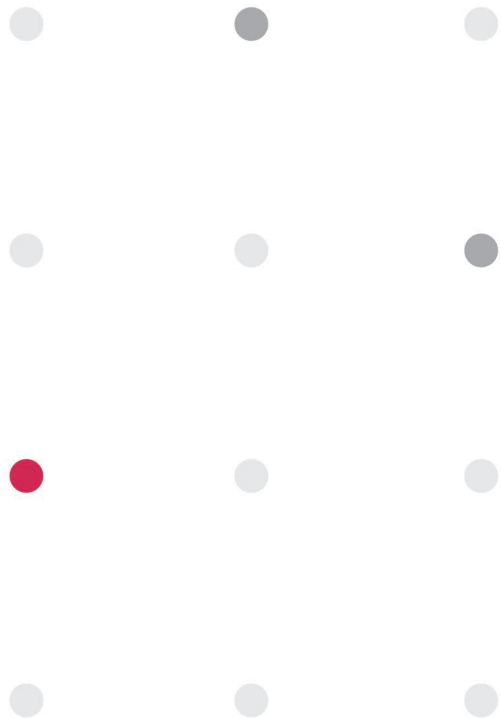


PSA

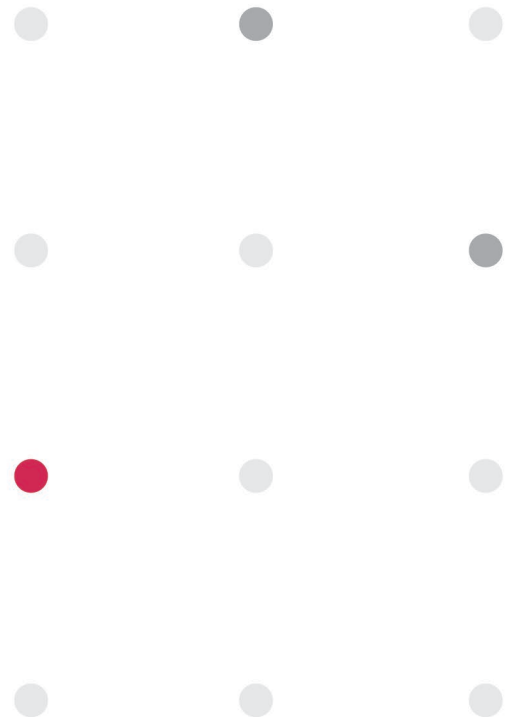
佳邦科技股份有限公司

INPAQ TECHNOLOGY CO., LTD.



PSA

PASSIVE SYSTEM ALLIANCE
INPAQ TECHNOLOGY CO., LTD.



群光 WiFi Chime

Presented by

Ken Cheng

2025/04/16

Version	Date	Description	Author
V01	2024/03/04	New Release	Simon Huang
V02	2024/03/07	調整匹配元件改善天線效率	Ken Cheng
V03	2024/09/20	新版樣機調整匹配元件	Ken Cheng
V04	2024/11/15	SPK 電線影響天線頻偏實驗	Ken Cheng
V05	2024/11/19	SPK電線整線方式、調整匹配元件	Ken Cheng
V06	2024/11/26	改用群光慣用電感量測、SPK理線採用客戶手法	Ken Cheng
V07	2024/12/13	兩台樣機量測差異實驗	Ken Cheng
V08	2024/12/19	C01主板比較差異	Ken Cheng
V09	2024/12/24	C01主板僅移除並聯元件並修改天線	Ken Cheng
V10	2024/12/27	C01_3、C01_4主板僅移除並聯元件，串聯0ohm並修改天線	Ken Cheng
V11	2025/01/14	線切割樣品量測	Ken Cheng
V12	2025/04/16	天線被動數據	Ken Cheng

OUTLINE

1. Measurement Information

- 1.1 Experimental Setup
- 1.2 Antenna Solution Detail

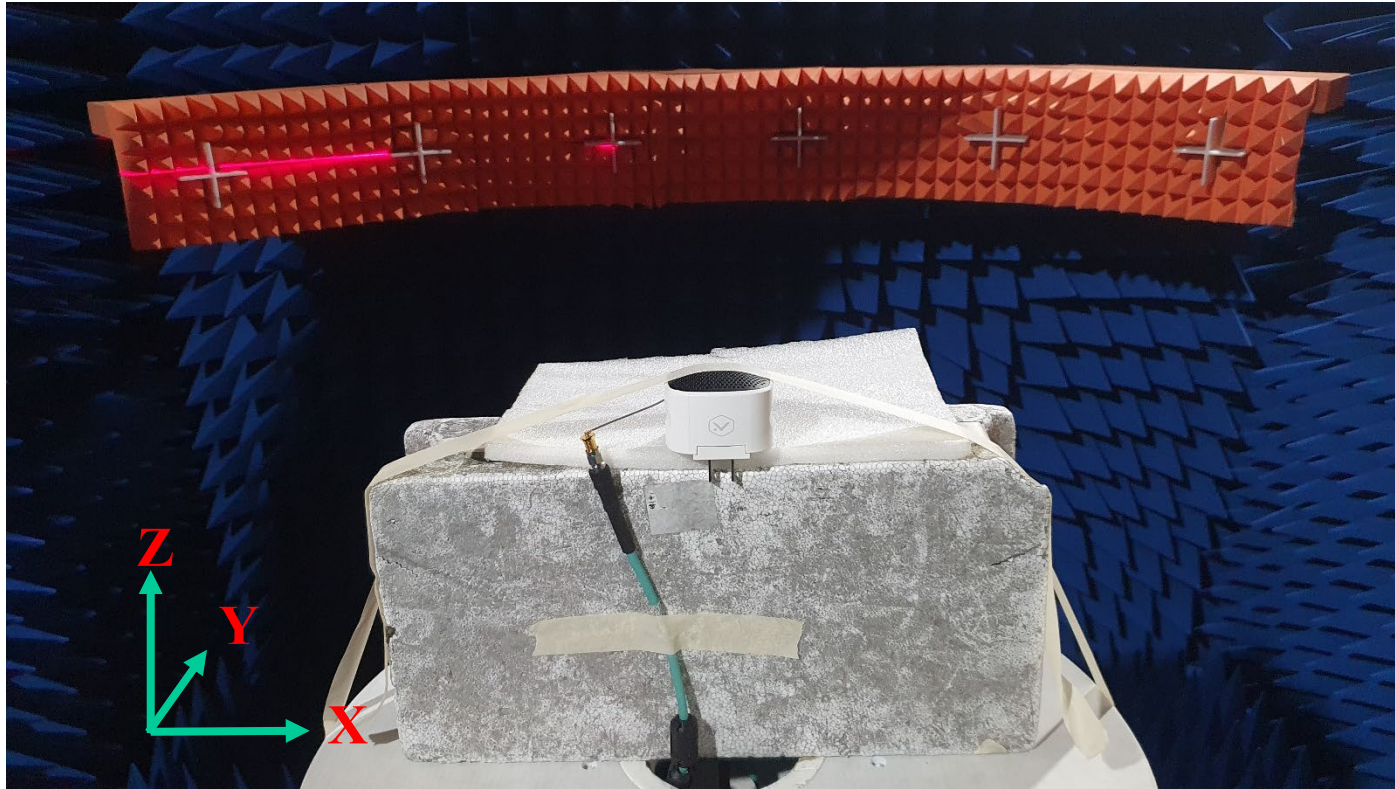
2. Antenna Characteristics

- 2.1 S-Parameter
- 2.2 Antenna Efficiency and Peak Gain
- 2.3 3 views of antenna & 2D Radiation Patterns

3. Summary

1. Measurement Information

1.1 Experimental Setup



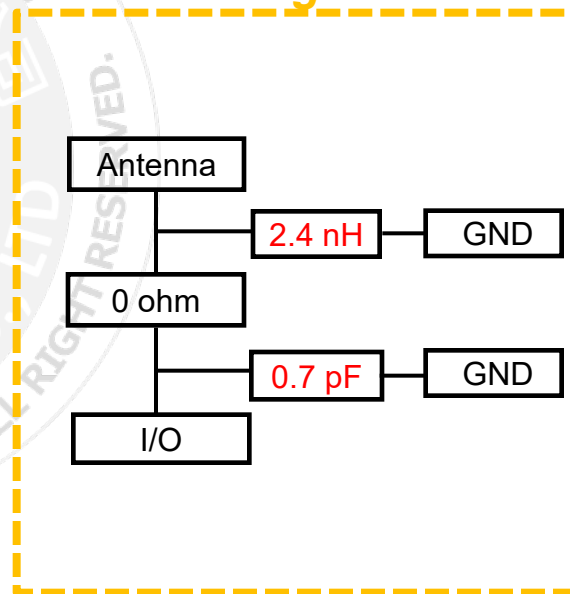
1. Measurement Information

1.2 Antenna Solution Detail



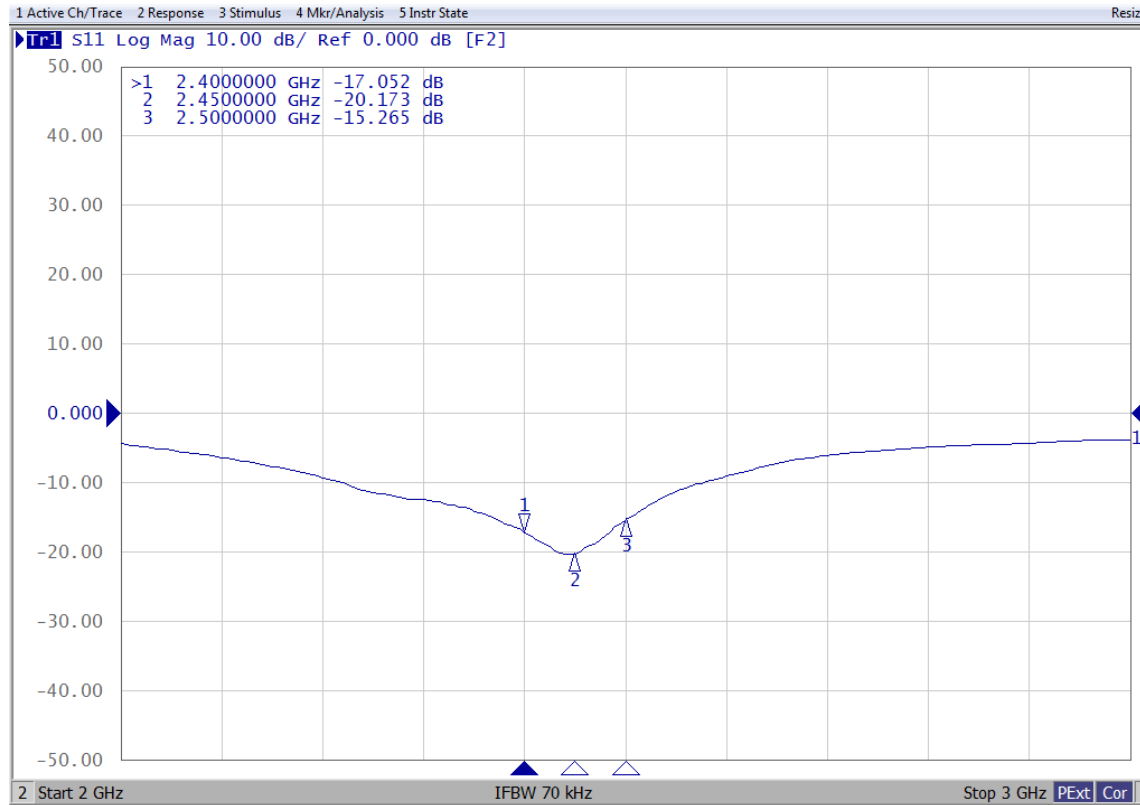
	對應料號
2.4 nH (群光慣用電感)	HCRF0603SR-2N4B
0 ohm	WR02X000PTL
0.7 pF	RF03N0R7B500CT

Matching values



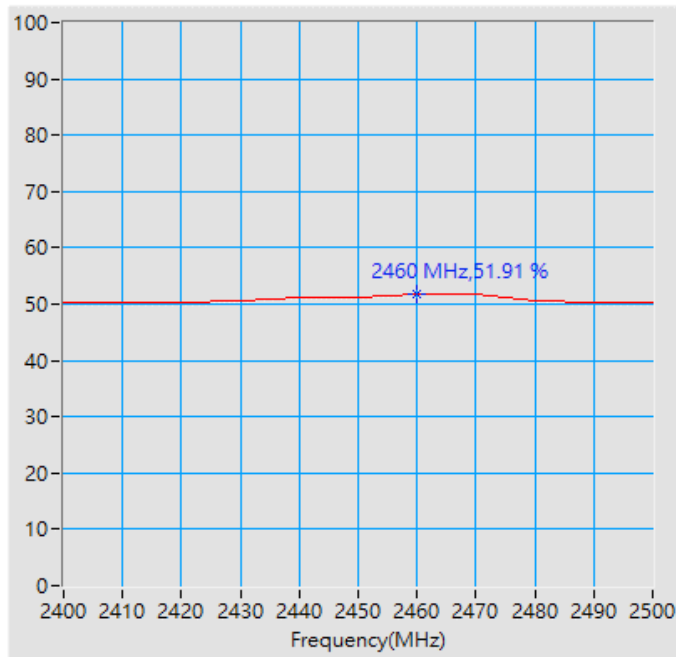
2. Antenna Characteristics

2.1 S-Parameter

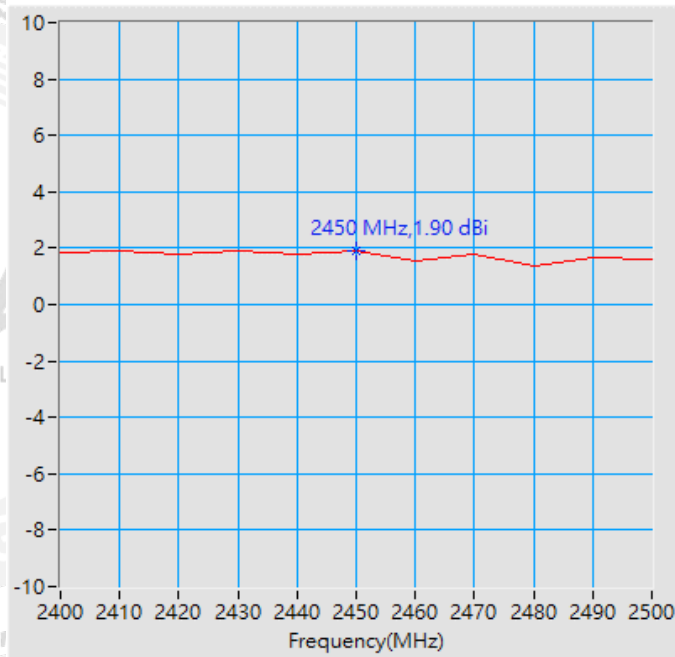


2. Antenna Characteristics

2.2 Antenna Efficiency and Peak Gain



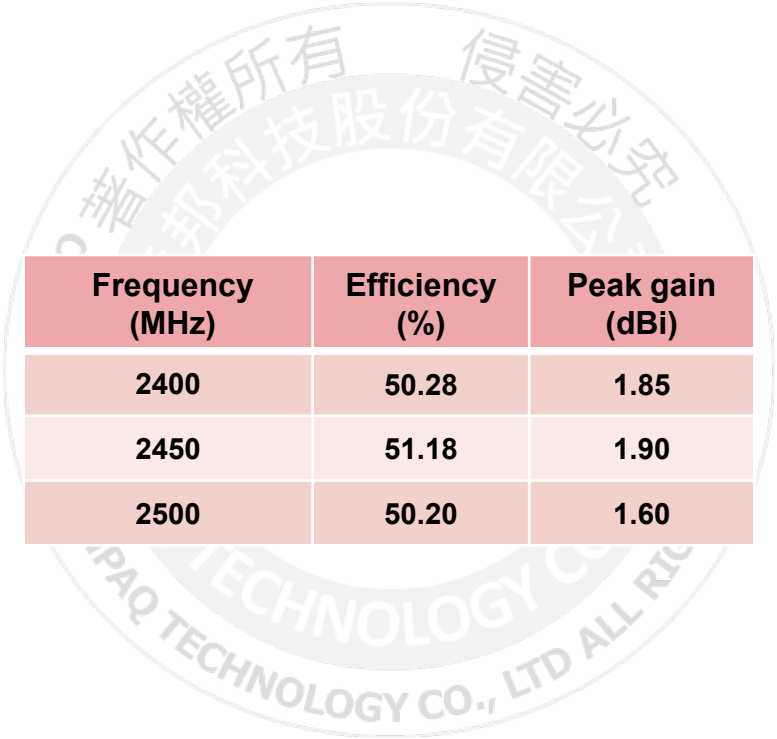
Maximum Efficiency at 2460 MHz : 51.91 %



Maximum Peak Gain at 2450 MHz : 1.90 dBi

2. Antenna Characteristics

2.2 Antenna Efficiency and Peak Gain

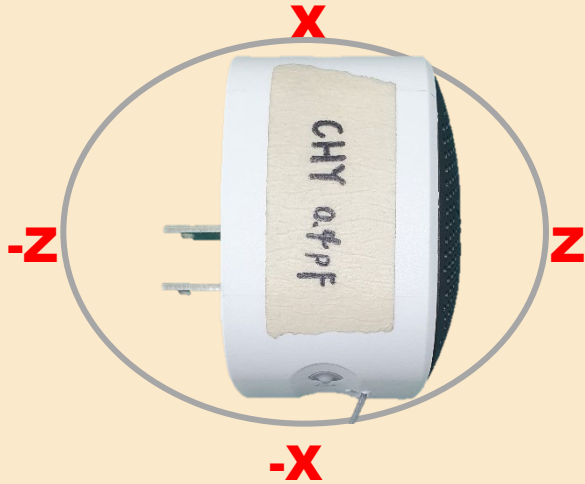


Frequency (MHz)	Efficiency (%)	Peak gain (dBi)
2400	50.28	1.85
2450	51.18	1.90
2500	50.20	1.60

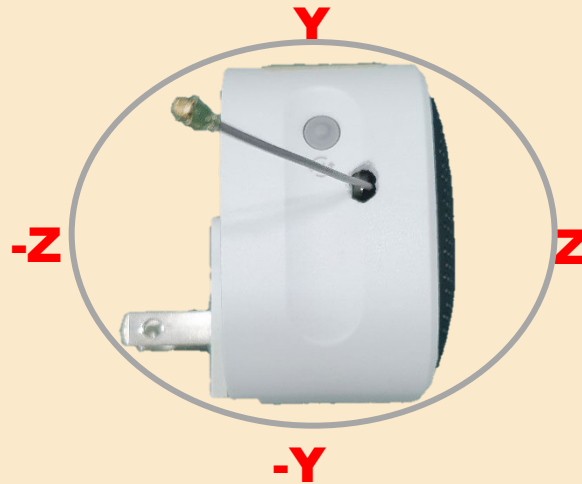
2. Antenna Characteristics

2.3 3 views of antenna

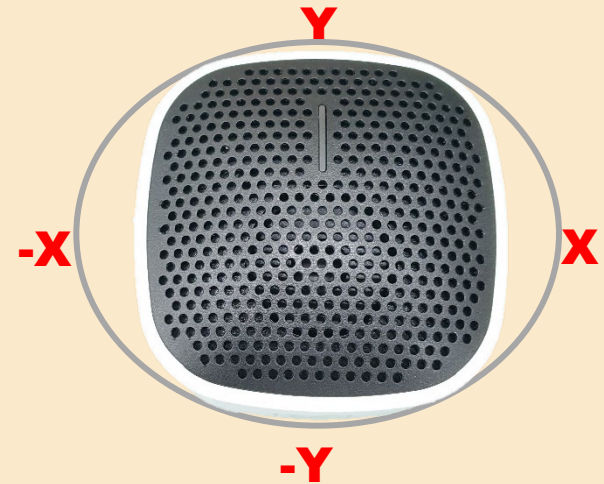
X-Z plane



Y-Z plane

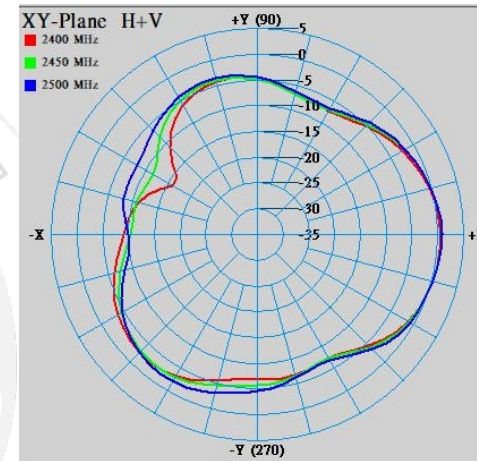
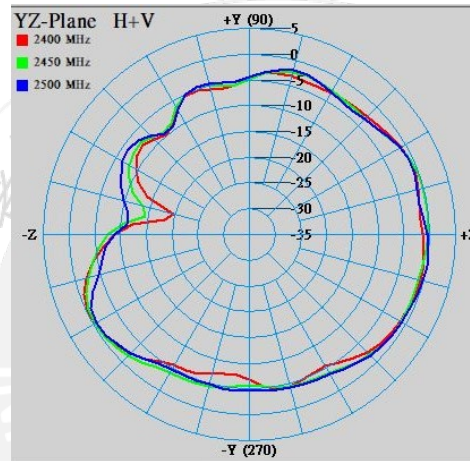
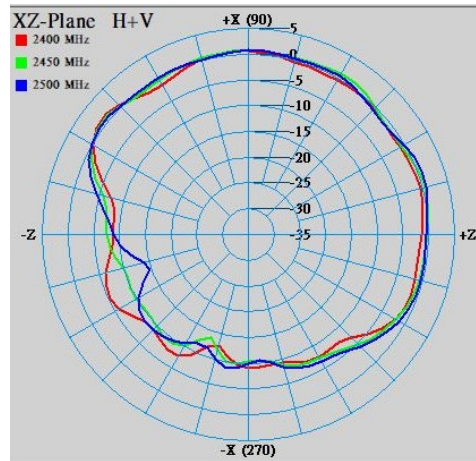


X-Y plane



2. Antenna Characteristics

2.3 2D Radiation Patterns

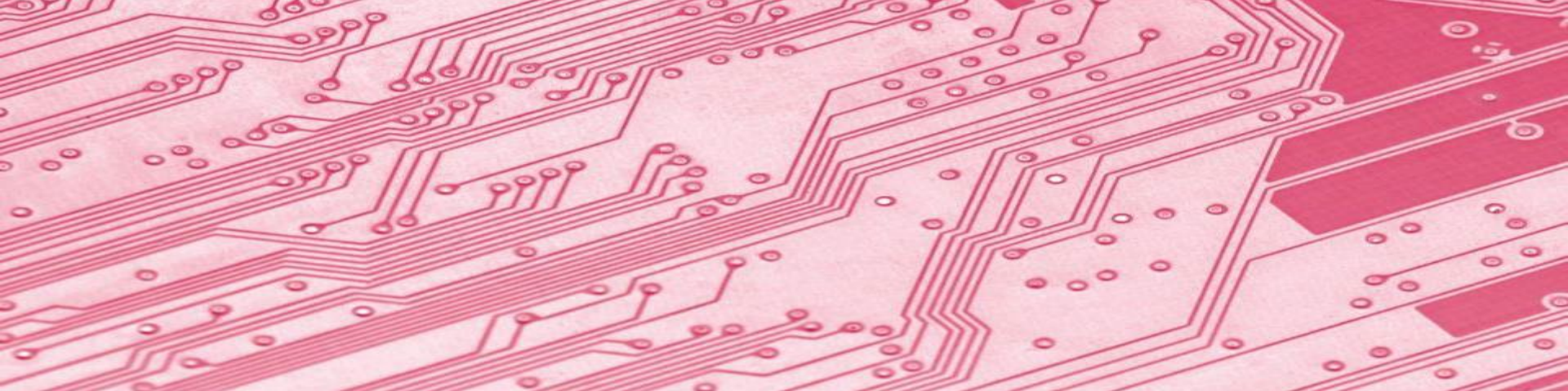


	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2400	1.17	-2.60	-0.32	-3.58	0.60	-4.14
2450	1.00	-2.16	-0.14	-3.12	0.82	-3.94
2500	0.85	-2.13	0.00	-3.22	0.75	-3.55

3. Summary

- The performance of antennas is shown in table

	2400 – 2500 MHz
Maximum Efficiency (%)	51.91
Maximum Gain (dBi)	1.90



Title for Image (above image could be replaced)

Content Details

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