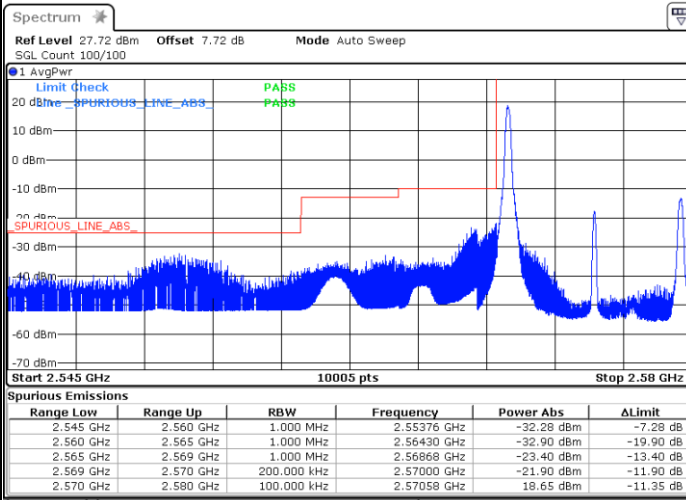




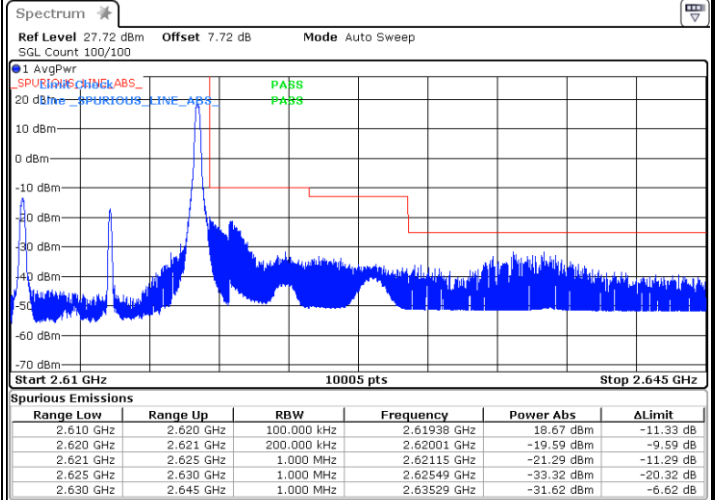
LTE Band 38 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



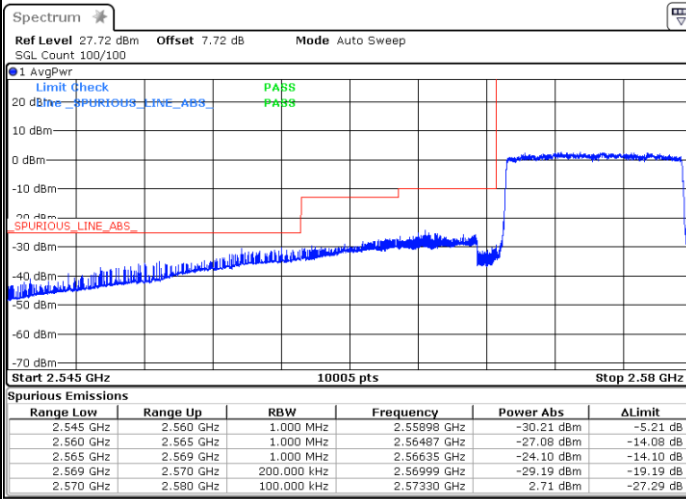
Date: 14.MAY.2018 17:19:55



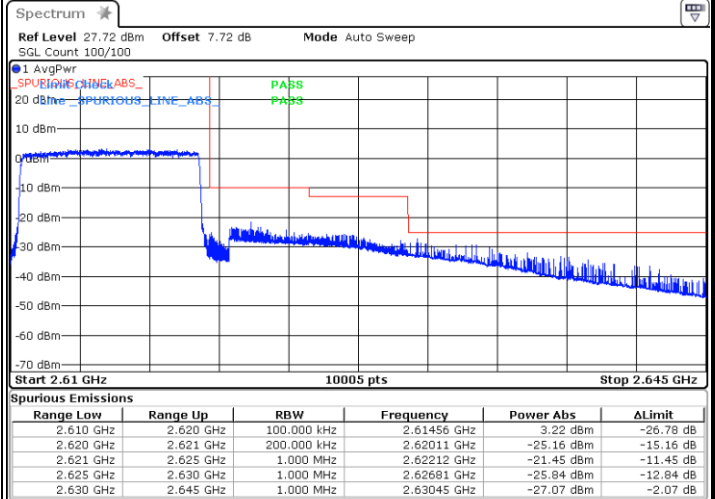
Date: 14.MAY.2018 17:24:58

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.MAY.2018 17:20:55

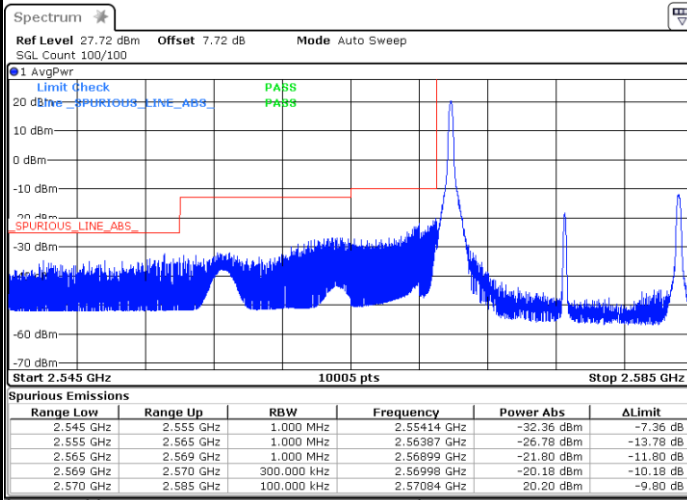


Date: 14.MAY.2018 17:26:58



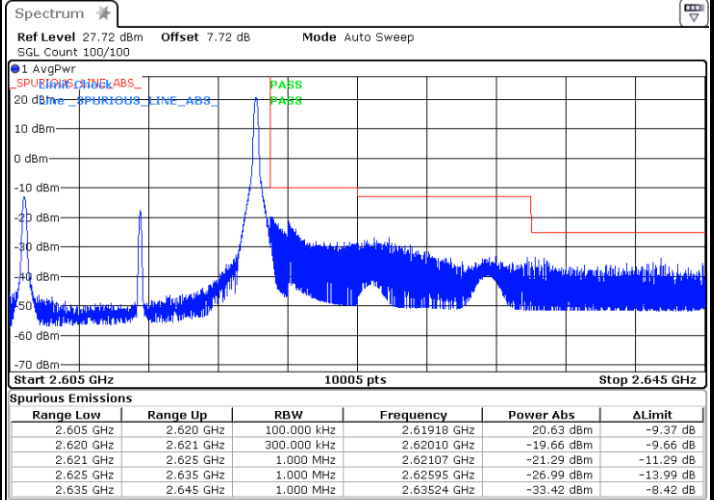
LTE Band 38 / 15MHz / QPSK

Lowest Band Edge / 1 RB



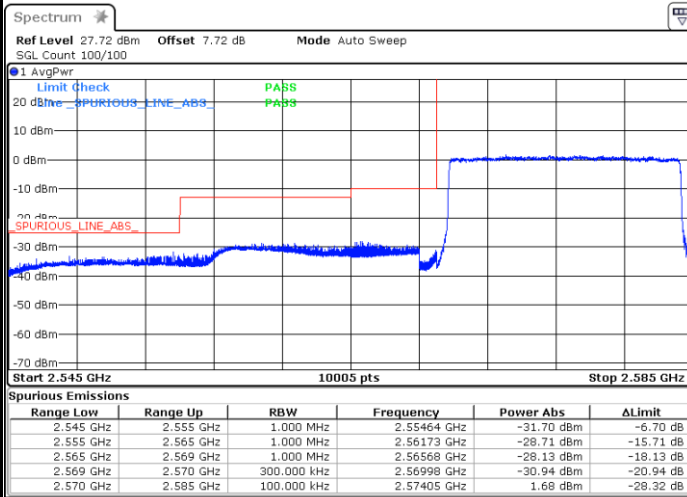
Date: 14.MAY.2018 17:37:48

Highest Band Edge / 1 RB



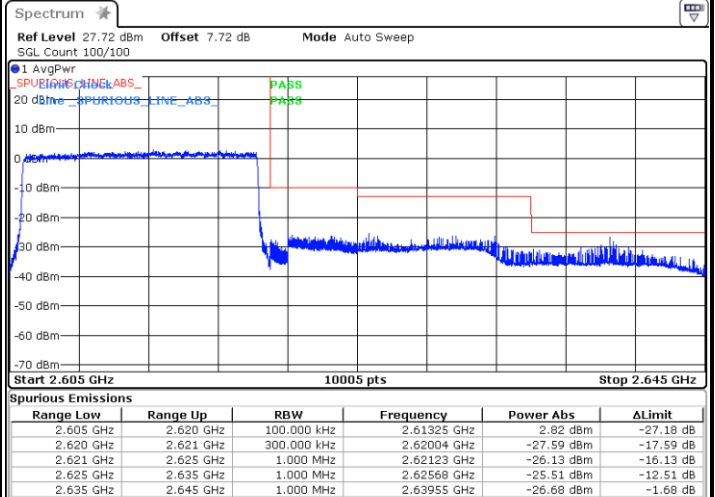
Date: 14.MAY.2018 17:39:22

Lowest Band Edge / Full RB



Date: 14.MAY.2018 17:32:04

Highest Band Edge / Full RB

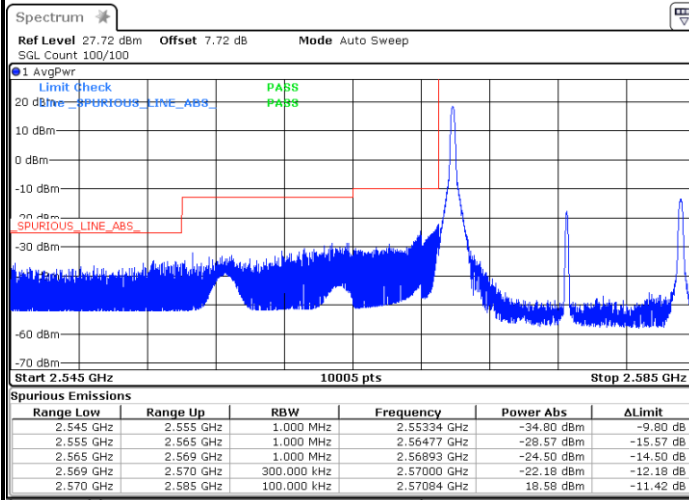


Date: 14.MAY.2018 17:43:18



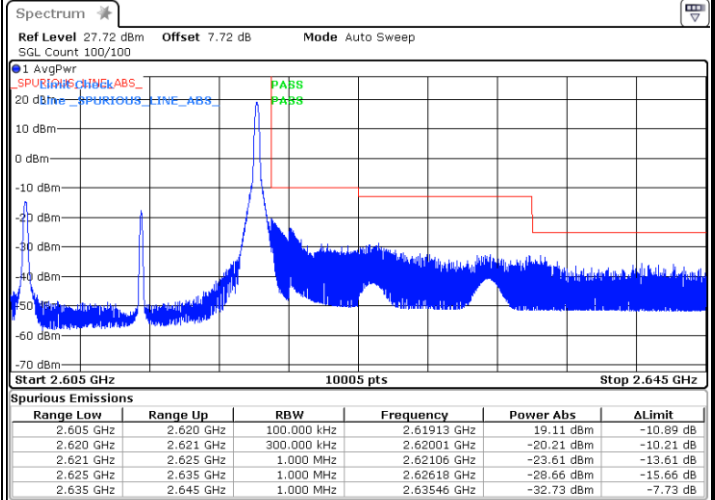
LTE Band 38 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



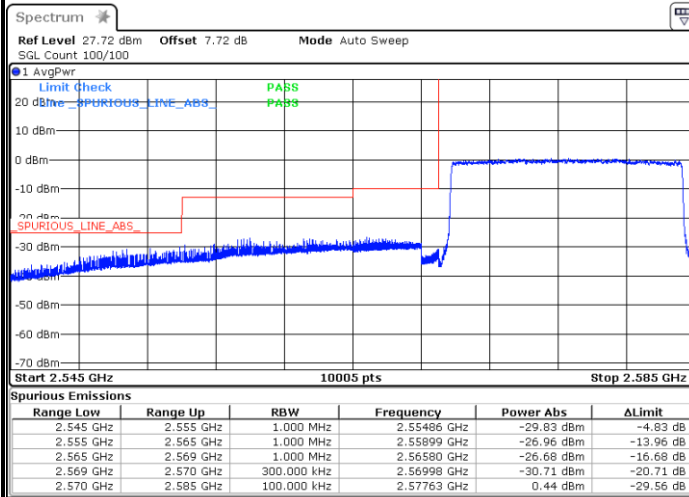
Date: 14.MAY.2018 17:34:41

Highest Band Edge / 1 RB



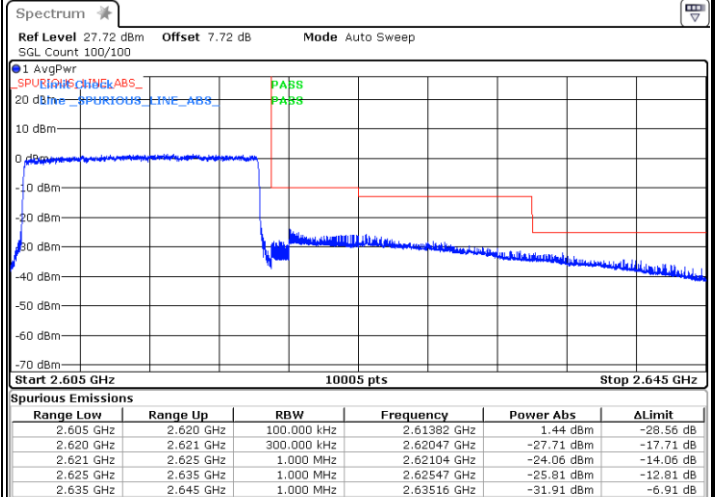
Date: 14.MAY.2018 17:40:50

Lowest Band Edge / Full RB



Date: 14.MAY.2018 17:33:10

Highest Band Edge / Full RB



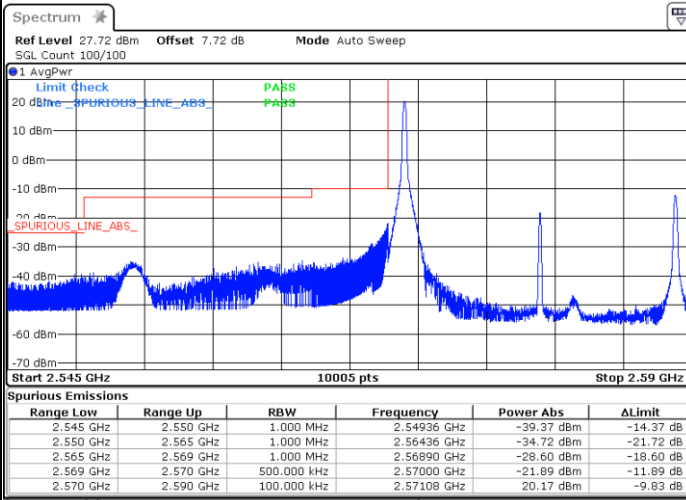
Date: 14.MAY.2018 17:41:56



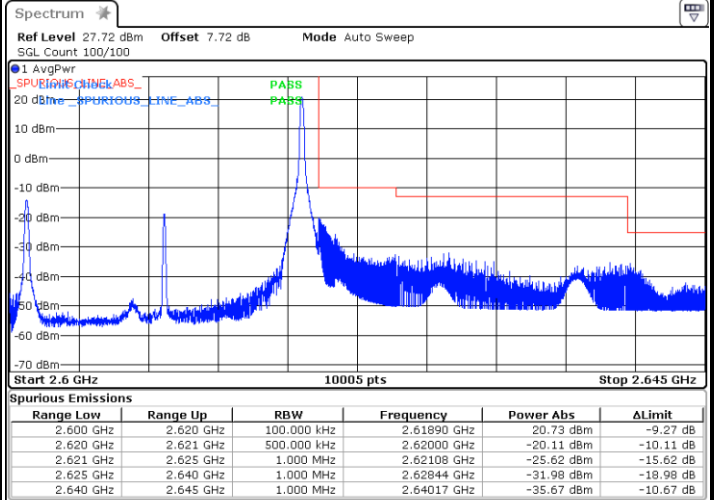
LTE Band 38 / 20MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



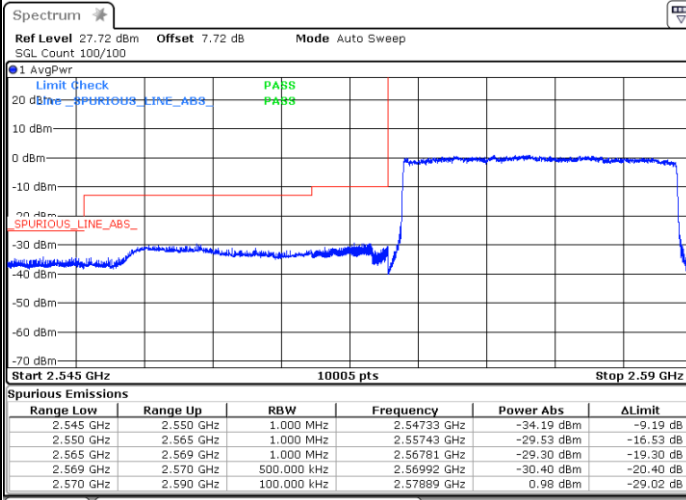
Date: 15.MAY.2018 09:07:30



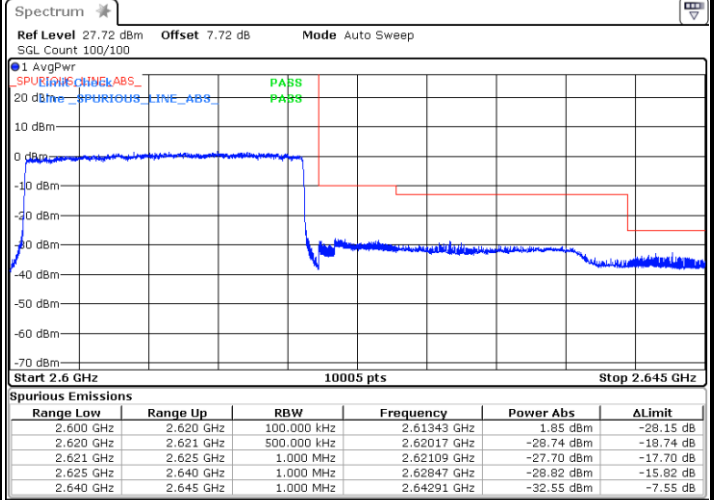
Date: 14.MAY.2018 17:49:47

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.MAY.2018 17:44:34

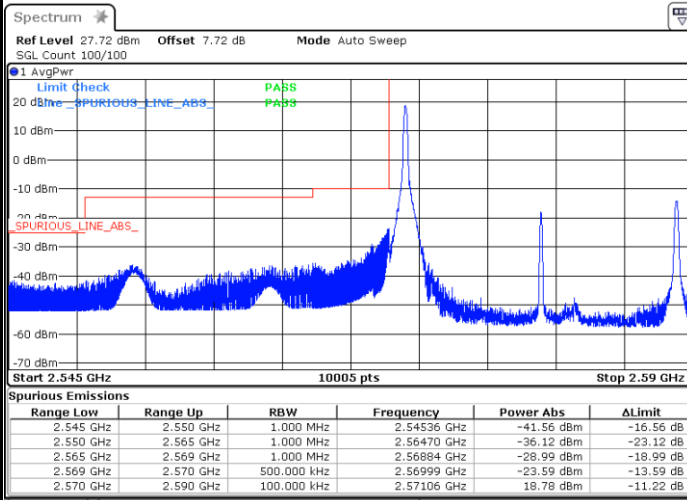


Date: 14.MAY.2018 17:47:56



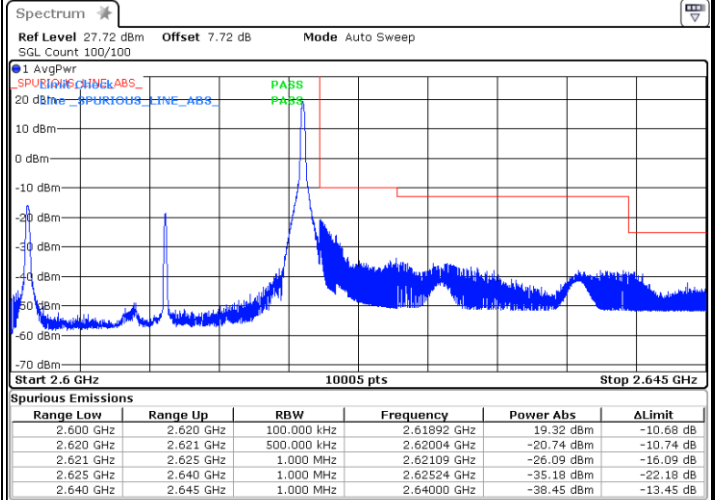
LTE Band 38 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



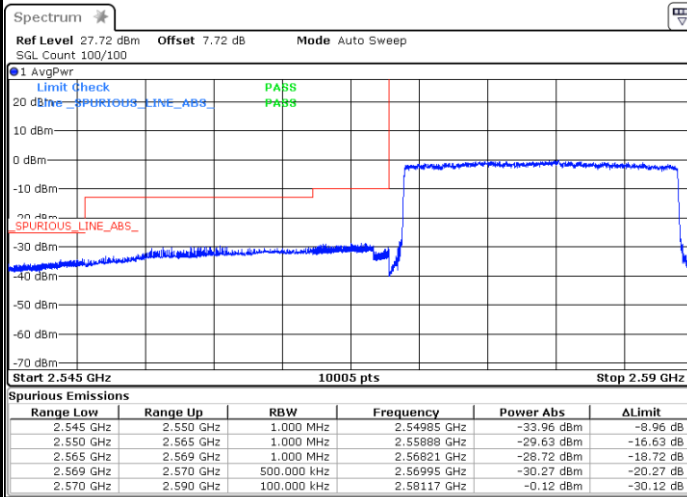
Date: 15.MAY.2018 09:09:51

Highest Band Edge / 1 RB



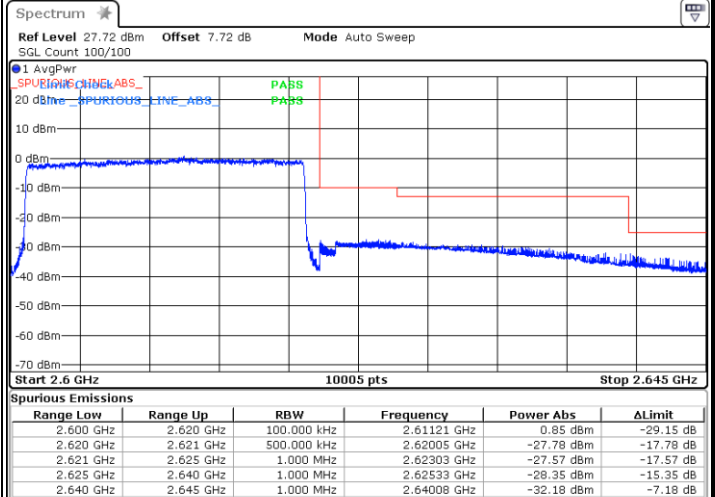
Date: 14.MAY.2018 17:51:11

Lowest Band Edge / Full RB



Date: 14.MAY.2018 17:45:48

Highest Band Edge / Full RB



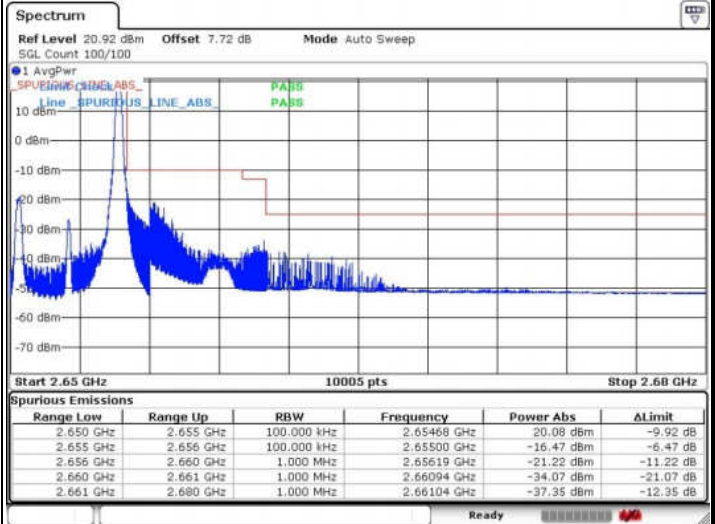
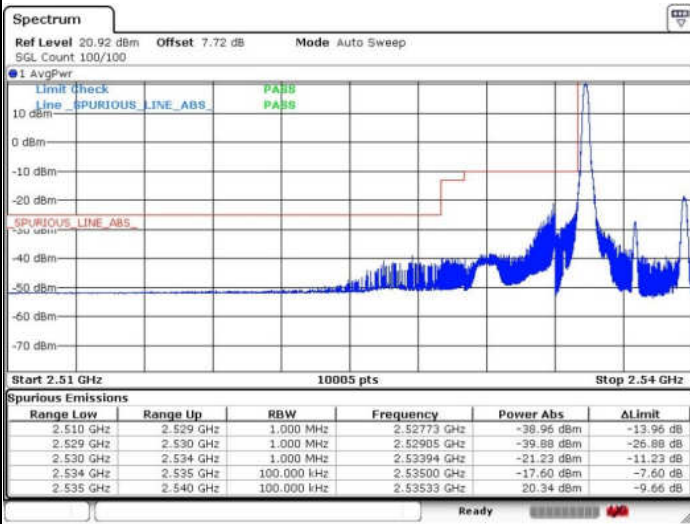
Date: 14.MAY.2018 17:46:57



LTE Band 41 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

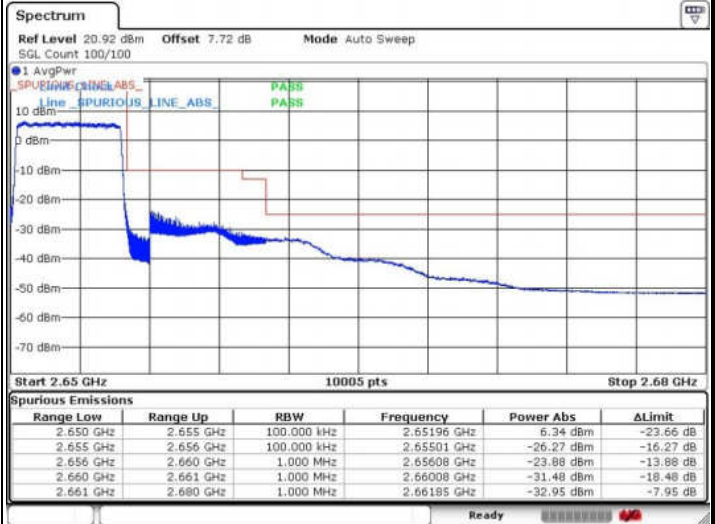


Date: 15 MAY 2018 10:34:33

Date: 15 MAY 2018 10:43:36

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



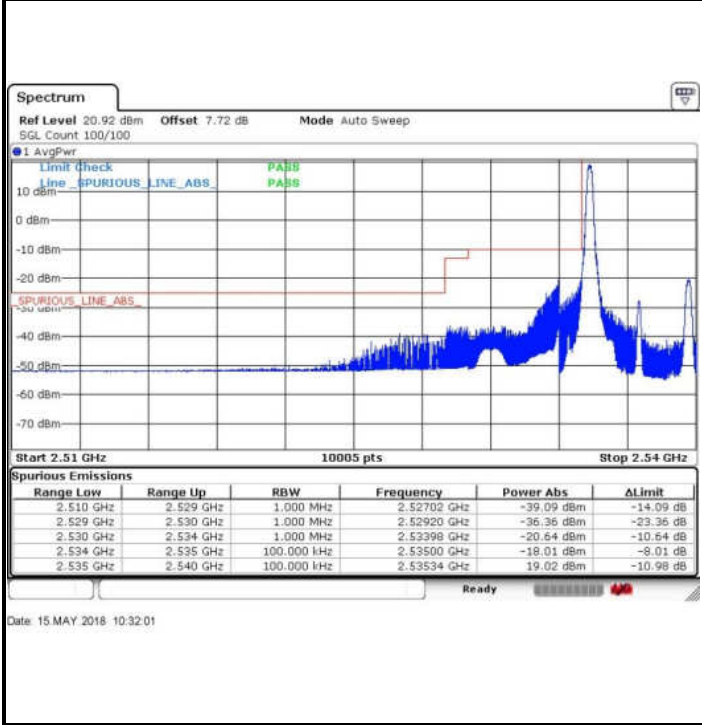
Date: 15 MAY 2018 10:35:20

Date: 15 MAY 2018 10:42:08

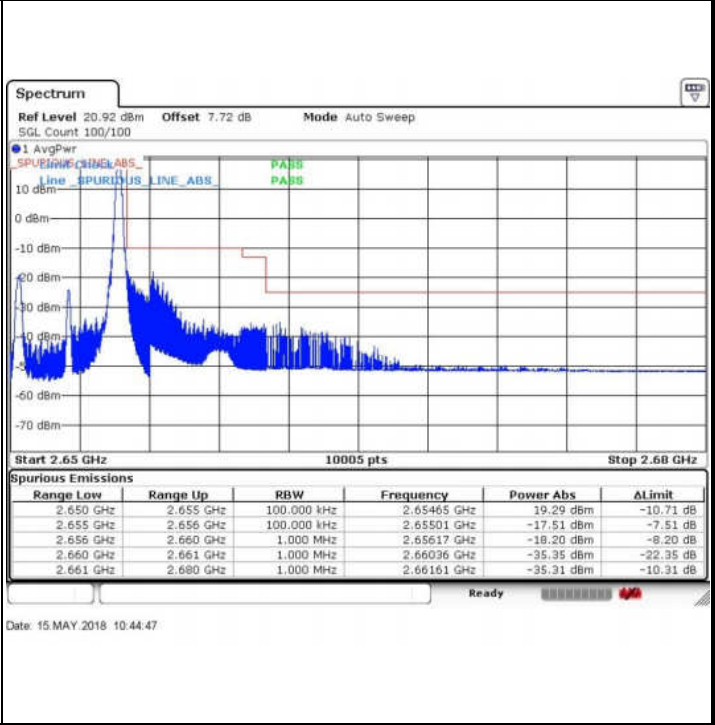


LTE Band 41 / 5MHz / 16QAM

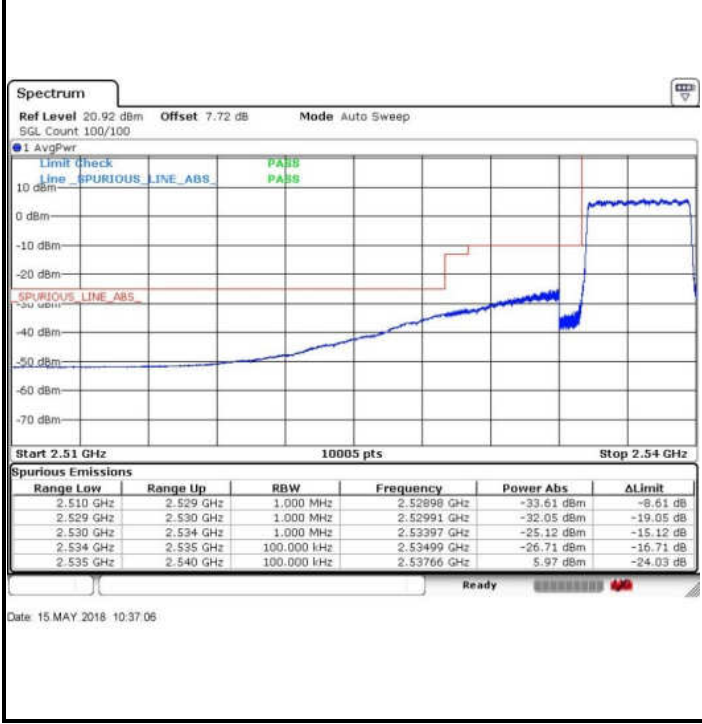
Lowest Band Edge / 1RB



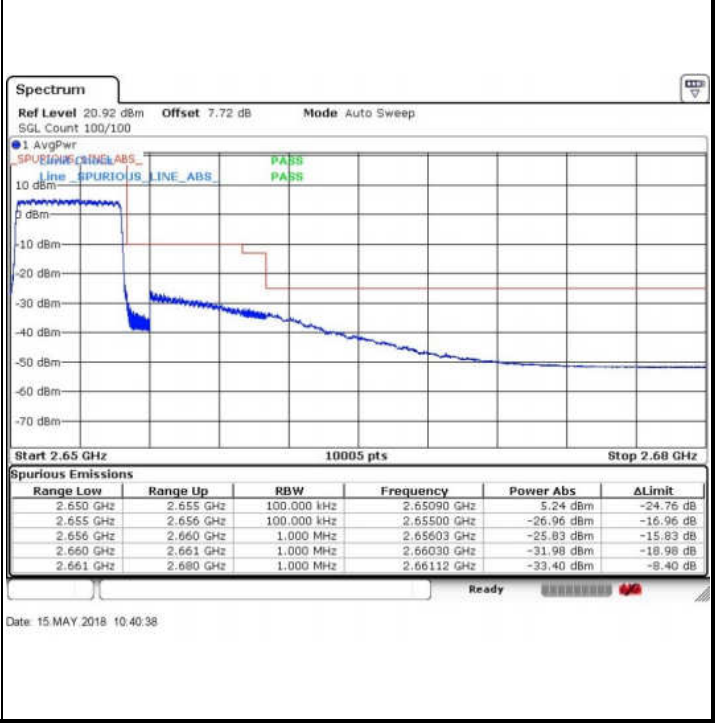
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

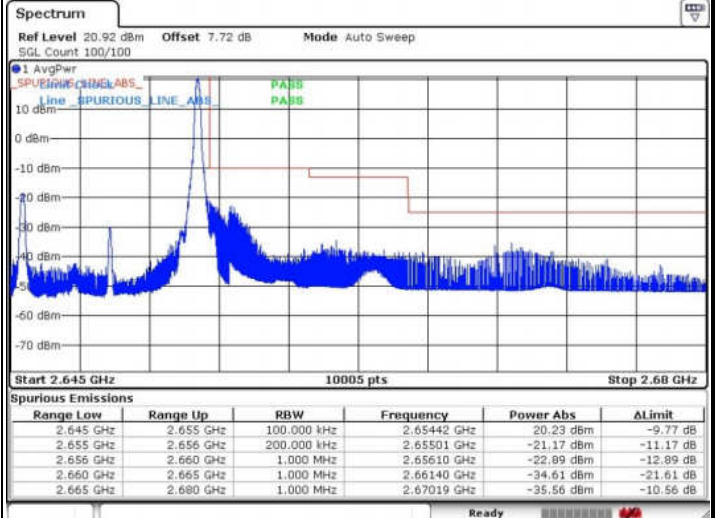
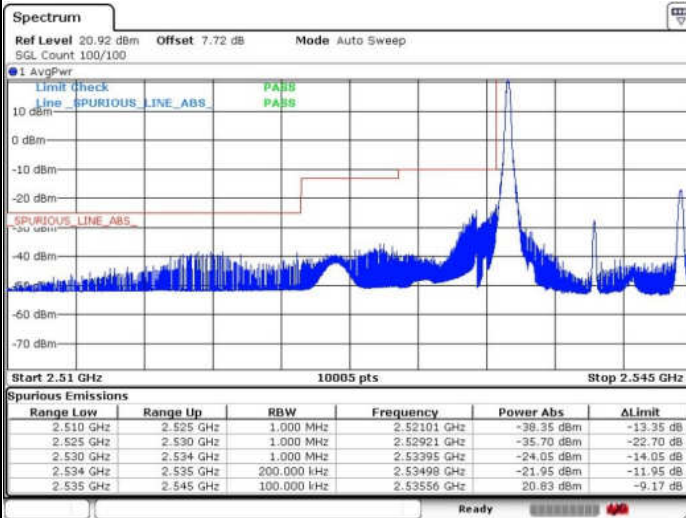




LTE Band 41 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

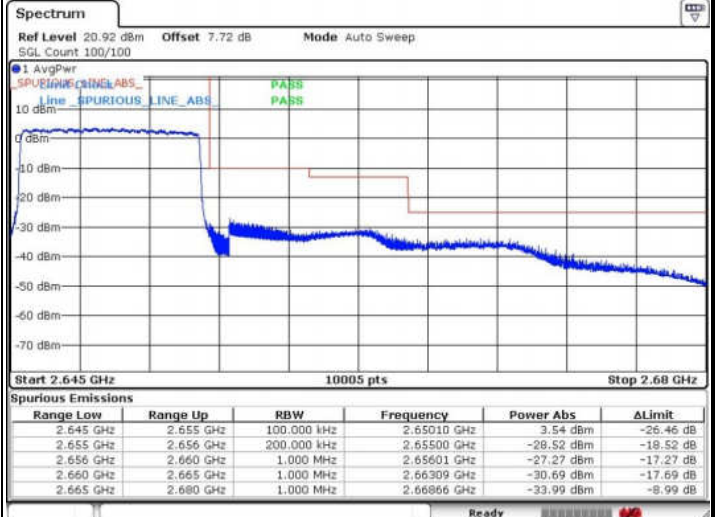
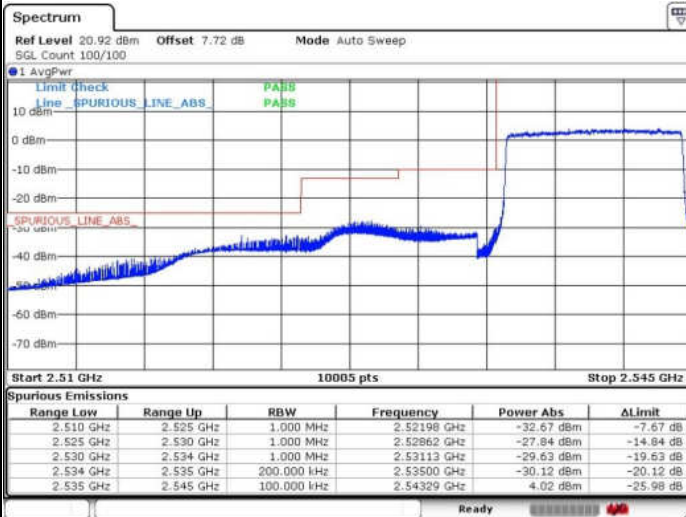


Date: 15 MAY 2018 10:53:44

Date: 15 MAY 2018 11:00:49

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



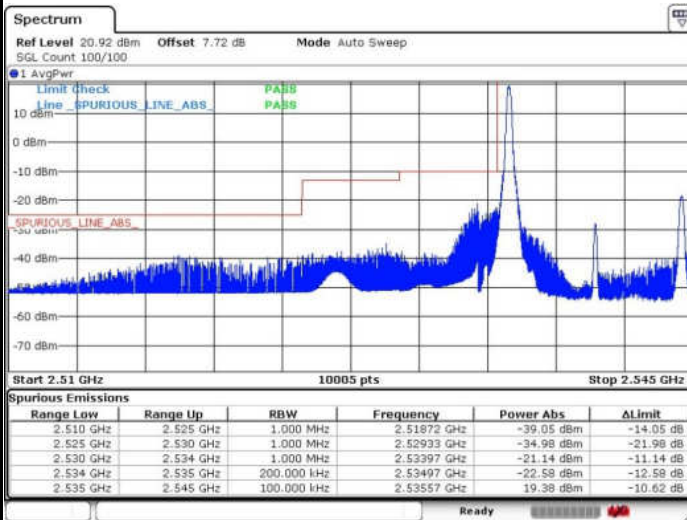
Date: 15 MAY 2018 10:52:59

Date: 15 MAY 2018 11:07:48



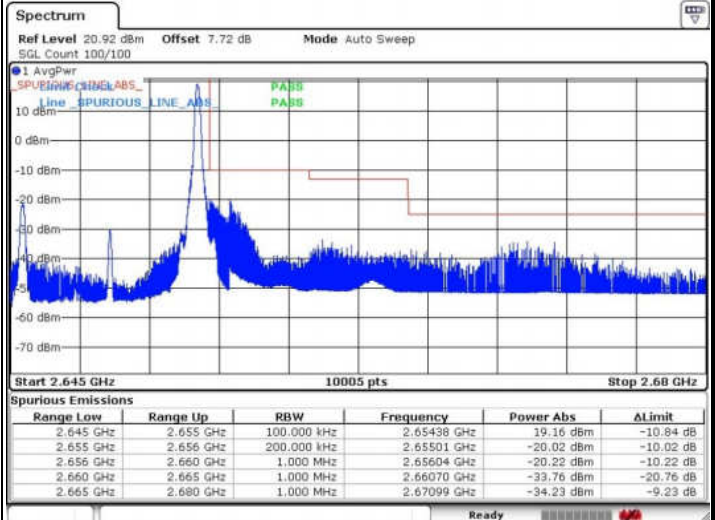
LTE Band 41 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



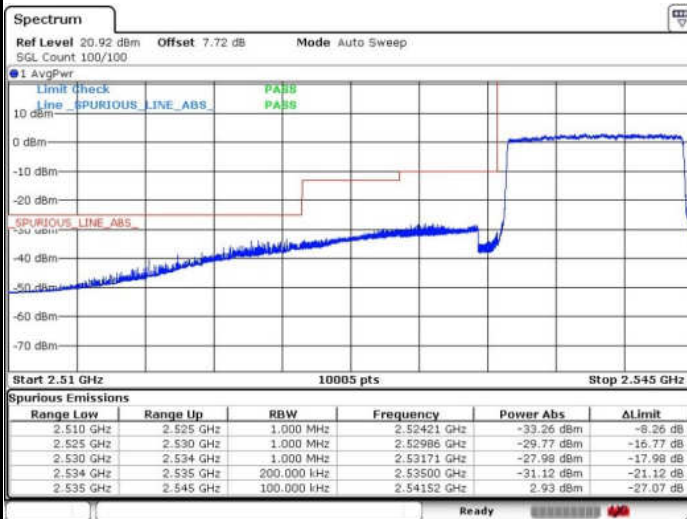
Date: 15 MAY 2016 10:54:43

Highest Band Edge / 1 RB



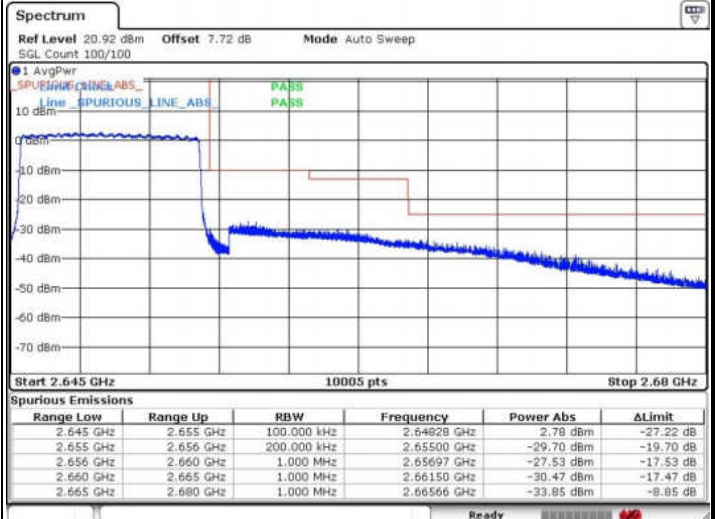
Date: 15 MAY 2016 10:58:53

Lowest Band Edge / Full RB



Date: 15 MAY 2016 10:50:42

Highest Band Edge / Full RB



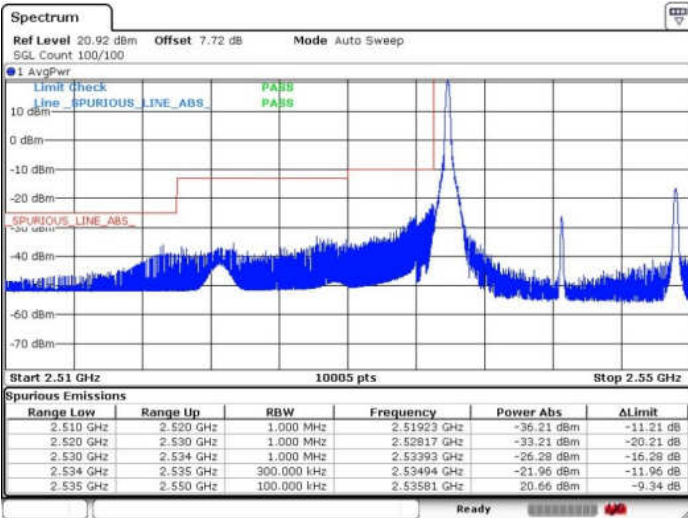
Date: 15 MAY 2016 11:09:03



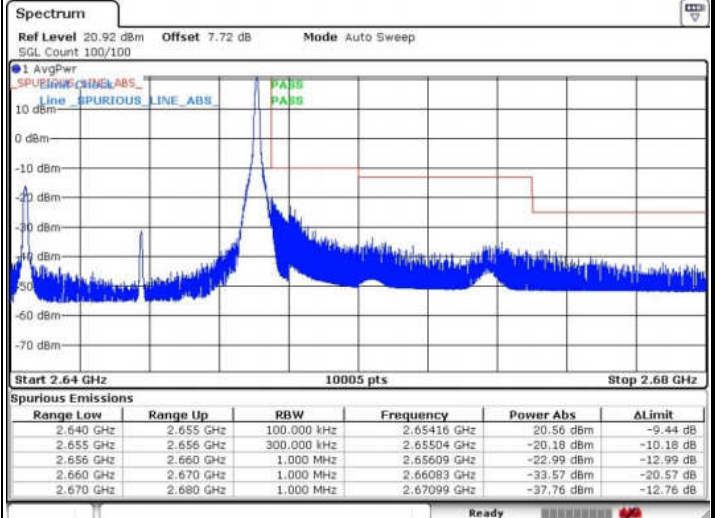
LTE Band 41 / 15MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



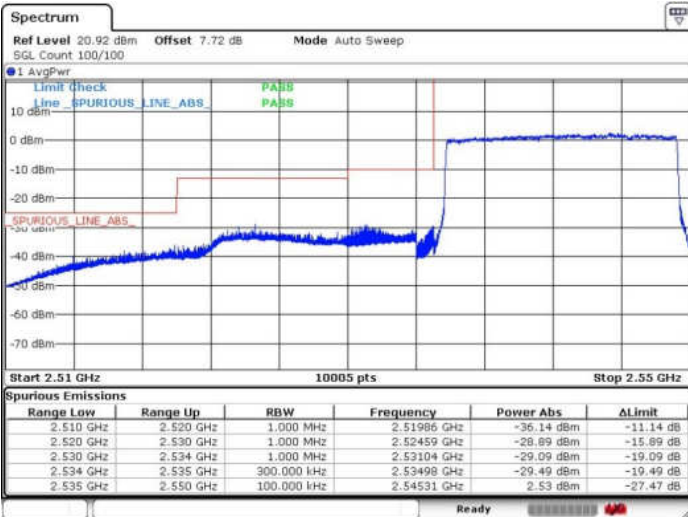
Date: 15 MAY 2016 11:14:43



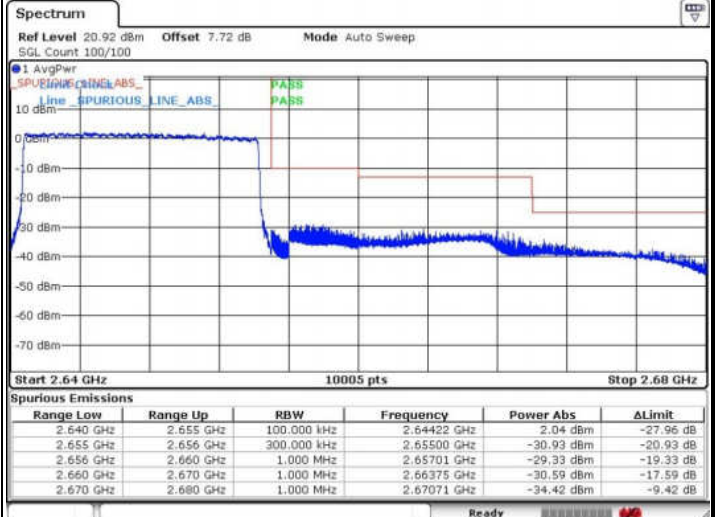
Date: 15 MAY 2016 11:20:11

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15 MAY 2016 11:12:48



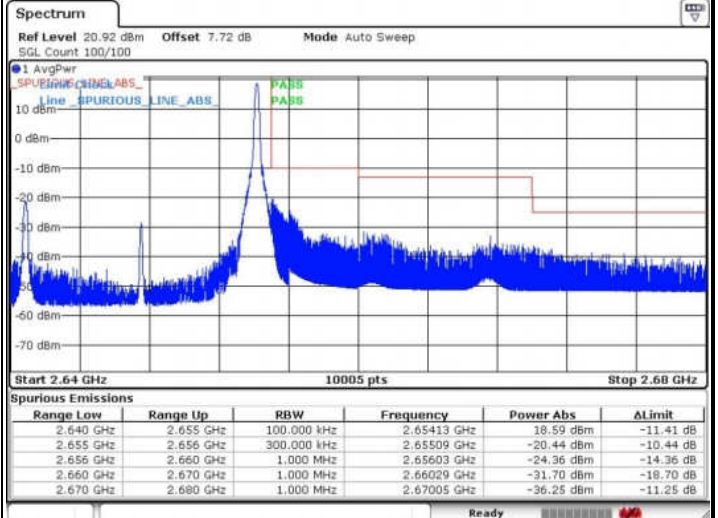
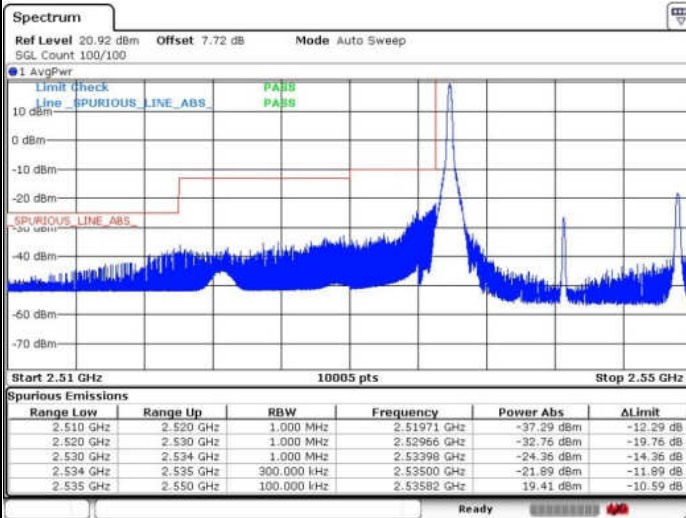
Date: 15 MAY 2016 11:21:06



LTE Band 41 / 15MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

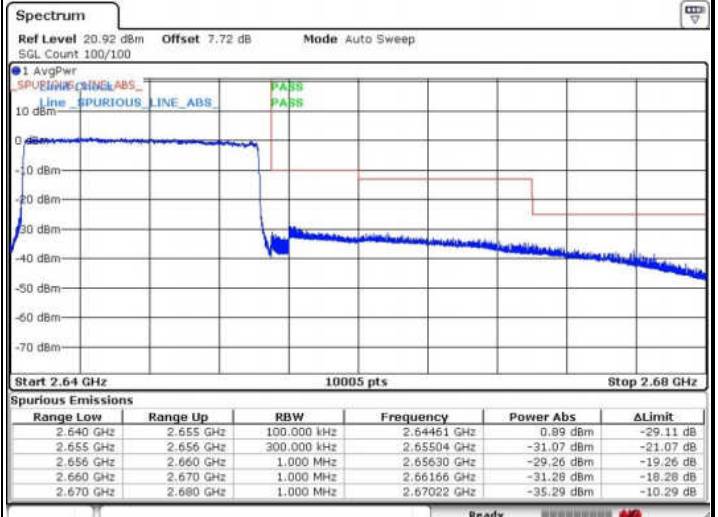
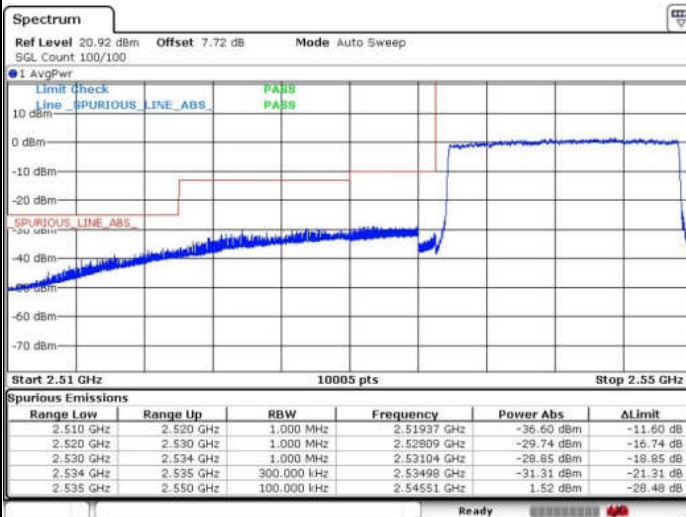


Date: 15 MAY 2018 11:15:33

Date: 15 MAY 2018 11:18:58

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15 MAY 2018 11:11:49

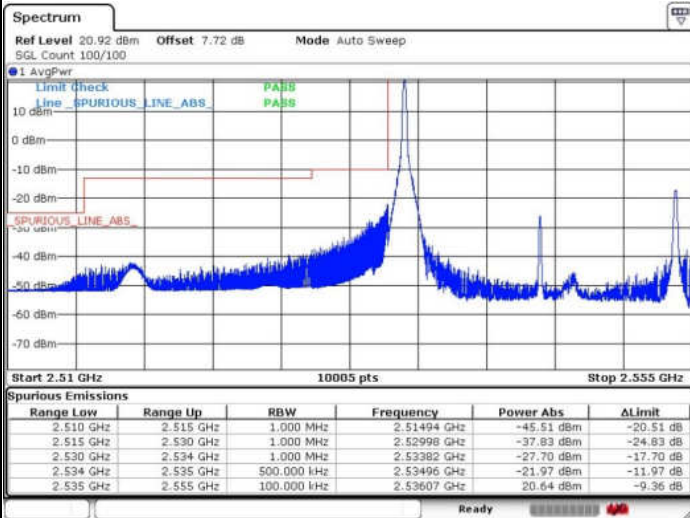
Date: 15 MAY 2018 11:22:02



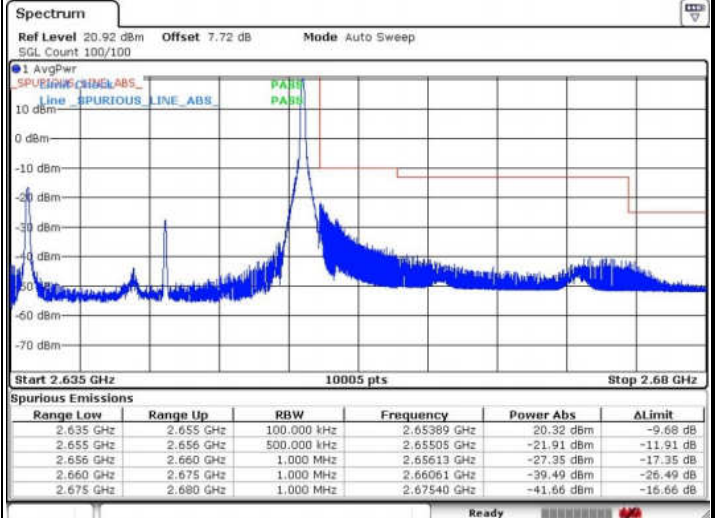
LTE Band 41 / 20MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



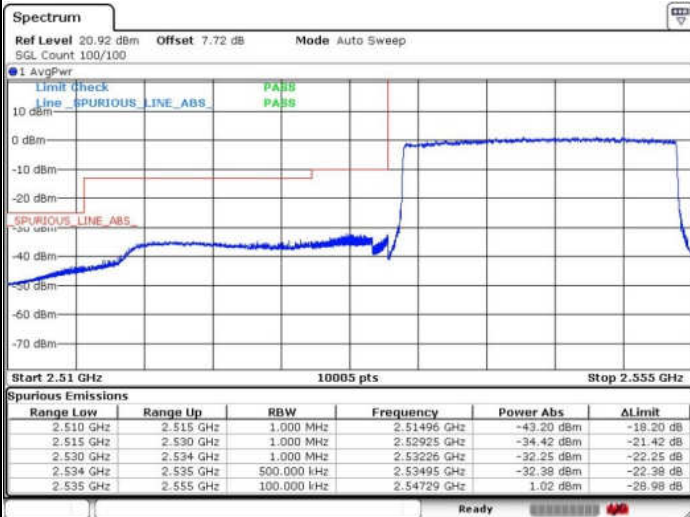
Date: 15 MAY 2018 11:27:21



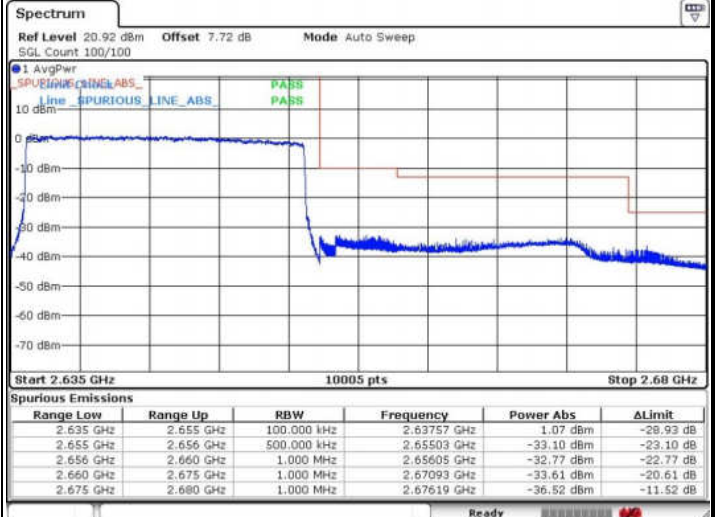
Date: 15 MAY 2018 11:32:03

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15 MAY 2018 11:26:38

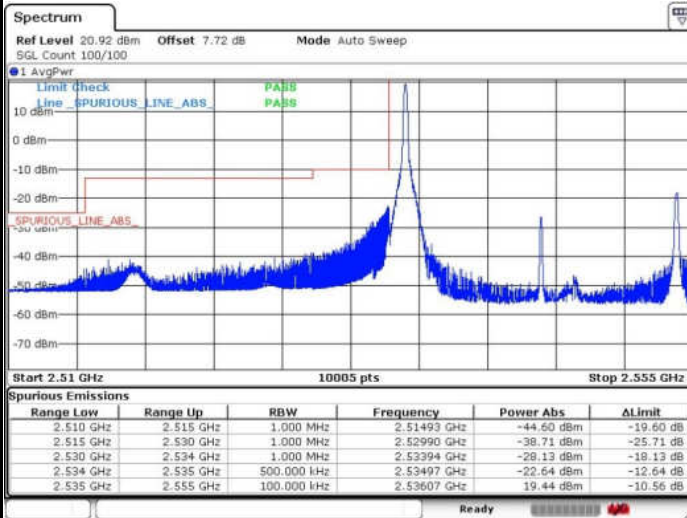


Date: 15 MAY 2018 11:33:04



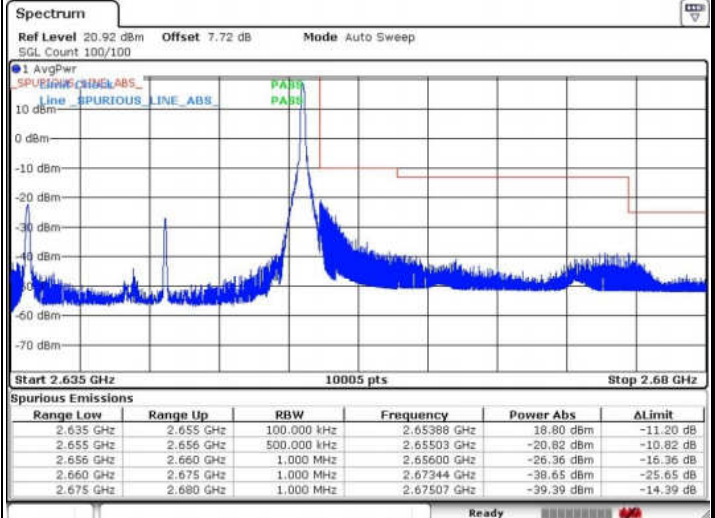
LTE Band 41 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



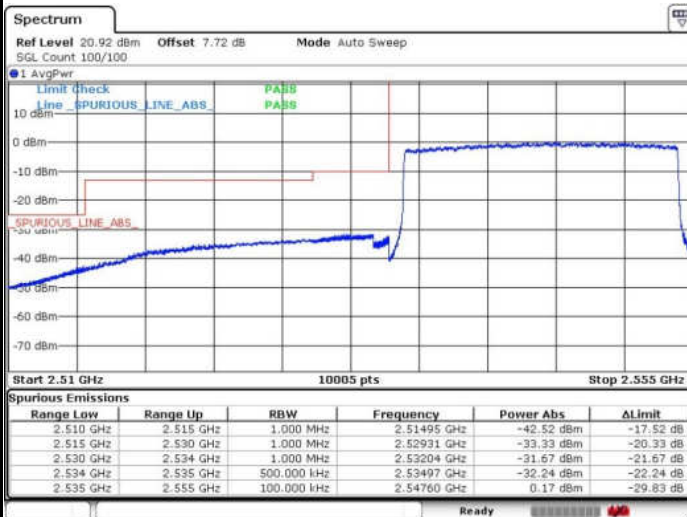
Date: 15 MAY 2018 11:28:18

Highest Band Edge / 1 RB



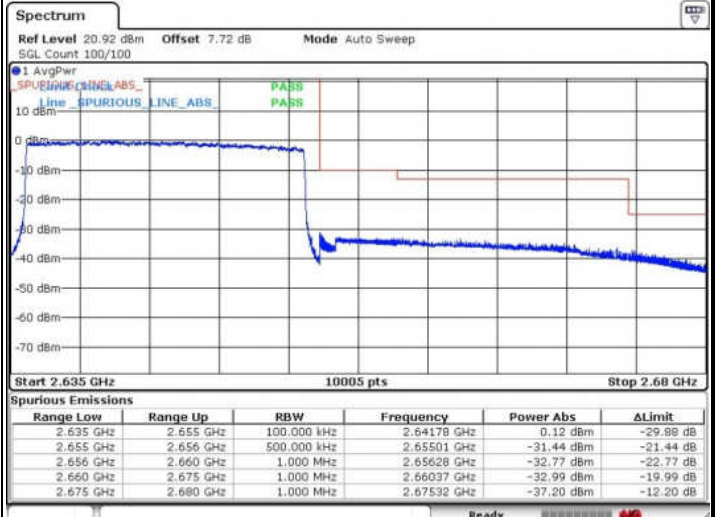
Date: 15 MAY 2018 11:30:51

Lowest Band Edge / Full RB



Date: 15 MAY 2018 11:25:44

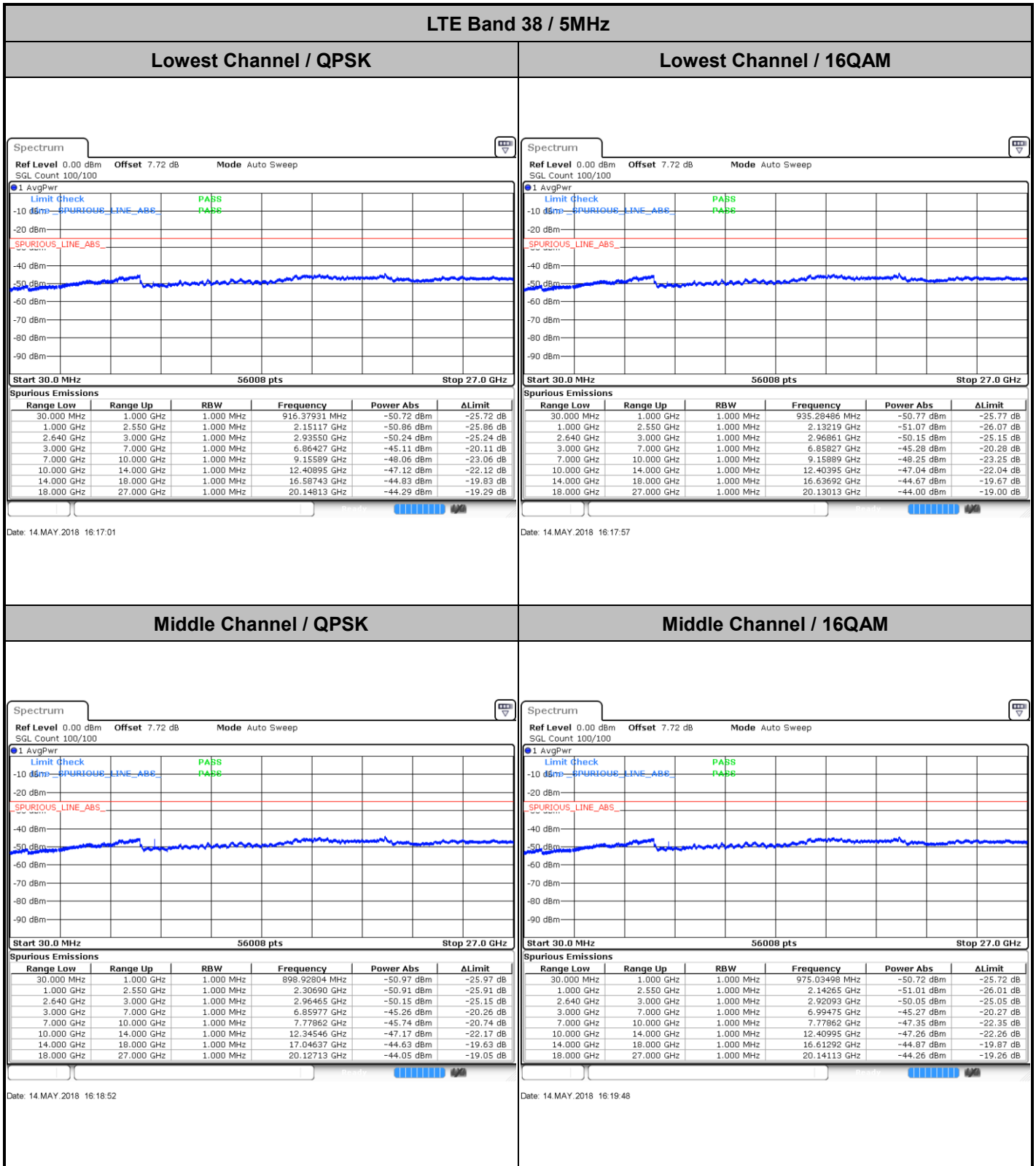
Highest Band Edge / Full RB



Date: 15 MAY 2018 11:33:52



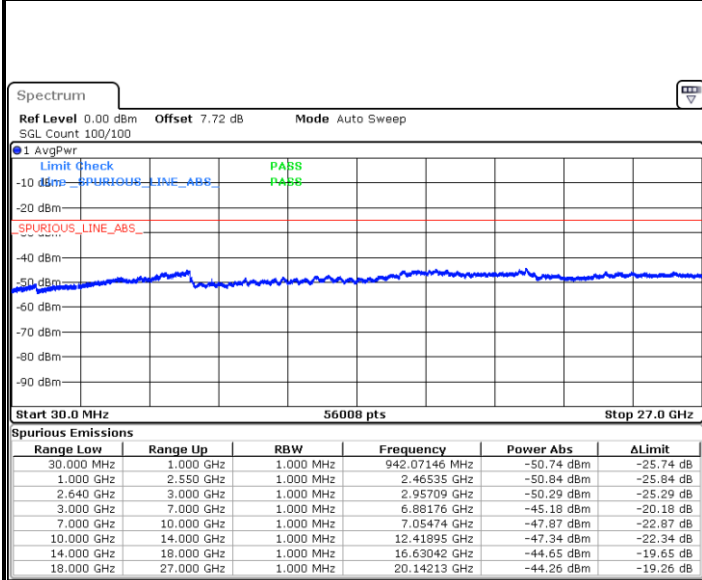
Conducted Spurious Emission





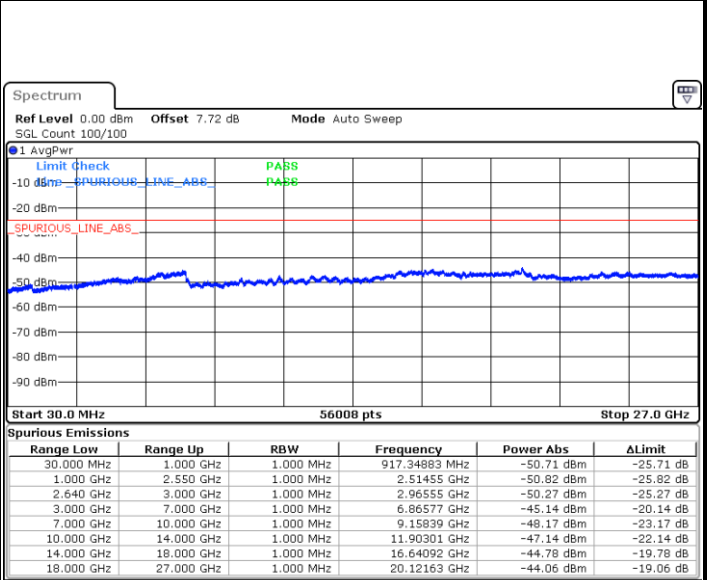
LTE Band 38 / 5MHz

Highest Channel / QPSK



Date: 14.MAY.2018 16:20:43

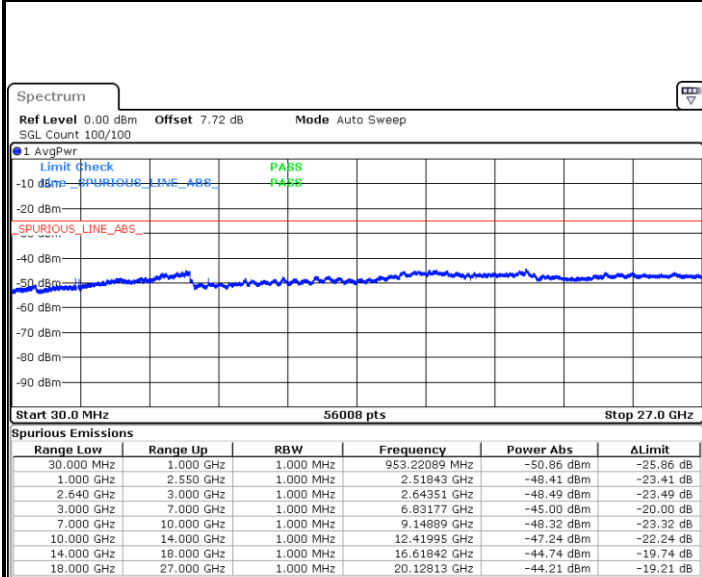
Highest Channel / 16QAM



Date: 14.MAY.2018 16:21:39

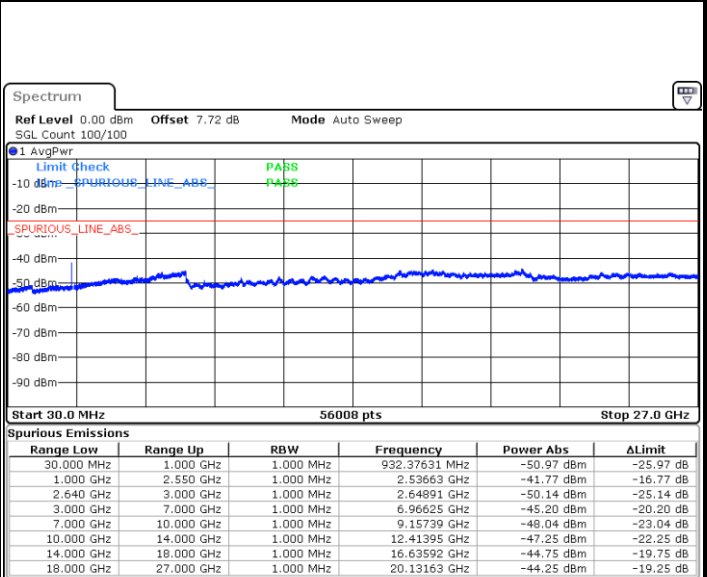
LTE Band 38 / 10MHz

Lowest Channel / QPSK



Date: 14.MAY.2018 16:22:34

Lowest Channel / 16QAM



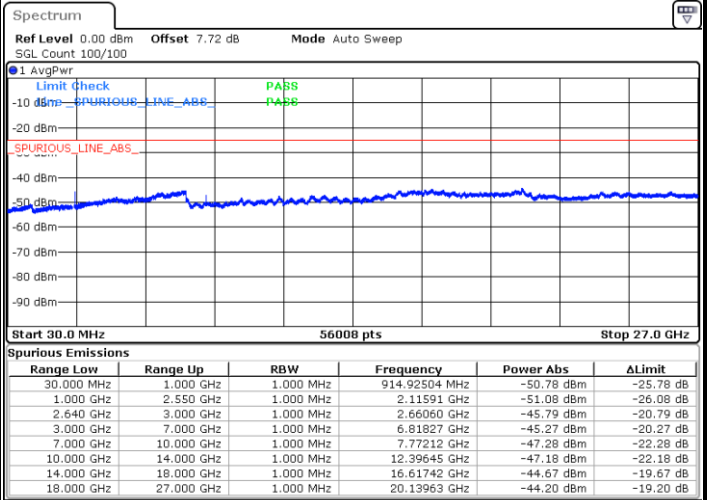
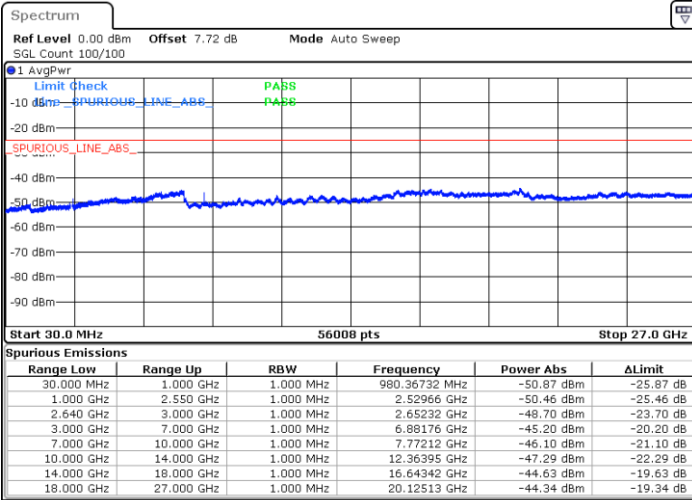
Date: 14.MAY.2018 16:23:30



LTE Band 38 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

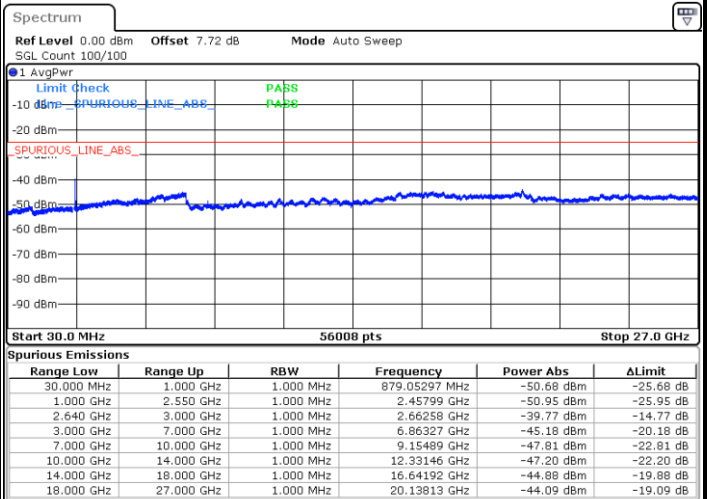
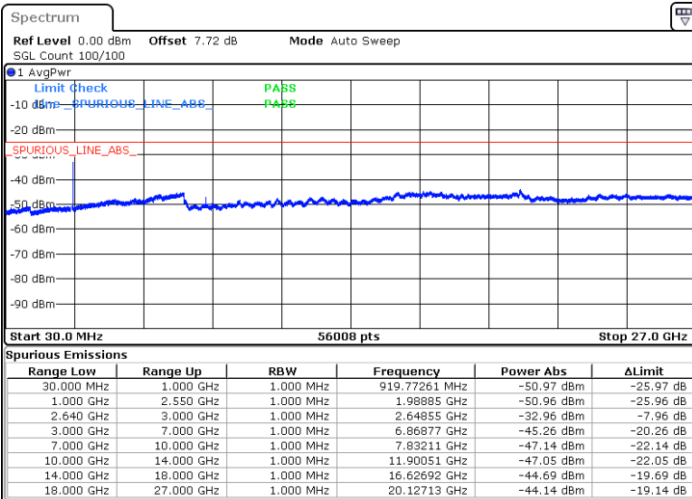


Date: 14.MAY.2018 16:24:26

Date: 14.MAY.2018 16:25:21

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 14.MAY.2018 16:26:17

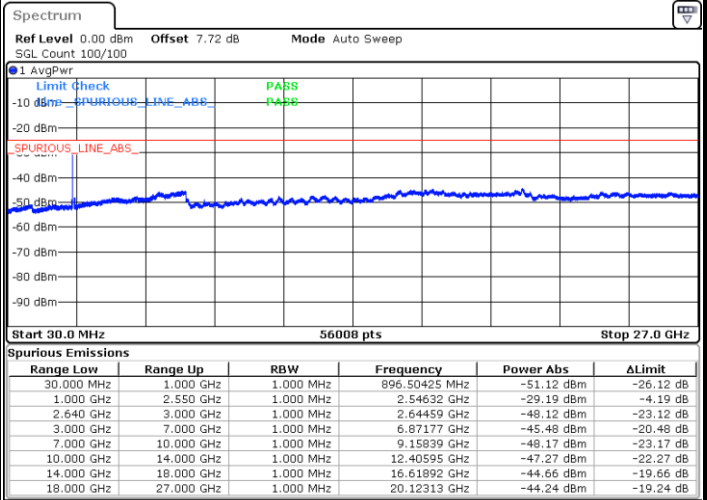
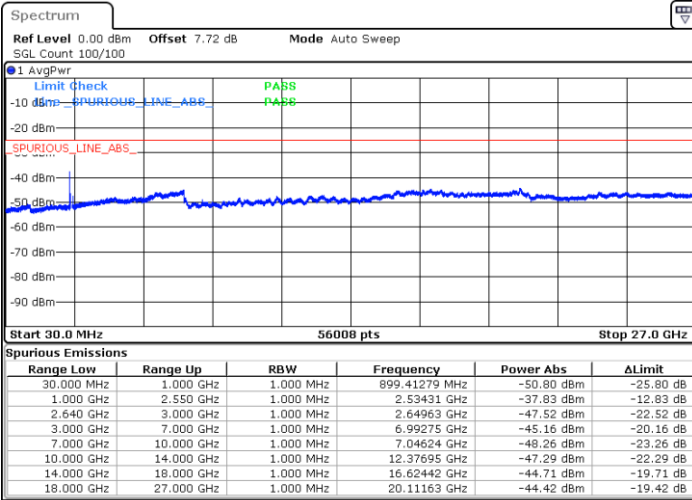
Date: 14.MAY.2018 16:27:12



LTE Band 38 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

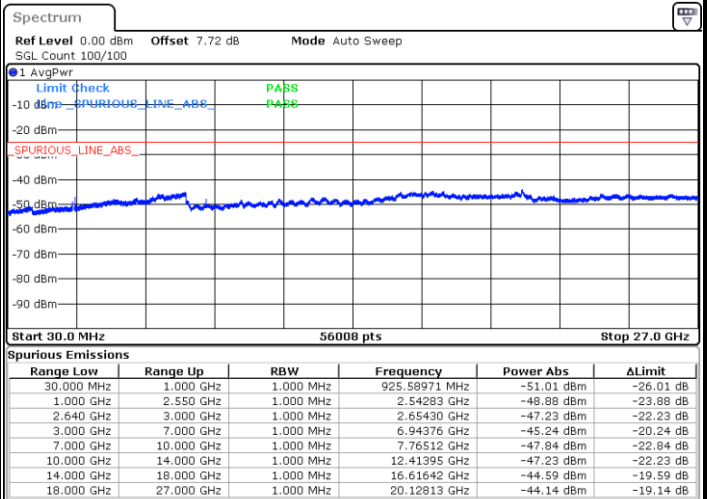
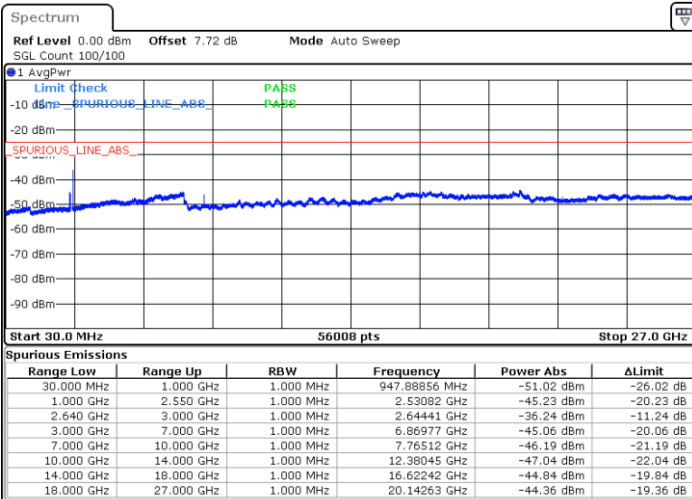


Date: 14.MAY.2018 16:28:08

Date: 14.MAY.2018 16:29:03

Middle Channel / QPSK

Middle Channel / 16QAM



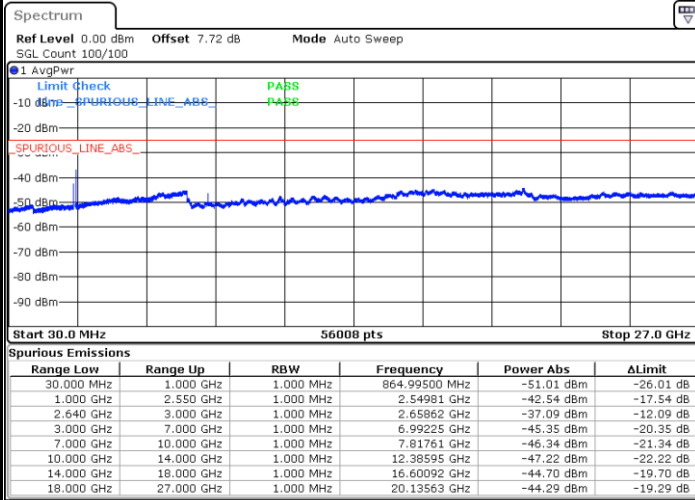
Date: 14.MAY.2018 16:29:59

Date: 14.MAY.2018 16:30:55



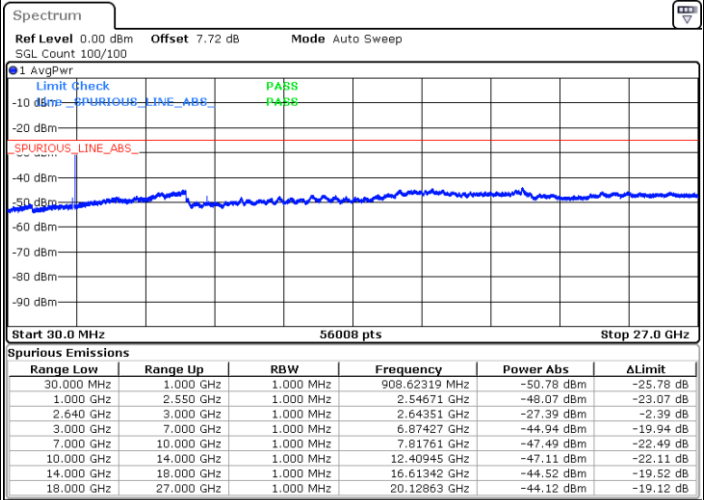
LTE Band 38 / 15MHz

Highest Channel / QPSK



Date: 14.MAY.2018 16:31:50

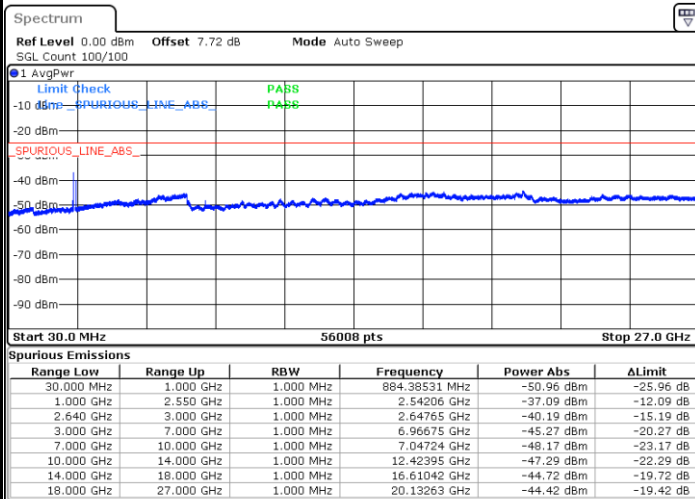
Highest Channel / 16QAM



Date: 15.MAY.2018 09:03:48

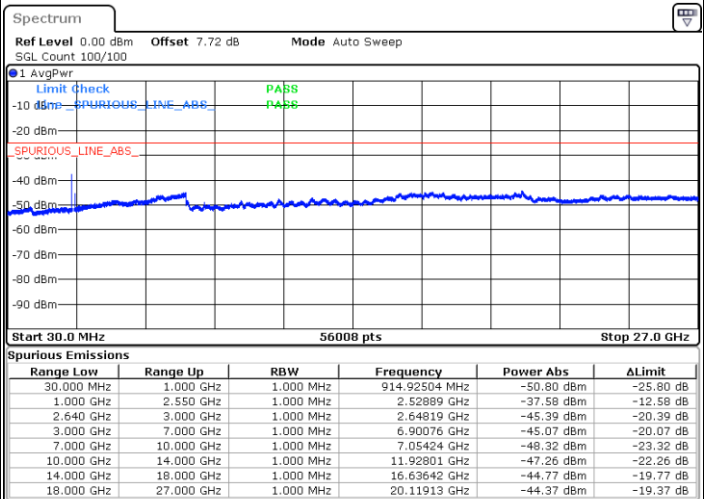
LTE Band 38 / 20MHz

Lowest Channel / QPSK



Date: 14.MAY.2018 16:40:53

Lowest Channel / 16QAM



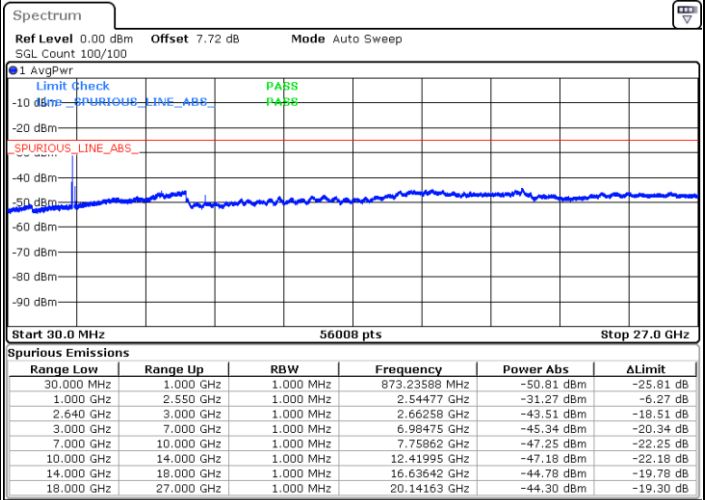
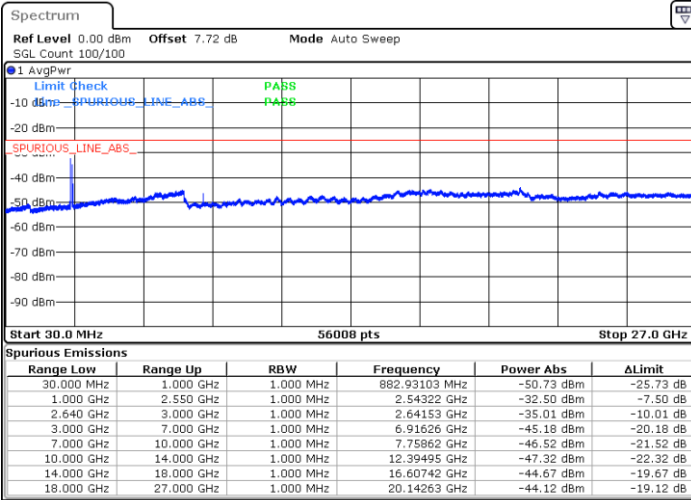
Date: 14.MAY.2018 16:41:48



LTE Band 38 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

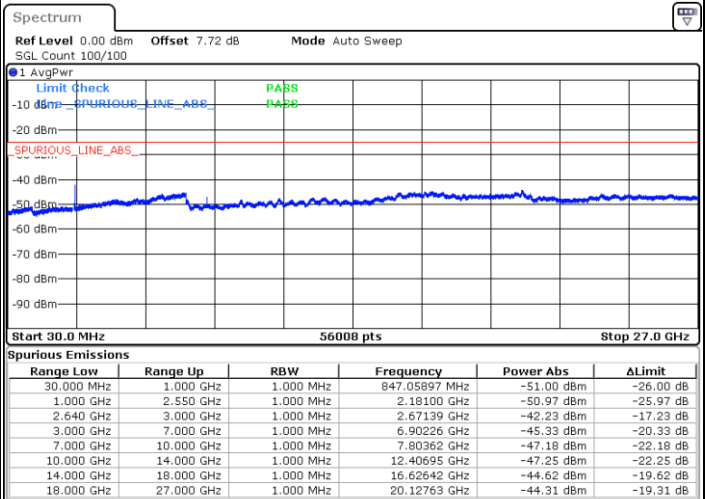
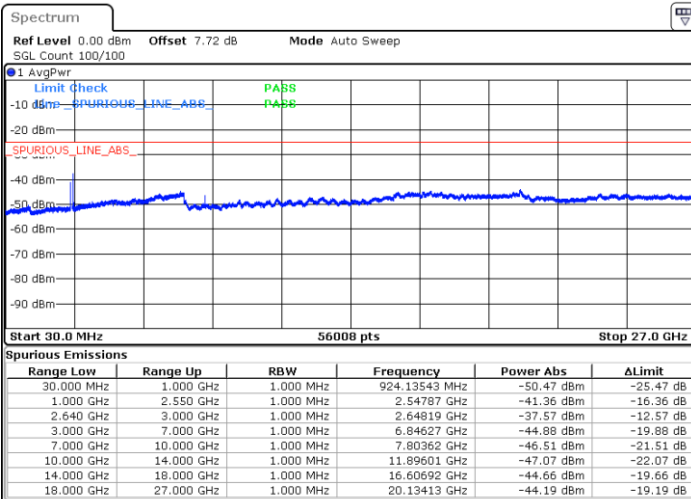


Date: 14.MAY.2018 16:42:44

Date: 14.MAY.2018 16:43:39

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 15.MAY.2018 09:11:14

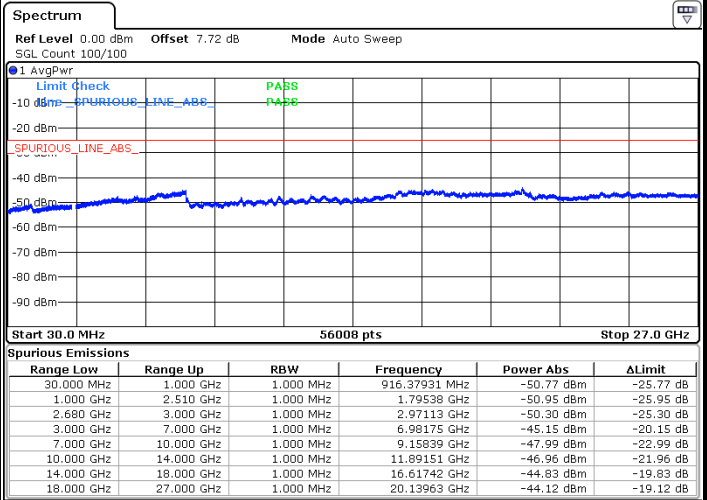
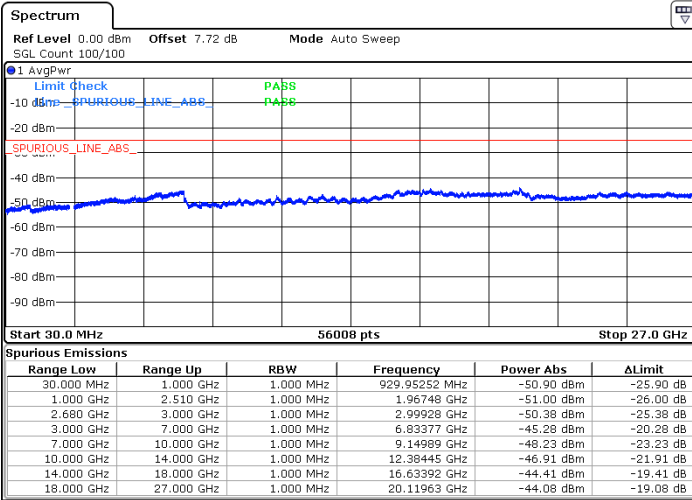
Date: 14.MAY.2018 16:47:01



LTE Band 41 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

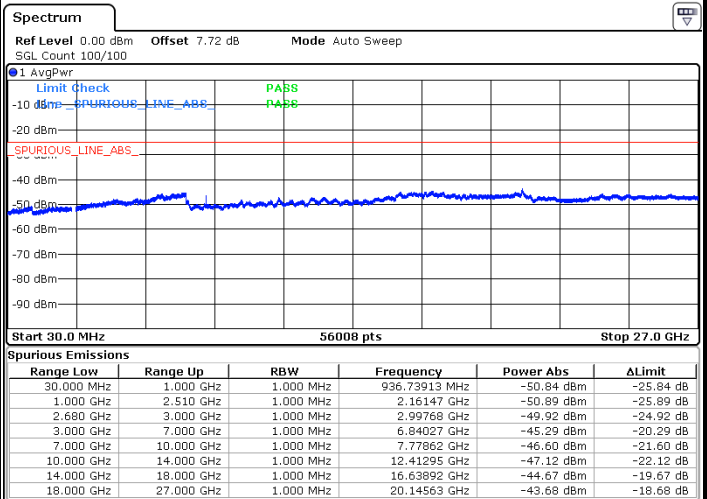
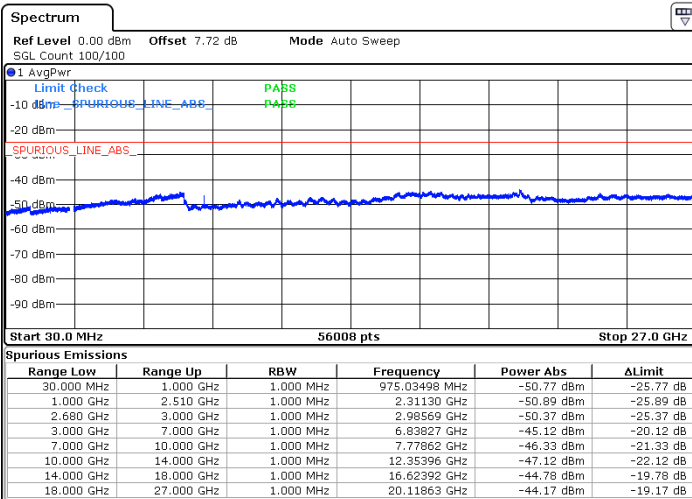


Date: 15 MAY 2018 11:40:09

Date: 15 MAY 2018 11:38:59

Middle Channel / QPSK

Middle Channel / 16QAM



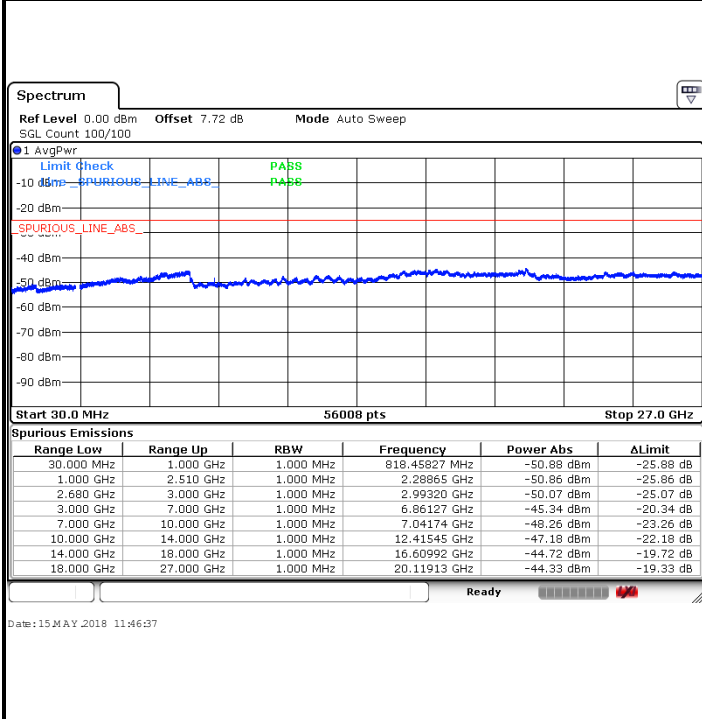
Date: 15 MAY 2018 11:41:01

Date: 15 MAY 2018 11:42:01

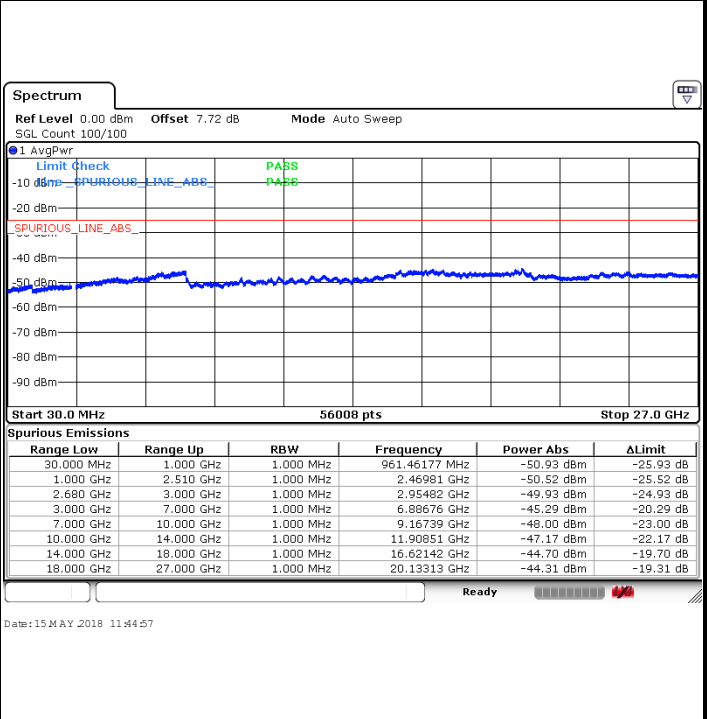


LTE Band 41 / 5MHz

Highest Channel / QPSK

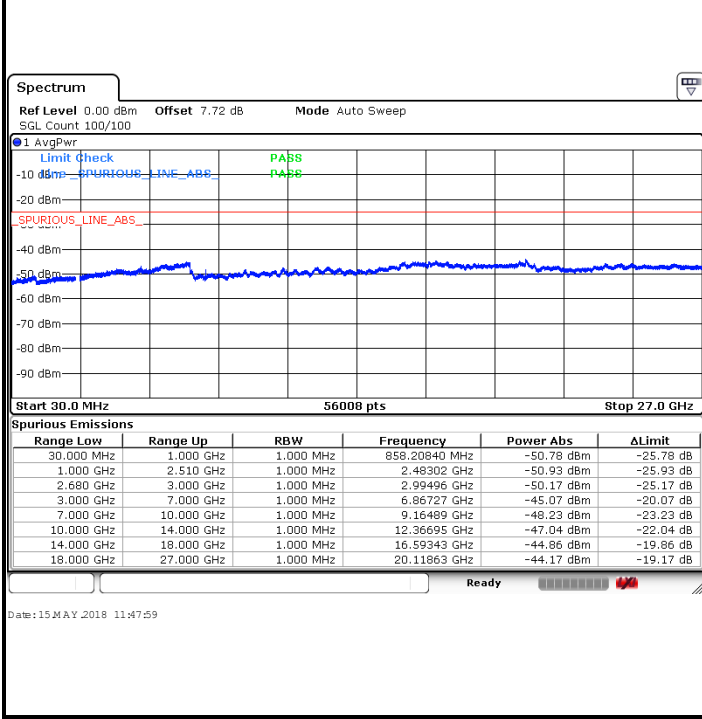


Highest Channel / 16QAM

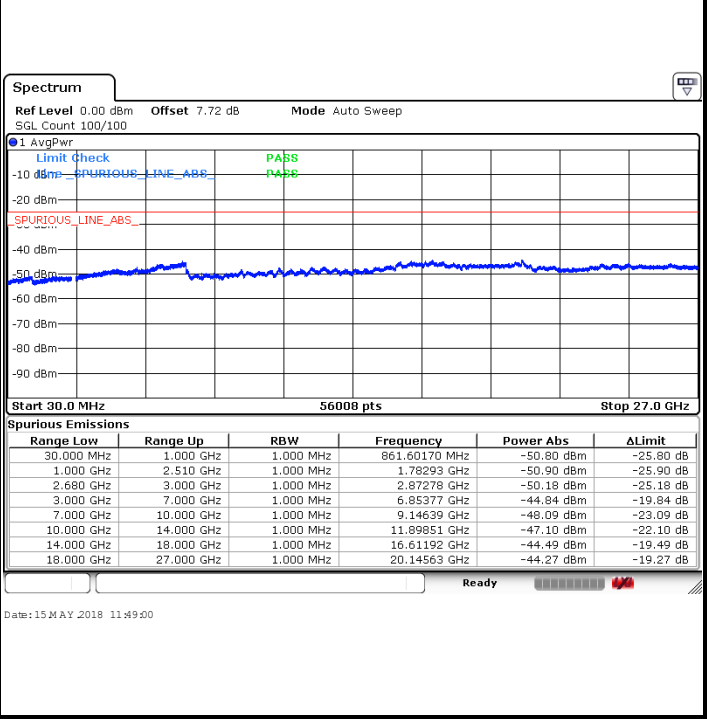


LTE Band 41 / 10MHz

Lowest Channel / QPSK



Lowest Channel / 16QAM

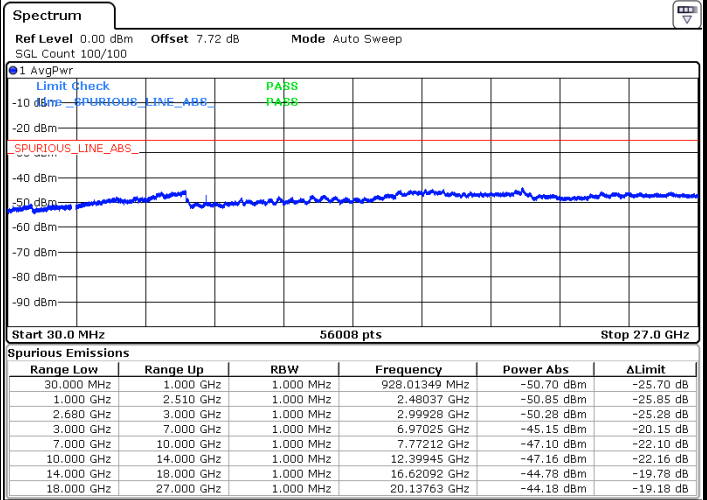
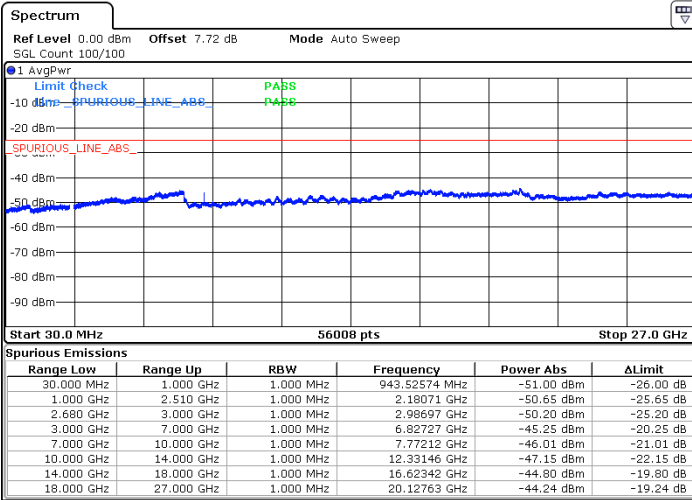




LTE Band 41 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

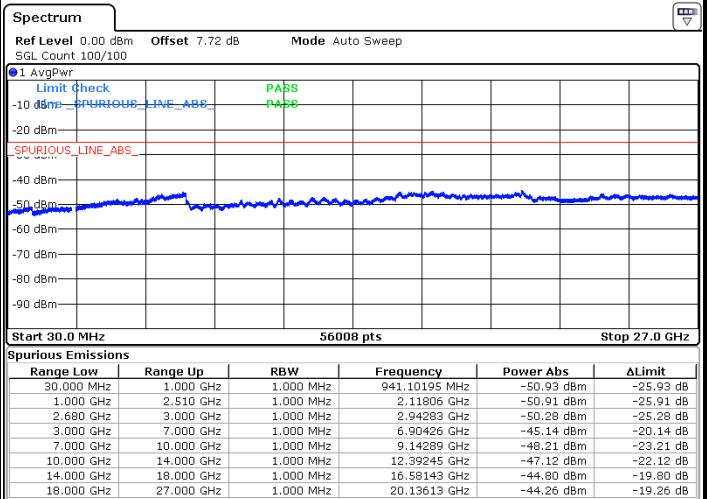
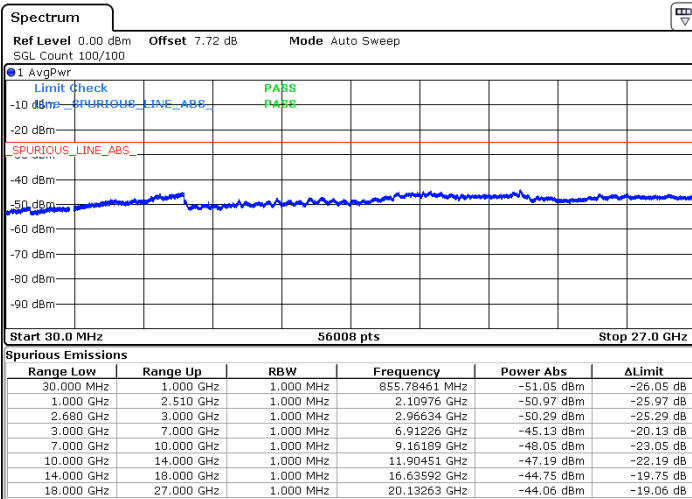


Date: 15 MAY 2018 11:52:59

Date: 15 MAY 2018 11:50:40

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 15 MAY 2018 11:54:41

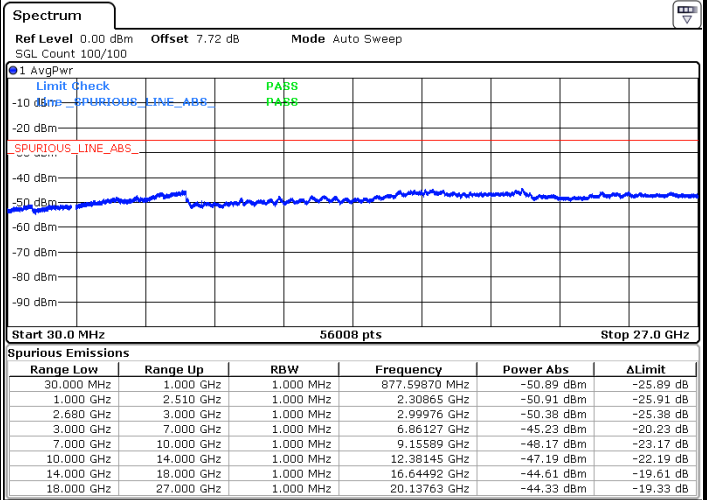
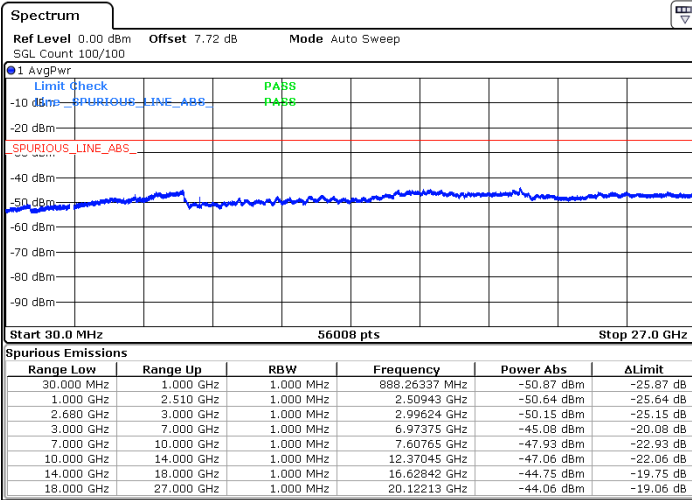
Date: 15 MAY 2018 11:56:14



LTE Band 41 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

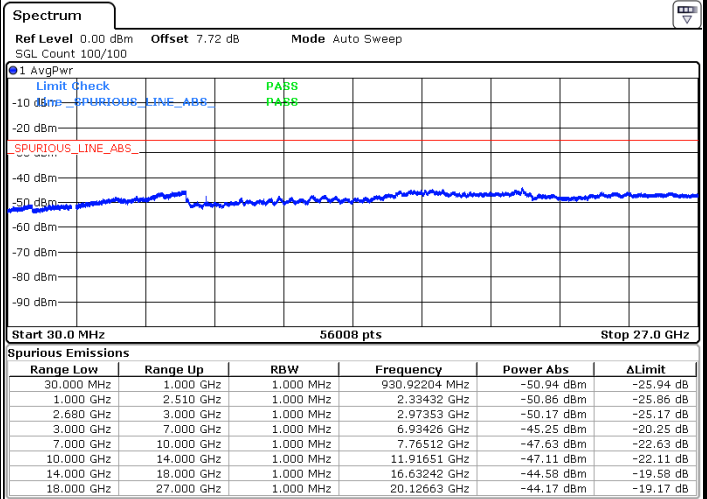
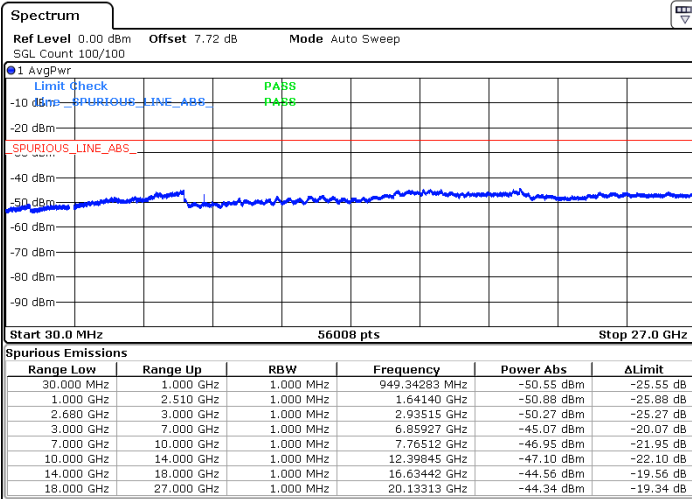


Date: 15 MAY 2018 11:58:47

Date: 15 MAY 2018 11:57:35

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 15 MAY 2018 11:59:42

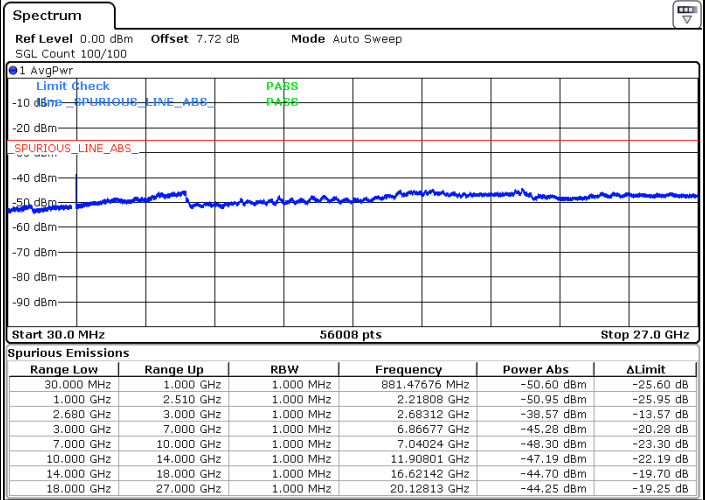
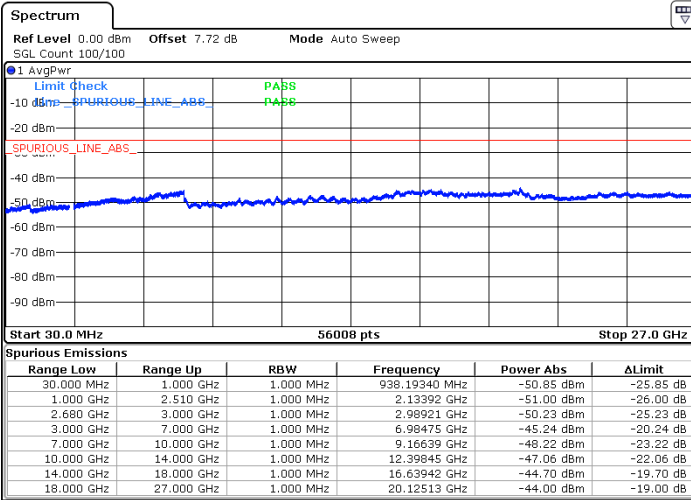
Date: 15 MAY 2018 12:00:36



LTE Band 41 / 15MHz

Highest Channel / QPSK

Highest Channel / 16QAM



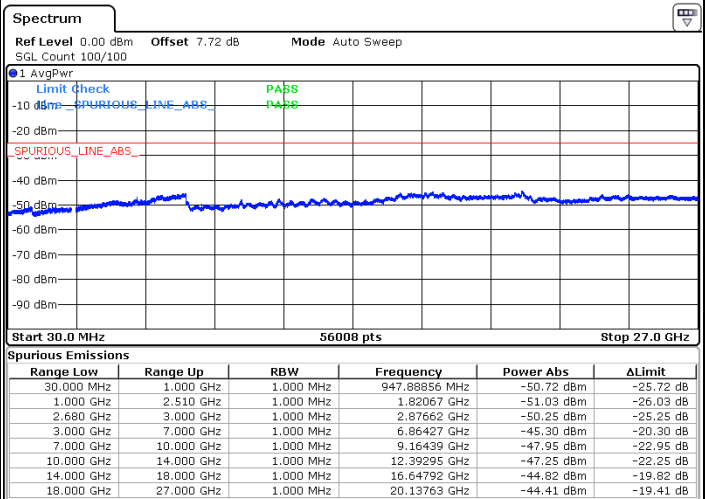
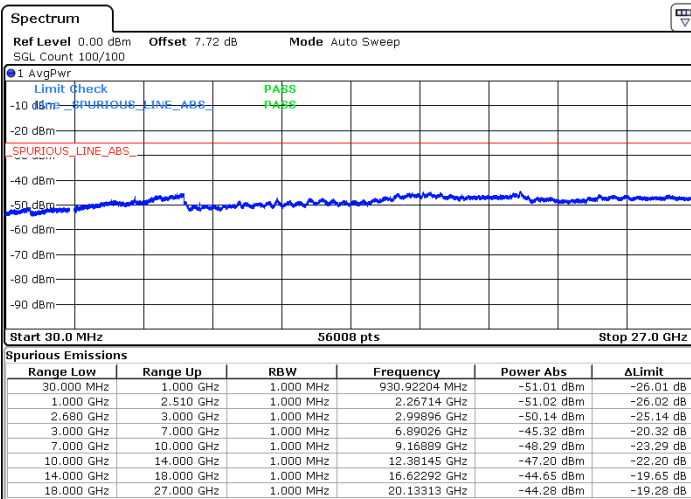
Date: 15 MAY 2018 12:02:49

Date: 15 MAY 2018 12:01:34

LTE Band 41 / 20MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 15 MAY 2018 13:50:56

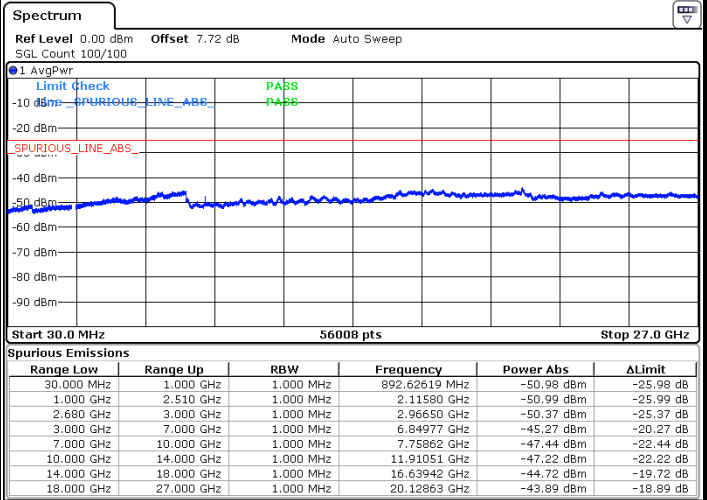
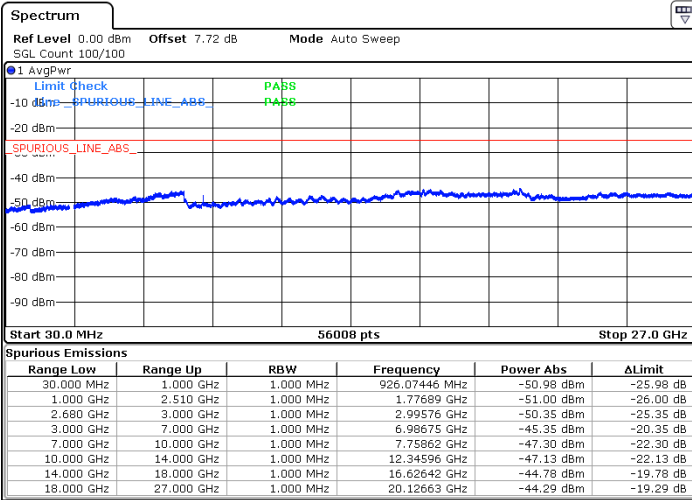
Date: 15 MAY 2018 13:52:13



LTE Band 41 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

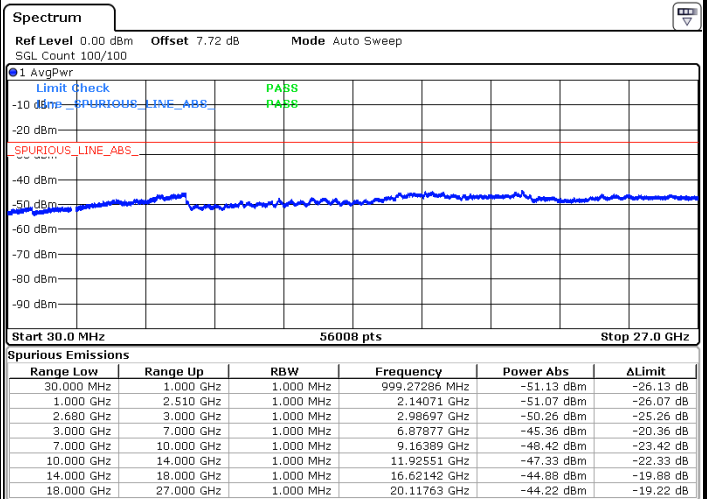
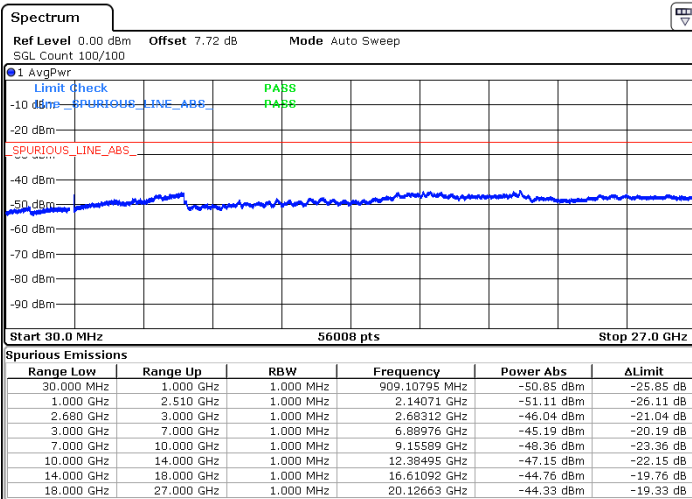


Date: 15 MAY 2018 13:55:11

Date: 15 MAY 2018 13:53:57

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 15 MAY 2018 13:56:08

Date: 15 MAY 2018 13:57:16



Frequency Stability

| Test Conditions | | LTE Band 38 (QPSK) / Middle Channel | Limit |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0007 | PASS |
| 40 | Normal Voltage | 0.0001 | |
| 30 | Normal Voltage | 0.0014 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0016 | |
| 0 | Normal Voltage | 0.0017 | |
| -10 | Normal Voltage | 0.0014 | |
| -20 | Normal Voltage | 0.0002 | |
| -30 | Normal Voltage | 0.0018 | |
| 20 | Maximum Voltage | 0.0014 | |
| 20 | Normal Voltage | 0.0017 | |
| 20 | Battery End Point | 0.0001 | |

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.1 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 | 0.0002 | PASS |
| 40 | Normal Voltage | 0.0009 | |
| 30 | Normal Voltage | 0.0022 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0006 | |
| 0 | Normal Voltage | 0.0020 | |
| -10 | Normal Voltage | 0.0015 | |
| -20 | Normal Voltage | 0.0007 | |
| -30 | Normal Voltage | 0.0020 | |
| 20 | Maximum Voltage | 0.0002 | |
| 20 | Normal Voltage | 0.0023 | |
| 20 | Battery End Point | 0.0021 | |

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.1V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

| 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 | -59.31 | -13 | -46.31 | -61.43 | 1.333 | 5.60 | H |
| | 2496 | -53.71 | -13 | -40.71 | -56.62 | 1.64 | 6.70 | H |
| | 3330 | -56.97 | -13 | -43.97 | -60.33 | 1.89 | 7.40 | H |
| | 1664 | -59.11 | -13 | -46.11 | -61.23 | 1.33 | 5.60 | V |
| | 2496 | -49.93 | -13 | -36.93 | -52.84 | 1.64 | 6.70 | V |
| | 3330 | -55.85 | -13 | -42.85 | -59.21 | 1.89 | 7.40 | 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 | -63.71 | -25 | -38.71 | -70.15 | 2.34 | 8.78 | H |
| | 7580 | -54.29 | -25 | -29.29 | -63.50 | 2.66 | 11.87 | H |
| | 10107 | -61.51 | -25 | -36.51 | -70.53 | 2.99 | 12.01 | H |
| | 5052 | -63.84 | -25 | -38.84 | -70.28 | 2.34 | 8.78 | V |
| | 7580 | -50.02 | -25 | -25.02 | -59.23 | 2.66 | 11.87 | V |
| | 10107 | -60.74 | -25 | -35.74 | -69.76 | 2.99 | 12.01 | V |

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



| LTE Band 38 / 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 | 5172 | -62.37 | -25 | -37.37 | -69.08 | 2.37 | 9.08 | H |
| | 7760 | -56.75 | -25 | -31.75 | -66.34 | 2.69 | 12.28 | H |
| | 10341 | -61.76 | -25 | -36.76 | -70.93 | 3.04 | 12.21 | H |
| | 5172 | -61.47 | -25 | -36.47 | -68.18 | 2.37 | 9.08 | V |
| | 7760 | -53.80 | -25 | -28.80 | -63.39 | 2.69 | 12.28 | V |
| | 10341 | -61.26 | -25 | -36.26 | -70.43 | 3.04 | 12.21 | 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 | 5172 | -63.31 | -25 | -38.31 | -70.02 | 2.37 | 9.08 | H |
| | 7756 | -61.15 | -25 | -36.15 | -70.74 | 2.69 | 12.28 | H |
| | 10341 | -60.77 | -25 | -35.77 | -69.94 | 3.04 | 12.21 | H |
| | 5172 | -63.40 | -25 | -38.40 | -70.11 | 2.37 | 9.08 | V |
| | 7756 | -58.84 | -25 | -33.84 | -68.43 | 2.69 | 12.28 | V |
| | 10341 | -60.39 | -25 | -35.39 | -69.56 | 3.04 | 12.21 | V |

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



Appendix D. Reference Report

Please refer to Sporton report number FG841203B which is issued separately.