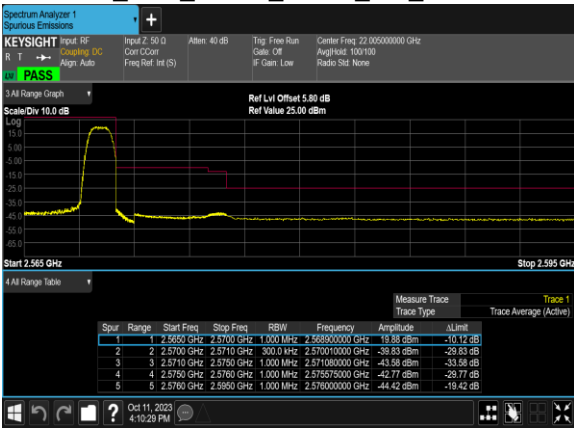
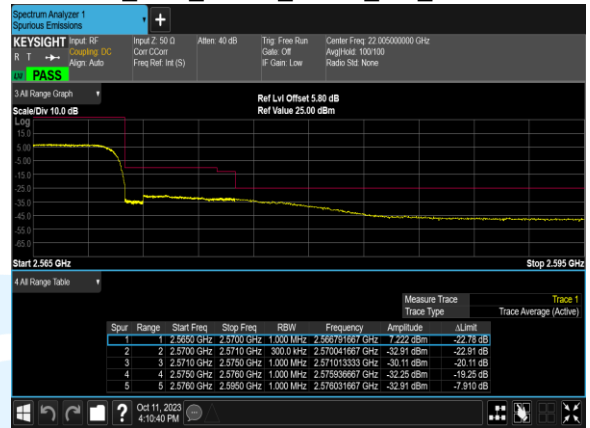


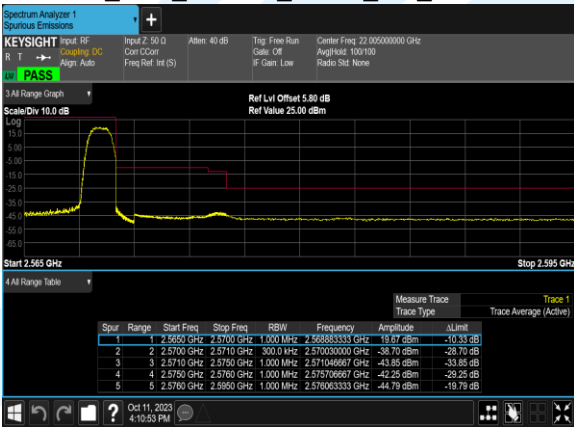
B7_15M_QPSK_1@74_CH_21375



B7_15M_QPSK_75@0_CH_21375



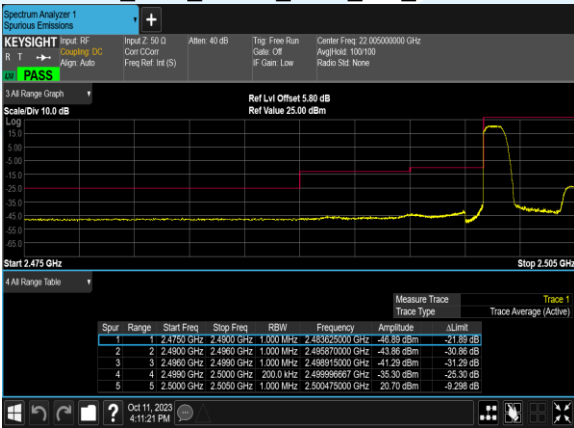
B7_15M_16QAM_1@74_CH_21375



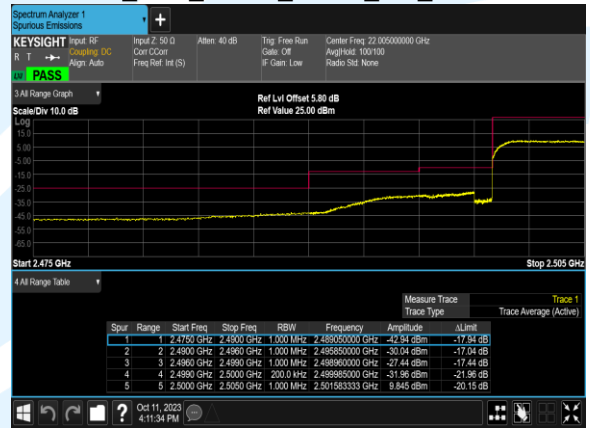
B7_15M_16QAM_75@0_CH_21375



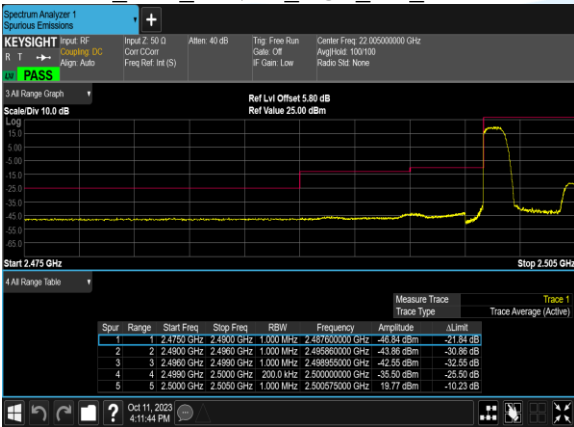
B7_10M_QPSK_1@0_CH_20800



B7_10M_QPSK_50@0_CH_20800



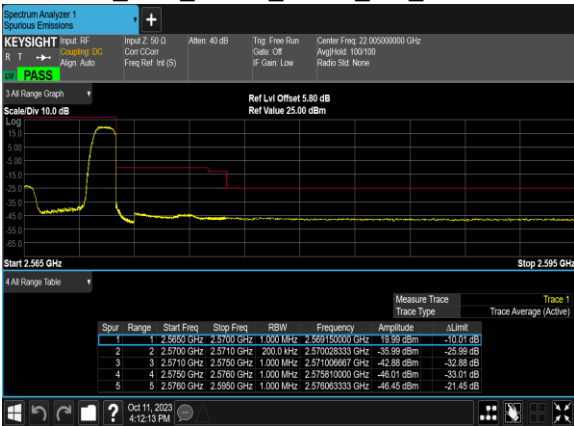
B7_10M_16QAM_1@0_CH_20800



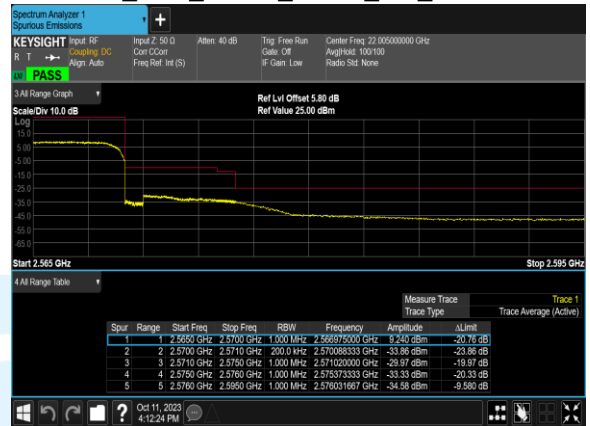
B7_10M_16QAM_50@0_CH_20800



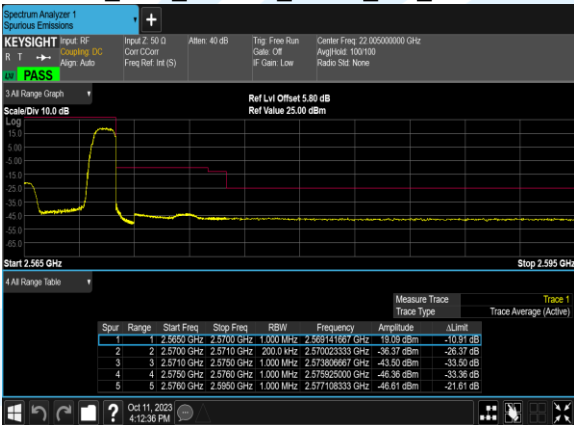
B7_10M_QPSK_1@49_CH_21400



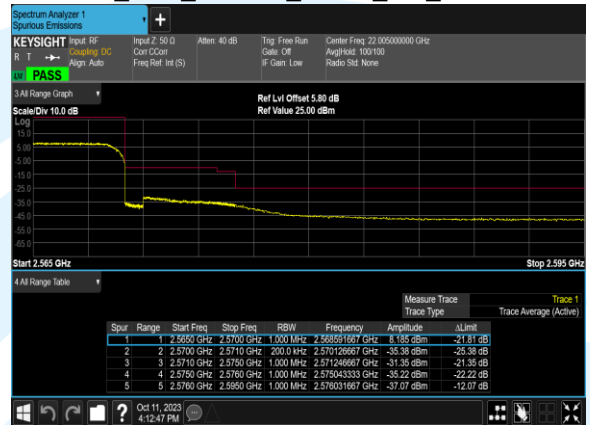
B7_10M_QPSK_50@0_CH_21400



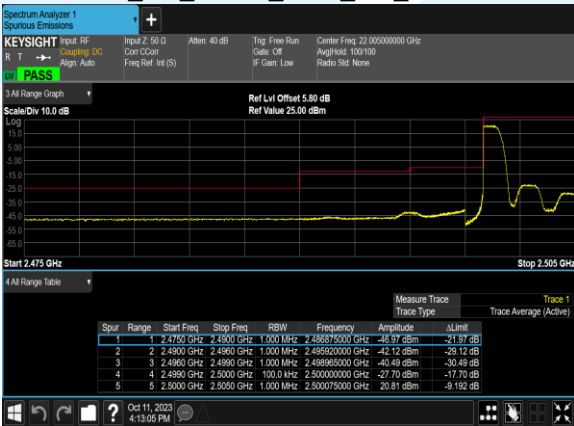
B7_10M_16QAM_1@49_CH_21400



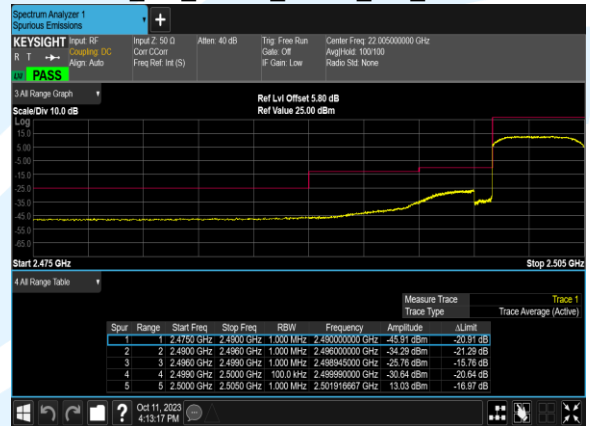
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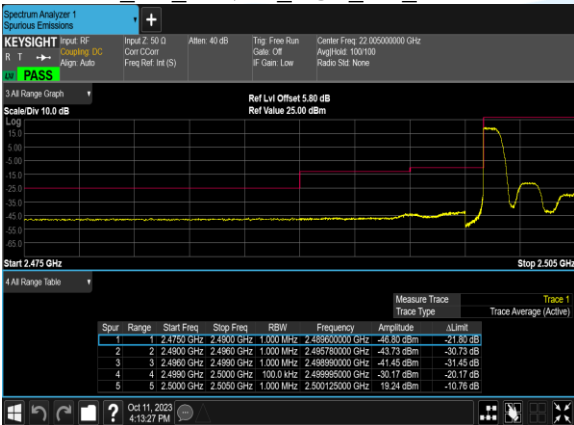
B7_5M_QPSK_1@0_CH_20775



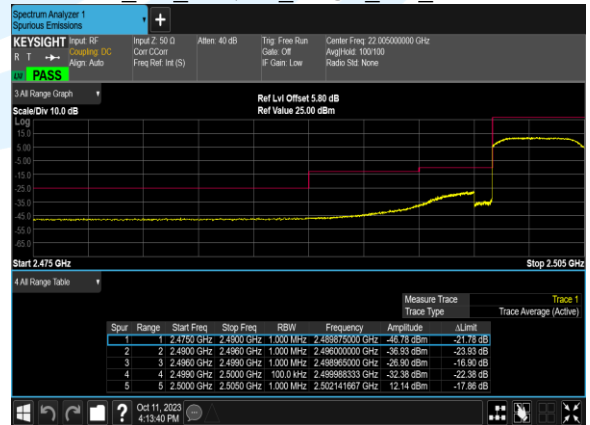
B7_5M_QPSK_25@0_CH_20775



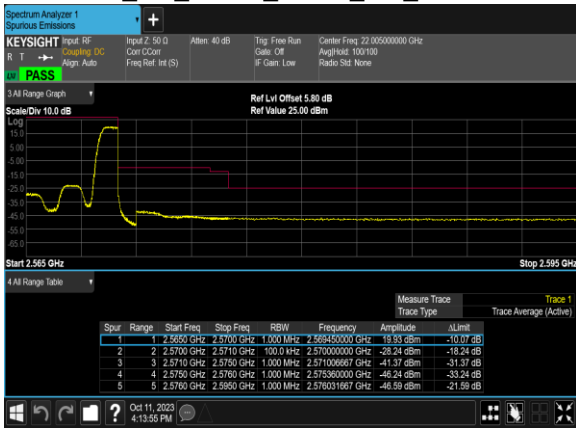
B7_5M_16QAM_1@0_CH_20775



B7_5M_16QAM_25@0_CH_20775



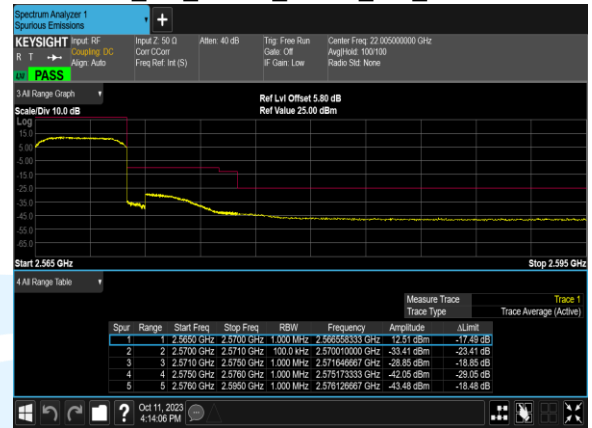
B7_5M_QPSK_1@24_CH_21425



B7_5M_16QAM_1@24_CH_21425



B7_5M_QPSK_25@0_CH_21425



B7_5M_16QAM_25@0_CH_21425



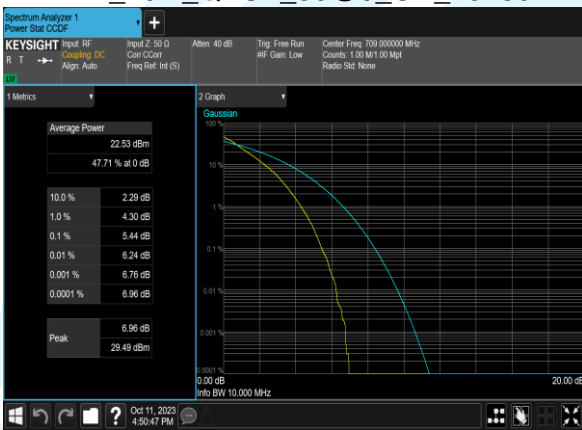
A.5 LTE BAND 17

Peak to Average Ratio

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB | Result (dB) | Limit (dB) | Verdict |
|------|-----------------|---------|------------|------------|------|-------------|------------|---------|
| 17 | 10.0 | 23780 | 709.0 | QPSK | 50@0 | 5.44 | 13 | PASS |
| 17 | 10.0 | 23780 | 709.0 | 16QAM | 50@0 | 6.29 | 13 | PASS |
| 17 | 10.0 | 23790 | 710.0 | QPSK | 50@0 | 5.50 | 13 | PASS |
| 17 | 10.0 | 23790 | 710.0 | 16QAM | 50@0 | 6.28 | 13 | PASS |
| 17 | 10.0 | 23800 | 711.0 | QPSK | 50@0 | 5.57 | 13 | PASS |
| 17 | 10.0 | 23800 | 711.0 | 16QAM | 50@0 | 6.32 | 13 | PASS |
| 17 | 5.0 | 23755 | 706.5 | QPSK | 25@0 | 5.62 | 13 | PASS |
| 17 | 5.0 | 23755 | 706.5 | 16QAM | 25@0 | 6.28 | 13 | PASS |
| 17 | 5.0 | 23790 | 710.0 | QPSK | 25@0 | 5.58 | 13 | PASS |
| 17 | 5.0 | 23790 | 710.0 | 16QAM | 25@0 | 6.29 | 13 | PASS |
| 17 | 5.0 | 23825 | 713.5 | QPSK | 25@0 | 5.64 | 13 | PASS |
| 17 | 5.0 | 23825 | 713.5 | 16QAM | 25@0 | 6.25 | 13 | PASS |

Test Graphs

B17_10M_QPSK_50@0_CH_23780



B17_10M_16QAM_50@0_CH_23780



B17_10M_QPSK_50@0_CH_23790



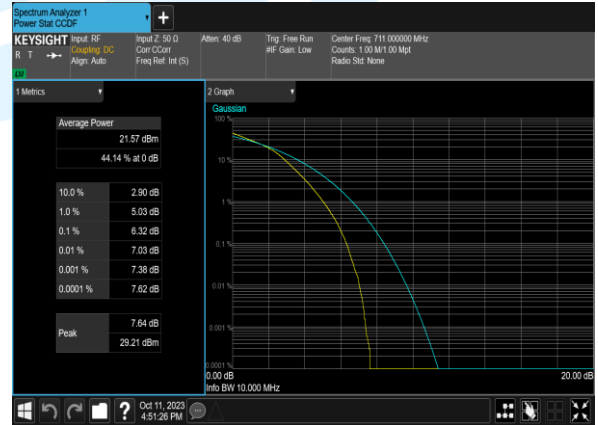
B17_10M_16QAM_50@0_CH_23790



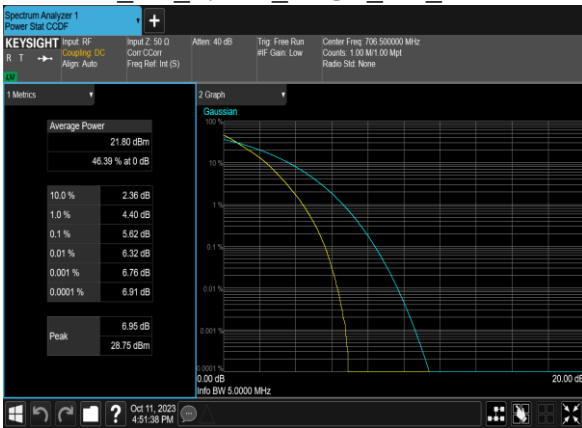
B17_10M_QPSK_50@0_CH_23800



B17_10M_16QAM_50@0_CH_23800



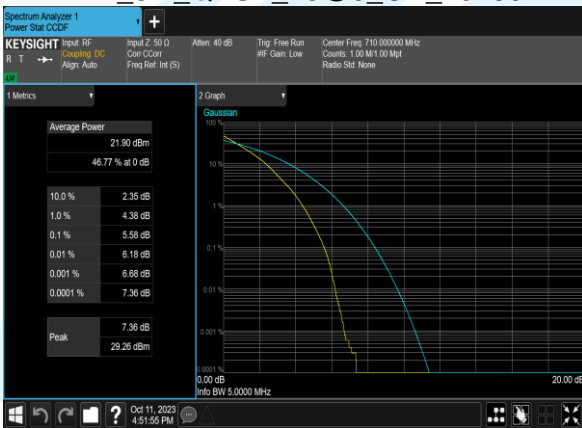
B17_5M_QPSK_25@0_CH_23755



B17_5M_16QAM_25@0_CH_23755



B17_5M_QPSK_25@0_CH_23790



B17_5M_16QAM_25@0_CH_23790



B17_5M_QPSK_25@0_CH_23825



B17_5M_16QAM_25@0_CH_23825

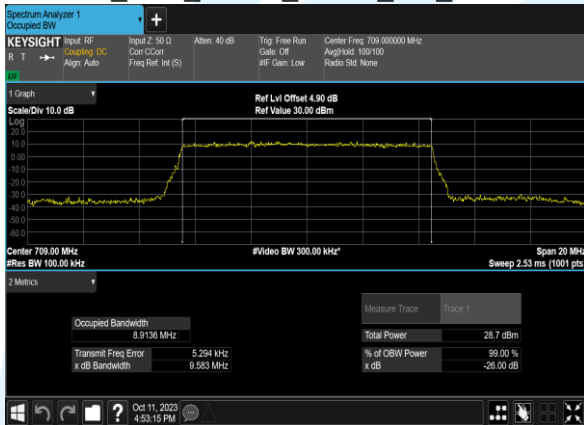


Occupied Bandwidth

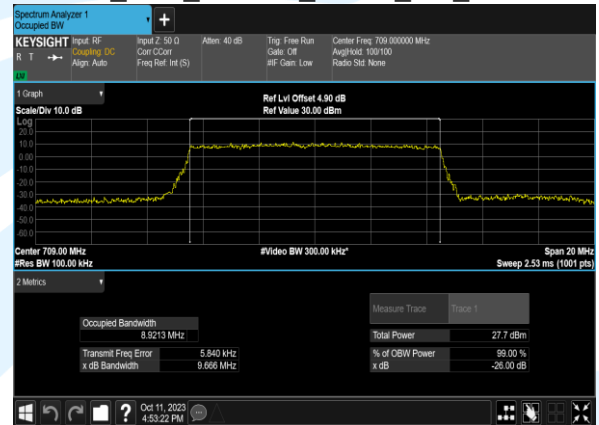
| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB | OBW (MHz) | 26dB BW (MHz) |
|------|-----------------|---------|------------|------------|------|-----------|---------------|
| 17 | 10.0 | 23780 | 709.0 | QPSK | 50@0 | 8.9136 | 9.583 |
| 17 | 10.0 | 23780 | 709.0 | 16QAM | 50@0 | 8.9213 | 9.666 |
| 17 | 10.0 | 23790 | 710.0 | QPSK | 50@0 | 8.9122 | 9.580 |
| 17 | 10.0 | 23790 | 710.0 | 16QAM | 50@0 | 8.9150 | 9.603 |
| 17 | 10.0 | 23800 | 711.0 | QPSK | 50@0 | 8.9359 | 9.586 |
| 17 | 10.0 | 23800 | 711.0 | 16QAM | 50@0 | 8.9545 | 9.692 |
| 17 | 5.0 | 23755 | 706.5 | QPSK | 25@0 | 4.4652 | 4.878 |
| 17 | 5.0 | 23755 | 706.5 | 16QAM | 25@0 | 4.4537 | 4.845 |
| 17 | 5.0 | 23790 | 710.0 | QPSK | 25@0 | 4.4653 | 4.839 |
| 17 | 5.0 | 23790 | 710.0 | 16QAM | 25@0 | 4.4564 | 4.845 |
| 17 | 5.0 | 23825 | 713.5 | QPSK | 25@0 | 4.4625 | 4.844 |
| 17 | 5.0 | 23825 | 713.5 | 16QAM | 25@0 | 4.4606 | 4.845 |

Test Graphs

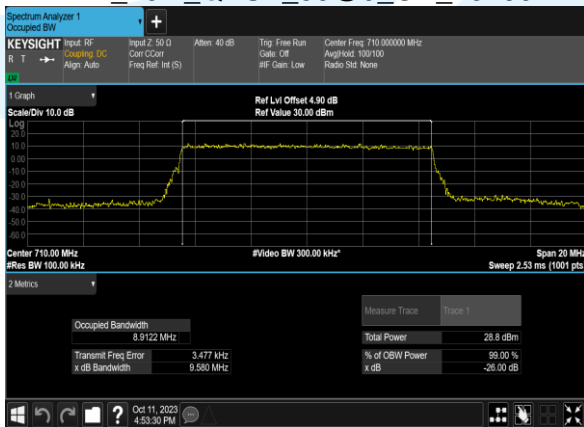
B17_10M_QPSK_50@0_CH_23780



B17_10M_16QAM_50@0_CH_23780



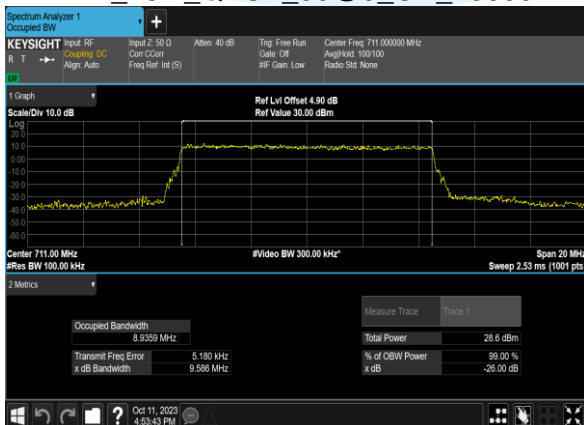
B17_10M_QPSK_50@0_CH_23790



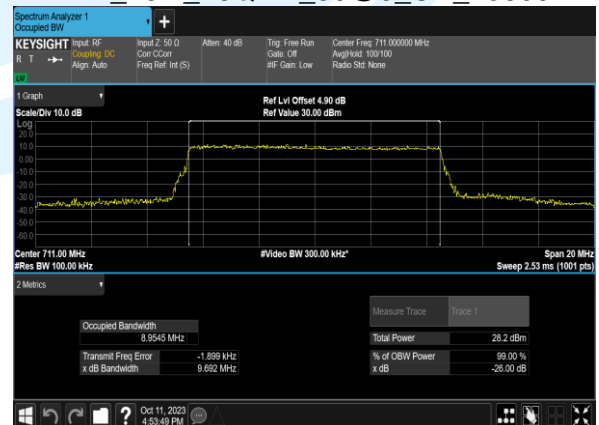
B17_10M_16QAM_50@0_CH_23790



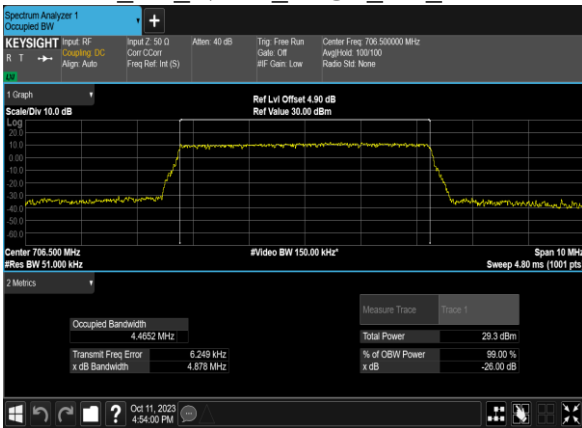
B17_10M_QPSK_50@0_CH_23800



B17_10M_16QAM_50@0_CH_23800



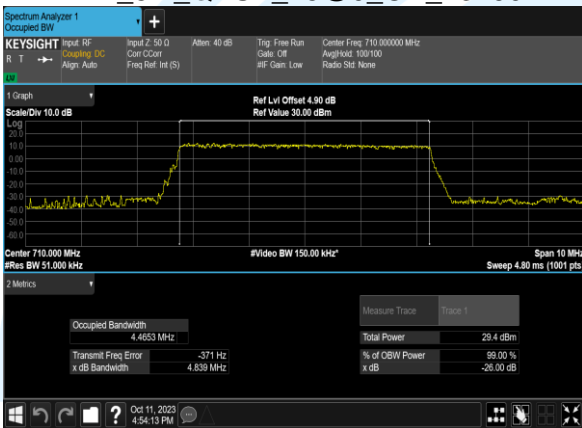
B17_5M_QPSK_25@0_CH_23755



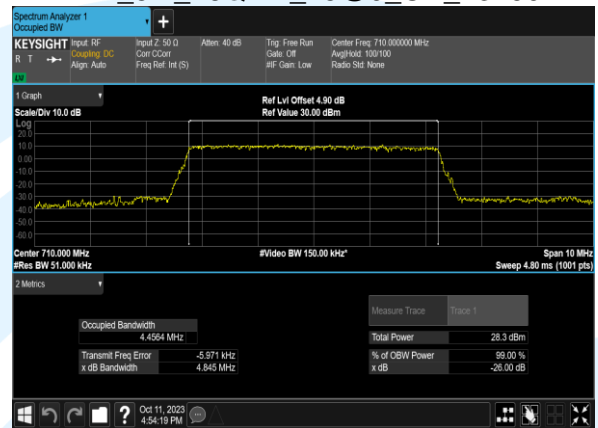
B17_5M_16QAM_25@0_CH_23755



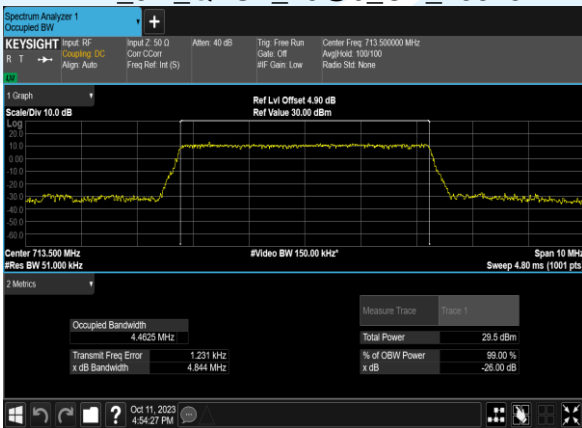
B17_5M_QPSK_25@0_CH_23790



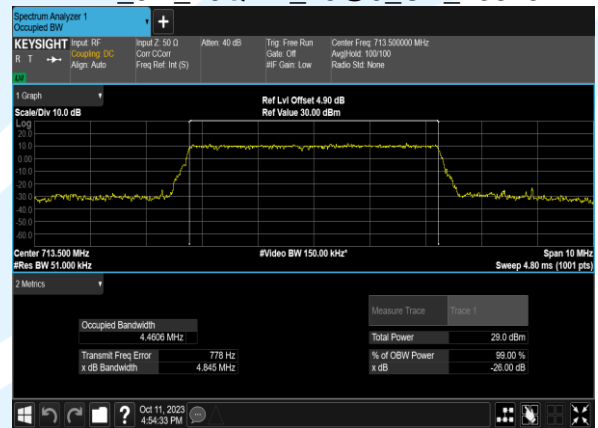
B17_5M_16QAM_25@0_CH_23790



B17_5M_QPSK_25@0_CH_23825



B17_5M_16QAM_25@0_CH_23825



Conducted Spurious Emissions

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB | Result (dBm) | Limit (dBm) | Verdict |
|------|-----------------|---------|------------|------------|-----|--------------|-------------|---------|
| 17 | 10.0 | 23780 | 709.0 | QPSK | 1@0 | -14.22 | -13 | PASS |
| 17 | 10.0 | 23780 | 709.0 | 16QAM | 1@0 | -19.32 | -13 | PASS |
| 17 | 10.0 | 23790 | 710.0 | QPSK | 1@0 | -19.07 | -13 | PASS |
| 17 | 10.0 | 23790 | 710.0 | 16QAM | 1@0 | -19.98 | -13 | PASS |
| 17 | 10.0 | 23800 | 711.0 | QPSK | 1@0 | -17.03 | -13 | PASS |
| 17 | 10.0 | 23800 | 711.0 | 16QAM | 1@0 | -19.07 | -13 | PASS |
| 17 | 5.0 | 23755 | 706.5 | QPSK | 1@0 | -15.88 | -13 | PASS |
| 17 | 5.0 | 23755 | 706.5 | 16QAM | 1@0 | -16.07 | -13 | PASS |
| 17 | 5.0 | 23790 | 710.0 | QPSK | 1@0 | -18.68 | -13 | PASS |
| 17 | 5.0 | 23790 | 710.0 | 16QAM | 1@0 | -21.35 | -13 | PASS |
| 17 | 5.0 | 23825 | 713.5 | QPSK | 1@0 | -20.5 | -13 | PASS |
| 17 | 5.0 | 23825 | 713.5 | 16QAM | 1@0 | -22.27 | -13 | PASS |

Test Graphs

B17_10M_QPSK_1@0_CH_23780



B17_10M_16QAM_1@0_CH_23780



B17_10M_QPSK_1@0_CH_23790



B17_10M_16QAM_1@0_CH_23790



B17_10M_QPSK_1@0_CH_23800



B17_10M_16QAM_1@0_CH_23800



Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

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B17_5M_QPSK_1@0_CH_23755



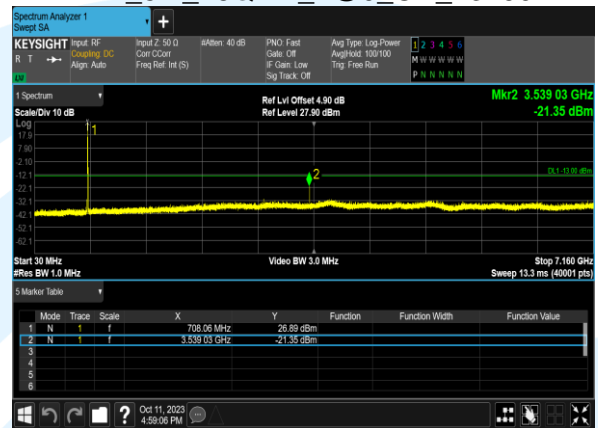
B17_5M_16QAM_1@0_CH_23755



B17_5M_QPSK_1@0_CH_23790



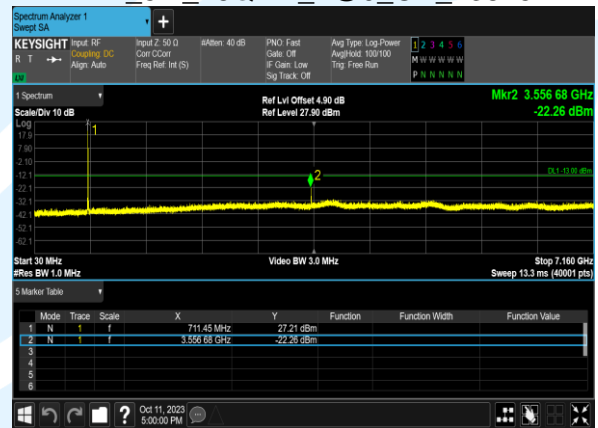
B17_5M_16QAM_1@0_CH_23790



B17_5M_QPSK_1@0_CH_23825



B17_5M_16QAM_1@0_CH_23825

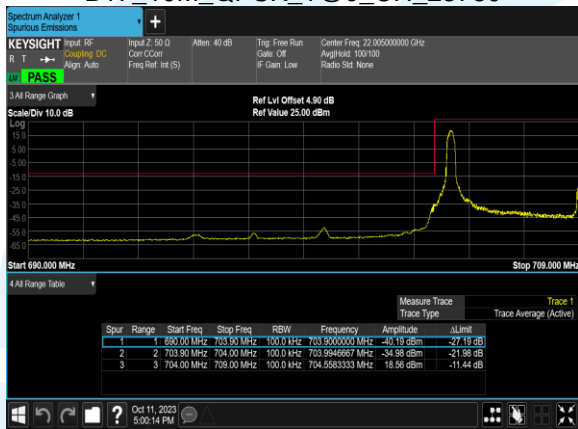


Conducted Band Edge

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB | Result | Verdict |
|------|-----------------|---------|------------|------------|------|-----------|---------|
| 17 | 10.0 | 23780 | 709.0 | QPSK | 1@0 | see graph | PASS |
| 17 | 10.0 | 23780 | 709.0 | QPSK | 50@0 | see graph | PASS |
| 17 | 10.0 | 23780 | 709.0 | 16QAM | 1@0 | see graph | PASS |
| 17 | 10.0 | 23780 | 709.0 | 16QAM | 50@0 | see graph | PASS |
| 17 | 10.0 | 23800 | 711.0 | QPSK | 1@49 | see graph | PASS |
| 17 | 10.0 | 23800 | 711.0 | QPSK | 50@0 | see graph | PASS |
| 17 | 10.0 | 23800 | 711.0 | 16QAM | 1@49 | see graph | PASS |
| 17 | 10.0 | 23800 | 711.0 | 16QAM | 50@0 | see graph | PASS |
| 17 | 5.0 | 23755 | 706.5 | QPSK | 1@0 | see graph | PASS |
| 17 | 5.0 | 23755 | 706.5 | QPSK | 25@0 | see graph | PASS |
| 17 | 5.0 | 23755 | 706.5 | 16QAM | 1@0 | see graph | PASS |
| 17 | 5.0 | 23755 | 706.5 | 16QAM | 25@0 | see graph | PASS |
| 17 | 5.0 | 23825 | 713.5 | QPSK | 1@24 | see graph | PASS |
| 17 | 5.0 | 23825 | 713.5 | QPSK | 25@0 | see graph | PASS |
| 17 | 5.0 | 23825 | 713.5 | 16QAM | 1@24 | see graph | PASS |
| 17 | 5.0 | 23825 | 713.5 | 16QAM | 25@0 | see graph | PASS |

Test Graphs

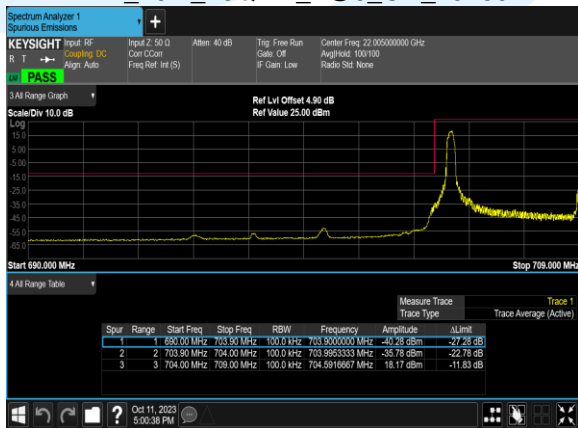
B17_10M_QPSK_1@0_CH_23780



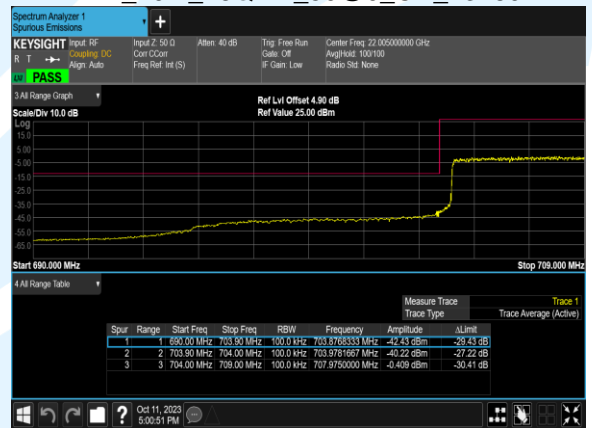
B17_10M_QPSK_50@0_CH_23780



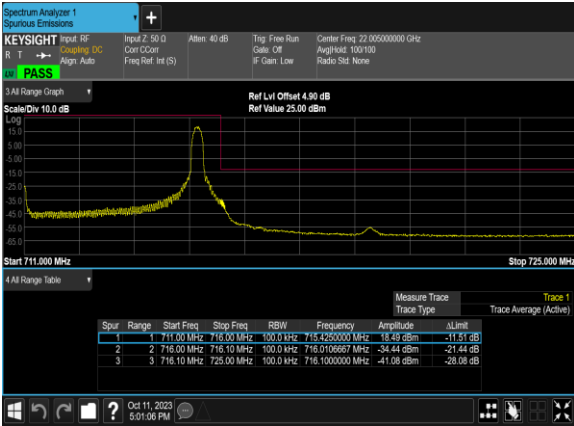
B17_10M_16QAM_1@0_CH_23780



B17_10M_16QAM_50@0_CH_23780



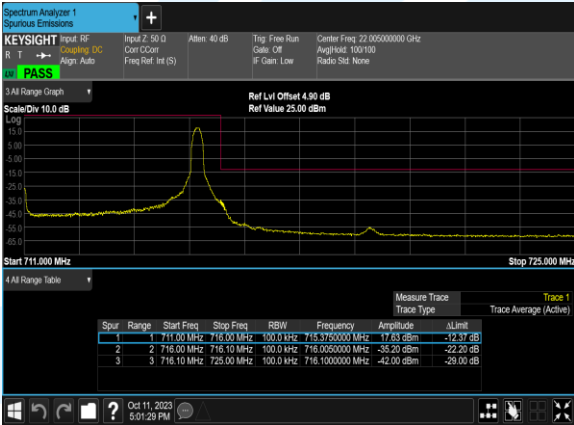
B17_10M_QPSK_1@49_CH_23800



B17_10M_QPSK_50@0_CH_23800



B17_10M_16QAM_1@49_CH_23800



B17_10M_16QAM_50@0_CH_23800



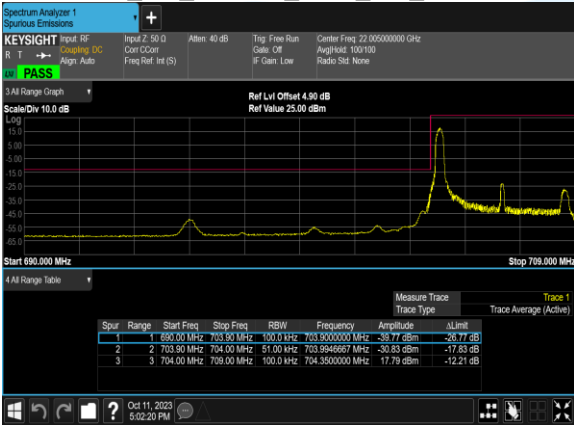
B17_5M_QPSK_1@0_CH_23755



B17_5M_QPSK_25@0_CH_23755



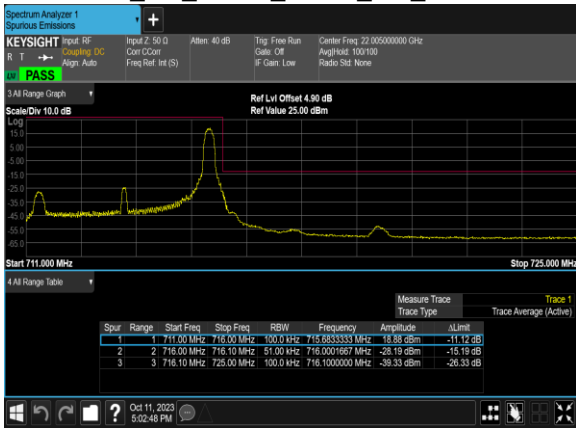
B17_5M_16QAM_1@0_CH_23755



B17_5M_16QAM_25@0_CH_23755



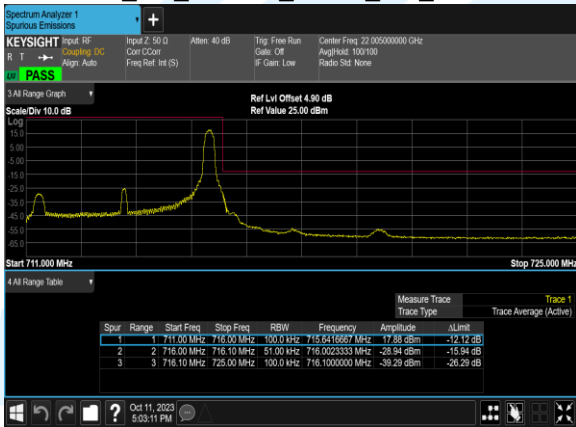
B17_5M_QPSK_1@24_CH_23825



B17_5M_QPSK_25@0_CH_23825



B17_5M_16QAM_1@24_CH_23825



B17_5M_16QAM_25@0_CH_23825



A.6 LTE BAND 38

Peak to Average Ratio

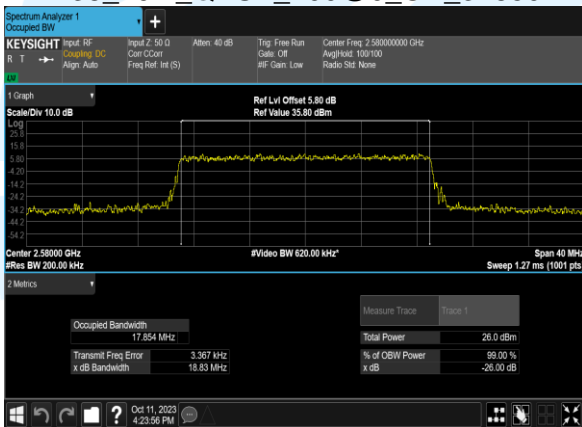
| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB | Result (dB) | Limit (dB) | Verdict |
|------|-----------------|---------|------------|------------|-------|-------------|------------|---------|
| 38 | 20.0 | 37850 | 2580.0 | QPSK | 100@0 | 6.53 | 13 | PASS |
| 38 | 20.0 | 37850 | 2580.0 | 16QAM | 100@0 | 7.68 | 13 | PASS |
| 38 | 20.0 | 38000 | 2595.0 | QPSK | 100@0 | 6.49 | 13 | PASS |
| 38 | 20.0 | 38000 | 2595.0 | 16QAM | 100@0 | 7.36 | 13 | PASS |
| 38 | 20.0 | 38150 | 2610.0 | QPSK | 100@0 | 6.47 | 13 | PASS |
| 38 | 20.0 | 38150 | 2610.0 | 16QAM | 100@0 | 7.23 | 13 | PASS |
| 38 | 15.0 | 37825 | 2577.5 | QPSK | 75@0 | 6.41 | 13 | PASS |
| 38 | 15.0 | 37825 | 2577.5 | 16QAM | 75@0 | 7.76 | 13 | PASS |
| 38 | 15.0 | 38000 | 2595.0 | QPSK | 75@0 | 6.32 | 13 | PASS |
| 38 | 15.0 | 38000 | 2595.0 | 16QAM | 75@0 | 7.23 | 13 | PASS |
| 38 | 15.0 | 38175 | 2612.5 | QPSK | 75@0 | 6.56 | 13 | PASS |
| 38 | 15.0 | 38175 | 2612.5 | 16QAM | 75@0 | 7.31 | 13 | PASS |
| 38 | 10.0 | 37800 | 2575.0 | QPSK | 50@0 | 6.17 | 13 | PASS |
| 38 | 10.0 | 37800 | 2575.0 | 16QAM | 50@0 | 7.11 | 13 | PASS |
| 38 | 10.0 | 38000 | 2595.0 | QPSK | 50@0 | 6.16 | 13 | PASS |
| 38 | 10.0 | 38000 | 2595.0 | 16QAM | 50@0 | 7.15 | 13 | PASS |
| 38 | 10.0 | 38200 | 2615.0 | QPSK | 50@0 | 6.65 | 13 | PASS |
| 38 | 10.0 | 38200 | 2615.0 | 16QAM | 50@0 | 7.35 | 13 | PASS |
| 38 | 5.0 | 37775 | 2572.5 | QPSK | 25@0 | 5.96 | 13 | PASS |
| 38 | 5.0 | 37775 | 2572.5 | 16QAM | 25@0 | 6.79 | 13 | PASS |
| 38 | 5.0 | 38000 | 2595.0 | QPSK | 25@0 | 5.86 | 13 | PASS |
| 38 | 5.0 | 38000 | 2595.0 | 16QAM | 25@0 | 6.51 | 13 | PASS |
| 38 | 5.0 | 38225 | 2617.5 | QPSK | 25@0 | 6.28 | 13 | PASS |
| 38 | 5.0 | 38225 | 2617.5 | 16QAM | 25@0 | 6.75 | 13 | PASS |

Occupied Bandwidth

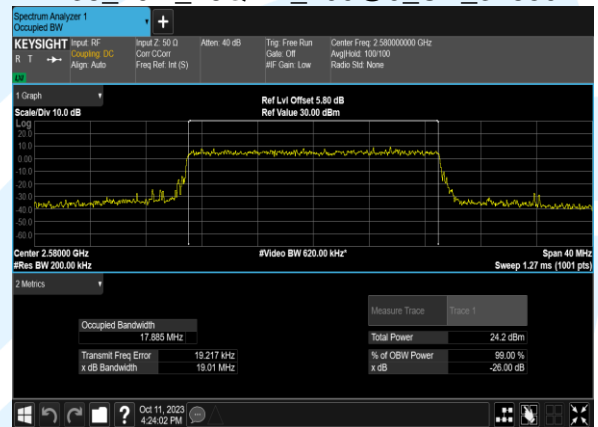
| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB | OBW (MHz) | 26dB BW (MHz) |
|------|-----------------|---------|------------|------------|-------|-----------|---------------|
| 38 | 20.0 | 37850 | 2580.0 | QPSK | 100@0 | 17.854 | 18.83 |
| 38 | 20.0 | 37850 | 2580.0 | 16QAM | 100@0 | 17.885 | 19.01 |
| 38 | 20.0 | 38000 | 2595.0 | QPSK | 100@0 | 17.885 | 18.94 |
| 38 | 20.0 | 38000 | 2595.0 | 16QAM | 100@0 | 17.945 | 20.25 |
| 38 | 20.0 | 38150 | 2610.0 | QPSK | 100@0 | 17.885 | 18.94 |
| 38 | 20.0 | 38150 | 2610.0 | 16QAM | 100@0 | 17.921 | 19.02 |
| 38 | 15.0 | 37825 | 2577.5 | QPSK | 75@0 | 13.418 | 14.51 |
| 38 | 15.0 | 37825 | 2577.5 | 16QAM | 75@0 | 13.411 | 14.33 |
| 38 | 15.0 | 38000 | 2595.0 | QPSK | 75@0 | 13.370 | 14.39 |
| 38 | 15.0 | 38000 | 2595.0 | 16QAM | 75@0 | 13.397 | 14.46 |
| 38 | 15.0 | 38175 | 2612.5 | QPSK | 75@0 | 13.412 | 14.55 |
| 38 | 15.0 | 38175 | 2612.5 | 16QAM | 75@0 | 13.379 | 14.46 |
| 38 | 10.0 | 37800 | 2575.0 | QPSK | 50@0 | 8.9406 | 9.639 |
| 38 | 10.0 | 37800 | 2575.0 | 16QAM | 50@0 | 8.9234 | 9.570 |
| 38 | 10.0 | 38000 | 2595.0 | QPSK | 50@0 | 8.9374 | 9.687 |
| 38 | 10.0 | 38000 | 2595.0 | 16QAM | 50@0 | 8.9348 | 9.563 |
| 38 | 10.0 | 38200 | 2615.0 | QPSK | 50@0 | 8.9304 | 9.689 |
| 38 | 10.0 | 38200 | 2615.0 | 16QAM | 50@0 | 8.9352 | 9.546 |
| 38 | 5.0 | 37775 | 2572.5 | QPSK | 25@0 | 4.4481 | 4.869 |
| 38 | 5.0 | 37775 | 2572.5 | 16QAM | 25@0 | 4.4519 | 4.796 |
| 38 | 5.0 | 38000 | 2595.0 | QPSK | 25@0 | 4.4594 | 4.836 |
| 38 | 5.0 | 38000 | 2595.0 | 16QAM | 25@0 | 4.4448 | 4.800 |
| 38 | 5.0 | 38225 | 2617.5 | QPSK | 25@0 | 4.4436 | 4.798 |
| 38 | 5.0 | 38225 | 2617.5 | 16QAM | 25@0 | 4.4539 | 4.864 |

Test Graphs

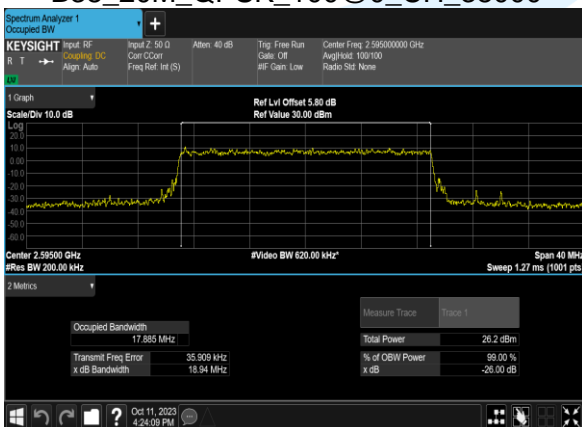
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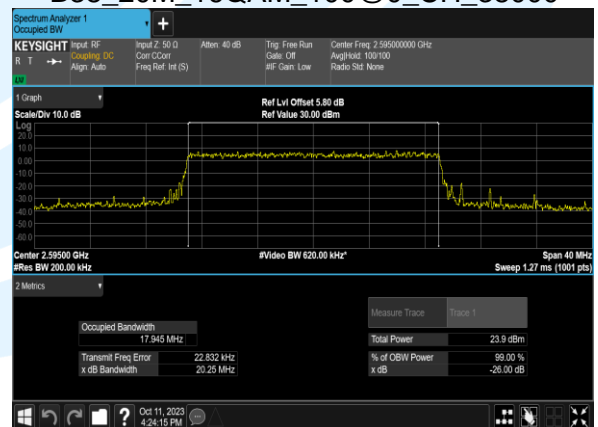
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Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

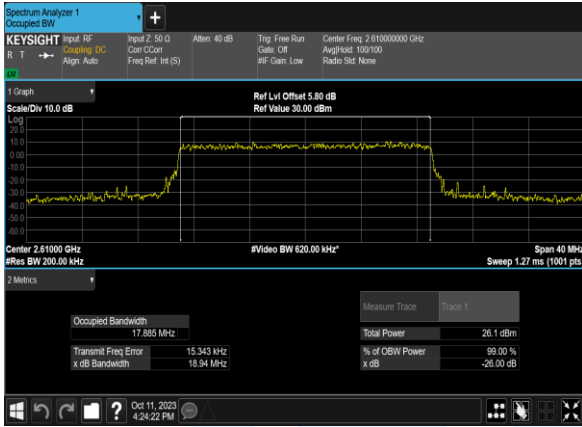
Fax: +86-755-28230886

E-mail: info@uttlab.com

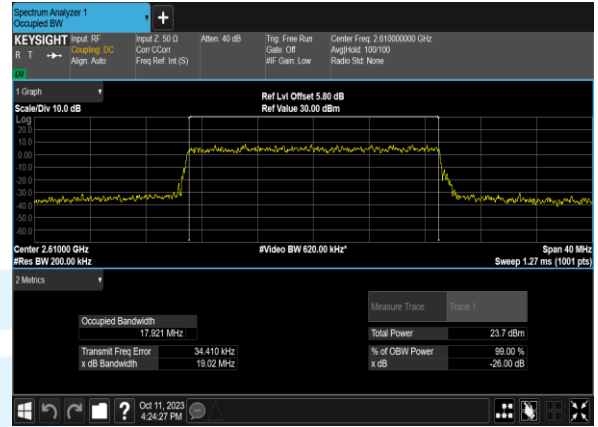
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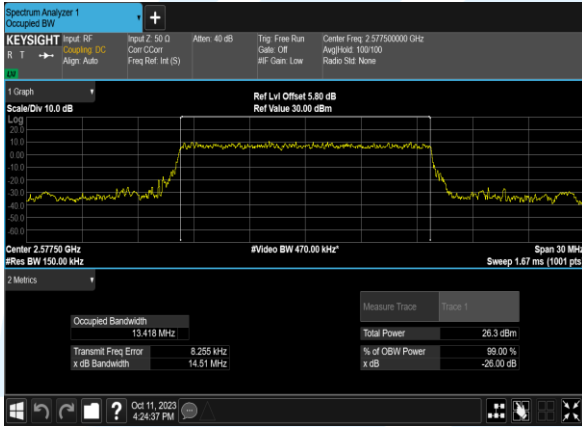
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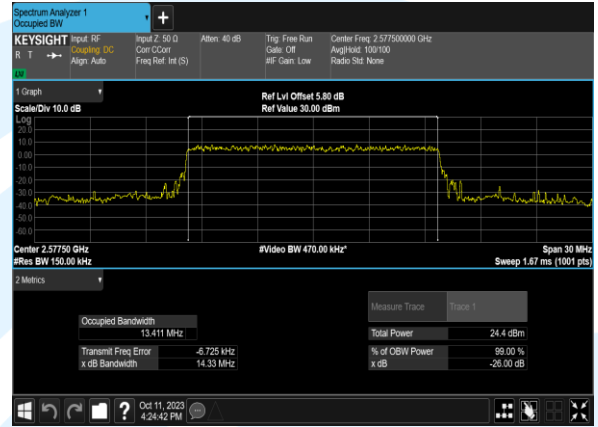
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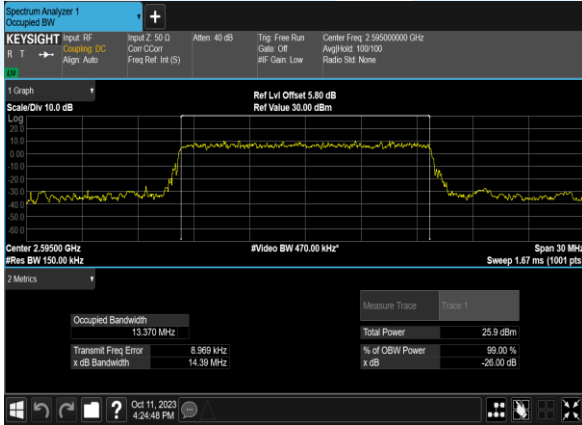
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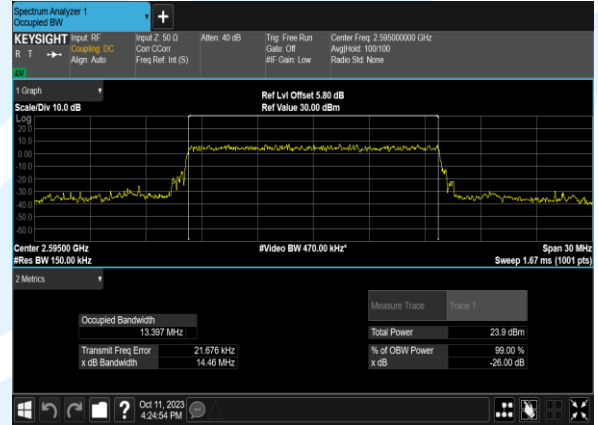
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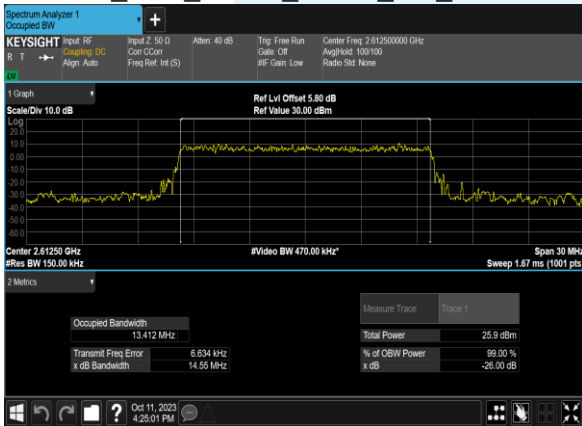
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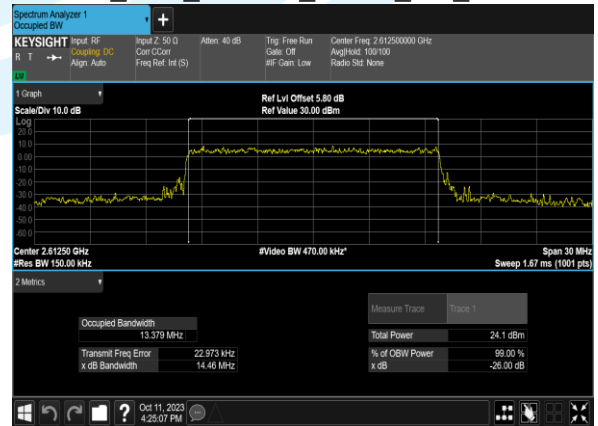
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Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

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