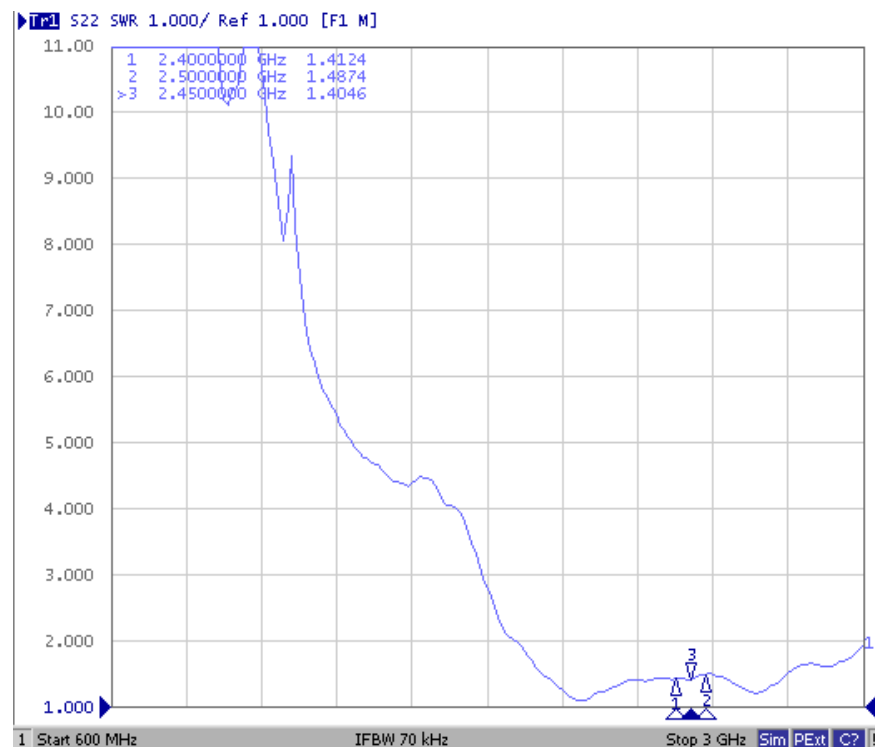


Manufacturer: Sunnyway Technology (China) Co.,
Ltd.

Address: Floor 6, Building 5, Nam Tai Inno Park,
Guangming District, Shenzhen

1. WIFI 1 Antenna

1. Passive performance test parameters



2. Antenna passive data:

Frequency/MHz	Max Gain/dBi	Efficiency / %
2400	5.43	59.29
2410	5.64	60.26

2420	5.41	57.81
2430	5.7	60.39
2440	5.74	62.66
2450	5.84	62.95
2460	5.66	60.95
2470	5.98	64.12
2480	5.94	64.57
2490	5.93	63.53
2500	5.74	62.37

3. Directional diagram

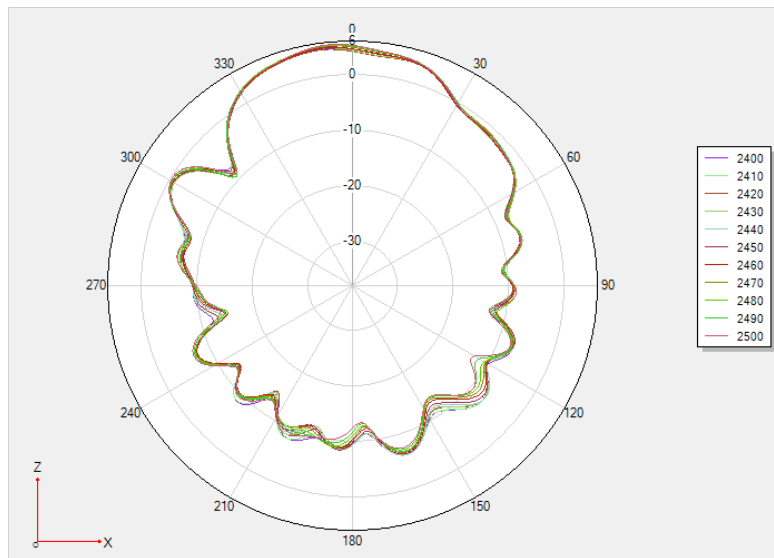


chart 1 Phi 0 2D

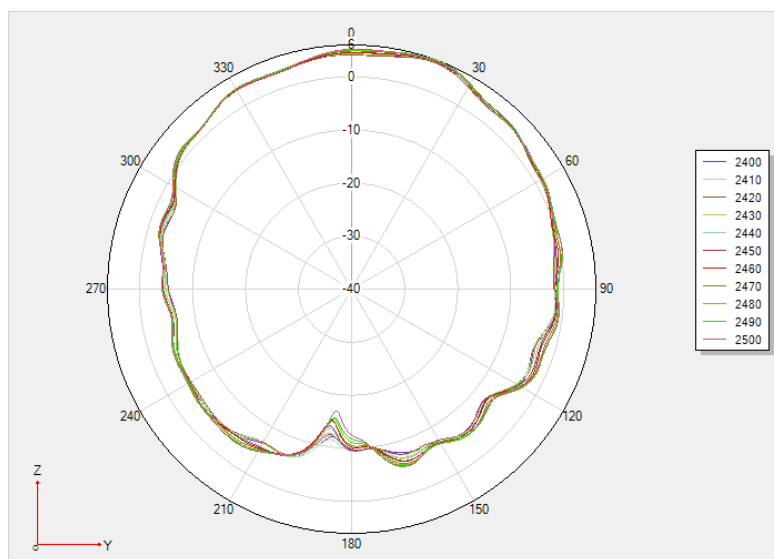


chart 2 Phi 90 2D

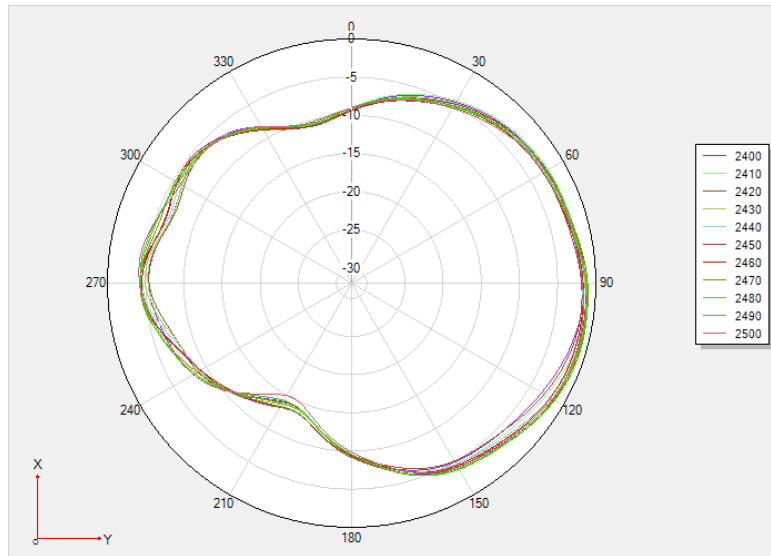


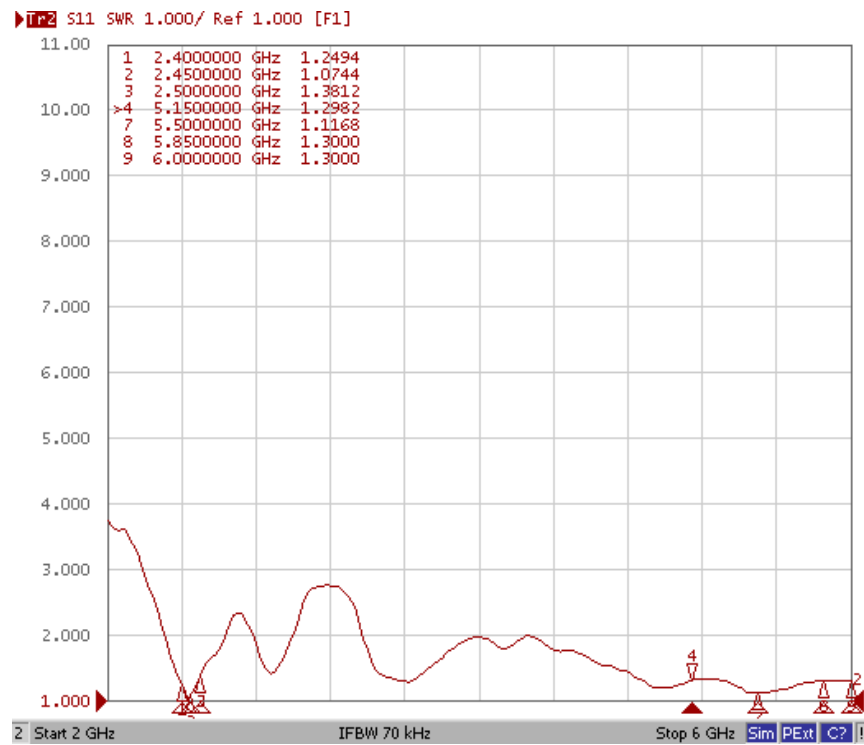
chart 3 Theta 90 2D

4. Antenna OTA data:

Item	Measurement	Band	Channel	Total
1	TRP	WIFI_B (11M)	1	19.06
2	TRP	WIFI_B (11M)	7	18.16
3	TRP	WIFI_B (11M)	13	18.79
4	TIS(EIRP)	WIFI_B (11M)	1	-87.07
5	TIS(EIRP)	WIFI_B (11M)	7	-87.99
6	TIS(EIRP)	WIFI_B (11M)	13	-88.44
7	TRP	WIFI_G (54M)	1	19.41
8	TRP	WIFI_G (54M)	7	19.63
9	TRP	WIFI_G (54M)	13	19.43
10	TIS(EIRP)	WIFI_G (54M)	1	-78.25
11	TIS(EIRP)	WIFI_G (54M)	7	-77.36
12	TIS(EIRP)	WIFI_G (54M)	13	-76.57
13	TRP	WIFI_N_ISM (65M)	1	19.64
14	TRP	WIFI_N_ISM (65M)	7	19.95
15	TRP	WIFI_N_ISM (65M)	13	19.36
16	TIS(EIRP)	WIFI_N_ISM (65M)	1	-71.18
17	TIS(EIRP)	WIFI_N_ISM (65M)	7	-71.31
18	TIS(EIRP)	WIFI_N_ISM (65M)	13	-71.61

2. WIFI 2 Antenna

1. Passive performance test parameters



2. Antenna passive data:

Frequency/MHz	Max Gain/dBi	Efficiency / %
2400	1.03	53.21
2410	1	53.58
2420	1.26	52.6
2430	1.23	52.97
2440	2.05	53.09
2450	1.86	53.09
2460	2.73	52.12
2470	2.29	51.64
2480	3.04	50.58
2490	3.59	49.89
2500	3.96	48.53

3. Directional diagram

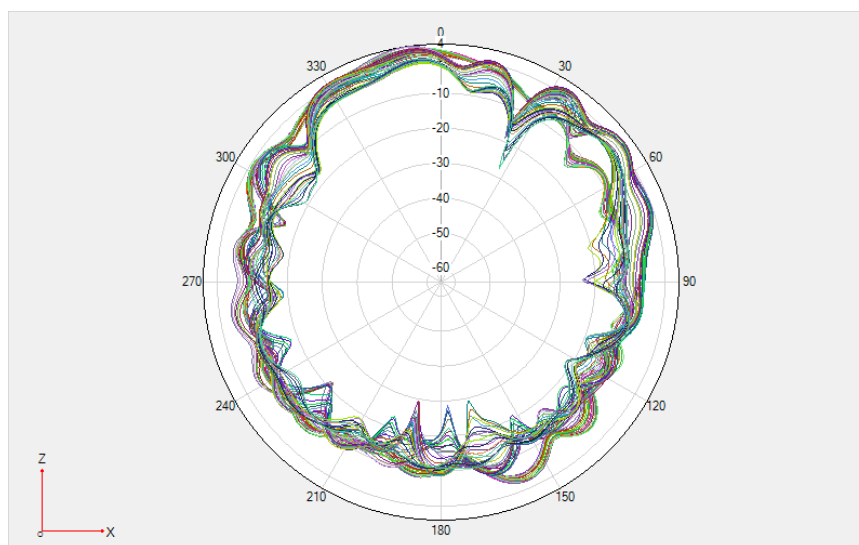


chart 4 Phi 0 2D

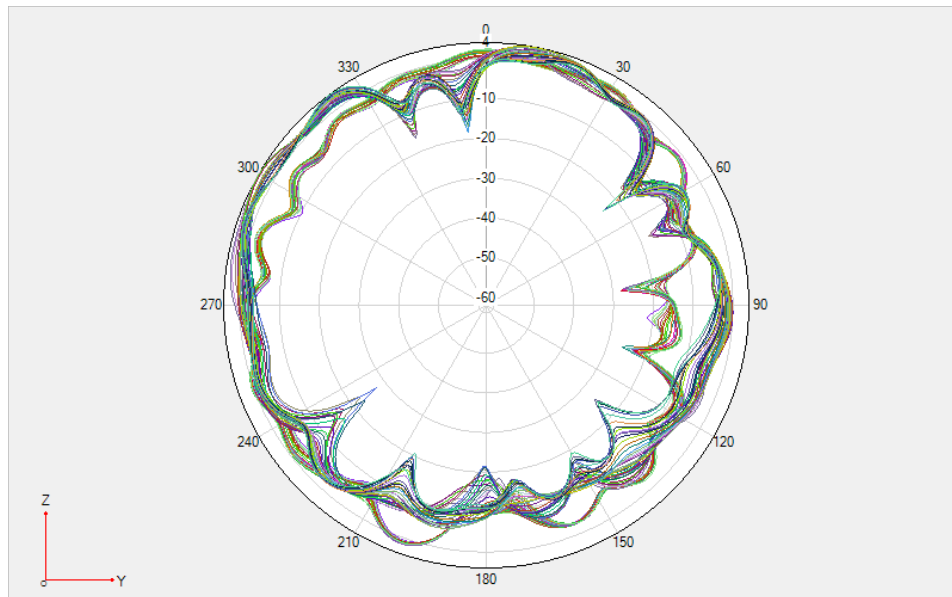


chart 5 Phi 90 2D

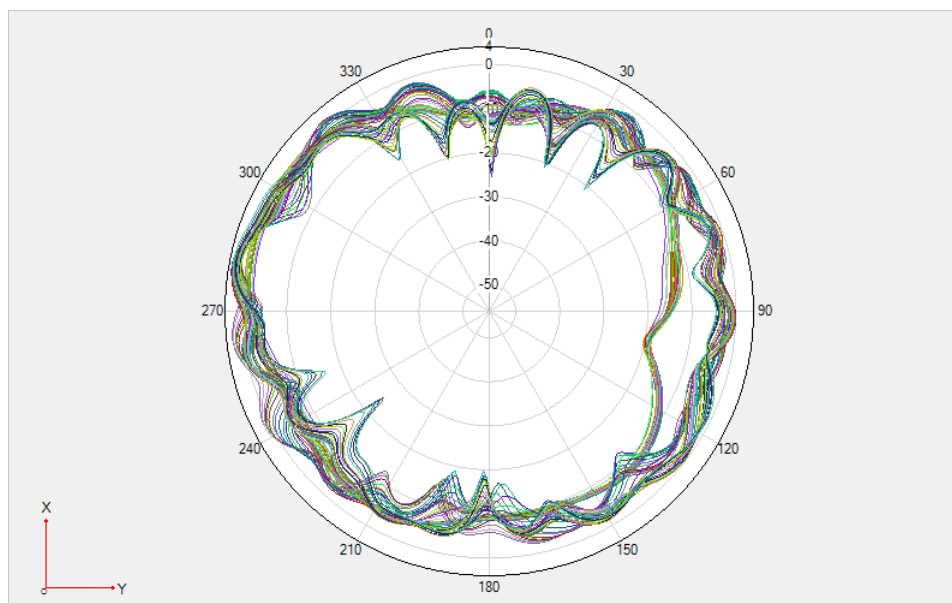


chart 6 Theta 90 2D

4. Antenna OTA data:

Item	Measurement	Band	Channel	Total
1	TRP	WIFI_B (11M)	1	19.06
2	TRP	WIFI_B (11M)	7	18.16
3	TRP	WIFI_B (11M)	13	18.79
4	TIS(EIRP)	WIFI_B (11M)	1	-87.07
5	TIS(EIRP)	WIFI_B (11M)	7	-87.99
6	TIS(EIRP)	WIFI_B (11M)	13	-88.44
7	TRP	WIFI_G (54M)	1	19.41
8	TRP	WIFI_G (54M)	7	19.63
9	TRP	WIFI_G (54M)	13	19.43
10	TIS(EIRP)	WIFI_G (54M)	1	-78.25
11	TIS(EIRP)	WIFI_G (54M)	7	-77.36
12	TIS(EIRP)	WIFI_G (54M)	13	-76.57
13	TRP	WIFI_N_ISM (65M)	1	19.64
14	TRP	WIFI_N_ISM (65M)	7	19.95
15	TRP	WIFI_N_ISM (65M)	13	19.36
16	TIS(EIRP)	WIFI_N_ISM (65M)	1	-71.18
17	TIS(EIRP)	WIFI_N_ISM (65M)	7	-71.31
18	TIS(EIRP)	WIFI_N_ISM (65M)	13	-71.61

3. BT antenna

1. Passive performance test parameters



2. Antenna passive data:

Frequency/MHz	Max Gain/dBi	Efficiency / %
2400	2.78	49.55
2410	2.9	48.53
2420	2.82	47.75
2430	2.93	46.88
2440	2.84	48.64
2450	3.06	48.42
2460	2.92	49.77
2470	3.19	50
2480	2.91	51.17
2490	2.89	51.05
2500	2.63	50.82

3. Directional diagram

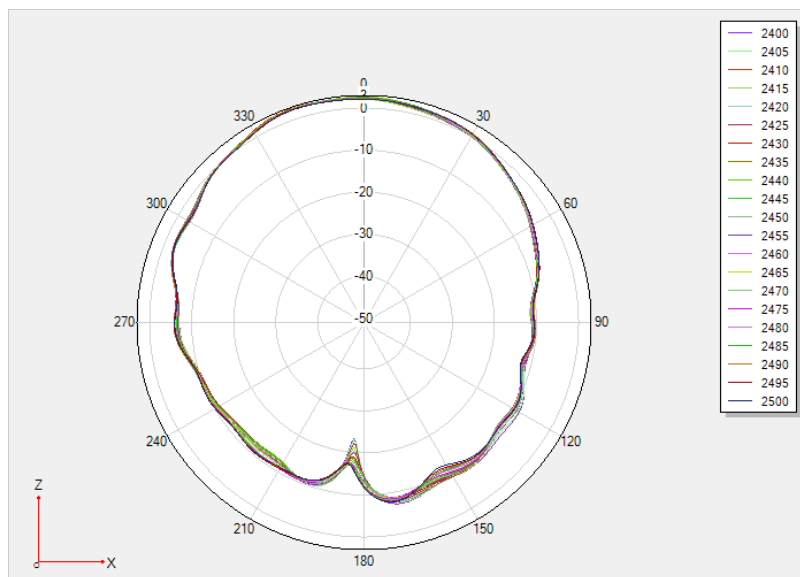


chart 7 Phi 0 2D

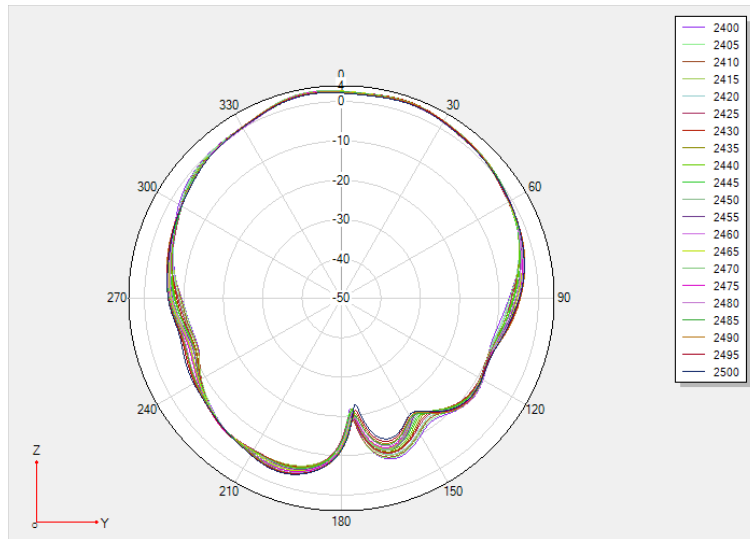


chart 8 Phi 90 2D

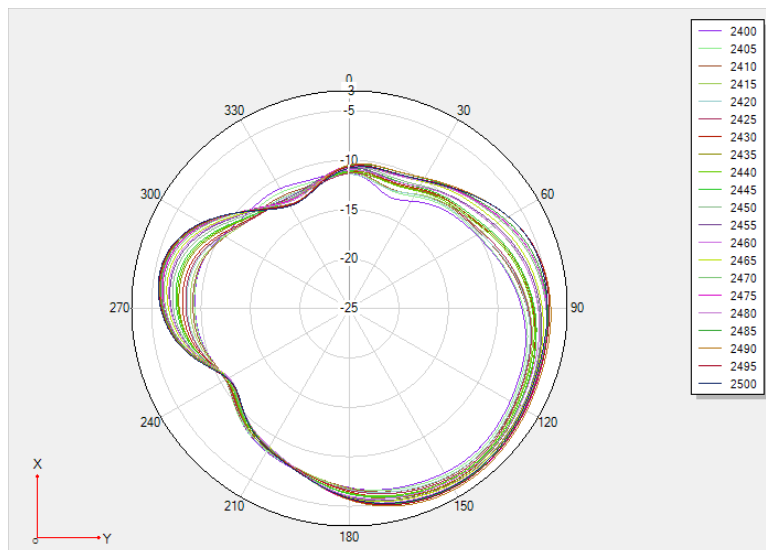


chart 9 Theta 90 2D

4. Antenna OTA data:

Item	Measurement	Band	Channel	Total
1	TRP	BLUETOOTH	0	3.54
2	TRP	BLUETOOTH	19	3.51
3	TRP	BLUETOOTH	39	3.98
4	TIS(EIRP)	BLUETOOTH	0	-92.37
5	TIS(EIRP)	BLUETOOTH	19	-90.97
6	TIS(EIRP)	BLUETOOTH	39	-89.63