

# **SPECIFICATION**

## APPLICATION FOR APPROVAL

CUSTOMER: FOTRIC Inc.

Material Code : 10119101000001
PART NAME : Falcon-wifi\_ANT

DEVE NO: B91863-00

AUDEN NO. : AUK01841-WIFI
DATE : December 6, 2019

Release: Full release

Customer Approval											
RF	MECHANICAL	R&D	PRODUCT								
ENGINEER	ENGINEER	MANAGER	MANAGER								
AUDEN COM	MUNICATIONS&MULTIME	EDIA TECHNO (KUNSHA	AN) CO. LTD								
RF	MECHANICAL	R&D	PRODUCT								
ENGINEER	ENGINEER	MANAGER	MANAGER								
李向	王汉林	姜焕	肖建江								

总部

Head Quarter

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## **REVISION**

REV.NO.	DATE	DESCRIPTION
0	December 6, 2019	APPROVAL

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SPECIFICATION FOR QUAD BAND ANTENNA

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## 0. DEFINITIONS

dBi Decibel relative isotropic antenna

Tx Transmit frequency
Rx Receive frequency

VSWR Voltage Standing Wave Ratio

GSM Global Service for Mobile communication

DCS Digital Communication System
PCS Personal Communication System
CDMA Code Division Multiple Access

WCDMA Wideband Code Division Multiple Access

PHS Personal Handly-phone System

SAR Specific Absorption Rate
PCB Printed Circuit Board

TBD To Be Defined

P Parallel connection
S Series connection

## 1. ELECTRICAL SPECIFICATIONS

1-1 FREQUENCY BAND

1-2

Freq. Band	x(MHz)	Rx(MHz)
------------	--------	---------

### 1-2 IMPEDANCE

Nominal Impedance(including matching circuit) : 50ohms

## 1-3 MATCHING REQUIREMENTS

The matching circuit on the PCB of the handset is according to Figure 1-3.

Optimum matching circuit is highly dependent on the handset and thus.

Final matching circuit layout and values will be defined when handset is available

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							1
Gain/ dBi	Freq	TRP	Efficier	Gain/ dBi		TRP	Efficienc
1.63	2400	-3.455175	45.1317	5.51	5200	-3.011707	49.98381
1.5	2405	-3.597681	43.674	5.3	5220	-3.066555	49.35651
1.76	2410	-3.626011	43.3909	4.97	5240	-2.9361	50.8616
1.59	2415	-3.561616	44.039	4.5	5260	-2. 723444	53.41406
1.46	2420	-3.428683	45.4079	4.08	5280	-2.999674	50.12248
1.7	2425	-3.371713	46.007	4.24	5300	-3.004213	50.07013
1.31	2430	-3.433245	45.3602	4.44	5320	-3.082358	49.17724
1.2	2435	-3.487099	44.8012	4.77	5340	-2.951731	50.67886
1.46	2440	-3.590509		5.19	5360	-3.023337	49.85013
1.22	2445	-3.51017		5.5	5380	-3.138807	48.54219
1.45	2450	-3.428979	45.4048	5.6	5400	-3.287589	46.90737
1.44	2455	-3.433899	45.3534	5.49	5420	-3, 44476	45.24015
1.27	2460	-3.447956	45.2068	5.77	5440	-3.525994	44.4018
1.63	2465	-3.492527	44.7452	5.82	5460	-3.105943	48.9109
1.45	2470	-3.531938	44.3410	5.83	5480	-3.251009	47.30413
1.4	2475	-3.55551	44.1010	5.69	5500	-3.163603	48.26582
1.66	2480	-3.507269		5.5	5520	-3.168522	48.21118
1.43	2485	-3.527018	44.3913	5.21	5540	-3.078587	49.21996
1.49	2490	-3.628554	43.3655	4.89	5560	-3.21291	47.72094
1.47	2495	-3. 71223	42.5379	4.54	5580	-3.317207	46.58856
1.17	2500	-3. 752327	42.1470	4.33	5600	-3.339039	46.35495

3.99	5620	-3.384931	45.86769
4.09	5640	-3.353361	46.20234
4.32	5660	-3.126161	48.68374
4.4	5680	-3.412087	45.58178
4.63	5700	-3.488728	44.78444
5.08	5720	-3.407895	45.6258
5.47	5740	-3.326454	46.48947
5.75	5760	-3.360996	46.12117
5.94	5780	-3.431243	45.38117
5.96	5800	-3.449777	45.18791
3			

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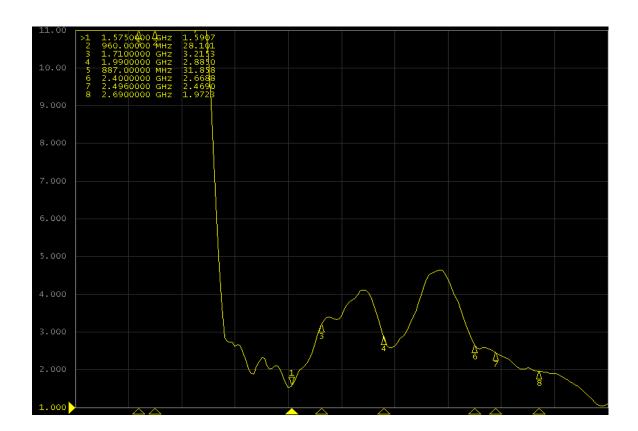
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## 1-4 WiFi 驻波图



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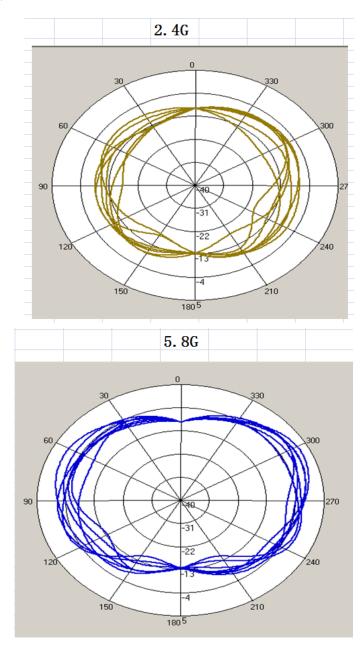
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## 1-5 2D 图档



## 2. MECHANICAL SPECIFICATIONS

## 2-1 MECHANICAL CONFIGURATION

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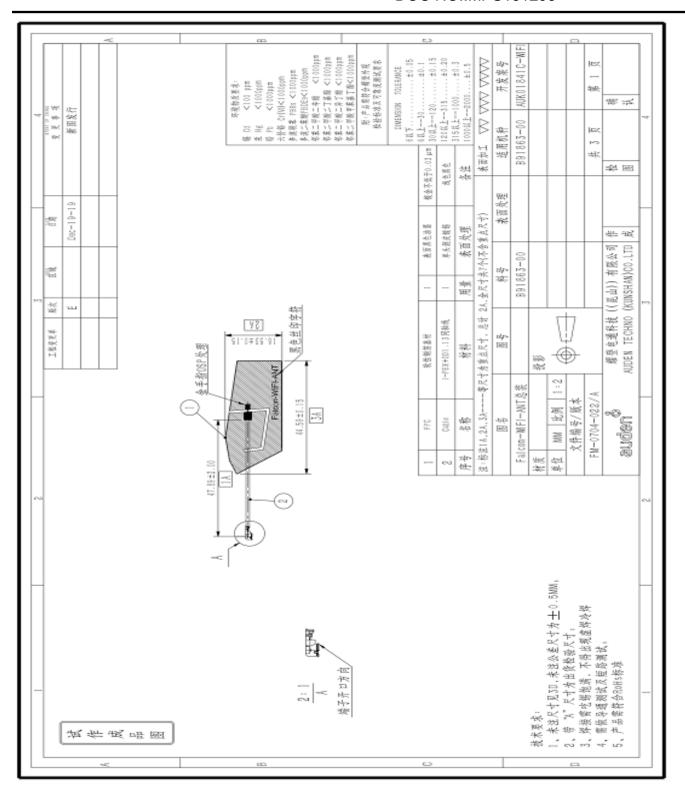
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## **3.ENVIRONMENTAL CHARACTERISTICS**

NO.	ITEM	TEST CONDITION		SPECI	FICATI	ON			
3-1	Low Temperature Test	1.Temperature: -40±2°C							
		2.Time: 48hrs							
3-2	High Temperature Test	1.Tempearture: +85°C ±2°C	No material def			rmation	is		
		2.Time: 48hrs	allowed.			allowed.			
3-3	High Temperature/Humidity	1.Temperature: +60 ±2°C							
	Storage Test(non operating)	2.Humidity: 93%±2%RH							
		3.Time: 48hrss							
3-4	Salt-Spray Test	35°C, 85%RH, 48Hours(According to	NO	appear	rustin	ng			
		MIL-STD-810E)	phe	nomenon	is a	allowed			
		The salt-spray is generated from a 5%							
		salt(NaCl) solution.,							

## 耀登电通科技(昆山)有限公司

## 可靠性测试汇总报告

				リョミエ火ルはいこん	1K 🗖							
客户	上海热像科技	客户机种		耀登机种	AUK01841-WIFI							
				可靠性测试项目及要求								
序号	测试项目	测试时间	测试仪器	测试条件	判定标准	1	2	3	4	5	备注	
1	盐雾试验	2019/11/27	盐雾测试机	将产品放于盐雾试验机中,在35℃±2℃的密闭 环境中,PH值在6.5-7.2范围内,用5%±1%的 Nacl溶液连续48h盐水喷雾后,将样品用清水冲 洗干净后检查天线外观;		OK	OK	OK	ОК	OK	盐雾试验. doc	
2	低温试验	2019/11/27	恒温恒湿机	将产品放置在温度为-40℃±2℃的低温环境存贮 48h,试验完成后在常温环境下放置2小时后检 查产品外观。	部件无裂痕、明显的变形、脱落,RF 测试通过为合格。	ОК	ОК	ОК	ок	ОК	低温试验 doc	
3	高温试验	2019/11/29	恒温恒湿机	将产品放置在温度为85℃±2℃的高温环境存贮 48h,试验完成后在常温环境下放置2 h后检查 产品外观。	部件无製痕、明显的变形、脱落,RF 测试通过为合格。	ОК	ОК	OK	ОК	OK	高温试验. doc	
4	高温高湿试验	2019/12/1	恒温恒湿机	将产品放置在温度为60℃±2℃;湿度:93%± 2%RH环填存贮48h,试验完成后在常温环填下 放置2小时后检查产品外观。	部件无裂痕、明显的变形、脱落,RF 测试通过为合格。	ОК	ок	ОК	ОК	OK	高温高湿试验. doc	
试验结果判定                             可靠性试验合格												

核准:邹菊

审核:麦建国

测试员:孙赟赟

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#### SGS清单

#### 填写说明:

4号では5. 1. 技下列留体展开产品的成份或部件。 2、不同的成份或部件需提供相应的测试报告以及物质安全成分(MSDS)文件,测试项目为:Cd、Pb、Hg、Cr6+、PBB、PBDE、DBP、DEHP、BBP、DIBP。 3、有害物质含量必须満足客户(供应商ROHS管理规定)要求

产品/物料名称	产品/物料	产品/	组成部件	组成部件	组成部件	原材料		宣告均质材料中有害物质含量(PPM)				有害物质	测试日期	豁免条	ROHS	备注						
产吅/切符名钟	代码	物料版本	组成部件	代码	均质材料名 称	厂商名 私	Cd	РЪ	HG	Cr6+	PBB	PBDE	DBP	DEHP	BBP	DIBP	测试报告编号 (Y)	(YY-MM-DD)	款	KOHS	無汪	
			PI基材		PI基材		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SHAEC1904039602	2019/3/13		2 . C		
			黑色油墨		黑色油墨		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	CE_2019_A0149	2019/10/14		图全法基 . pdf		
				OSP	740818-00	0SP		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	CANEC1903726401	2019/7/20		OSP . FOR	
AUK01841-WIFI	B91863-00	A	3M9471		3M9471	耀登	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	CANEC1825887001	2018/12/18		Deca Withint		
			绝缘体		绝缘体		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	A2180259581101003	2019/1/19		BELLESSEDS STAFF		
			端子	753370-00	端子		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	A2190187804101016E	2019/7/29		SENIOR WATER		
			黑线		黑线		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	A219026163010112	2019/10/18		黑色般状.pdf		

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授权声明人所属部门:	品保	职位:	董事长
授权声明人职位:	QE		
声明日期:	2019/12/6	签名:	
签名:			

公司名称:

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