



CTE BT2 ANTENNA

Applicant	Open Road NO.88-13 Shuili Road Hsinchu City 30059,Taiwan
Brand	ORS
Manufacturer	Open Road NO.88-13 Shuili Road Hsinchu City 30059,Taiwan
Product Name	CTE BT2 Antenna
Model Name	ORS-A81



List of Contents

1. Description of Antenna	1
2. Test Frequency and Polarization	2
3. Measuring Instrument List (Test Equipment)	3
4. Test Connection Diagram and Condition	4
5. Test Procedure	5
6. Test Result	6
Appendix I : Photographs of Test Configuration	7
Appendix II : Photographs of the Antenna Outview	8
Appendix III : Antenna Pattern	10

1. Description of Antenna

Ant. No.	Brand Name	Model Name	Ant. Type	Operation Mode
1	ORS	ORS-A81	PIFA	BT 2.4GHz

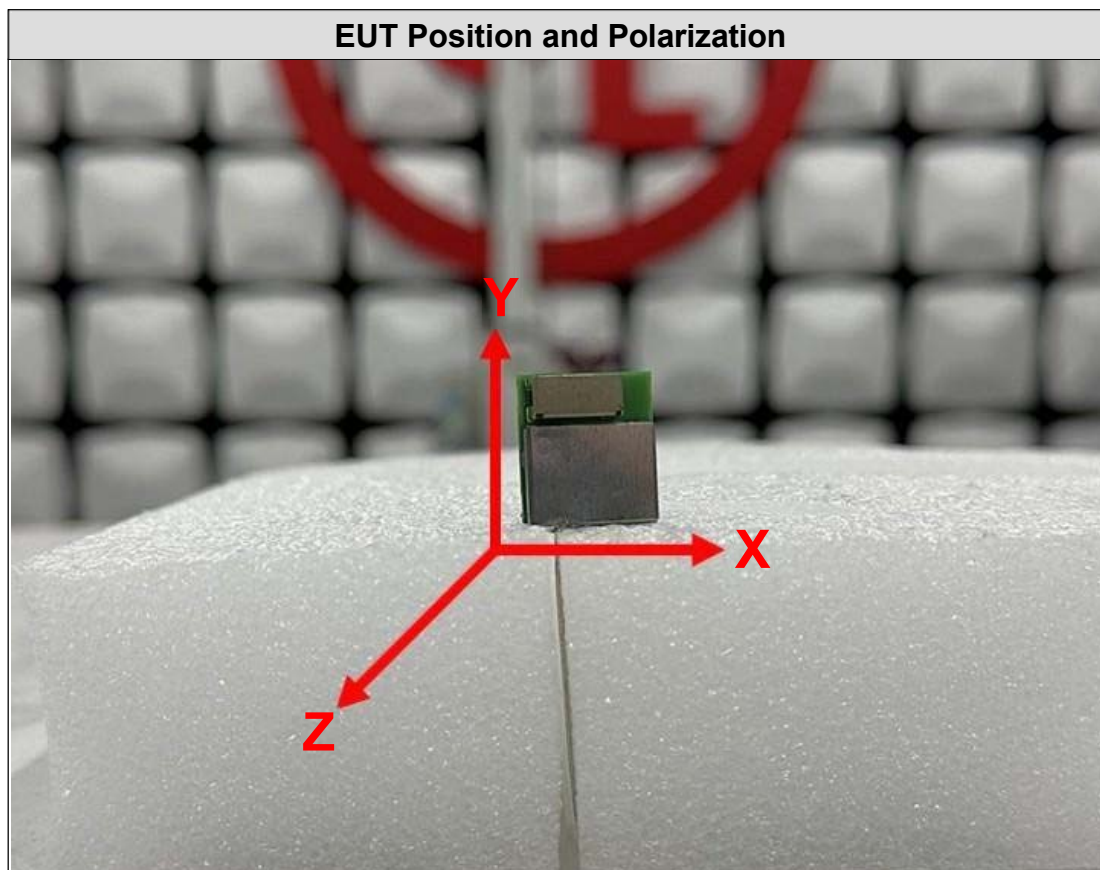
Note:

1. The above Antenna information is declared by manufacturer and for more detailed features description, please refer the manufacturer's or user's manual.

2. Test Frequency and Polarization

The tests frequency is declared by manufacturer.

Band (MHz)	Test Frequency (MHz)
2300-2600	2300 、 2350 2400 、 2450 、 2500 、 2550 、 2600



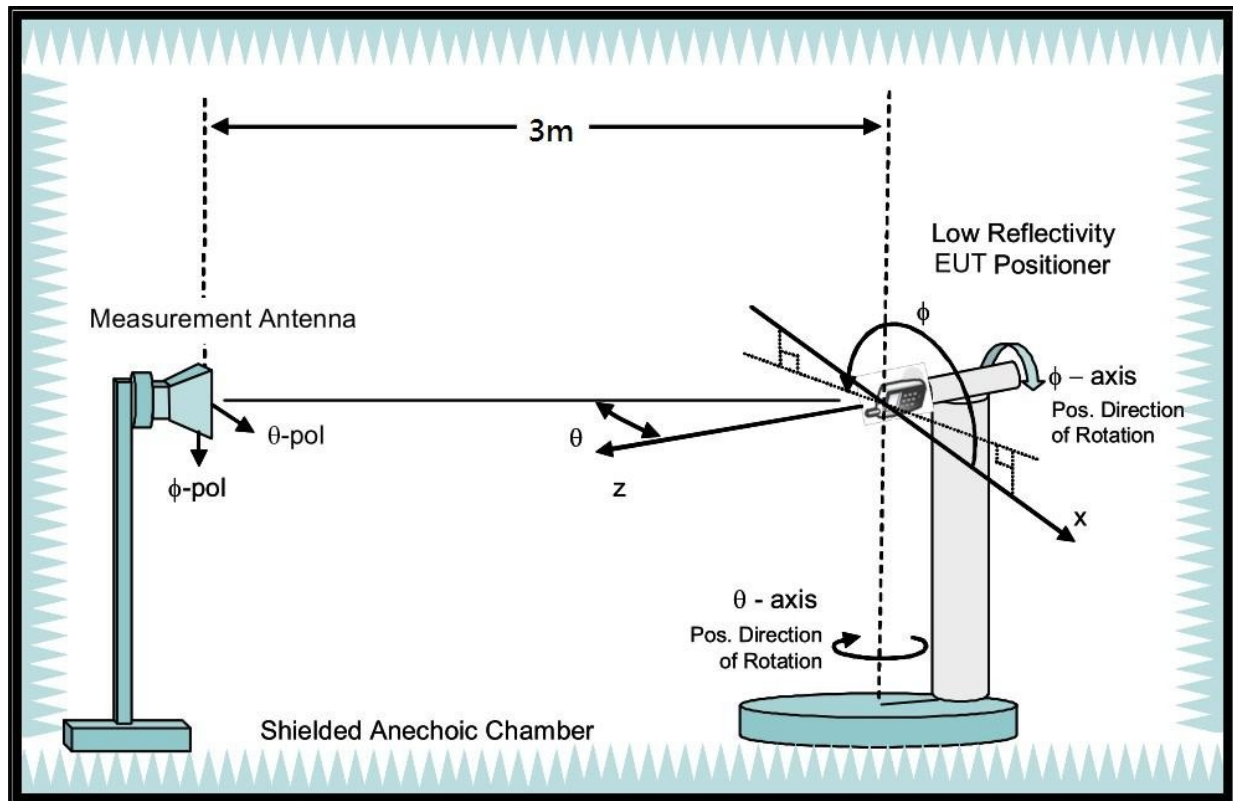
3. Measuring Instrument List (Test Equipment)

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

Test Equipment List					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Expired Date
Trilog-Broadband Antenna	Schwarzbeck	VULB 9163 & N-6-05	1059 & N0537	2025/1/20	2026/1/19
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	781	2025/12/17	2026/12/16
Signal Generator	Keysight	N5173B	MY53271122	2024/12/3	2025/12/2
Spectrum Analyzer	Keysight	N9010A	MY56070818	2025/3/12	2026/3/11
Cables	Hanyitek	K1K50-UP0264-K1K50-2500	170214-1 & 170214-2	2024/11/22	2025/11/21
Cables	Hanyitek	HPMC40KM90KF	CB038	2025/1/16	2026/1/15

Software	Version
e3	6.191211 (V6)

4. Test Connection Diagram and Condition



5. Test Procedure

1. Set the Calibration Antenna on multi-axis positioner and connect to signal generator for capture the correction factor.
2. Signal generator insertion normalize and calculate the standard antenna factor with spectrum analyzer.
3. Calibration Antenna change to the EUT's antenna.
4. The EUT is then stepped between 0 to 360 degrees along the theta axis.

6. Test Result

Maximum gain result refer below table:

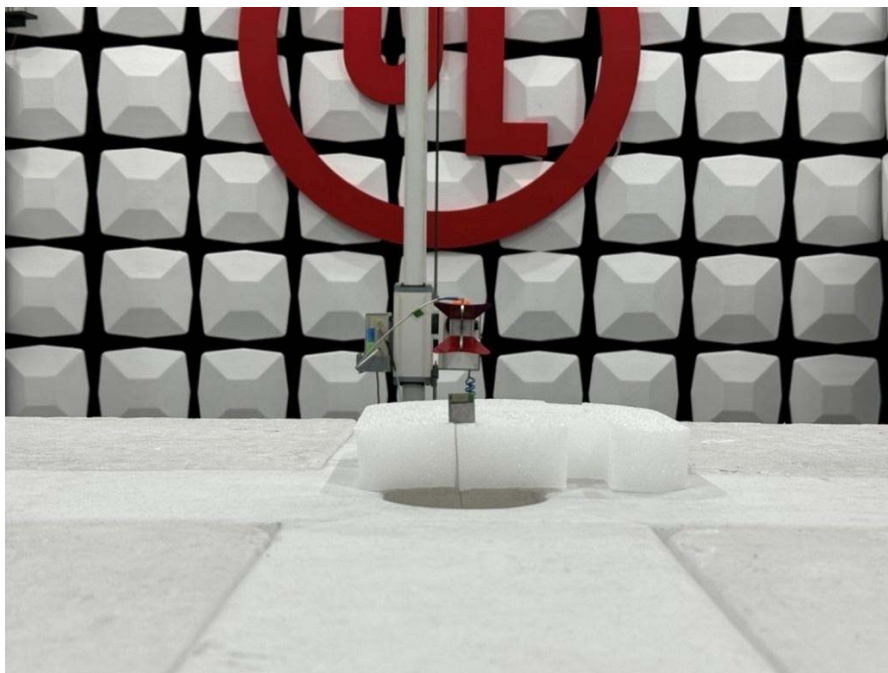
Polarization	Test Frequency (MHz)	X-Y Plane Gain (dBi)	Y-Z Plane Gain (dBi)	X-Z Plane Gain (dBi)
Avg. Gain	2300	-6.2	-8.5	-6.3
Peak Gain	2350	-5.2	-6.2	-5.5

Polarization	Test Frequency (MHz)	X-Y Plane Gain (dBi)	X-Z Plane Gain (dBi)	Y-Z Plane Gain (dBi)
Avg. Gain	2400	-3.7	-6.0	-4.7
Peak Gain	2450	3.3	-2.2	-2.0

Polarization	Test Frequency (MHz)	X-Y Plane Gain (dBi)	X-Z Plane Gain (dBi)	Y-Z Plane Gain (dBi)
Avg. Gain	2500	-3.6	-7.5	-4.6
Peak Gain	2550	2.6	-3.3	-2.2

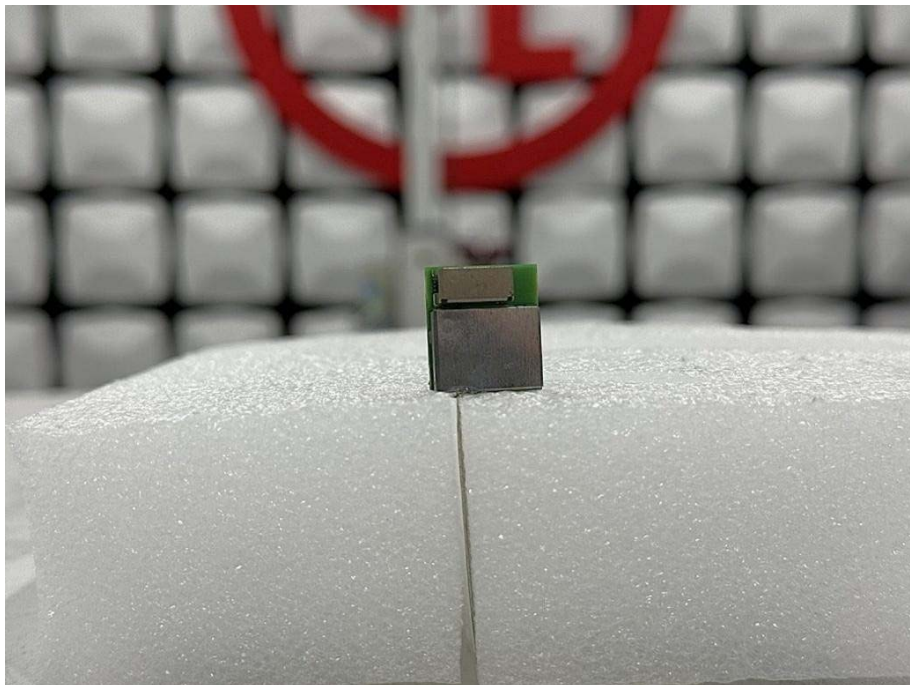
Polarization	Test Frequency (MHz)	X-Y Plane Gain (dBi)	X-Z Plane Gain (dBi)	Y-Z Plane Gain (dBi)
Avg. Gain	2600	-6.9	-10.1	-6.9
Peak Gain	2600	-1.8	-4.7	-5.8

Appendix I : Photographs of Test Configuration



Appendix II : Photographs of the Antenna Outview

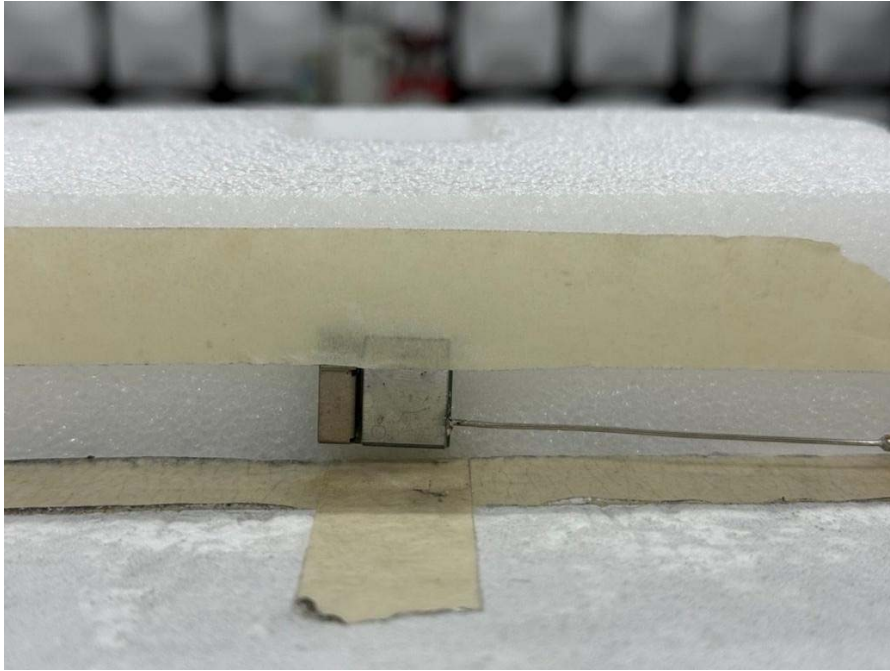
XY Plane



XZ Plane

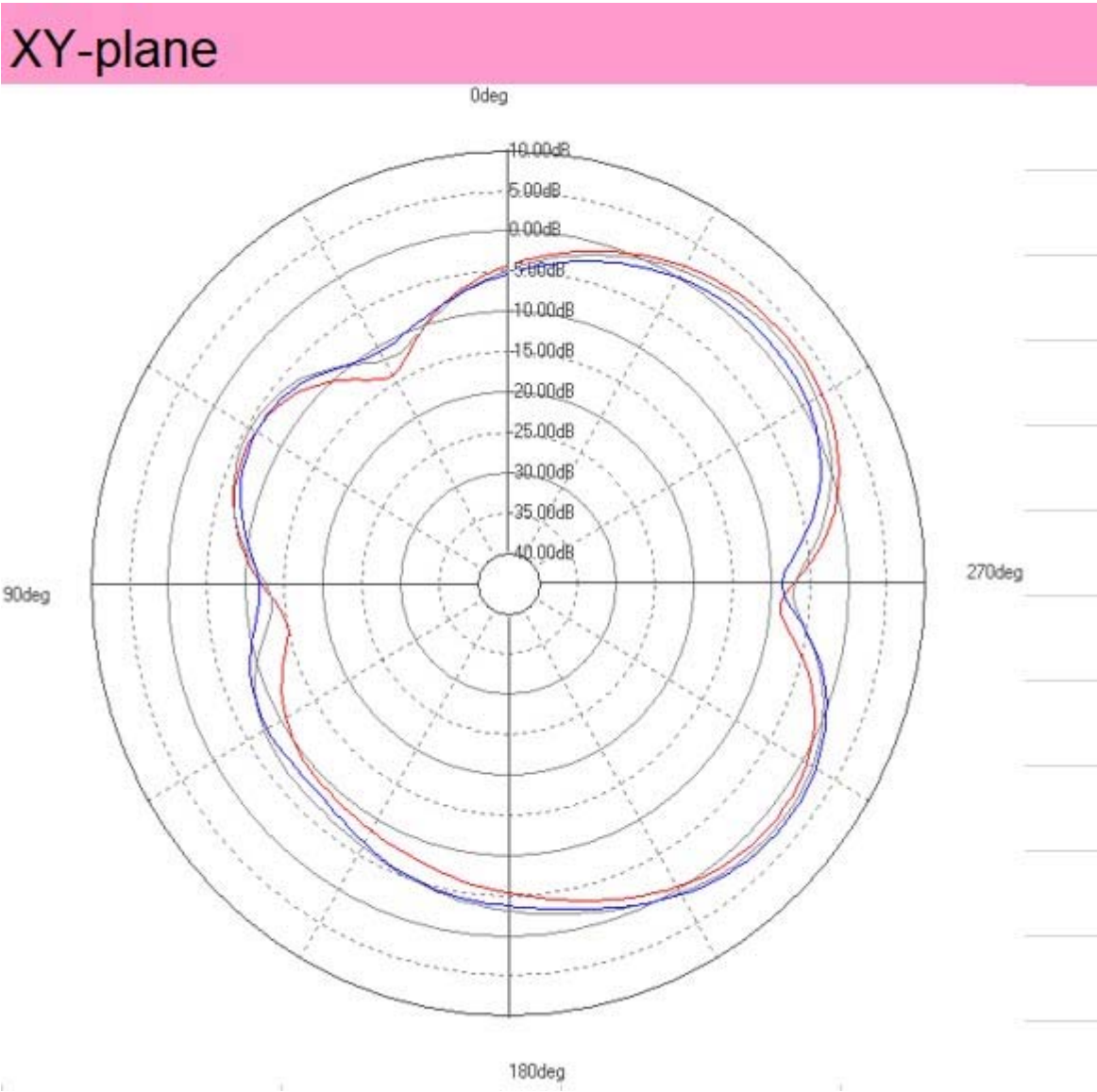


YZ Plane

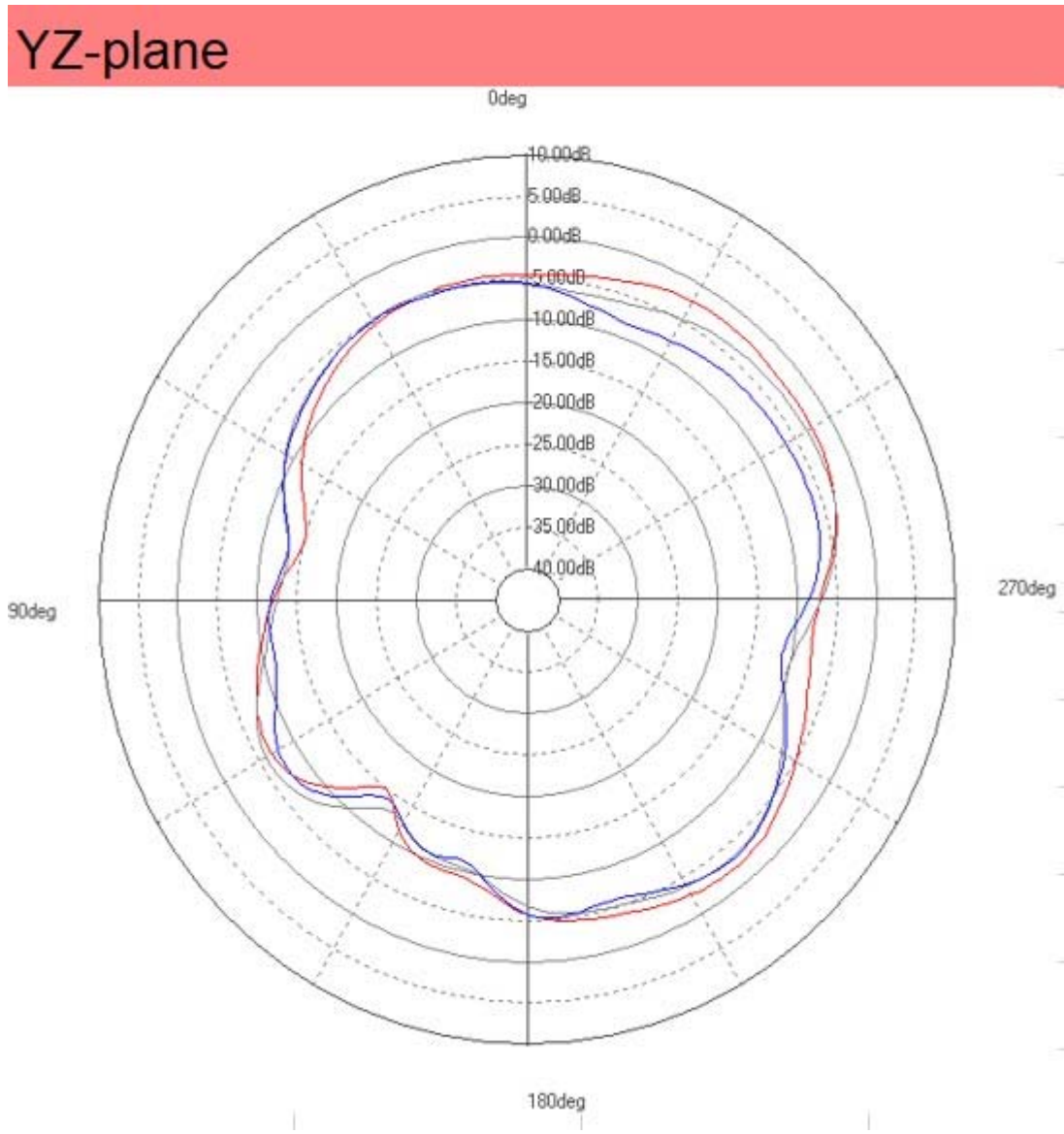


Appendix III : Antenna Pattern

Condition	Peak Gain
Test Mode	2400MHz_XY
	2450MHz_XY
	2500MHz_XY



Condition	Peak Gain
Test Mode	2400MHz_YZ 2450MHz_YZ 2500MHz_YZ



Condition	Peak Gain
Test Mode	2400MHz_ZX 2450MHz_ZX 2500MHz_ZX

Legend
— 2400.00(MHz)
— 2450.00(MHz)
— 2500.00(MHz)

