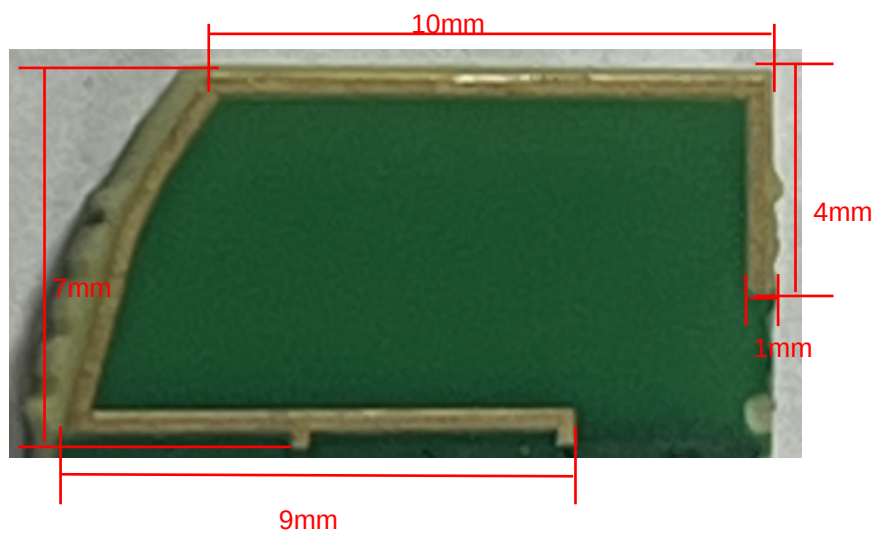


Measurement of Antenna for RETROFIT

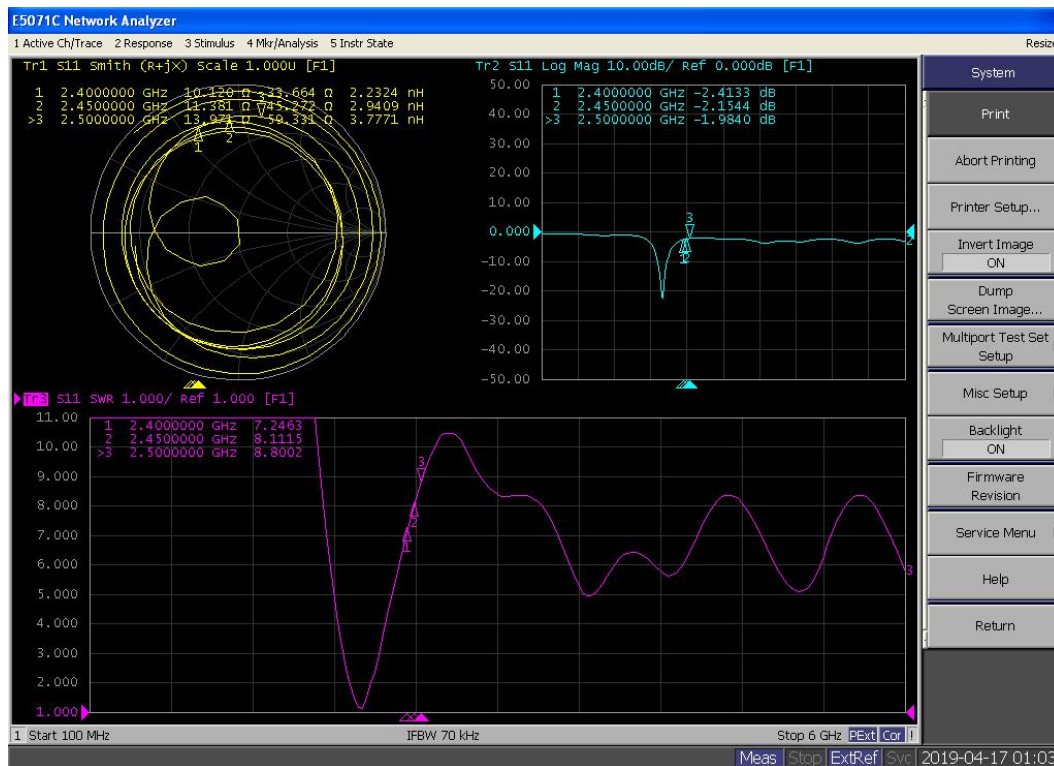
Manufacture :Duracell Industrial Operations, Inc

Antenna Model: RETROFIT Antenna

Antenna Dimensions



1. Measurement of Reflection Coefficients and Isolation



2. Radiation Patterns and Gain

2.1. Measurement

test data

Freq/GHz	2.4	2.45	2.5
VSWR	7.24	8.11	8.80

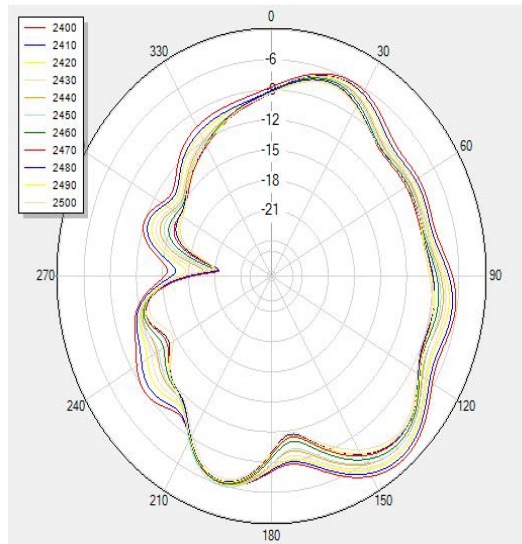
2.2 Typical Free Space Efficiency and Gain

Frequency/MHz	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain/dBi	-2.41	-3.80	-4.00	-4.36	-3.85	-3.96	-4.39	-4.91	-5.09	-5.02	-5.37
Efficiency/%	13.63%	10.03%	11.70%	10.90%	10.10%	9.88%	9.09%	8.37%	8.21%	8.09%	7.57%

2.3 Typical Free Space Radiation Pattern

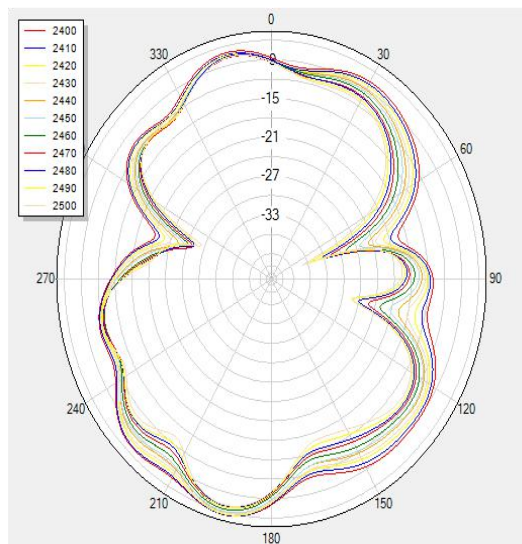
(1) X-Z Plane:

V Phi=0



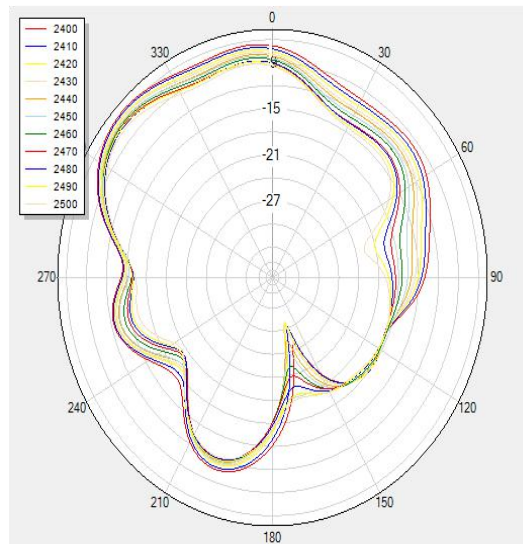
(2) Y-Z Plane:

V Phi=90

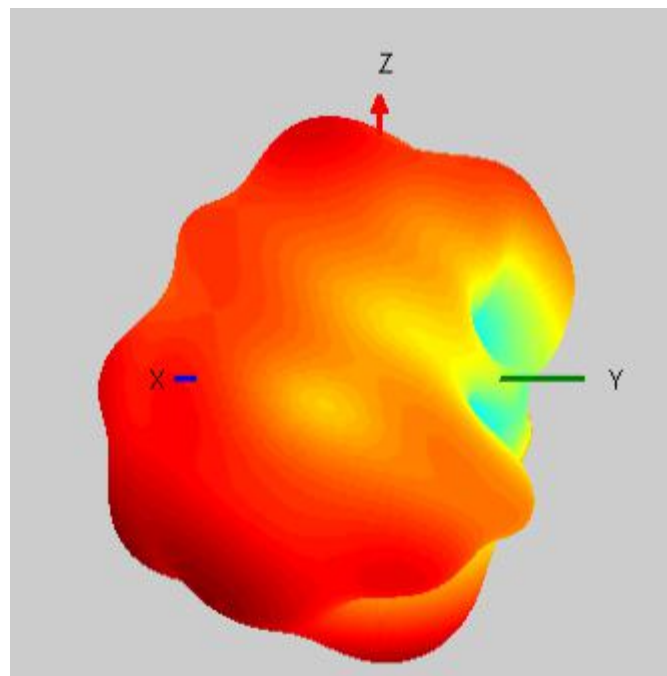


(3) X-Y Plane:

H Theta=90



(4) Typical Free Space 3D Radiation Pattern at 2.45GHz:



-----End-----