

Antenna Measurement Report

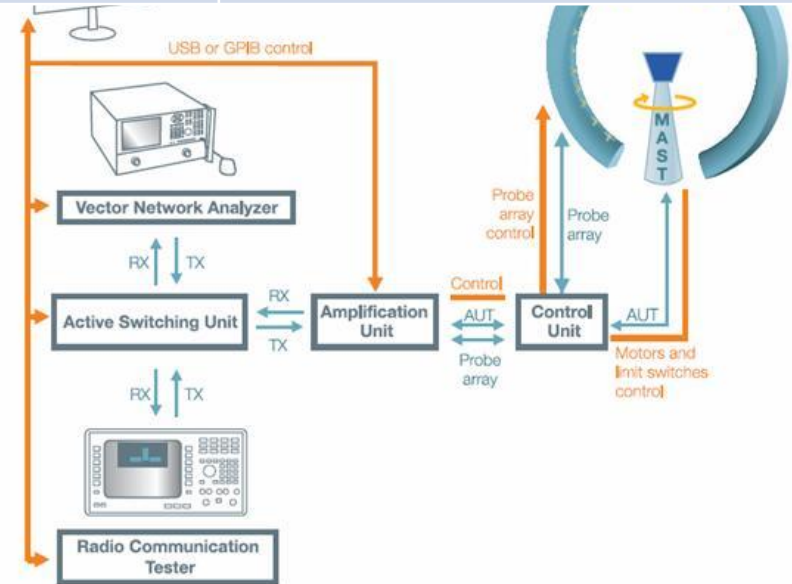
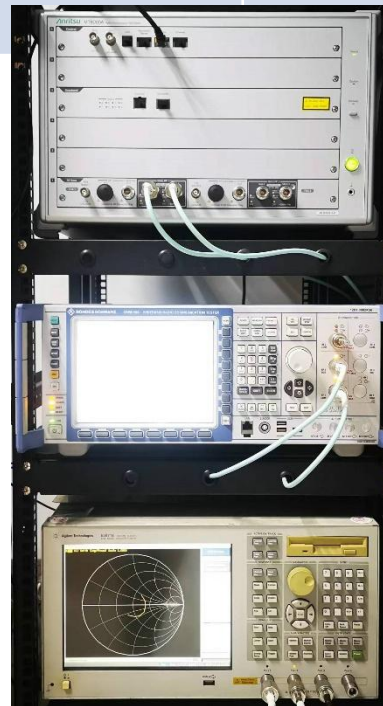
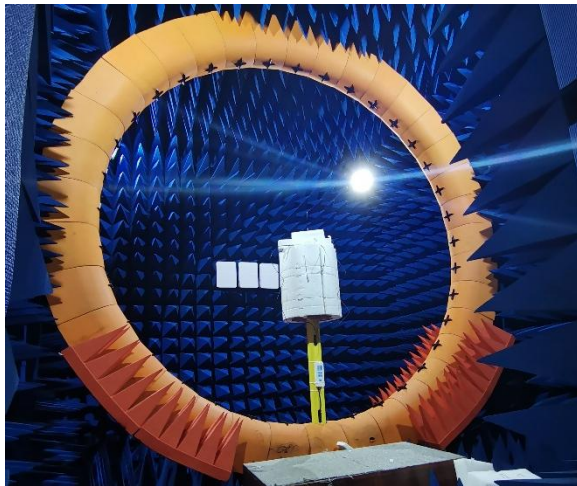
Project name :	HB742
Type of antenna :	WIFI
Frequency range :	5.15-5.58GHz
Redact :	Jiang Daiming
Approver :	
Version number :	V1.0
Date :	20240513

1. Test items and equipment

Passive test items

Active testing

1. Sparameter	Network analyzer E5071C	1. Whole machine radiation power	Microwave chamber
2. Radiation parameters	Microwave chamber Network analyzer E5071B	2. Whole machine receiving sensitivity	CMW500 MT8000A



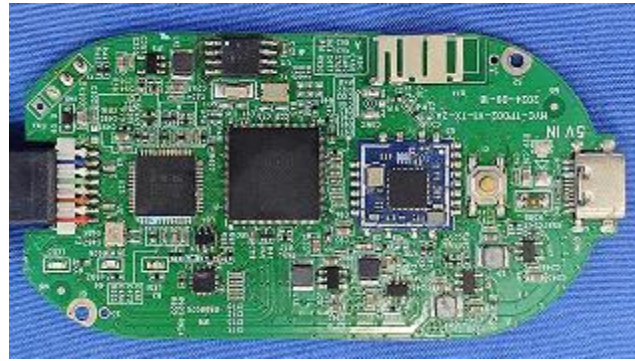
2. Product information

product name:	HB742 WIFI antenna
Item number :	SLEingB246050030
test frequency:	5.15–5.85GHz/2.40–2.50G

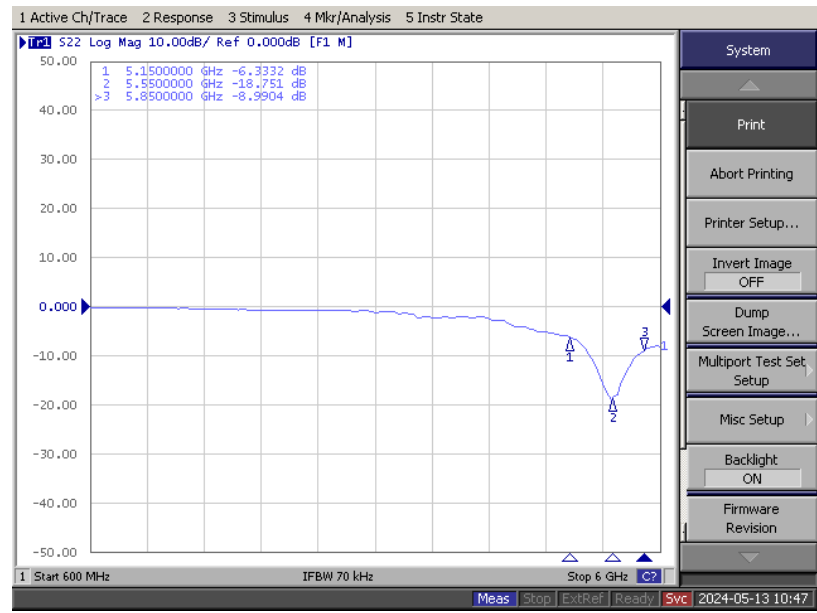
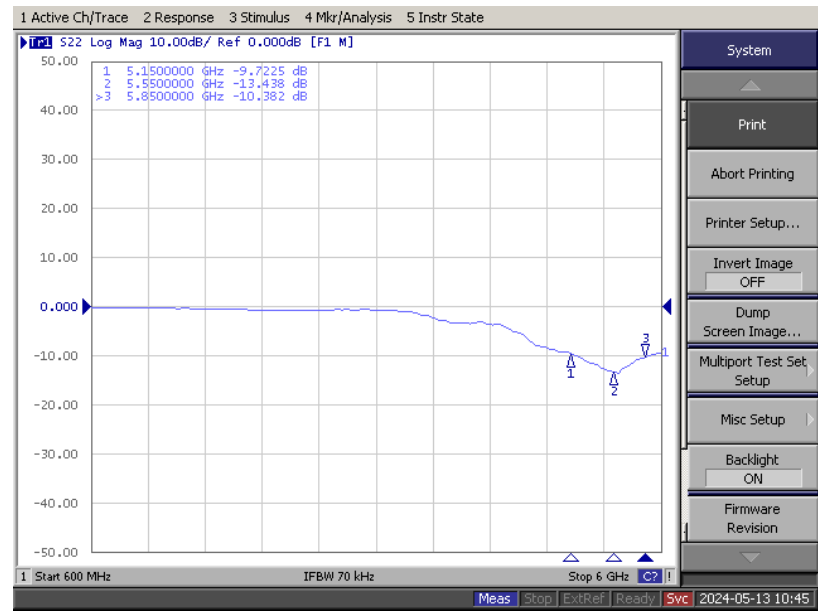
3. Specification Description

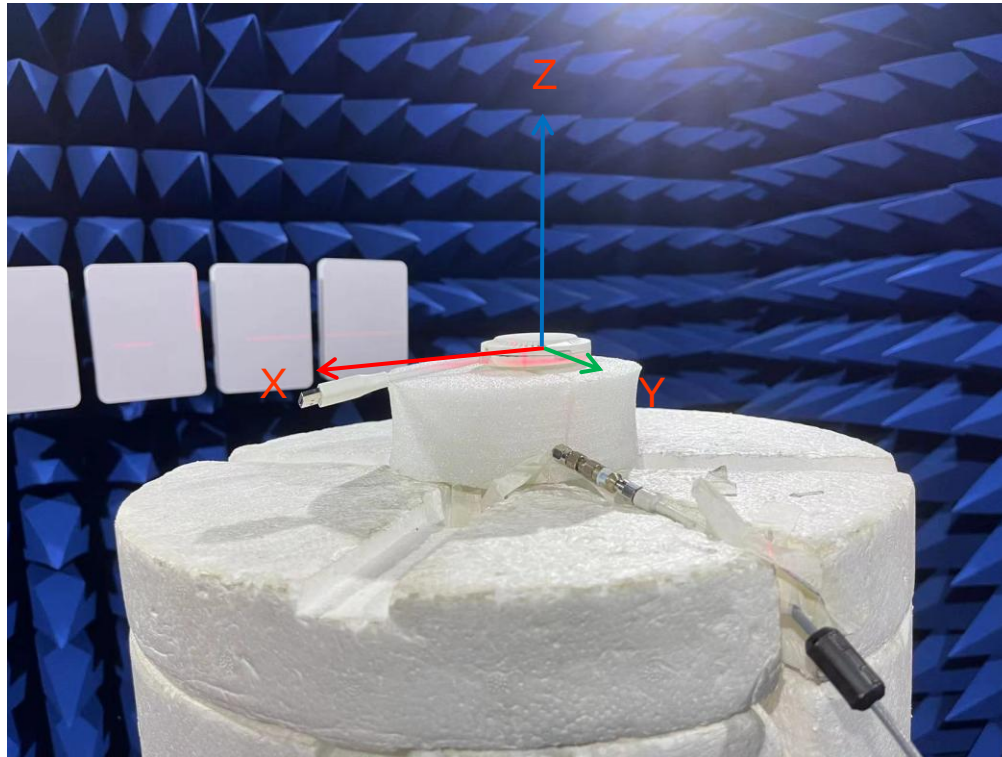
Rough description	WIFI ANT	Dimensions	
Impedance	50Ω	Test environment	None
Application	wifi	Freq. Range	5.15-5.85GHz/2.40-2.50GHz
Gain	Peak gain:	VSWR	1.92: 1
Radiation		Polarization	linear
Connector type	None	Cable type	None
Isolation	None	Special request	None

Antennaassemblyposition



5. S parameter





* This image only represents the relative coordinates of the annotations

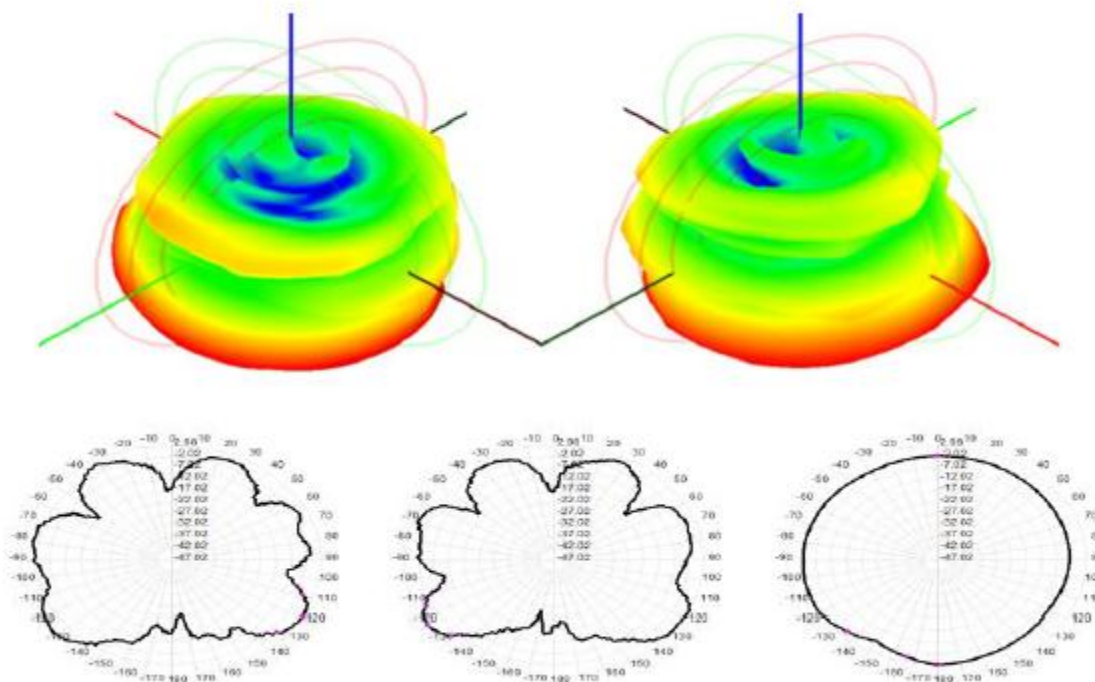
7. Passive data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Frequency (MHz)	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
Gain (dBi)	2.68	2.29	3.51	3.88	2.51	3.56	3.45	3.74	3.22	2.75	3.72	2.80	2.52	2.68	2.74
Efficiency (%)	56.13	56.27	56.53	56.23	58.24	65.46	62.22	61.43	54.76	52.43	58.82	55.46	55.83	58.18	59.54

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	
Gain (dBi)	1.23	1.35	1.52	1.43	1.55	2.65	2.71	2.82	2.45	2.43	2.56	
Efficiency (%)	35.26	36.28	39.65	42.59	43.16	45.78	47.56	48.49	50.60	49.56	49.32	

8. Field Pattern

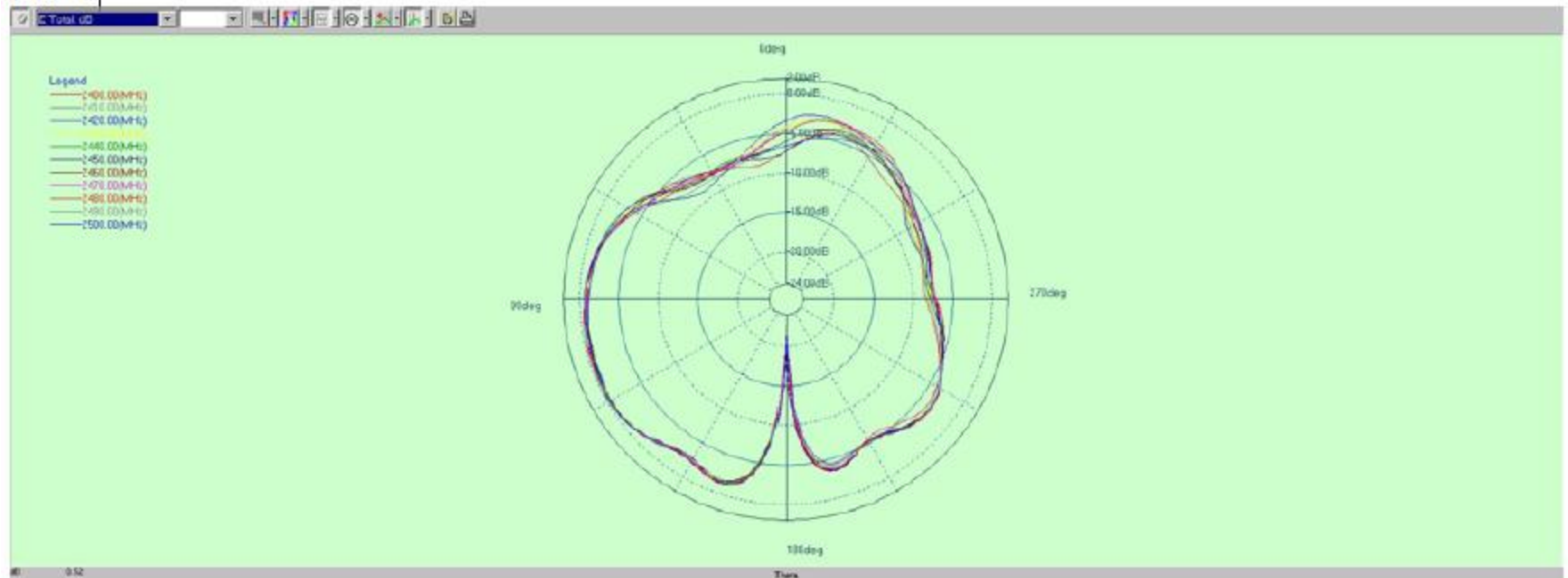
5250MHz:



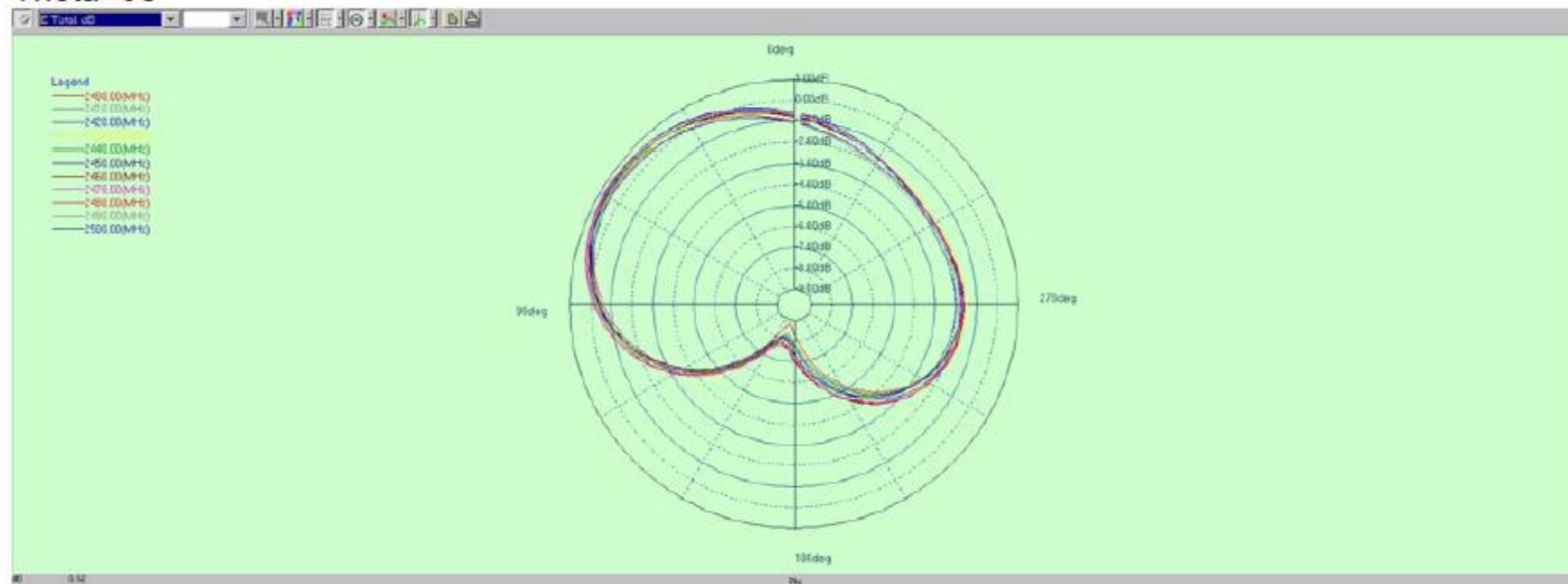
2.4GWIFI

Radiation Pattern

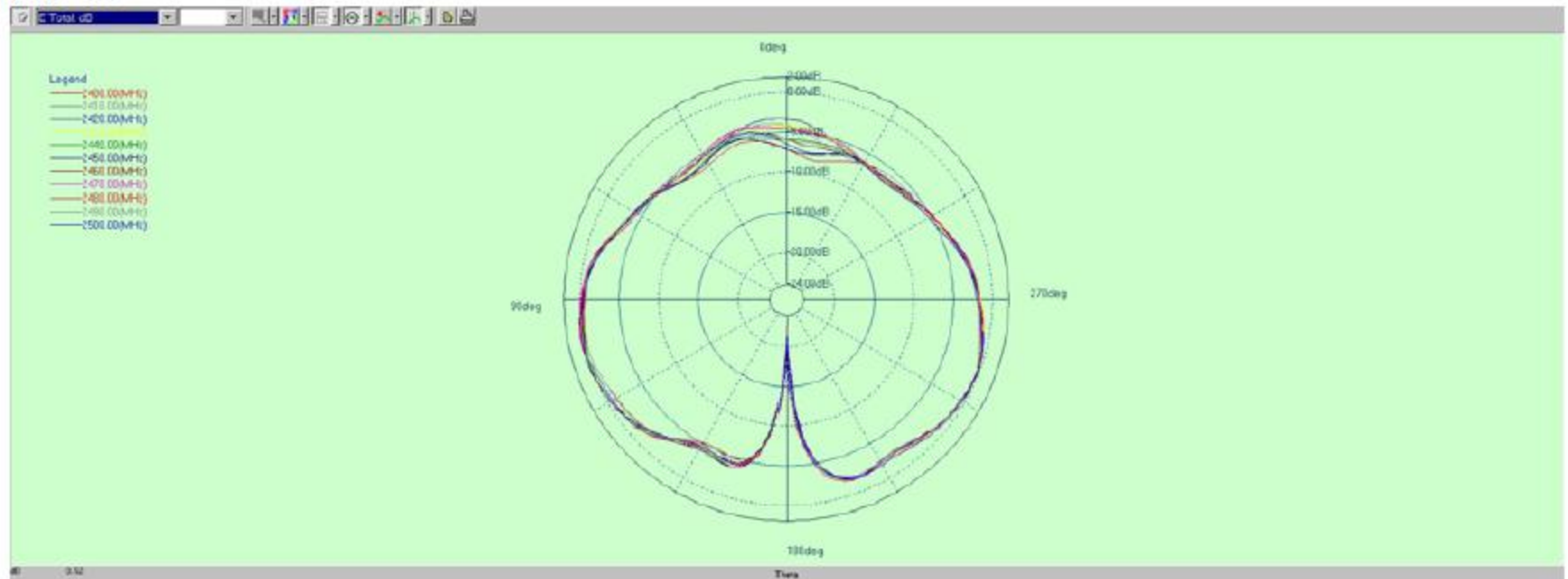
Phi=0



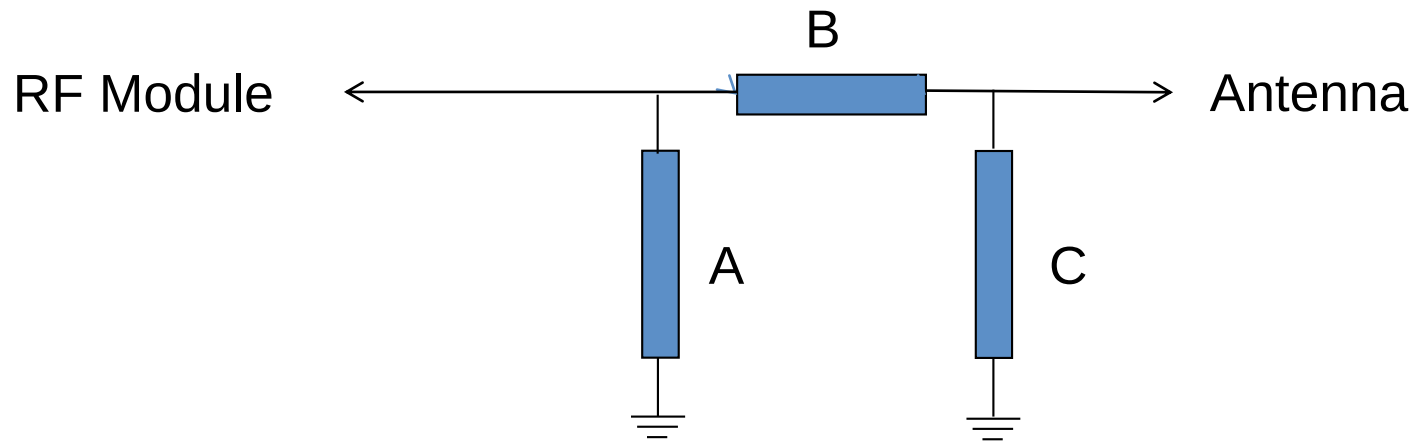
Theta=90



Phi=90



9. Matching lines



Element	Value
A	NC
B	NC
C	NC

✱ The device is a module output,
matched without modification

