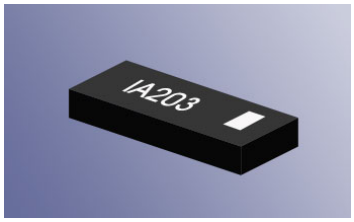
2.4G Band ANT Solution

2.4GHz Antenna **P/N: IA2 0 3**

Version: B **Date: Mar. 31, 08'**

※SPECIFICATIONS

2.4G Antenna	
Frequency	2.4~2.483GHz
Dimension	5.2×2×1.2mm
Polarization	Linear
Pattern	Omni-Directional
Impedance	50Ω
Operating Temperature	-25 ~ +85°C

※KEY FEATURES

- Ultra-Thin, Light Weight (0.03g)
- Good Performance (Typical Gain=2 dBi)
- Cost-Effective
- SMD Type

※APPLICATIONS

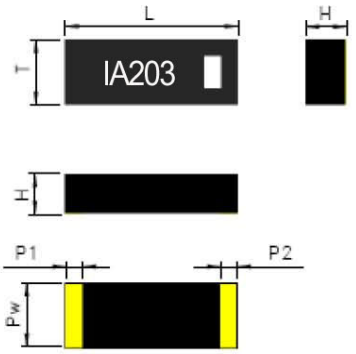
- Blue Tooth
- IEEE 802.11b/g
- ZigBee
- WiFi

2.4G Band ANT Solution

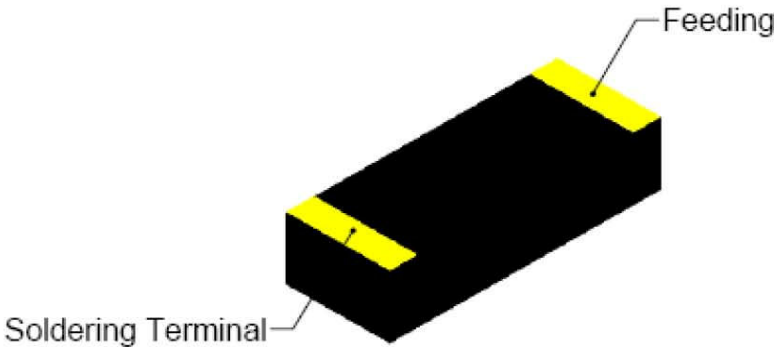
2.4GHz Antenna **P/N: IA2 0 3**

Version: B **Date: Mar. 31, 08'**

※Dimensions

Figure	Dimension		Pad Definition
	L	5.2±0.1mm	-
	T	2±0.1mm	-
	H	1.2±0.2mm	-
	Pw	2±0.1mm	Pad Width
	P1	0.5±0.1mm	Soldering Terminal
	P2	0.5±0.1mm	Feeding

※Construction (unit :mm)

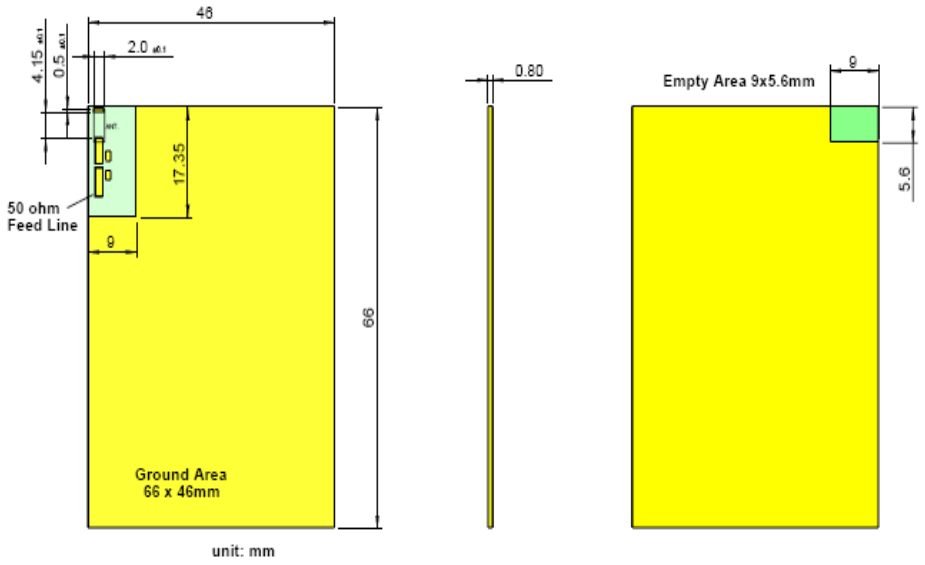


2.4G Band ANT Solution

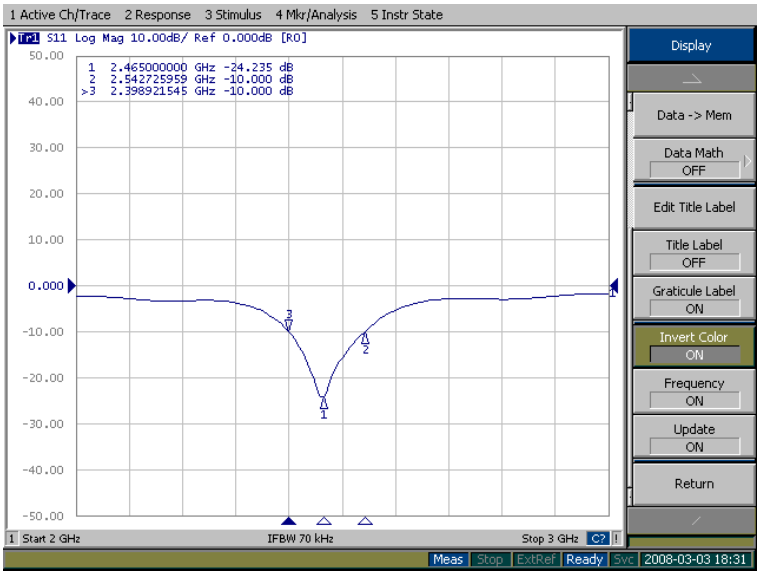
2.4GHz Antenna **P/N: IA2 0 3**

Version: B **Date: Mar. 31, 08'**

※Empty Area



※S11



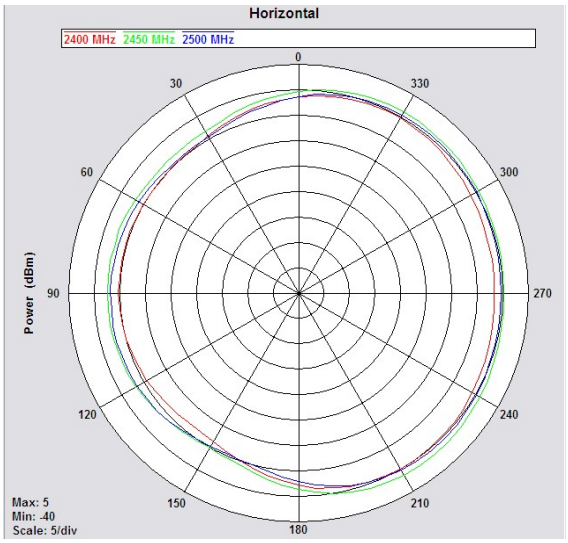
Remark: The test based on 2.4GHz ANT with EVB

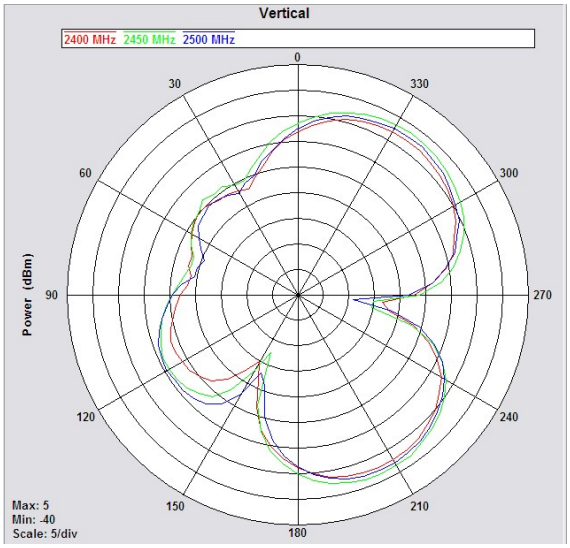
2.4G Band ANT Solution

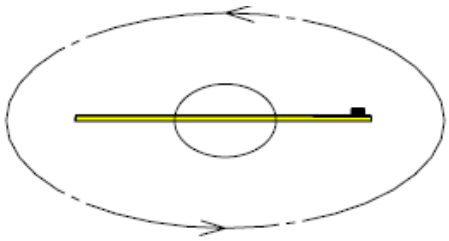
2.4GHz Antenna **P/N: IA2 0 3**

Version: B **Date: Mar. 31, 08'**

※ Gain Pattern (X-Z PLANE)







X-Z PLANE

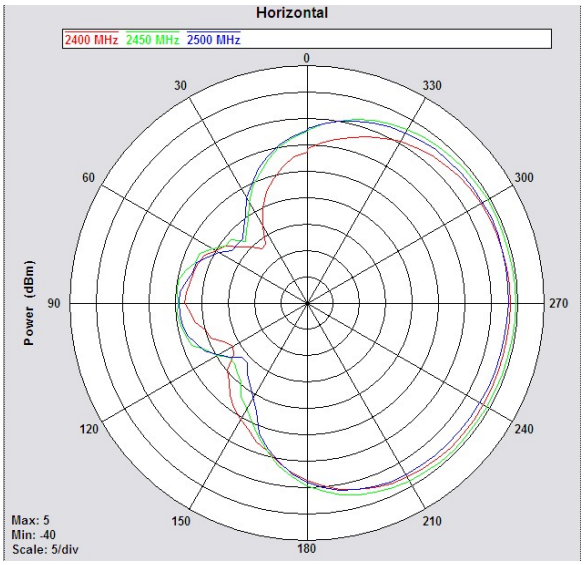
Remark: The test based on 2.4GHz ANT with EVB

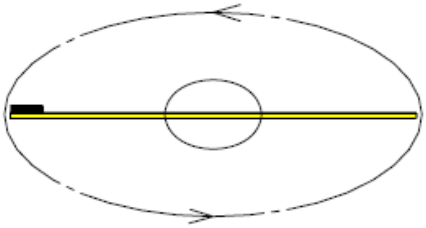
2.4G Band ANT Solution

2.4GHz Antenna **P/N: IA2 0 3**

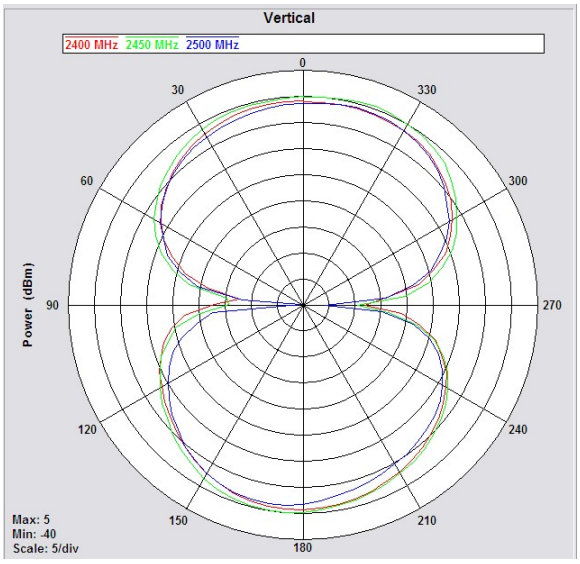
Version: B **Date: Mar. 31, 08'**

※ Gain Pattern (Y-Z PLANE)





Y-Z PLANE



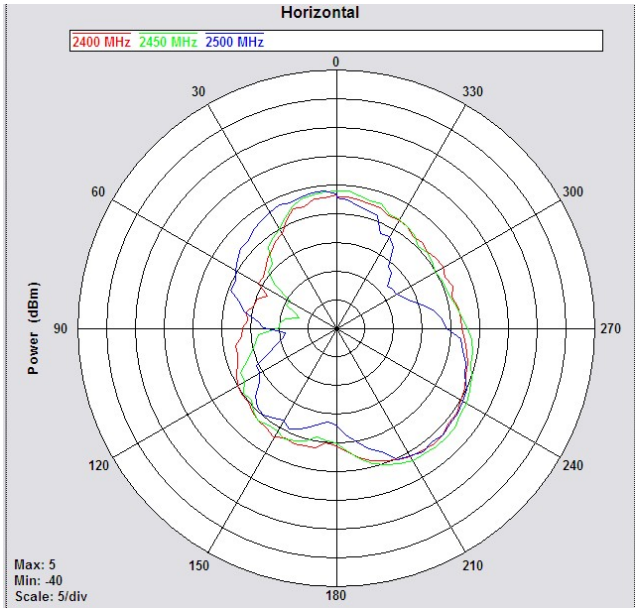
Remark: The test based on 2.4GHz ANT with EVB

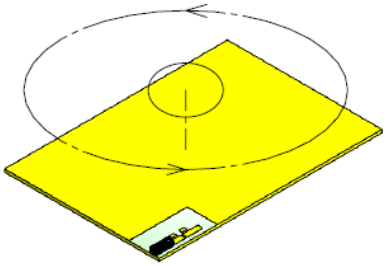
2.4G Band ANT Solution

2.4GHz Antenna **P/N: IA2 0 3**

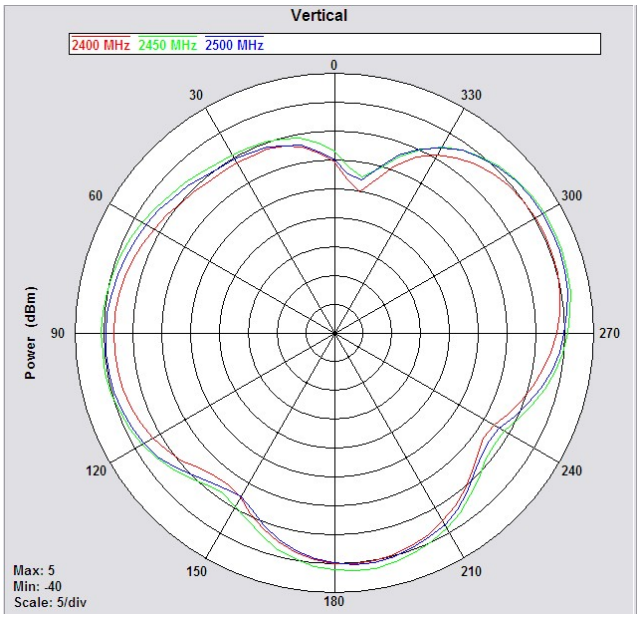
Version: B **Date: Mar. 31, 08'**

※Gain Pattern (X-Y PLANE)





X-Y PLANE



Remark: The test based on 2.4GHz ANT with EVB

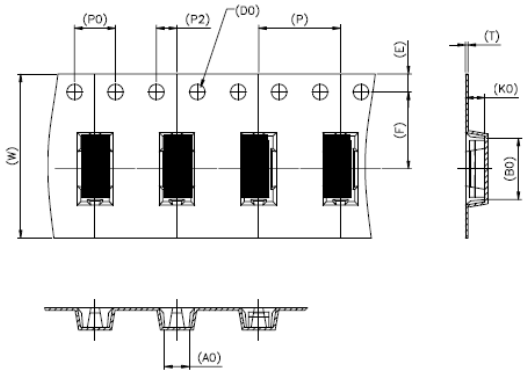
2.4G Band ANT Solution

2.4GHz Antenna **P/N: IA2 0 3**

Version: B **Date: Mar. 31, 08'**

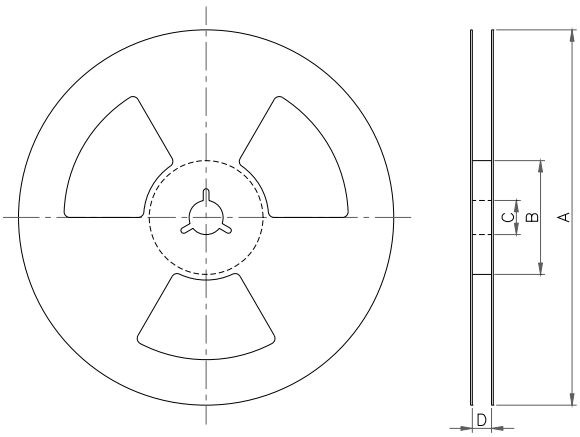
※Packing

Plastic Tape Specification (unit: mm)



Index	W	E	F	T	P	K0
Dimension(mm)	16.00 ± 0.30	1.75 ± 0.10	7.50 ± 0.10	0.25 ± 0.05	8.00 ± 0.10	1.90± 0.10
Index	P0	P2	D0	A0	B0	
Dimension(mm)	4.00 ± 0.10	2.00 ± 0.10	Φ1.50	2.40 ± 0.10	6.00 ± 0.10	

※Reel Dimensions



Index	A	B	C	D
Dimension(mm)	Φ330	Φ100	Φ13.5	17.0 ± 0.5

Taping Quantity: MOQ=4K pieces per 13" reel.

(주)유경테크놀로지스　귀중

승 인 원

품　　명	GSM/DCS/PCS/WCDMA 송·수신용 Swivel Antenna
모　　델	S10
코드번호	KRM-S5-G2DPW-0905
승인번호	
업체담당	김 종 훈 대리
조　　건	가.
	나.
	다.
	라.

상기 제품에 대해 승인합니다.

	구 분	담 당	검 토	승 인
공급업체	전 자			
	기 구			
승　　인	구 분	담 당	검 토	승 인
	전 자			
	기 구			
	승인일자	년　　월　　일		

제출일: 2009년05월 28일

공 급 업 체 정 보	
상 호	(주)맥스웨이브아이
주 소	서울시 금천구 가산동 월드 메르디앙벤처 센터 1202호
TEL	02-785-2777
FAX	02-785-2744

업체 대표 직인

목 차

1. 개 요

본 제품은 GSM/DCS/PCS/WCDMA 송·수신용 Swivel 안테나이다.

1.1 안테나 사용 조건

■휴대 □고정 ■이동 ■실외 ■실내 □기타

1.2 적용범위

본 사양승인원은 귀사에서 개발 혹은 생산되는, 시스템에 장착되어 사용하는 GSM/DCS/PCS/WCDMA 송·수신용 Swivel 안테나에 대하여 규정한다.

2. 안테나 구성

No.	부품명	MODEL	Q'ty	비고
1	송·수신용 Antenna	KRM-S5-G2DPW-0905	1	승인도 참조
2	Antenna Matching 단		1	0Ω

3. 특 성

3.1 전기적 특성								
Frequency(Mhz)			824	894	960	1710	1850	1990	2170
VSWR			2.53:1	3.69:1	3.66:1	3.62:1	2.11:1	1.87:1	1.32:1
Gain [dBi]	H Plane	Peak	-1.74	-1.87	-1.66	-3.01	-1.63	-2.87	-3.22
		Average	-2.96	-3.41	-2.31	-5.33	-4.08	-4.95	-7.22
	E1 Plane	Peak	-7.29	-5.04	-3.21	-6.8	-3.26	-1.14	-3.69
		Average	-8.39	-7.29	-5.16	-10.2	-7.21	-5.77	-7.48
	E2 Plane	Peak	-11.3	-12.5	-11.0	-15.1	-9.61	-10.3	-11.1
		Average	-14.8	-16.5	-15.3	-19.8	-12.3	-13.6	-17.3
Polarization			Vertical						
Impedance [Ω]			50						
Temperature			-30°C ~ +85°C						

4. 전기적 특성시험

4.1 네트워크 측정

4.1.1 시험조건

(1)V.S.W.R. 측정을 위한 Network Analyzer 준비.
(2)Rod Cable 준비.
(3)Test용 Zig 준비.
(4)Calibration Kit 준비.

4.1.2 시험절차

4.1.2.1 주파수 범위 설정.

Network Analyzer (E5071B)의 주파수 범위를 824[MHz] ~ 2170[MHz]로 한다.

4.1.2.2 Calibration 방법 및 측정

■ OPEN Cal Kit으로 Calibration.
■ SHORT Cal Kit으로 Calibration.
■ 50(Ω) TERMINATION으로 Calibration.

4.1.2.3 Test시료의 V.S.W.R. 측정.

Test 시료와 Network Analyzer를 연결한 상태에서 거리를 약 30[cm]두고, V.S.W.R.을 측정한다.

(그림1) Network Analyzer **E5071C**

(그림2) **테스트 시료**

(그림3) Calibration Kit **85033D**

(그림4) 네트워크 측정 시 연장 Cable

4.2 무반사실 측정

4.2.1 시험조건

■ CHAMBER SIZE
10m(D) * 5m(W) * 5m(H)

■ 송수신 안테나 거리 : 6.5m

■ 송수신 안테나 높이 : 3m

■ 송신안테나를 수직으로 놓는다.

■ Vertical Gain 측정 : 단말시료를 Test Zig 이용하여 수직으로 세운 후, LCD 정면이 송신안테나를 바라봤을 때를 0°로 기준하여 시계방향으로 360° 회전시켜 Gain을 측정한다.

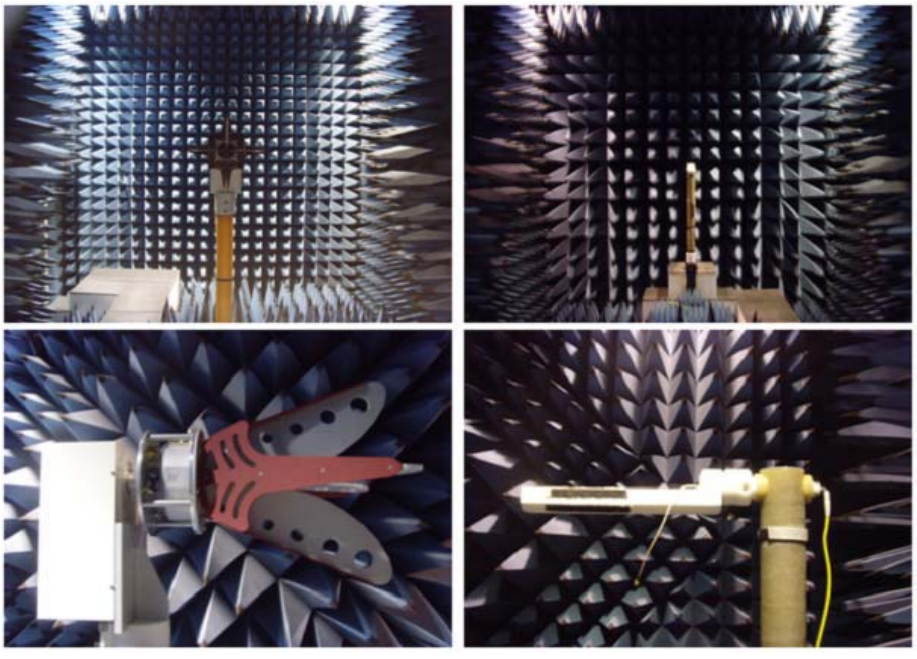
■ Horizontal Gain 측정 :
(1)Test 단말 LCD가 위를 향하도록 수평으로 놓는다.
(2)Test 단말 안테나가 송신안테나 방향으로 바라보도록 놓는다.
(3)위의 (1),(2)를 만족할 때를 0°로 기준하여 시계방향으로 360° 회전시켜 Gain을 측정한다.

4.2.2 시험절차

■송신안테나를 높이 2m에 수직으로 배치한 다음, Network Analyzer에 연결한다.

■ Test 시료로 송신안테나와 일직선상에 배치한 다음 높이를 3m에 고정시킨다.

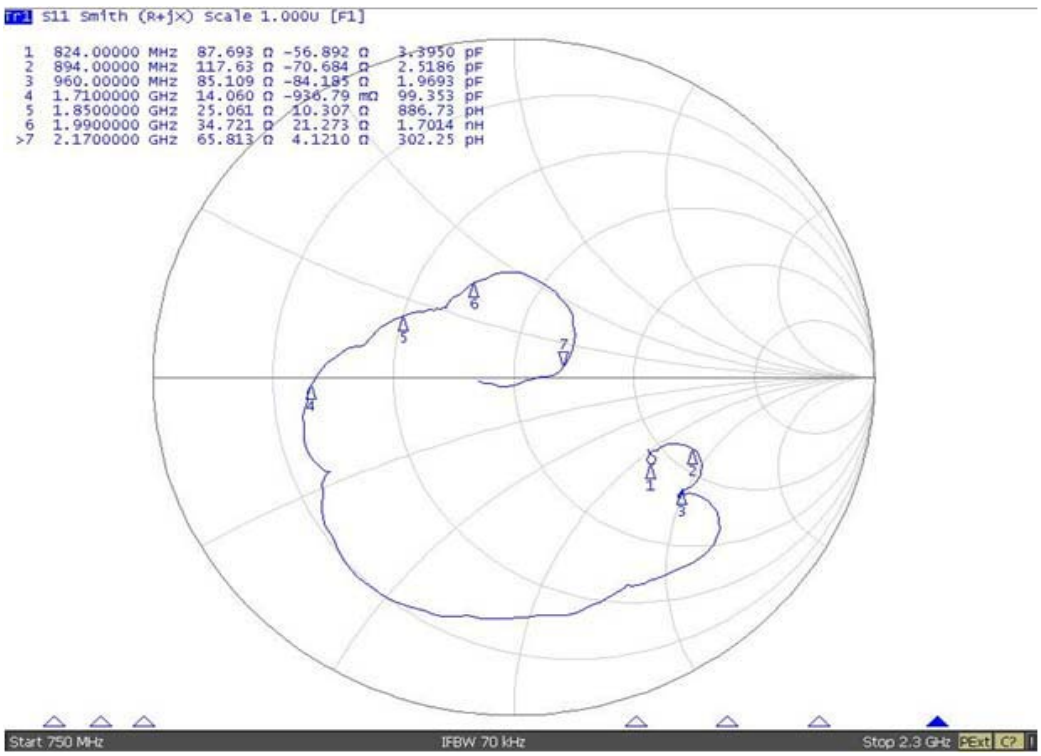
■ Turn Table을 시계방향으로 10° 간격으로 돌리며 Gain을 측정한다.



4.3 시험결과 [NETWORK DATA]

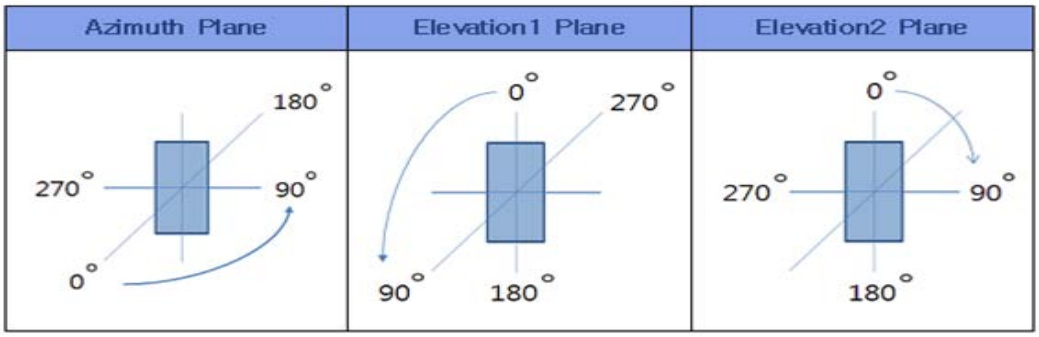
4.3.1 In Put Return Loss (반사손실)

4.3.2 SMITH CHART



4.3.2 VSWR(정재파비)

4.4 방사패턴



4.5 2D Passive Chamber Data

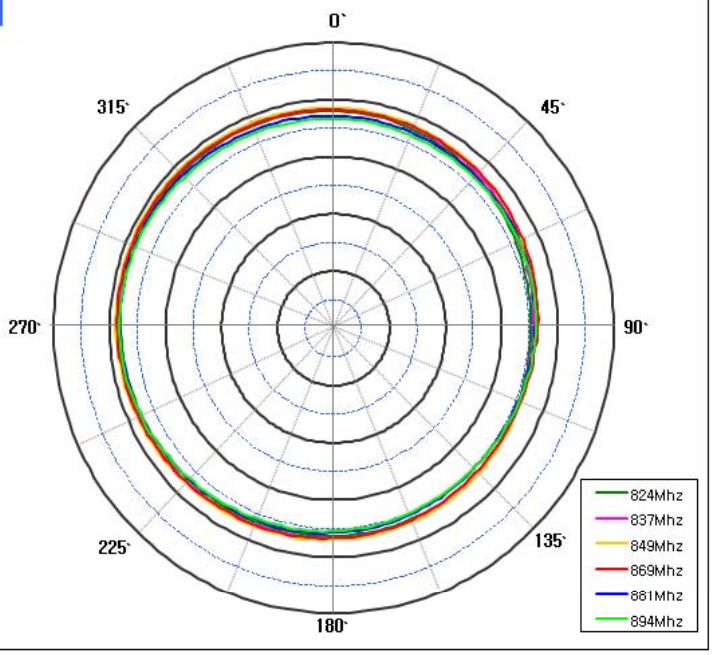
4.5.1 GSM850

- Azimuth Plane

Gain & Radiation Pattern

Model Name:	FileName
Test Band :	GSM850
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
824Mhz	-1.74	-4.76	-2.96	306`
837Mhz	-1.24	-4.42	-2.52	300`
849Mhz	-1.00	-4.13	-2.24	292`
869Mhz	-1.22	-4.26	-2.45	294`
881Mhz	-1.81	-4.95	-3.20	286`
894Mhz	-1.87	-5.07	-3.41	272`

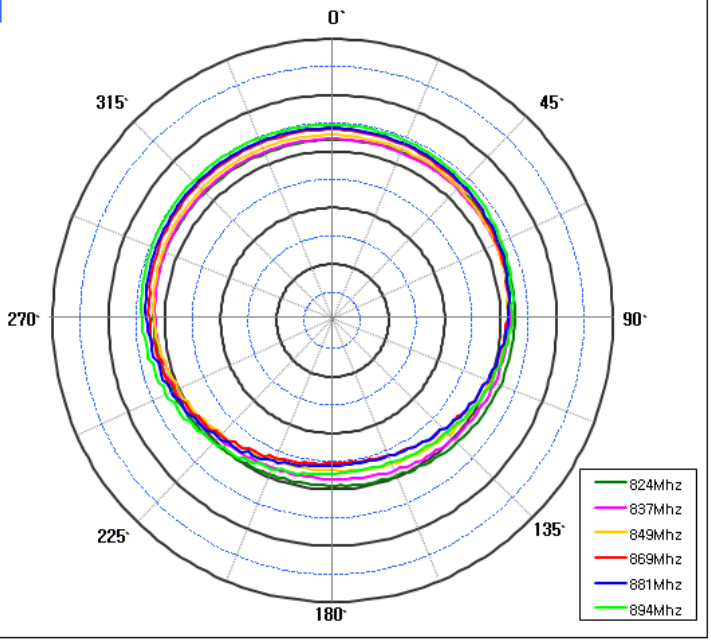


- Elevation1 Plane

Gain & Radiation Pattern

Model Name:	FileName
Test Band :	GSM850
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
824Mhz	-7.29	-10.69	-8.39	62`
837Mhz	-7.68	-11.91	-8.85	316`
849Mhz	-7.00	-13.32	-8.83	324`
869Mhz	-6.01	-14.59	-8.33	324`
881Mhz	-5.69	-14.23	-8.03	318`
894Mhz	-5.04	-12.91	-7.29	318`

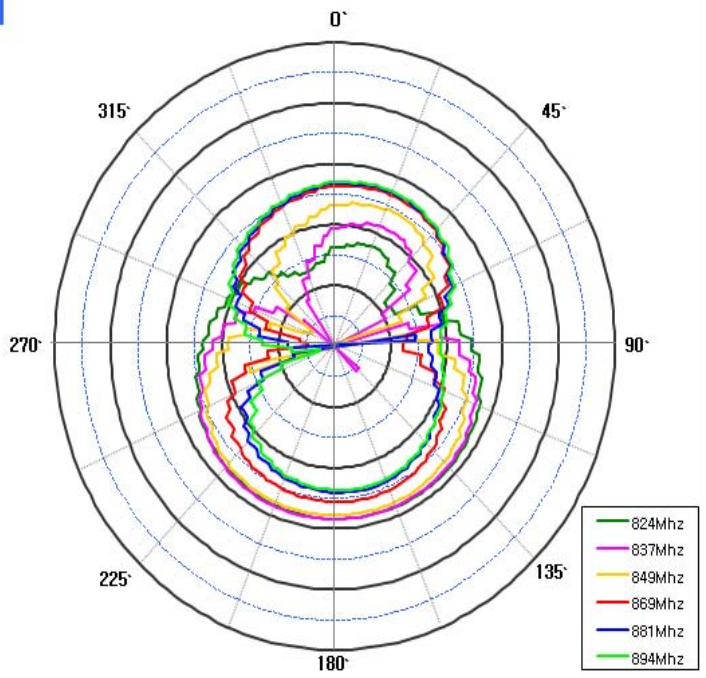


- Elevation2 Plane

Gain & Radiation Pattern

Model Name:	FileName
Test Band :	GSM850
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
824Mhz	-11.31	-28.54	-14.80	146`
837Mhz	-11.47	-45.69	-15.00	160`
849Mhz	-12.13	-55.57	-15.50	160`
869Mhz	-13.15	-35.26	-16.30	24`
881Mhz	-12.81	-54.45	-16.70	16`
894Mhz	-12.55	-37.36	-16.50	16`



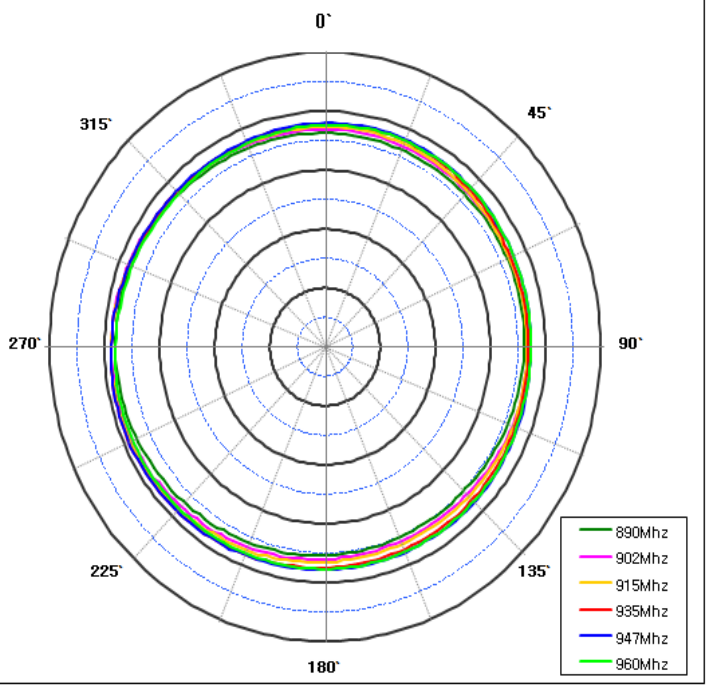
4.5.2 GSM900

- Azimuth Plane

Gain & Radiation Pattern

Model Name:	FileName
Test Band :	GSM900
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
890Mhz	-1.93	-5.13	-3.55	272`
902Mhz	-1.19	-4.37	-2.86	266`
915Mhz	-1.02	-3.90	-2.62	258`
935Mhz	-0.90	-3.21	-2.22	244`
947Mhz	-0.92	-2.72	-1.99	252`
960Mhz	-1.66	-2.77	-2.31	246`

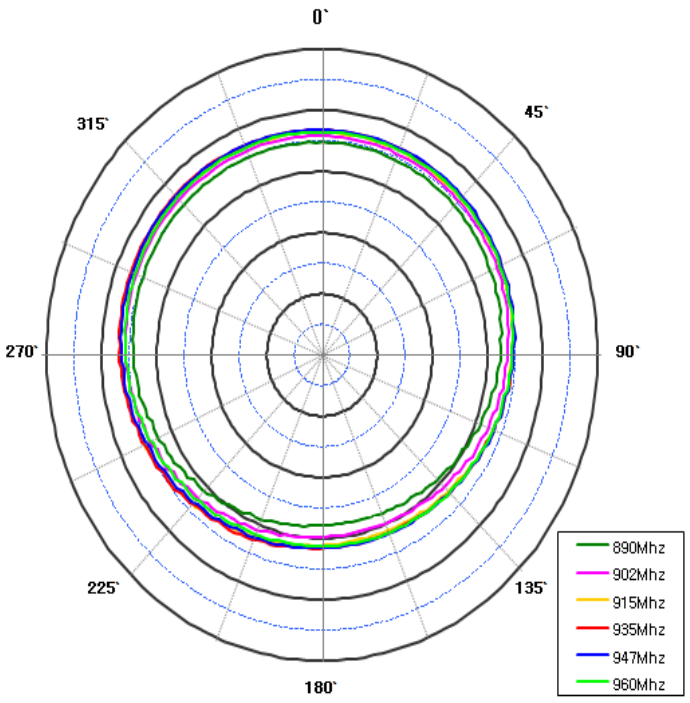


- Elevation1 Plane

Gain & Radiation Pattern

Model Name:	FileName
Test Band :	GSM900
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
890Mhz	-4.84	-12.31	-7.02	312`
902Mhz	-3.67	-10.46	-5.74	304`
915Mhz	-2.93	-9.15	-4.94	304`
935Mhz	-2.63	-8.64	-4.63	306`
947Mhz	-2.76	-8.60	-4.71	312`
960Mhz	-3.21	-8.82	-5.16	320`

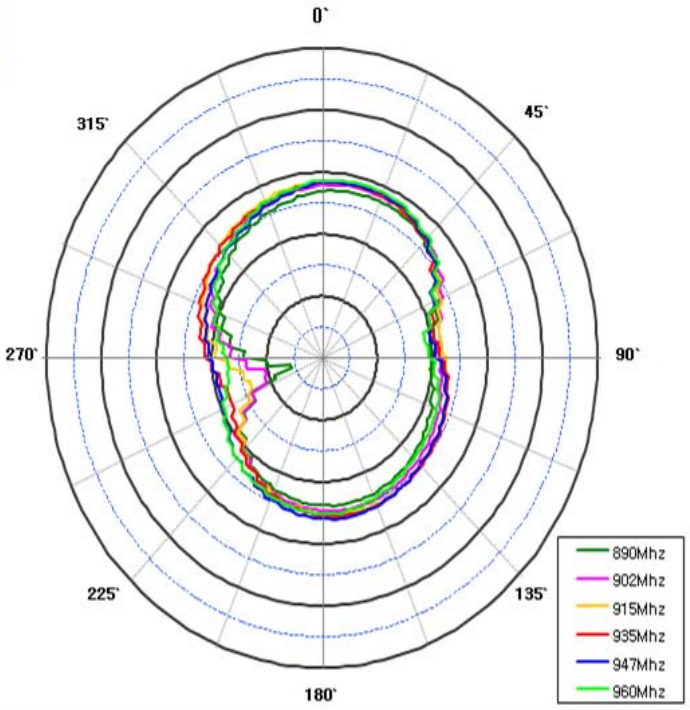


- Elevation2 Plane

Gain & Radiation Pattern

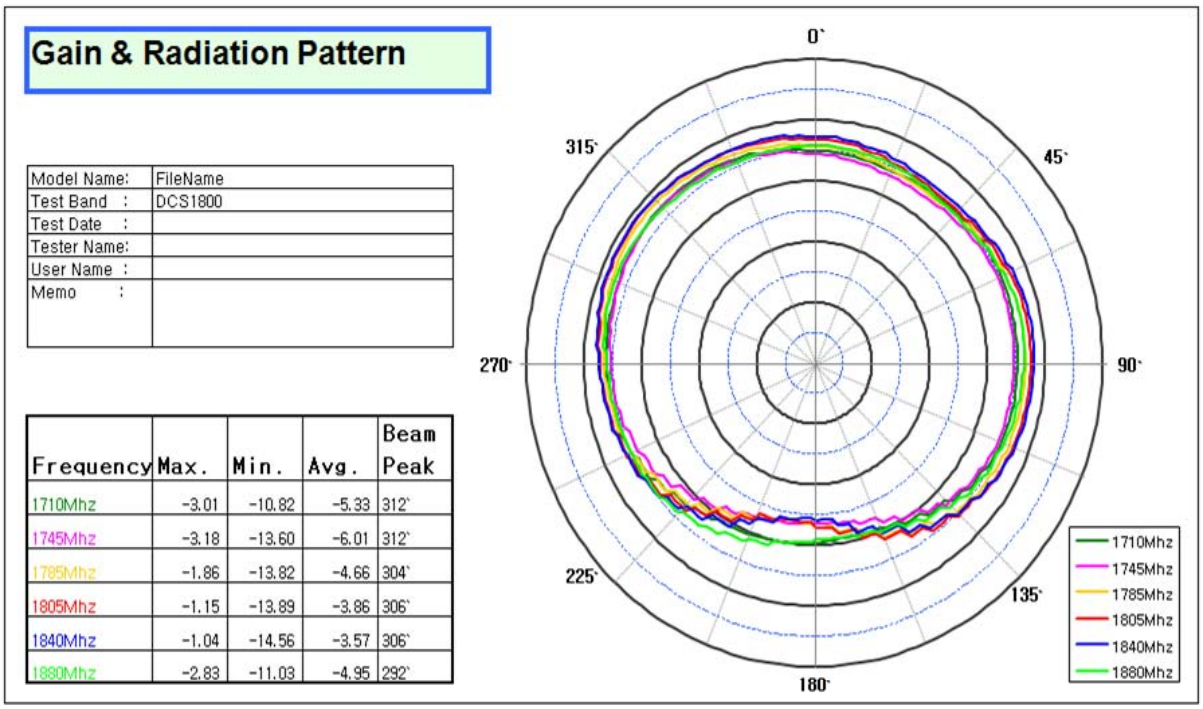
Model Name:	FileName
Test Band :	GSM900
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
890Mhz	-12.61	-34.15	-16.50	18`
902Mhz	-11.78	-29.52	-15.50	18`
915Mhz	-11.35	-26.33	-15.00	10`
935Mhz	-11.46	-22.10	-15.00	12`
947Mhz	-11.37	-20.65	-15.00	18`
960Mhz	-11.01	-22.88	-15.30	20`

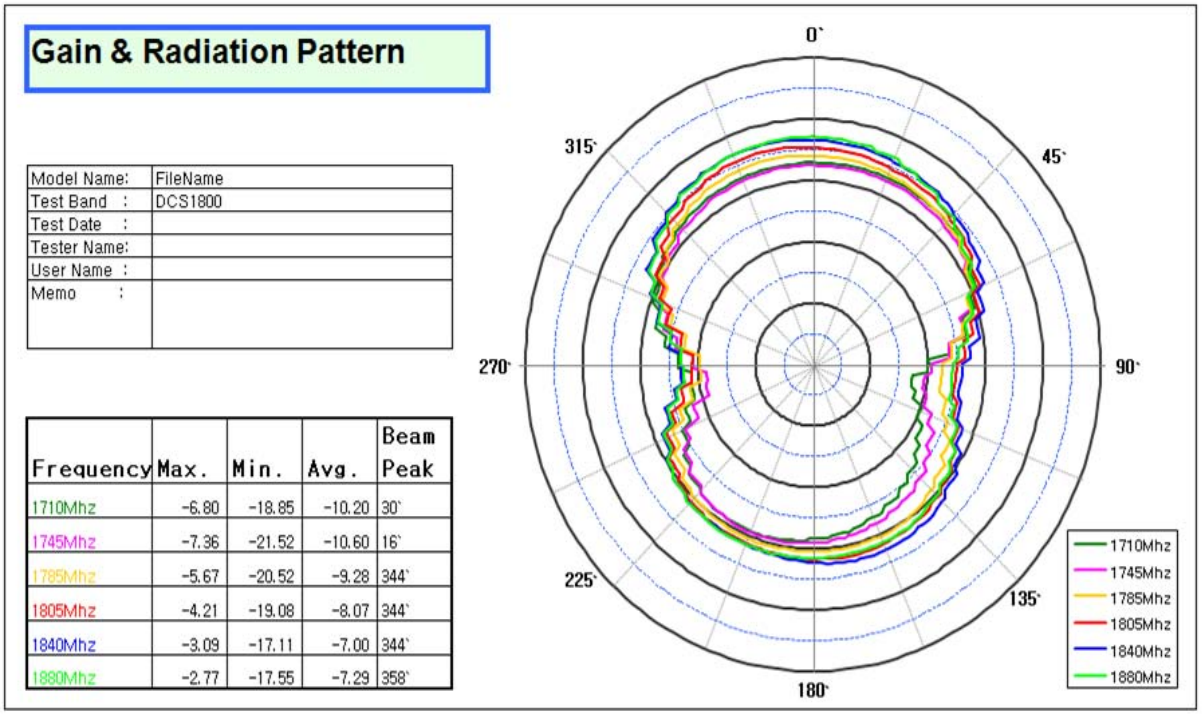


4.5.3 DCS1800

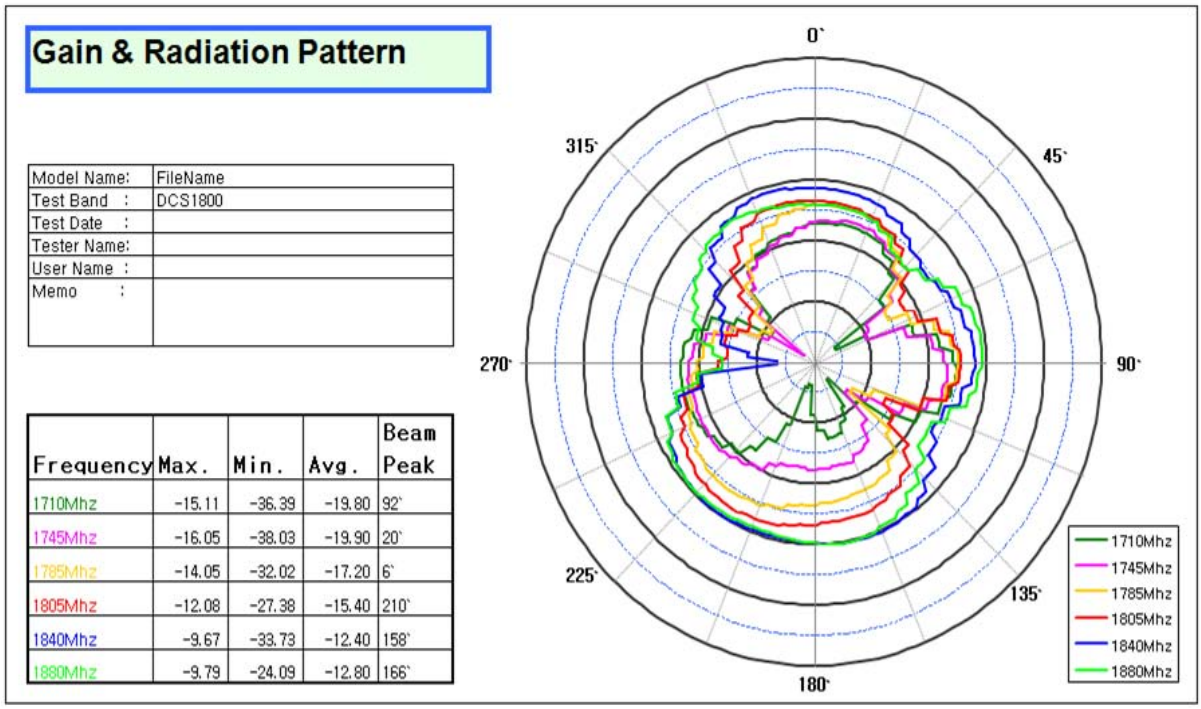
- Azimuth Plane



- Elevation1 Plane

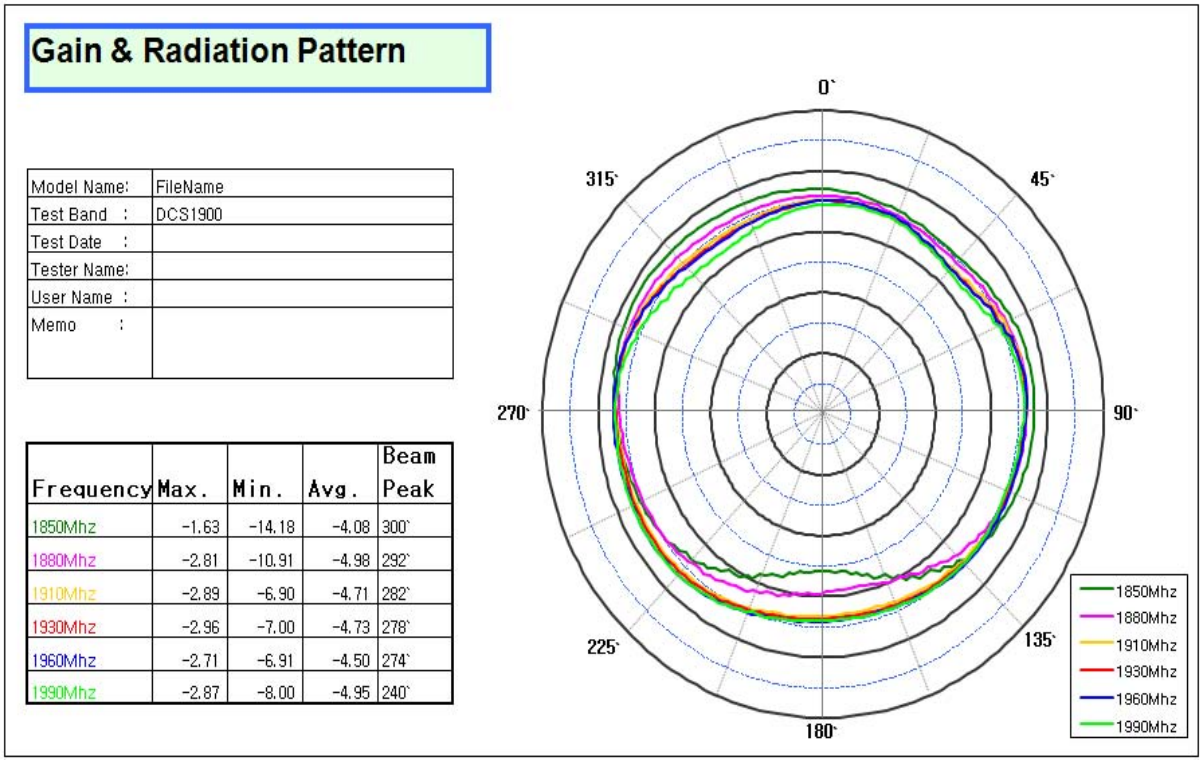


- Elevation2 Plane



4.5.4 DCS1900

- Azimuth Plane

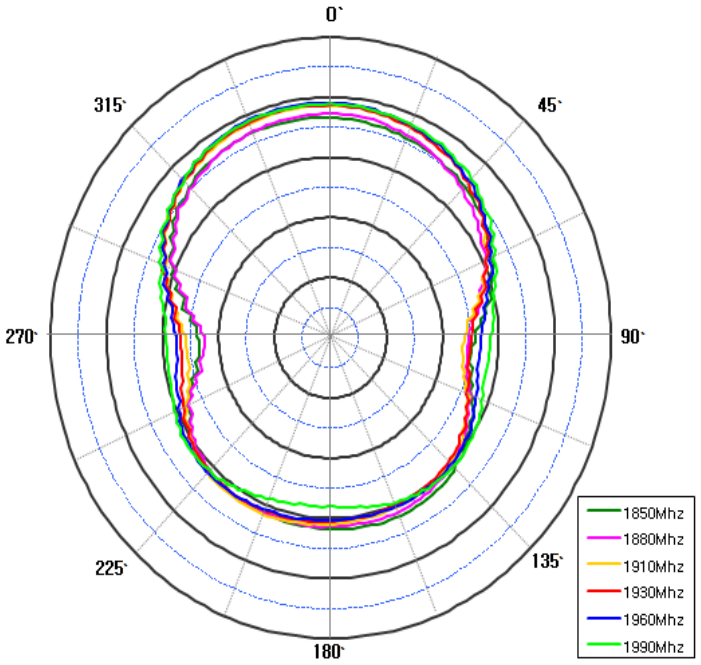


- Elevation1 Plane

Gain & Radiation Pattern

Model Name:	FileName
Test Band :	DCS1900
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
1850Mhz	-3.26	-16.58	-7.21	338`
1880Mhz	-2.77	-17.66	-7.31	358`
1910Mhz	-1.40	-16.37	-6.21	350`
1930Mhz	-1.23	-15.06	-6.19	350`
1960Mhz	-0.90	-13.23	-5.81	350`
1990Mhz	-1.14	-11.87	-5.77	350`

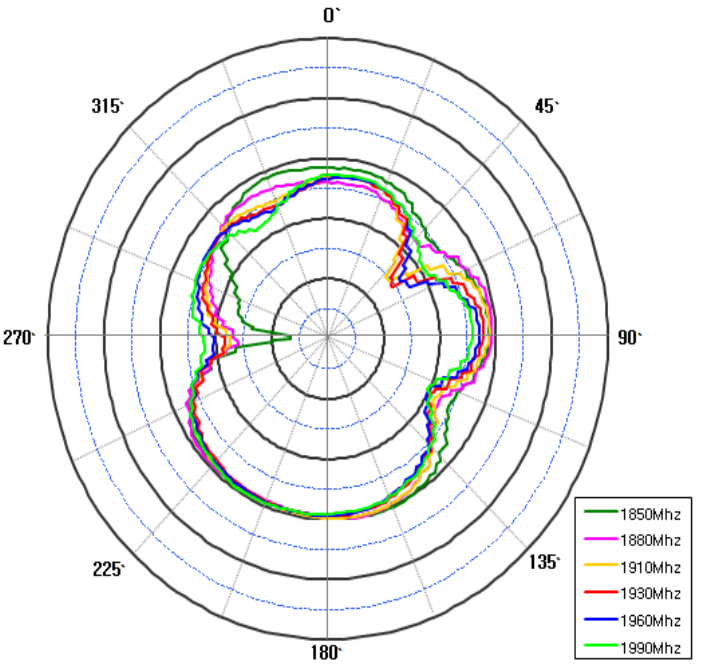


- Elevation2 Plane

Gain & Radiation Pattern

Model Name:	FileName
Test Band :	DCS1900
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
1850Mhz	-9.61	-33.43	-12.30	164`
1880Mhz	-9.81	-24.02	-12.80	168`
1910Mhz	-9.90	-25.38	-13.10	170`
1930Mhz	-10.44	-25.64	-13.70	180`
1960Mhz	-10.51	-23.81	-13.70	184`
1990Mhz	-10.35	-20.20	-13.60	214`



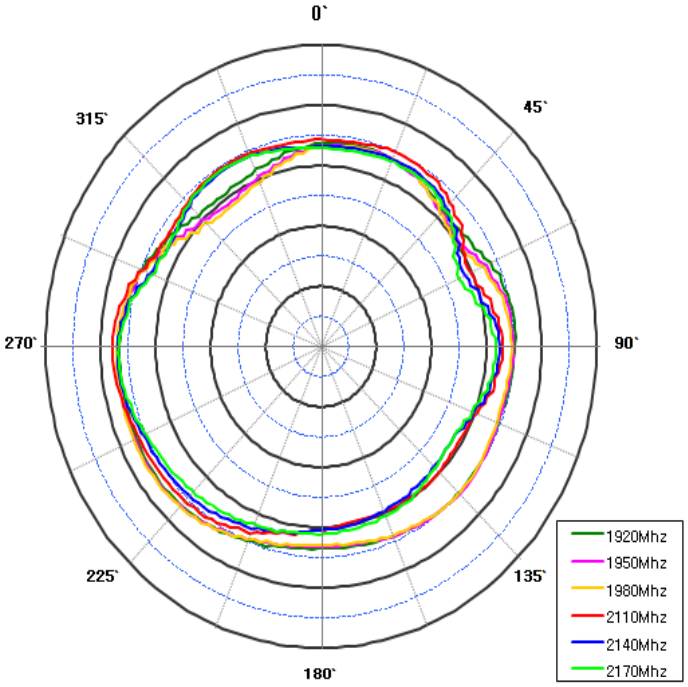
4.5.5 WCDMA

– Azimuth Plane

Gain & Radiation Pattern

Model Name:	FileName
Test Band :	WCDMA
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
1920Mhz	-3.11	-9.24	-5.50	242`
1950Mhz	-2.82	-10.89	-5.64	236`
1980Mhz	-2.60	-11.63	-5.73	242`
2110Mhz	-2.11	-10.51	-6.08	270`
2140Mhz	-3.04	-11.71	-6.94	266`
2170Mhz	-3.22	-12.63	-7.22	266`

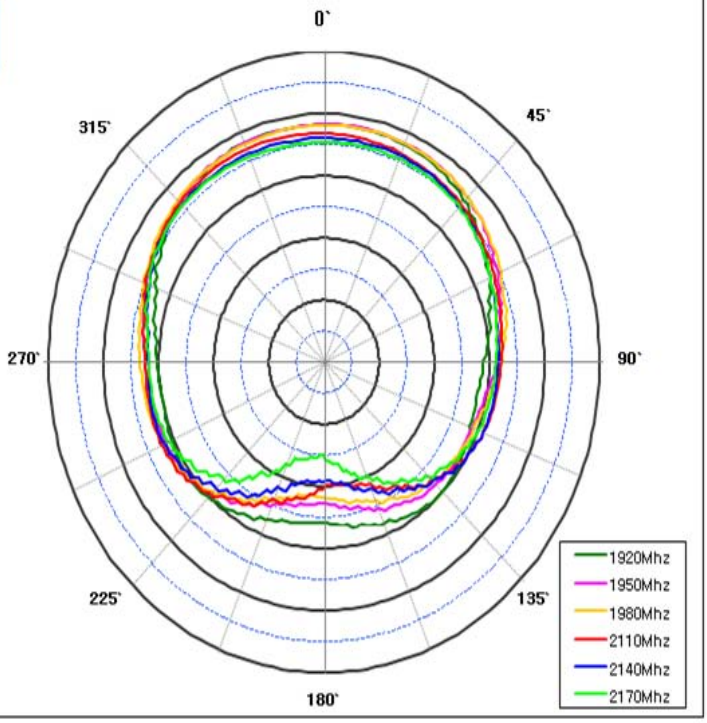


– Elevation1 Plan

Gain & Radiation Pattern

Model Name:	FileName
Test Band :	WCDMA
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
1920Mhz	-1.72	-14.13	-6.10	350`
1950Mhz	-1.65	-17.35	-5.71	0`
1980Mhz	-1.72	-18.44	-5.58	4`
2110Mhz	-2.90	-20.24	-6.49	342`
2140Mhz	-3.69	-20.86	-7.05	328`
2170Mhz	-3.89	-25.03	-7.48	324`

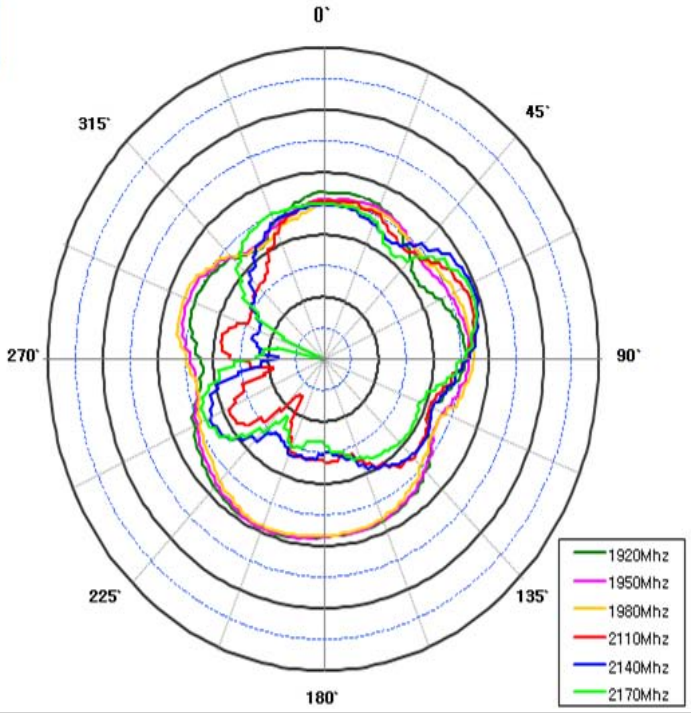


- Elevation2 Plane

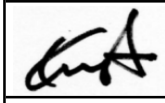
Gain & Radiation Pattern

Model Name:	FileName
Test Band :	WCDMA
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
1920Mhz	-10.72	-19.15	-14.00	200`
1950Mhz	-10.72	-18.44	-13.80	204`
1980Mhz	-11.11	-18.77	-13.90	200`
2110Mhz	-11.76	-32.94	-17.70	68`
2140Mhz	-10.51	-31.77	-17.00	68`
2170Mhz	-11.10	-39.83	-17.30	68`



5. 신뢰성 기준

작 성 자	검 토 자	승 인 자
		
김 진아	배 진섭	박 승교

5.1 기구 신뢰성

NO	신뢰성 항 목	검사 방법	판정 기준
1	외관 및 구조	육안으로 확인하여 Shape, 구조, 색상이 한도 견본 및 해당사양과 일치하는지 여부확인	파손, 부식, 함몰 등의 결함이 없을 것
2	형 합 성	Rear Case에 취부시 Antenna 형합부위 치수가 도면치수 허용차와 일치여부 및 유해한 결함 없을 것	개별사양 및 좌동에 준함
3	외관 치수	해당사양 사내 승인도면 또는 고객의 최종 승인원을 만족할 것	개별사양 및 좌동에 준함
4	삽발거 수명시험 (인출/삽입력)	안테나를 상대물(치구)에 Antenna Rod 일단을 고정하여 지그로 5,000회(10회/분) 삽•발거력을 실시한 후 각 단의 중간 지점에서삽•발거력을 측정한다.	자력으로 삽발거 되지 않을 것
5	Hinge 수명시험	Hinge Post를 고정하고 적합 JIG로 5,000회(20회/분) 좌우 90도 반복절곡 후, Push Pull Gauge로 회전 지지력을 체크한다.	20gf.cm이상 관리
6	회전강도 시험	Holder고정하고 적합 JIG로 3,000회(10회/분)360도 Swing을 실시한 후 Torque Gauge로 회전 지지력을 체크한다.	20gf.cm이상 관리
7	Pulling(몸체)강도시험	강도시험기에 TOP 과 Holder 고정후 Push Pull Gauge로 5Kgf을 5초간 당긴 후 확인 한다	외관 및 기구적인 손상이 없어야 하며 ,전기적 성능을 만족해야 한다.

5.2 도금 신뢰성

NO	신뢰성 항 목	검사 방법	판정 기준
1	고온고습	① 온도 : 60±2℃ ② 상대습도 : 80% ③ 시험시간 : 96±2시간	EMI: 저항 값 및 TAPE밀착 력 만족할 것
2	염수분무 시험	① 염수농도 : 35±2도,5% 48Hr 시험후 10분내염수제거 >상온24시간방치	부식,외관 이상 없을 것 EMI경우 TAPE밀착 력,저항치 만족할 것

6. 신뢰성 성적서

기구 신뢰성 성적서

시 험 D A T A

시료 NO	외관	검사항목						판정
		치 수 검 사				삽, 발거력	형 합 성	
		A (117.29±1.0)	B (59.03±0.5)	C (M5x P0.5)	D (70.2±0.3)			
1	OK	118.09	59.14	OK	70.28	OK	-	OK
2	OK	117.94	59.14	OK	70.36	OK	-	OK
3	OK	117.29	59.14	OK	70.28	OK	-	OK
4	OK	117.33	59.04	OK	70.38	OK	-	OK
5	OK	118.05	59.02	OK	70.28	OK	-	OK
6	OK	118.00	59.01	OK	70.26	OK	-	OK
7	OK	117.98	59.15	OK	70.40	OK	-	OK
8	OK	117.35	59.12	OK	70.22	OK	-	OK
9	OK	117.44	59.11	OK	70.14	OK	-	OK
10	OK	118.10	59.14	OK	70.16	OK	-	OK
11	OK							
12	OK							
13	OK							
14	OK							
15	OK							
16	OK							
17	OK							
18	OK							
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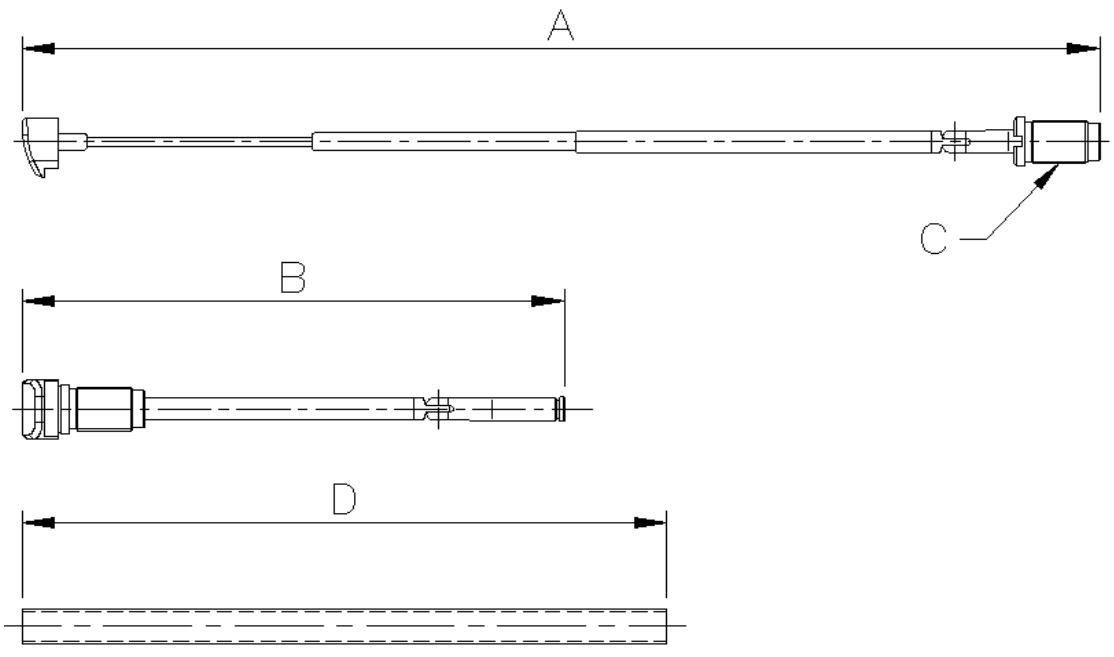
28	OK							
29	OK							
30	OK							



시 험 항 목	Hinge 수명시험

시 험 D A T A

시료 NO	검사항목																결과
	외 관 (gf.cm)		VSWR														
			824MHz		894MHz		960MHz		1710MHz		1850MHz		1990MHz		2170MHz		VSWR 4 이하
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	
1	108	76	2.6	2.5	3.7	3.7	3.6	3.6	3.6	3.6	2.2	2.1	1.9	2.0	1.3	1.2	OK
2	100	71	2.5	2.5	3.6	3.6	3.6	3.5	3.5	3.5	2.2	2.0	1.8	1.9	1.3	1.3	OK
3	121	82	2.5	2.5	3.6	3.7	3.5	3.6	3.5	3.6	2.1	2.1	1.8	2.0	1.4	1.2	OK
4	98	65	2.5	2.5	3.7	3.7	3.7	3.6	3.6	3.5	2.1	2.1	1.7	1.9	1.3	1.3	OK
5	132	85	2.7	2.5	3.7	3.7	3.5	3.6	3.4	3.4	2.1	2.2	1.8	1.9	1.4	1.3	OK
6																	
7																	
8																	
9																	
10																	

시 험 항 목	회전강도 시험

시 험 D A T A

시료 NO	검사항목																결과
	외 관 (gf.cm)		VSWR														
			824MHz		894MHz		960MHz		1710MHz		1850MHz		1990MHz		2170MHz		VSWR 4 이하
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	
1	86.4	54	2.6	2.5	3.6	3.7	3.5	3.6	3.5	3.5	2.1	2.2	1.9	1.9	1.4	1.3	OK
2	98	63	2.6	2.6	3.5	3.5	3.4	3.5	3.4	3.3	2.2	2.1	1.7	1.7	1.3	1.3	OK
3	80	51	2.6	2.6	3.8	3.7	3.8	3.7	3.7	3.8	2.0	2.1	2.0	1.9	1.1	1.1	OK
4	76	42	2.4	2.4	3.7	3.7	3.7	3.6	3.6	3.7	2.0	2.0	1.7	1.8	1.3	1.2	OK
5	82	50	2.5	2.5	3.5	3.5	3.5	4.5	3.4	3.5	2.2	2.1	2.0	1.9	1.4	1.4	OK
6																	
7																	
8																	
9																	
10																	

시 험 항 목	Pulling(몸체)강도시험

시 험 D A T A

시료 NO	검사항목																결과
	외 관		VSWR														
			824MHz		894MHz		960MHz		1710MHz		1850MHz		1990MHz		2170MHz		VSWR 4 이하
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	
1	OK	OK	2.8	2.7	3.7	3.6	3.6	3.6	3.6	3.6	2.2	2.1	1.8	1.8	1.3	1.3	OK
2	OK	OK	2.3	2.3	3.9	3.9	3.7	3.6	3.8	3.7	2.4	2.3	2.0	1.9	1.5	1.4	OK
3	OK	OK	2.4	2.3	3.8	3.8	3.8	3.8	3.7	3.7	2.5	2.4	2.0	2.0	1.4	1.4	OK
4	OK	OK	2.5	2.4	3.7	3.7	3.7	3.7	3.6	3.5	2.3	2.2	2.0	2.0	1.5	1.5	OK
5	OK	OK	2.6	2.5	3.6	3.6	3.6	3.5	3.5	2.5	2.1	2.0	1.8	1.8	1.3	1.2	OK
6																	
7																	
8																	
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시 험 항 목	고온고습

시 험 D A T A

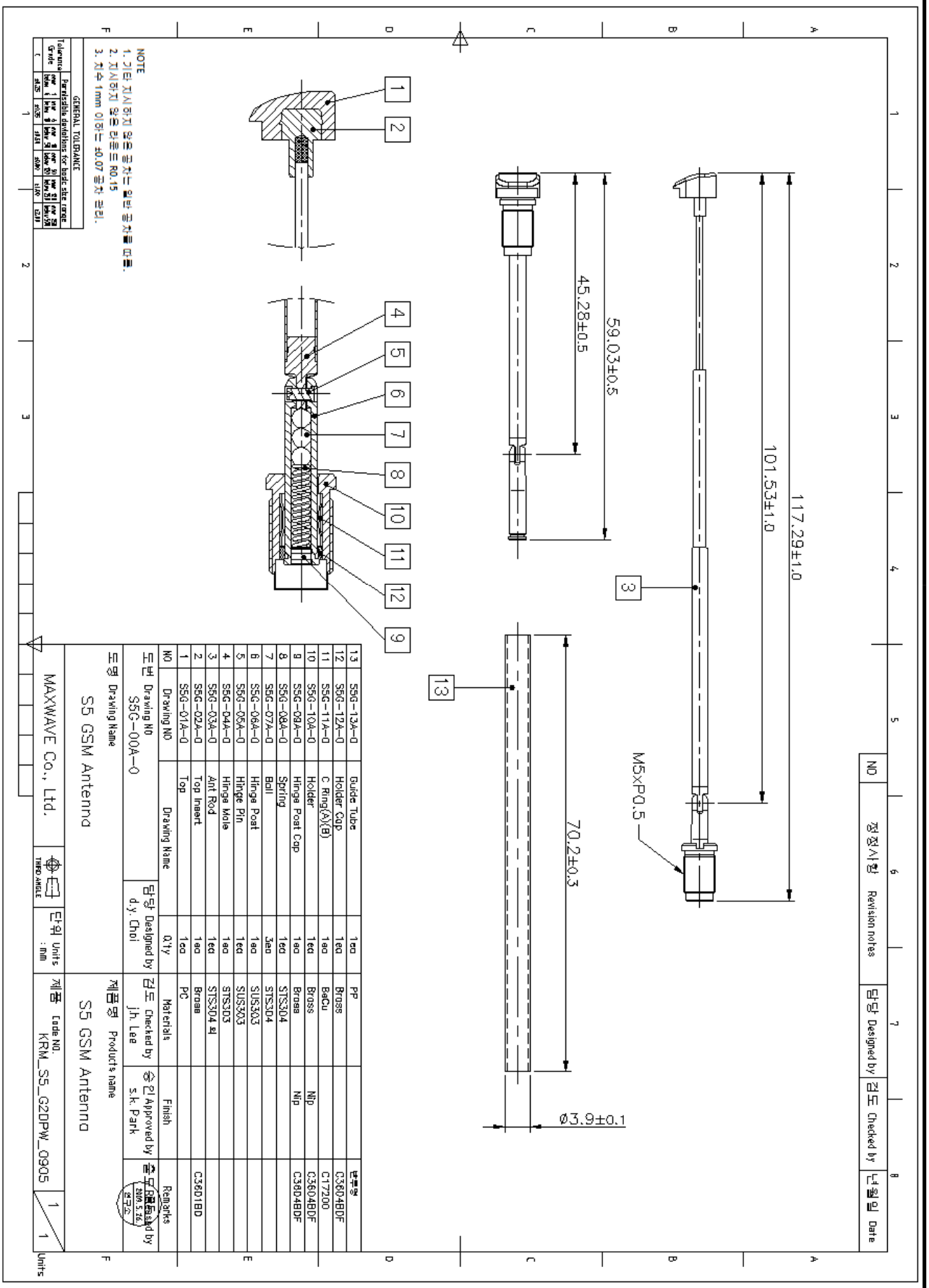
시료 NO	검사항목														결과
	VSWR														
	824MHz		894MHz		960MHz		1710MHz		1850MHz		1990MHz		2170MHz		VSWR 4 이하
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	
1	2.7	2.8	3.7	3.6	3.7	3.7	3.6	3.6	2.3	2.2	1.8	1.8	1.4	1.3	OK
2	2.3	2.3	3.9	3.9	3.6	3.5	3.8	3.7	2.3	2.4	2.0	2.0	1.5	1.4	OK
3	2.3	2.4	3.8	3.9	3.8	3.8	3.7	3.7	2.5	2.4	2.0	1.9	1.4	1.4	OK
4	2.5	2.4	3.6	3.7	3.7	3.6	3.6	3.7	2.4	2.3	2.0	2.0	1.5	1.6	OK
5	2.6	2.6	3.6	3.6	3.6	3.6	3.6	3.5	2.1	2.1	1.9	1.8	1.3	1.3	OK
6															
7															
8															
9															
10															

시 험 항 목	염수 분무

시 험 D A T A

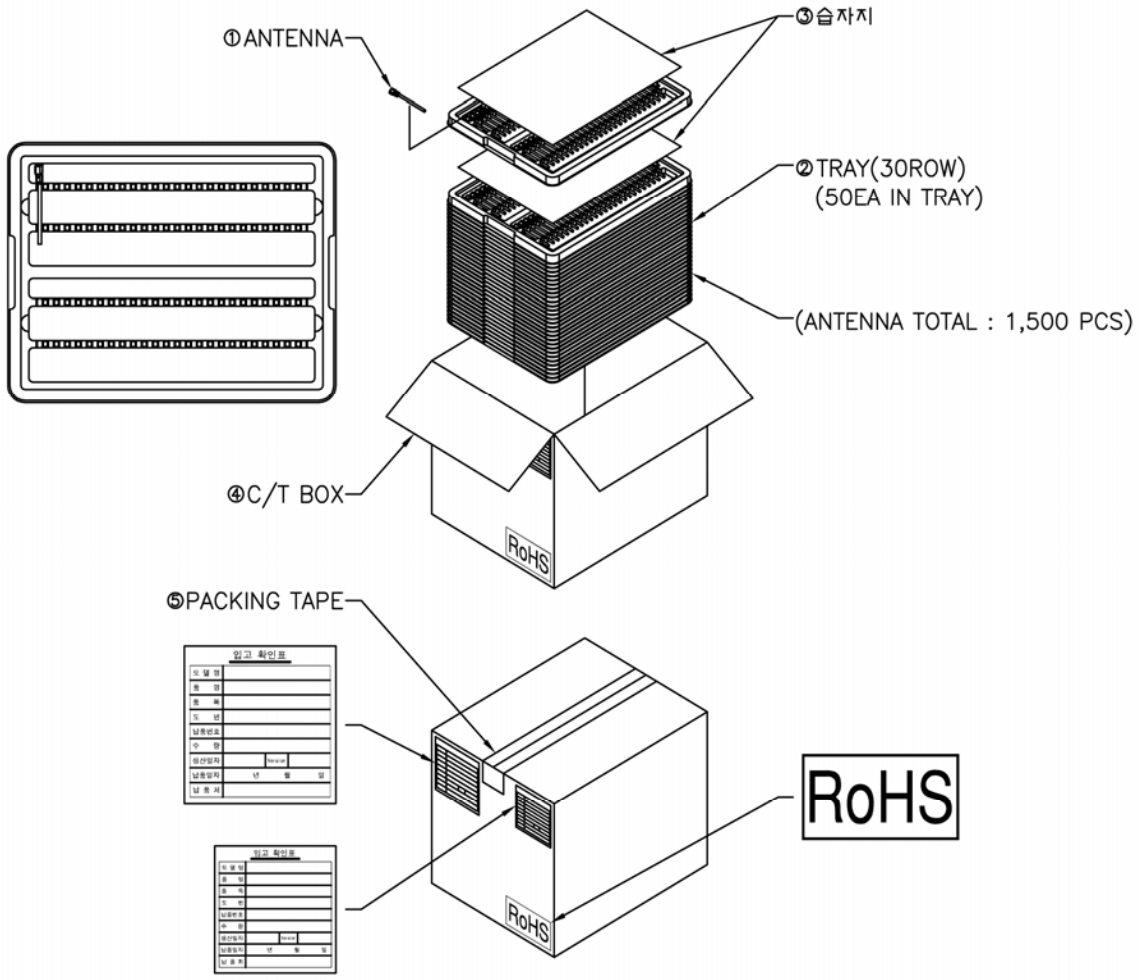
시료 NO	검사항목														결과
	VSWR														
	824MHz		894MHz		960MHz		1710MHz		1850MHz		1990MHz		2170MHz		VSWR 4 이하
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	
1	2.7	2.7	3.7	3.6	3.6	3.6	3.7	3.6	2.2	2.1	1.9	1.8	1.4	1.3	OK
2	2.4	2.3	3.9	3.9	3.6	3.6	3.7	3.7	2.4	2.3	1.9	1.9	1.4	1.4	OK
3	2.4	2.3	3.8	3.7	3.7	2.6	3.7	3.7	2.4	2.4	2.0	2.0	1.4	1.3	OK
4	2.5	2.4	3.7	3.7	3.8	3.8	3.6	3.6	2.4	2.4	2.0	2.0	1.5	1.5	OK
5	2.6	2.5	3.6	3.5	3.5	3.5	3.5	2.5	2.1	2.1	1.9	1.8	1.3	1.2	OK
6															
7															
8															
9															
10															

7.Antenna 승인도



8.포장사양

NO	정정사항 Revision notes	담당 Designed by	검도 Checked by	년월일 Date
1				



8	에어폼	–	–		
7	INK (MAGIC PEN MONAMI)	–	–		
6	RoHS STAMP	–	–		
5	PACKING TAPE	–	–		
4	C/T BOX	1/1500	K180		
3	습자지	1/50	–		
2	TRAY	1/50	PS		
1	ANTENNA	1500	–		
NO	Part Name	Q'ty	Materials	Finish	Remarks

도번 Drawing NO	담당 Designed by	검도 Checked by	승인 Approved by	
S5G-14A-0	d.y. Choi	j.h. Lee	s.k. Park	

도명 Drawing Name	제품명 Products name
포 장 사 양 서	S5 GSM Antenna

MAXWAVE Co., Ltd.	THIRD ANGLE	단위 Units : mm	제품 Code NO. KRM_S5_G2DPW_0905	1 / 1