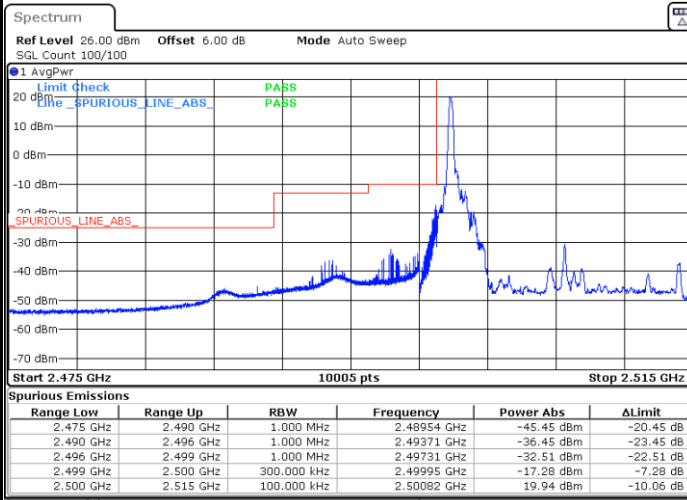




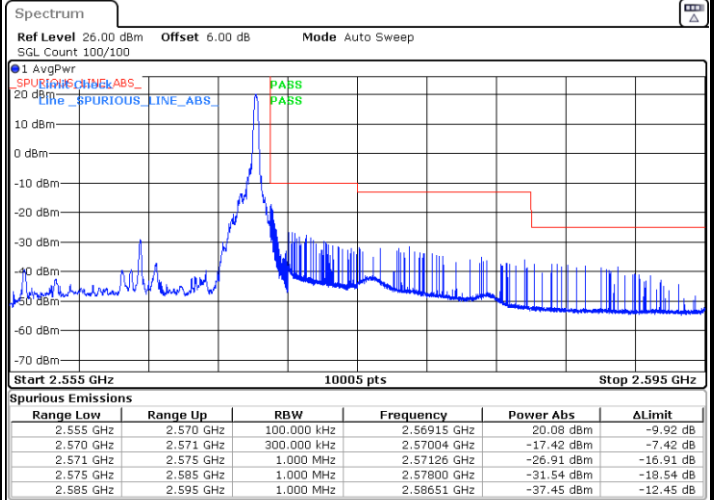
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



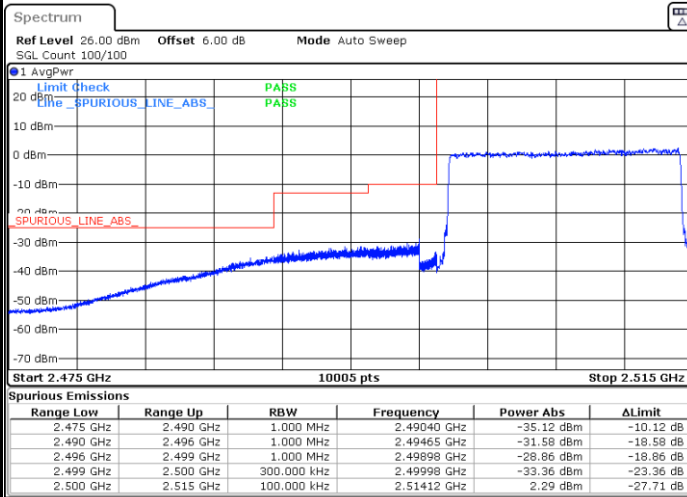
Date: 4. JAN 2020 21:36:23

Highest Band Edge / 1 RB



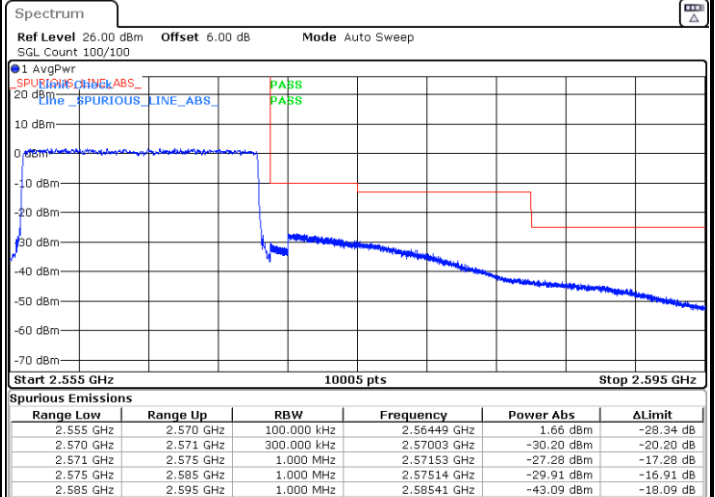
Date: 4. JAN 2020 21:42:04

Lowest Band Edge / Full RB



Date: 4. JAN 2020 21:37:31

Highest Band Edge / Full RB

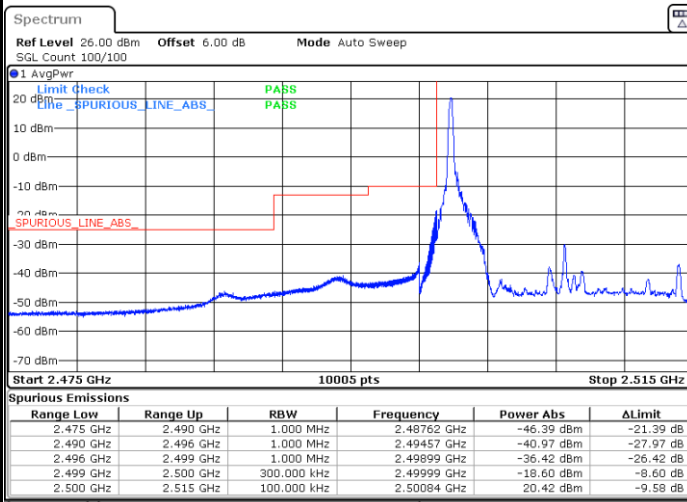


Date: 4. JAN 2020 21:40:56



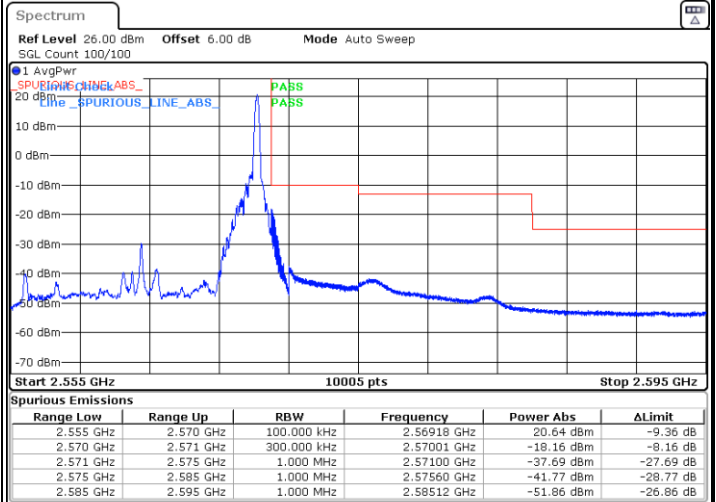
LTE Band 7 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



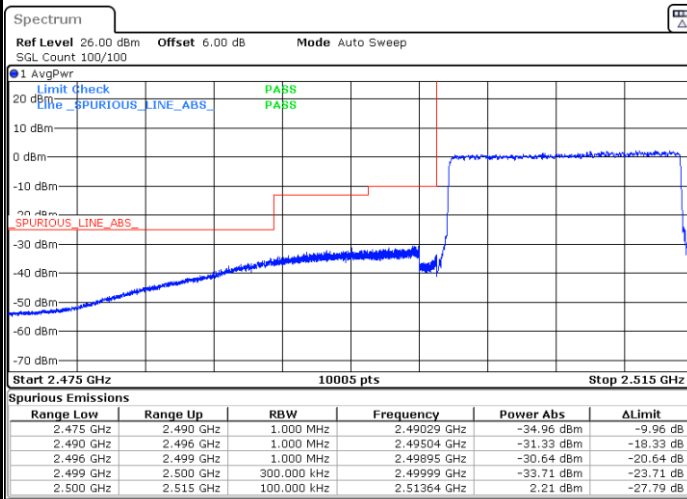
Date: 4 JAN 2020 22:24:47

Highest Band Edge / 1 RB



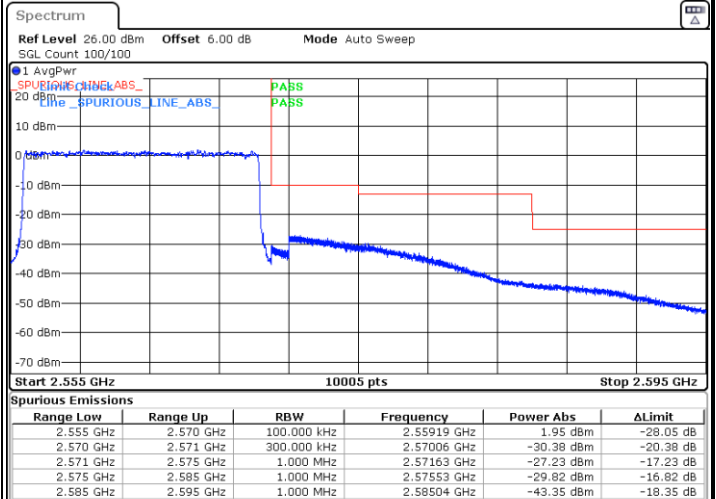
Date: 4 JAN 2020 22:27:03

Lowest Band Edge / Full RB



Date: 4 JAN 2020 22:23:38

Highest Band Edge / Full RB

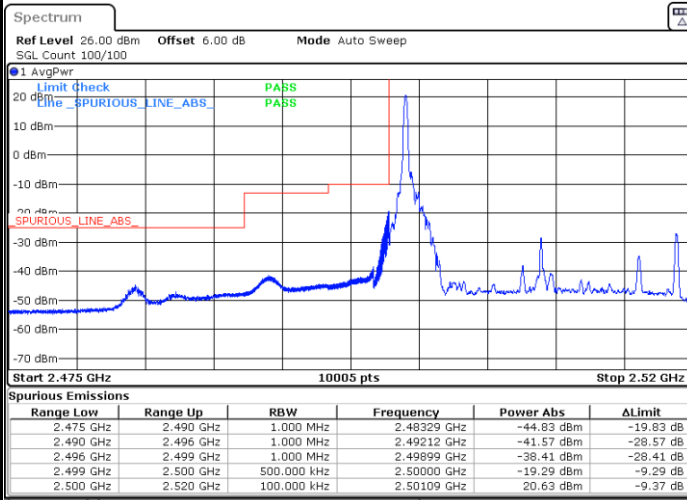


Date: 4 JAN 2020 22:25:55



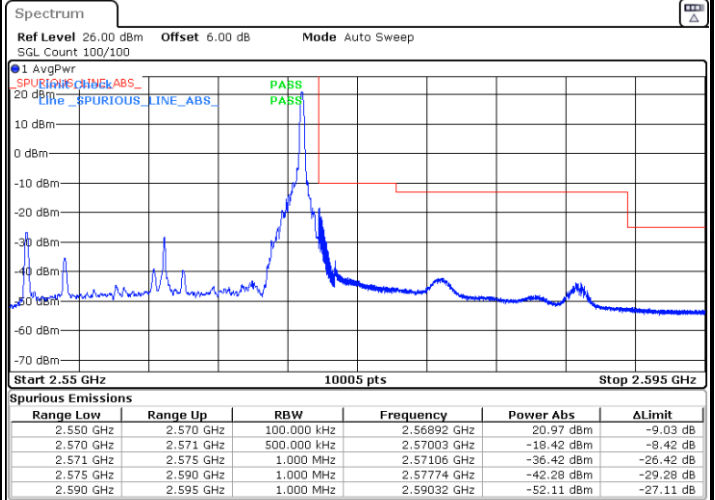
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB



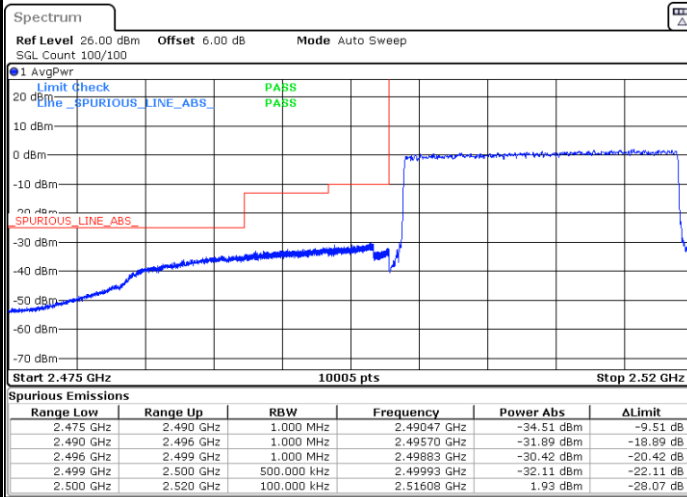
Date: 4 JAN 2020 21:51:42

Highest Band Edge / 1 RB



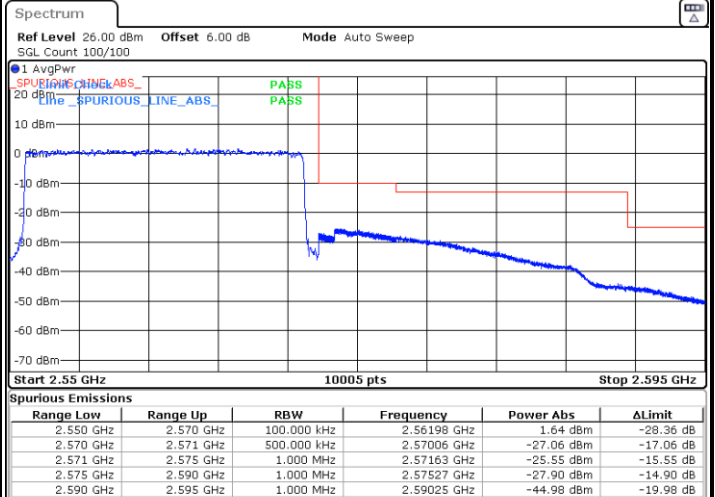
Date: 4 JAN 2020 21:59:40

Lowest Band Edge / Full RB



Date: 4 JAN 2020 21:55:07

Highest Band Edge / Full RB

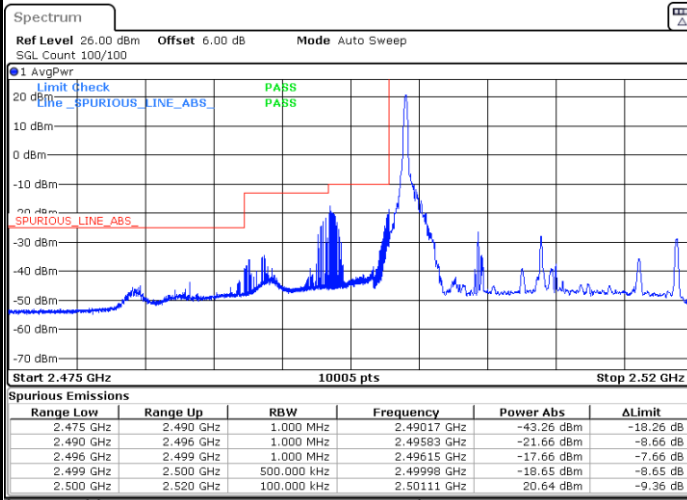


Date: 4 JAN 2020 21:56:15



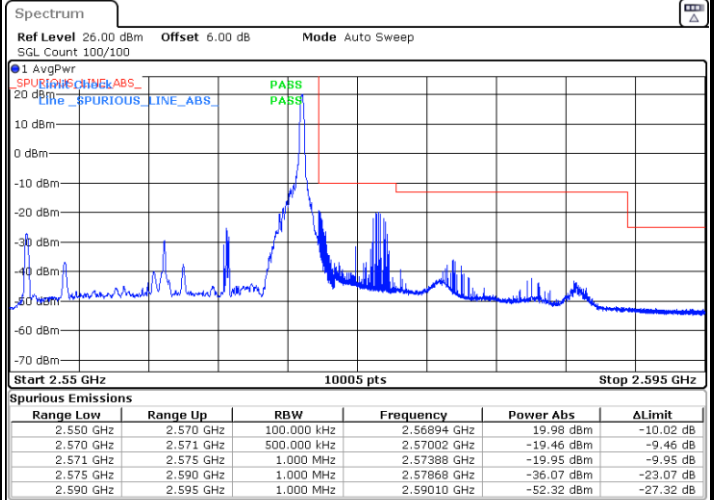
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



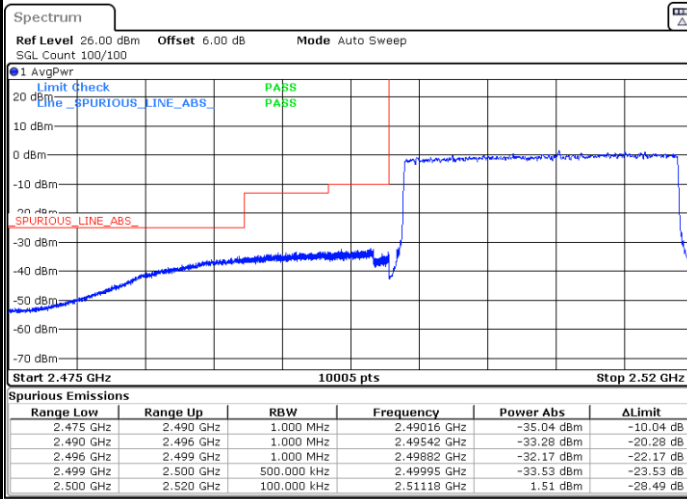
Date: 4 JAN 2020 21:52:51

Highest Band Edge / 1RB



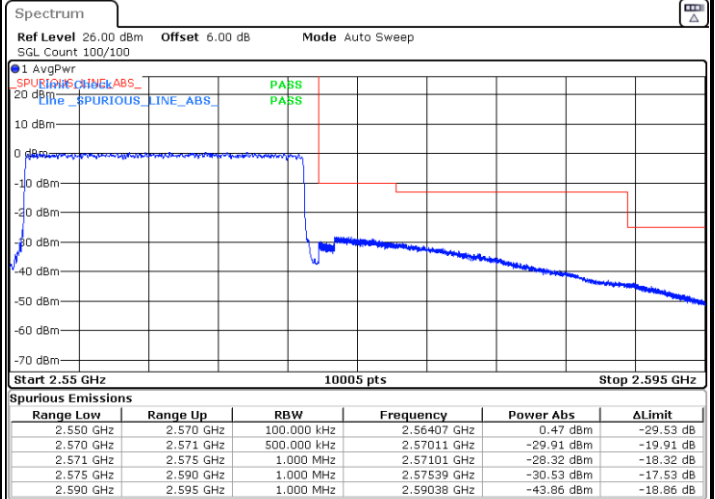
Date: 4 JAN 2020 21:58:31

Lowest Band Edge / Full RB



Date: 4 JAN 2020 21:53:59

Highest Band Edge / Full RB

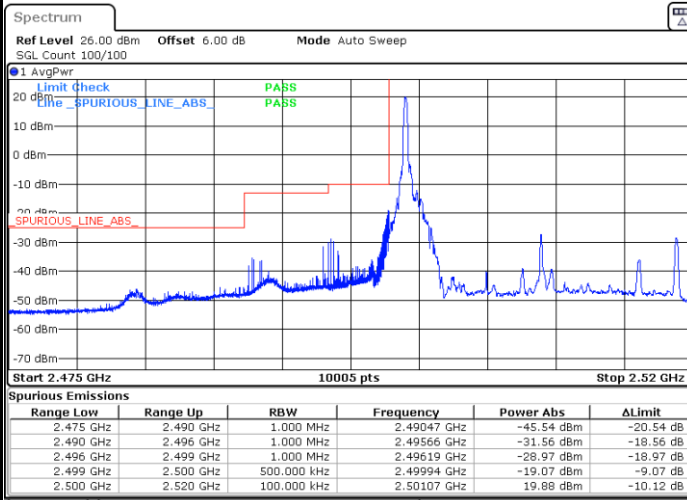


Date: 4 JAN 2020 21:57:23



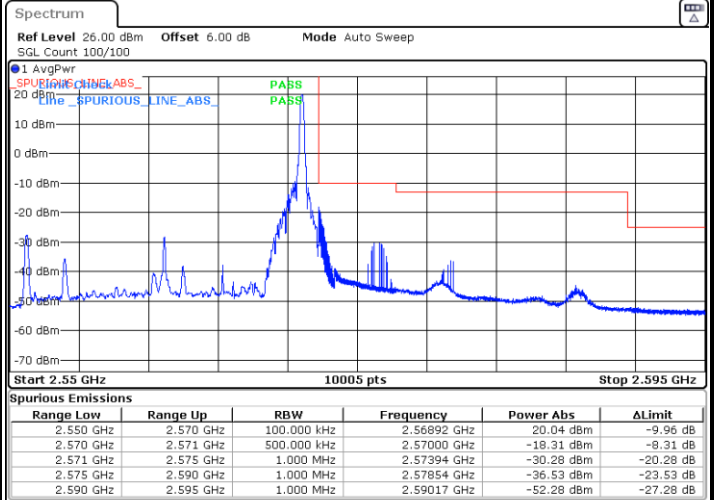
LTE Band 7 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



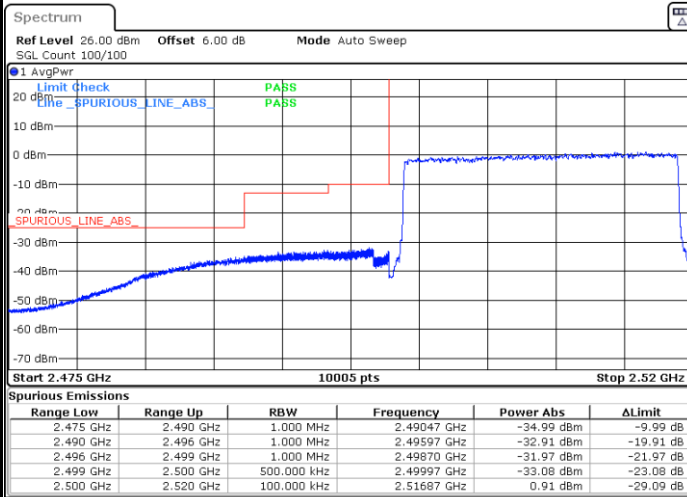
Date: 4 JAN 2020 22:33:01

Highest Band Edge / 1 RB



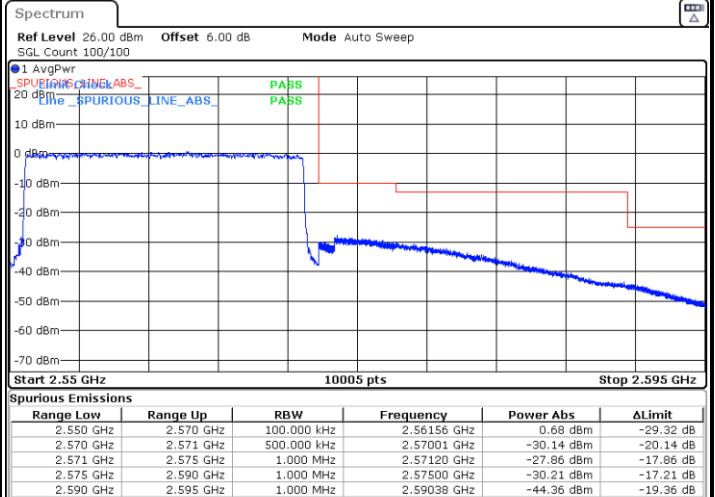
Date: 4 JAN 2020 22:35:17

Lowest Band Edge / Full RB



Date: 4 JAN 2020 22:31:52

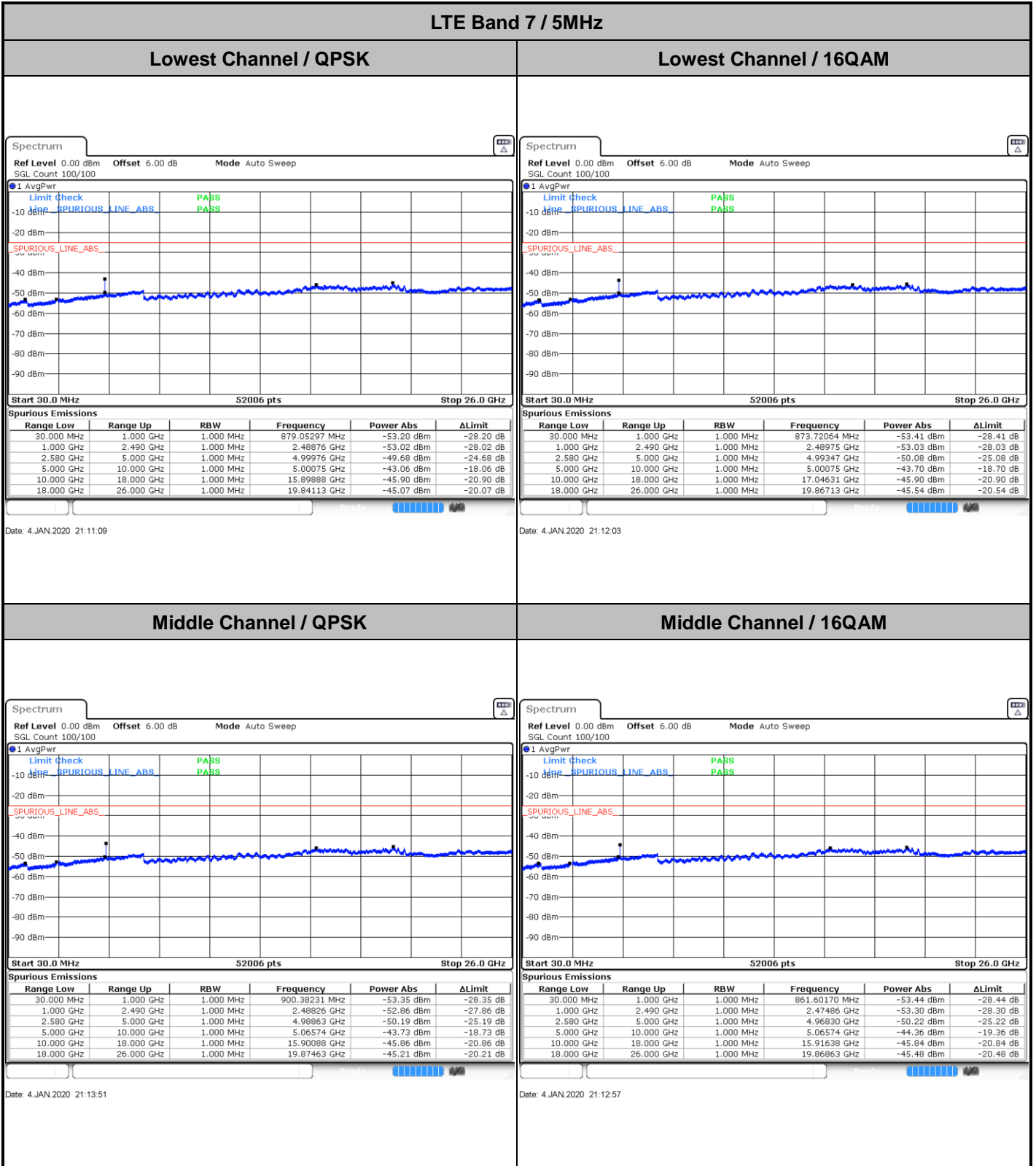
Highest Band Edge / Full RB



Date: 4 JAN 2020 22:34:09



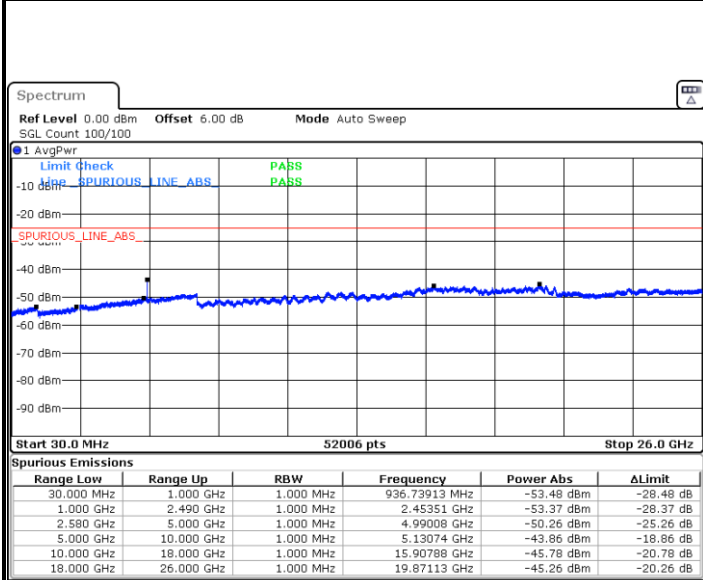
Conducted Spurious Emission





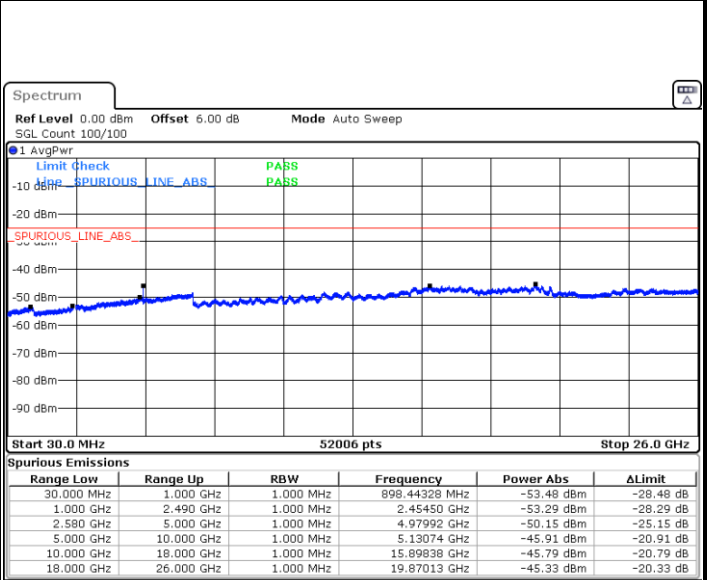
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 4 JAN 2020 21:14:44

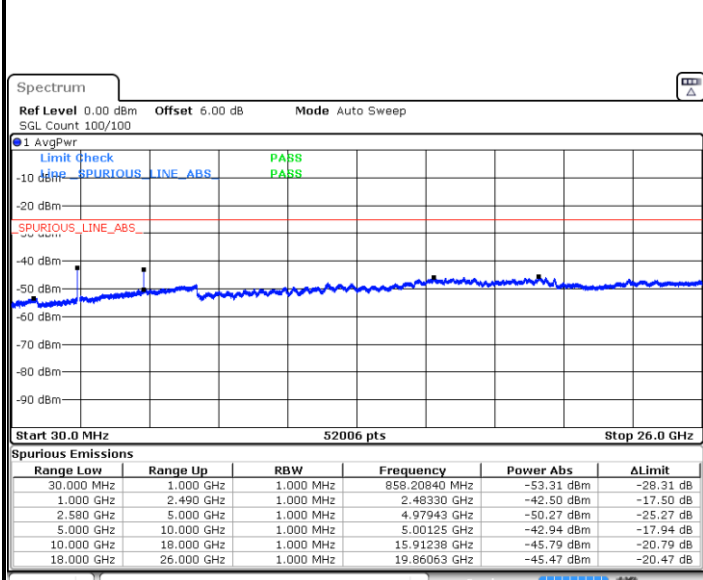
Highest Channel / 16QAM



Date: 4 JAN 2020 21:15:38

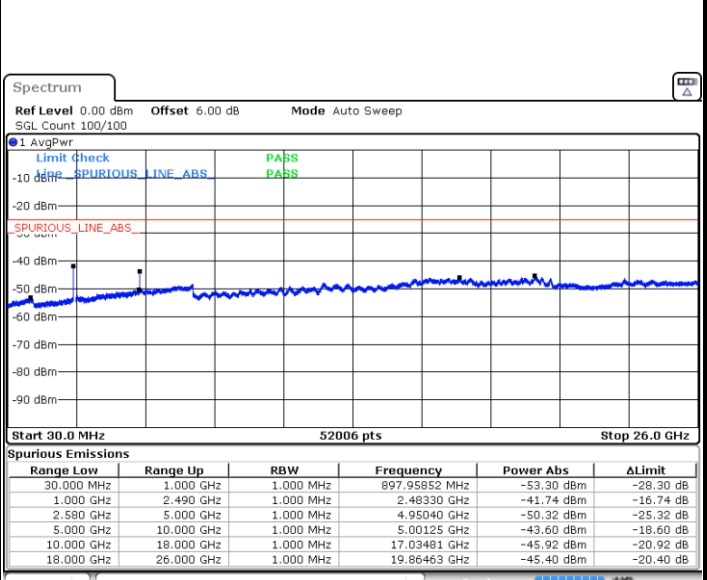
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 4 JAN 2020 21:27:36

Lowest Channel / 16QAM



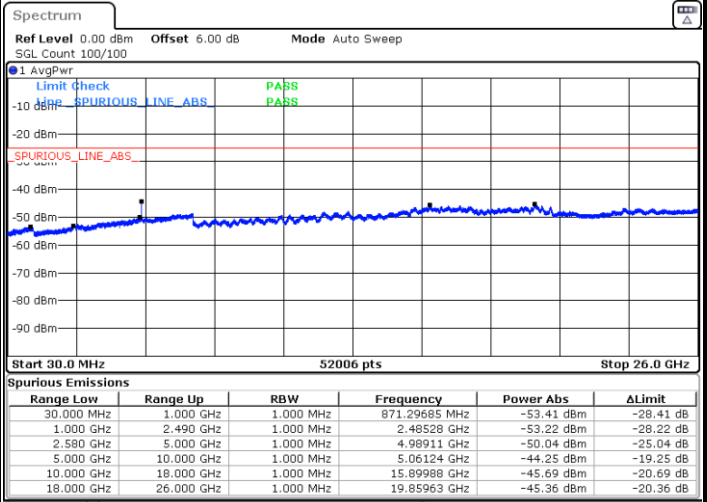
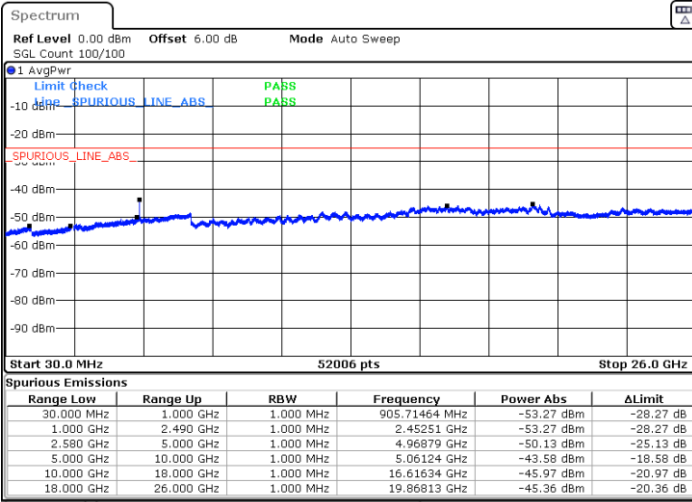
Date: 4 JAN 2020 21:28:30



LTE Band 7 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

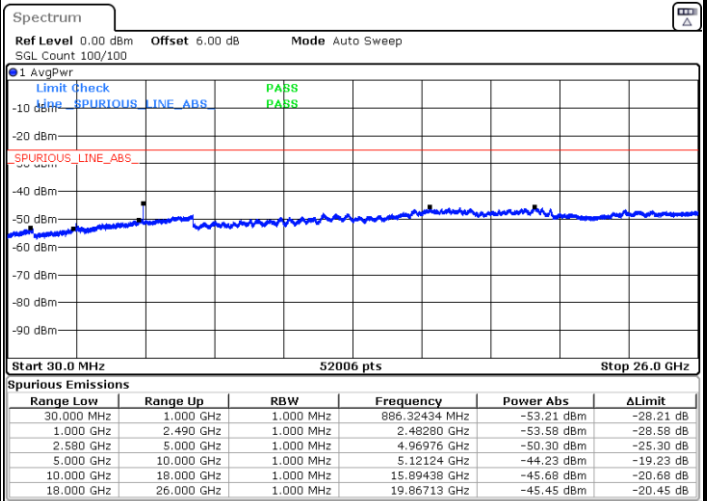
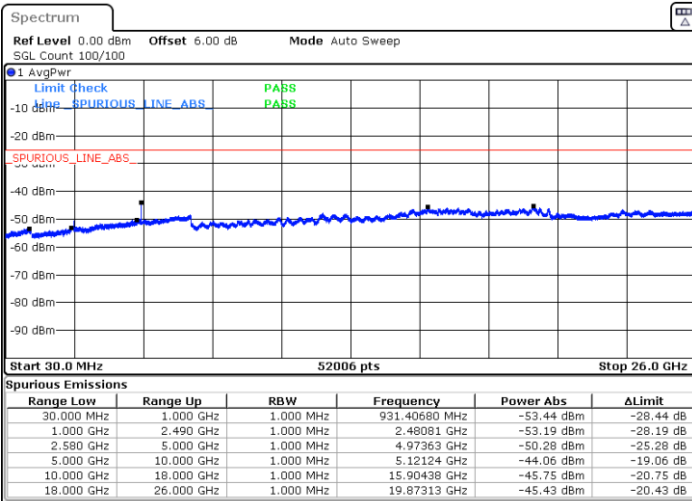


Date: 4 JAN 2020 21:30:18

Date: 4 JAN 2020 21:29:24

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 4 JAN 2020 21:31:11

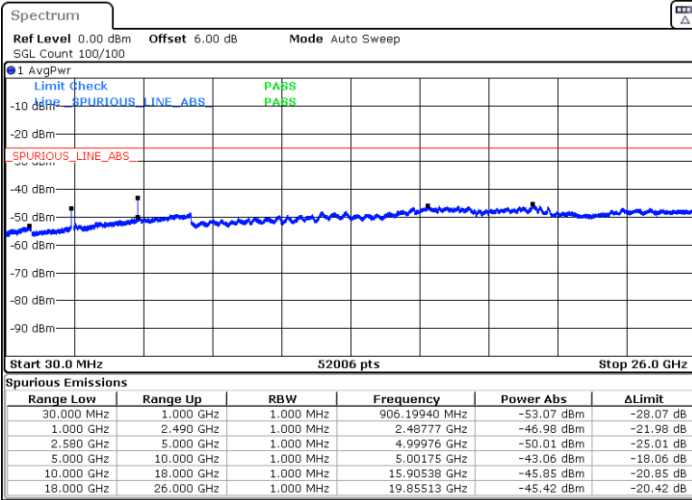
Date: 4 JAN 2020 21:32:05



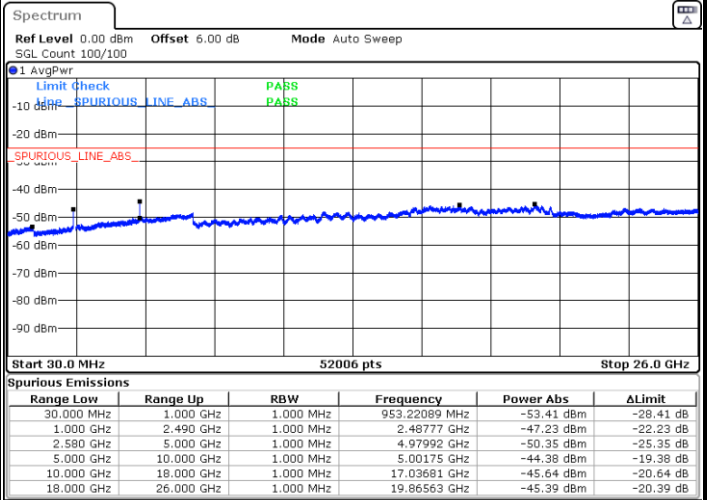
LTE Band 7 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



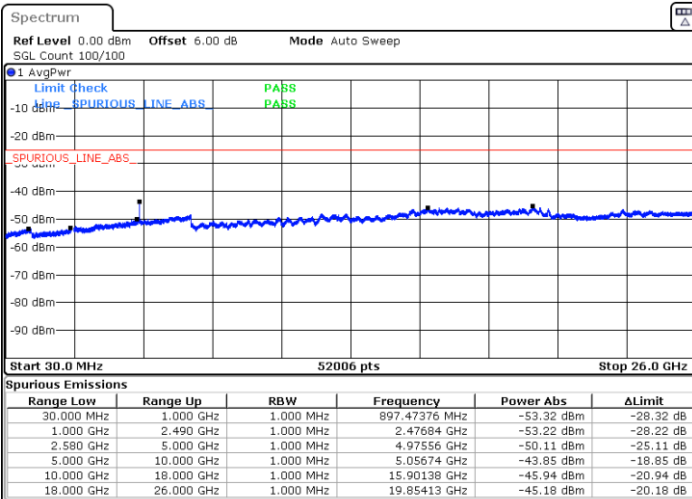
Date: 4 JAN 2020 21:44:04



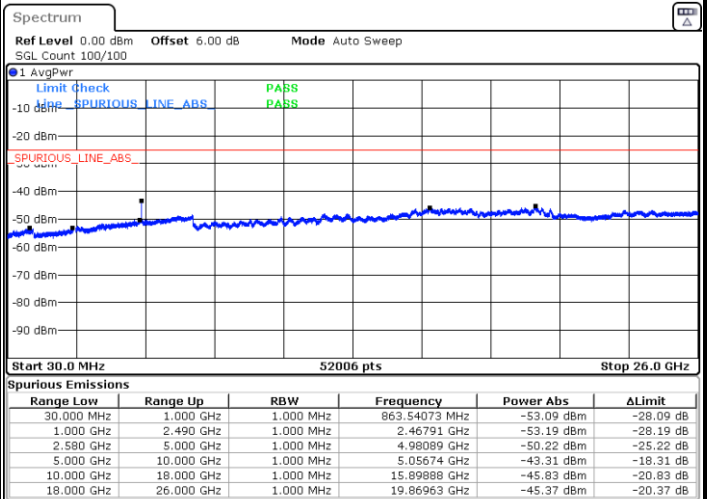
Date: 4 JAN 2020 21:44:58

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 4 JAN 2020 21:46:46

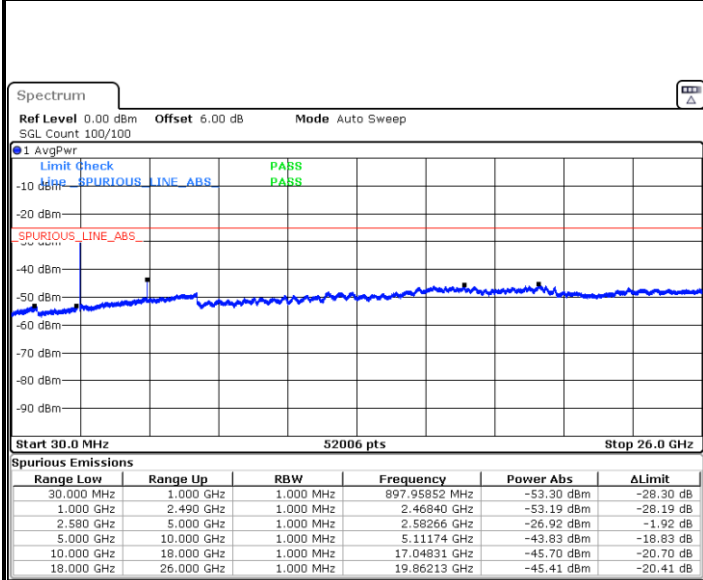


Date: 4 JAN 2020 21:45:52



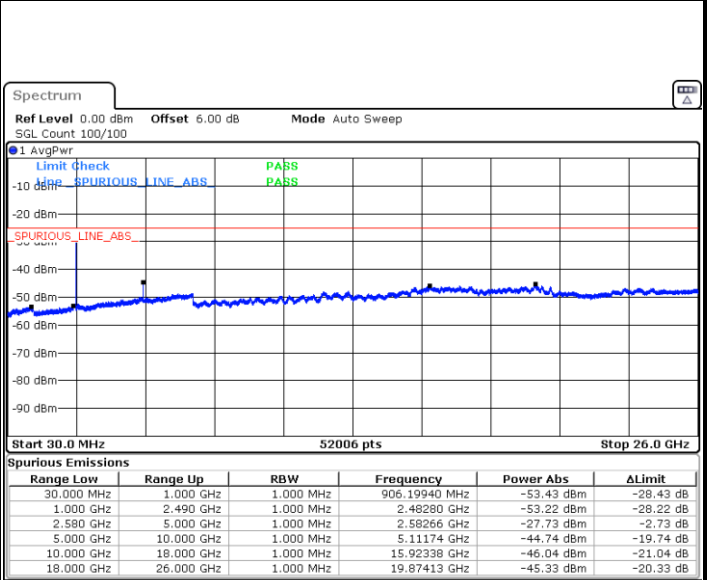
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 4 JAN 2020 21:47:39

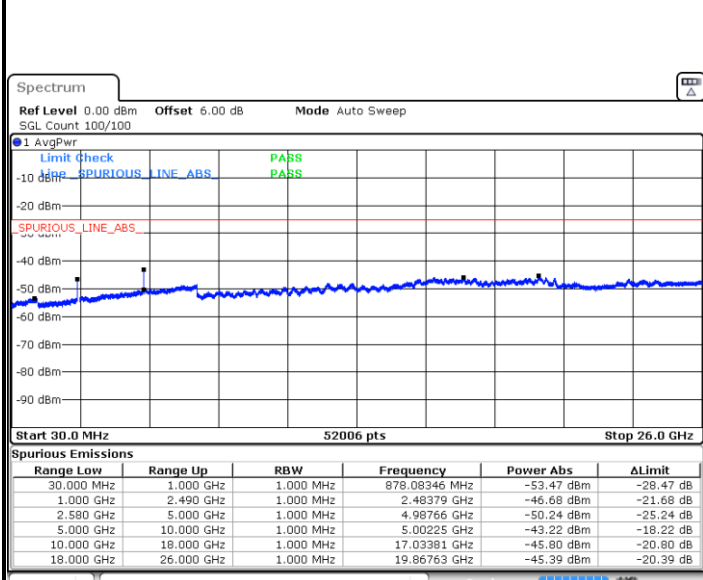
Highest Channel / 16QAM



Date: 4 JAN 2020 21:48:33

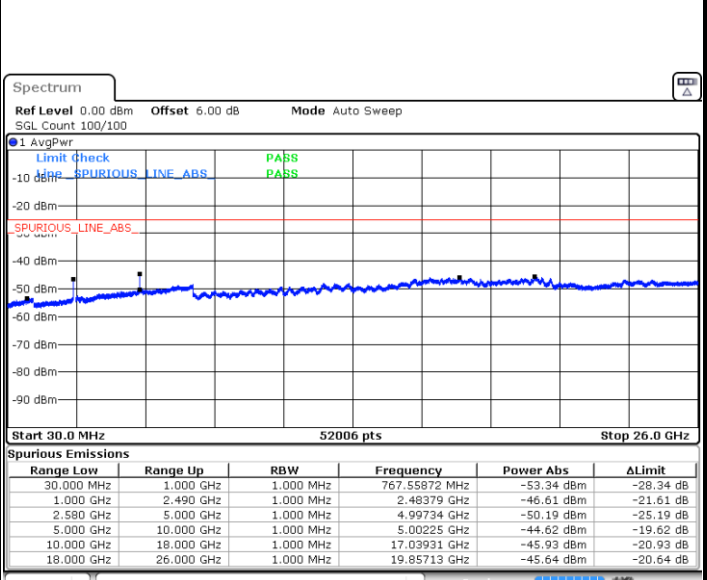
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 4 JAN 2020 22:00:32

Lowest Channel / 16QAM

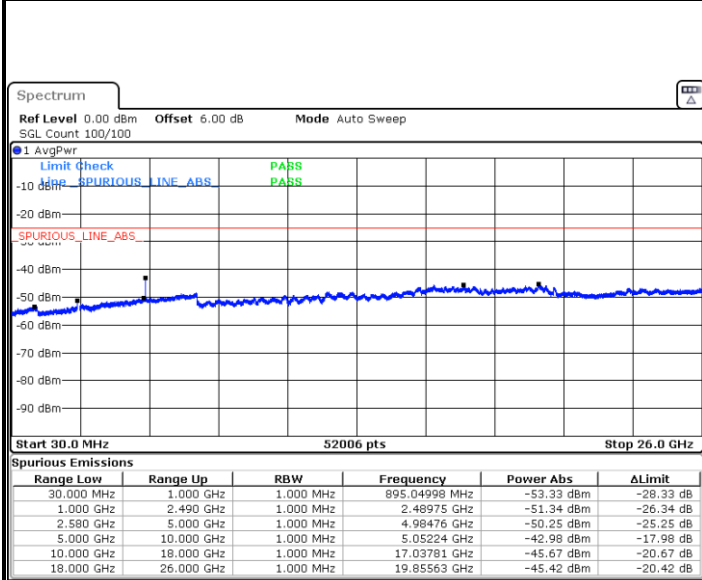


Date: 4 JAN 2020 22:01:26



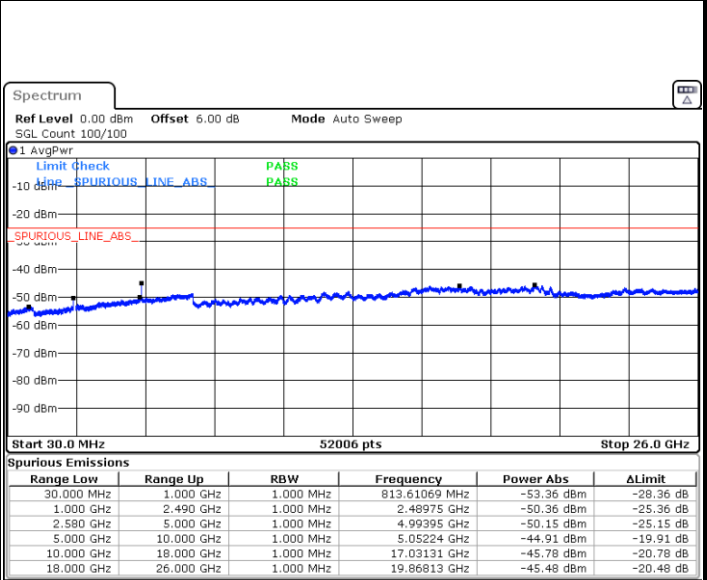
LTE Band 7 / 20MHz

Middle Channel / QPSK



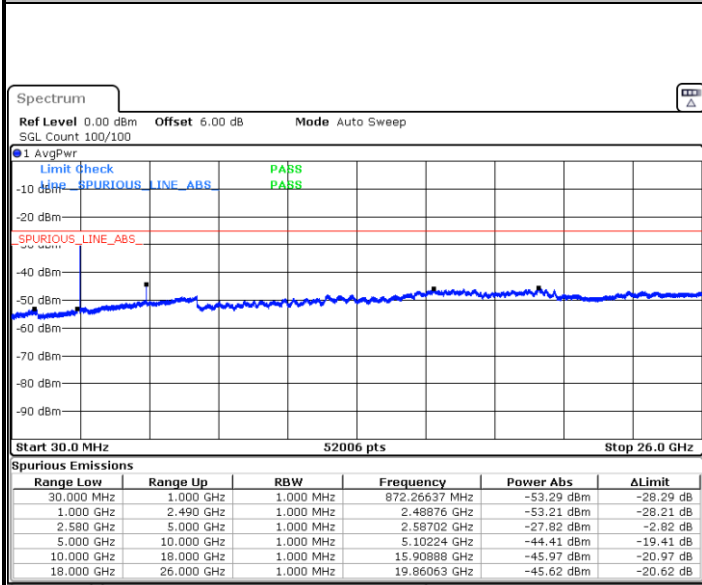
Date: 4 JAN 2020 22:03:14

Middle Channel / 16QAM



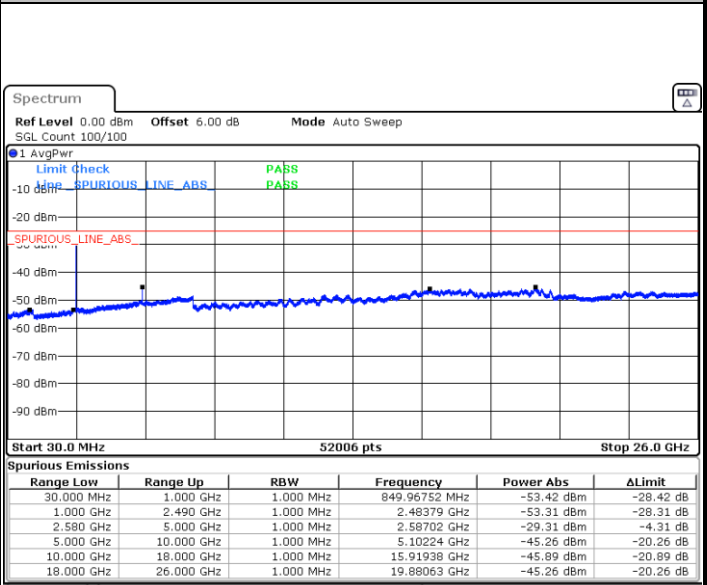
Date: 4 JAN 2020 22:02:20

Highest Channel / QPSK

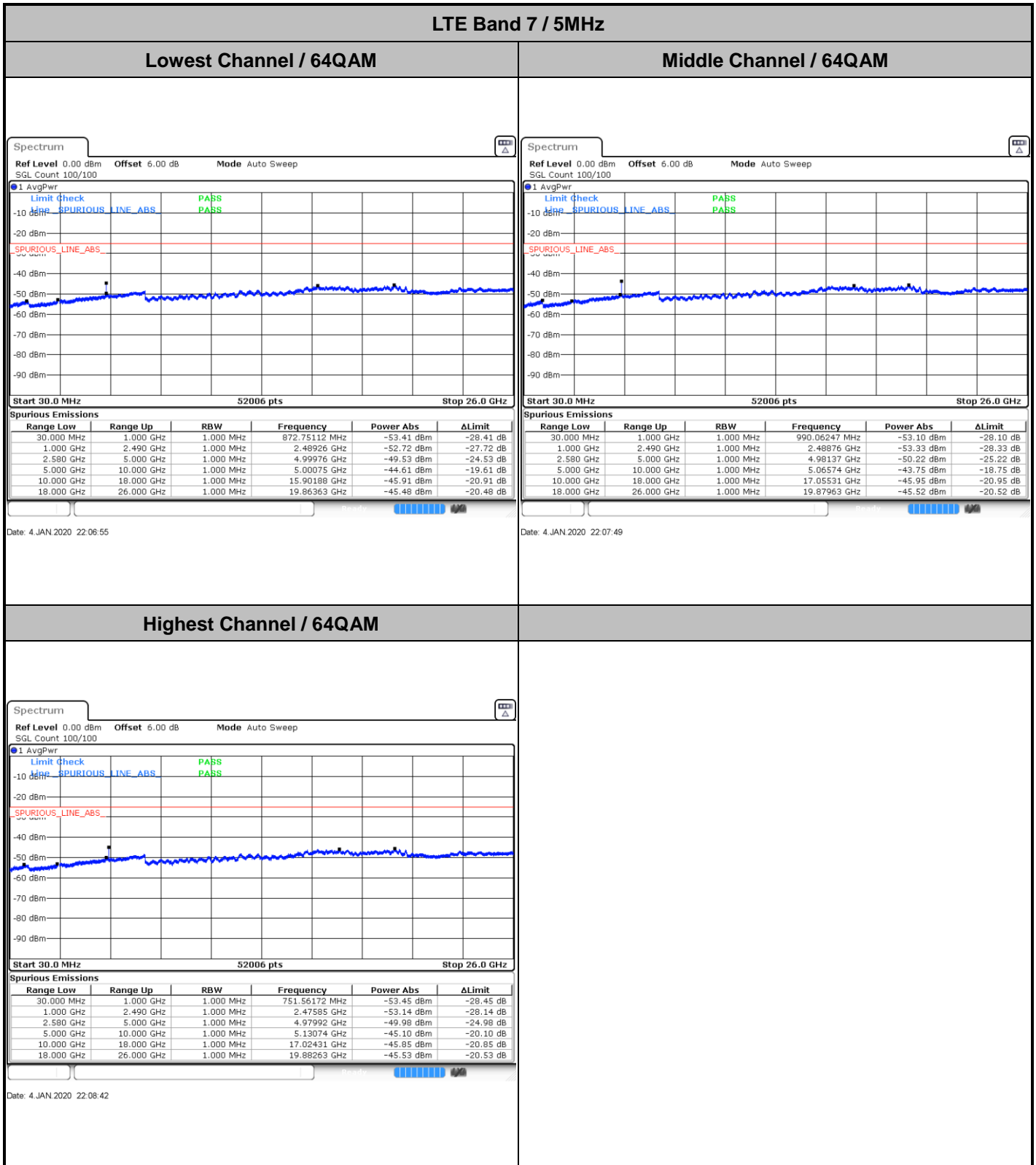


Date: 4 JAN 2020 22:04:07

Highest Channel / 16QAM



Date: 4 JAN 2020 22:05:01

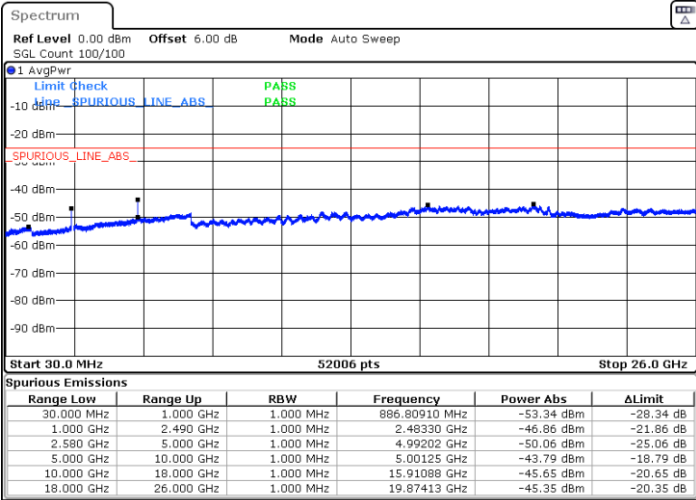




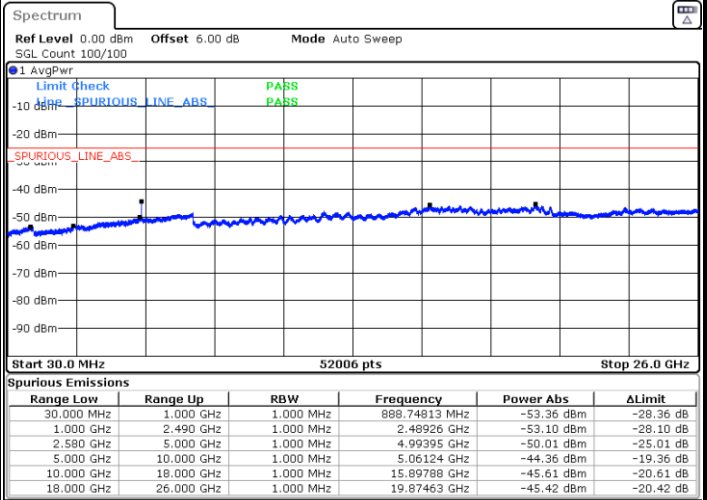
LTE Band 7 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

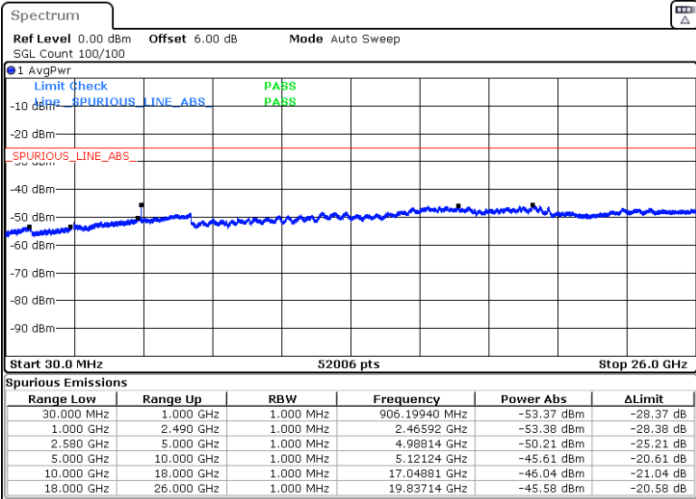


Date: 4. JAN 2020 22:15:09



Date: 4. JAN 2020 22:16:03

Highest Channel / 64QAM

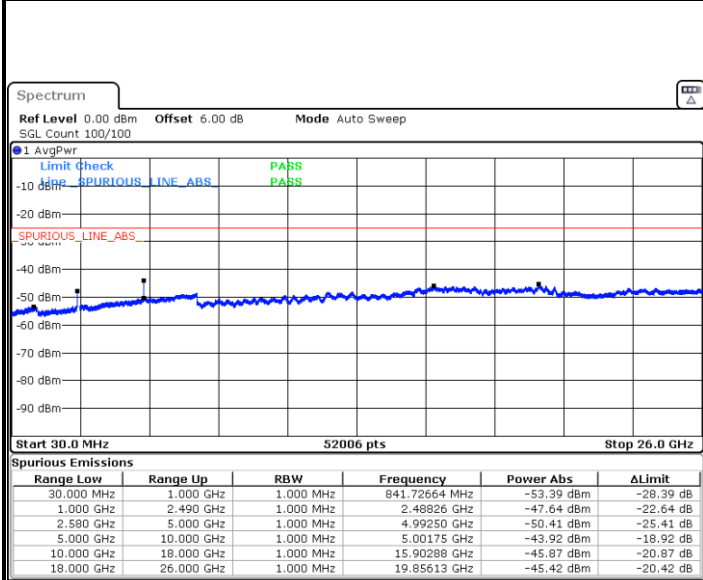


Date: 4. JAN 2020 22:16:57



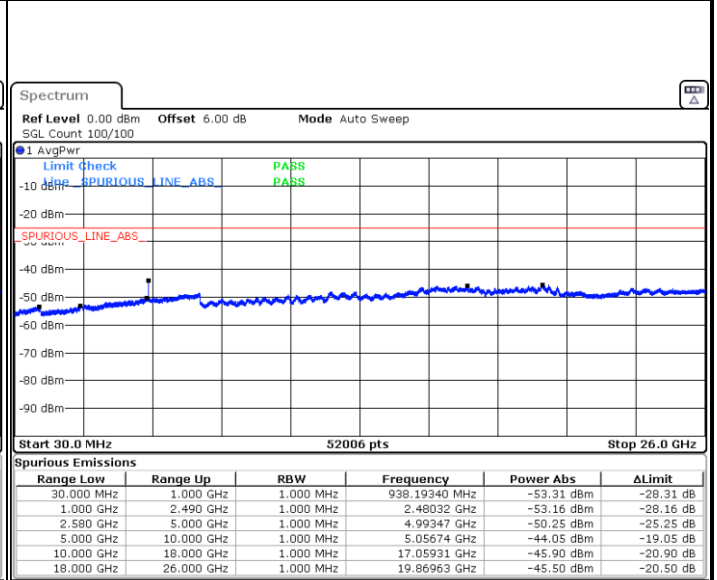
LTE Band 7 / 15MHz

Lowest Channel / 64QAM



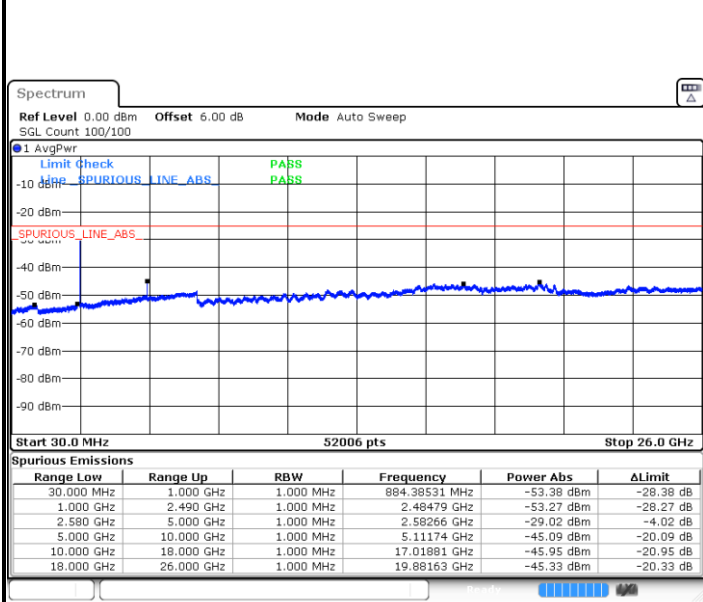
Date: 4. JAN 2020 22:27:56

Middle Channel / 64QAM



Date: 4. JAN 2020 22:28:49

Highest Channel / 64QAM



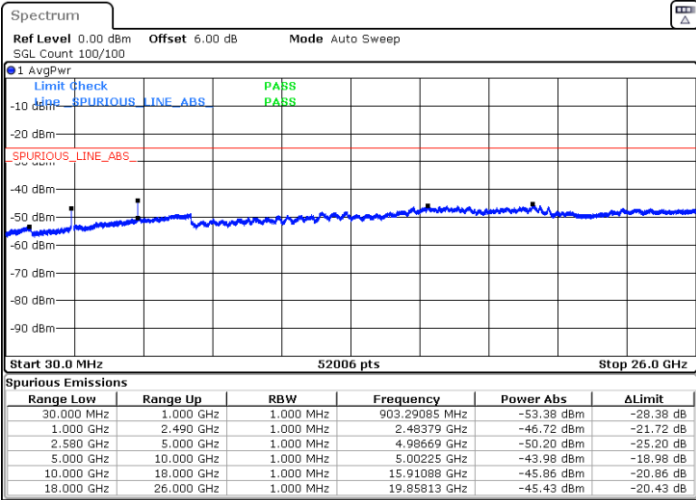
Date: 4. JAN 2020 22:29:43



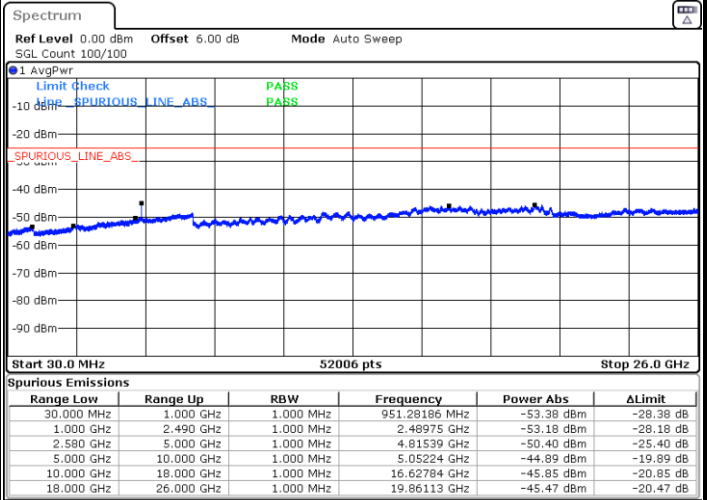
LTE Band 7 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

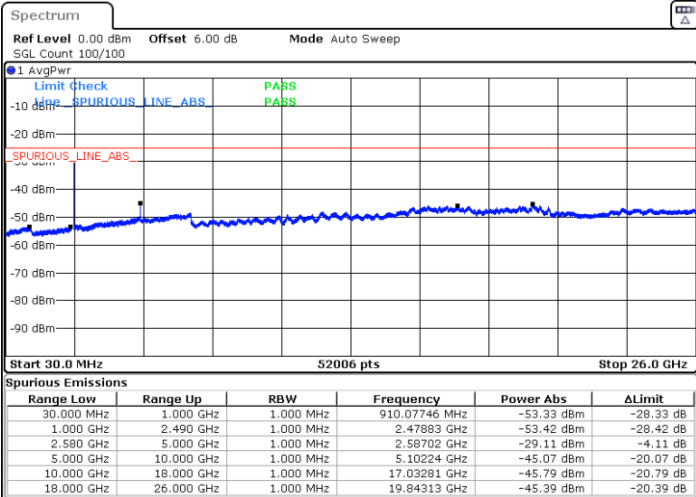


Date: 4. JAN 2020 22:36:09



Date: 4. JAN 2020 22:37:03

Highest Channel / 64QAM



Date: 4. JAN 2020 22:37:57



Frequency Stability

| Test Conditions | | LTE Band 7 (QPSK) / Middle Channel | Limit |
|------------------|-------------------|------------------------------------|---------|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0023 | PASS |
| 40 | Normal Voltage | 0.0028 | |
| 30 | Normal Voltage | 0.0008 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0019 | |
| 0 | Normal Voltage | 0.0032 | |
| -10 | Normal Voltage | 0.0002 | |
| -20 | Normal Voltage | 0.0004 | |
| -30 | Normal Voltage | 0.0020 | |
| 20 | Maximum Voltage | 0.0006 | |
| 20 | Normal Voltage | 0.0024 | |
| 20 | Battery End Point | 0.0027 | |

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.0V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 38

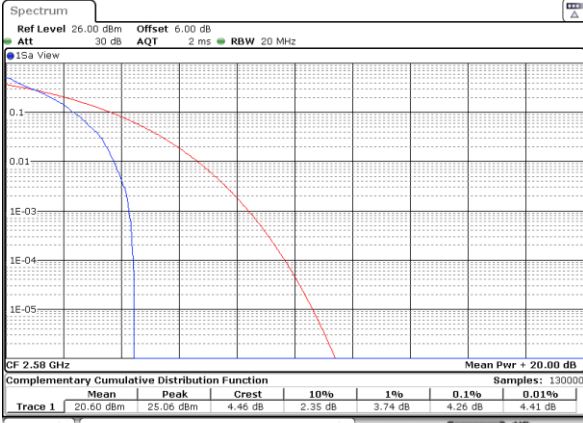
Peak-to-Average Ratio

| Mode | LTE Band 38 / 20MHz | | | | |
|------------|---------------------|---------|-------|---------|-------------|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 4.26 | 5.62 | 5.33 | 6.52 | PASS |
| Middle CH | 4.52 | 5.13 | 5.57 | 6.03 | |
| Highest CH | 4.67 | 6.99 | 7.51 | 6.12 | |
| Mod. | 64QAM | | | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | 5.45 | 6.38 | | | PASS |
| Middle CH | 5.42 | 5.86 | | | |
| Highest CH | 8.12 | 6.99 | | | |



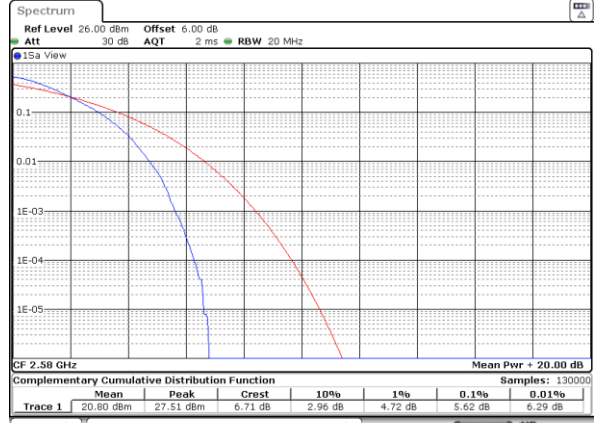
LTE Band 38 / 20MHz / QPSK

Lowest Channel / 1RB



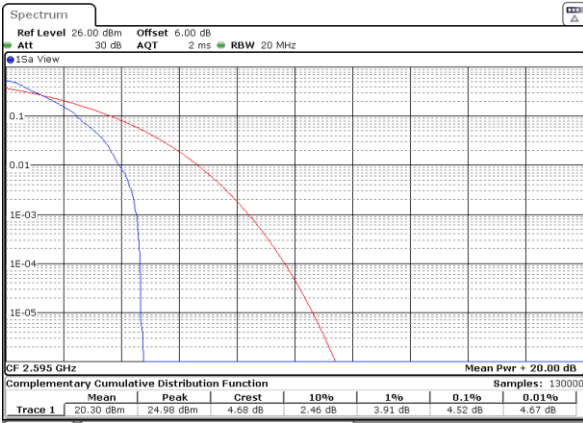
Date: 5 JAN 2020 00:37:47

Lowest Channel / Full RB



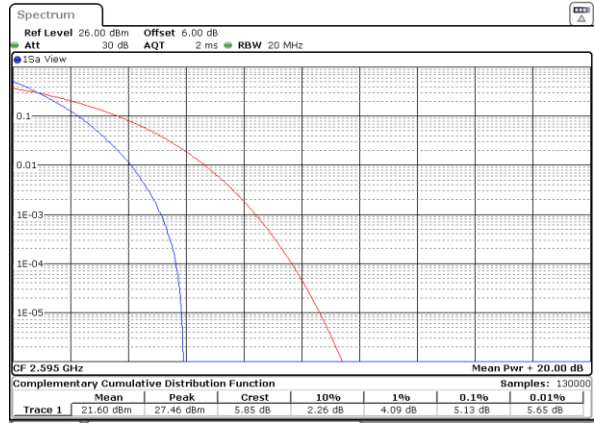
Date: 5 JAN 2020 00:38:07

Middle Channel / 1RB



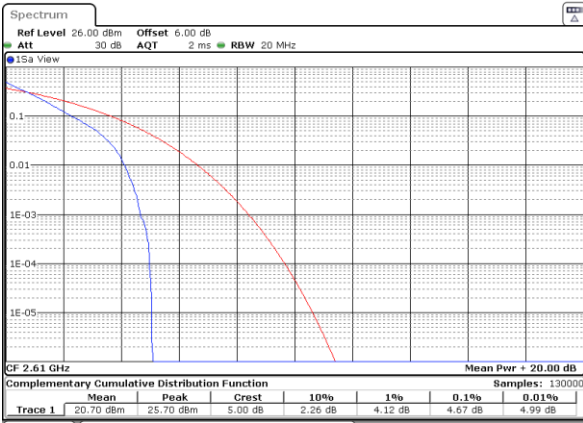
Date: 5 JAN 2020 00:39:13

Middle Channel / Full RB



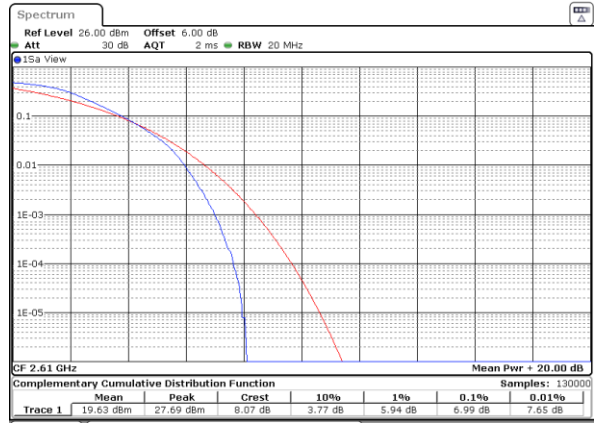
Date: 5 JAN 2020 00:39:29

Highest Channel / 1RB



Date: 5 JAN 2020 00:40:37

Highest Channel / Full RB

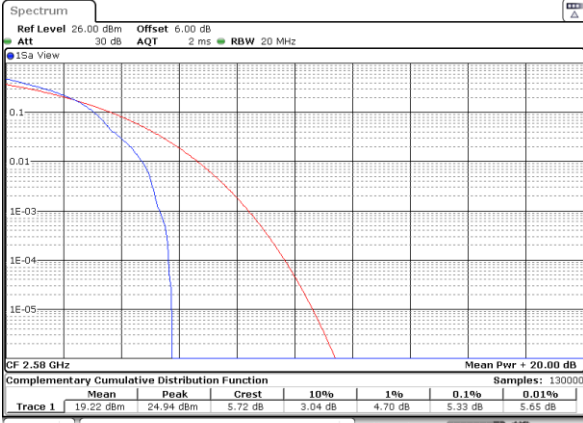


Date: 5 JAN 2020 00:40:46



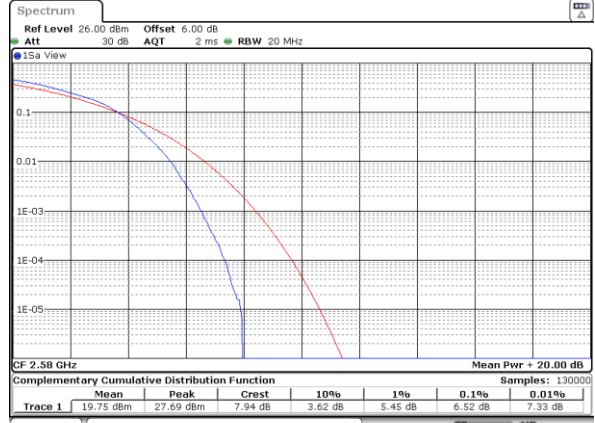
LTE Band 38 / 20MHz / 16QAM

Lowest Channel / 1RB



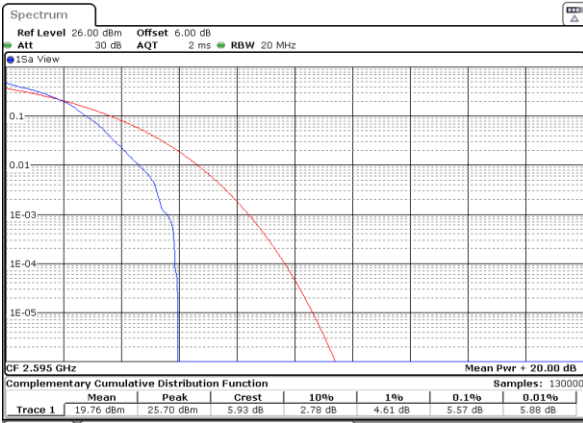
Date: 5 JAN 2020 00:38:29

Lowest Channel / Full RB



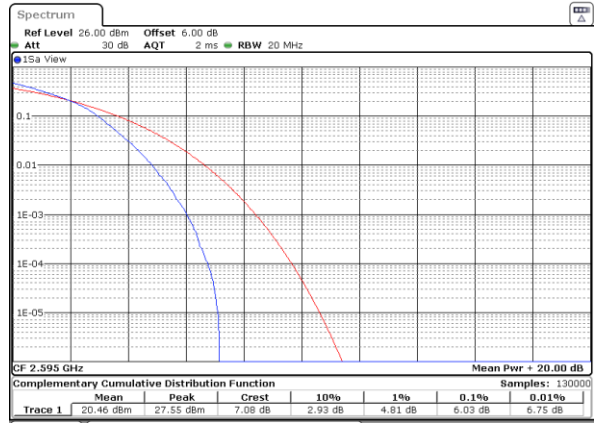
Date: 5 JAN 2020 00:38:20

Middle Channel / 1RB



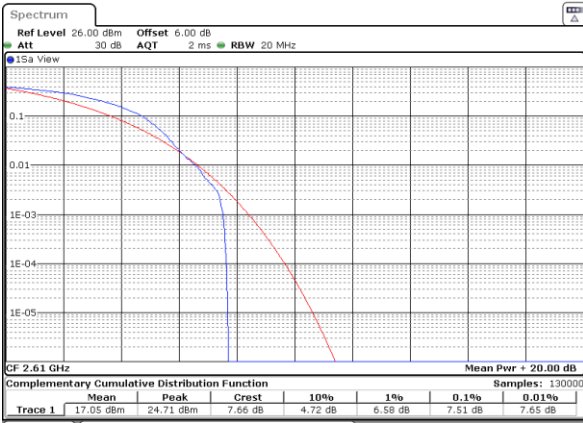
Date: 5 JAN 2020 00:39:51

Middle Channel / Full RB



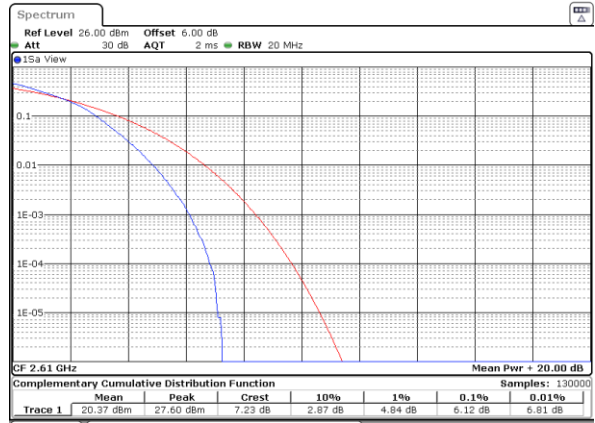
Date: 5 JAN 2020 00:39:39

Highest Channel / 1RB



Date: 5 JAN 2020 00:41:08

Highest Channel / Full RB

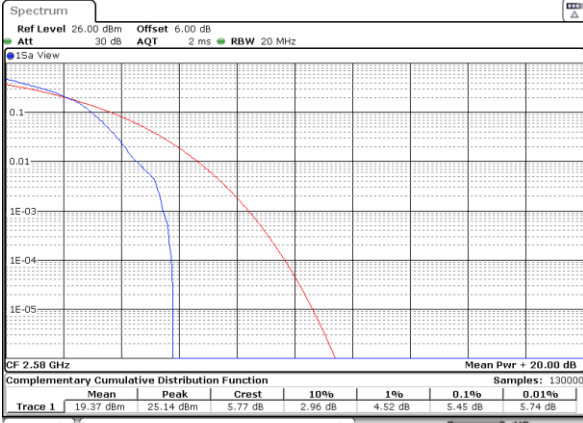


Date: 5 JAN 2020 00:40:59



LTE Band 38 / 20MHz / 64QAM

Lowest Channel / 1RB



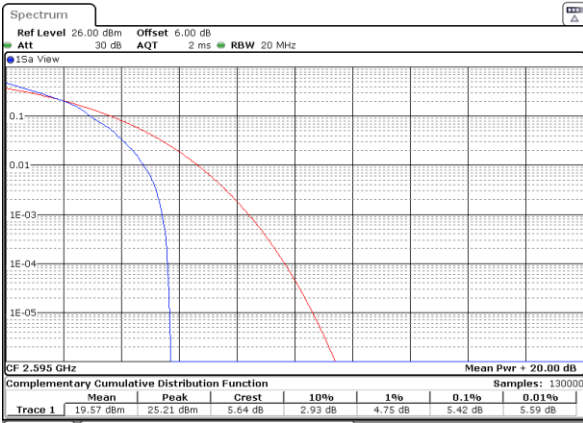
Date: 5 JAN 2020 00:38:58

Lowest Channel / Full RB



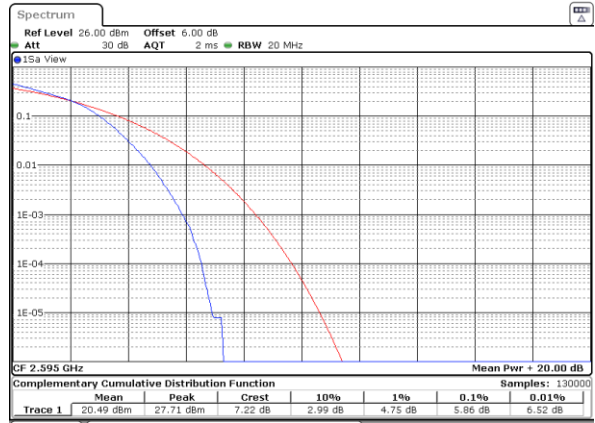
Date: 5 JAN 2020 00:38:44

Middle Channel / 1RB



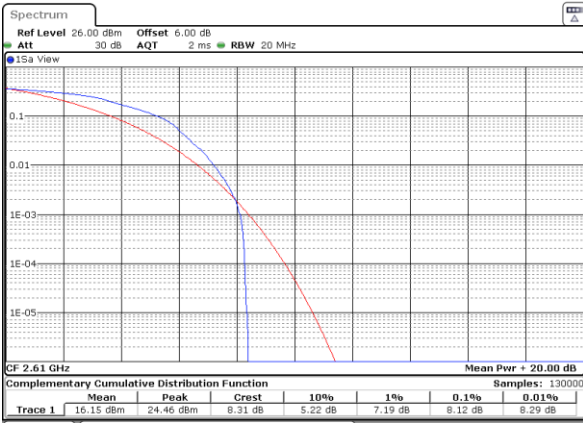
Date: 5 JAN 2020 00:40:28

Middle Channel / Full RB



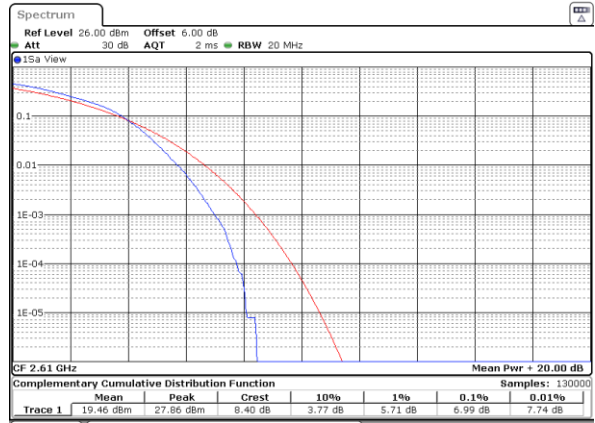
Date: 5 JAN 2020 00:40:14

Highest Channel / 1RB



Date: 5 JAN 2020 00:41:17

Highest Channel / Full RB



Date: 5 JAN 2020 00:41:33



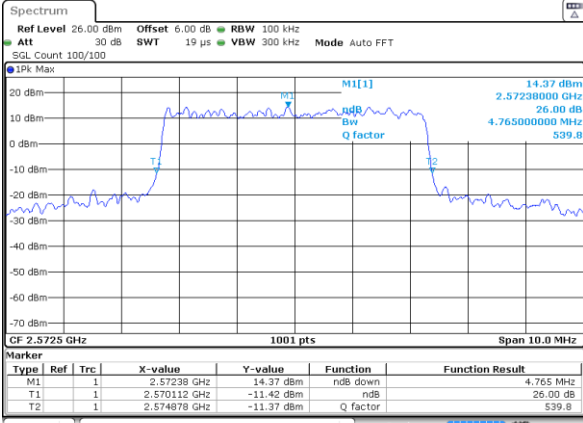
26dB Bandwidth

| Mode | LTE Band 38 : 26dB BW(MHz) | | | | | | | |
|------------|----------------------------|-------|-------|-------|--------|--------|-------|-------|
| | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| BW | | | | | | | | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 4.765 | 4.795 | 9.75 | 9.77 | 14.326 | 14.146 | 20.14 | 20.1 |
| Middle CH | 4.825 | 4.805 | 9.65 | 9.73 | 14.236 | 14.086 | 20.34 | 20.14 |
| Highest CH | 4.775 | 4.855 | 9.63 | 9.63 | 14.296 | 14.296 | 20.1 | 20.1 |
| BW | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | |
| Lowest CH | 4.765 | | 9.71 | | 14.146 | | 20.1 | |
| Middle CH | 4.755 | | 9.71 | | 14.326 | | 20.26 | |
| Highest CH | 4.755 | | 9.63 | | 14.266 | | 20.1 | |



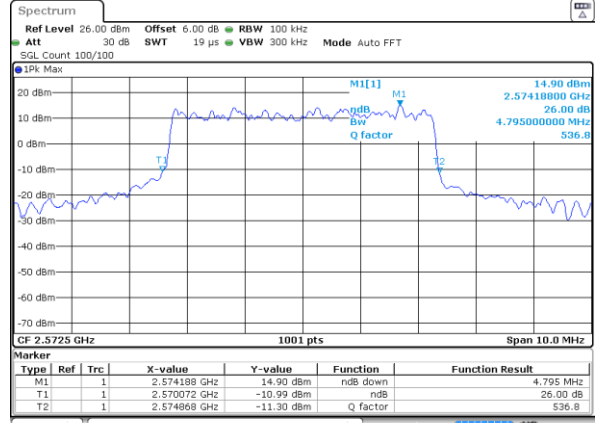
LTE Band 38

Lowest Channel / 5MHz / QPSK



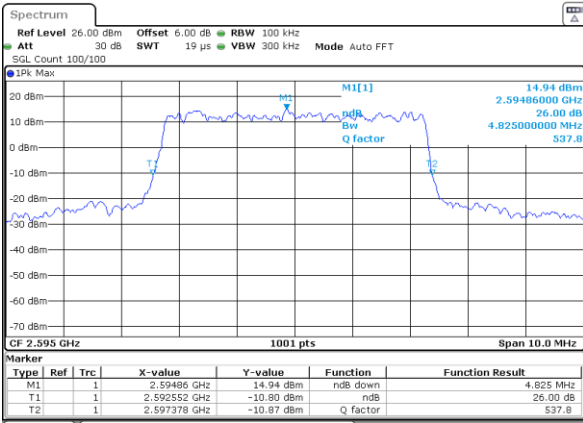
Date: 4 JAN 2020 22:46:34

Lowest Channel / 5MHz / 16QAM



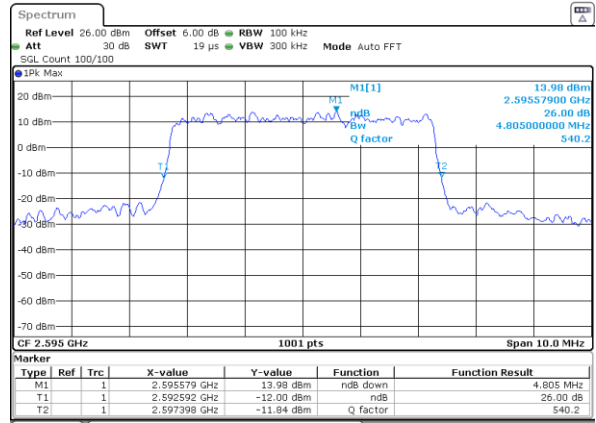
Date: 4 JAN 2020 22:46:44

Middle Channel / 5MHz / QPSK



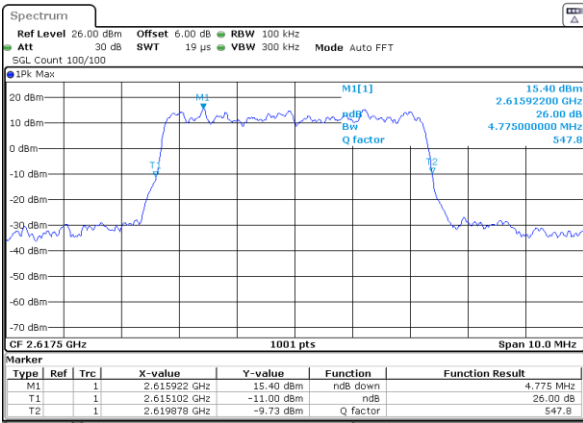
Date: 4 JAN 2020 22:47:14

Middle Channel / 5MHz / 16QAM



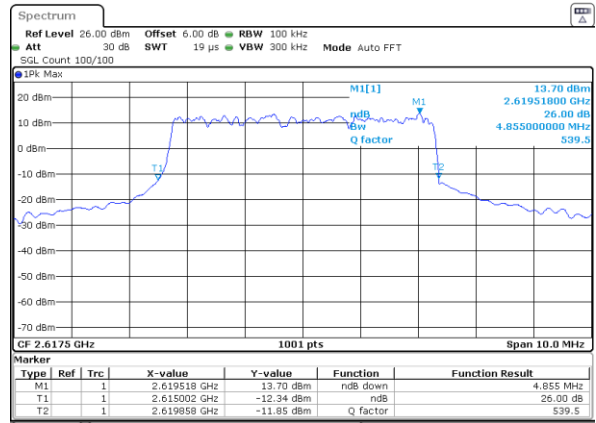
Date: 4 JAN 2020 22:47:24

Highest Channel / 5MHz / QPSK



Date: 4 JAN 2020 22:47:54

Highest Channel / 5MHz / 16QAM

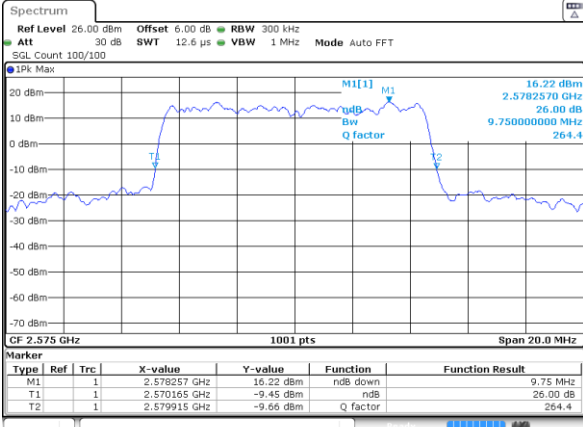


Date: 4 JAN 2020 22:48:04



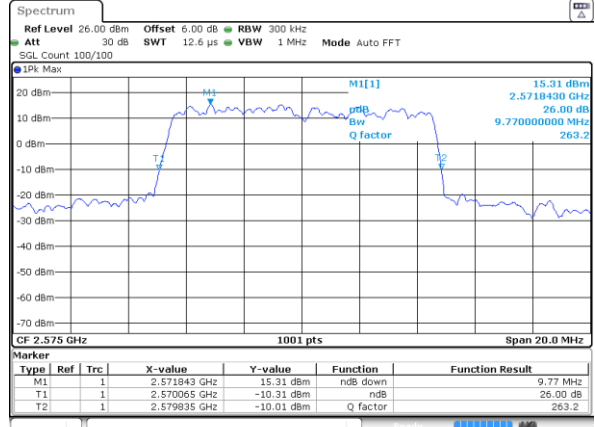
LTE Band 38

Lowest Channel / 10MHz / QPSK



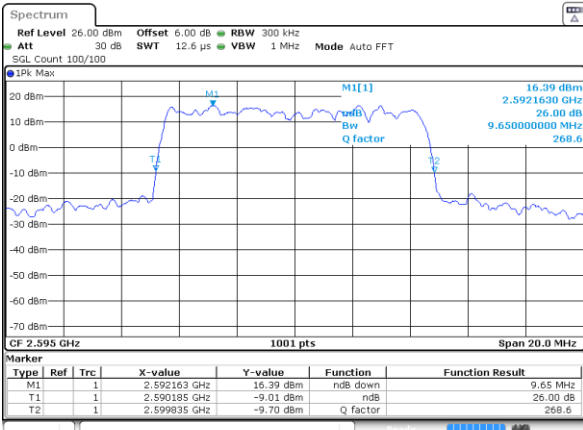
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Lowest Channel / 10MHz / 16QAM



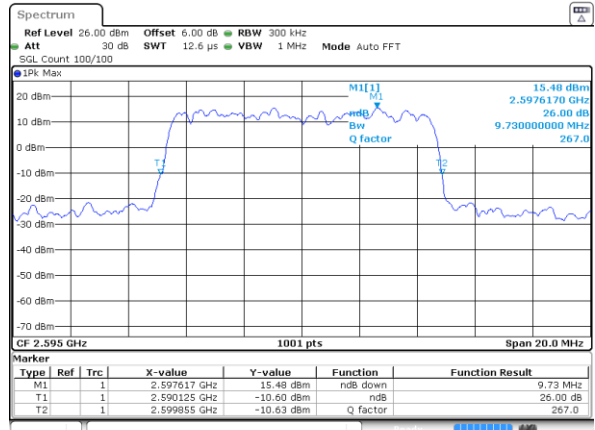
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Middle Channel / 10MHz / QPSK



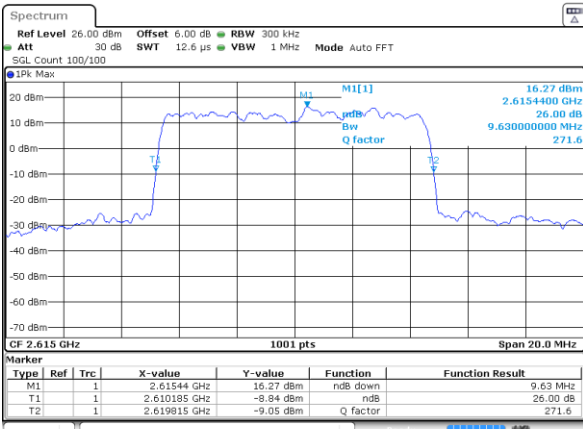
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Middle Channel / 10MHz / 16QAM



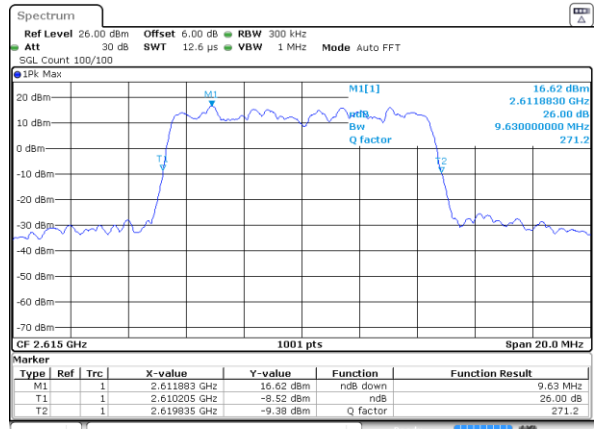
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Highest Channel / 10MHz / QPSK



Date: 4 JAN 2020 22:49:54

Highest Channel / 10MHz / 16QAM

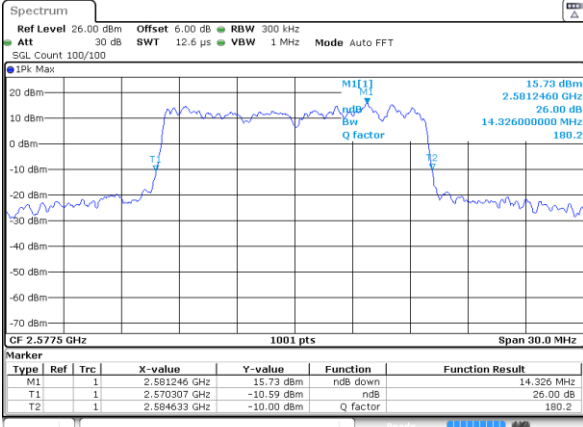


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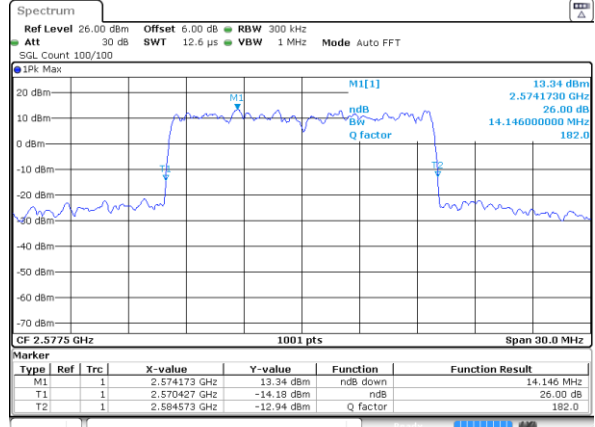
LTE Band 38

Lowest Channel / 15MHz / QPSK



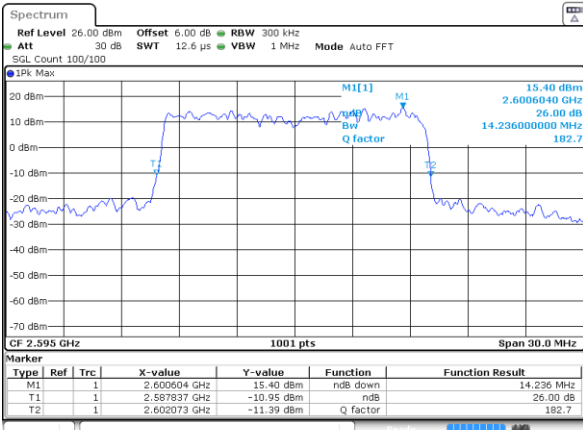
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Lowest Channel / 15MHz / 16QAM



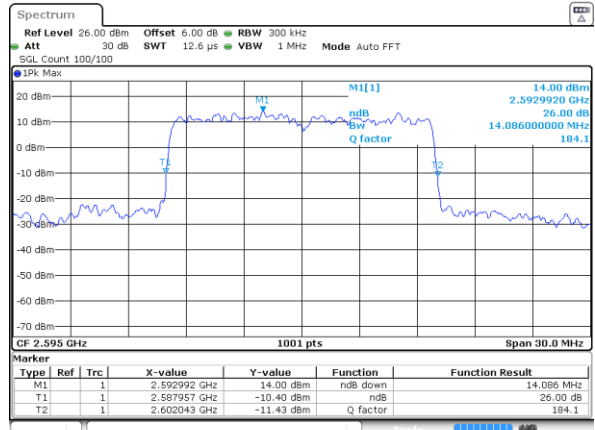
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Middle Channel / 15MHz / QPSK



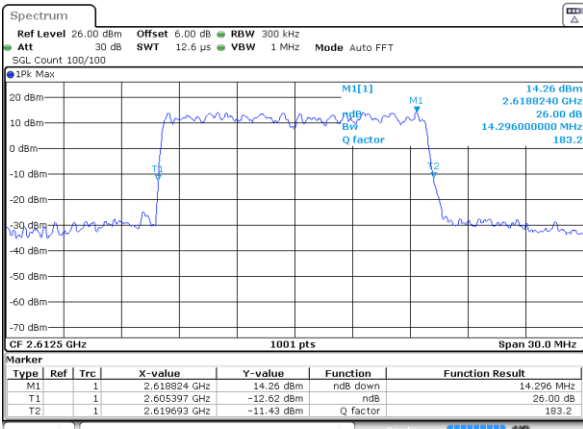
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Middle Channel / 15MHz / 16QAM



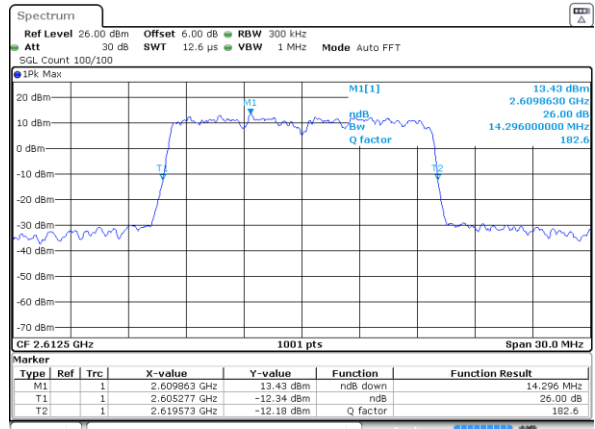
Date: 4 JAN 2020 22:51:24

Highest Channel / 15MHz / QPSK



Date: 4 JAN 2020 22:51:54

Highest Channel / 15MHz / 16QAM

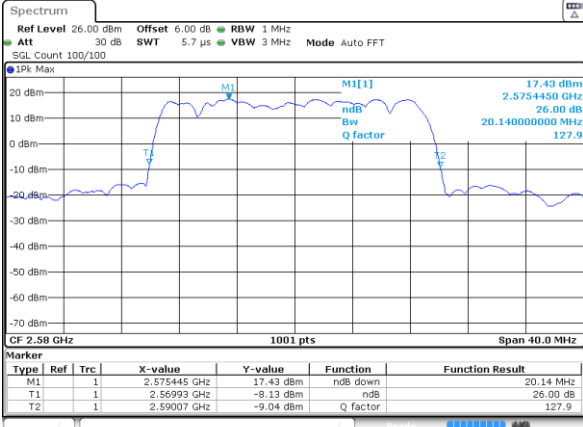


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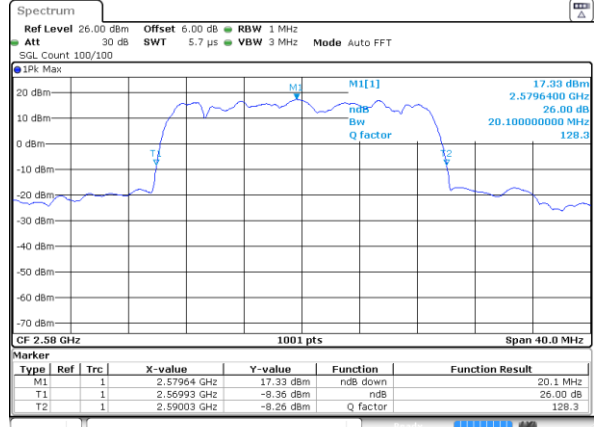
LTE Band 38

Lowest Channel / 20MHz / QPSK



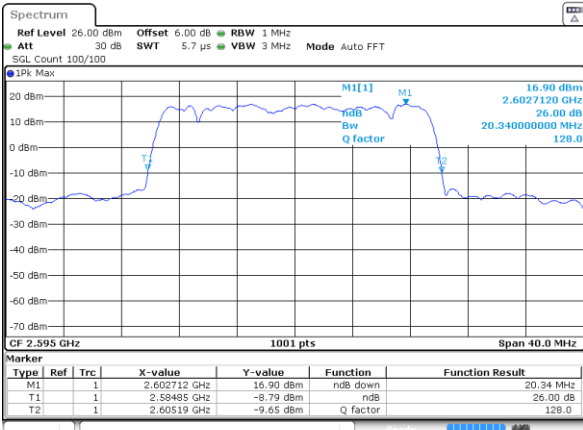
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Lowest Channel / 20MHz / 16QAM



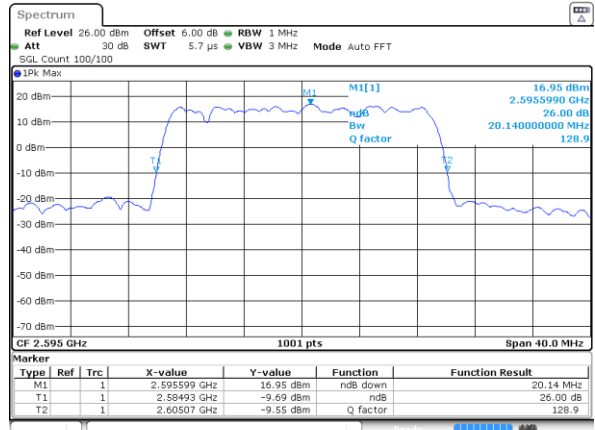
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Middle Channel / 20MHz / QPSK



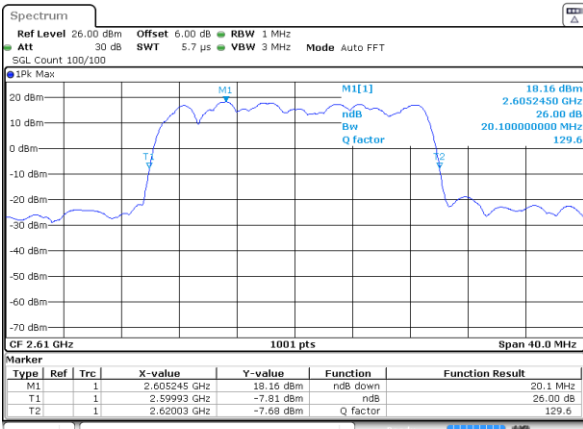
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Middle Channel / 20MHz / 16QAM



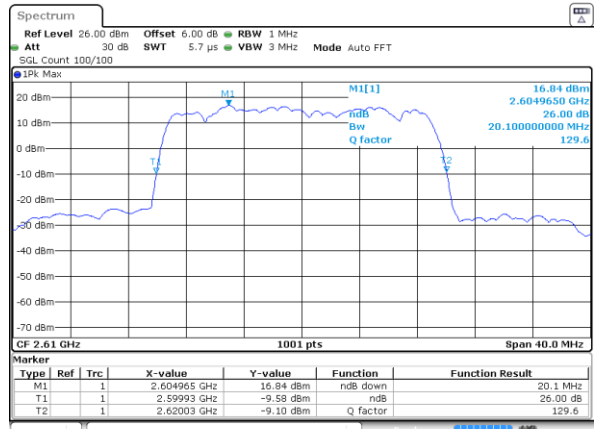
Date: 4 JAN 2020 22:53:24

Highest Channel / 20MHz / QPSK



Date: 4 JAN 2020 22:53:54

Highest Channel / 20MHz / 16QAM

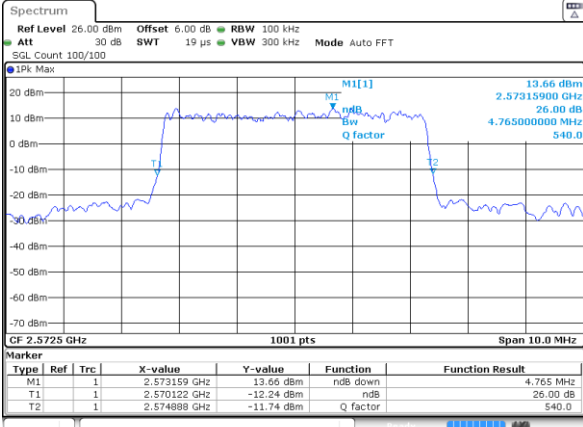


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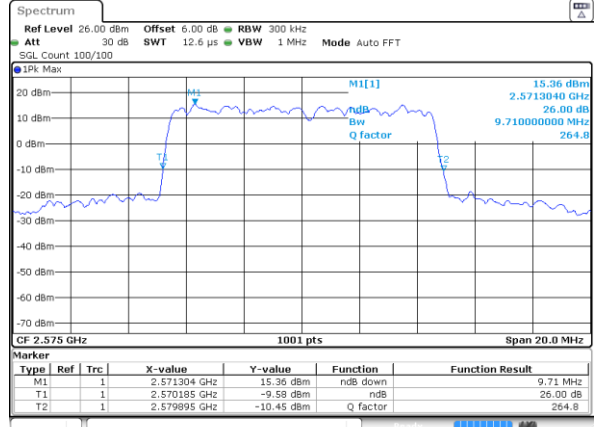
LTE Band 38

Lowest Channel / 5MHz / 64QAM



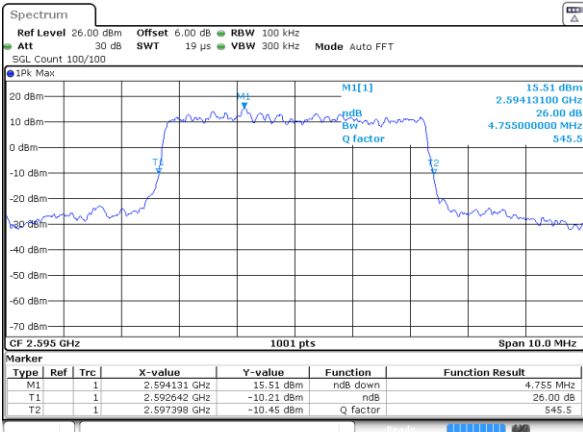
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Lowest Channel / 10MHz / 64QAM



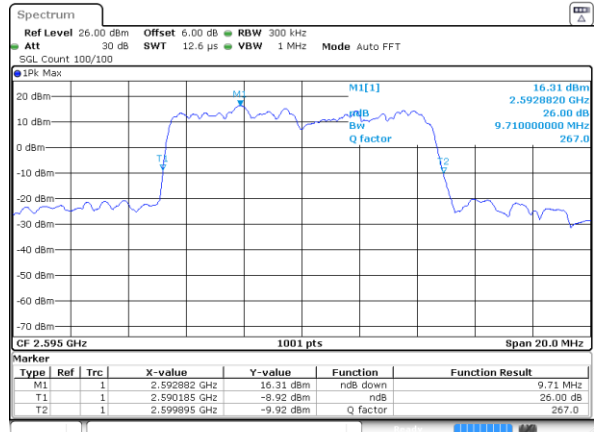
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Middle Channel / 5MHz / 64QAM



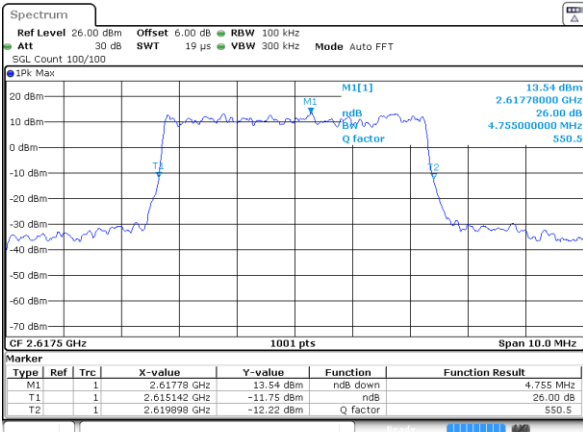
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Middle Channel / 10MHz / 64QAM



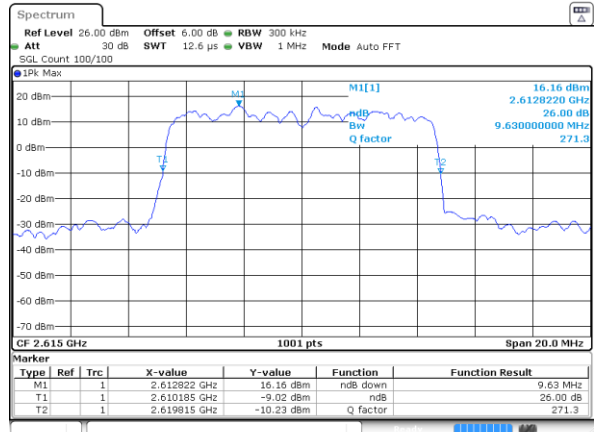
Date: 4 JAN 2020 22:55:44

Highest Channel / 5MHz / 64QAM



Date: 4 JAN 2020 22:55:04

Highest Channel / 10MHz / 64QAM



Date: 4 JAN 2020 22:56:04