

	Date 02/01/2026	Version No. V3.0
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Shenzhen Rongshengyuan Technology Co., Ltd

PRODUCTSPECIFICATION

Customer	M5
Customer's part number	
Product Material Code	RSY-E8131
Working Band	868/915/2.4GMHz
Issue Date	2026-02-01
Release Version	V3.0
Author	Yang Ye

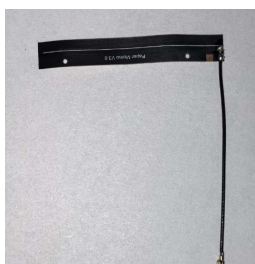
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1 PRODUCT TECHNICAL SPECIFICATION)

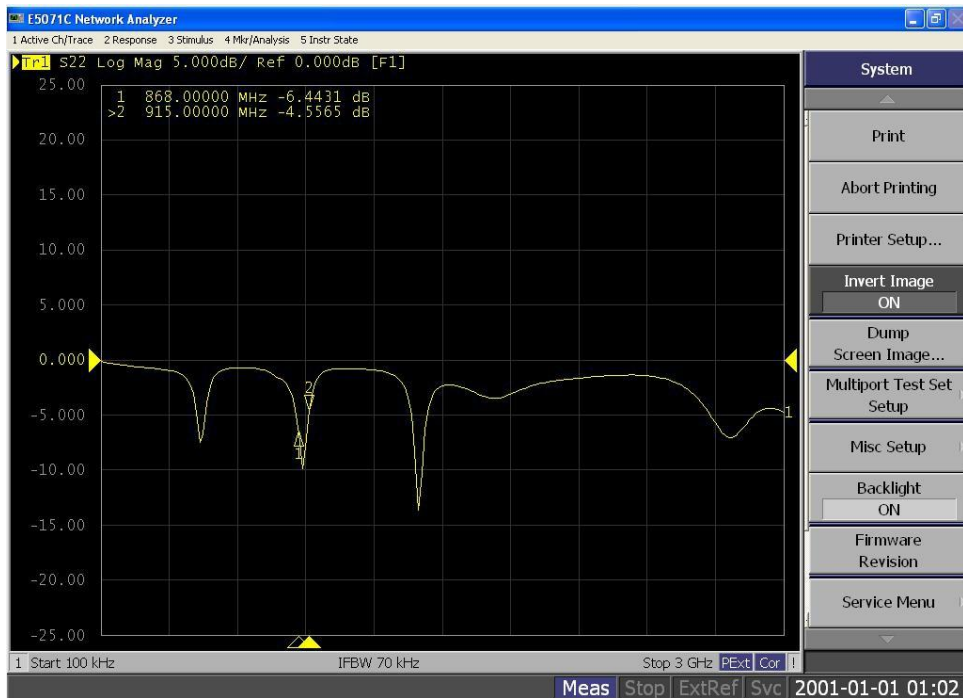
Electrical Specifications	
Frequency Range (MHz)	868/915/2.4G
Bandwidth (MHz)	50
Input Impedence (Ω)	50
VSWR	<4
Gain (dBi)	-4.57
Polarization Type	Vertical
Mechanical Specifications	
Antenna Length (mm)	LoRa: 52*7.7mm 2.4G: 14.42*5.04mm
Connection Mode	IPEX4
Operatin Temp (°C)	-30~70
Storing Temp(°C)	-30~70
ANT Color	black

2 (PRODUCT ELECTRICAL PERFORMANCE PARAMETER)

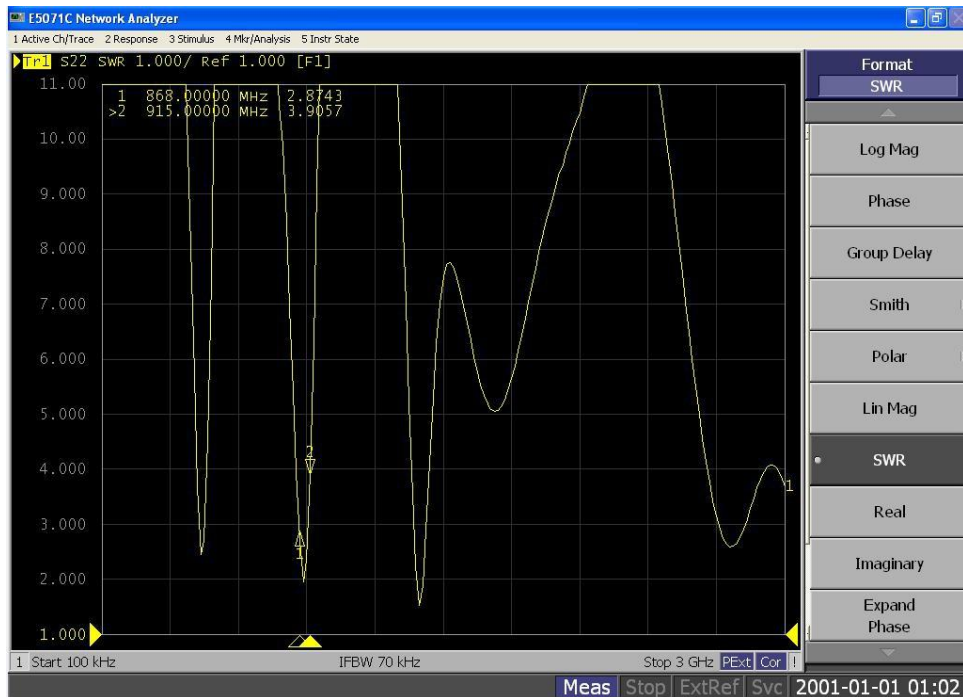
1. (Product picture)



2.2 868/915 (S11)



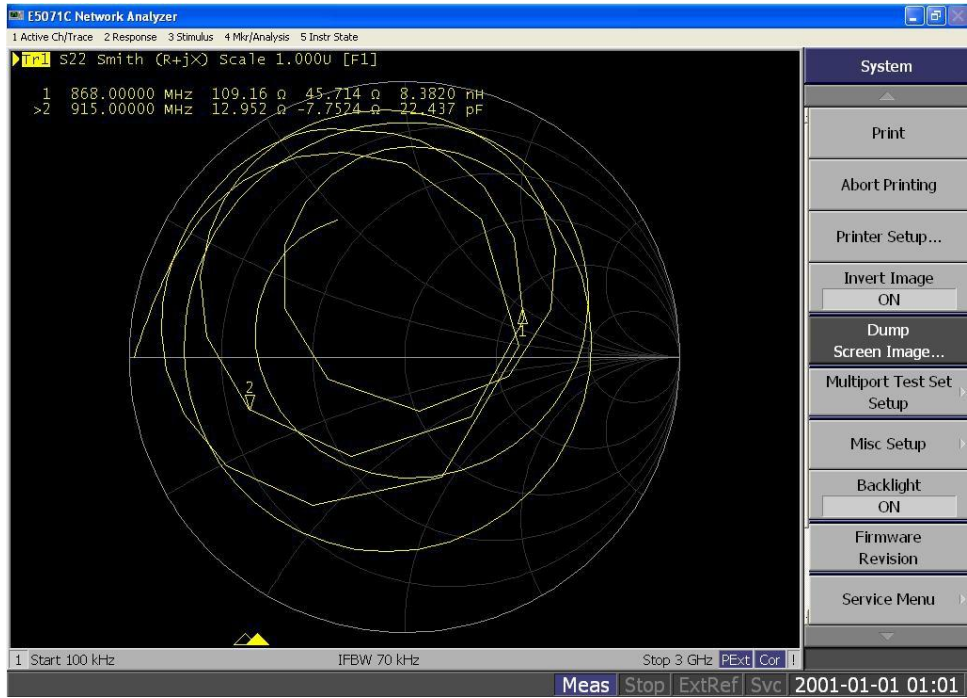
2.3 (VSWR)



2.4 (Smith Chart)

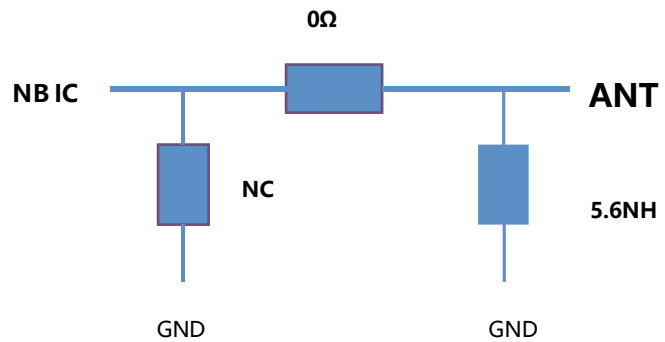
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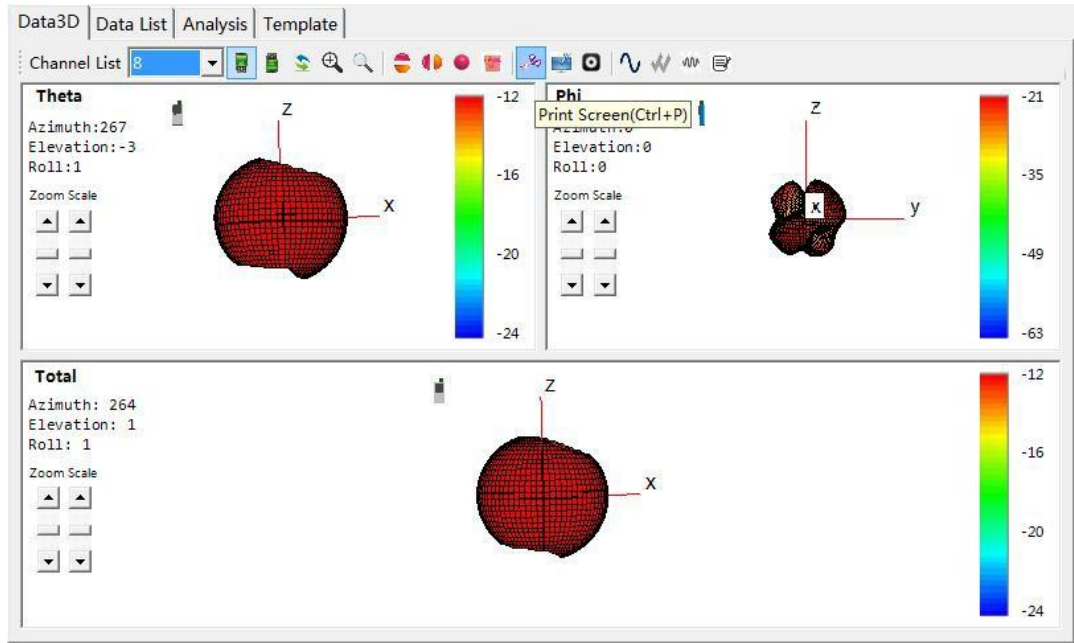
2.5 (Efficiency/Gain)–868/915MHz

Freq(MHz)	Gain(dBi)	Efficiency_dB(dB)	Efficiency_Pcent(%)
860	-6.72	-9.36	11.59
870	-5.92	-8.58	13.87
880	-4.92	-7.90	16.23
890	-4.57	-7.62	17.31
900	-5.51	-8.07	15.58
910	-5.00	-7.98	15.92
920	-6.13	-9.34	11.65

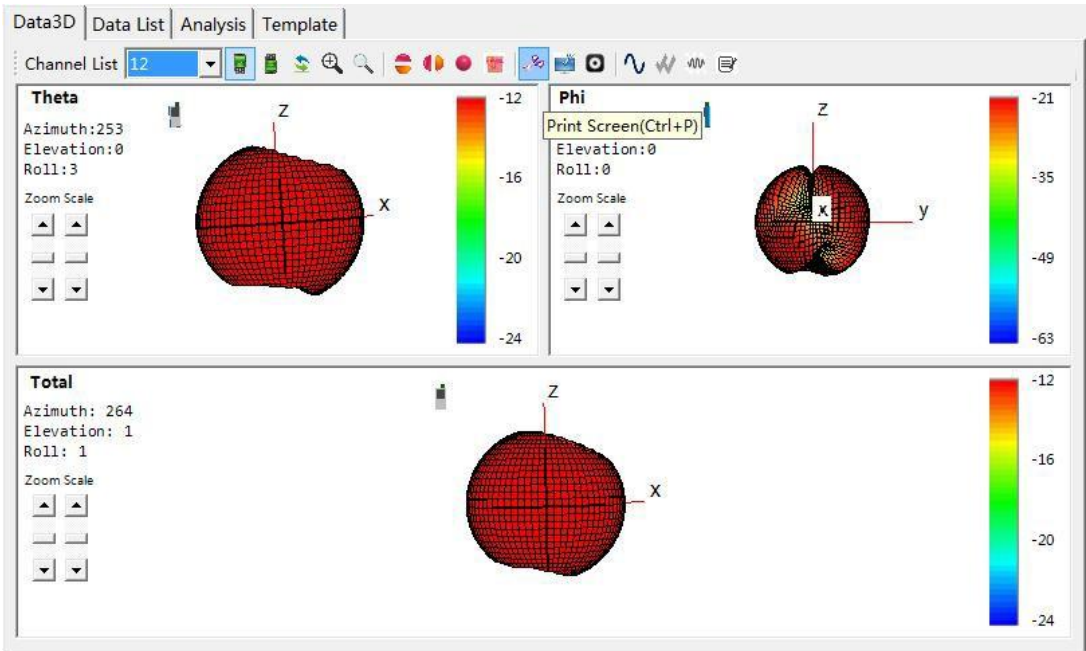


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2.6 Radiation Pattern



868MHz



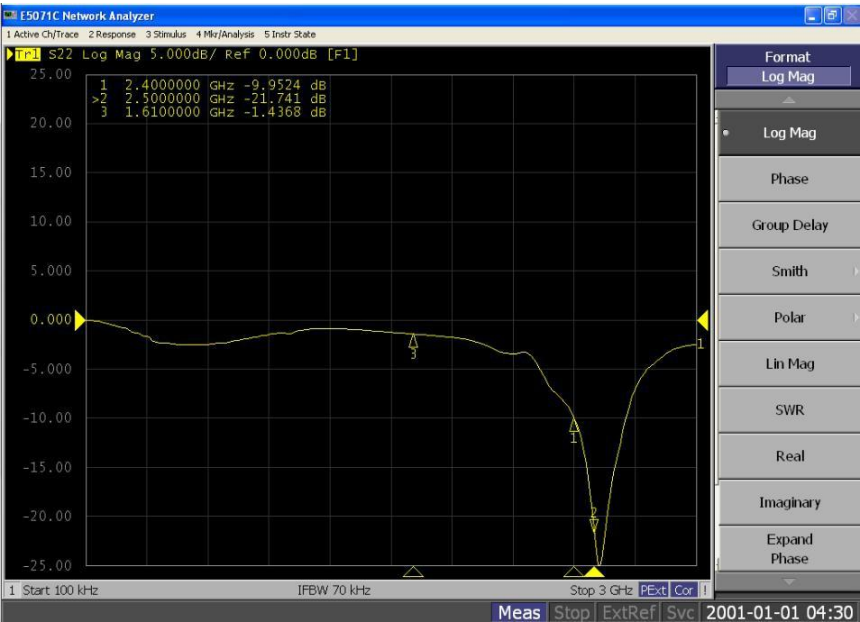
915MHz

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4.1 2.4G (VSWR)

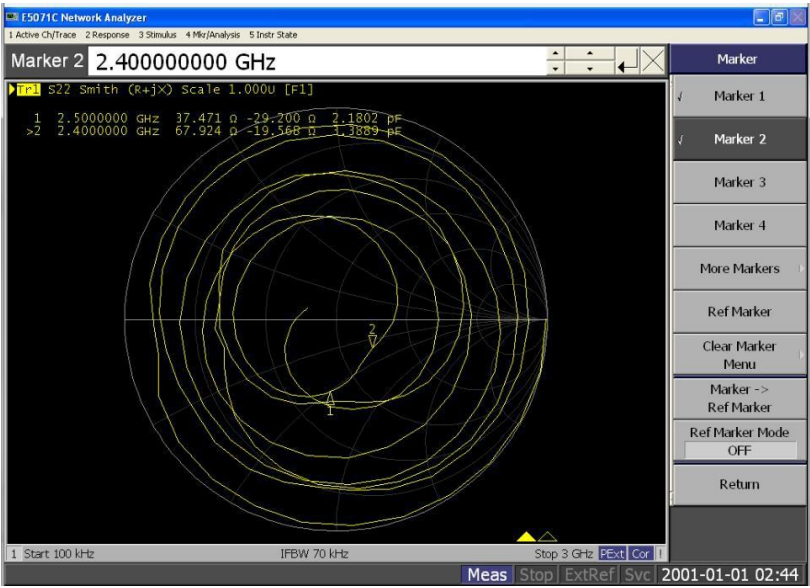


4.2 (Return Loss)



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4.3 （ Smith Chart）



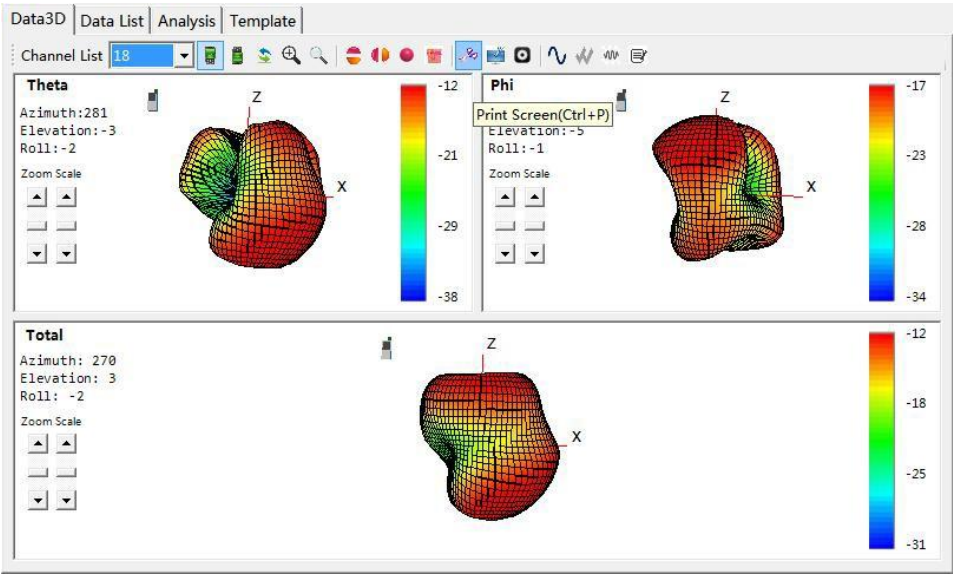
4.4 （Efficiency/Gain ） -2.4GMHz

Freq(MHz)	Gain(dBi)	Efficiency_dB(dB)	Efficiency_Pcent(%)
2400	-0.89851	-7.01053	19.90431
2410	-0.42294	-6.64557	21.64926
2420	-0.4866	-6.82101	20.79211
2430	-0.94013	-7.08174	19.58061
2440	-0.35459	-6.68147	21.47101
2450	-0.12462	-6.25963	23.66122
2460	0.156693	-6.18416	24.07601
2470	0.518826	-5.89543	25.73101
2480	0.737191	-5.6664	27.12438
2490	0.837584	-5.41453	28.74396
2500	0.665638	-5.31962	29.37909

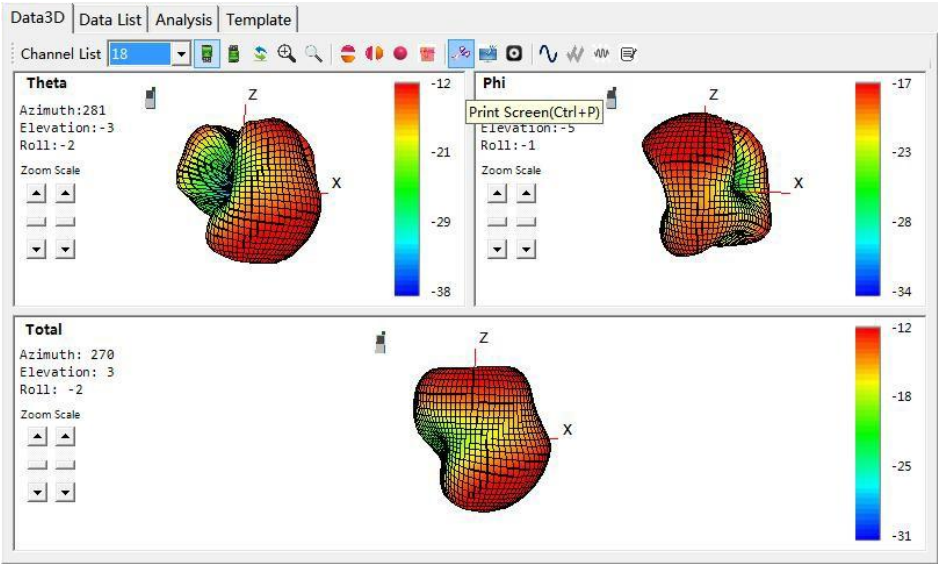
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4. 5 Radiation

2400



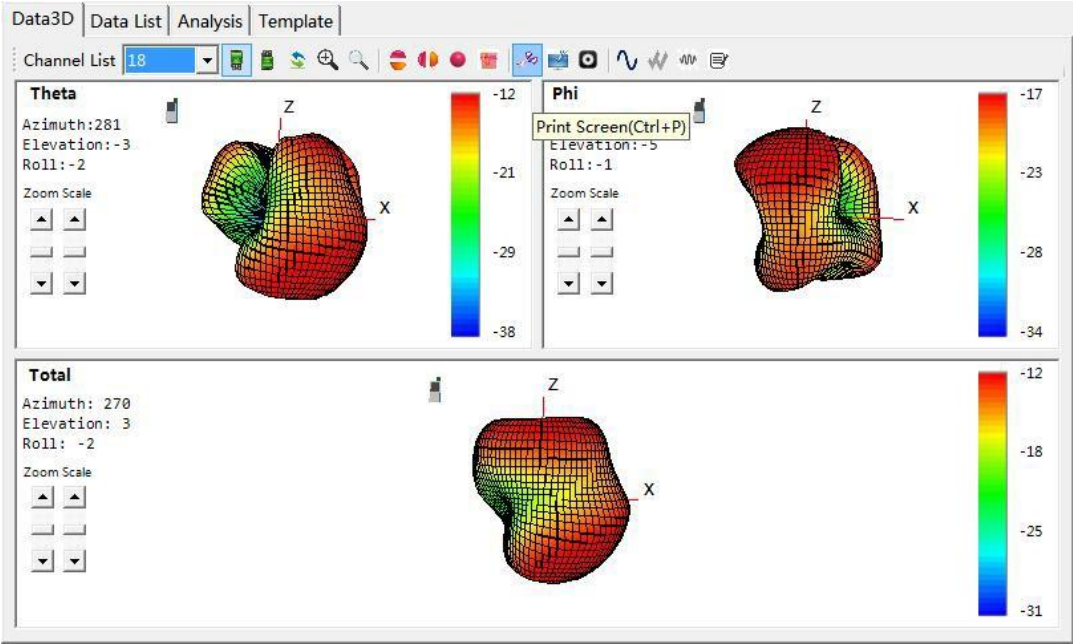
2420



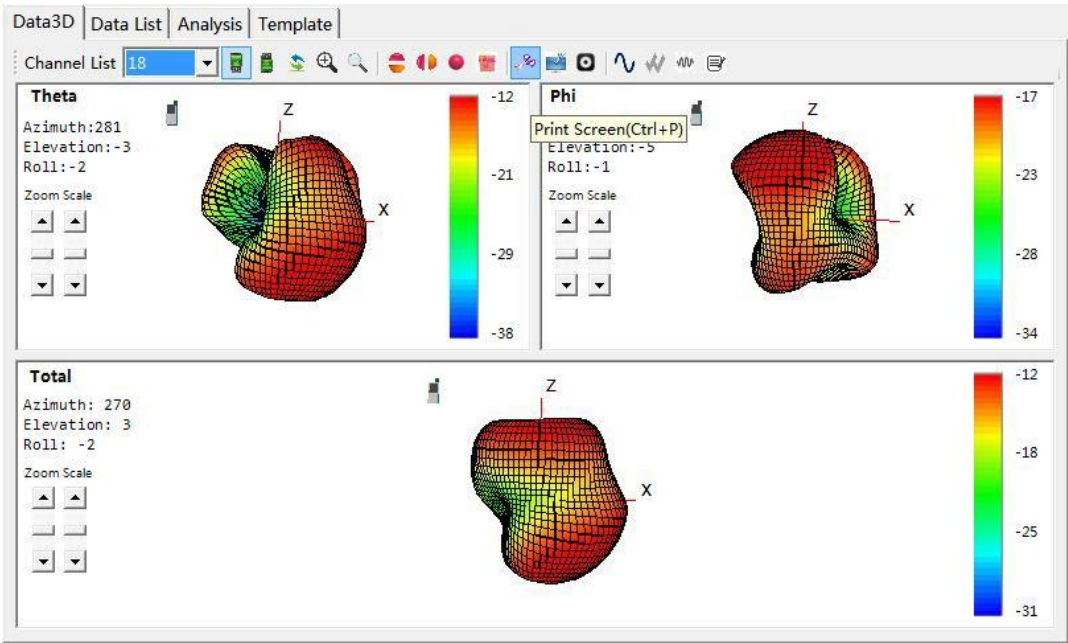
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4.5 Radiation

2440



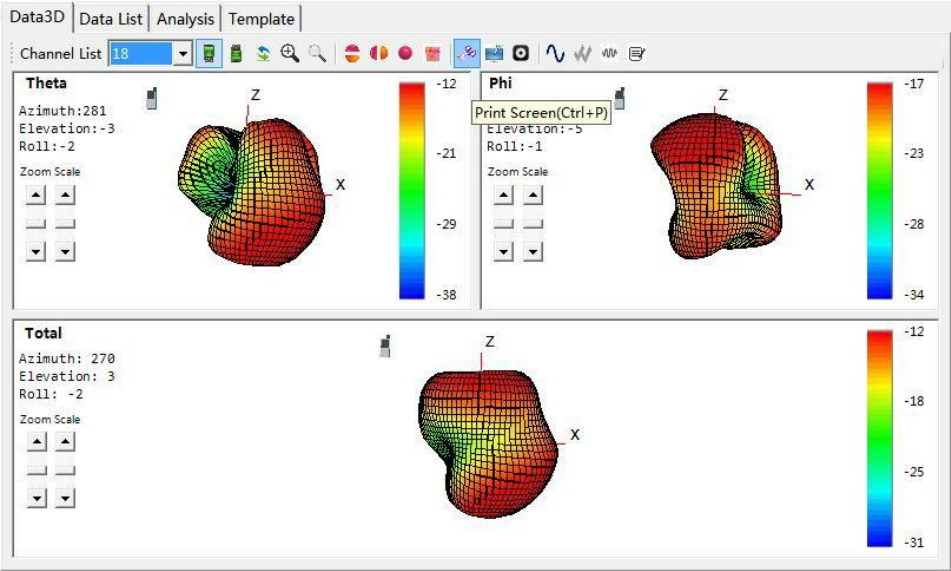
2460



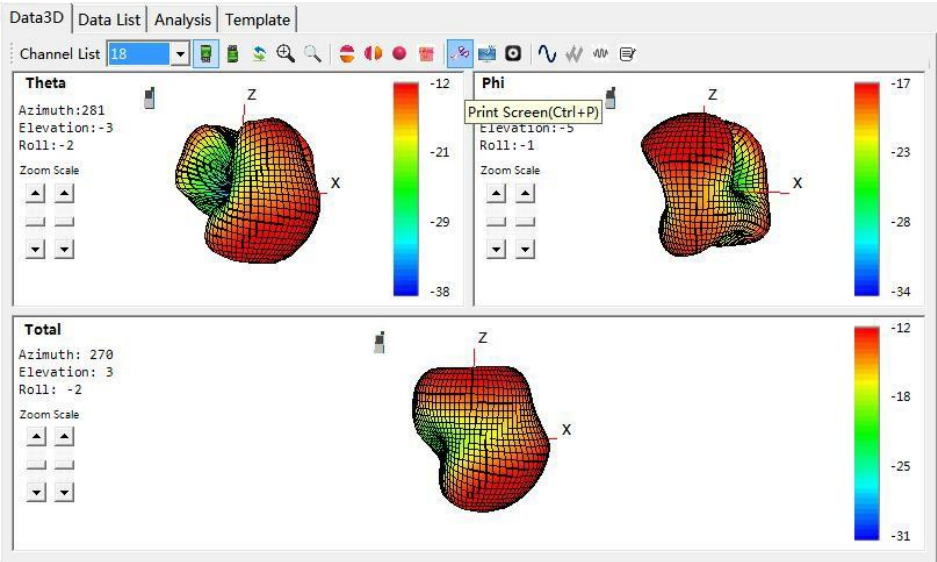
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4. 5 Radiation

2480

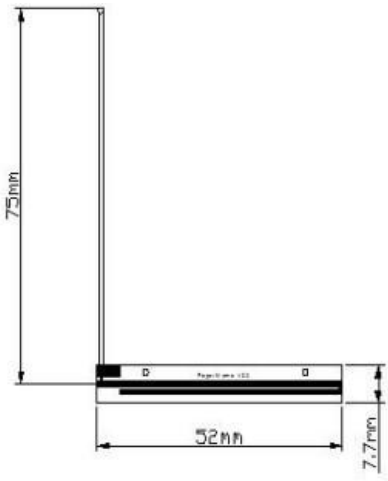


2500

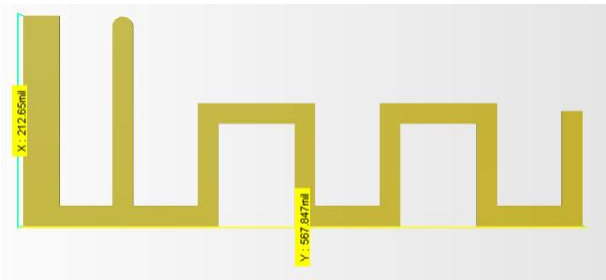


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3 产品尺寸 (Product dimensions)



LoRa: 52*7.7mm



2.4G: 14.42*5.04mm