

OTA TEST REPORT

Applicant JetBlack Cycling PTY LTD
Product SMART TRAINER
Model JETBLACK VICTORY
Report No. Y2411A1763-T1V1
Issue Date March 20, 2025

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **ANSI/IEEE Std 149-2021**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.



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Version	Revision Description	Issue Date
Rev.0	Initial issue of report.	March 3, 2025
Rev.1	Updated Antenna Manufacturer on page 5.	March 20, 2025
Note: This revised report (Report No.: Y2411A1763-T1V1) supersedes and replaces the previously issued report (Report No.: Y2411A1763-T1). Please discard or destroy the previously issued report and dispose of it accordingly.		

1. Test Laboratory

1.1. Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test Facility

A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3. Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.
Address: Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City: Shanghai
Post code: 201201
Country: P. R. China
Contact: Xu Kai
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Fax: +86-021-50791141/2/3-8000
Website: <https://www.eurofins.com/electrical-and-electronics>
E-mail: Kain.Xu@cpt.eurofinscn.com

1.4. Laboratory Environment

Temperature	15°C ~ 35°C	
Relative humidity	20% ~ 80%	
Shield effect	0.7-6GHz	> 100dB
Ground resistance	<0.5Ω	

2. General Description of Equipment Under Test

2.1. Applicant and Manufacturer Information

Applicant Name	JetBlack Cycling PTY LTD
Applicant address	31 Walker Street, South Windsor, New South Wales 2756, AUSTRALIA
Manufacturer Name	JetBlack Cycling PTY LTD
Manufacturer address	31 Walker Street, South Windsor, New South Wales 2756, AUSTRALIA

2.2. General Information

EUT Description	
Product Name:	SMART TRAINER
Model	JETBLACK VICTORY
HW Version:	3.9
SW Version:	4.1
Antenna Type:	Chip Antenna
Antenna Manufacturer:	Pulse Electronics. Inc.
Test Frequency:	2402MHz ~ 2480MHz
Note: The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.	

2.3. Test Date

The test is performed from February 10, 2025 to February 13, 2025.

2.4. Received Date

The sample was received on February 8, 2025.

2.5. Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test Method: **ANSI/IEEE Std 149-2021**

3. Test Conditions

3.1. Test Configuration

Great-Circle-Cut method is used to measure the antenna 3D GAIN of EUT in OTA qualified anechoic chamber. Equipment Under Test (EUT) geometry centre vertical projection at the centre of platform, the distance from EUT to measurement antenna is 5m.

3.2. Test Measurement

Spherical coordinate system

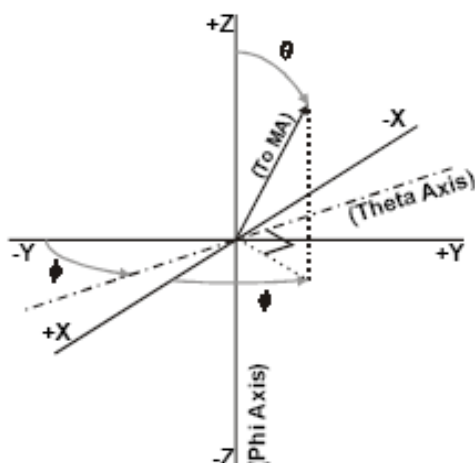
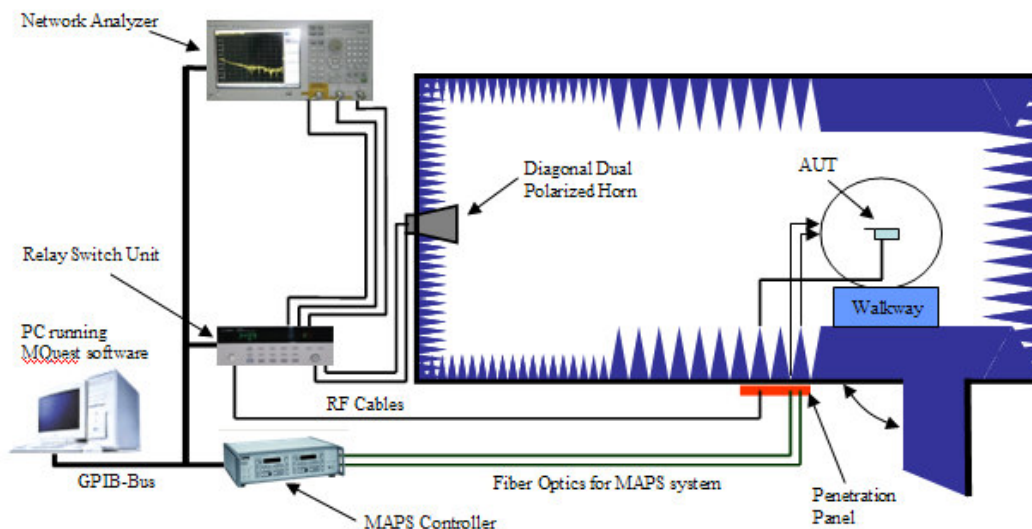


Figure 1 Test coordinate system

Note: Theta is from 0~180 degree. Phi is from 0~360. Rotate the EUT and record the Data, the step of rotation is 15 degree.

Test Setup



4. Test Results

4.1. Gain and Efficiency

Test Item	Test State	Frequency (MHz)	Efficiency (%)	Gain (dBi)
Gain	FS	2402	22.41	-0.81
		2403	22.16	-0.82
		2404	21.93	-1.23
		2405	21.38	-1.21
		2406	20.88	-1.28
		2407	20.35	-1.28
		2408	20.21	-1.24
		2409	19.58	-1.55
		2410	19.45	-1.76
		2411	19.23	-1.53
		2412	18.88	-1.66
		2413	18.37	-1.76
		2414	18.00	-1.59
		2415	17.78	-2.17
		2416	17.47	-2.15
		2417	16.94	-1.91
		2418	16.39	-2.20
		2419	16.16	-2.20
		2420	15.69	-2.25
		2421	15.36	-2.31
		2422	14.79	-2.77
		2423	14.62	-2.65
		2424	14.17	-2.84
		2425	13.64	-2.95
		2426	13.25	-3.28
		2427	12.86	-3.73
		2428	12.47	-3.52
		2429	12.42	-3.76
		2430	12.03	-3.83
		2431	11.74	-3.80
		2432	11.62	-4.28
		2433	11.46	-4.39
		2434	11.37	-4.11
		2435	11.30	-4.33
		2436	11.27	-4.08
		2437	11.21	-4.05
		2438	11.05	-3.81

	2439	10.98	-4.24
	2440	11.09	-4.23
	2441	10.89	-4.13
	2442	10.81	-4.24
	2443	10.76	-4.15
	2444	10.64	-4.58
	2445	10.57	-4.16
	2446	10.65	-4.44
	2447	10.34	-4.38
	2448	10.30	-4.61
	2449	10.36	-4.72
	2450	10.17	-4.86
	2451	10.15	-4.52
	2452	10.09	-4.94
	2453	10.06	-4.83
	2454	9.91	-4.78
	2455	9.94	-4.94
	2456	9.97	-4.61
	2457	9.96	-5.13
	2458	9.87	-5.17
	2459	9.83	-4.90
	2460	9.68	-5.15
	2461	9.65	-5.00
	2462	9.61	-5.15
	2463	9.54	-5.22
	2464	9.39	-5.14
	2465	9.36	-4.90
	2466	9.38	-4.92
	2467	9.12	-5.20
	2468	8.96	-5.38
	2469	8.96	-5.53
	2470	8.84	-5.48
	2471	8.66	-5.11
	2472	8.73	-5.43
	2473	8.58	-5.85
	2474	8.56	-5.90
	2475	8.47	-5.87
	2476	8.43	-5.79
	2477	8.42	-5.72
	2478	8.45	-5.92
	2479	8.32	-5.68
	2480	8.28	-5.75

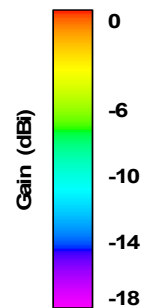
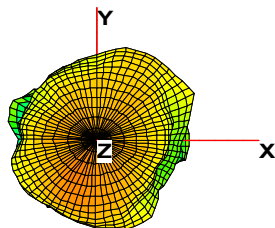
5. Equipment List

Type of Equipment	Manufacturer	Model	SN	Version	Calibration Date	Expiration Time
Anechoic Chamber	ETS	AMS-8500	CT-001157-1219	/	2020-05-17	2025-05-16
Test Software	ETS	EMQuest™	1464	REV 1.17	/	/
EMCenter_Switch Control System	ETS	7006/7001	00059957/MY42001152	/	/	/
Diagonal Dual Polarized Horn	ETS	ETS 3164-04	00062743	/	2024-03-09	2029-03-08
Network Analyzer	Keysight	E5071B	MY42404014	REV.A.0 6.50	2025-01-06	2026-01-05

ANNEX A: 3-D Pattern Plots

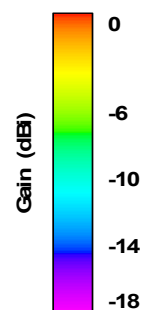
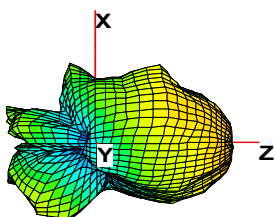
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Roll = 0.0



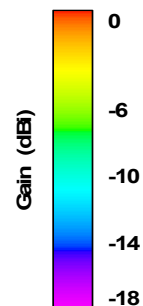
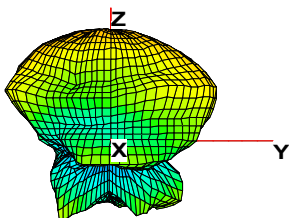
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Roll = 90.0



Total

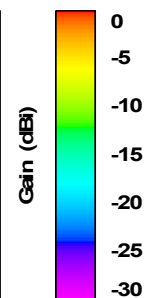
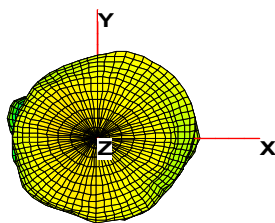
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2402MHz

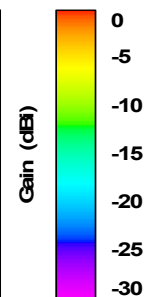
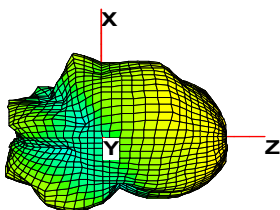
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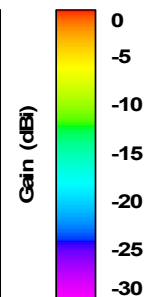
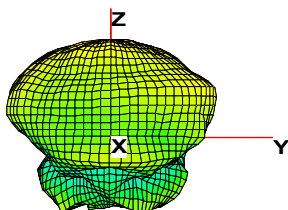
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Elevation = -90.0
Roll = 90.0



Total

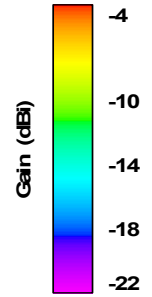
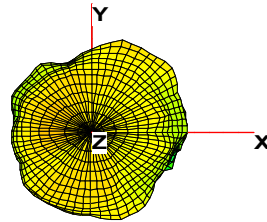
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Roll = -90.0



2442MHz

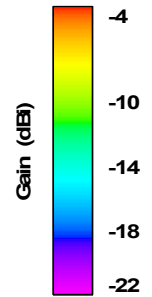
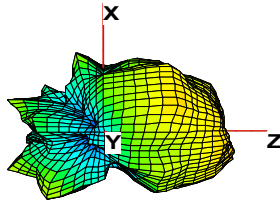
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Azimuth = 0.0
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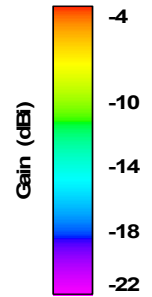
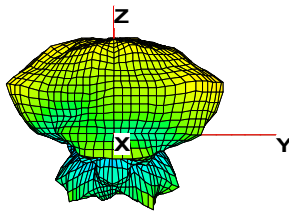
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Elevation = -90.0
Roll = 90.0



Total

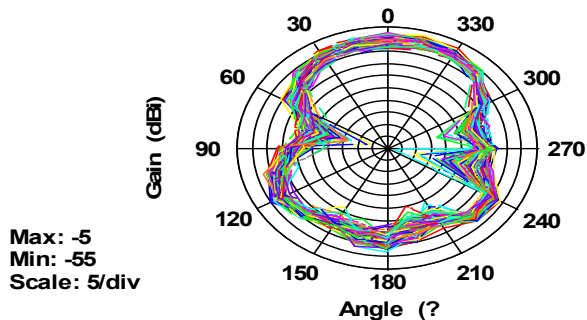
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Roll = -90.0



2480MHz

ANNEX B: 2-D Pattern Plots

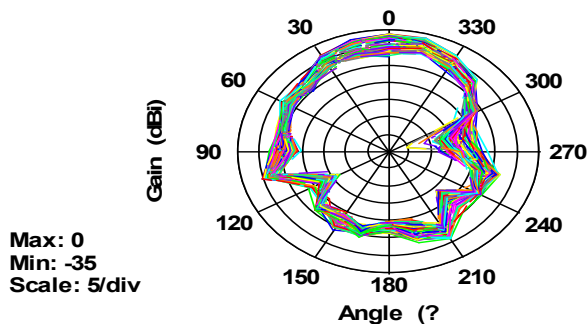
Cut1



2402 MHz	2412 MHz	2422 MHz	2432 MHz	2442 MHz
2403 MHz	2413 MHz	2423 MHz	2433 MHz	2443 MHz
2404 MHz	2414 MHz	2424 MHz	2434 MHz	2444 MHz
2405 MHz	2415 MHz	2425 MHz	2435 MHz	2445 MHz
2406 MHz	2416 MHz	2426 MHz	2436 MHz	2446 MHz
2407 MHz	2417 MHz	2427 MHz	2437 MHz	2447 MHz
2408 MHz	2418 MHz	2428 MHz	2438 MHz	2448 MHz
2409 MHz	2419 MHz	2429 MHz	2439 MHz	2449 MHz
2410 MHz	2420 MHz	2430 MHz	2440 MHz	2450 MHz
2411 MHz	2421 MHz	2431 MHz	2441 MHz	2451 MHz

Horizontal X-Y

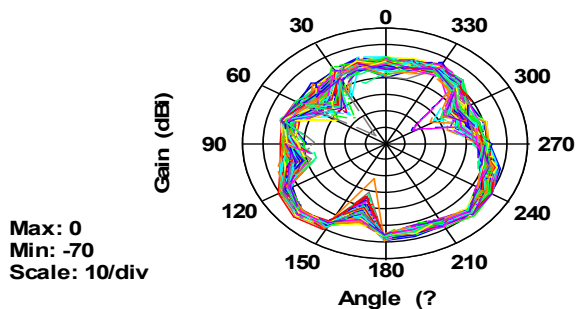
Cut2



2402 MHz	2412 MHz	2422 MHz	2432 MHz	2442 MHz
2403 MHz	2413 MHz	2423 MHz	2433 MHz	2443 MHz
2404 MHz	2414 MHz	2424 MHz	2434 MHz	2444 MHz
2405 MHz	2415 MHz	2425 MHz	2435 MHz	2445 MHz
2406 MHz	2416 MHz	2426 MHz	2436 MHz	2446 MHz
2407 MHz	2417 MHz	2427 MHz	2437 MHz	2447 MHz
2408 MHz	2418 MHz	2428 MHz	2438 MHz	2448 MHz
2409 MHz	2419 MHz	2429 MHz	2439 MHz	2449 MHz
2410 MHz	2420 MHz	2430 MHz	2440 MHz	2450 MHz
2411 MHz	2421 MHz	2431 MHz	2441 MHz	2451 MHz

Horizontal X-Z

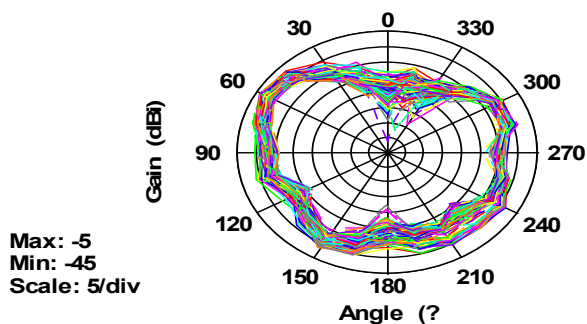
Cut3



2402 MHz	2412 MHz	2422 MHz	2432 MHz	2442 MHz
2403 MHz	2413 MHz	2423 MHz	2433 MHz	2443 MHz
2404 MHz	2414 MHz	2424 MHz	2434 MHz	2444 MHz
2405 MHz	2415 MHz	2425 MHz	2435 MHz	2445 MHz
2406 MHz	2416 MHz	2426 MHz	2436 MHz	2446 MHz
2407 MHz	2417 MHz	2427 MHz	2437 MHz	2447 MHz
2408 MHz	2418 MHz	2428 MHz	2438 MHz	2448 MHz
2409 MHz	2419 MHz	2429 MHz	2439 MHz	2449 MHz
2410 MHz	2420 MHz	2430 MHz	2440 MHz	2450 MHz
2411 MHz	2421 MHz	2431 MHz	2441 MHz	2451 MHz

Horizontal Y-Z

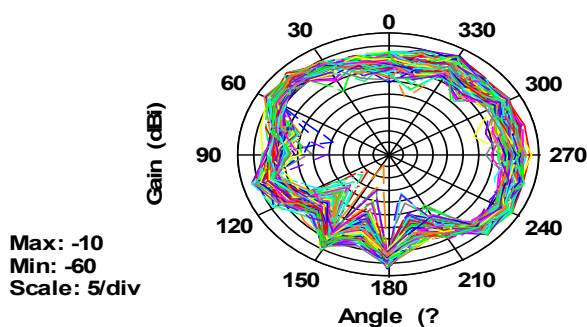
Cut1



2402 MHz	2412 MHz	2422 MHz	2432 MHz	2442 MHz
2403 MHz	2413 MHz	2423 MHz	2433 MHz	2443 MHz
2404 MHz	2414 MHz	2424 MHz	2434 MHz	2444 MHz
2405 MHz	2415 MHz	2425 MHz	2435 MHz	2445 MHz
2406 MHz	2416 MHz	2426 MHz	2436 MHz	2446 MHz
2407 MHz	2417 MHz	2427 MHz	2437 MHz	2447 MHz
2408 MHz	2418 MHz	2428 MHz	2438 MHz	2448 MHz
2409 MHz	2419 MHz	2429 MHz	2439 MHz	2449 MHz
2410 MHz	2420 MHz	2430 MHz	2440 MHz	2450 MHz
2411 MHz	2421 MHz	2431 MHz	2441 MHz	2451 MHz

Vertical X-Y

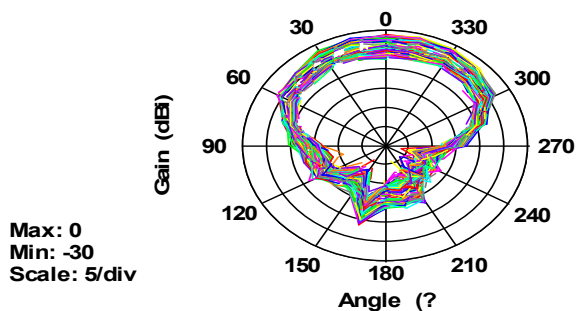
Cut2



2402 MHz	2412 MHz	2422 MHz	2432 MHz	2442 MHz
2403 MHz	2413 MHz	2423 MHz	2433 MHz	2443 MHz
2404 MHz	2414 MHz	2424 MHz	2434 MHz	2444 MHz
2405 MHz	2415 MHz	2425 MHz	2435 MHz	2445 MHz
2406 MHz	2416 MHz	2426 MHz	2436 MHz	2446 MHz
2407 MHz	2417 MHz	2427 MHz	2437 MHz	2447 MHz
2408 MHz	2418 MHz	2428 MHz	2438 MHz	2448 MHz
2409 MHz	2419 MHz	2429 MHz	2439 MHz	2449 MHz
2410 MHz	2420 MHz	2430 MHz	2440 MHz	2450 MHz
2411 MHz	2421 MHz	2431 MHz	2441 MHz	2451 MHz

Vertical X-Z

Cut3

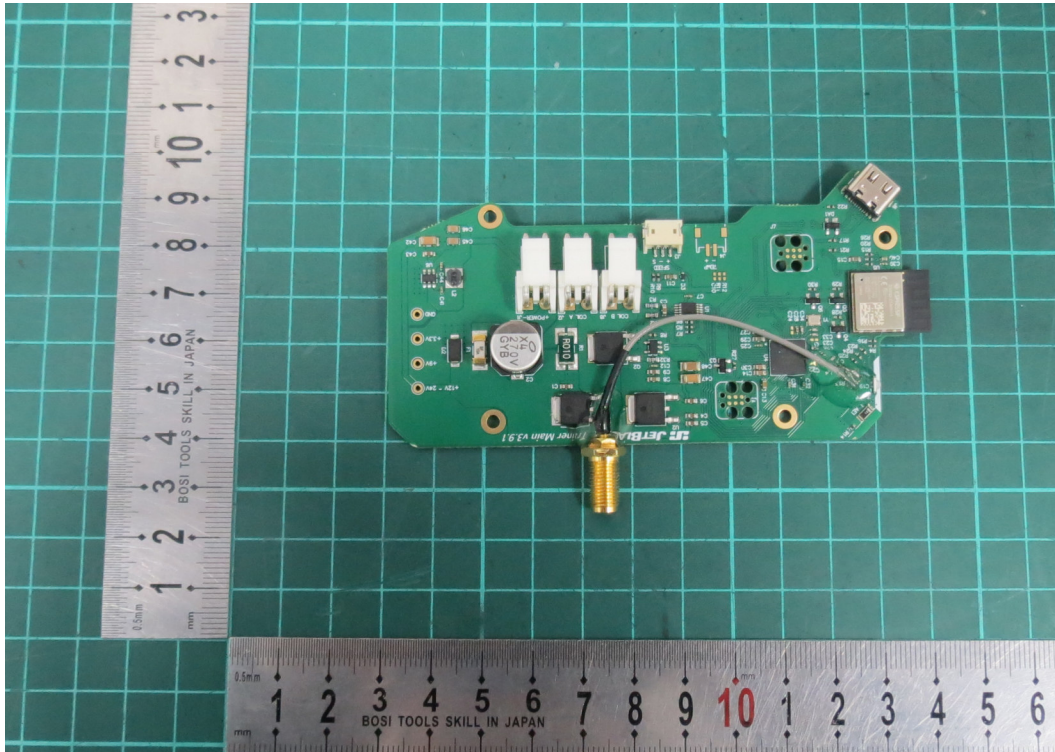


2402 MHz	2412 MHz	2422 MHz	2432 MHz	2442 MHz
2403 MHz	2413 MHz	2423 MHz	2433 MHz	2443 MHz
2404 MHz	2414 MHz	2424 MHz	2434 MHz	2444 MHz
2405 MHz	2415 MHz	2425 MHz	2435 MHz	2445 MHz
2406 MHz	2416 MHz	2426 MHz	2436 MHz	2446 MHz
2407 MHz	2417 MHz	2427 MHz	2437 MHz	2447 MHz
2408 MHz	2418 MHz	2428 MHz	2438 MHz	2448 MHz
2409 MHz	2419 MHz	2429 MHz	2439 MHz	2449 MHz
2410 MHz	2420 MHz	2430 MHz	2440 MHz	2450 MHz
2411 MHz	2421 MHz	2431 MHz	2441 MHz	2451 MHz

Vertical Y-Z

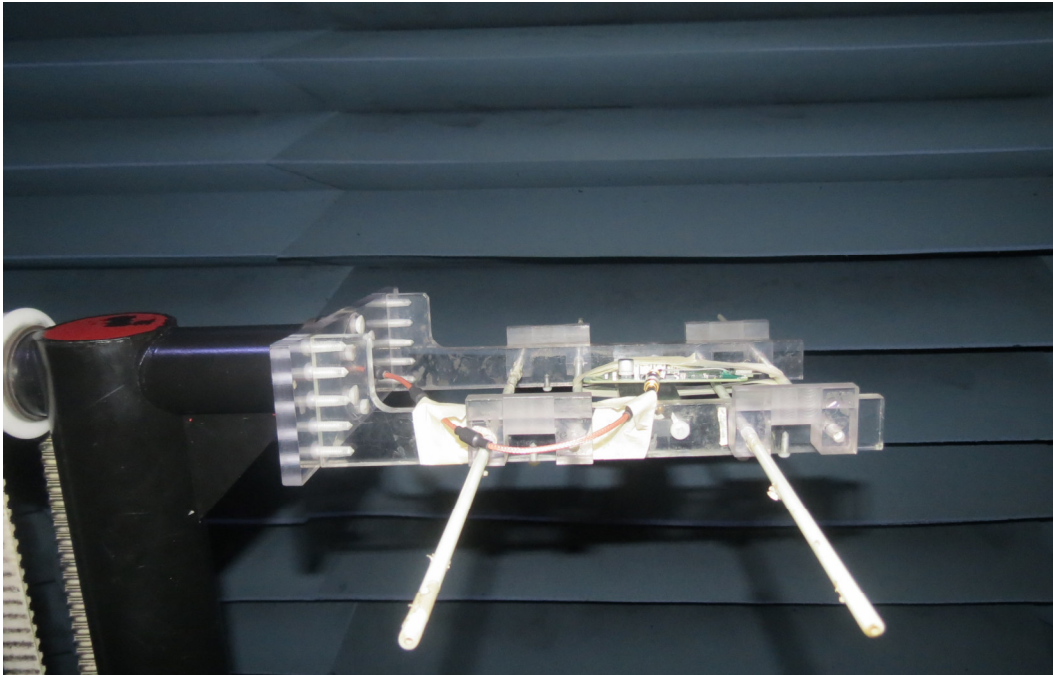
ANNEX C: THE EUT APPEARANCE AND TEST CONFIGURATION

C.1 EUT Appearance



Picture 1 Constituents of EUT

C.2 Test Configuration



Picture 2 Test Setup

*****END OF REPORT *****