SUNNYWAY ANTENNA TEST REPORT

1. ANTENNA information

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

Model name: Wifi antenna.

PN:105040280

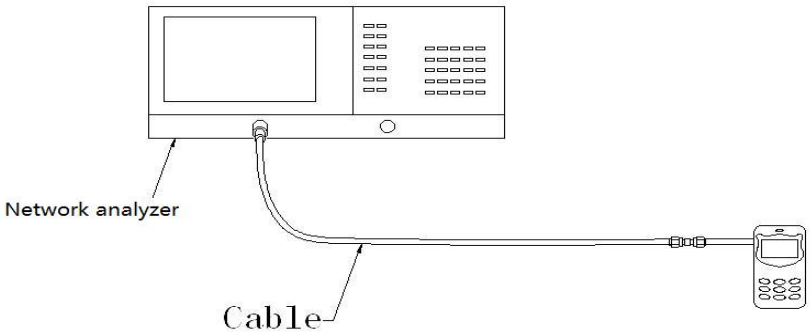
2. S11 test

2.0 S11 test conditions

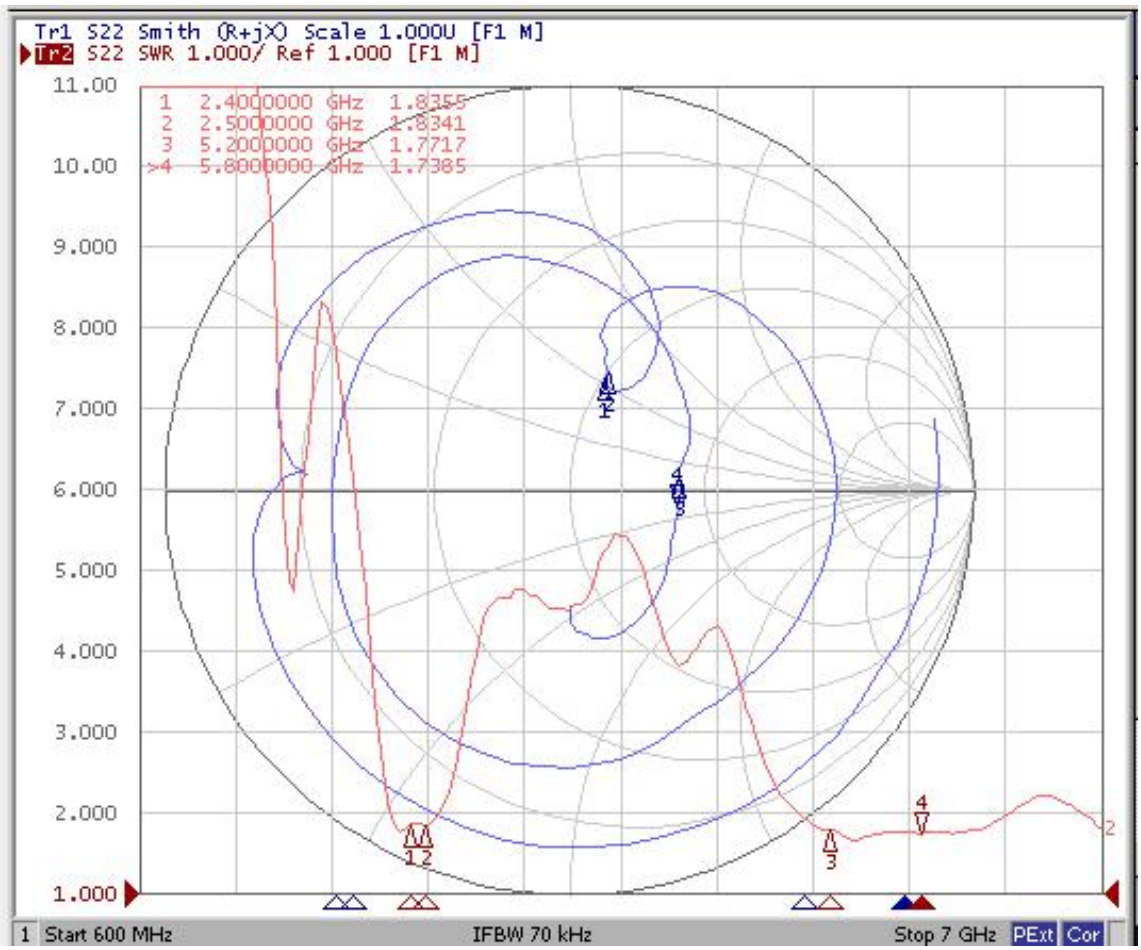
test device: network analyzer(HP 8753E)

test method: A 50 ohm cable was exported from the test port of the instrument and connected to the SMA joint of the prototype tool after calibration with the calibration kit. Then record return loss and standing wave ratio corresponding to the relevant frequency points.

Schematic diagram of test:



2.1 Parameters



3 Shield chamber test

3.1 Test conditions

Test system : shield chamber

Test environment: temperature 22℃±3℃, humidity 50%±15%

Test device: When testing passive data, using Agilent E5062C;
When testing active data, using Agilent 8960 /CMW500/E4438C .

3.2 Antenna passive efficiency

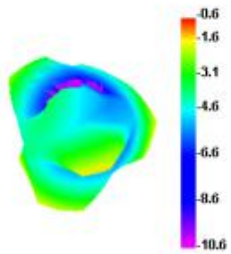
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2350	27.79	-5.56	-1.09	5200	24.87	-6.04	-1.15	5500	25.65	-5.91	-0.59
2360	30.03	-5.22	-0.87	5210	25.17	-5.99	-1.01	5510	29.22	-5.34	-0.16
2370	29.62	-5.28	-0.72	5220	26.97	-5.69	-0.76	5520	28.52	-5.45	-0.2
2380	30.27	-5.19	-0.58	5230	28.46	-5.46	-0.44	5530	27.34	-5.63	-0.34
2390	30.71	-5.13	-0.61	5240	27.54	-5.6	-0.46	5540	20.53	-6.88	-1.55
2400	30.17	-5.2	-0.57	5250	27.27	-5.64	-0.5	5550	15.64	-8.06	-2.69
2410	29.63	-5.28	-0.81	5260	25.27	-5.97	-0.79	5560	14.73	-8.32	-3
2420	28.98	-5.38	-0.93	5270	22.48	-6.48	-1.23	5570	13.68	-8.64	-3.33
2430	29.49	-5.3	-0.96	5280	24.73	-6.07	-0.97	5580	16.23	-7.9	-2.52
2440	30.2	-5.2	-0.92	5290	25.82	-5.88	-0.69	5590	20.95	-6.79	-1.41
2450	30.44	-5.17	-1	5300	25.21	-5.98	-0.97	5600	21.26	-6.72	-1.31
2460	30.12	-5.21	-1.16	5310	29.01	-5.37	-0.4	5610	20.81	-6.82	-1.44
2470	29.8	-5.26	-1.29	5320	33.09	-4.8	0.2	5620	18.51	-7.32	-1.91
2480	29.74	-5.27	-1.09	5330	33.96	-4.69	0.48	5630	18.02	-7.44	-2.04
2490	29.92	-5.24	-0.79	5340	32.34	-4.9	0.35	5640	19.25	-7.16	-1.94
2500	28.71	-5.42	-0.84	5350	30.65	-5.14	0.06	5650	19.06	-7.2	-1.85
2510	28.47	-5.46	-0.68	5360	28.63	-5.43	-0.24	5660	21.68	-6.64	-1.4
2520	28.11	-5.51	-0.59	5370	26.2	-5.82	-0.6	5670	22.88	-6.41	-1.14
2530	28.36	-5.47	-0.44	5380	25.95	-5.86	-0.46	5680	21.77	-6.62	-1.47
2540	27.43	-5.62	-0.52	5390	23.26	-6.33	-0.87	5690	23.92	-6.21	-1.11
2550	26.36	-5.79	-0.71	5400	26.77	-5.72	-0.29	5700	22.33	-6.51	-1.52
				5410	25.04	-6.01	-0.35	5710	23.46	-6.3	-1.19
				5420	22.49	-6.48	-0.95	5720	22.23	-6.53	-1.31
				5430	25.72	-5.9	-0.26	5730	18.14	-7.41	-2.32
				5440	24.69	-6.08	-0.55	5740	16.33	-7.87	-2.79
				5450	25.2	-5.99	-0.46	5750	12.75	-8.94	-3.84
				5460	28.3	-5.48	-0.05	5760	12.98	-8.87	-3.51
				5470	24.86	-6.04	-0.81	5770	16.84	-7.74	-2.43
				5480	26.5	-5.77	-0.64	5780	19.85	-7.02	-1.74
				5490	25.96	-5.86	-0.73	5790	25.18	-5.99	-0.64
								5800	27.49	-5.61	-0.1

3.3 Active test data

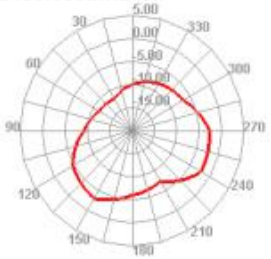
AdditionalInfor	802.11b : 11MBps		
Test	Wifi 2G TRP		
Result	1	6	12
Txp Ave(dBm)	12.37	11.66	12.19
Test	Wifi 2G TIS		
Result	1	6	12
Sens Ave(dBm)	-84.7	-82.14	-81.36

AdditionalInfor	802.11a : 54MBps			
Test	Wifi 5G TRP			
Result	36	100	149	165
Txp Ave(dBm)			9.26	9.12
Test	Wifi 5G TIS			
Result	36	100	149	165
Sens Ave(dBm)			-75.19	-74.58

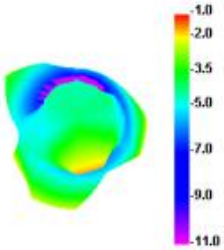
2400.000MHz



2400.000MHz H



2450.000MHz



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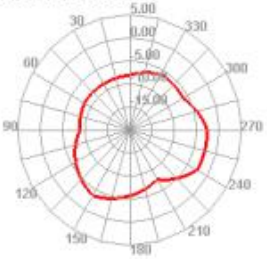

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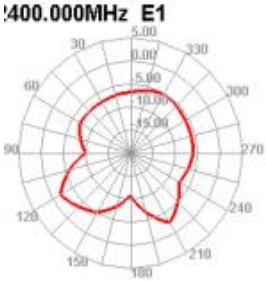

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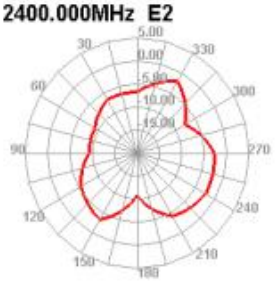

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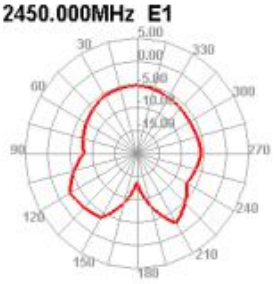
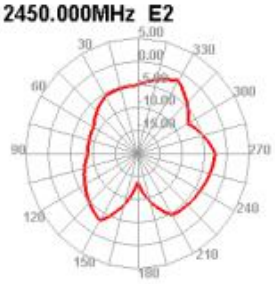
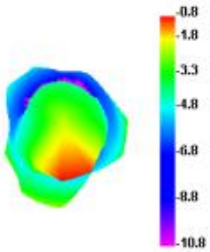


2450.000MHz E2



2500.000MHz



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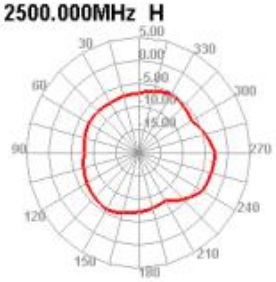

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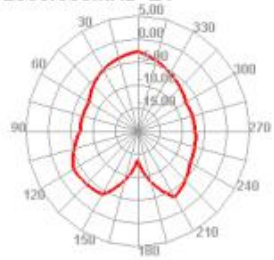

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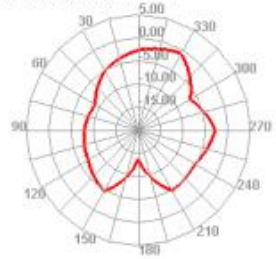
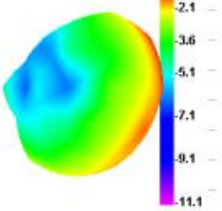


5200.000MHz



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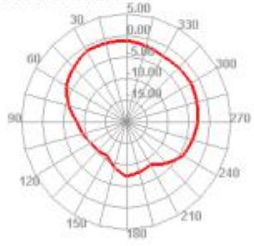

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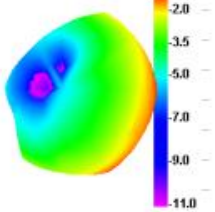

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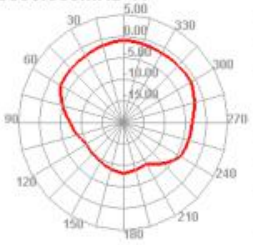

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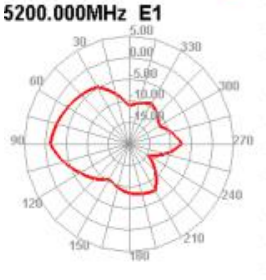

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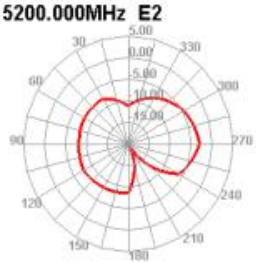

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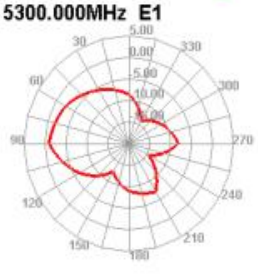

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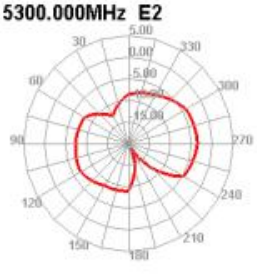

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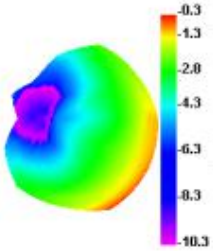

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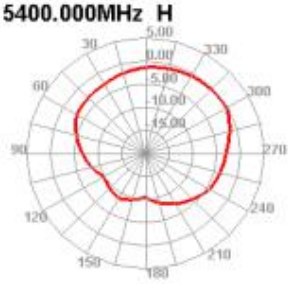

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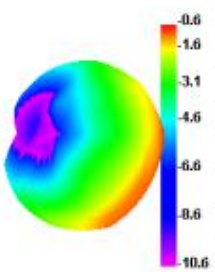

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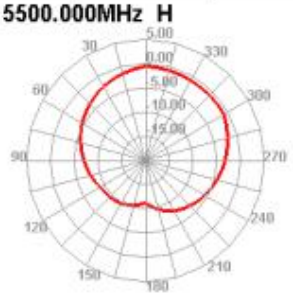

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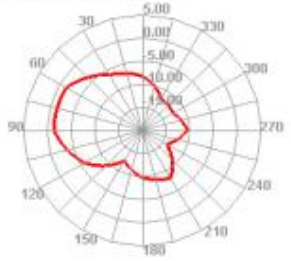

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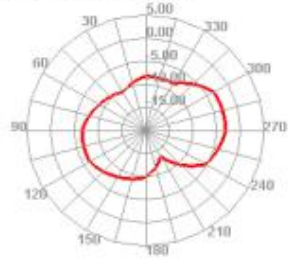

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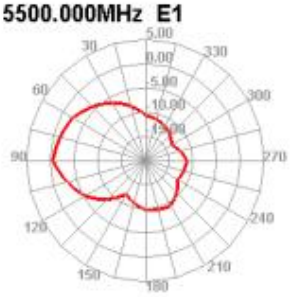

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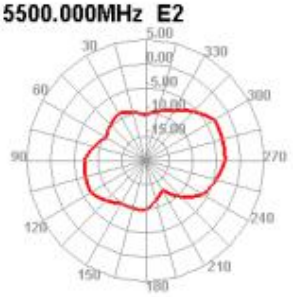

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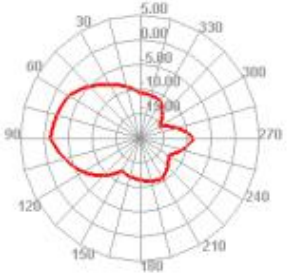

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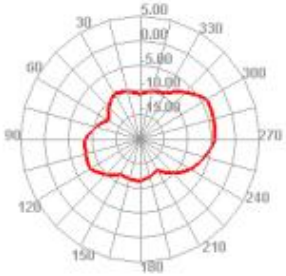

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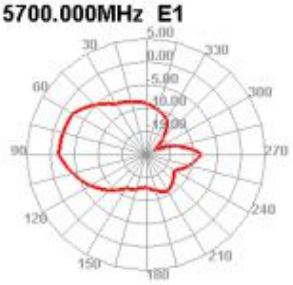

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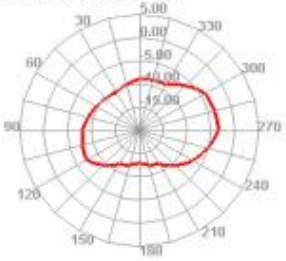

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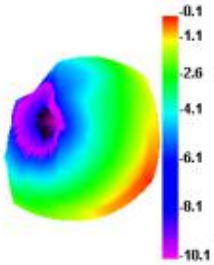

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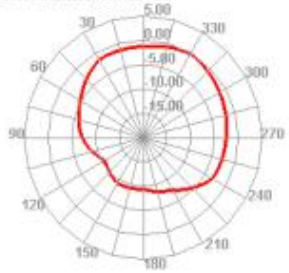

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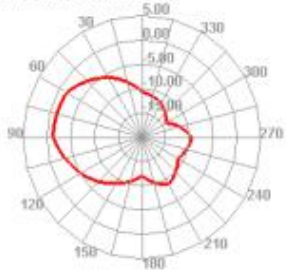

5800.000MHz E2