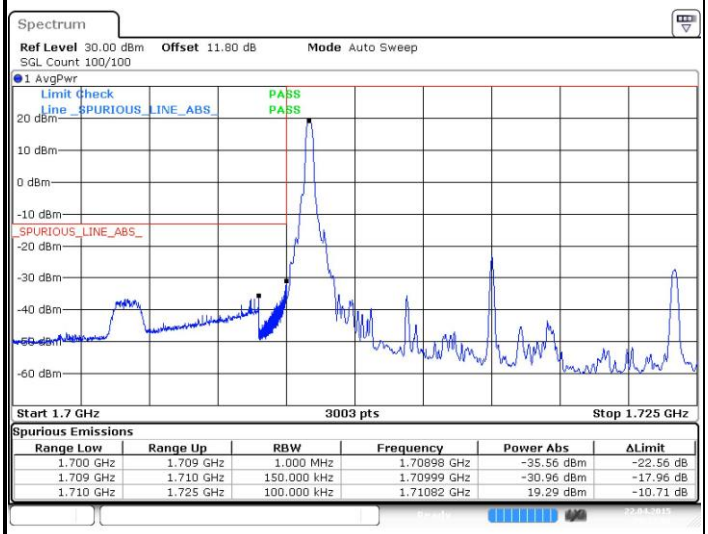
## LTE Band 4 / 15MHz / 16QAM

### Lowest Band Edge / 1RB

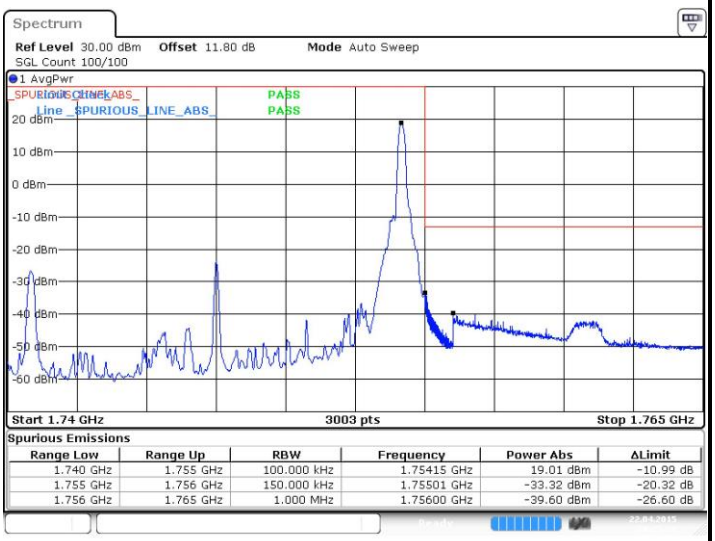



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.700 GHz | 1.709 GHz | 1.000 MHz | 1.70898 GHz | -35.56 dBm | -22.56 dB |
| 1.709 GHz | 1.710 GHz | 150.000 kHz | 1.70999 GHz | -30.96 dBm | -17.96 dB |
| 1.710 GHz | 1.725 GHz | 100.000 kHz | 1.71082 GHz | 19.29 dBm | -10.71 dB |

Date: 22.APR.2015 20:12:02

### Highest Band Edge / 1RB

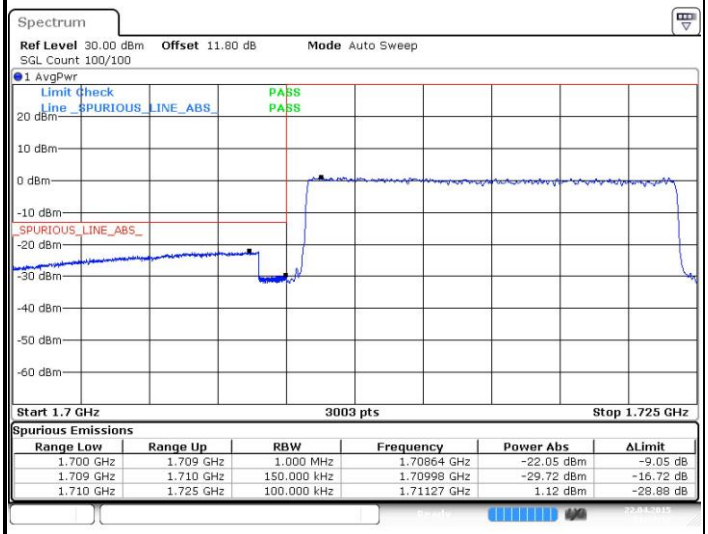



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.740 GHz | 1.755 GHz | 100.000 kHz | 1.75415 GHz | 19.01 dBm | -10.99 dB |
| 1.755 GHz | 1.756 GHz | 150.000 kHz | 1.75501 GHz | -33.32 dBm | -20.32 dB |
| 1.756 GHz | 1.765 GHz | 1.000 MHz | 1.75600 GHz | -39.60 dBm | -26.60 dB |

Date: 22.APR.2015 20:25:26

### Lowest Band Edge / Full RB

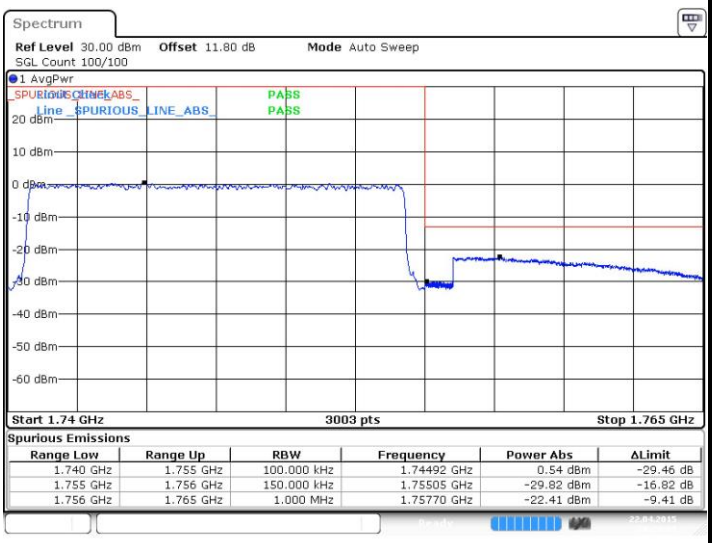



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.700 GHz | 1.709 GHz | 1.000 MHz | 1.70864 GHz | -22.05 dBm | -9.05 dB |
| 1.709 GHz | 1.710 GHz | 150.000 kHz | 1.70998 GHz | -29.72 dBm | -16.72 dB |
| 1.710 GHz | 1.725 GHz | 100.000 kHz | 1.71127 GHz | 1.12 dBm | -28.88 dB |

Date: 22.APR.2015 21:27:13

### Highest Band Edge / Full RB



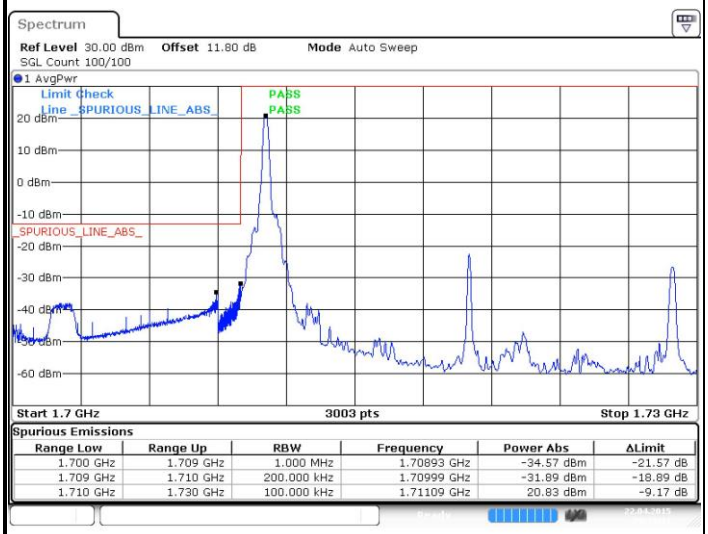

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.740 GHz | 1.755 GHz | 100.000 kHz | 1.74492 GHz | 0.54 dBm | -29.46 dB |
| 1.755 GHz | 1.756 GHz | 150.000 kHz | 1.75505 GHz | -29.82 dBm | -16.82 dB |
| 1.756 GHz | 1.765 GHz | 1.000 MHz | 1.75770 GHz | -22.41 dBm | -9.41 dB |

Date: 22.APR.2015 20:28:01

## LTE Band 4 / 20MHz / QPSK

### Lowest Band Edge / 1RB

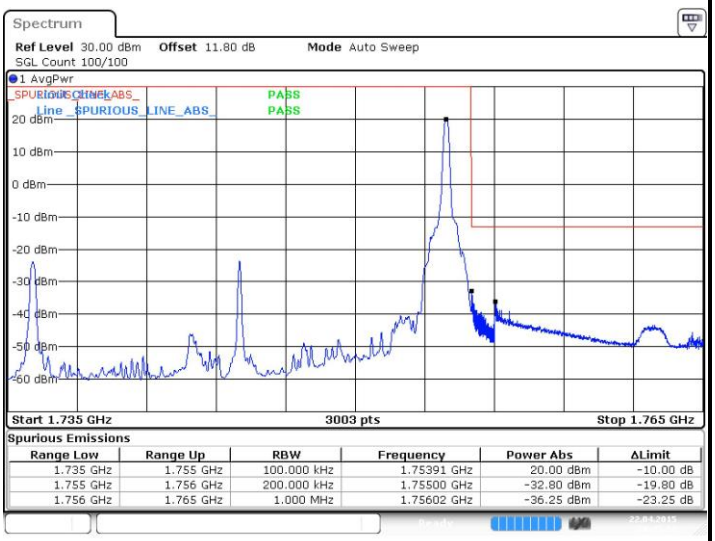



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.700 GHz | 1.709 GHz | 1.000 MHz | 1.70893 GHz | -34.57 dBm | -21.57 dB |
| 1.709 GHz | 1.710 GHz | 200.000 kHz | 1.70999 GHz | -31.89 dBm | -18.89 dB |
| 1.710 GHz | 1.730 GHz | 100.000 kHz | 1.71109 GHz | 20.83 dBm | -9.17 dB |

Date: 22.APR.2015 20:33:11

### Highest Band Edge / 1RB

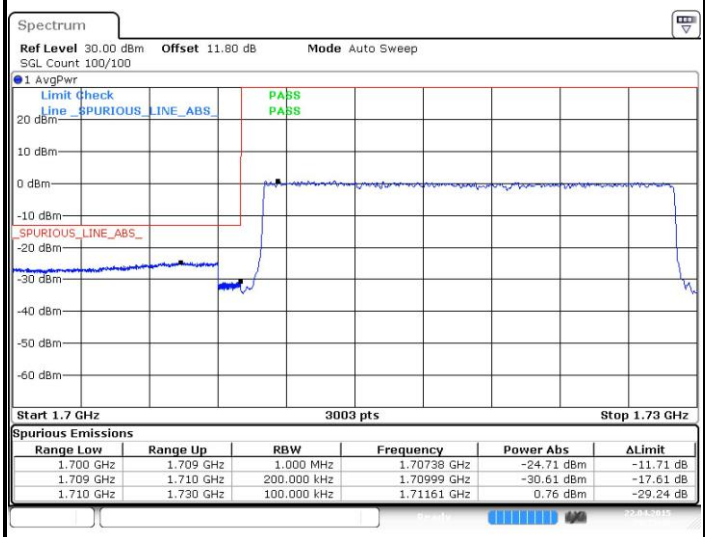



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.735 GHz | 1.755 GHz | 100.000 kHz | 1.75391 GHz | 20.00 dBm | -10.00 dB |
| 1.755 GHz | 1.756 GHz | 200.000 kHz | 1.75500 GHz | -32.80 dBm | -19.80 dB |
| 1.756 GHz | 1.765 GHz | 1.000 MHz | 1.75602 GHz | -36.25 dBm | -23.25 dB |

Date: 22.APR.2015 20:45:53

### Lowest Band Edge / Full RB

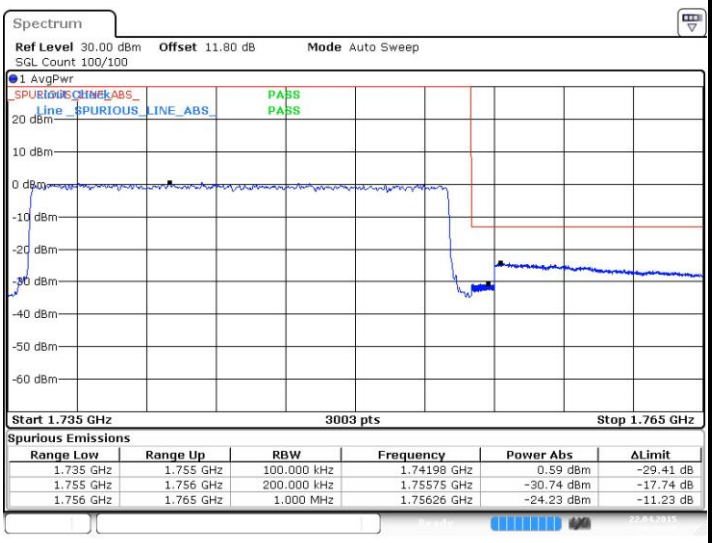



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.700 GHz | 1.709 GHz | 1.000 MHz | 1.70738 GHz | -24.71 dBm | -11.71 dB |
| 1.709 GHz | 1.710 GHz | 200.000 kHz | 1.70999 GHz | -30.61 dBm | -17.61 dB |
| 1.710 GHz | 1.730 GHz | 100.000 kHz | 1.71161 GHz | 0.76 dBm | -29.24 dB |

Date: 22.APR.2015 20:35:45

### Highest Band Edge / Full RB



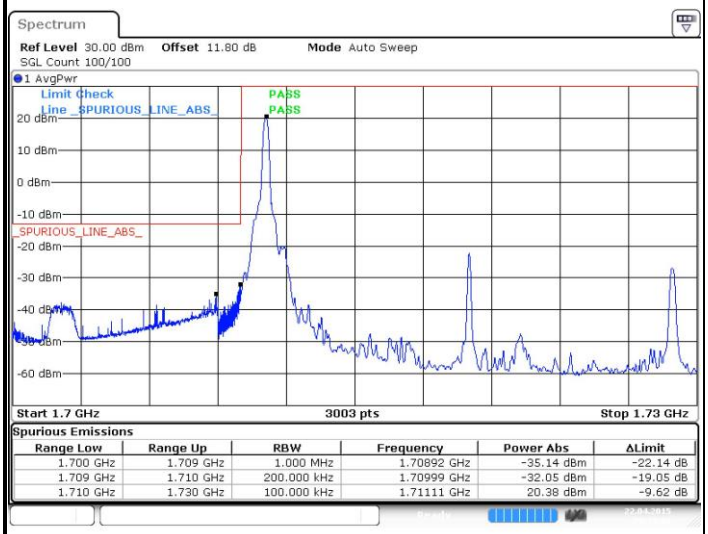

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.735 GHz | 1.755 GHz | 100.000 kHz | 1.74198 GHz | 0.59 dBm | -29.41 dB |
| 1.755 GHz | 1.756 GHz | 200.000 kHz | 1.75575 GHz | -30.74 dBm | -17.74 dB |
| 1.756 GHz | 1.765 GHz | 1.000 MHz | 1.75626 GHz | -24.23 dBm | -11.23 dB |

Date: 22.APR.2015 20:48:28

## LTE Band 4 / 20MHz / 16QAM

### Lowest Band Edge / 1RB

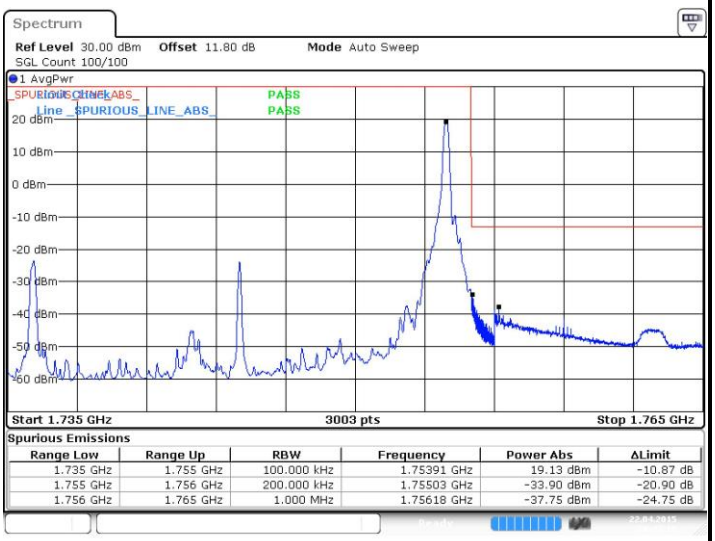



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.700 GHz | 1.709 GHz | 1.000 MHz | 1.70892 GHz | -35.14 dBm | -22.14 dB |
| 1.709 GHz | 1.710 GHz | 200.000 kHz | 1.70999 GHz | -32.05 dBm | -19.05 dB |
| 1.710 GHz | 1.730 GHz | 100.000 kHz | 1.71111 GHz | 20.38 dBm | -9.62 dB |

Date: 22.APR.2015 20:34:29

### Highest Band Edge / 1RB

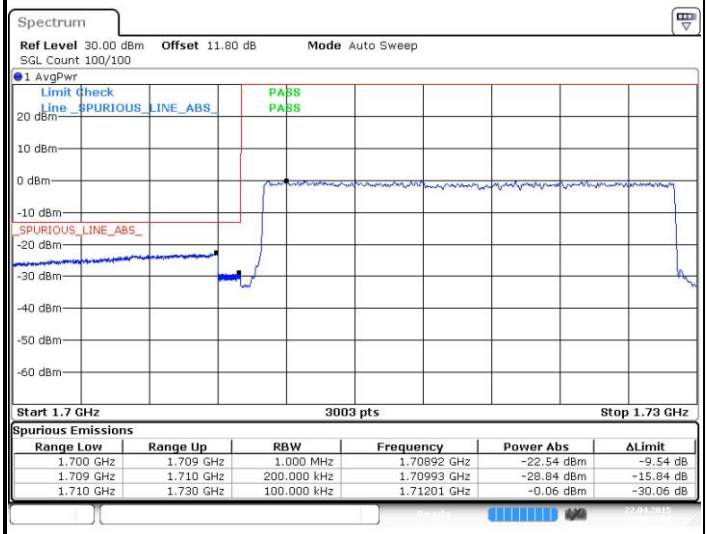



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.735 GHz | 1.755 GHz | 100.000 kHz | 1.75391 GHz | 19.13 dBm | -10.87 dB |
| 1.755 GHz | 1.756 GHz | 200.000 kHz | 1.75503 GHz | -33.90 dBm | -20.90 dB |
| 1.756 GHz | 1.765 GHz | 1.000 MHz | 1.75618 GHz | -37.75 dBm | -24.75 dB |

Date: 22.APR.2015 20:47:11

### Lowest Band Edge / Full RB

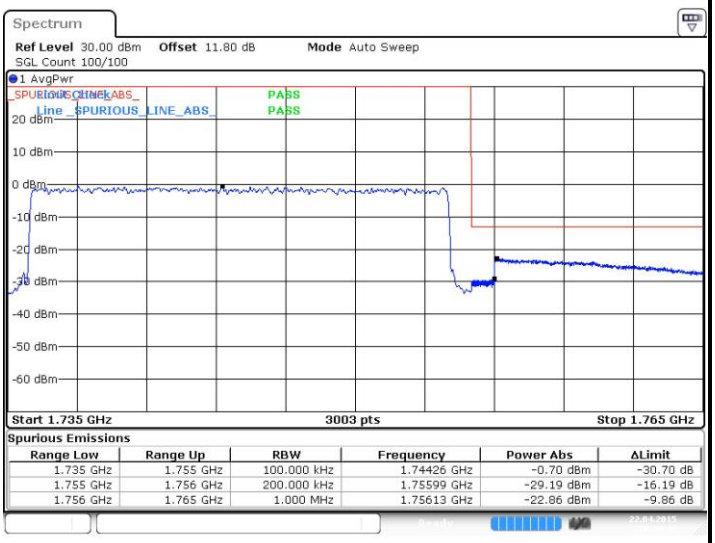



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.700 GHz | 1.709 GHz | 1.000 MHz | 1.70892 GHz | -22.54 dBm | -9.54 dB |
| 1.709 GHz | 1.710 GHz | 200.000 kHz | 1.70993 GHz | -28.84 dBm | -15.84 dB |
| 1.710 GHz | 1.730 GHz | 100.000 kHz | 1.71201 GHz | -0.06 dBm | -30.06 dB |

Date: 22.APR.2015 20:37:02

### Highest Band Edge / Full RB




Spurious Emissions

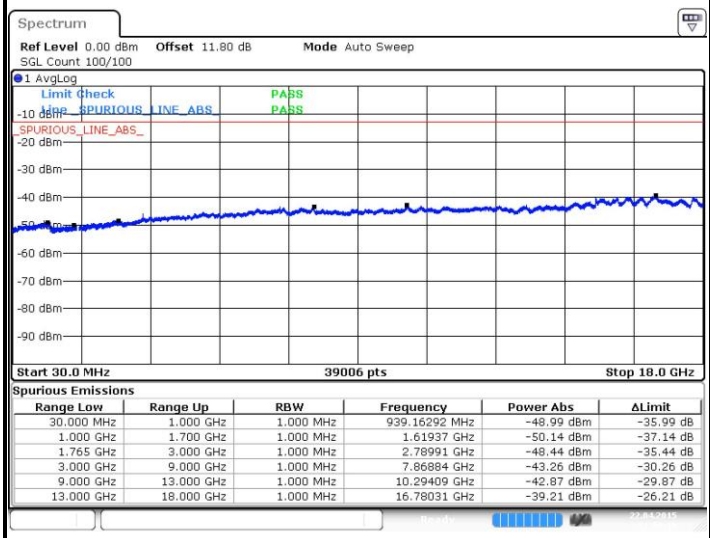
| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 1.735 GHz | 1.755 GHz | 100.000 kHz | 1.74426 GHz | -0.70 dBm | -30.70 dB |
| 1.755 GHz | 1.756 GHz | 200.000 kHz | 1.75599 GHz | -29.19 dBm | -16.19 dB |
| 1.756 GHz | 1.765 GHz | 1.000 MHz | 1.75613 GHz | -22.86 dBm | -9.86 dB |

Date: 22.APR.2015 20:49:44

# Conducted Spurious Emission

## LTE Band 4 / 1.4MHz

### Lowest Channel / QPSK

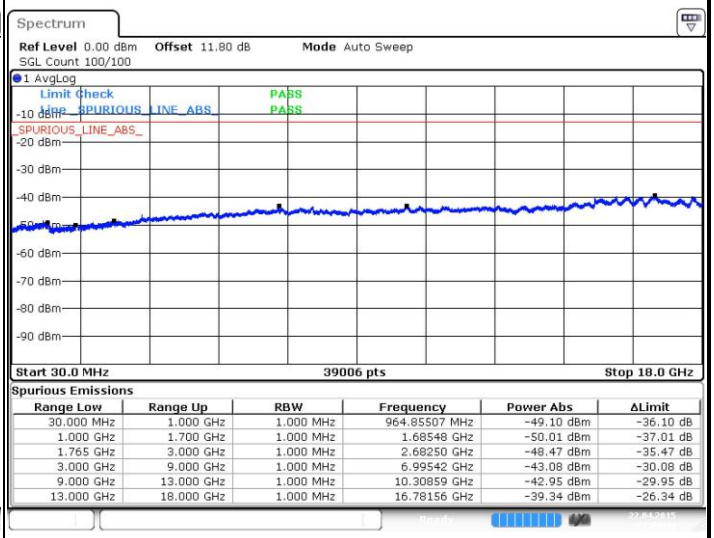



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 939.16292 MHz | -48.99 dBm | -35.99 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.61937 GHz | -50.14 dBm | -37.14 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.78991 GHz | -48.44 dBm | -35.44 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86884 GHz | -43.26 dBm | -30.26 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.29409 GHz | -42.87 dBm | -29.87 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.78031 GHz | -39.21 dBm | -26.21 dB |

Date: 22.APR.2015 21:02:16

### Lowest Channel / 16QAM

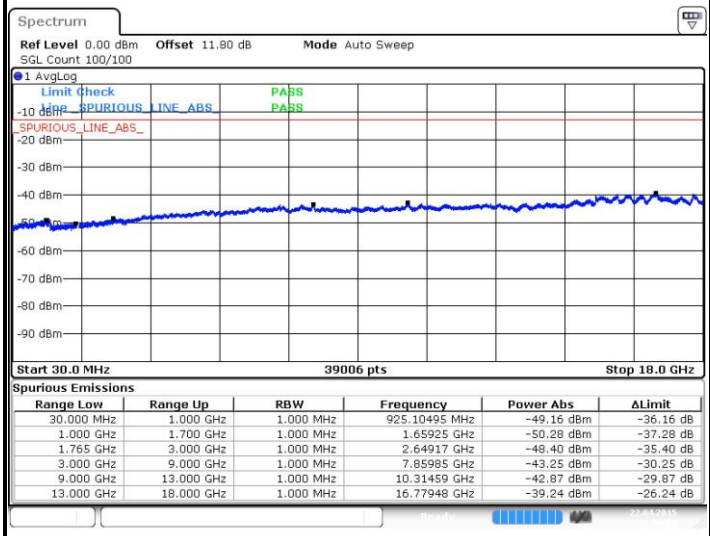



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 964.85507 MHz | -49.10 dBm | -36.10 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.68548 GHz | -50.01 dBm | -37.01 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.68250 GHz | -48.47 dBm | -35.47 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.99542 GHz | -43.08 dBm | -30.08 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.30859 GHz | -42.95 dBm | -29.95 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.78156 GHz | -39.34 dBm | -26.34 dB |

Date: 22.APR.2015 21:03:41

### Middle Channel / QPSK

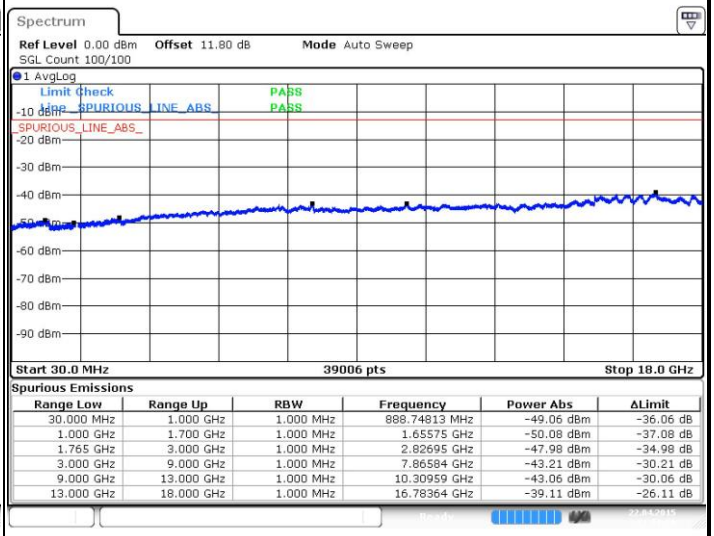



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 925.10495 MHz | -49.16 dBm | -36.16 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.65925 GHz | -50.28 dBm | -37.28 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.64917 GHz | -48.40 dBm | -35.40 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.85985 GHz | -43.25 dBm | -30.25 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31459 GHz | -42.87 dBm | -29.87 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77948 GHz | -39.24 dBm | -26.24 dB |

Date: 22.APR.2015 21:06:01

### Middle Channel / 16QAM



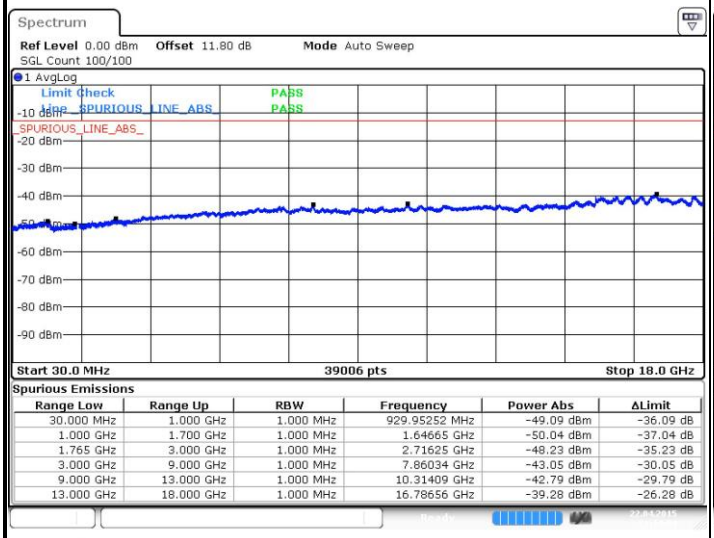

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 888.74813 MHz | -49.06 dBm | -36.06 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.65575 GHz | -50.08 dBm | -37.08 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.82695 GHz | -47.98 dBm | -34.98 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86584 GHz | -43.21 dBm | -30.21 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.30959 GHz | -43.06 dBm | -30.06 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.78364 GHz | -39.11 dBm | -26.11 dB |

Date: 22.APR.2015 21:07:26

## LTE Band 4 / 1.4MHz

### Highest Channel / QPSK

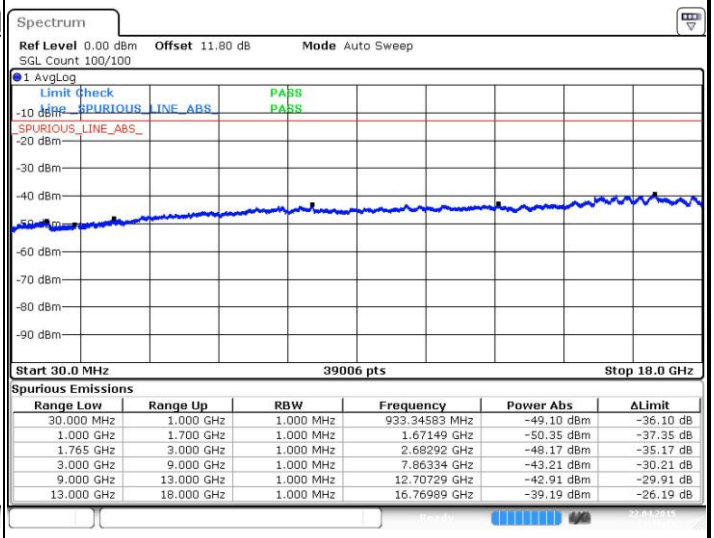



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 929.95252 MHz | -49.09 dBm | -36.09 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.64665 GHz | -50.04 dBm | -37.04 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.71625 GHz | -48.23 dBm | -35.23 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86034 GHz | -43.05 dBm | -30.05 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31409 GHz | -42.79 dBm | -29.79 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.78656 GHz | -39.28 dBm | -26.28 dB |

Date: 22.APR.2015 21:14:54

### Highest Channel / 16QAM



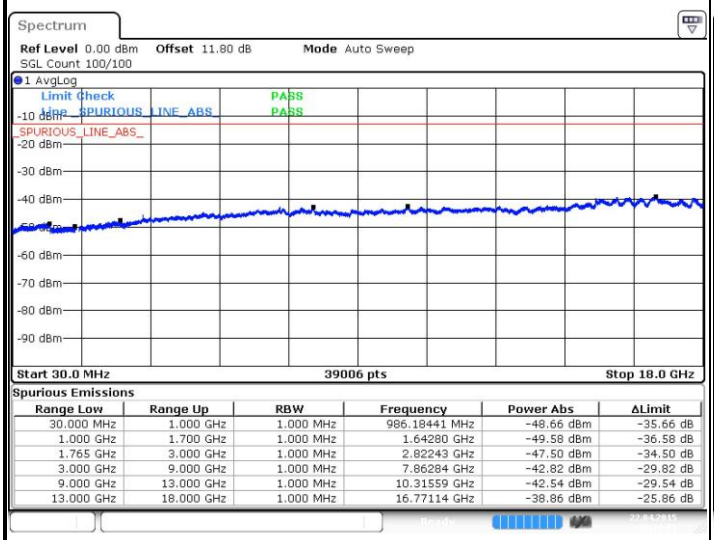

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 933.34583 MHz | -49.10 dBm | -36.10 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.67149 GHz | -50.35 dBm | -37.35 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.68292 GHz | -48.17 dBm | -35.17 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86334 GHz | -43.21 dBm | -30.21 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 12.70729 GHz | -42.91 dBm | -29.91 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.76989 GHz | -39.19 dBm | -26.19 dB |

Date: 22.APR.2015 21:16:19

## LTE Band 4 / 3MHz

### Lowest Channel / QPSK

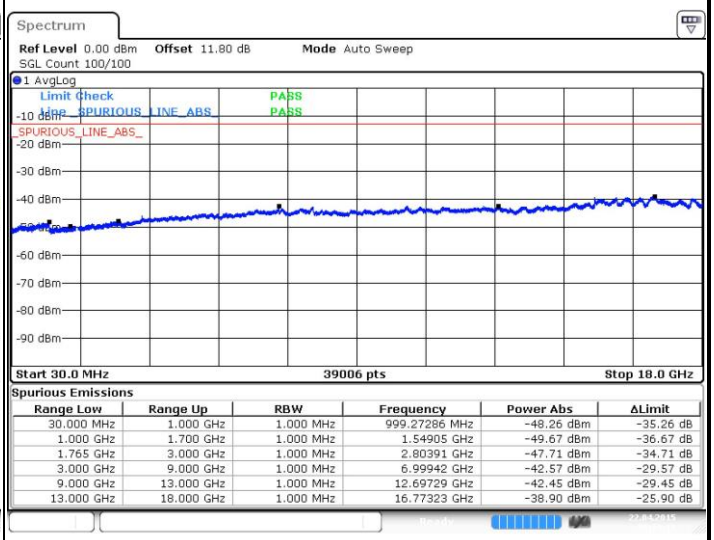



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 986.18441 MHz | -48.66 dBm | -35.66 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.64280 GHz | -49.58 dBm | -36.58 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.82243 GHz | -47.50 dBm | -34.50 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86284 GHz | -42.82 dBm | -29.82 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31559 GHz | -42.54 dBm | -29.54 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77114 GHz | -38.86 dBm | -25.86 dB |

Date: 22.APR.2015 00:31:51

### Lowest Channel / 16QAM



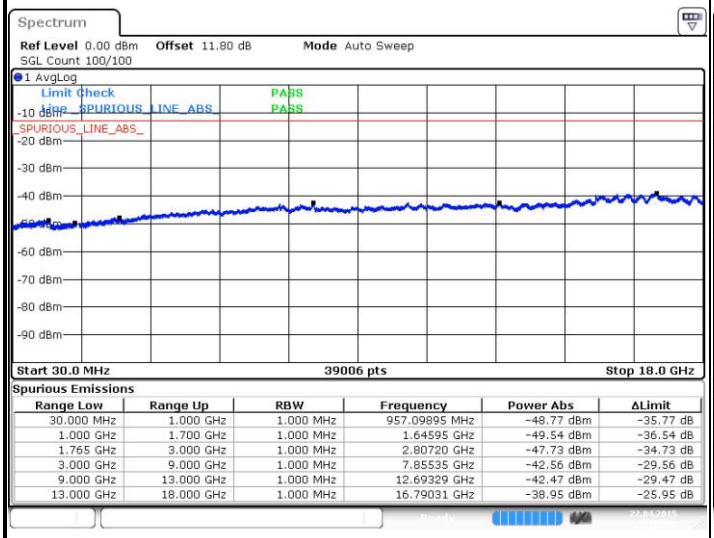

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 999.27286 MHz | -48.26 dBm | -35.26 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.54905 GHz | -49.67 dBm | -36.67 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.80391 GHz | -47.71 dBm | -34.71 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.99942 GHz | -42.57 dBm | -29.57 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 12.69729 GHz | -42.45 dBm | -29.45 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77323 GHz | -38.90 dBm | -25.90 dB |

Date: 22.APR.2015 00:33:19

## LTE Band 4 / 3MHz

### Middle Channel / QPSK

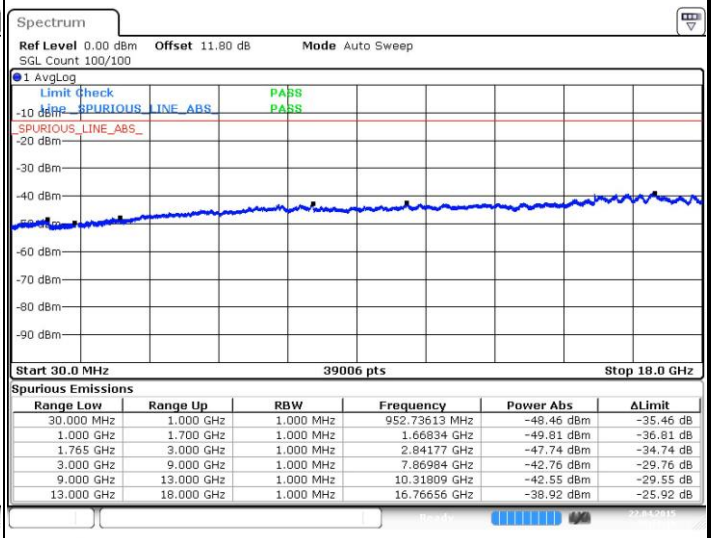



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 957.09895 MHz | -48.77 dBm | -35.77 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.64595 GHz | -49.54 dBm | -36.54 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.80720 GHz | -47.73 dBm | -34.73 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.85535 GHz | -42.56 dBm | -29.56 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 12.69329 GHz | -42.47 dBm | -29.47 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.79031 GHz | -38.95 dBm | -25.95 dB |

Date: 22.APR.2015 00:35:49

### Middle Channel / 16QAM

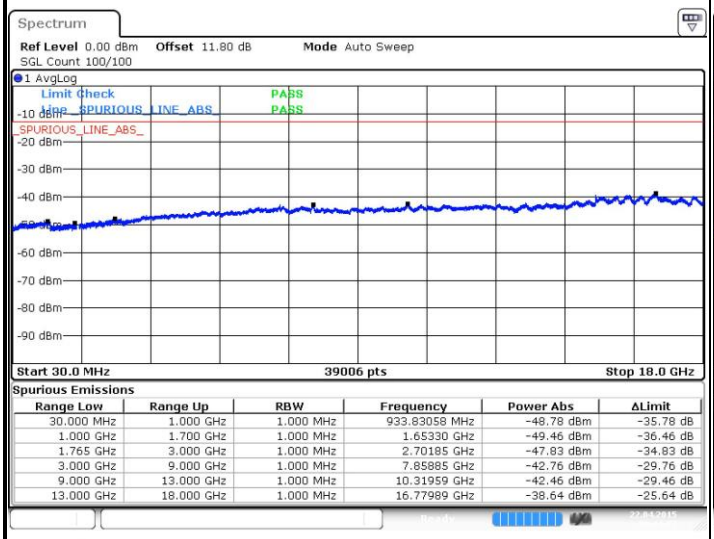



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 952.73613 MHz | -48.46 dBm | -35.46 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.66834 GHz | -49.81 dBm | -36.81 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.84177 GHz | -47.74 dBm | -34.74 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86984 GHz | -42.76 dBm | -29.76 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31809 GHz | -42.55 dBm | -29.55 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.76656 GHz | -38.92 dBm | -25.92 dB |

Date: 22.APR.2015 00:37:15

### Highest Channel / QPSK

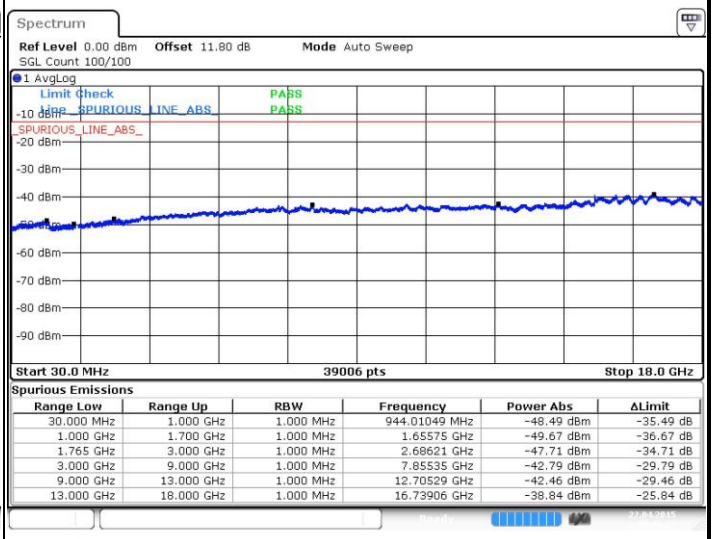



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 933.83058 MHz | -48.78 dBm | -35.78 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.65330 GHz | -49.46 dBm | -36.46 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.70185 GHz | -47.83 dBm | -34.83 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.85885 GHz | -42.76 dBm | -29.76 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31959 GHz | -42.46 dBm | -29.46 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77989 GHz | -38.64 dBm | -25.64 dB |

Date: 22.APR.2015 00:44:57

### Highest Channel / 16QAM



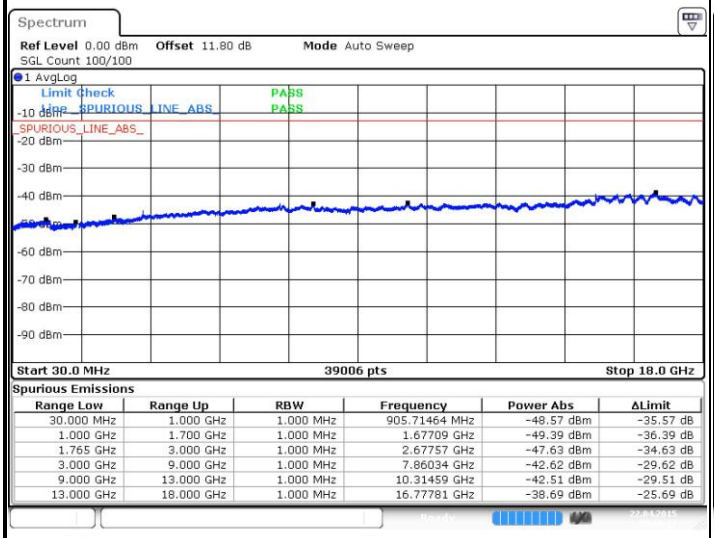

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 944.01049 MHz | -48.49 dBm | -35.49 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.65575 GHz | -49.67 dBm | -36.67 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.68621 GHz | -47.71 dBm | -34.71 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.85535 GHz | -42.79 dBm | -29.79 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 12.70529 GHz | -42.46 dBm | -29.46 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.73906 GHz | -38.84 dBm | -25.84 dB |

Date: 22.APR.2015 00:46:23

## LTE Band 4 / 5MHz

### Lowest Channel / QPSK

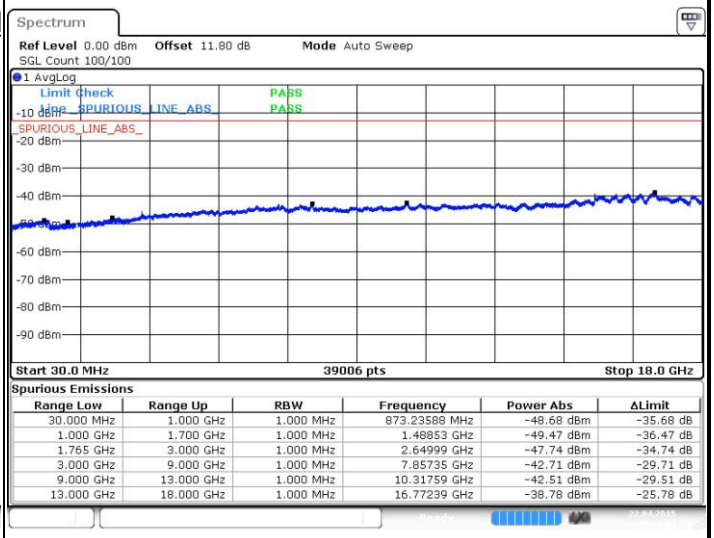



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 905.71464 MHz | -48.57 dBm | -35.57 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.67709 GHz | -49.39 dBm | -36.39 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.67757 GHz | -47.63 dBm | -34.63 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86034 GHz | -42.62 dBm | -29.62 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31459 GHz | -42.51 dBm | -29.51 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77781 GHz | -38.69 dBm | -25.69 dB |

Date: 22.APR.2015 00:58:17

### Lowest Channel / 16QAM

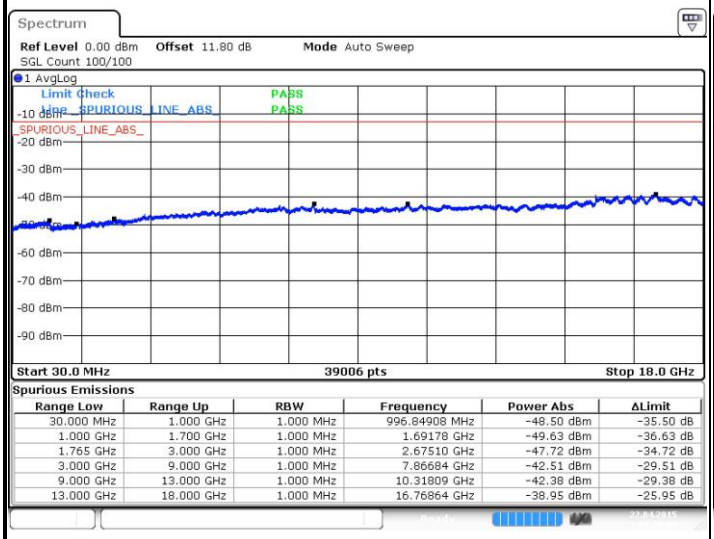



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 873.23588 MHz | -48.68 dBm | -35.68 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.48853 GHz | -49.47 dBm | -36.47 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.64999 GHz | -47.74 dBm | -34.74 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.85735 GHz | -42.71 dBm | -29.71 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31759 GHz | -42.51 dBm | -29.51 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77239 GHz | -38.78 dBm | -25.78 dB |

Date: 22.APR.2015 01:16:33

### Middle Channel / QPSK

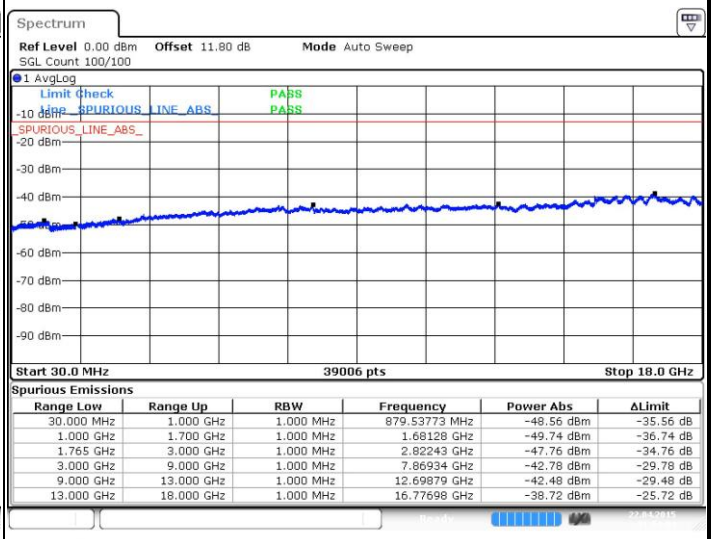



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 996.84908 MHz | -48.50 dBm | -35.50 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69178 GHz | -49.63 dBm | -36.63 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.67510 GHz | -47.72 dBm | -34.72 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86684 GHz | -42.51 dBm | -29.51 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31809 GHz | -42.38 dBm | -29.38 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.76864 GHz | -38.95 dBm | -25.95 dB |

Date: 22.APR.2015 01:02:35

### Middle Channel / 16QAM



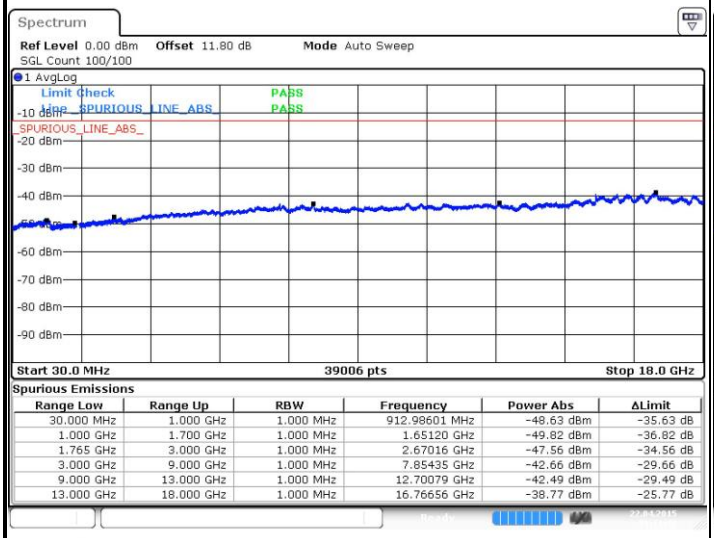

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 879.53773 MHz | -48.56 dBm | -35.56 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.68128 GHz | -49.74 dBm | -36.74 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.82243 GHz | -47.76 dBm | -34.76 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86934 GHz | -42.78 dBm | -29.78 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 12.69879 GHz | -42.48 dBm | -29.48 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77698 GHz | -38.72 dBm | -25.72 dB |

Date: 22.APR.2015 01:04:03

## LTE Band 4 / 5MHz

### Highest Channel / QPSK

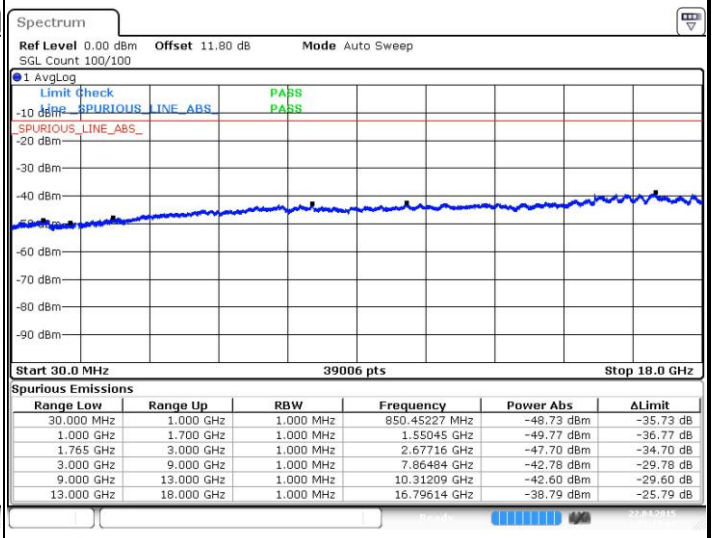



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 912.98601 MHz | -48.63 dBm | -35.63 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.65120 GHz | -49.82 dBm | -36.82 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.67016 GHz | -47.56 dBm | -34.56 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.85435 GHz | -42.66 dBm | -29.66 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 12.70079 GHz | -42.49 dBm | -29.49 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.76656 GHz | -38.77 dBm | -25.77 dB |

Date: 22.APR.2015 01:11:47

### Highest Channel / 16QAM



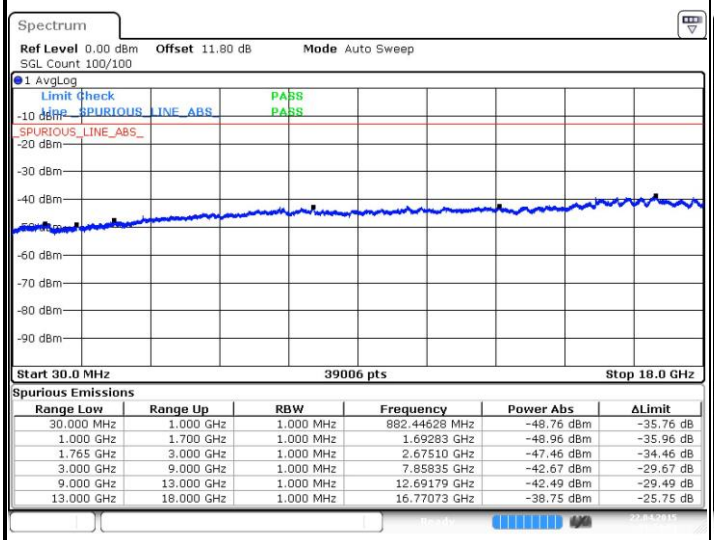

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 850.45227 MHz | -48.73 dBm | -35.73 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.55045 GHz | -49.77 dBm | -36.77 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.67716 GHz | -47.70 dBm | -34.70 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86484 GHz | -42.78 dBm | -29.78 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31209 GHz | -42.60 dBm | -29.60 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.79614 GHz | -38.79 dBm | -25.79 dB |

Date: 22.APR.2015 01:13:14

## LTE Band 4 / 10MHz

### Lowest Channel / QPSK

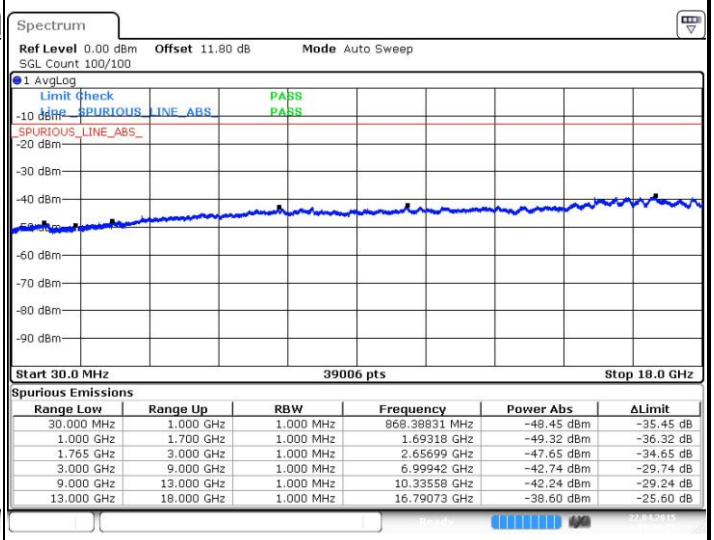



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 882.44628 MHz | -48.76 dBm | -35.76 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69283 GHz | -48.96 dBm | -35.96 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.67510 GHz | -47.46 dBm | -34.46 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.85835 GHz | -42.67 dBm | -29.67 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 12.69179 GHz | -42.49 dBm | -29.49 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77073 GHz | -38.75 dBm | -25.75 dB |

Date: 22.APR.2015 01:24:53

### Lowest Channel / 16QAM



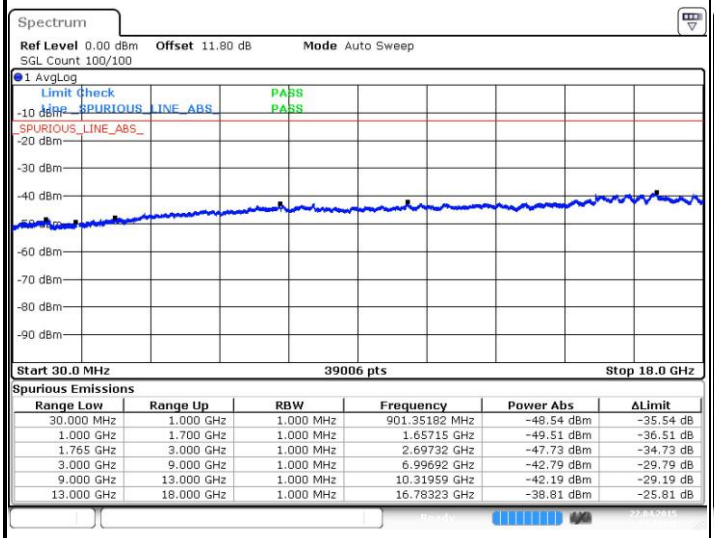

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 868.38831 MHz | -48.45 dBm | -35.45 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69318 GHz | -49.32 dBm | -36.32 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.65699 GHz | -47.65 dBm | -34.65 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.99942 GHz | -42.74 dBm | -29.74 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.33558 GHz | -42.24 dBm | -29.24 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.79073 GHz | -38.60 dBm | -25.60 dB |

Date: 22.APR.2015 01:26:19

## LTE Band 4 / 10MHz

### Middle Channel / QPSK

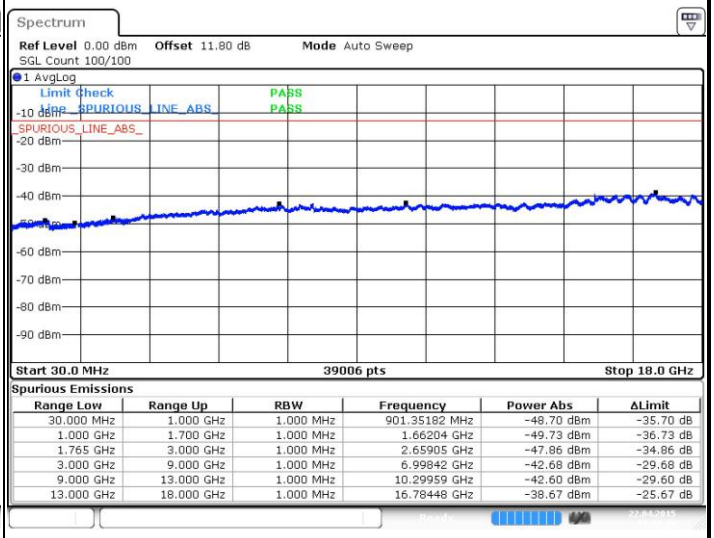



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 901.35182 MHz | -48.54 dBm | -35.54 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.65715 GHz | -49.51 dBm | -36.51 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.69732 GHz | -47.73 dBm | -34.73 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.99692 GHz | -42.79 dBm | -29.79 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31959 GHz | -42.19 dBm | -29.19 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.78323 GHz | -38.81 dBm | -25.81 dB |

Date: 22.APR.2015 01:28:48

### Middle Channel / 16QAM

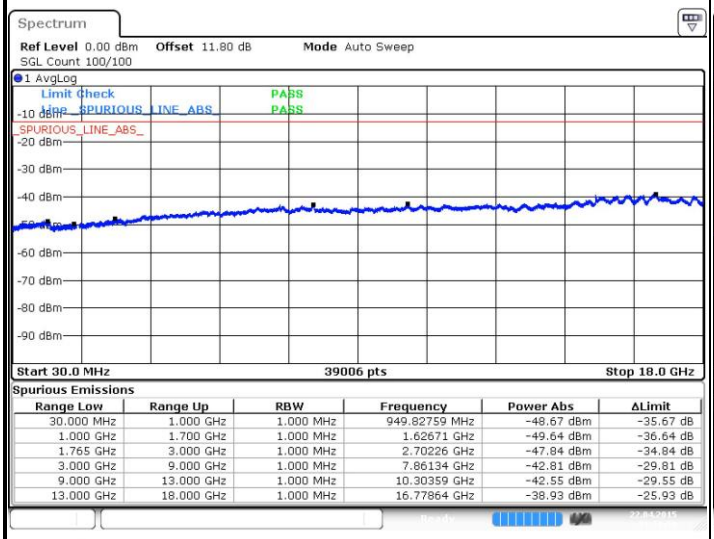



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 901.35182 MHz | -48.70 dBm | -35.70 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.66204 GHz | -49.73 dBm | -36.73 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.65905 GHz | -47.86 dBm | -34.86 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.99842 GHz | -42.68 dBm | -29.68 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.29959 GHz | -42.60 dBm | -29.60 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.78448 GHz | -38.67 dBm | -25.67 dB |

Date: 22.APR.2015 01:30:16

### Highest Channel / QPSK

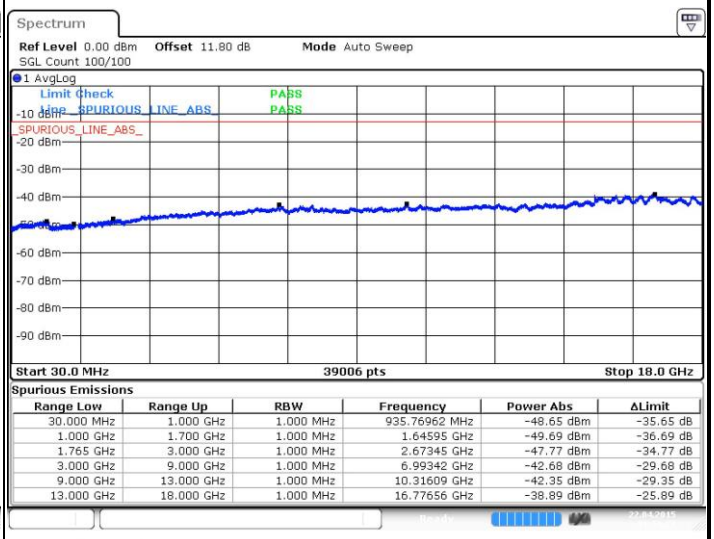



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 949.82759 MHz | -48.67 dBm | -35.67 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.62671 GHz | -49.64 dBm | -36.64 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.70226 GHz | -47.84 dBm | -34.84 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86134 GHz | -42.81 dBm | -29.81 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.30359 GHz | -42.55 dBm | -29.55 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77864 GHz | -38.93 dBm | -25.93 dB |

Date: 22.APR.2015 01:37:59

### Highest Channel / 16QAM



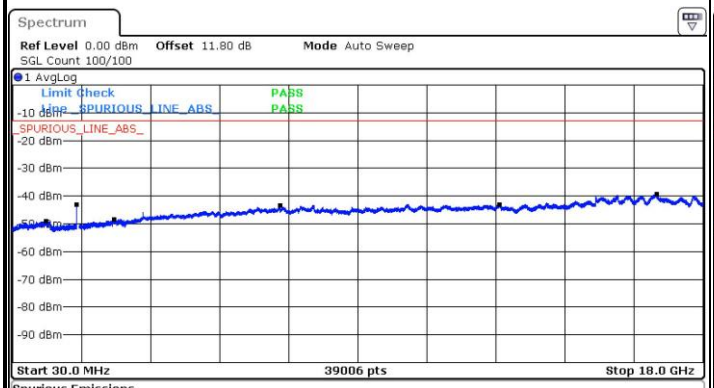

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 935.76962 MHz | -48.65 dBm | -35.65 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.64595 GHz | -49.69 dBm | -36.69 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.67345 GHz | -47.77 dBm | -34.77 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.99342 GHz | -42.68 dBm | -29.68 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31609 GHz | -42.35 dBm | -29.35 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77656 GHz | -38.89 dBm | -25.89 dB |

Date: 22.APR.2015 01:39:27

## LTE Band 4 / 15MHz

### Lowest Channel / QPSK

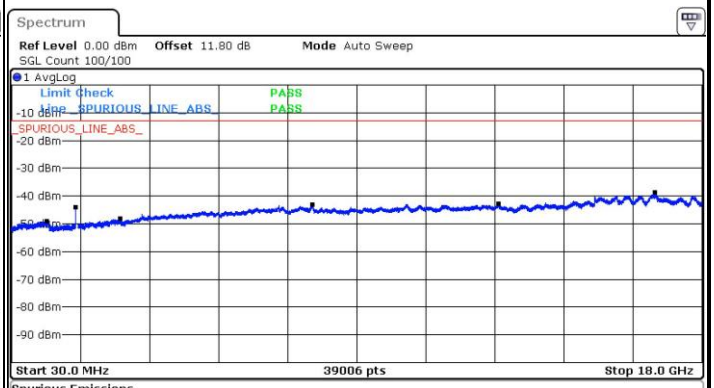



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 903.77561 MHz | -49.04 dBm | -36.04 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69808 GHz | -42.95 dBm | -29.95 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.67633 GHz | -48.48 dBm | -35.48 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.99292 GHz | -43.38 dBm | -30.38 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 12.69979 GHz | -42.94 dBm | -29.94 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.79114 GHz | -39.34 dBm | -26.34 dB |

Date: 22.APR.2015 20:15:59

### Lowest Channel / 16QAM

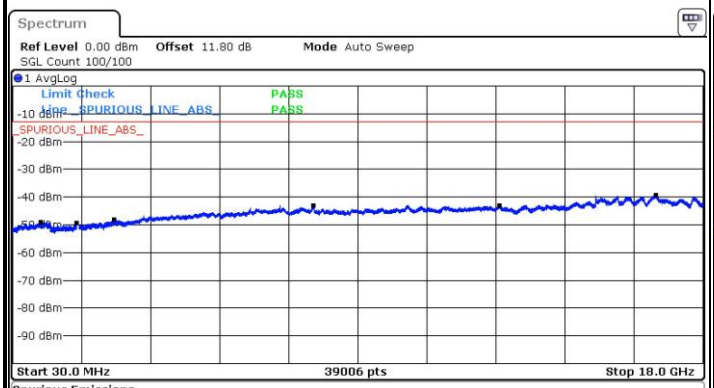



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 931.89155 MHz | -49.12 dBm | -36.12 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69773 GHz | -44.16 dBm | -31.16 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.84094 GHz | -48.25 dBm | -35.25 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86284 GHz | -43.23 dBm | -30.23 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 12.69979 GHz | -42.89 dBm | -29.89 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.78114 GHz | -38.76 dBm | -25.76 dB |

Date: 22.APR.2015 20:17:25

### Middle Channel / QPSK

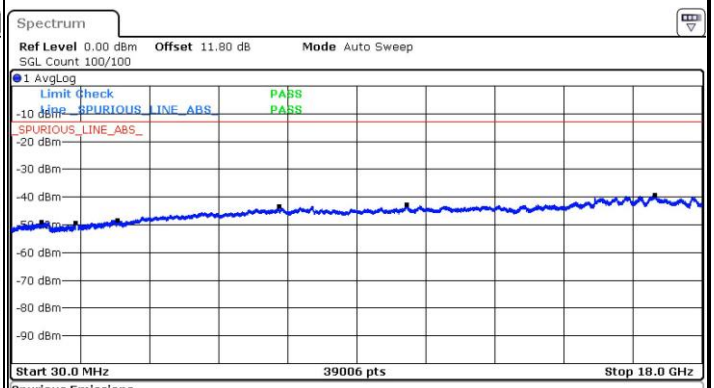



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 760.77211 MHz | -49.21 dBm | -36.21 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69458 GHz | -49.39 dBm | -36.39 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.66275 GHz | -48.16 dBm | -35.16 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86184 GHz | -43.22 dBm | -30.22 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 12.69379 GHz | -43.02 dBm | -30.02 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77489 GHz | -39.27 dBm | -26.27 dB |

Date: 22.APR.2015 20:19:46

### Middle Channel / 16QAM



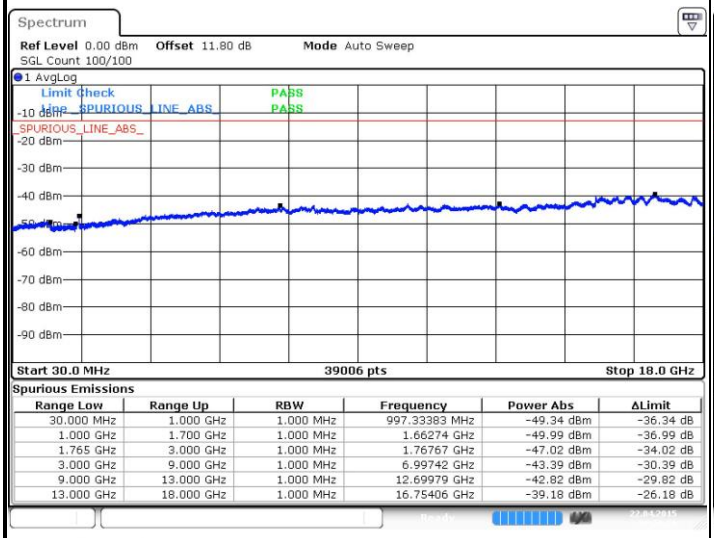

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 792.28136 MHz | -49.11 dBm | -36.11 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69423 GHz | -49.26 dBm | -36.26 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.77345 GHz | -48.42 dBm | -35.42 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.99592 GHz | -43.34 dBm | -30.34 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.30659 GHz | -42.79 dBm | -29.79 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77864 GHz | -39.19 dBm | -26.19 dB |

Date: 22.APR.2015 21:28:25

## LTE Band 4 / 15MHz

### Highest Channel / QPSK

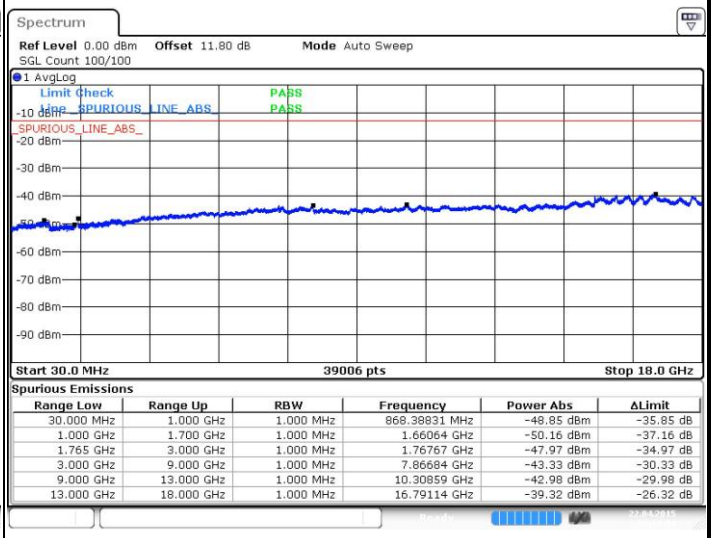



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 997.33383 MHz | -49.34 dBm | -36.34 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.66274 GHz | -49.99 dBm | -36.99 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 1.76767 GHz | -47.02 dBm | -34.02 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.99742 GHz | -43.39 dBm | -30.39 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 12.69979 GHz | -42.82 dBm | -29.82 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.75406 GHz | -39.18 dBm | -26.18 dB |

Date: 22.APR.2015 20:29:26

### Highest Channel / 16QAM



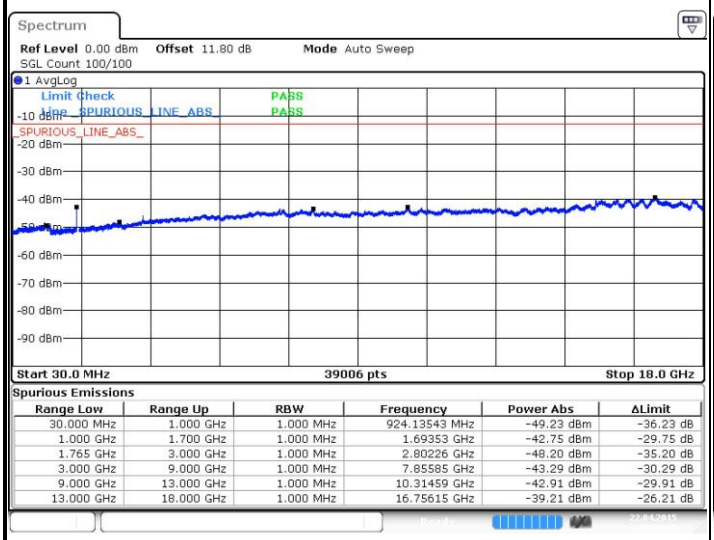

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 868.38831 MHz | -48.85 dBm | -35.85 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.66064 GHz | -50.16 dBm | -37.16 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 1.76767 GHz | -47.97 dBm | -34.97 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86684 GHz | -43.33 dBm | -30.33 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.30859 GHz | -42.98 dBm | -29.98 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.79114 GHz | -39.32 dBm | -26.32 dB |

Date: 22.APR.2015 20:30:53

## LTE Band 4 / 20MHz

### Lowest Channel / QPSK

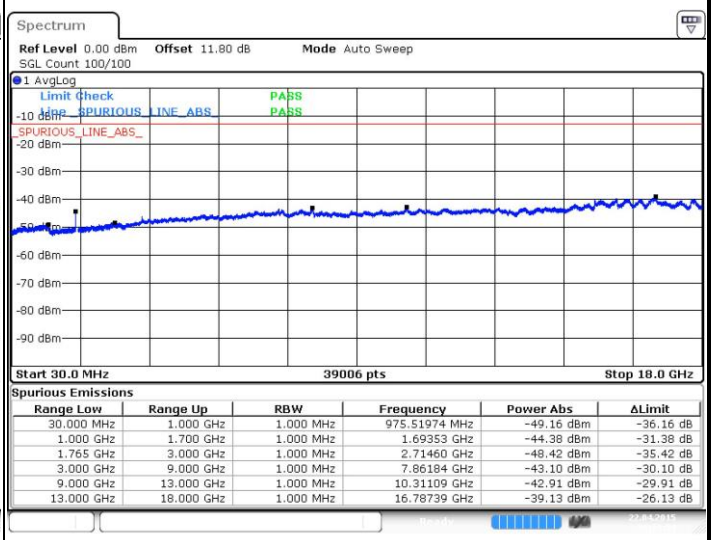



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 924.13543 MHz | -49.23 dBm | -36.23 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69353 GHz | -42.75 dBm | -29.75 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.80226 GHz | -48.20 dBm | -35.20 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.85585 GHz | -43.29 dBm | -30.29 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31459 GHz | -42.91 dBm | -29.91 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.75615 GHz | -39.21 dBm | -26.21 dB |

Date: 22.APR.2015 20:38:28

### Lowest Channel / 16QAM



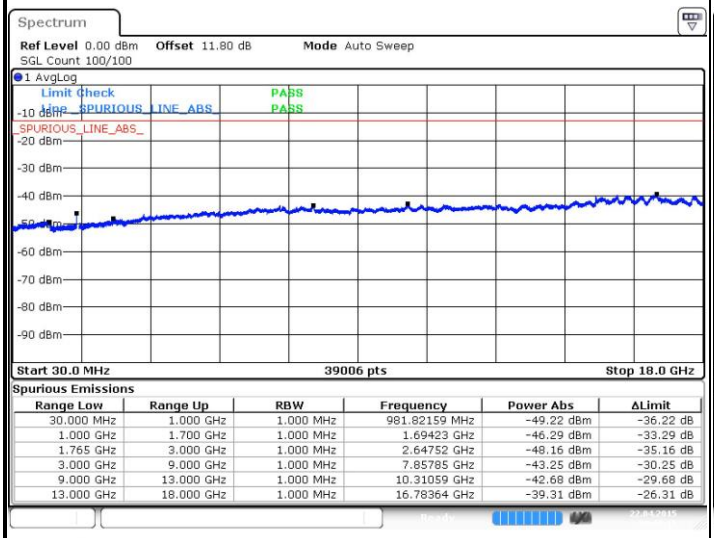

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 975.51974 MHz | -49.16 dBm | -36.16 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69353 GHz | -44.38 dBm | -31.38 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.71460 GHz | -48.42 dBm | -35.42 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86184 GHz | -43.10 dBm | -30.10 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31109 GHz | -42.91 dBm | -29.91 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.78739 GHz | -39.13 dBm | -26.13 dB |

Date: 22.APR.2015 20:39:54

## LTE Band 4 / 20MHz

### Middle Channel / QPSK

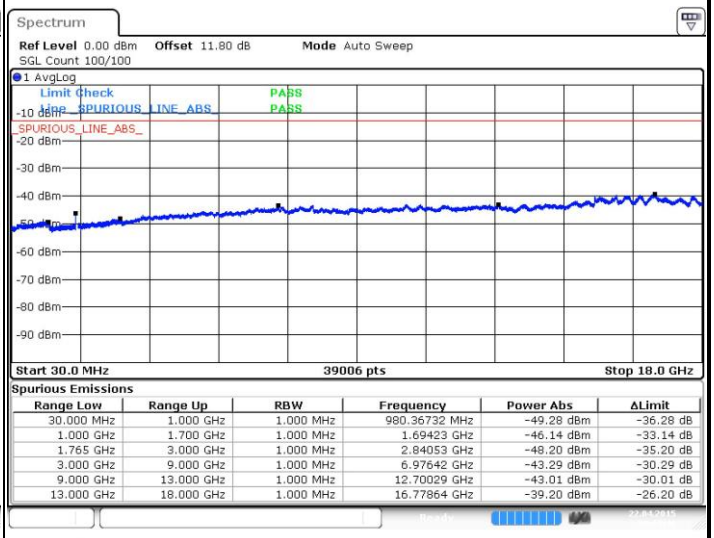



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 981.82159 MHz | -49.22 dBm | -36.22 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69423 GHz | -46.29 dBm | -33.29 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.64752 GHz | -48.16 dBm | -35.16 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.85785 GHz | -43.25 dBm | -30.25 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31059 GHz | -42.68 dBm | -29.68 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.78364 GHz | -39.31 dBm | -26.31 dB |

Date: 22.APR.2015 20:42:16

### Middle Channel / 16QAM

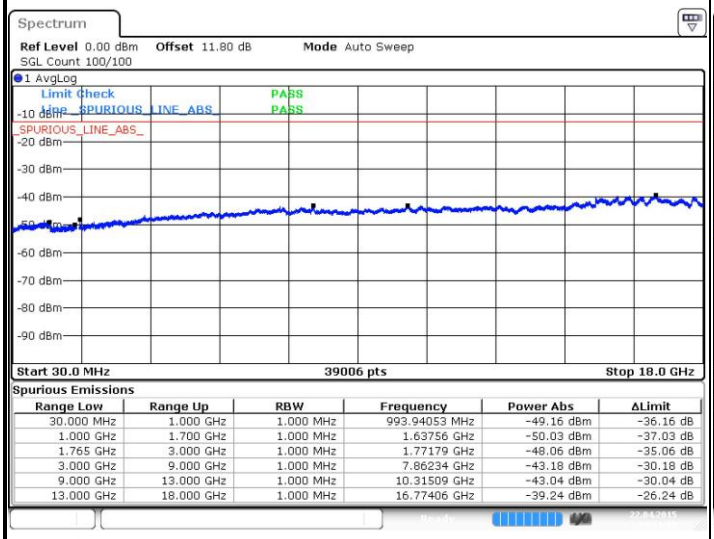



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 980.36732 MHz | -49.28 dBm | -36.28 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69423 GHz | -46.14 dBm | -33.14 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 2.84053 GHz | -48.20 dBm | -35.20 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.97642 GHz | -43.29 dBm | -30.29 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 12.70029 GHz | -43.01 dBm | -30.01 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77864 GHz | -39.20 dBm | -26.20 dB |

Date: 22.APR.2015 20:43:40

### Highest Channel / QPSK

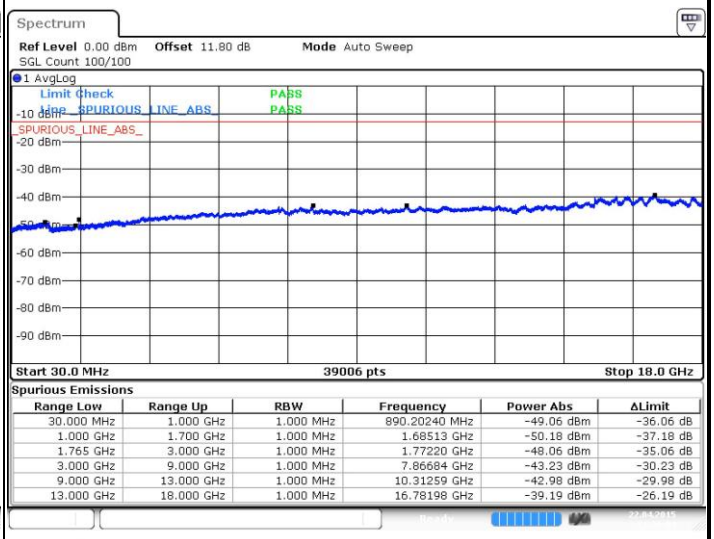



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 993.94053 MHz | -49.16 dBm | -36.16 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.63756 GHz | -50.03 dBm | -37.03 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 1.77179 GHz | -48.06 dBm | -35.06 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86234 GHz | -43.18 dBm | -30.18 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31509 GHz | -43.04 dBm | -30.04 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.77406 GHz | -39.24 dBm | -26.24 dB |

Date: 22.APR.2015 20:51:09

### Highest Channel / 16QAM




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 890.20240 MHz | -49.06 dBm | -36.06 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.68513 GHz | -50.18 dBm | -37.18 dB |
| 1.765 GHz | 3.000 GHz | 1.000 MHz | 1.77220 GHz | -48.06 dBm | -35.06 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 7.86684 GHz | -43.23 dBm | -30.23 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.31259 GHz | -42.98 dBm | -29.98 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.78198 GHz | -39.19 dBm | -26.19 dB |

Date: 22.APR.2015 21:26:03

# Frequency Stability

| Test Conditions | | LTE Band 4 (QPSK) / Middle Channel | Limit |
|---|---|---|---|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0070 | PASS |
| 40 | Normal Voltage | 0.0001 | |
| 30 | Normal Voltage | 0.0061 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0001 | |
| 0 | Normal Voltage | 0.0065 | |
| -10 | Normal Voltage | 0.0074 | |
| -20 | Normal Voltage | 0.0016 | |
| -30 | Normal Voltage | 0.0006 | |
| 20 | Maximum Voltage | 0.0002 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0001 | |

**Note:**

1. Normal Voltage = 3.87 V. ；Battery End Point (BEP) = 3.4 V.；Maximum Voltage = 4.35 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

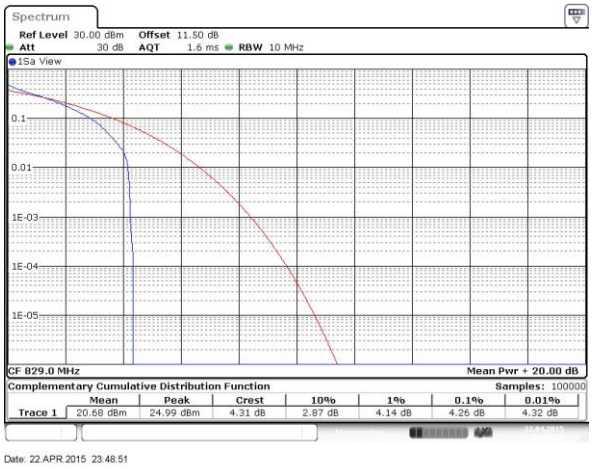
# LTE Band 5

## Peak-to-Average Ratio

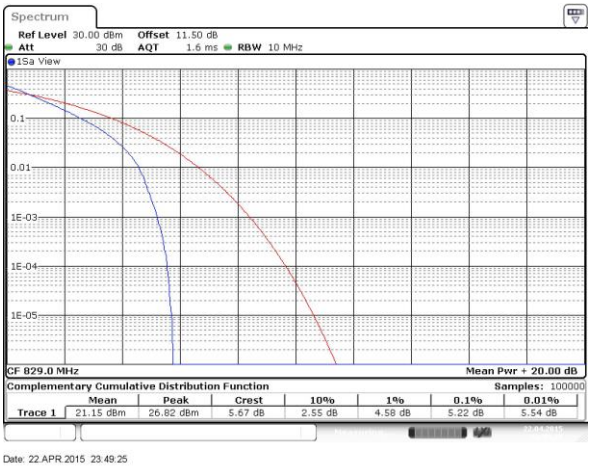
| Mode | LTE Band 5 / 10MHz | | | | |
|---|---|---|---|---|---|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 4.26 | 5.22 | 5.19 | 6.17 | PASS |
| Middle CH | 4.41 | 5.16 | 5.39 | 6.03 | |
| Highest CH | 4.23 | 5.33 | 5.33 | 6.35 | |

## LTE Band 5 / 10MHz / QPSK

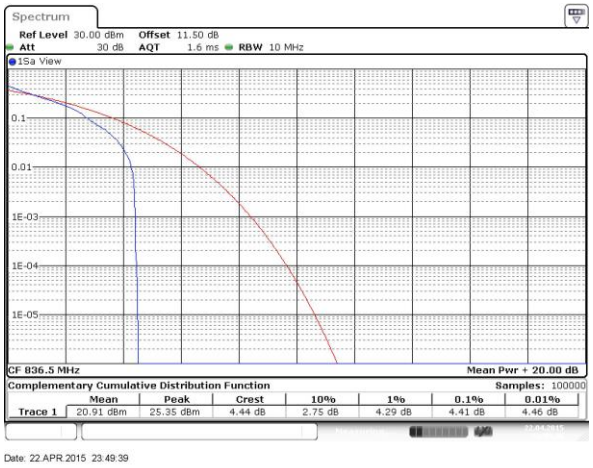
### Lowest Channel / 1RB



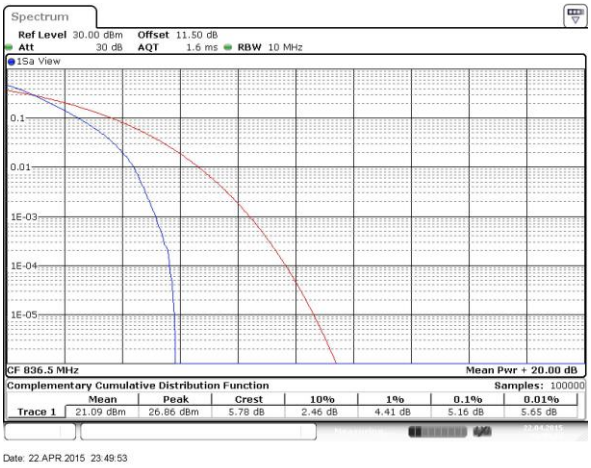

### Lowest Channel / Full RB



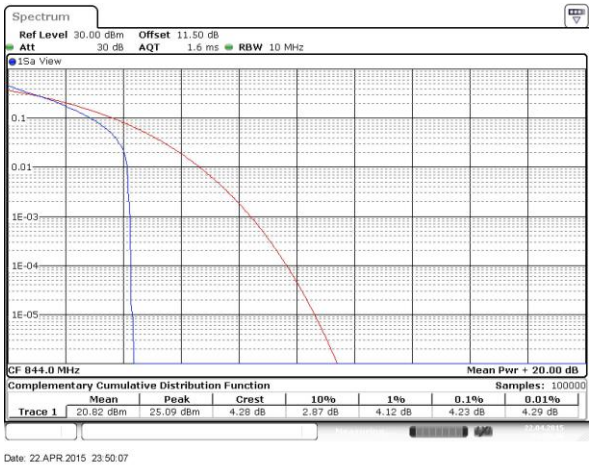

### Middle Channel / 1RB



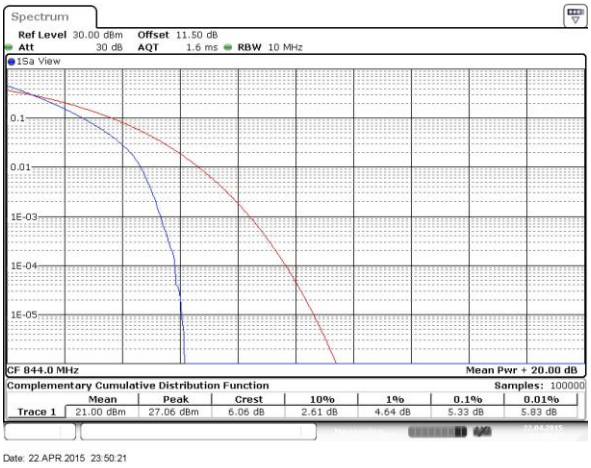

### Middle Channel / Full RB




### Highest Channel / 1RB

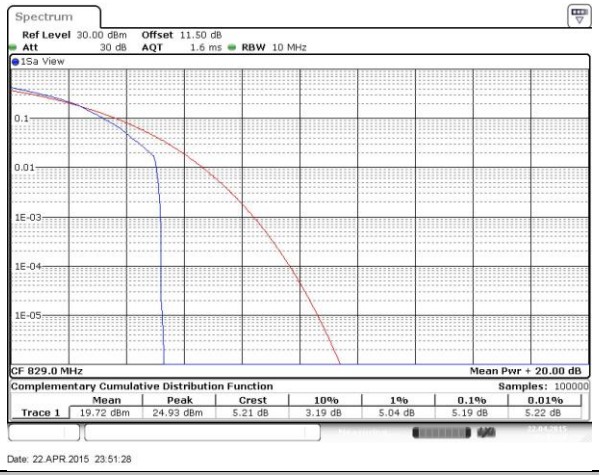



### Highest Channel / Full RB

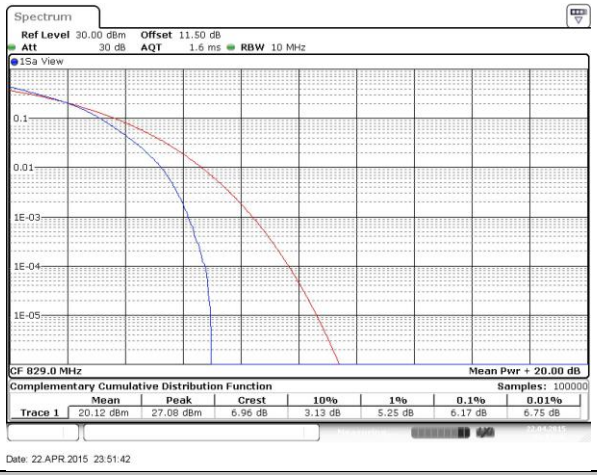


## LTE Band 5 / 10MHz / 16QAM

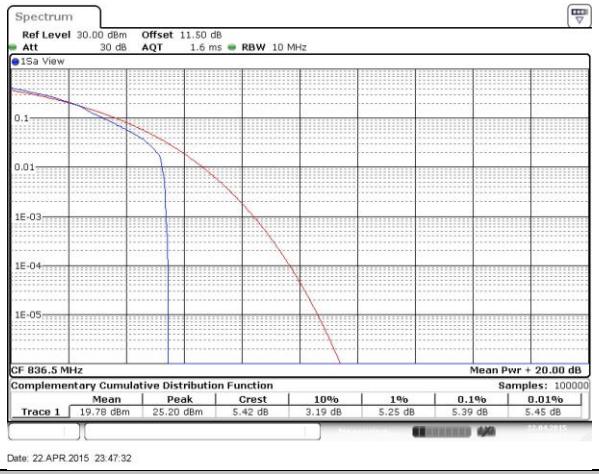
### Lowest Channel / 1RB



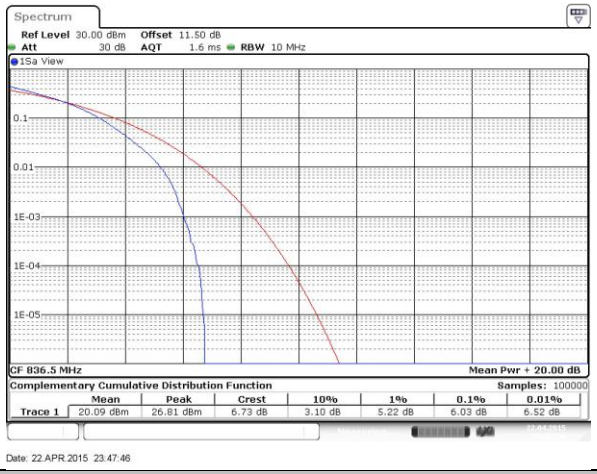

### Lowest Channel / Full RB



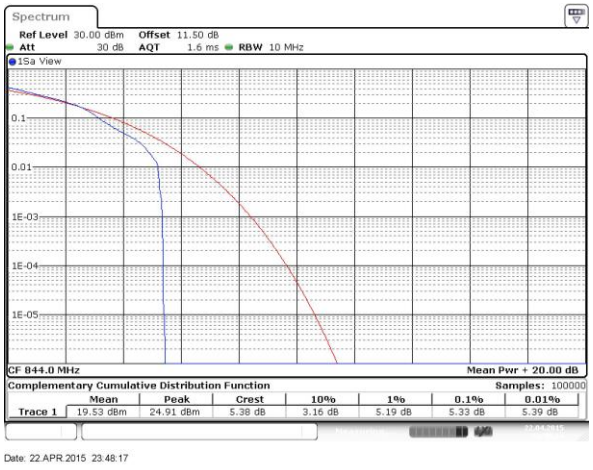

### Middle Channel / 1RB

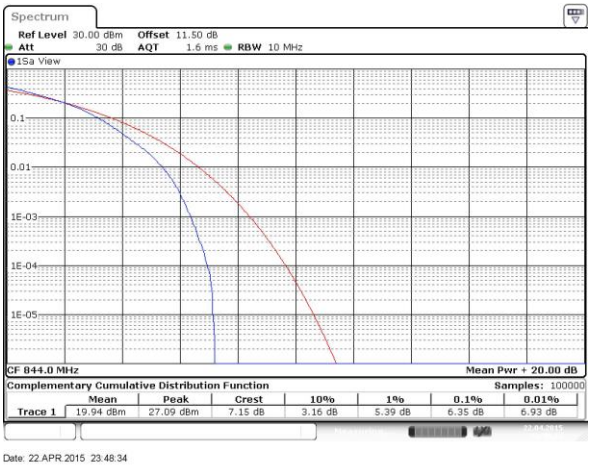



### Middle Channel / Full RB




### Highest Channel / 1RB




### Highest Channel / Full RB