

## Appendix P-4G Peak-to-average Ratio(PAR)

### Peak-to-average Ratio(PAR)

#### FCC Part 22H

##### B5, Normal

| Mode                    | Result (dB) | Limit (dB) |
|-------------------------|-------------|------------|
| 10MHz_Low_QPSK_1@0      | 5.62        | 13         |
| 10MHz_Low_QPSK_50@0     | 5.16        | 13         |
| 10MHz_Low_16QAM_1@0     | <b>6.41</b> | 13         |
| 10MHz_Low_16QAM_50@0    | 6.12        | 13         |
| 10MHz_Middle_QPSK_1@0   | 5.91        | 13         |
| 10MHz_Middle_QPSK_50@0  | 5.30        | 13         |
| 10MHz_Middle_16QAM_1@0  | 6.20        | 13         |
| 10MHz_Middle_16QAM_50@0 | 6.14        | 13         |
| 10MHz_High_QPSK_1@0     | 5.04        | 13         |
| 10MHz_High_QPSK_50@0    | 5.28        | 13         |
| 10MHz_High_16QAM_1@0    | 5.25        | 13         |
| 10MHz_High_16QAM_50@0   | 6.09        | 13         |

##### B26\_2, Normal

| Mode                    | Result (dB) | Limit (dB) |
|-------------------------|-------------|------------|
| 15MHz_Low_QPSK_1@0      | 5.07        | 13         |
| 15MHz_Low_QPSK_75@0     | 5.71        | 13         |
| 15MHz_Low_16QAM_1@0     | 5.80        | 13         |
| 15MHz_Low_16QAM_75@0    | 6.23        | 13         |
| 15MHz_Middle_QPSK_1@0   | 5.36        | 13         |
| 15MHz_Middle_QPSK_75@0  | 5.83        | 13         |
| 15MHz_Middle_16QAM_1@0  | <b>6.87</b> | 13         |
| 15MHz_Middle_16QAM_75@0 | 6.26        | 13         |
| 15MHz_High_QPSK_1@0     | 5.86        | 13         |
| 15MHz_High_QPSK_75@0    | 5.71        | 13         |
| 15MHz_High_16QAM_1@0    | 6.64        | 13         |
| 15MHz_High_16QAM_75@0   | 6.23        | 13         |

**Note: worst case.**

## FCC Part 24E

### B2, Normal

| Mode                     | Result (dB) | Limit (dB) |
|--------------------------|-------------|------------|
| 20MHz_Low_QPSK_1@0       | 5.65        | 13         |
| 20MHz_Low_QPSK_100@0     | 5.65        | 13         |
| 20MHz_Low_16QAM_1@0      | 6.20        | 13         |
| 20MHz_Low_16QAM_100@0    | 6.38        | 13         |
| 20MHz_Middle_QPSK_1@0    | 5.74        | 13         |
| 20MHz_Middle_QPSK_100@0  | 5.45        | 13         |
| 20MHz_Middle_16QAM_1@0   | <b>6.93</b> | 13         |
| 20MHz_Middle_16QAM_100@0 | 6.29        | 13         |
| 20MHz_High_QPSK_1@0      | 5.59        | 13         |
| 20MHz_High_QPSK_100@0    | 5.74        | 13         |
| 20MHz_High_16QAM_1@0     | 6.38        | 13         |
| 20MHz_High_16QAM_100@0   | 6.58        | 13         |

### B25, Normal

| Mode                     | Result (dB) | Limit (dB) |
|--------------------------|-------------|------------|
| 20MHz_Low_QPSK_1@0       | 5.88        | 13         |
| 20MHz_Low_QPSK_100@0     | 5.59        | 13         |
| 20MHz_Low_16QAM_1@0      | <b>6.78</b> | 13         |
| 20MHz_Low_16QAM_100@0    | 6.41        | 13         |
| 20MHz_Middle_QPSK_1@0    | 5.80        | 13         |
| 20MHz_Middle_QPSK_100@0  | 5.54        | 13         |
| 20MHz_Middle_16QAM_1@0   | 6.67        | 13         |
| 20MHz_Middle_16QAM_100@0 | 6.49        | 13         |
| 20MHz_High_QPSK_1@0      | 5.71        | 13         |
| 20MHz_High_QPSK_100@0    | 5.80        | 13         |
| 20MHz_High_16QAM_1@0     | 6.49        | 13         |
| 20MHz_High_16QAM_100@0   | 6.46        | 13         |

**Note: worst case.**

## FCC Part 27

### B4, Normal

| Mode                     | Result (dB) | Limit (dB) |
|--------------------------|-------------|------------|
| 20MHz_Low_QPSK_1@0       | 4.70        | 13         |
| 20MHz_Low_QPSK_100@0     | 5.25        | 13         |
| 20MHz_Low_16QAM_1@0      | 5.39        | 13         |
| 20MHz_Low_16QAM_100@0    | 6.17        | 13         |
| 20MHz_Middle_QPSK_1@0    | 5.19        | 13         |
| 20MHz_Middle_QPSK_100@0  | 5.36        | 13         |
| 20MHz_Middle_16QAM_1@0   | 5.94        | 13         |
| 20MHz_Middle_16QAM_100@0 | 6.26        | 13         |
| 20MHz_High_QPSK_1@0      | 5.01        | 13         |
| 20MHz_High_QPSK_100@0    | <b>8.41</b> | 13         |
| 20MHz_High_16QAM_1@0     | 5.71        | 13         |
| 20MHz_High_16QAM_100@0   | 6.49        | 13         |

### B7, Normal

| Mode                     | Result (dB) | Limit (dB) |
|--------------------------|-------------|------------|
| 20MHz_Low_QPSK_1@0       | 5.25        | 13         |
| 20MHz_Low_QPSK_100@0     | 5.28        | 13         |
| 20MHz_Low_16QAM_1@0      | 6.09        | 13         |
| 20MHz_Low_16QAM_100@0    | 6.12        | 13         |
| 20MHz_Middle_QPSK_1@0    | 5.30        | 13         |
| 20MHz_Middle_QPSK_100@0  | 5.04        | 13         |
| 20MHz_Middle_16QAM_1@0   | 5.88        | 13         |
| 20MHz_Middle_16QAM_100@0 | 5.91        | 13         |
| 20MHz_High_QPSK_1@0      | 5.07        | 13         |
| 20MHz_High_QPSK_100@0    | 5.28        | 13         |
| 20MHz_High_16QAM_1@0     | 6.09        | 13         |
| 20MHz_High_16QAM_100@0   | <b>6.14</b> | 13         |

### B12, Normal

| Mode                    | Result (dB) | Limit (dB) |
|-------------------------|-------------|------------|
| 10MHz_Low_QPSK_1@0      | 5.51        | 13         |
| 10MHz_Low_QPSK_50@0     | 5.33        | 13         |
| 10MHz_Low_16QAM_1@0     | 5.83        | 13         |
| 10MHz_Low_16QAM_50@0    | 6.17        | 13         |
| 10MHz_Middle_QPSK_1@0   | 5.77        | 13         |
| 10MHz_Middle_QPSK_50@0  | 5.10        | 13         |
| 10MHz_Middle_16QAM_1@0  | 6.09        | 13         |
| 10MHz_Middle_16QAM_50@0 | 5.97        | 13         |
| 10MHz_High_QPSK_1@0     | 5.10        | 13         |
| 10MHz_High_QPSK_50@0    | 5.16        | 13         |
| 10MHz_High_16QAM_1@0    | <b>6.41</b> | 13         |
| 10MHz_High_16QAM_50@0   | 5.97        | 13         |

### B13, Normal

| Mode                    | Result (dB) | Limit (dB) |
|-------------------------|-------------|------------|
| 10MHz_Middle_QPSK_1@0   | 4.14        | 13         |
| 10MHz_Middle_QPSK_50@0  | 5.07        | 13         |
| 10MHz_Middle_16QAM_1@0  | 4.03        | 13         |
| 10MHz_Middle_16QAM_50@0 | <b>6</b>    | 13         |

### B38, Normal

| Mode                     | Result (dB) | Limit (dB) |
|--------------------------|-------------|------------|
| 20MHz_Low_QPSK_1@0       | 5.86        | 13         |
| 20MHz_Low_QPSK_100@0     | 5.88        | 13         |
| 20MHz_Low_16QAM_1@0      | 6.29        | 13         |
| 20MHz_Low_16QAM_100@0    | 6.49        | 13         |
| 20MHz_Middle_QPSK_1@0    | 5.57        | 13         |
| 20MHz_Middle_QPSK_100@0  | 5.45        | 13         |
| 20MHz_Middle_16QAM_1@0   | 6.46        | 13         |
| 20MHz_Middle_16QAM_100@0 | 6.35        | 13         |
| 20MHz_High_QPSK_1@0      | 5.42        | 13         |
| 20MHz_High_QPSK_100@0    | 5.65        | 13         |
| 20MHz_High_16QAM_1@0     | 6.06        | 13         |
| 20MHz_High_16QAM_100@0   | <b>6.52</b> | 13         |

**B41, Normal**

| Mode                     | Result (dB) | Limit (dB) |
|--------------------------|-------------|------------|
| 20MHz_Low_QPSK_1@0       | 5.59        | 13         |
| 20MHz_Low_QPSK_100@0     | 6           | 13         |
| 20MHz_Low_16QAM_1@0      | 6.32        | 13         |
| 20MHz_Low_16QAM_100@0    | 6.61        | 13         |
| 20MHz_Middle_QPSK_1@0    | 6.06        | 13         |
| 20MHz_Middle_QPSK_100@0  | <b>8.58</b> | 13         |
| 20MHz_Middle_16QAM_1@0   | 6.87        | 13         |
| 20MHz_Middle_16QAM_100@0 | 6.38        | 13         |
| 20MHz_High_QPSK_1@0      | 6.03        | 13         |
| 20MHz_High_QPSK_100@0    | 5.83        | 13         |
| 20MHz_High_16QAM_1@0     | 7.48        | 13         |
| 20MHz_High_16QAM_100@0   | 6.64        | 13         |

**B66, Normal**

| Mode                     | Result (dB) | Limit (dB) |
|--------------------------|-------------|------------|
| 20MHz_Low_QPSK_1@0       | 4.93        | 13         |
| 20MHz_Low_QPSK_100@0     | 5.36        | 13         |
| 20MHz_Low_16QAM_1@0      | 5.51        | 13         |
| 20MHz_Low_16QAM_100@0    | 6.23        | 13         |
| 20MHz_Middle_QPSK_1@0    | 4.93        | 13         |
| 20MHz_Middle_QPSK_100@0  | 5.68        | 13         |
| 20MHz_Middle_16QAM_1@0   | 5.54        | 13         |
| 20MHz_Middle_16QAM_100@0 | <b>6.46</b> | 13         |
| 20MHz_High_QPSK_1@0      | 5.10        | 13         |
| 20MHz_High_QPSK_100@0    | 5.45        | 13         |
| 20MHz_High_16QAM_1@0     | 5.83        | 13         |
| 20MHz_High_16QAM_100@0   | 6.41        | 13         |

### B71, Normal

| Mode                     | Result (dB) | Limit (dB) |
|--------------------------|-------------|------------|
| 20MHz_Low_QPSK_1@0       | 4.64        | 13         |
| 20MHz_Low_QPSK_100@0     | 5.39        | 13         |
| 20MHz_Low_16QAM_1@0      | 5.77        | 13         |
| 20MHz_Low_16QAM_100@0    | <b>6.43</b> | 13         |
| 20MHz_Middle_QPSK_1@0    | 4.99        | 13         |
| 20MHz_Middle_QPSK_100@0  | 5.45        | 13         |
| 20MHz_Middle_16QAM_1@0   | 5.80        | 13         |
| 20MHz_Middle_16QAM_100@0 | 6.38        | 13         |
| 20MHz_High_QPSK_1@0      | 4.99        | 13         |
| 20MHz_High_QPSK_100@0    | 5.42        | 13         |
| 20MHz_High_16QAM_1@0     | 5.80        | 13         |
| 20MHz_High_16QAM_100@0   | 6.38        | 13         |

### B17, Normal

| Mode                    | Result (dB) | Limit (dB) |
|-------------------------|-------------|------------|
| 10MHz_Low_QPSK_1@0      | 4.61        | 13         |
| 10MHz_Low_QPSK_50@0     | 4.99        | 13         |
| 10MHz_Low_16QAM_1@0     | 5.04        | 13         |
| 10MHz_Low_16QAM_50@0    | 5.91        | 13         |
| 10MHz_Middle_QPSK_1@0   | 5.28        | 13         |
| 10MHz_Middle_QPSK_50@0  | 5.04        | 13         |
| 10MHz_Middle_16QAM_1@0  | 5.71        | 13         |
| 10MHz_Middle_16QAM_50@0 | <b>6</b>    | 13         |
| 10MHz_High_QPSK_1@0     | 5.16        | 13         |
| 10MHz_High_QPSK_50@0    | 5.13        | 13         |
| 10MHz_High_16QAM_1@0    | 5.59        | 13         |
| 10MHz_High_16QAM_50@0   | 5.86        | 13         |

**Note: worst case.**

\*\*\*\*\* **END** \*\*\*\*\*