7
	Peak Gain (dBi)	~0.4	~1.7	~-0.1	~-1.4
	Average Gain (dB)	~-3.7	~-4.2	~-6.3	~-6.7
	Impedance (Ohm)	50			
	Polarization	Linear			
	Radiation Pattern	Omni-Directional			
	Max Input Power	35			
	Connector Type	SMA-Male Standard (Other Connectors Available)			
	Cable Length	300 cm Standard (Any Cable Length Available)			
	Cable Type	LL195 Standard (Other Cables Available)			

Cable 3 - 2.4/5.0 GHz ISM Antenna	Parameter	Specifications	
	Standards	WiFi, BT, ZigBee, ISM	
	Band (MHz)	2.4 GHz	5.0 GHz
	Frequency Range	2410-2490 MHz	4920-5925 MHz
	Return Loss (dB)	~-7.8	~-9.8
	VSWR	~2.4:1	~2.0:1
	Efficiency (%)	~24.3	~47.2
	Peak Gain (dBiC)	~-1.5	~-3.8
	Average Gain (dB)	~-6.3	~-3.3
	Impedance (Ohm)	50	
	Radiation Pattern	Omni-Directional	
	Polarisation	Linear	
	Max. Input Power (W)	25	
	Connector Type	SMA-Male-RP Standard (Other Connectors Available)	
	Cable Length	300 cm Standard (Any Cable Length Available)	
	Cable Type	LL195 Standard (Other Cables Available)	

Cable 4 - 2.4/5.0 GHz ISM Antenna	Parameter	Specifications	
	Standards	WiFi, BT, ZigBee, ISM	
	Band (MHz)	2.4 GHz	5.0 GHz
	Frequency Range	2410-2490 MHz	4920-5925 MHz
	Return Loss (dB)	~-11.6	~-18.3
	VSWR	~1.7:1	~1.4:1
	Efficiency (%)	~39.0	~55.9
	Peak Gain (dBiC)	~0.8	~4.9
	Average Gain (dB)	~-4.3	~-2.6
	Impedance (Ohm)	50	
	Radiation Pattern	Omni-Directional	
	Polarisation	Linear	
	Max. Input Power (W)	25	
	Connector Type	SMA-Male-RP Standard (Other Connectors Available)	
	Cable Length	300 cm Standard (Any Cable Length Available)	
	Cable Type	LL195 Standard (Other Cables Available)	

### Antenna Measurement Conditions:

Mounted on Plastic Plate of 30 x 30 cm

100 cm of Cable LL195

Measured in Certified CTIA 3D Anechoic Chamber

Cable 5 - GPS/GLONASS Antenna	Parameter	Specifications	
	Standards	GPS/QZSS/Galileo	GLONASS
	Band (MHz)	1575	1602
	Frequency Range	1575.42 MHz	1598-1610 MHz
	Return Loss (dB)	<= -15 dB	
	Patch Size (mm)	25 x 25 x 4	
	Impedance (Ohm)	50	
	VSWR	<= 1.4:1 dB	
	Radiation Pattern	Hemispherical	
	Polarization	RHCP	
	Saw Filter	Pre-Filter	
	Active Gain (dB)	28 @ 2.7 V	
	Noise Figure (dB)	1.5 Typ	
	Voltage (V)	1.5 – 3.6	
	Current (mA)	9 Typ	
	Power Consumption (mW)	24.3 Typ	
	ESD Protection	2kV	
	Connector Type	SMA-Male Standard (Other Connectors Available)	
	Cable Length	300 cm Standard (Any Cable Length Available)	
	Cable Type	LL100 Standard (Other Cables Available)	

### Mechanical Specifications

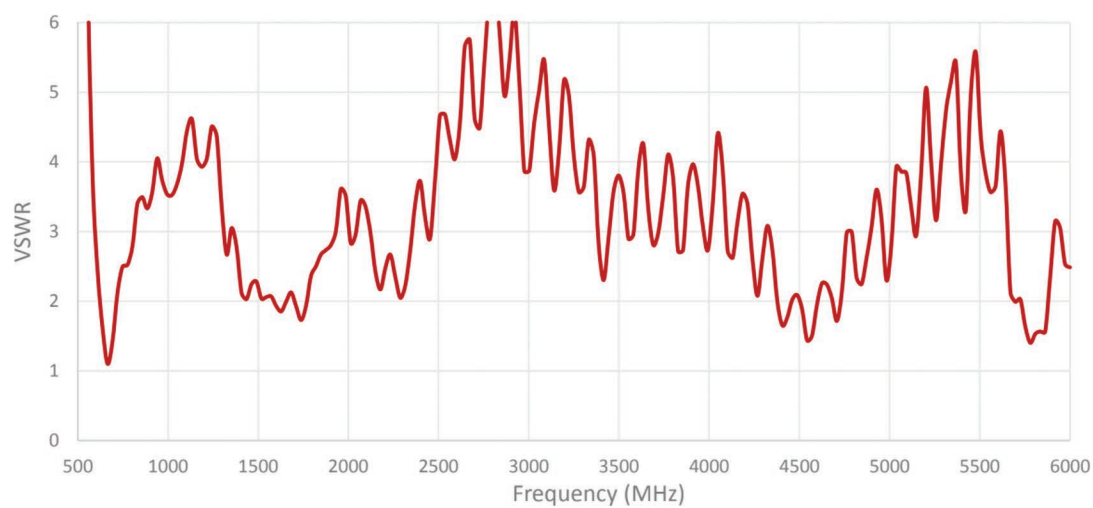
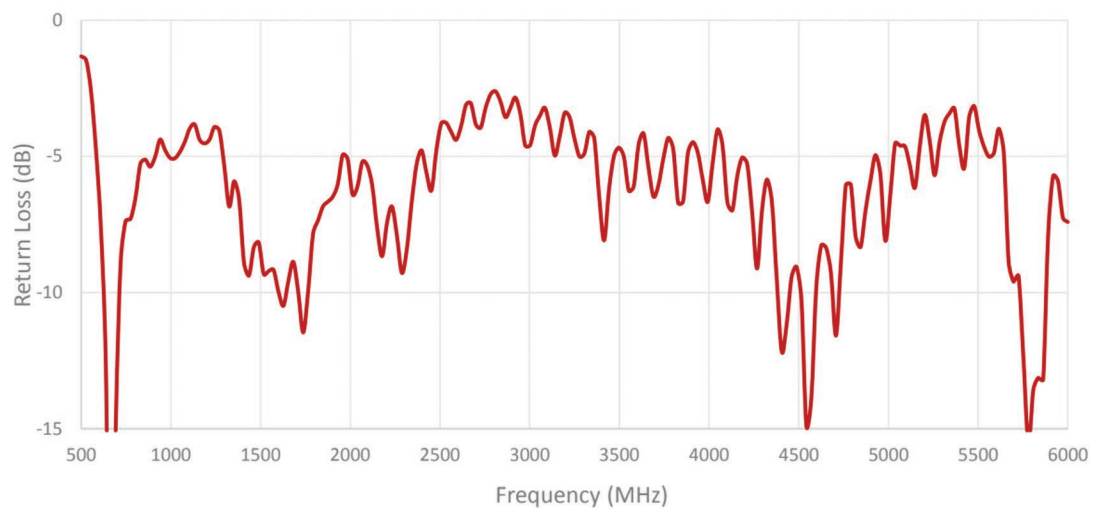
Parameter	Specifications
Antenna Dimensions (mm)	61.8 x 155.6 x 17.0
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Mounting Type	Adhesive Mount
Substance Compliance	RoHS
Radome Type/Color	ABS UV Stable/Black
Certificates	IP67, IP69, CE, Vibration



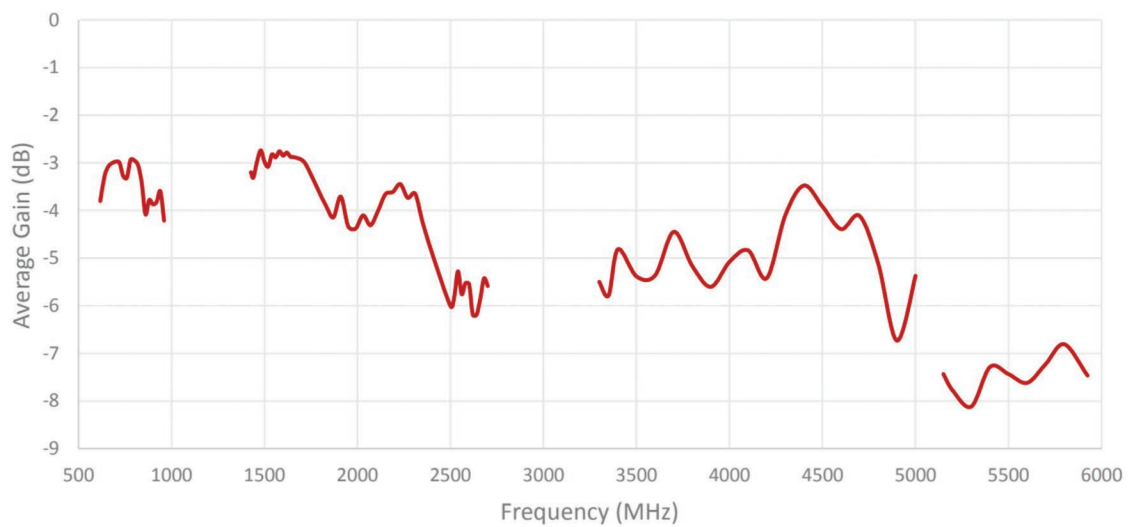
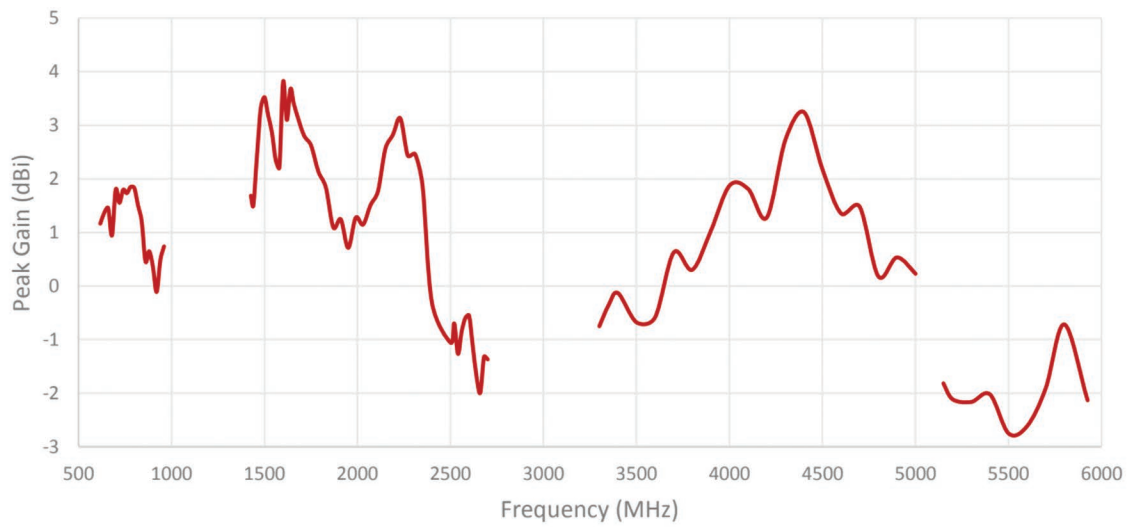
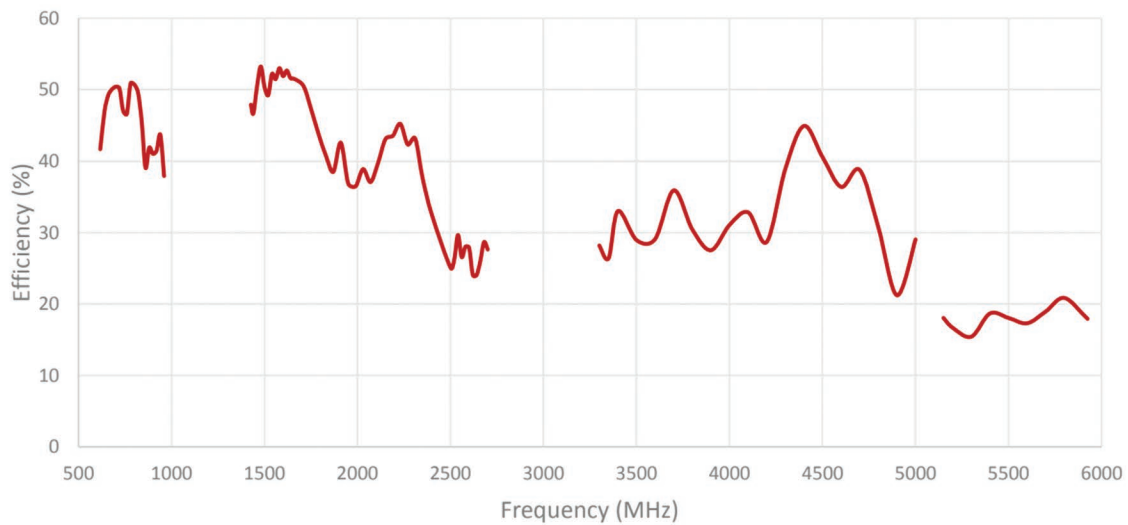
Maxtena Inc.  
20310 Seneca Meadows Pkwy Suite A  
Germantown, MD 20876  
1-877-629-8362  
info@maxtena.com  
www.maxtena.com

## Antenna Parameters

Cable 1: 5GNR

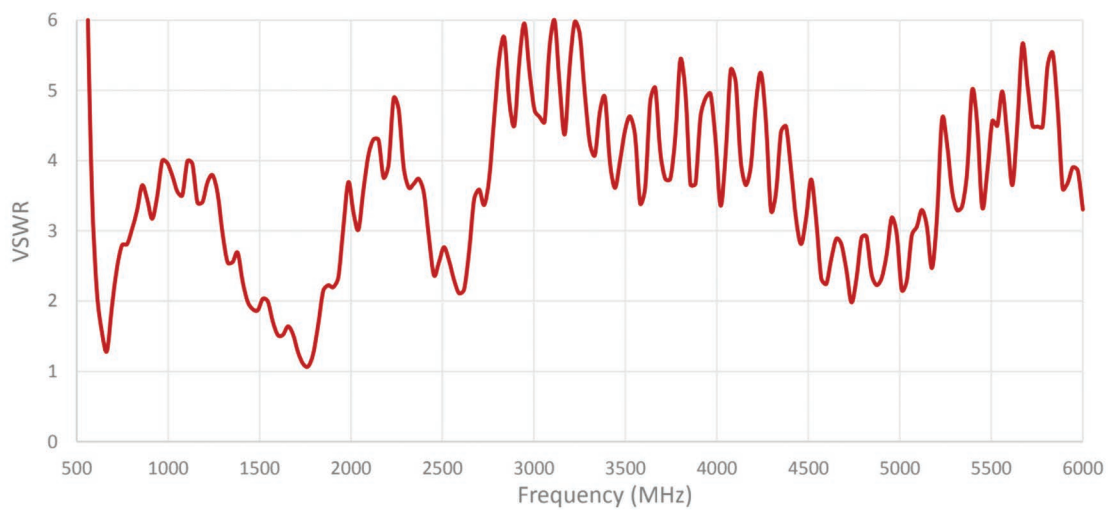
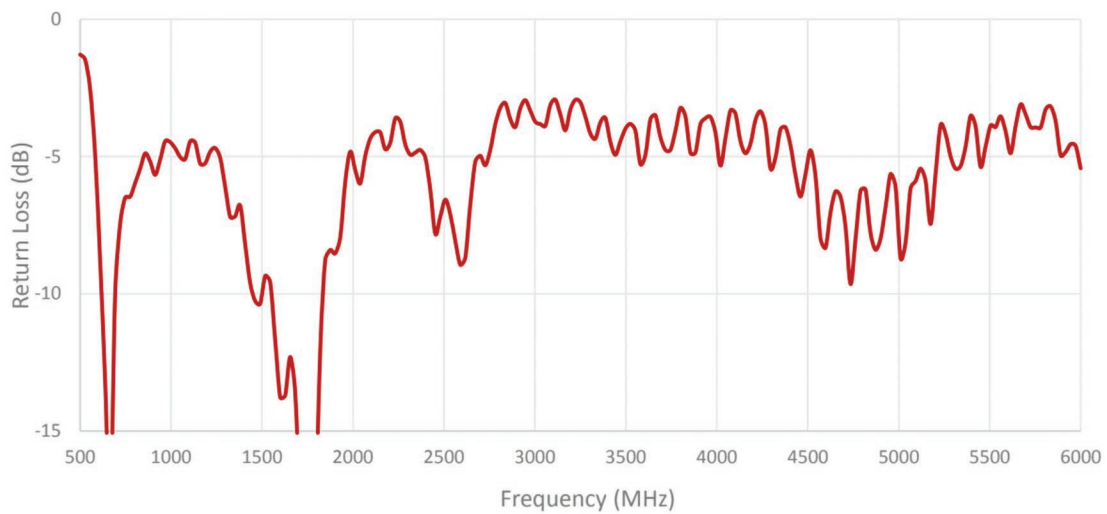


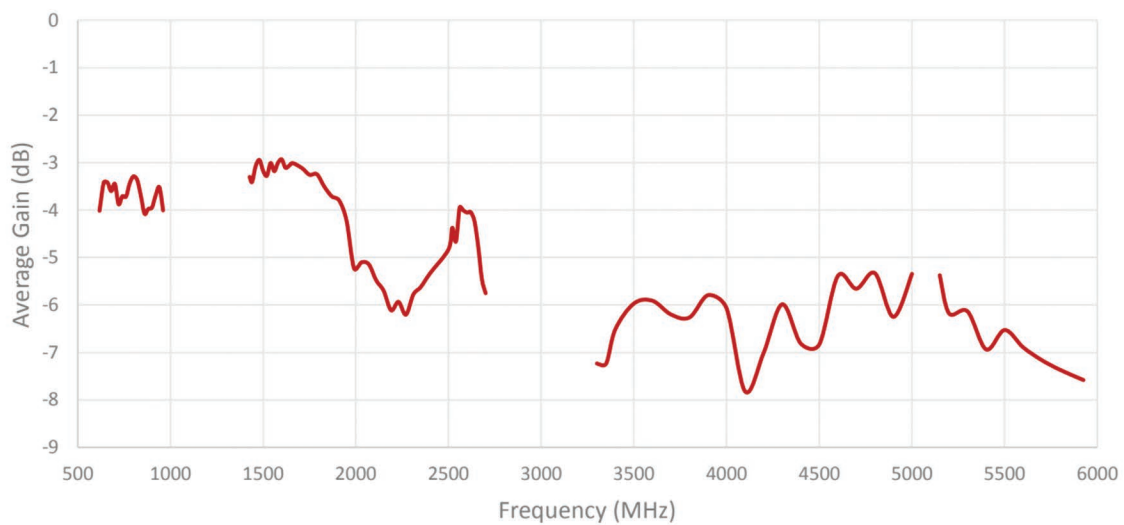
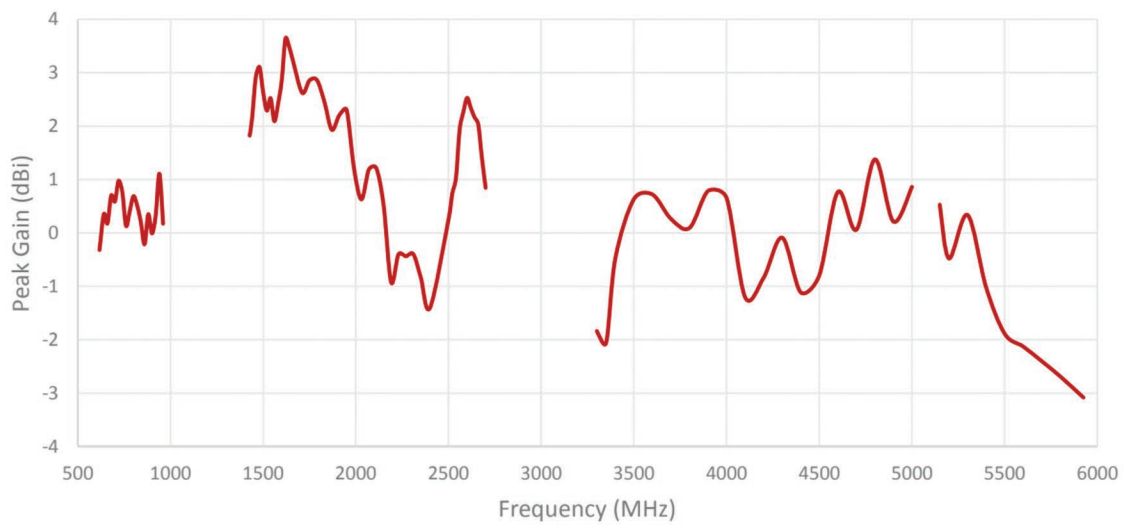
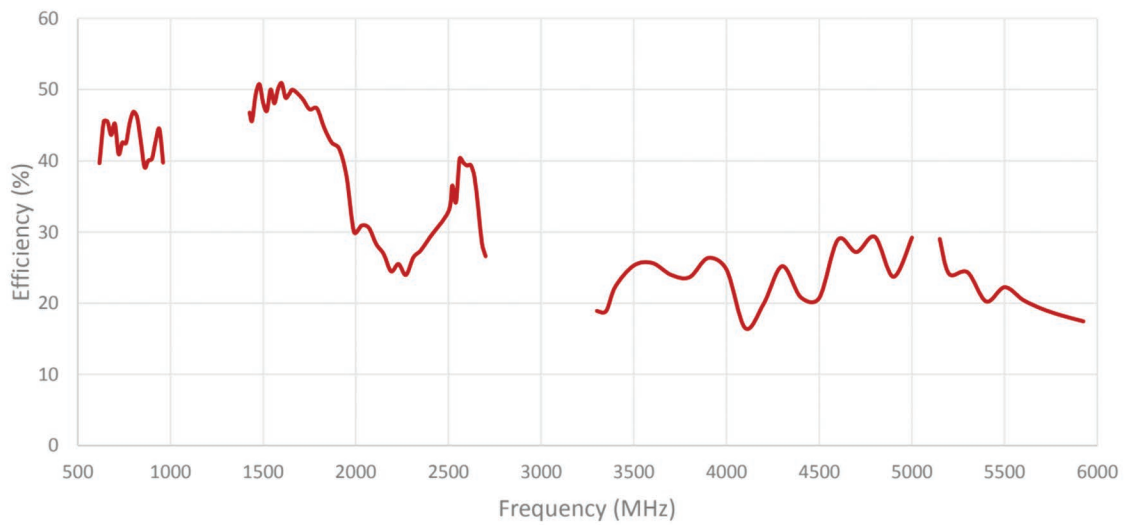




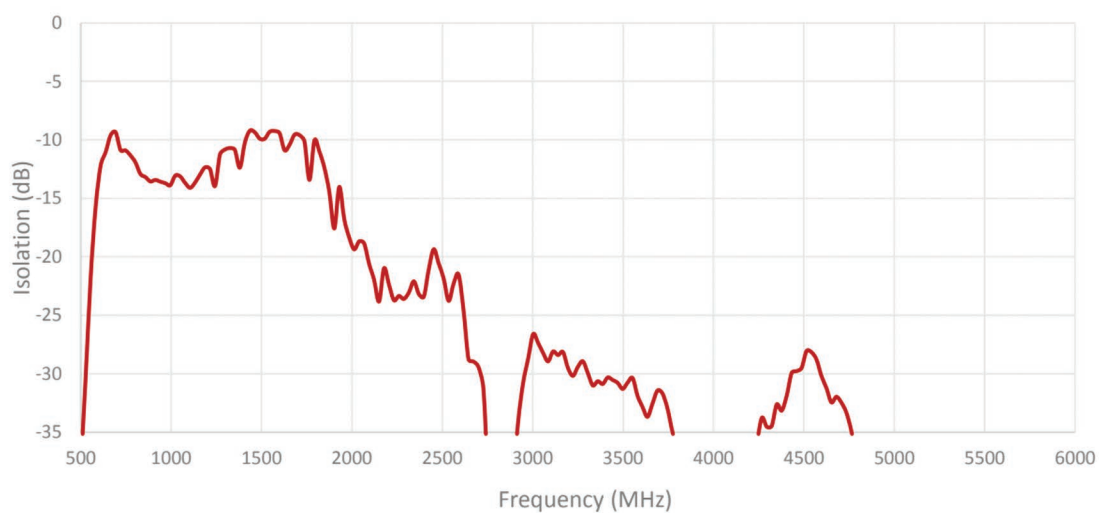
Maxtena Inc.  
 20310 Seneca Meadows Pkwy Suite A  
 Germantown, MD 20876  
 1-877-629-8362  
[info@maxtena.com](mailto:info@maxtena.com)  
[www.maxtena.com](http://www.maxtena.com)

Cable 2: 5GNR

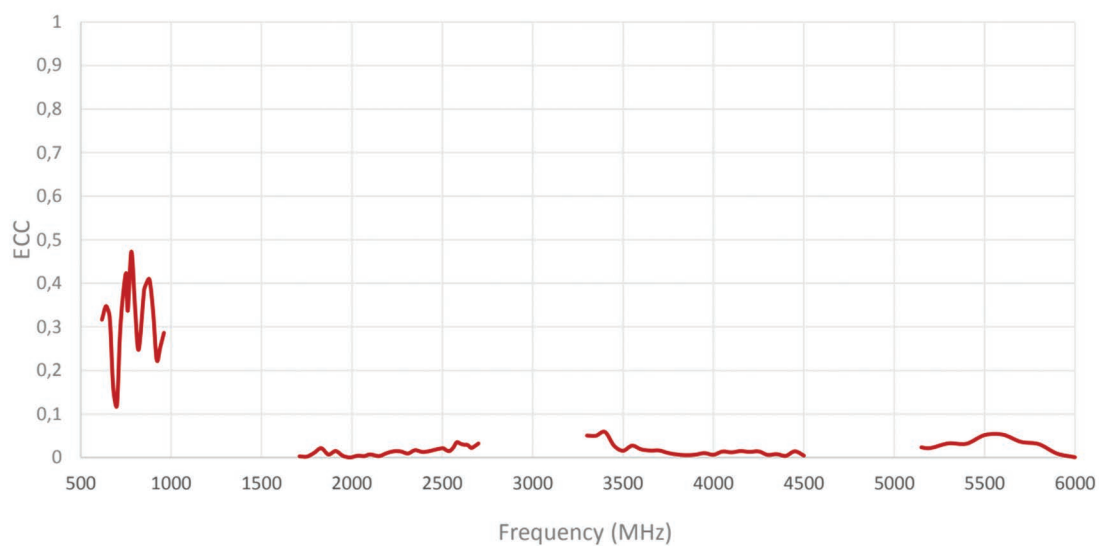




#### ISOLATION FOR CABLES 1 AND 2

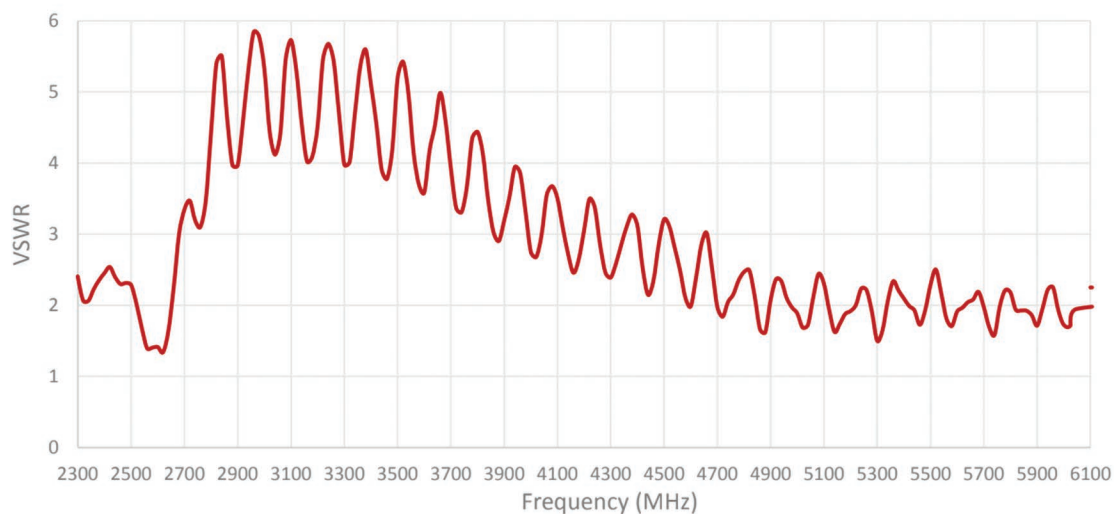
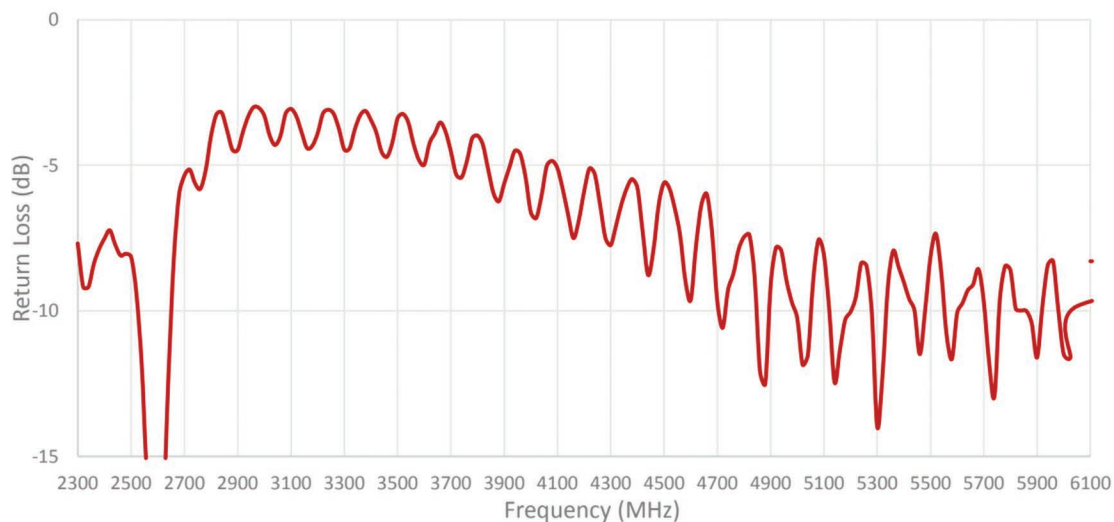


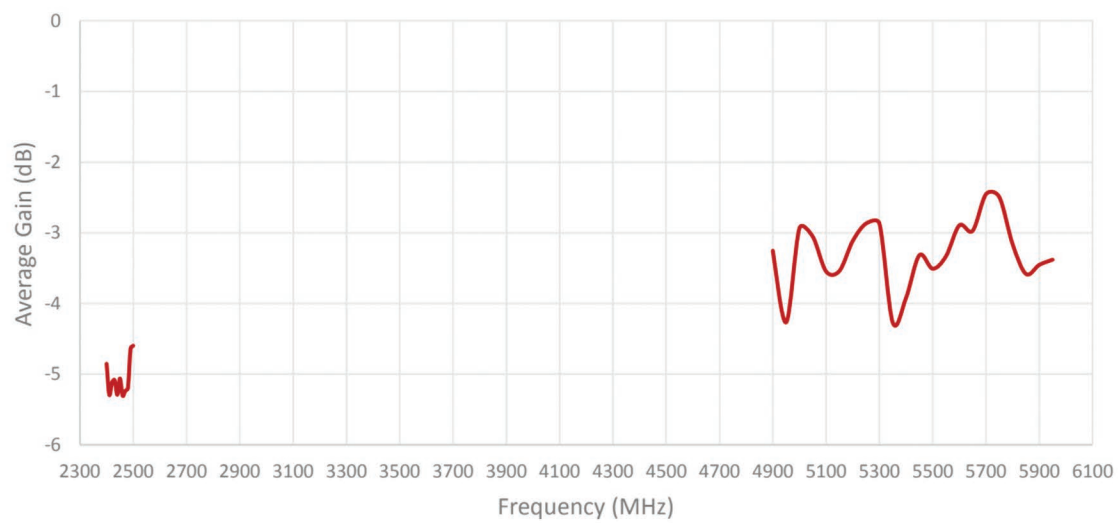
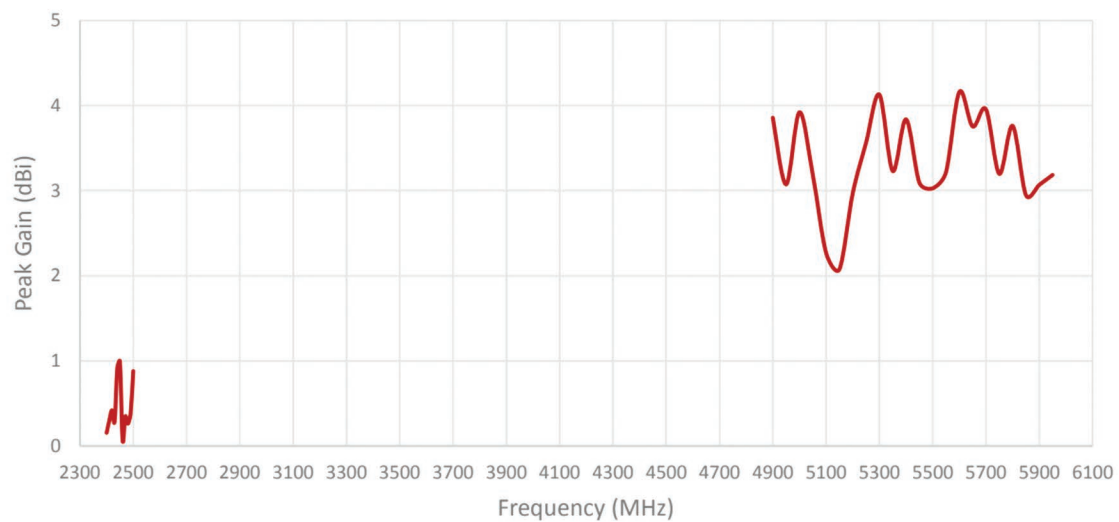
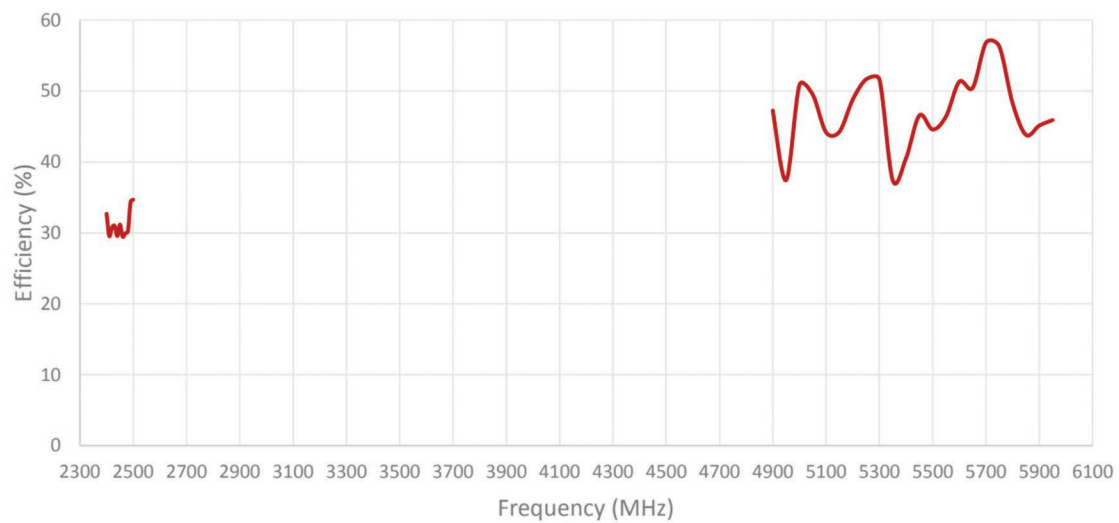
#### ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 2



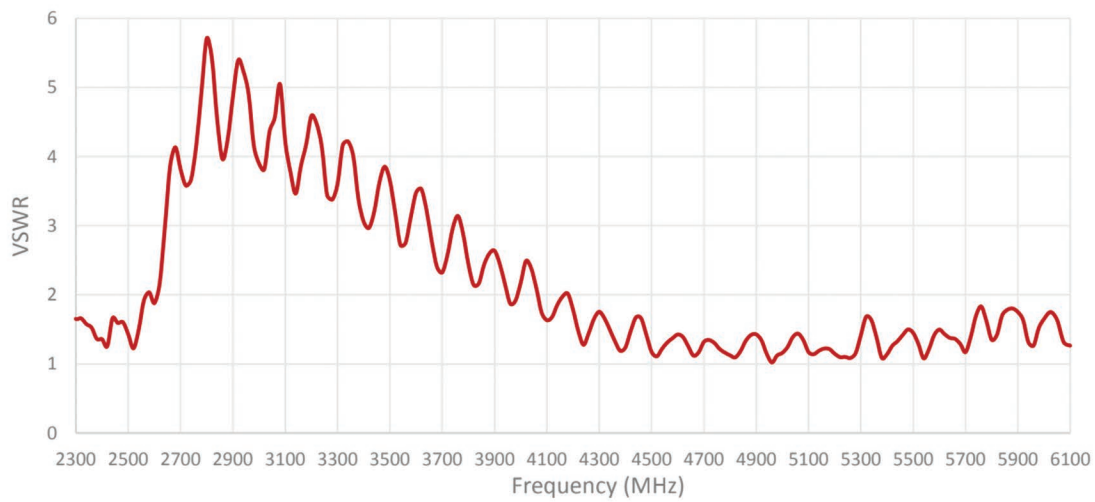
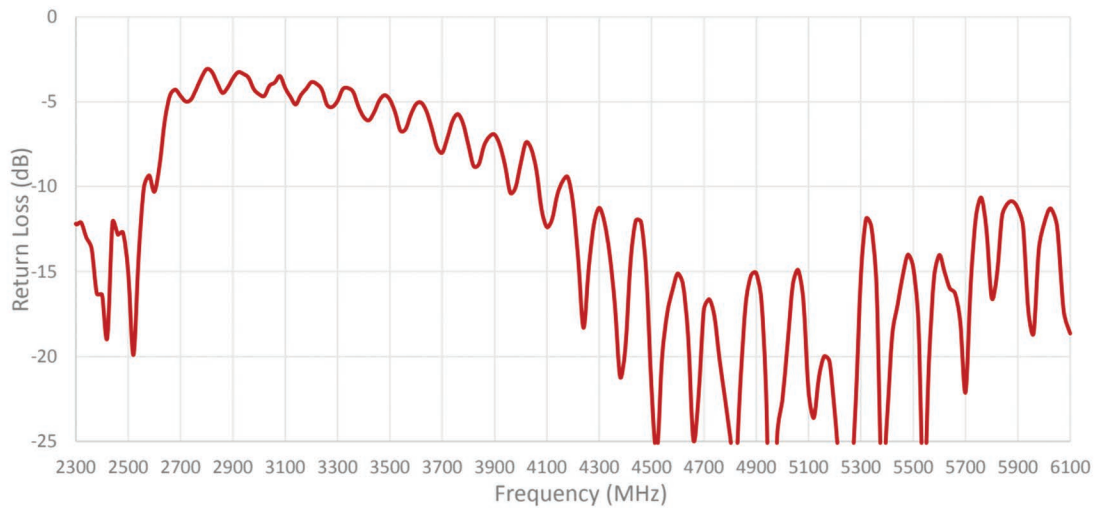


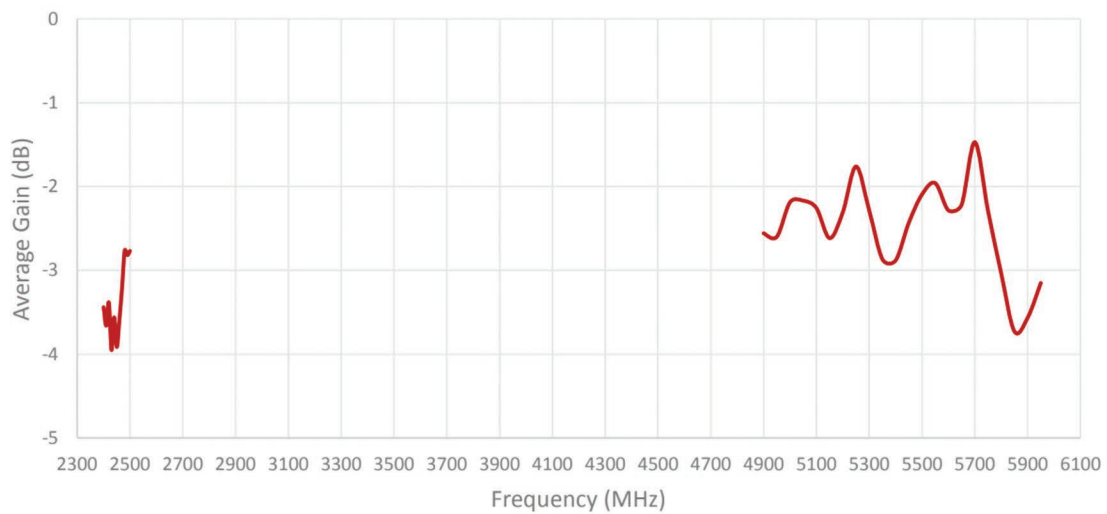
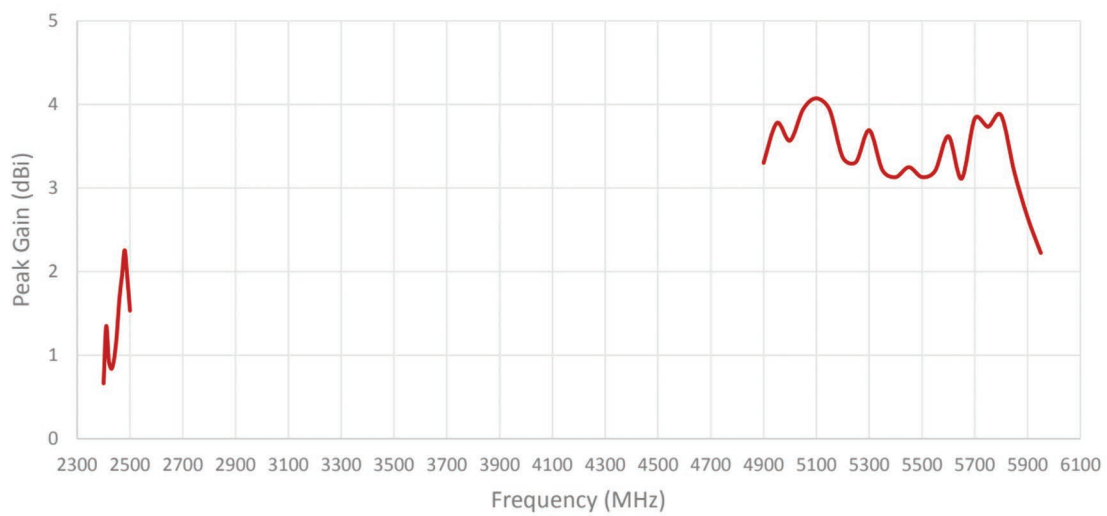
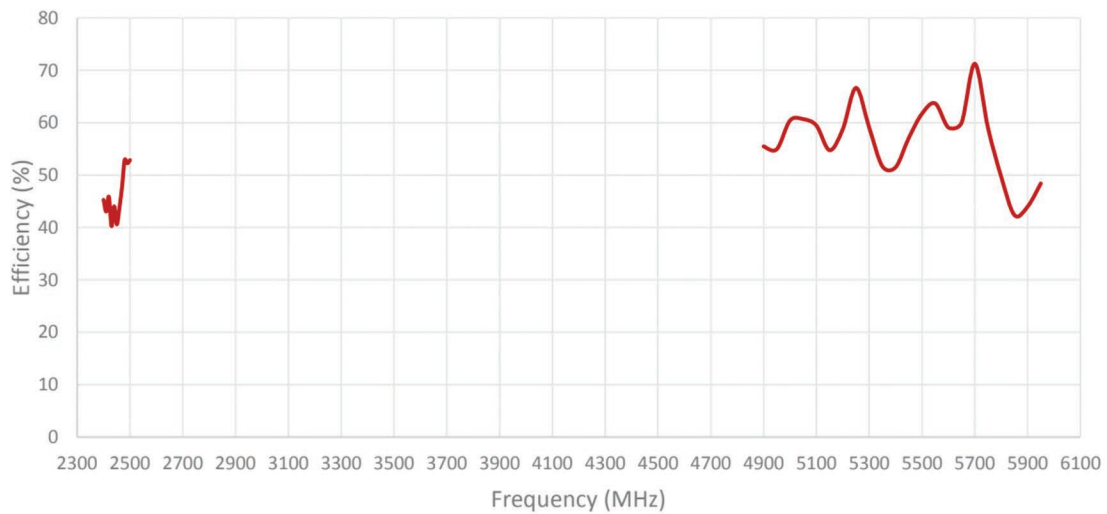
Cable 3: 2.4/5.0 GHz ISM



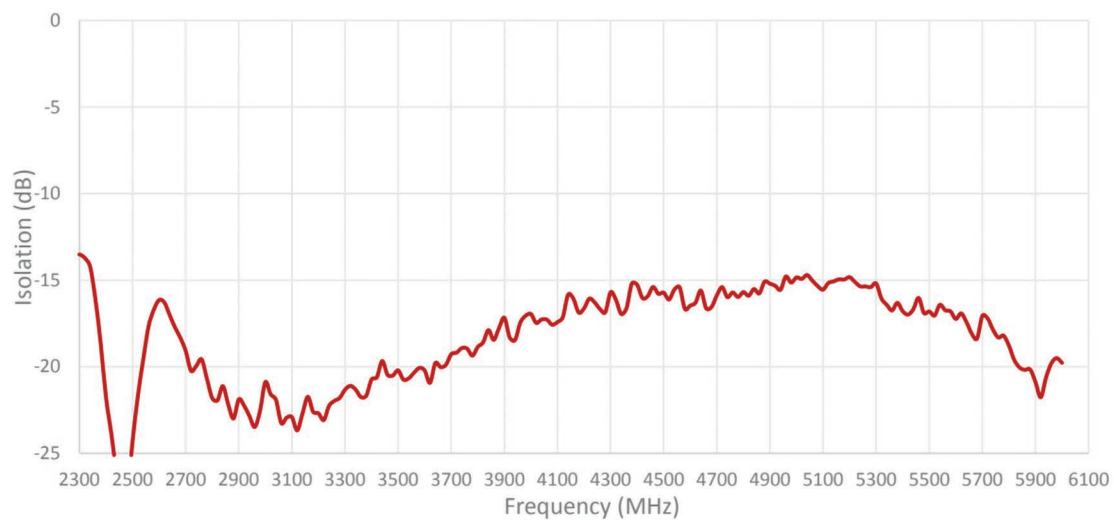


Cable 4: 2.4/5.0 GHz ISM

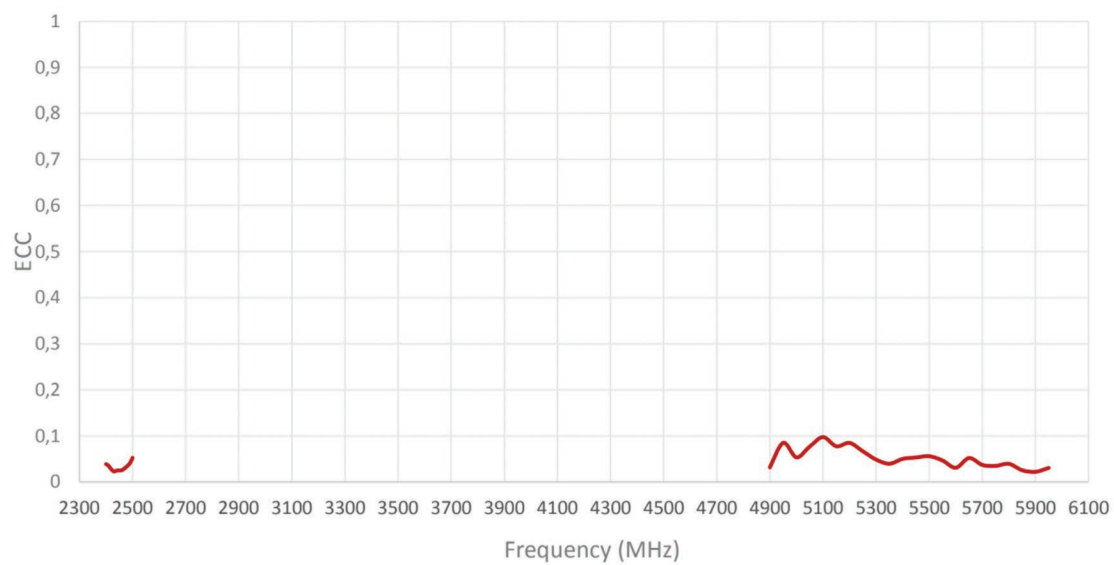




#### ISOLATION FOR CABLES 3 AND 4

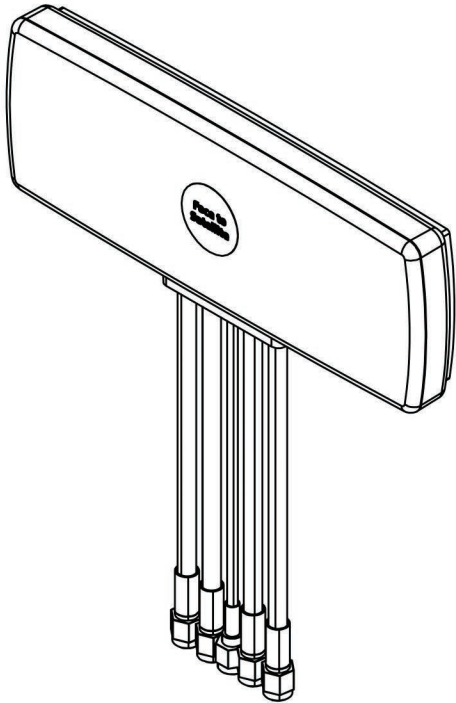
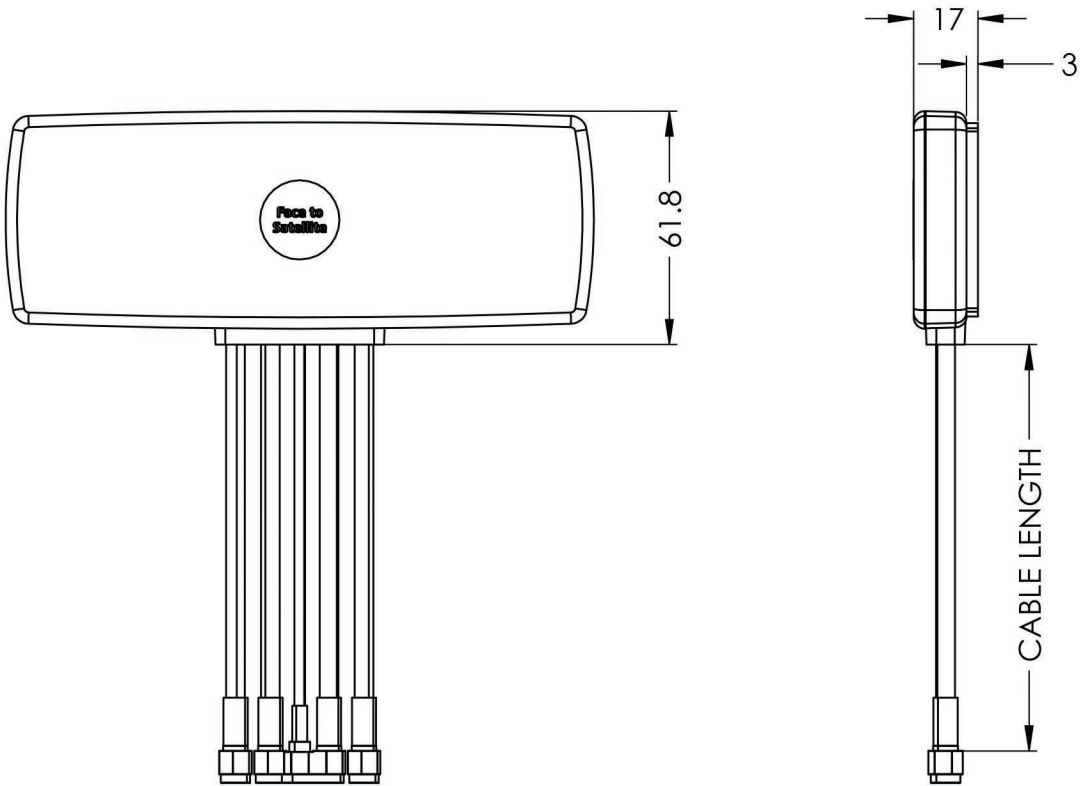


#### ENVELOPE CORRELATION COEFFICIENT FOR CABLES 3 AND 4





DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2024-01-15	MP




NOTES:

- FREQUENCY:
  - CABLE 1-2: 5GNR (617-960, 1427-2690, 3300-5000 AND 5150-5925 MHz)
  - CABLE 3-4: 2.4/5.0 GHz ISM (2410-2490 AND 4920-5925 MHz)
  - CABLE 5: GPS/GLONASS/Galileo/QZSS (1575-1606 MHz)
- CUSTOMIZABLE CABLE AND CONNECTOR OPTIONS
- MOUNTING TYPE: ADHESIVE MOUNT
- DIMENSIONS ARE AFTER MOUNTING
- MATERIALS:
  - RADOME: ASA UV STABLE
  - ANTENNA BASE: ABS
  - RADOME COLOR: BLACK OR WHITE
- OPERATING TEMPERATURE: -40°C ~ +85°C
- STORAGE TEMPERATURE: -40°C ~ +85°C
- CERTIFICATIONS: IP67, IP69, CE, VIBRATON

ITEM 100-00334-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2024-01-15	MP

100-00334-01 CONFIGURATION TABLE				
DASH NO	CABLE TYPE	CABLE LENGTH	CONNECTOR TYPE	RADOME COLOR
-01	CABLE 1-2 : LL195 CABLE 3-4 : LL195 CABLE 5 : LL100	300CM	SMA MALE SMA MALE-RP SMA MALE	BLACK

UNLESS OTHERWISE SPECIFIED:		NAME		DATE		MAXTENA, INC							
DIMENSIONS ARE IN MM TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± .5° BEND ± ONE PLACE DECIMAL ± 1.0 TWO PLACE DECIMAL ± .50		DRAWN	MP	2024-01-15						TITLE:  100-00334-01 MEA-5G-IMG-AM			
		CHECKED	AV	2024-01-15									
		ENG APPR.	AV	2024-01-15									
		MFG APPR.											
INTERPRET GEOMETRIC TOLERANCING PER:		Q.A.											
 THIRD ANGLE PROJECTION		CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.				SIZE		DWG. NO.		REV			
						B		117-00760-01		A			
DO NOT SCALE DRAWING						CAGE CODE: 5KQH7		SCALE: NONE		SHEET 1 OF 1			

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MAXTENA, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF MAXTENA, INC IS PROHIBITED.