

# Wi-Fi 3X3 MIMO DUAL BAND ANTENNA ASSEMBLY

**Part Numbers: 2108802-1  
2108802-2  
2108802-3**

## FEATURES & BENEFITS

- Wi-Fi 6 3x3 MIMO Dual band antenna assembly
- Screw mount chassis assembly
- Cable length x1, x2, x3, Connector: MHF or compatible
- Spherical omnidirectional radiation pattern
- Minimal peak gain, reduced SINR

## SPECIFICATIONS (Shown as 2108802-1 : Others can vary with different cable lengths.)

P/N	PUCK-Left		PUCK-Center		PUCK-Right	
Frequency Range (MHz)	2400-2500	5150-5875	2400-2500	5150-5875	2400-2500	5150-5875
VSWR	< 3.1:1	< 2.3:1	< 2.4:1	< 2.3:1	< 2.5:1	< 2.1:1
Average Efficiency(%)	34	35	36	35	36	34
Peak Gain(dBi)	0.2	1.5	0.2	1.1	0.9	1.1
Average Gain(dBi)	-4.8	-4.7	-4.6	-4.8	-4.5	-4.8
Isolation(dB)	< -20 in 2400-2500MHz; <-22 in 5150-5875MHz					
Power Handling	10 Watt cw					
Feed Point Impedance	50 ohms unbalanced					
Polarization	Linear					
Size	150.0 mm x 34.0 mm x 7.02 mm					
Weight	< 25 g					
Mounting	Screw Mount					
Mating Connector	MHF-type receptacle (TE PN 2337019-1)					
Cable	Coaxial Cable : 1.37mm Dia.					
Operating Temperature	-40 to +85°C					
Storage Temperature	-40 to +85°C					
Hazardous Materials	A certificate of conformance is available from the product page on TE website.					

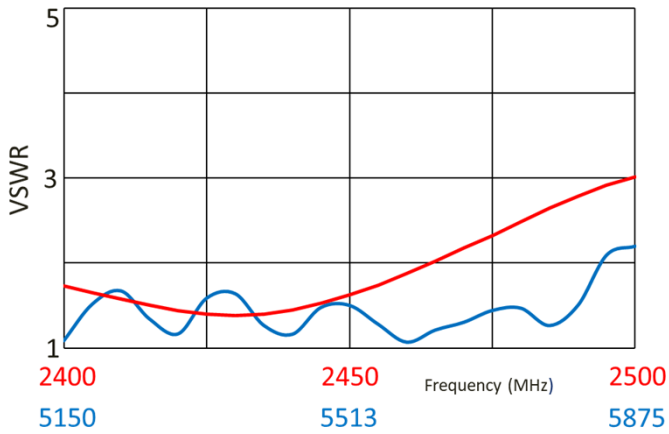
# Wi-Fi 3X3 MIMO DUAL BAND ANTENNA ASSEMBLY

Standard Antenna Solutions

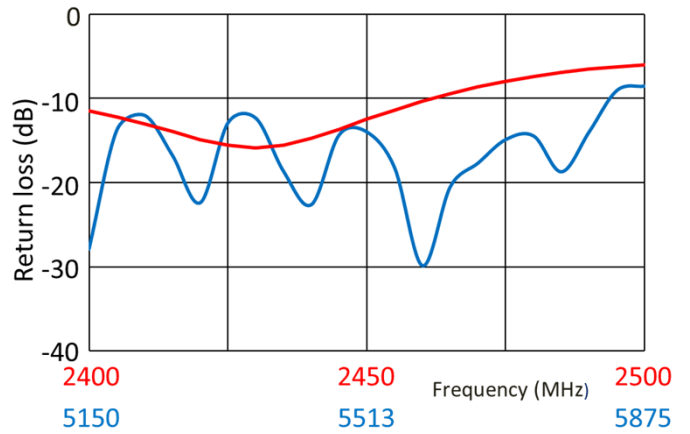
## RF DATA (PUCK-Left)

(Shown as 2108802-1 : Others can vary with different cable lengths.)

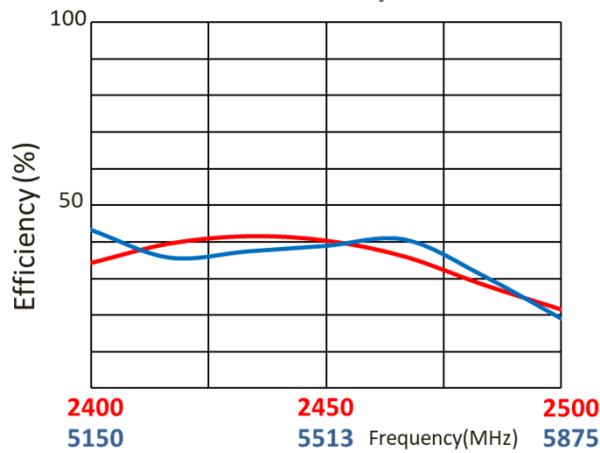
### VSWR



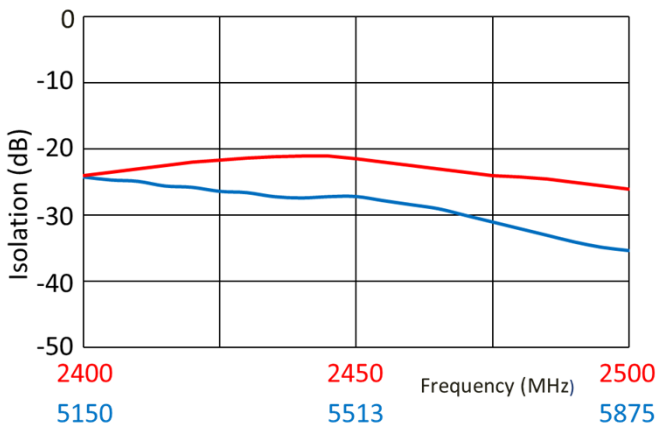
### Return Loss



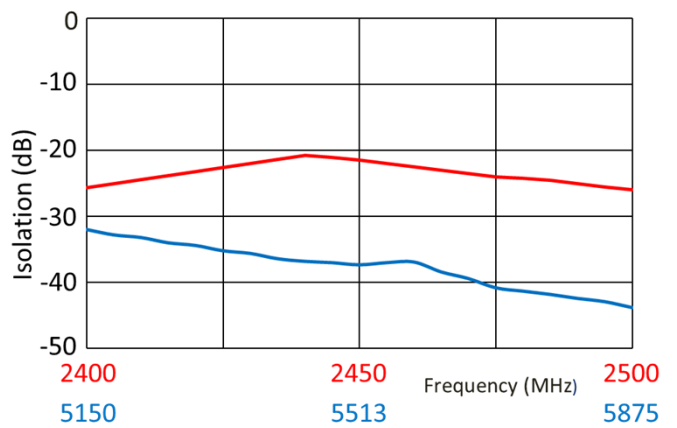
### Efficiency



### Isolation S<sub>CL</sub>



### Isolation S<sub>RL</sub>



Data measured in free space and on plastic device enclosure

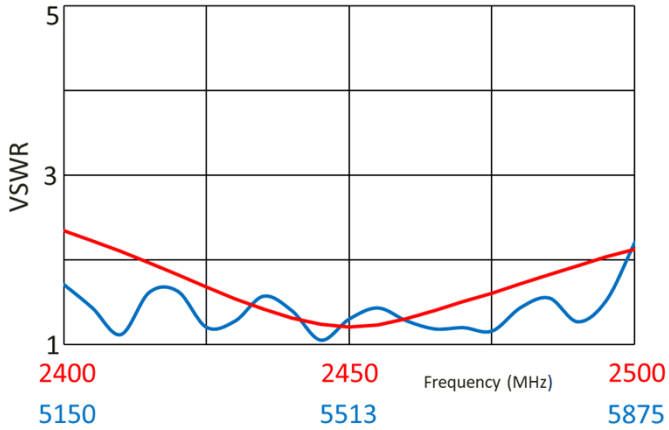
# Wi-Fi 3X3 MIMO DUAL BAND ANTENNA ASSEMBLY

Standard Antenna Solutions

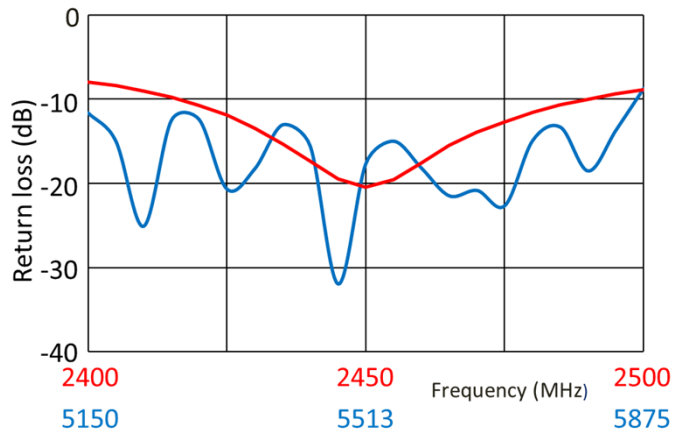
## RF DATA (PUCK-Center)

(Shown as 2108802-1 : Others can vary with different cable lengths.)

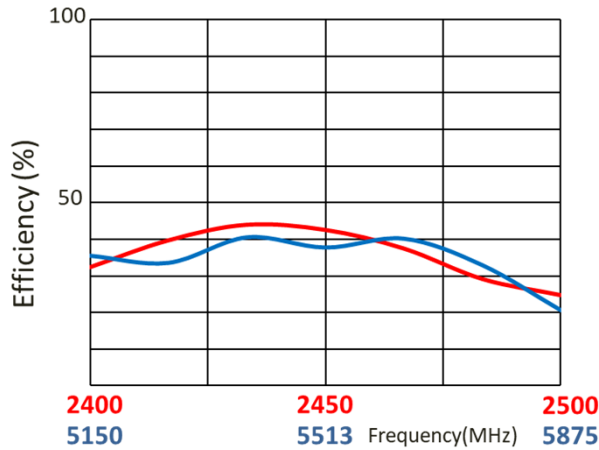
### VSWR



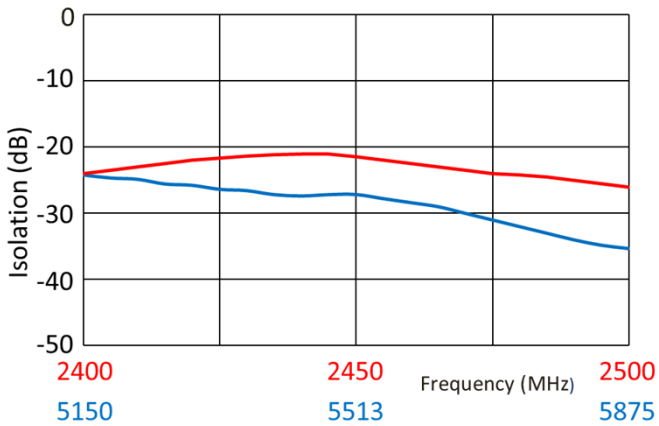
### Return Loss



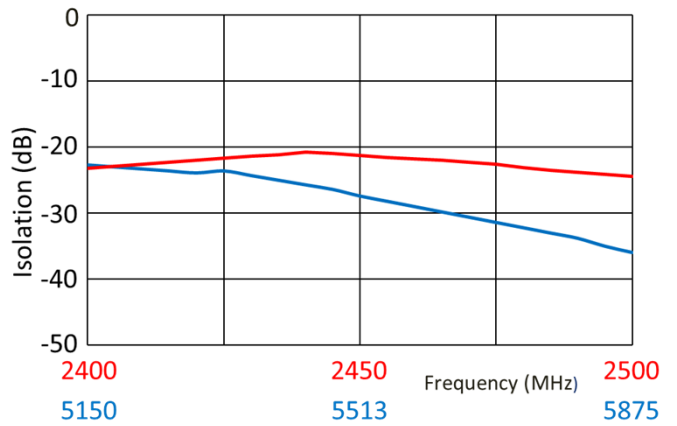
### Efficiency



### Isolation S<sub>LC</sub>



### Isolation S<sub>RC</sub>



Data measured in free space and on plastic device enclosure

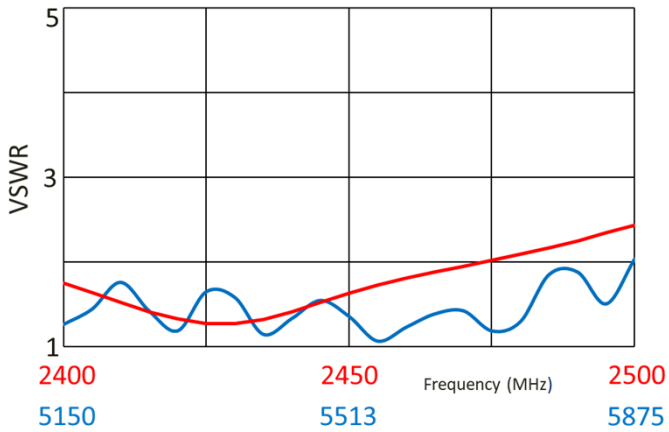
# Wi-Fi 3X3 MIMO DUAL BAND ANTENNA ASSEMBLY

Standard Antenna Solutions

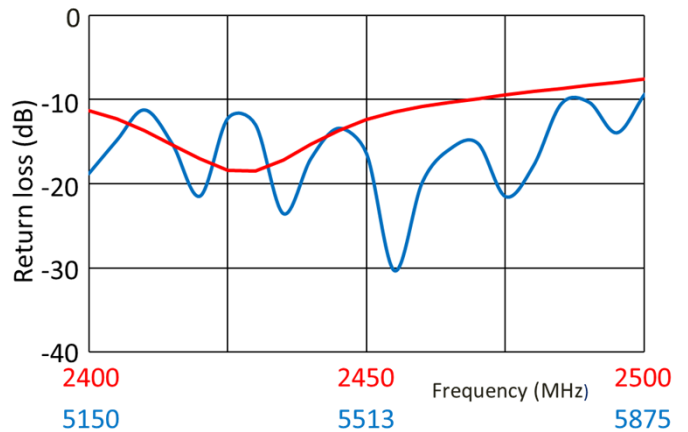
## RF DATA (PUCK-Right)

(Shown as 2108802-1 : Others can vary with different cable lengths.)

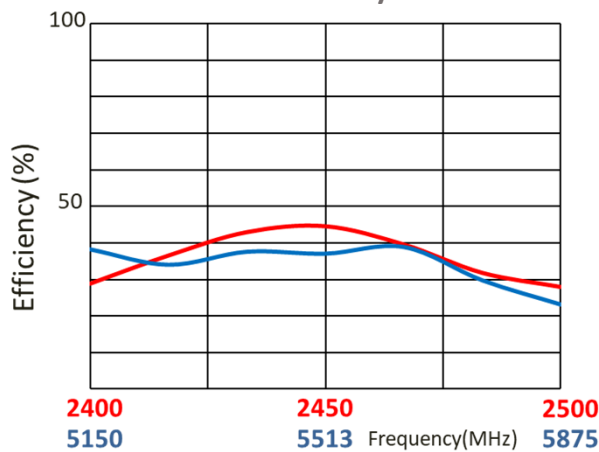
### VSWR



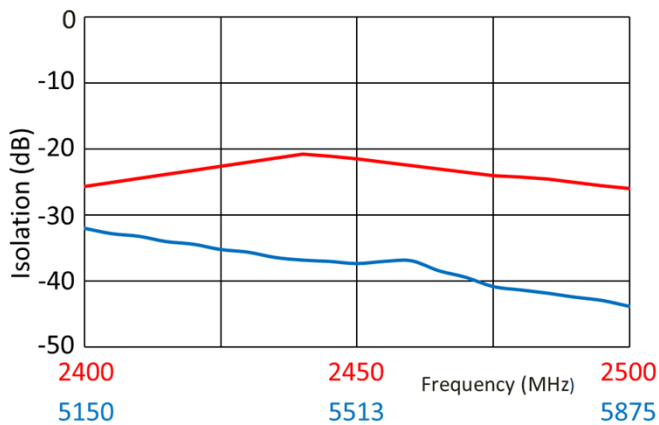
### Return Loss



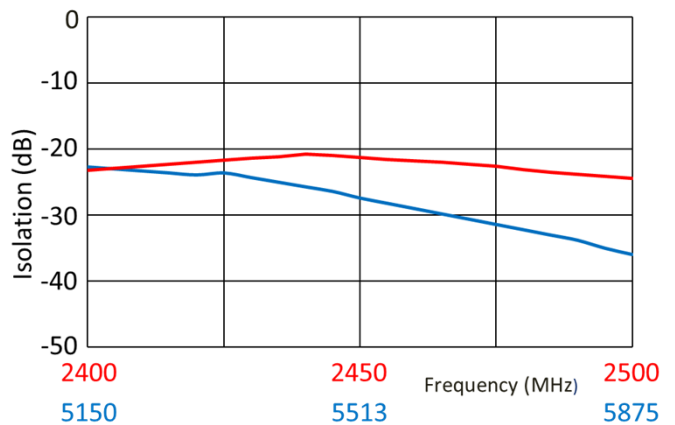
### Efficiency



### Isolation S<sub>LR</sub>



### Isolation S<sub>CR</sub>



Data measured in free space and on plastic device enclosure

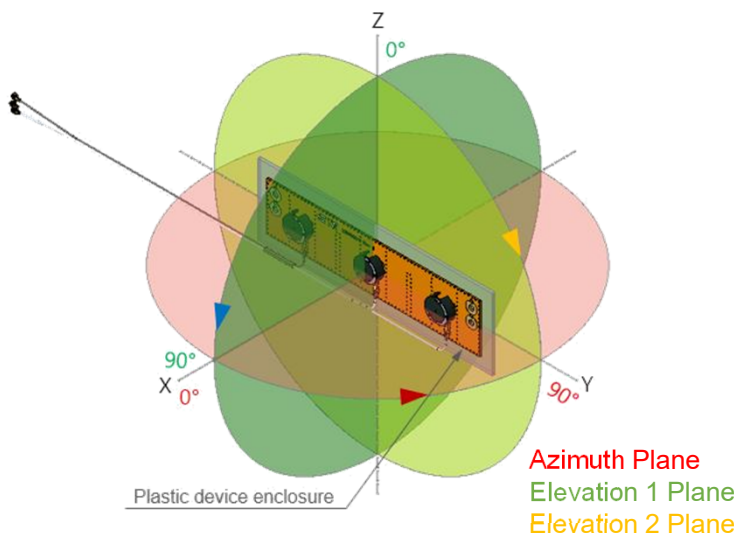
# Wi-Fi 3X3 MIMO DUAL BAND ANTENNA ASSEMBLY

Standard Antenna Solutions

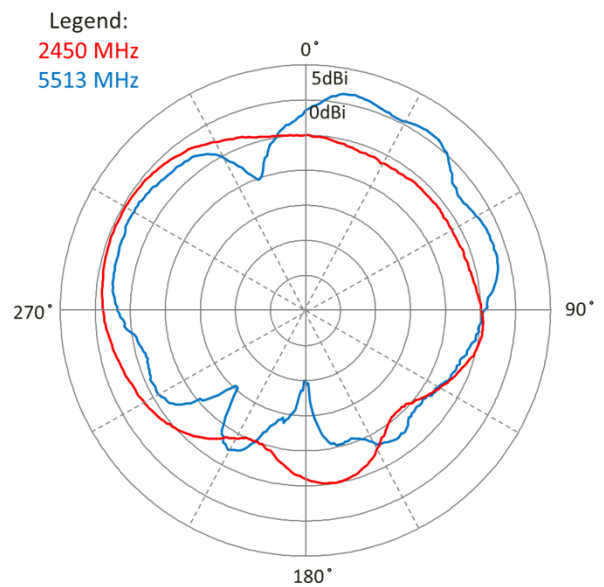
## RADIATION PATTERN (PUCK-Left)

(Shown as 2108802-1 : Others can vary with different cable lengths.)

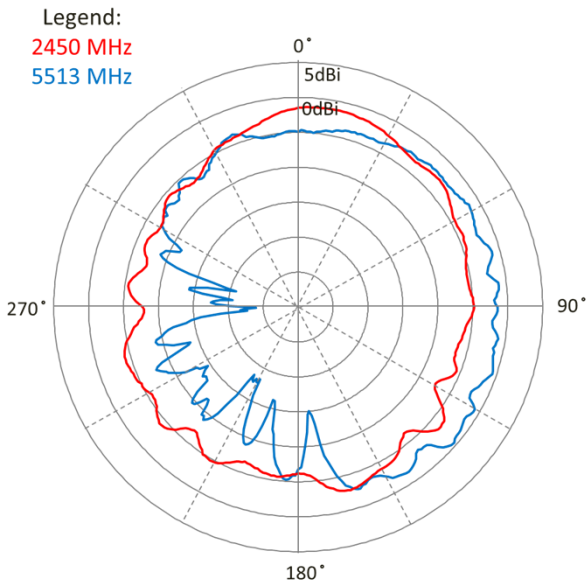
### Test setup



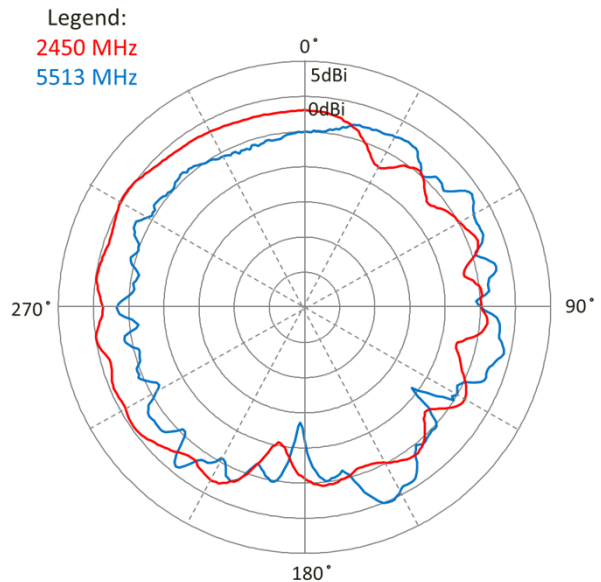
### Azimuth



### Elevation 1



### Elevation 2



Data measured in free space and on plastic device enclosure

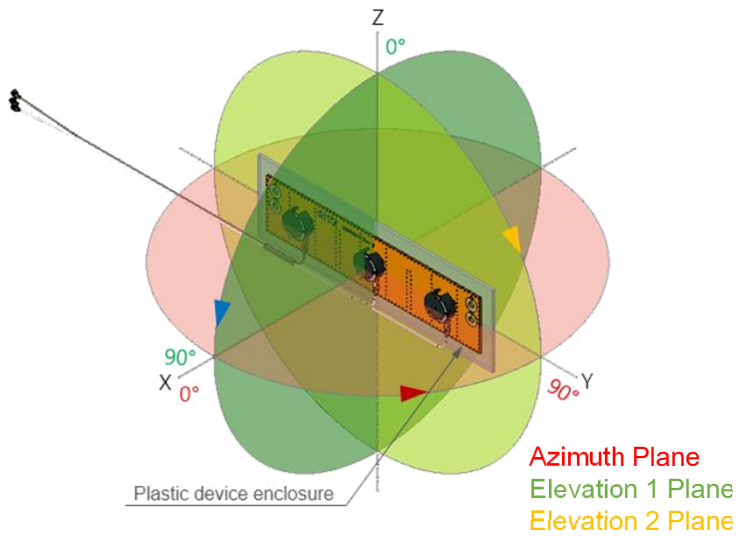
# Wi-Fi 3X3 MIMO DUAL BAND ANTENNA ASSEMBLY

Standard Antenna Solutions

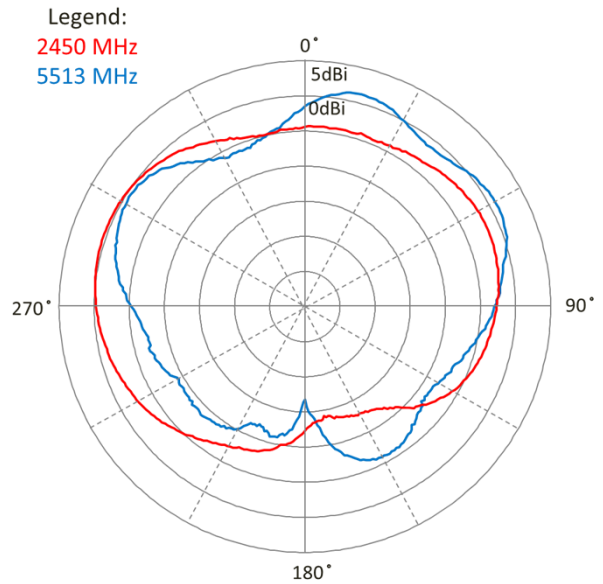
## RADIATION PATTERN (PUCK-Center)

(Shown as 2108802-1 : Others can vary with different cable lengths.)

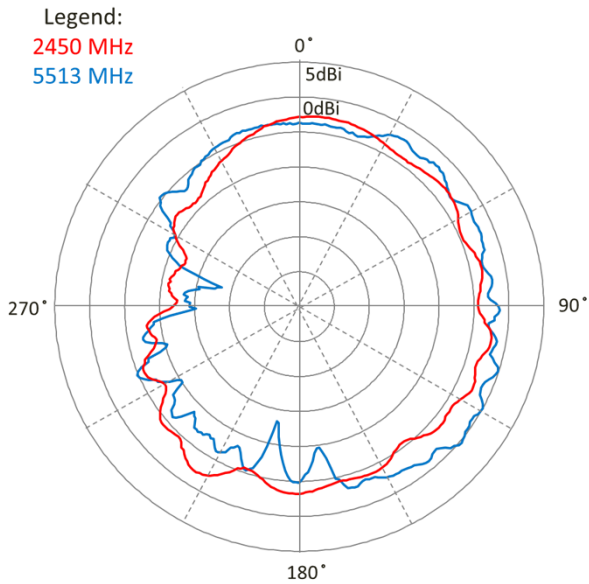
### Test setup



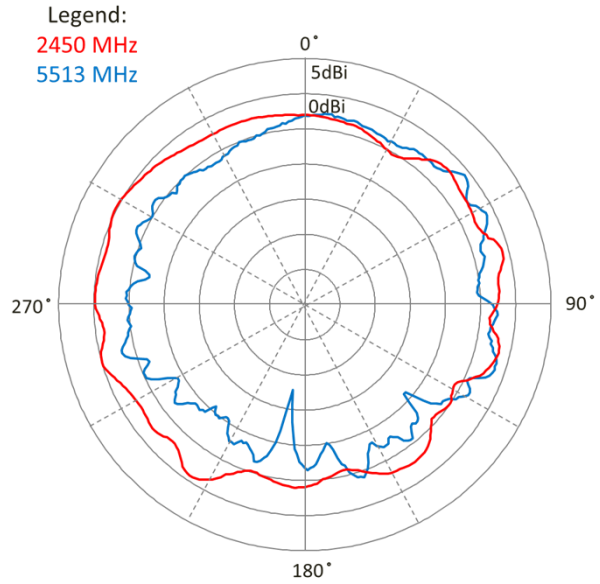
### Azimuth



### Elevation 1



### Elevation 2



Data measured in free space and on plastic device enclosure

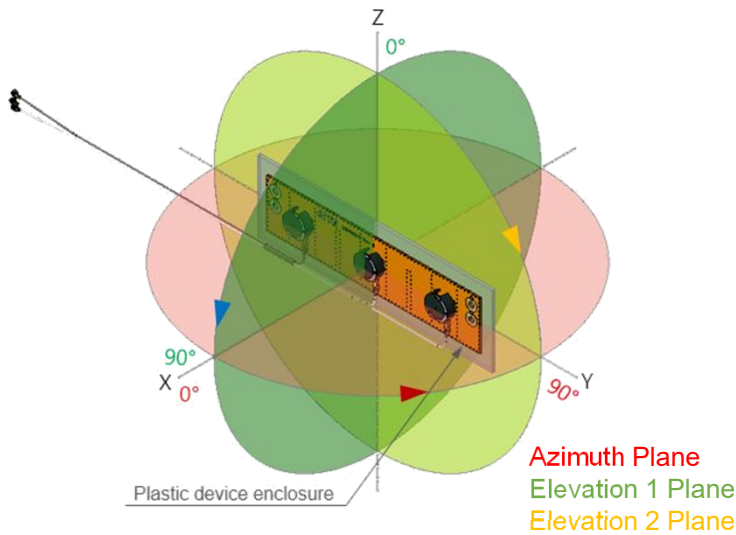
# Wi-Fi 3X3 MIMO DUAL BAND ANTENNA ASSEMBLY

Standard Antenna Solutions

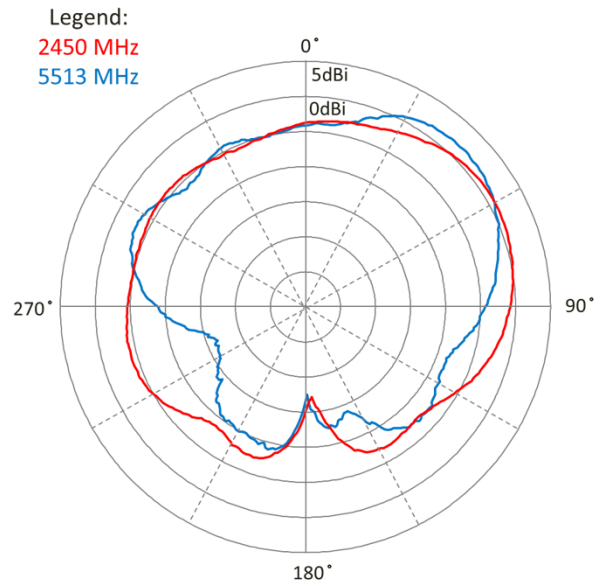
## RADIATION PATTERN (PUCK-Right)

(Shown as 2108802-1 : Others can vary with different cable lengths.)

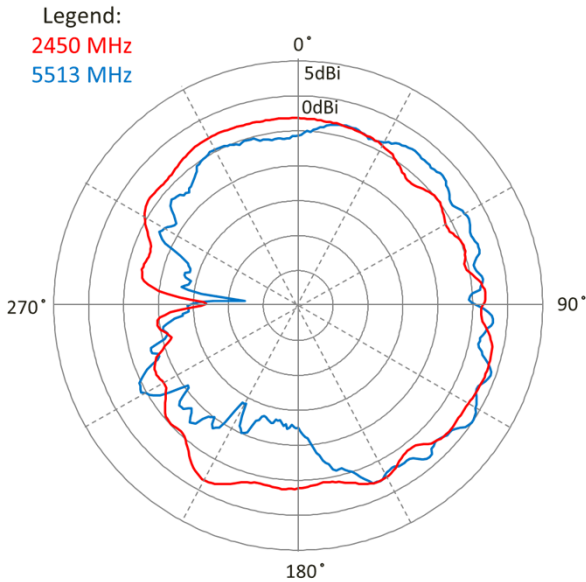
### Test setup



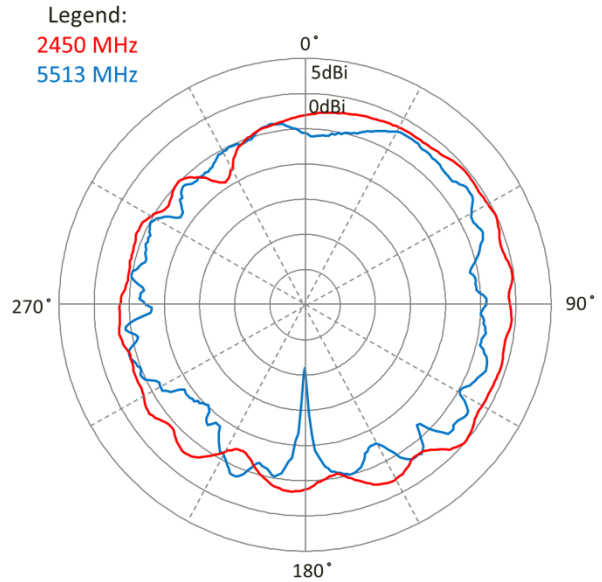
### Azimuth



### Elevation 1



### Elevation 2

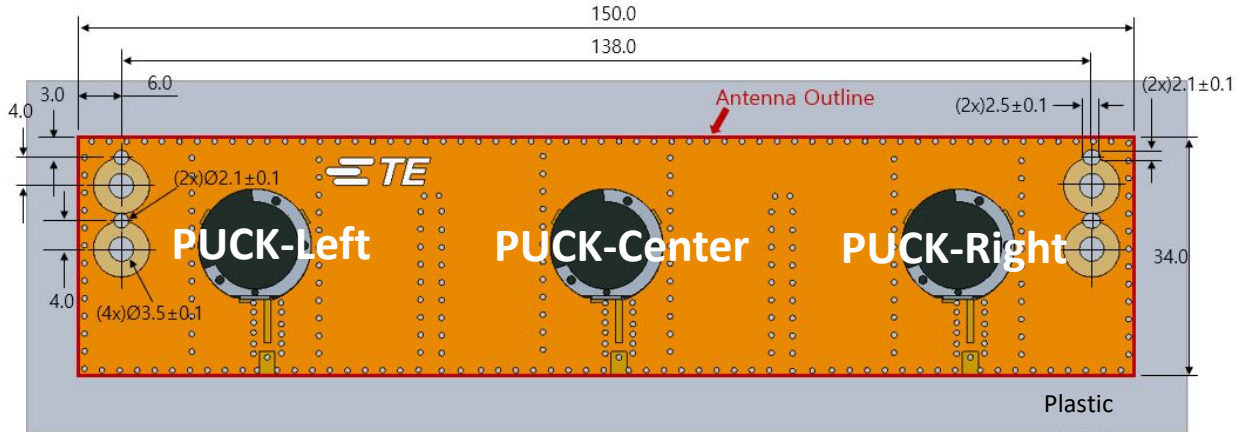


Data measured in free space and on plastic device enclosure

# Wi-Fi 3X3 MIMO DUAL BAND ANTENNA ASSEMBLY

Standard Antenna Solutions

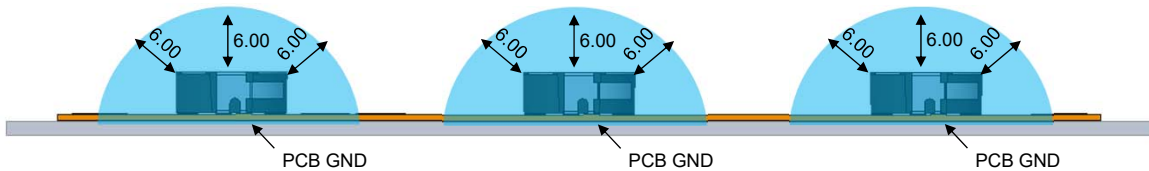
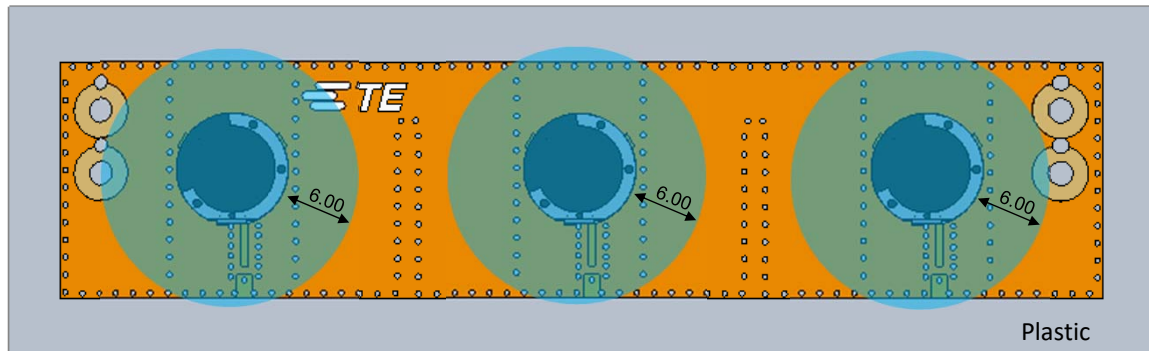
## MOUNTING GUIDE



- NOTES: 1. No copper allowed in designated area on all PCB layers –   
 2. For more information please call TE.

Dimensions: mm  
 Diagram is not to scale

## KEEP OUT AREA



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

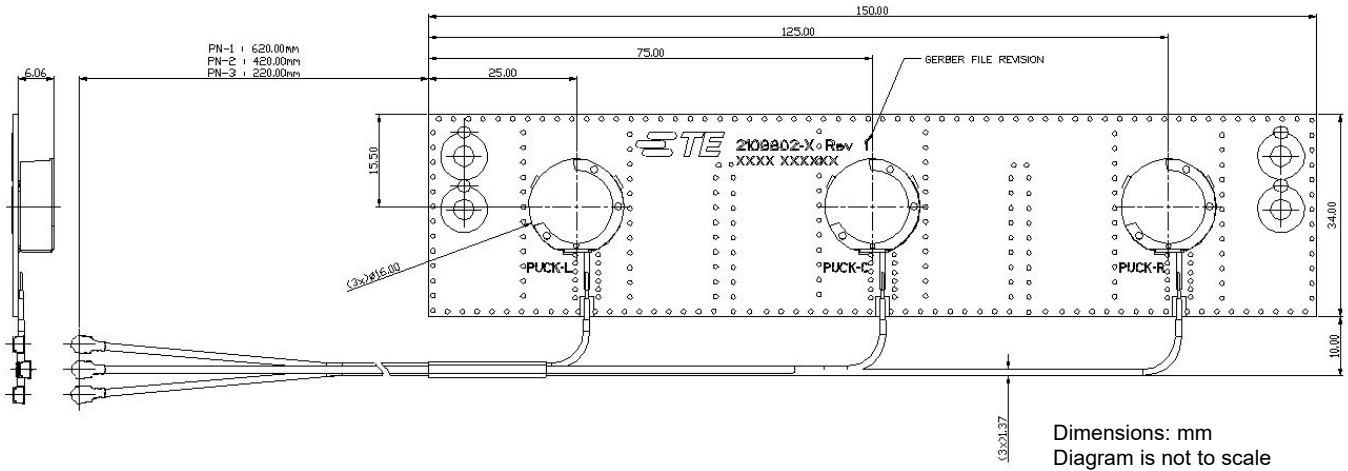
Dimensions: mm  
 Diagram is not to scale




# Wi-Fi 3X3 MIMO DUAL BAND ANTENNA ASSEMBLY

Standard Antenna Solutions

## DIMENSIONS



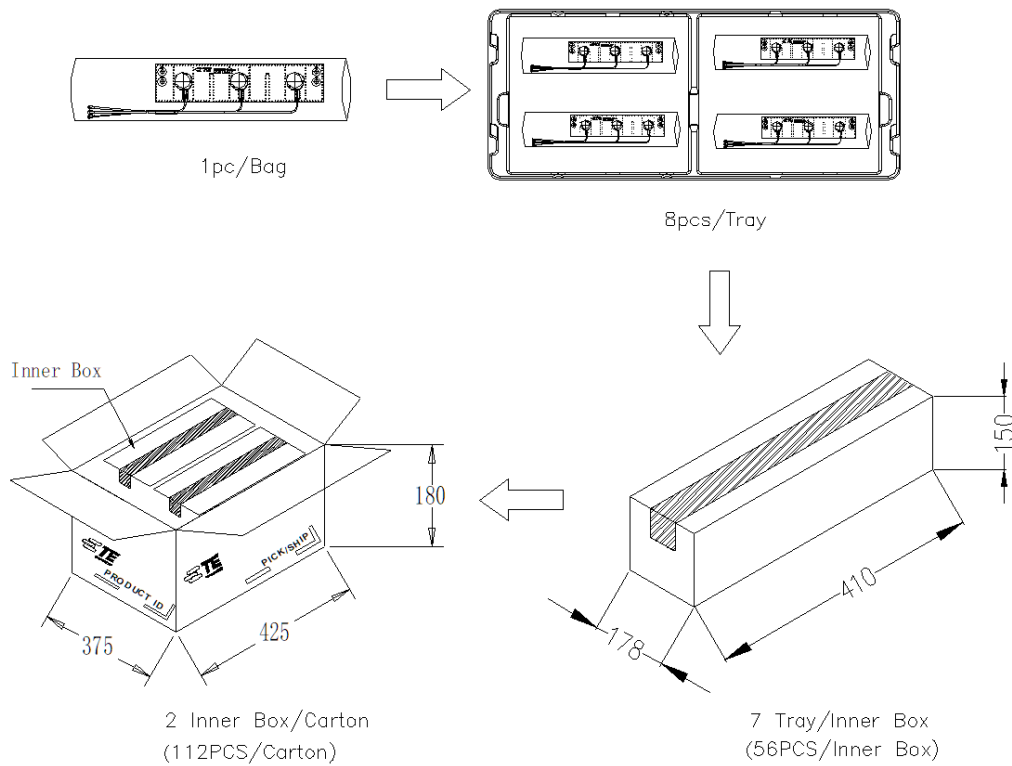
## MATING COMPONENTS

2108802-3	220.0	8.661	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2108802-2	420.0	16.535	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2108802-1	620.0	24.409	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
PART NUMBER	MM	INCH	CONNECTOR TYPE (ON CABLE)	PART NUMBER	IMAGE
	CABLE LENGTH			MATING COMPONENTS	

# Wi-Fi 3X3 MIMO DUAL BAND ANTENNA ASSEMBLY

Standard Antenna Solutions

## PACKAGING



### TE TECHNICAL SUPPORT CENTER

- USA: +1 (800) 522-6752
- Canada: +1 (905) 475-6222
- Mexico: +52 (0) 55-1106-0800
- Latin/S. America: +54 (0) 11-4733-2200
- Germany: +49 (0) 6251-133-1999
- UK: +44 (0) 800-267666
- France: +33 (0) 1-3420-8686
- Netherlands: +31 (0) 73-6246-999
- China: +86 (0) 400-820-6015

For phone numbers in other countries, go to [te.com/support-center](http://te.com/support-center)

### te.com

TE Connectivity, TE Connectivity (logo) are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2020 TE Connectivity Ltd. family of companies All Rights Reserved.

02/2021