

# **HR60 (Presario) Antenna Information for HP**

**Wistron NeWeb Corporation**

# HP HR60 Antenna Information

## I. Antenna Assembly Specifications

### Antenna assembly overview: Peak Gain including cable loss.

Designator	Manufacture	Antenna type	Cable Assembly Info.	Peak Gain W/ Cable loss (dBi)
Main antenna (P/N:81.EBC15.002)	WNC	Metal PIFA	(1) P/N: J12B1394-1 50 ohm Coaxial. length: 62cm diameter: 1.13mm (2) P/N:20278-101R-13 Connector: I-PEX	2400-2500MHz 2.73 dBi(peak)
				5150-5350MHz 1.98 dBi(peak)
				5470-5825MHz 0.4 dBi(peak)
Auxiliary antenna (P/N:81.EBC15.001)	WNC	Metal PIFA	(1)P/N: J12B1394-2 50 ohm Coaxial. length: 67cm diameter: 1.13mm (2)P/N:20278-101R-13 Connector: I-PEX	2400-2500MHz 2.97dBi (peak)
				5150-5350MHz 1.66 dBi (peak)
				5470-5825MHz 1.34 dBi (peak)

### Antenna overview: Peak Gain not including cable loss.

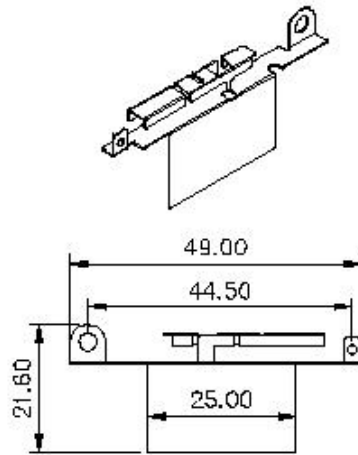
Antenna Designator	Manufacture	Antenna type	Peak Gain w/o Cable Loss (dBi)
Main antenna (P/N:81.EBC15.002)	WNC	Metal PIFA	2400-2500MHz 4.97 dBi(peak)
			5150-5350MHz 5.35 dBi(peak)
			5470-5825MHz 3.86 dBi(peak)
Auxiliary antenna (P/N:81.EBC15.001)	WNC	Metal PIFA	2400-2500MHz 5.34dBi (peak)
			5150-5350MHz 5.22 dBi (peak)
			5470-5825MHz 5.08 dBi (peak)

**Cable assembly overview: Cable loss (including connector).**

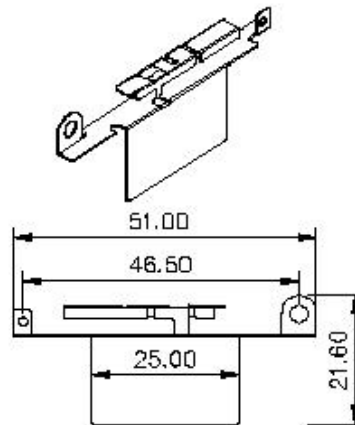
Designator	Manufacture	Cable type and length	VSWR	Cable Loss (dBi)
P/N: 50.EBC04.001 For use with the Main antenna	<b>WNC</b>	P/N: 50.EBC04.001 50 ohm Coaxial. length: 62cm diameter: 1.13mm Connector: I-PEX	2400-2500MHz 1.51 max	2400-2500MHz 2.24 dBi (peak)
			5150-5350MHz 1.54max	5150-5350MHz 3.33 dBi (peak)
			5470-5825MHz 1.36 max	5470-5825MHz 3.46dBi(peak)
P/N: 50.EBC05.011 For use with the Auxiliary antenna	<b>WNC</b>	P/N: 50.EBC05.001 50 ohm Coaxial. length: 67cm diameter: 1.13mm Connector: I-PEX	2400-2500MHz 1.41 max	2400-2500MHz 2.37 dBi (peak)
			5150-5350MHz 1.52 max	5150-5350MHz 3.56 dBi (peak)
			5470-5825MHz 1.57 max	5470-5825MHz 3.71 dBi(peak)

**Antenna mechanical drawings.**

**A.Main antenna (Right\_side antenna)**



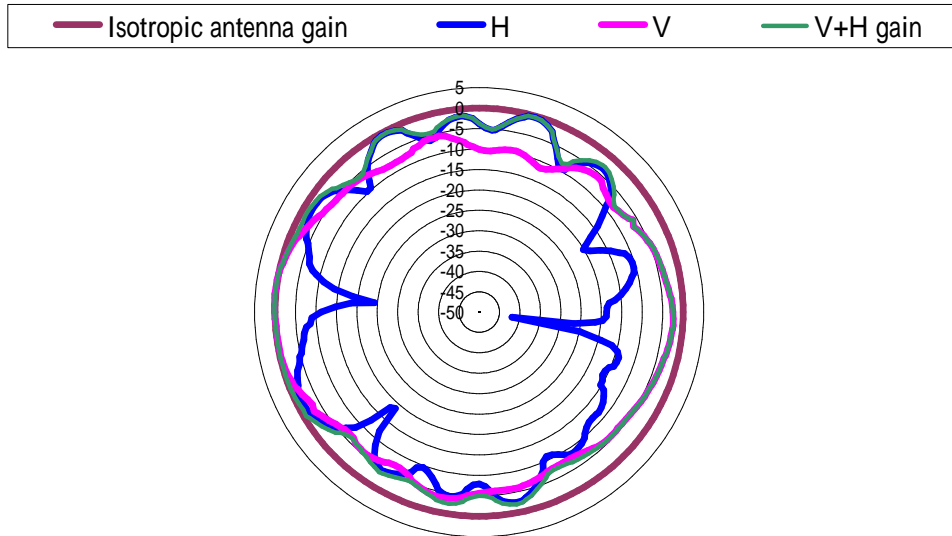
**B.AUXiliary antenna(Left\_side antenna)**



# Radiation characteristic of antennae Loaded (In Host System)

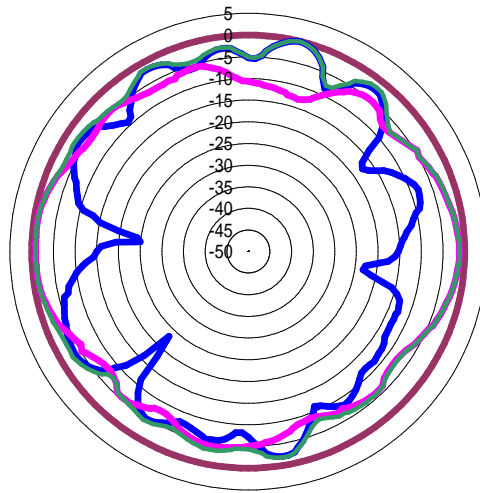
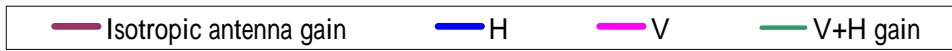
## 2400-2500MHz radiation characteristic

Main antenna @2.4GHz



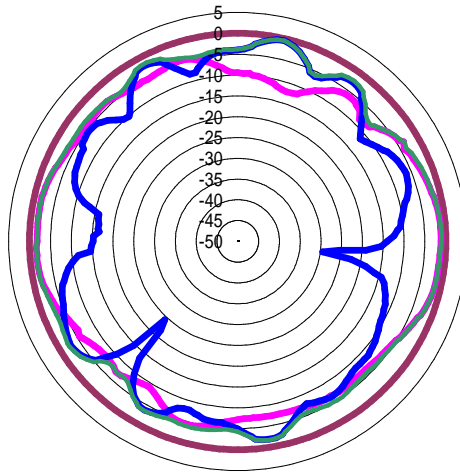
Center Frequency	<b>2400 MHz</b>
Horizontal (dBi) peak	<b>0.49</b>
Vertical (dBi) peak	<b>-1.35</b>
Horz+Vert (dBi) peak	<b>0.5</b>

**Main antenna @2.45GHz**



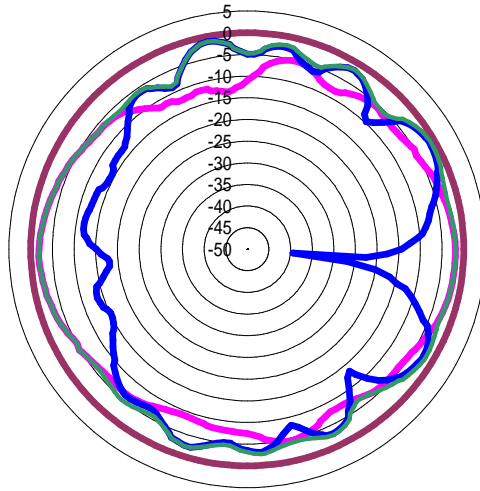
Center Frequency	<b>2450 MHz</b>
Horizontal (dBi) peak	<b>-0.28</b>
Vertical (dBi) peak	<b>1.16</b>
Horz+Vert (dBi) peak	<b>1.18</b>

**Main antenna @2.5GHz**



Center Frequency	<b>2500 MHz</b>
Horizontal (dBi) peak	<b>1.54</b>
Vertical (dBi) peak	<b>1.57</b>
Horz+Vert (dBi) peak	<b>2.35</b>

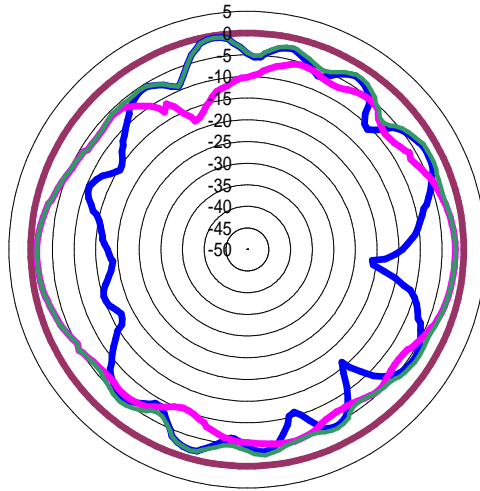
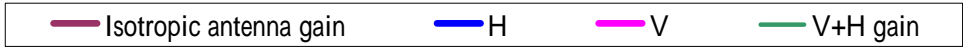
**Aux antenna @2.4GHz**



Center Frequency	<b>2400 MHz</b>
Horizontal (dBi) peak	<b>-1.20</b>
Vertical (dBi) peak	<b>-1.85</b>
Horz+Vert (dBi) peak	<b>-0.96</b>

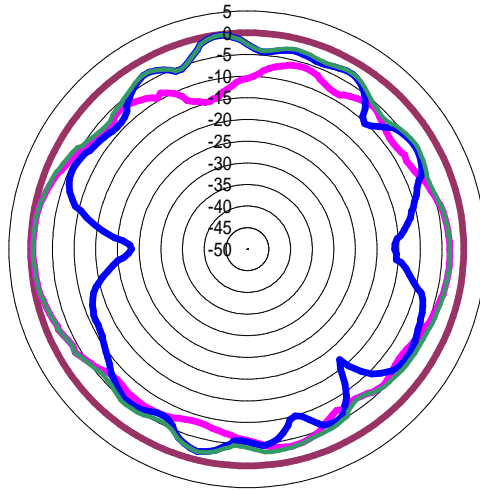


**Aux antenna @2.45GHz**



Center Frequency	<b>2450 MHz</b>
Horizontal (dBi) peak	<b>-0.54</b>
Vertical (dBi) peak	<b>-1.41</b>
Horz+Vert (dBi) peak	<b>-0.54</b>

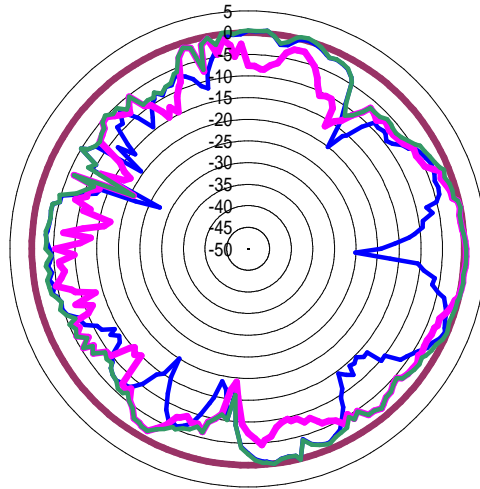
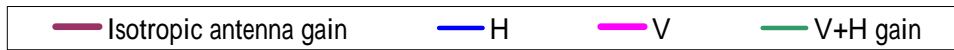
**Aux antenna @2.5GHz**



Center Frequency	<b>2500 MHz</b>
Horizontal (dBi) peak	<b>-0.21</b>
Vertical (dBi) peak	<b>-0.52</b>
Horz+Vert (dBi) peak	<b>-0.2</b>

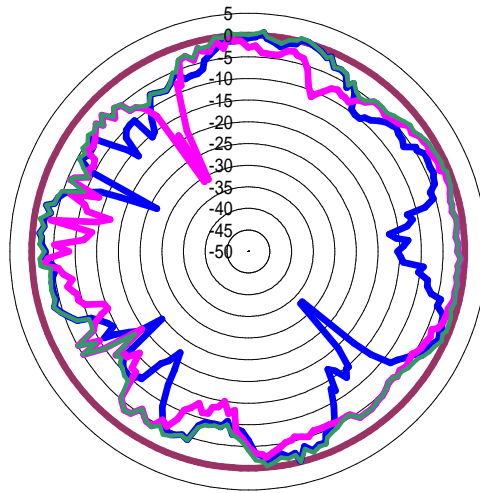
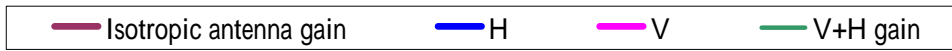
## 5150-5135 MHz radiation characteristic

**Main antenna @5.15GHz**



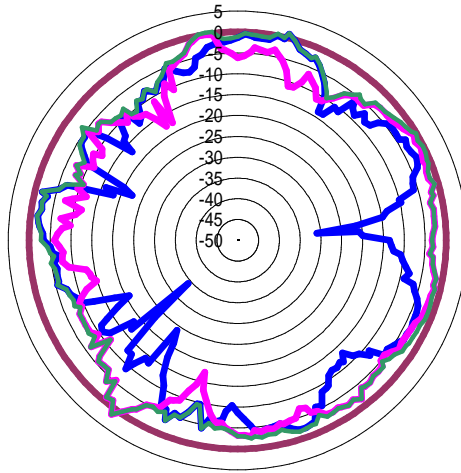
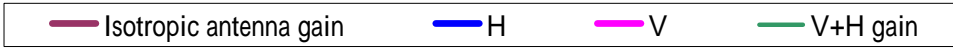
Center Frequency	<b>5150 MHz</b>
Horizontal (dBi) peak	<b>0.63</b>
Vertical (dBi) peak	<b>0.48</b>
Horz+Vert (dBi) peak	<b>0.66</b>

**Main antenna @5.25GHz**



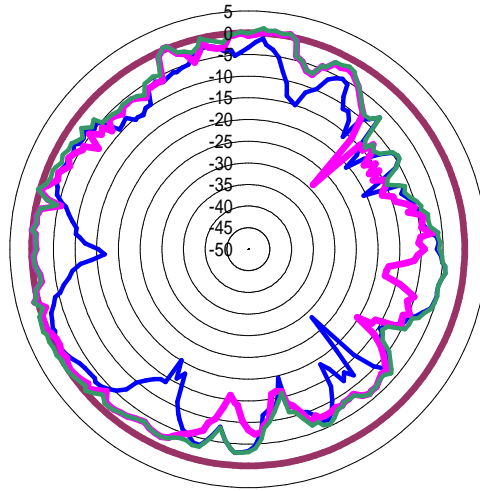
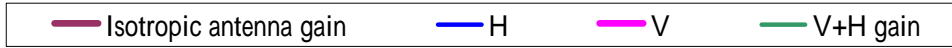
Center Frequency	<b>5250 MHz</b>
Horizontal (dBi) peak	<b>0.73</b>
Vertical (dBi) peak	<b>0.07</b>
Horz+Vert (dBi) peak	<b>1.04</b>

**Main antenna @5.35GHz**



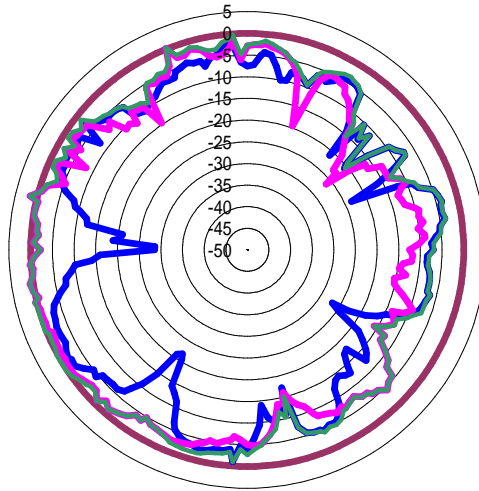
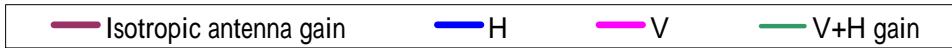
Center Frequency	<b>5350 MHz</b>
Horizontal (dBi) peak	<b>1.53</b>
Vertical (dBi) peak	<b>1.03</b>
Horz+Vert (dBi) peak	<b>1.53</b>

**Aux antenna @5.15GHz**



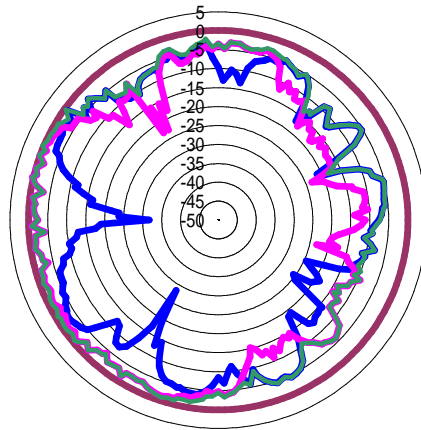
Center Frequency	<b>5150 MHz</b>
Horizontal (dBi) peak	<b>-0.68</b>
Vertical (dBi) peak	<b>0.79</b>
Horz+Vert (dBi) peak	<b>1.14</b>

**Aux antenna @5.25GHz**



Center Frequency	<b>5250 MHz</b>
Horizontal (dBi) peak	<b>-1.01</b>
Vertical (dBi) peak	<b>1.69</b>
Horz+Vert (dBi) peak	<b>1.71</b>

Aux antenna @5.35GHz

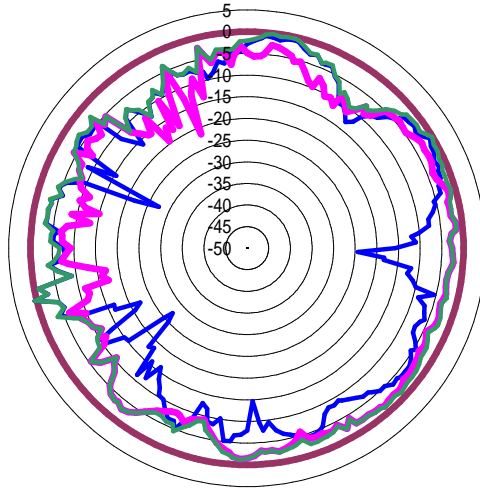
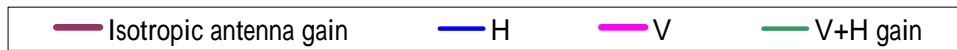


Center Frequency	<b>5350 MHz</b>
Horizontal (dBi) peak	<b>-0.64</b>
Vertical (dBi) peak	<b>0.25</b>
Horz+Vert (dBi) peak	<b>0.26</b>



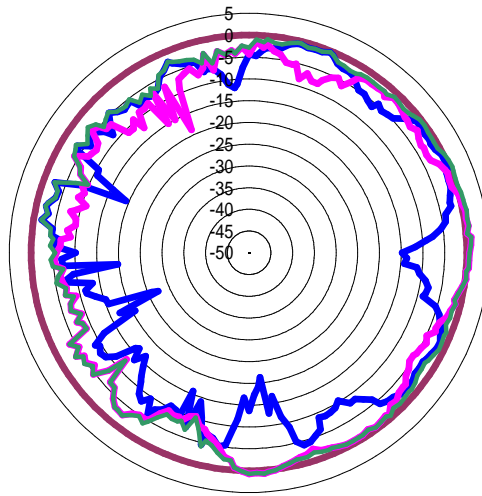
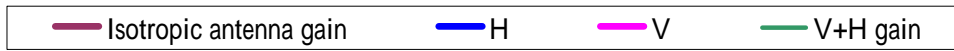
## 5470-5825MHz radiation characteristic

Main antenna @5.47GHz



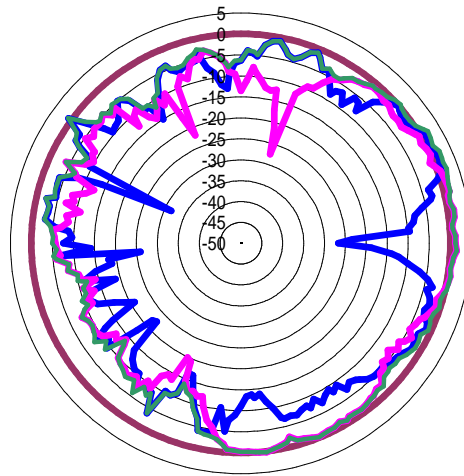
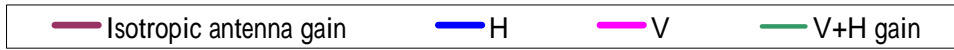
Center Frequency	<b>5470 MHz</b>
Horizontal (dBi) peak	<b>0.20</b>
Vertical (dBi) peak	<b>-0.33</b>
Horz+Vert (dBi) peak	<b>0.2</b>

**Main antenna @5.6475GHz**



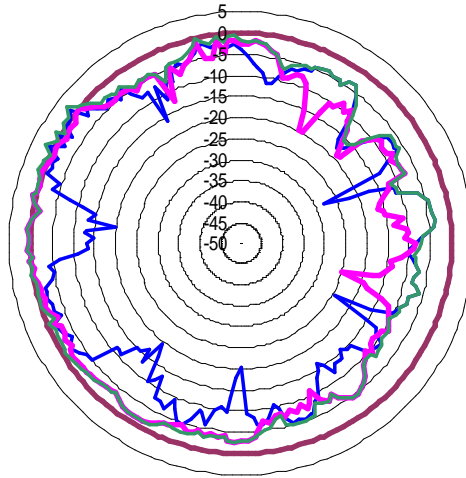
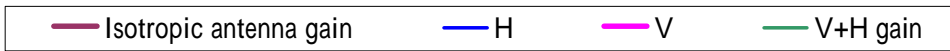
Center Frequency	<b>5647.5 MHz</b>
Horizontal (dBi) peak	<b>-0.06</b>
Vertical (dBi) peak	<b>-0.82</b>
Horz+Vert (dBi) peak	<b>-0.06</b>

**Main antenna @5.825GHz**



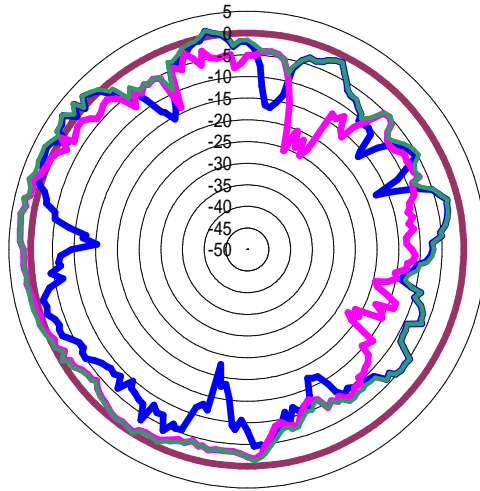
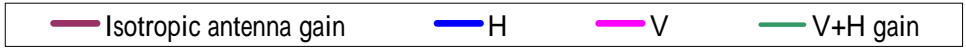
Center Frequency	<b>5825 MHz</b>
Horizontal (dBi) peak	<b>-1.43</b>
Vertical (dBi) peak	<b>-1.11</b>
Horz+Vert (dBi) peak	<b>-0.42</b>

**Aux antenna @5.47GHz**



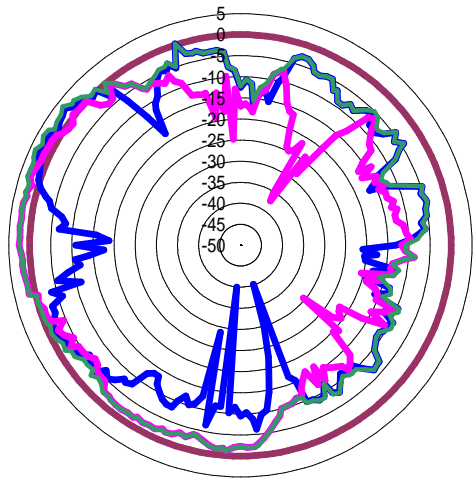
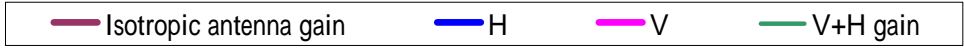
Center Frequency	<b>5470 MHz</b>
Horizontal (dBi) peak	<b>1.78</b>
Vertical (dBi) peak	<b>0.93</b>
Horz+Vert (dBi) peak	<b>2.49</b>

**Aux antenna @5.6475GHz**



Center Frequency	<b>5647.5 MHz</b>
Horizontal (dBi) peak	<b>2.95</b>
Vertical (dBi) peak	<b>2.60</b>
Horz+Vert (dBi) peak	<b>3.03</b>

**Aux antenna @5.825GHz**



Center Frequency	<b>5825 MHz</b>
Horizontal (dBi) peak	<b>2.89</b>
Vertical (dBi) peak	<b>2.5</b>
Horz+Vert (dBi) peak	<b>3.74</b>

**Host PC Information**

Host model:

Main antenna



**Auxiliary Antenna**

