Shenzhen Anweiwuxian Electronics Co., Ltd

Customers: Mao ren

Project name: A9

RF engineer: Huang he

Report edition: 20250513

● A Brief Introduction to debugging the project

Plate type	The whole machine						
Antenna Overview	The main antenna	Frequency band		Antenna status	Antenna form	Design area	Match the changes
		2G		Gold-plated FPC	PIFA	The bottom of the phone	YES
		3G					
		4G	FDD1/2/3/4/5/7/8/12/17/19/20/28AB TDD 38/40/41				
		5G	N/A				
	Other antennas	BT/WIFI	2.4G/5.0	Gold-plated FPC	PIFA	Top of the phone	No
		GPS					No
		Diversity	N/A			Top of the phone	No
Prototype status	PD03A Debugging machine		Environmental treatment				

Main antenna&wifi darkroom data

	Channel	TRP (dBm)	TIS (dBm)
FDD B1	L	17.87	
	M	16.62	
	H	15.54	-91.04
FDD B2	L	16.99	
	M	16.88	
	H	14.78	-88.56
FDD B3	L	17.62	
	M	18.03	
	H	17.36	-87.78
FDD B4	L	15.7	
	M	16.63	
	H	16.7	-90.01
FDD B5	L	12.74	
	M	13.07	
	H	13.73	-87.14
FDD B7	L	18.78	
	M	19.9	
	H	20.29	-89.39
FDD B8	L	16.88	
	M	16.4	
	H	17.1	-88.1

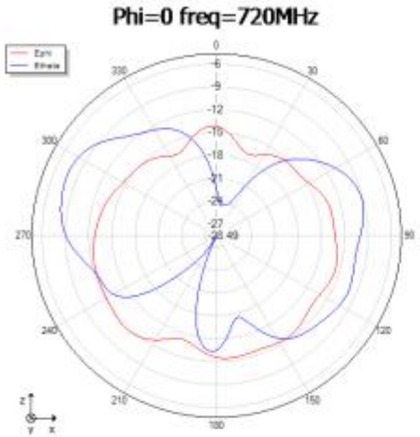
	Channel	TRP (dBm)	TIS (dBm)
FDD B12	L	6.72	
	M	6.79	
	H	6.82	-84.23
FDD B17	L	6.21	
	M	6.9	
	H	6.75	-83.42
FDD B19	L	12.71	
	M	13.25	
	H	13.81	-86.9
FDD B20	L	14.31	
	M	15.04	
	H	14.87	-86.06
FDD B28A	L	7.67	
	M	7.96	
	H	9.92	-84.87
FDD B28B	L	10.05	
	M	10.25	
	H	9.33	-84.16
TDD B38	L	21.3	
	M	20.07	
	H	20.14	-88.98

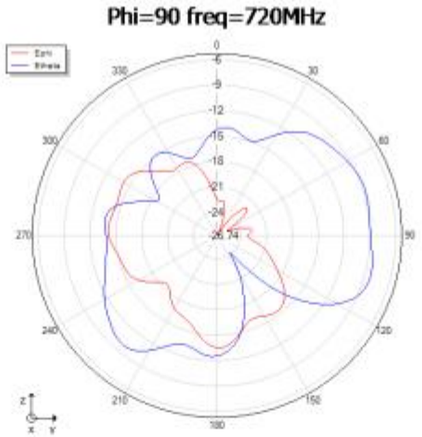
	Channel	TRP (dBm)	TIS (dBm)
TDD B40	L	21.44	
	M	20.1	
	H	18.65	-91.76
TDD B41	L	19.72	
	M	19.35	
	H	19.37	-88.57
WIFI-B	1	13.23	-81.23
	6	13.86	-81.33
	11	13.46	-81.19
WIFI-A	36	12.32	-70.32
	64	12.13	-70.45
	165	11.36	-71.23

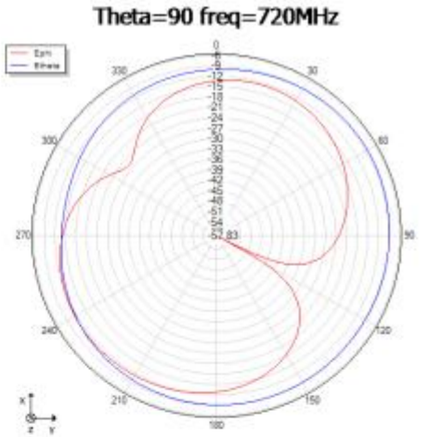
Antenna gain

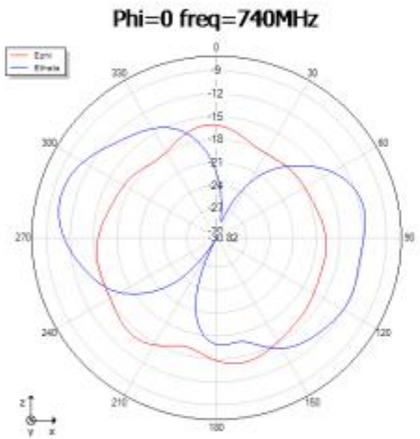
Technical Specification							
Band		Mode	Name	Frequency	Antenna Type	Antenna Max Gain	
GSM Band	Band-5 GSM 850			824-894	PIFA		dBi
	Band-8 GSM 900			880-960			
	Band-3 DCS 1800			1710-1880			
	Band-2 PCS 1900			1850-1990			
WCDMA Band	Band-1 2100		IMT	1920-2170	PIFA		dBi
	Band-2 1900		PCS A-F	1850-1990			
	Band-4 1700						
	Band-5 850		CLR	824-894			
	Band-8 900		E-GSM	880-960			
LTE Band	Band-1 2100	FDD	IMT	1920-2170	PIFA	-0.94	dBi
	Band-2 1900	FDD	PCS	1850-1990		-1.4	
	Band-3 1800	FDD	DCS	1710-1880		-1.6	
	Band-4 1700	FDD		1710-2150		-2.39	
	Band-5 850	FDD	CLR	824-894		-5.94	
	Band-7 2600	FDD	IMT-E	2500-2690		0.53	
	Band-8 900	FDD	EGSM	880-960		-5.64	
	Band-12 700	FDD	EUDD	704-740		-5.99	
	Band-17 700	FDD	APT	709-741		-6.76	
	Band-19 850	TDD	S-Band	835-885		-5.94	
	Band-20 850	TDD	S-Band	816-857		-5.94	
	Band-28 700	TDD	S-Band	700-797		-5.99	
	Band-38 2570	TDD	S-Band	2570-2620		0.53	
	Band-40 2300	TDD	BRS	2300-2400		2.45	
	Band-41 2496	FDD	Extended AWS	2496-2690		0.53	
WiFi	802.11b/g/n	2.4GHz	Wi-Fi 4	2401-2495	PIFA	1.39	dBi
	802.11a/n/ac	5GHz	Wi-Fi 5	4910-5895	PIFA	1.65	dBi
BT	Bluetooth			2400-2500	PIFA	1.39	dBi
GPS	Gps L1 Band			1575.42	PIFA		dBi

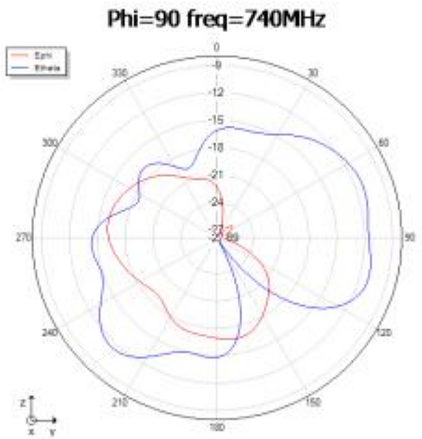
Lobe diagram

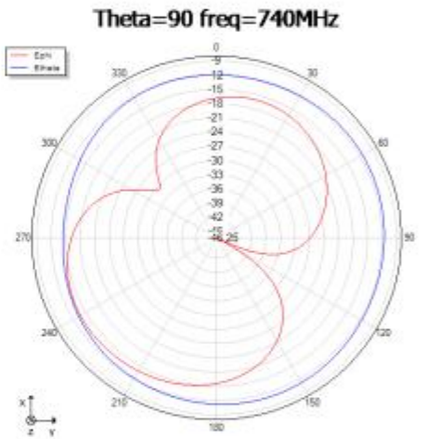


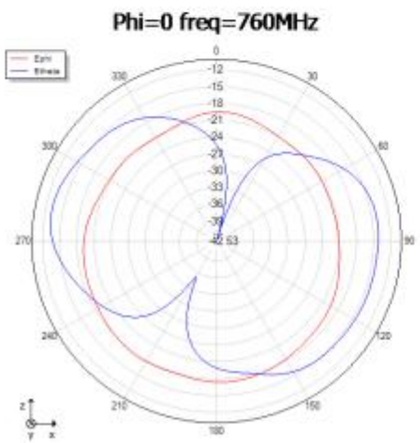


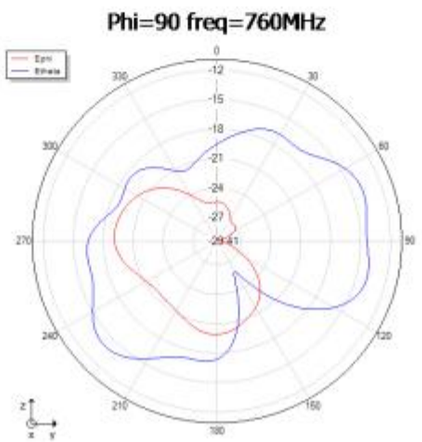


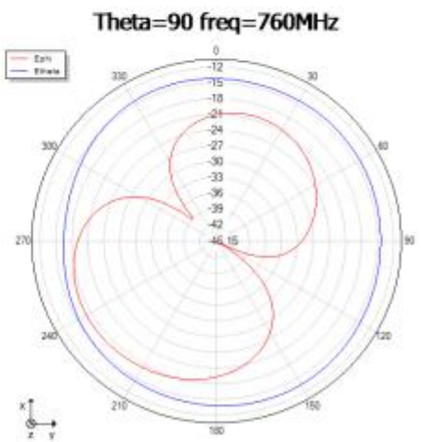




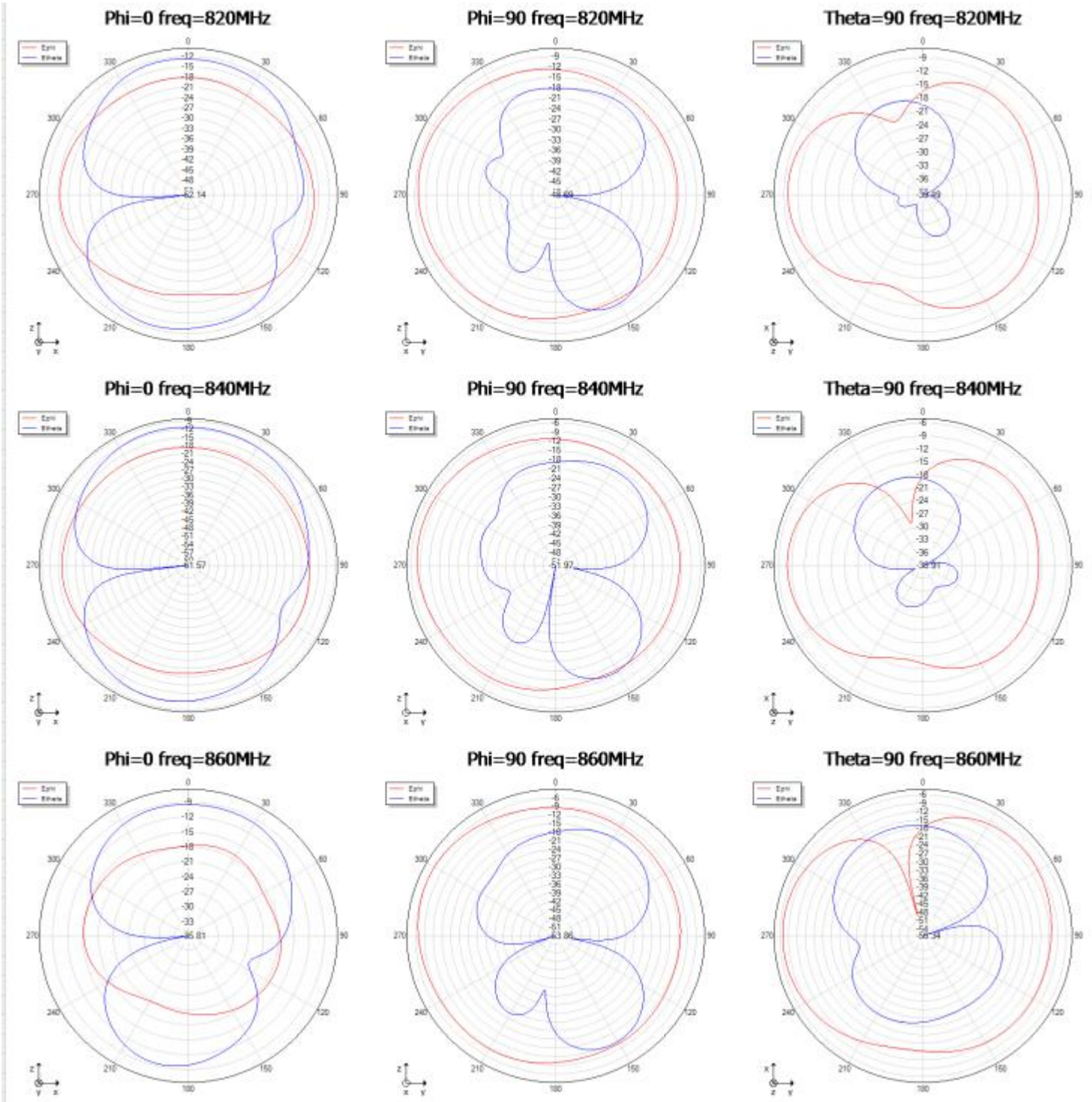








Lobe diagram



Lobe diagram

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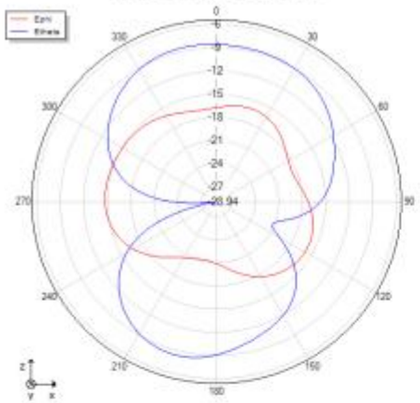

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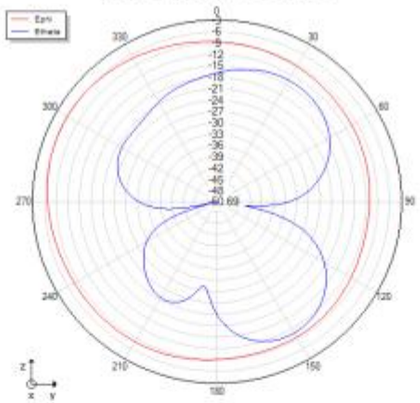

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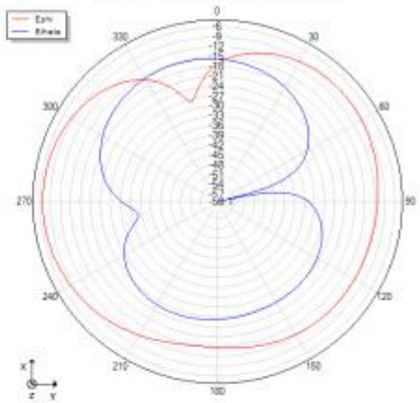

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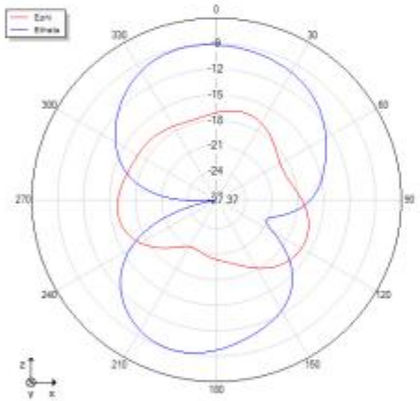

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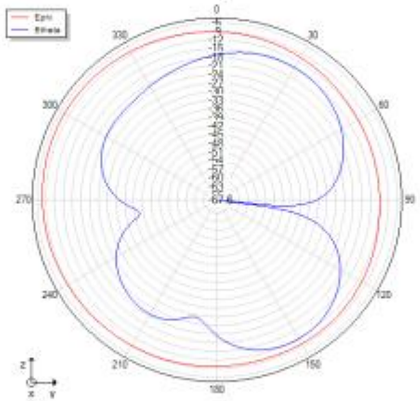

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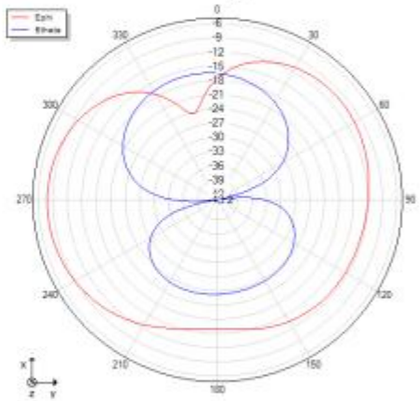

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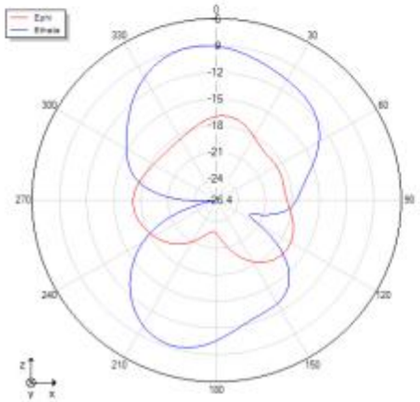

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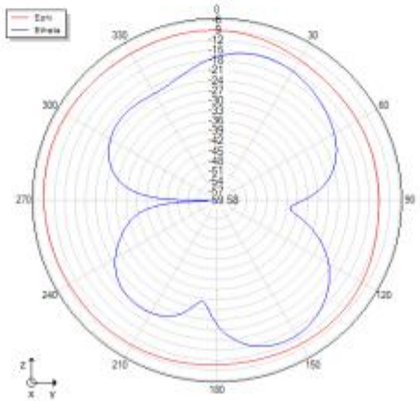

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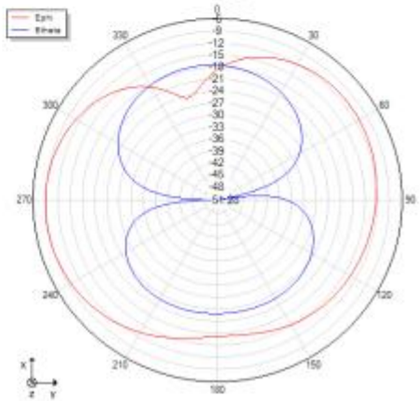
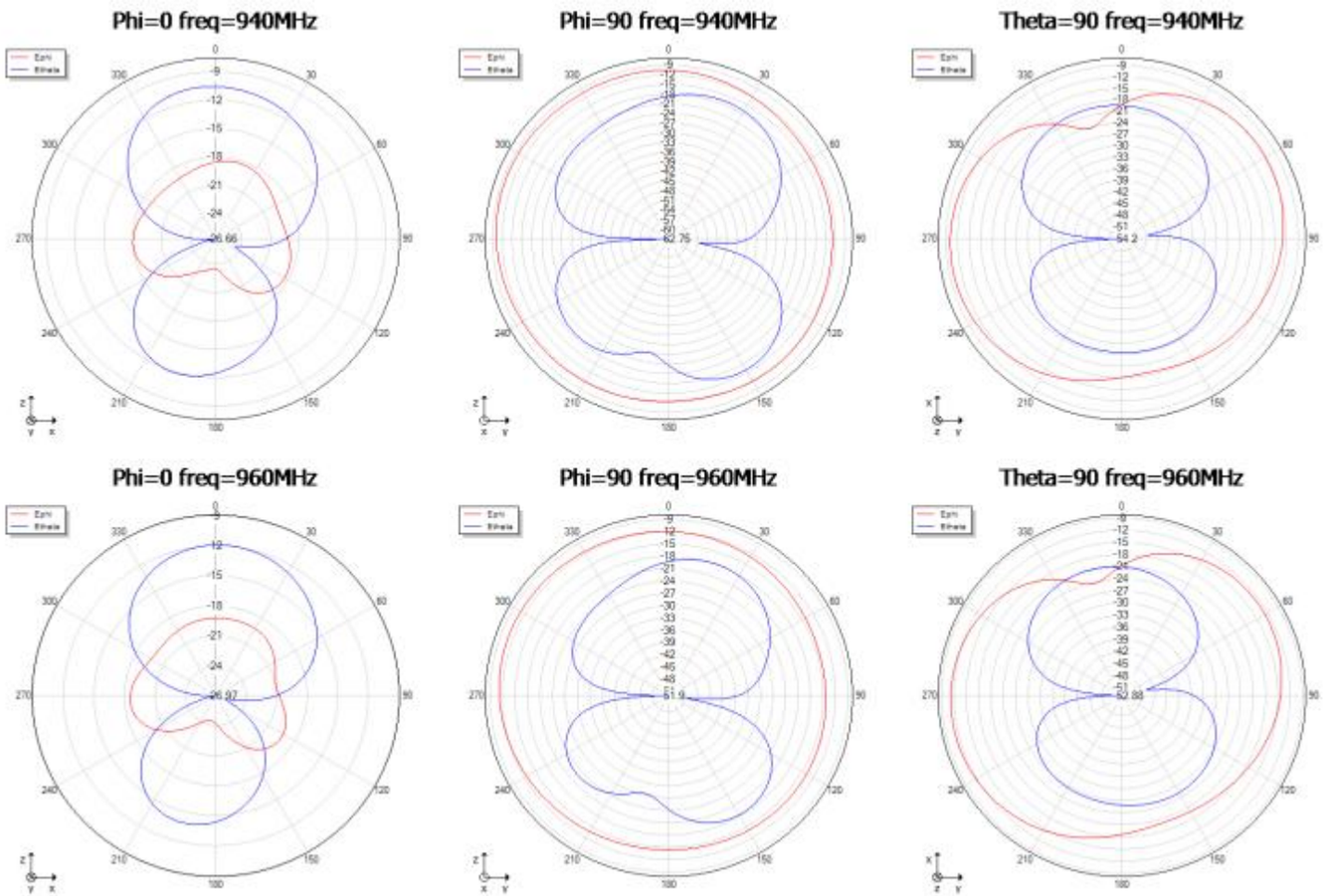


Lobe diagram



Lobe diagram

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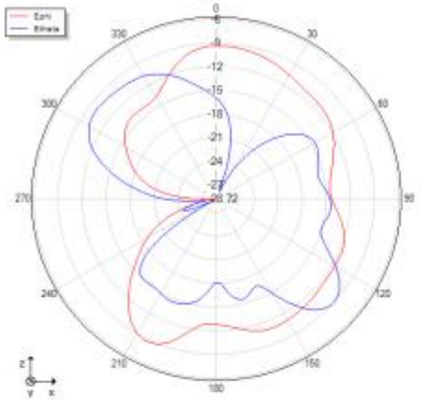

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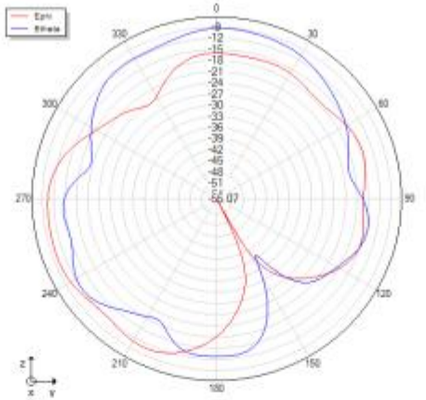

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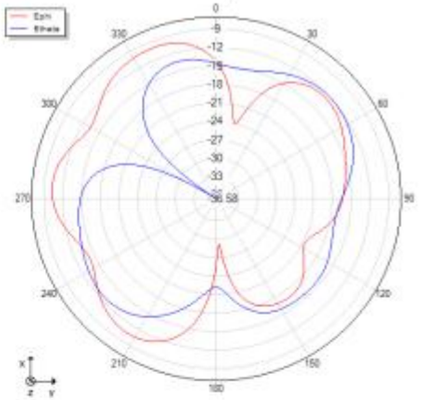

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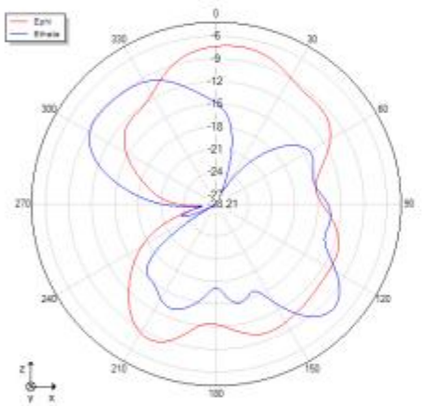

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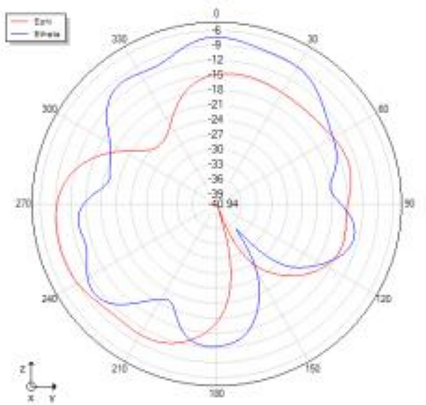

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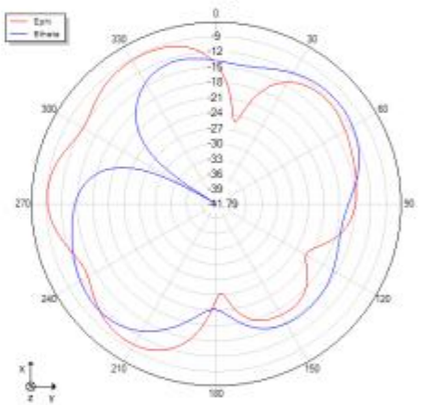

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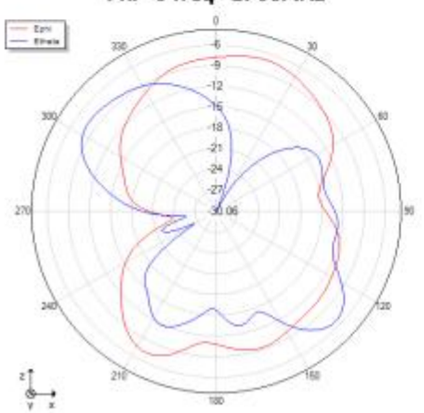

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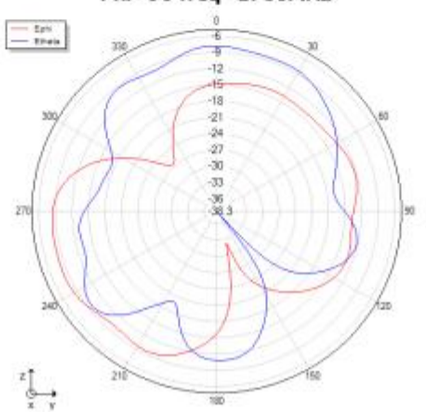

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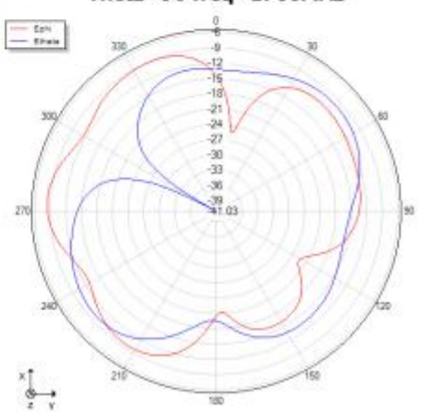
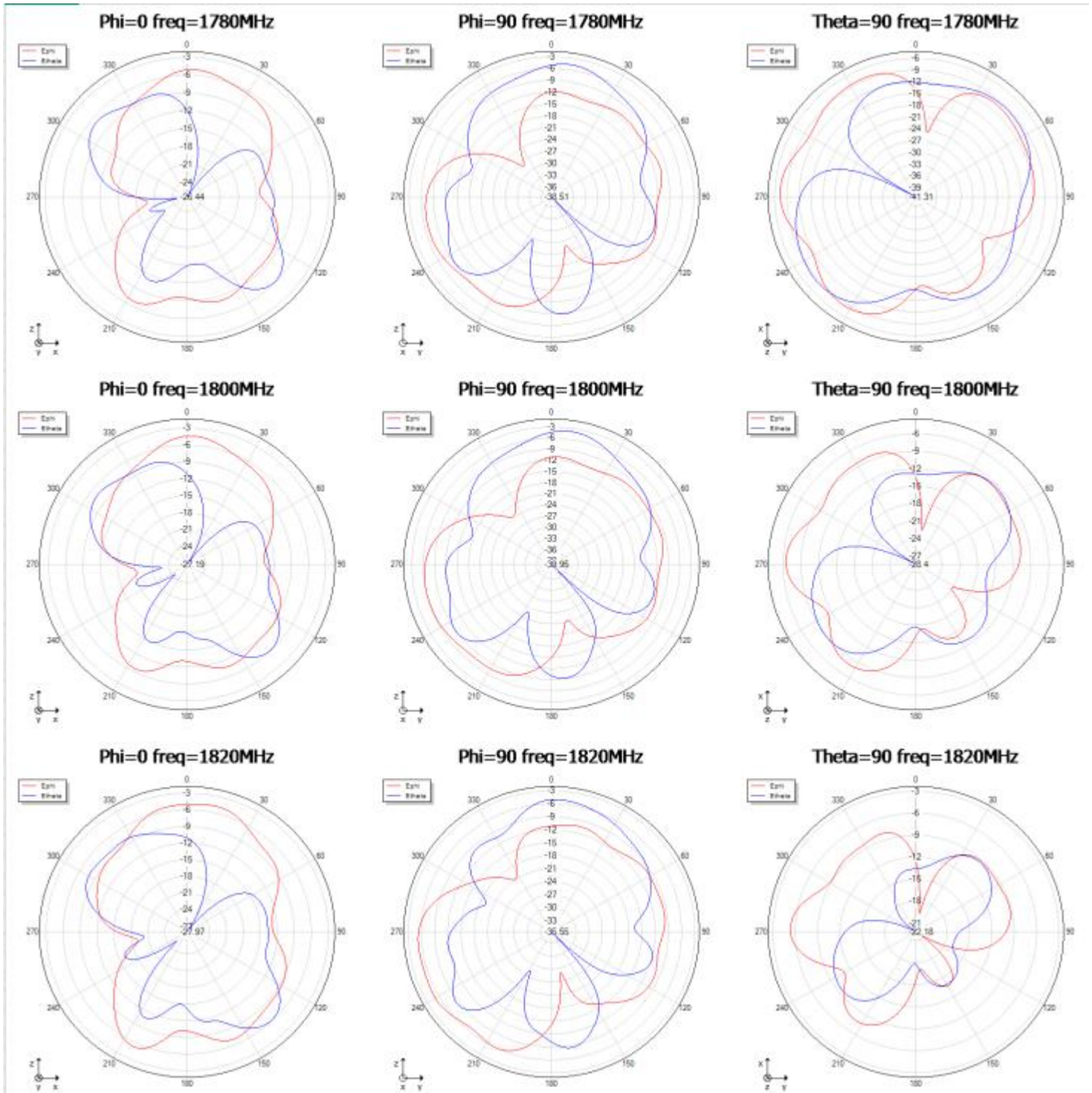


Lobe diagram



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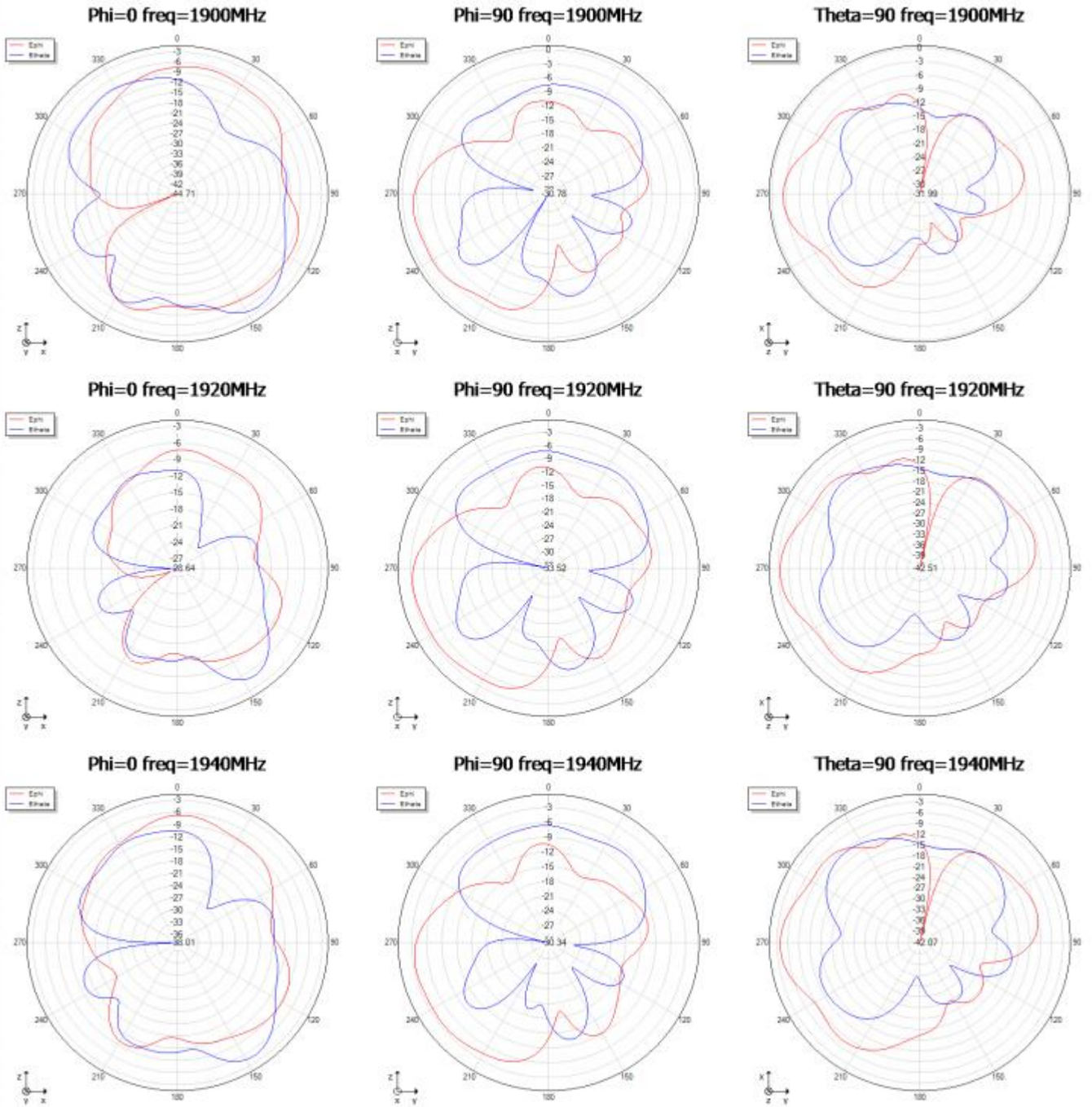

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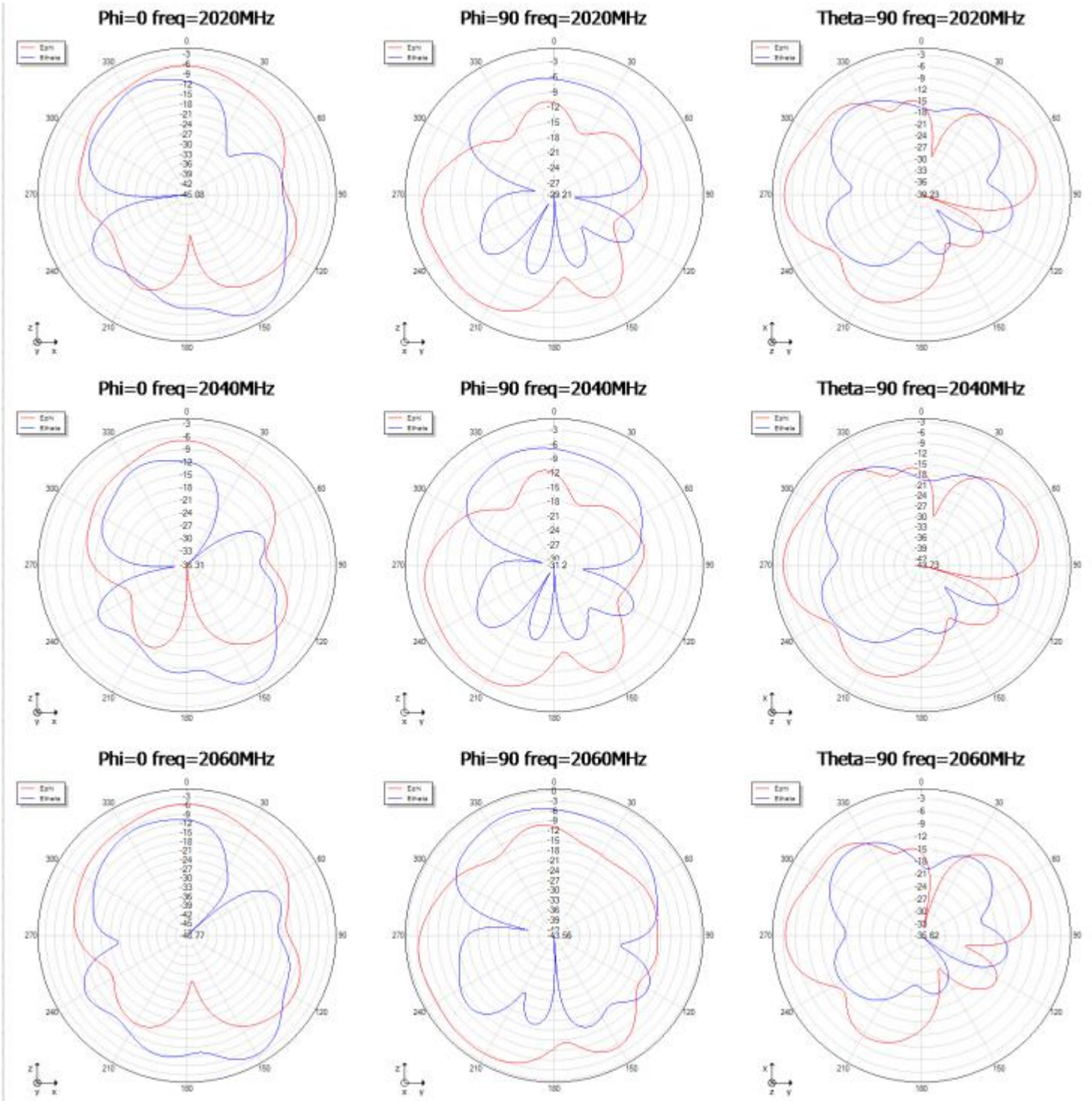

Lobe diagram

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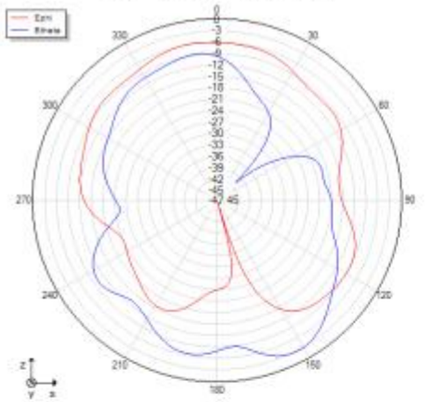

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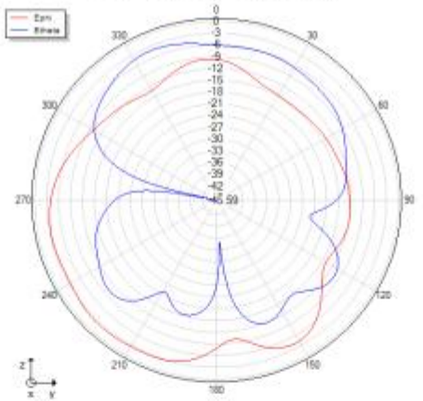

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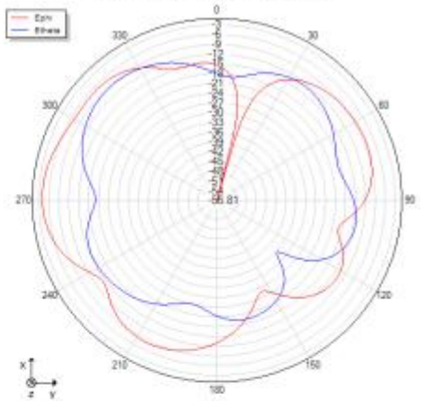

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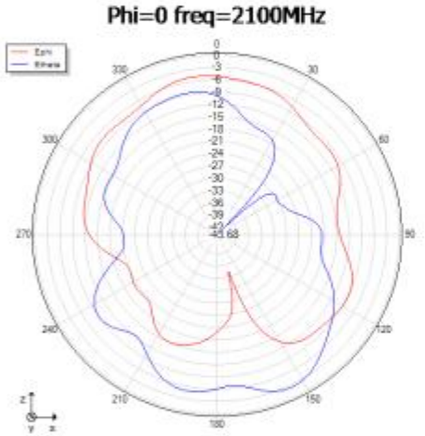

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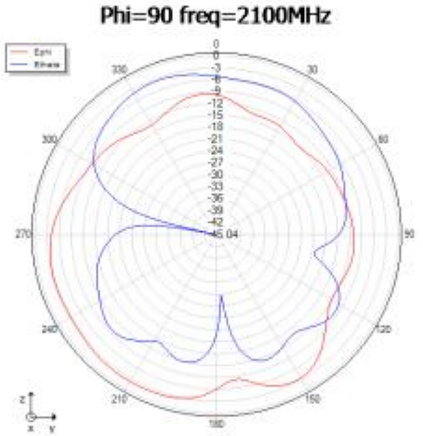

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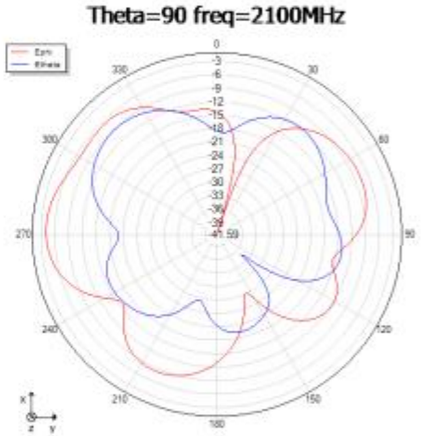

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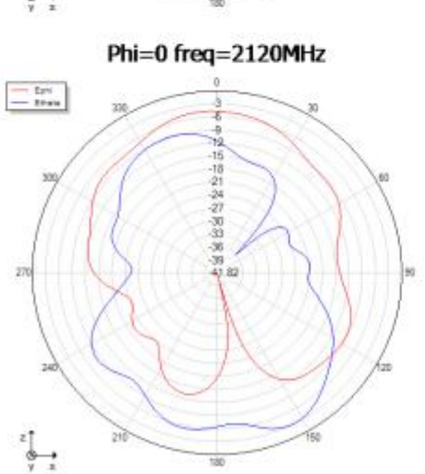

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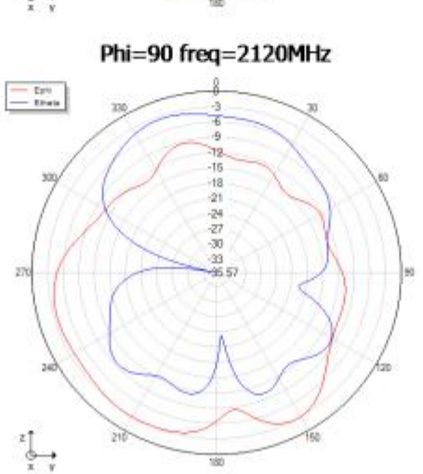

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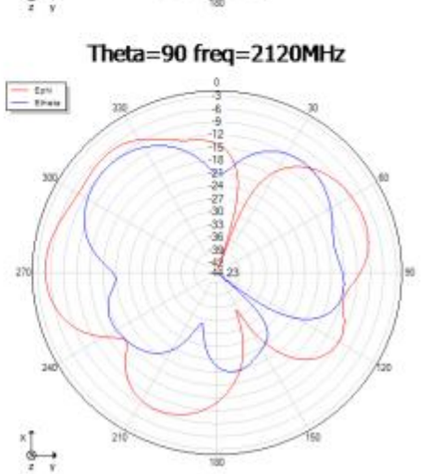
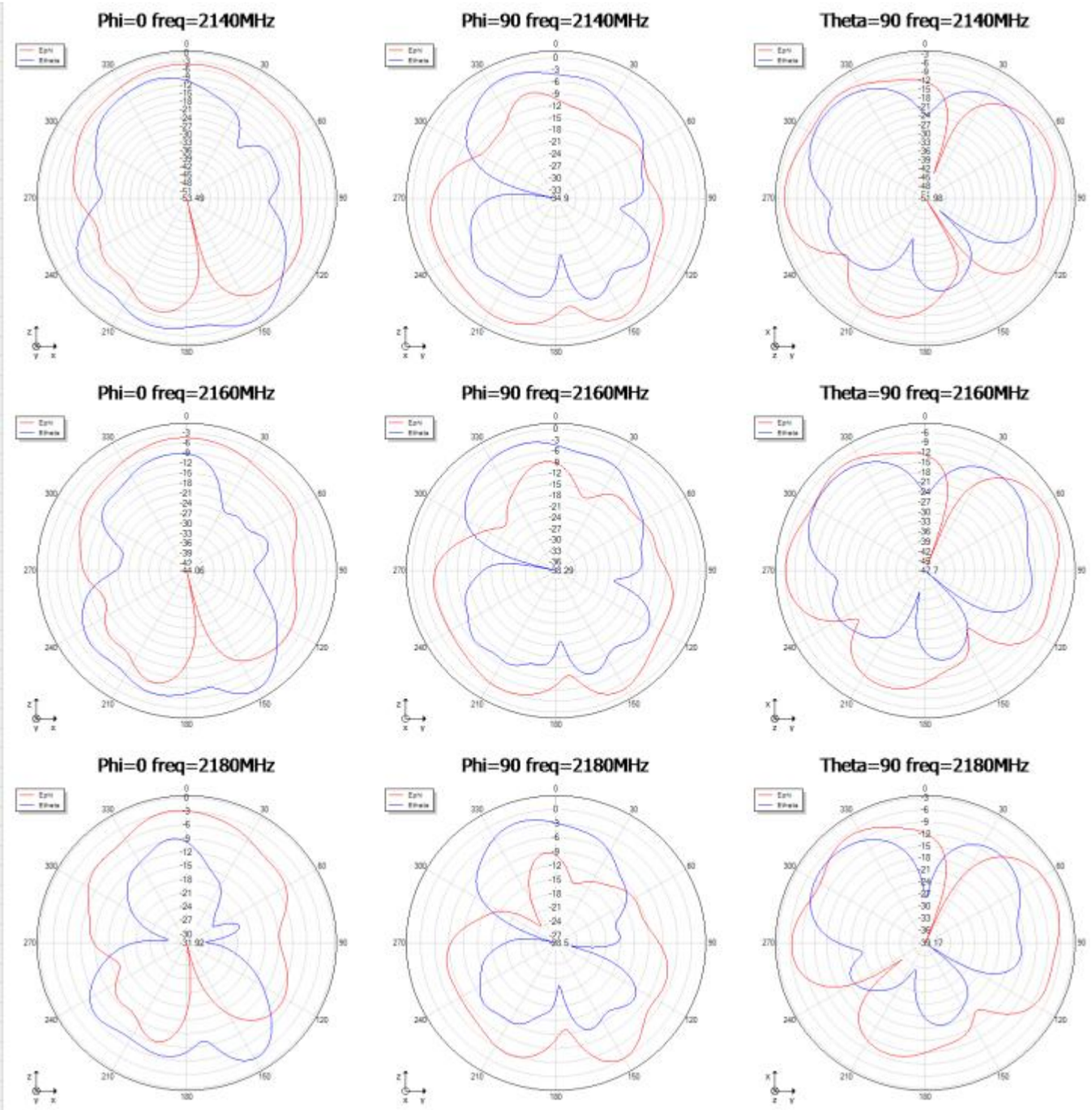
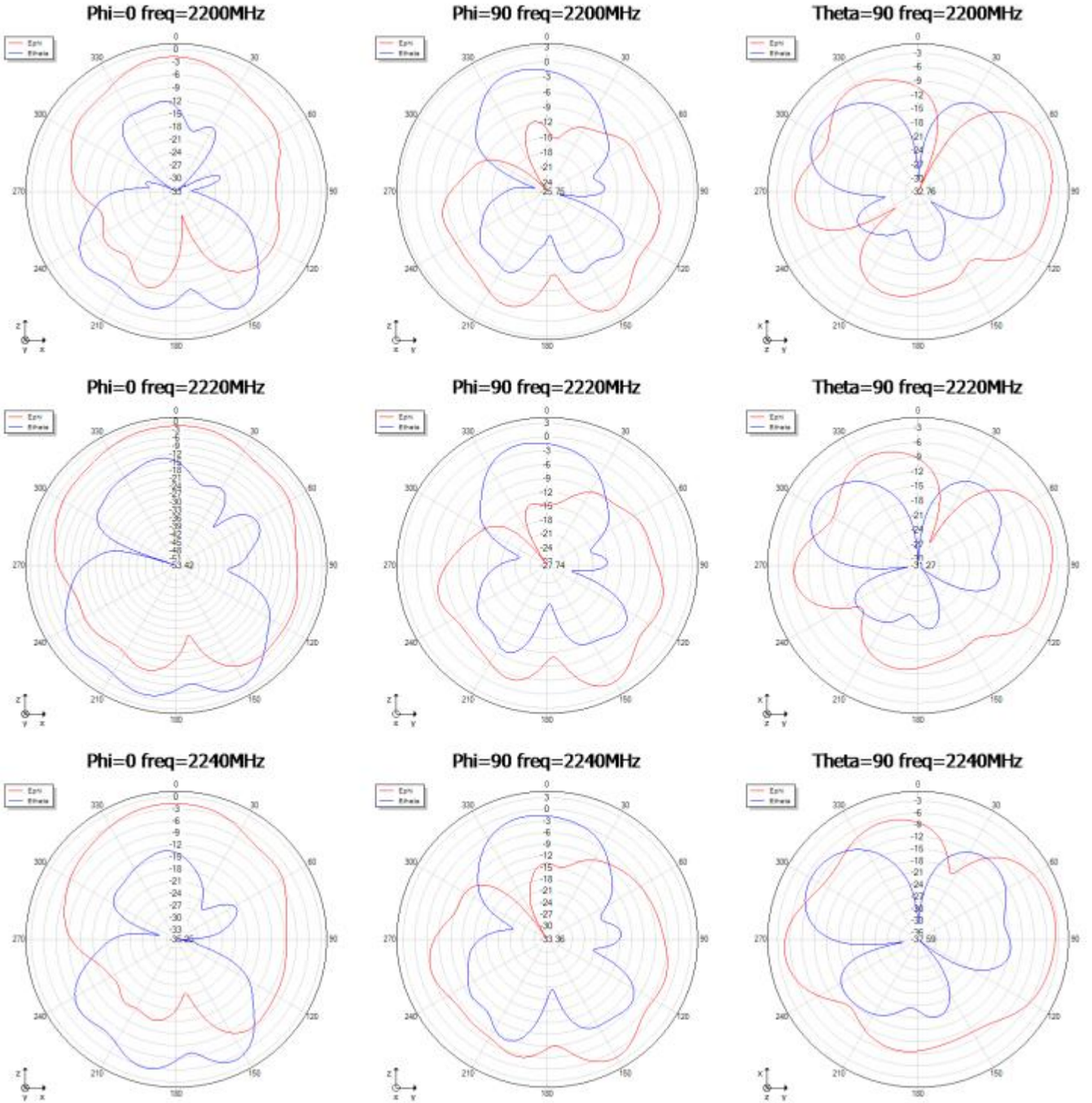


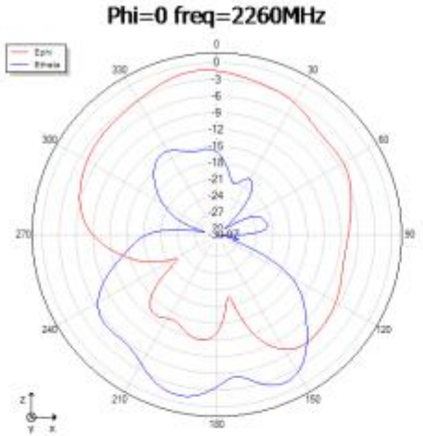
Lobe diagram

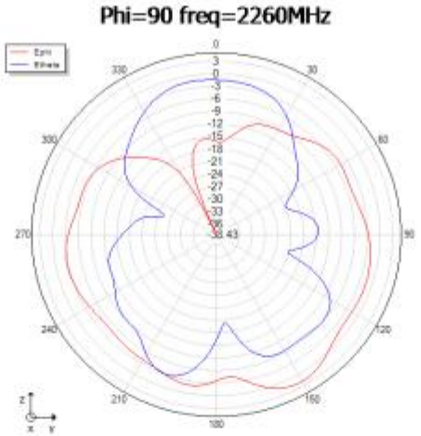


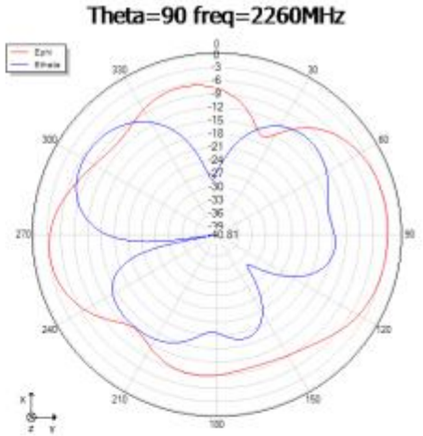
Lobe diagram

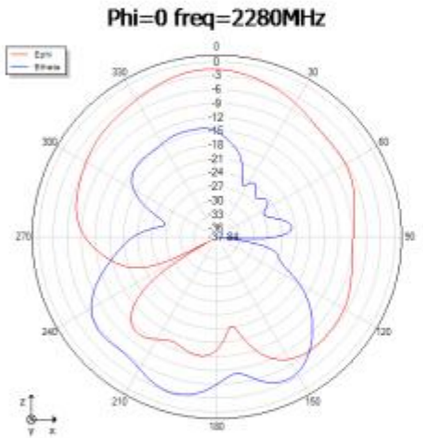


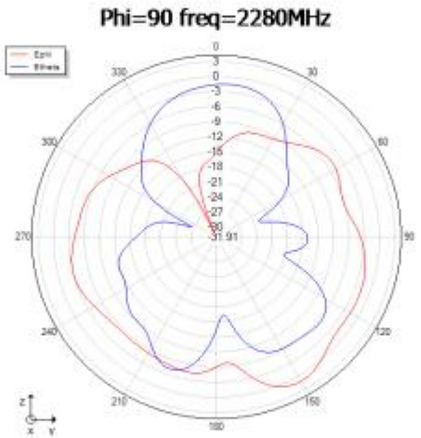
Lobe diagram

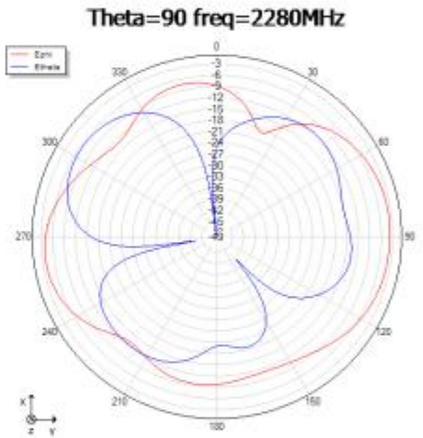


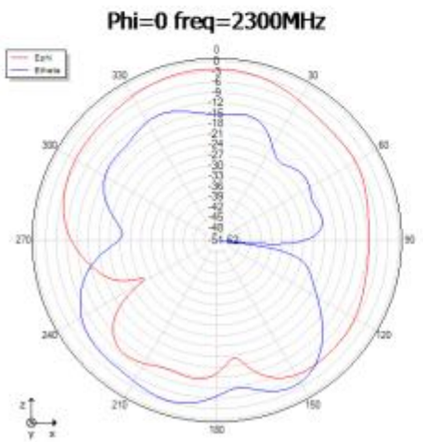


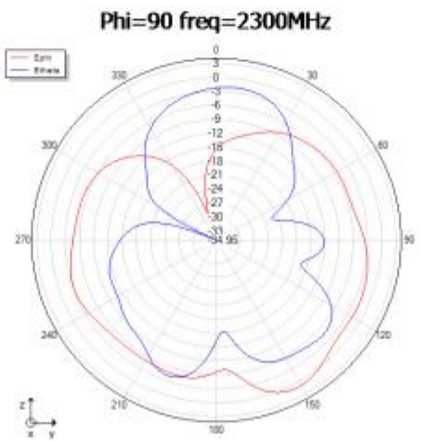


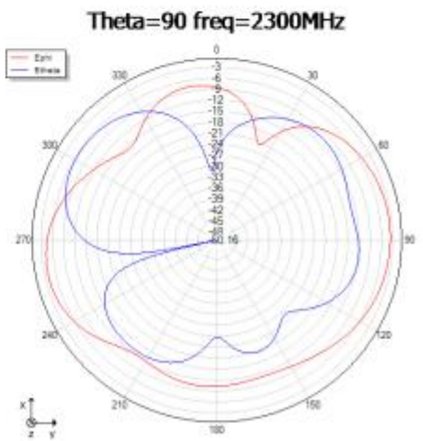




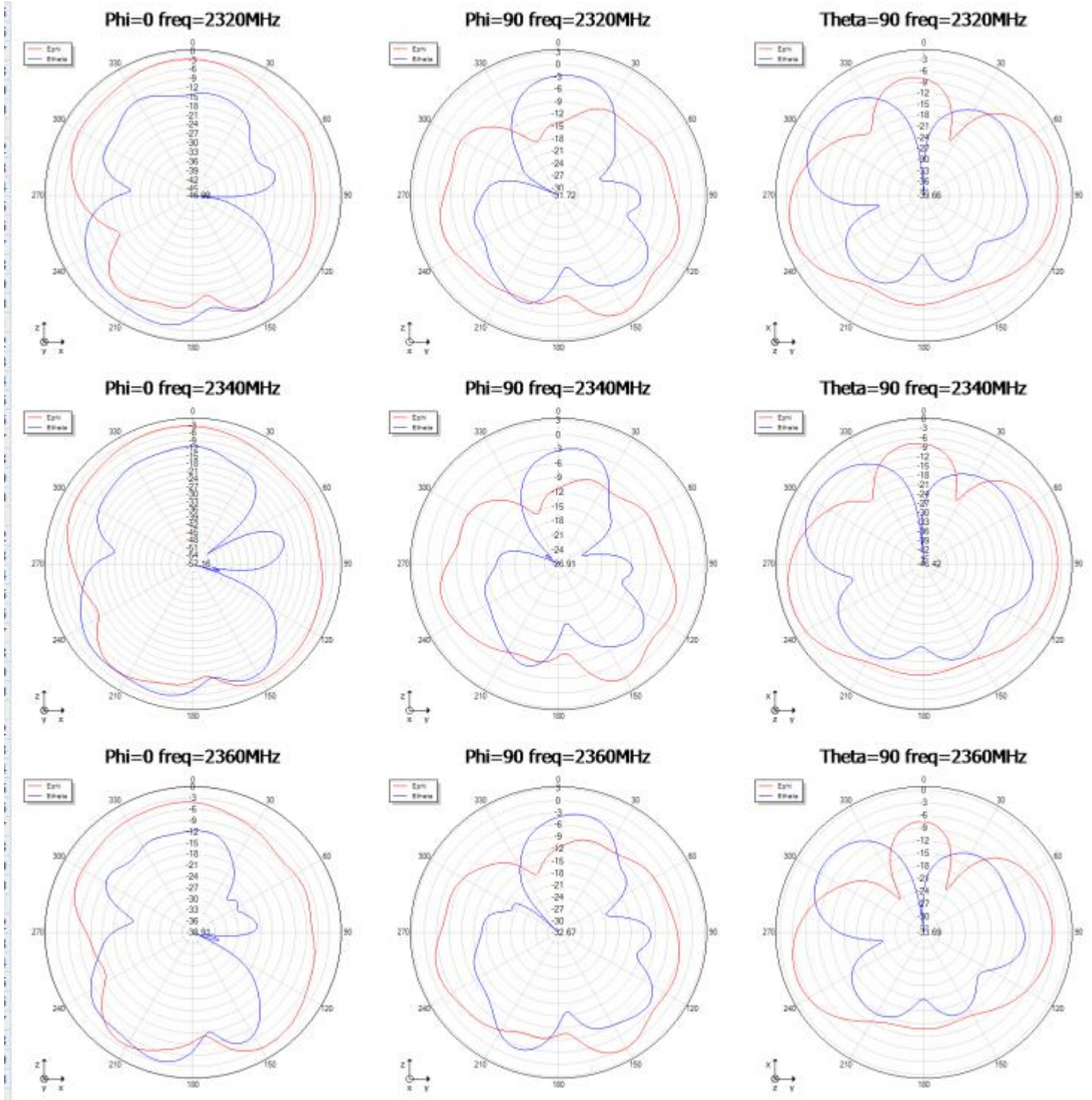




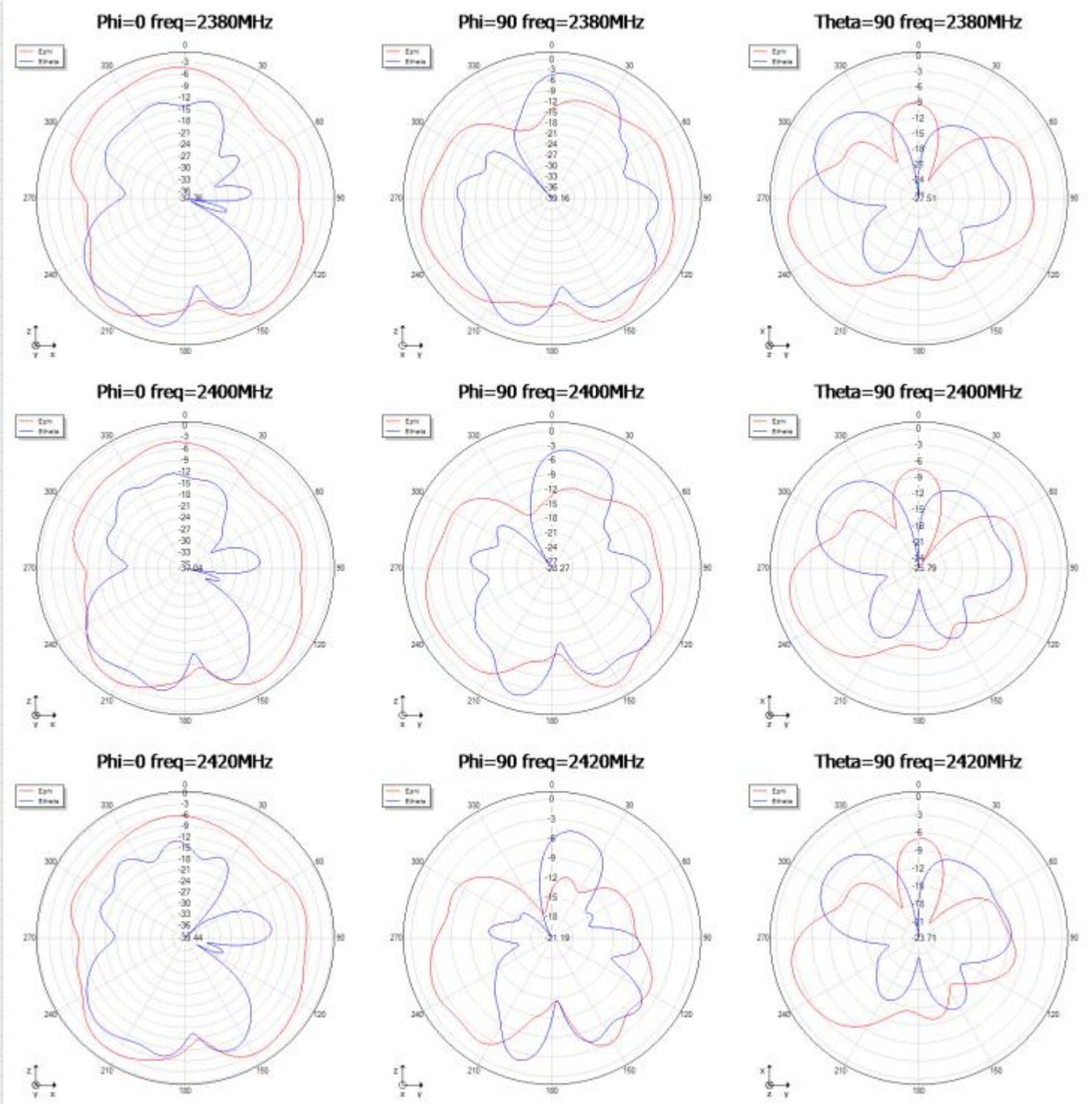




Lobe diagram

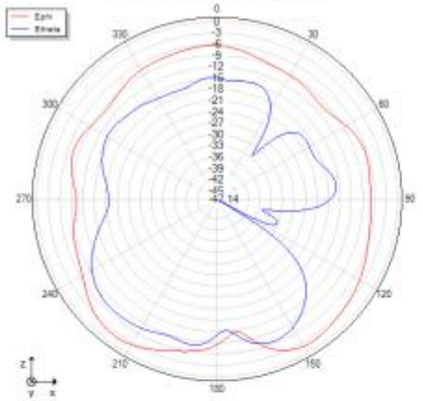


Lobe diagram

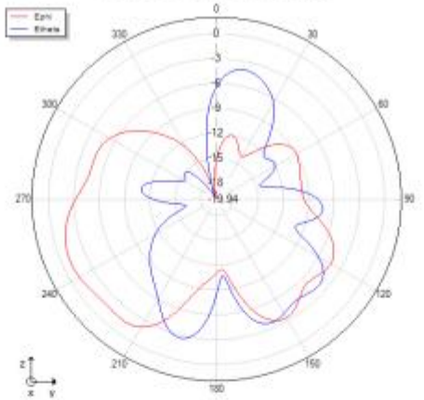


Lobe diagram

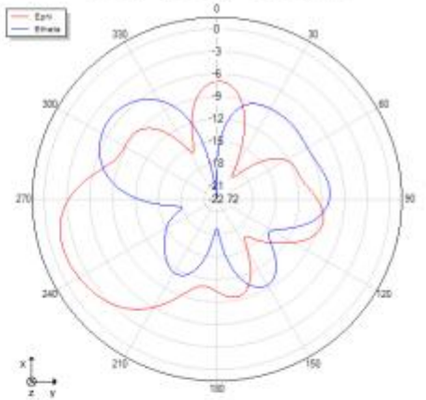
Phi=0 freq=2440MHz



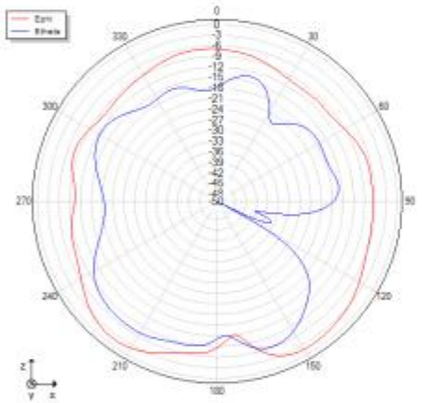
Phi=90 freq=2440MHz



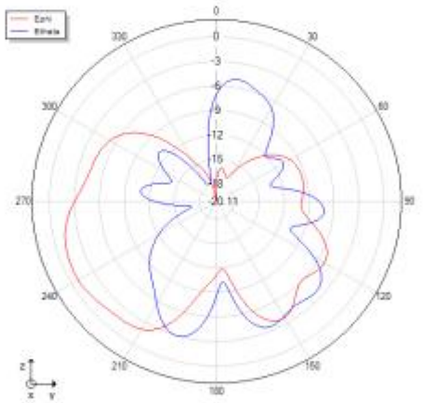
Theta=90 freq=2440MHz



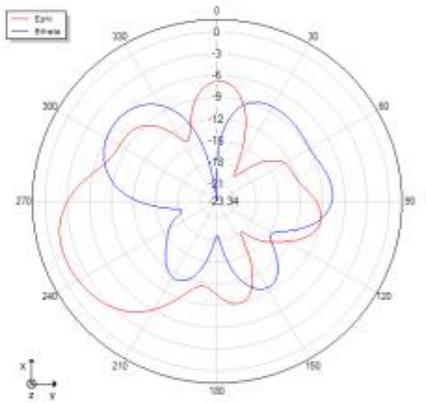
Phi=0 freq=2460MHz



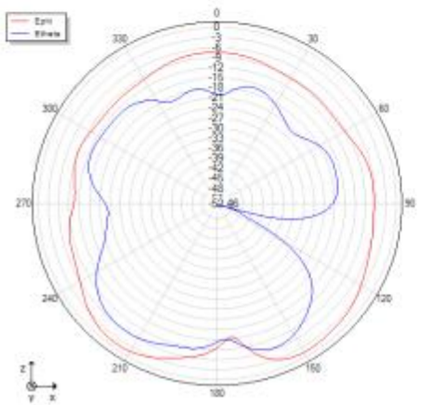
Phi=90 freq=2460MHz



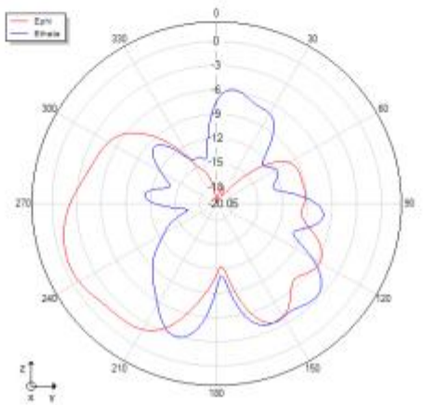
Theta=90 freq=2460MHz



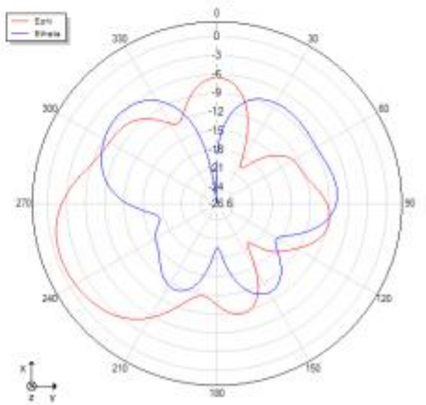
Phi=0 freq=2480MHz



Phi=90 freq=2480MHz

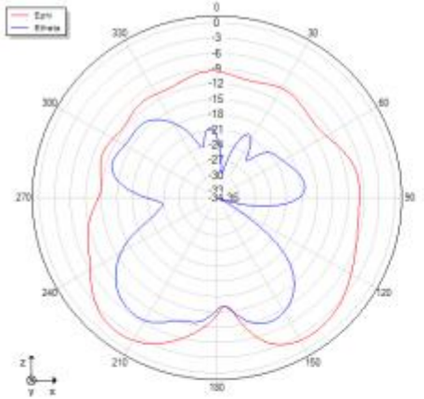


Theta=90 freq=2480MHz

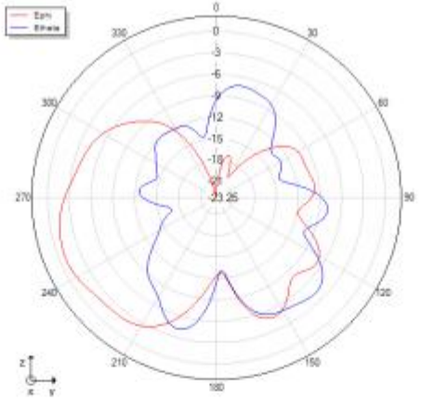


Lobe diagram

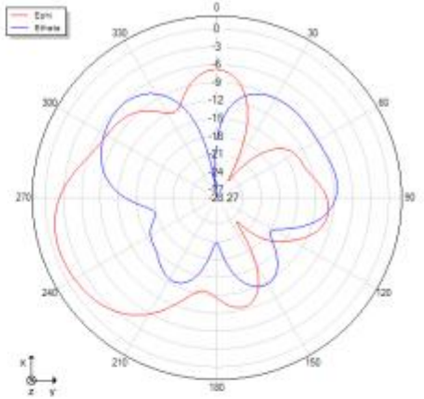
Phi=0 freq=2500MHz



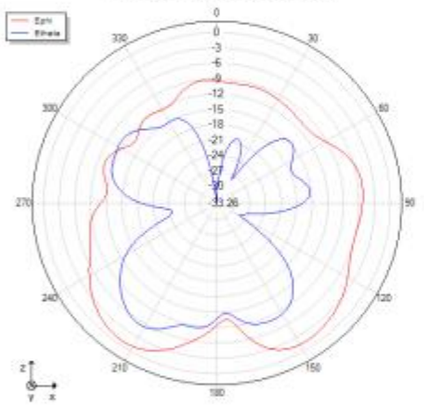
Phi=90 freq=2500MHz



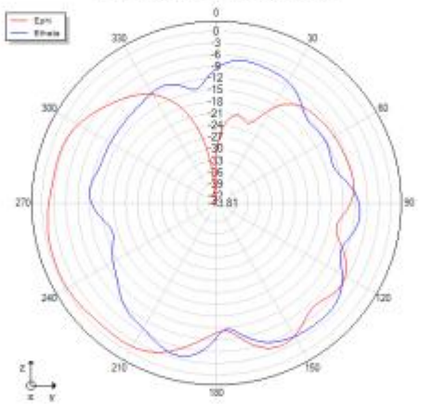
Theta=90 freq=2500MHz



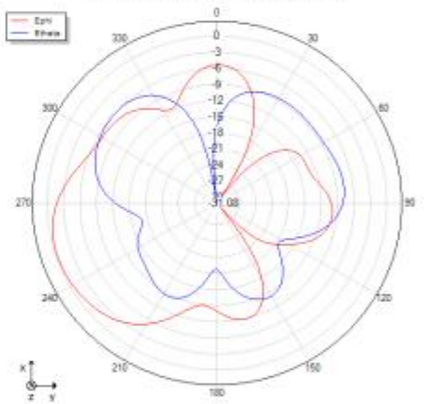
Phi=0 freq=2520MHz



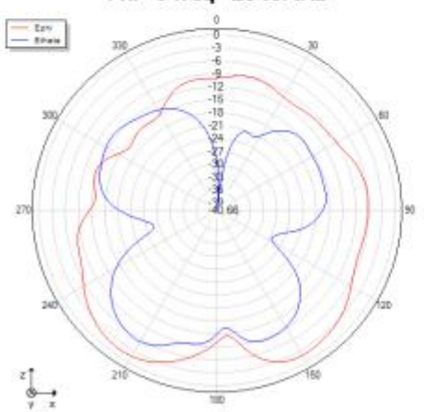
Phi=90 freq=2520MHz



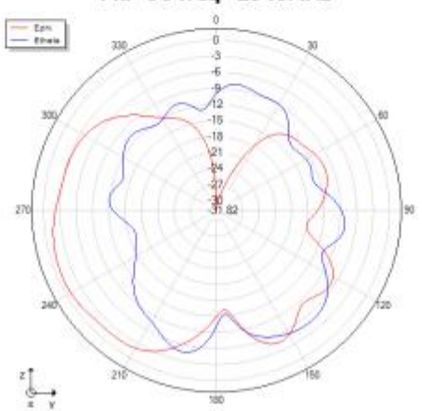
Theta=90 freq=2520MHz



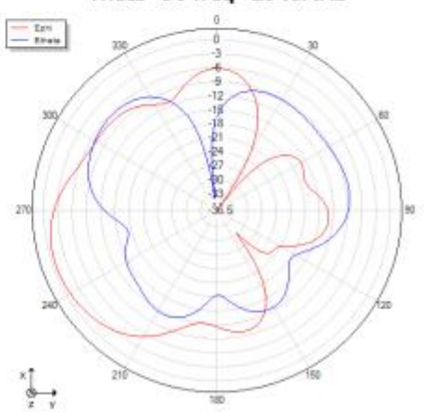
Phi=0 freq=2540MHz



Phi=90 freq=2540MHz

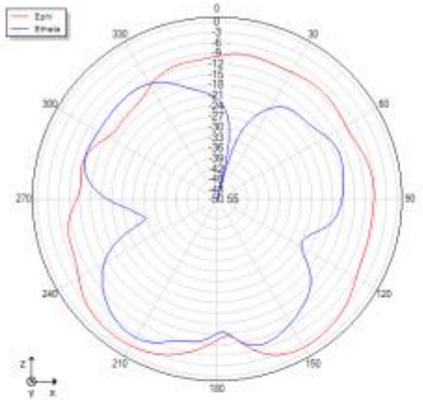


Theta=90 freq=2540MHz

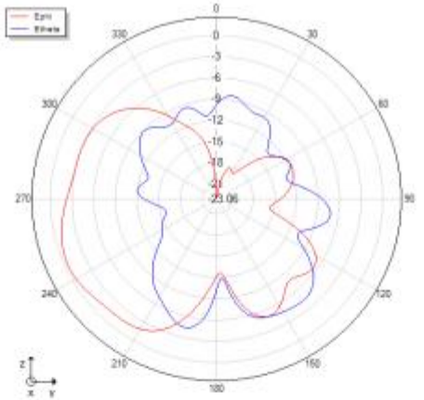


Lobe diagram

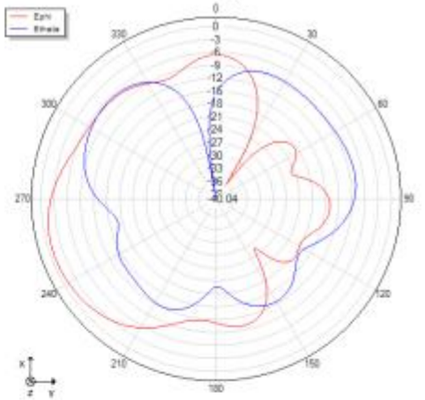
Phi=0 freq=2560MHz



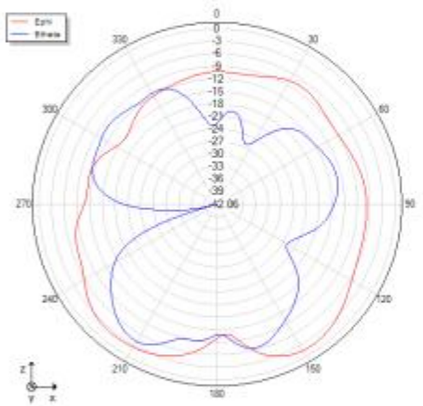
Phi=90 freq=2560MHz



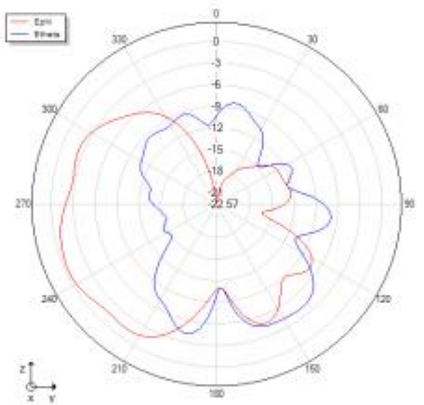
Theta=90 freq=2560MHz



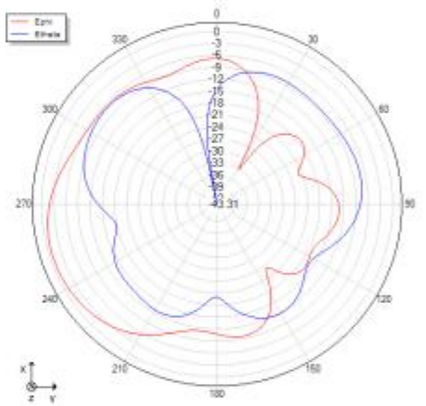
Phi=0 freq=2580MHz



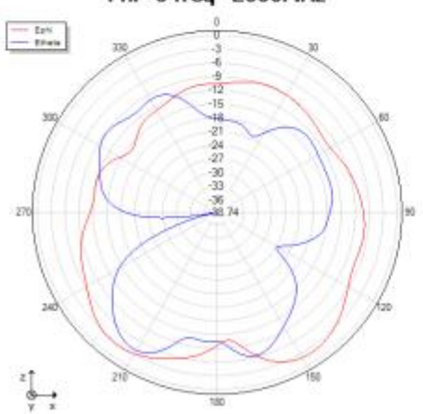
Phi=90 freq=2580MHz



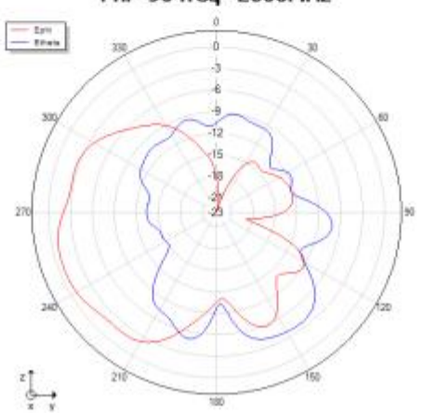
Theta=90 freq=2580MHz



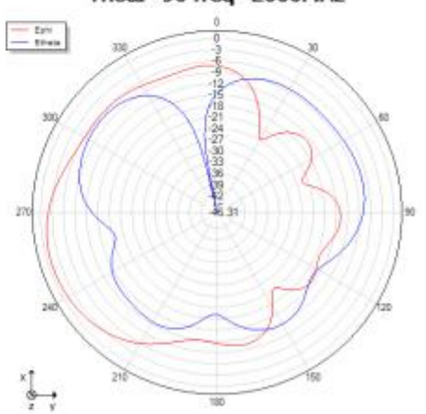
Phi=0 freq=2600MHz



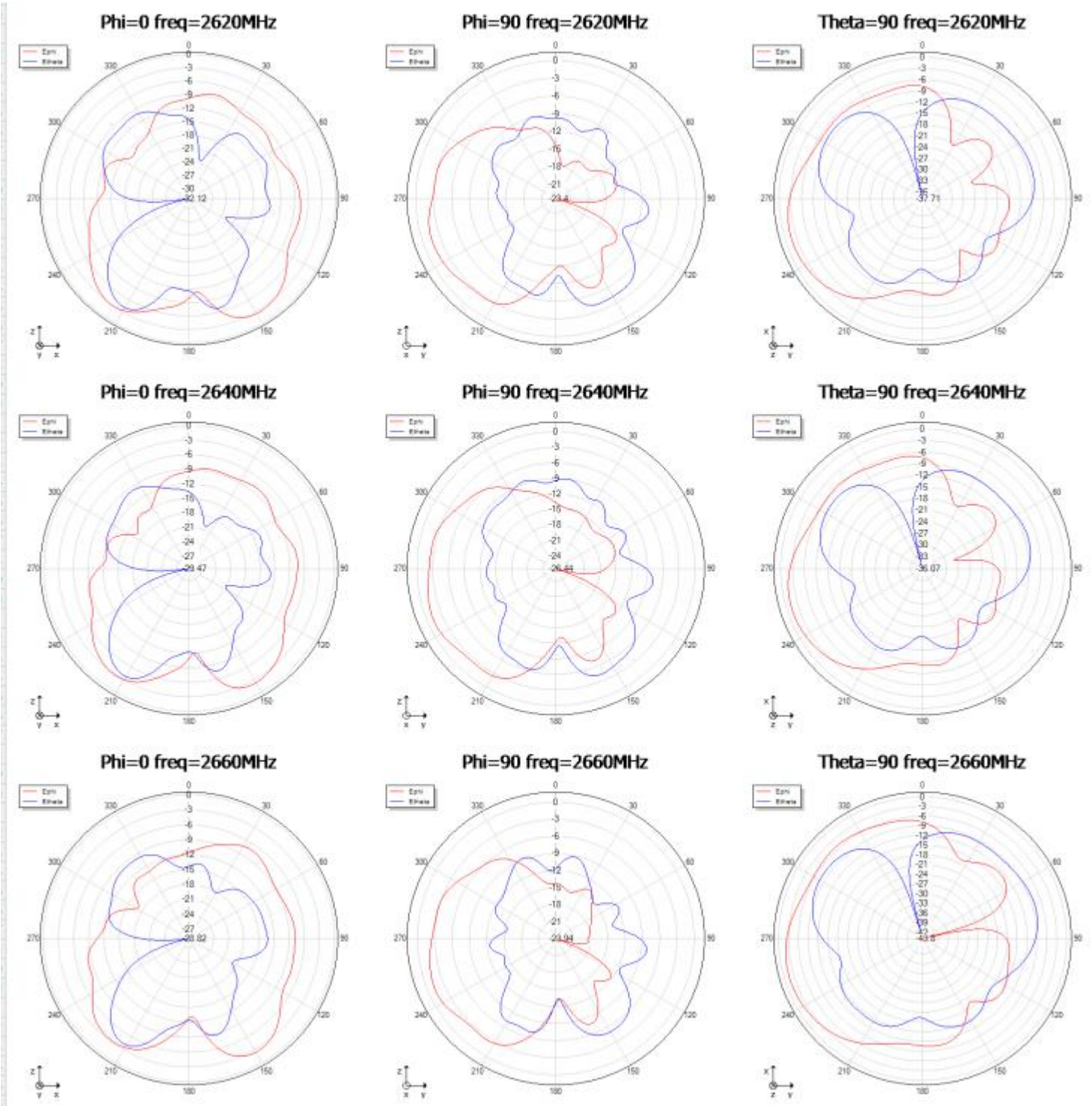
Phi=90 freq=2600MHz



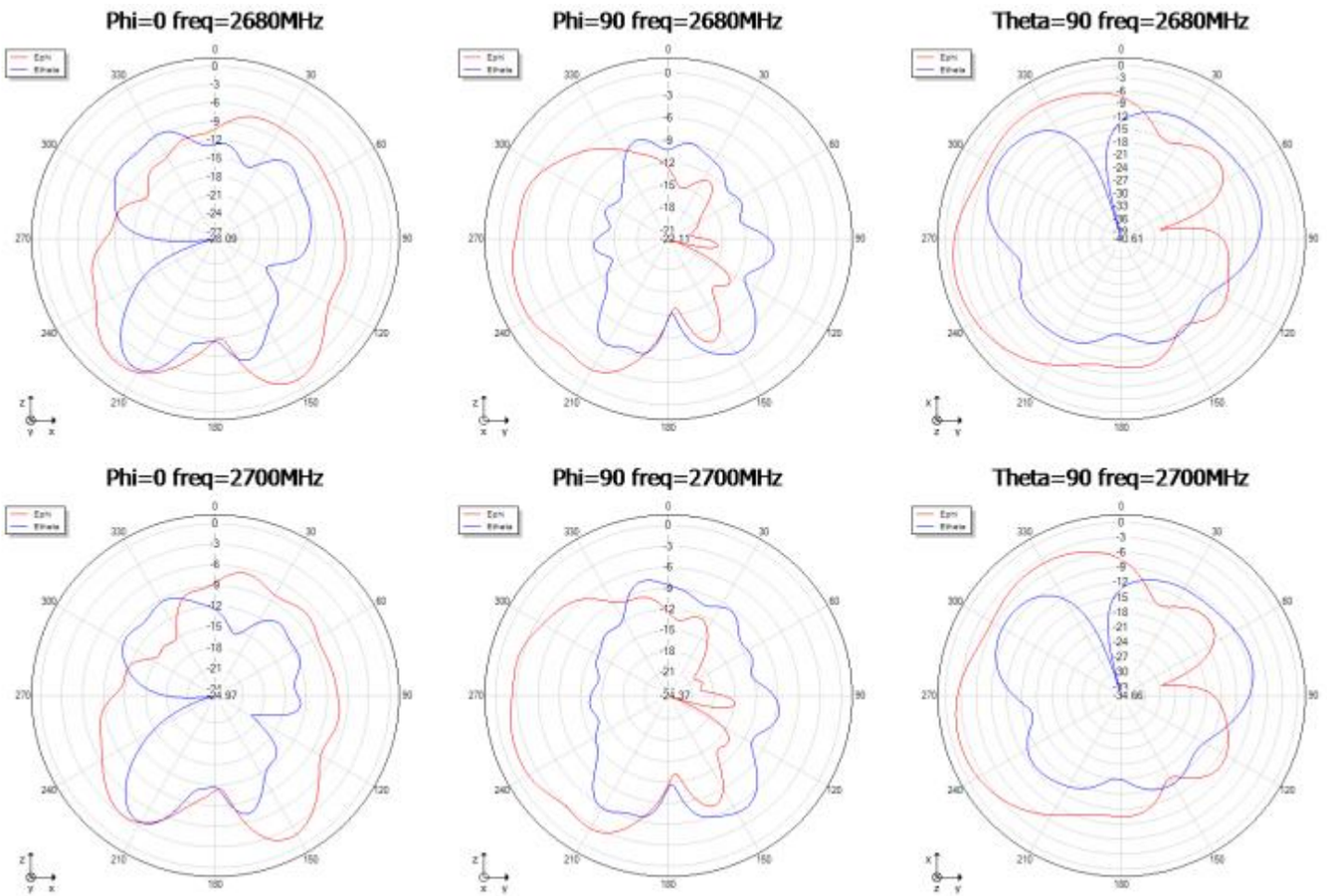
Theta=90 freq=2600MHz



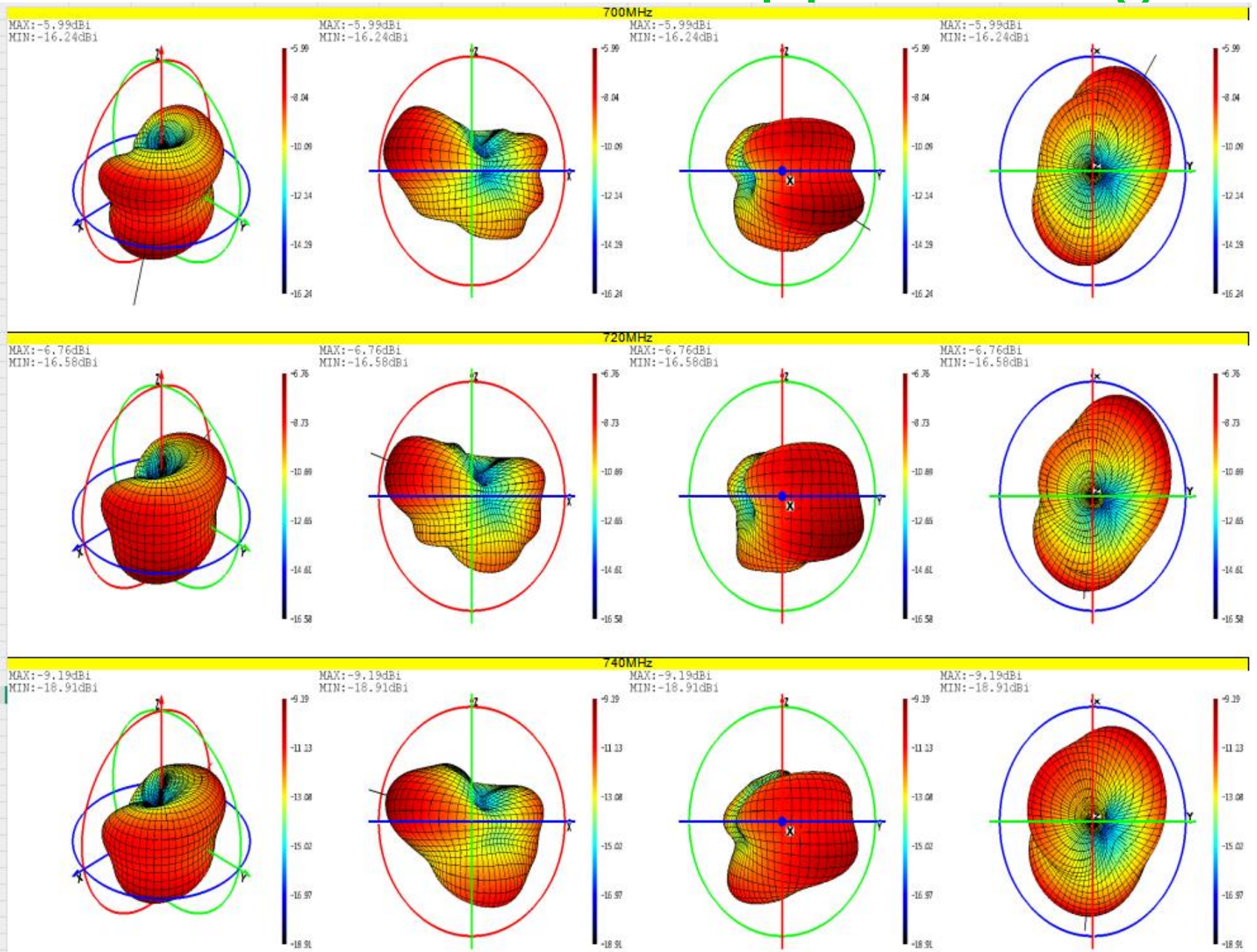
Lobe diagram



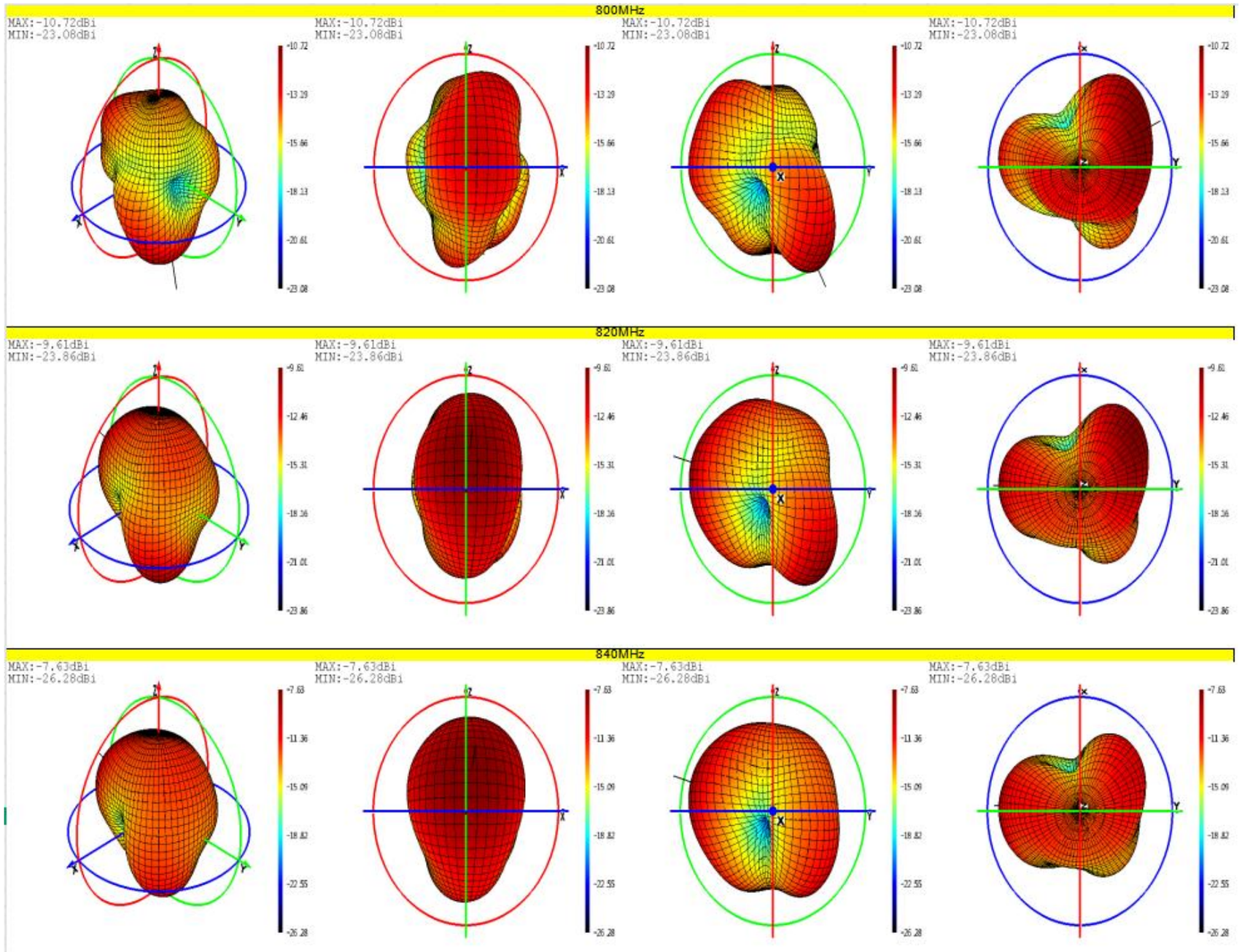
Lobe diagram



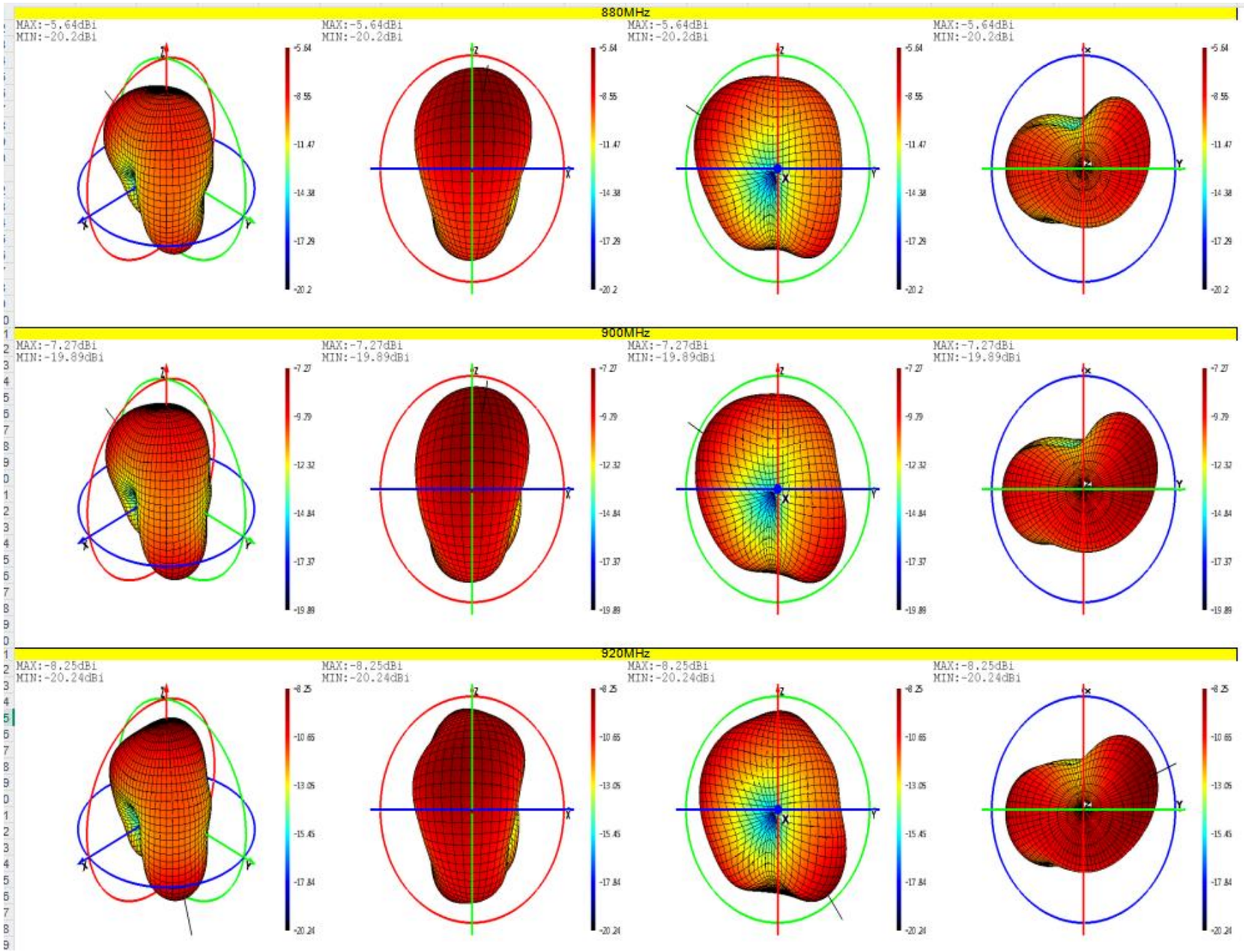
Antenna antenna apple diagram



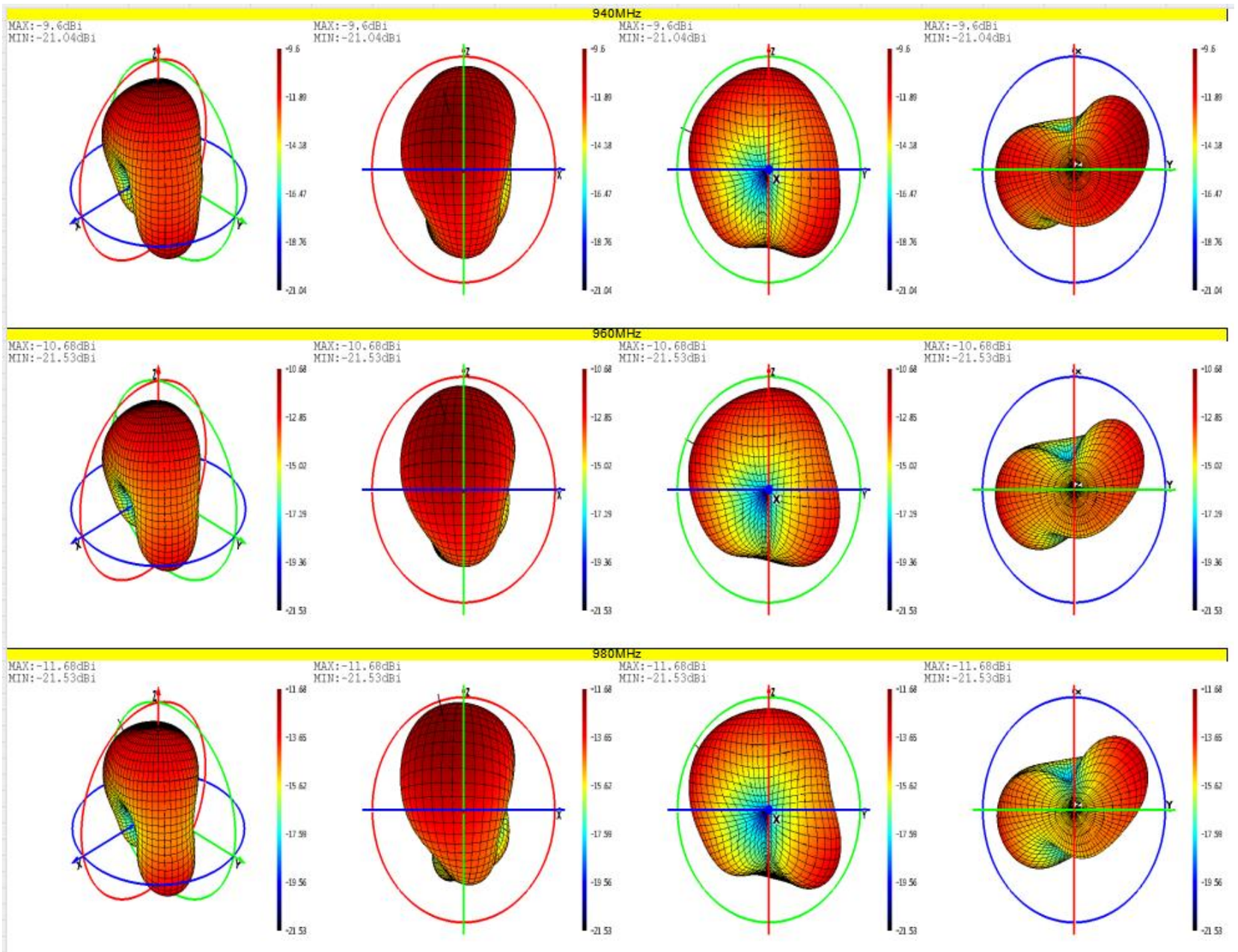
Antenna antenna apple diagram



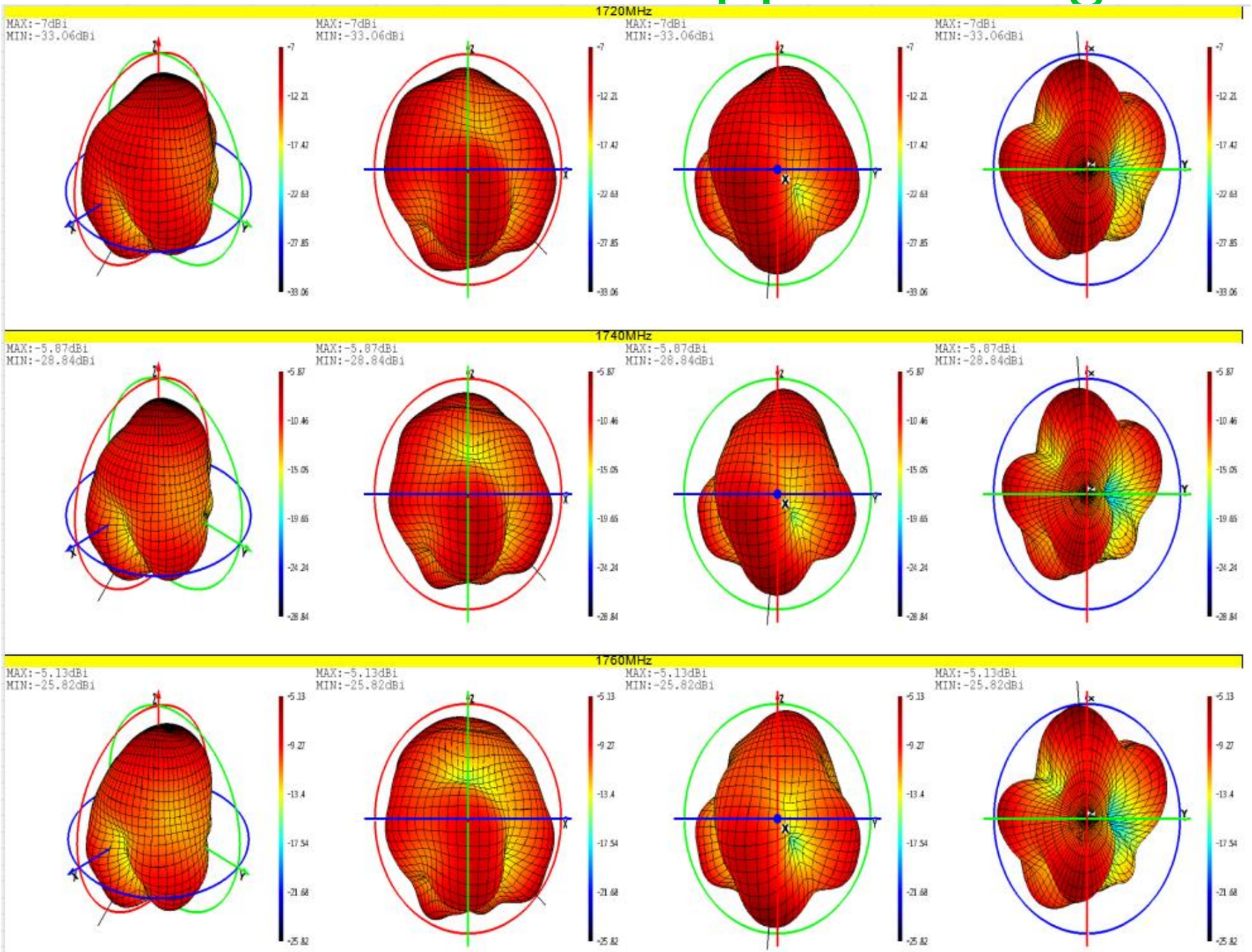
Antenna antenna apple diagram



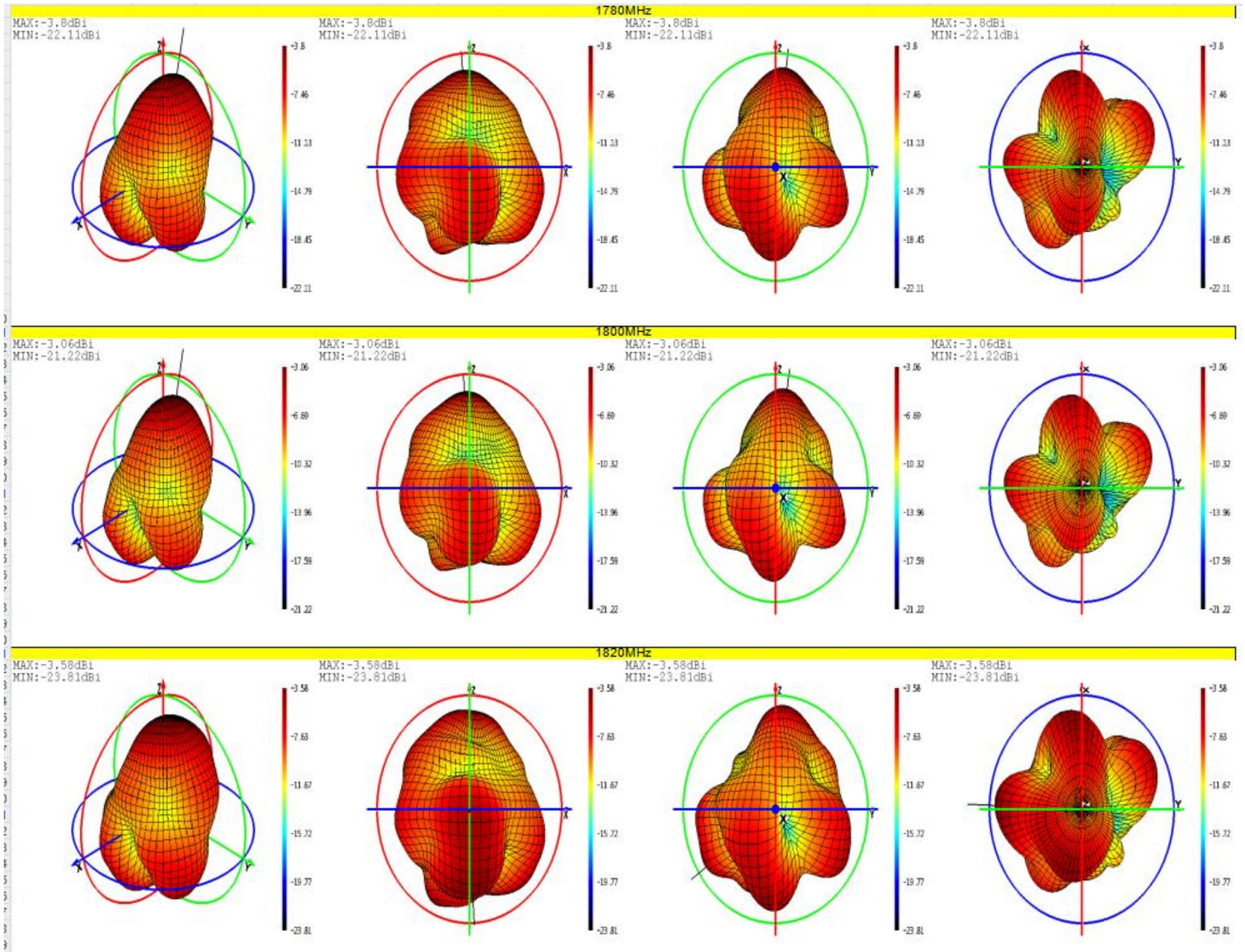
Antenna antenna apple diagram



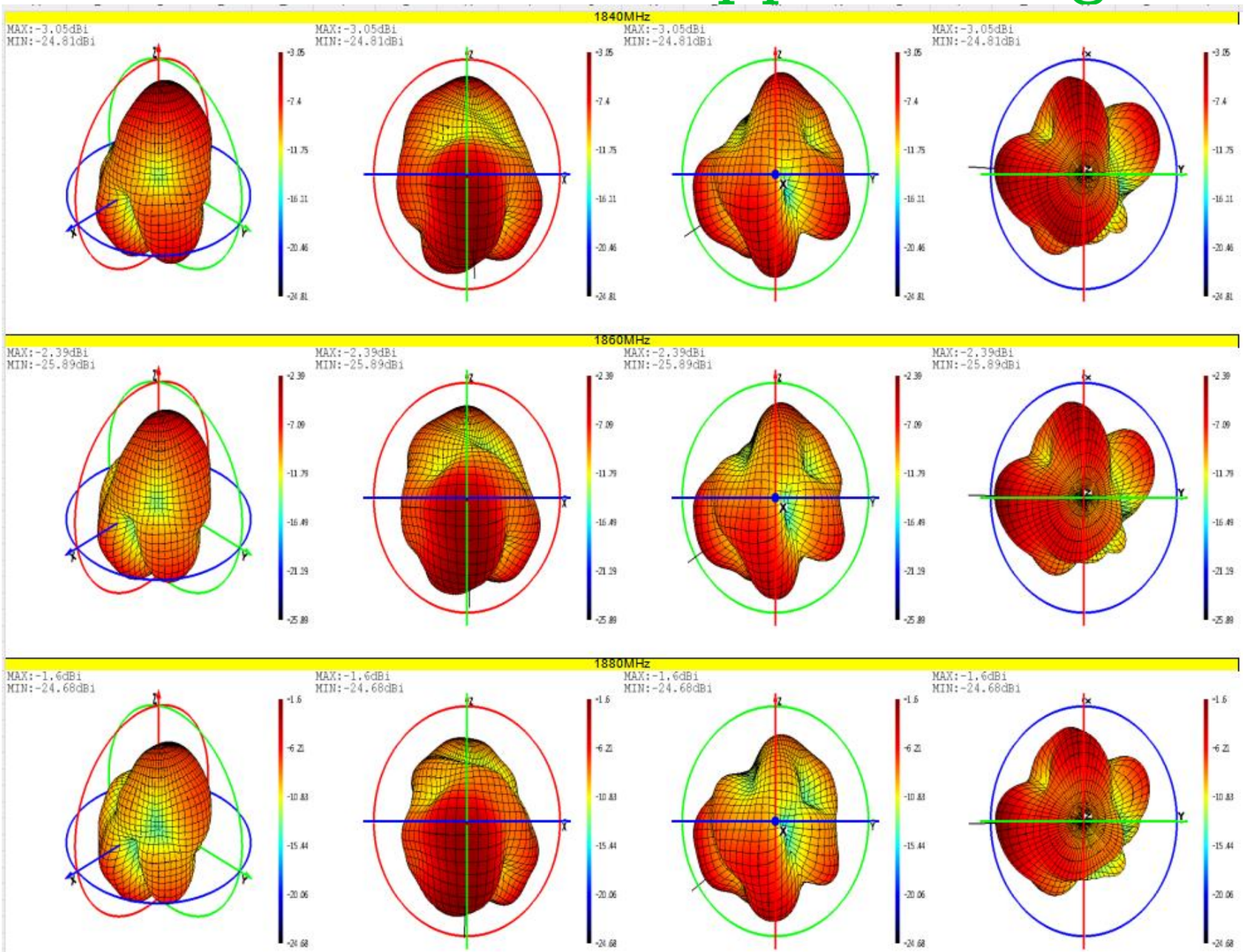
Antenna antenna apple diagram



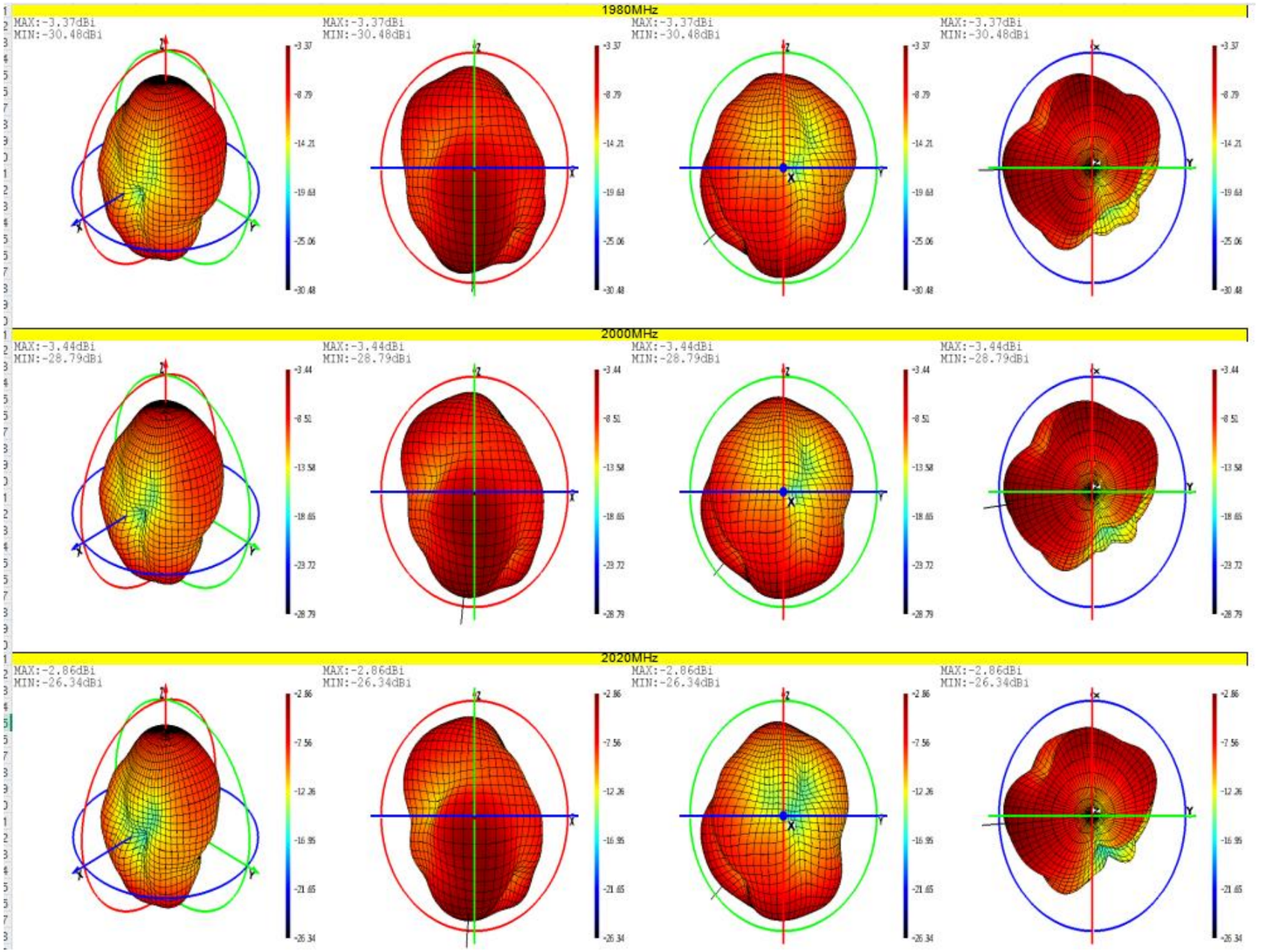
Antenna antenna apple diagram



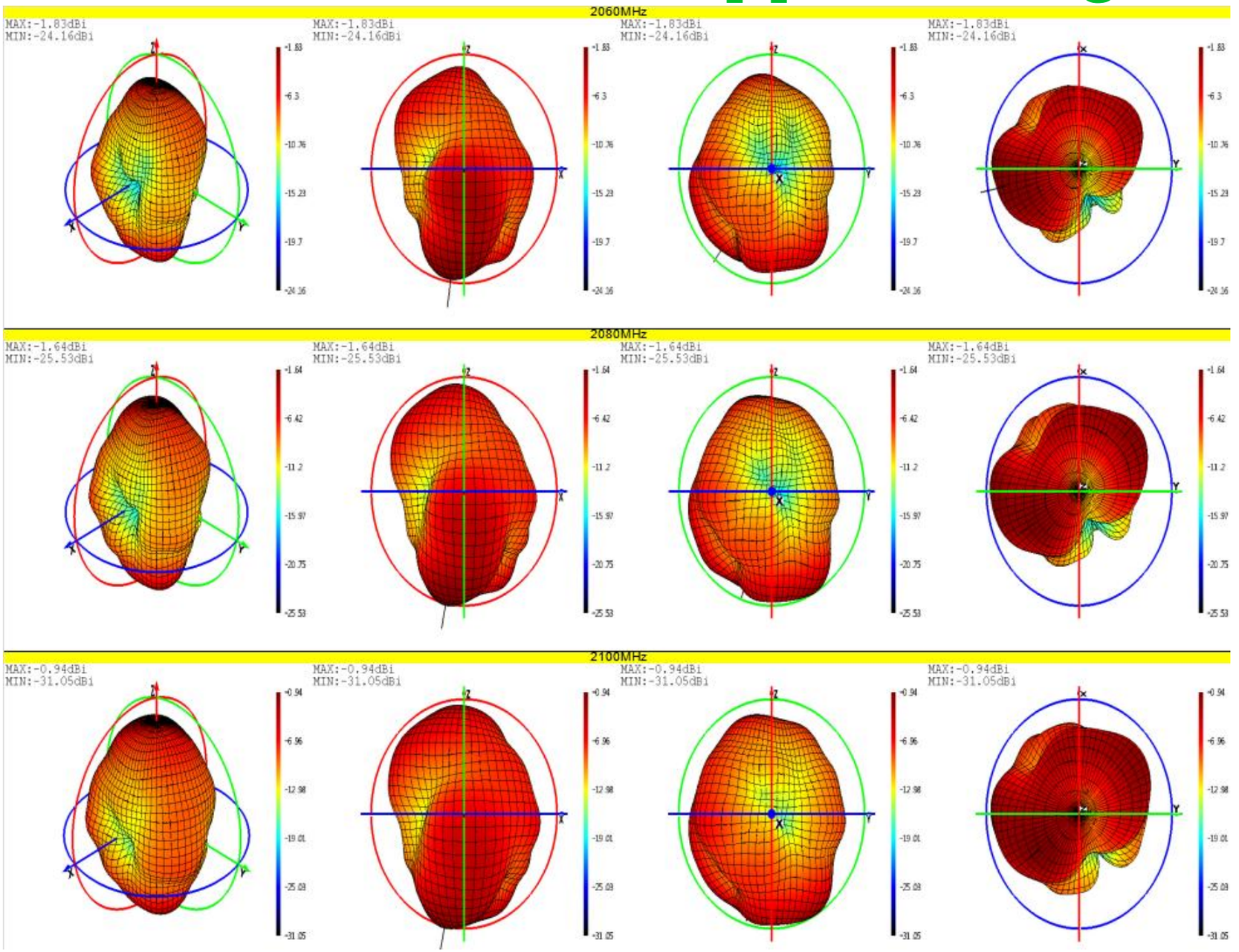
Antenna antenna apple diagram



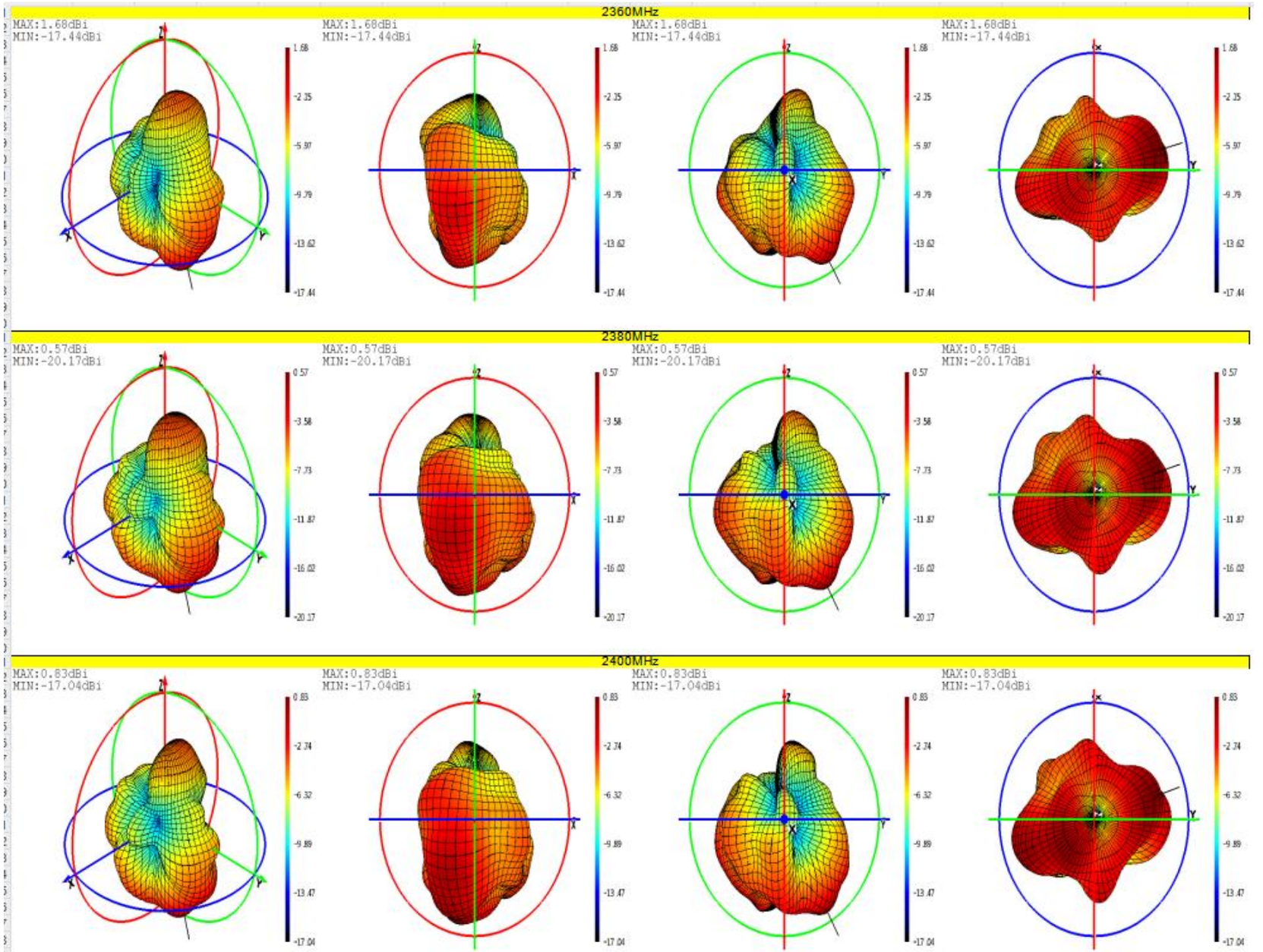
Antenna antenna apple diagram



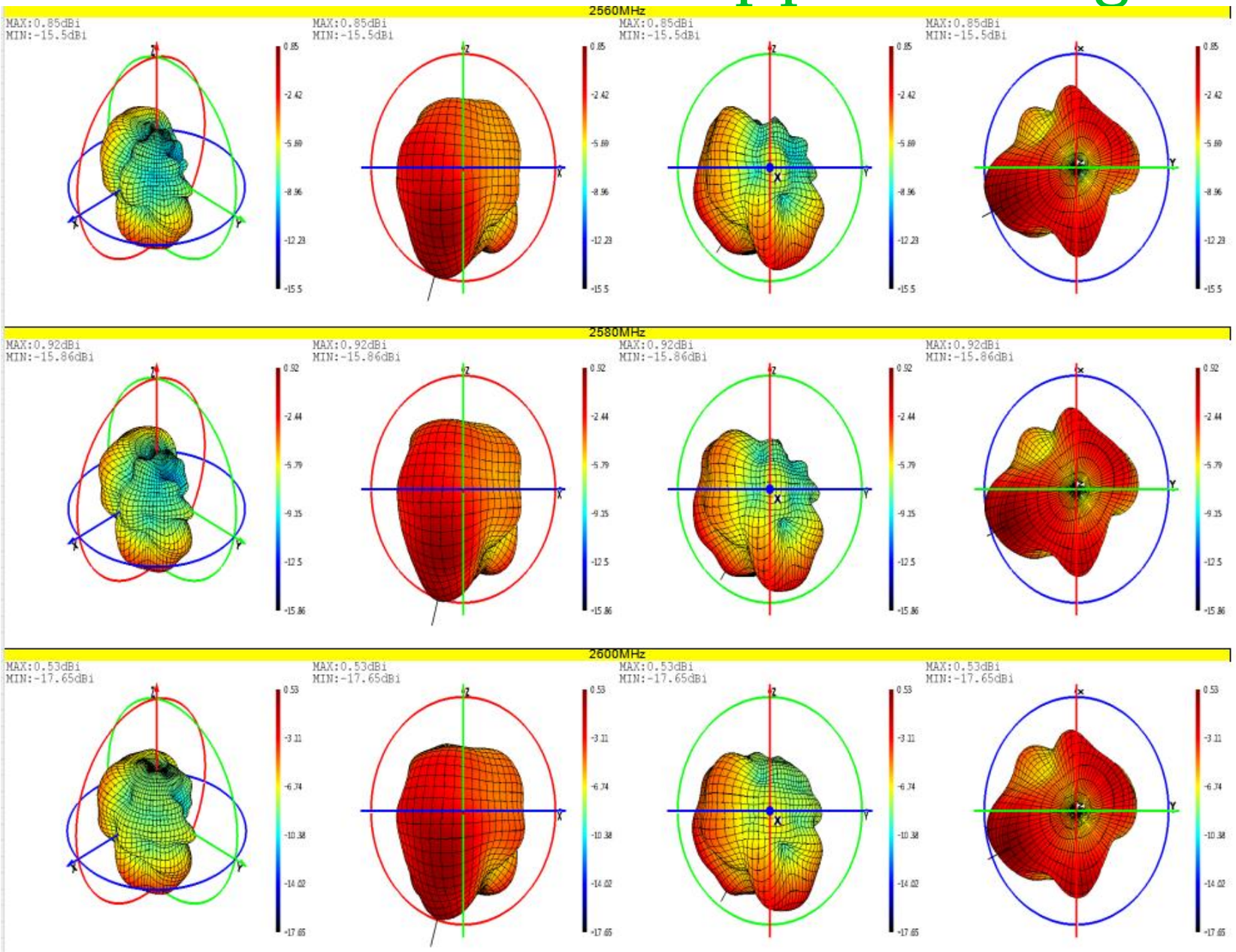
Antenna antenna apple diagram



Antenna antenna apple diagram

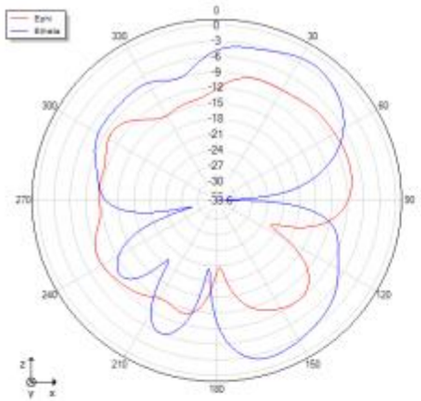


Antenna antenna apple diagram

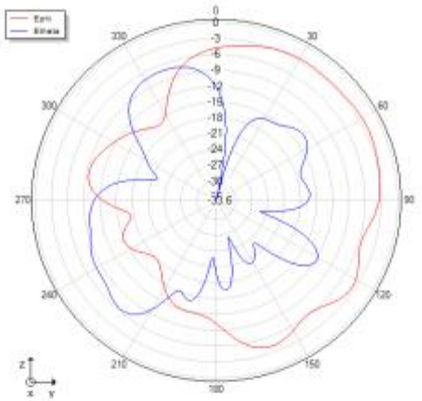


Lobe diagram

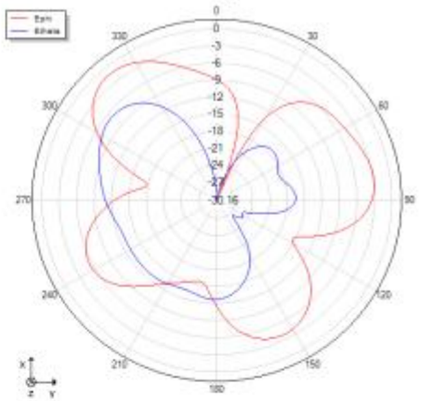
Phi=0 freq=2400MHz



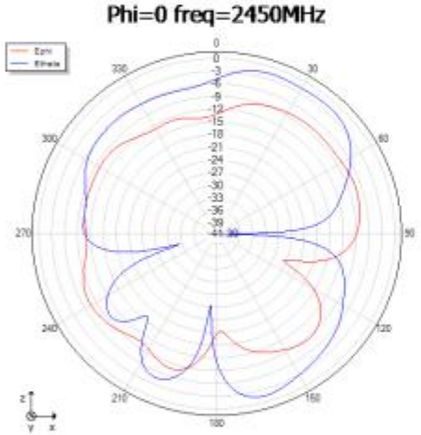
Phi=90 freq=2400MHz



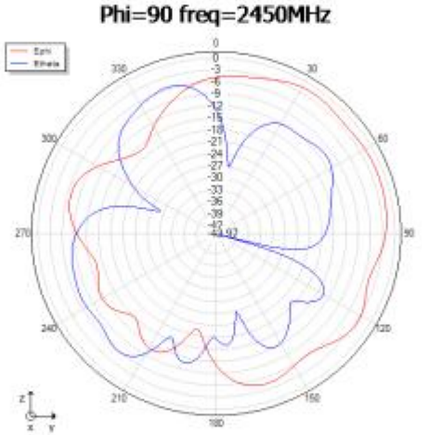
Theta=90 freq=2400MHz



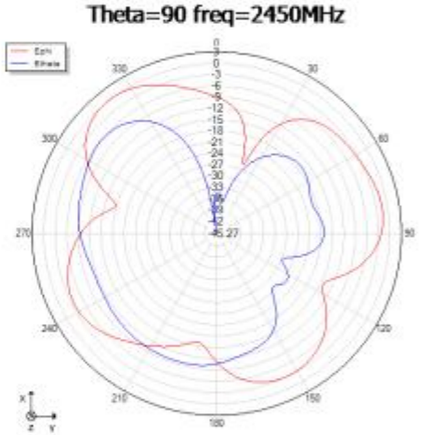
Phi=0 freq=2450MHz



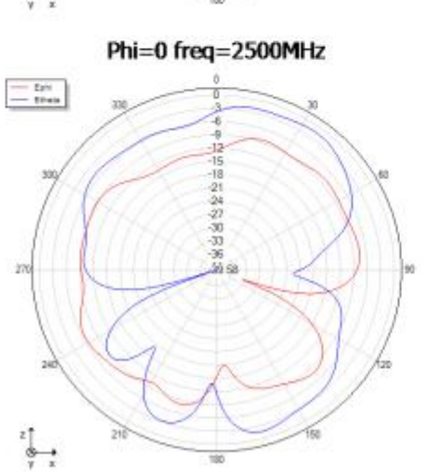
Phi=90 freq=2450MHz



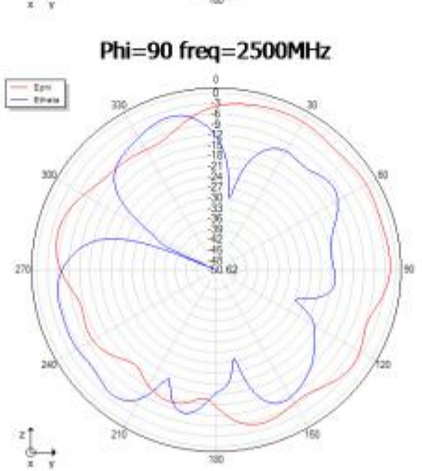
Theta=90 freq=2450MHz



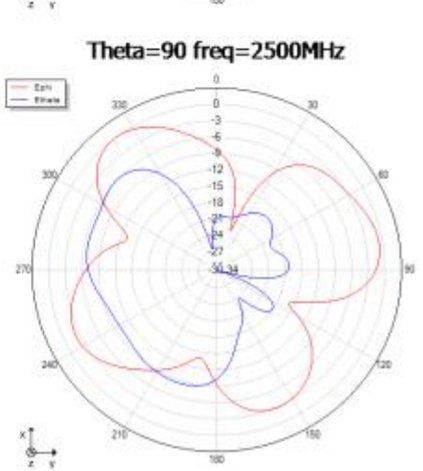
Phi=0 freq=2500MHz



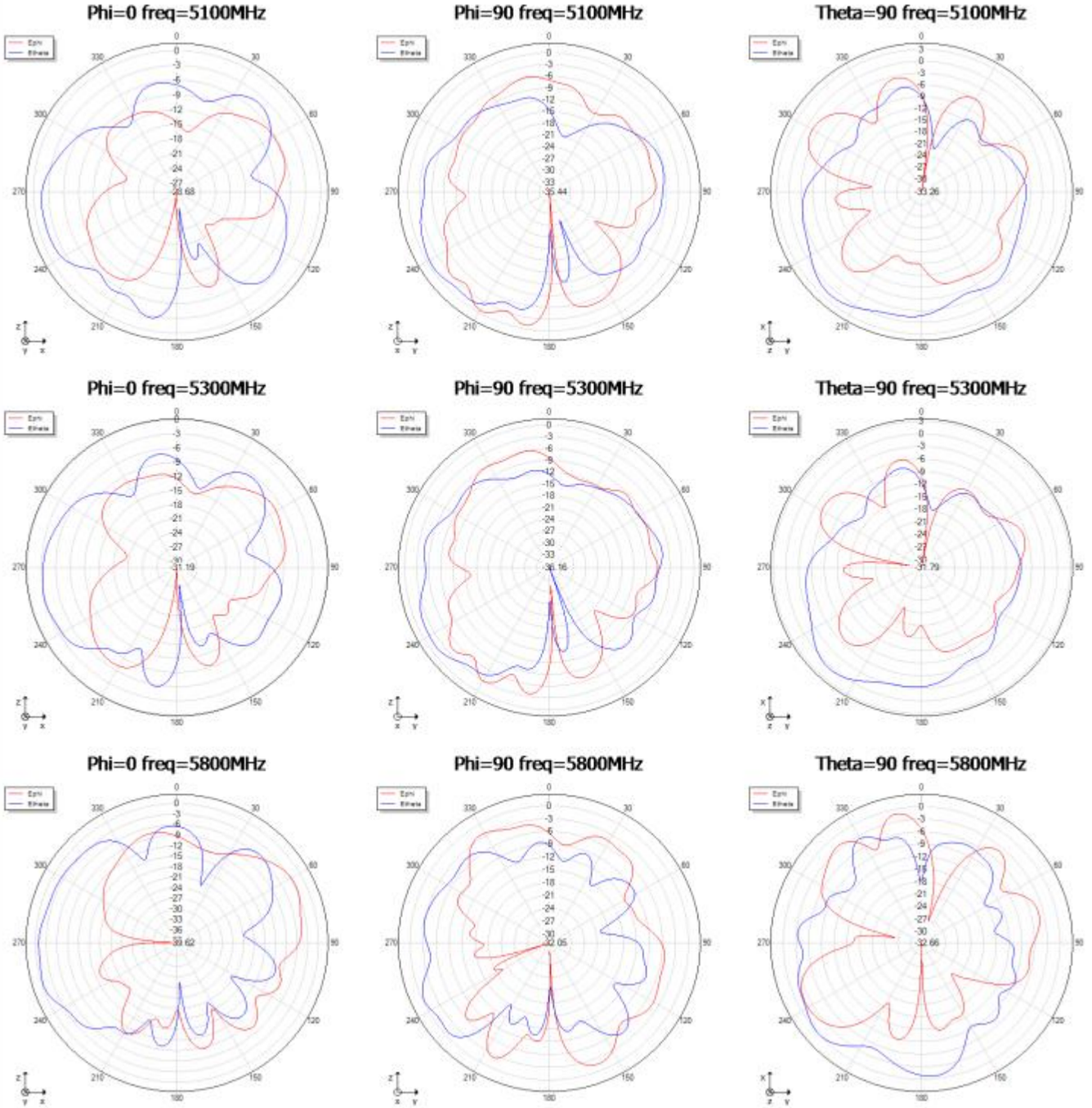
Phi=90 freq=2500MHz



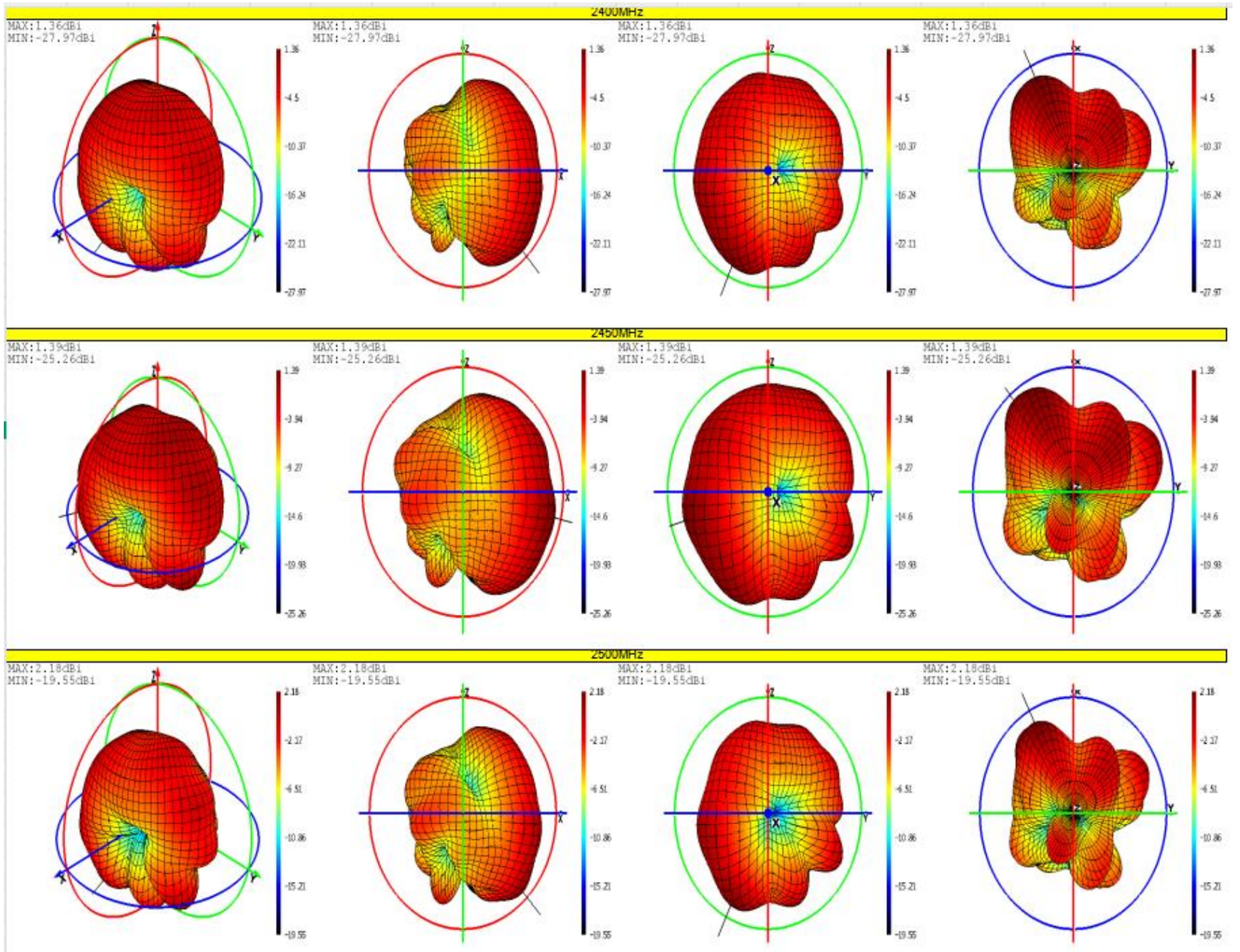
Theta=90 freq=2500MHz



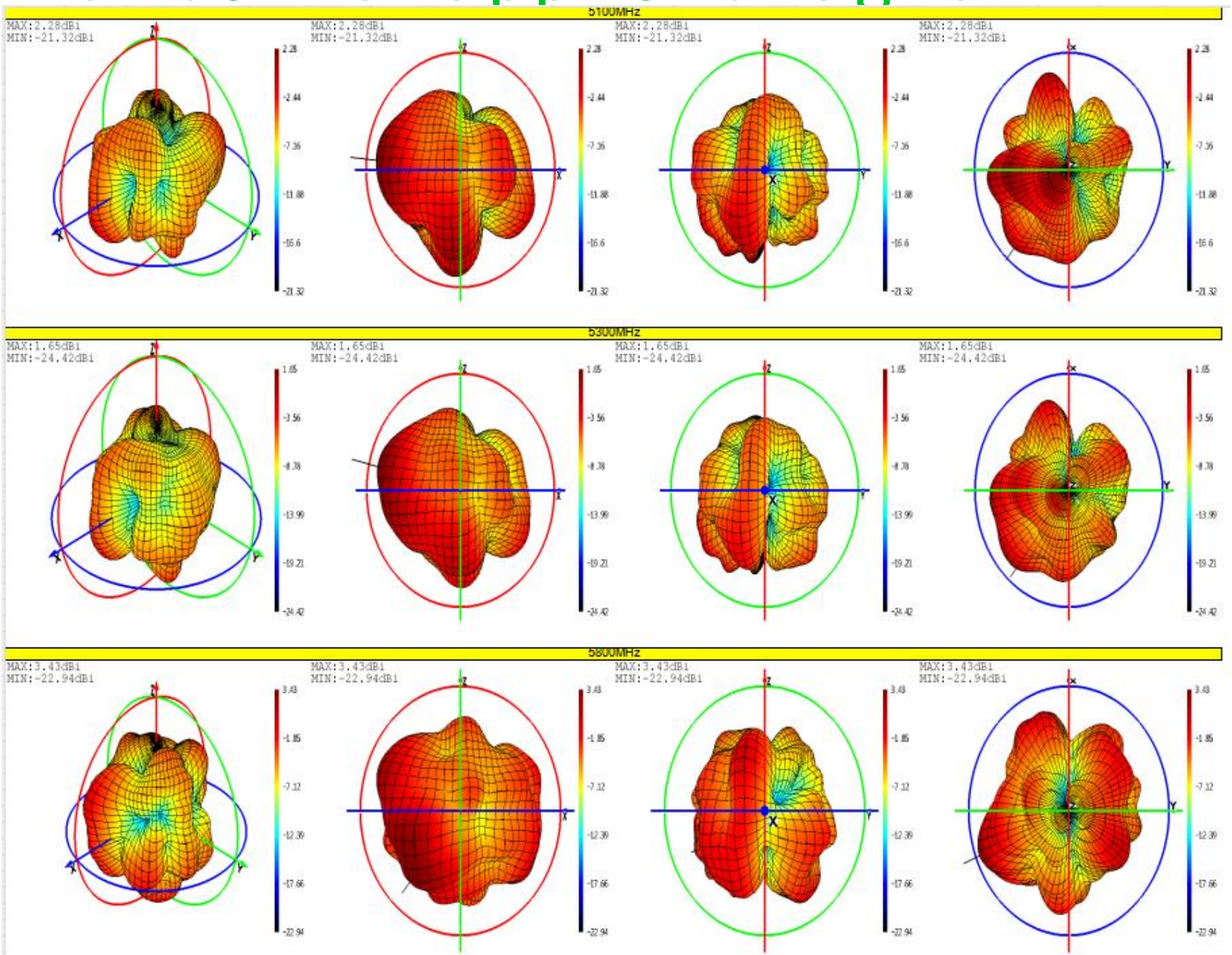
Lobe diagram



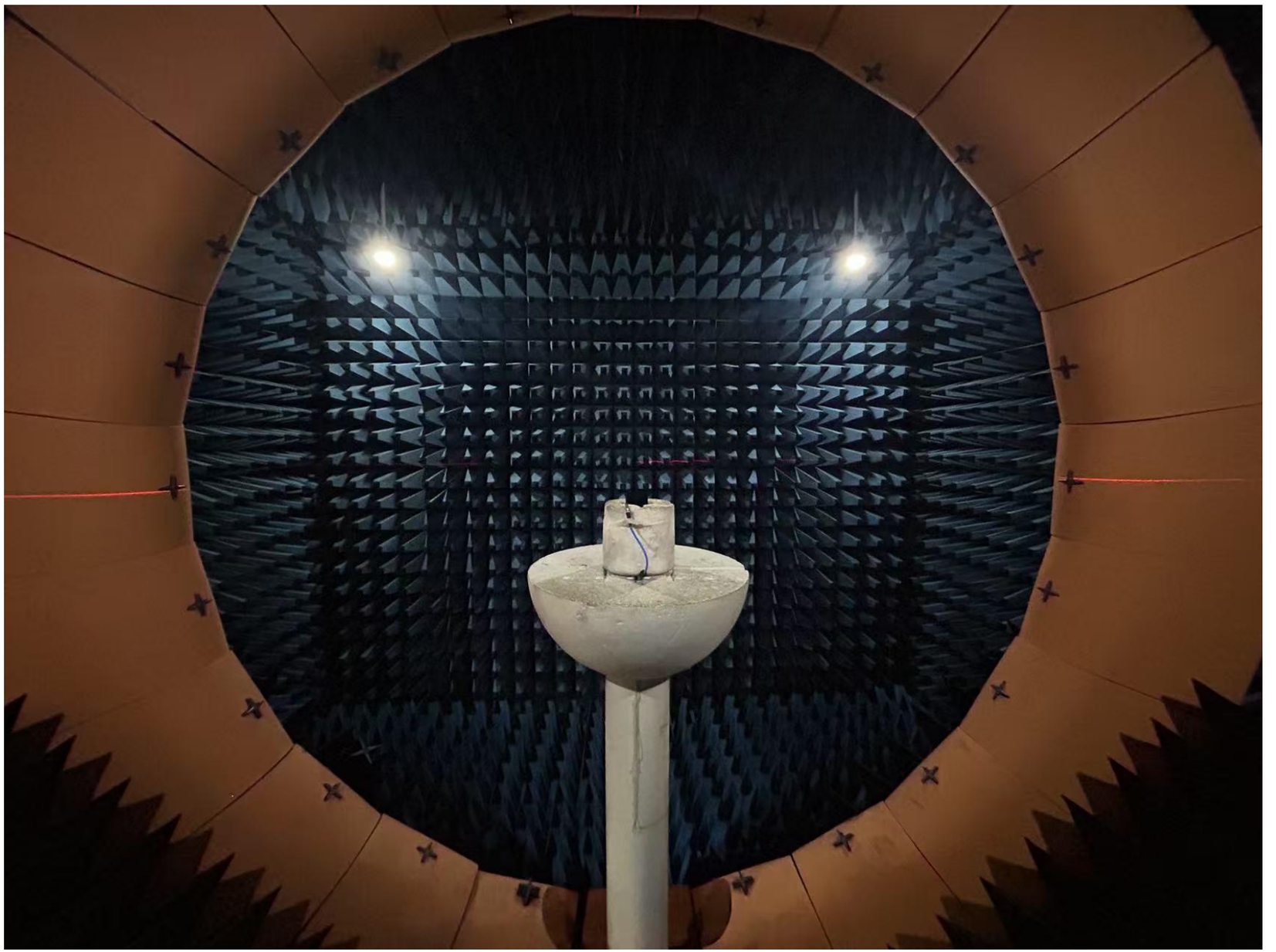
WB antenna apple diagram



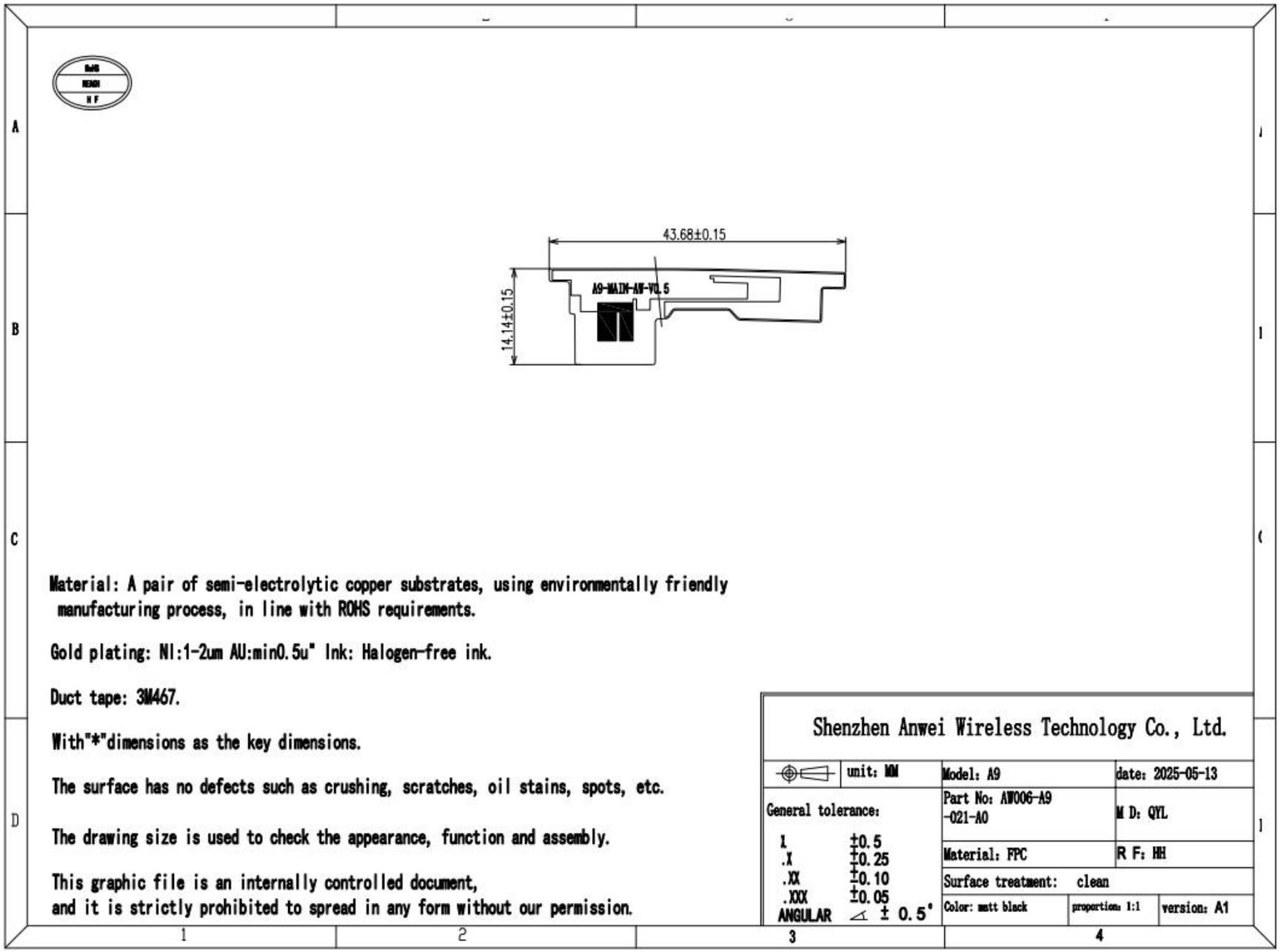
WB antenna apple diagram



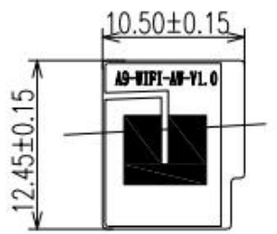
Device Test scenario



Antenna size diagram



Antenna size diagram



Material: A pair of semi-electrolytic copper substrates, using environmentally friendly manufacturing process, in line with ROHS requirements.

Gold plating: NI:1-2um AU:min0.5u" Ink: Halogen-free ink.

Duct tape: 3M467.

With"*"dimensions as the key dimensions.

The surface has no defects such as crushing, scratches, oil stains, spots, etc.

The drawing size is used to check the appearance, function and assembly.

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Shenzhen Anwei Wireless Technology Co., Ltd.			
unit: MM		Model: A9	date: 2025-05-13
General tolerance: .X ±0.5 .XX ±0.25 .XXX ±0.10 ANGULAR ±0.05 ∠ ± 0.5°		Part No: AW006-A9-022-A0	M D: QYL
		Material: FPC	R F: HH
		Surface treatment: clean	
		Color: matt black	proportion: 1:1 version: A1