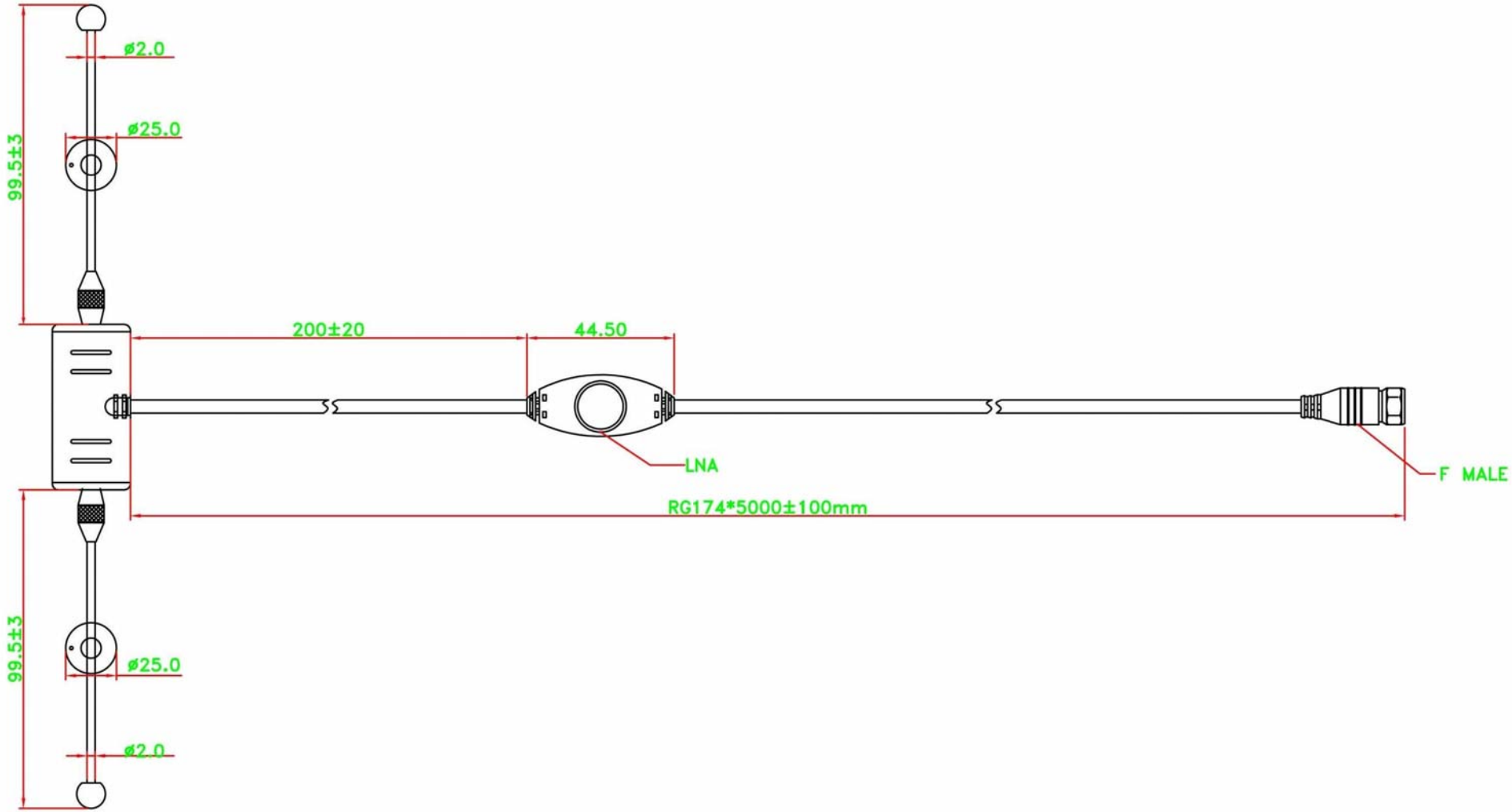
Digital TV (DVB-T) Antenna

RF Castle Electronics Co., Ltd.
NO.151, Sec 3, Haidian RD., Annan District, Tainan City 70966, Taiwan, R.O.C.
TEL: + 886-6-2475285 FAX : + 886-6-2475282 E-mail: sales@rfcastle.com Website: www.rfcastle.com

SPECIFICATION

1. Description	**Digital TV (DVB-T)Antenna (UHF)**
2. Part Number	DVB-T-001
3. Mechanical Characteristics	**See attached drawing**
Connector	**F-PLUG**
Cable	**RG174x5M±100mm**
Color	**Black**
Appearance	**See attached drawing**
4. Electrical Characteristics	**See attached drawing**
Operating Frequency	**UHF: 470MHz~862MHz** **(Main Frequency:500~600MHz)**
Peak Gain	**(Main Frequency: 500~600MHz)：2dBi**
Impedance	**75 ohm**
V.S.W.R	**(Main Frequency:500MHz~600MHz) : 2.0:1max**
5.LNA Gain	**+20dB**
LNA Operation Frequency	**150~860MHz**
LNA Noise Figure	**1.5dB max**
LNA D.C Drive	**5V**
LNA Consumption Current	**18~20mA**
LNA Impedance	**75 ohm**
6.Operating Temperature	**-20℃ ~+65℃**
7. Storage Temperature	**-30℃ ~+75℃**
8.Helix Tensile Load	**≦7 kgs**
9.Dimensions	**Hx241mm, Wx20mm, Dx13mm**

REV	DESCRIPTION	DRAWN	DATE
A	Change Length		

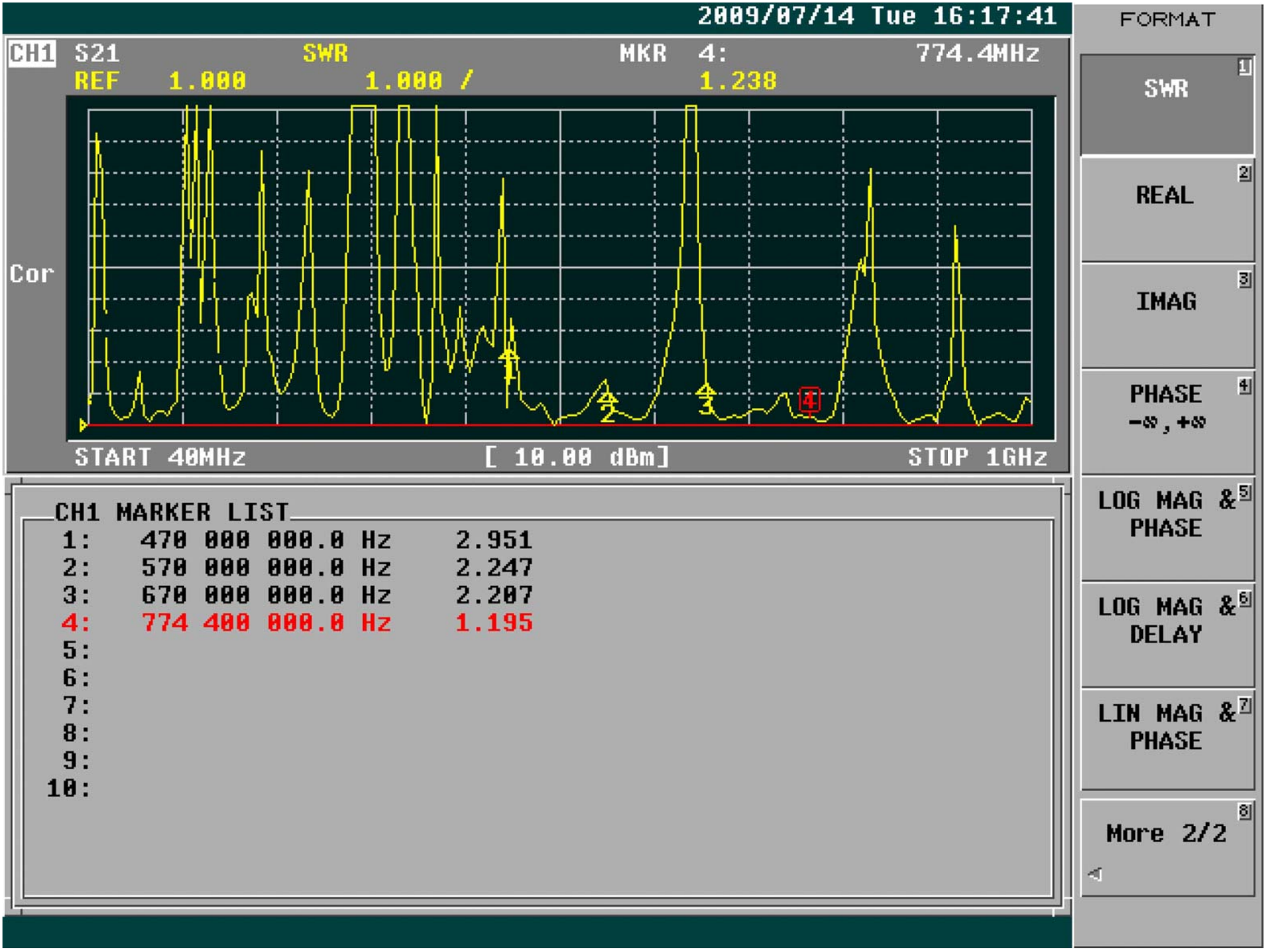


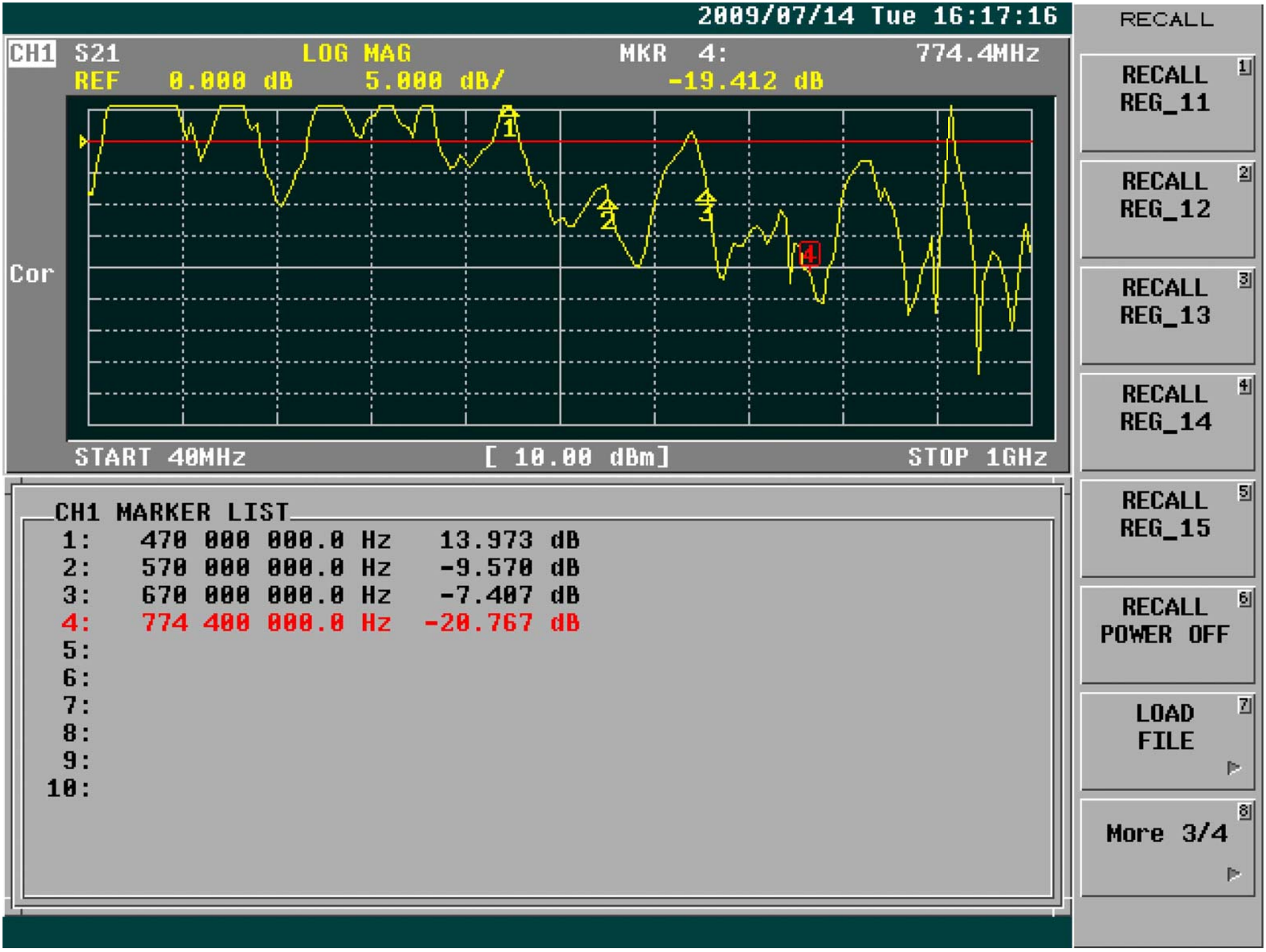
DRAWN	DRAWN DATE	TOLERANCE	SCALE		TITLE	
YOYO	03/04/09	.X± .XX± .XXX± ANGLES±			TV ANTENNA(F MALE)	RF CASTLE ELECTRONICS CO., LTD.
CHECKED	APPROVED		UNIT		DRAWING NO.	REV
			m/m	SH 1 OF 1	TV000005	A

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 史密斯圖	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

MECHANICAL CHARACTERISTICS.機械性能			
1	STRENGTH TEST 強度試驗	A static force of 15lbs being applied in one direction on the of the cable terminal for one minute 一個 15 磅之靜負荷施加於線端底部持續一分鐘.	There shall be no visible marks of mechanical and electrical damage. 無任何現象顯示機械及電器性能之損壞.
2	VIBRATION TEST 振動測試	After being applied vibration of Amplitude of 1.5mm with 1000Hz band Of vibration frequency of perpendicular Directions for 5 minute. 以 1.5㎜ 的振幅和 1000MHz/sec 振動頻率以垂直方向振動 5 分鐘	There shall be no visible marks of mechanical and electrical damage. 無任何現象顯示機械及電器性能之損壞.


2009/07/14 Tue 16:17:41
CH1 S21 SWR MKR 4: 774.4MHz
REF 1.000 1.000 / 1.238
Cor
START 40MHz [10.00 dBm] STOP 1GHz
CH1 MARKER LIST
1: 470 000 000.0 Hz 2.951
2: 570 000 000.0 Hz 2.247
3: 670 000 000.0 Hz 2.207
4: 774 400 000.0 Hz 1.195
5:
6:
7:
8:
9:
10:
FORMAT
1 SWR
2 REAL
3 IMAG
4 PHASE -∞,+∞
5 LOG MAG & PHASE
6 LOG MAG & DELAY
7 LIN MAG & PHASE
8 More 2/2


2009/07/14 Tue 16:17:16
CH1 S21 LOG MAG MKR 4: 774.4MHz
REF 0.000 dB 5.000 dB/ -19.412 dB
Cor
START 40MHz [10.00 dBm] STOP 1GHz
CH1 MARKER LIST
1: 470 000 000.0 Hz 13.973 dB
2: 570 000 000.0 Hz -9.570 dB
3: 670 000 000.0 Hz -7.407 dB
4: 774 400 000.0 Hz -20.767 dB
5:
6:
7:
8:
9:
10:
RECALL
RECALL REG_11
RECALL REG_12
RECALL REG_13
RECALL REG_14
RECALL REG_15
RECALL POWER OFF
LOAD FILE
More 3/4