

Please be sure to consider the following when installing antennae from AvaLAN:

Vertical polarization for directional antennas

Omni-antenna



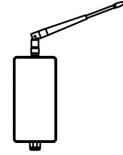
Figure 1



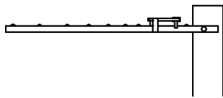
11 dBi antenna



WRONG!



Horizontal polarization for directional antennas



RIGHT

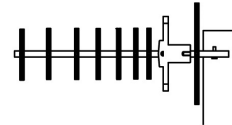
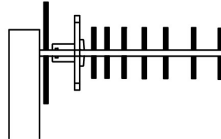


Figure 2

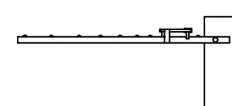
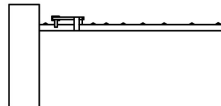


WRONG!
Do *not* aim the 2.5 dBi antenna directly at each other.

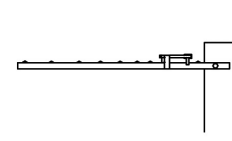
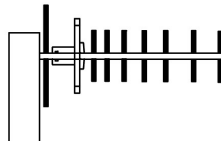
RIGHT



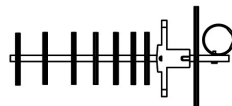
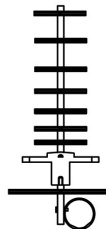
RIGHT



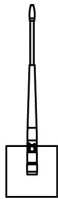
WRONG!



WRONG!



RIGHT

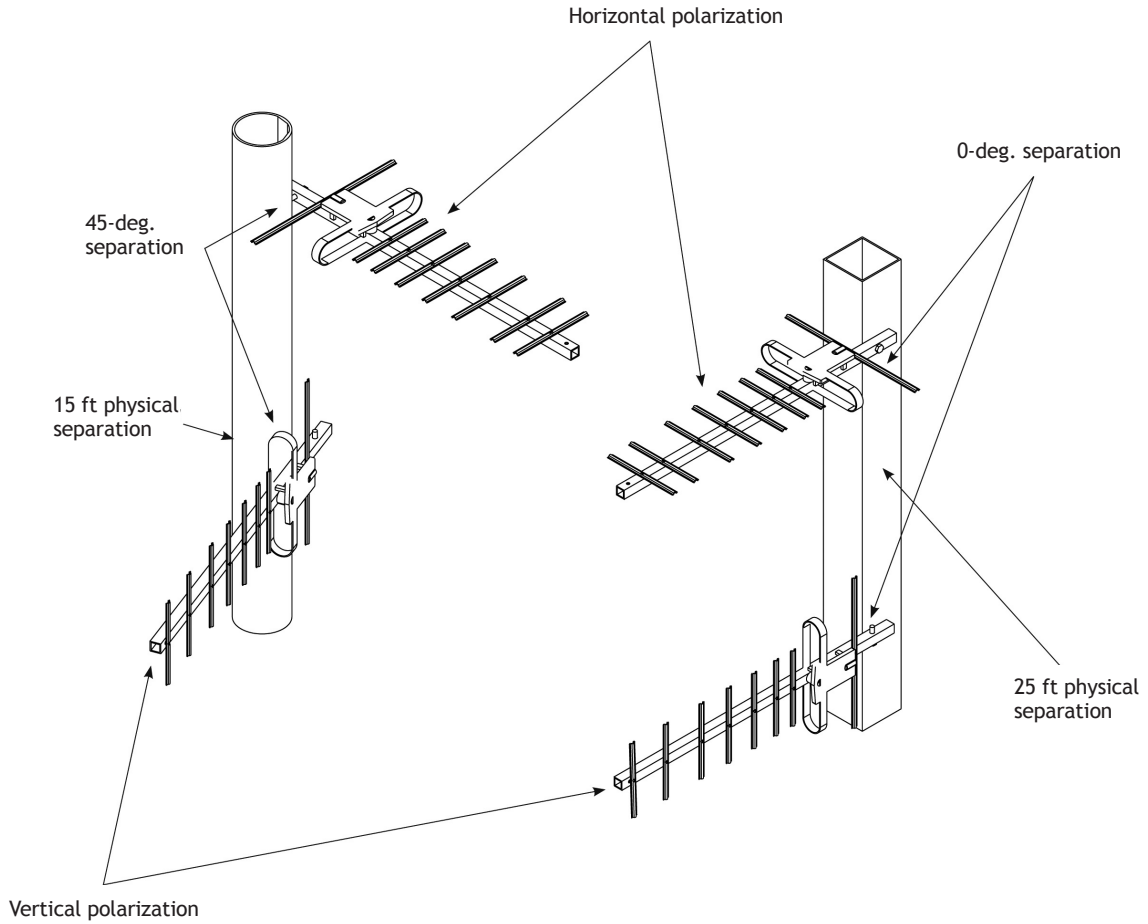


RIGHT



Antenna polarization display

ATTENTION: When multiple antennas defined as Access Points are installed in one area and face the same direction, antennas should be spaced a minimum of 25 feet apart. When multiple antennas are installed in one area and face different directions, antennas should be spaced a minimum of 15 feet apart.



Transmitter to receiver placement

If radios are installed either indoors or outdoors at distances closer than recommended, antennas can overpower each other and cause undesired effects. If testing radios within one or two feet, remove both antennas. The radios will still be able to signal each other at close distances. This applies to both indoor and outdoor units.

Antennae	Estimated Ethernet Throughput	Range Maximum Line-of-Sight	Maximum Non-Line-of-Sight	Minimum Recommended Distance from paired antenna
AW2-900	935 kbps	1 mile	5 walls/450 FT	10 FT
AW5-900	935 kbps	2 miles	6 walls/500 FT	10 FT
AW11-900	935 kbps	20 miles	1,200 FT w/ trees	125 FT
AW15-900	935 kbps	40 miles	1,500 FT w/trees	150 FT
AW2-2400	935 kbps	0.5 miles	N/A	10 FT
AW19-2400	935 kbps	20 miles	N/A	10 FT

Antennae	Estimated Rate	Point-to-Point	Access Point to Subscriber (PTMP)	Minimum Recommended Distance from paired antenna
AW58100 Series	5	50 miles	10 miles	150 FT
	25	30 miles	5 miles	150 FT
	75	10 miles	2 miles	150 FT
	100	4 miles	0.75 miles	150 FT
AW58300 Series	15	40 miles	8 miles	150 FT
	75	20 miles	4 miles	150 FT
	225	6 miles	1 miles	150 FT
	300	2 miles	0.5 miles	150 FT
AW58800 Series	40	25 miles	6 miles	150 FT
	200	8 miles	1.5 miles	150 FT
	540	1 mile	1,000 feet	150 FT
	800	2,000 feet	500 feet	150 FT

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