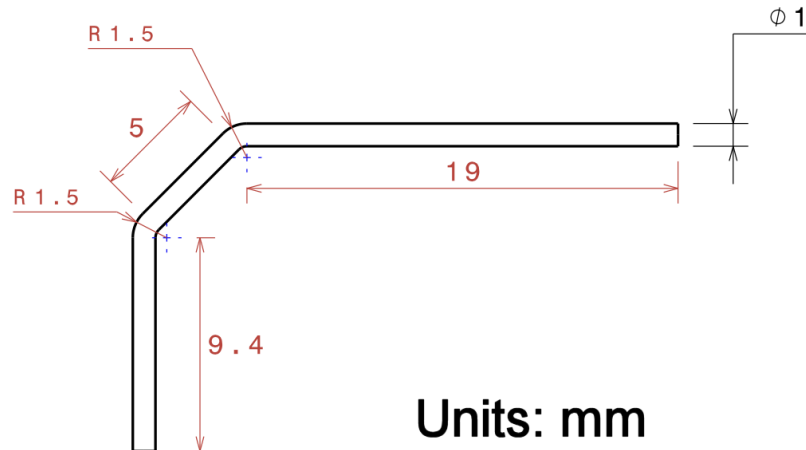


2.4G Metal Wire Antenna

IVX0082-NVX2



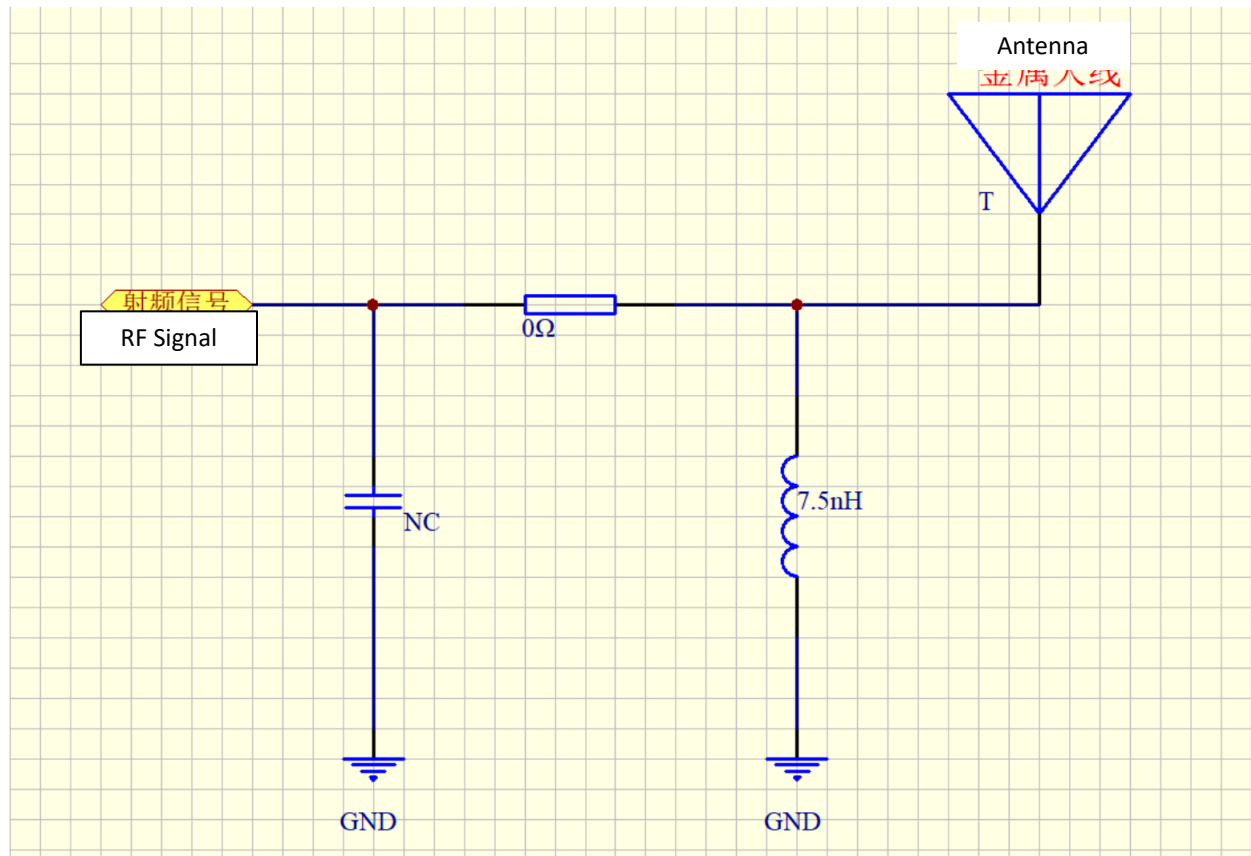
Electrical Properties	
Frequency	2400-2500 MHz
VSWR	< 1.1 (@ center frequency*)
Peak Gain	2.71 dBi (typical**)
Radiation	Omni-directional
Characteristic Impedance	50 ohm

Physical Properties	
Wire Type	Brass/Lead/Tin
Wire Diameter	OD 1mm
Operation Temp.	-20~+50°C
Storage Temp.	-40~+85°C

* At center frequency means the frequency with the lowest value in return loss of the antenna on evaluation board.

** Typical value is for reference only, not guaranteed.

Antenna Matching*



* Matching circuit and values are for the measurements contained in this document and are for reference only. Actual implementation may differ in each application.

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

► F1 S22 Smith (R+jX) Scale 1.0000 [F1]

Marker	Frequency (GHz)	Real (Ω)	Imag (Ω)	Value
1	2.400000	42.890	9.7165	644.35 pF
2	2.500000	44.595	-14.303	4.4509 pF
>3	2.450000	48.206	-1.7480	37.164 pF

1 Start 1.9 GHz IFBW 30 kHz Stop 3 GHz PExt C? !

Meas Stop ExtRef Svc 2022-03-14 11:09

System

Print

Abort Printing

Printer Setup...

Invert Image
ON

Dump
Screen Image...

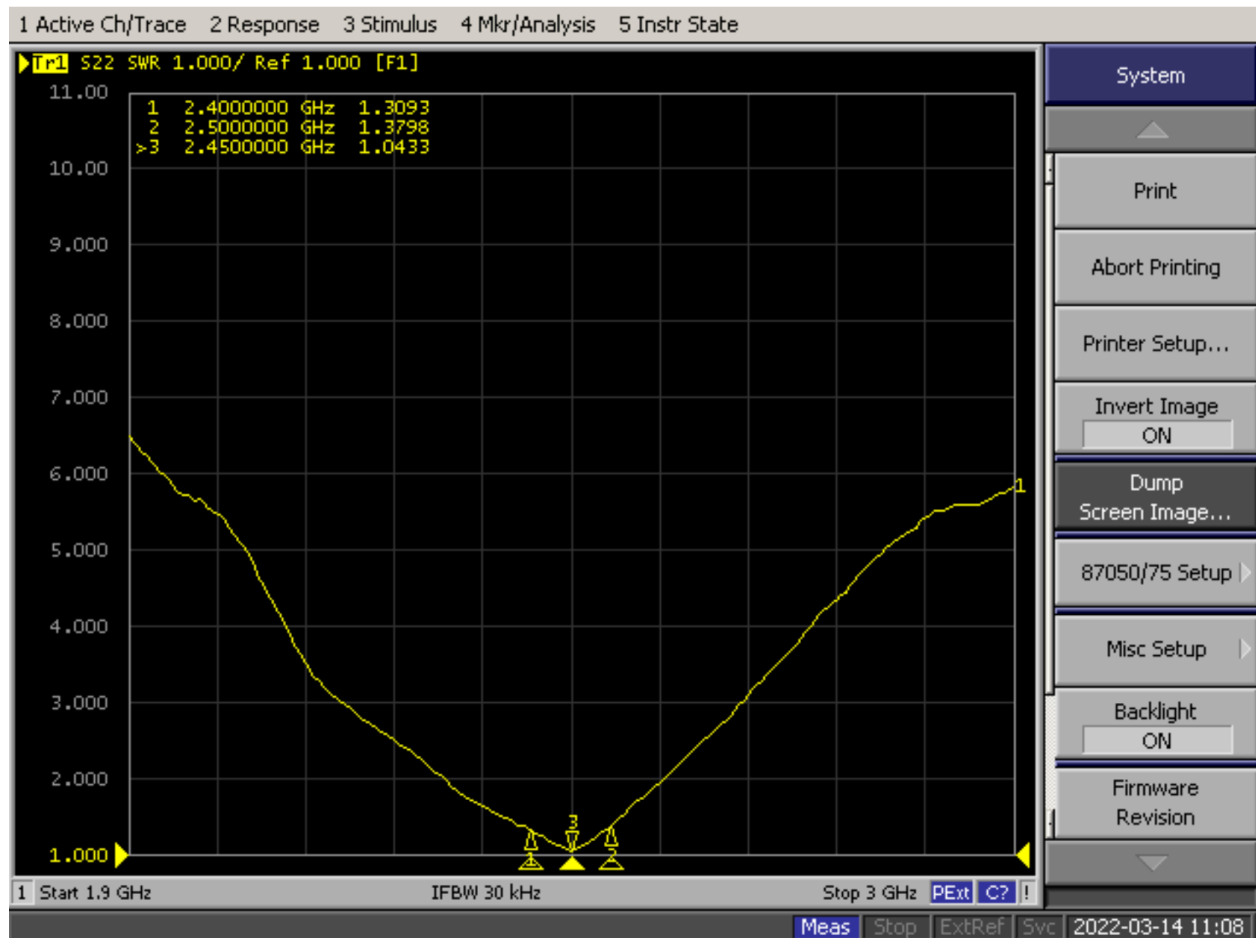
87050/75 Setup ►

Misc Setup ►

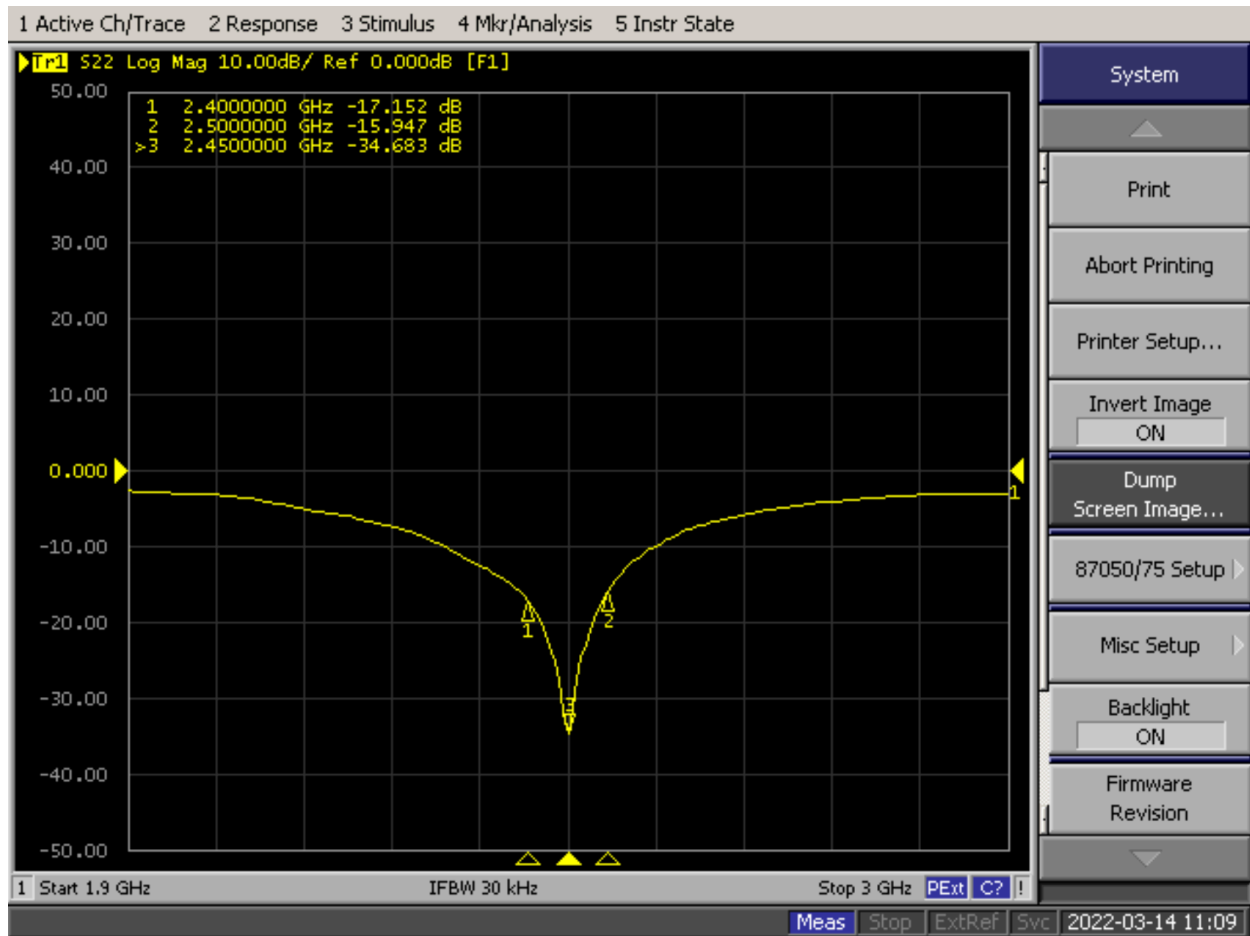
Backlight
ON

Firmware
Revision

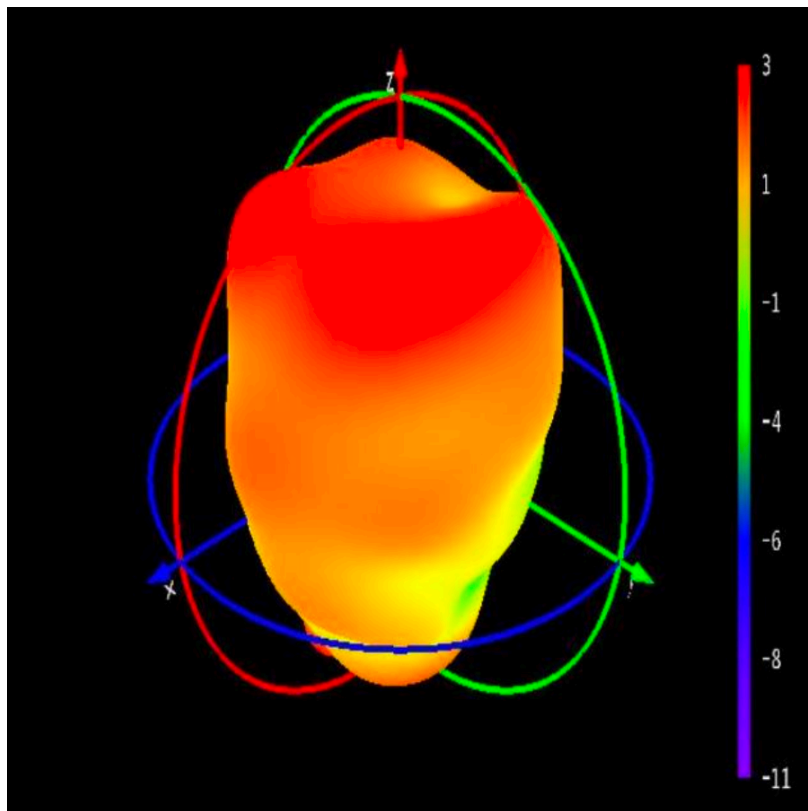
VSWR



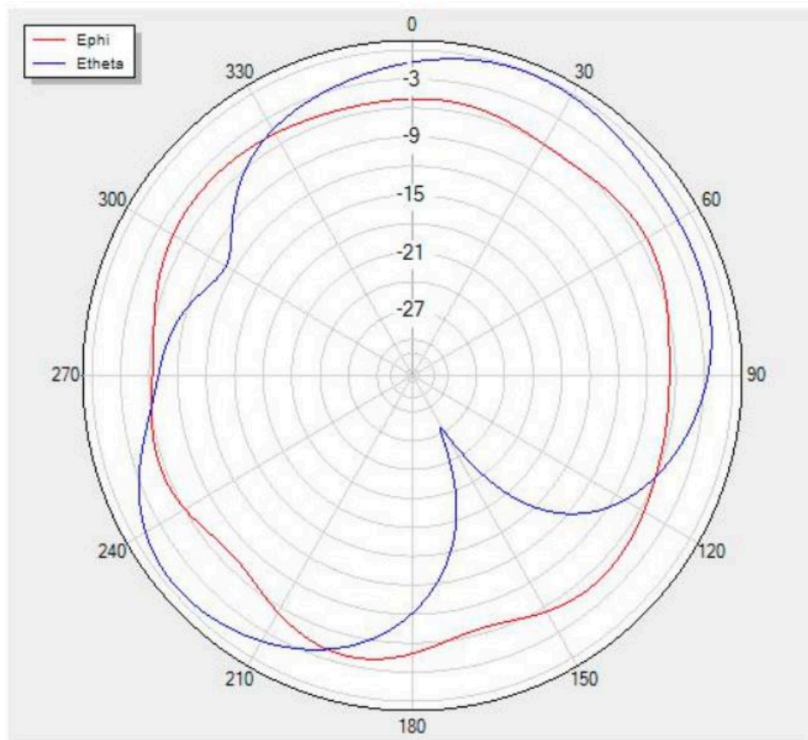
Return Loss



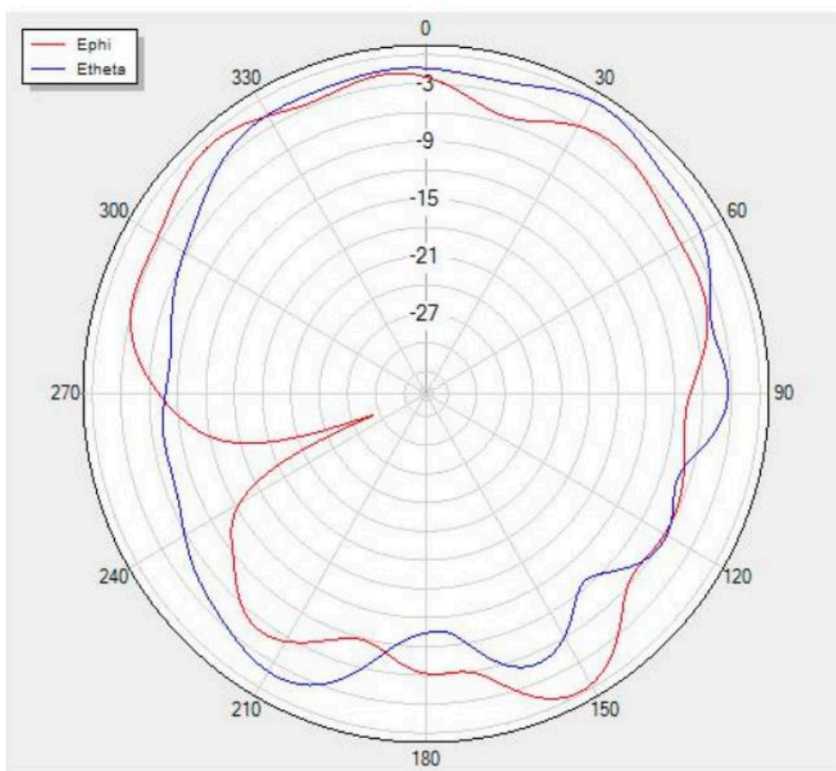
Radiation Pattern



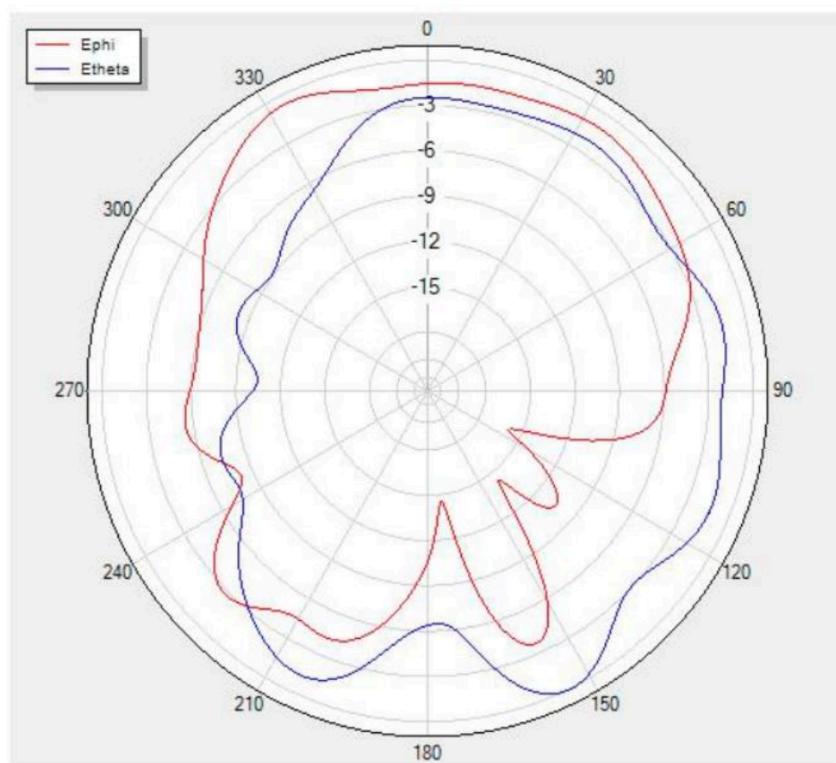
Theta=90 freq=2450MHz



Phi=90 freq=2450MHz



Phi=0 freq=2450MHz



Antenna Gain and Efficiency

frequency	Gain	Efficiency	efficiency
(MHz)	(dBi)	(dB)	(%)
2400	2.71	-1.98	63.43
2405	2.65	-1.85	65.29
2410	2.39	-1.83	65.57
2415	2.09	-1.83	65.59
2420	1.9	-1.85	65.24
2425	1.81	-1.84	65.49
2430	1.74	-1.83	65.58
2435	1.79	-1.78	66.32
2440	1.98	-1.68	68.00
2445	1.99	-1.64	68.54
2450	2.04	-1.59	69.33
2455	2.15	-1.56	69.89
2460	2.23	-1.64	68.58
2465	2.36	-1.68	67.87
2470	2.59	-1.61	69.04
2475	2.67	-1.61	69.00
2480	2.64	-1.6	69.12
2485	2.49	-1.58	69.58
2490	2.16	-1.67	68.14
2495	1.7	-1.83	65.58
2500	1.13	-2.11	61.56