



# 5G FR1, LTE GLOBAL WORLD BAND COMBINATION ANTENNA

Part Numbers:

L000810-01

L000810-80

## FEATURES & BENEFITS

- Omnidirectional coverage
- High efficiency, low profile, on board SMD PCB antenna
- Wideband coverage for CBRS and 5G Midband without matching circuit
- Evaluation board available for testing (L000810-80)
- Bandwidth and performance dependent on ground plane size/ design
- Suggested minimum ground plane length from antenna feed is 150mm
- Available in tape & reel packaging for automatic mounting
- RoHS 2.0 compliant, Road vehicle compliant, REACH compliant

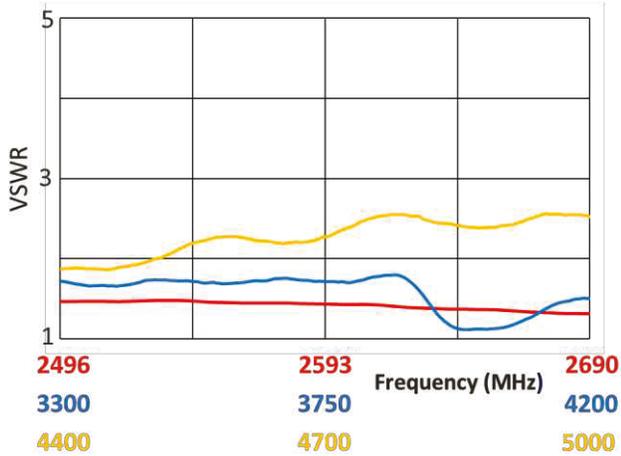
## SPECIFICATIONS

<b>Frequency Range (MHz)</b>	2484-2690	3300-4200	4400-5000
<b>VSWR</b>	< 1.5:1	< 1.8:1	< 2.6:1
<b>Average Efficiency</b>	76.05%	69.36%	59.43%
<b>Peak Gain</b>	4.2dBi	3.3dBi	2.2dBi
<b>Average Gain</b>	-1.21dBi	-1.62dBi	-2.29dBi
<b>Power Handling</b>	5 Watt cw		
<b>Feed Point Impedance</b>	50 ohms unbalanced		
<b>Polarization</b>	Linear		
<b>Size</b>	20.0 mm x 10.0 mm x 1.61 mm (± 0.13mm)		
<b>Weight</b>	< 1.5 g		
<b>Mounting</b>	Surface mount		
<b>Operating Temperature</b>	-40 to +85°C		
<b>Storage Temperature</b>	-40 to +85°C		
<b>Packaging Specification</b>	Bag & Box / Tape & Reel		
<b>Hazardous Materials</b>	A certificate of conformance is available from the product page on TE website.		

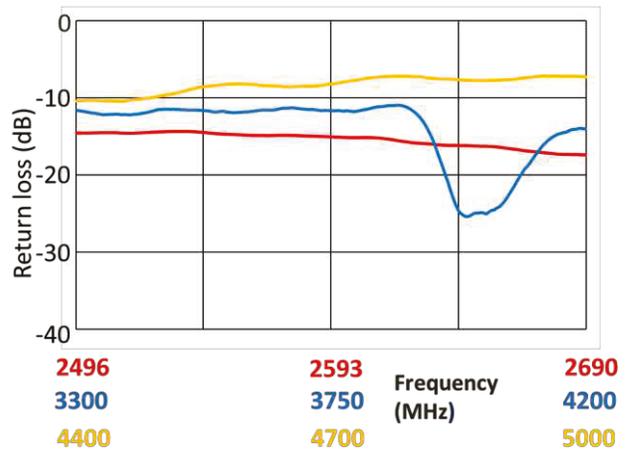
Data measured in free space and on reference ground plane of 150mm ground length and 55mm width, application data might vary.

**RF DATA (SHOWN AS L000810: OTHERS CAN VARY WITH DIFFERENT GROUND LENGTHS.)**

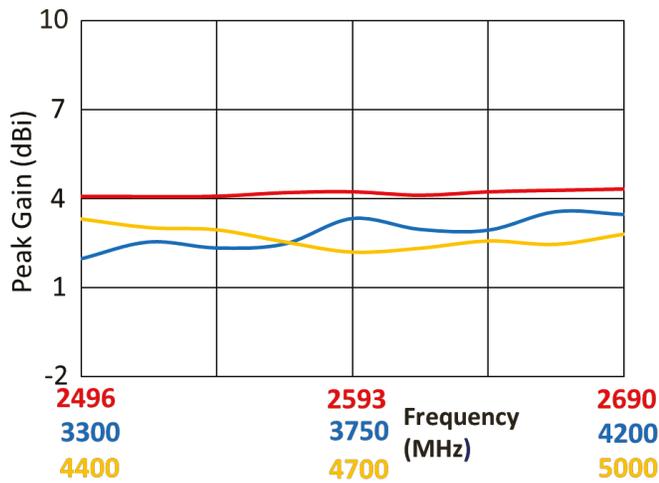
**VSWR**



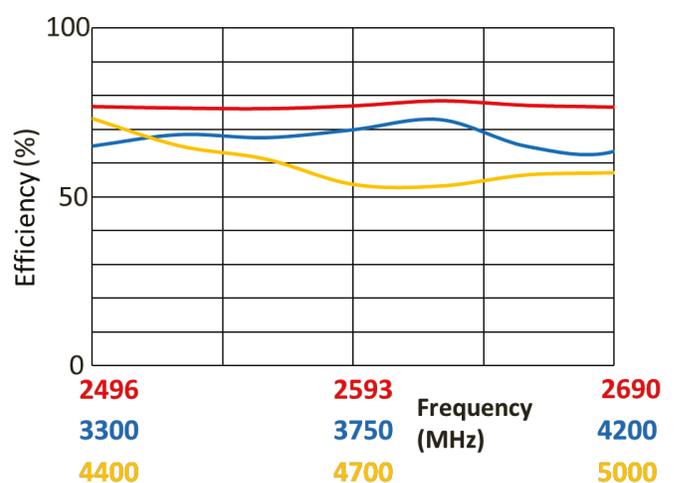
**Return Loss**



**Peak Gain**



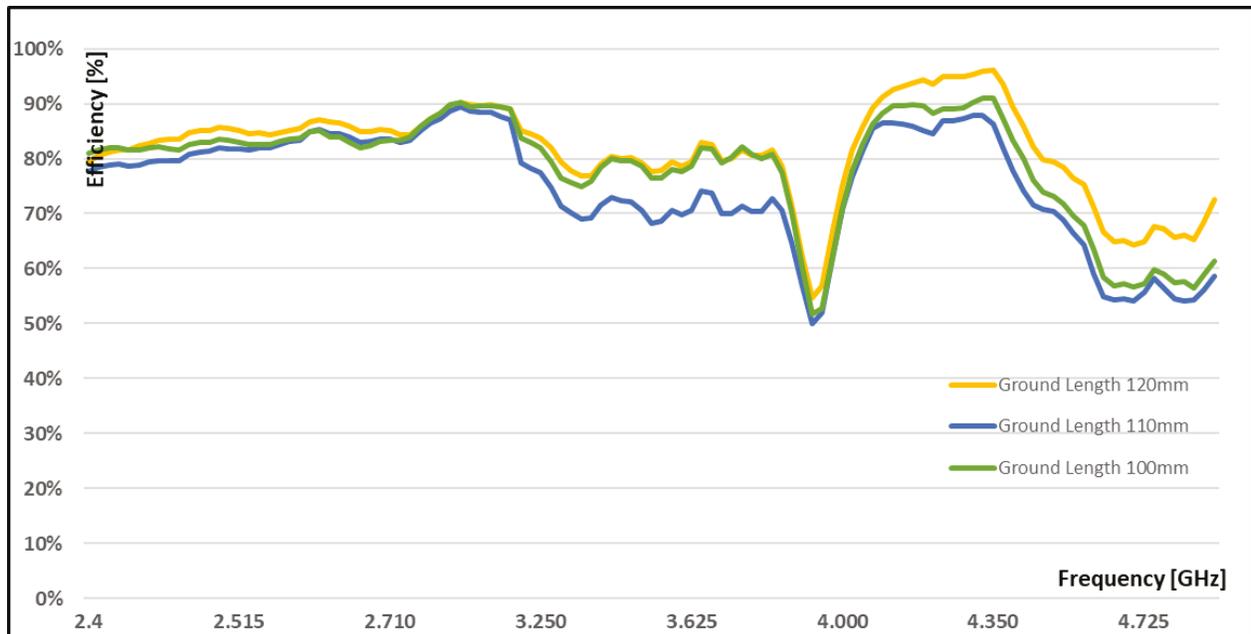
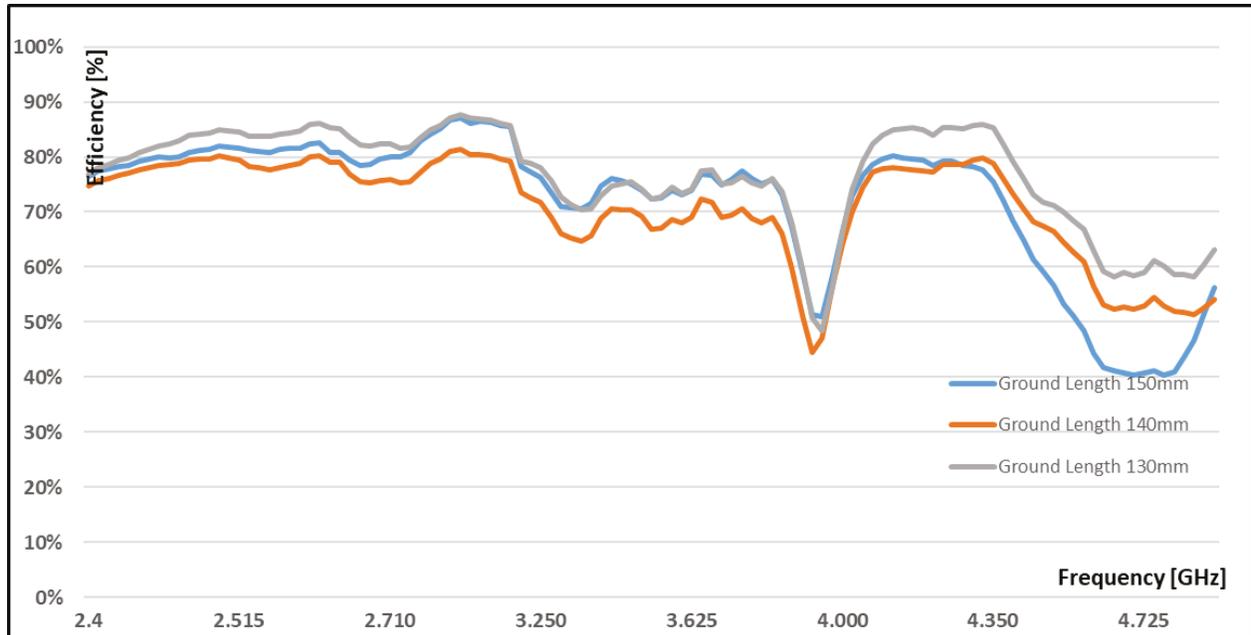
**Efficiency**



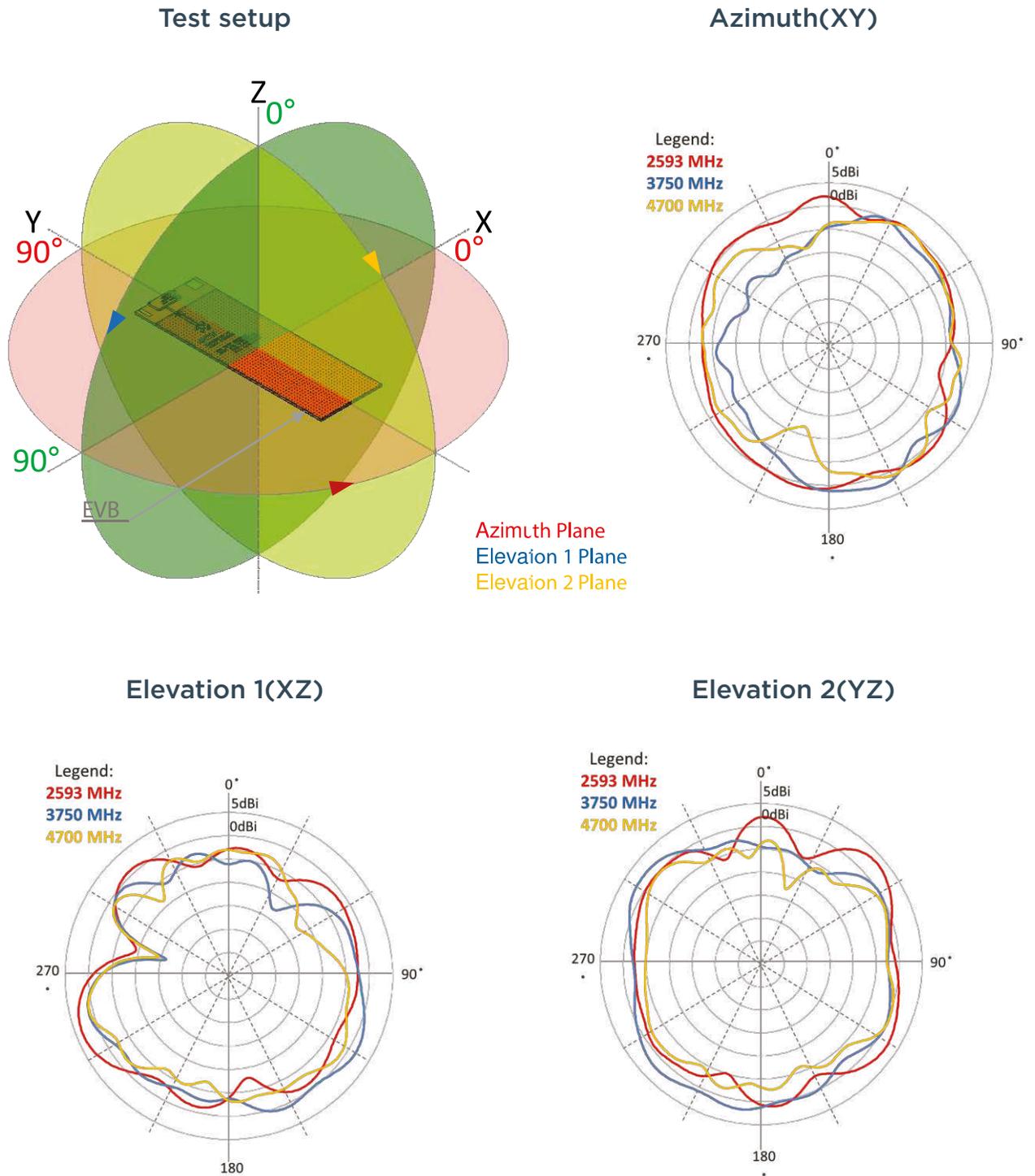
Data measured in free space and on reference ground plane of 150mm ground length and 55mm width, application data might vary.

**RF DATA (SHOWN AS L000810: OTHERS CAN VARY WITH DIFFERENT GROUND LENGTHS.)**

Efficiency vs. Ground Length size



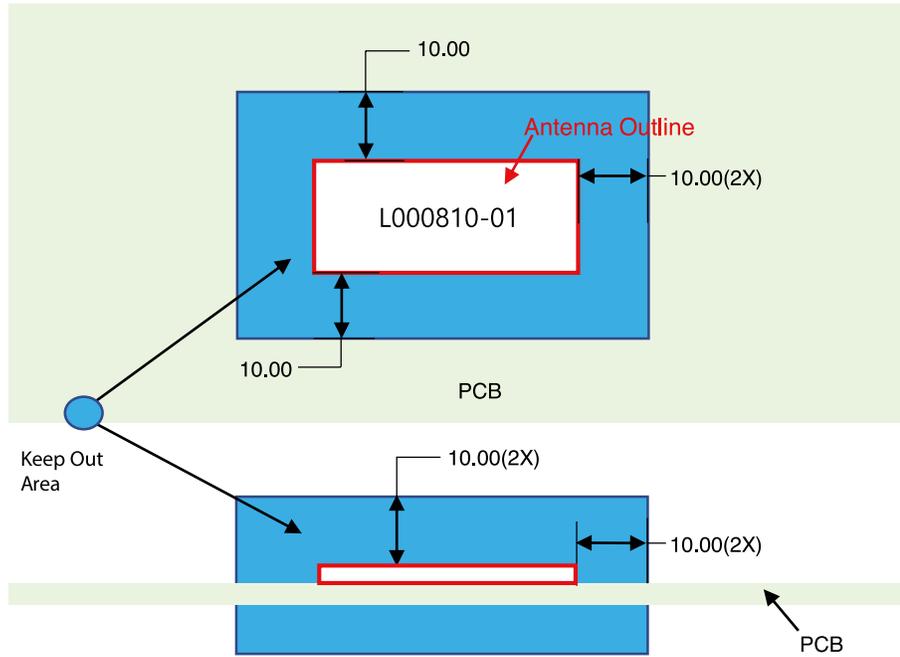
## RADIATION PATTERN



Data measured in free space and on reference ground plane of 150mm ground length and 55mm width, application data might vary.



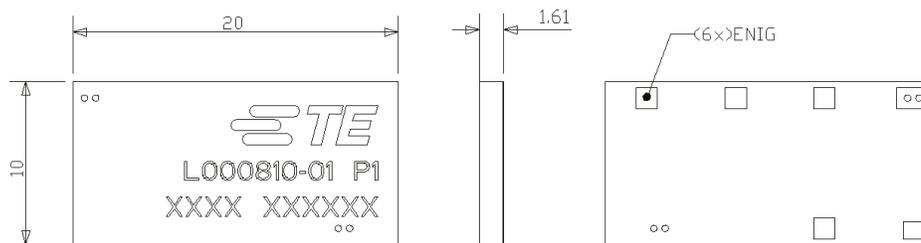
**KEEP OUT AREA**



- NOTES:**
1. Antenna designed to be mounted on PCB.
  2. Area in blue above indicates Keep Out Area.
  3. For more information please call TE.

Dimensions: mm  
 Diagram is not to scale

**DIMENSIONS**



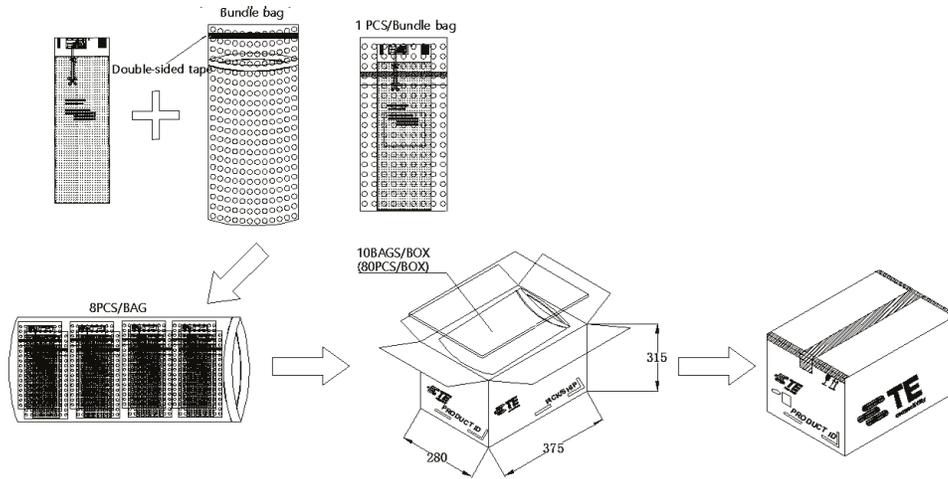
Dimensions: mm  
 Diagram is not to scale

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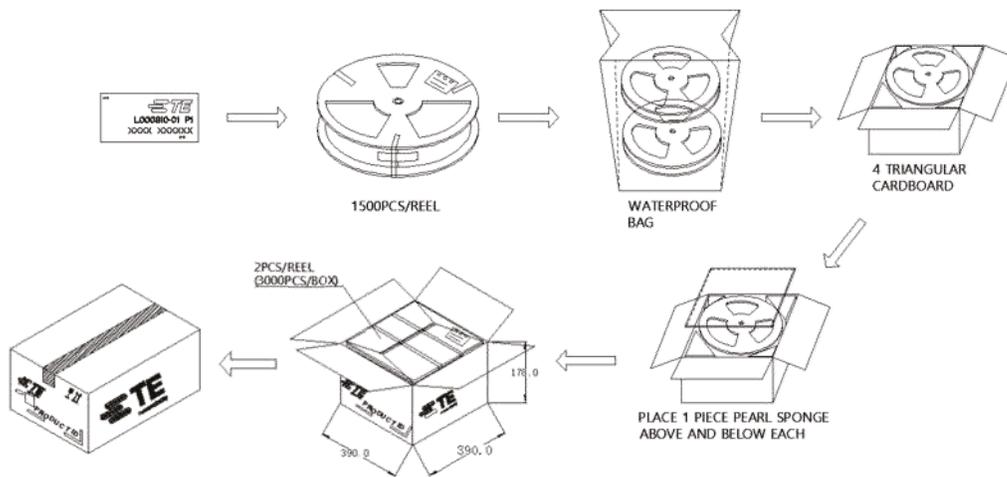
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## PACKAGING

### L000810-80 (BULK)



### L000810-01 (TAPE & REEL)



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Standard Antenna Solutions

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