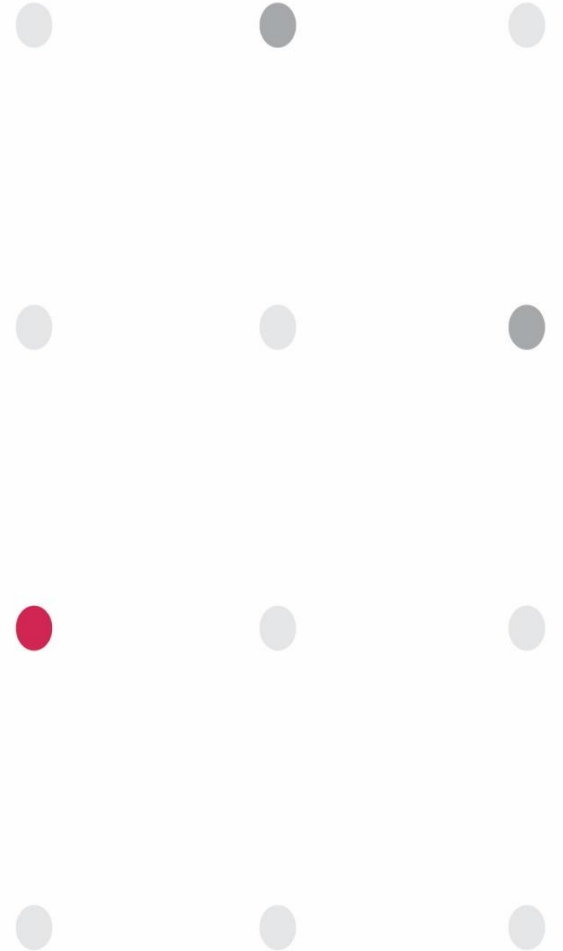


PSA



PASSIVE SYSTEM ALLIANCE  
WALSIN TECHNOLOGY CORPORATION

# MTK

## Low gain antenna 5925-7125MHz\_pifa-type (RFMTA421208IMMB701)

Presented by

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**2022/08/30**

# OUTLINE

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1.1 Experimental Setup

1.2 Antenna Solution Detail

## 2. Antenna Characteristics

2.1 Returnloss

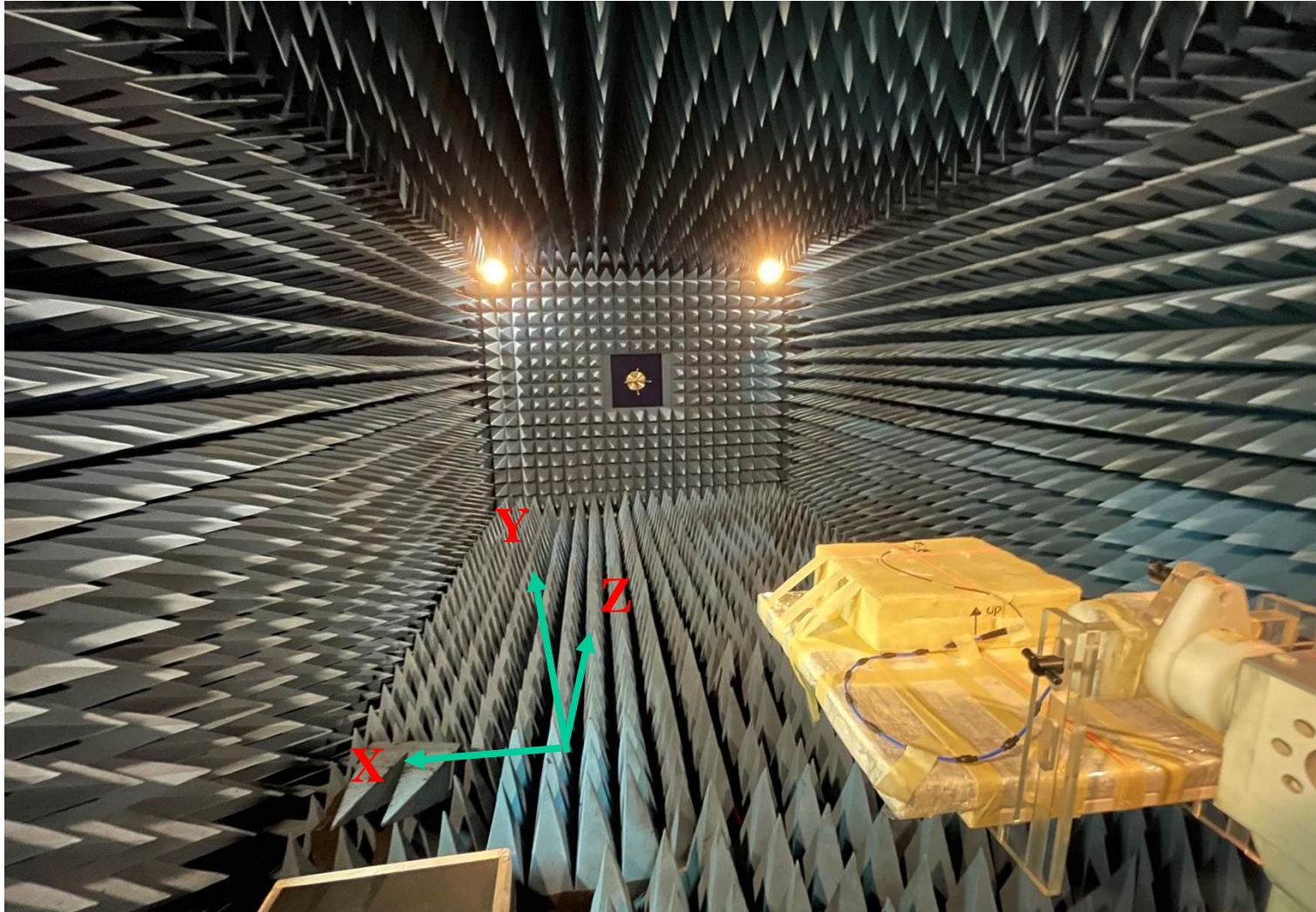
2.2 Antenna Efficiency and Peak Gain

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# 1. Measurement Information

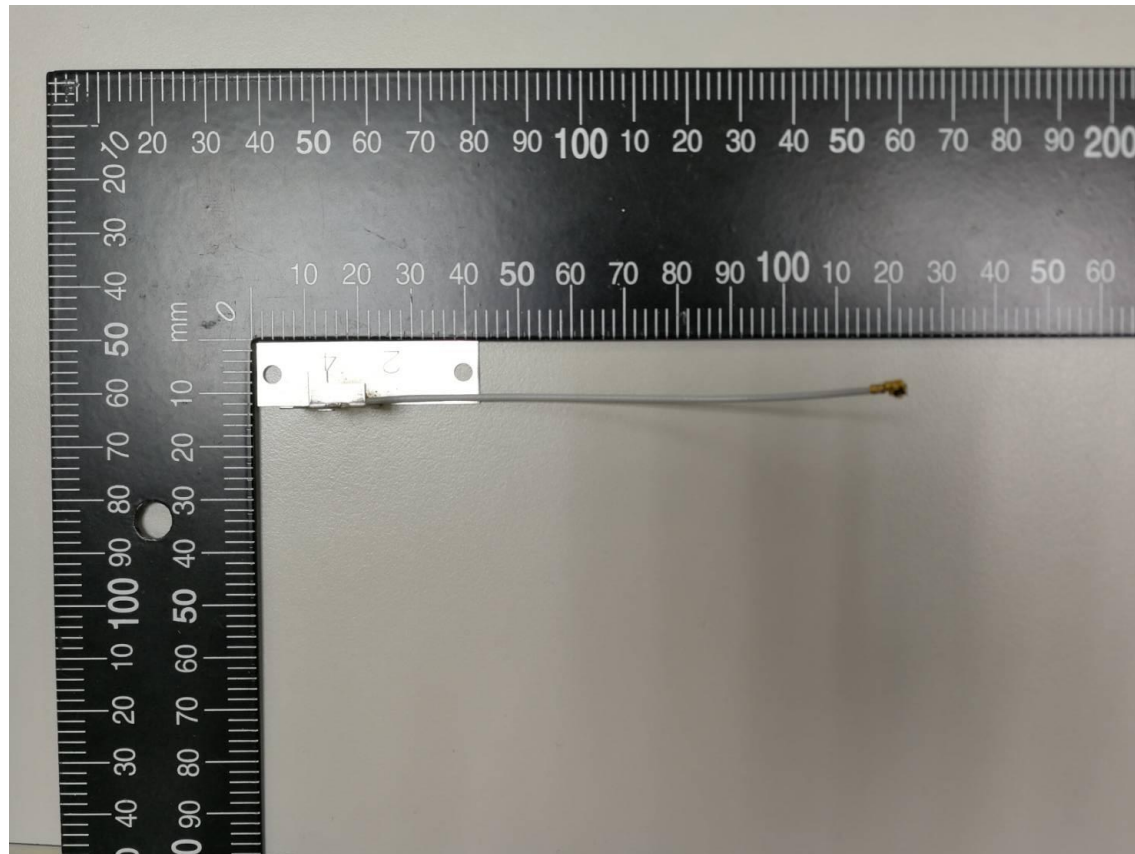
## 1.1 Experimental Setup



# 1. Measurement Information

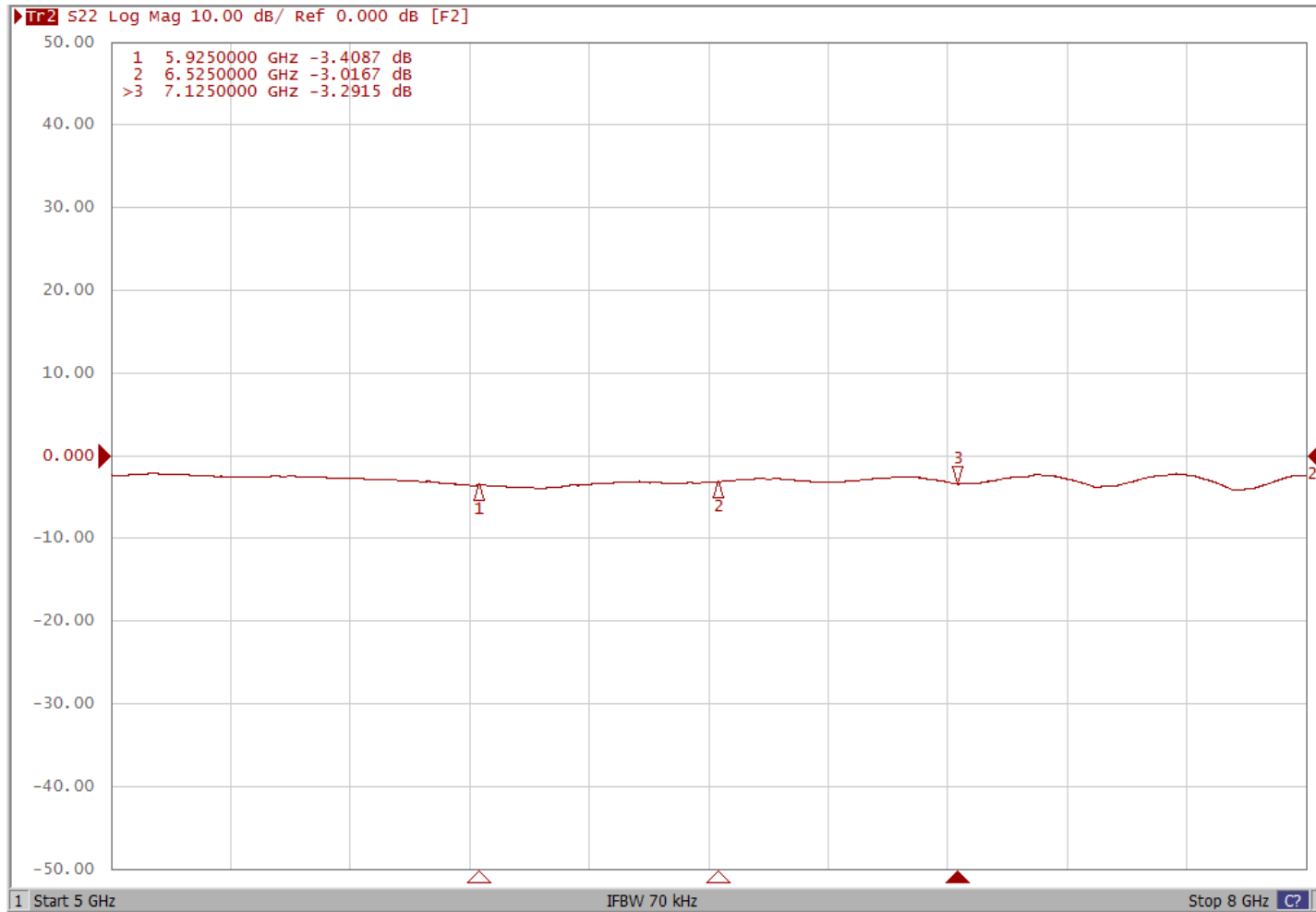
## 1.2 Antenna Solution Detail

Project No:RFMTA421208IMMB701



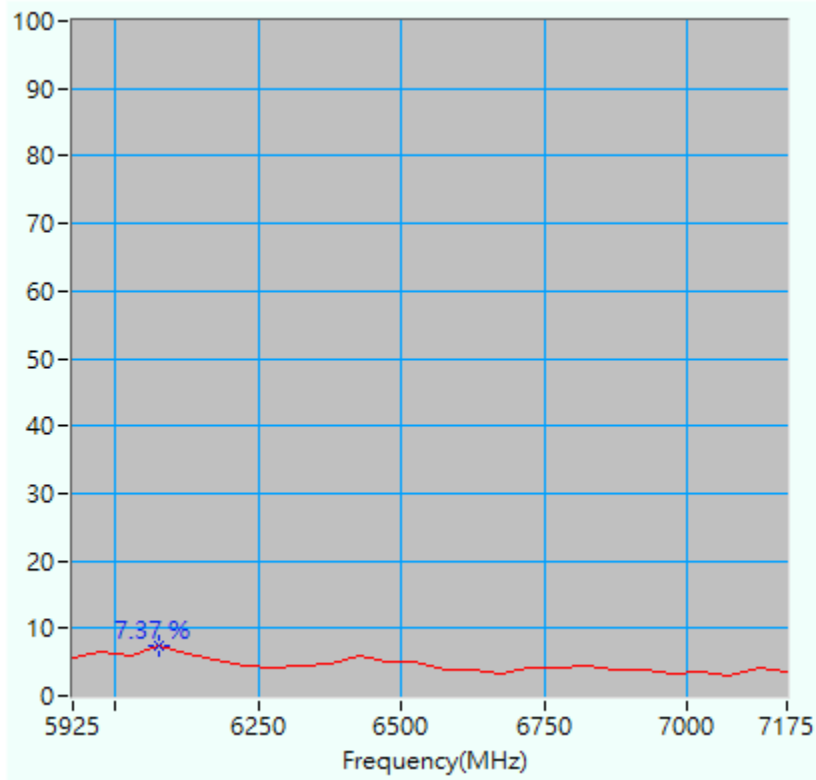
## 2. Antenna Characteristics

### 2.1 Returnloss

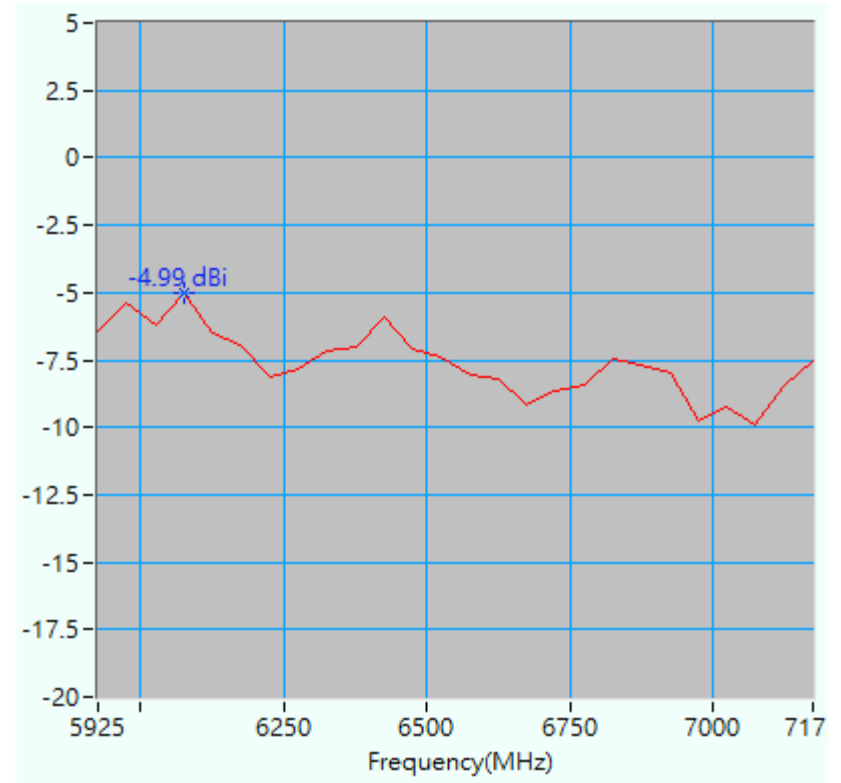


## 2. Antenna Characteristics

### 2.2 Antenna Efficiency and peak gain



Maximum Efficiency at 6075MHz : 7.37 %



Maximum Peak Gain at 6075 MHz : -4.99 dBi

## 2. Antenna Characteristics

- The performance of antennas is shown in table.

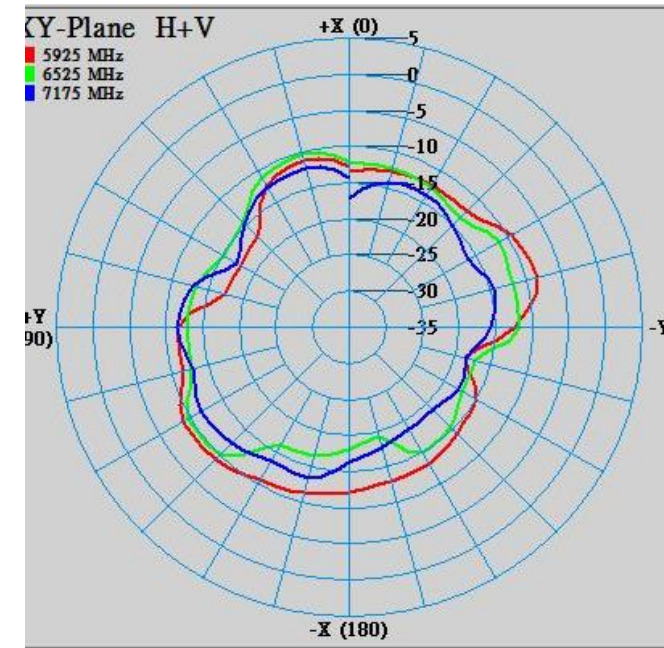
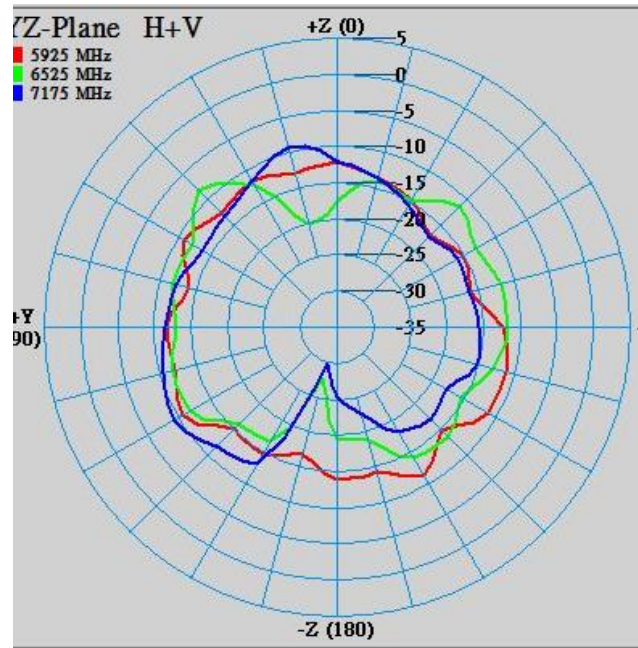
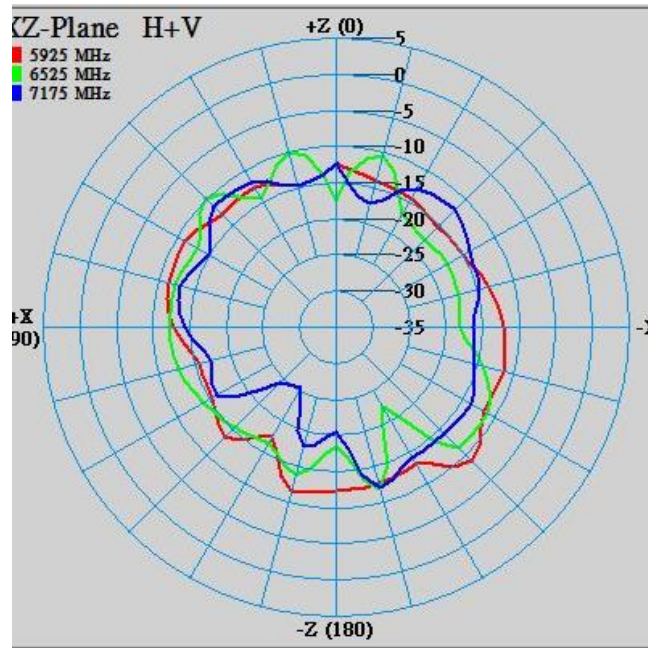
Antenna	Frequency(MHz)	Efficiency (%)	Peak Gain (dBi)
	5925	5.63	-6.44
	5975	6.41	-5.37
	6025	5.85	-6.20
	6075	7.37	-4.99
	6125	6.29	-6.52
	6175	5.49	-6.96
	6225	4.46	-8.12
	6275	4.10	-7.87
	6325	4.50	-7.20
	6375	4.69	-6.98
	6425	5.93	-5.92
	6475	5.02	-7.08
	6525	5.19	-7.40
6575	3.94	-8.08	

Antenna	Frequency(MHz)	Efficiency (%)	Peak Gain (dBi)
	6625	3.80	-8.18
	6675	3.33	-9.15
	6725	4.22	-8.62
	6775	4.18	-8.44
	6825	4.40	-7.49
	6875	3.81	-7.70
	6925	3.80	-8.02
	6975	3.25	-9.79
	7025	3.69	-9.26
	7075	3.04	-9.90
	7125	4.10	-8.44
	7175	3.70	-7.56



## 2. Antenna Characteristics

### 2.3 2D Radiation Patterns



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
5925	-8.69	-12.75	-10.57	-12.95	-8.36	-12.10
6525	-9.79	-13.49	-8.36	-13.35	-9.66	-13.22
7125	-11.43	-14.40	-9.19	-13.55	-11.49	-14.44

### 3. Summary

- The performance of antennas is shown in table.

		Maximum Efficiency (%)	Peak Gain (dBi)
Antenna	5925-7125MHz	7.37	-4.99

# Thank you

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