



Shenzhen Kaipushen Communication Technology Co., Ltd

Antenna test report

customer: Xinfeng Weiye

project name: SL08

RF: Jiang Gong

structure: He Gong

Date: 24.5.2024

Antenna version: V1.0



Catalogue

- one. Introduction to Project Debugging
- two. Laboratory testing environment and equipment
- three. Antenna matching circuit
- four. Antenna S11 parameters
- five. Main antenna test data
- SIX. WiFi antenna S parameters
- seven. Diversity antenna S parameters
- eight. Environmental treatment
- nine. Assembly diagram of the entire machine antenna
- ten. Contact information



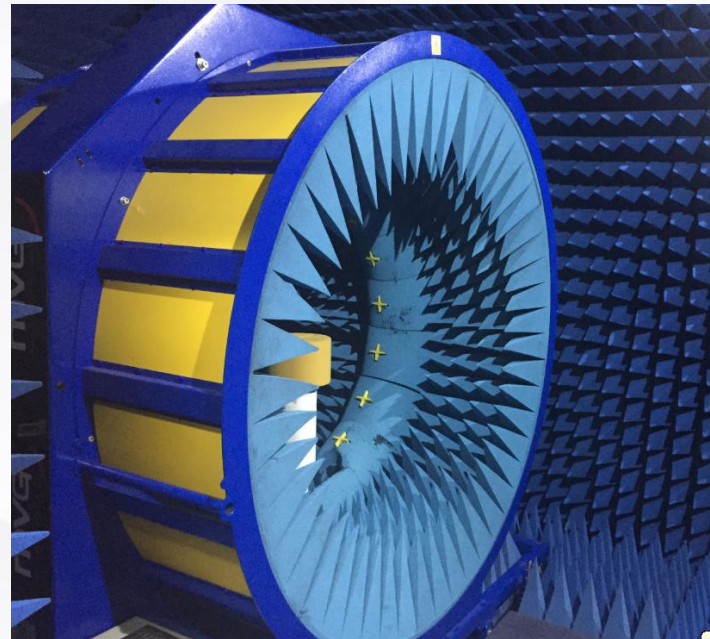
凯普深

Introduction to Project Debugging

Machine type	MIFI			
		Frequency band information	Antenna form	Matching changes
Antenna type and frequency band information	Antenna	FDD B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28 TDD 38/39/40/41 W1/2/4/5/6/8/19 B9 is included in B3 B17 is included in B12	Bipolar	YES
	Sub antenna	2.4G WIFI	Bipolar	YES
	Diversity antenna	824M-2700M	Bipolar	YES
Antenna material	FPC			

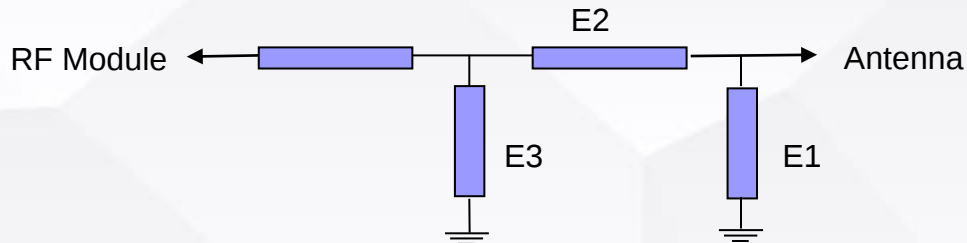


Laboratory testing environment and equipment



Test items	Test equipment
S11、S12、VSWR、LOSS	network analyzer E5071B、E5062A
Efficiency、Gain 3D Radiation Pattern	Satimo SG16darkroom、GP7*4*3darkroom、E5071B
TRP、TIS	Satimo SG16darkroom、GP7*4*3darkroom、8960、CMW500、MT8820C、E4438C、

Main antenna matching circuit



Main antenna

Element

Value

E1

E2

E3

E4

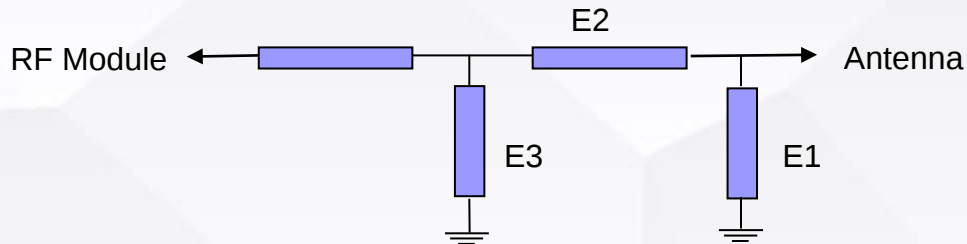
0R

18nh

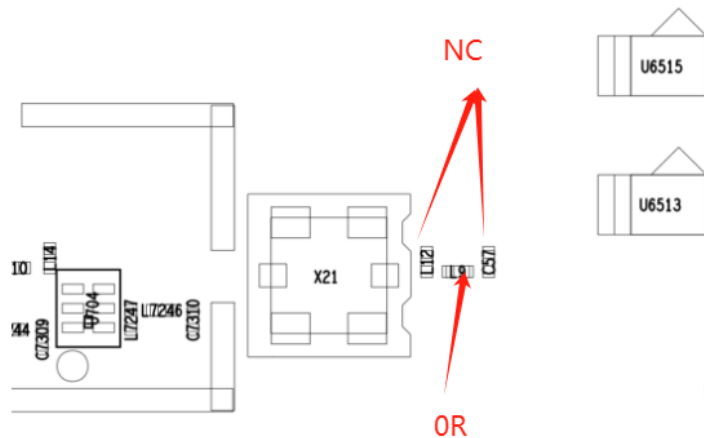
4.7pf

R6605 3.9PF
R6604 3.9NH
C142 0R
L7236 18NH
C139 4.7PF
L7237 NC

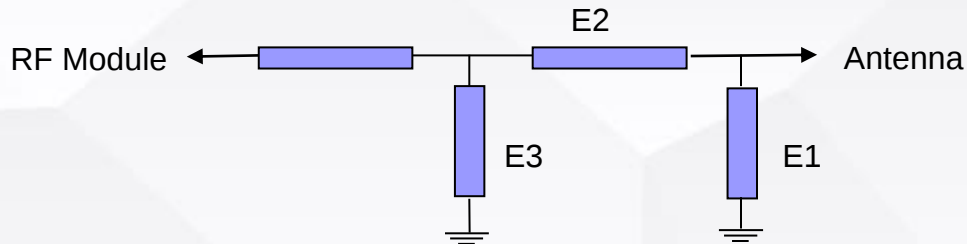
WIFI antenna matching circuit



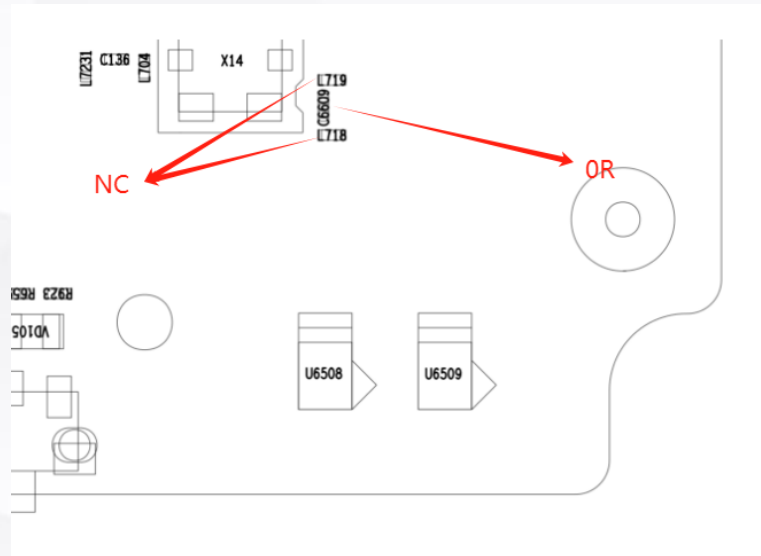
WIFI antenna	Element	Value
	E1	
	E2	0Ω
	E3	NC
	E4	



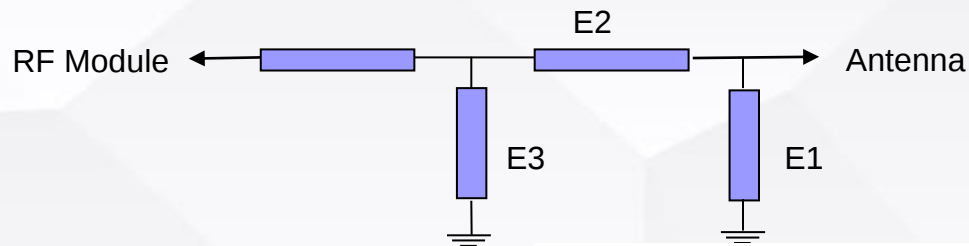
Diversity antenna matching circuit



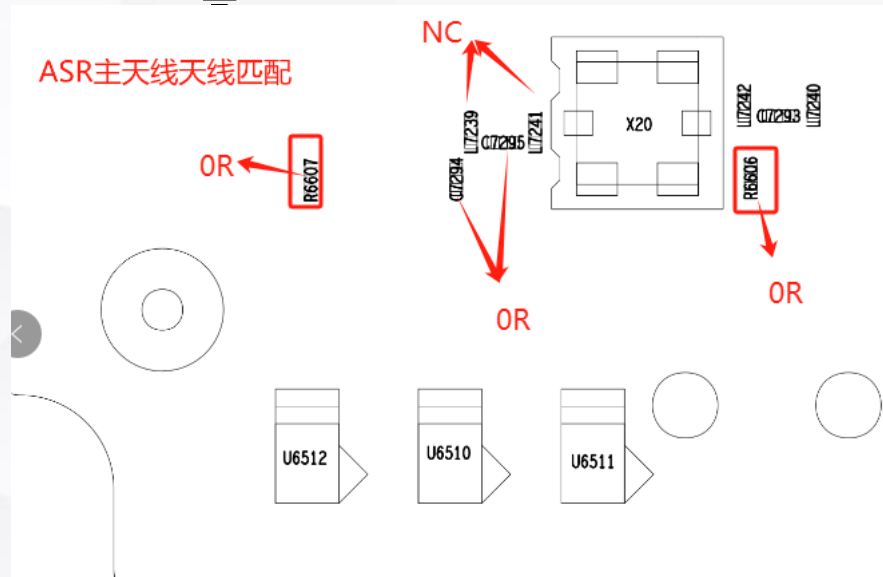
Diversity antenna	Element	Value
	E1	
	E2	
	E3	
	E4	



ASR antenna matching circuit



ASR antenna	Element	Value
	E1	NC
	E2	0Ω
	E3	NC
	E4	0Ω



Main antenna standing wave diagram





GPS/WIFI Antenna standing wave diagram





凯普深

Antenna test data

FS	Channel	TRP (dBm)	TIS (dBm)
B1	L	21.1	-97.3
	M	20.3	-97.0
	H	20.1	-96.1
B2	L	20.3	-97.5
	M	20.2	-97.6
	H	20.7	-98.3
B3	L	20.3	-90.3
	M	20.2	-96.0
	H	20.2	-96.8
B4	L	20.1	-96.3
	M	20.1	-96.5
	H	20.2	-96.2

FS	Channel	TRP (dBm)	TIS (dBm)	FS	Channel	TRP (dBm)	TIS (dBm)
B5	L	20.5	-95.5	B13	L	20.5	-90.9
	M	20.7	-95.3		M	20.3	-90.6
	H	20.8	-95.1		H	20.6	-90.1
B7	L	19.3	-90.9	B18	L	20.6	-93.5
	M	19.0	-90.7		M	20.9	-93.5
	H	19.2	-90.4		H	20.6	-93.1
B8	L	20.7	-94.9	B19	L	20.1	-93.8
	M	20.4	-94.8		M	20.2	-93.5
	H	20.2	-95.0		H	20.3	-93.2
B12	L	19.6	-95.3	B25	L	20.7	-95.8
	M	19.8	-94.9		M	20.5	-95.3
	H	19.7	-94.8		H	20.1	-95.6



Antenna test data

FS	Channel	TRP (dBm)	TIS (dBm)
B26	L	20.1	-93.5
	M	20.1	-93.1
	H	19.7	-92.8
B28	L	20.8	-94.7
	M	20.4	-94.3
	H	20.1	-94.5
B38(20 M)	L	19.1	-90.5
	M	18.8	-90.3
	H	18.3	-90.1
B20	L	20.5	-94.0
	M	20.3	-93.8
	H	20.5	-93.3

FS	Channel	TRP (dBm)	TIS (dBm)
B39	L	20.1	-93.5
	M	20.7	-93.2
	H	20.7	-93.1
B40	L	19.2	-91.2
	M	18.7	-90.7
	H	18.1	-90.6
B41	L	18.7	-92.1
	M	18.8	-91.5
	H	19.1	-91.7



凯普深

Antenna test data

FS	Channel	TRP (dBm)	TIS (dBm)
W-1	L	20.5	-108.1
	M	20.3	-107.8
	H	20.4	-107.5
W-2	L	20.9	-107.7
	M	20.8	-107.3
	H	20.8	-106.8
W-4	L	20.3	-107.3
	M	20.7	-107.7
	H	20.6	-107.4

FS	Channel	TRP (dBm)	TIS (dBm)
W-5	L	20.7	-106.8
	M	20.7	-106.7
	H	20.8	-106.4
W-6	L	20.3	-107.2
	M	20.1	-106.7
	H	20.4	-106.7
W-8	L	20.7	-106.8
	M	20.9	-105.9
	H	21.4	-106.3
W-19	L	20.4	-106.5
	M	20.8	-106.3
	H	20.4	-106.1



Antenna test data

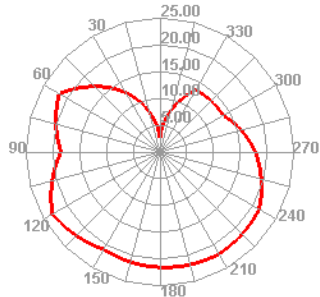
FS	Channel	TRP	TIS
2.4G WIFI	L	12.0	-81.5
	M	12.3	-81.9
	H	12.6	-82.8



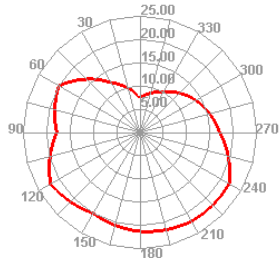
凯普深

2D directional map

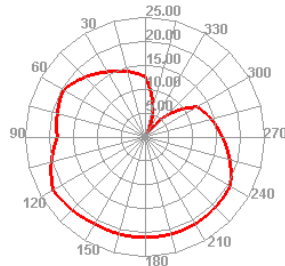
LTE1 18050 TRP Phi=45



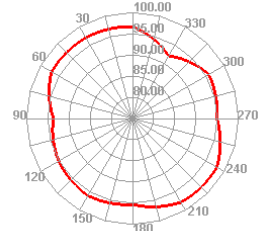
LTE1 18300 TRP Phi=45



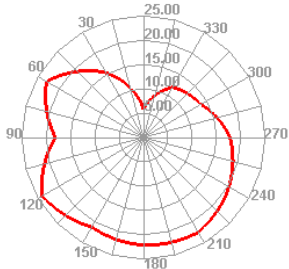
LTE1 18550 TRP Phi=45



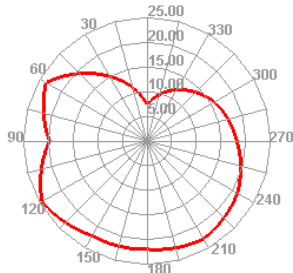
LTE1 550 TIS Phi=45



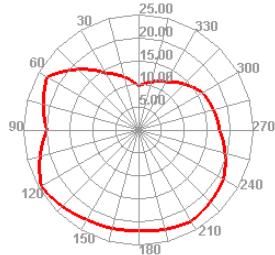
LTE2 18650 TRP Phi=45



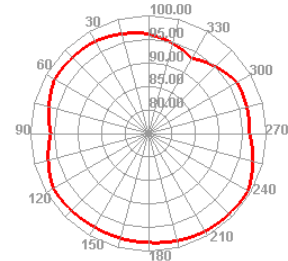
LTE2 18900 TRP Phi=45



LTE2 19150 TRP Phi=45



LTE2 1150 TIS Phi=45

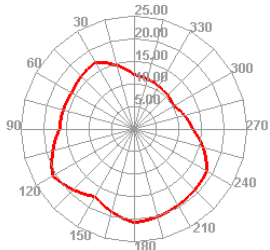




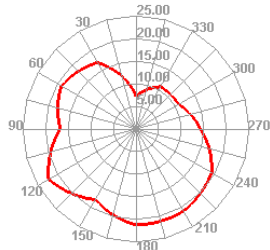
凯普深

2D directional map

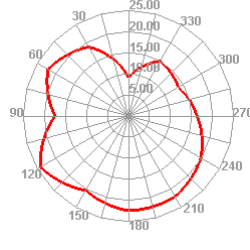
LTE3 19250 TRP Phi=45



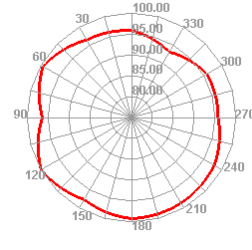
LTE3 19575 TRP Phi=45



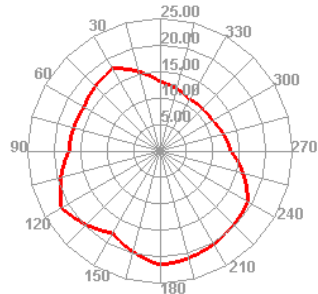
LTE3 19900 TRP Phi=45



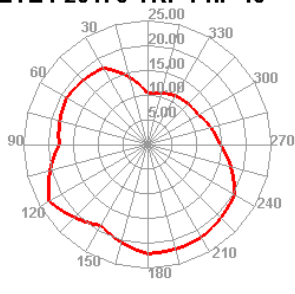
LTE3 1900 TIS Phi=45



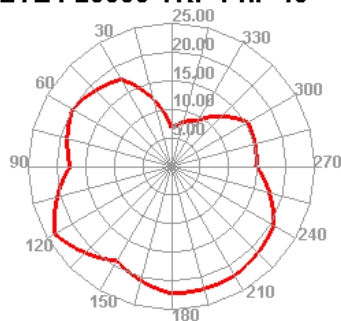
LTE4 20000 TRP Phi=45



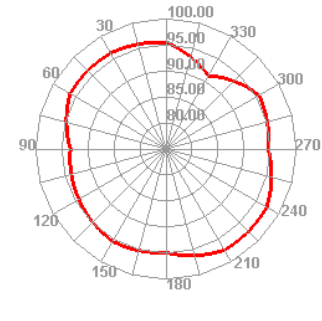
LTE4 20175 TRP Phi=45



LTE4 20350 TRP Phi=45



LTE4 2350 TIS Phi=45

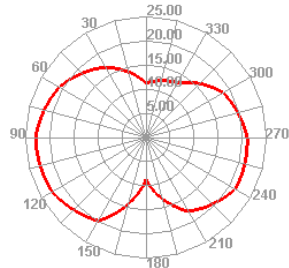




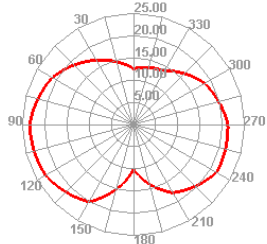
凯普深

2D directional map

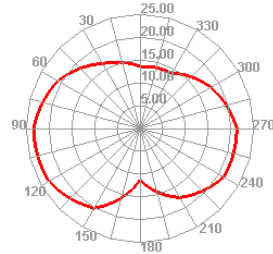
LTE5 20450 TRP Phi=45



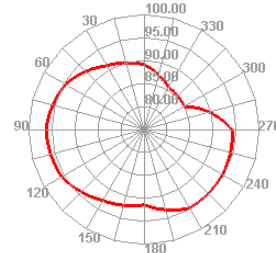
LTE5 20525 TRP Phi=45



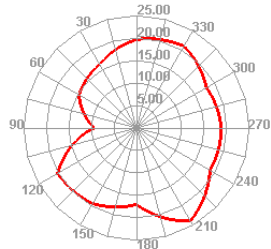
LTE5 20600 TRP Phi=45



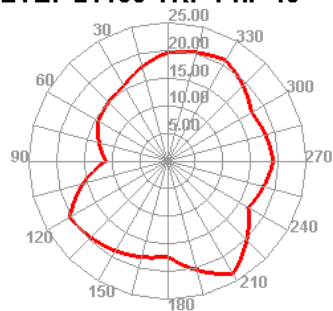
LTE5 2600 TIS Phi=45



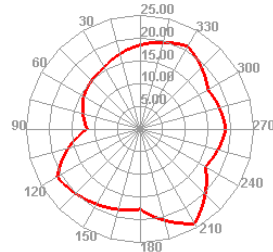
LTE7 20800 TRP Phi=45



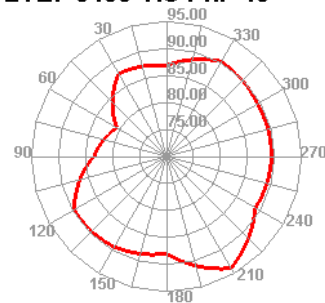
LTE7 21100 TRP Phi=45



LTE7 21400 TRP Phi=45



LTE7 3400 TIS Phi=45

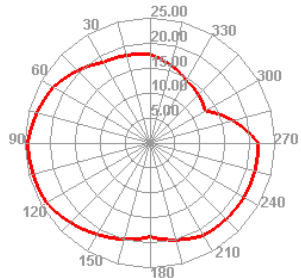




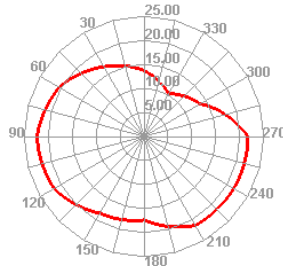
凯普深

2D directional map

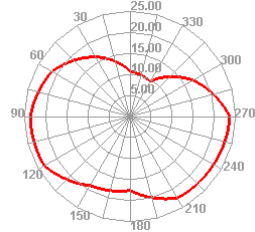
LTE8 21500 TRP Phi=45



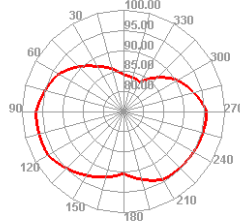
LTE8 21625 TRP Phi=45



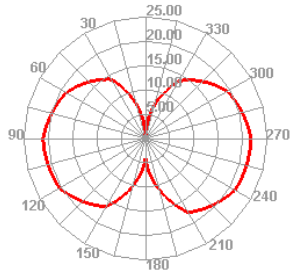
LTE8 21750 TRP Phi=45



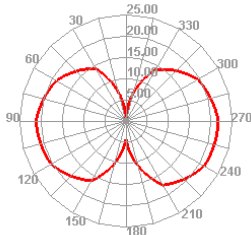
LTE8 3750 TIS Phi=45



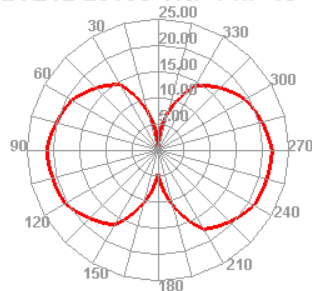
LTE12 23060 TRP Phi=45



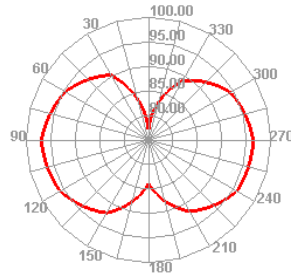
LTE12 23095 TRP Phi=45



LTE12 23130 TRP Phi=45



LTE12 5130 TIS Phi=45

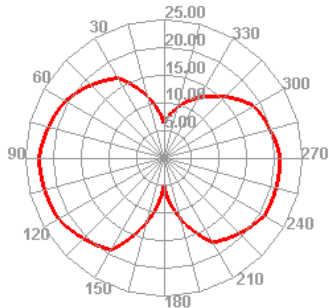




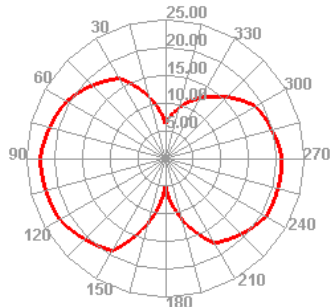
凯普深

2D directional map

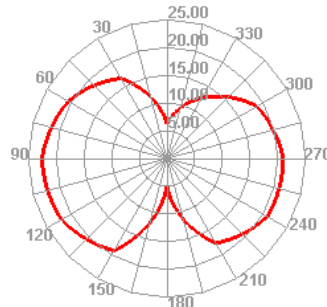
LTE13 23230 TRP Phi=45



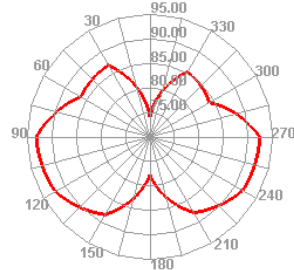
LTE13 23230 TRP Phi=45



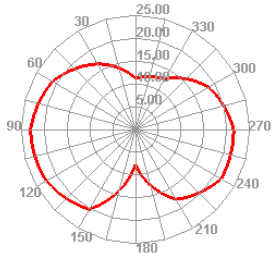
LTE13 23230 TRP Phi=45



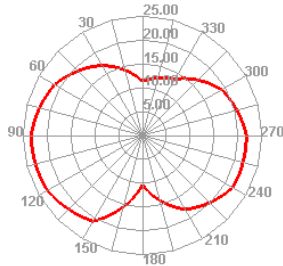
LTE13 5230 TIS Phi=45



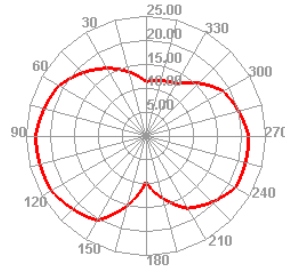
LTE18 23900 TRP Phi=45



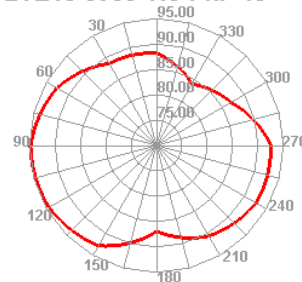
LTE18 23925 TRP Phi=45



LTE18 23950 TRP Phi=45



LTE18 5950 TIS Phi=45

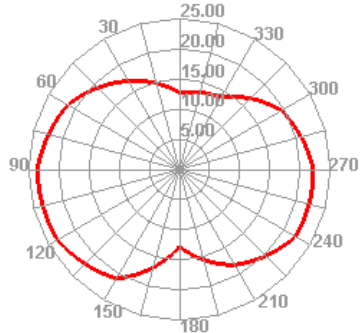




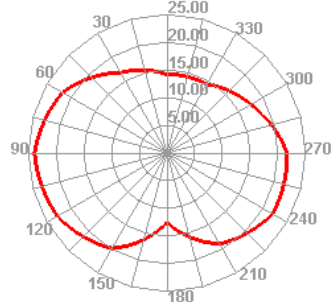
凯普深

2D directional map

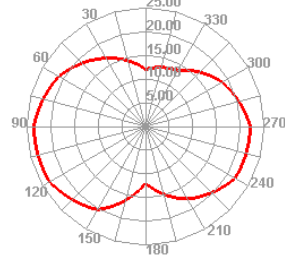
LTE19 24050 TRP Phi=45



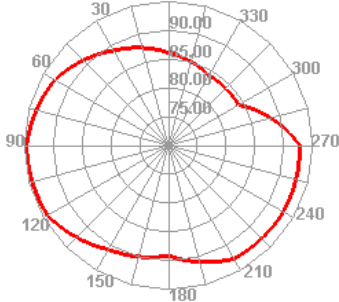
LTE19 24075 TRP Phi=45



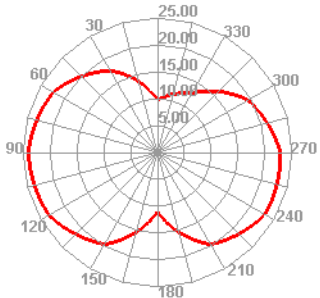
LTE19 24100 TRP Phi=45



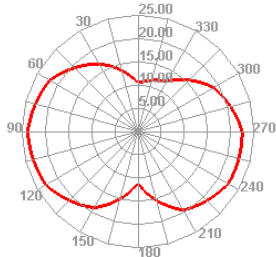
LTE19 6100 TIS Phi=45



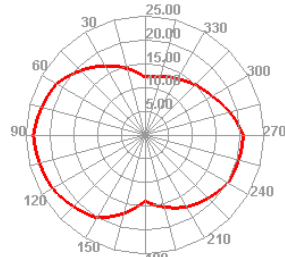
LTE20 24200 TRP Phi=45



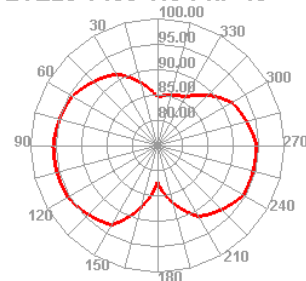
LTE20 24300 TRP Phi=45



LTE20 24400 TRP Phi=45



LTE20 6400 TIS Phi=45

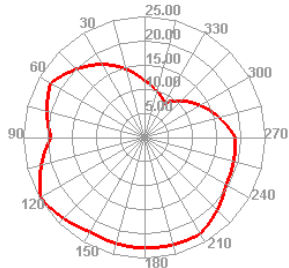




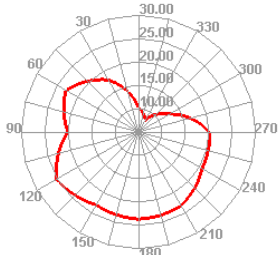
凯普深

2D directional map

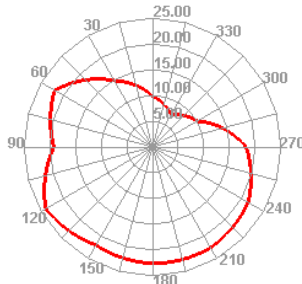
LTE25 26090 TRP Phi=45



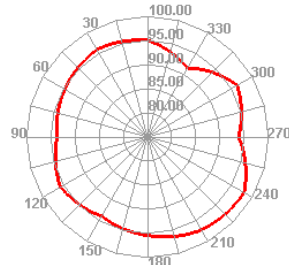
LTE25 26365 TRP Phi=45



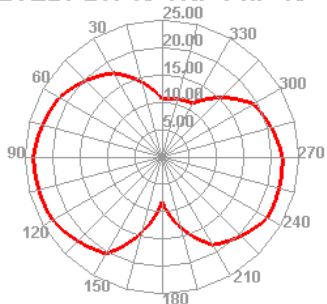
LTE25 26640 TRP Phi=45



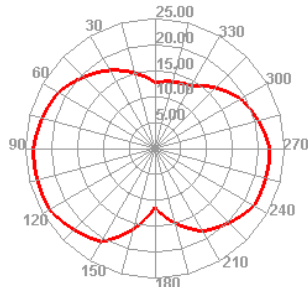
LTE25 8640 TIS Phi=45



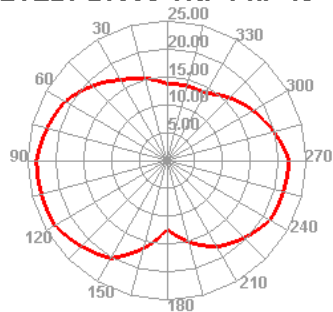
LTE26 26740 TRP Phi=45



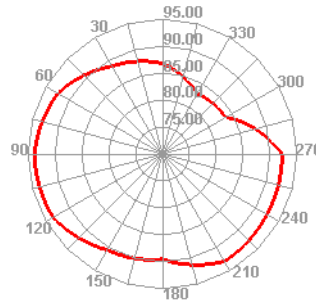
LTE26 26865 TRP Phi=45



LTE26 26990 TRP Phi=45



LTE26 8990 TIS Phi=45

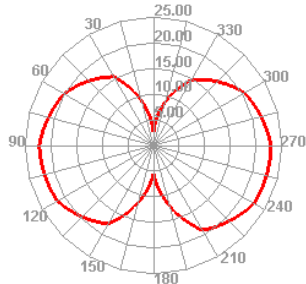




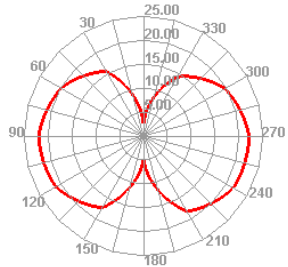
凯普深

2D directional map

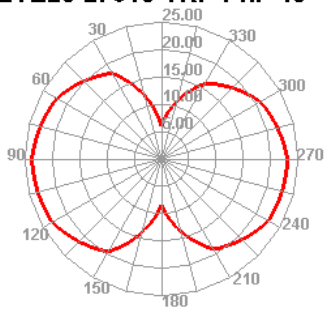
LTE28 27260 TRP Phi=45



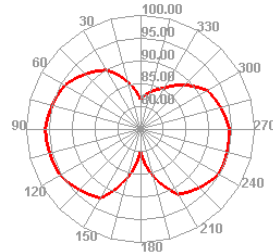
LTE28 27435 TRP Phi=45



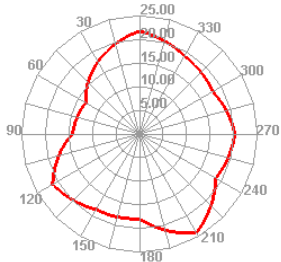
LTE28 27610 TRP Phi=45



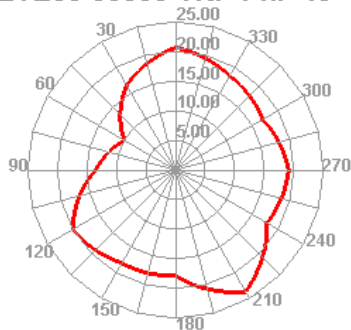
LTE28 9610 TIS Phi=45



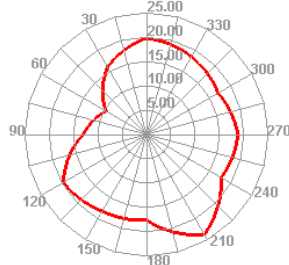
LTE38 37850 TRP Phi=45



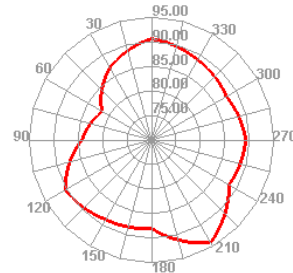
LTE38 38000 TRP Phi=45



LTE38 38150 TRP Phi=45



LTE38 38150 TIS Phi=45

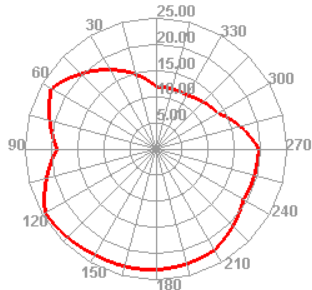




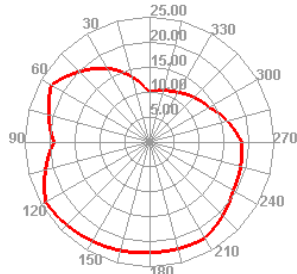
凯普深

2D directional map

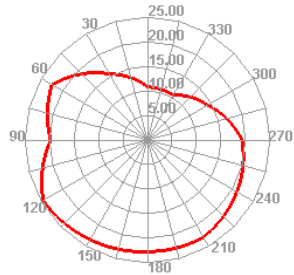
LTE39 38350 TRP Phi=45



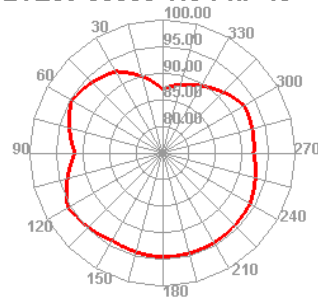
LTE39 38450 TRP Phi=45



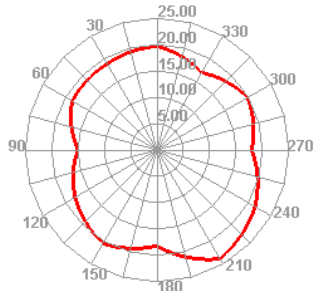
LTE39 38550 TRP Phi=45



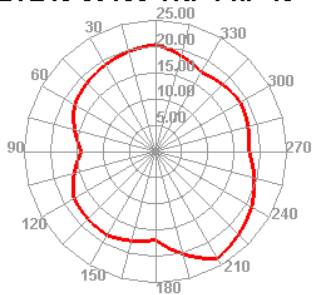
LTE39 38550 TIS Phi=45



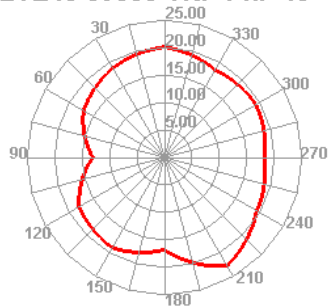
LTE40 38750 TRP Phi=45



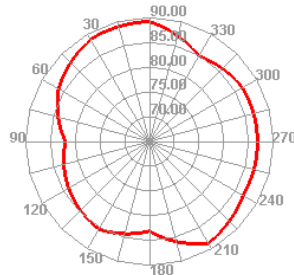
LTE40 39150 TRP Phi=45



LTE40 39550 TRP Phi=45



LTE40 39550 TIS Phi=45

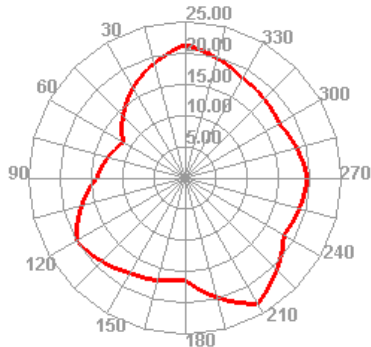




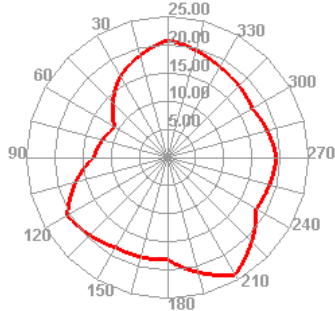
凯普深

2D directional map

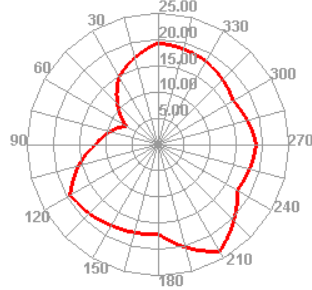
LTE41 40240 TRP Phi=45



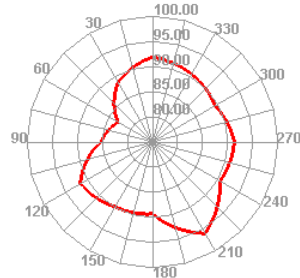
LTE41 40740 TRP Phi=45



LTE41 41140 TRP Phi=45



LTE41 41140 TIS Phi=45

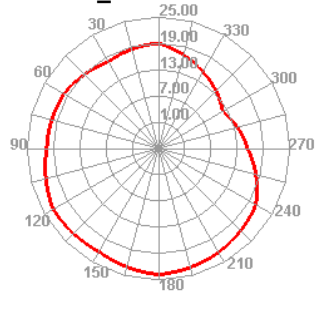




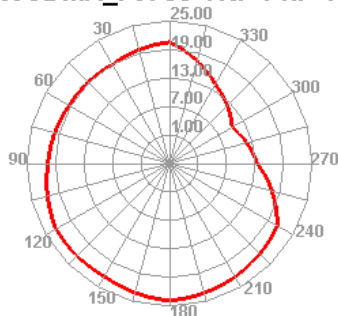
凯普深

Directional diagram

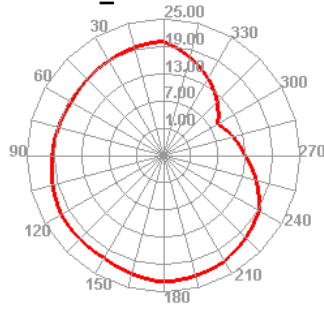
WCDMA_I 9612 TRP Phi=45



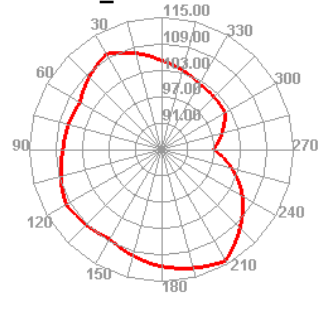
WCDMA_I 9750 TRP Phi=45



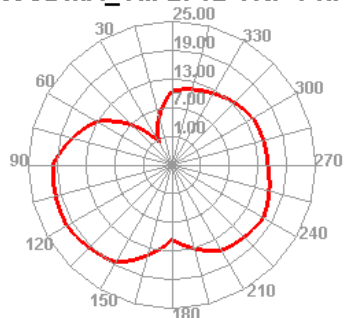
WCDMA_I 9888 TRP Phi=45



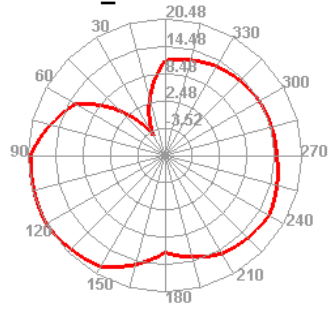
WCDMA_I 10838 TIS Phi=45



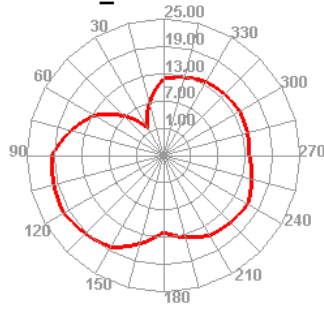
WCDMA_VIII 2712 TRP Phi=45



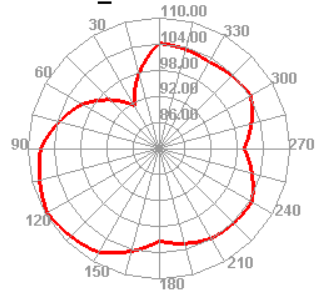
WCDMA_VIII 2788 TRP Phi=45



WCDMA_VIII 2863 TRP Phi=45



WCDMA_VIII 3088 TIS Phi=45

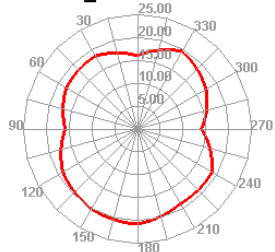




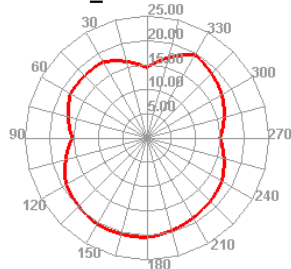
凯普深

Directional diagram

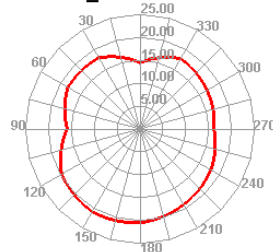
WCDMA_II 9262 TRP Phi=45



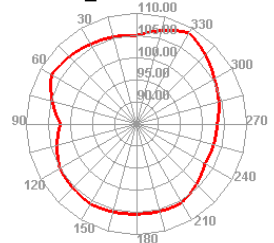
WCDMA_II 9400 TRP Phi=45



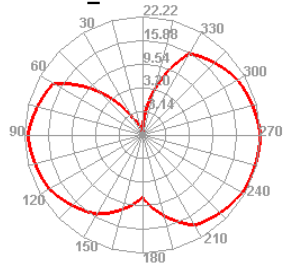
WCDMA_II 9538 TRP Phi=45



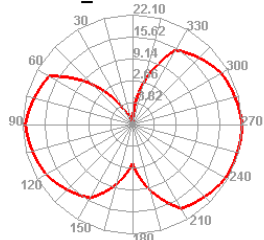
WCDMA_II 9938 TIS Phi=45



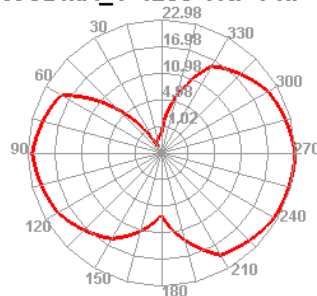
WCDMA_V 4132 TRP Phi=45



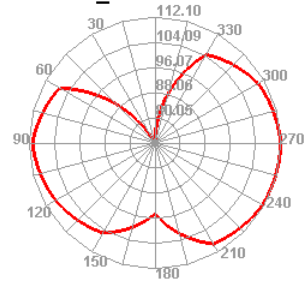
WCDMA_V 4185 TRP Phi=45



WCDMA_V 4233 TRP Phi=45



WCDMA_V 4458 TIS Phi=45

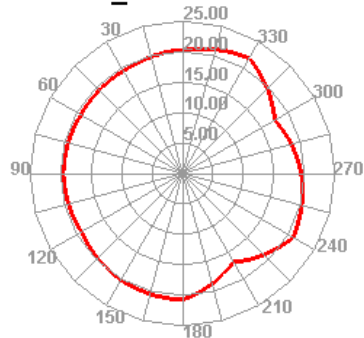




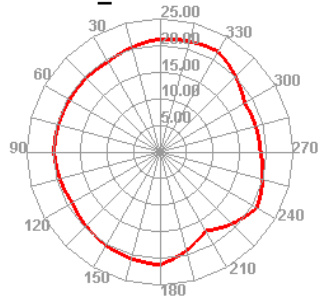
凯普深

2D directional map

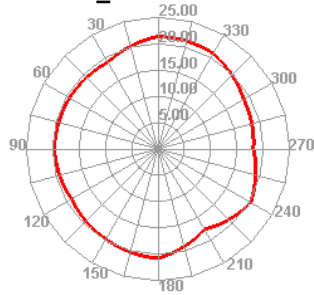
WCDMA_IV 1312 TRP Phi=4!



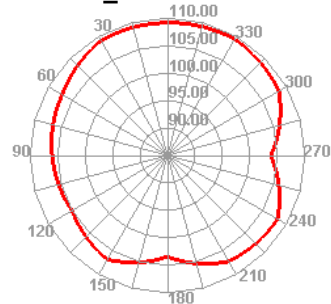
WCDMA_IV 1413 TRP Phi=4!



WCDMA_IV 1513 TRP Phi=4!



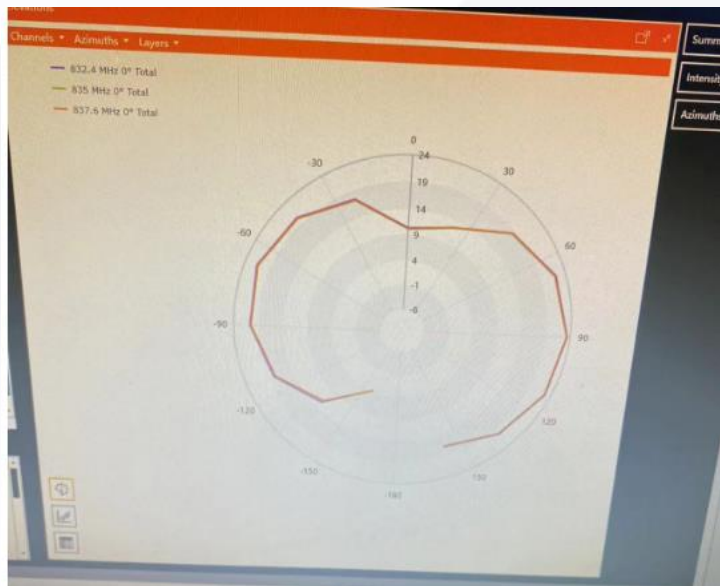
WCDMA_IV 1738 TIS Phi=45



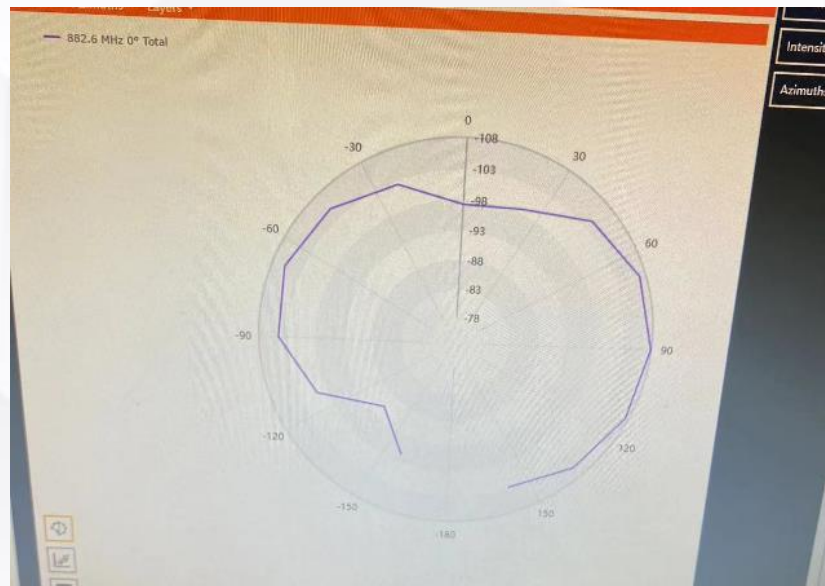


凯普深

2D directional map



W-6



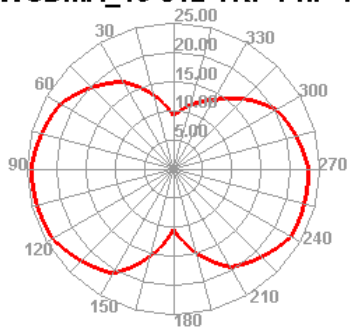
W-6



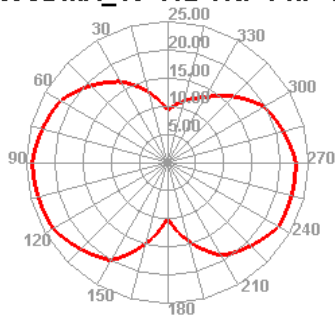
凯普深

2D directional map

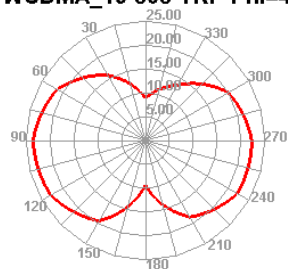
WCDMA_19 312 TRP Phi=45



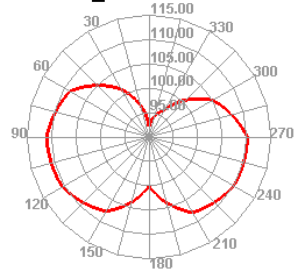
WCDMA_19 412 TRP Phi=45



WCDMA_19 363 TRP Phi=45



WCDMA_19 763 TIS Phi=45



W-19

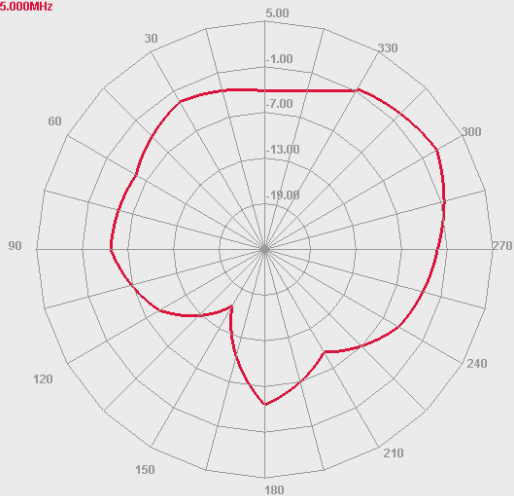


凯普深

2D directional map

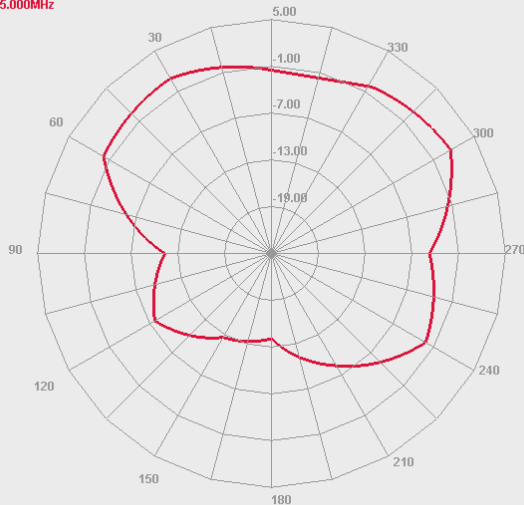
E2 Face

1575.000MHz



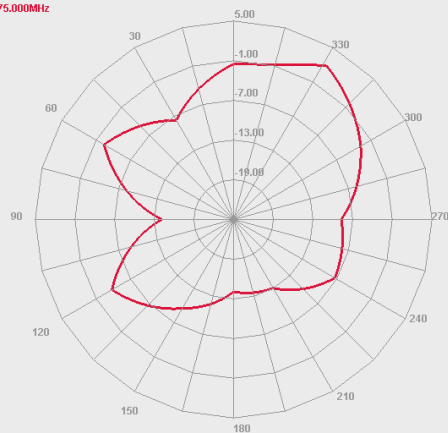
E2 Face

1575.000MHz



E1 Face

1575.000MHz

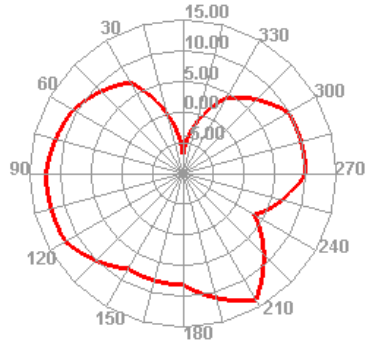




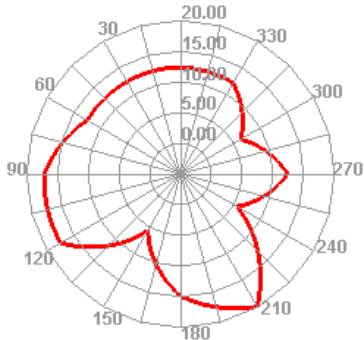
凯普深

2D directional map

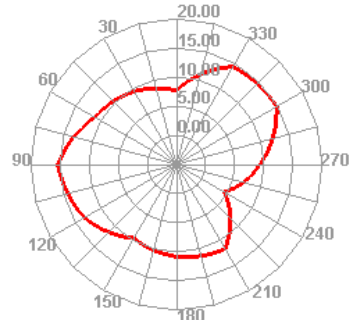
Wifi 1 TRP Phi=45



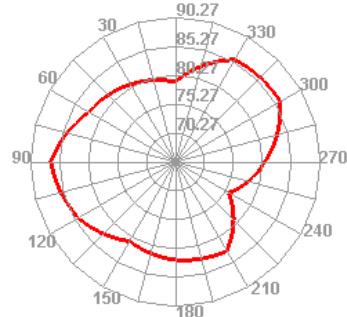
Wifi 6 TRP Phi=45



Wifi 12 TRP Phi=45



Wifi 12 TIS Phi=45





凯普深

Passive efficiency and gain

Passive Test For 低频												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	irectivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
690	16.51	-7.82	-4.7	-6.85	8.337	8.171	-4.7	-24.11	3.12	90	40.04	39.74
700	30.12	-5.21	-1.93	-4.08	14.939	15.185	-1.93	-24.48	3.28	30	42.08	41.55
710	43.19	-3.65	0.07	-2.08	21.54	21.651	0.07	-27.38	3.71	0	43.19	42.56
720	28.35	-5.47	-1.72	-3.87	14.017	14.332	-1.72	-26.61	3.75	0	40.81	40.14
730	30.26	-5.19	-1.26	-3.41	14.961	15.3	-1.26	-21.88	3.94	0	40.89	40.25
740	31.32	-5.04	-1.07	-3.22	15.487	15.83	-1.07	-19.5	3.97	0	40.45	39.74
750	43.73	-3.59	0.65	-1.5	21.738	21.996	0.65	-16.93	4.24	0	41.68	40.82
760	49.24	-3.08	1.04	-1.11	24.983	24.255	1.04	-16.22	4.12	0	42	41.06
770	32.78	-4.84	-0.58	-2.73	16.857	15.927	-0.58	-17.86	4.26	0	40.24	39.27
780	29.63	-5.28	-1.16	-3.31	15.62	14.012	-1.16	-19.08	4.12	0	39.57	38.69
790	32.79	-4.84	-0.72	-2.87	17.286	15.506	-0.72	-18.2	4.12	0	39.96	39.27
800	65.32	-1.85	2.1	-0.05	34.699	30.624	2.1	-14.41	3.95	0	42.91	42.32
810	68.07	-1.67	2.21	0.06	36.661	31.408	2.21	-13.18	3.88	0	43	42.53
820	71.82	-1.44	2.37	0.22	39.773	32.049	2.37	-12.84	3.81	0	43.21	42.75
830	62.49	-2.04	1.78	-0.37	35.386	27.1	1.78	-13.55	3.83	30	42.8	42.39
840	61.1	-2.14	1.65	-0.5	35.342	25.755	1.65	-14.28	3.79	30	42.88	42.48
850	63.4	-1.98	1.81	-0.34	37.028	26.372	1.81	-14.38	3.78	30	43.37	43.04
860	68.72	-1.63	2.17	0.02	40.202	28.521	2.17	-13.25	3.8	30	43.92	43.57
870	65.23	-1.86	1.98	-0.17	37.817	27.413	1.98	-12	3.83	30	43.82	43.57
880	62.08	-2.07	1.82	-0.33	35.918	26.162	1.82	-12.12	3.89	30	43.75	43.49
890	62.05	-2.07	1.88	-0.27	36.171	25.882	1.88	-13.08	3.95	30	43.78	43.48
900	57.97	-2.37	1.61	-0.54	34.635	23.335	1.61	-14.67	3.98	30	43.38	43.13
910	57.57	-2.4	1.54	-0.61	35.145	22.426	1.54	-15.07	3.94	30	43.86	43.46
920	55.98	-2.52	1.43	-0.72	34.663	21.317	1.43	-15.12	3.95	30	43.6	43.26
930	51.37	-2.89	1	-1.15	31.999	19.371	1	-15.08	3.9	30	43.35	43.04
940	49.42	-3.06	0.87	-1.28	30.787	18.631	0.87	-15.06	3.93	30	43.55	43.19
950	46.67	-3.31	0.56	-1.59	29.165	17.51	0.56	-15.68	3.87	30	43.42	43.26
960	41.32	-3.84	0.04	-2.11	25.995	15.321	0.04	-17.11	3.88	30	43.08	42.99

690.00MHz - 960.00MHz Gain



Passive efficiency and gain

Passive Test For 中高频												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	irectivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
1690	25.37	-5.96	-0.51	-2.66	17.407	7.966	-0.51	-19.63	5.45	30	46.42	46.51
1700	45.68	-3.4	1.74	-0.41	31.882	13.793	1.74	-17.3	5.14	30	48.77	48.86
1710	49.79	-3.03	2.15	0	35.435	14.359	2.15	-17.23	5.18	30	49.13	49.26
1720	52.41	-2.81	2.06	-0.09	38.009	14.398	2.06	-18.7	4.86	30	49.64	49.63
1730	53.1	-2.75	2.15	0	38.853	14.247	2.15	-19.35	4.9	30	49.39	49.52
1740	56.43	-2.48	2.2	0.05	41.513	14.918	2.2	-18.75	4.68	30	49.83	49.74
1750	54.72	-2.62	2.07	-0.08	39.895	14.825	2.07	-17.04	4.69	30	49.52	49.48
1760	53.72	-2.7	1.86	-0.29	38.733	14.985	1.86	-15.76	4.55	30	49.53	49.48
1770	49.97	-3.01	1.52	-0.63	35.25	14.716	1.52	-16.05	4.53	0	49.38	49.15
1780	60.17	-2.21	2.09	-0.06	41.469	18.699	2.09	-16.01	4.3	0	49.9	49.82
1790	58.92	-2.3	1.92	-0.23	39.66	19.263	1.92	-16.49	4.22	0	49.9	49.81
1800	61.03	-2.14	1.84	-0.31	40.291	20.739	1.84	-16.99	3.99	0	50.08	50.05
1810	60.94	-2.15	1.74	-0.41	39.977	20.965	1.74	-18.15	3.89	0	50.1	50.17
1820	60.61	-2.17	1.56	-0.59	39.672	20.94	1.56	-19.81	3.73	30	50.18	50.23
1830	60.77	-2.16	1.71	-0.44	40.096	20.671	1.71	-21.27	3.87	30	50.24	50.24
1840	57.4	-2.41	1.66	-0.49	38.133	19.263	1.66	-20.95	4.07	30	50.02	50.17
1850	55.2	-2.58	1.52	-0.63	37.054	18.143	1.52	-19.2	4.1	30	49.99	50.01
1860	49.93	-3.02	1.01	-1.14	33.63	16.302	1.01	-17.44	4.03	30	49.7	49.72
1870	45.99	-3.37	0.56	-1.59	31.113	14.881	0.56	-18.96	3.93	30	49.63	49.8
1880	48.35	-3.16	0.76	-1.39	32.608	15.74	0.76	-20.34	3.91	30	49.89	49.75
1890	45.71	-3.4	0.65	-1.5	30.789	14.922	0.65	-18.52	4.05	30	49.85	49.91
1900	41.35	-3.84	0.5	-1.65	27.942	13.41	0.5	-19.85	4.34	30	50.03	49.8
1910	43.11	-3.65	1	-1.15	29.335	13.77	1	-19.72	4.65	30	50.01	49.91
1920	49.34	-3.07	1.74	-0.41	33.721	15.623	1.74	-19.58	4.81	30	50.35	50.25
1930	51.32	-2.9	1.9	-0.25	35.506	15.816	1.9	-19.43	4.79	60	50.73	50.58
1940	48.15	-3.17	1.69	-0.46	33.689	14.458	1.69	-18.67	4.86	60	50.76	50.74
1950	52.12	-2.83	1.92	-0.23	37.091	15.032	1.92	-18.63	4.74	60	51.32	51.26
1960	51.16	-2.91	1.71	-0.44	36.919	14.242	1.71	-17.69	4.62	60	51.16	51.13
1970	46.25	-3.35	1.18	-0.97	33.913	12.338	1.18	-17.02	4.53	60	51.34	51.28
1980	45.13	-3.46	1.07	-1.08	33.296	11.837	1.07	-19.6	4.53	60	51.35	51.29



凯普深

Passive efficiency and gain

1990	48.61	-3.13	1.44	-0.71	35.831	12.78	1.44	-21.89	4.57	60	51.49	51.42
2000	48.29	-3.16	1.41	-0.74	35.438	12.854	1.41	-23.76	4.57	60	51.63	51.72
2010	45.85	-3.39	1.23	-0.92	33.576	12.272	1.23	-25.36	4.62	60	51.87	51.75
2020	47.74	-3.21	1.5	-0.65	34.99	12.751	1.5	-25.13	4.71	60	51.83	52
2030	49.34	-3.07	1.67	-0.48	36.061	13.284	1.67	-25.18	4.74	60	52	51.98
2040	46.07	-3.37	1.36	-0.79	33.463	12.61	1.36	-24.45	4.73	60	51.77	51.88
2050	43.1	-3.65	0.94	-1.21	30.838	12.265	0.94	-22.52	4.59	60	51.71	51.76
2060	46.56	-3.32	1.22	-0.93	32.712	13.848	1.22	-19.84	4.54	60	51.99	52.14
2070	50.05	-3.01	1.43	-0.72	34.393	15.657	1.43	-17.08	4.44	60	52.22	52.32
2080	51.32	-2.9	1.56	-0.59	34.659	16.656	1.56	-15.46	4.46	60	52.64	52.88
2090	55.18	-2.58	1.77	-0.38	36.612	18.567	1.77	-14.18	4.35	30	52.48	52.65
2100	52.21	-2.82	1.41	-0.74	34.043	18.166	1.41	-14.21	4.24	30	52.21	52.46
2110	49.83	-3.02	0.96	-1.19	31.952	17.882	0.96	-14.52	3.99	30	52.32	52.46
2120	48.43	-3.15	0.73	-1.42	30.687	17.747	0.73	-14.35	3.87	120	51.85	52.1
2130	55.64	-2.55	1.27	-0.88	34.84	20.798	1.27	-13.59	3.82	120	52.08	52.25
2140	54.65	-2.62	1.29	-0.86	33.755	20.899	1.29	-13.63	3.91	120	52.03	52.2
2150	48.28	-3.16	0.84	-1.31	29.453	18.826	0.84	-13.99	4	120	51.56	51.76
2160	44.39	-3.53	0.66	-1.49	26.831	17.564	0.66	-13.88	4.19	30	51.2	51.33
2170	44.59	-3.51	0.71	-1.44	26.787	17.8	0.71	-13.53	4.21	30	51.13	51.25
2180	41.73	-3.8	0.35	-1.8	24.968	16.767	0.35	-13.91	4.14	30	51.21	51.34
2190	45.46	-3.42	0.54	-1.61	27.002	18.454	0.54	-13.6	3.97	30	51.38	51.48
2200	46.02	-3.37	0.34	-1.81	26.892	19.127	0.34	-13.71	3.71	30	51.51	51.5
2210	44.92	-3.48	0.01	-2.14	25.703	19.219	0.01	-13.58	3.49	30	51.7	51.68
2220	40.41	-3.94	-0.44	-2.59	22.563	17.846	-0.44	-13.78	3.49	30	51.65	51.49
2230	46.75	-3.3	0.17	-1.98	25.484	21.262	0.17	-12.78	3.48	30	52.13	52.07
2240	50.67	-2.95	0.53	-1.62	27.081	23.591	0.53	-12.21	3.48	30	52.62	52.42
2250	36.58	-4.37	-0.9	-3.05	19.393	17.187	-0.9	-13.47	3.46	30	51.72	51.52
2260	37.21	-4.29	-0.88	-3.03	19.643	17.566	-0.88	-13.25	3.42	30	51.84	51.7
2270	38.04	-4.2	-0.64	-2.79	19.997	18.046	-0.64	-13.26	3.56	30	51.71	51.59
2280	41.63	-3.81	-0.12	-2.27	21.645	19.983	-0.12	-13.3	3.68	30	52.16	52.04
2290	35.25	-4.53	-0.75	-2.9	18.104	17.142	-0.75	-14.64	3.78	30	52.02	51.89
2300	38.35	-4.16	-0.25	-2.4	19.485	18.865	-0.25	-14.92	3.91	30	52.22	52.03
2310	37.64	-4.24	-0.22	-2.37	18.92	18.723	-0.22	-15.64	4.02	30	52.14	51.94



凯普深

Passive efficiency and gain

2350	42.99	-3.67	0.63	-1.52	20.877	22.115	0.63	-18.05	4.3	30	53.14	53.24
2360	41.15	-3.86	0.47	-1.68	20.023	21.131	0.47	-19.93	4.32	30	53.26	53.37
2370	38.78	-4.11	0.3	-1.85	18.748	20.029	0.3	-23.23	4.41	30	53.14	53.38
2380	45.67	-3.4	0.99	-1.16	22.115	23.558	0.99	-23.5	4.4	30	53.66	53.86
2390	42.52	-3.71	0.72	-1.43	20.572	21.945	0.72	-16.51	4.44	30	53.42	53.6
2400	41.75	-3.79	0.54	-1.61	20.181	21.565	0.54	-20.35	4.33	30	53.32	53.67
2410	41.04	-3.87	0.39	-1.76	19.824	21.216	0.39	-18.37	4.25	30	53.27	53.49
2420	42.8	-3.69	0.53	-1.62	20.729	22.07	0.53	-16.27	4.22	0	53.48	53.82
2430	40.31	-3.95	0.18	-1.97	19.652	20.66	0.18	-15.31	4.12	0	53.56	53.84
2440	44.9	-3.48	0.72	-1.43	21.759	23.143	0.72	-17.06	4.19	0	53.98	54.23
2450	47.32	-3.25	1.11	-1.04	22.878	24.439	1.11	-17.52	4.36	0	54.03	54.15
2460	44.92	-3.48	0.86	-1.29	21.958	22.962	0.86	-15.31	4.33	0	53.82	54.08
2470	40.32	-3.95	0.18	-1.97	20.089	20.229	0.18	-14.83	4.12	0	53.87	53.96
2480	48.15	-3.17	1.21	-0.94	24.074	24.074	1.21	-16.04	4.39	0	53.98	54.19
2490	53.73	-2.7	1.69	-0.46	27.108	26.62	1.69	-15.54	4.39	0	54.44	54.63
2500	53.36	-2.73	1.72	-0.43	26.899	26.46	1.72	-14.22	4.45	0	54.68	54.84
2510	47.01	-3.28	1.19	-0.96	23.622	23.387	1.19	-13.72	4.47	0	54.23	54.46
2520	48.61	-3.13	1.33	-0.82	24.383	24.222	1.33	-12.95	4.47	0	54.3	54.43
2530	48.86	-3.11	1.17	-0.98	24.707	24.158	1.17	-12.52	4.28	0	54.5	54.5
2540	40.57	-3.92	0.33	-1.82	20.711	19.854	0.33	-12.9	4.25	0	54.18	54.37
2550	46.38	-3.34	0.81	-1.34	23.9	22.479	0.81	-12.38	4.15	0	54.74	54.76
2560	50.12	-3	1.23	-0.92	25.913	24.212	1.23	-12.28	4.23	0	54.93	55.04
2570	48.27	-3.16	1.02	-1.13	24.969	23.299	1.02	-13.45	4.18	0	55.09	55.16
2580	46.29	-3.34	0.91	-1.24	23.929	22.365	0.91	-14.76	4.26	0	55.1	55.03
2590	46.09	-3.36	1.03	-1.12	23.78	22.313	1.03	-16.22	4.39	0	54.95	54.91
2600	48.65	-3.13	1.56	-0.59	25.33	23.323	1.56	-17.04	4.68	0	55.33	55.31
2610	41.76	-3.79	0.96	-1.19	21.9	19.858	0.96	-18.7	4.75	0	55.36	55.12
2620	38.74	-4.12	0.59	-1.56	20.286	18.452	0.59	-19.24	4.71	0	55.31	55.25
2630	39.72	-4.01	0.62	-1.53	20.615	19.103	0.62	-20.25	4.63	0	55.46	55.36
2640	44.9	-3.48	1.2	-0.95	22.89	22.011	1.2	-20.48	4.68	0	56.05	55.85
2650	41.11	-3.86	0.8	-1.35	20.397	20.708	0.8	-21.21	4.66	0	56.19	56.18
2660	37.4	-4.27	0.32	-1.83	18.203	19.201	0.32	-21.52	4.59	0	56.17	56
2670	38.83	-4.11	0.46	-1.69	18.422	20.404	0.46	-19.85	4.57	0	56.33	56.25



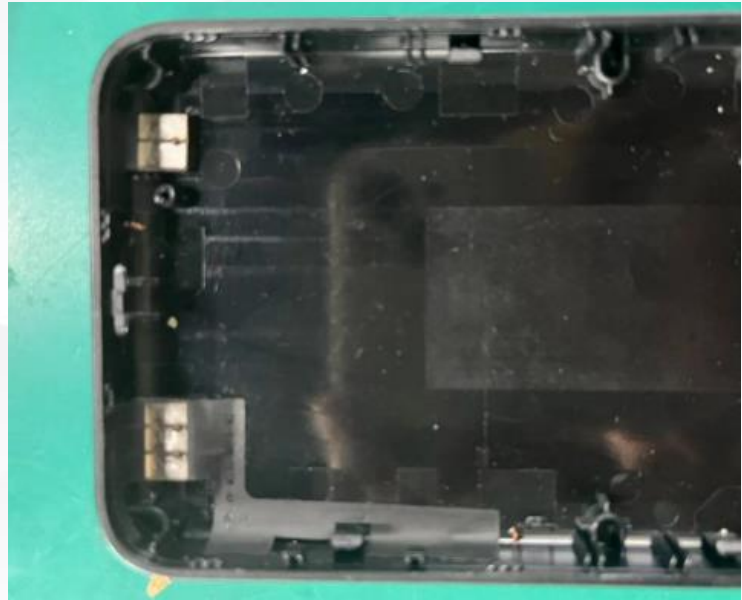
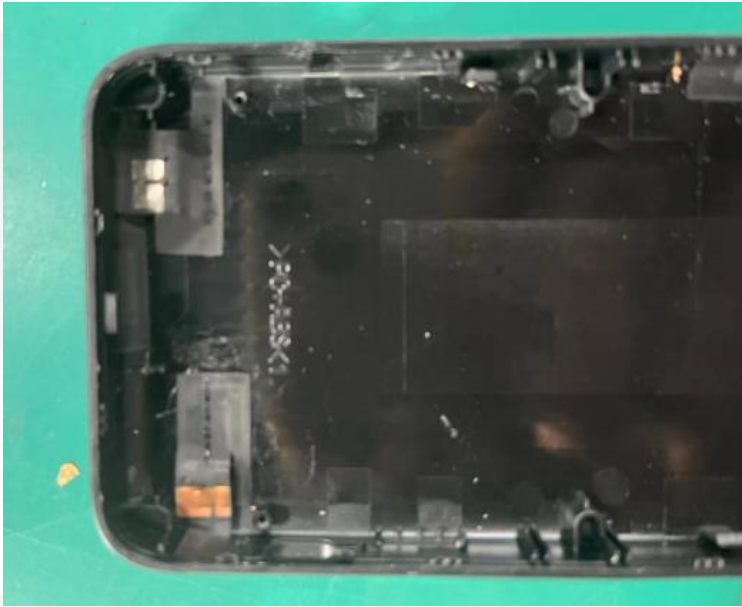
凯普深

WIFI passive data

Passive Test For WIFI2.4												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Directivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	42.99	-3.67	-0.07	-2.22	19.443	15.343	-0.07	-12.89	4.52	30	53.32	53.67
2410	47.8	-3.21	-0.07	-2.22	19.005	14.983	-0.07	-12.75	4.62	30	53.27	53.49
2420	50.73	-2.95	0.18	-1.97	19.947	15.593	0.18	-11.82	4.67	30	53.48	53.82
2430	53.5	-2.72	0.46	-1.69	21.219	16.648	0.46	-10.97	4.67	30	53.56	53.84
2440	52.96	-2.76	1.01	-1.14	23.618	18.419	1.01	-10.77	4.77	30	53.98	54.23
2450	57.63	-2.39	1.12	-1.03	23.455	17.967	1.12	-11.17	4.95	30	54.03	54.15
2460	53.86	-2.69	0.97	-1.18	22.732	16.583	0.97	-11.9	5.02	30	53.82	54.08
2470	53.27	-2.73	1	-1.15	22.857	15.756	1	-12.61	5.13	30	53.87	53.96
2480	48.03	-3.18	1.46	-0.69	24.901	16.146	1.46	-13.34	5.33	30	53.98	54.19
2490	48.54	-3.14	2.02	-0.13	27.612	17.217	2.02	-13.98	5.5	30	54.44	54.63
2500	50.17	-3	2.46	0.31	29.799	18.29	2.46	-14.83	5.64	30	54.68	54.84



Assembly diagram of the entire machine antenna





Contact information

RF : Jiang Gong

Tel : 15014104367

E-mail : kpsyanfa@szkpstx.com

address : 2nd Floor, Building 1, Yulong Building, Longcheng Industrial Zone, No.440, Longguan Avenue, Longhua District, Shenzhen



THE END

**Thank you for your
valuable feedback !**