

Specification for Approval

Customer:	Motic
Part name:	WIFI6 Camera-specific Antenna
Part No. :	ZH100169
Customer Part No. :	

Customer Approved By		
APPROVAL	CHIEF	DESIGN

Supplier Confirmed		
	CHIEF	DESIGN
	Jack	Lee
	2025. 2. 11	2025. 2. 11
Technical Support		
If you have any questions about the following Specifications or RF product Keep Call Phone: 18350272787 E-Mail: li.jinkun@mhzrf.com		

Catalogue

NO	Content	Page
1	Cover	1
2	Catalog	2
3	Product chart/Assembly	3
4	Characteristics/Match	4
5	OTA darkroom	5
6	efficiency and gain report	6
7	SWR and S parameter	6
8	Isolation	7
9	Directional and 3D diagram	8-11
10	Drawing	12

Update of the Records			
Rev	Formulate	Date	Content
01	Lee	2024. 4. 15	new
02	Lee	2025. 2. 11	Add 2. 4 data

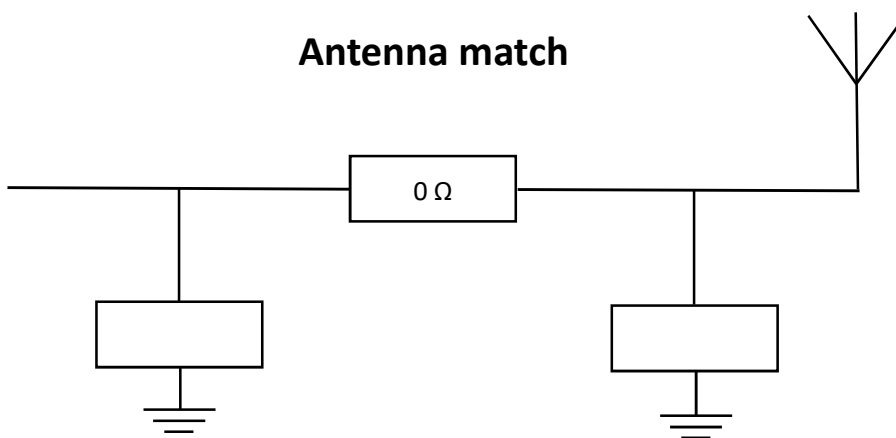
Customer product



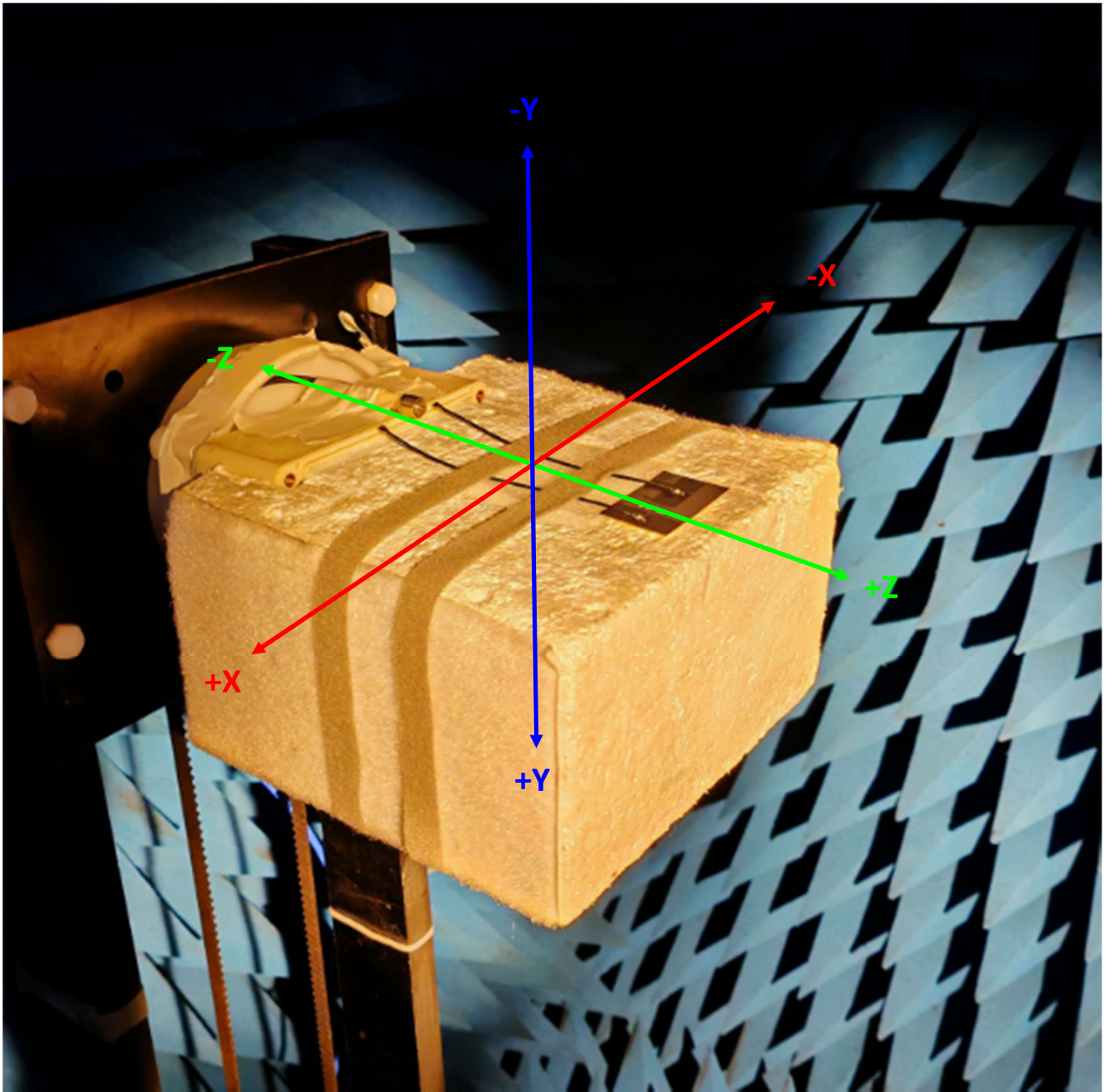
Antenna performance

product type	FPC antenna
DESCRIPTION	VALUE
Frequency Range	2400~2500&5000~6000 MHz
V.S.W.R	Air
Impedance	50 Ω
Gain	ANT1:-2.7dBi & 2.0 dBi ANT2:-2.2dBi & 4.6 dBi
Radiation	Omni-directional
Radiating element	1/4 Wave Helical
Polarization	Linear Vertical
Admitted power	2W
Connector	Ipex
Operating temp	-40℃~+85℃

Antenna match



OTA darkroom picture

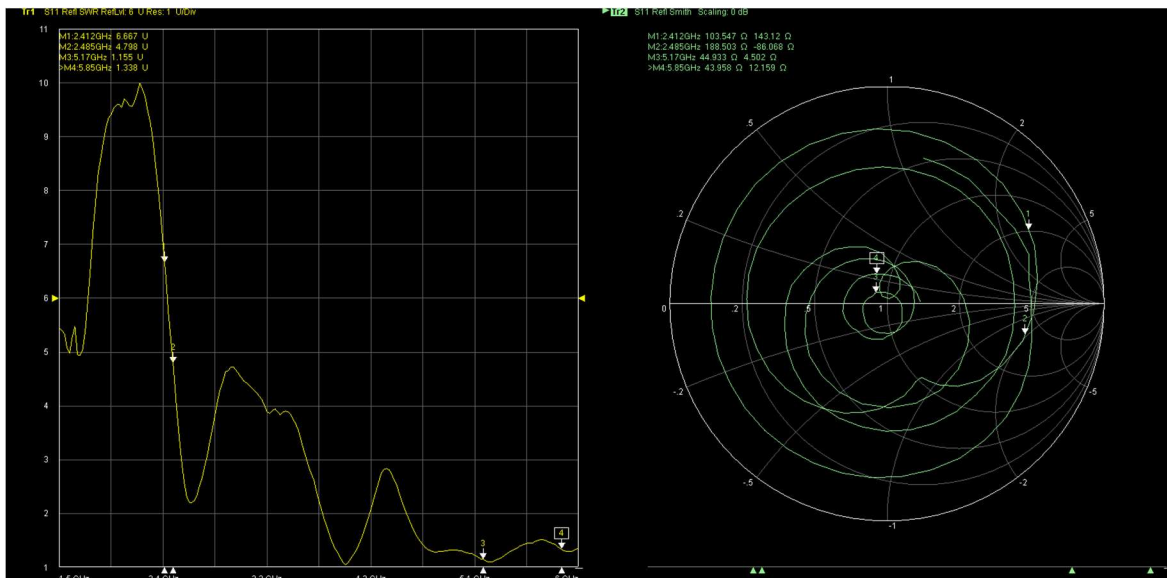


efficiency and gain report

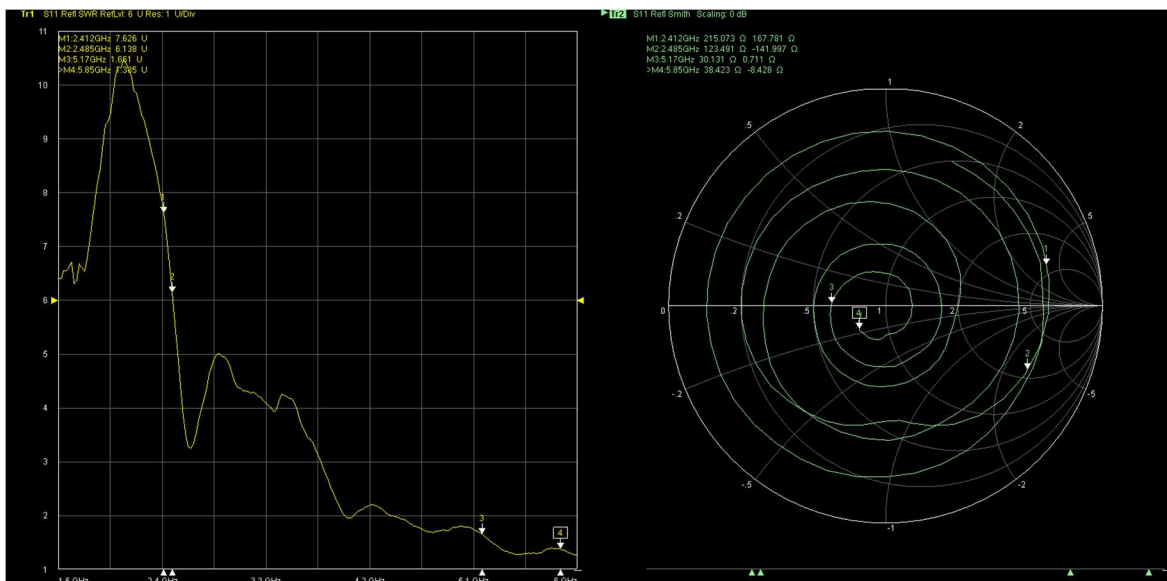
ANTENNA	FREQUENCY	EFFICIENCY	GAIN	FREQUENCY	EFFICIENCY	GAIN
Right	2400	12.5%	-3.9	5170	62.7%	2.0
	2450	13.1%	-3.6	5500	51.6%	1.5
	2500	15.1%	-2.7	5850	54.7%	1.9
Left	2400	11.2%	-3.9	5170	59.2%	2.4
	2450	14.9%	-3.2	5500	67.2%	4.6
	2500	15.2%	-2.2	5850	66.4%	3.1

SWR and S parameter

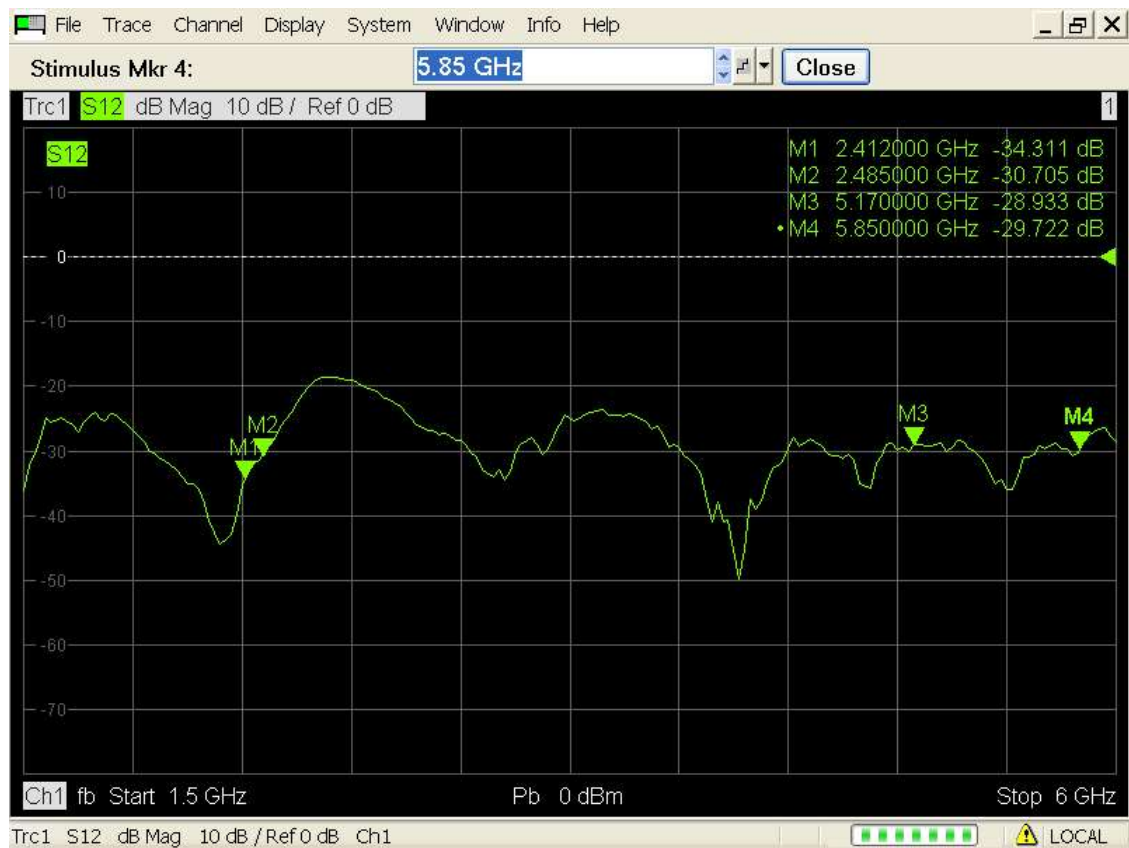
Right



Left

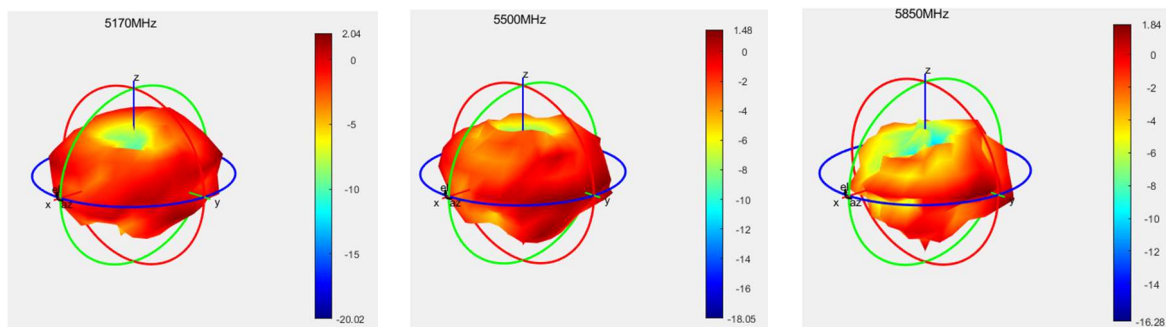
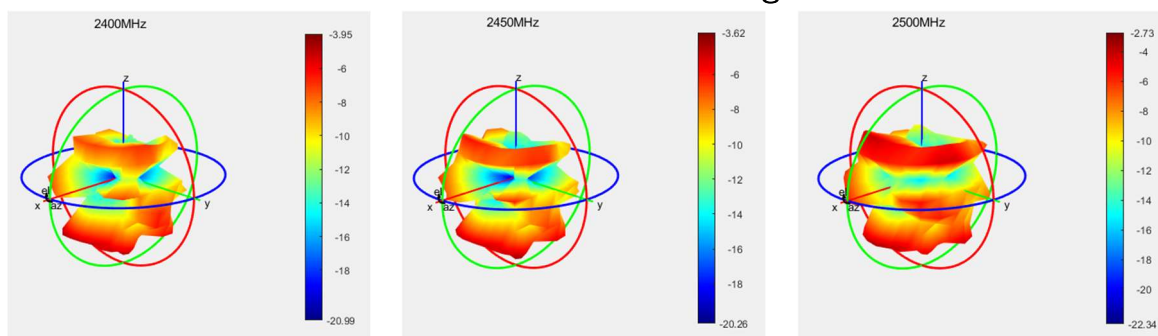


Isolation

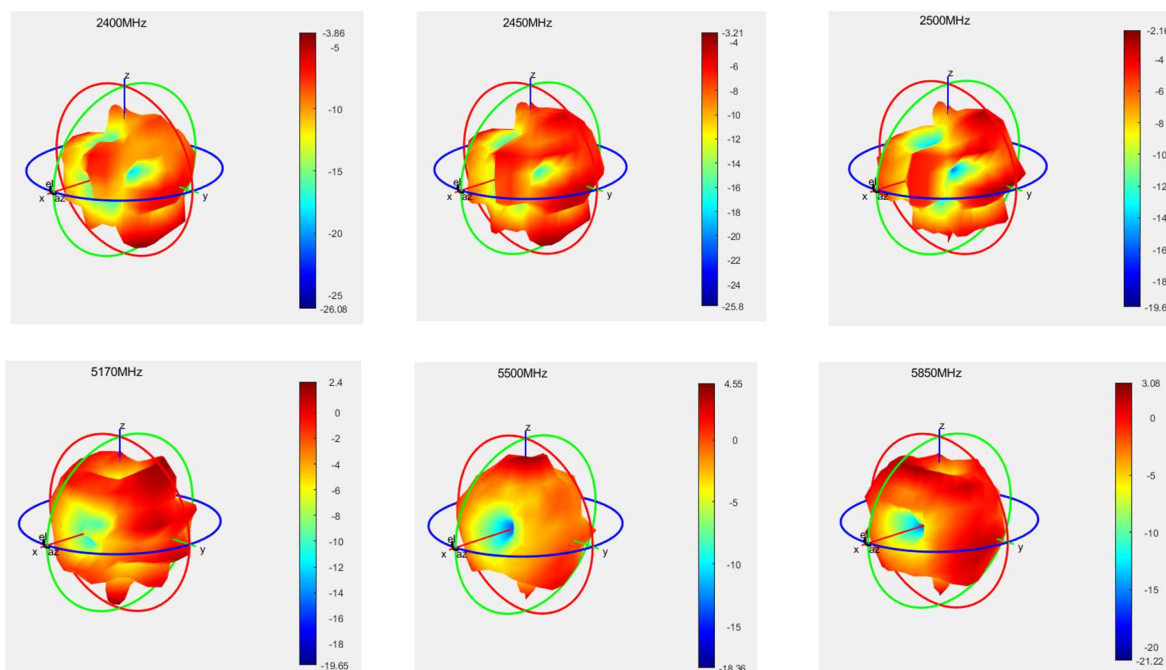


Directional and 3D diagram

3D right

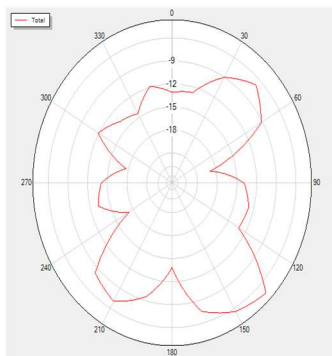


3D left

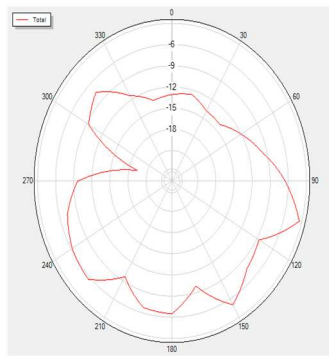


2D right

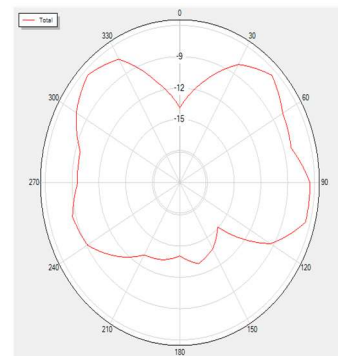
2400P0 Total



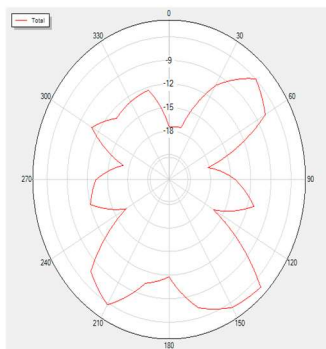
2400P90 Total



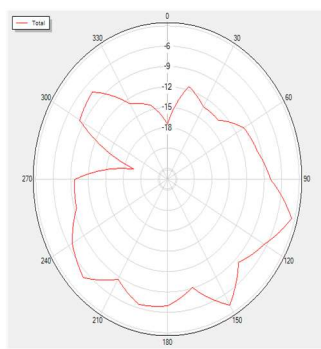
2400T90 Total



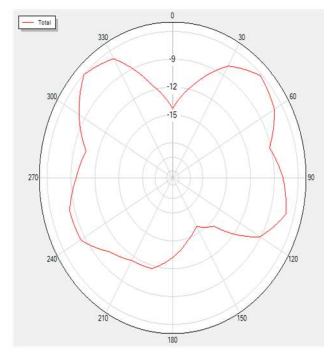
2450P0 Total



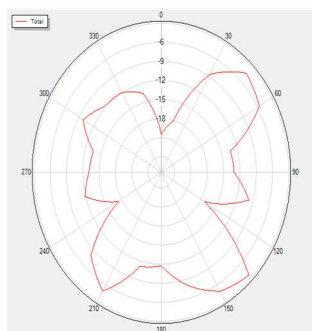
2450P90 Total



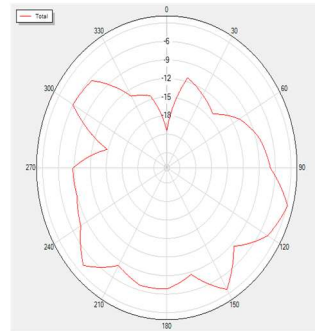
2450T90 Total



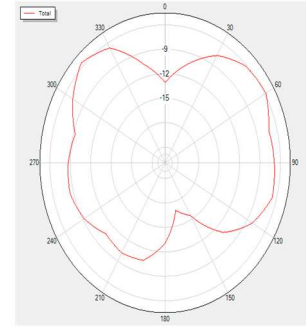
2500P0 Total



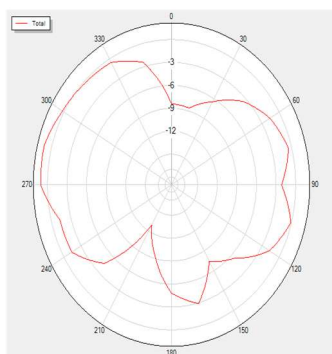
2500P90 Total



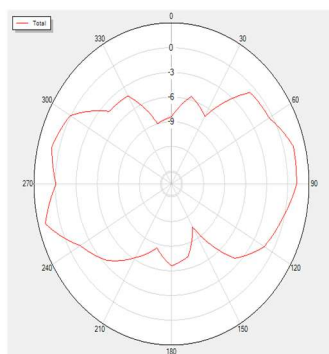
2500T90 Total



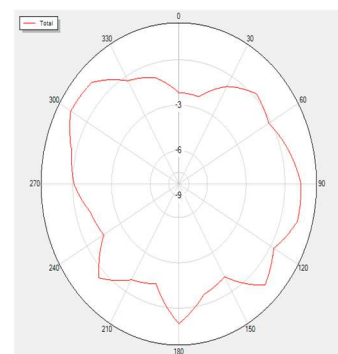
5170P0 Total



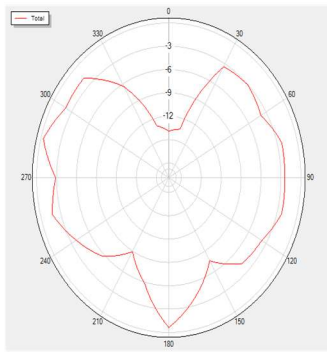
5170P90 Total



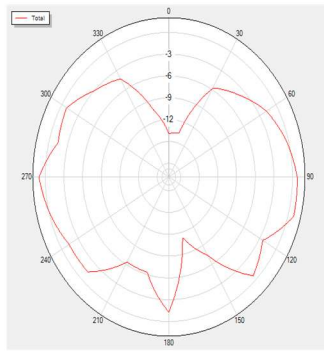
5170T90 Total



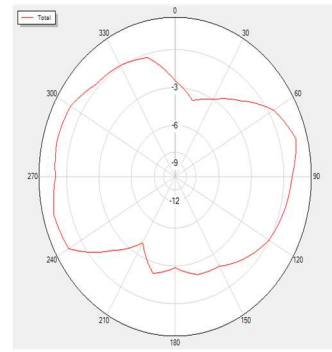
5500P0 Total



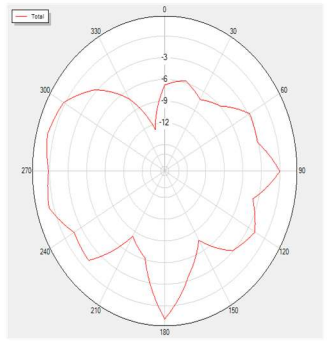
5500P90 Total



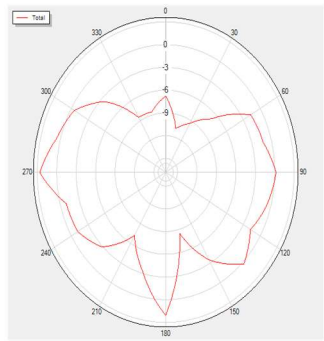
5500T90 Total



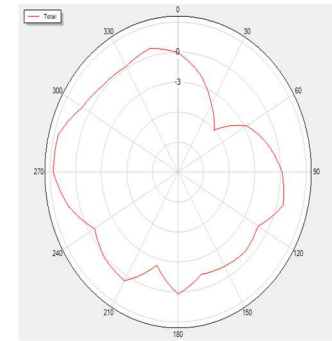
5850P0 Total



5850P90 Total

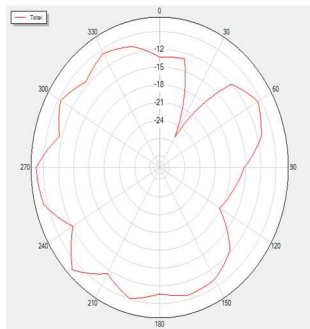


5850T90 Total

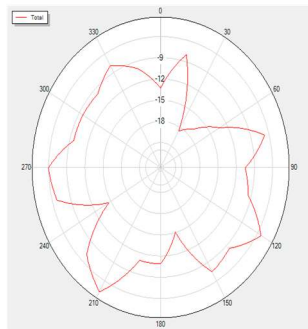


2D left

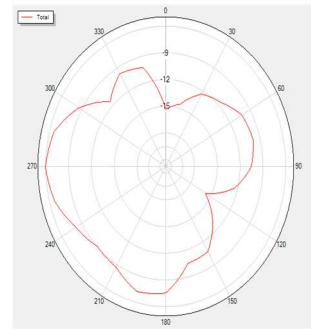
2400P0 Total



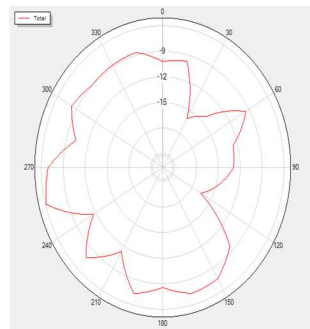
2400P90 Total



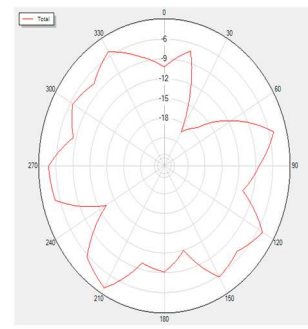
2400T90 Total



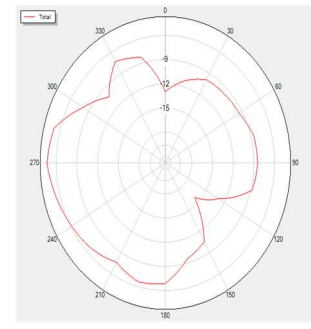
2450P0 Total



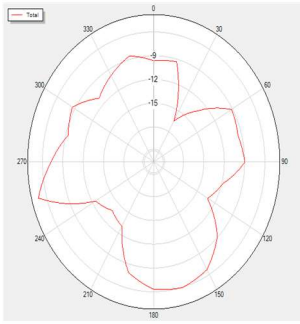
2450P90 Total



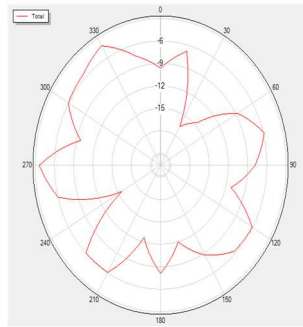
2450T90 Total



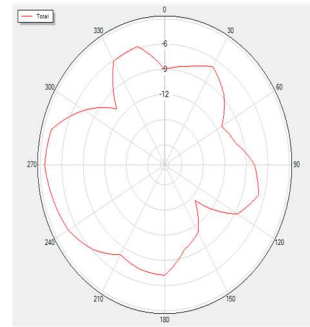
2500P0 Total



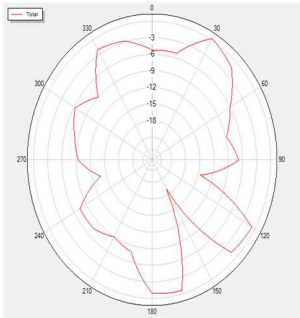
2500P90 Total



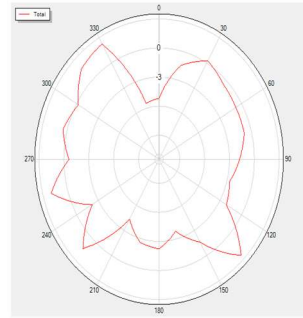
2500T90 Total



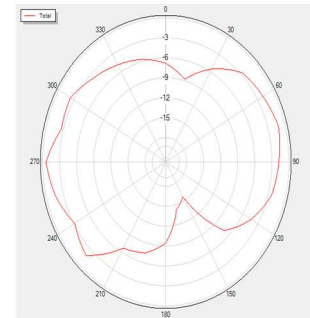
5170P0 Total



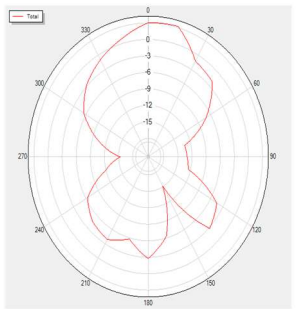
5170P90 Total



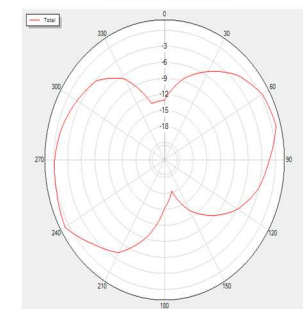
5170T90 Total



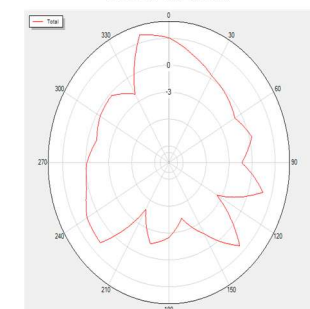
5500P0 Total



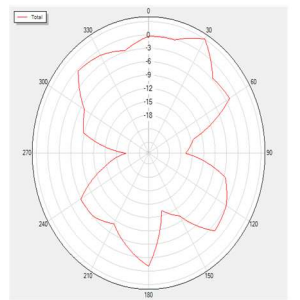
5500T90 Total



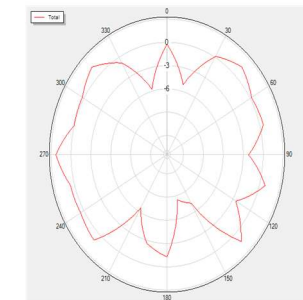
5500P90 Total



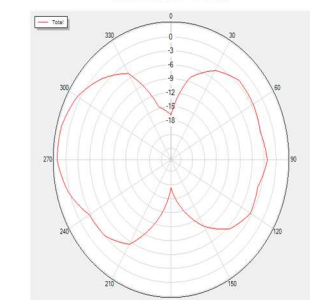
5850P0 Total



5850P90 Total



5850T90 Total



Drawing

