

# AUT Report

Product Model: EAP625GP-Wall

Manufacturer: TP-Link Systems Inc.

Test Date: 2024.8.19

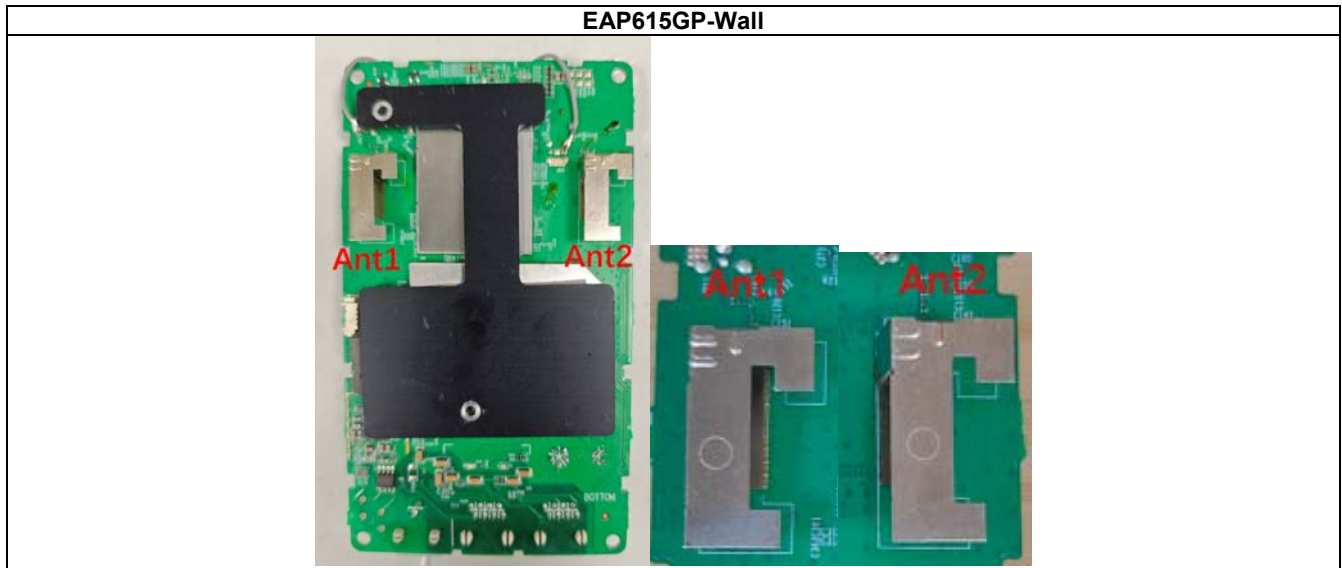
Tested By: Cui Jiafu *Cui Jiafu*

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## 1. Antenna Distribution



## 2. Electrical Characteristics

| <b>Ant1</b>              |  |
|--------------------------|--|
| <b>Frequency</b>         | 2400~2500 & 5150~5895MHz   |
| <b>Impedance</b>         | 50Ohm  |
| <b>Antenna Type</b>      | PIFA   |
| <b>Antenna Gain</b>      | 3.00dBi@2400~2500MHz<br>3.00dBi@5150~5250MHz<br>3.00dBi@5250~5350MHz<br>3.00dBi@5470~5725MHz<br>3.00dBi@5725~5895MHz |
| <b>Radiation pattern</b> | Omni-Directional   |
| <b>P/N</b>               | 6035500222   |

| <b>Ant2</b>              |  |
|--------------------------|--|
| <b>Frequency</b>         | 2400~2500 & 5150~5895MHz   |
| <b>Impedance</b>         | 50Ohm  |
| <b>Antenna Type</b>      | PIFA   |
| <b>Antenna Gain</b>      | 3.00dBi@2400~2500MHz<br>3.00dBi@5150~5250MHz<br>3.00dBi@5250~5350MHz<br>3.00dBi@5470~5725MHz<br>3.00dBi@5725~5895MHz |
| <b>Radiation pattern</b> | Omni-Directional   |
| <b>P/N</b>               | 6035500222   |



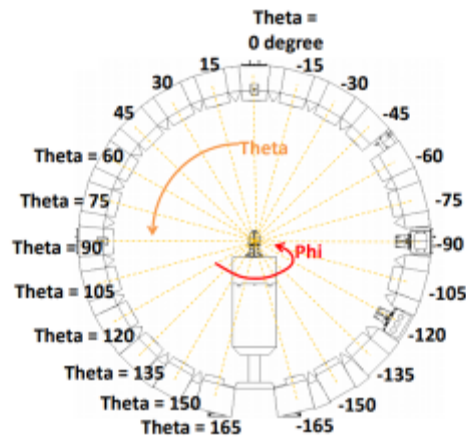


Figure 3-2

Before the measurement, calibrated the vector network analyzer, and then connected the input end of each antenna to the output end of the vector network analyzer, and evenly the antennas to be measured.

Test Equipment listed below:

| Equipments              | Model       | Manufacturer             | S/N            | Cali. Interval | Cali. Due Date |
|-------------------------|-------------|--------------------------|----------------|----------------|----------------|
| Chamber                 | Rayzone2800 | GTS(General Test System) | MY5347043<br>5 | 12months       | 2026/01/15     |
| Vector Network Analyzer | E5071C      | Keysight                 | MY46315238     | 24months       | 2026/03/13     |
| GTS MaxSign100 Software | V2.1        | GTS(General Test System) | /              | /              | /              |

## 3.2 Test Setup

The test setup was shown in Figure 3-3, 3-4:



Figure 3-3

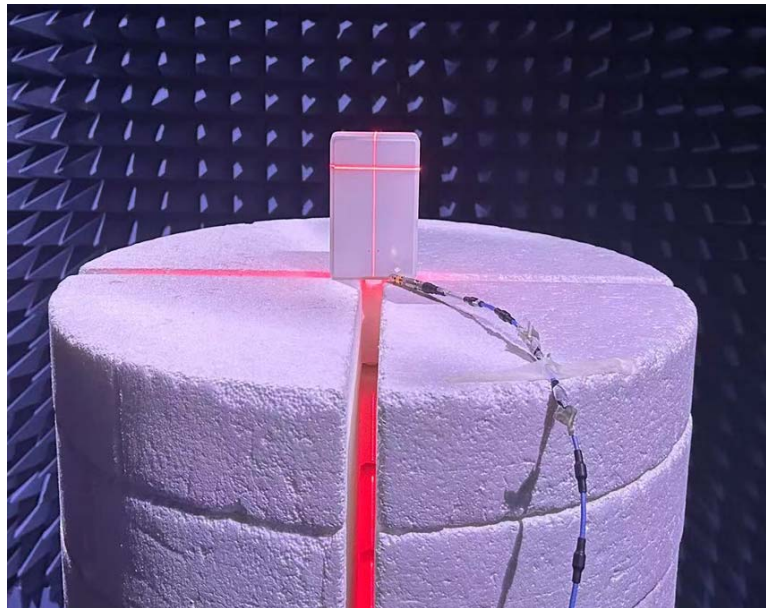
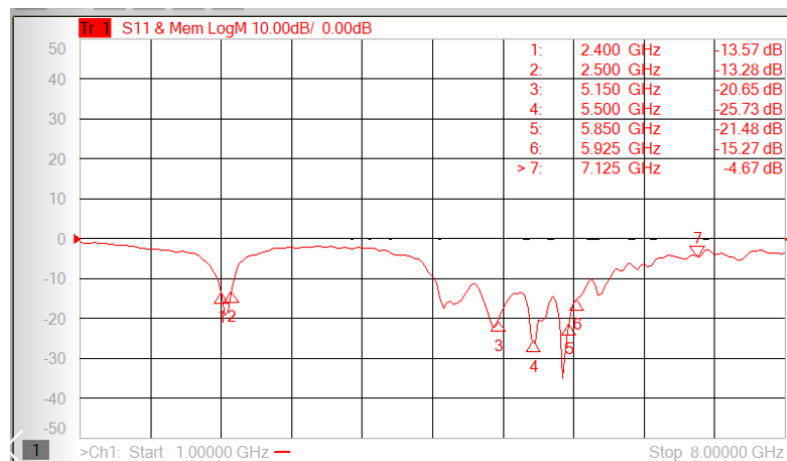


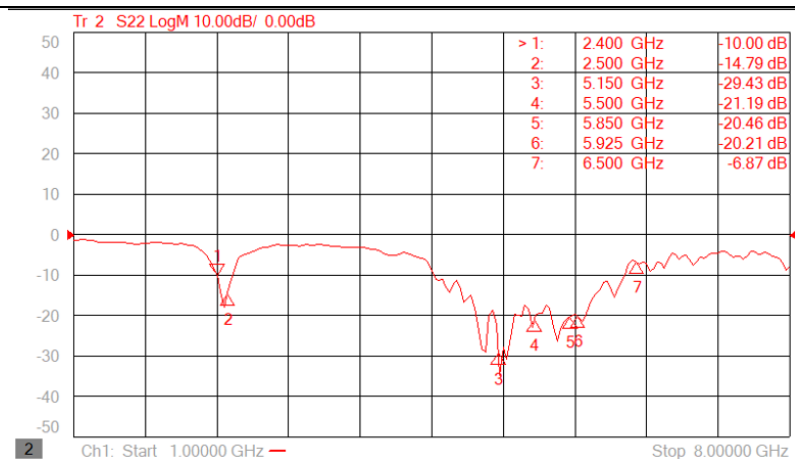
Figure 3-4

### 3.3 S Parameter Test Data

Ant1



Ant2



### 3.4 Antenna Peak Gain

| Frequency                                       | 2.45GHz<br>2400~2500MHz | 5.2GHz<br>5150~5250MHz | 5.3GHz<br>5250~5350MHz | 5.6GHz<br>5470~5725MHz |
|---|-------------------------|------------------------|------------------------|------------------------|
| Ant1 MaxGain(dBi)                               | 3.00                    | 3.00                   | 3.00                   | 3.00                   |
| Ant2 MaxGain(dBi)                               | 3.00                    | 3.00                   | 3.00                   | 3.00                   |
| Ant1 Polarization/ $\Phi$<br>(°) / $\theta$ (°) | Theta/135/90            | Theta/90/90            | Theta/0/90             | Theta/75/90            |
| Ant2 Polarization/ $\Phi$<br>(°) / $\theta$ (°) | Theta/165/90            | Theta/105/90           | Theta/105/90           | Theta/105/90           |
| Max Gain(dBi)                                   | 3.00                    | 3.00                   | 3.00                   | 3.00                   |

| Frequency                                       | 5.8GHz<br>5725~5895MHz |
|---|------------------------|
| Ant1 MaxGain(dBi)                               | 3.00                   |
| Ant2 MaxGain(dBi)                               | 3.00                   |
| Ant1 Polarization/ $\Phi$<br>(°) / $\theta$ (°) | Theta/75/90            |
| Ant2 Polarization/ $\Phi$<br>(°) / $\theta$ (°) | Theta/105/90           |
| Max Gain(dBi)                                   | 3.00                   |

### 3.5 Antenna Radiation Pattern

