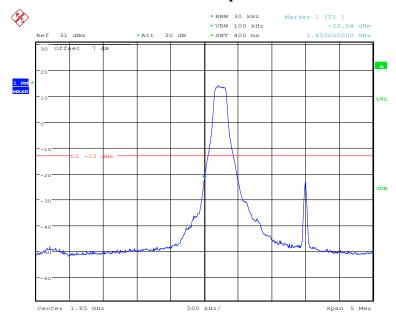
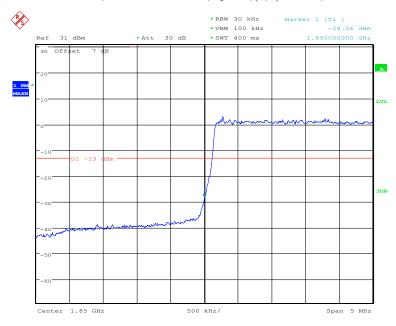
### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 19:48:48

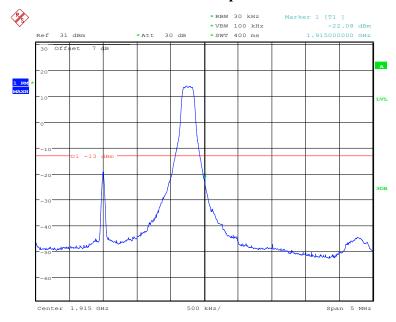
LTE Band25, 3MHz bandwidth, QPSK,(1,0) Mode, Below 1850MHz



Date: 15.NOV.2019 19:50:58

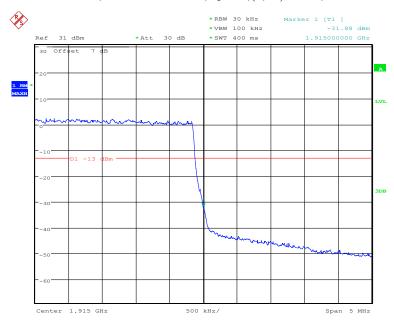
LTE Band25, 3MHz bandwidth, QPSK,(15,0) Mode, Below 1850MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 19:53:53

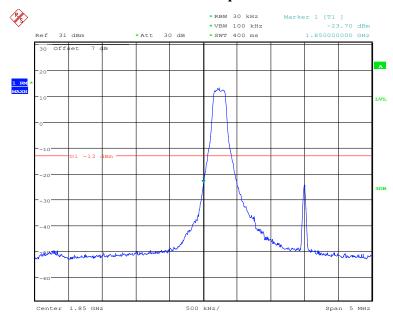
LTE Band25, 3MHz bandwidth, QPSK,(1,15) Mode, Above 1915MHz



Date: 15.NOV.2019 19:55:35

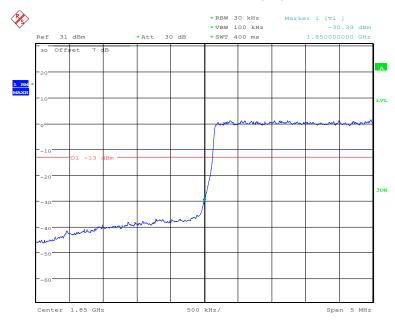
LTE Band25, 3MHz bandwidth, QPSK,(15,0) Mode, Above 1915MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 19:49:28

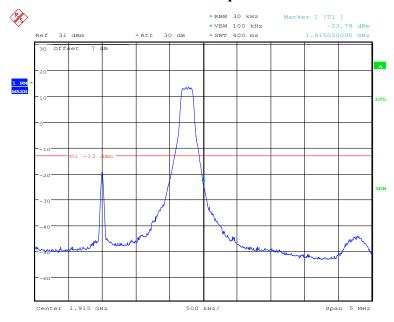
#### LTE Band25, 3MHz bandwidth, 16QAM,(1,0) Mode, Below 1850MHz



Date: 15.NOV.2019 19:50:25

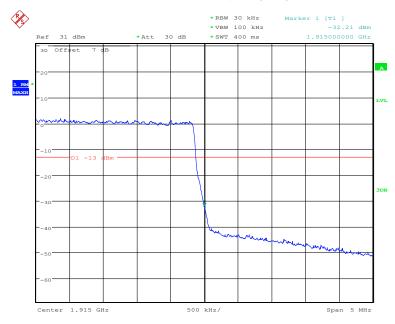
LTE Band25, 3MHz bandwidth, 16QAM,(15,0) Mode, Below 1850MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 19:54:25

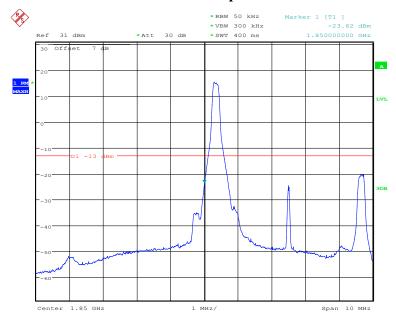
#### LTE Band25, 3MHz bandwidth, 16QAM,(1,15) Mode, Above 1915MHz



Date: 15.NOV.2019 19:55:06

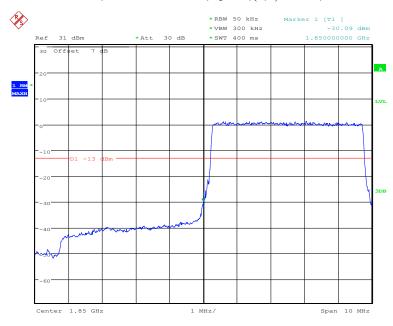
LTE Band25, 3MHz bandwidth, 16QAM,(15,0) Mode, Above 1915MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 19:58:46

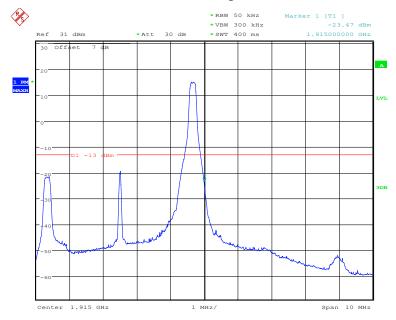
LTE Band25, 5MHz bandwidth, QPSK,(1,0) Mode, Below 1850MHz



Date: 15.NOV.2019 20:00:18

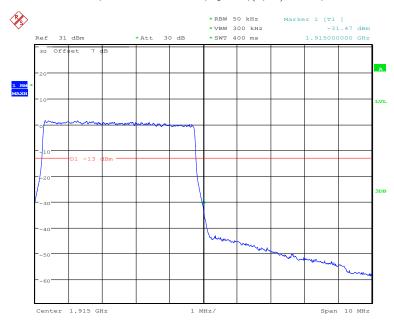
LTE Band25, 5MHz bandwidth, QPSK,(25,0) Mode, Below 1850MHz





Date: 15.NOV.2019 20:01:32

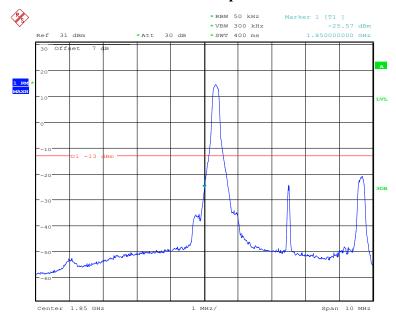
LTE Band25, 5MHz bandwidth, QPSK,(1,25) Mode, Above 1915MHz



Date: 15.NOV.2019 20:02:43

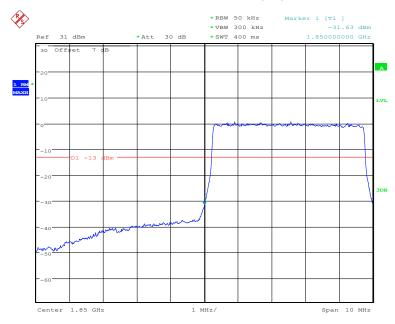
LTE Band25, 5MHz bandwidth, QPSK,(25,0) Mode, Above 1915MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 19:59:24

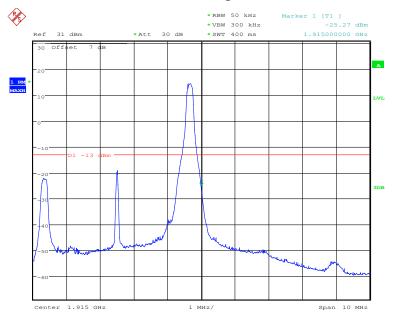
#### LTE Band25, 5MHz bandwidth, 16QAM,(1,0) Mode, Below 1850MHz



Date: 15.NOV.2019 19:59:56

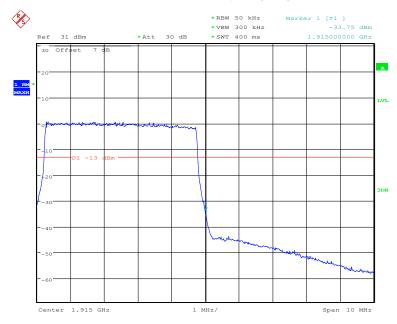
LTE Band25, 5MHz bandwidth, 16QAM,(25,0) Mode, Below 1850MHz





Date: 15.NOV.2019 20:01:57

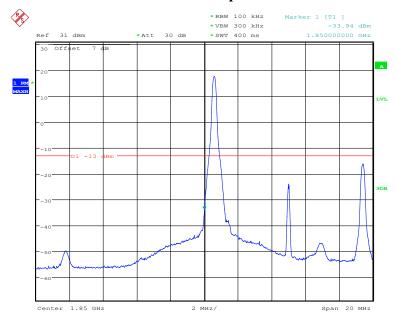
#### LTE Band25, 5MHz bandwidth, 16QAM,(1,25) Mode, Above 1915MHz



Date: 15.NOV.2019 20:02:23

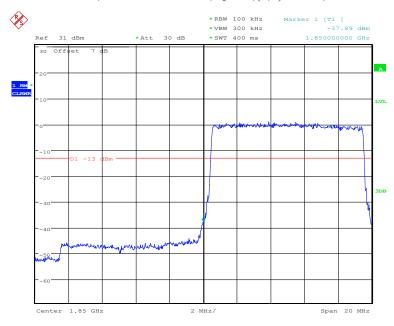
LTE Band25, 5MHz bandwidth, 16QAM,(25,0) Mode, Above 1915MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 20:07:23

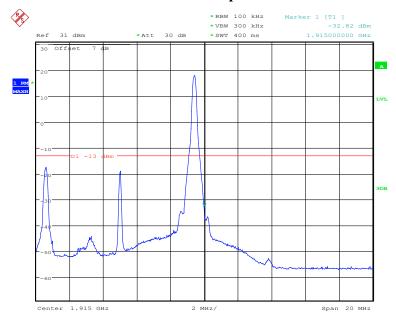
#### LTE Band25, 10MHz bandwidth, QPSK,(1,0) Mode, Below 1850MHz



Date: 15.NOV.2019 20:08:06

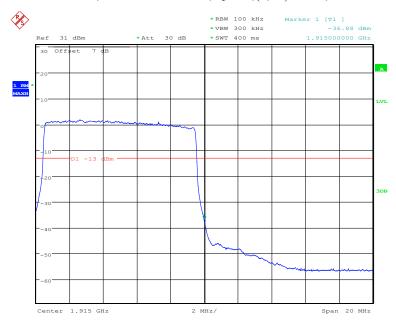
LTE Band25, 10MHz bandwidth, QPSK,(50,0) Mode, Below 1850MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 20:10:17

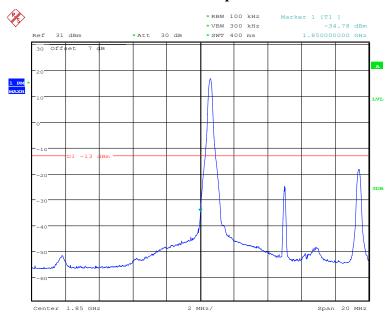
#### LTE Band25, 10MHz bandwidth, QPSK,(1,50) Mode, Above 1915MHz



Date: 15.NOV.2019 20:10:54

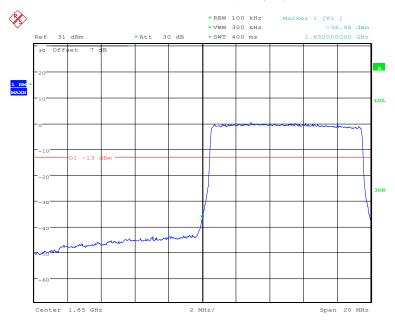
LTE Band25, 10MHz bandwidth, QPSK,(50,0) Mode, Above 1915MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 20:06:58

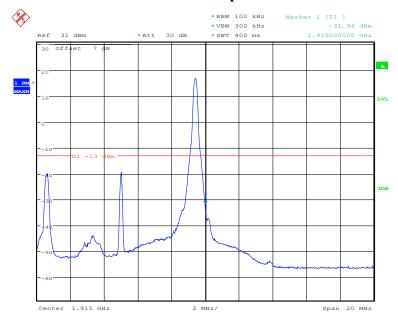
LTE Band25, 10MHz bandwidth, 16QAM,(1,0) Mode, Below 1850MHz



Date: 15.NOV.2019 20:08:29

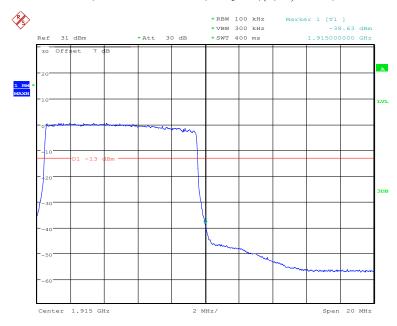
LTE Band25, 10MHz bandwidth, 16QAM,(50,0) Mode , Below 1850MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 20:09:55

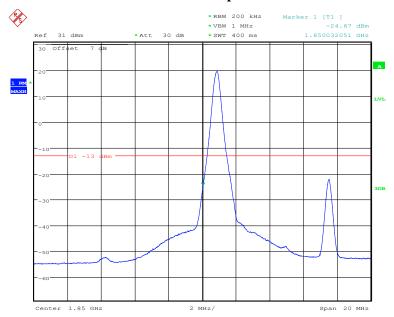
#### LTE Band25, 10MHz bandwidth, 16QAM,(1,50) Mode, Above 1915MHz



Date: 15.NOV.2019 20:11:12

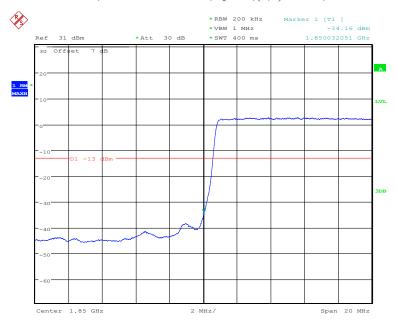
LTE Band25, 10MHz bandwidth, 16QAM,(50,0) Mode, Above 1915MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 20:14:20

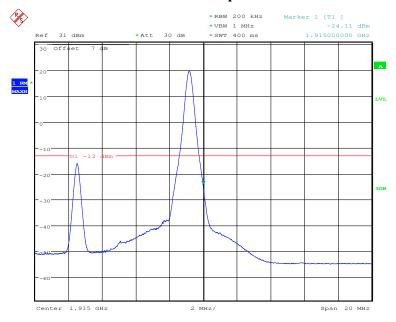
#### LTE Band25, 15MHz bandwidth, QPSK,(1,0) Mode, Below 1850MHz



Date: 15.NOV.2019 20:15:31

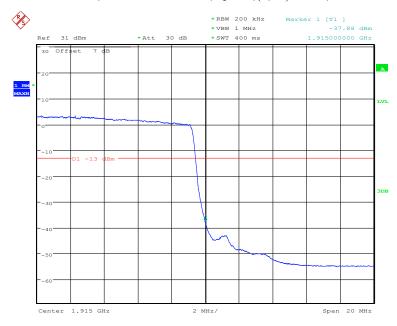
LTE Band25, 15MHz bandwidth, QPSK,(75,0) Mode, Below 1850MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 20:16:54

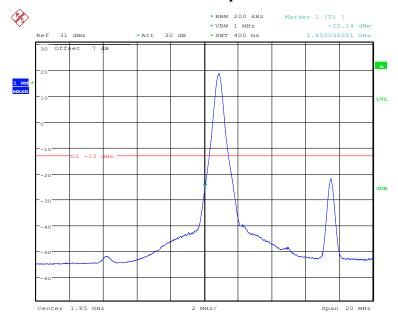
#### LTE Band25, 15MHz bandwidth, QPSK,(1,75) Mode, Above 1915MHz



Date: 15.NOV.2019 20:17:57

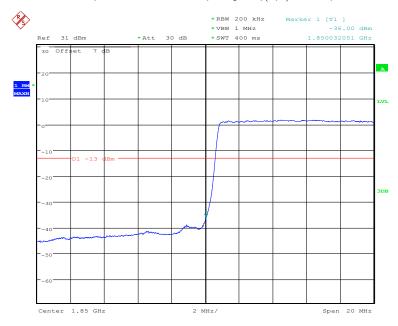
LTE Band25, 15MHz bandwidth, QPSK,(75,0) Mode, Above 1915MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 20:14:43

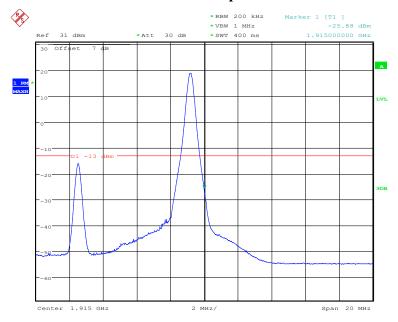
#### LTE Band25, 15MHz bandwidth, 16QAM,(1,0) Mode, Below 1850MHz



Date: 15.NOV.2019 20:15:10

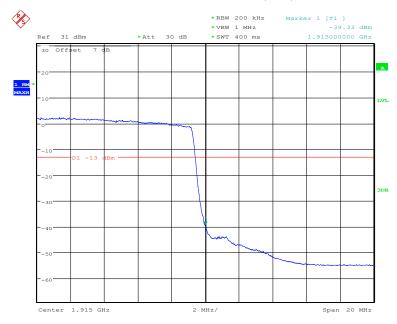
LTE Band25, 15MHz bandwidth, 16QAM,(75,0) Mode , Below 1850MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 20:17:15

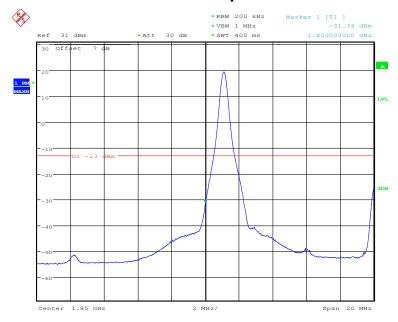
#### LTE Band25, 15MHz bandwidth, 16QAM,(1,75) Mode, Above 1915MHz



Date: 15.NOV.2019 20:17:39

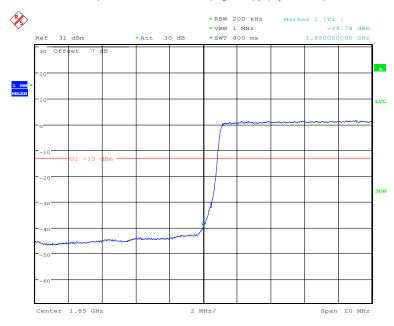
LTE Band25, 15MHz bandwidth, 16QAM,(75,0) Mode, Above 1915MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 20:19:48

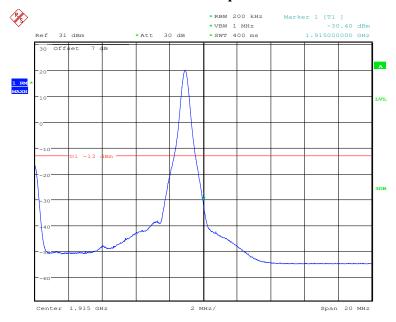
#### LTE Band25, 20MHz bandwidth, QPSK,(1,0) Mode, Below 1850MHz



Date: 15.NOV.2019 20:20:46

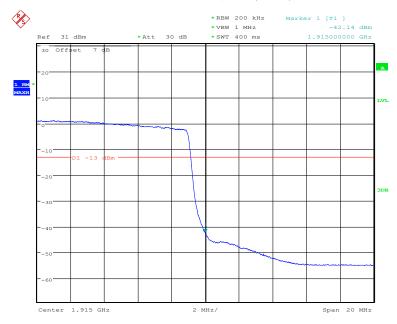
LTE Band25, 20MHz bandwidth, QPSK,(100,0) Mode , Below 1850MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 20:21:48

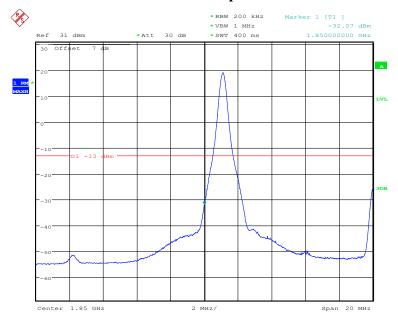
#### LTE Band25, 20MHz bandwidth, QPSK,(1,100) Mode, Above 1915MHz



Date: 15.NOV.2019 20:22:31

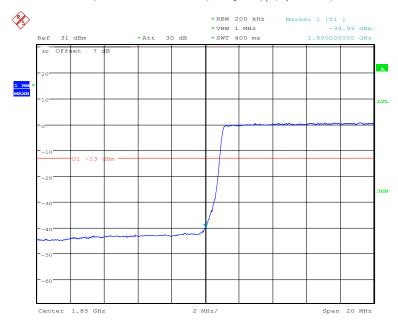
LTE Band25, 20MHz bandwidth, QPSK,(100,0) Mode, Above 1915MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 20:20:07

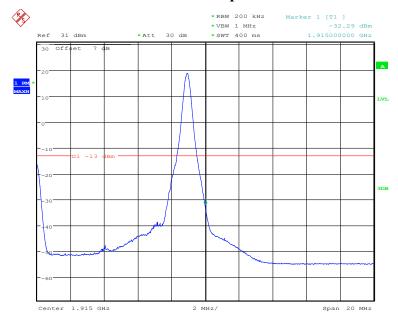
#### LTE Band25, 20MHz bandwidth, 16QAM,(1,0) Mode, Below 1850MHz



Date: 15.NOV.2019 20:20:29

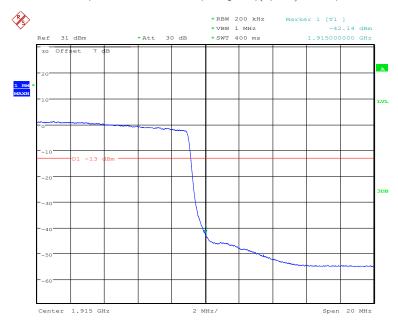
LTE Band25, 20MHz bandwidth, 16QAM,(100,0) Mode, Below 1850MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 20:22:04

#### LTE Band25, 20MHz bandwidth, 16QAM,(1,100) Mode, Above 1915MHz

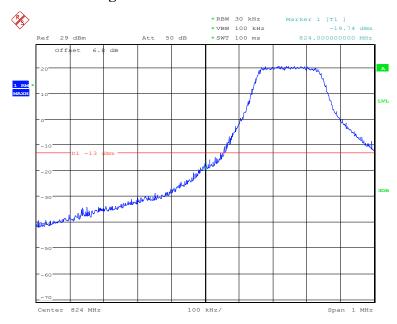


Date: 15.NOV.2019 20:22:31

LTE Band25, 20MHz bandwidth, 16QAM,(100,0) Mode, Above 1915MHz

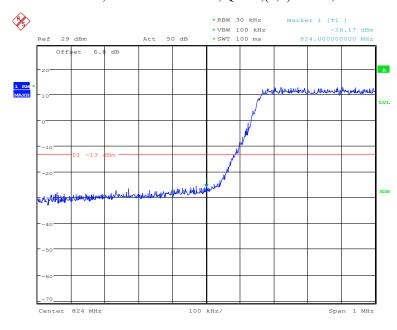
### Report No.:B19W50601-WWAN\_Rev1

### 5.5.10 LTE B26 Band Edge Results



Date: 18.DEC.2019 10:19:54

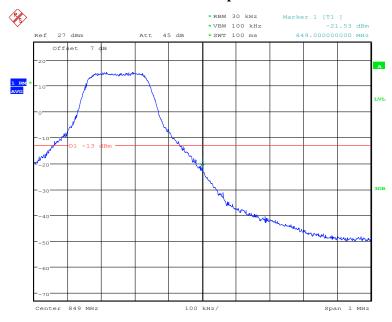
LTE Band26, 1.4MHz bandwidth, QPSK,(1,0) Mode, Below 824MHz



Date: 18.DEC.2019 10:20:32

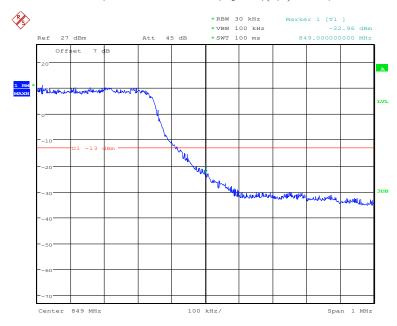
LTE Band26, 1.4MHz bandwidth, QPSK,(6,0) Mode, Below 824MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 15:41:43

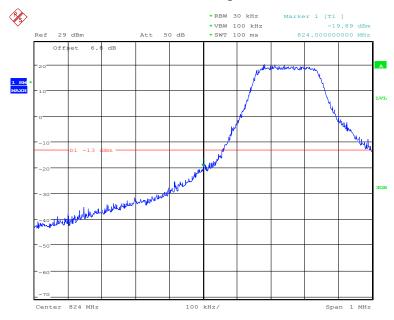
LTE Band26, 1.4MHz bandwidth, QPSK,(1,6) Mode, Above 849MHz



Date: 16.NOV.2019 15:41:09

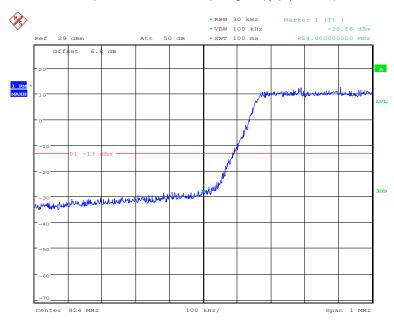
LTE Band26, 1.4MHz bandwidth, QPSK,(6,0) Mode, Above 849MHz





Date: 18.DEC.2019 10:21:20

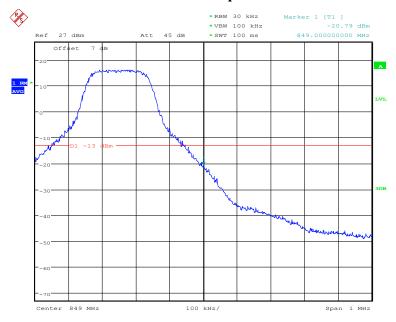
LTE Band26, 1.4MHz bandwidth, 16QAM,(1,0) Mode, Below 824MHz



Date: 18.DEC.2019 10:21:43

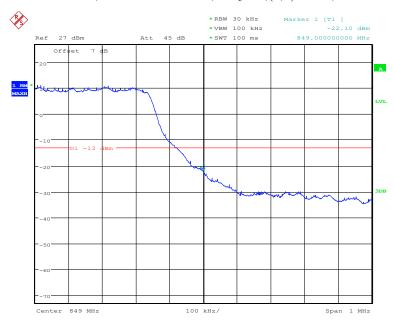
LTE Band26, 1.4MHz bandwidth, 16QAM,(6,0) Mode, Below 824MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 15:41:58

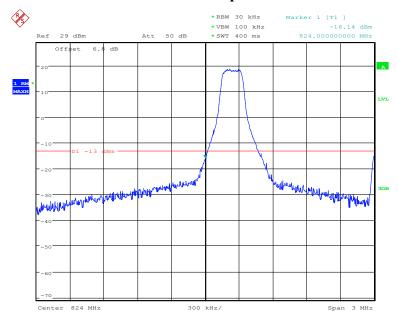
LTE Band26, 1.4MHz bandwidth, 16QAM,(1,6) Mode, Above 849MHz



Date: 16.NOV.2019 15:40:59

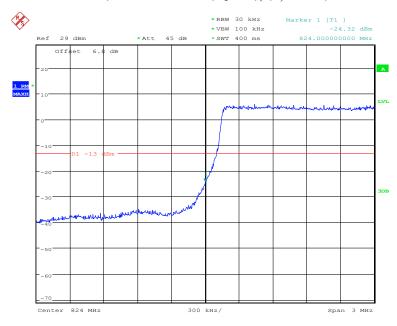
LTE Band26, 1.4MHz bandwidth, 16QAM,(6,0) Mode, Above 849MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 18.DEC.2019 10:24:55

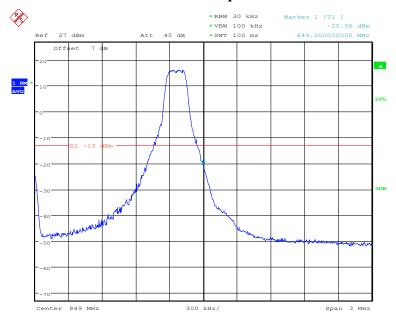
#### LTE Band26, 3MHz bandwidth, QPSK,(1,0) Mode, Below 824MHz



Date: 18.DEC.2019 10:28:38

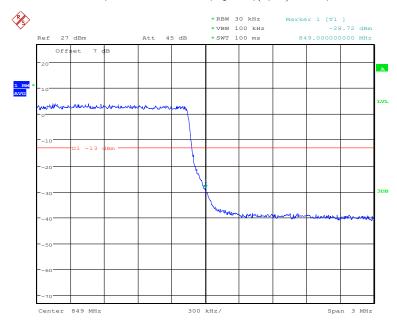
LTE Band26, 3MHz bandwidth, QPSK,(15,0) Mode, Below 824MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 15:47:36

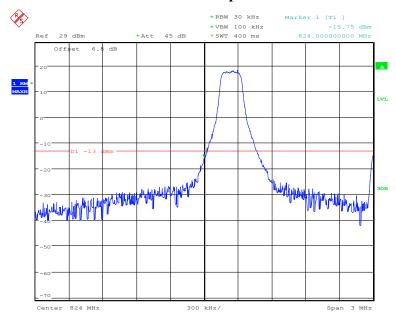
#### LTE Band26, 3MHz bandwidth, QPSK,(1,15) Mode, Above 849MHz



Date: 16.NOV.2019 15:46:58

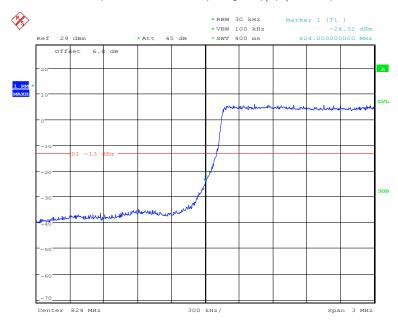
LTE Band26, 3MHz bandwidth, QPSK,(15,0) Mode, Above 849MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 18.DEC.2019 10:28:22

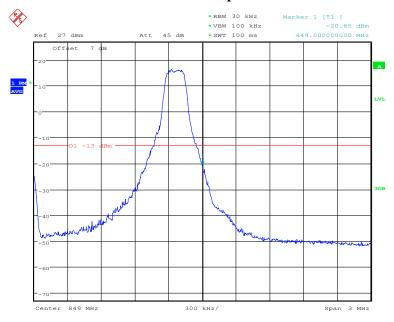
#### LTE Band26, 3MHz bandwidth, 16QAM,(1,0) Mode, Below 824MHz



Date: 18.DEC.2019 10:28:38

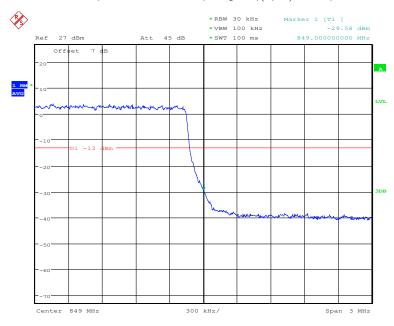
LTE Band26, 3MHz bandwidth, 16QAM,(15,0) Mode , Below 824MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 15:47:25

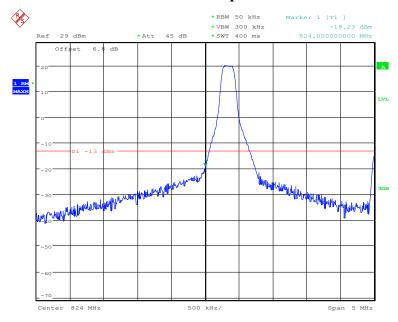
#### LTE Band26, 3MHz bandwidth, 16QAM,(1,15) Mode, Above 849MHz



Date: 16.NOV.2019 15:47:09

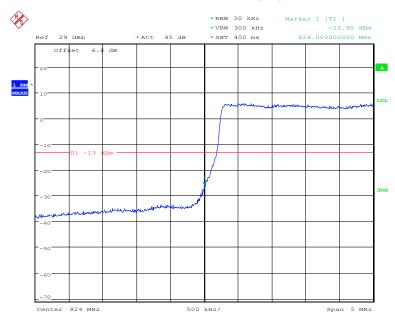
LTE Band26, 3MHz bandwidth, 16QAM,(15,0) Mode, Above 849MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 18.DEC.2019 10:30:28

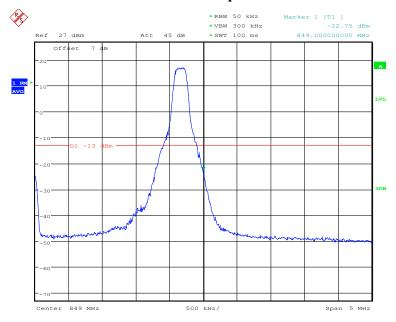
#### LTE Band26, 5MHz bandwidth, QPSK,(1,0) Mode, Below 824MHz



Date: 18.DEC.2019 10:36:19

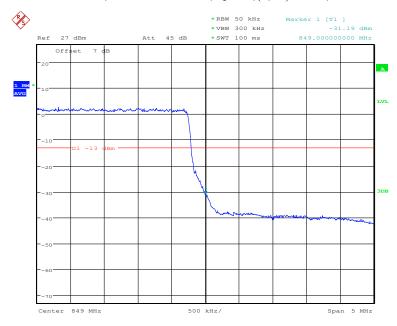
LTE Band26, 5MHz bandwidth, QPSK,(25,0) Mode, Below 824MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 15:53:59

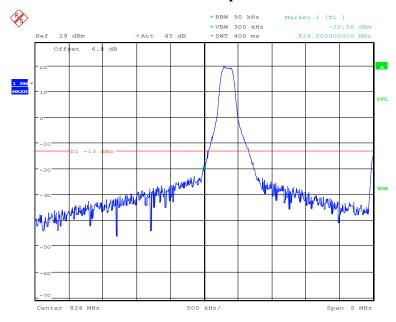
#### LTE Band26, 5MHz bandwidth, QPSK,(1,25) Mode, Above 849MHz



Date: 16.NOV.2019 15:54:13

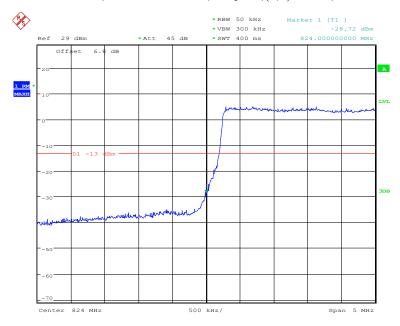
LTE Band26, 5MHz bandwidth, QPSK,(25,0) Mode, Above 849MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 18.DEC.2019 10:38:05

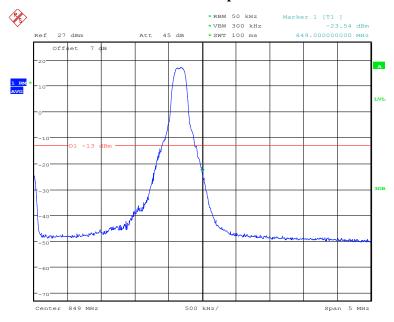
#### LTE Band26, 5MHz bandwidth, 16QAM,(1,0) Mode, Below 824MHz



Date: 18.DEC.2019 10:36:38

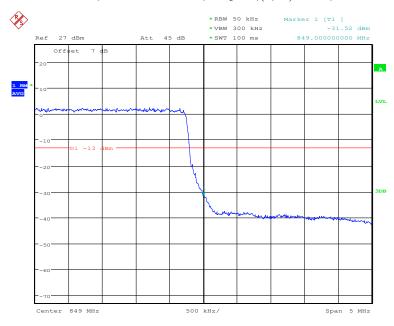
LTE Band26, 5MHz bandwidth, 16QAM,(25,0) Mode, Below 824MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 15:53:48

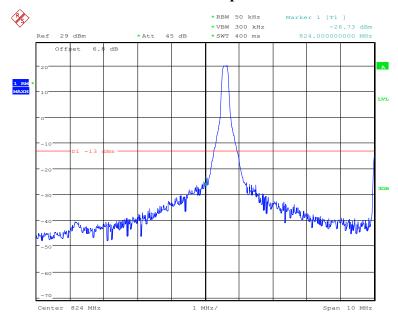
#### LTE Band26, 5MHz bandwidth, 16QAM,(1,25) Mode, Above 849MHz



Date: 16.NOV.2019 15:54:23

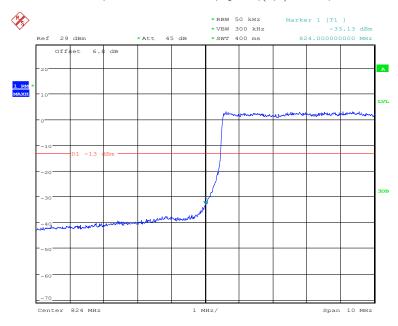
LTE Band26, 5MHz bandwidth, 16QAM,(25,0) Mode, Above 849MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 18.DEC.2019 10:39:15

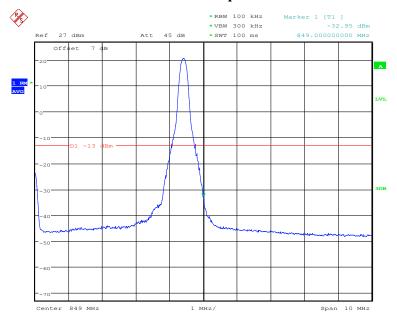
#### LTE Band26, 10MHz bandwidth, QPSK,(1,0) Mode, Below 824MHz



Date: 18.DEC.2019 10:39:30

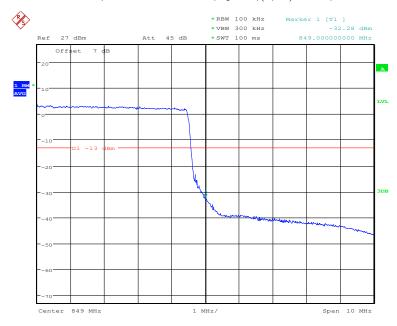
LTE Band26, 10MHz bandwidth, QPSK,(50,0) Mode, Below 824MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 15:58:52

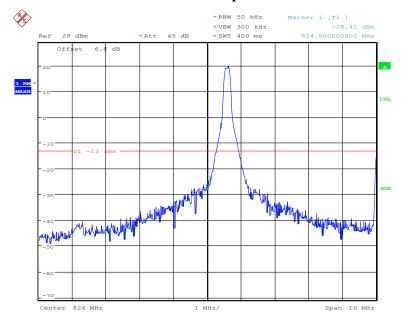
#### LTE Band26, 10MHz bandwidth, QPSK,(1,50) Mode, Above 849MHz



Date: 16.NOV.2019 15:59:19

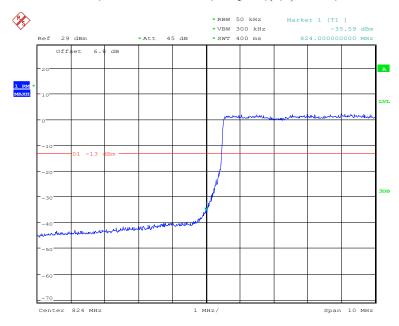
LTE Band26, 10MHz bandwidth, QPSK,(50,0) Mode, Above 849MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 18.DEC.2019 10:40:27

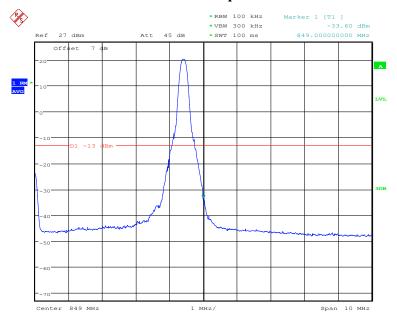
#### LTE Band26, 10MHz bandwidth, 16QAM,(1,0) Mode, Below 824MHz



Date: 18.DEC.2019 10:39:50

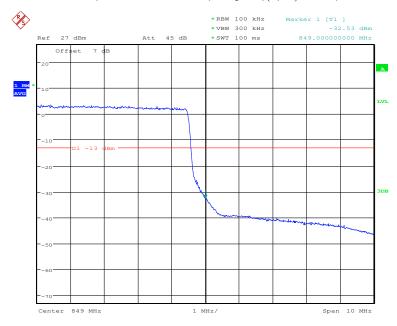
LTE Band26, 10MHz bandwidth, 16QAM,(50,0) Mode , Below 824MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 15:58:43

#### LTE Band26, 10MHz bandwidth, 16QAM,(1,50) Mode, Above 849MHz

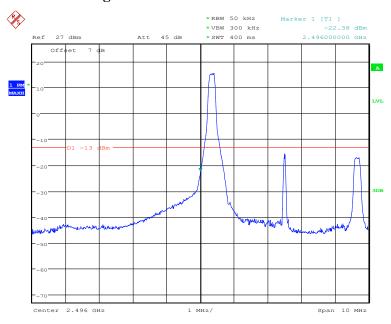


Date: 16.NOV.2019 15:59:35

LTE Band26, 10MHz bandwidth, 16QAM,(50,0) Mode, Above 849MHz

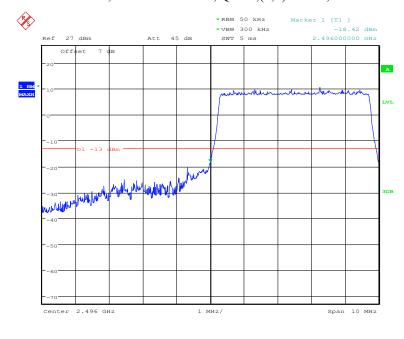
### Report No.:B19W50601-WWAN\_Rev1

### 5.5.11 LTE B41 Band Edge Results



Date: 16.NOV.2019 14:15:11

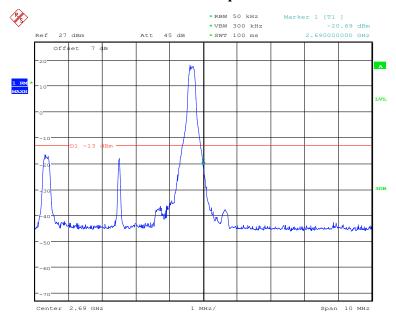
#### LTE Band41, 5MHz bandwidth, QPSK,(1,0) Mode, Below 2496MHz



Date: 16.NOV.2019 14:14:12

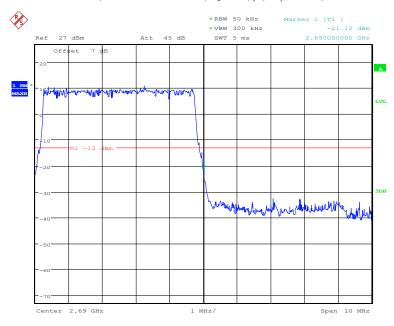
LTE Band41, 5MHz bandwidth, QPSK,(25,0) Mode, Below 2496MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:17:41

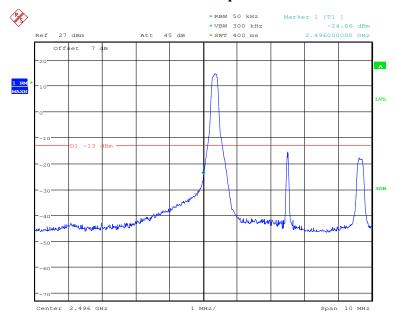
LTE Band41, 5MHz bandwidth, QPSK,(1,25) Mode, Above 2690MHz



Date: 16.NOV.2019 14:16:59

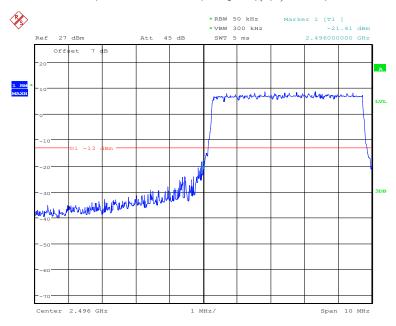
LTE Band41, 5MHz bandwidth, QPSK,(25,0) Mode, Above 2690MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:15:30

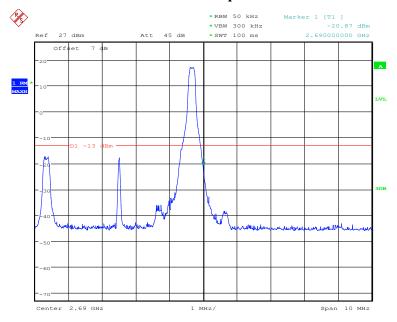
#### LTE Band41, 5MHz bandwidth, 16QAM,(1,0) Mode, Below 2496MHz



Date: 16.NOV.2019 14:16:08

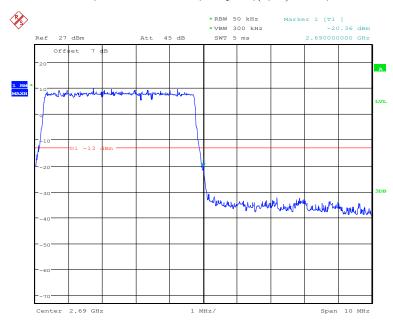
LTE Band41, 5MHz bandwidth, 16QAM,(25,0) Mode, Below 2496MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:17:56

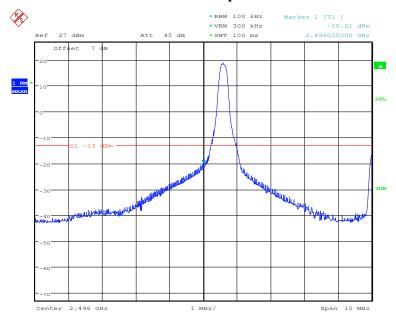
#### LTE Band41, 5MHz bandwidth, 16QAM,(1,25) Mode, Above 2690MHz



Date: 16.NOV.2019 14:16:45

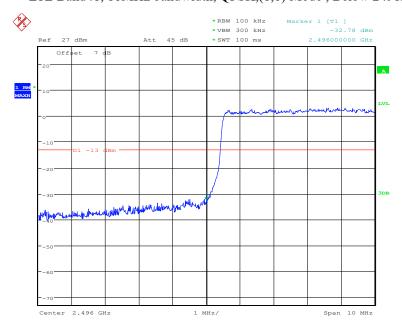
LTE Band41, 5MHz bandwidth, 16QAM,(25,0) Mode, Above 2690MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:27:00

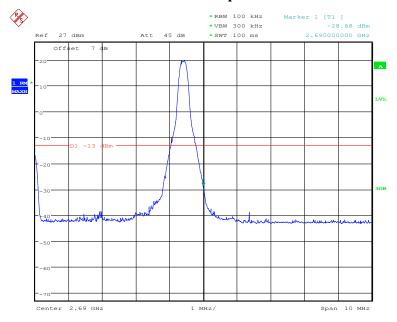
#### LTE Band41, 10MHz bandwidth, QPSK,(1,0) Mode, Below 2496MHz



Date: 16.NOV.2019 14:24:04

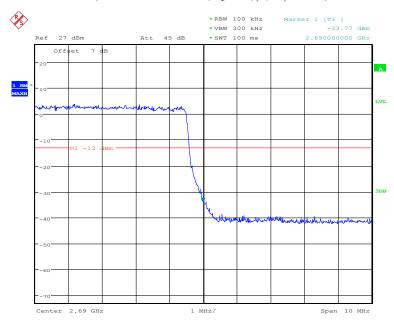
LTE Band41, 10MHz bandwidth, QPSK,(50,0) Mode, Below 2496MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:27:53

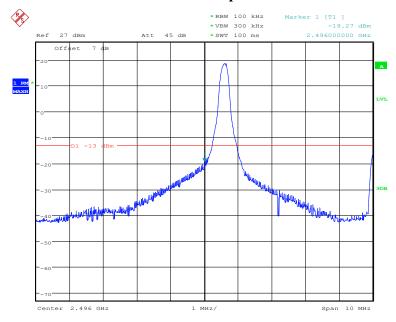
#### LTE Band41, 10MHz bandwidth, QPSK,(1,50) Mode, Above 2690MHz



Date: 16.NOV.2019 14:28:45

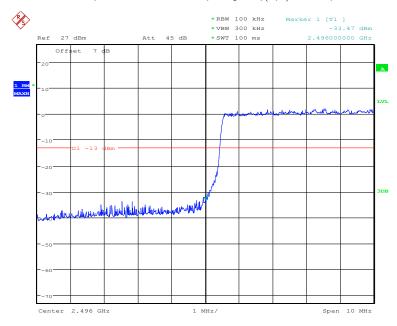
LTE Band41, 10MHz bandwidth, QPSK,(50,0) Mode, Above 2690MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:26:21

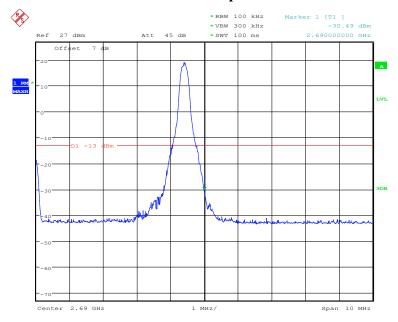
#### LTE Band41, 10MHz bandwidth, 16QAM,(1,0) Mode, Below 2496MHz



Date: 16.NOV.2019 14:25:40

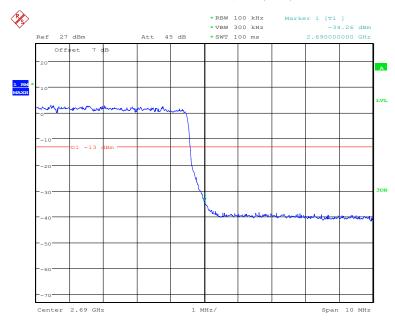
LTE Band41, 10MHz bandwidth, 16QAM,(50,0) Mode , Below 2496MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:28:16

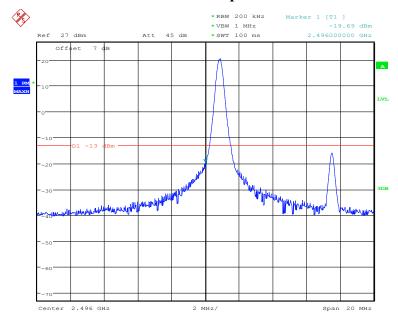
#### LTE Band41, 10MHz bandwidth, 16QAM,(1,50) Mode, Above 2690MHz



Date: 16.NOV.2019 14:28:33

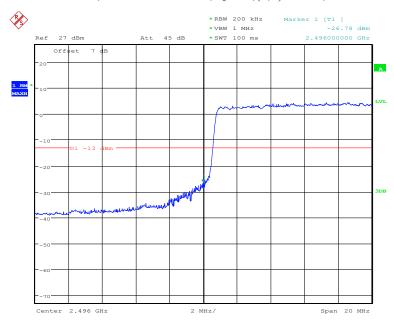
LTE Band41, 10MHz bandwidth, 16QAM,(50,0) Mode, Above 2690MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:31:10

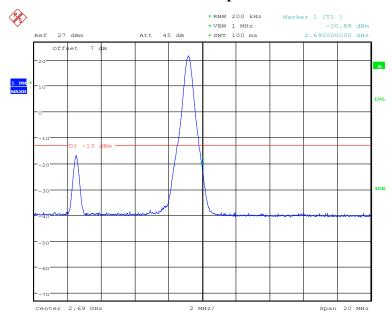
#### LTE Band41, 15MHz bandwidth, QPSK,(1,0) Mode, Below 2496MHz



Date: 16.NOV.2019 14:30:27

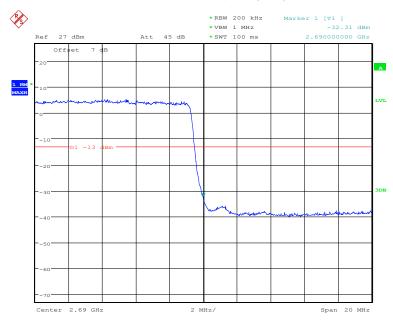
LTE Band41, 15MHz bandwidth, QPSK,(75,0) Mode, Below 2496MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:31:48

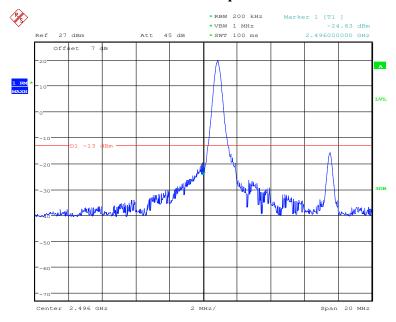
#### LTE Band41, 15MHz bandwidth, QPSK,(1,75) Mode, Above 2690MHz



Date: 16.NOV.2019 14:32:28

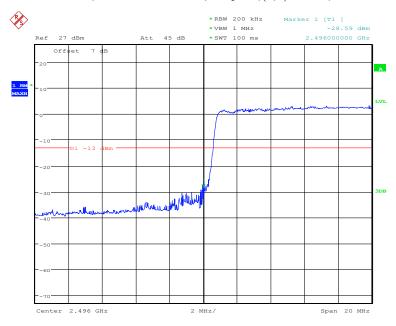
LTE Band41, 15MHz bandwidth, QPSK,(75,0) Mode, Above 2690MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:30:54

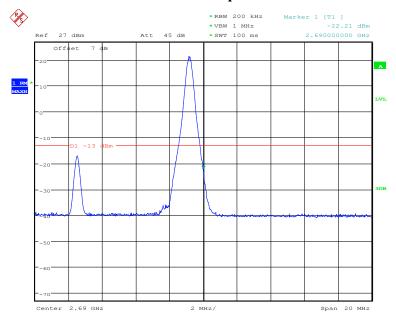
LTE Band41, 15MHz bandwidth, 16QAM,(1,0) Mode, Below 2496MHz



Date: 16.NOV.2019 14:30:41

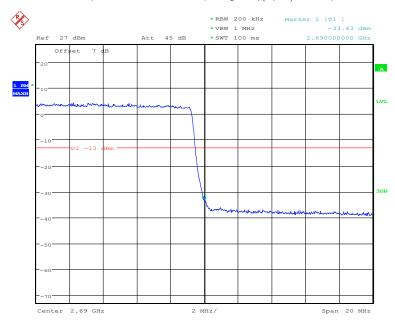
LTE Band41, 15MHz bandwidth, 16QAM,(75,0) Mode, Below 2496MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:32:01

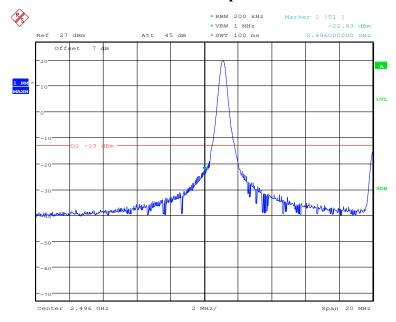
#### LTE Band41, 15MHz bandwidth, 16QAM,(1,75) Mode, Above 2690MHz



Date: 16.NOV.2019 14:32:16

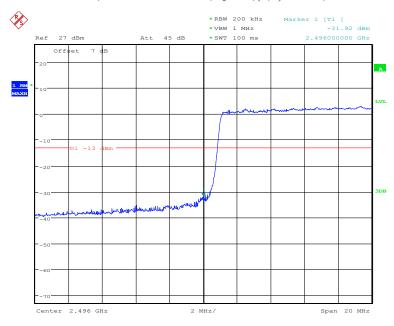
LTE Band41, 15MHz bandwidth, 16QAM,(75,0) Mode, Above 2690MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:37:41

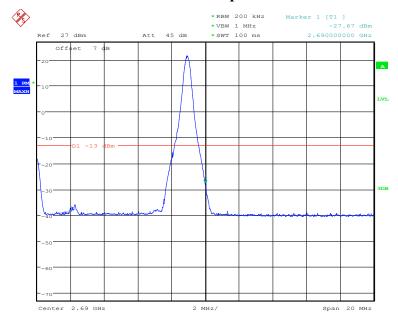
#### LTE Band41, 20MHz bandwidth, QPSK,(1,0) Mode, Below 2496MHz



Date: 16.NOV.2019 14:35:16

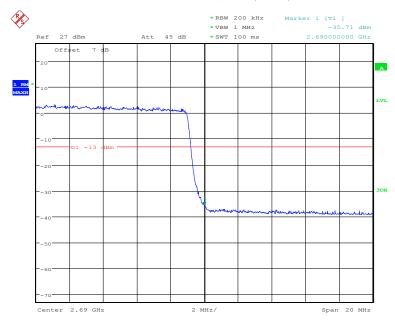
LTE Band41, 20MHz bandwidth, QPSK,(100,0) Mode, Below 2496MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:38:57

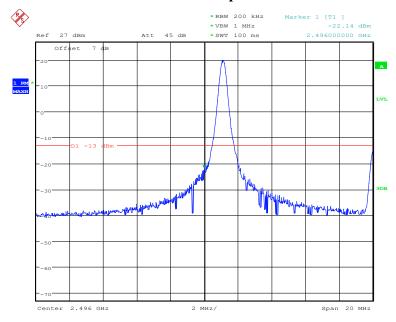
#### LTE Band41, 20MHz bandwidth, QPSK,(1,100) Mode, Above 2690MHz



Date: 16.NOV.2019 14:39:36

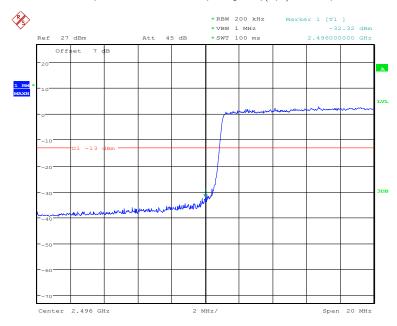
LTE Band41, 20MHz bandwidth, QPSK,(100,0) Mode, Above 2690MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:37:27

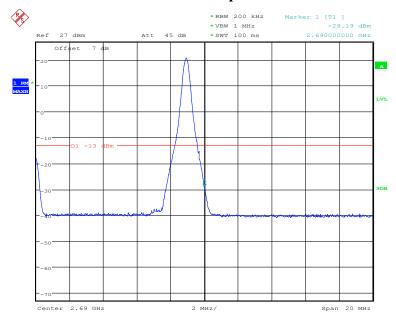
#### LTE Band41, 20MHz bandwidth, 16QAM,(1,0) Mode, Below 2496MHz



Date: 16.NOV.2019 14:35:32

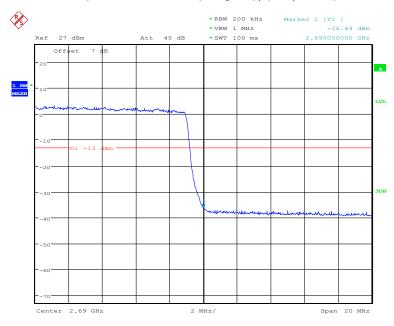
LTE Band41, 20MHz bandwidth, 16QAM,(100,0) Mode, Below 2496MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 16.NOV.2019 14:39:09

#### LTE Band41, 20MHz bandwidth, 16QAM,(1,100) Mode, Above 2690MHz

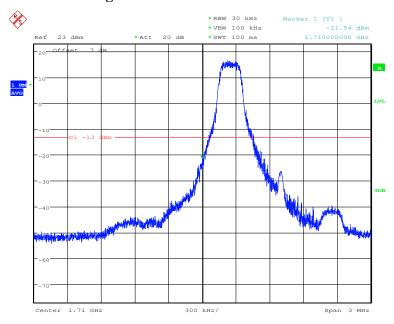


Date: 16.NOV.2019 14:39:26

LTE Band41, 20MHz bandwidth, 16QAM,(100,0) Mode, Above 2690MHz

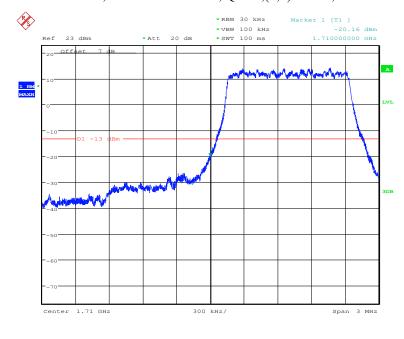
### Report No.:B19W50601-WWAN\_Rev1

### 5.5.12 LTE B66 Band Edge Results



Date: 17.NOV.2019 16:04:04

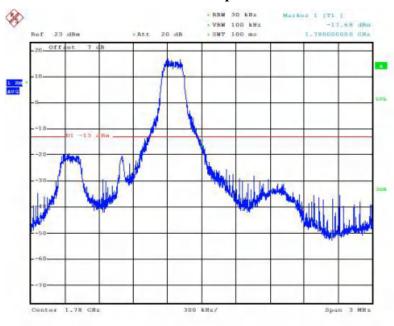
LTE Band66, 1.4MHz bandwidth, QPSK,(1,0) Mode, Below 1710MHz



Date: 17.NOV.2019 16:11:19

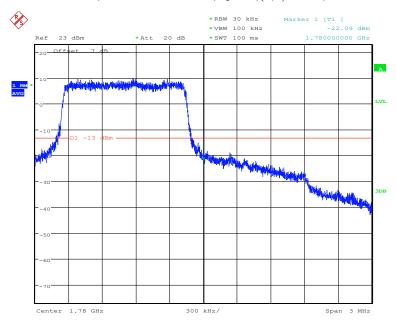
LTE Band66, 1.4MHz bandwidth, QPSK,(6,0) Mode, Below 1710MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:15:07

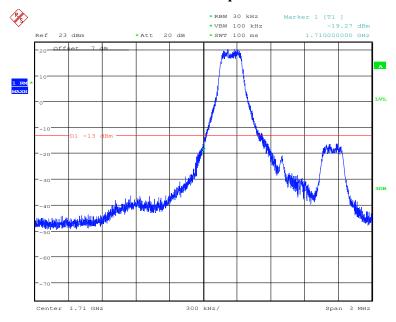
LTE Band66, 1.4MHz bandwidth, QPSK,(1,6) Mode, Above 1780MHz



Date: 17.NOV.2019 16:17:51

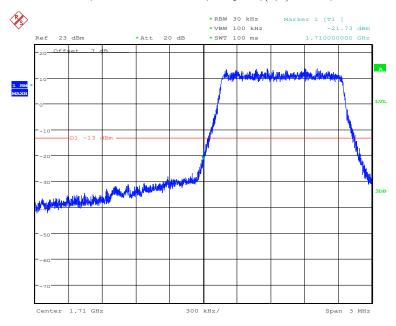
LTE Band66, 1.4MHz bandwidth, QPSK,(6,0) Mode, Above 1780MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:06:29

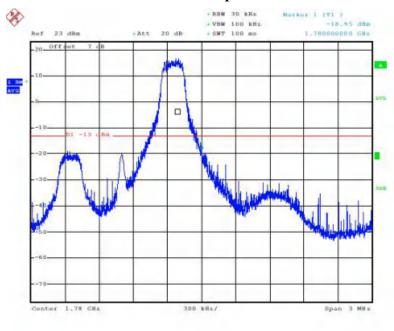
#### LTE Band66, 1.4MHz bandwidth, 16QAM,(1,0) Mode, Below 1710MHz



Date: 17.NOV.2019 16:07:07

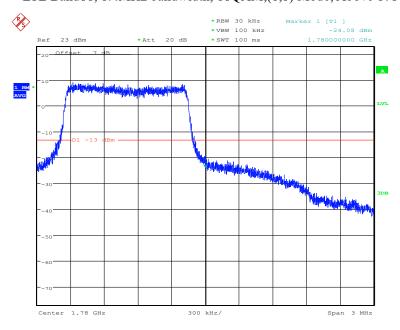
LTE Band66, 1.4MHz bandwidth, 16QAM,(6,0) Mode , Below 1710MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:15:39

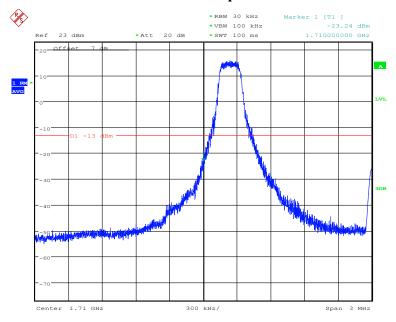
LTE Band66, 1.4MHz bandwidth, 16QAM,(1,6) Mode, Above 1780MHz



Date: 17.NOV.2019 16:17:07

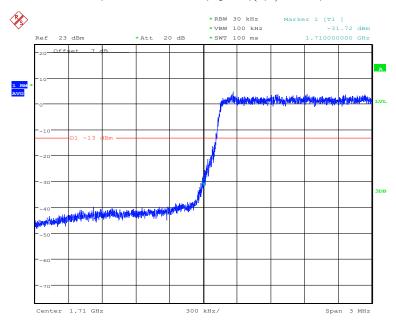
LTE Band66, 1.4MHz bandwidth, 16QAM,(6,0) Mode, Above 1780MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:20:15

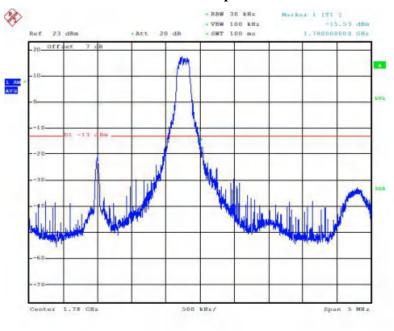
#### LTE Band66, 3MHz bandwidth, QPSK,(1,0) Mode, Below 1710MHz



Date: 17.NOV.2019 16:22:58

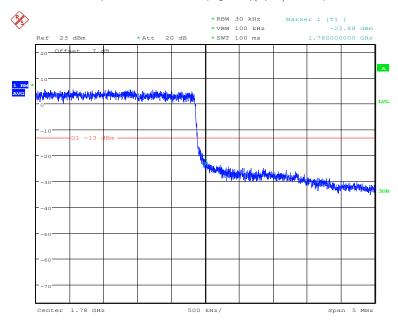
LTE Band66, 3MHz bandwidth, QPSK,(15,0) Mode, Below 1710MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:27:42

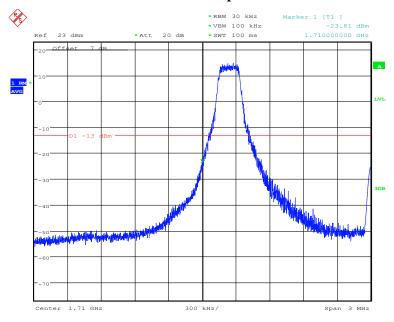
LTE Band66, 3MHz bandwidth, QPSK,(1,15) Mode, Above 1780MHz



Date: 17.NOV.2019 16:29:32

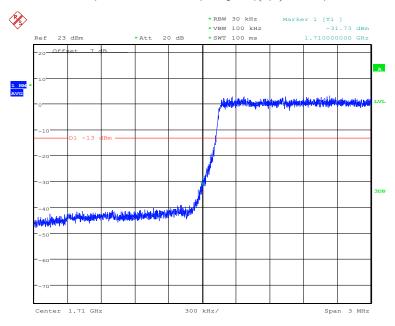
LTE Band66, 3MHz bandwidth, QPSK,(15,0) Mode, Above 1780MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:20:43

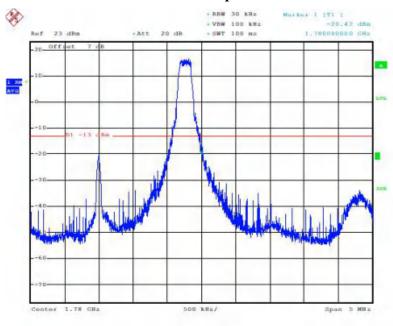
#### LTE Band66, 3MHz bandwidth, 16QAM,(1,0) Mode, Below 1710MHz



Date: 17.NOV.2019 16:22:21

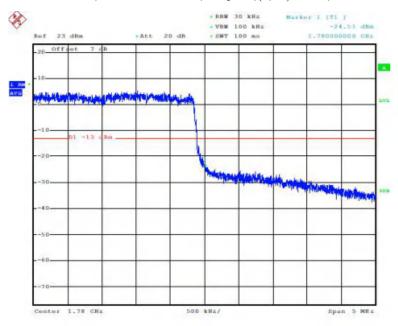
LTE Band66, 3MHz bandwidth, 16QAM,(15,0) Mode, Below 1710MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:28:07

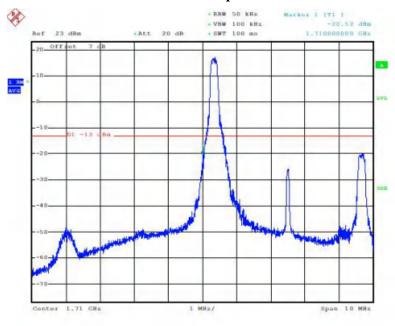
LTE Band66, 3MHz bandwidth, 16QAM,(1,15) Mode, Above 1780MHz



Date: 17.NOV.2019 16:29:05

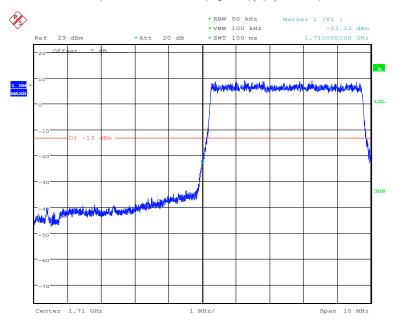
LTE Band66, 3MHz bandwidth, 16QAM,(15,0) Mode, Above 1780MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:31:39

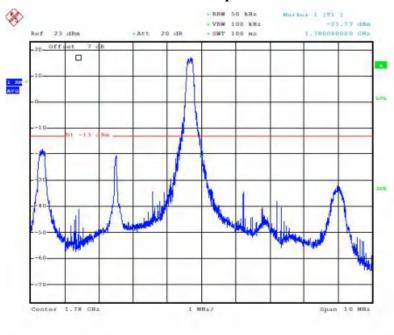
LTE Band66, 5MHz bandwidth, QPSK,(1,0) Mode, Below 1710MHz



Date: 17.NOV.2019 16:33:23

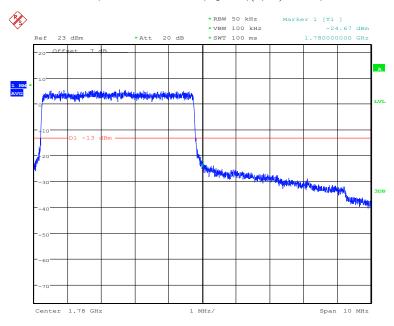
LTE Band66, 5MHz bandwidth, QPSK,(25,0) Mode, Below 1710MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:37:06

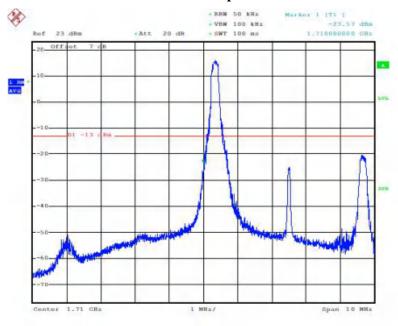
LTE Band66, 5MHz bandwidth, QPSK,(1,25) Mode, Above 1780MHz



Date: 17.NOV.2019 16:38:40

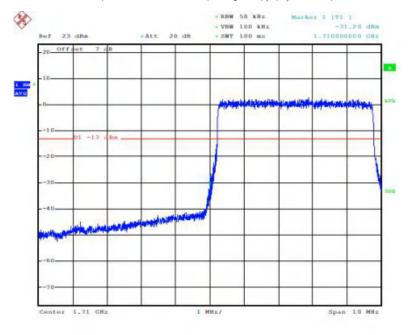
LTE Band66, 5MHz bandwidth, QPSK,(25,0) Mode, Above 1780MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:32:13

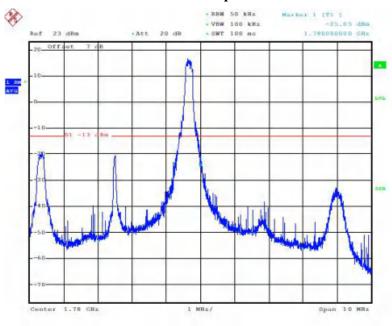
LTE Band66, 5MHz bandwidth, 16QAM,(1,0) Mode, Below 1710MHz



Date: 17.NOV.2019 16:32:57

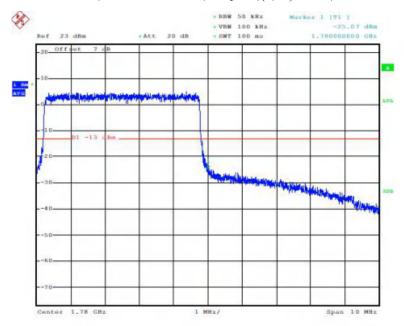
LTE Band66, 5MHz bandwidth, 16QAM,(25,0) Mode, Below 1710MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:27:42

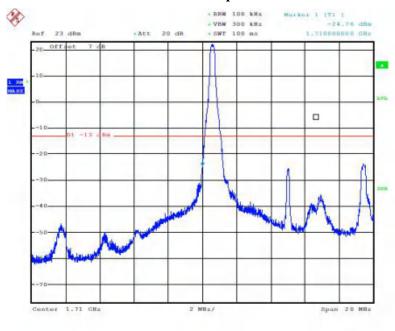
LTE Band66, 5MHz bandwidth, 16QAM,(1,25) Mode, Above 1780MHz



Date: 17.NOV.2019 16:38:14

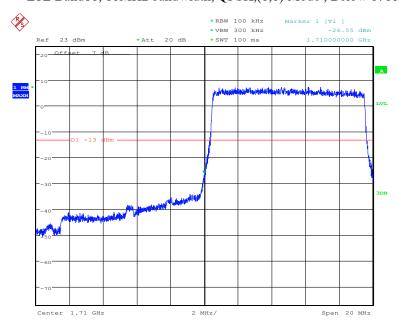
LTE Band66, 5MHz bandwidth, 16QAM,(25,0) Mode, Above 1780MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:52:06

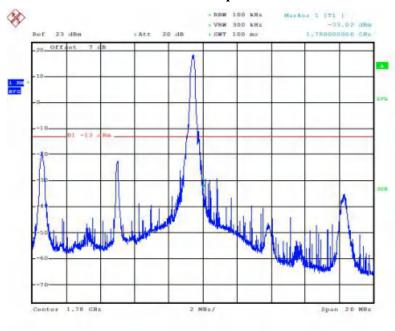
LTE Band66, 10MHz bandwidth, QPSK,(1,0) Mode, Below 1710MHz



Date: 17.NOV.2019 16:53:46

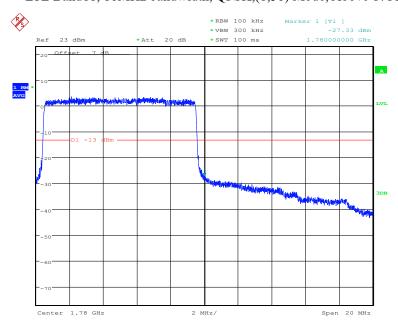
LTE Band66, 10MHz bandwidth, QPSK,(50,0) Mode, Below 1710MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:57:00

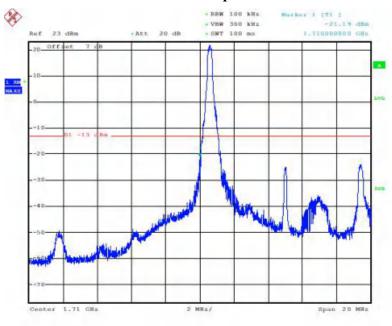
LTE Band66, 10MHz bandwidth, QPSK,(1,50) Mode, Above 1780MHz



Date: 17.NOV.2019 16:58:24

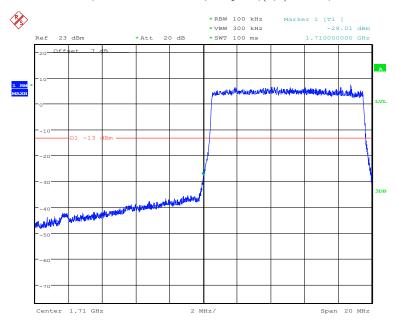
LTE Band66, 10MHz bandwidth, QPSK,(50,0) Mode, Above 1780MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:52:34

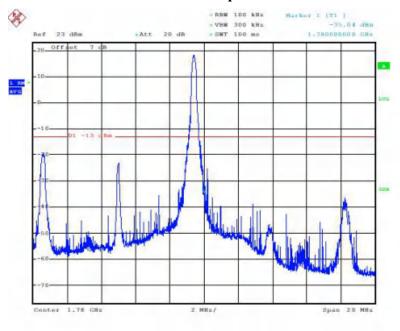
LTE Band66, 10MHz bandwidth, 16QAM,(1,0) Mode, Below 1710MHz



Date: 17.NOV.2019 16:53:23

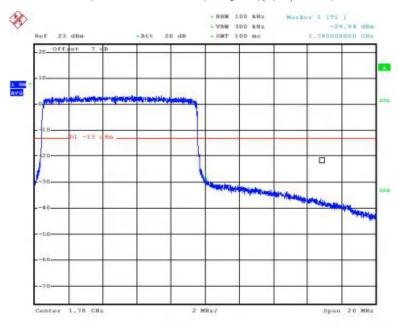
LTE Band66, 10MHz bandwidth, 16QAM,(50,0) Mode , Below 1710MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 16:57:27

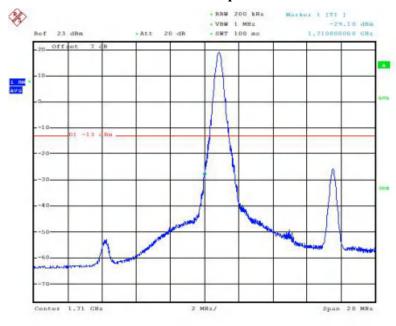
LTE Band66, 10MHz bandwidth, 16QAM,(1,50) Mode, Above 1780MHz



Date: 17.NOV.2019 16:57:58

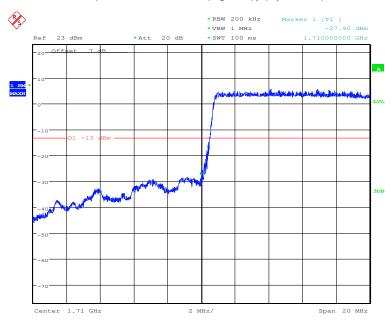
LTE Band66, 10MHz bandwidth, 16QAM,(50,0) Mode, Above 1780MHz

Report No.:B19W50601-WWAN\_Rev1



Date: 17. NOV. 2019 17:00:40

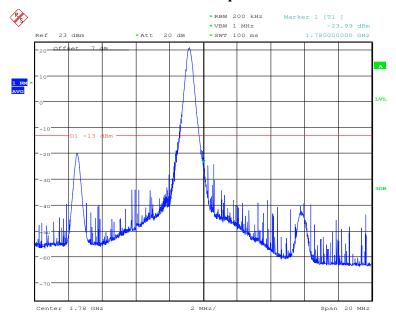
LTE Band66, 15MHz bandwidth, QPSK,(1,0) Mode, Below 1710MHz



Date: 17.NOV.2019 17:01:59

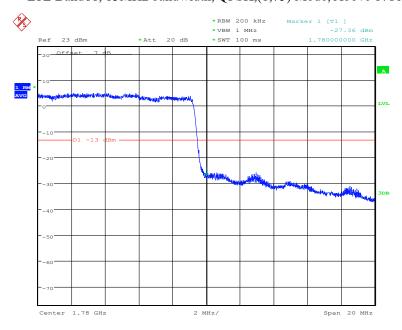
LTE Band66, 15MHz bandwidth, QPSK,(75,0) Mode, Below 1710MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 17:03:29

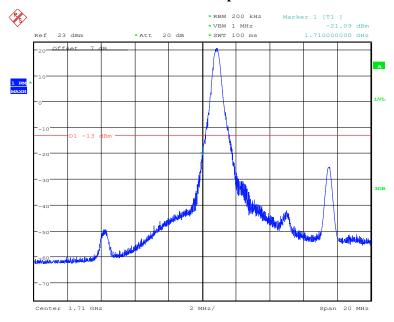
#### LTE Band66, 15MHz bandwidth, QPSK,(1,75) Mode, Above 1780MHz



Date: 17.NOV.2019 17:04:51

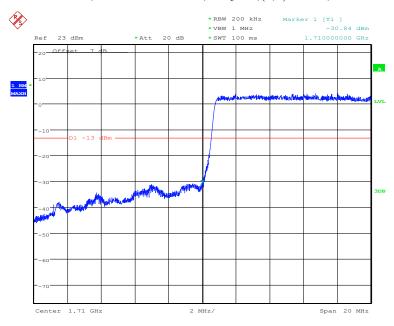
LTE Band66, 15MHz bandwidth, QPSK,(75,0) Mode, Above 1780MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 17:01:01

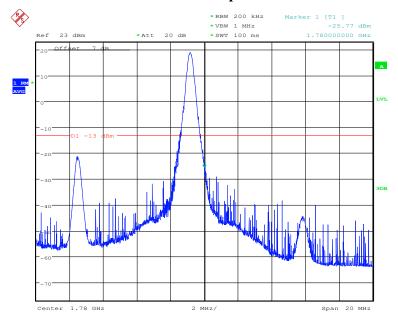
#### LTE Band66, 15MHz bandwidth, 16QAM,(1,0) Mode, Below 1710MHz



Date: 17.NOV.2019 17:01:36

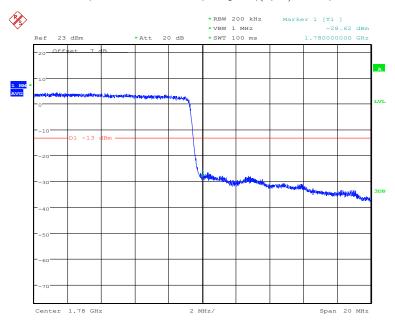
LTE Band66, 15MHz bandwidth, 16QAM,(75,0) Mode , Below 1710MHz

### Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 17:03:58

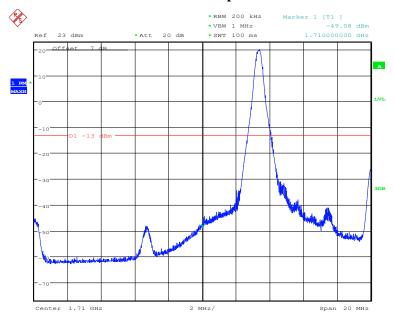
#### LTE Band66, 15MHz bandwidth, 16QAM,(1,75) Mode, Above 1780MHz



Date: 17.NOV.2019 17:04:26

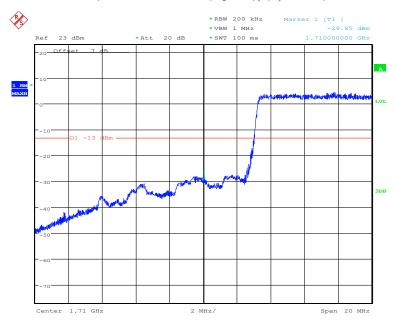
LTE Band66, 15MHz bandwidth, 16QAM,(75,0) Mode, Above 1780MHz

## Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 17:07:18

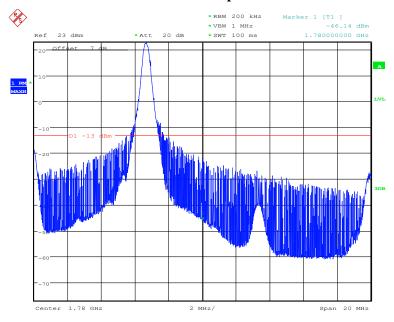
#### LTE Band66, 20MHz bandwidth, QPSK,(1,0) Mode, Below 1710MHz



Date: 17.NOV.2019 17:08:41

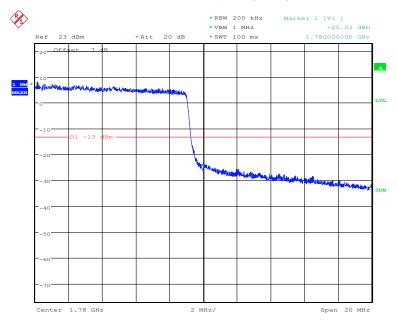
LTE Band66, 20MHz bandwidth, QPSK,(100,0) Mode, Below 1710MHz

## Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 17:10:17

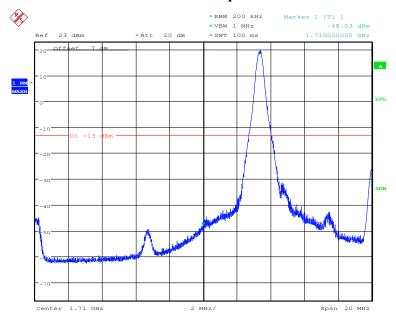
#### LTE Band66, 20MHz bandwidth, QPSK,(1,100) Mode, Above 1780MHz



Date: 17.NOV.2019 17:13:17

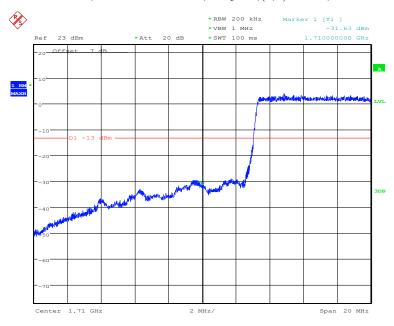
LTE Band66, 20MHz bandwidth, QPSK,(100,0) Mode, Above 1780MHz

## Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 17:07:40

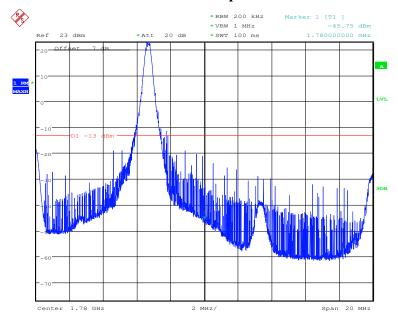
#### LTE Band66, 20MHz bandwidth, 16QAM,(1,0) Mode, Below 1710MHz



Date: 17.NOV.2019 17:08:16

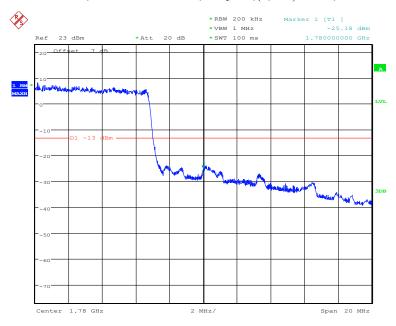
LTE Band66, 20MHz bandwidth, 16QAM,(100,0) Mode, Below 1710MHz

## Report No.:B19W50601-WWAN\_Rev1



Date: 17.NOV.2019 17:10:56

#### LTE Band66, 20MHz bandwidth, 16QAM,(1,100) Mode, Above 1780MHz



Date: 17.NOV.2019 17:12:15

LTE Band66, 20MHz bandwidth, 16QAM,(100,0) Mode, Above 1780MHz

Report No.:B19W50601-WWAN Rev1

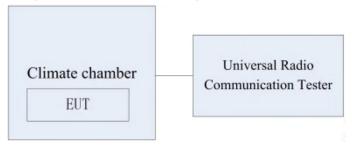
## **5.6 Frequency Stability over Temperature Variation**

Charifications	FCC Part 2.1055, 22.355, 24.235, 27.54, 90.213
Specifications:	RSS-130 4.3, RSS-132 4.3, RSS-133 6.3, RSS-199 4.3
DUT Serial Number:	868822040009761
	Ambient Temperature:15°C-35°C
Test conditions:	Relative Humidity:30%-60%
	Air pressure: 86-106kPa
Test Results:	

Limit					
Frequency deviation [ppm]	±2.5				

### **Test Setup**

The EUT was placed in a temperature chamber, demonstrated as figure T. The Wireless Telecommunications Test Set was used to set the Tx channel and power level, modulate the TX signal with different bit patterns and measure the frequency of Tx.



#### **Test Method**

- 1. The EUT was turned off and placed in the temperature chamber.
- 2. The temperature of the chamber was set to  $-30^{\circ}$ C and allowed to stabilize.
- 3. The EUT temperature was allowed to stabilize for 45 minutes.
- 4. The EUT was turned on and set to transmit with Wireless Telecommunications Test Set.
- 5. The maximum transmit frequency deviation during one minute period was measured by Wireless Communications Test Set.
- 6. The steps 3-5 were repeated for  $-30^{\circ}\text{C}$ ,  $-20^{\circ}\text{C}$ ,  $-10^{\circ}\text{C}$ ,  $0^{\circ}\text{C}$ ,  $10^{\circ}\text{C}$ ,  $20^{\circ}\text{C}$ ,  $30^{\circ}\text{C}$ ,  $40^{\circ}\text{C}$  and  $50^{\circ}\text{C}$ .

Report No.:B19W50601-WWAN\_Rev1

## 5.6.1 GSM Band Frequency Stability over Temperature Variation Results

D J	Offered				Temperature[°C]					
Band	Offset	-30	-20	-10	0	10	20	30	40	50
GSM850	Hz	-2.82	3.65	1.40	-6.30	3.53	-7.21	2.65	-4.13	-2.67
GMSK	ppm	-0.003	0.004	0.002	-0.007	0.004	-0.009	0.003	-0.005	-0.003
GSM850	Hz	5.33	-3.75	2.52	7.26	-4.43	5.16	2.82	-4.30	4.88
8PSK	ppm	0.003	-0.002	0.001	0.004	-0.002	0.003	0.001	-0.002	0.002
PCS1900	Hz	6.92	-8.02	-12.15	7.82	3.95	4.88	-7.21	6.05	-6.58
GMSK	ppm	0.004	-0.004	-0.006	0.004	0.002	0.002	-0.004	0.003	-0.003
PCS1900	Hz	13.20	-8.25	-6.77	4.52	3.58	9.20	-3.55	6.26	4.32
8PSK	ppm	0.007	-0.004	-0.004	0.002	0.002	0.005	-0.002	0.003	0.002

## 5.6.2 WCDMA Band Frequency Stability over Temperature Variation Results

Dand	Offset	Temperature[℃]								
Band	Offset	-30	-20	-10	0	10	20	30	40	50
2	Hz	2.31	-4.25	3.53	5.65	-1.36	7.25	2.49	3.52	6.15
2	ppm	0.001	-0.002	0.002	0.003.	-0.001	0.004	0.001	0.002	0.003
4	Hz	6.35	-7.89	-10.26	6.15	4.26	-3.52	-4.15	2.98	-8.24
4	ppm	0.004	-0.004	-0.006	0.003	0.002	-0.002	-0.002	0.002	-0.005
5	Hz	-7.76	-3.49	5.06	3.99	-7.15	-5.40	3.82	4.58	6.16
3	ppm	-0.009	-0.004	0.006	0.005	-0.008	-0.006	0.004	0.005	0.007

Report No.:B19W50601-WWAN\_Rev1

## **5.6.3** LTE Band Frequency Stability over Temperature Variation Results

D. I	Off. 4	Temperature[°C]								
Band Of	Offset	-30	-20	-10	0	10	20	30	40	50
7	Hz	3.31	-1.98	5.09	4.62	-3.62	-7.89	2.95	-10.20	-8.13
/	ppm	0.001	-0.001	0.002	0.002	-0.001	-0.003	0.001	-0.004	-0.003
10	Hz	6.26	-3.25	4.09	5.30	-7.29	12.51	-6.36	-4.92	-7.15
12	ppm	0.009	-0.004	0.006	0.007	-0.010	0.018	-0.009	-0.007	-0.010
12	Hz	2.89	6.12	-7.51	11.20	-6.30	2.85	-3.49	4.83	-6.06
13	ppm	0.004	0.008	-0.010	0.014	-0.008	0.004	-0.004	0.006	-0.008
25	Hz	4.50	-7.59	-9.05	5.17	3.14	6.28	-5.22	-3.07	8.75
25	ppm	0.002	-0.004	-0.005	0.003	0.002	0.003	-0.003	-0.002	0.005
26	Hz	8.16	-6.67	-3.91	7.82	-4.33	-5.01	2.70	3.62	-4.96
26	ppm	0.010	-0.008	-0.005	0.009	-0.005	-0.006	0.003	0.004	-0.006
4.1	Hz	3.26	-5.10	-6.79	12.10	4.31	6.92	-4.01	7.31	2.99
41	ppm	0.001	-0.002	-0.003	0.005	0.002	0.003	-0.001	0.003	0.001
	Hz	4.17	3.93	-2.54	-6.30	-3.17	6.05	4.76	-3.30	-6.59
66	ppm	0.002	0.002	-0.001	-0.004	-0.002	0.003	0.003	-0.002	-0.004

## Report No.:B19W50601-WWAN\_Rev1

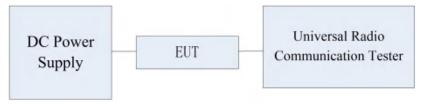
### 5.7 Frequency Stability over Voltage Variation

Specifications	FCC Part 2.1055, 22.355, 24.235, 27.54, 90.213
Specifications:	RSS-130 4.3, RSS-132 4.3, RSS-133 6.3, RSS-199 4.3
DUT Serial Number:	868822040009761
	Ambient Temperature:15°C-35°C
Test conditions:	Relative Humidity:30%-60%
	Air pressure: 86-106kPa
Test Results:	

Limit					
Frequency deviation [ppm]	±2.5				

### **Test Setup**

The EUT was placed in a shielding chamber and powered by an adjustable power supply, demonstrated as figure V. A Wireless Telecommunications Test Set was used to set the TX channel and power level, modulate the TX signal with different bit patterns and measure the frequency of TX.



#### **Test Method**

The EUT was powered by the adjustable power supply. The frequency stability is measured by the Wireless Telecommunications Test Set.

Report No.:B19W50601-WWAN\_Rev1

## 5.7.1 GSM Band Frequency Stability over Voltage Variation Results

#### Test data:

D d	Off. 4	Voltage (V)				
Band	Offset	3.30	3.80	4.20		
GSM850	Hz	-2.55	3.17	4.52		
GMSK	ppm	-0.003	0.004	0.005		
GSM850	Hz	3.05	-2.95	1.72		
8PSK	ppm	0.004	-0.003	0.002		
PCS1900	Hz	5.16	-6.21	-2.96		
GMSK	ppm	0.003	-0.003	-0.001		
PCS1900	Hz	3.82	-1.77	-2.69		
8PSK	ppm	0.002	-0.001	-0.001		

## 5.7.2 WCDMA Band Frequency Stability over Voltage Variation Results

### Test data:

Dand	Offset	Voltage (V)				
Band		3.30	3.80	4.20		
2	Hz	5.65	-8.21	3.77		
2	ppm	0.003	-0.004	0.002		
4	Hz	10.03	6.78	-7.62		
4	ppm	0.006	0.004	-0.004		
5	Hz	4.75	-6.50	2.92		
3	ppm	0.006	-0.008	0.003		

Report No.:B19W50601-WWAN\_Rev1

## 5.7.3 LTE Band Frequency Stability over Voltage Variation Results

### Test data:

n. I	Off. 4		Voltage (V)	
Band	Band Offset	3.30	3.80	4.20
7	Hz	7.51	-5.15	8.95
,	ppm	0.003	-0.002	0.003
12	Hz	5.44	12.62	-7.52
12	ppm	0.008	0.018	-0.011
13	Hz	2.99	-5.34	6.83
13	ppm	0.004	-0.007	0.009
25	Hz	8.75	3.92	-7.56
25	ppm	0.005	0.002	-0.004
26	Hz	15.20	6.95	-8.14
20	ppm	0.018	0.008	-0.010
41	Hz	4.42	-3.50	7.35
41	ppm	0.002	-0.001	0.003
66	Hz	4.39	8.21	-5.63
UU	ppm	0.002	0.005	-0.003

### Report No.:B19W50601-WWAN Rev1

### 5.8 Peak to Average Ratio

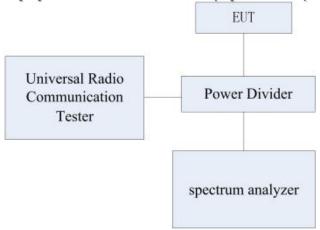
Specifications:	FCC Part 24.232, 27.50, RSS-130 4.4
DUT Serial Number:	868822040009761
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	

#### Limit

The EUT meets the requirement of having a peak to average ratio of less than 13dB.

#### **Test Setup**

During the test, the EUT was controlled via the Wireless Communications Test Set to ensure max power transmission and proper modulation and measured by spectrum analyzer.



#### **Test Method**

The transmitter output was connected to a CMW500 through a coaxial RF cable and directional coupler, and configured to operate at maximum power. The peak to average ratio was measured at the required operating frequencies in each Band on the Spectrum Analyzer.

Report No.:B19W50601-WWAN\_Rev1

## 5.8.1 GSM850 Peak to Average Ratio Results

Frequency (MHz)	EUT channel No.	Modulation	Peak to Average Ratio
836.6	190	GMSK	11.94
		8PSK	12.65

## **5.8.2 GSM1900 Peak to Average Ratio Results**

Frequency (MHz)	EUT channel No.	Modulation	Peak to Average Ratio
1000	1880 661	GMSK	10.04
1880		8PSK	12.24

### 5.8.3 WCDMA B2 Peak to Average Ratio Results

Frequency (MHz)	EUT channel No.	Modulation	Peak to Average Ratio
1000	1880 9400	QPSK	3.62
1080		16QAM	6.89

### **5.8.4 WCDMA B4 Peak to Average Ratio Results**

Frequency (MHz)	EUT channel No.	Modulation	Peak to Average Ratio
1722 4	1732.4 1412	QPSK	3.73
1/32.4		16QAM	7.55

Report No.:B19W50601-WWAN\_Rev1

## 5.8.5 WCDMA B5 Peak to Average Ratio Results

Frequency (MHz)	EUT channel No.	Modulation	Peak to Average Ratio
836.4 4182	QPSK	3.68	
	16QAM	7.78	

## 5.8.6 LTE B7 Peak to Average Ratio Results

Frequency (MHz)	EUT channel No.	bandwidth	Modulation	Peak to Average Ratio
2525MH-	21100	10MHz	QPSK	6.36
2535MHz	21100		16QAM	7.29

### **5.8.7 LTE B12 Peak to Average Ratio Results**

Frequency (MHz)	EUT channel No.	bandwidth	Modulation	Peak to Average Ratio
707 5MHz	22005	10MII_	QPSK	6.30
707.5MHz 23095	10MHz	16QAM	7.15	

### 5.8.8 LTE B13 Peak to Average Ratio Results

Frequency (MHz)	EUT channel No.	bandwidth	Modulation	Peak to Average Ratio
792 OMIL-	22220	101411	QPSK	5.35
782.0MHz	23230	10MHz	16QAM	6.51

## 5.8.10 LTE B25 Peak to Average Ratio Results

Frequency (MHz)	EUT channel No.	bandwidth	Modulation	Peak to Average Ratio
1992 FMII-	26265	10MHz	QPSK	6.24
1882.5MHz	26365		16QAM	6.93

Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336 Tel: 0086-23-88069965 FAX: 0086-23-88608777

## Report No.:B19W50601-WWAN\_Rev1

## **5.8.9 LTE B26 Peak to Average Ratio Results**

Frequency (MHz)	EUT channel No.	bandwidth	Modulation	Peak to Average Ratio
021 5MH-	831.5MHz 26865	10MI	QPSK	5.94
831.3MHZ		10MHz	16QAM	6.71

## 5.8.10 LTE B41 Peak to Average Ratio Results

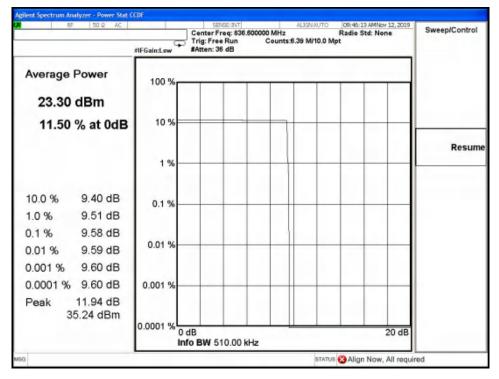
Frequency (MHz)	EUT channel No.	bandwidth	Modulation	Peak to Average Ratio
2593MHz 40620	10MII-	QPSK	9.09	
	10MHz	16QAM 9.2	9.27	

## 5.8.11 LTE B66 Peak to Average Ratio Results

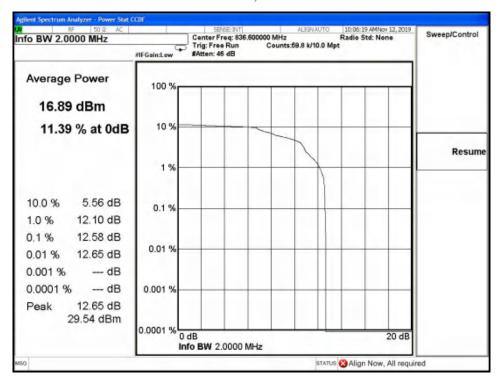
Frequency (MHz)	EUT channel No.	bandwidth	Modulation	Peak to Average Ratio
1745MII-	MHz 132322	10) (1)	QPSK	7.00
1745MHz		10MHz	16QAM	7.57

Report No.:B19W50601-WWAN\_Rev1

#### **Graphical for Peak to Average Ratio Results**

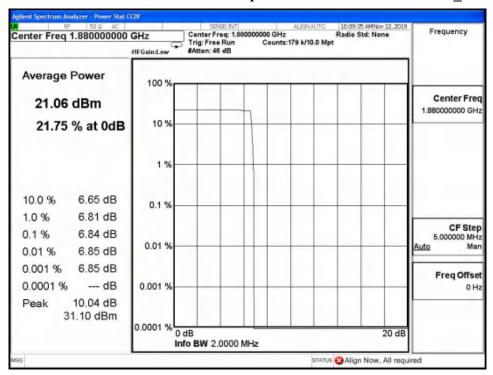


#### GSM850, GMSK

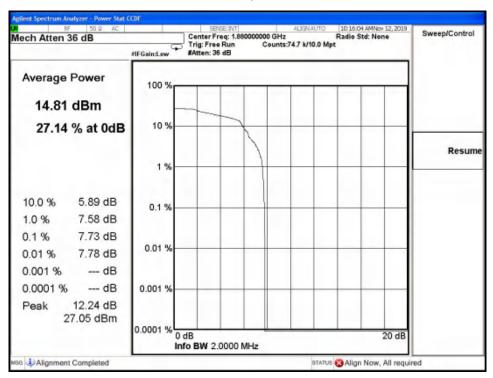


GSM850,8PSK

Report No.:B19W50601-WWAN Rev1

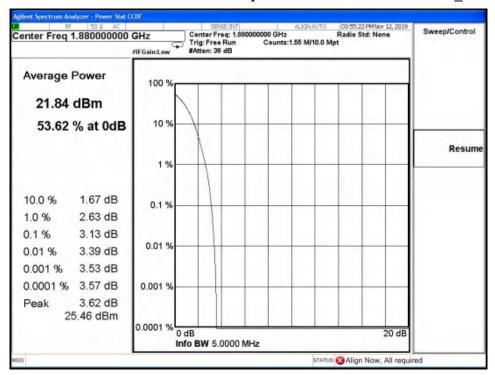


PCS1900, GMSK

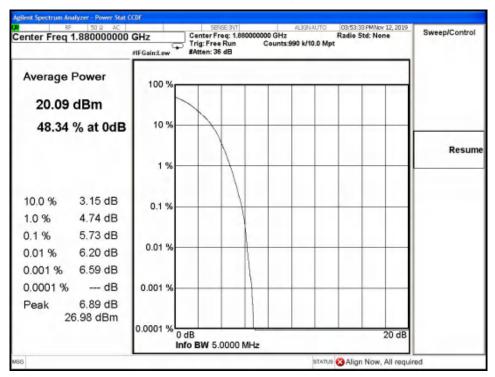


PCS1900, 8PSK

Report No.:B19W50601-WWAN Rev1

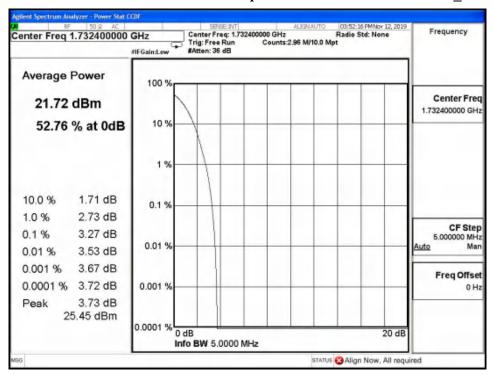


WCDMA Band2, QPSK

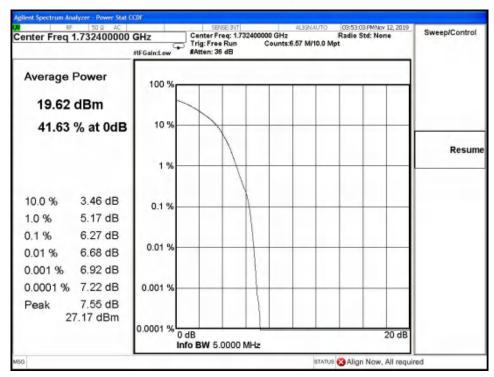


WCDMA Band2, 16QAM

Report No.:B19W50601-WWAN Rev1

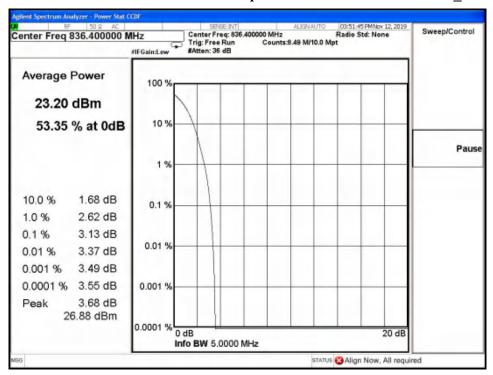


WCDMA Band4, QPSK

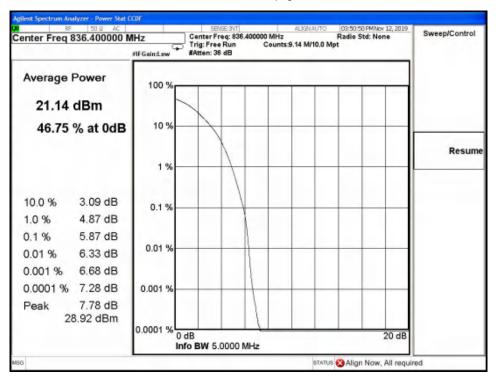


WCDMA Band4, 16QAM

Report No.:B19W50601-WWAN Rev1

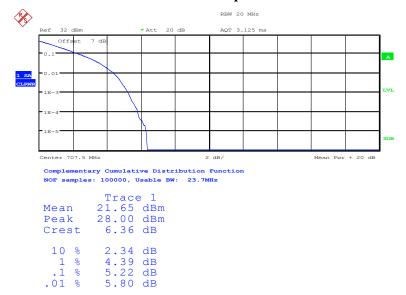


WCDMA Band5, QPSK



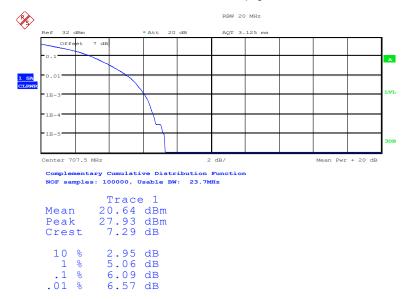
WCDMA Band5, 16QAM

## Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 18:02:17

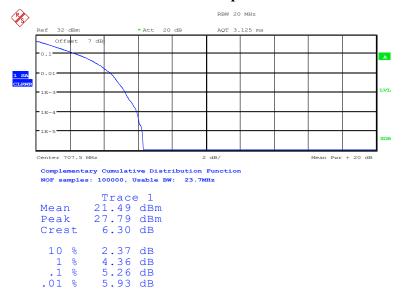
#### LTE Band7, QPSK



Date: 15.NOV.2019 18:01:27

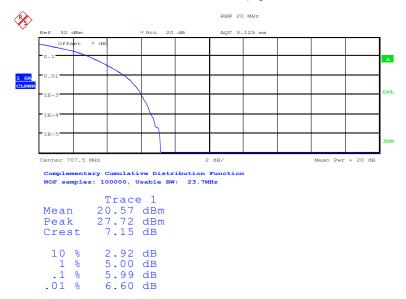
LTE Band7, 16QAM

## Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 18:09:15

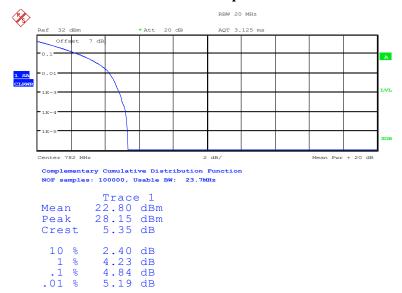
#### LTE Band12, QPSK



Date: 15.NOV.2019 18:08:15

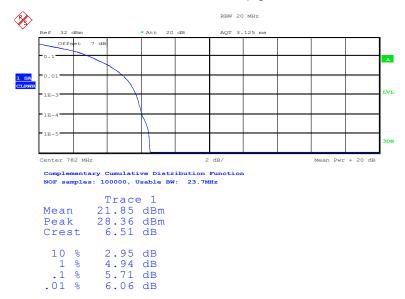
LTE Band12, 16QAM

## Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 18:05:52

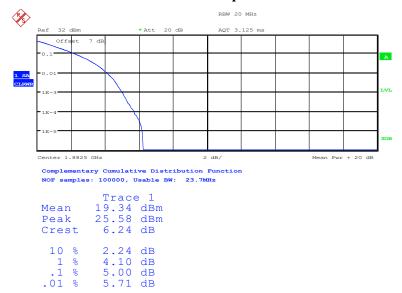
#### LTE Band13, QPSK



Date: 15.NOV.2019 18:07:08

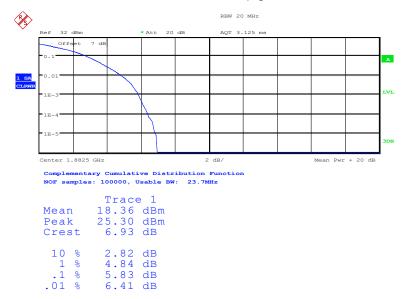
LTE Band13, 16QAM

## Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 18:11:32

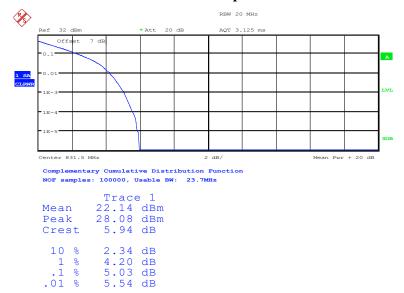
#### LTE Band25, QPSK



Date: 15.NOV.2019 18:13:03

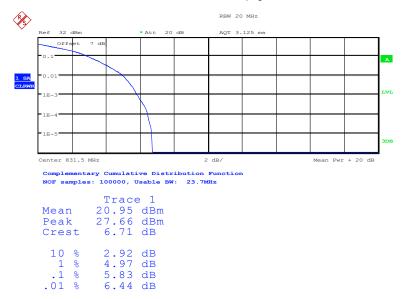
LTE Band25, 16QAM

## Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 18:15:24

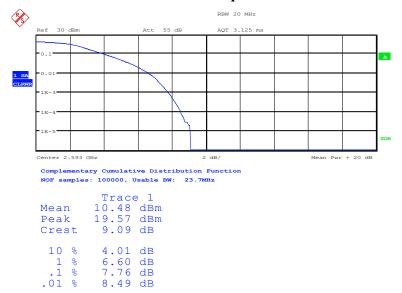
#### LTE Band26, QPSK



Date: 15.NOV.2019 18:14:21

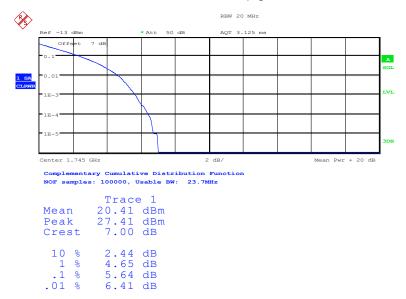
LTE Band26, 16QAM

## Report No.:B19W50601-WWAN\_Rev1



Date: 15.NOV.2019 19:18:04

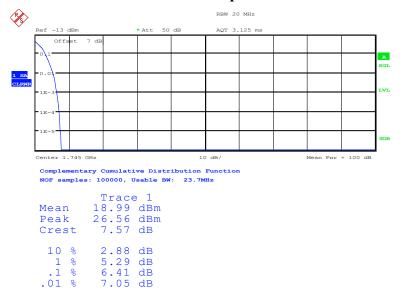
#### LTE Band41, QPSK



Date: 19.NOV.2019 12:21:33

LTE Band66, QPSK

## Report No.:B19W50601-WWAN\_Rev1



Date: 19.NOV.2019 12:22:52

LTE Band66, 16QAM

#### Report No.:B19W50601-WWAN Rev1

#### 5.9 ERP and EIRP

Specifications:	FCC Part 2.1046, 22.913(a), 24.232(c), 27.50, 90.635(b) RSS-130 4.4, RSS-132 4.4, RSS-133 6.4, RSS-139 4.4,
	RSS-199 4.4
DUT Serial Number:	868822040004135
	Ambient Temperature:15°C-35°C
Test conditions:	Relative Humidity:30%-60%
	Air pressure: 86-106kPa
Test Results:	

#### **Limit Level Construction:**

This is the test for the maximum radiated power from the EUT.

According to Part 24.232(c), "Mobile/portable stations are limited to 2 watts e.i.r.p. Peak power" and 24.232(c) specifies that "Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage."

According to 22.913(a), The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts."

**According to Part 27.50(d),** "Fixed, mobile, and portable (handheld) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP".

According to Part 27.50(h)(2) "Mobile stations are limited to 2.0 watts EIRP.".

According to Part 27.50(c), specifies "Portable stations (hand-held de-vices) are limited to 3 watts ERP.".

#### **Method of Measurement**

The measurements procedures in TIA-603E-2016 are used.

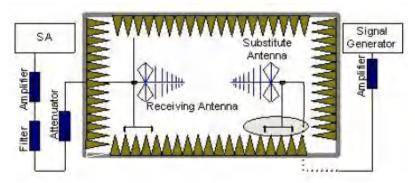
1. EUT was placed on a 1.5 meter high non-conductive stand at a 3 meter test distance from thereceive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUTfor emission measurements. The height of receiving antenna is 1.5m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUTthrough 360° and adjusting the receiving antenna polarization. The radiated emissionmeasurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.



- 2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
- 3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.

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Report No.:B19W50601-WWAN Rev1



In the chamber, an substitution antenna for the frequency band of interest is placed at thereference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of thereceiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antennapolarization.

4. A amplifier should be connected to the Signal Source output port. And the cable should beconnect between the Amplifier and the Substitution Antenna.

The cable loss (Pcl) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.

The measurement results are obtained as described below:

Power(EIRP)=PMea+ PAg- Pcl+ Ga

- 5. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15dBi) and known input power.
- 6. ERP can be calculated from EIRP by subtracting the gain of the dipole,

ERP=S.G output(dBM)-cable loss (dB) + antenna gain (dBd)

EIRP=S.G output(dBM)-cable loss (dB) + antenna gain (dBi)

Report No.:B19W50601-WWAN\_Rev1

### 5.9.1 GSM 850 Measurement result

### **GPRS(GMSK)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	ERP [dBm]	Antenna Polarization [H/V]
824.2	35.65	3.4	-0.96	31.29	V
836.6	35.75	3.4	-0.96	31.39	V
848.8	35.02	3.4	-0.96	30.66	V

## GPRS(8PSK)

Frequency [MHz]	Generator output power( $P_g$ ) [dBm]	Cable loss [dB]	Antenna Gain [dB]	ERP [dBm]	Antenna Polarization [H/V]
824.2	35.05	3.4	-0.96	30.69	V
836.6	34.97	3.4	-0.96	30.61	V
848.8	34.89	3.4	-0.96	30.53	V

### 5.9.2 PCS 1900 Measurement result

## **GPRS(GMSK)**

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	EIRP [dBm]	Antenna Polarization [H/V]
1850.2	25.07	5.0	10.4	30.47	V
1880.0	24.48	5.0	10.4	29.88	V
1909.8	24.15	5.1	10.4	29.45	V

## GPRS(8PSK)

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	EIRP [dBm]	Antenna Polarization [H/V]
1850.2	25.12	5.0	10.4	30.52	V

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Report No.:B19W50601-WWAN\_Rev1

1880.0	24.79	5.0	10.4	30.19	V
1909.8	24.81	5.1	10.4	30.11	V

### 5.9.3 WCDMA Band 2 Measurement result

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	EIRP [dBm]	Antenna Polarization [H/V]
1852.4	15.94	5.0	10.4	21.34	V
1880.0	15.94	5.0	10.4	21.34	V
1907.6	15.07	5.1	10.4	20.37	V

### 5.9.4 WCDMA Band 4 Measurement result

Frequency [MHz]	Generator output power(P <sub>g</sub> ) [dBm]	Cable loss [dB]	Antenna Gain [dB]	EIRP [dBm]	Antenna Polarization [H/V]
1712.4	15.58	4.8	10.4	21.18	V
1732.6	15.69	4.9	10.4	21.19	V
1752.6	15.28	4.9	10.4	20.78	V

### 5.9.5 WCDMA Band 5 Measurement result

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	ERP [dBm]	Antenna Polarization [H/V]
826.4	24.56	3.4	-0.96	20.20	V
836.4	24.60	3.4	-0.96	20.24	V
846.6	24.98	3.4	-0.96	20.62	V

Report No.:B19W50601-WWAN\_Rev1

### 5.9.6 LTE Band 7 Measurement result

### LTE Band 7\_20 MHz\_QPSK

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	EIRP [dBm]	Antenna Polarization [H/V]
2510.0	17.98	5.9	9.0	21.08	V
2535.0	18.05	5.9	9.0	21.15	V
2576.0	18.16	5.9	9.0	21.26	V

### LTE Band 7\_20 MHz\_16QAM

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	EIRP [dBm]	Antenna Polarization [H/V]
2510.0	17.44	5.9	9.0	20.54	V
2535.0	17.65	5.9	9.0	20.75	V
2576.0	17.39	5.9	9.0	20.49	V

### 5.9.7 LTE Band 12 Measurement result

### LTE Band 12\_10MHz\_QPSK

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	ERP [dBm]	Antenna Polarization [H/V]
699.0	24.76	3.1	-0.96	20.70	V
707.5	24.69	3.1	-0.96	20.63	V
716.0	24.49	3.1	-0.96	20.43	V

## LTE Band 12\_10MHz\_16QAM

Frequency [MHz]	Generator output power(P <sub>g</sub> ) [dBm]	Cable loss [dB]	Antenna Gain [dB]	ERP [dBm]	Antenna Polarization [H/V]
699.0	24.71	3.1	-0.96	20.65	V

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Report No.:B19W50601-WWAN\_Rev1

707.5	24.39	3.1	-0.96	20.33	V
716.0	24.53	3.1	-0.96	20.47	V

#### 5.9.8 LTE Band 13 Measurement result

### LTE Band 13\_10MHz\_QPSK

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	ERP [dBm]	Antenna Polarization [H/V]
777.0	24.35	3.3	-0.96	20.09	V
782.0	24.88	3.3	-0.96	20.62	V
787.0	24.70	3.3	-0.96	20.44	V

## LTE Band 13\_10MHz\_16QAM

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	ERP [dBm]	Antenna Polarization [H/V]
777.0	24.62	3.3	-0.96	20.36	V
782.0	24.26	3.3	-0.96	20.00	V
787.0	24.51	3.3	-0.96	20.25	V

### 5.9.9 LTE Band 25 Measurement result

### LTE Band 25\_20MHz\_QPSK

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	EIRP [dBm]	Antenna Polarization [H/V]
1860.0	17.03	5.9	9.0	20.13	V
1882.5	18.11	5.9	9.0	21.21	V
1905.0	17.49	5.9	9.0	20.59	V

### LTE Band 25\_20MHz\_16QAM

Frequency   Generator   Cable loss   Antenna   EIRP   Antenna
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Report No.:B19W50601-WWAN\_Rev1

[MHz]	output	[dB]	Gain [dB]	[dBm]	Polarization
	power(Pg)				[H/V]
	[dBm]				
1860.0	17.35	5.9	9.0	20.45	V
1882.5	17.84	5.9	9.0	20.94	V
1905.0	17.62	5.9	9.0	20.72	V

#### 5.9.10 LTE Band 26 Measurement result

### LTE Band 26\_10MHz\_QPSK

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	ERP [dBm]	Antenna Polarization [H/V]
824.0	24.67	3.4	-0.96	20.31	V
831.5	24.11	3.4	-0.96	19.75	V
840.0	24.58	3.4	-0.96	20.22	V

### LTE Band 26 10MHz 16QAM

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	ERP [dBm]	Antenna Polarization [H/V]
824.0	24.68	3.4	-0.96	20.32	V
831.5	24.03	3.4	-0.96	19.67	V
840.0	24.61	3.4	-0.96	20.25	V

### 5.9.11 LTE Band 41 Measurement result

### LTE Band 41\_20MHz\_QPSK

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	EIRP [dBm]	Antenna Polarization [H/V]
2505.0	17.48	5.9	9.0	20.58	V
2593.0	17.29	6.0	9.0	20.29	V

Report No.:B19W50601-WWAN Rev1

				_	
2690.0	17.40	6.1	9.0	20.30	V

## LTE Band 41\_20MHz\_16QAM

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	EIRP [dBm]	Antenna Polarization [H/V]
2505.0	17.34	5.9	9.0	20.44	V
2593.0	17.29	6.0	9.0	20.29	V
2690.0	17.31	6.1	9.0	20.21	V

### 5.9.12 LTE Band 66 Measurement result

### LTE Band 66\_20MHz\_QPSK

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	EIRP [dBm]	Antenna Polarization [H/V]
1710.0	15.26	4.8	10.4	20.86	V
1745.0	15.83	4.9	10.4	21.33	V
1780.0	15.44	4.9	10.4	20.94	V

### LTE Band 66\_20MHz\_16QAM

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	EIRP [dBm]	Antenna Polarization [H/V]
1710.0	15.26	4.8	10.4	20.86	V
1745.0	15.83	4.9	10.4	21.33	V
1780.0	15.44	4.9	10.4	20.94	V

Report No.:B19W50601-WWAN\_Rev1

## **Annex A EUT Photos**

See the document"SIM7600G-H/SIM7600G-H miniPCIE-External Photos". See the document"SIM7600G-H/SIM7600G-H miniPCIE-Internal Photos".

Report No.:B19W50601-WWAN\_Rev1

# **ANNEX B Deviations from Prescribed Test Methods**

No deviation from Prescribed Test Methods.

\*\*\*End Of Report\*\*\*