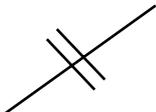


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Antenna Specifications

Product Name	: CDMA PTI 11 Main Antenna
Product Part/No	: 3357276
Customer Model	: CDMA PTI 11
Customer Part/No	:
Customer	: Pantech. Co., Ltd.
Date	: 2011-04-29

		DRAFTING	CHECK	CHECK	APPROVAL
		DYKTX	RF Engineer		
	04/29			04/29	
DYKTX	Design Engineer				
		04/29		04/29	

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TEL : 82-32-676-9224 FAX : 82-32-546-4797



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1, Document Change Record

Rev. No	Rev. Date	Page	History	Drafter
1	-	-	-	-
2	-	-	-	-

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2. List of Material

	Raw Material	Material Supplier	Tooling & Injection	Finishing & Spec.	Remark
Carrier	PC(SC1004,KPA1)	LG CHMISTRY	QDM	-	-
Radiator	STS304 3/4H (t=0.15)	POONGSAN	Deayoung KTX	-	-
Assembly	Tolerance of heat staking height should not bk over 0.6mm the surface of pattern				

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3. Electrical & Mechanical Specifications

3.1. Electrical Specifications

Frequency Range	USC		JCDMA		IMT-2000	
	TX(824~849MHz)	RX(869~894MHz)	TX(898~925MHz)	RX(843~870MHz)	TX(1920~1980MHz)	RX(2110~2170MHz)
Peak gain	-0.4dBi(max, at824MHz)	-0.5dBi(max, at870MHz)	-0.3dBi(max, at898MHz)	-0.6dBi(max, at843MHz)	-0.3dBi(max, at1920MHz)	-0.8dBi(max, at2130MHz)
VSWR	3.0:1 below(at 824Mhz)		3.0:1 below(at 925Mhz)		3.0:1 below(at 2110Mhz)	
Impedance	50Ω					
Polarization	Linear					
Radiation pattern	Omni-directional					
Power Handling	2 Watt					

3.2. Mechanical Specifications

Connector	Contact Type
Dimension	55.2(W) x 11.32(H) x 4.65(D)
Operating Temperature	-30℃ ~ +80℃
Weight	2.0g

3.3. Package

Name	Quantity	Material	Remark
Tray	50EA	P.S(0.5t)	N/A
Carton BOX	1000EA	DW 2 Branches(AB)	N/A

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4. Electrical properties

4.1. Test equipment

The equipment for the antenna measurement we used is as follows.

4.1.1. Agilent 8753 Series Network Analyzer to measure the V.S.W.R and input impedance.

4.1.2. Three-dimensional anechoic chamber to measure the gain

(Standard dipole and horn were used to calibrate the chamber)

4.1.3. Digital caliper to measure the dimensions.

4.1.4. Climatic chamber for mechanical tests.

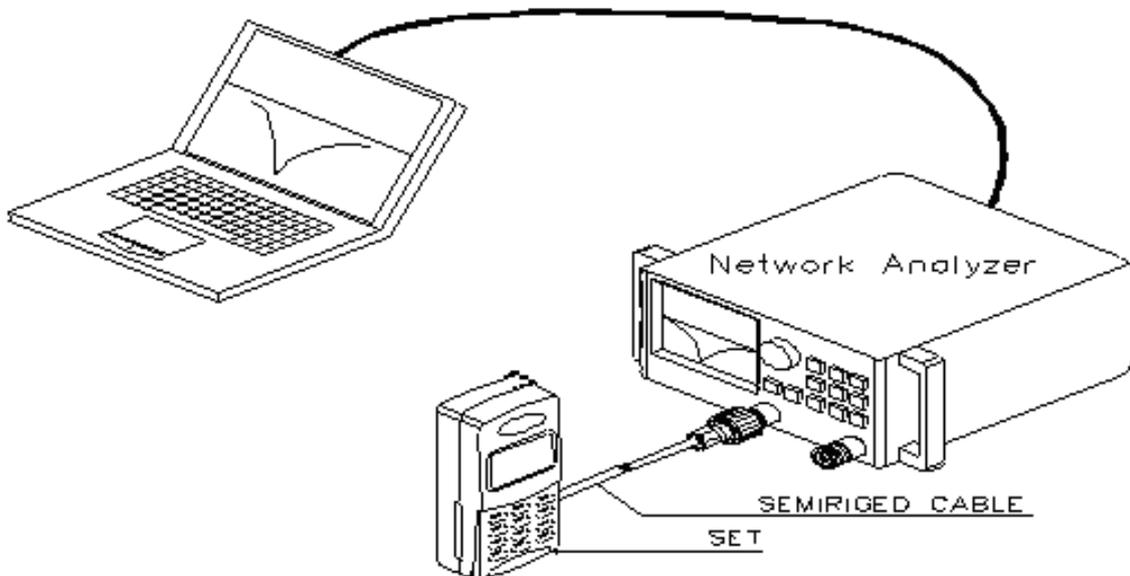
4.1.5 Test environment

Standard temperature : 15°C ~ 25°C (Normal state : 20°C)

Relative humidity 25% ~ 80%, Air pressure : 86 ~ 106 kPa

4.2. V.S.W.R

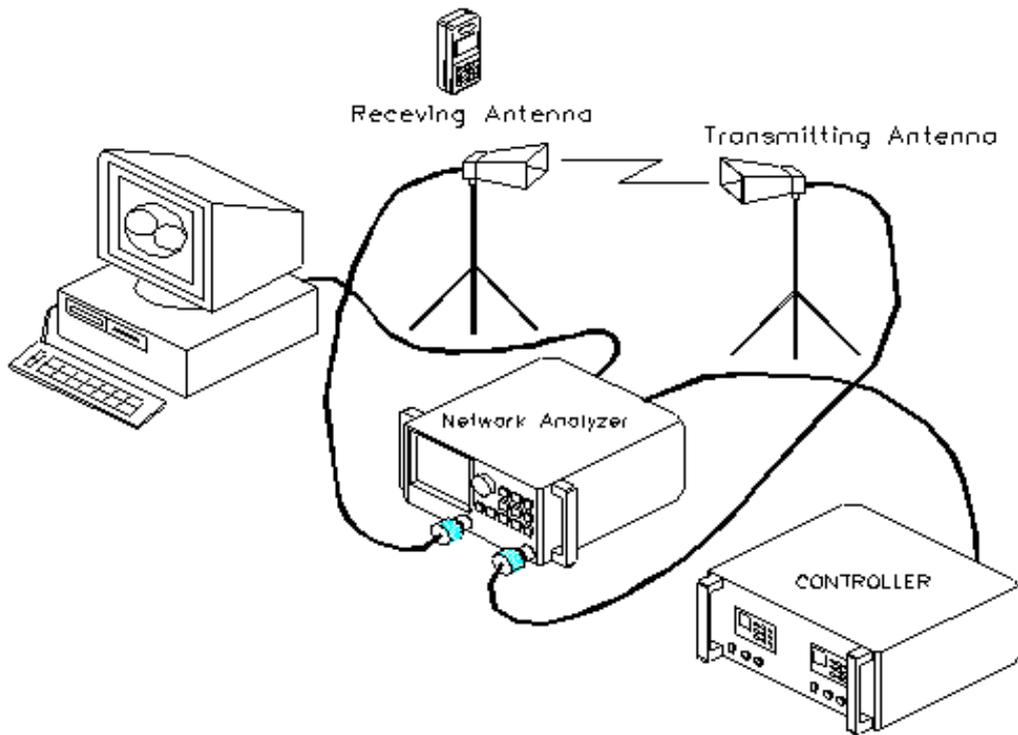
The VSWR characteristics must satisfy the electrical demands. The VSWR is measured with Agilent 8753 Series network analyzer. All the measurements are performed with the customer provided fixture.



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4.3. Radiation pattern and gain

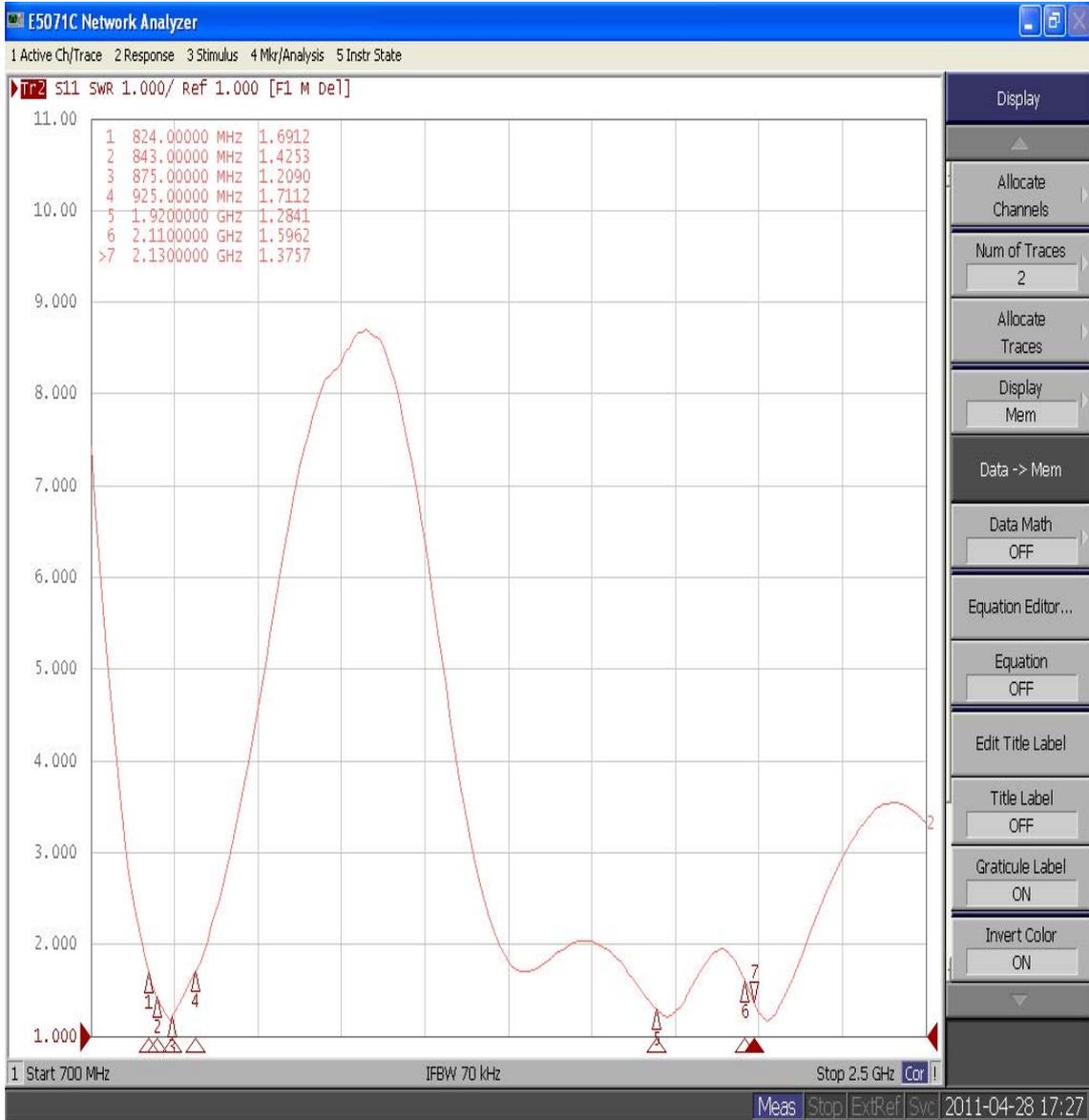
Radiation pattern of this antenna has Omni-directional specification in H-Plane. Antenna gain is satisfied with customer demand based on SET after calibration with standard horn antenna.



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5. Measurement Data

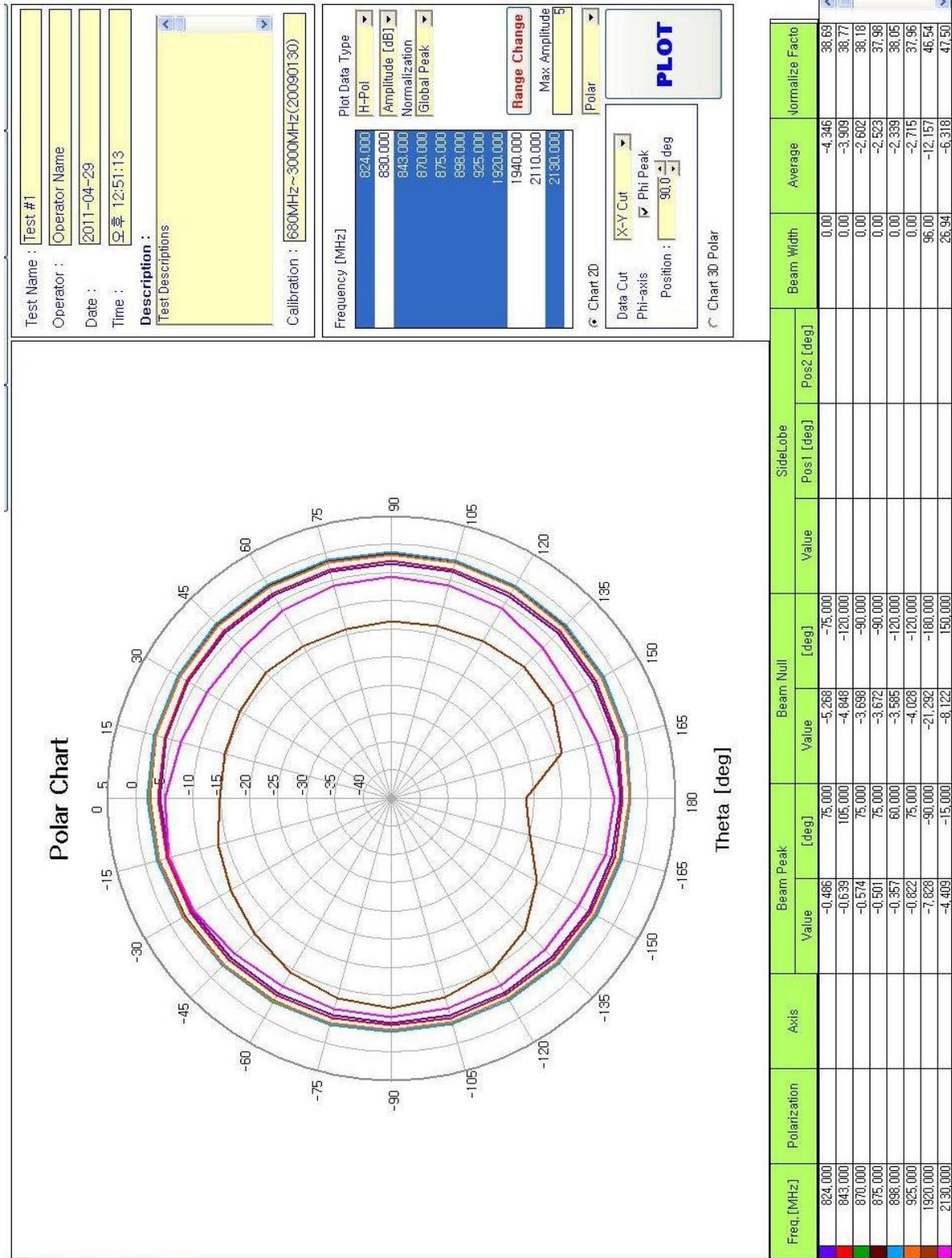
5.1. V.S.W.R



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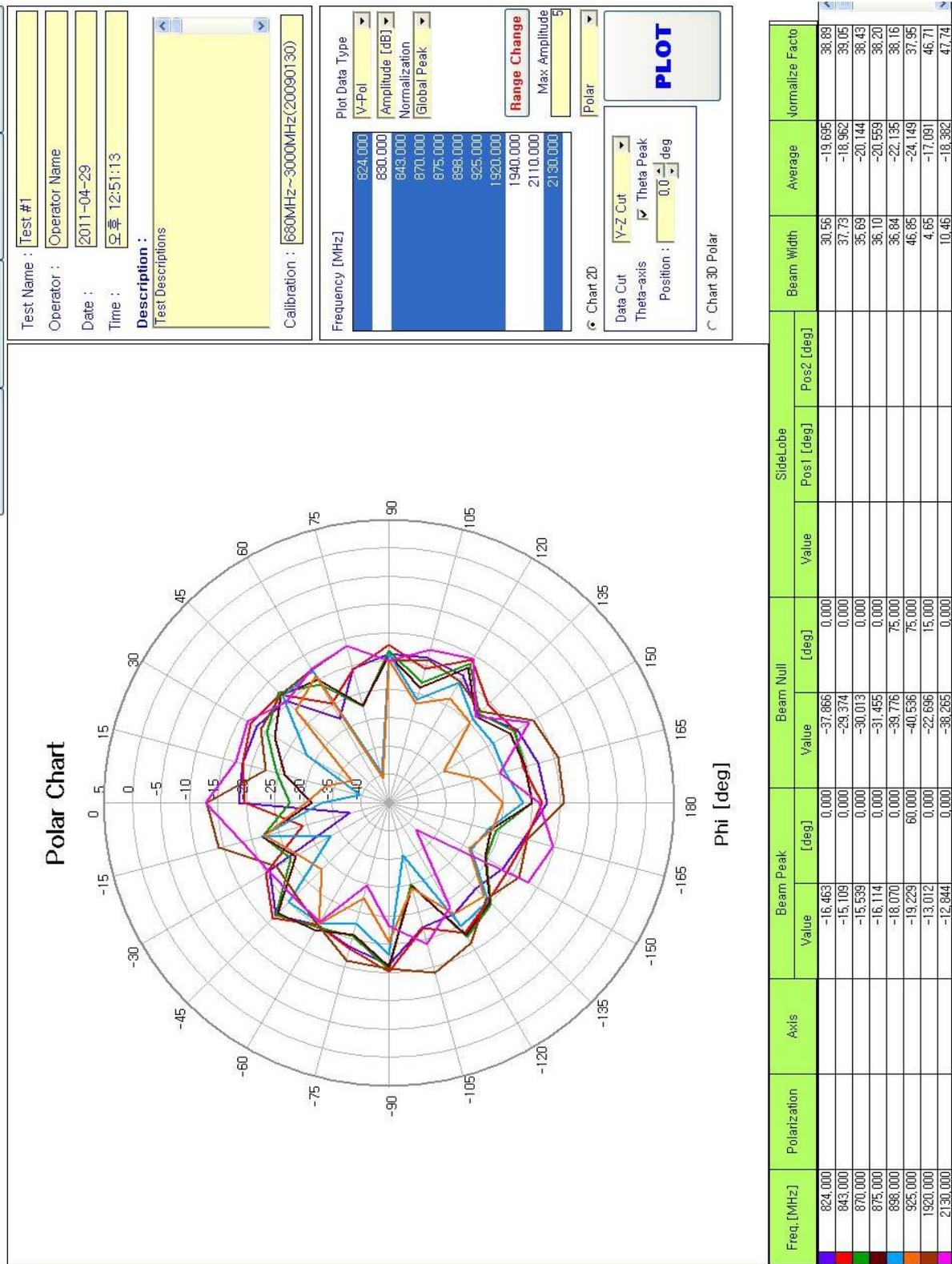
5.2. Radiation pattern

Azimuth pattern theta=90(USC/JCDMA/IMT-2000)



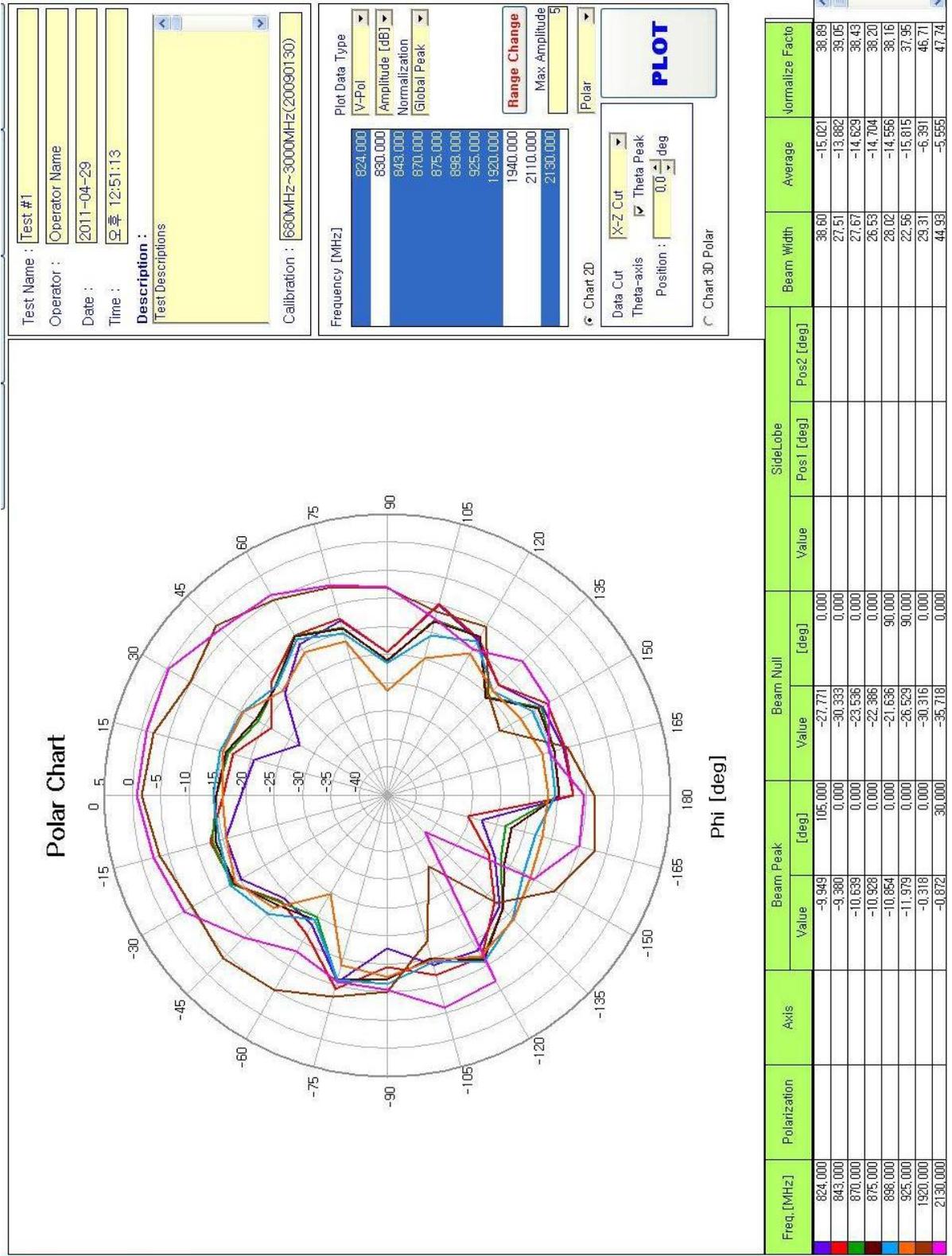
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Elevation pattern phi=0(USC/JCDMA/IMT-2000)



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Elevation pattern phi=90(USC/JCDMA/IMT-2000)



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6. Mechanical Drawing

6.1. Assembly

