

AUT Report

Product Model: RE700X

Manufacturer: TP-Link Systems Inc.

Test Date: 2024.11.28

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1. Antenna Distribution



2. Electrical Characteristics

Ant1	
Frequency	2400~2500 & 5150~5895MHz
Impedance	50Ohm

Antenna Type	Dipole
Antenna Gain	0.96dBi@2400~2500MHz 1.46dBi@5150~5250MHz 1.49dBi@5250~5350MHz 1.50dBi@5470~5725MHz 1.50dBi@5725~5895MHz
Radiation pattern	Omni-Directional
P/N	

Ant2	
Frequency	2400~2500 & 5150~5895MHz
Impedance	50Ohm
Antenna Type	Dipole
Antenna Gain	1.00dBi@2400~2500MHz 1.50dBi@5150~5250MHz 1.50dBi@5250~5350MHz 1.50dBi@5470~5725MHz 1.43dBi@5725~5895MHz
Radiation pattern	Omni-Directional
P/N	

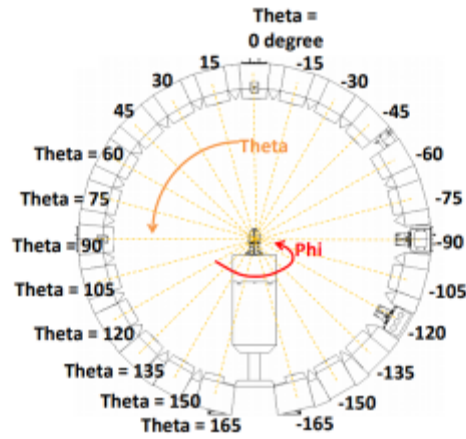


Figure 3-2

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 5	12months	2025/01/15
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

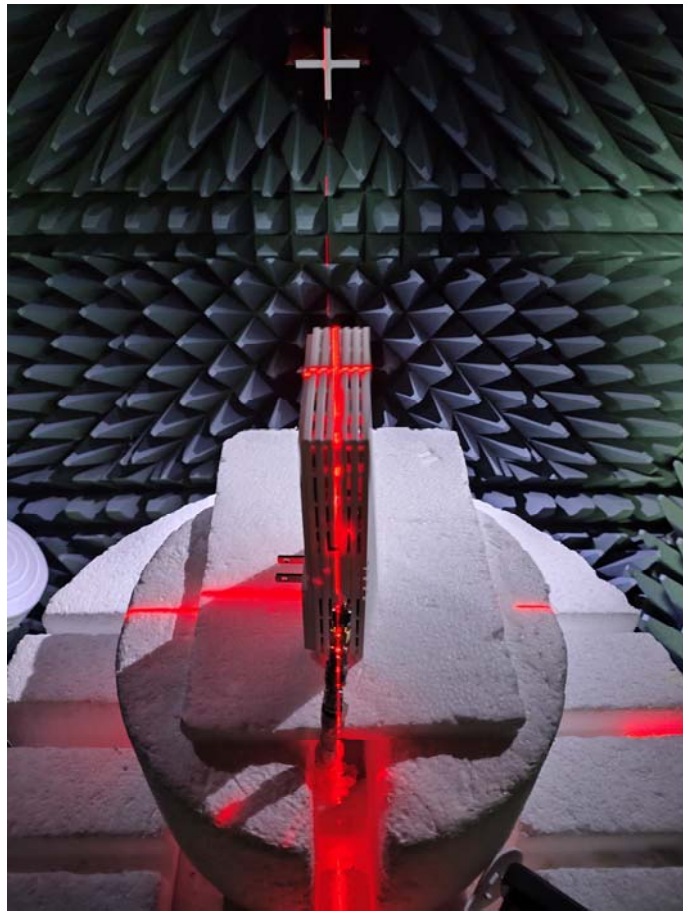
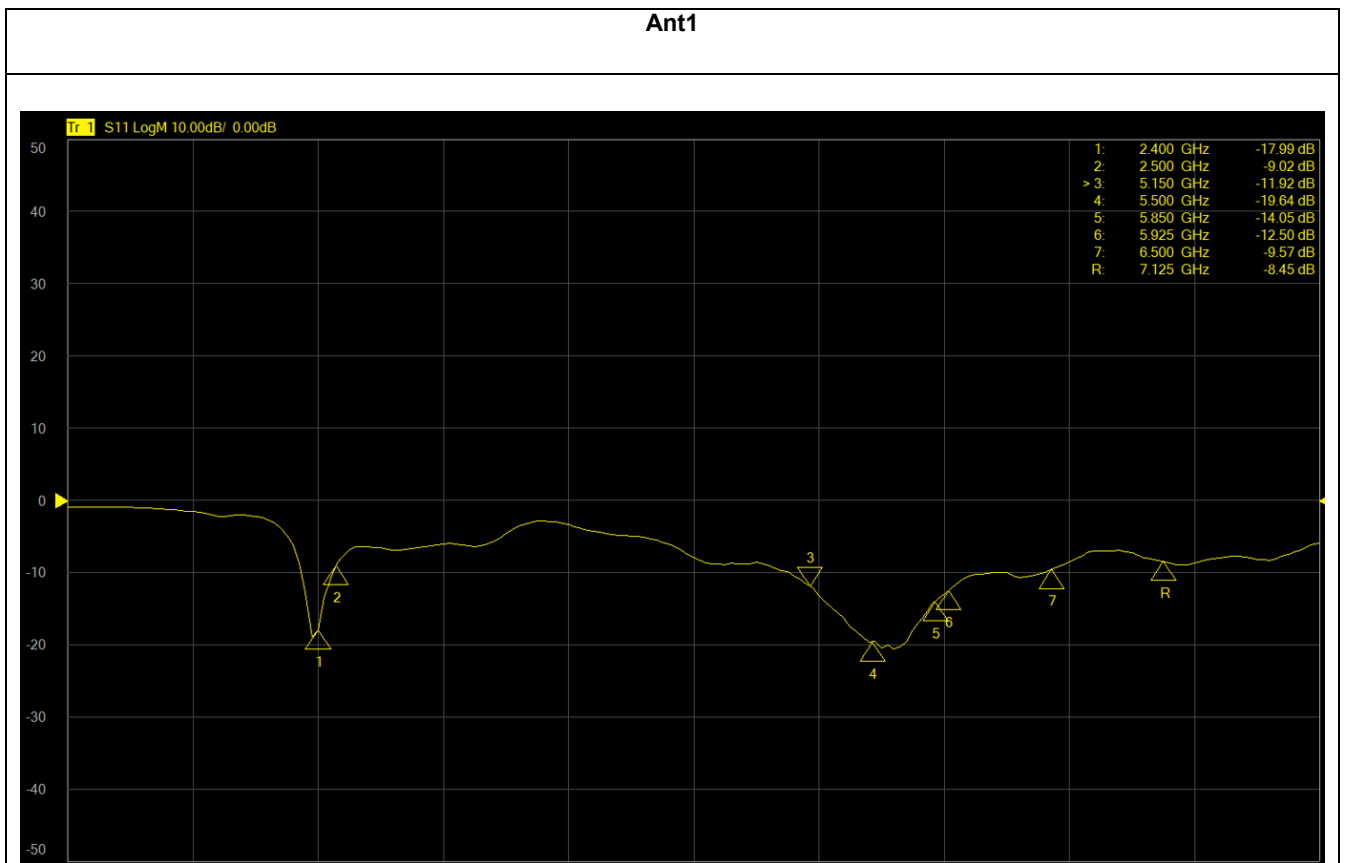


Figure 3-4

3.3 S Parameter Test Data





3.4 Antenna Peak Gain

Frequency	2.45GHz 2400~2500MHz	5.2GHz 5150~5250MHz	5.3GHz 5250~5350MHz	5.6GHz 5470~5725MHz	5.8GHz 5725~5895MHz
Ant1 MaxGain(dBi)	0.96	1.46	1.49	1.50	1.50
Ant2 MaxGain(dBi)	1.00	1.50	1.50	1.50	1.43
Ant1 Polarization/ Φ (°) / θ (°)	Theta/270/105	Theta/225/75	Theta/225/75	Theta/225/90	Theta/225/90
Ant2 Polarization/ Φ (°) / θ (°)	Theta/90/75	Theta/135/75	Theta/135/75	Theta/90/75	Theta/135/90
Max Gain(dBi)	1.00	1.50	1.50	1.50	1.50

3.5 Antenna Radiation Pattern

