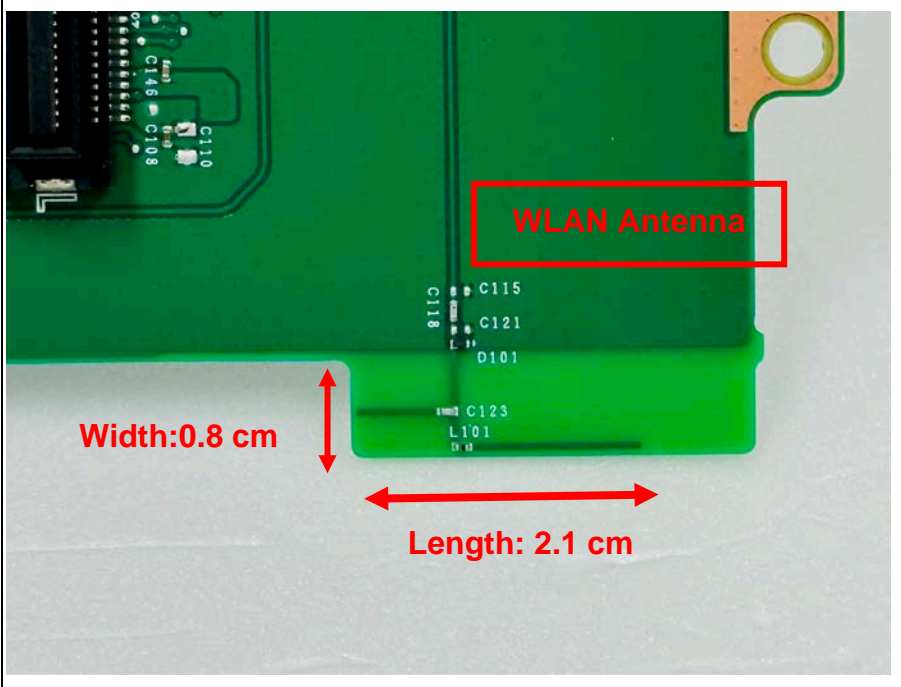
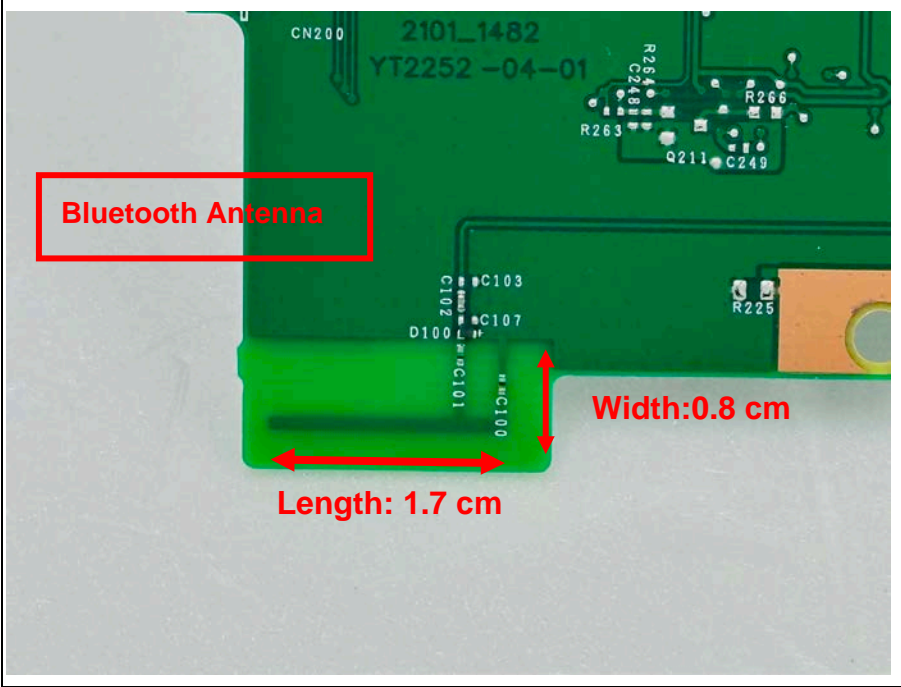


Antenna Information

| Item | | Contents |
|---------------------------|--------|---|
| Antenna Type | | Pattern Antenna |
| Antenna peak gain | | 2 402 MHz ~ 2 480MHz: -0.18 dBi (BT) 2 412 MHz ~ 2 462MHz: -0.01 dBi (WLAN 2GHz) 5 150 MHz ~ 5 250 MHz: -0.61 dBi (WLAN 5GHz) 5 250 MHz ~ 5 350 MHz: -0.18 dBi (WLAN 5GHz) 5 470 MHz ~ 5 725 MHz: -0.77 dBi (WLAN 5GHz) 5 725 MHz ~ 5 850 MHz: -0.18 dBi (WLAN 5GHz) |
| Manufacturer / Model name | | Partron / D-Audio2.0V |
| Address of manufacturer | | 22, Samsung 1-ro 2-gil, Hwaseong-si, Gyeonggi-do, Korea(18449) |
| Test laboratory | | LG Innoteck Co., Ltd. |
| BT Antenna | Length | 1.7 cm |
| | Width | 0.8 cm |
| WLAN Antenna | Length | 2.1 cm |
| | Width | 0.8 cm |



Pattern (BT) Antenna Data Sheet

- Model : D-Audio2.0V -

9-05-16 14:41:25 LEEJOONGGEON-PC ***.***.30.57

| - Application Frequency - | |
|---------------------------|-------------|
| | Band [MHz] |
| BT | 2400 ~ 2485 |

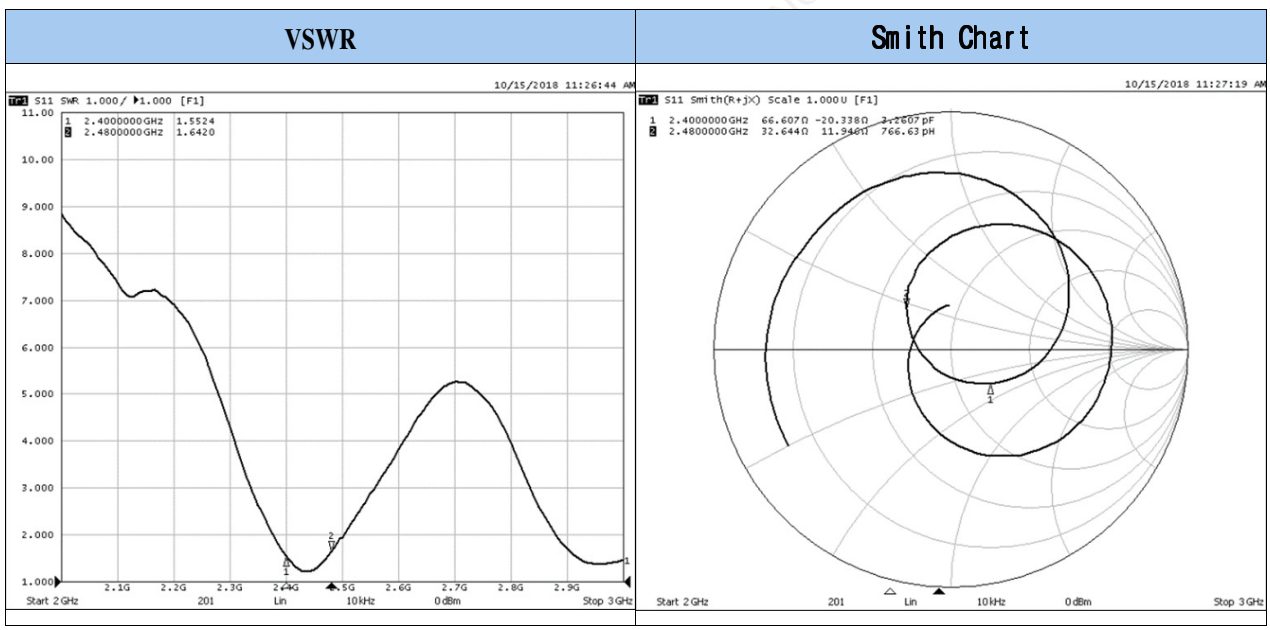
Pattern Antenna



ELECTRICAL CHARACTERISTICS

| No. | Freq. | PwrSur Eff.[%] | Avg.[dBi] | Peak[dBi] | Theta[°] | Phi[deg] | H(Theta=0) Avg.[dBi] | Peak[dBi] | Phi[deg] | BW[deg] | E1(Phi=0) Avg.[dBi] | Peak[dBi] | Theta[°] | BW[deg] | E2(Phi=90) Avg.[dBi] | Peak[dBi] | Theta[°] | BW[deg] |
|-----|----------|----------------|-----------|-----------|----------|----------|----------------------|-----------|----------|---------|---------------------|-----------|----------|---------|----------------------|-----------|----------|---------|
| 1 | 2400.000 | 35.39 | -4.51 | -2.21 | 60.00 | 270.00 | -4.25 | -3.39 | 270.00 | 47.74 | -6.65 | -2.82 | -30.00 | 34.66 | -3.02 | -2.21 | -60.00 | 76.78 |
| 2 | 2425.000 | 44.83 | -3.48 | -0.18 | 45.00 | 255.00 | -2.98 | -3.41 | 255.00 | 49.95 | -5.25 | -2.18 | -30.00 | 59.76 | -3.11 | -3.00 | -60.00 | 86.19 |
| 3 | 2445.000 | 33.21 | -4.79 | -2.16 | 45.00 | 255.00 | -4.05 | -3.50 | 255.00 | 50.87 | -6.24 | -2.66 | 0.00 | 51.20 | -2.73 | -2.55 | -45.00 | 91.37 |
| 4 | 2465.000 | 31.43 | -5.03 | -2.60 | 45.00 | 255.00 | -4.13 | -3.10 | 255.00 | 62.43 | -6.30 | -3.82 | -135.00 | 24.47 | -3.67 | -3.63 | -45.00 | 96.12 |
| 5 | 2485.000 | 30.73 | -5.12 | -2.78 | 45.00 | 255.00 | -4.27 | -3.12 | 240.00 | 60.70 | -6.14 | -3.23 | -135.00 | 26.57 | -4.22 | -4.12 | -45.00 | 99.41 |

MEASUREMENT



Pattern Antenna



RADIATION PATTERN

| | | 2D Gain / Efficiency | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|--|----------------------|---------|-----------|-----------|----------|----------|-------------|-----------|-----------|---------|------------|-----------|----------|---------|-----------|-----------|----------|---------|-------|-----------|---------|-----------|-----------|----------|----------|-------------|--|-----------|--|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------|-----------|----------|---------|-----------|-----------|----------|---------|-----------|-----------|----------|---------|---|----------|-------|-------|-------|-------|--------|-------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|---|----------|-------|-------|-------|-------|--------|-------|-------|--------|-------|--------|-------|--------|-------|-------|-------|--------|-------|---|----------|-------|-------|-------|-------|--------|-------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|---|----------|-------|-------|-------|--------|--------|-------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|---|----------|-------|-------|-------|--------|--------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| Theta | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>No.</th> <th>Freq.</th> <th>Theta-Pol</th> <th>Eff.[%]</th> <th>Avg.[dBi]</th> <th>Peak[dBi]</th> <th>Theta[°]</th> <th>Phi[deg]</th> <th colspan="2">H(Theta=90)</th> <th colspan="2">E1(PHI=0)</th> <th colspan="2">E2(PHI=90)</th> <th colspan="2"></th> <th colspan="2"></th> </tr> <tr> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Avg.[dBi]</th> <th>Peak[dBi]</th> <th>Phi[deg]</th> <th>BW[deg]</th> <th>Avg.[dBi]</th> <th>Peak[dBi]</th> <th>Theta[°]</th> <th>BW[deg]</th> <th>Avg.[dBi]</th> <th>Peak[dBi]</th> <th>Theta[°]</th> <th>BW[deg]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2400.000</td> <td>23.96</td> <td>-6.21</td> <td>-2.19</td> <td>90.00</td> <td>270.00</td> <td>-5.77</td> <td>-5.19</td> <td>270.00</td> <td>44.46</td> <td>-11.13</td> <td>-7.01</td> <td>60.00</td> <td>41.78</td> <td>-2.64</td> <td>-2.28</td> <td>-90.00</td> <td>77.28</td> </tr> <tr> <td>2</td> <td>2425.000</td> <td>31.02</td> <td>-5.08</td> <td>-1.16</td> <td>90.00</td> <td>270.00</td> <td>-4.33</td> <td>-5.16</td> <td>270.00</td> <td>45.87</td> <td>-10.29</td> <td>-6.08</td> <td>165.00</td> <td>20.03</td> <td>-1.73</td> <td>-1.50</td> <td>-90.00</td> <td>84.97</td> </tr> <tr> <td>3</td> <td>2445.000</td> <td>22.73</td> <td>-6.43</td> <td>-3.10</td> <td>90.00</td> <td>255.00</td> <td>-5.48</td> <td>-5.10</td> <td>255.00</td> <td>45.23</td> <td>-11.45</td> <td>-7.69</td> <td>-75.00</td> <td>41.96</td> <td>-3.42</td> <td>-3.34</td> <td>-45.00</td> <td>88.71</td> </tr> <tr> <td>4</td> <td>2465.000</td> <td>21.00</td> <td>-6.78</td> <td>-4.34</td> <td>90.00</td> <td>255.00</td> <td>-5.81</td> <td>-5.58</td> <td>255.00</td> <td>51.53</td> <td>-10.65</td> <td>-6.34</td> <td>105.00</td> <td>34.50</td> <td>-4.48</td> <td>-4.34</td> <td>-45.00</td> <td>91.14</td> </tr> <tr> <td>5</td> <td>2485.000</td> <td>20.42</td> <td>-6.90</td> <td>-5.02</td> <td>90.00</td> <td>240.00</td> <td>-5.42</td> <td>-5.02</td> <td>240.00</td> <td>56.55</td> <td>-10.34</td> <td>-6.56</td> <td>-75.00</td> <td>39.04</td> <td>-5.14</td> <td>-5.02</td> <td>-90.00</td> <td>103.12</td> </tr> </tbody> </table> | | | | | | | | | | | | | | | | | | No. | Freq. | Theta-Pol | Eff.[%] | Avg.[dBi] | Peak[dBi] | Theta[°] | Phi[deg] | H(Theta=90) | | E1(PHI=0) | | E2(PHI=90) | | | | | | | | | | | | | | Avg.[dBi] | Peak[dBi] | Phi[deg] | BW[deg] | Avg.[dBi] | Peak[dBi] | Theta[°] | BW[deg] | Avg.[dBi] | Peak[dBi] | Theta[°] | BW[deg] | 1 | 2400.000 | 23.96 | -6.21 | -2.19 | 90.00 | 270.00 | -5.77 | -5.19 | 270.00 | 44.46 | -11.13 | -7.01 | 60.00 | 41.78 | -2.64 | -2.28 | -90.00 | 77.28 | 2 | 2425.000 | 31.02 | -5.08 | -1.16 | 90.00 | 270.00 | -4.33 | -5.16 | 270.00 | 45.87 | -10.29 | -6.08 | 165.00 | 20.03 | -1.73 | -1.50 | -90.00 | 84.97 | 3 | 2445.000 | 22.73 | -6.43 | -3.10 | 90.00 | 255.00 | -5.48 | -5.10 | 255.00 | 45.23 | -11.45 | -7.69 | -75.00 | 41.96 | -3.42 | -3.34 | -45.00 | 88.71 | 4 | 2465.000 | 21.00 | -6.78 | -4.34 | 90.00 | 255.00 | -5.81 | -5.58 | 255.00 | 51.53 | -10.65 | -6.34 | 105.00 | 34.50 | -4.48 | -4.34 | -45.00 | 91.14 | 5 | 2485.000 | 20.42 | -6.90 | -5.02 | 90.00 | 240.00 | -5.42 | -5.02 | 240.00 | 56.55 | -10.34 | -6.56 | -75.00 | 39.04 | -5.14 | -5.02 | -90.00 |
| No. | Freq. | Theta-Pol | Eff.[%] | Avg.[dBi] | Peak[dBi] | Theta[°] | Phi[deg] | H(Theta=90) | | E1(PHI=0) | | E2(PHI=90) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | Avg.[dBi] | Peak[dBi] | Phi[deg] | BW[deg] | Avg.[dBi] | Peak[dBi] | Theta[°] | BW[deg] | Avg.[dBi] | Peak[dBi] | Theta[°] | BW[deg] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2400.000 | 23.96 | -6.21 | -2.19 | 90.00 | 270.00 | -5.77 | -5.19 | 270.00 | 44.46 | -11.13 | -7.01 | 60.00 | 41.78 | -2.64 | -2.28 | -90.00 | 77.28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 2425.000 | 31.02 | -5.08 | -1.16 | 90.00 | 270.00 | -4.33 | -5.16 | 270.00 | 45.87 | -10.29 | -6.08 | 165.00 | 20.03 | -1.73 | -1.50 | -90.00 | 84.97 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 2445.000 | 22.73 | -6.43 | -3.10 | 90.00 | 255.00 | -5.48 | -5.10 | 255.00 | 45.23 | -11.45 | -7.69 | -75.00 | 41.96 | -3.42 | -3.34 | -45.00 | 88.71 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 2465.000 | 21.00 | -6.78 | -4.34 | 90.00 | 255.00 | -5.81 | -5.58 | 255.00 | 51.53 | -10.65 | -6.34 | 105.00 | 34.50 | -4.48 | -4.34 | -45.00 | 91.14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 2485.000 | 20.42 | -6.90 | -5.02 | 90.00 | 240.00 | -5.42 | -5.02 | 240.00 | 56.55 | -10.34 | -6.56 | -75.00 | 39.04 | -5.14 | -5.02 | -90.00 | 103.12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phi | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>No.</th> <th>Freq.</th> <th>Phi-Pol</th> <th>Eff.[%]</th> <th>Avg.[dBi]</th> <th>Peak[dBi]</th> <th>Theta[°]</th> <th>Phi[deg]</th> <th colspan="2">H(Theta=90)</th> <th colspan="2">E1(PHI=0)</th> <th colspan="2">E2(PHI=90)</th> <th colspan="2"></th> <th colspan="2"></th> </tr> <tr> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Avg.[dBi]</th> <th>Peak[dBi]</th> <th>Phi[deg]</th> <th>BW[deg]</th> <th>Avg.[dBi]</th> <th>Peak[dBi]</th> <th>Theta[°]</th> <th>BW[deg]</th> <th>Avg.[dBi]</th> <th>Peak[dBi]</th> <th>Theta[°]</th> <th>BW[deg]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2400.000</td> <td>11.43</td> <td>-9.42</td> <td>-3.44</td> <td>30.00</td> <td>165.00</td> <td>-9.55</td> <td>-4.94</td> <td>315.00</td> <td>39.43</td> <td>-8.56</td> <td>-3.80</td> <td>-30.00</td> <td>34.10</td> <td>-10.83</td> <td>-6.77</td> <td>-60.00</td> <td>43.62</td> </tr> <tr> <td>2</td> <td>2425.000</td> <td>13.81</td> <td>-8.60</td> <td>-3.67</td> <td>30.00</td> <td>165.00</td> <td>-8.73</td> <td>-4.63</td> <td>315.00</td> <td>41.27</td> <td>-6.88</td> <td>-3.88</td> <td>-30.00</td> <td>53.24</td> <td>-9.87</td> <td>-6.80</td> <td>-60.00</td> <td>58.56</td> </tr> <tr> <td>3</td> <td>2445.000</td> <td>10.48</td> <td>-9.80</td> <td>-3.62</td> <td>0.00</td> <td>0.00</td> <td>-9.55</td> <td>-4.65</td> <td>315.00</td> <td>43.85</td> <td>-7.80</td> <td>-3.62</td> <td>0.00</td> <td>30.38</td> <td>-11.07</td> <td>-6.55</td> <td>-45.00</td> <td>63.16</td> </tr> <tr> <td>4</td> <td>2465.000</td> <td>10.43</td> <td>-9.82</td> <td>-3.56</td> <td>120.00</td> <td>210.00</td> <td>-9.52</td> <td>-4.78</td> <td>210.00</td> <td>55.33</td> <td>-8.28</td> <td>-3.85</td> <td>0.00</td> <td>63.71</td> <td>-11.33</td> <td>-6.01</td> <td>-45.00</td> <td>57.67</td> </tr> <tr> <td>5</td> <td>2485.000</td> <td>10.31</td> <td>-9.87</td> <td>-3.20</td> <td>120.00</td> <td>210.00</td> <td>-10.64</td> <td>-6.25</td> <td>210.00</td> <td>60.64</td> <td>-8.23</td> <td>-3.98</td> <td>-45.00</td> <td>56.98</td> <td>-11.41</td> <td>-6.94</td> <td>-45.00</td> <td>55.74</td> </tr> </tbody> </table> | | | | | | | | | | | | | | | | | | No. | Freq. | Phi-Pol | Eff.[%] | Avg.[dBi] | Peak[dBi] | Theta[°] | Phi[deg] | H(Theta=90) | | E1(PHI=0) | | E2(PHI=90) | | | | | | | | | | | | | | Avg.[dBi] | Peak[dBi] | Phi[deg] | BW[deg] | Avg.[dBi] | Peak[dBi] | Theta[°] | BW[deg] | Avg.[dBi] | Peak[dBi] | Theta[°] | BW[deg] | 1 | 2400.000 | 11.43 | -9.42 | -3.44 | 30.00 | 165.00 | -9.55 | -4.94 | 315.00 | 39.43 | -8.56 | -3.80 | -30.00 | 34.10 | -10.83 | -6.77 | -60.00 | 43.62 | 2 | 2425.000 | 13.81 | -8.60 | -3.67 | 30.00 | 165.00 | -8.73 | -4.63 | 315.00 | 41.27 | -6.88 | -3.88 | -30.00 | 53.24 | -9.87 | -6.80 | -60.00 | 58.56 | 3 | 2445.000 | 10.48 | -9.80 | -3.62 | 0.00 | 0.00 | -9.55 | -4.65 | 315.00 | 43.85 | -7.80 | -3.62 | 0.00 | 30.38 | -11.07 | -6.55 | -45.00 | 63.16 | 4 | 2465.000 | 10.43 | -9.82 | -3.56 | 120.00 | 210.00 | -9.52 | -4.78 | 210.00 | 55.33 | -8.28 | -3.85 | 0.00 | 63.71 | -11.33 | -6.01 | -45.00 | 57.67 | 5 | 2485.000 | 10.31 | -9.87 | -3.20 | 120.00 | 210.00 | -10.64 | -6.25 | 210.00 | 60.64 | -8.23 | -3.98 | -45.00 | 56.98 | -11.41 | -6.94 | -45.00 |
| No. | Freq. | Phi-Pol | Eff.[%] | Avg.[dBi] | Peak[dBi] | Theta[°] | Phi[deg] | H(Theta=90) | | E1(PHI=0) | | E2(PHI=90) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | Avg.[dBi] | Peak[dBi] | Phi[deg] | BW[deg] | Avg.[dBi] | Peak[dBi] | Theta[°] | BW[deg] | Avg.[dBi] | Peak[dBi] | Theta[°] | BW[deg] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2400.000 | 11.43 | -9.42 | -3.44 | 30.00 | 165.00 | -9.55 | -4.94 | 315.00 | 39.43 | -8.56 | -3.80 | -30.00 | 34.10 | -10.83 | -6.77 | -60.00 | 43.62 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 2425.000 | 13.81 | -8.60 | -3.67 | 30.00 | 165.00 | -8.73 | -4.63 | 315.00 | 41.27 | -6.88 | -3.88 | -30.00 | 53.24 | -9.87 | -6.80 | -60.00 | 58.56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 2445.000 | 10.48 | -9.80 | -3.62 | 0.00 | 0.00 | -9.55 | -4.65 | 315.00 | 43.85 | -7.80 | -3.62 | 0.00 | 30.38 | -11.07 | -6.55 | -45.00 | 63.16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 2465.000 | 10.43 | -9.82 | -3.56 | 120.00 | 210.00 | -9.52 | -4.78 | 210.00 | 55.33 | -8.28 | -3.85 | 0.00 | 63.71 | -11.33 | -6.01 | -45.00 | 57.67 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 2485.000 | 10.31 | -9.87 | -3.20 | 120.00 | 210.00 | -10.64 | -6.25 | 210.00 | 60.64 | -8.23 | -3.98 | -45.00 | 56.98 | -11.41 | -6.94 | -45.00 | 55.74 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Pattern Antenna



Pattern (WiFi) Antenna Data Sheet

- Model : D-Audio2.0V -

| - Application Frequency - | |
|----------------------------------|--------------------|
| | Band [MHz] |
| WiFi | 2400 ~ 2485 |
| | 5150 ~ 5850 |

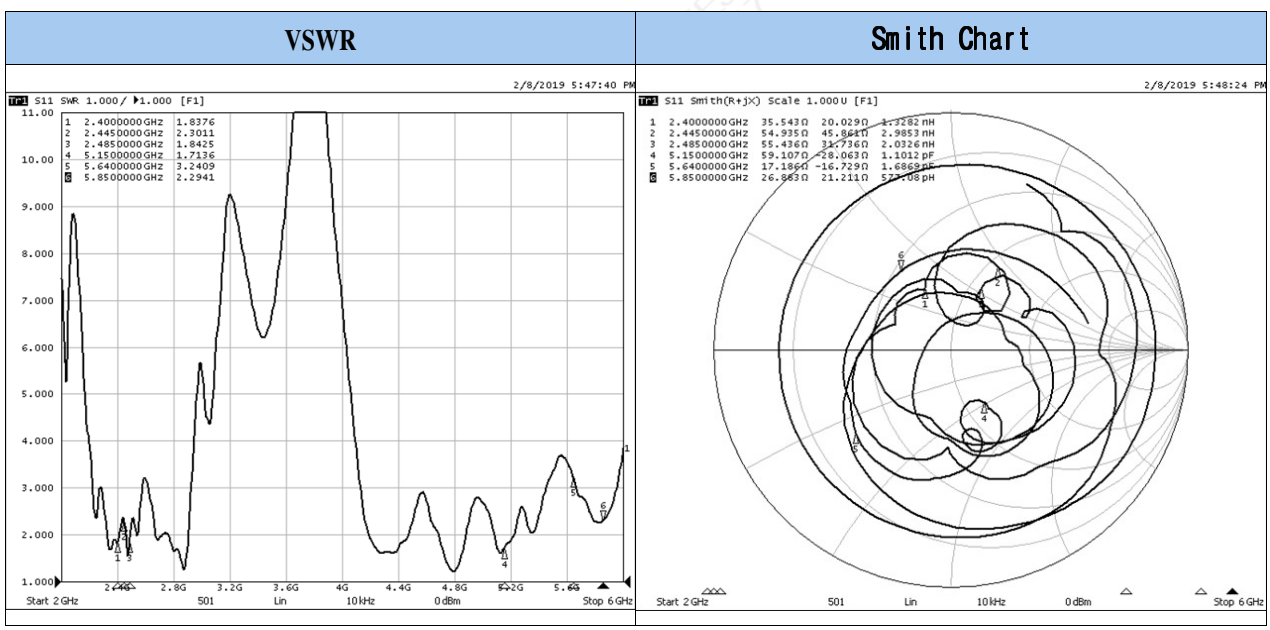
Pattern Antenna



ELECTRICAL CHARACTERISTICS

| No. | Freq. | PwrSum | Eff.[%] | Avg.[dBi] | Peak[dBi] | Theta[°] | Phi[deg] | H(Theta=) | Avg.[dBi] | Peak[dBi] | Phi[deg] | BW[deg] | E1(Phi=0) | Avg.[dBi] | Peak[dBi] | Theta[°] | BW[deg] | E2(Phi=90) | Avg.[dBi] | Peak[dBi] | Theta[°] | BW[deg] | |
|-----|----------|--------|---------|-----------|-----------|----------|----------|-----------|-----------|-----------|----------|---------|-----------|-----------|-----------|----------|---------|------------|-----------|-----------|----------|---------|--|
| 1 | 2400.000 | 23.67 | -6.26 | -1.26 | 75.00 | 285.00 | | -7.02 | -3.71 | 285.00 | 26.33 | | -7.25 | -3.43 | 30.00 | 58.02 | | -7.18 | -5.41 | -15.00 | 34.12 | | |
| 2 | 2425.000 | 30.64 | -5.14 | -0.62 | 150.00 | 135.00 | | -6.56 | -3.40 | 285.00 | 25.45 | | -6.29 | -2.42 | 30.00 | 63.56 | | -5.90 | -5.68 | -30.00 | 37.19 | | |
| 3 | 2445.000 | 36.76 | -4.35 | -0.01 | 150.00 | 120.00 | | -6.23 | -3.21 | 285.00 | 24.97 | | -5.45 | -4.33 | 30.00 | 69.60 | | -4.82 | -4.74 | 45.00 | 35.25 | | |
| 4 | 2465.000 | 26.66 | -5.74 | -0.43 | 150.00 | 120.00 | | -7.87 | -3.86 | 285.00 | 23.67 | | -6.77 | -4.60 | 30.00 | 59.90 | | -5.74 | -4.30 | 165.00 | 24.56 | | |
| 5 | 2485.000 | 26.47 | -5.77 | -0.04 | 150.00 | 120.00 | | -8.15 | -2.57 | 285.00 | 22.42 | | -6.71 | -4.68 | 30.00 | 53.39 | | -5.11 | -4.42 | 165.00 | 23.80 | | |
| 6 | 5150.000 | 30.90 | -5.10 | -0.61 | 30.00 | 255.00 | | -7.34 | -3.42 | 285.00 | 78.13 | | -7.06 | -3.20 | 15.00 | 55.74 | | -3.19 | -3.10 | -45.00 | 61.41 | | |
| 7 | 5300.000 | 33.90 | -4.70 | -0.18 | 45.00 | 240.00 | | -6.97 | -2.20 | 285.00 | 74.62 | | -6.34 | -4.12 | 15.00 | 66.07 | | -3.26 | -2.97 | -30.00 | 56.71 | | |
| 8 | 5640.000 | 41.42 | -3.83 | -0.77 | 45.00 | 255.00 | | -5.44 | -2.34 | 255.00 | 69.49 | | -5.04 | -4.90 | -30.00 | 33.78 | | -3.21 | -2.46 | -45.00 | 67.53 | | |
| 9 | 5745.000 | 36.08 | -4.43 | -0.96 | 30.00 | 225.00 | | -5.74 | -3.02 | 240.00 | 35.06 | | -5.60 | -4.22 | -30.00 | 42.00 | | -4.05 | -3.67 | -60.00 | 70.68 | | |
| 10 | 5785.000 | 29.47 | -5.31 | -0.18 | 30.00 | 225.00 | | -6.63 | -2.82 | 150.00 | 36.20 | | -6.21 | -2.54 | -30.00 | 43.00 | | -5.11 | -4.47 | -45.00 | 69.74 | | |
| 11 | 5825.000 | 28.75 | -5.41 | -0.44 | 30.00 | 225.00 | | -6.83 | -2.43 | 150.00 | 30.10 | | -5.98 | -2.18 | -30.00 | 50.25 | | -5.50 | -4.21 | -45.00 | 66.95 | | |

MEASUREMENT



Pattern Antenna



RADIATION PATTERN

| | | 2D Gain / Efficiency | | | | | | | | | | | | | | | | | | |
|-------|----------|----------------------|-----------|---------|-----------|-----------|----------|----------|------------|-----------|----------|---------|-----------|-----------|----------|---------|------------|-----------|----------|---------|
| Theta | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | No. | Freq. | Theta-Pol | Eff.[%] | Avg.[dBi] | Peak[dBi] | Theta[°] | Phi[deg] | H(Theta=0) | Peak[dBi] | Phi[deg] | BW[deg] | E1(Phi=0) | Peak[dBi] | Theta[°] | BW[deg] | E2(Phi=90) | Peak[dBi] | Theta[°] | BW[deg] |
| | 1 | 2400.000 | | 12.88 | -8.90 | -3.05 | 120.00 | 300.00 | -10.11 | -3.25 | 285.00 | 21.43 | -9.28 | -7.48 | 30.00 | 50.72 | -10.43 | -6.28 | 45.00 | 31.31 |
| | 2 | 2425.000 | | 16.91 | -7.72 | -4.10 | 105.00 | 225.00 | -9.30 | -4.67 | 285.00 | 22.53 | -8.24 | -7.58 | 30.00 | 52.52 | -8.78 | -6.83 | 45.00 | 27.90 |
| | 3 | 2445.000 | | 20.87 | -6.80 | -4.02 | 60.00 | 105.00 | -8.44 | -5.14 | 300.00 | 22.75 | -7.32 | -6.56 | 15.00 | 49.63 | -6.93 | -6.71 | 60.00 | 28.81 |
| | 4 | 2465.000 | | 15.51 | -8.09 | -3.43 | 30.00 | 15.00 | -9.85 | -4.60 | 300.00 | 24.47 | -8.71 | -7.86 | 30.00 | 31.86 | -6.87 | -6.42 | 165.00 | 23.54 |
| | 5 | 2485.000 | | 15.46 | -8.11 | -3.87 | 30.00 | 0.00 | -10.25 | -5.56 | 255.00 | 16.79 | -8.75 | -7.87 | 30.00 | 23.43 | -6.01 | -5.45 | 165.00 | 23.16 |
| | 6 | 5150.000 | | 11.91 | -9.24 | -3.52 | 15.00 | 210.00 | -10.55 | -4.49 | 315.00 | 10.35 | -9.48 | -7.42 | -15.00 | 54.70 | -9.64 | -6.54 | 15.00 | 22.23 |
| | 7 | 5300.000 | | 14.60 | -8.36 | -3.29 | 30.00 | 195.00 | -11.23 | -5.99 | 135.00 | 18.12 | -8.66 | -7.99 | -15.00 | 37.66 | -7.94 | -6.29 | -30.00 | 50.54 |
| 8 | 5640.000 | | 18.41 | -7.35 | -3.59 | 30.00 | 195.00 | -9.14 | -4.38 | 135.00 | 21.60 | -7.56 | -6.22 | -30.00 | 36.95 | -8.55 | -5.63 | -45.00 | 35.45 | |
| 9 | 5745.000 | | 15.45 | -8.11 | -4.17 | 30.00 | 210.00 | -9.22 | -4.51 | 300.00 | 28.99 | -8.10 | -6.92 | -15.00 | 45.67 | -10.95 | -5.04 | -60.00 | 47.08 | |
| 10 | 5785.000 | | 12.62 | -8.99 | -3.21 | 30.00 | 210.00 | -10.07 | -4.63 | 300.00 | 25.51 | -8.75 | -6.48 | -30.00 | 44.94 | -11.78 | -5.72 | -45.00 | 60.22 | |
| 11 | 5825.000 | | 12.37 | -9.08 | -3.51 | 30.00 | 210.00 | -10.19 | -4.80 | 300.00 | 30.73 | -8.57 | -6.58 | -45.00 | 48.70 | -11.44 | -5.58 | -45.00 | 22.60 | |
| Phi | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | No. | Freq. | Phi-Pol | Eff.[%] | Avg.[dBi] | Peak[dBi] | Theta[°] | Phi[deg] | H(Theta=0) | Peak[dBi] | Phi[deg] | BW[deg] | E1(Phi=0) | Peak[dBi] | Theta[°] | BW[deg] | E2(Phi=90) | Peak[dBi] | Theta[°] | BW[deg] |
| | 1 | 2400.000 | | 10.78 | -9.67 | -2.32 | 135.00 | 150.00 | -9.95 | -3.37 | 330.00 | 26.29 | -11.53 | -4.82 | -150.00 | 21.12 | -9.96 | -3.49 | -15.00 | 26.74 |
| | 2 | 2425.000 | | 13.73 | -8.62 | -3.01 | 150.00 | 150.00 | -9.86 | -4.31 | 285.00 | 61.84 | -10.72 | -3.22 | -150.00 | 14.93 | -9.04 | -3.04 | -15.00 | 31.69 |
| | 3 | 2445.000 | | 15.89 | -7.99 | -2.85 | 150.00 | 135.00 | -10.24 | -3.36 | 285.00 | 20.36 | -10.01 | -3.04 | -150.00 | 13.14 | -8.96 | -2.92 | -15.00 | 33.07 |
| | 4 | 2465.000 | | 11.15 | -9.53 | -4.46 | 150.00 | 135.00 | -12.23 | -5.14 | 285.00 | 16.80 | -11.19 | -5.21 | -150.00 | 14.24 | -12.13 | -5.76 | -15.00 | 33.40 |
| | 5 | 2485.000 | | 11.01 | -9.58 | -4.91 | 15.00 | 135.00 | -12.30 | -5.18 | 285.00 | 13.09 | -10.99 | -5.55 | -150.00 | 15.48 | -12.39 | -4.95 | -15.00 | 35.79 |
| | 6 | 5150.000 | | 18.99 | -7.21 | -3.32 | 30.00 | 255.00 | -10.16 | -4.04 | 285.00 | 61.50 | -10.76 | -5.45 | 15.00 | 15.41 | -4.30 | -3.53 | -45.00 | 63.74 |
| | 7 | 5300.000 | | 19.29 | -7.15 | -2.97 | 45.00 | 255.00 | -9.01 | -4.70 | 285.00 | 43.46 | -10.18 | -5.78 | 15.00 | 22.38 | -5.07 | -3.79 | -30.00 | 57.20 |
| 8 | 5640.000 | | 23.01 | -6.38 | -2.87 | 30.00 | 255.00 | -7.86 | -4.73 | 240.00 | 54.04 | -8.61 | -5.02 | -30.00 | 21.68 | -4.72 | -3.15 | -60.00 | 71.89 | |
| 9 | 5745.000 | | 20.63 | -6.85 | -4.50 | 30.00 | 255.00 | -8.33 | -4.59 | 240.00 | 15.61 | -9.19 | -5.68 | -30.00 | 25.18 | -5.05 | -4.87 | -60.00 | 73.59 | |
| 10 | 5785.000 | | 16.85 | -7.74 | -3.56 | 30.00 | 255.00 | -9.25 | -4.89 | 150.00 | 23.73 | -9.75 | -3.76 | -30.00 | 24.28 | -6.17 | -5.16 | -60.00 | 70.34 | |
| 11 | 5825.000 | | 16.38 | -7.86 | -3.29 | 30.00 | 255.00 | -9.52 | -4.53 | 150.00 | 23.59 | -9.45 | -3.49 | 30.00 | 7.27 | -6.77 | -5.93 | -30.00 | 72.42 | |