



REPORT No.: SZ23060216S02

## Annex B Conducted Power

**Note:**

Conducted power unit: dBm

The target power was recorded in the manufacture document.

## Conducted Power

| Band            |                         | WCDMA Band II (dBm) |       |        | Tune-up<br>Limit<br>(dBm) | WCDMA Band IV (dBm) |        |        | Tune-up<br>Limit<br>(dBm) | WCDMA Band V (dBm) |       |       | Tune-up<br>Limit<br>(dBm) |
|-----------------|-------------------------|---------------------|-------|--------|---------------------------|---------------------|--------|--------|---------------------------|--------------------|-------|-------|---------------------------|
| TX Channel      |                         | 9262                | 9400  | 9538   |                           | 1312                | 1413   | 1513   |                           | 4132               | 4182  | 4233  |                           |
| Rx Channel      |                         | 9662                | 9800  | 9938   |                           | 1537                | 1638   | 1738   |                           | 4357               | 4407  | 4458  |                           |
| Frequency (MHz) |                         | 1852.4              | 1880  | 1907.6 |                           | 1712.4              | 1732.6 | 1752.6 |                           | 826.4              | 836.4 | 846.6 |                           |
| 3GPP Rel 99     | RMC 12.2Kbps            | 23.51               | 23.58 | 23.52  | 24.50                     | 23.19               | 23.26  | 23.15  | 24.50                     | 23.58              | 23.65 | 23.60 | 24.50                     |
| 3GPP Rel 5      | HSDPA Subtest-1         | 23.34               | 23.26 | 23.25  | 24.50                     | 23.06               | 23.06  | 23.25  | 24.50                     | 23.26              | 23.35 | 23.28 | 24.50                     |
| 3GPP Rel 5      | HSDPA Subtest-2         | 23.34               | 23.27 | 23.25  | 24.50                     | 23.07               | 23.01  | 23.24  | 24.50                     | 23.25              | 23.30 | 23.25 | 24.50                     |
| 3GPP Rel 5      | HSDPA Subtest-3         | 22.87               | 22.80 | 22.78  | 24.00                     | 22.57               | 22.53  | 22.75  | 24.00                     | 22.75              | 23.06 | 22.76 | 24.00                     |
| 3GPP Rel 5      | HSDPA Subtest-4         | 22.88               | 22.81 | 22.78  | 24.00                     | 22.57               | 22.52  | 22.73  | 24.00                     | 22.75              | 23.05 | 22.76 | 24.00                     |
| 3GPP Rel 8      | DC-HSDPA Subtest-1      | 23.25               | 23.25 | 23.36  | 24.50                     | 23.00               | 23.06  | 23.18  | 24.00                     | 23.08              | 23.00 | 22.96 | 24.00                     |
| 3GPP Rel 8      | DC-HSDPA Subtest-2      | 23.38               | 23.23 | 23.28  | 24.50                     | 23.11               | 23.12  | 23.14  | 24.00                     | 23.06              | 22.98 | 23.10 | 24.00                     |
| 3GPP Rel 8      | DC-HSDPA Subtest-3      | 22.78               | 22.87 | 22.77  | 24.00                     | 22.63               | 22.55  | 22.80  | 23.50                     | 22.55              | 22.56 | 22.65 | 23.50                     |
| 3GPP Rel 8      | DC-HSDPA Subtest-4      | 22.84               | 22.83 | 22.77  | 24.00                     | 22.60               | 22.48  | 22.64  | 23.50                     | 22.66              | 22.57 | 22.55 | 23.50                     |
| 3GPP Rel 6      | HSUPA Subtest-1         | 22.07               | 22.51 | 22.70  | 23.50                     | 22.21               | 22.40  | 22.27  | 23.50                     | 21.64              | 21.81 | 22.92 | 23.50                     |
| 3GPP Rel 6      | HSUPA Subtest-2         | 21.94               | 21.99 | 22.19  | 23.00                     | 21.67               | 21.91  | 21.74  | 22.50                     | 21.92              | 22.09 | 22.40 | 23.50                     |
| 3GPP Rel 6      | HSUPA Subtest-3         | 22.10               | 22.53 | 22.71  | 23.50                     | 21.82               | 22.39  | 22.25  | 22.50                     | 22.44              | 22.61 | 22.84 | 23.50                     |
| 3GPP Rel 6      | HSUPA Subtest-4         | 22.41               | 22.47 | 22.68  | 23.50                     | 21.78               | 22.42  | 22.24  | 23.00                     | 22.38              | 22.57 | 22.87 | 23.50                     |
| 3GPP Rel 6      | HSUPA Subtest-5         | 22.47               | 22.50 | 22.69  | 23.50                     | 22.20               | 22.39  | 22.29  | 23.50                     | 22.41              | 22.58 | 22.81 | 23.50                     |
| 3GPP Rel 7      | HSPA+ (16QAM) Subtest-1 | 22.78               | 22.78 | 22.91  | 23.50                     | 22.96               | 22.83  | 22.63  | 23.50                     | 21.83              | 21.68 | 21.30 | 22.50                     |
| Attenuator      |                         | Cable Loss          |       | 0.8    |                           | Cable Loss          |        | 0.8    |                           | Cable Loss         |       | 0.8   |                           |
| Mode            |                         | Max.                |       | 23.58  |                           | Max.                |        | 23.26  |                           | Max.               |       | 23.65 |                           |



| Band 2 (1900MHz Band) (dBm) |            |         |           |             |                |              |                     |
|-----------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| Part 24E                    |            |         |           |             |                |              |                     |
| BW [MHz]                    | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                     |            |         |           | 18700       | 18900          | 19100        |                     |
| Frequency (MHz)             |            |         |           | 1860        | 1880           | 1900         |                     |
| 20                          | QPSK       | 1       | 0         | 23.31       | 23.20          | 23.18        |                     |
| 20                          | QPSK       | 1       | 49        | 23.25       | 23.17          | 23.14        | 24                  |
| 20                          | QPSK       | 1       | 99        | 23.16       | 23.12          | 23.10        |                     |
| 20                          | QPSK       | 50      | 0         | 22.36       | 22.25          | 22.23        |                     |
| 20                          | QPSK       | 50      | 24        | 22.24       | 22.20          | 22.15        | 23                  |
| 20                          | QPSK       | 50      | 50        | 22.13       | 22.11          | 22.06        |                     |
| 20                          | QPSK       | 100     | 0         | 22.18       | 22.16          | 22.13        |                     |
| 20                          | 16QAM      | 1       | 0         | 22.43       | 22.41          | 22.34        | 23                  |
| 20                          | 16QAM      | 1       | 49        | 22.29       | 22.30          | 22.21        |                     |
| 20                          | 16QAM      | 1       | 99        | 22.22       | 22.24          | 22.18        |                     |
| 20                          | 16QAM      | 50      | 0         | 21.25       | 21.22          | 21.19        | 22                  |
| 20                          | 16QAM      | 50      | 24        | 21.21       | 21.17          | 21.20        |                     |
| 20                          | 16QAM      | 50      | 50        | 21.14       | 21.02          | 21.12        |                     |
| 20                          | 16QAM      | 100     | 0         | 21.15       | 21.13          | 21.10        | 22                  |
| 20                          | 64QAM      | 1       | 0         | 21.40       | 21.36          | 21.28        |                     |
| 20                          | 64QAM      | 1       | 49        | 21.32       | 21.25          | 21.19        |                     |
| 20                          | 64QAM      | 1       | 99        | 21.26       | 21.23          | 21.21        | 21                  |
| 20                          | 64QAM      | 50      | 0         | 20.24       | 20.21          | 20.16        |                     |
| 20                          | 64QAM      | 50      | 24        | 20.20       | 20.15          | 20.13        |                     |
| 20                          | 64QAM      | 50      | 50        | 20.11       | 20.10          | 20.05        | 20                  |
| 20                          | 64QAM      | 100     | 0         | 20.18       | 20.16          | 20.14        |                     |
| Channel                     |            |         |           | 18675       | 18900          | 19125        |                     |
| Frequency (MHz)             |            |         |           | 1857.5      | 1880           | 1902.5       |                     |
| 15                          | QPSK       | 1       | 0         | 23.28       | 23.23          | 23.17        |                     |
| 15                          | QPSK       | 1       | 37        | 23.19       | 23.16          | 23.20        | 24                  |
| 15                          | QPSK       | 1       | 74        | 23.22       | 23.04          | 23.13        |                     |
| 15                          | QPSK       | 36      | 0         | 22.35       | 22.38          | 22.23        |                     |
| 15                          | QPSK       | 36      | 20        | 22.20       | 22.07          | 22.12        | 23                  |
| 15                          | QPSK       | 36      | 39        | 22.25       | 22.13          | 22.23        |                     |
| 15                          | QPSK       | 75      | 0         | 22.26       | 22.35          | 22.32        |                     |
| 15                          | 16QAM      | 1       | 0         | 22.55       | 22.49          | 22.19        | 23                  |
| 15                          | 16QAM      | 1       | 37        | 22.34       | 22.51          | 22.44        |                     |
| 15                          | 16QAM      | 1       | 74        | 22.14       | 22.40          | 22.18        |                     |
| 15                          | 16QAM      | 36      | 0         | 21.27       | 21.15          | 21.13        | 22                  |
| 15                          | 16QAM      | 36      | 20        | 21.26       | 21.13          | 21.26        |                     |
| 15                          | 16QAM      | 36      | 39        | 21.18       | 21.02          | 21.22        |                     |
| 15                          | 16QAM      | 75      | 0         | 21.32       | 20.99          | 21.14        | 22                  |
| 15                          | 64QAM      | 1       | 0         | 21.45       | 21.22          | 21.23        |                     |
| 15                          | 64QAM      | 1       | 37        | 21.33       | 21.22          | 21.11        |                     |
| 15                          | 64QAM      | 1       | 74        | 21.28       | 21.27          | 21.22        | 21                  |
| 15                          | 64QAM      | 36      | 0         | 20.36       | 20.17          | 20.16        |                     |
| 15                          | 64QAM      | 36      | 20        | 20.09       | 19.96          | 20.12        |                     |
| 15                          | 64QAM      | 36      | 39        | 20.17       | 20.28          | 20.00        | 20                  |
| 15                          | 64QAM      | 75      | 0         | 20.26       | 20.04          | 20.10        |                     |
| Channel                     |            |         |           | 18650       | 18900          | 19150        |                     |
| Frequency (MHz)             |            |         |           | 1855        | 1880           | 1905         |                     |
| 10                          | QPSK       | 1       | 0         | 23.27       | 23.23          | 23.19        |                     |
| 10                          | QPSK       | 1       | 25        | 23.21       | 23.17          | 22.94        | 24                  |
| 10                          | QPSK       | 1       | 49        | 23.26       | 23.07          | 23.16        |                     |
| 10                          | QPSK       | 25      | 0         | 22.37       | 22.20          | 22.18        |                     |
| 10                          | QPSK       | 25      | 12        | 22.29       | 22.34          | 22.14        | 23                  |
| 10                          | QPSK       | 25      | 25        | 22.16       | 22.00          | 22.30        |                     |
| 10                          | QPSK       | 50      | 0         | 22.16       | 22.25          | 22.36        |                     |
| 10                          | 16QAM      | 1       | 0         | 22.40       | 22.38          | 22.26        | 23                  |
| 10                          | 16QAM      | 1       | 25        | 22.19       | 22.10          | 22.42        |                     |
| 10                          | 16QAM      | 1       | 49        | 22.37       | 22.29          | 22.34        |                     |
| 10                          | 16QAM      | 25      | 0         | 21.24       | 21.34          | 21.13        | 22                  |
| 10                          | 16QAM      | 25      | 12        | 21.38       | 21.30          | 21.31        |                     |
| 10                          | 16QAM      | 25      | 25        | 21.14       | 21.27          | 21.32        |                     |
| 10                          | 16QAM      | 50      | 0         | 21.18       | 21.15          | 21.14        | 22                  |
| 10                          | 64QAM      | 1       | 0         | 21.40       | 21.41          | 21.24        |                     |
| 10                          | 64QAM      | 1       | 25        | 21.19       | 21.19          | 21.22        |                     |
| 10                          | 64QAM      | 1       | 49        | 21.25       | 21.08          | 21.20        | 21                  |
| 10                          | 64QAM      | 25      | 0         | 20.27       | 20.35          | 20.33        |                     |
| 10                          | 64QAM      | 25      | 12        | 20.31       | 20.12          | 20.19        |                     |
| 10                          | 64QAM      | 25      | 25        | 20.21       | 20.10          | 20.04        | 20                  |
| 10                          | 64QAM      | 50      | 0         | 20.31       | 20.12          | 19.98        |                     |
| Channel                     |            |         |           | 18625       | 18900          | 19175        |                     |
| Frequency (MHz)             |            |         |           | 1852.5      | 1880           | 1907.5       |                     |
| 5                           | QPSK       | 1       | 0         | 23.29       | 23.22          | 23.19        |                     |
| 5                           | QPSK       | 1       | 12        | 23.23       | 23.19          | 23.22        | 24                  |
| 5                           | QPSK       | 1       | 24        | 23.28       | 23.15          | 23.17        |                     |
| 5                           | QPSK       | 12      | 0         | 22.33       | 22.33          | 22.28        |                     |
| 5                           | QPSK       | 12      | 7         | 22.40       | 22.16          | 22.17        | 23                  |
| 5                           | QPSK       | 12      | 13        | 22.09       | 22.13          | 22.17        |                     |
| 5                           | QPSK       | 25      | 0         | 22.21       | 22.19          | 22.00        |                     |
| 5                           | 16QAM      | 1       | 0         | 22.34       | 22.32          | 22.19        | 23                  |
| 5                           | 16QAM      | 1       | 12        | 22.30       | 22.22          | 22.02        |                     |
| 5                           | 16QAM      | 1       | 24        | 22.04       | 22.26          | 22.13        |                     |
| 5                           | 16QAM      | 12      | 0         | 21.37       | 21.24          | 21.17        | 22                  |
| 5                           | 16QAM      | 12      | 7         | 21.27       | 21.18          | 21.08        |                     |
| 5                           | 16QAM      | 12      | 13        | 21.26       | 20.87          | 21.08        |                     |
| 5                           | 16QAM      | 25      | 0         | 21.05       | 21.35          | 21.05        | 22                  |
| 5                           | 64QAM      | 1       | 0         | 21.20       | 21.27          | 21.19        |                     |
| 5                           | 64QAM      | 1       | 12        | 21.12       | 21.18          | 21.24        |                     |
| 5                           | 64QAM      | 1       | 24        | 21.10       | 21.12          | 21.33        | 21                  |
| 5                           | 64QAM      | 12      | 0         | 20.32       | 20.20          | 20.18        |                     |
| 5                           | 64QAM      | 12      | 7         | 20.06       | 20.08          | 20.19        |                     |
| 5                           | 64QAM      | 12      | 13        | 20.23       | 20.18          | 20.17        | 20                  |
| 5                           | 64QAM      | 25      | 0         | 20.34       | 20.03          | 20.00        |                     |
| Channel                     |            |         |           | 18615       | 18900          | 19185        |                     |
| Frequency (MHz)             |            |         |           | 1851.5      | 1880           | 1908.5       |                     |
| 3                           | QPSK       | 1       | 0         | 23.27       | 23.23          | 23.07        |                     |
| 3                           | QPSK       | 1       | 8         | 23.22       | 23.25          | 23.10        | 24                  |
| 3                           | QPSK       | 1       | 14        | 23.19       | 22.95          | 23.08        |                     |
| 3                           | QPSK       | 8       | 0         | 22.37       | 22.34          | 22.35        |                     |
| 3                           | QPSK       | 8       | 4         | 22.35       | 22.32          | 21.99        | 23                  |
| 3                           | QPSK       | 8       | 7         | 22.00       | 22.11          | 22.10        |                     |

| Band 4 (AWS Band) (dBm)             |            |         |           |             |                |              |                     |
|-------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| Part 27L (only on channel required) |            |         |           |             |                |              |                     |
| BW [MHz]                            | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                             |            |         |           | 20050       | 20175          | 20300        |                     |
| Frequency (MHz)                     |            |         |           | 1720        | 1732.5         | 1745         |                     |
| 20                                  | QPSK       | 1       | 0         | 22.82       | 22.80          | 22.76        | 24                  |
| 20                                  | QPSK       | 1       | 49        | 22.80       | 22.66          | 22.68        |                     |
| 20                                  | QPSK       | 1       | 99        | 22.71       | 22.56          | 22.51        |                     |
| 20                                  | QPSK       | 50      | 0         | 21.85       | 21.77          | 21.81        | 23                  |
| 20                                  | QPSK       | 50      | 24        | 21.74       | 21.78          | 21.80        |                     |
| 20                                  | QPSK       | 50      | 50        | 21.76       | 21.75          | 21.66        |                     |
| 20                                  | QPSK       | 100     | 0         | 21.70       | 21.70          | 21.61        | 23                  |
| 20                                  | 16QAM      | 1       | 0         | 21.88       | 21.87          | 21.70        |                     |
| 20                                  | 16QAM      | 1       | 49        | 21.70       | 21.83          | 21.61        |                     |
| 20                                  | 16QAM      | 1       | 99        | 21.71       | 21.80          | 21.58        | 22                  |
| 20                                  | 16QAM      | 50      | 0         | 20.79       | 20.76          | 20.86        |                     |
| 20                                  | 16QAM      | 50      | 24        | 20.86       | 20.70          | 20.72        |                     |
| 20                                  | 16QAM      | 50      | 50        | 20.56       | 20.66          | 20.54        | 22                  |
| 20                                  | 16QAM      | 100     | 0         | 20.83       | 20.77          | 20.78        |                     |
| 20                                  | 64QAM      | 1       | 0         | 20.95       | 20.89          | 20.75        |                     |
| 20                                  | 64QAM      | 1       | 49        | 20.96       | 20.91          | 20.89        | 22                  |
| 20                                  | 64QAM      | 1       | 99        | 20.86       | 20.76          | 21.01        |                     |
| 20                                  | 64QAM      | 50      | 0         | 19.88       | 19.85          | 19.76        |                     |
| 20                                  | 64QAM      | 50      | 24        | 19.74       | 19.84          | 19.92        | 21                  |
| 20                                  | 64QAM      | 50      | 50        | 19.76       | 19.57          | 19.89        |                     |
| 20                                  | 64QAM      | 100     | 0         | 19.84       | 19.77          | 19.54        |                     |
| Channel                             |            |         |           | 20025       | 20175          | 20325        | Tune-up limit (dBm) |
| Frequency (MHz)                     |            |         |           | 1717.5      | 1732.5         | 1747.5       |                     |
| 15                                  | QPSK       | 1       | 0         | 22.78       | 22.75          | 22.72        | 24                  |
| 15                                  | QPSK       | 1       | 37        | 22.72       | 22.60          | 22.70        |                     |
| 15                                  | QPSK       | 1       | 74        | 22.63       | 22.72          | 22.62        |                     |
| 15                                  | QPSK       | 36      | 0         | 21.90       | 21.80          | 21.73        | 23                  |
| 15                                  | QPSK       | 36      | 20        | 21.88       | 21.74          | 21.77        |                     |
| 15                                  | QPSK       | 36      | 39        | 21.74       | 21.63          | 21.66        |                     |
| 15                                  | QPSK       | 75      | 0         | 21.83       | 21.60          | 21.71        | 23                  |
| 15                                  | 16QAM      | 1       | 0         | 21.85       | 21.88          | 21.75        |                     |
| 15                                  | 16QAM      | 1       | 37        | 21.78       | 21.85          | 21.63        |                     |
| 15                                  | 16QAM      | 1       | 74        | 21.71       | 21.73          | 21.70        | 22                  |
| 15                                  | 16QAM      | 36      | 0         | 20.78       | 20.77          | 20.81        |                     |
| 15                                  | 16QAM      | 36      | 20        | 20.68       | 20.74          | 20.70        |                     |
| 15                                  | 16QAM      | 36      | 39        | 20.64       | 20.65          | 20.53        | 22                  |
| 15                                  | 16QAM      | 75      | 0         | 20.73       | 20.55          | 20.71        |                     |
| 15                                  | 64QAM      | 1       | 0         | 20.90       | 20.85          | 20.81        |                     |
| 15                                  | 64QAM      | 1       | 37        | 20.83       | 20.81          | 20.73        | 22                  |
| 15                                  | 64QAM      | 1       | 74        | 20.84       | 20.65          | 20.76        |                     |
| 15                                  | 64QAM      | 36      | 0         | 19.80       | 19.72          | 19.64        |                     |
| 15                                  | 64QAM      | 36      | 20        | 19.71       | 19.84          | 19.89        | 21                  |
| 15                                  | 64QAM      | 36      | 39        | 19.89       | 19.75          | 19.63        |                     |
| 15                                  | 64QAM      | 75      | 0         | 19.82       | 19.81          | 19.79        |                     |
| Channel                             |            |         |           | 20000       | 20175          | 20350        | Tune-up limit (dBm) |
| Frequency (MHz)                     |            |         |           | 1715        | 1732.5         | 1750         |                     |
| 10                                  | QPSK       | 1       | 0         | 22.79       | 22.77          | 22.74        | 24                  |
| 10                                  | QPSK       | 1       | 25        | 22.77       | 22.71          | 22.60        |                     |
| 10                                  | QPSK       | 1       | 49        | 22.61       | 22.54          | 22.75        |                     |
| 10                                  | QPSK       | 25      | 0         | 21.85       | 21.76          | 21.84        | 23                  |
| 10                                  | QPSK       | 25      | 12        | 21.79       | 21.77          | 21.79        |                     |
| 10                                  | QPSK       | 25      | 25        | 21.63       | 21.79          | 21.60        |                     |
| 10                                  | QPSK       | 50      | 0         | 21.84       | 21.76          | 21.78        | 23                  |
| 10                                  | 16QAM      | 1       | 0         | 21.92       | 21.95          | 21.83        |                     |
| 10                                  | 16QAM      | 1       | 25        | 21.86       | 21.82          | 21.83        |                     |
| 10                                  | 16QAM      | 1       | 49        | 21.92       | 21.77          | 21.85        | 22                  |
| 10                                  | 16QAM      | 25      | 0         | 20.85       | 20.84          | 20.63        |                     |
| 10                                  | 16QAM      | 25      | 12        | 20.90       | 20.86          | 20.85        |                     |
| 10                                  | 16QAM      | 25      | 25        | 20.86       | 20.84          | 20.86        | 22                  |
| 10                                  | 16QAM      | 50      | 0         | 20.83       | 20.83          | 20.67        |                     |
| 10                                  | 64QAM      | 1       | 0         | 20.84       | 20.81          | 20.90        |                     |
| 10                                  | 64QAM      | 1       | 25        | 20.73       | 20.76          | 20.90        | 22                  |
| 10                                  | 64QAM      | 1       | 49        | 20.97       | 20.86          | 20.75        |                     |
| 10                                  | 64QAM      | 25      | 0         | 19.98       | 19.93          | 19.79        |                     |
| 10                                  | 64QAM      | 25      | 12        | 19.86       | 19.73          | 19.62        | 21                  |
| 10                                  | 64QAM      | 25      | 25        | 19.92       | 19.69          | 19.63        |                     |
| 10                                  | 64QAM      | 50      | 0         | 19.68       | 19.84          | 19.69        |                     |
| Channel                             |            |         |           | 19975       | 20175          | 20375        | Tune-up limit (dBm) |
| Frequency (MHz)                     |            |         |           | 1712.5      | 1732.5         | 1752.5       |                     |
| 5                                   | QPSK       | 1       | 0         | 22.80       | 22.79          | 22.72        | 24                  |
| 5                                   | QPSK       | 1       | 12        | 22.68       | 22.73          | 22.72        |                     |
| 5                                   | QPSK       | 1       | 24        | 22.68       | 22.71          | 22.51        |                     |
| 5                                   | QPSK       | 12      | 0         | 21.92       | 21.92          | 21.75        | 23                  |
| 5                                   | QPSK       | 12      | 7         | 21.73       | 21.82          | 21.69        |                     |
| 5                                   | QPSK       | 12      | 13        | 21.85       | 21.78          | 21.52        |                     |
| 5                                   | QPSK       | 25      | 0         | 21.65       | 21.87          | 21.67        | 23                  |
| 5                                   | 16QAM      | 1       | 0         | 21.85       | 21.91          | 21.86        |                     |
| 5                                   | 16QAM      | 1       | 12        | 21.79       | 21.92          | 21.72        |                     |
| 5                                   | 16QAM      | 1       | 24        | 21.77       | 21.67          | 21.76        | 22                  |
| 5                                   | 16QAM      | 12      | 0         | 20.91       | 20.86          | 20.76        |                     |
| 5                                   | 16QAM      | 12      | 7         | 20.75       | 20.79          | 20.81        |                     |
| 5                                   | 16QAM      | 12      | 13        | 20.67       | 20.84          | 20.77        | 22                  |
| 5                                   | 16QAM      | 25      | 0         | 20.89       | 20.61          | 20.72        |                     |
| 5                                   | 64QAM      | 1       | 0         | 20.95       | 20.91          | 20.96        |                     |
| 5                                   | 64QAM      | 1       | 12        | 20.92       | 20.83          | 20.96        | 22                  |
| 5                                   | 64QAM      | 1       | 24        | 20.84       | 20.85          | 20.91        |                     |
| 5                                   | 64QAM      | 12      | 0         | 19.83       | 19.95          | 19.98        |                     |
| 5                                   | 64QAM      | 12      | 7         | 19.94       | 19.60          | 19.97        | 21                  |
| 5                                   | 64QAM      | 12      | 13        | 19.77       | 19.78          | 19.70        |                     |
| 5                                   | 64QAM      | 25      | 0         | 19.80       | 19.86          | 19.85        |                     |
| Channel                             |            |         |           | 19965       | 20175          | 20385        | Tune-up limit (dBm) |
| Frequency (MHz)                     |            |         |           | 1711.5      | 1732.5         | 1753.5       |                     |
| 3                                   | QPSK       | 1       | 0         | 22.78       | 22.76          | 22.66        | 24                  |
| 3                                   | QPSK       | 1       | 8         | 22.69       | 22.73          | 22.71        |                     |
| 3                                   | QPSK       | 1       | 14        | 22.65       | 22.64          | 22.67        |                     |
| 3                                   | QPSK       | 8       | 0         | 21.76       | 21.81          | 21.64        | 23                  |
| 3                                   | QPSK       | 8       | 4         | 21.80       | 21.79          | 21.80        |                     |
| 3                                   | QPSK       | 8       | 7         | 21.84       | 21.57          | 21.67        |                     |



|                 |       |    |    |        |       |        |                        |
|-----------------|-------|----|----|--------|-------|--------|------------------------|
| 3               | QPSK  | 15 | 0  | 21.98  | 22.21 | 21.96  | 23                     |
| 3               | 16QAM | 1  | 0  | 22.30  | 22.37 | 22.25  |                        |
| 3               | 16QAM | 1  | 8  | 22.16  | 22.42 | 22.20  |                        |
| 3               | 16QAM | 1  | 14 | 22.16  | 22.18 | 22.38  | 22                     |
| 3               | 16QAM | 8  | 0  | 21.42  | 21.32 | 21.09  |                        |
| 3               | 16QAM | 8  | 4  | 21.03  | 21.26 | 21.38  |                        |
| 3               | 16QAM | 8  | 7  | 21.30  | 21.20 | 21.09  | 22                     |
| 3               | 16QAM | 15 | 0  | 21.17  | 20.98 | 21.03  |                        |
| 3               | 64QAM | 1  | 0  | 21.45  | 21.35 | 21.16  |                        |
| 3               | 64QAM | 1  | 8  | 21.45  | 21.28 | 21.11  | 22                     |
| 3               | 64QAM | 1  | 14 | 21.36  | 21.14 | 21.26  |                        |
| 3               | 64QAM | 8  | 0  | 20.10  | 20.11 | 20.34  |                        |
| 3               | 64QAM | 8  | 4  | 20.17  | 20.34 | 20.23  | 21                     |
| 3               | 64QAM | 8  | 7  | 20.15  | 20.28 | 20.18  |                        |
| 3               | 64QAM | 15 | 0  | 20.03  | 20.11 | 20.04  |                        |
| Channel         |       |    |    | 18607  | 18900 | 19193  | Tune-up limit<br>(dBm) |
| Frequency (MHz) |       |    |    | 1850.7 | 1880  | 1909.3 |                        |
| 1.4             | QPSK  | 1  | 0  | 23.26  | 23.20 | 23.16  | 24                     |
| 1.4             | QPSK  | 1  | 3  | 23.23  | 22.98 | 23.13  |                        |
| 1.4             | QPSK  | 1  | 5  | 23.06  | 22.99 | 22.90  |                        |
| 1.4             | QPSK  | 3  | 0  | 22.38  | 22.26 | 22.17  |                        |
| 1.4             | QPSK  | 3  | 1  | 22.48  | 22.24 | 22.11  |                        |
| 1.4             | QPSK  | 3  | 3  | 22.31  | 22.12 | 22.13  |                        |
| 1.4             | QPSK  | 6  | 0  | 22.06  | 22.15 | 22.32  | 23                     |
| 1.4             | 16QAM | 1  | 0  | 22.31  | 22.22 | 22.16  | 23                     |
| 1.4             | 16QAM | 1  | 3  | 22.47  | 22.50 | 22.36  |                        |
| 1.4             | 16QAM | 1  | 5  | 22.47  | 22.45 | 22.42  |                        |
| 1.4             | 16QAM | 3  | 0  | 21.15  | 21.26 | 21.10  |                        |
| 1.4             | 16QAM | 3  | 1  | 21.18  | 21.28 | 21.18  |                        |
| 1.4             | 16QAM | 3  | 3  | 21.25  | 21.13 | 21.17  |                        |
| 1.4             | 16QAM | 6  | 0  | 21.36  | 21.08 | 21.07  | 22                     |
| 1.4             | 64QAM | 1  | 0  | 21.41  | 21.17 | 21.23  | 22                     |
| 1.4             | 64QAM | 1  | 3  | 21.37  | 21.12 | 21.13  |                        |
| 1.4             | 64QAM | 1  | 5  | 21.30  | 21.46 | 21.15  |                        |
| 1.4             | 64QAM | 3  | 0  | 20.34  | 20.39 | 20.30  |                        |
| 1.4             | 64QAM | 3  | 1  | 20.11  | 20.13 | 20.29  |                        |
| 1.4             | 64QAM | 3  | 3  | 20.33  | 20.13 | 20.15  |                        |
| 1.4             | 64QAM | 6  | 0  | 20.28  | 20.17 | 20.03  | 21                     |

|                 |       |    |    |        |        |        |                        |
|-----------------|-------|----|----|--------|--------|--------|------------------------|
| 3               | QPSK  | 15 | 0  | 21.76  | 21.76  | 21.64  | 23                     |
| 3               | 16QAM | 1  | 0  | 21.92  | 21.90  | 21.89  |                        |
| 3               | 16QAM | 1  | 8  | 21.87  | 21.75  | 21.85  |                        |
| 3               | 16QAM | 1  | 14 | 21.86  | 21.91  | 21.60  | 22                     |
| 3               | 16QAM | 8  | 0  | 20.92  | 20.84  | 20.77  |                        |
| 3               | 16QAM | 8  | 4  | 20.83  | 20.70  | 20.81  |                        |
| 3               | 16QAM | 8  | 7  | 20.69  | 20.61  | 20.73  | 22                     |
| 3               | 16QAM | 15 | 0  | 20.70  | 20.65  | 20.71  |                        |
| 3               | 64QAM | 1  | 0  | 20.94  | 20.92  | 20.75  |                        |
| 3               | 64QAM | 1  | 8  | 20.86  | 20.74  | 20.80  | 21                     |
| 3               | 64QAM | 1  | 14 | 20.82  | 20.72  | 20.86  |                        |
| 3               | 64QAM | 8  | 0  | 19.89  | 19.93  | 19.57  |                        |
| 3               | 64QAM | 8  | 4  | 19.85  | 19.79  | 19.76  | 21                     |
| 3               | 64QAM | 8  | 7  | 19.52  | 19.55  | 19.56  |                        |
| 3               | 64QAM | 15 | 0  | 19.86  | 19.83  | 19.83  |                        |
| Channel         |       |    |    | 19957  | 20175  | 20393  | Tune-up limit<br>(dBm) |
| Frequency (MHz) |       |    |    | 1710.7 | 1732.5 | 1754.3 |                        |
| 1.4             | QPSK  | 1  | 0  | 22.77  | 22.75  | 22.76  | 23.5                   |
| 1.4             | QPSK  | 1  | 3  | 22.71  | 22.66  | 22.68  |                        |
| 1.4             | QPSK  | 1  | 5  | 22.72  | 22.74  | 22.65  |                        |
| 1.4             | QPSK  | 3  | 0  | 21.90  | 21.79  | 21.88  |                        |
| 1.4             | QPSK  | 3  | 1  | 21.85  | 21.63  | 21.76  |                        |
| 1.4             | QPSK  | 3  | 3  | 21.81  | 21.77  | 21.66  |                        |
| 1.4             | QPSK  | 6  | 0  | 21.82  | 21.87  | 21.75  | 22.5                   |
| 1.4             | 16QAM | 1  | 0  | 21.89  | 21.84  | 21.73  | 22.5                   |
| 1.4             | 16QAM | 1  | 3  | 21.85  | 21.82  | 21.86  |                        |
| 1.4             | 16QAM | 1  | 5  | 21.82  | 21.71  | 21.72  |                        |
| 1.4             | 16QAM | 3  | 0  | 20.71  | 20.90  | 20.69  |                        |
| 1.4             | 16QAM | 3  | 1  | 20.94  | 20.89  | 20.78  |                        |
| 1.4             | 16QAM | 3  | 3  | 20.92  | 20.67  | 20.76  |                        |
| 1.4             | 16QAM | 6  | 0  | 20.62  | 20.86  | 20.94  | 21.5                   |
| 1.4             | 64QAM | 1  | 0  | 20.80  | 20.87  | 20.73  | 21.5                   |
| 1.4             | 64QAM | 1  | 3  | 20.82  | 20.94  | 20.75  |                        |
| 1.4             | 64QAM | 1  | 5  | 20.96  | 20.93  | 20.97  |                        |
| 1.4             | 64QAM | 3  | 0  | 19.76  | 19.74  | 19.79  |                        |
| 1.4             | 64QAM | 3  | 1  | 19.91  | 19.56  | 19.72  |                        |
| 1.4             | 64QAM | 3  | 3  | 19.83  | 19.85  | 19.80  |                        |
| 1.4             | 64QAM | 6  | 0  | 19.84  | 19.82  | 19.97  | 20.5                   |



| Band 5 (Celluar Band) (dBm)<br>Part 22H(only on channel required) |            |         |           |             |                |              |                     |
|-------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                                          | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                                           |            |         |           | 20450       | 20525          | 20600        |                     |
| Frequency (MHz)                                                   |            |         |           | 829         | 836.5          | 844          |                     |
| 10                                                                | QPSK       | 1       | 0         | 23.09       | 23.15          | 23.19        | 24                  |
| 10                                                                | QPSK       | 1       | 25        | 23.08       | 23.00          | 23.13        |                     |
| 10                                                                | QPSK       | 1       | 49        | 22.91       | 23.13          | 23.16        |                     |
| 10                                                                | QPSK       | 25      | 0         | 22.02       | 22.18          | 22.34        | 23                  |
| 10                                                                | QPSK       | 25      | 12        | 22.15       | 22.28          | 22.10        |                     |
| 10                                                                | QPSK       | 25      | 25        | 21.99       | 22.25          | 22.06        |                     |
| 10                                                                | QPSK       | 50      | 0         | 22.11       | 22.14          | 22.20        | 23                  |
| 10                                                                | 16QAM      | 1       | 0         | 22.16       | 22.32          | 22.36        |                     |
| 10                                                                | 16QAM      | 1       | 25        | 22.24       | 22.30          | 22.14        |                     |
| 10                                                                | 16QAM      | 1       | 49        | 21.96       | 22.06          | 22.33        | 22                  |
| 10                                                                | 16QAM      | 25      | 0         | 21.03       | 21.06          | 21.17        |                     |
| 10                                                                | 16QAM      | 25      | 12        | 21.06       | 20.98          | 21.11        |                     |
| 10                                                                | 16QAM      | 25      | 25        | 20.93       | 21.08          | 21.03        | 22                  |
| 10                                                                | 16QAM      | 50      | 0         | 20.97       | 21.24          | 21.12        |                     |
| 10                                                                | 64QAM      | 1       | 0         | 21.22       | 21.31          | 21.25        |                     |
| 10                                                                | 64QAM      | 1       | 25        | 21.04       | 21.14          | 21.09        | 22                  |
| 10                                                                | 64QAM      | 1       | 49        | 21.03       | 21.18          | 21.16        |                     |
| 10                                                                | 64QAM      | 25      | 0         | 20.02       | 20.32          | 20.29        |                     |
| 10                                                                | 64QAM      | 25      | 12        | 20.17       | 20.11          | 20.15        | 21                  |
| 10                                                                | 64QAM      | 25      | 25        | 20.07       | 20.15          | 20.18        |                     |
| 10                                                                | 64QAM      | 50      | 0         | 20.14       | 20.23          | 20.16        |                     |
| Channel                                                           |            |         |           | 20425       | 20525          | 20625        | Tune-up limit (dBm) |
| Frequency (MHz)                                                   |            |         |           | 826.5       | 836.5          | 846.5        |                     |
| 5                                                                 | QPSK       | 1       | 0         | 23.06       | 23.11          | 23.16        | 24                  |
| 5                                                                 | QPSK       | 1       | 12        | 23.04       | 23.08          | 23.02        |                     |
| 5                                                                 | QPSK       | 1       | 24        | 23.02       | 23.06          | 23.13        |                     |
| 5                                                                 | QPSK       | 12      | 0         | 22.17       | 22.31          | 22.19        | 23                  |
| 5                                                                 | QPSK       | 12      | 7         | 22.24       | 22.11          | 22.12        |                     |
| 5                                                                 | QPSK       | 12      | 13        | 22.08       | 22.14          | 22.03        |                     |
| 5                                                                 | QPSK       | 25      | 0         | 21.93       | 22.21          | 22.00        | 23                  |
| 5                                                                 | 16QAM      | 1       | 0         | 22.23       | 22.34          | 22.35        |                     |
| 5                                                                 | 16QAM      | 1       | 12        | 22.22       | 22.17          | 22.08        |                     |
| 5                                                                 | 16QAM      | 1       | 24        | 22.08       | 22.19          | 22.07        | 22                  |
| 5                                                                 | 16QAM      | 12      | 0         | 21.08       | 21.27          | 21.20        |                     |
| 5                                                                 | 16QAM      | 12      | 7         | 21.12       | 21.15          | 21.14        |                     |
| 5                                                                 | 16QAM      | 12      | 13        | 21.12       | 21.09          | 21.19        | 22                  |
| 5                                                                 | 16QAM      | 25      | 0         | 21.12       | 21.01          | 21.15        |                     |
| 5                                                                 | 64QAM      | 1       | 0         | 21.11       | 21.14          | 21.22        |                     |
| 5                                                                 | 64QAM      | 1       | 12        | 21.18       | 21.12          | 21.02        | 22                  |
| 5                                                                 | 64QAM      | 1       | 24        | 21.16       | 21.23          | 21.19        |                     |
| 5                                                                 | 64QAM      | 12      | 0         | 20.10       | 20.21          | 20.18        |                     |
| 5                                                                 | 64QAM      | 12      | 7         | 20.09       | 19.98          | 20.15        | 21                  |
| 5                                                                 | 64QAM      | 12      | 13        | 19.92       | 20.08          | 19.93        |                     |
| 5                                                                 | 64QAM      | 25      | 0         | 20.07       | 20.19          | 20.14        |                     |
| Channel                                                           |            |         |           | 20415       | 20525          | 20635        | Tune-up limit (dBm) |
| Frequency (MHz)                                                   |            |         |           | 825.5       | 836.5          | 847.5        |                     |
| 3                                                                 | QPSK       | 1       | 0         | 23.05       | 23.17          | 23.15        | 24                  |
| 3                                                                 | QPSK       | 1       | 8         | 22.93       | 22.99          | 23.01        |                     |
| 3                                                                 | QPSK       | 1       | 14        | 23.01       | 23.06          | 23.07        |                     |
| 3                                                                 | QPSK       | 8       | 0         | 22.10       | 22.07          | 22.27        | 23                  |
| 3                                                                 | QPSK       | 8       | 4         | 22.10       | 22.35          | 22.12        |                     |
| 3                                                                 | QPSK       | 8       | 7         | 21.94       | 22.02          | 22.14        |                     |
| 3                                                                 | QPSK       | 15      | 0         | 22.15       | 22.18          | 22.20        | 23                  |
| 3                                                                 | 16QAM      | 1       | 0         | 22.21       | 22.33          | 22.19        |                     |
| 3                                                                 | 16QAM      | 1       | 8         | 22.05       | 22.29          | 22.14        |                     |
| 3                                                                 | 16QAM      | 1       | 14        | 22.10       | 22.14          | 22.32        | 22                  |
| 3                                                                 | 16QAM      | 8       | 0         | 21.15       | 21.31          | 21.31        |                     |
| 3                                                                 | 16QAM      | 8       | 4         | 20.95       | 21.29          | 21.23        |                     |
| 3                                                                 | 16QAM      | 8       | 7         | 21.10       | 21.10          | 21.21        | 22                  |
| 3                                                                 | 16QAM      | 15      | 0         | 21.09       | 21.23          | 21.12        |                     |
| 3                                                                 | 64QAM      | 1       | 0         | 21.25       | 21.28          | 21.36        |                     |
| 3                                                                 | 64QAM      | 1       | 8         | 21.05       | 21.06          | 21.07        | 22                  |
| 3                                                                 | 64QAM      | 1       | 14        | 21.10       | 21.09          | 21.26        |                     |
| 3                                                                 | 64QAM      | 8       | 0         | 20.20       | 20.29          | 20.21        |                     |
| 3                                                                 | 64QAM      | 8       | 4         | 20.09       | 20.13          | 20.10        | 21                  |
| 3                                                                 | 64QAM      | 8       | 7         | 20.07       | 20.06          | 20.05        |                     |
| 3                                                                 | 64QAM      | 15      | 0         | 20.03       | 20.01          | 19.98        |                     |
| Channel                                                           |            |         |           | 20407       | 20525          | 20643        | Tune-up limit (dBm) |
| Frequency (MHz)                                                   |            |         |           | 824.7       | 836.5          | 848.3        |                     |
| 1.4                                                               | QPSK       | 1       | 0         | 23.12       | 23.14          | 23.17        | 24                  |
| 1.4                                                               | QPSK       | 1       | 3         | 23.08       | 23.06          | 23.15        |                     |
| 1.4                                                               | QPSK       | 1       | 5         | 22.92       | 22.96          | 23.02        |                     |
| 1.4                                                               | QPSK       | 3       | 0         | 22.10       | 22.18          | 22.09        | 23                  |
| 1.4                                                               | QPSK       | 3       | 1         | 22.12       | 22.03          | 22.08        |                     |
| 1.4                                                               | QPSK       | 3       | 3         | 22.08       | 22.02          | 22.15        |                     |
| 1.4                                                               | QPSK       | 6       | 0         | 21.88       | 22.02          | 22.00        | 23                  |
| 1.4                                                               | 16QAM      | 1       | 0         | 22.09       | 22.36          | 22.28        |                     |
| 1.4                                                               | 16QAM      | 1       | 3         | 22.16       | 22.14          | 22.16        |                     |
| 1.4                                                               | 16QAM      | 1       | 5         | 22.14       | 22.14          | 22.28        | 23                  |
| 1.4                                                               | 16QAM      | 3       | 0         | 21.00       | 21.27          | 21.03        |                     |
| 1.4                                                               | 16QAM      | 3       | 1         | 21.20       | 21.21          | 21.29        |                     |
| 1.4                                                               | 16QAM      | 3       | 3         | 21.06       | 21.11          | 21.13        | 22                  |
| 1.4                                                               | 16QAM      | 6       | 0         | 21.02       | 21.05          | 21.25        |                     |
| 1.4                                                               | 64QAM      | 1       | 0         | 21.28       | 21.26          | 21.15        |                     |
| 1.4                                                               | 64QAM      | 1       | 3         | 21.05       | 21.20          | 21.20        | 22                  |
| 1.4                                                               | 64QAM      | 1       | 5         | 21.09       | 21.27          | 21.08        |                     |
| 1.4                                                               | 64QAM      | 3       | 0         | 20.01       | 20.14          | 20.15        |                     |
| 1.4                                                               | 64QAM      | 3       | 1         | 20.07       | 20.16          | 20.01        | 21                  |
| 1.4                                                               | 64QAM      | 3       | 3         | 20.05       | 20.13          | 20.18        |                     |
| 1.4                                                               | 64QAM      | 6       | 0         | 20.16       | 20.26          | 20.21        |                     |

| Band 7 (2600MHz Band) (dBm) |            |         |           |             |                |              |                     |
|-----------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| Part 27                     |            |         |           |             |                |              |                     |
| BW [MHz]                    | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                     |            |         |           | 20850       | 21100          | 21350        |                     |
| Frequency (MHz)             |            |         |           | 2510        | 2535           | 2560         |                     |
| 20                          | QPSK       | 1       | 0         | 22.77       | 22.83          | 22.75        | 24                  |
| 20                          | QPSK       | 1       | 49        | 22.79       | 22.72          | 22.67        |                     |
| 20                          | QPSK       | 1       | 99        | 22.67       | 22.72          | 22.75        |                     |
| 20                          | QPSK       | 50      | 0         | 21.72       | 21.94          | 21.84        | 23                  |
| 20                          | QPSK       | 50      | 24        | 21.66       | 21.82          | 21.85        |                     |
| 20                          | QPSK       | 50      | 50        | 21.66       | 21.78          | 21.68        |                     |
| 20                          | QPSK       | 100     | 0         | 21.63       | 21.85          | 21.88        | 23                  |
| 20                          | 16QAM      | 1       | 0         | 21.74       | 21.88          | 21.79        |                     |
| 20                          | 16QAM      | 1       | 49        | 21.69       | 21.77          | 21.85        |                     |
| 20                          | 16QAM      | 1       | 99        | 21.75       | 21.82          | 21.78        | 22                  |
| 20                          | 16QAM      | 50      | 0         | 20.76       | 20.86          | 20.83        |                     |
| 20                          | 16QAM      | 50      | 24        | 20.80       | 20.81          | 20.81        |                     |
| 20                          | 16QAM      | 50      | 50        | 20.57       | 20.50          | 20.78        | 22                  |
| 20                          | 16QAM      | 100     | 0         | 20.63       | 20.58          | 20.69        |                     |
| 20                          | 64QAM      | 1       | 0         | 20.71       | 20.89          | 20.80        |                     |
| 20                          | 64QAM      | 1       | 49        | 20.73       | 20.69          | 20.77        | 22                  |
| 20                          | 64QAM      | 1       | 99        | 20.59       | 20.67          | 20.63        |                     |
| 20                          | 64QAM      | 50      | 0         | 19.70       | 19.78          | 19.70        | 21                  |
| 20                          | 64QAM      | 50      | 24        | 19.71       | 19.84          | 19.68        |                     |
| 20                          | 64QAM      | 50      | 50        | 19.52       | 19.71          | 19.71        |                     |
| 20                          | 64QAM      | 100     | 0         | 19.75       | 19.63          | 19.75        |                     |
| Channel                     |            |         |           | 20825       | 21100          | 21375        | Tune-up limit (dBm) |
| Frequency (MHz)             |            |         |           | 2507.5      | 2535           | 2562.5       |                     |
| 15                          | QPSK       | 1       | 0         | 22.71       | 22.78          | 22.74        | 24                  |
| 15                          | QPSK       | 1       | 37        | 22.73       | 22.69          | 22.57        |                     |
| 15                          | QPSK       | 1       | 74        | 22.50       | 22.70          | 22.66        |                     |
| 15                          | QPSK       | 36      | 0         | 21.74       | 21.84          | 21.88        | 23                  |
| 15                          | QPSK       | 36      | 20        | 21.67       | 21.77          | 21.78        |                     |
| 15                          | QPSK       | 36      | 39        | 21.56       | 21.61          | 21.61        |                     |
| 15                          | QPSK       | 75      | 0         | 21.67       | 21.81          | 21.68        | 23                  |
| 15                          | 16QAM      | 1       | 0         | 21.87       | 21.78          | 21.75        |                     |
| 15                          | 16QAM      | 1       | 37        | 21.58       | 21.64          | 21.63        |                     |
| 15                          | 16QAM      | 1       | 74        | 21.64       | 21.69          | 21.62        | 22                  |
| 15                          | 16QAM      | 36      | 0         | 20.85       | 20.85          | 20.72        |                     |
| 15                          | 16QAM      | 36      | 20        | 20.59       | 20.63          | 20.68        |                     |
| 15                          | 16QAM      | 36      | 39        | 20.69       | 20.56          | 20.73        | 22                  |
| 15                          | 16QAM      | 75      | 0         | 20.55       | 20.60          | 20.58        |                     |
| 15                          | 64QAM      | 1       | 0         | 20.68       | 20.85          | 20.74        |                     |
| 15                          | 64QAM      | 1       | 37        | 20.64       | 20.77          | 20.69        | 22                  |
| 15                          | 64QAM      | 1       | 74        | 20.79       | 20.72          | 20.75        |                     |
| 15                          | 64QAM      | 36      | 0         | 19.79       | 19.64          | 19.61        | 21                  |
| 15                          | 64QAM      | 36      | 20        | 19.56       | 19.64          | 19.60        |                     |
| 15                          | 64QAM      | 36      | 39        | 19.57       | 19.60          | 19.58        |                     |
| 15                          | 64QAM      | 75      | 0         | 19.50       | 19.69          | 19.66        |                     |
| Channel                     |            |         |           | 20800       | 21100          | 21400        | Tune-up limit (dBm) |
| Frequency (MHz)             |            |         |           | 2505        | 2535           | 2565         |                     |
| 10                          | QPSK       | 1       | 0         | 22.69       | 22.76          | 22.81        | 24                  |
| 10                          | QPSK       | 1       | 25        | 22.60       | 22.67          | 22.60        |                     |
| 10                          | QPSK       | 1       | 49        | 22.62       | 22.61          | 22.68        |                     |
| 10                          | QPSK       | 25      | 0         | 21.84       | 21.79          | 21.69        | 23                  |
| 10                          | QPSK       | 25      | 12        | 21.51       | 21.71          | 21.84        |                     |
| 10                          | QPSK       | 25      | 25        | 21.52       | 21.60          | 21.77        |                     |
| 10                          | QPSK       | 50      | 0         | 21.55       | 21.78          | 21.68        | 23                  |
| 10                          | 16QAM      | 1       | 0         | 21.81       | 21.86          | 21.80        |                     |
| 10                          | 16QAM      | 1       | 25        | 21.61       | 21.74          | 21.72        |                     |
| 10                          | 16QAM      | 1       | 49        | 21.72       | 21.70          | 21.71        | 22                  |
| 10                          | 16QAM      | 25      | 0         | 20.72       | 20.78          | 20.73        |                     |
| 10                          | 16QAM      | 25      | 12        | 20.63       | 20.78          | 20.72        |                     |
| 10                          | 16QAM      | 25      | 25        | 20.60       | 20.42          | 20.57        | 22                  |
| 10                          | 16QAM      | 50      | 0         | 20.63       | 20.84          | 20.81        |                     |
| 10                          | 64QAM      | 1       | 0         | 20.83       | 20.78          | 20.88        |                     |
| 10                          | 64QAM      | 1       | 25        | 20.58       | 20.78          | 20.76        | 22                  |
| 10                          | 64QAM      | 1       | 49        | 20.86       | 20.68          | 20.75        |                     |
| 10                          | 64QAM      | 25      | 0         | 19.73       | 19.83          | 19.84        |                     |
| 10                          | 64QAM      | 25      | 12        | 19.56       | 19.56          | 19.71        | 21                  |
| 10                          | 64QAM      | 25      | 25        | 19.56       | 19.76          | 19.59        |                     |
| 10                          | 64QAM      | 50      | 0         | 19.63       | 19.85          | 19.61        |                     |
| Channel                     |            |         |           | 20775       | 21100          | 21425        | Tune-up limit (dBm) |
| Frequency (MHz)             |            |         |           | 2502.5      | 2535           | 2567.5       |                     |
| 5                           | QPSK       | 1       | 0         | 22.70       | 22.75          | 22.72        | 24                  |
| 5                           | QPSK       | 1       | 12        | 22.63       | 22.61          | 22.76        |                     |
| 5                           | QPSK       | 1       | 24        | 22.56       | 22.63          | 22.72        |                     |
| 5                           | QPSK       | 12      | 0         | 21.72       | 21.65          | 21.80        | 23                  |
| 5                           | QPSK       | 12      | 7         | 21.50       | 21.62          | 21.75        |                     |
| 5                           | QPSK       | 12      | 13        | 21.67       | 21.61          | 21.67        |                     |
| 5                           | QPSK       | 25      | 0         | 21.68       | 21.59          | 21.53        | 23                  |
| 5                           | 16QAM      | 1       | 0         | 21.79       | 21.81          | 21.78        |                     |
| 5                           | 16QAM      | 1       | 12        | 21.63       | 21.77          | 21.77        |                     |
| 5                           | 16QAM      | 1       | 24        | 21.57       | 21.65          | 21.72        | 22                  |
| 5                           | 16QAM      | 12      | 0         | 20.74       | 20.78          | 20.67        |                     |
| 5                           | 16QAM      | 12      | 7         | 20.61       | 20.82          | 20.72        |                     |
| 5                           | 16QAM      | 12      | 13        | 20.63       | 20.53          | 20.78        | 22                  |
| 5                           | 16QAM      | 25      | 0         | 20.68       | 20.65          | 20.68        |                     |
| 5                           | 64QAM      | 1       | 0         | 20.80       | 20.94          | 20.81        |                     |
| 5                           | 64QAM      | 1       | 12        | 20.87       | 20.66          | 20.79        | 21                  |
| 5                           | 64QAM      | 1       | 24        | 20.73       | 20.80          | 20.78        |                     |
| 5                           | 64QAM      | 12      | 0         | 19.80       | 19.82          | 19.72        |                     |
| 5                           | 64QAM      | 12      | 7         | 19.72       | 19.66          | 19.71        | 21                  |
| 5                           | 64QAM      | 12      | 13        | 19.61       | 19.72          | 19.61        |                     |
| 5                           | 64QAM      | 25      | 0         | 19.50       | 19.58          | 19.74        |                     |



| Band 12 (700MHz Low Band) (dBm)<br>Part 27F(only on channel required) |            |         |           |             |                |              |                     |
|-----------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                                              | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                                               |            |         |           | 23090       | 23095          | 23130        |                     |
| Frequency (MHz)                                                       |            |         |           | 704         | 707.5          | 711          |                     |
| 10                                                                    | QPSK       | 1       | 0         | 23.17       | 23.13          | 23.25        | 24                  |
| 10                                                                    | QPSK       | 1       | 25        | 23.20       | 23.17          | 23.12        |                     |
| 10                                                                    | QPSK       | 1       | 49        | 23.12       | 23.06          | 23.22        |                     |
| 10                                                                    | QPSK       | 25      | 0         | 22.34       | 22.31          | 22.40        | 23                  |
| 10                                                                    | QPSK       | 25      | 12        | 22.19       | 22.26          | 22.15        |                     |
| 10                                                                    | QPSK       | 25      | 25        | 22.11       | 22.24          | 22.10        |                     |
| 10                                                                    | QPSK       | 50      | 0         | 22.26       | 22.19          | 22.17        | 23                  |
| 10                                                                    | 16QAM      | 1       | 0         | 22.21       | 22.41          | 22.45        |                     |
| 10                                                                    | 16QAM      | 1       | 25        | 22.28       | 22.23          | 22.36        |                     |
| 10                                                                    | 16QAM      | 1       | 49        | 22.31       | 22.33          | 22.23        | 22                  |
| 10                                                                    | 16QAM      | 25      | 0         | 21.31       | 21.15          | 21.35        |                     |
| 10                                                                    | 16QAM      | 25      | 12        | 21.07       | 21.36          | 21.12        |                     |
| 10                                                                    | 16QAM      | 25      | 25        | 21.13       | 21.05          | 21.26        | 22                  |
| 10                                                                    | 16QAM      | 50      | 0         | 21.22       | 21.32          | 21.21        |                     |
| 10                                                                    | 64QAM      | 1       | 0         | 21.25       | 21.35          | 21.39        |                     |
| 10                                                                    | 64QAM      | 1       | 25        | 21.24       | 21.30          | 21.22        | 22                  |
| 10                                                                    | 64QAM      | 1       | 49        | 21.14       | 21.31          | 21.28        |                     |
| 10                                                                    | 64QAM      | 25      | 0         | 20.29       | 20.22          | 20.26        |                     |
| 10                                                                    | 64QAM      | 25      | 12        | 20.24       | 20.31          | 20.34        | 21                  |
| 10                                                                    | 64QAM      | 25      | 25        | 20.17       | 20.29          | 20.22        |                     |
| 10                                                                    | 64QAM      | 50      | 0         | 20.10       | 20.22          | 20.10        |                     |
| Channel                                                               |            |         |           | 23035       | 23095          | 23155        |                     |
| Frequency (MHz)                                                       |            |         |           | 701.5       | 707.5          | 713.5        |                     |
| 5                                                                     | QPSK       | 1       | 0         | 23.13       | 23.12          | 23.22        | 24                  |
| 5                                                                     | QPSK       | 1       | 12        | 23.19       | 23.15          | 23.19        |                     |
| 5                                                                     | QPSK       | 1       | 24        | 23.19       | 23.17          | 23.14        |                     |
| 5                                                                     | QPSK       | 12      | 0         | 22.12       | 22.15          | 22.26        | 23                  |
| 5                                                                     | QPSK       | 12      | 7         | 22.10       | 22.21          | 22.14        |                     |
| 5                                                                     | QPSK       | 12      | 13        | 22.03       | 22.22          | 22.18        |                     |
| 5                                                                     | QPSK       | 25      | 0         | 22.14       | 22.07          | 22.12        | 23                  |
| 5                                                                     | 16QAM      | 1       | 0         | 22.35       | 22.35          | 22.30        |                     |
| 5                                                                     | 16QAM      | 1       | 12        | 22.28       | 22.21          | 22.32        |                     |
| 5                                                                     | 16QAM      | 1       | 24        | 22.24       | 22.32          | 22.18        | 22                  |
| 5                                                                     | 16QAM      | 12      | 0         | 21.15       | 21.13          | 21.18        |                     |
| 5                                                                     | 16QAM      | 12      | 7         | 20.97       | 21.16          | 21.28        |                     |
| 5                                                                     | 16QAM      | 12      | 13        | 21.14       | 21.07          | 21.26        | 22                  |
| 5                                                                     | 16QAM      | 25      | 0         | 20.99       | 21.24          | 21.05        |                     |
| 5                                                                     | 64QAM      | 1       | 0         | 21.24       | 21.26          | 21.32        |                     |
| 5                                                                     | 64QAM      | 1       | 12        | 21.22       | 21.18          | 21.17        | 22                  |
| 5                                                                     | 64QAM      | 1       | 24        | 21.23       | 21.17          | 21.16        |                     |
| 5                                                                     | 64QAM      | 12      | 0         | 20.10       | 20.11          | 20.37        |                     |
| 5                                                                     | 64QAM      | 12      | 7         | 20.05       | 20.19          | 20.29        | 21                  |
| 5                                                                     | 64QAM      | 12      | 13        | 20.07       | 20.04          | 20.05        |                     |
| 5                                                                     | 64QAM      | 25      | 0         | 20.06       | 20.25          | 20.22        |                     |
| Channel                                                               |            |         |           | 23025       | 23095          | 23165        |                     |
| Frequency (MHz)                                                       |            |         |           | 700.5       | 707.5          | 714.5        |                     |
| 3                                                                     | QPSK       | 1       | 0         | 23.16       | 23.20          | 23.20        | 24                  |
| 3                                                                     | QPSK       | 1       | 8         | 23.15       | 23.05          | 23.18        |                     |
| 3                                                                     | QPSK       | 1       | 14        | 23.05       | 23.12          | 23.02        |                     |
| 3                                                                     | QPSK       | 8       | 0         | 22.16       | 22.20          | 22.14        | 23                  |
| 3                                                                     | QPSK       | 8       | 4         | 22.10       | 22.23          | 22.17        |                     |
| 3                                                                     | QPSK       | 8       | 7         | 22.19       | 22.20          | 22.10        |                     |
| 3                                                                     | QPSK       | 15      | 0         | 22.03       | 22.16          | 22.18        | 23                  |
| 3                                                                     | 16QAM      | 1       | 0         | 22.24       | 22.29          | 22.35        |                     |
| 3                                                                     | 16QAM      | 1       | 8         | 22.16       | 22.33          | 22.36        |                     |
| 3                                                                     | 16QAM      | 1       | 14        | 22.07       | 22.36          | 22.31        | 22                  |
| 3                                                                     | 16QAM      | 8       | 0         | 21.07       | 21.38          | 21.12        |                     |
| 3                                                                     | 16QAM      | 8       | 4         | 21.30       | 21.31          | 21.33        |                     |
| 3                                                                     | 16QAM      | 8       | 7         | 21.12       | 21.15          | 21.20        | 22                  |
| 3                                                                     | 16QAM      | 15      | 0         | 21.11       | 21.03          | 21.01        |                     |
| 3                                                                     | 64QAM      | 1       | 0         | 21.31       | 21.36          | 21.24        |                     |
| 3                                                                     | 64QAM      | 1       | 8         | 21.26       | 21.29          | 21.41        | 22                  |
| 3                                                                     | 64QAM      | 1       | 14        | 21.11       | 21.36          | 21.37        |                     |
| 3                                                                     | 64QAM      | 8       | 0         | 20.31       | 20.11          | 20.20        |                     |
| 3                                                                     | 64QAM      | 8       | 4         | 20.01       | 20.31          | 20.34        | 21                  |
| 3                                                                     | 64QAM      | 8       | 7         | 20.05       | 20.20          | 20.15        |                     |
| 3                                                                     | 64QAM      | 15      | 0         | 20.03       | 20.36          | 20.19        |                     |
| Channel                                                               |            |         |           | 23017       | 23095          | 23173        |                     |
| Frequency (MHz)                                                       |            |         |           | 699.7       | 707.5          | 715.3        |                     |
| 1.4                                                                   | QPSK       | 1       | 0         | 23.16       | 23.17          | 23.19        | 24                  |
| 1.4                                                                   | QPSK       | 1       | 3         | 23.07       | 23.17          | 23.07        |                     |
| 1.4                                                                   | QPSK       | 1       | 5         | 23.05       | 23.07          | 23.18        |                     |
| 1.4                                                                   | QPSK       | 3       | 0         | 22.28       | 22.33          | 22.34        | 23                  |
| 1.4                                                                   | QPSK       | 3       | 1         | 22.26       | 22.30          | 22.31        |                     |
| 1.4                                                                   | QPSK       | 3       | 3         | 22.23       | 22.13          | 22.17        |                     |
| 1.4                                                                   | QPSK       | 6       | 0         | 22.28       | 22.39          | 22.17        | 23                  |
| 1.4                                                                   | 16QAM      | 1       | 0         | 22.27       | 22.33          | 22.42        |                     |
| 1.4                                                                   | 16QAM      | 1       | 3         | 22.07       | 22.34          | 22.37        |                     |
| 1.4                                                                   | 16QAM      | 1       | 5         | 22.09       | 22.33          | 22.40        | 23                  |
| 1.4                                                                   | 16QAM      | 3       | 0         | 21.15       | 21.19          | 21.20        |                     |
| 1.4                                                                   | 16QAM      | 3       | 1         | 21.12       | 21.13          | 21.29        |                     |
| 1.4                                                                   | 16QAM      | 3       | 3         | 21.10       | 21.25          | 21.27        | 22                  |
| 1.4                                                                   | 16QAM      | 6       | 0         | 21.21       | 21.09          | 21.02        |                     |
| 1.4                                                                   | 64QAM      | 1       | 0         | 21.27       | 21.25          | 21.37        |                     |
| 1.4                                                                   | 64QAM      | 1       | 3         | 21.12       | 21.29          | 21.28        | 22                  |
| 1.4                                                                   | 64QAM      | 1       | 5         | 21.08       | 21.19          | 21.13        |                     |
| 1.4                                                                   | 64QAM      | 3       | 0         | 20.03       | 20.27          | 20.18        |                     |
| 1.4                                                                   | 64QAM      | 3       | 1         | 20.14       | 20.20          | 20.13        | 21                  |
| 1.4                                                                   | 64QAM      | 3       | 3         | 20.20       | 20.06          | 20.24        |                     |
| 1.4                                                                   | 64QAM      | 6       | 0         | 20.09       | 20.26          | 20.31        |                     |

| Band 13(700MHz Band) (dBm) |            |         |           |             |                |              |                     |
|----------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| Part 27F                   |            |         |           |             |                |              |                     |
| BW [MHz]                   | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                    |            |         |           | 23230       |                |              |                     |
| Frequency (MHz)            |            |         |           | 782         |                |              |                     |
| 10                         | QPSK       | 1       | 0         |             | 23.26          |              | 24                  |
| 10                         | QPSK       | 1       | 25        |             | 23.10          |              |                     |
| 10                         | QPSK       | 1       | 49        |             | 23.04          |              |                     |
| 10                         | QPSK       | 25      | 0         |             | 22.34          |              | 23                  |
| 10                         | QPSK       | 25      | 12        |             | 22.03          |              |                     |
| 10                         | QPSK       | 25      | 25        |             | 22.01          |              |                     |
| 10                         | QPSK       | 50      | 0         |             | 22.14          |              | 23                  |
| 10                         | 16QAM      | 1       | 0         |             | 22.18          |              |                     |
| 10                         | 16QAM      | 1       | 25        |             | 22.18          |              |                     |
| 10                         | 16QAM      | 1       | 49        |             | 22.23          |              | 22                  |
| 10                         | 16QAM      | 25      | 0         |             | 21.14          |              |                     |
| 10                         | 16QAM      | 25      | 12        |             | 21.17          |              |                     |
| 10                         | 16QAM      | 25      | 25        |             | 21.09          |              | 22                  |
| 10                         | 16QAM      | 50      | 0         |             | 21.04          |              |                     |
| 10                         | 64QAM      | 1       | 0         |             | 21.40          |              |                     |
| 10                         | 64QAM      | 1       | 25        |             | 21.13          |              | 22                  |
| 10                         | 64QAM      | 1       | 49        |             | 21.05          |              |                     |
| 10                         | 64QAM      | 25      | 0         |             | 20.33          |              |                     |
| 10                         | 64QAM      | 25      | 12        |             | 20.09          |              | 21                  |
| 10                         | 64QAM      | 25      | 25        |             | 20.04          |              |                     |
| 10                         | 64QAM      | 50      | 0         |             | 20.14          |              |                     |
| Channel                    |            |         |           | 23205       | 23230          | 23255        | Tune-up limit (dBm) |
| Frequency (MHz)            |            |         |           | 779.5       | 782            | 784.5        |                     |
| 5                          | QPSK       | 1       | 0         | 23.21       | 23.22          | 23.18        | 24                  |
| 5                          | QPSK       | 1       | 12        | 23.01       | 23.17          | 23.17        |                     |
| 5                          | QPSK       | 1       | 24        | 23.09       | 23.08          | 23.06        |                     |
| 5                          | QPSK       | 12      | 0         | 22.32       | 22.39          | 22.31        | 23                  |
| 5                          | QPSK       | 12      | 7         | 22.12       | 22.13          | 22.13        |                     |
| 5                          | QPSK       | 12      | 13        | 22.20       | 22.26          | 22.01        |                     |
| 5                          | QPSK       | 25      | 0         | 22.27       | 22.21          | 22.20        | 23                  |
| 5                          | 16QAM      | 1       | 0         | 22.35       | 22.36          | 22.32        |                     |
| 5                          | 16QAM      | 1       | 12        | 22.24       | 22.31          | 22.16        |                     |
| 5                          | 16QAM      | 1       | 24        | 22.26       | 22.32          | 22.13        | 22                  |
| 5                          | 16QAM      | 12      | 0         | 21.24       | 21.25          | 21.11        |                     |
| 5                          | 16QAM      | 12      | 7         | 21.18       | 21.11          | 21.22        |                     |
| 5                          | 16QAM      | 12      | 13        | 21.06       | 21.17          | 21.20        | 22                  |
| 5                          | 16QAM      | 25      | 0         | 20.97       | 21.18          | 21.11        |                     |
| 5                          | 64QAM      | 1       | 0         | 21.16       | 21.33          | 21.32        |                     |
| 5                          | 64QAM      | 1       | 12        | 21.38       | 21.23          | 21.22        | 22                  |
| 5                          | 64QAM      | 1       | 24        | 21.10       | 21.31          | 21.17        |                     |
| 5                          | 64QAM      | 12      | 0         | 20.08       | 20.18          | 20.09        | 21                  |
| 5                          | 64QAM      | 12      | 7         | 20.07       | 20.15          | 20.08        |                     |
| 5                          | 64QAM      | 12      | 13        | 20.11       | 20.06          | 20.10        |                     |
| 5                          | 64QAM      | 25      | 0         | 20.27       | 20.17          | 20.30        |                     |



| Band 14 (700MHz Band) (dBm) |            |         |           |             |                |              |                     |
|-----------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                    | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                     |            |         |           | 23330       |                |              | Tune-up limit (dBm) |
| Frequency (MHz)             |            |         |           | 793         |                |              |                     |
| 10                          | QPSK       | 1       | 0         |             | 23.22          |              | 24                  |
| 10                          | QPSK       | 1       | 25        |             | 23.14          |              |                     |
| 10                          | QPSK       | 1       | 49        |             | 23.09          |              |                     |
| 10                          | QPSK       | 25      | 0         |             | 22.34          |              | 23                  |
| 10                          | QPSK       | 25      | 12        |             | 22.12          |              |                     |
| 10                          | QPSK       | 25      | 25        |             | 22.11          |              |                     |
| 10                          | QPSK       | 50      | 0         |             | 22.14          |              | 23                  |
| 10                          | 16QAM      | 1       | 0         |             | 22.33          |              |                     |
| 10                          | 16QAM      | 1       | 25        |             | 22.28          |              |                     |
| 10                          | 16QAM      | 1       | 49        |             | 22.13          |              | 22                  |
| 10                          | 16QAM      | 25      | 0         |             | 21.18          |              |                     |
| 10                          | 16QAM      | 25      | 12        |             | 21.04          |              |                     |
| 10                          | 16QAM      | 25      | 25        |             | 21.06          |              | 22                  |
| 10                          | 16QAM      | 50      | 0         |             | 21.12          |              |                     |
| 10                          | 64QAM      | 1       | 0         |             | 21.28          |              |                     |
| 10                          | 64QAM      | 1       | 25        |             | 21.28          |              | 22                  |
| 10                          | 64QAM      | 1       | 49        |             | 21.19          |              |                     |
| 10                          | 64QAM      | 25      | 0         |             | 20.26          |              |                     |
| 10                          | 64QAM      | 25      | 12        |             | 20.14          |              | 21                  |
| 10                          | 64QAM      | 25      | 25        |             | 20.05          |              |                     |
| 10                          | 64QAM      | 50      | 0         |             | 20.13          |              |                     |
| Channel                     |            |         |           | 23305       | 23330          | 23355        | Tune-up limit (dBm) |
| Frequency (MHz)             |            |         |           | 790.5       | 793            | 795.5        |                     |
| 5                           | QPSK       | 1       | 0         | 23.09       | 23.20          | 23.11        | 24                  |
| 5                           | QPSK       | 1       | 12        | 23.18       | 23.17          | 23.07        |                     |
| 5                           | QPSK       | 1       | 24        | 23.08       | 23.10          | 23.01        |                     |
| 5                           | QPSK       | 12      | 0         | 22.29       | 22.29          | 22.27        | 23                  |
| 5                           | QPSK       | 12      | 7         | 22.04       | 22.19          | 22.20        |                     |
| 5                           | QPSK       | 12      | 13        | 22.10       | 22.25          | 22.16        |                     |
| 5                           | QPSK       | 25      | 0         | 22.10       | 22.29          | 22.14        | 23                  |
| 5                           | 16QAM      | 1       | 0         | 22.27       | 22.41          | 22.29        |                     |
| 5                           | 16QAM      | 1       | 12        | 22.24       | 22.46          | 22.34        |                     |
| 5                           | 16QAM      | 1       | 24        | 22.16       | 22.16          | 22.39        | 22                  |
| 5                           | 16QAM      | 12      | 0         | 21.09       | 21.24          | 21.11        |                     |
| 5                           | 16QAM      | 12      | 7         | 21.20       | 21.13          | 21.20        |                     |
| 5                           | 16QAM      | 12      | 13        | 21.21       | 21.19          | 21.13        | 22                  |
| 5                           | 16QAM      | 25      | 0         | 21.09       | 21.37          | 21.26        |                     |
| 5                           | 64QAM      | 1       | 0         | 21.20       | 21.28          | 21.39        |                     |
| 5                           | 64QAM      | 1       | 12        | 21.12       | 21.31          | 21.28        | 22                  |
| 5                           | 64QAM      | 1       | 24        | 21.14       | 21.19          | 21.27        |                     |
| 5                           | 64QAM      | 12      | 0         | 20.12       | 20.21          | 20.30        |                     |
| 5                           | 64QAM      | 12      | 7         | 20.01       | 20.25          | 20.15        | 21                  |
| 5                           | 64QAM      | 12      | 13        | 20.10       | 20.20          | 20.23        |                     |
| 5                           | 64QAM      | 25      | 0         | 20.23       | 20.10          | 20.34        |                     |

| Band 17 (700MHz Band) (dBm)<br>Part 27H(only on channel required) |            |         |           |             |                |              |                     |
|-------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                                          | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                                           |            |         |           | 23780       | 23790          | 23800        | Tune-up limit (dBm) |
| Frequency (MHz)                                                   |            |         |           | 709         | 710            | 711          |                     |
| 10                                                                | QPSK       | 1       | 0         | 23.05       | 23.18          | 23.15        | 24                  |
| 10                                                                | QPSK       | 1       | 25        | 23.11       | 23.10          | 23.11        |                     |
| 10                                                                | QPSK       | 1       | 49        | 23.14       | 23.11          | 23.06        |                     |
| 10                                                                | QPSK       | 25      | 0         | 22.15       | 22.25          | 22.22        | 23                  |
| 10                                                                | QPSK       | 25      | 12        | 22.18       | 22.13          | 22.03        |                     |
| 10                                                                | QPSK       | 25      | 25        | 22.06       | 22.19          | 21.98        |                     |
| 10                                                                | QPSK       | 50      | 0         | 21.99       | 21.99          | 22.07        | 23                  |
| 10                                                                | 16QAM      | 1       | 0         | 22.13       | 22.36          | 22.26        |                     |
| 10                                                                | 16QAM      | 1       | 25        | 22.10       | 22.35          | 22.20        |                     |
| 10                                                                | 16QAM      | 1       | 49        | 22.04       | 22.15          | 22.12        | 22                  |
| 10                                                                | 16QAM      | 25      | 0         | 21.25       | 21.23          | 21.21        |                     |
| 10                                                                | 16QAM      | 25      | 12        | 21.08       | 21.09          | 21.20        |                     |
| 10                                                                | 16QAM      | 25      | 25        | 21.02       | 21.08          | 21.24        | 22                  |
| 10                                                                | 16QAM      | 50      | 0         | 21.07       | 20.96          | 21.03        |                     |
| 10                                                                | 64QAM      | 1       | 0         | 21.20       | 21.38          | 21.38        |                     |
| 10                                                                | 64QAM      | 1       | 25        | 21.17       | 21.28          | 21.09        | 21                  |
| 10                                                                | 64QAM      | 1       | 49        | 21.03       | 21.06          | 21.16        |                     |
| 10                                                                | 64QAM      | 25      | 0         | 20.15       | 20.11          | 20.08        |                     |
| 10                                                                | 64QAM      | 25      | 12        | 20.02       | 20.14          | 20.19        | 21                  |
| 10                                                                | 64QAM      | 25      | 25        | 20.02       | 20.05          | 20.11        |                     |
| 10                                                                | 64QAM      | 50      | 0         | 20.08       | 20.10          | 20.13        |                     |
| Channel                                                           |            |         |           | 23755       | 23790          | 23825        | Tune-up limit (dBm) |
| Frequency (MHz)                                                   |            |         |           | 706.5       | 710            | 713.5        |                     |
| 5                                                                 | QPSK       | 1       | 0         | 23.09       | 23.15          | 23.07        | 24                  |
| 5                                                                 | QPSK       | 1       | 12        | 23.10       | 23.07          | 23.01        |                     |
| 5                                                                 | QPSK       | 1       | 24        | 22.96       | 23.06          | 23.12        |                     |
| 5                                                                 | QPSK       | 12      | 0         | 22.09       | 22.31          | 22.14        | 23                  |
| 5                                                                 | QPSK       | 12      | 7         | 22.13       | 22.22          | 22.04        |                     |
| 5                                                                 | QPSK       | 12      | 13        | 22.09       | 22.06          | 22.07        |                     |
| 5                                                                 | QPSK       | 25      | 0         | 22.10       | 22.22          | 22.21        | 23                  |
| 5                                                                 | 16QAM      | 1       | 0         | 22.25       | 22.28          | 22.20        |                     |
| 5                                                                 | 16QAM      | 1       | 12        | 22.04       | 22.29          | 22.14        |                     |
| 5                                                                 | 16QAM      | 1       | 24        | 22.06       | 22.19          | 22.03        | 22                  |
| 5                                                                 | 16QAM      | 12      | 0         | 21.14       | 21.25          | 21.22        |                     |
| 5                                                                 | 16QAM      | 12      | 7         | 21.16       | 21.05          | 21.22        |                     |
| 5                                                                 | 16QAM      | 12      | 13        | 21.00       | 21.11          | 21.23        | 22                  |
| 5                                                                 | 16QAM      | 25      | 0         | 21.02       | 21.02          | 20.97        |                     |
| 5                                                                 | 64QAM      | 1       | 0         | 21.26       | 21.39          | 21.33        |                     |
| 5                                                                 | 64QAM      | 1       | 12        | 21.31       | 21.26          | 21.07        | 21                  |
| 5                                                                 | 64QAM      | 1       | 24        | 21.05       | 21.08          | 21.07        |                     |
| 5                                                                 | 64QAM      | 12      | 0         | 20.01       | 20.22          | 20.10        |                     |
| 5                                                                 | 64QAM      | 12      | 7         | 20.12       | 20.19          | 20.24        | 21                  |
| 5                                                                 | 64QAM      | 12      | 13        | 20.10       | 20.17          | 20.13        |                     |
| 5                                                                 | 64QAM      | 25      | 0         | 20.09       | 20.05          | 20.24        |                     |



| Band 25 (1900MHz Band) (dBm)<br>Part 24E |            |         |           |             |                |              |                     |
|------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                 | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                  |            |         |           | 26140       | 26365          | 26590        |                     |
| Frequency (MHz)                          |            |         |           | 1860        | 1882.5         | 1905         |                     |
| 20                                       | QPSK       | 1       | 0         | 23.21       | 23.31          | 23.18        | 24                  |
| 20                                       | QPSK       | 1       | 49        | 23.11       | 23.09          | 23.20        |                     |
| 20                                       | QPSK       | 1       | 99        | 23.06       | 23.18          | 23.16        |                     |
| 20                                       | QPSK       | 50      | 0         | 22.26       | 22.38          | 22.13        | 23                  |
| 20                                       | QPSK       | 50      | 24        | 22.06       | 22.03          | 22.09        |                     |
| 20                                       | QPSK       | 50      | 50        | 22.08       | 22.09          | 22.06        |                     |
| 20                                       | QPSK       | 100     | 0         | 22.09       | 22.02          | 22.10        | 23                  |
| 20                                       | 16QAM      | 1       | 0         | 22.18       | 22.27          | 22.32        |                     |
| 20                                       | 16QAM      | 1       | 49        | 22.17       | 22.34          | 22.22        |                     |
| 20                                       | 16QAM      | 1       | 99        | 22.09       | 22.31          | 22.29        | 22                  |
| 20                                       | 16QAM      | 50      | 0         | 21.06       | 21.20          | 21.09        |                     |
| 20                                       | 16QAM      | 50      | 24        | 21.04       | 21.02          | 21.33        |                     |
| 20                                       | 16QAM      | 50      | 50        | 21.05       | 21.16          | 21.05        | 22                  |
| 20                                       | 16QAM      | 100     | 0         | 21.08       | 21.10          | 21.01        |                     |
| 20                                       | 64QAM      | 1       | 0         | 21.09       | 21.20          | 21.36        |                     |
| 20                                       | 64QAM      | 1       | 49        | 21.07       | 21.32          | 21.13        | 22                  |
| 20                                       | 64QAM      | 1       | 99        | 21.18       | 21.38          | 21.33        |                     |
| 20                                       | 64QAM      | 50      | 0         | 20.12       | 20.38          | 20.30        |                     |
| 20                                       | 64QAM      | 50      | 24        | 20.08       | 20.06          | 20.27        | 21                  |
| 20                                       | 64QAM      | 50      | 50        | 20.02       | 20.15          | 20.18        |                     |
| 20                                       | 64QAM      | 100     | 0         | 20.06       | 20.18          | 20.22        |                     |
| Channel                                  |            |         |           | 26115       | 26365          | 26615        | Tune-up limit (dBm) |
| Frequency (MHz)                          |            |         |           | 1857.5      | 1882.5         | 1907.5       |                     |
| 15                                       | QPSK       | 1       | 0         | 23.22       | 23.26          | 23.17        | 24                  |
| 15                                       | QPSK       | 1       | 37        | 23.10       | 23.13          | 23.20        |                     |
| 15                                       | QPSK       | 1       | 74        | 23.04       | 23.06          | 23.00        |                     |
| 15                                       | QPSK       | 36      | 0         | 22.08       | 22.39          | 22.25        | 23                  |
| 15                                       | QPSK       | 36      | 20        | 22.24       | 22.08          | 22.06        |                     |
| 15                                       | QPSK       | 36      | 39        | 22.05       | 22.04          | 22.10        |                     |
| 15                                       | QPSK       | 75      | 0         | 22.15       | 22.10          | 22.16        | 23                  |
| 15                                       | 16QAM      | 1       | 0         | 22.22       | 22.37          | 22.31        |                     |
| 15                                       | 16QAM      | 1       | 37        | 22.11       | 22.31          | 22.24        |                     |
| 15                                       | 16QAM      | 1       | 74        | 22.07       | 22.10          | 22.10        | 22                  |
| 15                                       | 16QAM      | 36      | 0         | 21.21       | 21.21          | 21.10        |                     |
| 15                                       | 16QAM      | 36      | 20        | 21.13       | 21.09          | 21.14        |                     |
| 15                                       | 16QAM      | 36      | 39        | 21.08       | 21.04          | 21.23        | 22                  |
| 15                                       | 16QAM      | 75      | 0         | 21.20       | 21.27          | 21.09        |                     |
| 15                                       | 64QAM      | 1       | 0         | 21.21       | 21.25          | 21.19        |                     |
| 15                                       | 64QAM      | 1       | 37        | 21.14       | 21.21          | 21.23        | 22                  |
| 15                                       | 64QAM      | 1       | 74        | 21.24       | 21.10          | 21.18        |                     |
| 15                                       | 64QAM      | 36      | 0         | 19.96       | 20.19          | 20.16        |                     |
| 15                                       | 64QAM      | 36      | 20        | 19.86       | 20.15          | 19.99        | 21                  |
| 15                                       | 64QAM      | 36      | 39        | 19.86       | 20.10          | 20.12        |                     |
| 15                                       | 64QAM      | 75      | 0         | 20.08       | 20.13          | 20.10        |                     |
| Channel                                  |            |         |           | 26090       | 26365          | 26640        | Tune-up limit (dBm) |
| Frequency (MHz)                          |            |         |           | 1855        | 1882.5         | 1910         |                     |
| 10                                       | QPSK       | 1       | 0         | 23.20       | 23.22          | 23.11        | 24                  |
| 10                                       | QPSK       | 1       | 25        | 23.10       | 23.17          | 23.17        |                     |
| 10                                       | QPSK       | 1       | 49        | 23.02       | 23.16          | 23.01        |                     |
| 10                                       | QPSK       | 25      | 0         | 22.09       | 22.38          | 22.10        | 23                  |
| 10                                       | QPSK       | 25      | 12        | 22.06       | 22.25          | 22.08        |                     |
| 10                                       | QPSK       | 25      | 25        | 22.09       | 22.10          | 22.13        |                     |
| 10                                       | QPSK       | 50      | 0         | 22.17       | 22.16          | 22.05        | 23                  |
| 10                                       | 16QAM      | 1       | 0         | 22.09       | 22.33          | 22.32        |                     |
| 10                                       | 16QAM      | 1       | 25        | 22.10       | 22.26          | 22.10        |                     |
| 10                                       | 16QAM      | 1       | 49        | 22.17       | 22.19          | 22.22        | 22                  |
| 10                                       | 16QAM      | 25      | 0         | 21.17       | 21.35          | 21.14        |                     |
| 10                                       | 16QAM      | 25      | 12        | 21.00       | 21.01          | 21.00        |                     |
| 10                                       | 16QAM      | 25      | 25        | 21.09       | 21.08          | 21.23        | 22                  |
| 10                                       | 16QAM      | 50      | 0         | 21.10       | 21.14          | 21.10        |                     |
| 10                                       | 64QAM      | 1       | 0         | 21.21       | 21.30          | 21.25        |                     |
| 10                                       | 64QAM      | 1       | 25        | 21.30       | 21.07          | 21.11        | 22                  |
| 10                                       | 64QAM      | 1       | 49        | 21.09       | 21.15          | 21.26        |                     |
| 10                                       | 64QAM      | 25      | 0         | 20.14       | 20.28          | 20.30        |                     |
| 10                                       | 64QAM      | 25      | 12        | 20.07       | 20.25          | 20.03        | 21                  |
| 10                                       | 64QAM      | 25      | 25        | 20.06       | 20.02          | 20.01        |                     |
| 10                                       | 64QAM      | 50      | 0         | 20.09       | 20.05          | 20.07        |                     |
| Channel                                  |            |         |           | 26065       | 26365          | 26665        | Tune-up limit (dBm) |
| Frequency (MHz)                          |            |         |           | 1852.5      | 1882.5         | 1912.5       |                     |
| 5                                        | QPSK       | 1       | 0         | 23.07       | 23.23          | 23.10        | 24                  |
| 5                                        | QPSK       | 1       | 12        | 23.19       | 23.19          | 22.97        |                     |
| 5                                        | QPSK       | 1       | 24        | 23.01       | 23.27          | 22.98        |                     |
| 5                                        | QPSK       | 12      | 0         | 22.31       | 22.32          | 22.25        | 23                  |
| 5                                        | QPSK       | 12      | 7         | 22.21       | 22.29          | 22.05        |                     |
| 5                                        | QPSK       | 12      | 13        | 22.08       | 22.18          | 22.10        |                     |
| 5                                        | QPSK       | 25      | 0         | 21.94       | 21.96          | 22.21        | 23                  |
| 5                                        | 16QAM      | 1       | 0         | 22.25       | 22.21          | 22.26        |                     |
| 5                                        | 16QAM      | 1       | 12        | 22.23       | 22.23          | 22.17        |                     |
| 5                                        | 16QAM      | 1       | 24        | 22.03       | 22.13          | 22.27        | 22                  |
| 5                                        | 16QAM      | 12      | 0         | 21.21       | 21.31          | 21.24        |                     |
| 5                                        | 16QAM      | 12      | 7         | 21.20       | 21.06          | 21.06        |                     |
| 5                                        | 16QAM      | 12      | 13        | 21.11       | 21.06          | 21.13        | 22                  |
| 5                                        | 16QAM      | 25      | 0         | 21.03       | 21.14          | 21.07        |                     |
| 5                                        | 64QAM      | 1       | 0         | 21.35       | 21.30          | 21.25        |                     |
| 5                                        | 64QAM      | 1       | 12        | 21.13       | 21.22          | 21.33        | 22                  |
| 5                                        | 64QAM      | 1       | 24        | 21.12       | 21.31          | 21.24        |                     |
| 5                                        | 64QAM      | 12      | 0         | 20.06       | 20.20          | 20.08        |                     |
| 5                                        | 64QAM      | 12      | 7         | 20.10       | 20.15          | 20.15        | 21                  |
| 5                                        | 64QAM      | 12      | 13        | 20.05       | 20.03          | 20.14        |                     |
| 5                                        | 64QAM      | 25      | 0         | 20.06       | 20.03          | 20.10        |                     |
| Channel                                  |            |         |           | 26055       | 26365          | 26675        | Tune-up limit (dBm) |
| Frequency (MHz)                          |            |         |           | 1851.5      | 1882.5         | 1913.5       |                     |
| 3                                        | QPSK       | 1       | 0         | 23.14       | 23.23          | 23.13        | 24                  |
| 3                                        | QPSK       | 1       | 8         | 23.08       | 23.21          | 23.11        |                     |
| 3                                        | QPSK       | 1       | 14        | 23.02       | 23.25          | 23.15        |                     |
| 3                                        | QPSK       | 8       | 0         | 22.34       | 22.17          | 22.19        | 23                  |
| 3                                        | QPSK       | 8       | 4         | 22.03       | 22.18          | 22.26        |                     |
| 3                                        | QPSK       | 8       | 7         | 21.91       | 22.03          | 22.10        |                     |

| Band 26 for FCC (dBm)<br>(only on channel required) |            |         |           |             |                |              |                     |
|-----------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                            | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                             |            |         |           | 26765       | 26865          | 26965        |                     |
| Frequency (MHz)                                     |            |         |           | 821.5       | 831.5          | 841.5        |                     |
| 15                                                  | QPSK       | 1       | 0         | 23.11       | 23.16          | 23.09        | 24                  |
| 15                                                  | QPSK       | 1       | 37        | 23.03       | 23.05          | 22.90        |                     |
| 15                                                  | QPSK       | 1       | 74        | 22.91       | 23.03          | 22.98        |                     |
| 15                                                  | QPSK       | 36      | 0         | 22.02       | 22.25          | 21.93        | 23                  |
| 15                                                  | QPSK       | 36      | 20        | 22.04       | 22.18          | 22.13        |                     |
| 15                                                  | QPSK       | 36      | 39        | 22.04       | 22.09          | 21.99        |                     |
| 15                                                  | QPSK       | 75      | 0         | 22.04       | 22.20          | 22.12        | 23                  |
| 15                                                  | 16QAM      | 1       | 0         | 22.13       | 22.23          | 22.07        |                     |
| 15                                                  | 16QAM      | 1       | 37        | 22.01       | 22.21          | 22.10        |                     |
| 15                                                  | 16QAM      | 1       | 74        | 22.03       | 22.08          | 22.15        | 22                  |
| 15                                                  | 16QAM      | 36      | 0         | 21.09       | 21.15          | 21.11        |                     |
| 15                                                  | 16QAM      | 36      | 20        | 20.95       | 20.91          | 21.00        |                     |
| 15                                                  | 16QAM      | 36      | 39        | 21.04       | 20.96          | 20.92        | 22                  |
| 15                                                  | 16QAM      | 75      | 0         | 20.85       | 20.88          | 20.95        |                     |
| 15                                                  | 64QAM      | 1       | 0         | 21.06       | 21.25          | 21.09        |                     |
| 15                                                  | 64QAM      | 1       | 37        | 21.11       | 21.01          | 21.06        | 22                  |
| 15                                                  | 64QAM      | 1       | 74        | 21.06       | 21.07          | 21.01        |                     |
| 15                                                  | 64QAM      | 36      | 0         | 20.04       | 20.06          | 20.15        |                     |
| 15                                                  | 64QAM      | 36      | 20        | 19.75       | 20.16          | 19.90        | 21                  |
| 15                                                  | 64QAM      | 36      | 39        | 19.75       | 19.98          | 20.07        |                     |
| 15                                                  | 64QAM      | 75      | 0         | 20.05       | 20.11          | 20.04        |                     |
| Channel                                             |            |         |           | 26740       | 26865          | 26990        | Tune-up limit (dBm) |
| Frequency (MHz)                                     |            |         |           | 819         | 831.5          | 844          |                     |
| 10                                                  | QPSK       | 1       | 0         | 23.03       | 23.13          | 23.12        | 24                  |
| 10                                                  | QPSK       | 1       | 25        | 22.86       | 22.90          | 23.04        |                     |
| 10                                                  | QPSK       | 1       | 49        | 22.89       | 23.02          | 23.10        |                     |
| 10                                                  | QPSK       | 25      | 0         | 22.05       | 22.22          | 22.10        | 23                  |
| 10                                                  | QPSK       | 25      | 12        | 21.89       | 22.21          | 21.89        |                     |
| 10                                                  | QPSK       | 25      | 25        | 22.06       | 21.81          | 21.95        |                     |
| 10                                                  | QPSK       | 50      | 0         | 22.09       | 22.16          | 22.01        | 23                  |
| 10                                                  | 16QAM      | 1       | 0         | 22.16       | 22.30          | 22.32        |                     |
| 10                                                  | 16QAM      | 1       | 25        | 22.16       | 22.28          | 22.07        |                     |
| 10                                                  | 16QAM      | 1       | 49        | 22.04       | 22.18          | 22.17        | 22                  |
| 10                                                  | 16QAM      | 25      | 0         | 21.03       | 21.18          | 21.16        |                     |
| 10                                                  | 16QAM      | 25      | 12        | 21.05       | 21.14          | 20.99        |                     |
| 10                                                  | 16QAM      | 25      | 25        | 21.02       | 21.06          | 20.88        | 22                  |
| 10                                                  | 16QAM      | 50      | 0         | 20.93       | 20.96          | 21.05        |                     |
| 10                                                  | 64QAM      | 1       | 0         | 21.22       | 21.27          | 21.19        |                     |
| 10                                                  | 64QAM      | 1       | 25        | 21.07       | 21.05          | 21.17        | 22                  |
| 10                                                  | 64QAM      | 1       | 49        | 21.08       | 21.16          | 21.07        |                     |
| 10                                                  | 64QAM      | 25      | 0         | 20.08       | 20.11          | 20.02        |                     |
| 10                                                  | 64QAM      | 25      | 12        | 19.82       | 19.85          | 19.91        | 21                  |
| 10                                                  | 64QAM      | 25      | 25        | 19.94       | 19.86          | 19.90        |                     |
| 10                                                  | 64QAM      | 50      | 0         | 19.96       | 20.01          | 20.08        |                     |
| Channel                                             |            |         |           | 26715       | 26865          | 27015        | Tune-up limit (dBm) |
| Frequency (MHz)                                     |            |         |           | 816.5       | 831.5          | 846.5        |                     |
| 5                                                   | QPSK       | 1       | 0         | 22.89       | 23.14          | 23.05        | 24                  |
| 5                                                   | QPSK       | 1       | 12        | 22.92       | 22.94          | 22.86        |                     |
| 5                                                   | QPSK       | 1       | 24        | 22.92       | 23.03          | 22.87        |                     |
| 5                                                   | QPSK       | 12      | 0         | 22.12       | 22.19          | 22.25        | 23                  |
| 5                                                   | QPSK       | 12      | 7         | 22.14       | 21.98          | 21.90        |                     |
| 5                                                   | QPSK       | 12      | 13        | 21.97       | 22.14          | 21.96        |                     |
| 5                                                   | QPSK       | 25      | 0         | 21.98       | 22.09          | 21.95        | 23                  |
| 5                                                   | 16QAM      | 1       | 0         | 22.00       | 22.21          | 22.27        |                     |
| 5                                                   | 16QAM      | 1       | 12        | 21.95       | 22.08          | 21.98        |                     |
| 5                                                   | 16QAM      | 1       | 24        | 21.93       | 22.24          | 22.19        | 22                  |
| 5                                                   | 16QAM      | 12      | 0         | 21.12       | 21.16          | 21.11        |                     |





|                 |       |    |    |        |        |        |                        |
|-----------------|-------|----|----|--------|--------|--------|------------------------|
| 3               | QPSK  | 15 | 0  | 22.11  | 21.96  | 22.27  | 23                     |
| 3               | 16QAM | 1  | 0  | 22.39  | 22.44  | 22.19  |                        |
| 3               | 16QAM | 1  | 8  | 22.09  | 22.38  | 22.16  |                        |
| 3               | 16QAM | 1  | 14 | 22.01  | 22.12  | 22.08  | 22                     |
| 3               | 16QAM | 8  | 0  | 21.06  | 21.13  | 21.10  |                        |
| 3               | 16QAM | 8  | 4  | 21.01  | 21.04  | 21.28  |                        |
| 3               | 16QAM | 8  | 7  | 20.90  | 21.10  | 20.97  | 22                     |
| 3               | 16QAM | 15 | 0  | 20.92  | 21.03  | 21.15  |                        |
| 3               | 64QAM | 1  | 0  | 21.10  | 21.20  | 21.11  |                        |
| 3               | 64QAM | 1  | 8  | 21.27  | 21.09  | 21.04  | 22                     |
| 3               | 64QAM | 1  | 14 | 20.92  | 21.08  | 21.19  |                        |
| 3               | 64QAM | 8  | 0  | 20.19  | 20.11  | 19.98  |                        |
| 3               | 64QAM | 8  | 4  | 20.05  | 20.22  | 19.98  | 21                     |
| 3               | 64QAM | 8  | 7  | 19.77  | 20.20  | 20.15  |                        |
| 3               | 64QAM | 15 | 0  | 20.12  | 20.10  | 20.29  |                        |
| Channel         |       |    |    | 26047  | 26365  | 26683  | Tune-up limit<br>(dBm) |
| Frequency (MHz) |       |    |    | 1850.7 | 1882.5 | 1914.3 |                        |
| 1.4             | QPSK  | 1  | 0  | 23.18  | 23.24  | 23.03  | 24                     |
| 1.4             | QPSK  | 1  | 3  | 22.92  | 23.14  | 23.15  |                        |
| 1.4             | QPSK  | 1  | 5  | 23.14  | 23.11  | 23.13  |                        |
| 1.4             | QPSK  | 3  | 0  | 22.31  | 22.33  | 22.17  |                        |
| 1.4             | QPSK  | 3  | 1  | 22.15  | 22.33  | 22.11  |                        |
| 1.4             | QPSK  | 3  | 3  | 22.12  | 22.13  | 22.15  |                        |
| 1.4             | QPSK  | 6  | 0  | 22.01  | 22.25  | 22.16  | 23                     |
| 1.4             | 16QAM | 1  | 0  | 22.15  | 22.29  | 22.28  | 22                     |
| 1.4             | 16QAM | 1  | 3  | 22.03  | 22.10  | 22.18  |                        |
| 1.4             | 16QAM | 1  | 5  | 22.08  | 22.38  | 22.25  |                        |
| 1.4             | 16QAM | 3  | 0  | 21.12  | 21.37  | 21.24  |                        |
| 1.4             | 16QAM | 3  | 1  | 21.06  | 21.29  | 21.11  |                        |
| 1.4             | 16QAM | 3  | 3  | 21.11  | 21.03  | 21.13  |                        |
| 1.4             | 16QAM | 6  | 0  | 21.11  | 21.27  | 21.14  | 21                     |
| 1.4             | 64QAM | 1  | 0  | 21.33  | 21.20  | 21.14  | 22                     |
| 1.4             | 64QAM | 1  | 3  | 21.07  | 21.34  | 21.10  |                        |
| 1.4             | 64QAM | 1  | 5  | 21.11  | 21.18  | 21.29  |                        |
| 1.4             | 64QAM | 3  | 0  | 20.10  | 20.05  | 20.19  |                        |
| 1.4             | 64QAM | 3  | 1  | 20.04  | 20.19  | 20.21  |                        |
| 1.4             | 64QAM | 3  | 3  | 20.13  | 20.21  | 20.01  |                        |
| 1.4             | 64QAM | 6  | 0  | 20.14  | 20.27  | 19.99  | 21                     |

|     |       |   |   |       |       |       |    |
|-----|-------|---|---|-------|-------|-------|----|
| 1.4 | QPSK  | 6 | 0 | 21.80 | 22.02 | 21.86 | 23 |
| 1.4 | 16QAM | 1 | 0 | 22.09 | 22.11 | 22.35 | 23 |
| 1.4 | 16QAM | 1 | 3 | 21.96 | 22.28 | 22.04 |    |
| 1.4 | 16QAM | 1 | 5 | 22.07 | 22.01 | 22.06 |    |
| 1.4 | 16QAM | 3 | 0 | 21.12 | 21.08 | 21.05 |    |
| 1.4 | 16QAM | 3 | 1 | 21.00 | 21.08 | 21.04 |    |
| 1.4 | 16QAM | 3 | 3 | 21.02 | 21.07 | 21.16 |    |
| 1.4 | 16QAM | 6 | 0 | 20.78 | 20.90 | 20.84 | 22 |
| 1.4 | 64QAM | 1 | 0 | 21.27 | 21.39 | 21.32 | 22 |
| 1.4 | 64QAM | 1 | 3 | 21.02 | 20.99 | 20.98 |    |
| 1.4 | 64QAM | 1 | 5 | 21.16 | 21.17 | 21.14 |    |
| 1.4 | 64QAM | 3 | 0 | 20.07 | 20.04 | 20.07 |    |
| 1.4 | 64QAM | 3 | 1 | 20.10 | 20.04 | 20.18 |    |
| 1.4 | 64QAM | 3 | 3 | 20.01 | 20.09 | 20.03 |    |
| 1.4 | 64QAM | 6 | 0 | 20.05 | 20.09 | 20.18 | 21 |



| Band 30 (dBm)   |            |         |           |             |                |              |                     |
|-----------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |            |         |           | 27710       |                |              | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 2310        |                |              |                     |
| 10              | QPSK       | 1       | 0         |             | 22.87          |              | 24                  |
| 10              | QPSK       | 1       | 25        |             | 22.82          |              |                     |
| 10              | QPSK       | 1       | 49        |             | 22.81          |              |                     |
| 10              | QPSK       | 25      | 0         |             | 21.73          |              | 23                  |
| 10              | QPSK       | 25      | 12        |             | 21.81          |              |                     |
| 10              | QPSK       | 25      | 25        |             | 21.52          |              |                     |
| 10              | QPSK       | 50      | 0         |             | 21.78          |              | 23                  |
| 10              | 16QAM      | 1       | 0         |             | 21.81          |              |                     |
| 10              | 16QAM      | 1       | 25        |             | 21.71          |              |                     |
| 10              | 16QAM      | 1       | 49        |             | 21.69          |              | 22                  |
| 10              | 16QAM      | 25      | 0         |             | 20.73          |              |                     |
| 10              | 16QAM      | 25      | 12        |             | 20.62          |              |                     |
| 10              | 16QAM      | 25      | 25        |             | 20.66          |              | 22                  |
| 10              | 16QAM      | 50      | 0         |             | 20.71          |              |                     |
| 10              | 64QAM      | 1       | 0         |             | 20.82          |              |                     |
| 10              | 64QAM      | 1       | 25        |             | 20.85          |              | 22                  |
| 10              | 64QAM      | 1       | 49        |             | 20.79          |              |                     |
| 10              | 64QAM      | 25      | 0         |             | 19.78          |              |                     |
| 10              | 64QAM      | 25      | 12        |             | 19.84          |              | 21                  |
| 10              | 64QAM      | 25      | 25        |             | 19.79          |              |                     |
| 10              | 64QAM      | 50      | 0         |             | 19.72          |              |                     |
| Channel         |            |         |           | 27885       | 27710          | 27735        | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 2307.5      | 2310           | 2312.5       |                     |
| 5               | QPSK       | 1       | 0         | 22.76       | 22.82          | 22.74        | 24                  |
| 5               | QPSK       | 1       | 12        | 22.65       | 22.80          | 22.66        |                     |
| 5               | QPSK       | 1       | 24        | 22.50       | 22.71          | 22.68        |                     |
| 5               | QPSK       | 12      | 0         | 21.83       | 21.88          | 21.81        | 23                  |
| 5               | QPSK       | 12      | 7         | 21.65       | 21.68          | 21.74        |                     |
| 5               | QPSK       | 12      | 13        | 21.61       | 21.82          | 21.51        |                     |
| 5               | QPSK       | 25      | 0         | 21.52       | 21.87          | 21.85        | 23                  |
| 5               | 16QAM      | 1       | 0         | 21.78       | 21.85          | 21.87        |                     |
| 5               | 16QAM      | 1       | 12        | 21.81       | 21.82          | 21.67        |                     |
| 5               | 16QAM      | 1       | 24        | 21.59       | 21.73          | 21.68        | 22                  |
| 5               | 16QAM      | 12      | 0         | 20.71       | 20.86          | 20.89        |                     |
| 5               | 16QAM      | 12      | 7         | 20.86       | 20.80          | 20.81        |                     |
| 5               | 16QAM      | 12      | 13        | 20.66       | 20.78          | 20.66        | 22                  |
| 5               | 16QAM      | 25      | 0         | 20.66       | 20.88          | 20.57        |                     |
| 5               | 64QAM      | 1       | 0         | 20.71       | 20.87          | 20.81        |                     |
| 5               | 64QAM      | 1       | 12        | 20.80       | 20.81          | 20.70        | 22                  |
| 5               | 64QAM      | 1       | 24        | 20.56       | 20.75          | 20.68        |                     |
| 5               | 64QAM      | 12      | 0         | 19.84       | 19.91          | 19.75        |                     |
| 5               | 64QAM      | 12      | 7         | 19.62       | 19.68          | 19.61        | 21                  |
| 5               | 64QAM      | 12      | 13        | 19.59       | 19.87          | 19.64        |                     |
| 5               | 64QAM      | 25      | 0         | 19.69       | 19.63          | 19.76        |                     |

| Band 66 (dBm)   |            |         |           |             |                |              |                     |
|-----------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |            |         |           | 132072      | 132322         | 132572       | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 1720        | 1745           | 1770         |                     |
| 20              | QPSK       | 1       | 0         | 22.72       | 22.81          | 22.78        | 24                  |
| 20              | QPSK       | 1       | 49        | 22.74       | 22.67          | 22.59        |                     |
| 20              | QPSK       | 1       | 99        | 22.51       | 22.69          | 22.62        |                     |
| 20              | QPSK       | 50      | 0         | 21.79       | 21.90          | 21.88        | 23                  |
| 20              | QPSK       | 50      | 24        | 21.74       | 21.69          | 21.56        |                     |
| 20              | QPSK       | 50      | 50        | 21.66       | 21.71          | 21.68        |                     |
| 20              | QPSK       | 100     | 0         | 21.55       | 21.79          | 21.68        | 23                  |
| 20              | 16QAM      | 1       | 0         | 21.73       | 21.85          | 21.83        |                     |
| 20              | 16QAM      | 1       | 49        | 21.56       | 21.71          | 21.76        |                     |
| 20              | 16QAM      | 1       | 99        | 21.69       | 21.66          | 21.71        | 22                  |
| 20              | 16QAM      | 50      | 0         | 20.81       | 20.86          | 20.72        |                     |
| 20              | 16QAM      | 50      | 24        | 20.81       | 20.62          | 20.84        |                     |
| 20              | 16QAM      | 50      | 50        | 20.52       | 20.76          | 20.60        | 22                  |
| 20              | 16QAM      | 100     | 0         | 20.72       | 20.58          | 20.76        |                     |
| 20              | 64QAM      | 1       | 0         | 20.82       | 20.80          | 20.74        |                     |
| 20              | 64QAM      | 1       | 49        | 20.70       | 20.76          | 20.70        | 22                  |
| 20              | 64QAM      | 1       | 99        | 20.56       | 20.65          | 20.67        |                     |
| 20              | 64QAM      | 50      | 0         | 19.73       | 19.84          | 19.71        |                     |
| 20              | 64QAM      | 50      | 24        | 19.63       | 19.56          | 19.76        | 21                  |
| 20              | 64QAM      | 50      | 50        | 19.57       | 19.60          | 19.79        |                     |
| 20              | 64QAM      | 100     | 0         | 19.77       | 19.69          | 19.73        |                     |
| Channel         |            |         |           | 132047      | 132322         | 132597       | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 1717.5      | 1745           | 1772.5       |                     |
| 15              | QPSK       | 1       | 0         | 22.73       | 22.75          | 22.68        | 24                  |
| 15              | QPSK       | 1       | 37        | 22.72       | 22.68          | 22.70        |                     |
| 15              | QPSK       | 1       | 74        | 22.63       | 22.66          | 22.66        |                     |
| 15              | QPSK       | 36      | 0         | 21.76       | 21.87          | 21.86        | 23                  |
| 15              | QPSK       | 36      | 20        | 21.63       | 21.70          | 21.62        |                     |
| 15              | QPSK       | 36      | 39        | 21.59       | 21.75          | 21.65        |                     |
| 15              | QPSK       | 75      | 0         | 21.50       | 21.59          | 21.70        | 23                  |
| 15              | 16QAM      | 1       | 0         | 21.75       | 21.85          | 21.85        |                     |
| 15              | 16QAM      | 1       | 37        | 21.70       | 21.80          | 21.76        |                     |
| 15              | 16QAM      | 1       | 74        | 21.82       | 21.86          | 21.78        | 22                  |
| 15              | 16QAM      | 36      | 0         | 20.71       | 20.83          | 20.73        |                     |
| 15              | 16QAM      | 36      | 20        | 20.66       | 20.80          | 20.95        |                     |
| 15              | 16QAM      | 36      | 39        | 20.63       | 20.67          | 20.87        | 22                  |
| 15              | 16QAM      | 75      | 0         | 20.67       | 20.65          | 20.51        |                     |
| 15              | 64QAM      | 1       | 0         | 20.73       | 20.83          | 20.74        |                     |
| 15              | 64QAM      | 1       | 37        | 20.64       | 20.74          | 20.61        | 22                  |
| 15              | 64QAM      | 1       | 74        | 20.77       | 20.81          | 20.83        |                     |
| 15              | 64QAM      | 36      | 0         | 19.65       | 19.75          | 19.82        |                     |
| 15              | 64QAM      | 36      | 20        | 19.73       | 19.76          | 19.56        | 21                  |
| 15              | 64QAM      | 36      | 39        | 19.58       | 19.84          | 19.69        |                     |
| 15              | 64QAM      | 75      | 0         | 19.51       | 19.71          | 19.84        |                     |
| Channel         |            |         |           | 132022      | 132322         | 132622       | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 1715        | 1745           | 1775         |                     |
| 10              | QPSK       | 1       | 0         | 22.74       | 22.79          | 22.75        | 24                  |
| 10              | QPSK       | 1       | 25        | 22.61       | 22.69          | 22.59        |                     |
| 10              | QPSK       | 1       | 49        | 22.62       | 22.75          | 22.53        |                     |
| 10              | QPSK       | 25      | 0         | 21.62       | 21.89          | 21.74        | 23                  |
| 10              | QPSK       | 25      | 12        | 21.82       | 21.87          | 21.85        |                     |
| 10              | QPSK       | 25      | 25        | 21.66       | 21.61          | 21.66        |                     |
| 10              | QPSK       | 50      | 0         | 21.69       | 21.91          | 21.61        | 23                  |
| 10              | 16QAM      | 1       | 0         | 21.76       | 21.80          | 21.82        |                     |
| 10              | 16QAM      | 1       | 25        | 21.83       | 21.76          | 21.75        |                     |
| 10              | 16QAM      | 1       | 49        | 21.68       | 21.69          | 21.83        | 22                  |
| 10              | 16QAM      | 25      | 0         | 20.82       | 20.88          | 20.86        |                     |
| 10              | 16QAM      | 25      | 12        | 20.65       | 20.86          | 20.62        |                     |
| 10              | 16QAM      | 25      | 25        | 20.59       | 20.53          | 20.67        | 22                  |
| 10              | 16QAM      | 50      | 0         | 20.69       | 20.77          | 20.60        |                     |
| 10              | 64QAM      | 1       | 0         | 20.76       | 20.88          | 20.85        |                     |
| 10              | 64QAM      | 1       | 25        | 20.62       | 20.67          | 20.75        | 22                  |
| 10              | 64QAM      | 1       | 49        | 20.57       | 20.71          | 20.76        |                     |
| 10              | 64QAM      | 25      | 0         | 19.52       | 19.77          | 19.63        |                     |
| 10              | 64QAM      | 25      | 12        | 19.65       | 19.73          | 19.77        | 21                  |
| 10              | 64QAM      | 25      | 25        | 19.59       | 19.75          | 19.54        |                     |
| 10              | 64QAM      | 50      | 0         | 19.69       | 19.80          | 19.54        |                     |
| Channel         |            |         |           | 131997      | 132322         | 132647       | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 1712.5      | 1745           | 1777.5       |                     |
| 5               | QPSK       | 1       | 0         | 22.66       | 22.78          | 22.73        | 24                  |
| 5               | QPSK       | 1       | 12        | 22.77       | 22.71          | 22.71        |                     |
| 5               | QPSK       | 1       | 24        | 22.71       | 22.76          | 22.50        |                     |
| 5               | QPSK       | 12      | 0         | 21.72       | 21.76          | 21.76        | 23                  |
| 5               | QPSK       | 12      | 7         | 21.80       | 21.63          | 21.58        |                     |
| 5               | QPSK       | 12      | 13        | 21.60       | 21.62          | 21.51        |                     |
| 5               | QPSK       | 25      | 0         | 21.84       | 21.65          | 21.79        | 23                  |
| 5               | 16QAM      | 1       | 0         | 21.88       | 21.86          | 21.73        |                     |
| 5               | 16QAM      | 1       | 12        | 21.83       | 21.75          | 21.72        |                     |
| 5               | 16QAM      | 1       | 24        | 21.59       | 21.77          | 21.66        | 22                  |
| 5               | 16QAM      | 12      | 0         | 20.71       | 20.69          | 20.76        |                     |
| 5               | 16QAM      | 12      | 7         | 20.64       | 20.75          | 20.81        |                     |
| 5               | 16QAM      | 12      | 13        | 20.51       | 20.57          | 20.54        | 22                  |
| 5               | 16QAM      | 25      | 0         | 20.40       | 20.60          | 20.65        |                     |
| 5               | 64QAM      | 1       | 0         | 20.68       | 20.79          | 20.72        |                     |
| 5               | 64QAM      | 1       | 12        | 20.89       | 20.84          | 20.82        | 22                  |
| 5               | 64QAM      | 1       | 24        | 20.52       | 20.63          | 20.73        |                     |
| 5               | 64QAM      | 12      | 0         | 19.83       | 19.70          | 19.77        |                     |
| 5               | 64QAM      | 12      | 7         | 19.66       | 19.80          | 19.78        | 21                  |
| 5               | 64QAM      | 12      | 13        | 19.59       | 19.75          | 19.78        |                     |
| 5               | 64QAM      | 25      | 0         | 19.56       | 19.70          | 19.65        |                     |
| Channel         |            |         |           | 131987      | 132322         | 132657       | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 1711.5      | 1745           | 1778.5       |                     |
| 3               | QPSK       | 1       | 0         | 22.68       | 22.77          | 22.68        | 24                  |
| 3               | QPSK       | 1       | 8         | 22.59       | 22.71          | 22.59        |                     |
| 3               | QPSK       | 1       | 14        | 22.60       | 22.63          | 22.75        |                     |
| 3               | QPSK       | 8       | 0         | 21.65       | 21.77          | 21.78        | 23                  |
| 3               | QPSK       | 8       | 4         | 21.75       | 21.79          | 21.71        |                     |
| 3               | QPSK       | 8       | 7         | 21.57       | 21.64          | 21.46        |                     |



|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | QPSK  | 15 | 0  | 21.74  | 21.60  | 21.63  | 23                  |
| 3               | 16QAM | 1  | 0  | 21.77  | 21.86  | 21.84  |                     |
| 3               | 16QAM | 1  | 8  | 21.87  | 21.83  | 21.69  |                     |
| 3               | 16QAM | 1  | 14 | 21.68  | 21.82  | 21.77  | 22                  |
| 3               | 16QAM | 8  | 0  | 20.68  | 20.71  | 20.90  |                     |
| 3               | 16QAM | 8  | 4  | 20.69  | 20.72  | 20.88  |                     |
| 3               | 16QAM | 8  | 7  | 20.62  | 20.57  | 20.70  |                     |
| 3               | 16QAM | 15 | 0  | 20.65  | 20.80  | 20.53  |                     |
| 3               | 64QAM | 1  | 0  | 20.73  | 20.87  | 20.81  | 22                  |
| 3               | 64QAM | 1  | 8  | 20.82  | 20.82  | 20.82  |                     |
| 3               | 64QAM | 1  | 14 | 20.58  | 20.69  | 20.73  |                     |
| 3               | 64QAM | 8  | 0  | 19.69  | 19.81  | 19.83  | 21                  |
| 3               | 64QAM | 8  | 4  | 19.62  | 19.66  | 19.62  |                     |
| 3               | 64QAM | 8  | 7  | 19.61  | 19.70  | 19.56  |                     |
| 3               | 64QAM | 15 | 0  | 19.64  | 19.75  | 19.87  |                     |
| Channel         |       |    |    | 131979 | 132322 | 132665 |                     |
| Frequency (MHz) |       |    |    | 1710.7 | 1745   | 1779.3 | Tune-up limit (dBm) |
| 1.4             | QPSK  | 1  | 0  | 22.70  | 22.76  | 22.65  | 23.5                |
| 1.4             | QPSK  | 1  | 3  | 22.57  | 22.72  | 22.69  |                     |
| 1.4             | QPSK  | 1  | 5  | 22.60  | 22.65  | 22.61  |                     |
| 1.4             | QPSK  | 3  | 0  | 21.65  | 21.72  | 21.67  |                     |
| 1.4             | QPSK  | 3  | 1  | 21.66  | 21.65  | 21.86  |                     |
| 1.4             | QPSK  | 3  | 3  | 21.73  | 21.80  | 21.69  |                     |
| 1.4             | QPSK  | 6  | 0  | 21.77  | 21.60  | 21.80  | 22.5                |
| 1.4             | 16QAM | 1  | 0  | 21.81  | 21.83  | 21.79  | 22.5                |
| 1.4             | 16QAM | 1  | 3  | 21.69  | 21.82  | 21.74  |                     |
| 1.4             | 16QAM | 1  | 5  | 21.55  | 21.87  | 21.77  |                     |
| 1.4             | 16QAM | 3  | 0  | 20.57  | 20.76  | 20.71  |                     |
| 1.4             | 16QAM | 3  | 1  | 20.65  | 20.85  | 20.85  |                     |
| 1.4             | 16QAM | 3  | 3  | 20.52  | 20.69  | 20.83  |                     |
| 1.4             | 16QAM | 6  | 0  | 20.65  | 20.83  | 20.68  | 21.5                |
| 1.4             | 64QAM | 1  | 0  | 20.71  | 20.86  | 20.80  | 21.5                |
| 1.4             | 64QAM | 1  | 3  | 20.84  | 20.78  | 20.81  |                     |
| 1.4             | 64QAM | 1  | 5  | 20.56  | 20.68  | 20.72  |                     |
| 1.4             | 64QAM | 3  | 0  | 19.65  | 19.89  | 19.90  |                     |
| 1.4             | 64QAM | 3  | 1  | 19.57  | 19.75  | 19.85  |                     |
| 1.4             | 64QAM | 3  | 3  | 19.58  | 19.60  | 19.53  |                     |
| 1.4             | 64QAM | 6  | 0  | 19.54  | 19.58  | 19.70  | 20.5                |



| Band 71 (dBm)   |            |         |           |             |                |              |                     |
|-----------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |            |         |           | 133222      | 133322         | 133372       |                     |
| Frequency (MHz) |            |         |           | 673         | 683            | 688          |                     |
| 20              | QPSK       | 1       | 0         | 23.05       | 23.15          | 23.07        |                     |
| 20              | QPSK       | 1       | 49        | 23.04       | 23.12          | 23.03        | 24                  |
| 20              | QPSK       | 1       | 99        | 23.00       | 22.98          | 22.91        |                     |
| 20              | QPSK       | 50      | 0         | 22.22       | 22.11          | 22.19        |                     |
| 20              | QPSK       | 50      | 24        | 21.96       | 22.21          | 21.99        | 23                  |
| 20              | QPSK       | 50      | 50        | 21.90       | 22.02          | 21.93        |                     |
| 20              | QPSK       | 100     | 0         | 21.95       | 21.86          | 21.99        |                     |
| 20              | 16QAM      | 1       | 0         | 22.15       | 22.28          | 22.18        | 23                  |
| 20              | 16QAM      | 1       | 49        | 22.06       | 22.10          | 21.98        |                     |
| 20              | 16QAM      | 1       | 99        | 21.96       | 22.15          | 22.01        |                     |
| 20              | 16QAM      | 50      | 0         | 21.14       | 21.15          | 21.04        | 22                  |
| 20              | 16QAM      | 50      | 24        | 21.10       | 20.91          | 20.93        |                     |
| 20              | 16QAM      | 50      | 50        | 20.94       | 20.98          | 20.90        |                     |
| 20              | 16QAM      | 100     | 0         | 20.94       | 21.11          | 21.08        | 22                  |
| 20              | 64QAM      | 1       | 0         | 21.22       | 21.22          | 21.00        |                     |
| 20              | 64QAM      | 1       | 49        | 21.09       | 21.30          | 21.22        |                     |
| 20              | 64QAM      | 1       | 99        | 21.03       | 21.17          | 21.08        | 21                  |
| 20              | 64QAM      | 50      | 0         | 20.05       | 20.12          | 20.07        |                     |
| 20              | 64QAM      | 50      | 24        | 19.86       | 20.18          | 19.99        |                     |
| 20              | 64QAM      | 50      | 50        | 19.97       | 20.05          | 19.98        |                     |
| 20              | 64QAM      | 100     | 0         | 20.02       | 20.14          | 20.19        |                     |
| Channel         |            |         |           | 133197      | 133297         | 133397       |                     |
| Frequency (MHz) |            |         |           | 670.5       | 680.5          | 690.5        |                     |
| 15              | QPSK       | 1       | 0         | 23.04       | 23.12          | 23.07        |                     |
| 15              | QPSK       | 1       | 37        | 22.98       | 23.11          | 23.06        | 24                  |
| 15              | QPSK       | 1       | 74        | 23.04       | 23.05          | 23.02        |                     |
| 15              | QPSK       | 36      | 0         | 22.23       | 22.25          | 22.14        |                     |
| 15              | QPSK       | 36      | 20        | 22.10       | 22.07          | 22.07        | 23                  |
| 15              | QPSK       | 36      | 39        | 21.90       | 22.09          | 21.91        |                     |
| 15              | QPSK       | 75      | 0         | 21.80       | 21.86          | 21.83        |                     |
| 15              | 16QAM      | 1       | 0         | 22.31       | 22.36          | 22.13        | 23                  |
| 15              | 16QAM      | 1       | 37        | 22.11       | 22.35          | 22.20        |                     |
| 15              | 16QAM      | 1       | 74        | 22.06       | 22.23          | 22.12        |                     |
| 15              | 16QAM      | 36      | 0         | 21.02       | 21.11          | 21.10        | 22                  |
| 15              | 16QAM      | 36      | 20        | 20.97       | 21.10          | 21.08        |                     |
| 15              | 16QAM      | 36      | 39        | 20.94       | 20.86          | 21.15        |                     |
| 15              | 16QAM      | 75      | 0         | 21.06       | 21.12          | 21.01        | 22                  |
| 15              | 64QAM      | 1       | 0         | 21.14       | 21.34          | 21.12        |                     |
| 15              | 64QAM      | 1       | 37        | 21.17       | 21.21          | 21.10        |                     |
| 15              | 64QAM      | 1       | 74        | 21.15       | 21.02          | 21.16        | 21                  |
| 15              | 64QAM      | 36      | 0         | 20.01       | 20.07          | 19.90        |                     |
| 15              | 64QAM      | 36      | 20        | 19.82       | 20.10          | 19.93        |                     |
| 15              | 64QAM      | 36      | 39        | 20.01       | 19.62          | 19.95        |                     |
| 15              | 64QAM      | 75      | 0         | 20.07       | 19.98          | 19.90        |                     |
| Channel         |            |         |           | 133172      | 133272         | 133422       |                     |
| Frequency (MHz) |            |         |           | 668         | 678            | 693          |                     |
| 10              | QPSK       | 1       | 0         | 22.99       | 23.11          | 23.08        |                     |
| 10              | QPSK       | 1       | 25        | 23.04       | 22.89          | 22.95        | 24                  |
| 10              | QPSK       | 1       | 49        | 23.02       | 22.88          | 23.03        |                     |
| 10              | QPSK       | 25      | 0         | 22.16       | 22.20          | 22.09        |                     |
| 10              | QPSK       | 25      | 12        | 22.06       | 22.18          | 21.93        | 23                  |
| 10              | QPSK       | 25      | 25        | 21.87       | 21.91          | 21.85        |                     |
| 10              | QPSK       | 50      | 0         | 21.98       | 22.07          | 22.16        |                     |
| 10              | 16QAM      | 1       | 0         | 22.32       | 22.33          | 22.24        | 23                  |
| 10              | 16QAM      | 1       | 25        | 22.06       | 22.16          | 22.24        |                     |
| 10              | 16QAM      | 1       | 49        | 22.04       | 21.99          | 22.06        |                     |
| 10              | 16QAM      | 25      | 0         | 21.06       | 21.14          | 21.22        | 22                  |
| 10              | 16QAM      | 25      | 12        | 20.90       | 21.07          | 21.15        |                     |
| 10              | 16QAM      | 25      | 25        | 20.94       | 20.99          | 21.06        |                     |
| 10              | 16QAM      | 50      | 0         | 21.04       | 20.93          | 21.09        | 22                  |
| 10              | 64QAM      | 1       | 0         | 21.04       | 21.23          | 21.25        |                     |
| 10              | 64QAM      | 1       | 25        | 21.15       | 21.03          | 21.05        |                     |
| 10              | 64QAM      | 1       | 49        | 21.12       | 21.20          | 21.05        | 21                  |
| 10              | 64QAM      | 25      | 0         | 20.12       | 20.13          | 20.06        |                     |
| 10              | 64QAM      | 25      | 12        | 19.93       | 19.99          | 20.08        |                     |
| 10              | 64QAM      | 25      | 25        | 19.98       | 19.91          | 19.89        |                     |
| 10              | 64QAM      | 50      | 0         | 20.01       | 20.10          | 20.14        |                     |
| Channel         |            |         |           | 133147      | 133247         | 133447       |                     |
| Frequency (MHz) |            |         |           | 665.5       | 675.5          | 695.5        |                     |
| 5               | QPSK       | 1       | 0         | 23.09       | 23.10          | 22.89        |                     |
| 5               | QPSK       | 1       | 12        | 22.81       | 23.07          | 22.99        | 24                  |
| 5               | QPSK       | 1       | 24        | 22.87       | 22.90          | 22.82        |                     |
| 5               | QPSK       | 12      | 0         | 21.92       | 22.11          | 22.11        |                     |
| 5               | QPSK       | 12      | 7         | 21.80       | 21.90          | 22.03        | 23                  |
| 5               | QPSK       | 12      | 13        | 21.80       | 22.06          | 21.94        |                     |
| 5               | QPSK       | 25      | 0         | 22.00       | 22.16          | 22.10        |                     |
| 5               | 16QAM      | 1       | 0         | 22.20       | 22.36          | 22.27        | 23                  |
| 5               | 16QAM      | 1       | 12        | 22.05       | 22.07          | 22.02        |                     |
| 5               | 16QAM      | 1       | 24        | 22.05       | 22.07          | 21.98        |                     |
| 5               | 16QAM      | 12      | 0         | 21.05       | 21.07          | 21.09        | 22                  |
| 5               | 16QAM      | 12      | 7         | 20.82       | 20.91          | 21.01        |                     |
| 5               | 16QAM      | 12      | 13        | 20.99       | 20.98          | 20.96        |                     |
| 5               | 16QAM      | 25      | 0         | 21.05       | 20.99          | 21.00        | 22                  |
| 5               | 64QAM      | 1       | 0         | 21.16       | 21.12          | 20.99        |                     |
| 5               | 64QAM      | 1       | 12        | 20.98       | 20.98          | 21.12        |                     |
| 5               | 64QAM      | 1       | 24        | 20.91       | 21.15          | 21.17        | 21                  |
| 5               | 64QAM      | 12      | 0         | 19.95       | 20.11          | 20.01        |                     |
| 5               | 64QAM      | 12      | 7         | 20.10       | 20.09          | 19.99        |                     |
| 5               | 64QAM      | 12      | 13        | 19.82       | 19.85          | 19.98        |                     |
| 5               | 64QAM      | 25      | 0         | 20.03       | 20.08          | 20.17        |                     |



| Band 41 (2496~2690MHz) (dBm) |            |         |           |             |                    |                |                     |              |    |                     |                     |
|------------------------------|------------|---------|-----------|-------------|--------------------|----------------|---------------------|--------------|----|---------------------|---------------------|
| BW [MHz]                     | Modulation | RB Size | RB Offset | Low Channel | Middle Low Channel | Middle Channel | Middle High Channel | High Channel |    | Tune-up limit (dBm) |                     |
| Channel                      |            |         |           | 39750       | 40185              | 40620          | 41055               | 41490        |    |                     |                     |
| Frequency (MHz)              |            |         |           | 2506        | 2549.5             | 2593           | 2636.5              | 2680         |    |                     |                     |
| 20                           | QPSK       | 1       | 0         | 23.20       | 23.24              | 23.26          | 23.10               | 23.15        | 24 |                     |                     |
| 20                           | QPSK       | 1       | 49        | 23.05       | 23.09              | 23.10          | 23.15               | 23.03        |    |                     |                     |
| 20                           | QPSK       | 1       | 99        | 23.06       | 23.01              | 23.11          | 23.11               | 23.00        |    |                     |                     |
| 20                           | QPSK       | 50      | 0         | 22.27       | 22.25              | 22.33          | 22.15               | 22.18        |    |                     |                     |
| 20                           | QPSK       | 50      | 24        | 22.07       | 22.10              | 22.19          | 22.08               | 22.02        | 23 |                     |                     |
| 20                           | QPSK       | 50      | 50        | 22.14       | 22.10              | 22.09          | 22.08               | 22.06        |    |                     |                     |
| 20                           | QPSK       | 100     | 0         | 22.09       | 22.08              | 22.10          | 22.11               | 21.89        |    |                     |                     |
| 20                           | 16QAM      | 1       | 0         | 22.25       | 22.19              | 22.31          | 22.28               | 22.17        |    |                     |                     |
| 20                           | 16QAM      | 1       | 49        | 22.25       | 22.07              | 22.11          | 22.02               | 22.06        | 23 |                     |                     |
| 20                           | 16QAM      | 1       | 99        | 22.19       | 22.06              | 22.00          | 22.21               | 22.16        |    |                     |                     |
| 20                           | 16QAM      | 50      | 0         | 21.02       | 21.12              | 21.22          | 21.18               | 21.08        |    |                     |                     |
| 20                           | 16QAM      | 50      | 24        | 20.99       | 21.07              | 21.07          | 21.18               | 21.06        |    |                     |                     |
| 20                           | 16QAM      | 50      | 50        | 20.90       | 21.06              | 21.10          | 21.17               | 21.01        | 22 |                     |                     |
| 20                           | 16QAM      | 100     | 0         | 21.02       | 21.03              | 21.07          | 21.00               | 20.95        |    |                     |                     |
| 20                           | 64QAM      | 1       | 0         | 21.20       | 21.26              | 21.41          | 21.21               | 21.37        |    |                     |                     |
| 20                           | 64QAM      | 1       | 49        | 21.25       | 21.14              | 21.26          | 21.07               | 21.05        |    |                     |                     |
| 20                           | 64QAM      | 1       | 99        | 21.19       | 21.01              | 21.09          | 21.09               | 21.03        | 22 |                     |                     |
| 20                           | 64QAM      | 50      | 0         | 19.94       | 20.04              | 20.15          | 20.17               | 20.18        |    |                     |                     |
| 20                           | 64QAM      | 50      | 24        | 19.86       | 19.96              | 20.13          | 19.99               | 19.88        |    |                     |                     |
| 20                           | 64QAM      | 50      | 50        | 20.14       | 20.05              | 19.99          | 20.02               | 19.81        |    |                     |                     |
| 20                           | 64QAM      | 100     | 0         | 19.88       | 19.90              | 19.87          | 20.04               | 19.93        |    |                     |                     |
| Channel                      |            |         |           | 39725       | 40173              | 40620          | 41058               | 41515        |    | Tune-up limit (dBm) |                     |
| Frequency (MHz)              |            |         |           | 2503.5      | 2548.3             | 2593           | 2637.8              | 2692.5       |    |                     |                     |
| 15                           | QPSK       | 1       | 0         | 23.05       | 23.11              | 23.20          | 23.20               | 23.04        | 24 |                     |                     |
| 15                           | QPSK       | 1       | 37        | 22.80       | 23.11              | 22.97          | 23.09               | 22.97        |    |                     |                     |
| 15                           | QPSK       | 1       | 74        | 22.88       | 22.80              | 23.14          | 22.97               | 22.98        |    |                     |                     |
| 15                           | QPSK       | 36      | 0         | 22.28       | 22.03              | 22.23          | 22.20               | 22.01        |    |                     |                     |
| 15                           | QPSK       | 36      | 20        | 22.06       | 21.89              | 22.19          | 21.91               | 21.94        | 23 |                     |                     |
| 15                           | QPSK       | 36      | 36        | 21.98       | 21.94              | 22.04          | 22.10               | 21.92        |    |                     |                     |
| 15                           | QPSK       | 75      | 0         | 22.19       | 21.95              | 21.91          | 22.16               | 22.03        |    |                     |                     |
| 15                           | 16QAM      | 1       | 0         | 22.16       | 22.28              | 22.28          | 22.27               | 22.17        |    |                     |                     |
| 15                           | 16QAM      | 1       | 37        | 22.20       | 21.99              | 22.27          | 22.16               | 22.23        | 23 |                     |                     |
| 15                           | 16QAM      | 1       | 74        | 22.20       | 22.06              | 22.12          | 21.97               | 22.26        |    |                     |                     |
| 15                           | 16QAM      | 36      | 0         | 20.95       | 21.05              | 21.15          | 20.94               | 21.05        |    |                     |                     |
| 15                           | 16QAM      | 36      | 20        | 20.95       | 21.06              | 21.18          | 21.21               | 21.13        |    |                     |                     |
| 15                           | 16QAM      | 36      | 36        | 20.84       | 20.91              | 20.87          | 20.90               | 20.96        | 22 |                     |                     |
| 15                           | 16QAM      | 75      | 0         | 21.16       | 20.98              | 21.17          | 21.01               | 21.01        |    |                     |                     |
| 15                           | 64QAM      | 1       | 0         | 21.02       | 21.02              | 21.07          | 21.06               | 21.11        |    |                     |                     |
| 15                           | 64QAM      | 1       | 37        | 21.27       | 20.99              | 21.08          | 20.98               | 21.22        |    |                     |                     |
| 15                           | 64QAM      | 1       | 74        | 20.93       | 20.99              | 21.17          | 21.01               | 21.05        | 21 |                     |                     |
| 15                           | 64QAM      | 36      | 0         | 20.09       | 20.00              | 20.24          | 20.09               | 20.26        |    |                     |                     |
| 15                           | 64QAM      | 36      | 20        | 20.19       | 20.10              | 20.06          | 20.11               | 20.13        |    |                     |                     |
| 15                           | 64QAM      | 36      | 36        | 19.93       | 19.99              | 20.15          | 19.91               | 20.08        |    |                     |                     |
| 15                           | 64QAM      | 75      | 0         | 20.10       | 19.99              | 20.21          | 20.15               | 19.97        |    |                     |                     |
| Channel                      |            |         |           | 39700       | 40160              | 40620          | 41050               | 41540        |    |                     | Tune-up limit (dBm) |
| Frequency (MHz)              |            |         |           | 2501        | 2547               | 2593           | 2639                | 2685         |    |                     |                     |
| 10                           | QPSK       | 1       | 0         | 23.14       | 22.94              | 23.16          | 23.12               | 23.01        | 24 |                     |                     |
| 10                           | QPSK       | 1       | 25        | 22.89       | 23.03              | 22.97          | 22.88               | 23.03        |    |                     |                     |
| 10                           | QPSK       | 1       | 49        | 22.80       | 23.03              | 23.05          | 23.12               | 22.93        |    |                     |                     |
| 10                           | QPSK       | 25      | 0         | 22.12       | 22.00              | 22.16          | 21.94               | 22.20        |    |                     |                     |
| 10                           | QPSK       | 25      | 12        | 22.24       | 22.07              | 22.04          | 22.04               | 21.90        | 23 |                     |                     |
| 10                           | QPSK       | 25      | 25        | 22.05       | 21.92              | 22.15          | 21.99               | 22.06        |    |                     |                     |
| 10                           | QPSK       | 50      | 0         | 22.15       | 21.85              | 22.00          | 22.15               | 22.10        |    |                     |                     |
| 10                           | 16QAM      | 1       | 0         | 22.35       | 22.11              | 22.38          | 22.35               | 22.35        |    |                     |                     |
| 10                           | 16QAM      | 1       | 25        | 22.17       | 22.00              | 22.04          | 22.19               | 22.03        | 23 |                     |                     |
| 10                           | 16QAM      | 1       | 49        | 22.09       | 22.09              | 22.24          | 22.05               | 22.26        |    |                     |                     |
| 10                           | 16QAM      | 25      | 0         | 20.97       | 20.97              | 21.15          | 20.92               | 21.04        |    |                     |                     |
| 10                           | 16QAM      | 25      | 12        | 21.19       | 21.02              | 20.95          | 21.06               | 21.12        |    |                     |                     |
| 10                           | 16QAM      | 25      | 25        | 20.95       | 20.95              | 20.99          | 20.96               | 20.93        | 22 |                     |                     |
| 10                           | 16QAM      | 50      | 0         | 20.89       | 21.02              | 21.15          | 21.09               | 20.89        |    |                     |                     |
| 10                           | 64QAM      | 1       | 0         | 21.27       | 21.06              | 21.19          | 21.07               | 21.16        |    |                     |                     |
| 10                           | 64QAM      | 1       | 25        | 21.18       | 21.05              | 21.03          | 21.12               | 21.05        |    |                     |                     |
| 10                           | 64QAM      | 1       | 49        | 21.07       | 20.99              | 21.18          | 20.98               | 21.13        | 21 |                     |                     |
| 10                           | 64QAM      | 25      | 0         | 20.07       | 20.12              | 20.21          | 19.93               | 20.18        |    |                     |                     |
| 10                           | 64QAM      | 25      | 12        | 20.16       | 19.90              | 19.98          | 19.98               | 19.87        |    |                     |                     |
| 10                           | 64QAM      | 25      | 25        | 19.90       | 19.97              | 20.11          | 20.04               | 19.95        |    |                     |                     |
| 10                           | 64QAM      | 50      | 0         | 20.12       | 19.93              | 19.96          | 20.14               | 20.07        |    |                     |                     |
| Channel                      |            |         |           | 39675       | 40148              | 40620          | 41093               | 41565        |    |                     | Tune-up limit (dBm) |
| Frequency (MHz)              |            |         |           | 2498.5      | 2545.3             | 2593           | 2640.3              | 2687.5       |    |                     |                     |
| 5                            | QPSK       | 1       | 0         | 23.12       | 23.00              | 23.19          | 22.90               | 22.99        | 24 |                     |                     |
| 5                            | QPSK       | 1       | 12        | 23.02       | 23.13              | 23.19          | 22.91               | 22.95        |    |                     |                     |
| 5                            | QPSK       | 1       | 24        | 23.12       | 22.90              | 23.08          | 22.90               | 23.03        |    |                     |                     |
| 5                            | QPSK       | 12      | 0         | 22.09       | 22.21              | 22.23          | 21.96               | 22.09        |    |                     |                     |
| 5                            | QPSK       | 12      | 7         | 22.11       | 22.12              | 22.05          | 21.97               | 22.21        | 23 |                     |                     |
| 5                            | QPSK       | 12      | 13        | 21.95       | 21.92              | 22.00          | 21.95               | 22.11        |    |                     |                     |
| 5                            | QPSK       | 25      | 0         | 22.15       | 21.90              | 22.18          | 22.11               | 22.14        |    |                     |                     |
| 5                            | 16QAM      | 1       | 0         | 22.14       | 22.06              | 22.11          | 22.29               | 22.13        |    |                     |                     |
| 5                            | 16QAM      | 1       | 12        | 22.02       | 22.15              | 22.05          | 22.10               | 22.01        | 23 |                     |                     |
| 5                            | 16QAM      | 1       | 24        | 22.17       | 22.09              | 22.16          | 21.94               | 21.95        |    |                     |                     |
| 5                            | 16QAM      | 12      | 0         | 21.16       | 20.97              | 21.00          | 20.98               | 21.13        |    |                     |                     |
| 5                            | 16QAM      | 12      | 7         | 20.90       | 20.82              | 20.95          | 20.93               | 21.12        |    |                     |                     |
| 5                            | 16QAM      | 12      | 13        | 21.01       | 20.94              | 21.04          | 21.07               | 21.04        | 22 |                     |                     |
| 5                            | 16QAM      | 25      | 0         | 20.95       | 20.88              | 21.15          | 20.89               | 20.84        |    |                     |                     |
| 5                            | 64QAM      | 1       | 0         | 21.22       | 20.98              | 21.15          | 21.03               | 21.09        |    |                     |                     |
| 5                            | 64QAM      | 1       | 12        | 21.26       | 21.10              | 21.25          | 21.00               | 21.06        |    |                     |                     |
| 5                            | 64QAM      | 1       | 24        | 21.16       | 21.13              | 21.04          | 21.22               | 21.02        | 22 |                     |                     |
| 5                            | 64QAM      | 12      | 0         | 19.97       | 19.89              | 20.05          | 20.20               | 20.16        |    |                     |                     |
| 5                            | 64QAM      | 12      | 7         | 20.14       | 19.95              | 20.13          | 19.91               | 20.00        |    |                     |                     |
| 5                            | 64QAM      | 12      | 13        | 20.14       | 19.93              | 20.09          | 20.01               | 20.15        |    |                     |                     |
| 5                            | 64QAM      | 25      | 0         | 20.02       | 19.90              | 20.01          | 20.19               | 20.04        |    |                     |                     |

| Band 41 HPUE (2496~2690MHz) (dBm) |            |         |           |             |                    |                |                     |              |                     |  |
|-----------------------------------|------------|---------|-----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|--|
| BW [MHz]                          | Modulation | RB Size | RB Offset | Low Channel | Middle Low Channel | Middle Channel | Middle High Channel | High Channel | Tune-up limit (dBm) |  |
| Channel                           |            |         |           | 39750       | 40185              | 40620          | 41055               | 41490        |                     |  |
| Frequency (MHz)                   |            |         |           | 2506        | 2549.5             | 2593           | 2636.5              | 2680         |                     |  |
| 20                                | QPSK       | 1       | 0         | 25.60       | 25.51              | 25.68          | 25.59               | 25.42        | 27                  |  |
| 20                                | QPSK       | 1       | 49        | 25.63       | 25.36              | 25.40          | 25.62               | 25.55        |                     |  |
| 20                                | QPSK       | 1       | 99        | 25.42       | 25.49              | 25.54          | 25.43               | 25.47        |                     |  |
| 20                                | QPSK       | 50      | 0         | 24.61       | 24.60              | 24.77          | 24.60               | 24.60        |                     |  |
| 20                                | QPSK       | 50      | 24        | 24.65       | 24.64              | 24.65          | 24.66               | 24.70        | 26                  |  |
| 20                                | QPSK       | 50      | 50        | 24.58       | 24.53              | 24.62          | 24.58               | 24.57        |                     |  |
| 20                                | QPSK       | 100     | 0         | 24.65       | 24.45              | 24.52          | 24.35               | 24.69        |                     |  |
| 20                                | 16QAM      | 1       | 0         | 24.55       | 24.52              | 24.64          | 24.62               | 24.70        |                     |  |
| 20                                | 16QAM      | 1       | 49        | 24.84       | 24.60              | 24.68          | 24.63               | 24.56        | 26                  |  |
| 20                                | 16QAM      | 1       | 99        | 24.52       | 24.59              | 24.67          | 24.56               | 24.72        |                     |  |
| 20                                | 16QAM      | 50      | 0         | 23.62       | 23.60              | 23.61          | 23.50               | 23.67        |                     |  |
| 20                                | 16QAM      | 50      | 24        | 23.58       | 23.50              | 23.46          | 23.69               | 23.43        |                     |  |
| 20                                | 16QAM      | 50      | 50        | 23.49       | 23.52              | 23.60          | 23.35               | 23.53        | 25                  |  |
| 20                                | 16QAM      | 100     | 0         | 23.45       | 23.50              | 23.58          | 23.48               | 23.48        |                     |  |
| 20                                | 64QAM      | 1       | 0         | 23.56       | 23.61              | 23.81          | 23.68               | 23.68        |                     |  |
| 20                                | 64QAM      | 1       | 49        | 23.67       | 23.60              | 23.77          | 23.63               | 23.54        |                     |  |
| 20                                | 64QAM      | 1       | 99        | 23.61       | 23.60              | 23.58          | 23.57               | 23.73        | 24                  |  |
| 20                                | 64QAM      | 50      | 0         | 22.54       | 22.46              | 22.52          | 22.56               | 22.46        |                     |  |
| 20                                | 64QAM      | 50      | 24        | 22.43       | 22.49              | 22.54          | 22.45               | 22.47        |                     |  |
| 20                                | 64QAM      | 50      | 50        | 22.42       | 22.45              | 22.63          | 22.25               | 22.48        |                     |  |
| 20                                | 64QAM      | 100     | 0         | 22.49       | 22.39              | 22.58          | 22.36               | 22.56        |                     |  |
| Channel                           |            |         |           | 39725       | 40173              | 40620          | 41068               | 41515        |                     |  |
| Frequency (MHz)                   |            |         |           | 2503.5      | 2548.3             | 2593           | 2637.8              | 2682.5       |                     |  |
| 15                                | QPSK       | 1       | 0         | 25.56       | 25.54              | 25.65          | 25.63               | 25.40        | 27                  |  |
| 15                                | QPSK       | 1       | 37        | 25.43       | 25.32              | 25.38          | 25.58               | 25.57        |                     |  |
| 15                                | QPSK       | 1       | 74        | 25.35       | 25.54              | 25.34          | 25.54               | 25.63        |                     |  |
| 15                                | QPSK       | 36      | 0         | 24.51       | 24.73              | 24.79          | 24.59               | 24.60        |                     |  |
| 15                                | QPSK       | 36      | 20        | 24.51       | 24.61              | 24.61          | 24.56               | 24.62        | 26                  |  |
| 15                                | QPSK       | 36      | 39        | 24.50       | 24.52              | 24.65          | 24.64               | 24.54        |                     |  |
| 15                                | QPSK       | 75      | 0         | 24.37       | 24.38              | 24.66          | 24.64               | 24.55        |                     |  |
| 15                                | 16QAM      | 1       | 0         | 24.69       | 24.74              | 24.82          | 24.82               | 24.62        |                     |  |
| 15                                | 16QAM      | 1       | 37        | 24.63       | 24.51              | 24.56          | 24.72               | 24.71        | 26                  |  |
| 15                                | 16QAM      | 1       | 74        | 24.46       | 24.54              | 24.53          | 24.46               | 24.64        |                     |  |
| 15                                | 16QAM      | 36      | 0         | 23.55       | 23.53              | 23.64          | 23.61               | 23.54        |                     |  |
| 15                                | 16QAM      | 36      | 20        | 23.65       | 23.55              | 23.59          | 23.59               | 23.57        |                     |  |
| 15                                | 16QAM      | 36      | 39        | 23.54       | 23.30              | 23.30          | 23.50               | 23.31        | 25                  |  |
| 15                                | 16QAM      | 75      | 0         | 23.34       | 23.25              | 23.36          | 23.30               | 23.58        |                     |  |
| 15                                | 64QAM      | 1       | 0         | 23.82       | 23.80              | 23.83          | 23.81               | 23.62        |                     |  |
| 15                                | 64QAM      | 1       | 37        | 23.50       | 23.52              | 23.73          | 23.59               | 23.65        |                     |  |
| 15                                | 64QAM      | 1       | 74        | 23.62       | 23.56              | 23.68          | 23.53               | 23.68        | 24                  |  |
| 15                                | 64QAM      | 36      | 0         | 22.47       | 22.56              | 22.53          | 22.50               | 22.72        |                     |  |
| 15                                | 64QAM      | 36      | 20        | 22.44       | 22.57              | 22.67          | 22.49               | 22.48        |                     |  |
| 15                                | 64QAM      | 36      | 39        | 22.57       | 22.45              | 22.55          | 22.41               | 22.37        |                     |  |
| 15                                | 64QAM      | 75      | 0         | 22.42       | 22.42              | 22.40          | 22.52               | 22.61        |                     |  |
| Channel                           |            |         |           | 39710       | 40160              | 40600          | 41060               | 41540        |                     |  |
| Frequency (MHz)                   |            |         |           | 2501        | 2547               | 2593           | 2639                | 2685         |                     |  |
| 10                                | QPSK       | 1       | 0         | 25.57       | 25.48              | 25.62          | 25.47               | 25.53        | 27                  |  |
| 10                                | QPSK       | 1       | 25        | 25.49       | 25.45              | 25.59          | 25.60               | 25.41        |                     |  |
| 10                                | QPSK       | 1       | 49        | 25.44       | 25.36              | 25.54          | 25.54               | 25.63        |                     |  |
| 10                                | QPSK       | 25      | 0         | 24.62       | 24.46              | 24.58          | 24.75               | 24.77        |                     |  |
| 10                                | QPSK       | 25      | 12        | 24.72       | 24.40              | 24.49          | 24.42               | 24.43        | 26                  |  |
| 10                                | QPSK       | 25      | 25        | 24.61       | 24.43              | 24.43          | 24.47               | 24.41        |                     |  |
| 10                                | QPSK       | 50      | 0         | 24.64       | 24.54              | 24.63          | 24.45               | 24.45        |                     |  |
| 10                                | 16QAM      | 1       | 0         | 24.60       | 24.83              | 24.64          | 24.68               | 24.72        |                     |  |
| 10                                | 16QAM      | 1       | 25        | 24.73       | 24.46              | 24.70          | 24.49               | 24.77        | 26                  |  |
| 10                                | 16QAM      | 1       | 49        | 24.67       | 24.54              | 24.53          | 24.64               | 24.66        |                     |  |
| 10                                | 16QAM      | 25      | 0         | 23.52       | 23.30              | 23.64          | 23.49               | 23.43        |                     |  |
| 10                                | 16QAM      | 25      | 12        | 23.60       | 23.57              | 23.67          | 23.67               | 23.65        |                     |  |
| 10                                | 16QAM      | 25      | 25        | 23.47       | 23.48              | 23.51          | 23.34               | 23.37        | 25                  |  |
| 10                                | 16QAM      | 50      | 0         | 23.58       | 23.31              | 23.62          | 23.35               | 23.48        |                     |  |
| 10                                | 64QAM      | 1       | 0         | 23.64       | 23.64              | 23.88          | 23.57               | 23.70        |                     |  |
| 10                                | 64QAM      | 1       | 25        | 23.55       | 23.52              | 23.54          | 23.73               | 23.60        |                     |  |
| 10                                | 64QAM      | 1       | 49        | 23.75       | 23.63              | 23.60          | 23.53               | 23.64        | 25                  |  |
| 10                                | 64QAM      | 25      | 0         | 22.42       | 22.48              | 22.62          | 22.45               | 22.56        |                     |  |
| 10                                | 64QAM      | 25      | 12        | 22.43       | 22.32              | 22.57          | 22.43               | 22.65        |                     |  |
| 10                                | 64QAM      | 25      | 25        | 22.46       | 22.45              | 22.52          | 22.38               | 22.31        |                     |  |
| 10                                | 64QAM      | 50      | 0         | 22.65       | 22.43              | 22.47          | 22.61               | 22.67        |                     |  |
| Channel                           |            |         |           | 39675       | 40148              | 40620          | 41093               | 41565        |                     |  |
| Frequency (MHz)                   |            |         |           | 2498.5      | 2545.3             | 2593           | 2639.3              | 2687.5       |                     |  |
| 5                                 | QPSK       | 1       | 0         | 25.62       | 25.48              | 25.60          | 25.43               | 25.60        | 27                  |  |
| 5                                 | QPSK       | 1       | 12        | 25.46       | 25.37              | 25.43          | 25.62               | 25.45        |                     |  |
| 5                                 | QPSK       | 1       | 24        | 25.60       | 25.42              | 25.34          | 25.38               | 25.45        |                     |  |
| 5                                 | QPSK       | 12      | 0         | 24.54       | 24.73              | 24.45          | 24.75               | 24.48        |                     |  |
| 5                                 | QPSK       | 12      | 7         | 24.52       | 24.53              | 24.55          | 24.56               | 24.58        | 26                  |  |
| 5                                 | QPSK       | 12      | 13        | 24.65       | 24.41              | 24.61          | 24.40               | 24.58        |                     |  |
| 5                                 | QPSK       | 25      | 0         | 24.62       | 24.50              | 24.38          | 24.56               | 24.59        |                     |  |
| 5                                 | 16QAM      | 1       | 0         | 24.72       | 24.65              | 24.70          | 24.73               | 24.66        |                     |  |
| 5                                 | 16QAM      | 1       | 12        | 24.76       | 24.54              | 24.64          | 24.54               | 24.65        | 26                  |  |
| 5                                 | 16QAM      | 1       | 24        | 24.69       | 24.52              | 24.64          | 24.47               | 24.69        |                     |  |
| 5                                 | 16QAM      | 12      | 0         | 23.61       | 23.64              | 23.63          | 23.67               | 23.72        |                     |  |
| 5                                 | 16QAM      | 12      | 7         | 23.59       | 23.44              | 23.59          | 23.58               | 23.74        |                     |  |
| 5                                 | 16QAM      | 12      | 13        | 23.44       | 23.37              | 23.52          | 23.48               | 23.44        | 25                  |  |
| 5                                 | 16QAM      | 25      | 0         | 23.57       | 23.29              | 23.62          | 23.57               | 23.45        |                     |  |
| 5                                 | 64QAM      | 1       | 0         | 23.31       | 23.78              | 23.67          | 23.52               | 23.80        |                     |  |
| 5                                 | 64QAM      | 1       | 12        | 23.56       | 23.69              | 23.67          | 23.65               | 23.52        |                     |  |
| 5                                 | 64QAM      | 1       | 24        | 23.61       | 23.60              | 23.63          | 23.75               | 23.60        | 25                  |  |
| 5                                 | 64QAM      | 12      | 0         | 22.57       | 22.44              | 22.63          | 22.49               | 22.70        |                     |  |
| 5                                 | 64QAM      | 12      | 7         | 22.42       | 22.50              | 22.49          | 22.43               | 22.69        |                     |  |
| 5                                 | 64QAM      | 12      | 13        | 22.50       | 22.46              | 22.46          | 22.38               | 22.63        |                     |  |
| 5                                 | 64QAM      | 25      | 0         | 22.61       | 22.24              | 22.26          | 22.39               | 22.36        | 24                  |  |



| Band 48 (3.5G Band) (dBm) |            |         |           |                       |                    |                    |                     |              |                     |
|---------------------------|------------|---------|-----------|-----------------------|--------------------|--------------------|---------------------|--------------|---------------------|
| BW [MHz]                  | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Middle-Low Channel | Middle-Low Channel | Middle-High Channel | High Channel | Tune-up limit (dBm) |
| Channel                   |            |         |           | 55340                 | 55830              | 55990              | 56190               | 56640        |                     |
| Frequency (MHz)           |            |         |           | 3500                  | 3609               | 3625               | 3641                | 3690         |                     |
| 20                        | QPSK       | 1       | 0         | 22.50                 | 22.85              | 22.88              | 22.86               | 22.83        | 24                  |
| 20                        | QPSK       | 1       | 49        | 22.51                 | 22.71              | 22.87              | 22.71               | 22.79        |                     |
| 20                        | QPSK       | 1       | 99        | 22.80                 | 22.80              | 22.83              | 22.74               | 22.68        |                     |
| 20                        | QPSK       | 50      | 0         | 21.50                 | 21.71              | 21.91              | 21.90               | 21.78        | 23                  |
| 20                        | QPSK       | 50      | 24        | 21.57                 | 21.79              | 21.83              | 21.87               | 21.71        |                     |
| 20                        | QPSK       | 50      | 50        | 21.59                 | 21.81              | 21.72              | 21.74               | 21.80        |                     |
| 20                        | QPSK       | 100     | 0         | 21.64                 | 21.85              | 21.81              | 21.76               | 21.78        | 23                  |
| 20                        | 16QAM      | 1       | 0         | 21.67                 | 21.89              | 21.90              | 21.81               | 21.84        |                     |
| 20                        | 16QAM      | 1       | 49        | 21.66                 | 21.84              | 21.82              | 21.89               | 21.85        |                     |
| 20                        | 16QAM      | 1       | 99        | 21.52                 | 21.86              | 21.85              | 21.82               | 21.83        | 22                  |
| 20                        | 16QAM      | 50      | 0         | 20.55                 | 20.67              | 20.58              | 20.68               | 20.92        |                     |
| 20                        | 16QAM      | 50      | 24        | 20.44                 | 20.85              | 20.88              | 20.85               | 20.86        |                     |
| 20                        | 16QAM      | 50      | 50        | 20.48                 | 20.74              | 20.67              | 20.91               | 20.74        | 22                  |
| 20                        | 16QAM      | 100     | 0         | 20.64                 | 20.82              | 20.78              | 20.69               | 20.71        |                     |
| 20                        | 64QAM      | 1       | 0         | 20.79                 | 20.85              | 20.92              | 20.88               | 20.92        |                     |
| 20                        | 64QAM      | 1       | 49        | 20.65                 | 20.68              | 20.82              | 20.71               | 20.78        | 22                  |
| 20                        | 64QAM      | 1       | 99        | 20.63                 | 20.82              | 20.77              | 20.83               | 20.84        |                     |
| 20                        | 64QAM      | 50      | 0         | 19.68                 | 19.75              | 19.92              | 19.85               | 19.92        |                     |
| 20                        | 64QAM      | 50      | 24        | 19.51                 | 19.84              | 19.92              | 19.92               | 19.92        | 21                  |
| 20                        | 64QAM      | 50      | 50        | 19.63                 | 19.53              | 19.80              | 19.87               | 19.68        |                     |
| 20                        | 64QAM      | 100     | 0         | 19.60                 | 19.61              | 19.71              | 19.89               | 19.78        |                     |
| Channel                   |            |         |           | 55315                 | 55830              | 55990              | 56160               | 56595        | Tune-up limit (dBm) |
| Frequency (MHz)           |            |         |           | 3507.5                | 3608               | 3625               | 3642                | 3692.5       |                     |
| 15                        | QPSK       | 1       | 0         | 22.53                 | 22.82              | 22.85              | 22.75               | 22.85        | 24                  |
| 15                        | QPSK       | 1       | 37        | 22.81                 | 22.70              | 22.79              | 22.72               | 22.69        |                     |
| 15                        | QPSK       | 1       | 74        | 22.49                 | 22.67              | 22.79              | 22.60               | 22.85        |                     |
| 15                        | QPSK       | 36      | 0         | 21.62                 | 21.74              | 21.85              | 21.80               | 21.84        | 23                  |
| 15                        | QPSK       | 36      | 20        | 21.65                 | 21.84              | 21.85              | 21.79               | 21.73        |                     |
| 15                        | QPSK       | 36      | 39        | 21.66                 | 21.49              | 21.76              | 21.82               | 21.84        |                     |
| 15                        | QPSK       | 75      | 0         | 21.61                 | 21.62              | 21.80              | 21.78               | 21.85        | 23                  |
| 15                        | 16QAM      | 1       | 0         | 21.68                 | 21.84              | 21.92              | 21.84               | 21.91        |                     |
| 15                        | 16QAM      | 1       | 37        | 21.78                 | 21.90              | 21.83              | 21.82               | 21.86        |                     |
| 15                        | 16QAM      | 1       | 74        | 21.60                 | 21.81              | 21.84              | 21.84               | 21.83        | 22                  |
| 15                        | 16QAM      | 36      | 0         | 20.56                 | 20.75              | 20.81              | 20.72               | 20.79        |                     |
| 15                        | 16QAM      | 36      | 20        | 20.66                 | 20.87              | 20.79              | 20.83               | 20.74        |                     |
| 15                        | 16QAM      | 36      | 39        | 20.60                 | 20.58              | 20.73              | 20.82               | 20.87        | 22                  |
| 15                        | 16QAM      | 75      | 0         | 20.34                 | 20.74              | 20.78              | 20.66               | 20.72        |                     |
| 15                        | 64QAM      | 1       | 0         | 20.87                 | 20.79              | 20.94              | 20.79               | 20.78        |                     |
| 15                        | 64QAM      | 1       | 37        | 20.58                 | 20.90              | 20.81              | 20.76               | 20.83        | 22                  |
| 15                        | 64QAM      | 1       | 74        | 20.71                 | 20.64              | 20.86              | 20.82               | 20.87        |                     |
| 15                        | 64QAM      | 36      | 0         | 19.56                 | 19.86              | 19.71              | 19.69               | 19.87        |                     |
| 15                        | 64QAM      | 36      | 20        | 19.65                 | 19.60              | 19.73              | 19.91               | 19.93        | 21                  |
| 15                        | 64QAM      | 36      | 39        | 19.53                 | 19.56              | 19.73              | 19.86               | 19.72        |                     |
| 15                        | 64QAM      | 75      | 0         | 19.69                 | 19.64              | 19.96              | 19.66               | 19.97        |                     |
| Channel                   |            |         |           | 55290                 | 55815              | 55990              | 56165               | 56590        | Tune-up limit (dBm) |
| Frequency (MHz)           |            |         |           | 3505                  | 3607.5             | 3625               | 3642.5              | 3695         |                     |
| 10                        | QPSK       | 1       | 0         | 22.63                 | 22.79              | 22.83              | 22.72               | 22.76        | 24                  |
| 10                        | QPSK       | 1       | 65        | 22.66                 | 22.74              | 22.81              | 22.77               | 22.72        |                     |
| 10                        | QPSK       | 1       | 49        | 22.51                 | 22.55              | 22.74              | 22.75               | 22.70        |                     |
| 10                        | QPSK       | 25      | 0         | 21.60                 | 21.75              | 21.80              | 21.89               | 21.91        | 23                  |
| 10                        | QPSK       | 25      | 12        | 21.55                 | 21.74              | 21.91              | 21.92               | 21.89        |                     |
| 10                        | QPSK       | 25      | 25        | 21.61                 | 21.69              | 21.85              | 21.75               | 21.68        |                     |
| 10                        | QPSK       | 50      | 0         | 21.51                 | 21.73              | 21.83              | 21.83               | 21.72        | 23                  |
| 10                        | 16QAM      | 1       | 0         | 21.78                 | 21.85              | 21.91              | 21.91               | 21.89        |                     |
| 10                        | 16QAM      | 1       | 25        | 21.72                 | 21.93              | 21.85              | 21.86               | 21.80        |                     |
| 10                        | 16QAM      | 1       | 49        | 21.53                 | 21.59              | 21.86              | 21.74               | 21.95        | 22                  |
| 10                        | 16QAM      | 25      | 0         | 20.73                 | 20.77              | 20.82              | 20.85               | 20.73        |                     |
| 10                        | 16QAM      | 25      | 12        | 20.59                 | 20.86              | 20.67              | 20.83               | 20.86        |                     |
| 10                        | 16QAM      | 25      | 25        | 20.52                 | 20.68              | 20.81              | 20.62               | 20.57        | 22                  |
| 10                        | 16QAM      | 50      | 0         | 20.57                 | 20.62              | 20.79              | 20.89               | 20.76        |                     |
| 10                        | 64QAM      | 1       | 0         | 20.75                 | 20.85              | 20.90              | 20.81               | 20.84        |                     |
| 10                        | 64QAM      | 1       | 25        | 20.63                 | 20.81              | 20.88              | 20.73               | 20.78        | 22                  |
| 10                        | 64QAM      | 1       | 49        | 20.76                 | 20.74              | 20.80              | 20.84               | 20.87        |                     |
| 10                        | 64QAM      | 25      | 0         | 19.68                 | 19.74              | 19.81              | 19.76               | 19.84        |                     |
| 10                        | 64QAM      | 25      | 12        | 19.57                 | 19.62              | 19.86              | 19.70               | 19.74        | 21                  |
| 10                        | 64QAM      | 25      | 25        | 19.62                 | 19.60              | 19.60              | 19.60               | 19.86        |                     |
| 10                        | 64QAM      | 50      | 0         | 19.44                 | 19.55              | 19.75              | 19.72               | 19.82        |                     |
| Channel                   |            |         |           | 55265                 | 55810              | 55990              | 56170               | 56175        | Tune-up limit (dBm) |
| Frequency (MHz)           |            |         |           | 3502.5                | 3607               | 3625               | 3643                | 3697.5       |                     |
| 5                         | QPSK       | 1       | 0         | 22.42                 | 22.71              | 22.85              | 22.81               | 22.76        | 24                  |
| 5                         | QPSK       | 1       | 12        | 22.72                 | 22.84              | 22.83              | 22.74               | 22.83        |                     |
| 5                         | QPSK       | 1       | 24        | 22.42                 | 22.62              | 22.79              | 22.68               | 22.70        |                     |
| 5                         | QPSK       | 12      | 0         | 21.58                 | 21.93              | 22.06              | 21.79               | 22.08        | 23                  |
| 5                         | QPSK       | 12      | 7         | 21.66                 | 21.63              | 21.92              | 21.67               | 21.83        |                     |
| 5                         | QPSK       | 12      | 13        | 21.35                 | 21.63              | 21.63              | 21.69               | 21.94        |                     |
| 5                         | QPSK       | 25      | 0         | 21.40                 | 21.58              | 21.89              | 21.71               | 21.72        | 23                  |
| 5                         | 16QAM      | 1       | 0         | 21.66                 | 21.89              | 22.01              | 21.90               | 21.95        |                     |
| 5                         | 16QAM      | 1       | 12        | 21.85                 | 21.77              | 22.05              | 21.67               | 22.11        |                     |
| 5                         | 16QAM      | 1       | 24        | 21.48                 | 21.75              | 21.99              | 21.82               | 22.04        | 22                  |
| 5                         | 16QAM      | 12      | 0         | 20.67                 | 20.84              | 20.89              | 20.69               | 20.83        |                     |
| 5                         | 16QAM      | 12      | 7         | 20.69                 | 20.90              | 20.85              | 20.79               | 20.93        |                     |
| 5                         | 16QAM      | 12      | 13        | 20.55                 | 20.54              | 20.52              | 20.70               | 20.86        | 22                  |
| 5                         | 16QAM      | 25      | 0         | 20.42                 | 20.65              | 20.71              | 20.88               | 20.89        |                     |
| 5                         | 64QAM      | 1       | 0         | 20.87                 | 21.07              | 20.94              | 21.12               | 21.12        |                     |
| 5                         | 64QAM      | 1       | 12        | 20.75                 | 21.02              | 20.79              | 20.86               | 20.89        | 22                  |
| 5                         | 64QAM      | 1       | 24        | 20.55                 | 20.86              | 20.81              | 21.06               | 20.98        |                     |
| 5                         | 64QAM      | 12      | 0         | 19.43                 | 19.59              | 20.01              | 19.76               | 19.79        |                     |
| 5                         | 64QAM      | 12      | 7         | 19.50                 | 19.71              | 19.75              | 19.72               | 19.95        | 21                  |
| 5                         | 64QAM      | 12      | 13        | 19.48                 | 19.79              | 19.62              | 19.67               | 19.76        |                     |
| 5                         | 64QAM      | 25      | 0         | 19.46                 | 19.61              | 19.67              | 19.63               | 19.85        |                     |