

ANTENNA INFORMATION

Antenna manufacturer Company name	Microsoft Corporation
Address	One Microsoft Way, Redmond, WA 98052-6399, USA
Company name	
Test location	Cheng Uei Precision Industry Co., Ltd.
Address	RF Technology Center
Test Personnel Name(Full name) E-mail	No. 18, Chung Shan Rd., Tu Cheng City, Taipei Hsien, 23680, Taiwan.
Tel/Mobile	Nick_Lu Nick_Lu@foxlink.com.tw
Testing date	+886-2-2269-9888 2026/01

Antenna Part number	Main	M200_AE1
	Diversity	M200_AE2
Antenna type (ex: PIFA, Dipole...etc)		Main- PIFA, Diversity -PIFA

	2400- 2483.5 MHz	5150- 5250MHz	5250- 5350MHz	5470- 5725MHz	5725- 5850MHz	5850- 5895MHz
Main	2.41	1.79	1.79	2.12	2.54	2.05
Diversity	-	1.93	1.93	1.89	1.69	2.09

Table of Contents

Cover page 1

1.Document Revision History..... 3

2. Test & System Description

 2.1 Measurement Method and System..... 4

 2.2 Test setup 4

 2.3 Equipment list 5

3. Radiation characteristics of antenna loaded in Host Platform6

1. Document Revision History

Doc.No.:01-27-26Rev01

Revision #	Revision Details	Issued Date
Rev. 00	First Release	

2. Test & System Description

2.1 Measurement Method and System

This test report is prepared for antenna testing under an

ETS-Lindgren AMS-8500 Anechoic Chamber.

Names of commercial software being used for antenna measurement: **EMQuest**

2.2 Test setup

1.Equipment Setup - S parameter

Test Procedure

1.1 Set start and stop frequency and Calibrate the NA with 50 ohm calibration kit

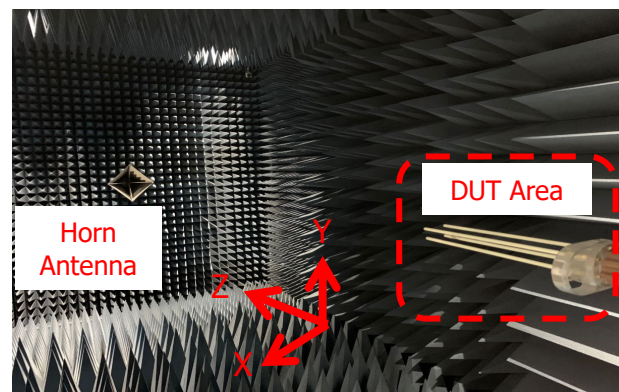
1.2 Connect the NA cable to DUT antenna via SMA or I-PAX connector.

1.3 Measure the DUT antenna performance in the free space and record the s11.



2.Testing Environment - Passive Testing

- Lab standard : 3D Chamber for CTIA standard
- Chamber size : 7.2 * 3.6 * 3.6(meter)
- Chamber type: Fully anechoic Chamber
- Chamber usable frequency range : 700~6000MHz
- Measurement instrument : Network Analyzer
- Measurement Software : EMQuest (ETS-Lindgren)



2.3 Equipment list

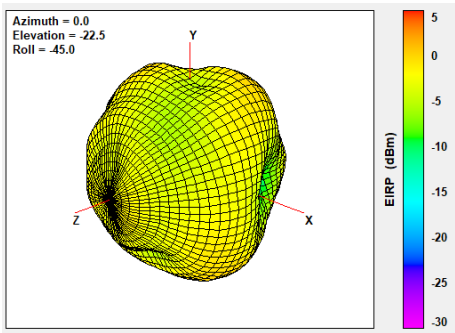
No.	Device	Model	Manufacturer	Cal. Date	Cal. Due Date
1	ETS-Lindgren AMS-8500 Antenna Measurement System	AMS-8500	ETS-Lindgren	11/2026	11/2027
2	EMCO Antenna Controller	2090	ETS-Lindgren	2/21/2026	4/2027
3	RF Switch Matrix	N/A	ETS-Lindgren	2/21/2026	4/2027
4	Multi-Axis Positioning Controller	EMCO 2090	ETS-Lindgren	2/21/2026	4/2027
5	Low Noise Amplifier	N/A	ETS-Lindgren	2/21/2026	4/2027

3. Radiation characteristics of antenna loaded in Host Platform

Main Antenna

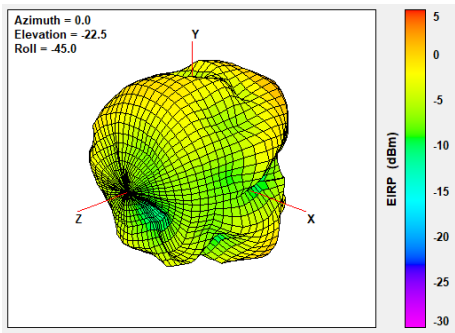
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
2400-2483.5	2.41



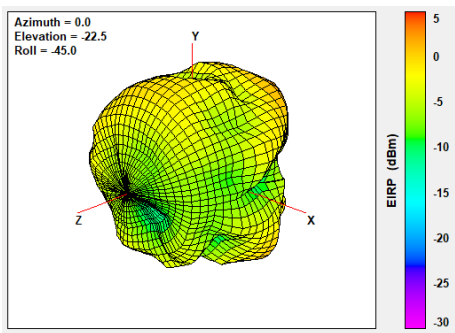
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	1.79



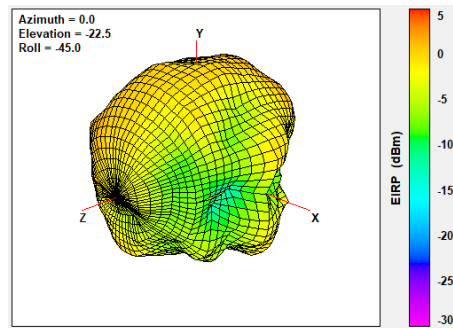
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	1.79



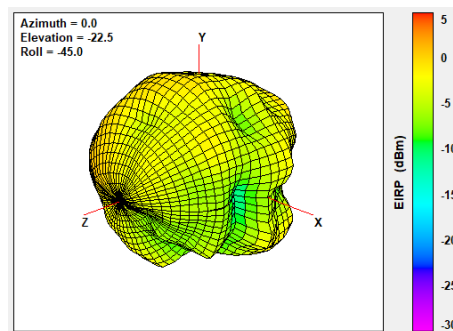
Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	2.12



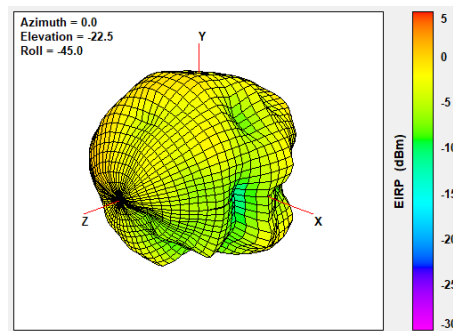
Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	2.54



Max Antenna 3D Radiation Pattern 5850-5895 MHz

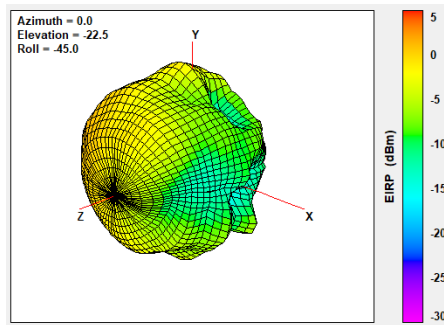
Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5850-5895	2.05



Diversity Antenna

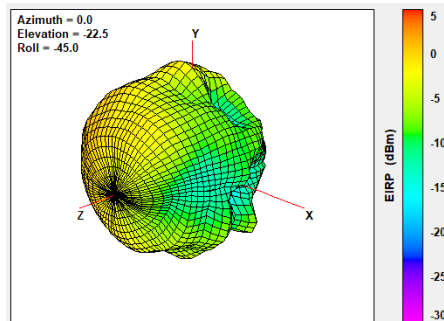
Max Antenna 3D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5150-5250	1.93



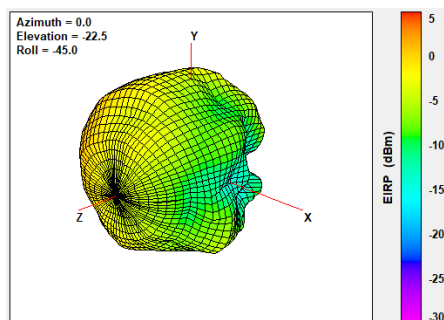
Max Antenna 3D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5250-5350	1.93



Max Antenna 3D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5470-5725	1.89



Max Antenna 3D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Peak Gain w/ Cable Loss (dBi)
5725-5850	1.69

