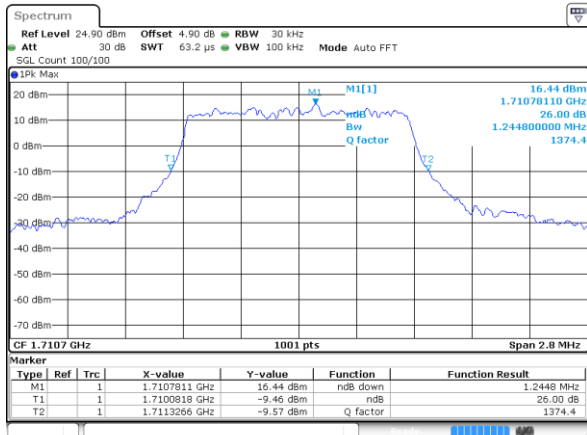




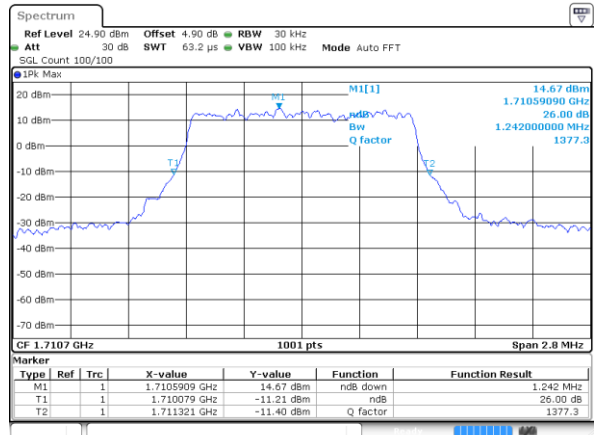
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



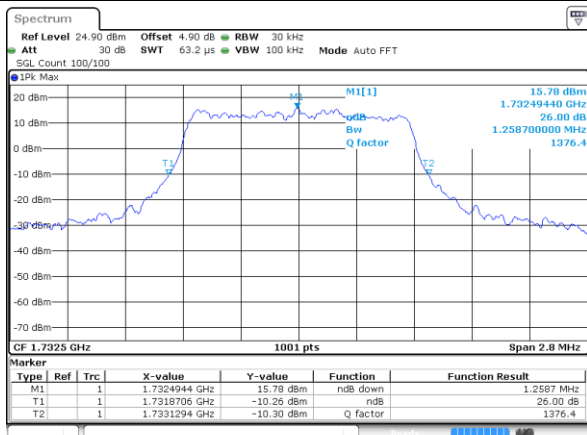
Date: 13 JUL 2019 17:56:49

Lowest Channel / 1.4MHz / 16QAM



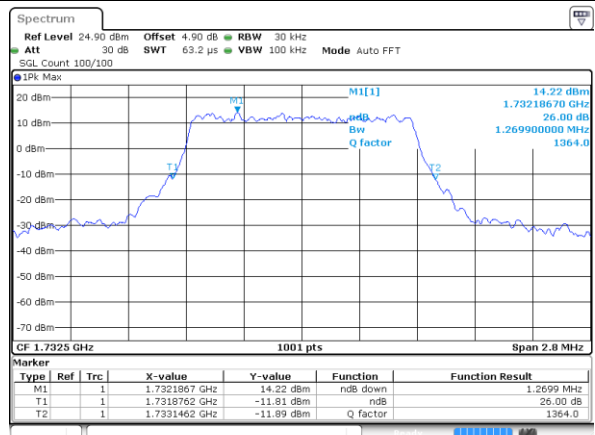
Date: 13 JUL 2019 17:56:59

Middle Channel / 1.4MHz / QPSK



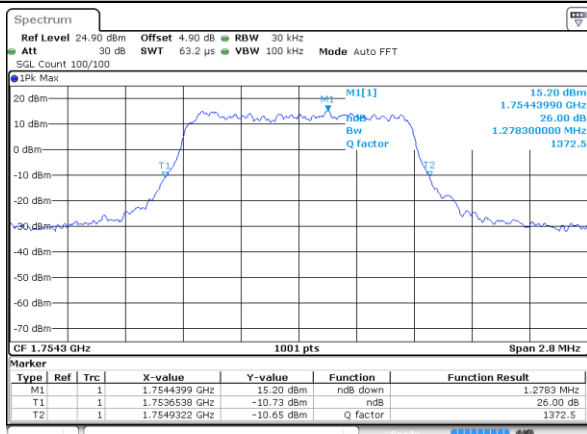
Date: 13 JUL 2019 18:07:52

Middle Channel / 1.4MHz / 16QAM



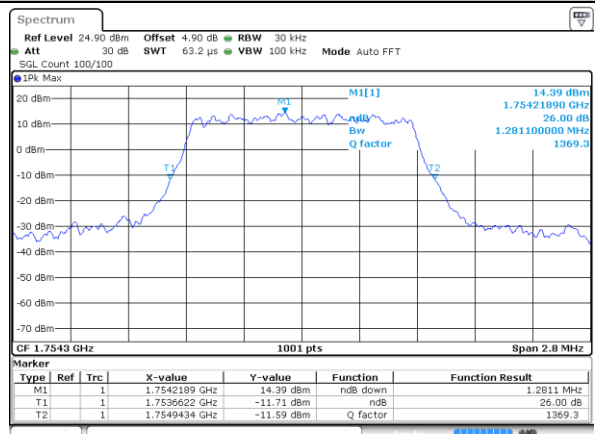
Date: 13 JUL 2019 18:08:02

Highest Channel / 1.4MHz / QPSK



Date: 13 JUL 2019 18:10:24

Highest Channel / 1.4MHz / 16QAM

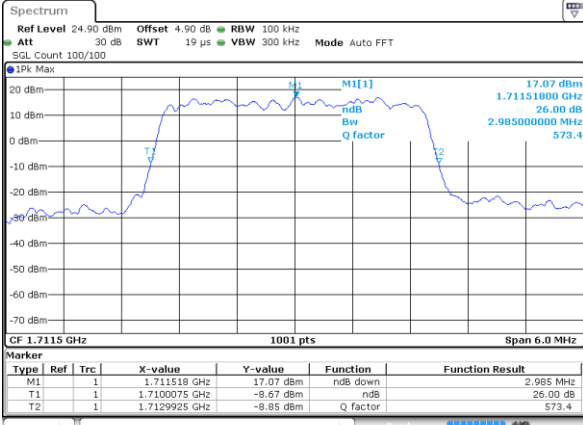


Date: 13 JUL 2019 18:10:34



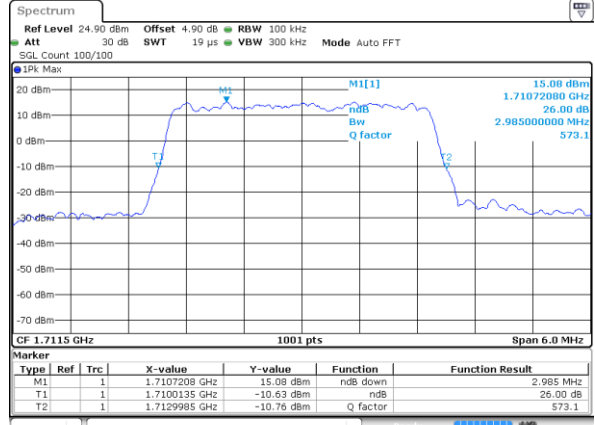
LTE Band 4

Lowest Channel / 3MHz / QPSK



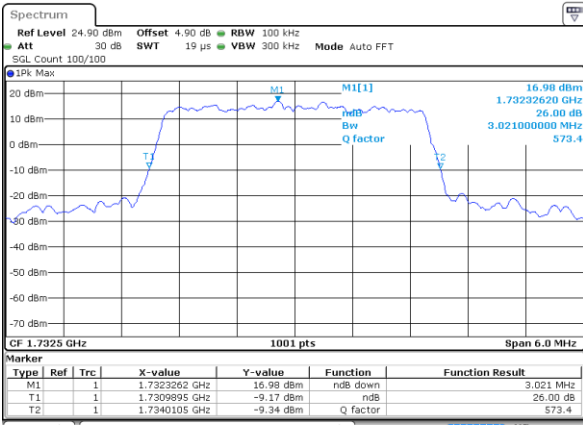
Date: 13 JUL 2019 18:17:30

Lowest Channel / 3MHz / 16QAM



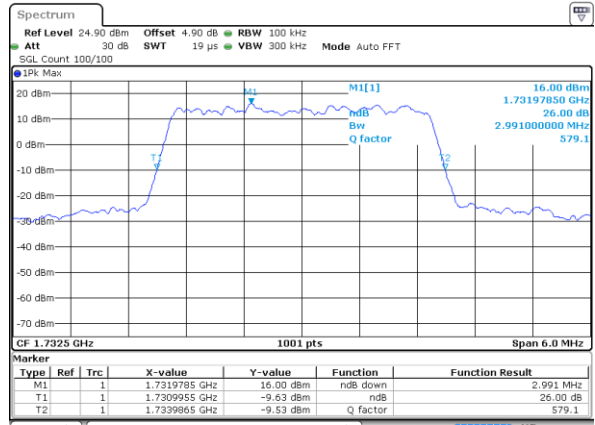
Date: 13 JUL 2019 18:17:40

Middle Channel / 3MHz / QPSK



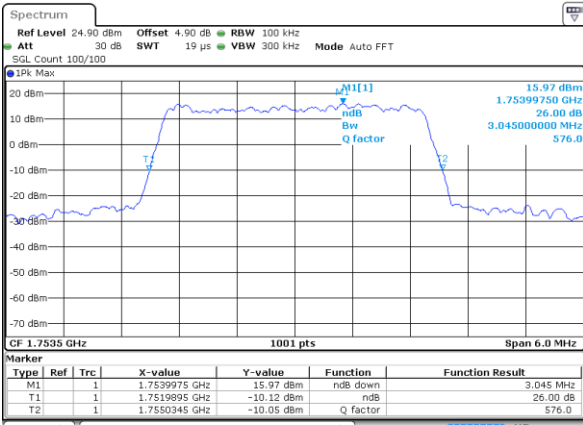
Date: 13 JUL 2019 18:24:37

Middle Channel / 3MHz / 16QAM



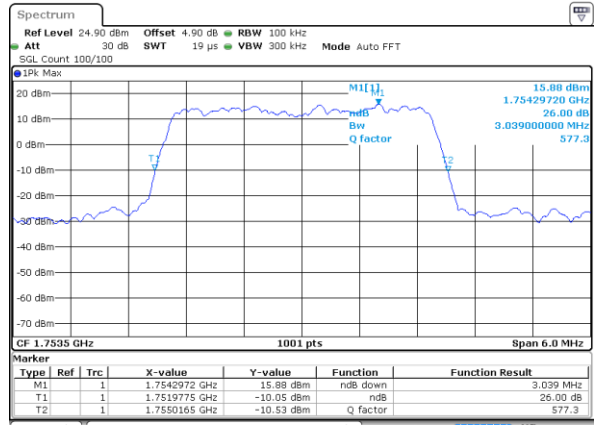
Date: 13 JUL 2019 18:24:47

Highest Channel / 3MHz / QPSK



Date: 13 JUL 2019 18:27:09

Highest Channel / 3MHz / 16QAM

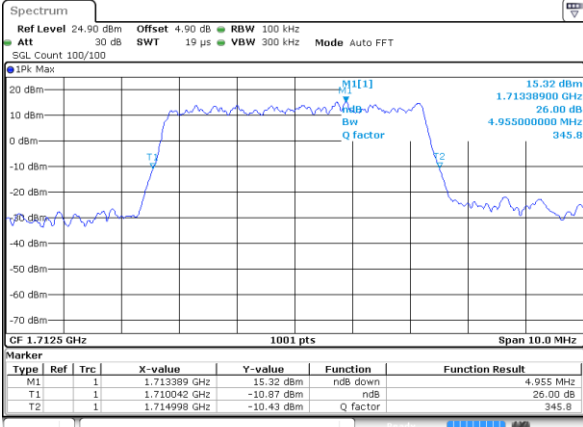


Date: 13 JUL 2019 18:27:19



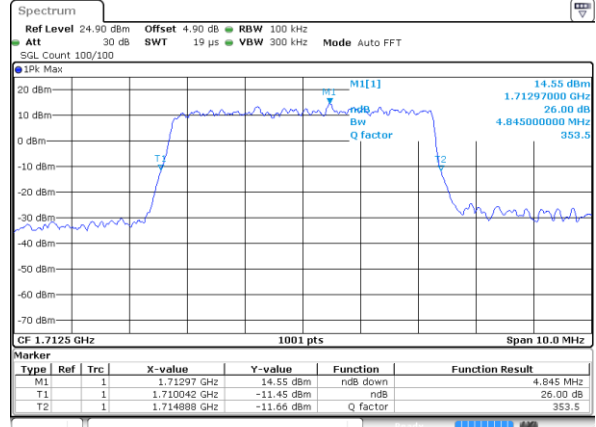
LTE Band 4

Lowest Channel / 5MHz / QPSK



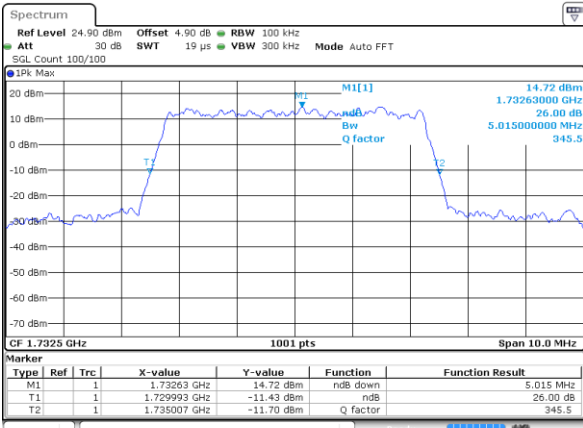
Date: 13 JUL 2019 18:34:15

Lowest Channel / 5MHz / 16QAM



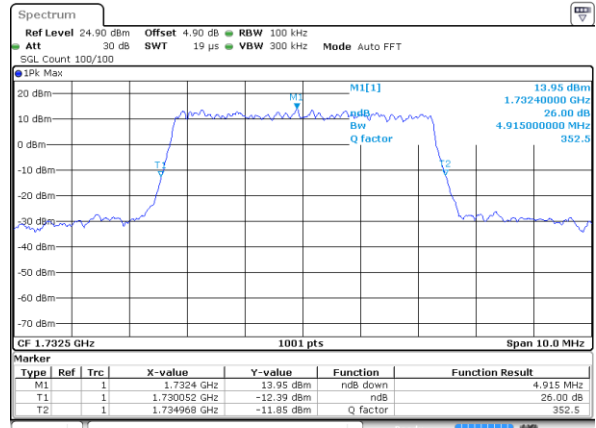
Date: 13 JUL 2019 18:34:25

Middle Channel / 5MHz / QPSK



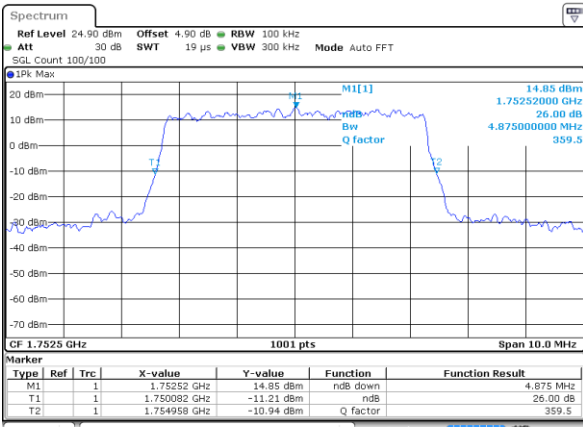
Date: 13 JUL 2019 18:41:22

Middle Channel / 5MHz / 16QAM



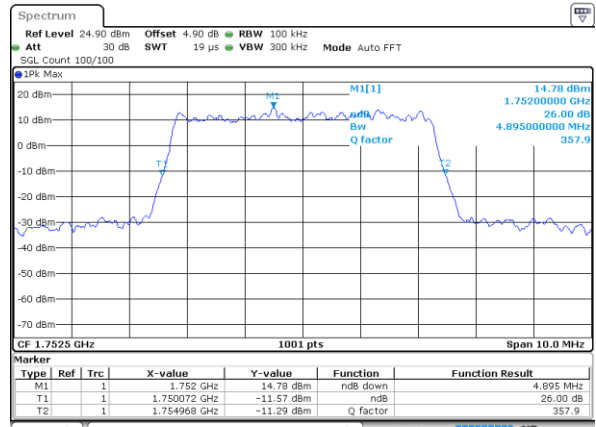
Date: 13 JUL 2019 18:41:32

Highest Channel / 5MHz / QPSK



Date: 13 JUL 2019 18:43:54

Highest Channel / 5MHz / 16QAM

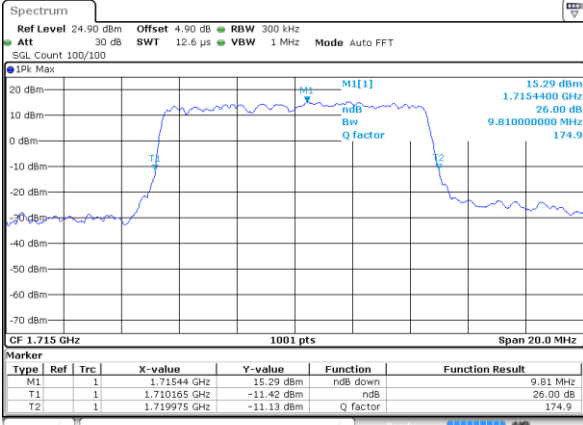


Date: 13 JUL 2019 18:44:04



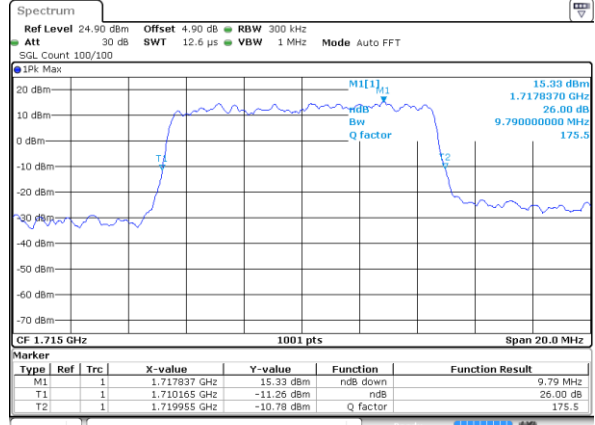
LTE Band 4

Lowest Channel / 10MHz / QPSK



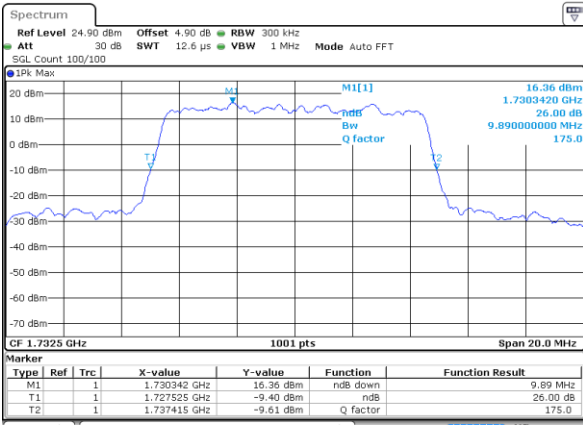
Date: 13 JUL 2019 18:51:01

Lowest Channel / 10MHz / 16QAM



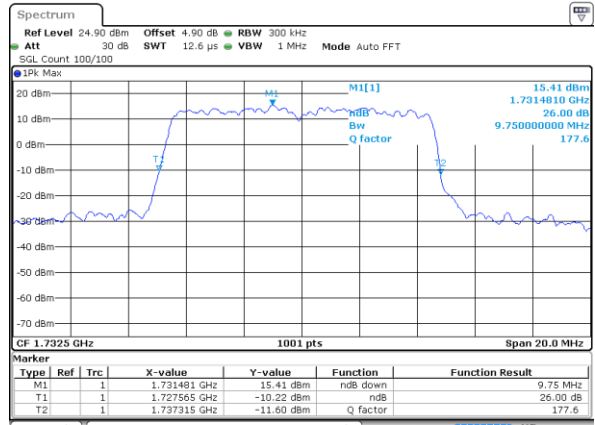
Date: 13 JUL 2019 18:51:11

Middle Channel / 10MHz / QPSK



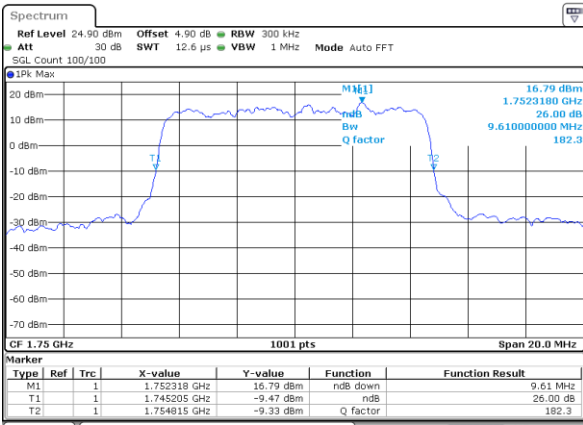
Date: 13 JUL 2019 18:58:09

Middle Channel / 10MHz / 16QAM



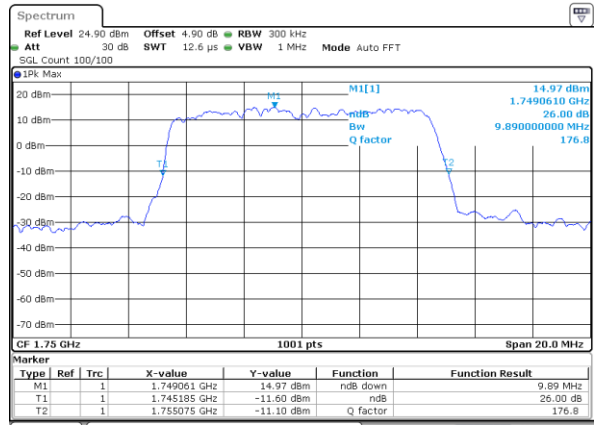
Date: 13 JUL 2019 18:58:19

Highest Channel / 10MHz / QPSK



Date: 13 JUL 2019 19:00:41

Highest Channel / 10MHz / 16QAM

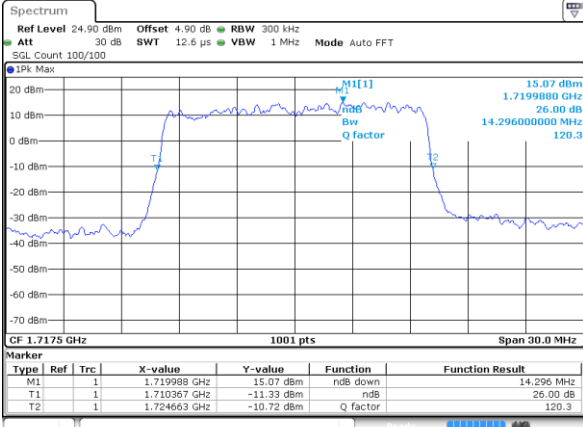


Date: 13 JUL 2019 19:00:50



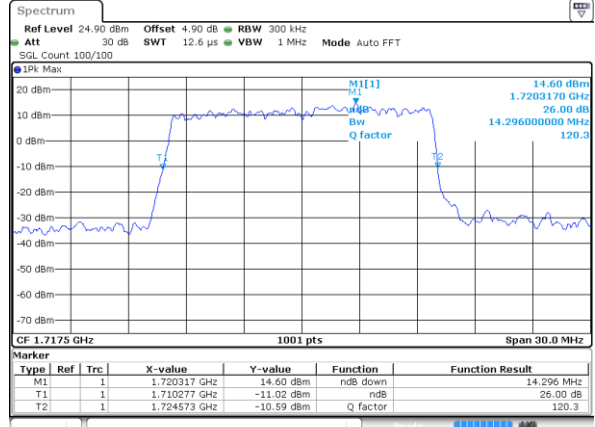
LTE Band 4

Lowest Channel / 15MHz / QPSK



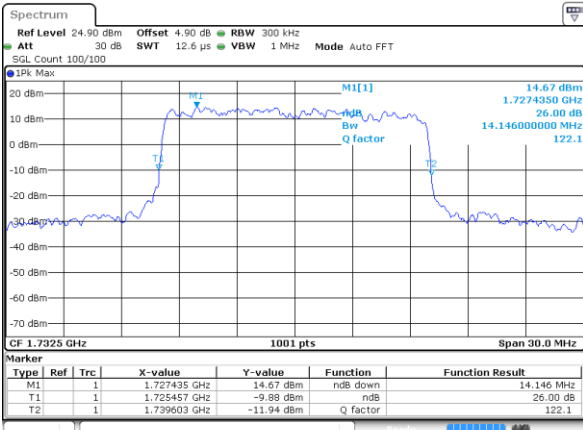
Date: 13 JUL 2019 19:07:47

Lowest Channel / 15MHz / 16QAM



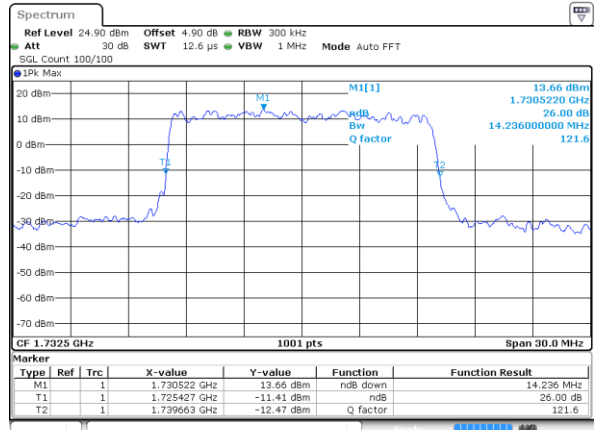
Date: 13 JUL 2019 19:07:57

Middle Channel / 15MHz / QPSK



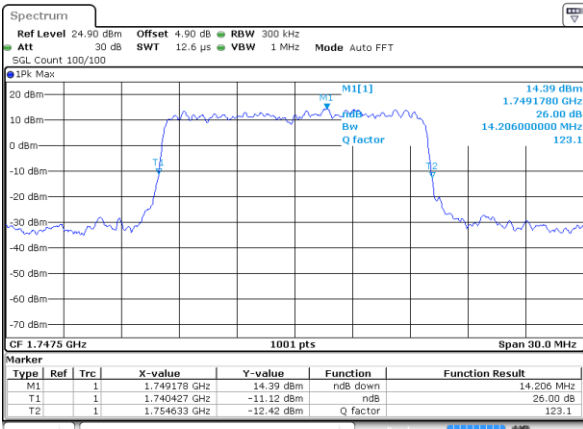
Date: 13 JUL 2019 19:14:54

Middle Channel / 15MHz / 16QAM



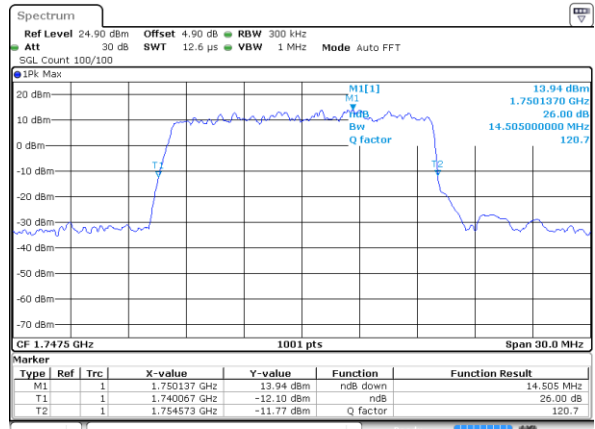
Date: 13 JUL 2019 19:15:04

Highest Channel / 15MHz / QPSK



Date: 13 JUL 2019 19:17:25

Highest Channel / 15MHz / 16QAM

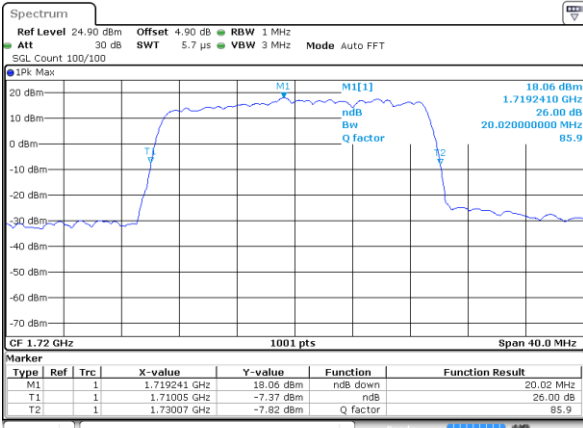


Date: 13 JUL 2019 19:17:35



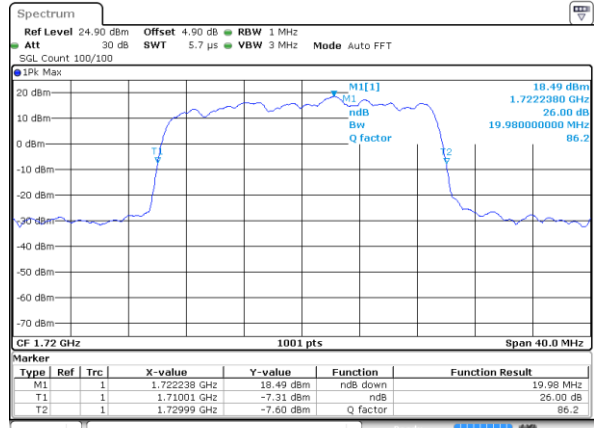
LTE Band 4

Lowest Channel / 20MHz / QPSK



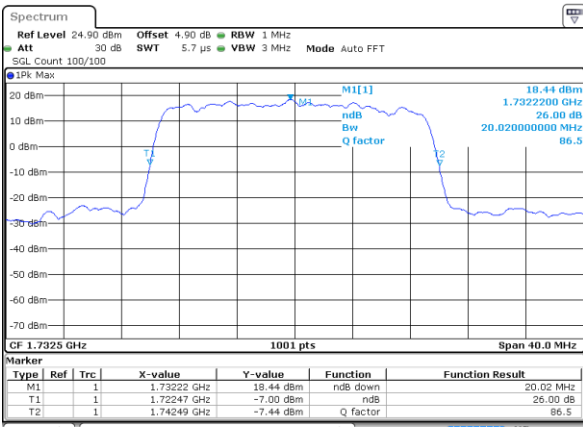
Date: 13 JUL 2019 19:24:33

Lowest Channel / 20MHz / 16QAM



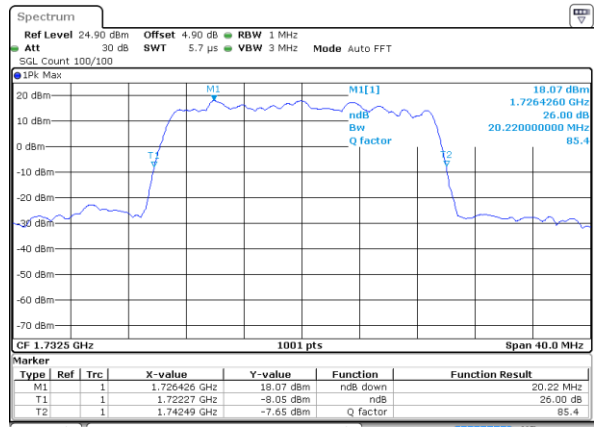
Date: 13 JUL 2019 19:24:43

Middle Channel / 20MHz / QPSK



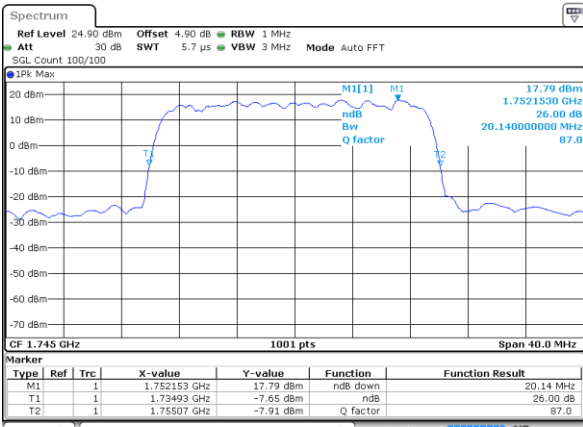
Date: 13 JUL 2019 19:31:42

Middle Channel / 20MHz / 16QAM



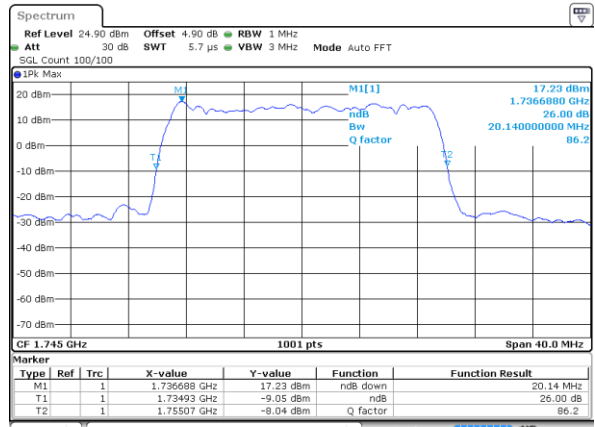
Date: 13 JUL 2019 19:31:51

Highest Channel / 20MHz / QPSK



Date: 13 JUL 2019 19:34:13

Highest Channel / 20MHz / 16QAM

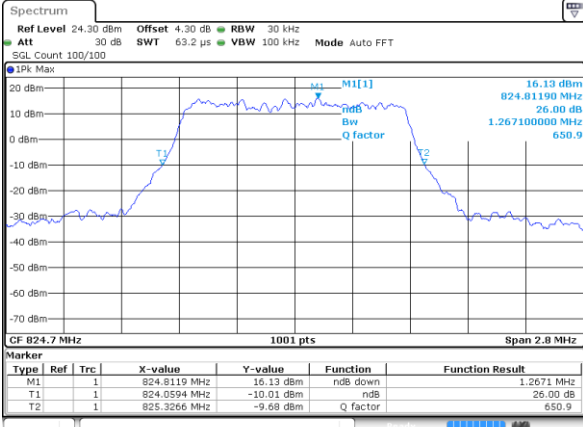


Date: 13 JUL 2019 19:34:23



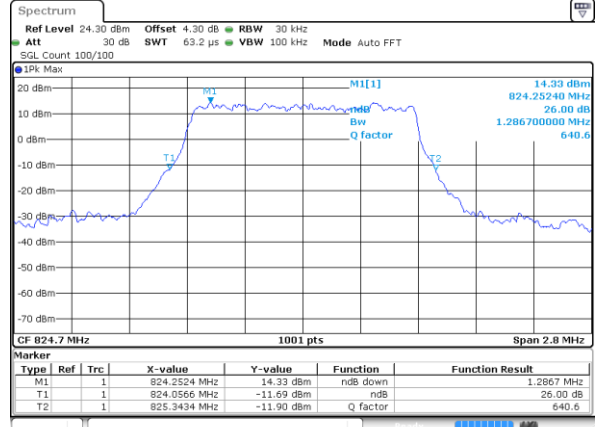
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



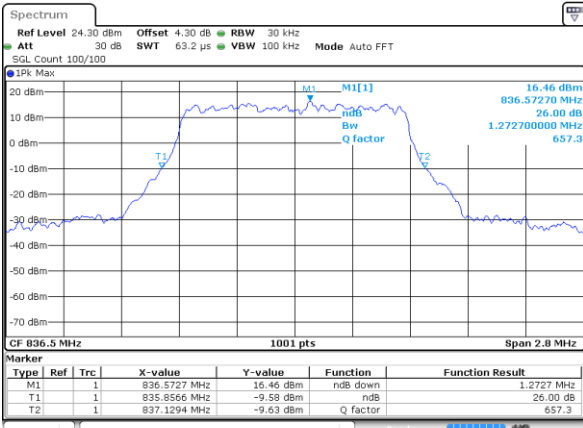
Date: 14 JUL 2019 12:37:17

Lowest Channel / 1.4MHz / 16QAM



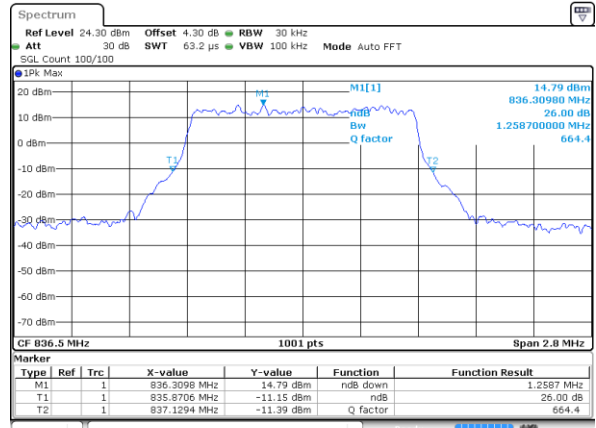
Date: 14 JUL 2019 12:37:07

Middle Channel / 1.4MHz / QPSK



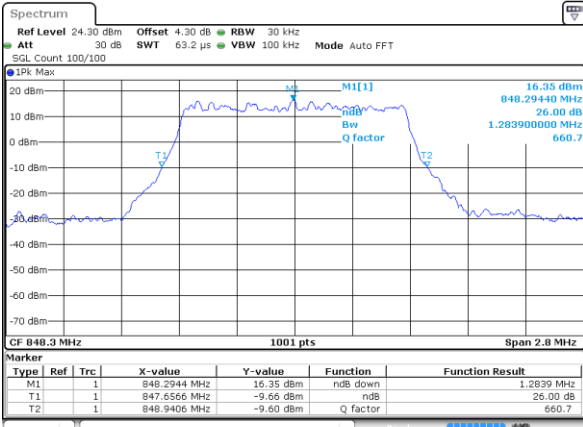
Date: 14 JUL 2019 12:46:05

Middle Channel / 1.4MHz / 16QAM



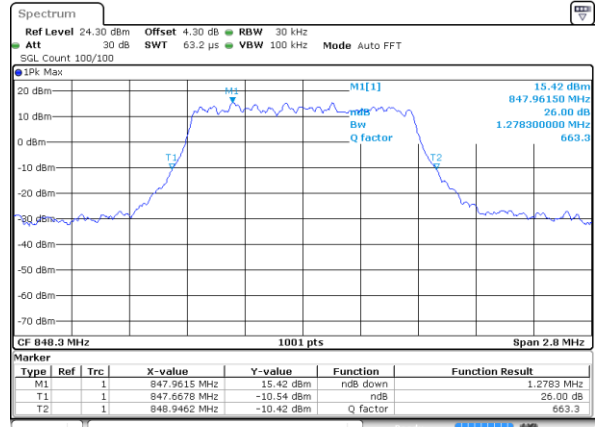
Date: 14 JUL 2019 12:46:15

Highest Channel / 1.4MHz / QPSK



Date: 14 JUL 2019 12:48:33

Highest Channel / 1.4MHz / 16QAM

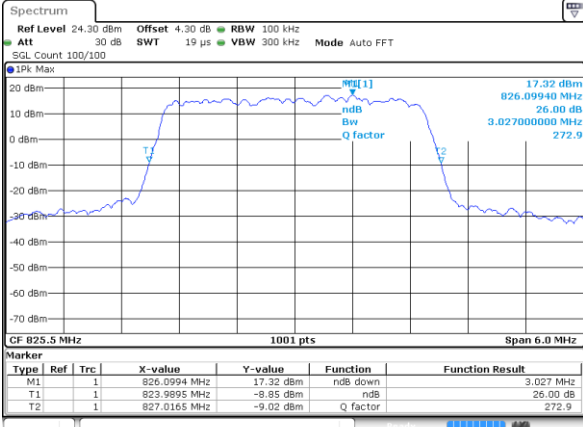


Date: 14 JUL 2019 12:48:43



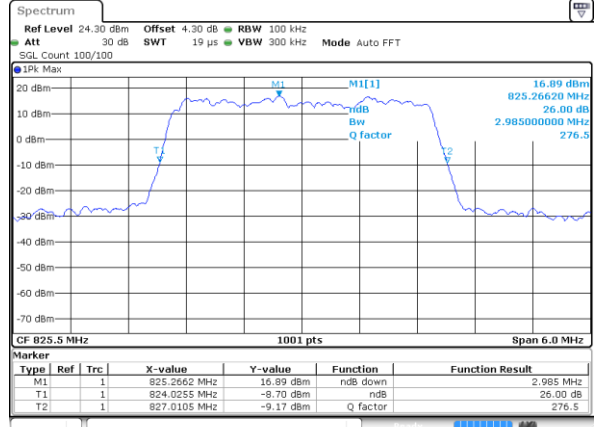
LTE Band 5

Lowest Channel / 3MHz / QPSK



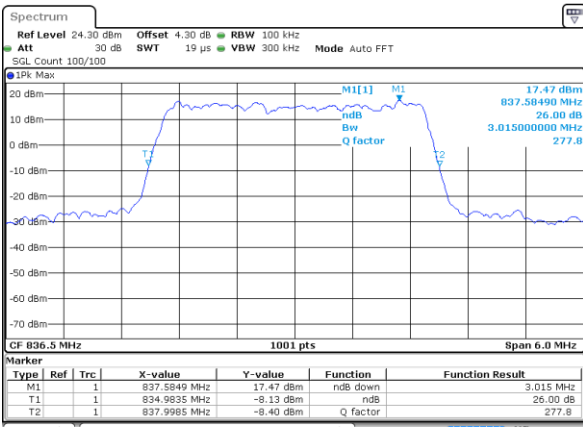
Date: 14 JUL 2019 13:32:26

Lowest Channel / 3MHz / 16QAM



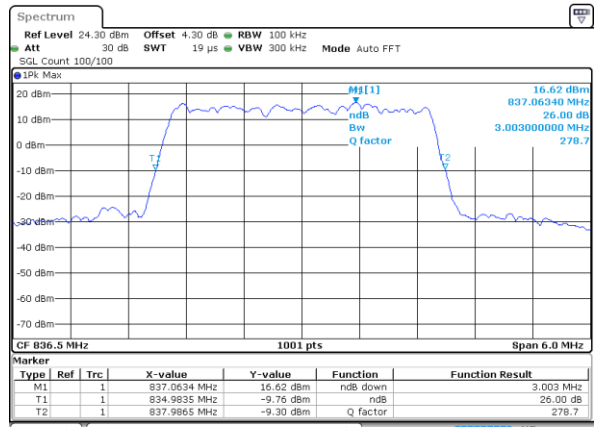
Date: 14 JUL 2019 13:32:36

Middle Channel / 3MHz / QPSK



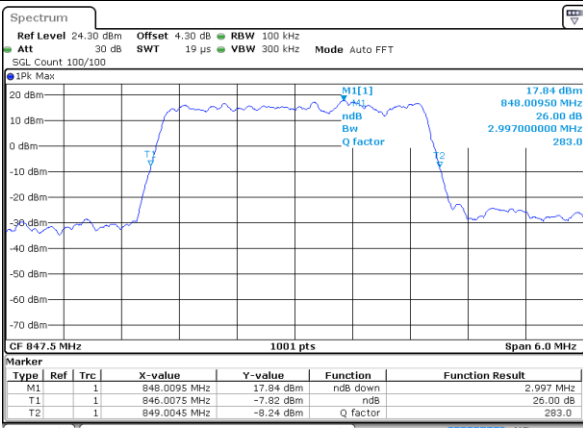
Date: 14 JUL 2019 13:41:25

Middle Channel / 3MHz / 16QAM



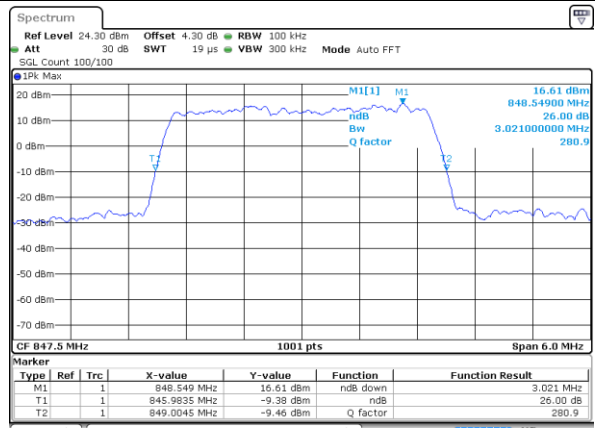
Date: 14 JUL 2019 13:41:35

Highest Channel / 3MHz / QPSK



Date: 14 JUL 2019 13:43:53

Highest Channel / 3MHz / 16QAM

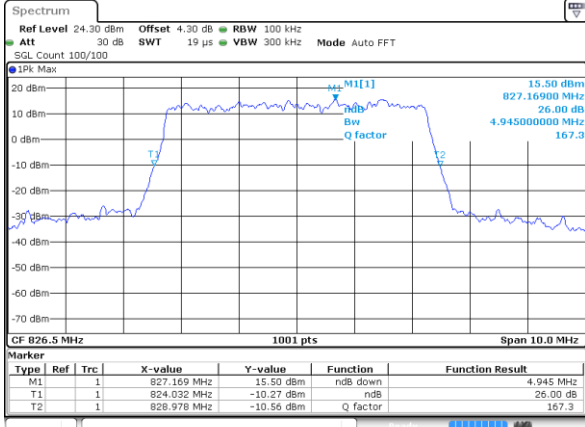


Date: 14 JUL 2019 13:44:03



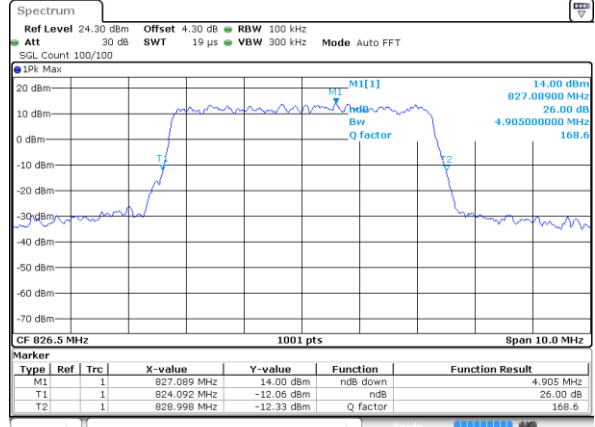
LTE Band 5

Lowest Channel / 5MHz / QPSK



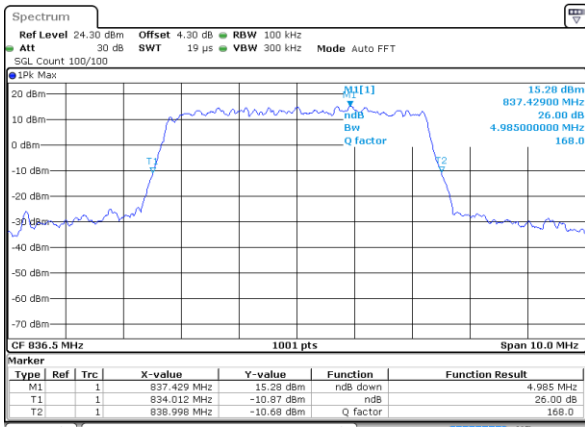
Date: 14 JUL 2019 13:57:03

Lowest Channel / 5MHz / 16QAM



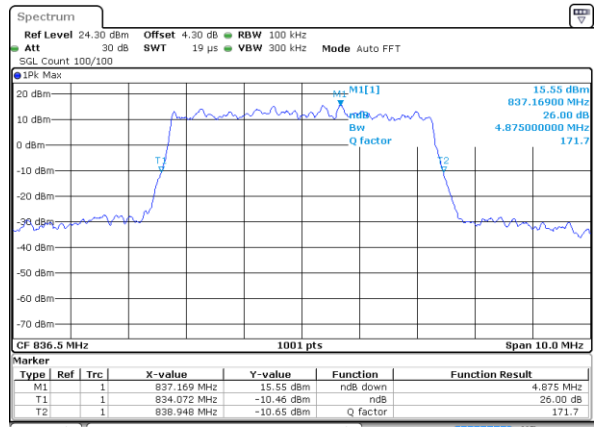
Date: 14 JUL 2019 13:56:44

Middle Channel / 5MHz / QPSK



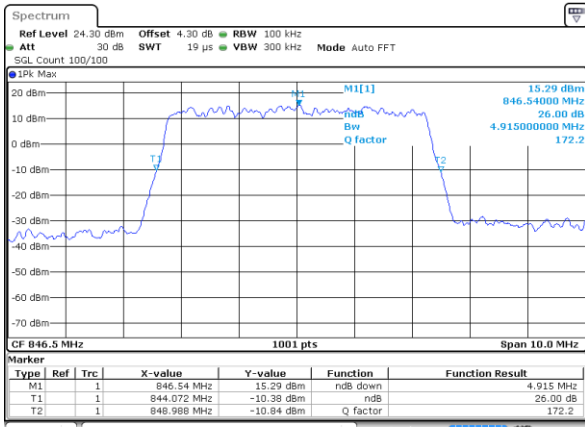
Date: 14 JUL 2019 12:59:06

Middle Channel / 5MHz / 16QAM



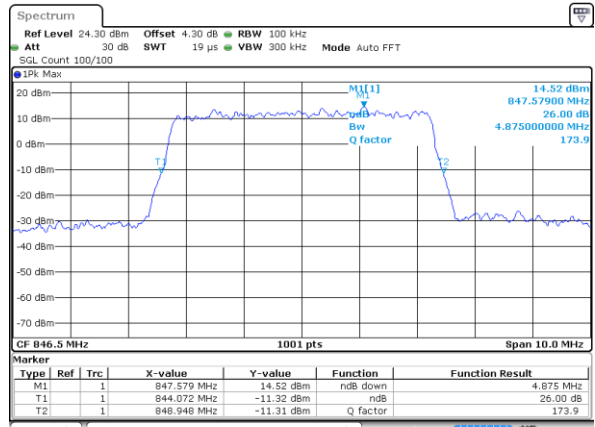
Date: 14 JUL 2019 12:59:16

Highest Channel / 5MHz / QPSK



Date: 14 JUL 2019 13:01:35

Highest Channel / 5MHz / 16QAM

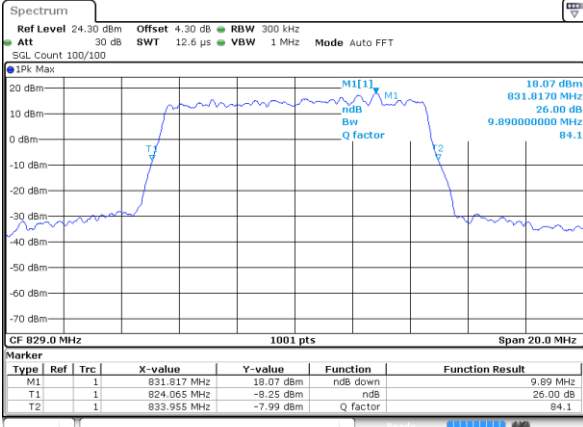


Date: 14 JUL 2019 13:01:44



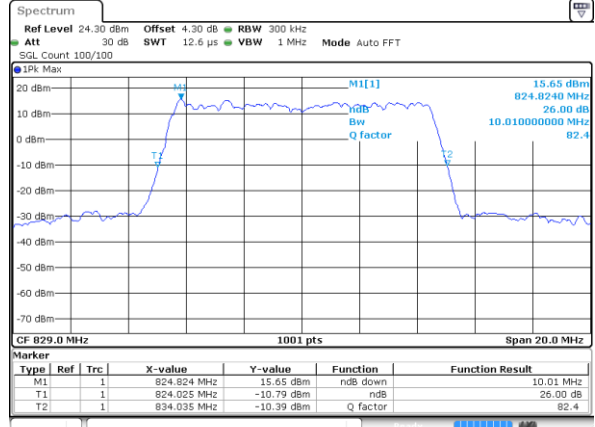
LTE Band 5

Lowest Channel / 10MHz / QPSK



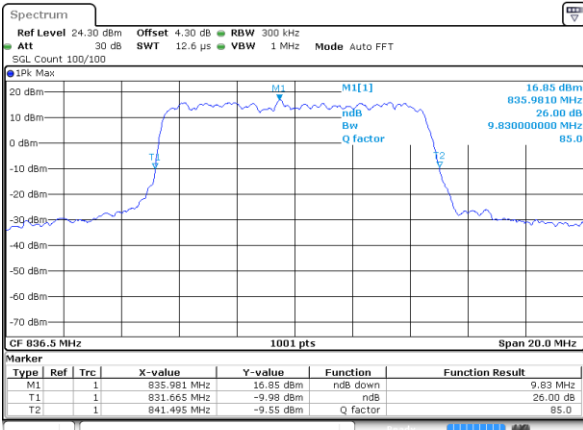
Date: 14 JUL 2019 13:10:33

Lowest Channel / 10MHz / 16QAM



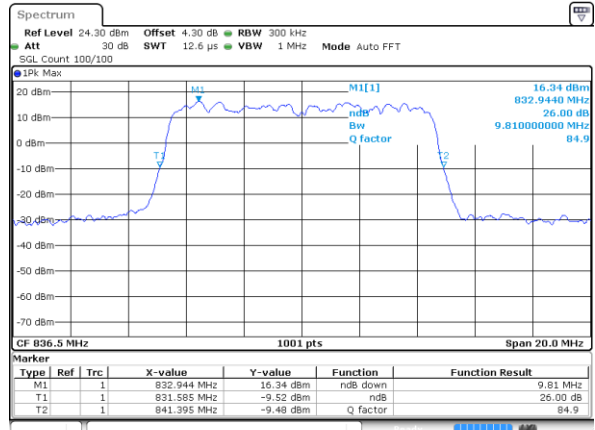
Date: 14 JUL 2019 13:10:42

Middle Channel / 10MHz / QPSK



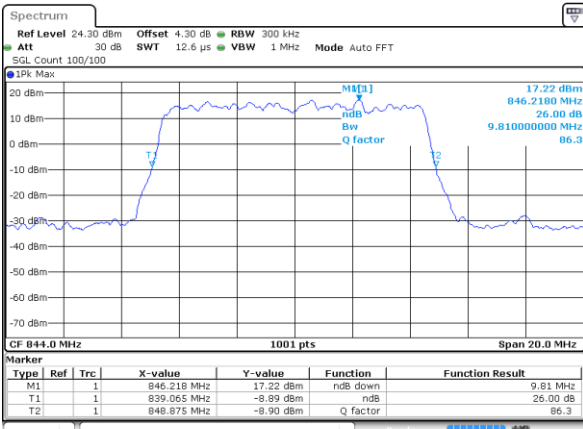
Date: 14 JUL 2019 13:19:31

Middle Channel / 10MHz / 16QAM



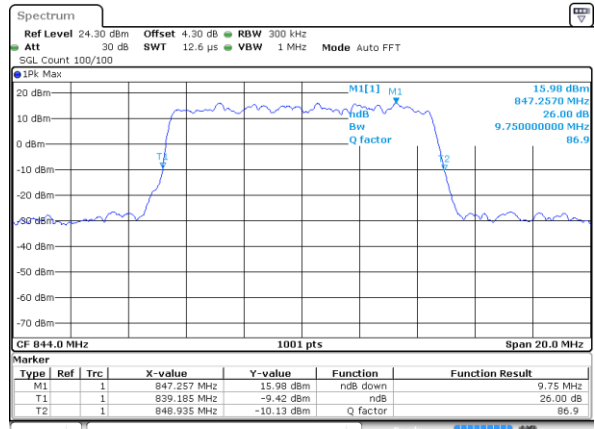
Date: 14 JUL 2019 13:19:41

Highest Channel / 10MHz / QPSK



Date: 14 JUL 2019 13:21:59

Highest Channel / 10MHz / 16QAM

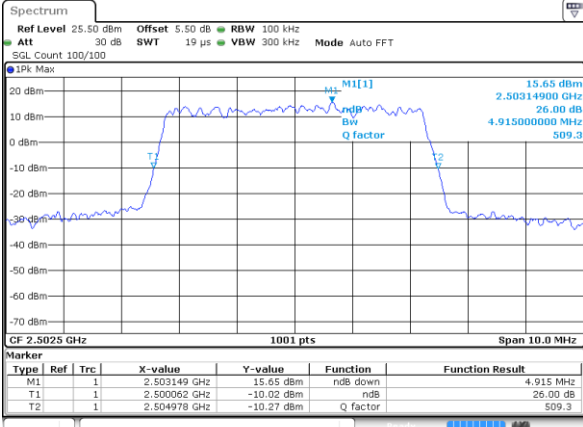


Date: 14 JUL 2019 13:22:09



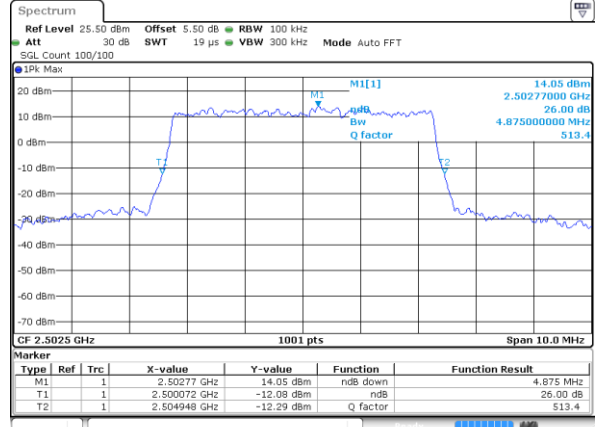
LTE Band 7

Lowest Channel / 5MHz / QPSK



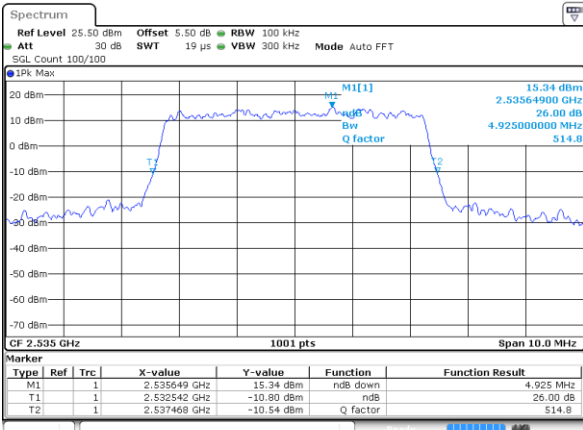
Date: 14.JUL.2019 14:35:57

Lowest Channel / 5MHz / 16QAM



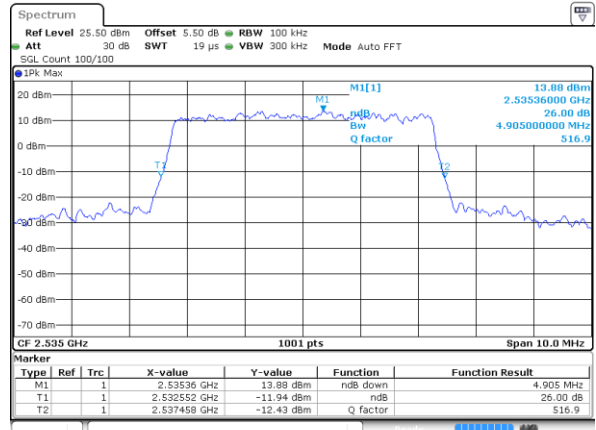
Date: 14.JUL.2019 14:36:17

Middle Channel / 5MHz / QPSK



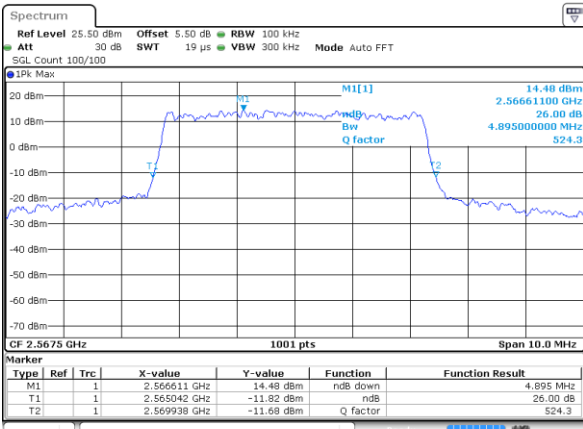
Date: 14.JUL.2019 14:36:57

Middle Channel / 5MHz / 16QAM



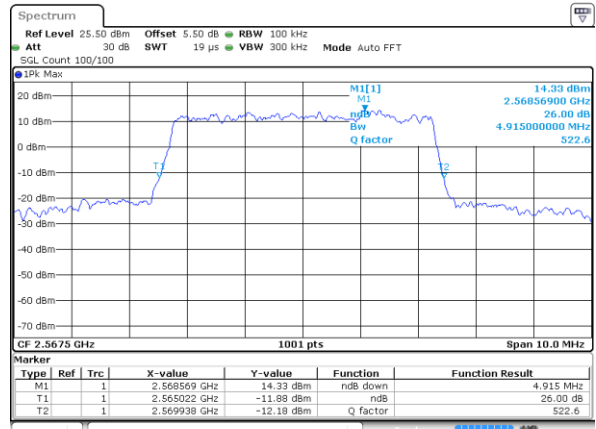
Date: 14.JUL.2019 14:36:37

Highest Channel / 5MHz / QPSK



Date: 14.JUL.2019 14:37:17

Highest Channel / 5MHz / 16QAM

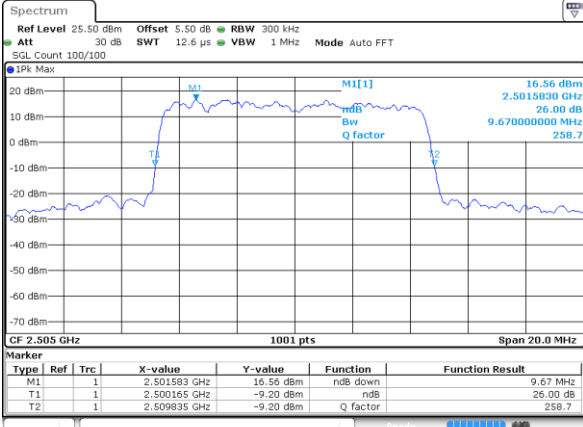


Date: 14.JUL.2019 14:37:37



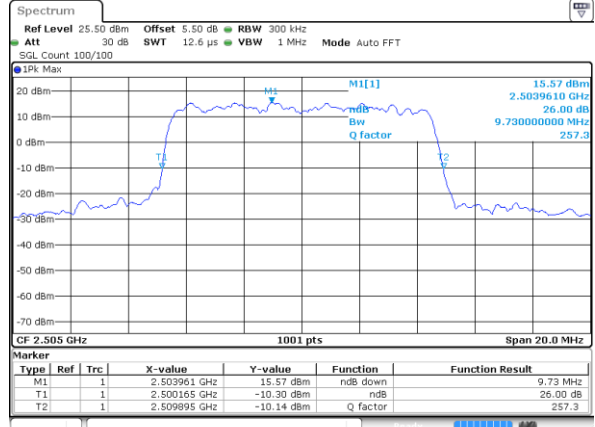
LTE Band 7

Lowest Channel / 10MHz / QPSK



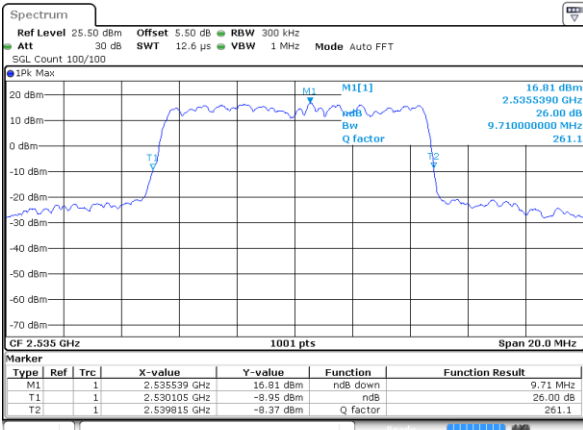
Date: 14 JUL 2019 14:52:25

Lowest Channel / 10MHz / 16QAM



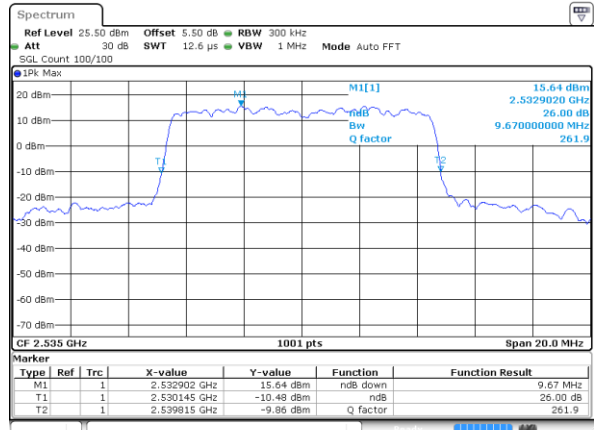
Date: 14 JUL 2019 14:52:45

Middle Channel / 10MHz / QPSK



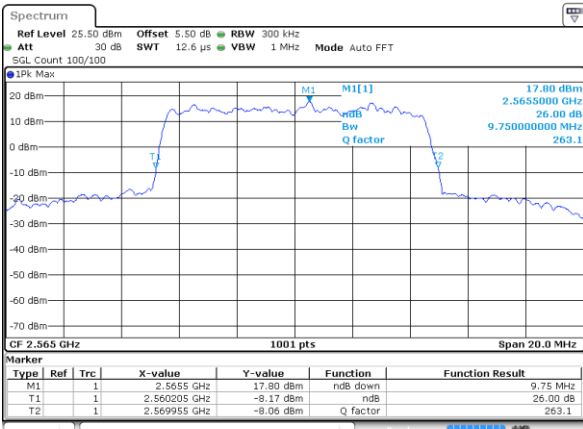
Date: 14 JUL 2019 14:53:25

Middle Channel / 10MHz / 16QAM



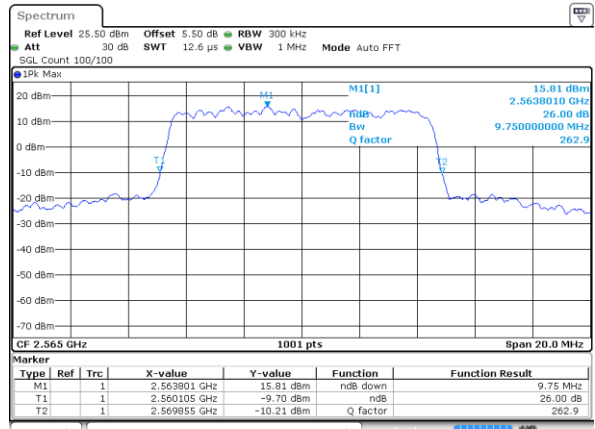
Date: 14 JUL 2019 14:53:05

Highest Channel / 10MHz / QPSK



Date: 14 JUL 2019 14:53:45

Highest Channel / 10MHz / 16QAM

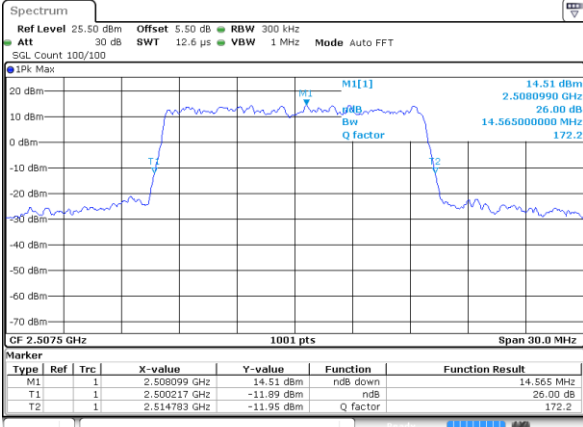


Date: 14 JUL 2019 14:54:04



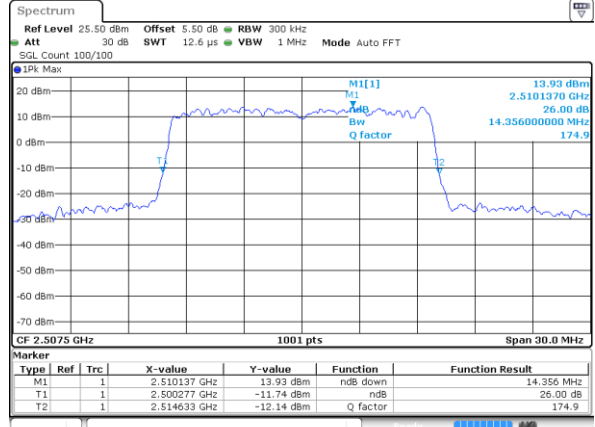
LTE Band 7

Lowest Channel / 15MHz / QPSK



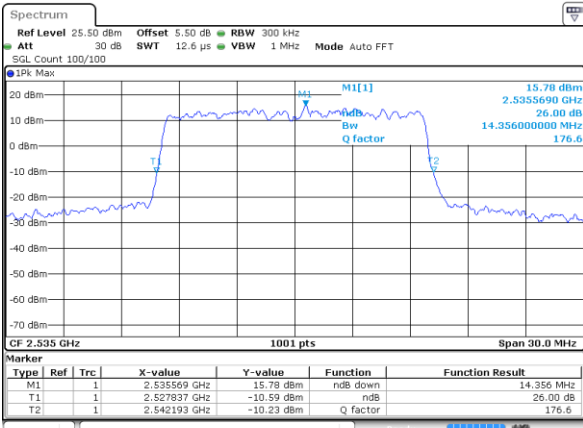
Date: 14 JUL 2019 15:09:11

Lowest Channel / 15MHz / 16QAM



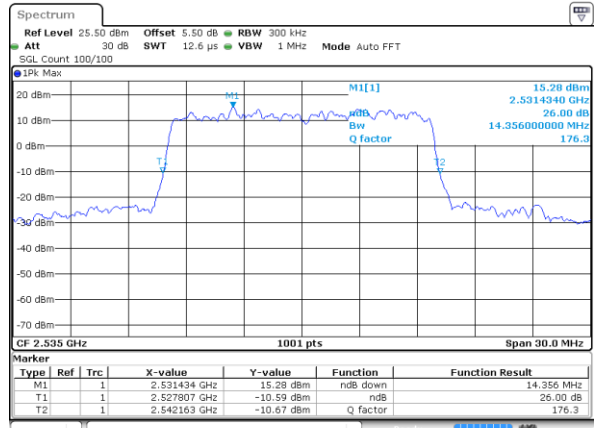
Date: 14 JUL 2019 15:08:51

Middle Channel / 15MHz / QPSK



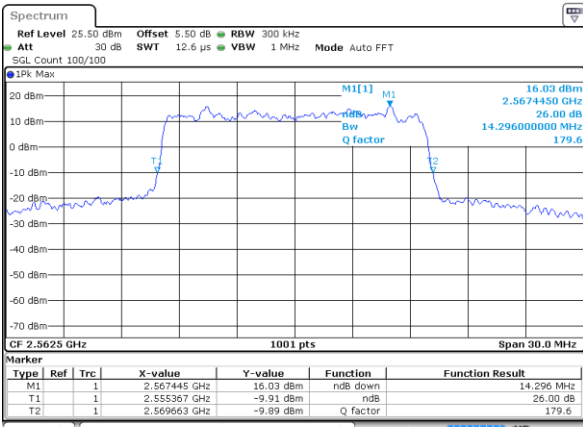
Date: 14 JUL 2019 15:09:31

Middle Channel / 15MHz / 16QAM



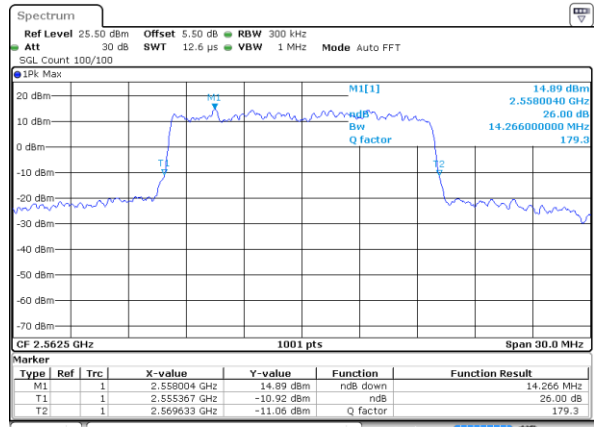
Date: 14 JUL 2019 15:09:51

Highest Channel / 15MHz / QPSK



Date: 14 JUL 2019 15:10:31

Highest Channel / 15MHz / 16QAM

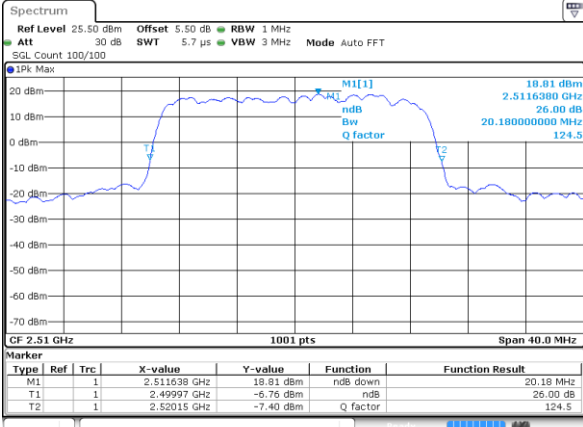


Date: 14 JUL 2019 15:10:11



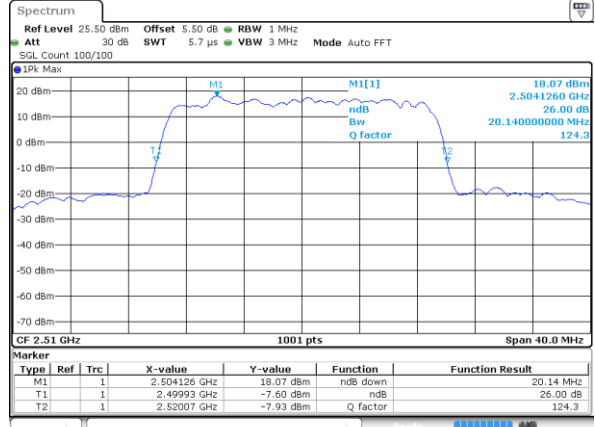
LTE Band 7

Lowest Channel / 20MHz / QPSK



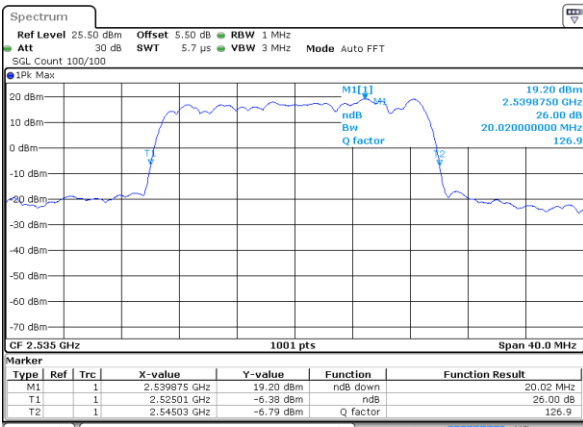
Date: 14 JUL 2019 15:25:39

Lowest Channel / 20MHz / 16QAM



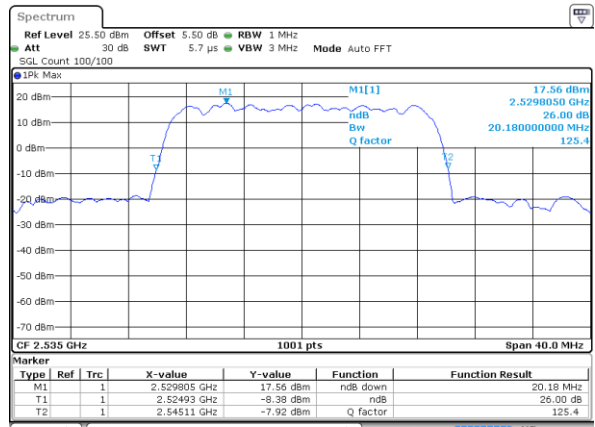
Date: 14 JUL 2019 15:25:19

Middle Channel / 20MHz / QPSK



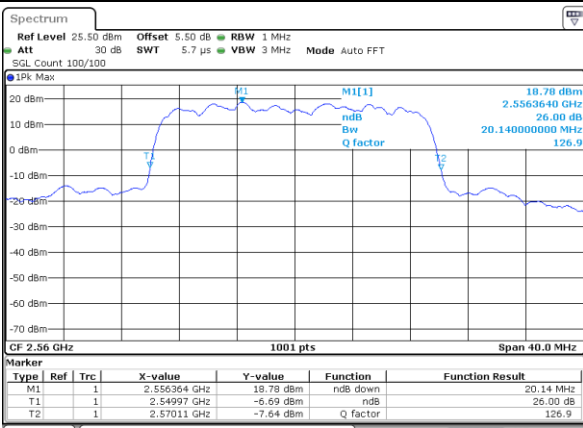
Date: 14 JUL 2019 15:25:59

Middle Channel / 20MHz / 16QAM



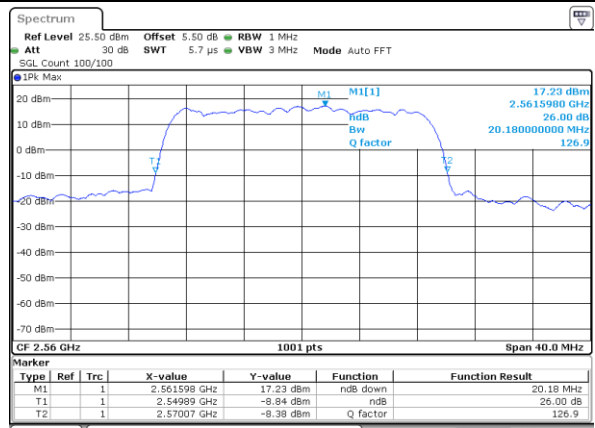
Date: 14 JUL 2019 15:26:19

Highest Channel / 20MHz / QPSK



Date: 14 JUL 2019 15:26:59

Highest Channel / 20MHz / 16QAM

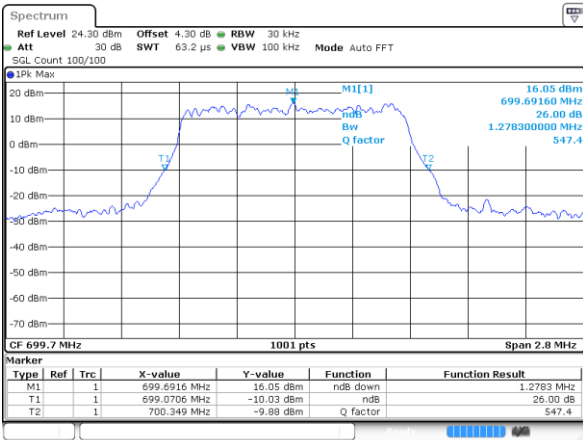


Date: 14 JUL 2019 15:26:39



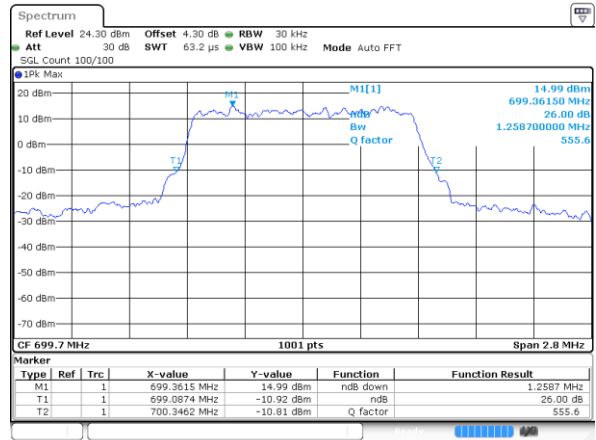
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



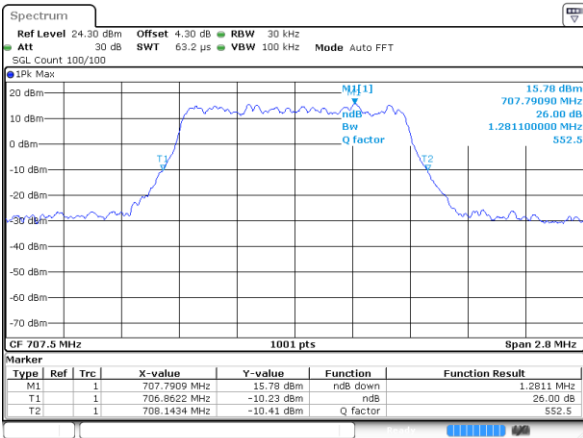
Date: 14 JUL 2019 15:59:53

Lowest Channel / 1.4MHz / 16QAM



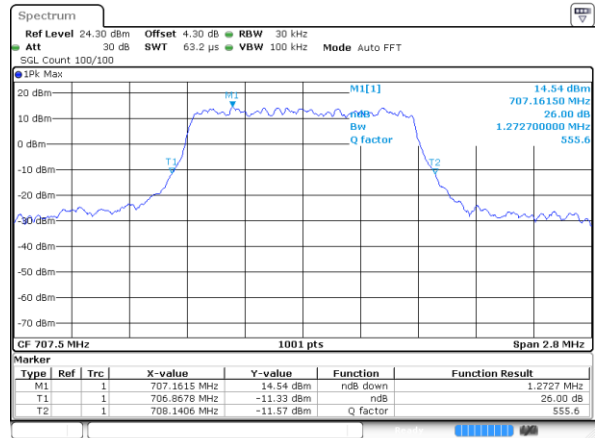
Date: 14 JUL 2019 15:59:43

Middle Channel / 1.4MHz / QPSK



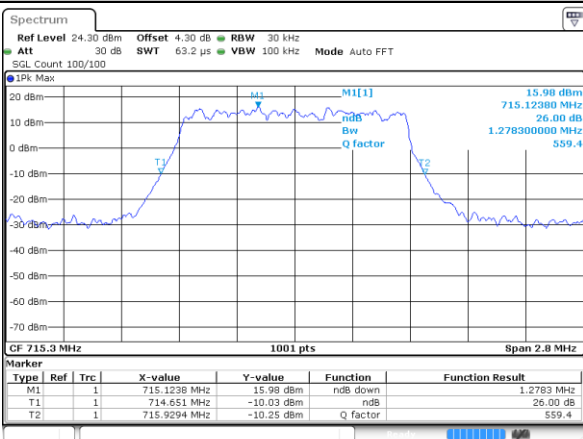
Date: 14 JUL 2019 15:59:23

Middle Channel / 1.4MHz / 16QAM



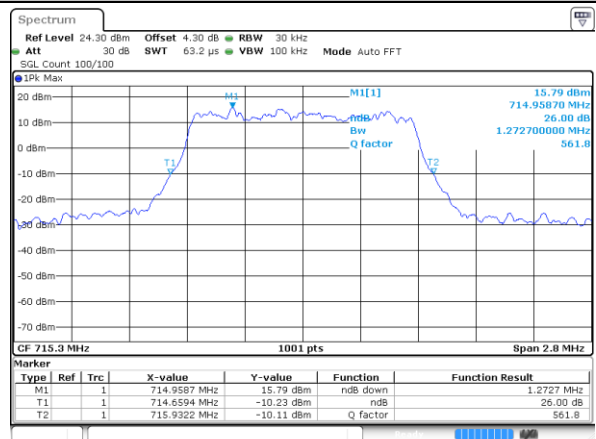
Date: 14 JUL 2019 15:59:33

Highest Channel / 1.4MHz / QPSK



Date: 14 JUL 2019 15:59:13

Highest Channel / 1.4MHz / 16QAM

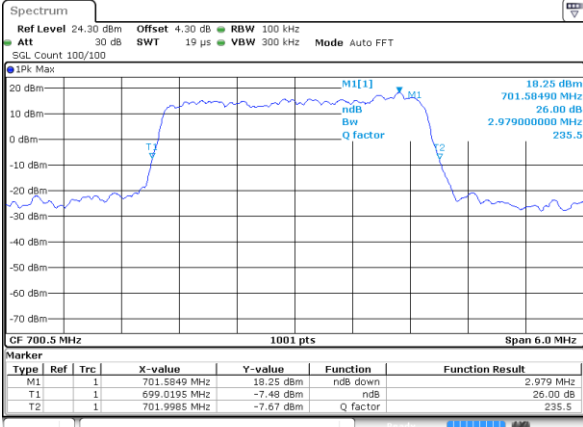


Date: 14 JUL 2019 15:59:03



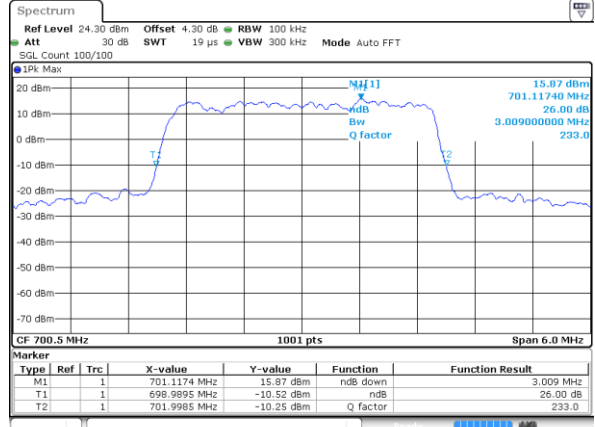
LTE Band 12

Lowest Channel / 3MHz / QPSK



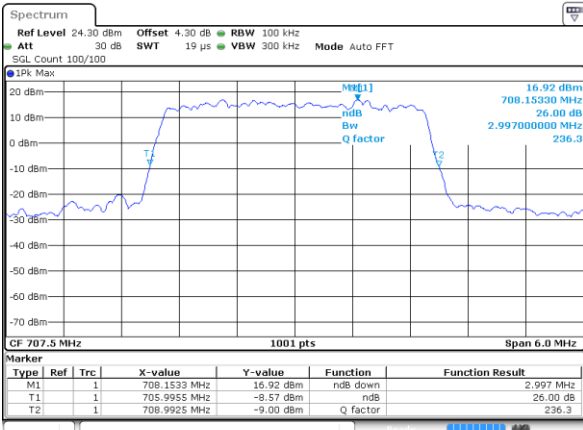
Date: 14 JUL 2019 16:16:18

Lowest Channel / 3MHz / 16QAM



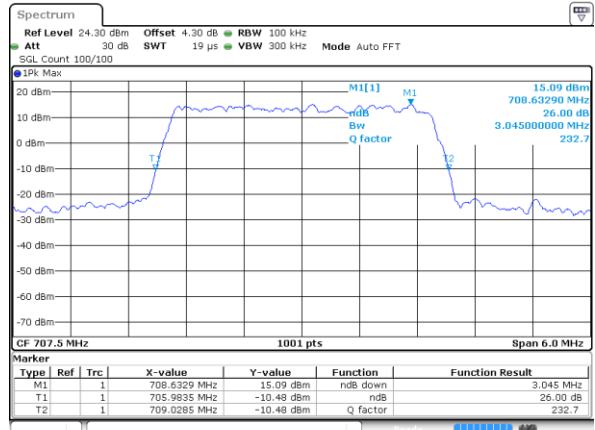
Date: 14 JUL 2019 16:16:08

Middle Channel / 3MHz / QPSK



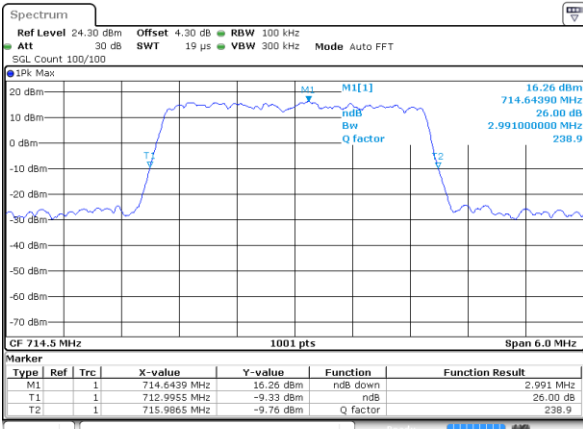
Date: 14 JUL 2019 16:15:48

Middle Channel / 3MHz / 16QAM



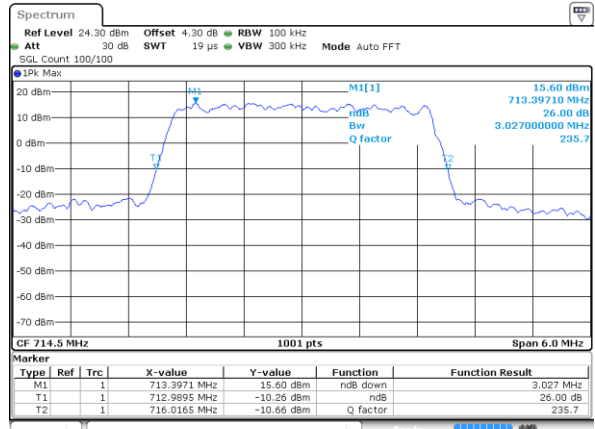
Date: 14 JUL 2019 16:15:58

Highest Channel / 3MHz / QPSK



Date: 14 JUL 2019 16:15:38

Highest Channel / 3MHz / 16QAM

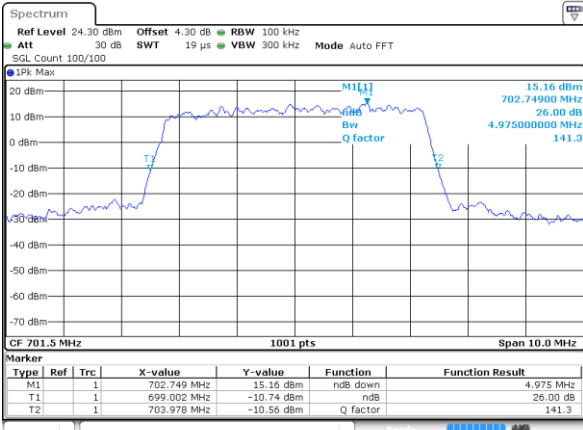


Date: 14 JUL 2019 16:15:28



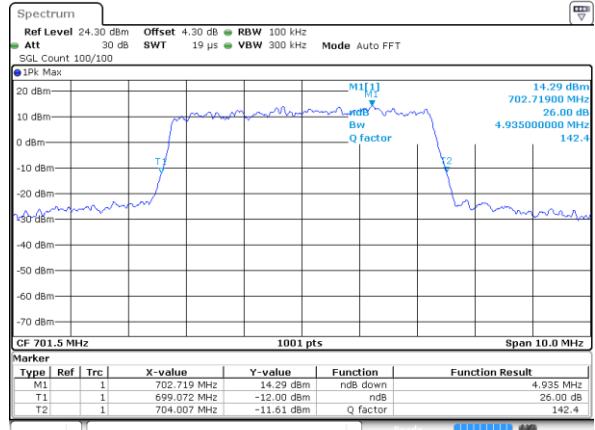
LTE Band 12

Lowest Channel / 5MHz / QPSK



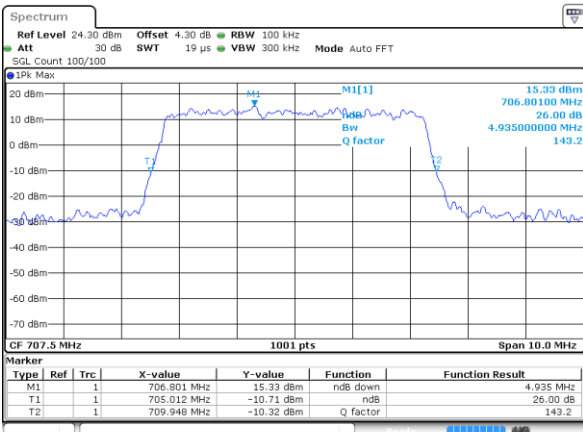
Date: 14 JUL 2019 16:32:43

Lowest Channel / 5MHz / 16QAM



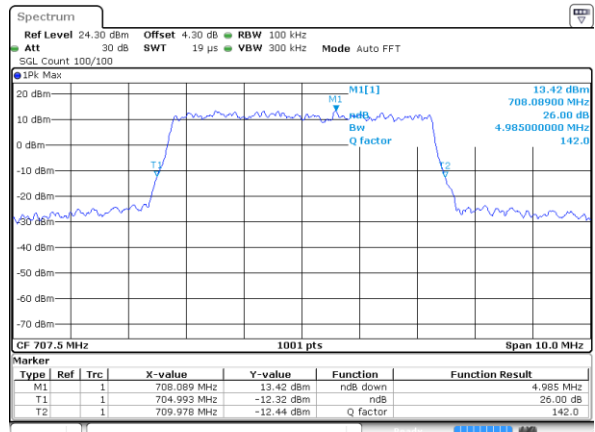
Date: 14 JUL 2019 16:32:33

Middle Channel / 5MHz / QPSK



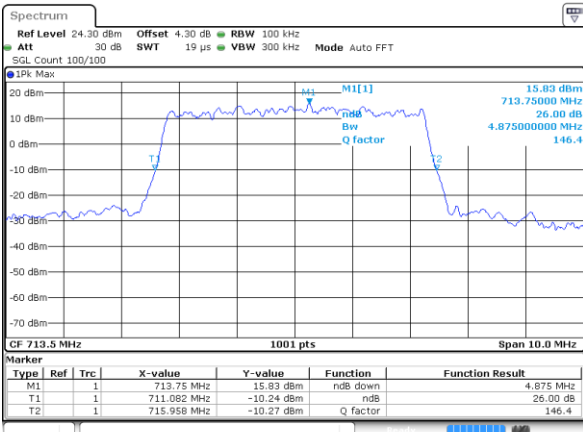
Date: 14 JUL 2019 16:32:13

Middle Channel / 5MHz / 16QAM



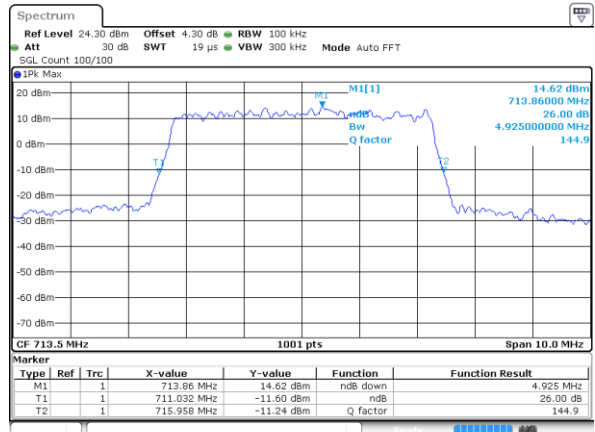
Date: 14 JUL 2019 16:32:23

Highest Channel / 5MHz / QPSK



Date: 14 JUL 2019 16:32:03

Highest Channel / 5MHz / 16QAM

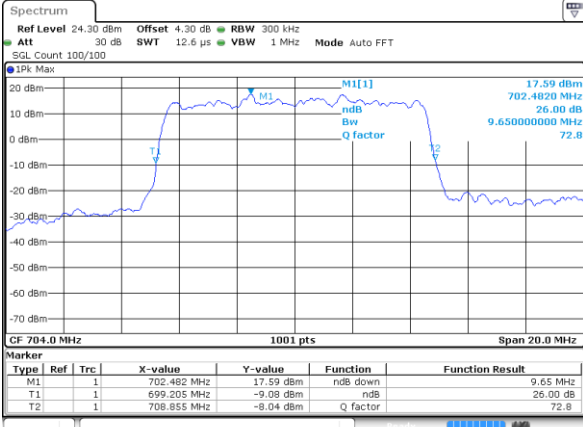


Date: 14 JUL 2019 16:31:53



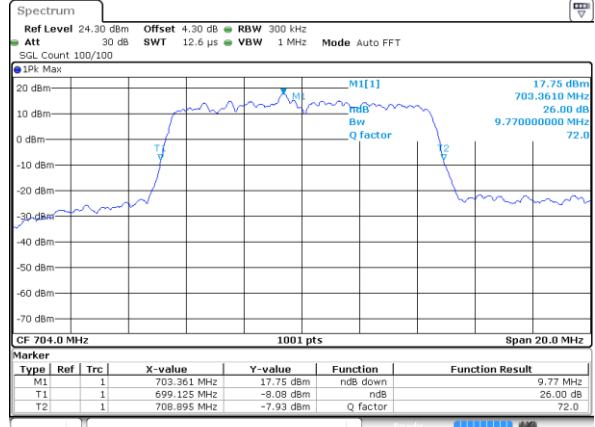
LTE Band 12

Lowest Channel / 10MHz / QPSK



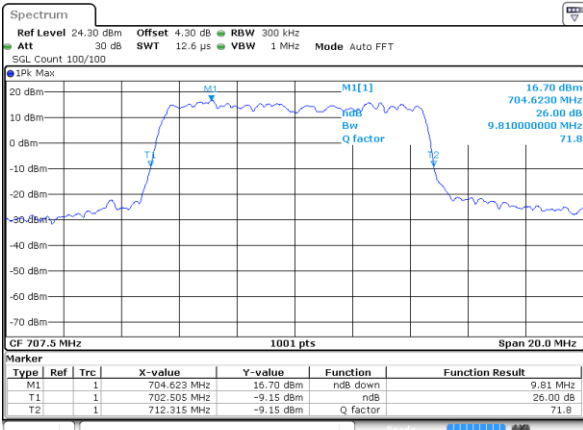
Date: 14 JUL 2019 16:49:08

Lowest Channel / 10MHz / 16QAM



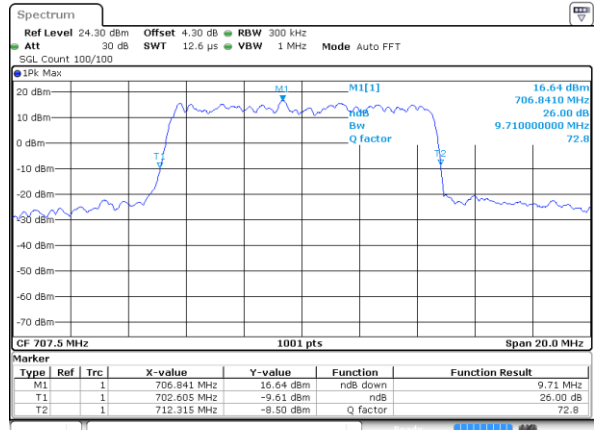
Date: 14 JUL 2019 16:48:58

Middle Channel / 10MHz / QPSK



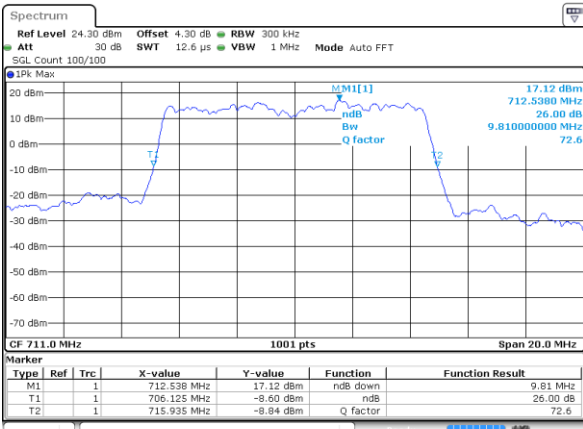
Date: 14 JUL 2019 16:48:38

Middle Channel / 10MHz / 16QAM



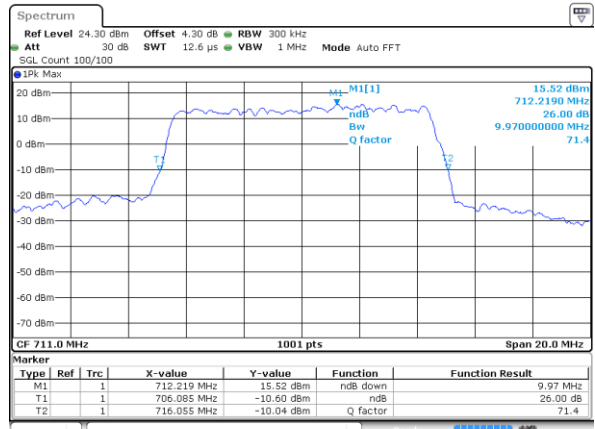
Date: 14 JUL 2019 16:48:48

Highest Channel / 10MHz / QPSK



Date: 14 JUL 2019 16:48:28

Highest Channel / 10MHz / 16QAM

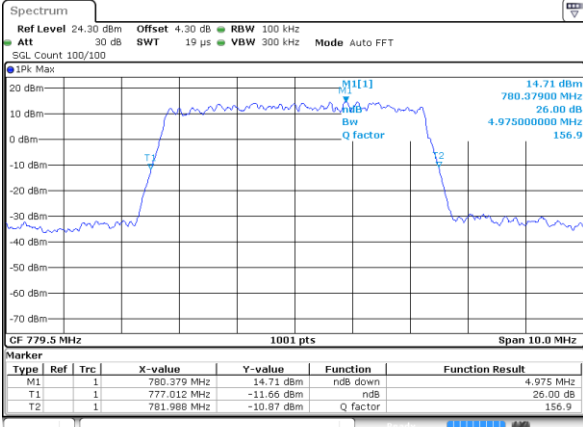


Date: 14 JUL 2019 16:48:18



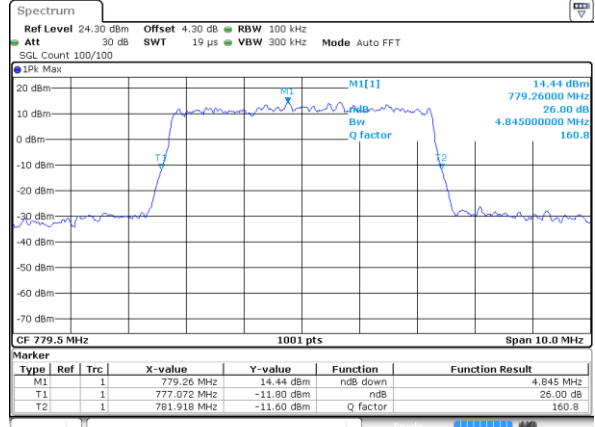
LTE Band 13

Lowest Channel / 5MHz / QPSK



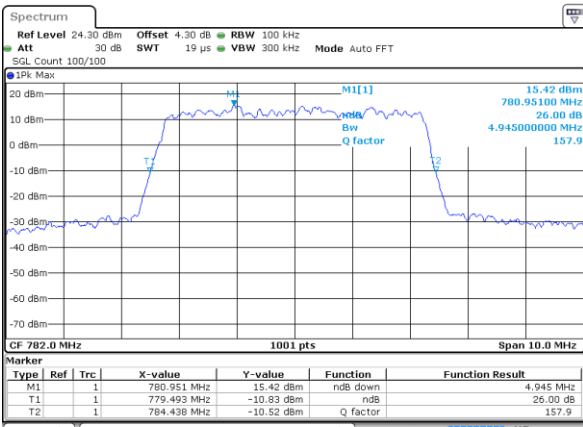
Date: 14 JUL 2019 17:21:59

Lowest Channel / 5MHz / 16QAM



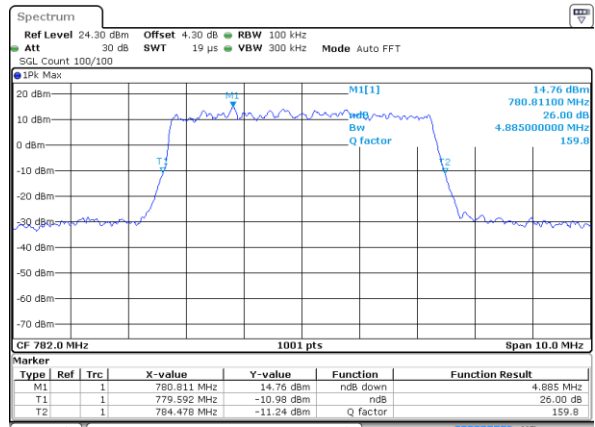
Date: 14 JUL 2019 17:22:09

Middle Channel / 5MHz / QPSK



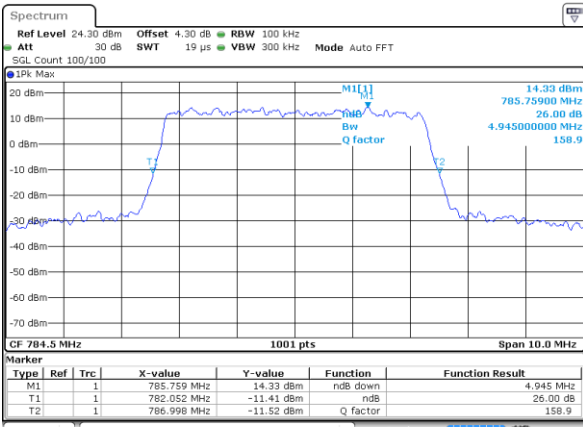
Date: 14 JUL 2019 17:30:58

Middle Channel / 5MHz / 16QAM



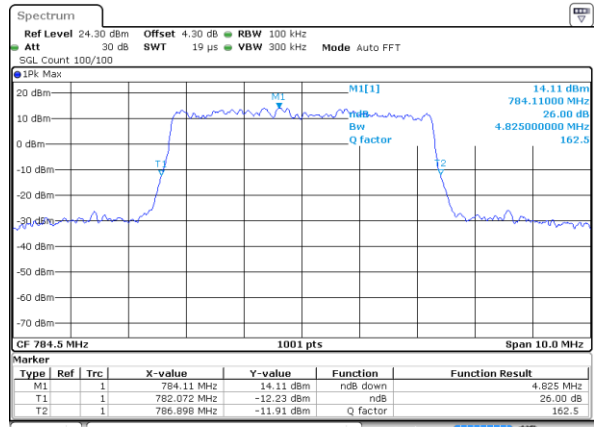
Date: 14 JUL 2019 17:31:07

Highest Channel / 5MHz / QPSK



Date: 14 JUL 2019 17:33:36

Highest Channel / 5MHz / 16QAM

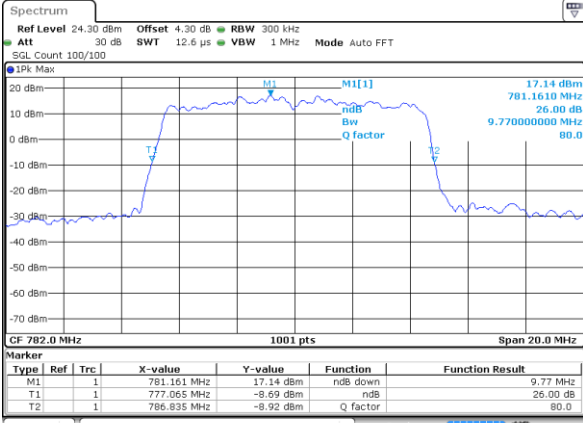


Date: 14 JUL 2019 17:33:26



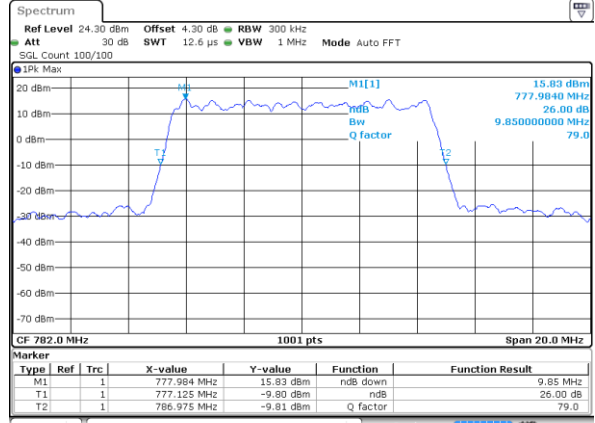
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 14 JUL 2019 17:44:22

Middle Channel / 10MHz / 16QAM



Date: 14 JUL 2019 17:44:12



Occupied Bandwidth

| Mode | LTE Band 2 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|--------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 1.09 | 1.1 | 2.73 | 2.7 | 4.49 | 4.49 | 8.99 | 8.95 | 13.43 | 13.4 | 18.22 | 18.38 |
| Middle CH | 1.1 | 1.09 | 2.72 | 2.72 | 4.48 | 4.5 | 9.03 | 9.03 | 13.46 | 13.49 | 18.34 | 18.38 |
| Highest CH | 1.1 | 1.1 | 2.72 | 2.7 | 4.5 | 4.51 | 9.07 | 8.95 | 13.43 | 13.46 | 18.42 | 18.22 |

| Mode | LTE Band 4 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|--------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 1.09 | 1.09 | 2.72 | 2.71 | 4.5 | 4.46 | 9.03 | 8.99 | 13.37 | 13.4 | 18.3 | 18.14 |
| Middle CH | 1.09 | 1.1 | 2.72 | 2.7 | 4.49 | 4.5 | 8.97 | 9.03 | 13.43 | 13.4 | 18.26 | 18.22 |
| Highest CH | 1.1 | 1.09 | 2.7 | 2.7 | 4.5 | 4.5 | 9.09 | 9.07 | 13.49 | 13.49 | 18.34 | 18.3 |

| Mode | LTE Band 5 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|--------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 1.10 | 1.09 | 2.72 | 2.73 | 4.49 | 4.51 | 9.05 | 9.05 | - | - | - | - |
| Middle CH | 1.09 | 1.08 | 2.73 | 2.72 | 4.49 | 4.49 | 9.03 | 9.01 | - | - | - | - |
| Highest CH | 1.09 | 1.09 | 2.71 | 2.72 | 4.50 | 4.47 | 9.05 | 8.99 | - | - | - | - |

| Mode | LTE Band 7 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|--------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | | | | | 4.49 | 4.50 | 9.03 | 9.01 | 13.46 | 13.40 | 18.38 | 18.34 |
| Middle CH | | | | | 4.49 | 4.49 | 9.01 | 9.01 | 13.43 | 13.43 | 18.22 | 18.22 |
| Highest CH | | | | | 4.48 | 4.48 | 9.01 | 8.99 | 13.43 | 13.46 | 18.34 | 18.30 |



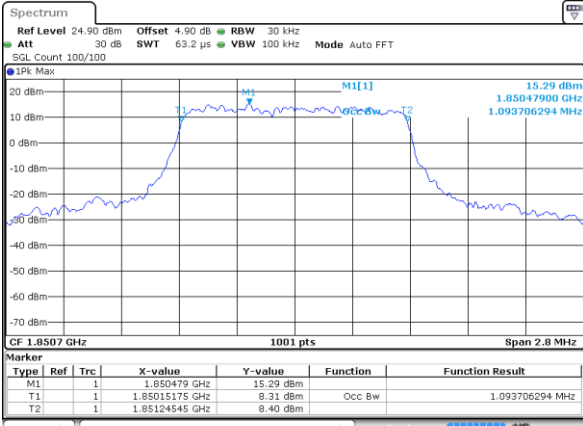
| Mode | LTE Band 12 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 1.09 | 1.10 | 2.71 | 2.72 | 4.49 | 4.48 | 9.01 | 8.93 | | | | |
| Middle CH | 1.09 | 1.09 | 2.72 | 2.72 | 4.50 | 4.49 | 9.03 | 9.01 | | | | |
| Highest CH | 1.09 | 1.09 | 2.72 | 2.71 | 4.46 | 4.48 | 9.07 | 8.99 | | | | |

| Mode | LTE Band 13 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|---------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | | | | | 4.49 | 4.49 | | | | | | |
| Middle CH | | | | | 4.47 | 4.48 | 8.97 | 8.97 | | | | |
| Highest CH | | | | | 4.50 | 4.47 | | | | | | |



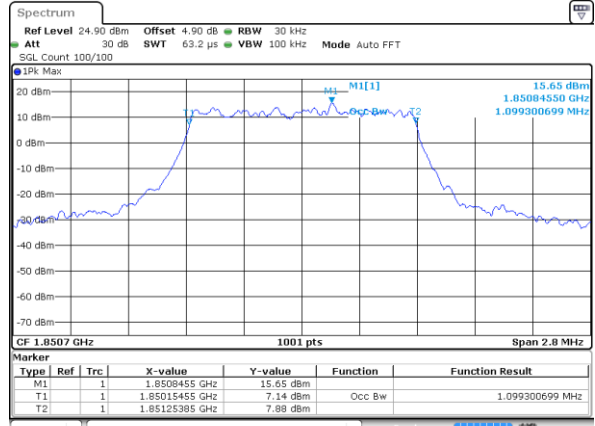
LTE Band 2

Lowest Channel / 1.4MHz / QPSK



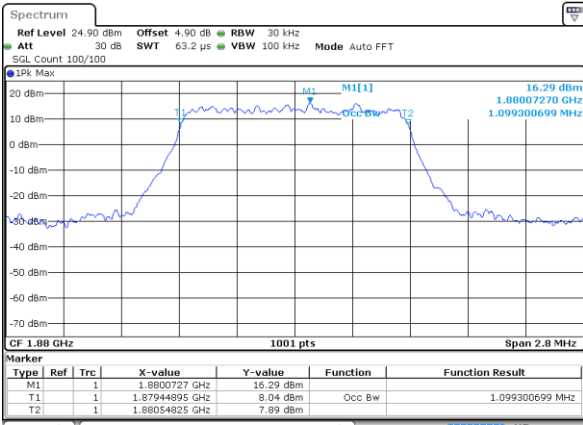
Date: 13 JUL 2019 15:40:39

Lowest Channel / 1.4MHz / 16QAM



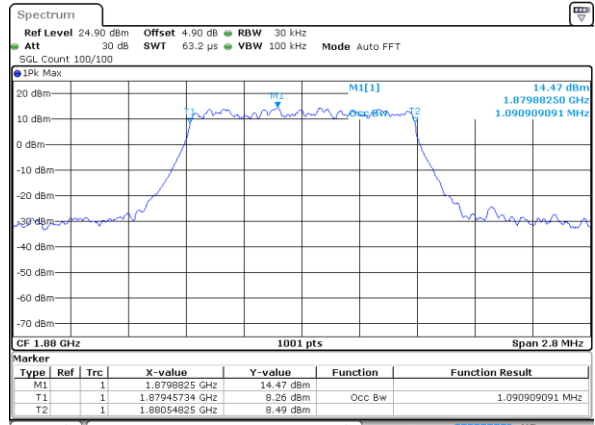
Date: 13 JUL 2019 15:40:49

Middle Channel / 1.4MHz / QPSK



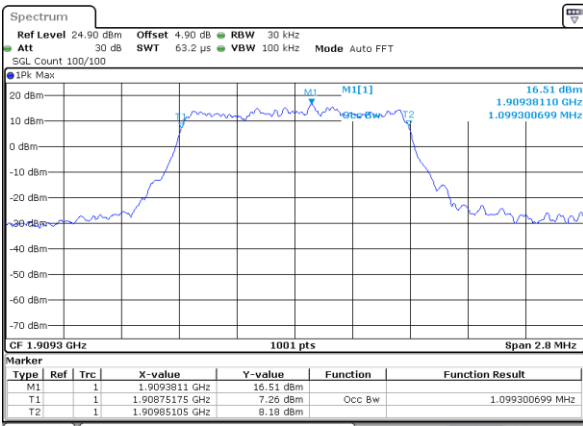
Date: 13 JUL 2019 15:47:45

Middle Channel / 1.4MHz / 16QAM



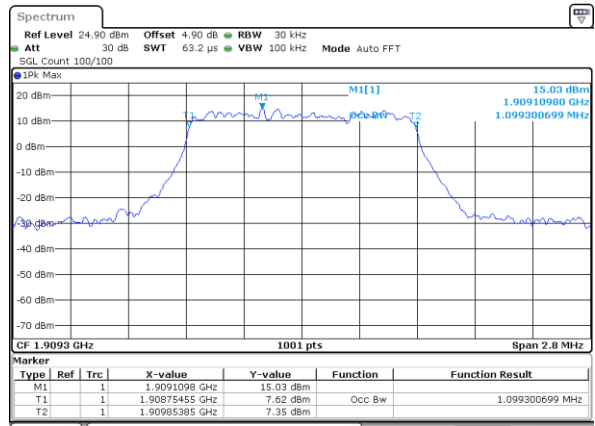
Date: 13 JUL 2019 15:47:55

Highest Channel / 1.4MHz / QPSK



Date: 13 JUL 2019 15:50:18

Highest Channel / 1.4MHz / 16QAM

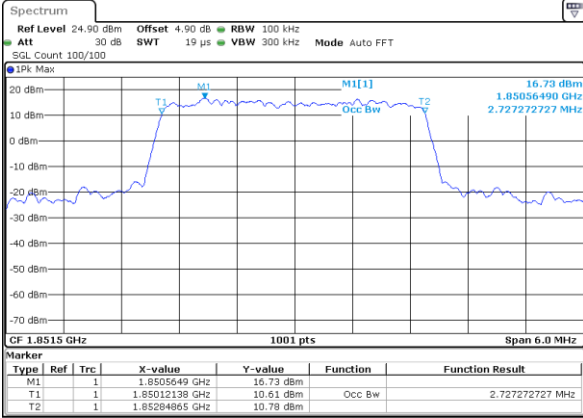


Date: 13 JUL 2019 15:50:28



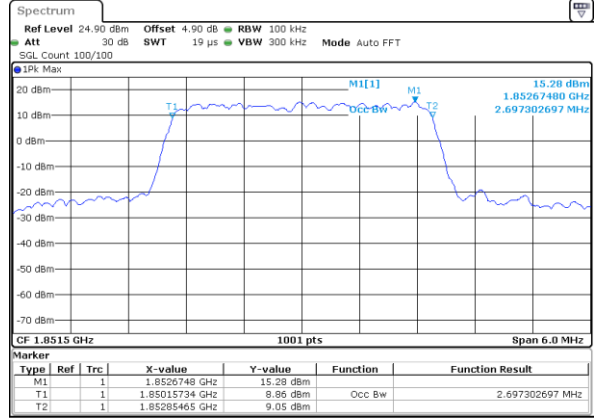
LTE Band 2

Lowest Channel / 3MHz / QPSK



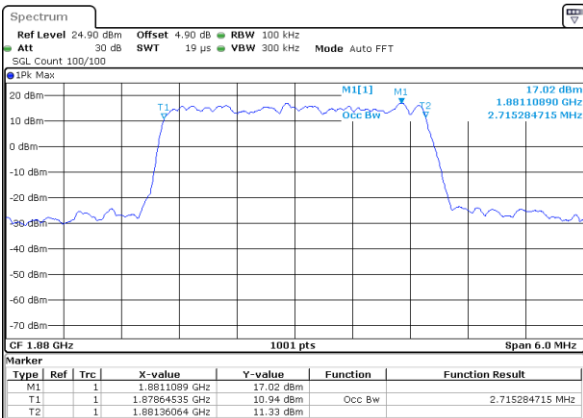
Date: 13 JUL 2019 15:57:24

Lowest Channel / 3MHz / 16QAM



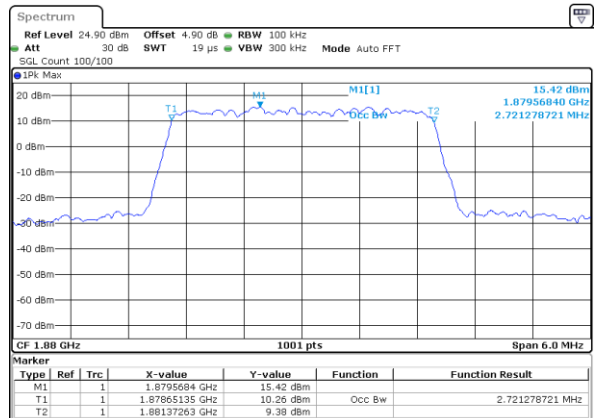
Date: 13 JUL 2019 15:57:34

Middle Channel / 3MHz / QPSK



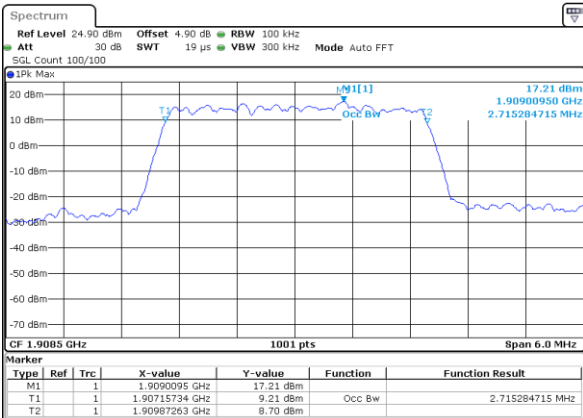
Date: 13 JUL 2019 16:04:30

Middle Channel / 3MHz / 16QAM



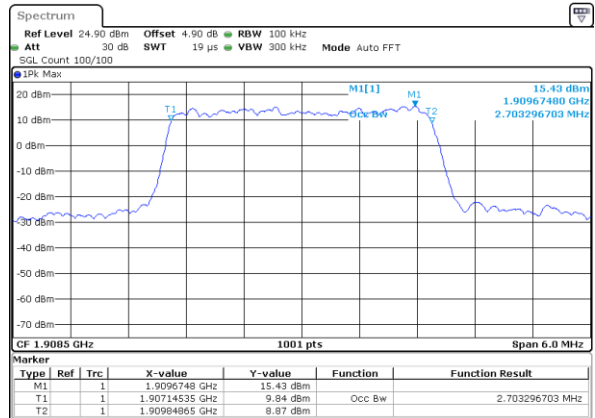
Date: 13 JUL 2019 16:04:40

Highest Channel / 3MHz / QPSK



Date: 13 JUL 2019 16:07:03

Highest Channel / 3MHz / 16QAM

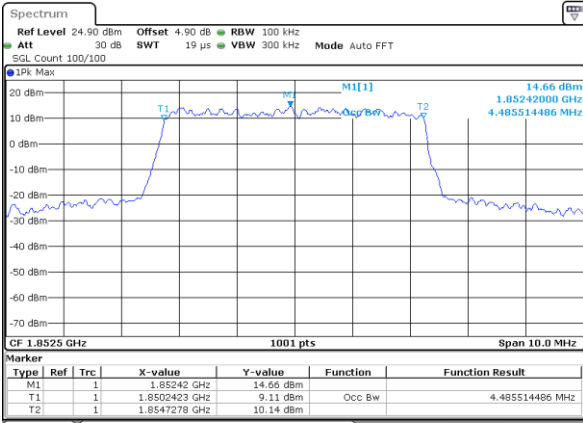


Date: 13 JUL 2019 16:07:13



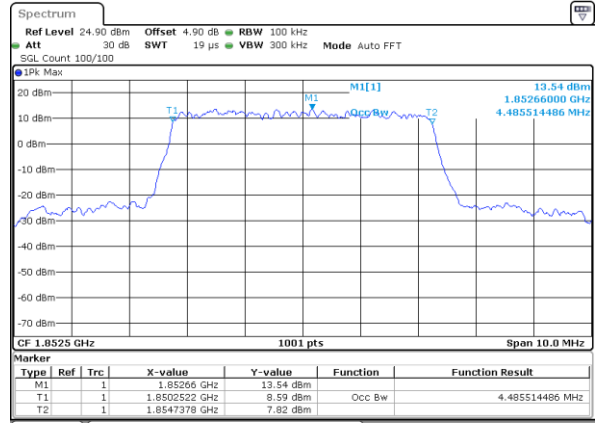
LTE Band 2

Lowest Channel / 5MHz / QPSK



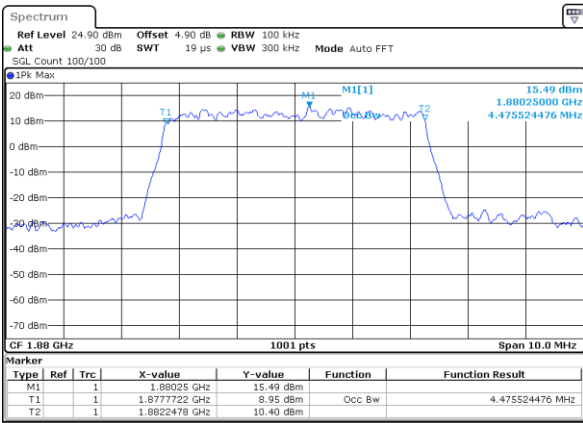
Date: 13 JUL 2019 16:14:09

Lowest Channel / 5MHz / 16QAM



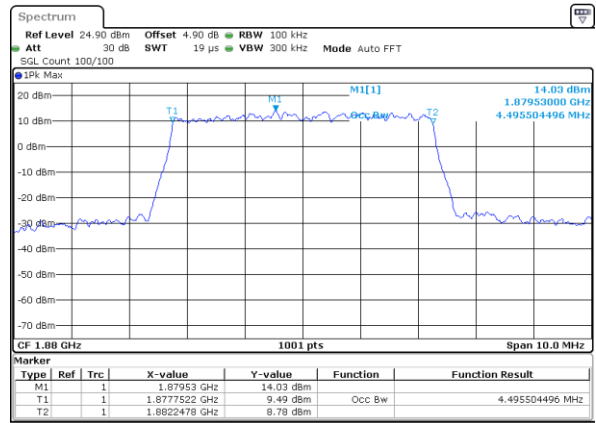
Date: 13 JUL 2019 16:14:19

Middle Channel / 5MHz / QPSK



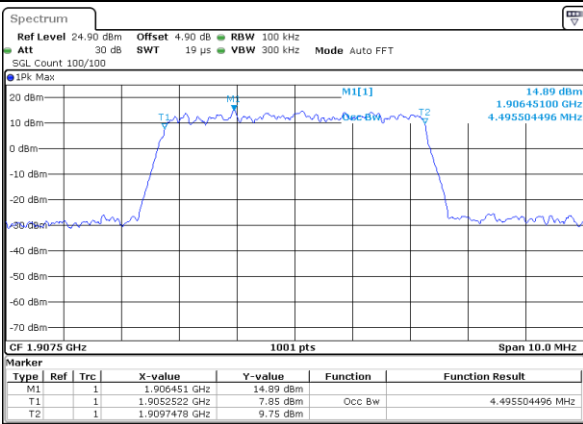
Date: 13 JUL 2019 16:21:16

Middle Channel / 5MHz / 16QAM



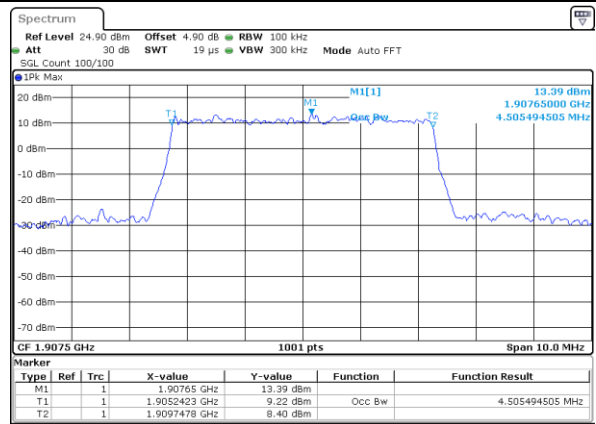
Date: 13 JUL 2019 16:21:26

Highest Channel / 5MHz / QPSK



Date: 13 JUL 2019 16:23:49

Highest Channel / 5MHz / 16QAM

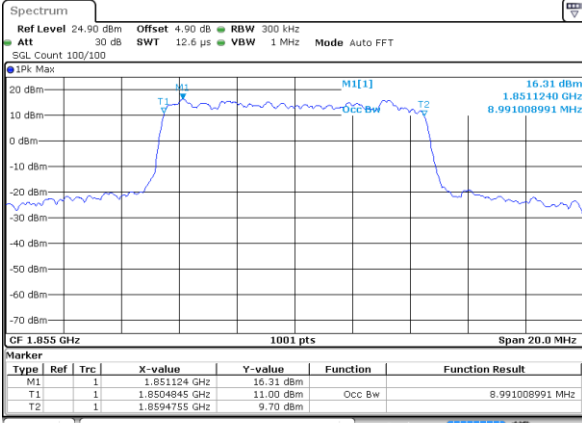


Date: 13 JUL 2019 16:23:59



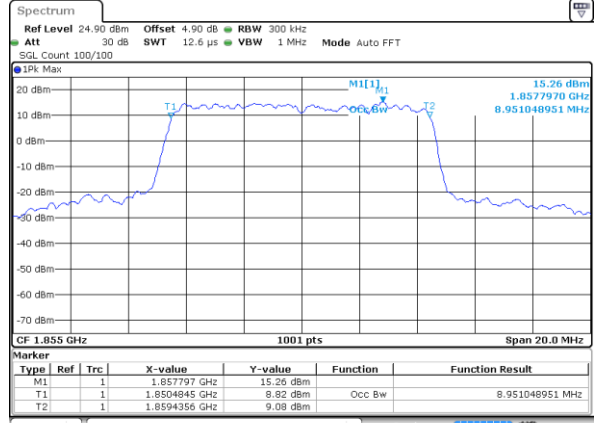
LTE Band 2

Lowest Channel / 10MHz / QPSK



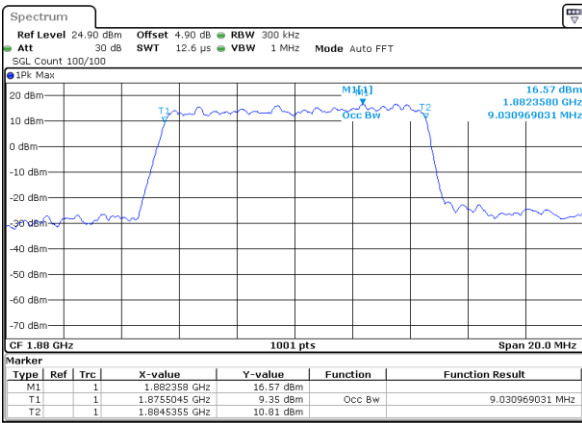
Date: 13 JUL 2019 16:30:55

Lowest Channel / 10MHz / 16QAM



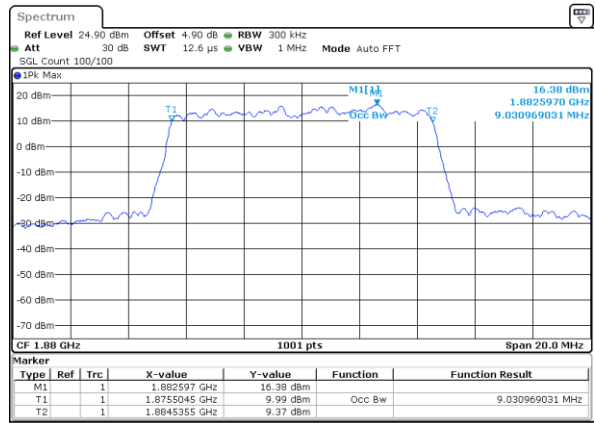
Date: 13 JUL 2019 16:31:05

Middle Channel / 10MHz / QPSK



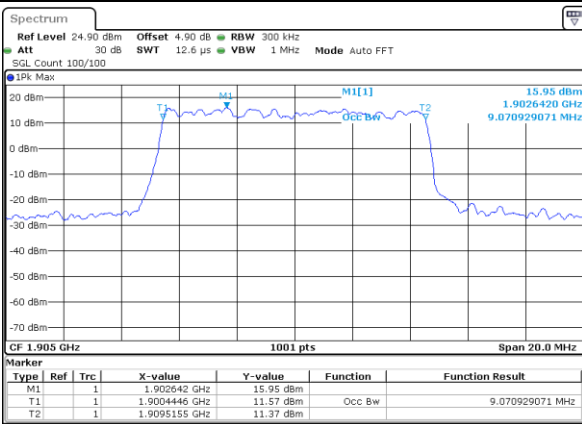
Date: 13 JUL 2019 16:38:01

Middle Channel / 10MHz / 16QAM



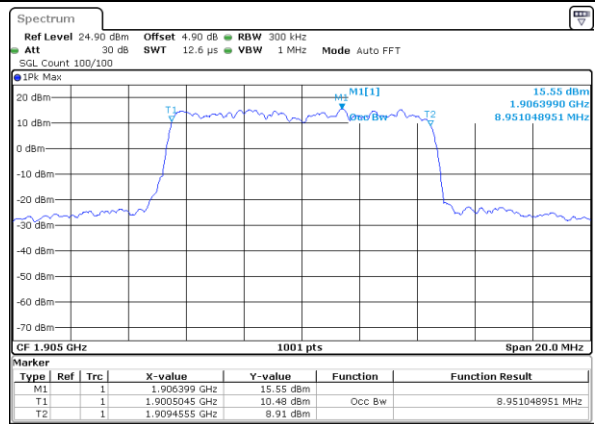
Date: 13 JUL 2019 16:38:11

Highest Channel / 10MHz / QPSK



Date: 13 JUL 2019 16:40:34

Highest Channel / 10MHz / 16QAM



Date: 13 JUL 2019 16:40:44