

# 耕興股份有限公司

## 低功率射頻電機型式認證證明

- (1) 申請者 : 香港商極進網路有限公司台灣分公司  
(臺北市松山區南京東路4段126號5樓)
- (2) 製造廠商 : 神準科技股份有限公司
- (3) 器材名稱 : Wireless 802.11a/AC+ b/g/n Access Point
- (4) 廠牌/型號 : Extreme Networks / 31019
- (5) 發射功率(電場強度) : 2.412-2.462 GHz: 27.74dBm  
2.422-2.452 GHz: 22.77dBm  
5.180-5.240 GHz: 27.61dBm  
5.190-5.230 GHz: 26.41dBm  
5.210 GHz: 18.53dBm  
5.260-5.320 GHz: 23.18dBm  
5.270-5.310 GHz: 23.91dBm  
5.290 GHz: 19.43dBm  
5.500-5.720 GHz: 23.40dBm  
5.510-5.710 GHz: 23.96dBm  
5.530-5.690 GHz: 23.80dBm  
5.745-5.825 GHz: 27.96dBm  
5.755-5.795 GHz: 25.42dBm  
5.775 GHz: 18.36dBm
- (6) 工作頻率 : 2.412-2.462 GHz (DSSS/OFDM 11CH, ChS-5MHz)  
2.422-2.452 GHz (OFDM 7CH, ChS-5MHz)  
5.180-5.240 GHz (OFDM 4CH, ChS-20MHz)  
5.190-5.230 GHz (OFDM 2CH, ChS-40MHz)  
5.210 GHz (OFDM 1CH, ChS-80MHz)  
5.260-5.320 GHz (OFDM 4CH, ChS-20MHz)  
5.270-5.310 GHz (OFDM 2CH, ChS-40MHz)  
5.290 GHz (OFDM 1CH, ChS-80MHz)  
5.500-5.720 GHz (OFDM 12CH, ChS-20MHz)  
5.510-5.710 GHz (OFDM 6CH, ChS-40MHz)  
5.530-5.690 GHz (OFDM 3CH, ChS-80MHz)  
5.745-5.825 GHz (OFDM 5CH, ChS-20MHz)  
5.755-5.795 GHz (OFDM 2CH, ChS-40MHz)  
5.775 GHz (OFDM 1CH, ChS-80MHz)
- (7) 審驗日期 : 105年02月01日
- (8) 審驗合格標籤式樣 :



CCAF16LP0170T2



### 說明:

- 請依上列標籤式樣自製標籤, 標貼或印鑄於器材本體明顯處, 始得販賣或公開陳列。
- 經型式認證合格之低功率射頻電機, 其廠牌、型號、設計、射頻性能如有變更, 應重新申請型式認證。
- 違反低功率電波輻射性電機管理辦法之規定, 擅自使用或變更無線電頻率、電功率者, 除依電信法規定處罰外, 驗證機關(構)並得廢止其型式認證證明或型式認證標籤。
- 送審廠商應保留送審樣品供日後核對。
- 本型式認證證明及其合格標籤使用權專屬取得本證明者。依電信管制射頻器材審驗辦法第15條規定, 持有人得經由網際網路申請同意他人於同廠牌同型號之電信管制射頻器材使用型式認證標籤, 並於次日起30天內, 應檢具「電信管制射頻器材審驗合格標籤或符合性聲明標籤同意使用備查表」送國家通訊傳播委員會備查。

### 備註:

- 本器材符合低功率射頻電機技術規範(第3.10.1及4.7章節)之規定。
- 本器材之5150~5250MHz、5250~5350MHz、5470~5725MHz、5725~5850MHz, 符合FCC PART 15E 最新版本的限制值要求。
- 本器材使用之天線請詳見附件三。
- 本公司係經國家通訊傳播委員會委託之驗證機構(電信管制射頻器材驗證機構認證證書號碼:NCC-RCB-05/電信終端設備驗證機構認證證書號碼:NCC-RCB-05), 核發本型式認證證明。
- 依「商品標示法」及「資訊、通信及消費性電子商品標示基準」規定, 標示事項貼於商品或內外包裝上, 以免違法而受處分。
- 本器材須經專業工程人員安裝及設定, 始得設置使用, 且不得直接販售給一般消費者。
- 本器材電磁波曝露量MPE標準值1mW/cm<sup>2</sup>, 本產品使用時建議應距離人體58cm。
- 固定式點對點操作, 不包括點對多點系統、全方向性應用及多台共站發射機傳送相同資訊。

## 附件三

| Sef. | Brand Holder | Model Number<br>(Part No.) | Extreme Part No.<br>(Short Description) | Antenna<br>Type   | Connector   | Polarized<br>Antenna | Gain (dBi) |      |
|------|--------------|----------------------------|-----------------------------------------|-------------------|-------------|----------------------|------------|------|
|      |              |                            |                                         |                   |             |                      | 2.4GHz     | 5GHz |
| 1    | PCTEL Inc.   | 908412-10                  | 30714<br>(WS-AO-DE07025N)               | Sector<br>Antenna | N Male      | V                    | 7.5        | 6.5  |
| 2    | PCTEL Inc.   | 908414-10                  | 30716<br>(WS-AO-5Q05025N)               | Sector<br>Antenna | N Male      | V                    | -          | 4.5  |
| 3    | PCTEL Inc.   | 908409-10                  | 30711<br>(WS-AO-DQ05120N)               | Sector<br>Antenna | N Male      | V                    | 5.5        | 5.5  |
| 4    | PCTEL Inc.   | 908416-10                  | 30718<br>(WS-AO-DE10055N)               | Sector<br>Antenna | N Male      | V                    | 10.5       | 7.5  |
| 5    | PCTEL Inc.   | 908418-10                  | 30720<br>(WS-AO-DE07100N)               | Panel<br>Antenna  | N Male      | X                    | 7          | 6    |
| 6    | PCTEL Inc.   | 908411-10                  | 30713<br>(WS-AO-2Q05060N)               | Sector<br>Antenna | N Male Plug | V                    | 5          | -    |
| 7    | PCTEL Inc.   | 908415-10                  | 30717<br>(WS-AO-5Q11025N)               | Sector<br>Antenna | N Male      | V                    | -          | 11.5 |
| 8    | PCTEL Inc.   | 908413-10                  | 30715<br>(WS-AO-DE13025N)               | Sector<br>Antenna | N Male      | V                    | 13         | 12   |
| 9    | PCTEL Inc.   | 908410-10                  | 30712<br>(WS-AO-5Q04060N)               | Sector<br>Antenna | N Male Plug | V                    | -          | 4    |
| 10   | PCTEL Inc.   | -                          | WS-AO-5D23009N                          | Panel<br>Antenna  | N Type      | V                    | -          | 23   |
| 11   | PCTEL Inc.   | 908550-10                  | 30724<br>(WS-AO-DQ04360N)               | Omni<br>Antenna   | N Male      | X                    | 5.5        | 6    |

Model: 31019

2.4G Non-beamforming

Set 1 Sector Antenna / 7.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11b                  | 2412 MHz  | 25.28                       |
|                          | 2437 MHz  | 26.75                       |
|                          | 2462 MHz  | 25.40                       |
| 802.11g                  | 2412 MHz  | 21.08                       |
|                          | 2437 MHz  | 27.16                       |
|                          | 2462 MHz  | 20.98                       |
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 21.09                       |
|                          | 2437 MHz  | 27.04                       |
|                          | 2462 MHz  | 20.85                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 18.69                       |
|                          | 2437 MHz  | 21.33                       |
|                          | 2452 MHz  | 18.99                       |

Set 3 Sector Antenna / 5.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11b                  | 2412 MHz  | 26.97                       |
|                          | 2437 MHz  | 26.58                       |
|                          | 2462 MHz  | 26.21                       |
| 802.11g                  | 2412 MHz  | 22.52                       |
|                          | 2437 MHz  | 27.16                       |
|                          | 2462 MHz  | 21.53                       |
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 20.60                       |
|                          | 2437 MHz  | 27.04                       |
|                          | 2462 MHz  | 21.11                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 18.21                       |
|                          | 2437 MHz  | 20.73                       |
|                          | 2452 MHz  | 17.26                       |

Set 4 Sector Antenna / 10.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11b                  | 2412 MHz  | 22.65                       |
|                          | 2437 MHz  | 25.45                       |
|                          | 2462 MHz  | 22.91                       |
| 802.11g                  | 2412 MHz  | 21.08                       |
|                          | 2437 MHz  | 25.43                       |
|                          | 2462 MHz  | 20.01                       |
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 20.60                       |
|                          | 2437 MHz  | 25.26                       |
|                          | 2462 MHz  | 18.23                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 15.22                       |
|                          | 2437 MHz  | 18.63                       |
|                          | 2452 MHz  | 15.22                       |

## Set 5 Panel Antenna / 7 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11b                  | 2412 MHz  | 24.64                       |
|                          | 2437 MHz  | 26.67                       |
|                          | 2462 MHz  | 24.78                       |
| 802.11g                  | 2412 MHz  | 20.19                       |
|                          | 2437 MHz  | 27.16                       |
|                          | 2462 MHz  | 20.98                       |
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 19.46                       |
|                          | 2437 MHz  | 27.04                       |
|                          | 2462 MHz  | 19.94                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 18.21                       |
|                          | 2437 MHz  | 21.33                       |
|                          | 2452 MHz  | 16.36                       |

## Set 6 Sector Antenna / 5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11b                  | 2412 MHz  | 26.55                       |
|                          | 2437 MHz  | 26.58                       |
|                          | 2462 MHz  | 25.40                       |
| 802.11g                  | 2412 MHz  | 23.98                       |
|                          | 2437 MHz  | 27.16                       |
|                          | 2462 MHz  | 20.54                       |
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 24.21                       |
|                          | 2437 MHz  | 27.04                       |
|                          | 2462 MHz  | 21.11                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 18.69                       |
|                          | 2437 MHz  | 22.77                       |
|                          | 2452 MHz  | 20.25                       |

## Set 8 Sector Antenna / 13 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11b                  | 2412 MHz  | 22.01                       |
|                          | 2437 MHz  | 21.56                       |
|                          | 2462 MHz  | 21.69                       |
| 802.11g                  | 2412 MHz  | 20.00                       |
|                          | 2437 MHz  | 22.91                       |
|                          | 2462 MHz  | 18.97                       |
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 18.24                       |
|                          | 2437 MHz  | 22.76                       |
|                          | 2462 MHz  | 18.23                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 15.67                       |
|                          | 2437 MHz  | 19.55                       |
|                          | 2452 MHz  | 14.74                       |

**Set 11 Omni Antenna / 5.5 dBi**

| Mode                        | Frequency | Total Conducted Power (dBm) |
|-----------------------------|-----------|-----------------------------|
| 802.11b                     | 2412 MHz  | 25.28                       |
|                             | 2437 MHz  | 26.75                       |
|                             | 2462 MHz  | 25.40                       |
| 802.11g                     | 2412 MHz  | 23.43                       |
|                             | 2437 MHz  | 27.42                       |
|                             | 2462 MHz  | 21.86                       |
| 802.11ac MCS0/Nss1<br>VHT20 | 2412 MHz  | 22.28                       |
|                             | 2437 MHz  | 27.44                       |
|                             | 2462 MHz  | 21.11                       |
| 802.11ac MCS0/Nss1<br>VHT40 | 2422 MHz  | 19.60                       |
|                             | 2437 MHz  | 21.11                       |
|                             | 2452 MHz  | 17.68                       |

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## 2.4G Beamforming

### Set 1 Sector Antenna / 7.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 19.21                       |
|                          | 2437 MHz  | 25.26                       |
|                          | 2462 MHz  | 19.30                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 18.21                       |
|                          | 2437 MHz  | 18.63                       |
|                          | 2452 MHz  | 17.26                       |

### Set 3 Sector Antenna / 5.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 20.60                       |
|                          | 2437 MHz  | 27.25                       |
|                          | 2462 MHz  | 18.79                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 17.69                       |
|                          | 2437 MHz  | 20.73                       |
|                          | 2452 MHz  | 17.26                       |

### Set 4 Sector Antenna / 10.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 18.72                       |
|                          | 2437 MHz  | 22.13                       |
|                          | 2462 MHz  | 17.31                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 15.22                       |
|                          | 2437 MHz  | 18.63                       |
|                          | 2452 MHz  | 15.22                       |

### Set 5 Panel Antenna / 7 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 19.46                       |
|                          | 2437 MHz  | 22.76                       |
|                          | 2462 MHz  | 18.79                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 17.21                       |
|                          | 2437 MHz  | 19.55                       |
|                          | 2452 MHz  | 16.08                       |

### Set 6 Sector Antenna / 5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 21.73                       |
|                          | 2437 MHz  | 27.74                       |
|                          | 2462 MHz  | 20.73                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 18.69                       |
|                          | 2437 MHz  | 20.16                       |
|                          | 2452 MHz  | 17.26                       |

### Set 8 Sector Antenna / 13 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 18.24                       |
|                          | 2437 MHz  | 19.71                       |
|                          | 2462 MHz  | 17.31                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 14.73                       |
|                          | 2437 MHz  | 18.63                       |
|                          | 2452 MHz  | 14.74                       |

## Set 11 Omni Antenna / 5.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 2412 MHz  | 19.15                       |
|                          | 2437 MHz  | 24.34                       |
|                          | 2462 MHz  | 18.79                       |
| 802.11ac MCS0/Nss1 VHT40 | 2422 MHz  | 17.69                       |
|                          | 2437 MHz  | 20.73                       |
|                          | 2452 MHz  | 17.68                       |

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5G Non-beamforming

Set 1 Sector Antenna / 6.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11a                  | 5180 MHz  | 23.02                       |
|                          | 5200 MHz  | 22.96                       |
|                          | 5240 MHz  | 22.91                       |
|                          | 5260 MHz  | 20.48                       |
|                          | 5300 MHz  | 20.48                       |
|                          | 5320 MHz  | 20.48                       |
|                          | 5500 MHz  | 20.47                       |
|                          | 5580 MHz  | 20.48                       |
|                          | 5700 MHz  | 20.46                       |
|                          | 5720 MHz  | 19.47                       |
|                          | 5745 MHz  | 23.69                       |
|                          | 5785 MHz  | 27.36                       |
|                          | 5825 MHz  | 25.44                       |
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 23.08                       |
|                          | 5200 MHz  | 23.13                       |
|                          | 5240 MHz  | 23.14                       |
|                          | 5260 MHz  | 20.44                       |
|                          | 5300 MHz  | 20.45                       |
|                          | 5320 MHz  | 20.32                       |
|                          | 5500 MHz  | 20.45                       |
|                          | 5580 MHz  | 20.46                       |
|                          | 5700 MHz  | 20.48                       |
|                          | 5720 MHz  | 19.22                       |
|                          | 5745 MHz  | 23.44                       |
|                          | 5785 MHz  | 27.21                       |
|                          | 5825 MHz  | 25.24                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 21.43                       |
|                          | 5230 MHz  | 23.02                       |
|                          | 5270 MHz  | 23.39                       |
|                          | 5310 MHz  | 20.32                       |
|                          | 5510 MHz  | 20.60                       |
|                          | 5550 MHz  | 23.14                       |
|                          | 5670 MHz  | 23.46                       |
|                          | 5710 MHz  | 23.09                       |
|                          | 5755 MHz  | 21.78                       |
|                          | 5795 MHz  | 25.42                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 17.42                       |
|                          | 5290 MHz  | 17.25                       |
|                          | 5530 MHz  | 15.02                       |
|                          | 5610 MHz  | 22.21                       |
|                          | 5690 MHz  | 23.01                       |
|                          | 5775 MHz  | 16.83                       |

Set 2 Sector Antenna / 4.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11a                  | 5180 MHz  | 20.38                       |
|                          | 5200 MHz  | 20.30                       |
|                          | 5240 MHz  | 20.28                       |
|                          | 5260 MHz  | 22.48                       |
|                          | 5300 MHz  | 22.46                       |
|                          | 5320 MHz  | 22.41                       |
|                          | 5500 MHz  | 22.46                       |
|                          | 5580 MHz  | 22.47                       |
|                          | 5700 MHz  | 22.47                       |
|                          | 5720 MHz  | 21.49                       |
|                          | 5745 MHz  | 24.19                       |
|                          | 5785 MHz  | 27.36                       |
|                          | 5825 MHz  | 25.44                       |
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 20.09                       |
|                          | 5200 MHz  | 20.07                       |
|                          | 5240 MHz  | 20.06                       |
|                          | 5260 MHz  | 22.48                       |
|                          | 5300 MHz  | 22.34                       |
|                          | 5320 MHz  | 22.21                       |
|                          | 5500 MHz  | 22.24                       |
|                          | 5580 MHz  | 22.15                       |
|                          | 5700 MHz  | 22.17                       |
|                          | 5720 MHz  | 21.28                       |
|                          | 5745 MHz  | 23.96                       |
|                          | 5785 MHz  | 27.21                       |
|                          | 5825 MHz  | 26.07                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 20.46                       |
|                          | 5230 MHz  | 20.31                       |
|                          | 5270 MHz  | 23.91                       |
|                          | 5310 MHz  | 21.36                       |
|                          | 5510 MHz  | 22.18                       |
|                          | 5550 MHz  | 23.66                       |
|                          | 5670 MHz  | 23.91                       |
|                          | 5710 MHz  | 23.53                       |
|                          | 5755 MHz  | 22.79                       |
|                          | 5795 MHz  | 25.42                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 18.53                       |
|                          | 5290 MHz  | 19.43                       |
|                          | 5530 MHz  | 18.06                       |
|                          | 5610 MHz  | 23.80                       |
|                          | 5690 MHz  | 23.61                       |
|                          | 5775 MHz  | 18.36                       |

Set 3 Sector Antenna / 5.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11a                  | 5180 MHz  | 18.87                       |
|                          | 5200 MHz  | 18.79                       |
|                          | 5240 MHz  | 18.76                       |
|                          | 5260 MHz  | 21.29                       |
|                          | 5300 MHz  | 21.33                       |
|                          | 5320 MHz  | 21.67                       |
|                          | 5500 MHz  | 21.66                       |
|                          | 5580 MHz  | 21.70                       |
|                          | 5700 MHz  | 21.31                       |
|                          | 5720 MHz  | 19.88                       |
|                          | 5745 MHz  | 23.69                       |
|                          | 5785 MHz  | 27.36                       |
|                          | 5825 MHz  | 25.88                       |
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 19.12                       |
|                          | 5200 MHz  | 19.04                       |
|                          | 5240 MHz  | 18.99                       |
|                          | 5260 MHz  | 21.63                       |
|                          | 5300 MHz  | 21.60                       |
|                          | 5320 MHz  | 21.47                       |
|                          | 5500 MHz  | 21.43                       |
|                          | 5580 MHz  | 21.51                       |
|                          | 5700 MHz  | 21.59                       |
|                          | 5720 MHz  | 20.49                       |
|                          | 5745 MHz  | 22.96                       |
|                          | 5785 MHz  | 27.21                       |
|                          | 5825 MHz  | 25.24                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 18.93                       |
|                          | 5230 MHz  | 18.84                       |
|                          | 5270 MHz  | 23.91                       |
|                          | 5310 MHz  | 22.91                       |
|                          | 5510 MHz  | 21.65                       |
|                          | 5550 MHz  | 23.66                       |
|                          | 5670 MHz  | 23.91                       |
|                          | 5710 MHz  | 23.53                       |
|                          | 5755 MHz  | 21.78                       |
|                          | 5795 MHz  | 25.42                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 17.98                       |
|                          | 5290 MHz  | 17.75                       |
|                          | 5530 MHz  | 17.56                       |
|                          | 5610 MHz  | 23.80                       |
|                          | 5690 MHz  | 23.61                       |
|                          | 5775 MHz  | 17.32                       |

Set 4 Sector Antenna / 7.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11a                  | 5180 MHz  | 18.87                       |
|                          | 5200 MHz  | 18.79                       |
|                          | 5240 MHz  | 18.76                       |
|                          | 5260 MHz  | 19.67                       |
|                          | 5300 MHz  | 19.56                       |
|                          | 5320 MHz  | 19.41                       |
|                          | 5500 MHz  | 19.46                       |
|                          | 5580 MHz  | 19.45                       |
|                          | 5700 MHz  | 19.72                       |
|                          | 5720 MHz  | 18.01                       |
|                          | 5745 MHz  | 23.20                       |
|                          | 5785 MHz  | 27.36                       |
|                          | 5825 MHz  | 25.44                       |
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 18.61                       |
|                          | 5200 MHz  | 19.04                       |
|                          | 5240 MHz  | 18.99                       |
|                          | 5260 MHz  | 19.43                       |
|                          | 5300 MHz  | 19.42                       |
|                          | 5320 MHz  | 19.33                       |
|                          | 5500 MHz  | 19.26                       |
|                          | 5580 MHz  | 19.31                       |
|                          | 5700 MHz  | 19.48                       |
|                          | 5720 MHz  | 18.28                       |
|                          | 5745 MHz  | 22.96                       |
|                          | 5785 MHz  | 27.21                       |
|                          | 5825 MHz  | 24.81                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 18.93                       |
|                          | 5230 MHz  | 18.84                       |
|                          | 5270 MHz  | 22.46                       |
|                          | 5310 MHz  | 20.32                       |
|                          | 5510 MHz  | 21.13                       |
|                          | 5550 MHz  | 22.10                       |
|                          | 5670 MHz  | 22.30                       |
|                          | 5710 MHz  | 21.42                       |
|                          | 5755 MHz  | 20.34                       |
|                          | 5795 MHz  | 24.30                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 16.38                       |
|                          | 5290 MHz  | 16.65                       |
|                          | 5530 MHz  | 16.07                       |
|                          | 5610 MHz  | 22.21                       |
|                          | 5690 MHz  | 22.46                       |
|                          | 5775 MHz  | 16.00                       |

Set 5 Panel Antenna / 6 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11a                  | 5180 MHz  | 20.95                       |
|                          | 5200 MHz  | 20.89                       |
|                          | 5240 MHz  | 20.89                       |
|                          | 5260 MHz  | 18.07                       |
|                          | 5300 MHz  | 18.10                       |
|                          | 5320 MHz  | 18.01                       |
|                          | 5500 MHz  | 18.01                       |
|                          | 5580 MHz  | 18.08                       |
|                          | 5700 MHz  | 18.25                       |
|                          | 5720 MHz  | 16.45                       |
|                          | 5745 MHz  | 23.69                       |
|                          | 5785 MHz  | 27.36                       |
|                          | 5825 MHz  | 25.88                       |
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 21.15                       |
|                          | 5200 MHz  | 21.14                       |
|                          | 5240 MHz  | 21.16                       |
|                          | 5260 MHz  | 18.35                       |
|                          | 5300 MHz  | 18.38                       |
|                          | 5320 MHz  | 18.30                       |
|                          | 5500 MHz  | 18.31                       |
|                          | 5580 MHz  | 18.36                       |
|                          | 5700 MHz  | 17.95                       |
|                          | 5720 MHz  | 16.77                       |
|                          | 5745 MHz  | 24.50                       |
|                          | 5785 MHz  | 27.21                       |
|                          | 5825 MHz  | 24.81                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 20.96                       |
|                          | 5230 MHz  | 20.94                       |
|                          | 5270 MHz  | 21.27                       |
|                          | 5310 MHz  | 18.65                       |
|                          | 5510 MHz  | 21.13                       |
|                          | 5550 MHz  | 21.24                       |
|                          | 5670 MHz  | 21.35                       |
|                          | 5710 MHz  | 19.73                       |
|                          | 5755 MHz  | 23.31                       |
|                          | 5795 MHz  | 25.42                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 17.42                       |
|                          | 5290 MHz  | 16.65                       |
|                          | 5530 MHz  | 16.60                       |
|                          | 5610 MHz  | 23.80                       |
|                          | 5690 MHz  | 23.01                       |
|                          | 5775 MHz  | 16.83                       |

Set 7 Sector Antenna / 11.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11a                  | 5180 MHz  | 12.81                       |
|                          | 5200 MHz  | 12.75                       |
|                          | 5240 MHz  | 12.84                       |
|                          | 5260 MHz  | 15.70                       |
|                          | 5300 MHz  | 15.67                       |
|                          | 5320 MHz  | 15.53                       |
|                          | 5500 MHz  | 15.40                       |
|                          | 5580 MHz  | 15.48                       |
|                          | 5700 MHz  | 15.72                       |
|                          | 5720 MHz  | 14.08                       |
|                          | 5745 MHz  | 20.72                       |
|                          | 5785 MHz  | 24.32                       |
|                          | 5825 MHz  | 23.54                       |
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 12.60                       |
|                          | 5200 MHz  | 13.07                       |
|                          | 5240 MHz  | 12.65                       |
|                          | 5260 MHz  | 15.45                       |
|                          | 5300 MHz  | 15.46                       |
|                          | 5320 MHz  | 15.30                       |
|                          | 5500 MHz  | 15.21                       |
|                          | 5580 MHz  | 15.24                       |
|                          | 5700 MHz  | 15.42                       |
|                          | 5720 MHz  | 14.30                       |
|                          | 5745 MHz  | 21.51                       |
|                          | 5785 MHz  | 24.12                       |
|                          | 5825 MHz  | 23.89                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 12.94                       |
|                          | 5230 MHz  | 12.85                       |
|                          | 5270 MHz  | 18.24                       |
|                          | 5310 MHz  | 17.17                       |
|                          | 5510 MHz  | 17.97                       |
|                          | 5550 MHz  | 18.49                       |
|                          | 5670 MHz  | 18.29                       |
|                          | 5710 MHz  | 17.71                       |
|                          | 5755 MHz  | 19.69                       |
|                          | 5795 MHz  | 23.99                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 13.00                       |
|                          | 5290 MHz  | 13.97                       |
|                          | 5530 MHz  | 13.65                       |
|                          | 5610 MHz  | 18.21                       |
|                          | 5690 MHz  | 18.28                       |
|                          | 5775 MHz  | 13.77                       |

Set 8 Sector Antenna / 12 dBi

| Mode                        | Frequency | Total Conducted Power (dBm) |
|-----------------------------|-----------|-----------------------------|
| 802.11a                     | 5180 MHz  | 17.32                       |
|                             | 5200 MHz  | 17.28                       |
|                             | 5240 MHz  | 17.16                       |
|                             | 5260 MHz  | 15.22                       |
|                             | 5300 MHz  | 15.14                       |
|                             | 5320 MHz  | 15.00                       |
|                             | 5500 MHz  | 14.96                       |
|                             | 5580 MHz  | 15.03                       |
|                             | 5700 MHz  | 15.19                       |
|                             | 5720 MHz  | 13.57                       |
|                             | 5745 MHz  | 22.17                       |
|                             | 5785 MHz  | 23.86                       |
|                             | 5825 MHz  | 23.54                       |
| 802.11ac MCS0/Nss1<br>VHT20 | 5180 MHz  | 17.10                       |
|                             | 5200 MHz  | 17.02                       |
|                             | 5240 MHz  | 16.97                       |
|                             | 5260 MHz  | 14.97                       |
|                             | 5300 MHz  | 14.93                       |
|                             | 5320 MHz  | 14.78                       |
|                             | 5500 MHz  | 14.73                       |
|                             | 5580 MHz  | 14.73                       |
|                             | 5700 MHz  | 14.93                       |
|                             | 5720 MHz  | 13.83                       |
|                             | 5745 MHz  | 21.51                       |
|                             | 5785 MHz  | 23.61                       |
|                             | 5825 MHz  | 23.89                       |
| 802.11ac MCS0/Nss1<br>VHT40 | 5190 MHz  | 17.42                       |
|                             | 5230 MHz  | 17.33                       |
|                             | 5270 MHz  | 17.73                       |
|                             | 5310 MHz  | 17.17                       |
|                             | 5510 MHz  | 17.44                       |
|                             | 5550 MHz  | 17.97                       |
|                             | 5670 MHz  | 17.71                       |
|                             | 5710 MHz  | 17.21                       |
|                             | 5755 MHz  | 18.64                       |
|                             | 5795 MHz  | 23.44                       |
| 802.11ac MCS0/Nss1<br>VHT80 | 5210 MHz  | 14.49                       |
|                             | 5290 MHz  | 13.42                       |
|                             | 5530 MHz  | 13.06                       |
|                             | 5610 MHz  | 17.71                       |
|                             | 5690 MHz  | 17.87                       |
|                             | 5775 MHz  | 13.77                       |

Set 9 Sector Antenna / 4 dBi

| Mode                        | Frequency | Total Conducted Power (dBm) |
|-----------------------------|-----------|-----------------------------|
| 802.11a                     | 5180 MHz  | 24.31                       |
|                             | 5200 MHz  | 27.20                       |
|                             | 5240 MHz  | 27.61                       |
|                             | 5260 MHz  | 23.18                       |
|                             | 5300 MHz  | 23.16                       |
|                             | 5320 MHz  | 23.13                       |
|                             | 5500 MHz  | 23.16                       |
|                             | 5580 MHz  | 23.21                       |
|                             | 5700 MHz  | 23.35                       |
|                             | 5720 MHz  | 21.67                       |
|                             | 5745 MHz  | 24.19                       |
|                             | 5785 MHz  | 27.36                       |
|                             | 5825 MHz  | 24.61                       |
| 802.11ac MCS0/Nss1<br>VHT20 | 5180 MHz  | 23.67                       |
|                             | 5200 MHz  | 27.05                       |
|                             | 5240 MHz  | 27.02                       |
|                             | 5260 MHz  | 23.06                       |
|                             | 5300 MHz  | 23.03                       |
|                             | 5320 MHz  | 23.01                       |
|                             | 5500 MHz  | 23.40                       |
|                             | 5580 MHz  | 23.05                       |
|                             | 5700 MHz  | 22.06                       |
|                             | 5720 MHz  | 22.07                       |
|                             | 5745 MHz  | 23.96                       |
|                             | 5785 MHz  | 27.21                       |
|                             | 5825 MHz  | 24.33                       |
| 802.11ac MCS0/Nss1<br>VHT40 | 5190 MHz  | 23.52                       |
|                             | 5230 MHz  | 26.41                       |
|                             | 5270 MHz  | 23.91                       |
|                             | 5310 MHz  | 19.72                       |
|                             | 5510 MHz  | 20.06                       |
|                             | 5550 MHz  | 23.66                       |
|                             | 5670 MHz  | 22.92                       |
|                             | 5710 MHz  | 23.96                       |
|                             | 5755 MHz  | 21.34                       |
|                             | 5795 MHz  | 25.42                       |
| 802.11ac MCS0/Nss1<br>VHT80 | 5210 MHz  | 16.99                       |
|                             | 5290 MHz  | 17.25                       |
|                             | 5530 MHz  | 16.07                       |
|                             | 5610 MHz  | 22.81                       |
|                             | 5690 MHz  | 23.61                       |
|                             | 5775 MHz  | 16.83                       |

## Set 10 Panel Antenna / 23 dBi

| Mode                        | Frequency | Total Conducted Power (dBm) |
|-----------------------------|-----------|-----------------------------|
| 802.11a                     | 5180 MHz  | 13.76                       |
|                             | 5200 MHz  | 15.33                       |
|                             | 5240 MHz  | 16.27                       |
|                             | 5260 MHz  | 3.99                        |
|                             | 5300 MHz  | 3.90                        |
|                             | 5320 MHz  | 3.88                        |
|                             | 5500 MHz  | 3.81                        |
|                             | 5580 MHz  | 3.80                        |
|                             | 5700 MHz  | 3.92                        |
|                             | 5720 MHz  | 3.77                        |
|                             | 5745 MHz  | 16.19                       |
|                             | 5785 MHz  | 19.96                       |
|                             | 5825 MHz  | 17.03                       |
| 802.11ac MCS0/Nss1<br>VHT20 | 5180 MHz  | 13.48                       |
|                             | 5200 MHz  | 15.08                       |
|                             | 5240 MHz  | 16.13                       |
|                             | 5260 MHz  | 3.61                        |
|                             | 5300 MHz  | 3.72                        |
|                             | 5320 MHz  | 3.63                        |
|                             | 5500 MHz  | 3.62                        |
|                             | 5580 MHz  | 3.66                        |
|                             | 5700 MHz  | 3.74                        |
|                             | 5720 MHz  | 3.97                        |
|                             | 5745 MHz  | 15.95                       |
|                             | 5785 MHz  | 19.71                       |
|                             | 5825 MHz  | 16.85                       |
| 802.11ac MCS0/Nss1<br>VHT40 | 5190 MHz  | 11.38                       |
|                             | 5230 MHz  | 14.47                       |
|                             | 5270 MHz  | 6.67                        |
|                             | 5310 MHz  | 6.80                        |
|                             | 5510 MHz  | 6.54                        |
|                             | 5550 MHz  | 6.57                        |
|                             | 5670 MHz  | 6.89                        |
|                             | 5710 MHz  | 6.86                        |
|                             | 5755 MHz  | 11.73                       |
|                             | 5795 MHz  | 14.96                       |
| 802.11ac MCS0/Nss1<br>VHT80 | 5210 MHz  | 9.52                        |
|                             | 5290 MHz  | 6.78                        |
|                             | 5530 MHz  | 6.63                        |
|                             | 5610 MHz  | 6.79                        |
|                             | 5690 MHz  | 6.44                        |
|                             | 5775 MHz  | 7.33                        |

Set 11 Omni Antenna / 6 dBi

| Mode                        | Frequency | Total Conducted Power (dBm) |
|-----------------------------|-----------|-----------------------------|
| 802.11a                     | 5180 MHz  | 20.95                       |
|                             | 5200 MHz  | 20.89                       |
|                             | 5240 MHz  | 20.89                       |
|                             | 5260 MHz  | 18.07                       |
|                             | 5300 MHz  | 18.10                       |
|                             | 5320 MHz  | 18.01                       |
|                             | 5500 MHz  | 18.01                       |
|                             | 5580 MHz  | 18.08                       |
|                             | 5700 MHz  | 18.25                       |
|                             | 5720 MHz  | 16.45                       |
|                             | 5745 MHz  | 24.19                       |
|                             | 5785 MHz  | 27.96                       |
|                             | 5825 MHz  | 25.15                       |
| 802.11ac MCS0/Nss1<br>VHT20 | 5180 MHz  | 21.15                       |
|                             | 5200 MHz  | 21.14                       |
|                             | 5240 MHz  | 21.16                       |
|                             | 5260 MHz  | 18.35                       |
|                             | 5300 MHz  | 18.38                       |
|                             | 5320 MHz  | 18.30                       |
|                             | 5500 MHz  | 18.31                       |
|                             | 5580 MHz  | 18.36                       |
|                             | 5700 MHz  | 17.97                       |
|                             | 5720 MHz  | 16.77                       |
|                             | 5745 MHz  | 23.96                       |
|                             | 5785 MHz  | 27.75                       |
|                             | 5825 MHz  | 24.33                       |
| 802.11ac MCS0/Nss1<br>VHT40 | 5190 MHz  | 20.96                       |
|                             | 5230 MHz  | 20.94                       |
|                             | 5270 MHz  | 21.27                       |
|                             | 5310 MHz  | 20.80                       |
|                             | 5510 MHz  | 21.13                       |
|                             | 5550 MHz  | 21.24                       |
|                             | 5670 MHz  | 21.35                       |
|                             | 5710 MHz  | 19.73                       |
|                             | 5755 MHz  | 20.82                       |
|                             | 5795 MHz  | 24.30                       |
| 802.11ac MCS0/Nss1<br>VHT80 | 5210 MHz  | 16.38                       |
|                             | 5290 MHz  | 16.65                       |
|                             | 5530 MHz  | 16.60                       |
|                             | 5610 MHz  | 23.36                       |
|                             | 5690 MHz  | 23.01                       |
|                             | 5775 MHz  | 16.83                       |

# 5G Beamforming

## Set 1 Sector Antenna / 6.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 20.09                       |
|                          | 5200 MHz  | 20.07                       |
|                          | 5240 MHz  | 20.06                       |
|                          | 5260 MHz  | 20.44                       |
|                          | 5300 MHz  | 20.45                       |
|                          | 5320 MHz  | 20.32                       |
|                          | 5500 MHz  | 20.45                       |
|                          | 5580 MHz  | 20.46                       |
|                          | 5700 MHz  | 20.48                       |
|                          | 5720 MHz  | 19.38                       |
|                          | 5745 MHz  | 21.06                       |
|                          | 5785 MHz  | 26.47                       |
|                          | 5825 MHz  | 23.13                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 17.63                       |
|                          | 5230 MHz  | 20.14                       |
|                          | 5270 MHz  | 20.25                       |
|                          | 5310 MHz  | 20.32                       |
|                          | 5510 MHz  | 20.10                       |
|                          | 5550 MHz  | 20.21                       |
|                          | 5670 MHz  | 20.33                       |
|                          | 5710 MHz  | 20.26                       |
|                          | 5755 MHz  | 17.34                       |
|                          | 5795 MHz  | 24.30                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 15.95                       |
|                          | 5290 MHz  | 15.28                       |
|                          | 5530 MHz  | 15.02                       |
|                          | 5610 MHz  | 20.07                       |
|                          | 5690 MHz  | 20.26                       |
|                          | 5775 MHz  | 14.37                       |

Set 2 Sector Antenna / 4.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 17.10                       |
|                          | 5200 MHz  | 17.02                       |
|                          | 5240 MHz  | 17.42                       |
|                          | 5260 MHz  | 22.48                       |
|                          | 5300 MHz  | 22.34                       |
|                          | 5320 MHz  | 22.21                       |
|                          | 5500 MHz  | 22.24                       |
|                          | 5580 MHz  | 22.15                       |
|                          | 5700 MHz  | 20.48                       |
|                          | 5720 MHz  | 21.36                       |
|                          | 5745 MHz  | 20.64                       |
|                          | 5785 MHz  | 27.74                       |
|                          | 5825 MHz  | 22.76                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 17.42                       |
|                          | 5230 MHz  | 17.33                       |
|                          | 5270 MHz  | 22.37                       |
|                          | 5310 MHz  | 21.36                       |
|                          | 5510 MHz  | 21.65                       |
|                          | 5550 MHz  | 22.21                       |
|                          | 5670 MHz  | 22.30                       |
|                          | 5710 MHz  | 16.38                       |
|                          | 5755 MHz  | 17.34                       |
|                          | 5795 MHz  | 24.76                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 17.42                       |
|                          | 5290 MHz  | 19.43                       |
|                          | 5530 MHz  | 18.06                       |
|                          | 5610 MHz  | 22.21                       |
|                          | 5690 MHz  | 22.42                       |
|                          | 5775 MHz  | 17.32                       |

Set 3 Sector Antenna / 5.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 15.89                       |
|                          | 5200 MHz  | 15.91                       |
|                          | 5240 MHz  | 15.94                       |
|                          | 5260 MHz  | 21.03                       |
|                          | 5300 MHz  | 21.04                       |
|                          | 5320 MHz  | 21.47                       |
|                          | 5500 MHz  | 21.43                       |
|                          | 5580 MHz  | 21.03                       |
|                          | 5700 MHz  | 21.00                       |
|                          | 5720 MHz  | 20.35                       |
|                          | 5745 MHz  | 20.64                       |
|                          | 5785 MHz  | 27.21                       |
|                          | 5825 MHz  | 22.76                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 15.67                       |
|                          | 5230 MHz  | 15.68                       |
|                          | 5270 MHz  | 21.27                       |
|                          | 5310 MHz  | 19.11                       |
|                          | 5510 MHz  | 21.13                       |
|                          | 5550 MHz  | 21.24                       |
|                          | 5670 MHz  | 21.35                       |
|                          | 5710 MHz  | 21.25                       |
|                          | 5755 MHz  | 18.01                       |
|                          | 5795 MHz  | 24.30                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 15.95                       |
|                          | 5290 MHz  | 17.75                       |
|                          | 5530 MHz  | 17.56                       |
|                          | 5610 MHz  | 21.17                       |
|                          | 5690 MHz  | 21.31                       |
|                          | 5775 MHz  | 17.32                       |

Set 4 Sector Antenna / 7.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 15.89                       |
|                          | 5200 MHz  | 15.91                       |
|                          | 5240 MHz  | 15.94                       |
|                          | 5260 MHz  | 19.43                       |
|                          | 5300 MHz  | 19.42                       |
|                          | 5320 MHz  | 19.33                       |
|                          | 5500 MHz  | 19.26                       |
|                          | 5580 MHz  | 19.31                       |
|                          | 5700 MHz  | 19.48                       |
|                          | 5720 MHz  | 18.41                       |
|                          | 5745 MHz  | 21.06                       |
|                          | 5785 MHz  | 25.46                       |
|                          | 5825 MHz  | 25.24                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 15.67                       |
|                          | 5230 MHz  | 15.68                       |
|                          | 5270 MHz  | 19.02                       |
|                          | 5310 MHz  | 18.65                       |
|                          | 5510 MHz  | 18.96                       |
|                          | 5550 MHz  | 19.46                       |
|                          | 5670 MHz  | 19.21                       |
|                          | 5710 MHz  | 19.32                       |
|                          | 5755 MHz  | 18.64                       |
|                          | 5795 MHz  | 23.44                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 15.95                       |
|                          | 5290 MHz  | 16.65                       |
|                          | 5530 MHz  | 15.05                       |
|                          | 5610 MHz  | 19.18                       |
|                          | 5690 MHz  | 19.28                       |
|                          | 5775 MHz  | 15.57                       |

Set 5 Panel Antenna / 6 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 14.69                       |
|                          | 5200 MHz  | 14.70                       |
|                          | 5240 MHz  | 14.76                       |
|                          | 5260 MHz  | 17.92                       |
|                          | 5300 MHz  | 17.87                       |
|                          | 5320 MHz  | 17.73                       |
|                          | 5500 MHz  | 17.66                       |
|                          | 5580 MHz  | 17.77                       |
|                          | 5700 MHz  | 17.95                       |
|                          | 5720 MHz  | 16.83                       |
|                          | 5745 MHz  | 18.71                       |
|                          | 5785 MHz  | 23.47                       |
|                          | 5825 MHz  | 22.49                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 14.79                       |
|                          | 5230 MHz  | 14.77                       |
|                          | 5270 MHz  | 17.73                       |
|                          | 5310 MHz  | 17.72                       |
|                          | 5510 MHz  | 17.44                       |
|                          | 5550 MHz  | 17.95                       |
|                          | 5670 MHz  | 17.71                       |
|                          | 5710 MHz  | 17.64                       |
|                          | 5755 MHz  | 15.71                       |
|                          | 5795 MHz  | 23.44                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 14.87                       |
|                          | 5290 MHz  | 16.65                       |
|                          | 5530 MHz  | 15.55                       |
|                          | 5610 MHz  | 17.71                       |
|                          | 5690 MHz  | 17.72                       |
|                          | 5775 MHz  | 15.92                       |

## Set 7 Sector Antenna / 11.5 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 9.79                        |
|                          | 5200 MHz  | 9.74                        |
|                          | 5240 MHz  | 9.68                        |
|                          | 5260 MHz  | 15.45                       |
|                          | 5300 MHz  | 15.46                       |
|                          | 5320 MHz  | 15.30                       |
|                          | 5500 MHz  | 15.21                       |
|                          | 5580 MHz  | 15.24                       |
|                          | 5700 MHz  | 15.42                       |
|                          | 5720 MHz  | 14.41                       |
|                          | 5745 MHz  | 19.96                       |
|                          | 5785 MHz  | 21.31                       |
|                          | 5825 MHz  | 21.47                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 9.96                        |
|                          | 5230 MHz  | 9.96                        |
|                          | 5270 MHz  | 15.49                       |
|                          | 5310 MHz  | 15.49                       |
|                          | 5510 MHz  | 15.49                       |
|                          | 5550 MHz  | 15.49                       |
|                          | 5670 MHz  | 15.49                       |
|                          | 5710 MHz  | 15.41                       |
|                          | 5755 MHz  | 17.34                       |
|                          | 5795 MHz  | 21.32                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 10.06                       |
|                          | 5290 MHz  | 15.49                       |
|                          | 5530 MHz  | 15.49                       |
|                          | 5610 MHz  | 15.49                       |
|                          | 5690 MHz  | 15.43                       |
|                          | 5775 MHz  | 13.77                       |

## Set 8 Sector Antenna / 12 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 14.04                       |
|                          | 5200 MHz  | 13.98                       |
|                          | 5240 MHz  | 14.08                       |
|                          | 5260 MHz  | 14.97                       |
|                          | 5300 MHz  | 14.93                       |
|                          | 5320 MHz  | 14.78                       |
|                          | 5500 MHz  | 14.73                       |
|                          | 5580 MHz  | 14.73                       |
|                          | 5700 MHz  | 14.93                       |
|                          | 5720 MHz  | 13.76                       |
|                          | 5745 MHz  | 17.44                       |
|                          | 5785 MHz  | 20.64                       |
|                          | 5825 MHz  | 20.32                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 14.23                       |
|                          | 5230 MHz  | 14.20                       |
|                          | 5270 MHz  | 14.86                       |
|                          | 5310 MHz  | 14.78                       |
|                          | 5510 MHz  | 14.94                       |
|                          | 5550 MHz  | 14.97                       |
|                          | 5670 MHz  | 14.74                       |
|                          | 5710 MHz  | 14.56                       |
|                          | 5755 MHz  | 15.71                       |
|                          | 5795 MHz  | 20.40                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 13.99                       |
|                          | 5290 MHz  | 13.42                       |
|                          | 5530 MHz  | 13.06                       |
|                          | 5610 MHz  | 14.60                       |
|                          | 5690 MHz  | 14.65                       |
|                          | 5775 MHz  | 12.26                       |

Set 9 Sector Antenna / 4 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 23.67                       |
|                          | 5200 MHz  | 25.19                       |
|                          | 5240 MHz  | 25.13                       |
|                          | 5260 MHz  | 22.59                       |
|                          | 5300 MHz  | 22.57                       |
|                          | 5320 MHz  | 22.52                       |
|                          | 5500 MHz  | 22.51                       |
|                          | 5580 MHz  | 22.57                       |
|                          | 5700 MHz  | 22.06                       |
|                          | 5720 MHz  | 21.36                       |
|                          | 5745 MHz  | 20.64                       |
|                          | 5785 MHz  | 27.74                       |
|                          | 5825 MHz  | 21.97                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 18.43                       |
|                          | 5230 MHz  | 25.06                       |
|                          | 5270 MHz  | 22.53                       |
|                          | 5310 MHz  | 19.72                       |
|                          | 5510 MHz  | 20.06                       |
|                          | 5550 MHz  | 22.93                       |
|                          | 5670 MHz  | 22.56                       |
|                          | 5710 MHz  | 22.82                       |
|                          | 5755 MHz  | 17.34                       |
|                          | 5795 MHz  | 21.72                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 15.95                       |
|                          | 5290 MHz  | 17.25                       |
|                          | 5530 MHz  | 16.07                       |
|                          | 5610 MHz  | 22.81                       |
|                          | 5690 MHz  | 22.42                       |
|                          | 5775 MHz  | 16.00                       |

Set 10 Panel Antenna / 23 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 13.48                       |
|                          | 5200 MHz  | 13.54                       |
|                          | 5240 MHz  | 14.45                       |
|                          | 5260 MHz  | 3.61                        |
|                          | 5300 MHz  | 3.72                        |
|                          | 5320 MHz  | 3.63                        |
|                          | 5500 MHz  | 3.62                        |
|                          | 5580 MHz  | 3.66                        |
|                          | 5700 MHz  | 3.74                        |
|                          | 5720 MHz  | 2.57                        |
|                          | 5745 MHz  | 13.40                       |
|                          | 5785 MHz  | 19.71                       |
|                          | 5825 MHz  | 16.31                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 10.88                       |
|                          | 5230 MHz  | 10.96                       |
|                          | 5270 MHz  | 3.78                        |
|                          | 5310 MHz  | 3.84                        |
|                          | 5510 MHz  | 3.92                        |
|                          | 5550 MHz  | 3.62                        |
|                          | 5670 MHz  | 3.68                        |
|                          | 5710 MHz  | 3.61                        |
|                          | 5755 MHz  | 10.09                       |
|                          | 5795 MHz  | 15.99                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 9.52                        |
|                          | 5290 MHz  | 3.81                        |
|                          | 5530 MHz  | 3.61                        |
|                          | 5610 MHz  | 3.67                        |
|                          | 5690 MHz  | 3.70                        |
|                          | 5775 MHz  | 7.33                        |

## Set 11 Omni Antenna / 6 dBi

| Mode                     | Frequency | Total Conducted Power (dBm) |
|--------------------------|-----------|-----------------------------|
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz  | 15.11                       |
|                          | 5200 MHz  | 15.08                       |
|                          | 5240 MHz  | 15.11                       |
|                          | 5260 MHz  | 17.92                       |
|                          | 5300 MHz  | 17.87                       |
|                          | 5320 MHz  | 17.73                       |
|                          | 5500 MHz  | 17.66                       |
|                          | 5580 MHz  | 17.77                       |
|                          | 5700 MHz  | 17.97                       |
|                          | 5720 MHz  | 16.83                       |
|                          | 5745 MHz  | 18.14                       |
|                          | 5785 MHz  | 23.47                       |
|                          | 5825 MHz  | 21.47                       |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz  | 15.31                       |
|                          | 5230 MHz  | 15.29                       |
|                          | 5270 MHz  | 17.73                       |
|                          | 5310 MHz  | 16.27                       |
|                          | 5510 MHz  | 17.44                       |
|                          | 5550 MHz  | 17.97                       |
|                          | 5670 MHz  | 17.71                       |
|                          | 5710 MHz  | 17.64                       |
|                          | 5755 MHz  | 15.24                       |
|                          | 5795 MHz  | 23.44                       |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz  | 14.49                       |
|                          | 5290 MHz  | 12.58                       |
|                          | 5530 MHz  | 12.21                       |
|                          | 5610 MHz  | 17.71                       |
|                          | 5690 MHz  | 17.72                       |
|                          | 5775 MHz  | 14.37                       |