

Kunshan Innwave Communication Technology Co., LTD

Antenna Assessment Report For 2.4G&Wifi

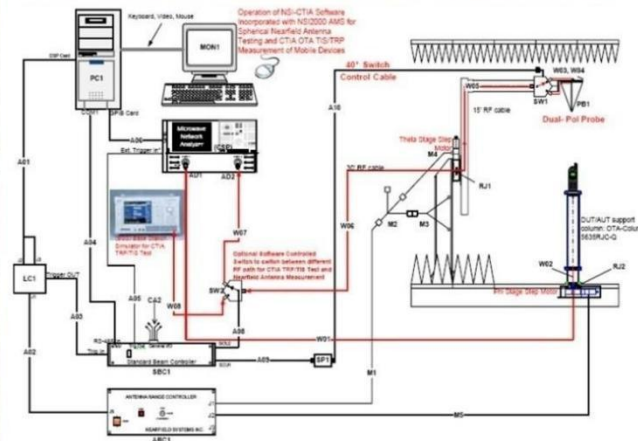
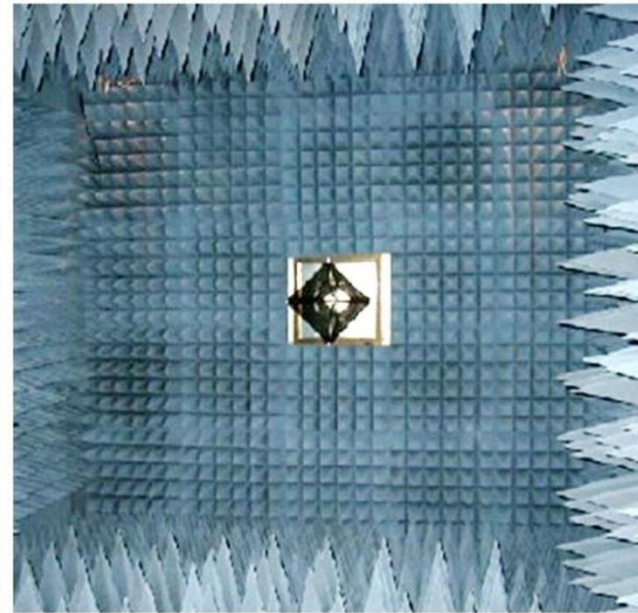
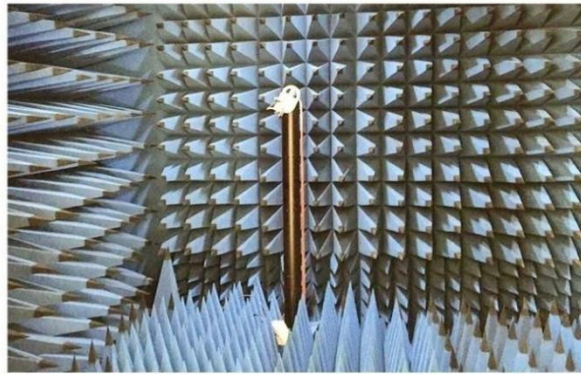
 **Project Type:**
2.4G&Wifi Antenna
Product Description
24000-2500MHz
5150-5850MHz
5950-7125MHz

 **Report Date: 2022.12.08**
 **Report Version: 1.0**
 **Prepared by:**
 **Approved by:**

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1. Device

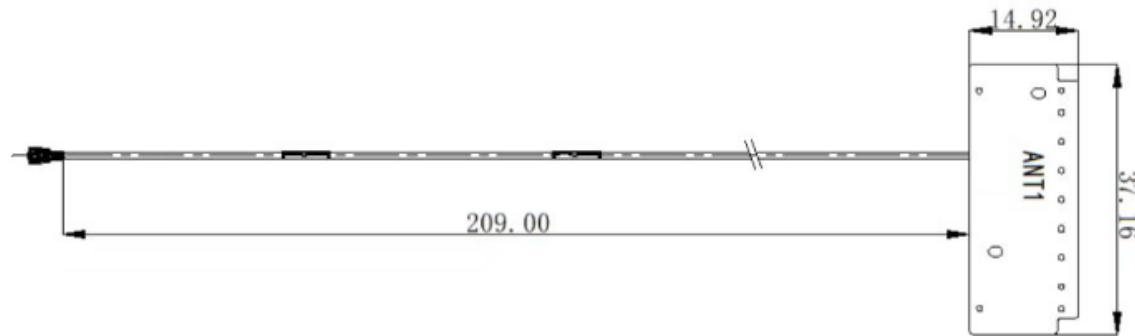


2. Antenna appearance figure

Type of antenna:FPC

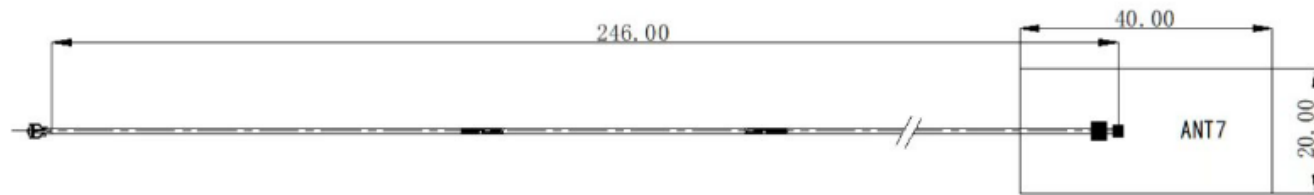
2.4G Antenna Gain :3.66dBi

Frequency range: 2400-2500MHz



WiFi 1 Antenna Gain :2.29dBi

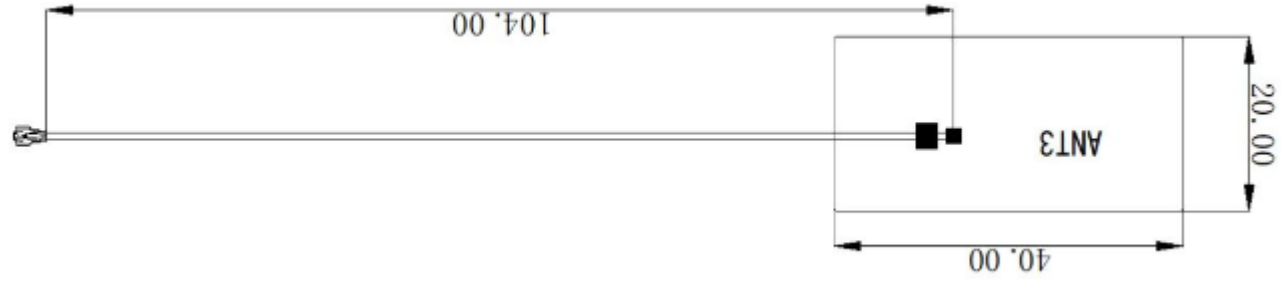
Frequency range: 2400-2500MHz、5150-5850MHz、
5950MHz-7125MHz



WiFi 2 Antenna Gain :1.26dBi

Frequency range: 2400-2500MHz、5150-5850MHz

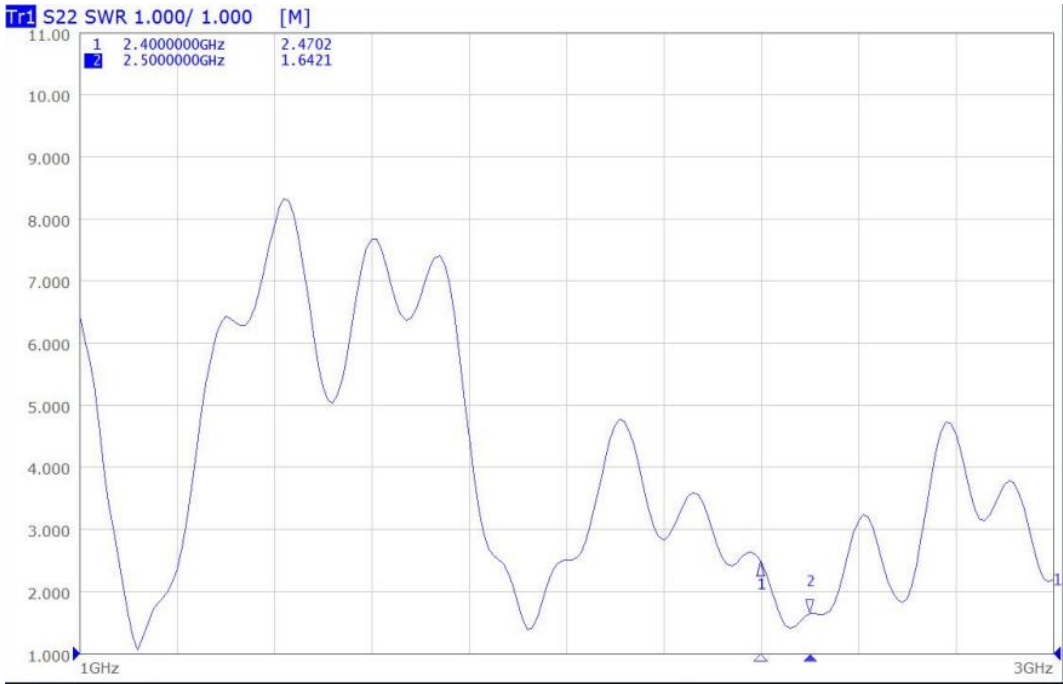
、 5950MHz-7125MHz



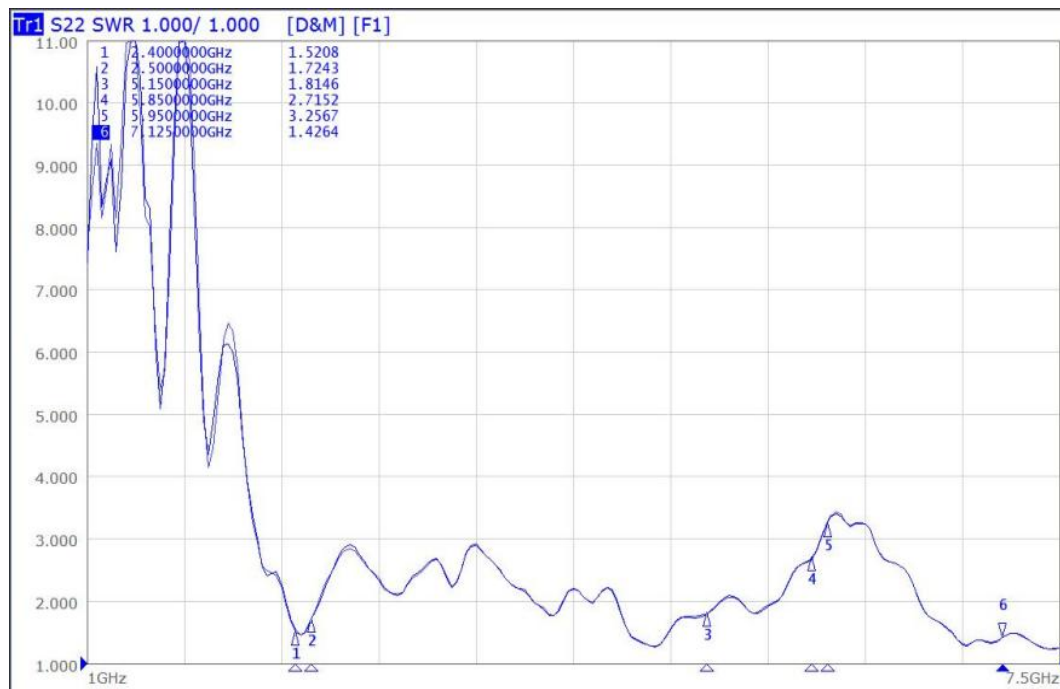
3. The antenna performance

3.1 AntennaSWR

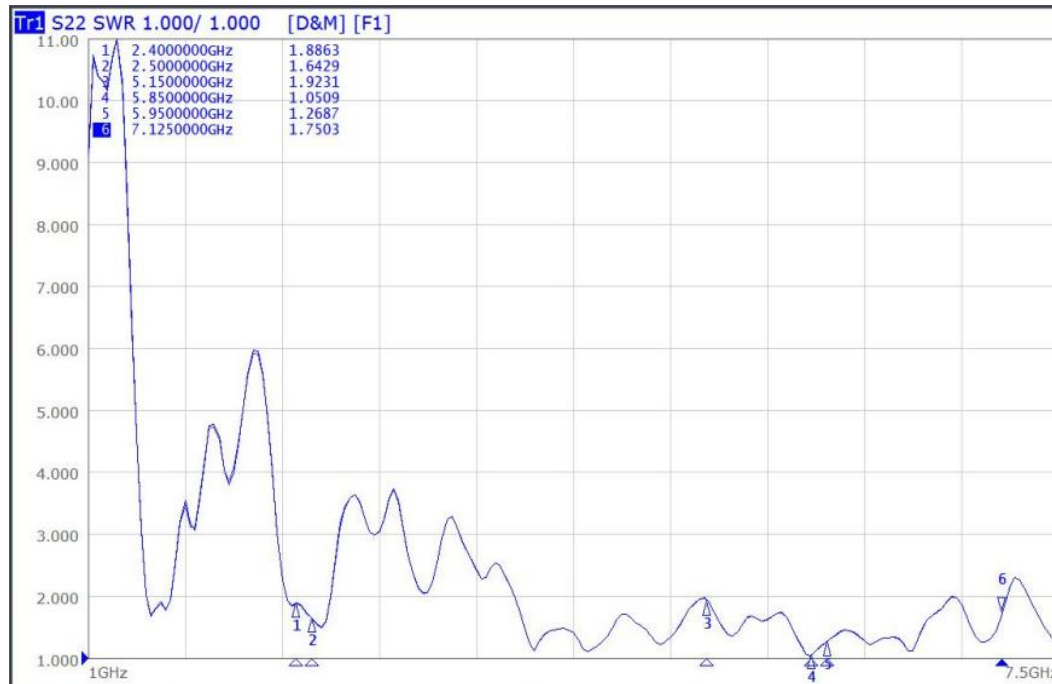
2.4G



WiFiAnt1



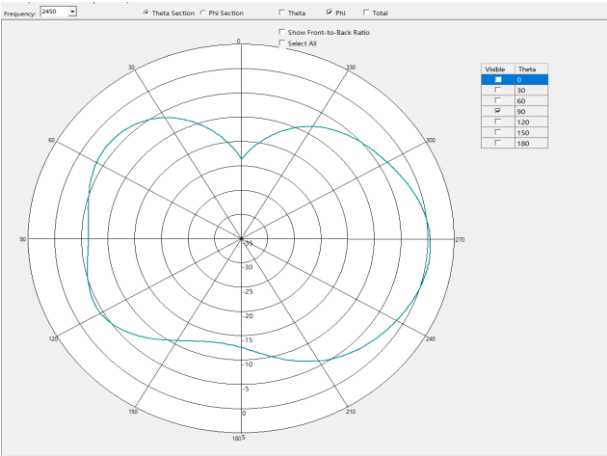
WiFiAnt2



3.2 Antenna radiation pattern

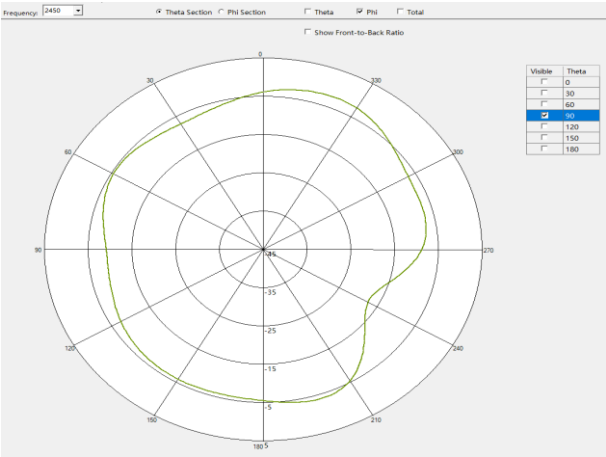
2.4G

2D 2450MHz

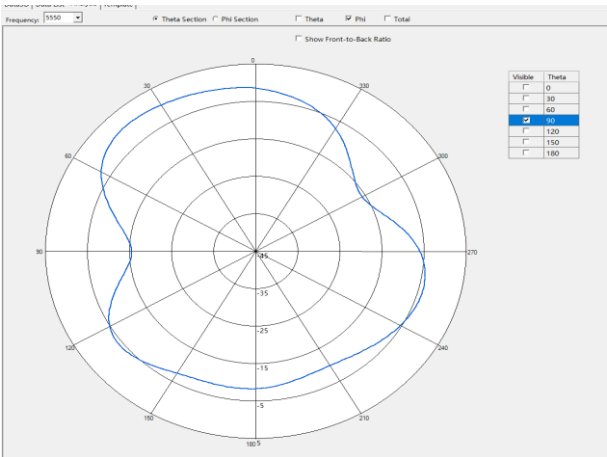


WiFiAnt1

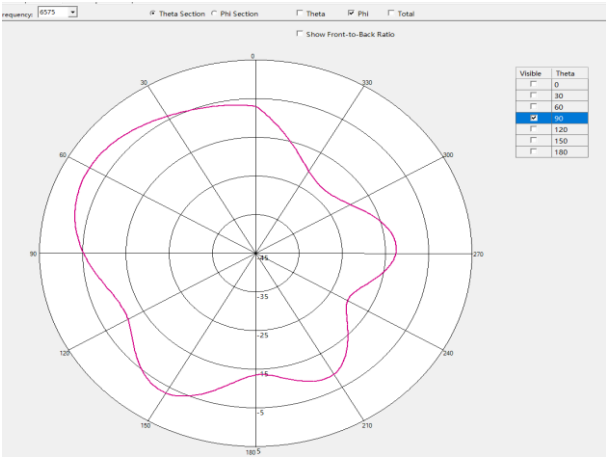
2450MHz 2D



5550MHz

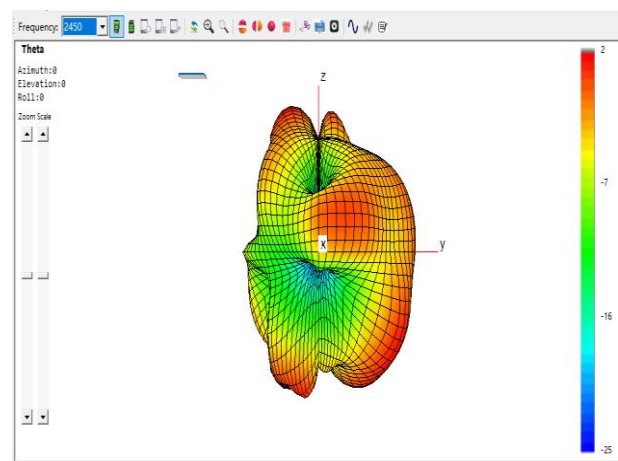


6575MHz

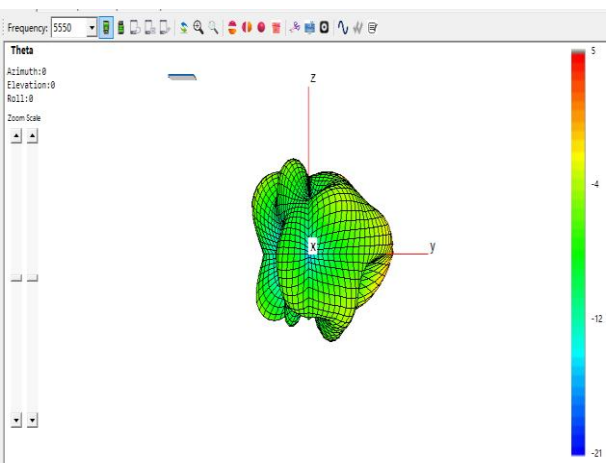


WiFiAnt2

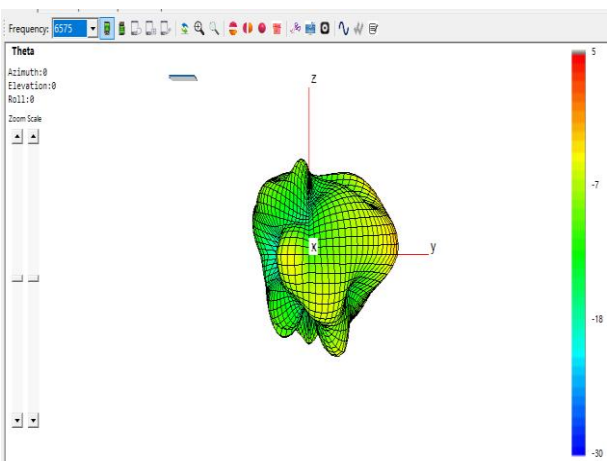
3D



2450MHz



5500MHz



6575MHz

4 Antenna efficiency gain

2.4G

Freq (MHz)	Avg. Gin (dB)	Pik. Gin (dB)
2400	−5. 0	−0. 2
2410	−4. 8	2. 01
2420	−4. 5	1. 64
2430	−4. 5	2. 75
2440	−4. 4	2. 92
2450	−4. 2	3. 66
2460	−4. 0	2. 42
2470	−3. 8	2. 56
2480	−3. 7	2. 41
2490	−3. 7	2. 36
2500	−3. 8	2. 04

WiFiAnt0

Freq (MHz)	Avg. Gin (dB)	Pik. Gin (dB)	Freq (MHz)	Avg. Gin (dB)	Pik. Gin (dB)
2400	−3. 9	0. 3	5925	−6. 3	−0. 1
2410	−3. 8	1. 5	5975	−6. 5	−0. 4
2420	−3. 8	1. 8	6025	−5. 8	−0. 3
2430	−3. 6	2. 2	6075	−5. 7	−0. 5
2440	−3. 6	2. 29	6125	−5. 8	−0. 5
2450	−3. 6	2. 54	6175	−5. 3	1. 6
2460	−3. 6	2. 18	6225	−5. 2	1. 7
2470	−3. 7	2. 08	6275	−5. 4	1. 1
2480	−3. 6	2. 1	6325	−5. 3	1. 5
2490	−3. 8	1. 9	6375	−5. 1	1. 7
2500	−3. 6	2. 1	6425	−4. 9	1. 8
5150	−4. 9	1. 5	6475	−4. 8	1. 9
5200	−4. 7	2. 0	6525	−4. 4	1. 45
5250	−4. 8	2. 0	6575	−5. 5	1. 24
5300	−5. 0	1. 8	6625	−5. 6	2. 21
5350	−5. 3	1. 5	6675	−5. 5	2. 29
5400	−5. 2	1. 9	6725	−4. 7	2. 24
5450	−5. 6	2. 2	6775	−4. 9	1. 8
5500	−5. 7	2. 02	6825	−5. 2	1. 6
5550	−5. 6	2. 29	6875	−5. 2	1. 4
5600	−5. 6	1. 8	6925	−5. 8	1. 5
5650	−5. 6	1. 4	6975	−6. 0	2. 1
5700	−5. 8	0. 4	7025	−6. 0	1. 6
5750	−5. 5	0. 7	7075	−5. 7	1. 3
5800	−5. 5	0. 7	7125	−5. 6	1. 6
5850	−5. 4	0. 4			

WiFiAnt1

Freq (MHz)	Avg. Gin (dB)	Pik. Gin (dB)	Freq (MHz)	Avg. Gin (dB)	Pik. Gin (dB)
2400	-3.3	1.21	5925	-5.2	1.25
2410	-3.3	1.09	5975	-5.6	1.24
2420	-3.3	1.2	6025	-5.2	1.16
2430	-3.2	1.18	6075	-5.1	1.12
2440	-3.3	1.26	6125	-5.2	1.13
2450	-3.5	1.14	6175	-4.8	1.17
2460	-3.5	1.25	6225	-4.6	1.13
2470	-3.7	1.24	6275	-4.6	1.19
2480	-3.6	1.16	6325	-4.6	1.22
2490	-4.0	1.12	6375	-4.7	0.93
2500	-3.8	1.13	6425	-4.7	1.25
5150	-4.4	1.17	6475	-4.9	1.26
5200	-4.2	1.13	6525	-4.5	1.25
5250	-4.4	1.19	6575	-5.5	1.13
5300	-4.4	1.22	6625	-5.5	1.14
5350	-4.5	0.93	6675	-5.3	0.8
5400	-4.1	1.25	6725	-4.6	1.0
5450	-4.2	1.26	6775	-5.0	1.0
5500	-4.3	1.26	6825	-5.2	0.9
5550	-4.3	1.1	6875	-4.9	1.22
5600	-4.4	0.89	6925	-5.3	1.03
5650	-4.5	0.93	6975	-5.5	1.21
5700	-5.0	1.01	7025	-5.5	1.18
5750	-4.7	1.21	7075	-5.1	1.03
5800	-4.6	1.12	7125	-5.2	1.05
5850	-4.6	1.21			