

Chicony Chip Antenna Test plan

- R&D Team, IPD BU
- Chicony Electronics Co., Ltd.
- Version: 0.1
- Prepared by: Eric Su

Table of Contents

- 1) Revision History
- 2) Matching circuit
- 3) Antenna S11/VSWR
- 4) Efficiency & Peak Gain
- 5) DUT setting
- 6) 2D & 3D pattern

CIROCOMM TECHNOLOGY CORP.

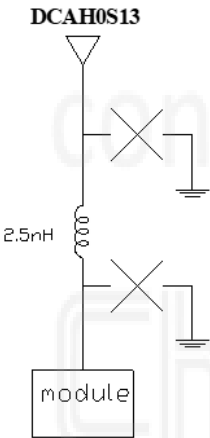
No. 37, Gongye S. Rd., Guantian Dist., Tainan City 720006, Taiwan (R.O.C.)

1) Revision History

Date	Revision	Explanation of changes	Edit by
22-Dec-2023	0.1	Initial release	Eric Su

2) Matching circuit

Example

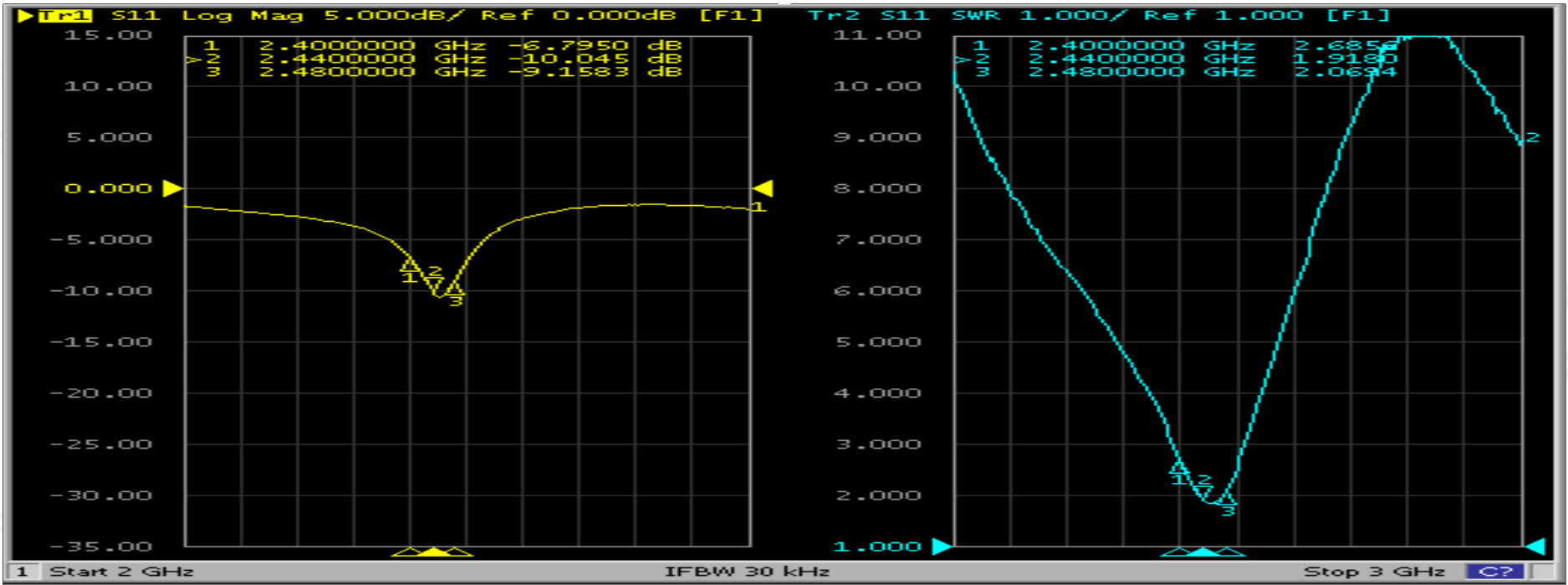


Note:

Please use Murata 0201 series(LQP03/GRM03) for matching components.

Location	Value	Murata PN
	2.5nH	LQP03TG2N5B02

3) Antenna S11/VSWR



	2400 MHz	2440 MHz	2480 MHz
S11 (dB)	-6.79	-10.04	-9.15
VSWR	2.68	1.91	2.06

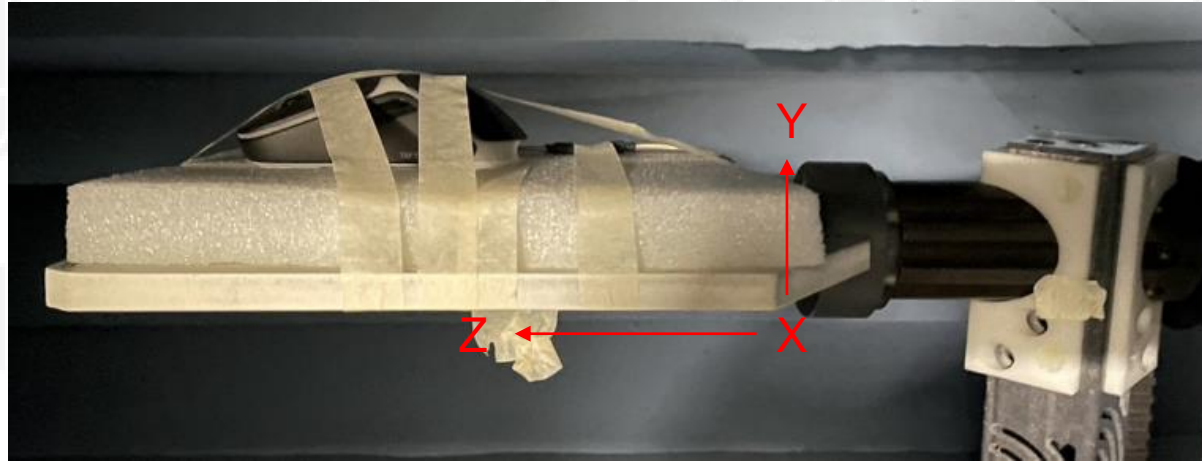
Note:

Start Freq.= 2GHz, Stop Freq.= 3GHz, Mark point= 2.4GHz, 2.44GHz, 2.48GHz

4) DUT setting

DUT Setting

Example



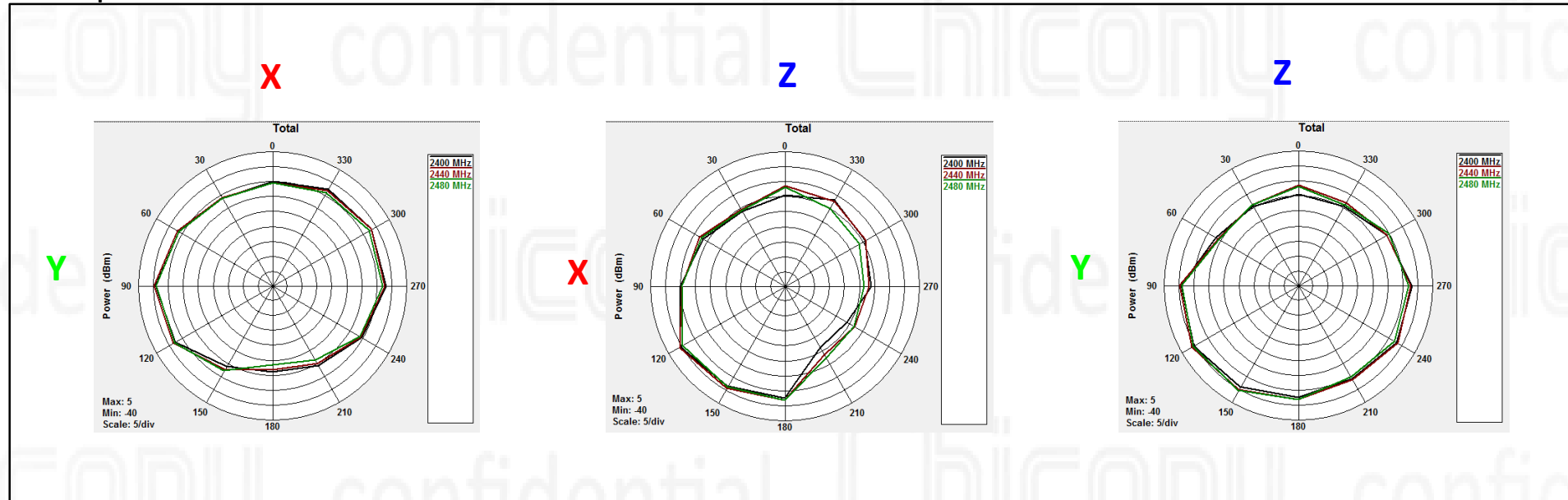
Note:

Please provide photos during testing

5) 2D & 3D pattern

2D Gain pattern

Example



Phi Polarization	XY Plane		XZ Plane		YZ Plane	
Frequency (MHz)	Peak Gain (dBi)	Avg. Gain (dBi)	Peak Gain (dBi)	Avg. Gain (dBi)	Peak Gain (dBi)	Avg. Gain (dBi)
2400MHz	-0.84	-4.07	0.21	-5.56	0.33	-3.34
2440MHz	-0.41	-4.02	0.62	-4.95	1.00	-2.82
2480MHz	-1.05	-4.54	-0.57	-5.68	0.48	-3.21

2D Pattern setting : Max=5 dB, Min=-40 dB, Step=5 dB

Thank You

This document and the information contained in this document are confidential and privileged, and are the sole property of Chiicony Co. Ltd., its subsidiaries and its affiliates (together referred to as "CHICONY"). No expressed or implied license is made or given to the recipient of this document. Without CHICONY's prior written permission, any form of reproduction, dissemination, copying, disclosure, modification, reverse engineering, distribution or publication of this document, in whole or in part, is strictly prohibited.