Wistron NeWeb Corp.

AP 4000-Testing Report

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Contents AP4000

- ***2 x Scanning Radio [SC1+SC2] + 2 x 6G [6G1+6G2]***
  - *Antenna Placement*
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  - *Scanning Radio and 6G WIFI*

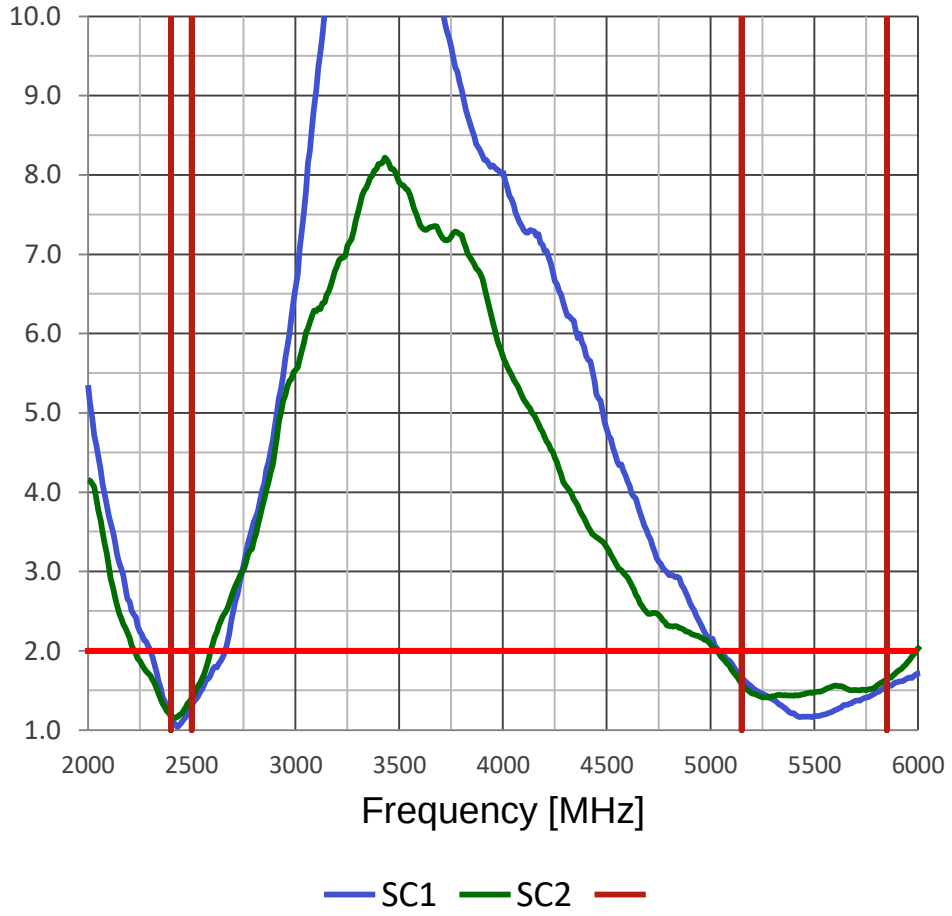
The summary antenna performance results shown in below.

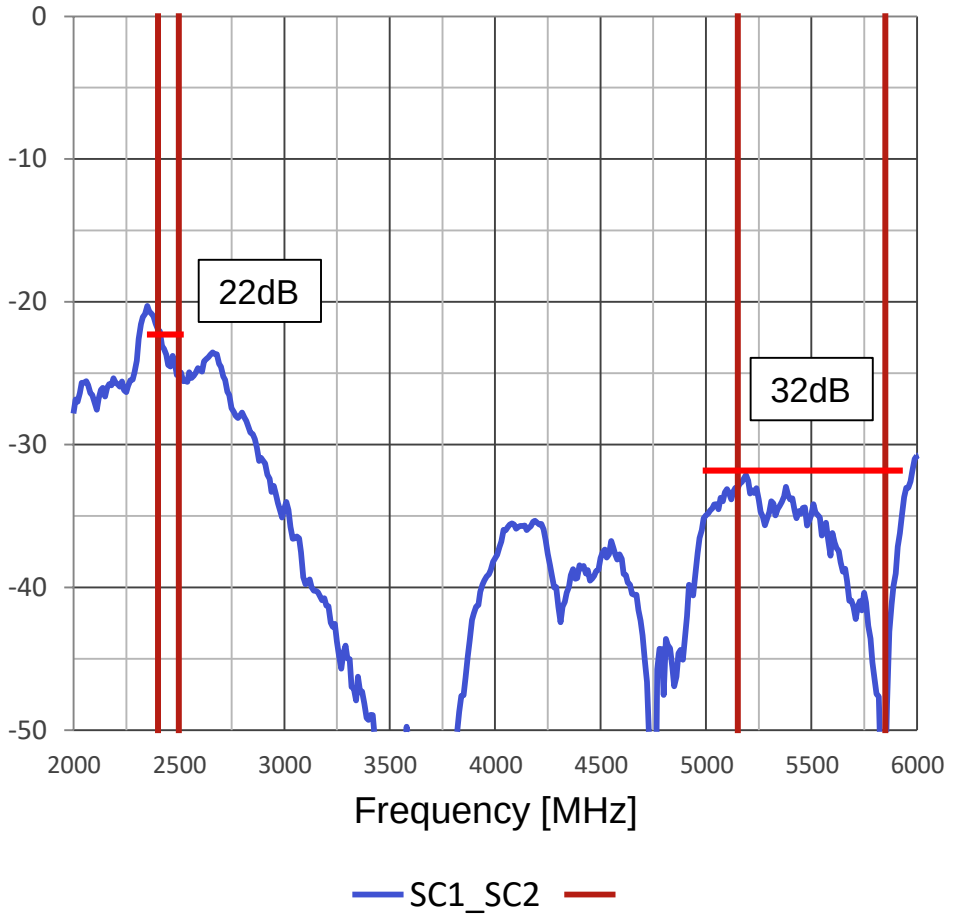
- VSWR
  - Under 2 for all antennas
- Radiation efficiency
  - ~71.0% for 2.4GHz Scanning antenna; ~71.2% for 5GHz Scanning antenna [SC1, SC2]
  - ~60.5% for 6GHz Single 6G antennas [6G1, 6G2]
- Peak gain

Scanning Radio

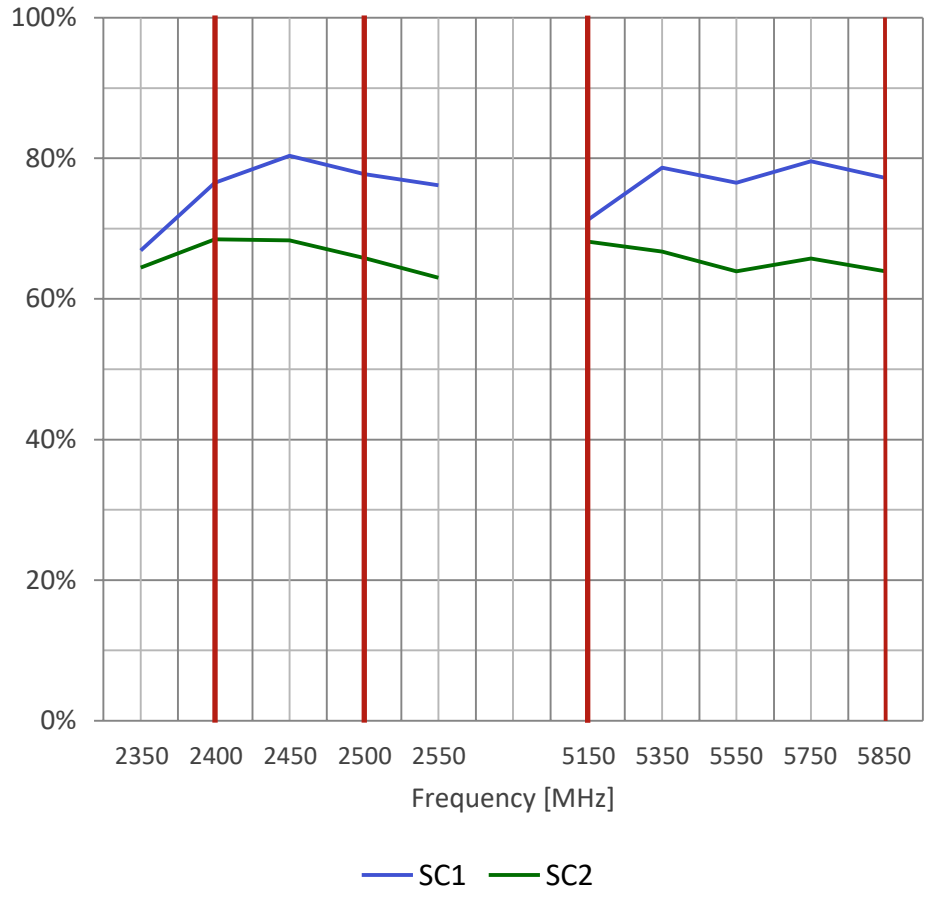
- **Maximum VSWR**
  - 1.5:1 on 2.4GHz / 1.7:1 on 5GHz
- **Minimum Isolation**
  - 22.0dB on 2.4GHz / 32.0dB on 5GHz
- **Efficiency**
  - ~71.0% on 2.4GHz / ~71.2% on 5GHz

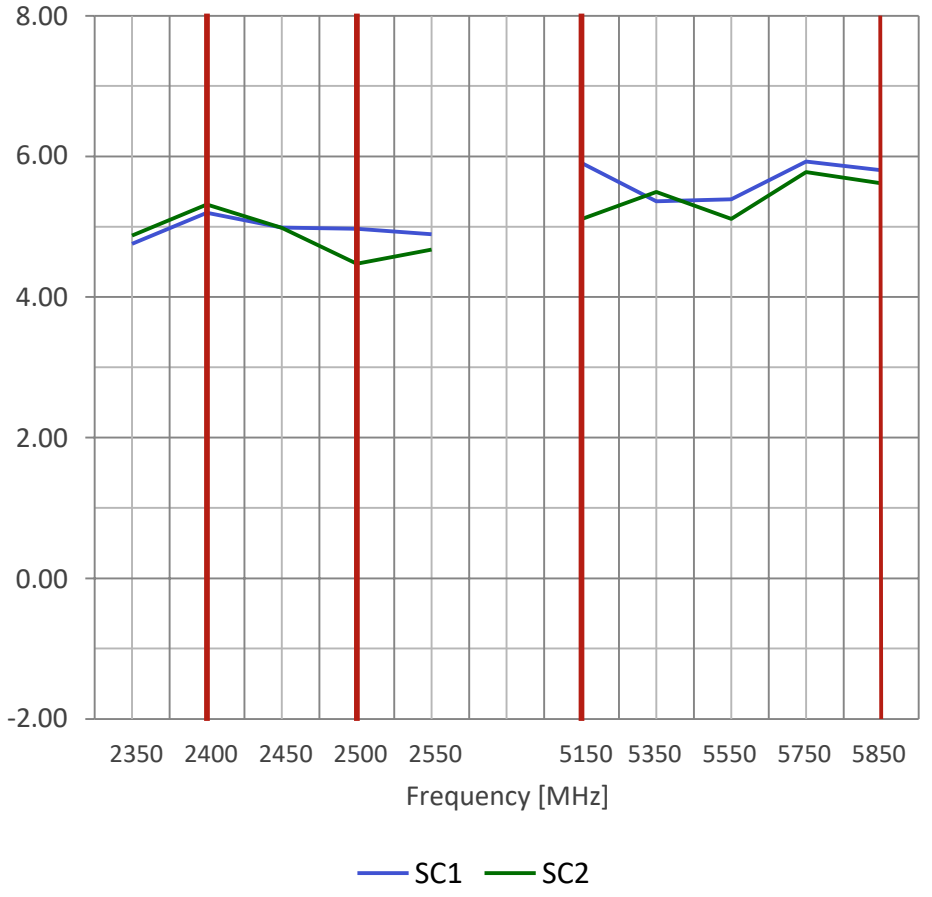
VSWR / Isolation Scanning Radio





Efficiency / Peak Gain Scanning Radio



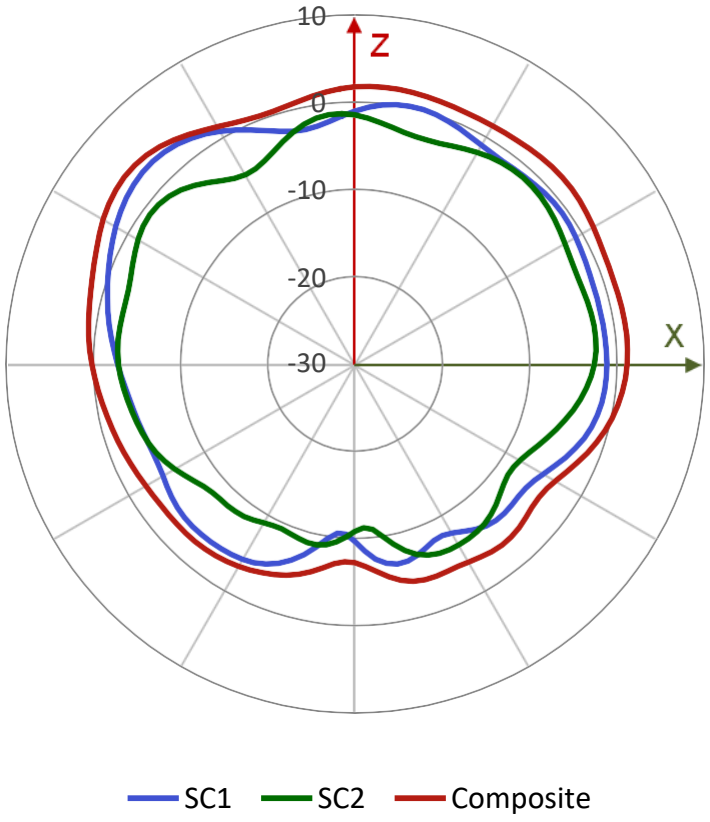


Efficiency / Peak Gain Scanning Radio

	Frequency	2400	2450	2500	Avg.
SC1	Efficiency	76.5%	80.4%	77.8%	78.2%
	Average Gain	-1.16	-0.95	-1.09	
	Peak Gain	5.20	4.99	4.97	
SC2	Efficiency	68.5%	68.4%	65.8%	67.6%
	Average Gain	-1.64	-1.65	-1.81	
	Peak Gain	5.32	4.98	4.47	
	Frequency	**5150**	**5550**	**5850**	**Avg.**
SC1	Efficiency	70.7%	62.9%	61.9%	65.2%
	Average Gain	-1.48	-1.16	-1.12	
	Peak Gain	5.91	5.39	5.80	
SC2	Efficiency	63.3%	54.4%	57.0%	58.2%
	Average Gain	-1.67	-1.94	-1.94	
	Peak Gain	5.11	5.11	5.62	

Realized Gain Pattern Scanning @2450MHz for Gtotal

phi = 0



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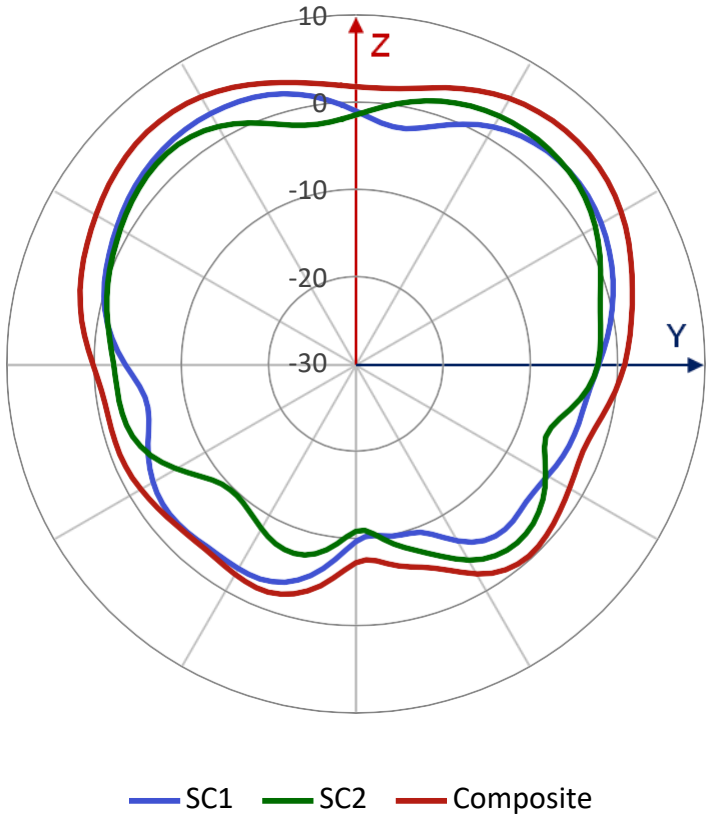
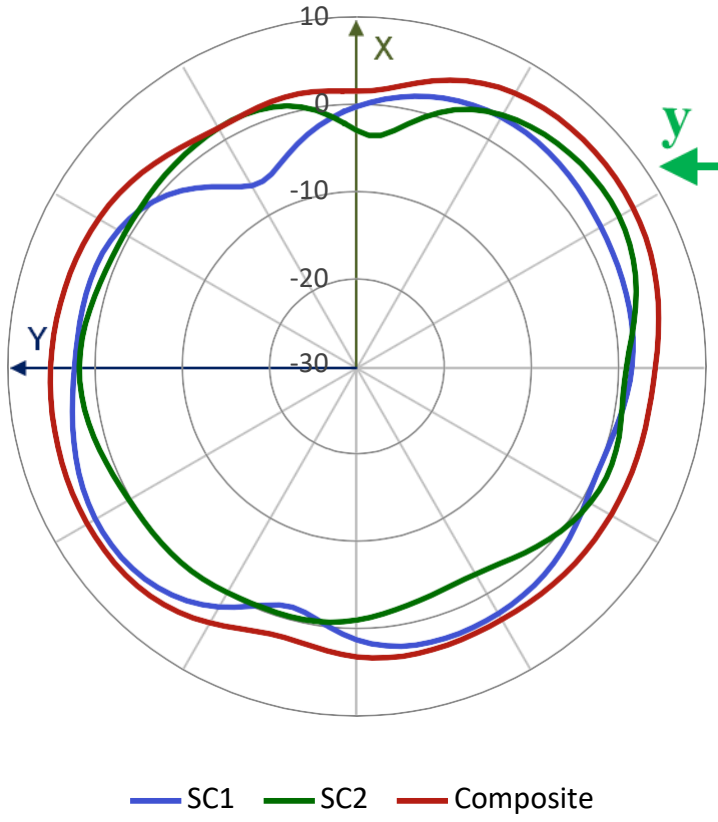
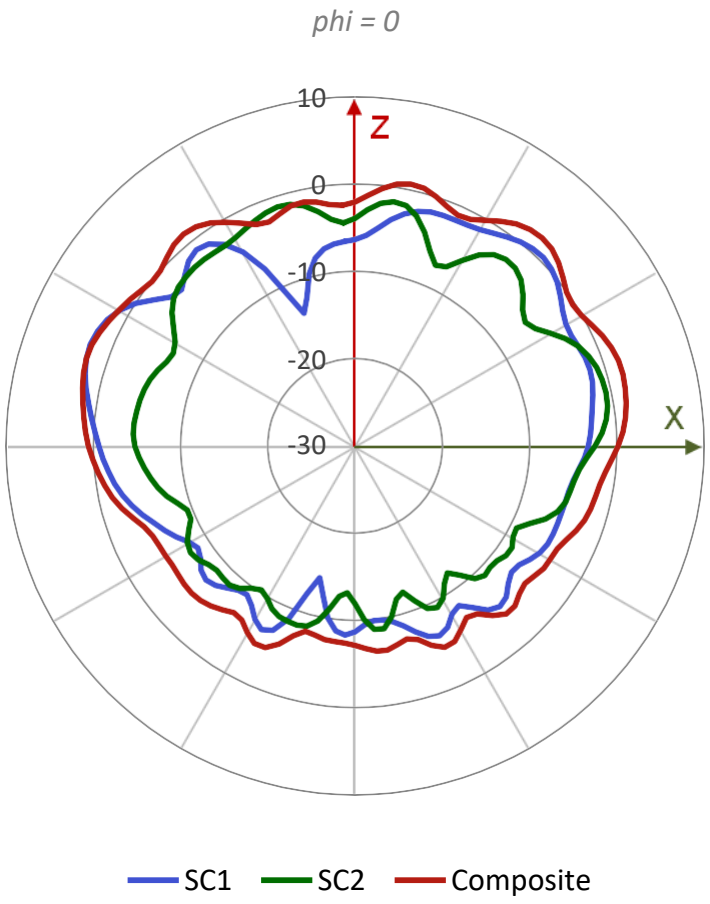
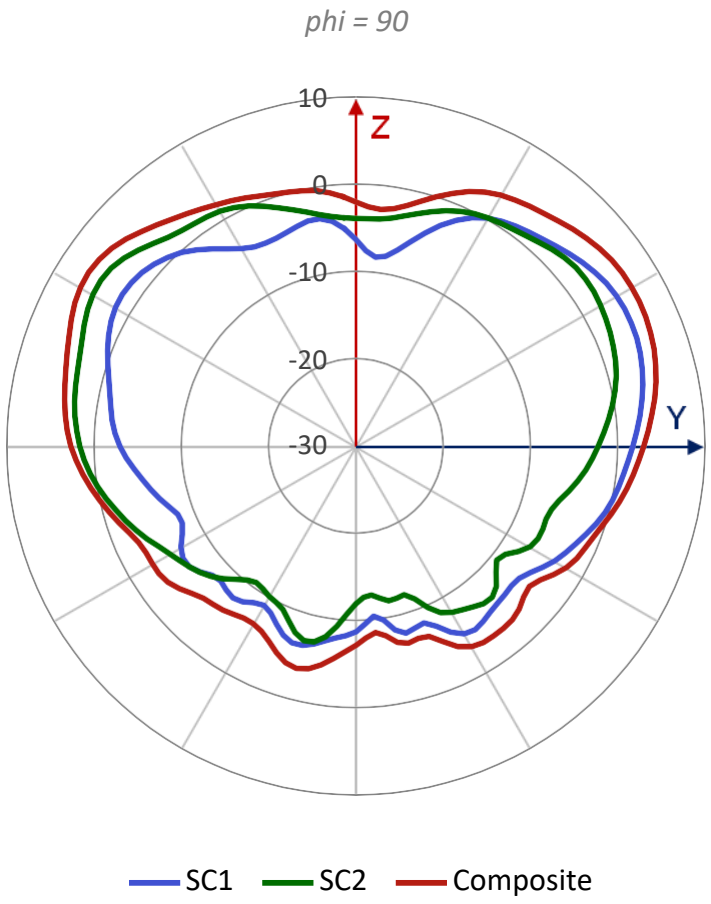


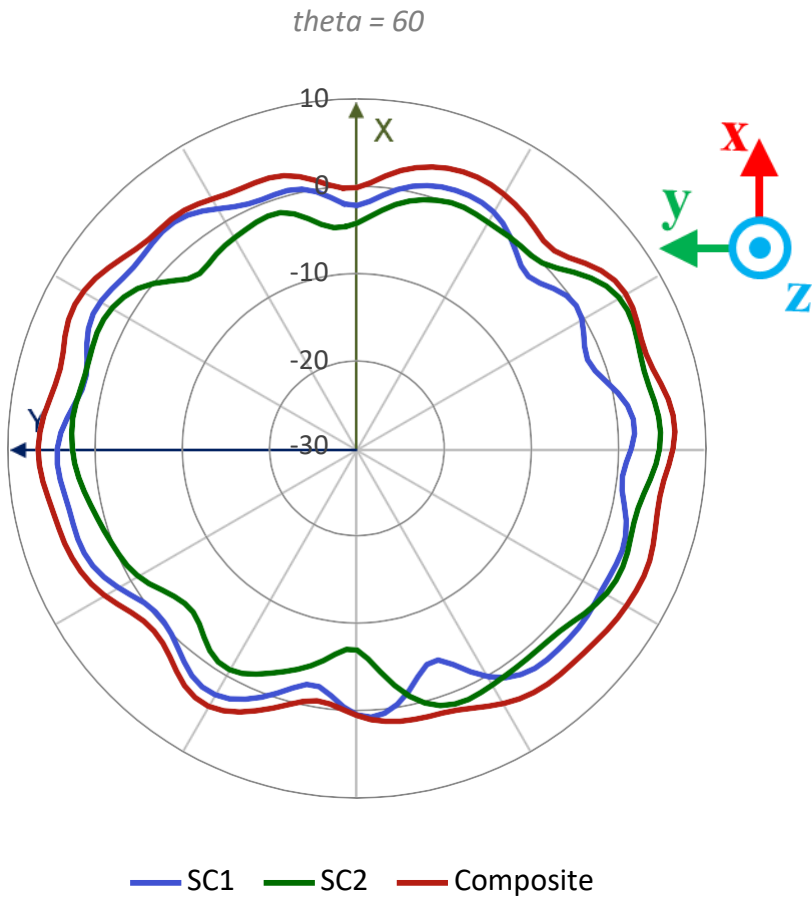
theta = 60



Realized Gain Pattern Scanning @5450MHz for Gtotal



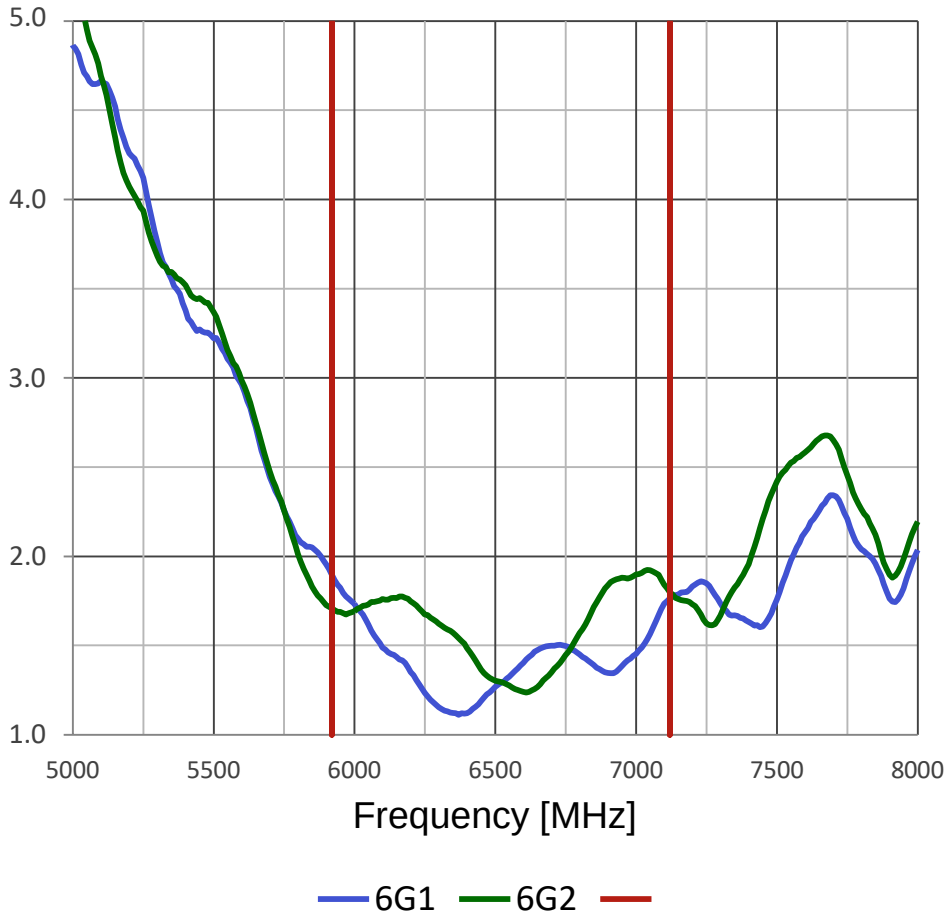


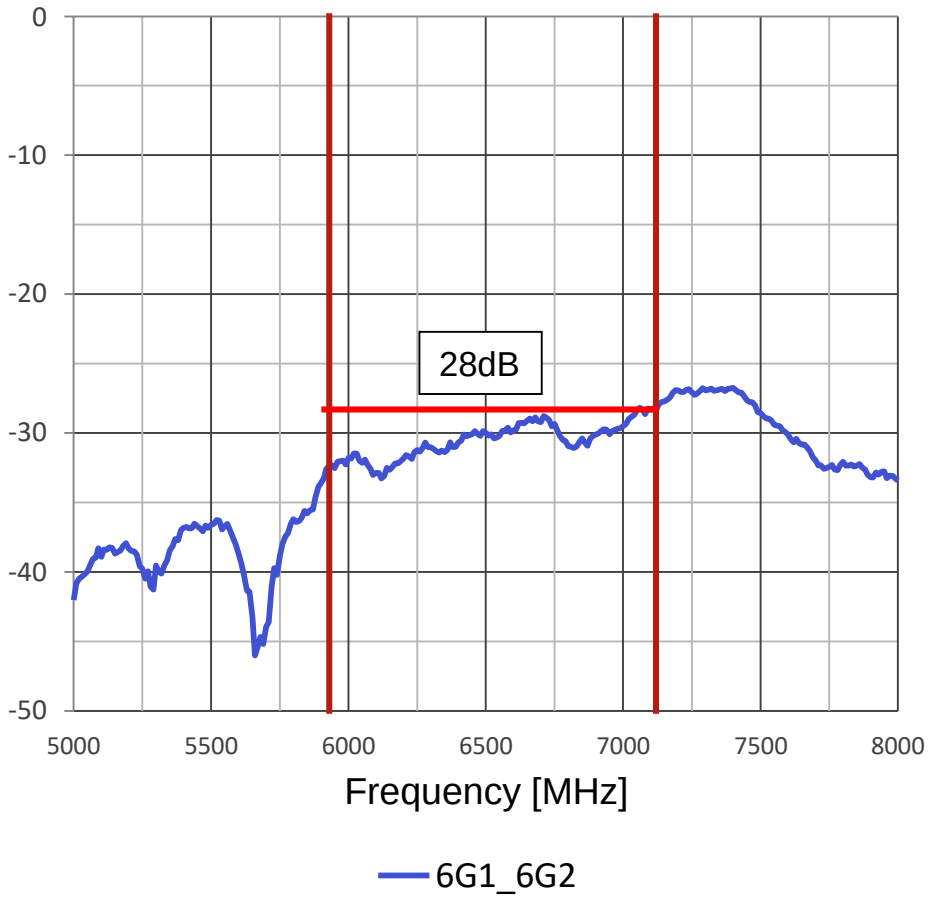


Single 6G

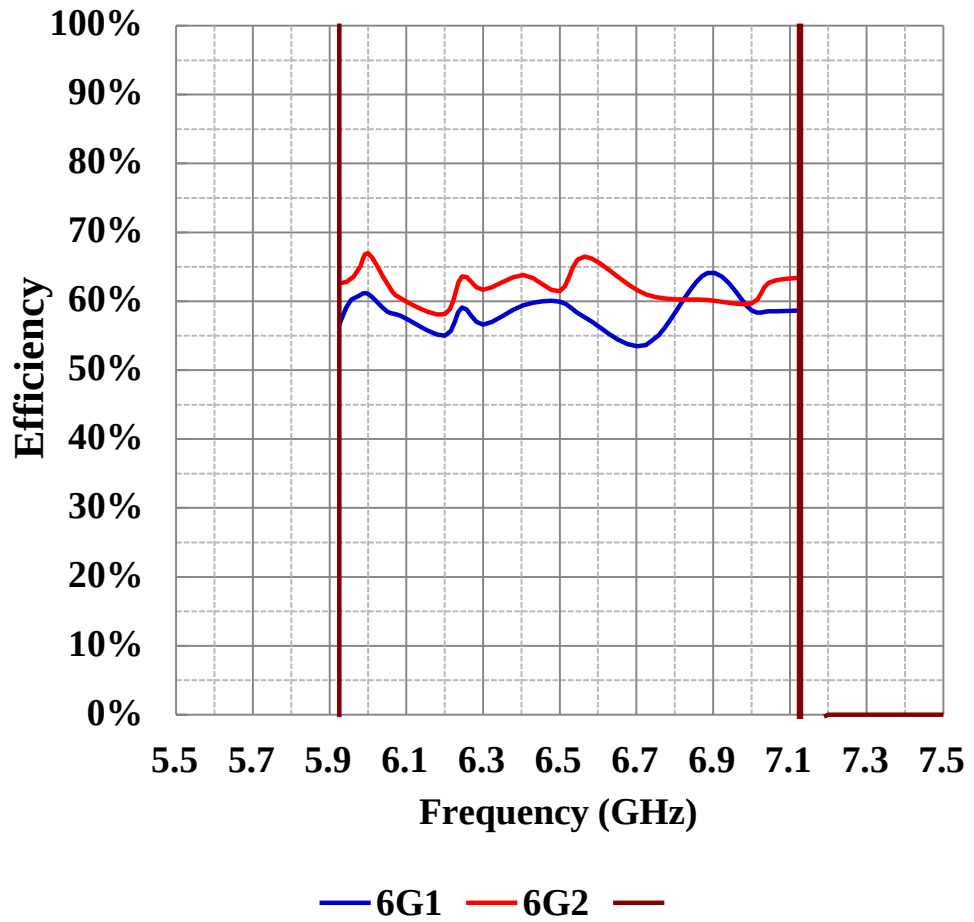
- **Maximum VSWR**
  - 1.9:1 on 6GHz
- **Minimum Isolation**
  - 29.7dB on 6GHz
- **Efficiency**
  - ~60.5% on 6GHz

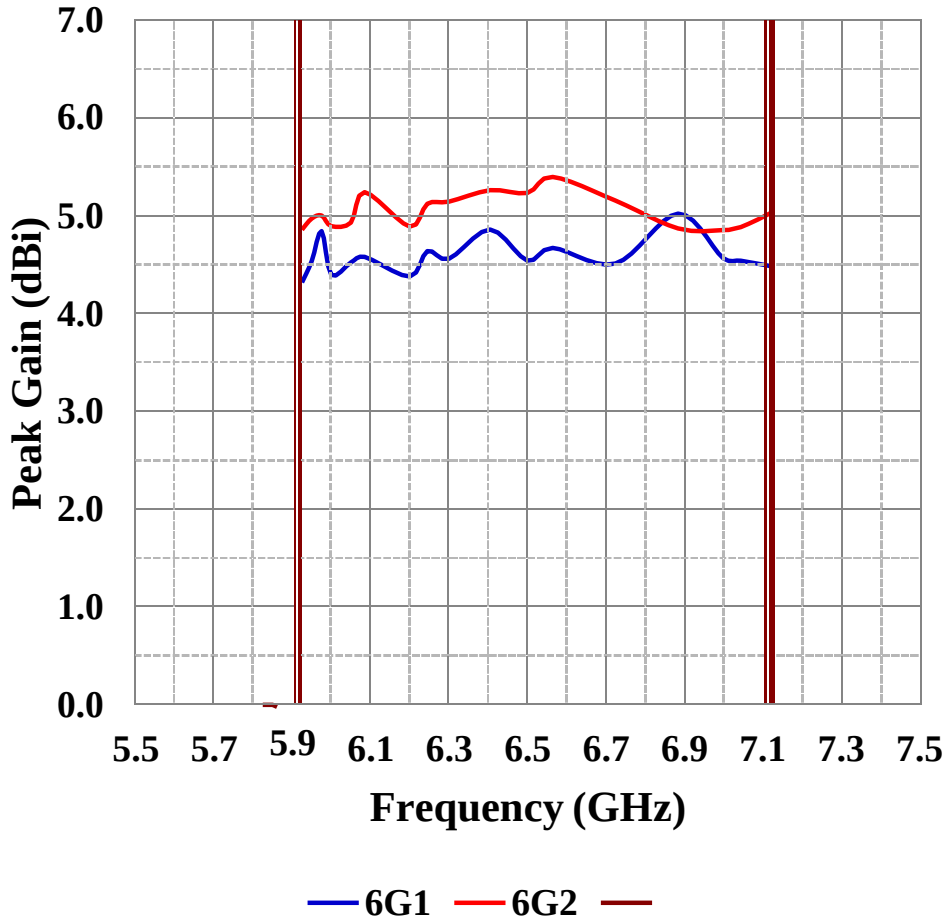
VSWR / Isolation Single 6G





Efficiency / Peak Gain Single 6G

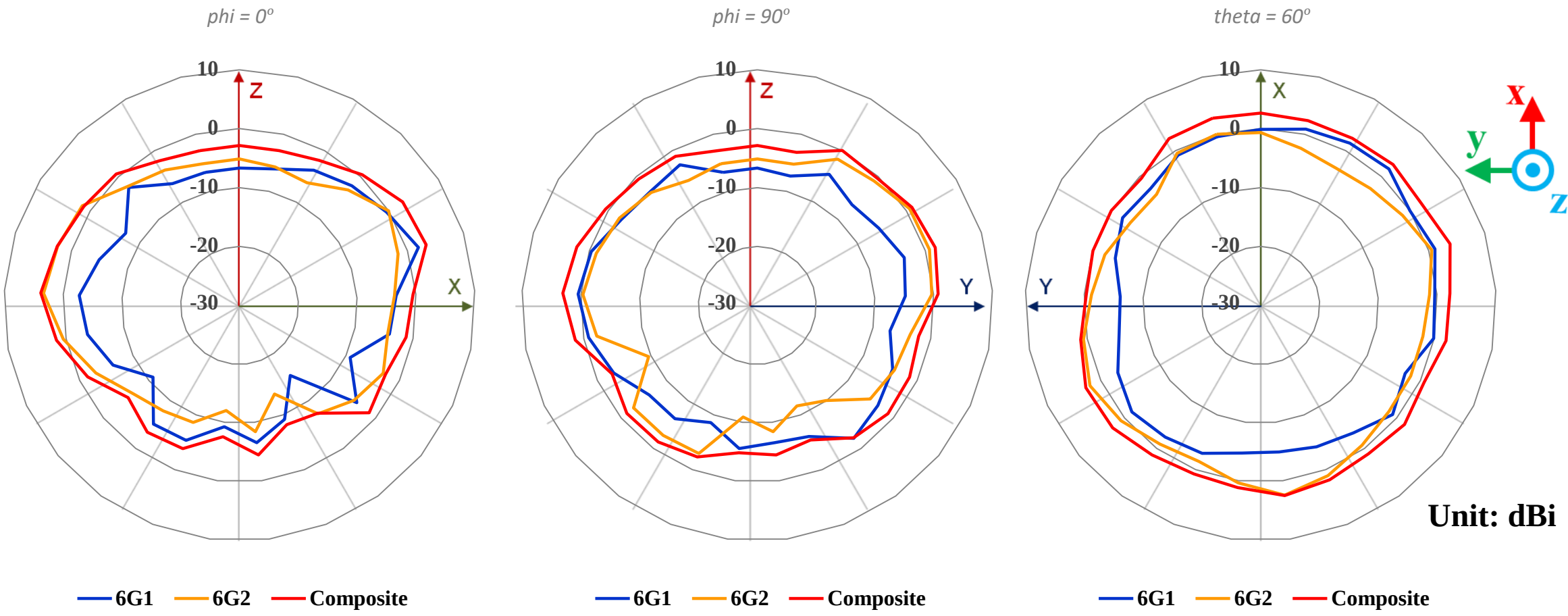




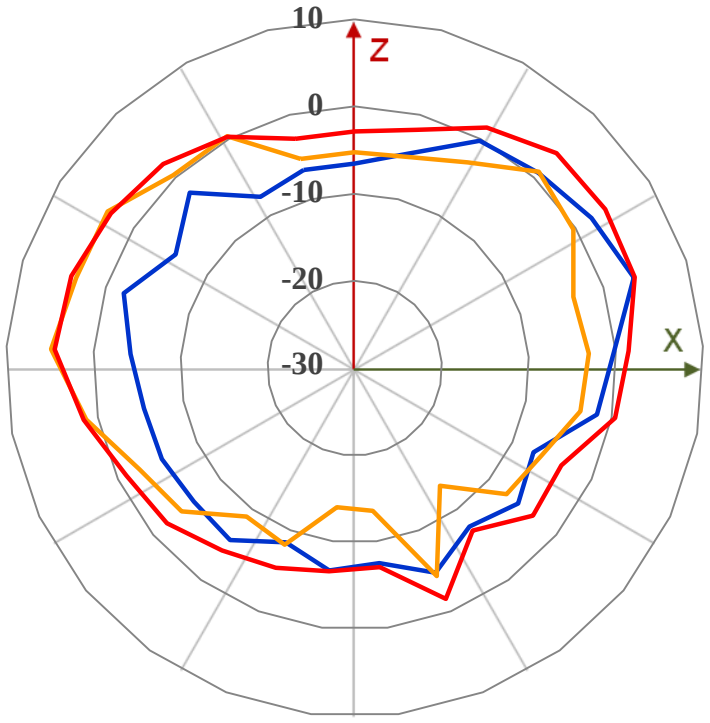
Efficiency / Peak Gain Single 6G

	Frequency	5925	6500	7125	Avg.
6G1	Efficiency	56.5%	59.9%	58.7%	58.4%
	Average Gain	-2.48	-2.22	-2.32	
	Peak Gain	4.34	4.56	4.50	
6G2	Efficiency	62.6%	61.5%	63.4%	62.5%
	Average Gain	-2.03	-2.11	-1.98	
	Peak Gain	4.88	5.25	5.05	

Realized Gain Pattern Single 6G @6200MHz for G_{total}

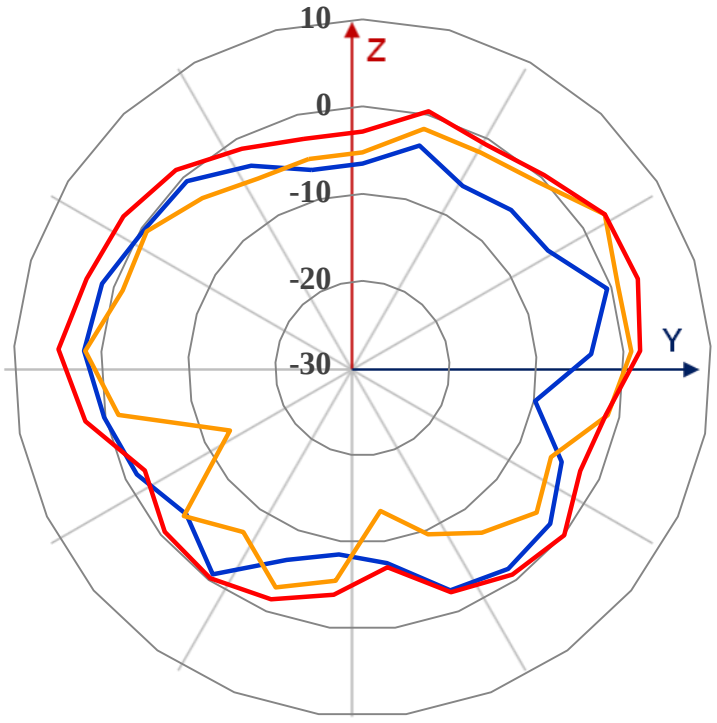


phi = 0°



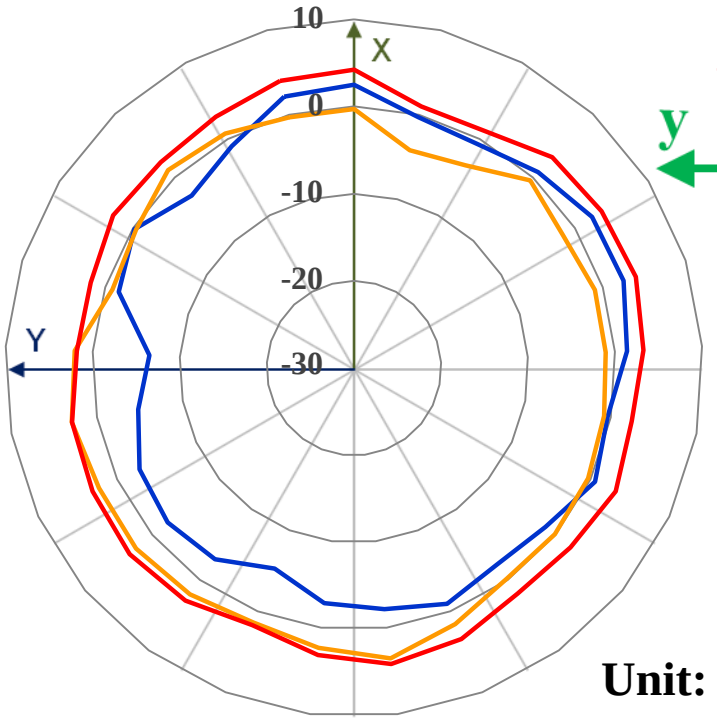
6G1 6G2 Composite

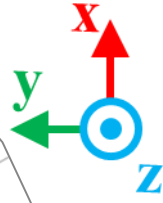
phi = 90°



6G1 6G2 Composite

theta = 60°





6G1 6G2 Composite

Unit: dBi