



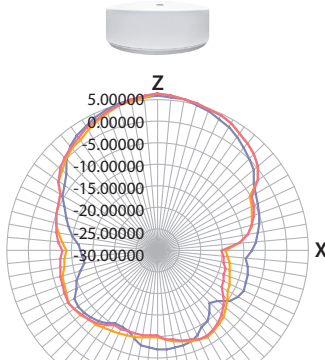
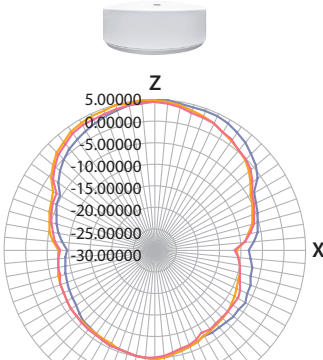
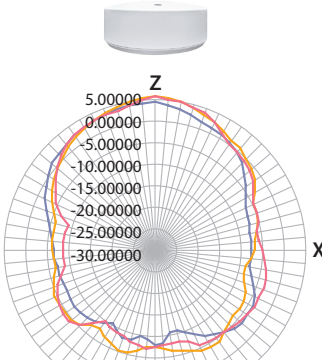
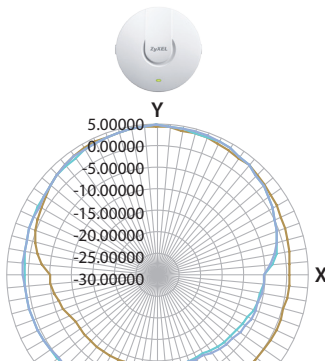
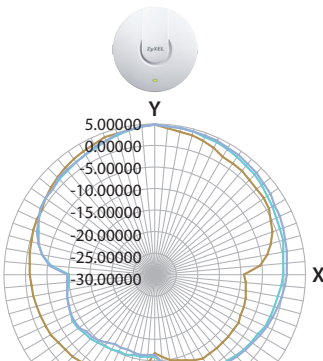
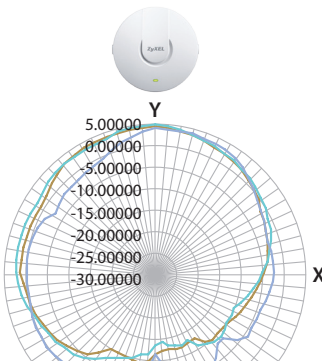
Technical Document

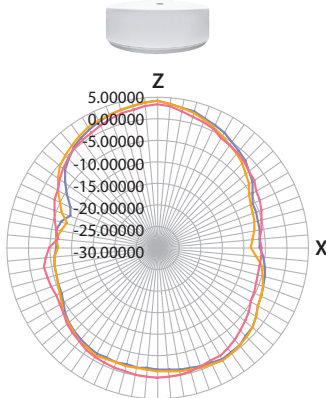
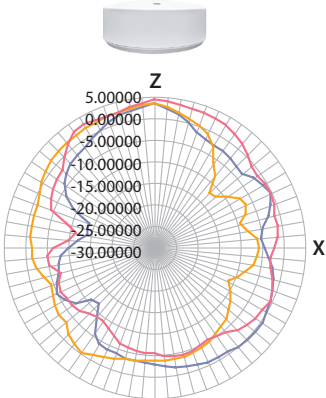
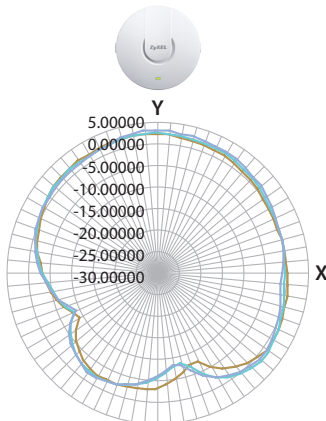
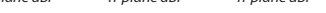
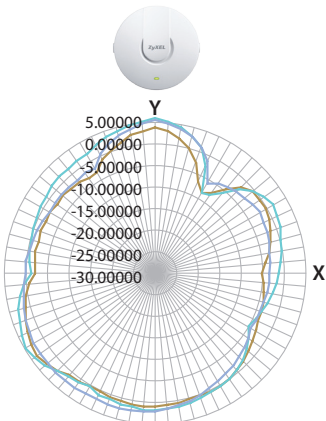
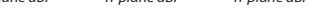
Antenna Specification Matrix

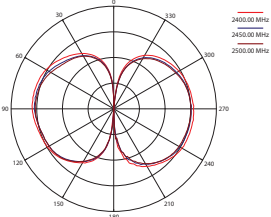
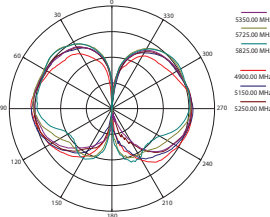
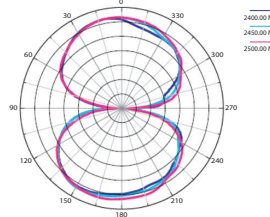
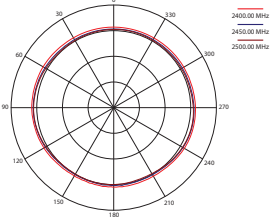
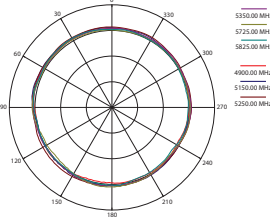
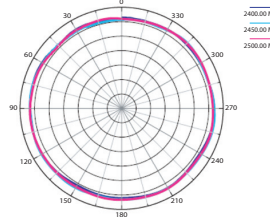
For internal and detachable antennas provided with ZyXEL access points

Antenna Intro

ZyXEL offers a wide range of antennas to support different deployment scenarios. Its diverse models of 2.4 GHz or 5 GHz, internal and external antennas fulfill needs of all environments with high performance and superior coverage. As a major component of Wireless LAN AP, different types of antennas from ZyXEL offer their respective advantages and signal levels. To optimize the overall performance of a ZyXEL wireless LAN, it is important to understand the appropriate antenna selection and placement technique for the maximum radio coverage. This antenna matrix has been designed to help customers to learn more about the access point purchased as well as in-depth information about the internal and detachable antennas provided with ZyXEL access points.

Model	NWA1121-NI NWA5121-NI		NWA1123-NI NWA5123-NI		
Product photo					
Space	Embedded		Embedded	Embedded	
Frequency band (MHz)	2400 - 2500		2400 - 2500	5150 - 5825	
Gain	7 dBi		5 dBi	6 dBi	
VSWR	1.92:1 Max.		2.0:1 Max.	2.0:1 Max.	
Polarization	Linear, vertical		Linear, vertical	Linear, vertical	
XZ-Plane (Side view)					
	NWA1121-NI Diopole 2.4 GHz e-plane dBi NWA1121-NI Diopole 2.45 GHz e-plane dBi NWA1121-NI Diopole 2.5 GHz e-plane dBi		NWA1123-NI Diopole 2.4 GHz e-plane dBi NWA1123-NI Diopole 2.45 GHz e-plane dBi NWA1123-NI Diopole 2.5 GHz e-plane dBi		NWA1123-NI Diopole 5.15 GHz e-plane dBi NWA1123-NI Diopole 5.45 GHz e-plane dBi NWA1123-NI Diopole 5.875 GHz e-plane dBi
XY-Plane (Top view)					
	NWA1121-NI Diopole 2.4 GHz h-plane dBi NWA1121-NI Diopole 2.45 GHz h-plane dBi NWA1121-NI Diopole 2.5 GHz h-plane dBi		NWA1123-NI Diopole 2.4 GHz h-plane dBi NWA1123-NI Diopole 2.45 GHz h-plane dBi NWA1123-NI Diopole 2.5 GHz h-plane dBi		NWA1123-NI Diopole 5.15 GHz h-plane dBi NWA1123-NI Diopole 5.45 GHz h-plane dBi NWA1123-NI Diopole 5.875 GHz h-plane dBi

Model	NWA1123-AC			NWA5301-NJ		
Product photo						
Space	Embedded			Embedded		
Frequency band (MHz)	2400 - 2500			5150 - 5875		
Gain	4 dBi			6 dBi		
VSWR	2.0:1 Max.			2.0:1 Max.		
Polarization	Linear			Linear		
XZ-Plane (Side view)	  			  		
XY-Plane (Top view)	  			  		

Model	NWA3160-N/NWA3560-N		NWA5121-N
Product photo			
Space	External Antenna		External Antenna
Frequency band (MHz)	2400 - 2500	4900 - 5825	2400 - 2500
Gain	3.0 dBi	3.0 dBi	3.0 dBi
VSWR	2.0:1 Max.	2.0:1 Max.	2.0:1 Max.
Polarization	Linear, vertical	Linear, vertical	Linear, vertical
Radiation pattern: H-plane			
Radiation pattern: V-plane			
HPBW/Horizontal	360°	360°	360°
HPBW/Vertical	80°	80°	80°
Front to back ratio	-	-	-
Impedance	50 Ω	50 Ω	50 Ω
Connector	RP-SMA plug	RP-SMA plug	RP-SMA plug
Survival wind speed	-	-	-
Temperature	-10°C to 60°C/14°F to 140°F	-10°C to 60°C/14°F to 140°F	-20°C to 65°C/-4°F to 149°F
Humidity	95% @ 40°C (104°F)	95% @ 40°C (104°F)	95% @ 40°C (104°F)
Radome color	White	White	White
Radome material	TPEE/PC/PBT	TPEE/PC/PBT	TPEE/PC/PBT
Dimensions (WxDxH)(mm/in.)	155 x 13 x 13/6.10 x 0.51 x 0.51	155 x 13 x 13/6.10 x 0.51 x 0.51	137 x 12.5 x 12.5/5.40 x 0.49 x 0.49
Weight (g/lb.)	13/0.03	13/0.03	13/0.03

For more product information, visit us on the web at www.ZyXEL.com



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