

3D Antenna Measurement Summary Report

REPORT NO.: W7L-P24050012OT01 R1

**PLATFORM
MANUFACTURER:** Hangzhou Yaguan Technology Co., LTD

PLATFORM NAME: Bluetooth Module

ANTENNA TYPE: PCB Antenna

TESTED DATE: 2021.05.28

ISSUED: 2024.06.14

APPLICANT: Hangzhou Yaguan Technology Co., LTD

ADDRESS : R901-2, 9F/T4 US Center, European and American Financial City, Yuhang District, Hangzhou, Zhejiang

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

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RELEASE CONTROL RECORD

REPORT NO.	REASON FOR CHANGE	DATE ISSUED
W7L- P24050012OT01	Original release	2024.06.01
W7L-P24050012OT01 R1	Delete testing setup photo and EUT photos	2024.06.14

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GENERAL INFORMATION

APPLICANT:	Hangzhou Yaguan Technology Co., LTD
MANUFACTURER:	Hangzhou Yaguan Technology Co., LTD
MODEL NO.:	YGB-T2LB

Test Standard: ANSI/IEEE Std. 149 2021.

PREPARED BY : Leon Guo , **DATE :** 2024.06.14
Leon Guo / Engineer

APPROVED BY : Luke Lu , **DATE :** 2024.06.14
Luke Lu / Manager

1. Test Equipment List

TYPE OF EQUIPMENT	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DUE DATE
Network Analyzer	E5071C	MY46214638	2025.04.28
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

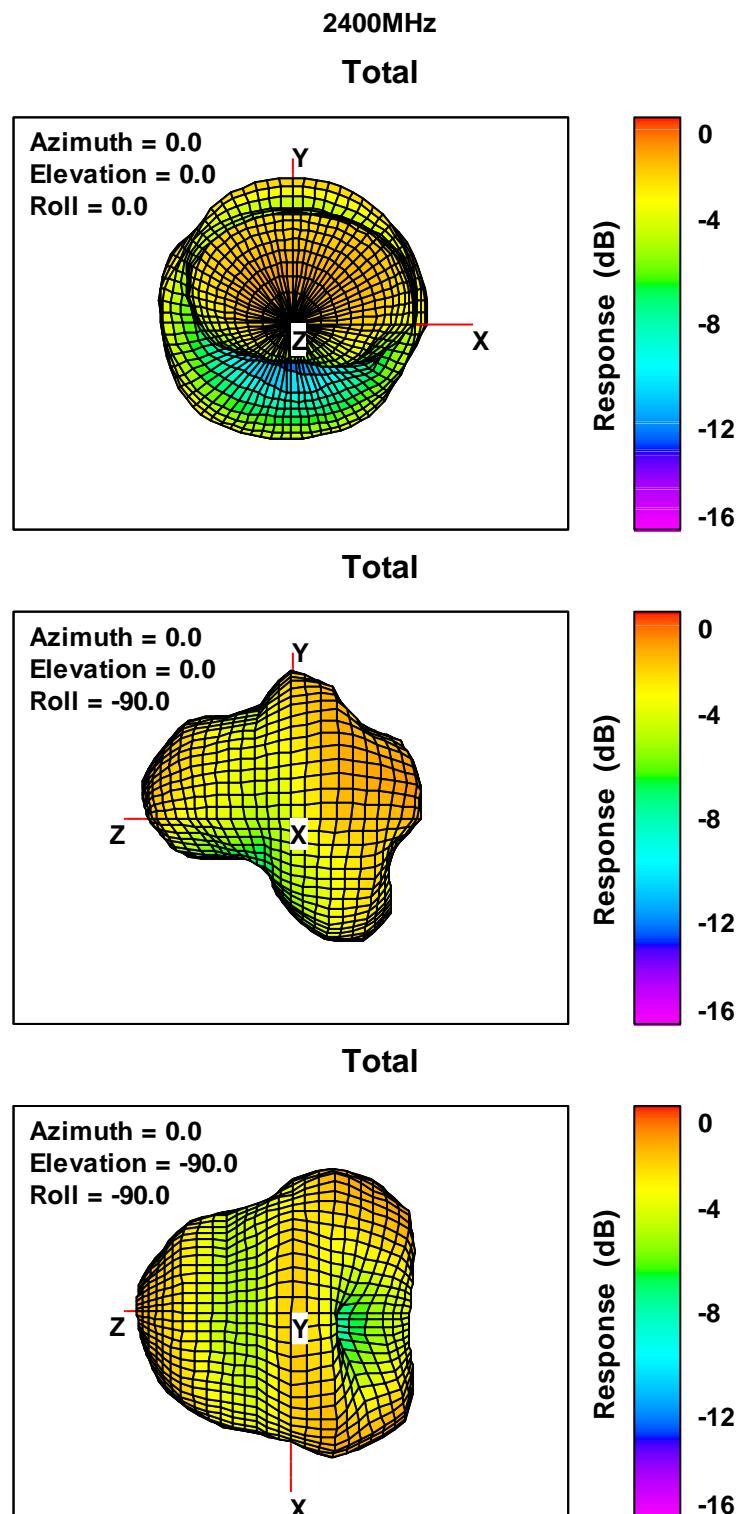
Expanded Uncertainty for Measurement (k=2 or 95% Confidence Level) at Passive antenna test over frequency range 780 – 2200MHz is +/- 1.52 dB.

3. Characteristics of antenna

3.1. 3D Antenna Gain-Free Space

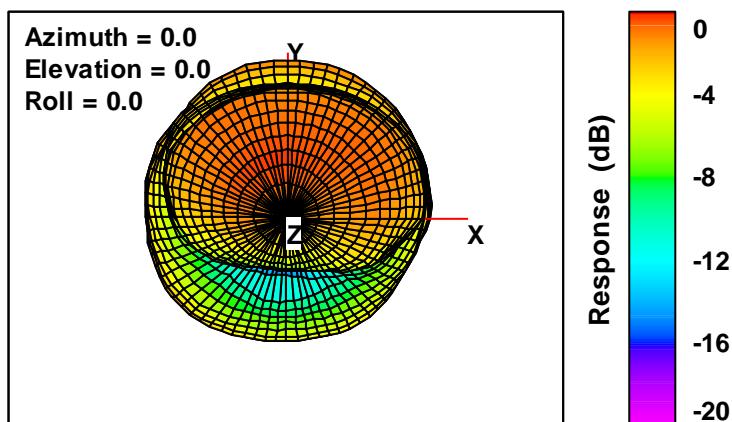
Frequency (MHz)	Directivity (dBi)	Efficiency (dB)	Efficiency (%)	Gain (dBi)
2400	2.95	-3.93	40.49	-0.98
2410	2.96	-3.74	42.24	-0.78
2420	3.09	-3.49	44.73	-0.40
2430	3.05	-3.29	46.84	-0.24
2440	3.02	-3.08	49.24	-0.06
2450	3.02	-2.95	50.74	0.07
2460	3.00	-2.96	50.62	0.04
2470	3.07	-3.06	49.41	0.01
2480	3.18	-3.28	46.94	-0.11
2490	3.16	-3.72	42.48	-0.56
2500	3.23	-3.88	40.88	-0.65

3.2. Antenna Pattern

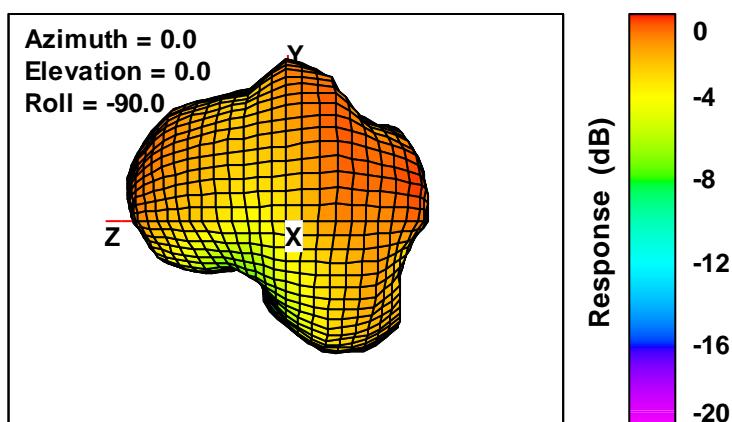


2440MHz

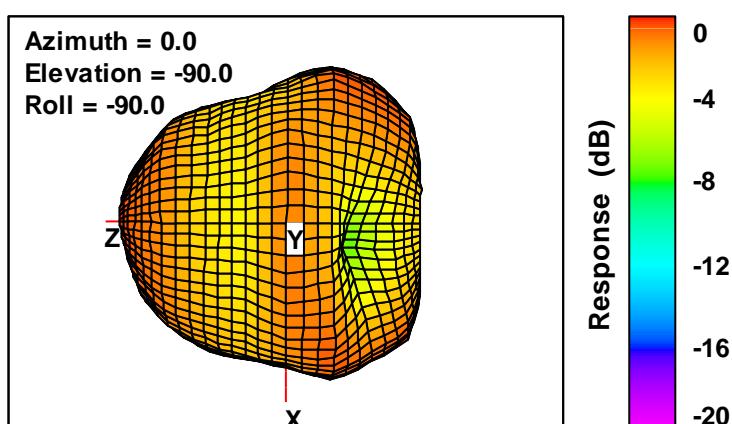
Total



Total

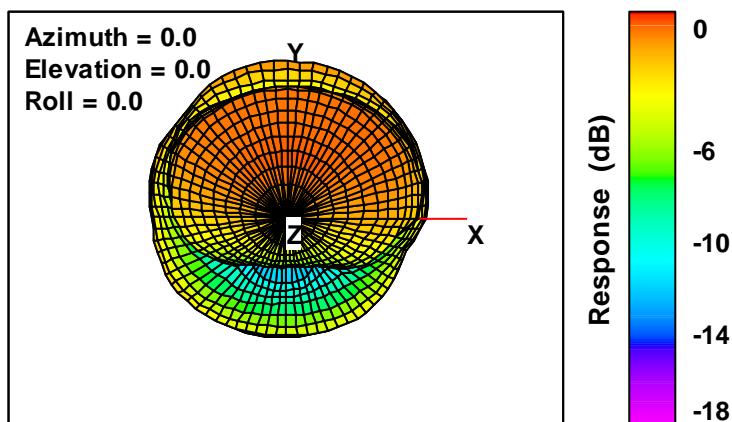


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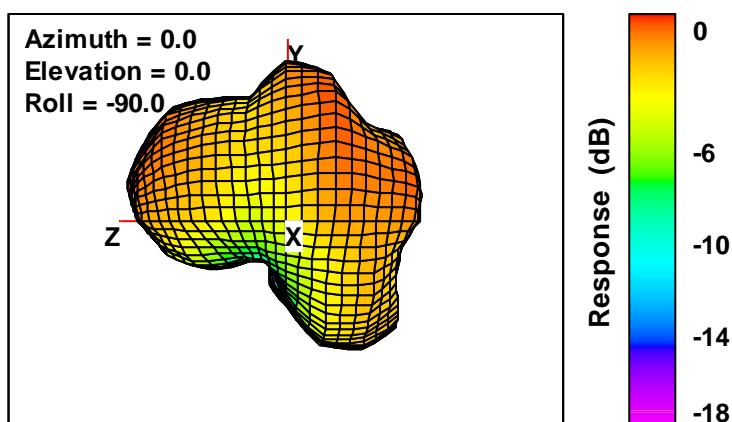


2480MHz

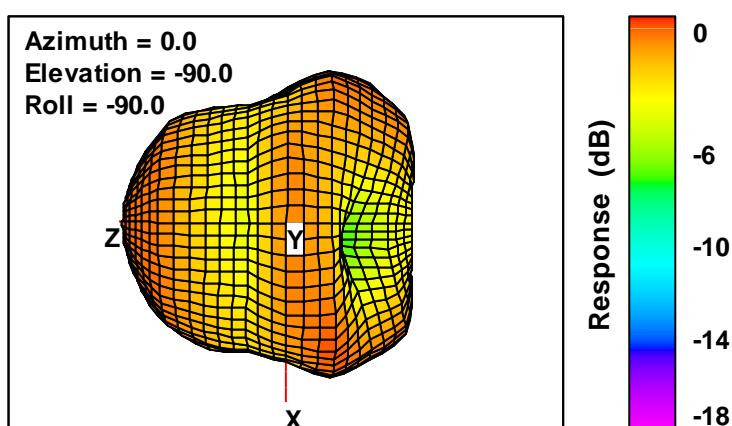
Total



Total



Total



3.3. S11

