

- 1) In order to use CCI's "Interactive Antenna Pattern Viewer," either perform a search for the Antenna Model of Interest, or find a suitable antenna while browsing CCI's Website. Note that you do not need to be logged in, in order to utilize this feature. An example will be shown for CCI Antenna Model Number DPA-65R-BUUUU-H8B.

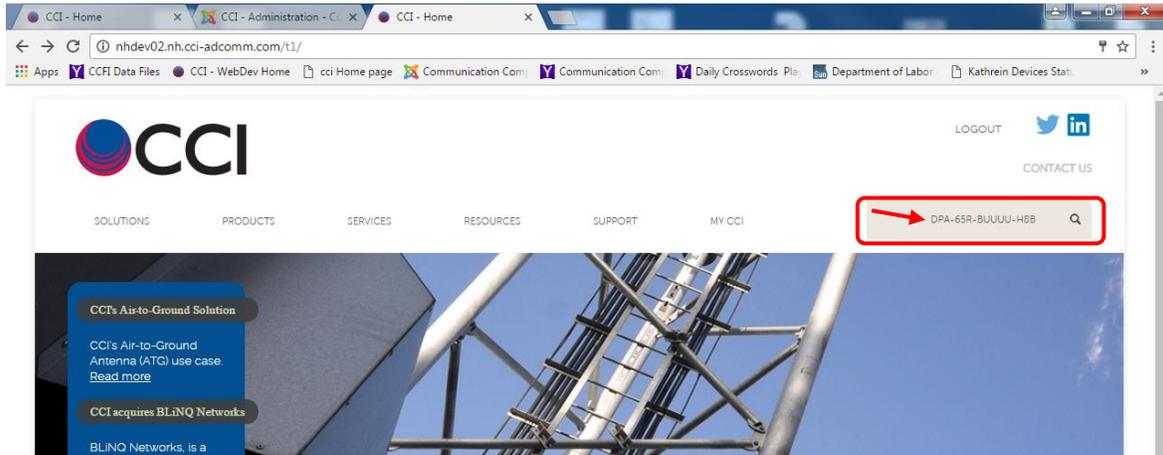


Figure 1 – Enter Model Number in Search Box

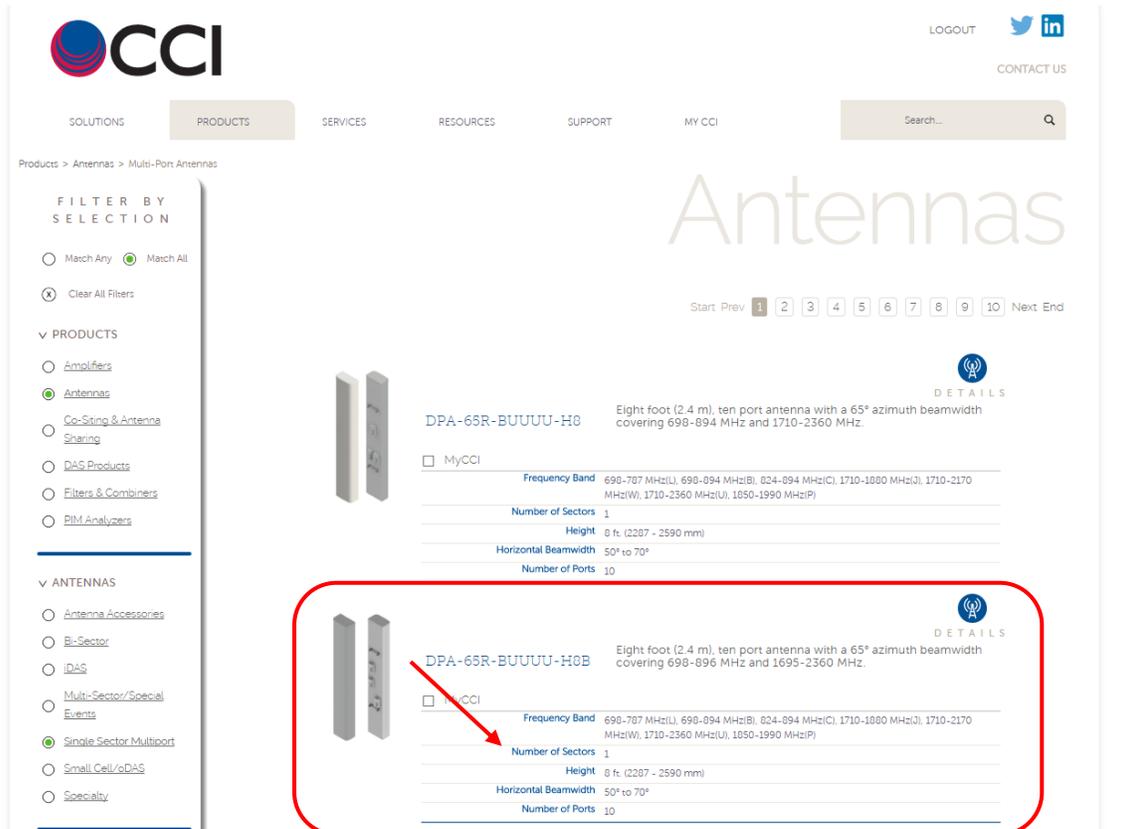


Figure 2 – Browse for Antenna of Interest

- 2) The user should either press the “Enter” button when performing a search, or click on the link for the antenna which is being browsed in order to get to the webpage of interest. This example will be for the DPA-65R-BUUUU-H8 antenna. Once on the DPA-65R-BUUUU-H8 webpage, the user can click on the “Specifications Tab” or click on the “Resources Tab” as found underneath the antenna model number on the webpage.

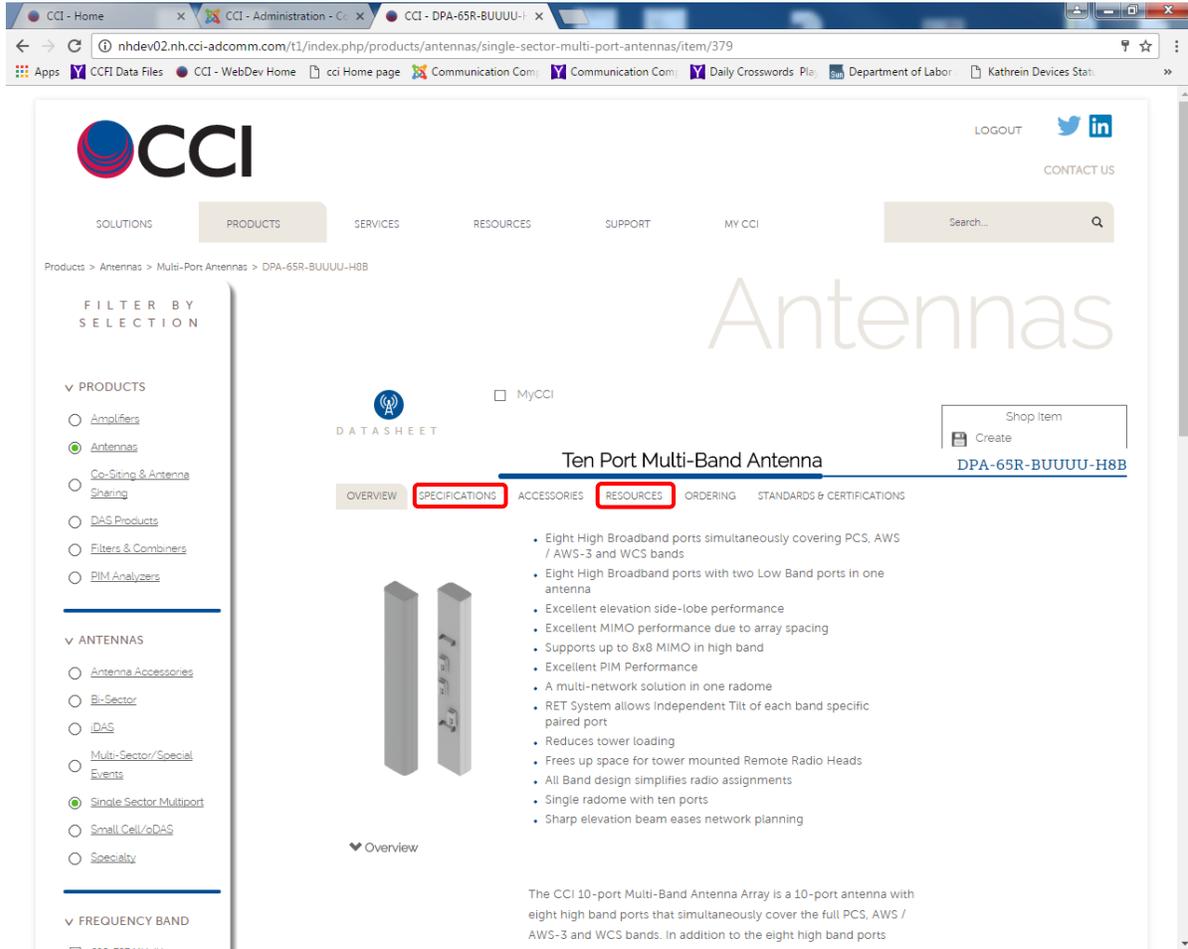


Figure 3 – Specifications and Resources Tab Locations

- 3) Clicking on the “Specifications Tab” opens a webpage containing Electrical specs, Mechanical specs, Bottom View, RET Connection Diagram, Connector Spacing Drawing and Typical Antenna Patterns (Interactive Pattern Viewer & Typical Antenna Patterns for a specific given frequency or frequencies).

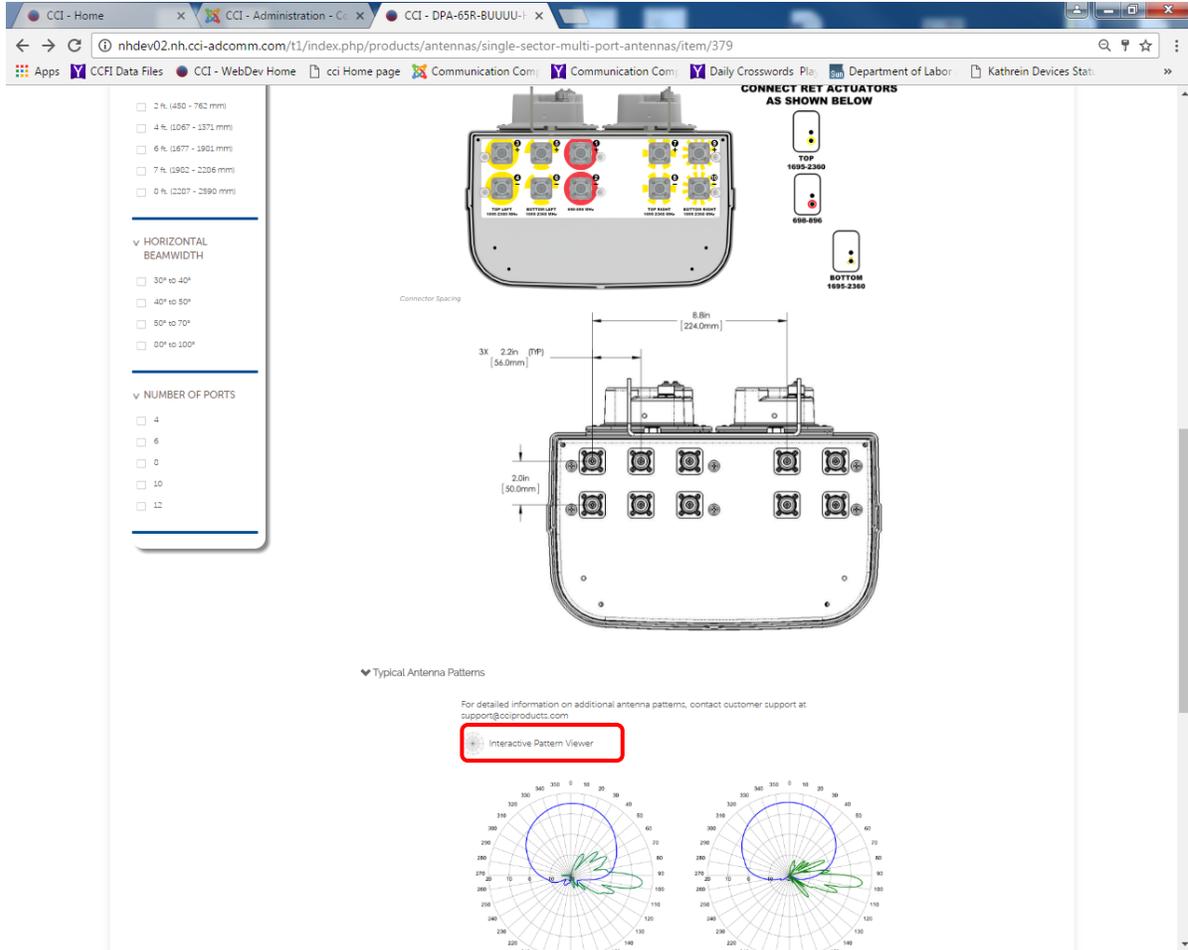


Figure 4 – Location of Interactive Pattern Viewer Link on Specifications Page

- 4) Clicking on the “Resources Tab” opens up the “Product Information” items which have been loaded onto the webpage of interest. These items typically include a link to the PDF datasheet, a Connector Spacing Drawing, and the Interactive Pattern Viewer.

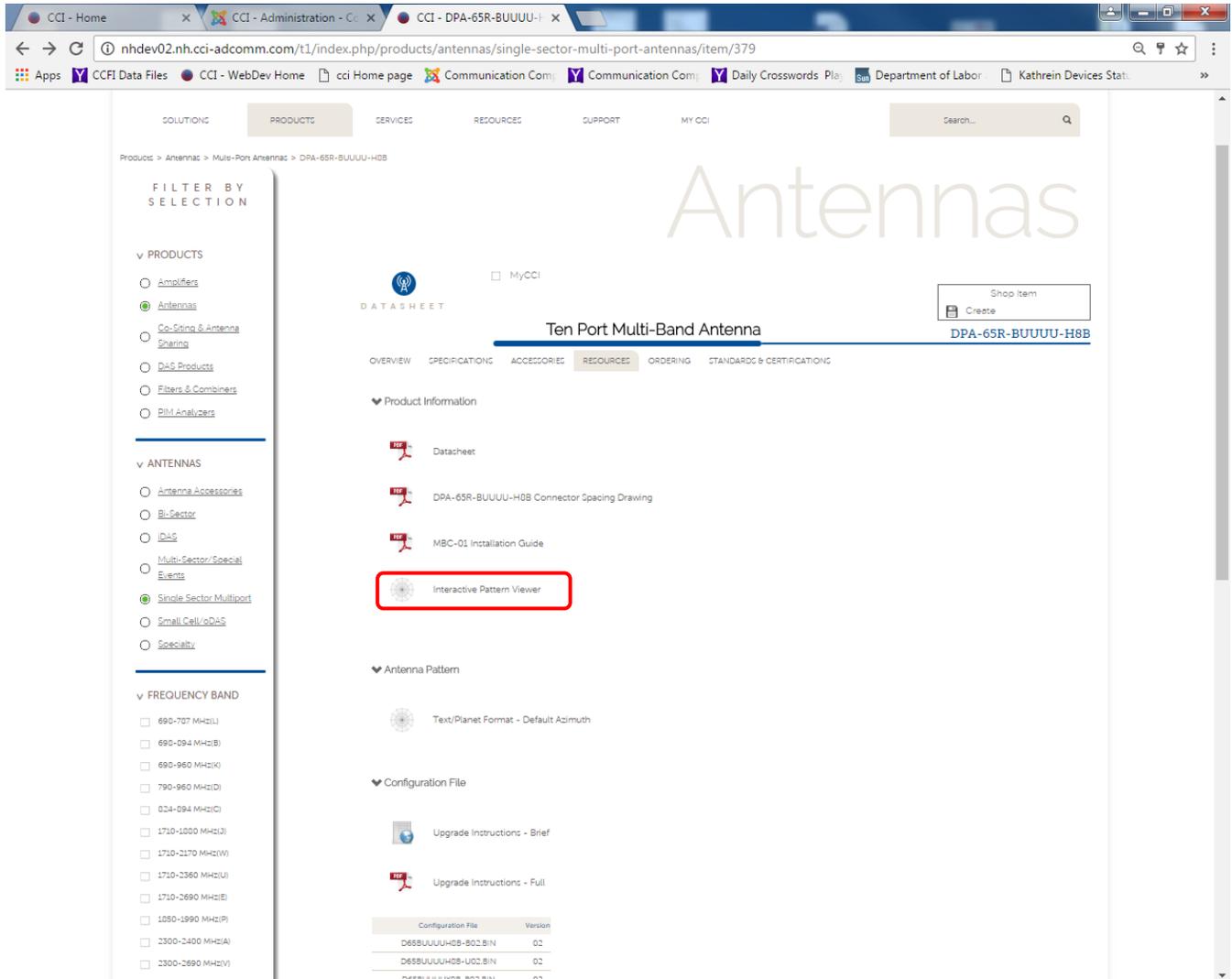


Figure 5 – Location of Interactive Pattern Viewer Link on Resources Page

- 5) Click on the “Interactive Pattern Viewer” link, in order to open the viewer function. *Please note that this Pattern Viewer “Normalizes” all patterns to “0.” The actual Antenna Gains can be different, so this must be taken into account when viewing patterns of more than one antenna model.*

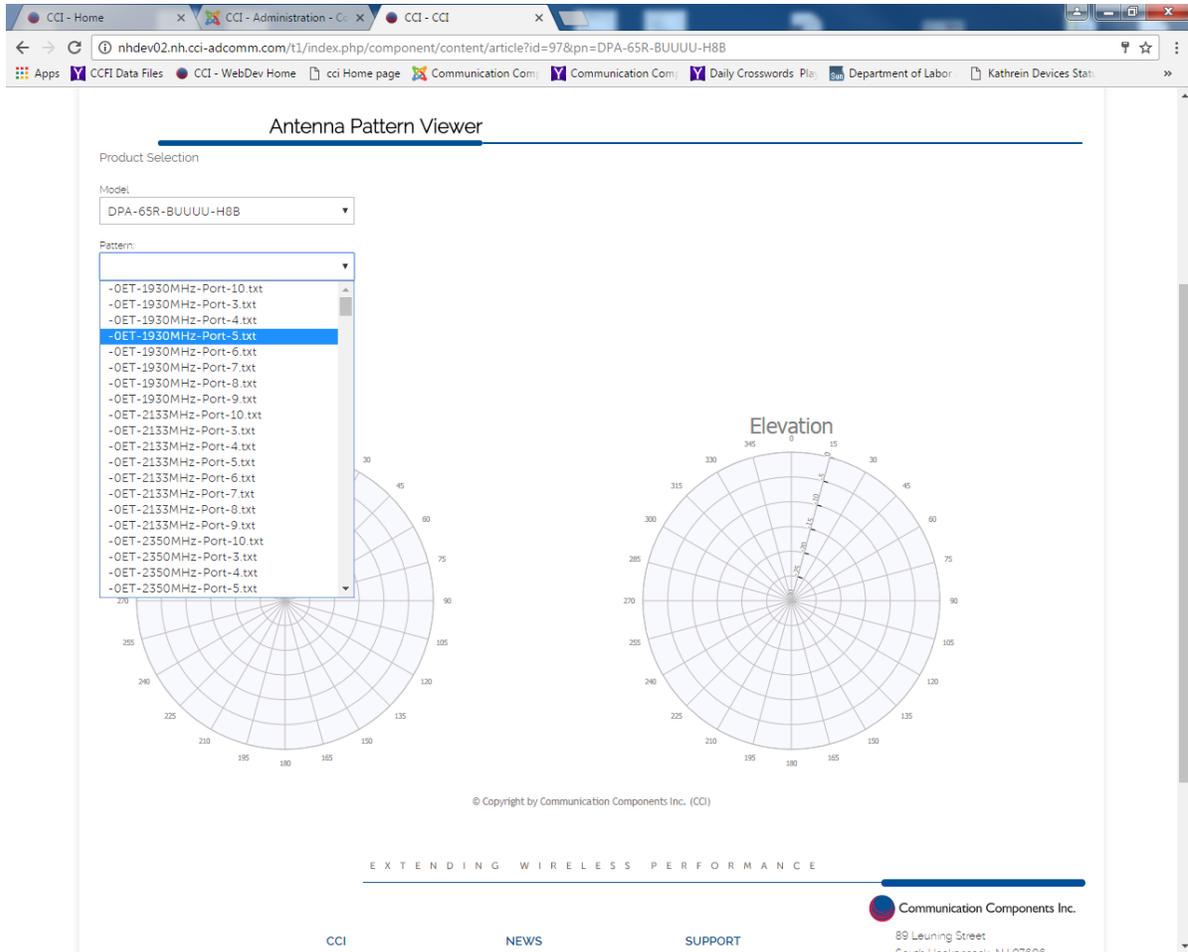


Figure 6 – Interactive Pattern Viewer Prior to Pattern Selection

- 6) Preloaded patterns are available from the “Pattern” pulldown. Select the desired pattern which contains information regarding: Electrical Downtilt (EDT) Setting, Frequency, and Port(s). In this example the first selection will be for “0ET-1930MHz-Port-5.txt” (0 degrees EDT, 1930 MHz, for port 5).

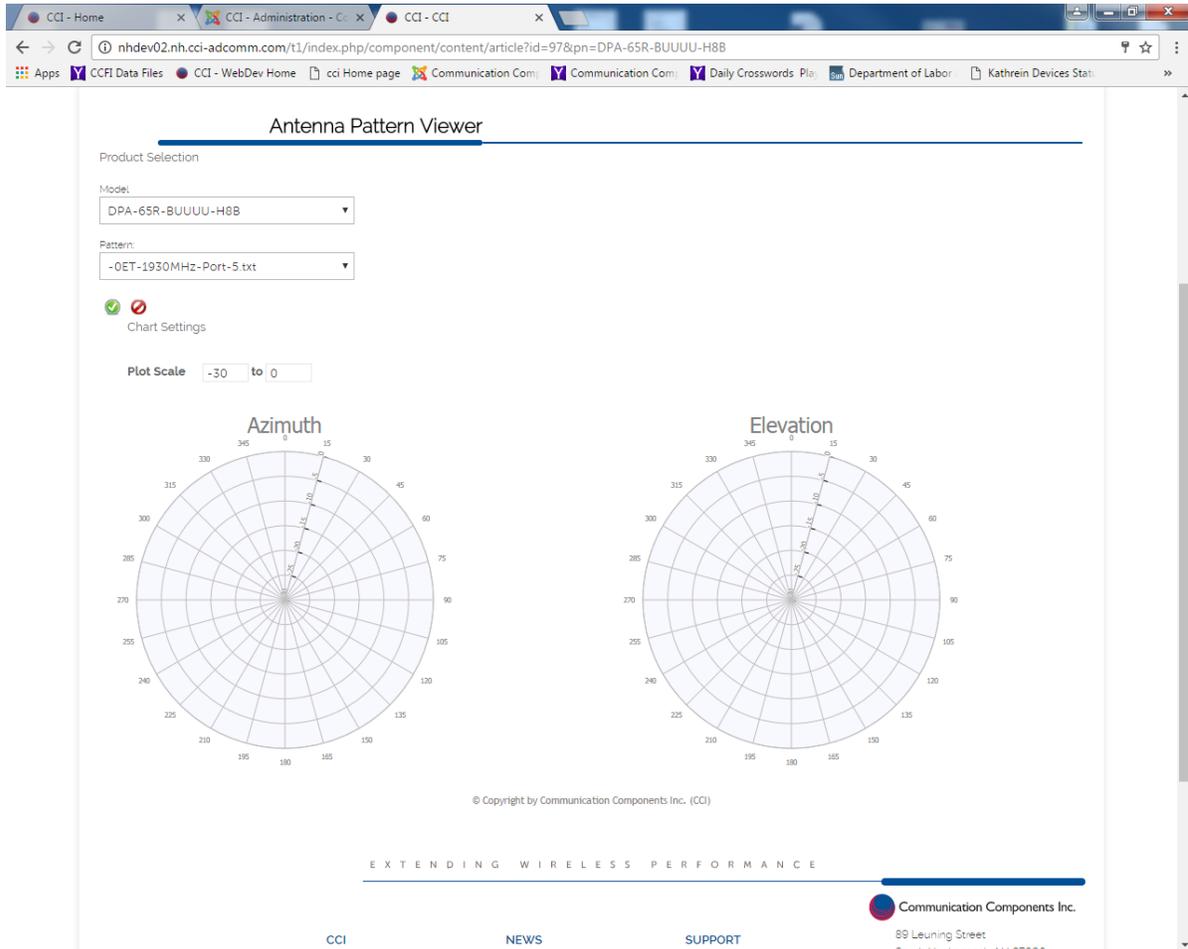


Figure 7 – Selection of Pattern for 0 Degrees EDT, 1930 MHz, and Port 5

7) Click on the “Green Check” (✔) icon (as seen in Figure 7) to view the selected pattern in the viewer.

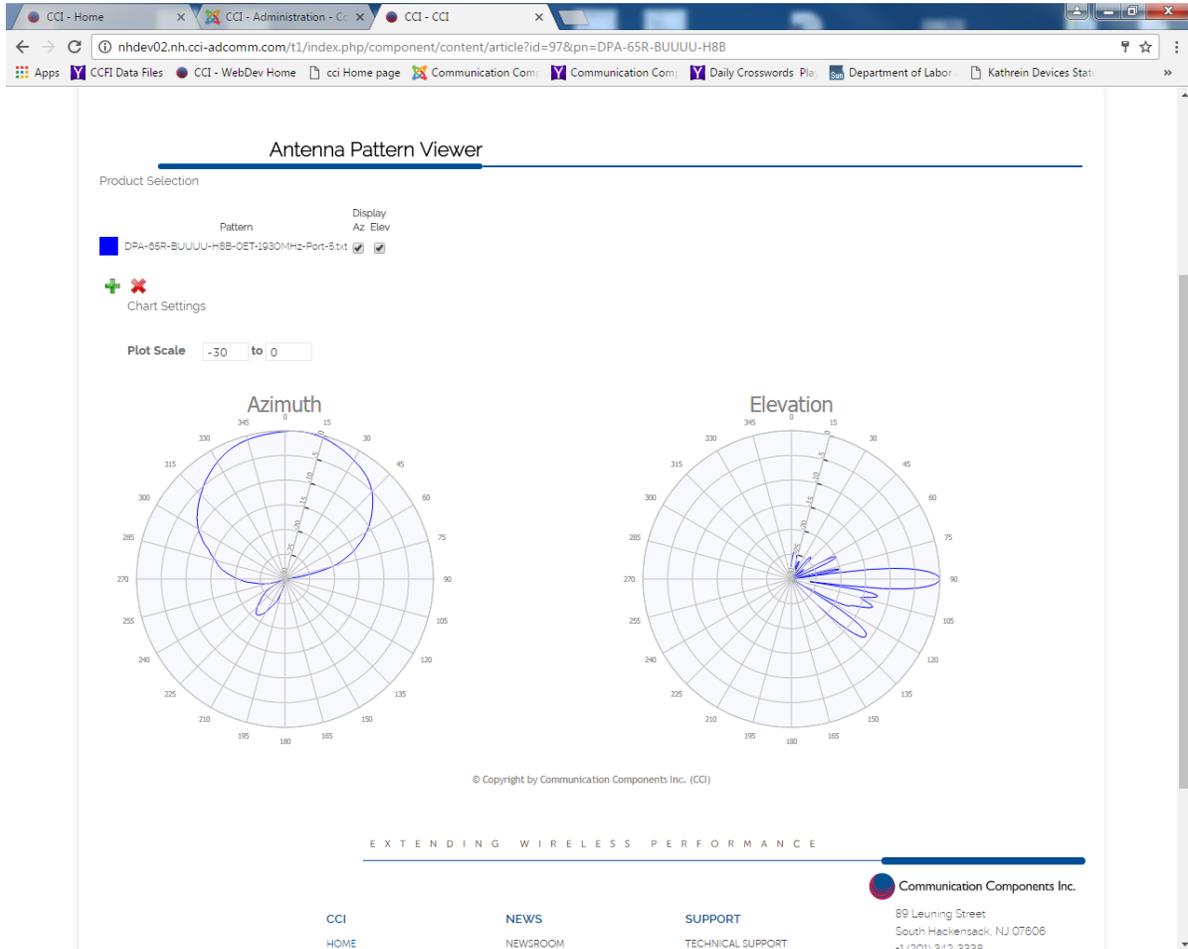


Figure 8 – Pattern for 0 Degrees EDT, at 1930 MHz for Port 5

- 8) Or the user may click on the “Not” (🚫) icon (as seen in Figure 7) to remove the pattern and antenna model from the viewer, so that they can search for a different antenna model.

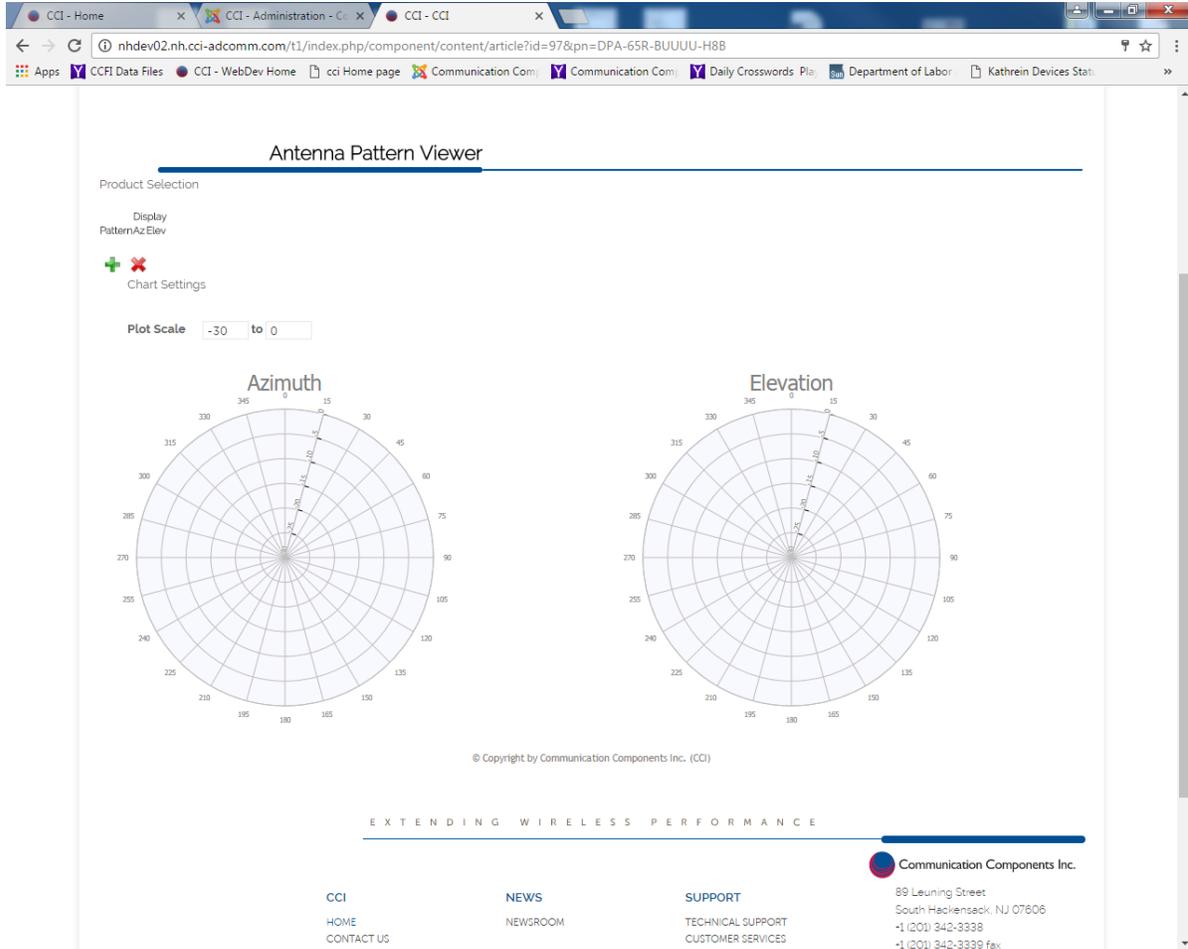


Figure 9 – Interactive Pattern Viewer Screen if the “Not” Icon is Selected

- 9) The Azimuth (Az) and Elevation (Elev) patterns are now visible in the viewer. The desired Azimuth or Elevation pattern can be “hidden” from view. This is accomplished by clicking (“Unchecking”) the “Az” or “Elev” “check box” across from the listed pattern in order to remove that pattern.

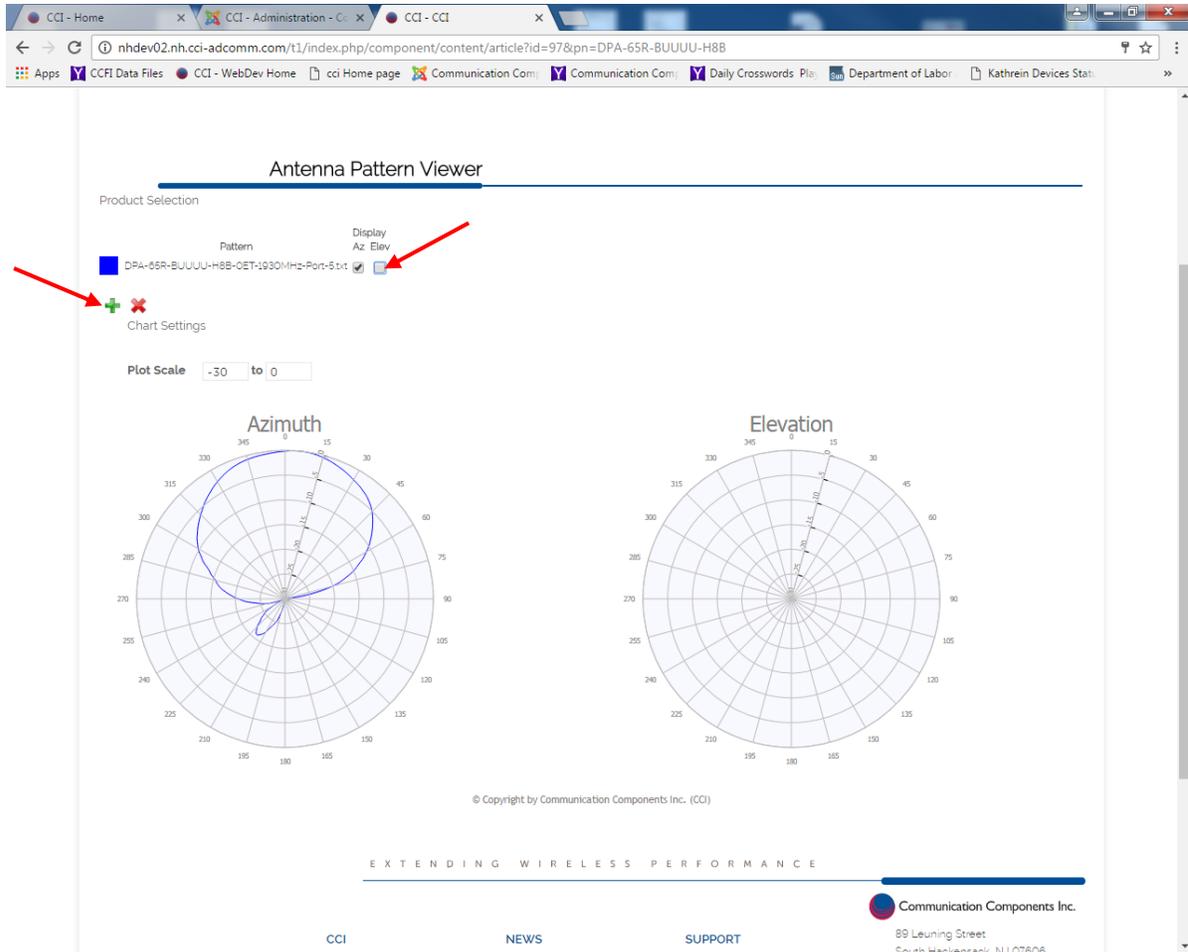


Figure 10 – Unchecking the “Elev” Check Box Removes the Elevation Pattern

10) To “Add” a pattern, click on the “Green Plus” (+) icon, and then find the pattern of interest. Once Selected, click on the Green Check Icon to display the additional pattern. In this way patterns can be superimposed if desired. The colors of the patterns are selected by the PC. In this case Blue & Green.

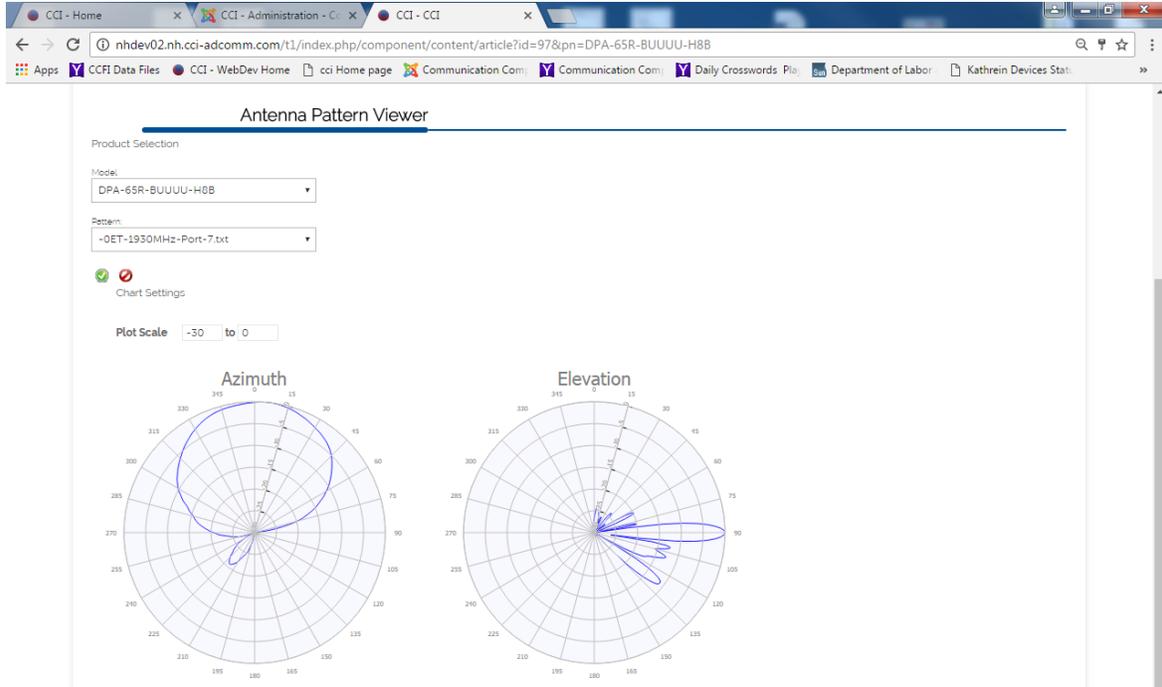


Figure 11 – Selection of 0ET-1930MHz-Port-7 in Viewer

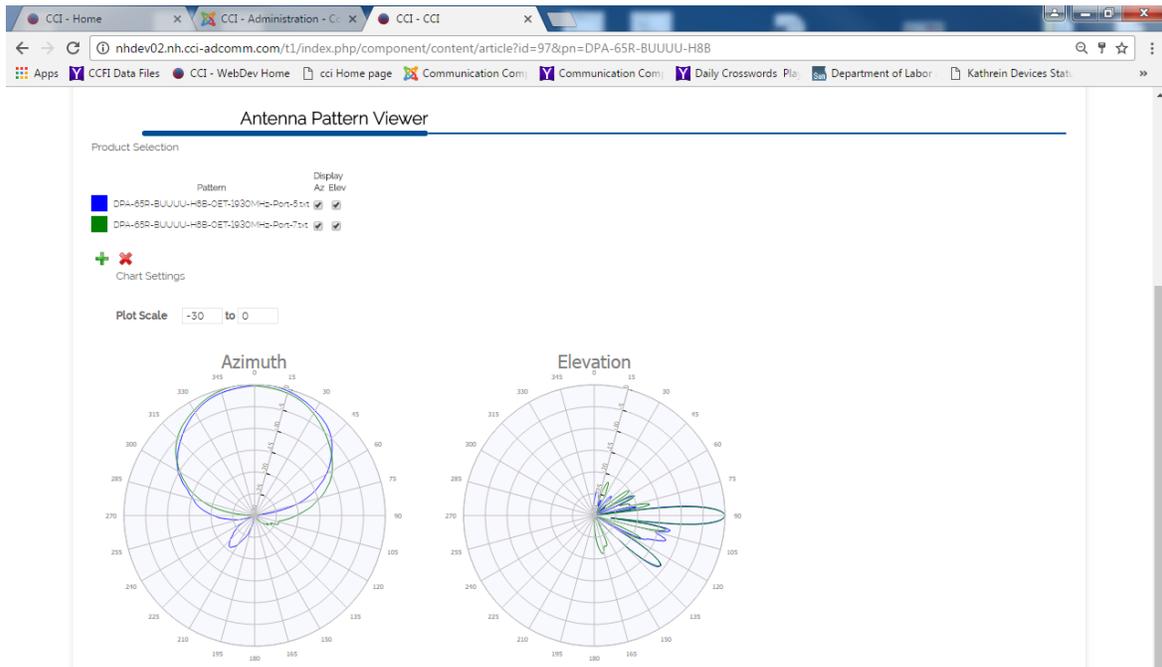


Figure 12 – Addition of Pattern for 0 Degrees, 1930 MHz for Port 7

11) If the user wishes to change the pattern to a specific color, they may do so by clicking on the color block in the Interactive Pattern Viewer and selecting the color they want to use. In this case the Green pattern is changed to Purple.

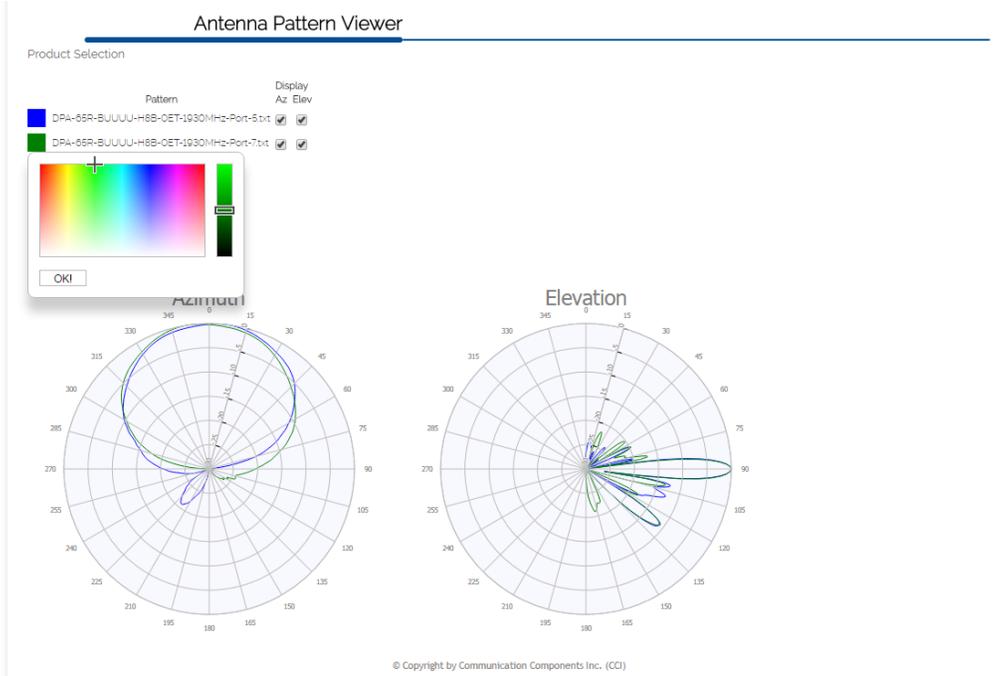


Figure 13 – Original Pattern Color Selection Pop-Up Showing

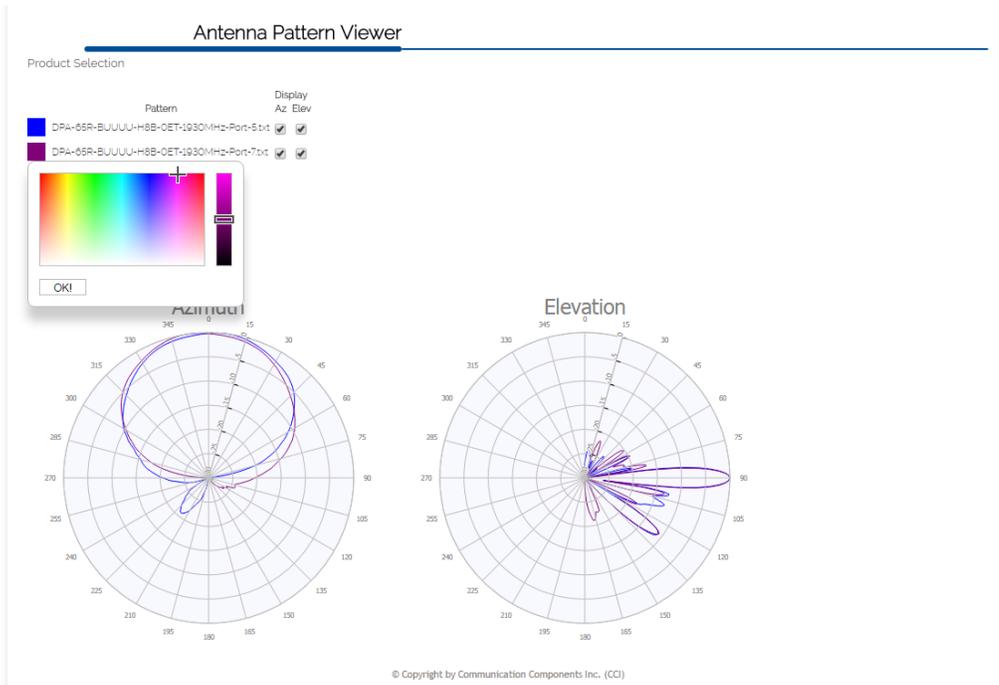


Figure 14 - Pattern Color Selection Pop-Up Showing Color to be changed to

12) To “Remove” a pattern, highlight the pattern to be removed, and then click on the “Red X” (✖) icon.

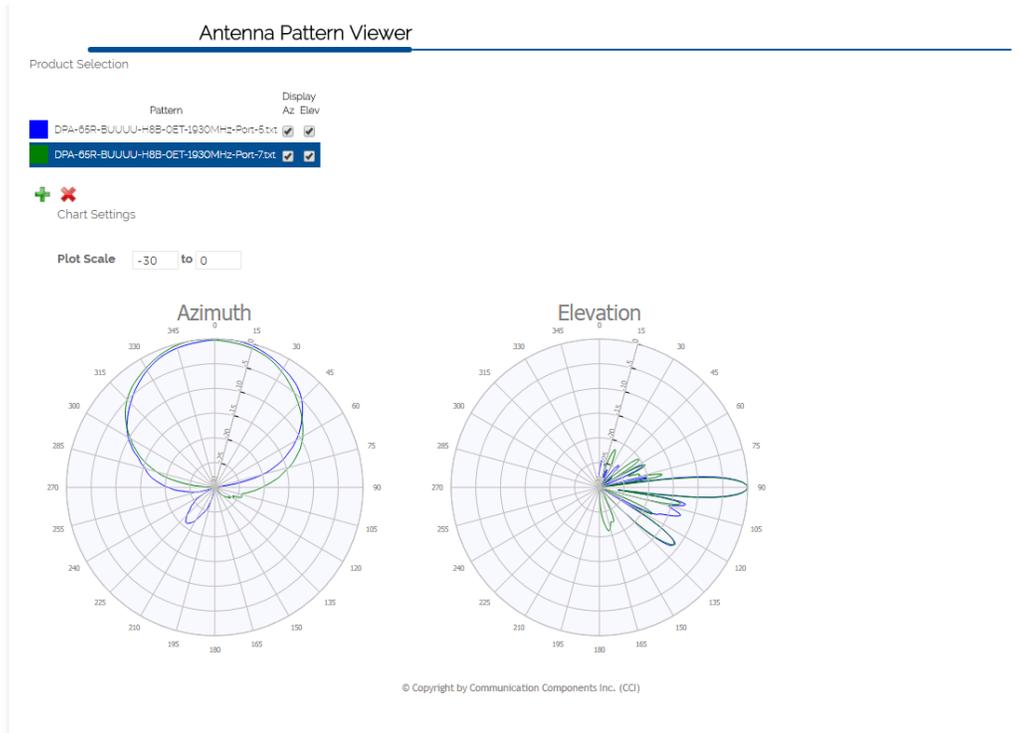


Figure 15 – Pattern to be removed is highlighted by clicking on it

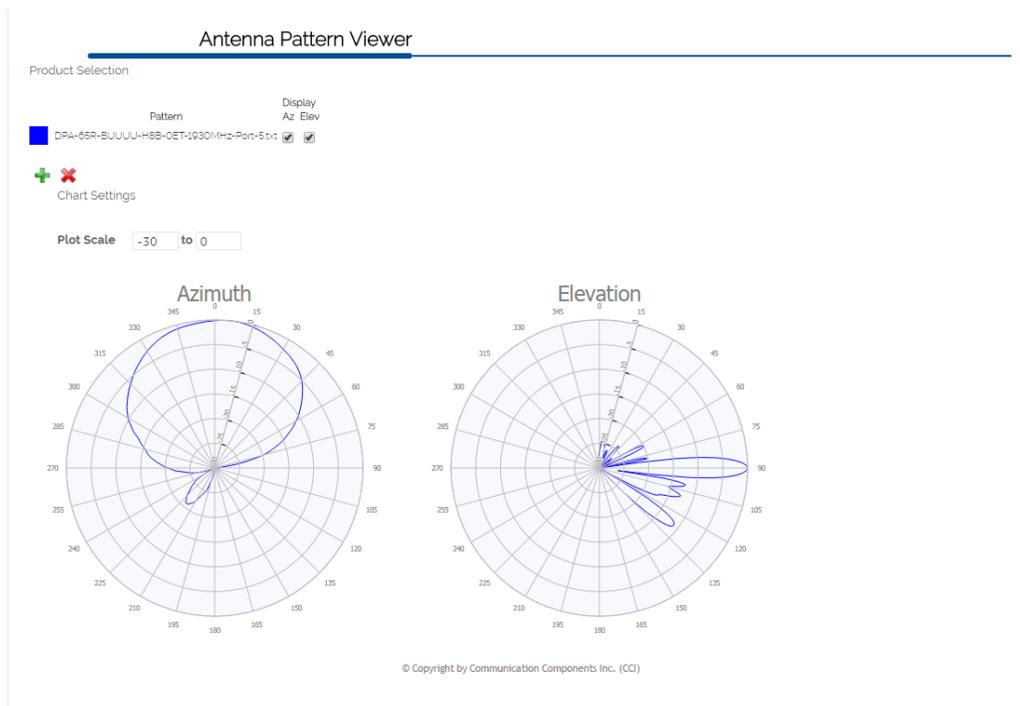


Figure 16 – After clicking on the “Red X” Icon, the pattern is now removed

13) Plot Scale can be changed if desired. The preset value is -30. However, the user can go to a minimum of -40. The scale is changed by either using the “Up” or “Down” arrows in the scale block, or by entry of an “allowable” number. When the scale is at -40, more detail is shown.

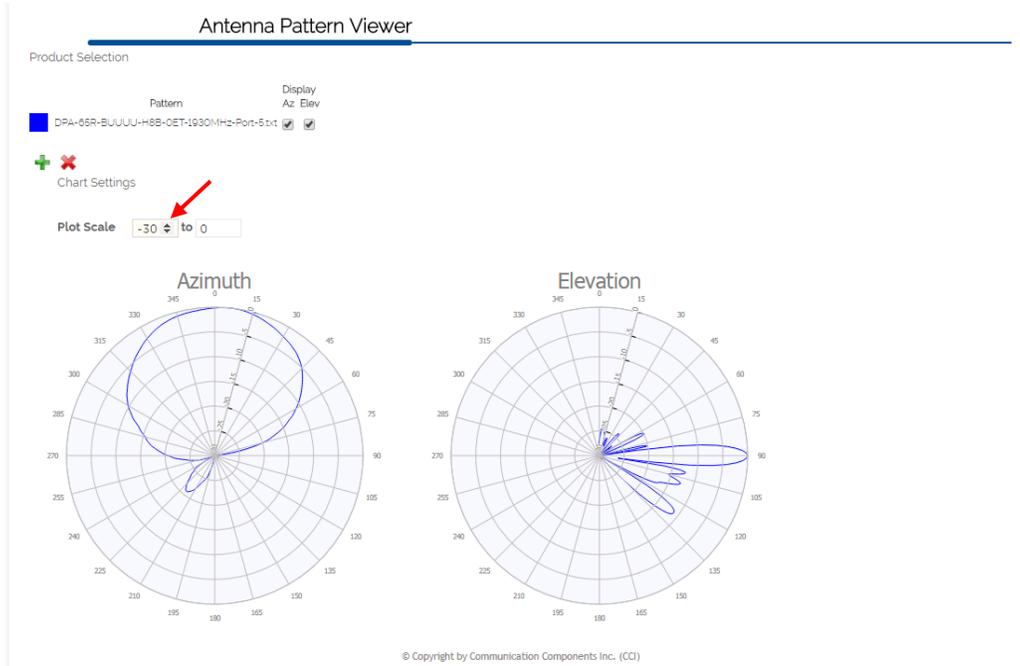


Figure 17 – “Up” and “Down” arrows visible in “Plot Scale”

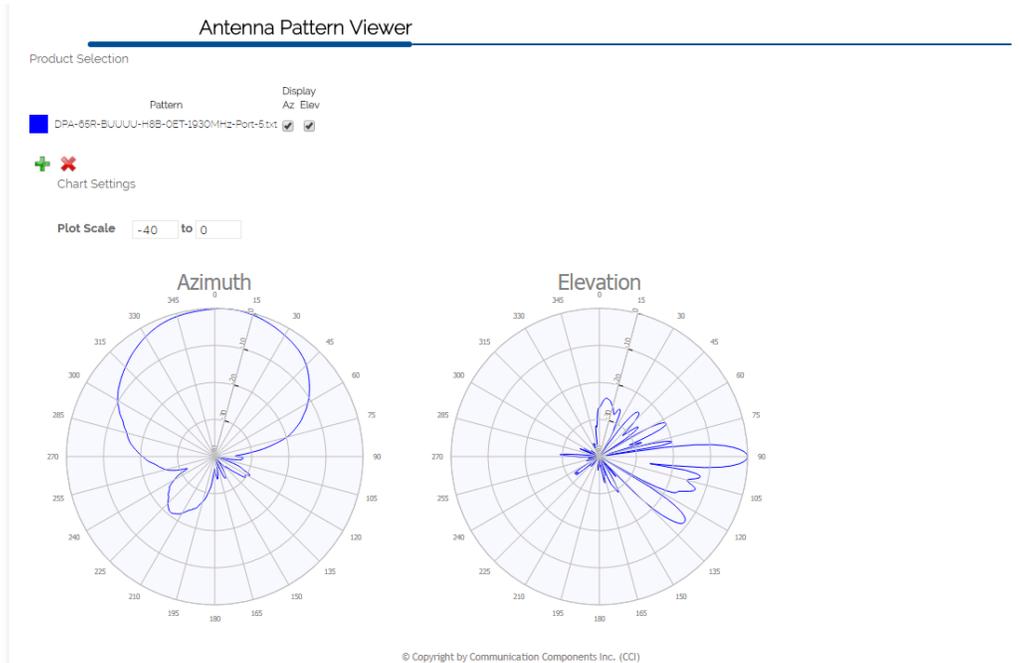


Figure 18 – Plot Scale shown at -40

14) Plot Scale at -20 shows less detail

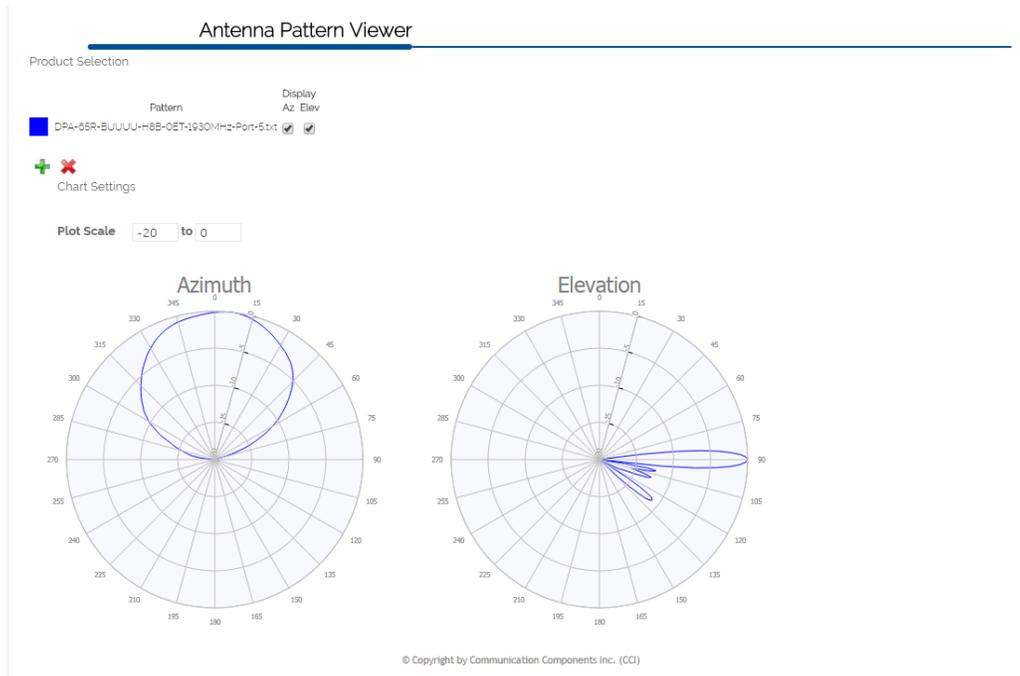


Figure 19 – Plot Scale shown at -20

15) The Pattern Viewer can show all ports associated with an antenna. In the case of the DPA-65R-BUUUU-H8B, there are eight (8) high band ports.

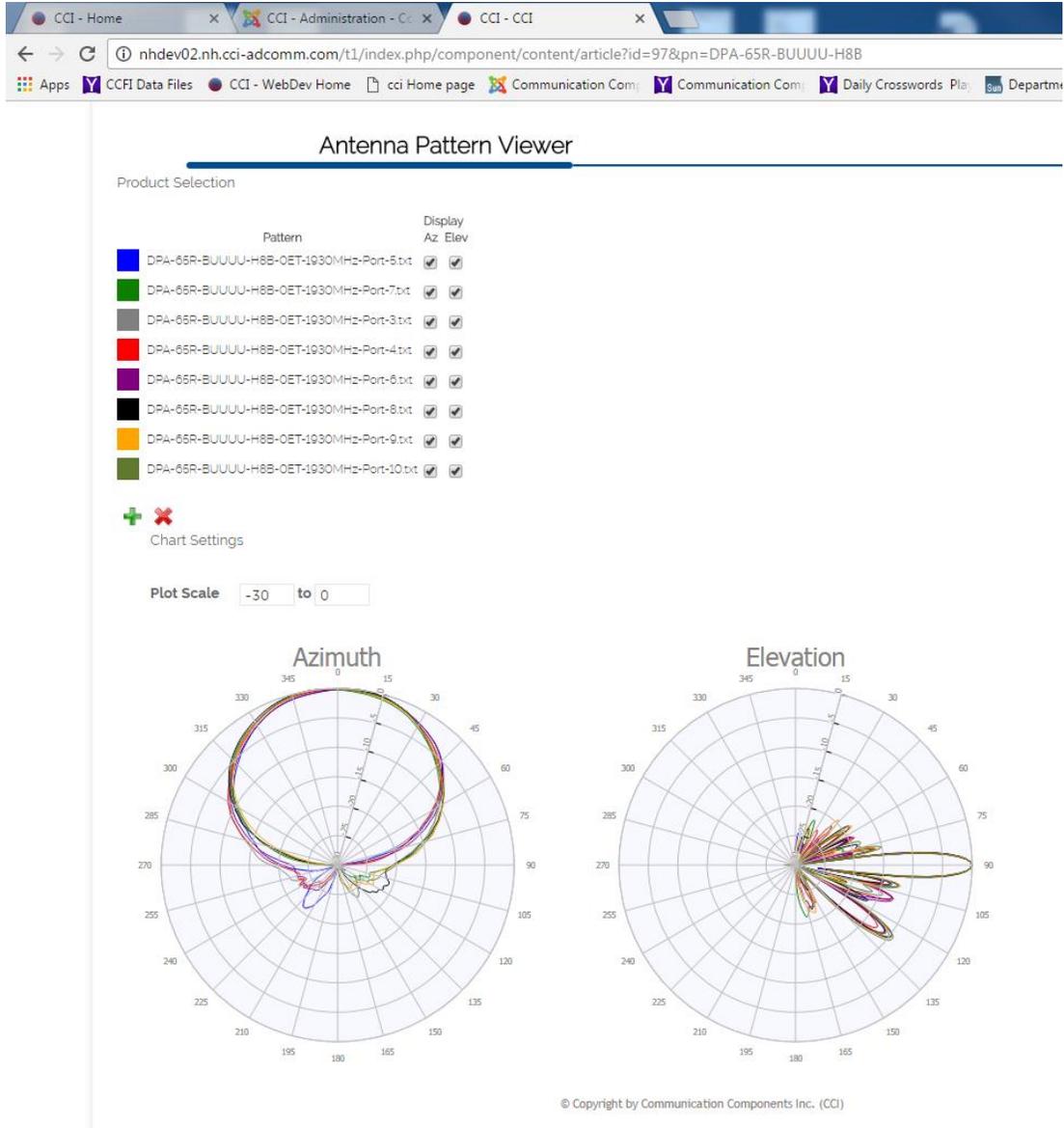


Figure 20 – All eight (8) High Band Ports on DPA-65R-BUUUU-H8B shown at 0° EDT, 1930 MHz

16) Or the user can compare different antennas. In this example Port 3 from the HPA-65R-BUU-H4, HPA-65R-BUU-H6 and HPA-65R-BUU-H8 Antennas are being compared (at 0 Degrees EDT, and 1743 MHz).

Warning: Please note that the antenna patterns are "Normalized." That is, the actual gains of the antennas can be different.

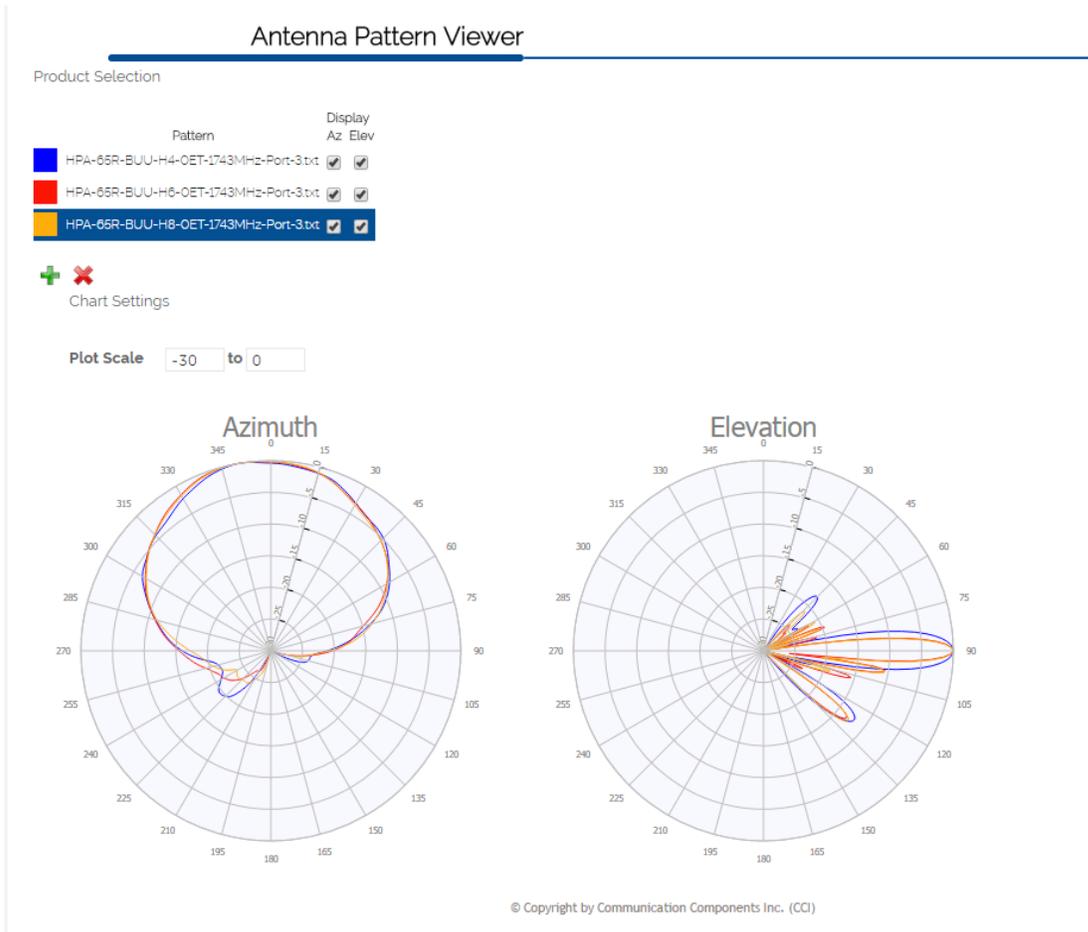


Figure 21 – Comparison of Port 3 on HPA-65R-BUU-H4, -H6 and -H8 Antennas (0° EDT, 1743 MHz)