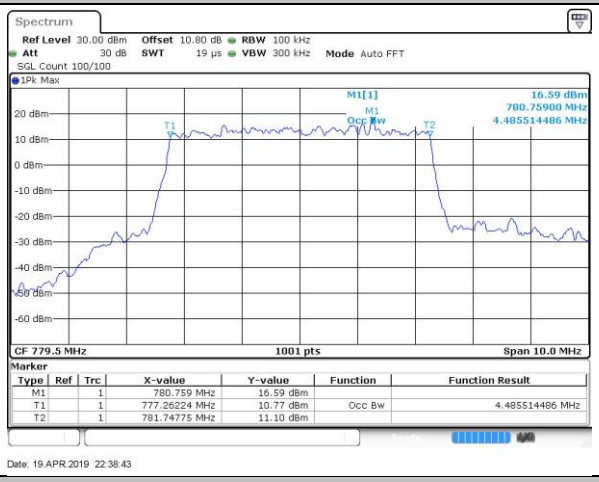
# Occupied Bandwidth

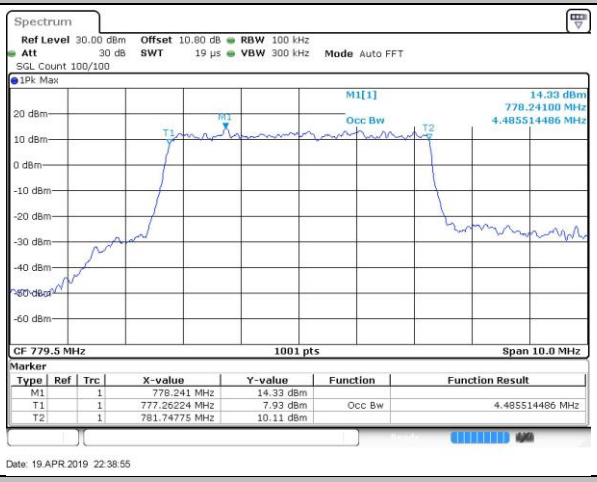
| Mode | LTE Band 13 : 99%OBW(MHz) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | - | - | - | - | 4.49 | 4.49 | - | - | - | - | - | - |
| Middle CH | - | - | - | - | 4.48 | 4.52 | 9.01 | 8.99 | - | - | - | - |
| Highest CH | - | - | - | - | 4.49 | 4.48 | - | - | - | - | - | - |
| Mode | LTE Band 13 : 99%OBW(MHz) | | | | | | | | | | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | |
| Lowest CH | - | - | - | - | 4.50 | - | - | - | - | - | - | - |
| Middle CH | - | - | - | - | 4.49 | - | 9.01 | - | - | - | - | - |
| Highest CH | - | - | - | - | 4.51 | - | - | - | - | - | - | - |

## LTE Band 13

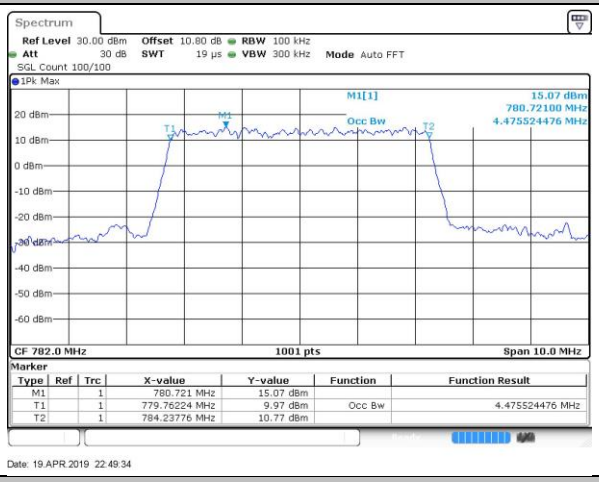
### Lowest Channel / 5MHz / QPSK



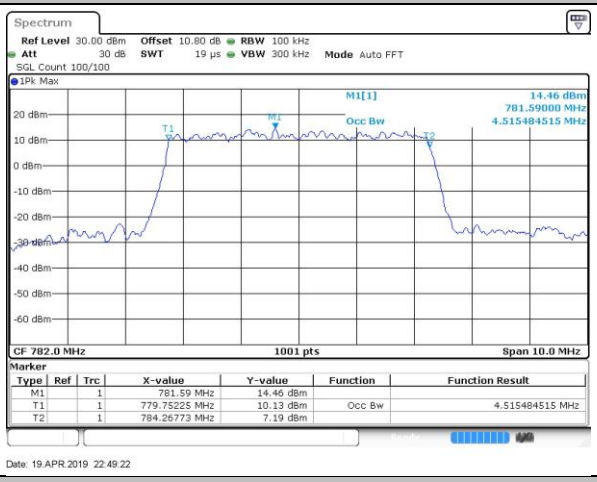

### Lowest Channel / 5MHz / 16QAM



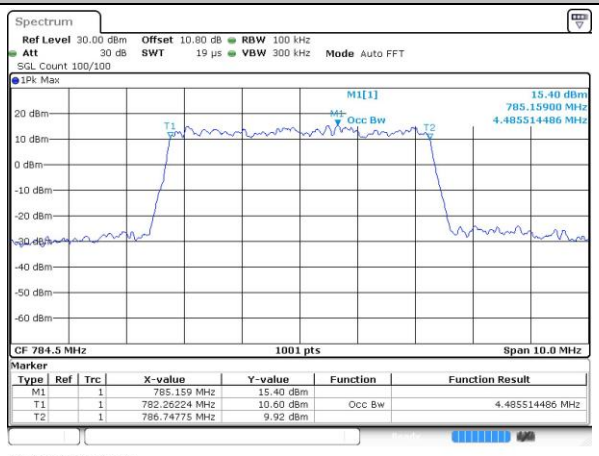

### Middle Channel / 5MHz / QPSK



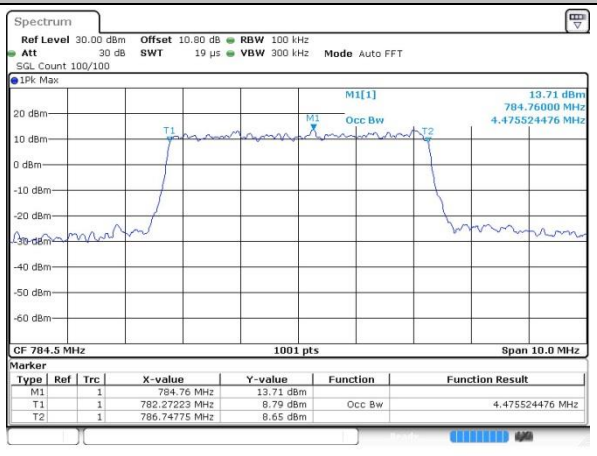

### Middle Channel / 5MHz / 16QAM



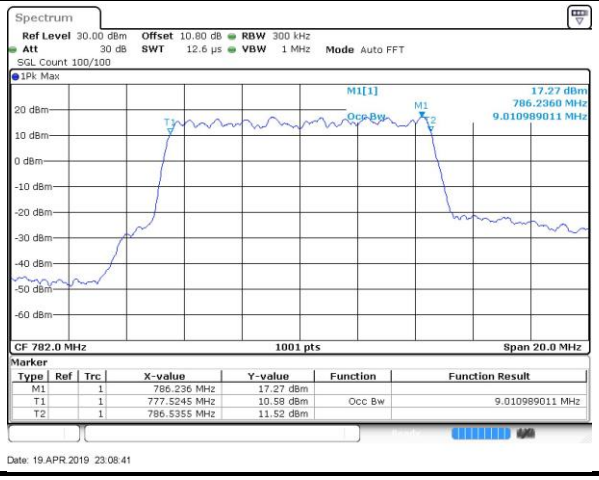

### Highest Channel / 5MHz / QPSK

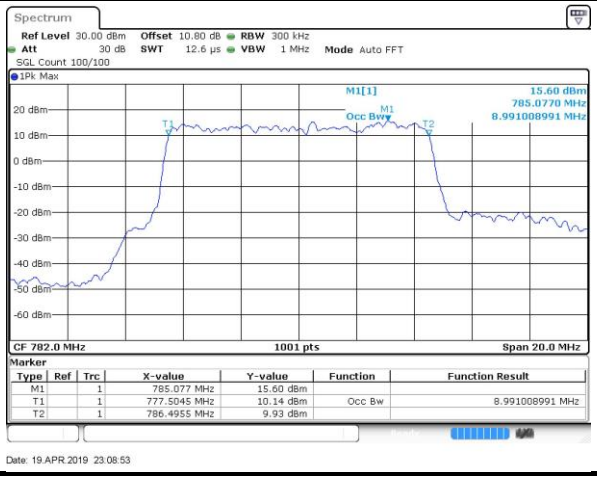



### Highest Channel / 5MHz / 16QAM



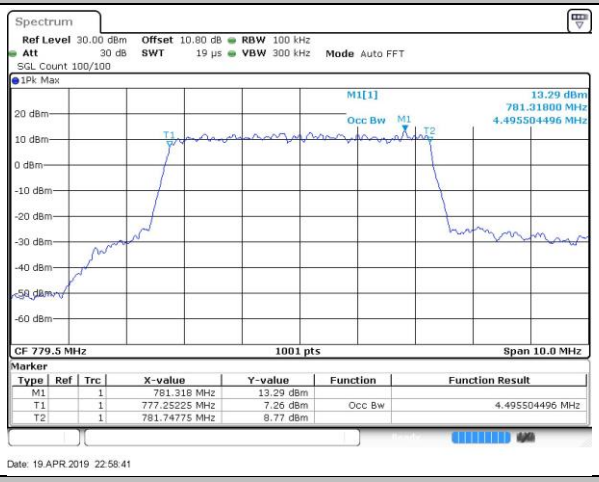
| LTE Band 13 | |
|---|---|
| Middle Channel / 10MHz / QPSK | Middle Channel / 10MHz / 16QAM |



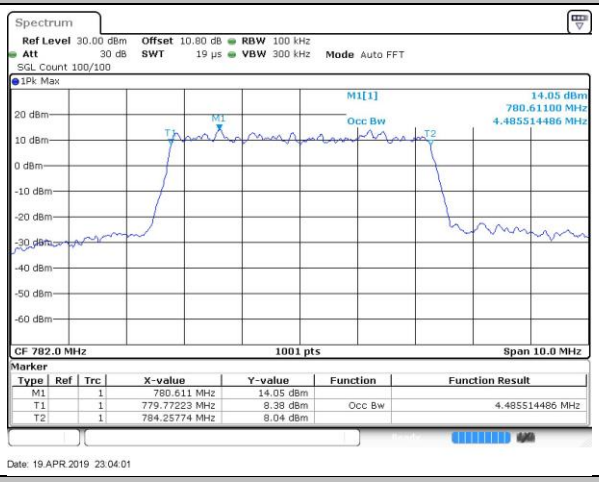



## LTE Band 13

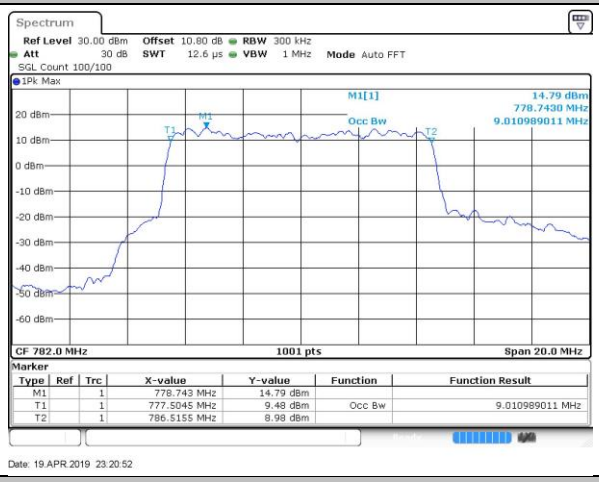
### Lowest Channel / 5MHz / 64QAM



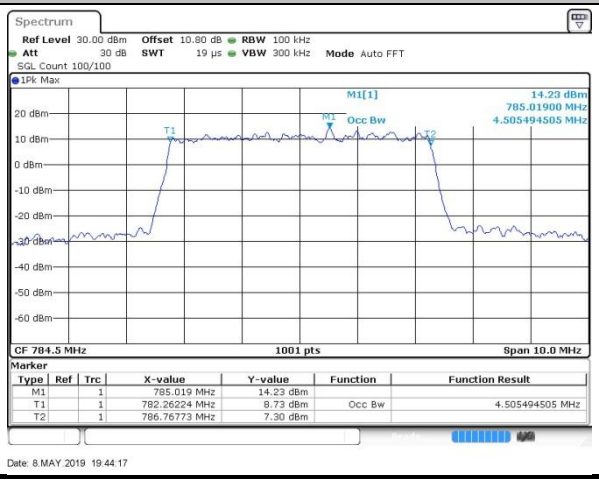

### Middle Channel / 5MHz / 64QAM




### Middle Channel / 10MHz / 64QAM



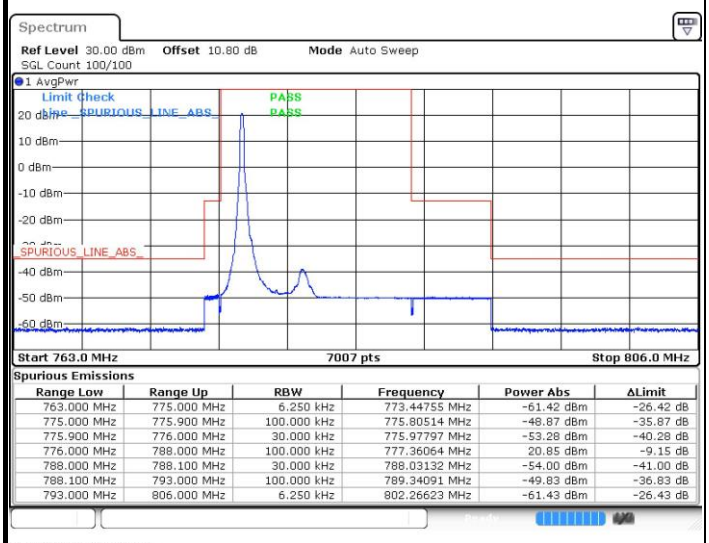

### Highest Channel / 5MHz / 64QAM



# Conducted Band Edge

## LTE Band 13 / 5MHz / QPSK

### Lowest Band Edge / 1 RB

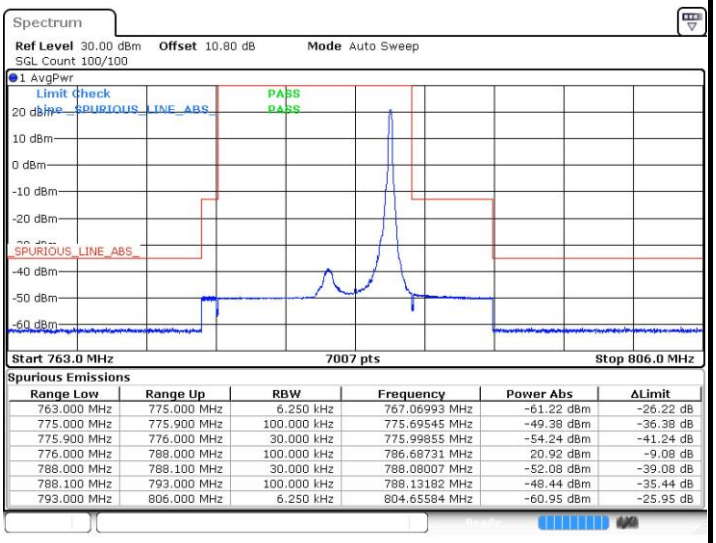



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 773.44755 MHz | -61.42 dBm | -26.42 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.80514 MHz | -48.87 dBm | -35.87 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.97797 MHz | -53.28 dBm | -40.28 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 777.36064 MHz | 20.85 dBm | -9.15 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.03132 MHz | -54.00 dBm | -41.00 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 789.34091 MHz | -49.83 dBm | -36.83 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 802.26623 MHz | -61.43 dBm | -26.43 dB |

Date: 19.APR.2019 22:46:04

### Highest Band Edge / 1 RB

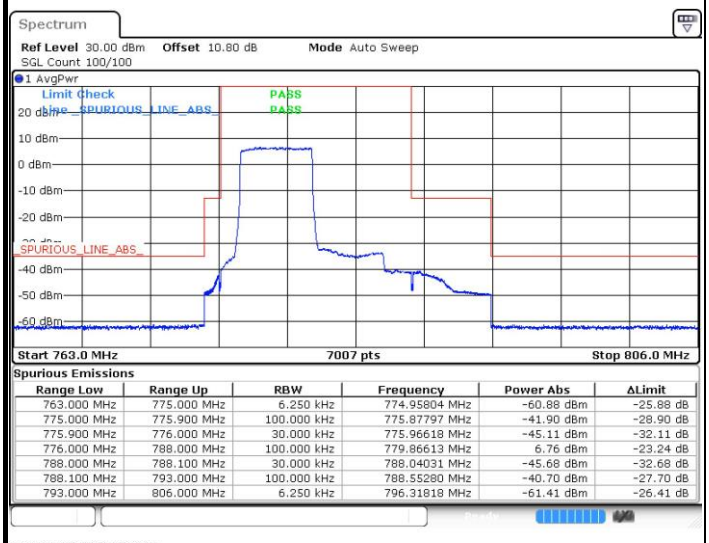



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 767.06993 MHz | -61.22 dBm | -26.22 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.69545 MHz | -49.38 dBm | -36.38 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.99855 MHz | -54.24 dBm | -41.24 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 786.68731 MHz | 20.92 dBm | -9.08 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.08007 MHz | -52.08 dBm | -39.08 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.13182 MHz | -48.44 dBm | -35.44 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 804.65584 MHz | -60.95 dBm | -25.95 dB |

Date: 19.APR.2019 22:57:07

### Lowest Band Edge / Full RB

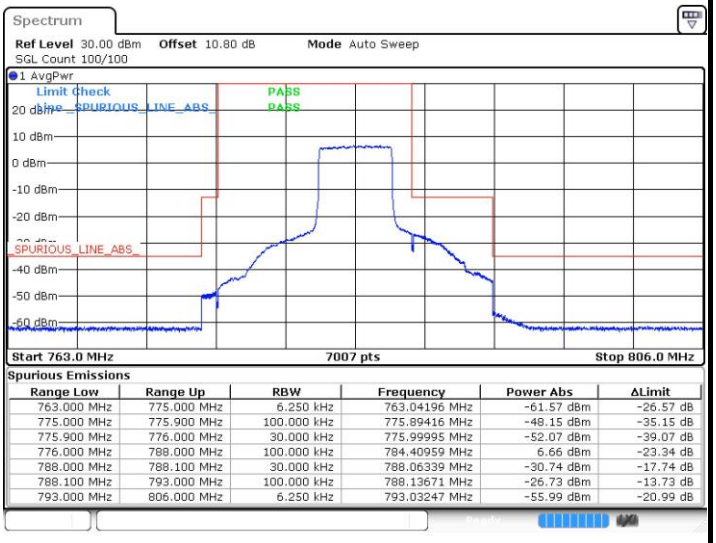



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 774.95804 MHz | -60.88 dBm | -25.88 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.87797 MHz | -41.90 dBm | -28.90 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.96618 MHz | -45.11 dBm | -32.11 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 779.86613 MHz | 6.76 dBm | -23.24 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.04031 MHz | -45.68 dBm | -32.68 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.55280 MHz | -40.70 dBm | -27.70 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 796.31818 MHz | -61.41 dBm | -26.41 dB |

Date: 19.APR.2019 22:41:00

### Highest Band Edge / Full RB



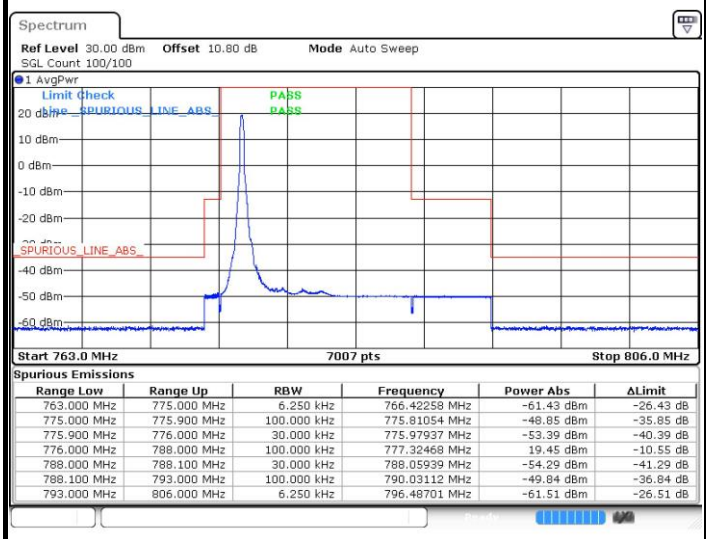

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 763.04196 MHz | -61.57 dBm | -26.57 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.89416 MHz | -48.15 dBm | -35.15 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.99995 MHz | -52.07 dBm | -39.07 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 784.40959 MHz | 6.66 dBm | -23.34 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.06339 MHz | -30.74 dBm | -17.74 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.13671 MHz | -26.73 dBm | -13.73 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.03247 MHz | -55.99 dBm | -20.99 dB |

Date: 19.APR.2019 22:52:03

## LTE Band 13 / 5MHz / 16QAM

### Lowest Band Edge / 1 RB

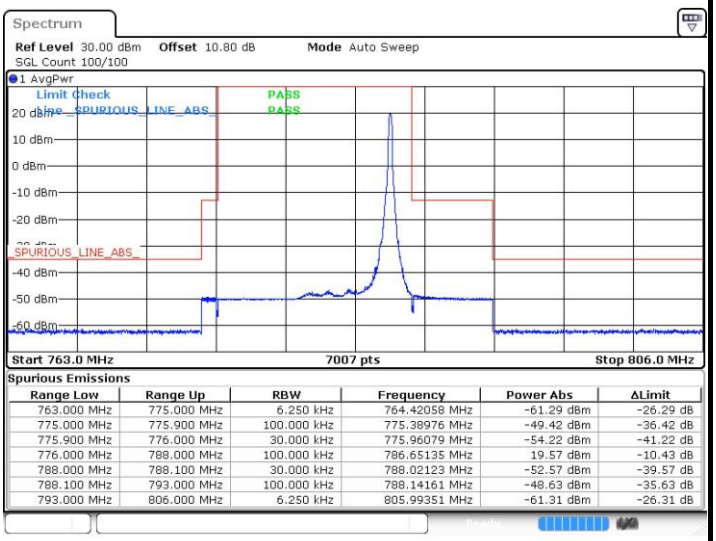



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 766.42258 MHz | -61.43 dBm | -26.43 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.81054 MHz | -48.85 dBm | -35.85 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.97937 MHz | -53.39 dBm | -40.39 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 777.32468 MHz | 19.45 dBm | -10.55 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.05939 MHz | -54.29 dBm | -41.29 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 790.03112 MHz | -49.84 dBm | -36.84 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 796.48701 MHz | -61.51 dBm | -26.51 dB |

Date: 19.APR.2019 22:44:23

### Highest Band Edge / 1 RB

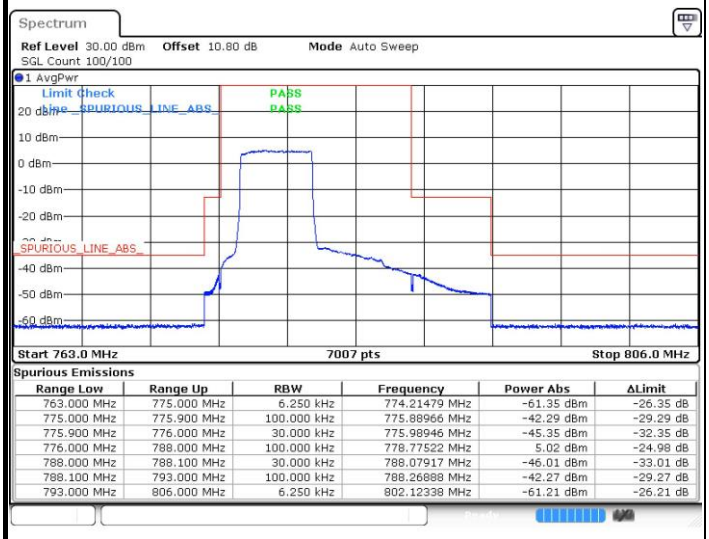



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 764.42058 MHz | -61.29 dBm | -26.29 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.38976 MHz | -49.42 dBm | -36.42 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.96079 MHz | -54.22 dBm | -41.22 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 786.65135 MHz | 19.57 dBm | -10.43 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.02123 MHz | -52.57 dBm | -39.57 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.14161 MHz | -48.63 dBm | -35.63 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 805.99351 MHz | -61.31 dBm | -26.31 dB |

Date: 19.APR.2019 22:55:25

### Lowest Band Edge / Full RB

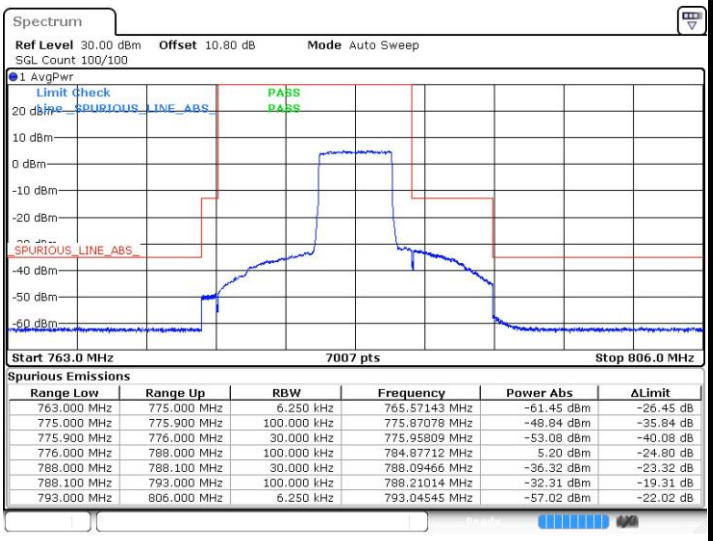



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 774.21479 MHz | -61.35 dBm | -26.35 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.88966 MHz | -42.29 dBm | -29.29 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.98946 MHz | -45.35 dBm | -32.35 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 778.77522 MHz | 5.02 dBm | -24.98 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.07917 MHz | -46.01 dBm | -33.01 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.26888 MHz | -42.27 dBm | -29.27 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 802.12338 MHz | -61.21 dBm | -26.21 dB |

Date: 19.APR.2019 22:42:41

### Highest Band Edge / Full RB



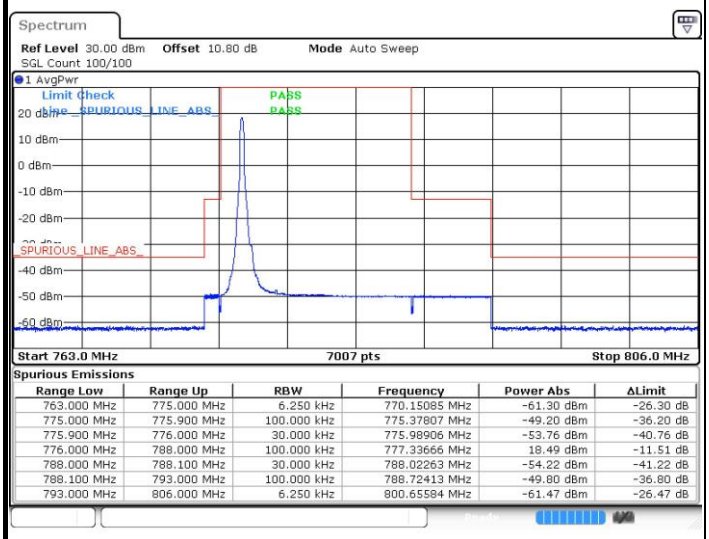

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 765.57143 MHz | -61.45 dBm | -26.45 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.87078 MHz | -48.84 dBm | -35.84 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.95809 MHz | -53.08 dBm | -40.08 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 784.87712 MHz | 5.20 dBm | -24.80 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.09466 MHz | -36.32 dBm | -23.32 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.21014 MHz | -32.31 dBm | -19.31 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.04545 MHz | -57.02 dBm | -22.02 dB |

Date: 19.APR.2019 22:53:44

## LTE Band 13 / 5MHz / 64QAM

### Lowest Band Edge / 1 RB

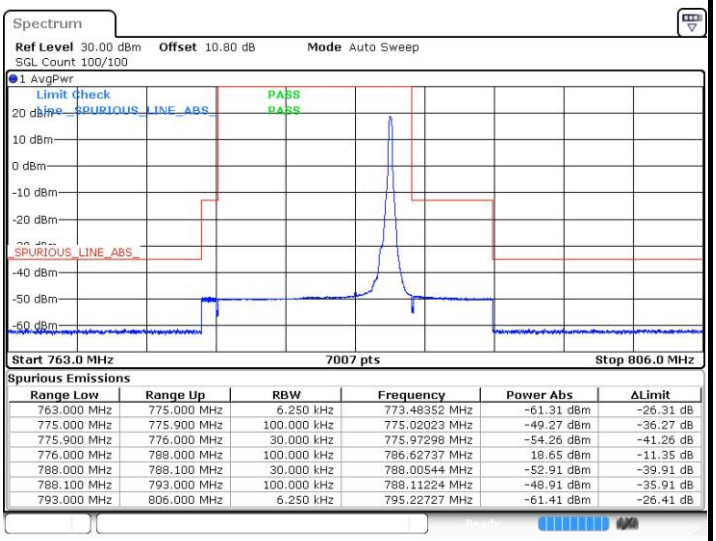



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 770.15085 MHz | -61.30 dBm | -26.30 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.37807 MHz | -49.20 dBm | -36.20 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.98906 MHz | -53.76 dBm | -40.76 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 777.33666 MHz | 18.49 dBm | -11.51 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.02263 MHz | -54.22 dBm | -41.22 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.72413 MHz | -49.80 dBm | -36.80 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 800.65584 MHz | -61.47 dBm | -26.47 dB |

Date: 19.APR.2019 23:02:15

### Highest Band Edge / 1 RB

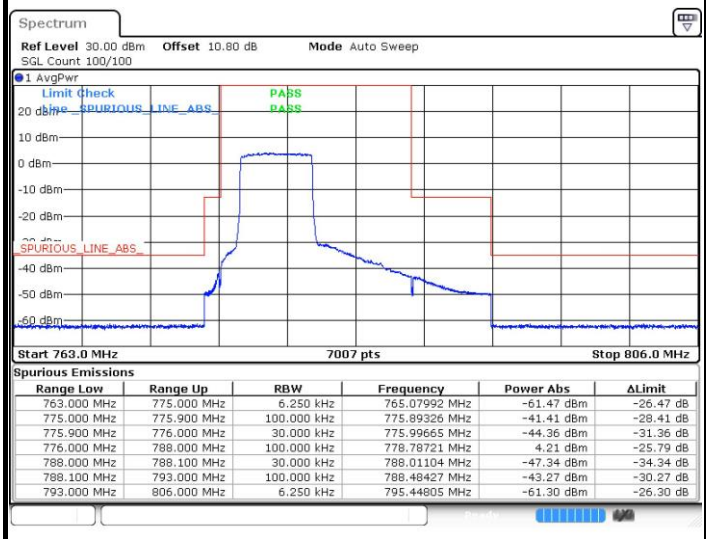



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 773.48352 MHz | -61.31 dBm | -26.31 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.02023 MHz | -49.27 dBm | -36.27 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.97298 MHz | -54.26 dBm | -41.26 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 786.62737 MHz | 18.65 dBm | -11.35 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.00544 MHz | -52.91 dBm | -39.91 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.11224 MHz | -48.91 dBm | -35.91 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 795.22727 MHz | -61.41 dBm | -26.41 dB |

Date: 19.APR.2019 23:07:47

### Lowest Band Edge / Full RB

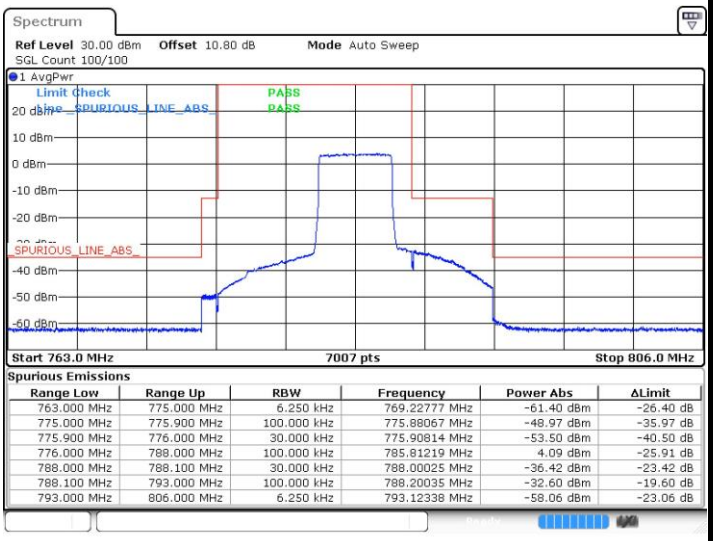



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 765.07992 MHz | -61.47 dBm | -26.47 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.89326 MHz | -41.41 dBm | -28.41 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.99665 MHz | -44.36 dBm | -31.36 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 778.78721 MHz | 4.21 dBm | -25.79 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.01104 MHz | -47.34 dBm | -34.34 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.48427 MHz | -43.27 dBm | -30.27 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 795.44805 MHz | -61.30 dBm | -26.30 dB |

Date: 19.APR.2019 23:00:34

### Highest Band Edge / Full RB



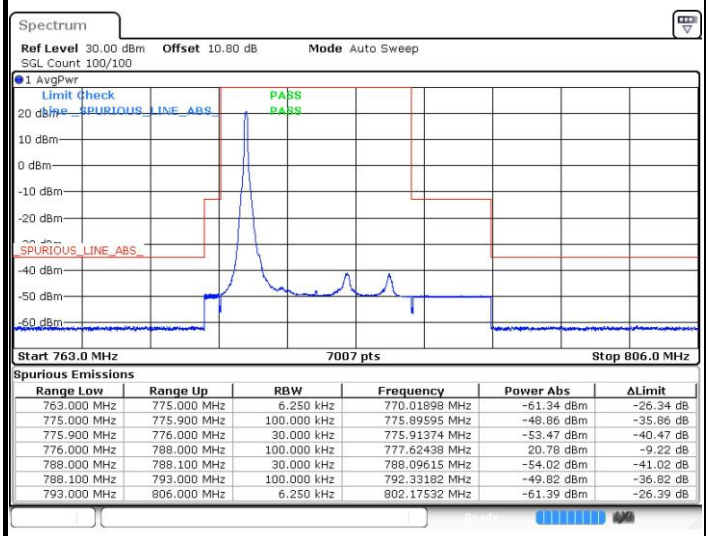

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 769.22777 MHz | -61.40 dBm | -26.40 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.88067 MHz | -48.97 dBm | -35.97 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.90814 MHz | -53.50 dBm | -40.50 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 785.81219 MHz | 4.09 dBm | -25.91 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.00025 MHz | -36.42 dBm | -23.42 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.20035 MHz | -32.60 dBm | -19.60 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.12338 MHz | -58.06 dBm | -23.06 dB |

Date: 19.APR.2019 23:06:05

## LTE Band 13 / 10MHz / QPSK

### Lowest Band Edge / 1 RB

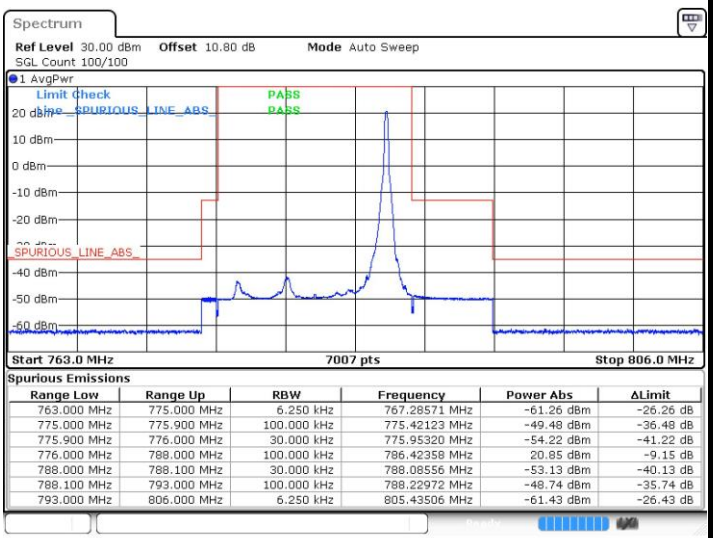



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 770.01898 MHz | -61.34 dBm | -26.34 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.89595 MHz | -48.86 dBm | -35.86 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.91374 MHz | -53.47 dBm | -40.47 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 777.62438 MHz | 20.78 dBm | -9.22 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.09615 MHz | -54.02 dBm | -41.02 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 792.33182 MHz | -49.82 dBm | -36.82 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 802.17532 MHz | -61.39 dBm | -26.39 dB |

Date: 19.APR.2019 23:15:58

### Highest Band Edge / 1 RB

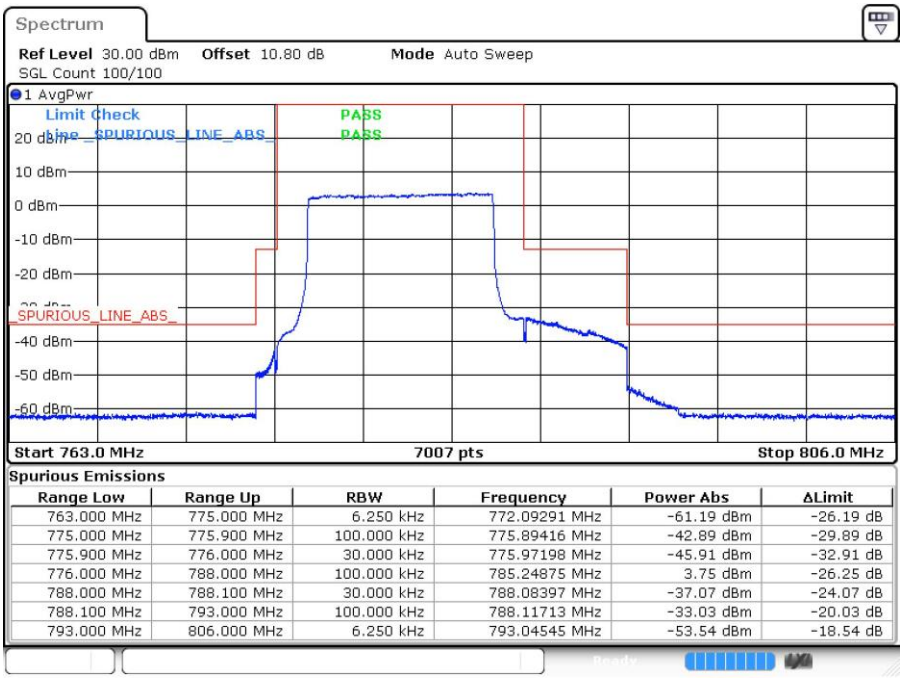



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 767.28571 MHz | -61.26 dBm | -26.26 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.42123 MHz | -49.48 dBm | -36.48 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.95320 MHz | -54.22 dBm | -41.22 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 786.42358 MHz | 20.85 dBm | -9.15 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.08556 MHz | -53.13 dBm | -40.13 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.22972 MHz | -48.74 dBm | -35.74 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 805.43506 MHz | -61.43 dBm | -26.43 dB |

Date: 19.APR.2019 23:17:39

### Band Edge / Full RB



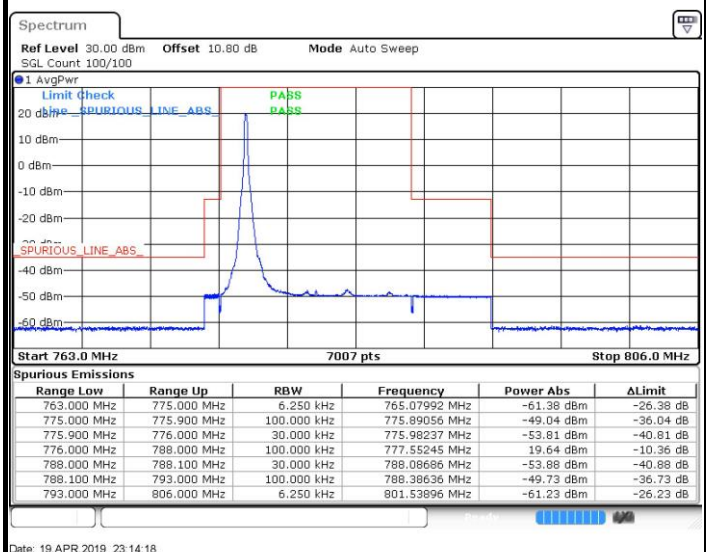

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 772.09291 MHz | -61.19 dBm | -26.19 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.89416 MHz | -42.89 dBm | -29.89 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.97198 MHz | -45.91 dBm | -32.91 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 785.24875 MHz | 3.75 dBm | -26.25 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.08397 MHz | -37.07 dBm | -24.07 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.11713 MHz | -33.03 dBm | -20.03 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.04545 MHz | -53.54 dBm | -18.54 dB |

Date: 19.APR.2019 23:10:56

## LTE Band 13 / 10MHz / 16QAM

### Lowest Band Edge / 1 RB

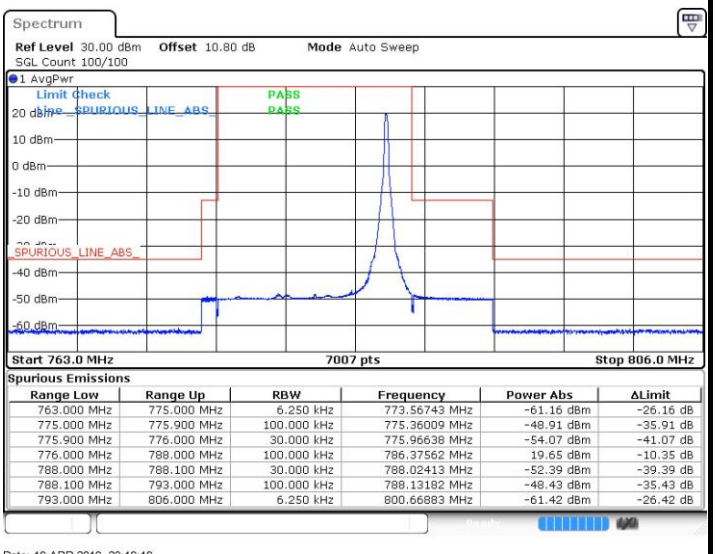



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 765.07992 MHz | -61.38 dBm | -26.38 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.89056 MHz | -49.04 dBm | -36.04 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.98237 MHz | -53.81 dBm | -40.81 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 777.55245 MHz | 19.64 dBm | -10.36 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.08686 MHz | -53.88 dBm | -40.88 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.38636 MHz | -49.73 dBm | -36.73 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 801.53896 MHz | -61.23 dBm | -26.23 dB |

Date: 19.APR.2019 23:14:18

### Highest Band Edge / 1 RB

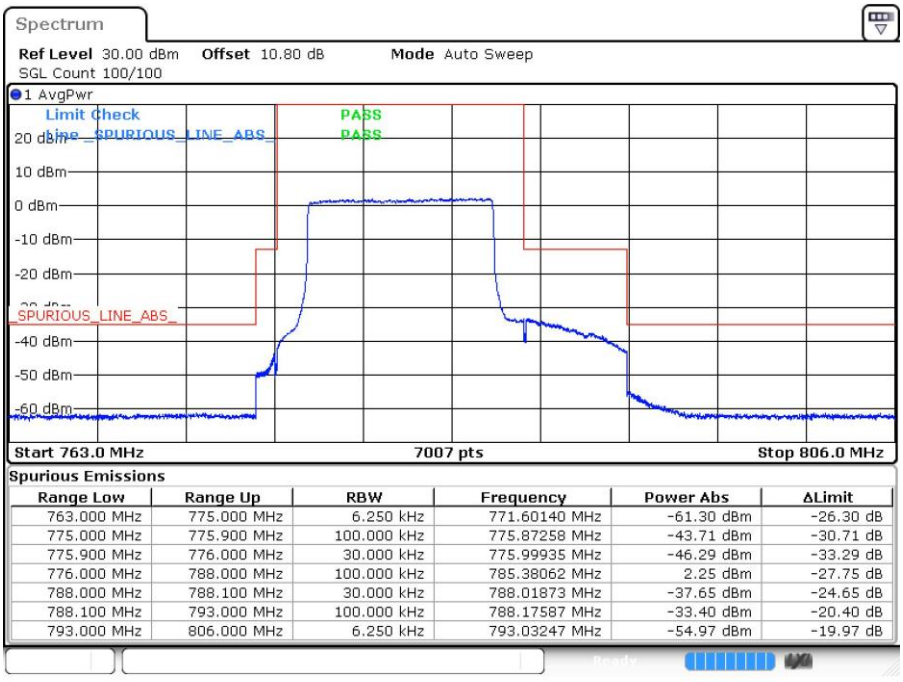



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 773.56743 MHz | -61.16 dBm | -26.16 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.36009 MHz | -48.91 dBm | -35.91 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.96638 MHz | -54.07 dBm | -41.07 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 786.37562 MHz | 19.65 dBm | -10.35 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.02413 MHz | -52.39 dBm | -39.39 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.13182 MHz | -48.43 dBm | -35.43 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 800.66883 MHz | -61.42 dBm | -26.42 dB |

Date: 19.APR.2019 23:19:19

### Band Edge / Full RB



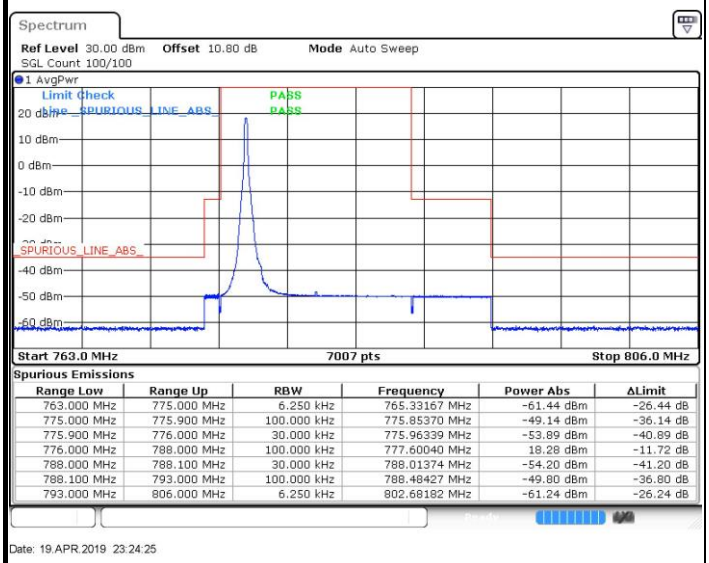

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 771.60140 MHz | -61.30 dBm | -26.30 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.87258 MHz | -43.71 dBm | -30.71 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.99935 MHz | -46.29 dBm | -33.29 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 785.38062 MHz | 2.25 dBm | -27.75 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.01873 MHz | -37.65 dBm | -24.65 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.17587 MHz | -33.40 dBm | -20.40 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.03247 MHz | -54.97 dBm | -19.97 dB |

Date: 19.APR.2019 23:12:37

## LTE Band 13 / 10MHz / 64QAM

### Lowest Band Edge / 1 RB

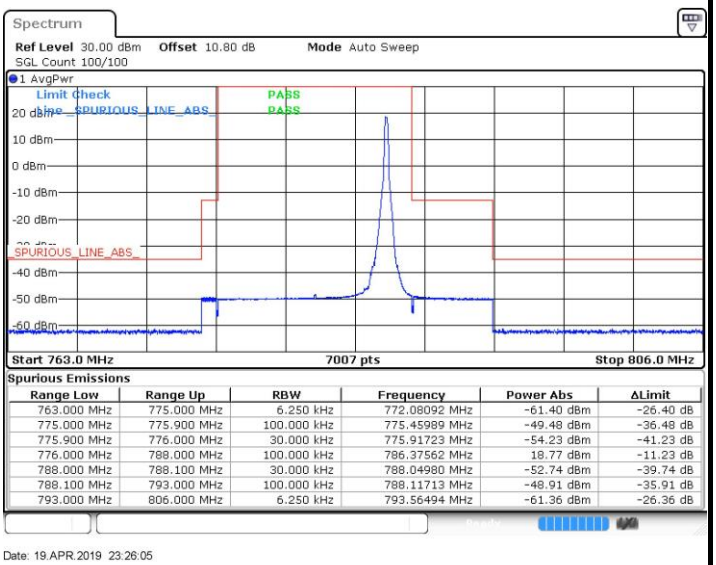



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 765.33167 MHz | -61.44 dBm | -26.44 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.85370 MHz | -49.14 dBm | -36.14 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.96339 MHz | -53.89 dBm | -40.89 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 777.60040 MHz | 18.28 dBm | -11.72 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.01374 MHz | -54.20 dBm | -41.20 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.48427 MHz | -49.80 dBm | -36.80 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 802.68182 MHz | -61.24 dBm | -26.24 dB |

Date: 19.APR.2019 23:24:25

### Highest Band Edge / 1 RB

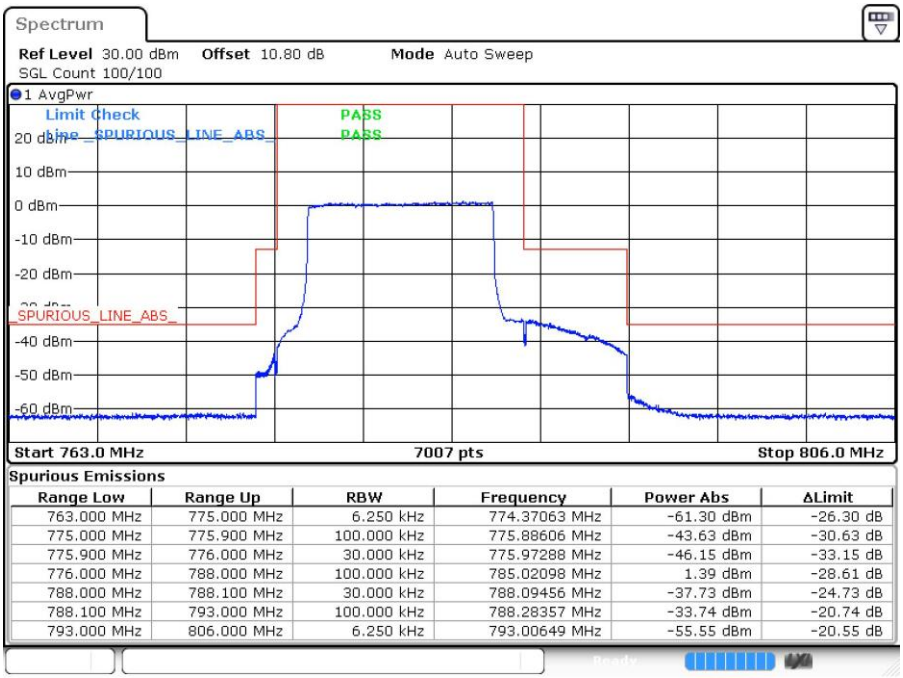



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 772.08092 MHz | -61.40 dBm | -26.40 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.45989 MHz | -49.48 dBm | -36.48 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.91723 MHz | -54.23 dBm | -41.23 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 786.37562 MHz | 18.77 dBm | -11.23 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.04980 MHz | -52.74 dBm | -39.74 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.11713 MHz | -48.91 dBm | -35.91 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.56494 MHz | -61.36 dBm | -26.36 dB |

Date: 19.APR.2019 23:26:05

### Band Edge / Full RB




Spurious Emissions

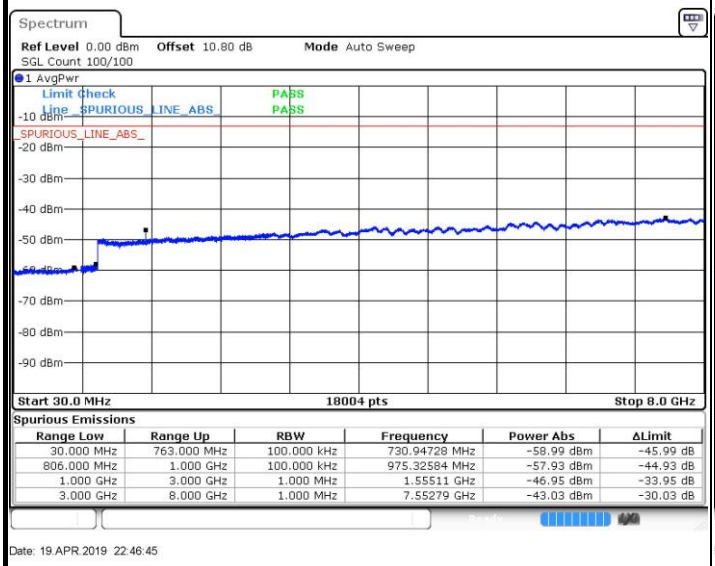
| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 774.37063 MHz | -61.30 dBm | -26.30 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.88606 MHz | -43.63 dBm | -30.63 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.97288 MHz | -46.15 dBm | -33.15 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 785.02098 MHz | 1.39 dBm | -28.61 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.09456 MHz | -37.73 dBm | -24.73 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.28357 MHz | -33.74 dBm | -20.74 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.00649 MHz | -55.55 dBm | -20.55 dB |

Date: 19.APR.2019 23:22:44

# Conducted Spurious Emission

## LTE Band 13 / 5MHz

### Lowest Channel / QPSK

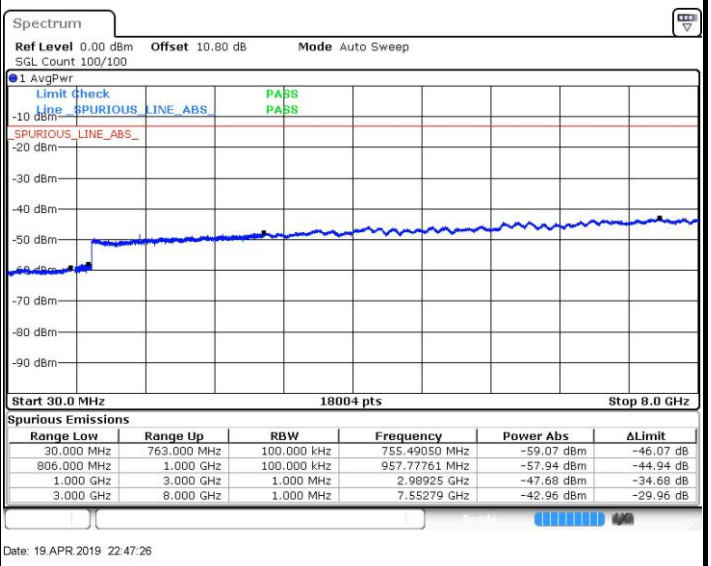



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 730.94728 MHz | -58.99 dBm | -45.99 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 975.32584 MHz | -57.93 dBm | -44.93 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.55511 GHz | -46.95 dBm | -33.95 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 7.55279 GHz | -43.03 dBm | -30.03 dB |

Date: 19.APR.2019 22:46:45

### Lowest Channel / 16QAM

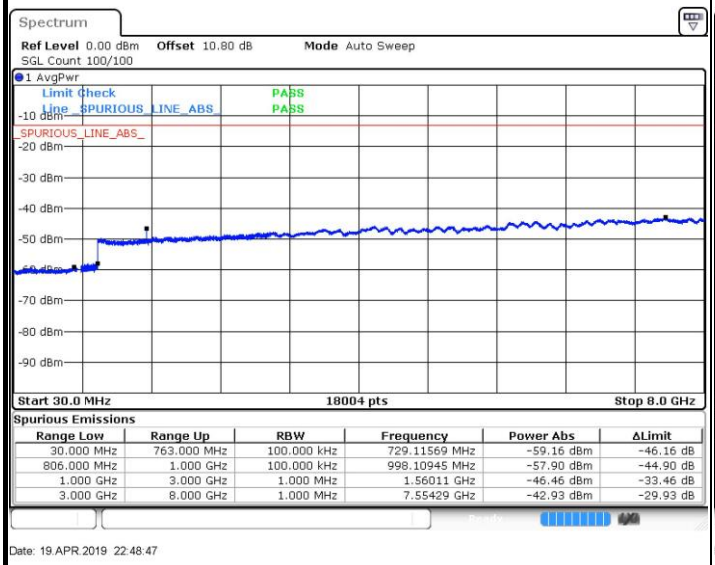



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 755.49050 MHz | -59.07 dBm | -46.07 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 957.77761 MHz | -57.94 dBm | -44.94 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.98925 GHz | -47.68 dBm | -34.68 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 7.55279 GHz | -42.96 dBm | -29.96 dB |

Date: 19.APR.2019 22:47:26

### Middle Channel / QPSK

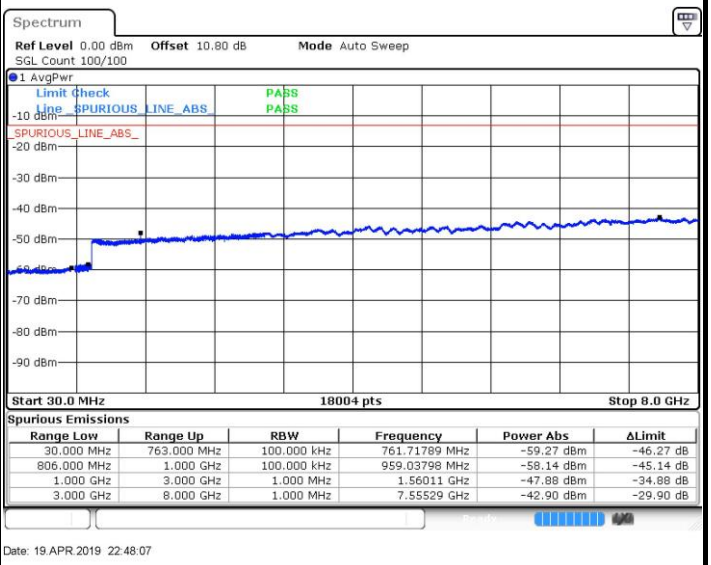



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 729.11569 MHz | -59.16 dBm | -46.16 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 998.10945 MHz | -57.90 dBm | -44.90 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.56011 GHz | -46.46 dBm | -33.46 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 7.55429 GHz | -42.93 dBm | -29.93 dB |

Date: 19.APR.2019 22:48:47

### Middle Channel / 16QAM



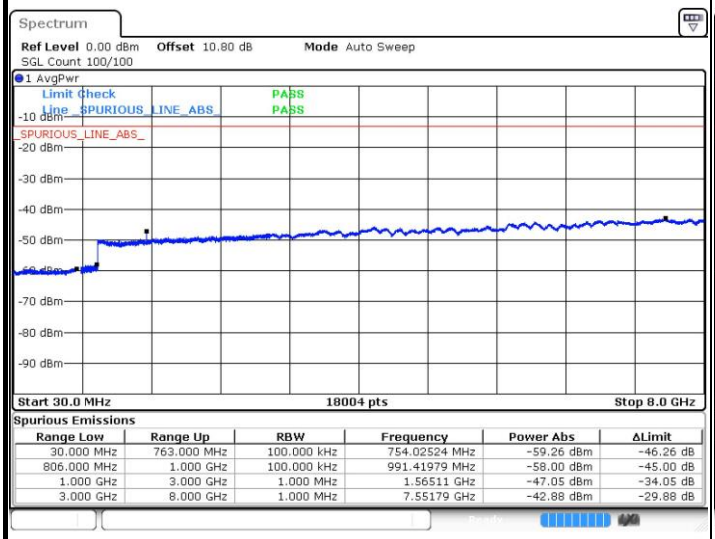

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 761.71789 MHz | -59.27 dBm | -46.27 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 959.03798 MHz | -58.14 dBm | -45.14 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.56011 GHz | -47.88 dBm | -34.88 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 7.55529 GHz | -42.90 dBm | -29.90 dB |

Date: 19.APR.2019 22:48:07

## LTE Band 13 / 5MHz

### Highest Channel / QPSK

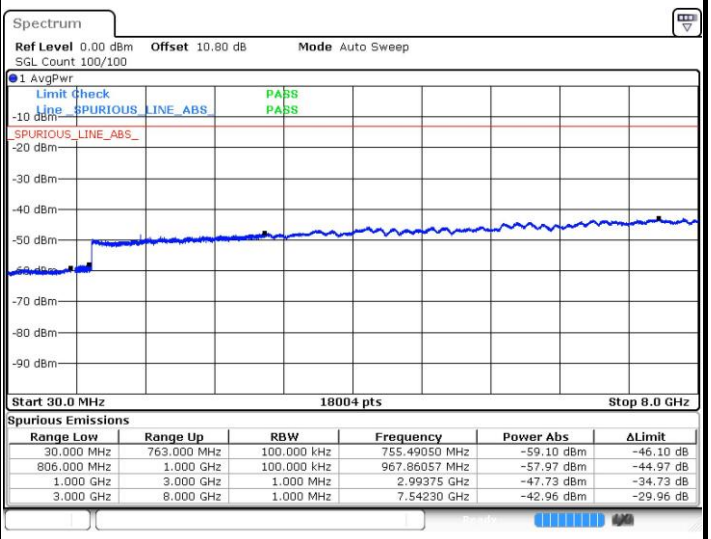



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 754.02524 MHz | -59.26 dBm | -46.26 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 991.41979 MHz | -58.00 dBm | -45.00 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.56511 GHz | -47.05 dBm | -34.05 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 7.55179 GHz | -42.88 dBm | -29.88 dB |

Date: 19.APR.2019 22:57:48

### Highest Channel / 16QAM



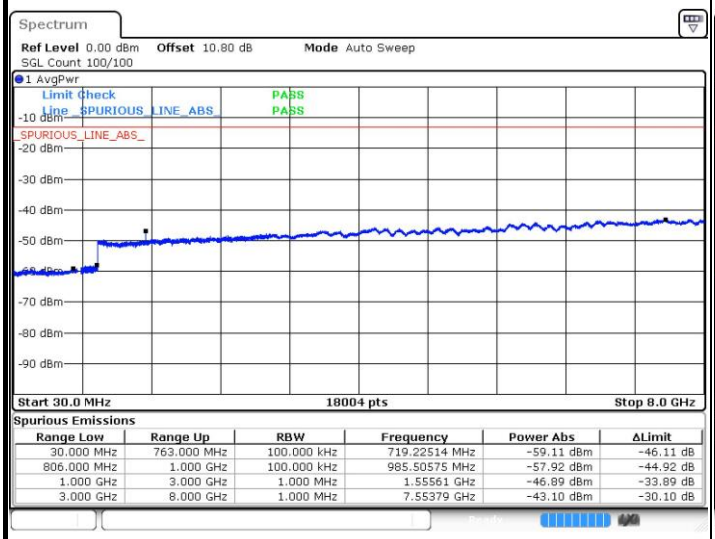

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 755.49050 MHz | -59.10 dBm | -46.10 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 967.86057 MHz | -57.97 dBm | -44.97 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.99375 GHz | -47.73 dBm | -34.73 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 7.54230 GHz | -42.96 dBm | -29.96 dB |

Date: 19.APR.2019 22:58:29

## LTE Band 13 / 10MHz

### Middle Channel / QPSK

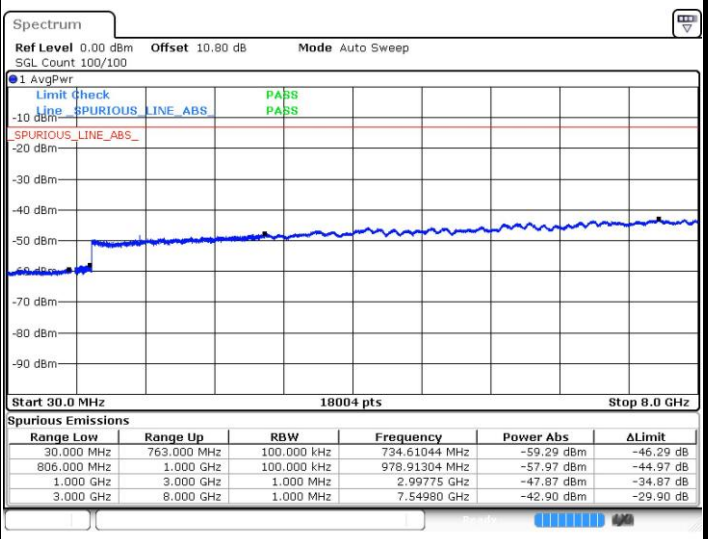



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 719.22514 MHz | -59.11 dBm | -46.11 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 985.50575 MHz | -57.92 dBm | -44.92 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.55561 GHz | -46.89 dBm | -33.89 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 7.55379 GHz | -43.10 dBm | -30.10 dB |

Date: 19.APR.2019 23:20:41

### Middle Channel / 16QAM



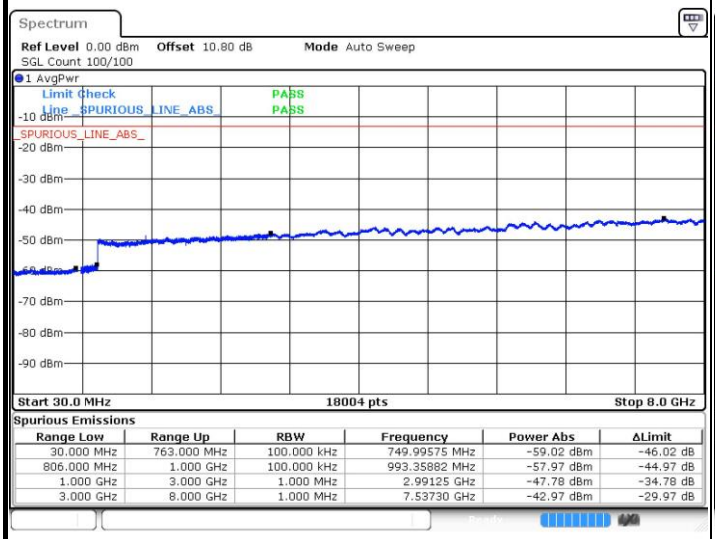

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 734.61044 MHz | -59.29 dBm | -46.29 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 978.91304 MHz | -57.97 dBm | -44.97 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.99775 GHz | -47.87 dBm | -34.87 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 7.54980 GHz | -42.90 dBm | -29.90 dB |

Date: 19.APR.2019 23:20:00

## LTE Band 13 / 5MHz

### Lowest Channel / 64QAM

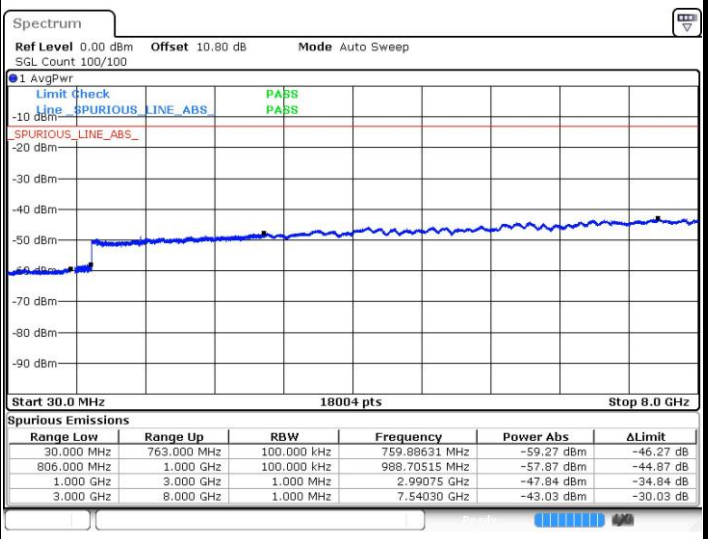



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 749.99575 MHz | -59.02 dBm | -46.02 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 993.35882 MHz | -57.97 dBm | -44.97 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.99125 GHz | -47.78 dBm | -34.78 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 7.53730 GHz | -42.97 dBm | -29.97 dB |

Date: 19.APR.2019 23:02:57

### Middle Channel / 64QAM

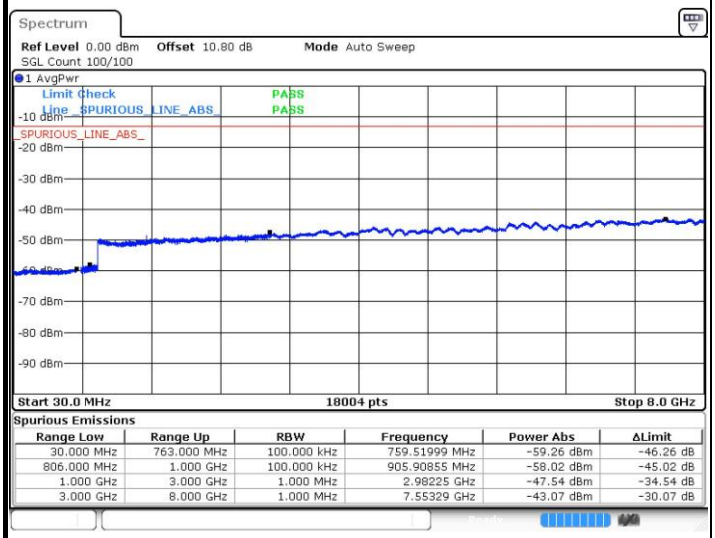



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 759.88631 MHz | -59.27 dBm | -46.27 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 988.70515 MHz | -57.87 dBm | -44.87 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.99075 GHz | -47.84 dBm | -34.84 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 7.54030 GHz | -43.03 dBm | -30.03 dB |

Date: 19.APR.2019 23:03:38

### Highest Channel / 64QAM




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 759.51999 MHz | -59.26 dBm | -46.26 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 905.90855 MHz | -58.02 dBm | -45.02 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 2.98225 GHz | -47.54 dBm | -34.54 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 7.55329 GHz | -43.07 dBm | -30.07 dB |

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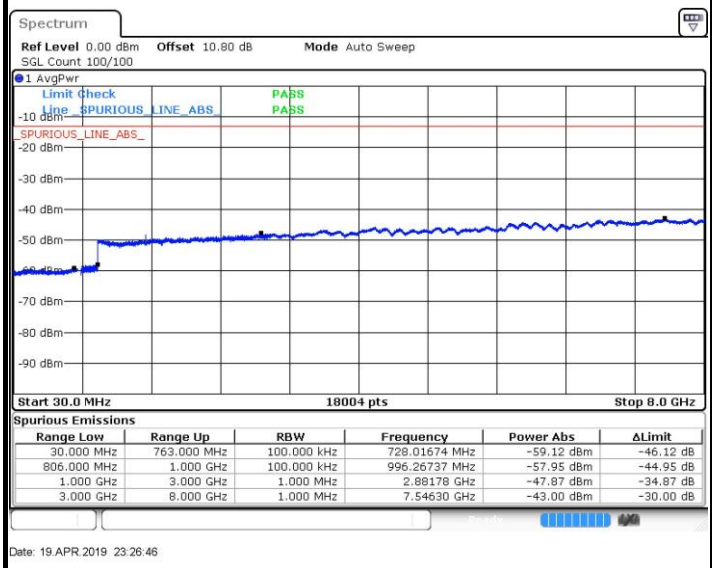
| LTE Band 13 / 10MHz | |
|---|---|
| **Middle Channel / 64QAM** | |
|  | |

# Frequency Stability

| Test Conditions | | LTE Band 13 (QPSK) / Middle Channel | Limit |
|---|---|---|---|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0070 | PASS |
| 40 | Normal Voltage | 0.0035 | |
| 30 | Normal Voltage | 0.0014 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0001 | |
| 0 | Normal Voltage | 0.0005 | |
| -10 | Normal Voltage | 0.0035 | |
| -20 | Normal Voltage | 0.0008 | |
| -30 | Normal Voltage | 0.0024 | |
| 20 | Maximum Voltage | 0.0006 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0058 | |

**Note:**

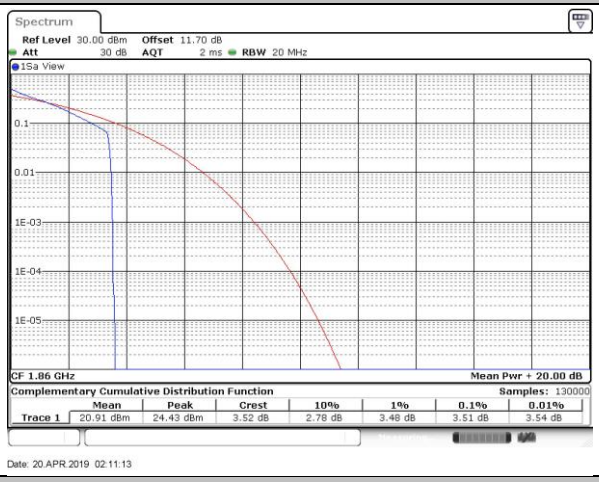
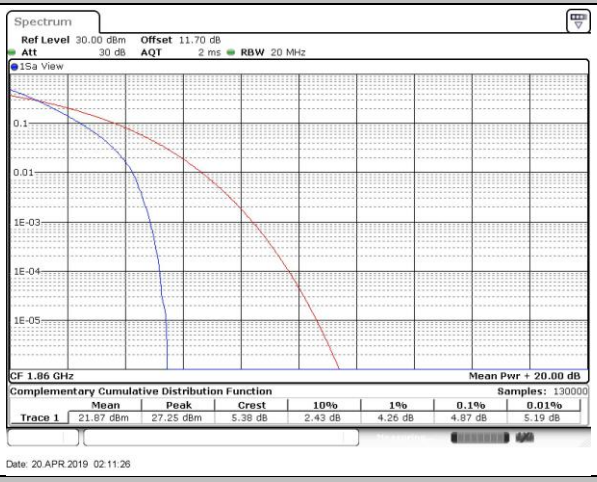
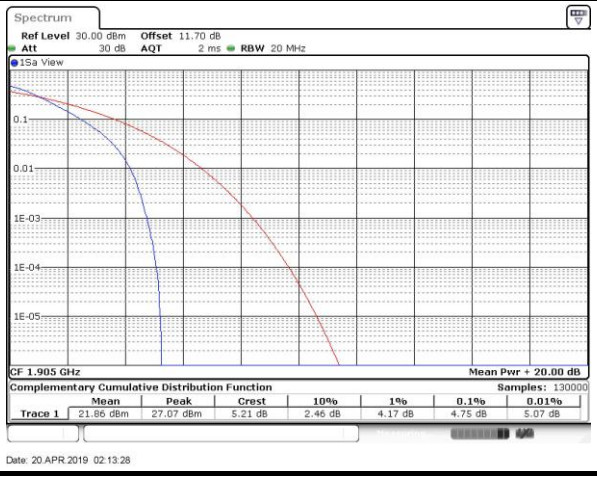
**1.** Normal Voltage =3.85 V.；Battery End Point (BEP) =3.65 V.；Maximum Voltage =4.25 V.

**2.** Note: The frequency fundamental emissions stay within the authorized frequency block.

# LTE Band 25

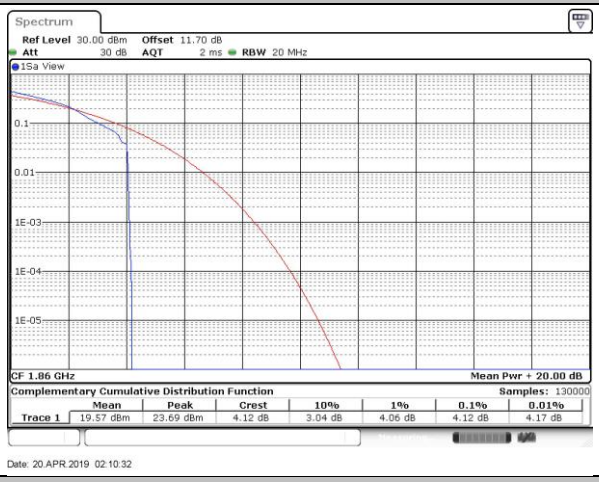
## Peak-to-Average Ratio

| Mode | LTE Band 25 / 20MHz | | | | |
|---|---|---|---|---|---|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 3.51 | 4.87 | 4.12 | 5.94 | PASS |
| Middle CH | 3.57 | 4.70 | 4.26 | 5.86 | |
| Highest CH | 3.57 | 4.75 | 4.23 | 5.91 | |
| Mode | LTE Band 25 / 20MHz | | | | |
| Mod. | 64QAM | | | | Limit: 13dB |
| RB Size | 1RB | Full RB | | | Result |
| Lowest CH | 4.93 | 6.43 | - | - | PASS |
| Middle CH | 5.39 | 6.43 | - | - | |
| Highest CH | 5.25 | 6.43 | - | - | |

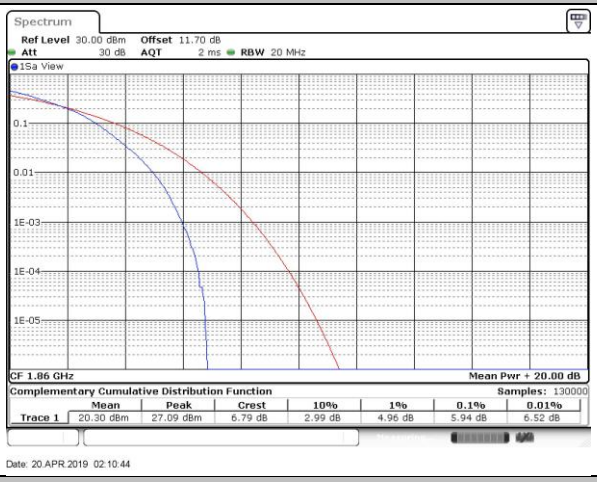
| LTE Band 25 / 20MHz / QPSK | |
|---|---|
| **Lowest Channel / 1RB** | **Lowest Channel / Full RB** |
|  |  |
| **Middle Channel / 1RB** | **Middle Channel / Full RB** |
| | |
| **Highest Channel / 1RB** | **Highest Channel / Full RB** |
| |  |

## LTE Band 25 / 20MHz / 16QAM

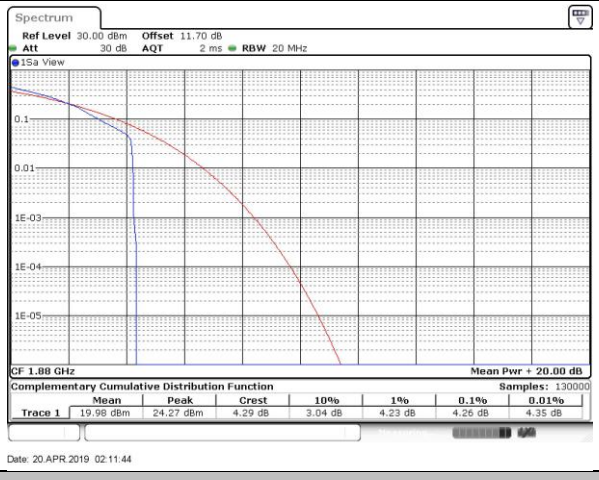
### Lowest Channel / 1RB




### Lowest Channel / Full RB

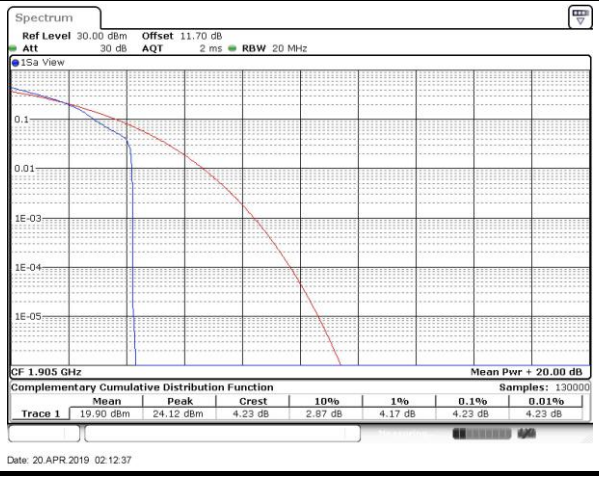



### Middle Channel / 1RB

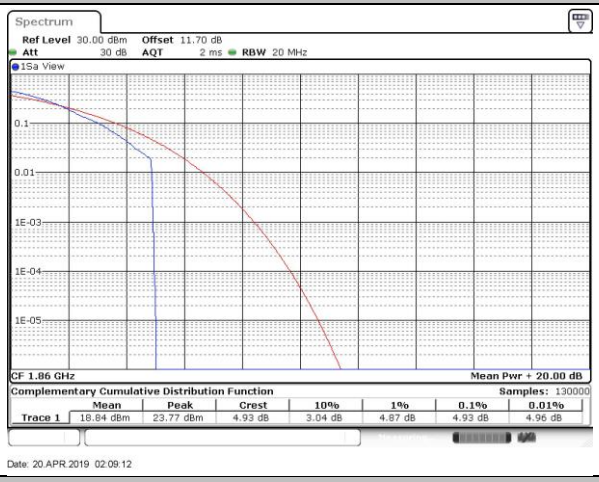
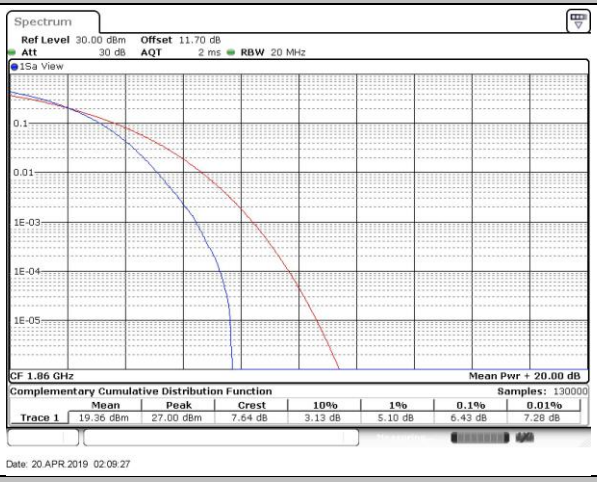
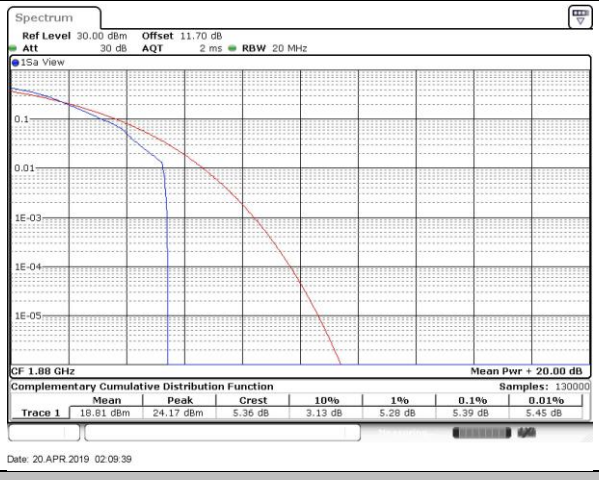



### Middle Channel / Full RB

### Highest Channel / 1RB




### Highest Channel / Full RB

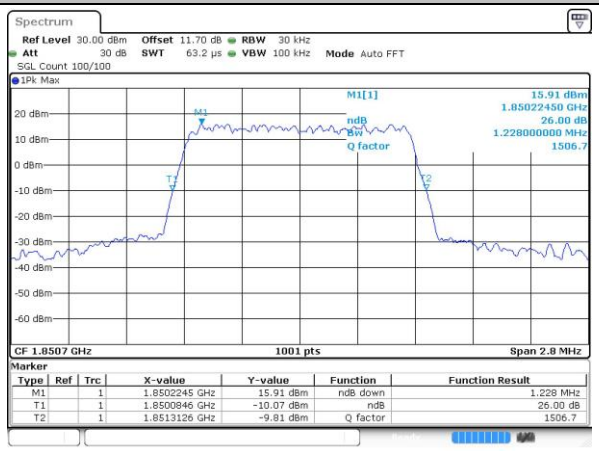
| LTE Band 25 / 20MHz / 64QAM | |
|---|---|
| **Lowest Channel / 1RB** | **Lowest Channel / Full RB** |
|  |  |
| **Middle Channel / 1RB** | **Middle Channel / Full RB** |
|  | |
| **Highest Channel / 1RB** | **Highest Channel / Full RB** |
| | |

# 26dB Bandwidth

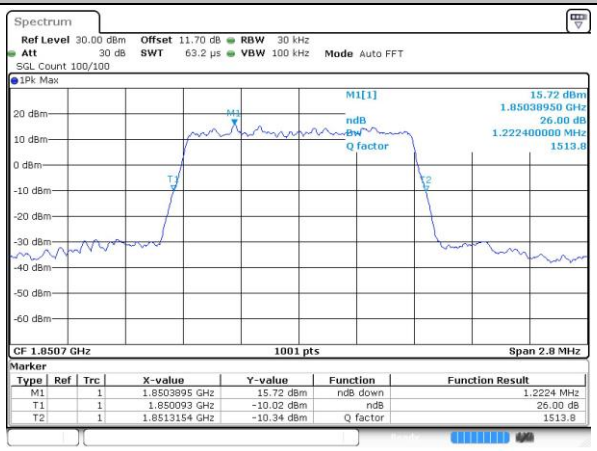
| Mode | LTE Band 25 : 26dB BW(MHz) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 1.23 | 1.22 | 3.05 | 3.00 | 4.97 | 4.87 | 9.75 | 9.79 | 14.48 | 14.39 | 19.22 | 18.82 |
| Middle CH | 1.21 | 1.22 | 3.02 | 3.06 | 4.89 | 4.85 | 9.67 | 9.71 | 14.42 | 14.30 | 18.82 | 18.78 |
| Highest CH | 1.22 | 1.23 | 3.06 | 3.03 | 4.85 | 4.90 | 9.75 | 9.87 | 14.48 | 14.30 | 19.10 | 19.38 |
| Mode | LTE Band 25 : 26dB BW(MHz) | | | | | | | | | | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | |
| Lowest CH | 1.23 | - | 3.02 | - | 4.87 | - | 9.69 | - | 14.45 | - | 18.86 | - |
| Middle CH | 1.21 | - | 3.02 | - | 4.92 | - | 9.95 | - | 14.33 | - | 19.06 | - |
| Highest CH | 1.23 | - | 3.05 | - | 4.88 | - | 9.81 | - | 14.39 | - | 19.18 | - |

## LTE Band 25

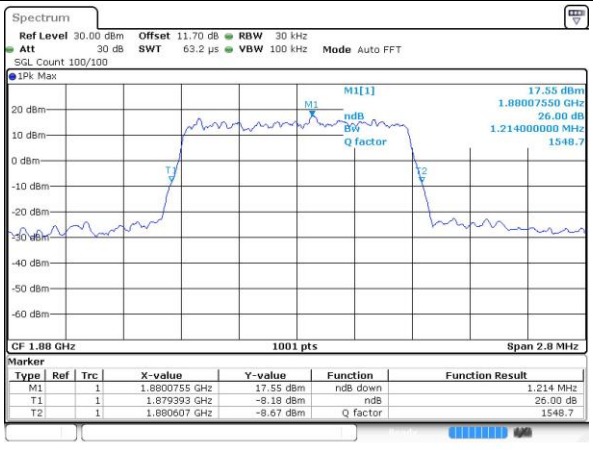
### Lowest Channel / 1.4MHz / QPSK



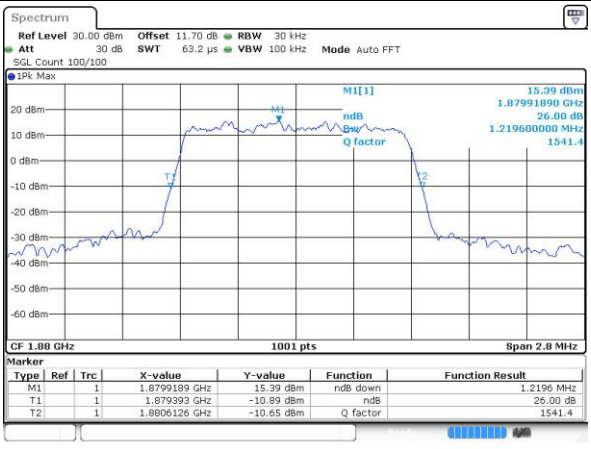

### Lowest Channel / 1.4MHz / 16QAM



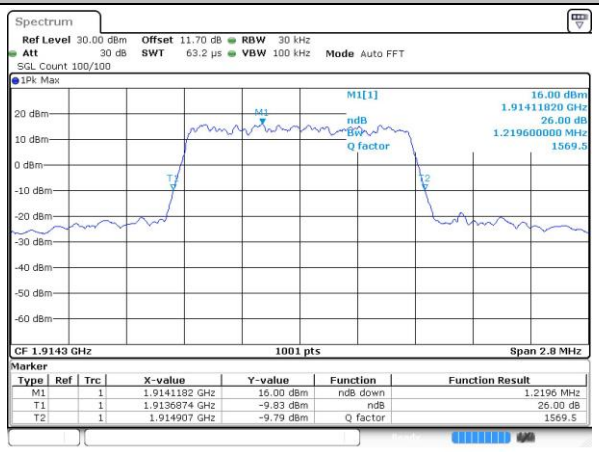

### Middle Channel / 1.4MHz / QPSK

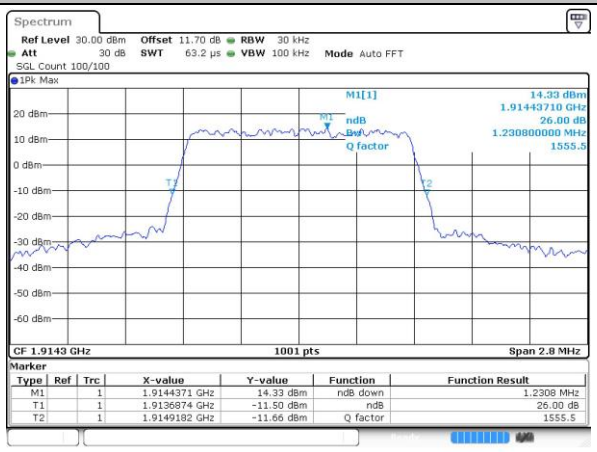



### Middle Channel / 1.4MHz / 16QAM




### Highest Channel / 1.4MHz / QPSK




### Highest Channel / 1.4MHz / 16QAM