



Antenna PERFORMANCE TEST REPORT

Product Name	VVK20
Applicant	Innocomm
Manufacturer	Innocomm
Test site	Innocomm
Model	Sylvie_VVK20
Antenna type	Monopole
Address	1F, No.6, Hsin Ann Rd., Hsinchu Science Park, Hsinchu 30078, Taiwan

Approved by	Reviewed by	Issued by
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TABLE OF CONTENT

1. INTRODUCTION.....	3
1.1 TEST EQUIPMENT	3
1.2 TEST CONDITION	3
1.3 TEST SETUP AND ENVIRONMENTS.....	3
2. PASSIVE PERFORMANCE TEST	4
2.1 VSWR MEASUREMENT	4
2.2 RADIATION PATTERN.....	5
2.3 AVERAGE EFFICIENCY PEAK GAIN	6
2.4 3D GAIN OF FREE SPACE(AVERAGE).....	6

1. INTRODUCTION

1.1 TEST EQUIPMENT

Passive Test:

Network Analyzer: R/S ZNB8 (9KHz ~ 8.5GHz)

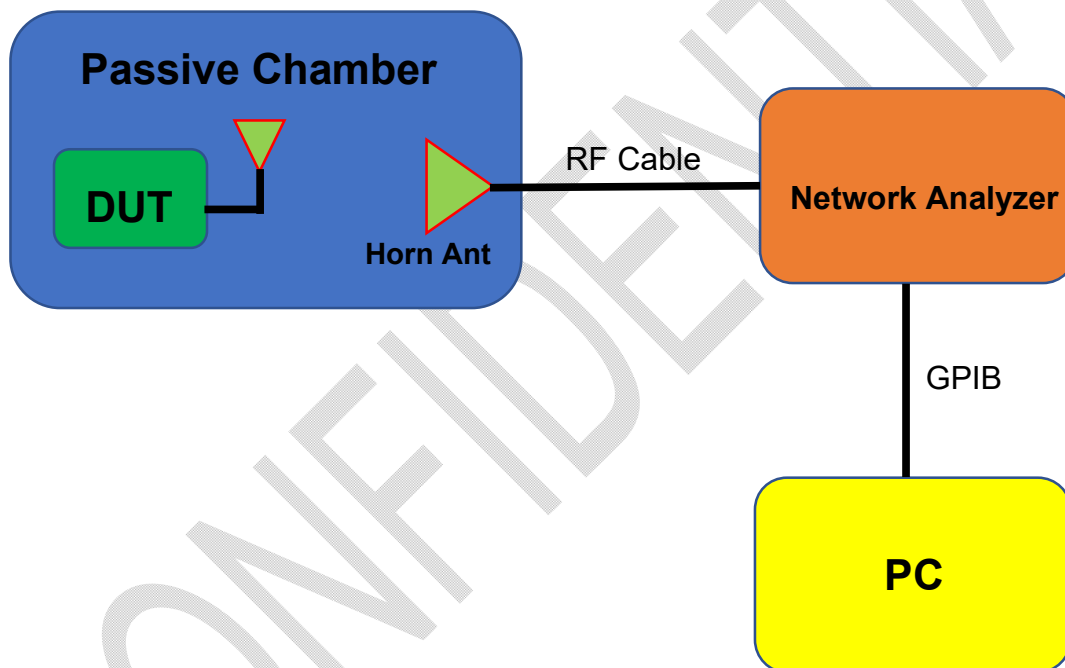
Passive Chamber: Atenlab OTA 200

1.2 TEST CONDITION

Support Band: Sub-G (850MHz~928MHz)

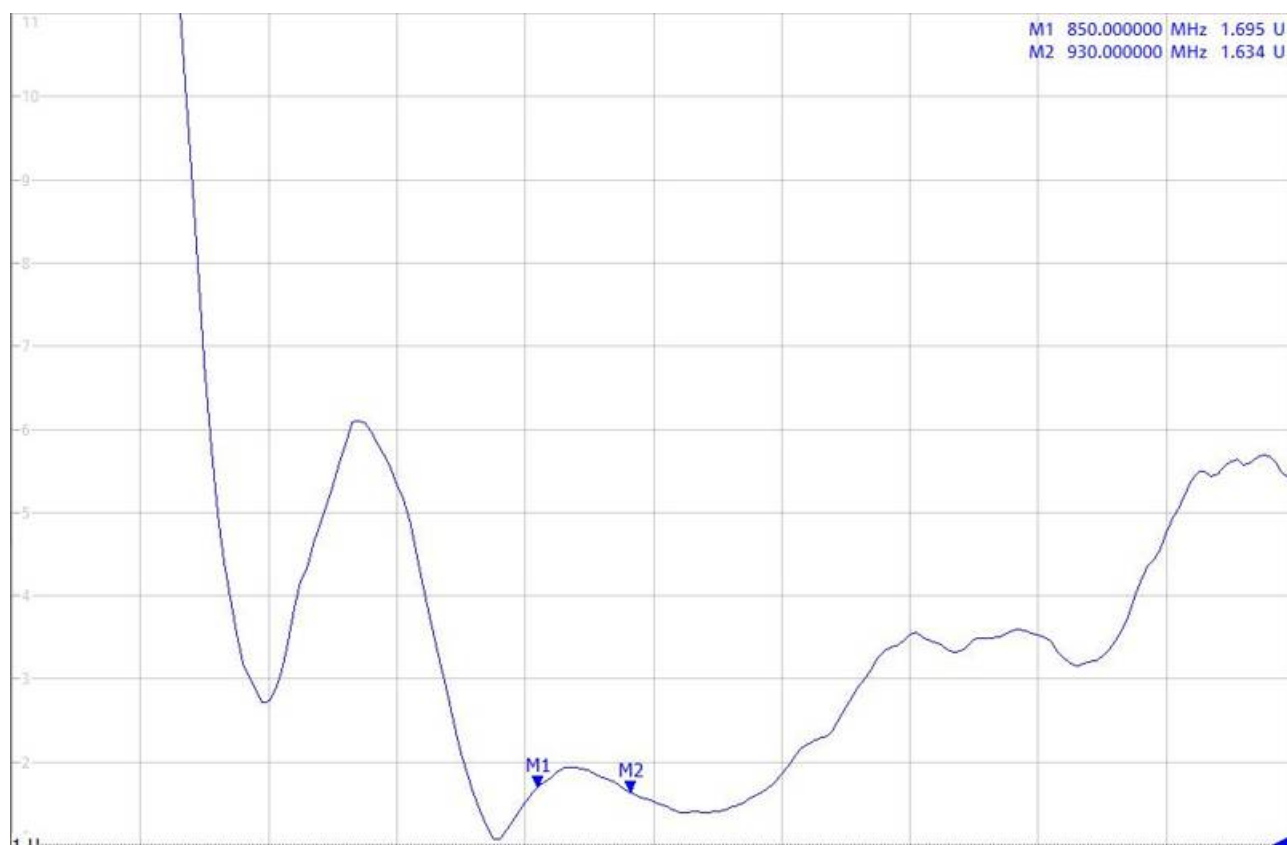
Temperature: 25°C

1.3 TEST SETUP AND ENVIRONMENTS



2. PASSIVE PERFORMANCE TEST

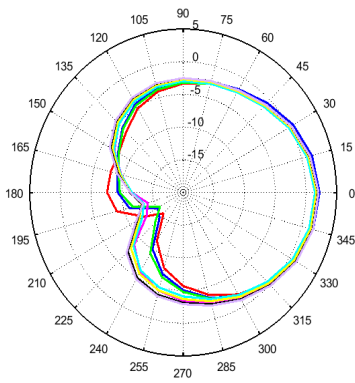
2.1 VSWR MEASUREMENT



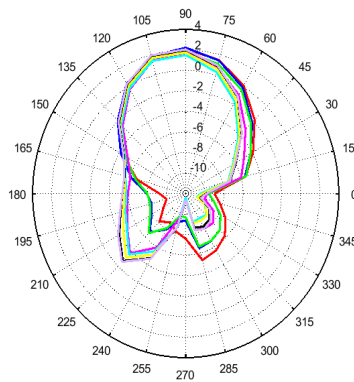
Sub-G (850MHz~928MHz)

2.2 RADIATION PATTERN

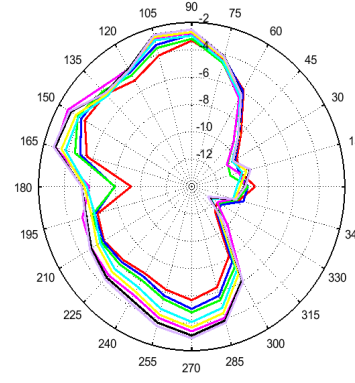
Total_Polar Graph_H_XY Plane



Total_Polar Graph_E1_XZ Plane



Total_Polar Graph_E2_YZ Plane



	Color	Freq./Chan.
1	Red	850MHz
2	Blue	863MHz
3	Green	868MHz
4	Cyan	902MHz
5	Magenta	917MHz
6	Yellow	920MHz
7	Black	925MHz
8	Purple	928MHz

Sub-G (850MHz~928MHz)

2.3 AVERAGE EFFICIENCY PEAK GAIN

	Average efficiency (%)	Average Gain (dBi)	Peak Gain (dBi)
Sub-G	39.9	-3.99	1.13

2.4 3D GAIN OF FREE SPACE(AVERAGE)

	VVK20		
	Frequency (MHz)	Gain (dBi)	Efficiency %
Sub-G 850MHz~928MHz	850M	-4.11	38.8
	863M	-4	39.8
	868M	-4.22	37.8
	902M	-3.95	40.3
	917M	-4.3	37.2
	920M	-4.02	39.6
	925M	-3.72	42.5
	928M	-3.64	43.3