Antenna Reports

Company: Lenovo

Model name: P785

Issue date: 2025/06/18

Documented by: *Quan Meng*

Antenna Summary Table

Check items	Information
Provided by lab	RayZone2800 (GTS)
Manufacturer/ Brand name	Lenovo
Product Model Name	P785
Antenna detail info.	BT/WIFI ANT:2.4-2.5GHz/5150-5850GHz PIFA type antenna.
Antenna gain test data	Included antenna frequency, gain pattern
Antenna Manufaturer Address	NO.15,Yingbin Road,Zhoushi Town,KunShan,Suzhou City,Jiangsu Province,215313,China

Note: Antenna gain was measured in the anechoic chamber, 3D scan was exercised, and the highest numbers are reported in this document.
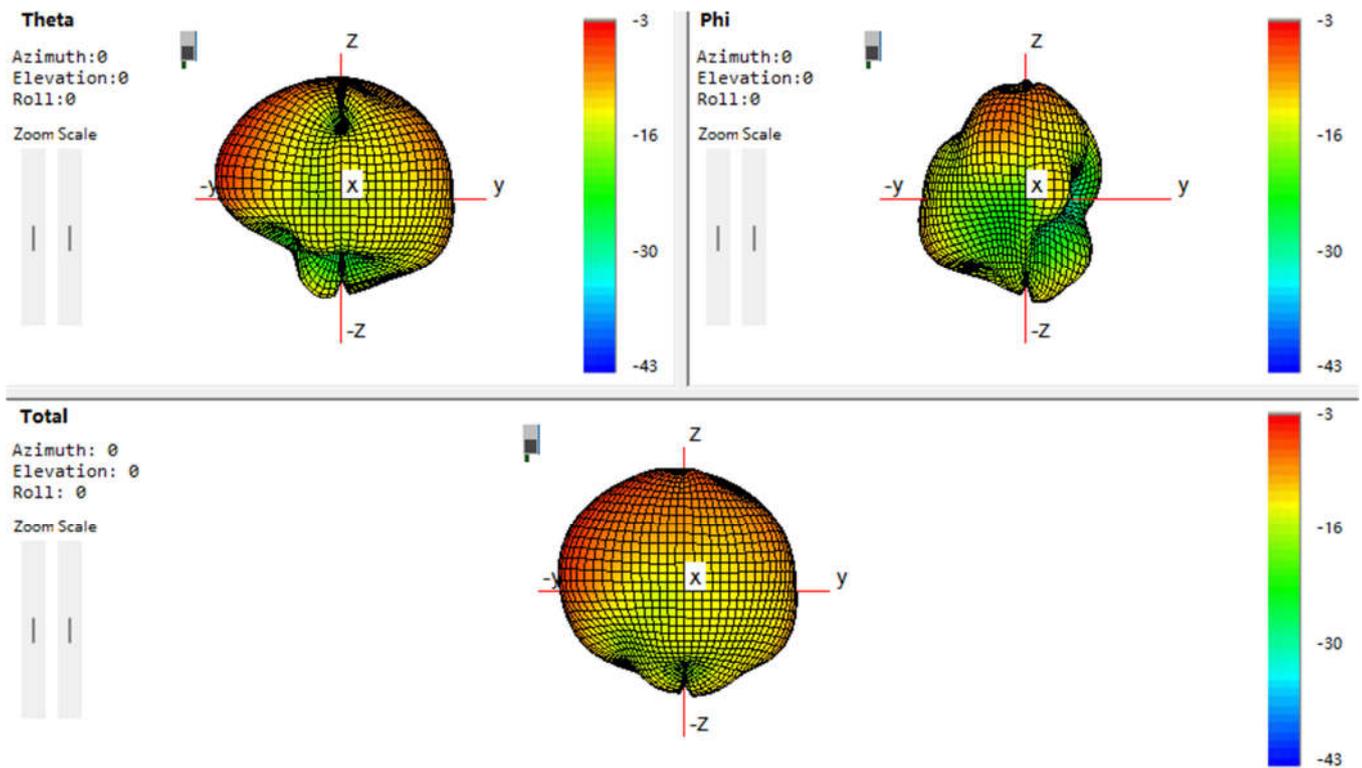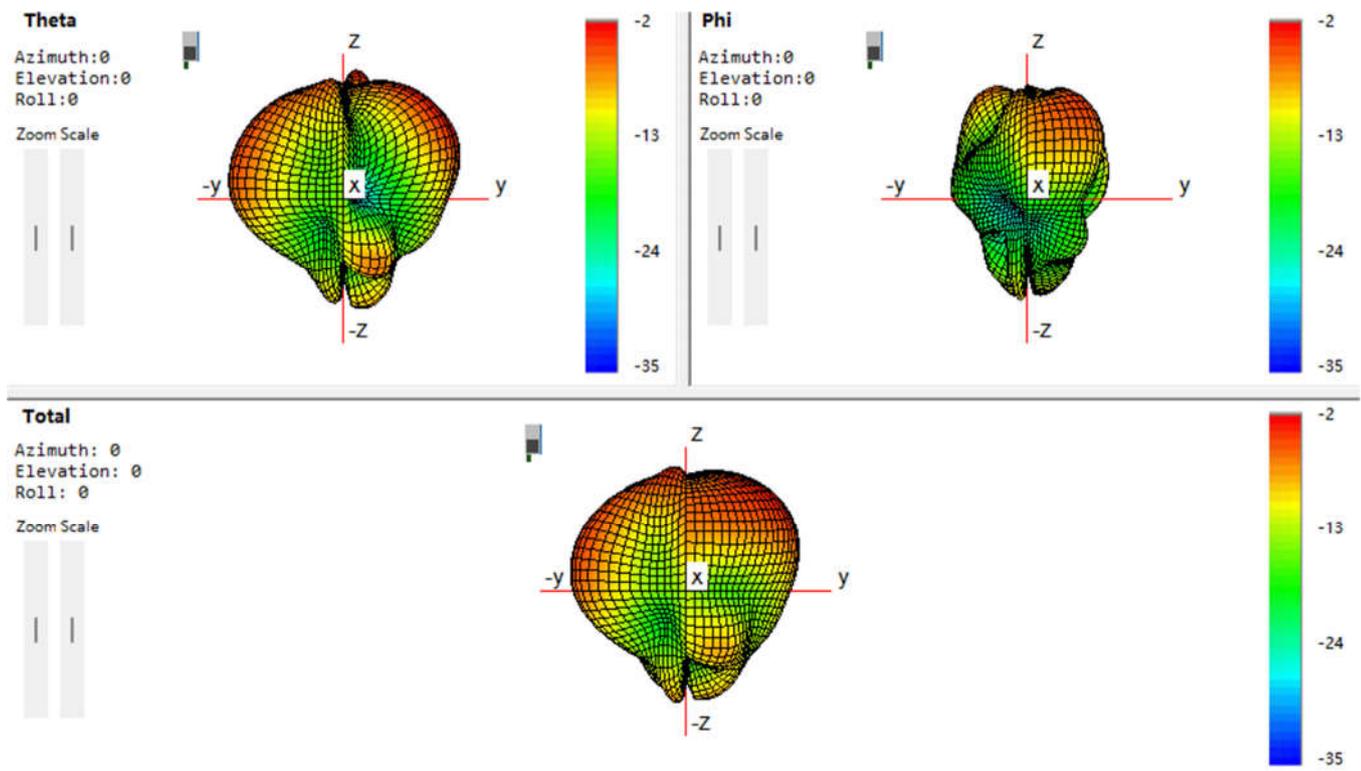
1.Antenna Test data:

Antenna model name: P785 Antenna

Antenna Gain and Antenna Type specification:

Antenna Gain (dBi)		WIFI	Antenna Type
2.4G WiFi	2400~2483.5MHz	-1.05	PIFA
5G Wifi	5150~5250 MHz	-0.43	PIFA
	5250~5350 MHz	-0.23	PIFA
	5470~5725 MHz	-0.36	PIFA
	5725~5850 MHz	-1.12	PIFA
BT	2400~2483.5MHz	-1.05	PIFA

WIFI   2.4G (2450 MHz)

WIFI 5G (5150~5850MHz)

List of Test and Measurement Instruments

NO.	Equipment	Manufacturer	Model No.	Calibration date	DUE DATE	Test soft
1	RayZone2800	GTS	CT10120500B5058	20250514	20260514	Libra
2	Network Analyzer ZVB 8	ROHDE&SCHWARZ	MY46651258	20250318	20260318	

I. Measurement Setup:

A. Reflection Coefficient Measurement:

Instrument: Network Analyzer (Network Analyzer ZVB 8.)

Setup:

1. Calibrate the Network Analyzer by one port calibration using Kesight 85033E Electronic calibration module .

2. Connect the antenna under test to the Network Analyzer.

3. Measure the S11(reflection coefficient),Return Loss….

B. Pattern Measurement:

A Fully Anechoic Chamber is used to simulate free-space conditions.

A Fully Anechoic Chamber is a shielded room lined with RF/microwave absorber on all walls, ceiling, and floor.

RF/microwave absorber reduces reflections from the inner walls of the shield. Absorber performance depends on the depth and design of the absorber and the angle of incidence of the field.

Normal incidence is best, shallower angles are worse.