



深圳市凯普深通讯科技有限公司

Shenzhen Kaipushen Communication Technology Co., Ltd

Antenna debugging report

1. 基本信息/Basic information

制造商Manufacturer	Shenzhen Kaipushen Communication Technology Co., Ltd 2nd Floor, Building 1, Yulong Building, Longcheng Industrial Zone, No.440,Longguan Avenue, Longhua District, Shenzhen
型号Model	KPS-S86B1-MAIN-V0.3 KPS-S86B1-DIV-V0.1 KPS-S86B1-G/W/B-V0.1
频段Frequency Bands:	2G: GSM850/900/1800/1900 3G: W1/2/4/5/8 4G:B1/2/3/4/5/7/8/12/17/18/19/20/26/28/38/40/41 /66 GPS/2.4W/5.8W

2. 暗室设备/Darkroom Equipment

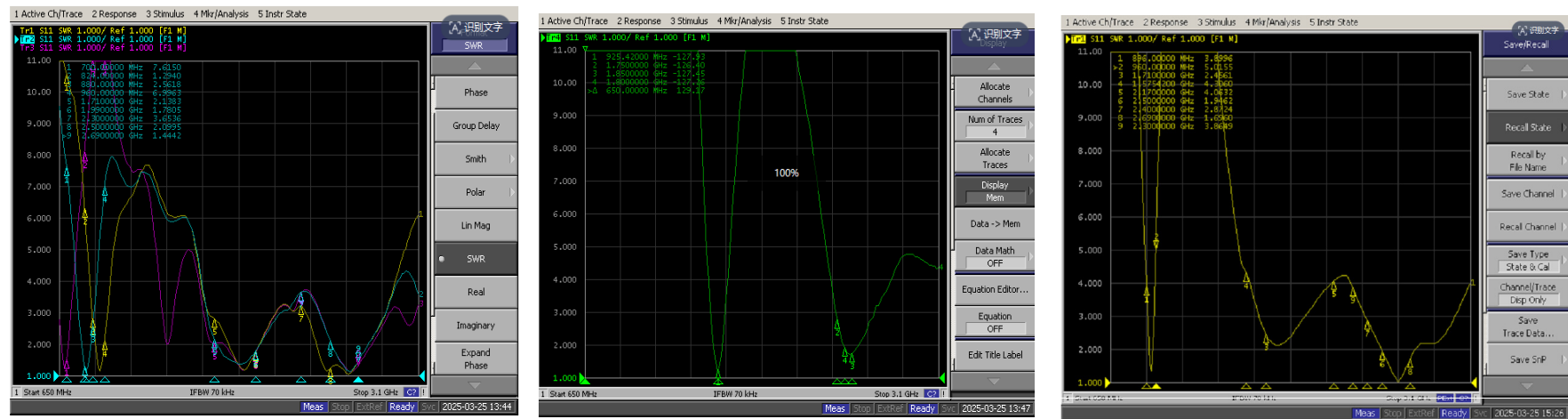
图示1/Figure 1: 3D暗室。3D Anechoic Chamber



图示2/Figure 2: 正面.Front View



3. 驻波图 Standing Wave Ratio (SWR) Graphs



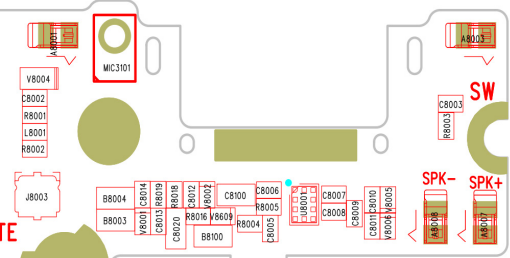
main

GPS/WIFI/BT

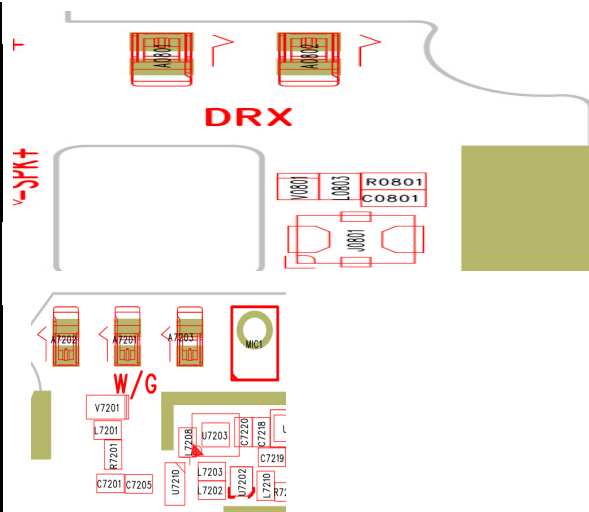
DIV

4. 天线匹配电路及开关逻辑 Antenna Matching Circuit and Switch Logic

MAIN			S86B1 MAIN		
主路/Main Road	V8004	NC	RF1	0欧姆	TRX: GSM900/1800/1900 WCDMA1/2/4/8
	C8002	1PF	RF2	2.4NH	TRX: GSM850 WCDMA5
	R8001	0R	RF3	18PF	RX: 2G 900RX
	L8001	5.6nH	RF4	15NH	TRX: B12/17/28
	R8002	0R			
Switch(SW7103)	C8003	NC			
	R8003	0R			
	C8006	0R			
	R8005	3.6nH			
	C8007	22pF			
	C8008	12nH			



DIV		
Main Road	V0801	NC
	L0803	0.5PF
	R0801	4.3NH
	C0801	NC
GPS/WiFi/bt		
Main Road	V7201	NC
	L7201	NC
	R7201	0R
	C7201	NC
	C7205	0R



5. 天线OTA测试数据

Antenna OTA Test Data

4G	CH	TRP	TIS LCD off	TIS LCD on	4G	CH	TRP	TIS LCD off	TIS LCD on
FDD-B1(10M)	L	17.9			FDD-B18(10M)	L	15.6		
	M	17.4				M	16.1		
	H	17.2	-96.7	-96.6		H	16.3	-92.9	-90.3
FDD-B2(10M)	L	19.3			FDD-B19(10M)	L	16		
	M	19.2				M	16.4		
	H	18.9	-95.8	-95.4		H	16.7	-91.4	-90.1
FDD-B3(10M)	L	16.0			FDD-B20(10M)	L	16.1		
	M	16.7				M	16.8		
	H	17.5	-96.7	-96.3		H	16.8	-90.4	-85.9
FDD-B4(10M)	L	16.2			FDD-B26(10M)	L	15.6		
	M	16.9				M	16.2		
	H	17.8	-95.3	-95		H	16.8	-90.3	-89.4
FDD-B5(10M)	L	16.3			FDD-B28(10M)	L	18.7		
	M	16.7				M	18.3		
	H	16.8	-92.6	-91.2		H	17.3	-88.5	-86.1

TDD-B7(10M)	L	18.4			FDD-B66(10M)	L	16.2		
	M	18.5				M	16.8		
	H	17.6	-94.3	-94.1		H	17.0	-95.2	-94.8
TDD-B8(10M)	L	16.7			TDD-B38(20M)	L	18.5		
	M	16.2				M	18.1		
	H	17.2	-92.1	-91.8		H	17.6	-92.7	-92.2
TDD-B12(5M)	L	17.4			TDD-B40(20M)	L	15.5		
	M	17.9				M	16.2		
	H	18.3	-91.2	-86.1		H	16.7	-87.1	-86.7
TDD-B17(10M)	L	18.8			TDD-B41(20M)	L	18.8		
	M	18.2				M	18.4		
	H	18.3	-90.9	-85.8		H	17.2	-93.4	-93.2
3G	CH		TIS LCD off	TIS LCD on	2G	CH	TRP	TIS LCD off	TIS LCD on
W-1	L	17.8			GSM-850	L	25.1		
	M	17.8				M	25.1		
	H	17.6	-104.8	-104.2		H	25.2	-102.2	101.2
W2	L	18.3			EGSM900	L	25.8		
	M	18.6				M	26.3		
	H	18.2	-106.3	-105.8		H	26.8	-102.9	-100.3
W4	L	16.7			DCS1800	L	23.5		
	M	16.5				M	24.1		
	H	17.4	-104.3	103.9		H	24.7	-103.7	-102.9
W5	L	16.2			PCS1900	L	25.2		
	M	16.3				M	25.2		
	H	16.8	-103.5	101.7		H	25.3	-104.2	-103.6
W-8	L	16.8							
	M	16.8							
	H	17.5	-104.9	-103.6					

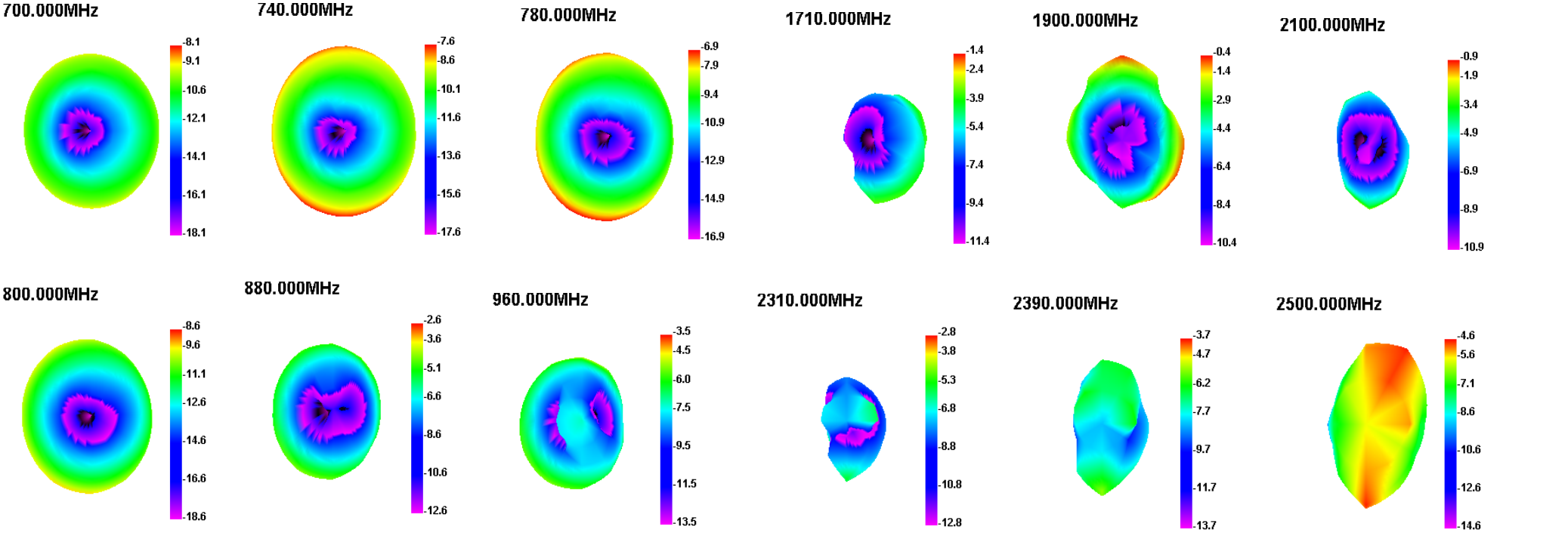
6. 天线增益 GAIN



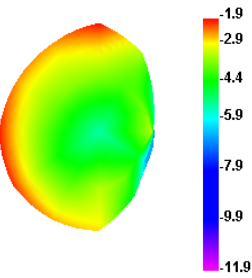
	GAIN(dBi)		GAIN(dBi)			
B1	-1.89	B38	-0.87			
B2	-1.56	B40	-0.68			
B3	-2.04	B41	-0.87			
B4	-2.13	W1	-1.8			
B5	-3.47	W2	-1.56			
B7	-1.02	W4	-2.13			
B12	-3.65	W5	-3.47			
B17	-3.58	W8	-3.77			
B18	-3.63	GSM850	-3.47			
B19	-3.65	EGSM900	-3.77			
B20	-3.67	DCS1800	-2.04			
B26	3.65	PCS1900	-1.56			
B28	-3.48	gps	-1.35			
B66	-2.13	WiFi	-0.33			
		bt	-0.33			

3D方向图

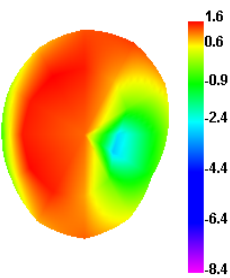
Radiation Pattern (Directional Characteristics)



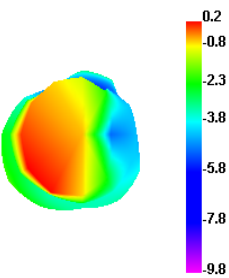
2690.000MHz



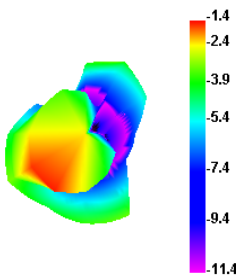
1575.000MHz



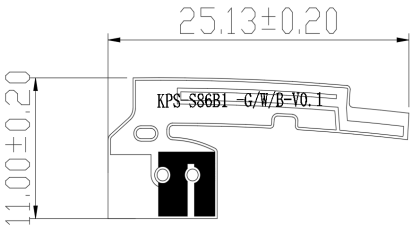
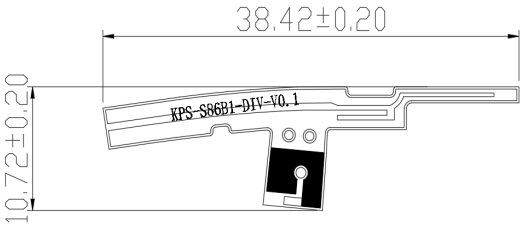
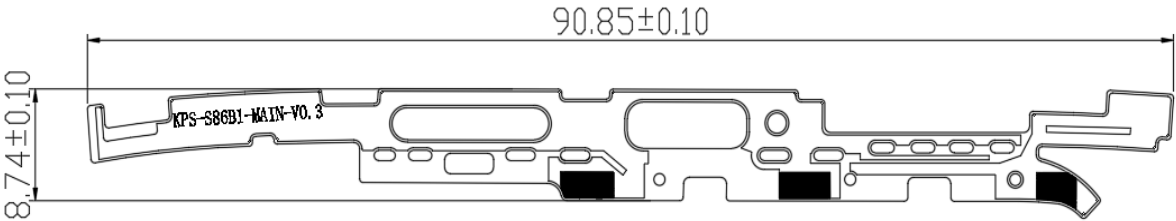
2400.000MHz



2500.000MHz



天线尺寸 Antenna Dimensions



GPS/WiFi TEST

		channel	TRP	TIS
2. 4G	11b : 11Mbps	1	15.5	
		7	13.8	
		13	15.6	-80.8

