

Effective Area

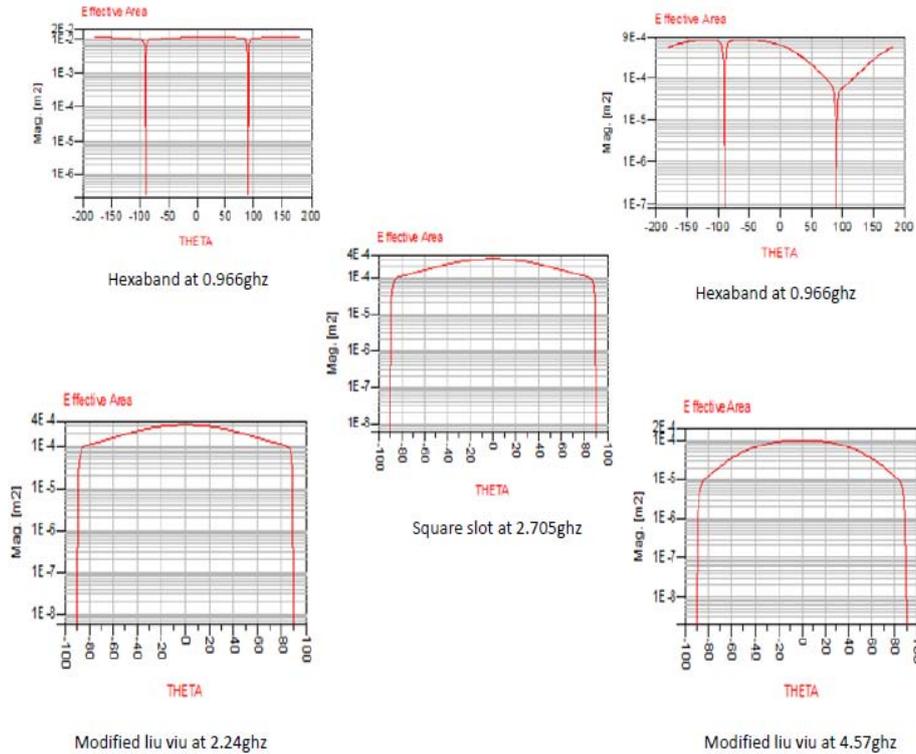


Figure 4: Effective area

4.2 Effective Area

Hexaband at 0.966 GHz

Effective area of hexaband at 0.966 GHz is $55.68 \times 10^2 \text{ m}^2$

Effective area of hexaband at 2.24 GHz is $63.63 \times 10^4 \text{ m}^2$

Effective area of square slot at 2.705 GHz is $222.7 \times 10^4 \text{ m}^2$

Effective area of modified liuwuat 2.24 GHz is $55.68 \times 10^4 \text{ m}^2$

Effective area of modified liuwuat 4.57 GHz is $55.68 \times 10^4 \text{ m}^2$

4.3 Efficiency

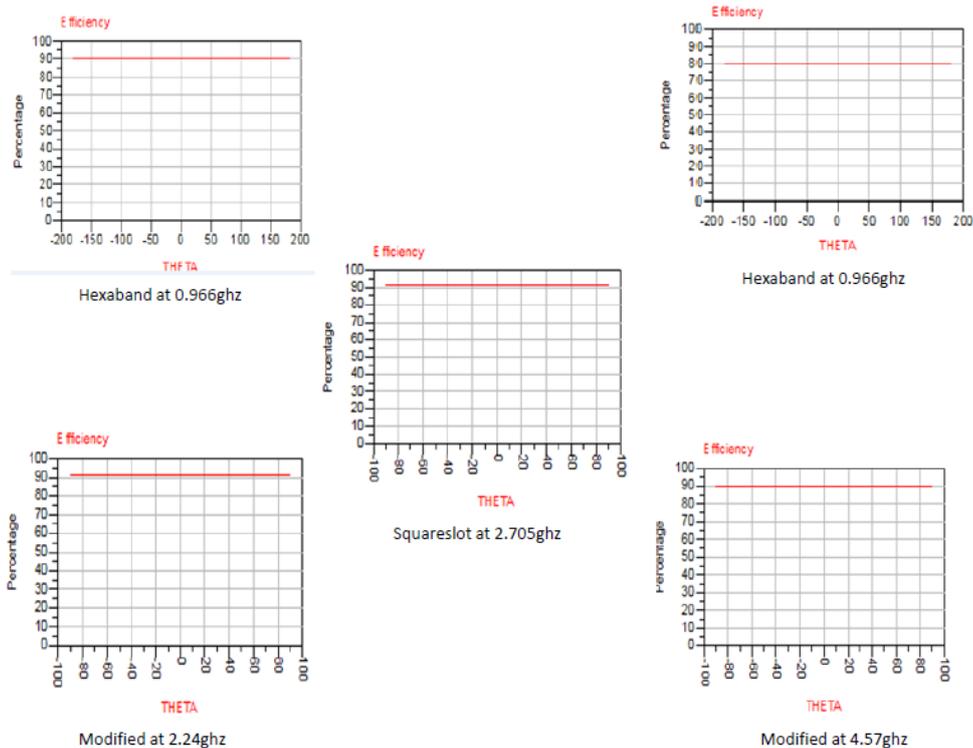


Figure 5: Efficiency

Efficiency of hexaband at 0.966 GHz is 90%
 Efficiency of hexaband at 2.24 GHz is 80%
 Efficiency of square slot at 2.705 GHz is 91.3%
 Efficiency of modified liuwu at 2.24 GHz is 91.5%
 Efficiency of modified liuwu at 4.57 GHz is 90%

4.4 Radiated Power

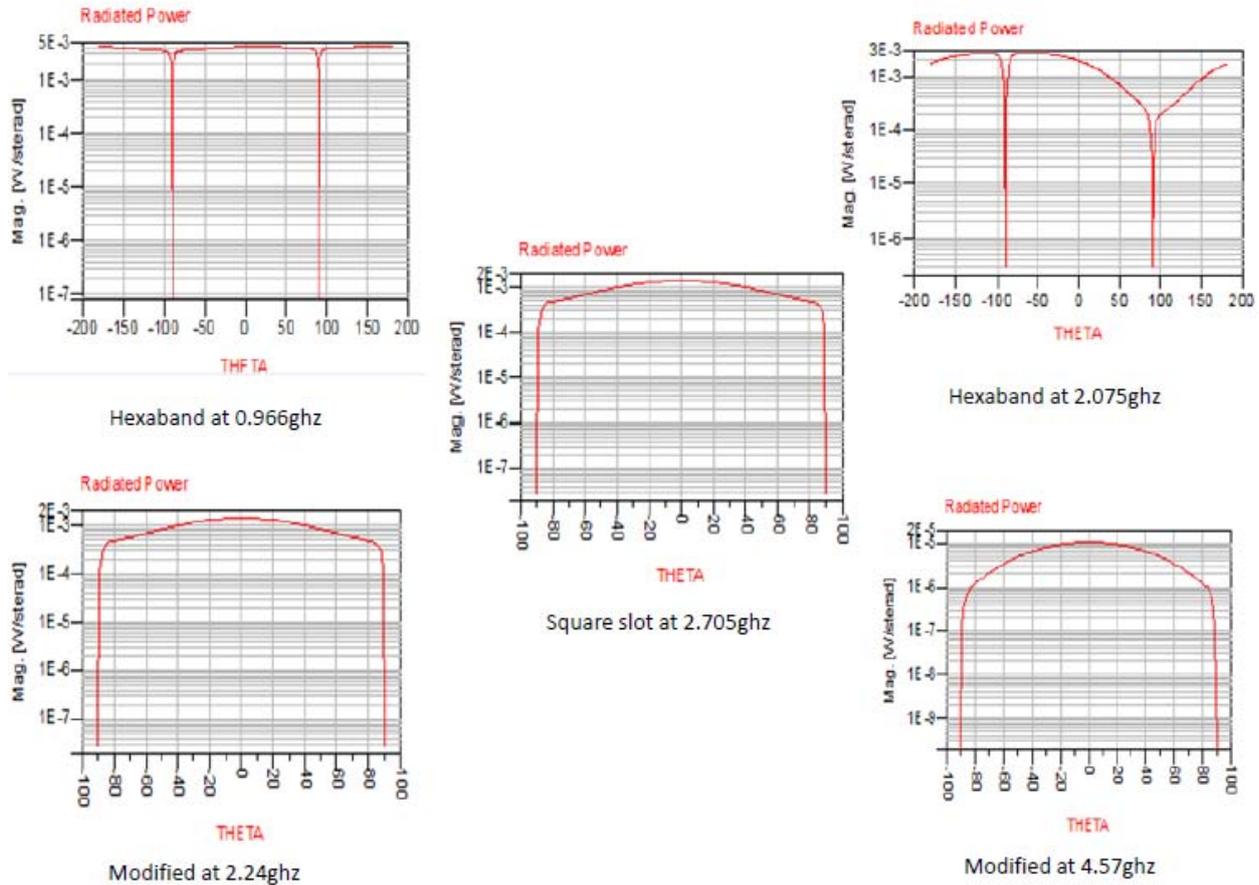


Figure 6: Radiated Power

Hexaband at 0.966 GHz has radiated power 278.4×10^3 w
 Hexaband at 2.075 has radiated power 135.2×10^3 w
 Square slot at 2.705 GHz from $+90^\circ$ to -90° is 111.3×10^3 w
 Modified at 2.24GHz from $+90^\circ$ to -90° is 111.3×10^3 w
 Modified at 4.57GHz from $+90^\circ$ to -90° is 55.68×10^5 w

References

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- [4] C.A. Balanis, Antenna Theory, 2nd ed. New York: John Wiley & Sons, Inc., 1997.
- [5] Kaymaram and L. Shafai, "Enhancement of microstrip antenna