



Light Tek Co., Ltd.

2f, No. 158, Gan Cheng Rd., Pan Chiao City
Taipei Hsien, Taiwan, R.O.C.
Tel: 886-2-89510688 Fax: 886-2-89510681

Samsung Gemini

Antenna Test Report

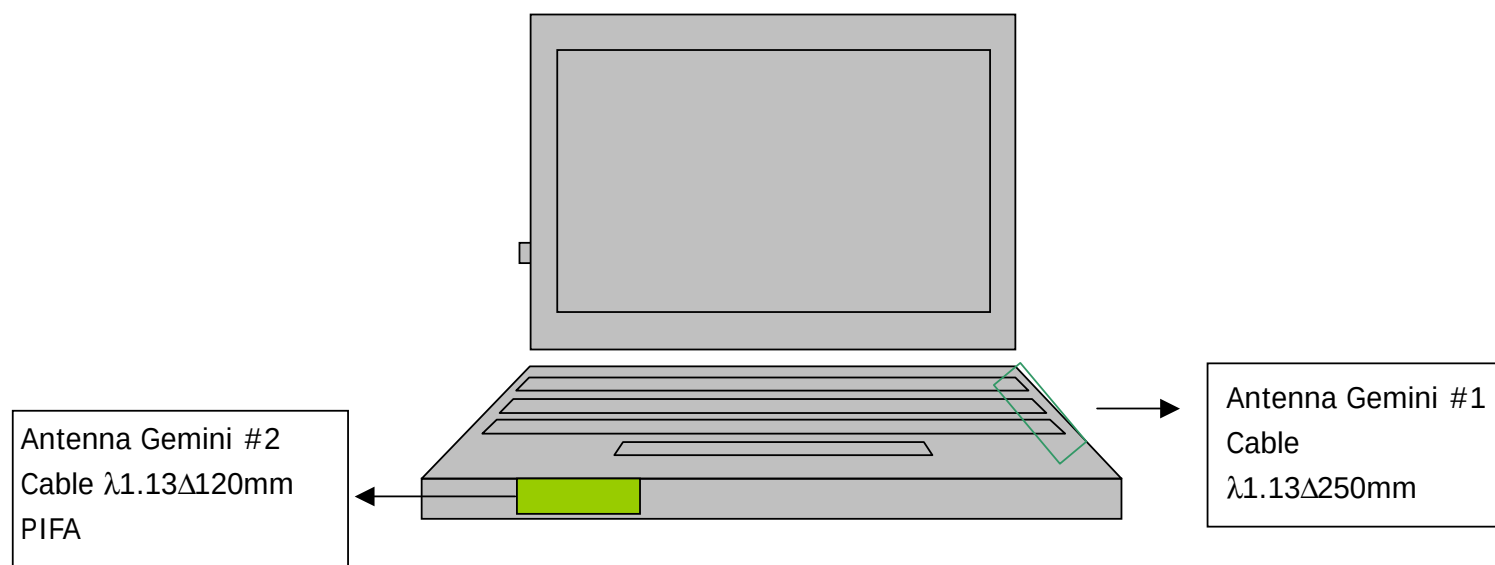
RD Manager	Supervisor	RD engineer	Sales engineer
Bill	Jackson	Jackson	Johnson



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1. Mechanical dimensions





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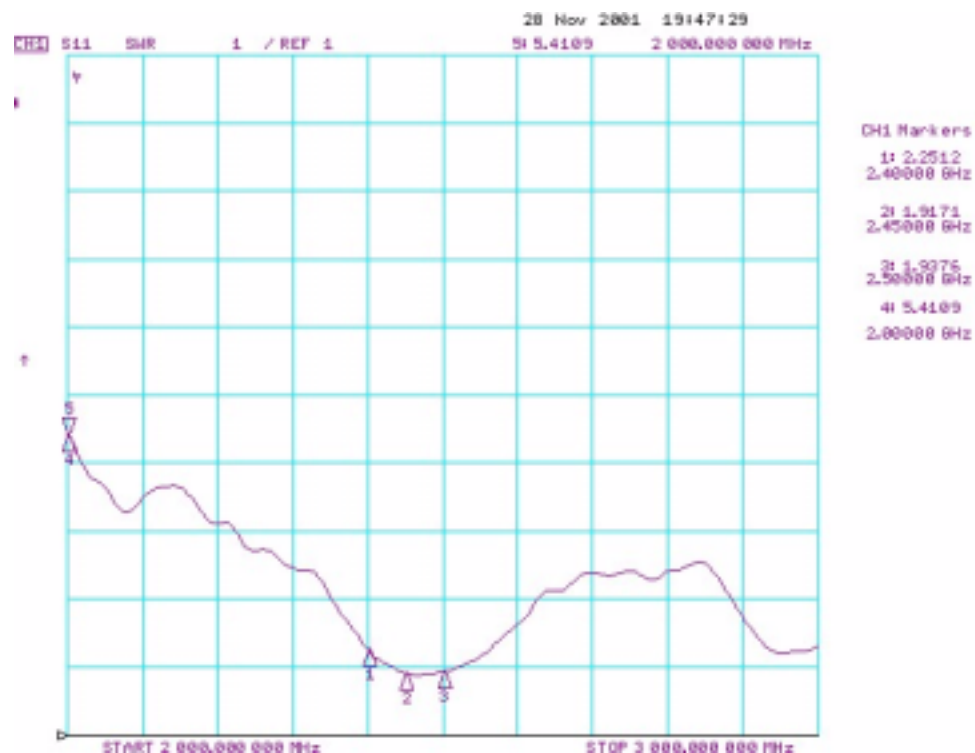
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II. Test results 1

Antenna	Application	Location	Cable dia. $\bar{u}$ mm	Cable length mm
Gemini	PIFA #1	Sidebar	1.13	250 mm

1. VSWR

Antenna	Center freg. @MHz	BW @MHz	VSWR		
			2.4GHz	2.45GHz	2.5GHz
Gemini PIFA #1	2450	100	2.25	1.91	1.93





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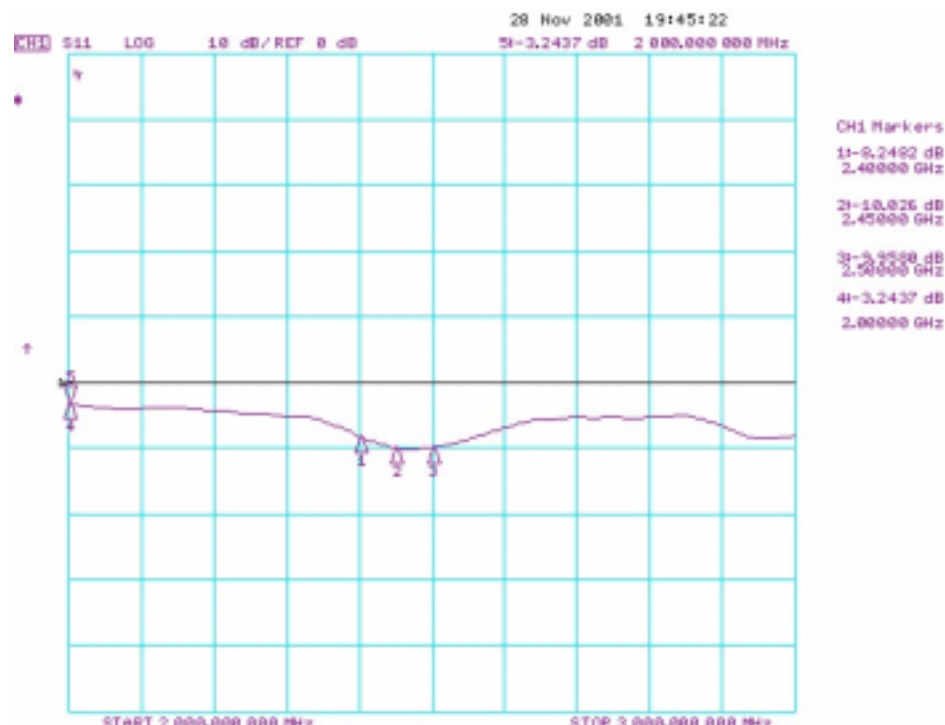
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II. Test results 1

Antenna	Application	Location	Cable dia. $\bar{u}$ mm	Cable length mm
Gemini	PIFA #1	Sidebar	1.13	250 mm

1. Return Loss

Antenna	Center freg. @MHz	BW @MHz	VSWR		
			2.4GHz	2.45GHz	2.5GHz
Gemini PIFA #1	2450	50	-8.24	-10.02	-9.95

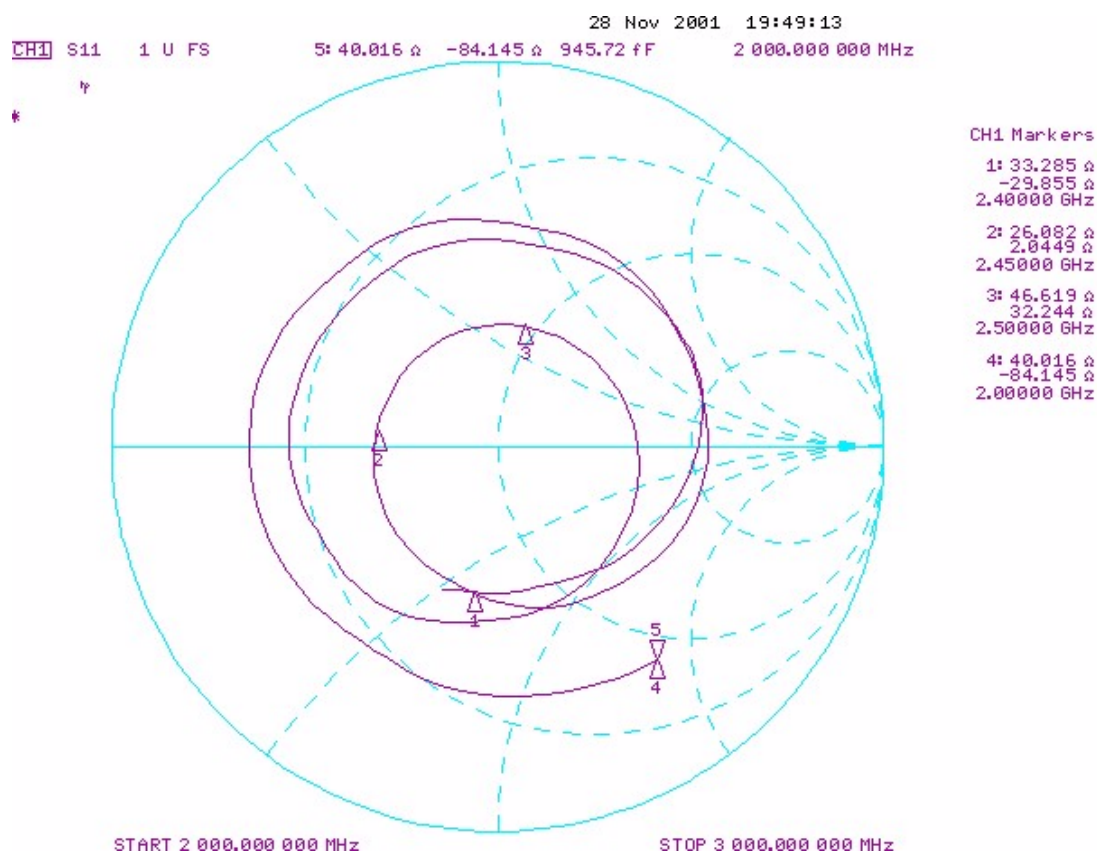




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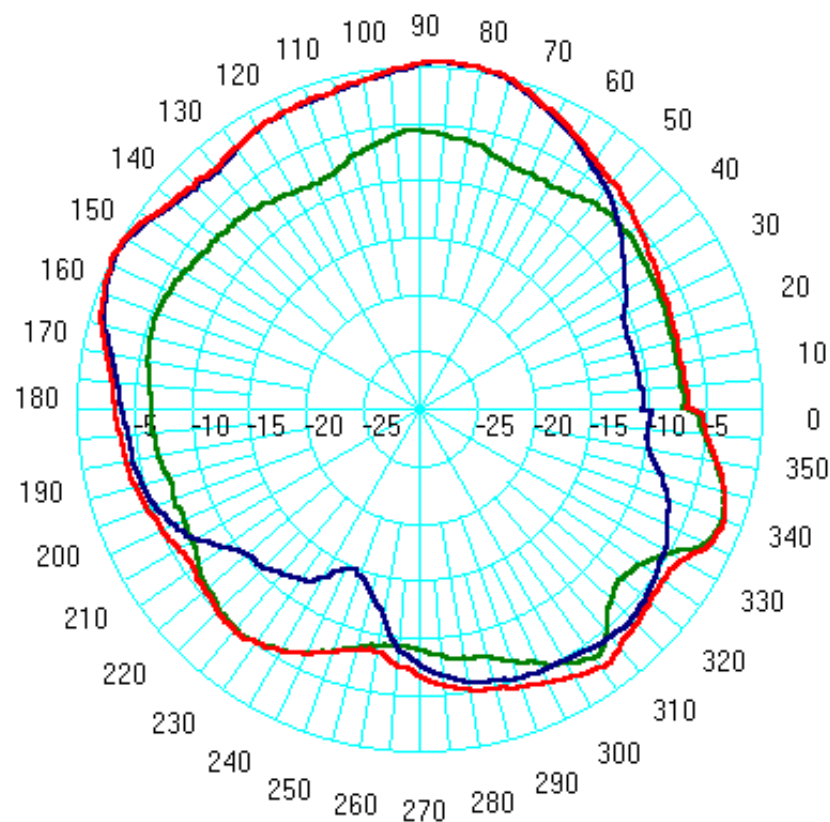
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2. Peak Gain and Average Gain

Antenna	Gain of XY Plane(Azimuth)-Open		
	Frequency		2.45
<u>Gemini</u> <u>PIFA #1</u>	H	Peak	-1.80
		Average	-6.33
<u>Gemini</u> <u>PIFA #1</u>	V	Peak	NLRQ>
		Average	KSLPV>
<u>Gemini</u> <u>PIFA #1</u>	H+V	Peak	0.54
		Average	-3.41
		%>-5dBi	73.29

3. Radiation Pattern of XY Plane(Azimuth)-Open

— H-polarized — V- polarized — H+V- polarized





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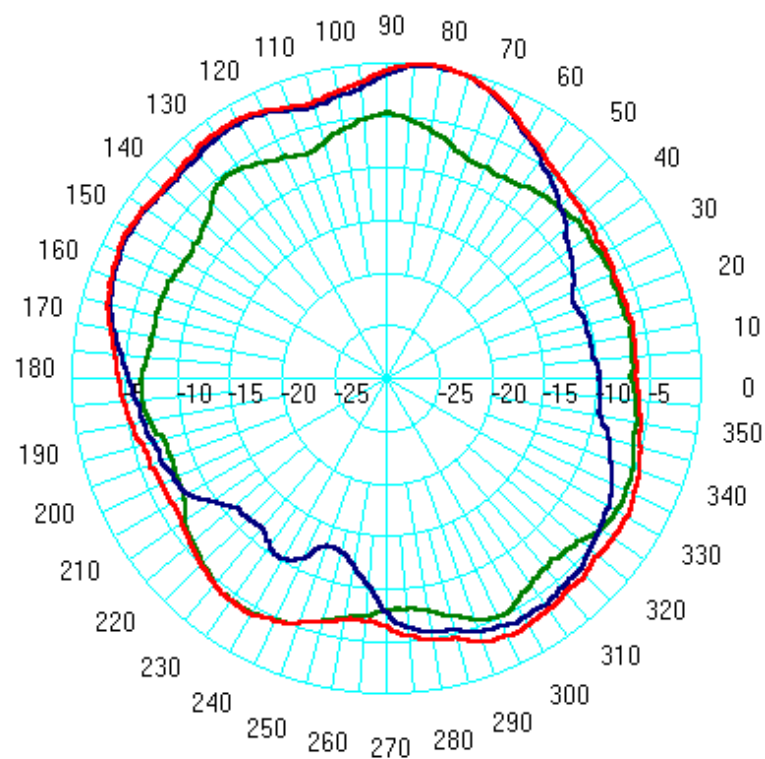
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2. Peak Gain and Average Gain

Antenna	Gain of XY Plane(Azimuth)-Close		
	Frequency		2.45
<u>Gemini</u> <u>PIFA#1</u>	H	Peak	KRLOW>
		Average	KTLRO>
<u>Gemini</u> <u>PIFA#1</u>	V	Peak	N>
		Average	KSLTW>
<u>Gemini</u> <u>PIFA#1</u>	H+V	Peak	0.13
		Average	-3.81
		%>-5dBi	68.24

3. Radiation Pattern of XY Plane(Azimuth)-Close

— H-polarized — V- polarized — H+V- polarized





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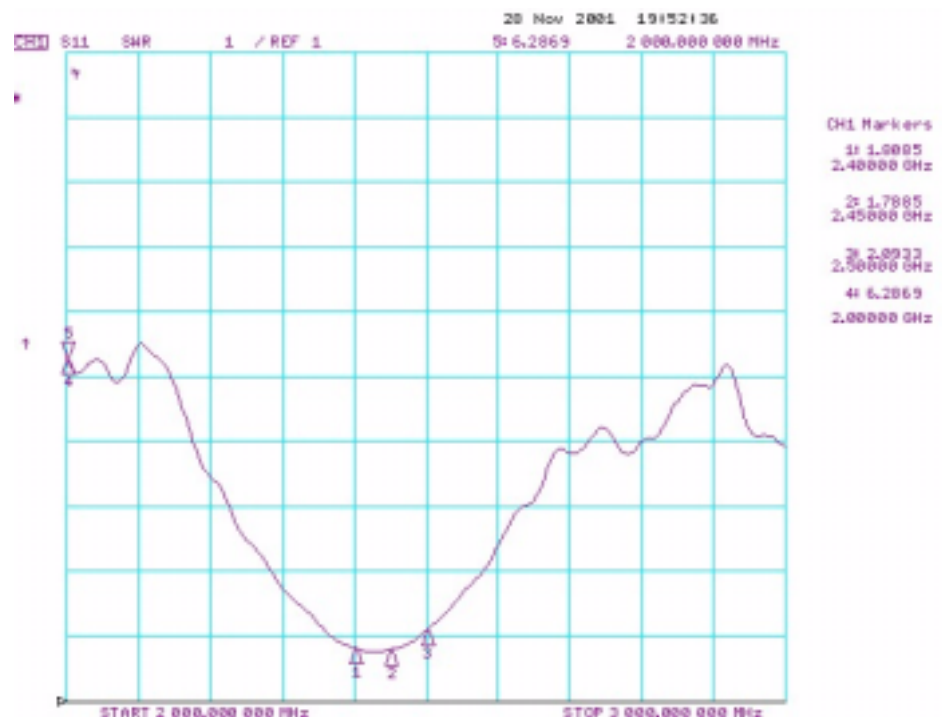
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II. Test results 1

Antenna	Application	Location	Cable dia. $\bar{u}$ mm	Cable length mm
Gemini	PIFA #2	front	1.13	250 mm

1. VSWR

Antenna	Center freq. @MHz	BW @MHz	VSWR		
			2.4GHz	2.45GHz	2.5GHz
Gemini PIFA #2	2450	100	1.80	1.78	2.09





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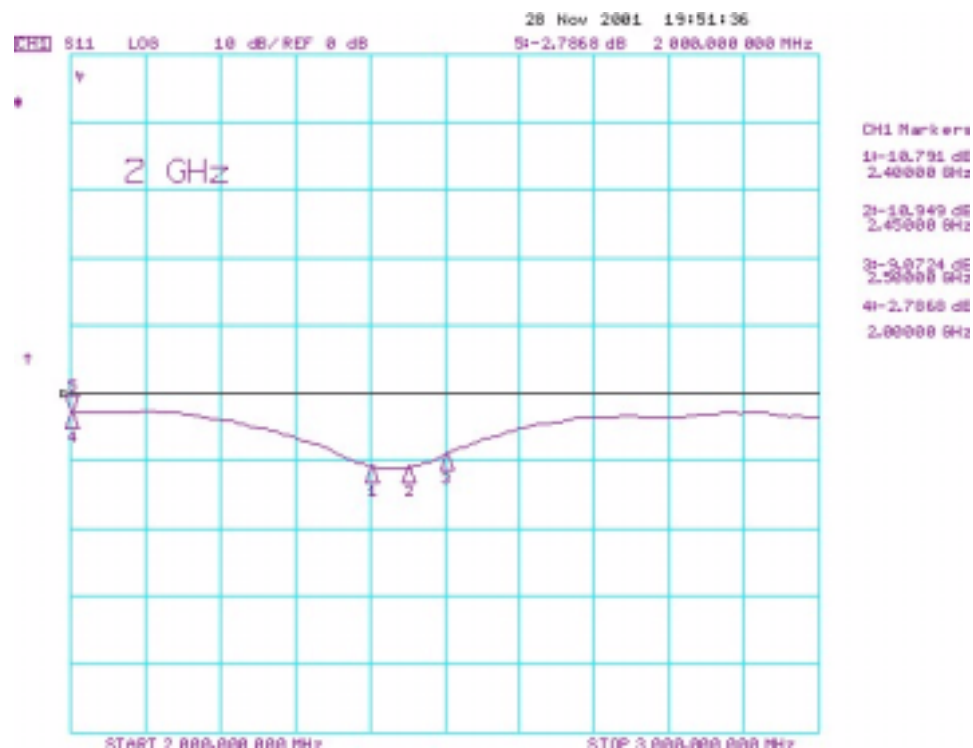
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II. Test results 1

Antenna	Application	Location	Cable dia. $\bar{u}$ mm	Cable length mm
Gemini	PIFA #1	Sidebar	1.13	250 mm

1. Return Loss

Antenna	Center freg. @MHz	BW @MHz	VSWR		
			2.4GHz	2.45GHz	2.5GHz
Gemini PIFA #1	2450	100	-10.79	-10.94	-9.07

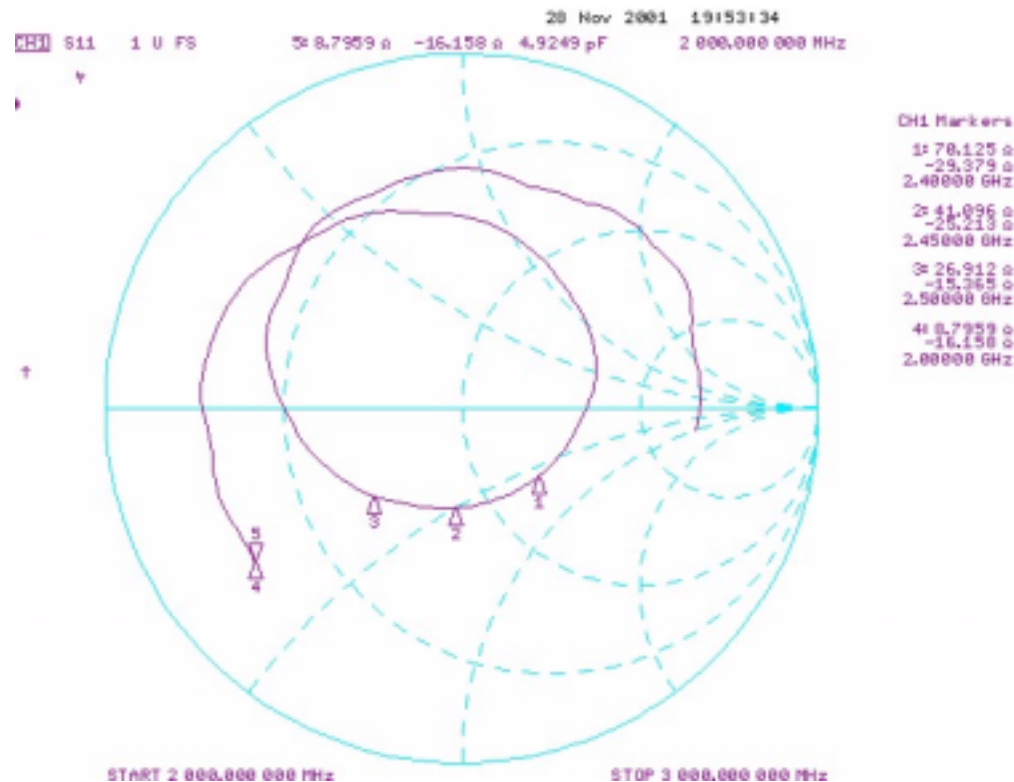




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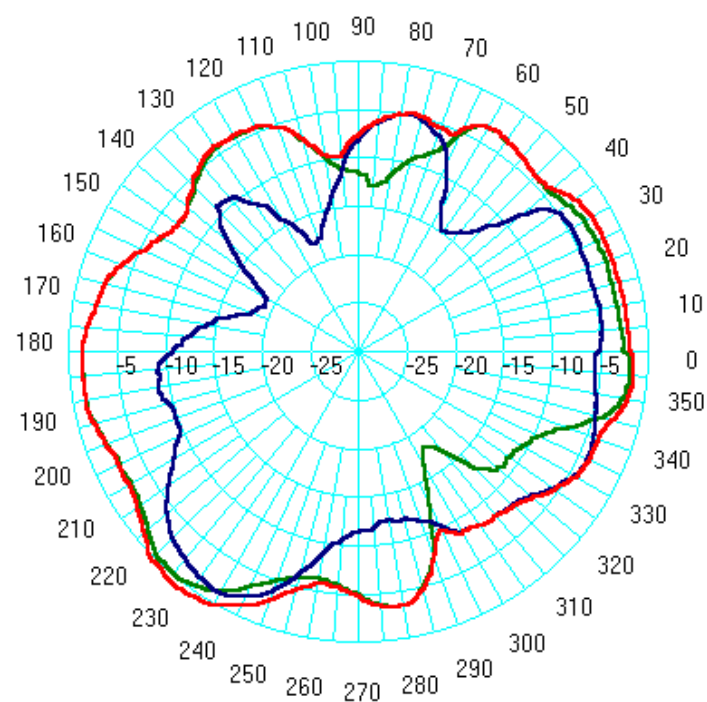
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2. Peak Gain and Average Gain

Antenna	Gain of XY Plane(Azimuth)-Open		
	Frequency		2.45
<u>Gemini</u> <u>PIFA #2</u>	H	Peak	0.12
		Average	-5.74
<u>Gemini</u> <u>PIFA #2</u>	V	Peak	KOLPQ>
		Average	KWLOV>
<u>Gemini</u> <u>PIFA #2</u>	H+V	Peak	0.68
		Average	-4.14
		%>-5dBi	65.28%

3. Radiation Pattern of XY Plane(Azimuth)-Open

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2. Peak Gain and Average Gain

Antenna	Gain of XY Plane(Azimuth)-Close		
	Frequency		2.45
<u>Gemini PIFA#2</u>	H	Peak	-1.38
		Average	-7.54
<u>Gemini PIFA#2</u>	V	Peak	0.43
		Average	-5.28
<u>Gemini PIFA#2</u>	H+V	Peak	0.43
		Average	-3.11
		%>-5dBi	76.85%

3. Radiation Pattern of XY Plane(Azimuth)-Close

— H-polarized — V- polarized — H+V- polarized

