

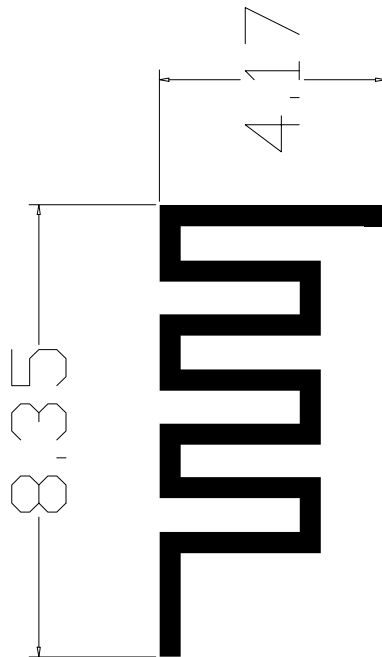
RT5013 ANTENNA TEST REPORT

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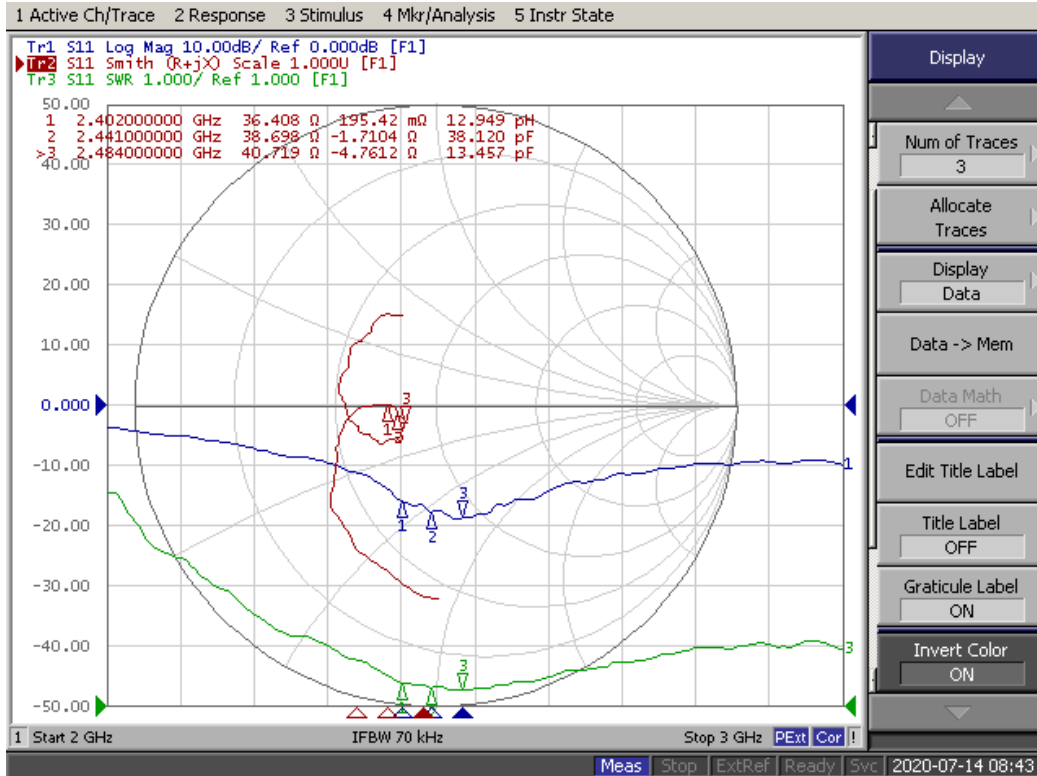
1. Electrical Characteristics

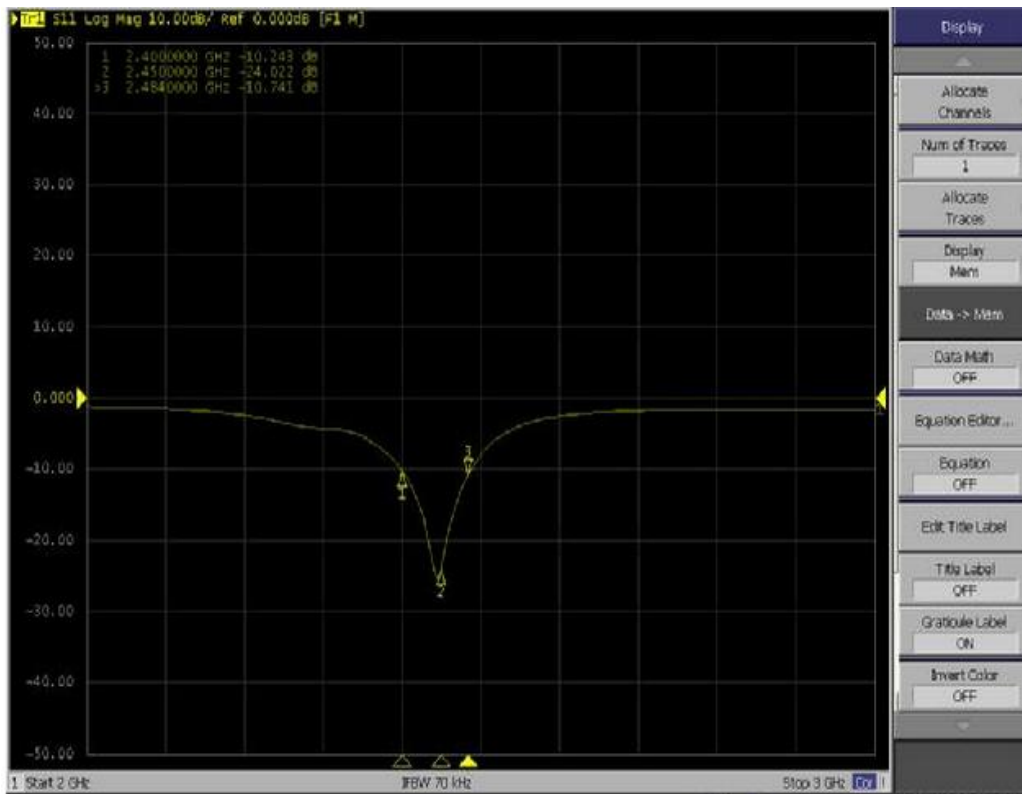
Item	Specification
Type	PCB Inverted-F Antenna
Central frequency	2.441 GHz
Bandwidth	78 MHz (Typical value)
Maximum Gain	2.52 dBi
Polarization	Linear
VSWR	2 max.
Azimuth Bandwidth	Omni-directional
Impedance	50Ω
Rated Power (max.)	2dBm
Maximum Input Power	10dBm
Operation Temperature	-40 ' C ~ +85 ' C

2. The suggestion of matching circuit

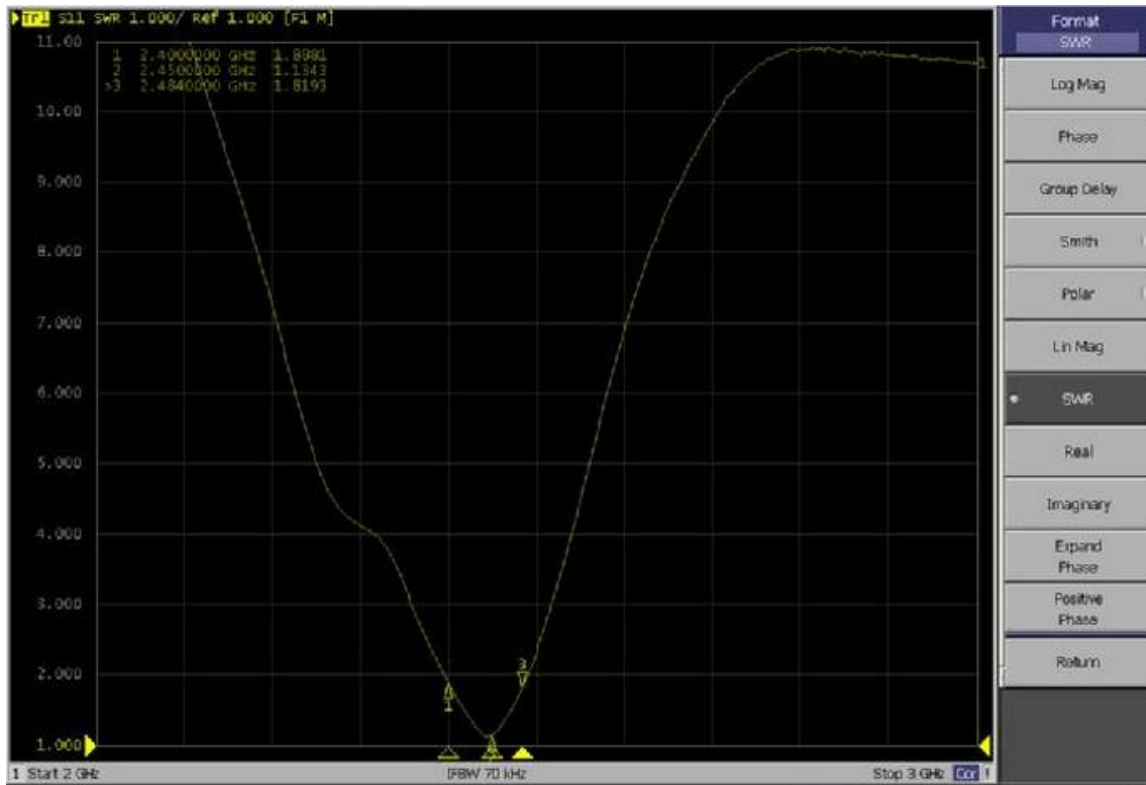


3. SWR & Smith chart





Frequency(GHz)	S11(dB)
2.402	-10.24
2.441	-24.02
2.480	-10.74



Frequency(GHz)	VSWR
2.402	1.88
2.441	1.13
2.480	1.81

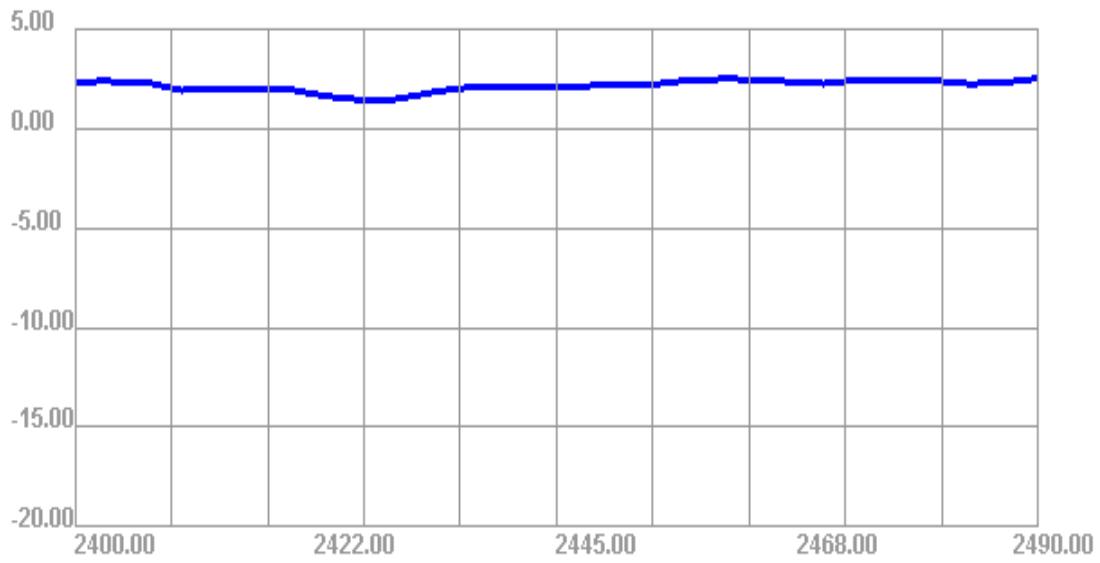
The reference:

Return Loss	-6.02dB	-7.36dB	-10dB	-13dB	-20dB
VSWR	3	2.5	1.92	1.576	1.22
Return Power Ratio	25%	18.37%	10%	5%	0.98%

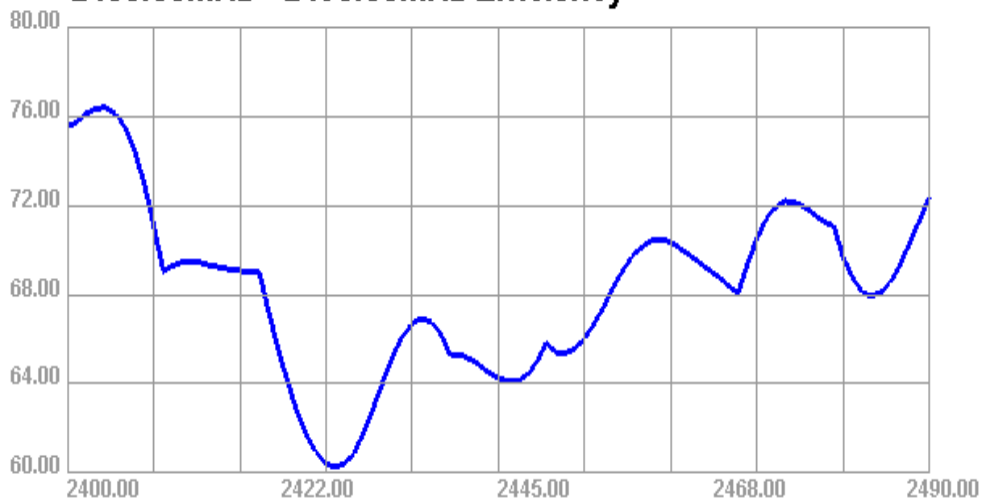
4. Gain & Efficiency:

Passive Test For BT										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Directivity (dBi)	Beamwidth (3dB)
2400	75.52	-1.22	2.36	0.21	32.188	43.335	2.36	-11.99	3.58	45
2410	69.05	-1.61	1.92	-0.23	29.32	39.729	1.92	-11.23	3.52	45
2420	69.04	-1.61	1.98	-0.17	29.191	39.852	1.98	-10.64	3.58	45
2430	60.93	-2.15	1.47	-0.68	25.77	35.164	1.47	-11.13	3.63	45
2440	65.24	-1.85	2.04	-0.11	27.779	37.463	2.04	-11.51	3.89	15
2450	65.84	-1.82	2.23	0.08	28.091	37.745	2.23	-12.25	4.05	45
2460	70.14	-1.54	2.47	0.32	29.886	40.252	2.47	-12.09	4.01	60
2470	68.04	-1.67	2.25	0.1	29.065	38.975	2.25	-12.07	3.92	45
2480	71.08	-1.48	2.4	0.25	30.396	40.681	2.4	-13.13	3.89	45
2490	72.42	-1.4	2.52	0.37	30.826	41.595	2.52	-13.89	3.92	45

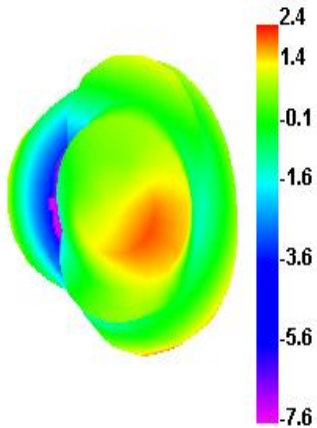
2400.00MHz - 2490.00MHz Gain



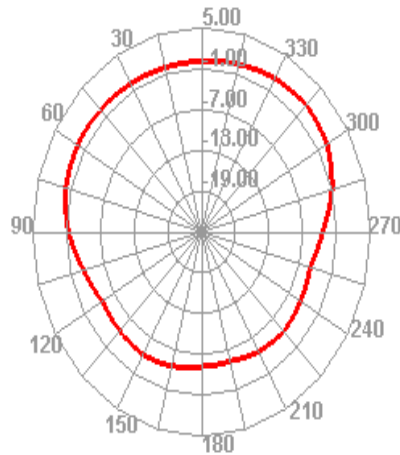
2400.00MHz - 2490.00MHz Efficiency



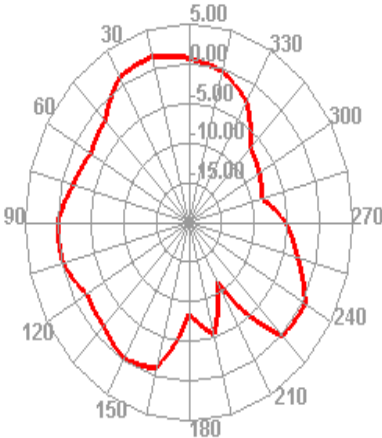
2402.000MHz



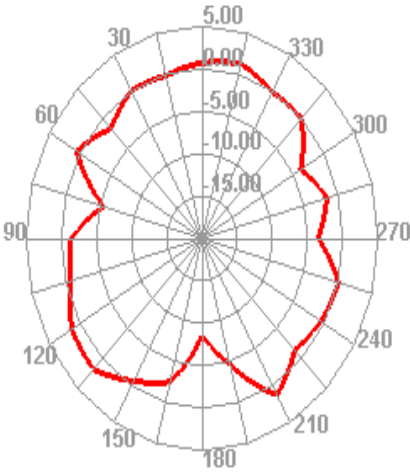
2402.000MHz H



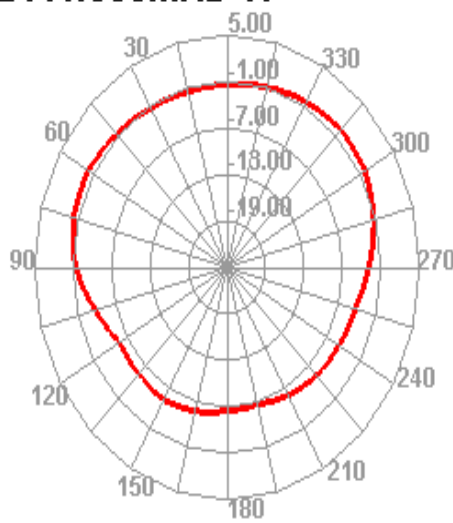
2402.000MHz E1



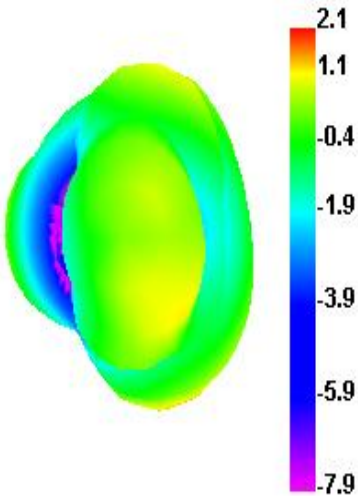
2402.000MHz E2



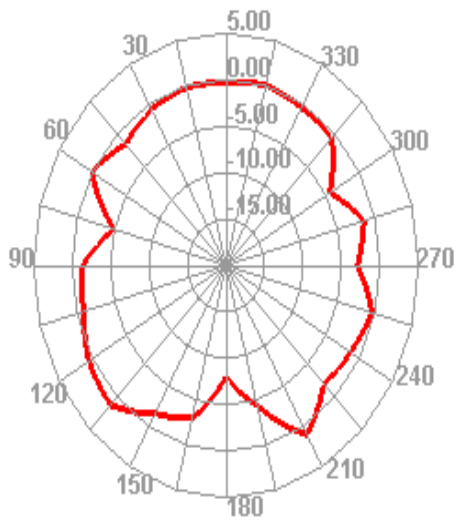
2441.000MHz H



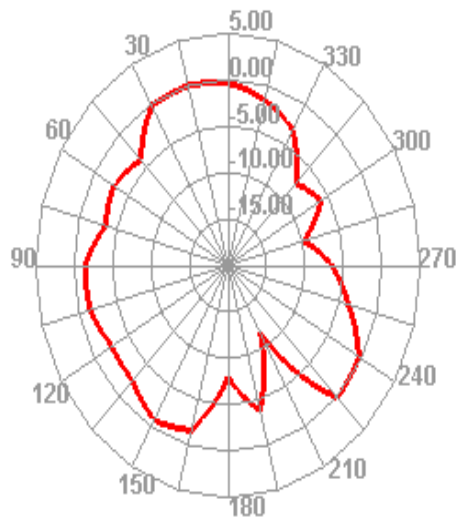
2441.000MHz



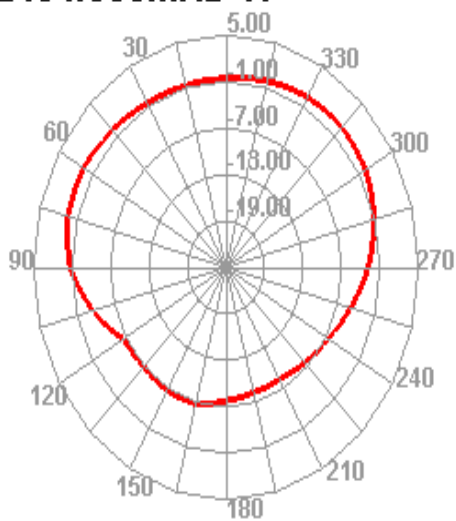
2441.000MHz E2



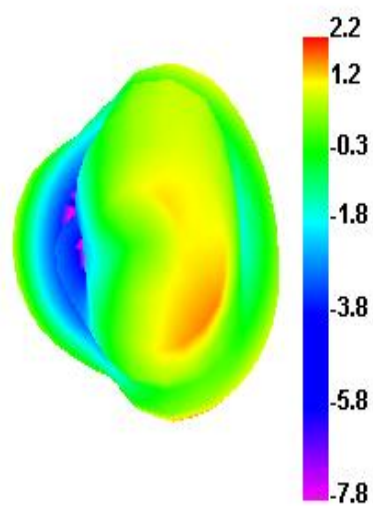
2441.000MHz E1



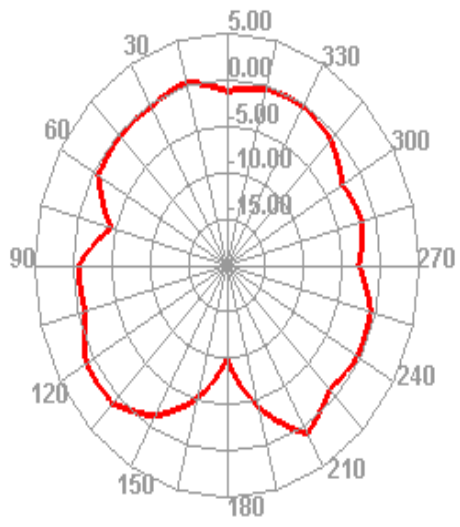
2484.000MHz H



2484.000MHz



2484.000MHz E2



2484.000MHz E1

