百 展 科 技 有 限 公 司 承 認 書

BJTEK NAVIGATION,INC. SPECIFICATION FOR APPROVAL

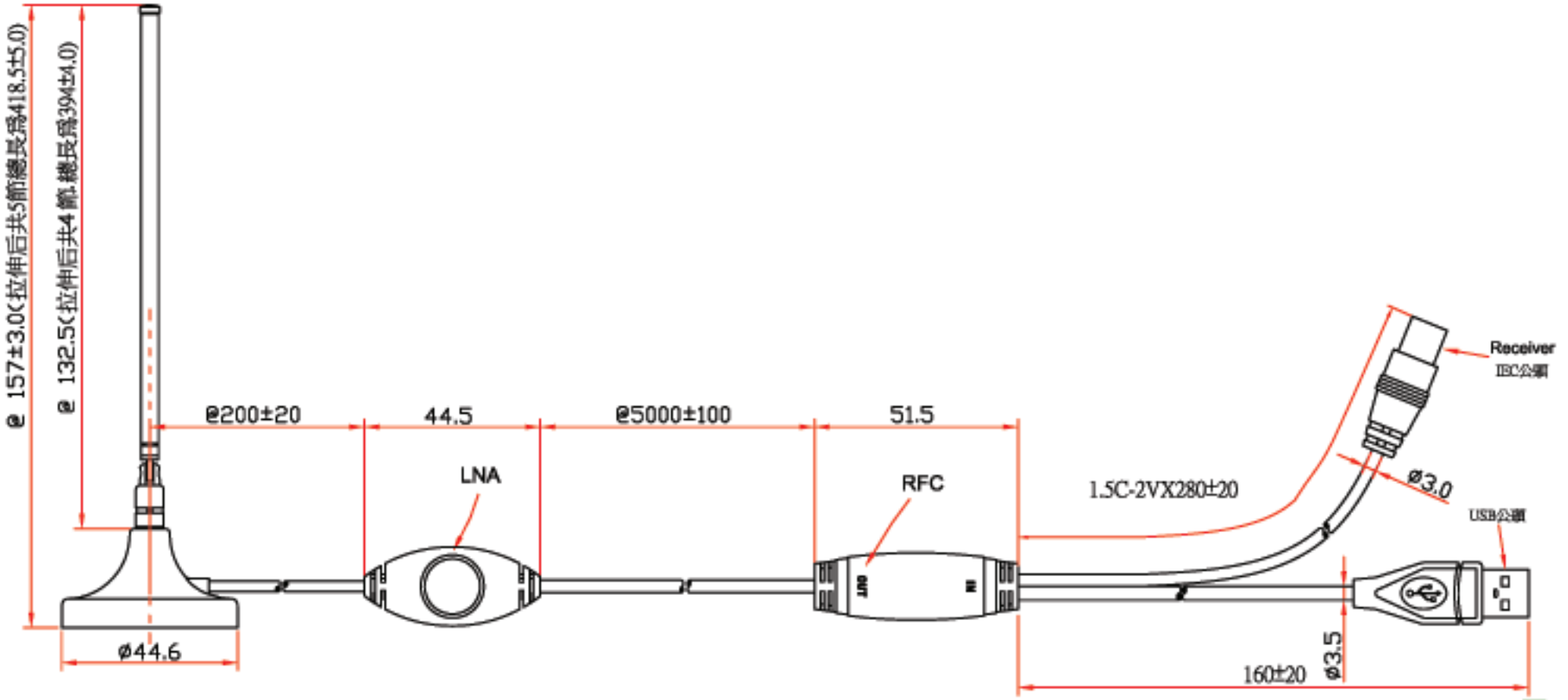
Customer :
Customer's part number :
Product description : **Digital TV Antenna**
Part number : **DA-110A-5M-IEC-USB**
Issue Date : **2010/7/9**
Note: **V+UHF/主動, φ4.4mm 彎頭 4 節伸縮銅管 -molding(ABS)/黑色+45mm 磁座(黑色), 20dB LNA, 1.5C-2V*5M 接 PS-B(USB 接頭), IEC(M), PE 袋, ROHS**

Customer Use	ˇ	Customer's authorized signature	Remarks
Full approved			
Conditional approved			
Rejected			

Approved:_____Sales : _____Engineer: _____

SPECIFICATION

1. Description	**Digital TV Antenna**
2. Part Number	**DA-110A-5M-IEC-USB**
3. Mechanical Characteristics	
Connector	**IEC(M)**
Cable	**1.5C-2V×5000±100mm**
Color	**Black**
Appearance	**See attached drawing**
4. Electrical Characteristics	
Operating Frequency	**VHF: 174MHz~230MHz** **UHF: 470MHz~862MHz**
Gain	**VHF: 3±2dBi** **UHF(500~600MHz): 3±2dBi**
Impedance	**75 ohm**
V.S.W.R	**VHF: 2:1 max** **UHF (500~600MHz): 2:1 Max**
Polarization	**Linear**
5.LNA Gain	**+20dB**
6. Operating Temperature	**-20℃ ~ +65℃**
7. Storage Temperature	**-40℃ ~ +85℃**
8.Helix Tensile Load	**1.2kgf (Cable)**
9.Magnetic base power	**500~600 gauss Tensile ≧ 0.2 kgs**
9.Dimensions	**H×157mm , W×45mm , D×45mm**



一般公差/Tolerance(mm)			
Range	Cable	Metal	Plastic
0~10	±0.1	±0.05	±0.2
11~20	±0.5		
21~30		±0.1	
31~100	±2	±1	±1
101~300	±5	±2	±2
301~1000	±10	±5	±5
1001~	±50	±10	±10

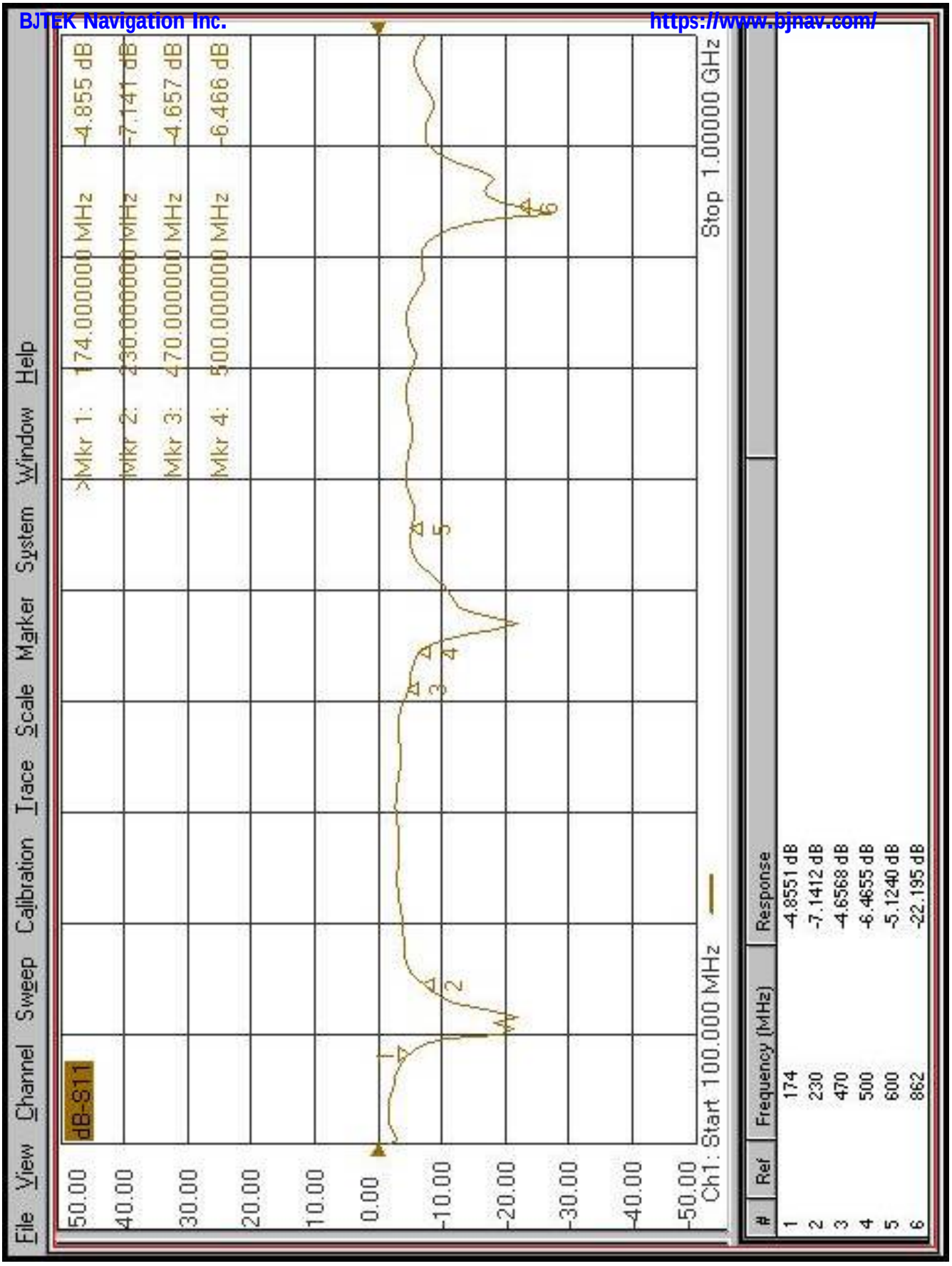
變更記錄/Change record					
客户编号Customer's part number		机种编号/Product number		图名/Name	A0
				成品外觀圖	版本/Vision
Third angle projection	度量单位/Unit	比例/Scale	主要检验项目/Critical Check Item		
	MM	1:1.5	@		
制图/Drawing	审核/Check	核准/Approval	日期/Date		
劉永鋒			2010-07-07		

RoHS

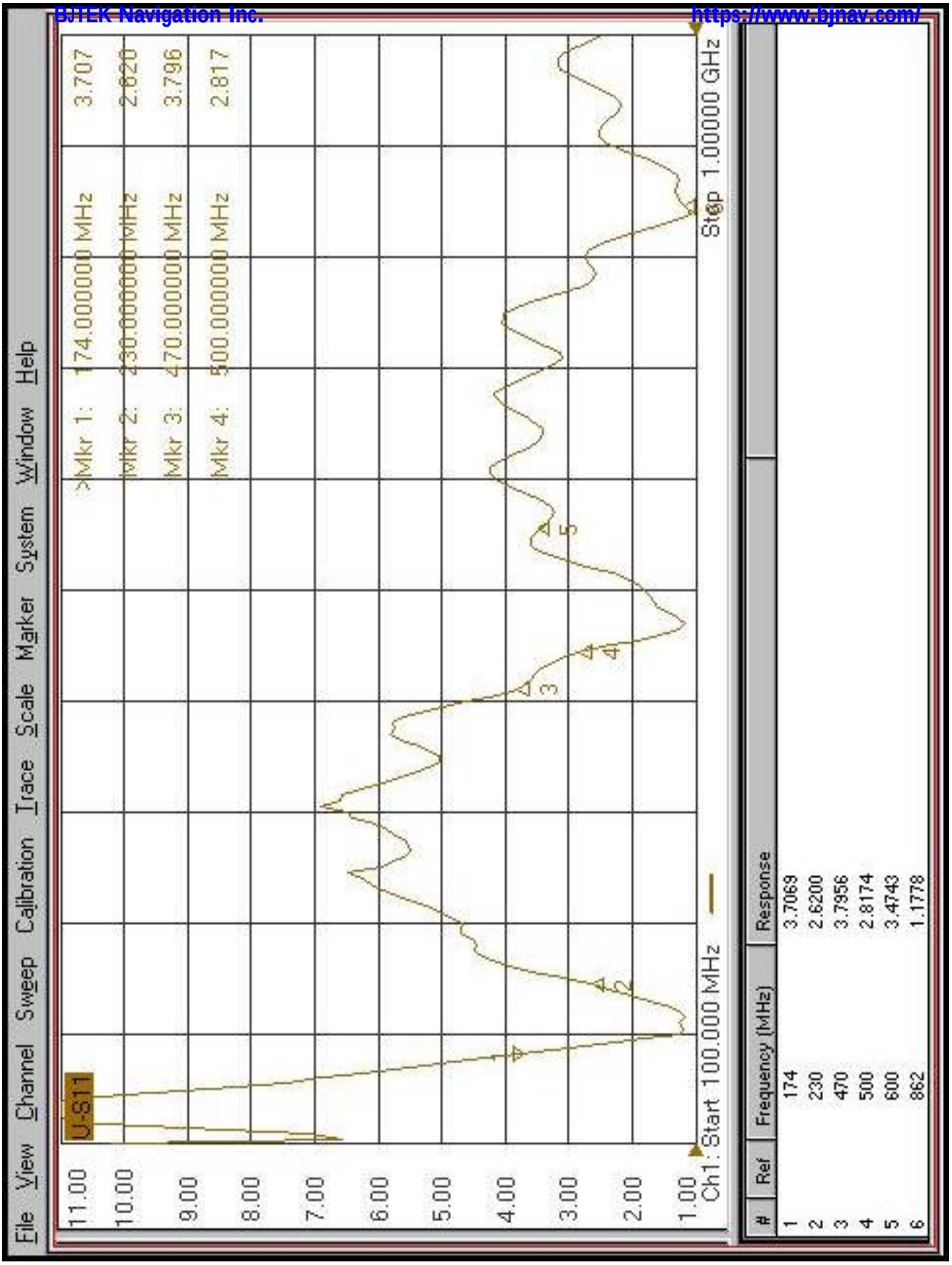
ELECTRONICAL CHARACTERISTICS.電氣特性.

ITEM 項目		TEST CONDITION 測試環境	SPECIFICATION 規格
1	RETURN LOSS 反射損耗	Using Agilent Network Analyzer 8753ET to measure antenna S11 return loss Characteristics. 使用 Agilent 網路分析儀 8753ET 測量 天線 S11 之返迴損耗參數	如附圖 1
2	VSWR 電壓駐波比	Using Agilent Network Analyzer 8753ET to measure antenna S11 VSWR characteristics. 使用 Agilent 網路分析儀 8753ET 測量天線 S11 之電壓駐波比參數	如附圖 2
3	Smith Chart 阻抗	Using Agilent Network Analyzer 8753ET to measure antenna S11 Smith Chart characteristics. 使用 Agilent 網路分析儀 8753ET 測量天線 S11 之史密斯阻抗參數	如附圖 3
4	Gain Response 增益響應	Using Agilent Network Analyzer 8753ET to measure antenna S11 Smith Chart characteristics. 使用 Agilent 網路分析儀 8753ET 測量天線 S21 之史密斯阻抗參數	如附圖 4

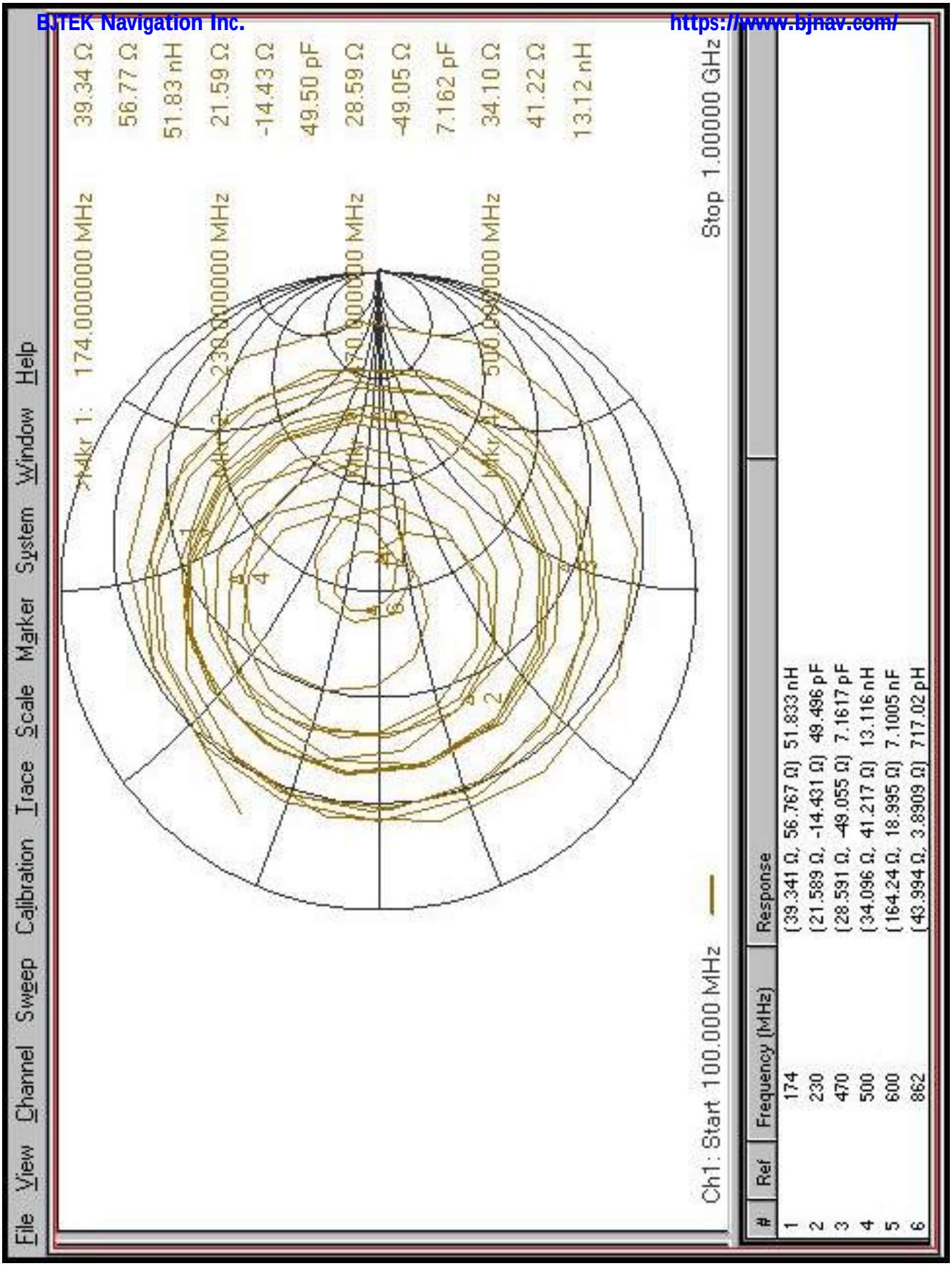
附圖一：RETURN LOSS



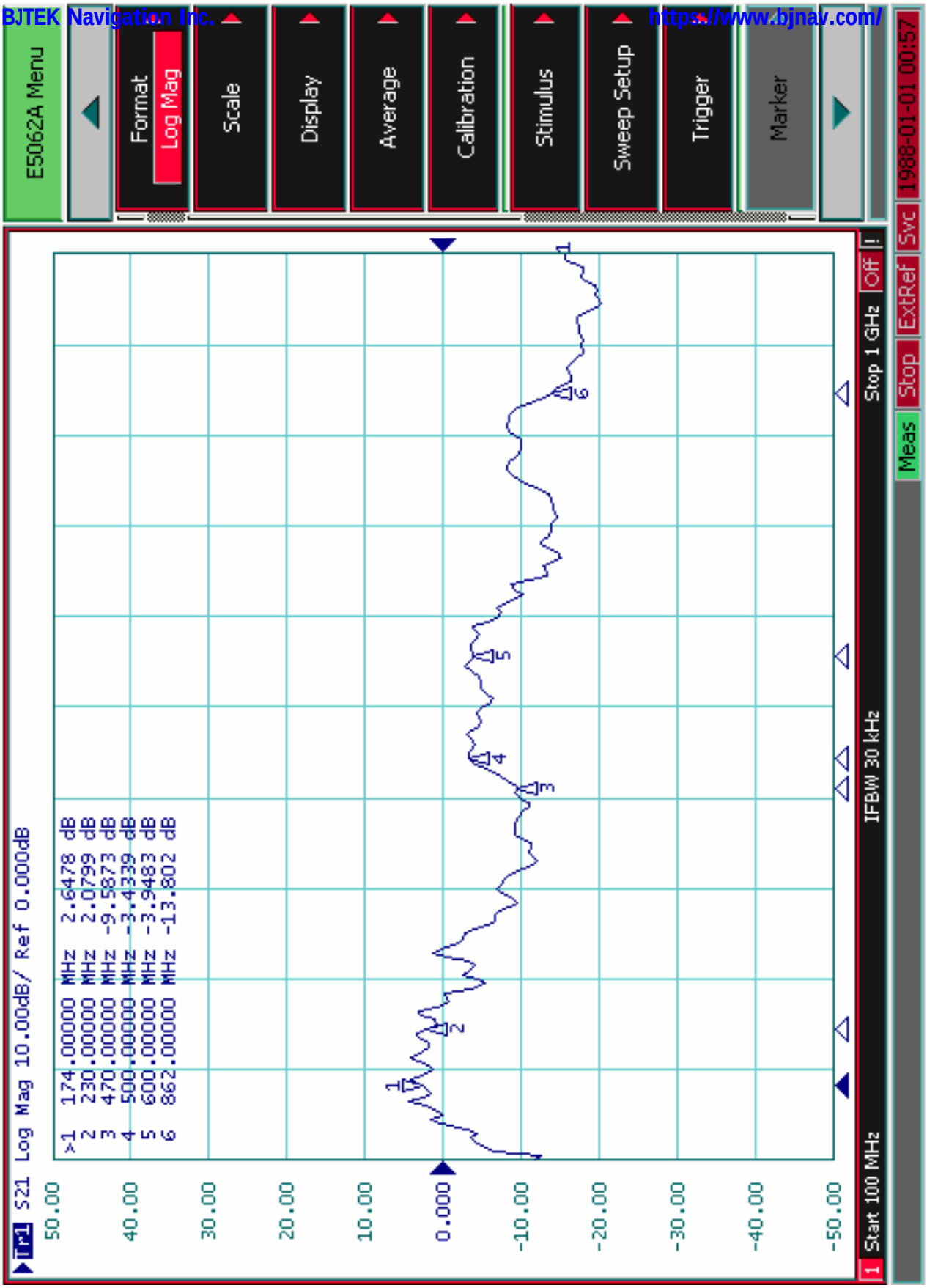
附圖二：VSWR



附圖三：Smith Chart



附圖四：Gain Response




04
PE-LD