# Regulatory WLAN Antenna Information (Template)

*English Language Required for Intel Regulatory Review / Approval*

**(OEM/ODM or antenna vendor is required to complete this document with platform antenna information.**

**Remove Intel references and make this your own document)**

**Platform information**

| Brand | ODM | RMN | Intel platform (ex: Yes, No or NA) | Platform type (ex: regular NB, convertible PC, AIO…etc) | *SAR minimum separation (mm) |
|---|---|---|---|---|---|
| HP Inc. | Compal | TPN-C165<br>TPN-C166 | Yes | Convertible PC | 2.58mm |

*****Please fill in exact product model name and make sure the model name is visible on product cover or any parts for end users recognize for authority inspection.**

**Antenna information**

| Vendor | Type | Antenna Part number (Main/Tx2) | Antenna Part number (Aux/Tx1) |
|---|---|---|---|
| High-tek | PIFA | 219HCTN12274 | 219HCTN12275 |

**Peak gain w/ cable loss (dBi)***

| | 2.4GHz 2400-2483.5 MHz | 5.2GHz 5150-5250MHz | 5.3GHz 5250-5350MHz | 5.6GHz 5470-5725MHz | 5.8GHz 5725-5850MHz | 5.9GHz 5850-5895MHz | 6.2GHz 5925-6425MHz | 6.5GHz 6425-6525MHz | 6.7GHz 6525-6875MHz | 7.0 GHz 6875-7125MHz |
|---|---|---|---|---|---|---|---|---|---|---|
| Main | 2.59 | 2.46 | 0.8 | 1.25 | 1.03 | 1.03 | 1.08 | 1.89 | 2.19 | 2.81 |
| Aux | 0.99 | 0.5 | 1.17 | 1.19 | 2.59 | 2.59 | 2.98 | 2.32 | 2.76 | 2.76 |

**Module Information**

| Model | Form factor and suffixes |
|---|---|
| RTL8852CE | Realtek Champagne 8852CE Wi-Fi 6E +Bluetooth 5.3 M.2 2230 PCI-e+USB WW WLAN |

# Antenna Information

## Section 1. Antenna Assembly Specifications

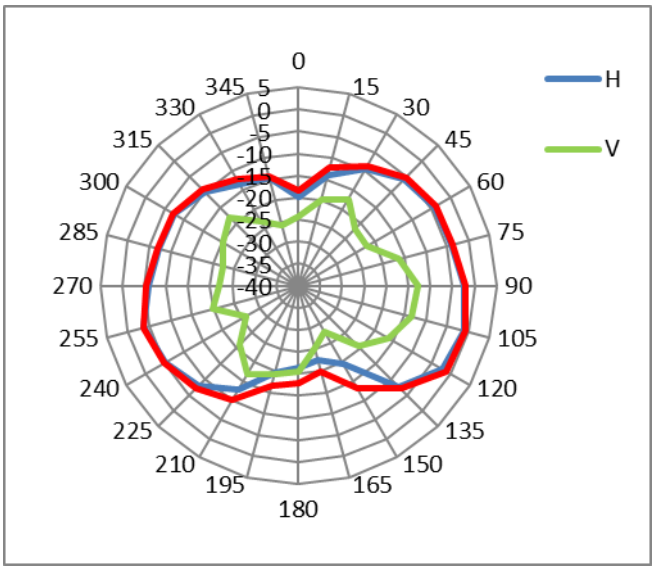
| 1A<br>Antenna Part Number | 1B<br>Manufacturer | 1C<br>Antenna Type | 1D<br>Cable Assembly Part Number and Information | Freq Range<br>MHz | 1E<br>* Peak Gain W/ Cable loss (dBi) | 1F<br>Peak Gain w/o Cable Loss (dBi) | 1G<br>Max VSWR | 1H<br>Cable Loss (dB) |
|---|---|---|---|---|---|---|---|---|
| P/N:<br>219HCTN12274<br>Main<br>Antenna<br>(TX2) | High-Tek Electronics Co., Ltd | PIFA | Connector: CM<br>958-C437-CM-B-YHU-AO<br>50 Ohm Coaxial Cable<br>Length: 485 mm<br>Diameter: 1.37 mm | 2400-2495 | **2.59** | 3.62 | 3 | 1.03 |
| | | | | 5150-5250 | **2.46** | 3.96 | 3 | 1.5 |
| | | | | 5250-5350 | **0.8** | 2.3 | 3 | 1.5 |
| | | | | 5470-5725 | **1.25** | 2.8 | 3 | 1.55 |
| | | | | 5725-5850 | **1.03** | 2.65 | 3 | 1.62 |
| | | | | 5850-5895 | **1.03** | 2.65 | 3 | 1.62 |
| | | | | 5925-6425 | **1.08** | 2.74 | 3 | 1.66 |
| | | | | 6425-6525 | **1.89** | 3.63 | 3 | 1.74 |
| | | | | 6525-6875 | **2.19** | 3.95 | 3 | 1.76 |
| | | | | 6875-7125 | **2.81** | 4.74 | 3 | 1.93 |
| P/N:<br>219HCTN12275<br>Aux<br>Antenna<br>(TX1) | High-Tek Electronics Co., Ltd | PIFA | Connector: CM<br>958-C437-CM-B-YHU-AO<br>50 Ohm Coaxial Cable<br>Length: 585 mm<br>Diameter: 1.37 mm | 2400-2495 | **0.99** | 2.22 | 3 | 1.23 |
| | | | | 5150-5250 | **0.5** | 2.29 | 3 | 1.79 |
| | | | | 5250-5350 | **1.17** | 2.97 | 3 | 1.8 |
| | | | | 5470-5725 | **1.19** | 3.04 | 3 | 1.85 |
| | | | | 5725-5850 | **2.59** | 4.48 | 3 | 1.89 |
| | | | | 5850-5895 | **2.59** | 4.49 | 3 | 1.9 |
| | | | | 5925-6425 | **2.98** | 4.92 | 3 | 1.94 |
| | | | | 6425-6525 | **2.32** | 4.34 | 3 | 2.02 |
| | | | | 6525-6875 | **2.76** | 4.82 | 3 | 2.06 |
| | | | | 6875-7125 | **2.76** | 4.99 | 3 | 2.23 |

# Section 3. Radiation characteristics of antenna loaded in Host Platform

## Main Antenna

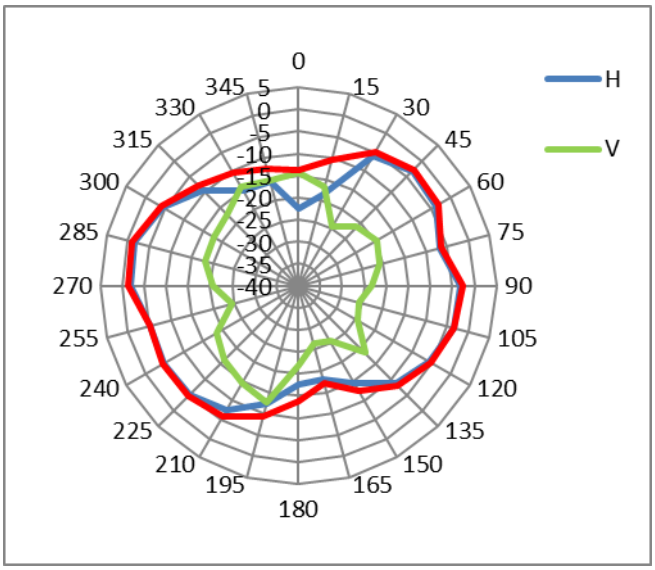
### Max Antenna 2D Radiation Pattern 2400 – 2495 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **2400-2495** | 2.59 |



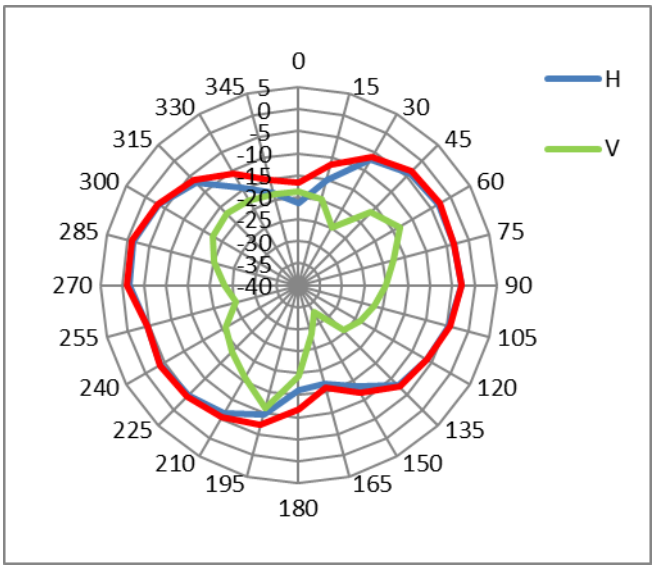

### Max Antenna 2D Radiation Pattern 5150-5250 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **5150-5250** | 2.46 |



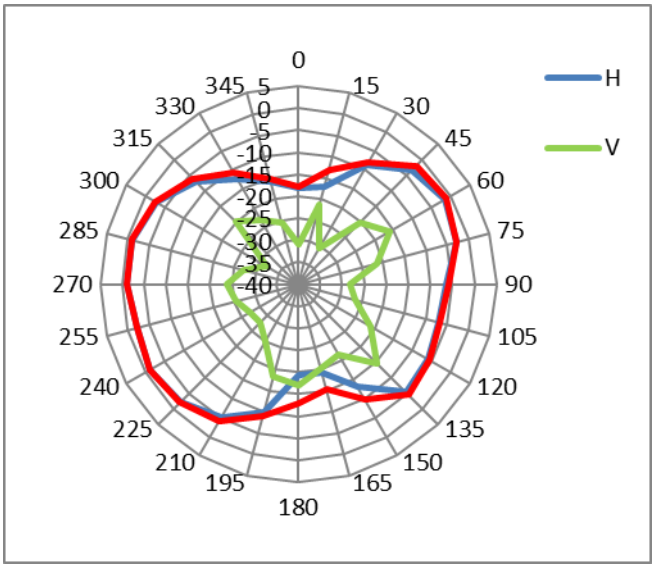
## Max Antenna 2D Radiation Pattern 5250-5350 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **5250-5350** | 0.8 |



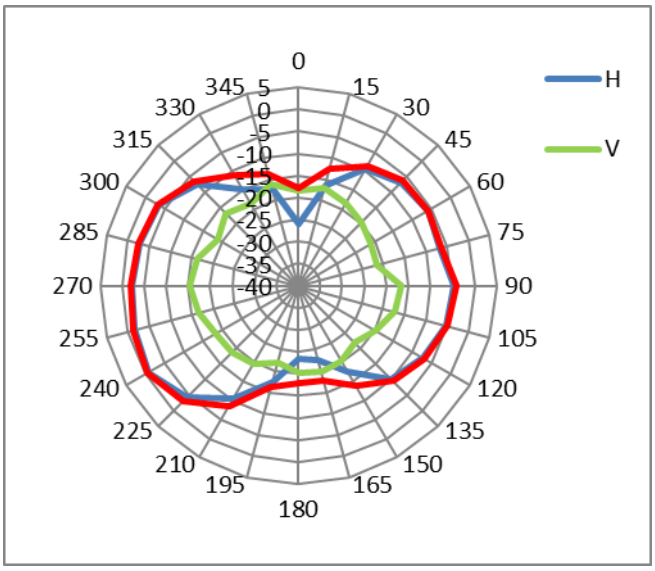

## Max Antenna 2D Radiation Pattern 5470-5725 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **5470-5725** | 1.25 |



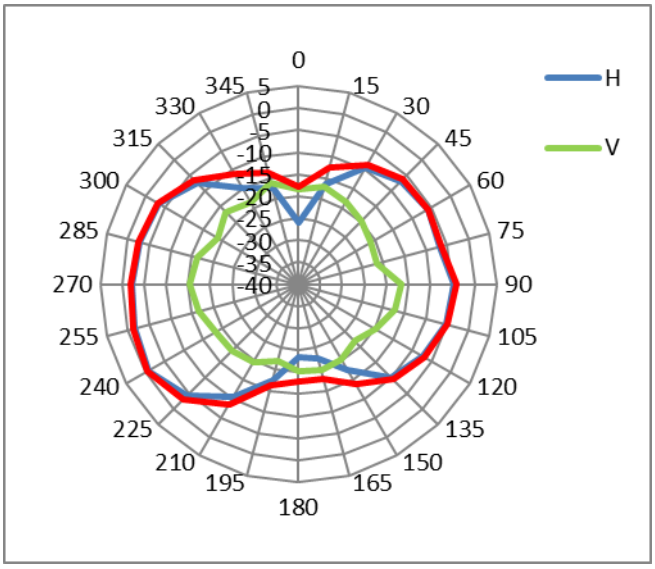
## Max Antenna 2D Radiation Pattern 5725-5850 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **5725-5850** | 1.03 |



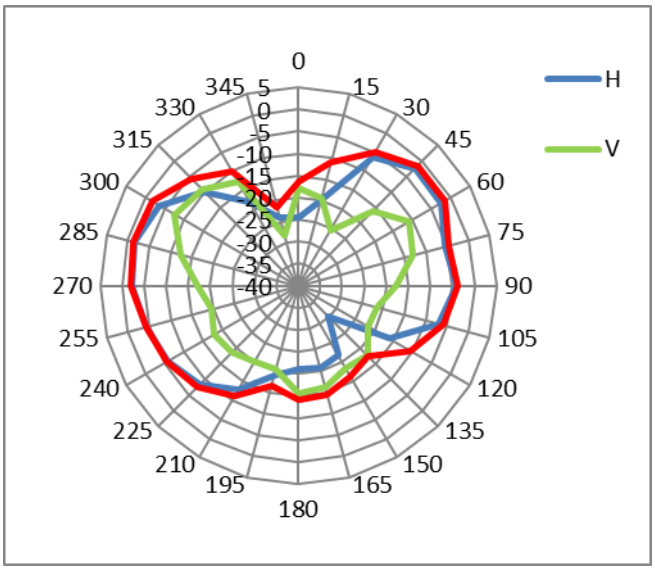

## Max Antenna 2D Radiation Pattern 5850-5895 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **5850-5895** | 1.03 |



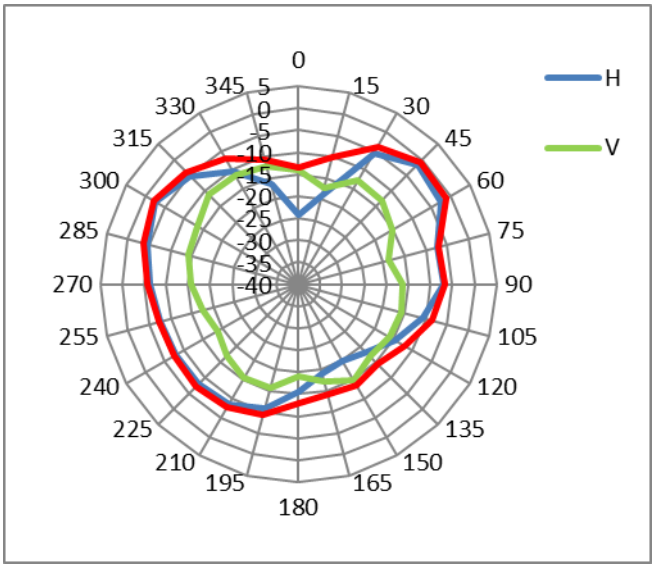
## Max Antenna 2D Radiation Pattern 5925-6425 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **5925-6425** | 1.08 |



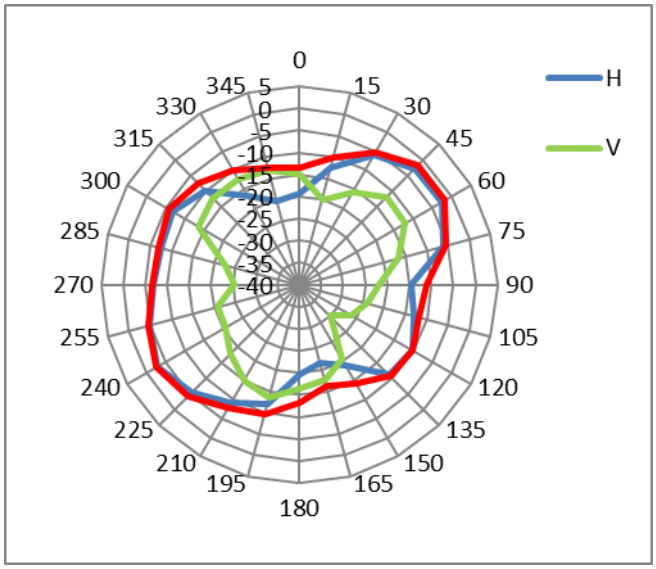

## Max Antenna 2D Radiation Pattern 6425-6525 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **6425-6525** | 1.89 |



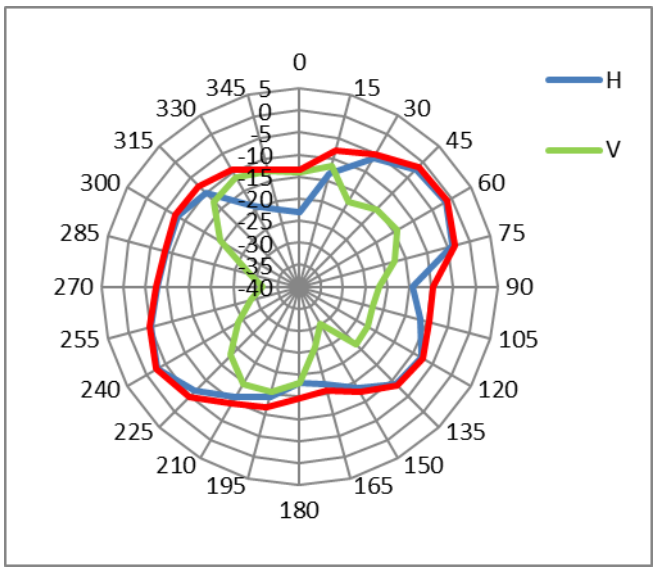
## Max Antenna 2D Radiation Pattern 6525-6875 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **6525-6875** | 2.19 |




## Max Antenna 2D Radiation Pattern 6875-7125 MHz

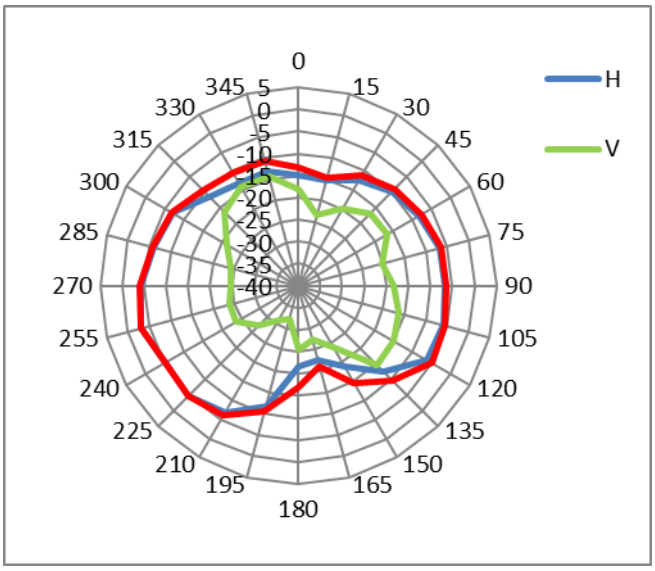
| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **6875-7125** | 2.81 |



# Auxiliary Antenna

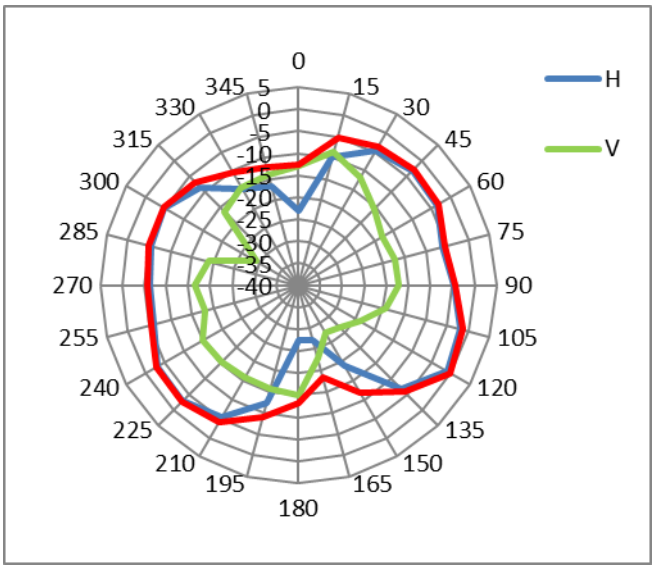
## Max Antenna 2D Radiation Pattern 2400 – 2483.5 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **2400-2483.5** | 0.99 |



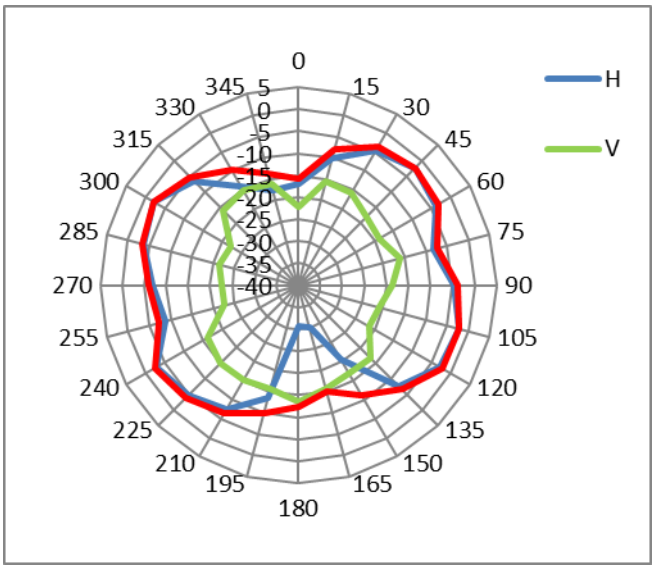

## Max Antenna 2D Radiation Pattern 5150-5250 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **5150-5250** | 0.5 |



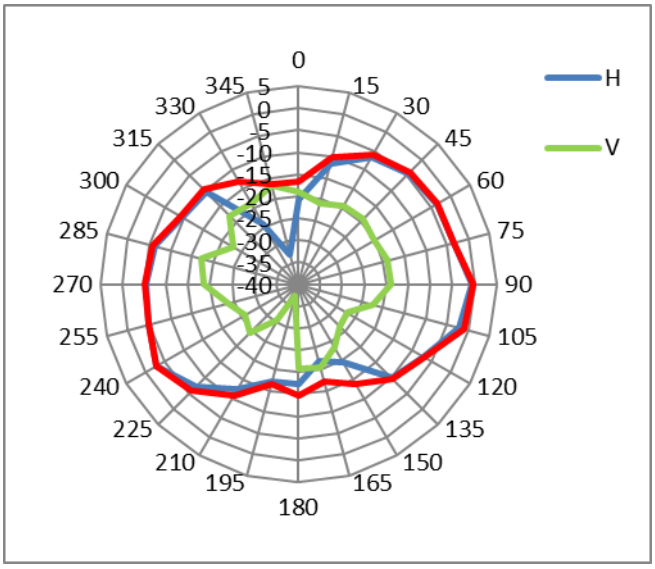
## Max Antenna 2D Radiation Pattern 5250-5350 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **5250-5350** | 1.17 |



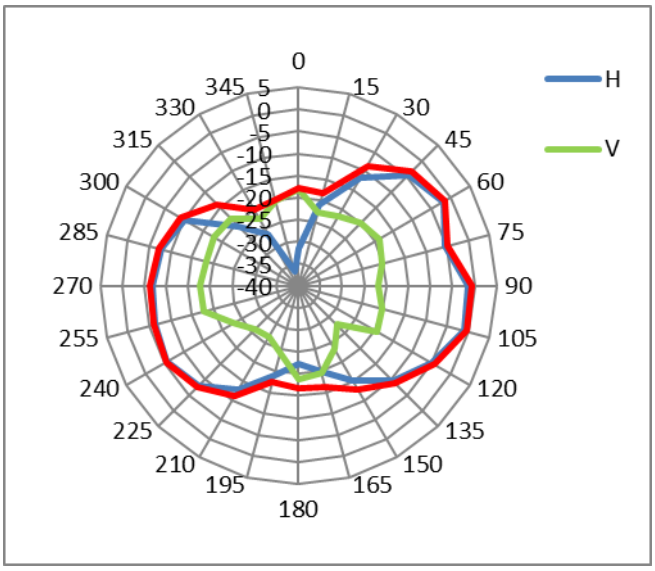

## Max Antenna 2D Radiation Pattern 5470-5725 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **5470-5725** | 1.19 |



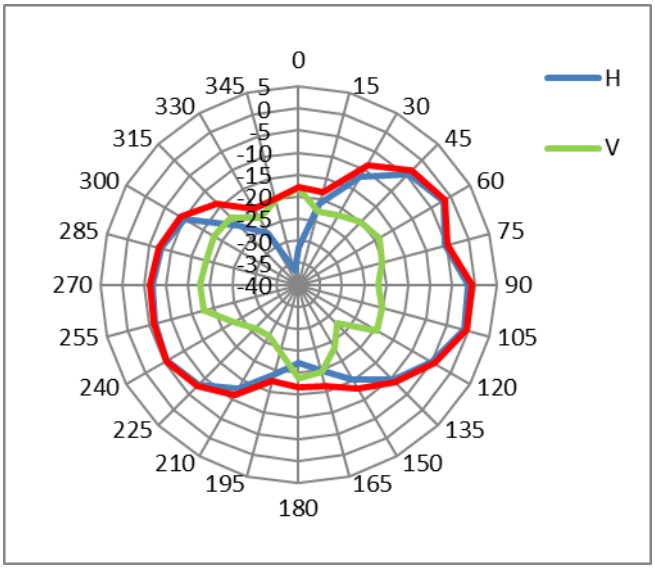
## Max Antenna 2D Radiation Pattern 5725-5850 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **5725-5850** | 2.59 |



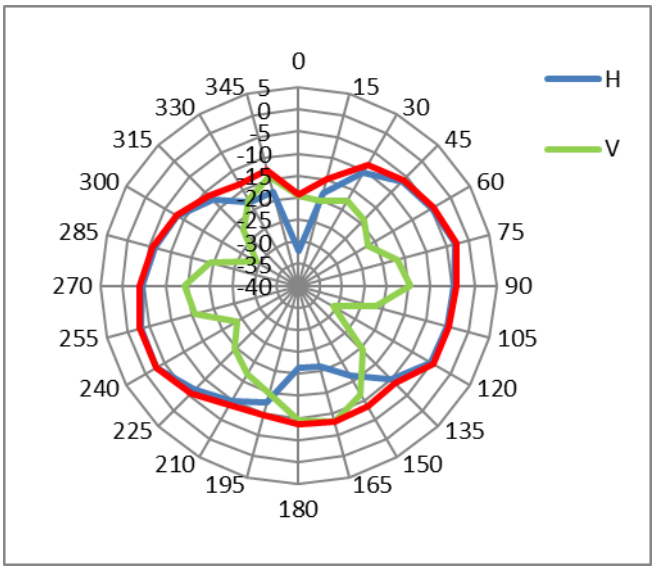

## Max Antenna 2D Radiation Pattern 5850-5895 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **5850-5895** | 2.59 |



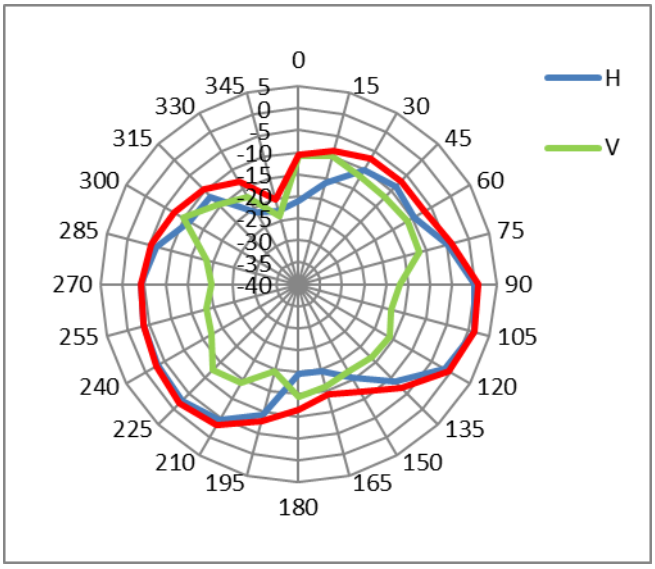
## Max Antenna 2D Radiation Pattern 5925-6425 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **5925-6425** | 2.98 |



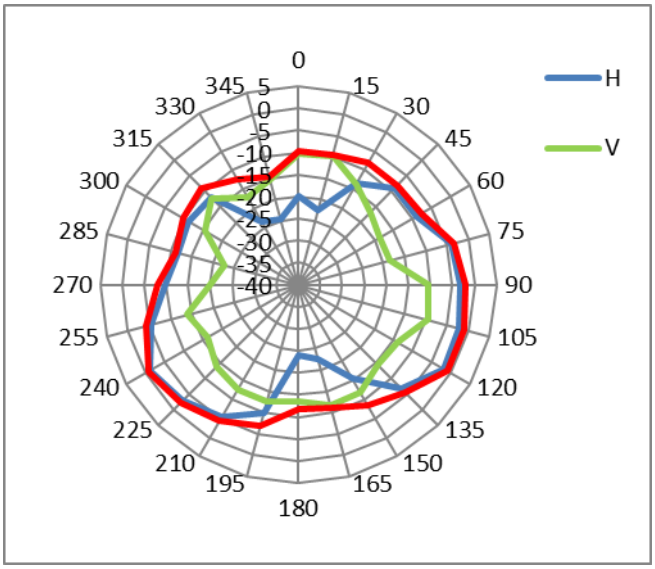

## Max Antenna 2D Radiation Pattern 6425-6525 MHz

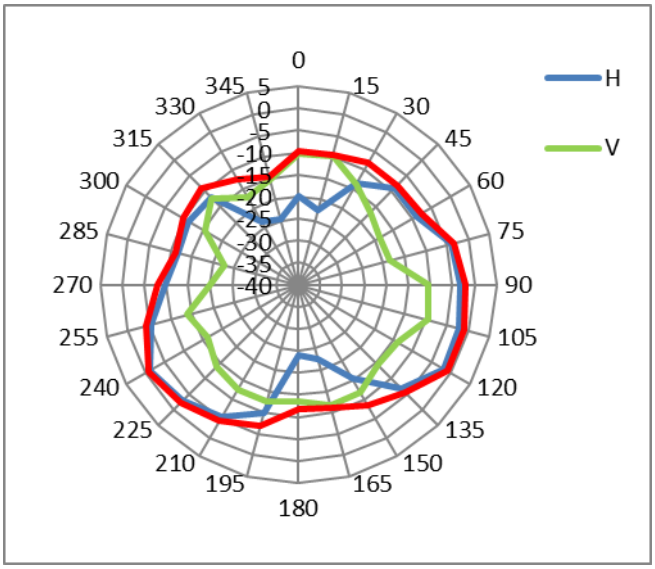
| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **6425-6525** | 2.32 |



## Max Antenna 2D Radiation Pattern 6525-6875 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **6525-6875** | 2.76 |




## Max Antenna 2D Radiation Pattern 6875-7125 MHz

| Frequency (MHz) | Horizontal+ Vertical (dBi) peak (dBi) |
|---|---|
| **6875-7125** | 2.76 |