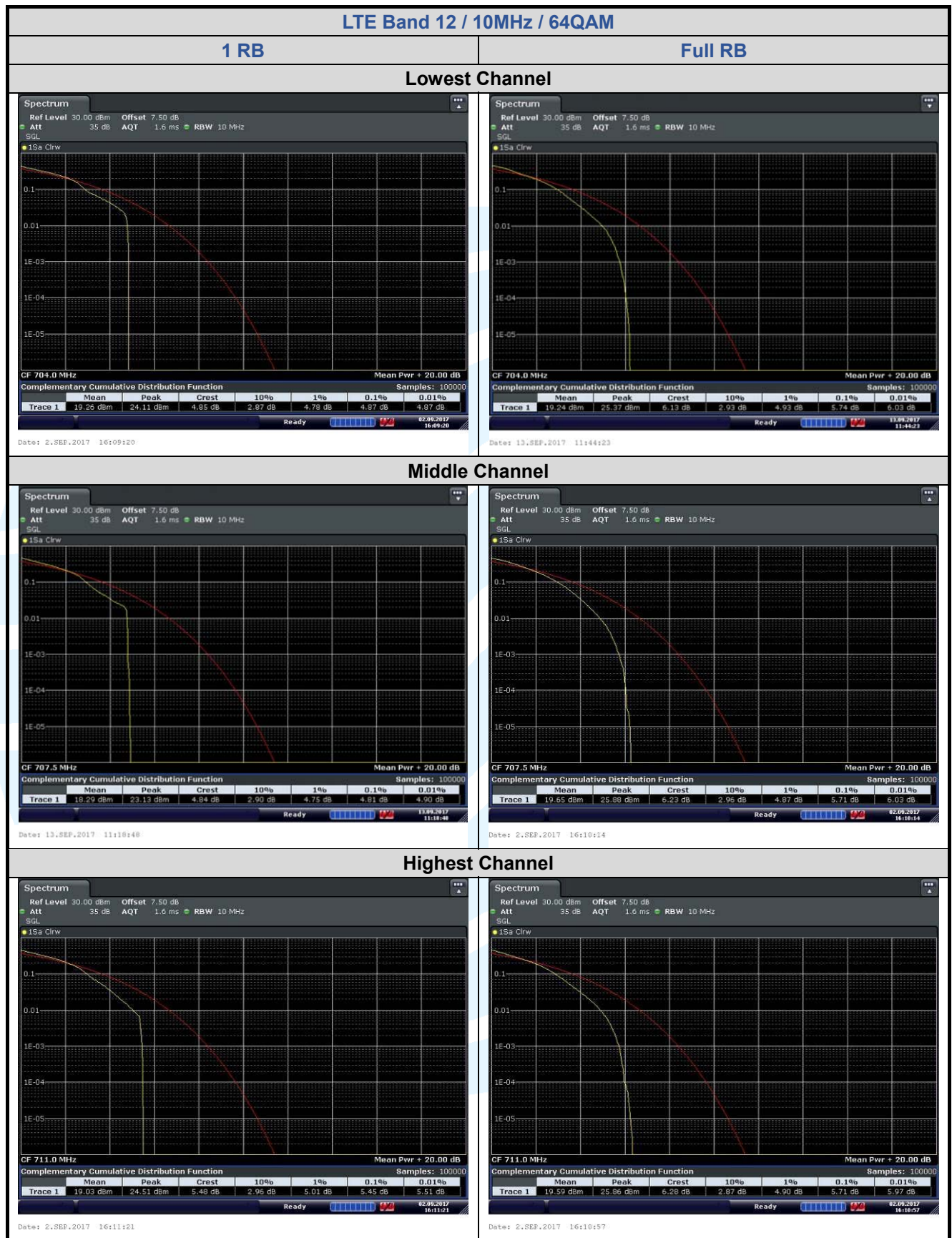
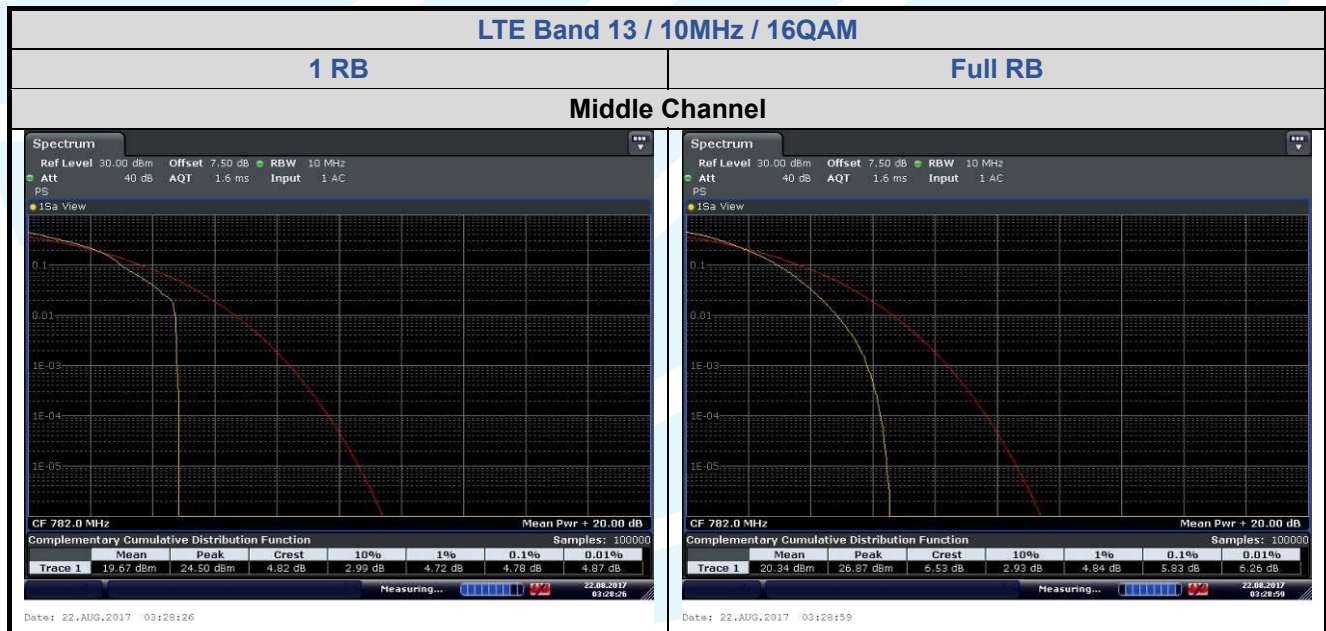
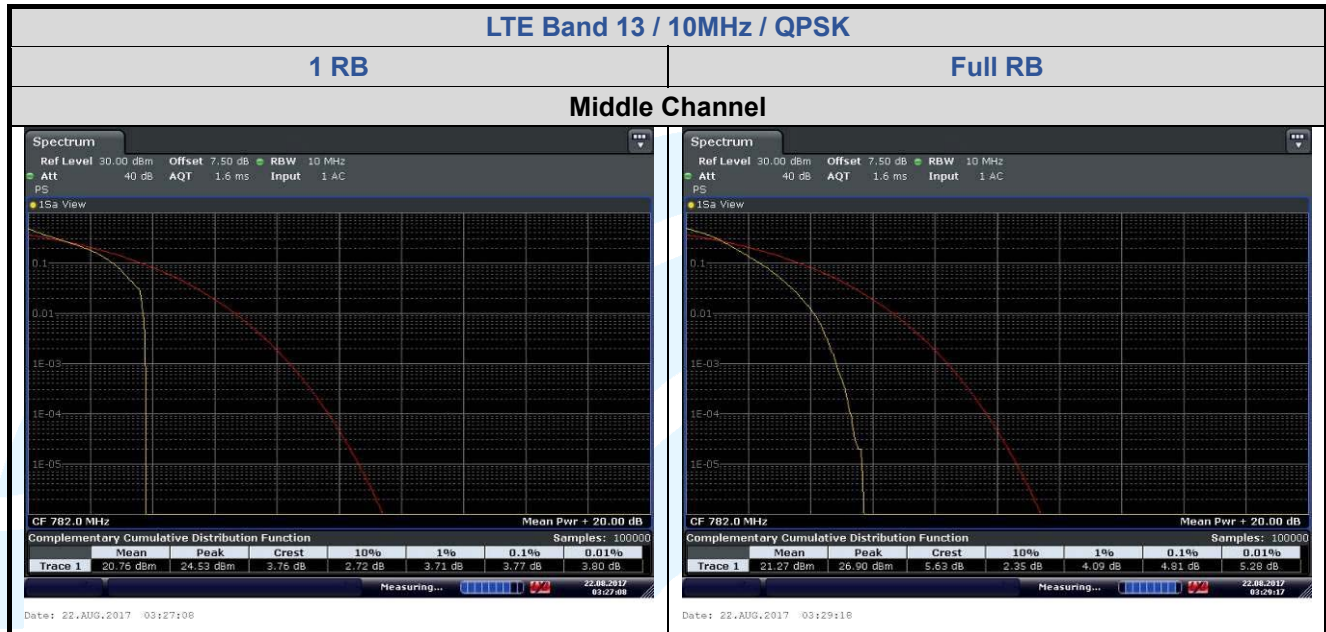
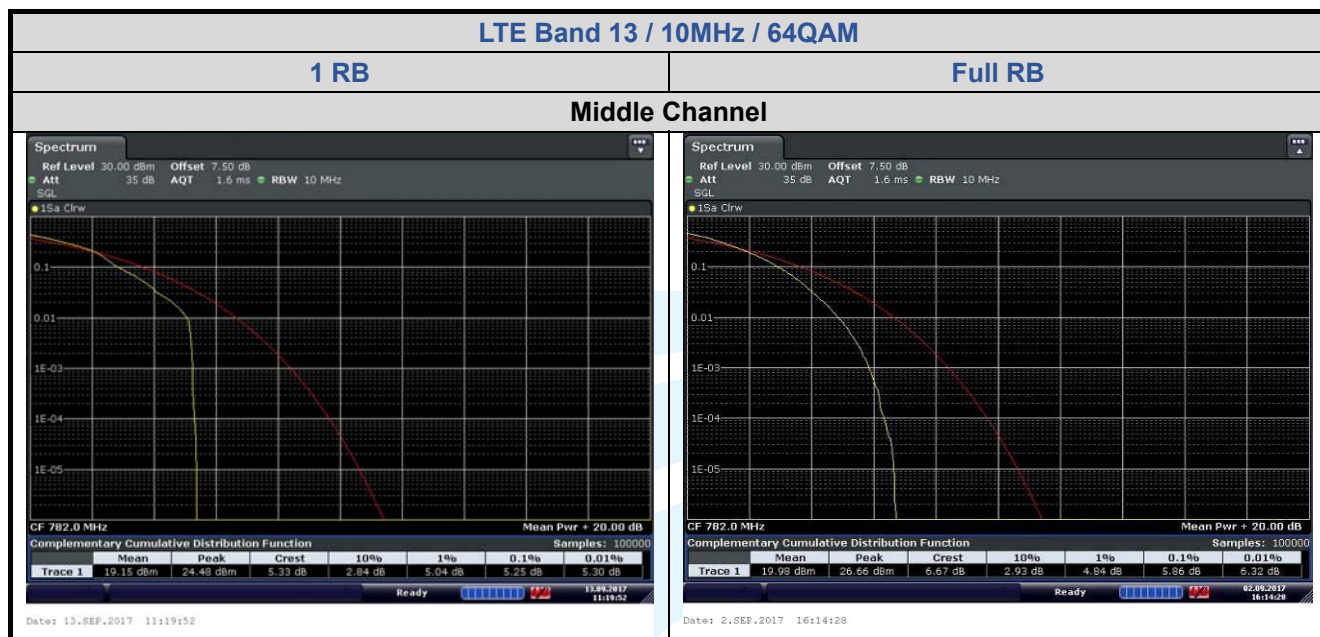




5.4.5 LTE Band 13

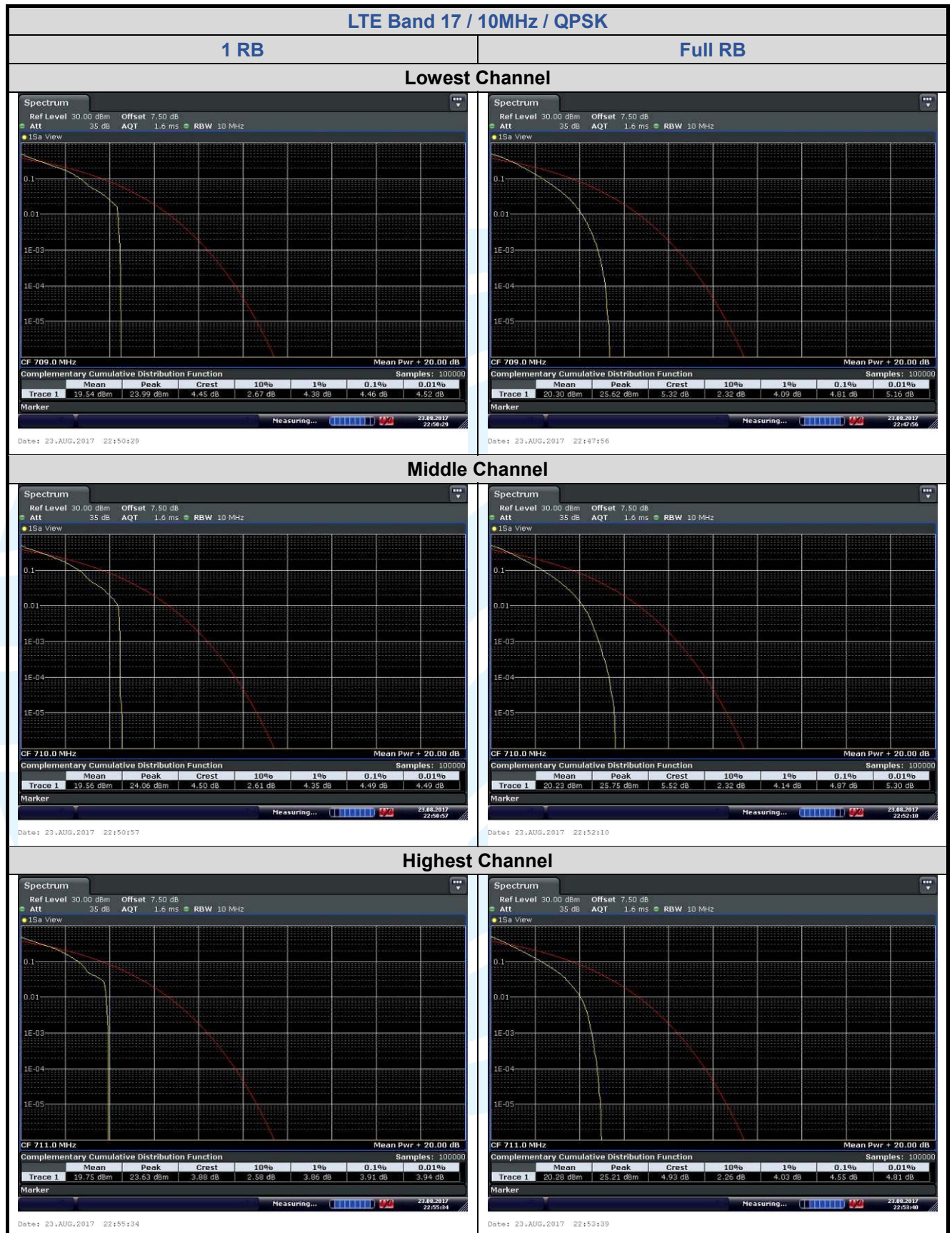
Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	1 RB	3.77	4.78	5.25	13	Pass
	Full RB	4.81	5.83	5.86	13	Pass

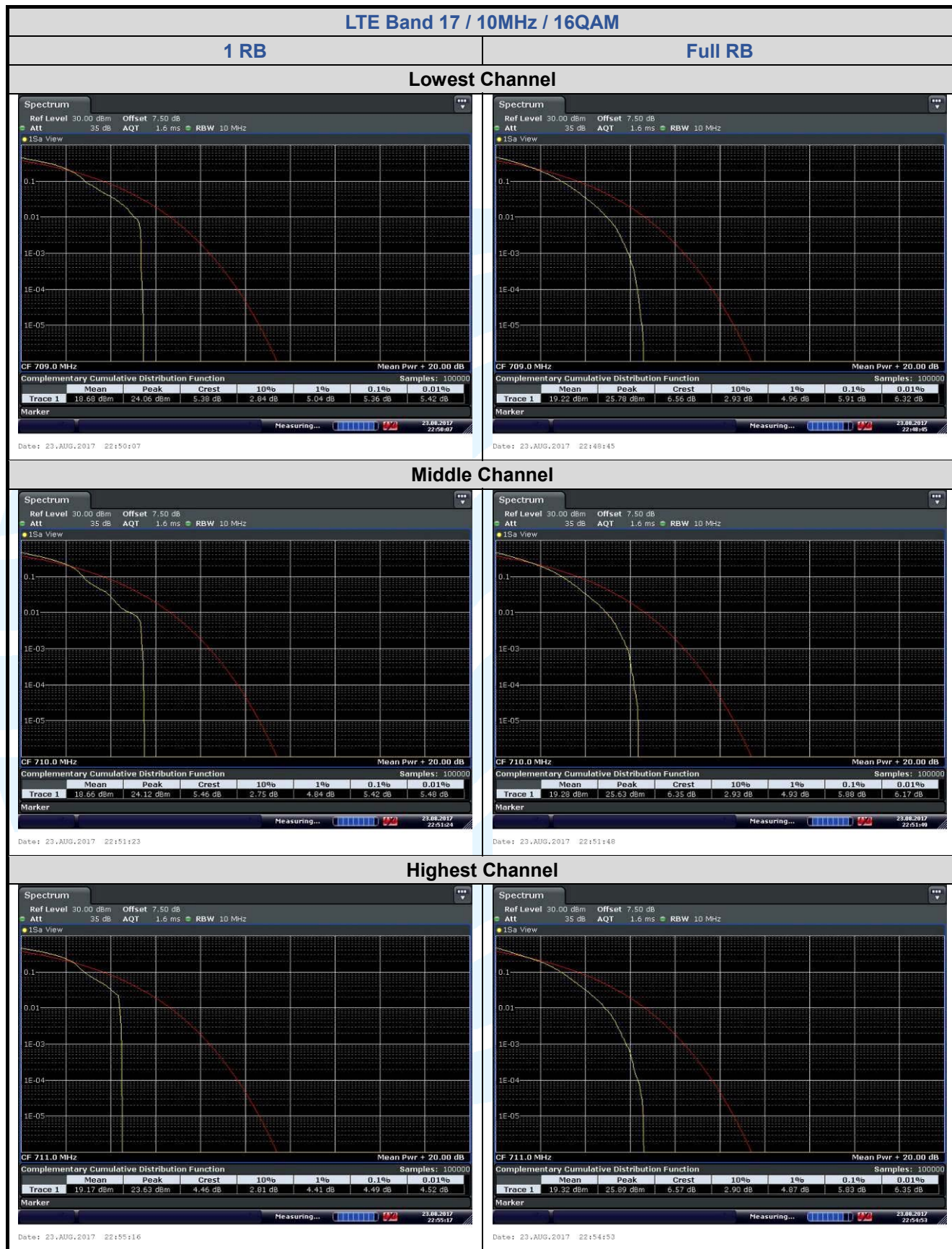


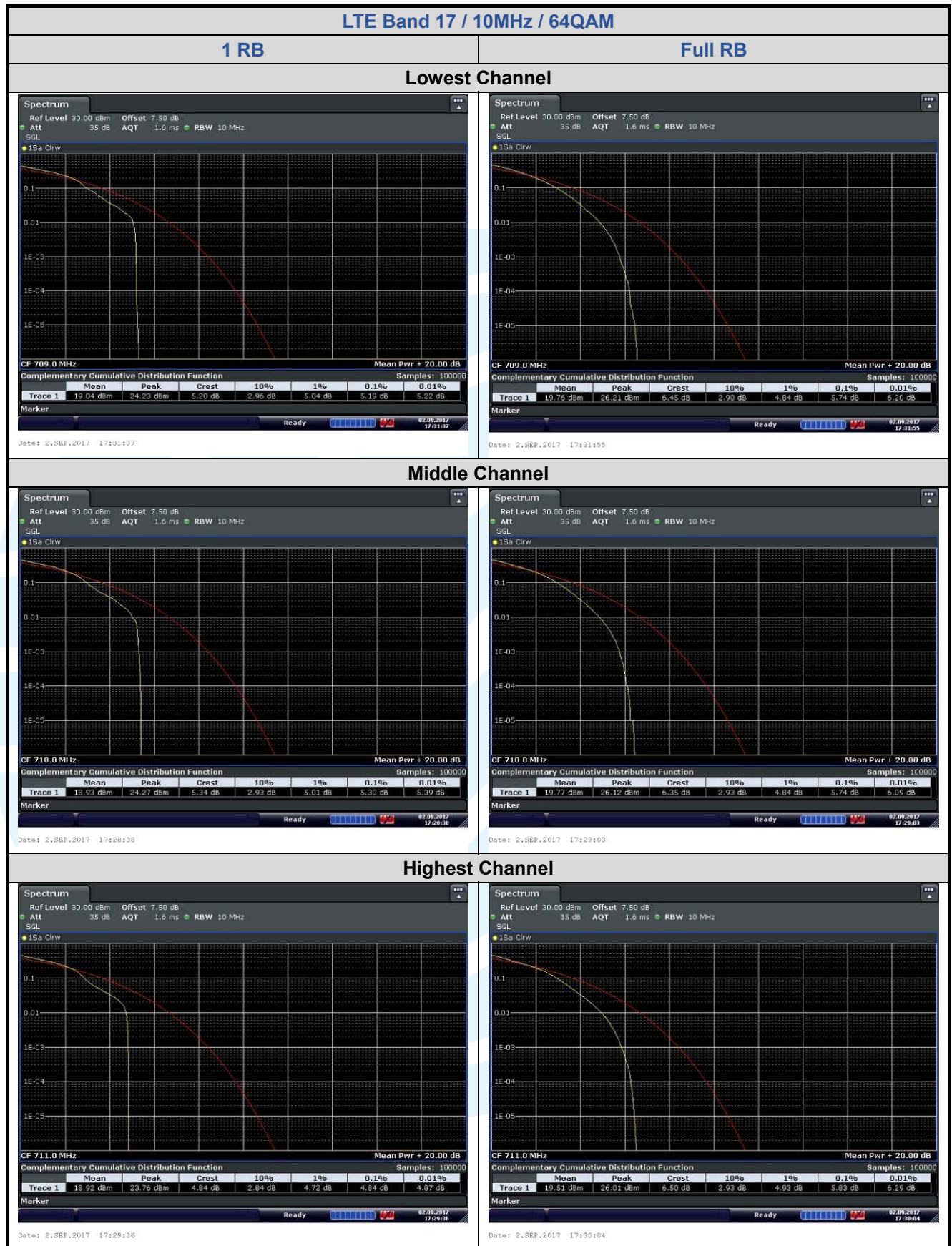


5.4.6 LTE Band 17

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	4.46	5.36	5.19	13	Pass
	Full RB	4.81	5.91	5.74	13	Pass
Middle	1 RB	4.49	5.42	5.30	13	Pass
	Full RB	4.87	5.88	5.74	13	Pass
Highest	1 RB	3.91	4.49	4.84	13	Pass
	Full RB	4.55	5.83	5.83	13	Pass

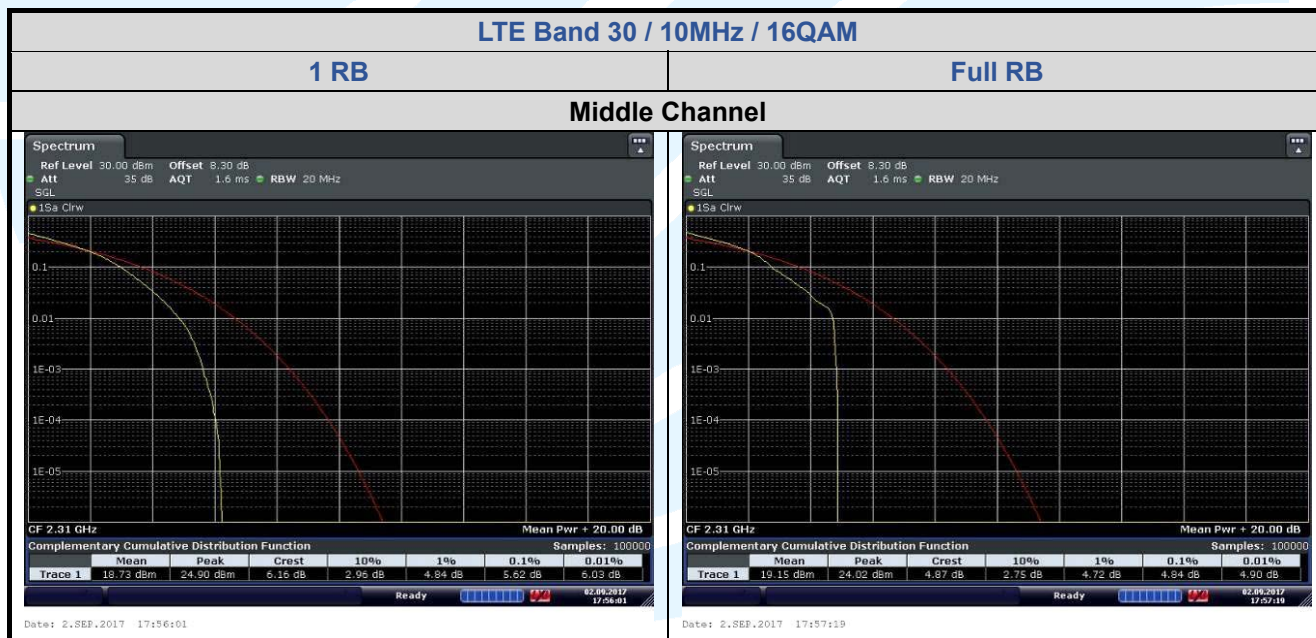
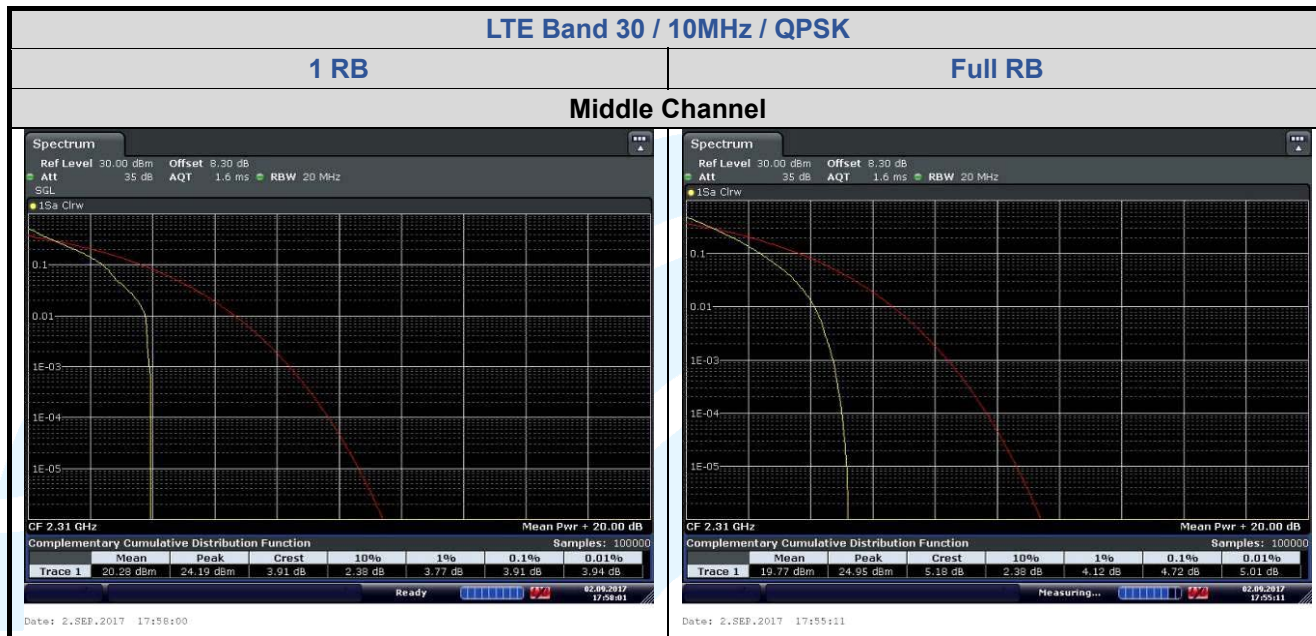


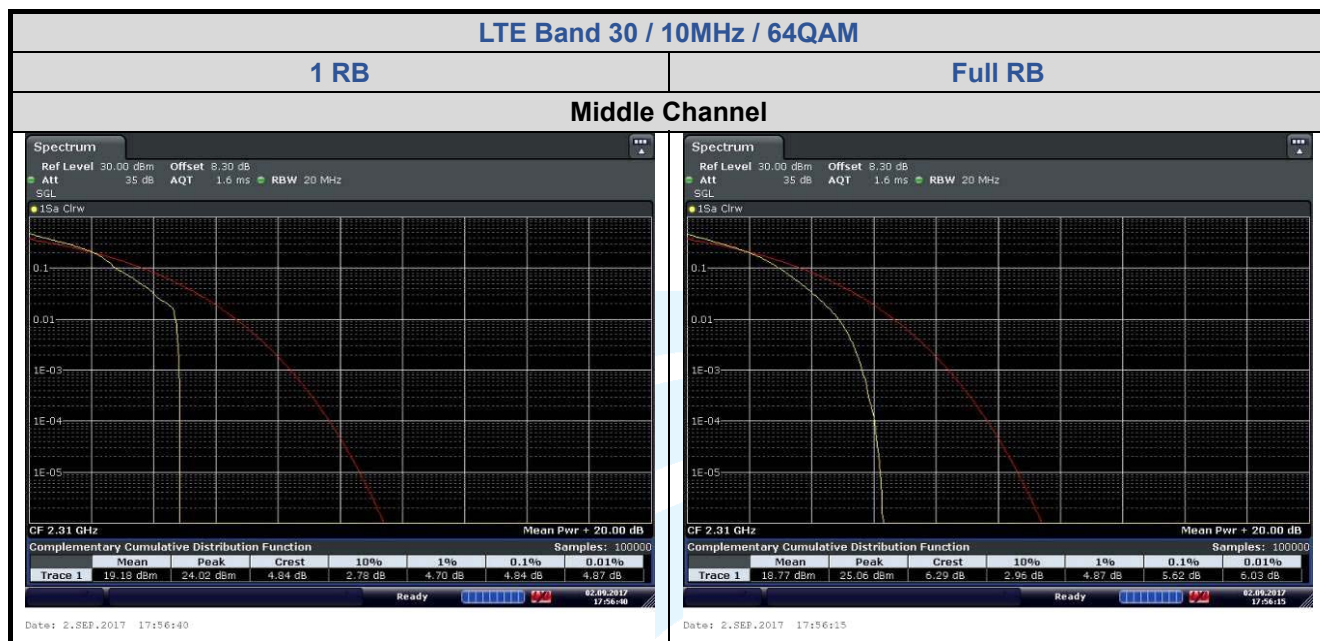




5.4.7 LTE Band 30

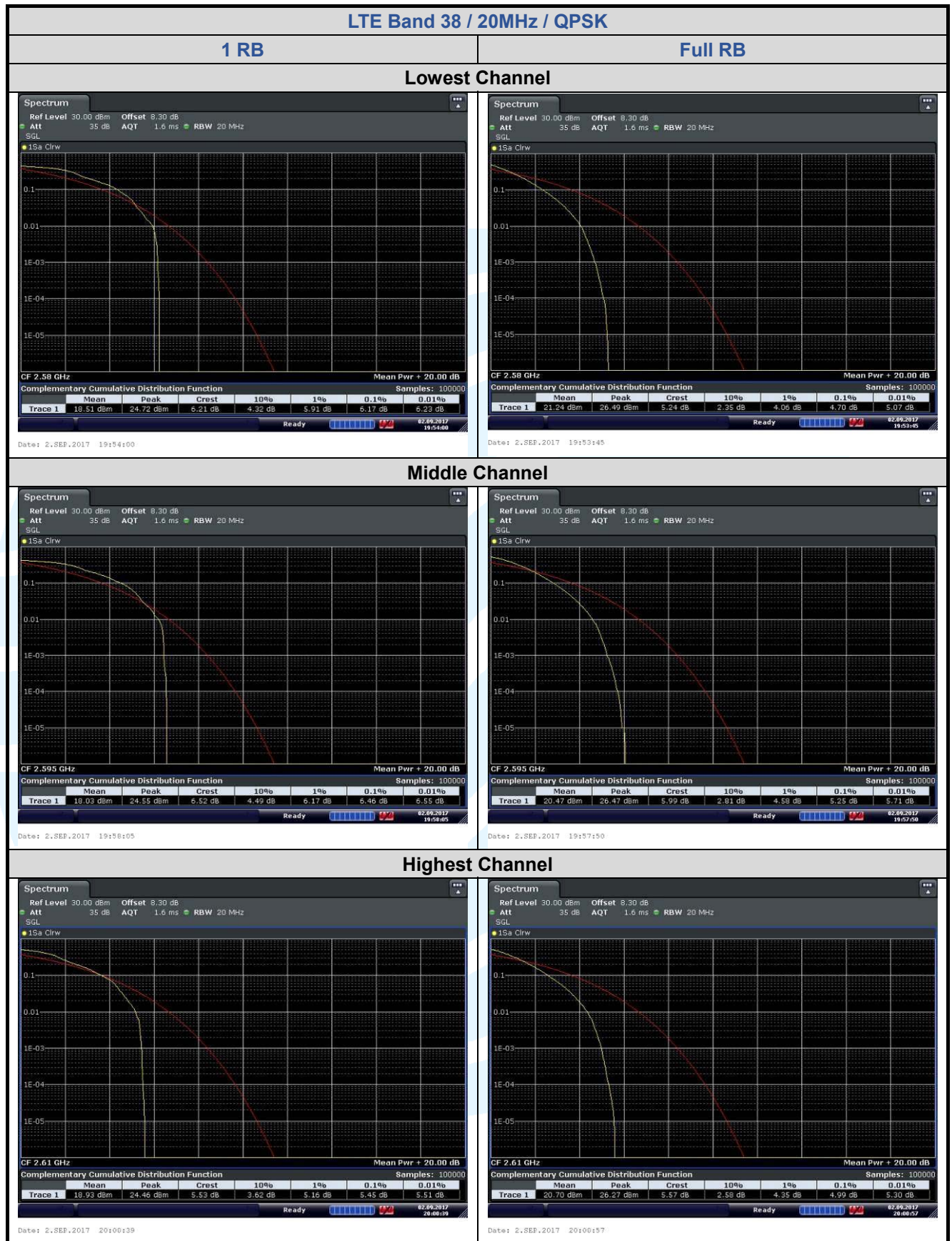
Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	1 RB	3.91	5.62	4.84	13	Pass
	Full RB	4.72	4.84	5.62	13	Pass

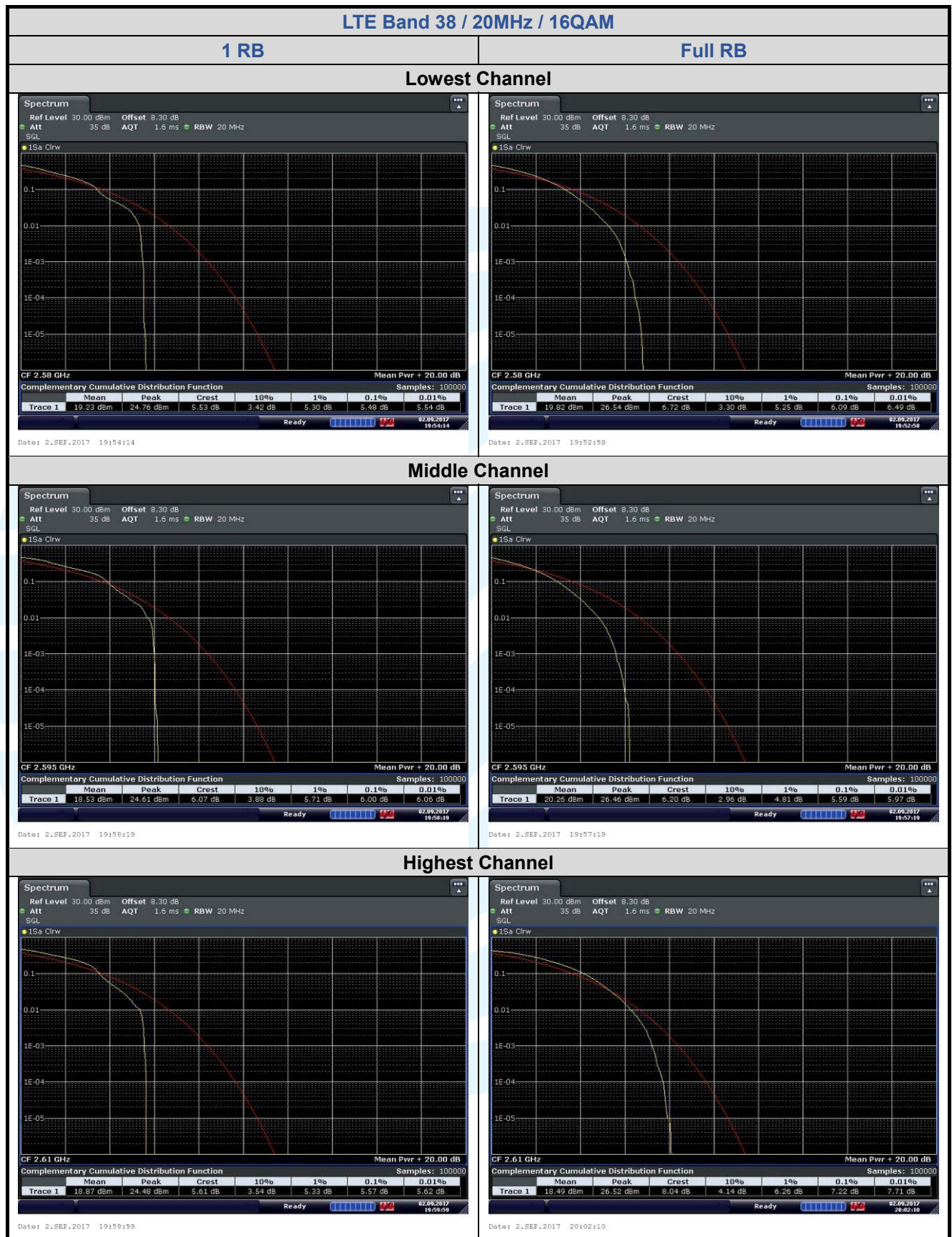


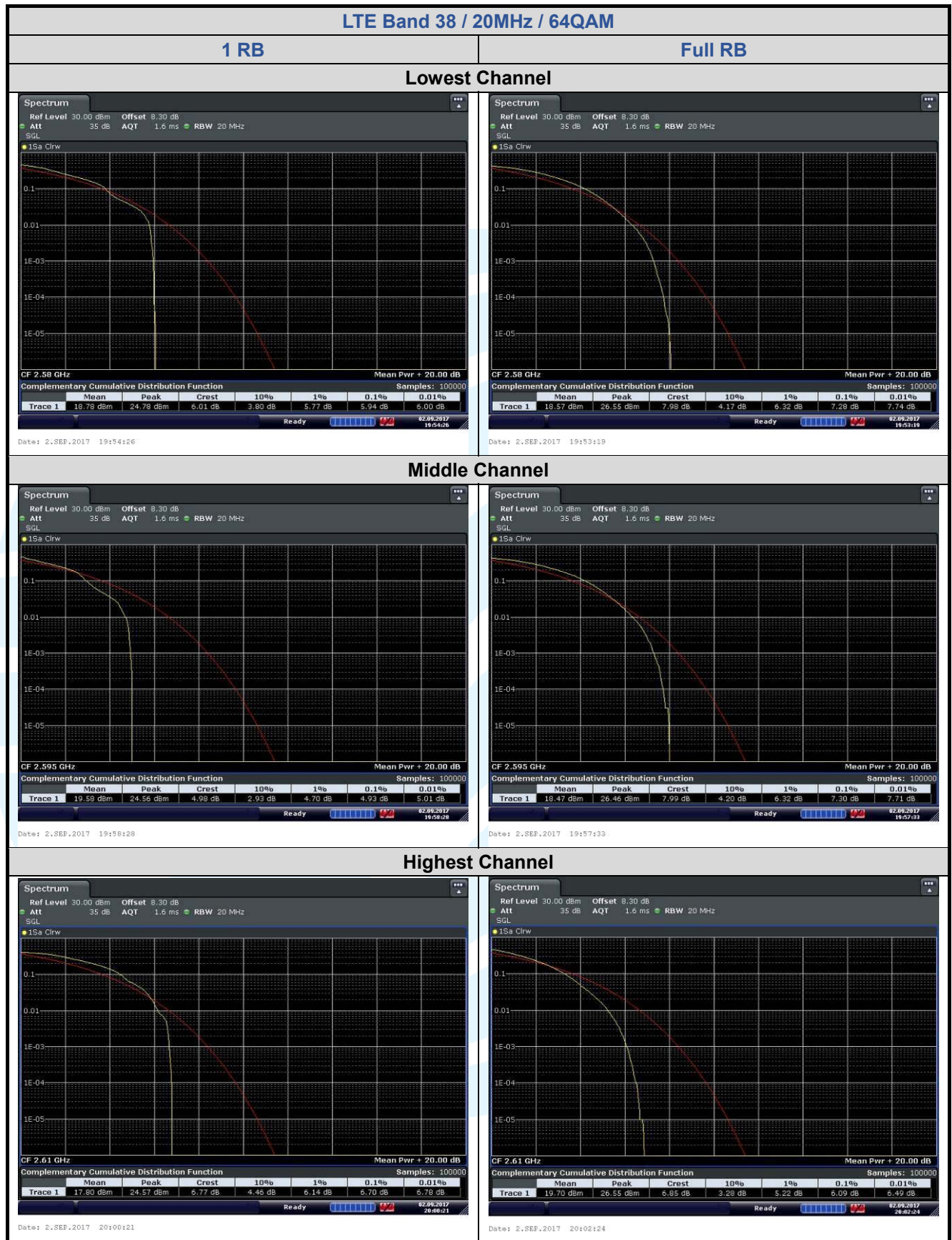


5.4.8 LTE Band 38

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	6.17	5.48	5.94	13	Pass
	Full RB	4.70	6.09	7.28	13	Pass
Middle	1 RB	6.46	6.00	4.93	13	Pass
	Full RB	5.25	5.59	7.30	13	Pass
Highest	1 RB	5.45	5.57	6.70	13	Pass
	Full RB	4.99	7.22	6.09	13	Pass

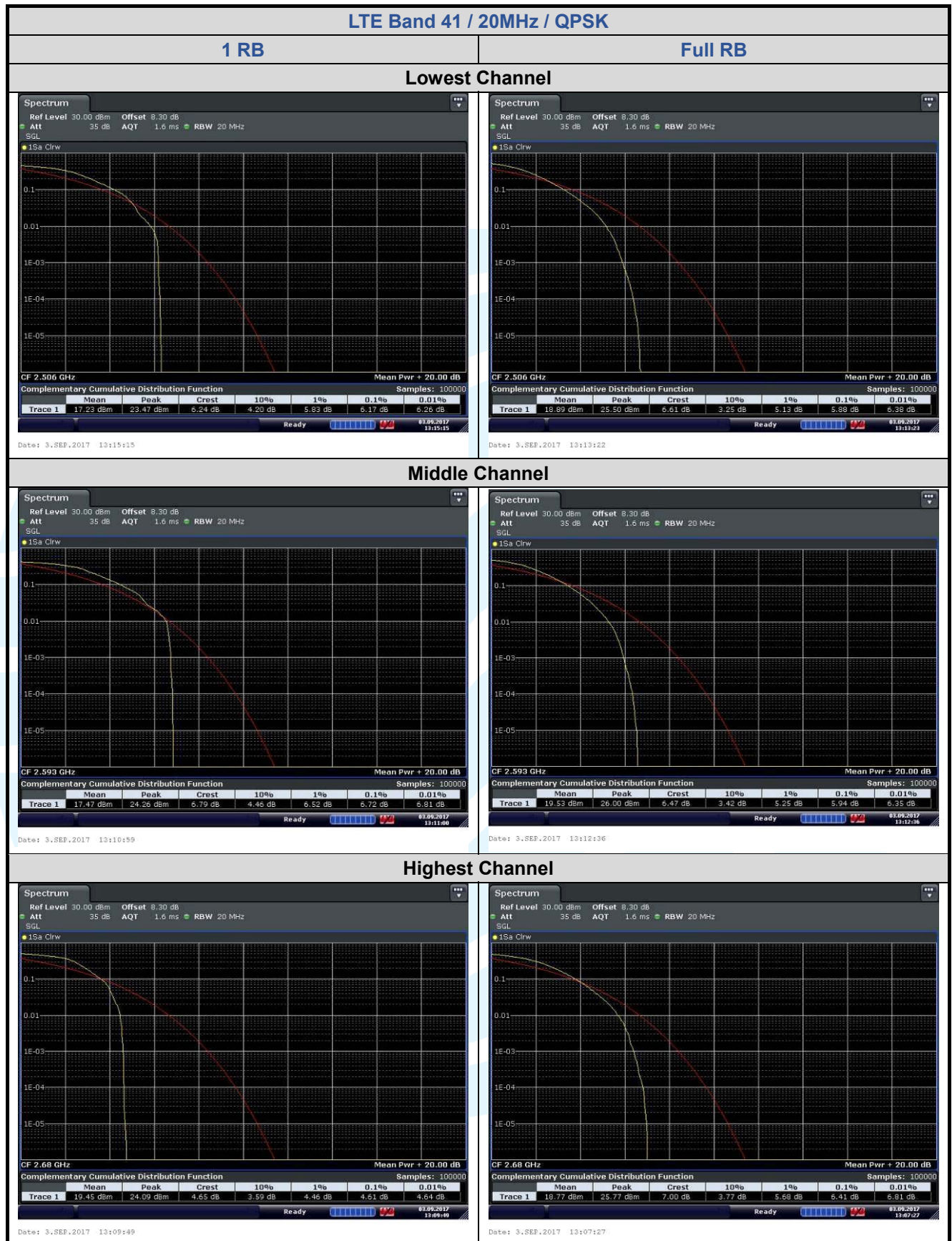


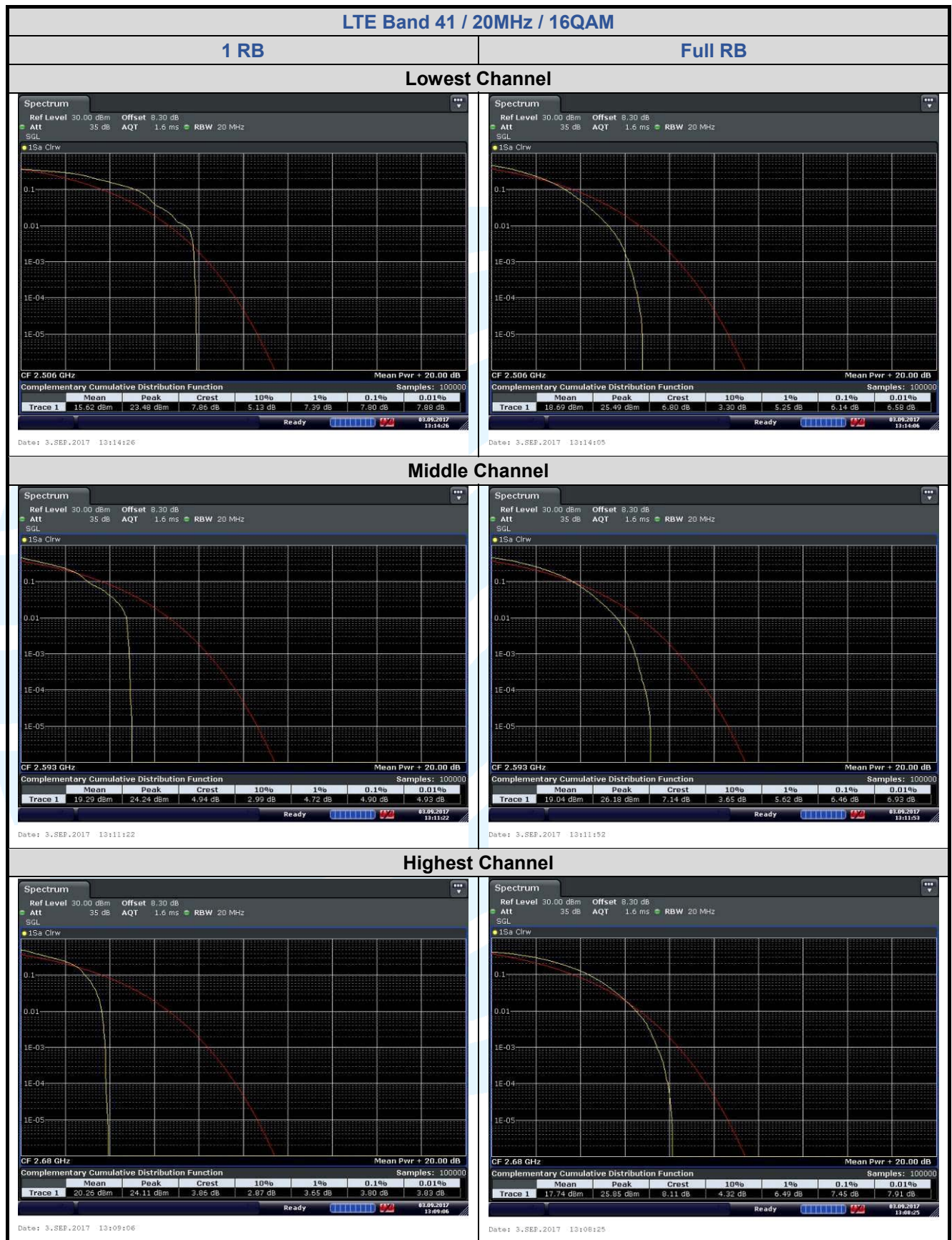


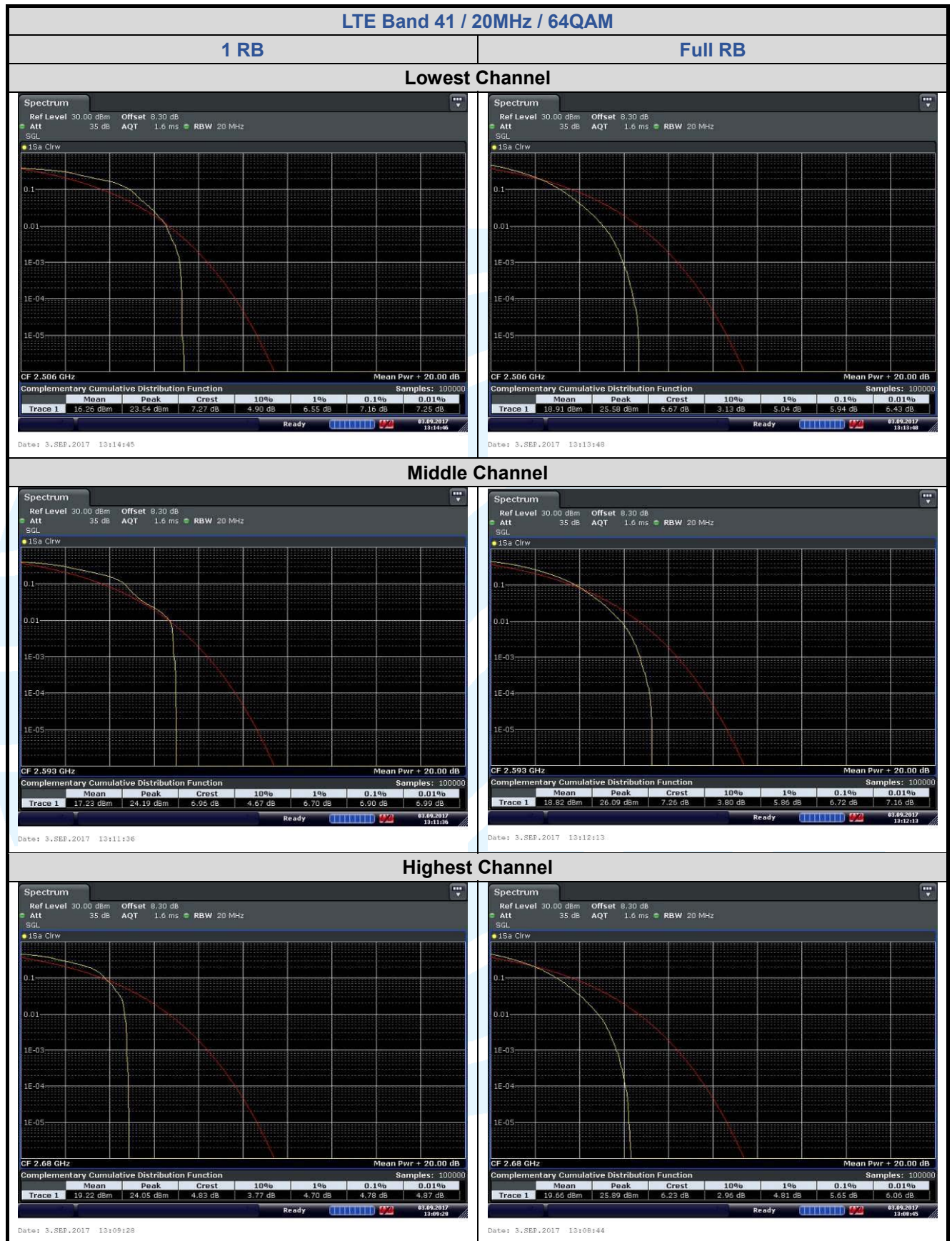


5.4.9 LTE Band 41

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	6.17	7.80	7.16	13	Pass
	Full RB	5.88	6.14	5.94	13	Pass
Middle	1 RB	6.72	4.90	6.90	13	Pass
	Full RB	5.94	6.46	6.72	13	Pass
Highest	1 RB	4.61	3.80	4.78	13	Pass
	Full RB	6.41	7.45	5.65	13	Pass







5.5 99%&26DB BANDWIDTH

Test Requirement: FCC 47 CFR Part 2.1049(h)
Test Method: ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02
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

5.5.1 WCDMA Band IV

99% & 26 dB Bandwidth				
Test Mode	Channel	Frequency (MHz)	26 dB BW (MHz)	99% BW (MHz)
WCDMA RMC 12.2Kbps	1312	1712.4	4.722	4.1413
	1412	1732.4	4.723	4.1388
	1513	1752.6	4.722	4.1478

Lowest Channel

Agilent Spectrum Analyzer - Occupied BW

Center Freq: 1.71200000 GHz
#Res BW: 100 kHz
#VBW: 300 kHz
Sweep: 1 ms

Ref Value: 30.00 dBm
Ref Offset: 8 dB
Ref: 30.00 dBm

Attenuation: [34 dB]
Scale/Div: 10.0 dB

Occupied Bandwidth	Total Power	
4.1413 MHz	33.5 dBm	

Transmit Freq Error	OBW Power	
10.776 kHz	99.00 %	

x dB Bandwidth		
4.722 MHz	x dB	-26.00 dB

Middle Channel

Agilent Spectrum Analyzer - Occupied BW

Center Freq: 1.732400000 GHz
#Res BW: 100 kHz
#VBW: 300 kHz
Sweep: 1 ms

Ref Value: 30.00 dBm
Ref Offset: 8 dB
Ref: 30.00 dBm

Attenuation: [34 dB]
Scale/Div: 10.0 dB

Occupied Bandwidth	Total Power	
4.1388 MHz	32.6 dBm	

Transmit Freq Error	OBW Power	
207.30 kHz	99.00 %	

x dB Bandwidth		
4.723 MHz	x dB	-26.00 dB

Highest Channel

Agilent Spectrum Analyzer - Occupied BW

Center Freq: 1.752600000 GHz
#Res BW: 100 kHz
#VBW: 300 kHz
Sweep: 1 ms

Ref Value: 30.00 dBm
Ref Offset: 8 dB
Ref: 30.00 dBm

Attenuation: [34 dB]
Scale/Div: 10.0 dB

Occupied Bandwidth	Total Power	
4.1478 MHz	32.6 dBm	

Transmit Freq Error	OBW Power	
3.791 kHz	99.00 %	

x dB Bandwidth		
4.722 MHz	x dB	-26.00 dB

N/A

5.5.2 LTE Band 4

LTE Band 4								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 1.4 MHz								
Lowest	6	0	1.239	1.243	1.244	1.0862	1.0944	1.0949
Middle	6	0	1.235	1.240	1.237	1.1019	1.0922	1.0923
Highest	6	0	1.248	1.228	1.226	1.0917	1.0937	1.0864
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.999	3.021	3.001	2.7034	2.6980	2.6964
Middle	15	0	2.996	3.011	3.011	2.7092	2.6968	2.6986
Highest	15	0	3.034	3.002	3.025	2.7049	2.7079	2.7053
Channel Bandwidth: 5 MHz								
Lowest	25	0	4.974	4.923	4.955	4.5237	4.4980	4.4969
Middle	25	0	4.963	4.955	4.975	4.5041	4.5158	4.5109
Highest	25	0	4.947	4.955	4.990	4.4963	4.5116	4.5268
Channel Bandwidth: 10 MHz								
Lowest	50	0	9.798	9.804	9.804	8.9585	8.9704	8.9851
Middle	50	0	9.787	9.809	9.817	8.9628	8.9803	8.9699
Highest	50	0	9.841	9.797	9.797	8.9741	9.0047	8.9986
Channel Bandwidth: 15 MHz								
Lowest	75	0	14.62	14.58	14.53	13.446	13.451	13.465
Middle	75	0	14.57	14.63	14.68	13.440	13.471	13.479
Highest	75	0	14.68	14.56	14.67	13.459	13.488	13.477
Channel Bandwidth: 20 MHz								
Lowest	100	0	19.42	19.42	19.37	17.973	17.962	17.938
Middle	100	0	19.42	19.48	19.55	17.940	17.977	17.942
Highest	100	0	19.51	19.46	19.45	17.979	17.996	18.056