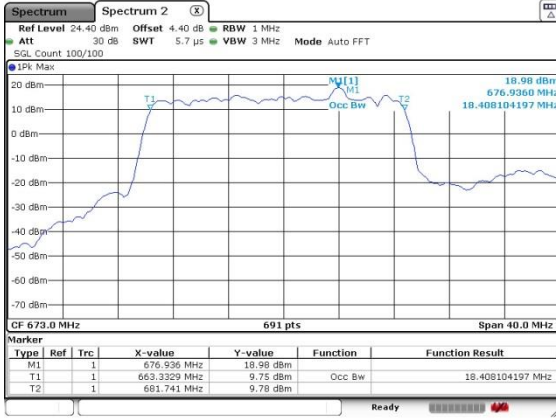




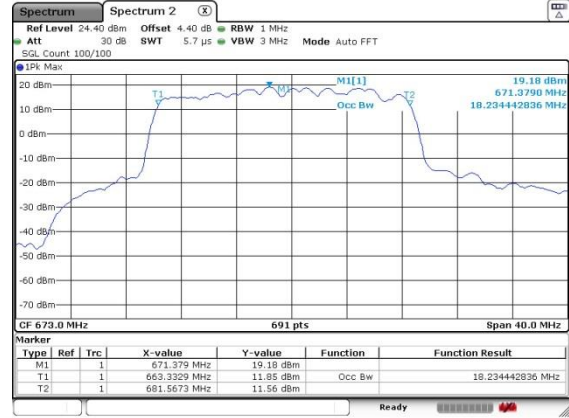
n71

20MHz

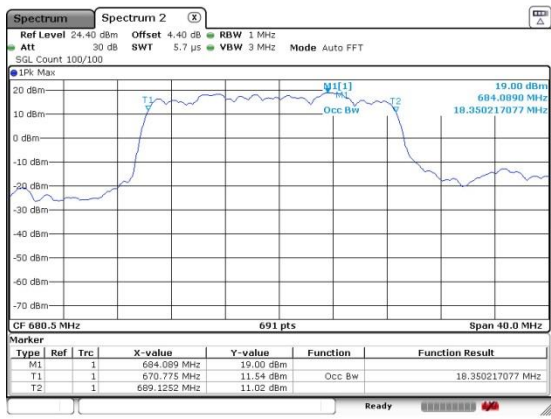
Lowest Channel / BPSK



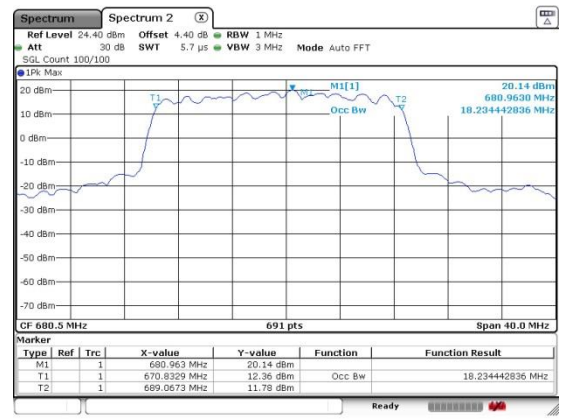
Lowest Channel / 16QAM



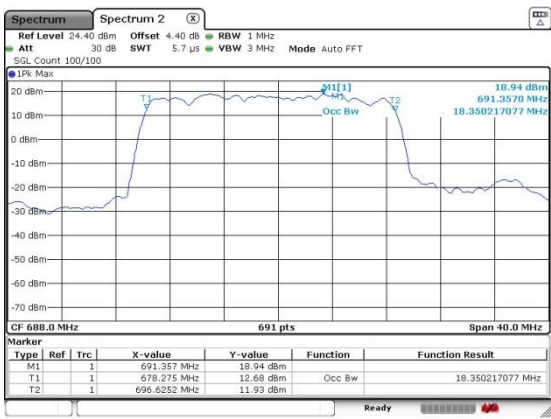
Middle Channel / BPSK



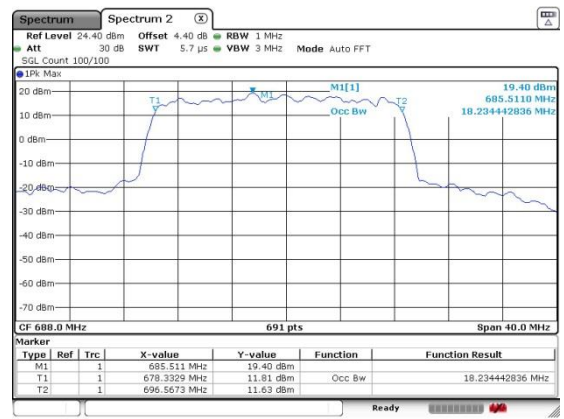
Middle Channel / 16QAM



Highest Channel / BPSK

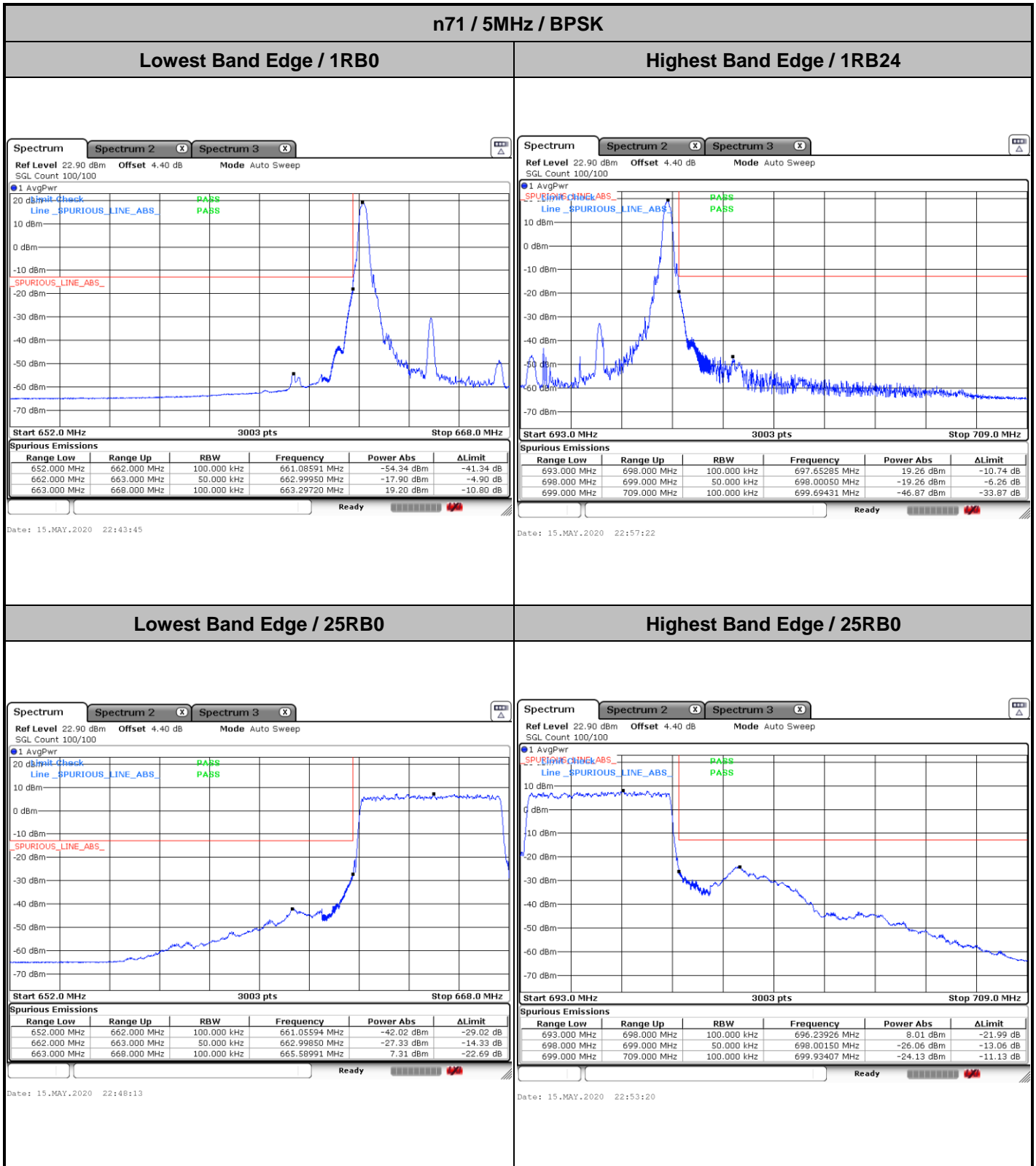


Highest Channel / 16QAM





A6.4. Conducted Band Edge

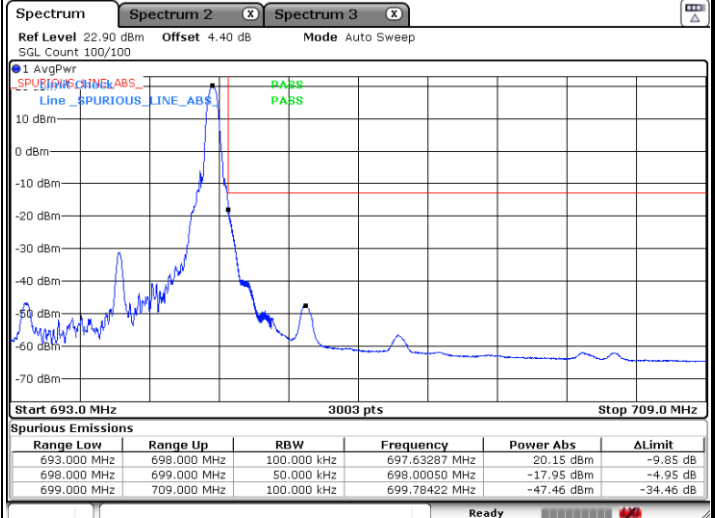
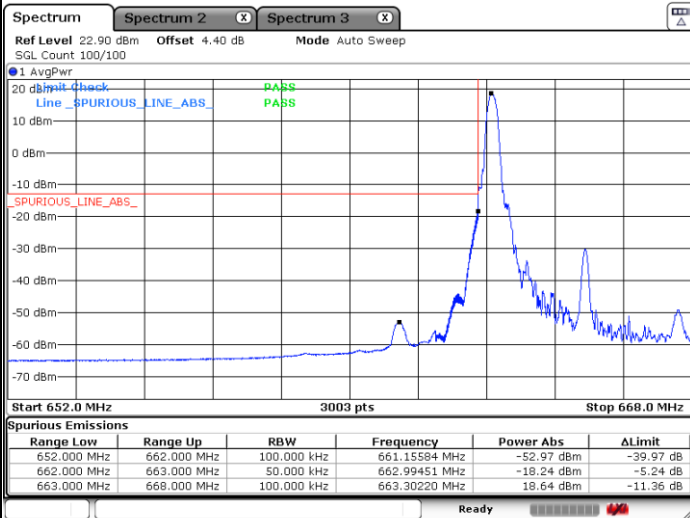




n71 / 5MHz / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RB24

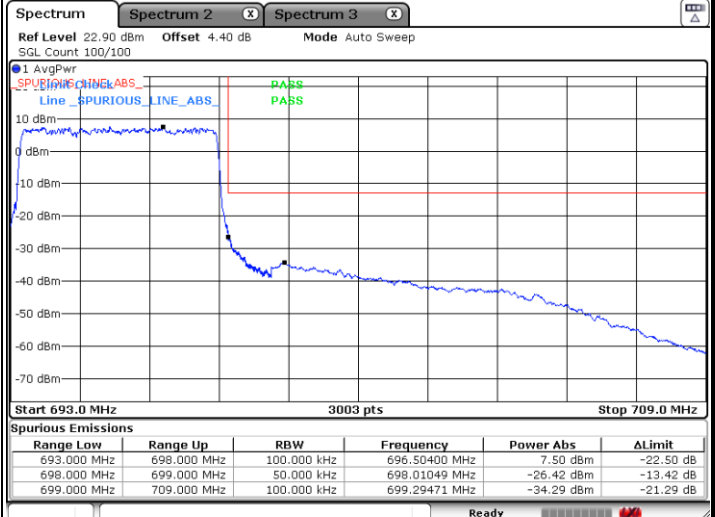
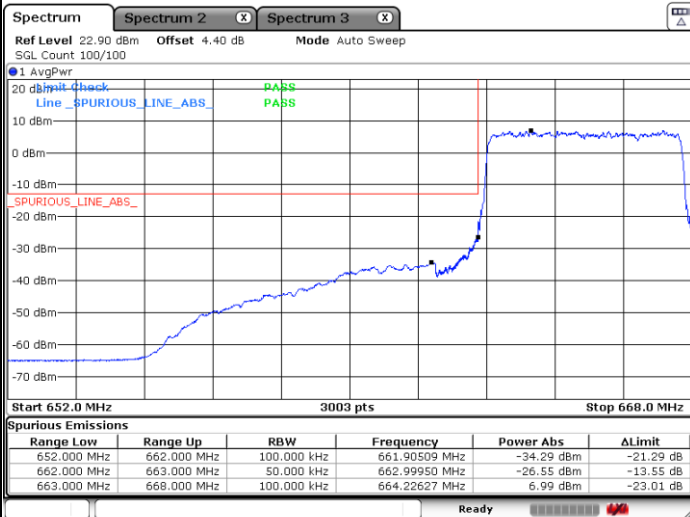


Date: 15.MAY.2020 22:45:34

Date: 15.MAY.2020 22:59:44

Lowest Band Edge / 25RB0

Highest Band Edge / 25RB0



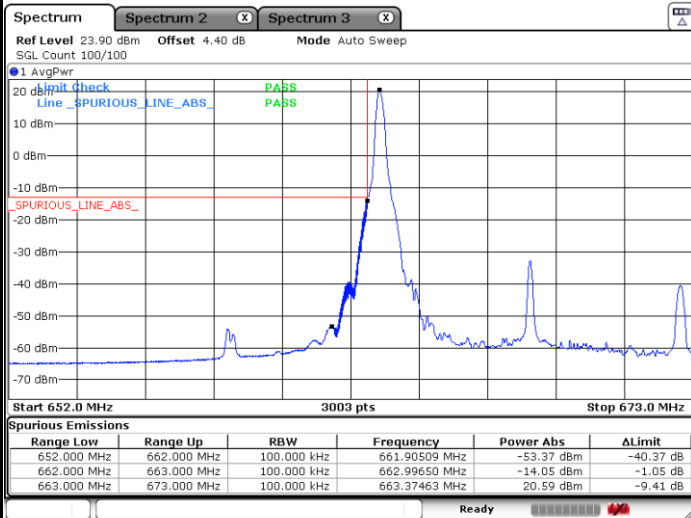
Date: 15.MAY.2020 22:50:19

Date: 15.MAY.2020 22:55:04

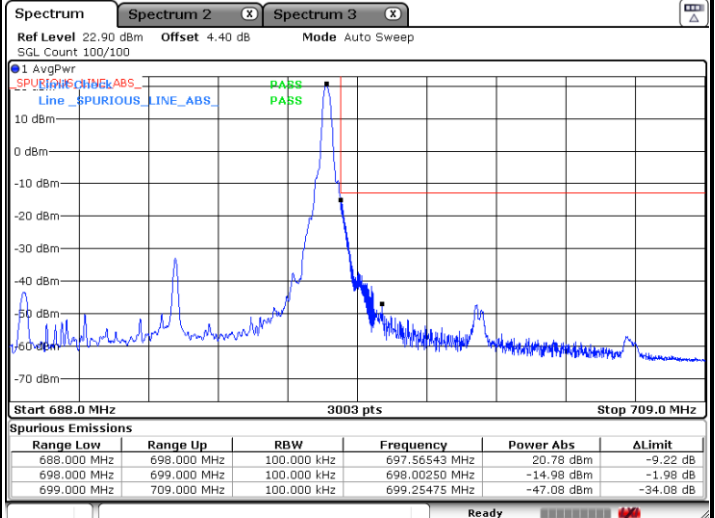


n71 / 10MHz / BPSK

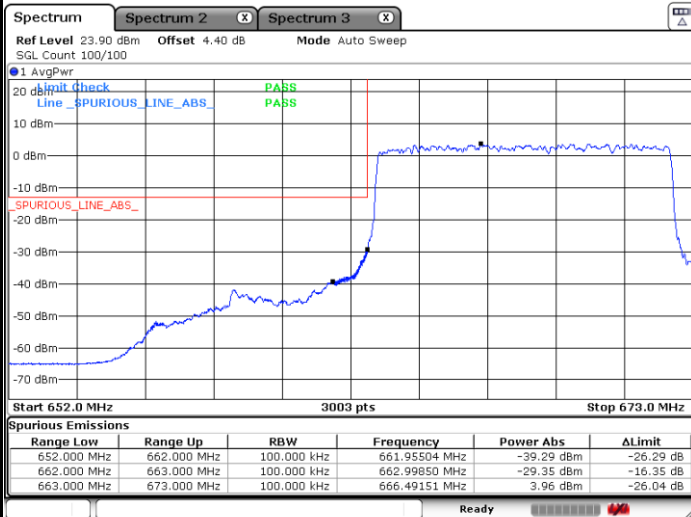
Lowest Band Edge / 1RB0



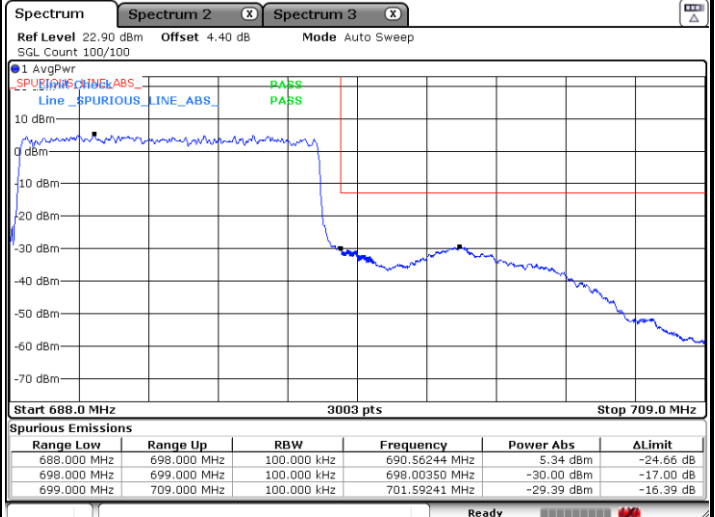
Highest Band Edge / 1RB51



Lowest Band Edge / 50RB0



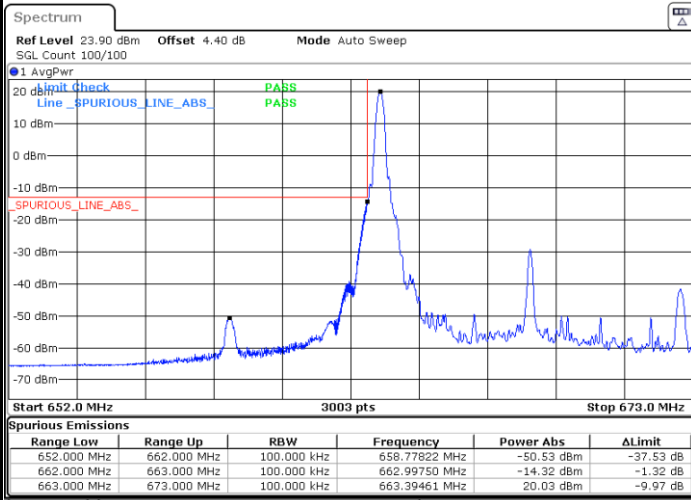
Highest Band Edge / 50RB0





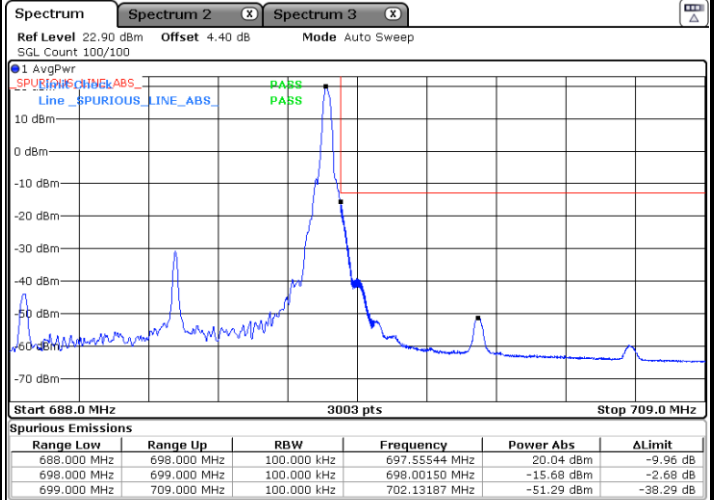
n71 / 10MHz / 16QAM

Lowest Band Edge / 1RB0



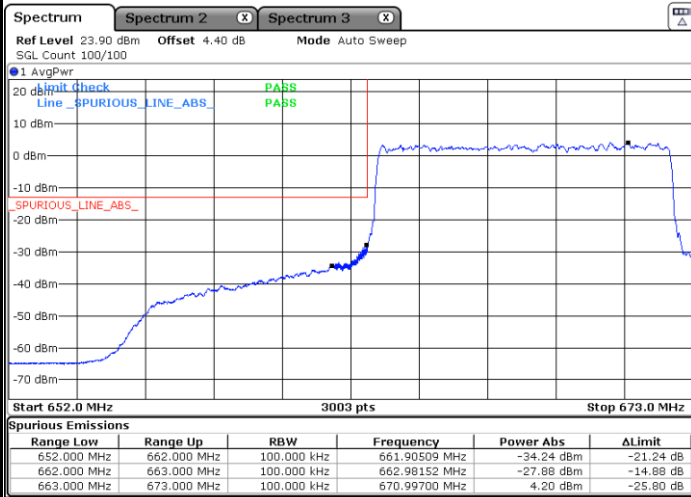
Date: 19.MAY.2020 17:11:41

Highest Band Edge / 1RB51



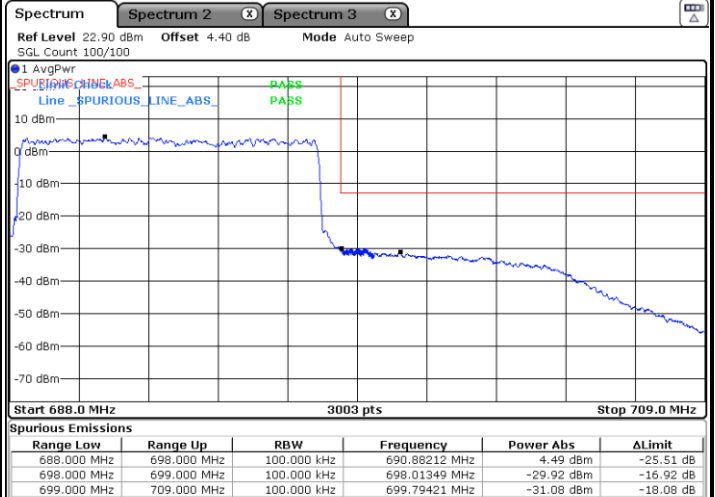
Date: 15.MAY.2020 23:44:05

Lowest Band Edge / 50RB0



Date: 15.MAY.2020 23:29:04

Highest Band Edge / 50RB0



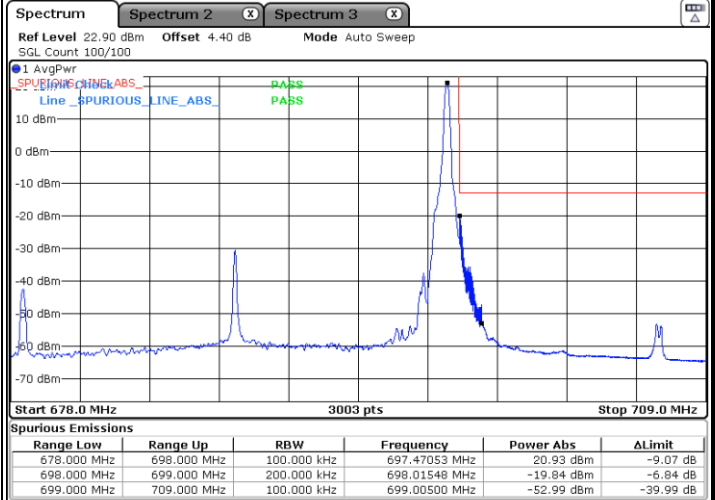
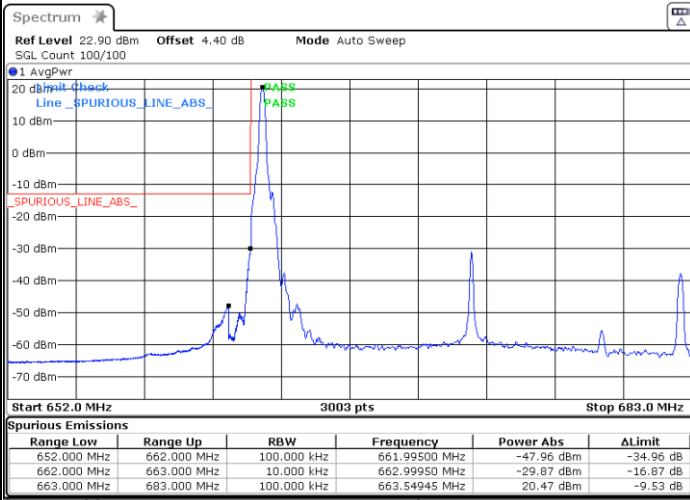
Date: 15.MAY.2020 23:38:34



n71 / 20MHz / BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RB105

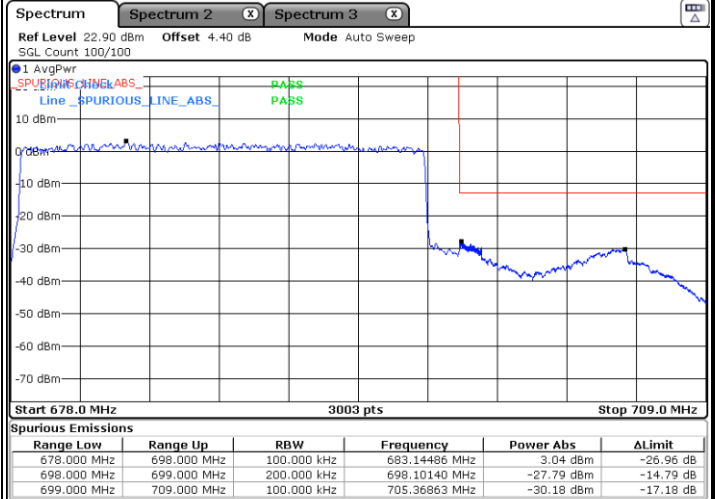
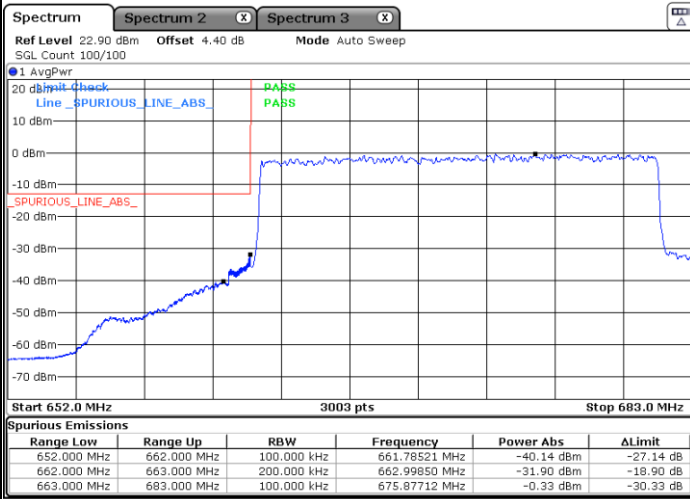


Date: 19.MAY.2020 17:03:31

Date: 15.MAY.2020 21:59:59

Lowest Band Edge / 100RB0

Highest Band Edge / 100RB0



Date: 15.MAY.2020 21:50:53

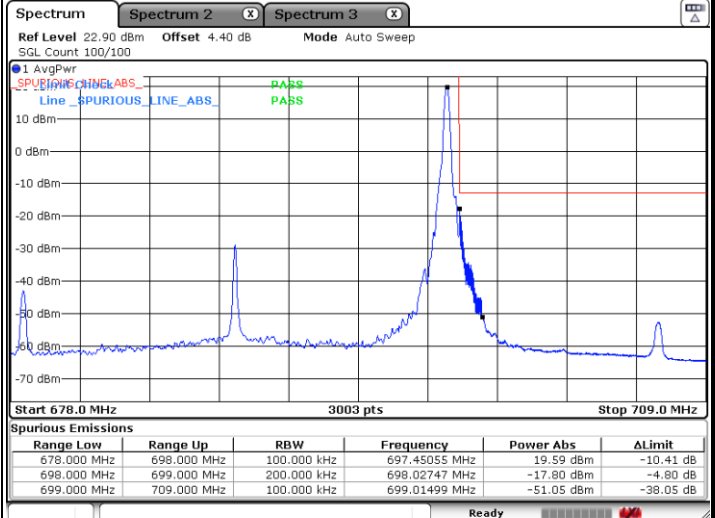
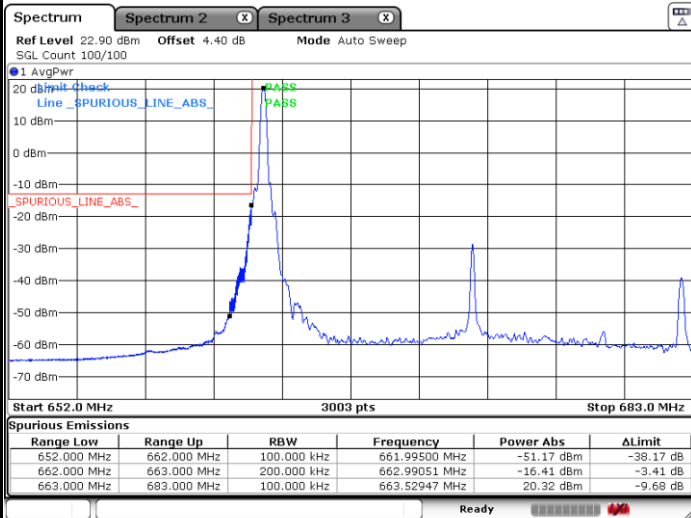
Date: 15.MAY.2020 22:07:16



n71 / 20MHz / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RB105

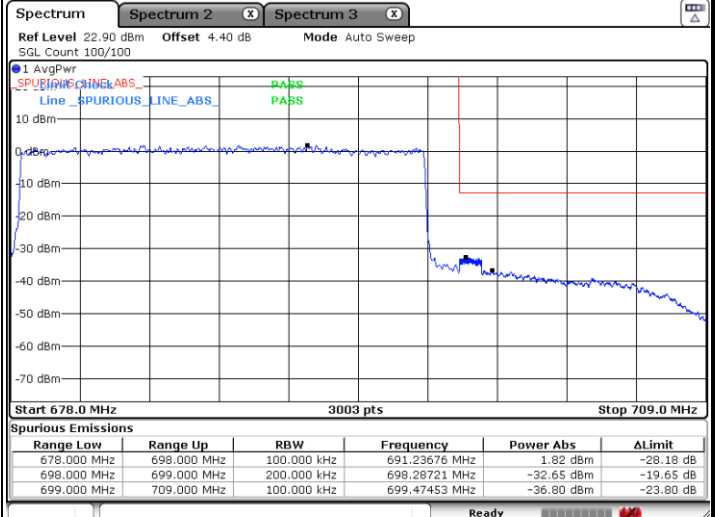
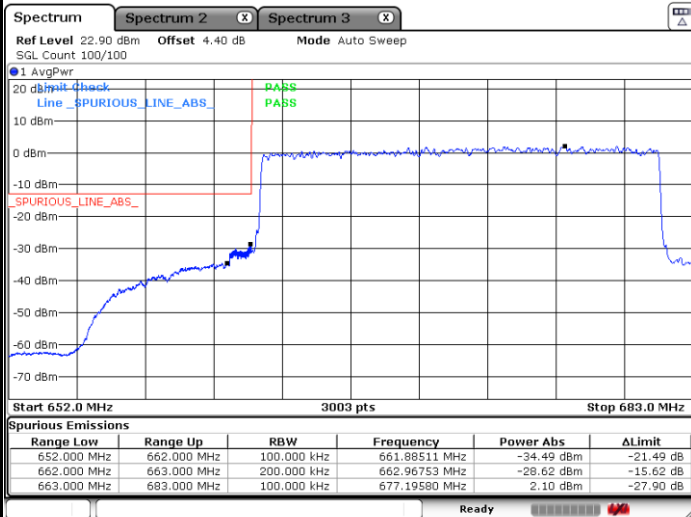


Date: 15.MAY.2020 21:56:52

Date: 15.MAY.2020 22:02:20

Lowest Band Edge / 100RB0

Highest Band Edge / 100RB0

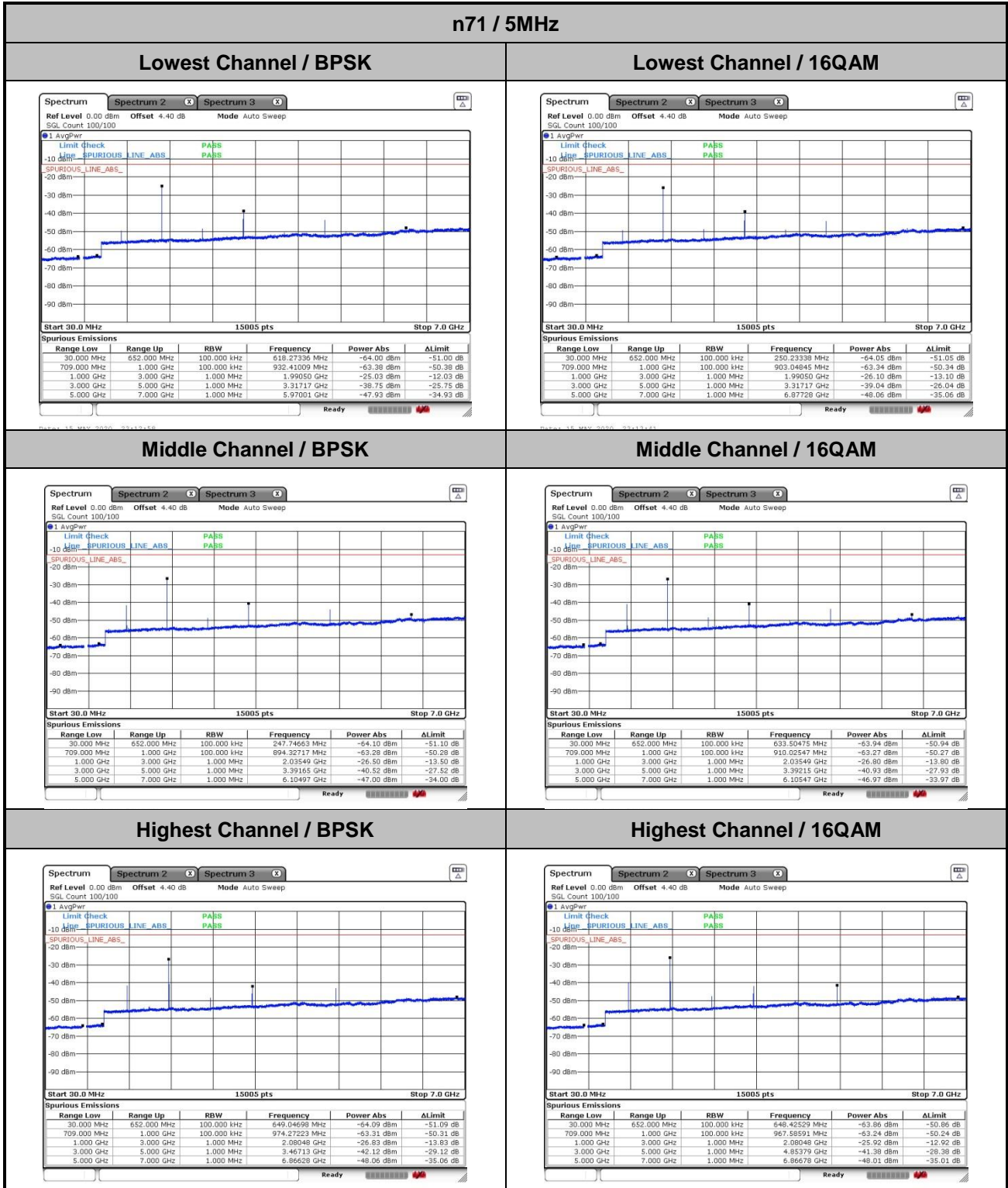


Date: 15.MAY.2020 21:52:43

Date: 15.MAY.2020 22:10:22



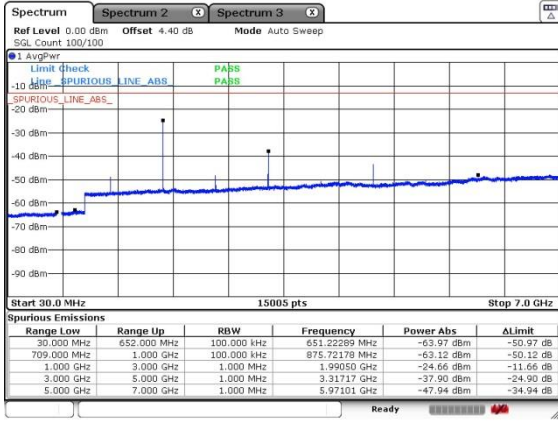
A6.5. Conducted Spurious Emission



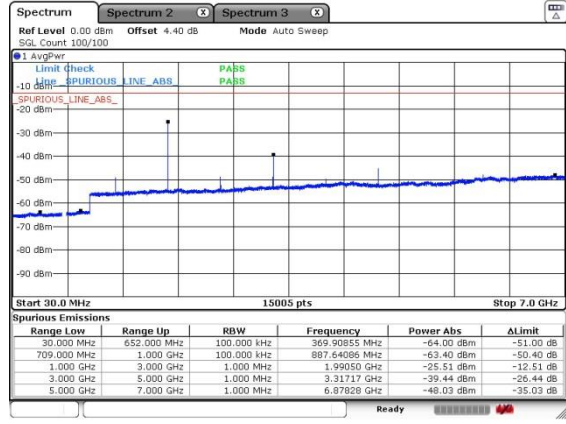


n71A / 10MHz

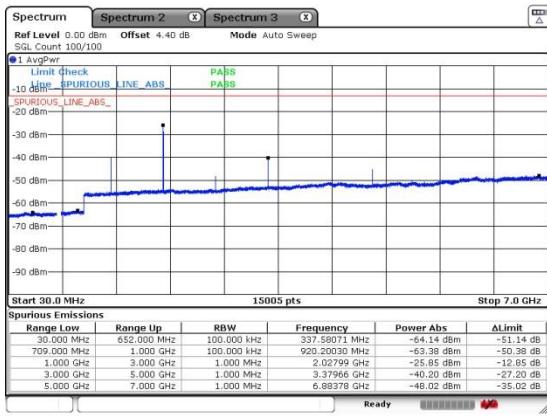
Lowest Channel / BPSK



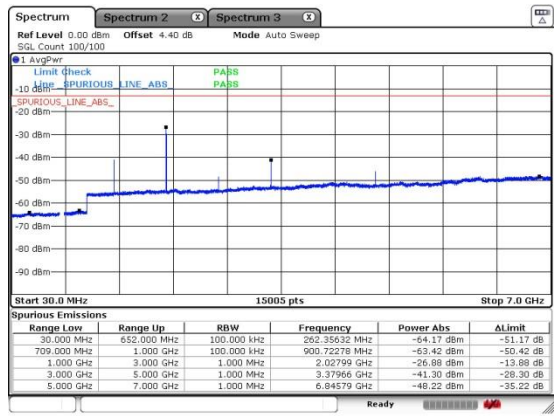
Lowest Channel / 16QAM



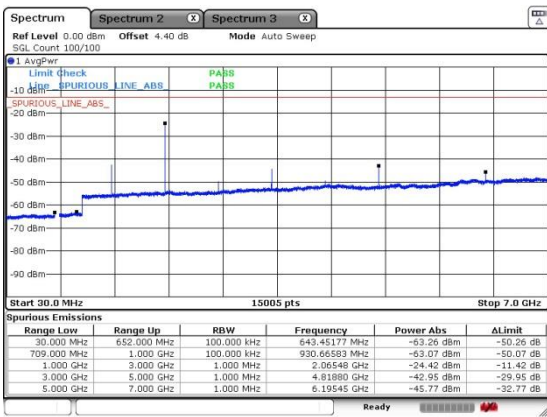
Middle Channel / BPSK



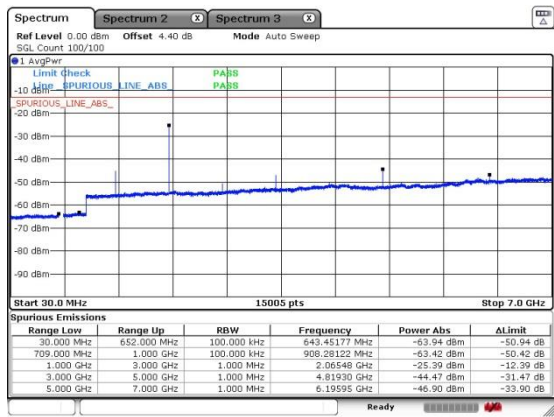
Middle Channel / 16QAM



Highest Channel / BPSK



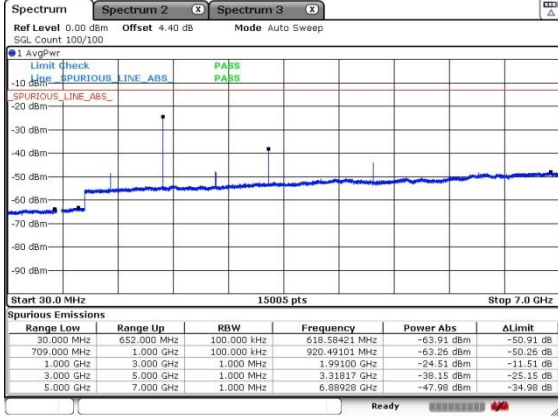
Highest Channel / 16QAM



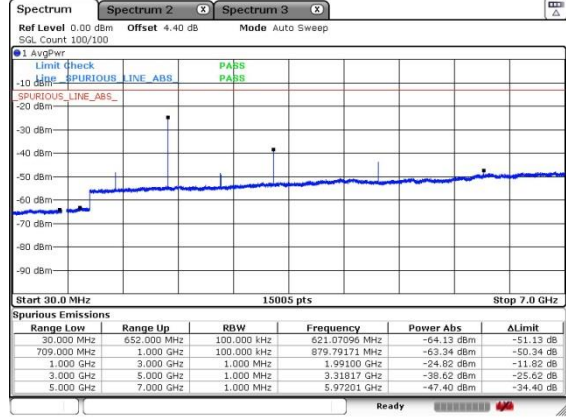


n71 / 20MHz

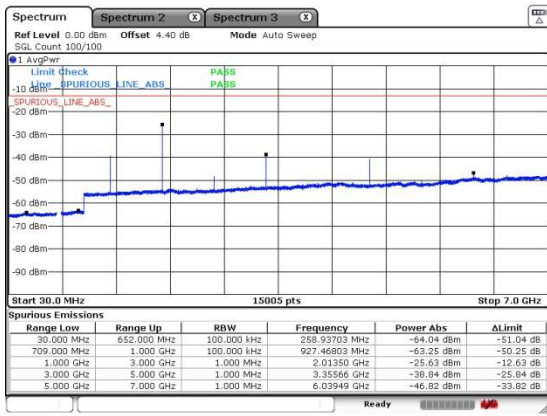
Lowest Channel / BPSK



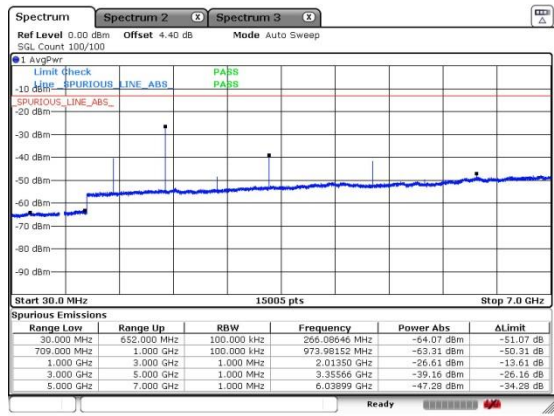
Lowest Channel / 16QAM



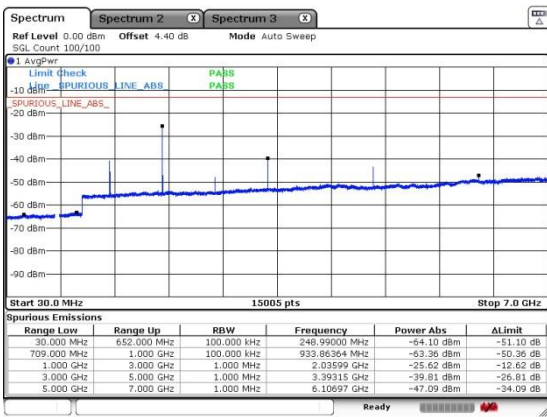
Middle Channel / BPSK



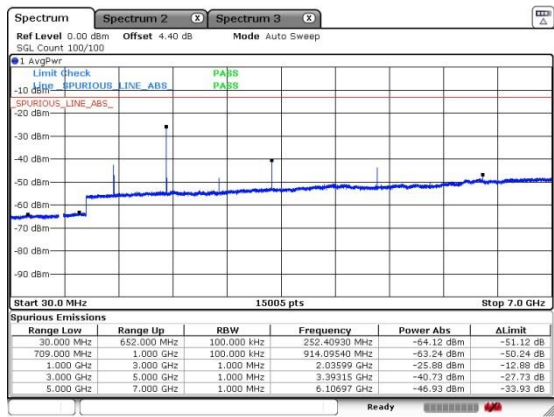
Middle Channel / 16QAM



Highest Channel / BPSK



Highest Channel / 16QAM





A6.6. Frequency Stability

| Test Conditions | | n71 (BPSK) / Middle Channel | Limit |
|------------------|-------------------|-----------------------------|---------|
| Temperature (°C) | Voltage (Volt) | 20MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0017 | PASS |
| 40 | Normal Voltage | 0.0011 | |
| 30 | Normal Voltage | 0.0018 | |
| 20(Ref.) | Normal Voltage | 0.0013 | |
| 10 | Normal Voltage | 0.0015 | |
| 0 | Normal Voltage | 0.0021 | |
| -10 | Normal Voltage | 0.0005 | |
| -20 | Normal Voltage | 0.0007 | |
| -30 | Normal Voltage | 0.0005 | |
| 20 | Maximum Voltage | 0.0021 | |
| 20 | Normal Voltage | 0.0013 | |
| 20 | Battery End Point | 0.0004 | |

Note:

1. Normal Voltage =110 V. ; Battery End Point (BEP) =100 V. ; Maximum Voltage =120 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

5G NR NSA (EN-DC) mode:

| EN-DC_12A_n2A / LTE 10MHz + NR 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) |
| NR n2 Middle CH | 3780 | -56.97 | -13 | -43.97 | -69.23 | 2.64 | 14.90 | H |
| | 5664 | -53.27 | -13 | -40.27 | -65.13 | 2.94 | 14.80 | H |
| | 7554 | -48.70 | -13 | -35.70 | -58.47 | 3.39 | 13.16 | H |
| | 3780 | -56.55 | -13 | -43.55 | -68.81 | 2.64 | 14.90 | V |
| | 5664 | -53.43 | -13 | -40.43 | -65.29 | 2.94 | 14.80 | V |
| | 7554 | -48.13 | -13 | -35.13 | -57.90 | 3.39 | 13.16 | V |
| LTE Band12 Middle CH | 1424 | -56.05 | -13 | -43.05 | -63.02 | 1.58 | 10.70 | H |
| | 2136 | -54.75 | -13 | -41.75 | -63.00 | 2.102 | 12.50 | H |
| | 2848 | -51.49 | -13 | -38.49 | -60.38 | 2.856 | 13.90 | H |
| | 1424 | -55.45 | -13 | -42.45 | -62.42 | 1.58 | 10.70 | V |
| | 2136 | -53.71 | -13 | -40.71 | -61.96 | 2.10 | 12.50 | V |
| | 2848 | -51.62 | -13 | -38.62 | -60.51 | 2.86 | 13.90 | V |

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

| EN-DC_66A_n25A / LTE 20MHz + NR 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) |
| NR n25 Middle CH | 3783 | -57.07 | -13 | -44.07 | -69.33 | 2.64 | 14.90 | H |
| | 5673 | -53.54 | -13 | -40.54 | -65.40 | 2.94 | 14.80 | H |
| | 7560 | -48.44 | -13 | -35.44 | -58.21 | 3.39 | 13.16 | H |
| | 3783 | -56.94 | -13 | -43.94 | -69.20 | 2.64 | 14.90 | V |
| | 5673 | -53.04 | -13 | -40.04 | -64.90 | 2.94 | 14.80 | V |
| | 7560 | -48.08 | -13 | -35.08 | -57.85 | 3.39 | 13.16 | V |
| LTE Band66 Middle CH | 3507 | -43.54 | -13 | -30.54 | -54.28 | 2.604 | 13.34 | H |
| | 5262 | -54.63 | -13 | -41.63 | -65.14 | 3.011 | 13.52 | H |
| | 7020 | -50.28 | -13 | -37.28 | -60.48 | 3.271 | 13.47 | H |
| | 3507 | -42.87 | -13 | -29.87 | -53.61 | 2.604 | 13.34 | V |
| | 5262 | -54.60 | -13 | -41.60 | -65.11 | 3.011 | 13.52 | V |
| | 7020 | -49.68 | -13 | -36.68 | -59.88 | 3.271 | 13.47 | V |

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



| EN-DC_41A_n41A / LTE 20MHz + NR 100MHz / 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) |
| NR n41 Middle CH | 3010 | -47.52 | -13 | -34.52 | -55.95 | 1.93 | 10.36 | H |
| | 5370 | -66.55 | -13 | -53.55 | -75.78 | 2.64 | 11.87 | H |
| | 6250 | -53.51 | -13 | -40.51 | -64.34 | 2.64 | 13.47 | H |
| | 8055 | -60.55 | -13 | -47.55 | -67.43 | 6.91 | 13.78 | H |
| | 9648 | -40.22 | -13 | -27.22 | -47.61 | 7.74 | 15.13 | H |
| | 10359 | -50.21 | -13 | -37.21 | -57.88 | 8.62 | 16.29 | H |
| | 10737 | -55.53 | -13 | -42.53 | -63.48 | 9.51 | 17.45 | H |
| | 11493 | -49.46 | -13 | -36.46 | -56.12 | 7.55 | 14.21 | H |
| | 3010 | -53.90 | -13 | -40.90 | -62.33 | 1.93 | 10.36 | V |
| | 5370 | -66.63 | -13 | -53.63 | -75.86 | 2.64 | 11.87 | V |
| | 6250 | -60.83 | -13 | -47.83 | -71.66 | 2.64 | 13.47 | V |
| | 8055 | -60.01 | -13 | -47.01 | -66.89 | 6.91 | 13.78 | V |
| | 9648 | -44.39 | -13 | -31.39 | -51.05 | 7.55 | 14.21 | V |
| | 10359 | -53.20 | -13 | -40.20 | -60.28 | 8.47 | 15.55 | V |
| 10737 | -55.64 | -13 | -42.64 | -62.85 | 9.32 | 16.53 | V | |
| LTE Band41 Middle CH | 5030 | -66.39 | -13 | -53.39 | -76.60 | 3.03 | 13.24 | H |
| | 7545 | -61.50 | -13 | -48.50 | -70.95 | 3.56 | 13.01 | H |
| | 10062 | -57.24 | -13 | -44.24 | -66.76 | 3.92 | 13.44 | H |
| | 5030 | -66.09 | -13 | -53.09 | -76.30 | 3.03 | 13.24 | V |
| | 7545 | -60.96 | -13 | -47.96 | -70.41 | 3.56 | 13.01 | V |
| | 10062 | -57.54 | -13 | -44.54 | -67.06 | 3.92 | 13.44 | V |

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



| EN-DC_(n)41AA / LTE 20MHz + NR 100MHz / 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) |
| NR n41 Middle CH | 3067 | -49.40 | -13 | -36.40 | -57.83 | 1.93 | 10.36 | H |
| | 5075 | -64.91 | -13 | -51.91 | -74.14 | 2.64 | 11.87 | H |
| | 6250 | -54.24 | -13 | -41.24 | -65.07 | 2.64 | 13.47 | H |
| | 7615 | -60.81 | -13 | -47.81 | -67.69 | 6.91 | 13.78 | H |
| | 9648 | -40.04 | -13 | -27.04 | -47.43 | 7.74 | 15.13 | H |
| | 10152 | -57.29 | -13 | -44.29 | -64.96 | 8.62 | 16.29 | H |
| | 10359 | -49.08 | -13 | -36.08 | -57.03 | 9.51 | 17.45 | H |
| | 11493 | -48.81 | -13 | -35.81 | -55.47 | 7.55 | 14.21 | H |
| | 3067 | -55.07 | -13 | -42.07 | -63.50 | 1.93 | 10.36 | V |
| | 5075 | -64.93 | -13 | -51.93 | -74.16 | 2.64 | 11.87 | V |
| | 6250 | -60.92 | -13 | -47.92 | -71.75 | 2.64 | 13.47 | V |
| | 7615 | -60.18 | -13 | -47.18 | -67.06 | 6.91 | 13.78 | V |
| | 9648 | -44.26 | -13 | -31.26 | -50.92 | 7.55 | 14.21 | V |
| | 10152 | -57.54 | -13 | -44.54 | -64.62 | 8.47 | 15.55 | V |
| 10359 | -52.40 | -13 | -39.40 | -59.61 | 9.32 | 16.53 | V | |
| LTE Band41 Middle CH | 5270 | -65.47 | -13 | -52.47 | -75.68 | 3.03 | 13.24 | H |
| | 7900 | -60.69 | -13 | -47.69 | -70.14 | 3.56 | 13.01 | H |
| | 10539 | -55.61 | -13 | -42.61 | -65.13 | 3.92 | 13.44 | H |
| | 5270 | -65.28 | -13 | -52.28 | -75.49 | 3.03 | 13.24 | V |
| | 7900 | -59.81 | -13 | -46.81 | -69.26 | 3.56 | 13.01 | V |
| | 10539 | -55.90 | -13 | -42.90 | -65.42 | 3.92 | 13.44 | V |

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

| EN-DC_2A_n66A / LTE 20MHz + NR 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) |
| NR n66 Middle CH | 3489 | -60.07 | -13 | -47.07 | -70.81 | 2.604 | 13.34 | H |
| | 5235 | -54.76 | -13 | -41.76 | -65.27 | 3.011 | 13.52 | H |
| | 6984 | -50.17 | -13 | -37.17 | -60.37 | 3.271 | 13.47 | H |
| | 3489 | -60.13 | -13 | -47.13 | -70.87 | 2.604 | 13.34 | V |
| | 5235 | -54.48 | -13 | -41.48 | -64.99 | 3.011 | 13.52 | V |
| | 6984 | -49.91 | -13 | -36.91 | -60.11 | 3.271 | 13.47 | V |
| LTE Band2 Middle CH | 3759 | -57.05 | -13 | -44.05 | -69.31 | 2.64 | 14.90 | H |
| | 5640 | -53.46 | -13 | -40.46 | -65.32 | 2.94 | 14.80 | H |
| | 7524 | -48.21 | -13 | -35.21 | -57.98 | 3.39 | 13.16 | H |
| | 3759 | -57.08 | -13 | -44.08 | -69.34 | 2.64 | 14.90 | V |
| | 5640 | -53.41 | -13 | -40.41 | -65.27 | 2.94 | 14.80 | V |
| | 7524 | -47.77 | -13 | -34.77 | -57.54 | 3.39 | 13.16 | V |

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



| EN-DC_2A_n71A / LTE 20MHz + NR 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) |
| NR n71 Middle CH | 1344 | -66.36 | -13 | -53.36 | -68.11 | 1.02 | 4.92 | H |
| | 2014 | -64.94 | -13 | -51.94 | -66.91 | 1.27 | 5.39 | H |
| | 2686 | -62.13 | -13 | -49.13 | -65.06 | 1.49 | 6.57 | H |
| | 1344 | -67.08 | -13 | -54.08 | -68.83 | 1.02 | 4.92 | V |
| | 2014 | -64.99 | -13 | -51.99 | -66.96 | 1.27 | 5.39 | V |
| | 2686 | -61.90 | -13 | -48.90 | -64.83 | 1.49 | 6.57 | V |
| LTE Band2 Middle CH | 3744 | -56.93 | -13 | -43.93 | -69.19 | 2.64 | 14.90 | H |
| | 5616 | -53.16 | -13 | -40.16 | -65.02 | 2.94 | 14.80 | H |
| | 7482 | -48.69 | -13 | -35.69 | -58.46 | 3.39 | 13.16 | H |
| | 3744 | -57.15 | -13 | -44.15 | -69.41 | 2.64 | 14.90 | V |
| | 5616 | -52.93 | -13 | -39.93 | -64.79 | 2.94 | 14.80 | V |
| | 7482 | -48.36 | -13 | -35.36 | -58.13 | 3.39 | 13.16 | V |

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



5G NR SA mode:

| n2A / NR 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) |
| NR n2 Middle CH | 3759 | -57.76 | -13 | -44.76 | -70.02 | 2.64 | 14.90 | H |
| | 5640 | -53.66 | -13 | -40.66 | -65.52 | 2.94 | 14.80 | H |
| | 7524 | -48.44 | -13 | -35.44 | -58.21 | 3.39 | 13.16 | H |
| | 3759 | -57.39 | -13 | -44.39 | -69.65 | 2.64 | 14.90 | V |
| | 5640 | -53.51 | -13 | -40.51 | -65.37 | 2.94 | 14.80 | V |
| | 7524 | -47.84 | -13 | -34.84 | -57.61 | 3.39 | 13.16 | V |

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

| n25A / NR 10MHz / 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) |
| NR n25 Middle CH | 3765 | -57.40 | -13 | -44.40 | -69.66 | 2.64 | 14.90 | H |
| | 5646 | -53.45 | -13 | -40.45 | -65.31 | 2.94 | 14.80 | H |
| | 7536 | -48.35 | -13 | -35.35 | -58.12 | 3.39 | 13.16 | H |
| | 3765 | -57.13 | -13 | -44.13 | -69.39 | 2.64 | 14.90 | V |
| | 5649 | -53.45 | -13 | -40.45 | -65.31 | 2.94 | 14.80 | V |
| | 7536 | -47.67 | -13 | -34.67 | -57.44 | 3.39 | 13.16 | V |

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

| n41A / NR 100MHz / 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) |
| NR n41 Middle CH | 5184 | -63.20 | -13 | -50.20 | -73.41 | 3.03 | 13.24 | H |
| | 7660 | -59.55 | -13 | -46.55 | -69.00 | 3.56 | 13.01 | H |
| | 10360 | -50.56 | -13 | -37.56 | -60.08 | 3.92 | 13.44 | H |
| | 5184 | -66.31 | -13 | -53.31 | -76.52 | 3.03 | 13.24 | V |
| | 7660 | -60.44 | -13 | -47.44 | -69.89 | 3.56 | 13.01 | V |
| | 10360 | -52.46 | -13 | -39.46 | -61.98 | 3.92 | 13.44 | V |

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



| n66A / NR 5MHz / 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) |
| NR n66 Middle CH | 3489 | -60.23 | -13 | -47.23 | -70.97 | 2.604 | 13.34 | H |
| | 5235 | -54.68 | -13 | -41.68 | -65.19 | 3.011 | 13.52 | H |
| | 6984 | -50.21 | -13 | -37.21 | -60.41 | 3.271 | 13.47 | H |
| | 3489 | -60.36 | -13 | -47.36 | -71.10 | 2.604 | 13.34 | V |
| | 5235 | -54.86 | -13 | -41.86 | -65.37 | 3.011 | 13.52 | V |
| | 6984 | -50.00 | -13 | -37.00 | -60.20 | 3.271 | 13.47 | V |

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

| n71A / NR 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) |
| NR n71 Middle CH | 1344 | -63.61 | -13 | -50.61 | -65.36 | 1.02 | 4.92 | H |
| | 2014.77 | -63.95 | -13 | -50.95 | -65.92 | 1.27 | 5.39 | H |
| | 2686.36 | -61.74 | -13 | -48.74 | -64.67 | 1.49 | 6.57 | H |
| | 1343.18 | -64.94 | -13 | -51.94 | -66.69 | 1.02 | 4.92 | V |
| | 2014.77 | -63.97 | -13 | -50.97 | -65.94 | 1.27 | 5.39 | V |
| | 2686 | -61.50 | -13 | -48.50 | -64.43 | 1.49 | 6.57 | V |

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



Appendix C.Setup Photographs