

FEATURE:

- ◆Fast switching speeds(down to 20 ns maximum)
- ◆Optimized for lowest phase deviation over band
- ◆RMS phase error $\leq 3^\circ$ typical
- ◆Low insertion loss
- ◆Power handing up to 30dbm
- ◆Hermetic sealing availabe



APPLICATION:

- ◆Test equipment
- ◆Radar&EW array system
- ◆Communication system

SPECIFICATIONS:

ITEMS	Parameters
Fre. Range (GHz)	4.0~8.0GHz
IL (dB)	6dB type
IN/OUT VSWR(Max)	IN:1.6 OUT:type1.6
Switching Speed (ns)	100ns
Phase Accuracy (°)	4.5~7GHz $\pm 2.5^\circ$ 4~4.5GHz 7~8GHz $\pm 5^\circ$
Amplitude Balance (dB.Max)	5~6.8GHz $\pm 0.5\text{dB}$ 6.8~8GHz $\pm 1\text{dB}$ 4~4.5GHz $\pm 1.5\text{dB}$
Phase Shift(°)	0~360°
Step Site (°)	5.625°
Control(Bits)	6Bits
Power Handing(dBm)	20dBm



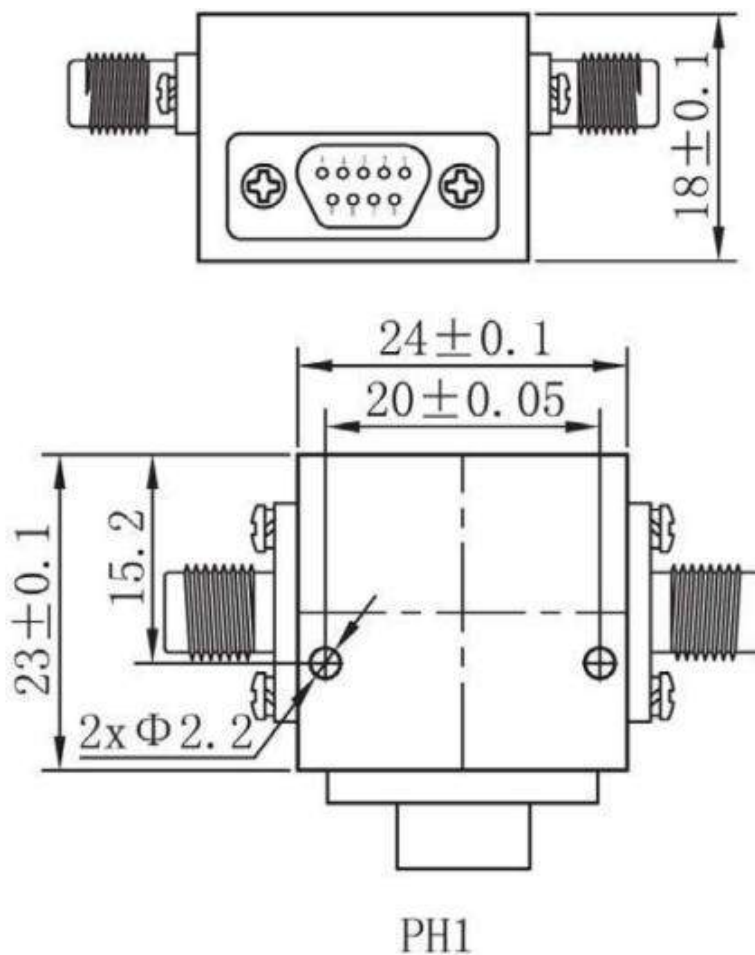
HENGWEI MICROWAVE

HWDPH4080-6

ENVIRONMENTAL RATINGS:

Parameter	Min	Typical	Max	Units
Operating Temperature	-55		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	10000		30000	feet
Shock / Vibration(MIL-STD-810F)		Airborne		

OUTLINE DRAWING(mm):



Connector: RF Input、Output (SMA-K 50 Ω)

Control Port: J30J-9

J30J-9 Pin Definition:

PIN No.	Property
1~7	Phase Control Port
8	NC
9	GND

Control: TTL Level

“0” : 0V; “1” : +5V

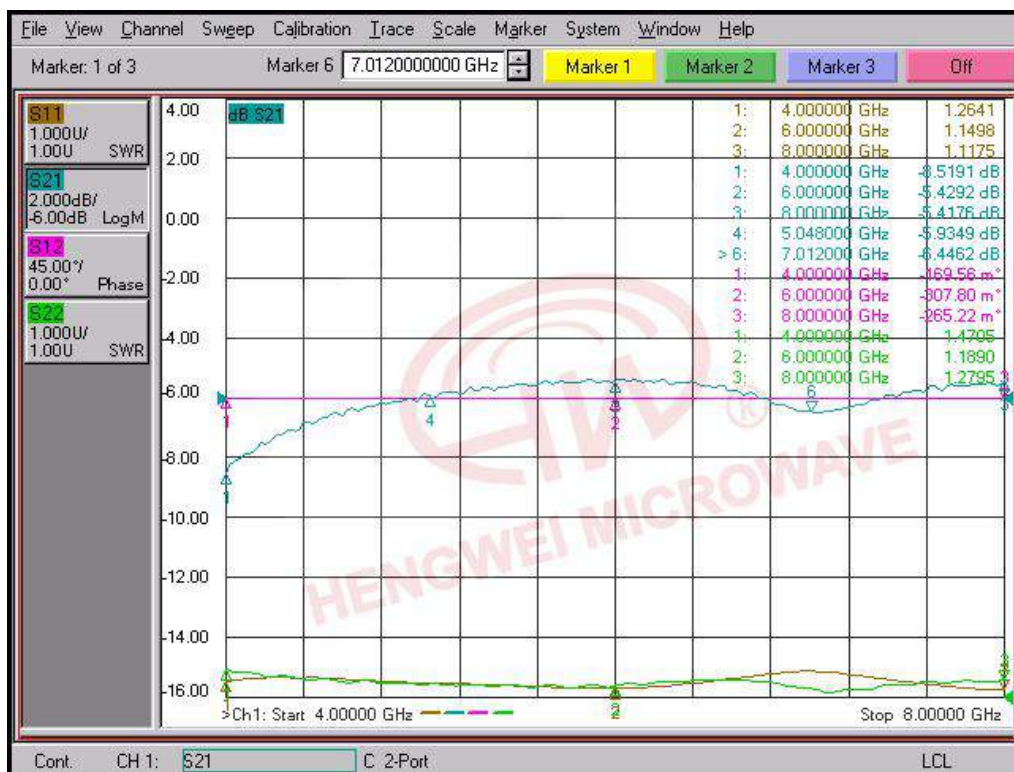
Phase Shifter	J30J-9 Pin No.						
	1	2	3	4	5	6	7
0° (Reference)	0	0	0	0	0	0	1
5°	1	0	0	0	0	0	1
11°	0	1	0	0	0	0	1
22°	0	0	1	0	0	0	1
45°	0	0	0	1	0	0	1
90°	0	0	0	0	1	0	1
180°	0	0	0	0	0	1	1
360°	1	1	1	1	1	1	1



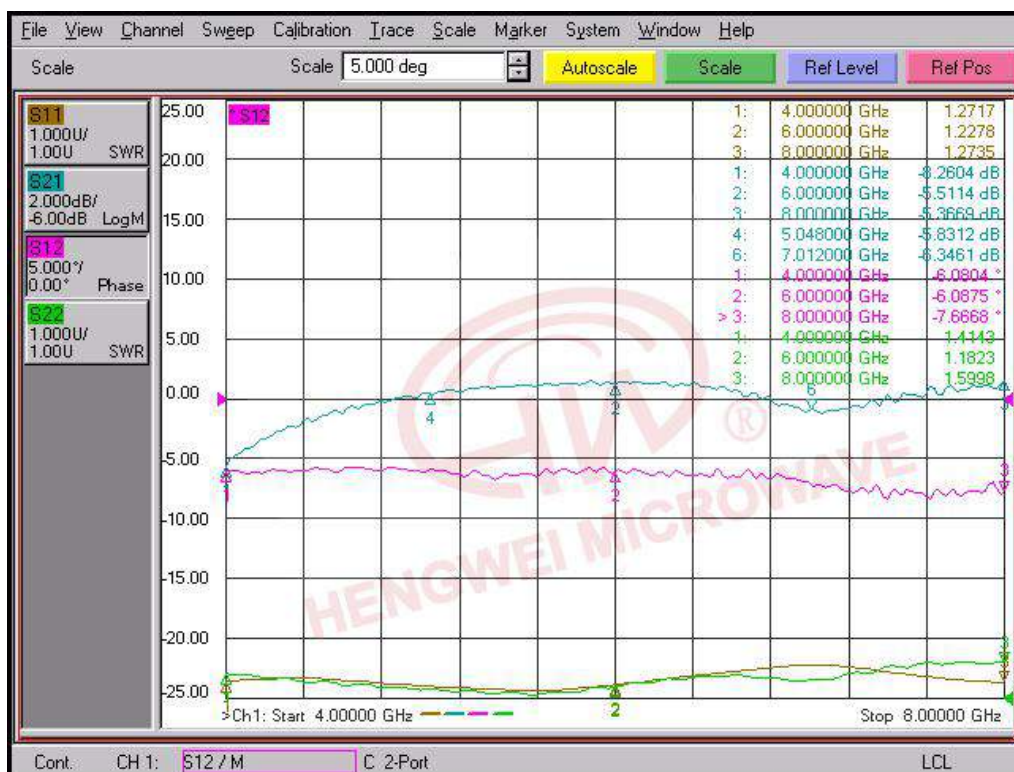
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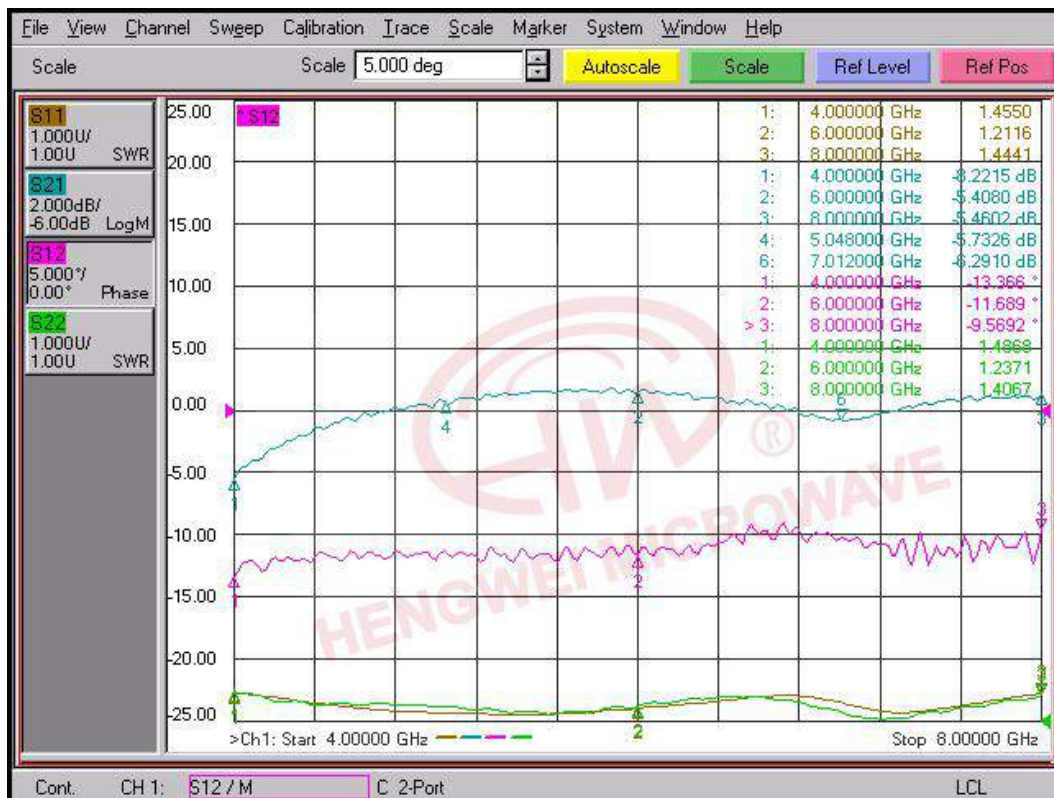
HWDPH4080-6 TEST CURVE AS FOLLOWS:



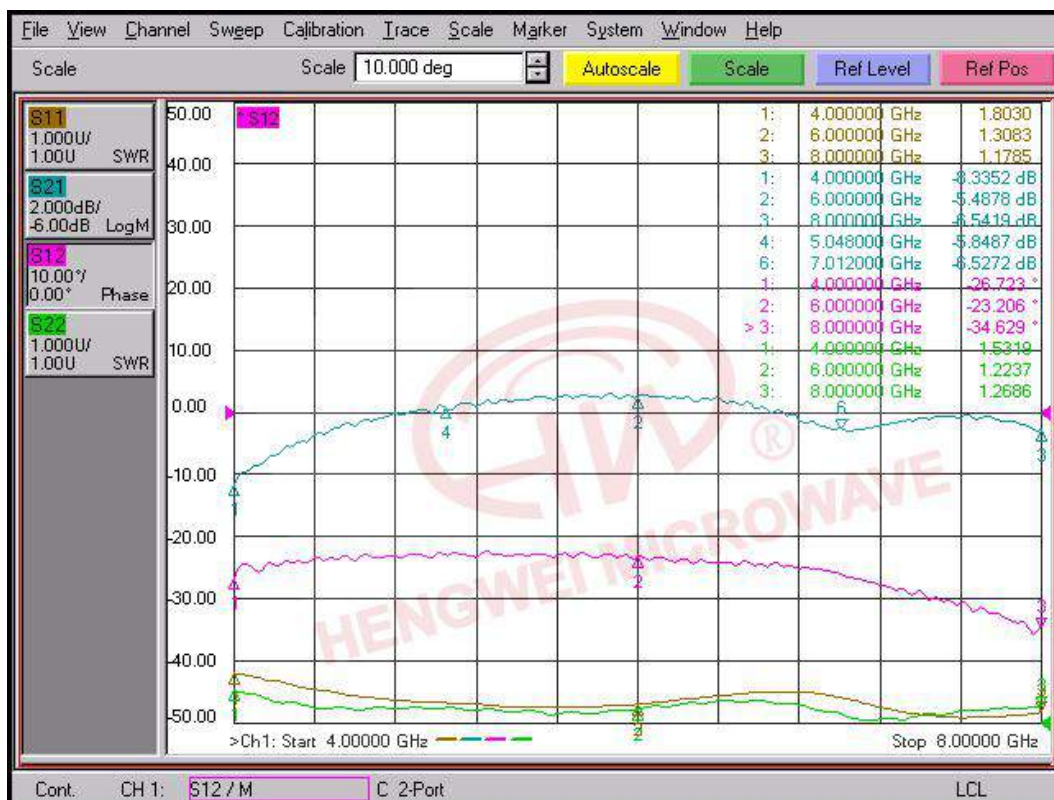
PIC1: 0° Test Curve



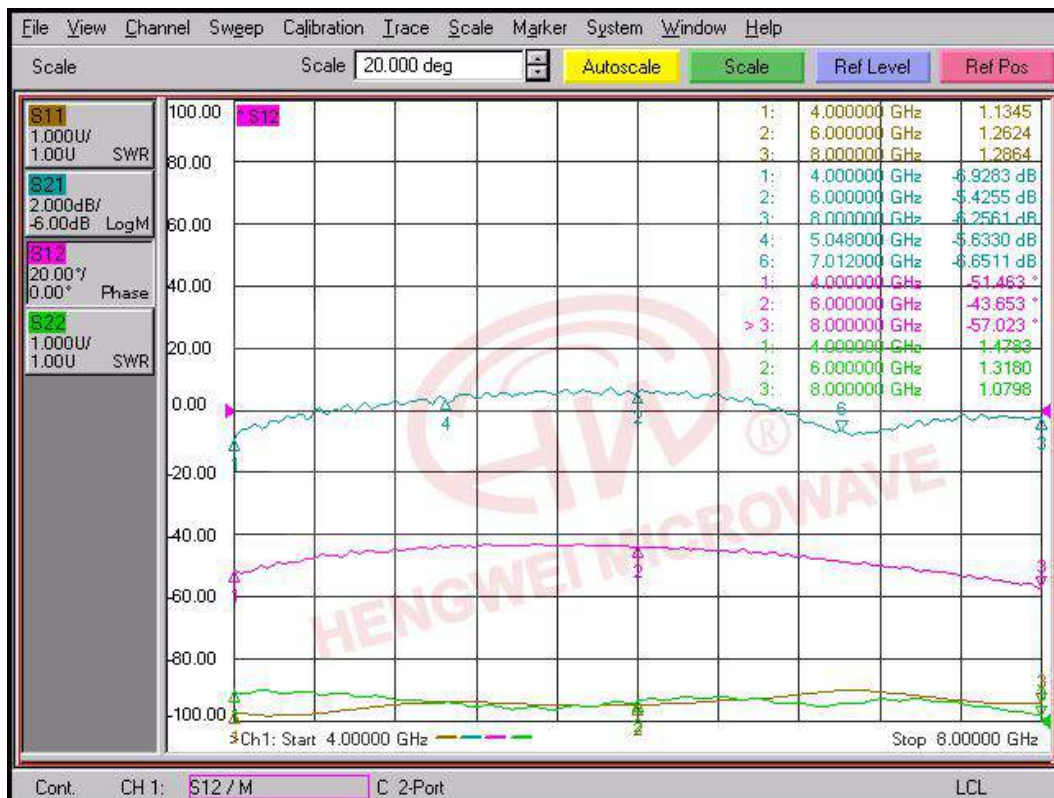
PIC2: 5° Test Curve



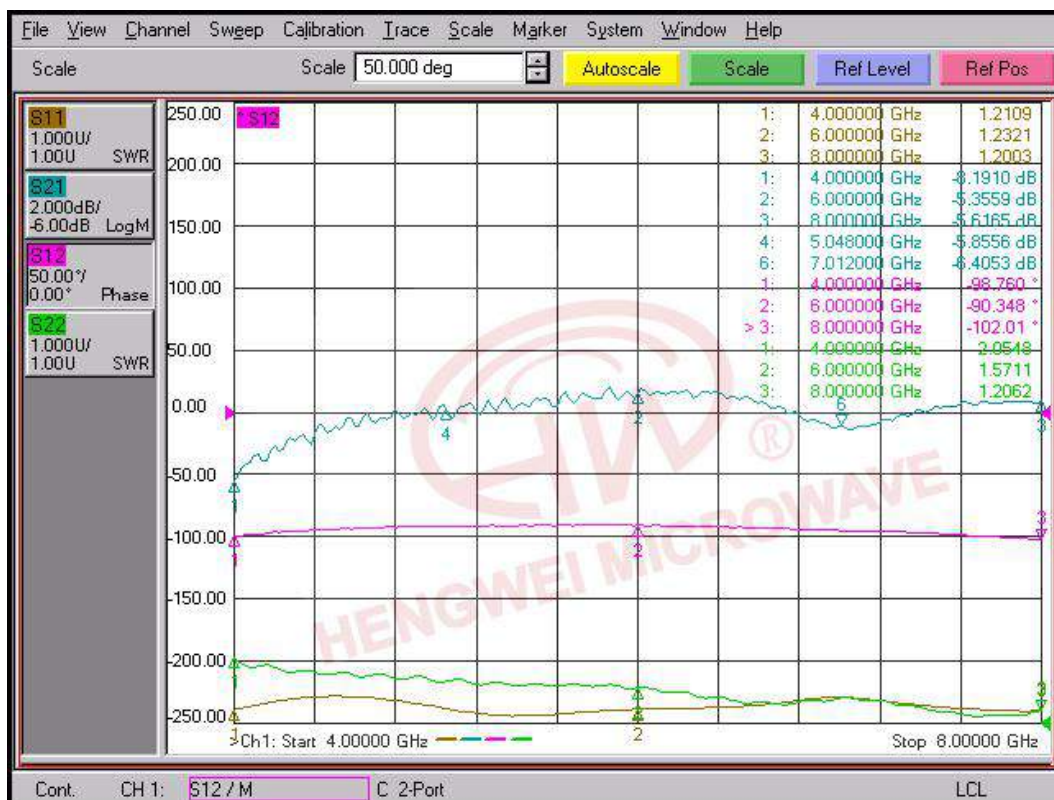
PIC3: 11° Test Curve



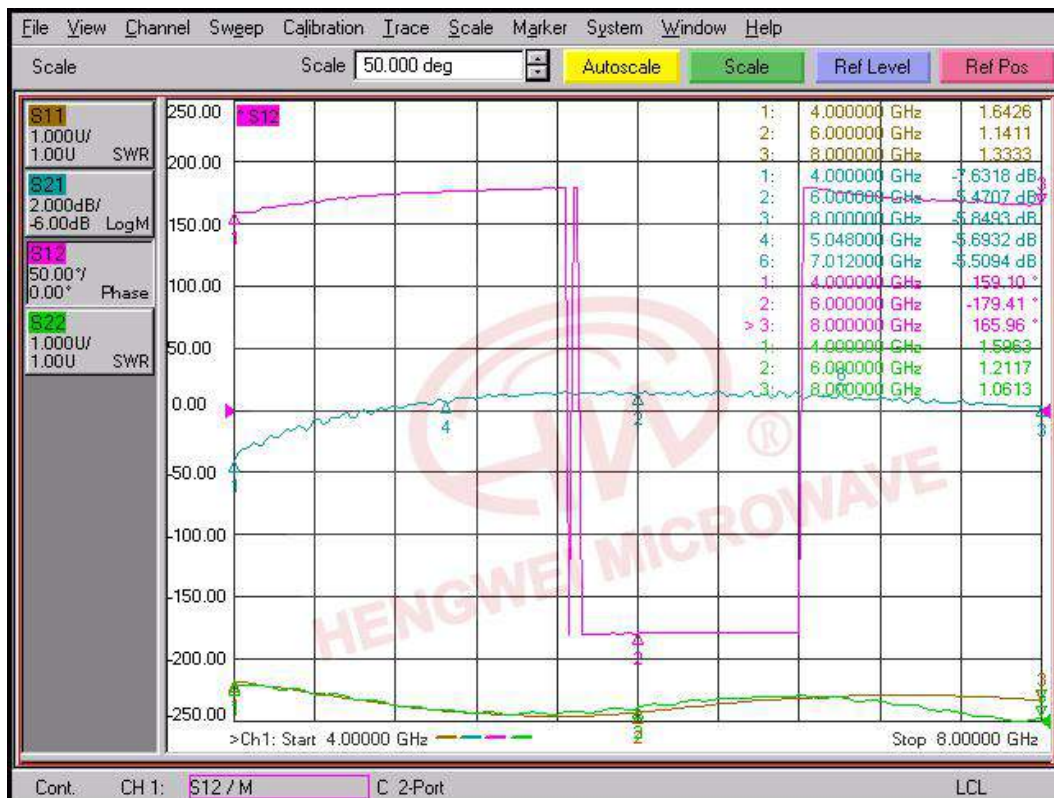
PIC4: 22° Test Curve



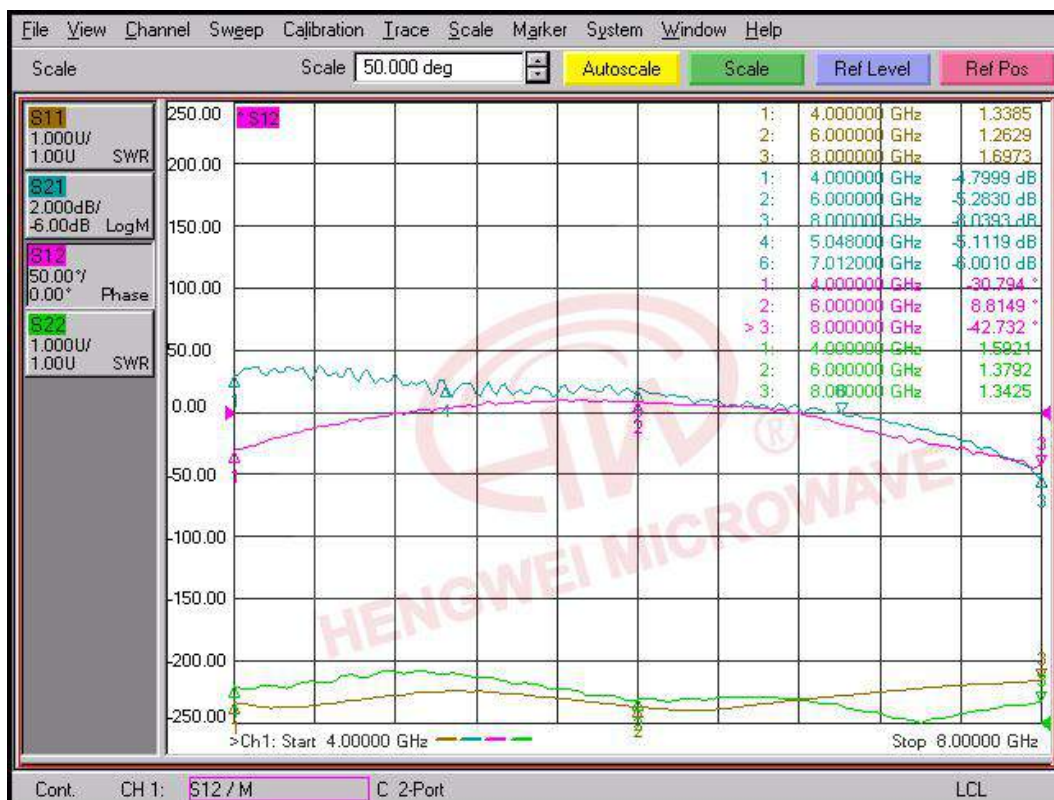
PIC5: 45° Test Curve



PIC6: 90° Test Curve



PIC7: 180° Test Curve



PIC8: 360° Test Curve