

TEST REPORT

Product Name : Evoluent VMD Antenna
Model/Type reference : VMD
Report Number : JXT250314003
Date of Issue : Mar 14, 2025
Test Standards : GB/T 9410-2008
ANSI/IEEE Std149-1979

Compiled by: Eason Reviewed by: Acron
Approved by: Frazer Date: Mar 14, 2025

Prepared by:
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Version

Version No.	Date	Description
00	Mar 14, 2025	Original

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1. General Information

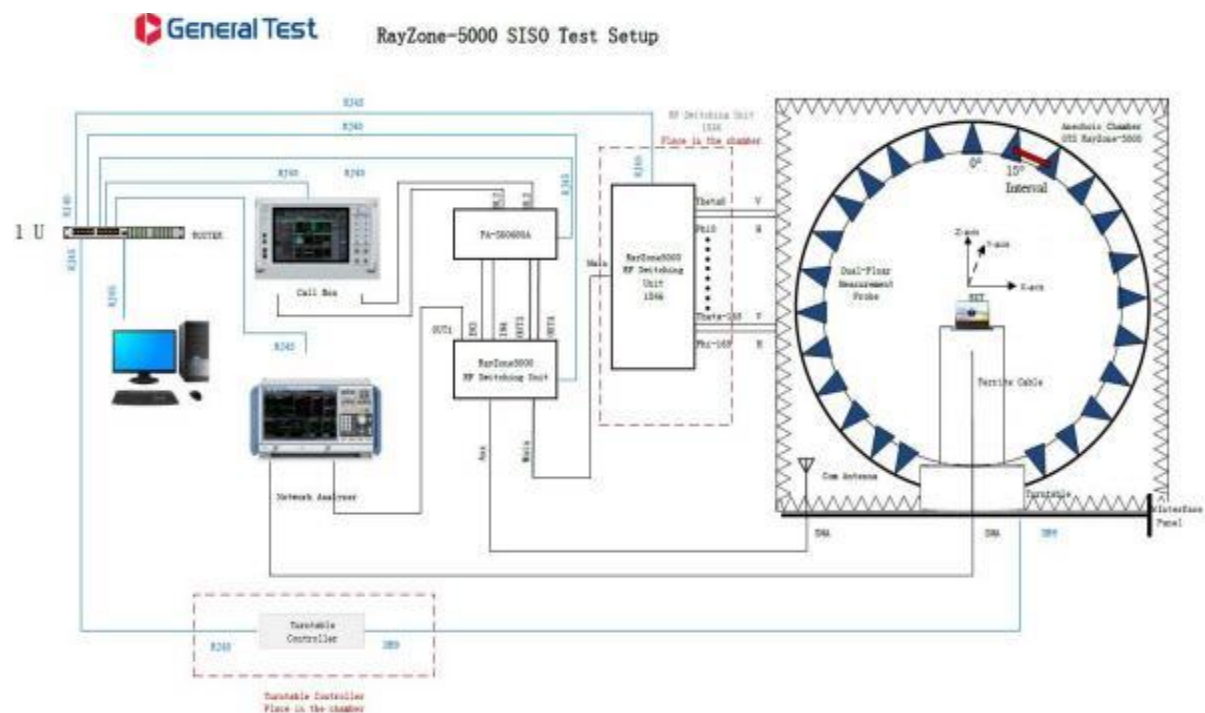
1.1 General information of testing institutions

Name	Shenzhen Jiaxin Testing Technology Service Co., Ltd
Address	Tian'an Digital City, Tian'an Chegongmiao Industrial Zone, Tian'an Community, Shatou Street, Futian District, Shenzhen

1.2 Applicant and Manufacturer

Applicant/Client Name	Evoluent
Applicant Address	925 Linden Ave., Unit C, South San Francisco, CA 94080 USA
Manufacturer Name	Evoluent
Manufacturer Address	925 Linden Ave., Unit C, South San Francisco, CA 94080 USA

1.3 Testing principle



1.4 Test equipment

Equipment	Model No.	Serial No.	Manufacturer	Calibration date	Next calibration date
OTA Test System	RayZone-5000	A0011	GTS	2023.8.14	2025.8.13
Network Analyzer	E5071C	C0017	KEYSIGHT	2024.5.11	2025.5.10

1.5 Test environment

Temperature	24.5°C
Humidity	83%RH
Pressure	100.09kPa

1.6 Statement

- (1) The test results in the report are only applicable to the tested samples and the tested samples work under the environment described in the report.
- (2) Only Shenzhen Jiabin Testing Technology Service Co., Ltd. have the right to modify the report, and the modification information shall be annotated in the revision form.
- (3) Any objection to this report shall be raised within 30 days after formal confirmation of the report.
- (4) This report is invalid if there is any evidence that the sample information provided is falsified.
- (5) The report is invalid without the signature of the auditor and approver.

2.Sample Information

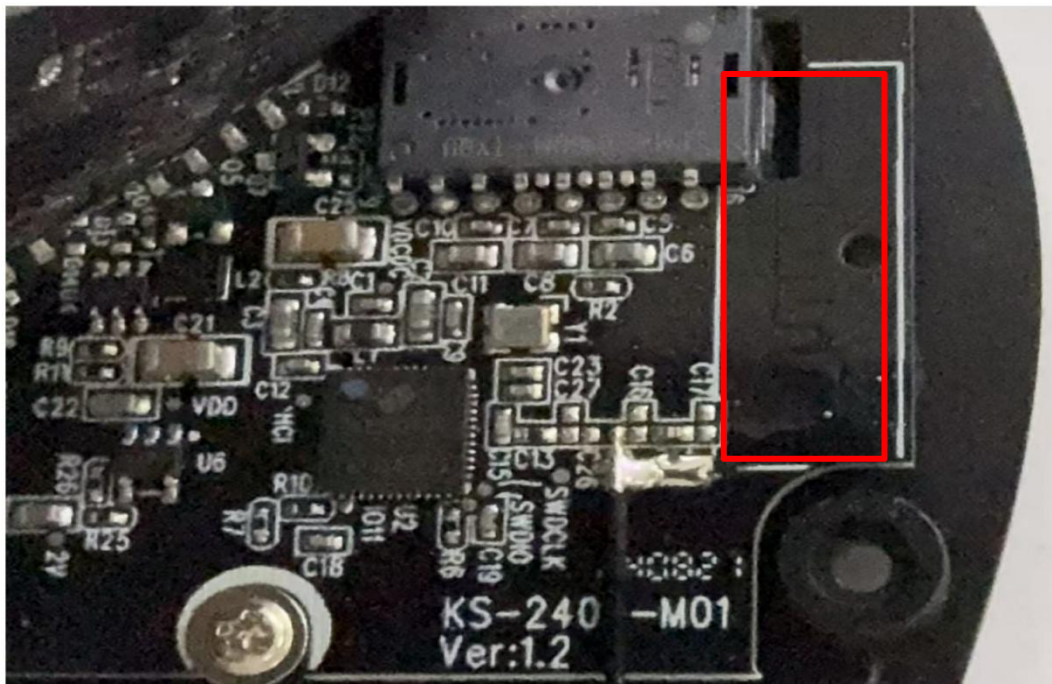
2.1 Description of EUT(S)

Test Item	VSWR;Antenna gain; Efficiency; Radiation pattern
Frequency Range	2400-2500MHz
Received Date	Mar 13, 2025
Test Date	Mar 13, 2025

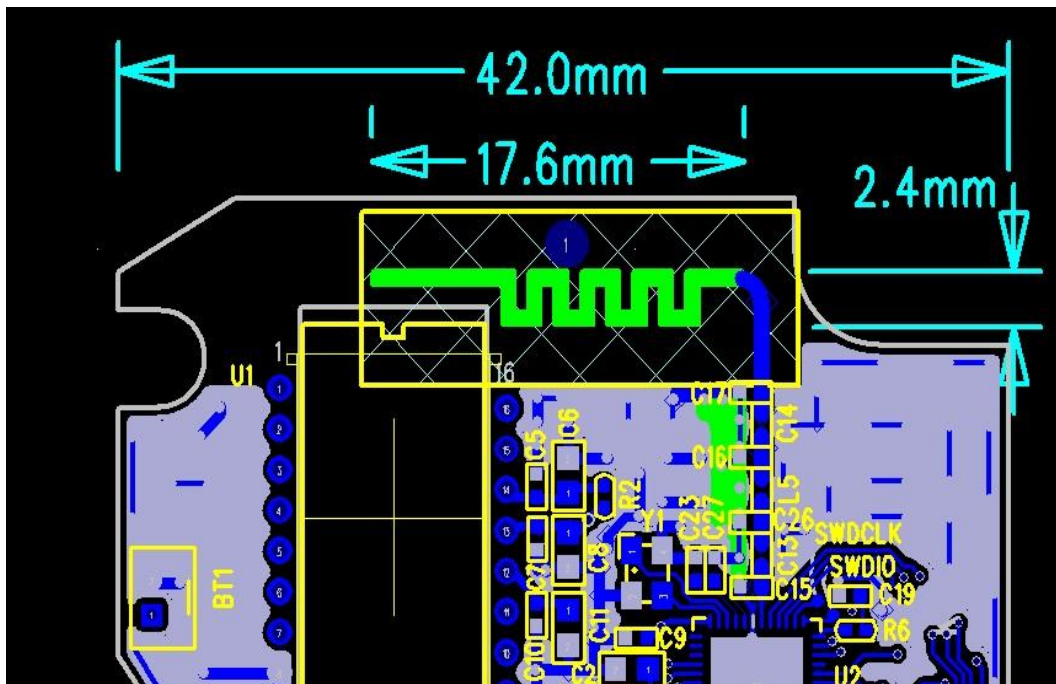
2.2 EUT appearance



View Of Product-01

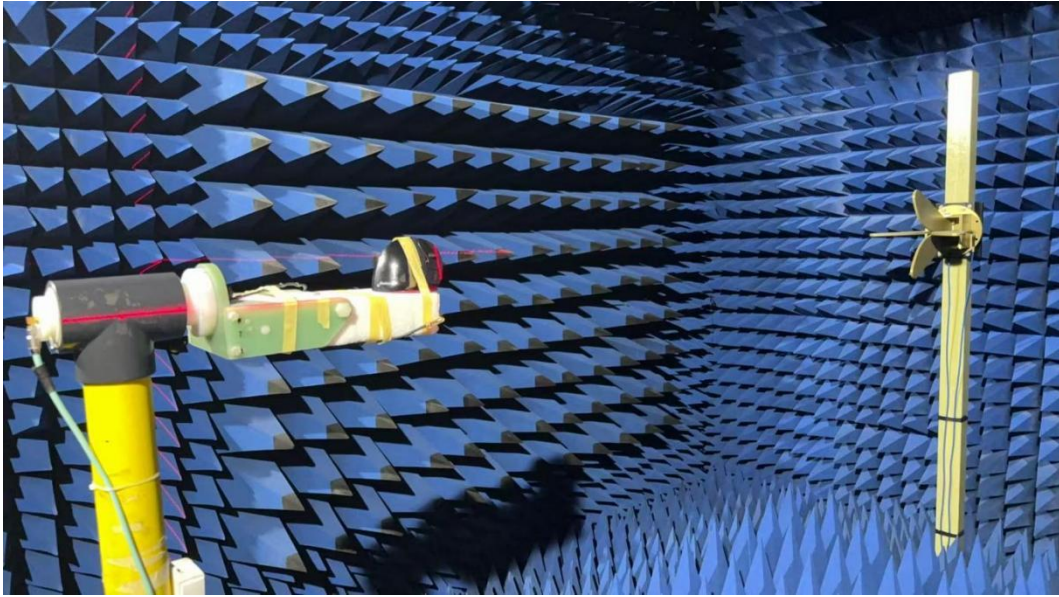


View Of Product-02



Antenna Dimensions

2.3 EUT setup photo of free space OTA testing



3. Test Results

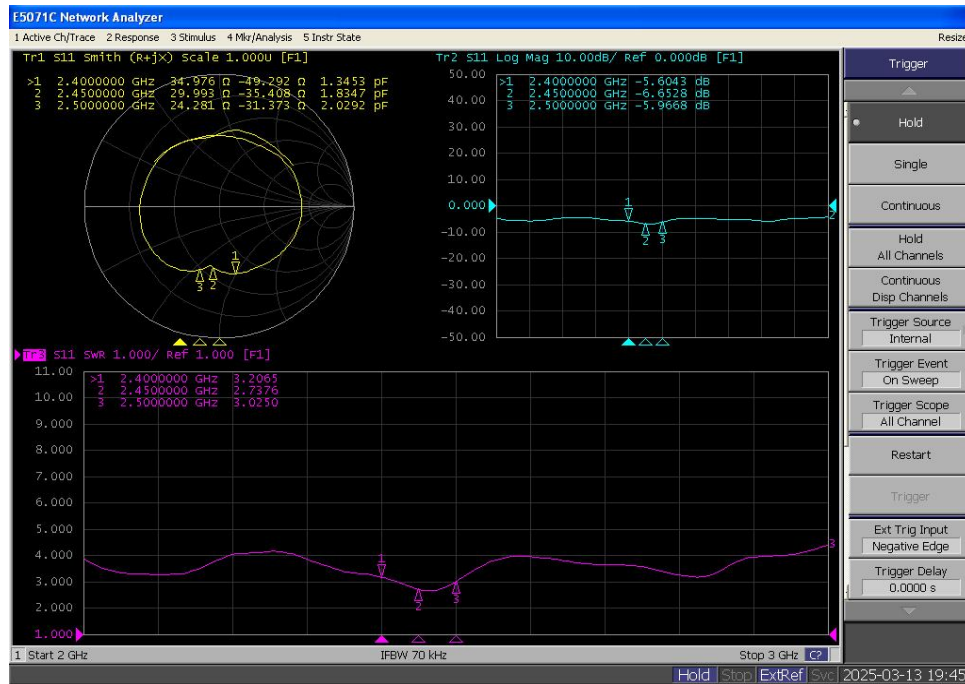
3.1 Test uncertainty

The uncertainty was calculated on the basis of the GUM published by ISO, using the inclusion factor of $K=2$ and the 95% confidence level to express the extended uncertainty.

Item	Uncertainty
VSWR	± 0.3
Antenna gain	$\pm 0.72\text{dB}$
Radiation efficiency	$\pm 0.72\text{dB}$

3.2 Test data

3.2.1 VSWR parameters



3.2.2 VSWR data

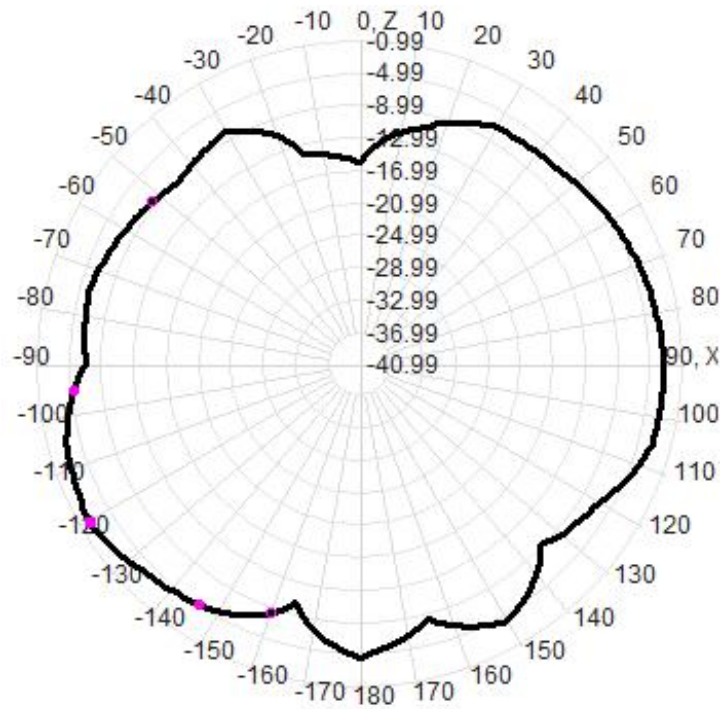
Frequency/MHz	2400	2450	2500
VSWR	3.21	2.74	3.03

3.2.3 Typical free space efficiency and gain

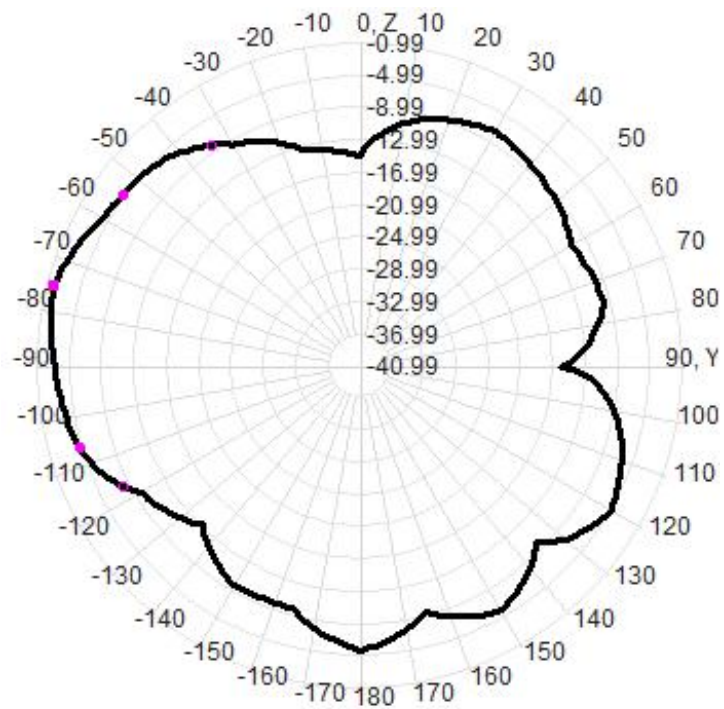
Frequency/MHz	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain/dBi	-0.08	-0.07	-0.11	-0.25	-0.54	-0.50	-0.72	-0.59	-1.08	-1.19	-2.01
Efficiency/%	27.65	28.32	28.74	28.90	28.00	27.50	26.52	25.77	25.37	23.65	22.71

3.2.4 Radiation pattern

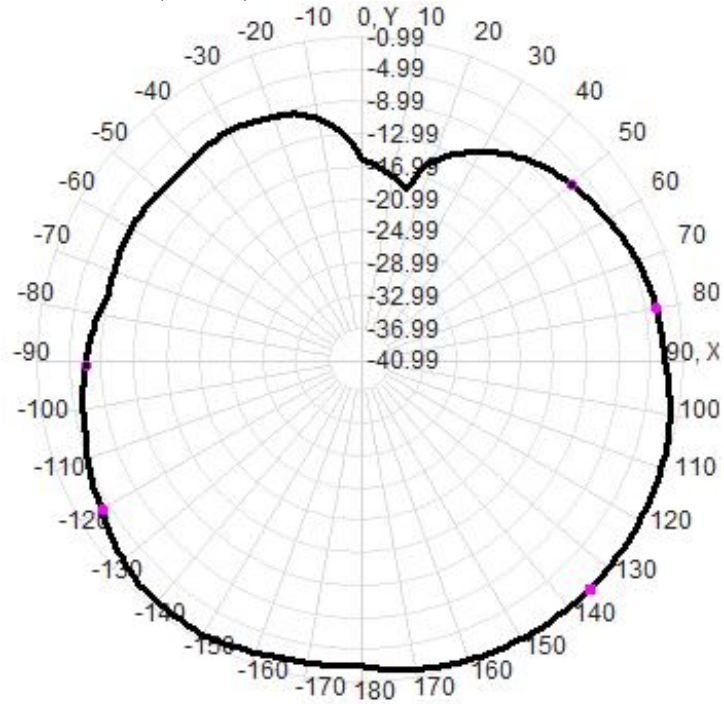
2410.0MHz Total(E1-XZ), Max= -2.37dBi



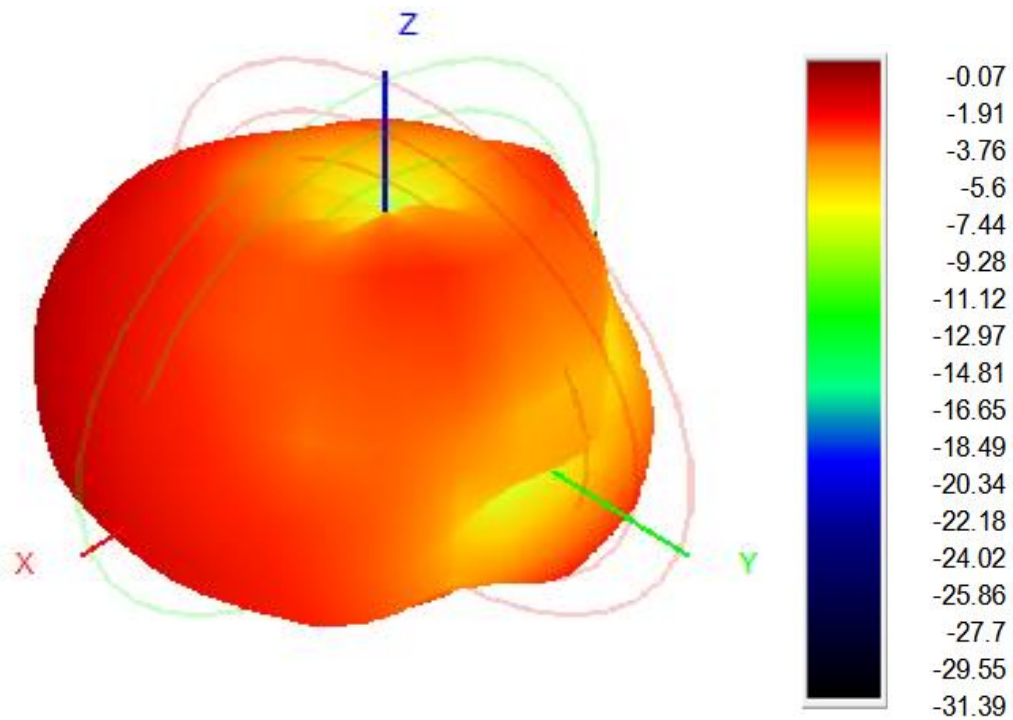
2410.0MHz Total(E2-YZ), Max= -1.84dBi



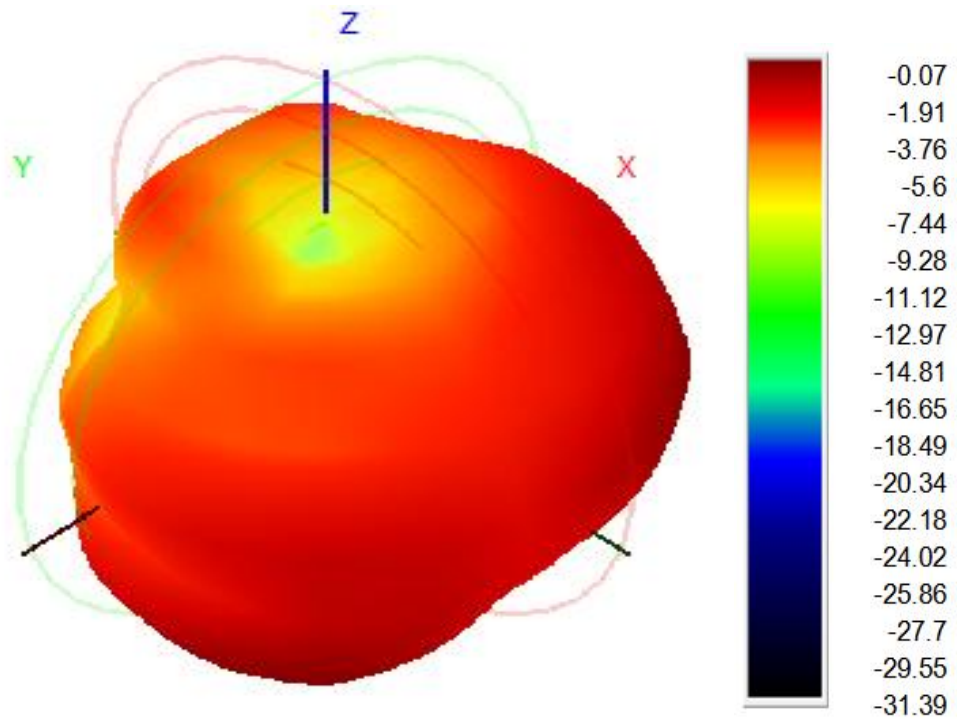
Total(H-XY), Max= -0.99dBi, CirD=18.16



2410.0MHz H+V, Eff: 28.3%



Back View



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