

2.4G Band ANT Solution

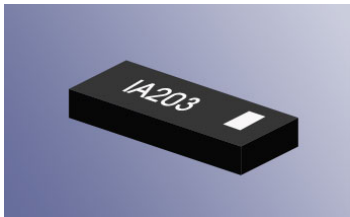
2.4GHz Antenna

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

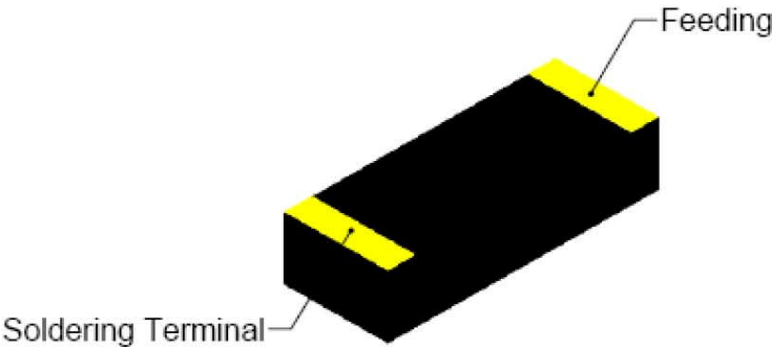
2.4GHz Antenna
Version: B

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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

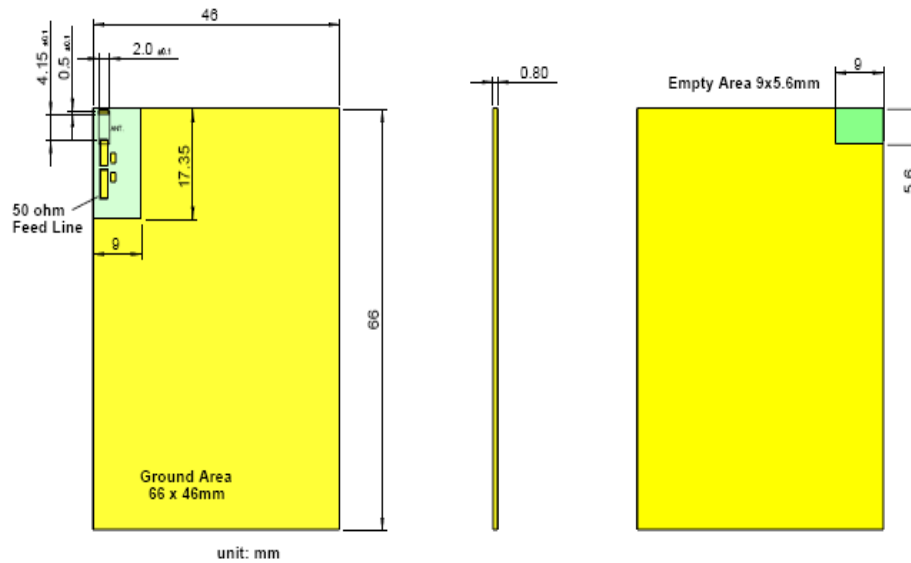
2.4GHz Antenna

P/N: IA2 0 3

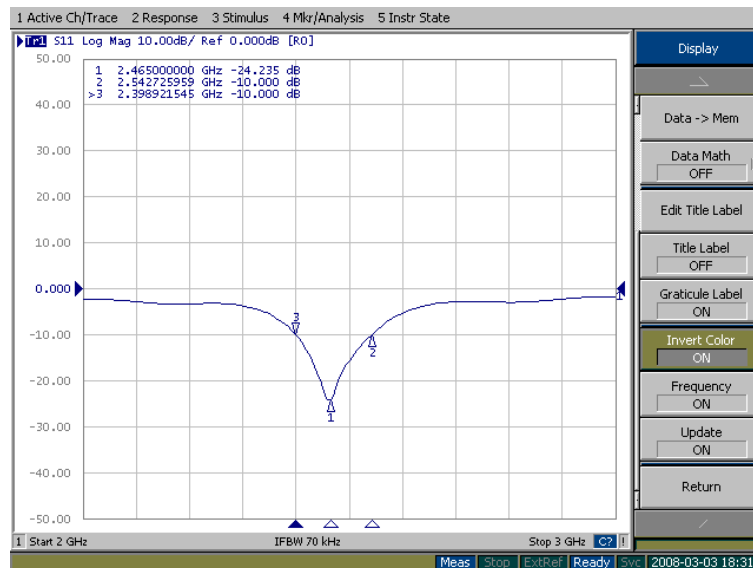
Version: B

Date: Mar. 31, 08'

※Empty Area



※S11



Remark: The test based on 2.4GHz ANT with EVB

2.4G Band ANT Solution

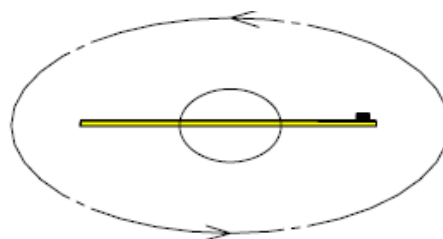
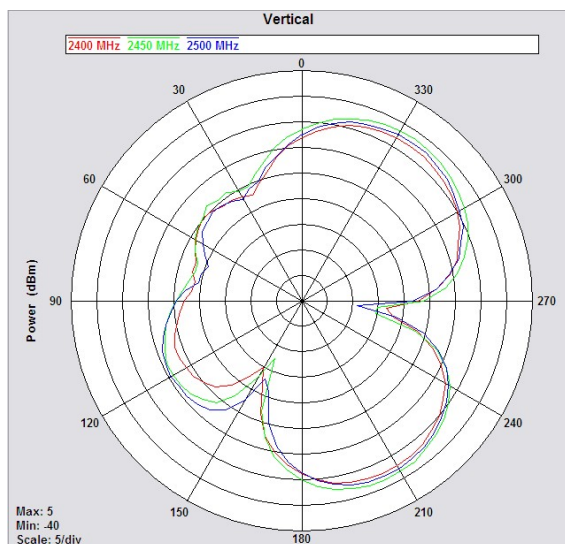
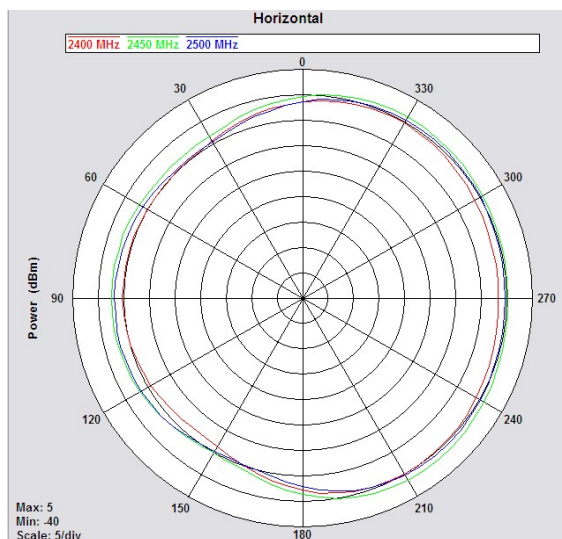
2.4GHz Antenna

Version: B

P/N: IA2 0 3

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

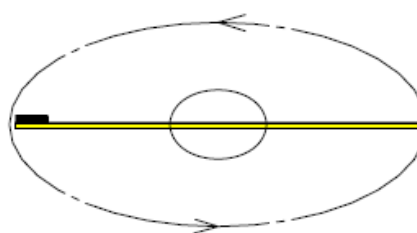
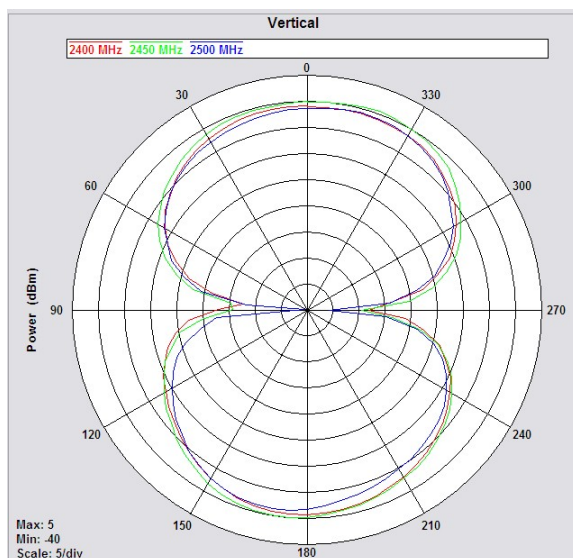
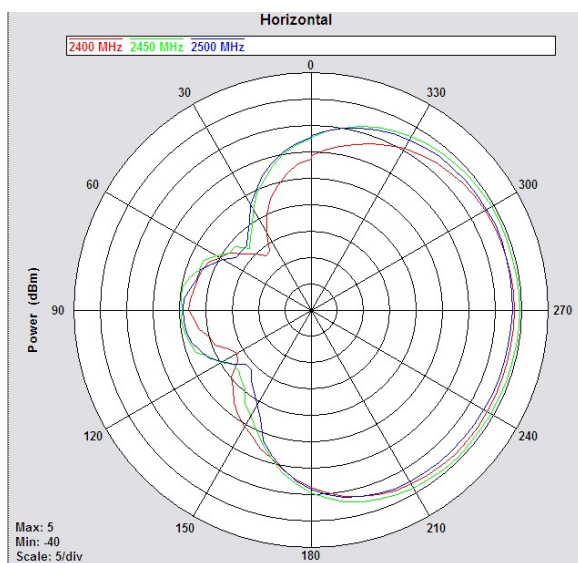
2.4GHz Antenna

Version: B

P/N: IA2 0 3

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

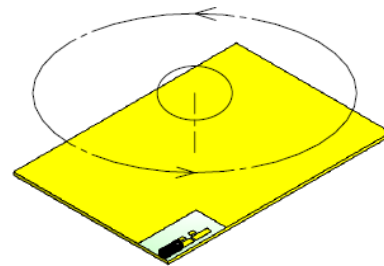
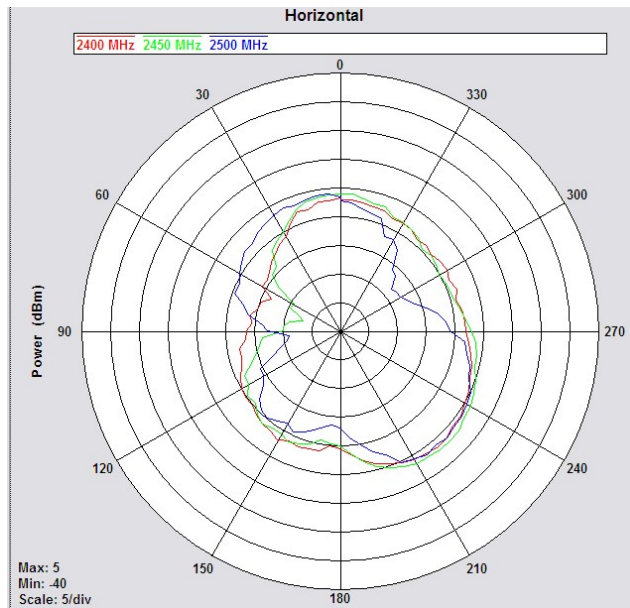
2.4GHz Antenna

P/N: IA2 0 3

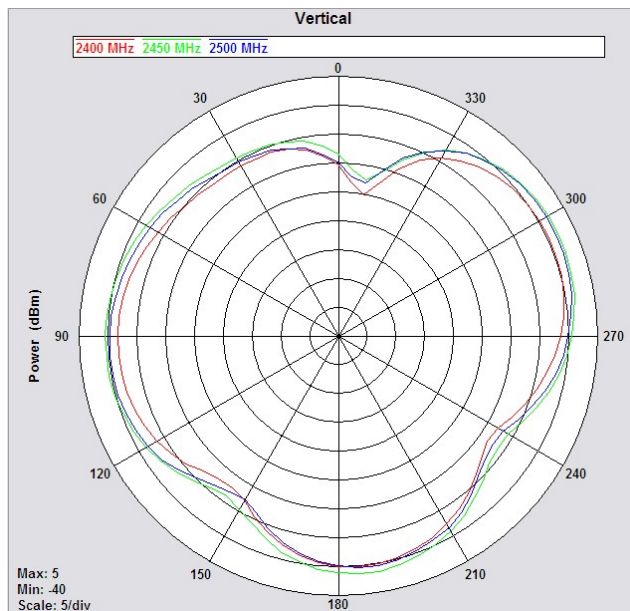
Version: B

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

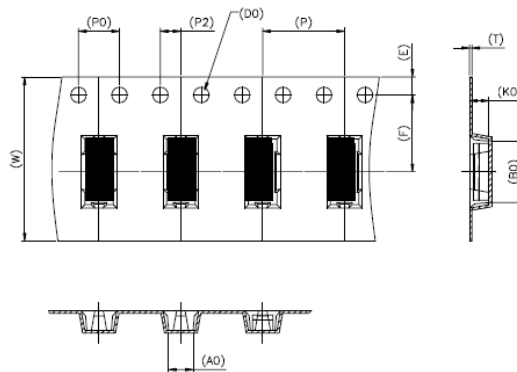
P/N: IA2 0 3

Version: B

Date: Mar. 31, 08'

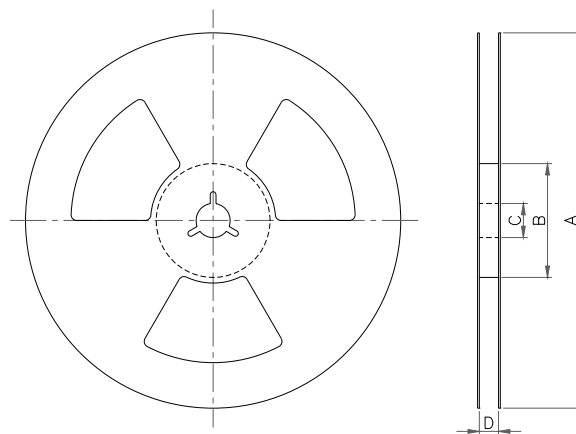
※Packing

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.

공급업체	구 분	담 당	검 토	승 인
	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	
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FAX	02-785-2744

업체 대표 직인


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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.

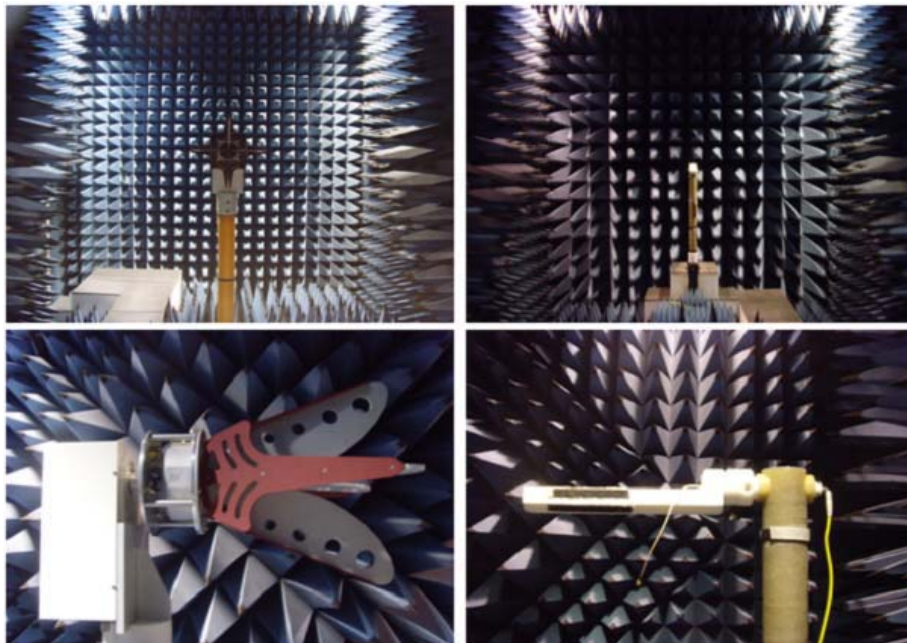
(3)위의 (1),(2)를 만족할 때를 0°로 기준하여 시계방향으로 360° 회전시켜
Gain을 측정한다.

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.

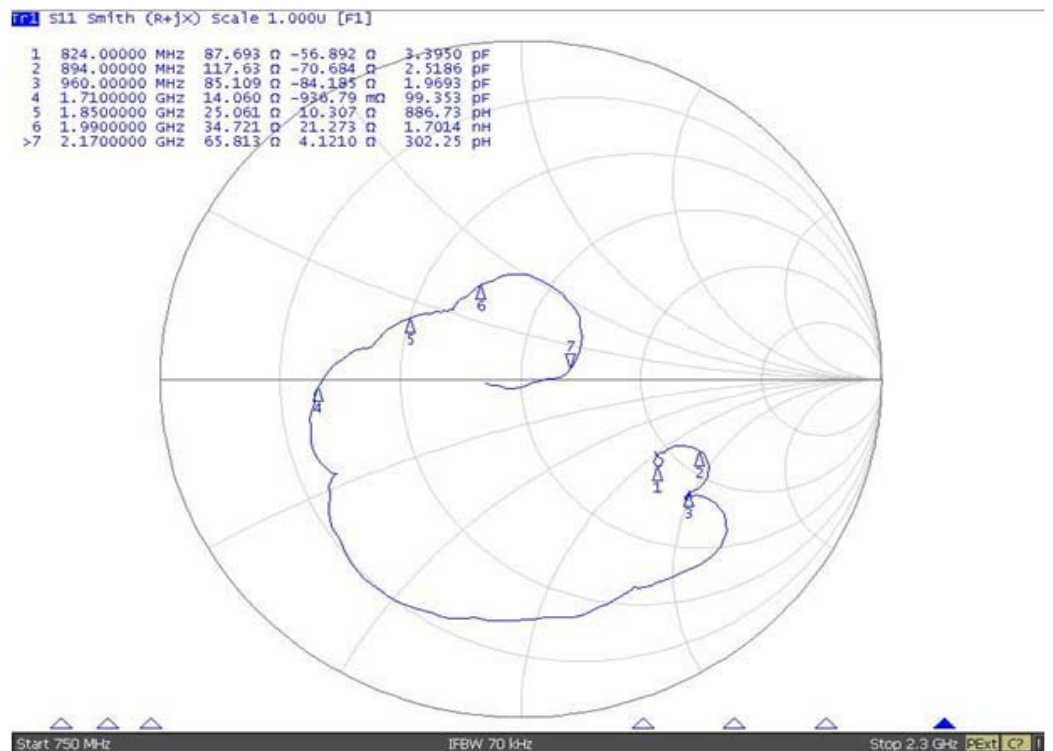


4.3 시험결과 [NETWORK DATA]

4.3.1 In Put Return Loss (반사손실)



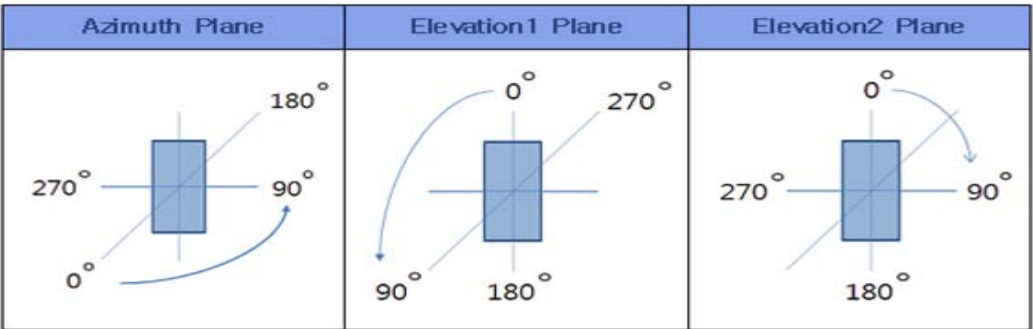
4.3.2 SMITH CHART



4.3.2 VSWR(정재 파비)



4.4 방사패턴



4.5 2D Passive Chamber Data

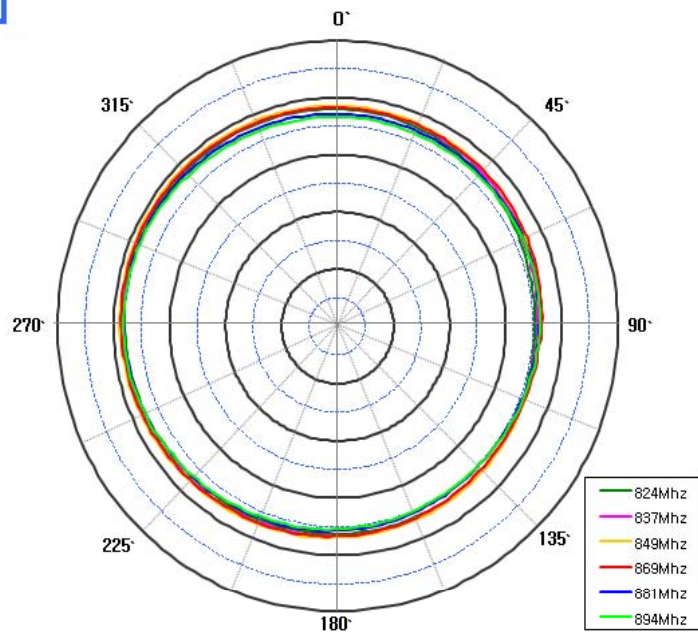
4.5.1 GSM850

– 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°

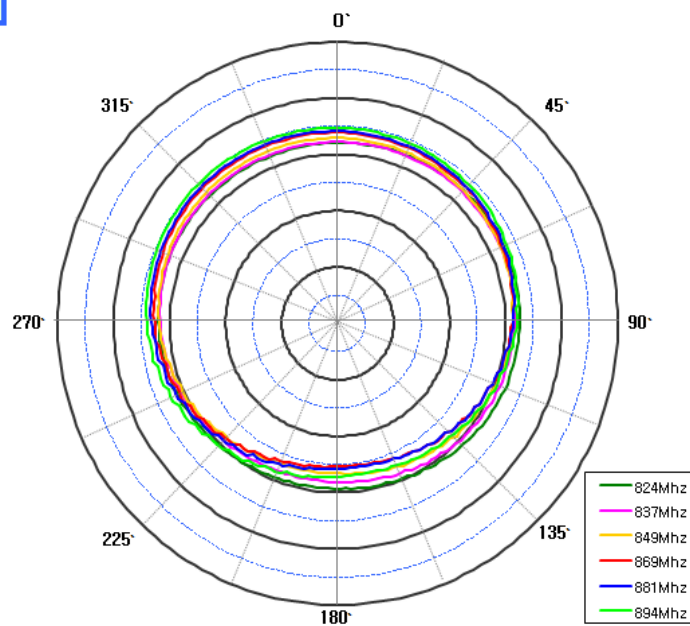


– Elevation1 Plane

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°

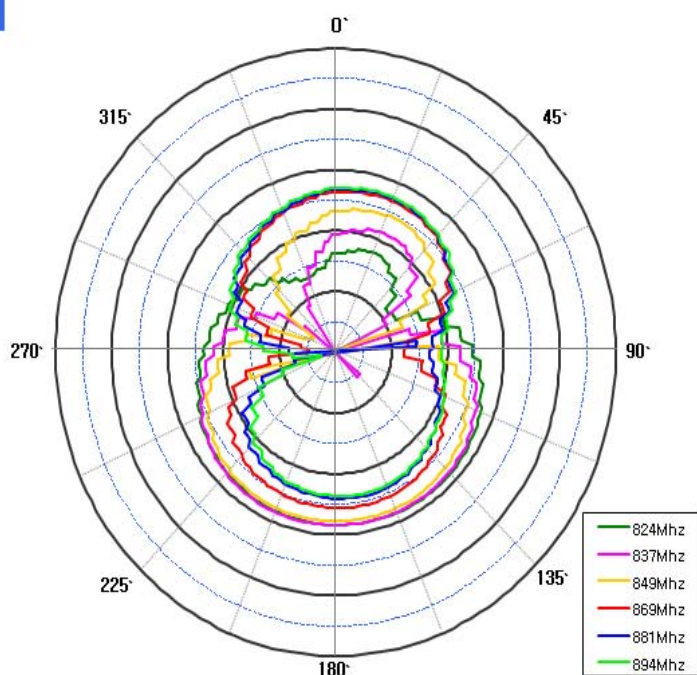


– Elevation2 Plane

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°



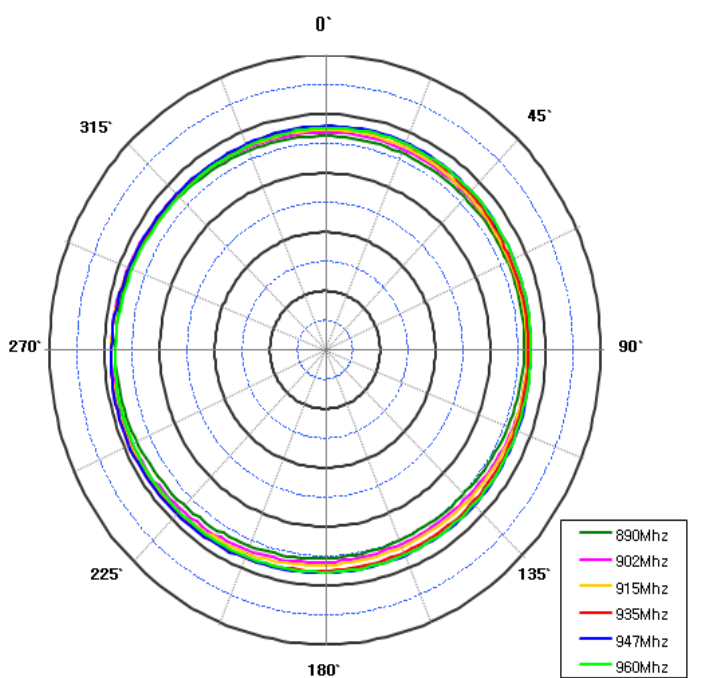
4.5.2 GSM900

– 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°

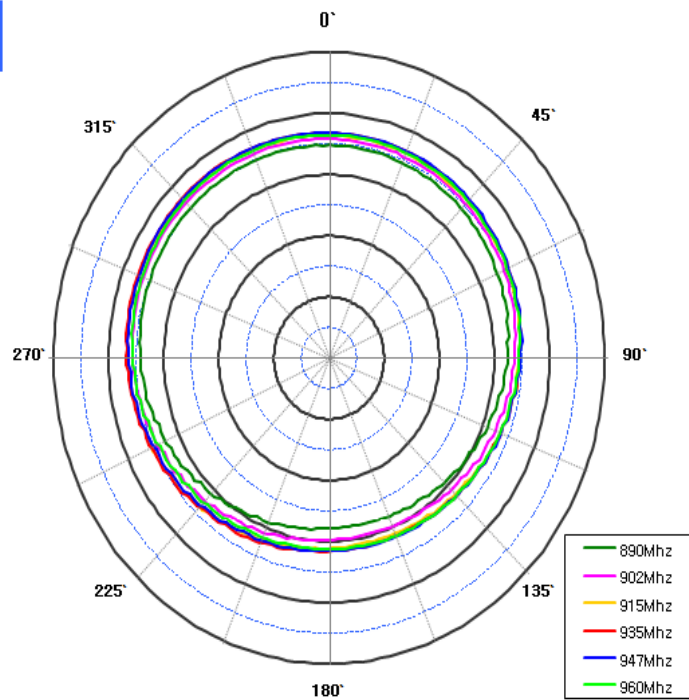


– Elevation1 Plane

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°

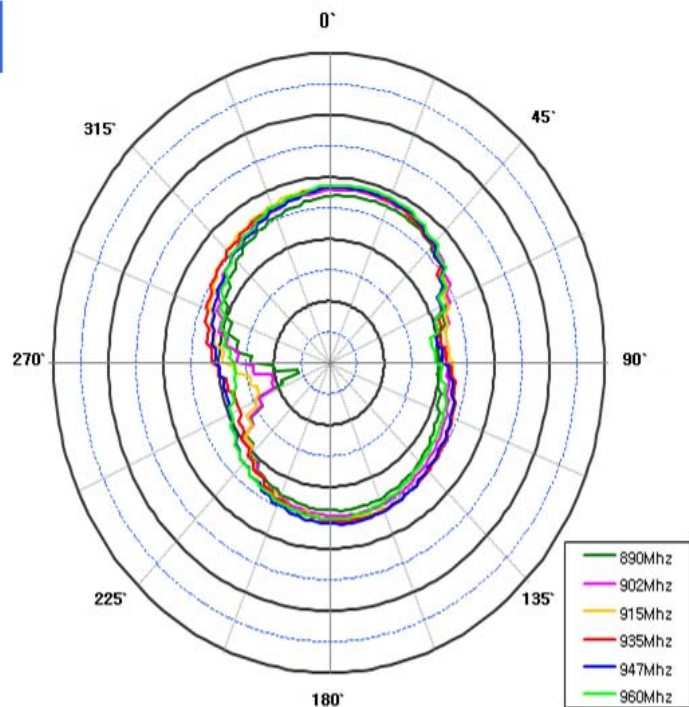


– Elevation2 Plane

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°



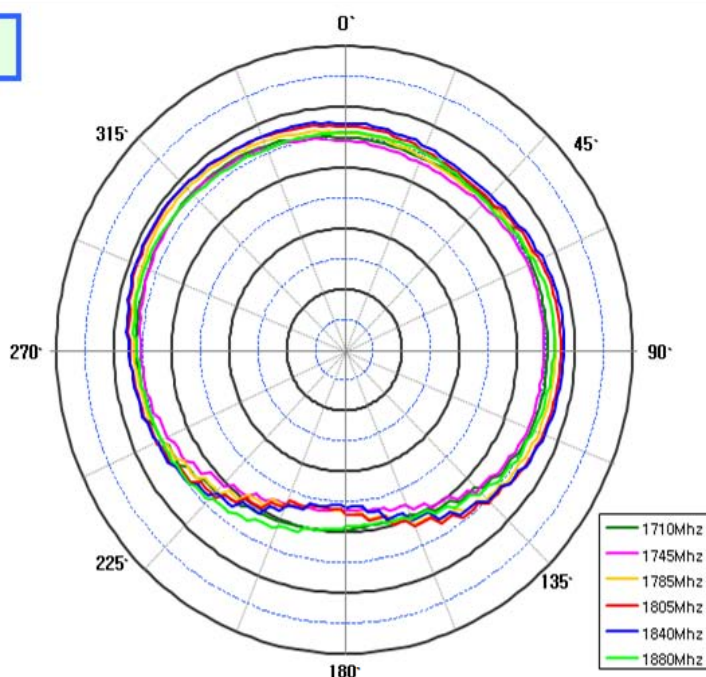
4.5.3 DCS1800

– Azimuth Plane

Gain & Radiation Pattern

Model Name:	FileName
Test Band :	DCS1800
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
1710Mhz	-3.01	-10.82	-5.33	312°
1745Mhz	-3.18	-13.60	-6.01	312°
1785Mhz	-1.86	-13.82	-4.66	304°
1805Mhz	-1.15	-13.89	-3.86	306°
1840Mhz	-1.04	-14.56	-3.57	306°
1880Mhz	-2.83	-11.03	-4.95	292°

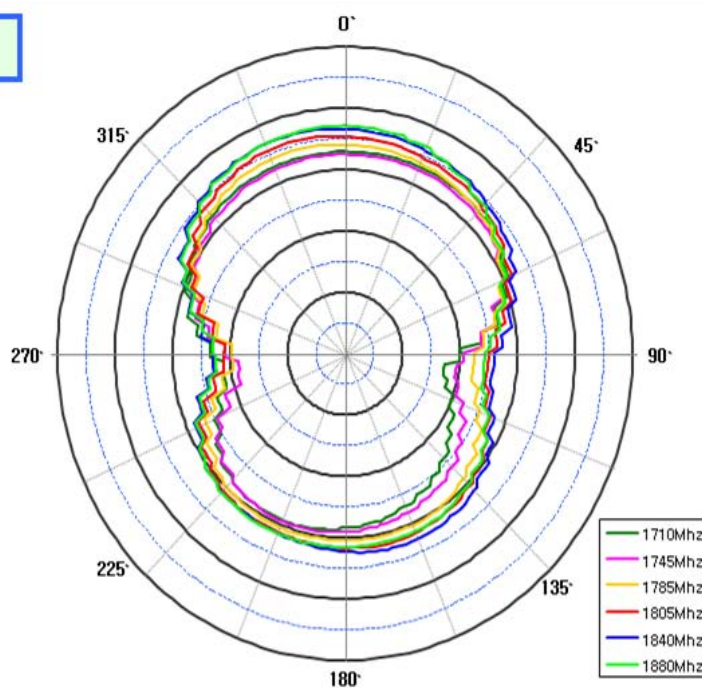


– Elevation1 Plane

Gain & Radiation Pattern

Model Name:	FileName
Test Band :	DCS1800
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
1710Mhz	-6.80	-18.85	-10.20	30°
1745Mhz	-7.36	-21.52	-10.60	16°
1785Mhz	-5.67	-20.52	-9.28	344°
1805Mhz	-4.21	-19.08	-8.07	344°
1840Mhz	-3.09	-17.11	-7.00	344°
1880Mhz	-2.77	-17.55	-7.29	358°

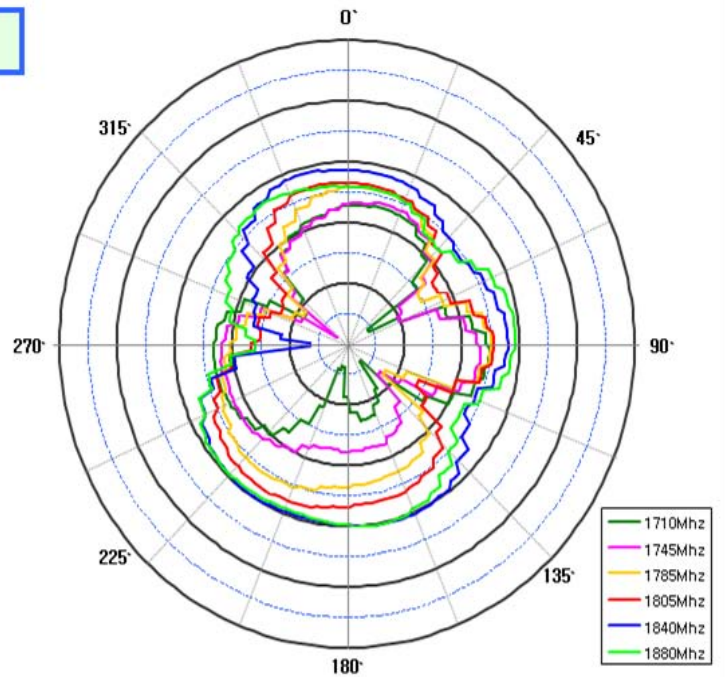


– Elevation2 Plane

Gain & Radiation Pattern

Model Name:	FileName
Test Band :	DCS1800
Test Date :	
Tester Name:	
User Name :	
Memo :	

Frequency	Max.	Min.	Avg.	Beam Peak
1710Mhz	-15.11	-36.39	-19.80	92°
1745Mhz	-16.05	-38.03	-19.90	20°
1785Mhz	-14.05	-32.02	-17.20	6°
1805Mhz	-12.08	-27.38	-15.40	210°
1840Mhz	-9.67	-33.73	-12.40	158°
1880Mhz	-9.79	-24.09	-12.80	166°



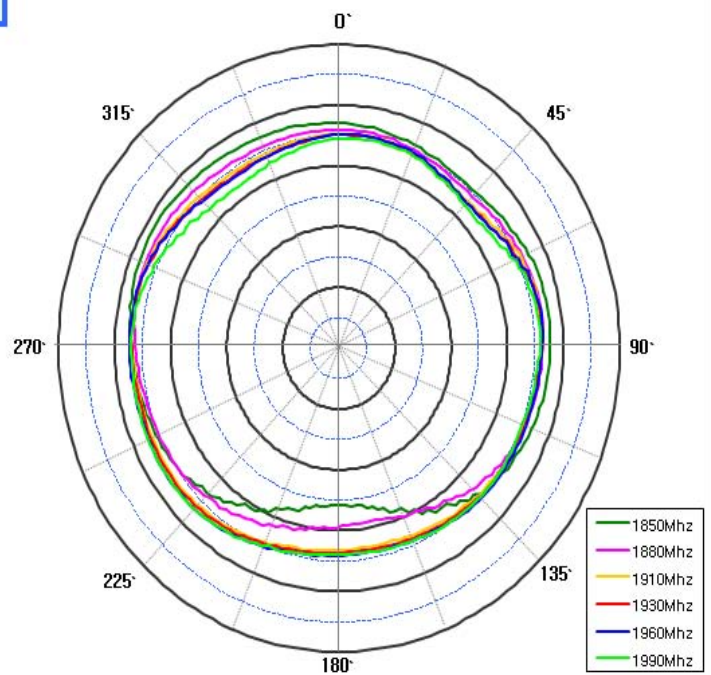
4.5.4 DCS1900

– Azimuth Plane

Gain & Radiation Pattern

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

Frequency	Max.	Min.	Avg.	Beam Peak
1850Mhz	-1.63	-14.18	-4.08	300°
1880Mhz	-2.81	-10.91	-4.98	292°
1910Mhz	-2.89	-6.90	-4.71	282°
1930Mhz	-2.96	-7.00	-4.73	278°
1960Mhz	-2.71	-6.91	-4.50	274°
1990Mhz	-2.87	-8.00	-4.95	240°

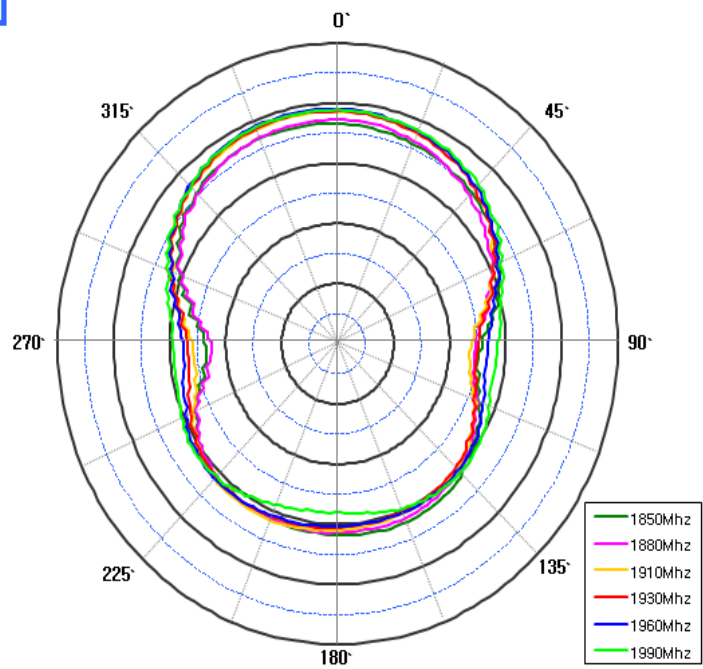


– Elevation1 Plane

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°

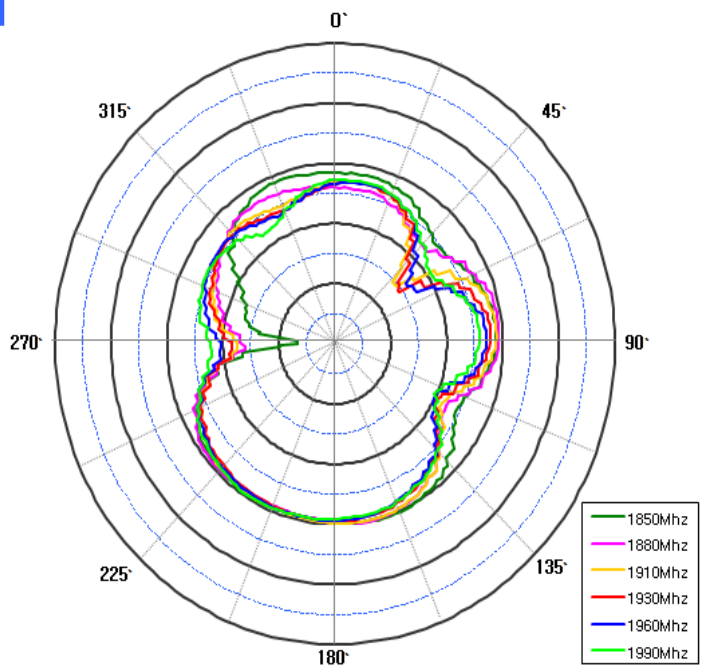


– Elevation2 Plane

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°



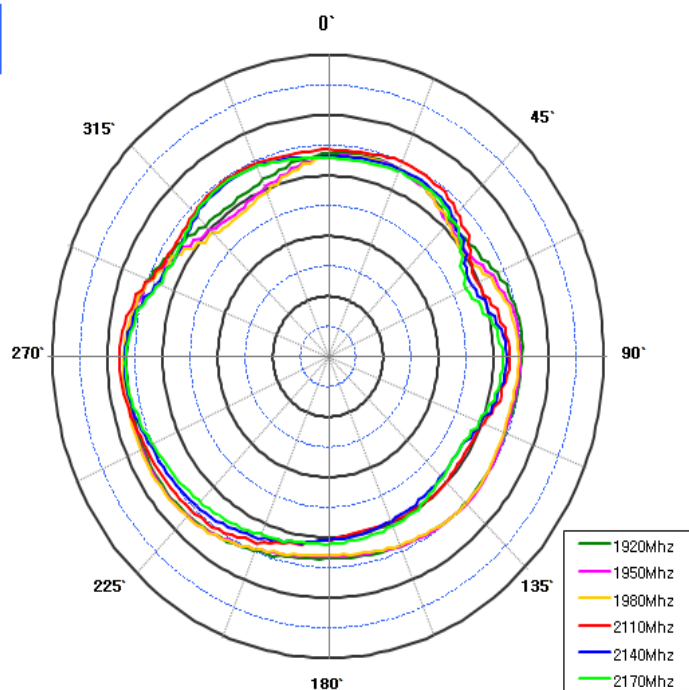
4.5.5 WCDMA

– 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°

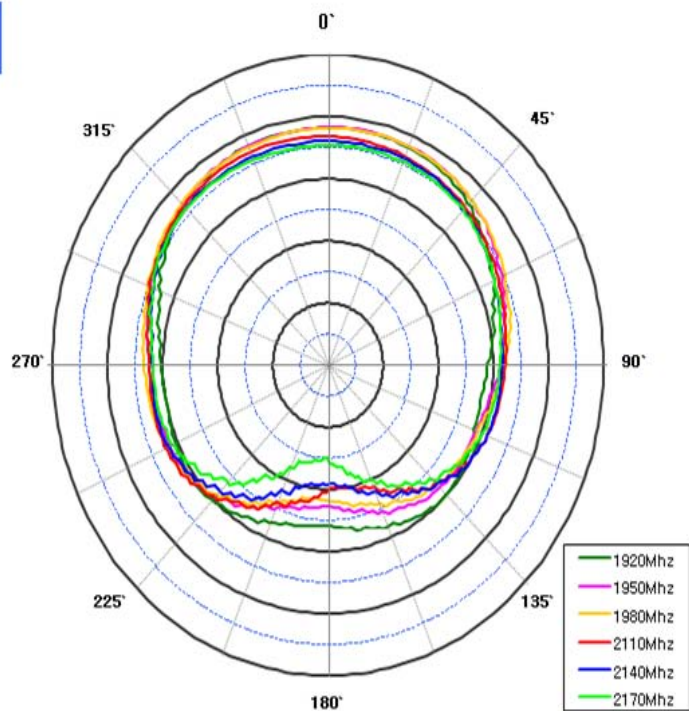


– Elevation1 Plan

Gain & Radiation Pattern

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

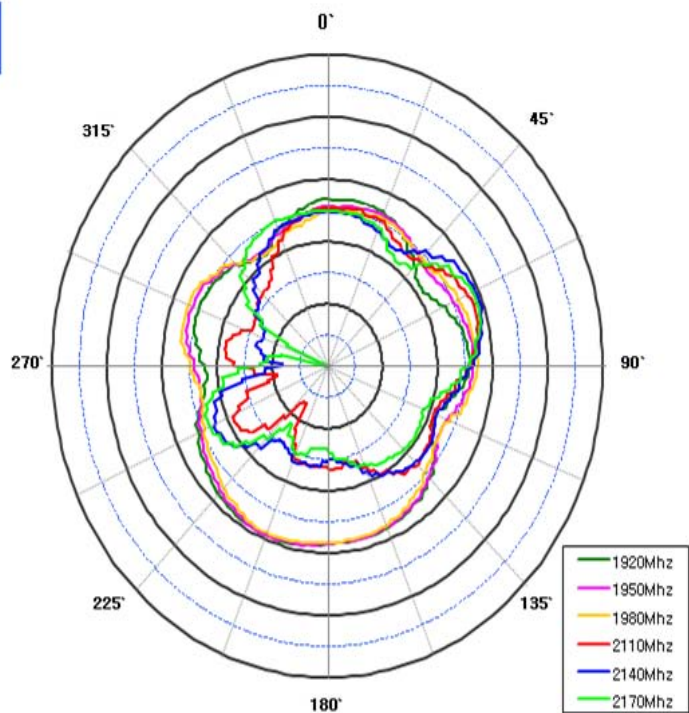
Frequency	Max.	Min.	Avg.	Beam Peak
1920Mhz	-1.72	-14.13	-6.10	350°
1950Mhz	-1.65	-17.35	-5.71	0°
1980Mhz	-1.72	-18.44	-5.58	4°
2110Mhz	-2.90	-20.24	-6.49	342°
2140Mhz	-3.69	-20.86	-7.05	328°
2170Mhz	-3.89	-25.03	-7.48	324°

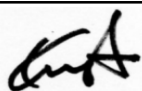


Gain & Radiation Pattern

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°

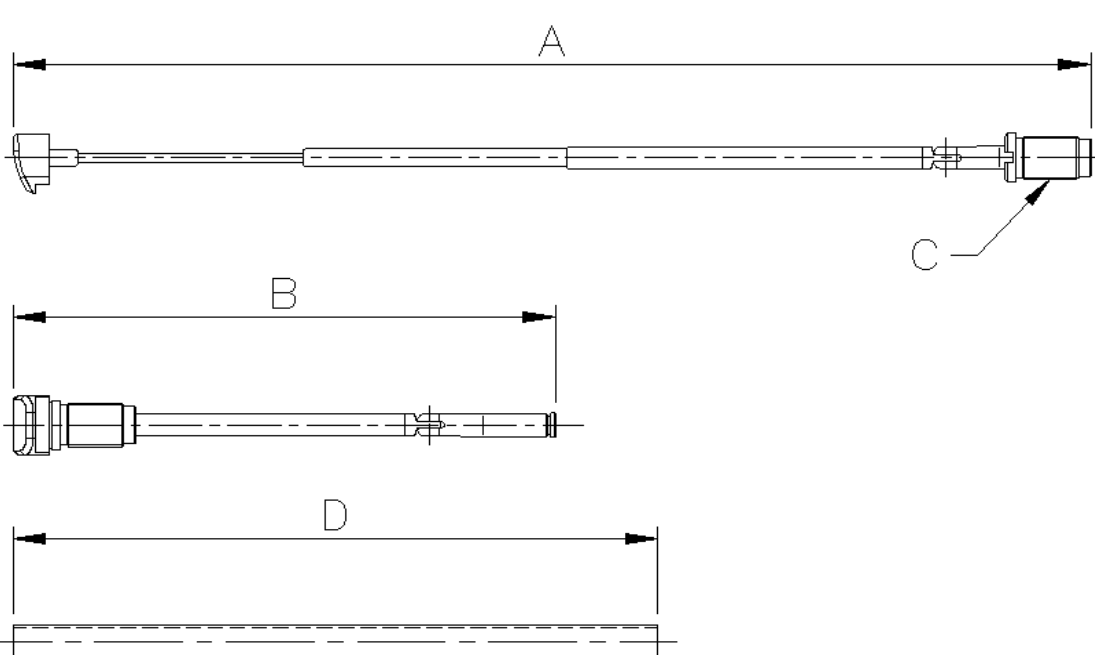


5. 신뢰성 기준		작 성 자	검 토 자	승 인 자
				
		김 진아	배 진섭	박 승교
5.1 기구 신뢰성				
NO	신뢰성 항 목	검사 방법	판정 기준	
1	외관 및 구조	육안으로 확인하여 Shape, 구조, 색상이 한도 견본 및 해당사양과 일치하는지 여부 확인	파손, 부식, 함몰 등의 결함이 없을 것	
2	형 합 성	Rear Case에 취부시 Antenna 형합부위 치수가 도면치수 허용차와 일치여부 및 유해한 결함 없을 것	개별사양 및 좌동에 준함	
3	외관 치수	해당사양 사내 승인도면 또는 고객의 최종 승인원을 만족할 것	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	외 관	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							
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29	OK							
30	OK							

시 험 항 목			Hinge 수명시험														
시 험 D A T A																	
시 료 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																	

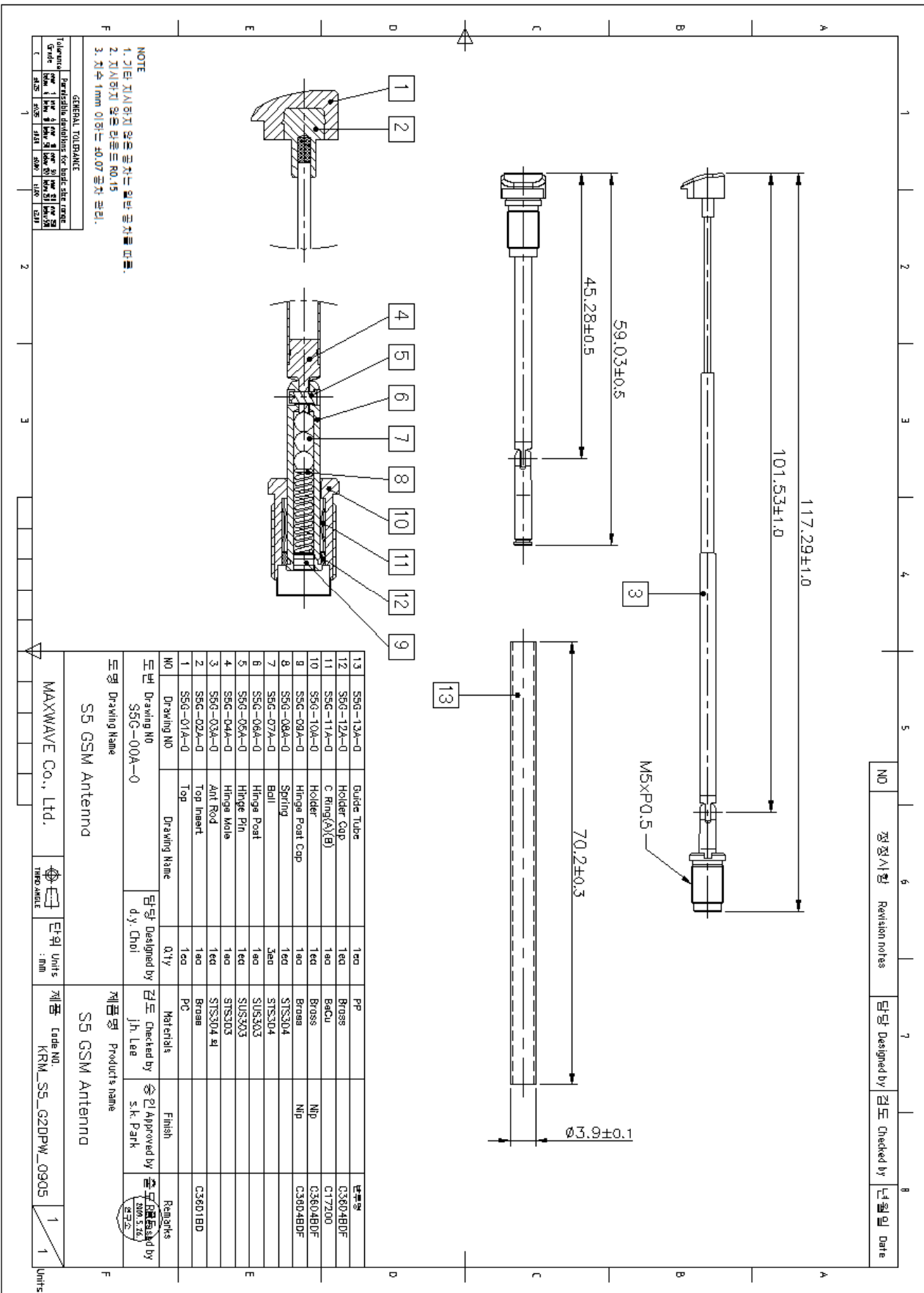
시 험 항 목			회전강도 시험														
시 험 D A T A																	
시 료 NO	검사항목																결과
	외 관 (gf.cm)		VSWR														
			824MHz		894MHz		960MHz		1710MHz		1850MHz		1990MHz		2170MHz		VSWR 4 이하
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	
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																	
시 료 NO	검사항목																결과
	외 관		VSWR														VSWR 4 이하
			824MHz		894MHz		960MHz		1710MHz		1850MHz		1990MHz		2170MHz		
	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																	
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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															

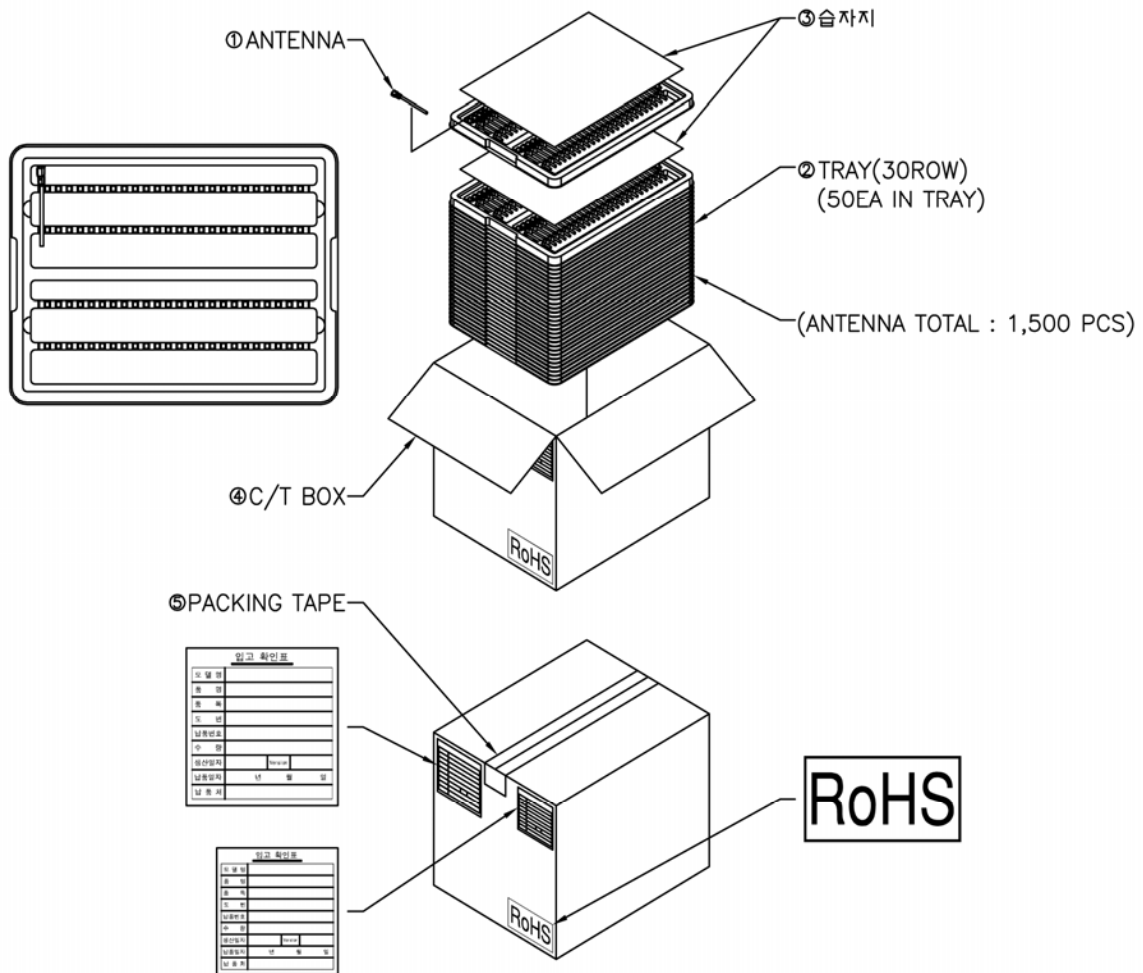
시 험 항 목			염수 분무												
시 험 D A T A															
시료 NO	검사항목														결과
	VSWR														
	824MHz		894MHz		960MHz		1710MHz		1850MHz		1990MHz		2170MHz		VSWR 4 이하
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	
1	2.7	2.7	3.7	3.6	3.6	3.6	3.7	3.6	2.2	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	S5G-14A-0	담당 Designed by	검도 Checked by	승인 Approved by	
도명 Drawing Name	포장사양서	제품명 Products name	S5 GSM Antenna		
MAXWAVE Co., Ltd.	THIRD ANGLE	단위 Units : mm	제품 Code NO. KRM_S5_G2DPW_0905	1	1