Suzhou Top-link wireless Technologies CO., LTD.

# 苏州市拓普联科无线技术有限公司 样品承认书

# **Antenna Specifications**

Custome r	Honeywell	Phone Model	WIFI6		
project	EDA52wifi6	Frequency band	WIFI 2.4G-5.8 G		
Color	Black	Revision	P03		
Design	Alan	Date	2022-03-30		
Check	Daniel	Date	2022-03-30		
Approve	Kevin	Date	2022-03-30		
Custome r Approve		Date			

Honeywell P/N#: 3008-5462-001

Describe: FRAME,S0703 ENGINE,WIFI6,EDA52 REV: P03

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目录是空的,因为您没有使用被设为在目录中显示的段落样式。

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#### 1. General

This document presents the antenna specifications on electric and mechanic. The testing conditions, fixturing methods and related pictures are also included.

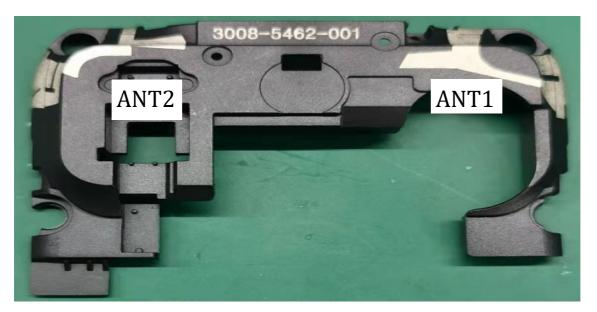
1.1 Product Description

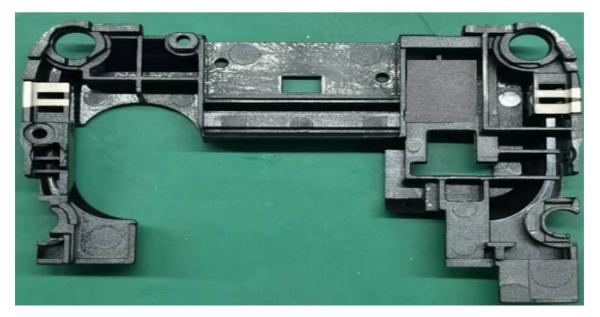
These antennas product contains one fixed internal antenna which consisting of a plastic carrier element ant. They are useds in a portable unit for wireless communication (referred to

as a phone). The phone model No. is Honeywell EDA52wifi6 antenna. The Honeywell

EDA52wifi6 Wifi antenna works in frequency bands Wifi (2.4G-5.8G)

The pictures of the antenna is as Figure 1-1





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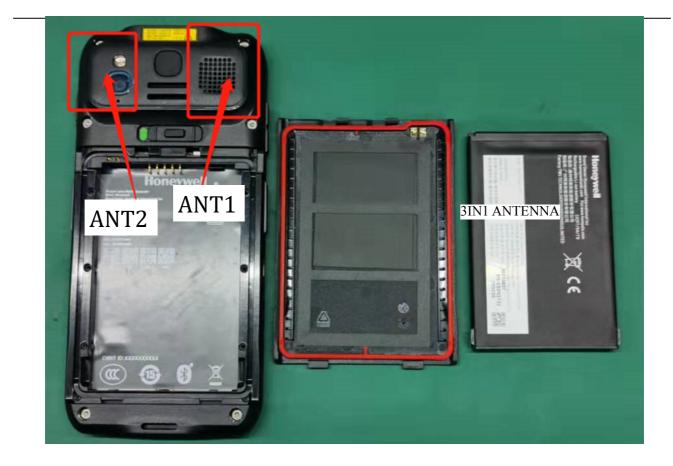


Figure 1 1 The pictures of the antenna

#### 1.2 Product Part Number

Customer Product Number: 3008-5462-001

#### WIFI6 ANTENNA

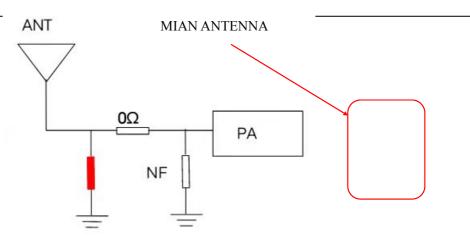
#### 1.3 Print Acceptance

Samples and Antenna Specifications are to be sent to customer. When they are approved, the approval form should be completed, signed, and sent back to Top-link before further mass production batches can be delivered.

#### **2.** Electrical Properties

2.1 Frequency Band WIFI 2.4G WIFI5.8 G

2.2 Impedance 2.2.1 Nominal 50Ohm 2.2.2 Method



Top-link will supply engineering assistance to ensure that the impedance over the frequency bands is as close to 50 ohms as possible after matching.

2.3 Passive Specifications

2.3.1 Methods of passive measurements

A 50 ohms coaxial cable is connected to the 50 ohms feeding point on the RF JIG. S11 of typical sample (Free Space)

Figure 2-1 is the Methods of passive measurements

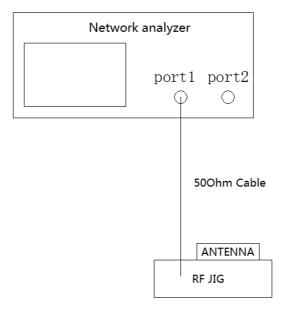
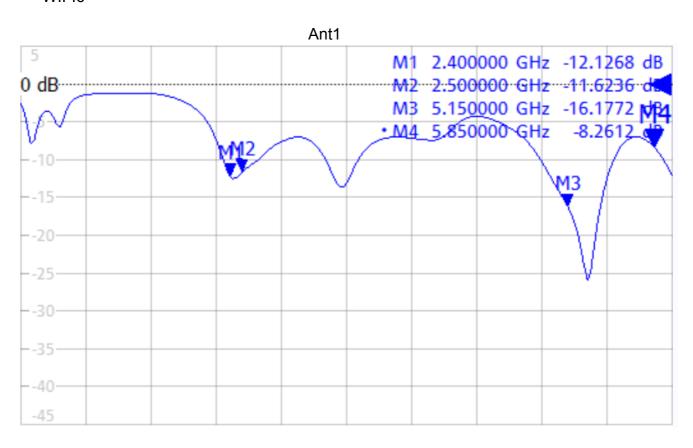


Figure 2-1 is the Methods of passive measurements

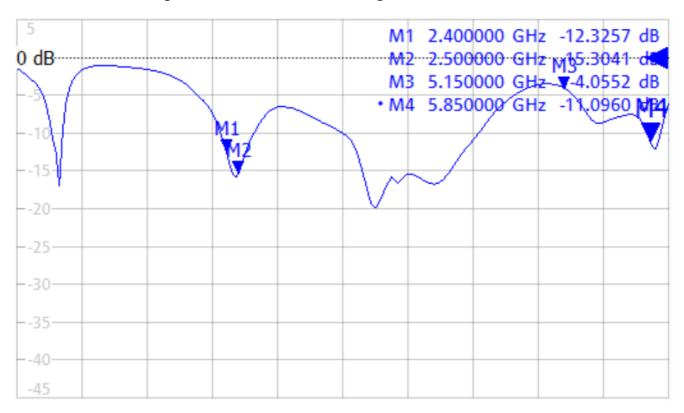
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Figure 2-2 is the Return Loss



WIFI6

Ant2



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#### 2.3.2 Efficiency Specifications (Free Space)

Chambers which complies with CTIA criteria is used in Top-link to measure antenna transmission parameters such as antenna efficiency, radiation pattern, etc. Table 2-4 is the efficiency of the typical sample.

Table 2-4 Efficiency of the typical sample

WIF10 ANU 2.4G		WIFID AIILT 5.8G						
频率(MHz)	效率(%)	增益(dBi)	频率(MHz)	效率(%)	增益(dBi)	频率(MHz)	效率(%)	增益(dBi)
· 妙平 (MITZ)	双平(70)	'百皿(uD1)	5100	46.51	0.49	5471	38.04	1.21
2400	46.33	0.34	5121	40.54	0.85	5491	32. 54	0.56
-			5141	38.73	0.64	5512	44.67	0.84
2411	44.67	0. 52	5162	33. 52	0.9	5532	42.36	0.88
0400	00 40 00	0.45	5182	32.31	0.7	5553	41.27	0.9
2422	42.36	0.45	5203	35.65	0.91	5574	39.83	0.88
2433	41.27	0.45	5224	38.94	0.74	5594	48.46	1.46
2100	11.21	0.40	5244	34.1	0.98	5615	46.33	-0.22
2444	37.1	0.57	5265	36.52	0.45	5635	44.67	1.25
-			5285	29.36	0.89	5656	42.36	1.53
2456	36.83	0.85	5306	47.99	1.31	5676	40.19	1.75
2467	39.21	1.23	5326	35.81	1.45	5697	39.43	1.74
2407	39.21	1.20	5347	31.31	1.63	5718	40.78	2.15
2478	41.23	1.36	5368	52.1	1.61	5738	34.95	2.14
-			5388	46.36	1.71	5759	39.08	2.26
2489	38.06	1.05	5409	39. <mark>5</mark>	0.77	5779	36.34	1.99
2500	40.15	1 00	5429	37.05	1. 52	5800	40.15	2.1
2500	40.15	1.33	5450	35.48	1.21			

WIFI6 Ant1 2.4G

WIFI6 Ant1 5.8G

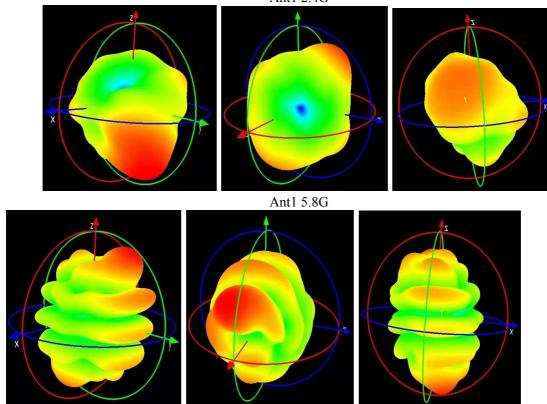
WIFI6 Ant2 2.4G

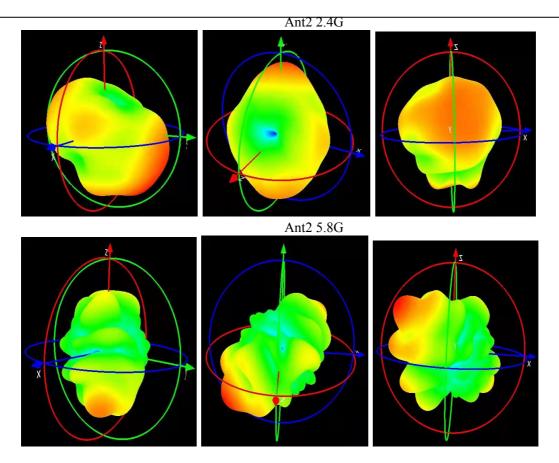
WIFI6 Ant2 5.8G

频率(MHz)	效率(%)	增益(dBi)	频率(MHz)	效率(%)	增益(dBi)	频率(MHz)	效率(%)	增益(dBi)
<u> </u>	双平(70)	归皿(uD1)	5100	32.31	0.35	5471	41.52	2.26
2400	37	-0.31	5121	35. 78	0.72	5491	36.42	2.13
			5141	33.92	1.04	5512	36.24	1.9
2411	38.3	-0.04	5162	36. 57	1.48	5532	36.21	1.72
2422	37.79	0.22	5182	34.41	1.55	5553	36.82	1.5
2422	31.19	0.32	5203	39.08	2.13	5574	34.06	2.06
2433	38.23	0.75	5224	36.34	2.11	5594	37.3	2.03
-			5244	40.15	2.78	5615	23.87	-0.3
2444	39.25	1.18	5265	33.96	2.41	5635	36.71	1.21
0.450	40 40	1 70	5285	36.51	3	5656	35.49	1.81
2456	40.43	1.79	5306	38.52	3.06	5676	37.02	1.57
2467	42.39	2.25	5326	41.2	3.42	5697	34.12	1.83
2407	42.39	2.20	5347	40.19	3.31	5718	36.79	1.73
2478	43.66	2.51	5368	39.43	3.42	5738	34.78	2.06
			5388	40.78	3.14	5759	35.11	1.72
2489	41.32	2.3	5409	34.95	2.04	5779	31.63	1.52
2500	44.95	14 25 2 01	5429	44.31	2.49	5800	33.6	1.44
2500	44. 35	2.91	5450	43.39	2.67			

#### 2.3.3 Directivity diagram

Ant1 2.4G





### **3. Mechanical Properties**

3.1 Specifications Drawings Figure 3-1 is the specifications drawing of this antenna.

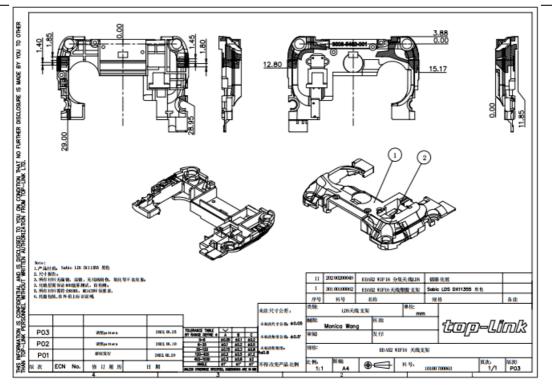


Figure 3-1 Antenna specifications drawing