

PCB Pattern Antenna

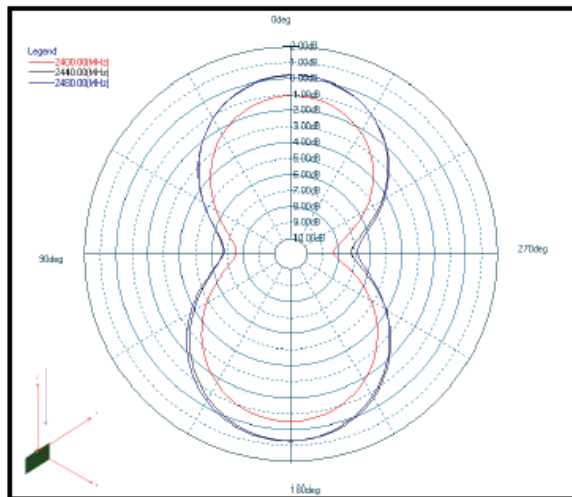
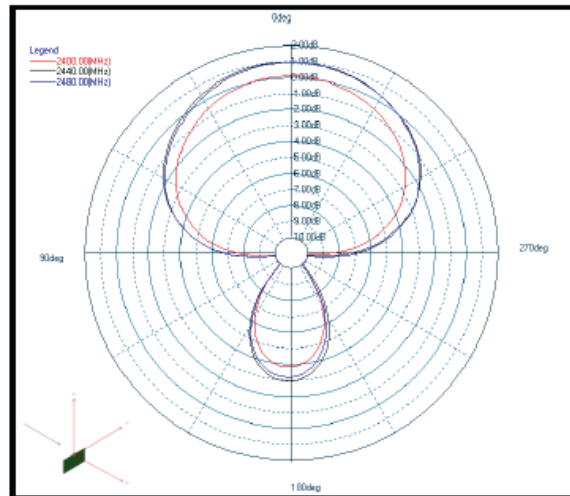
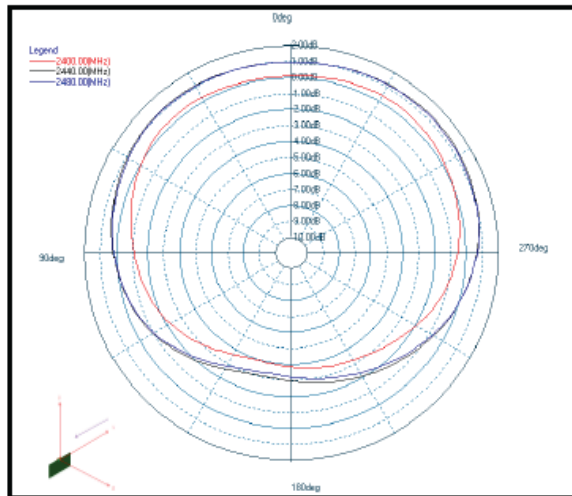
MODEL: MO3-WFH

TEST LAB: SILICON LABS

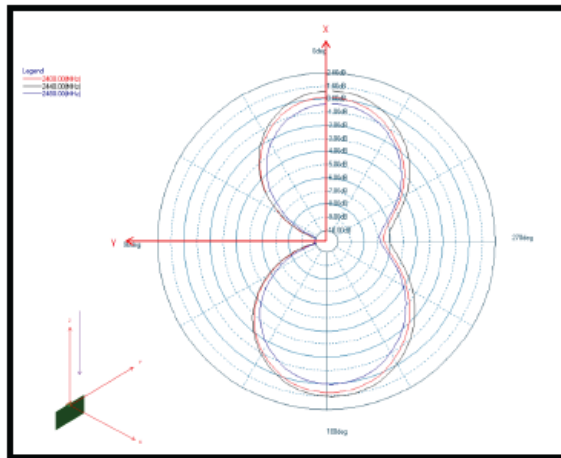
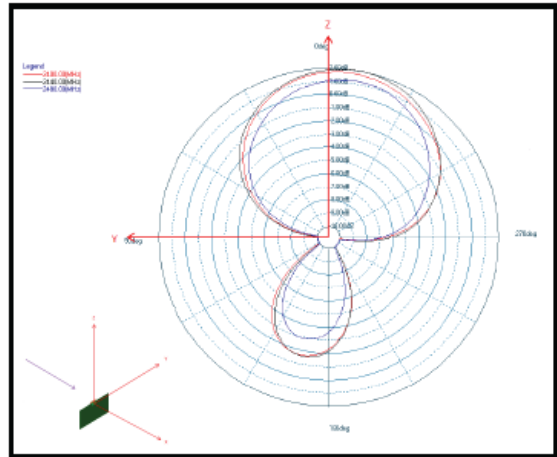
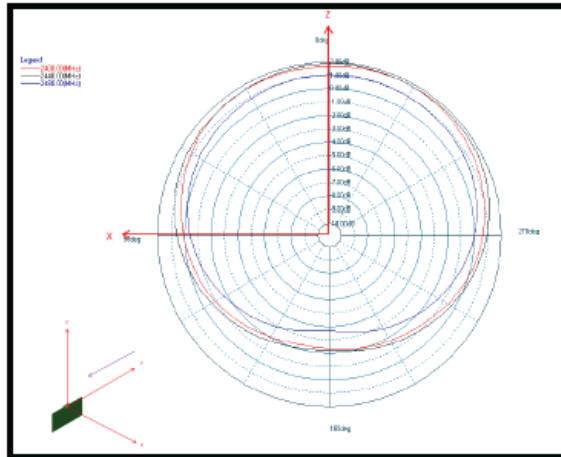
1. Antenna Efficiency and Peak Gain

Parameter	With optimal layout	Note
Efficiency	-1 to -2 dB	Antenna efficiency, gain and radiation pattern are highly dependent on the application PCB layout and mechanical design. Refer to 7. Design Guidelines for recommendations to achieve optimal antenna performance.
Peak gain	2.3 dBi	

2. Antenna Typical Characteristics

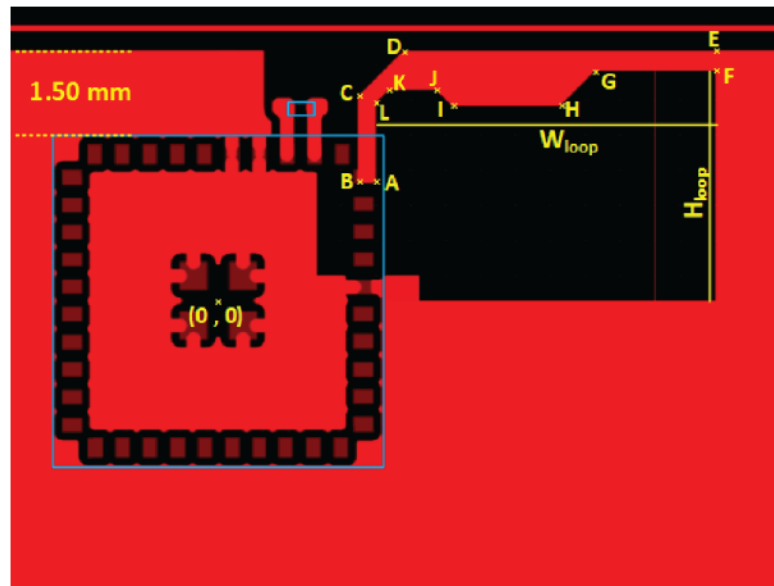


Top Left: $\Phi = 0^\circ$, Top Right: $\Phi = 90^\circ$, Bottom Left: $\Theta = 90^\circ$



Top Left: Phi 0°, Top Right: Phi 90°, Bottom Left: Theta 90°

3. Antenna Layout

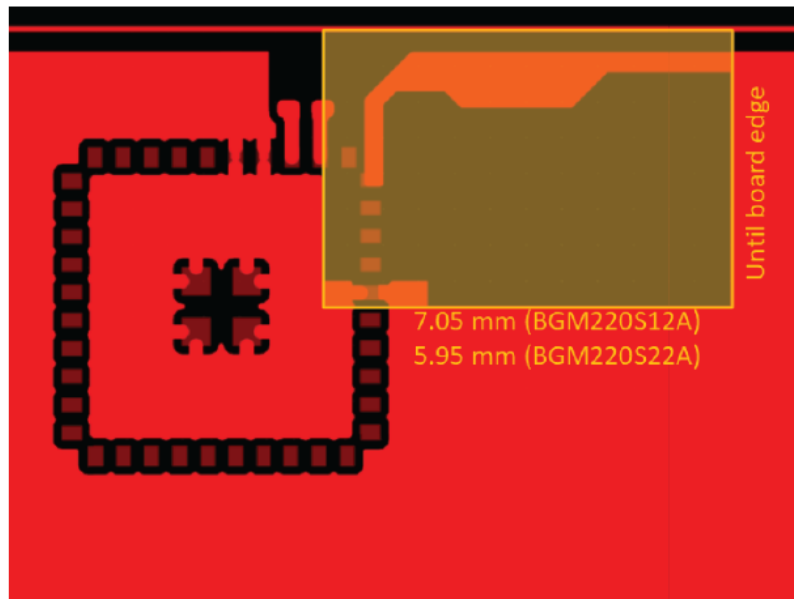


< Antenna Layout With Coordinates >

Point	BGM220SC12WGA2	BGM220SC22WGA2 BGM220SC22HNA2
A	(2.87, 2.13)	(2.87, 2.13)
B	(2.54, 2.13)	(2.54, 2.13)
C	(2.54, 3.69)	(2.54, 3.69)
D	(3.36, 4.51)	(3.36, 4.51)
E	(8.85, 4.51)	(7.75, 4.51)
F	(8.85, 4.15)	(7.75, 4.15)
G	(6.84, 4.15)	(6.84, 4.15)
H	(6.21, 3.52)	(6.21, 3.52)
I	(4.26, 3.52)	(4.26, 3.52)
J	(3.97, 3.81)	(3.97, 3.81)
K	(3.10, 3.81)	(3.10, 3.81)
L	(2.87, 3.58)	(2.87, 3.58)
W_{loop}	5.98	4.88
H_{loop}	4.15	4.15

Note:

1. All coordinates and dimensions listed in mm.



< Antenna Clearance in Inner and Bottom Layers >

- END -