Applicant	G.Tech Technology Ltd.	**Date**	2025/3/21	**Temperature**	24.8℃
Product	Dongle	**Tested by**	Carl	**Humidity**	40%
Model	RG64-B	**Frequency range**	2404-2480MHZ	**Antenna Type**	On board antenna
Testing laboratory	TUV Rheinland(Shenzhen) Co.,Ltd.				
Test Site Location	No.362, Huangguan Middle Road, Guanghu Street, Longhua District, Shenzhen, 518110, P.R. China				
Manufacturer	GOFORTUNE TECHNOLOGIES INDUSTRIAL CO LTD				
Test specification:	3GPP TS 34.114; 3GPP TR 37.902; 3GPP TR 25.914; IEEE Std 149-1979 Test procedure for antennas				

Testing Condition

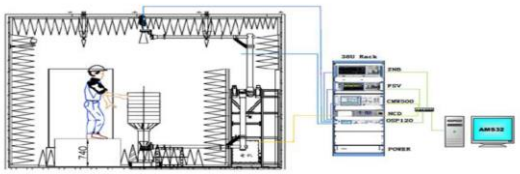
Environment Parameter	Ambient Pressure	Temperature	Voltage	Relative Humidity
Normal Temperature, Normal Voltage (NTNV)	100 to 102 KPa	23.6˚C	AC 220V	59.5%

List of Equipment

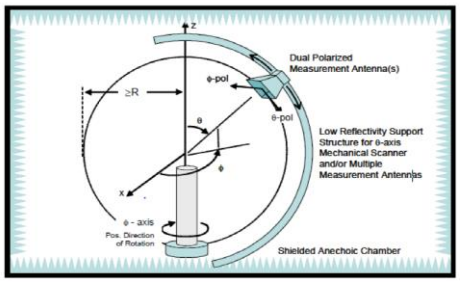
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Vector Network Analyzer	R&S	ZNB 8	107040	2024.08.09	1 year
Signal and Spectrum Analyzer	R&S	FSV 7	103665	2024.08.09	1 year
Open swtich and control platform	R&S	OSP120	102054	N/A	N/A
Positioner Controller	R&S	NCD	Jan-67	N/A	N/A
Test antenna	R&S	TC-TA18	101198	N/A	N/A

Test set up

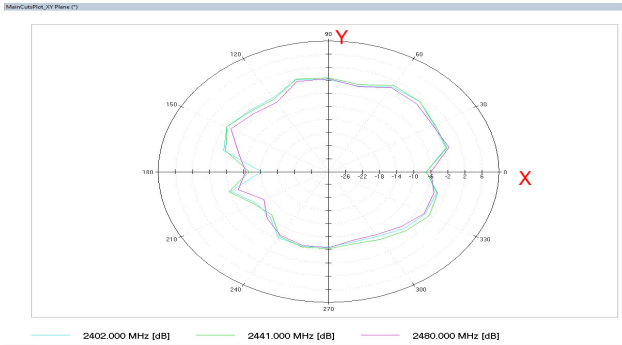
Measurements are performed in a R&S TS8991 3D fully anechoic test system. The test system includes a high-performance RF-shielded, rectangular anechoic chamber, a Distributed-axes system and R&S AMS32 data acquisition and analysis software.

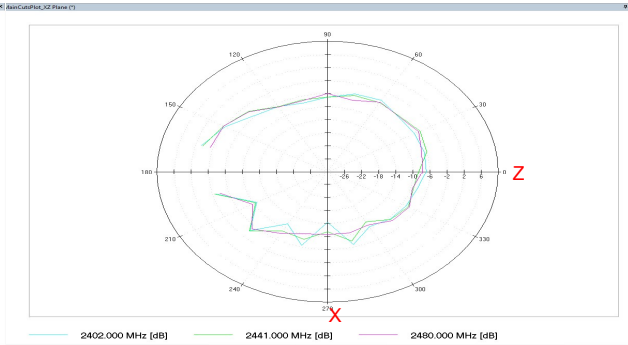


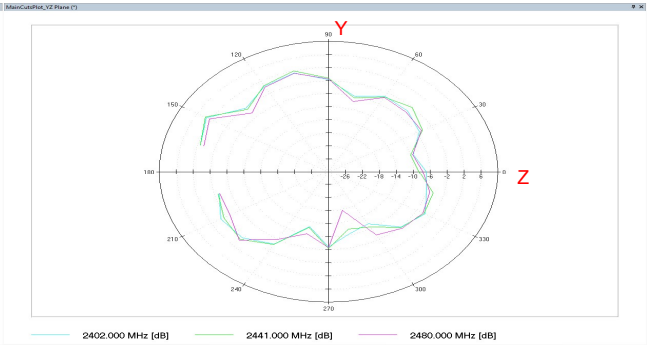
Typical Setup for R&S TS8991

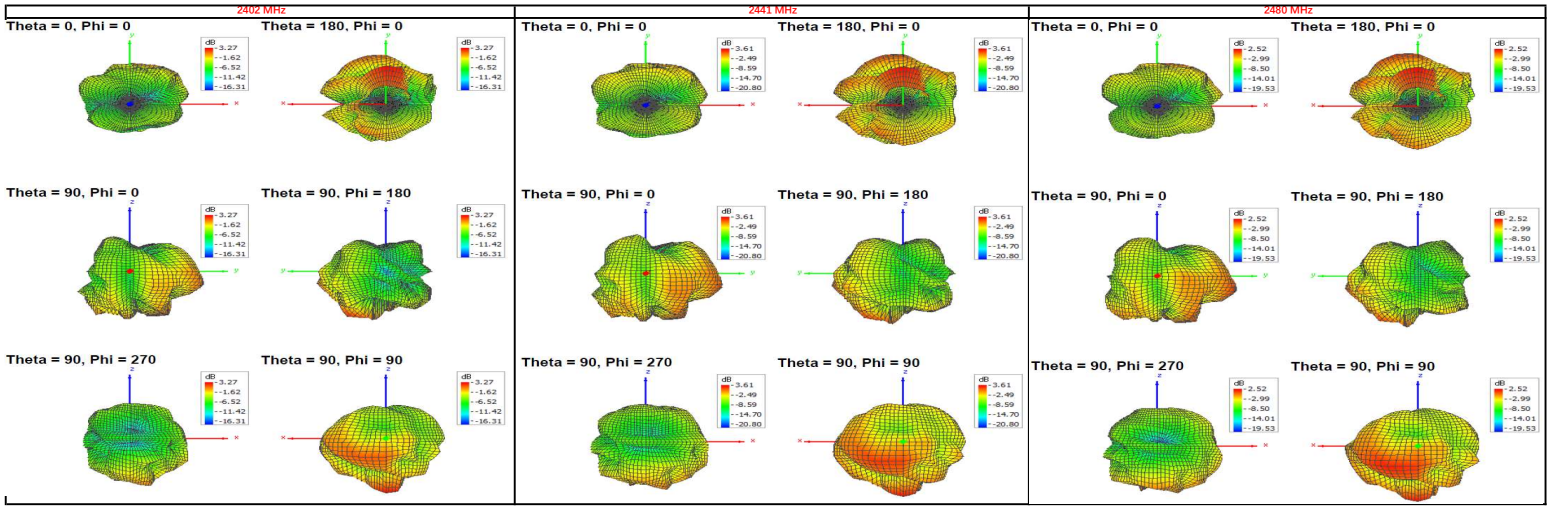
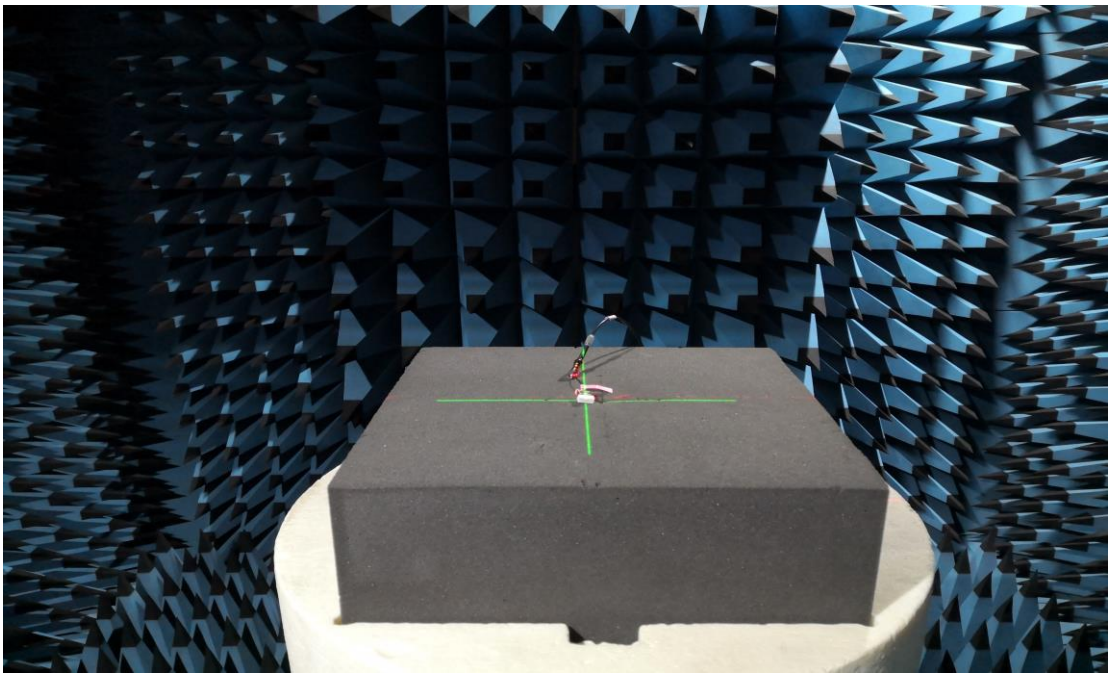


RG64-B			
Frequency	**Efficiency(dB)**	**Efficiency(%)**	**Peak Gain**
2400.00	-3.73	42.37	3.27
2402.00	-3.72	42.43	3.27
2405.00	-3.74	42.31	3.27
2410.00	-3.45	45.23	3.53
2415.00	-3.65	43.18	3.36
2420.00	-3.55	44.11	3.41
2425.00	-3.74	42.27	3.22
2430.00	-3.64	43.23	3.40
2435.00	-3.64	43.29	3.39
2440.00	-3.43	45.41	3.54
2441.00	-3.38	45.95	3.61
2445.00	-3.39	45.83	3.53
2450.00	-3.42	45.49	3.51
2455.00	-3.42	45.45	3.41
2460.00	-3.51	44.53	3.23
2465.00	-3.67	42.91	3.10
2470.00	-3.92	40.59	2.80
2475.00	-3.80	41.66	2.93
2480.00	-4.03	39.56	2.52
2485.00	-3.96	40.20	2.55
2490.00	-4.04	39.44	2.49
2495.00	-4.12	38.71	2.38
2500.00	-4.39	36.35	2.04


Y
X
2402.000 MHz [dB]
2441.000 MHz [dB]
2480.000 MHz [dB]


Z
X
2402.000 MHz [dB]
2441.000 MHz [dB]
2480.000 MHz [dB]


Y
Z
2402.000 MHz [dB]
2441.000 MHz [dB]
2480.000 MHz [dB]


2402 MHz
2441 MHz
2480 MHz
Theta = 0, Phi = 0
Theta = 180, Phi = 0
Theta = 90, Phi = 0
Theta = 90, Phi = 180
Theta = 90, Phi = 270
Theta = 90, Phi = 90