



JPN Sony TV FY26 RCU Affordable AKIRA Antenna Measurement T1/P2_2025925

Universal Electronic Inc.

REDEFINING **CONTROL**

Antenna info

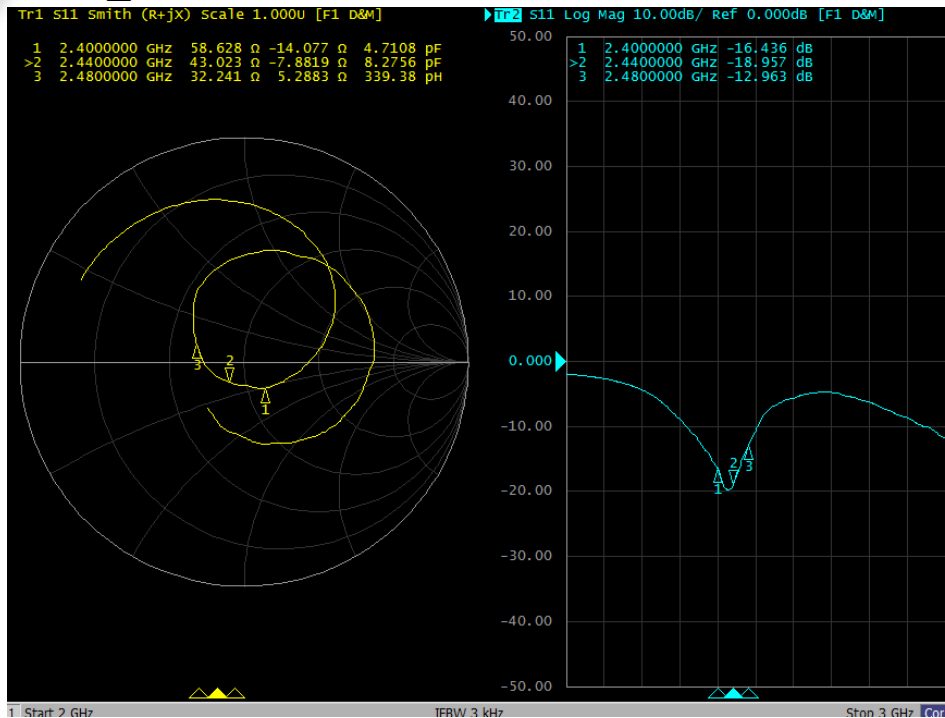
REDEFINING CONTROL

- Antenna Model:
 - Integrated PCB trace antenna (no discrete part)
- Antenna Manufacturer:
 - Universal Electronics Inc.
 - Address: 201 E. SANDPOINTE AVE 8TH FLOOR SANTA ANA 92702 CA USA
- Antenna Type:
 - PCB trace antenna (integrated on board)

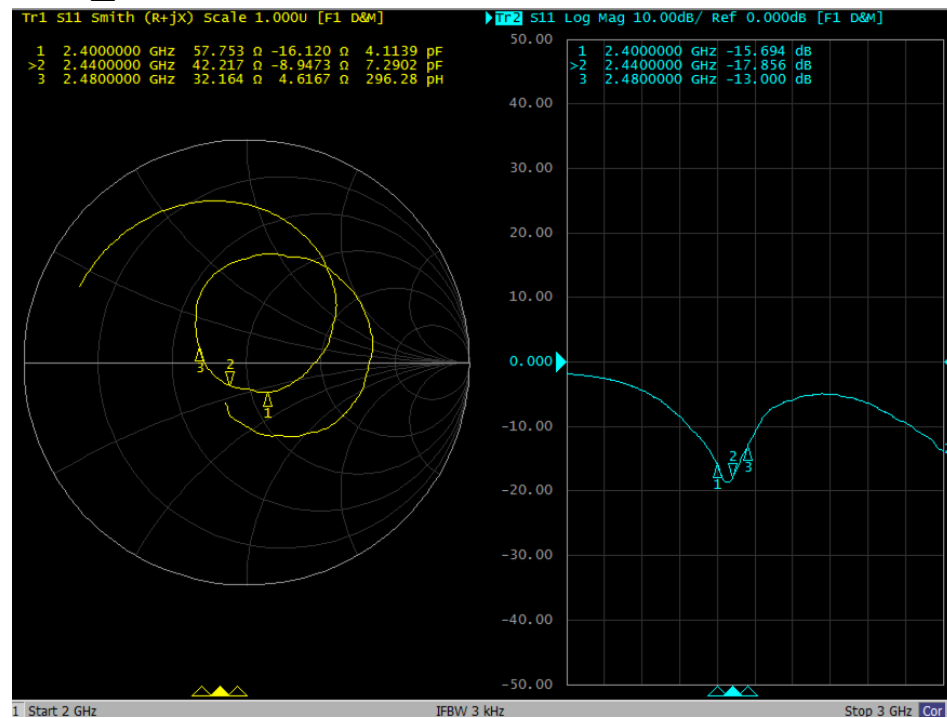
Return Loss and Smith Chart

REDEFINING CONTROL

#1_ C24=2.4PF, L3=1.8NH, C13=DNF



#2_ C24=2.4PF, L3=1.8NH, C13=DNF



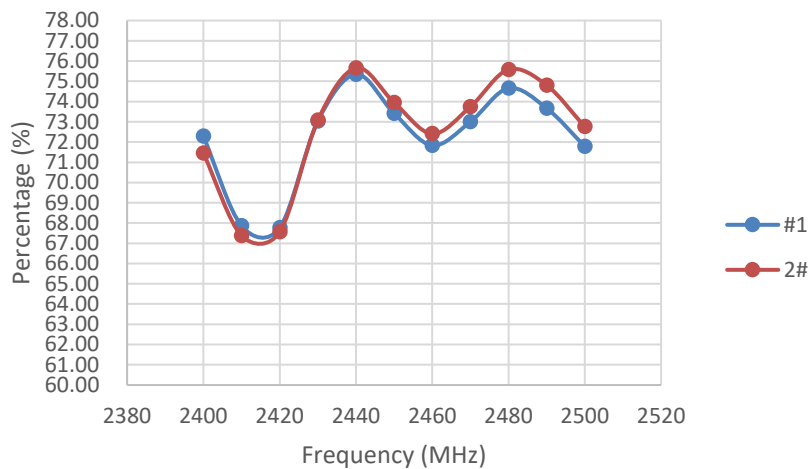
Frequency (MHz)	S11 (dB)		
	2400	2440	2480
# 1	-16.436	-18.957	-12.963

Frequency (MHz)	S11 (dB)		
	2400	2440	2480
# 2	-15.694	-17.856	-13.000

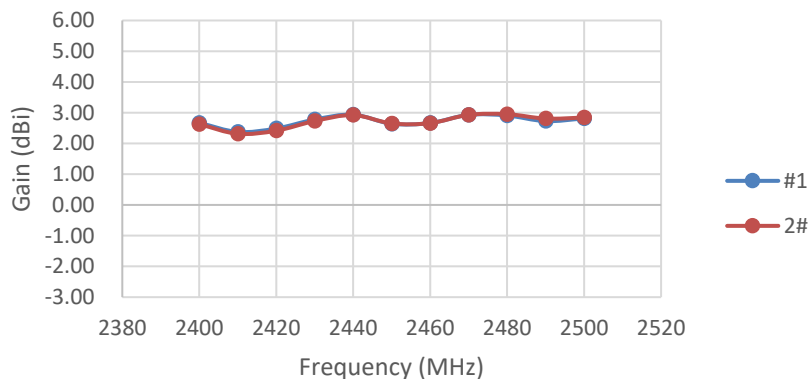
Efficiency and Gain table

REDEFINING CONTROL

Efficiency (%)



Gain (dBi)



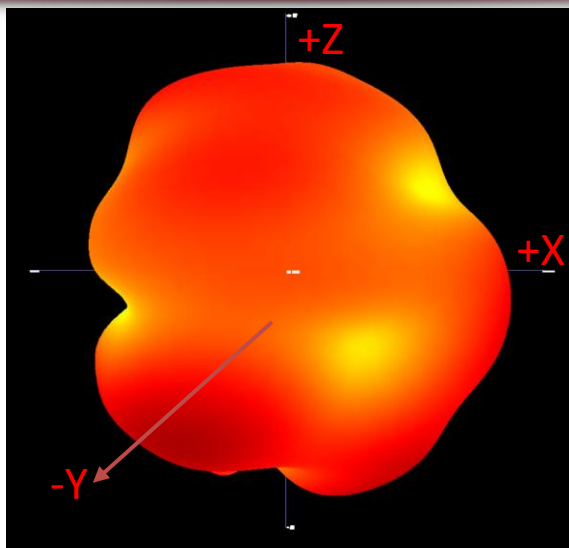
	#1	#2
Frequency (MHz)	Efficiency (%)	Efficiency (%)
2400	72%	71%
2410	68%	67%
2420	68%	68%
2430	73%	73%
2440	75%	76%
2450	73%	74%
2460	72%	72%
2470	73%	74%
2480	75%	76%
2490	74%	75%
2500	72%	73%

	#1	#2
Frequency (MHz)	Gain (dBi)	Gain (dBi)
2400	2.67	2.63
2410	2.37	2.31
2420	2.49	2.41
2430	2.78	2.73
2440	2.94	2.92
2450	2.64	2.65
2460	2.66	2.66
2470	2.93	2.93
2480	2.91	2.95
2490	2.73	2.81
2500	2.81	2.84

Radiation Pattern - Unit 1

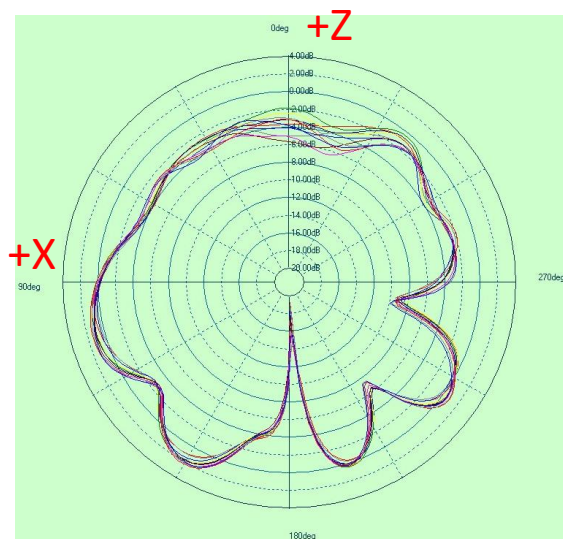
REDEFINING CONTROL

Unit 1_2.440 GHz

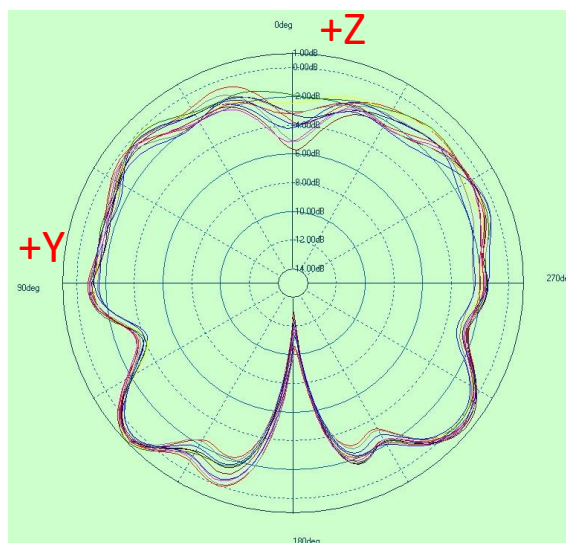


Legend

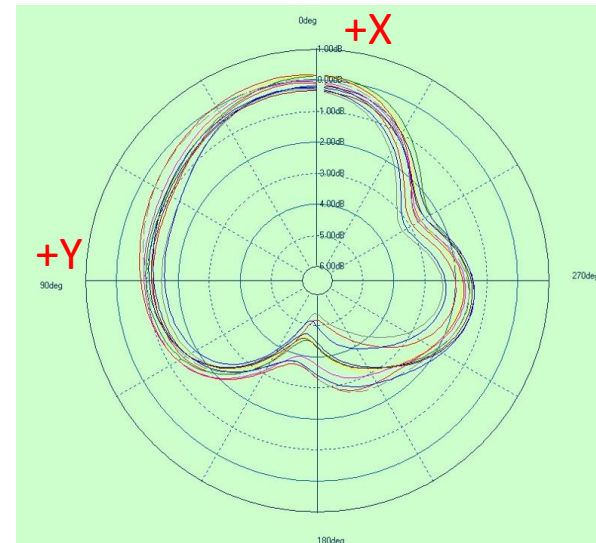
— 2400.00(MHz)
— 2410.00(MHz)
— 2420.00(MHz)
— 2430.00(MHz)
— 2440.00(MHz)
— 2450.00(MHz)
— 2460.00(MHz)
— 2470.00(MHz)
— 2480.00(MHz)
— 2490.00(MHz)
— 2500.00(MHz)



Phi=0°



Phi=90°

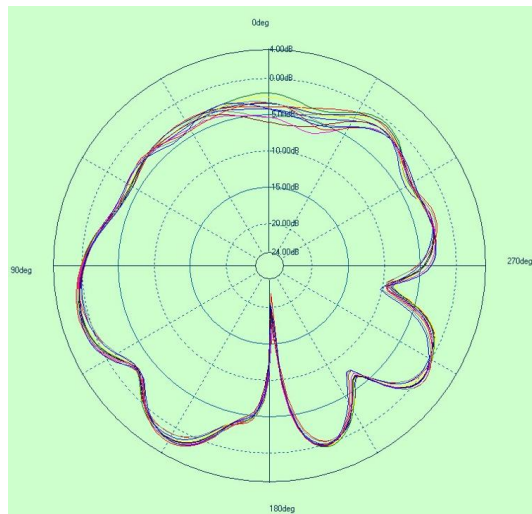


Theta=90°

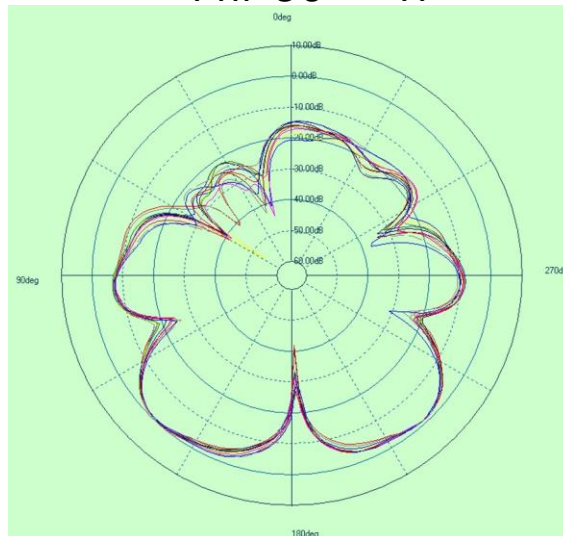
Radiation Pattern - Unit 1

REDEFINING CONTROL

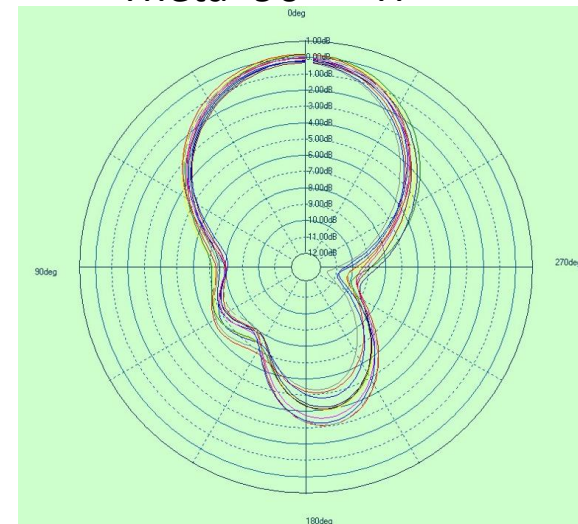
$\Phi=0^\circ$ - H



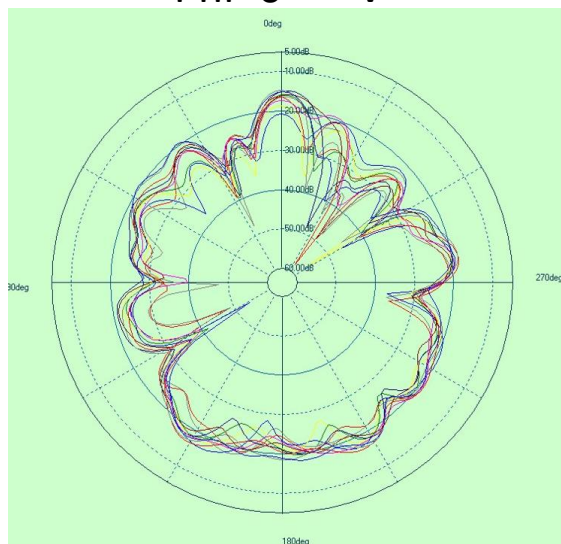
$\Phi=90^\circ$ - H



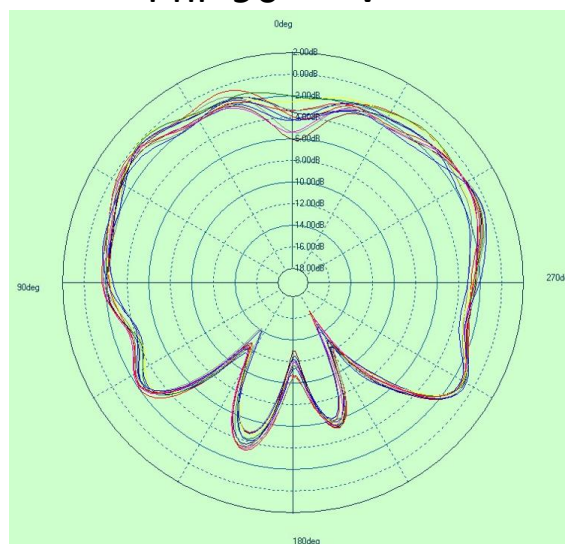
$\Theta=90^\circ$ - H



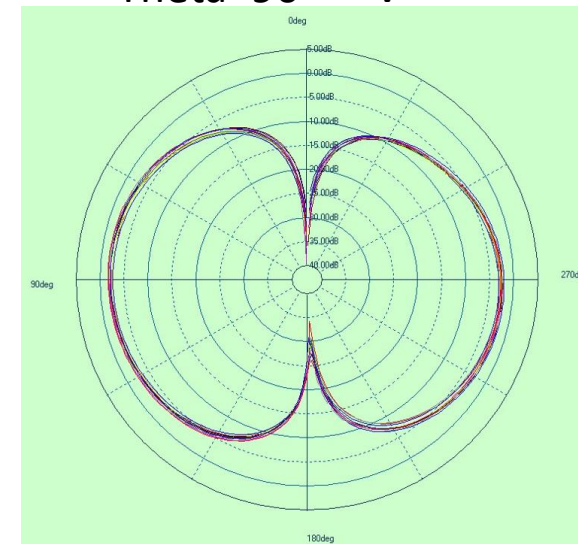
$\Phi=0^\circ$ - V



$\Phi=90^\circ$ - V



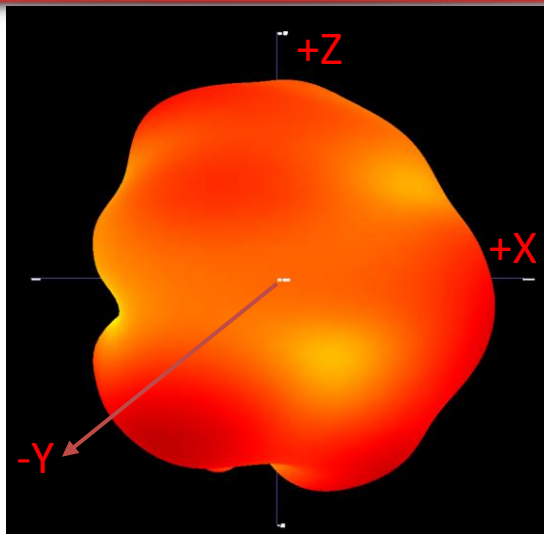
$\Theta=90^\circ$ - V



Radiation Pattern - Unit 2

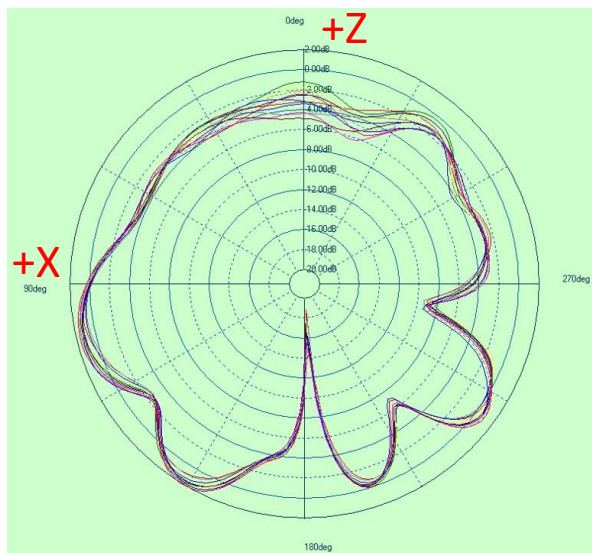
REDEFINING CONTROL

Unit 2_2.440 GHz

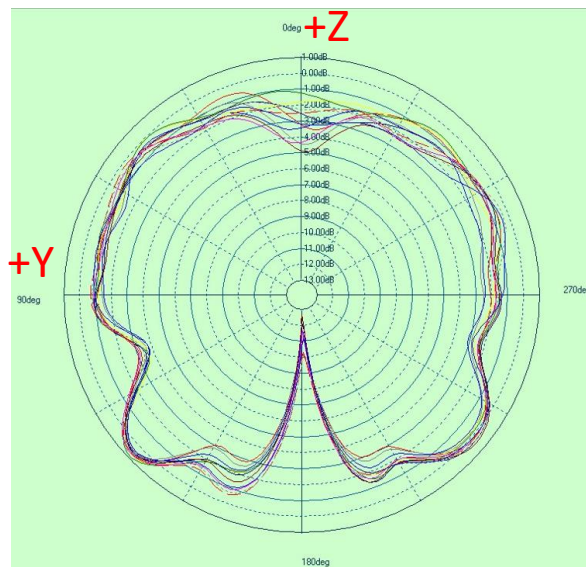


Legend

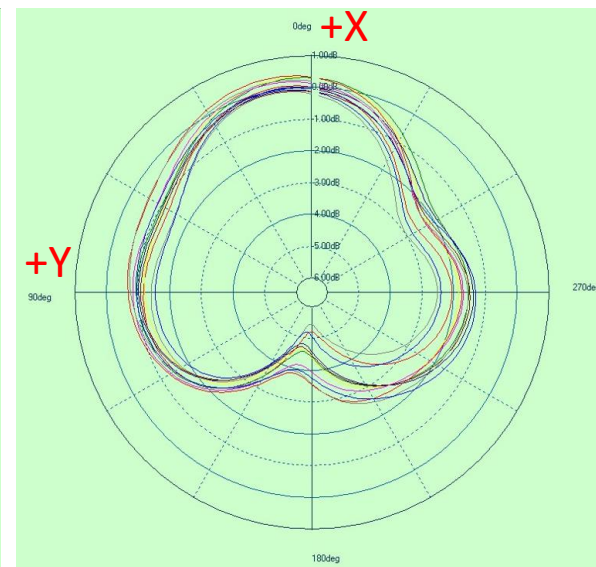
- 2400.00(MHz)
- 2410.00(MHz)
- 2420.00(MHz)
- 2430.00(MHz)
- 2440.00(MHz)
- 2450.00(MHz)
- 2460.00(MHz)
- 2470.00(MHz)
- 2480.00(MHz)
- 2490.00(MHz)
- 2500.00(MHz)



Phi=0°



Phi=90°

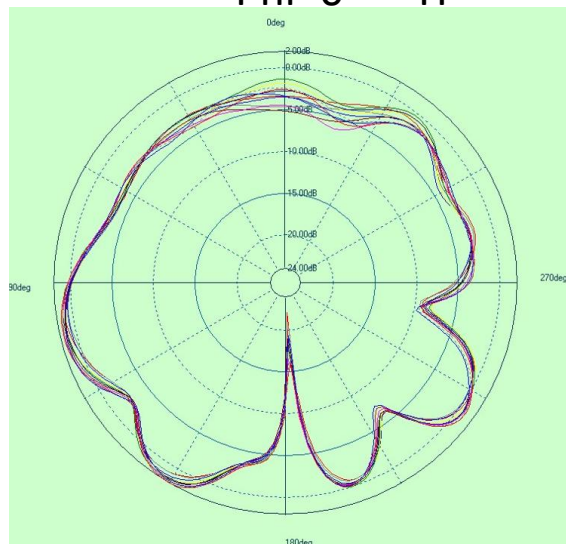


Theta=90°

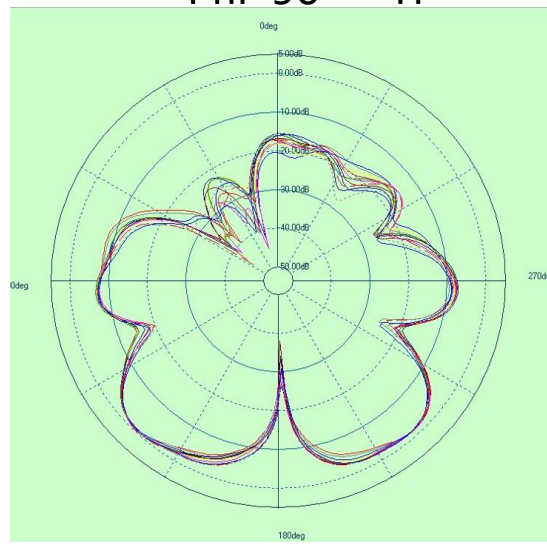
Radiation Pattern - Unit 2

REDEFINING CONTROL

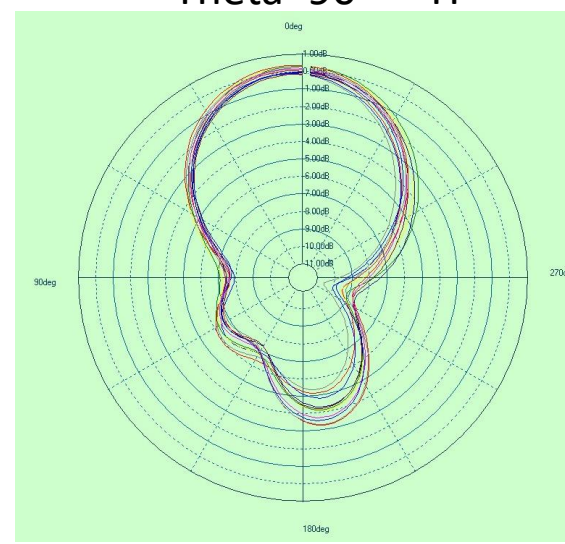
$\Phi=0^\circ$ - H



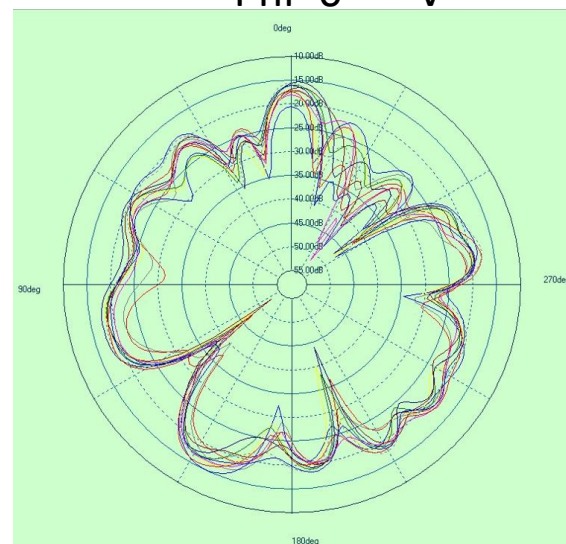
$\Phi=90^\circ$ - H



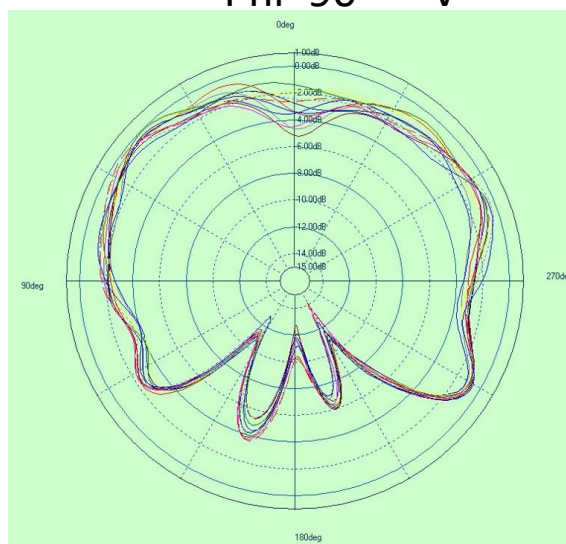
$\Theta=90^\circ$ - H



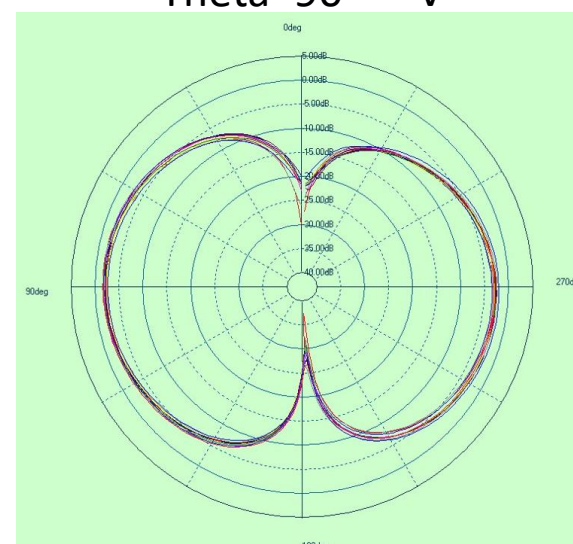
$\Phi=0^\circ$ - V



$\Phi=90^\circ$ - V



$\Theta=90^\circ$ - V



Measured Gain Table

REDEFINING CONTROL

SONY FY26				Average Gain +/- 90 deg		Minimum gain +/- 45 deg	
AKIRA				(Averaged for 3 frequencies)		(Averaged every 10 deg, min value picked among all the values and all 3 frequencies)	
Coordinate System	Sony	UEI	H (phi)	V (theta)	H (phi)	V (theta)	
	XY	XZ	-23.6	-2.8	-31.8	-5.6	
	YZ	YZ	-1.4	-15.8	-3.9	-29.7	
	ZX	XY	-5.8	-4.4	-6.8	-10.2	

SONY FY26				Average Gain +/- 90 deg		Minimum gain +/- 45 deg	
AKIRA				(Averaged for 3 frequencies)		(Averaged every 10 deg, min value picked among all the values and all 3 frequencies)	
Coordinate System	Sony	UEI	H (phi)	V (theta)	H (phi)	V (theta)	
	XY	XZ	-23.2	-2.7	-35.5	-5.4	
	YZ	YZ	-1.4	-15.2	-3.4	-31.7	
	ZX	XY	-5.9	-4.2	-7.0	-9.4	

Measured Gain Table with left hand

REDEFINING CONTROL

SONY FY26			Average Gain +/- 90 deg		Minimum gain +/- 45 deg	
AKIRA with left hand			(Averaged for 3 frequencies)		(Averaged every 10 deg, min value picked among all the values and all 3 frequencies)	
Coordinate System	Sony	UEI	H (phi)	V (theta)	H (phi)	V (theta)
Remote 1	XY	XZ	-18.8	-3.0	-31.6	-4.9
	YZ	YZ	-1.5	-16.8	-4.2	-29.7
	ZX	XY	-8.1	-6.6	-9.2	-20.2

SONY FY26				Average Gain +/- 90 deg		Minimum gain +/- 45 deg	
AKIRA with left hand				(Averaged for 3 frequencies)		(Averaged every 10 deg, min value picked among all the values and all 3 frequencies)	
Coordinate System	Sony	UEI	H (phi)	V (theta)	H (phi)	V (theta)	
Remote 2	XY	XZ	-16.3	-3.0	-32.6	-4.9	
	YZ	YZ	-1.8	-14.7	-4.2	-29.3	
	ZX	XY	-9.0	-6.0	-8.9	-14.0	

Measured Gain Table with right hand

REDEFINING CONTROL

SONY FY26				Average Gain +/- 90 deg		Minimum gain +/- 45 deg	
AKIRA with right hand				(Averaged for 3 frequencies)		(Averaged every 10 deg, min value picked among all the values and all 3 frequencies)	
Coordinate System	Sony	UEI	H (phi)	V (theta)	H (phi)	V (theta)	
Remote 1	XY	XZ	-18.0	-2.7	-30.4	-5.2	
	YZ	YZ	-1.9	-13.4	-4.3	-30.4	
	ZX	XY	-9.7	-4.3	-11.5	-11.2	

SONY FY26				Average Gain +/- 90 deg		Minimum gain +/- 45 deg	
AKIRA with right hand				(Averaged for 3 frequencies)		(Averaged every 10 deg, min value picked among all the values and all 3 frequencies)	
Coordinate System	Sony	UEI	H (phi)	V (theta)	H (phi)	V (theta)	
	XY	XZ	-17.2	-2.7	-29.7	-5.1	
	YZ	YZ	-2.2	-12.9	-5.1	-33.7	
	ZX	XY	-10.4	-4.1	-13.8	-10.6	