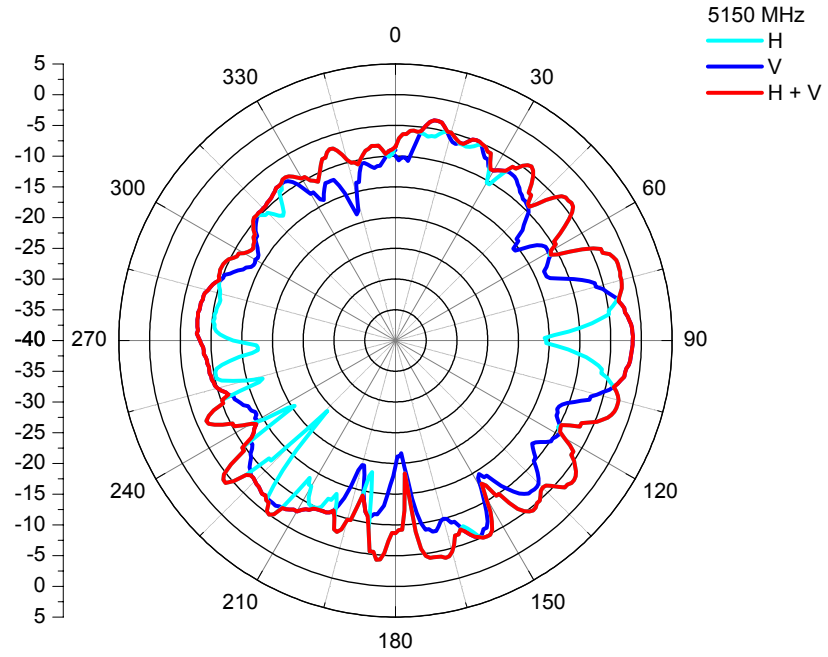


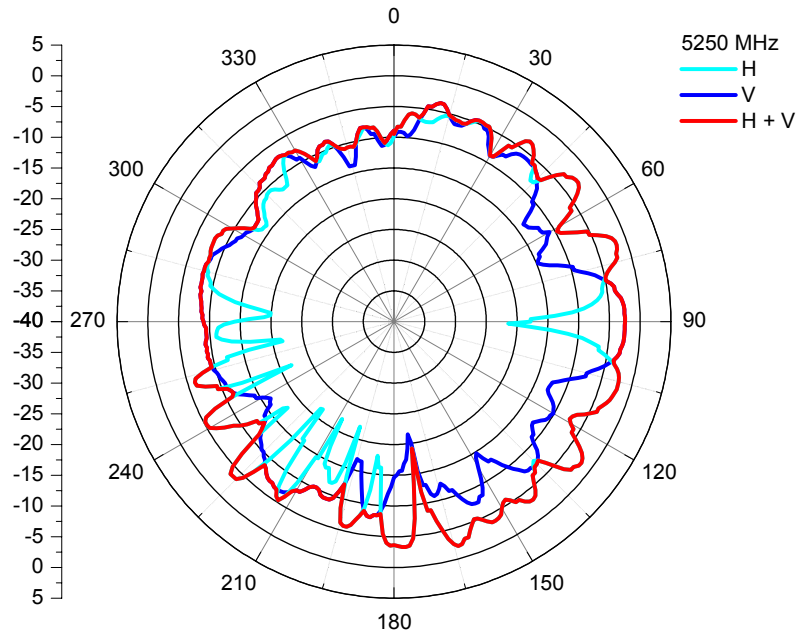
**5150-5350 MHz radiation characteristic**

**Tx1 antenna: 5150 MHz**



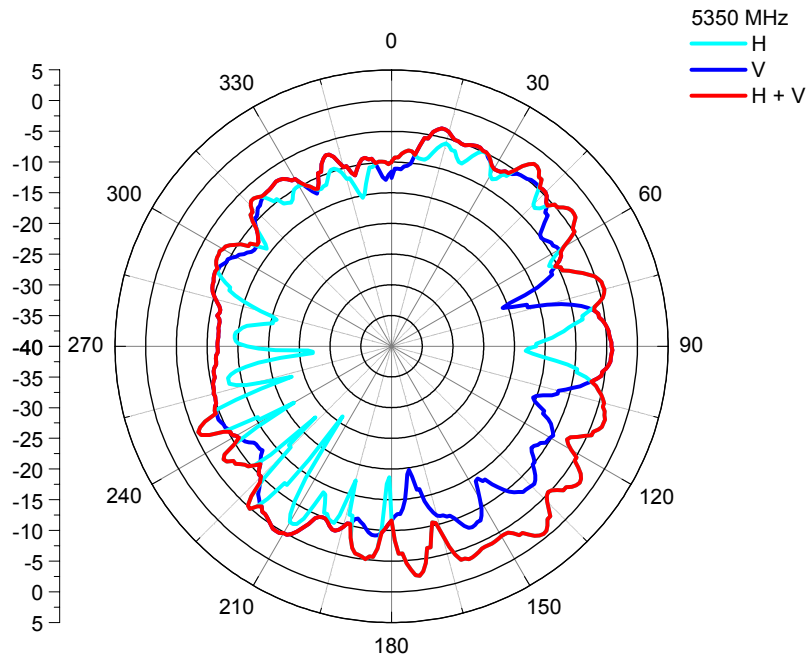
Center Frequency	<b>5150 MHz</b>	Center Frequency	<b>5150MHz</b>
Horizontal (dBi) peak	<b>-1.68</b>	Horizontal (dBi) average	<b>-7.00</b>
Vertical (dBi) peak	<b>-1.27</b>	Vertical (dBi) average	<b>-8.00</b>
Horz+Vert (dBi) peak	<b>-1.68</b>	Horz+Vert (dBi) average	<b>-4.46</b>

**Tx1 antenna: 5250 MHz**



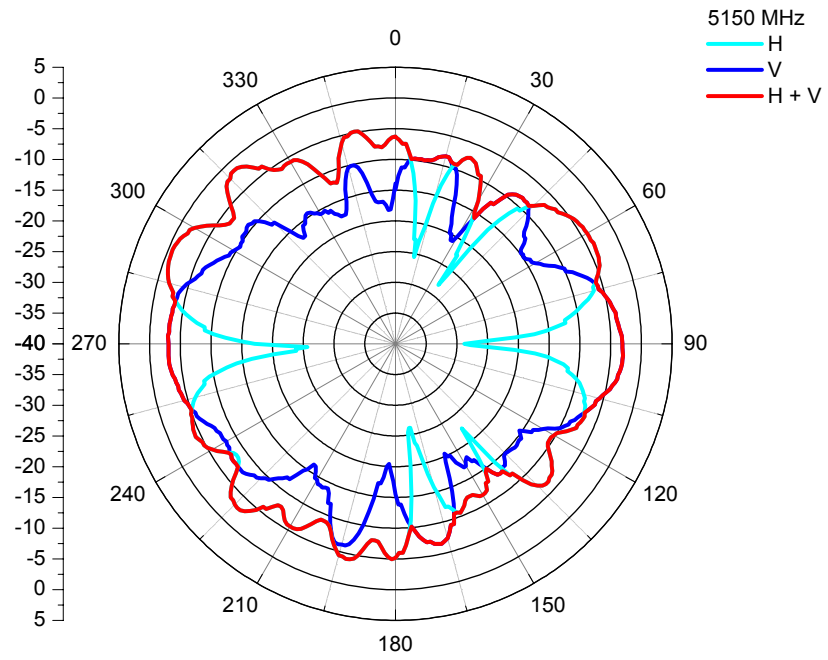
Center Frequency	<b>5250 MHz</b>	Center Frequency	<b>5250MHz</b>
Horizontal (dBi) peak	<b>-1.52</b>	Horizontal (dBi) average	<b>-6.36</b>
Vertical (dBi) peak	<b>-2.32</b>	Vertical (dBi) average	<b>-8.26</b>
Horz+Vert (dBi) peak	<b>-1.52</b>	Horz+Vert (dBi) average	<b>-4.19</b>

**Tx1 antenna: 5350 MHz**



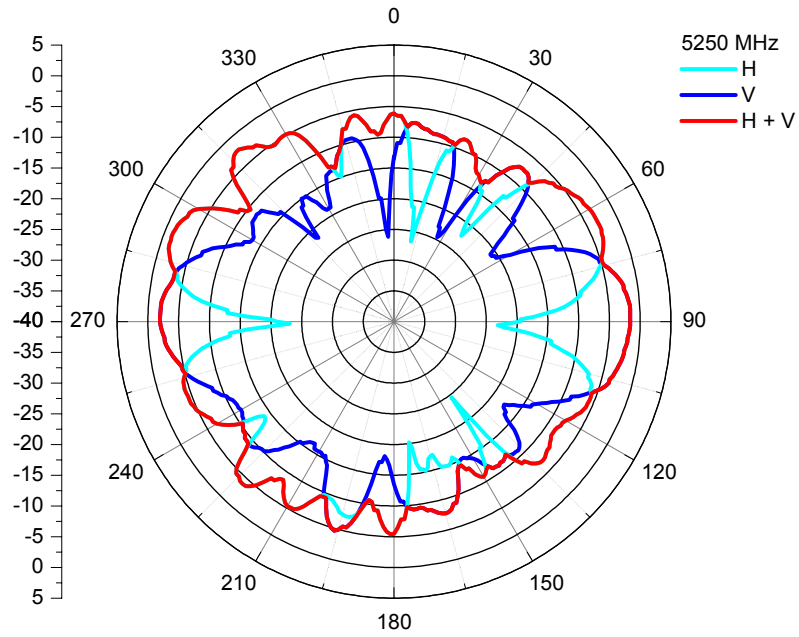
Center Frequency	<b>5350 MHz</b>	Center Frequency	<b>5350MHz</b>
Horizontal (dBi) peak	<b>-0.63</b>	Horizontal (dBi) average	<b>-6.97</b>
Vertical (dBi) peak	<b>-3.48</b>	Vertical (dBi) average	<b>-8.41</b>
Horz+Vert (dBi) peak	<b>-0.63</b>	Horz+Vert (dBi) average	<b>-4.62</b>

**Tx2 antenna: 5150 MHz**



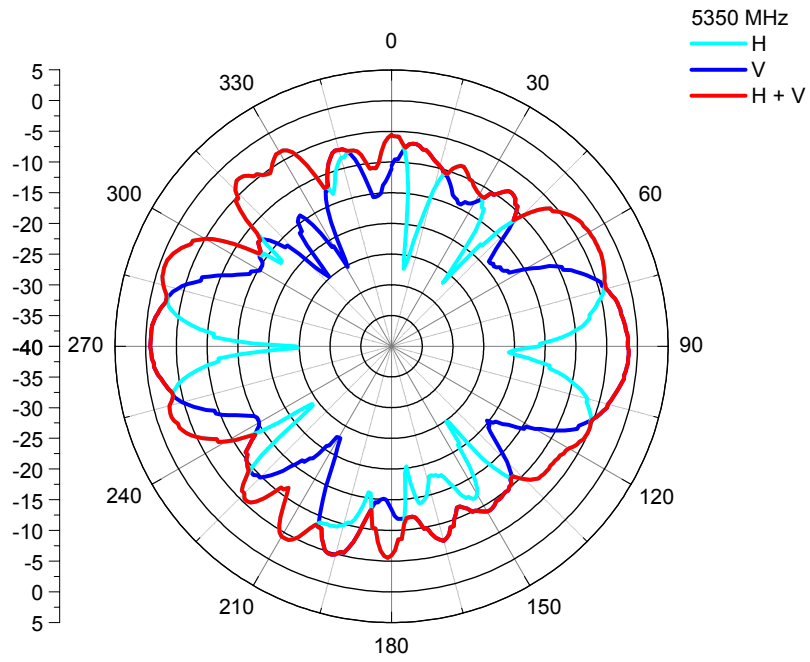
Center Frequency	<b>5150 MHz</b>	Center Frequency	<b>5150MHz</b>
Horizontal (dBi) peak	<b>-0.73</b>	Horizontal (dBi) average	<b>-6.65</b>
Vertical (dBi) peak	<b>-3.06</b>	Vertical (dBi) average	<b>-8.31</b>
Horz+Vert (dBi) peak	<b>-0.73</b>	Horz+Vert (dBi) average	<b>-4.39</b>

**Tx2 antenna: 5250 MHz**



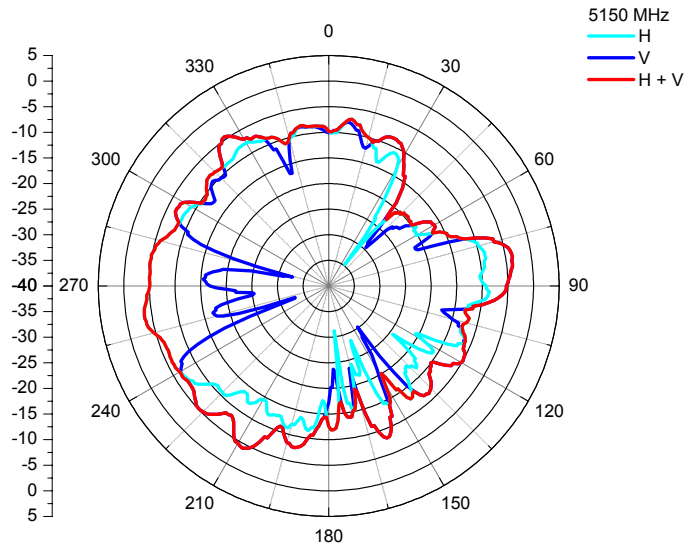
Center Frequency	<b>5250 MHz</b>	Center Frequency	<b>5250MHz</b>
Horizontal (dBi) peak	<b>-1.28</b>	Horizontal (dBi) average	<b>-6.97</b>
Vertical (dBi) peak	<b>-1.51</b>	Vertical (dBi) average	<b>-7.74</b>
Horz+Vert (dBi) peak	<b>-1.28</b>	Horz+Vert (dBi) average	<b>-4.33</b>

**Tx2 antenna: 5350 MHz**



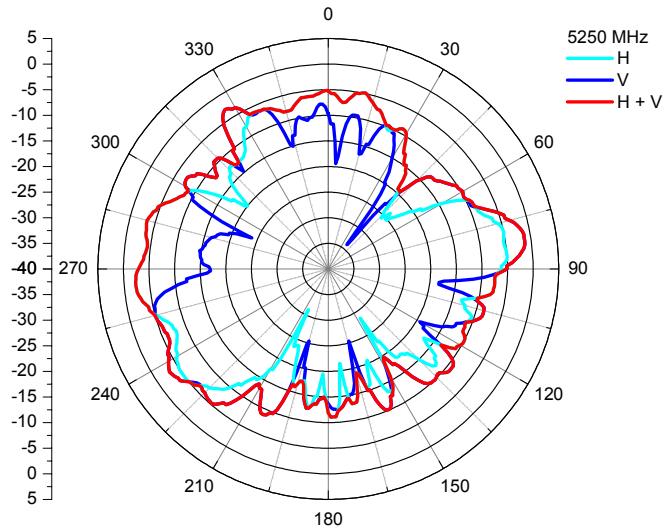
Center Frequency	<b>5350 MHz</b>	Center Frequency	<b>5350MHz</b>
Horizontal (dBi) peak	<b>-0.77</b>	Horizontal (dBi) average	<b>-6.80</b>
Vertical (dBi) peak	<b>-0.60</b>	Vertical (dBi) average	<b>-7.14</b>
Horz+Vert (dBi) peak	<b>-0.60</b>	Horz+Vert (dBi) average	<b>-3.96</b>

**Tx3 (or Rx3) antenna: 5150 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>5150 MHz</b>	Center Frequency	<b>5150MHz</b>
Horizontal (dBi) peak	<b>-3.49</b>	Horizontal (dBi) average	<b>-9.76</b>
Vertical (dBi) peak	<b>-3.67</b>	Vertical (dBi) average	<b>-9.59</b>
Horz+Vert (dBi) peak	<b>-3.49</b>	Horz+Vert (dBi) average	<b>-6.66</b>

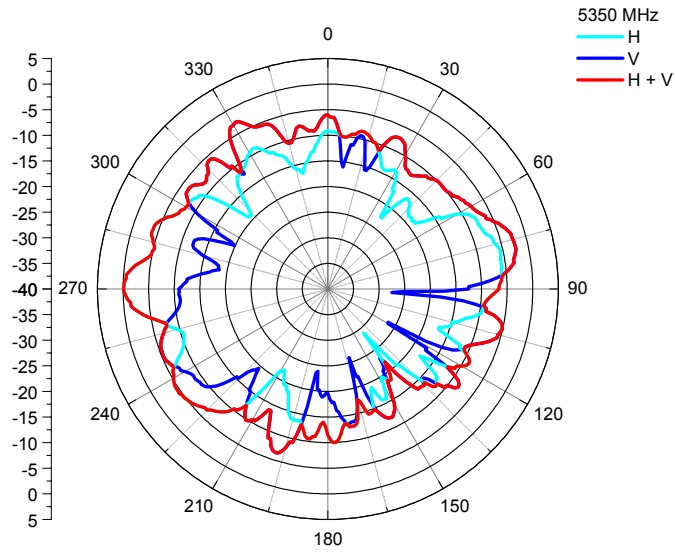
**Tx3 (or Rx3) antenna: 5250 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>5250 MHz</b>	Center Frequency	<b>5250MHz</b>
Horizontal (dBi) peak	<b>-2.28</b>	Horizontal (dBi) average	<b>-8.24</b>
Vertical (dBi) peak	<b>-1.25</b>	Vertical (dBi) average	<b>-8.70</b>
Horz+Vert (dBi) peak	<b>-1.25</b>	Horz+Vert (dBi) average	<b>-5.45</b>



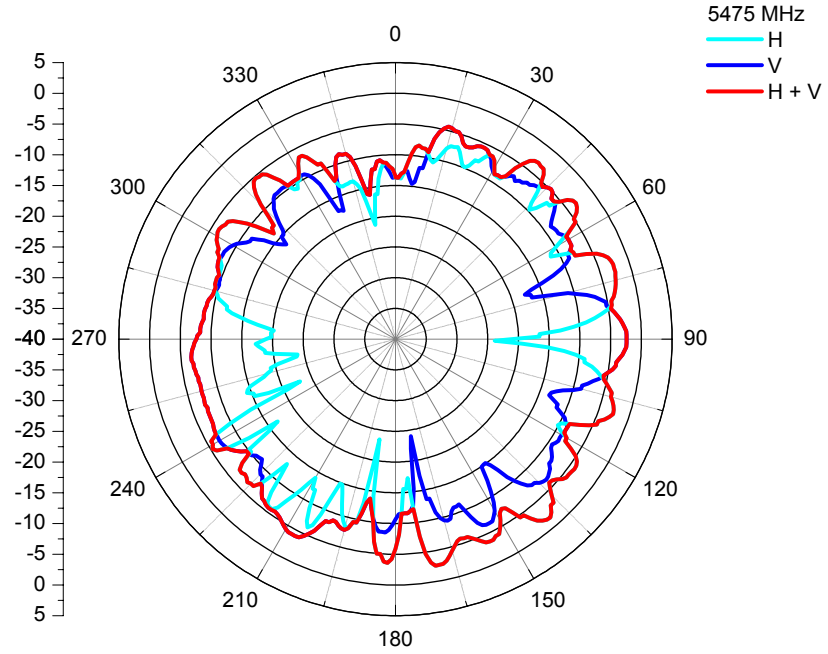
**Tx3 (or Rx3) antenna: 5350 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>5350 MHz</b>	Center Frequency	<b>5350MHz</b>
Horizontal (dBi) peak	<b>-0.13</b>	Horizontal (dBi) average	<b>-8.63</b>
Vertical (dBi) peak	<b>-2.45</b>	Vertical (dBi) average	<b>-8.80</b>
Horz+Vert (dBi) peak	<b>-0.13</b>	Horz+Vert (dBi) average	<b>-5.70</b>

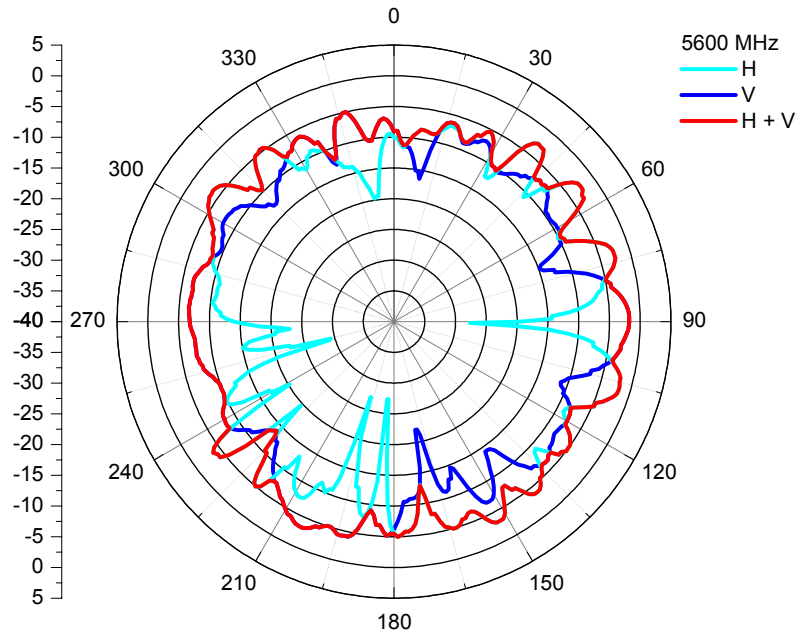
**5475-5725MHz radiation characteristic**

**Tx1 antenna: 5475 MHz**



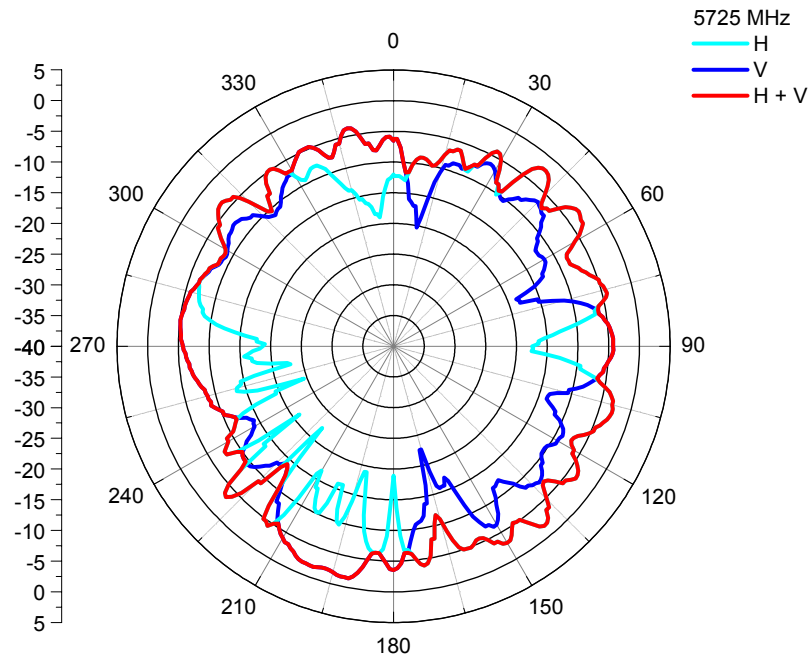
Center Frequency	<b>5475 MHz</b>	Center Frequency	<b>5475 MHz</b>
Horizontal (dBi) peak	<b>-1.47</b>	Horizontal (dBi) average	<b>-6.99</b>
Vertical (dBi) peak	<b>-2.50</b>	Vertical (dBi) average	<b>-8.08</b>
Horz+Vert (dBi) peak	<b>-1.47</b>	Horz+Vert (dBi) average	<b>-4.49</b>

**Tx1 antenna: 5600 MHz**



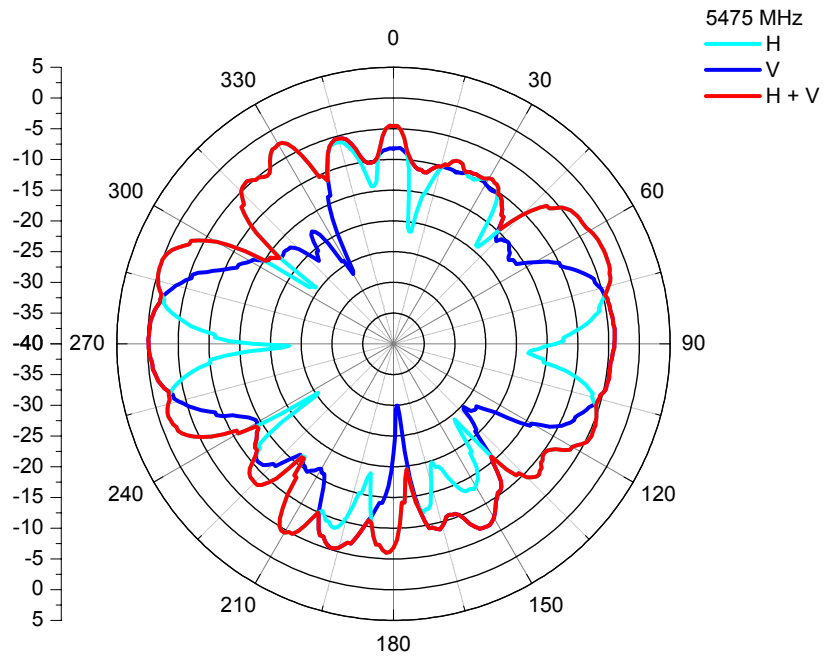
Center Frequency	<b>5600MHz</b>	Center Frequency	<b>5600 MHz</b>
Horizontal (dBi) peak	<b>-1.68</b>	Horizontal (dBi) average	<b>-7.03</b>
Vertical (dBi) peak	<b>-1.91</b>	Vertical (dBi) average	<b>-7.68</b>
Horz+Vert (dBi) peak	<b>-1.68</b>	Horz+Vert (dBi) average	<b>-4.33</b>

**Tx1 antenna: 5725 MHz**



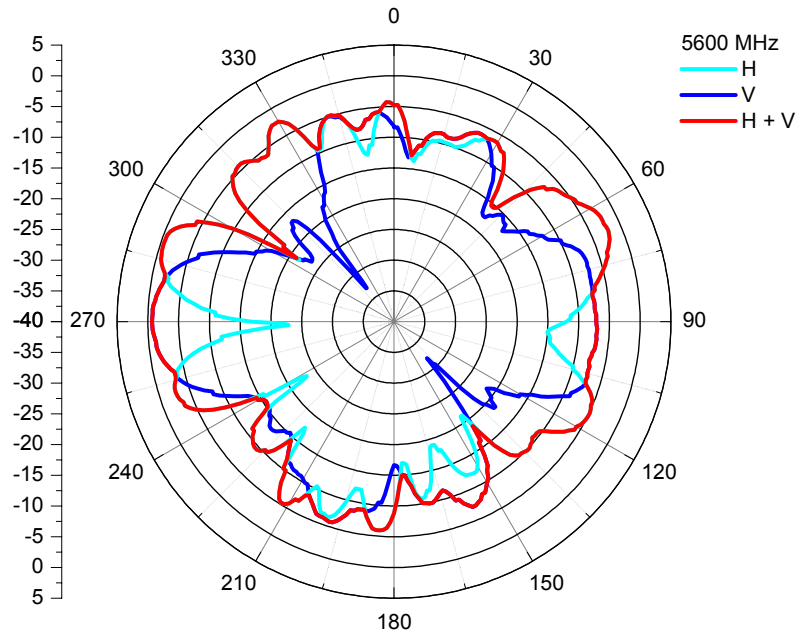
Center Frequency	<b>5725 MHz</b>	Center Frequency	<b>5725 MHz</b>
Horizontal (dBi) peak	<b>-1.93</b>	Horizontal (dBi) average	<b>-7.12</b>
Vertical (dBi) peak	<b>-1.62</b>	Vertical (dBi) average	<b>-7.46</b>
Horz+Vert (dBi) peak	<b>-1.62</b>	Horz+Vert (dBi) average	<b>-4.27</b>

**Tx2 antenna: 5475 MHz**



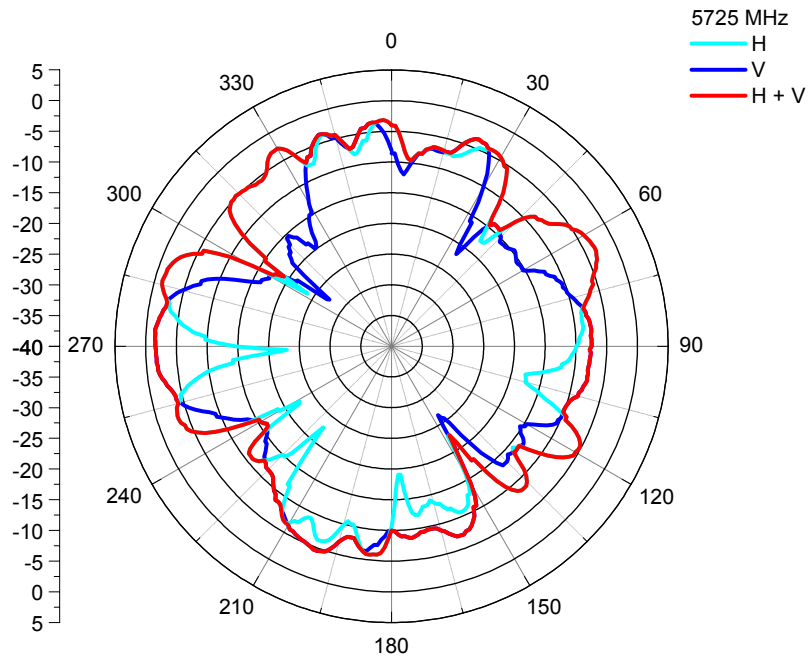
Center Frequency	<b>5475 MHz</b>	Center Frequency	<b>5475 MHz</b>
Horizontal (dBi) peak	<b>0.18</b>	Horizontal (dBi) average	<b>-6.43</b>
Vertical (dBi) peak	<b>-0.06</b>	Vertical (dBi) average	<b>-7.54</b>
Horz+Vert (dBi) peak	<b>0.18</b>	Horz+Vert (dBi) average	<b>-3.94</b>

**Tx2 antenna: 5600 MHz**



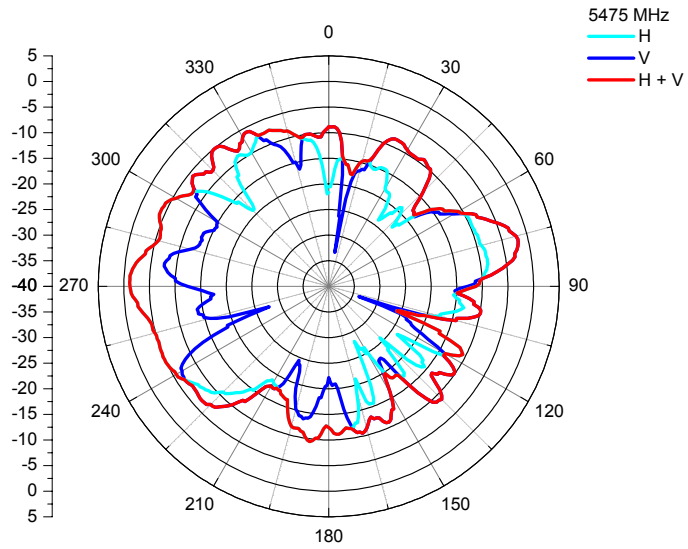
Center Frequency	<b>5600MHz</b>	Center Frequency	<b>5600 MHz</b>
Horizontal (dBi) peak	<b>-0.47</b>	Horizontal (dBi) average	<b>-6.78</b>
Vertical (dBi) peak	<b>-0.52</b>	Vertical (dBi) average	<b>-8.01</b>
Horz+Vert (dBi) peak	<b>-0.47</b>	Horz+Vert (dBi) average	<b>-4.34</b>

**Tx2 antenna: 5725 MHz**



Center Frequency	<b>5725 MHz</b>	Center Frequency	<b>5725 MHz</b>
Horizontal (dBi) peak	<b>-1.08</b>	Horizontal (dBi) average	<b>-6.89</b>
Vertical (dBi) peak	<b>-1.35</b>	Vertical (dBi) average	<b>-7.74</b>
Horz+Vert (dBi) peak	<b>-1.08</b>	Horz+Vert (dBi) average	<b>-4.28</b>

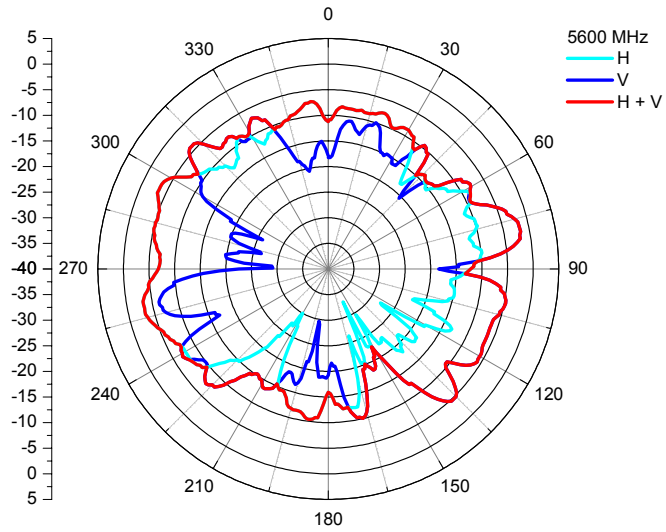
**Tx3 (or Rx3): 5475 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>5475 MHz</b>	Center Frequency	<b>5475 MHz</b>
Horizontal (dBi) peak	<b>-1.14</b>	Horizontal (dBi) average	<b>-9.12</b>
Vertical (dBi) peak	<b>-1.95</b>	Vertical (dBi) average	<b>-9.98</b>
Horz+Vert (dBi) peak	<b>-1.14</b>	Horz+Vert (dBi) average	<b>-6.52</b>

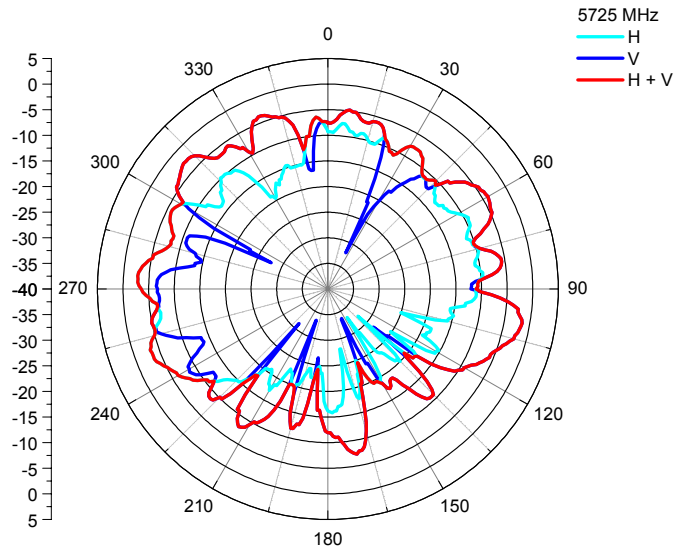


**Tx3 (or Rx3) antenna: 5600 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>5600 MHz</b>	Center Frequency	<b>5600 MHz</b>
Horizontal (dBi) peak	<b>-3.23</b>	Horizontal (dBi) average	<b>-9.58</b>
Vertical (dBi) peak	<b>-1.75</b>	Vertical (dBi) average	<b>-9.38</b>
Horz+Vert (dBi) peak	<b>-1.75</b>	Horz+Vert (dBi) average	<b>-6.47</b>

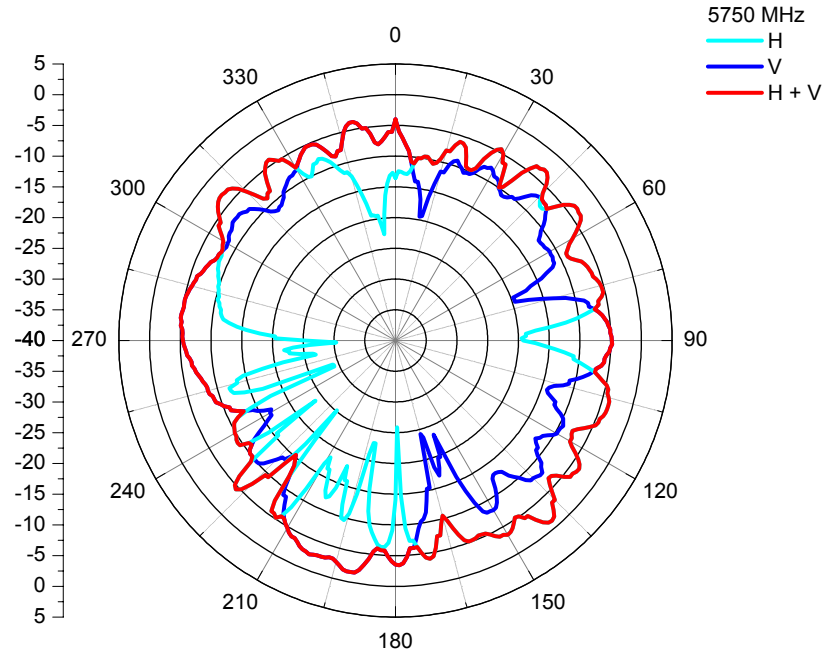
**Tx3 (or Rx3) antenna: 5725 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>5725 MHz</b>	Center Frequency	<b>5725 MHz</b>
Horizontal (dBi) peak	<b>-2.79</b>	Horizontal (dBi) average	<b>-10.05</b>
Vertical (dBi) peak	<b>-1.51</b>	Vertical (dBi) average	<b>-7.86</b>
Horz+Vert (dBi) peak	<b>-1.51</b>	Horz+Vert (dBi) average	<b>-5.81</b>

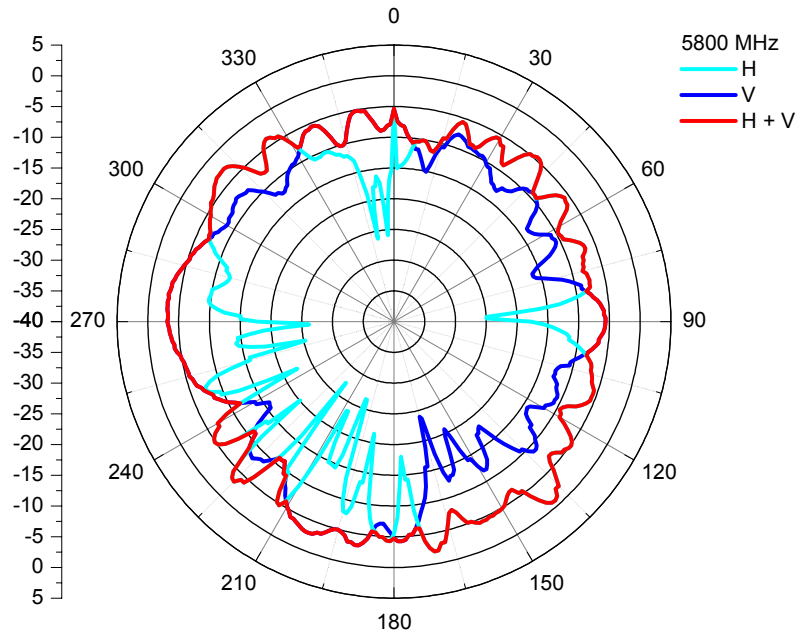
**5750-5875 MHz radiation characteristic**

**Tx1 antenna: 5750 MHz**



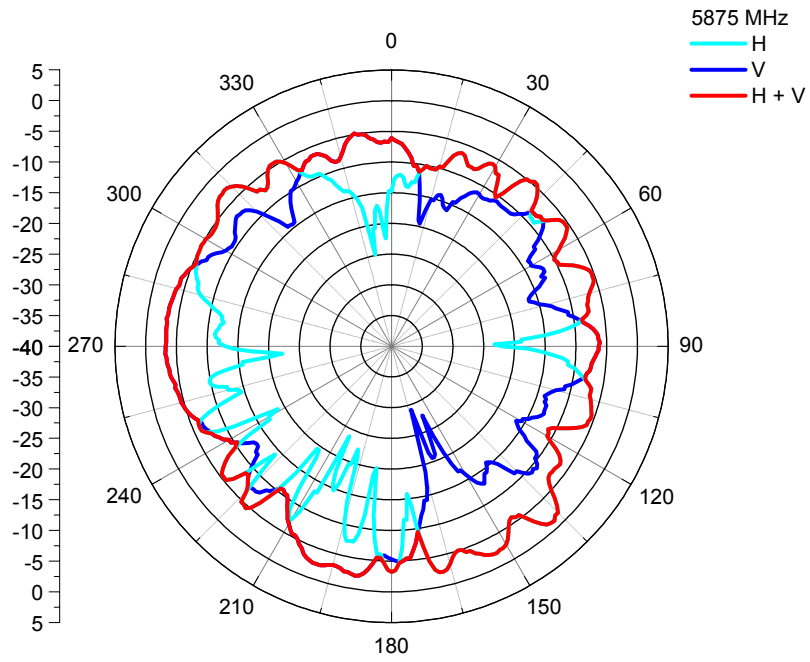
Center Frequency	<b>5750 MHz</b>	Center Frequency	<b>5750 MHz</b>
Horizontal (dBi) peak	<b>-1.30</b>	Horizontal (dBi) average	<b>-7.45</b>
Vertical (dBi) peak	<b>-1.87</b>	Vertical (dBi) average	<b>-7.90</b>
Horz+Vert (dBi) peak	<b>-1.30</b>	Horz+Vert (dBi) average	<b>-4.66</b>

**Tx1 antenna: 5800 MHz**



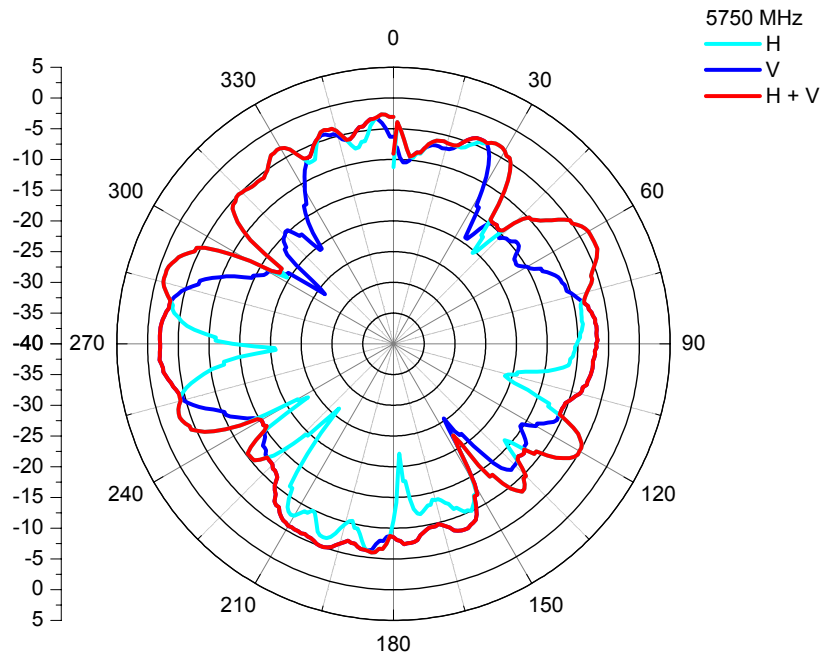
Center Frequency	<b>5800 MHz</b>	Center Frequency	<b>5800 MHz</b>
Horizontal (dBi) peak	<b>-0.98</b>	Horizontal (dBi) average	<b>-7.48</b>
Vertical (dBi) peak	<b>-3.08</b>	Vertical (dBi) average	<b>-7.98</b>
Horz+Vert (dBi) peak	<b>-0.98</b>	Horz+Vert (dBi) average	<b>-4.71</b>

**Tx1 antenna: 5875 MHz**



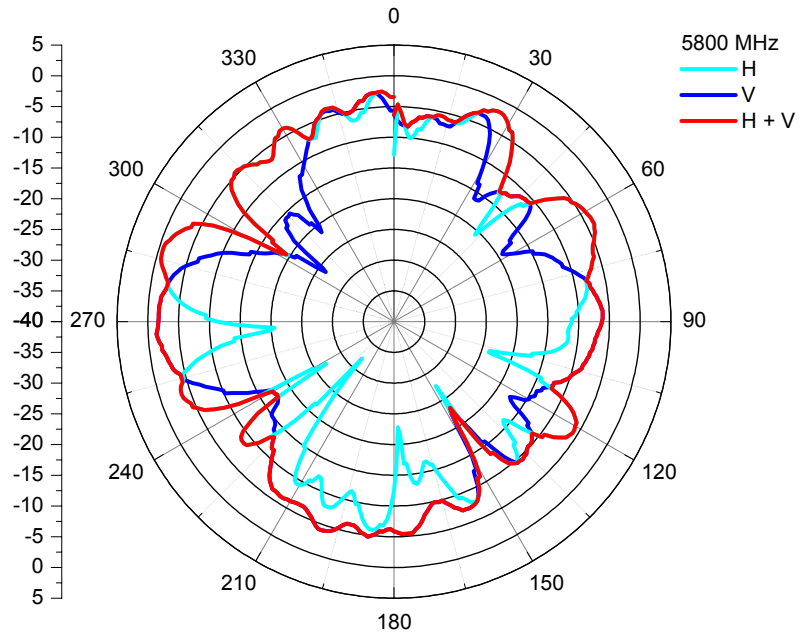
Center Frequency	<b>5875 MHz</b>	Center Frequency	<b>5875 MHz</b>
Horizontal (dBi) peak	<b>-1.18</b>	Horizontal (dBi) average	<b>-7.21</b>
Vertical (dBi) peak	<b>-1.98</b>	Vertical (dBi) average	<b>-7.47</b>
Horz+Vert (dBi) peak	<b>-1.18</b>	Horz+Vert (dBi) average	<b>-4.33</b>

**Tx2 antenna: 5750 MHz**



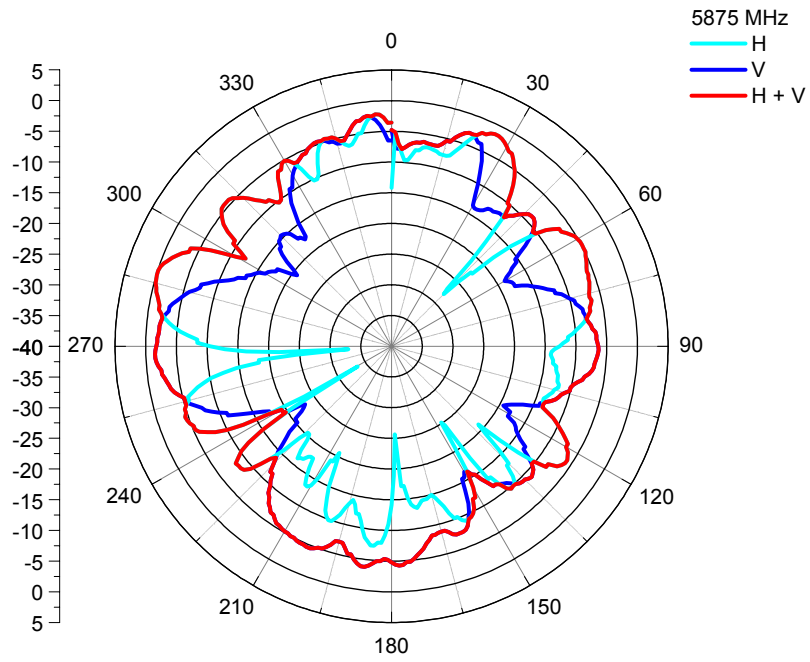
Center Frequency	<b>5750 MHz</b>	Center Frequency	<b>5750 MHz</b>
Horizontal (dBi) peak	<b>-1.31</b>	Horizontal (dBi) average	<b>-7.10</b>
Vertical (dBi) peak	<b>-1.99</b>	Vertical (dBi) average	<b>-7.92</b>
Horz+Vert (dBi) peak	<b>-1.31</b>	Horz+Vert (dBi) average	<b>-4.48</b>

**Tx2 antenna: 5800 MHz**



Center Frequency	<b>5800 MHz</b>	Center Frequency	<b>5800 MHz</b>
Horizontal (dBi) peak	<b>-0.45</b>	Horizontal (dBi) average	<b>-6.72</b>
Vertical (dBi) peak	<b>-1.21</b>	Vertical (dBi) average	<b>-7.21</b>
Horz+Vert (dBi) peak	<b>-0.45</b>	Horz+Vert (dBi) average	<b>-3.95</b>

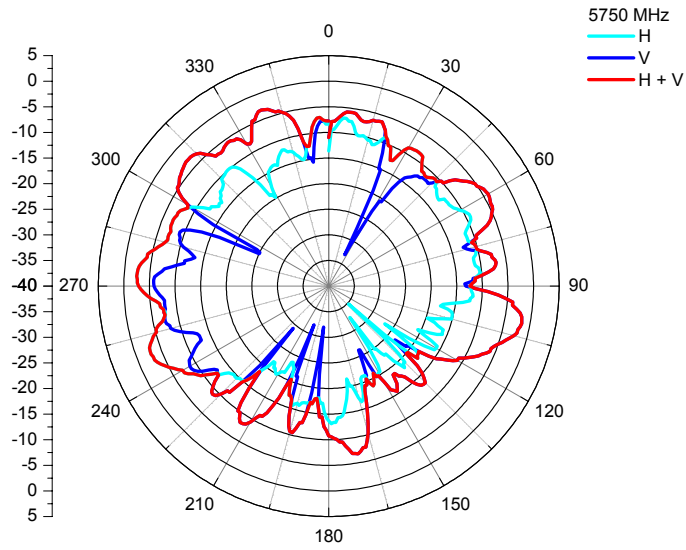
**Tx2 antenna: 5875 MHz**



Center Frequency	<b>5875 MHz</b>	Center Frequency	<b>5875 MHz</b>
Horizontal (dBi) peak	<b>-0.21</b>	Horizontal (dBi) average	<b>-7.27</b>
Vertical (dBi) peak	<b>-1.58</b>	Vertical (dBi) average	<b>-7.42</b>
Horz+Vert (dBi) peak	<b>-0.21</b>	Horz+Vert (dBi) average	<b>-4.33</b>

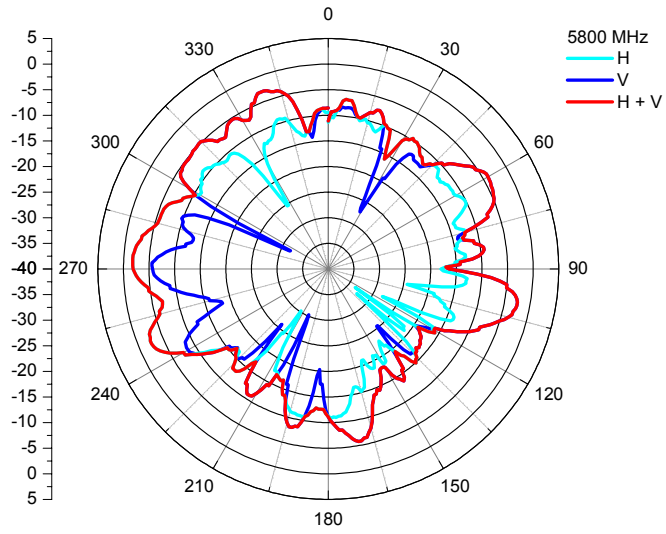


**Tx3 (or Rx3) antenna: 5750 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



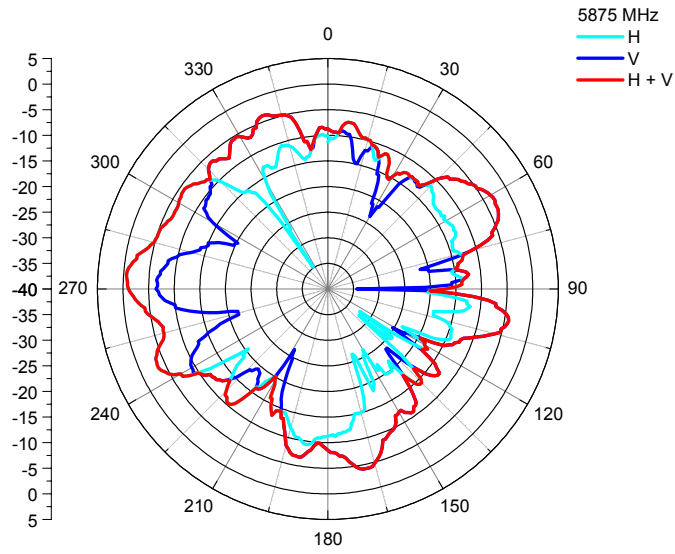
Center Frequency	<b>5750MHz</b>	Center Frequency	<b>5750MHz</b>
Horizontal (dBi) peak	<b>-2.48</b>	Horizontal (dBi) average	<b>-10.01</b>
Vertical (dBi) peak	<b>-1.58</b>	Vertical (dBi) average	<b>-8.06</b>
Horz+Vert (dBi) peak	<b>-1.58</b>	Horz+Vert (dBi) average	<b>-5.92</b>

**Tx3 (or Rx3) antenna: 5800 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx3 for 4965AGN)**



Center Frequency	<b>5800 MHz</b>	Center Frequency	<b>5800 MHz</b>
Horizontal (dBi) peak	<b>-1.76</b>	Horizontal (dBi) average	<b>-9.63</b>
Vertical (dBi) peak	<b>-2.47</b>	Vertical (dBi) average	<b>-8.66</b>
Horz+Vert (dBi) peak	<b>-1.76</b>	Horz+Vert (dBi) average	<b>-6.11</b>

**Tx3 (or Rx3) antenna: 5875 MHz (Plot is not required if 3<sup>rd</sup> Antenna is receive only e.g. Rx 3 for 4965AGN)**



Center Frequency	<b>5875 MHz</b>	Center Frequency	<b>5875 MHz</b>
Horizontal (dBi) peak	<b>-0.59</b>	Horizontal (dBi) average	<b>-9.35</b>
Vertical (dBi) peak	<b>-3.09</b>	Vertical (dBi) average	<b>-8.99</b>
Horz+Vert (dBi) peak	<b>-0.59</b>	Horz+Vert (dBi) average	<b>-6.16</b>

## Section 4. Host Platform Information

OEM / ODM Host platform: FJ3 platform correlated to antenna data

### Rating Label Photo:

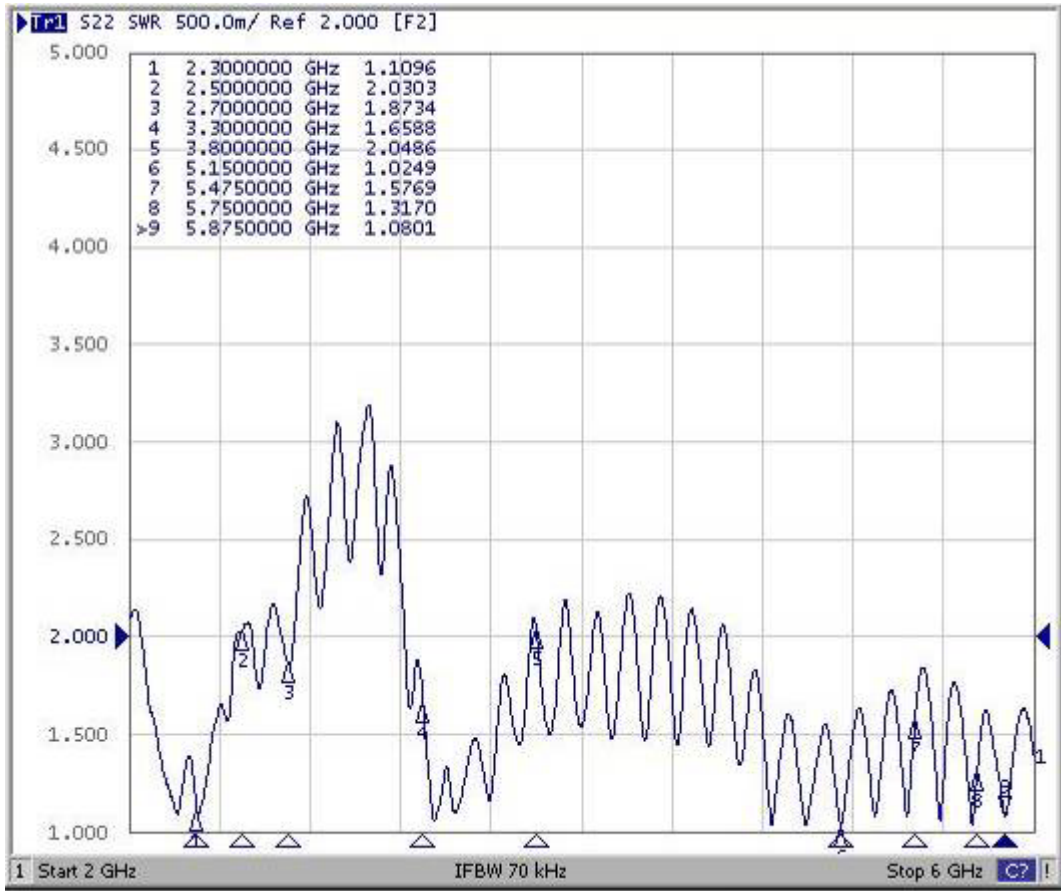


**TX1 Antenna**

**Cable Color:Black**

**Cable length=705mm**

**Antenna VSWR**



Antenna	VSWR								
Frequency(GHz)	2.3	2.4	2.45	2.5	2.6	2.7	3.3	3.5	3.8
<b>TX1</b>	1.10	1.66	1.71	2.03	1.81	1.87	1.65	1.35	3.04

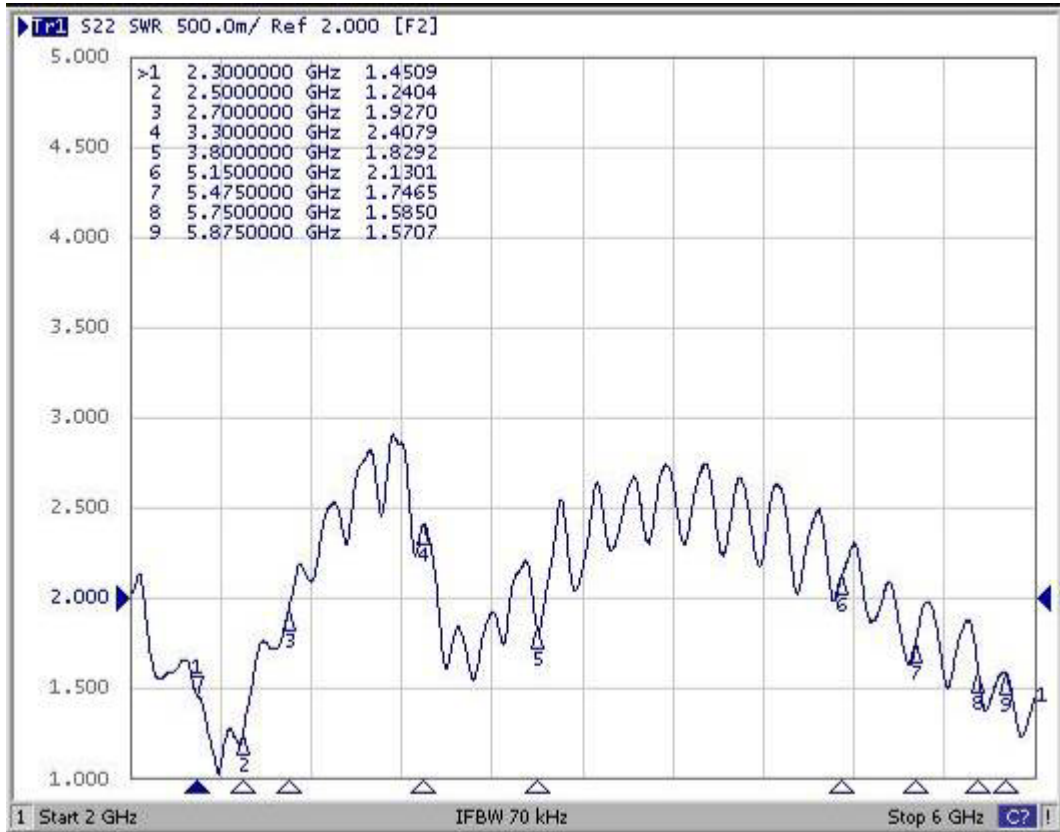
Antenna	VSWR								
Frequency(GHz)	5.15	5.25	5.35	5.475	5.6	5.725	5.75	5.8	5.875
<b>TX1</b>	1.02	1.55	1.73	1.57	1.26	1.02	1.31	1.64	1.08

**TX2 Antenna**

**Cable Color:Gray**

**Cable length=608mm**

**Antenna VSWR**



Antenna	VSWR								
Frequency(GHz)	2.3	2.4	2.45	2.5	2.6	2.7	3.3	3.5	3.8
<b>TX2</b>	1.45	1.23	1.38	1.24	1.74	1.92	2.40	1.83	1.82

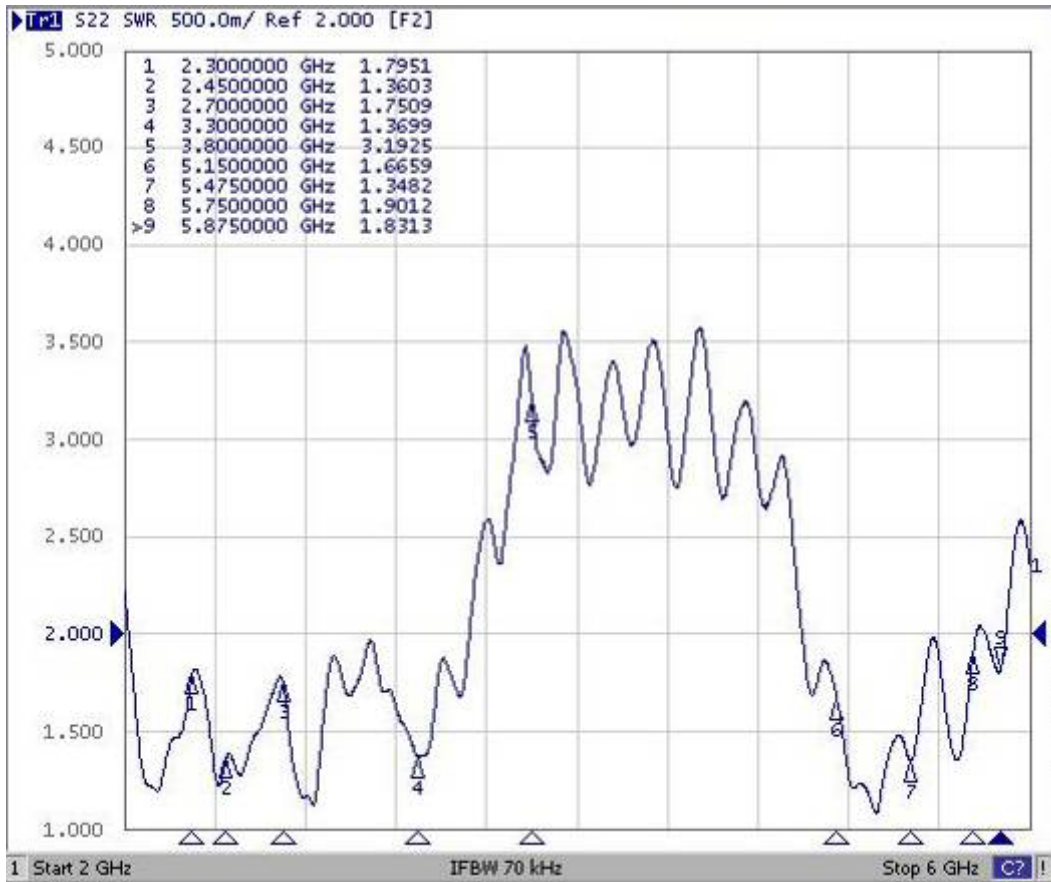
Antenna	VSWR								
Frequency(GHz)	5.15	5.25	5.35	5.475	5.6	5.725	5.75	5.8	5.875
<b>TX2</b>	2.13	1.97	1.81	1.74	1.53	1.65	1.58	1.51	1.57

**TX3 Antenna**

**Cable Color: Blue**

**Cable length=494mm**

**Antenna VSWR**

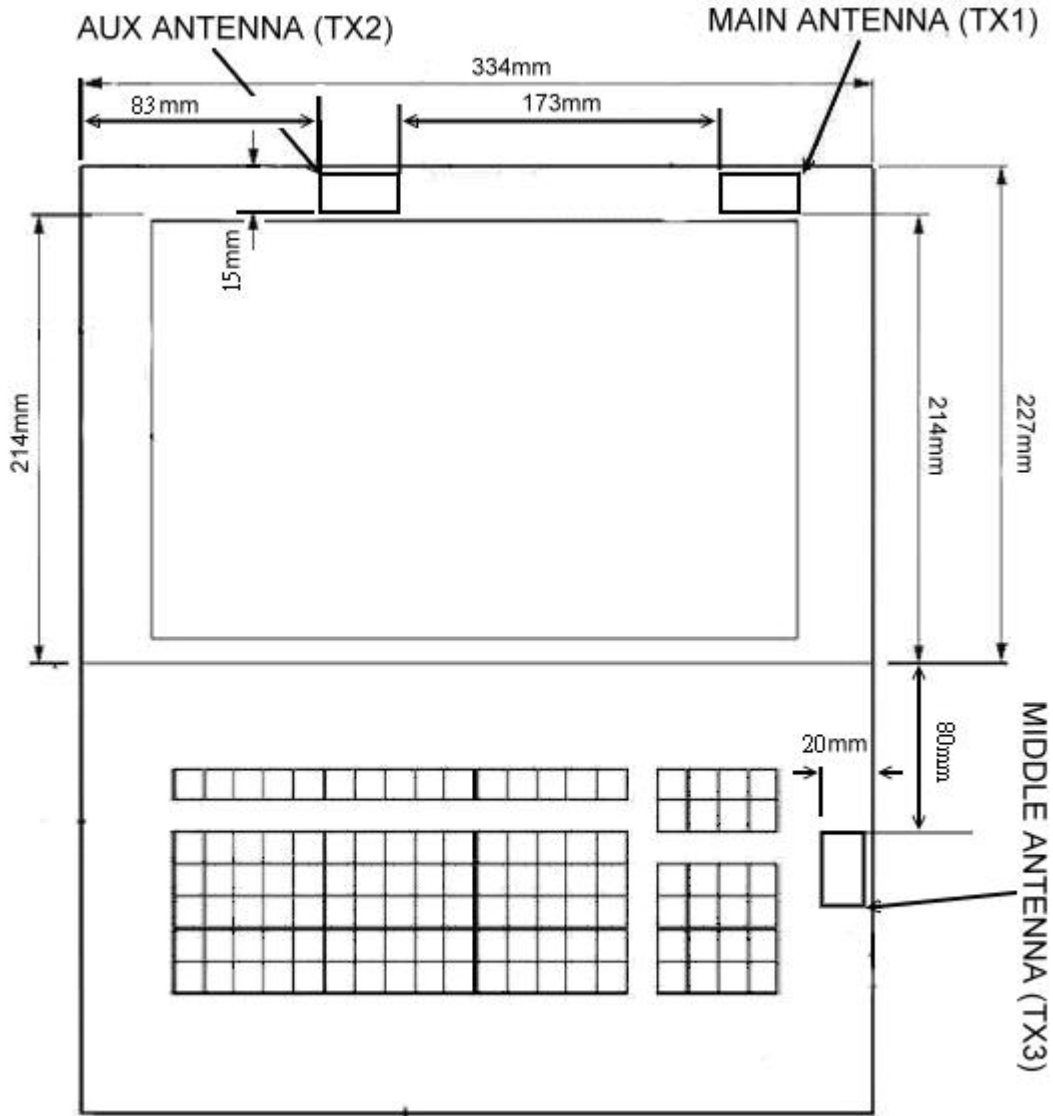


Antenna	VSWR								
Frequency(GHz)	2.3	2.4	2.45	2.5	2.6	2.7	3.3	3.5	3.8
<b>TX3</b>	1.79	1.58	1.36	1.38	1.53	1.75	1.36	1.87	3.19

Antenna	VSWR								
Frequency(GHz)	5.15	5.25	5.35	5.475	5.6	5.725	5.75	5.8	5.875
<b>TX3</b>	1.66	1.22	1.36	1.34	1.85	1.87	1.90	1.93	1.83

## Section 5. Antenna Host Platform Location Information

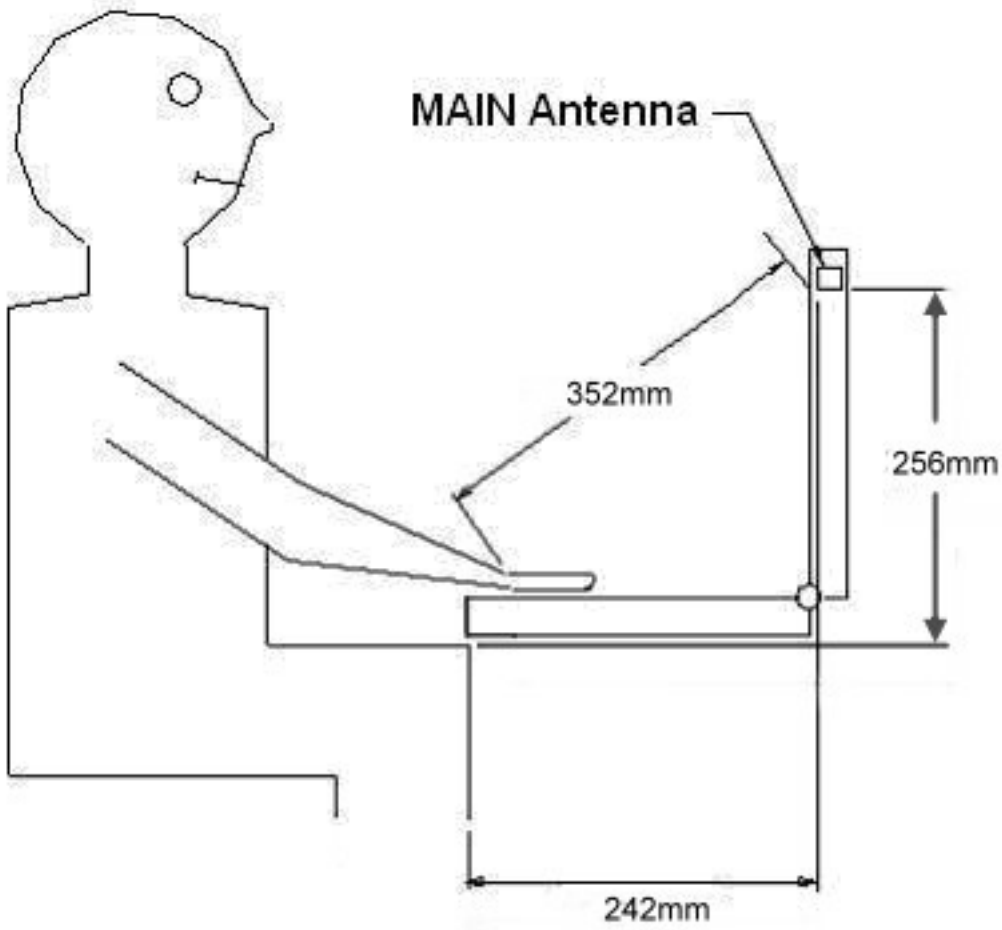
Include a **dimensioned photo or dimensioned drawing** of Tx1, Tx2 and Tx3 antenna placements (measurements are not required for receive-only antenna). Any antenna that transmits must show dimensions to bottom of laptop.





## Section 6. Antenna dimensional information for SAR evaluation

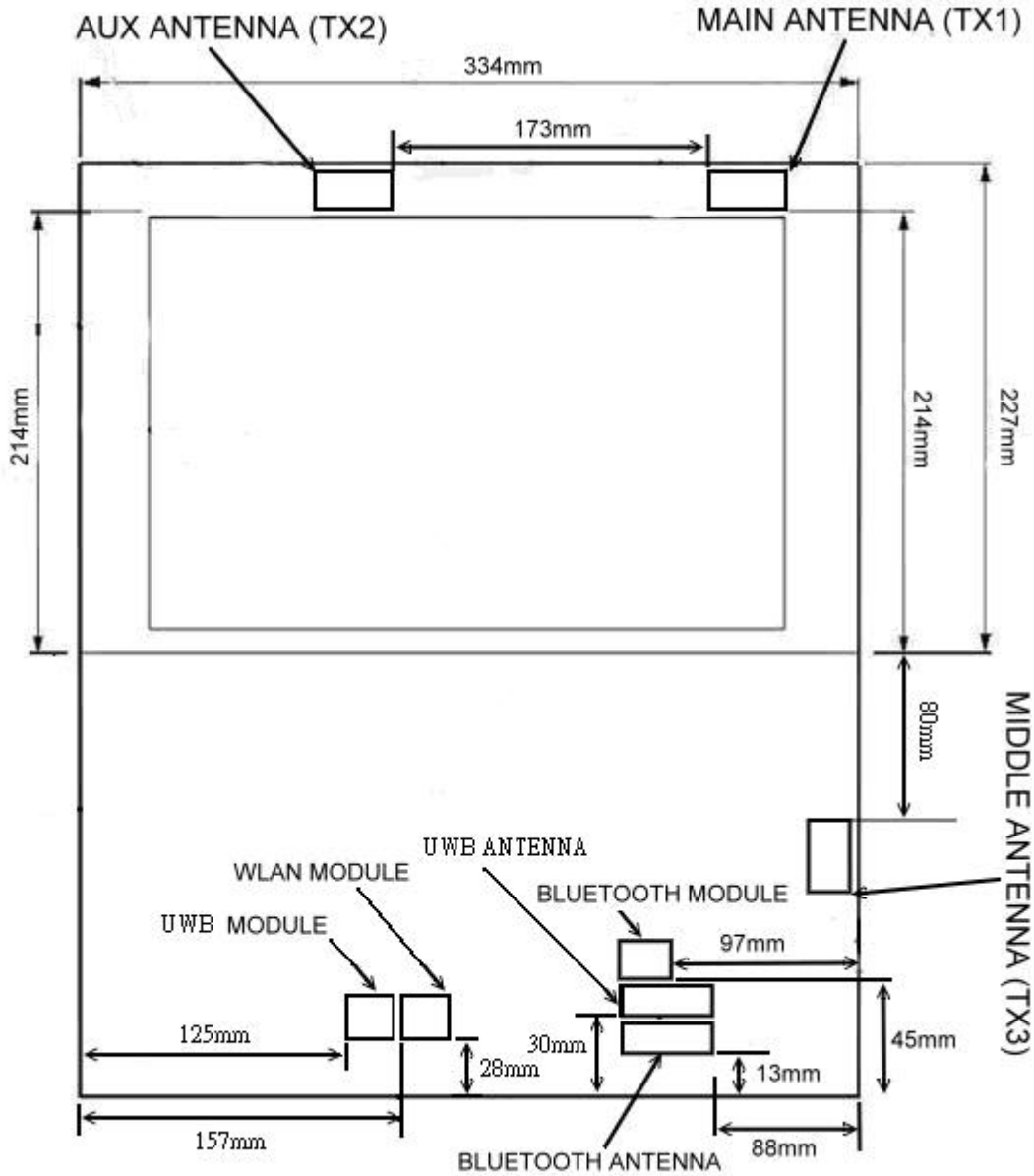
Include a **dimensioned photo or dimensioned drawing** showing the distance (mm) between the transmit antennas and the user (excluding hands, wrist, feet, lap/ thigh, and ankle)



## Section 7. Diagram Example of Co-Location Antenna Separation

Include a **dimensioned photo or dimensioned drawing** showing the distance (mm) between **all WLAN transmit antennas** and other co-located radiator transmit antenna such as Bluetooth, WWAN,...

(Note: Due to the evolving rules regarding co-location, each platform will need to be reviewed on a case by case basis)



## Section 8. Local representative contact information

Local representative contact information is required for regulatory support for target countries below.

	Local company name	Contact name	Phone number	FAX Number	e-Mail Address	Notes
<b>Argentina</b>						
<b>Brazil</b>						
<b>Indonesia</b>						
<b>Israel</b>						
<b>Malaysia</b>						
<b>Mexico</b>						
<b>Singapore</b>						Telecommunication Equipment Dealer License Required
<b>South Africa</b>						
<b>USA, Canada</b>						