

## A.4 MAXIMUM PEAK OUTPUT POWER

|              |                                |            |               |
|--------------|--------------------------------|------------|---------------|
| Test Date    | 2022/07/14 ~ 18                | Temp./Hum. | 24 ~ 26°C/48% |
| Cable Loss   | 0.5dB                          | Tested By  | Kuper Hsu     |
| Test Voltage | AC 120V, 60Hz (via AC Adapter) |            |               |

### A.4.1 Peak Output Power

| Mode    | Centre Frequency (MHz) | Peak Output Power (dBm) |       | Max Peak Output Power (dBm) | Antenna Gain (dBi) |      | E.I.R.P (dBm) <sup>Note 2</sup> | Limit  |
|---------|------------------------|-------------------------|-------|-----------------------------|--------------------|------|---------------------------------|--|
|         |                        | Aux                     | Main  |                             | Aux                | Main |                                 |  |
| 802.11b | 2412                   | 23.72                   | 23.83 | 23.830                      | 1.90               | 3.10 | 26.93                           | <30dBm<br>(Maximum Peak Output Power)<br><36dBm<br>(E.I.R.P) |
|         | 2442                   | 22.93                   | 23.84 | <b>23.840</b>               | 2.20               | 4.40 | <b>28.24</b>                    |  |
|         | 2462                   | 23.71                   | 23.73 | 23.730                      | 2.20               | 4.40 | 28.13                           |  |
|         | 2467                   | 22.78                   | 22.38 | 22.780                      | 3.20               | 4.50 | 26.88                           |  |
|         | 2472                   | 21.38                   | 20.26 | 21.380                      | 3.20               | 4.50 | 24.76                           |  |
| 802.11g | 2412                   | 21.66                   | 22.36 | 22.360                      | 1.90               | 3.10 | 25.46                           |  |
|         | 2417                   | 23.07                   | 23.02 | 23.070                      | 2.30               | 4.80 | 27.82                           |  |
|         | 2442                   | 23.58                   | 24.43 | <b>24.430</b>               | 2.20               | 4.40 | <b>28.83</b>                    |  |
|         | 2457                   | 23.22                   | 23.19 | 23.220                      | 2.20               | 4.40 | 27.59                           |  |
|         | 2462                   | 21.12                   | 21.41 | 21.410                      | 2.20               | 4.40 | 25.81                           |  |
|         | 2467                   | 19.79                   | 18.82 | 19.790                      | 3.20               | 4.50 | 23.32                           |  |
|         | 2472                   | 16.91                   | 16.61 | 16.910                      | 3.20               | 4.50 | 21.11                           |  |

Note: 1. The results have been included cable loss.

2. E.I.R.P.= The Max. of Peak Output Power (AUX or Main)(dBm)+ Antenna Gain (dBi).

| Mode          | Centre Frequency (MHz) | Peak Output Power (dBm) |       | Total Peak Output Power Note 2 (dBm) | Directional Gain Note 3 (dBi) | E.I.R.P. Note 4 (dBm) | Limit  |
|---------------|------------------------|-------------------------|-------|--------------------------------------|-------------------------------|-----------------------|--|
|               |                        | Aux                     | Main  |                                      |                               |                       |  |
| 802.11n-HT20  | 2412                   | 20.08                   | 20.19 | 23.146                               | 2.54                          | 25.69                 | <30dBm<br>(Maximum Peak Output Power)<br><36dBm<br>(E.I.R.P) |
|               | 2417                   | 21.38                   | 21.47 | 24.436                               | 3.73                          | 28.17                 |  |
|               | 2422                   | 22.65                   | 22.68 | 25.675                               | 3.73                          | 29.41                 |  |
|               | 2442                   | 23.80                   | 23.91 | <b>26.866</b>                        | 3.44                          | <b>30.31</b>          |  |
|               | 2457                   | 22.67                   | 22.89 | 25.792                               | 3.44                          | 29.23                 |  |
|               | 2462                   | 19.49                   | 19.56 | 22.535                               | 3.44                          | 25.98                 |  |
|               | 2467                   | 15.71                   | 15.47 | 18.602                               | 3.90                          | 22.50                 |  |
|               | 2472                   | 13.53                   | 13.45 | 16.500                               | 3.90                          | 20.40                 |  |
| 802.11n-HT40  | 2422                   | 20.56                   | 20.83 | 23.707                               | 3.73                          | 27.44                 |  |
|               | 2442                   | 21.23                   | 21.56 | <b>24.408</b>                        | 3.44                          | <b>27.85</b>          |  |
|               | 2452                   | 20.18                   | 20.33 | 23.266                               | 3.44                          | 26.71                 |  |
|               | 2457                   | 17.51                   | 17.65 | 20.591                               | 3.44                          | 24.03                 |  |
|               | 2462                   | 14.79                   | 14.82 | 17.815                               | 3.44                          | 21.26                 |  |
| 802.11ax-HE20 | 2412                   | 20.43                   | 20.47 | 23.460                               | 2.54                          | 26.00                 |  |
|               | 2417                   | 21.62                   | 21.80 | 24.721                               | 3.73                          | 28.45                 |  |
|               | 2422                   | 17.85                   | 17.83 | 20.850                               | 3.73                          | 24.58                 |  |
|               | 2442                   | 23.84                   | 24.05 | <b>26.957</b>                        | 3.44                          | <b>30.40</b>          |  |
|               | 2457                   | 22.84                   | 23.14 | 26.003                               | 3.44                          | 29.44                 |  |
|               | 2462                   | 19.94                   | 19.77 | 22.866                               | 3.44                          | 26.31                 |  |
|               | 2467                   | 16.01                   | 15.84 | 18.936                               | 3.90                          | 22.84                 |  |
|               | 2472                   | 13.58                   | 13.76 | 16.681                               | 3.90                          | 20.58                 |  |
| 802.11ax-HE40 | 2422                   | 20.86                   | 20.68 | 23.781                               | 3.73                          | 27.51                 |  |
|               | 2442                   | 21.28                   | 21.55 | <b>24.427</b>                        | 3.44                          | <b>27.87</b>          |  |
|               | 2452                   | 19.84                   | 20.27 | 23.071                               | 3.44                          | 26.51                 |  |
|               | 2457                   | 20.14                   | 20.53 | 23.350                               | 3.44                          | 26.79                 |  |
|               | 2462                   | 14.77                   | 14.89 | 17.841                               | 3.44                          | 21.28                 |  |

Note: 1. The results have been included cable loss.

2. According to KDB 662911 D01 E)1), Total peak power = sum to individual output power

3. According to KDB 662911 D01 d) ii), transmit signals are completely uncorrelated, then

$$\text{Directional gain} = 10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/N_{\text{ANT}}] \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{3.1/10} + 10^{1.9/10})/2] = 2.54 \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{4.8/10} + 10^{2.3/10})/2] = 3.73 \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{4.4/10} + 10^{2.2/10})/2] = 3.44 \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{4.5/10} + 10^{3.2/10})/2] = 3.90 \text{ dBi}$$

The MIMO is uncorrelated and supported SDM(Spatial Division Multiplexing) mode only. This radio device doesn't support beamforming and Cyclic Delay Diversity (CDD).

4. E.I.R.P.= The Total Peak Output Power (dBm)+ Directional Gain (dBi).

| Mode          | Centre Frequency (MHz) | RU Configuration | Peak Output Power (dBm) |       | Total Peak Output Power Note 2 (dBm) | Directional Gain Note 3 (dBi) | E.I.R.P Note 4 (dBm) | Limit  |
|---------------|------------------------|------------------|-------------------------|-------|--------------------------------------|-------------------------------|----------------------|--|
|               |                        |                  | Aux                     | Main  |                                      |                               |                      |  |
| 802.11ax-HE20 | 2412                   | 26/30            | 22.19                   | 22.36 | 25.286                               | 2.54                          | 27.83                | <30dBm<br>(Maximum Peak Output Power)<br><36dBm<br>(E.I.R.P) |
|               |                        | 52/37            | 22.50                   | 22.15 | 25.339                               | 2.54                          | 27.88                |  |
|               |                        | 106/53           | 22.77                   | 22.44 | <b>25.618</b>                        | 2.54                          | <b>28.16</b>         |  |
|               | 2472                   | 26/8             | 19.36                   | 19.23 | 22.306                               | 3.90                          | 26.21                |  |
|               |                        | 52/40            | 20.10                   | 19.20 | 22.684                               | 3.90                          | 26.58                |  |
|               |                        | 106/54           | 20.03                   | 19.31 | <b>22.695</b>                        | 3.90                          | <b>26.60</b>         |  |
| 802.11ax-HE40 | 2422                   | 242/61           | 19.61                   | 20.08 | <b>22.862</b>                        | 3.73                          | <b>26.59</b>         |  |
|               | 2462                   | 242/62           | 20.35                   | 19.60 | <b>23.001</b>                        | 3.44                          | <b>26.44</b>         |  |

Note: 1. The results have been included cable loss.

2. According to KDB 662911 D01 E)1), Total peak power = sum to individual output power

3. According to KDB 662911 D01 d) ii), transmit signals are completely uncorrelated, then

$$\text{Directional gain} = 10 \log[(10^{3.1/10} + 10^{1.9/10})/2] = 2.54\text{dBi}$$

$$\text{Directional gain} = 10 \log[(10^{4.8/10} + 10^{2.3/10})/2] = 3.73\text{dBi}$$

$$\text{Directional gain} = 10 \log[(10^{4.4/10} + 10^{2.2/10})/2] = 3.44\text{dBi}$$

$$\text{Directional gain} = 10 \log[(10^{4.5/10} + 10^{3.2/10})/2] = 3.90\text{dBi}$$

The MIMO is uncorrelated and supported SDM(Spatial Division Multiplexing) mode only. This radio device doesn't support beamforming and Cyclic Delay Diversity (CDD).

4. E.I.R.P.= The Total Peak Output Power (dBm)+ Directional Gain (dBi).

| Mode               | Centre Frequency (MHz) | Peak Output Power (dBm) | Antenna Gain (dBi) | E.I.R.P (dBm) <sup>Note 2</sup> | Limit  |
|--------------------|------------------------|-------------------------|--------------------|---------------------------------|--|
|                    |                        | Aux                     | Aux                |                                 |  |
| BLE (1Mbps)        | 2402                   | 5.490                   | 1.90               | 7.39                            | <30dBm<br>(Maximum Peak Output Power)<br><36dBm<br>(E.I.R.P) |
|                    | 2440                   | 5.880                   | 2.20               | 8.08                            |  |
|                    | 2480                   | 5.660                   | 3.20               | 8.86                            |  |
| BLE (2Mbps)        | 2402                   | 5.580                   | 1.90               | 7.48                            |  |
|                    | 2440                   | 5.890                   | 2.20               | 8.09                            |  |
|                    | 2480                   | 5.670                   | 3.20               | 8.87                            |  |
| BLE (PHY Coded S2) | 2402                   | 5.590                   | 1.90               | 7.49                            |  |
|                    | 2440                   | <b>5.900</b>            | 2.20               | 8.10                            |  |
|                    | 2480                   | 5.670                   | 3.20               | 8.87                            |  |
| BLE (PHY Coded S8) | 2402                   | 5.400                   | 1.90               | 7.30                            |  |
|                    | 2440                   | 5.650                   | 2.20               | 7.85                            |  |
|                    | 2480                   | 5.640                   | 3.20               | 8.84                            |  |

Note: 1. The results have been included cable loss.  
 2. E.I.R.P.= The Peak Output Power (dBm)+ Antenna Gain (dBi).

A.4.2 Average Output Power (Reporting only)

| Mode    | Centre Frequency (MHz) | Average Output Power (dBm) |       | Duty cycle factor (dB)<br>10log (1/x) | Max Average Output Power (dBm) | Antenna Gain (dBi) |      | E.I.R.P (dBm) <sup>Note 2</sup> | Limit  |
|---------|------------------------|----------------------------|-------|---------------------------------------|--------------------------------|--------------------|------|---------------------------------|--|
|         |                        | Aux                        | Main  |                                       |                                | Aux                | Main |                                 |  |
| 802.11b | 2412                   | 20.04                      | 19.43 | 0.110                                 | 20.15                          | 1.90               | 3.10 | 22.64                           | <30dBm<br>(Maximum Peak Output Power)<br><36dBm<br>(E.I.R.P) |
|         | 2442                   | 19.86                      | 20.08 |                                       | 20.19                          | 2.20               | 4.40 | 24.59                           |  |
|         | 2462                   | 19.46                      | 20.01 |                                       | 20.12                          | 2.20               | 4.40 | 24.52                           |  |
|         | 2467                   | 19.53                      | 18.77 |                                       | 19.64                          | 3.20               | 4.50 | 23.38                           |  |
|         | 2472                   | 16.91                      | 15.98 |                                       | 17.02                          | 3.20               | 4.50 | 20.59                           |  |
| 802.11g | 2412                   | 16.58                      | 17.15 | 0.146                                 | 17.30                          | 1.90               | 3.10 | 20.40                           |  |
|         | 2417                   | 18.59                      | 18.87 |                                       | 19.02                          | 2.30               | 4.80 | 23.82                           |  |
|         | 2442                   | 19.48                      | 19.81 |                                       | 19.96                          | 2.20               | 4.40 | <b>24.36</b>                    |  |
|         | 2457                   | 18.27                      | 18.30 |                                       | 18.45                          | 2.20               | 4.40 | 22.85                           |  |
|         | 2462                   | 16.38                      | 17.00 |                                       | 17.15                          | 2.20               | 4.40 | 21.55                           |  |
|         | 2467                   | 14.66                      | 14.88 |                                       | 15.03                          | 3.20               | 4.50 | 19.53                           |  |
|         | 2472                   | 11.40                      | 10.90 |                                       | 11.55                          | 3.20               | 4.50 | 15.55                           |  |

Note: 1. The results have been included cable loss.

2. E.I.R.P.= The Max. of Average Output Power (AUX or Main)(dBm)+ Antenna Gain (dBi).

3. Max Average Output Power (dBm) = Max of each average output power (dBm)+ Duty Cycle Factor (dB) when duty cycle is less than 98%.

| Mode          | Centre Frequency (MHz) | Average Output Power (dBm) |       | Duty cycle factor (dB)<br>10log (1/x) | Total Average Output Power <sup>Note 2</sup> (dBm) | Directional Gain <sup>Note 3</sup> (dBi) | Average Output Power (E.I.R.P) <sup>Note 4</sup> (dBm) | Limit  |
|---------------|------------------------|----------------------------|-------|---------------------------------------|--|--|--|--|
|               |                        | Aux                        | Main  |                                       |  |  |  |  |
| 802.11n-HT20  | 2412                   | 15.21                      | 15.66 | 0.097                                 | 18.55  | 2.54                                     | 21.09  | <30dBm<br>(Maximum Peak Output Power)<br><36dBm<br>(E.I.R.P) |
|               | 2417                   | 16.76                      | 16.74 |                                       | 19.86  | 3.73                                     | 23.59  |  |
|               | 2422                   | 18.23                      | 18.02 |                                       | 21.23  | 3.73                                     | 24.96  |  |
|               | 2442                   | 19.11                      | 19.74 |                                       | 22.54  | 3.44                                     | <b>25.98</b>   |  |
|               | 2457                   | 17.50                      | 17.77 |                                       | 20.74  | 3.44                                     | 24.18  |  |
|               | 2462                   | 14.13                      | 14.68 |                                       | 17.52  | 3.44                                     | 20.96  |  |
|               | 2467                   | 10.68                      | 10.82 |                                       | 13.86  | 3.90                                     | 17.76  |  |
|               | 2472                   | 7.89                       | 7.93  |                                       | 11.02  | 3.90                                     | 14.92  |  |
| 802.11n-HT40  | 2422                   | 13.72                      | 14.26 | 0.114                                 | 17.12  | 3.73                                     | 20.85  |  |
|               | 2442                   | 15.12                      | 15.09 |                                       | 18.23  | 3.44                                     | <b>21.67</b>   |  |
|               | 2452                   | 14.27                      | 13.79 |                                       | 17.16  | 3.44                                     | 20.60  |  |
|               | 2457                   | 11.66                      | 11.42 |                                       | 14.67  | 3.44                                     | 18.11  |  |
|               | 2462                   | 8.15                       | 7.84  |                                       | 11.12  | 3.44                                     | 14.56  |  |
| 802.11ax-HE20 | 2412                   | 15.80                      | 15.56 | N/A                                   | 18.69  | 2.54                                     | 21.23  |  |
|               | 2417                   | 16.49                      | 17.17 |                                       | 19.85  | 3.73                                     | 23.58  |  |
|               | 2422                   | 17.49                      | 17.68 |                                       | 20.60  | 3.73                                     | 24.33  |  |
|               | 2442                   | 19.53                      | 20.02 |                                       | 22.79  | 3.44                                     | <b>26.23</b>   |  |
|               | 2457                   | 17.89                      | 18.06 |                                       | 20.99  | 3.44                                     | 24.43  |  |
|               | 2462                   | 14.51                      | 14.87 |                                       | 17.70  | 3.44                                     | 21.14  |  |
|               | 2467                   | 10.42                      | 10.62 |                                       | 13.53  | 3.90                                     | 17.43  |  |
|               | 2472                   | 7.05                       | 8.13  |                                       | 10.63  | 3.90                                     | 14.53  |  |
| 802.11ax-HE40 | 2422                   | 13.83                      | 13.83 | 0.106                                 | 16.95  | 3.73                                     | 20.68  |  |
|               | 2442                   | 14.60                      | 14.95 |                                       | 17.89  | 3.44                                     | <b>21.33</b>   |  |
|               | 2452                   | 13.73                      | 13.59 |                                       | 16.78  | 3.44                                     | 20.22  |  |
|               | 2457                   | 13.93                      | 13.66 |                                       | 16.91  | 3.44                                     | 20.35  |  |
|               | 2462                   | 8.11                       | 8.14  |                                       | 11.24  | 3.44                                     | 14.68  |  |

Note: 1. The results have been included cable loss.

2. According to KDB 662911 D01 E)1), Total Ave power = sum to individual output power + duty cycle factor (dB), when duty cycle is less than 98%.

3. According to KDB 662911 D01 d) ii), transmit signals are completely uncorrelated, then

$$\text{Directional gain} = 10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/N_{\text{ANT}}] \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{3.1/10} + 10^{1.9/10})/2] = 2.54 \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{4.8/10} + 10^{2.3/10})/2] = 3.73 \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{4.4/10} + 10^{2.2/10})/2] = 3.44 \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{4.5/10} + 10^{3.2/10})/2] = 3.90 \text{ dBi}$$

The MIMO is uncorrelated and supported SDM(Spatial Division Multiplexing) mode only. This radio device doesn't support beamforming and Cyclic Delay Diversity (CDD).

4. E.I.R.P.= The Total Average Output Power (dBm)+ Directional Gain (dBi).

| Mode          | Centre Frequency (MHz) | RU Configuration | Average Output Power (dBm) |       | Duty cycle factor (dB) 10log | Total Average Output Power Note 2 (dBm) | Directional Gain Note 3 (dBi) | Average Output Power (E.I.R.P.) <sup>Note 4</sup> | Limit  |
|---------------|------------------------|------------------|----------------------------|-------|------------------------------|---|-------------------------------|---|--|
|               |                        |                  | Aux                        | Main  |                              |   |                               |   |  |
| 802.11ax-HE20 | 2412                   | 26/30            | 17.83                      | 17.59 | N/A                          | 20.72                                   | 2.54                          | 23.26   | <30dBm<br>(Maximum Peak Output Power)<br><36dBm<br>(E.I.R.P) |
|               |                        | 52/37            | 17.64                      | 18.36 |                              | 21.03                                   | 2.54                          | 23.57   |  |
|               |                        | 106/53           | 18.05                      | 18.21 |                              | 21.14                                   | 2.54                          | <b>23.68</b>                                      |  |
|               | 2472                   | 26/8             | 4.85                       | 5.03  |                              | 7.95                                    | 3.90                          | 11.85   |  |
|               |                        | 52/40            | 6.48                       | 6.37  |                              | 9.44                                    | 3.90                          | <b>13.34</b>                                      |  |
|               |                        | 106/54           | 6.31                       | 6.30  |                              | 9.32                                    | 3.90                          | 13.22   |  |
| 802.11ax-HE40 | 2422                   | 242/61           | 14.82                      | 15.08 | N/A                          | 17.96                                   | 3.73                          | <b>21.69</b>                                      |  |
|               | 2462                   | 242/62           | 8.00                       | 8.11  |                              | 11.07                                   | 3.44                          | <b>14.51</b>                                      |  |

Note: 1. The results have been included cable loss.

2. According to KDB 662911 D01 E)1), Total Ave power = sum to individual output power + duty cycle factor (dB), when duty cycle is less than 98%.

3. According to KDB 662911 D01 d) ii), transmit signals are completely uncorrelated, then

$$\text{Directional gain} = 10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/N_{\text{ANT}}] \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{3.1/10} + 10^{1.9/10})/2] = 2.54\text{dBi}$$

$$\text{Directional gain} = 10 \log[(10^{4.8/10} + 10^{2.3/10})/2] = 3.73\text{dBi}$$

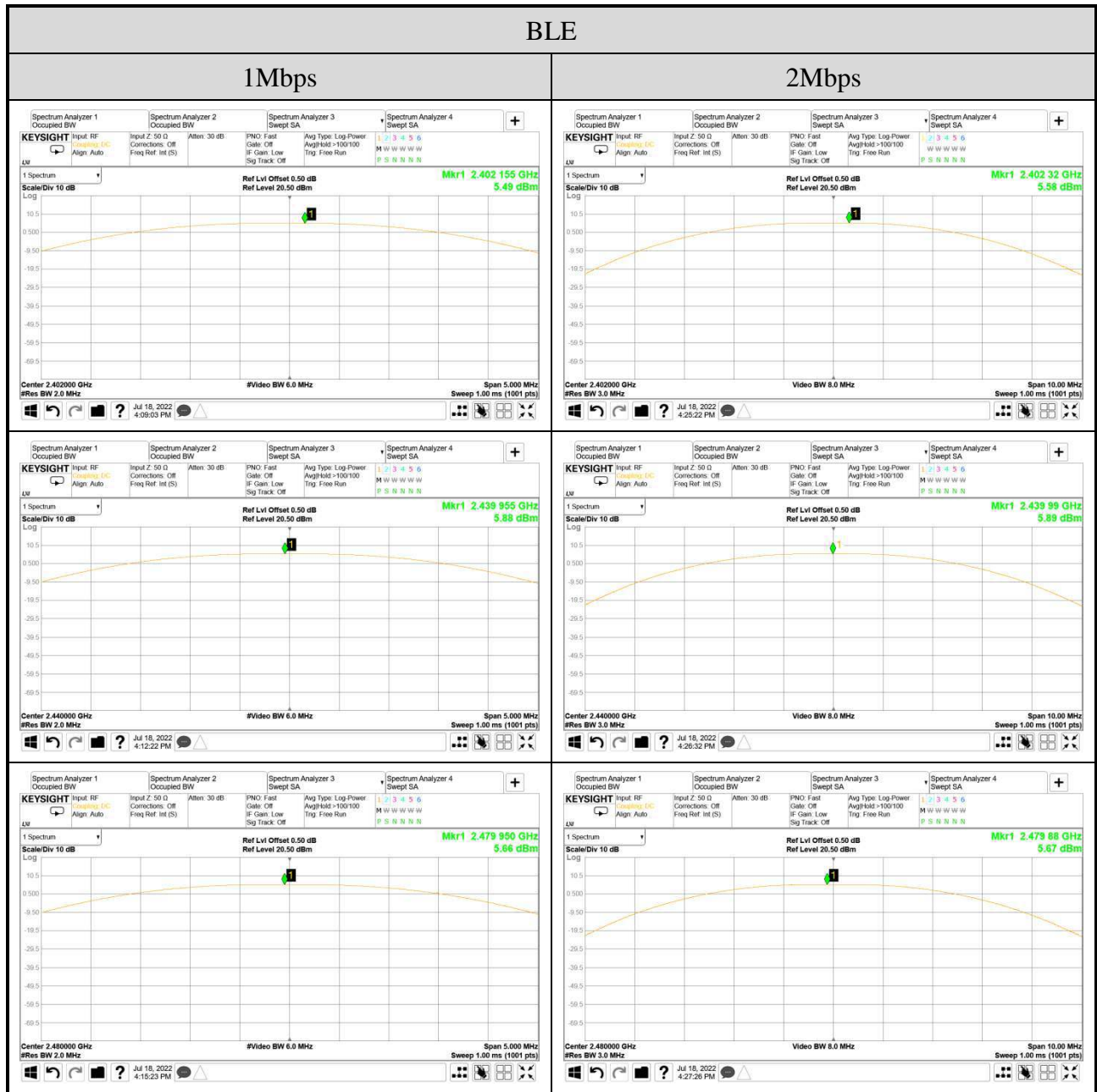
$$\text{Directional gain} = 10 \log[(10^{4.4/10} + 10^{2.2/10})/2] = 3.44\text{dBi}$$

$$\text{Directional gain} = 10 \log[(10^{4.5/10} + 10^{3.2/10})/2] = 3.90\text{dBi}$$

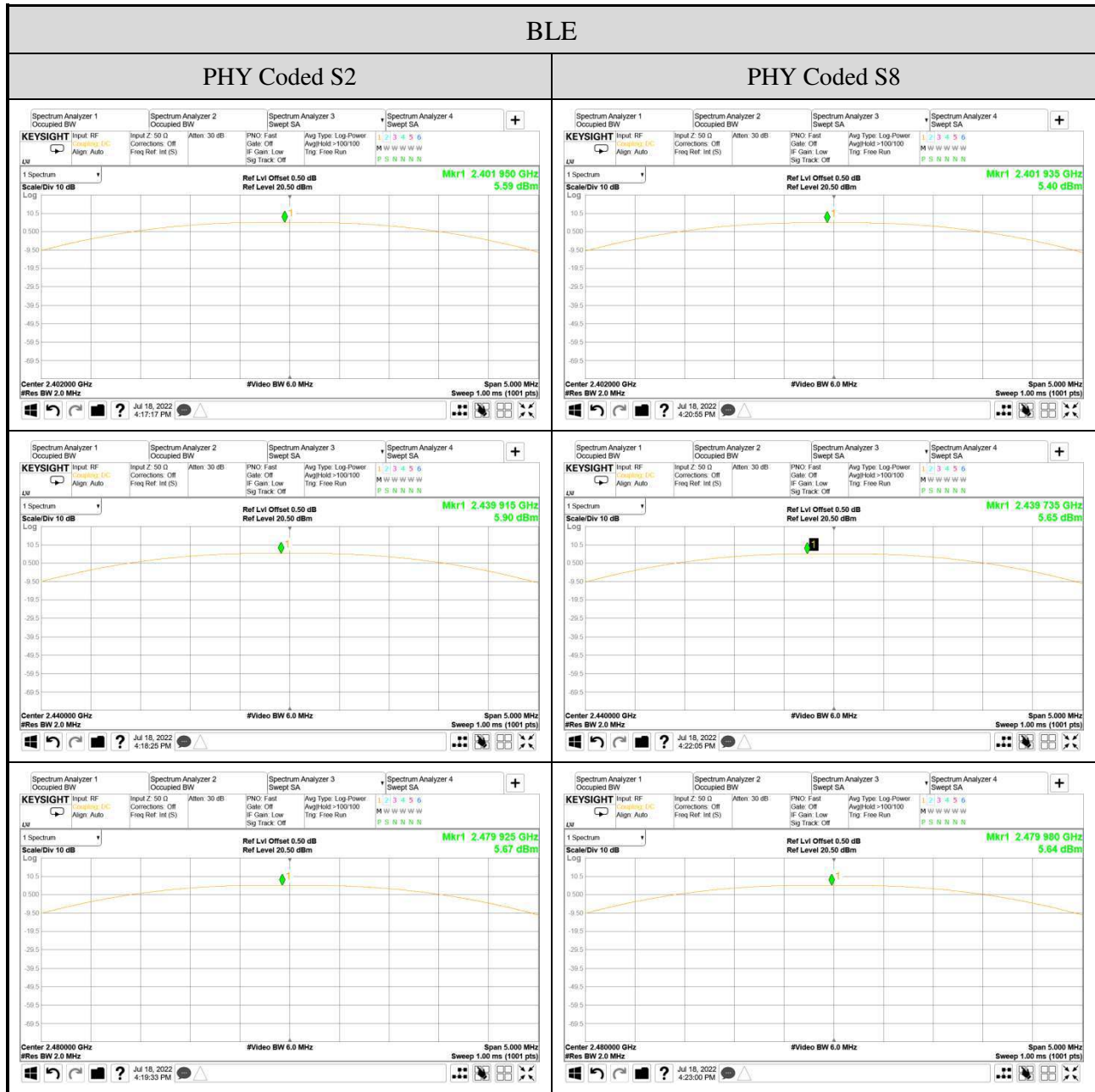
The MIMO is uncorrelated and supported SDM(Spatial Division Multiplexing) mode only. This radio device doesn't support beamforming and Cyclic Delay Diversity (CDD).

4. E.I.R.P.= The Total Average Output Power (dBm)+ Directional Gain (dBi).

A.4.3 Measurement Plots

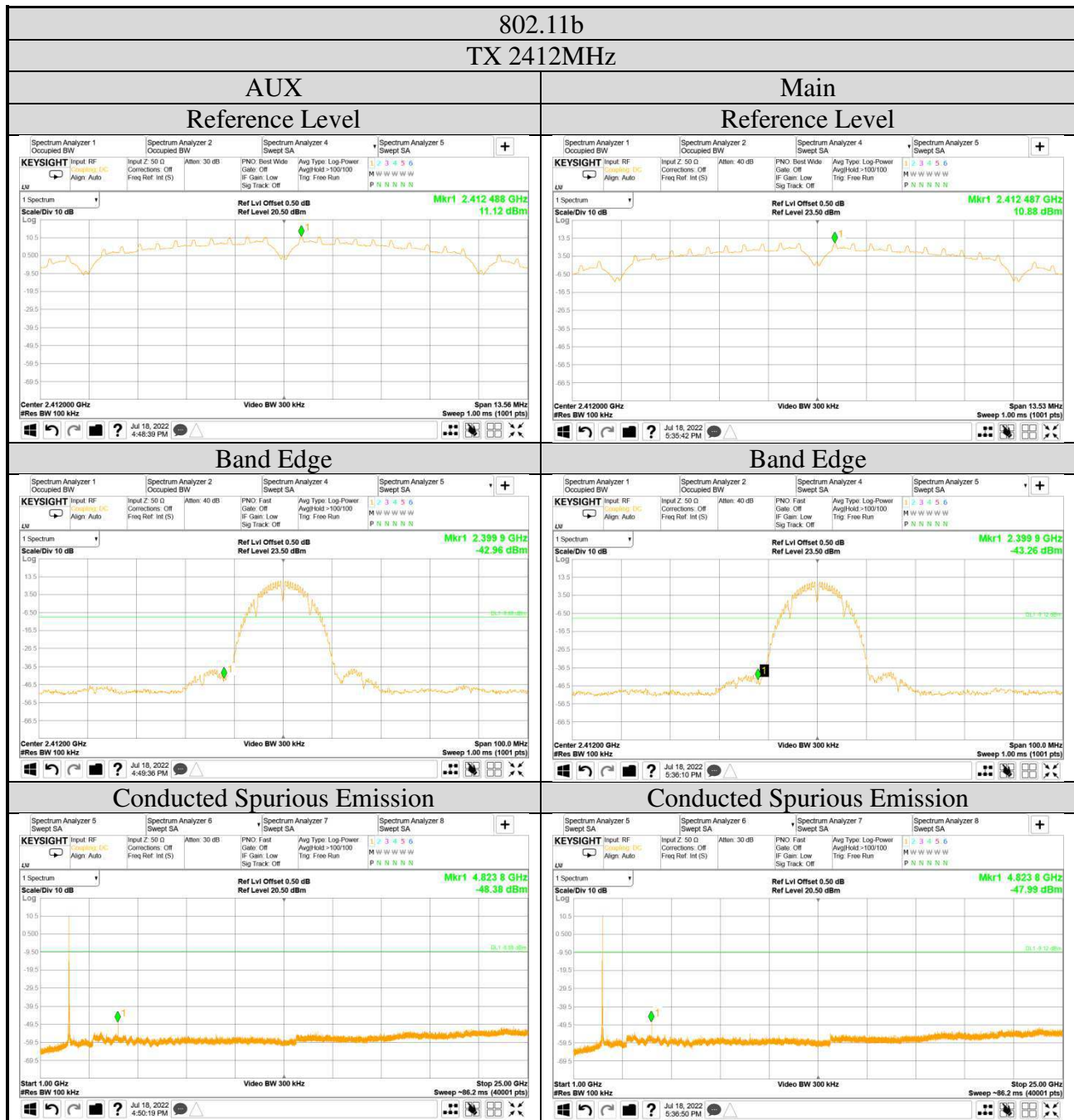






## A.5 EMISSION LIMITATIONS

|  |                                |            |           |
|--|--------------------------------|------------|-----------|
| Test Date  | 2022/07/18                     | Temp./Hum. | 26°C/48%  |
| Cable Loss   | 0.50dB                         | Tested By  | Kuper Hsu |
| Test Voltage   | AC 120V, 60Hz (via AC Adapter) |            |           |
| Simultaneous Factor 10 log(N <sub>ANT</sub> )(Note: where N <sub>ANT</sub> is the number of outputs) | 0dB                            |            |           |



802.11b

Audix Technology Corp.  
 No. 491, Zhongfu Rd., Linkou Dist.,  
 New Taipei City 244, Taiwan

Tel: +886 2 26099301  
 Fax: +886 2 26099303

