

SPECIFICATION

SHEET FOR APPROVAL

(Revision: R: A2)

	CUSTOMER(客户名称)	蓝斯通讯	
	CS P/N(客户机种)	LH16-LTE	
	PART NAME(品名)	4G 天线	
	FREQUENCY(频率)	880-960MHz , 1710-1880MHz , 2170-2300MHz, 2400-2650MHz	
	ZTX NO.(物料编号)	F.00000080	
	DATE(日期)	2017-11-30	

CUSTOMER			
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED

Remark(备注):

Sign(客户确认签字盖章): _____

ZHONG TIAN XUN TECHNOLOGY CO., LTD				
MANAGER CHECKED	MANAGER CHECKED	ME CHECKED	RF CHECKED	LISTER
		胡小良	沈建航	



福州中天迅通信技术有限公司

ZHONGTIAN XUN Communication Technology Co.,Ltd.

总部地址:深圳市宝安区石岩街道石龙大道 34 号 (原腾达工业园) 邮编: 518000

福州地址: 福建省福州市晋安区福兴大道南段 3 号福晟大厦 805 邮编: 350014

电话: 0591-83582969

传真: 0591-83583660

<http://www.chinaztx.com>

ANTENNA SPECIFICATION

CUS P/N :LH16-LTE

ApplicationDate:Novembe,30,201
7

Rev: R:A1

ZTX P/N :LH16-LTE

Editor:

Page 1 of 11

Revision history

版本	日期	状态
A1	2017-10-25	规格书制定
A2	2017-11-30	性能优化，丝印版本升级为 V2.0。



ANTENNA SPECIFICATION

CUS P/N :LH16-LTE

ApplicationDate:Novembe,30,201

Rev: R:A1

7

ZTX P/N :LH16-LTE

Editor:

Page 2 of 11

Index

		Revision history	1
1.		Test equipment	3
2.		Antenna test data	4
	2-1	Test Data	4
	2-2	VSWR	4
	2-3	Matching circuit	4
	2-4	No-source test data	5
	2-5	Directional drawing of horizontal plane of	5
	2-6	Environment treatment	6
3.		Mechanical Specification	7
	3-1	Mechanical Specification（天线组件）	7
4.		Size report	8
5.		Salt-Spray test	8
6.		Environment Characteristic	8
7.		The packing way	9



ANTENNA SPECIFICATION

CUS P/N :LH16-LTE

ApplicationDate:Novembe,30,201

Rev: R:A1

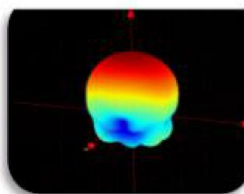
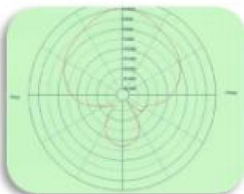
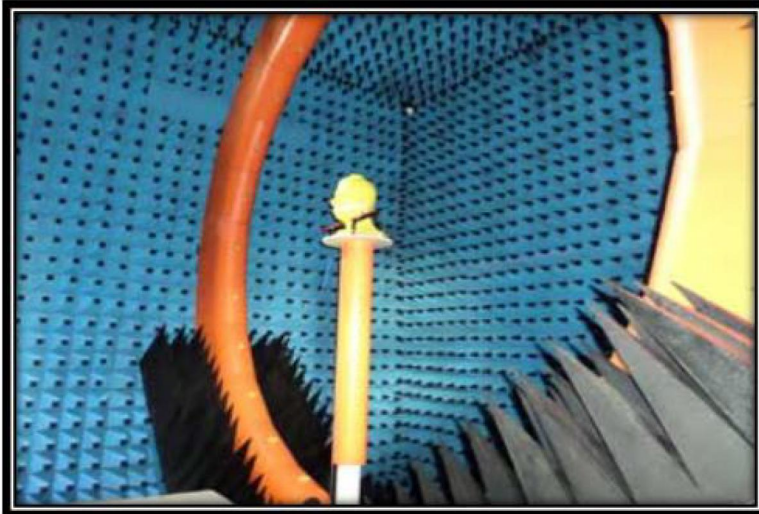
7

ZTX P/N :LH16-LTE

Editor:

Page 3 of 11

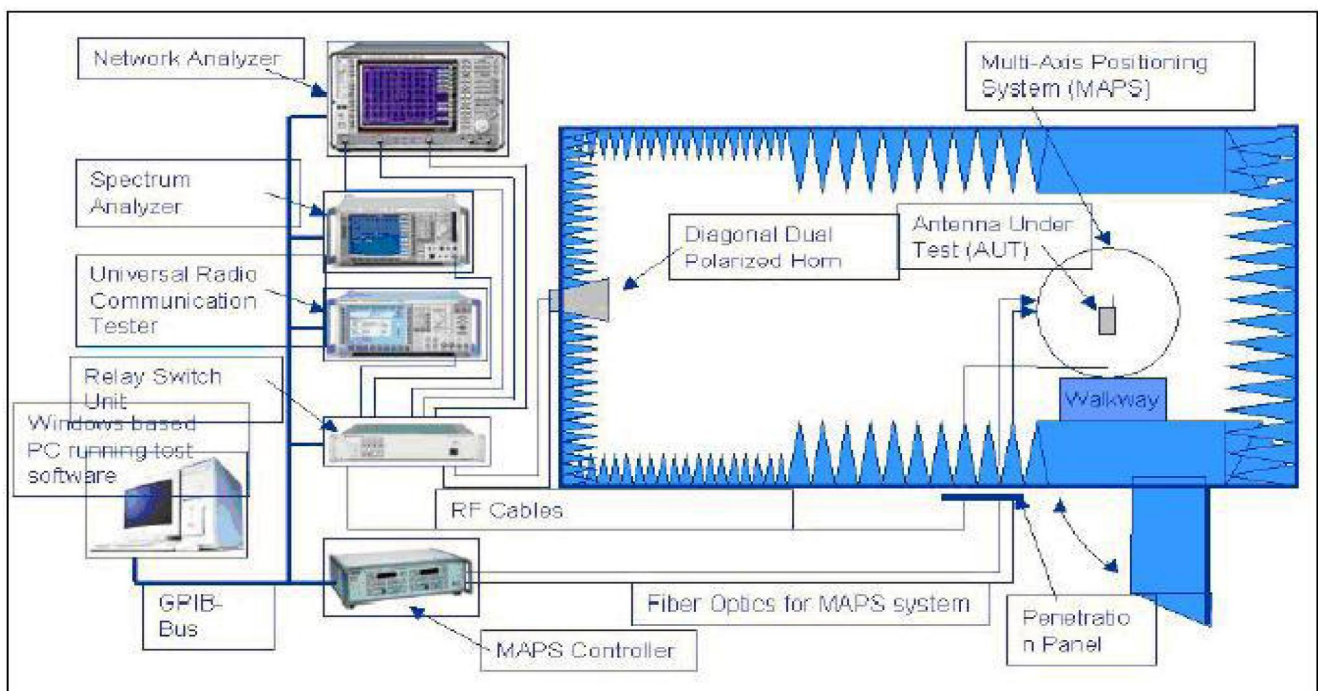
1. Test equipment



Owned 6 microwave dark room, equipped 2 sets world leading France Satimo SG24 OTA certification test systems (one in SHENZHEN, another one in Shanghai), ETS OTA Standard test system, Blue test reverberation test system which is High repeatability, high accuracy and high resolution. It can quickly provide accurate test reports, fully meet the CITA standards.

Testing range:

Support active, passive testing of
GSM/CDMA/WCDMA/TD-
SCDMA/LTE/WIFI/WLAN/WiMax/BT
/GPS/MIMO/UWB within0.4-6G.



ANTENNA SPECIFICATION

CUS P/N :LH16-LTE

ApplicationDate:Novembe,30,201

Rev: R:A1

7

ZTX P/N :LH16-LTE

Editor:

Page 4 of 11

2.Antenna test data

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
820.0	-6.43	-1.13	22.76
840.0	-6.35	-1.22	23.15
860.0	-5.91	-0.95	25.64
880.0	-5.77	-0.94	26.47
900.0	-5.38	-0.54	28.97
920.0	-4.63	0.16	34.44
940.0	-4.24	0.27	37.66
960.0	-3.65	0.56	43.14
1700.0	-3.68	1.49	42.89
1725.0	-3.00	2.05	50.07
1750.0	-3.60	1.36	43.64
1775.0	-2.70	1.83	53.70
1800.0	-3.94	0.42	40.38
1825.0	-3.23	1.27	47.52
1850.0	-3.64	1.25	43.26
1875.0	-3.74	1.05	42.24
1900.0	-3.75	1.51	42.15
1925.0	-3.47	1.72	44.97
1950.0	-3.53	1.43	44.37
1975.0	-3.35	1.70	46.20
2000.0	-2.93	1.77	50.90
2025.0	-2.48	2.51	56.53
2050.0	-2.32	3.02	58.66
2075.0	-2.22	3.40	59.98
2100.0	-1.66	3.89	68.18
2125.0	-2.09	3.20	61.86
2150.0	-1.92	3.12	64.23
2175.0	-2.21	2.72	60.14
2200.0	-2.27	2.33	59.30
2225.0	-2.38	1.91	57.84
2250.0	-2.38	1.58	57.85
2275.0	-2.06	1.72	62.18
2300.0	-2.91	0.41	51.20
2325.0	-2.38	0.65	57.77
2350.0	-3.37	-0.43	45.98
2375.0	-5.23	-0.66	30.00
2500.0	-3.79	-0.45	41.81
2525.0	-4.19	-0.73	38.15
2550.0	-3.53	-0.26	44.40
2575.0	-5.22	-1.93	30.08
2600.0	-3.99	-0.68	39.89
2625.0	-5.18	-1.68	30.31
2650.0	-4.54	-0.70	35.15
2675.0	-5.34	-1.11	29.27
2700.0	-4.31	0.29	37.04



ANTENNA SPECIFICATION

CUS P/N :LH16-LTE

ApplicationDate:Novembe,30,201

Rev: R:A1

7

ZTX P/N :LH16-LTE

Editor:

Page 5 of 11

频段	参数\信道	1	62	124
G900	TRP	27.2	27.1	25.4
	TIS	-103.3	-102.5	-101.2

频段	参数\信道	9612	9750	9888
W2100	TRP	20.4	20.3	20.5
	TIS	-107.2	-109.1	-109.2

频段	参数\信道	2712	2788	2863
W900	TRP	18.1	18.8	17
	TIS	-102.3	-101.4	-102.5

频段	参数\信道	37850	38000	38150
LTE-band8	TRP	20.5	20.1	17.9
	TIS	-90.6	-90.6	-87.8

频段	参数\信道	37850	38000	38150
LTE-band38	TRP	19.4	19.1	18.8
	TIS	-87.8	-87.9	-87.8

频段	参数\信道	38350	38450	38550
LTE-band39	TRP	20.4	20.1	19.3
	TIS	-90.4	-89.4	-91.0

频段	参数\信道	38750	39150	39550
LTE-band40	TRP	19.0	19.1	18.6
	TIS	-87.8	-88.1	-87.8

频段	参数\信道	40540	40740	40940
LTE-band41	TRP	19.5	19.3	18.6
	TIS	-87.6	-87.7	-87.7

频段	参数\信道	50	300	550
LTE-band1	TRP	20.0	19.6	18.9
	TIS	-91.3	-93.8	-94.0

频段	参数\信道	1250	1575	1900
LTE-band3	TRP	20.2	19.6	19.6
	TIS	-94.7	-95.4	-94.2



ANTENNA SPECIFICATION

CUS P/N :LH16-LTE

ApplicationDate:Novembe,30,201

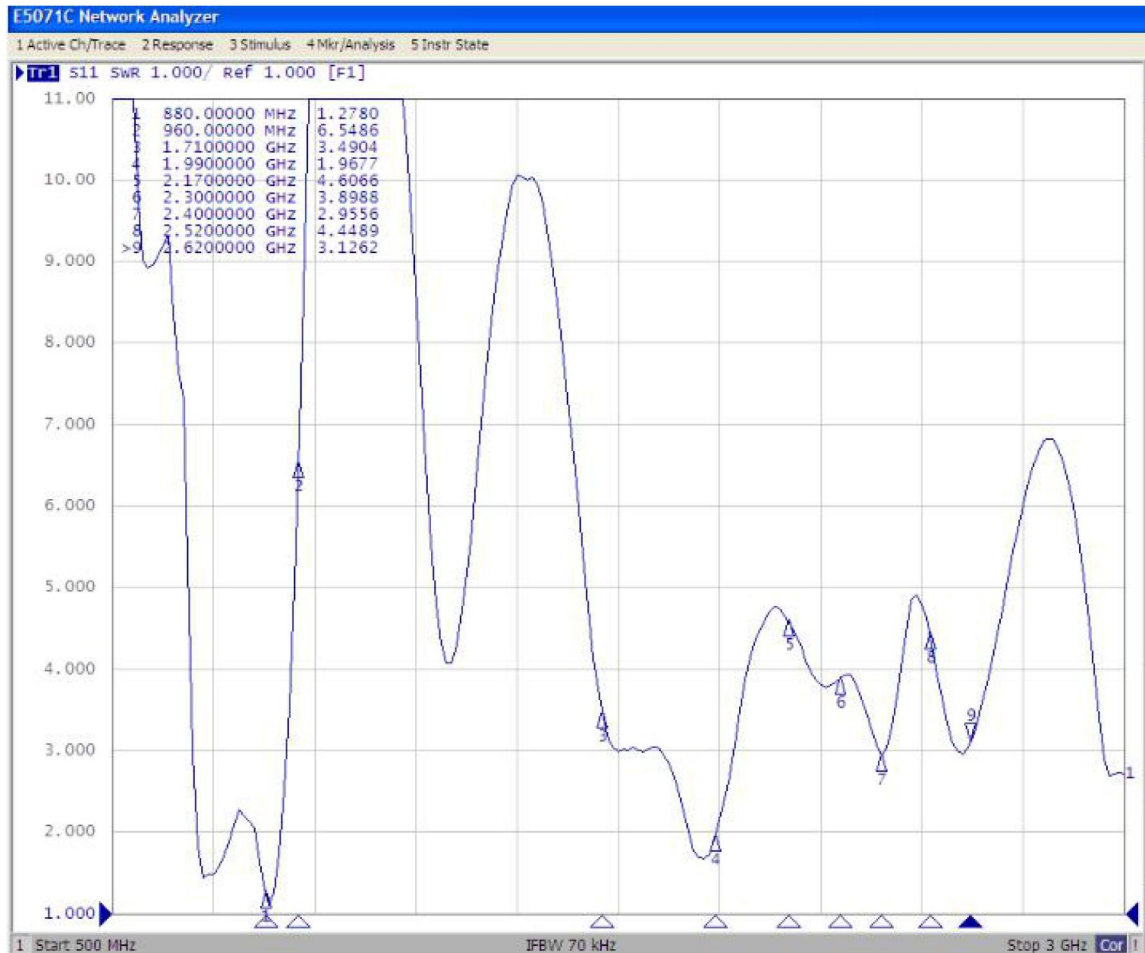
Rev: R:A1

ZTX P/N :LH16-LTE

Editor:

Page 6 of 11

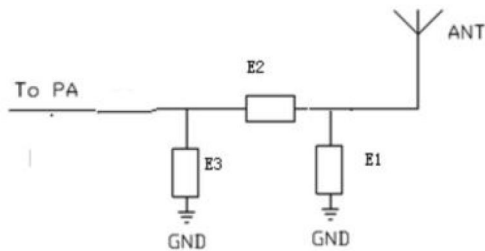
3. VSWR



ANTENNA SPECIFICATION

4. Matching circuit

Matching structure



匹配说明	GSM	Wifi	Blue tooth
E1			
E2			
E3			

ANTENNA SPECIFICATION

CUS P/N :LH16-LTE

ApplicationDate:Novembe,30,201
7

Rev: R:A1

ZTX P/N :LH16-LTE

Editor:

Page 8 of 11

5. Environment treatment



环保要求:

ANTENNA SPECIFICATION

CUS P/N :LH16-LTE

ApplicationDate:Novembe,30,201

Rev: R:A1

7

ZTX P/N :LH16-LTE

Editor:

Page 10 of 11

7.Size report

8.Salt-Spray test

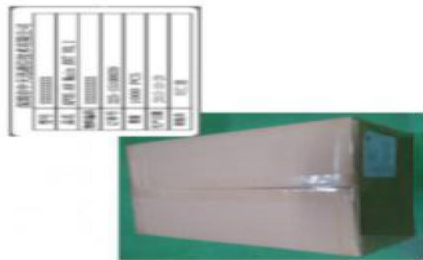
9.Environment Characteristic

NO.	ITEM	TEST CONDITION	SPECIFICATION
4-1	High Temperature/Humidity Storage Test(non operating)	1.Temperature: $+70 \pm 2^{\circ}\text{C}$ 2.Humidity: $90 \sim 95\% \text{RH}$ 3.Time: 48hrs	No material deformation is allowed.
4-2	Low Temperature/Humidity Storage Test(non operating)	1.Temperature: $-30 \pm 2^{\circ}\text{C}$ 2.Humidity: $0\% \text{RH}$ 3.Time: 48hrs	The VSWR, Gain, Radiation Pattern must be met specifications after these test.



ANTENNA SPECIFICATION

10.The packing way

福州中天迅通信技术有限公司 ZHONGTIAN XUN Communication Technology Co., Ltd.							作业指导书				
产品名称	产品型号	文件编号	版本	工序序号/名称	工序工时	日产量					
天线	LH16-LTE	ZTX-QD-WI-023	A1	包装	/	/					
 图1: 每50pcs装/袋 图2: 每5小袋/装1大袋 图3: 装箱 图4: 贴外箱标签, 封箱							作业方法 (自检验工序作业合格后, 方能流入下一道工序)				
							1. 50pcs采用泡棉整齐、橡皮筋包扎, 每 (50pcs) 产品用PE封口 膜袋包装;				
							2. 将每袋5小袋 (50pcs), 装入大PE封口膜袋中 (500PCS), 尾 数除外;				
							3. 在外箱装好 (500PCS)的PE袋袋上贴小标签, 填写产品名称、 物料号、数量、周期等信息;				
							4. 在装好产品的箱子将标签贴于外箱的右上角, 标签内容包含 (生产家, 型号, 产品名称, 客户编码, 数量, 订单号, 日 期, QA检验, 客户所提供月份标识等) 不可有漏写, 与错现象				
							4. 将贴好标签的箱子用胶带以“工”字型封箱				
物料编号				物料名称及规格		用量	工/夹装治具				
							电子称				
修订内容							修订日期		修订人		
版本											
A1	制定										
制订	胡小良	审核	易爱玲	品质确认	胡春梅	批准	刘玉威				