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|  | <p>Mercedes BT/WLAN Antenna -confidential-</p> | <p>PDA Antenna Engineering Date: 23.05.22 Version: 1.0 Status:</p> |
|---|--|--|

Data Sheet Mercedes BT/WLAN Antenna

A1779052902
920-584-002

| | | |
|---|--|--|
|  | <p>Mercedes BT/WLAN Antenna -confidential-</p> | <p>PDA Antenna Engineering Date: 23.05.22 Version: 1.0 Status:</p> |
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| | Name, Department | Erstellt | Version |
|-----------------|------------------|------------|---------|
| Author | Kevin Kuder, PDA | 23.05.2022 | 1.0 |
| Approval | | | |



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Version: 1.0
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1 Change Index

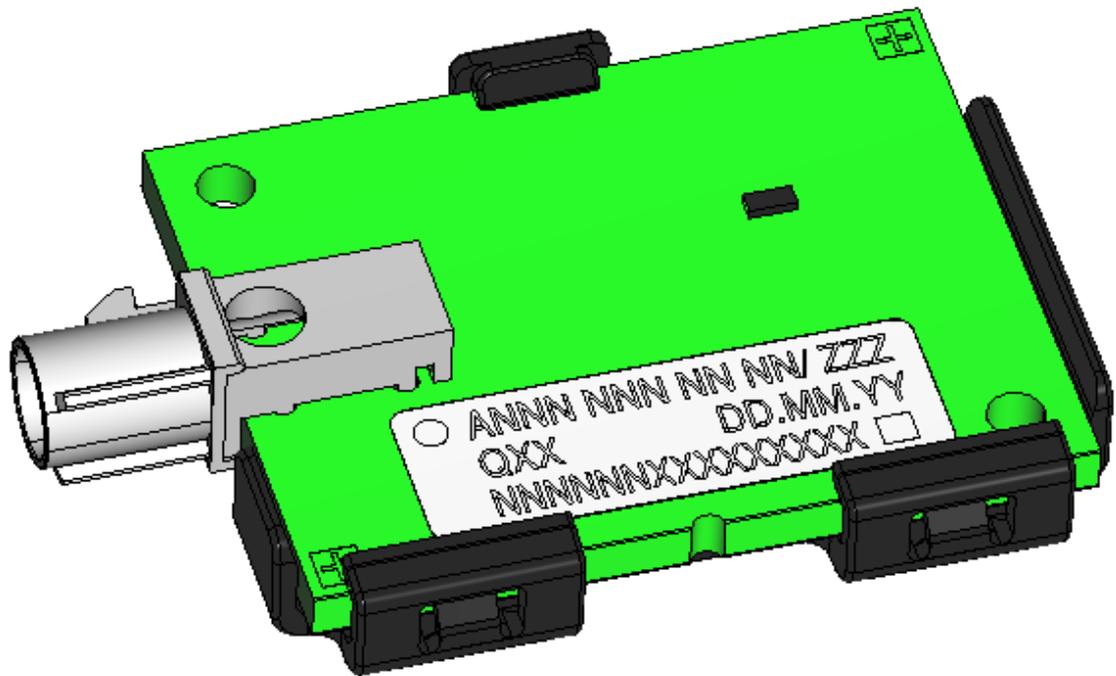
| Date | Section | Changed | Author | Revision |
|----------|---------|---------|--------|----------|
| 23.05.22 | | Created | Kuder | 1.0 |
| | | | | |
| | | | | |
| | | | | |



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2 Data Sheet



| | | |
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|---|--|--|

2.1 Antenna Parameters

Measured in free space

| | |
|---|---|
| Connector type | FAKRAm, C |
| Frequency range | 2400 – 2483.5 MHz 5150 – 5850 MHz |
| Average gain Theta = 0 – 45°, Phi = 0 – 360° | -1.5 dBi @ 2400 – 2483.5 MHz 1.4 dBi @ 5150 – 5850 MHz |
| Total peak gain Theta 0 - 180°, Phi 0 - 360° | -0.3 dBi @ 2400 – 2483.5 MHz 5.0 dBi @ 5150 – 5850 MHz |

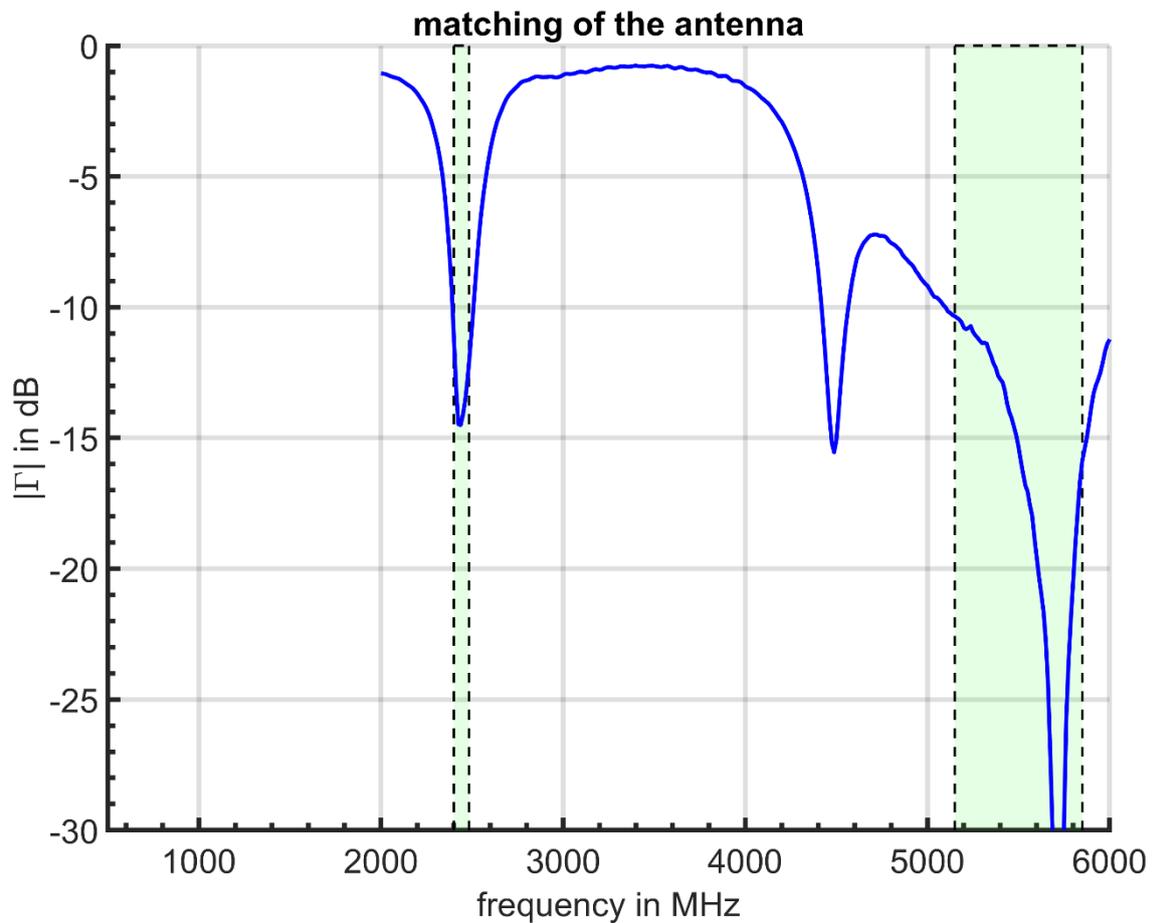


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2.2 Return Loss (S11)

Measured in free space



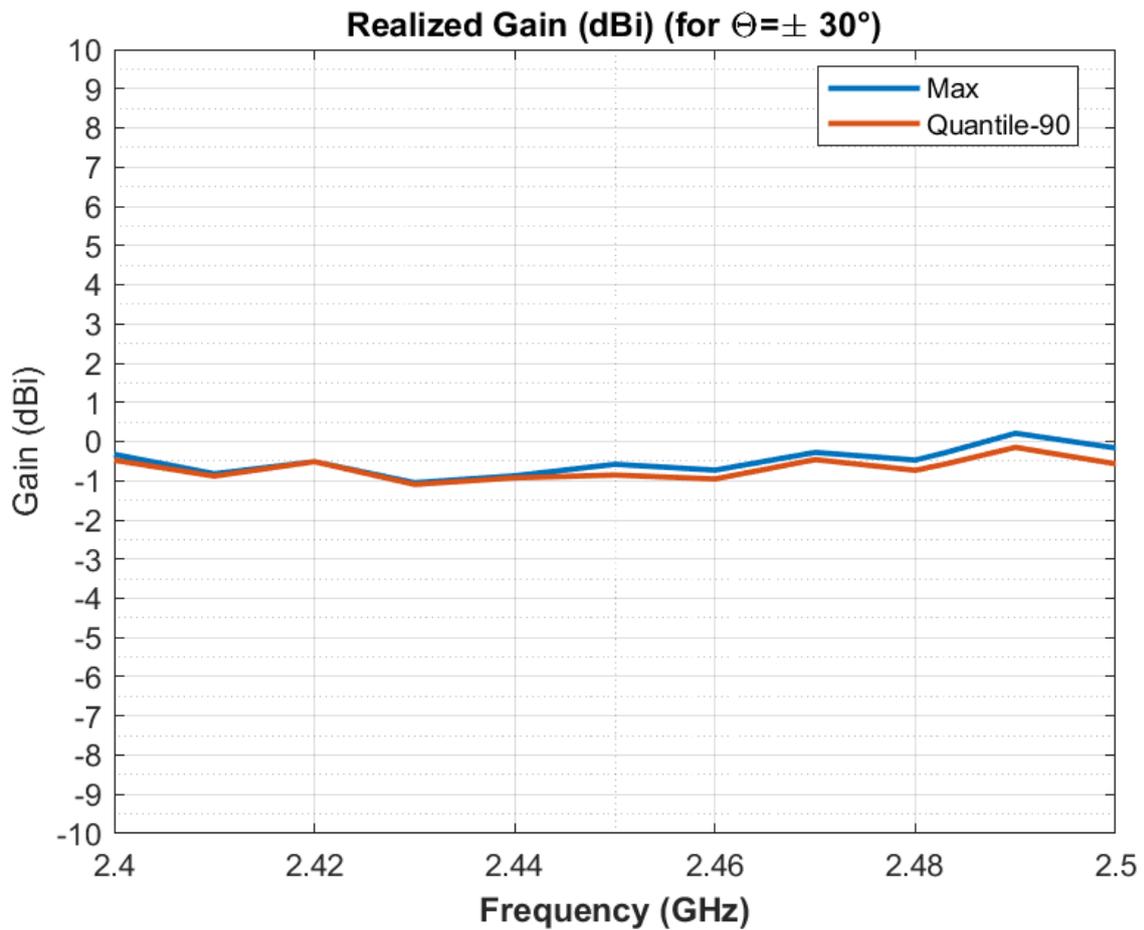


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2.3 Gain

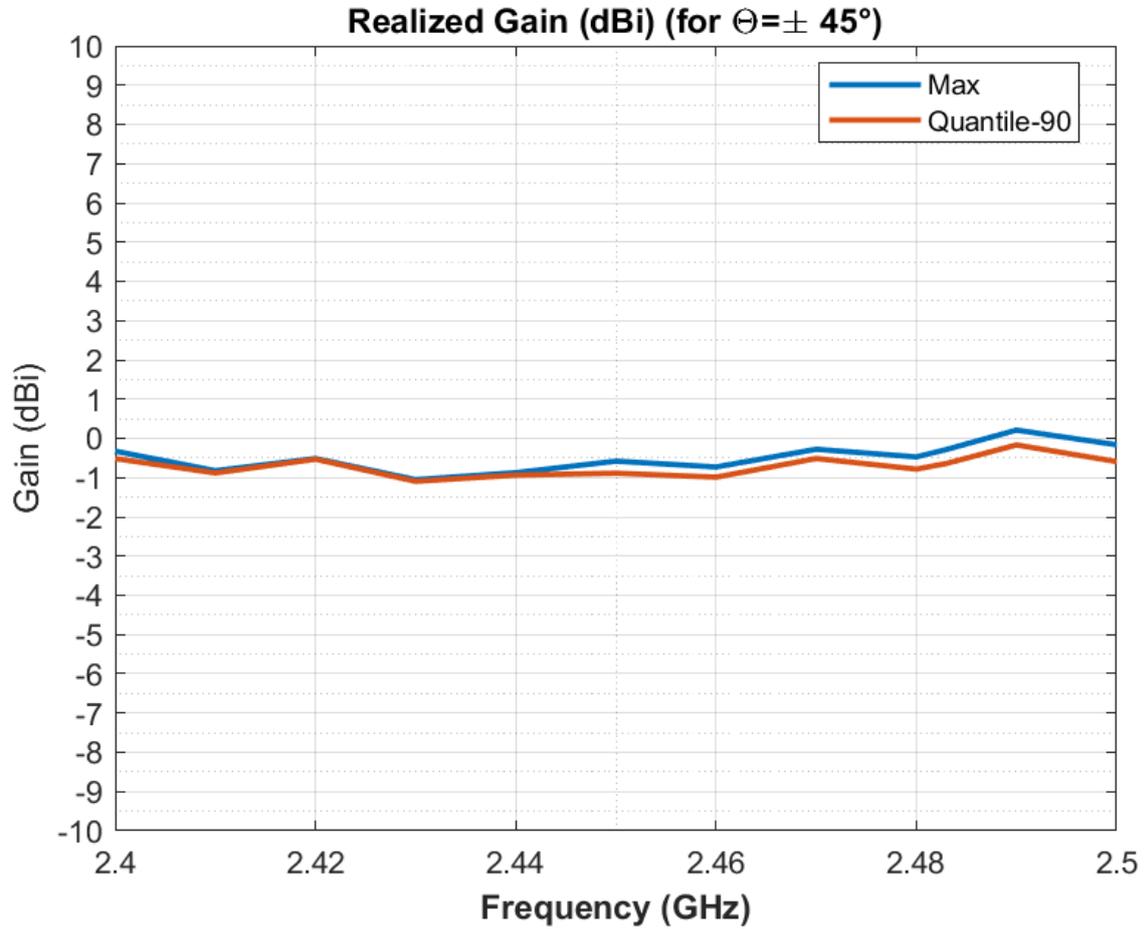
Measured in free space





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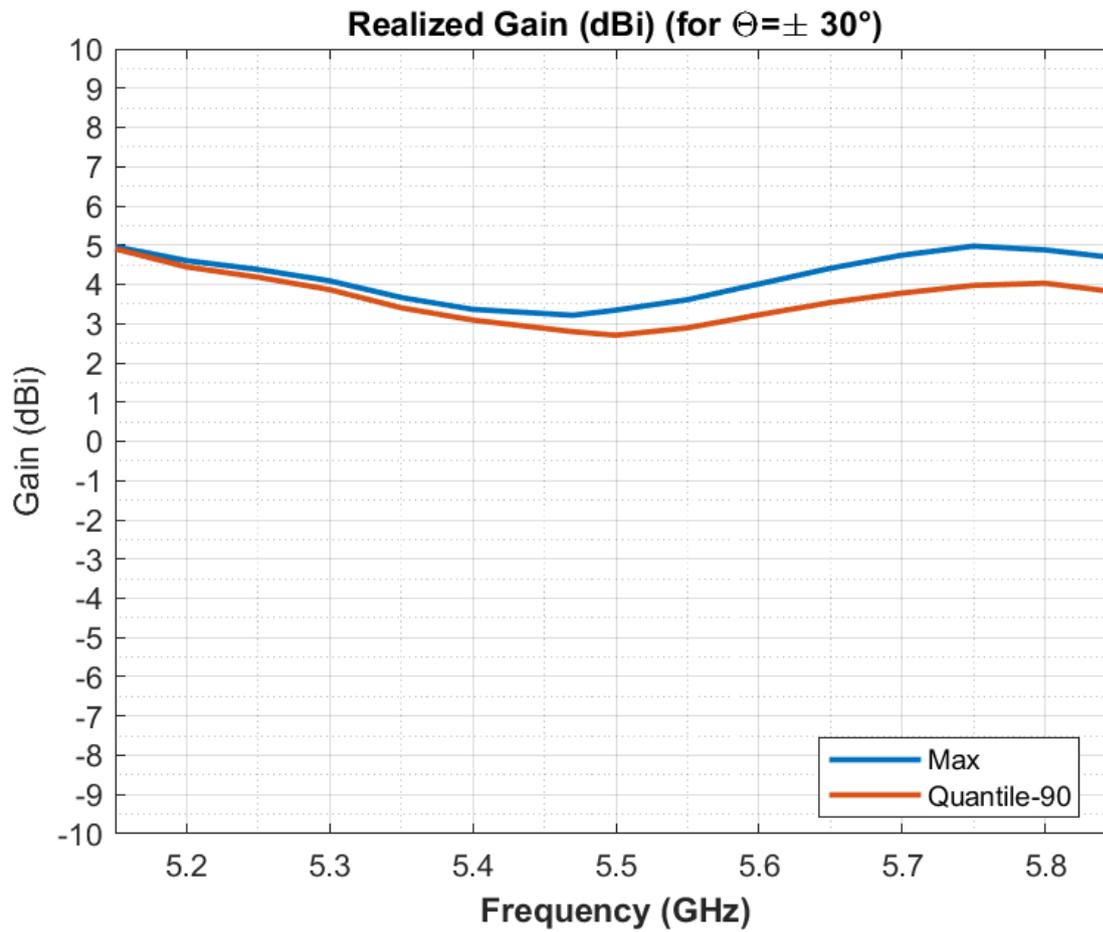
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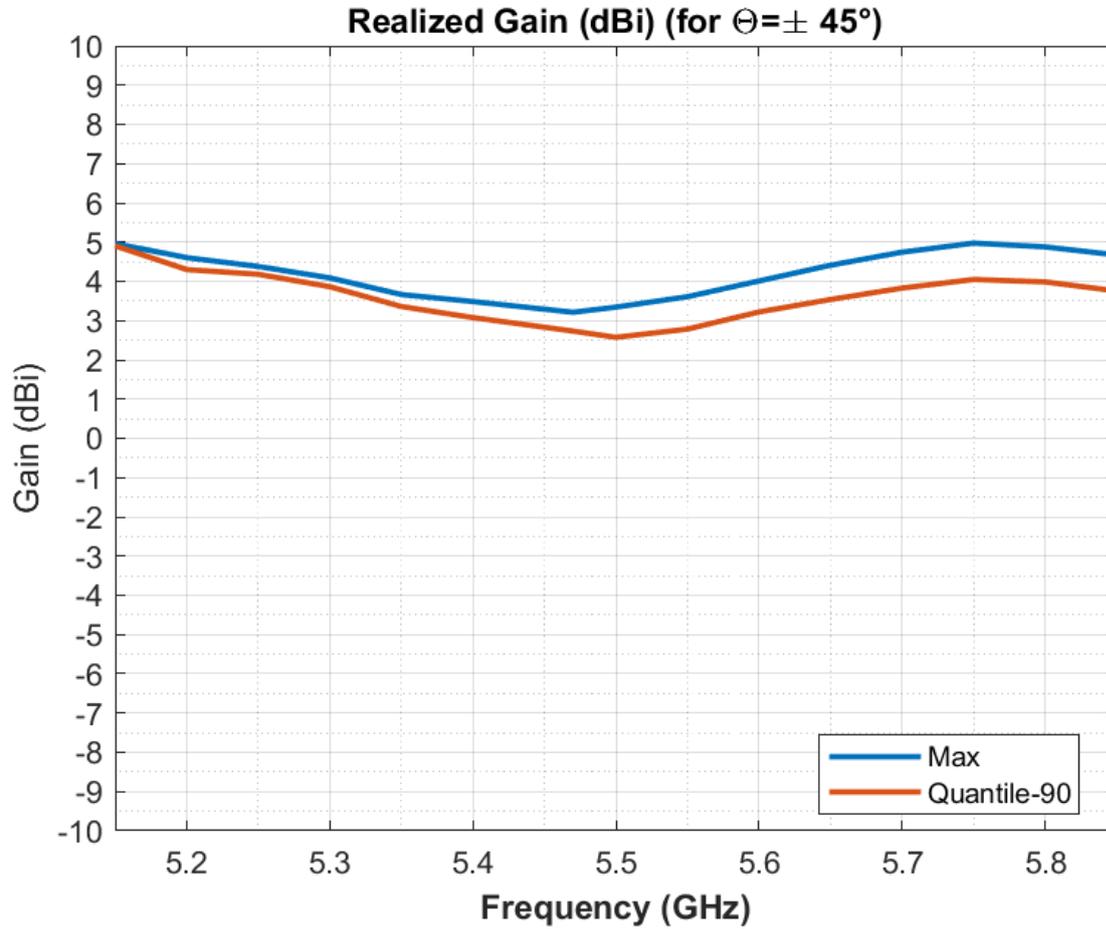
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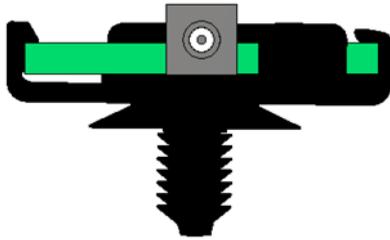
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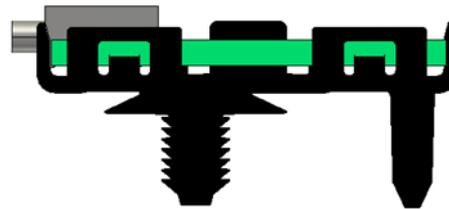
2.4 Radiation Pattern

Measured in free space

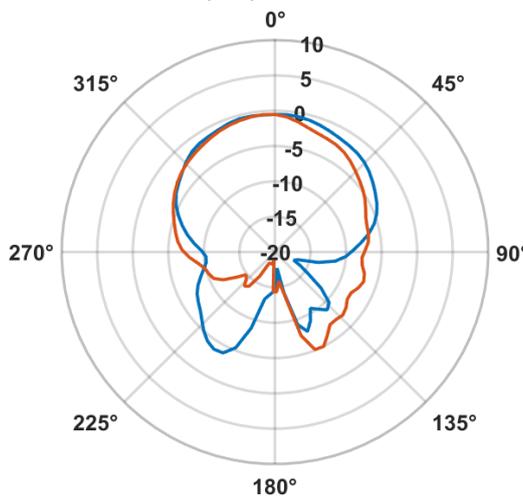
Phi = 90°



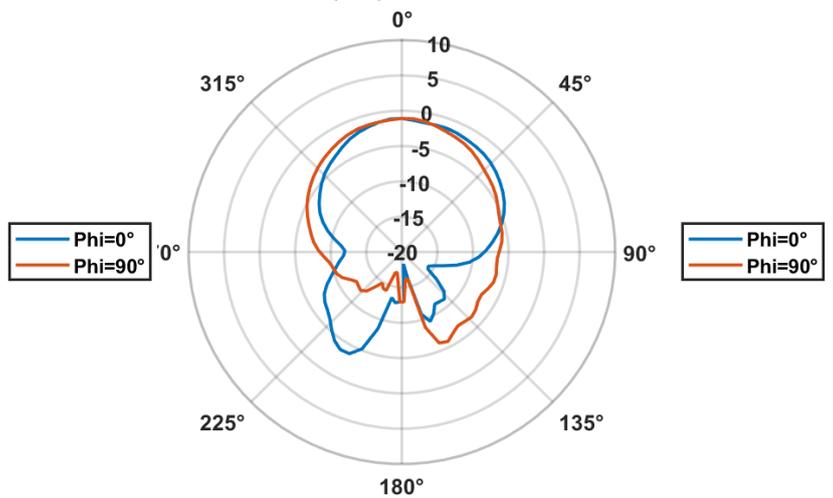
Phi = 0°



Etotal (dBi) at 2.4000 GHz



Etotal (dBi) at 2.4300 GHz

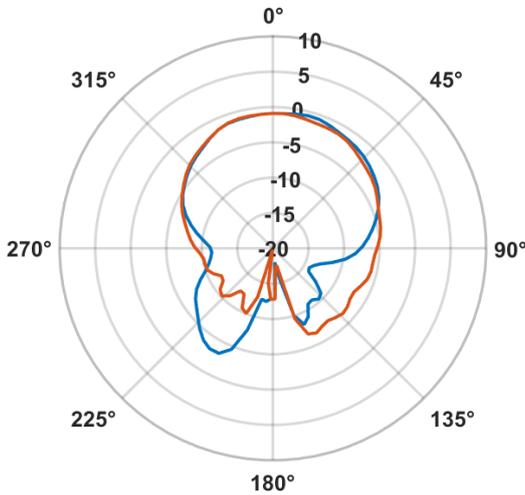




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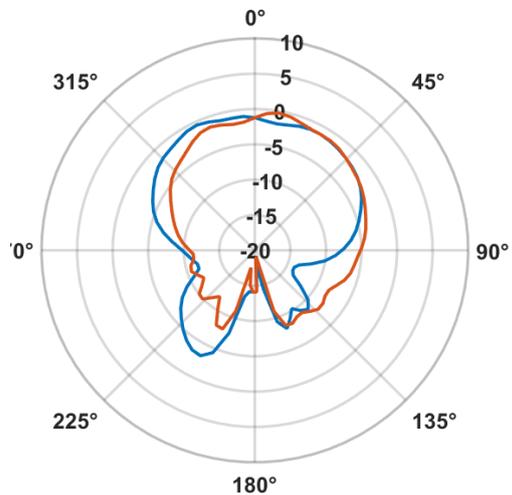
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Etotal (dBi) at 2.4500 GHz



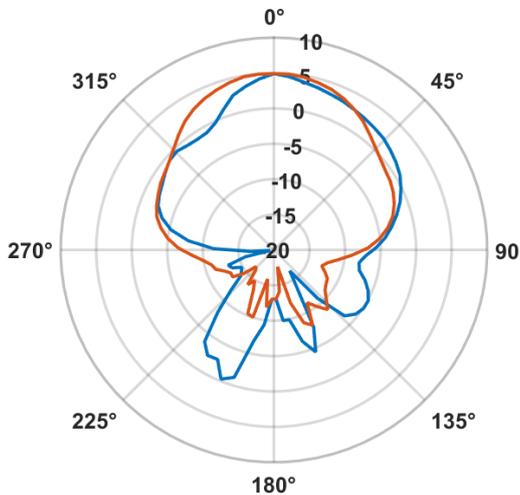
— Phi=0°
— Phi=90°

Etotal (dBi) at 2.4830 GHz



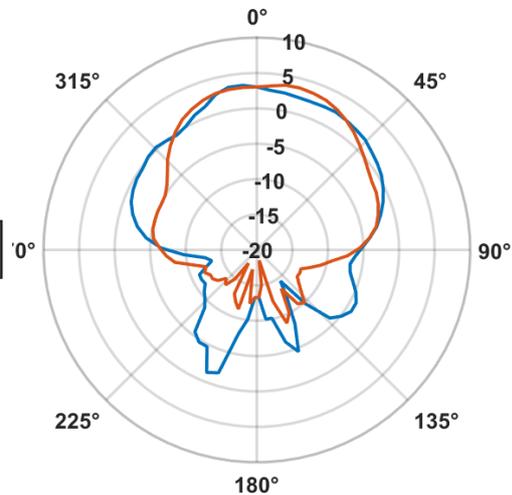
— Phi=0°
— Phi=90°

Etotal (dBi) at 5.1500 GHz



— Phi=0°
— Phi=90°

Etotal (dBi) at 5.3500 GHz



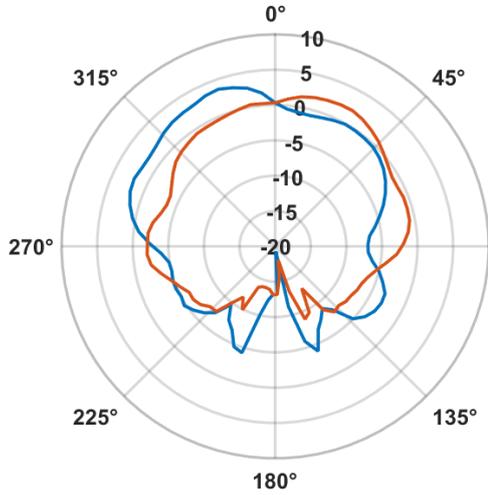
— Phi=0°
— Phi=90°



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Ettotal (dBi) at 5.6000 GHz



Ettotal (dBi) at 5.8500 GHz

