



ASUS-F70 SL **Antenna Data Sheet**

WIMAX/WLAN –R: 2023666-1

\WIMAX/WLAN –L: 2023665-1

MIMO Antenna: 2023667-1

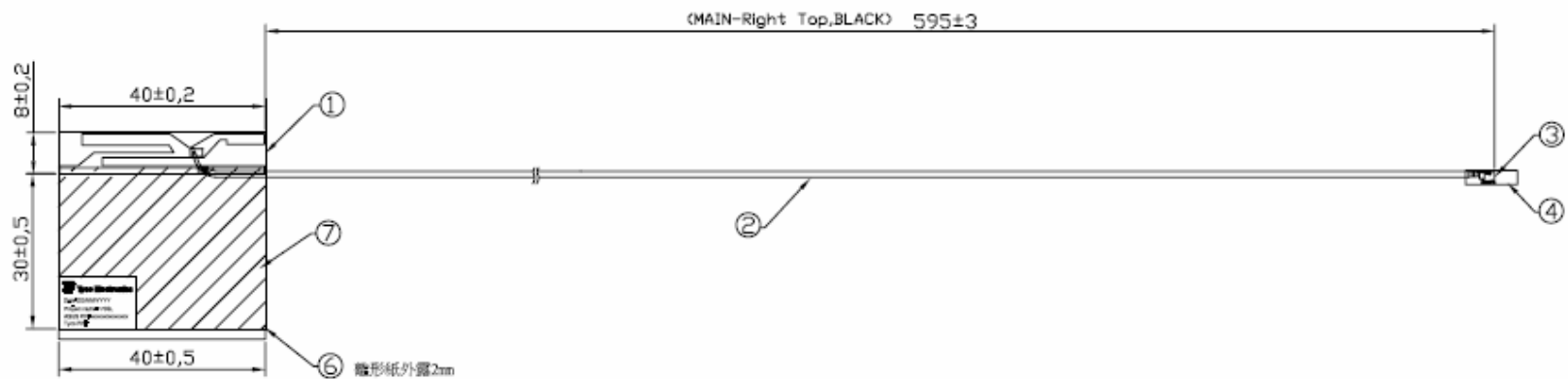
2008/8/29

Index

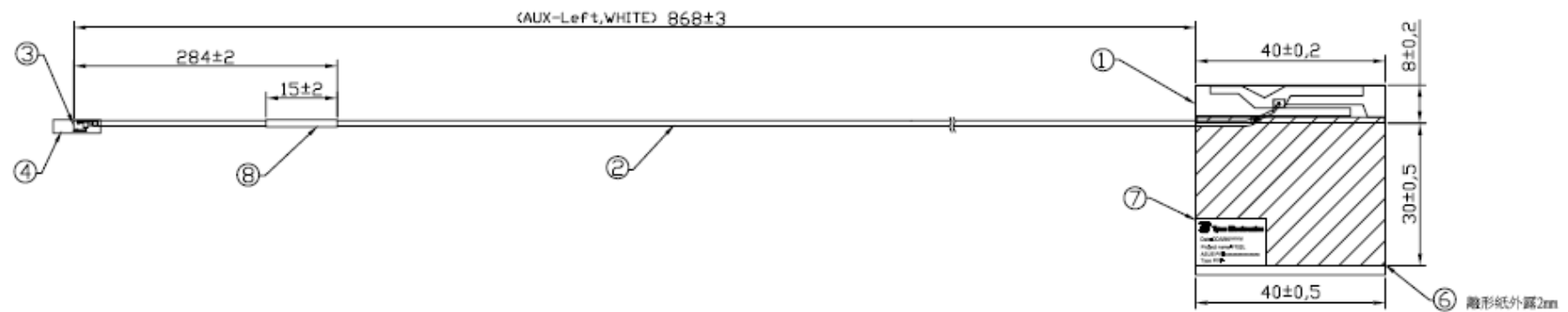
1. Index	P.2
2. Outline Drawing	P.3
3. Antenna Photo	P.6
4. Antenna Related Data	P.7
5. Antenna Testing Conditions	P.8
6. Test Result (VSWR)	P.9

2. Outline Drawing

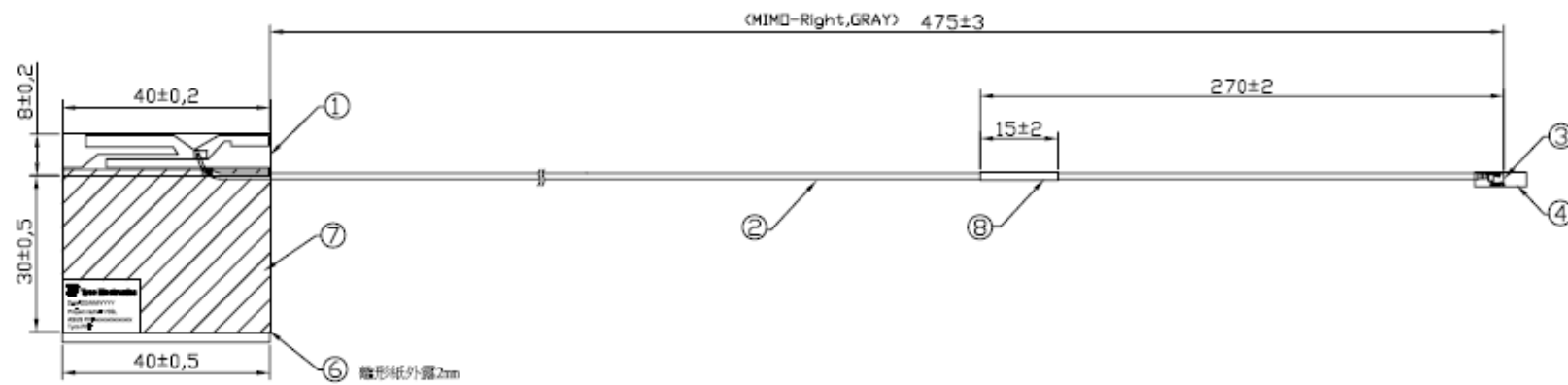
WIMAX/WLAN -R



WIMAX/WLAN -L



WLAN/MIMO



3. Antenna Photo

WIMAX/WLAN -R

WIMAX/WLAN -L

WLAN/MIMO

4. Antenna Related Data

Frequency Range:

WLAN ANTENNA : 2400~2500MHz,5150~5850MHz

WiMAX ANTENNA : 2300~2500MHz,3300~3800MHz,5150~5850MHz

Cable : Φ 1.13mm

Peak Gain: ≤ 3.0 dBi @ 2300~2500MHz, 3300~3800MHz,5150~5850MHz

V.S.W.R: ≤ 2.00 @ 2300~2500 MHz
 ≤ 2.00 @ 3300~3800 MHz
 ≤ 2.00 @ 5150~5850MHz

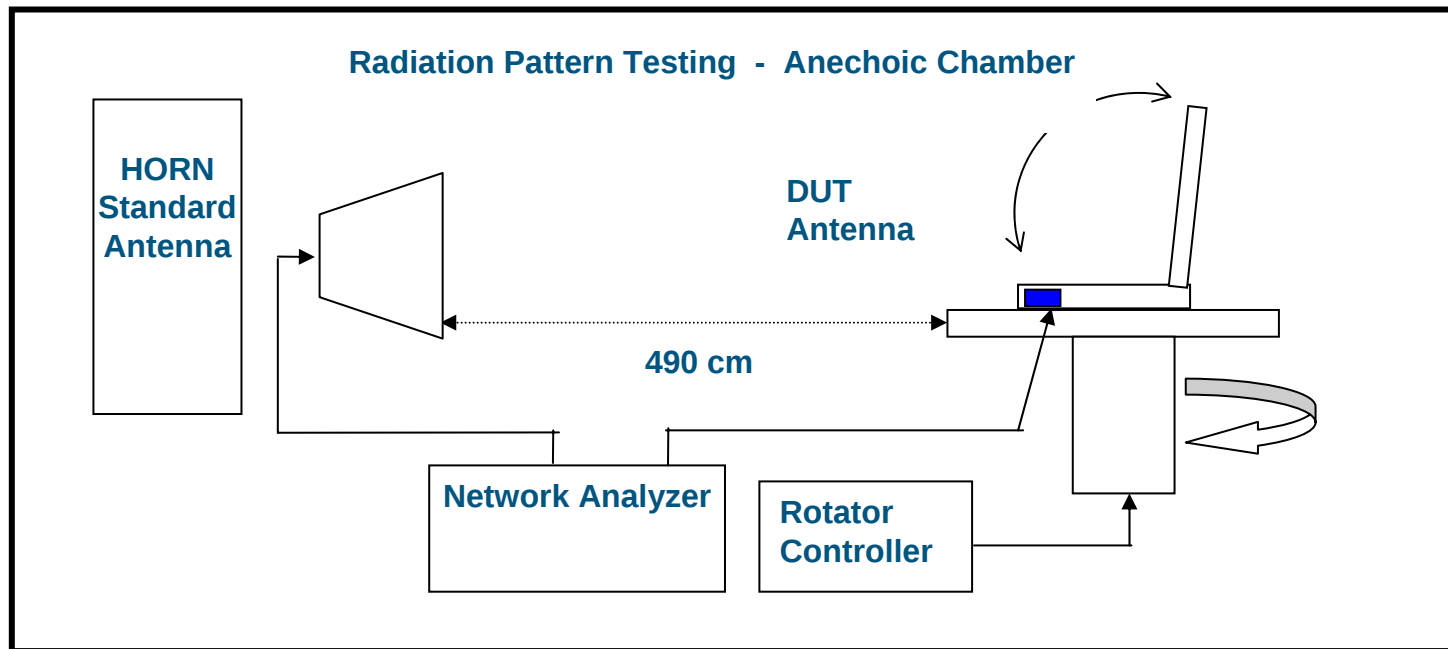
Average Gain: ≥ -5 dBi

Polarization: Linear

Impedance: 50Ω

4. Antenna Testing Conditions

Test Configuration



(Testing by 2D anechoic chamber)

Gain value (Testing by 2D anechoic chamber)

Gain List – WIMAX/WLAN-R/Black

Freq. (MHz)	WIMAX/WLAN (Peak)			WIMAX/WLAN (AVG.)		
	H	V	H + V	H	V	H + V
	dBi	dBi	dBi	dBi	dBi	dBi
2300	-0.9	-0.66	0.53	-7.15	-6.83	-3.98
2400	-0.28	-0.34	1.3	-6.30	-6.31	-3.29
2450	-0.4	-2.25	0.11	-6.18	-5.78	-2.96
2500	-2.53	-1.46	-0.37	-6.41	-6.02	-3.20
2600	-3.08	-2.42	-1.46	-7.02	-7.15	-4.07
2700	-3.57	-1.17	-0.4	-6.79	-6.71	-3.74
3300	-3.28	-2.58	-1.79	-8.52	-7.64	-5.04
3400	-1.83	-1.53	-0.46	-7.01	-6.83	-3.91
3500	-1.73	-1.63	0.48	-6.79	-6.33	-3.55
3600	-2.84	-1.61	-0.49	-7.13	-6.89	-4.00

Gain List – WIMAX/WLAN-R/Black

Freq. (MHz)	WIMAX/WLAN (Peak)			WIMAX/WLAN (AVG.)		
	H	V	H + V	H	V	H + V
	dBi	dBi	dBi	dBi	dBi	dBi
3700	-3.14	-0.94	-0.42	-7.24	-6.87	-4.04
3800	-2.51	-0.8	-0.25	-7.44	-6.47	-3.92
5150	-6.16	-2.64	-2.1	-10.95	-8.42	-6.50
5250	-6	-1.47	-0.91	-10.22	-7.53	-5.66
5350	-3.61	-1.09	0.35	-9.43	-7.71	-5.47
5470	-3.46	-1.31	0.74	-8.98	-8.02	-5.46
5600	-1.78	-1.37	1.44	-7.30	-8.39	-4.80
5725	-2.13	-3.04	-0.1	-6.88	-9.20	-4.88
5850	-2.41	-4.67	-1.44	-6.86	-9.28	-4.89

Gain value (Testing by 2D anechoic chamber)

Gain List – WIMAX/WLAN-L/White

Freq. (MHz)	WIMAX/WLAN (Peak)			WIMAX/WLAN (AVG.)		
	H	V	H + V	H	V	H + V
	dBi	dBi	dBi	dBi	dBi	dBi
2300	1.95	0.2	2.2	-4.85	-6.13	-2.43
2400	-0.19	-0.32	0.91	-5.31	-5.79	-2.54
2450	-0.82	-1.17	0.01	-5.82	-6.11	-2.96
2500	-1.41	-2.29	-0.06	-6.27	-6.30	-3.27
2600	-2.58	-2.15	-1.08	-6.98	-6.96	-3.96
2700	-2.7	-1.95	-0.33	-6.82	-6.67	-3.74
3300	-3.14	-2	-1.18	-8.09	-7.08	-4.55
3400	-2.68	-2.15	-0.3	-6.78	-6.91	-3.83
3500	-2.83	-2.55	-0.41	-6.95	-6.72	-3.82
3600	-3.3	-2.37	-0.8	-7.49	-6.75	-4.09

Gain List – WIMAX/WLAN-L/White

Freq. (MHz)	WIMAX/WLAN (Peak)			WIMAX/WLAN (AVG.)		
	H	V	H + V	H	V	H + V
	dBi	dBi	dBi	dBi	dBi	dBi
3700	-3.26	-3.23	-0.85	-7.65	-7.13	-4.37
3800	-4.38	-4.08	-1.44	-8.30	-8.14	-5.21
5150	-3.41	-3.06	-0.83	-8.58	-8.59	-5.58
5250	-1.73	-2.87	0.14	-8.34	-8.45	-5.39
5350	-1.73	-2.57	0.82	-8.75	-8.57	-5.65
5470	-1.11	-2.41	1.01	-8.52	-9.03	-5.76
5600	-2.09	-3.42	0.3	-8.33	-9.78	-5.99
5725	-1.72	-4.13	0.25	-7.87	-10.46	-5.97
5850	-2.4	-6.25	-1.04	-7.77	-11.25	-6.16

Gain value (Testing by 3D anechoic chamber)

Gain List – WLAN/MIMO

Freq. (MHz)	WLAN/MIMO Antenna		
	Tot. Rad. Pwr. (dBm)	Peak EIRP (dBm)	Efficiency (%)
2300	-5.47	1.87	27.86
2400	-5.55	1.36	27.86
2450	-5.71	-0.08	26.83
2500	-5.93	0.26	25.55
2600	-6.31	-0.47	23.39
2700	-6.06	-0.70	24.80
3300	-5.50	0.93	28.19
3400	-5.38	0.28	28.99
3500	-5.62	0.49	27.41
3600	-6.04	-0.91	24.89

Gain value (Testing by 3D anechoic chamber)

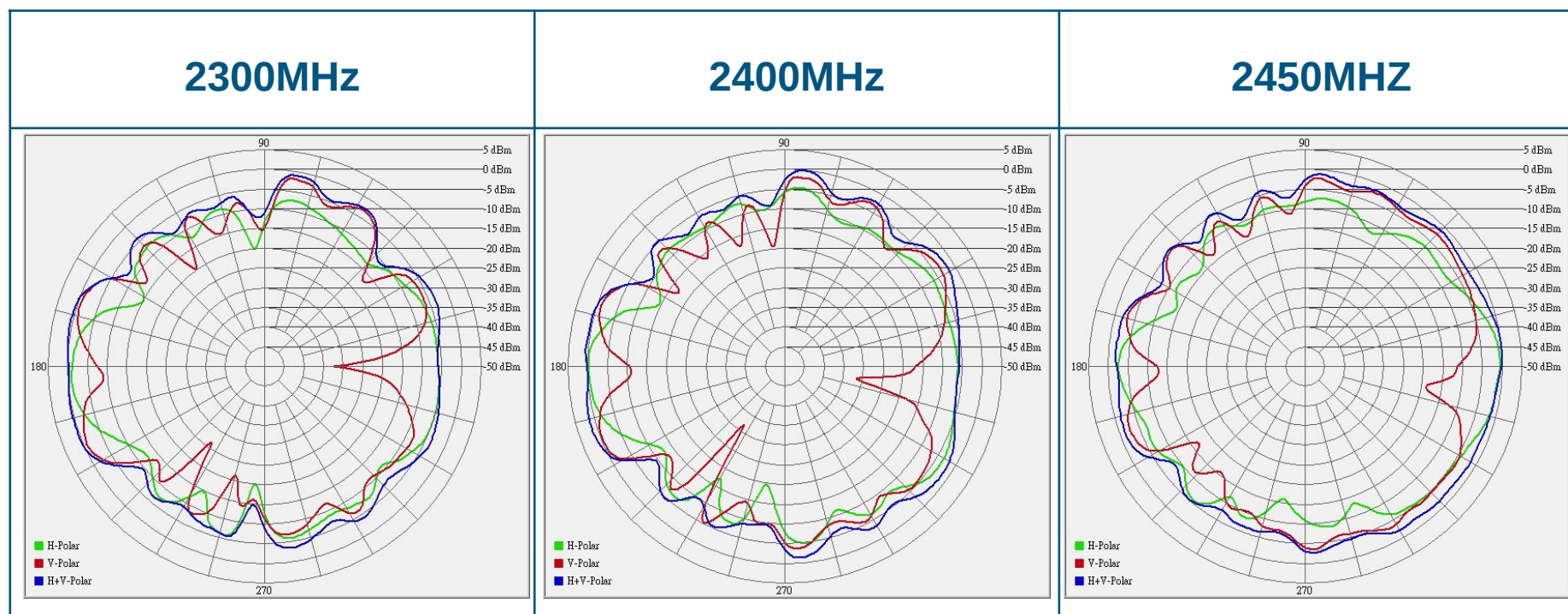
Gain List

Freq. (MHz)	WLAN/MIMO Antenna		
	Tot. Rad. Pwr. (dBm)	Peak EIRP (dBm)	Efficiency (%)
3700	-6.24	-0.47	23.77
3800	-6.66	0.15	21.57
5150	-8.33	-2.10	14.68
5250	-8.48	-1.80	14.19
5350	-8.38	-1.63	14.53
5470	-7.93	-1.82	16.10
5600	-7.23	-0.99	18.93
5725	-6.87	-1.02	20.54
5850	-6.80	-0.20	20.88

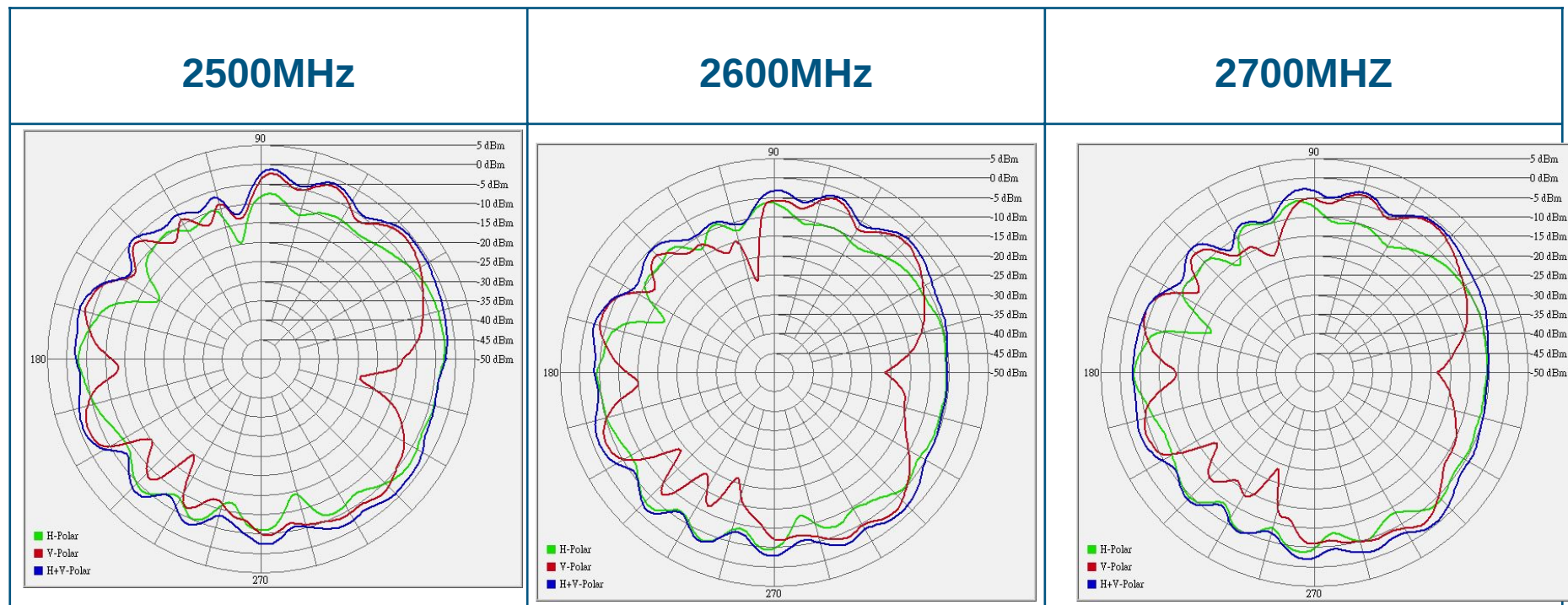
Radiation Pattern (Testing by 2D anechoic chamber)

ANTENNA (WIMAX/WLAN-R/Black)

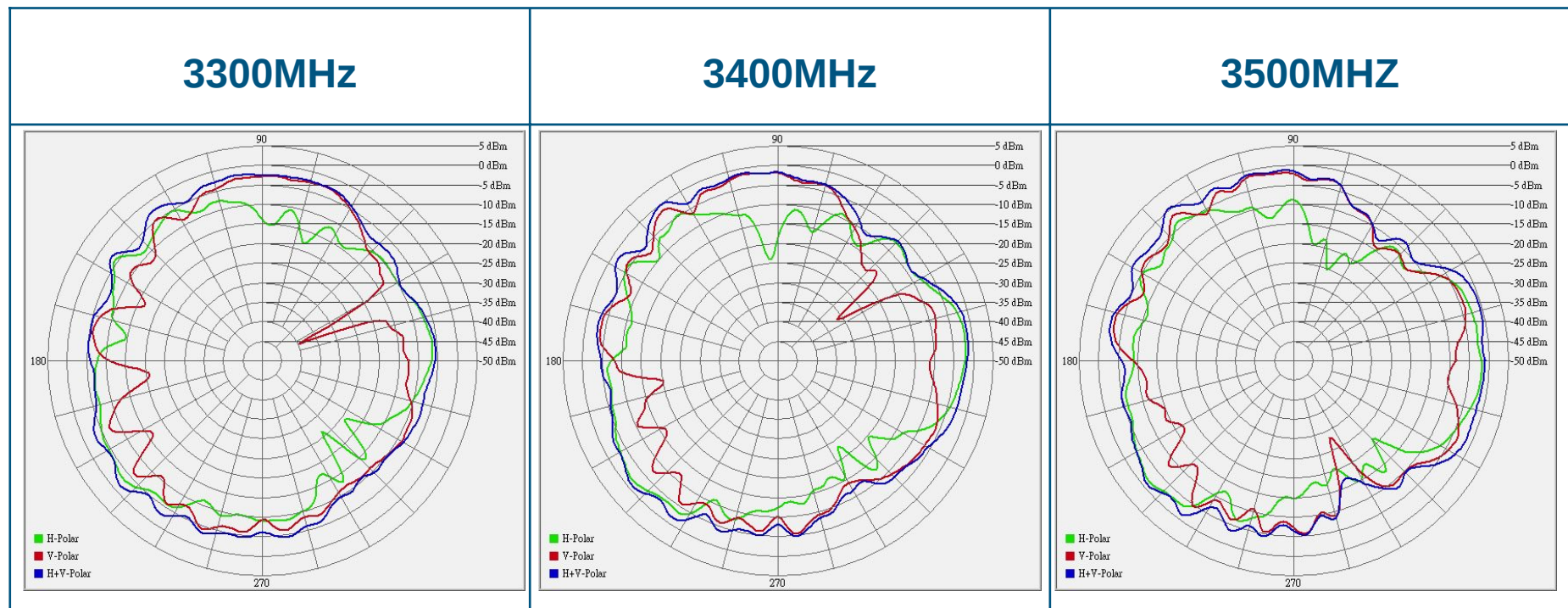
Radiation Pattern



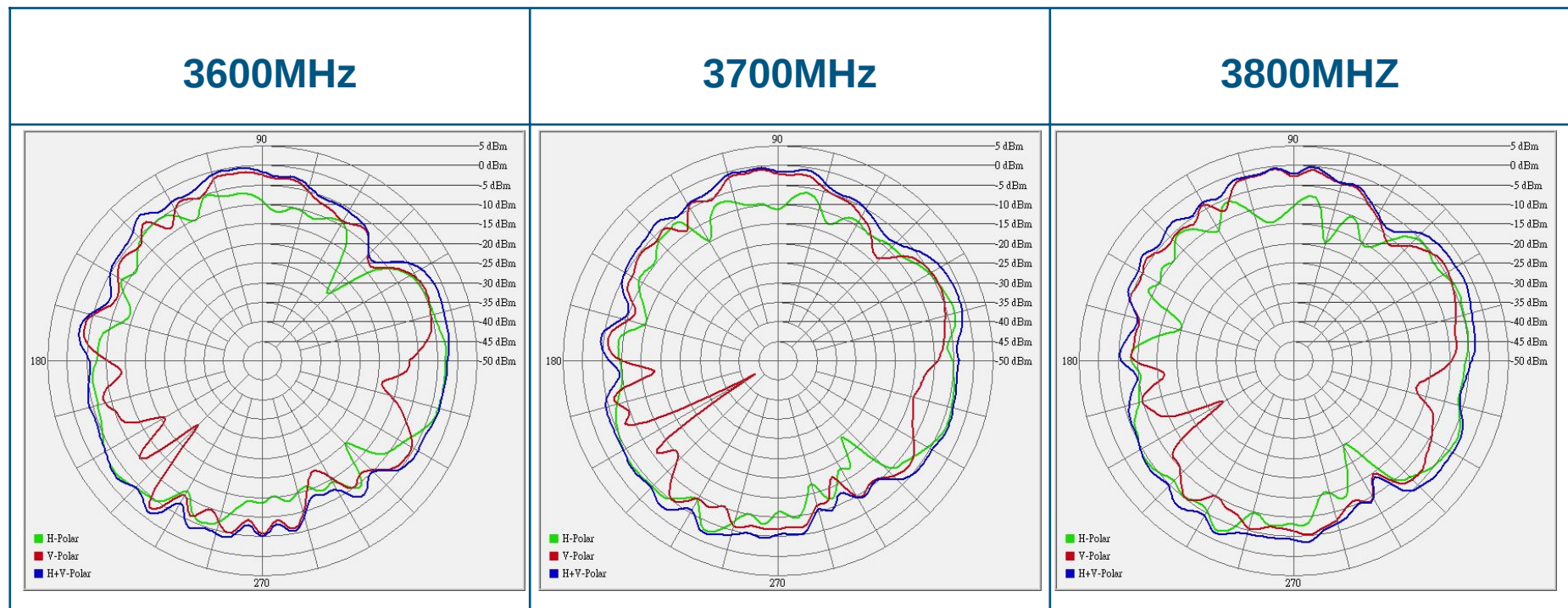
Radiation Pattern



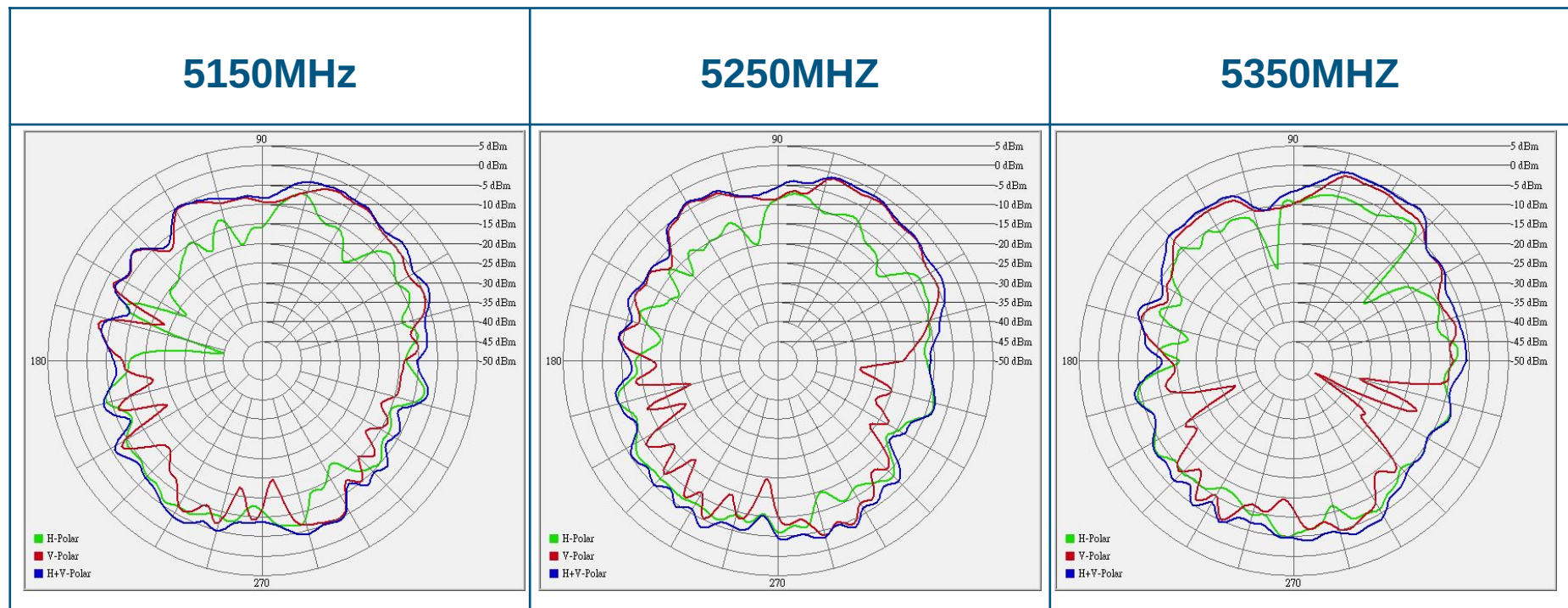
Radiation Pattern



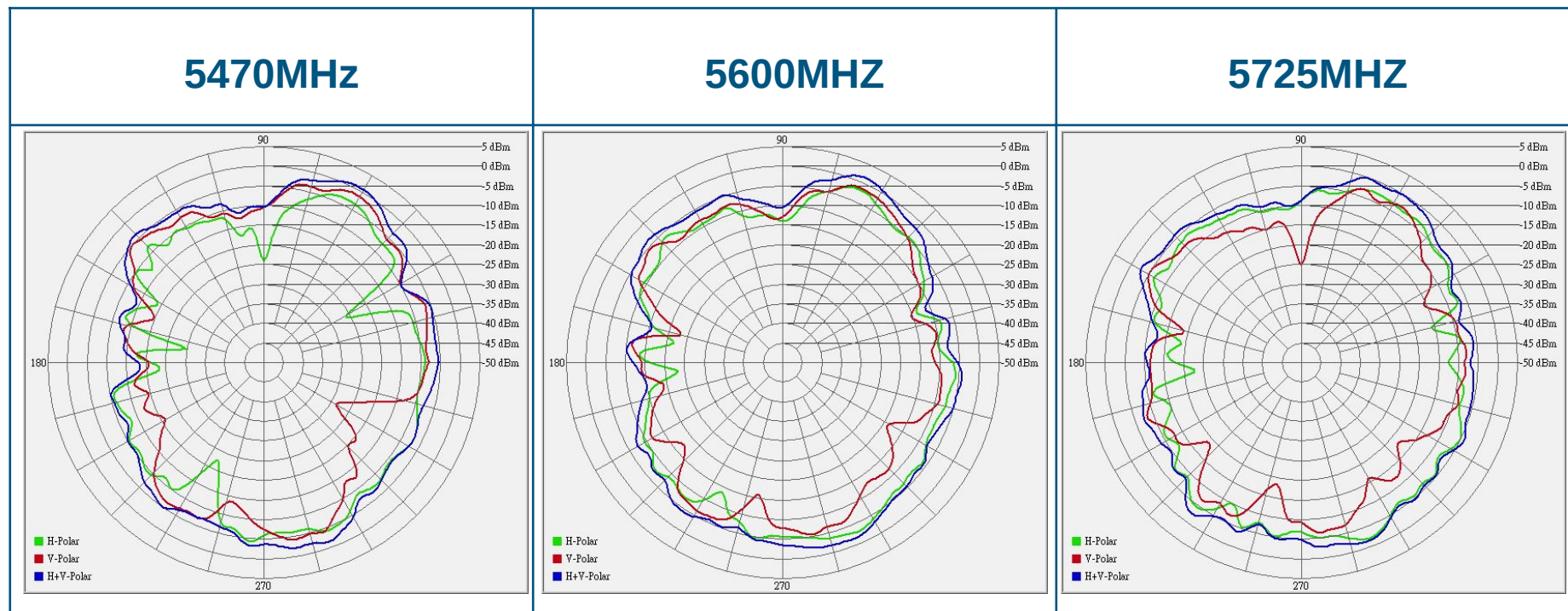
Radiation Pattern



Radiation Pattern

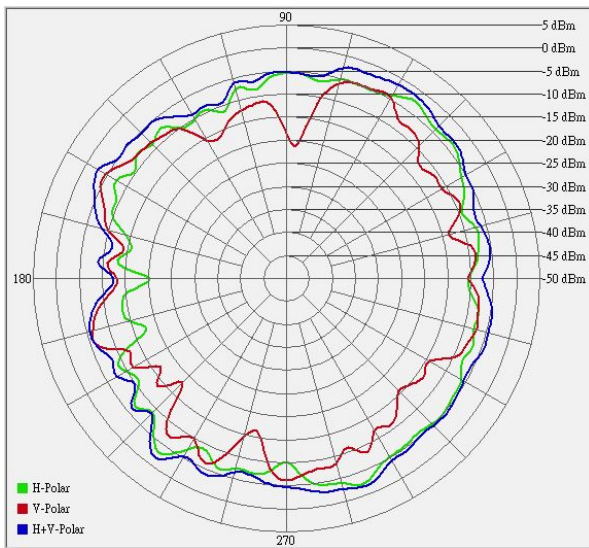


Radiation Pattern



Radiation Pattern

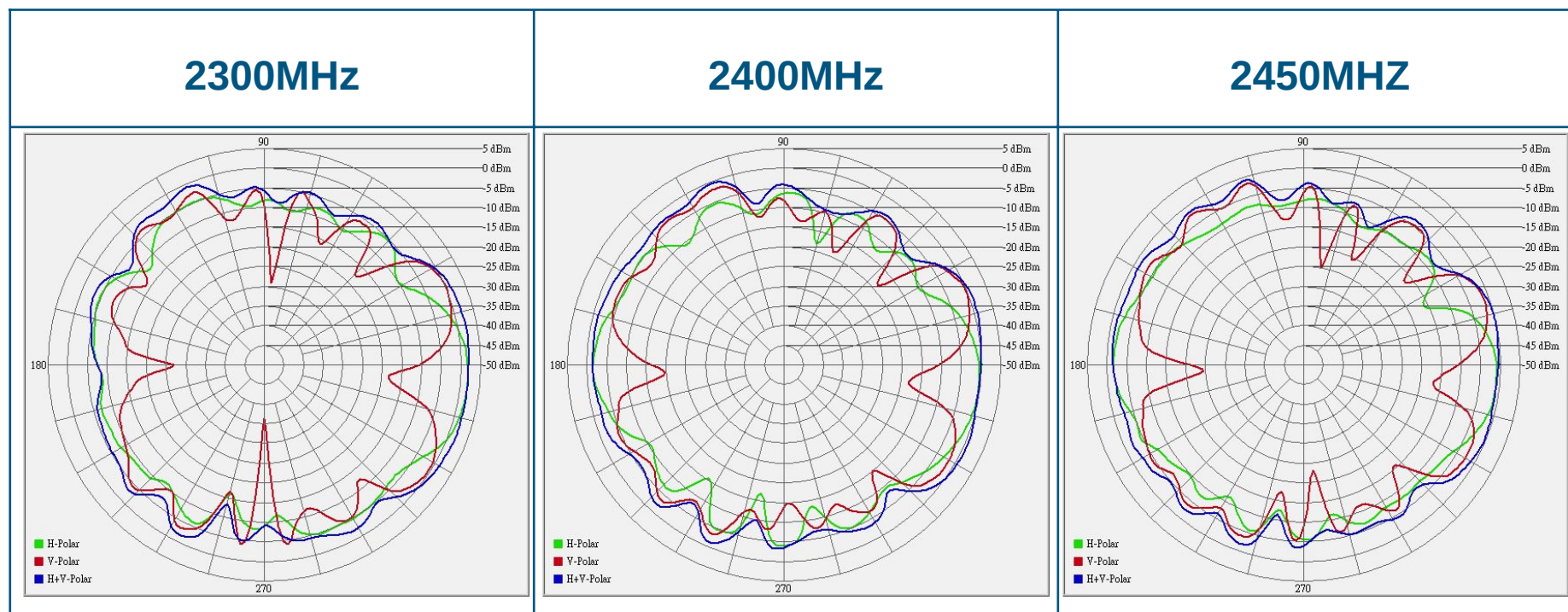
5850MHZ



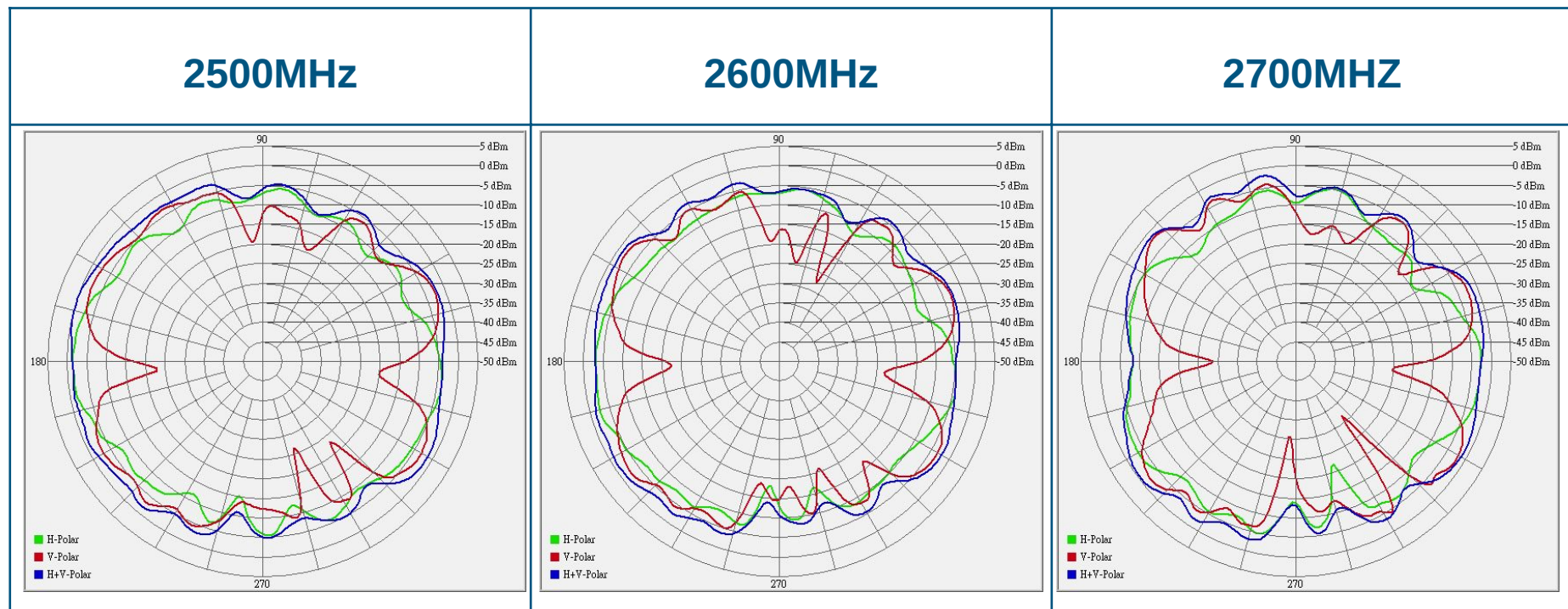
Radiation Pattern (Testing by 2D anechoic chamber)

ANTENNA (WIMAX/WLAN-L/White)

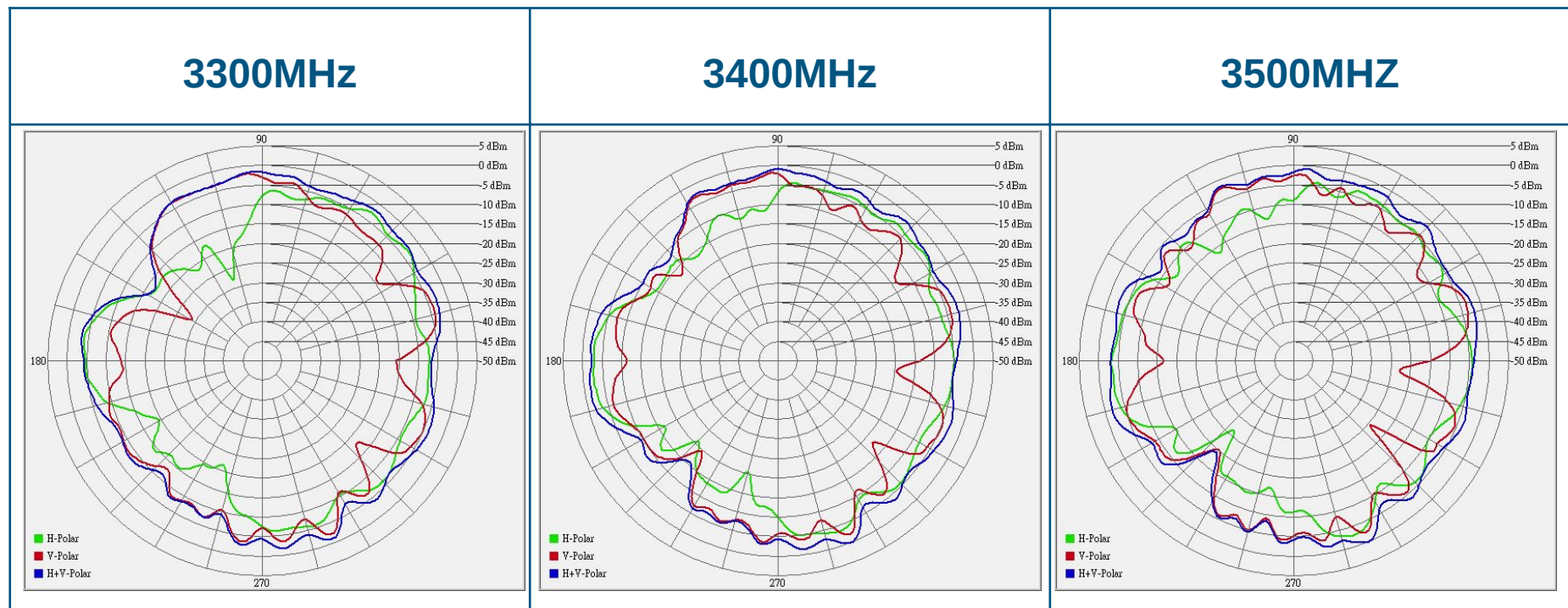
Radiation Pattern



Radiation Pattern



Radiation Pattern



Radiation Pattern

