



# Wireless Device Over the Air Performance Data Summary

REPORT NO. : OQ1D0806  
EQUIPMENT : ESP-ANT S-H  
BRAND NAME : ESPRESSIF  
MODEL NAME : ESP32-S3-MINI-1  
DEVICE RECEIVING DATE : Nov. 16, 2021  
TEST DATE(S) : Nov. 16, 2021 ~ Nov. 16, 2021

Reviewed by:

*Feynman Liu*

Feynman Liu / Vice Manager

Approved by:

*Kevin Chu*

Kevin Chu / Manager

***Sporton International (Kunshan) Inc.***

***No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300  
People's Republic of China***



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## 1. Administration Data

### 1.1 Testing Laboratory

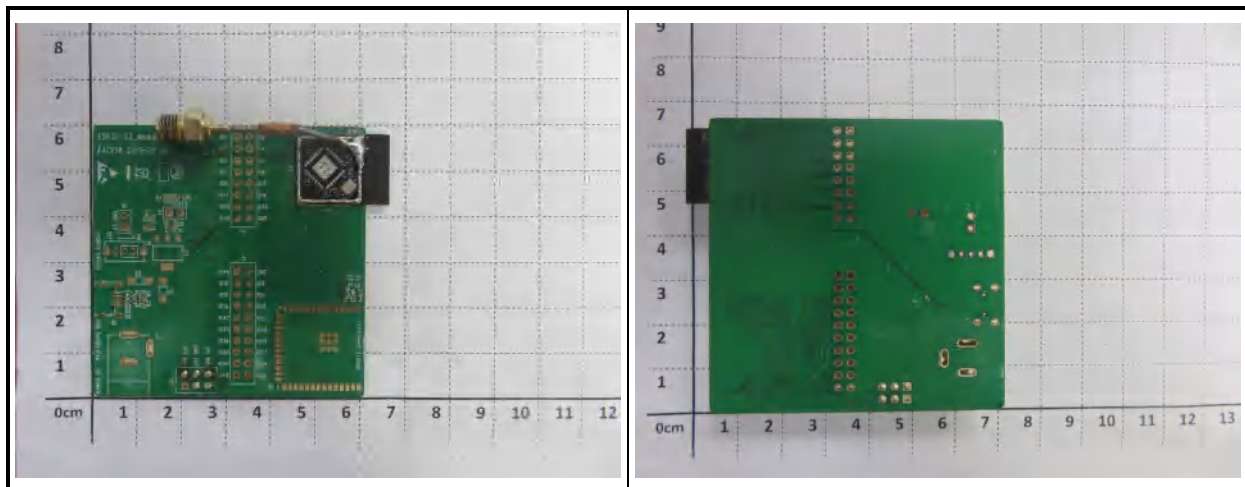
<b>Test Site</b>	Sporton International (Kunshan) Inc.
<b>Test Site Location</b>	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958
<b>Chamber</b>	<input type="checkbox"/> OTA01-KS <input type="checkbox"/> OTA02- KS <input type="checkbox"/> OTA03-KS <input type="checkbox"/> OTA04-KS <input checked="" type="checkbox"/> OTA05-KS

■: Indicates the chamber(s) used in this test report.

### 1.2 Applicant

<b>Company Name</b>	ESPRESSIF SYSTEMS (SHANGHAI) CO., LTD
<b>Address</b>	Suite 204, Block 2, 690 Bibo Road, Zhang Jiang Hi-Tech Park, Shanghai, China

## 2. Product Photo





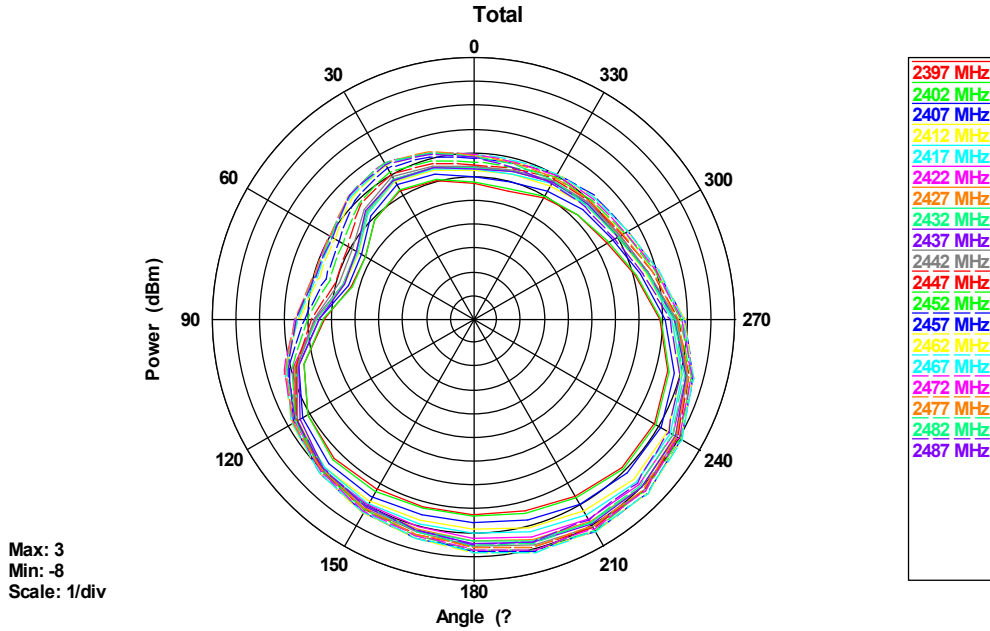
### 3. Summary of Test Results

Test / Position	Frequency (MHz)	Avg Gain (dBi)	Peak Gain (dBi)	Directivity (dBi)	Efficiency (dB)	Efficiency (%)
Free Space	2397	-1.79	3.72	5.51	-1.79	66.15
	2402	-1.74	3.69	5.43	-1.74	66.94
	2407	-1.53	3.86	5.39	-1.53	70.28
	2412	-1.32	3.99	5.31	-1.32	73.85
	2417	-1.25	3.99	5.24	-1.25	75.07
	2422	-1.17	4.00	5.17	-1.17	76.35
	2427	-1.15	3.94	5.09	-1.15	76.67
	2432	-1.18	3.87	5.05	-1.18	76.21
	2437	-1.22	3.79	5.01	-1.22	75.58
	2442	-1.15	3.92	5.06	-1.15	76.82
	2447	-1.07	3.99	5.06	-1.07	78.12
	2452	-0.99	4.17	5.16	-0.99	79.65
	2457	-0.88	4.31	5.19	-0.88	81.71
	2462	-0.82	4.43	5.25	-0.82	82.72
	2467	-0.82	4.49	5.31	-0.82	82.81
	2472	-0.86	4.54	5.40	-0.86	82.07
	2477	-0.95	4.47	5.42	-0.95	80.40
	2482	-1.04	4.42	5.45	-1.04	78.77
2487	-1.12	4.40	5.51	-1.12	77.31	

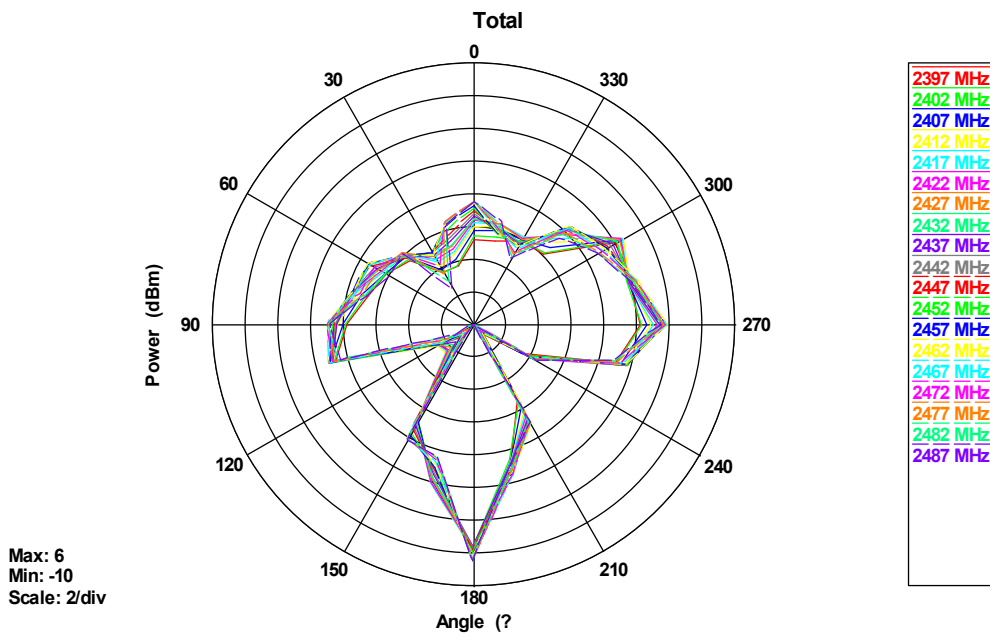


### 4. FS Pattern

Cut1

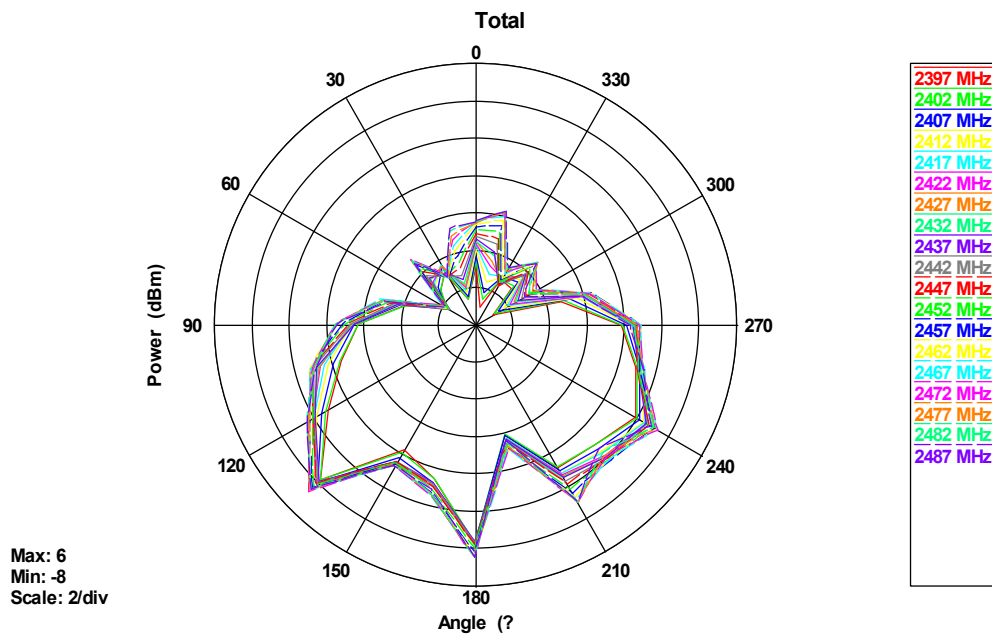


Cut2

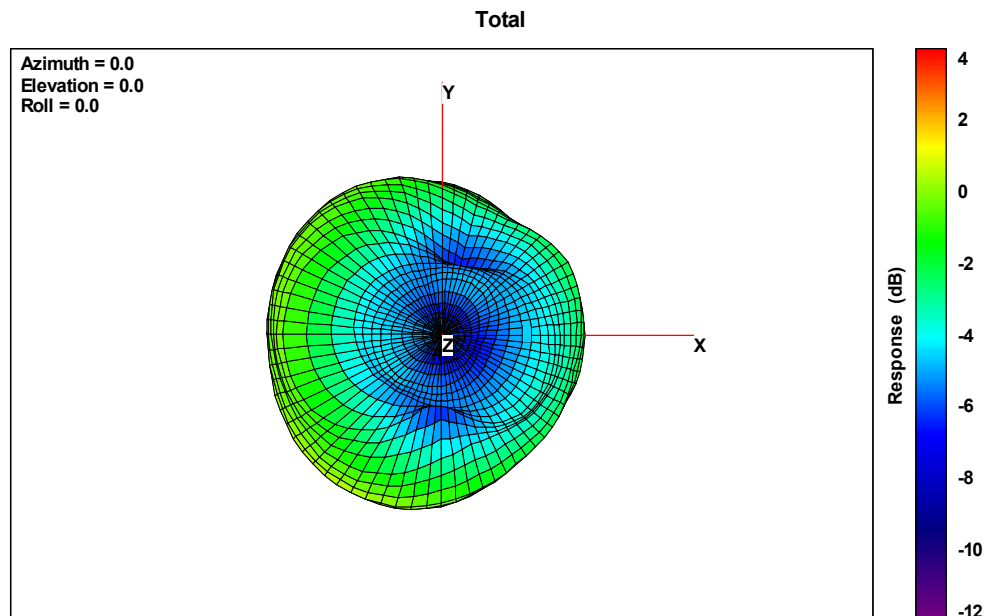




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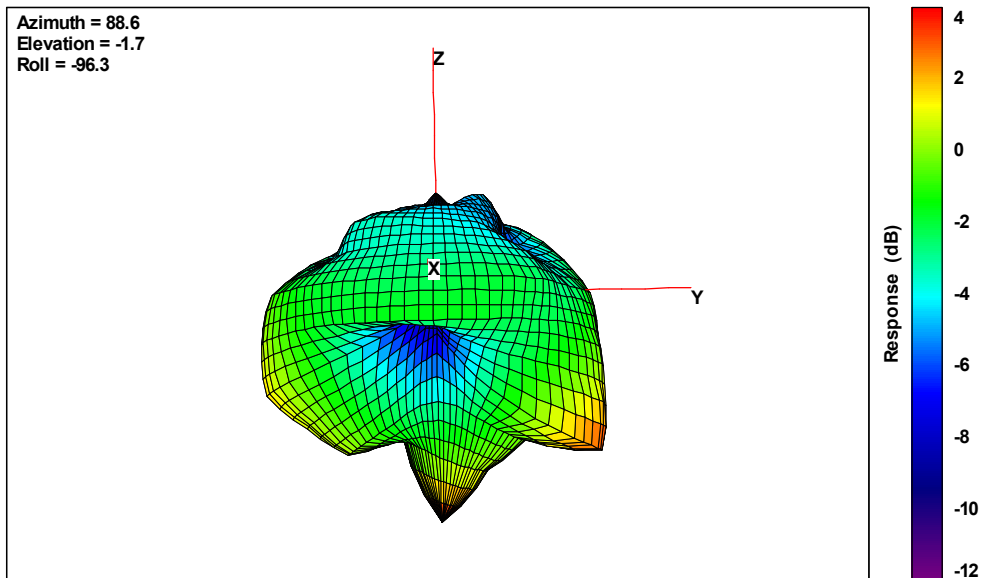


Free Space Gain Pattern

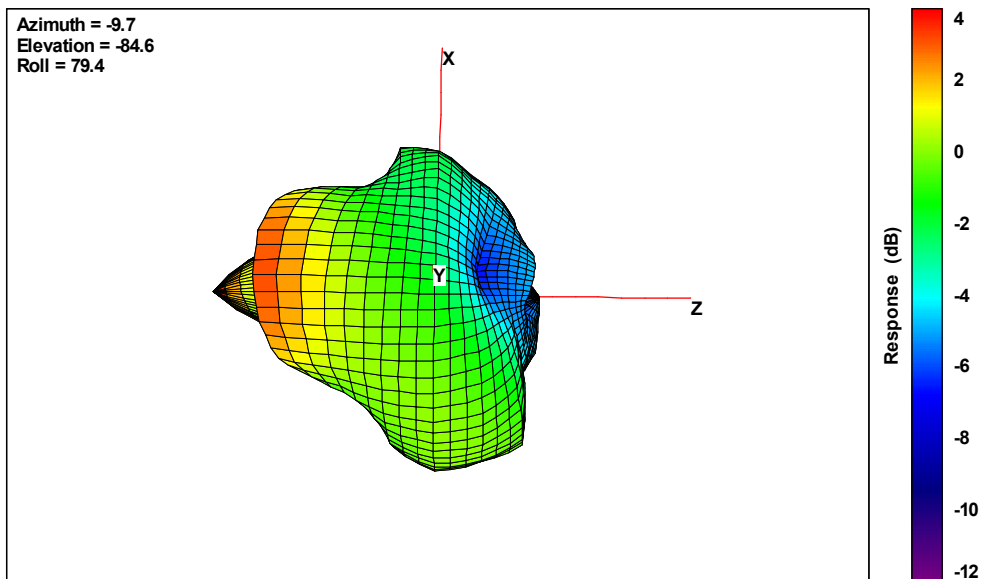




Total



Total



Free Space Gain Pattern



## 5. Description for EUT Testing Position

Placed and fixed with tape shown as below.

Initial Position:



Fig. 5-1 Free Space



Fig. 5-2 Free Space



Testing Position:

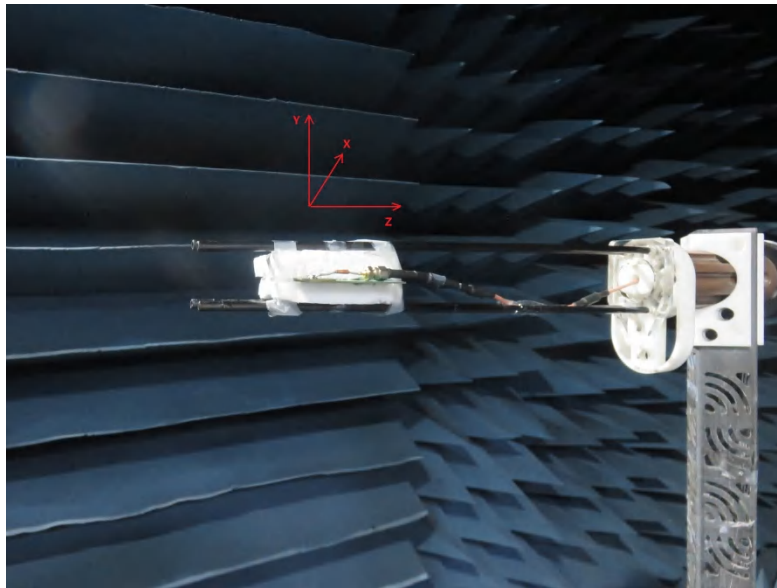


Fig. 5-3 Free Space

--THE END--