Part Name : SMA RF Antenna

Part Number: C381-510009-B

Specification

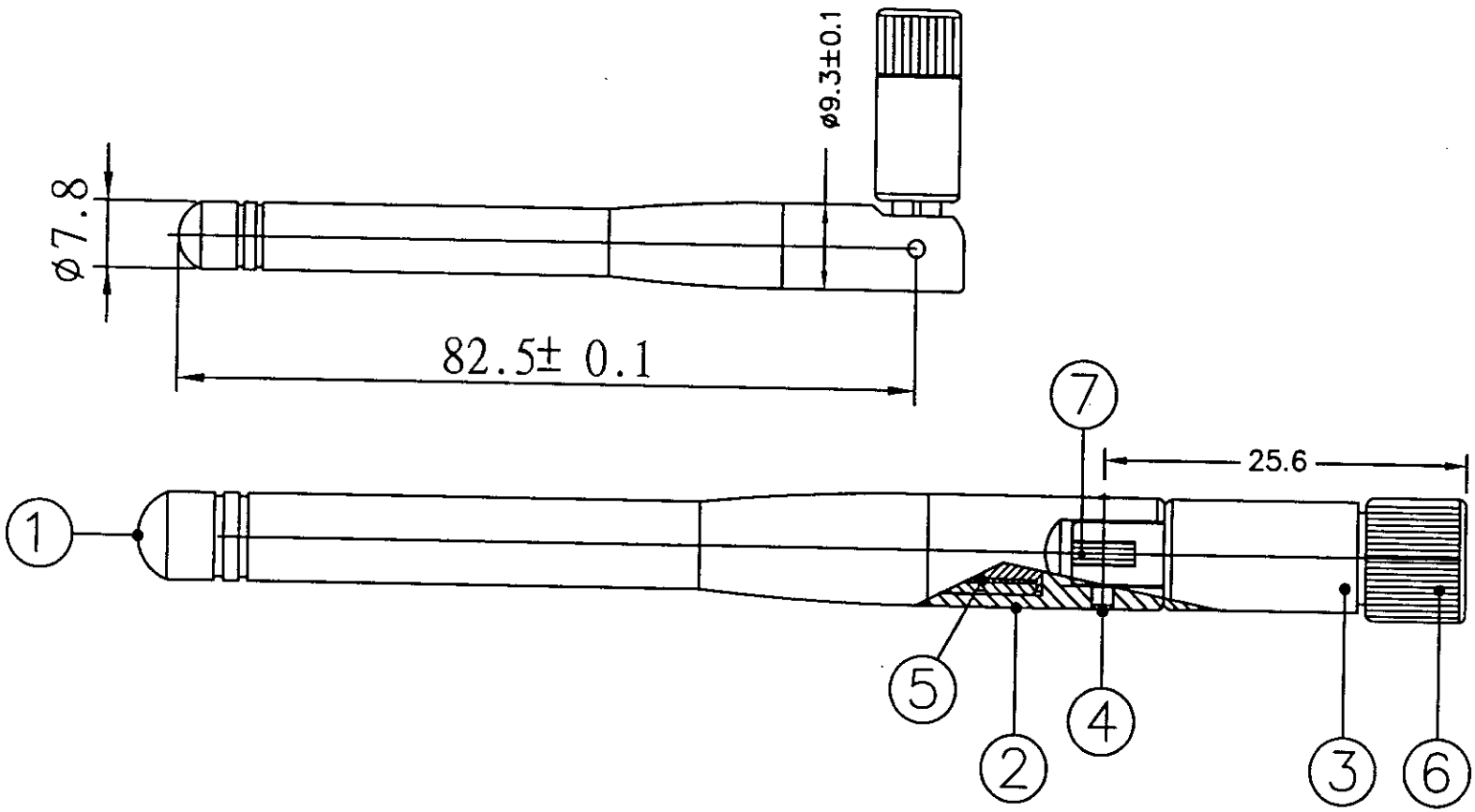
1. Electrical Properties :

1.1 Frequency Rang..... 2.4GHz ~ 2.5GHz
1.2 Impedance ..... 50Ω Nominal
1.3 VSWR .....2.0 Max.
1.4 Return Loss..... <=-9.5 dB
1.5 Electrical Wave..... 1/4 λ Diople
1.6 Gain..... 1.8 dBi
1.7 Admitted Power..... 1W

2. Physical Properties :

2.1 Connector..... SMA 180° Plug/Reverse
2.2 Cable..... RG-178 50Ω
2.3 Antenna Cover.....TPE
2.4 Antenna Base..... PC
2.5 Operating Temp. .....-20℃ ~ +65℃
2.6 Storage Temp. .....-30℃ ~ +75℃
2.7 Color .....Gray

REV	DATE	DESCRIPTION
X1	07/24-2002	SMA RF Antenna



NO	DESCRIPTION		QTY	REMARK
7	Cable	RG-178 透明棕 50 Ohms	1	
6	Connector	SMA Straight Plug/ Reverse	1	
5	銅管	Brass , Ni Plated	1	
4	鉚釘	Brass ,表面染黑處理	2	
3	下固定座	PC ; Black	1	
2	上固定座	PC ; Black	1	
1	天線桿套	TPE-EL630 ; Black	1	

CUSTOMER'S SINGATURE

XX.	±5
X.	±1.0
.X	±0.1
.XX	±0.01
.XXX	±0.005

APPROVED

CHECKED

DRAWING

CUSTOMER: 永洋科技股份有限公司

PART NO :

PARTNAME: SMA RF Antenna

W.Y P/NO : C381-510009-B

REV	UNIT	FILE :
X1	m/m	SHEET : 1/1

Wha Yu
INDUSTRIAL CO.,LTD.
譁裕實業股份有限公司

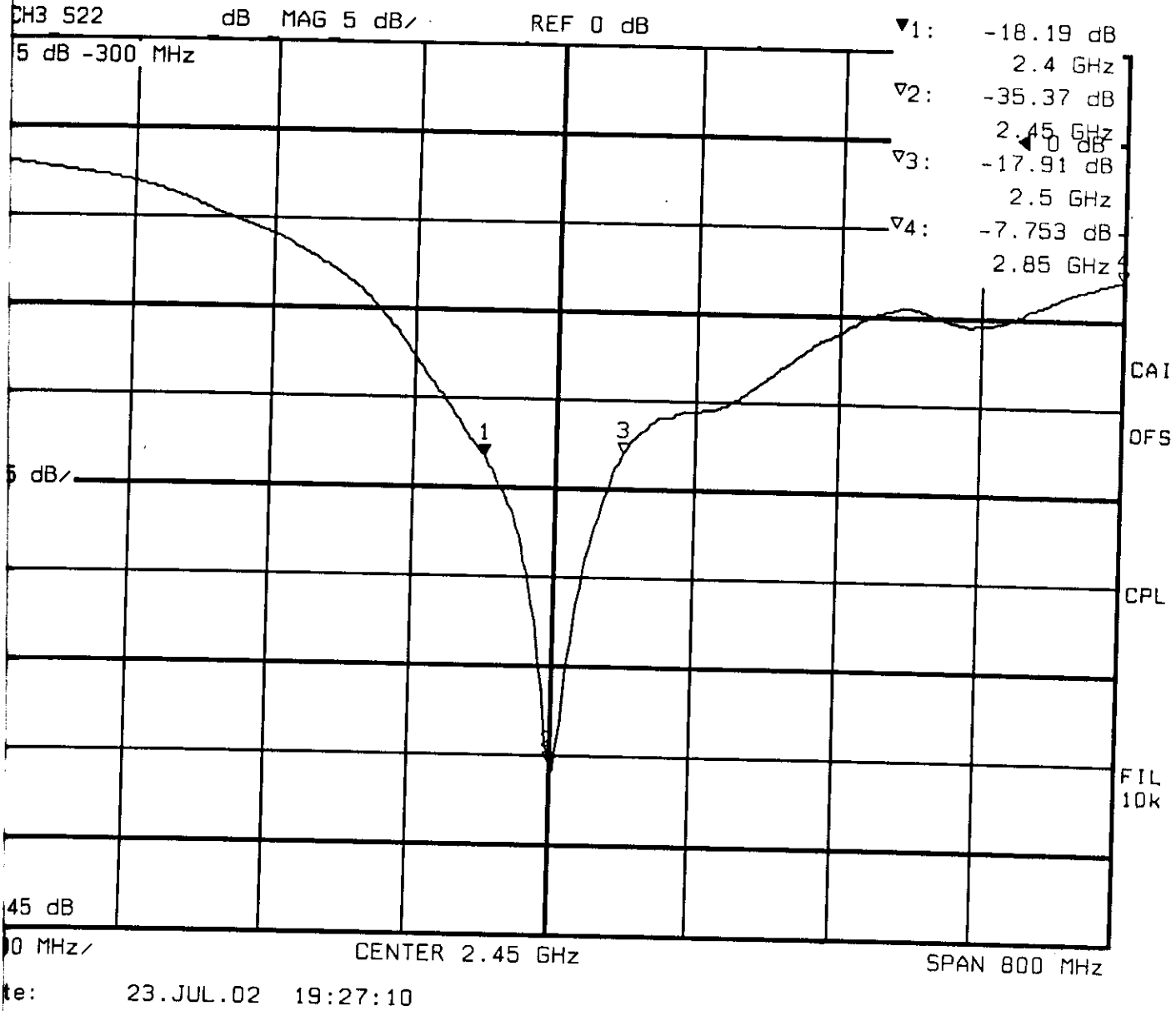
華裕實業股份有限公司
WHA YU INDUSTRIAL CO., LTD

Customer : 永洋科技股份有限公司

Part Name : SMA RF Antenna

WHA YU P/N : C381-510009-B

Return Loss



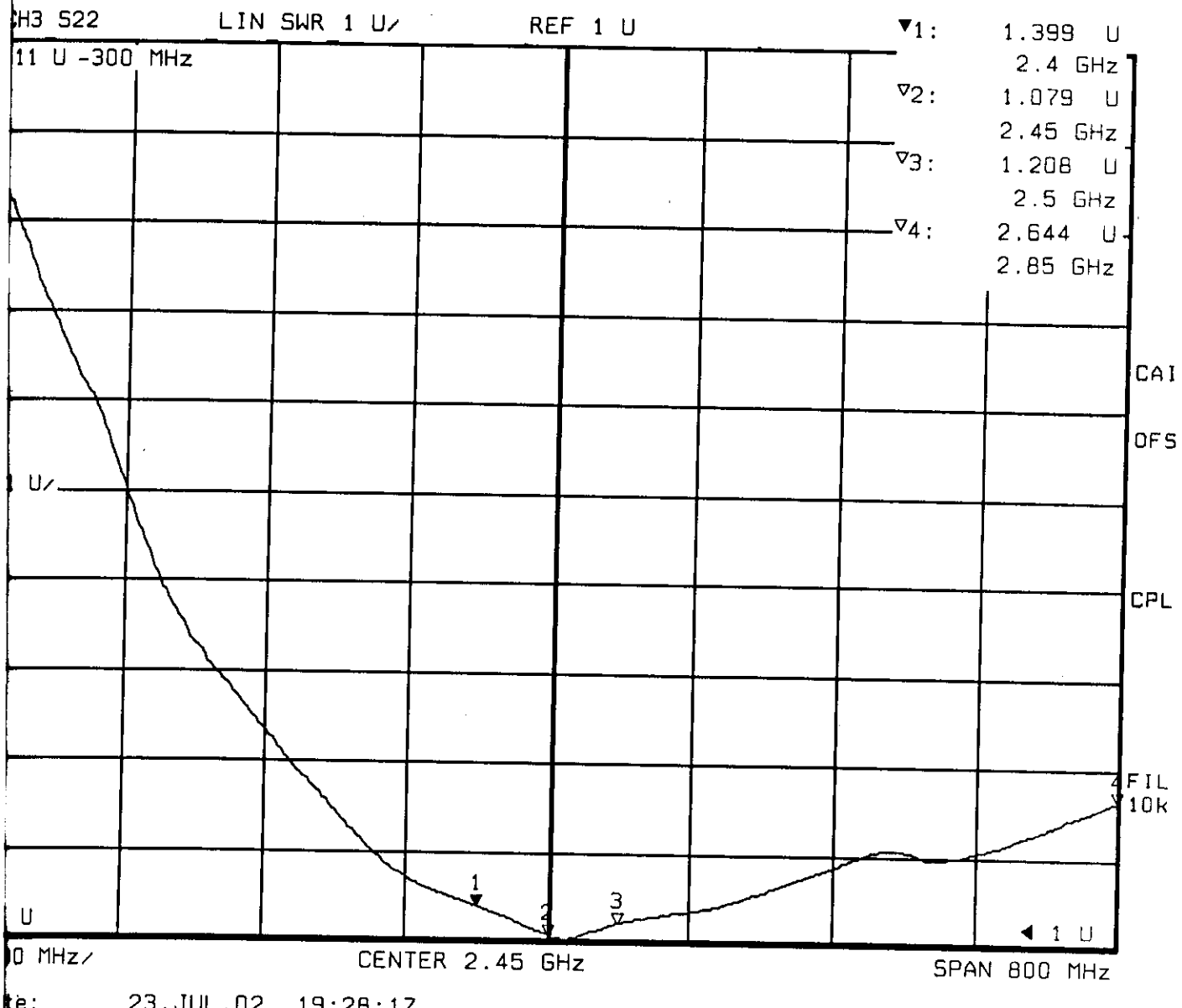
華裕實業股份有限公司
WHA YU INDUSTRIAL CO., LTD

Customer： 永洋科技股份有限公司

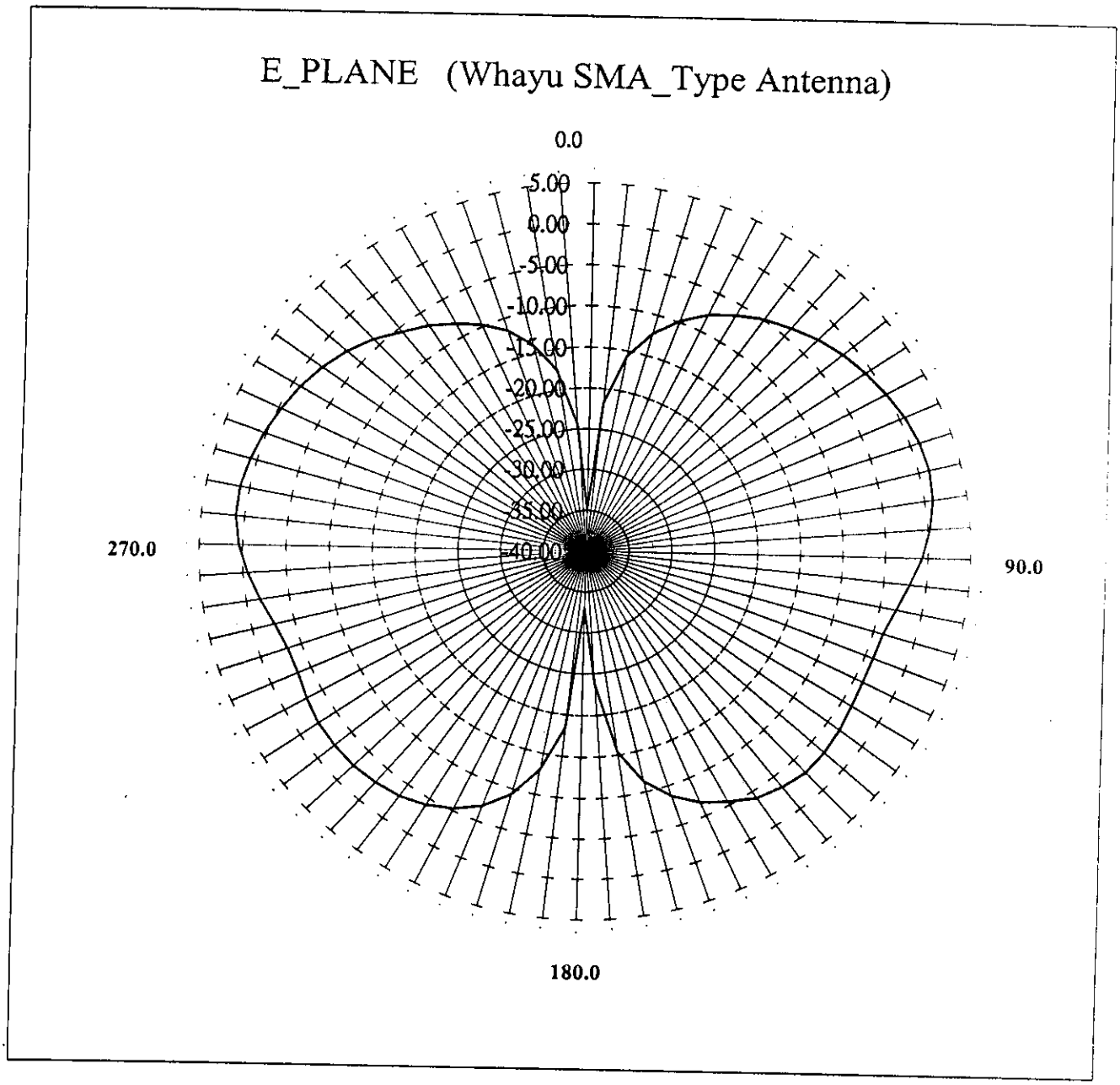
Part Name : SMA RF Antenna

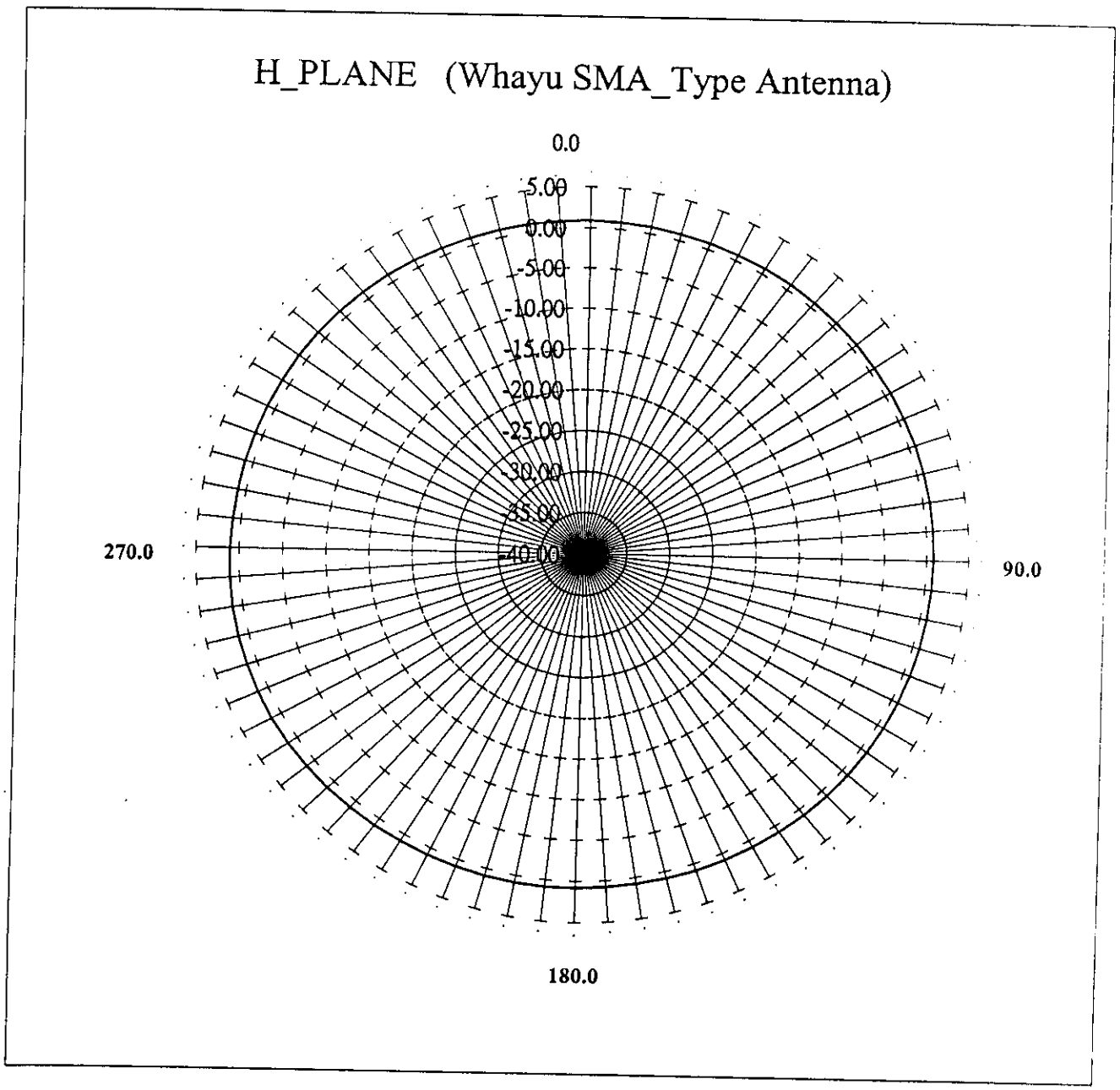
WHA YU P/N : C381-510009-B

VSWR



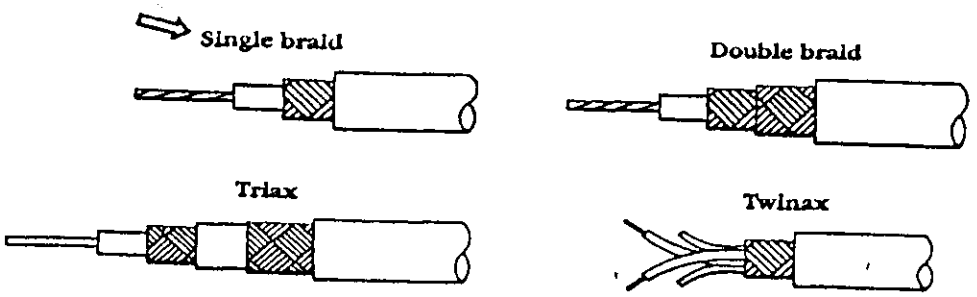
Date: 23.JUL.02 19:28:17


E_PLANE (Whayu SMA_Type Antenna)
0.0
-5.00
0.00
-5.00
-10.00
-15.00
-20.00
-25.00
-30.00
-35.00
-40.00
270.0
90.0
180.0


H_PLANE (Whayu SMA_Type Antenna)
0.0
-5.00
0.00
-5.00
-10.00
-15.00
-20.00
-25.00
-30.00
-35.00
-40.00
270.0
90.0
180.0

Model No. : **Cable** **M17/93-RG178**

MIL-C-17 Coax Cable – QPL Approved



Harbour supplies a complete line of high temperature, high performance QPL approved MIL-C-17 coax cables for the military, commercial and industrial markets. The specific M17 constructions referenced are manufactured in accordance with the most recent revision of the MIL-C-17 specification to ensure a quality product. The MIL-C-17 specification defines complete physical and electrical characteristics for each M17 part number, including diameter parameters, dielectric materials, braid coverage, maximum attenuation, and VSWR levels.

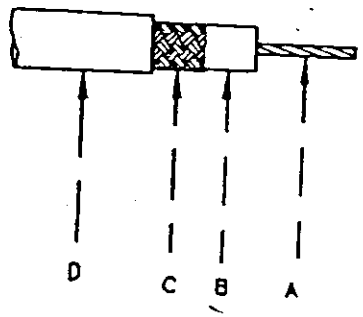
VSWR Sweep testing
When selecting a 50 ohm coaxial cable, constructions with VSWR requirements are recommended. Manufacturing and sweep testing cables with concern for VSWR ensures a quality cable free of spikes over the referenced frequency range. (Note the test frequencies specified in the electrical characteristics section.)

Precision PTFE Dielectrics
All of the high temperature, high performance coax cables listed have PTFE dielectrics with high dielectric strength and low capacitance in proportion to the dielectric constant. All PTFE dielectrics are manufactured with tolerances tighter than the MIL-C-17 specification to ensure uniformity of electrical characteristics, especially impedance, attenuation and VSWR.

Tape wrapped PTFE Constructions
Harbour also manufactures PTFE tape wrapped cables to a previous revision of the MIL-C-17 specification. These constructions can withstand operating temperatures up to 250° C. versus 200° C. for FEP jacketed cables. Also, PTFE tape wrapped cables are generally more flexible than their **FEP** jacketed counterparts.

UL Approvals
All of Harbour's M17 part numbers manufactured to the MIL-C-17 specification may be ordered with UL 1971 and FT4/FT6 approvals.

Harbour
INDUSTRIES



Construction:

A) Center Conductor:
30 7/38 SPCW
OD .012" ± .001"

B) Dielectric:
Extruded PTFE
OD .033" ± .002"

C) Shield:
38 AWG SPC
OD .051" Nom.

D) Jacket:
FEP - Brown Tint
OD .071" ± .004"
Surface Printed: "RG178HF HARBOUR INDUSTRIES 27478"

Electricals:

Impedance:	50 ± 2 Ohms
Capacitance:	32 pF/ft Max.
Velocity of Prop.:	70% Nom.
Cut off Frequency:	116 GHz

Physical Properties:

Weight per 1000 ft:	6.3 lbs Max.
Minimum Bend Radius:	.35"
Operating Temperature Range:	-55°C to 200°C

Attenuation:

1.0 GHz	45.0 dB/100ft.
2.0 GHz	64.4 dB/100ft.
3.0 GHz	79.7 dB/100ft.
4.0 GHz	92.7 dB/100ft.
5.0 GHz	104.3 dB/100ft.
6.0 GHz	115.0 dB/100ft

Harbour Industries

Date: 12/17/01	Scale: None	Drawn By: MTPiner
		Approved By:
Drawing Name: RG178HF	Rev:	Sheet 1 of 1
Part Number: TBD		Drawing Number: 121701_1