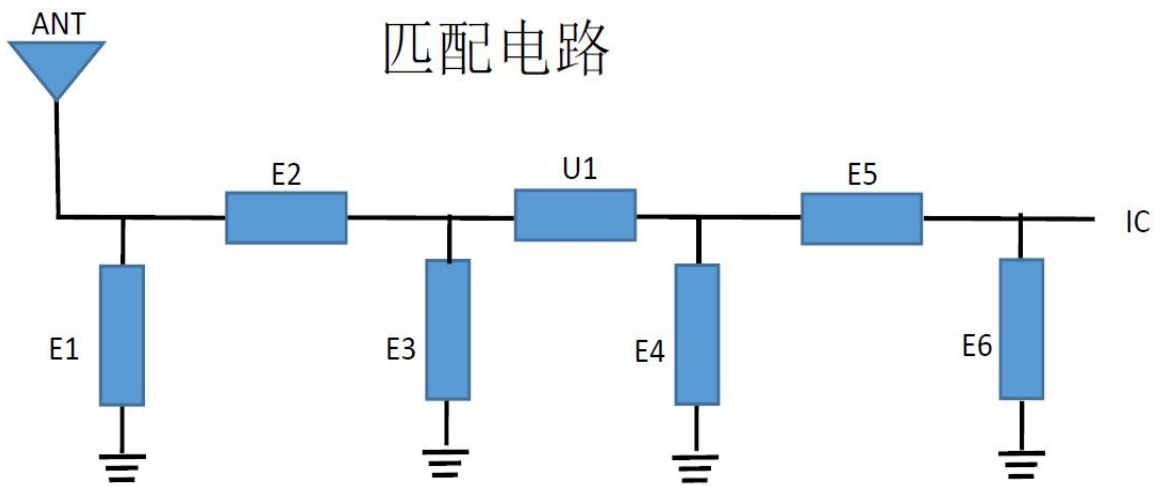


The main purpose of this report: Feedback prototype debugging

Main conclusions of this report: The free-space efficiency is about 31%

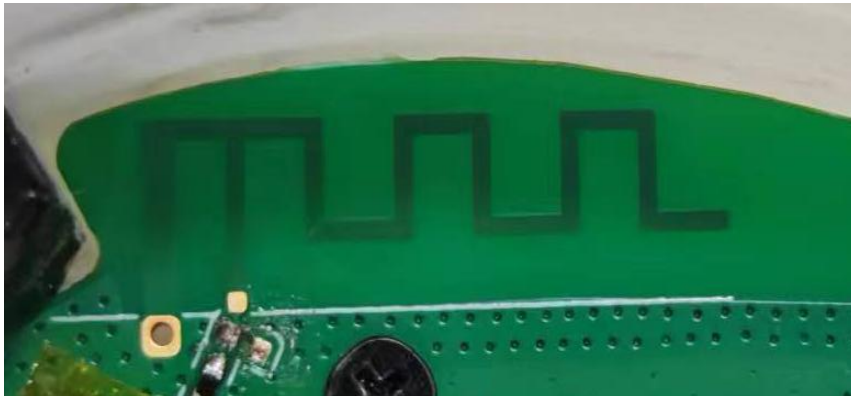
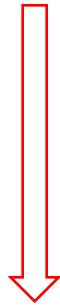
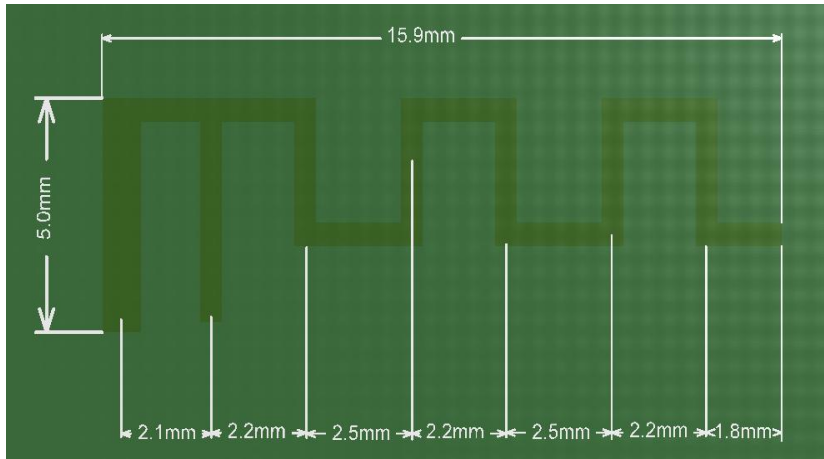
Key notes in this report: Modification of antenna length and modification of matching circuit

Schematic Diagram of Antenna Matching Circuit Modification

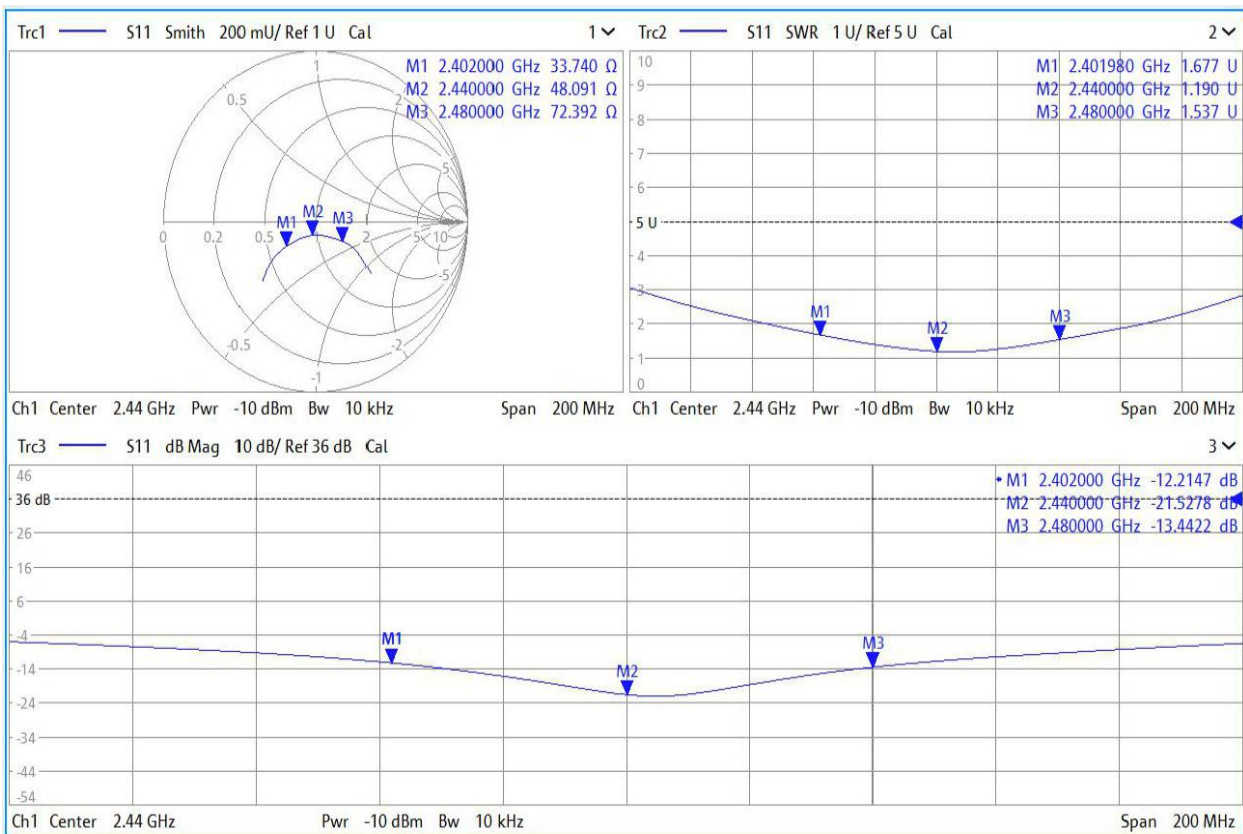


Element	Value
E1	N/A
E2	2.4nH
E3	N/A
U1	SBP1109R2400S202
E4	N/A
E5	3.3P
E6	N/A

Antenna Length

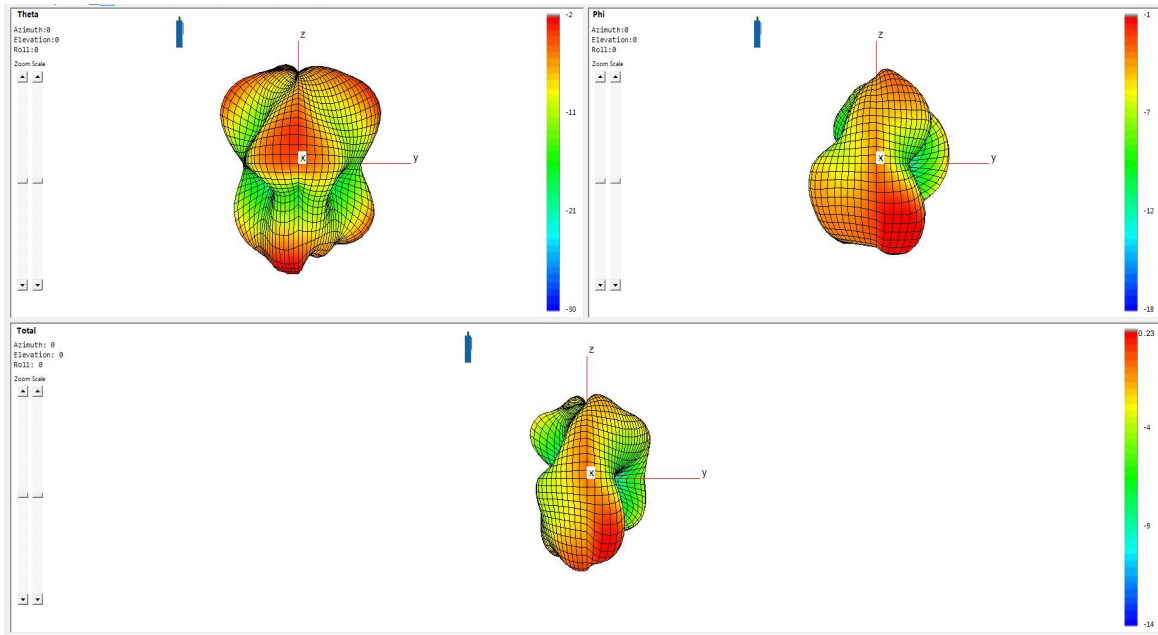


SWR&Smith&Log Mag Parameter

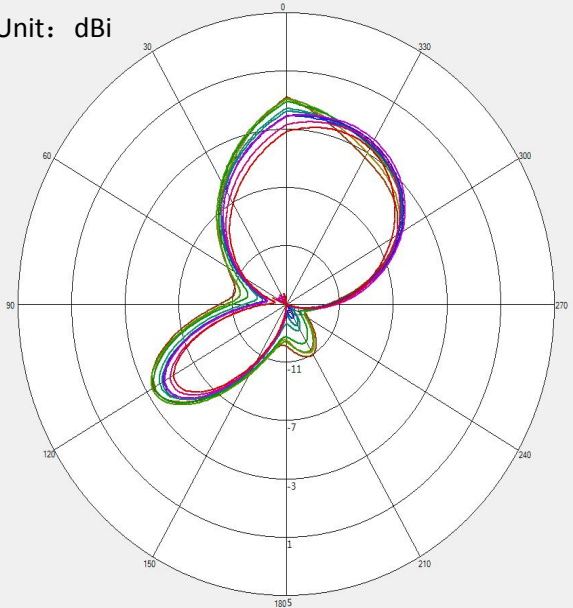


Antenna Efficiency Parameters

频点	增益dBi	效率dB	效率%
2400	0.02	-4.89	32.44
2410	0.18	-4.79	33.21
2420	0.23	-4.73	33.63
2430	0.07	-4.88	32.53
2440	-0.26	-5.11	30.83
2450	-0.38	-5.16	30.46
2460	-0.64	-5.44	28.60
2470	-0.62	-5.37	29.05
2480	-0.69	-5.35	29.16
平均值	-0.23	-5.08	31.10

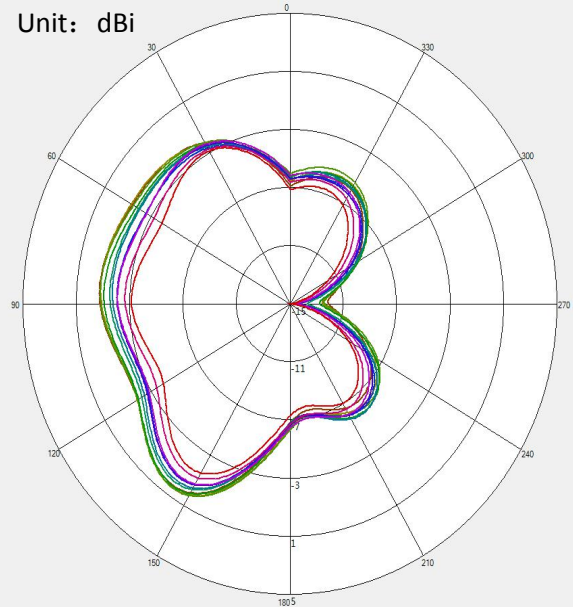


Unit: dBi

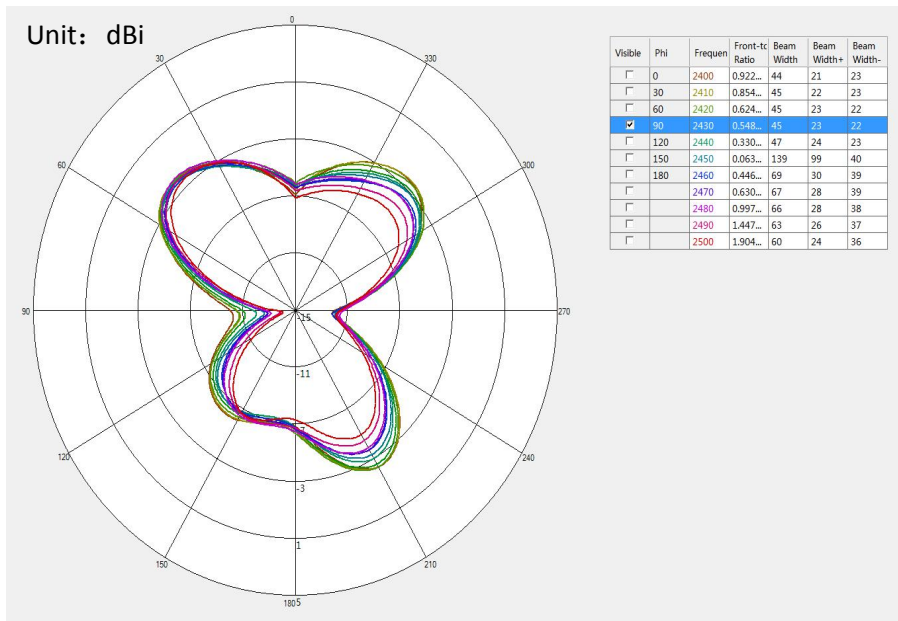


Visible	Theta	Frequen	Front-to	Beam	Beam	Beam
			Ratio	Width	Width+	Width-
<input type="checkbox"/>	0	2400	11.36...	59	40	19
<input type="checkbox"/>	30	2410	11.66...	67	47	20
<input type="checkbox"/>	60	2420	11.57...	71	50	21
<input checked="" type="checkbox"/>	90	2430	11.69...	75	53	22
<input type="checkbox"/>	120	2440	12.13...	79	56	23
<input type="checkbox"/>	150	2450	12.52...	81	58	23
<input type="checkbox"/>	180	2460	12.38...	83	59	24
<input type="checkbox"/>	2470	12.29...	84	60	24	
<input type="checkbox"/>	2480	8.230...	83	30	53	
<input type="checkbox"/>	2490	8.102...	80	29	51	
<input type="checkbox"/>	2500	7.916...	78	28	50	

Unit: dBi



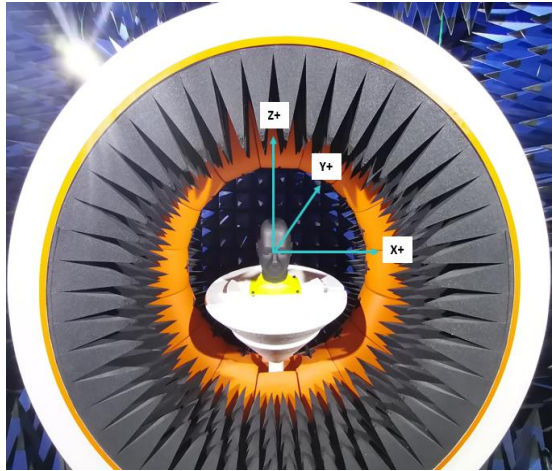
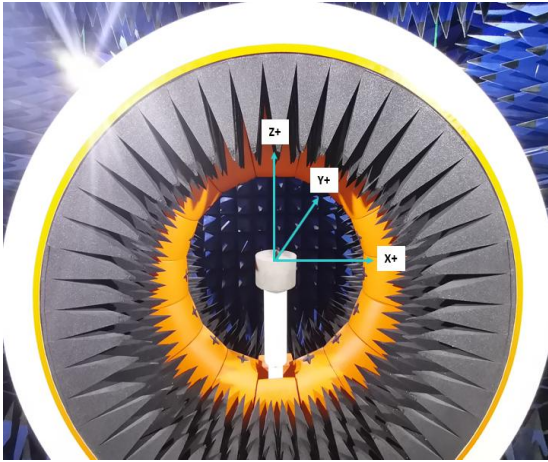
Visible	Phi	Frequen	Front-to	Beam	Beam	Beam
			Ratio	Width	Width+	Width-
<input checked="" type="checkbox"/>	0	2400	5.901...	143	128	15
<input type="checkbox"/>	30	2410	5.744...	142	127	15
<input type="checkbox"/>	60	2420	5.549...	143	128	15
<input type="checkbox"/>	90	2430	5.700...	143	128	15
<input type="checkbox"/>	120	2440	5.570...	144	129	15
<input type="checkbox"/>	150	2450	5.370...	146	131	15
<input type="checkbox"/>	180	2460	5.517...	148	132	16
<input type="checkbox"/>	2470	5.664...	149	133	16	
<input type="checkbox"/>	2480	5.427...	152	135	17	
<input type="checkbox"/>	2490	5.426...	153	136	17	
<input type="checkbox"/>	2500	5.552...	154	137	17	



OTA Parameters

Darkroom Test Axis Diagram (Free)

Darkroom Test Axis Diagram



1# (Free)	Channel	TRP (dBm)	TIS (dBm)
Free	CH 0	10.8	-95.3
	CH 39	12.9	-94.5
	CH 78	10.5	-91.5

1# (Head)	Channel	TRP (dBm)	TIS (dBm)
Head	CH 0	9.8	-92.5
	CH 39	11.8	-93.2
	CH 78	9.3	-90.3

List of RF key components

No.	Key component name	Model	Specifications	Vedor	spare parts
1	Antenna	PCB Antenna	/	/	
2	IC	BES2700H		BES	
3	Crystal Oscillator	24MHZ	±10PPM/8PF		

Generanal Information

Mode	ES850NB
Antenna	PCB Antenna
Frequency range	2400-2480MHz
Mode	ES850NB
Manufacturer	Dongguan Edifier Technology Co., Ltd.
Address	No.2 Gongyedong Road, Songshan Lake Sci.&Tech. Industry Park, Dongguan, 523808 Guangdong, P.R. China