

# **TEST REPORT**

APPLICANT : Airtouch (Shanghai) Intelligent Technology Co., Ltd

**PRODUCT NAME**: 5.8G radar sensor

MODEL NAME : AT58L4LDB-2020

TRADE NAME : Airtouch

**BRAND NAME**: Airtouch

STANDARD(S) : IEEE Std 149-2021

**RECEIPT DATE** : 2022-11-21

**TEST DATE** : 2022-12-14

**ISSUE DATE** : 2022-12-19

Edited by:

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Change History			
Version	Reason for change		
1.0	2022-12-19	First edition	



## 1.Technical Information

Note: Provide by manufacturer.

### 1.1. Applicant and Manufacturer Information

Applicant:	Airtouch (Shanghai) Intelligent Technology Co., Ltd				
Applicant Address:	11th Floor, Building 4, Lane 388, Shengrong Road, Pudong New				
	District, Shanghai, China				
Manufacturer:	Airtouch (Shanghai) Intelligent Technology Co., Ltd				
Manufacturer Address: 11th Floor, Building 4, Lane 388, Shengrong Road, Pudong N					
	District, Shanghai, China				

### 1.2. Equipment Under Test (EUT) Description

Wireless Type	N/A			
Frequency	5735MHz-5864.4MHz			
Product HW Version	N/A			
Product SW Version	N/A			
IMEI	N/A			
Sample No.	3#			





### 2. Test Results

### 2.1. Applied Reference Documents

Leading reference documents for testing:

	<u> </u>	
No.	Identity Document Title	
1	IEEE Std 149-2021	IEEE Recommended Practice for Antenna
		Measurements

#### 2.2. Test Conditions

**Test Environment Conditions:** 

Relative Humidity:	25 75 %		
Temperature:	+10 °C to +30 °C		

### 2.3. Measurement Uncertainty

ShenZhen , GuangDong Province, P. R. China

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO. When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% Confidence intervals.

Item	Measurement Uncertainty(dB)		
Gain	±0.5		
VSWR ±0.2			
Measurement Uncertainty(95% Confidence Interval) K=2			



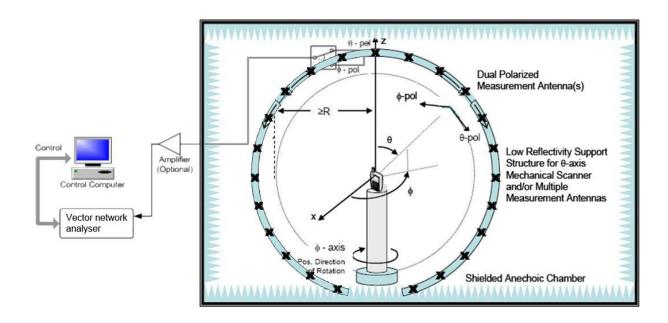
#### 2.4. Test Results lists

#### 2.4.1.Gain

Frequency(MHz)	Gain(dBi)
5735	-0.29
5801	0.04
5864.4	0.35



### Annex A Test Setup Photos

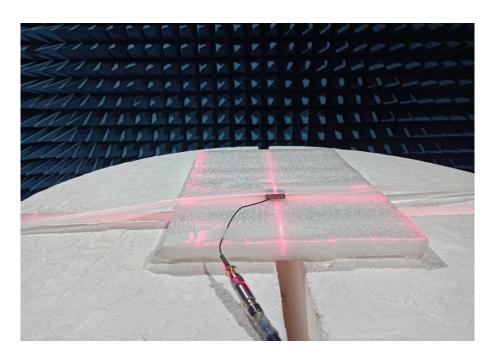




#### **Annex B EUT Photos**

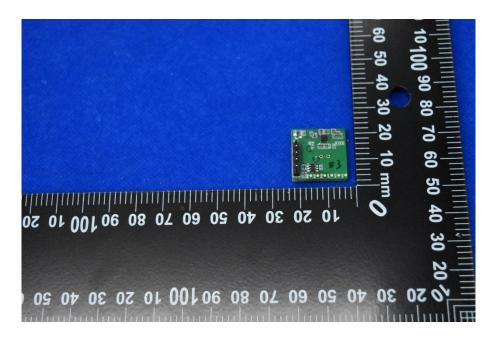
#### 1. Test environment

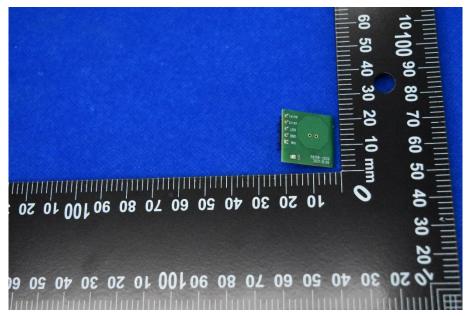




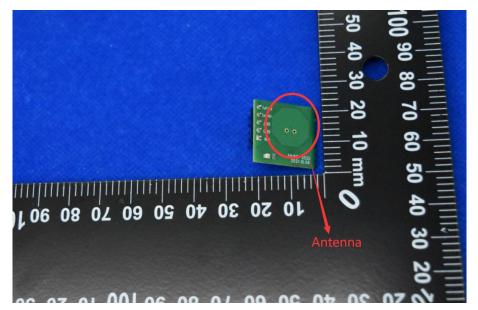


#### 2. EUT













#### **Annex C** General Information

### 1.1 Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.			
Laboratory Address:	FL1-3, Building A, FeiYang Science Park, No.8			
	LongChang Road, Block67, BaoAn District, ShenZhen ,			
	GuangDong Province, P. R. China			
Telephone:	+86 755 36698555			
Facsimile:	+86 755 36698525			

### 1.2 Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.			
Address:	FL1-3, Building A, FeiYang Science Park, No.8			
	LongChang Road, Block67, BaoAn District, ShenZhen ,			
	GuangDong Province, P. R. China			

### 1.3 Test Equipments Utilized

No.	Equipement Name	Serial No.	Туре	Manufa cturer	Cal.Date	Cal.Due Date
1	Network Analyzer	MY46110140	E5071C	Agilent	2022.07.04	2023.07.03
2	OTA Chamber	TJ2235-Q17 93	AMS-8923-1 50	ETS	2022.11.30	2025.11.29
3	Antenna Measurement System	1685	EMQuest EMQ-100 V 1.13 Build 21267	ETS	N/A	N/A

——— END OF REPORT ———

