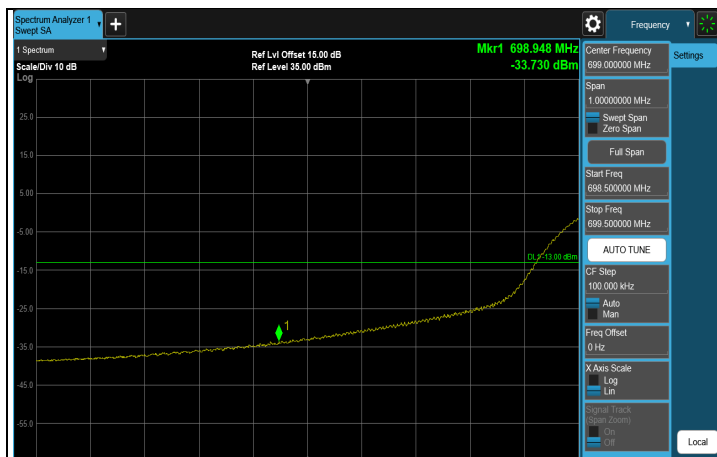
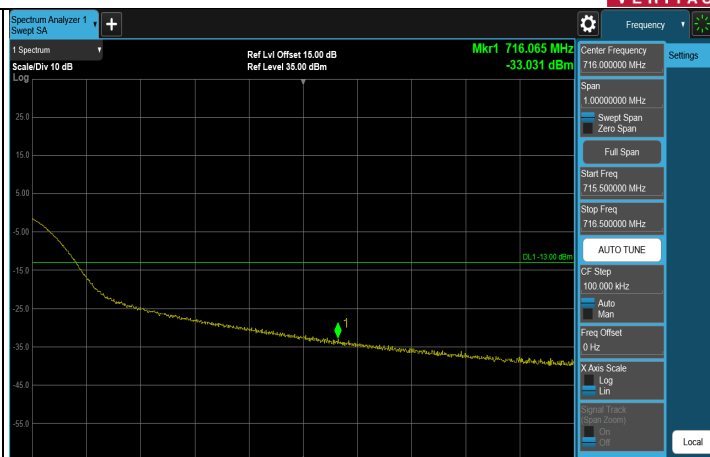




FULL CH 23060 (704 MHz)



FULL CH 23130 (711 MHz)



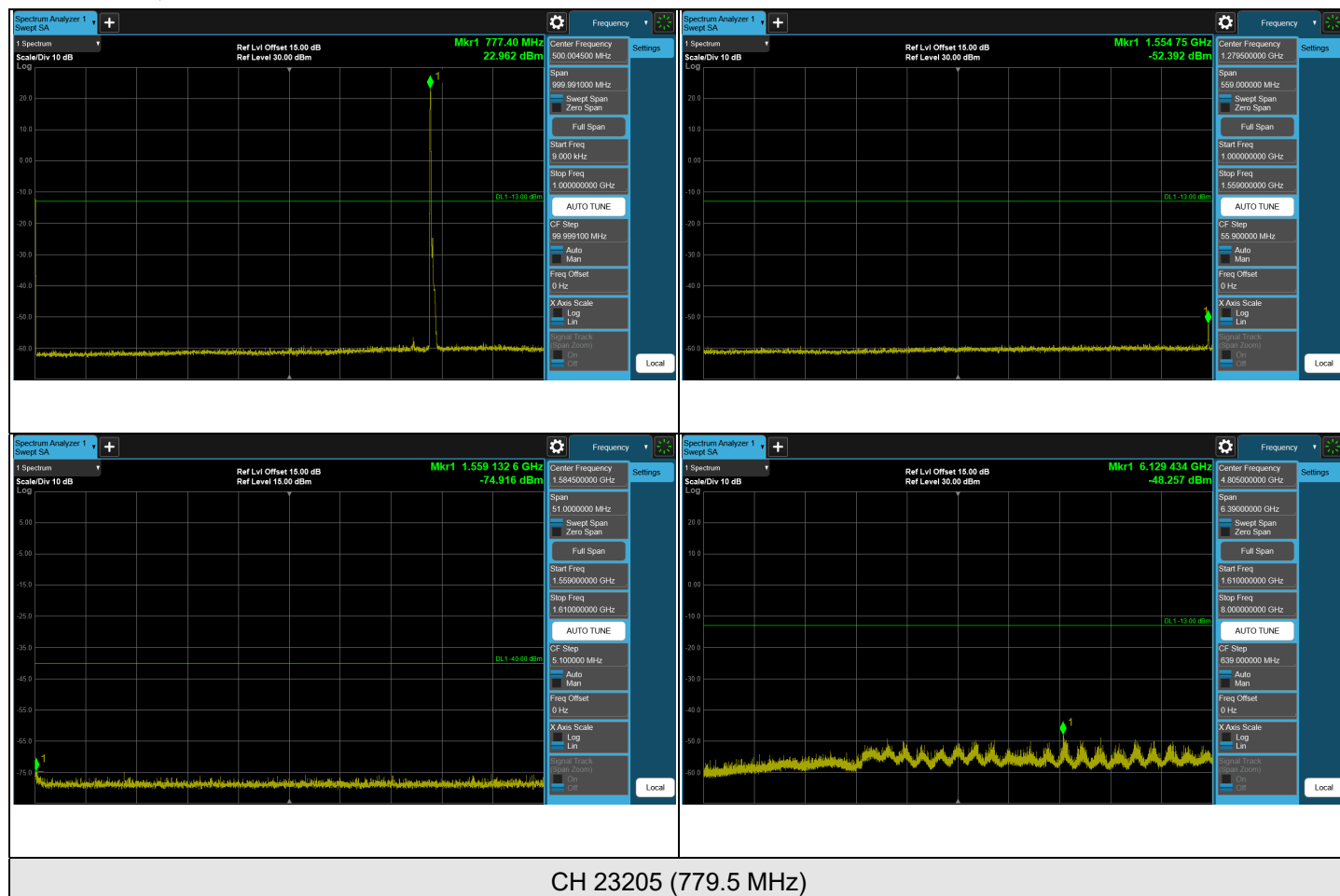
1RB CH 23060 (704 MHz)



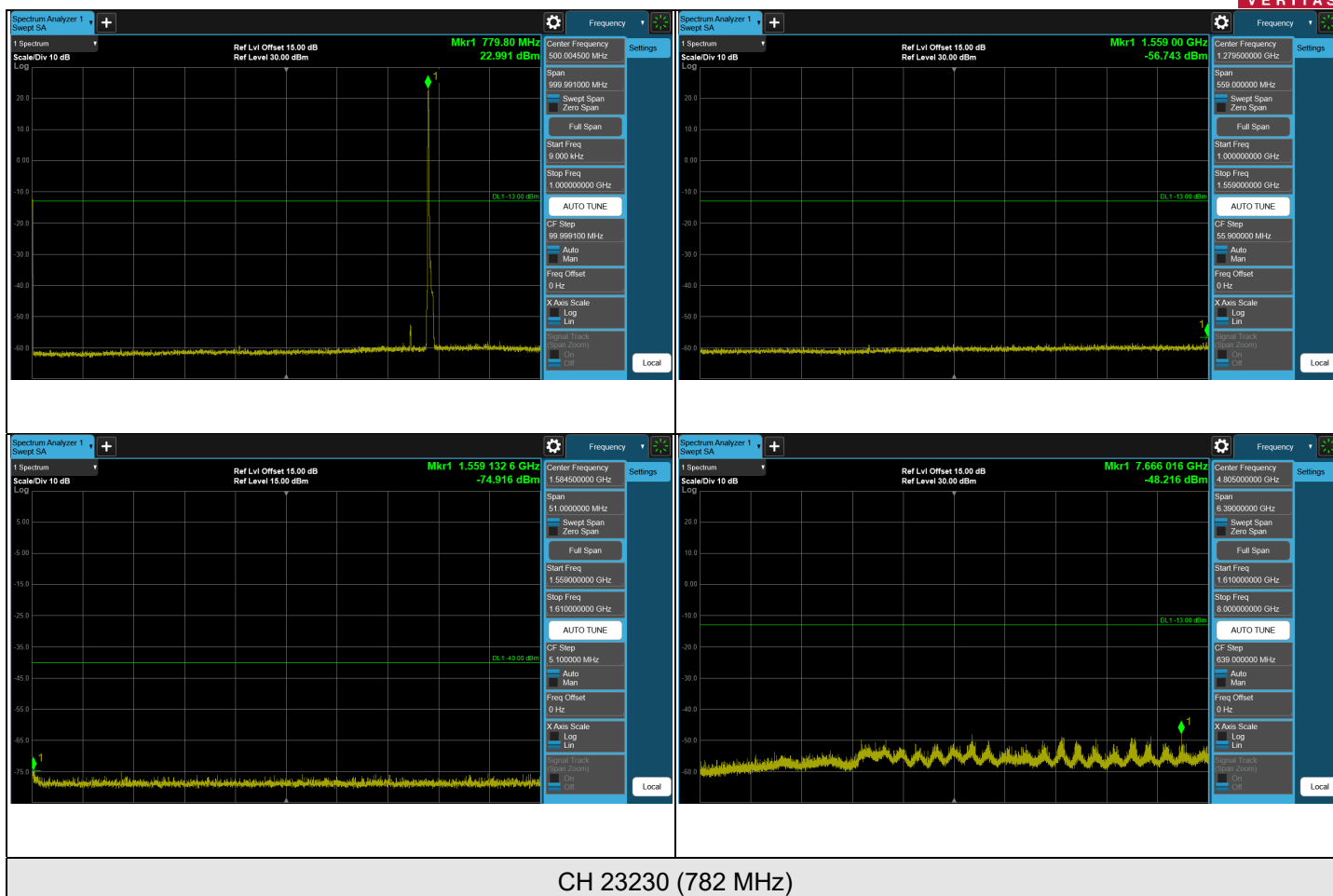
1RB CH 23130 (711 MHz)

## 7.5.5 LTE Band 13

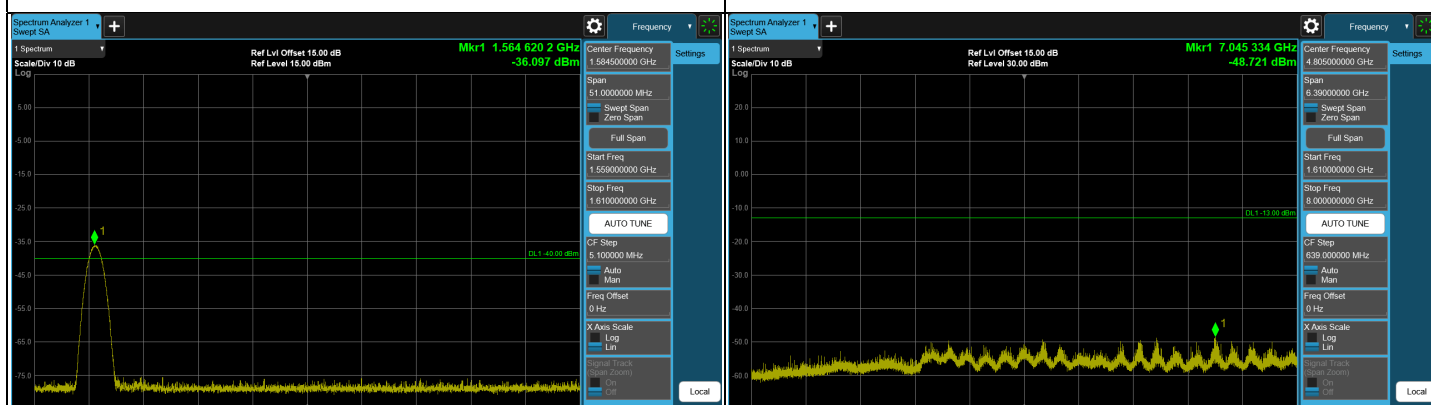
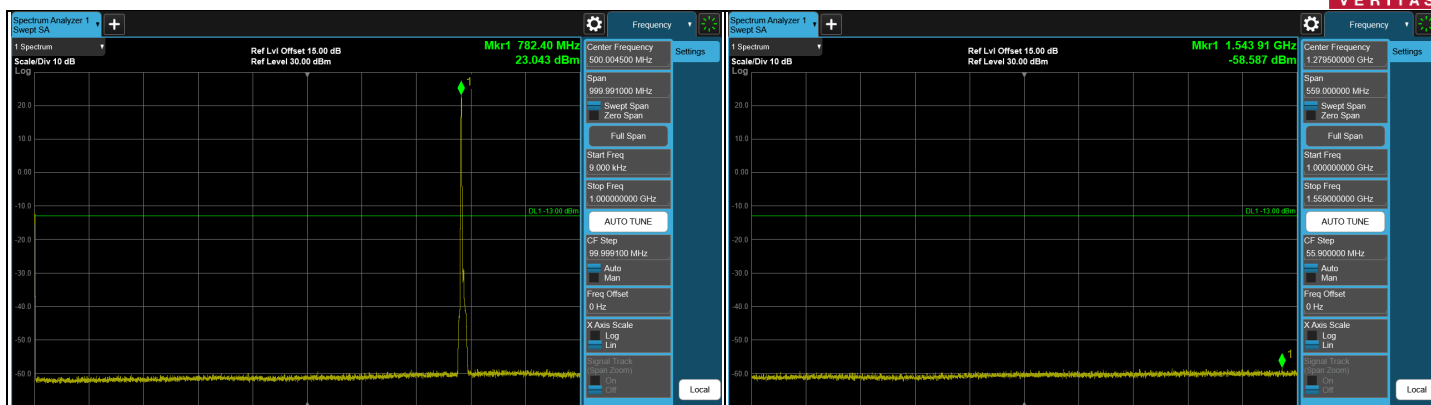
### LTE Band 13, Channel Bandwidth: 5 MHz



Note: The signal at 9 kHz is IF signal from spectrum analyzer.

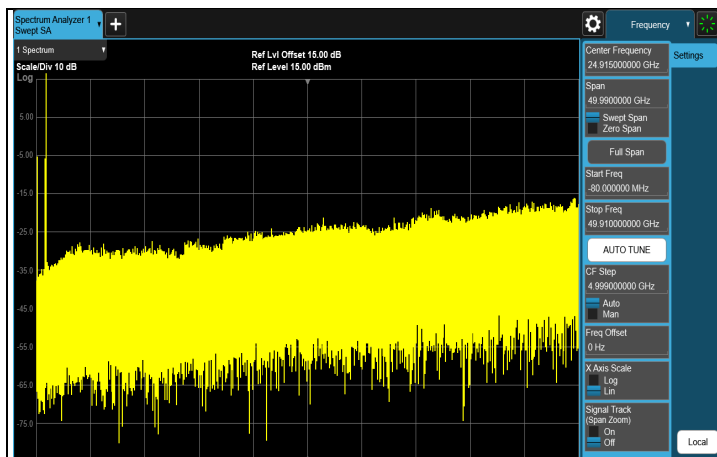


Note: The signal at 9 kHz is IF signal from spectrum analyzer.

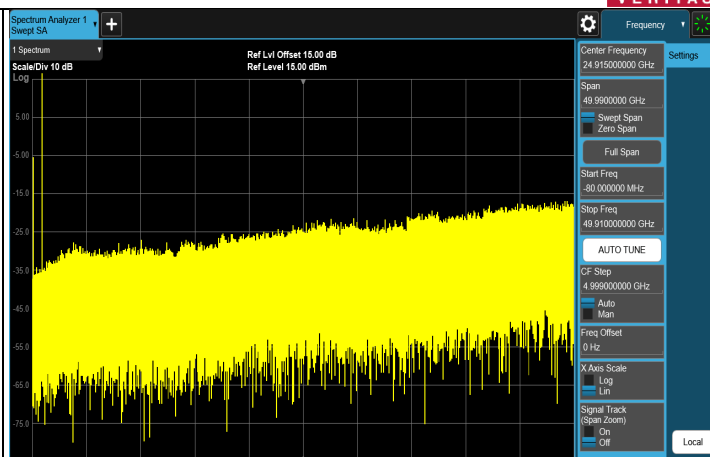


CH 23255 (784.5 MHz)

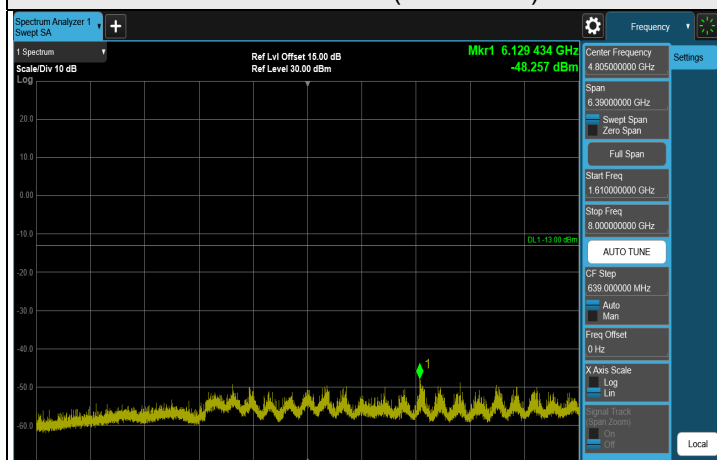
Note: The signal at 9 kHz is IF signal from spectrum analyzer.



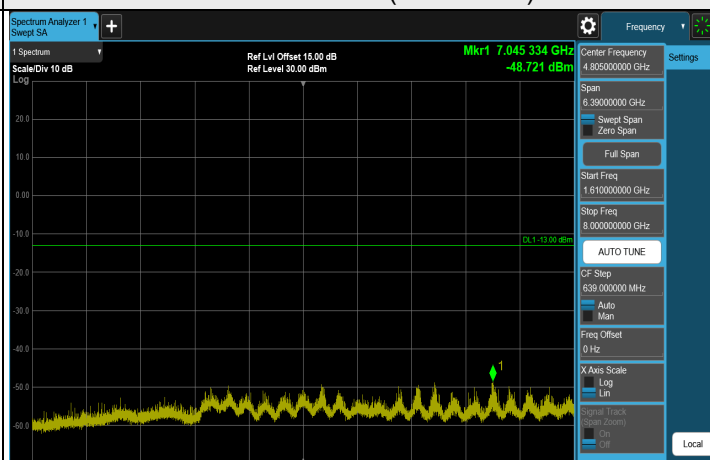
FULL CH 23205 (779.5 MHz)



FULL CH 23255 (784.5 MHz)

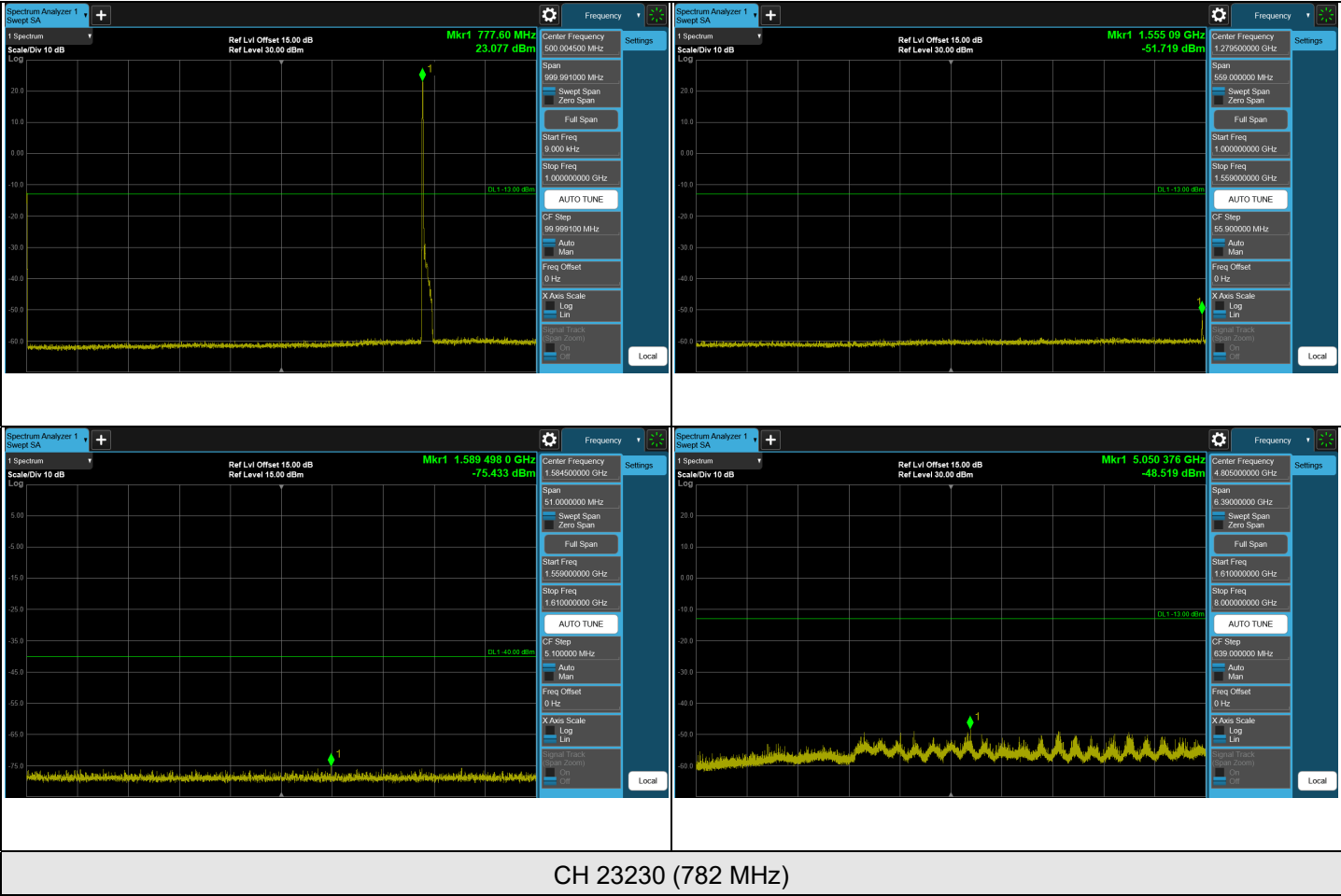


1RB CH 23205 (779.5 MHz)

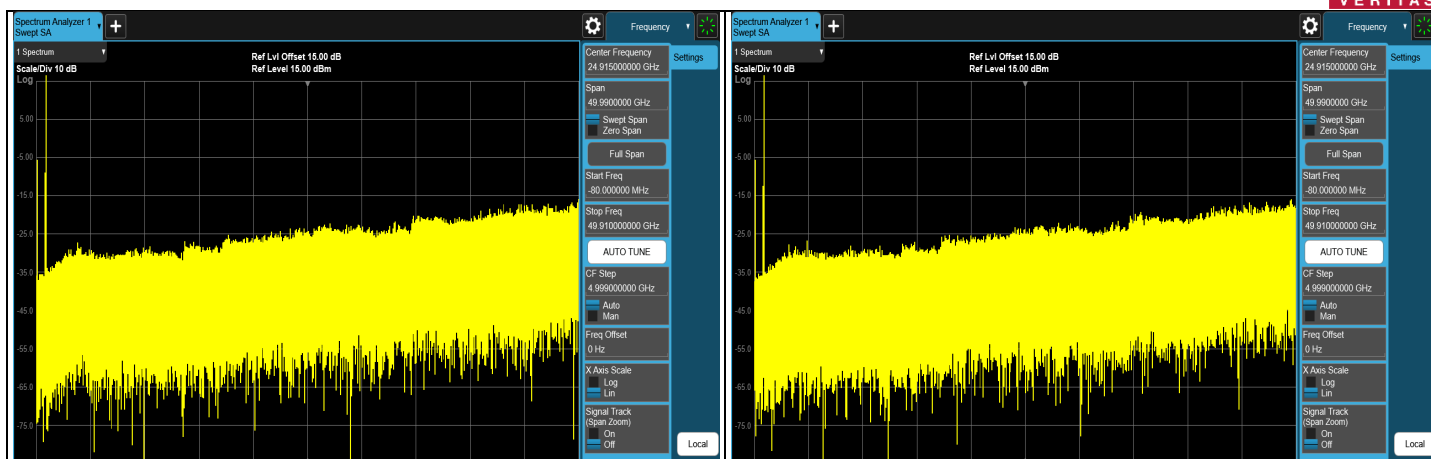


1RB CH 23255 (784.5 MHz)

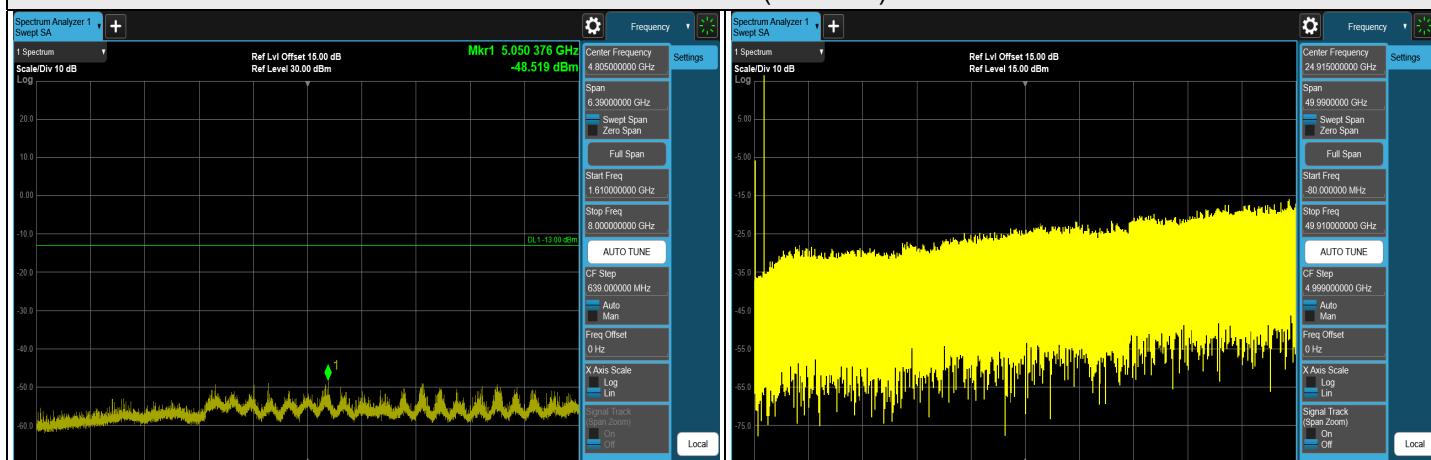
LTE Band 13, Channel Bandwidth: 10 MHz



Note: The signal at 9 kHz is IF signal from spectrum analyzer.



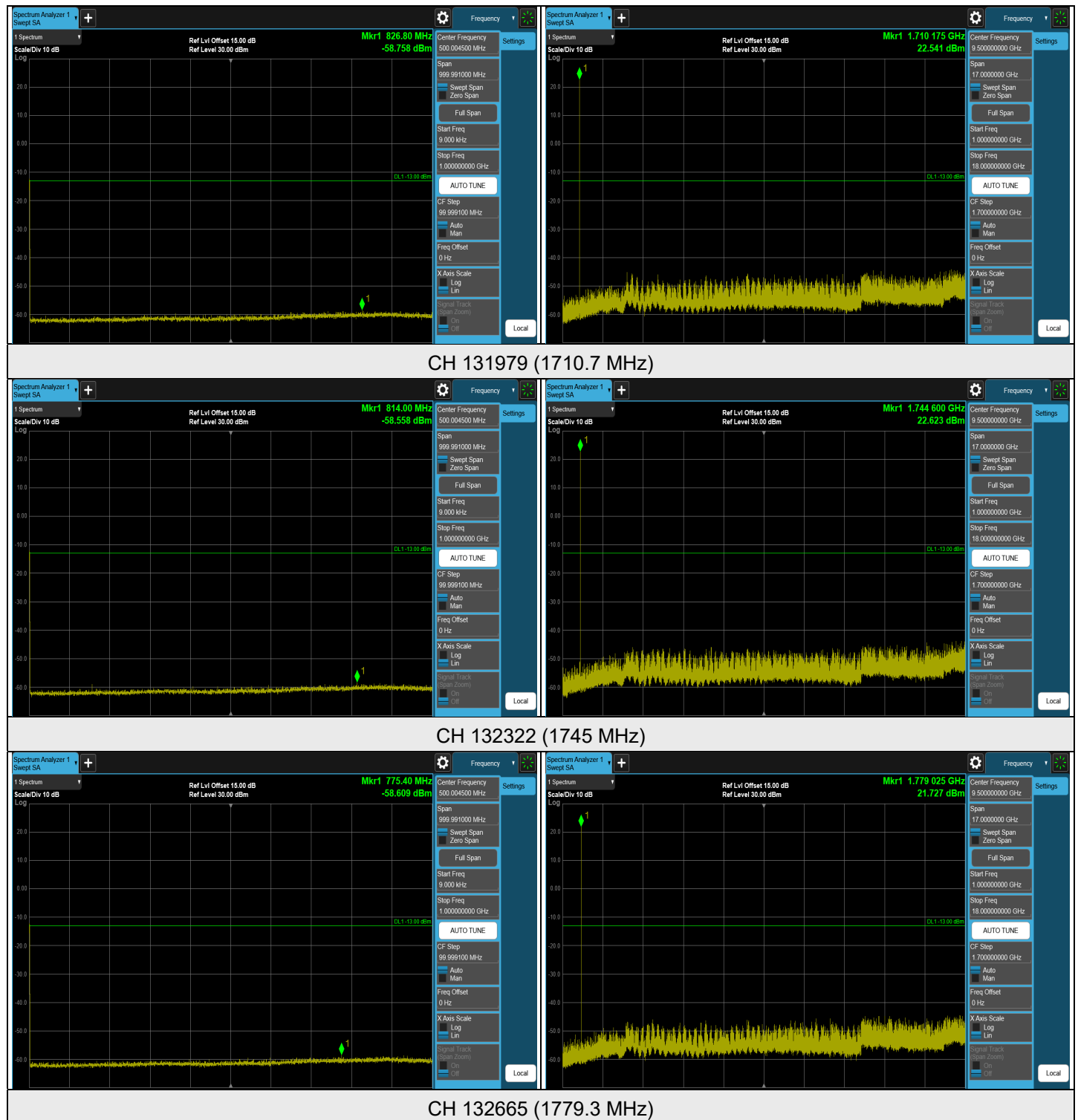
**FULL CH 23230 (782 MHz)**



**1RB CH 23230 (782 MHz)**

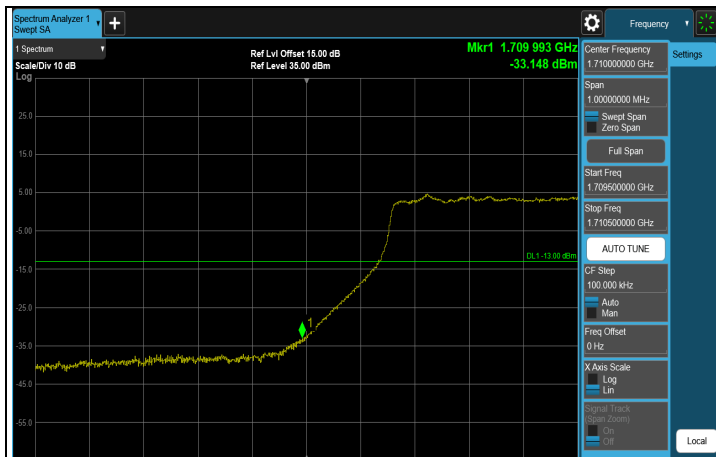
## 7.5.6 LTE Band 66

### LTE Band 66, Channel Bandwidth: 1.4 MHz

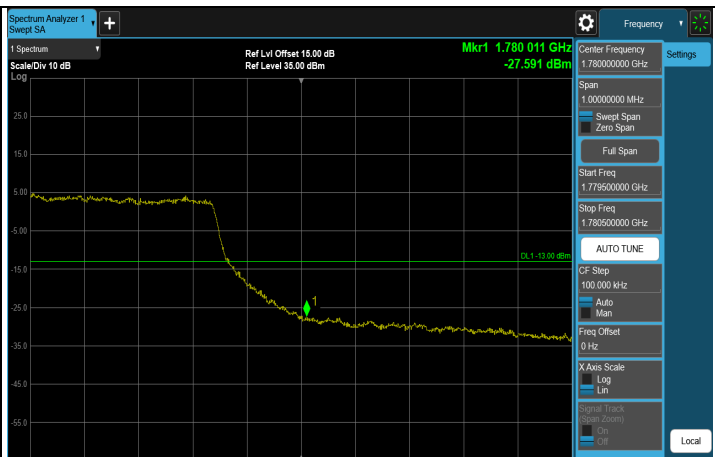


Note: The signal at 9 kHz is IF signal from spectrum analyzer.

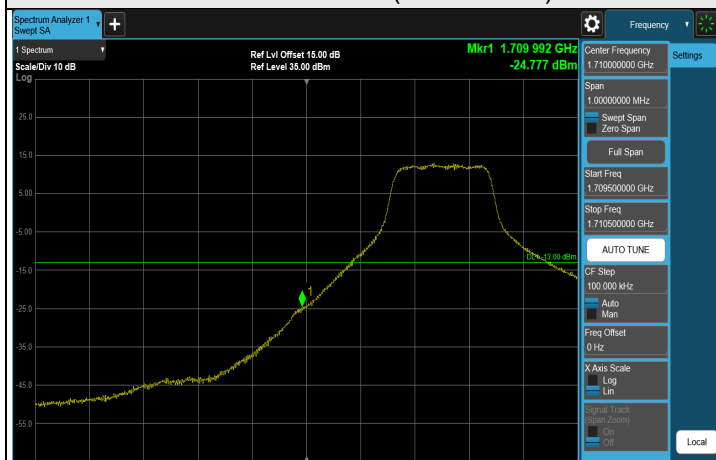




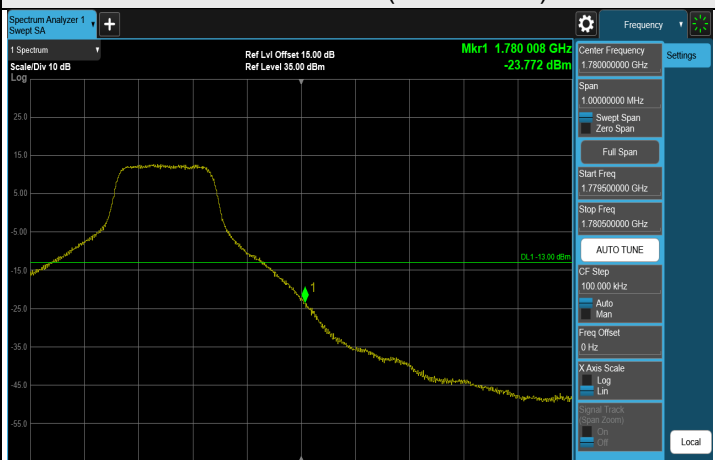
FULL CH 131979 (1710.7 MHz)



FULL CH 132665 (1779.3 MHz)

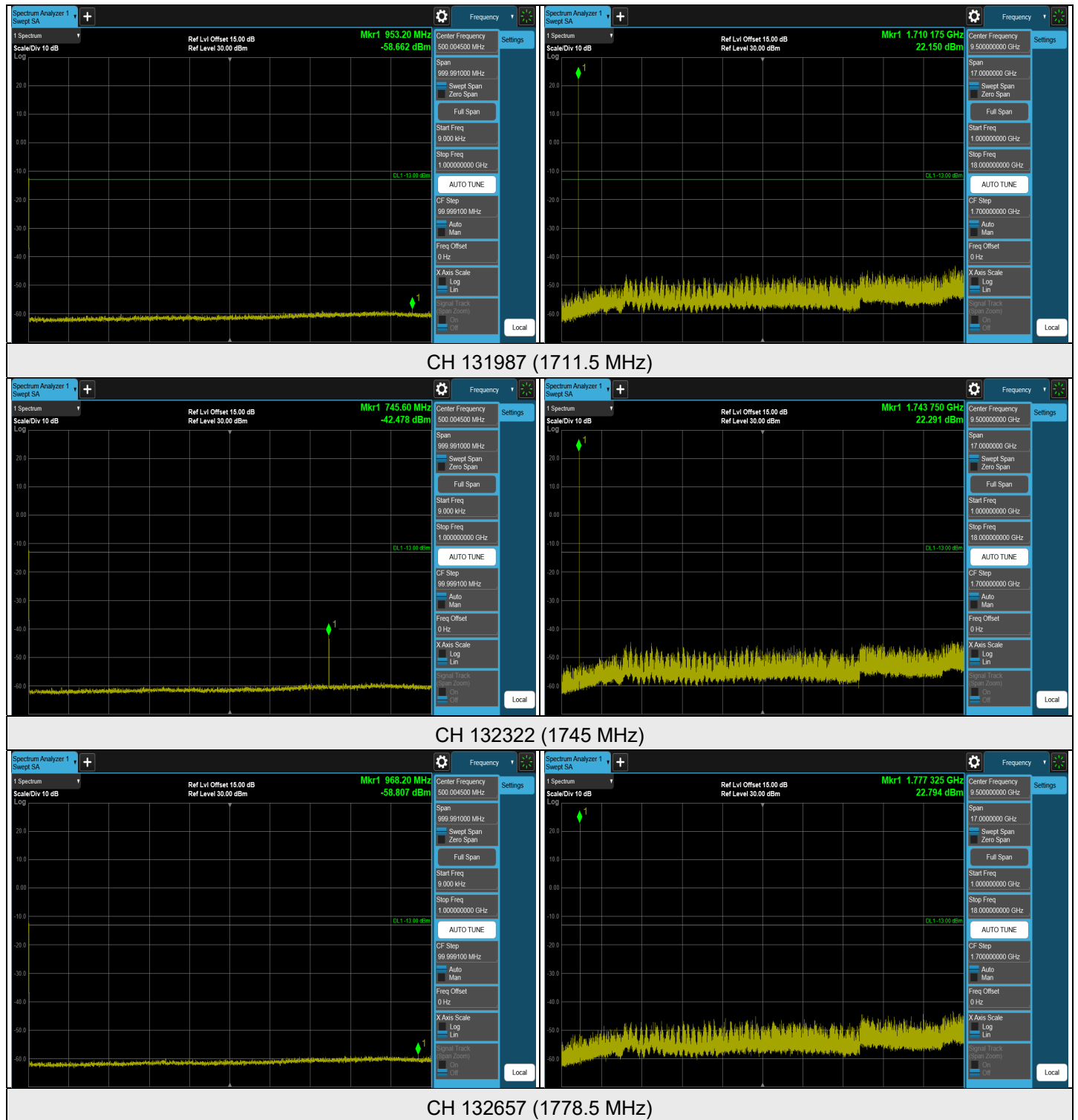


1RB CH 131979 (1710.7 MHz)

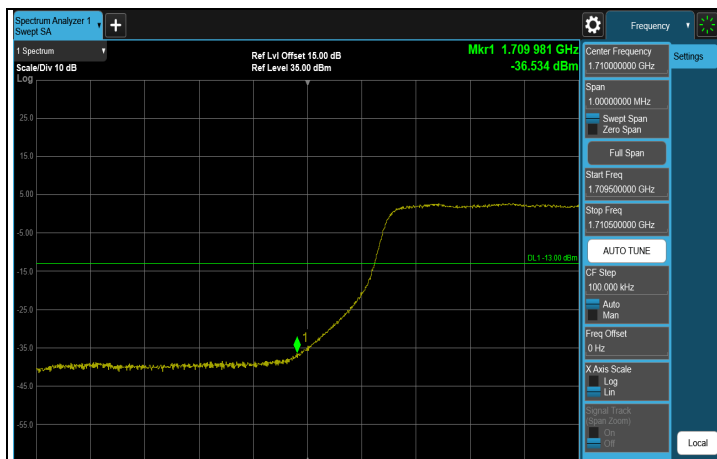


1RB CH 132665 (1779.3 MHz)

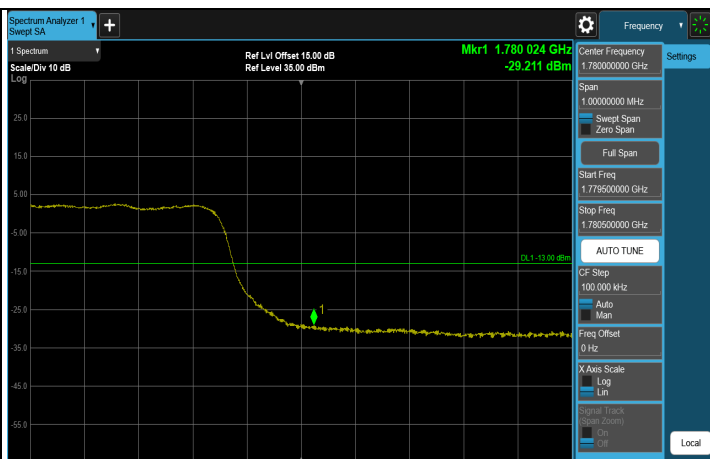
## LTE Band 66, Channel Bandwidth: 3 MHz



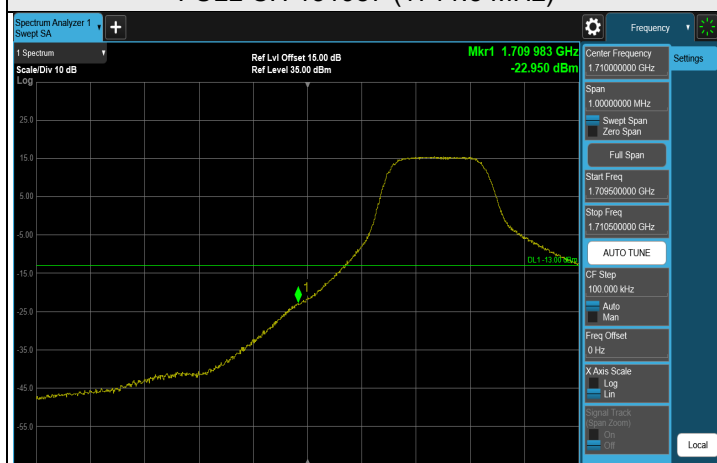
Note: The signal at 9 kHz is IF signal from spectrum analyzer.



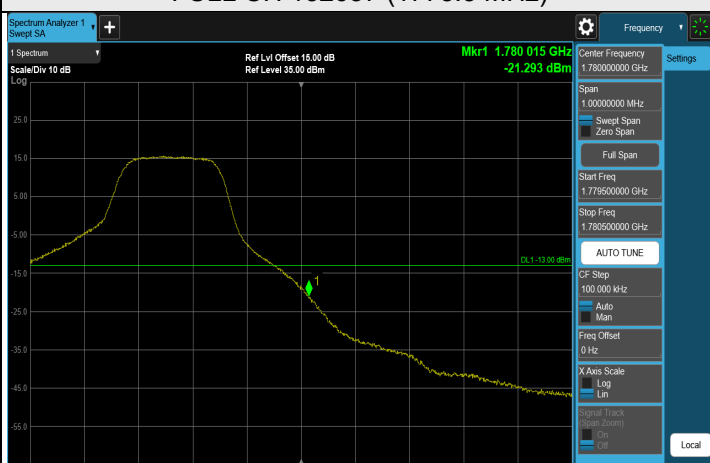
FULL CH 131987 (1711.5 MHz)



FULL CH 132657 (1778.5 MHz)

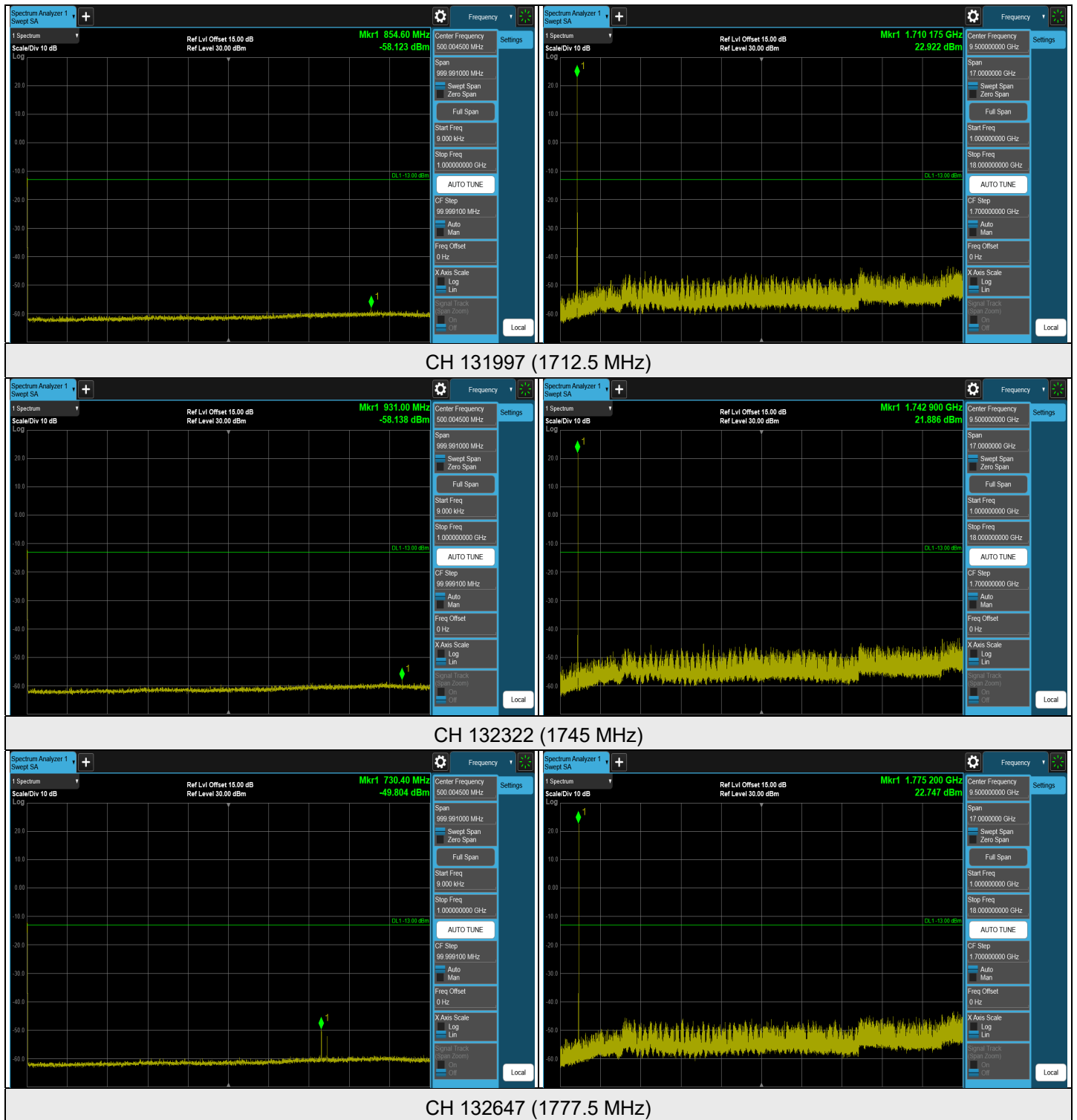


1RB CH 131987 (1711.5 MHz)

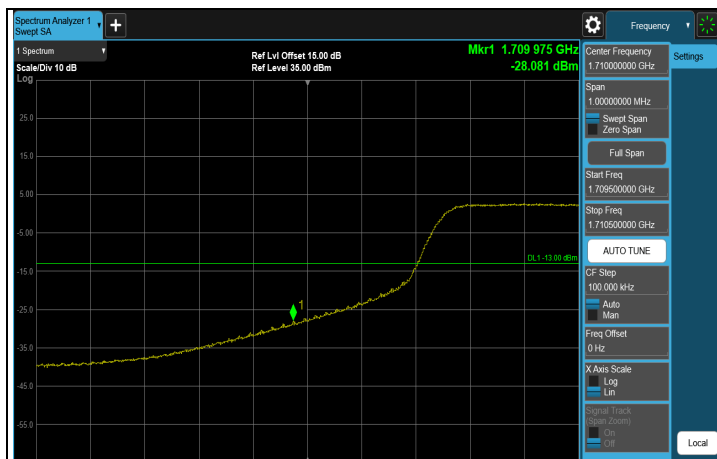


1RB CH 132657 (1778.5 MHz)

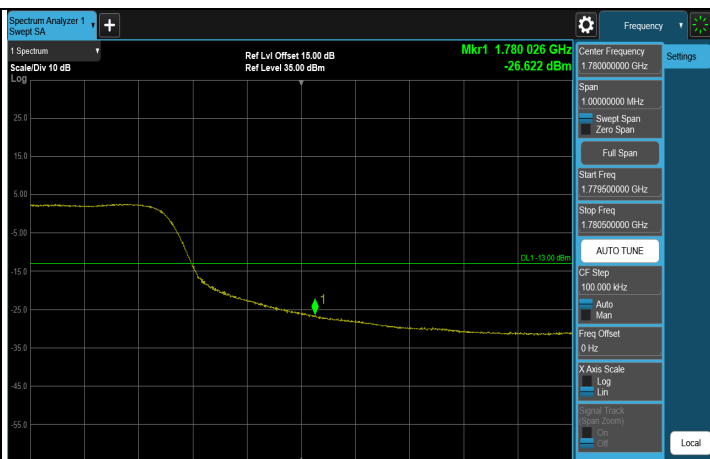
## LTE Band 66, Channel Bandwidth: 5MHz



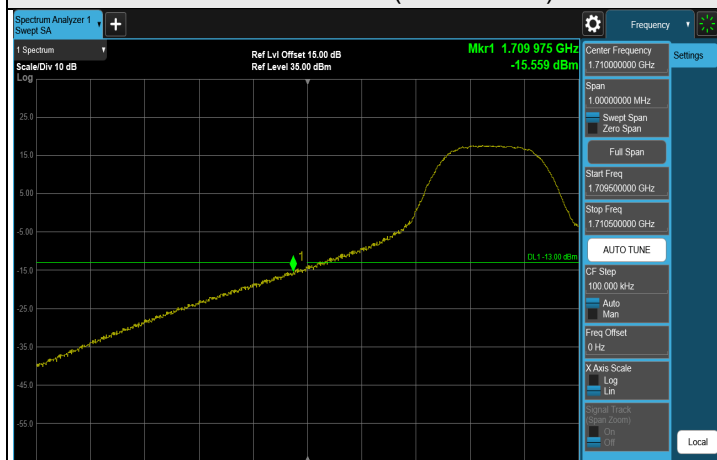
Note: The signal at 9 kHz is IF signal from spectrum analyzer.



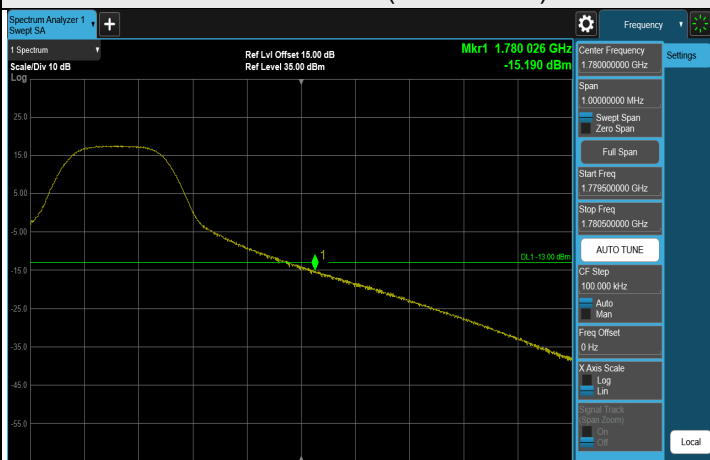
FULL CH 131997 (1712.5 MHz)



FULL CH 132647 (1777.5 MHz)

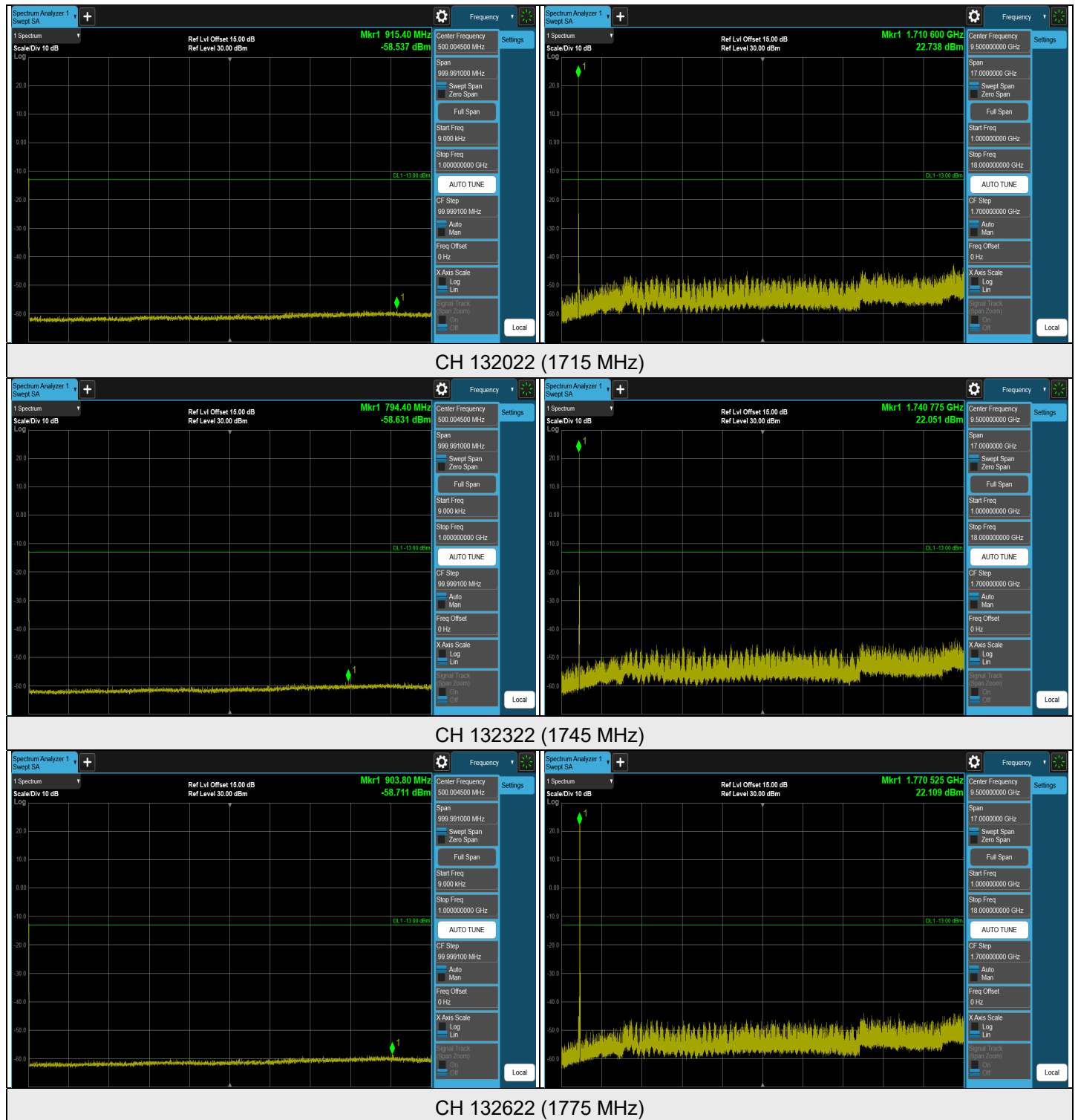


1RB CH 131997 (1712.5 MHz)

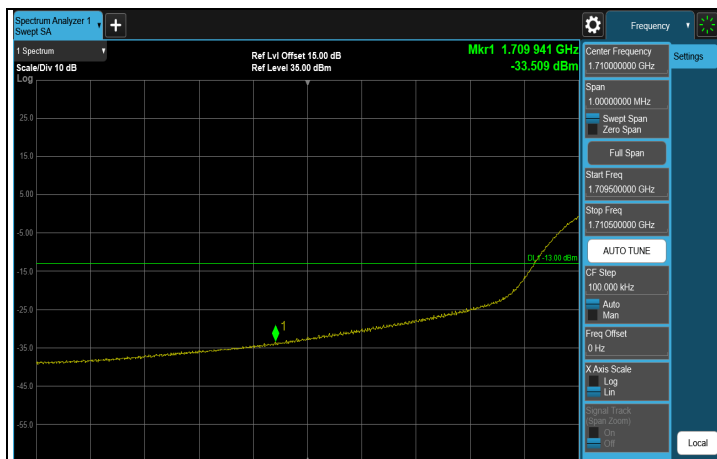


1RB CH 132647 (1777.5 MHz)

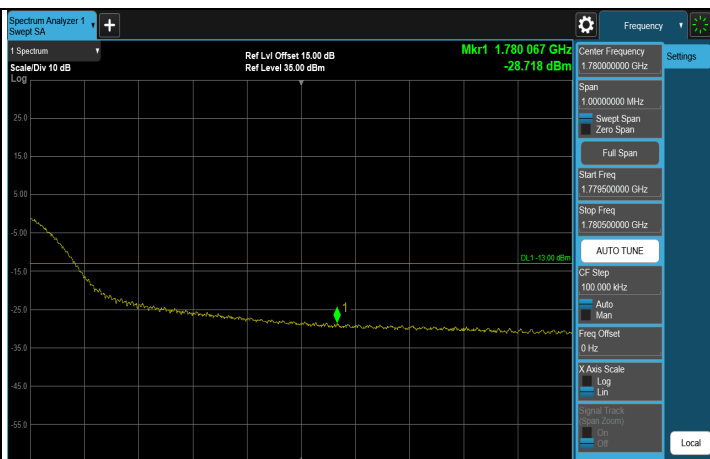
## LTE Band 66, Channel Bandwidth: 10 MHz



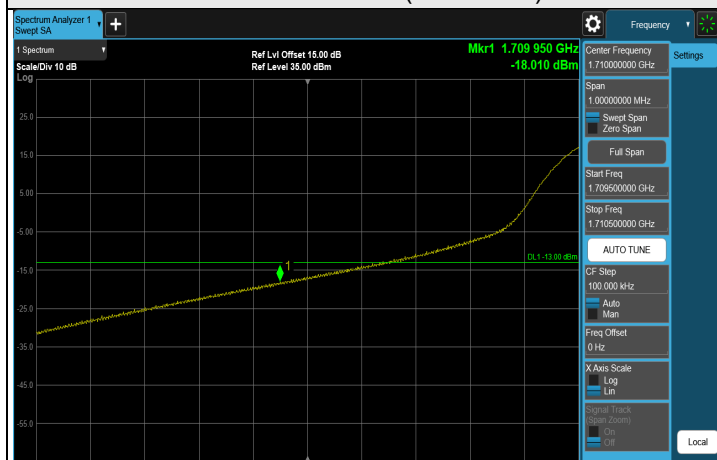
Note: The signal at 9 kHz is IF signal from spectrum analyzer.



FULL CH 132022 (1715 MHz)



FULL CH 132622 (1775 MHz)

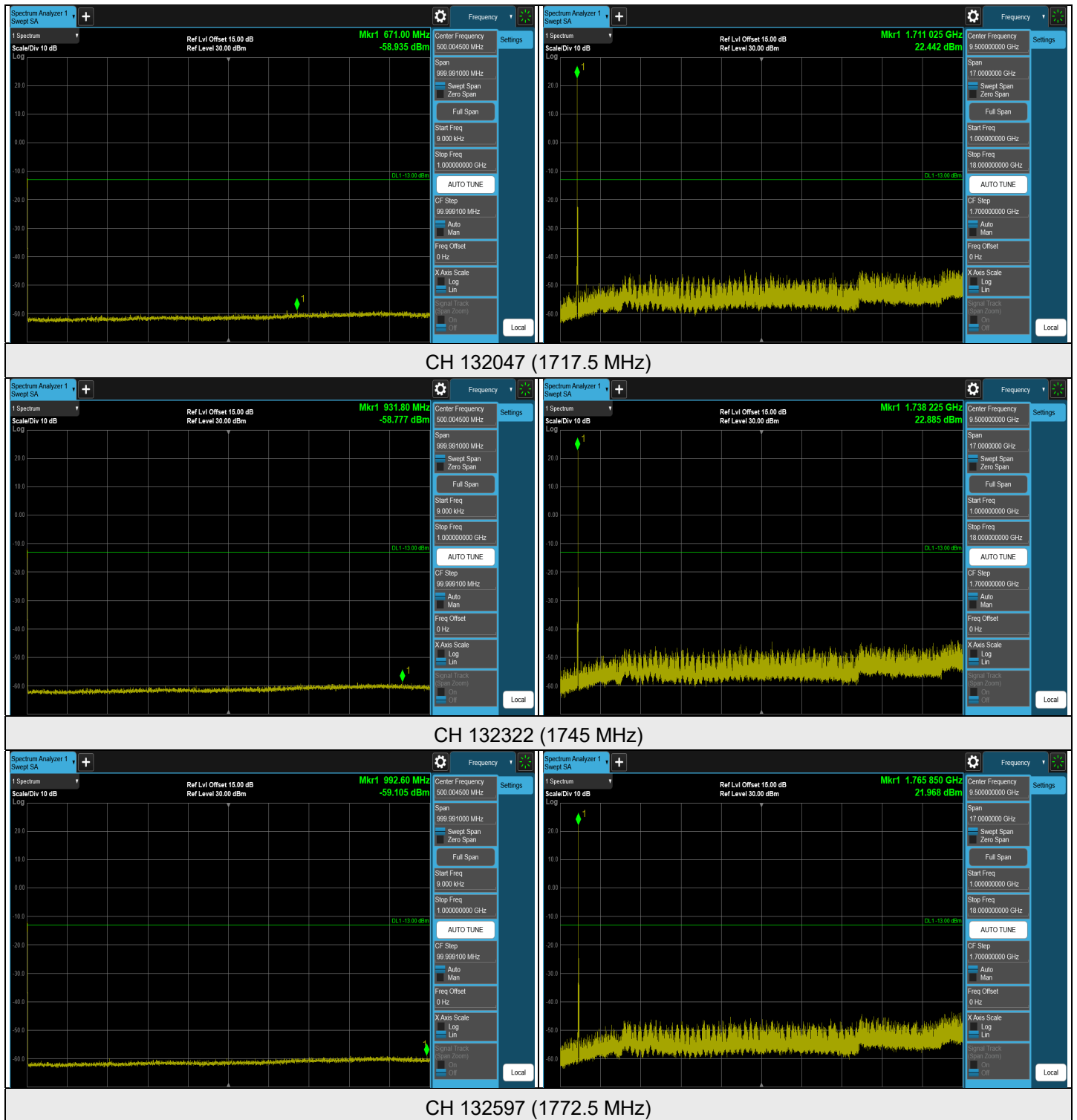


1RB CH 132022 (1715 MHz)



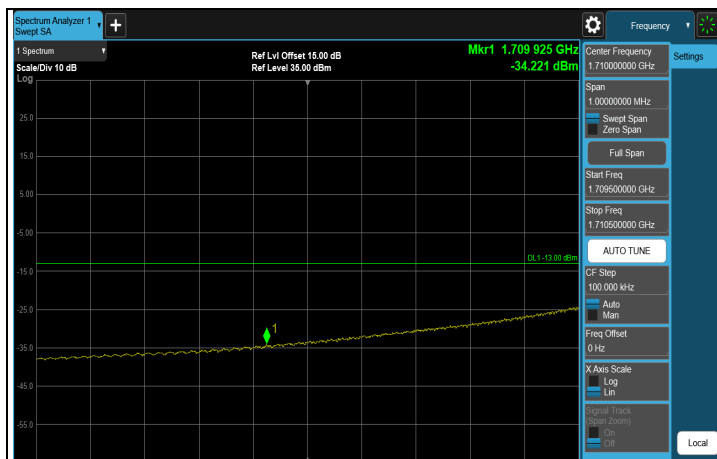
1RB CH 132622 (1775 MHz)

## LTE Band 66, Channel Bandwidth: 15 MHz

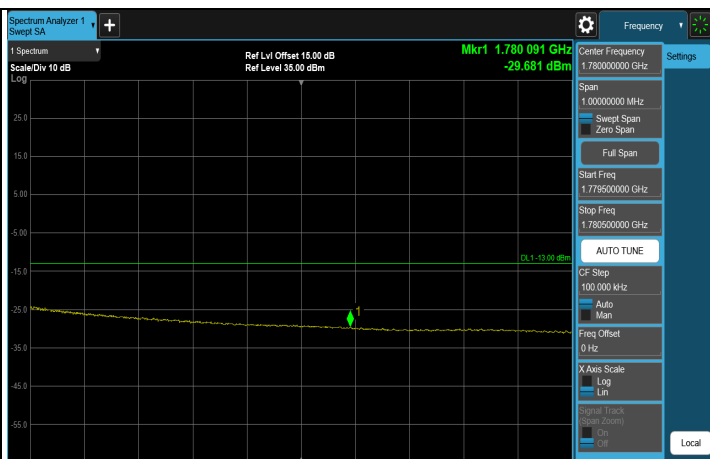


Note: The signal at 9 kHz is IF signal from spectrum analyzer.





FULL CH 132047 (1717.5 MHz)



FULL CH 132597 (1772.5 MHz)

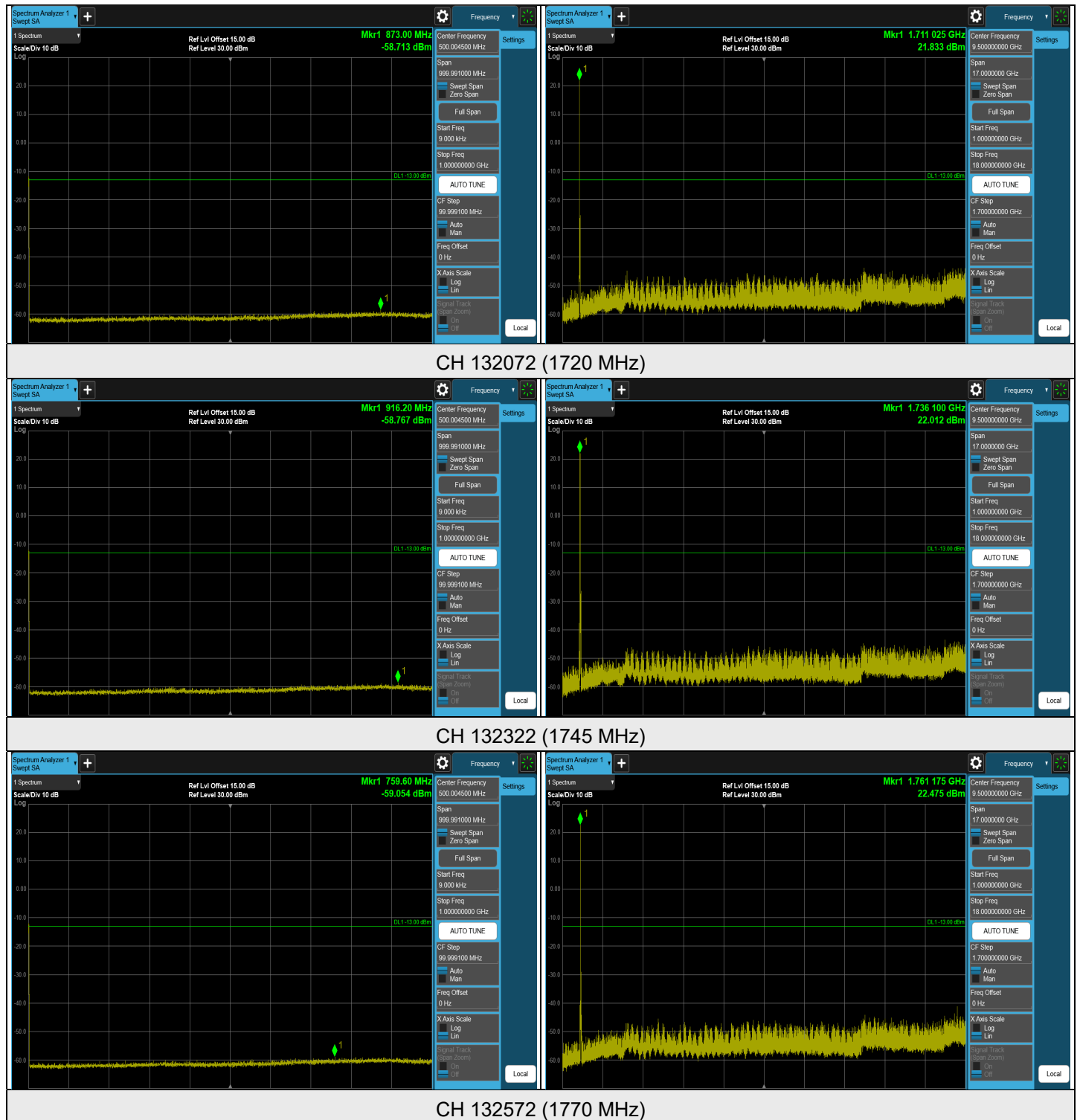


1RB CH 132047 (1717.5 MHz)

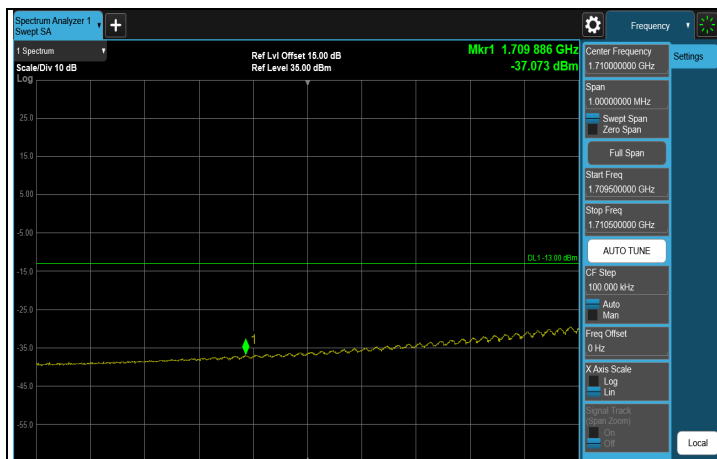


1RB CH 132597 (1772.5 MHz)

## LTE Band 66, Channel Bandwidth: 20 MHz



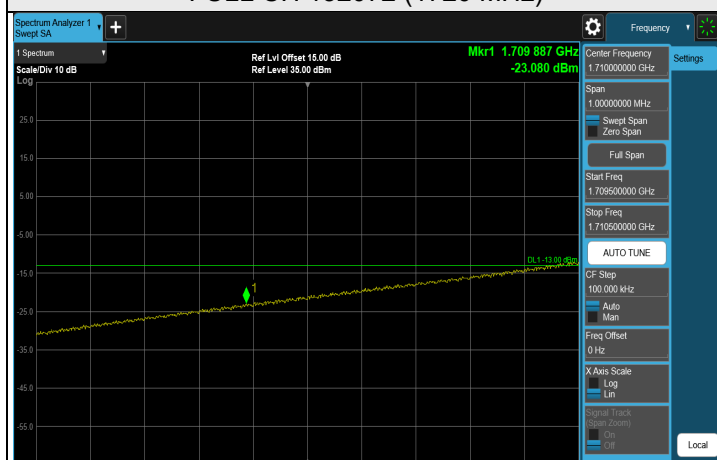
Note: The signal at 9 kHz is IF signal from spectrum analyzer.



FULL CH 132072 (1720 MHz)



FULL CH 132572 (1770 MHz)



1RB CH 132072 (1720 MHz)



1RB CH 132572 (1770 MHz)

## 7.6 Radiated Spurious Emissions below 1GHz

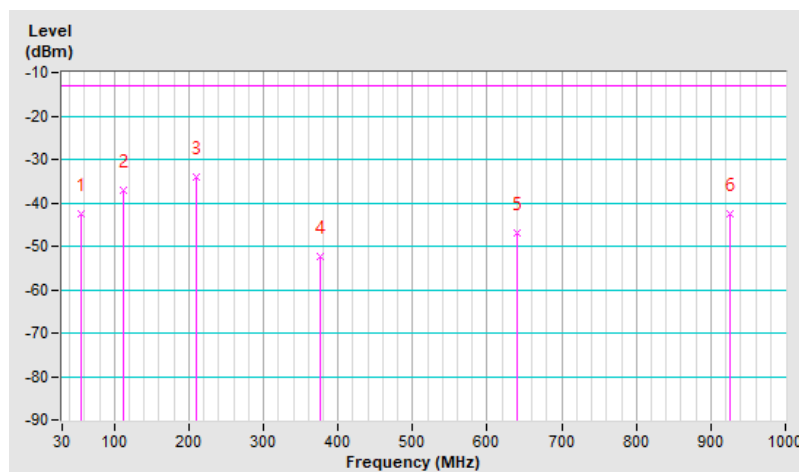
### 7.6.1 LTE Band 2

|                 |                                        |                               |                     |
|-----------------|----------------------------------------|-------------------------------|---------------------|
| RF Mode         | LTE Band 2<br>Channel Bandwidth: 20MHz | Channel                       | CH 19100 : 1900 MHz |
| Frequency Range | 30 MHz ~ 1 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)   |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 22°C, 68% RH        |
| Tested By       | Vincent Chen                           |                               |                     |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 56.19           | -42.38     | -13.00      | -29.38      | 1.00 H             | 214                  | 65.50            | -107.88                  |
| 2                                                    | 111.48          | -37.07     | -13.00      | -24.07      | 1.50 H             | 257                  | 73.38            | -110.45                  |
| 3                                                    | 209.45          | -34.12     | -13.00      | -21.12      | 2.00 H             | 226                  | 76.86            | -110.98                  |
| 4                                                    | 375.32          | -52.46     | -13.00      | -39.46      | 1.50 H             | 3                    | 52.83            | -105.29                  |
| 5                                                    | 640.13          | -47.09     | -13.00      | -34.09      | 1.00 H             | 196                  | 52.15            | -99.24                   |
| 6                                                    | 925.31          | -42.67     | -13.00      | -29.67      | 1.00 H             | 279                  | 52.70            | -95.37                   |

#### Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

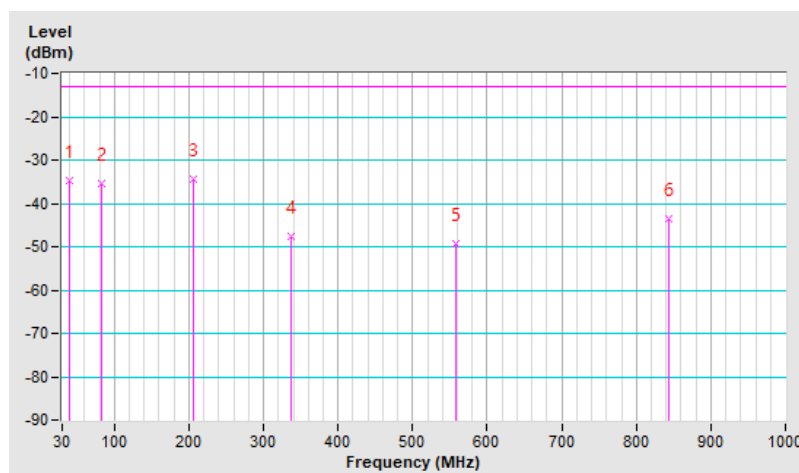


|                 |                                        |                               |                     |
|-----------------|----------------------------------------|-------------------------------|---------------------|
| RF Mode         | LTE Band 2<br>Channel Bandwidth: 20MHz | Channel                       | CH 19100 : 1900 MHz |
| Frequency Range | 30 MHz ~ 1 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)   |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 22°C, 68% RH        |
| Tested By       | Vincent Chen                           |                               |                     |

| Antenna Polarity & Test Distance : Vertical at 3 m |                 |            |             |             |                    |                      |                  |                          |
|----------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                 | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                  | 40.67           | -34.78     | -13.00      | -21.78      | 2.00 V             | 155                  | 73.01            | -107.79                  |
| 2                                                  | 82.38           | -35.36     | -13.00      | -22.36      | 1.50 V             | 51                   | 77.44            | -112.80                  |
| 3                                                  | 205.57          | -34.28     | -13.00      | -21.28      | 1.00 V             | 284                  | 76.73            | -111.01                  |
| 4                                                  | 337.49          | -47.58     | -13.00      | -34.58      | 1.00 V             | 223                  | 58.67            | -106.25                  |
| 5                                                  | 558.65          | -49.32     | -13.00      | -36.32      | 2.00 V             | 164                  | 52.00            | -101.32                  |
| 6                                                  | 843.83          | -43.49     | -13.00      | -30.49      | 1.50 V             | 111                  | 52.56            | -96.05                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



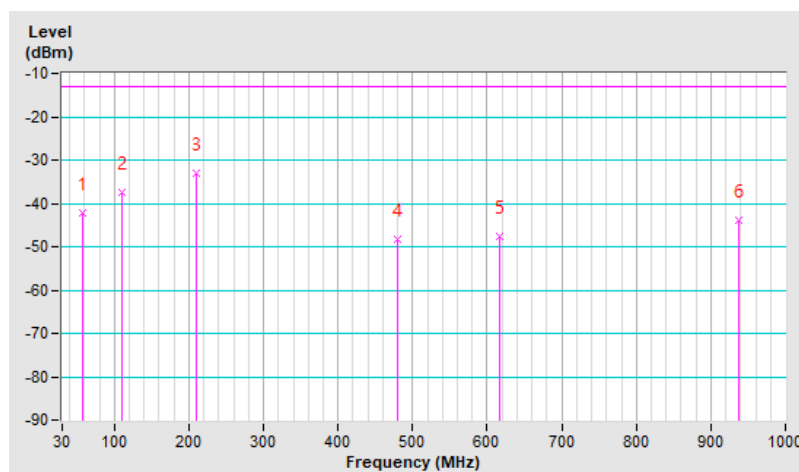
## 7.6.2 LTE Band 4

|                 |                                        |                               |                     |
|-----------------|----------------------------------------|-------------------------------|---------------------|
| RF Mode         | LTE Band 4<br>Channel Bandwidth: 20MHz | Channel                       | CH 20050 : 1720 MHz |
| Frequency Range | 30 MHz ~ 1 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)   |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 22°C, 68% RH        |
| Tested By       | Vincent Chen                           |                               |                     |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 57.16           | -42.18     | -13.00      | -29.18      | 2.00 H             | 217                  | 65.93            | -108.11                  |
| 2                                                    | 110.51          | -37.38     | -13.00      | -24.38      | 1.50 H             | 265                  | 73.20            | -110.58                  |
| 3                                                    | 210.42          | -33.11     | -13.00      | -20.11      | 1.00 H             | 234                  | 77.88            | -110.99                  |
| 4                                                    | 479.11          | -48.25     | -13.00      | -35.25      | 1.00 H             | 180                  | 54.40            | -102.65                  |
| 5                                                    | 616.85          | -47.67     | -13.00      | -34.67      | 2.00 H             | 73                   | 52.15            | -99.82                   |
| 6                                                    | 936.95          | -44.05     | -13.00      | -31.05      | 1.50 H             | 333                  | 51.20            | -95.25                   |

### Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

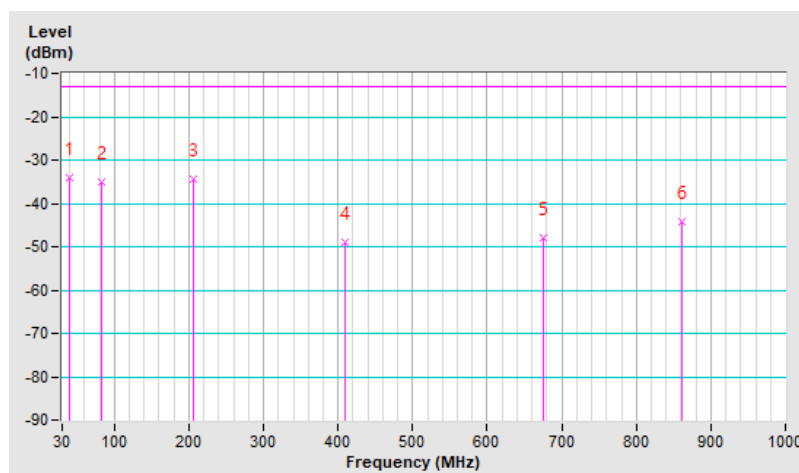


|                 |                                        |                               |                     |
|-----------------|----------------------------------------|-------------------------------|---------------------|
| RF Mode         | LTE Band 4<br>Channel Bandwidth: 20MHz | Channel                       | CH 20050 : 1720 MHz |
| Frequency Range | 30 MHz ~ 1 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)   |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 22°C, 68% RH        |
| Tested By       | Vincent Chen                           |                               |                     |

| Antenna Polarity & Test Distance : Vertical at 3 m |                 |            |             |             |                    |                      |                  |                          |
|----------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                 | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                  | 40.67           | -34.11     | -13.00      | -21.11      | 1.00 V             | 89                   | 73.68            | -107.79                  |
| 2                                                  | 83.35           | -35.18     | -13.00      | -22.18      | 1.50 V             | 216                  | 77.78            | -112.96                  |
| 3                                                  | 206.54          | -34.43     | -13.00      | -21.43      | 2.00 V             | 289                  | 76.57            | -111.00                  |
| 4                                                  | 410.24          | -48.83     | -13.00      | -35.83      | 1.50 V             | 12                   | 55.70            | -104.53                  |
| 5                                                  | 675.05          | -47.87     | -13.00      | -34.87      | 2.00 V             | 50                   | 51.07            | -98.94                   |
| 6                                                  | 860.32          | -44.32     | -13.00      | -31.32      | 1.50 V             | 191                  | 51.74            | -96.06                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



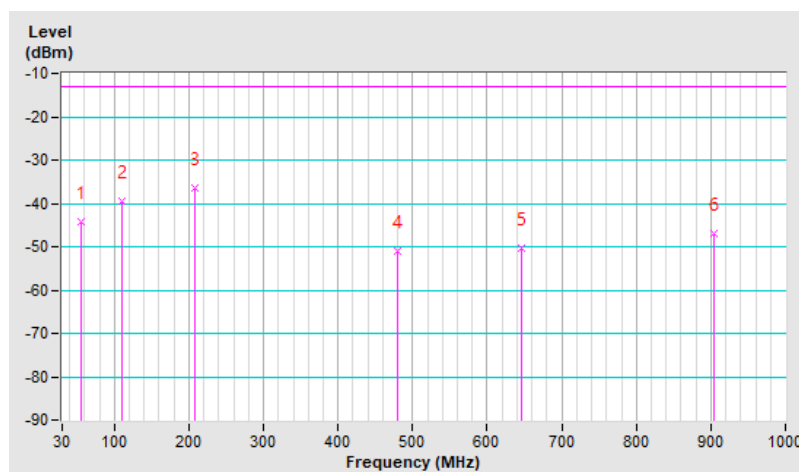
### 7.6.3 LTE Band 5

|                 |                                       |                               |                      |
|-----------------|---------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 5<br>Channel Bandwidth: 5MHz | Channel                       | CH 20425 : 826.5 MHz |
| Frequency Range | 30 MHz ~ 1 GHz                        | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                        | Environmental Conditions      | 22°C, 68% RH         |
| Tested By       | Vincent Chen                          |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 56.19           | -44.33    | -13.00      | -31.33      | 1.50 H             | 43                   | 65.70            | -110.03                  |
| 2                                                    | 110.51          | -39.60    | -13.00      | -26.60      | 2.00 H             | 254                  | 73.13            | -112.73                  |
| 3                                                    | 208.48          | -36.46    | -13.00      | -23.46      | 1.50 H             | 238                  | 76.68            | -113.14                  |
| 4                                                    | 479.11          | -51.11    | -13.00      | -38.11      | 1.00 H             | 168                  | 53.69            | -104.80                  |
| 5                                                    | 646.92          | -50.32    | -13.00      | -37.32      | 1.00 H             | 57                   | 50.98            | -101.30                  |
| 6                                                    | 903.97          | -47.01    | -13.00      | -34.01      | 2.00 H             | 136                  | 50.87            | -97.88                   |

#### Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



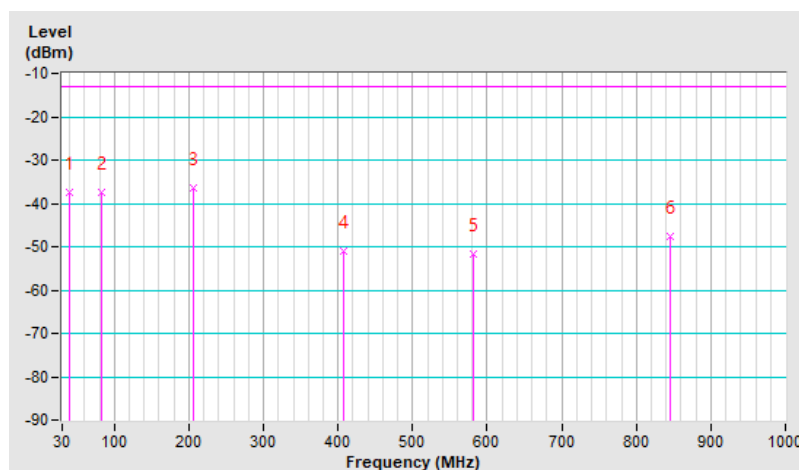


|                 |                                       |                               |                      |
|-----------------|---------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 5<br>Channel Bandwidth: 5MHz | Channel                       | CH 20425 : 826.5 MHz |
| Frequency Range | 30 MHz ~ 1 GHz                        | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                        | Environmental Conditions      | 22°C, 68% RH         |
| Tested By       | Vincent Chen                          |                               |                      |

| Antenna Polarity & Test Distance : Vertical at 3 m |                 |           |             |             |                    |                      |                  |                          |
|----------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                 | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                  | 40.67           | -37.31    | -13.00      | -24.31      | 1.00 V             | 73                   | 72.63            | -109.94                  |
| 2                                                  | 82.38           | -37.54    | -13.00      | -24.54      | 1.50 V             | 54                   | 77.41            | -114.95                  |
| 3                                                  | 206.54          | -36.53    | -13.00      | -23.53      | 2.00 V             | 286                  | 76.62            | -113.15                  |
| 4                                                  | 408.30          | -50.96    | -13.00      | -37.96      | 1.50 V             | 14                   | 55.78            | -106.74                  |
| 5                                                  | 580.96          | -51.60    | -13.00      | -38.60      | 1.00 V             | 168                  | 51.38            | -102.98                  |
| 6                                                  | 844.80          | -47.54    | -13.00      | -34.54      | 1.50 V             | 2                    | 50.67            | -98.21                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



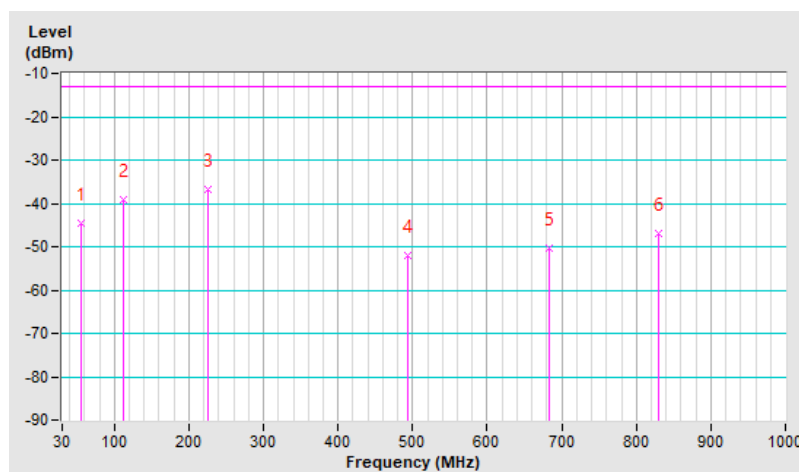
#### 7.6.4 LTE Band 12

|                 |                                         |                               |                    |
|-----------------|-----------------------------------------|-------------------------------|--------------------|
| RF Mode         | LTE Band 12<br>Channel Bandwidth: 10MHz | Channel                       | CH 23130 : 711 MHz |
| Frequency Range | 30 MHz ~ 1 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)  |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 22°C, 68% RH       |
| Tested By       | Vincent Chen                            |                               |                    |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 56.19           | -44.52    | -13.00      | -31.52      | 1.00 H             | 205                  | 65.51            | -110.03                  |
| 2                                                    | 111.48          | -39.30    | -13.00      | -26.30      | 1.50 H             | 248                  | 73.30            | -112.60                  |
| 3                                                    | 225.94          | -36.68    | -13.00      | -23.68      | 1.00 H             | 11                   | 76.59            | -113.27                  |
| 4                                                    | 493.66          | -51.90    | -13.00      | -38.90      | 1.50 H             | 121                  | 52.55            | -104.45                  |
| 5                                                    | 683.78          | -50.35    | -13.00      | -37.35      | 1.00 H             | 318                  | 50.55            | -100.90                  |
| 6                                                    | 829.28          | -46.93    | -13.00      | -33.93      | 2.00 H             | 237                  | 51.21            | -98.14                   |

#### Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

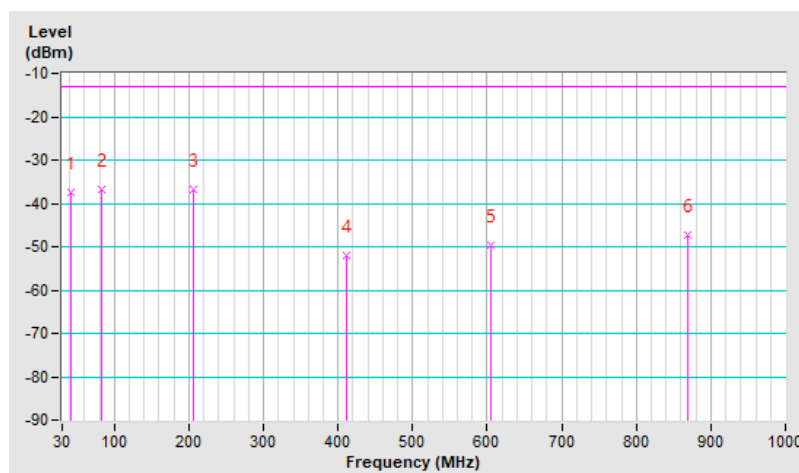


|                 |                                         |                               |                    |
|-----------------|-----------------------------------------|-------------------------------|--------------------|
| RF Mode         | LTE Band 12<br>Channel Bandwidth: 10MHz | Channel                       | CH 23130 : 711 MHz |
| Frequency Range | 30 MHz ~ 1 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)  |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 22°C, 68% RH       |
| Tested By       | Vincent Chen                            |                               |                    |

| Antenna Polarity & Test Distance : Vertical at 3 m |                 |           |             |             |                    |                      |                  |                          |
|----------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                 | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                  | 41.64           | -37.37    | -13.00      | -24.37      | 1.00 V             | 97                   | 72.45            | -109.82                  |
| 2                                                  | 83.35           | -36.67    | -13.00      | -23.67      | 1.50 V             | 52                   | 78.44            | -115.11                  |
| 3                                                  | 206.54          | -36.76    | -13.00      | -23.76      | 2.00 V             | 295                  | 76.39            | -113.15                  |
| 4                                                  | 411.21          | -52.14    | -13.00      | -39.14      | 1.50 V             | 14                   | 54.52            | -106.66                  |
| 5                                                  | 605.21          | -49.69    | -13.00      | -36.69      | 1.50 V             | 155                  | 52.68            | -102.37                  |
| 6                                                  | 869.05          | -47.41    | -13.00      | -34.41      | 1.00 V             | 263                  | 50.81            | -98.22                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



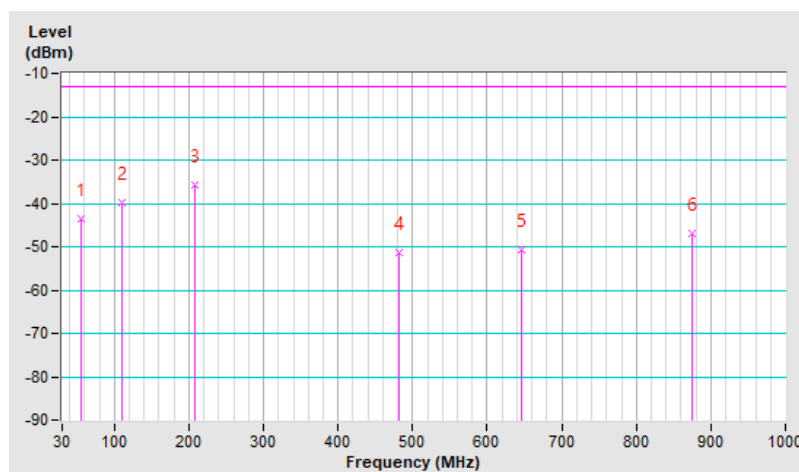
### 7.6.5 LTE Band 13

|                 |                                         |                               |                    |
|-----------------|-----------------------------------------|-------------------------------|--------------------|
| RF Mode         | LTE Band 13<br>Channel Bandwidth: 10MHz | Channel                       | CH 23230 : 782 MHz |
| Frequency Range | 30 MHz ~ 1 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)  |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 22°C, 68% RH       |
| Tested By       | Vincent Chen                            |                               |                    |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 56.19           | -43.72    | -13.00      | -30.72      | 2.00 H             | 204                  | 66.31            | -110.03                  |
| 2                                                    | 110.51          | -39.75    | -13.00      | -26.75      | 1.50 H             | 259                  | 72.98            | -112.73                  |
| 3                                                    | 207.51          | -35.84    | -13.00      | -22.84      | 1.00 H             | 236                  | 77.30            | -113.14                  |
| 4                                                    | 482.02          | -51.50    | -13.00      | -38.50      | 1.50 H             | 2                    | 53.25            | -104.75                  |
| 5                                                    | 646.92          | -50.57    | -13.00      | -37.57      | 2.00 H             | 154                  | 50.73            | -101.30                  |
| 6                                                    | 874.87          | -47.09    | -13.00      | -34.09      | 1.00 H             | 312                  | 51.05            | -98.14                   |

#### Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

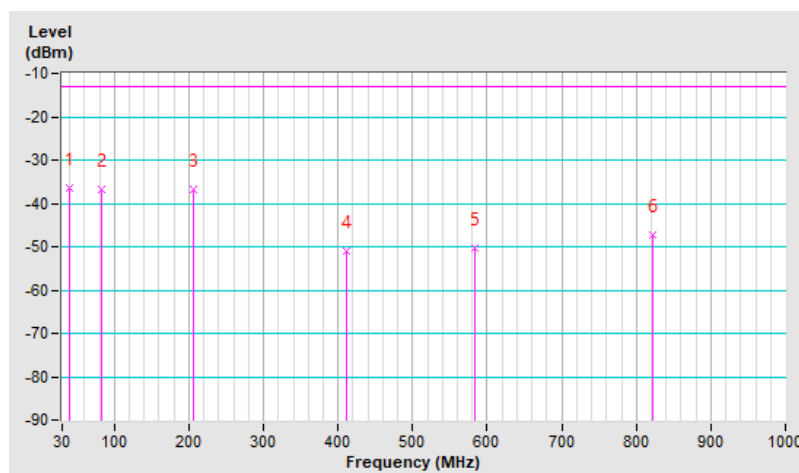


|                 |                                         |                               |                    |
|-----------------|-----------------------------------------|-------------------------------|--------------------|
| RF Mode         | LTE Band 13<br>Channel Bandwidth: 10MHz | Channel                       | CH 23230 : 782 MHz |
| Frequency Range | 30 MHz ~ 1 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)  |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 22°C, 68% RH       |
| Tested By       | Vincent Chen                            |                               |                    |

| Antenna Polarity & Test Distance : Vertical at 3 m |                 |           |             |             |                    |                      |                  |                          |
|----------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                 | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                  | 40.67           | -36.54    | -13.00      | -23.54      | 1.00 V             | 170                  | 73.40            | -109.94                  |
| 2                                                  | 82.38           | -36.62    | -13.00      | -23.62      | 2.00 V             | 226                  | 78.33            | -114.95                  |
| 3                                                  | 206.54          | -36.67    | -13.00      | -23.67      | 1.50 V             | 281                  | 76.48            | -113.15                  |
| 4                                                  | 411.21          | -51.12    | -13.00      | -38.12      | 2.00 V             | 18                   | 55.54            | -106.66                  |
| 5                                                  | 582.90          | -50.22    | -13.00      | -37.22      | 1.50 V             | 141                  | 52.70            | -102.92                  |
| 6                                                  | 822.49          | -47.13    | -13.00      | -34.13      | 1.00 V             | 81                   | 51.00            | -98.13                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



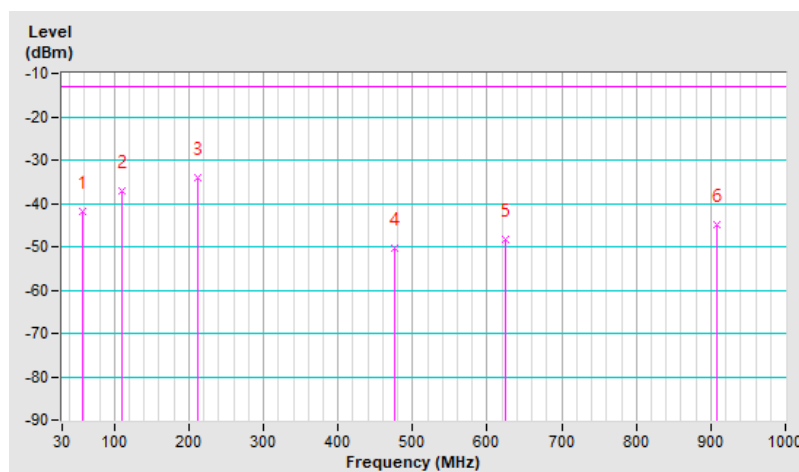
## 7.6.6 LTE Band 66

|                 |                                        |                               |                        |
|-----------------|----------------------------------------|-------------------------------|------------------------|
| RF Mode         | LTE Band 66<br>Channel Bandwidth: 5MHz | Channel                       | CH 131997 : 1712.5 MHz |
| Frequency Range | 30 MHz ~ 1 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)      |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 22°C, 68% RH           |
| Tested By       | Vincent Chen                           |                               |                        |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 57.16           | -41.88     | -13.00      | -28.88      | 1.00 H             | 228                  | 66.23            | -108.11                  |
| 2                                                    | 110.51          | -37.23     | -13.00      | -24.23      | 1.50 H             | 260                  | 73.35            | -110.58                  |
| 3                                                    | 212.36          | -34.05     | -13.00      | -21.05      | 2.00 H             | 233                  | 76.95            | -111.00                  |
| 4                                                    | 476.20          | -50.21     | -13.00      | -37.21      | 1.50 H             | 356                  | 52.51            | -102.72                  |
| 5                                                    | 623.64          | -48.24     | -13.00      | -35.24      | 1.00 H             | 233                  | 51.45            | -99.69                   |
| 6                                                    | 907.85          | -44.80     | -13.00      | -31.80      | 1.50 H             | 134                  | 50.84            | -95.64                   |

### Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

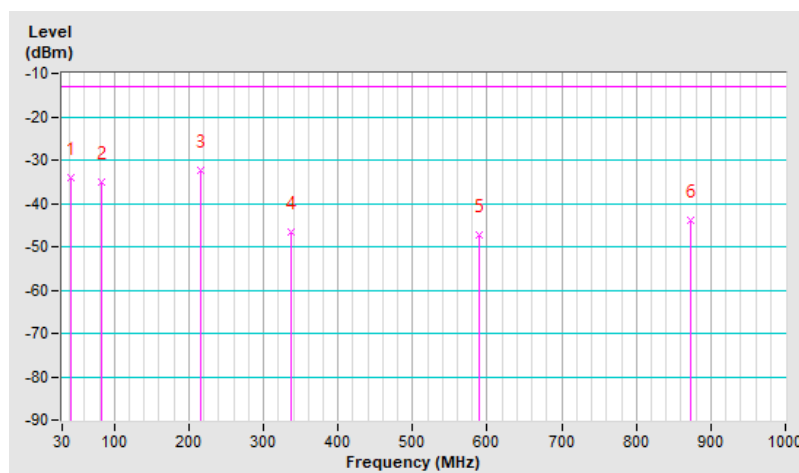


|                 |                                        |                               |                        |
|-----------------|----------------------------------------|-------------------------------|------------------------|
| RF Mode         | LTE Band 66<br>Channel Bandwidth: 5MHz | Channel                       | CH 131997 : 1712.5 MHz |
| Frequency Range | 30 MHz ~ 1 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)      |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 22°C, 68% RH           |
| Tested By       | Vincent Chen                           |                               |                        |

| Antenna Polarity & Test Distance : Vertical at 3 m |                 |               |               |               |                    |                      |                  |                          |
|----------------------------------------------------|-----------------|---------------|---------------|---------------|--------------------|----------------------|------------------|--------------------------|
| No                                                 | Frequency (MHz) | EIRP (dBm)    | Limit (dBm)   | Margin (dB)   | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                  | 41.64           | -34.17        | -13.00        | -21.17        | 1.00 V             | 40                   | 73.50            | -107.67                  |
| 2                                                  | 83.35           | -35.13        | -13.00        | -22.13        | 1.50 V             | 53                   | 77.83            | -112.96                  |
| 3                                                  | <b>215.27</b>   | <b>-32.46</b> | <b>-13.00</b> | <b>-19.46</b> | <b>1.00 V</b>      | <b>203</b>           | <b>78.56</b>     | <b>-111.02</b>           |
| 4                                                  | 337.49          | -46.45        | -13.00        | -33.45        | 1.50 V             | 180                  | 59.80            | -106.25                  |
| 5                                                  | 588.72          | -47.15        | -13.00        | -34.15        | 2.00 V             | 227                  | 53.47            | -100.62                  |
| 6                                                  | 871.96          | -43.89        | -13.00        | -30.89        | 2.00 V             | 83                   | 52.15            | -96.04                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



## 7.7 Radiated Spurious Emissions above 1GHz

### 7.7.1 LTE Band 2

|                 |                                         |                               |                       |
|-----------------|-----------------------------------------|-------------------------------|-----------------------|
| RF Mode         | LTE Band 2<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 18607 : 1850.7 MHz |
| Frequency Range | 1 GHz ~ 20 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)     |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH          |
| Tested By       | TitanHSU                                |                               |                       |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3760.00         | -47.81     | -13.00      | -34.81      | 1.51 H             | 236                  | 40.50            | -88.31                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3701.40         | -45.86     | -13.00      | -32.86      | 1.29 V             | 160                  | 42.77            | -88.63                   |

#### Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



|                 |                                         |                               |                     |
|-----------------|-----------------------------------------|-------------------------------|---------------------|
| RF Mode         | LTE Band 2<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 18900 : 1880 MHz |
| Frequency Range | 1 GHz ~ 20 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)   |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH        |
| Tested By       | TitanHSU                                |                               |                     |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3760.00         | -46.89     | -13.00      | -33.89      | 1.57 H             | 238                  | 41.42            | -88.31                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3760.00         | -45.69     | -13.00      | -32.69      | 1.34 V             | 158                  | 42.62            | -88.31                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                         |                               |                       |
|-----------------|-----------------------------------------|-------------------------------|-----------------------|
| RF Mode         | LTE Band 2<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 19193 : 1909.3 MHz |
| Frequency Range | 1 GHz ~ 20 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)     |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH          |
| Tested By       | TitanHSU                                |                               |                       |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3818.60         | -47.14     | -13.00      | -34.14      | 1.60 H             | 242                  | 40.88            | -88.02                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3818.60         | -45.13     | -13.00      | -32.13      | 1.32 V             | 159                  | 42.89            | -88.02                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                       |                               |                       |
|-----------------|---------------------------------------|-------------------------------|-----------------------|
| RF Mode         | LTE Band 2<br>Channel Bandwidth: 5MHz | Channel                       | CH 18625 : 1852.5 MHz |
| Frequency Range | 1 GHz ~ 20 GHz                        | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)     |
| Input Power     | 120 Vac, 60 Hz                        | Environmental Conditions      | 23°C, 66% RH          |
| Tested By       | TitanHSU                              |                               |                       |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3705.00         | -47.63     | -13.00      | -34.63      | 1.57 H             | 243                  | 40.97            | -88.60                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3705.00         | -45.11     | -13.00      | -32.11      | 1.26 V             | 158                  | 43.49            | -88.60                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                       |                               |                     |
|-----------------|---------------------------------------|-------------------------------|---------------------|
| RF Mode         | LTE Band 2<br>Channel Bandwidth: 5MHz | Channel                       | CH 18900 : 1880 MHz |
| Frequency Range | 1 GHz ~ 20 GHz                        | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)   |
| Input Power     | 120 Vac, 60 Hz                        | Environmental Conditions      | 23°C, 66% RH        |
| Tested By       | TitanHSU                              |                               |                     |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3760.00         | -47.22     | -13.00      | -34.22      | 1.50 H             | 242                  | 41.09            | -88.31                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3760.00         | -46.07     | -13.00      | -33.07      | 1.25 V             | 156                  | 42.24            | -88.31                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                       |                               |                       |
|-----------------|---------------------------------------|-------------------------------|-----------------------|
| RF Mode         | LTE Band 2<br>Channel Bandwidth: 5MHz | Channel                       | CH 19175 : 1907.5 MHz |
| Frequency Range | 1 GHz ~ 20 GHz                        | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)     |
| Input Power     | 120 Vac, 60 Hz                        | Environmental Conditions      | 23°C, 66% RH          |
| Tested By       | TitanHSU                              |                               |                       |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3815.00         | -46.71     | -13.00      | -33.71      | 1.57 H             | 243                  | 41.35            | -88.06                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3815.00         | -45.05     | -13.00      | -32.05      | 1.29 V             | 156                  | 43.01            | -88.06                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                        |                               |                     |
|-----------------|----------------------------------------|-------------------------------|---------------------|
| RF Mode         | LTE Band 2<br>Channel Bandwidth: 20MHz | Channel                       | CH 18700 : 1860 MHz |
| Frequency Range | 1 GHz ~ 20 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)   |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH        |
| Tested By       | TitanHSU                               |                               |                     |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3720.00         | -47.72     | -13.00      | -34.72      | 1.54 H             | 243                  | 40.80            | -88.52                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3720.00         | -45.88     | -13.00      | -32.88      | 1.32 V             | 159                  | 42.64            | -88.52                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                        |                               |                     |
|-----------------|----------------------------------------|-------------------------------|---------------------|
| RF Mode         | LTE Band 2<br>Channel Bandwidth: 20MHz | Channel                       | CH 18900 : 1880 MHz |
| Frequency Range | 1 GHz ~ 20 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)   |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH        |
| Tested By       | TitanHSU                               |                               |                     |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3760.00         | -47.18     | -13.00      | -34.18      | 1.51 H             | 238                  | 41.13            | -88.31                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3760.00         | -45.41     | -13.00      | -32.41      | 1.27 V             | 155                  | 42.90            | -88.31                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                        |                               |                     |
|-----------------|----------------------------------------|-------------------------------|---------------------|
| RF Mode         | LTE Band 2<br>Channel Bandwidth: 20MHz | Channel                       | CH 19100 : 1900 MHz |
| Frequency Range | 1 GHz ~ 20 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)   |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH        |
| Tested By       | TitanHSU                               |                               |                     |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3800.00         | -47.80     | -13.00      | -34.80      | 1.58 H             | 236                  | 40.36            | -88.16                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3800.00         | -44.90     | -13.00      | -31.90      | 1.35 V             | 155                  | 43.26            | -88.16                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



### 7.7.2 LTE Band 4

|                 |                                         |                               |                       |
|-----------------|-----------------------------------------|-------------------------------|-----------------------|
| RF Mode         | LTE Band 4<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 19957 : 1710.7 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)     |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH          |
| Tested By       | TitanHSU                                |                               |                       |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3421.40         | -34.50     | -13.00      | -21.50      | 1.43 H             | 137                  | 55.81            | -90.31                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3421.40         | -36.31     | -13.00      | -23.31      | 2.35 V             | 189                  | 54.00            | -90.31                   |

#### Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                         |                               |                       |
|-----------------|-----------------------------------------|-------------------------------|-----------------------|
| RF Mode         | LTE Band 4<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 20175 : 1732.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)     |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH          |
| Tested By       | TitanHSU                                |                               |                       |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3465.00         | -33.81     | -13.00      | -20.81      | 1.39 H             | 135                  | 56.28            | -90.09                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3465.00         | -35.90     | -13.00      | -22.90      | 2.38 V             | 190                  | 54.19            | -90.09                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                         |                               |                       |
|-----------------|-----------------------------------------|-------------------------------|-----------------------|
| RF Mode         | LTE Band 4<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 20393 : 1754.3 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)     |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH          |
| Tested By       | TitanHSU                                |                               |                       |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3508.60         | -34.03     | -13.00      | -21.03      | 1.38 H             | 138                  | 55.72            | -89.75                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3508.60         | -34.64     | -13.00      | -21.64      | 2.35 V             | 192                  | 55.11            | -89.75                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                       |                               |                       |
|-----------------|---------------------------------------|-------------------------------|-----------------------|
| RF Mode         | LTE Band 4<br>Channel Bandwidth: 5MHz | Channel                       | CH 19975 : 1712.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                        | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)     |
| Input Power     | 120 Vac, 60 Hz                        | Environmental Conditions      | 23°C, 66% RH          |
| Tested By       | TitanHSU                              |                               |                       |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3425.00         | -33.65     | -13.00      | -20.65      | 1.39 H             | 139                  | 56.65            | -90.30                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3425.00         | -35.31     | -13.00      | -22.31      | 2.36 V             | 195                  | 54.99            | -90.30                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                       |                               |                       |
|-----------------|---------------------------------------|-------------------------------|-----------------------|
| RF Mode         | LTE Band 4<br>Channel Bandwidth: 5MHz | Channel                       | CH 20175 : 1732.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                        | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)     |
| Input Power     | 120 Vac, 60 Hz                        | Environmental Conditions      | 23°C, 66% RH          |
| Tested By       | TitanHSU                              |                               |                       |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3465.00         | -33.88     | -13.00      | -20.88      | 1.40 H             | 133                  | 56.21            | -90.09                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3465.00         | -36.15     | -13.00      | -23.15      | 2.36 V             | 193                  | 53.94            | -90.09                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                       |                               |                       |
|-----------------|---------------------------------------|-------------------------------|-----------------------|
| RF Mode         | LTE Band 4<br>Channel Bandwidth: 5MHz | Channel                       | CH 20375 : 1752.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                        | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)     |
| Input Power     | 120 Vac, 60 Hz                        | Environmental Conditions      | 23°C, 66% RH          |
| Tested By       | TitanHSU                              |                               |                       |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3505.00         | -33.81     | -13.00      | -20.81      | 1.47 H             | 138                  | 55.95            | -89.76                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3505.00         | -34.56     | -13.00      | -21.56      | 2.35 V             | 191                  | 55.20            | -89.76                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                        |                               |                     |
|-----------------|----------------------------------------|-------------------------------|---------------------|
| RF Mode         | LTE Band 4<br>Channel Bandwidth: 20MHz | Channel                       | CH 20050 : 1720 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)   |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH        |
| Tested By       | TitanHSU                               |                               |                     |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3440.00         | -33.62     | -13.00      | -20.62      | 1.47 H             | 133                  | 56.63            | -90.25                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3440.00         | -35.76     | -13.00      | -22.76      | 2.29 V             | 192                  | 54.49            | -90.25                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                        |                               |                       |
|-----------------|----------------------------------------|-------------------------------|-----------------------|
| RF Mode         | LTE Band 4<br>Channel Bandwidth: 20MHz | Channel                       | CH 20175 : 1732.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)     |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH          |
| Tested By       | TitanHSU                               |                               |                       |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3465.00         | -34.15     | -13.00      | -21.15      | 1.47 H             | 139                  | 55.94            | -90.09                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3465.00         | -35.26     | -13.00      | -22.26      | 2.30 V             | 193                  | 54.83            | -90.09                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



|                 |                                        |                               |                     |
|-----------------|----------------------------------------|-------------------------------|---------------------|
| RF Mode         | LTE Band 4<br>Channel Bandwidth: 20MHz | Channel                       | CH 20300 : 1745 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)   |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH        |
| Tested By       | TitanHSU                               |                               |                     |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3490.00         | -33.65     | -13.00      | -20.65      | 1.39 H             | 132                  | 56.21            | -89.86                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3490.00         | -35.75     | -13.00      | -22.75      | 2.35 V             | 192                  | 54.11            | -89.86                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

### 7.7.3 LTE Band 5

|                 |                                         |                               |                      |
|-----------------|-----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 5<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 20407 : 824.7 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                              |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1649.40         | -41.00    | -13.00      | -28.00      | 1.50 H             | 215                  | 58.54            | -99.54                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1649.40         | -43.56    | -13.00      | -30.56      | 1.22 V             | 77                   | 55.98            | -99.54                   |

#### Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

|                 |                                         |                               |                      |
|-----------------|-----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 5<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 20525 : 836.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                              |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1673.00         | -41.22    | -13.00      | -28.22      | 1.51 H             | 100                  | 58.18            | -99.40                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1673.00         | -43.62    | -13.00      | -30.62      | 2.55 V             | 70                   | 55.78            | -99.40                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

|                 |                                         |                               |                      |
|-----------------|-----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 5<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 20643 : 848.3 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                              |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1696.60         | -41.26    | -13.00      | -28.26      | 1.55 H             | 200                  | 58.00            | -99.26                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1696.60         | -43.22    | -13.00      | -30.22      | 1.23 V             | 70                   | 56.04            | -99.26                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

|                 |                                       |                               |                      |
|-----------------|---------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 5<br>Channel Bandwidth: 5MHz | Channel                       | CH 20425 : 826.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                        | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                        | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                            |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1653.00         | -40.98    | -13.00      | -27.98      | 1.35 H             | 169                  | 58.54            | -99.52                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1653.00         | -42.95    | -13.00      | -29.95      | 2.15 V             | 77                   | 56.57            | -99.52                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.

|                 |                                       |                               |                      |
|-----------------|---------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 5<br>Channel Bandwidth: 5MHz | Channel                       | CH 20525 : 836.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                        | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                        | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                            |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1673.00         | -41.18    | -13.00      | -28.18      | 1.55 H             | 148                  | 58.22            | -99.40                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1673.00         | -43.32    | -13.00      | -30.32      | 1.41 V             | 60                   | 56.08            | -99.40                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

|                 |                                       |                               |                      |
|-----------------|---------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 5<br>Channel Bandwidth: 5MHz | Channel                       | CH 20625 : 846.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                        | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                        | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                            |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1693.00         | -41.17    | -13.00      | -28.17      | 1.04 H             | 111                  | 58.11            | -99.28                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1693.00         | -43.22    | -13.00      | -30.22      | 2.13 V             | 78                   | 56.06            | -99.28                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

|                 |                                        |                               |                    |
|-----------------|----------------------------------------|-------------------------------|--------------------|
| RF Mode         | LTE Band 5<br>Channel Bandwidth: 10MHz | Channel                       | CH 20450 : 829 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)  |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH       |
| Tested By       | Noah Chang                             |                               |                    |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1658.00         | -41.17    | -13.00      | -28.17      | 1.78 H             | 80                   | 58.32            | -99.49                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1658.00         | -42.97    | -13.00      | -29.97      | 2.05 V             | 95                   | 56.52            | -99.49                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



|                 |                                        |                               |                      |
|-----------------|----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 5<br>Channel Bandwidth: 10MHz | Channel                       | CH 20525 : 836.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                             |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1673.00         | -41.17    | -13.00      | -28.17      | 2.13 H             | 210                  | 58.23            | -99.40                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1673.00         | -43.22    | -13.00      | -30.22      | 1.74 V             | 60                   | 56.18            | -99.40                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

|                 |                                        |                               |                    |
|-----------------|----------------------------------------|-------------------------------|--------------------|
| RF Mode         | LTE Band 5<br>Channel Bandwidth: 10MHz | Channel                       | CH 20600 : 844 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)  |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH       |
| Tested By       | Noah Chang                             |                               |                    |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1688.00         | -41.00    | -13.00      | -28.00      | 1.00 H             | 210                  | 58.31            | -99.31                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1688.00         | -43.10    | -13.00      | -30.10      | 2.13 V             | 77                   | 56.21            | -99.31                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

#### 7.7.4 LTE Band 12

|                 |                                          |                               |                      |
|-----------------|------------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 12<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 23017 : 699.7 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                           | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                           | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                               |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1399.40         | -50.55    | -13.00      | -37.55      | 1.00 H             | 133                  | 49.34            | -99.89                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1399.40         | -54.88    | -13.00      | -41.88      | 2.12 V             | 188                  | 45.01            | -99.89                   |

#### Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.

|                 |                                          |                               |                      |
|-----------------|------------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 12<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 23095 : 707.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                           | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                           | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                               |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1415.00         | -50.78    | -13.00      | -37.78      | 1.44 H             | 150                  | 49.11            | -99.89                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1415.00         | -55.05    | -13.00      | -42.05      | 2.00 V             | 189                  | 44.84            | -99.89                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

|                 |                                          |                               |                      |
|-----------------|------------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 12<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 23173 : 715.3 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                           | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                           | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                               |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1430.60         | -50.28    | -13.00      | -37.28      | 1.40 H             | 128                  | 49.60            | -99.88                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1430.60         | -54.85    | -13.00      | -41.85      | 2.15 V             | 180                  | 45.03            | -99.88                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

|                 |                                        |                               |                      |
|-----------------|----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 12<br>Channel Bandwidth: 5MHz | Channel                       | CH 23035 : 701.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                             |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1403.00         | -51.00    | -13.00      | -38.00      | 1.40 H             | 131                  | 48.90            | -99.90                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1403.00         | -55.05    | -13.00      | -42.05      | 2.11 V             | 199                  | 44.85            | -99.90                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

|                 |                                        |                               |                      |
|-----------------|----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 12<br>Channel Bandwidth: 5MHz | Channel                       | CH 23095 : 707.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                             |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1415.00         | -50.55    | -13.00      | -37.55      | 1.35 H             | 128                  | 49.34            | -99.89                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1415.00         | -54.66    | -13.00      | -41.66      | 2.11 V             | 170                  | 45.23            | -99.89                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

|                 |                                        |                               |                      |
|-----------------|----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 12<br>Channel Bandwidth: 5MHz | Channel                       | CH 23155 : 713.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                             |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1427.00         | -50.99    | -13.00      | -37.99      | 1.50 H             | 135                  | 48.89            | -99.88                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1427.00         | -54.59    | -13.00      | -41.59      | 2.33 V             | 193                  | 45.29            | -99.88                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



|                 |                                         |                               |                    |
|-----------------|-----------------------------------------|-------------------------------|--------------------|
| RF Mode         | LTE Band 12<br>Channel Bandwidth: 10MHz | Channel                       | CH 23060 : 704 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)  |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH       |
| Tested By       | Noah Chang                              |                               |                    |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1408.00         | -50.85    | -13.00      | -37.85      | 1.44 H             | 138                  | 49.04            | -99.89                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1408.00         | -54.78    | -13.00      | -41.78      | 2.15 V             | 185                  | 45.11            | -99.89                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

|                 |                                         |                               |                      |
|-----------------|-----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 12<br>Channel Bandwidth: 10MHz | Channel                       | CH 23095 : 707.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                              |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1415.00         | -50.18    | -13.00      | -37.18      | 1.42 H             | 134                  | 49.71            | -99.89                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1415.00         | -55.11    | -13.00      | -42.11      | 3.00 V             | 180                  | 44.78            | -99.89                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

|                 |                                         |                               |                    |
|-----------------|-----------------------------------------|-------------------------------|--------------------|
| RF Mode         | LTE Band 12<br>Channel Bandwidth: 10MHz | Channel                       | CH 23130 : 711 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)  |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH       |
| Tested By       | Noah Chang                              |                               |                    |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |           |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1422.00         | -50.17    | -13.00      | -37.17      | 1.33 H             | 150                  | 49.72            | -99.89                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |           |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | ERP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1422.00         | -54.80    | -13.00      | -41.80      | 2.31 V             | 177                  | 45.09            | -99.89                   |

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

### 7.7.5 LTE Band 13

|                 |                                        |                               |                      |
|-----------------|----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 13<br>Channel Bandwidth: 5MHz | Channel                       | CH 23205 : 779.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                             |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1559.00         | -47.00     | -40.00      | -7.00       | 1.01 H             | 66                   | 50.60            | -97.60                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1559.00         | -53.20     | -40.00      | -13.20      | 2.45 V             | 69                   | 44.40            | -97.60                   |

#### Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                        |                               |                    |
|-----------------|----------------------------------------|-------------------------------|--------------------|
| RF Mode         | LTE Band 13<br>Channel Bandwidth: 5MHz | Channel                       | CH 23230 : 782 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)  |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH       |
| Tested By       | Noah Chang                             |                               |                    |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1564.00         | -47.00     | -40.00      | -7.00       | 1.00 H             | 62                   | 50.60            | -97.60                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1564.00         | -52.70     | -40.00      | -12.70      | 2.15 V             | 70                   | 44.90            | -97.60                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                        |                               |                      |
|-----------------|----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 13<br>Channel Bandwidth: 5MHz | Channel                       | CH 23255 : 784.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                             |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1569.00         | -47.30     | -40.00      | -7.30       | 1.00 H             | 68                   | 50.20            | -97.50                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1569.00         | -52.40     | -40.00      | -12.40      | 2.22 V             | 66                   | 45.10            | -97.50                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                         |                               |                    |
|-----------------|-----------------------------------------|-------------------------------|--------------------|
| RF Mode         | LTE Band 13<br>Channel Bandwidth: 10MHz | Channel                       | CH 23230 : 782 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)  |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH       |
| Tested By       | Noah Chang                              |                               |                    |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1564.00         | -46.90     | -40.00      | -6.90       | 1.15 H             | 65                   | 50.70            | -97.60                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 1564.00         | -52.60     | -40.00      | -12.60      | 2.15 V             | 70                   | 45.00            | -97.60                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

#### 7.7.6 LTE Band 66

|                 |                                          |                               |                        |
|-----------------|------------------------------------------|-------------------------------|------------------------|
| RF Mode         | LTE Band 66<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 131979 : 1710.7 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                           | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)      |
| Input Power     | 120 Vac, 60 Hz                           | Environmental Conditions      | 23°C, 66% RH           |
| Tested By       | Noah Chang                               |                               |                        |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3421.40         | -43.13     | -13.00      | -30.13      | 1.00 H             | 124                  | 47.18            | -90.31                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3421.40         | -43.99     | -13.00      | -30.99      | 1.88 V             | 256                  | 46.32            | -90.31                   |

#### Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



|                 |                                          |                               |                      |
|-----------------|------------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 66<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 132322 : 1745 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                           | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                           | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                               |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3490.00         | -43.33     | -13.00      | -30.33      | 2.15 H             | 240                  | 46.53            | -89.86                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3490.00         | -43.69     | -13.00      | -30.69      | 1.74 V             | 211                  | 46.17            | -89.86                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                          |                               |                        |
|-----------------|------------------------------------------|-------------------------------|------------------------|
| RF Mode         | LTE Band 66<br>Channel Bandwidth: 1.4MHz | Channel                       | CH 132665 : 1779.3 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                           | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)      |
| Input Power     | 120 Vac, 60 Hz                           | Environmental Conditions      | 23°C, 66% RH           |
| Tested By       | Noah Chang                               |                               |                        |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3558.60         | -43.50     | -13.00      | -30.50      | 1.44 H             | 139                  | 46.03            | -89.53                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3558.60         | -43.66     | -13.00      | -30.66      | 2.15 V             | 122                  | 45.87            | -89.53                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                        |                               |                        |
|-----------------|----------------------------------------|-------------------------------|------------------------|
| RF Mode         | LTE Band 66<br>Channel Bandwidth: 5MHz | Channel                       | CH 131997 : 1712.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)      |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH           |
| Tested By       | Noah Chang                             |                               |                        |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3425.00         | -42.89     | -13.00      | -29.89      | 1.44 H             | 130                  | 47.41            | -90.30                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3425.00         | -43.96     | -13.00      | -30.96      | 1.85 V             | 215                  | 46.34            | -90.30                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                        |                               |                      |
|-----------------|----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 66<br>Channel Bandwidth: 5MHz | Channel                       | CH 132322 : 1745 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                             |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3490.00         | -43.05     | -13.00      | -30.05      | 1.44 H             | 133                  | 46.81            | -89.86                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3490.00         | -43.63     | -13.00      | -30.63      | 1.87 V             | 231                  | 46.23            | -89.86                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                        |                               |                        |
|-----------------|----------------------------------------|-------------------------------|------------------------|
| RF Mode         | LTE Band 66<br>Channel Bandwidth: 5MHz | Channel                       | CH 132647 : 1777.5 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                         | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)      |
| Input Power     | 120 Vac, 60 Hz                         | Environmental Conditions      | 23°C, 66% RH           |
| Tested By       | Noah Chang                             |                               |                        |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3555.00         | -43.01     | -13.00      | -30.01      | 1.44 H             | 158                  | 46.54            | -89.55                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3555.00         | -43.16     | -13.00      | -30.16      | 1.81 V             | 200                  | 46.39            | -89.55                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                         |                               |                      |
|-----------------|-----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 66<br>Channel Bandwidth: 20MHz | Channel                       | CH 132072 : 1720 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                              |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3440.00         | -43.33     | -13.00      | -30.33      | 1.83 H             | 245                  | 46.92            | -90.25                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3440.00         | -43.83     | -13.00      | -30.83      | 1.89 V             | 255                  | 46.42            | -90.25                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                         |                               |                      |
|-----------------|-----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 66<br>Channel Bandwidth: 20MHz | Channel                       | CH 132322 : 1745 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                              |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3490.00         | -43.16     | -13.00      | -30.16      | 1.40 H             | 131                  | 46.70            | -89.86                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3490.00         | -43.32     | -13.00      | -30.32      | 1.32 V             | 215                  | 46.54            | -89.86                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

|                 |                                         |                               |                      |
|-----------------|-----------------------------------------|-------------------------------|----------------------|
| RF Mode         | LTE Band 66<br>Channel Bandwidth: 20MHz | Channel                       | CH 132572 : 1770 MHz |
| Frequency Range | 1 GHz ~ 18 GHz                          | Detector Function & Bandwidth | 1 MHz/3 MHz (RMS)    |
| Input Power     | 120 Vac, 60 Hz                          | Environmental Conditions      | 23°C, 66% RH         |
| Tested By       | Noah Chang                              |                               |                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |            |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3540.00         | -43.55     | -13.00      | -30.55      | 1.40 H             | 150                  | 46.06            | -89.61                   |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |            |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm) | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3540.00         | -43.39     | -13.00      | -30.39      | 1.88 V             | 221                  | 46.22            | -89.61                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



## 7.8 Frequency Stability

|                           |              |            |            |
|---------------------------|--------------|------------|------------|
| Environmental Conditions: | 22°C, 68% RH | Tested By: | Noah Chang |
|---------------------------|--------------|------------|------------|

### 7.8.1 LTE Band 2

#### LTE Band 2, Channel Bandwidth: 1.4 MHz

| Frequency Stability Versus Voltage |                       |                       |                       |                       |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Voltage (Vdc)                      | CH 18607 (1850.7 MHz) |                       | CH 19193 (1909.3 MHz) |                       |
|                                    | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| 3.85                               | 1850.700001           | 0.0005                | 1909.300000           | -0.0010               |
| 3.27                               | 1850.700001           | 0.0005                | 1909.299995           | -0.0026               |
| 4.43                               | 1850.699997           | -0.0016               | 1909.299995           | -0.0026               |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                       |                       |                       |                       |
|----------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Temperature (°C)                       | CH 18607 (1850.7 MHz) |                       | CH 19193 (1909.3 MHz) |                       |
|                                        | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| -30                                    | 1850.699996           | -0.0022               | 1909.299997           | -0.0016               |
| -20                                    | 1850.700004           | 0.0022                | 1909.299999           | -0.0005               |
| -10                                    | 1850.699995           | -0.0027               | 1909.299998           | -0.0010               |
| 0                                      | 1850.699997           | -0.0016               | 1909.299998           | -0.0010               |
| 10                                     | 1850.699997           | -0.0016               | 1909.299997           | -0.0016               |
| 20                                     | 1850.700003           | 0.0016                | 1909.300001           | 0.0005                |
| 30                                     | 1850.700003           | 0.0016                | 1909.300002           | 0.0010                |
| 40                                     | 1850.699999           | -0.0005               | 1909.299996           | -0.0021               |
| 50                                     | 1850.700002           | 0.0011                | 1909.299996           | -0.0021               |

## LTE Band 2, Channel Bandwidth: 3 MHz

| Frequency Stability Versus Voltage |                       |                       |                       |                       |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Voltage (Vdc)                      | CH 18615 (1851.5 MHz) |                       | CH 19185 (1908.5 MHz) |                       |
|                                    | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| 3.85                               | 1851.500002           | 0.0011                | 1908.500001           | 0.0005                |
| 3.27                               | 1851.500005           | 0.0027                | 1908.499996           | -0.0021               |
| 4.43                               | 1851.500004           | 0.0022                | 1908.500002           | 0.0010                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                       |                       |                       |                       |
|----------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Temperature (°C)                       | CH 18615 (1851.5 MHz) |                       | CH 19185 (1908.5 MHz) |                       |
|                                        | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| -30                                    | 1851.499996           | -0.0022               | 1908.500003           | 0.0016                |
| -20                                    | 1851.500004           | 0.0022                | 1908.500004           | 0.0021                |
| -10                                    | 1851.499996           | -0.0022               | 1908.499996           | -0.0021               |
| 0                                      | 1851.500001           | 0.0005                | 1908.500001           | 0.0005                |
| 10                                     | 1851.499998           | -0.0011               | 1908.500002           | 0.0010                |
| 20                                     | 1851.500004           | 0.0022                | 1908.500002           | 0.0010                |
| 30                                     | 1851.499997           | -0.0016               | 1908.499999           | -0.0005               |
| 40                                     | 1851.500001           | 0.0005                | 1908.500002           | 0.0010                |
| 50                                     | 1851.499995           | -0.0027               | 1908.499995           | -0.0026               |

## LTE Band 2, Channel Bandwidth: 5 MHz

| Frequency Stability Versus Voltage |                       |                       |                       |                       |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Voltage (Vdc)                      | CH 18625 (1852.5 MHz) |                       | CH 19175 (1907.5 MHz) |                       |
|                                    | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| 3.85                               | 1852.500005           | 0.0027                | 1907.499998           | -0.0010               |
| 3.27                               | 1852.500004           | 0.0022                | 1907.499997           | -0.0016               |
| 4.43                               | 1852.499998           | -0.0011               | 1907.499996           | -0.0021               |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                       |                       |                       |                       |
|----------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Temperature (°C)                       | CH 18625 (1852.5 MHz) |                       | CH 19175 (1907.5 MHz) |                       |
|                                        | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| -30                                    | 1852.500003           | 0.0016                | 1907.499996           | -0.0021               |
| -20                                    | 1852.500003           | 0.0016                | 1907.500005           | 0.0026                |
| -10                                    | 1852.499999           | -0.0005               | 1907.499995           | -0.0026               |
| 0                                      | 1852.500004           | 0.0022                | 1907.500004           | 0.0021                |
| 10                                     | 1852.500001           | 0.0005                | 1907.500001           | 0.0005                |
| 20                                     | 1852.499997           | -0.0016               | 1907.500001           | 0.0005                |
| 30                                     | 1852.499998           | -0.0011               | 1907.499998           | -0.0010               |
| 40                                     | 1852.499997           | -0.0016               | 1907.500001           | 0.0005                |
| 50                                     | 1852.499999           | -0.0005               | 1907.500001           | 0.0005                |

## LTE Band 2, Channel Bandwidth: 10 MHz

| Frequency Stability Versus Voltage |                     |                       |                     |                       |
|------------------------------------|---------------------|-----------------------|---------------------|-----------------------|
| Voltage (Vdc)                      | CH 18650 (1855 MHz) |                       | CH 19150 (1905 MHz) |                       |
|                                    | Frequency (MHz)     | Frequency Error (ppm) | Frequency (MHz)     | Frequency Error (ppm) |
| 3.85                               | 1854.999997         | -0.0016               | 1905.000001         | 0.0005                |
| 3.27                               | 1854.999998         | -0.0011               | 1905.000005         | 0.0026                |
| 4.43                               | 1854.999995         | -0.0027               | 1904.999996         | -0.0021               |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                     |                       |                     |                       |
|----------------------------------------|---------------------|-----------------------|---------------------|-----------------------|
| Temperature (°C)                       | CH 18650 (1855 MHz) |                       | CH 19150 (1905 MHz) |                       |
|                                        | Frequency (MHz)     | Frequency Error (ppm) | Frequency (MHz)     | Frequency Error (ppm) |
| -30                                    | 1855.000002         | 0.0011                | 1905.000001         | 0.0005                |
| -20                                    | 1854.999997         | -0.0016               | 1905.000001         | 0.0005                |
| -10                                    | 1854.999996         | -0.0022               | 1904.999996         | -0.0021               |
| 0                                      | 1855.000005         | 0.0027                | 1904.999997         | -0.0016               |
| 10                                     | 1854.999997         | -0.0016               | 1905.000004         | 0.0021                |
| 20                                     | 1855.000001         | 0.0005                | 1905.000003         | 0.0016                |
| 30                                     | 1855.000005         | 0.0027                | 1905.000004         | 0.0021                |
| 40                                     | 1854.999999         | -0.0005               | 1905.000002         | 0.0010                |
| 50                                     | 1855.000002         | 0.0011                | 1905.000004         | 0.0021                |

## LTE Band 2, Channel Bandwidth: 15 MHz

| Frequency Stability Versus Voltage |                       |                       |                       |                       |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Voltage (Vdc)                      | CH 18675 (1857.5 MHz) |                       | CH 19125 (1902.5 MHz) |                       |
|                                    | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| 3.85                               | 1857.499996           | -0.0022               | 1902.500001           | 0.0005                |
| 3.27                               | 1857.499995           | -0.0027               | 1902.499997           | -0.0016               |
| 4.43                               | 1857.499995           | -0.0027               | 1902.500001           | 0.0005                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                       |                       |                       |                       |
|----------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Temperature (°C)                       | CH 18675 (1857.5 MHz) |                       | CH 19125 (1902.5 MHz) |                       |
|                                        | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| -30                                    | 1857.500002           | 0.0011                | 1902.499996           | -0.0021               |
| -20                                    | 1857.500002           | 0.0011                | 1902.499998           | -0.0011               |
| -10                                    | 1857.500001           | 0.0005                | 1902.499998           | -0.0011               |
| 0                                      | 1857.499996           | -0.0022               | 1902.499998           | -0.0011               |
| 10                                     | 1857.499995           | -0.0027               | 1902.499996           | -0.0021               |
| 20                                     | 1857.499999           | -0.0005               | 1902.500001           | 0.0005                |
| 30                                     | 1857.500001           | 0.0005                | 1902.500002           | 0.0011                |
| 40                                     | 1857.500002           | 0.0011                | 1902.499995           | -0.0026               |
| 50                                     | 1857.499998           | -0.0011               | 1902.499995           | -0.0026               |

## LTE Band 2, Channel Bandwidth: 20 MHz

| Frequency Stability Versus Voltage |                     |                       |                     |                       |
|------------------------------------|---------------------|-----------------------|---------------------|-----------------------|
| Voltage (Vdc)                      | CH 18700 (1860 MHz) |                       | CH 19100 (1900 MHz) |                       |
|                                    | Frequency (MHz)     | Frequency Error (ppm) | Frequency (MHz)     | Frequency Error (ppm) |
| 3.85                               | 1859.999996         | -0.0022               | 1900.000002         | 0.0011                |
| 3.27                               | 1859.999995         | -0.0027               | 1899.999996         | -0.0021               |
| 4.43                               | 1860.000002         | 0.0011                | 1899.999996         | -0.0021               |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                     |                       |                     |                       |
|----------------------------------------|---------------------|-----------------------|---------------------|-----------------------|
| Temperature (°C)                       | CH 18700 (1860 MHz) |                       | CH 19100 (1900 MHz) |                       |
|                                        | Frequency (MHz)     | Frequency Error (ppm) | Frequency (MHz)     | Frequency Error (ppm) |
| -30                                    | 1859.999998         | -0.0011               | 1900.000004         | 0.0021                |
| -20                                    | 1859.999996         | -0.0022               | 1899.999999         | -0.0005               |
| -10                                    | 1860.000004         | 0.0022                | 1899.999997         | -0.0016               |
| 0                                      | 1859.999996         | -0.0022               | 1900.000001         | 0.0005                |
| 10                                     | 1860.000005         | 0.0027                | 1900.000002         | 0.0011                |
| 20                                     | 1860.000003         | 0.0016                | 1899.999999         | -0.0005               |
| 30                                     | 1860.000001         | 0.0005                | 1900.000002         | 0.0011                |
| 40                                     | 1860.000004         | 0.0022                | 1900.000003         | 0.0016                |
| 50                                     | 1859.999998         | -0.0011               | 1899.999998         | -0.0011               |

## 7.8.2 LTE Band 4

### LTE Band 4, Channel Bandwidth: 1.4 MHz

| Frequency Stability Versus Voltage |                       |                       |                       |                       |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Voltage (Vdc)                      | CH 19957 (1710.7 MHz) |                       | CH 20393 (1754.3 MHz) |                       |
|                                    | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| 3.85                               | 1710.700001           | 0.0006                | 1754.299995           | -0.0029               |
| 3.27                               | 1710.699997           | -0.0018               | 1754.299995           | -0.0029               |
| 4.43                               | 1710.699999           | -0.0006               | 1754.300005           | 0.0029                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                       |                       |                       |                       |
|----------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Temperature (°C)                       | CH 19957 (1710.7 MHz) |                       | CH 20393 (1754.3 MHz) |                       |
|                                        | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| -30                                    | 1710.699998           | -0.0012               | 1754.299997           | -0.0017               |
| -20                                    | 1710.700001           | 0.0006                | 1754.300004           | 0.0023                |
| -10                                    | 1710.700001           | 0.0006                | 1754.299999           | -0.0006               |
| 0                                      | 1710.700001           | 0.0006                | 1754.299997           | -0.0017               |
| 10                                     | 1710.700004           | 0.0023                | 1754.299998           | -0.0011               |
| 20                                     | 1710.700004           | 0.0023                | 1754.299997           | -0.0017               |
| 30                                     | 1710.700005           | 0.0029                | 1754.299995           | -0.0029               |
| 40                                     | 1710.700005           | 0.0029                | 1754.300002           | 0.0011                |
| 50                                     | 1710.700004           | 0.0023                | 1754.299997           | -0.0017               |

# LTE Band 4, Channel Bandwidth: 3 MHz

| Frequency Stability Versus Voltage |                       |                       |                       |                       |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Voltage (Vdc)                      | CH 19965 (1711.5 MHz) |                       | CH 20385 (1753.5 MHz) |                       |
|                                    | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| 3.85                               | 1711.499997           | -0.0018               | 1753.499998           | -0.0011               |
| 3.27                               | 1711.500002           | 0.0012                | 1753.499995           | -0.0029               |
| 4.43                               | 1711.500001           | 0.0006                | 1753.500004           | 0.0023                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                       |                       |                       |                       |
|----------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Temperature (°C)                       | CH 19965 (1711.5 MHz) |                       | CH 20385 (1753.5 MHz) |                       |
|                                        | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| -30                                    | 1711.500001           | 0.0006                | 1753.499996           | -0.0023               |
| -20                                    | 1711.500004           | 0.0023                | 1753.499996           | -0.0023               |
| -10                                    | 1711.499995           | -0.0029               | 1753.500001           | 0.0006                |
| 0                                      | 1711.500002           | 0.0012                | 1753.499996           | -0.0023               |
| 10                                     | 1711.500002           | 0.0012                | 1753.499996           | -0.0023               |
| 20                                     | 1711.499995           | -0.0029               | 1753.499999           | -0.0006               |
| 30                                     | 1711.500005           | 0.0029                | 1753.500001           | 0.0006                |
| 40                                     | 1711.499998           | -0.0012               | 1753.500005           | 0.0029                |
| 50                                     | 1711.500001           | 0.0006                | 1753.500003           | 0.0017                |



# LTE Band 4, Channel Bandwidth: 5 MHz

| Frequency Stability Versus Voltage |                       |                       |                       |                       |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Voltage (Vdc)                      | CH 19975 (1712.5 MHz) |                       | CH 20375 (1752.5 MHz) |                       |
|                                    | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| 3.85                               | 1712.500001           | 0.0006                | 1752.500003           | 0.0017                |
| 3.27                               | 1712.499997           | -0.0018               | 1752.500002           | 0.0011                |
| 4.43                               | 1712.500001           | 0.0006                | 1752.500002           | 0.0011                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                       |                       |                       |                       |
|----------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Temperature (°C)                       | CH 19975 (1712.5 MHz) |                       | CH 20375 (1752.5 MHz) |                       |
|                                        | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| -30                                    | 1712.499996           | -0.0023               | 1752.500001           | 0.0006                |
| -20                                    | 1712.499996           | -0.0023               | 1752.499995           | -0.0029               |
| -10                                    | 1712.499996           | -0.0023               | 1752.499995           | -0.0029               |
| 0                                      | 1712.499995           | -0.0029               | 1752.500003           | 0.0017                |
| 10                                     | 1712.500001           | 0.0006                | 1752.499995           | -0.0029               |
| 20                                     | 1712.499998           | -0.0012               | 1752.499999           | -0.0006               |
| 30                                     | 1712.500001           | 0.0006                | 1752.499998           | -0.0011               |
| 40                                     | 1712.499995           | -0.0029               | 1752.499995           | -0.0029               |
| 50                                     | 1712.500001           | 0.0006                | 1752.499998           | -0.0011               |

#### LTE Band 4, Channel Bandwidth: 10 MHz

| Frequency Stability Versus Voltage |                     |                       |                     |                       |
|------------------------------------|---------------------|-----------------------|---------------------|-----------------------|
| Voltage (Vdc)                      | CH 20000 (1715 MHz) |                       | CH 20350 (1750 MHz) |                       |
|                                    | Frequency (MHz)     | Frequency Error (ppm) | Frequency (MHz)     | Frequency Error (ppm) |
| 3.85                               | 1715.000004         | 0.0023                | 1749.999996         | -0.0023               |
| 3.27                               | 1715.000002         | 0.0012                | 1749.999997         | -0.0017               |
| 4.43                               | 1715.000004         | 0.0023                | 1749.999999         | -0.0006               |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                     |                       |                     |                       |
|----------------------------------------|---------------------|-----------------------|---------------------|-----------------------|
| Temperature (°C)                       | CH 20000 (1715 MHz) |                       | CH 20350 (1750 MHz) |                       |
|                                        | Frequency (MHz)     | Frequency Error (ppm) | Frequency (MHz)     | Frequency Error (ppm) |
| -30                                    | 1714.999997         | -0.0017               | 1749.999999         | -0.0006               |
| -20                                    | 1714.999997         | -0.0017               | 1749.999998         | -0.0011               |
| -10                                    | 1715.000004         | 0.0023                | 1750.000005         | 0.0029                |
| 0                                      | 1714.999999         | -0.0006               | 1749.999996         | -0.0023               |
| 10                                     | 1714.999997         | -0.0017               | 1749.999998         | -0.0011               |
| 20                                     | 1715.000005         | 0.0029                | 1750.000004         | 0.0023                |
| 30                                     | 1715.000005         | 0.0029                | 1749.999997         | -0.0017               |
| 40                                     | 1714.999998         | -0.0012               | 1750.000005         | 0.0029                |
| 50                                     | 1715.000002         | 0.0012                | 1750.000003         | 0.0017                |

# LTE Band 4, Channel Bandwidth: 15 MHz

| Frequency Stability Versus Voltage |                       |                       |                       |                       |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Voltage (Vdc)                      | CH 20025 (1717.5 MHz) |                       | CH 20325 (1747.5 MHz) |                       |
|                                    | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| 3.85                               | 1717.500002           | 0.0012                | 1747.500002           | 0.0011                |
| 3.27                               | 1717.500001           | 0.0006                | 1747.500001           | 0.0006                |
| 4.43                               | 1717.500004           | 0.0023                | 1747.500005           | 0.0029                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                       |                       |                       |                       |
|----------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Temperature (°C)                       | CH 20025 (1717.5 MHz) |                       | CH 20325 (1747.5 MHz) |                       |
|                                        | Frequency (MHz)       | Frequency Error (ppm) | Frequency (MHz)       | Frequency Error (ppm) |
| -30                                    | 1717.500004           | 0.0023                | 1747.500004           | 0.0023                |
| -20                                    | 1717.500003           | 0.0017                | 1747.500002           | 0.0011                |
| -10                                    | 1717.499997           | -0.0017               | 1747.499997           | -0.0017               |
| 0                                      | 1717.500004           | 0.0023                | 1747.500001           | 0.0006                |
| 10                                     | 1717.499997           | -0.0017               | 1747.500005           | 0.0029                |
| 20                                     | 1717.500002           | 0.0012                | 1747.500003           | 0.0017                |
| 30                                     | 1717.499997           | -0.0017               | 1747.500005           | 0.0029                |
| 40                                     | 1717.499995           | -0.0029               | 1747.500004           | 0.0023                |
| 50                                     | 1717.500002           | 0.0012                | 1747.499997           | -0.0017               |

# LTE Band 4, Channel Bandwidth: 20 MHz

| Frequency Stability Versus Voltage |                     |                       |                     |                       |
|------------------------------------|---------------------|-----------------------|---------------------|-----------------------|
| Voltage (Vdc)                      | CH 20050 (1720 MHz) |                       | CH 20300 (1745 MHz) |                       |
|                                    | Frequency (MHz)     | Frequency Error (ppm) | Frequency (MHz)     | Frequency Error (ppm) |
| 3.85                               | 1719.999998         | -0.0012               | 1744.999995         | -0.0029               |
| 3.27                               | 1720.000005         | 0.0029                | 1745.000003         | 0.0017                |
| 4.43                               | 1719.999996         | -0.0023               | 1745.000002         | 0.0011                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                     |                       |                     |                       |
|----------------------------------------|---------------------|-----------------------|---------------------|-----------------------|
| Temperature (°C)                       | CH 20050 (1720 MHz) |                       | CH 20300 (1745 MHz) |                       |
|                                        | Frequency (MHz)     | Frequency Error (ppm) | Frequency (MHz)     | Frequency Error (ppm) |
| -30                                    | 1720.000003         | 0.0017                | 1745.000005         | 0.0029                |
| -20                                    | 1719.999995         | -0.0029               | 1744.999997         | -0.0017               |
| -10                                    | 1720.000001         | 0.0006                | 1744.999997         | -0.0017               |
| 0                                      | 1720.000002         | 0.0012                | 1744.999997         | -0.0017               |
| 10                                     | 1719.999998         | -0.0012               | 1744.999995         | -0.0029               |
| 20                                     | 1720.000001         | 0.0006                | 1744.999999         | -0.0006               |
| 30                                     | 1720.000002         | 0.0012                | 1745.000002         | 0.0011                |
| 40                                     | 1720.000005         | 0.0029                | 1745.000003         | 0.0017                |
| 50                                     | 1719.999999         | -0.0006               | 1745.000003         | 0.0017                |

### 7.8.3 LTE Band 5

#### LTE Band 5, Channel Bandwidth: 1.4 MHz

| Frequency Stability Versus Voltage |                      |                       |                      |                       |
|------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Voltage (Vdc)                      | CH 20407 (824.7 MHz) |                       | CH 20643 (848.3 MHz) |                       |
|                                    | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| 3.85                               | 824.699995           | -0.0061               | 848.300004           | 0.0047                |
| 3.27                               | 824.699998           | -0.0024               | 848.299997           | -0.0035               |
| 4.43                               | 824.700003           | 0.0036                | 848.300005           | 0.0059                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                      |                       |                      |                       |
|----------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Temperature (°C)                       | CH 20407 (824.7 MHz) |                       | CH 20643 (848.3 MHz) |                       |
|                                        | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| -30                                    | 824.699996           | -0.0049               | 848.299995           | -0.0059               |
| -20                                    | 824.700003           | 0.0036                | 848.299997           | -0.0035               |
| -10                                    | 824.699996           | -0.0049               | 848.299996           | -0.0047               |
| 0                                      | 824.700001           | 0.0012                | 848.300003           | 0.0035                |
| 10                                     | 824.699997           | -0.0036               | 848.299999           | -0.0012               |
| 20                                     | 824.700001           | 0.0012                | 848.299996           | -0.0047               |
| 30                                     | 824.700004           | 0.0049                | 848.299999           | -0.0012               |
| 40                                     | 824.699995           | -0.0061               | 848.300001           | 0.0012                |
| 50                                     | 824.700003           | 0.0036                | 848.300003           | 0.0035                |

# LTE Band 5, Channel Bandwidth: 3 MHz

| Frequency Stability Versus Voltage |                      |                       |                      |                       |
|------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Voltage (Vdc)                      | CH 20415 (825.5 MHz) |                       | CH 20635 (847.5 MHz) |                       |
|                                    | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| 3.85                               | 825.499998           | -0.0024               | 847.499999           | -0.0012               |
| 3.27                               | 825.500002           | 0.0024                | 847.500003           | 0.0035                |
| 4.43                               | 825.500001           | 0.0012                | 847.500002           | 0.0024                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                      |                       |                      |                       |
|----------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Temperature (°C)                       | CH 20415 (825.5 MHz) |                       | CH 20635 (847.5 MHz) |                       |
|                                        | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| -30                                    | 825.499995           | -0.0061               | 847.500002           | 0.0024                |
| -20                                    | 825.500003           | 0.0036                | 847.499995           | -0.0059               |
| -10                                    | 825.500005           | 0.0061                | 847.499998           | -0.0024               |
| 0                                      | 825.499996           | -0.0048               | 847.499995           | -0.0059               |
| 10                                     | 825.500004           | 0.0048                | 847.499996           | -0.0047               |
| 20                                     | 825.500002           | 0.0024                | 847.499998           | -0.0024               |
| 30                                     | 825.500005           | 0.0061                | 847.500004           | 0.0047                |
| 40                                     | 825.500005           | 0.0061                | 847.499998           | -0.0024               |
| 50                                     | 825.499996           | -0.0048               | 847.500001           | 0.0012                |

# LTE Band 5, Channel Bandwidth: 5 MHz

| Frequency Stability Versus Voltage |                      |                       |                      |                       |
|------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Voltage (Vdc)                      | CH 20425 (826.5 MHz) |                       | CH 20625 (846.5 MHz) |                       |
|                                    | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| 3.85                               | 826.499997           | -0.0036               | 846.500001           | 0.0012                |
| 3.27                               | 826.500004           | 0.0048                | 846.499997           | -0.0035               |
| 4.43                               | 826.499996           | -0.0048               | 846.499996           | -0.0047               |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                      |                       |                      |                       |
|----------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Temperature (°C)                       | CH 20425 (826.5 MHz) |                       | CH 20625 (846.5 MHz) |                       |
|                                        | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| -30                                    | 826.500005           | 0.0060                | 846.500005           | 0.0059                |
| -20                                    | 826.500002           | 0.0024                | 846.499998           | -0.0024               |
| -10                                    | 826.500001           | 0.0012                | 846.499995           | -0.0059               |
| 0                                      | 826.500003           | 0.0036                | 846.500001           | 0.0012                |
| 10                                     | 826.499998           | -0.0024               | 846.500003           | 0.0035                |
| 20                                     | 826.499999           | -0.0012               | 846.500004           | 0.0047                |
| 30                                     | 826.500003           | 0.0036                | 846.499997           | -0.0035               |
| 40                                     | 826.500002           | 0.0024                | 846.500004           | 0.0047                |
| 50                                     | 826.500003           | 0.0036                | 846.500002           | 0.0024                |

# LTE Band 5, Channel Bandwidth: 10 MHz

| Frequency Stability Versus Voltage |                    |                       |                    |                       |
|------------------------------------|--------------------|-----------------------|--------------------|-----------------------|
| Voltage (Vdc)                      | CH 20450 (829 MHz) |                       | CH 20600 (844 MHz) |                       |
|                                    | Frequency (MHz)    | Frequency Error (ppm) | Frequency (MHz)    | Frequency Error (ppm) |
| 3.85                               | 829.000004         | 0.0048                | 843.999997         | -0.0036               |
| 3.27                               | 828.999997         | -0.0036               | 843.999998         | -0.0024               |
| 4.43                               | 828.999999         | -0.0012               | 844.000004         | 0.0047                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                    |                       |                    |                       |
|----------------------------------------|--------------------|-----------------------|--------------------|-----------------------|
| Temperature (°C)                       | CH 20450 (829 MHz) |                       | CH 20600 (844 MHz) |                       |
|                                        | Frequency (MHz)    | Frequency Error (ppm) | Frequency (MHz)    | Frequency Error (ppm) |
| -30                                    | 829.000004         | 0.0048                | 844.000005         | 0.0059                |
| -20                                    | 829.000003         | 0.0036                | 843.999999         | -0.0012               |
| -10                                    | 829.000005         | 0.0060                | 843.999999         | -0.0012               |
| 0                                      | 829.000004         | 0.0048                | 844.000003         | 0.0036                |
| 10                                     | 828.999995         | -0.0060               | 843.999996         | -0.0047               |
| 20                                     | 829.000004         | 0.0048                | 843.999995         | -0.0059               |
| 30                                     | 828.999995         | -0.0060               | 844.000003         | 0.0036                |
| 40                                     | 828.999997         | -0.0036               | 844.000003         | 0.0036                |
| 50                                     | 828.999998         | -0.0024               | 844.000003         | 0.0036                |



#### 7.8.4 LTE Band 12

##### LTE Band 12, Channel Bandwidth: 1.4 MHz

| Frequency Stability Versus Voltage |                      |                       |                      |                       |
|------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Voltage (Vdc)                      | CH 23017 (699.7 MHz) |                       | CH 23173 (715.3 MHz) |                       |
|                                    | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| 3.85                               | 699.700001           | 0.0014                | 715.299996           | -0.0056               |
| 3.27                               | 699.699997           | -0.0043               | 715.299998           | -0.0028               |
| 4.43                               | 699.699999           | -0.0014               | 715.299998           | -0.0028               |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                      |                       |                      |                       |
|----------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Temperature (°C)                       | CH 23017 (699.7 MHz) |                       | CH 23173 (715.3 MHz) |                       |
|                                        | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| -30                                    | 699.700001           | 0.0014                | 715.299996           | -0.0056               |
| -20                                    | 699.700003           | 0.0043                | 715.299997           | -0.0042               |
| -10                                    | 699.700003           | 0.0043                | 715.300002           | 0.0028                |
| 0                                      | 699.699998           | -0.0029               | 715.300004           | 0.0056                |
| 10                                     | 699.700001           | 0.0014                | 715.299999           | -0.0014               |
| 20                                     | 699.699999           | -0.0014               | 715.300001           | 0.0014                |
| 30                                     | 699.700005           | 0.0071                | 715.300002           | 0.0028                |
| 40                                     | 699.699997           | -0.0043               | 715.300002           | 0.0028                |
| 50                                     | 699.700001           | 0.0014                | 715.299998           | -0.0028               |

### LTE Band 12, Channel Bandwidth: 3 MHz

| Frequency Stability Versus Voltage |                      |                       |                      |                       |
|------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Voltage (Vdc)                      | CH 23025 (700.5 MHz) |                       | CH 23165 (714.5 MHz) |                       |
|                                    | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| 3.85                               | 700.500003           | 0.0043                | 714.500005           | 0.0070                |
| 3.27                               | 700.500001           | 0.0014                | 714.500005           | 0.0070                |
| 4.43                               | 700.500005           | 0.0071                | 714.499997           | -0.0042               |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                      |                       |                      |                       |
|----------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Temperature (°C)                       | CH 23025 (700.5 MHz) |                       | CH 23165 (714.5 MHz) |                       |
|                                        | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| -30                                    | 700.499995           | -0.0071               | 714.499996           | -0.0056               |
| -20                                    | 700.499996           | -0.0057               | 714.500003           | 0.0042                |
| -10                                    | 700.499999           | -0.0014               | 714.499997           | -0.0042               |
| 0                                      | 700.499999           | -0.0014               | 714.500004           | 0.0056                |
| 10                                     | 700.499997           | -0.0043               | 714.500003           | 0.0042                |
| 20                                     | 700.500001           | 0.0014                | 714.499997           | -0.0042               |
| 30                                     | 700.499995           | -0.0071               | 714.499995           | -0.0070               |
| 40                                     | 700.499997           | -0.0043               | 714.499996           | -0.0056               |
| 50                                     | 700.500005           | 0.0071                | 714.500002           | 0.0028                |

# LTE Band 12, Channel Bandwidth: 5 MHz

| Frequency Stability Versus Voltage |                      |                       |                      |                       |
|------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Voltage (Vdc)                      | CH 23035 (701.5 MHz) |                       | CH 23155 (713.5 MHz) |                       |
|                                    | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| 3.85                               | 701.500003           | 0.0043                | 713.500005           | 0.0070                |
| 3.27                               | 701.500003           | 0.0043                | 713.500002           | 0.0028                |
| 4.43                               | 701.500005           | 0.0071                | 713.500002           | 0.0028                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                      |                       |                      |                       |
|----------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Temperature (°C)                       | CH 23035 (701.5 MHz) |                       | CH 23155 (713.5 MHz) |                       |
|                                        | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| -30                                    | 701.500001           | 0.0014                | 713.499996           | -0.0056               |
| -20                                    | 701.499999           | -0.0014               | 713.500003           | 0.0042                |
| -10                                    | 701.500003           | 0.0043                | 713.500005           | 0.0070                |
| 0                                      | 701.499995           | -0.0071               | 713.499999           | -0.0014               |
| 10                                     | 701.500004           | 0.0057                | 713.500005           | 0.0070                |
| 20                                     | 701.499999           | -0.0014               | 713.500002           | 0.0028                |
| 30                                     | 701.499999           | -0.0014               | 713.500001           | 0.0014                |
| 40                                     | 701.499997           | -0.0043               | 713.500004           | 0.0056                |
| 50                                     | 701.500003           | 0.0043                | 713.500004           | 0.0056                |

# LTE Band 12, Channel Bandwidth: 10 MHz

| Frequency Stability Versus Voltage |                    |                       |                    |                       |
|------------------------------------|--------------------|-----------------------|--------------------|-----------------------|
| Voltage (Vdc)                      | CH 23060 (704 MHz) |                       | CH 23130 (711 MHz) |                       |
|                                    | Frequency (MHz)    | Frequency Error (ppm) | Frequency (MHz)    | Frequency Error (ppm) |
| 3.85                               | 704.000005         | 0.0071                | 711.000005         | 0.0070                |
| 3.27                               | 704.000001         | 0.0014                | 711.000004         | 0.0056                |
| 4.43                               | 704.000002         | 0.0028                | 710.999995         | -0.0070               |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                    |                       |                    |                       |
|----------------------------------------|--------------------|-----------------------|--------------------|-----------------------|
| Temperature (°C)                       | CH 23060 (704 MHz) |                       | CH 23130 (711 MHz) |                       |
|                                        | Frequency (MHz)    | Frequency Error (ppm) | Frequency (MHz)    | Frequency Error (ppm) |
| -30                                    | 703.999998         | -0.0028               | 711.000002         | 0.0028                |
| -20                                    | 704.000003         | 0.0043                | 710.999999         | -0.0014               |
| -10                                    | 704.000005         | 0.0071                | 711.000004         | 0.0056                |
| 0                                      | 703.999997         | -0.0043               | 710.999998         | -0.0028               |
| 10                                     | 703.999996         | -0.0057               | 710.999997         | -0.0042               |
| 20                                     | 703.999996         | -0.0057               | 710.999996         | -0.0056               |
| 30                                     | 703.999998         | -0.0028               | 710.999997         | -0.0042               |
| 40                                     | 703.999997         | -0.0043               | 710.999997         | -0.0042               |
| 50                                     | 703.999995         | -0.0071               | 711.000001         | 0.0014                |

## 7.8.5 LTE Band 13

### LTE Band 13, Channel Bandwidth: 5 MHz

| Frequency Stability Versus Voltage |                      |                       |                      |                       |
|------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Voltage (Vdc)                      | CH 23205 (779.5 MHz) |                       | CH 23255 (784.5 MHz) |                       |
|                                    | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| 3.85                               | 779.499997           | -0.0038               | 784.500002           | 0.0025                |
| 3.27                               | 779.500002           | 0.0026                | 784.500002           | 0.0025                |
| 4.43                               | 779.500002           | 0.0026                | 784.500001           | 0.0013                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                      |                       |                      |                       |
|----------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Temperature (°C)                       | CH 23205 (779.5 MHz) |                       | CH 23255 (784.5 MHz) |                       |
|                                        | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| -30                                    | 779.499996           | -0.0051               | 784.499999           | -0.0013               |
| -20                                    | 779.500002           | 0.0026                | 784.500002           | 0.0025                |
| -10                                    | 779.499998           | -0.0026               | 784.499997           | -0.0038               |
| 0                                      | 779.500002           | 0.0026                | 784.499997           | -0.0038               |
| 10                                     | 779.499997           | -0.0038               | 784.500004           | 0.0051                |
| 20                                     | 779.500003           | 0.0038                | 784.499999           | -0.0013               |
| 30                                     | 779.500003           | 0.0038                | 784.499999           | -0.0013               |
| 40                                     | 779.500005           | 0.0064                | 784.499997           | -0.0038               |
| 50                                     | 779.499996           | -0.0051               | 784.499997           | -0.0038               |

# LTE Band 13, Channel Bandwidth: 10 MHz

| Frequency Stability Versus Voltage |                    |                       |
|------------------------------------|--------------------|-----------------------|
| Voltage (Vdc)                      | CH 23230 (782 MHz) |                       |
|                                    | Frequency (MHz)    | Frequency Error (ppm) |
| 3.85                               | 782.000002         | 0.0026                |
| 3.27                               | 782.000005         | 0.0064                |
| 4.43                               | 782.000005         | 0.0064                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                    |                       |
|----------------------------------------|--------------------|-----------------------|
| Temperature (°C)                       | CH 23230 (782 MHz) |                       |
|                                        | Frequency (MHz)    | Frequency Error (ppm) |
| -30                                    | 781.999998         | -0.0026               |
| -20                                    | 782.000005         | 0.0064                |
| -10                                    | 782.000002         | 0.0026                |
| 0                                      | 781.999999         | -0.0013               |
| 10                                     | 781.999997         | -0.0038               |
| 20                                     | 781.999995         | -0.0064               |
| 30                                     | 782.000003         | 0.0038                |
| 40                                     | 782.000001         | 0.0013                |
| 50                                     | 782.000003         | 0.0038                |

## 7.8.6 LTE Band 66

### LTE Band 66, Channel Bandwidth: 1.4 MHz

| Frequency Stability Versus Voltage |                        |                       |                        |                       |
|------------------------------------|------------------------|-----------------------|------------------------|-----------------------|
| Voltage (Vdc)                      | CH 131979 (1710.7 MHz) |                       | CH 132665 (1779.3 MHz) |                       |
|                                    | Frequency (MHz)        | Frequency Error (ppm) | Frequency (MHz)        | Frequency Error (ppm) |
| 3.85                               | 1710.700002            | 0.0012                | 1779.300003            | 0.0017                |
| 3.27                               | 1710.699998            | -0.0012               | 1779.299999            | -0.0006               |
| 4.43                               | 1710.699996            | -0.0023               | 1779.300002            | 0.0011                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                        |                       |                        |                       |
|----------------------------------------|------------------------|-----------------------|------------------------|-----------------------|
| Temperature (°C)                       | CH 131979 (1710.7 MHz) |                       | CH 132665 (1779.3 MHz) |                       |
|                                        | Frequency (MHz)        | Frequency Error (ppm) | Frequency (MHz)        | Frequency Error (ppm) |
| -30                                    | 1710.700003            | 0.0018                | 1779.300001            | 0.0006                |
| -20                                    | 1710.700002            | 0.0012                | 1779.300004            | 0.0022                |
| -10                                    | 1710.700001            | 0.0006                | 1779.299996            | -0.0022               |
| 0                                      | 1710.700004            | 0.0023                | 1779.299998            | -0.0011               |
| 10                                     | 1710.699999            | -0.0006               | 1779.300002            | 0.0011                |
| 20                                     | 1710.699997            | -0.0018               | 1779.300003            | 0.0017                |
| 30                                     | 1710.699999            | -0.0006               | 1779.300002            | 0.0011                |
| 40                                     | 1710.700002            | 0.0012                | 1779.300001            | 0.0006                |
| 50                                     | 1710.700001            | 0.0006                | 1779.299998            | -0.0011               |

### LTE Band 66, Channel Bandwidth: 3 MHz

| Frequency Stability Versus Voltage |                        |                       |                        |                       |
|------------------------------------|------------------------|-----------------------|------------------------|-----------------------|
| Voltage (Vdc)                      | CH 131987 (1711.5 MHz) |                       | CH 132657 (1778.5 MHz) |                       |
|                                    | Frequency (MHz)        | Frequency Error (ppm) | Frequency (MHz)        | Frequency Error (ppm) |
| 3.85                               | 1711.499998            | -0.0012               | 1778.499997            | -0.0017               |
| 3.27                               | 1711.500003            | 0.0018                | 1778.500002            | 0.0011                |
| 4.43                               | 1711.499997            | -0.0018               | 1778.499998            | -0.0011               |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                        |                       |                        |                       |
|----------------------------------------|------------------------|-----------------------|------------------------|-----------------------|
| Temperature (°C)                       | CH 131987 (1711.5 MHz) |                       | CH 132657 (1778.5 MHz) |                       |
|                                        | Frequency (MHz)        | Frequency Error (ppm) | Frequency (MHz)        | Frequency Error (ppm) |
| -30                                    | 1711.500004            | 0.0023                | 1778.499997            | -0.0017               |
| -20                                    | 1711.500001            | 0.0006                | 1778.500002            | 0.0011                |
| -10                                    | 1711.499999            | -0.0006               | 1778.500002            | 0.0011                |
| 0                                      | 1711.500001            | 0.0006                | 1778.499996            | -0.0022               |
| 10                                     | 1711.500001            | 0.0006                | 1778.499998            | -0.0011               |
| 20                                     | 1711.500003            | 0.0018                | 1778.500002            | 0.0011                |
| 30                                     | 1711.499997            | -0.0018               | 1778.499999            | -0.0006               |
| 40                                     | 1711.500003            | 0.0018                | 1778.499999            | -0.0006               |
| 50                                     | 1711.500002            | 0.0012                | 1778.499996            | -0.0022               |



### LTE Band 66, Channel Bandwidth: 5 MHz

| Frequency Stability Versus Voltage |                        |                       |                        |                       |
|------------------------------------|------------------------|-----------------------|------------------------|-----------------------|
| Voltage (Vdc)                      | CH 131997 (1712.5 MHz) |                       | CH 132647 (1777.5 MHz) |                       |
|                                    | Frequency (MHz)        | Frequency Error (ppm) | Frequency (MHz)        | Frequency Error (ppm) |
| 3.85                               | 1712.500002            | 0.0012                | 1777.500003            | 0.0017                |
| 3.27                               | 1712.499998            | -0.0012               | 1777.499997            | -0.0017               |
| 4.43                               | 1712.499999            | -0.0006               | 1777.499998            | -0.0011               |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                        |                       |                        |                       |
|----------------------------------------|------------------------|-----------------------|------------------------|-----------------------|
| Temperature (°C)                       | CH 131997 (1712.5 MHz) |                       | CH 132647 (1777.5 MHz) |                       |
|                                        | Frequency (MHz)        | Frequency Error (ppm) | Frequency (MHz)        | Frequency Error (ppm) |
| -30                                    | 1712.499996            | -0.0023               | 1777.499998            | -0.0011               |
| -20                                    | 1712.499997            | -0.0018               | 1777.499999            | -0.0006               |
| -10                                    | 1712.499996            | -0.0023               | 1777.499997            | -0.0017               |
| 0                                      | 1712.499999            | -0.0006               | 1777.500004            | 0.0023                |
| 10                                     | 1712.500003            | 0.0018                | 1777.500002            | 0.0011                |
| 20                                     | 1712.500001            | 0.0006                | 1777.499999            | -0.0006               |
| 30                                     | 1712.500003            | 0.0018                | 1777.500002            | 0.0011                |
| 40                                     | 1712.500001            | 0.0006                | 1777.500001            | 0.0006                |
| 50                                     | 1712.500002            | 0.0012                | 1777.500002            | 0.0011                |

### LTE Band 66, Channel Bandwidth: 10 MHz

| Frequency Stability Versus Voltage |                      |                       |                      |                       |
|------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Voltage (Vdc)                      | CH 132022 (1715 MHz) |                       | CH 132622 (1775 MHz) |                       |
|                                    | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| 3.85                               | 1714.999998          | -0.0012               | 1774.999999          | -0.0006               |
| 3.27                               | 1714.999996          | -0.0023               | 1774.999997          | -0.0017               |
| 4.43                               | 1714.999999          | -0.0006               | 1775.000001          | 0.0006                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                      |                       |                      |                       |
|----------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Temperature (°C)                       | CH 132022 (1715 MHz) |                       | CH 132622 (1775 MHz) |                       |
|                                        | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| -30                                    | 1714.999998          | -0.0012               | 1775.000003          | 0.0017                |
| -20                                    | 1714.999997          | -0.0017               | 1775.000001          | 0.0006                |
| -10                                    | 1714.999996          | -0.0023               | 1775.000003          | 0.0017                |
| 0                                      | 1715.000002          | 0.0012                | 1774.999997          | -0.0017               |
| 10                                     | 1714.999999          | -0.0006               | 1775.000001          | 0.0006                |
| 20                                     | 1715.000002          | 0.0012                | 1774.999996          | -0.0023               |
| 30                                     | 1715.000004          | 0.0023                | 1775.000003          | 0.0017                |
| 40                                     | 1715.000001          | 0.0006                | 1775.000001          | 0.0006                |
| 50                                     | 1714.999996          | -0.0023               | 1775.000004          | 0.0023                |

### LTE Band 66, Channel Bandwidth: 15 MHz

| Frequency Stability Versus Voltage |                        |                       |                        |                       |
|------------------------------------|------------------------|-----------------------|------------------------|-----------------------|
| Voltage (Vdc)                      | CH 132047 (1717.5 MHz) |                       | CH 132597 (1772.5 MHz) |                       |
|                                    | Frequency (MHz)        | Frequency Error (ppm) | Frequency (MHz)        | Frequency Error (ppm) |
| 3.85                               | 1717.500003            | 0.0017                | 1772.500002            | 0.0011                |
| 3.27                               | 1717.499999            | -0.0006               | 1772.499997            | -0.0017               |
| 4.43                               | 1717.499998            | -0.0012               | 1772.500002            | 0.0011                |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                        |                       |                        |                       |
|----------------------------------------|------------------------|-----------------------|------------------------|-----------------------|
| Temperature (°C)                       | CH 132047 (1717.5 MHz) |                       | CH 132597 (1772.5 MHz) |                       |
|                                        | Frequency (MHz)        | Frequency Error (ppm) | Frequency (MHz)        | Frequency Error (ppm) |
| -30                                    | 1717.499996            | -0.0023               | 1772.499996            | -0.0023               |
| -20                                    | 1717.499996            | -0.0023               | 1772.499999            | -0.0006               |
| -10                                    | 1717.500004            | 0.0023                | 1772.500001            | 0.0006                |
| 0                                      | 1717.500002            | 0.0012                | 1772.500004            | 0.0023                |
| 10                                     | 1717.500001            | 0.0006                | 1772.500002            | 0.0011                |
| 20                                     | 1717.499998            | -0.0012               | 1772.499997            | -0.0017               |
| 30                                     | 1717.500001            | 0.0006                | 1772.499999            | -0.0006               |
| 40                                     | 1717.499999            | -0.0006               | 1772.500003            | 0.0017                |
| 50                                     | 1717.500003            | 0.0017                | 1772.499998            | -0.0011               |

### LTE Band 66, Channel Bandwidth: 20 MHz

| Frequency Stability Versus Voltage |                      |                       |                      |                       |
|------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Voltage (Vdc)                      | CH 132072 (1720 MHz) |                       | CH 132572 (1770 MHz) |                       |
|                                    | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| 3.85                               | 1720.000003          | 0.0017                | 1769.999997          | -0.0017               |
| 3.27                               | 1719.999996          | -0.0023               | 1770.000002          | 0.0011                |
| 4.43                               | 1720.000002          | 0.0012                | 1769.999998          | -0.0011               |

Note: The applicant defined the normal working voltage is from 3.27 to 4.43 Vdc.

| Frequency Stability Versus Temperature |                      |                       |                      |                       |
|----------------------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Temperature (°C)                       | CH 132072 (1720 MHz) |                       | CH 132572 (1770 MHz) |                       |
|                                        | Frequency (MHz)      | Frequency Error (ppm) | Frequency (MHz)      | Frequency Error (ppm) |
| -30                                    | 1720.000003          | 0.0017                | 1769.999999          | -0.0006               |
| -20                                    | 1720.000001          | 0.0006                | 1770.000001          | 0.0006                |
| -10                                    | 1720.000002          | 0.0012                | 1770.000002          | 0.0011                |
| 0                                      | 1719.999996          | -0.0023               | 1770.000001          | 0.0006                |
| 10                                     | 1720.000001          | 0.0006                | 1770.000003          | 0.0017                |
| 20                                     | 1719.999996          | -0.0023               | 1769.999998          | -0.0011               |
| 30                                     | 1720.000002          | 0.0012                | 1770.000002          | 0.0011                |
| 40                                     | 1719.999997          | -0.0017               | 1769.999999          | -0.0006               |
| 50                                     | 1720.000004          | 0.0023                | 1769.999998          | -0.0011               |

## 8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

## 9 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

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The address and road map of all our labs can be found in our web site also.

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