

Product Name	Type	Rev.	Hutec	IR
CG890 Sub1(Ant4)	PCB+CABLE		Franklin Technology	IR

APPROVAL SHEET

Customer Name : Franklin Technology

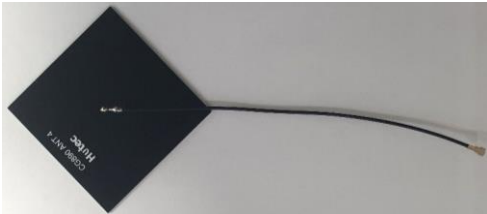
Company Name : Hutec

Product Name : CG890 Sub1(Ant4)

Description ITEM : Sub1(Ant4)

Customer P/N :

Franklin Technology	구 분	작성자	검토자	합 의	승 인 자
	소속/성명				
	서 명				
Hutec	구 분	작성자	검토자	합 의	승 인 자
	소속/성명	기구/유정석	회로/방구현	품질/권순흥	김영상 수석
	서 명	유정석	방구현	권순흥	김영상

PRODUCT PHOTO	T O P	
	B O T T O M	
Weight(g)	5.0g	

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1. Revision History of Product Specification

1.1 History List of Approval Sheet

[illegible]

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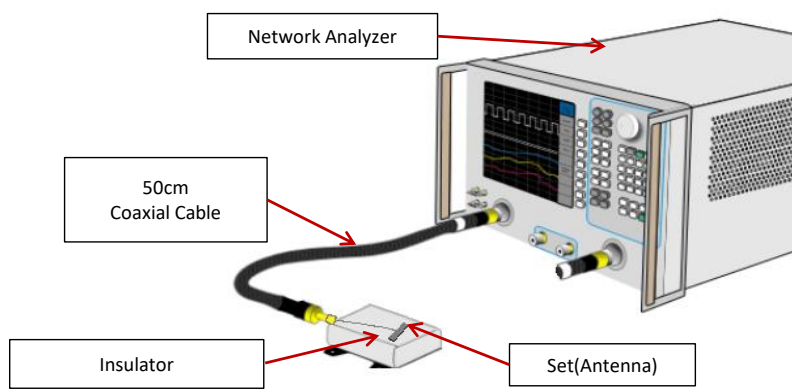
2. RF Specification

2.1 Test Condition

2.1.1 Test Environment (Condition/Method)

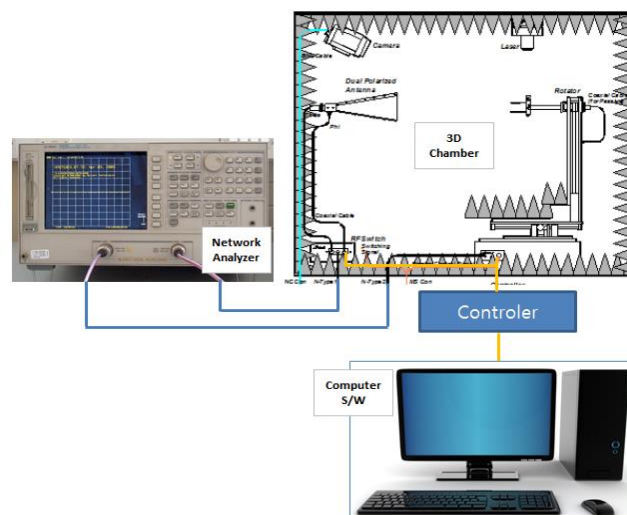
① Voltage Standing Wave Ratio(VSWR)

- Step 1. Set the frequency range after connect 50cm cable to Network analyzer.
- Step 2. Connect Calibration Kit to Network analyzer and calibrate.
- Step 3. Fix the cable and keep separation distance over 30cm for reducing effect by Network analyzer.
- Step 4. Fix insulator over 5cm on the bottom of measuring antenna.
- Step 5. Measure VSWR with setting marker of desired frequency.



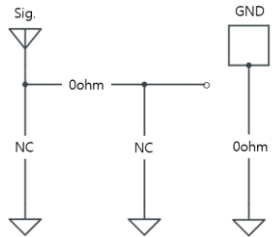
② Radiation Pattern & Gain

- Step 1. Calibrate the Chamber system using Horn antenna, and set up the software to control the Chamber system at the same time.
- Step 2. Keep the measuring antenna to holder.
- Step 3. Measure Gain & efficiency.



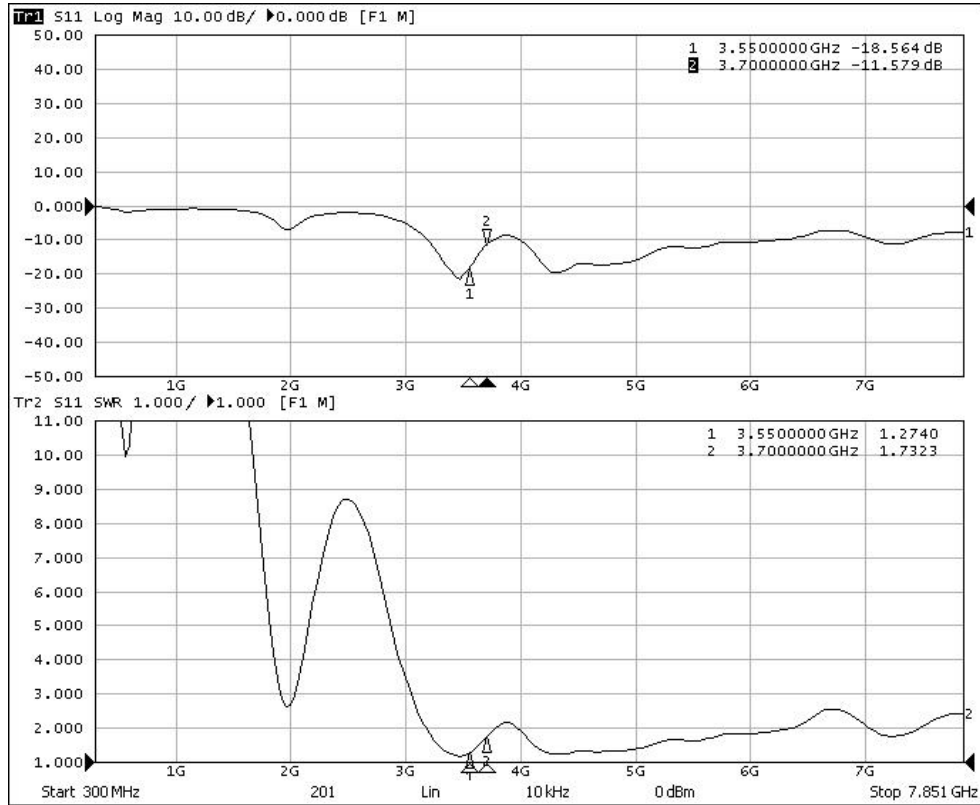
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2.2 Electrical Specification

Main4(Ant4) Antenna	
Frequency	B48(n48) 3550MHz ~ 3700MHz
VSWR	≤ 2.7
Peak Gain[dBi]	-0.6
Avg Gain[dBi]	-7.1
Matching Value	
Directivity	Omni-directional
Polarization	Linear
Feed Impedance	50 Ohms
Power Handling	2Watt

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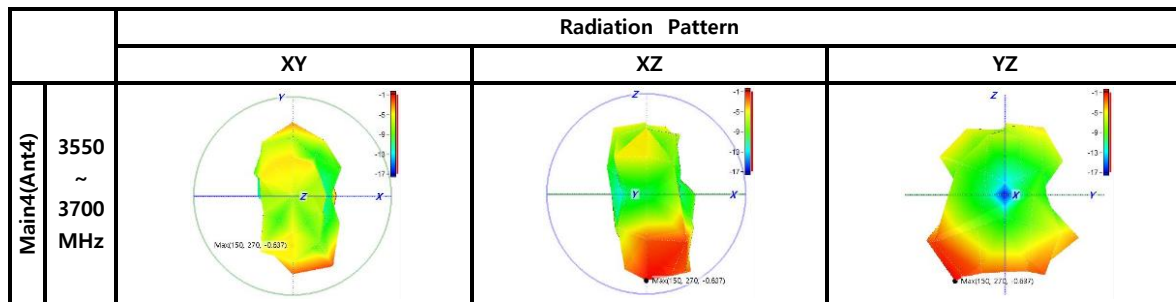
2.2.1 V.S.W.R



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2.2.2 3D Gain & Radiation Pattern

Frequency	Peak Value		Minimum Value		Avg. Gain	Efficiency
[MHz]	Value[dBi]	Degree	Value[dBi]	Degree	[dBi]	[%]
3550	-0.637	150 / 270	-17.361	90 / 0	-6.471	22.537
3650	-0.693	150 / 270	-21.057	60 / 180	-7.106	19.472
3700	-0.647	150 / 270	-17.559	60 / 0	-7.132	19.354



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3. Mechanical Specification

3.1 Part List

PART LIST											SIGN	DRAWN	CHECK	APPROVE	
												유정석			
PRODUCT NAME				CG890 Main4(ANT4)							ESTABLISH . DATE		2023.01.06.		
PRODUCT SPECIFICATION				LTE&NR							REVISION DATE		2023.01.06. V10		
CUSTOMER				Franklin Technology											
NO	LEVEL									PART NO.	PART NAME	Material & Description	Q'TY	VENDOR	REMARK
	1	2	3	4	5	6	7	8	9						
0	0									HPC-PCB0025N-IR	Sub1(Ant4)	FR4 35*35*1T/D/S	1	FMC	CG890Sub1(Ant4)
1	0									HPC-CAB0044B-IR	CABLE ASS'Y	MHF4 / Ø0.81	1	FMC	Sub1(Ant4)/BK
2	0														
3	0														
4															
5															
6															-
7															-
8															-
9															-
10															-
11															-
12															-
13															-
14															-
15															-
[REVISION HISTORY]															
REV	DATE	DESCRIPTION				REMARKS		REV	DATE	DESCRIPTION				REMARKS	
[REMARKS]															

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3.2 Ass'y Drawing

