

# Regulatory WLAN Antenna Information

## (WLAN SKU\_TB 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.	Inventec		HSN-I61C	Yes			Convertible PC		1.9		
*****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)			
HONG-BO			PIFA	6036B0346501 (00-2602754650)				6036B0346801 (00-2602754550)			
Peak gain w/ cable loss (dBi)*											
	2.4GHz 2400-2495 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	1.16	0.66	2.99	2.52	2.11	2.02	1.71	2	2	-1.52	
Aux	1.09	2.05	2.98	2.71	2.76	1.11	1.27	1.65	1.65	-1.05	
Module Information											
Model			Form factor and suffixes								
AX211NGW			Intel Garfield Peak 2 AX211 Wi-Fi 6e +Bluetooth 5.2 M.2 2230 160MHz CNVi WW WLAN								
BE200.NGW			Intel Gale Peak 2 BE200 Wi-Fi 7 +BT 5.4 M.2 2230 320MHz PCIe WW WLAN								
Antenna vendor connect person											
Antenna Vendor			HONGBO Wireless Communication Technology Co., LTD								
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Tel/Mobile			02-2792-6009 EXT: 683								
Web address			<a href="https://www.hong-lin.com.cn/index.php">https://www.hong-lin.com.cn/index.php</a>								

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1. **Applicable test methods**

ETS-Lindgren AMS-8500 system is 3D fully anechoic chamber, it is applied to the “Conical Cut test method”, the detail description is described as below.

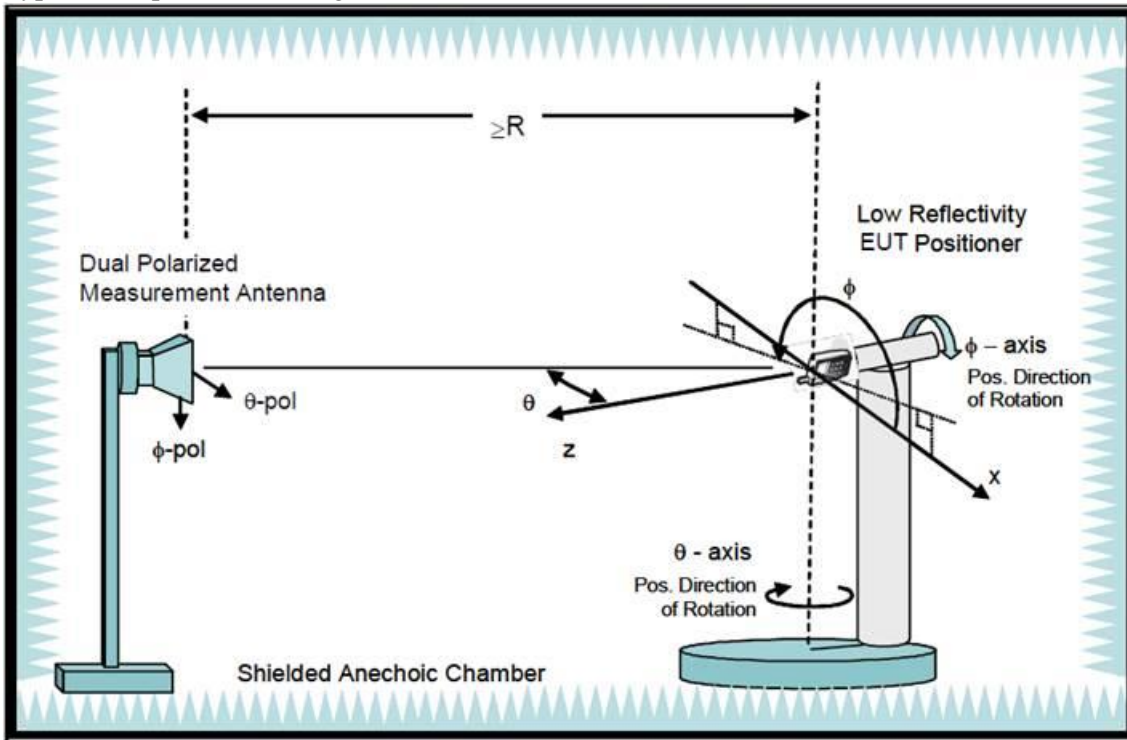
The Conical Cut method requires the ability of the Measurement Antenna to be physically rotated in the theta plane (overhead) of the EUT for implementations using a single Measurement Antenna, Eleven conical cuts are required to capture data at every 15 degrees from the EUT, with the top (0 degrees) and bottom (180 degrees) cuts not being measured. Typically, the EUT will remain affixed to a turntable during the entire measurement process. The Measurement Antenna will be positioned at a starting theta angle. The EUT will then be rotated around the full 360 degrees of phi rotation. The Measurement Antenna will then be positioned at the next theta angle, and the process repeated.

		$\theta$ -Axis	$\Phi$ -Axis
Passive	Step size	15°~165° step: 15°	0°~345° step: 15°
	N / M (Points)	12	24

2. **Test & System Description**

a. Test setup

Typical Setup for ETS-Lindgren AMS-8500:



## Antenna Information

### Section 1. Antenna Assembly Specifications

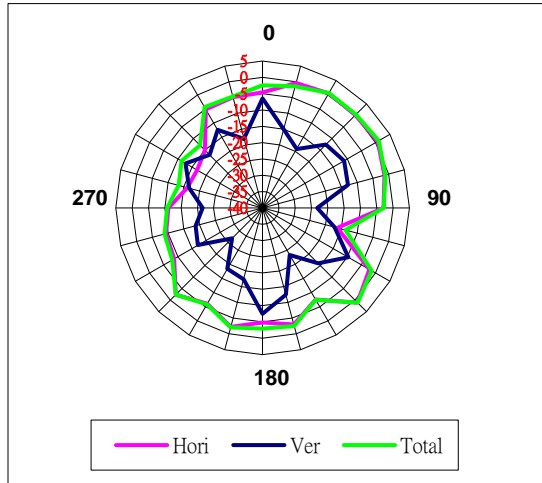
1A Antenna Part Number	1B Manufacturer	1C Antenna Type	1D Cable Assembly Part Number and Information	Freq Range MHz	1E * Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G Max VSWR	1H Cable Loss (dB)
Main Antenna P/N:6036B0346501 (00-2602754650) <b>(TX2)</b>	HONG-BO	PIFA	50 ohm Coaxial length: 540 mm diameter: 1.13mm (P/N:20565-001R-13)	2400-2495	1.16	2.54	3	1.38
				5150-5250	0.66	2.71	3	2.05
				5250-5350	2.99	5.05	3	2.06
				5470-5725	2.52	4.66	3	2.14
				5725-5850	2.11	4.28	3	2.17
				5850-5895	2.02	4.2	3	2.18
				5925-6425	1.71	3.98	3	2.27
				6425-6525	2	4.28	3	2.28
				6525-6875	2	4.36	3	2.36
6875-7125	-1.52	0.87	3	2.39				
Aux Antenna P/N:6036B0346801 (00-2602754550) <b>(TX1)</b>	HONG-BO	PIFA	50 ohm Coaxial length: 408 mm diameter: 1.13mm (P/N:20565-001R-13)	2400-2495	1.09	2.13	3	1.04
				5150-5250	2.05	3.6	3	1.55
				5250-5350	2.98	4.53	3	1.55
				5470-5725	2.71	4.33	3	1.62
				5725-5850	2.76	4.4	3	1.64
				5850-5895	1.11	2.76	3	1.65
				5925-6425	1.27	2.99	3	1.72
				6425-6525	1.65	3.37	3	1.72
				6525-6875	1.65	3.43	3	1.78
6875-7125	-1.05	0.76	3	1.81				

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

### Main Antenna

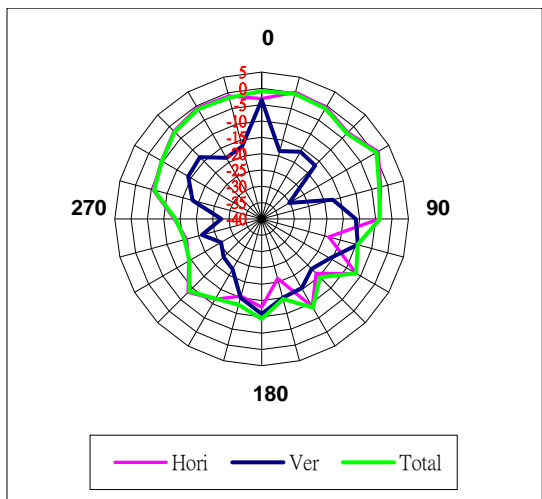
#### Max Antenna 2D Radiation Pattern 2400 – 2495 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
2400-2495	1.16



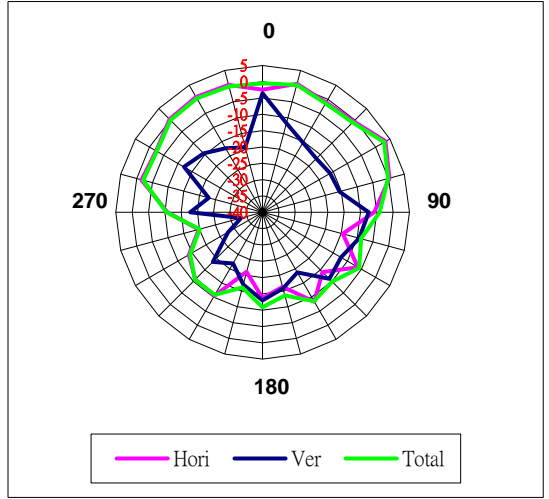
#### Max Antenna 2D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5150-5250	0.66



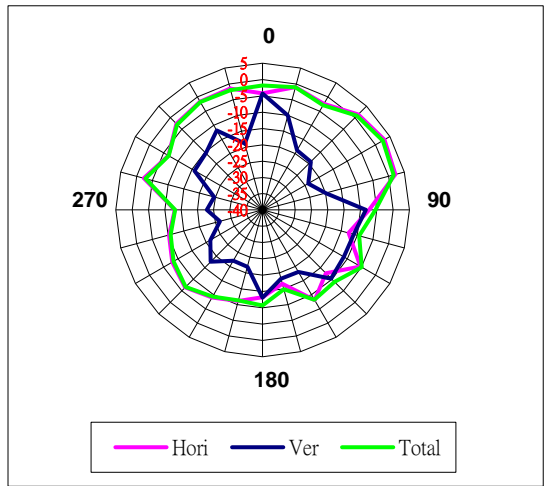
### Max Antenna 2D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5250-5350	2.99



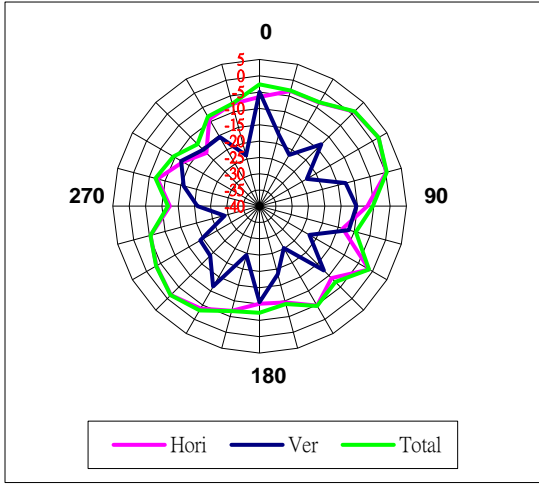
### Max Antenna 2D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5470-5725	2.52



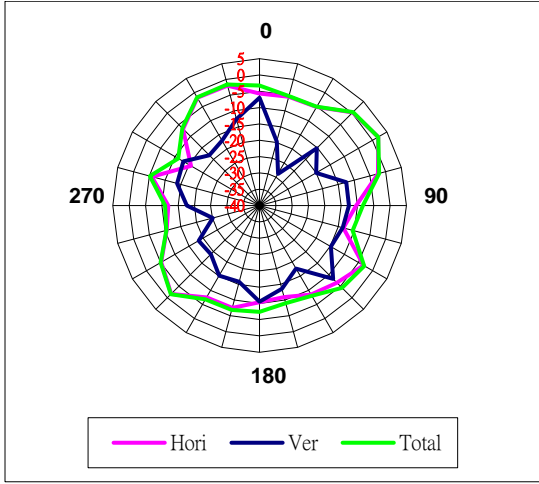
### Max Antenna 2D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5725-5850	2.11



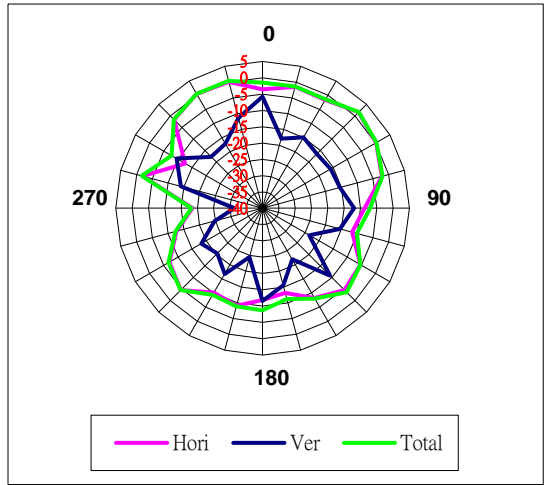
### Max Antenna 2D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5850-5895	2.02



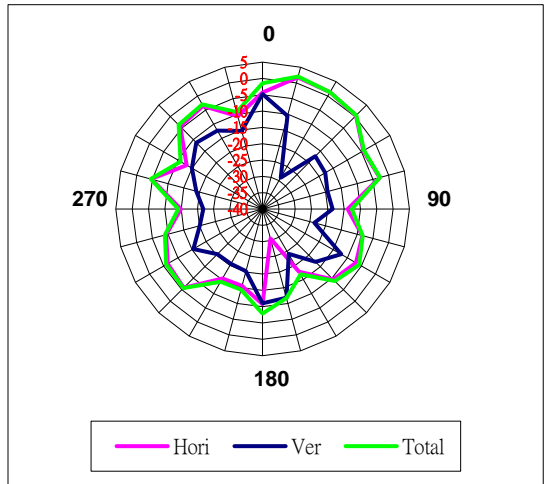
### Max Antenna 2D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5925-6425	1.71



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

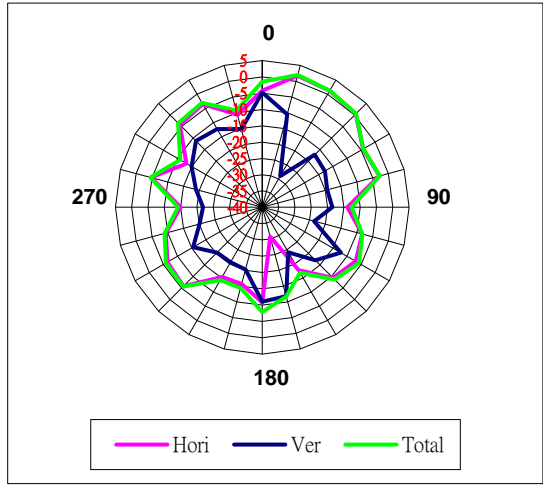
Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6425-6525	2.0





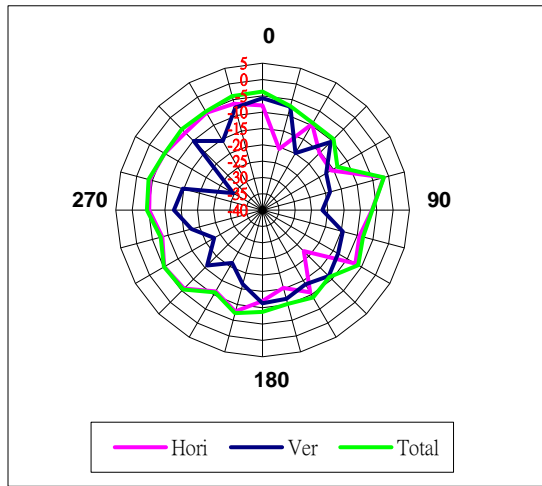
### Max Antenna 2D Radiation Pattern 6525-6875 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6525-6875	2.0



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

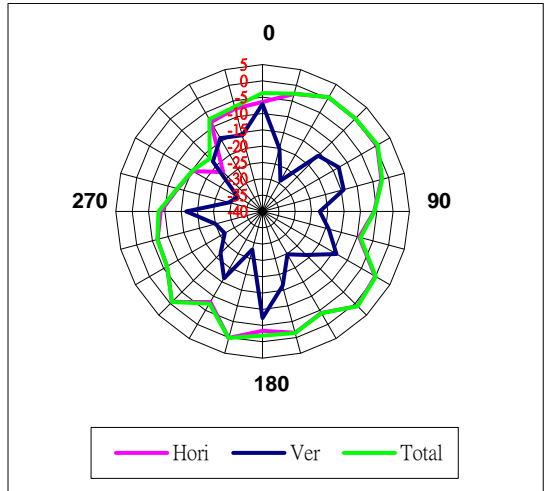
Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6875-7125	-1.52



## Auxiliary Antenna

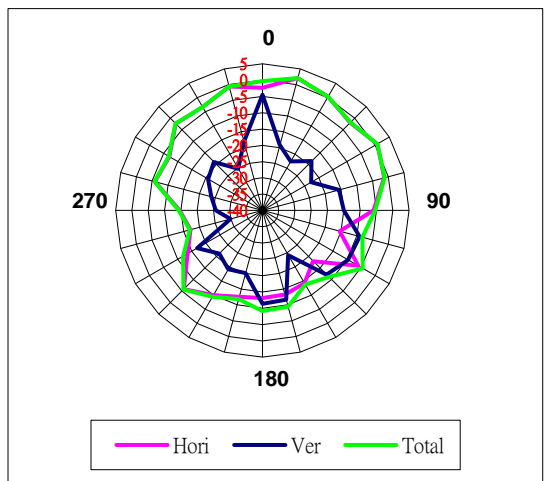
### Max Antenna 2D Radiation Pattern 2400 – 2495 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
2400-2495	1.09



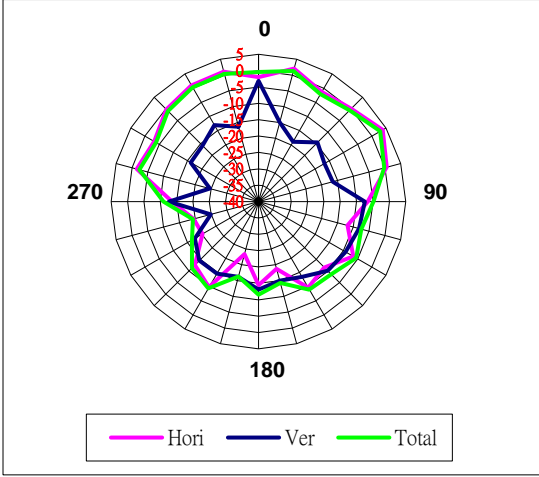
### Max Antenna 2D Radiation Pattern 5150-5250 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5150-5250	2.05



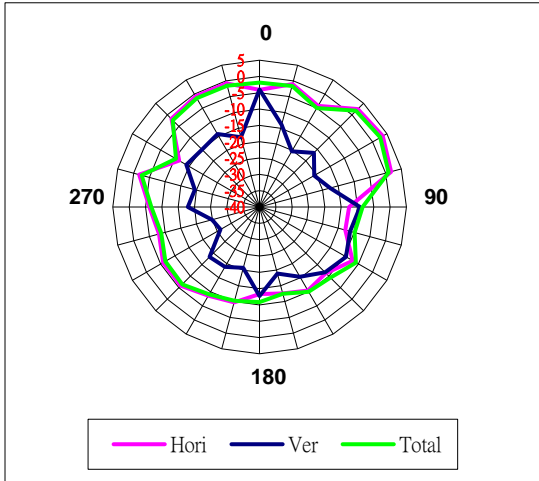
### Max Antenna 2D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5250-5350	2.98



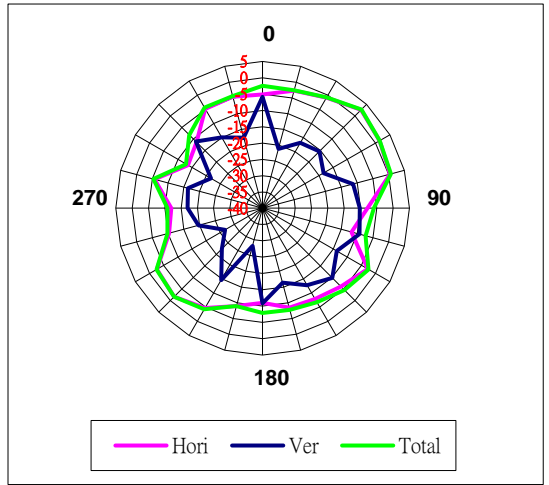
### Max Antenna 2D Radiation Pattern 5470-5725 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5470-5725	2.71



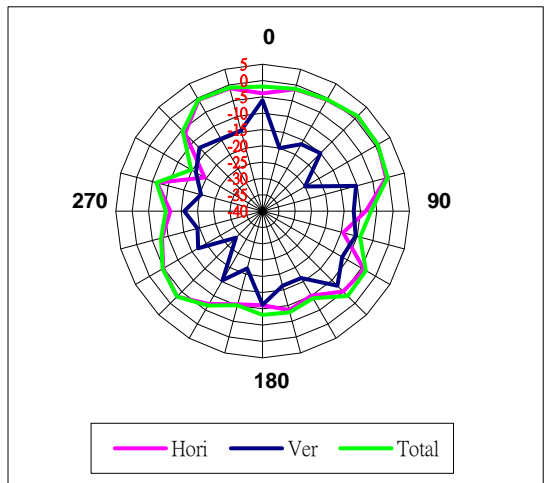
### Max Antenna 2D Radiation Pattern 5725-5850 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5725-5850	2.76



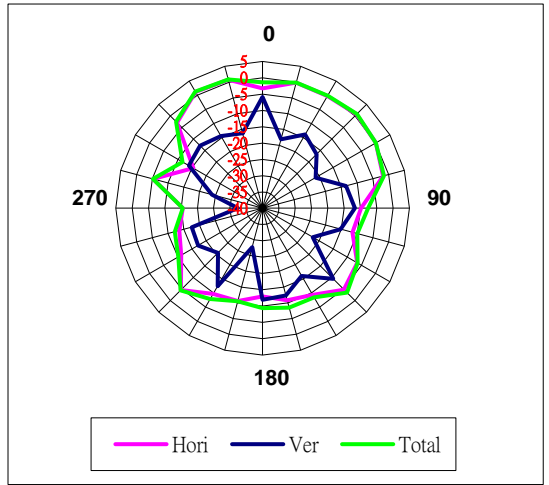
### Max Antenna 2D Radiation Pattern 5850-5895 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5850-5895	1.11



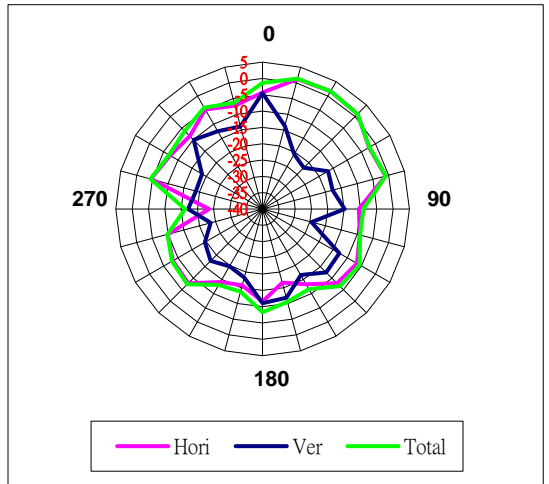
### Max Antenna 2D Radiation Pattern 5925-6425 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
5925-6425	1.27



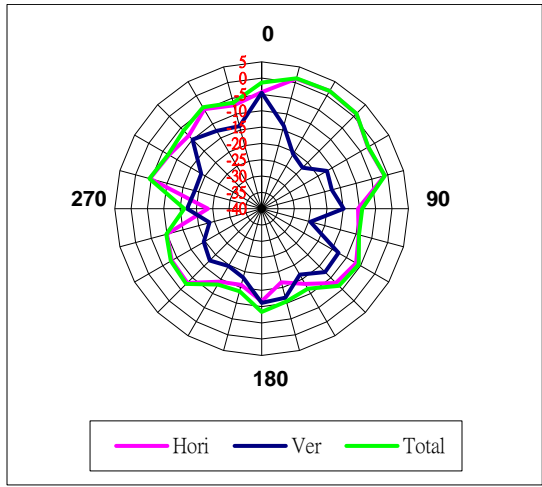
### Max Antenna 2D Radiation Pattern 6425-6525 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6425-6525	1.65



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

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6525-6875	1.65



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

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
6875-7125	-1.05

