

AUT Report

Product Model: Deco BE25

Manufacturer: TP-LINK CORPORATION PTE. LTD.

Test Date: 2024.3.11

Tested By: Xuan Shan 轩珊

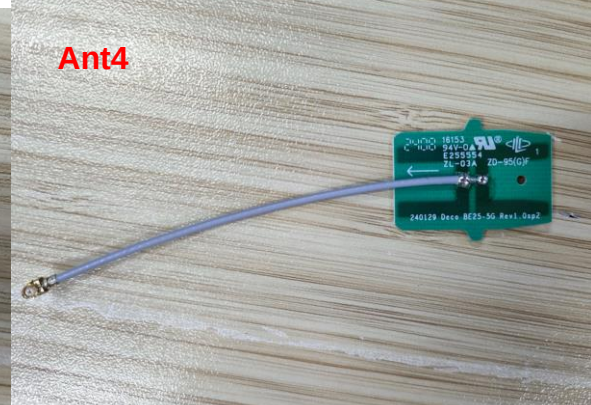
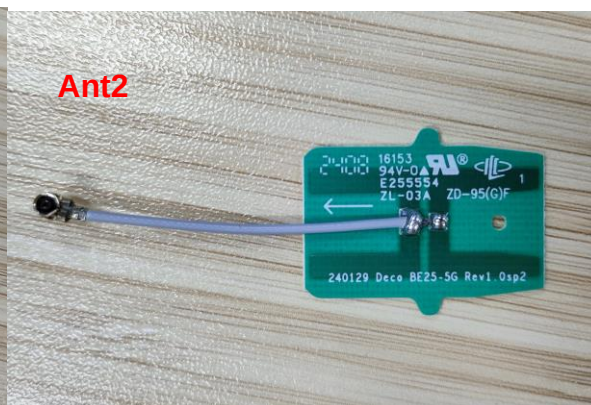
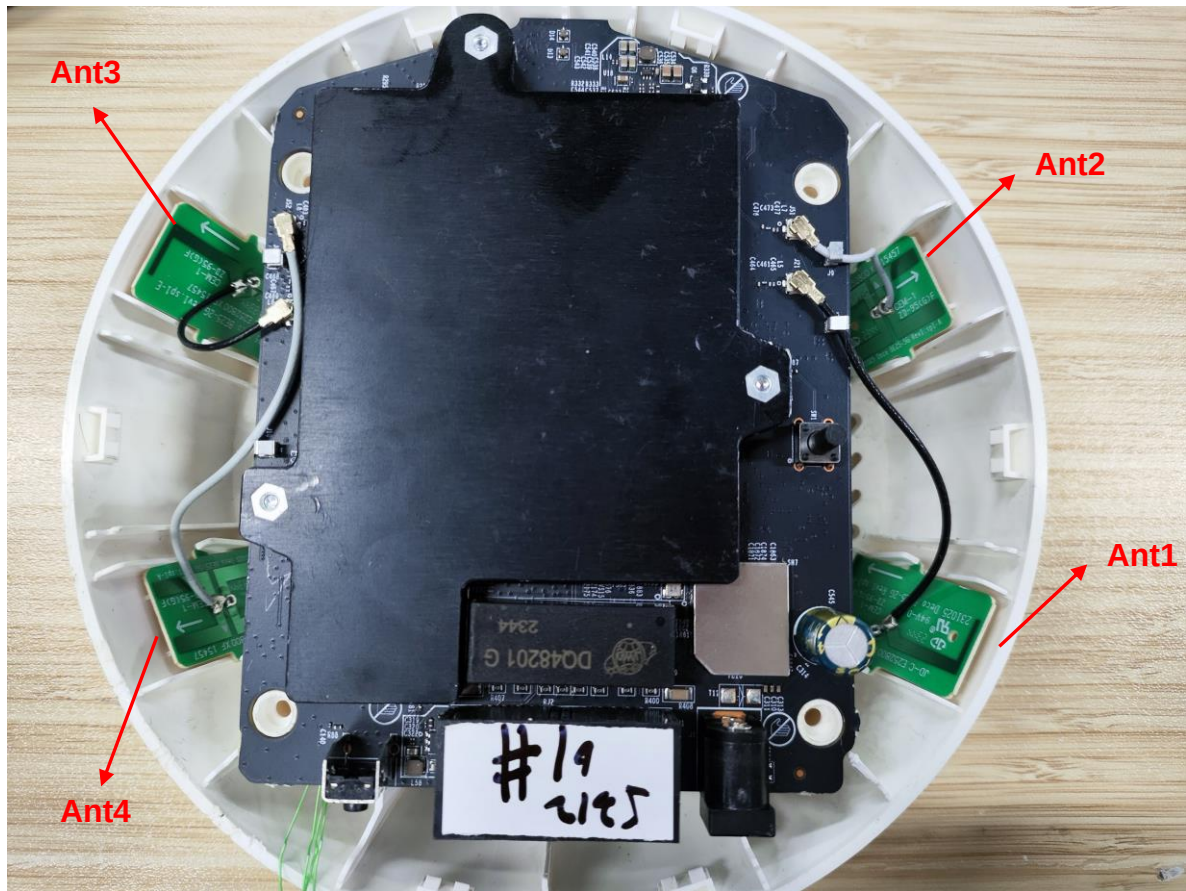
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1. Antenna Distribution

Deco BE25



2. Electrical Characteristics

Ant1	
Frequency	2400~2500 MHz
Impedance	50Ohm
Antenna Type	Dipole
Antenna Gain	2.00dBi@2400~2500MHz
Radiation pattern	Omni-Directional
P/N	3101506890

Ant2	
Frequency	5150~5850MHz
Impedance	50Ohm
Antenna Type	Dipole
Antenna Gain	3.00dBi@5150~5850MHz
Radiation pattern	Omni-Directional
P/N	3101506891

Ant3	
Frequency	2400~2500 MHz
Impedance	50Ohm
Antenna Type	Dipole
Antenna Gain	2.00dBi@2400~2500MHz
Radiation pattern	Omni-Directional
P/N	3101506889

Ant4	
Frequency	5150~5850MHz
Impedance	50Ohm
Antenna Type	Dipole
Antenna Gain	3.00dBi@5150~5850MHz
Radiation pattern	Omni-Directional
P/N	3101506892

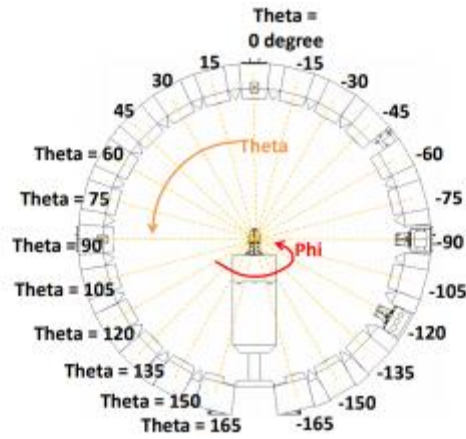


Figure 3-2

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

*需提供测试时的样机状态图，如图 3-4。

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



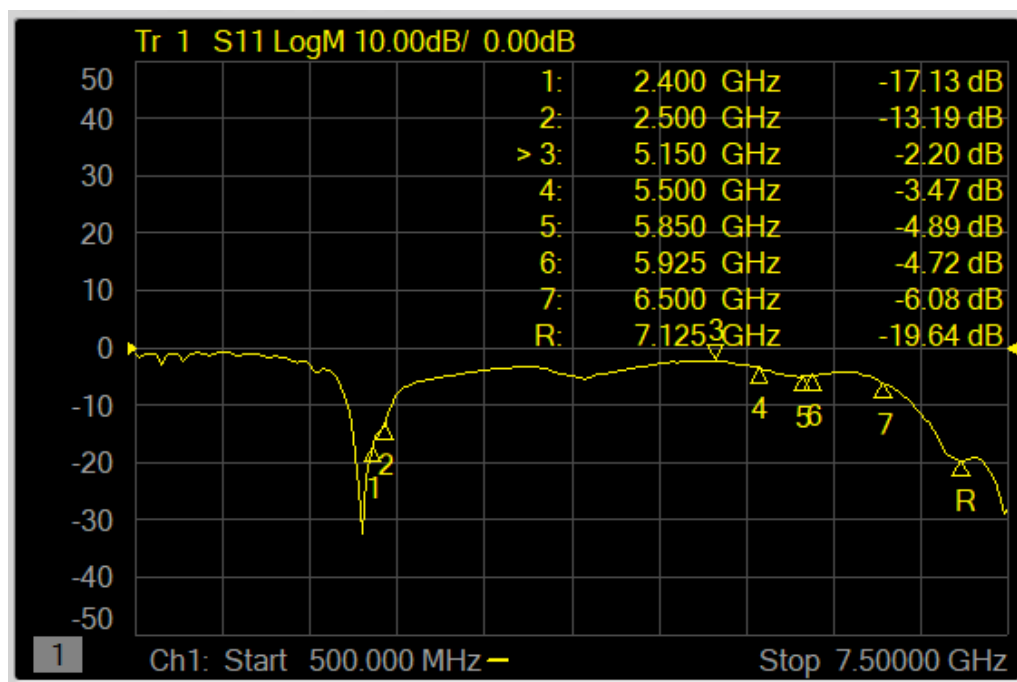
Figure 3-3



Figure 3-4

3.3 S Parameter Test Data

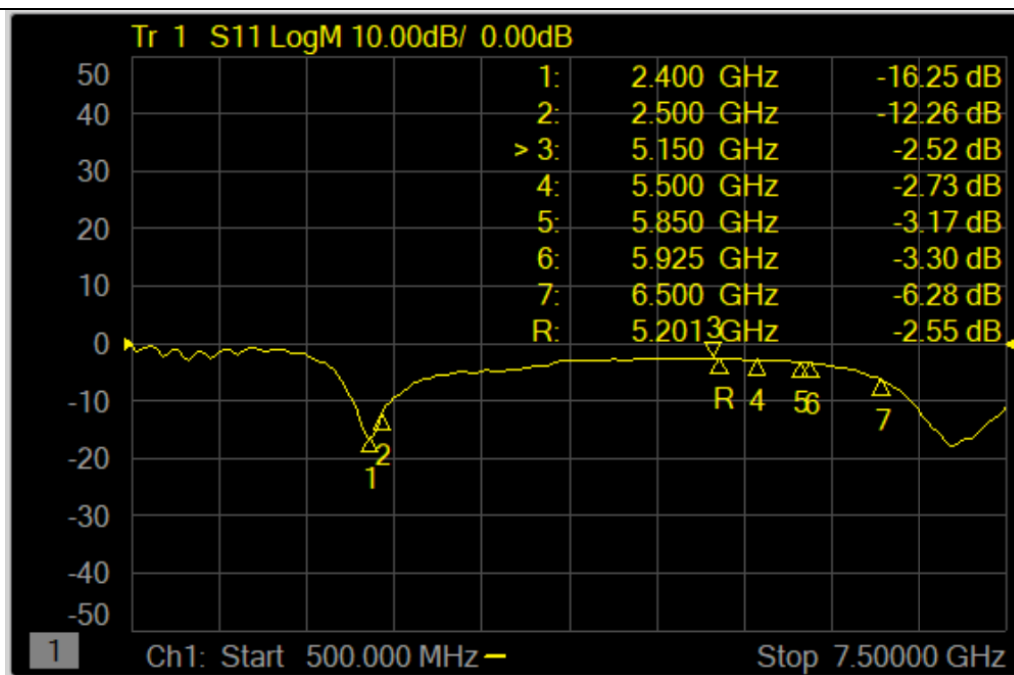
Ant1



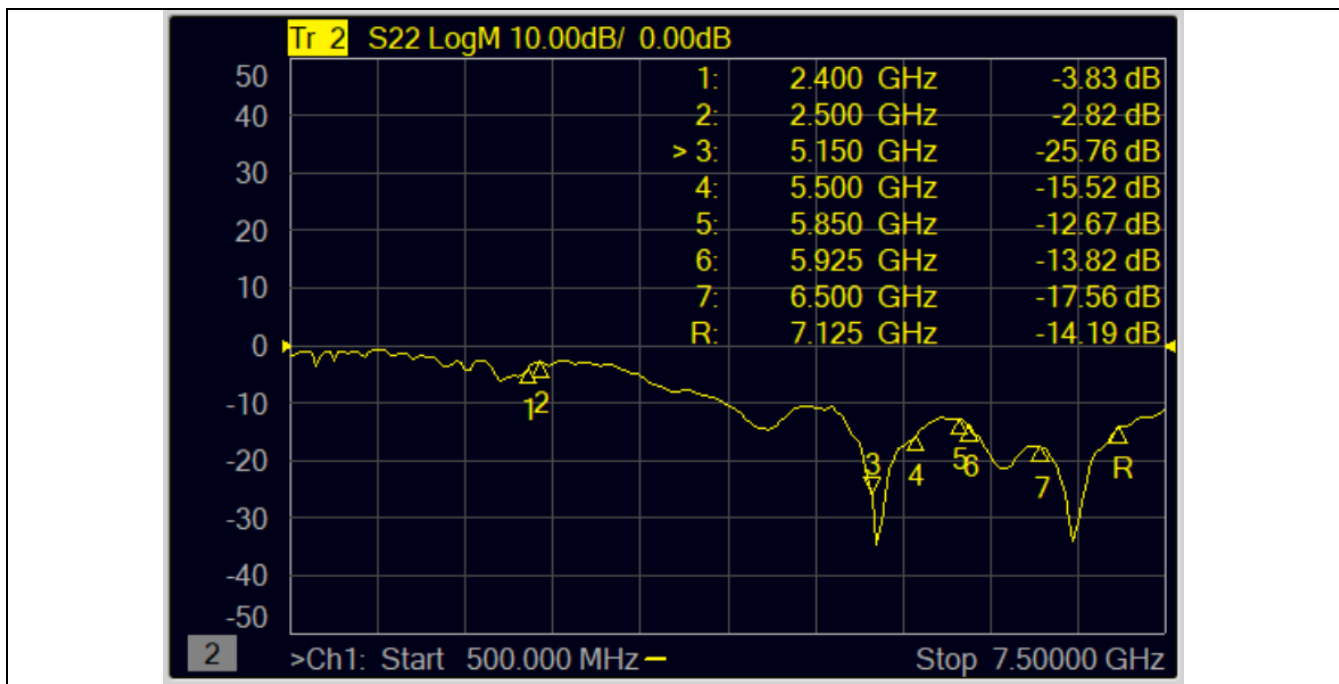
Ant2



Ant3



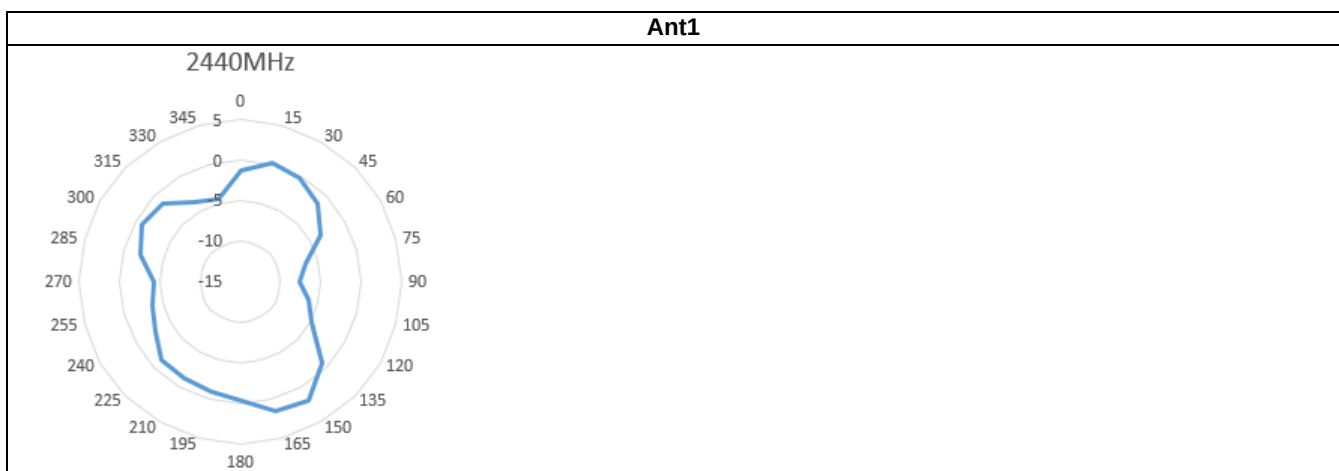
Ant4



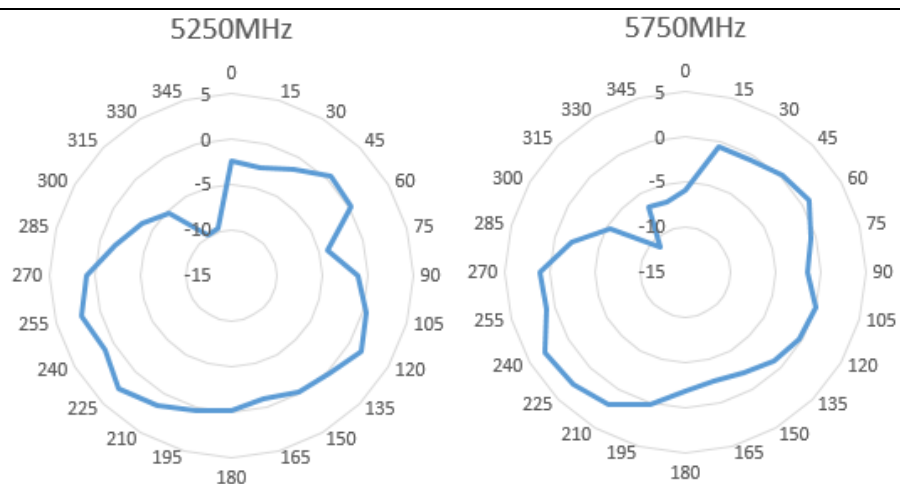
3.4 Antenna Peak Gain

Frequency(GHz)	2.45	5.2	5.3	5.6	5.8
Ant1 MaxGain(dBi)	2.00	\	\	\	\
Ant2 MaxGain(dBi)	\	2.47	2.58	3.00	2.99
Ant3 MaxGain(dBi)	2.00	\	\	\	\
Ant4 MaxGain(dBi)	\	3.00	2.48	2.50	2.80
Ant1 Polarization/ Φ (°) / θ (°)	Theta/135/150	\	\	\	\
Ant2 Polarization/ Φ (°) / θ (°)	\	Phi/-75/45	Phi/-75/45	Theta/-90/45	Theta/-90/60
Ant3 Polarization/ Φ (°) / θ (°)	Theta/-105/30	\	\	\	\
Ant4 Polarization/ Φ (°) / θ (°)	\	Phi/75/60	Phi/-90/45	Theta/120/30	Theta/-90/60
Max Gain(dBi)	2.00	3.00	2.58	3.00	2.99

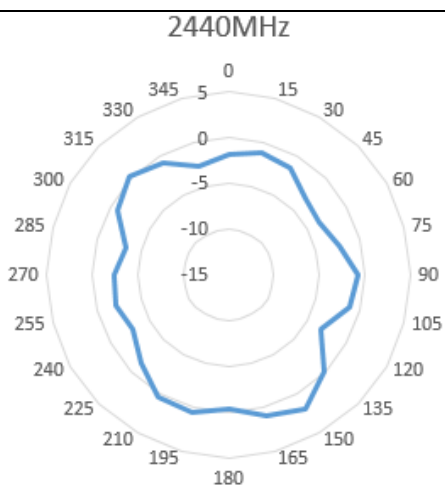
3.5 Antenna Radiation Pattern



Ant2



Ant3



Ant4

