

APPROVAL SPECIFICATION

Product : Internal Antenna

Model Name : KT017-X102-00

Date : 2022.10.19.

Table of Contents

	Page
1. Manufacturer -----	3
2. Model Name -----	3
3. Antenna Type -----	3
4. Electrical Performance Data -----	4
5. Electrical Graph(VSWR/Return loss)-----	7
6. USB Dongle Antenna -----	8

1. Manufacturer

SGM3010: Kunshan Yunzhihong Electronics and Technology Co.,Ltd.

2. Model Name

Basic Model: KT017-X102-00

3. Antenna Type

ANT	Antenna type
Main	FPC+Cable
DIV	FPC+Cable

4. Electric Performance Data

4.1 Specification Sheet

Main

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2300	75.1	-1.3	2.9
2310	65.6	-1.8	2.6
2320	74.0	-1.3	3.5
2330	76.9	-1.1	3.9
2340	68.3	-1.7	3.7
2350	75.1	-1.3	4.5
2360	65.7	-1.8	4.1
2370	64.8	-1.9	4.4
2380	65.8	-1.8	4.6
2390	64.2	-1.9	4.7
2400	67.7	-1.7	5.1
2410	63.9	-1.9	4.7
2420	64.3	-1.9	4.5
2430	65.8	-1.8	4.4
2440	67.3	-1.7	4.1
2450	68.7	-1.6	3.8
2460	69.8	-1.6	3.5
2470	66.5	-1.8	3.2
2480	72.2	-1.4	3.6
2490	72.9	-1.4	3.6
2500	70.6	-1.5	3.4
2510	71.8	-1.4	3.6
2520	64.1	-1.9	3.1
2530	69.2	-1.6	3.4
2540	61.6	-2.1	2.9
2550	63.5	-2.0	3.1
2560	65.9	-1.8	3.3
2570	62.3	-2.1	3.1
2580	72.3	-1.4	3.6
2590	59.6	-2.3	2.9
2600	64.8	-1.9	3.2
2610	64.6	-1.9	3.2
2620	55.0	-2.6	2.5
2630	61.7	-2.1	3.06

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2640	50.9	-2.9	2.2
2650	59.2	-2.3	2.9
2660	54.9	-2.6	2.4
2670	50.4	-3.0	2.0
2680	62.9	-2.0	2.9
2690	52.9	-2.8	1.9
2700	65.3	-1.9	2.7
3400	73.9	-1.31	2.68
3420	64.9	-1.9	2.1
3440	67.1	-1.7	2.0
3460	65.9	-1.8	1.5
3480	79.0	-1.0	2.0
3500	68.3	-1.7	1.6
3520	73.0	-1.4	1.8
3540	71.4	-1.5	1.6
3560	82.2	-0.9	2.4
3580	86.6	-0.6	2.7
3600	90.1	-0.5	2.8
3620	86.2	-0.6	2.4
3640	92.8	-0.3	2.8
3660	83.7	-0.8	2.4
3680	89.2	-0.5	2.7
3700	83.7	-0.8	2.6
3720	88.1	-0.6	3.1
3740	80.6	-0.9	2.9
3760	91.7	-0.4	3.7
3780	82.8	-0.8	3.3
3800	80.8	-0.9	3.1
4500	55.92	-2.52	2.13
4520	56.7	-2.5	2.2
4540	51.2	-2.9	1.6
4560	50.97	-2.93	1.38

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
4580	53.4	-2.7	1.5
4600	50.9	-2.9	1.3
4620	55.8	-2.5	1.8
4640	53.5	-2.7	1.4
4660	50.1	-3.0	0.6
4680	53.2	-2.7	0.8
4700	54.0	-2.7	1.1
4720	61.2	-2.1	1.6
4740	65.5	-1.8	1.7
4760	60.8	-2.2	1.7
4780	55.4	-2.6	1.7
4800	57.2	-2.4	2.0
4820	50.3	-3.0	1.3
4840	62.4	-2.1	2.1
4860	58.8	-2.3	2.1
4880	47.8	-3.2	1.5
4900	47.7	-3.2	1.6
4920	48.5	-3.1	1.6
4940	55.4	-2.6	2.3
4960	64.7	-1.9	3.4
4980	54.3	-2.7	2.8
5000	51.6	-2.9	2.6
5020	58.6	-2.3	3.2
5040	61.5	-2.1	3.5
5060	61.3	-2.1	3.7
5080	64.9	-1.9	4.0
5100	50.5	-3.0	2.9
5120	51.7	-2.9	3.0
5140	54.6	-2.6	3.4
5160	53.1	-2.8	3.4
5180	55.5	-2.6	3.5
5200	50.2	-3.0	3.1
5220	47.5	-3.2	2.9
5240	50.3	-2.98	3.17

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5260	49.9	-3.0	3.1
5280	49.1	-3.1	2.9
5300	51.4	-2.9	3.1
5320	47.3	-3.3	2.8
5340	47.6	-3.2	2.8
5360	47.0	-3.3	2.7
5380	41.0	-3.9	2.2
5400	49.7	-3.0	3.1
5420	50.4	-3.0	3.2
5440	42.9	-3.7	2.5
5460	43.7	-3.6	2.5
5480	41.4	-3.8	2.2
5500	37.5	-4.3	1.9
5520	43.9	-3.6	2.5
5540	48.0	-3.2	2.8
5560	45.0	-3.5	2.6
5580	44.2	-3.6	2.6
5600	39.0	-4.1	2.1
5620	44.1	-3.6	2.6
5640	52.6	-2.8	3.4
5660	50.5	-3.0	3.2
5680	44.8	-3.5	2.7
5700	46.5	-3.3	2.7
5720	47.6	-3.2	2.8
5740	53.8	-2.7	3.1
5760	54.5	-2.6	3.2
5780	48.3	-3.2	2.6
5800	50.4	-3.0	2.7
5820	51.4	-2.9	2.7
5840	56.4	-2.5	3.1
5860	56.0	-2.5	3.1
5880	51.1	-2.9	2.7
5900	49.9	-3.0	2.6

DIV

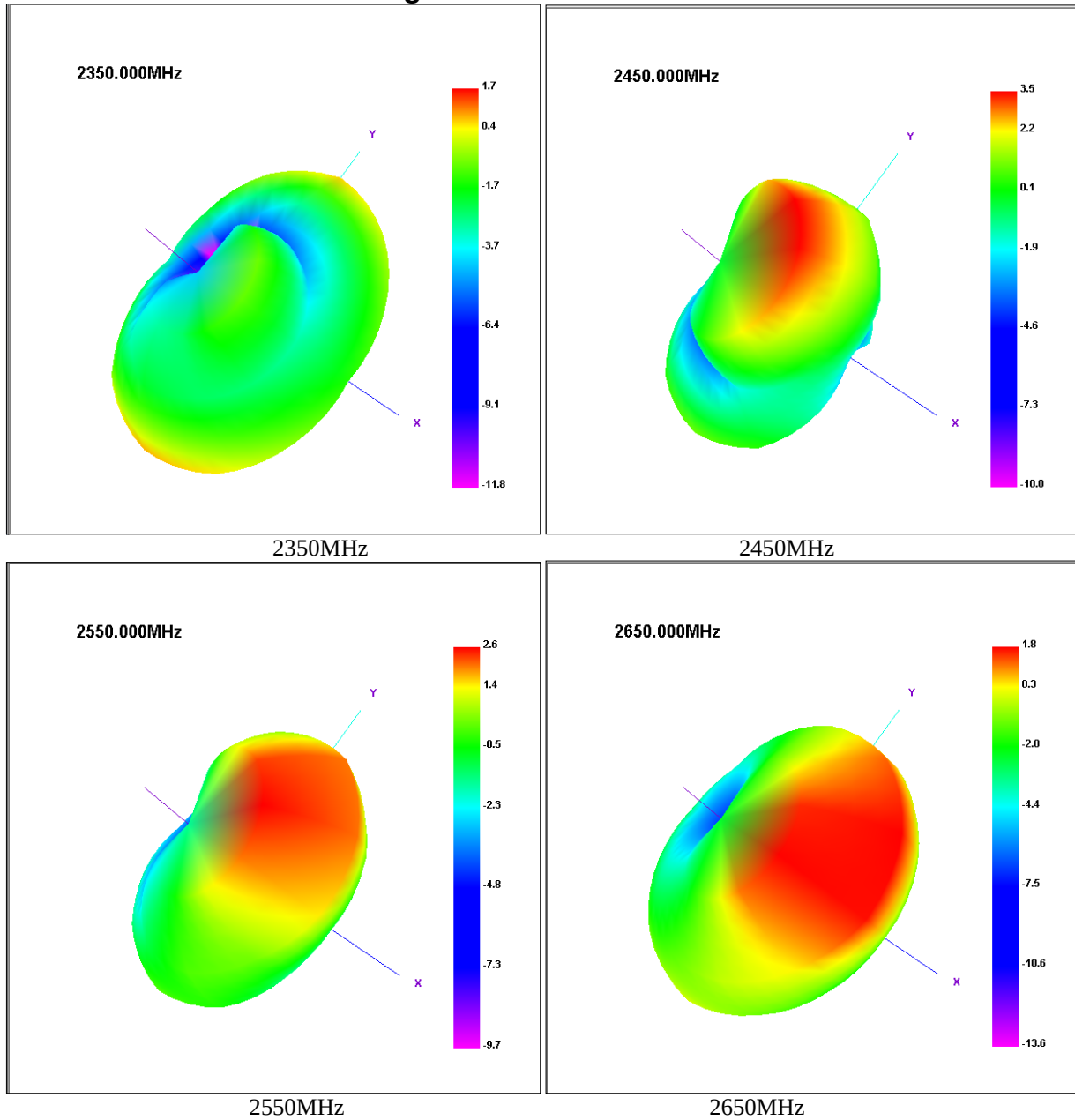
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2300	75.0	-1.3	3.0
2310	72.3	-1.4	3.1
2320	78.7	-1.0	3.6
2330	74.9	-1.3	3.4
2340	79.2	-1.0	3.6
2350	76.6	-1.2	3.4
2360	73.1	-1.4	3.0
2370	70.5	-1.5	2.7
2380	69.4	-1.6	2.7
2390	73.5	-1.3	3.0
2400	72.8	-1.4	2.9
2410	73.1	-1.4	2.9
2420	72.6	-1.4	2.7
2430	73.6	-1.3	2.7
2440	76.1	-1.2	2.6
2450	77.2	-1.1	2.6
2460	78.0	-1.1	2.7
2470	73.6	-1.3	2.5
2480	80.1	-1.0	2.9
2490	79.1	-1.0	2.9
2500	78.8	-1.0	2.9
2510	77.4	-1.1	2.9
2520	71.0	-1.5	2.4
2530	77.4	-1.1	2.7
2540	67.8	-1.7	2.0
2550	71.8	-1.4	2.3
2560	70.4	-1.5	2.2
2570	69.2	-1.6	2.1
2580	77.7	-1.1	2.7
2590	65.4	-1.9	1.9
2600	75.0	-1.3	2.4
2610	73.1	-1.4	2.3
2620	66.4	-1.8	1.8
2630	72.32	-1.41	2.19

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2640	64.1	-1.9	1.7
2650	75.1	-1.2	2.4
2660	67.1	-1.7	2.1
2670	65.0	-1.9	2.1
2680	74.3	-1.3	2.9
2690	64.4	-1.9	2.3
2700	75.2	-1.2	3.0
3400	79.12	-1.02	3.54
3420	73.7	-1.3	3.3
3440	79.8	-1.0	3.6
3460	75.3	-1.2	3.1
3480	81.7	-0.9	3.3
3500	71.4	-1.5	2.8
3520	75.8	-1.2	3.0
3540	74.9	-1.3	3.0
3560	84.7	-0.7	3.5
3580	80.7	-0.9	3.3
3600	81.2	-0.9	3.3
3620	76.0	-1.2	3.2
3640	81.9	-0.9	3.6
3660	76.1	-1.2	3.4
3680	80.2	-1.0	3.4
3700	71.3	-1.5	2.7
3720	75.8	-1.2	3.1
3740	70.4	-1.5	3.0
3760	81.7	-0.9	3.6
3780	72.1	-1.4	2.8
3800	63.5	-2.0	2.2
4500	50.23	-2.99	0.64
4520	54.1	-2.7	1.1
4540	58.7	-2.3	1.6
4560	51.8	-2.86	1.03

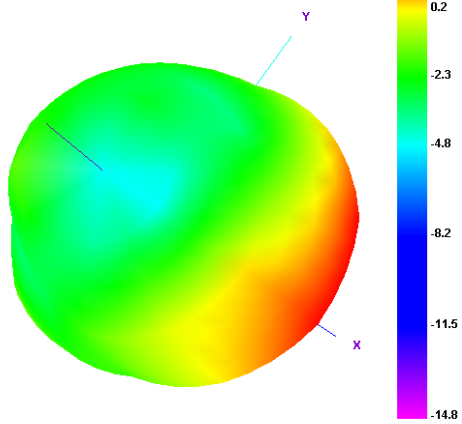
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
4580	49.3	-3.1	0.9
4600	43.0	-3.7	0.5
4620	41.8	-3.8	0.6
4640	45.9	-3.4	1.2
4660	45.3	-3.4	0.9
4680	40.4	-3.9	0.3
4700	37.5	-4.3	0.1
4720	38.4	-4.2	0.1
4740	40.4	-3.9	0.5
4760	48.6	-3.1	1.3
4780	46.6	-3.3	0.9
4800	41.6	-3.8	0.6
4820	39.5	-4.0	0.7
4840	43.8	-3.6	1.0
4860	49.9	-3.0	1.4
4880	47.2	-3.3	1.1
4900	41.4	-3.8	0.7
4920	40.8	-3.9	0.7
4940	42.1	-3.8	0.7
4960	46.7	-3.3	1.1
4980	45.9	-3.4	1.0
5000	45.0	-3.5	0.9
5020	47.3	-3.3	1.1
5040	48.9	-3.1	1.2
5060	47.7	-3.2	1.0
5080	50.0	-3.0	1.1
5100	49.6	-3.1	1.1
5120	44.9	-3.5	0.7
5140	49.6	-3.1	1.1
5160	44.3	-3.5	0.5
5180	42.0	-3.8	0.1
5200	43.5	-3.6	0.3
5220	43.7	-3.6	0.5
5240	44.71	-3.5	0.74

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5260	44.6	-3.5	0.6
5280	41.6	-3.8	0.3
5300	42.2	-3.8	0.3
5320	45.6	-3.4	0.6
5340	44.9	-3.5	0.8
5360	42.9	-3.7	0.7
5380	38.1	-4.2	0.4
5400	42.5	-3.7	1.1
5420	45.7	-3.4	1.6
5440	41.1	-3.9	1.2
5460	40.1	-4.0	1.1
5480	39.1	-4.1	0.8
5500	35.1	-4.5	0.1
5520	40.7	-3.9	0.6
5540	47.6	-3.2	1.0
5560	45.0	-3.5	0.6
5580	44.6	-3.5	0.2
5600	40.0	-4.0	-0.6
5620	44.3	-3.5	-0.1
5640	52.8	-2.8	0.6
5660	51.1	-2.9	0.4
5680	45.5	-3.4	-0.1
5700	47.2	-3.3	0.1
5720	48.3	-3.2	0.3
5740	54.9	-2.6	0.9
5760	53.6	-2.7	1.1
5780	48.7	-3.1	0.9
5800	49.4	-3.1	1.0
5820	50.7	-3.0	1.1
5840	57.1	-2.4	1.8
5860	51.9	-2.9	1.6
5880	44.8	-3.5	1.2
5900	43.4	-3.6	1.0

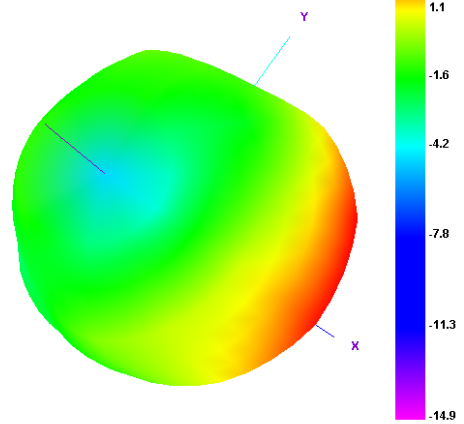
4.2 Antenna Pattern Drawing



3500.000MHz



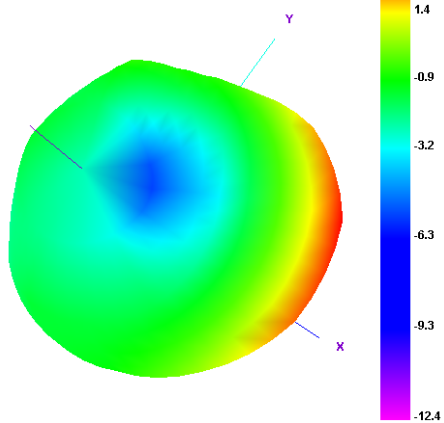
3600.000MHz



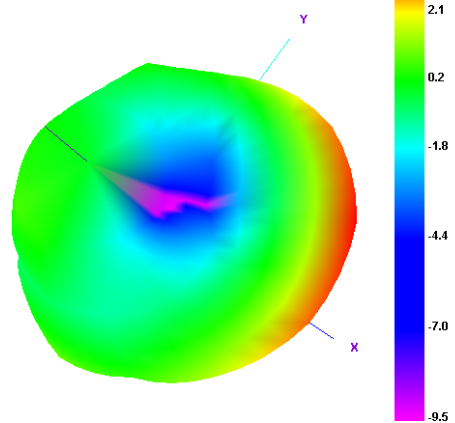
3500MHz

3600MHz

3700.000MHz



3800.000MHz

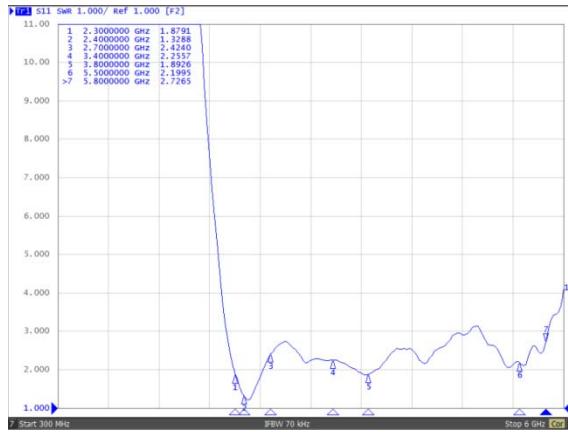


3700MHz

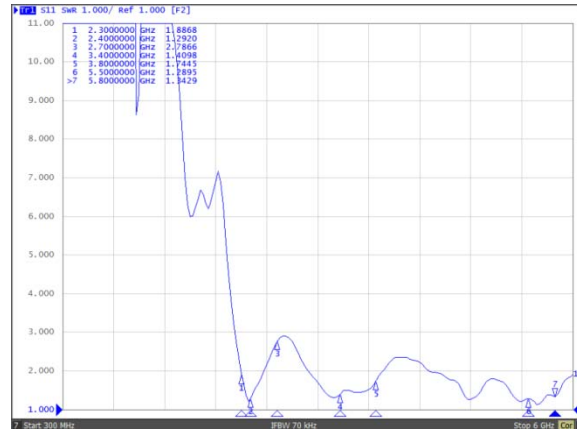
3800MHz

5. ElectricalGraph(Returnloss)

- Main Return loss



Main



DIV

6. USB Dongle Antenna

