Document NO.	KAT-1306-IN025P
Maker Code	KIN-DIV-MS1305
DATE	2013. 06. 28
Page	1 / 9

Model	Type	Rev.	DONGNAM	IR
G66	Built in Antenna		M7 SYSTEM	A

APPROVAL SHEET

Customer : M7 SYSTEM

Company : DONGNAM

Item : Built in Antenna

Model : G66

Customer P/N :

Maker Code : KIN-DIV-MS1305

Department	Investigation	Verification	Approval
Circuit			
Machine			
Safety			

PART NO.	
Maker Code	KIN-DIV-MS1305
DATE	2013. 06. 28
Page	2 / 9

Model	Type	Rev.	DONGNAM	IR
G66	Built in Antenna		M7 SYSTEM	A

▶ Contents ◀

Model	Type	Rev.	DONGNAM	IR
G66	Built in Antenna		M7 SYSTEM	A

1. Revison History of Product Specification

1.1 History List of Approval Sheet

History List of Approval Sheet							
NO.	Rev.		Rev. DATE	Detailed Contents of Revision	Amount	Request Dept.	Progress Stage
	M7 SYSTEM	DONGNAM					
1	A	IR	2013.06.28	Approval Publication	—	Quality Dept.	WS2

2. Circuit Specification

2.1 Test Setting

2.1.1 Test Environment (Condition/Method)

① VSWR

Step 1. Connect ANT port with cable included adaptor to port1 of Network analyzer

Step 2. Point out markers on network analyzer display at target frequencies.

Step 3. Inspect VSWR

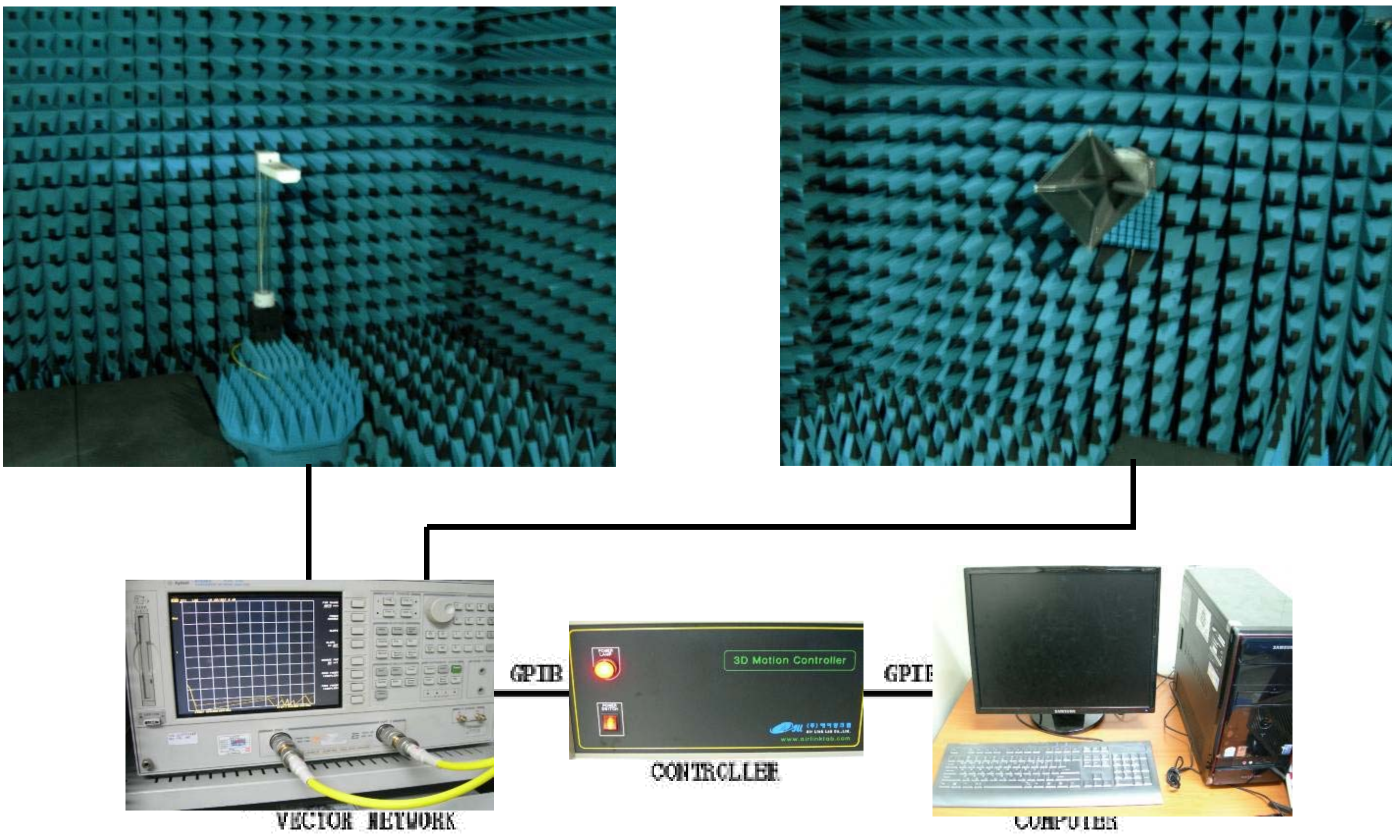
Model	Type	Rev.	DONGNAM	IR
G66	Built in Antenna		M7 SYSTEM	A

② Radiation Pattern adn Gain

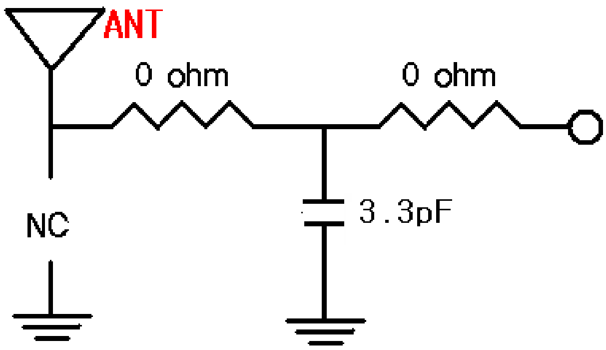
Step 1. Calibrate chamber system for gain measurement using horn antenna.
At the same time set up software program for chamber system control.

Step 2. Change over from a horn antenna to measuring antenna on target positioner

Step 3. Start a software program for chamber system control & measuring.



2.2 Electrical Specification

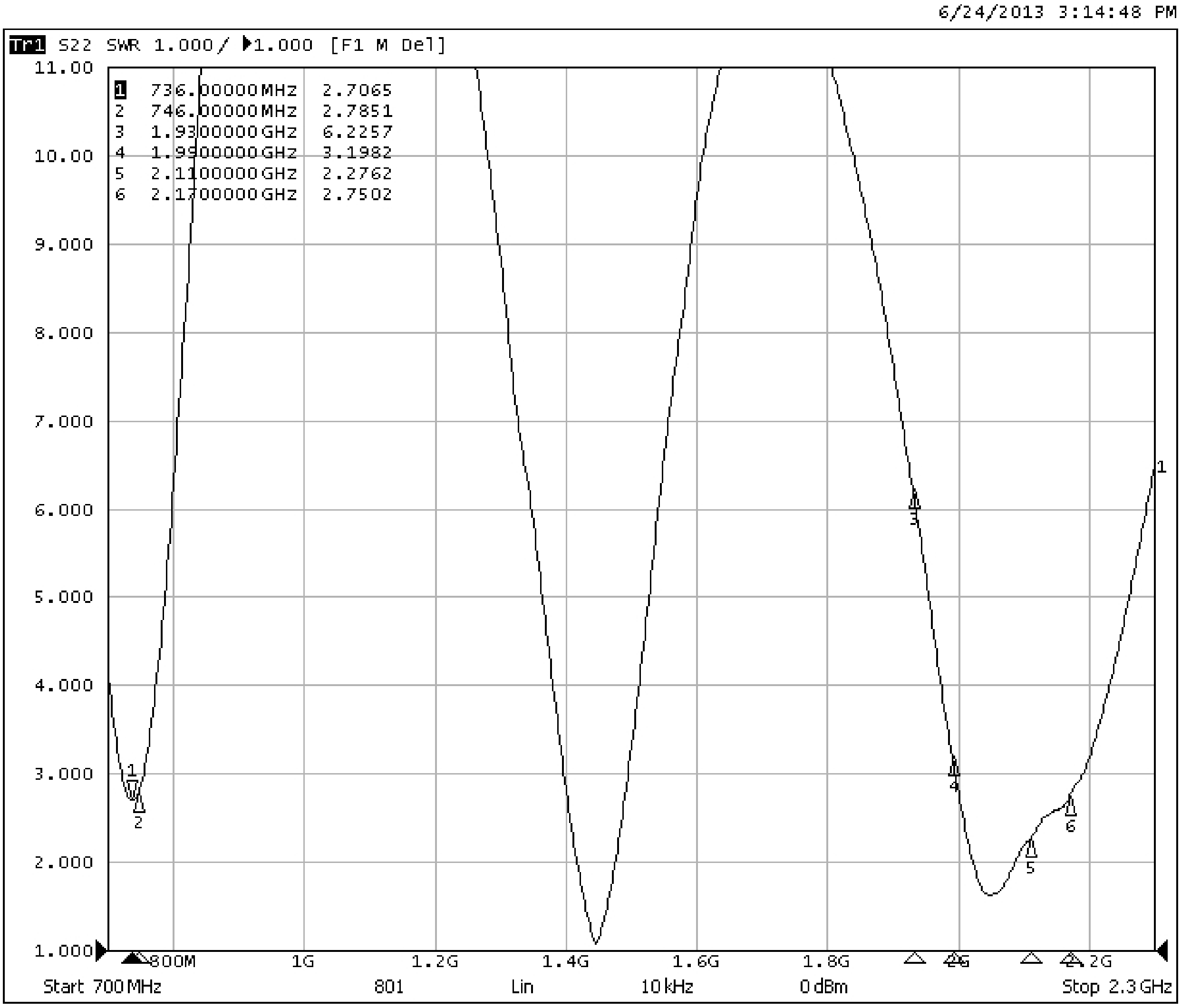
Frequency	LTE Band17 734MHz	LTE Band17 746MHz	UMTS Band 2 1930MHz	UMTS Band 2 1990MHz	UMTS Band4 2110MHz	UMTS Band4 2115MHz
VSWR	≤ 3.5	≤ 3.5	≤ 7.5	≤ 4.0	≤ 3.5	≤ 3.5
Peak Gain (dBi)	≤ -4.5	≤ -4.5	≤ -3.0	≤ -1.5	≤ -1.0	≤ -3.0
Average Gain (dBi)	≤ -7.0	≤ -7.0	≤ -9.0	≤ -7.5	≤ -5.5	≤ -7.0
Directivity	Omni-directional					
Polarization	Linear					
Matching Value						

PART NO.	
Maker Code	KIN-DIV-MS1305
DATE	2013. 06. 28
Page	7 / 9

Model	Type	Rev.	DONGNAM	IR
G66	Built in Antenna		M7 SYSTEM	A

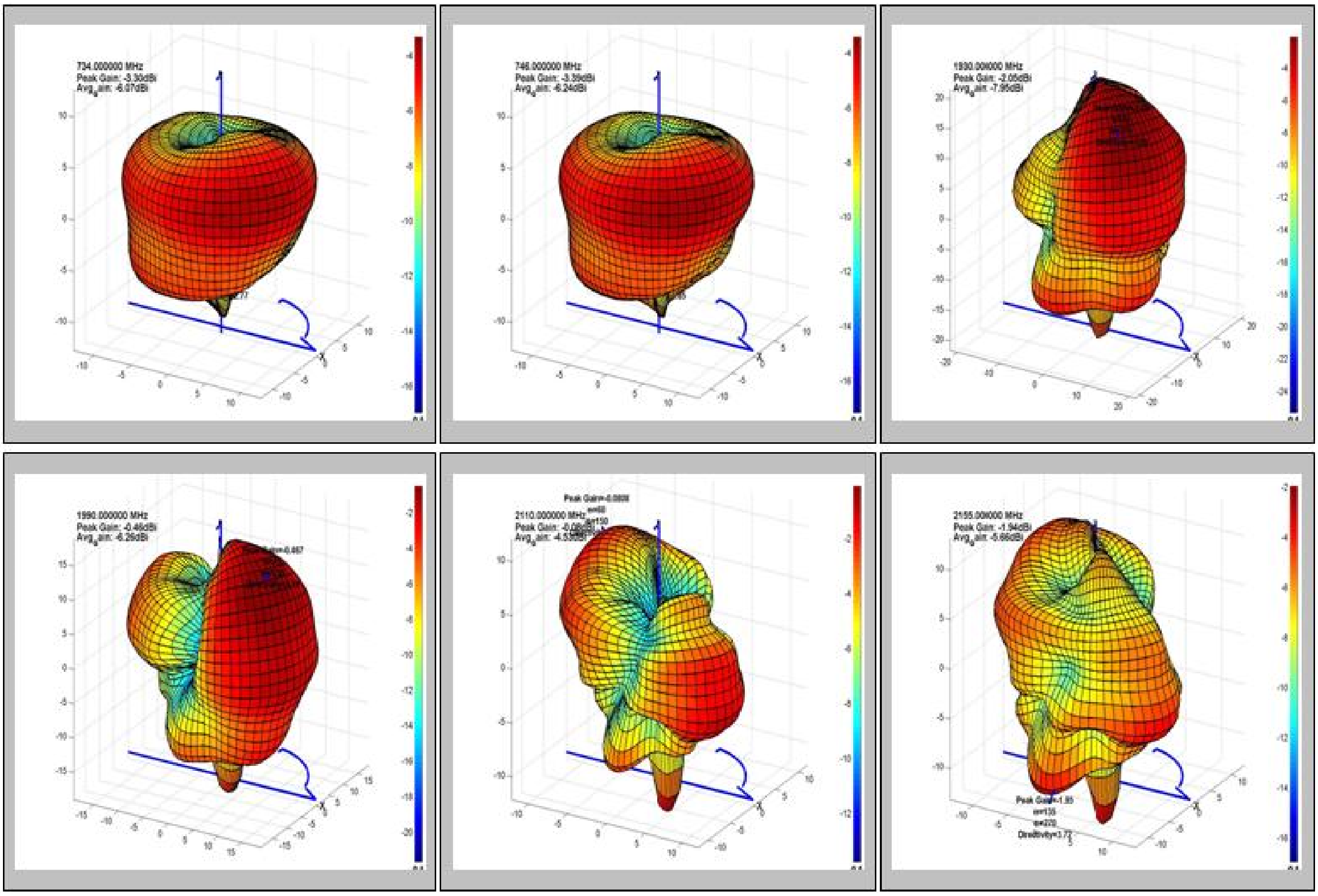
2.2.1 Electrical Spec. of Set (With VSWR)

BAR TYPE



2.2.2 Passive Gain & 3D Pattern

BAR TYPE



Frequency	Efficiency	Average Gain			Max Gain			Max Position	Directivity
		Ver	Hor	Total	Ver	Hor	Total		
734.000000 MHz	24.7 %	-13.6 dBi	-6.9 dBi	-6.1 dBi	-7.6 dBi	-4.1 dBi	-3.3 dBi	Theta135/Pie120	2.77 dB
746.000000 MHz	23.7 %	-13.6 dBi	-7.1 dBi	-6.2 dBi	-7.4 dBi	-4.6 dBi	-3.4 dBi	Theta135/Pie120	2.85 dB
1930.000000 MHz	16.0 %	-11.4 dBi	-10.6 dBi	-8.0 dBi	-5.6 dBi	-3.7 dBi	-2.1 dBi	Theta45/Pie315	5.89 dB
1990.000000 MHz	23.6 %	-11.2 dBi	-8.0 dBi	-6.3 dBi	-4.8 dBi	-2.0 dBi	-0.5 dBi	Theta45/Pie330	5.79 dB
2110.000000 MHz	35.2 %	-9.5 dBi	-6.2 dBi	-4.5 dBi	-4.3 dBi	-1.1 dBi	-0.1 dBi	Theta60/Pie150	4.46 dB
2155.000000 MHz	27.1 %	-10.4 dBi	-7.5 dBi	-5.7 dBi	-3.8 dBi	-2.7 dBi	-1.9 dBi	Theta135/Pie270	3.72 dB

PART NO.	
Maker Code	KIN-DIV-MS1305
DATE	2013. 06. 28
Page	9 / 9

Model	Type	Rev.	DONGNAM	IR
G66	Built in Antenna		M7 SYSTEM	A

3. Mechanical Specification

3.1 Assy Drawing