

# Regulatory WWAN Antenna Information

(English Language Required for Intel Regulatory Review / Approval)

(OEM/ODM or antenna vendor is required to complete this document with platform antenna information.  
Remove Intel references and make this your own document)

|                    |                                          |
|--------------------|------------------------------------------|
| Platform           |                                          |
| Platform Owner     | HP                                       |
| Brand Name         | HP                                       |
| Model Name         | G2022                                    |
| ODM                | Compal Corporation                       |
| Target Launch Date |                                          |
|                    |                                          |
| Antenna            |                                          |
| Manufacturer       | Vendor 2                                 |
| Part Number        | TPx Antenna 81ELA215.G63 (3200604284B0)  |
|                    | DRx Antenna 81ELA215.G64 (3200604283B0)  |
|                    | DRx1 Antenna 81ELA215.G63 (3200604284B0) |
|                    | DRx2 Antenna 81ELA215.G64 (3200604283B0) |
|                    |                                          |
| Module             |                                          |
| With WWAN Module   |                                          |
| (Check Box)        |                                          |
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# Antenna Information

## Section 1. Antenna Assembly Specifications

| 1A                                                        | 1B          | 1C           | 1D                                                                                           | 1E                                | 1F                                | 1G                      | 1H                                |
|-----------------------------------------------------------|-------------|--------------|----------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------|-------------------------|-----------------------------------|
| Antenna Part Number                                       | Manufacture | Antenna Type | Cable Assembly Part Number and Information                                                   | *Peak Gain W/ Cable loss (dBi)    | Peak Gain w/o Cable Loss (dBi)    | VSWR                    | Cable Loss (dBi)                  |
| WWAN Main Antenna (TPx)<br>81ELA215.G63<br>(3200604284B0) | Vendor 2    | PIFA         | 50 ohm Coaxial.<br>length: 84mm<br>diameter:1.13mm<br>connector:Speedtec<br>C87P115-00002-H  | 698-821MHz<br>-0.84 dBi (peak)    | 698-821MHz<br>-0.70 dBi (peak)    | 698-821MHz<br>4 max     | 698-821MHz<br>0.14 dBi (peak)     |
|                                                           |             |              |                                                                                              | 824-960MHz<br>-3.15 dBi (peak)    | 824-960MHz<br>-3.00 dBi (peak)    | 824-960MHz<br>4 max     | 824-960MHz<br>0.15 dBi (peak)     |
|                                                           |             |              |                                                                                              | 1425-1515MHz<br>-0.73 dBi (peak)  | 1425-1515MHz<br>-0.55 dBi (peak)  | 1425-1515MHz<br>4 max   | 1425-1515MHz<br>0.18 dBi (peak)   |
|                                                           |             |              |                                                                                              | 1710-2200MHz<br>2.22 dBi (peak)   | 1710-2200MHz<br>2.43 dBi (peak)-  | 1710-2200MHz<br>4 max   | 1710-2200MHz<br>0.21 dBi (peak)   |
|                                                           |             |              |                                                                                              | 2300-2690MHz<br>1.13 dBi (peak)   | 2300-2690MHz<br>1.37 dBi (peak)   | 2300-2690MHz<br>4 max   | 2300-2690MHz<br>0.24 dBi (peak)   |
|                                                           |             |              |                                                                                              | 3400-3800MHz<br>0.23 dBi (peak)   | 3400-3800MHz<br>0.51 dBi (peak)   | 3400-3800MHz<br>4 max   | 3400-3800MHz<br>0.28 dBi (peak)   |
|                                                           |             |              |                                                                                              | 4200-4700MHz<br>-1.41 dBi (peak)  | 4200-4700MHz<br>-1.10 dBi (peak)  | 4200-4700MHz<br>4 max   | 4200-4700MHz<br>0.31 dBi (peak)   |
|                                                           |             |              |                                                                                              | 5150-5925MHz<br>0.91 dBi (peak)   | 5150-5925MHz<br>1.27 dBi (peak)   | 5150-5925MHz<br>4 max   | 5150-5925MHz<br>0.36 dBi (peak)   |
| WWAN AUX Antenna (DRx)<br>81ELA215.G64<br>(3200604283B0)  | Vendor 2    | PIFA         | 50 ohm Coaxial.<br>length: 201mm<br>diameter:1.13mm<br>connector:Speedtec<br>C87P115-00002-H | 717-821MHz<br>-3.3 dBi (peak)     | 717-821MHz<br>-2.96 dBi (peak)    | 717-821MHz<br>4 max     | 717-821MHz<br>0.34 dBi (peak)     |
|                                                           |             |              |                                                                                              | 824-960MHz<br>-3.61 dBi (peak)    | 824-960MHz<br>-3.24 dBi (peak)    | 824-960MHz<br>4 max     | 824-960MHz<br>0.37 dBi (peak)     |
|                                                           |             |              |                                                                                              | 1425-1515MHz<br>0.60 dBi (peak)   | 1425-1515MHz<br>1.04 dBi (peak)   | 1425-1515MHz<br>4 max   | 1425-1515MHz<br>0.44 dBi (peak)   |
|                                                           |             |              |                                                                                              | 1557-1610 MHz<br>0.71 dBi (peak)  | 1557-1610 MHz<br>1.16 dBi (peak)  | 1557-1610 MHz<br>4 max  | 1557-1610 MHz<br>0.45 dBi (peak)  |
|                                                           |             |              |                                                                                              | 1805-2200MHz<br>1.43 dBi (peak)   | 1805-2200MHz<br>1.94 dBi (peak)   | 1805-2200MHz<br>4 max   | 1805-2200MHz<br>0.51 dBi (peak)   |
|                                                           |             |              |                                                                                              | 2300-2690MHzzz<br>1.29 dBi (peak) | 2300-2690MHzzz<br>1.86 dBi (peak) | 2300-2690MHzzz<br>4 max | 2300-2690MHzzz<br>0.57 dBi (peak) |
|                                                           |             |              |                                                                                              | 3400-3800MHz<br>-1.59 dBi (peak)  | 3400-3800MHz<br>-0.92 dBi (peak)  | 3400-3800MHz<br>4 max   | 3400-3800MHz<br>0.67 dBi (peak)   |
|                                                           |             |              |                                                                                              | 4200-4700MHz<br>-3.05 dBi (peak)  | 4200-4700MHz<br>-2.32 dBi (peak)  | 4200-4700MHz<br>4 max   | 4200-4700MHz<br>0.73 dBi (peak)   |
|                                                           |             |              |                                                                                              | 5150-5925MHz<br>1.80 dBi (peak)   | 5150-5925MHz<br>2.65 dBi (peak)   | 5150-5925MHz<br>4 max   | 5150-5925MHz<br>0.85 dBi (peak)   |

| 1A<br>Antenna Part Number                        | 1B<br>Manufacture | 1C<br>Antenna Type | 1D<br>Cable Assembly Part Number and Information                                             | 1E<br>*Peak Gain W/ Cable loss (dBi)   | 1F<br>Peak Gain w/o Cable Loss (dBi)   | 1G<br>VSWR                         | 1H<br>Cable Loss (dBi)                |
|--------------------------------------------------|-------------------|--------------------|----------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|------------------------------------|---------------------------------------|
| Antenna (DRx1)<br>81ELA215.G63<br>(3200604284B0) | Vendor 2          | PIFA               | 50 ohm Coaxial.<br>length: 91mm<br>diameter:1.13mm<br>connector:Speedtec<br>C87P115-00002-H  | 1805-2200MHz<br>0.62<br>dBi(peak)      | 1805-2200MHz<br>0.85<br>dBi(peak)      | 1805-2200MHz<br>4<br>dBi<br>(peak) | 1805-2200MHz<br>0.23<br>dBi(peak)     |
|                                                  |                   |                    |                                                                                              | 2300-2690MHz<br>-0.05<br>dBi(peak)     | 2300-2690MHz<br>0.21<br>dBi(peak)      | 2300-2690MHz<br>4<br>dBi<br>(peak) | 2300-2690MHz<br>0.26<br>dBi(peak)     |
|                                                  |                   |                    |                                                                                              | 3400-3800MHz<br>1.15<br>dBi(peak)      | 3400-3800MHz<br>1.45<br>dBi(peak)      | 3400-3800MHz<br>4<br>dBi<br>(peak) | 3400-3800MHz<br>0.30<br>dBi(peak)     |
|                                                  |                   |                    |                                                                                              | 4200-5000MHz<br>1.64<br>dBi(peak)      | 4200-5000MHz<br>1.99<br>dBi(peak)      | 4200-5000MHz<br>4<br>dBi<br>(peak) | 4200-5000MHz<br>0.35<br>dBi(peak)     |
| Antenna (DRx2)<br>81ELA215.G64<br>(3200604283B0) | Vendor 2          | PIFA               | 50 ohm Coaxial.<br>length: 212mm<br>diameter:1.13mm<br>connector:Speedtec<br>C87P115-00002-H | 1710-2200MHz<br>-0.04<br>dBi<br>(peak) | 1710-2200MHz<br>0.49<br>dBi<br>(peak)  | 1710-2200MHz<br>4<br>dBi<br>(peak) | 1710-2200MHz<br>0.53<br>dBi<br>(peak) |
|                                                  |                   |                    |                                                                                              | 2300-2690MHz<br>-0.66<br>dBi<br>(peak) | 2300-2690MHz<br>-0.06<br>dBi<br>(peak) | 2300-2690MHz<br>4<br>dBi<br>(peak) | 2300-2690MHz<br>0.60<br>dBi<br>(peak) |
|                                                  |                   |                    |                                                                                              | 3400-3800MHz<br>0.05<br>dBi<br>(peak)  | 3400-3800MHz<br>0.75<br>dBi<br>(peak)  | 3400-3800MHz<br>4<br>dBi<br>(peak) | 3400-3800MHz<br>0.70<br>dBi<br>(peak) |
|                                                  |                   |                    |                                                                                              | 4200-5000MHz<br>1.95<br>dBi<br>(peak)  | 4200-5000MHz<br>2.76<br>dBi<br>(peak)  | 4200-5000MHz<br>4<br>dBi<br>(peak) | 4200-5000MHz<br>0.81<br>dBi<br>(peak) |

- Antenna Peak Gain required being test in system basis.
- 1E frame contend absolutely peak antenna gain include H/V