



Shenzhen DEWEIMA Communication Equipment Co.Ltd

SPECIFICATION SHEET FOR APPROVAL

CUSTOMER NAME (客户名称)	Tangwei video
CUSTOMER P/N (客户料号)	
PART NAME (品 名)	Command-x
DWM P/N (料 号)	D506-2008
APPROVAL REV. 版次	DWM-V1.0

CONTRACTOR			DATE : 2024-05-22
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED

CUSTOMER		DATE :
Approved By	Checked By	Prepared By



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1. Product Application/产品应用

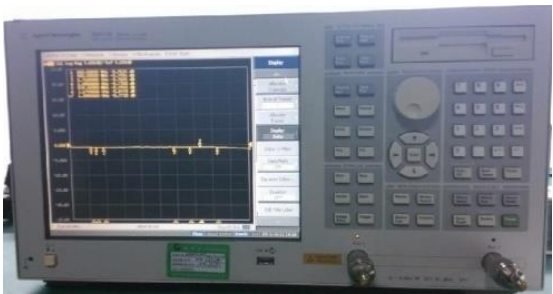
Terminal of the antenna products can only be used for Command-x4G antenna.

该天线产品用于 Command-x4G 信号的传输。

2. Antenna type/天线类型

Fixed External Antenna/固定外置天线

3. The test environment, equipment/测试环境、设备

Item 项目	Description 项目描述	Test Condition/测试条件	Requirement /规格要求
3.1	Passive testing /无源测试	The VSWR measurement devices are connected in sequence: Agilent5071B Network Analyzer → measurement Cable → Customer-providing Devices. (VSWR 测量装置依次连接: 网络分析仪测量电缆 agilent5071B → 客户提供终端。)	驻波比: 690~960MHz: <3.5 1700~2700MHz: <3.0 阻抗: 50 oh
		Test equipment/测试设备	
			
Item 项目	Description 项目描述	Test Condition/测试条件	Requirement /规格要求



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3.2

增益及
效率测试

Follow picture shows the measurement condition of the antenna been put on the measurement device, which is used for all measurement of electric performances.
(以下图片显示的天线的测量条件被放在测量装置,它是用于所有的测量电性能。)

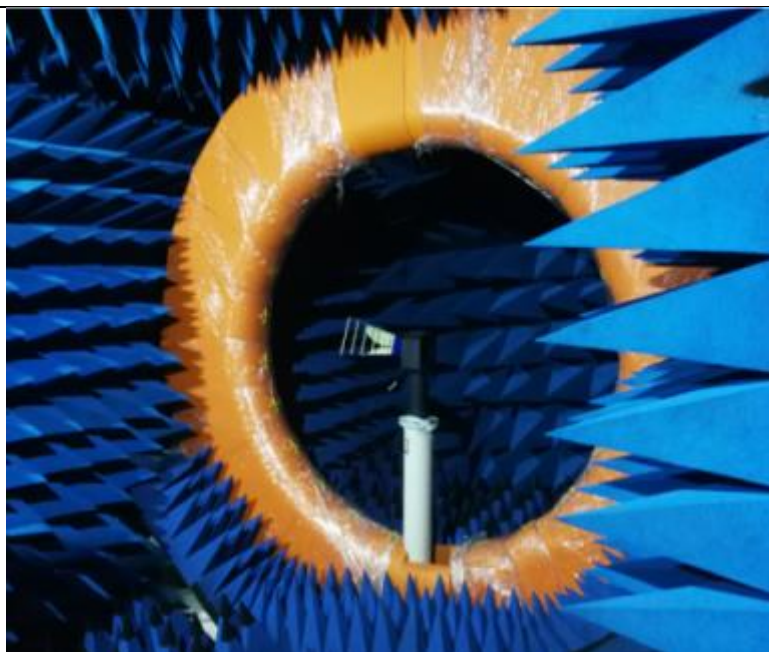
天线增益:
690~960MHz:0.86dBi
1700~2700MHz:2.98dBi

天线效率:
690~960MHz: >30%
1700~2700MHz:>40%

3.3

Microwave
Anechoic
(Satimo&ETS
)
/微波暗室

Test equipment/测试设备



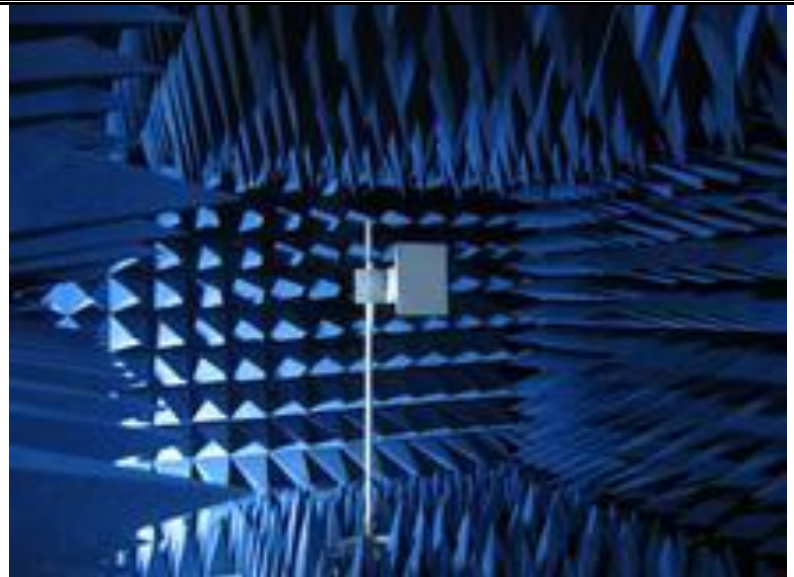


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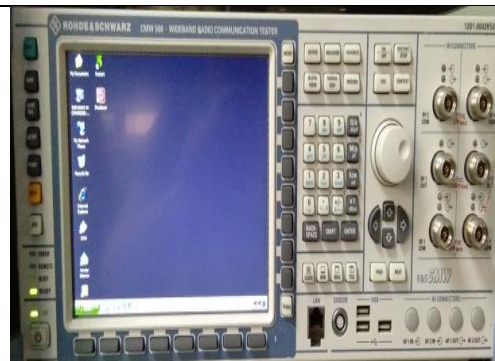
3.4

CMW500

Agilent5071B

AgilentE4405B

Agilent8960



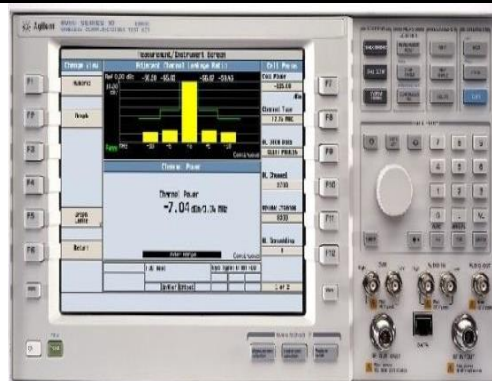


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4. Technology Parameters/技术参数

Frequency Range/频率范围:

690~960MHz&1700~2700MHz

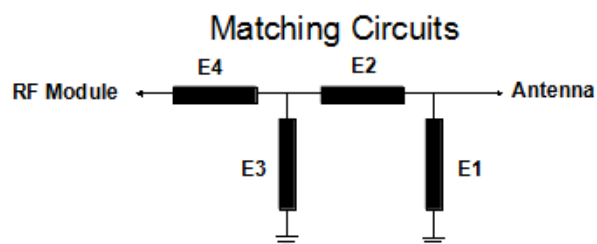
Operating Humidity/工作湿度:

85% R.H.MAX

Temperature Rating/温度范围:

-40℃ ~ +85℃

4.1 The matching test value/调试匹配值





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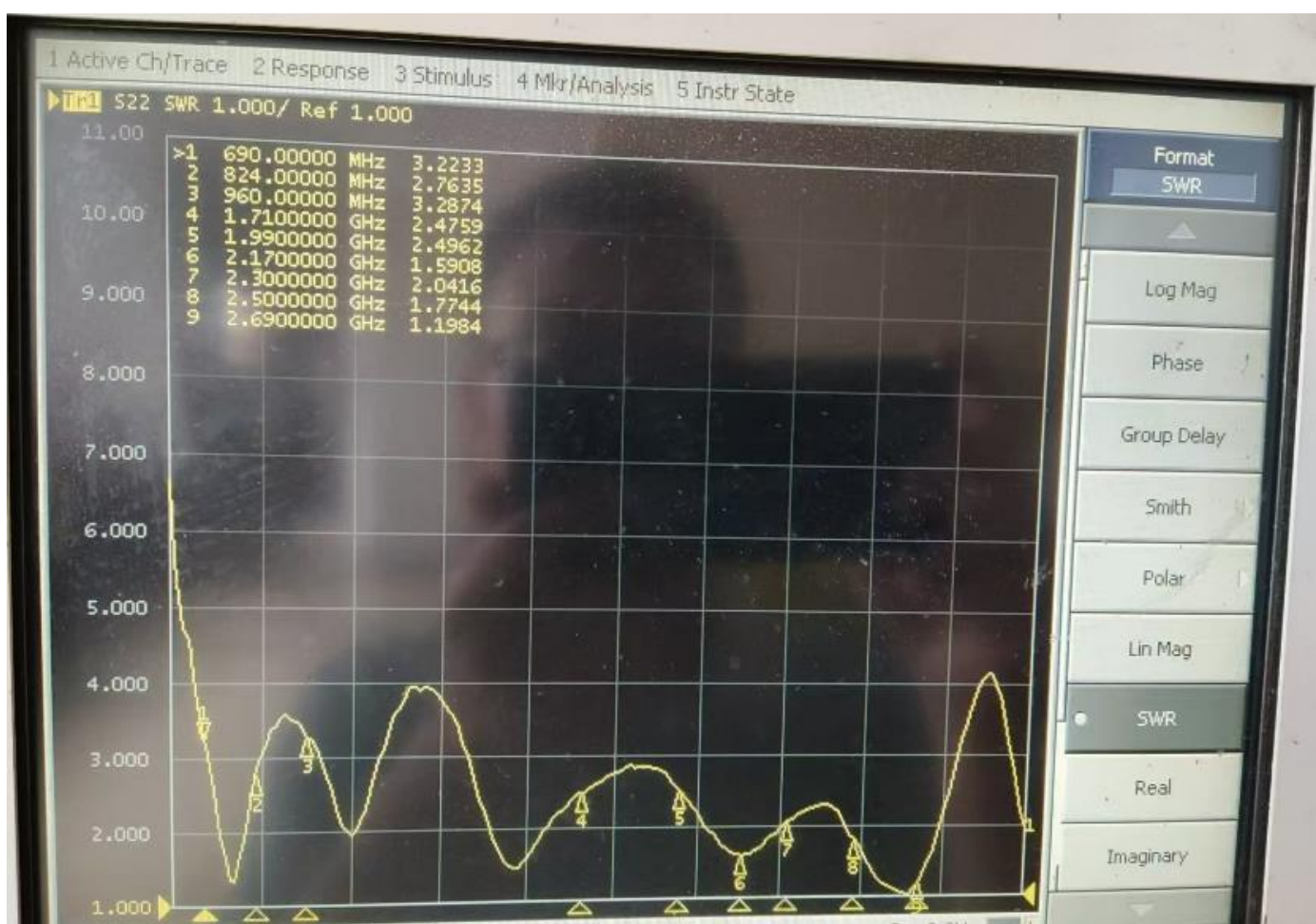
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Element	Value
E1(0402)	
E2(0402)	
E3(0402)	
E4(0402)	

4.2 VSWR/驻波比:





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4.3. Efficiency And Gain/效率和增益

Frequency 频率 (MHz)	Gain 增益(dBi)	Efficiency 效率(%)
690.00	-1.14	31.54
700.00	-1.20	35.55
720.00	-0.48	43.58
740.00	0.18	42.50
760.00	0.05	45.82
780.00	0.59	47.72
800.00	0.32	46.17
820.00	0.86	41.66
840.00	0.64	39.76
860.00	0.42	46.53
880.00	0.72	39.30
900.00	0.34	37.64
920.00	-0.54	34.33
940.00	-0.45	35.08
960.00	-0.64	36.06
1710.00	0.55	38.21
1740.00	0.88	37.44
1770.00	1.09	41.20
1800.00	0.64	41.17
1830.00	0.16	54.01
1860.00	0.25	52.05
1890.00	0.31	53.12
1920.00	1.21	66.24



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1950.00	1.01	64.33
1980.00	1.04	64.93
2010.00	1.45	64.59
2040.00	0.95	69.64
2070.00	1.69	69.87
2100.00	1.50	64.51
2130.00	2.23	62.05
2160.00	2.07	69.32
2190.00	1.72	65.18
2220.00	2.44	68.76
2250.00	2.98	65.45
2280.00	1.65	64.18
2310.00	2.02	67.31
2340.00	1.47	59.63
2370.00	1.63	62.66
2400.00	1.24	57.07
2430.00	1.36	47.71
2460.00	1.64	65.71
2490.00	2.14	61.91
2520.00	1.71	56.17
2550.00	2.80	59.31
2580.00	2.36	68.07
2610.00	2.19	64.26
2640.00	2.98	64.11
2670.00	2.79	63.47
2700.00	2.94	62.57



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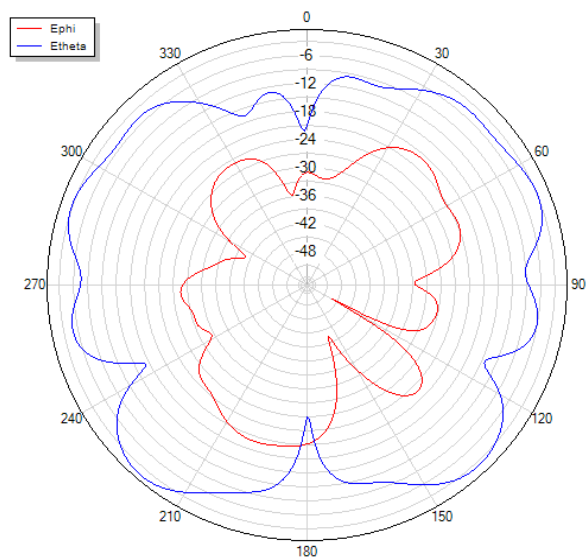
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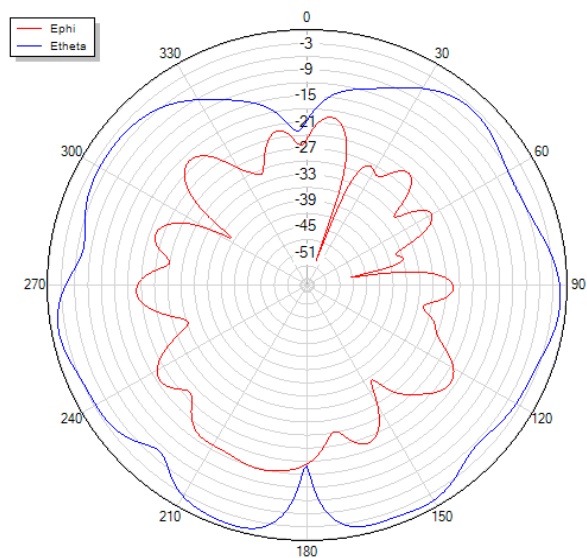
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4.4 2D & 3D PHOTO

$\Phi=90$ freq=690MHz



$\Phi=90$ freq=1770MHz





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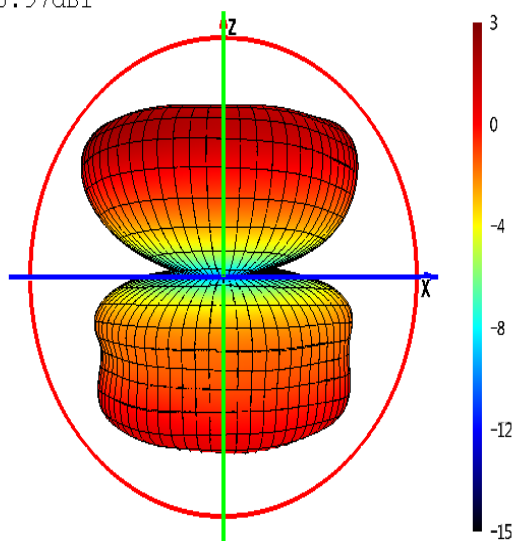
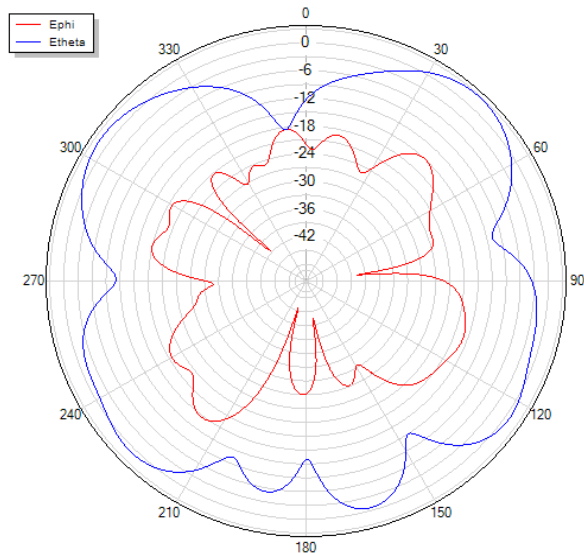
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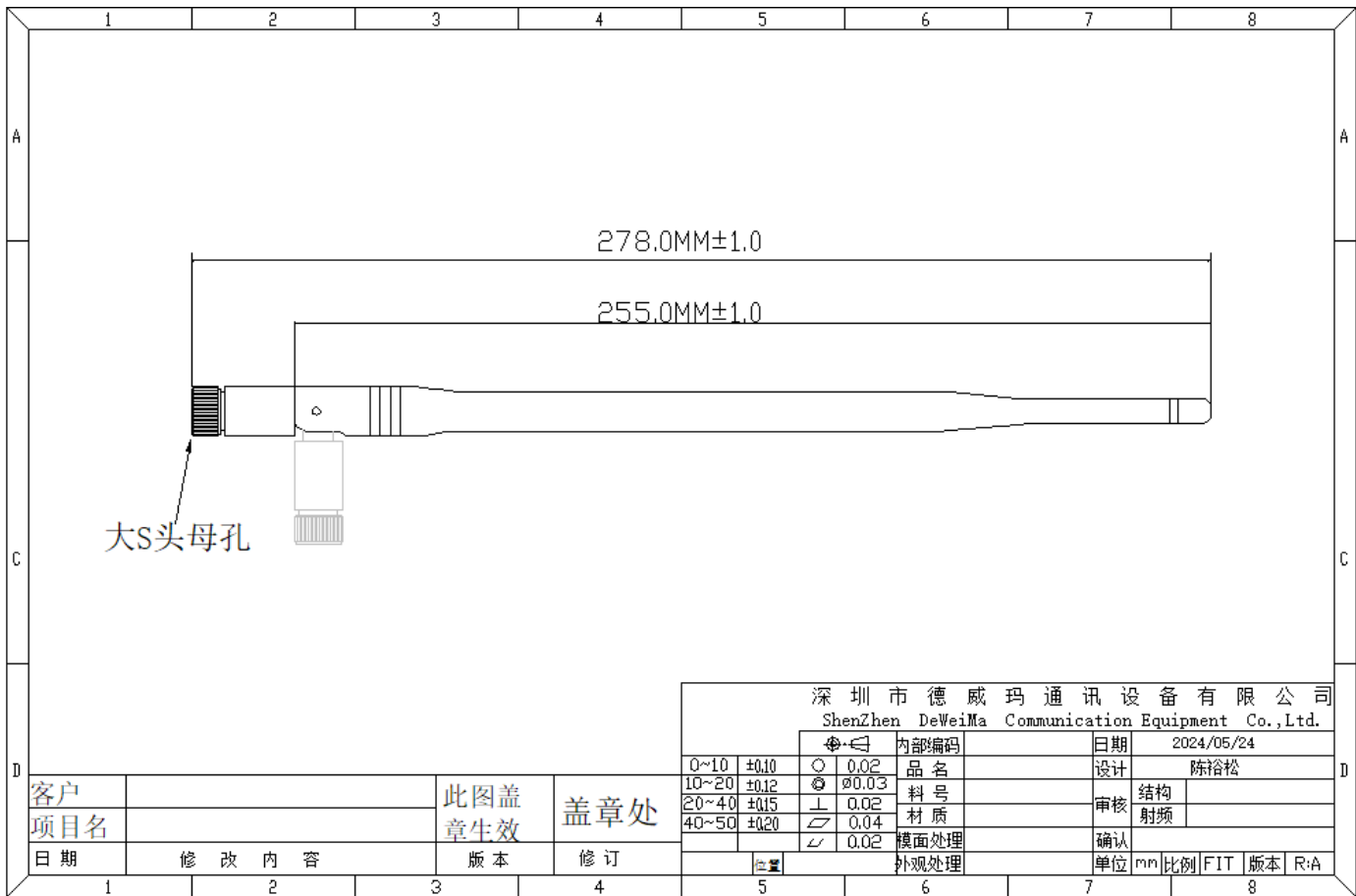
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Phi=90 freq=2640MHz



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5.Product dimension diagram/产品尺寸图



6.Environmental Performance/环境性能

Item 项目	Description 项目描述	Test Condition 测试条件	Requirement 规格要求
6.1	High and low temperature test 高低温测试	Temp.: -40 °C Time: 48 hours Temp.: 85°C Time: 48 hours	1. No visible damage. （无可见损伤） 2. The electric performances reach the standard. （电气性能达标）
Item 项目	Description 项目描述	Test Condition 测试条件	Requirement 规格要求

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5.2	Salt Spray 盐雾测试	$5\pm0.1\%$ Nad salt fog PH Value: 6.5-7.2 Temp: $35\pm1^{\circ}\text{C}$ Time: 24 hours	1. No color change. (无颜色变化) 2. the appearance of the antenna does not flake off. (天线无外观脱落)
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7.Usage Precaution/使用禁忌或注意事项

No	Items 项目	Matter 事项
7.1	Precautions 禁忌	a) Please avoid the cleaning of this product a) 请避免清洁此产品
No	Items 项目	Matter 事项
7.2	Stockpile condition 存储条件	Use this product within 6 months after receipt Condition : Temp: $5\sim30^{\circ}\text{C}$ Humidity: $\leq 70\%$ 有效期: 请在产品接收后的 6 个月内使用 存储环境: 温度: $5\sim30^{\circ}\text{C}$; 湿度: $\leq 70\%$