

# Regulatory WLAN Antenna Information (NB mode)

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-C157 TPN-C158	Yes No	Convertible PC	1.95					
****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 Electronics Co., Ltd		PIFA	219HCTN12198				219HCTN12197			
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	1.03	1.77	2.52	2.62	2.95	2.55	2.59	0.05	2.62	0.31
Aux	2.37	0.88	2.33	2.94	2.92	2.92	2.55	2.54	2.54	0.51
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 Antenna Part Number	1B Manufacturer	1C Antenna Type	1D Cable Assembly Part Number and Information	Freq Range MHz	1E * Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G Max VSWR	1H Cable Loss (dB)
(P/N: 219HCTN12198 Tx2/ Rx2 Antenna	High-Tek Electronics Co., Ltd	PIFA	Connector: CM 958-C437-CM-B- YHU-AO 50 Ohm Coaxial Cable Length: 535 mm Diameter: 1.37 mm	2400-2495	1.03	2.34	3.00	1.31
				5150-5250	1.77	3.68	3.00	1.91
				5250-5350	2.52	4.43	3.00	1.91
				5470-5725	2.62	4.62	3.00	2.00
				5725-5850	2.95	5.11	3.00	2.16
				5850-5925	2.55	4.71	3.00	2.16
				5925-6425	2.59	4.82	3.00	2.23
				6425-6525	0.05	2.31	3.00	2.26
				6525-6875	2.62	4.92	3.00	2.30
6875-7125	0.31	2.67	3.00	2.36				
(P/N: 219HCTN12197 Tx1/ Rx1 Antenna	High-Tek Electronics Co., Ltd	PIFA	Connector: CM 958-C437-CM-B- YHU-AO 50 Ohm Coaxial Cable Length: 430 mm Diameter: 1.37 mm	2400-2495	2.37	3.42	3.00	1.05
				5150-5250	0.88	2.41	3.00	1.53
				5250-5350	2.33	3.87	3.00	1.54
				5470-5725	2.94	4.55	3.00	1.61
				5725-5850	2.92	4.66	3.00	1.74
				5850-5925	2.92	4.66	3.00	1.74
				5925-6425	2.55	4.35	3.00	1.80
				6425-6525	2.54	4.36	3.00	1.82
				6525-6875	2.54	4.39	3.00	1.85
6875-7125	0.51	2.41	3.00	1.90				

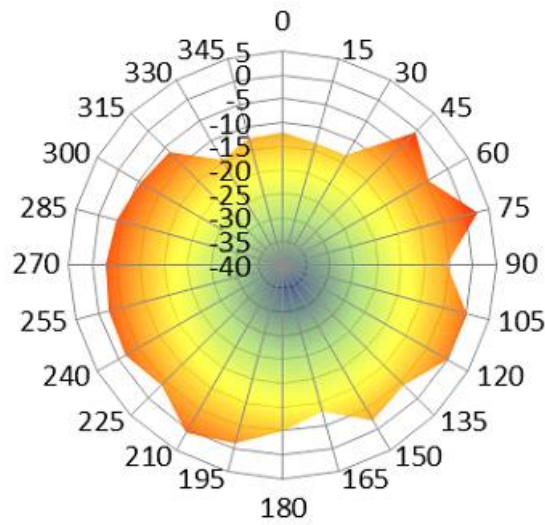
- Antenna Peak Gain required being test in system basis.
- 1E frame contend absolutely peak antenna gain include H/V

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

### Main Antenna

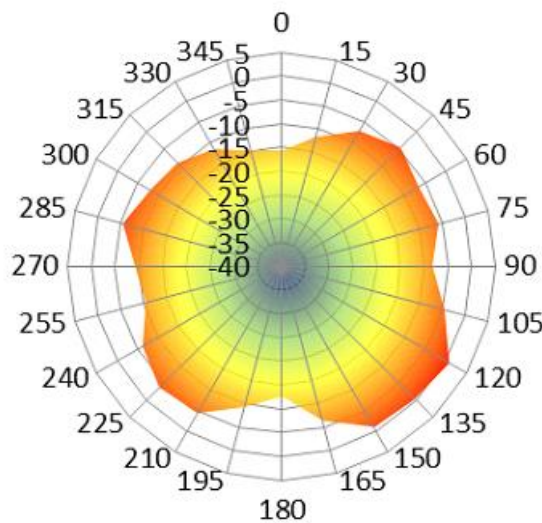
#### Max Antenna 2D Radiation Pattern 2400 – 2495 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
2400-2495	2.37



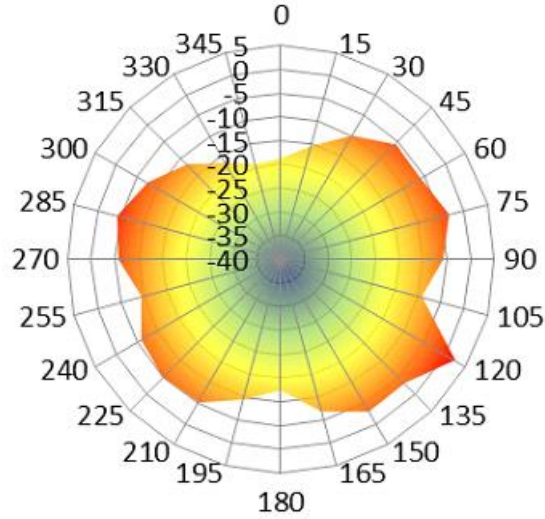
#### Max Antenna 2D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5150-5250	0.88



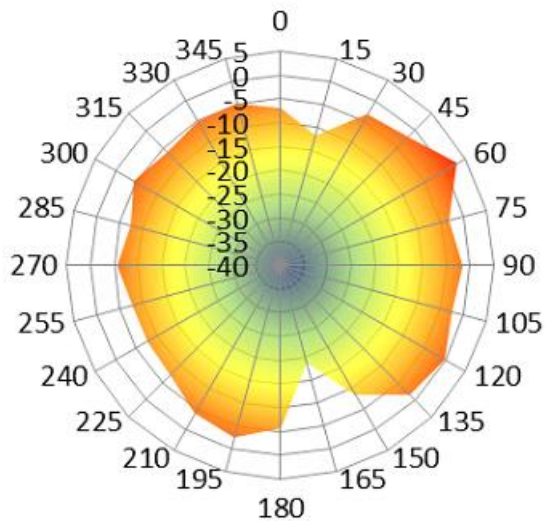
### Max Antenna 2D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5250-5350	2.33



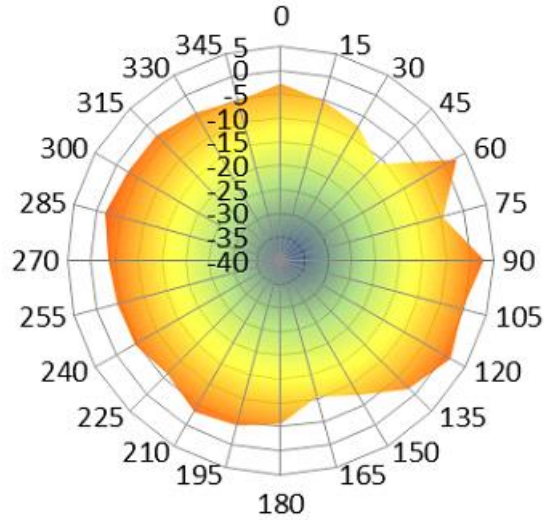
### Max Antenna 2D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5470-5725	2.94



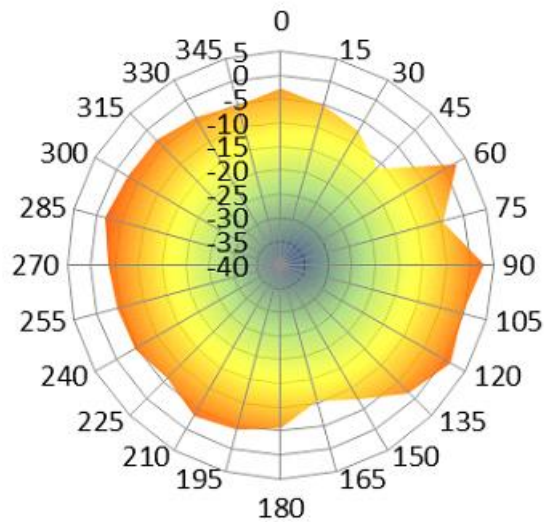
### Max Antenna 2D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5725-5850	2.92



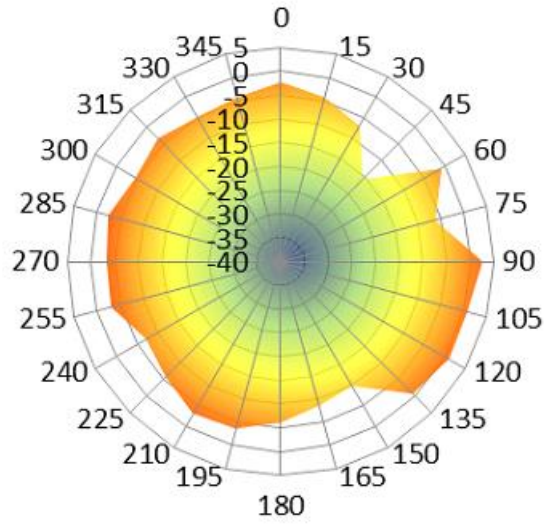
### Max Antenna 2D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5850-5895	2.92



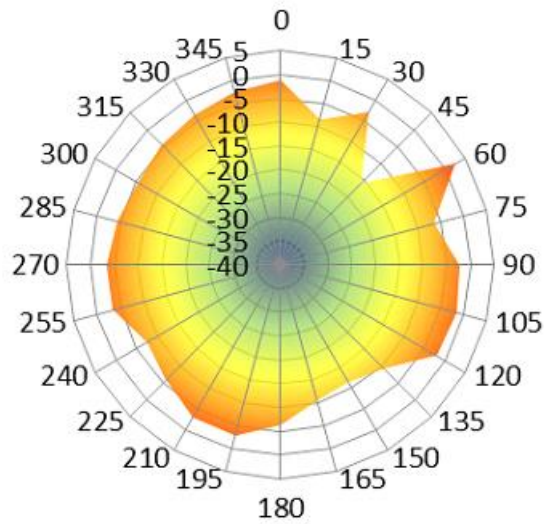
### Max Antenna 2D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5925-6425	2.55



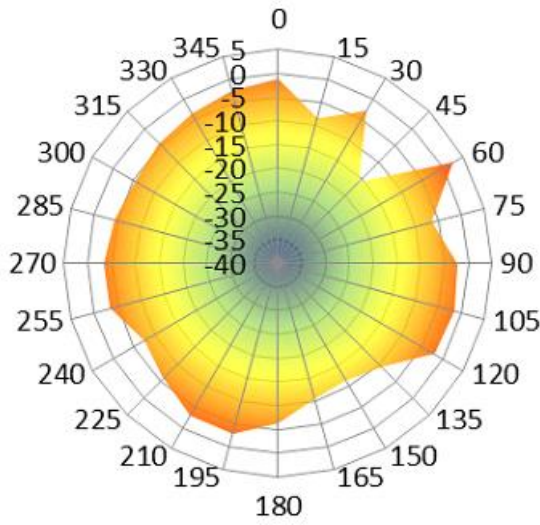
### Max Antenna 2D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6425-6525	2.54



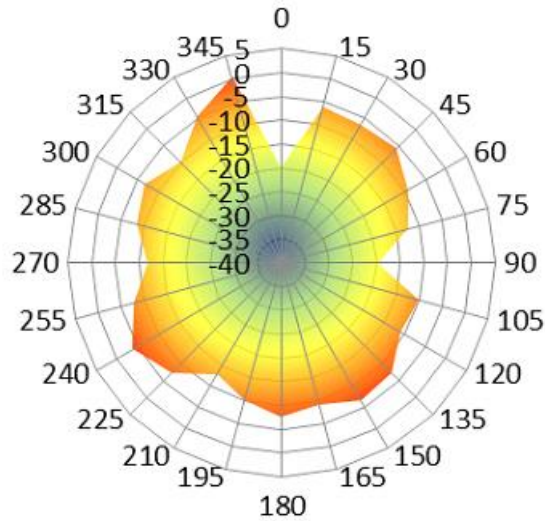
### Max Antenna 2D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6525-6875	2.54



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

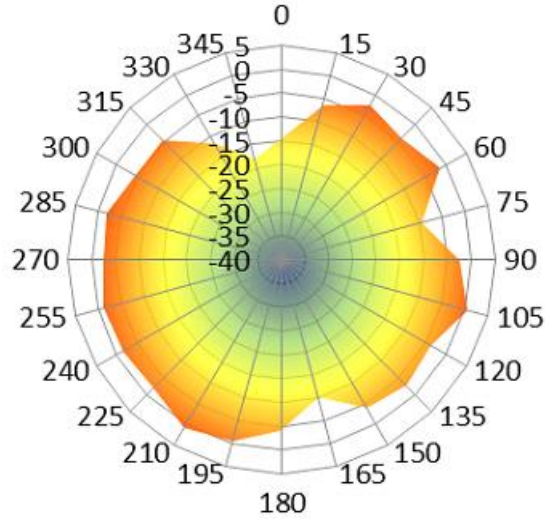
Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6875-7125	0.51



## Auxiliary Antenna

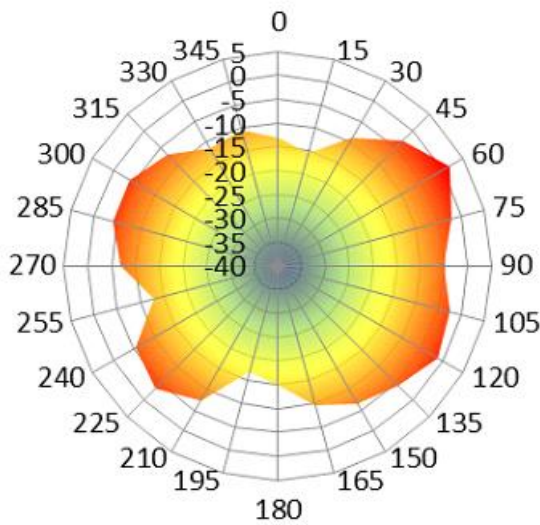
### Max Antenna 2D Radiation Pattern 2400 – 2483.5 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
2400-2483.5	1.03



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

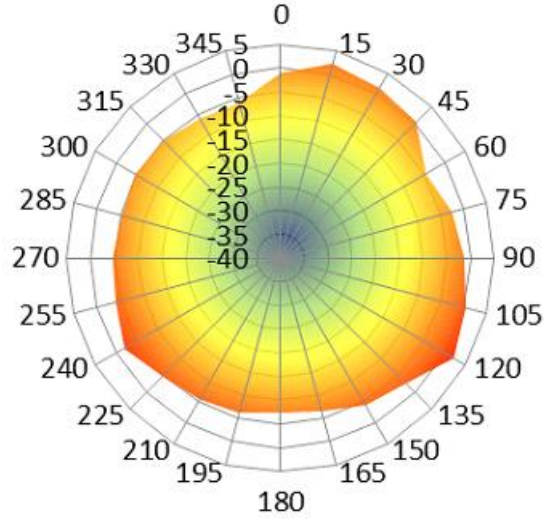
Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5150-5250	1.77





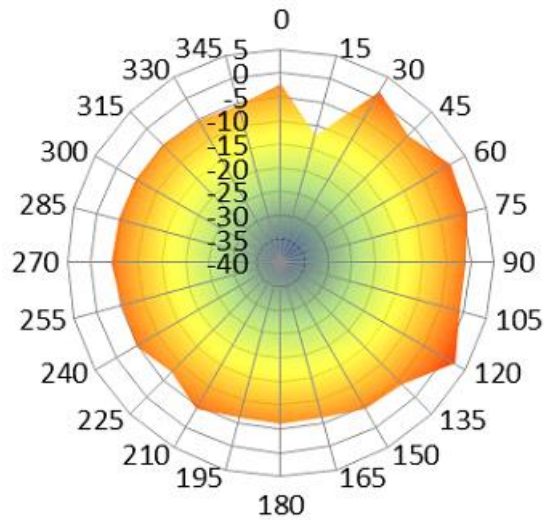
### Max Antenna 2D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5250-5350	2.52



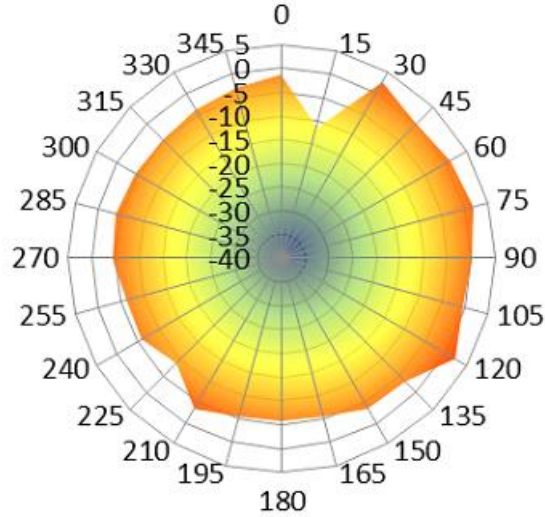
### Max Antenna 2D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5470-5725	2.62



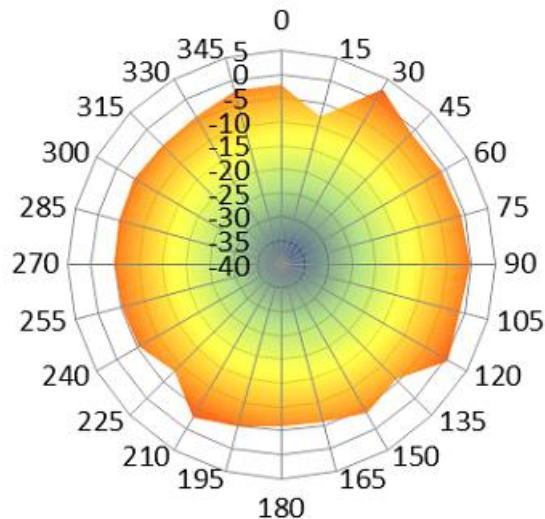
### Max Antenna 2D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5725-5850	2.95



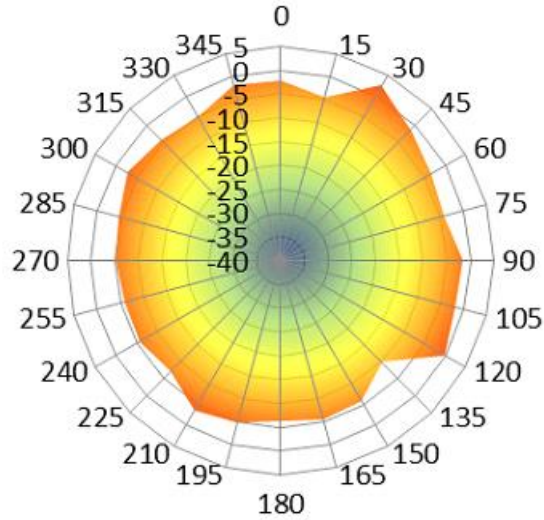
### Max Antenna 2D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5850-5895	2.55



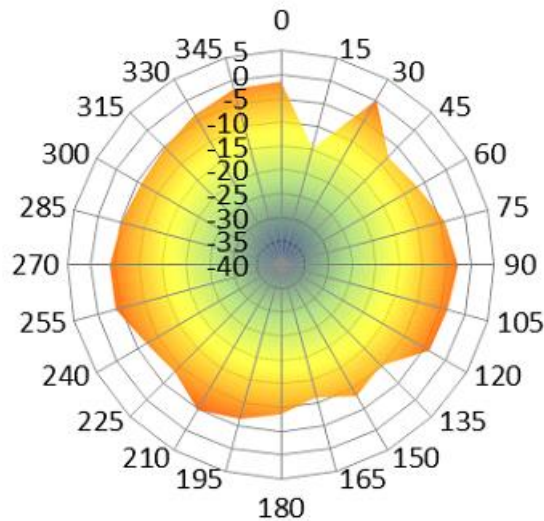
### Max Antenna 2D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5925-6425	2.59



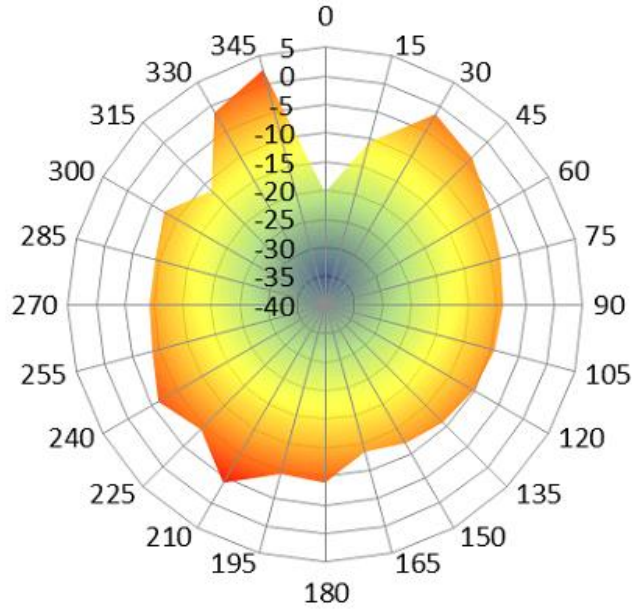
### Max Antenna 2D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6425-6525	0.05



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

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6525-6875	2.62



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

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6875-7125	0.31

