

## ANTENNA TEST REPORT

<b>Applicant</b>	:	Shenzhen Allcomm Electronic Company Limited
<b>Address</b>	:	Guangtian Road Left Side, Tangxiayong Community Songgang Street, Shenzhen City, Guangdong Province
<b>Equipment under Test</b>	:	Photolysis Air Purifier
<b>Model No</b>	:	RO222
<b>Manufacturer</b>	:	Shenzhen Allcomm Electronic Company Limited
<b>Address</b>	:	Guangtian Road Left Side, Tangxiayong Community Songgang Street, Shenzhen City, Guangdong Province

**Issued By: Dongguan Dongdian Testing Service Co., Ltd.**

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### TEST REPORT DECLARE

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<b>Address</b>	:	Guangtian Road Left Side, Tangxiayong Community Songgang Street, Shenzhen City, Guangdong Province

**Test Standard Used:**

IEEE149-1979.

**We Declare:**

The equipment described above is tested by Dongguan Dongdian Testing Service Co., Ltd and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these tests.

**After test and evaluation, our opinion is that the equipment in accordance with above standards.**

<b>Report No:</b>	DDT-R17Q0620-1E1		
<b>Date of Test:</b>	Jun. 13, 2017	<b>Date of Report:</b>	Jun. 21, 2017



*Prepared By:*

*Leo Liu*  
 Leo Liu/Engineer

Kevin Feng/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

## 1. Summary of test results

Description of Test Item	According Standard	Remark
Gain And Efficiency	IEEE149-1979	/

## 2. General test information

### 2.1. Description of EUT

EUT* Name	: Photolysis Air Purifier
Model Number	: RO222
EUT function description	: Please reference user manual of this device
Power supply	: N/A
Hardware Version	: N/A
Software Version	: N/A
Frequency Range	: 2400MHz~ 2500MHz
Antenna Type	: PCB Antenna
Date of Receipt	: Jun. 12, 2017
Sample Type	: Series production

### 2.2. Accessories of EUT

Description of Accessories	Manufacturer	Model number or Type	Serial No.	Other
N/A	N/A	N/A	N/A	N/A

### 2.3. Assistant equipment used for test

Description of Assistant equipment	Manufacturer	Model number or Type	Serial No.	Other
N/A	N/A	N/A	N/A	N/A

### 2.4. Deviations of test standard

No Deviation

### 2.5. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	21-25℃
Humidity range:	45-55%
Pressure range:	100-102kPa

## 2.6. Test laboratory

Dongguan Dongdian Testing Service Co., Ltd

Add: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808 Tel: +86-0769-22891499 <http://www.dgddt.com>

## 2.7. Measurement uncertainty

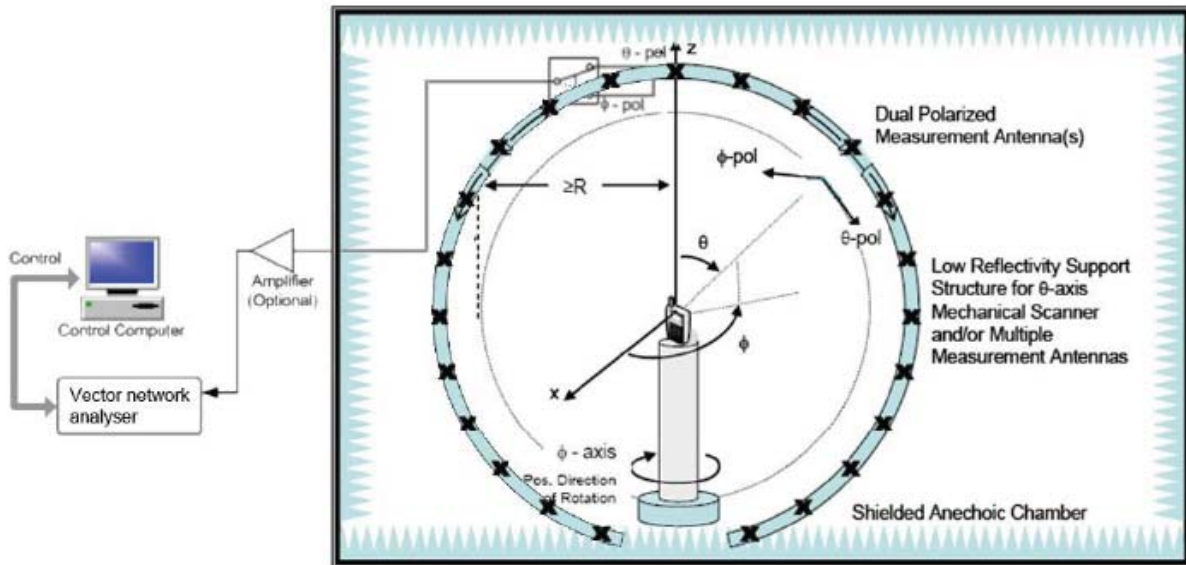
Test Item	Uncertainty
VSWR(S11)	$\pm 0.2\text{dB}$
Gain	$\pm 0.5\text{dB}$
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

## 3. Equipment used during test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. interval
<b>RE/RF in chamber</b>					
Vector Network Analyzer	Agilent	E5071C	MY46103472	2017.1.28	1 Year
5*5*5 Full Anechoic Chamber	SATIMO	5*5*5	CN-1307-555	2016.9.28	2 Year
SG24 Multi-probe Antenna Measurement System	SATIMO	SG24-L	1101855-0001	2016.9.14	1 Year

## 4. Gain and Efficiency test

### 4.1. Test setup



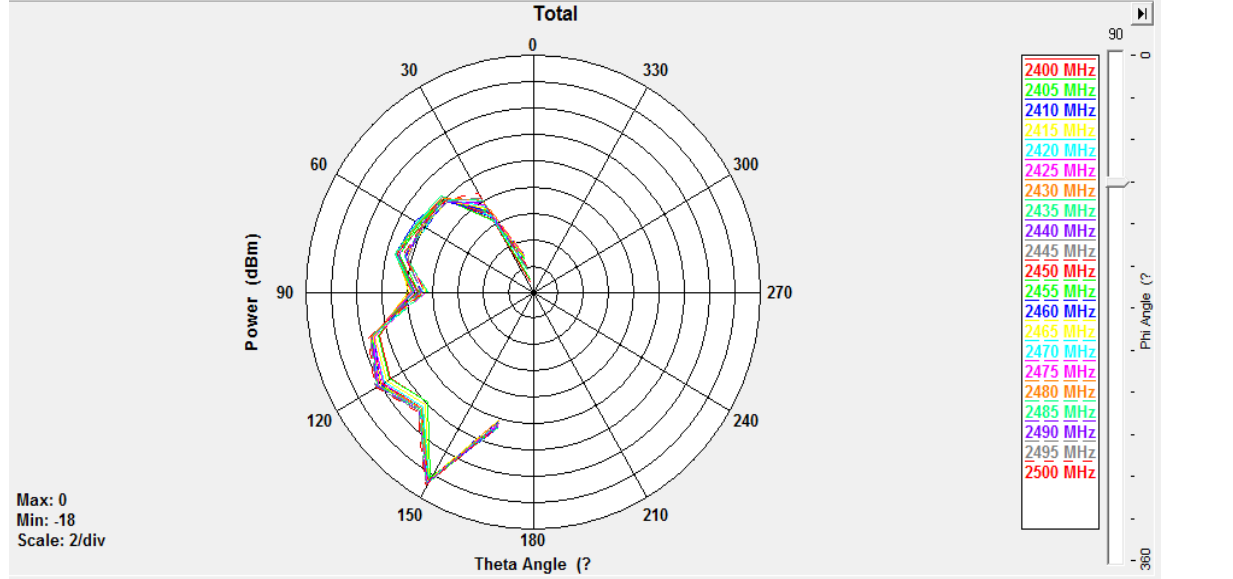
### 4.2. Test result

Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	24.40	1.17
2405	24.66	1.20
2410	25.19	<b>1.26</b>
2415	25.46	1.18
2420	25.99	1.25
2425	26.20	1.22
2430	26.26	1.25
2435	26.23	1.20
2440	26.10	1.22
2445	25.86	1.17
2450	25.59	1.05
2455	25.63	1.02
2460	25.40	1.03
2465	25.32	0.88
2470	25.40	0.94
2475	25.67	1.06
2480	25.52	0.87
2485	25.57	0.89
2490	25.72	0.93
2495	25.90	0.76
2500	25.93	0.83

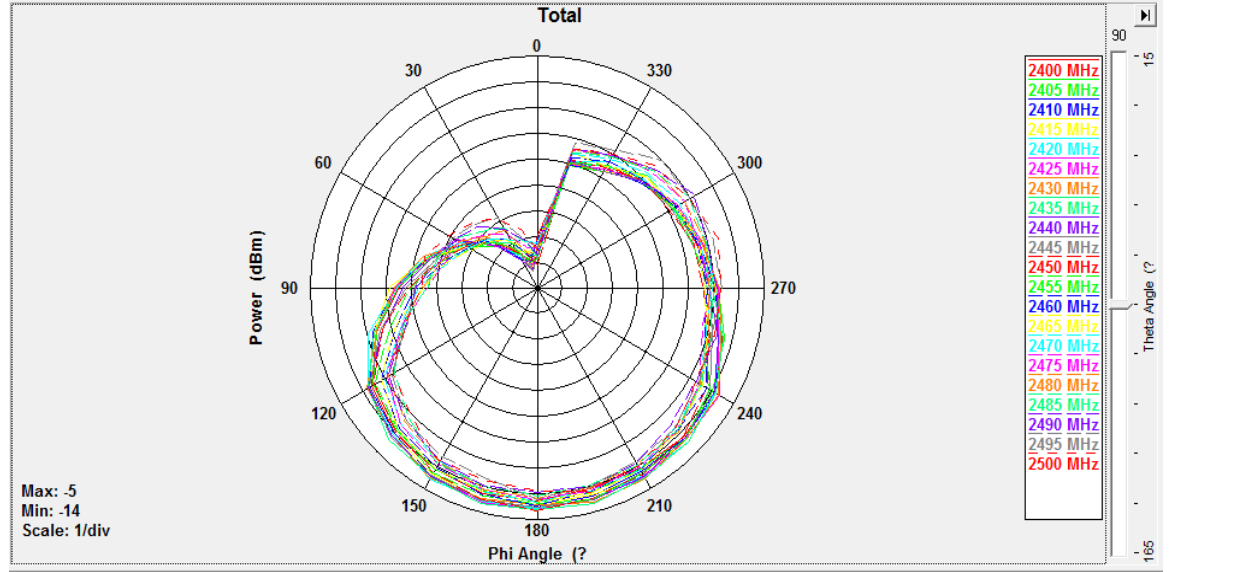
### 4.3. Original test data

#### 1D Radiation Pattern

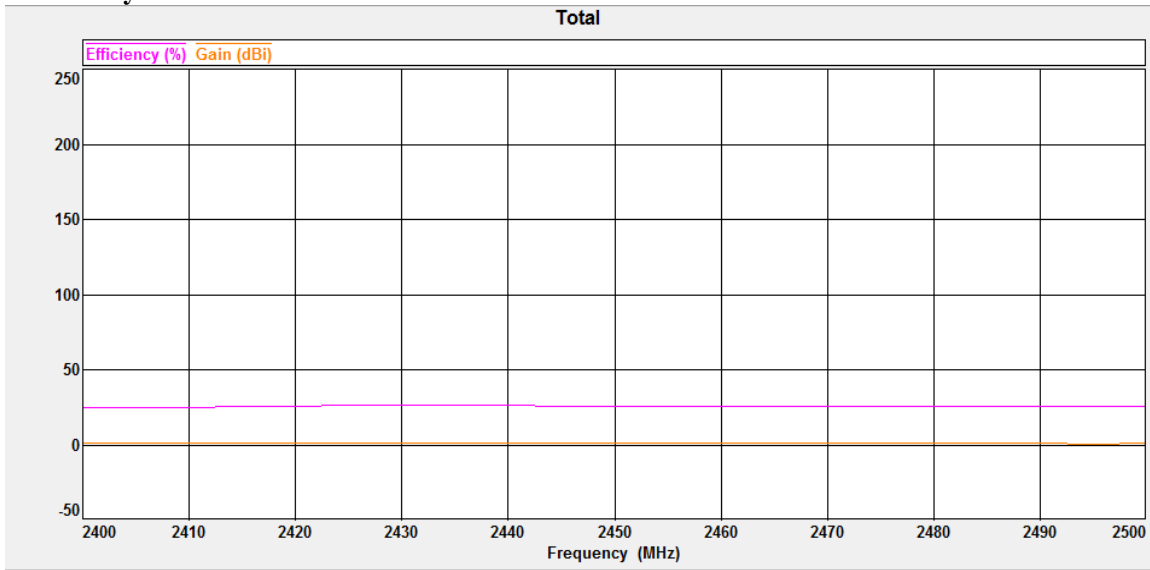
PHI=90



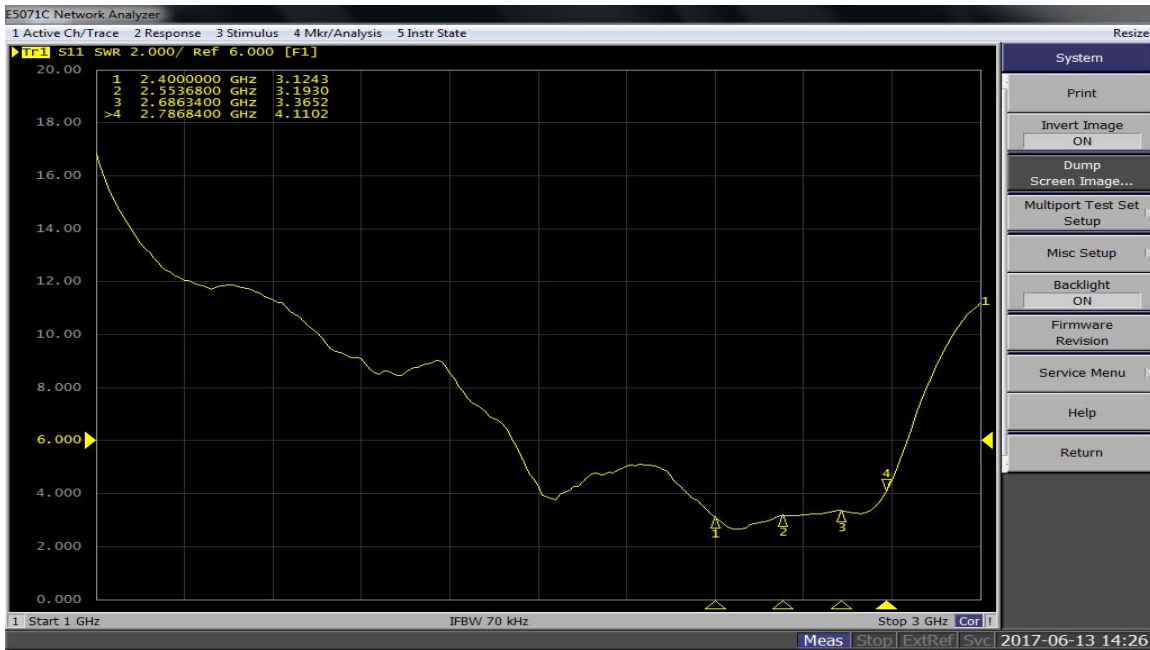
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### Eddiciency & Gain

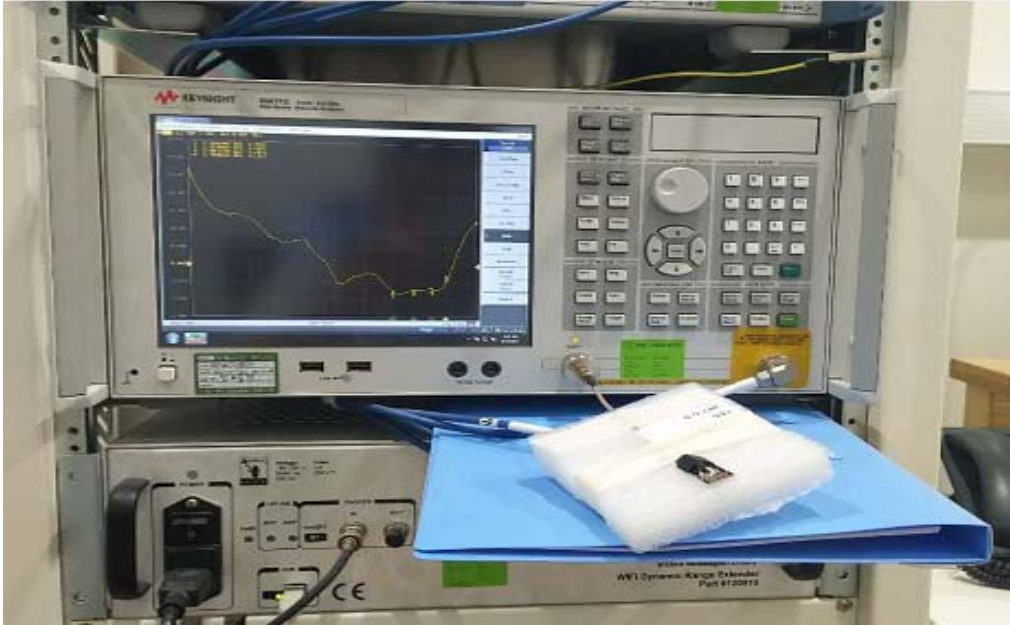
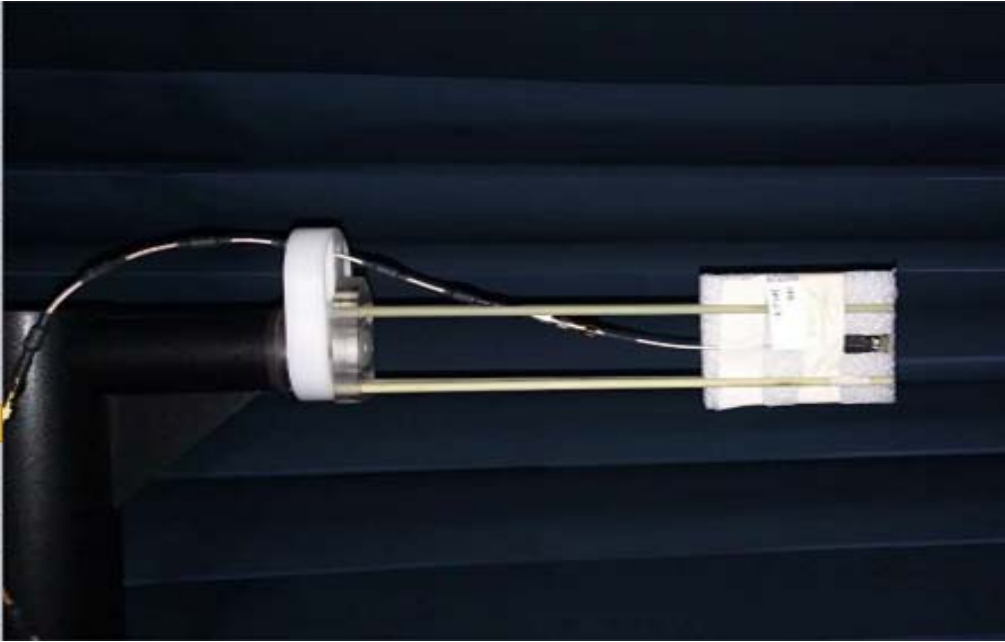


### SWR

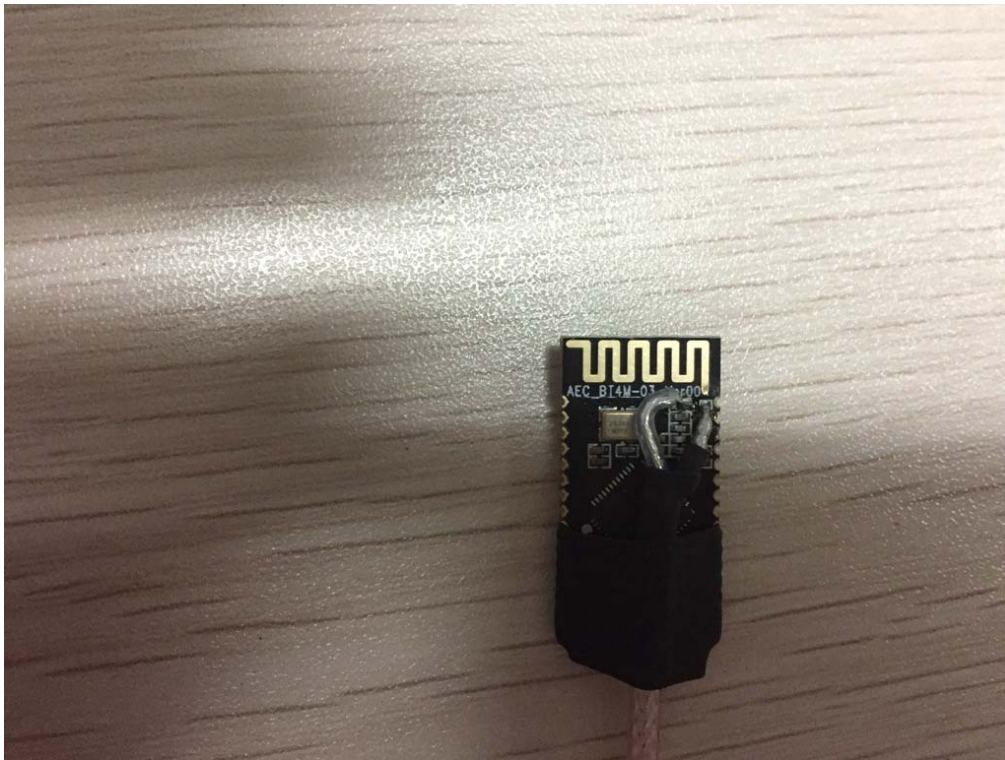




5. Test setup photograph



## 6. Photos of the EUT



**END OF REPORT**