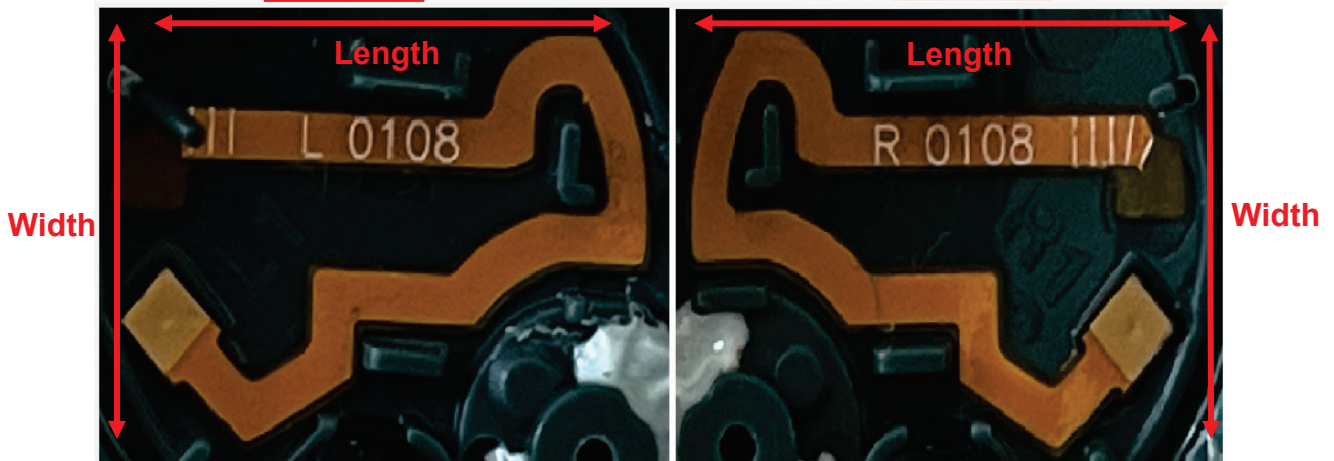


Antenna Information

Item	Contents	
Antenna Type	Monopole Antenna	
Antenna peak gain	Left	-2.8 dBi
	Right	-0.49 dBi
Manufacturer / Model name	Left	AWAVE / ATH-CKS50TW2-(L)
	Right	AWAVE / ATH-CKS50TW2-(R)
Address of manufacturer	519~520Ho, 75-15, Gasan digital 1-ro, Geumcheon-gu, Seoul, Republic of Korea	
Test Laboratory	AWAVE	
Left Antenna Length	1.4 cm	
Left Antenna Width	0.9 cm	
Right Antenna Length	1.4 cm	
Right Antenna Width	0.9 cm	

Left

Right



Model name: ATH-CKS50TW2

APPROVAL SPECIFICATION

Product : Internal Antenna

Model Name : ATH-CKS50TW2-(L)

Date : 2024.04.01



AWAVE

[08592] 519~520Ho, 75-15, Gasan digital 1-ro, Geumcheon-gu, Seoul, Republic of Korea

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1. Manufacturer

- **AWAVE**
- **AWAVE Part Number : AW-00009**

2. Model Name

- **ATH-CKS50TW2-(L)**

3. Antenna Type

- **Monopole : Monopole Antenna**

4. Electrical Performance Data

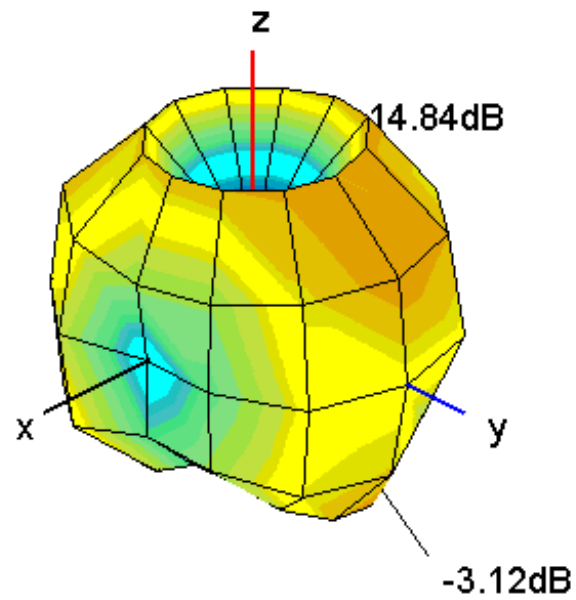
4.1 Specification Sheet

4.1.1 3D Gain Data

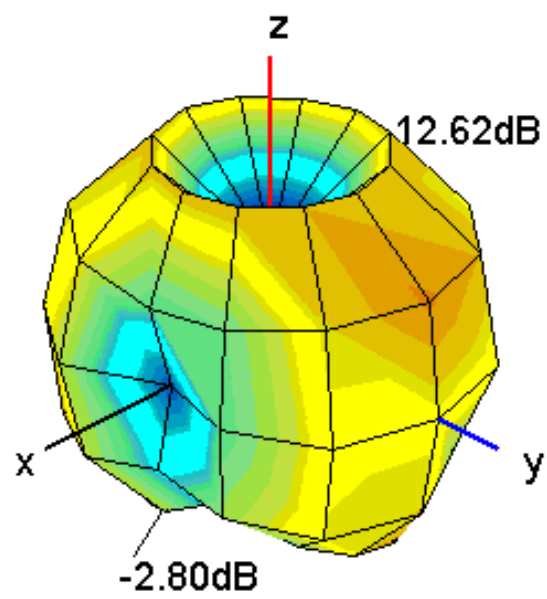
Electronic Specification			
Frequency Range (MHz)	Bluetooth		
	2400	2440	2480
3D Average Gain (dB)	-5.94	-5.48	-6.13
3D Average Efficiency (%)	25.4	28.3	24.4
3D Peak Gain (dBi)	-3.12	-2.80	-3.40

4.1.2 3D Radiation Pattern

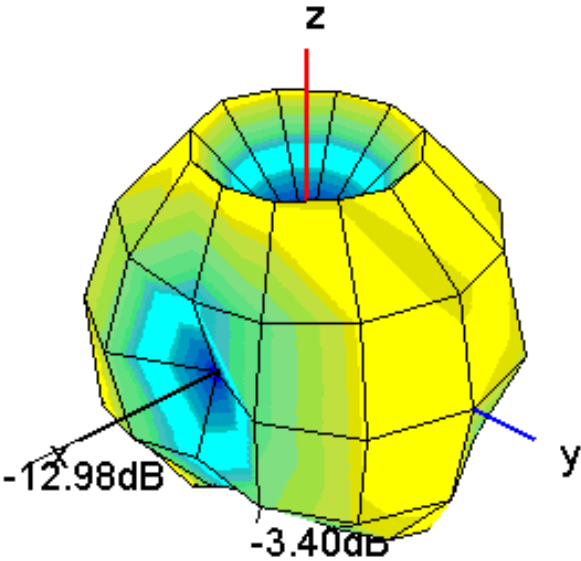
BT [2400MHz]



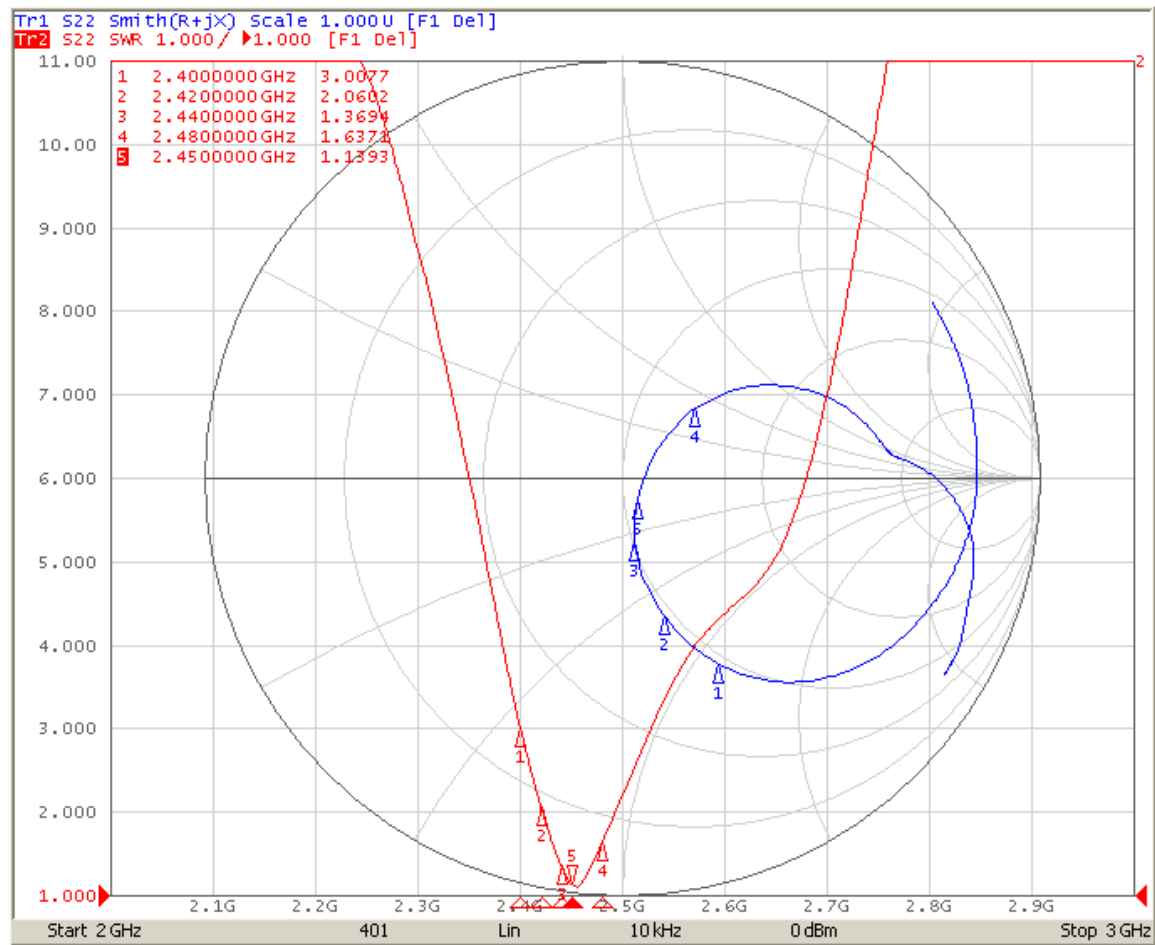
BT [2440MHz]



BT [2480MHz]



4.1.3 VSWR (SET)



5. External Drawing

1

2

3

4

5

6

7

8

9

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11

12

13

14

15

16

17

18

19

20

21

22

NO.

CHANGE

CONTENTS

REVISION

CHANGE CAUSE

⊕ ASSY



⊕ TOP_SILK PRINT



⊕ TOP_COVERLAY



⊕ TOP_PATERN



⊕ TOP_OUTLINE



⊕ BTM_STIFFNER



⊕ BTM_TAPE



⊕ BTM_이형지



TOP_ASSY

BTM_ASSY

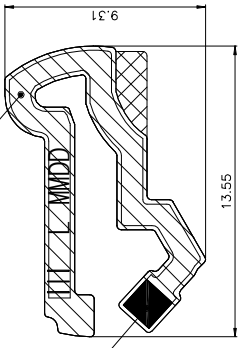
S=1/1

"A"
(PATTERN#)

9.31

"B"
(PATTERN#)

13.55

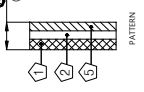


① 0.13±0.03
(이형지 제외)

②

③

④



정합부

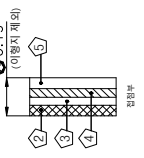
Detail "A"
S=N/S

① 0.19±0.03
(이형지 제외)

②

③

④



정합부

Detail "B"
S=N/S

NO.	PART NO.	DESCRIPTION	Q'TY	MATERIAL	REMARKS	REV.
	N/A	DRAW	DESIGN	CHECK	APPRO.	TITLE
	FINISH	N/A				ANTENNA
	TOLERANCE	Decimal	Angle			PART NO. AWA-00009
	SCALE	5/1	UNIT mm	MODEL	24.04.01	DWG NO. AWA-00009
	REVISION	A	SHEET 1	OP. NAME	OP. DATE	AWAVE A3

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APPROVAL SPECIFICATION

Product : Internal Antenna

Model Name : ATH-CKS50TW2-(R)

Date : 2024.04.01



AWAVE

[08592] 519~520Ho, 75-15, Gasan digital 1-ro, Geumcheon-gu, Seoul, Republic of Korea

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2.	Model Name	-----	3
3.	Antenna Type	-----	3
4.	Electrical Performance Data	-----	3
5.	External Drawing	-----	7

1. Manufacturer

- **AWAVE**
- **AWAVE Part Number : AW-00010**

2. Model Name

- **ATH-CKS50TW2-(R)**

3. Antenna Type

- **Monopole : Monopole Antenna**

4. Electrical Performance Data

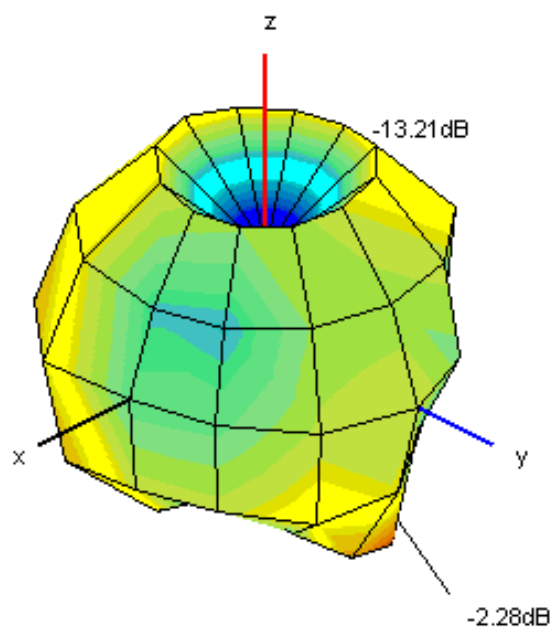
4.1 Specification Sheet

4.1.1 3D Gain Data

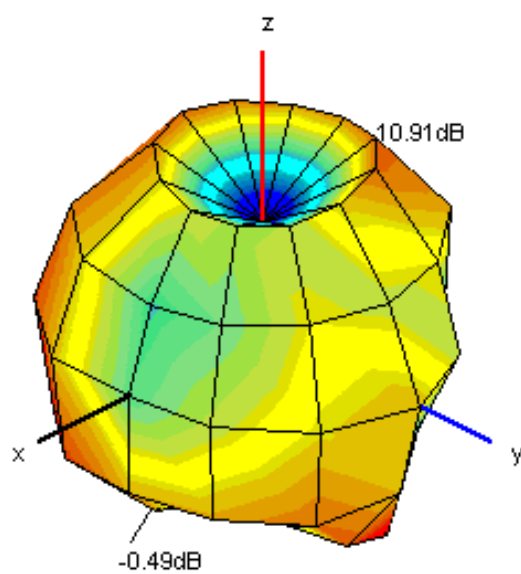
Electronic Specification			
Frequency Range (MHz)	Bluetooth		
	2400	2440	2480
3D Average Gain (dB)	-6.15	-5.01	-6.28
3D Average Efficiency (%)	24.3	31.5	23.5
3D Peak Gain (dBi)	-2.28	-0.49	-1.25

4.1.2 3D Radiation Pattern

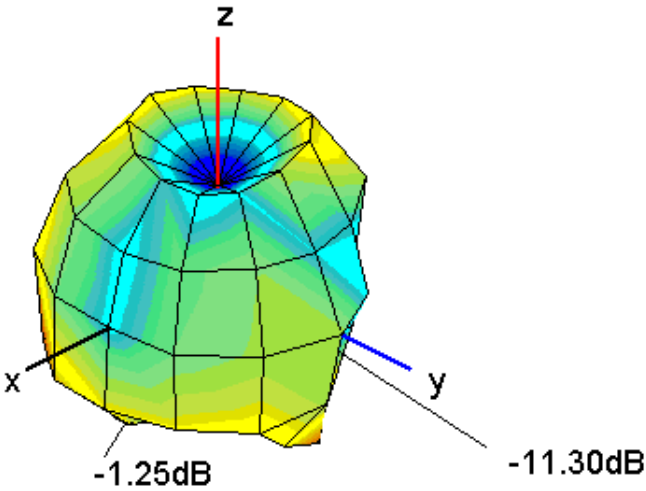
BT [2400MHz]



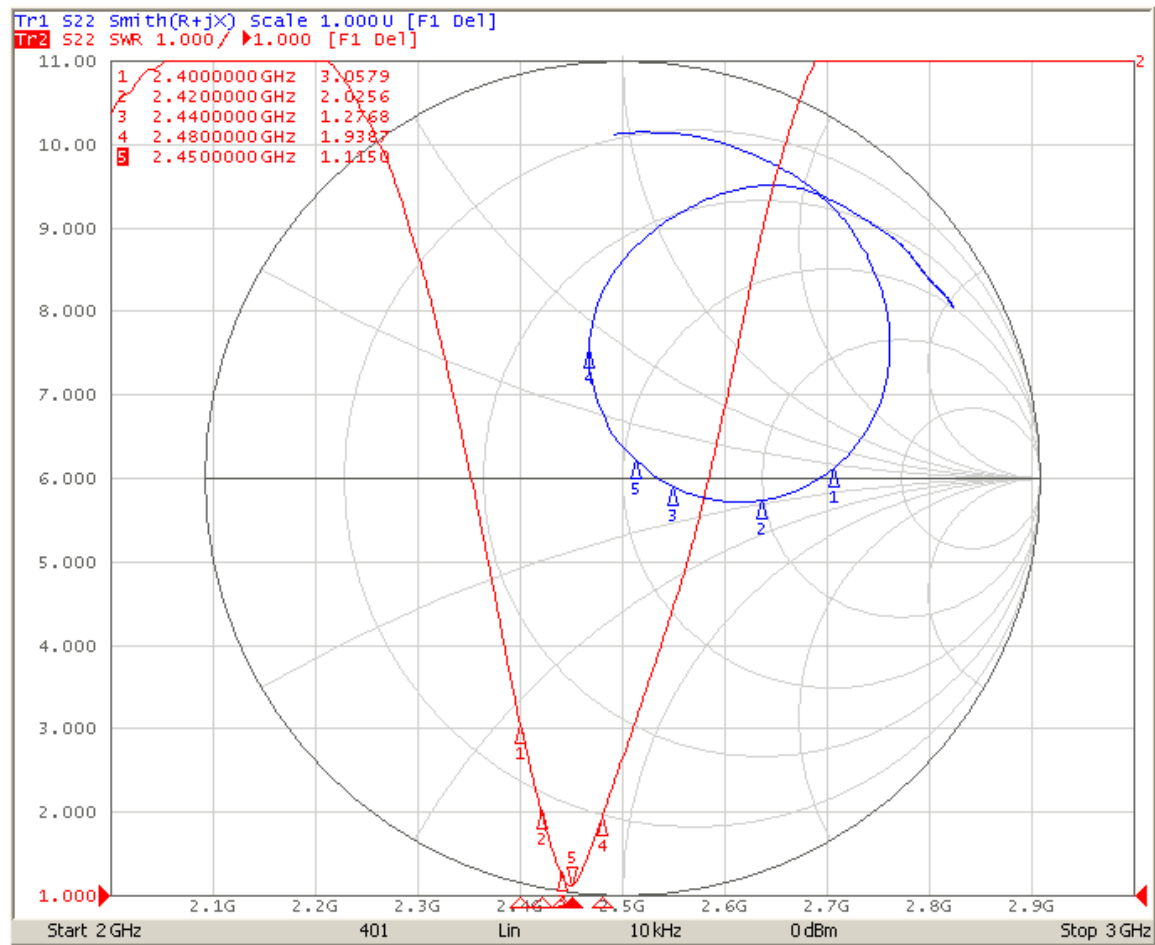
BT [2440MHz]



BT [2480MHz]



4.1.3 VSWR (SET)



5. External Drawing

[illegible]