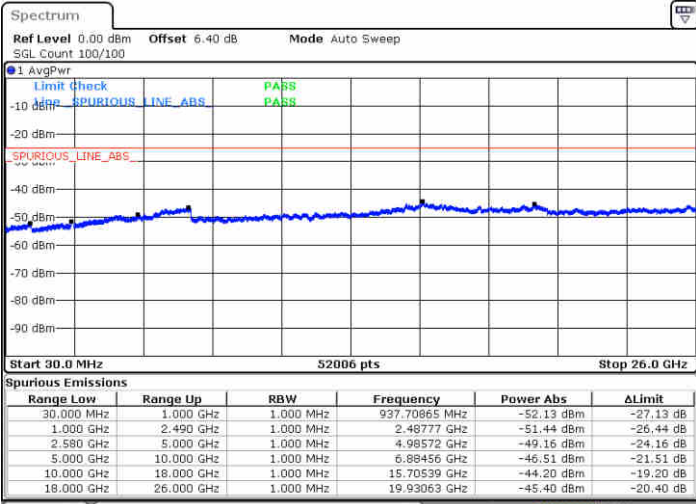




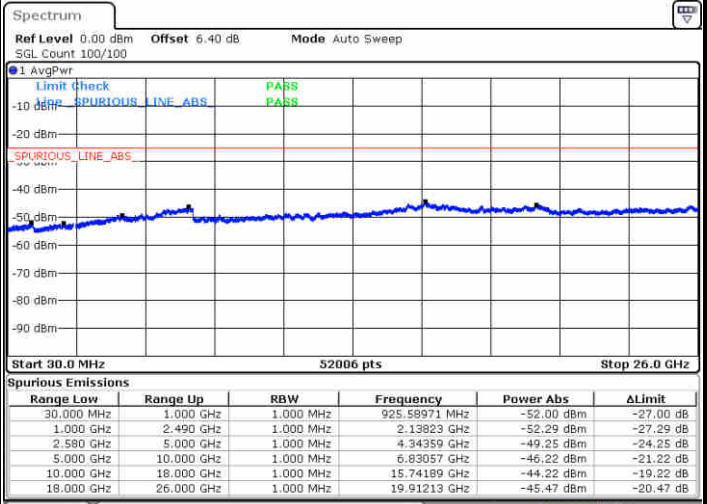
LTE Band 7 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

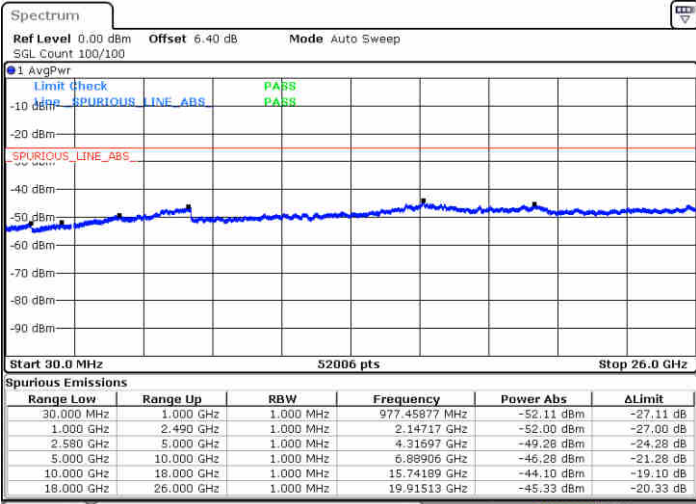


Date: 11.JUL.2019 03:09:57



Date: 11.JUL.2019 03:10:51

Highest Channel / 64QAM



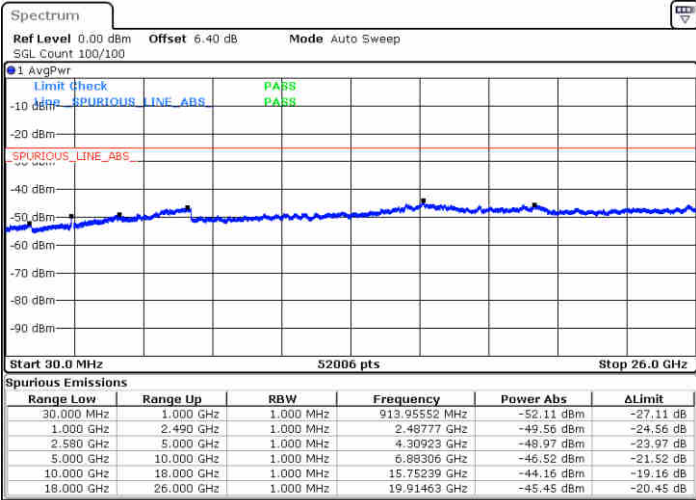
Date: 11.JUL.2019 03:11:45



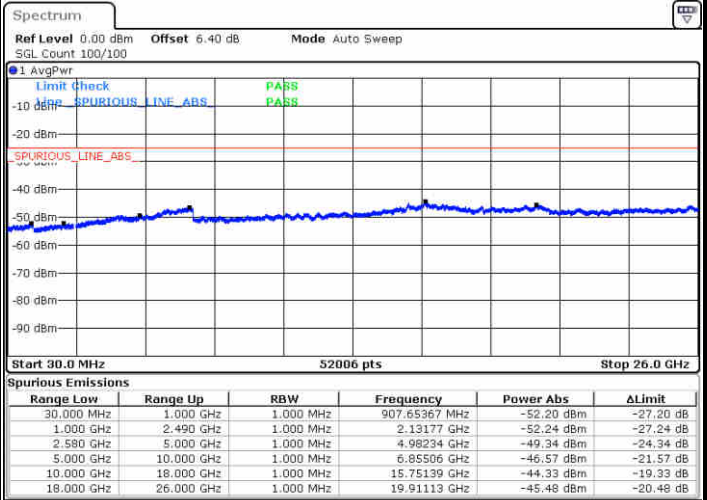
LTE Band 7 / 15MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

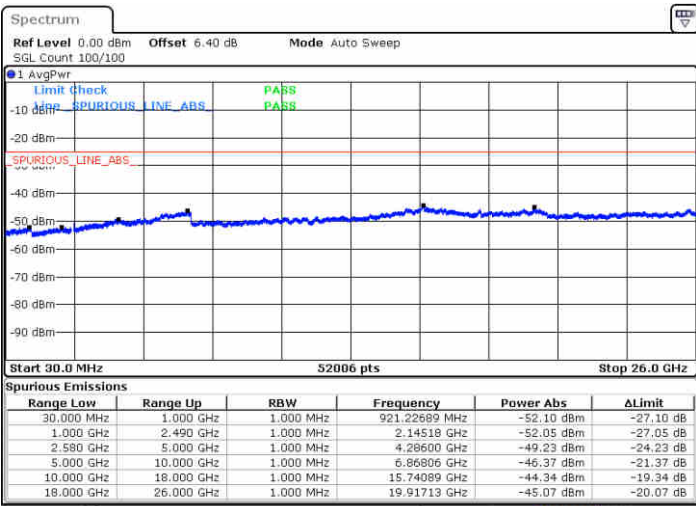


Date: 11.JUL.2019 03:22:45



Date: 11.JUL.2019 03:23:39

Highest Channel / 64QAM



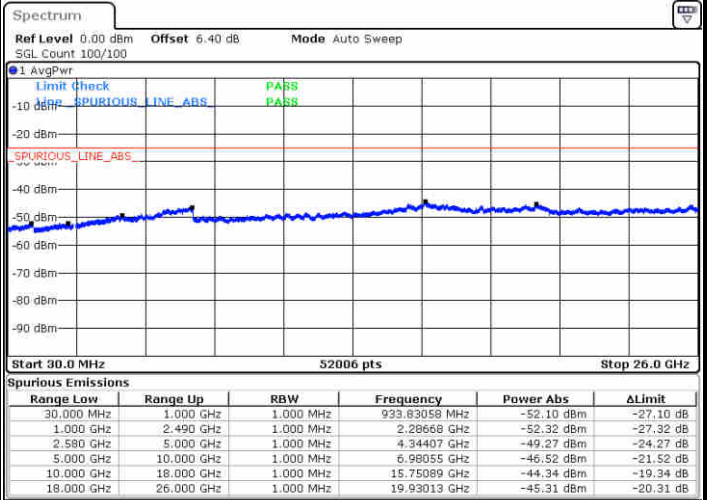
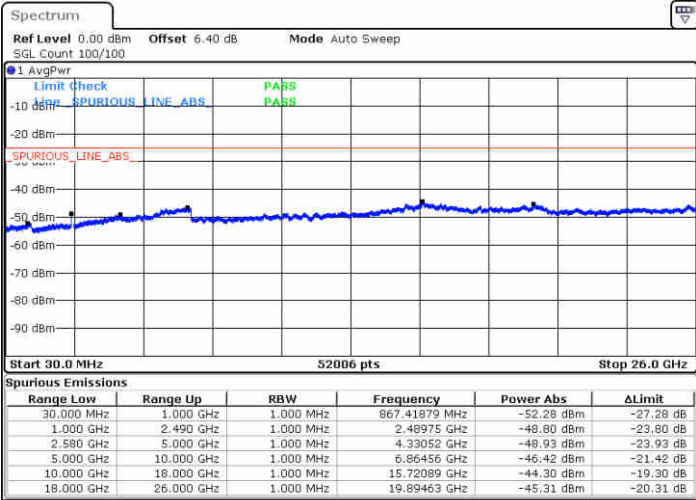
Date: 11.JUL.2019 03:24:33



LTE Band 7 / 20MHz

Lowest Channel / 64QAM

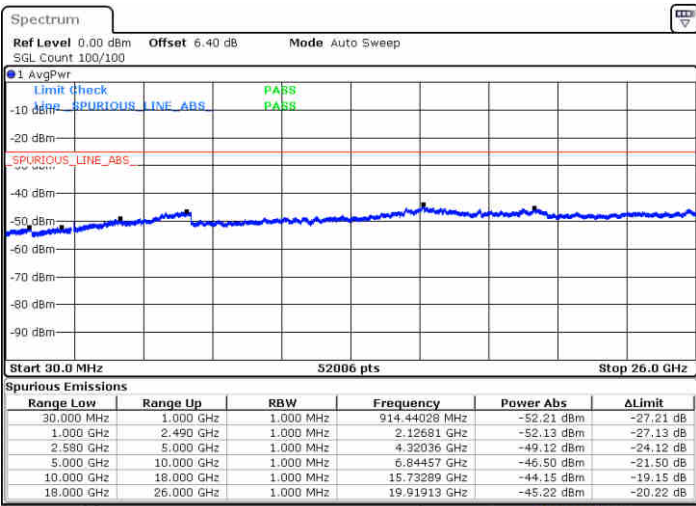
Middle Channel / 64QAM



Date: 11.JUL.2019 03:31:01

Date: 11.JUL.2019 03:31:55

Highest Channel / 64QAM



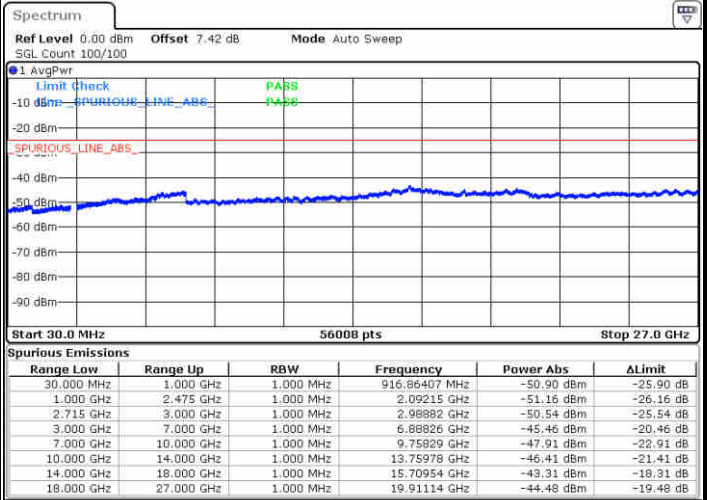
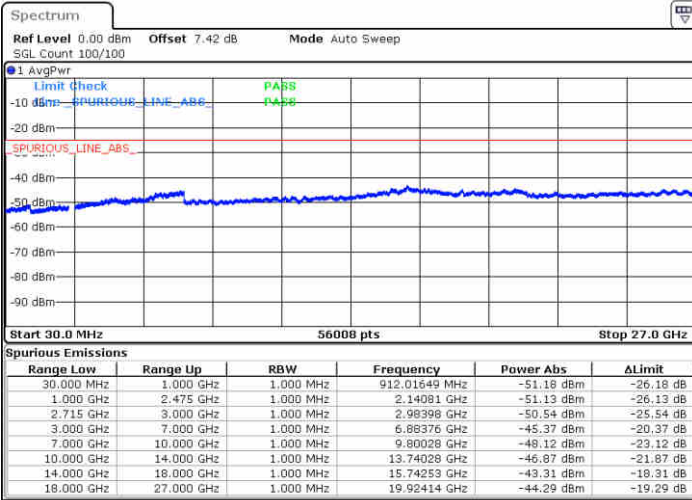
Date: 11.JUL.2019 03:32:49



LTE Band 41 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

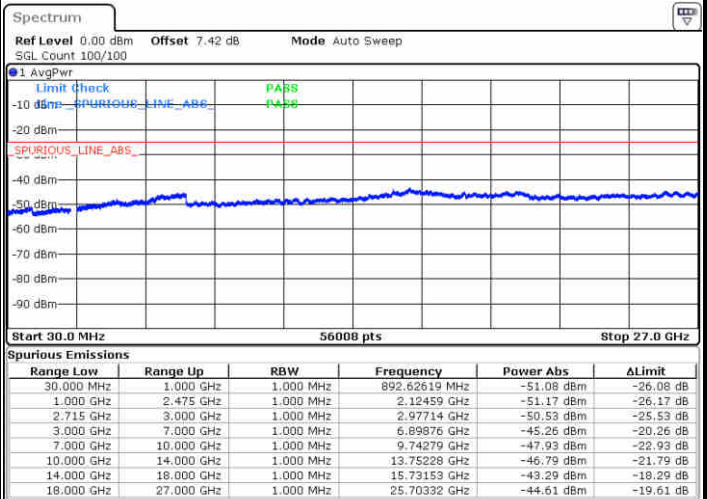
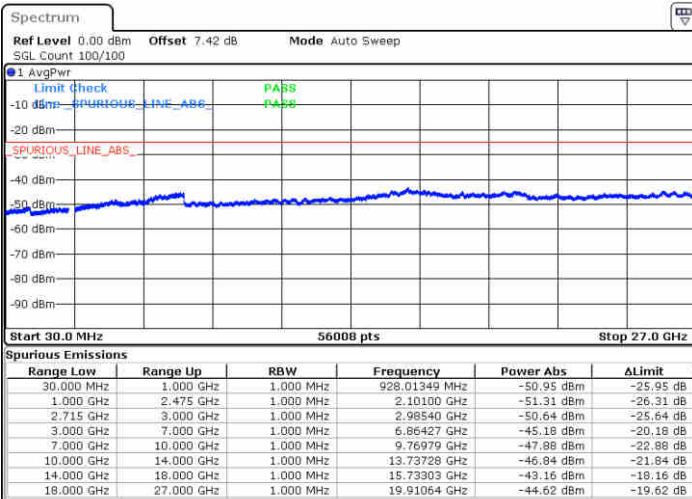


Date: 11.JUL.2019 10:35:28

Date: 11.JUL.2019 10:36:22

Middle Channel / QPSK

Middle Channel / 16QAM



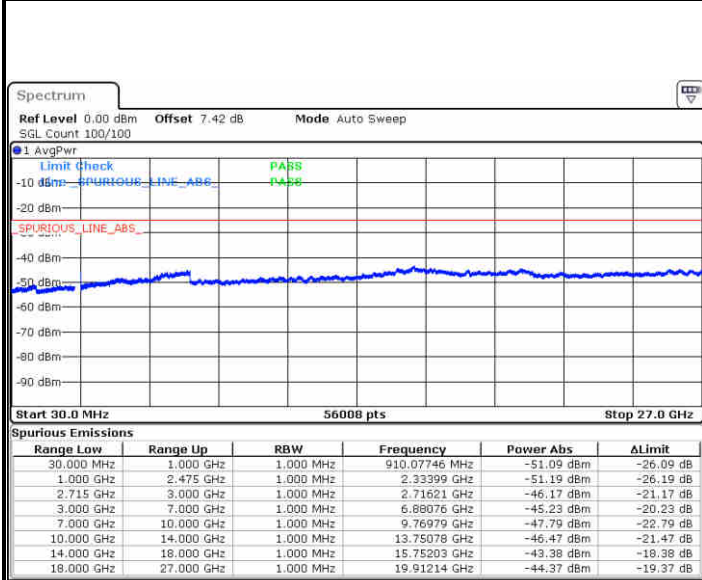
Date: 11.JUL.2019 10:37:17

Date: 11.JUL.2019 10:38:12



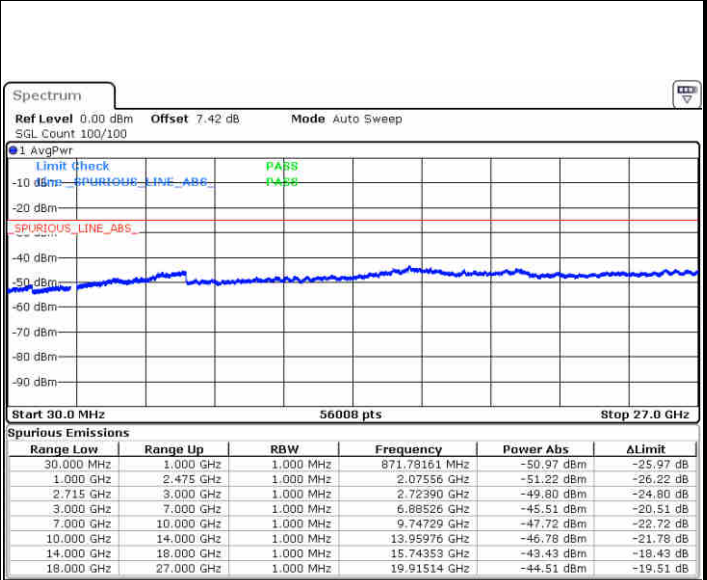
LTE Band 41 / 5MHz

Highest Channel / QPSK



Date: 11 JUL 2019 10:39:07

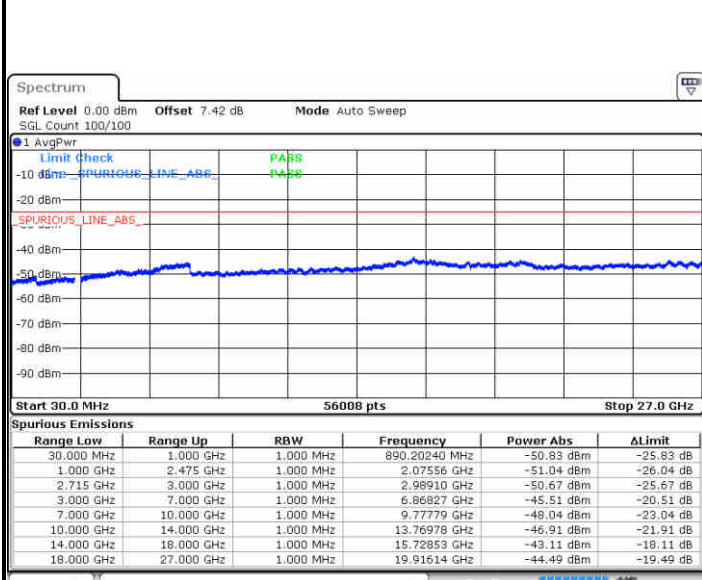
Highest Channel / 16QAM



Date: 11 JUL 2019 10:40:01

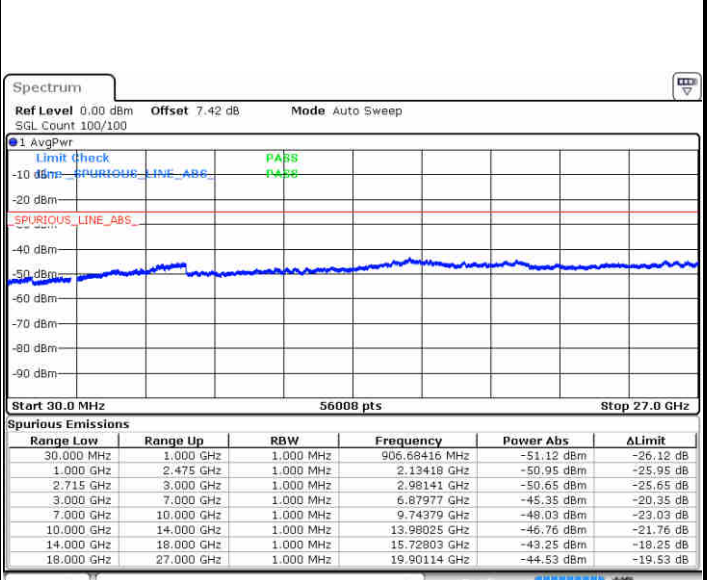
LTE Band 41 / 10MHz

Lowest Channel / QPSK



Date: 11 JUL 2019 10:40:56

Lowest Channel / 16QAM



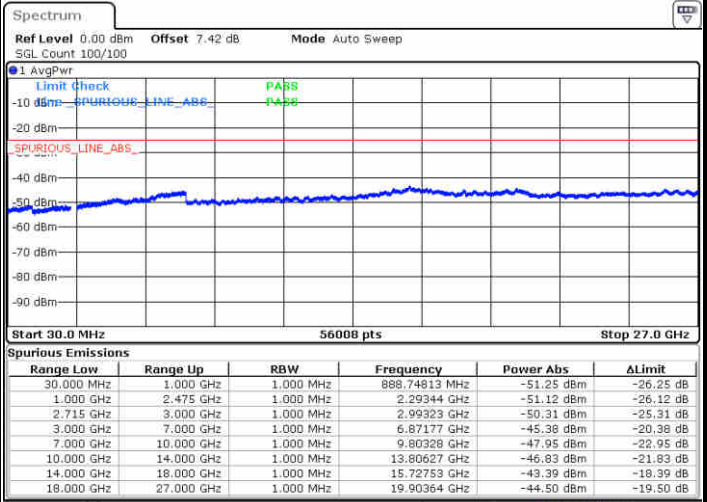
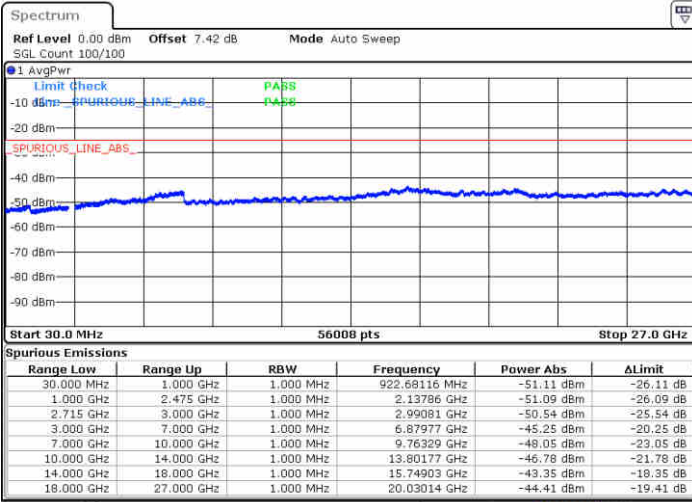
Date: 11 JUL 2019 10:41:51



LTE Band 41 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

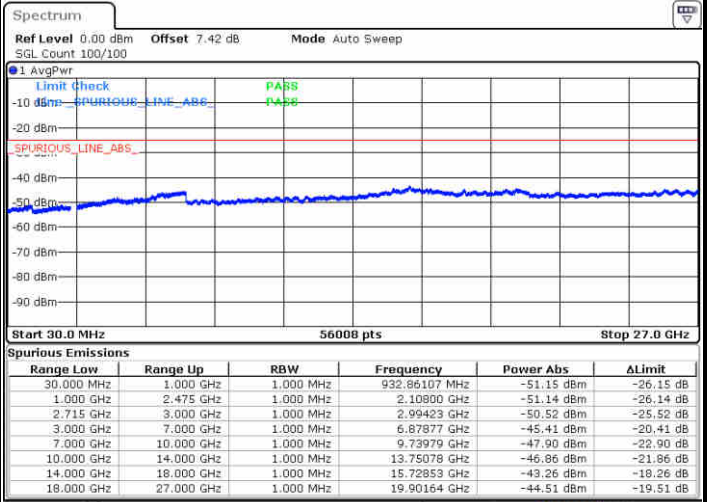
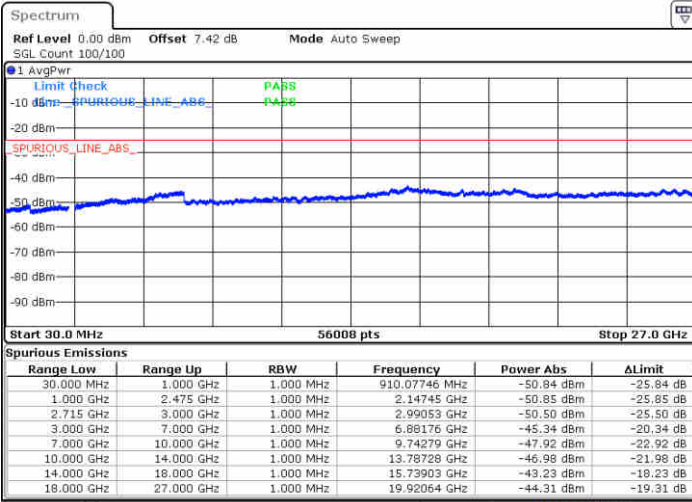


Date: 11.JUL.2019 10:42:45

Date: 11.JUL.2019 10:43:40

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 11.JUL.2019 10:44:35

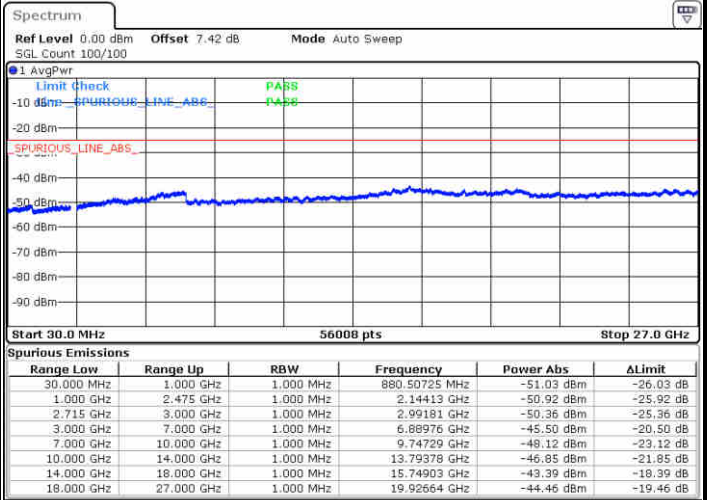
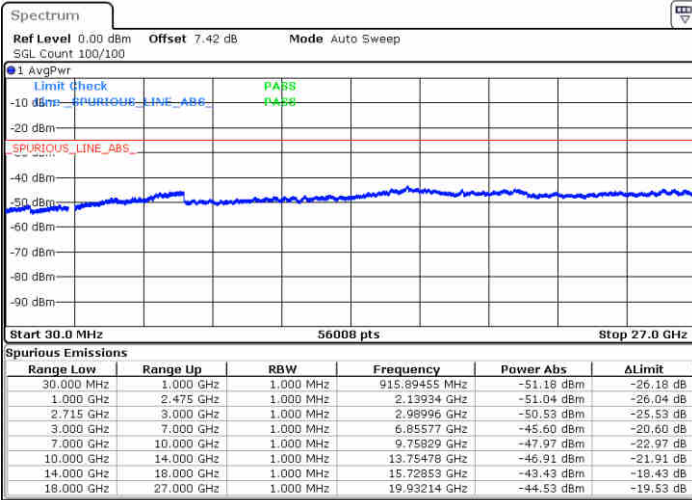
Date: 11.JUL.2019 10:45:30



LTE Band 41 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

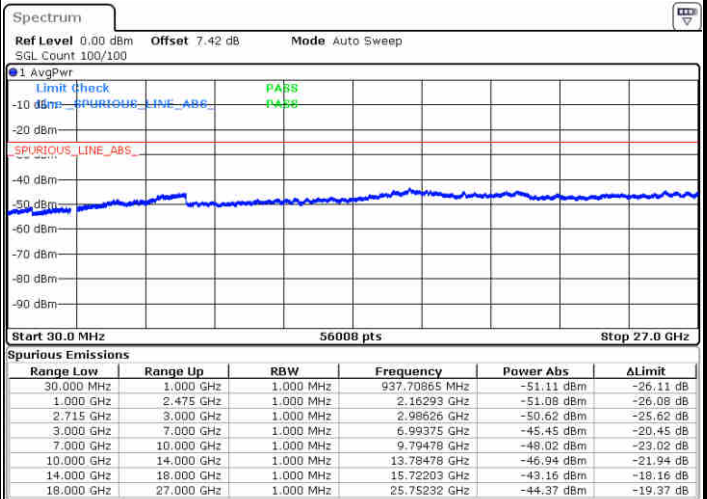
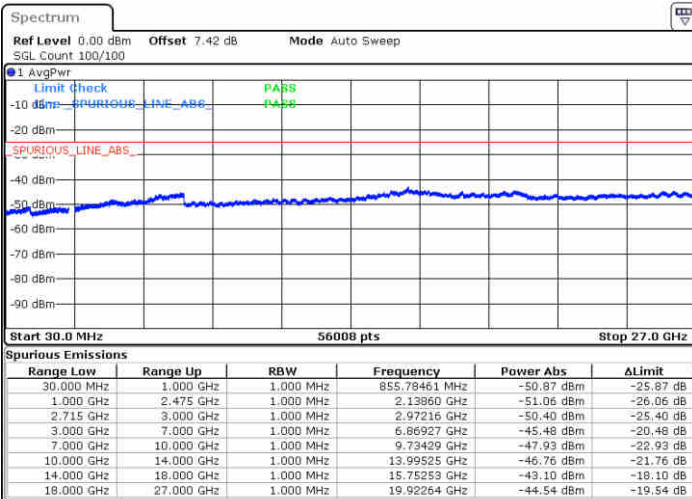


Date: 11.JUL.2019 10:46:24

Date: 11.JUL.2019 10:47:19

Middle Channel / QPSK

Middle Channel / 16QAM



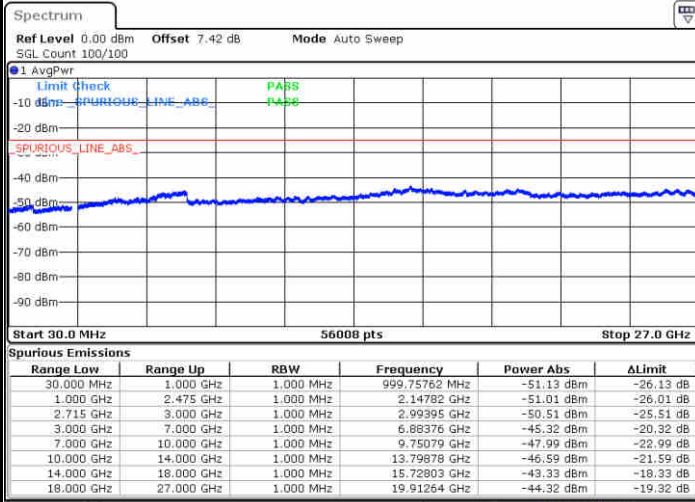
Date: 11.JUL.2019 10:48:14

Date: 11.JUL.2019 10:49:09



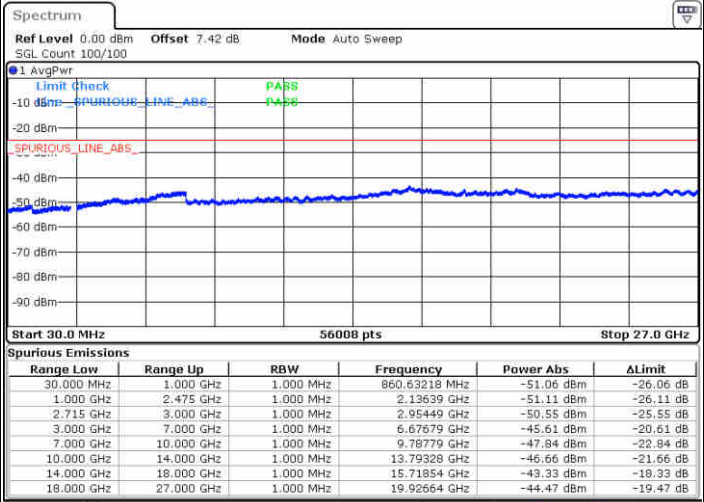
LTE Band 41 / 15MHz

Highest Channel / QPSK



Date: 11 JUL 2019 10:50:03

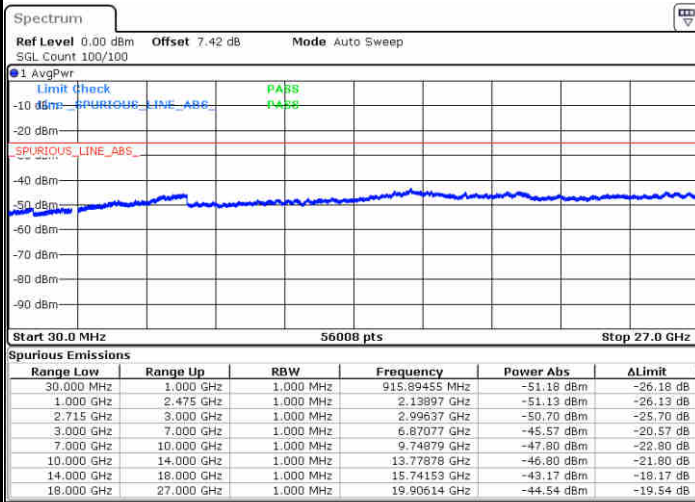
Highest Channel / 16QAM



Date: 11 JUL 2019 10:50:58

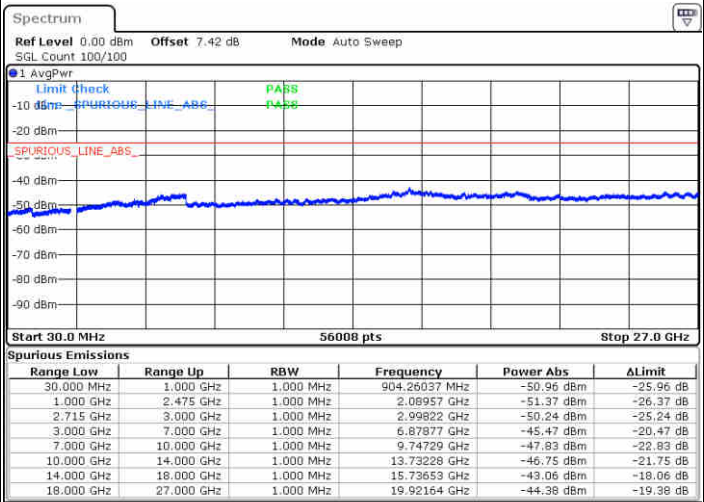
LTE Band 41 / 20MHz

Lowest Channel / QPSK



Date: 11 JUL 2019 10:51:53

Lowest Channel / 16QAM



Date: 11 JUL 2019 10:52:48

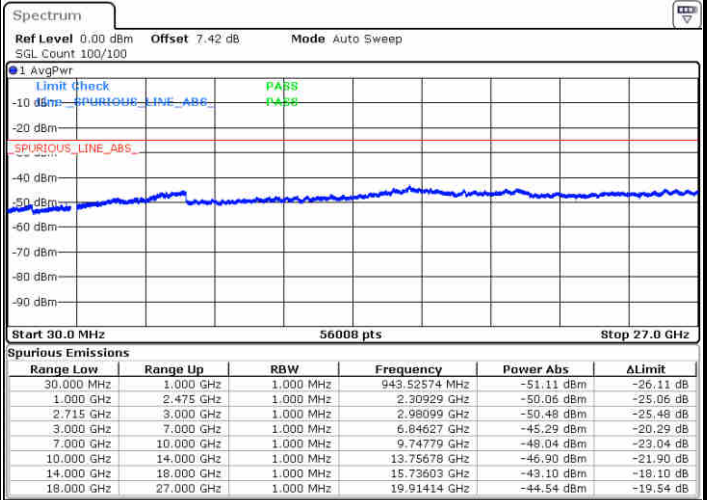
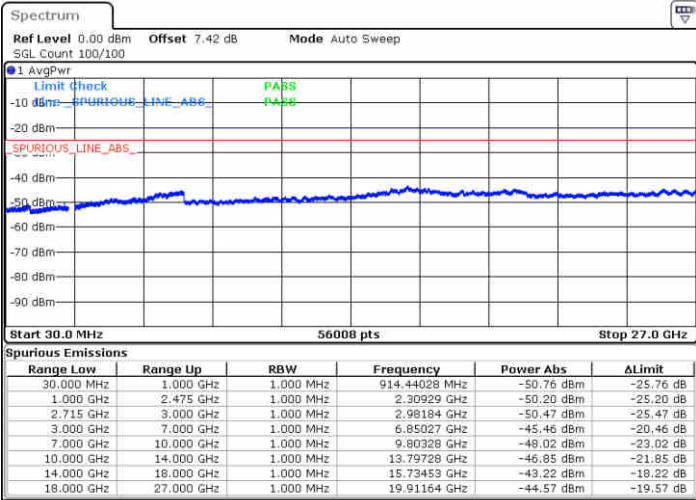




LTE Band 41 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

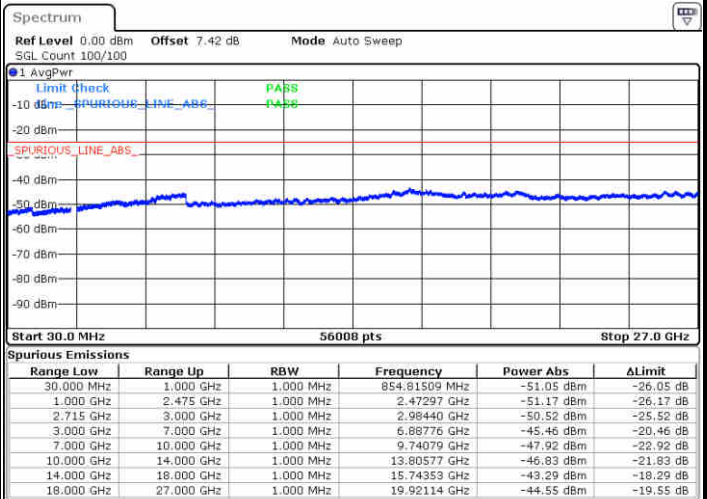
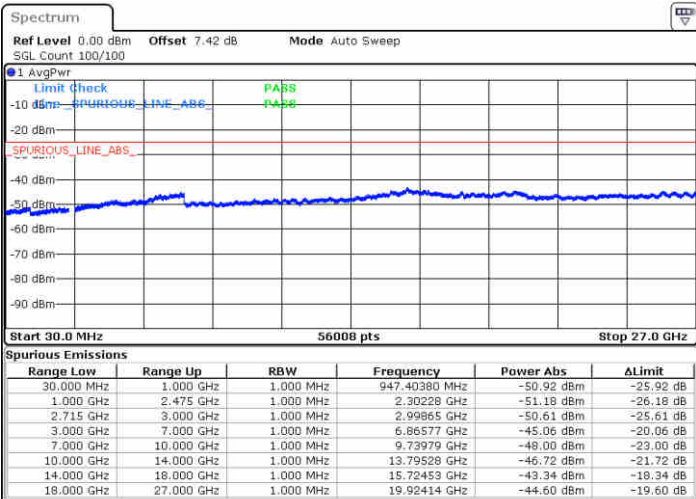


Date: 11.JUL.2019 10:53:43

Date: 11.JUL.2019 10:54:37

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 11.JUL.2019 10:55:32

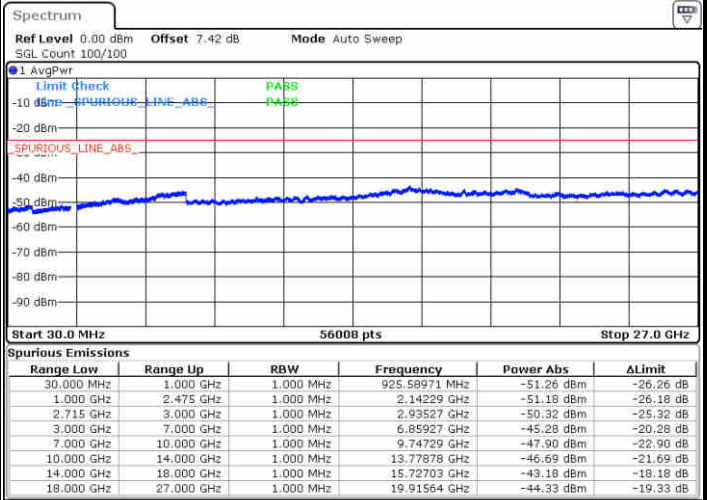
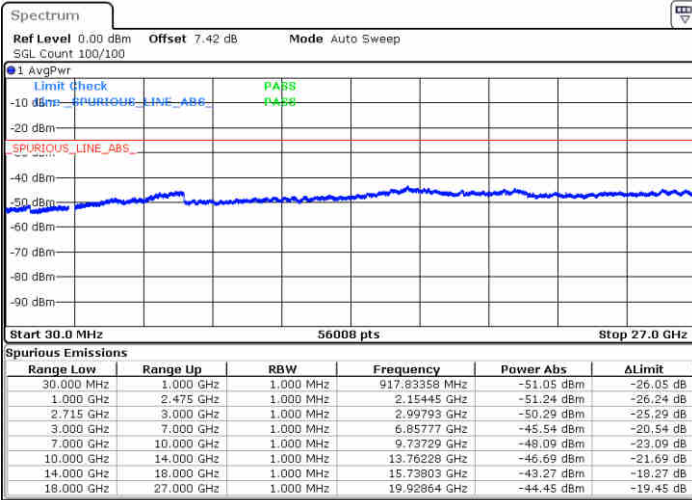
Date: 11.JUL.2019 10:56:27



LTE Band 41 / 5MHz

Lowest Channel / 64QAM

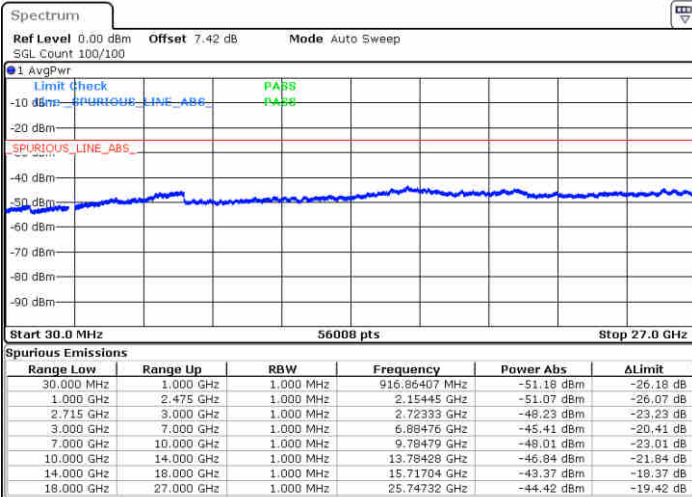
Middle Channel / 64QAM



Date: 11.JUL.2019 10:57:22

Date: 11.JUL.2019 10:58:16

Highest Channel / 64QAM



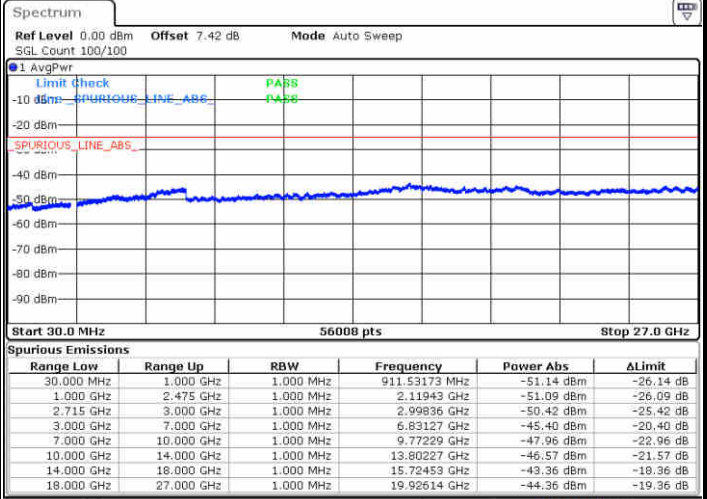
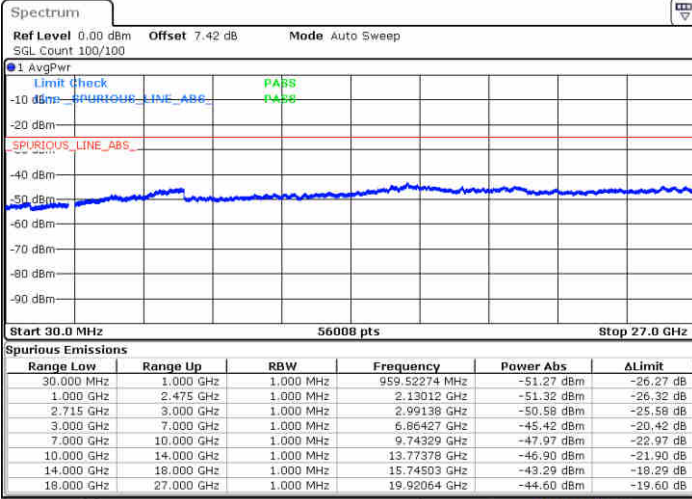
Date: 11.JUL.2019 10:59:11



LTE Band 41 / 10MHz

Lowest Channel / 64QAM

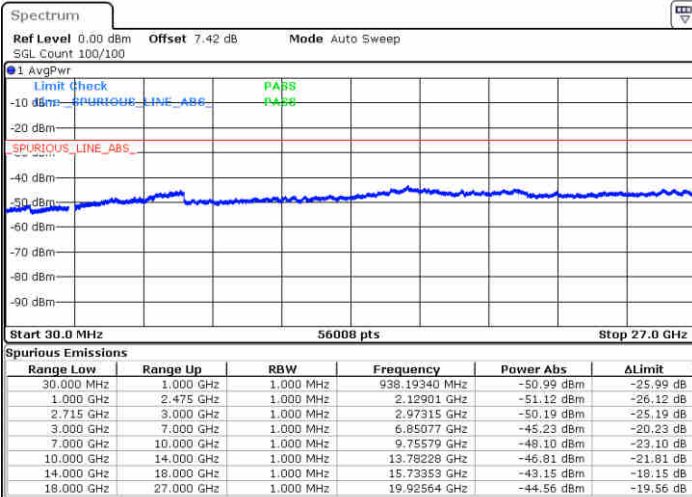
Middle Channel / 64QAM



Date: 11.JUL.2019 11:00:06

Date: 11.JUL.2019 11:01:00

Highest Channel / 64QAM

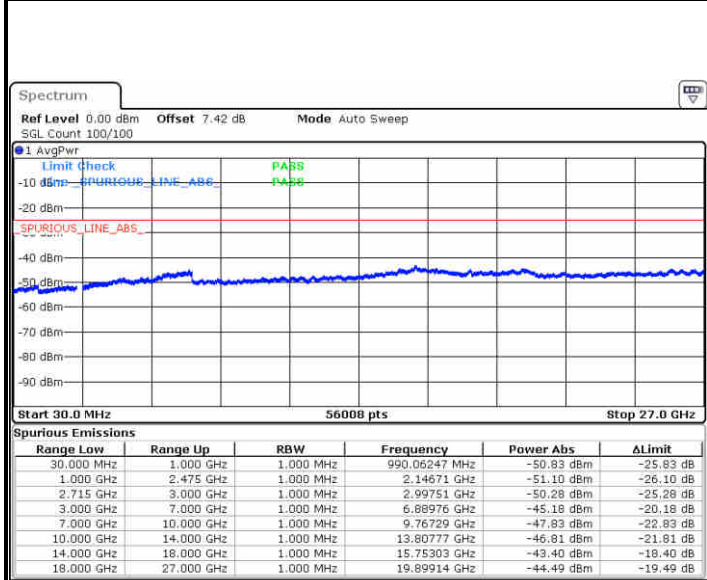


Date: 11.JUL.2019 11:01:55



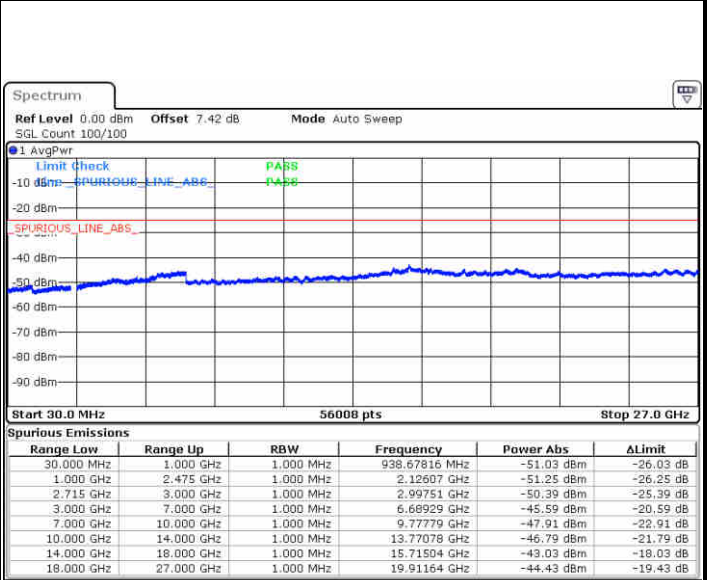
**LTE Band 41 / 15MHz**

**Lowest Channel / 64QAM**



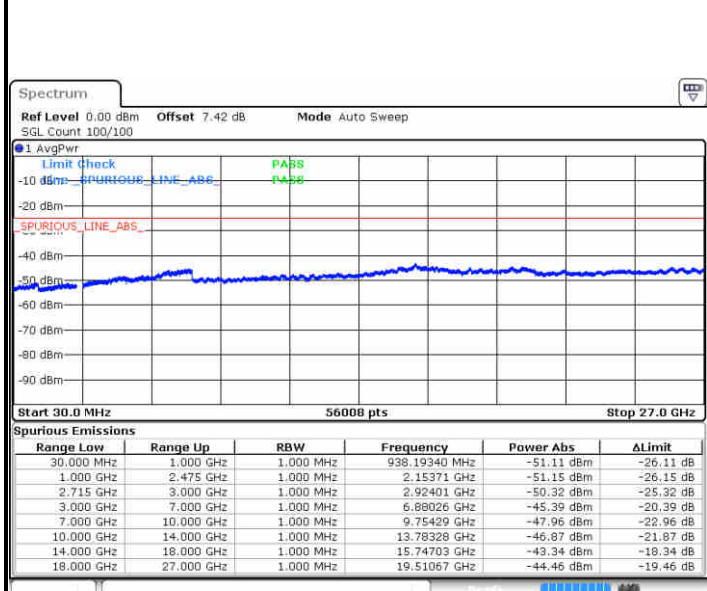
Date: 11.JUL.2019 11:02:50

**Middle Channel / 64QAM**



Date: 11.JUL.2019 11:03:45

**Highest Channel / 64QAM**



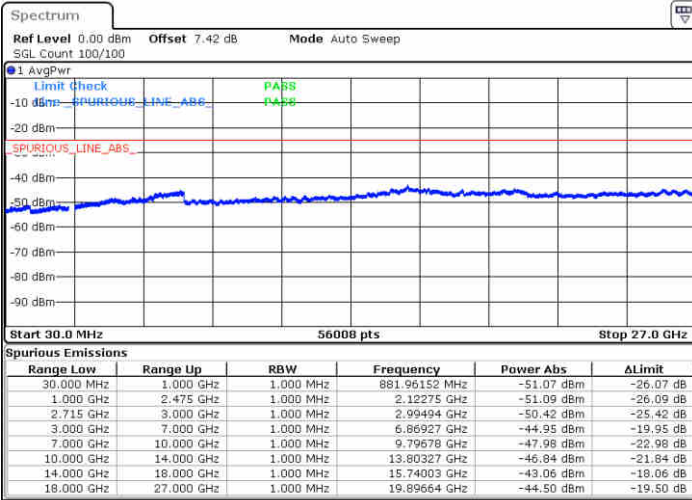
Date: 11.JUL.2019 11:04:39



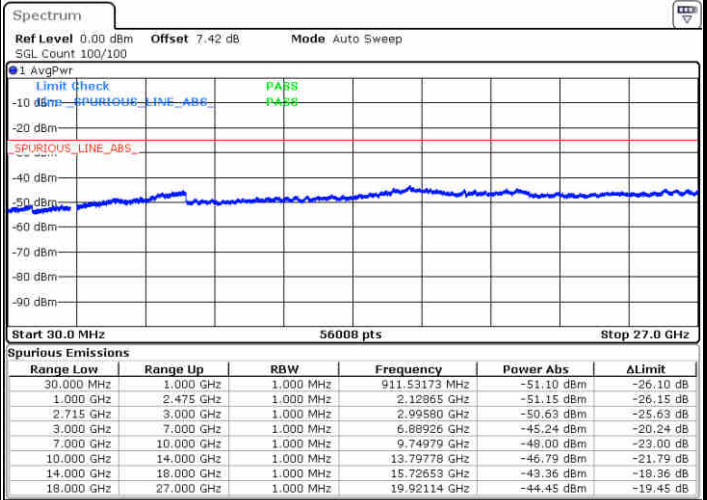
LTE Band 41 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

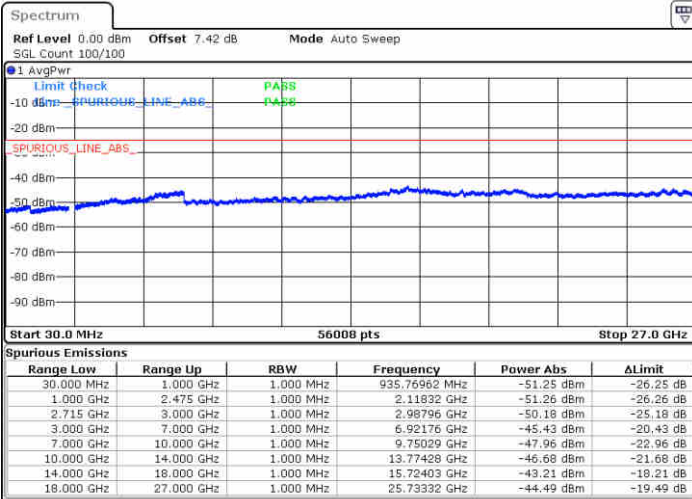


Date: 11.JUL.2019 11:05:34



Date: 11.JUL.2019 11:06:29

Highest Channel / 64QAM



Date: 11.JUL.2019 11:07:24



### Frequency Stability

| Test Conditions  |                   | LTE Band 2 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | Note 2. |
|                  |                   | Deviation (ppm)                    | Result  |
| 50               | Normal Voltage    | 0.0015                             | PASS    |
| 40               | Normal Voltage    | 0.0004                             |         |
| 30               | Normal Voltage    | 0.0017                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0005                             |         |
| 0                | Normal Voltage    | 0.0025                             |         |
| -10              | Normal Voltage    | 0.0023                             |         |
| -20              | Normal Voltage    | 0.0004                             |         |
| -30              | Normal Voltage    | 0.0028                             |         |
| 20               | Maximum Voltage   | 0.0004                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0024                             |         |

**Note:**

1. Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



| Test Conditions  |                   | LTE Band 4 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | Note 2. |
|                  |                   | Deviation (ppm)                    | Result  |
| 50               | Normal Voltage    | 0.0025                             | PASS    |
| 40               | Normal Voltage    | 0.0023                             |         |
| 30               | Normal Voltage    | 0.0011                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0029                             |         |
| 0                | Normal Voltage    | 0.0019                             |         |
| -10              | Normal Voltage    | 0.0008                             |         |
| -20              | Normal Voltage    | 0.0024                             |         |
| -30              | Normal Voltage    | 0.0022                             |         |
| 20               | Maximum Voltage   | 0.0014                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0004                             |         |

**Note:**

1. Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



| Test Conditions  |                   | LTE Band 5 (QPSK) / Middle Channel | Limit  |
|------------------|-------------------|------------------------------------|--------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | 2.5ppm |
|                  |                   | Deviation (ppm)                    | Result |
| 50               | Normal Voltage    | 0.0024                             | PASS   |
| 40               | Normal Voltage    | 0.0022                             |        |
| 30               | Normal Voltage    | 0.0012                             |        |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |        |
| 10               | Normal Voltage    | 0.0029                             |        |
| 0                | Normal Voltage    | 0.0018                             |        |
| -10              | Normal Voltage    | 0.0009                             |        |
| -20              | Normal Voltage    | 0.0025                             |        |
| -30              | Normal Voltage    | 0.0021                             |        |
| 20               | Maximum Voltage   | 0.0014                             |        |
| 20               | Normal Voltage    | 0.0000                             |        |
| 20               | Battery End Point | 0.0004                             |        |

Note: Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.2 V.





| Test Conditions  |                   | LTE Band 7 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                           | Note 2. |
|                  |                   | Deviation (ppm)                    | Result  |
| 50               | Normal Voltage    | 0.0044                             | PASS    |
| 40               | Normal Voltage    | 0.0041                             |         |
| 30               | Normal Voltage    | 0.0047                             |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                             |         |
| 10               | Normal Voltage    | 0.0038                             |         |
| 0                | Normal Voltage    | 0.0027                             |         |
| -10              | Normal Voltage    | 0.0030                             |         |
| -20              | Normal Voltage    | 0.0037                             |         |
| -30              | Normal Voltage    | 0.0042                             |         |
| 20               | Maximum Voltage   | 0.0030                             |         |
| 20               | Normal Voltage    | 0.0000                             |         |
| 20               | Battery End Point | 0.0031                             |         |

**Note:**

1. Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



| Test Conditions  |                   | LTE Band 41 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                            | Note 2. |
|                  |                   | Deviation (ppm)                     | Result  |
| 50               | Normal Voltage    | 0.0026                              | PASS    |
| 40               | Normal Voltage    | 0.0004                              |         |
| 30               | Normal Voltage    | 0.0017                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0005                              |         |
| 0                | Normal Voltage    | 0.0025                              |         |
| -10              | Normal Voltage    | 0.0031                              |         |
| -20              | Normal Voltage    | 0.0006                              |         |
| -30              | Normal Voltage    | 0.0028                              |         |
| 20               | Maximum Voltage   | 0.0009                              |         |
| 20               | Normal Voltage    | 0.0000                              |         |
| 20               | Battery End Point | 0.0024                              |         |

**Note:**

1. Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

| LTE Band 2 / 20MHz / QPSK |                   |              |               |                   |                    |                      |                       |                    |
|---------------------------|-------------------|--------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                   | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                    | 3741              | -43.80       | -13           | -30.80            | -56.06             | 2.641                | 14.90                 | H                  |
|                           | 5613              | -39.40       | -13           | -26.40            | -51.26             | 2.94                 | 14.80                 | H                  |
|                           | 7488              | -51.32       | -13           | -38.32            | -61.09             | 3.39                 | 13.16                 | H                  |
|                           | 9355              | -47.89       | -13           | -34.89            | -58.37             | 4.00                 | 14.48                 | H                  |
|                           | 11226             | -47.94       | -13           | -34.94            | -57.45             | 4.23                 | 13.74                 | H                  |
|                           | 13097             | -46.75       | -13           | -33.75            | -56.59             | 4.49                 | 14.32                 | H                  |
|                           | 14968             | -44.51       | -13           | -31.51            | -54.76             | 4.94                 | 15.19                 | H                  |
|                           | 16839             | -46.35       | -13           | -33.35            | -56.24             | 5.01                 | 14.90                 | H                  |
|                           | 3741              | -37.07       | -13           | -24.07            | -49.33             | 2.64                 | 14.90                 | V                  |
|                           | 5613              | -31.56       | -13           | -18.56            | -43.42             | 2.94                 | 14.80                 | V                  |
|                           | 7488              | -43.94       | -13           | -30.94            | -53.71             | 3.39                 | 13.16                 | V                  |
|                           | 9360              | -43.96       | -13           | -30.96            | -54.44             | 4.00                 | 14.48                 | V                  |
|                           | 11226             | -38.99       | -13           | -25.99            | -48.50             | 4.23                 | 13.74                 | V                  |
|                           | 13092             | -36.93       | -13           | -23.93            | -46.77             | 4.49                 | 14.32                 | V                  |
|                           | 14964             | -36.65       | -13           | -23.65            | -46.90             | 4.94                 | 15.19                 | V                  |
|                           | 16836             | -42.37       | -13           | -29.37            | -52.26             | 5.01                 | 14.90                 | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 4 / 20MHz / QPSK |                   |              |               |                   |                    |                      |                       |                    |
|---------------------------|-------------------|--------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                   | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                    | 3447              | -55.83       | -13           | -42.83            | -66.57             | 2.604                | 13.34                 | H                  |
|                           | 5172              | -40.24       | -13           | -27.24            | -50.75             | 3.011                | 13.52                 | H                  |
|                           | 6900              | -55.94       | -13           | -42.94            | -66.14             | 3.271                | 13.47                 | H                  |
|                           | 8616              | -51.29       | -13           | -38.29            | -58.26             | 5.527                | 12.5                  | H                  |
|                           | 10344             | -48.83       | -13           | -35.83            | -55.69             | 6.038                | 12.9                  | H                  |
|                           | 12060             | -46.78       | -13           | -33.78            | -53.98             | 6.726                | 13.93                 | H                  |
|                           | 13788             | -45.10       | -13           | -32.10            | -52.54             | 6.963                | 14.4                  | H                  |
|                           | 15516             | -47.37       | -13           | -34.37            | -54.00             | 7.57                 | 14.2                  | H                  |
|                           | 3447              | -49.42       | -13           | -36.42            | -60.16             | 2.604                | 13.34                 | V                  |
|                           | 5172              | -33.22       | -13           | -20.22            | -43.73             | 3.011                | 13.52                 | V                  |
|                           | 6900              | -49.80       | -13           | -36.80            | -60.00             | 3.271                | 13.47                 | V                  |
|                           | 8616              | -51.88       | -13           | -38.88            | -58.85             | 5.527                | 12.50                 | V                  |
|                           | 10344             | -43.97       | -13           | -30.97            | -50.83             | 6.038                | 12.90                 | V                  |
|                           | 12060             | -45.25       | -13           | -32.25            | -52.45             | 6.726                | 13.93                 | V                  |
|                           | 13788             | -43.41       | -13           | -30.41            | -50.85             | 6.963                | 14.40                 | V                  |
|                           | 15516             | -35.59       | -13           | -22.59            | -42.22             | 7.57                 | 14.20                 | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 5 / 10MHz / QPSK |                   |             |               |                   |                    |                      |                       |                    |
|---------------------------|-------------------|-------------|---------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                   | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                    | 1664              | -46.47      | -13           | -33.47            | -53.44             | 1.58                 | 10.70                 | H                  |
|                           | 2496              | -48.04      | -13           | -35.04            | -56.29             | 2.102                | 12.50                 | H                  |
|                           | 3330              | -57.93      | -13           | -44.93            | -66.82             | 2.856                | 13.90                 | H                  |
|                           | 4158              | -63.64      | -13           | -50.64            | -72.10             | 2.689                | 13.30                 | H                  |
|                           | 4992              | -62.01      | -13           | -49.01            | -69.77             | 3.093                | 13.00                 | H                  |
|                           | 5826              | -57.82      | -13           | -44.82            | -66.59             | 3.178                | 14.10                 | H                  |
|                           | 6654              | -58.96      | -13           | -45.96            | -66.20             | 3.306                | 12.70                 | H                  |
|                           | 7488              | -54.81      | -13           | -41.81            | -62.40             | 3.406                | 13.15                 | H                  |
|                           | 1664              | -46.64      | -13           | -33.64            | -53.61             | 1.58                 | 10.70                 | V                  |
|                           | 2496              | -49.58      | -13           | -36.58            | -57.83             | 2.10                 | 12.50                 | V                  |
|                           | 3330              | -50.74      | -13           | -37.74            | -59.63             | 2.86                 | 13.90                 | V                  |
|                           | 4158              | -63.09      | -13           | -50.09            | -71.55             | 2.69                 | 13.30                 | V                  |
|                           | 4992              | -60.46      | -13           | -47.46            | -68.22             | 3.09                 | 13.00                 | V                  |
|                           | 5826              | -52.02      | -13           | -39.02            | -60.79             | 3.18                 | 14.10                 | V                  |
|                           | 6654              | -57.81      | -13           | -44.81            | -65.05             | 3.31                 | 12.70                 | V                  |
|                           | 7488              | -47.97      | -13           | -34.97            | -55.56             | 3.41                 | 13.15                 | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 7 / 20MHz / QPSK |                   |              |               |                   |                    |                      |                        |                    |
|---------------------------|-------------------|--------------|---------------|-------------------|--------------------|----------------------|------------------------|--------------------|
| Channel                   | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain ( dBi) | Polarization (H/V) |
| Middle                    | 5052              | -43.46       | -25           | -18.46            | -53.67             | 3.03                 | 13.24                  | H                  |
|                           | 7580              | -48.85       | -25           | -23.85            | -58.30             | 3.56                 | 13.01                  | H                  |
|                           | 10100             | -44.95       | -25           | -19.95            | -54.47             | 3.92                 | 13.44                  | H                  |
|                           | 12630             | -58.97       | -25           | -33.97            | -68.89             | 4.44                 | 14.36                  | H                  |
|                           | 15160             | -51.16       | -25           | -26.16            | -61.53             | 4.77                 | 15.14                  | H                  |
|                           | 5052              | -30.74       | -25           | -5.74             | -40.95             | 3.03                 | 13.24                  | V                  |
|                           | 7580              | -34.67       | -25           | -9.67             | -44.12             | 3.56                 | 13.01                  | V                  |
|                           | 10100             | -37.00       | -25           | -12.00            | -46.52             | 3.92                 | 13.44                  | V                  |
|                           | 12630             | -47.24       | -25           | -22.24            | -57.16             | 4.44                 | 14.36                  | V                  |
| 15160                     | -43.53            | -25          | -18.53        | -53.90            | 4.77               | 15.14                | V                      |                    |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| LTE Band 41 / 20MHz / QPSK |                   |              |               |                   |                    |                      |                        |                    |
|----------------------------|-------------------|--------------|---------------|-------------------|--------------------|----------------------|------------------------|--------------------|
| Channel                    | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain ( dBi) | Polarization (H/V) |
| Middle                     | 5168              | -39.73       | -25           | -14.73            | -49.94             | 3.03                 | 13.24                  | H                  |
|                            | 7752              | -43.39       | -25           | -18.39            | -52.84             | 3.56                 | 13.01                  | H                  |
|                            | 10340             | -35.24       | -25           | -10.24            | -44.76             | 3.92                 | 13.44                  | H                  |
|                            | 12920             | -52.62       | -25           | -27.62            | -62.54             | 4.44                 | 14.36                  | H                  |
|                            | 15500             | -50.30       | -25           | -25.30            | -60.67             | 4.77                 | 15.14                  | H                  |
|                            | 5168.18           | -27.15       | -25           | -2.15             | -37.36             | 3.03                 | 13.24                  | V                  |
|                            | 7752              | -30.37       | -25           | -5.37             | -39.82             | 3.56                 | 13.01                  | V                  |
|                            | 10340             | -26.70       | -25           | -1.70             | -36.22             | 3.92                 | 13.44                  | V                  |
|                            | 12920             | -40.95       | -25           | -15.95            | -50.87             | 4.44                 | 14.36                  | V                  |
|                            | 15500             | -36.70       | -25           | -11.70            | -47.07             | 4.77                 | 15.14                  | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.