

Cisco CM66 Antenna Test Report in ETS Chamber

2021/10/28

Provided by Chikang Su



Smarter Solutions for a Smarter Future

Antenna Type and Placement

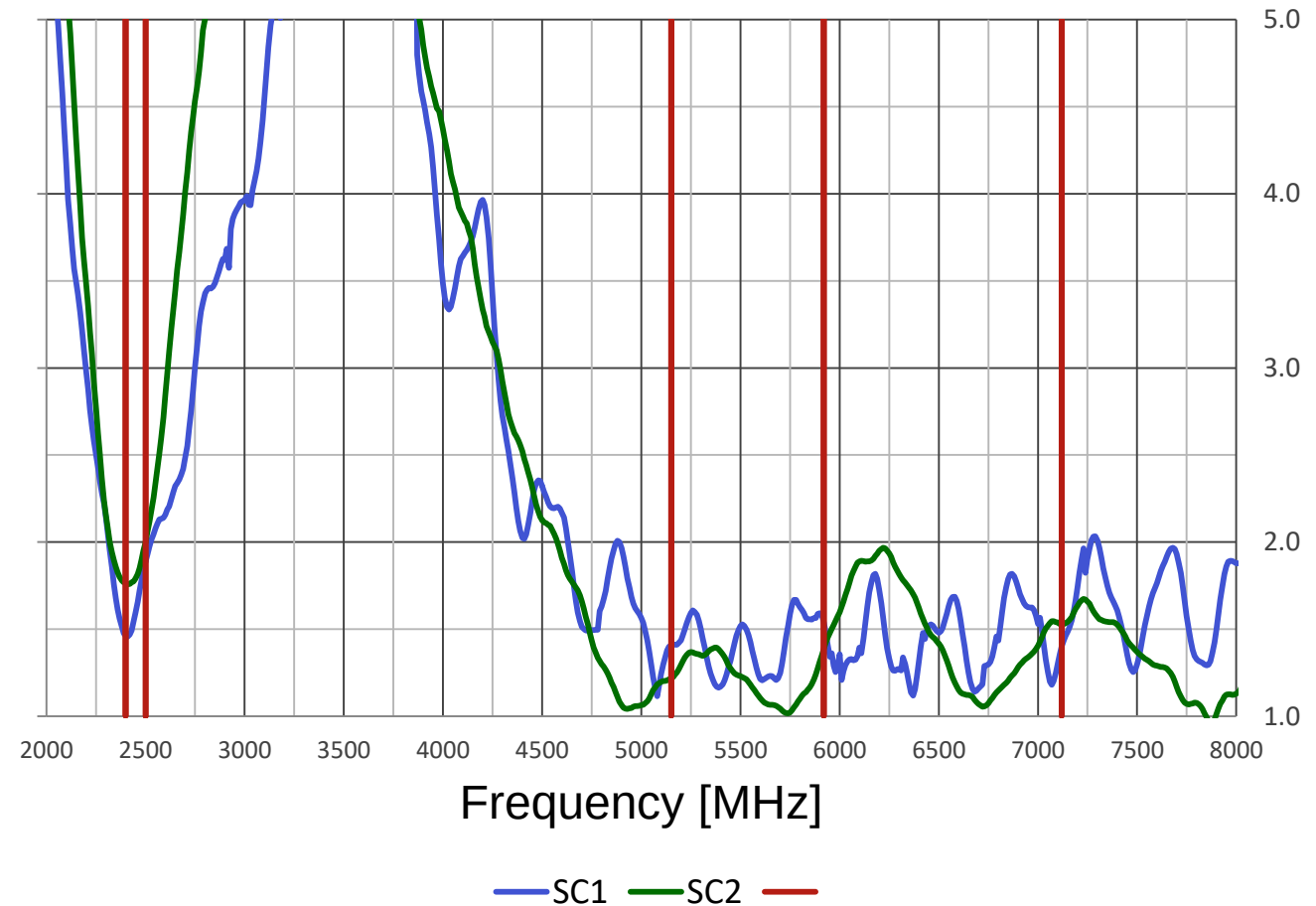
Frequency combination		ANT Type	Polarization
Scanning (2/5/6G)	2.4~2.5GHz 5.15~7.125GHz	PIFA (30 x 20 x 8.0 mm)	Mixed
BLE	2.4GHz	PIFA (30 x 14 x 8.6 mm)	Mixed

Scanning

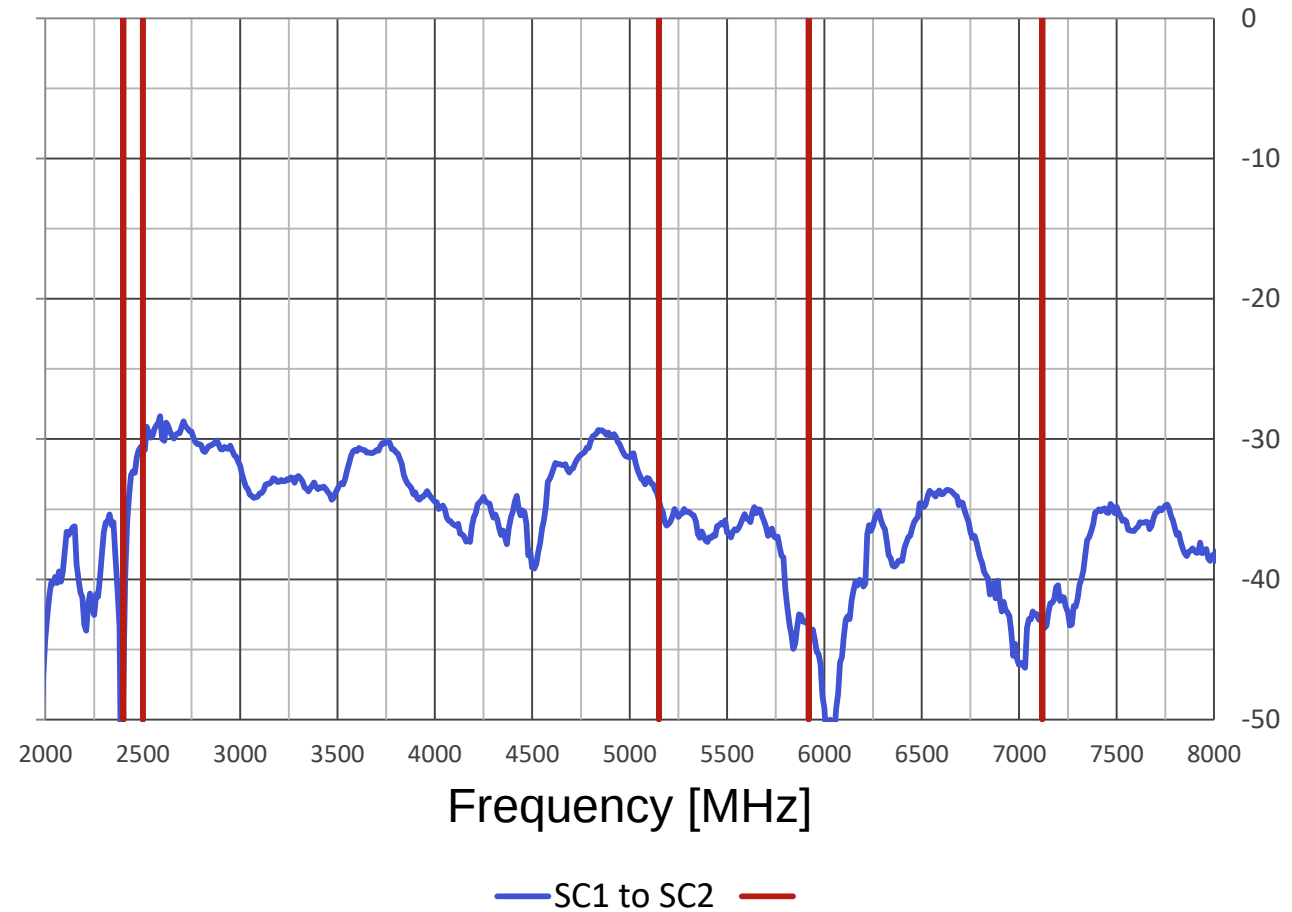
- **Maximum VSWR**
 - 2.0:1 on 2.4GHz / 1.6:1 on 5GHz / 2.0:1 on 6GHz
- **Minimum Isolation**
 - 30.8dB on 2.4GHz / 34.8dB on 5_6GHz/ 36.8dB on 6GHz
- **Average Efficiency**
 - ~62% on 2.4GHz / ~58% on 5GHz / ~58% on 6GHz
- **Peak Gain**
 - 3.3dBi on 2.4GHz / 4.0dBi on 5GHz / 5.3dBi on 6GHz



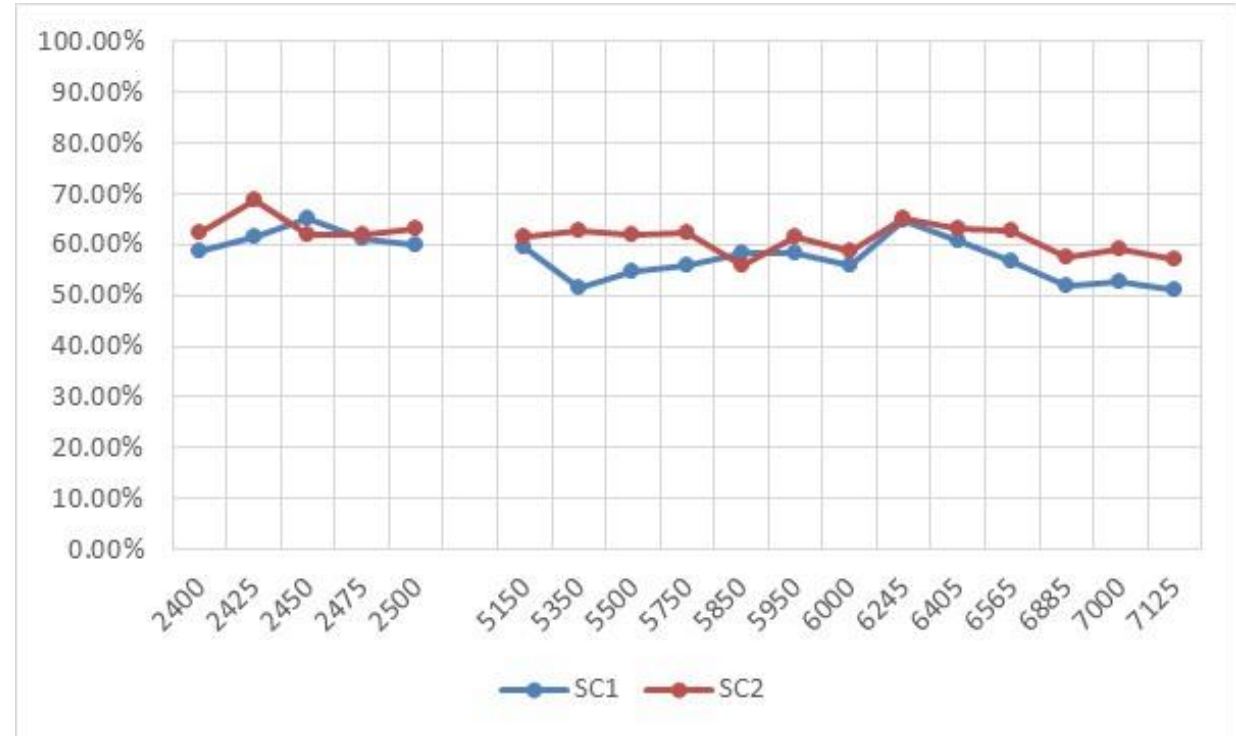
VSWR Scanning



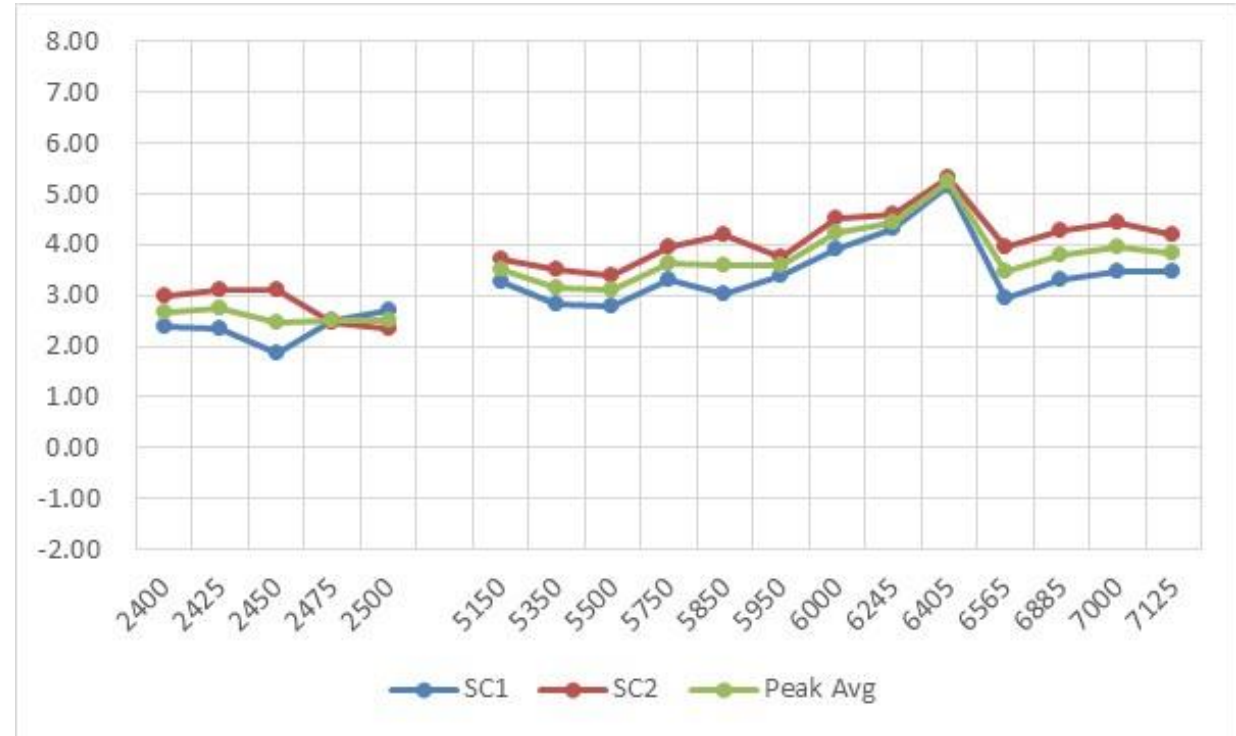
Isolation Scanning



Efficiency Scanning

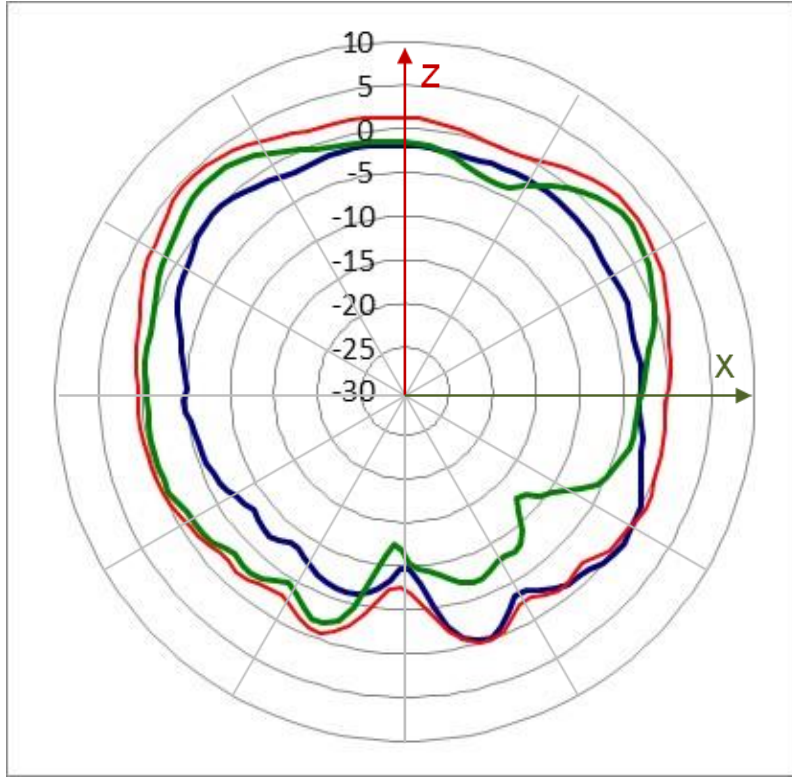


Peak Gain Scanning



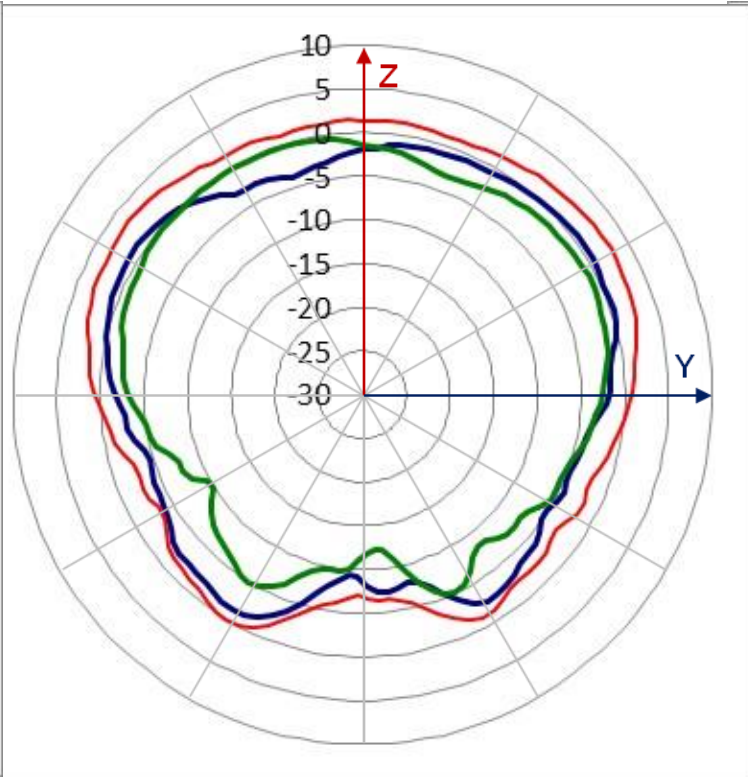
Realized Gain Pattern Scanning @2450MHz

$\phi = 0$



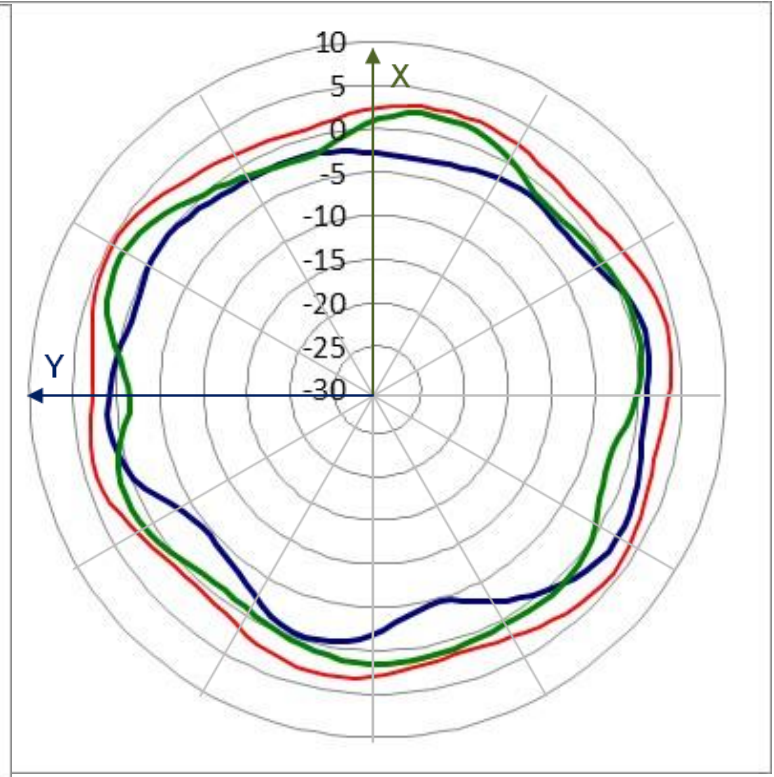
— SC1 — SC2 — Composite

$\phi = 90$



— SC1 — SC2 — Composite

$\theta = 60$

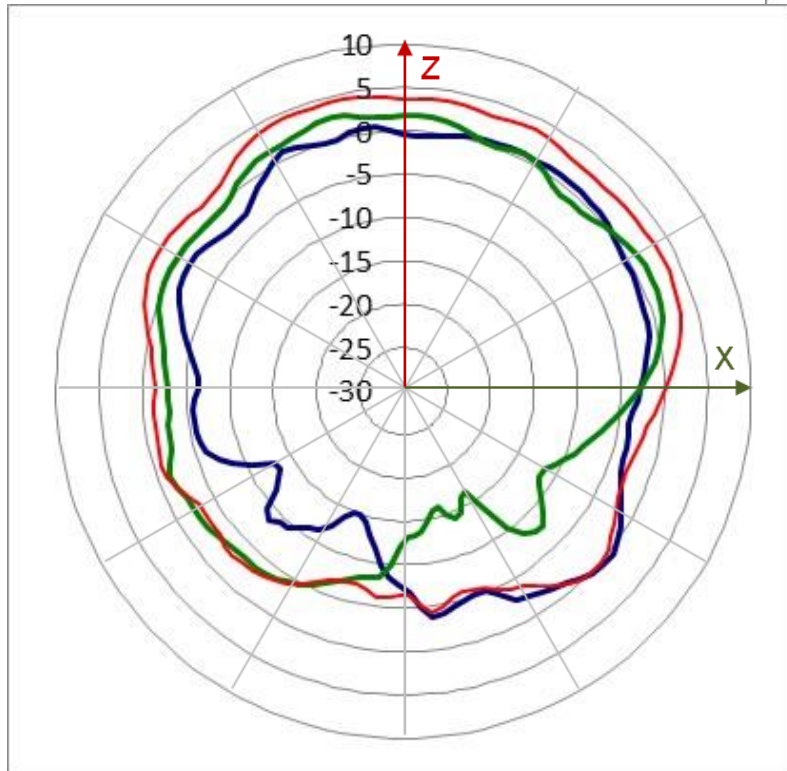


— SC1 — SC2 — Composite



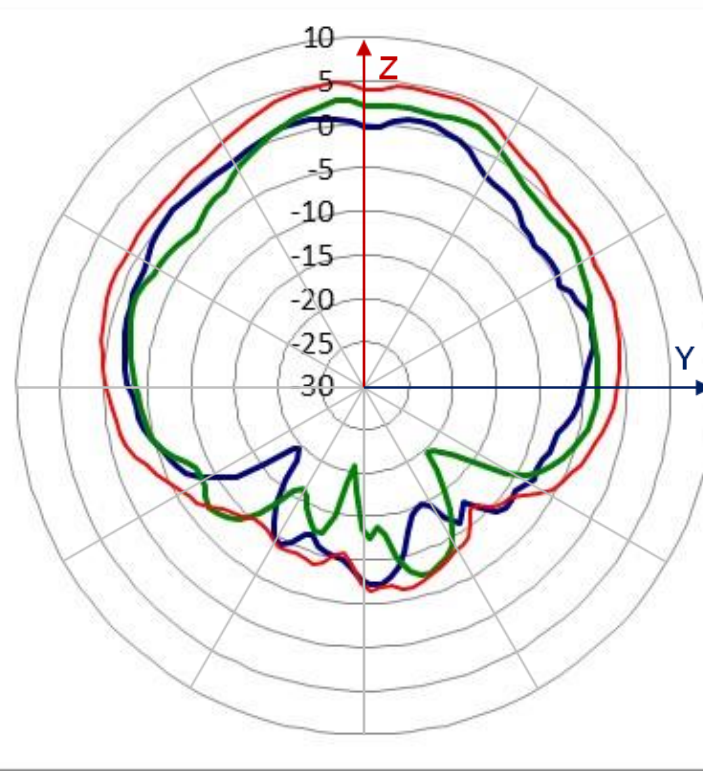
Realized Gain Pattern Scanning @5500MHz

$\phi = 0$



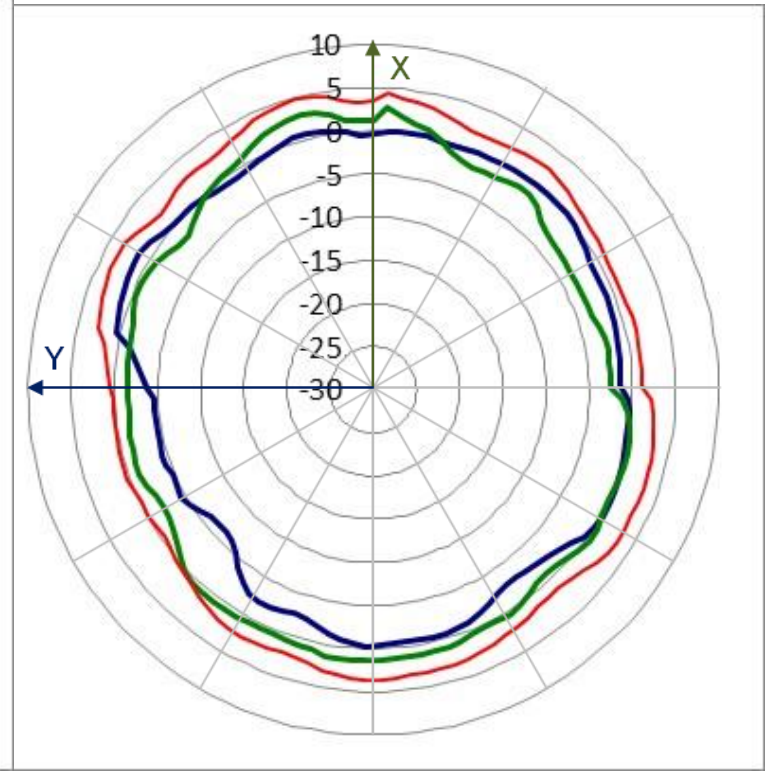
— SC1 — SC2 — Composite

$\phi = 90$



— SC1 — SC2 — Composite

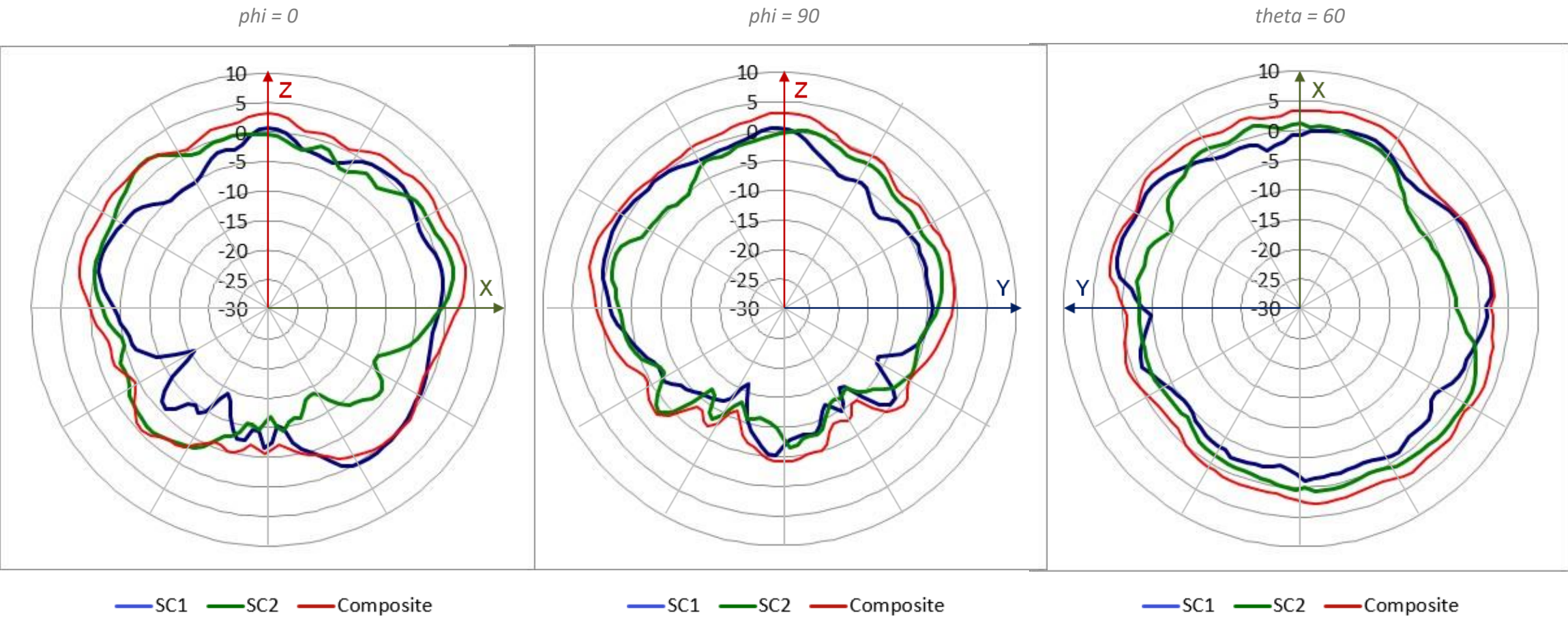
$\theta = 60$



— SC1 — SC2 — Composite



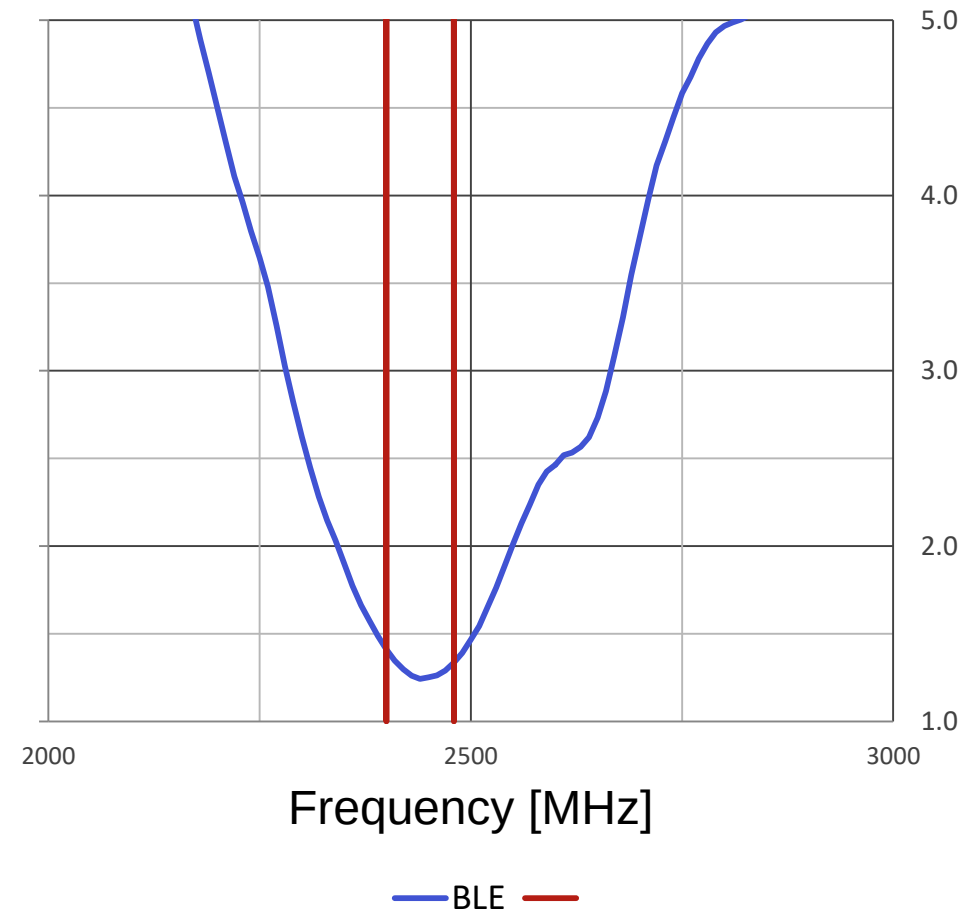
Realized Gain Pattern Scanning Realized Gain Pattern @6565MHz



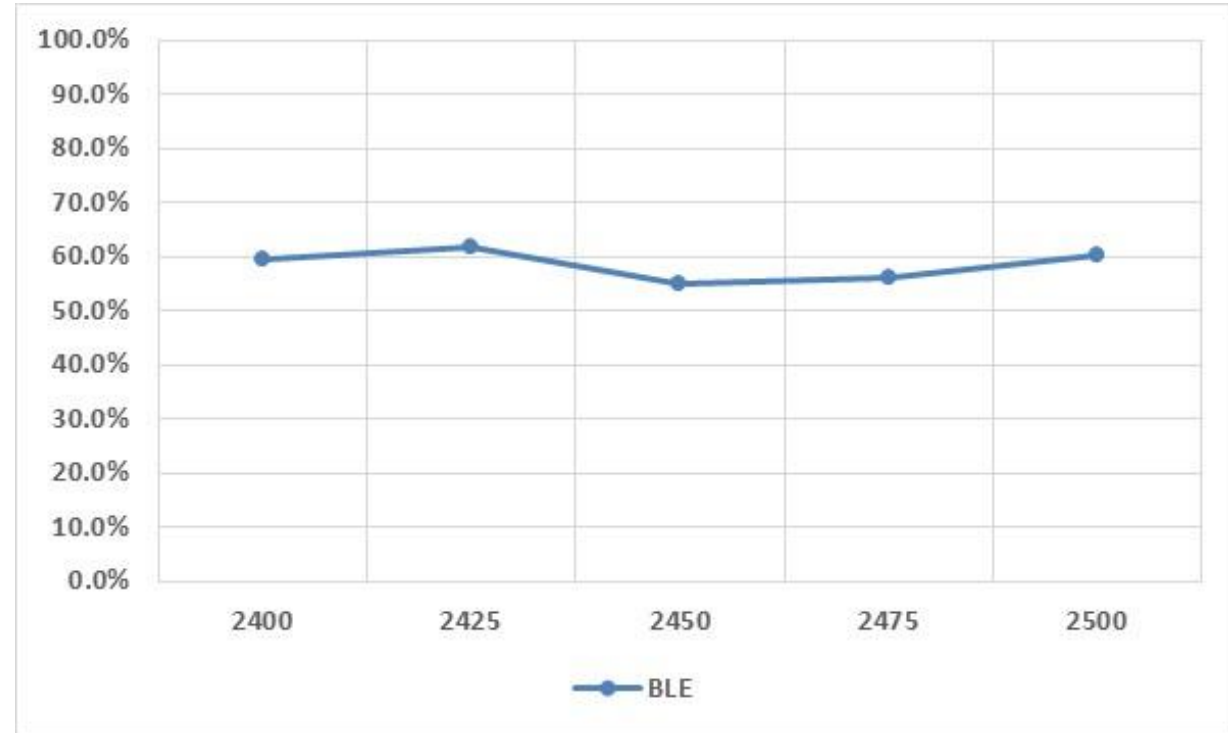
BLE

- **Maximum VSWR**
 - 1.5:1 on 2.4GHz
- **Average Efficiency**
 - ~58% on 2.4GHz
- **Peak Gain**
 - 3.8dBi on 2.4GHz

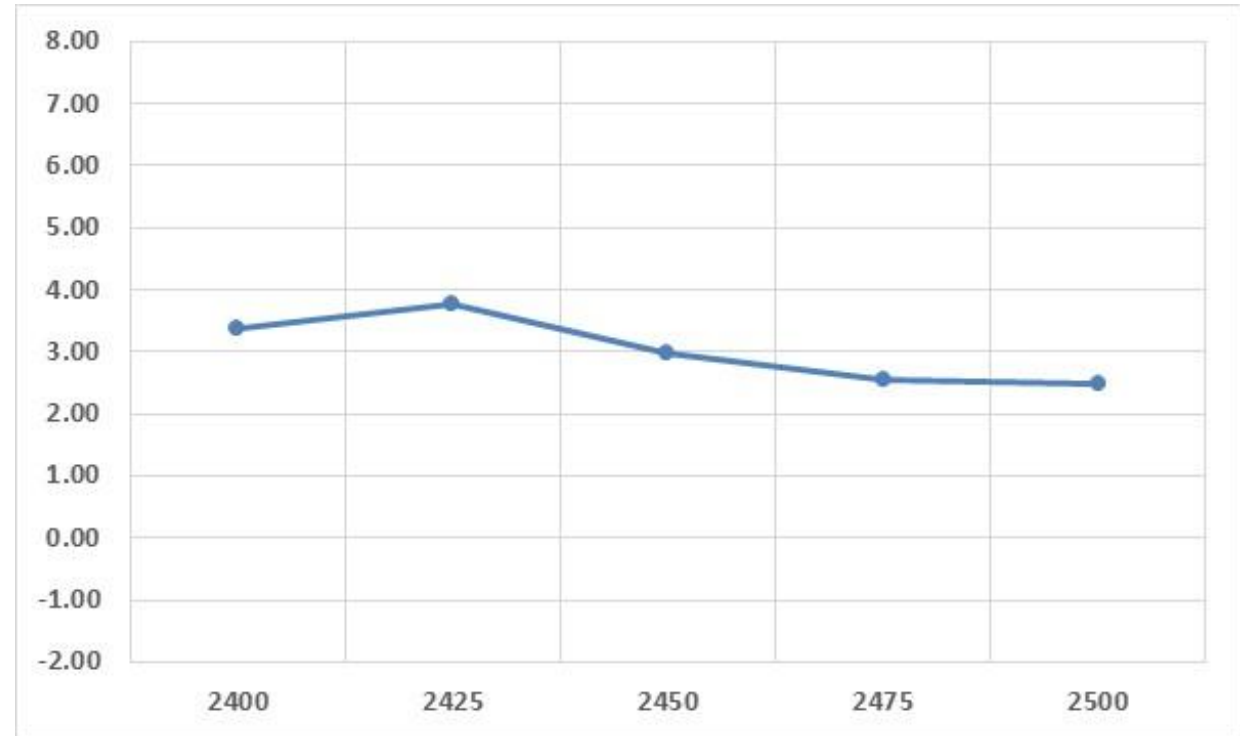




Efficiency BLE

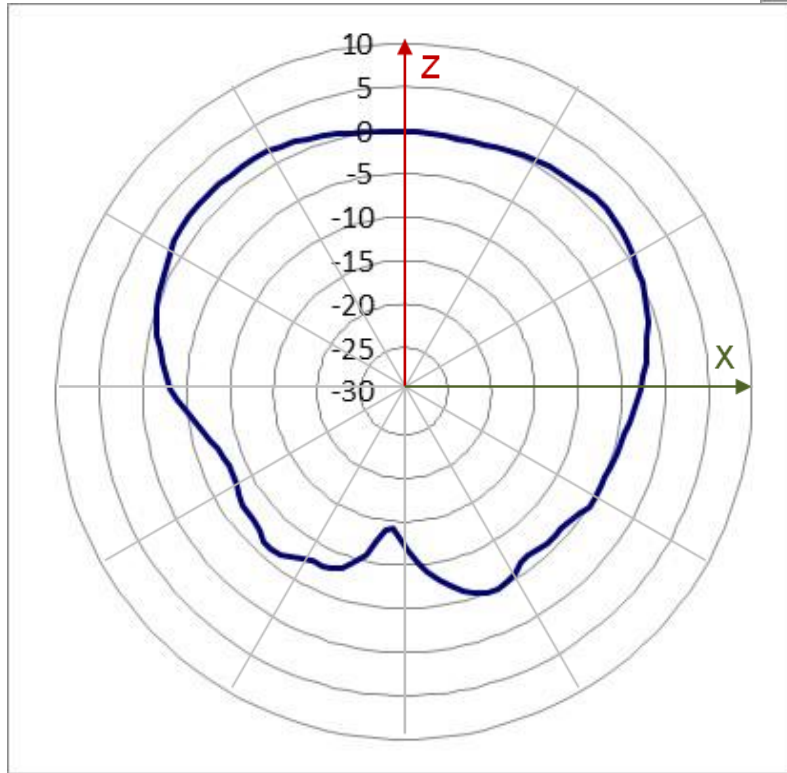


Peak Gain BLE



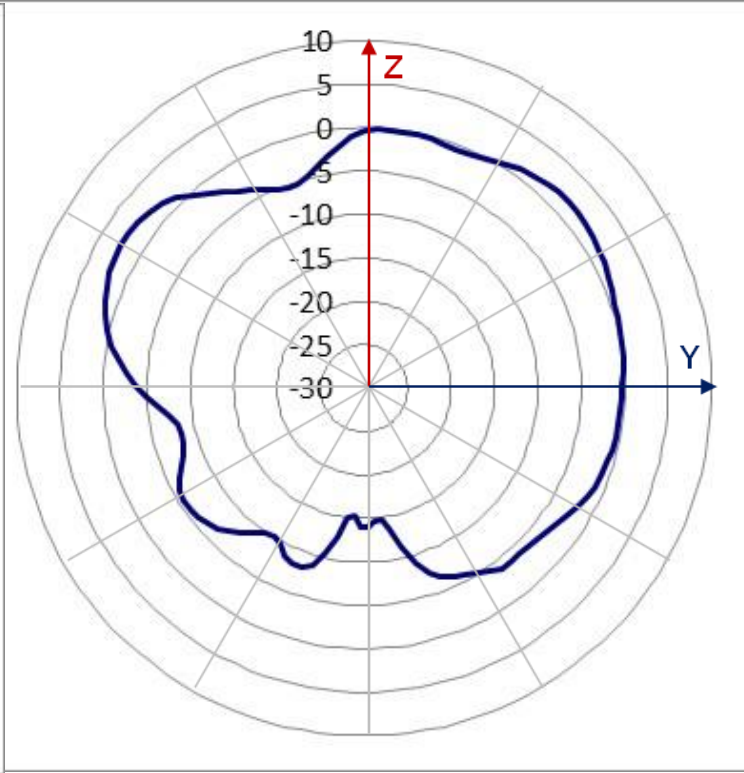
Realized Gain Pattern BLE Realized Gain Pattern @2450MHz

$\phi = 0$



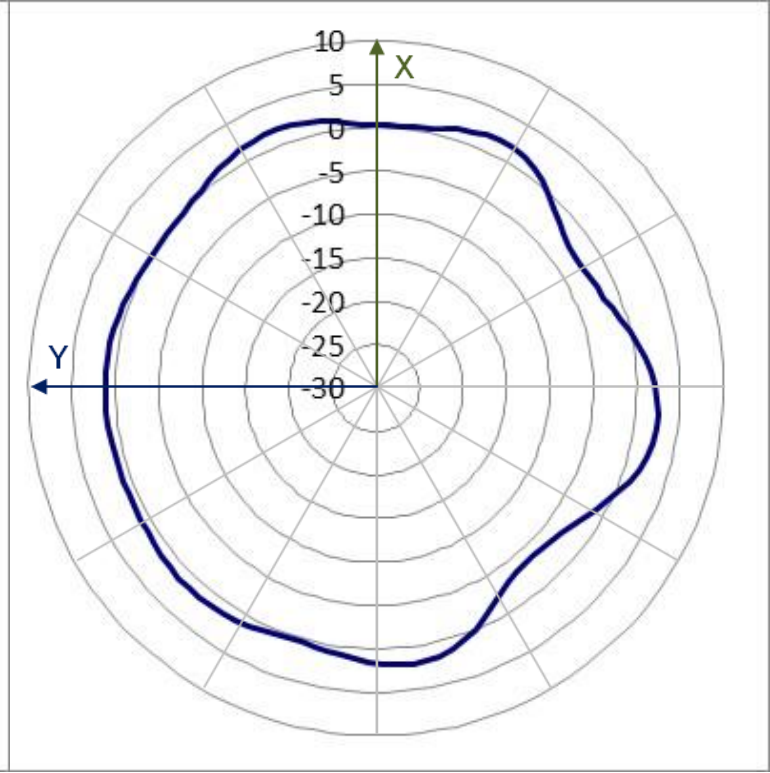
— BLE

$\phi = 90$



— BLE

$\theta = 60$



— BLE

