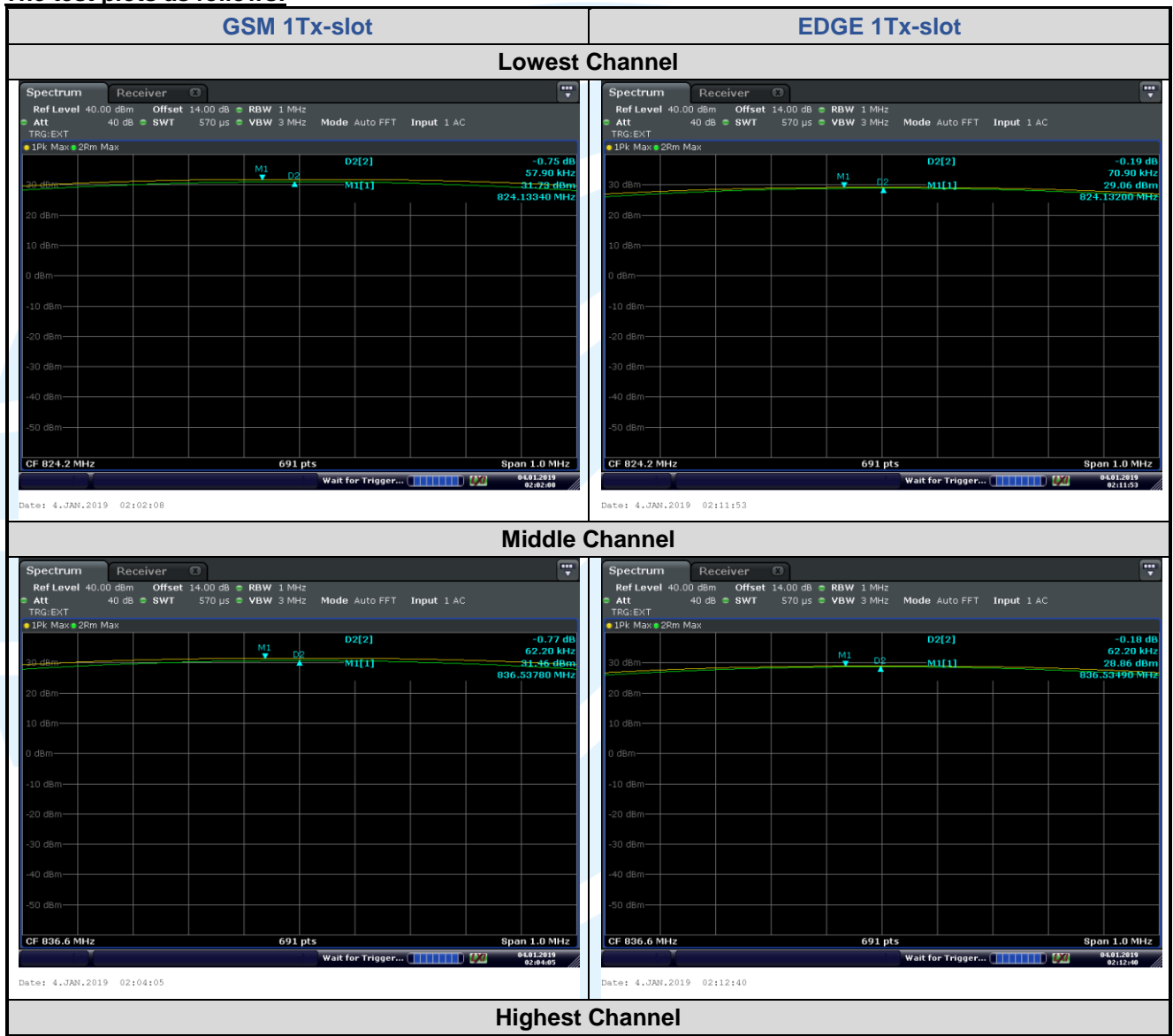
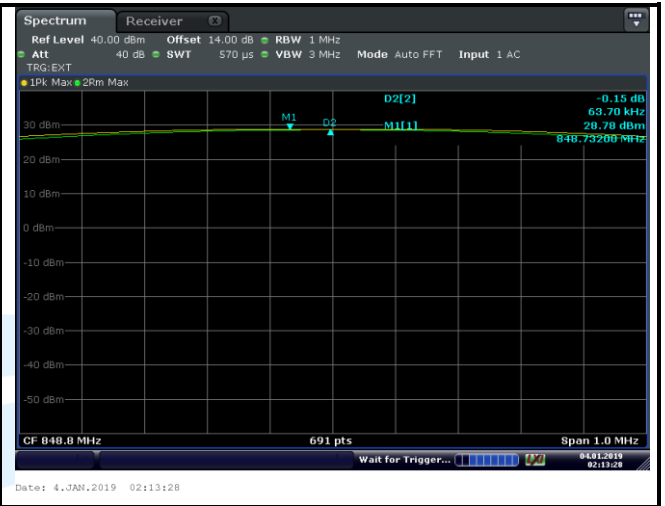


Peak-to-average ratio (dB)					
Channel	GSM 850 1Tx-slot	EDGE 850 1Tx-slot	WCDMA Band V RMC 12.2Kbps	Limit (dBm)	Result
Lowest	0.75	0.19	2.90	13	Pass
Middle	0.77	0.18	2.87	13	Pass
Highest	0.22	0.15	2.72	13	Pass

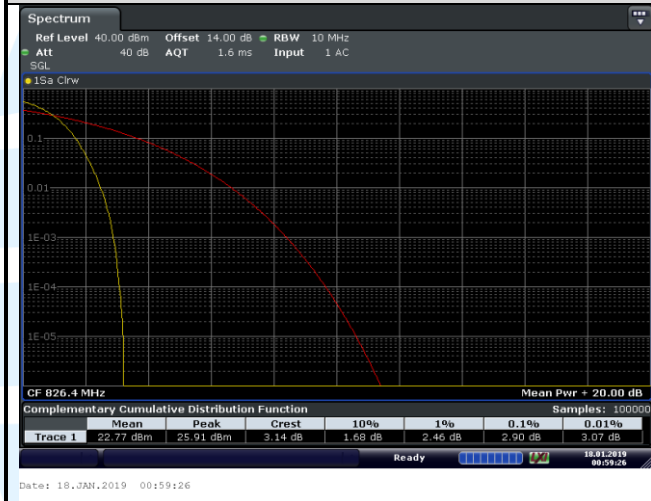
The test plots as follows:



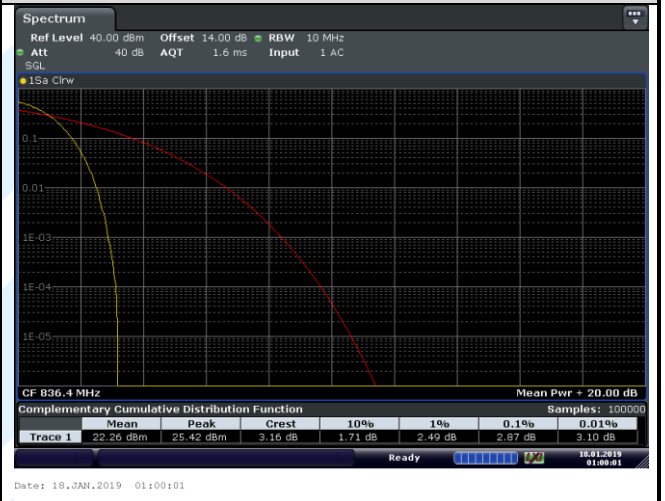


WCDMA RMC 12.2Kbps

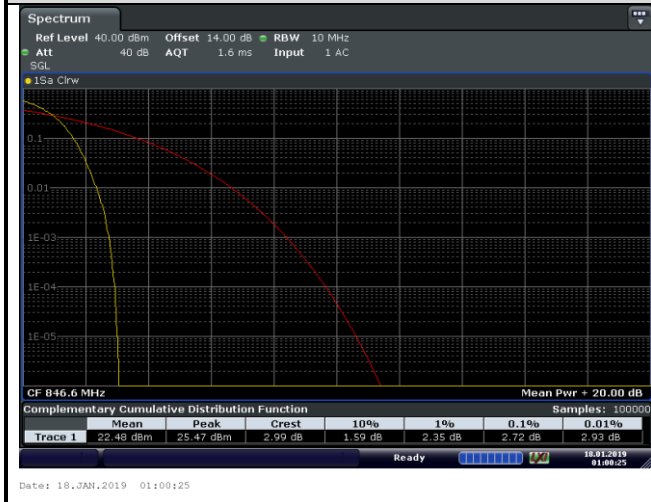
Lowest Channel



Middle Channel



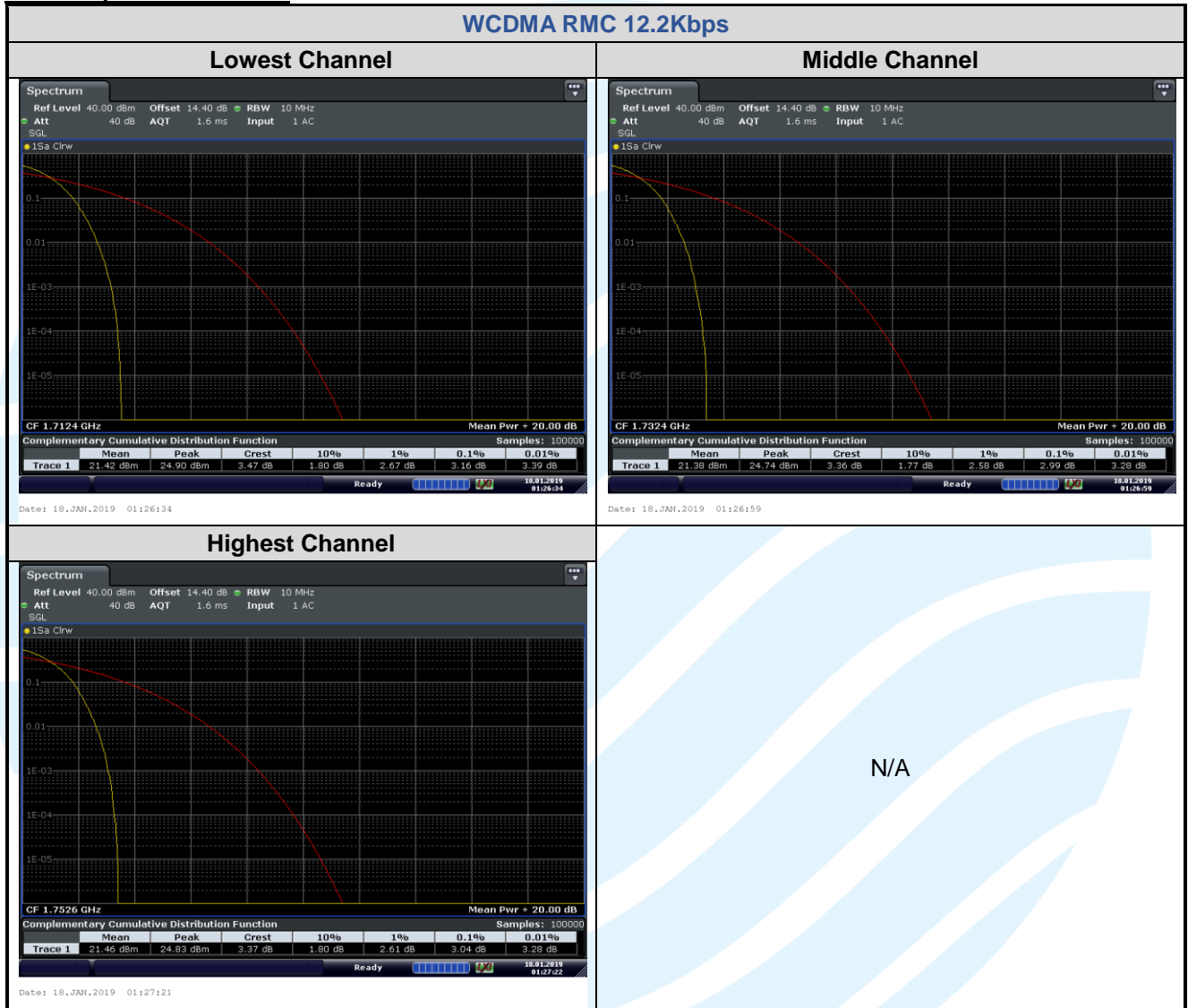
Highest Channel



N/A

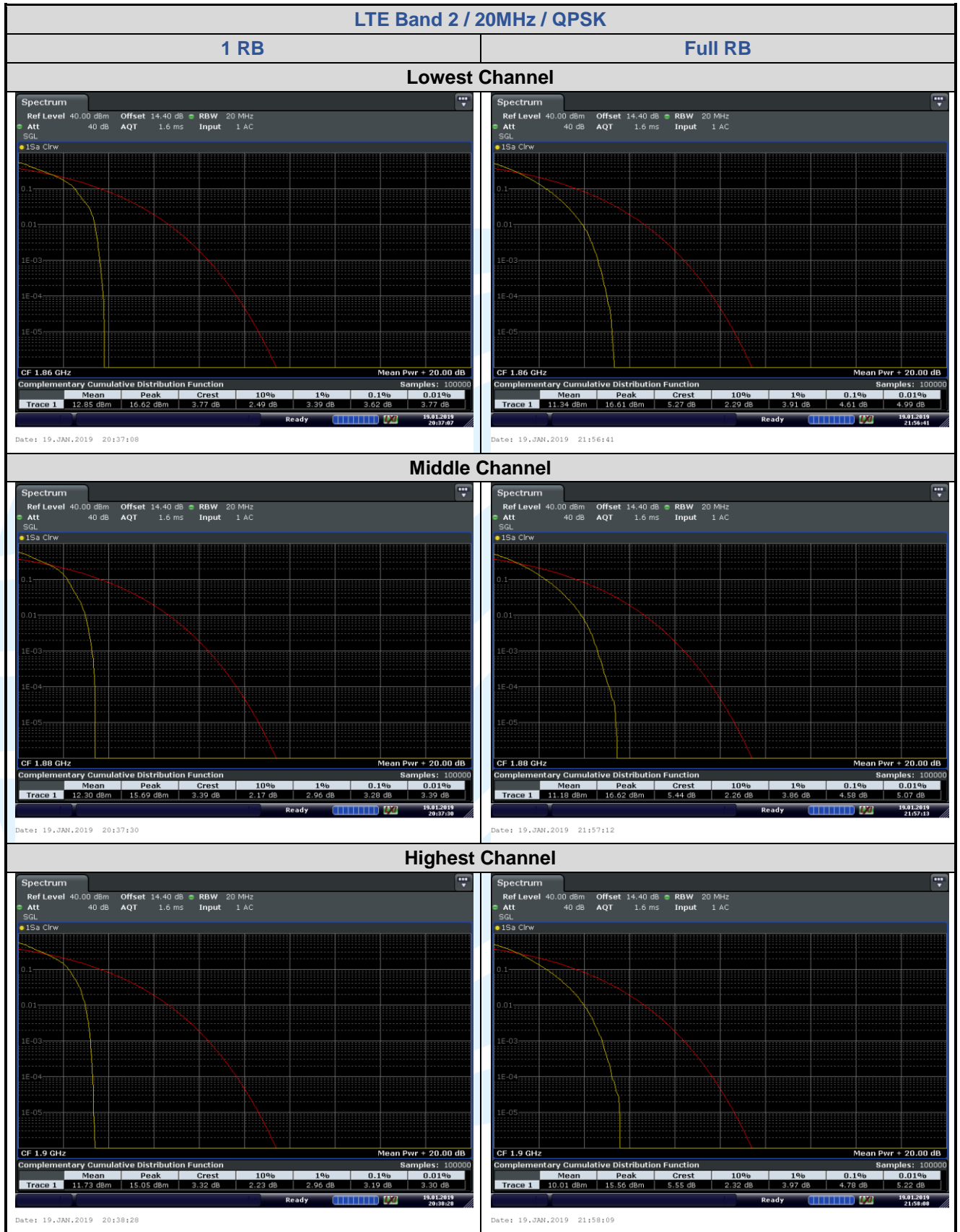
Peak-to-average ratio (dB)			
Channel	WCDMA Band IV RMC 12.2Kbps	Limit (dB)	Result
Lowest	3.16	13	Pass
Middle	2.99	13	Pass
Highest	3.04	13	Pass

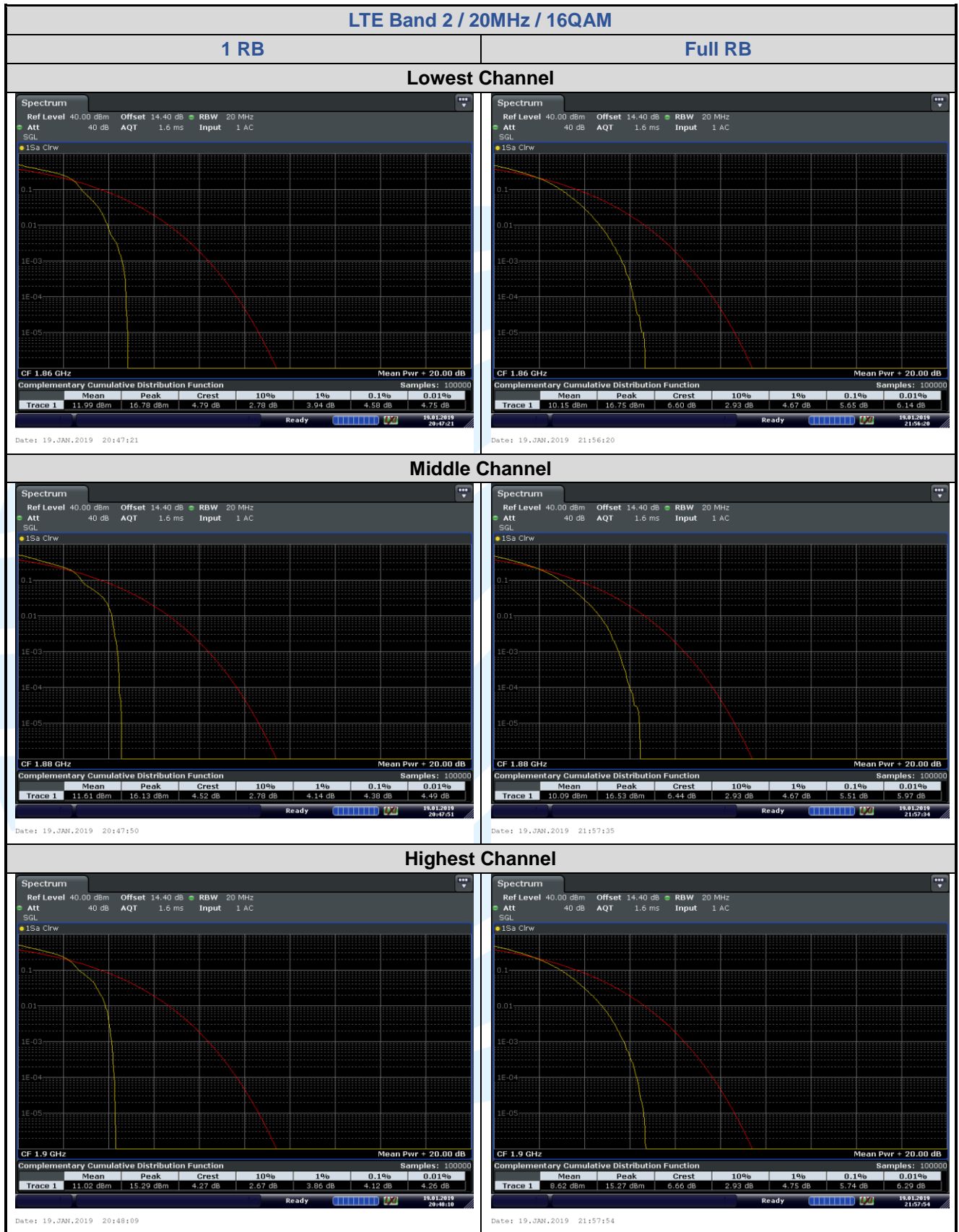
The test plots as follows:



LTE Band 2

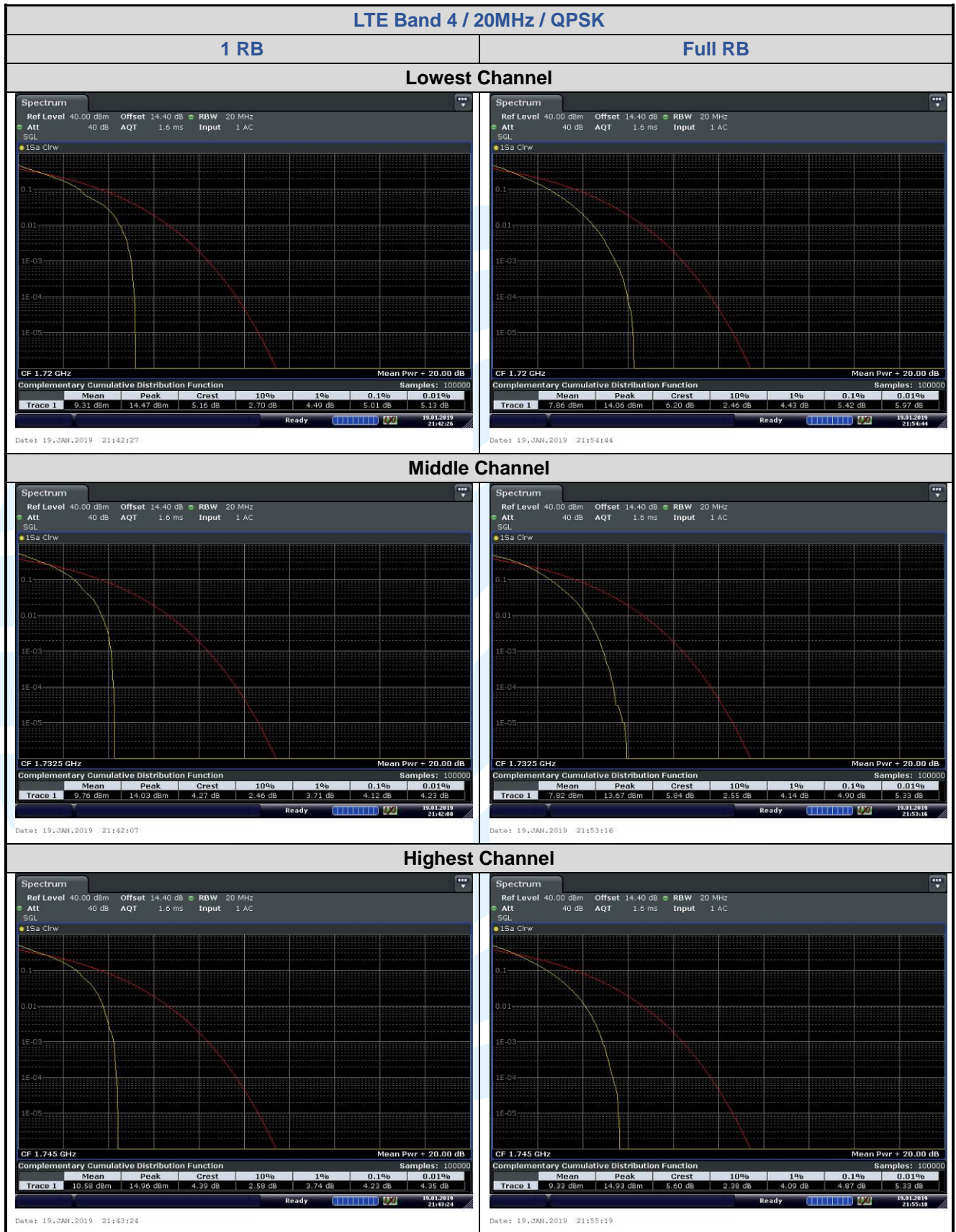
Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	3.62	4.58	N/A	13	Pass
	Full RB	4.61	5.65	N/A	13	Pass
Middle	1 RB	3.28	4.38	N/A	13	Pass
	Full RB	4.58	5.51	N/A	13	Pass
Highest	1 RB	3.19	4.12	N/A	13	Pass
	Full RB	4.78	5.74	N/A	13	Pass

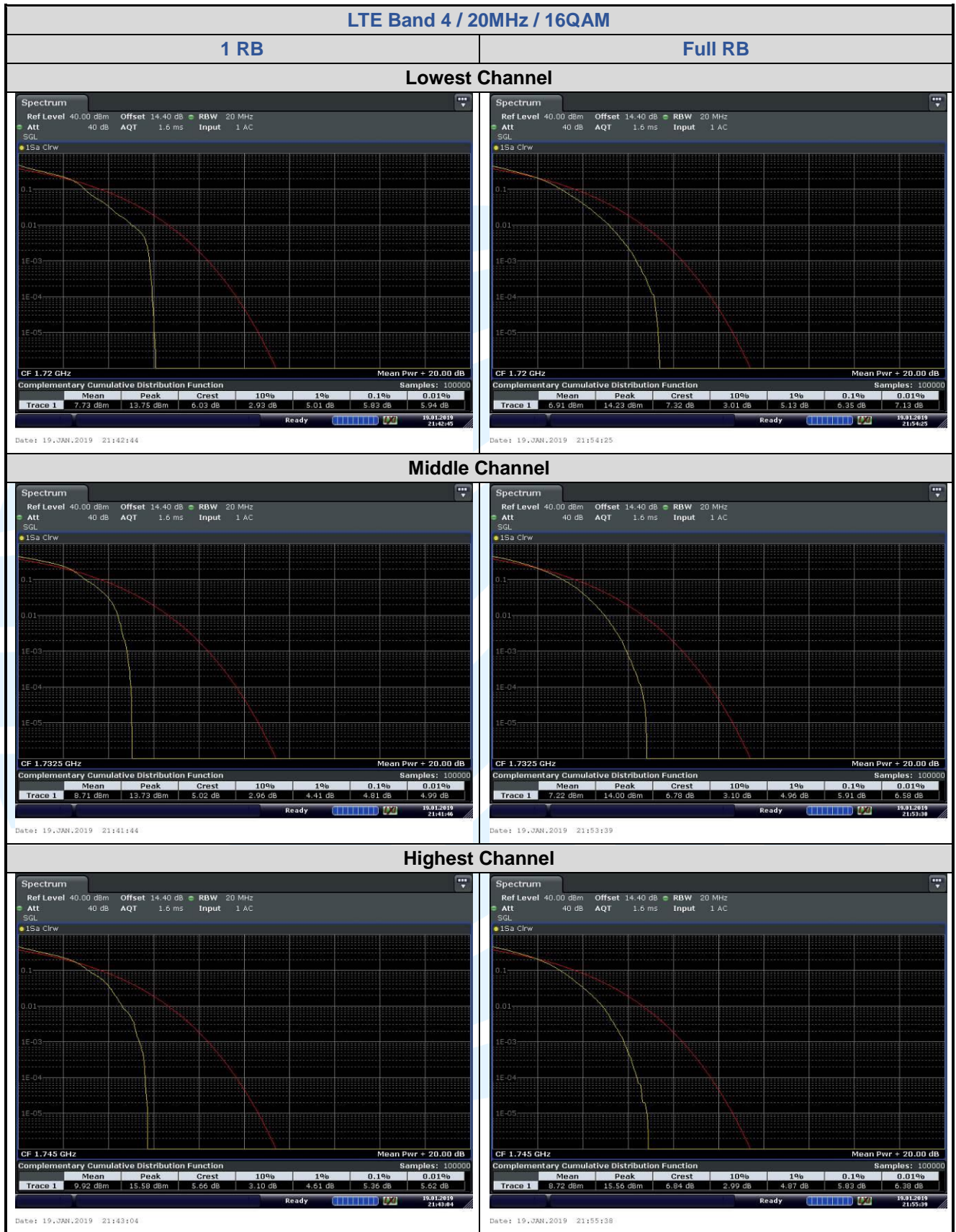




LTE Band 4

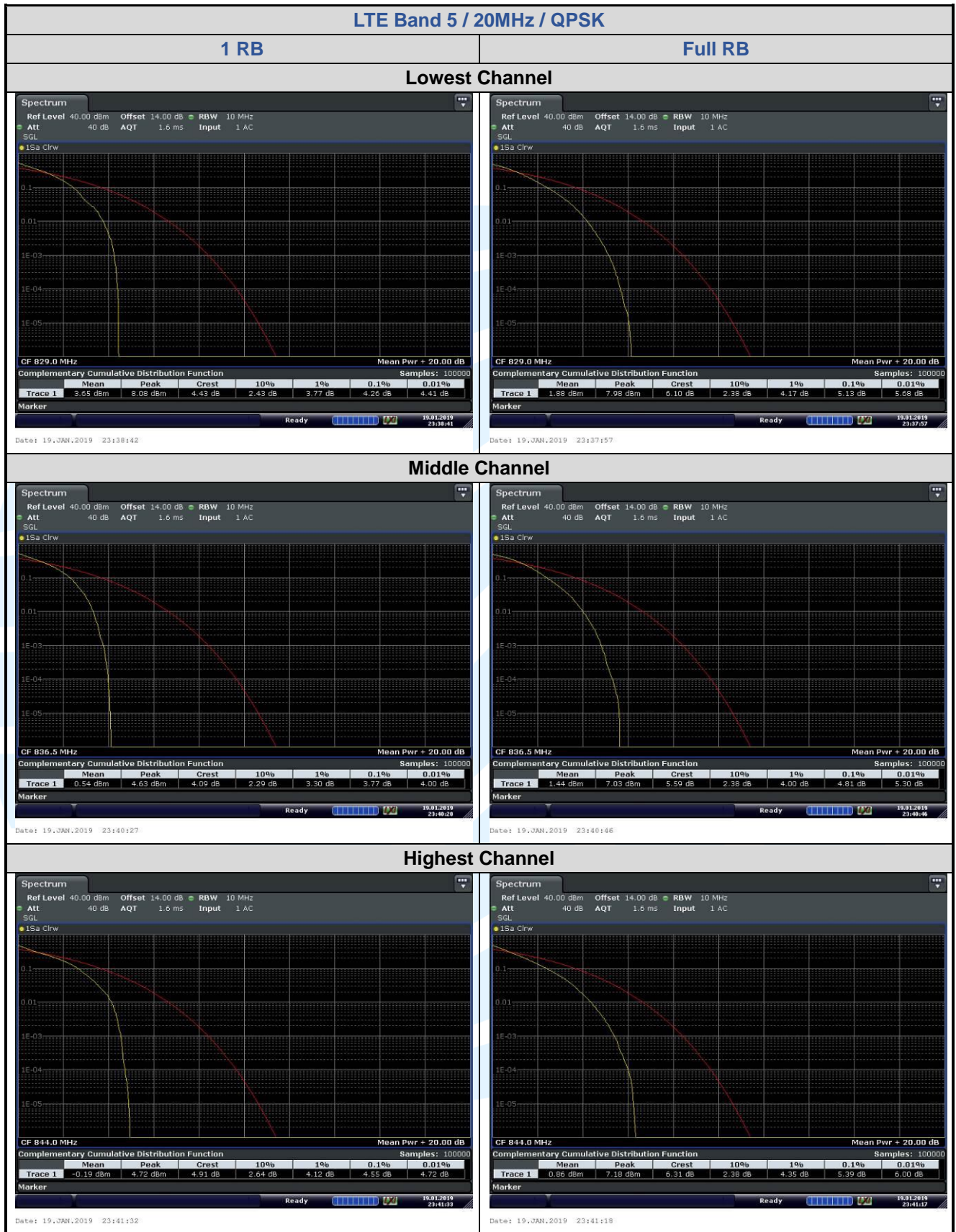
Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	5.01	5.83	N/A	13	Pass
	Full RB	5.42	6.35	N/A	13	Pass
Middle	1 RB	4.12	4.81	N/A	13	Pass
	Full RB	4.90	5.91	N/A	13	Pass
Highest	1 RB	4.23	5.36	N/A	13	Pass
	Full RB	4.87	5.83	N/A	13	Pass

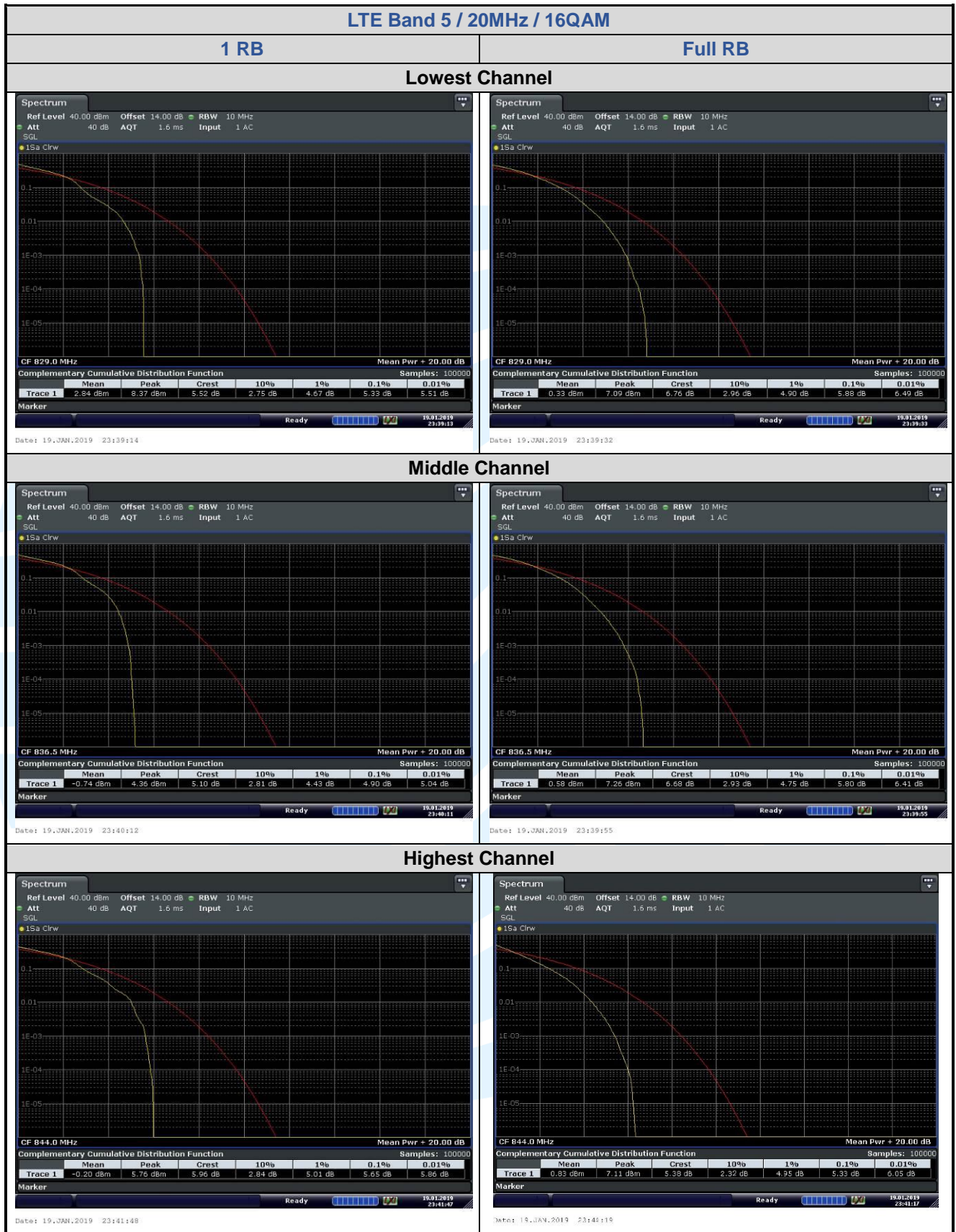




LTE Band 5

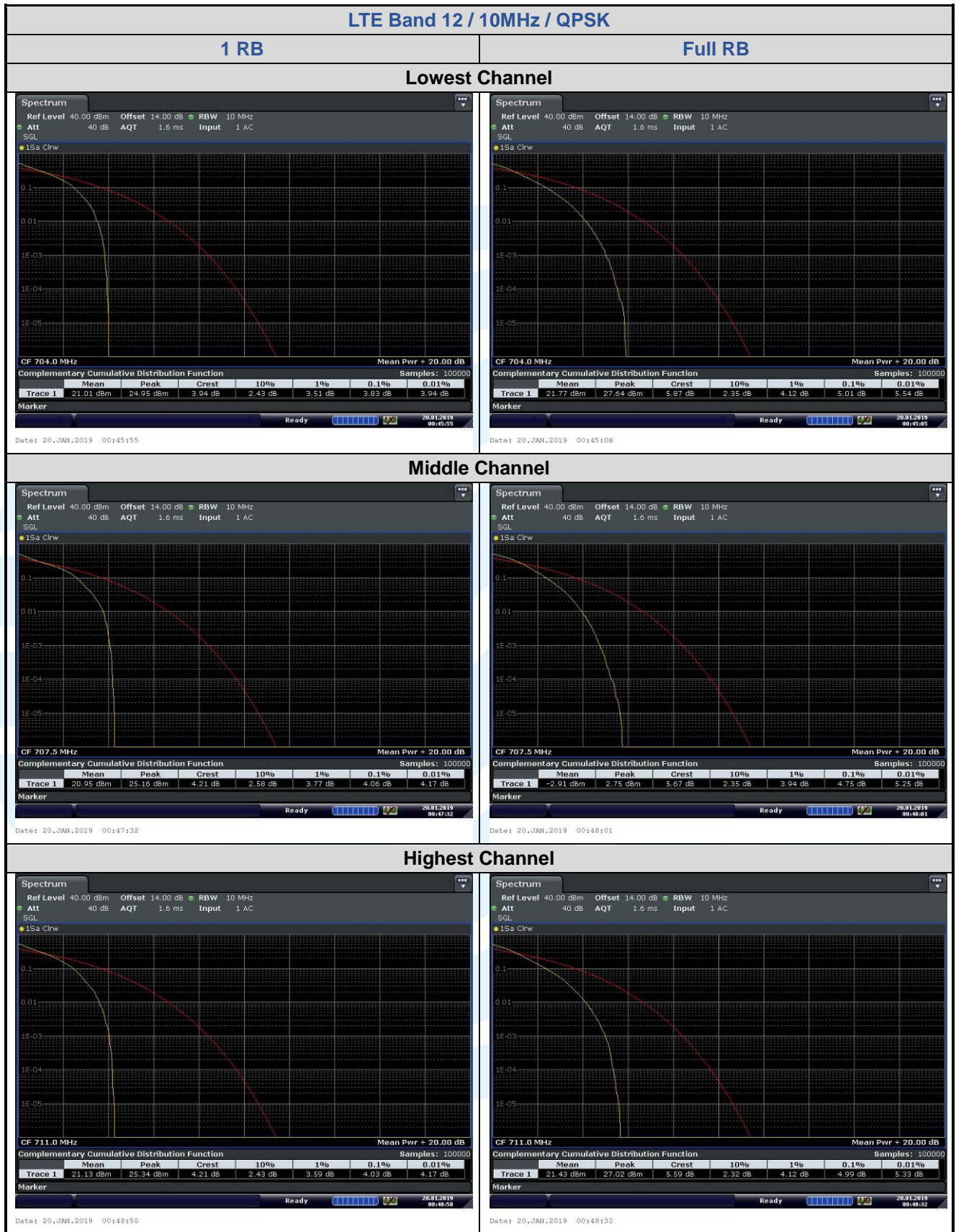
Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	4.26	5.33	N/A	13	Pass
	Full RB	5.13	5.88	N/A	13	Pass
Middle	1 RB	3.77	4.90	N/A	13	Pass
	Full RB	4.81	5.80	N/A	13	Pass
Highest	1 RB	4.55	5.65	N/A	13	Pass
	Full RB	5.39	5.33	N/A	13	Pass

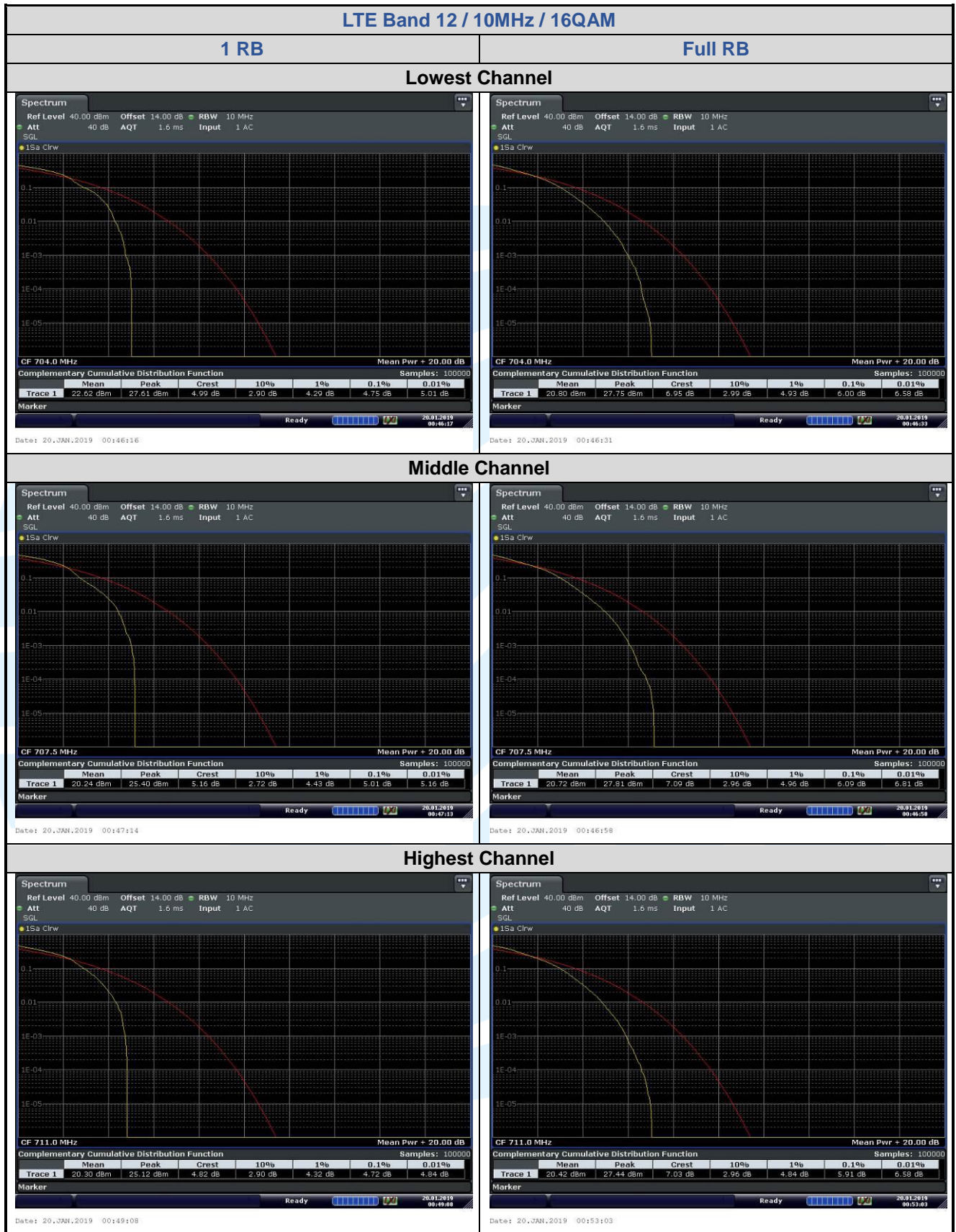




LTE Band 12

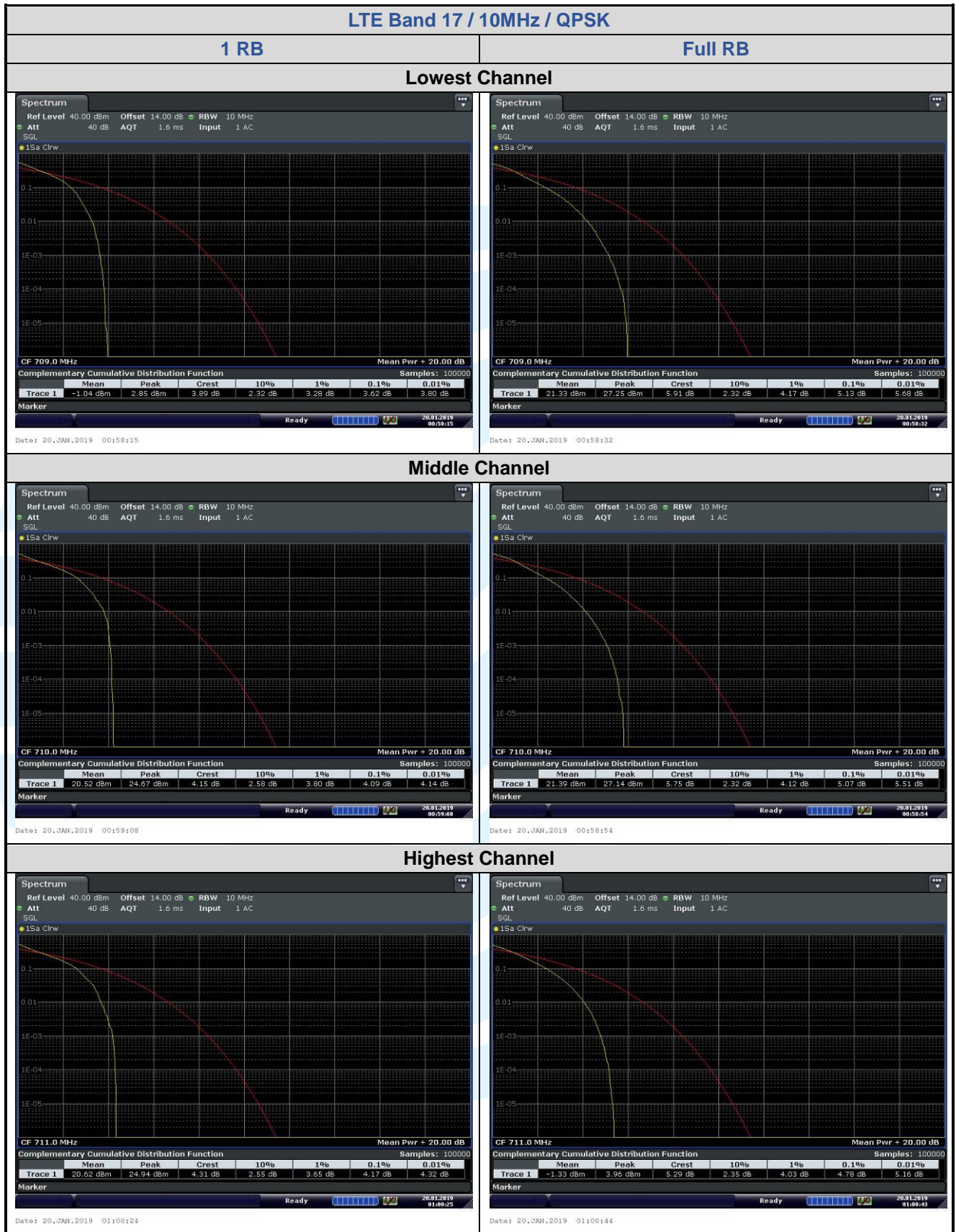
Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	3.83	4.75	N/A	13	Pass
	Full RB	5.01	6.00	N/A	13	Pass
Middle	1 RB	4.06	5.01	N/A	13	Pass
	Full RB	4.75	6.09	N/A	13	Pass
Highest	1 RB	4.03	4.72	N/A	13	Pass
	Full RB	4.99	5.91	N/A	13	Pass

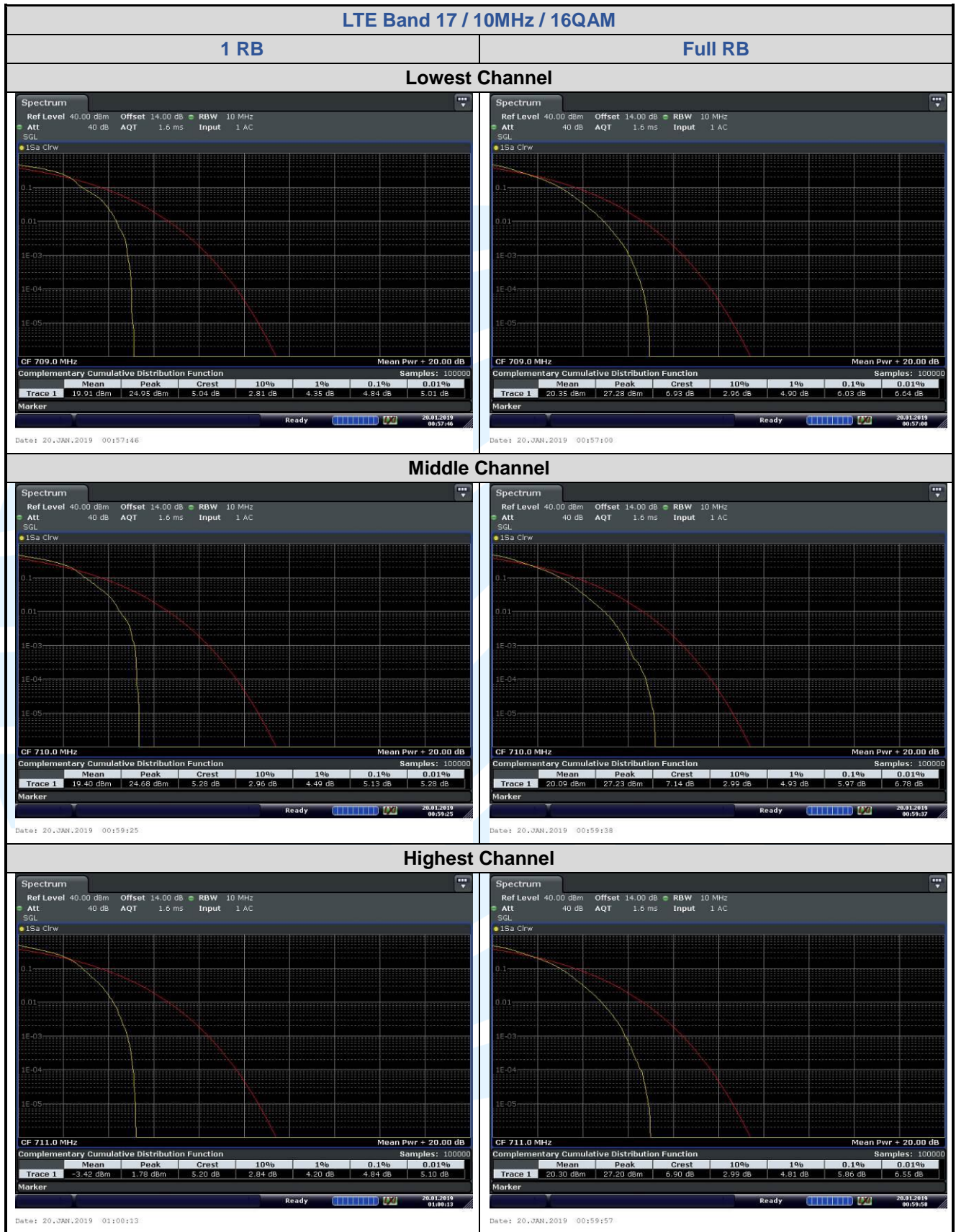




LTE Band 17

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	3.62	4.84	N/A	13	Pass
	Full RB	5.13	6.03	N/A	13	Pass
Middle	1 RB	4.09	5.13	N/A	13	Pass
	Full RB	5.07	5.97	N/A	13	Pass
Highest	1 RB	4.17	4.84	N/A	13	Pass
	Full RB	4.78	5.86	N/A	13	Pass





5.5 99%&26DB BANDWIDTH

Test Requirement: FCC 47 CFR Part 2.1049(h),
GSM 850 & WCDMA Band V & LTE Band 5: FCC 47 CFR Part 22.917(b),
GSM 1900 & WCDMA Band II & LTE Band 2: FCC 47 CFR Part 24.238(b),
WCDMA Band IV & LTE Band 4: FCC 47 CFR Part 27.53(h),
LTE Band 12 & Band 17: FCC 47 CFR Part 27.53(g)

Test Method: ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01

Limit: No Limit

Test Procedure:

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Test Data: See table below

99% & 26 dB Bandwidth				
Test Mode	Channel	Frequency (MHz)	26 dB BW (kHz)	99% BW (kHz)
GSM 850 1Tx-slot	128	824.2	320.2	244.59
	190	836.6	316.5	243.51
	251	848.8	320.0	246.96
EDGE 850 1Tx-slot	128	824.2	321.1	244.46
	190	836.6	321.2	242.98
	251	848.8	323.3	245.26
GSM 1900 1Tx-slot	512	1850.2	314.9	243.61
	661	1880.0	318.7	244.75
	810	1909.8	319.7	243.77
EDGE 1900 1Tx-slot	512	1850.2	320.0	245.21
	661	1880.0	313.7	243.78
	810	1909.8	320.0	243.68

99% & 26 dB Bandwidth				
Test Mode	Channel	Frequency (MHz)	26 dB BW (MHz)	99% BW (MHz)
WCDMA Band II RMC 12.2Kbps	9262	1852.4	4.711	4.1715
	9400	1880.0	4.717	4.1660
	9538	1907.6	4.728	4.1684
WCDMA Band IV RMC 12.2Kbps	1312	1712.4	4.715	4.1680
	1412	1732.4	4.709	4.1650
	1513	1752.6	4.784	4.1836
WCDMA Band V RMC 12.2Kbps	4132	826.4	4.733	4.1677
	4182	836.4	4.706	4.1684
	4233	846.6	4.739	4.1755