

WN-250gc
WN-251gc

ANTENNA TEST REPORT

TABLE OF CONTENTS

1.	DESCRIBE OF ANTENNA	2
2.	MEASURED SETUP	3
3.	ANTENNA MEASURED RESULT	4
3-1.	PATTERN	5~14

1. DESCRIBE OF ANTENNA:



AT9520 Series Multilayer Chip Antenna

Features

- ❖ Monolithic SMD with small, low-profile and light-weight type.
- ❖ Wide bandwidth

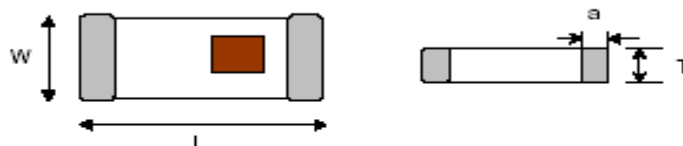
Applications

- ❖ 2.4GHz WLAN, Home RF, Bluetooth Modules, etc.



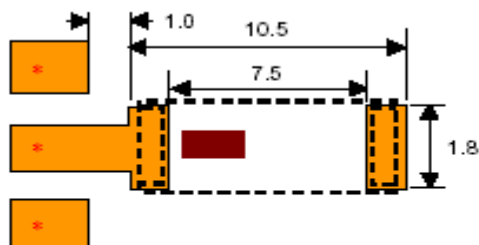
Dimensions and Recommended PC Board Pattern

Unit : mm

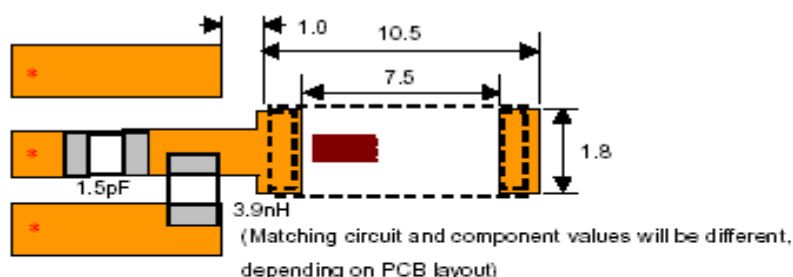


Mark	L	W	T	a
Dimensions	9.5±0.2	2.0±0.2	1.2+ 0.1/-0.2	0.5±0.3

(a) Without Matching Circuits (Moderate Bandwidth)

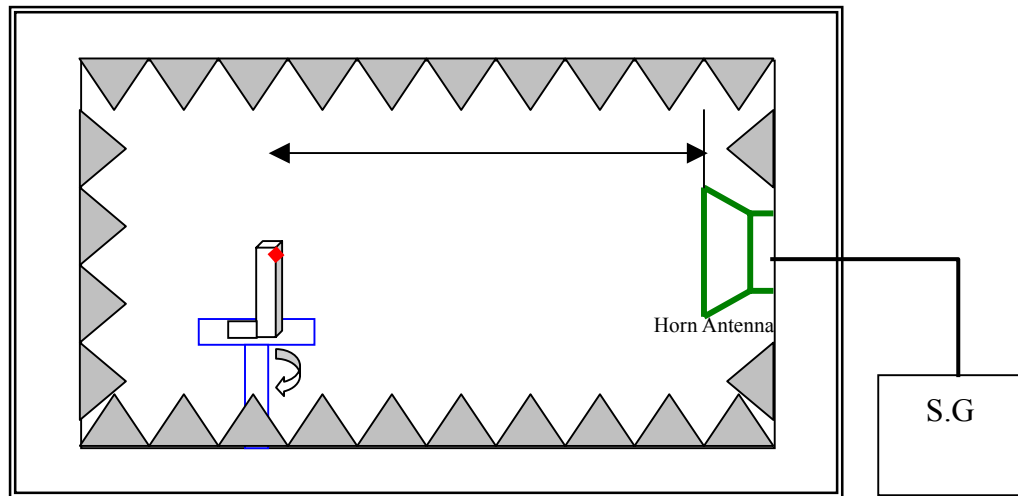


(b) With Matching Circuits (Wide Bandwidth)

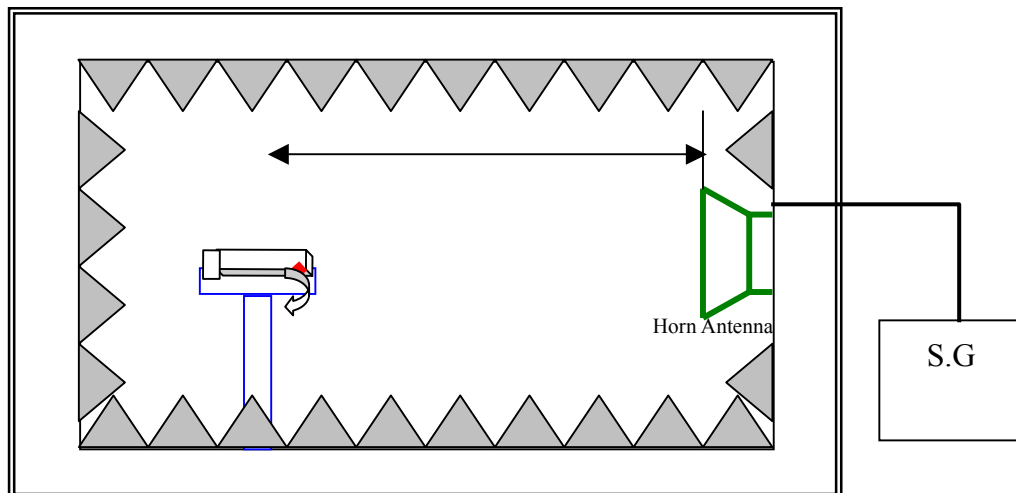


*Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

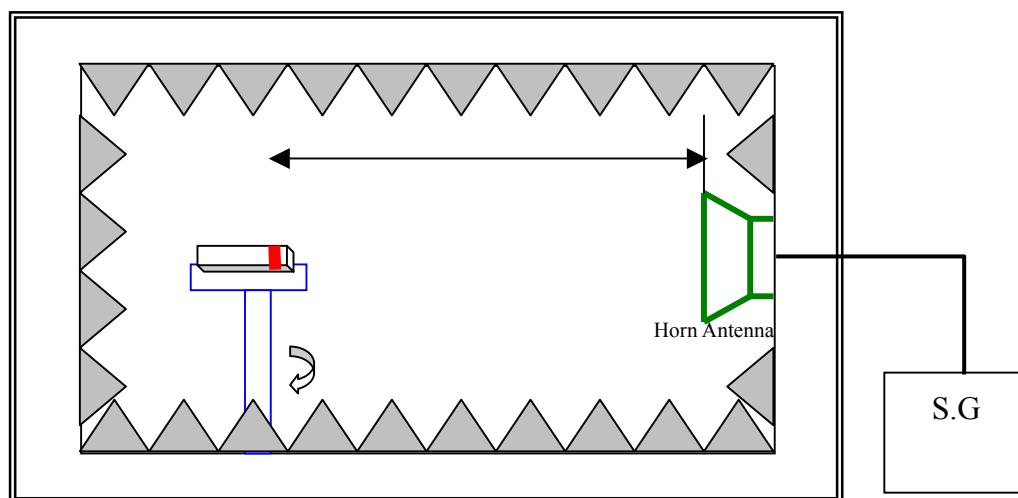
2. MEASURED SETUP:



X Mode



Y Mode



Z Mode

3. ANTENNA MEASURED RESULT:

3-1. PATTERN:

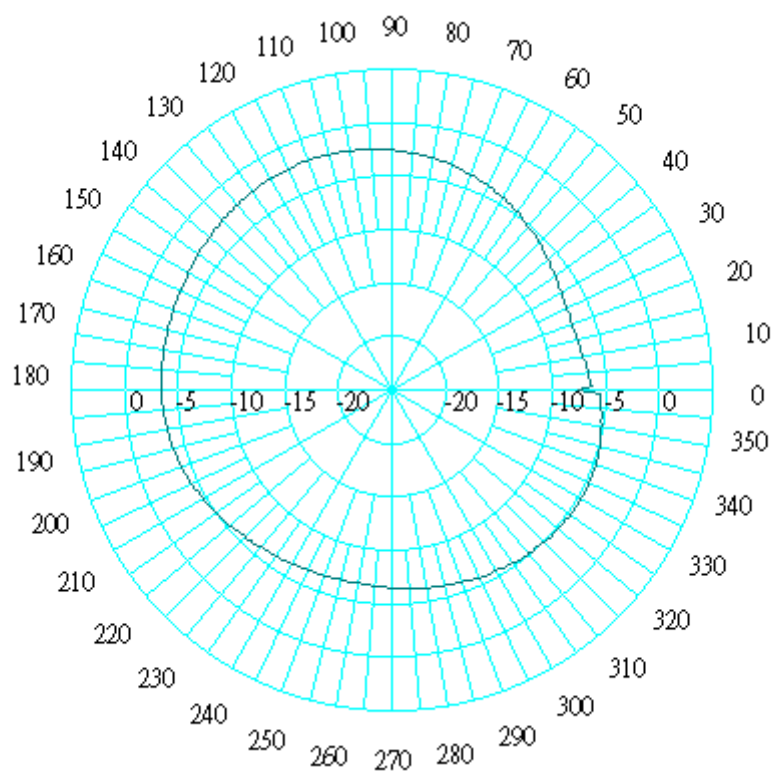
Unit:dBi

	POLARIZATION	2400MHz	2450MHz	2500MHz
X Mode	E(Peak Gain)	-8.721	-8.368	-9.308
	H(Peak Gain)	-4.636	-2.894	-4.110
Y Mode	E(Peak Gain)	-2.200	-2.805	-3.316
	H(Peak Gain)	-5.395	-4.394	-5.317
Z Mode	E(Peak Gain)	-2.407	-2.992	-4.499
	H(Peak Gain)	-3.387	-4.765	-6.092

H-X-2.4

PEAK-4.636

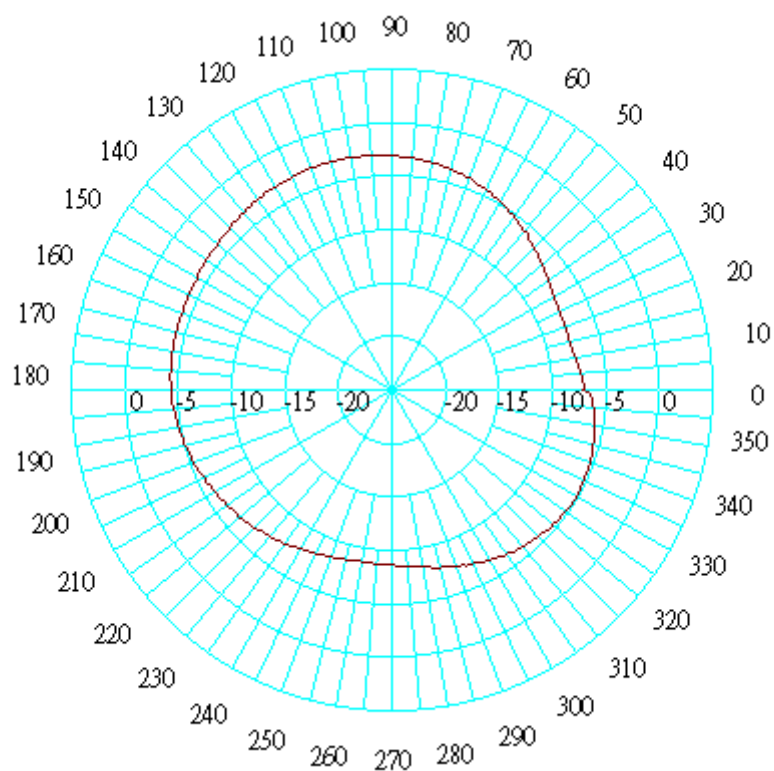
AVER-5.335



H-X-2.45

PEAK-2.894

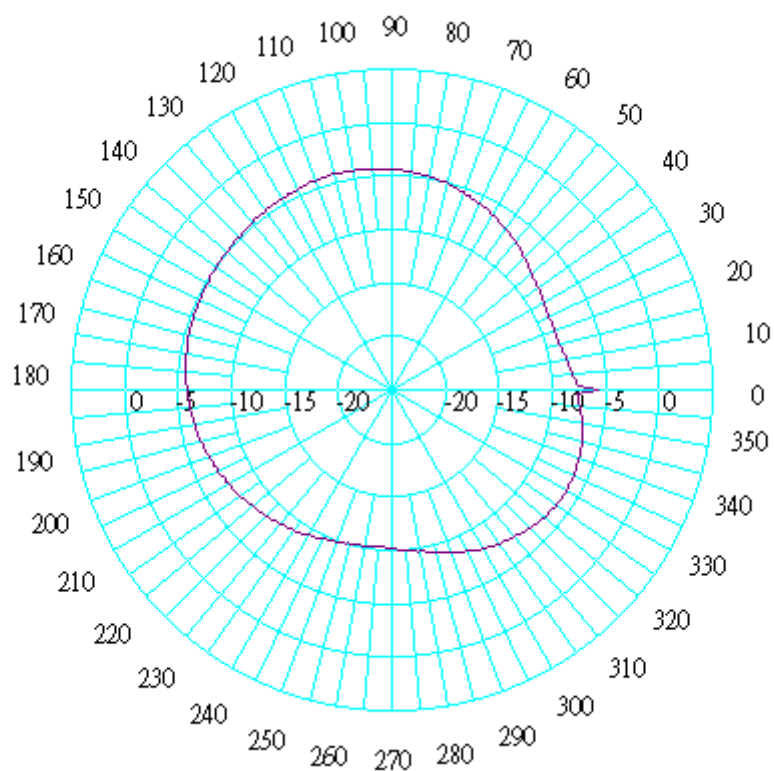
AVER-6.313



H-X-2.5

PEAK-4.11

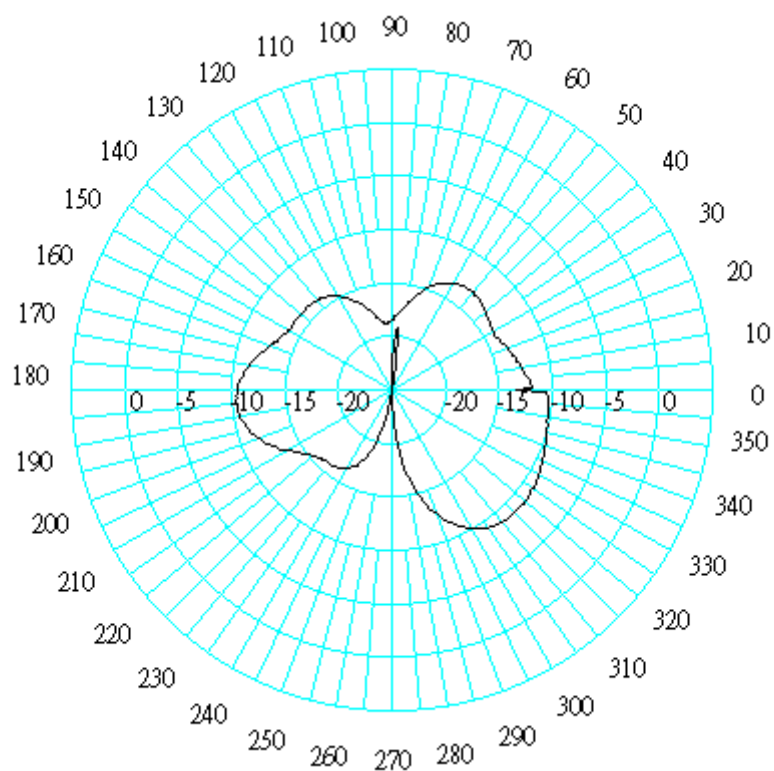
AVER-7.608



E-X-2.4

PEAK-8.721

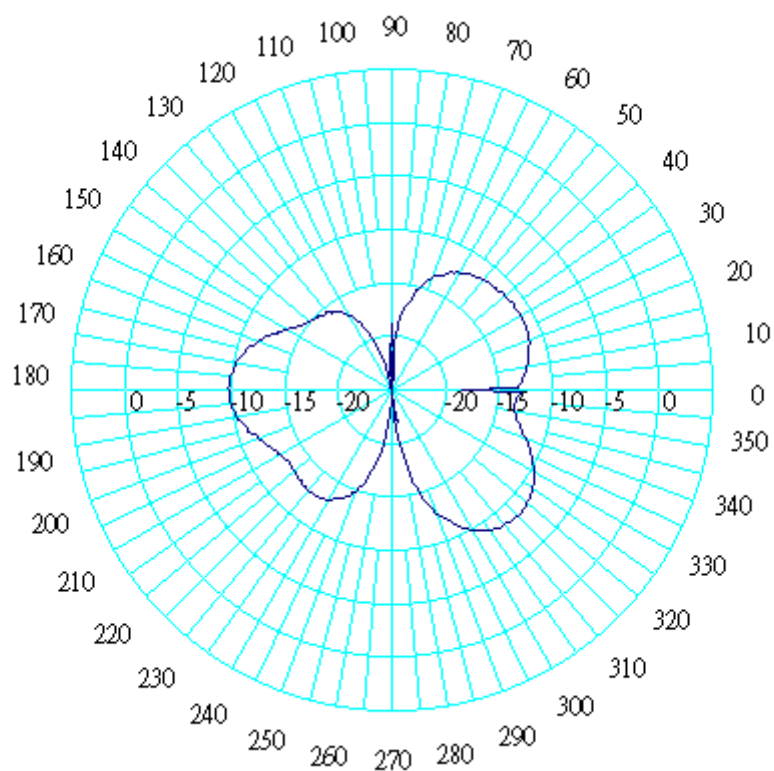
AVER-14.856



E-X-2.45

PEAK-8.368

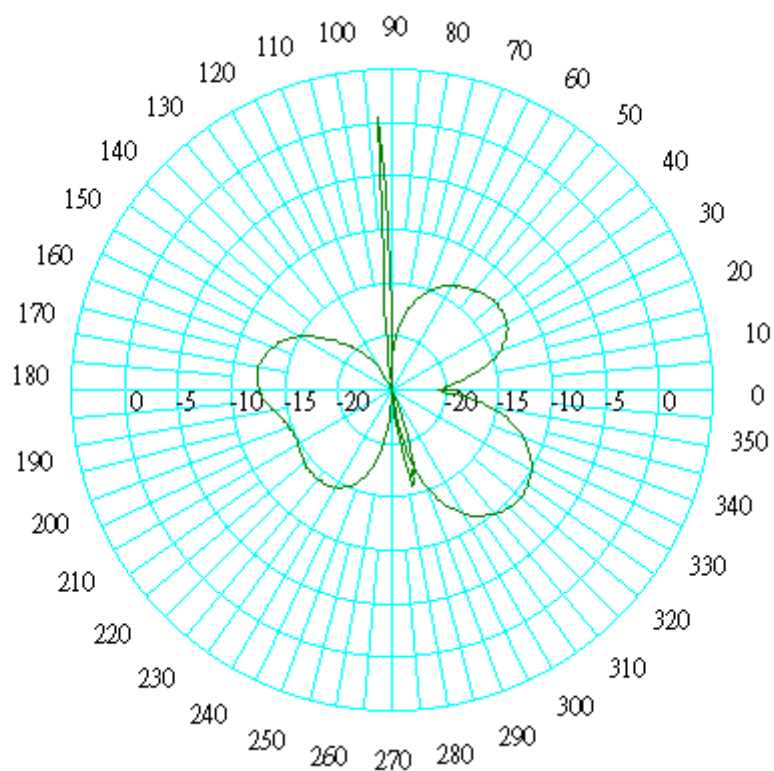
AVER-14.788



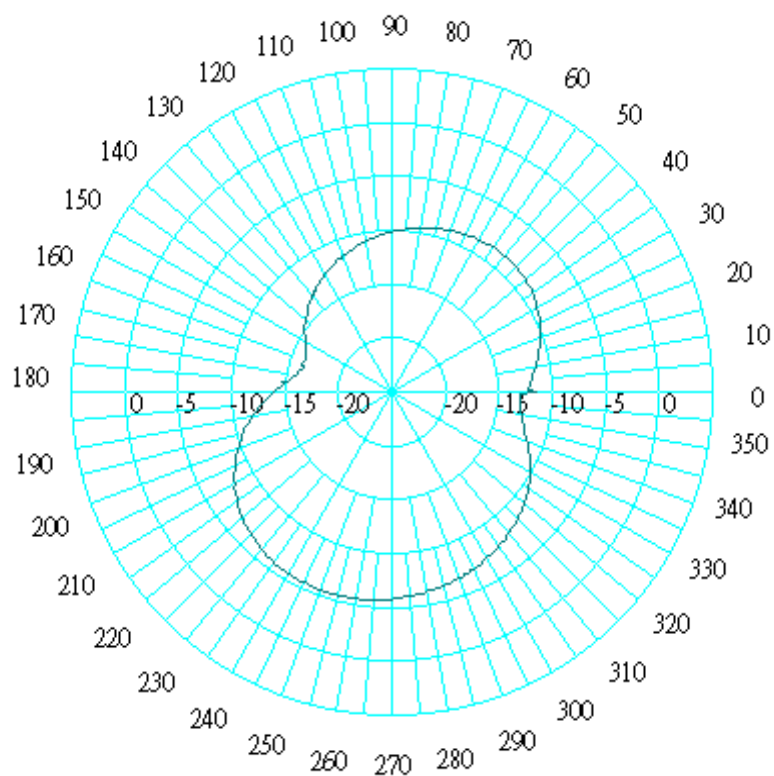
E-X-2.5

PELK-9.308

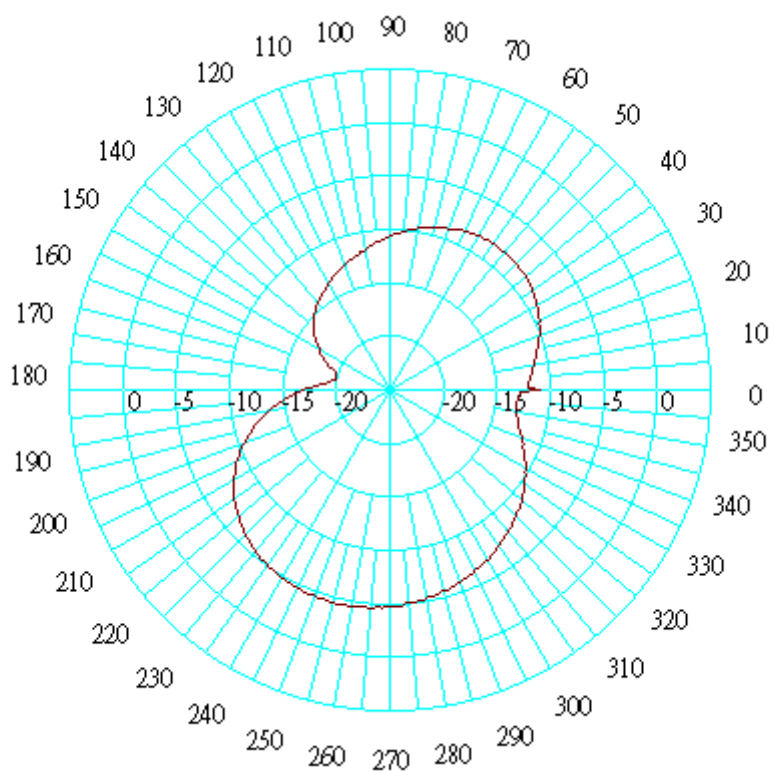
AVER-17.257



H-Y-2.4 PEAK-5.395 AVER-10.643



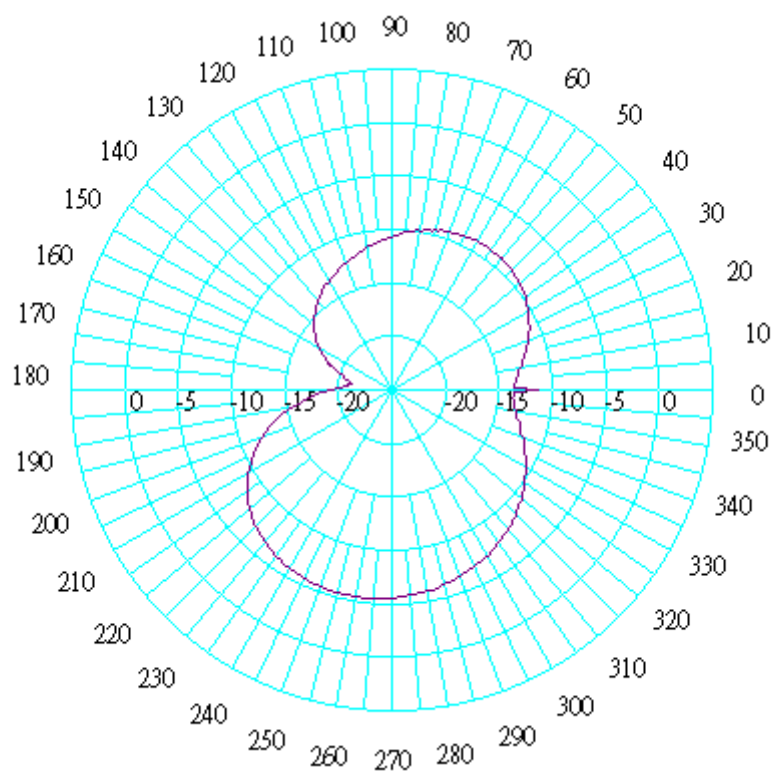
H-Y-2.45 PEAK-4.394 AVER-10.985



H-Y-2.5

PEAK-5.317

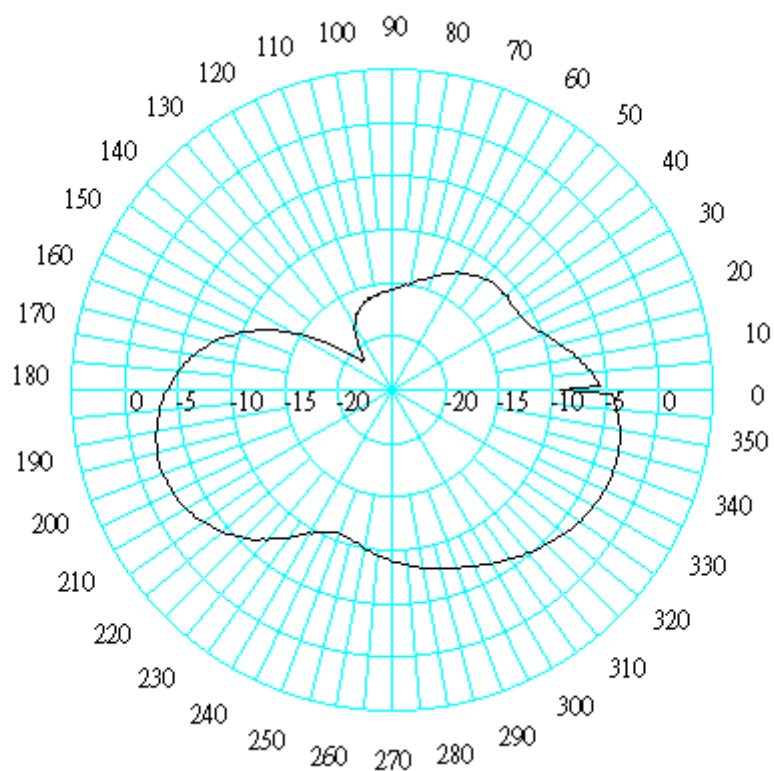
AVER-11.642



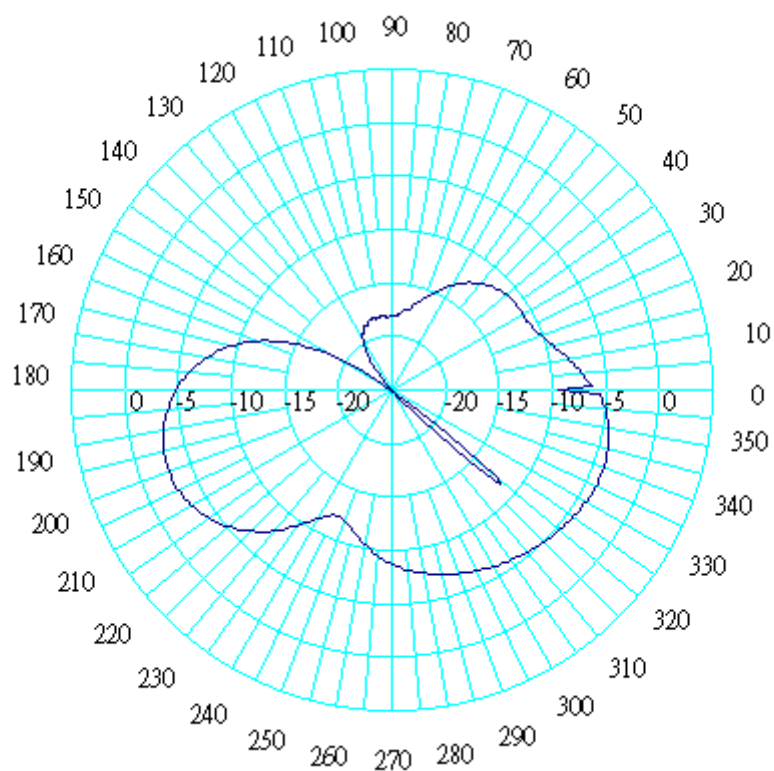
E-Y-2.4

PEAK-2.2

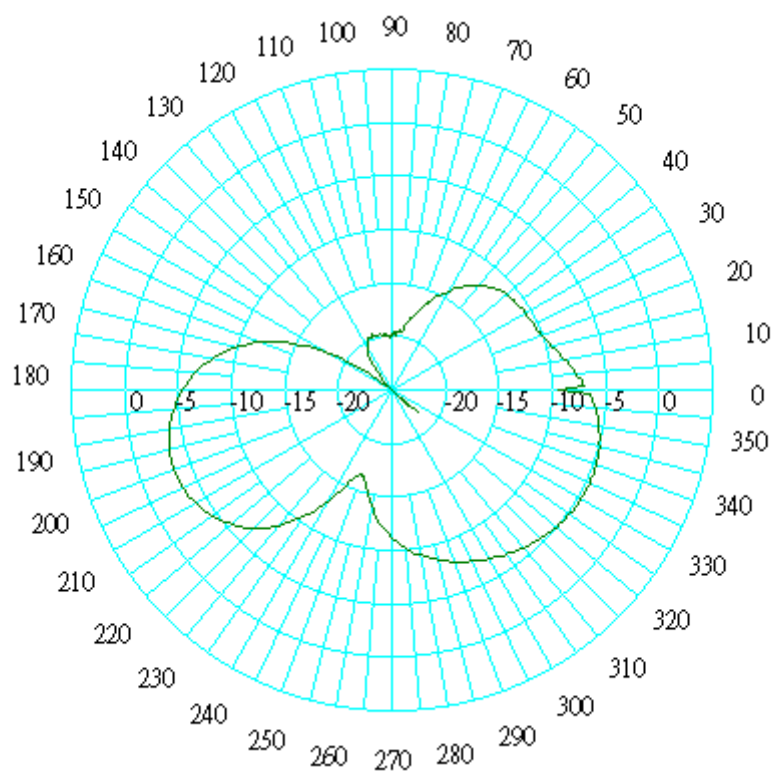
AVER-10.046



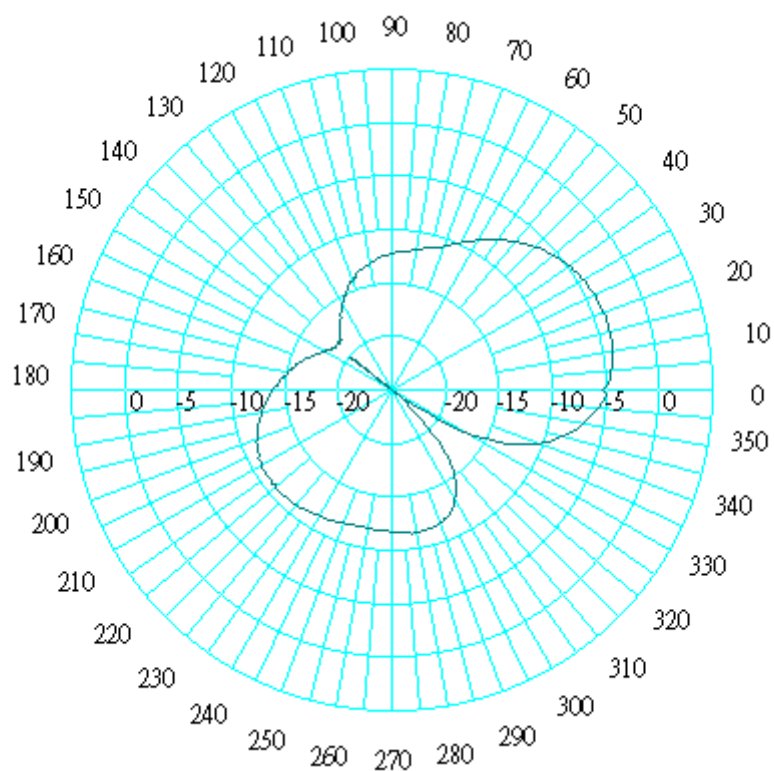
E-Y-2.45 PEAK-2.805 AVER-11.433



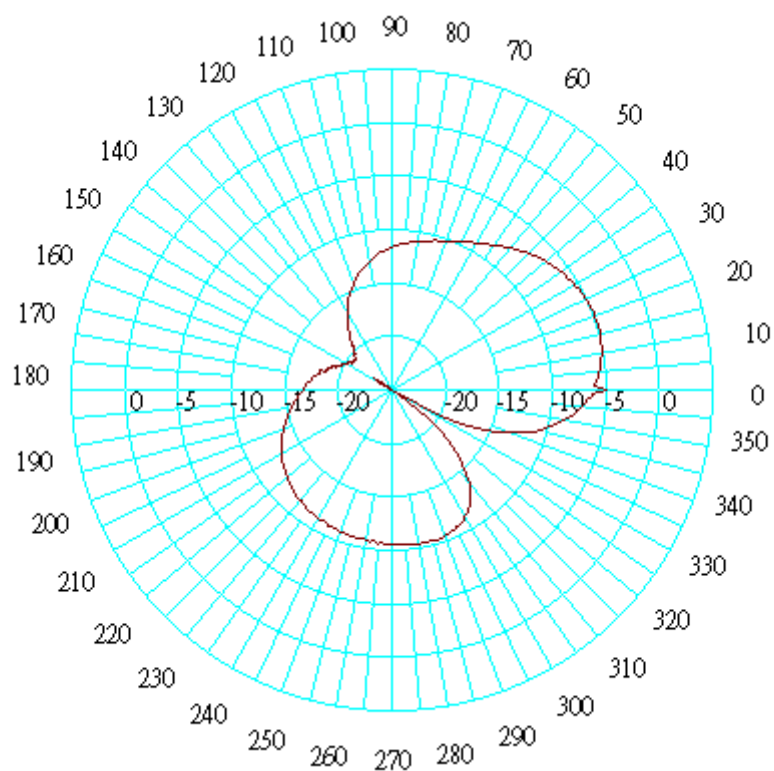
E-Y-2.5 PEAK-3.316 AVER-12.151



H-Z-2.4 PEAK-3.837 AVER-12.751



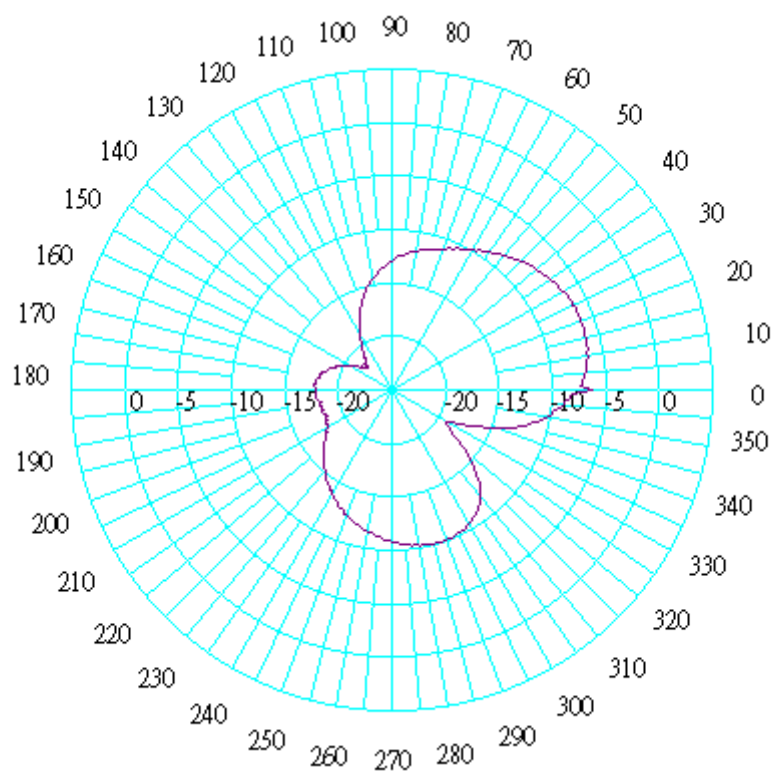
H-Z-2.45 PEAK-4.765 AVER-13.350



H-Z-2.5

PEAK-6092

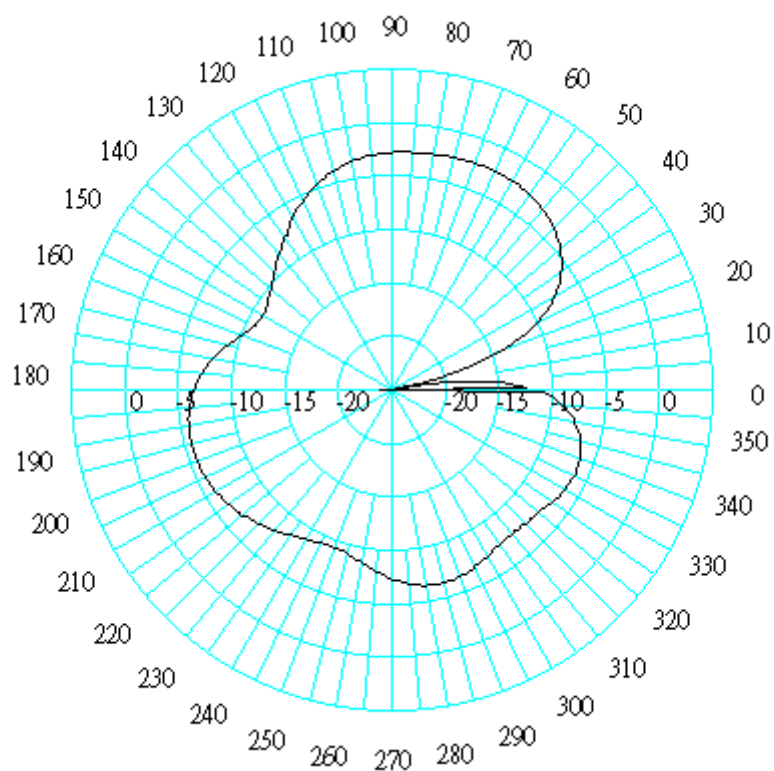
AVER-14.437



E-Z-2.4

PEAK-2.407

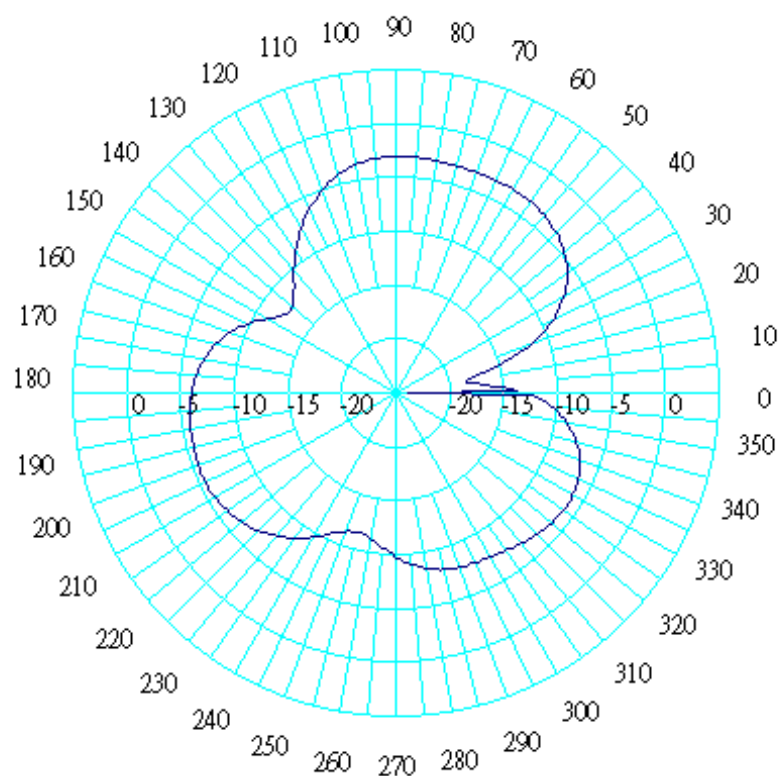
AVER-8.021



E-Z-2.45

PEAK-2.992

AVER-8.306



E-Z-2.5

PEAK-4.499

AVER-9.71

