

3D Antenna Measurement Summary Report

REPORT NO.: W7L-P24030007OT01 R1

**PLATFORM
MANUFACTURER:** Shenzhen Linkiing Technology Co.,Limited

PLATFORM NAME: Bluetooth Module

ANTENNA TYPE: PCB Antenna

TESTED DATE: 2024.03.19

ISSUED: 2024.05.22

APPLICANT: Shenzhen Linkiing Technology Co.,Limited

ADDRESS : Floor 2, Building 5, Lihe Industrial Area, 1055 SongBai Road, Xili Town, Nanshan District, Shenzhen, China

ISSUED BY : BV 7Layers Communications Technology (Shenzhen) Co., Ltd.

ADDRESS : Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan district, Shenzhen, P.R.C

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RELEASE CONTROL RECORD

REPORT NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P24030007OT01	Original release	2024.04.12
W7L-P24030007OT01 R1	Delete testing setup photo and EUT photos	2024.05.22

Table of Contents

GENERAL INFORMATION	3
1. Test Equipment List	4
2. Measurement Uncertainty	4
3. Characteristics of antenna	5



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GENERAL INFORMATION

APPLICANT:	Shenzhen Linkiing Technology Co.,Limited
MANUFACTURER:	Shenzhen Linkiing Technology Co.,Limited
MODEL NO.:	LK8720PA
HARDWARE VERSION:	V2.2
SOFTWARE VERSION:	46

Test Standard: ANSI/IEEE Std. 149 1979.

PREPARED BY : Leon Guo , **DATE :** 2024.05.22
Leon Guo / Engineer

APPROVED BY : Luke Lu , **DATE :** 2024.05.22
Luke Lu / Manager

1. Test Equipment List

TYPE OF EQUIPMENT	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DUE DATE
Network Analyzer	E5071C	MY46214638	2025.04.27
OTA Chamber	ETS AMS8500	N/A	N/A
RF Switch	ETS EMCenter	N/A	N/A
Measurement Antenna	ETS 3164-06	N/A	N/A

2. Measurement Uncertainty

Expanded Uncertainty for Measurement (k=2 or 95% Confidence Level) at Passive antenna test over frequency range 780 – 2200MHz is +/- 1.52 dB.

3. Characteristics of antenna

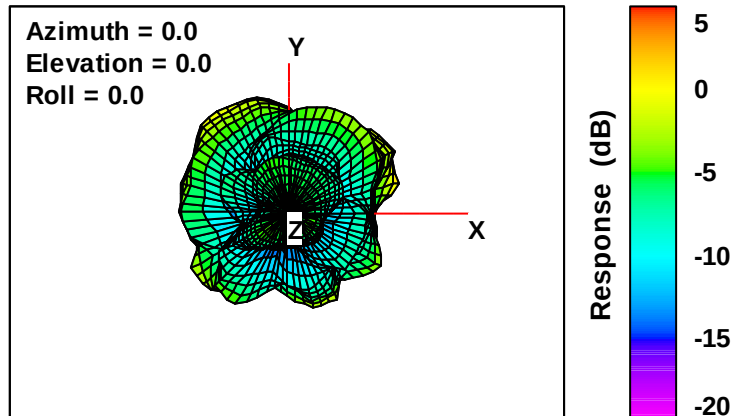
3.1. 3D Antenna Gain-Free Space

Frequency (MHz)	Directivity (dBi)	Efficiency (dB)	Efficiency (%)	Gain (dBi)
2400	7.60	-3.73	42.35	3.87
2410	7.68	-4.15	38.42	3.52
2420	7.72	-4.18	38.16	3.54
2430	7.80	-4.38	36.52	3.42
2440	7.79	-4.52	35.34	3.27
2450	7.80	-4.65	34.29	3.16
2460	7.84	-4.94	32.06	2.90
2470	7.84	-4.96	31.88	2.88
2480	7.80	-5.16	30.45	2.63
2490	7.82	-5.42	28.71	2.40
2500	7.94	-5.97	25.28	1.97

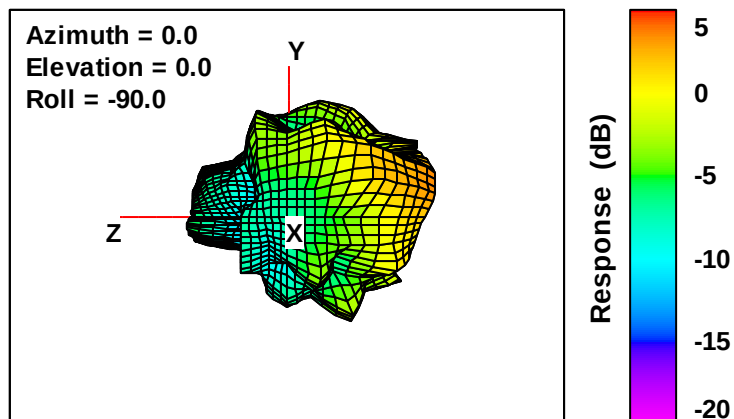
3.2. Antenna Pattern

2400MHz

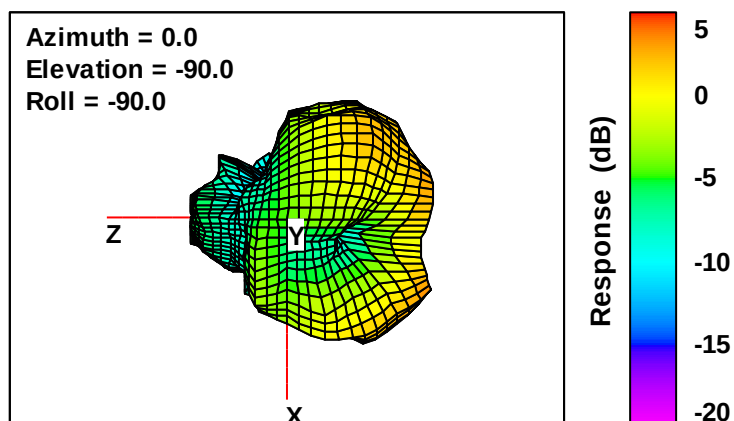
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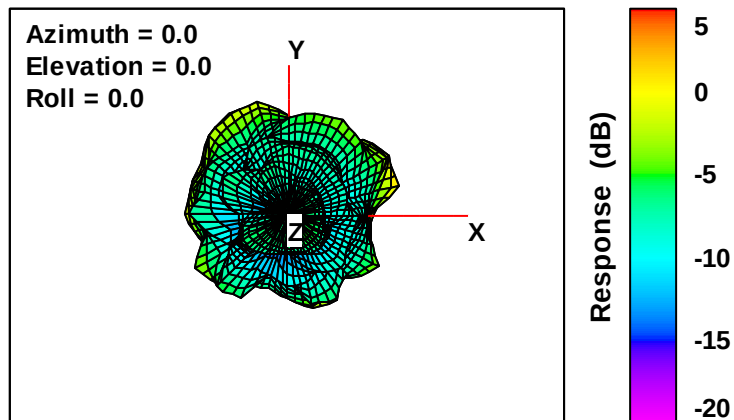


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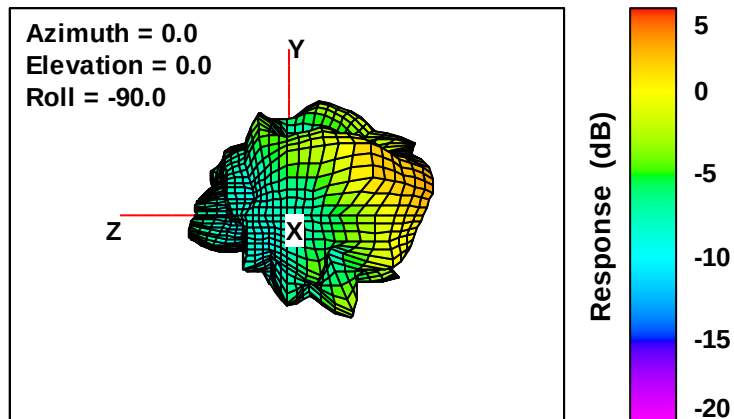


2440MHz

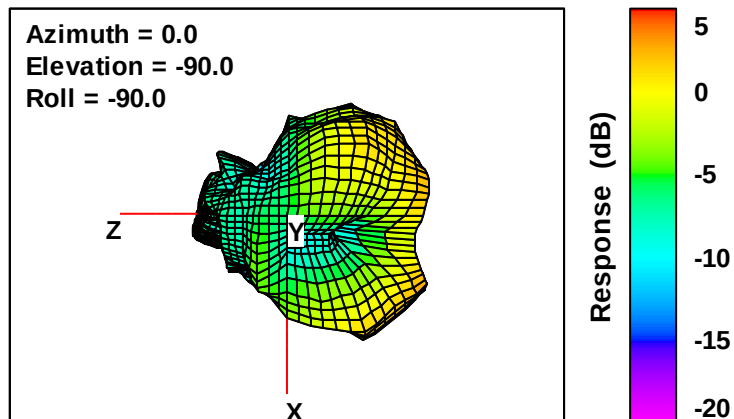
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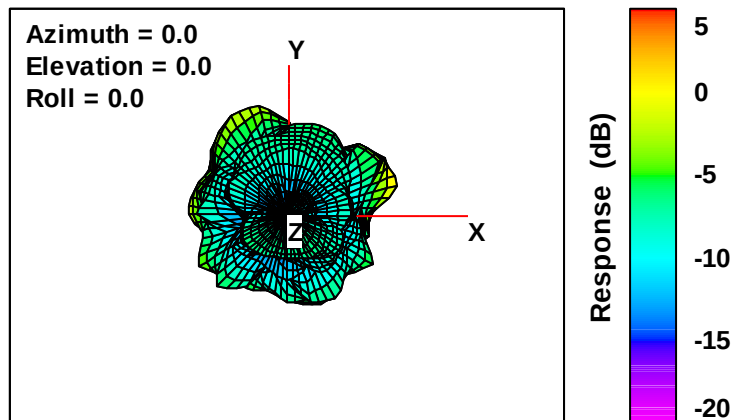


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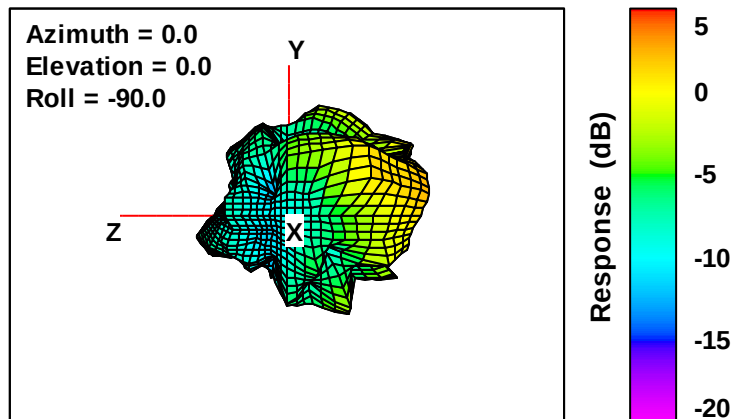


2480MHz

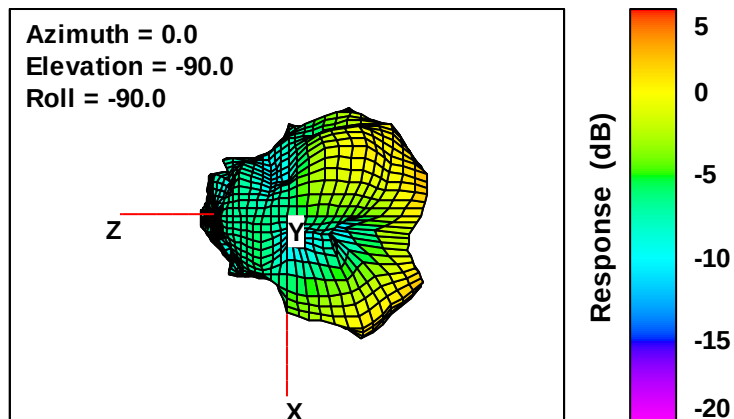
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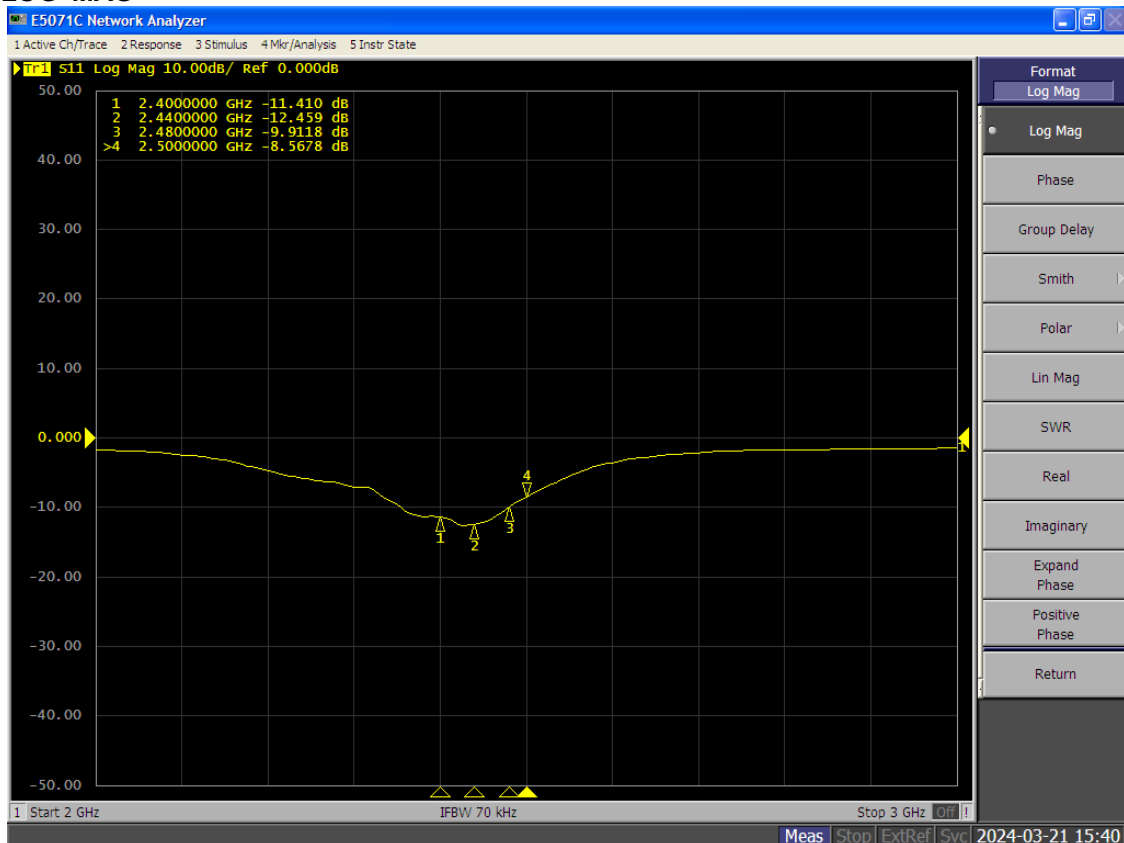
Total





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3.3. LOG MAG



3.4. SWR

