

N17整机天线测试报告

N17 whole antenna test report

项目调试简介

Introduction to project debugging

机 型	N17			
板 型	主板			
频段及天线材质	主天线	频 段		材 质
		2G	GSM850/900/1800/1900	FPC
		3G	WCDMA B1/2/4/5/8	
		4G	LTE B1/2/3/4/5/7/8/20 40/41	
	其他天线	GWB	1575. 42MHz/2. 450GHz	FPC
		DRX	824MHz-2700MHz	FPC
性能要求	按客户要求执行			

主天线有源参数

Active parameters of the main antenna

Test	GSM 850			EGSM 900		
Channel	128	190	251	1	62	124
TRP (dBm)	24.43	24.64	25.32	25.43	25.88	26.24
TIS (dBm)			-101.67			-100.38

Test	DCS 1800			PCS 1900		
Channel	512	698	885	512	661	810
TRP (dBm)	25.11	25.74	25.91	25.43	25.88	25.31
TIS (dBm)			-104.31			-105.41

主天线有源参数

Active parameters of the main antenna

Test	WCDMA_I			WCDMA_II		
Channel	10562	10700	10838	9662	9800	9938
TRP (dBm)	18.33	18.24	18.04	17.43	17.93	18.24
TIS (dBm)			-106.19			-106.31

Test	WCDMA_V			WCDMA_VIII		
Channel	4357	4408	4458	2937	3013	3088
TRP (dBm)	15.02	15.33	15.47	16.11	15.65	15.32
TIS (dBm)			-104.72			-103.48

Test	WCDMA_IV		
Channel	1537	1638	1738
TRP (dBm)	16.58	17.03	17.36
TIS (dBm)			-104.56

主天线有源参数

Active parameters of the main antenna

Test	FDD B1			FDD B2		
Channel	18050	18300	18550	18650	18900	19150
TRP (dBm)	19.25	19.18	19.42	18.56	19.24	19.36
TIS (dBm)			-93.68			-94.24
Test	FDD B3			FDD B4		
Channel	19250	19575	19900	20050	20175	20350
TRP (dBm)	17.42	18.39	19.05	17.04	17.55	18.32
TIS (dBm)			-93.92			-94.04
Test	FDD B5			FDD B7		
Channel	20450	20525	20600	20800	21100	21400
TRP (dBm)	15.14	15.48	16.08	18.24	18.33	17.92
TIS (dBm)			-93.22			-90.12
Test	FDD B8			FDD B20		
Channel	21500	21650	21750	24200	24300	24400
TRP (dBm)	16.65	16.17	15.53	15.72	16.14	16.72
TIS (dBm)			-93.56			-90.59

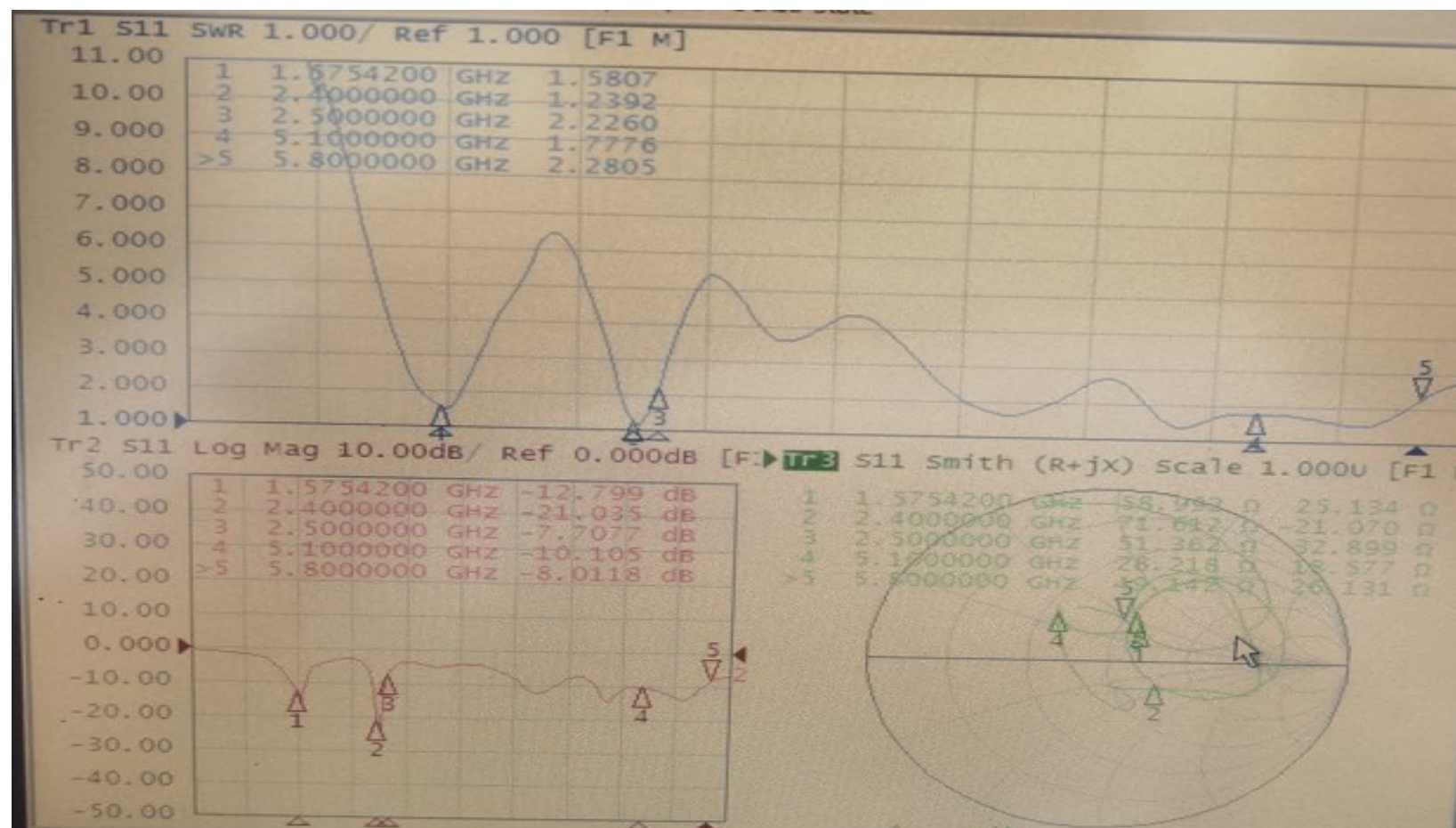
主天线有源参数

Active parameters of the main antenna

Test	TDD B40			FDD B41		
Channel	38750	39150	39550		40620	
TRP (dBm)	17.58	18.76	18.03		17.78	
TIS (dBm)			-90.28		-90.53	

三合一无源驻波比

Three in one passive standing wave ratio



天线无源参数-四合一

Antenna passive parameters - four in one

Freq (GPS天线效率)	Effi (%)	Freq (WIFI天线效率)	Effi (%)	Freq (5G/WIFI天线效率)	Effi (%)
1565MHZ	31	2400MHZ	26	5100MHZ	31
1575MHZ	34	2410MHZ	27	5200MHZ	33
1585MHZ	33	2420MHZ	29	5300MHZ	35
1595MHZ	32	2430MHZ	30	5400MHZ	36
1605MHZ	29	2440MHZ	31	5500MHZ	35
		2450MHZ	33	5600MHZ	34
		2460MHZ	30	5700MHZ	32
		2470MHZ	29	5800MHZ	30
		2480MHZ	28		
		2490MHZ	26		
		2500MHZ	26		

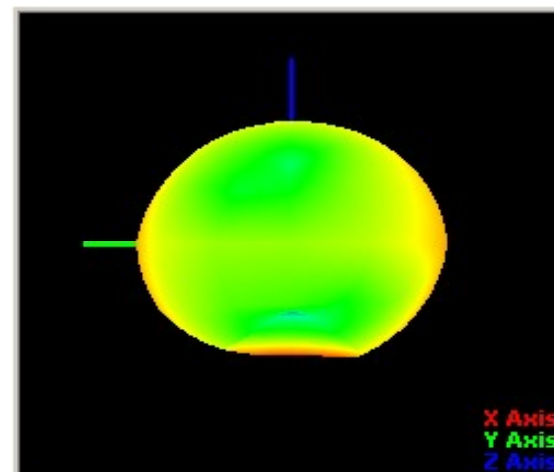
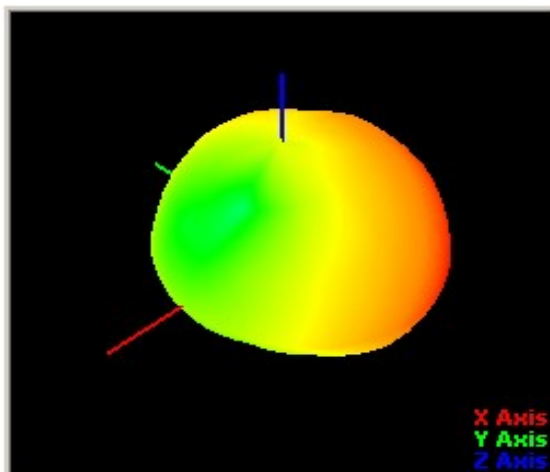
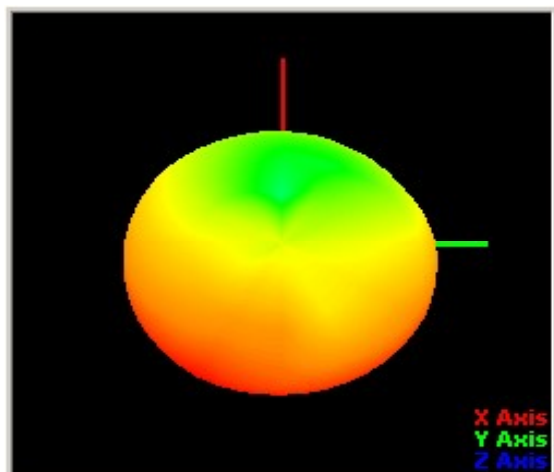
天线增益

antenna gain

Band		Gain (MAX)	
GSM850	0.47	LTE B7	0.54
EGSM900	0.51	LTE B8	0.51
DCS1800	0.44	LTE B20	0.47
PCS1900	0.42	LTE B40	0.48
WCDMA B1	0.53	LTE B41	0.54
WCDMA B2	0.42	GPS	1.19
WCDMA B4	0.41	WiFi	1.13
WCDMA B5	0.47	BT	1.13
WCDMA B8	0.51		
LTE B1	0.53		
LTE B2	0.42		
LTE B3	0.44		
LTE B4	0.41		
LTE B5	0.47		

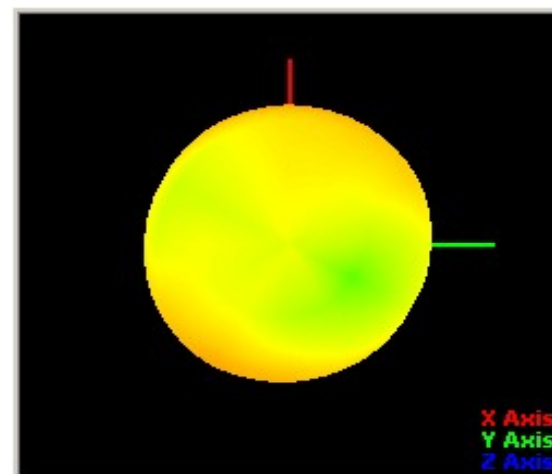
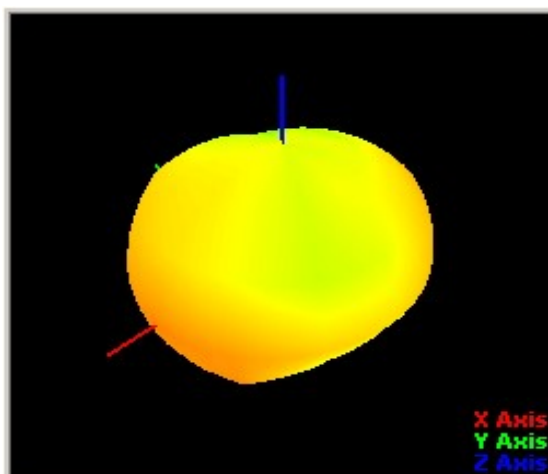
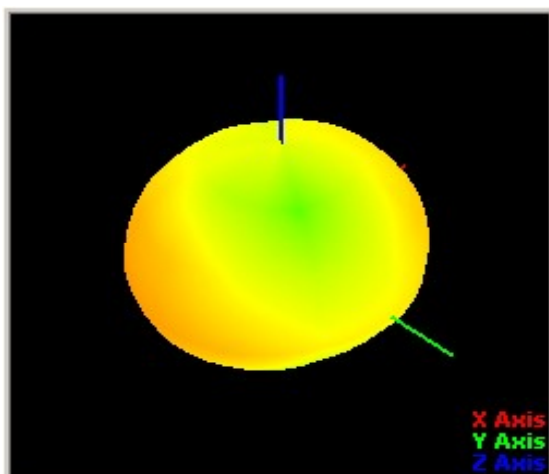
天线方向图-WCDMA B1/LTE B1

Antenna direction diagram -WCDMA B1/LTE B1



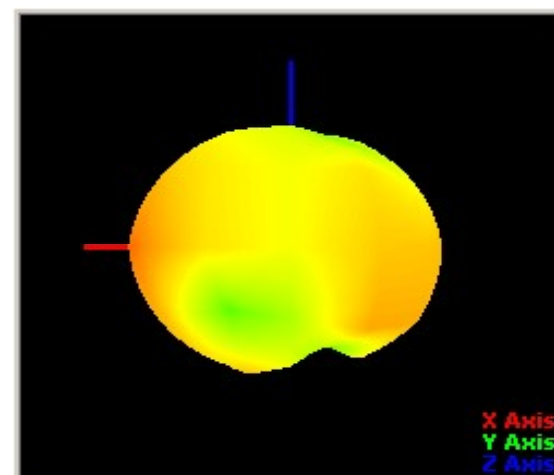
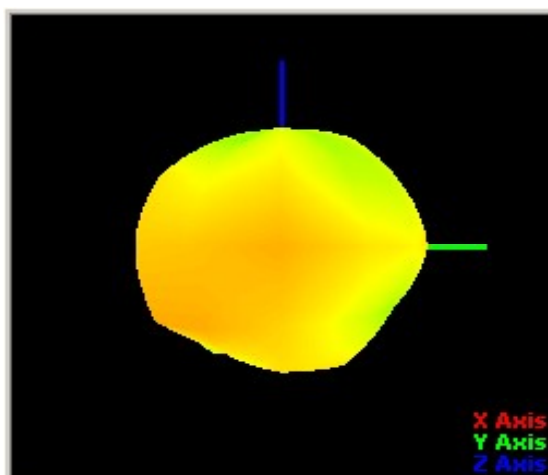
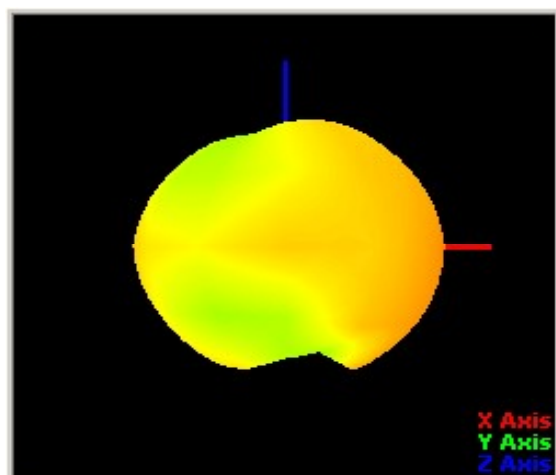
天线方向图-GSM1900/WCDMA B2/LTE B2

Antenna direction diagram -GSM1900/WCDMA B2/LTE B2



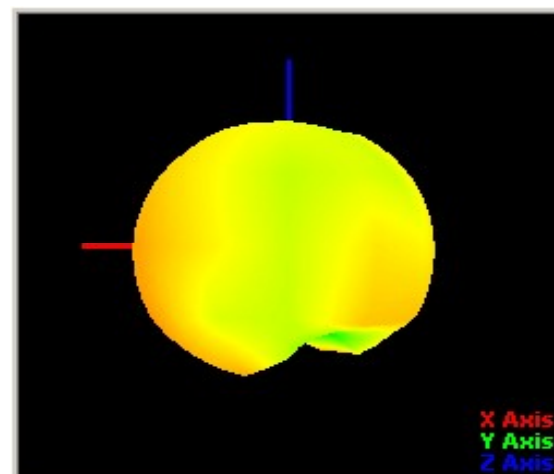
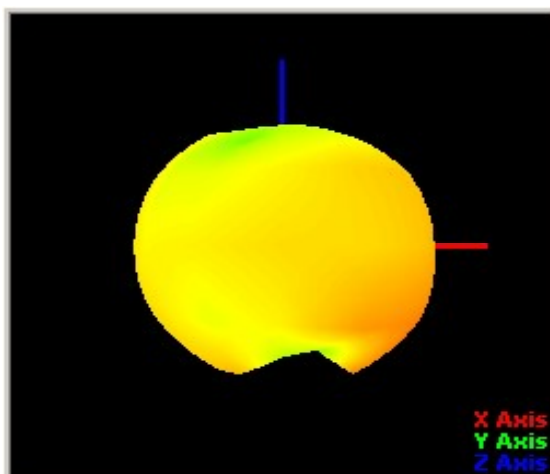
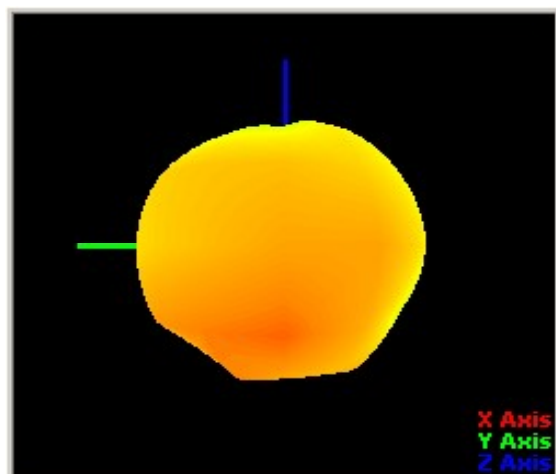
天线方向图-GSM1800/LTE B3

Antenna direction diagram -GSM1800/LTE B3



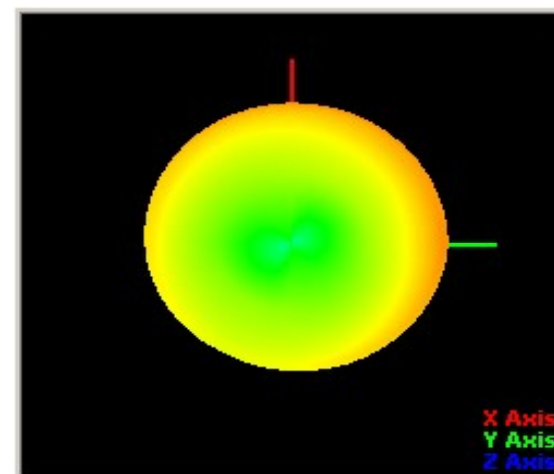
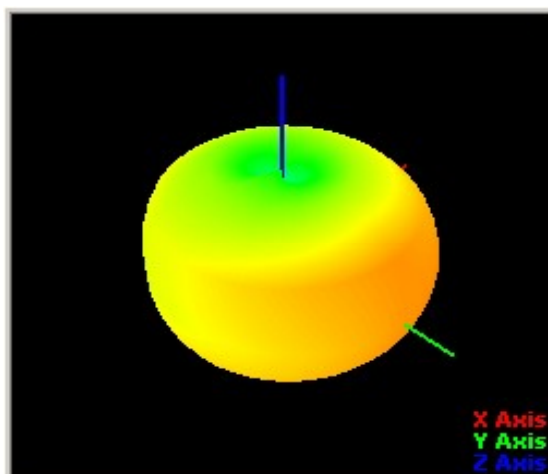
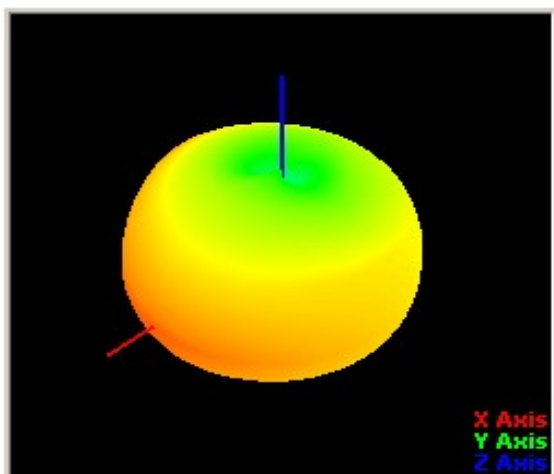
天线方向图-WCDMA B4/LTE B4

Antenna direction diagram -WCDMA B4/LTE B4



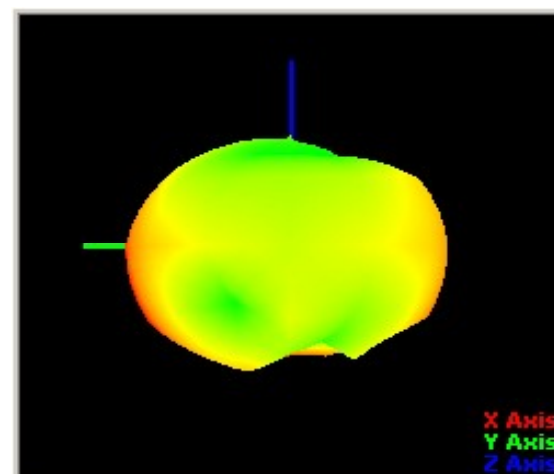
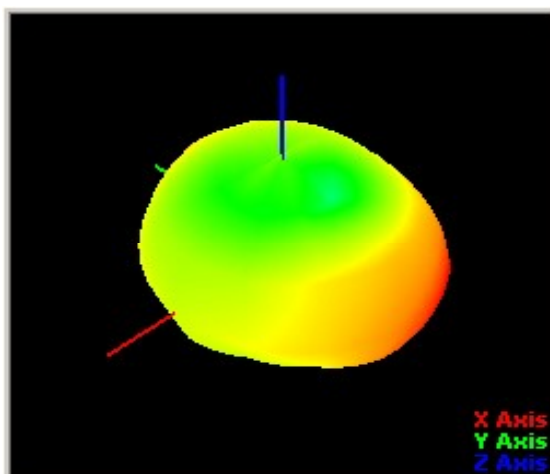
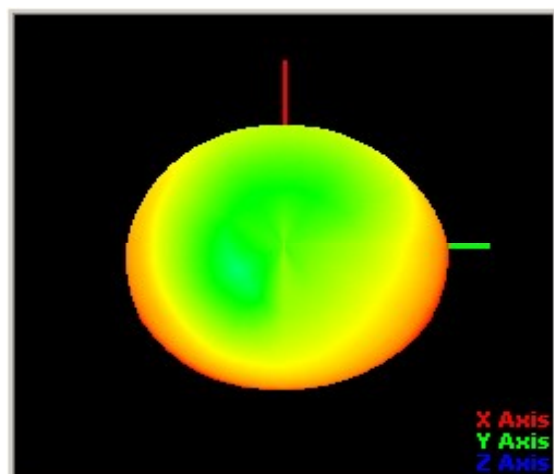
天线方向图-GSM850/WCDMA B5/LTE B5/B20

Antenna direction diagram -GSM850/WCDMA B5/LTE B5/B20



天线方向图-LTE B7/B41

Antenna direction diagram -LTE B7/B41



天线方向图-B40

Antenna direction diagram -B40

