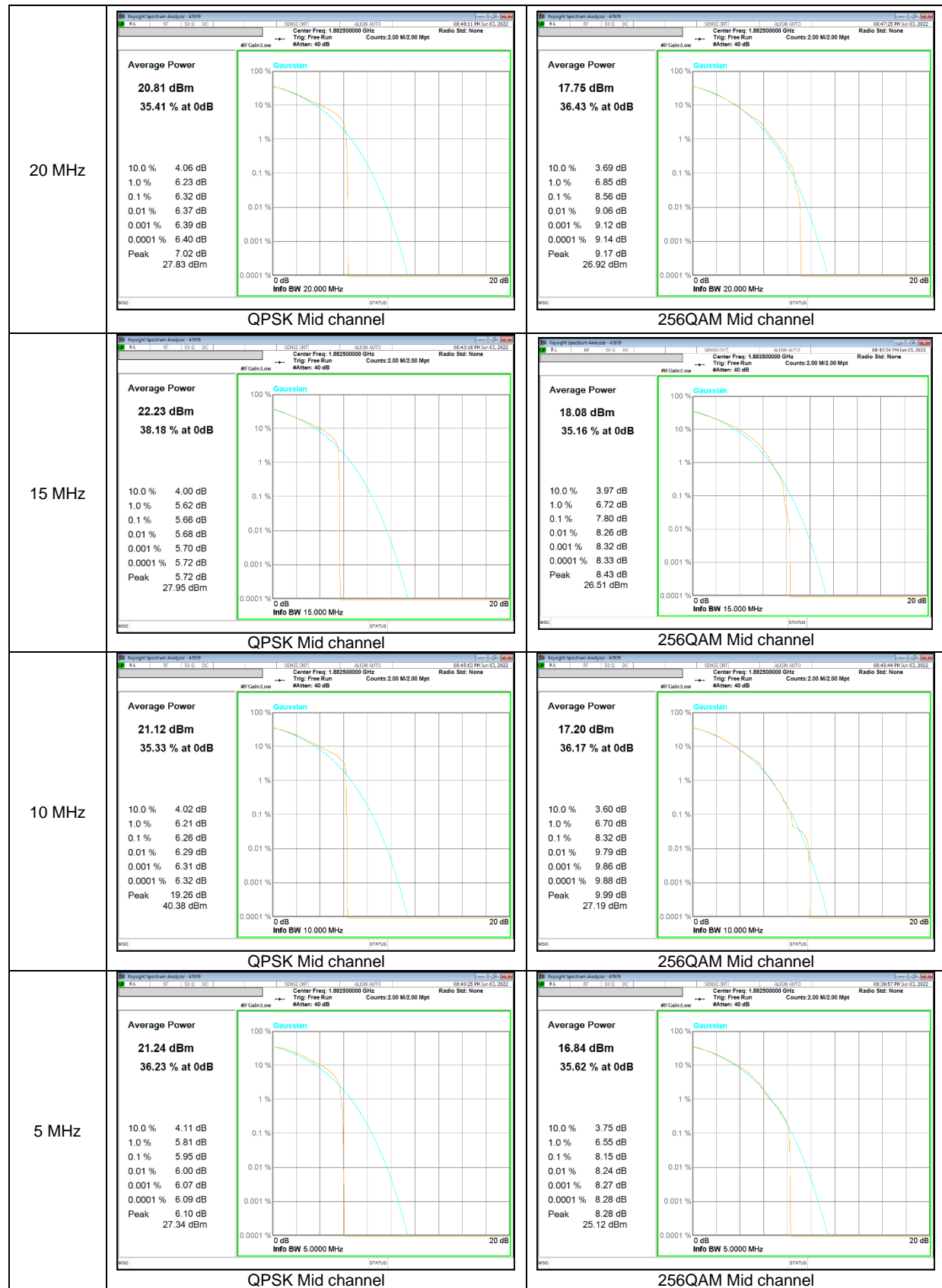
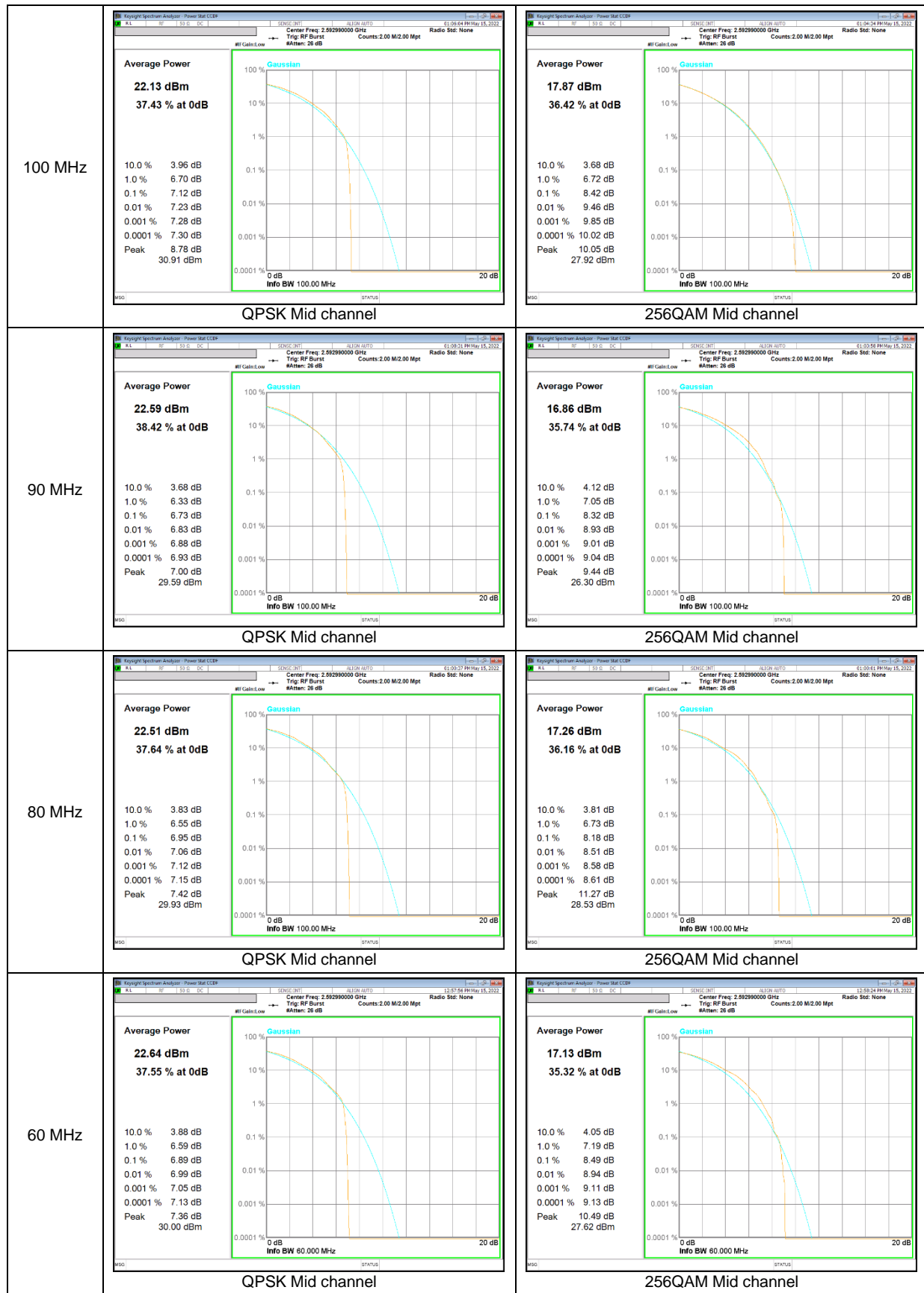
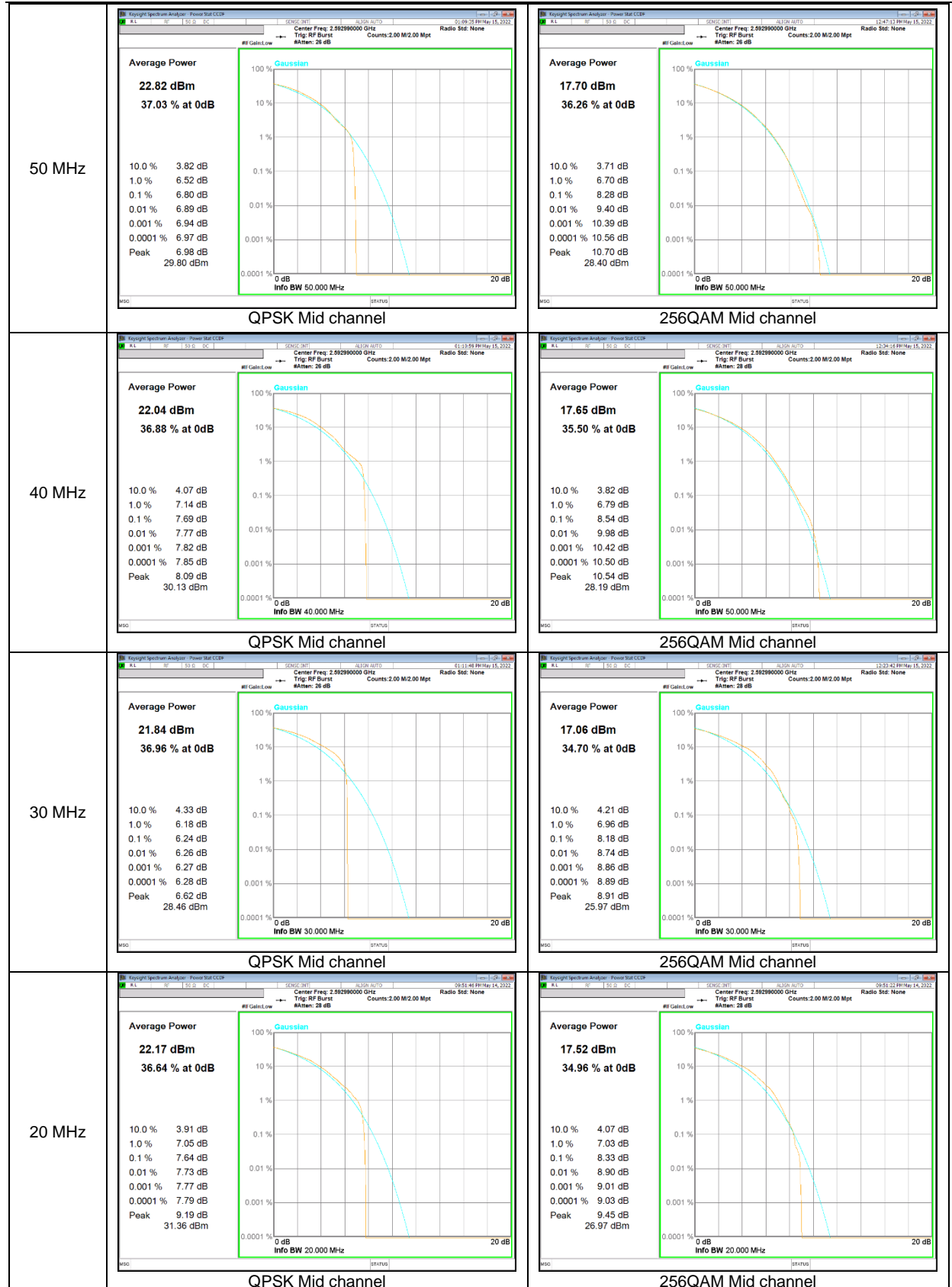


**NR Band n25 CP-OFDM**

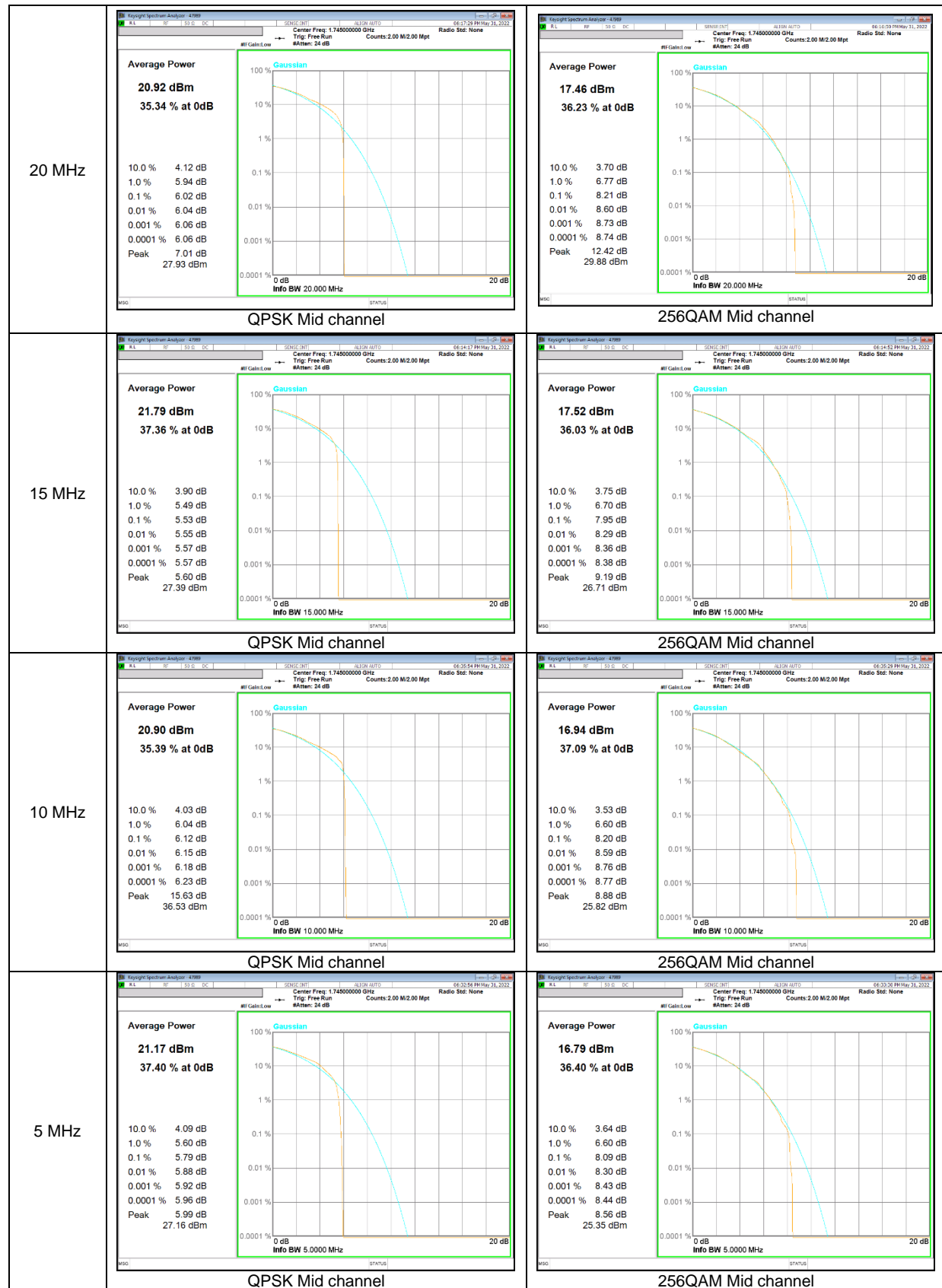


**NR Band n41 CP-OFDM**

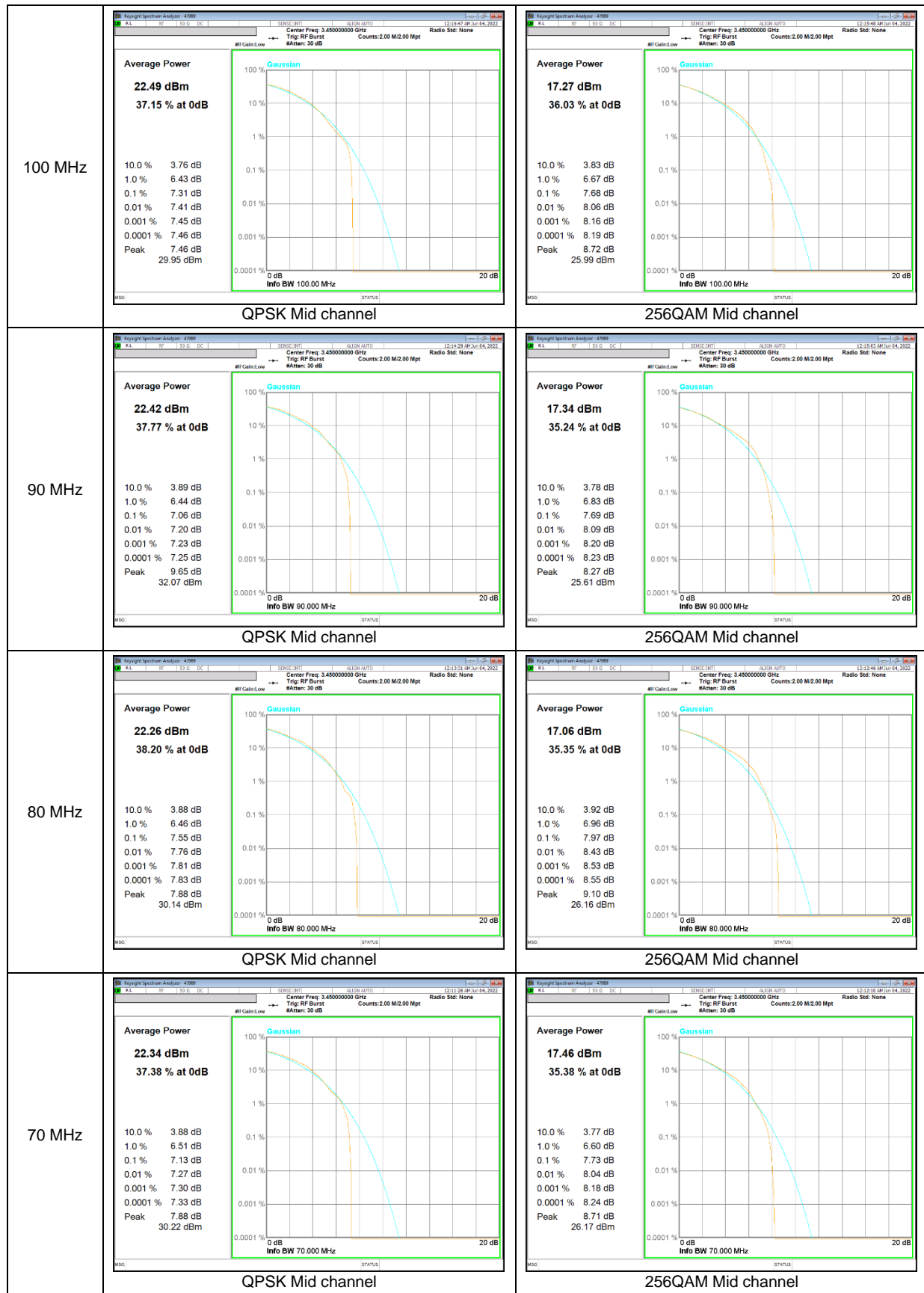


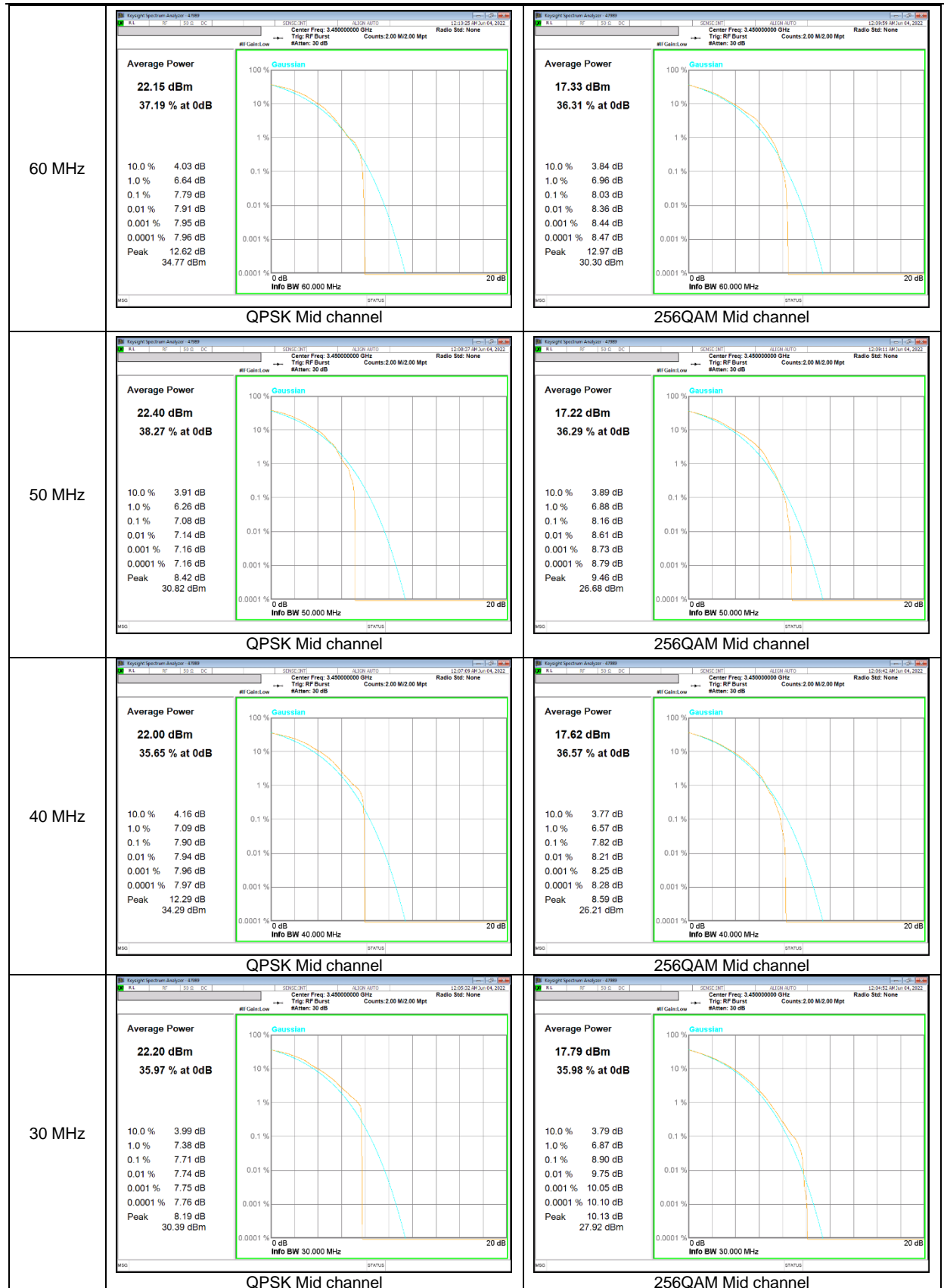


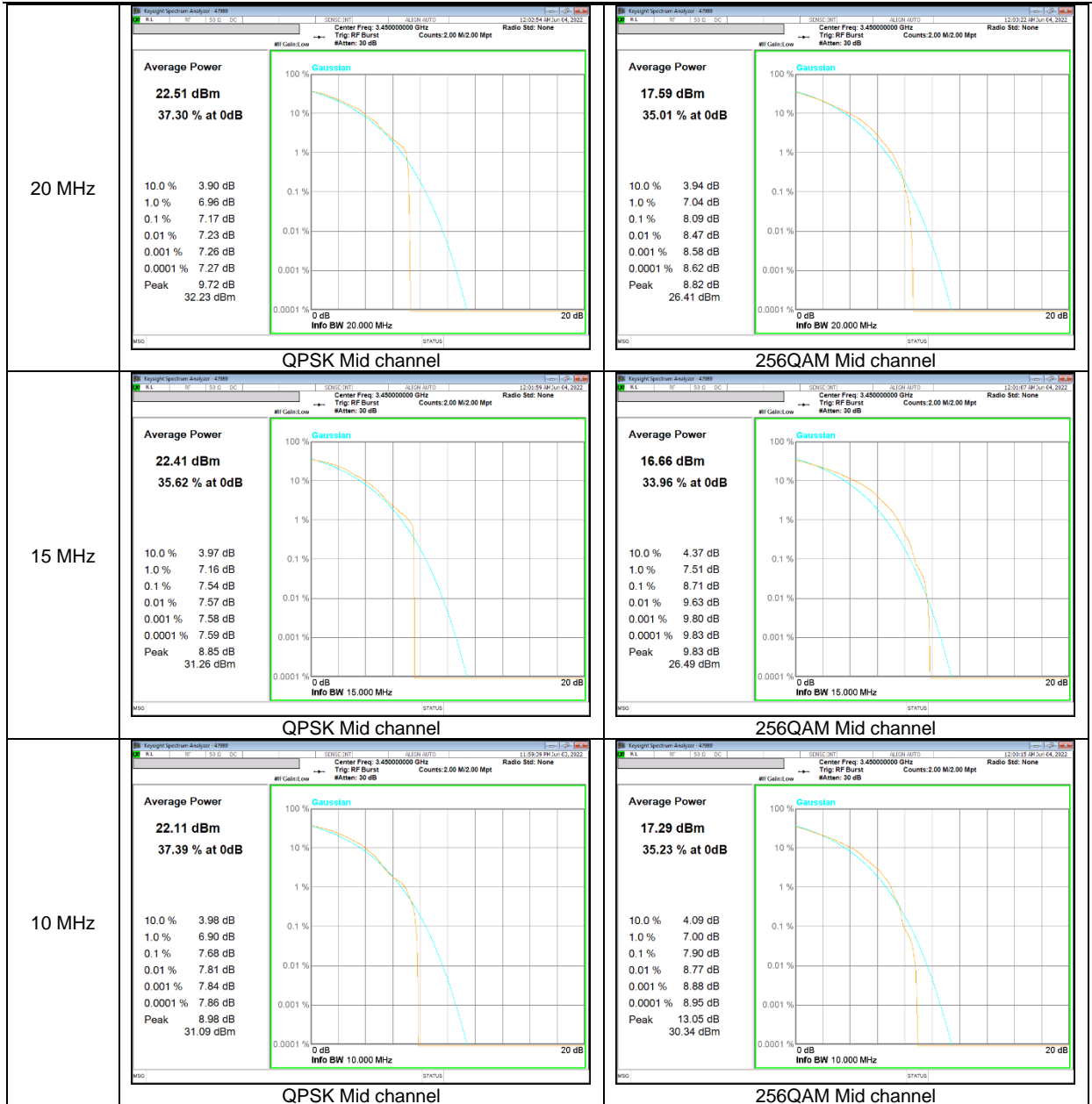
**NR Band n66 CP-OFDM**



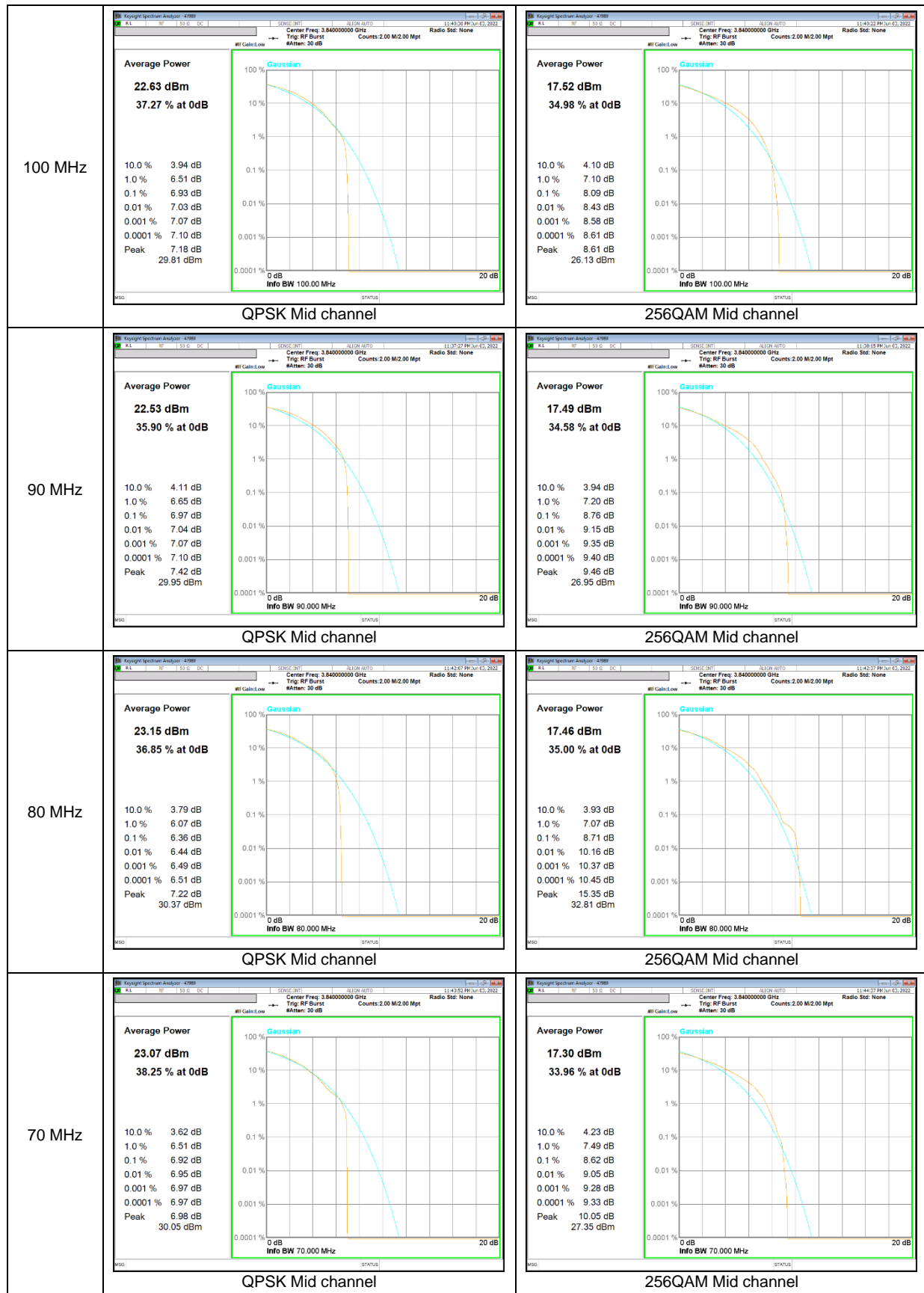
**NR Band n77 CP-OFDM (3450 ~ 3550 MHz)**



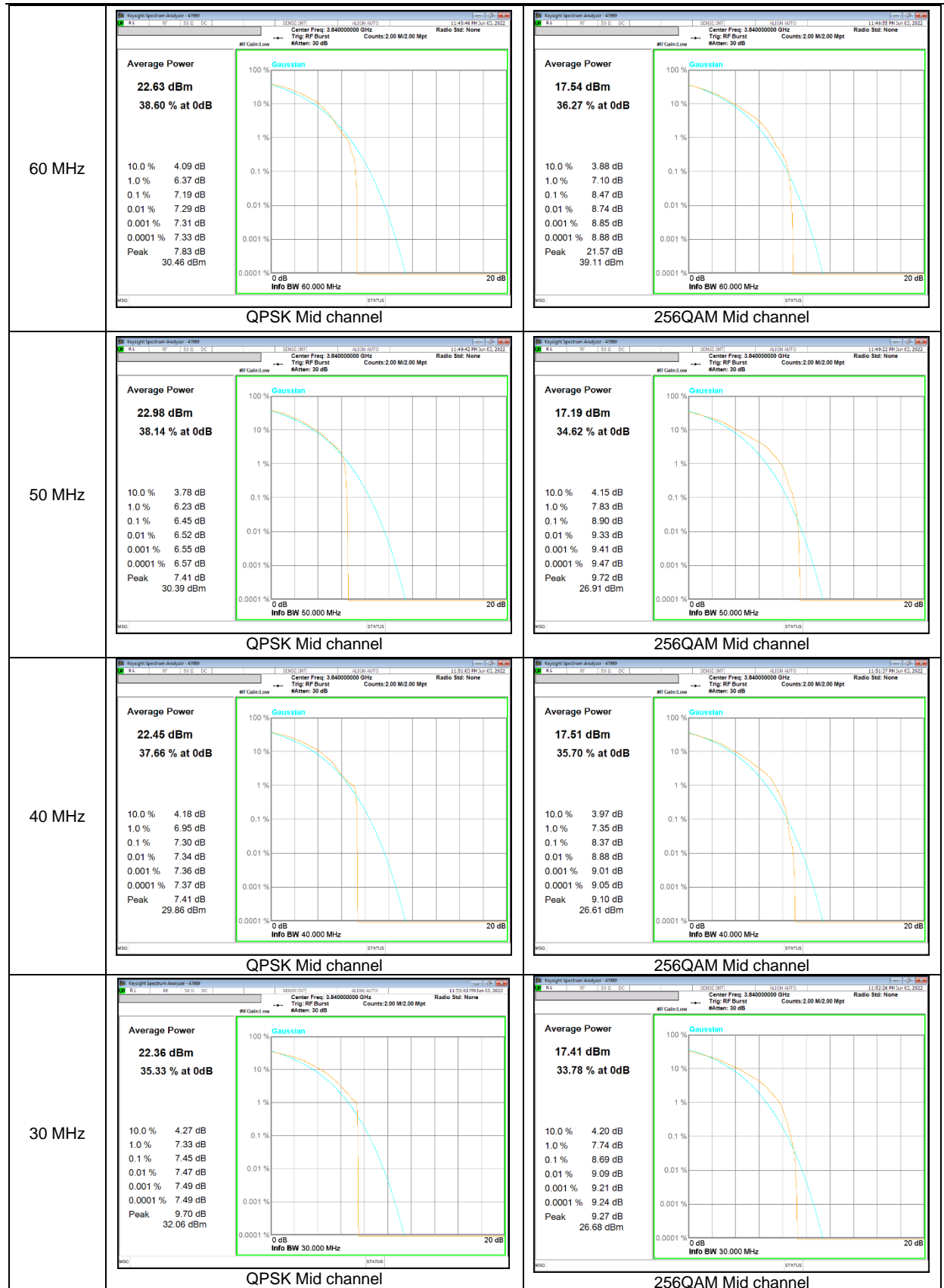


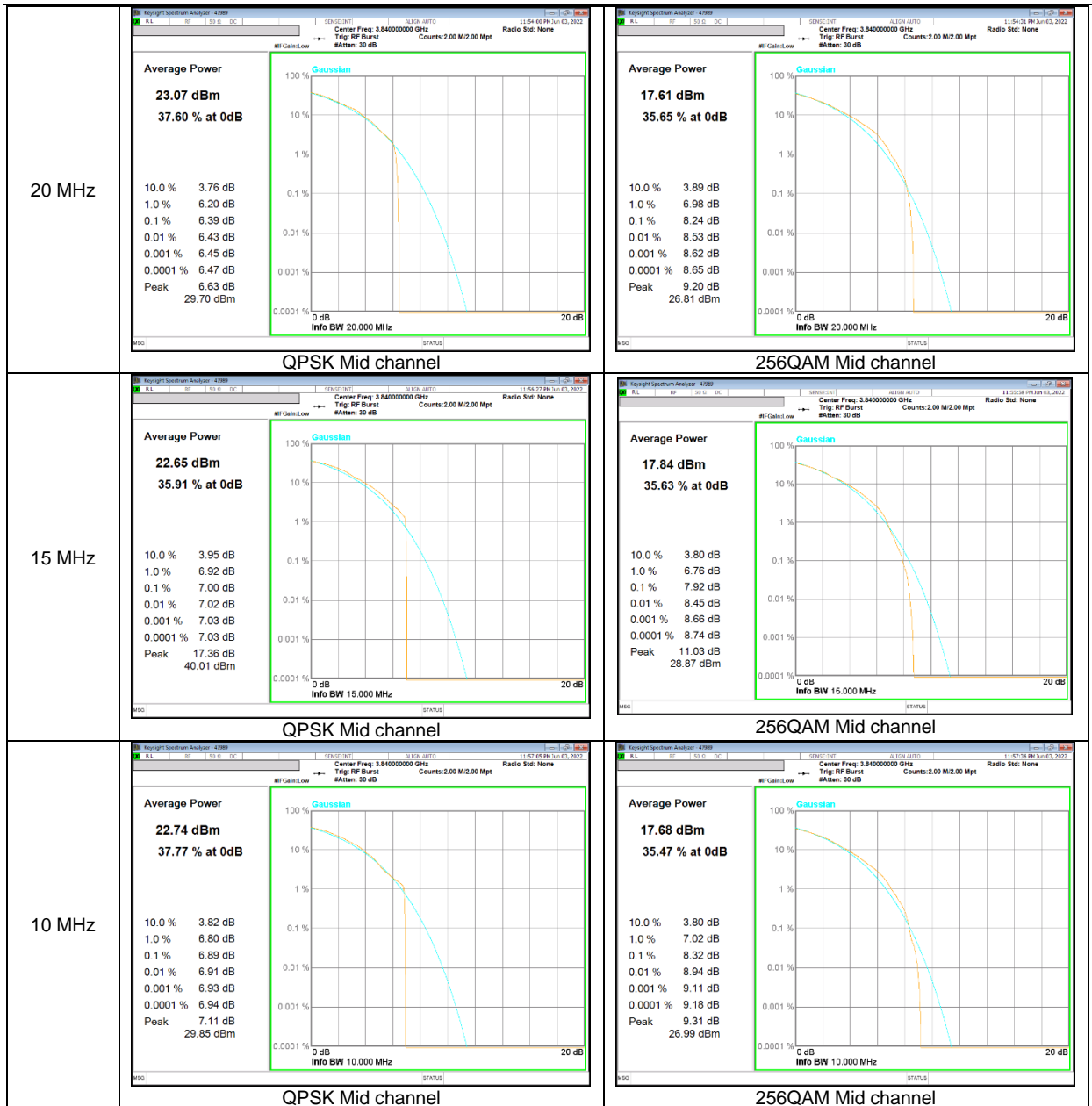


**NR Band n77 CP-OFDM (3700 ~ 3980 MHz)**









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## 9. LIMITS AND CONDUCTED RESULTS

### 9.1. OCCUPIED BANDWIDTH

#### RULE PART(S)

FCC: §2.1049

#### LIMITS

For reporting purposes only

#### 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 middle channel in each band. The -26dB bandwidth was also measured and recorded.

(KDB 971168 D01 Power Meas License Digital Systems v03r01)

#### RESULTS

See the following pages.

**- GSM**

Band	Modulation	f [MHz]	99% BW (kHz)	-26dB BW (kHz)
850	GPRS	836.6	242.14	320.70
	EGPRS		246.03	311.30
1900	GPRS	1880.0	241.90	325.20
	EGPRS		245.46	304.60

**- WCDMA**

Band	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
B5	Rel.99	836.6	4.146	4.690
	HSDPA		4.147	4.672
B4	Rel.99	1732.6	4.167	4.728
	HSDPA		4.163	4.693
B2	Rel.99	1880.0	4.161	4.764
	HSDPA		4.170	4.718

**- LTE Band 5**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B5	10M	QPSK	836.5	8.955	9.903
		16QAM		8.982	9.882
	5M	QPSK		4.497	5.078
		16QAM		4.497	5.112
	3M	QPSK		2.697	3.052
		16QAM		2.702	3.045
	1.4M	QPSK		1.088	1.347
		16QAM		1.092	1.353

**- LTE Band 12**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B12	10M	QPSK	707.5	8.936	9.836
		16QAM		8.954	9.788
	5M	QPSK		4.490	5.012
		16QAM		4.506	5.058
	3M	QPSK		2.698	3.014
		16QAM		2.701	3.027
	1.4M	QPSK		1.091	1.344
		16QAM		1.091	1.334

**- LTE Band 13**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B13	10M	QPSK	782.0	8.948	9.874
		16QAM		8.949	9.775
	5M	QPSK		4.492	5.078
		16QAM		4.492	5.109

**- LTE Band 25**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B25	20M	QPSK	1882.5	17.950	19.490
		16QAM		17.945	19.600
	15M	QPSK		13.446	14.850
		16QAM		13.441	14.760
	10M	QPSK		8.980	9.882
		16QAM		8.972	9.971
	5M	QPSK		4.509	5.172
		16QAM		4.505	5.117
	3M	QPSK		2.695	3.019
		16QAM		2.698	3.047
	1.4M	QPSK		1.089	1.323
		16QAM		1.092	1.343

**- LTE Band 26 (Part 90)**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B26	15M	QPSK	821.5	13.390	14.700
		16QAM		13.419	14.630
	10M	QPSK	819.0	8.994	9.842
		16QAM		8.966	9.830
	5M	QPSK	819.5	4.487	5.079
		16QAM		4.488	5.035
	3M	QPSK	820.5	2.691	3.006
		16QAM		2.699	3.050
	1.4M	QPSK	820.5	1.090	1.327
		16QAM		1.085	1.320

**- LTE Band 26 (Straddle)**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B26	15M	QPSK	824.0	13.384	14.560
		16QAM		13.385	14.590
	10M	QPSK		8.948	9.801
		16QAM		8.974	9.758
	5M	QPSK		4.495	5.057
		16QAM		4.489	5.068
	3M	QPSK		2.689	3.017
		16QAM		2.694	3.048
	1.4M	QPSK		1.085	1.319
		16QAM		1.089	1.300

**- LTE Band 26 (Part 22)**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B26	15M	QPSK	831.5	13.454	14.760
		16QAM		13.461	14.710
	10M	QPSK		8.966	9.862
		16QAM		8.974	9.894
	5M	QPSK		4.494	5.080
		16QAM		4.502	5.108
	3M	QPSK		2.705	3.038
		16QAM		2.702	3.024
	1.4M	QPSK		1.088	1.317
		16QAM		1.092	1.367

**- LTE Band 41(PC2)**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B41	20M	QPSK	2593.0	17.900	18.970
		16QAM		17.918	19.260
	15M	QPSK		13.410	14.610
		16QAM		13.454	14.940
	10M	QPSK		8.979	10.230
		16QAM		8.946	9.583
	5M	QPSK		4.487	5.108
		16QAM		4.484	5.094

**- LTE Band 66**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B66	20M	QPSK	1745.0	17.910	19.500
		16QAM		17.911	19.380
	15M	QPSK		13.472	14.690
		16QAM		13.438	14.690
	10M	QPSK		8.957	9.950
		16QAM		8.980	10.020
	5M	QPSK		4.501	5.060
		16QAM		4.495	5.108
	3M	QPSK		2.700	3.056
		16QAM		2.701	3.054
	1.4M	QPSK		1.089	1.309
		16QAM		1.095	1.401

**- NR Band n5 CP-OFDM**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n5	20M	QPSK	836.5	18.877	19.800
		16QAM		18.927	19.830
	15M	QPSK		14.136	15.090
		16QAM		14.113	14.970
	10M	QPSK		9.280	10.160
		16QAM		9.297	9.952
	5M	QPSK		4.474	5.114
		16QAM		4.507	5.104

**- NR Band n12 CP-OFDM**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n12	15M	QPSK	707.5	14.121	14.820
		16QAM		14.105	15.080
	10M	QPSK		9.266	10.130
		16QAM		9.271	10.030
	5M	QPSK		4.471	5.078
		16QAM		4.489	5.220

**- NR Band n25 CP-OFDM**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n25	20M	QPSK	1882.5	18.918	19.840
		16QAM		18.937	19.890
	15M	QPSK		14.094	14.820
		16QAM		14.084	14.890
	10M	QPSK		9.283	9.983
		16QAM		9.279	10.040
	5M	QPSK		4.466	5.020
		16QAM		4.467	4.949



**- NR Band n41 CP-OFDM**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n41	100M	QPSK	2593.0	97.175	100.500
		16QAM		97.350	100.400
	90M	QPSK		87.324	90.470
		16QAM		87.318	90.560
	80M	QPSK		77.353	80.360
		16QAM		77.418	80.370
	60M	QPSK		57.778	60.130
		16QAM		57.761	60.180
	50M	QPSK		47.422	49.590
		16QAM		47.355	49.460
	40M	QPSK		37.761	40.080
		16QAM		37.838	39.680
	30M	QPSK		27.791	29.410
		16QAM		27.813	29.320
	20M	QPSK		18.279	19.900
		16QAM		18.281	19.990

**- NR Band n66 CP-OFDM**

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n66	20M	QPSK	1745.0	18.933	19.820
		16QAM		18.939	20.030
	15M	QPSK		14.158	15.150
		16QAM		14.175	14.960
	10M	QPSK		9.302	10.060
		16QAM		9.291	10.120
	5M	QPSK		4.479	5.147
		16QAM		4.496	5.162

**- NR Band n77 CP-OFDM (3450 ~ 3550 MHz)**

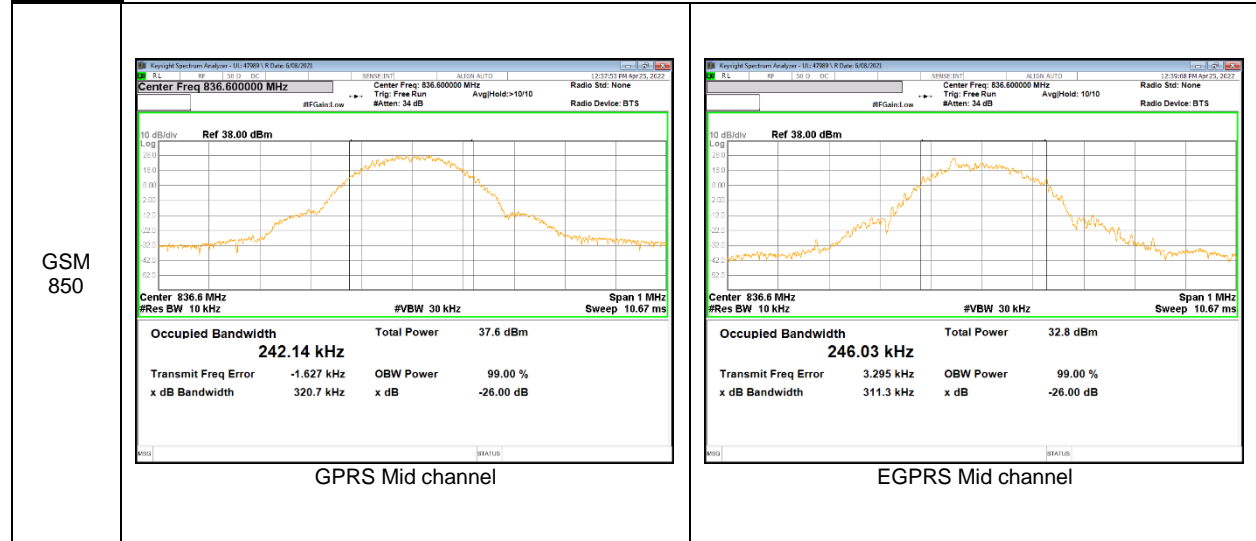
Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n77	100M	QPSK	3500.0	96.747	100.600
		16QAM		96.733	100.400
	90M	QPSK		86.893	90.310
		16QAM		86.913	90.230
	80M	QPSK		77.342	80.430
		16QAM		77.085	80.440
	70M	QPSK		64.614	67.240
		16QAM		64.519	67.270
	60M	QPSK		58.028	60.300
		16QAM		58.080	60.230
	50M	QPSK		45.804	48.020
		16QAM		45.848	47.820
	40M	QPSK		35.780	37.760
		16QAM		35.765	37.630
	30M	QPSK		26.891	28.140
		16QAM		26.877	28.330
	20M	QPSK		17.833	18.900
		16QAM		17.867	19.190
	15M	QPSK		12.824	14.120
		16QAM		12.885	14.200
10M	QPSK	8.604	9.365		
	16QAM	8.534	9.734		

**- NR Band n77 CP-OFDM (3700 ~ 3980 MHz)**

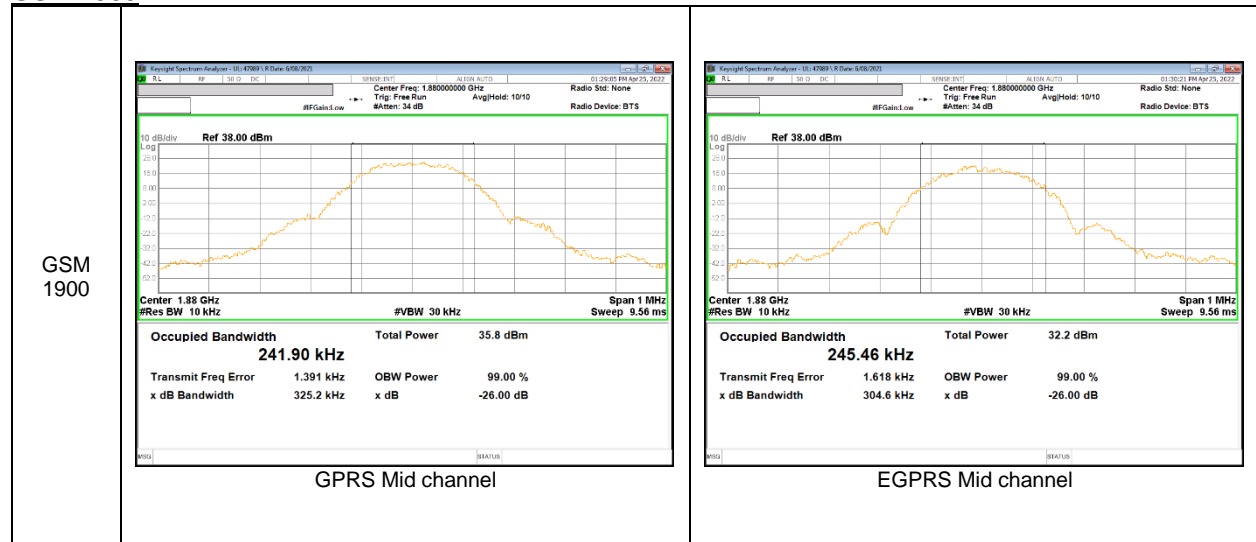
Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n77	100M	QPSK	3840.0	96.810	100.500
		16QAM		96.704	100.400
	90M	QPSK		86.951	90.310
		16QAM		87.172	90.260
	80M	QPSK		77.398	80.480
		16QAM		77.271	80.550
	70M	QPSK		64.610	67.330
		16QAM		64.498	67.260
	60M	QPSK		58.073	60.730
		16QAM		57.950	60.320
	50M	QPSK		45.907	47.640
		16QAM		45.895	47.940
	40M	QPSK		35.855	37.390
		16QAM		35.790	37.540
	30M	QPSK		26.913	28.440
		16QAM		26.912	28.500
	20M	QPSK		17.826	19.110
		16QAM		17.847	19.110
	15M	QPSK		12.836	13.910
		16QAM		12.855	13.870
10M	QPSK	8.569	9.633		
	16QAM	8.579	9.335		

**9.1.1. OCCUPIED BANDWIDTH RESULTS**

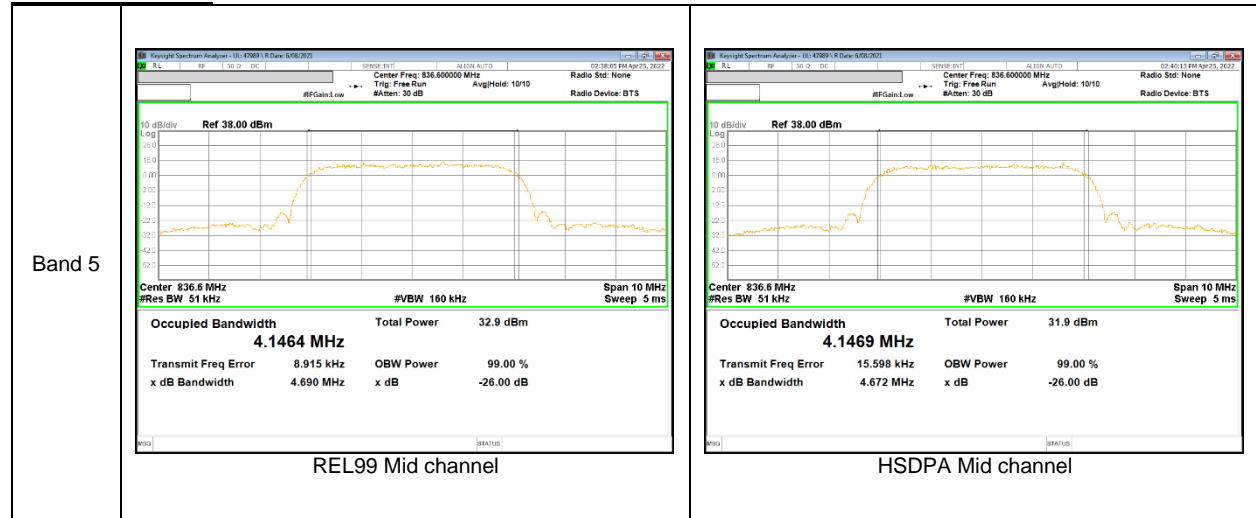
**GSM 850**



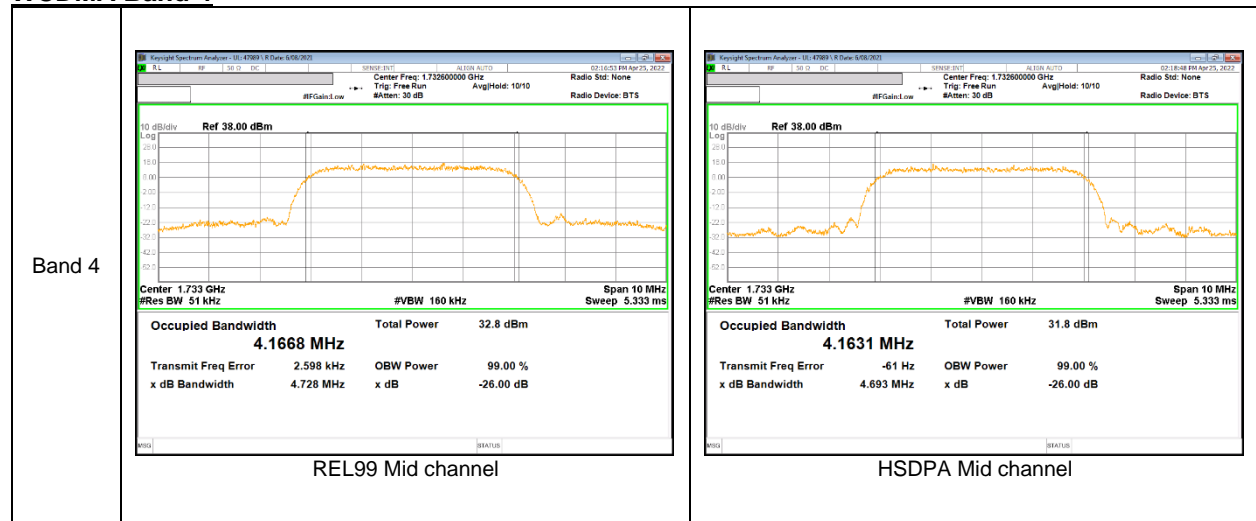
**GSM 1900**



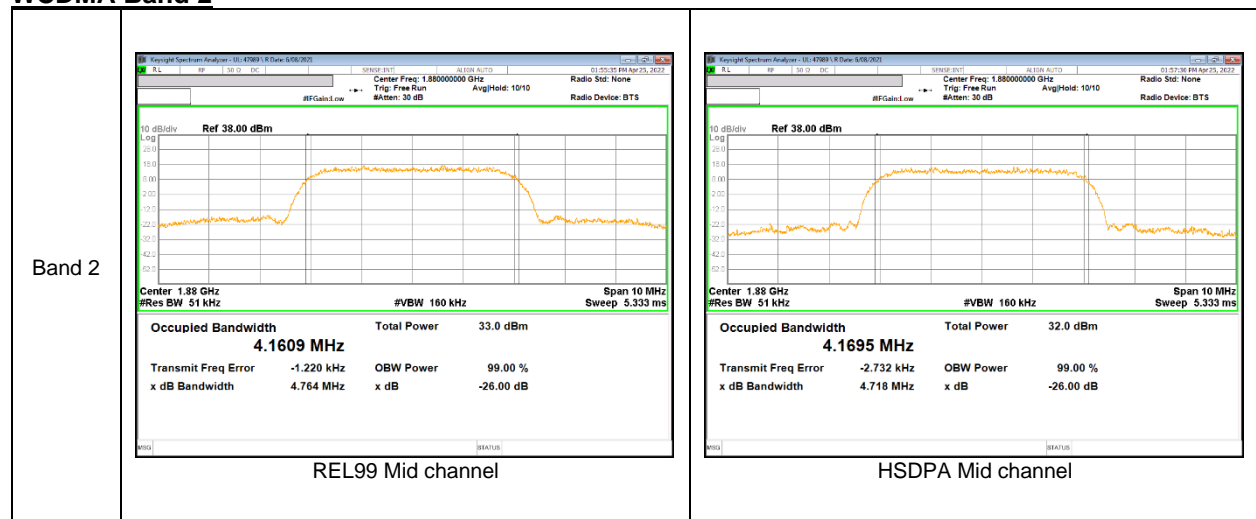
**WCDMA Band 5**



**WCDMA Band 4**



**WCDMA Band 2**



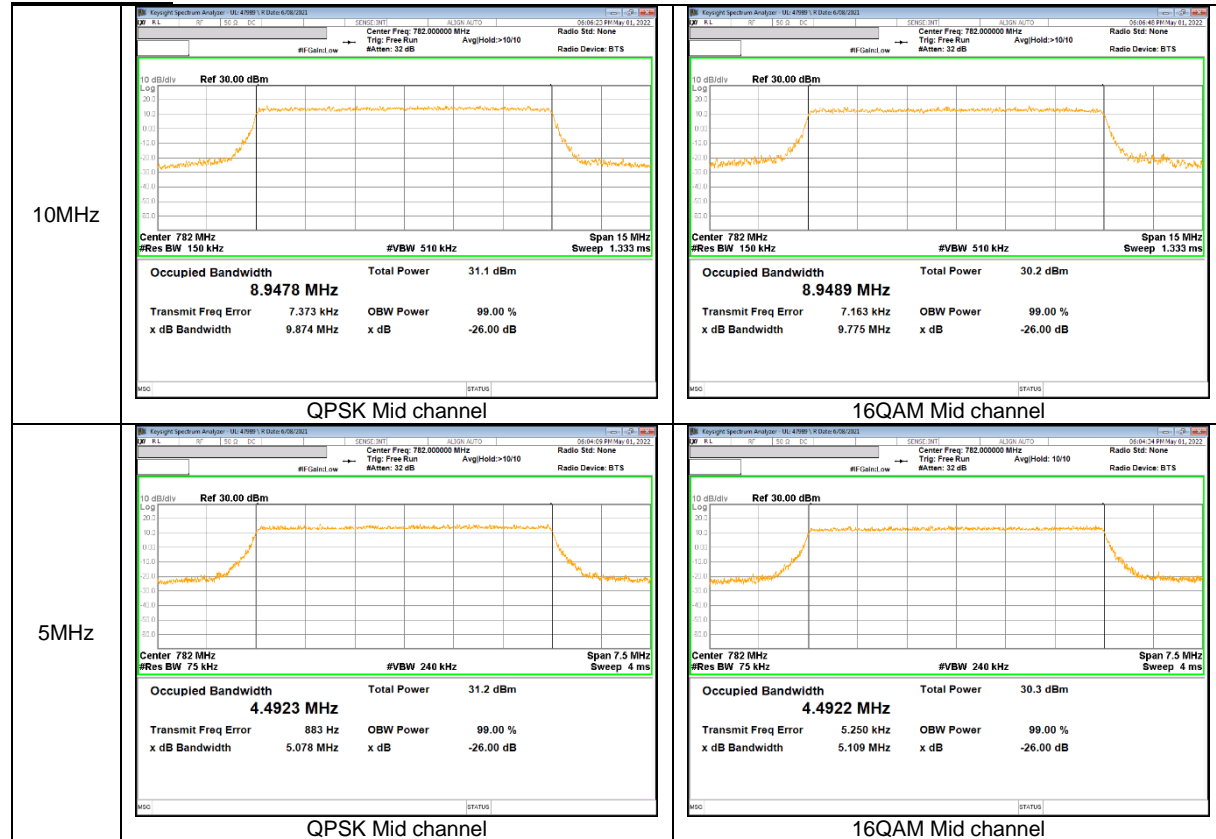
**LTE Band 5**



**LTE Band 12**



**LTE Band 13**





**LTE Band 25**



