

HORN AND SECTOR RECIPES FOR SUCCESS

Looking for more than cookie-cutter coverage?

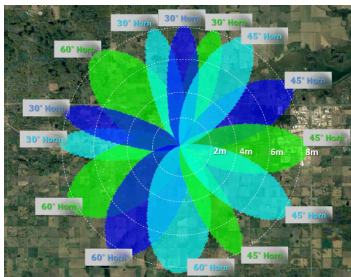
With the right ingredients, KP Performance will help you achieve superior coverage results. Enclosed are tower installation recipes with crowd-pleasing coverage...all calorie-free. Select the recipe that works best for your specific coverage needs, and KP Performance will do the rest.





RECIPE 1

Macro High Density Coverage Using Horns



AP RF Propagation Map with RRSP > 90dBm

Ingredients:

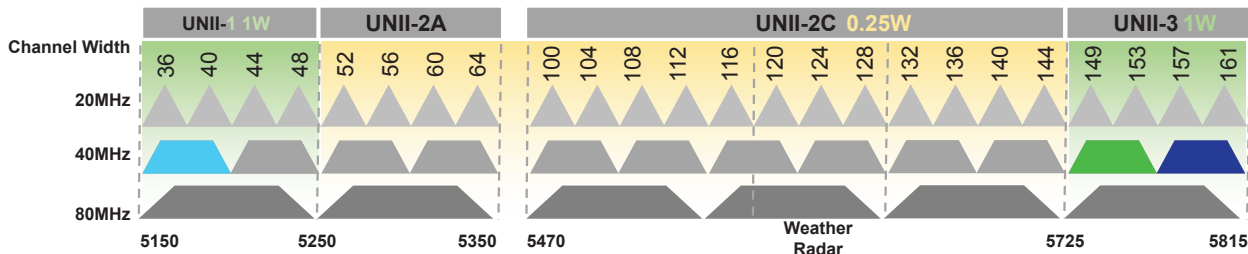
- KP-5HA-30 x 6
- KP-5HA-45 x 4
- KP-5HA-60 x 4

Preparation:

14 AP deployment on one tower with three channels

Results:

- 8 miles of maximum coverage with 6-7 miles minimum in the gaps
- Highly focused spotlight patterns result in data rich density to the customer
- Easy to plan for clusters of high density neighbourhoods
- Makes it easy to avoid self interference

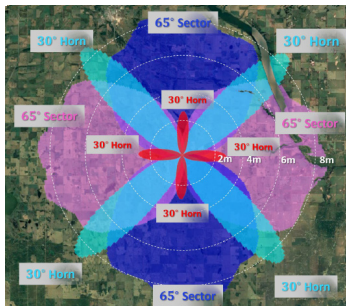


To place an order, call KP Performance at +1 (855) 276-5772 or contact us for additional recipes.



RECIPE 2

Macro Horn/Sector Combo Coverage with a Side of Horn Micro Coverage

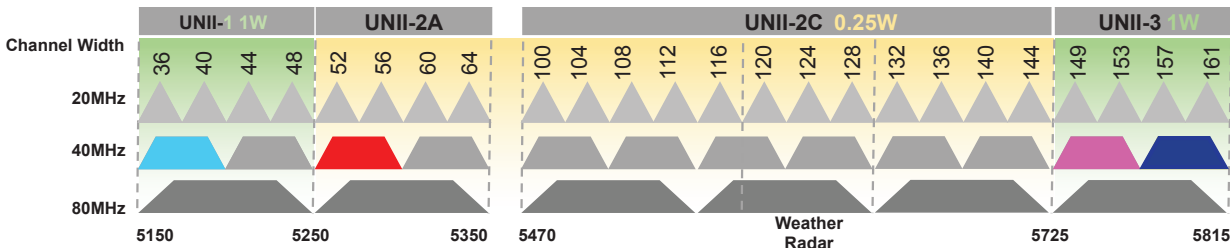


AP RF Propagation Map with RRSP>-90dBm

Preparation:

1. Start with 4 x KPP-5SX4-90, EIRP=36dBm
 - Frequency reuse two
 - 8 miles on boresight and 6 miles in gaps
2. Add 4 x KP-5HA-30 in the gaps, EIRP=36dBm
 - Focused to only regions that lack coverage and little overlap and unnecessary self interference
 - Only need one channel
 - 8 miles on boresight and 7 miles in the gaps
3. Add 4 x KP-5HA-30 to offload near the tower, EIRP=30dBm
 - Offload sectors in high-density near tower
 - Downtilt and reduce transmit power (UNII-2 limit) to focus on dense area
 - Adds only one channel

Results: You will end up with Four 40Mhz Channels utilizing 8 horns and 4 sectors providing high capacity data rich coverage over a broad area.

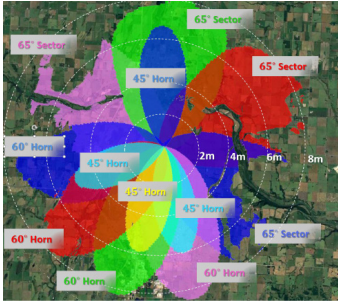


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RECIPE 3

Macro Horn & Sector Coverage Served with Micro High Density Horn Coverage

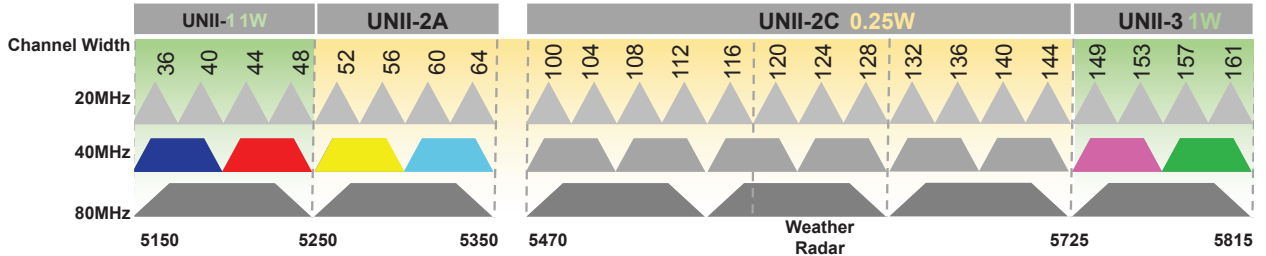


AP RF Propagation Map with RRSP>-90dBm

Preparation: Use sectors to cover low-density rural and horns to cover high-density town

1. Start with 4 x KP-5DP65S-45 and 4 x KP-5HA-60, EIRP=36dBm
 - Using 4 channels
 - 6 - 7 miles distances
2. Add 4 x KP-5HA-45, EIRP=30dBm,
 - Using two new channels to offload off horns and sectors
 - 2-5 miles distance

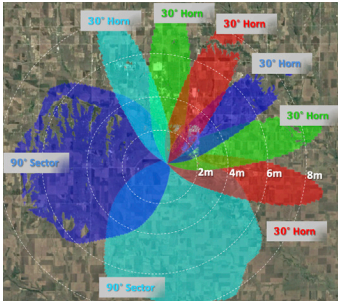
Results: Super high density coverage for targeted geographic area and broad coverage for the rest of the region.





RECIPE 4

Non-uniform distributed coverage using macro horns and sectors



AP RF Propagation Map with RRSP>90dBm

Preparation:

- Start with 2 x KPP-5DP90S-HV EIRP=36dBm
 - Using two channels
 - Two 90° sectors angled 90° to 105° apart to provide broad coverage to low-density rural SW of town with minimal gap
 - 5-7 miles
- Add 6 x KP-5HA-30, EIRP=36dBm
 - Use two existing channels and two new channels to densify over town and pickup higher density clients in clusters of residential areas
 - Horns are separated by 25° to keep coverage over 5 miles
 - 5-8 miles of coverage using 6 horns
 - Interference minimized by providing 60° of spacing between horns sharing the same channel

Results: Distributed coverage with higher density areas able to handle increased traffic without cross-talk between horns or sectors.

