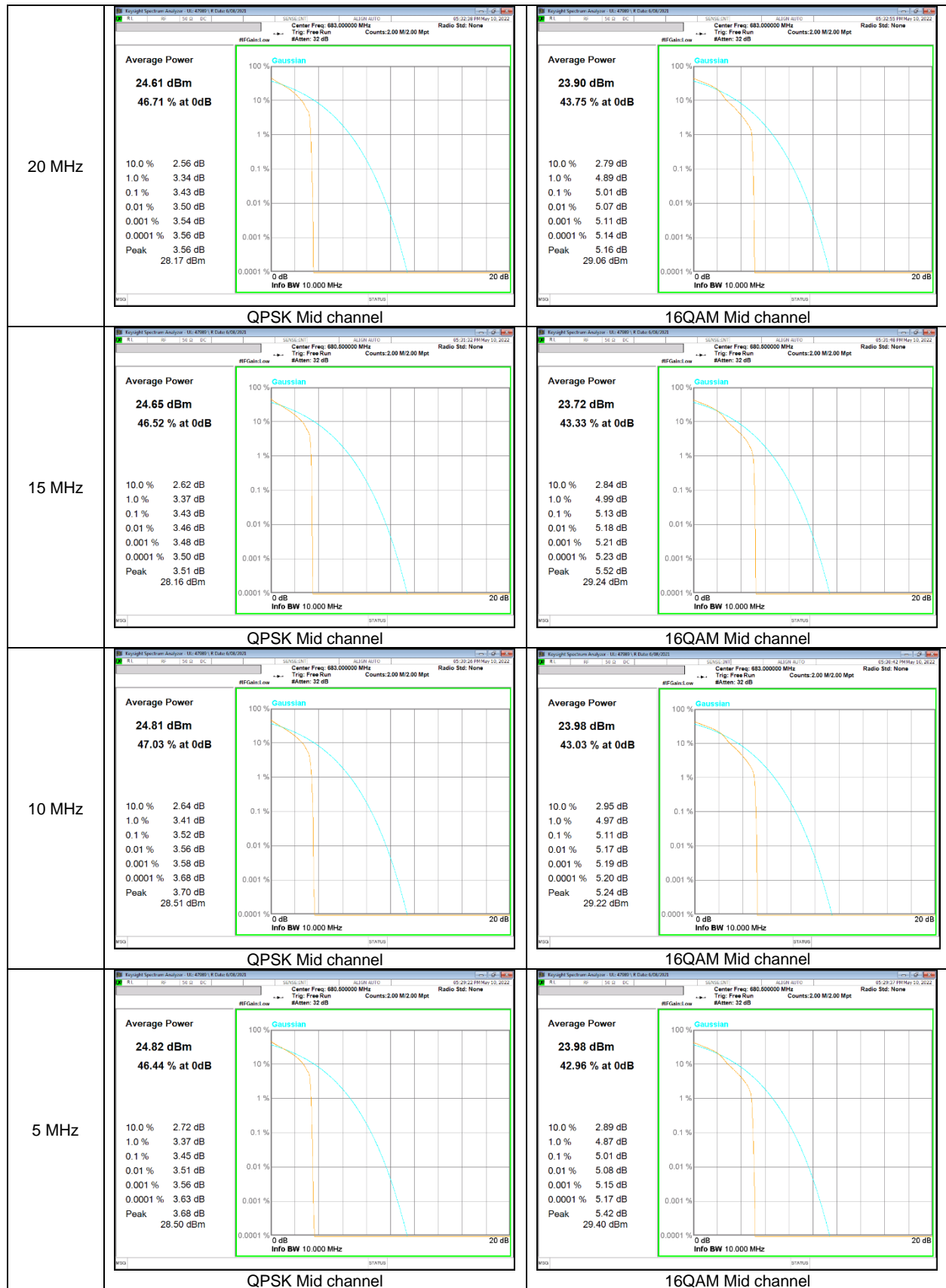
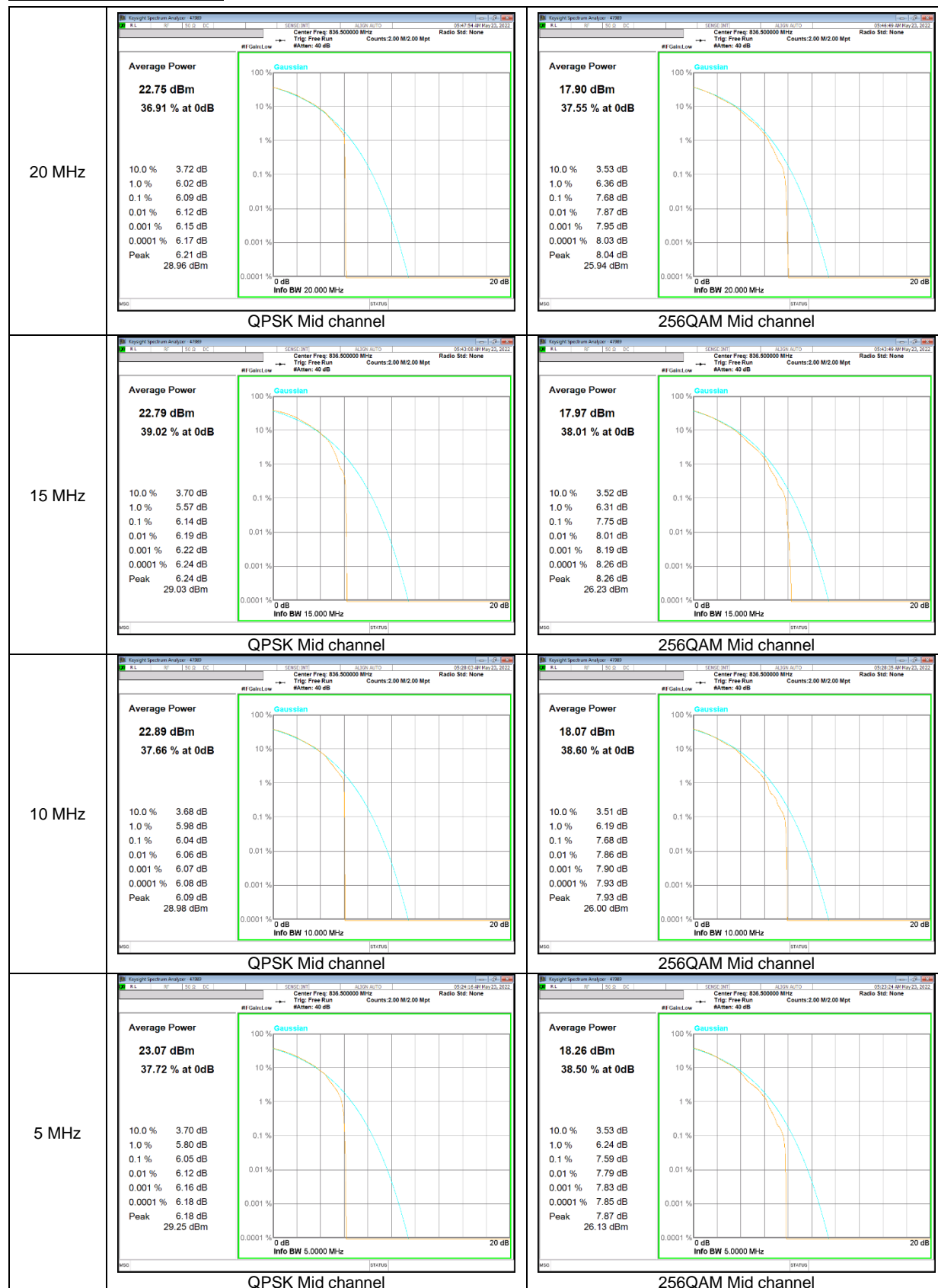


LTE Band 71

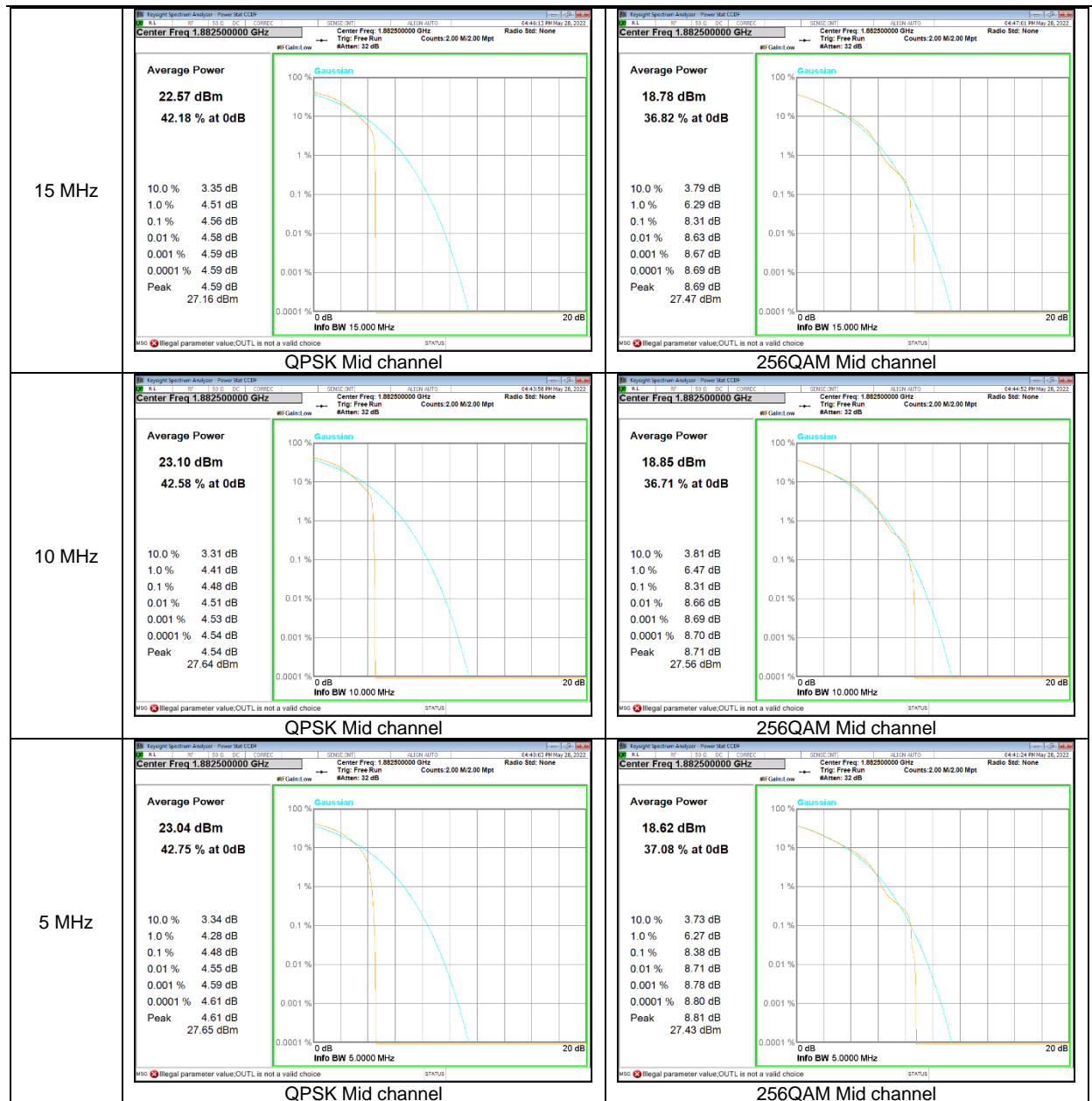


NR Band n5 CP-OFDM

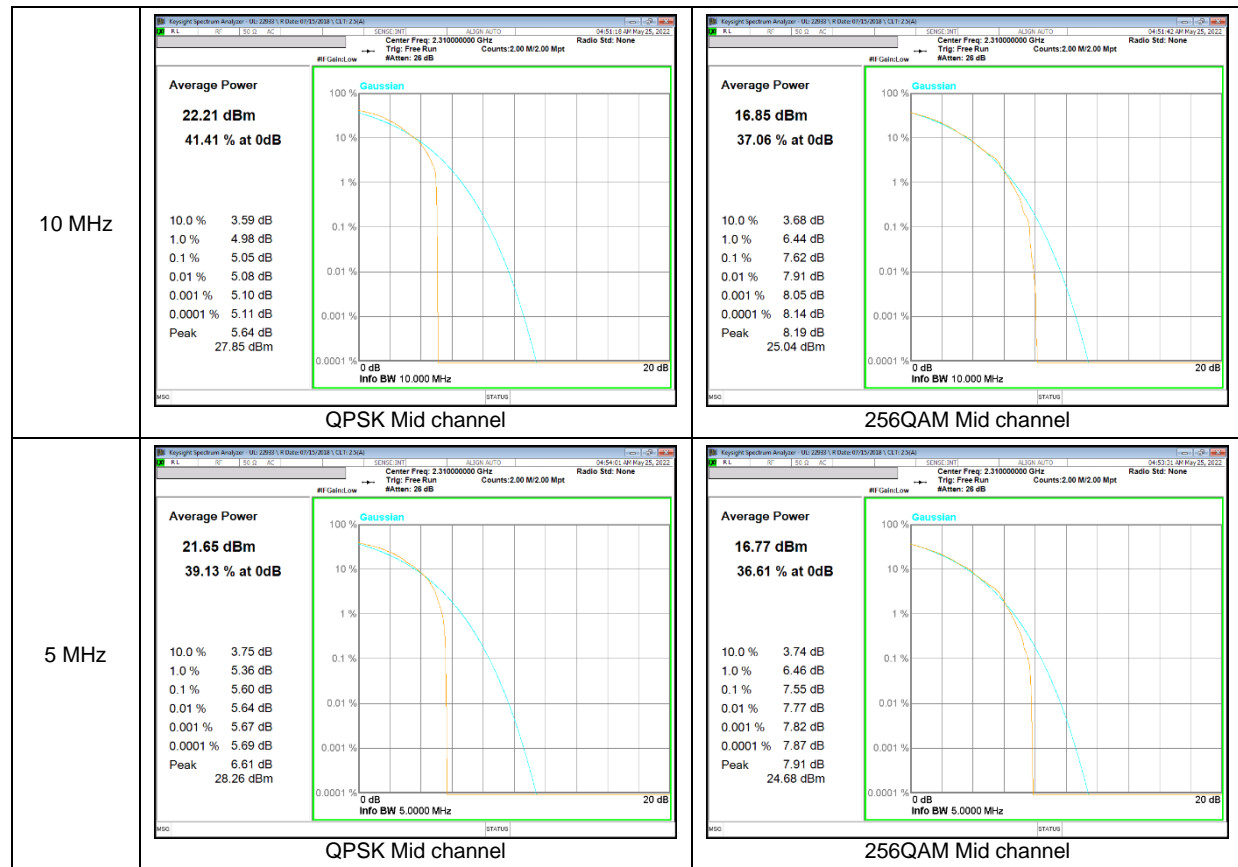


NR Band n25 CP-OFDM

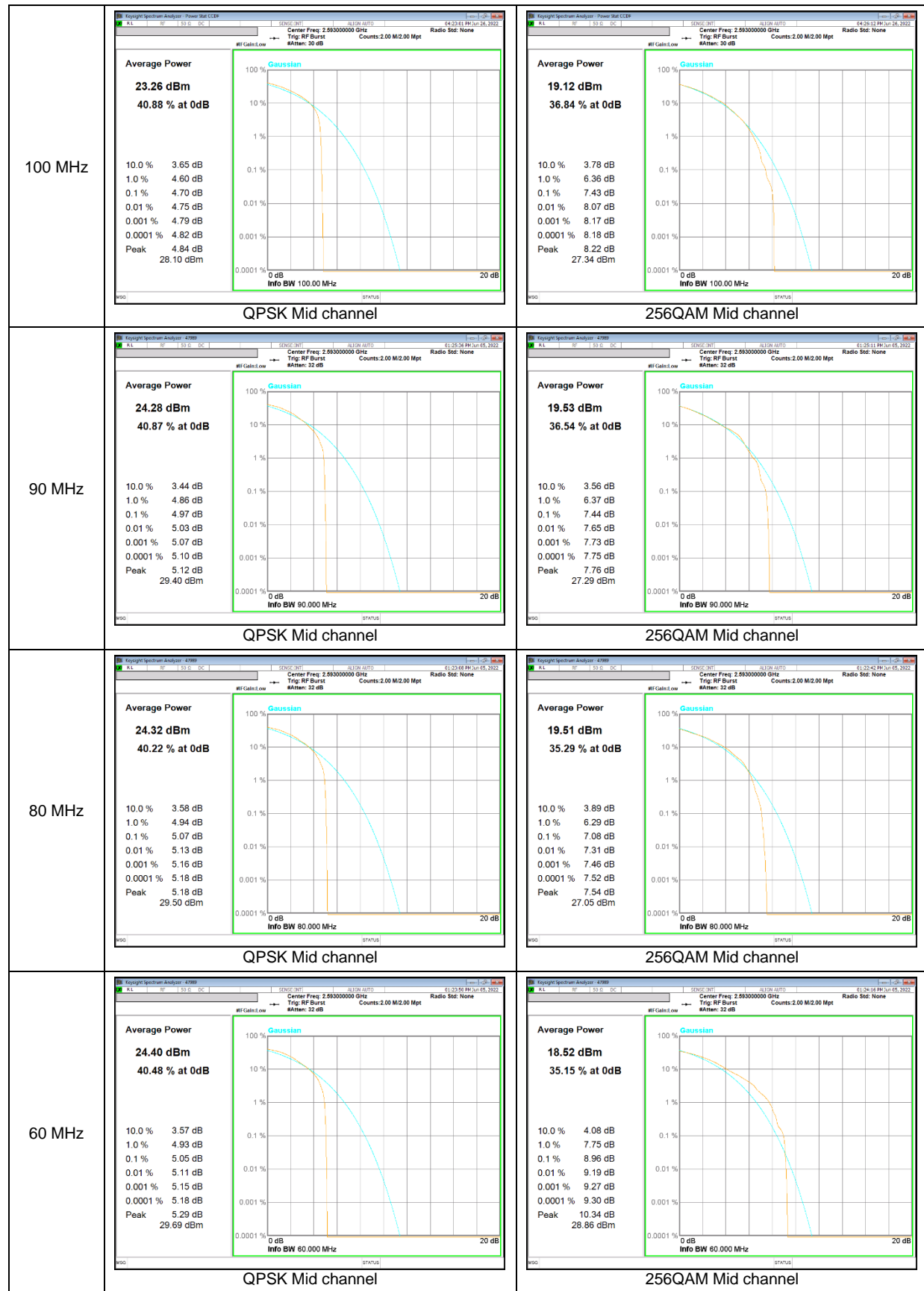


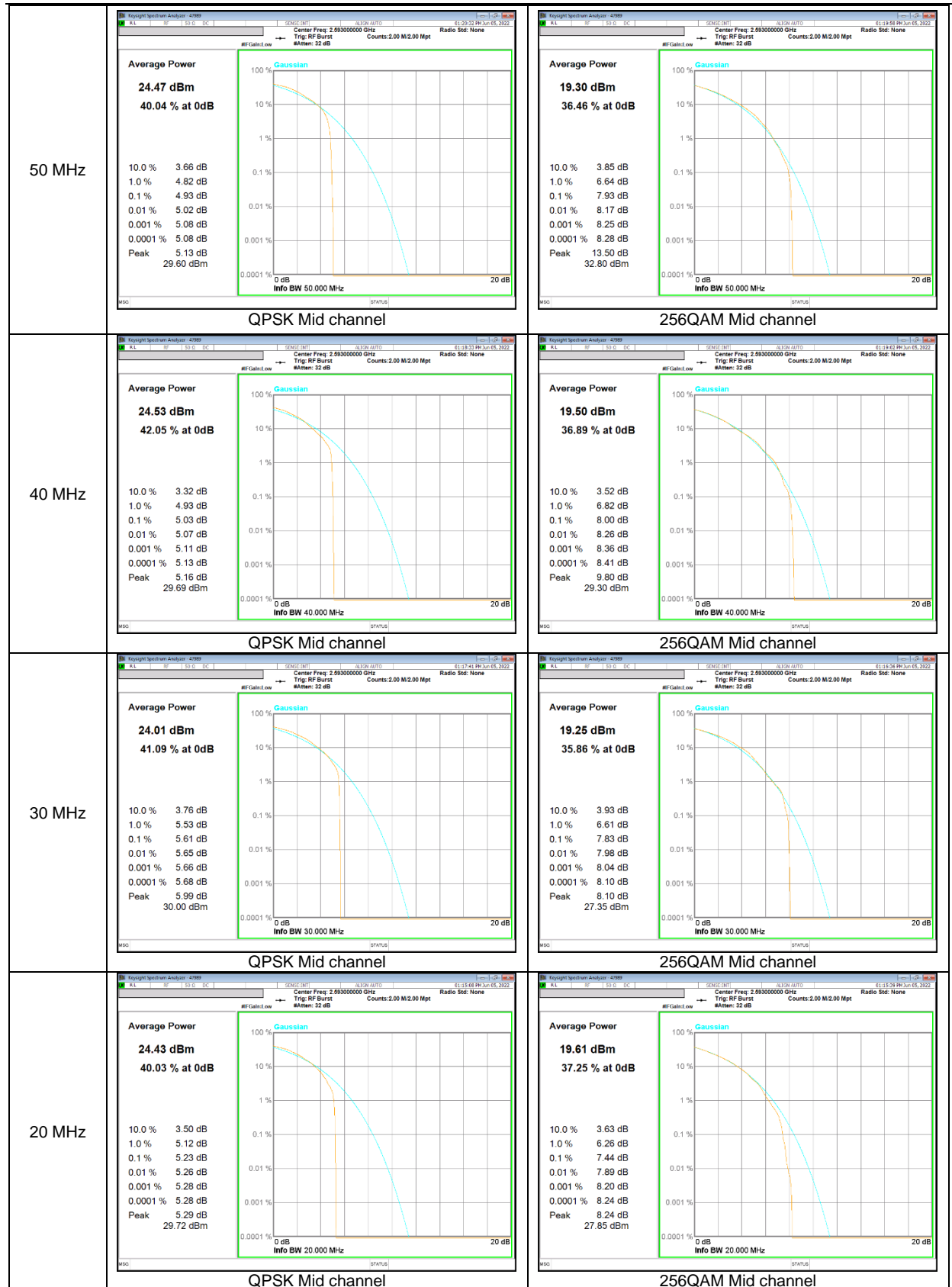


NR Band n30 CP-OFDM



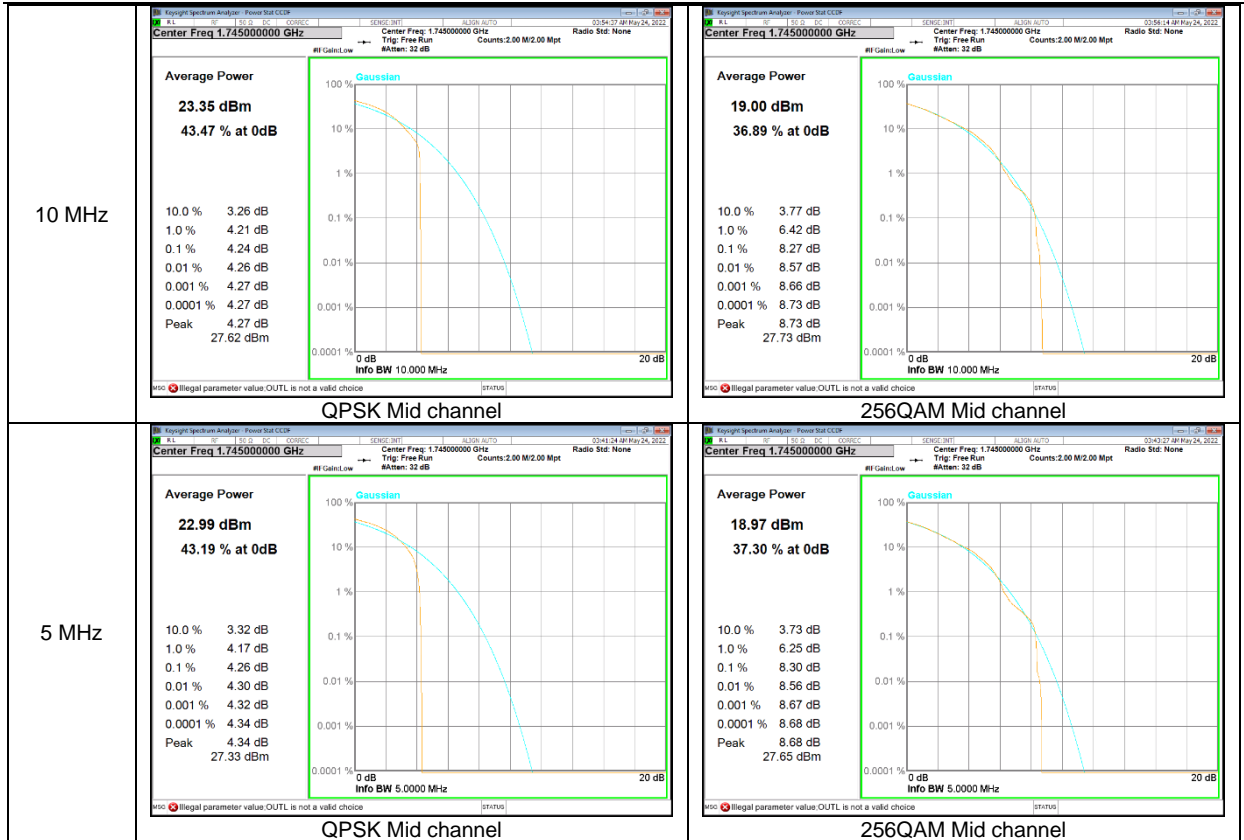
NR Band n41(PC2) CP-OFDM



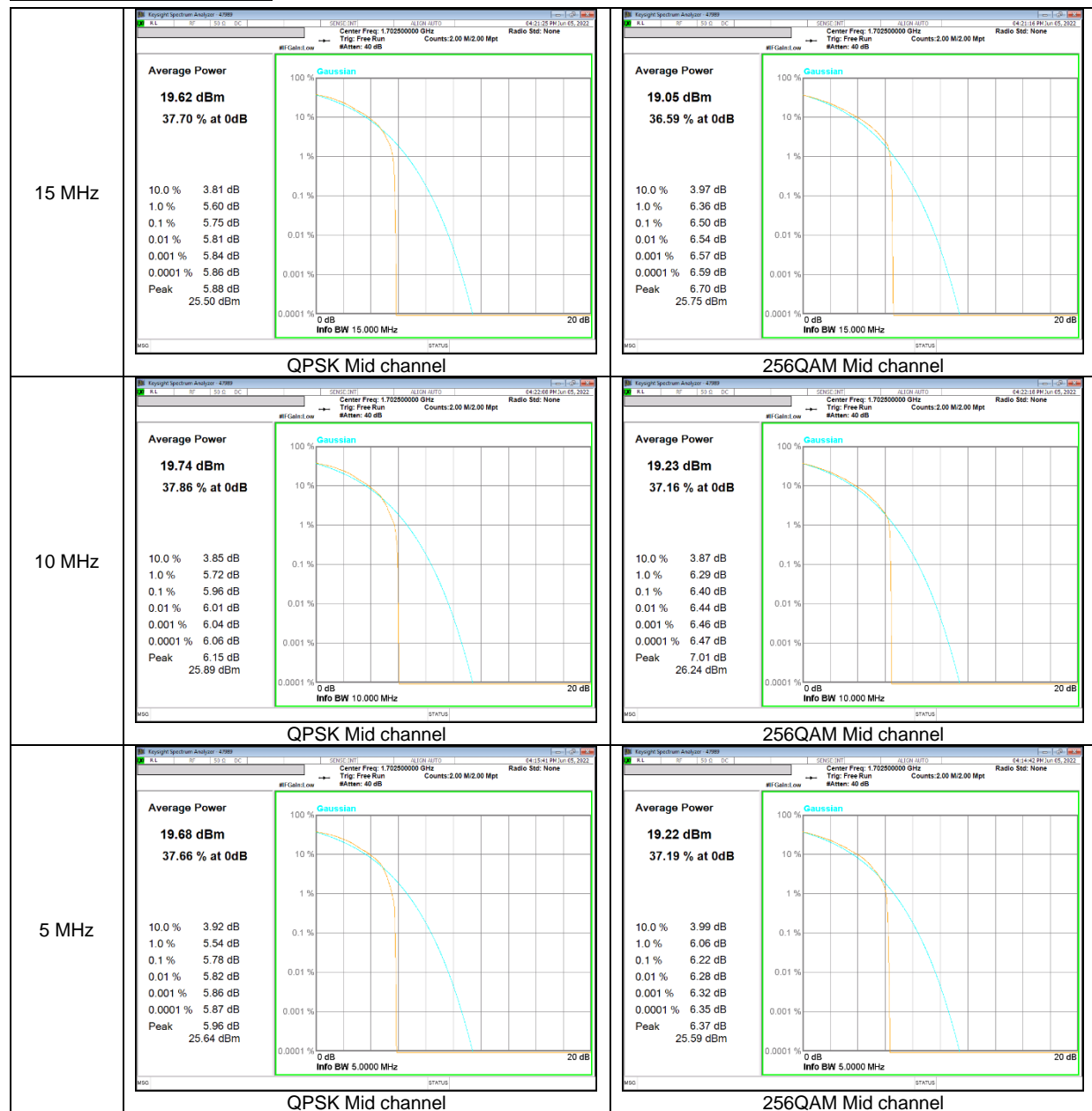


NR Band n66 CP-OFDM





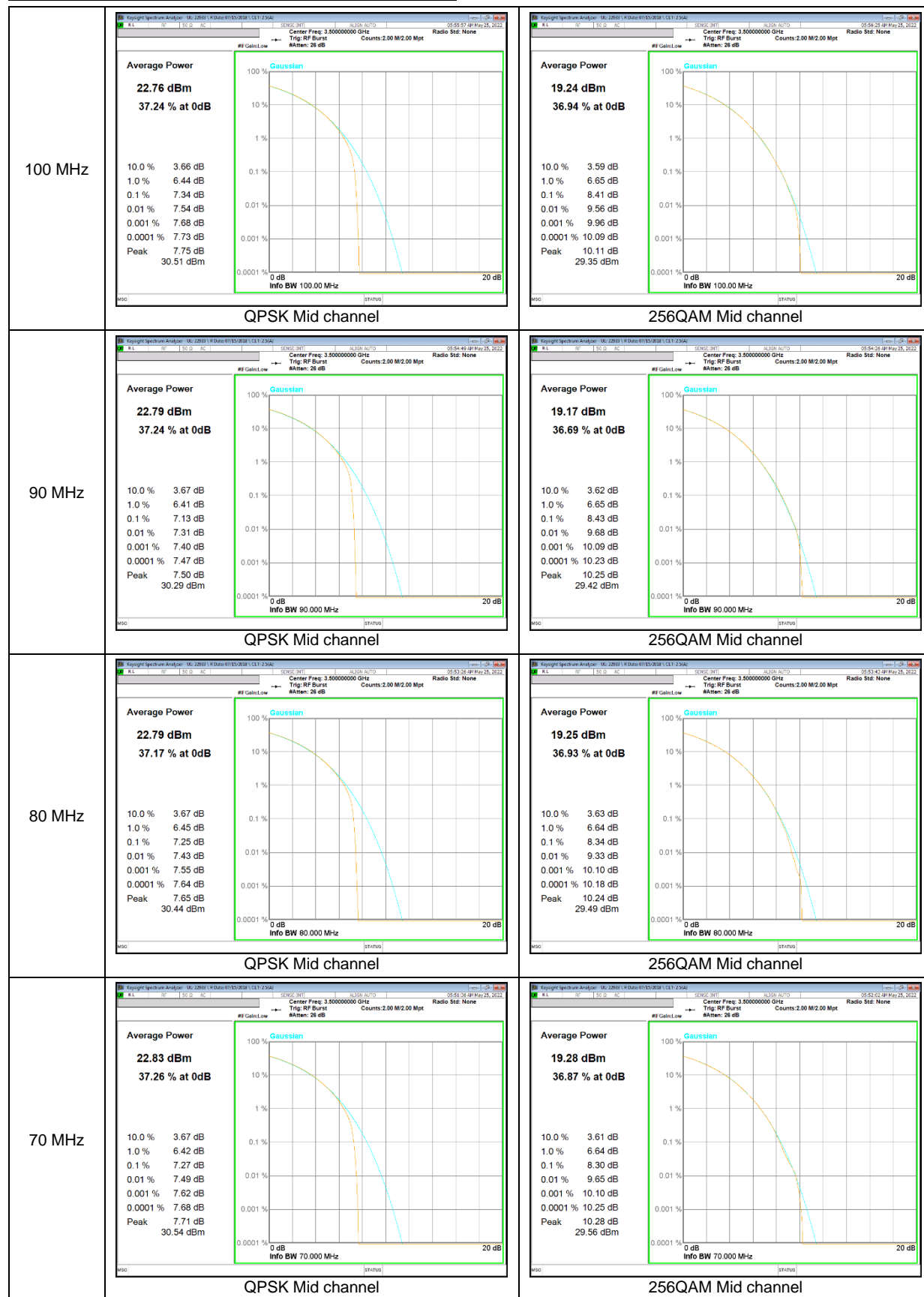
NR Band n70 CP-OFDM

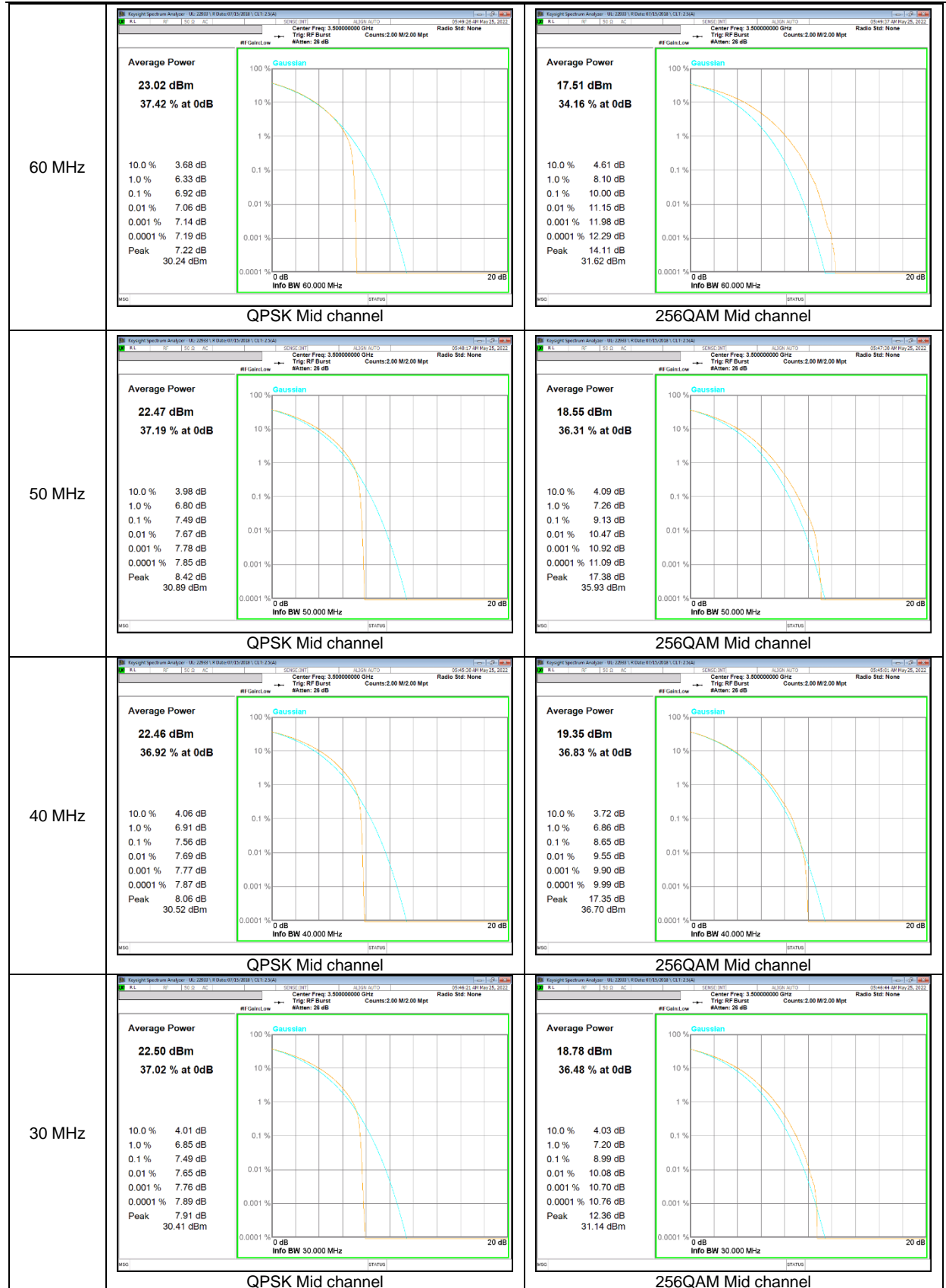


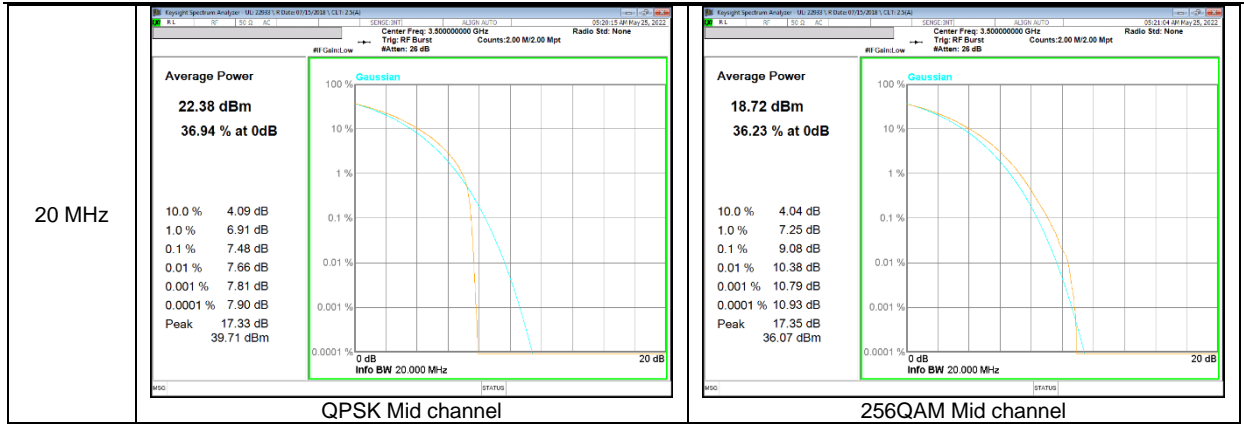
NR Band n71 CP-OFDM



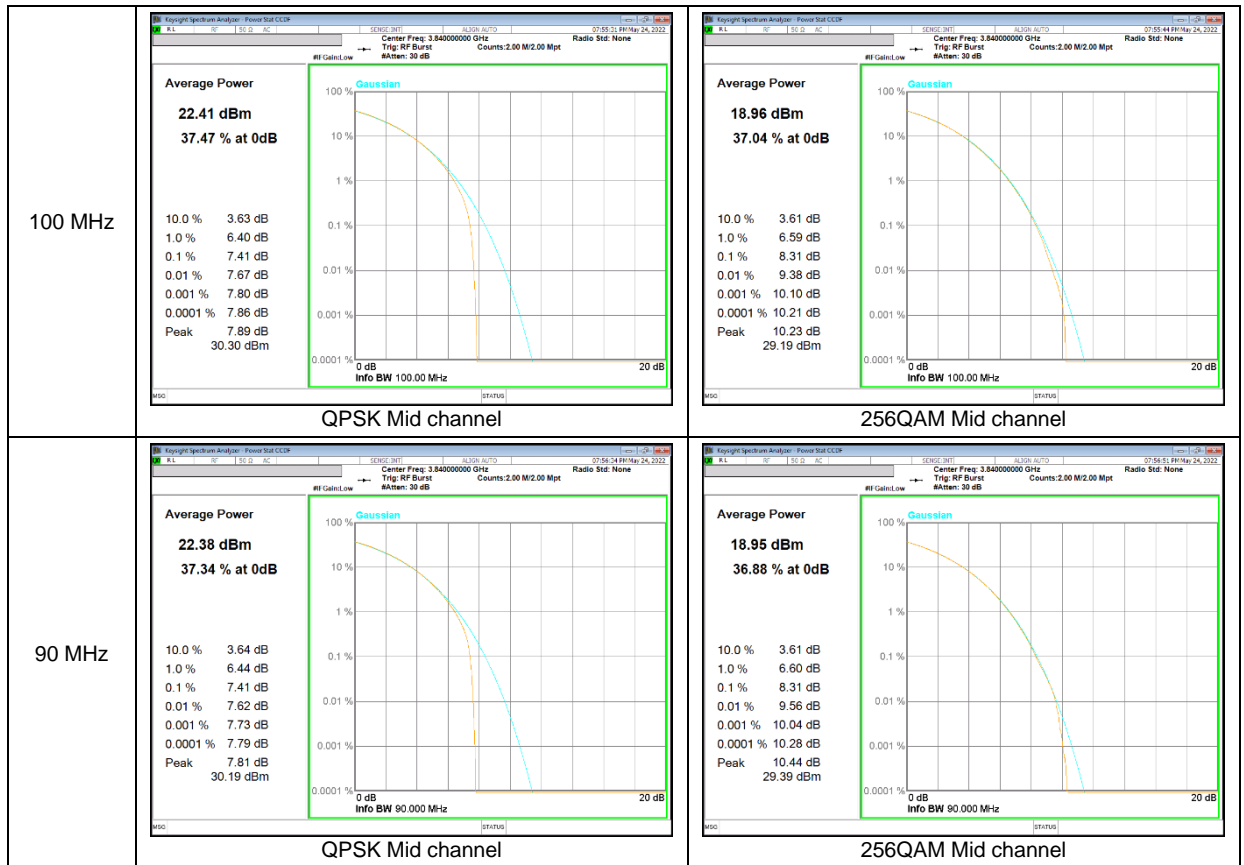
NR Band n77(PC2) CP-OFDM (3450 - 3550 MHz)

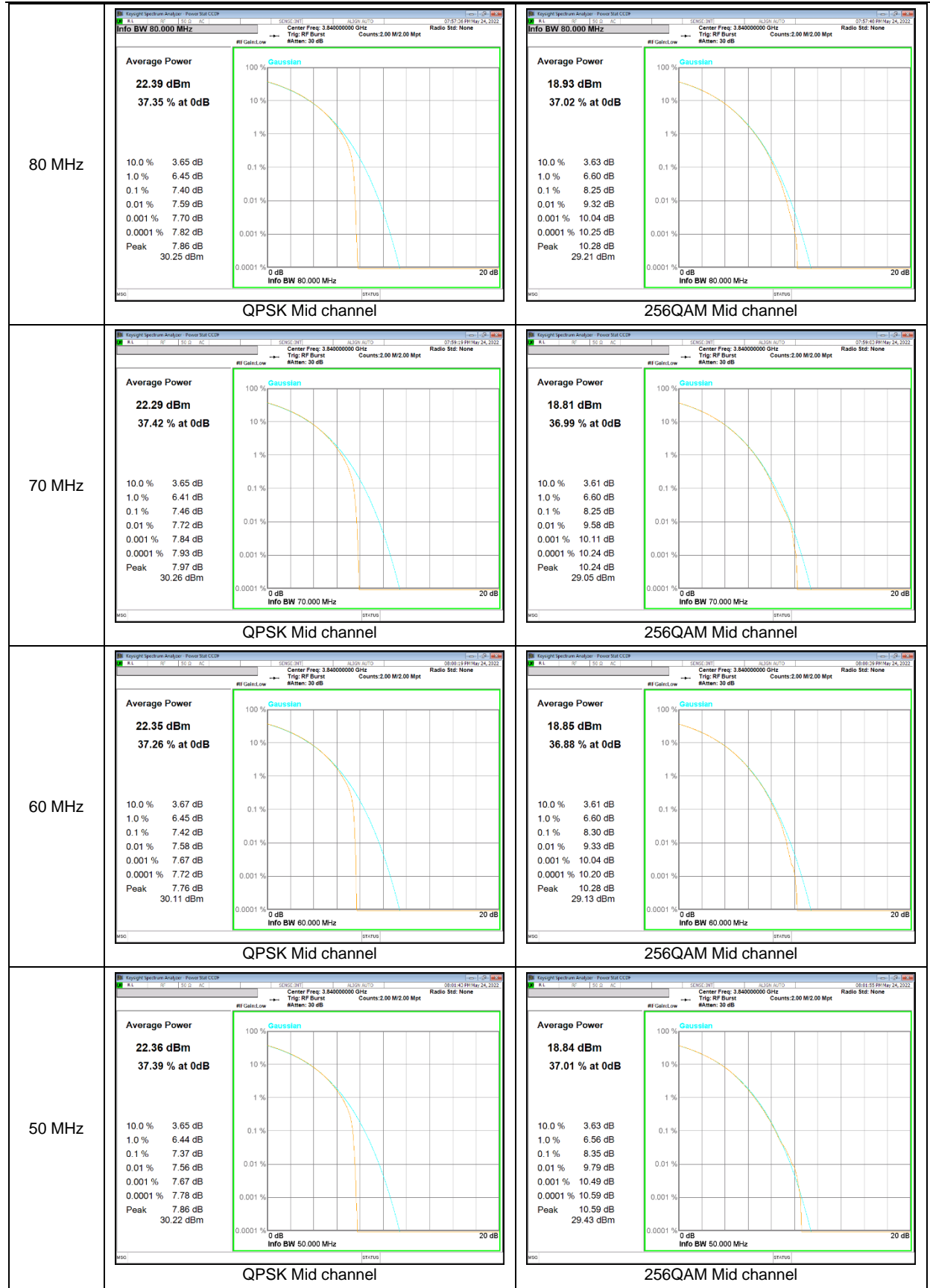


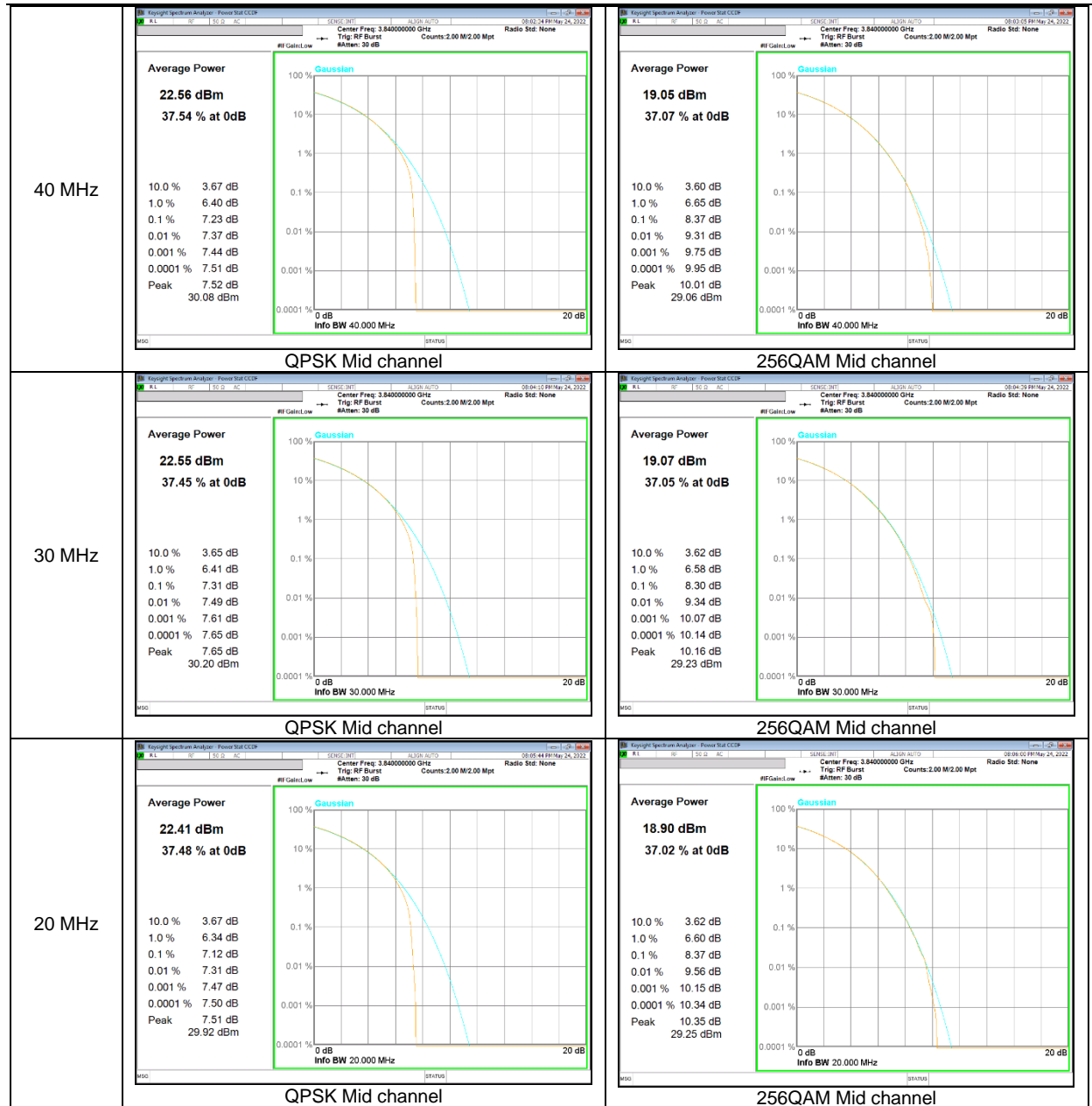




NR Band n77(PC2) CP-OFDM (3700 - 3980 MHz)







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	248.29	320.2
	EGPRS		244.83	316.4
1900	GPRS	1880.0	243.28	318.5
	EGPRS		240.46	294.5

- WCDMA

Band	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
B5	Rel.99	836.6	4.138	4.673
	HSDPA		4.145	4.670
B4	Rel.99	1732.6	4.158	4.724
	HSDPA		4.148	4.694
B2	Rel.99	1880.0	4.154	4.723
	HSDPA		4.152	4.663

- LTE Band 7

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B7	20M	QPSK	2535.0	17.885	19.340
		16QAM		17.920	19.260
	15M	QPSK	2535.0	13.442	14.530
		16QAM		13.449	14.430
	10M	QPSK	2535.0	8.965	9.593
		16QAM		8.984	9.717
5M	QPSK	2535.0	4.503	4.976	
	16QAM		4.491	4.966	

- LTE Band 12

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B12	10M	QPSK	707.5	8.933	9.684
		16QAM		8.892	9.632
	5M	QPSK	707.5	4.480	4.888
		16QAM		4.478	4.908
	3M	QPSK	707.5	2.691	2.972
		16QAM		2.689	2.989
	1.4M	QPSK	707.5	1.078	1.223
		16QAM		1.081	1.226

- LTE Band 13

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B13	10M	QPSK	782.0	8.960	9.645
		16QAM		8.930	9.678
	5M	QPSK	782.0	4.499	4.915
		16QAM		4.493	4.967

- LTE Band 14

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B14	10M	QPSK	793.0	8.948	9.772
		16QAM		8.978	9.747
	5M	QPSK	793.0	4.508	4.967
		16QAM		4.492	4.948

- LTE Band 25

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B25	20M	QPSK	1882.5	17.899	19.250
		16QAM		17.916	19.330
	15M	QPSK	1882.5	13.434	14.390
		16QAM		13.415	14.520
	10M	QPSK	1882.5	8.968	9.810
		16QAM		8.949	9.650
	5M	QPSK	1882.5	4.489	4.909
		16QAM		4.486	4.923
	3M	QPSK	1882.5	2.690	2.979
		16QAM		2.690	3.006
	1.4M	QPSK	1882.5	1.075	1.215
		16QAM		1.083	1.227

- LTE Band 26 (Part 90)

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B26	15M	QPSK	821.5	13.410	14.470
		16QAM		13.413	14.480
	10M	QPSK	819.0	8.970	9.817
		16QAM		8.956	9.700
	5M	QPSK	819.5	4.495	4.901
		16QAM		4.480	4.905
	3M	QPSK	820.5	2.693	2.989
		16QAM		2.693	2.981
	1.4M	QPSK	820.5	1.081	1.223
		16QAM		1.082	1.226

- LTE Band 26 (Straddle)

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B26	15M	QPSK	824.0	13.418	14.480
		16QAM		13.424	14.510
	10M	QPSK		8.962	9.738
		16QAM		8.954	9.680
	5M	QPSK		4.486	4.921
		16QAM		4.484	4.898
	3M	QPSK		2.693	2.958
		16QAM		2.688	2.968
	1.4M	QPSK		1.080	1.219
		16QAM		1.185	1.229

- LTE Band 26 (Part 22)

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B26	15M	QPSK	831.5	13.406	14.460
		16QAM		13.409	14.500
	10M	QPSK	831.5	8.957	9.744
		16QAM		8.945	9.720
	5M	QPSK	831.5	4.487	4.911
		16QAM		4.486	4.928
	3M	QPSK	831.5	2.694	2.980
		16QAM		2.688	2.991
	1.4M	QPSK	831.5	1.080	1.221
		16QAM		1.081	1.225

- LTE Band 30

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B30	10M	QPSK	2310.0	8.969	9.756
		16QAM		8.966	9.738
	5M	QPSK	2310.0	4.490	4.881
		16QAM		4.481	4.924

- LTE Band 40(2307.5 - 2312.5 MHz)

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B40	10M	QPSK	2310.0	8.959	9.995
		16QAM		8.954	9.779
	5M	QPSK	2310.0	4.485	4.933
		16QAM		4.482	4.899

- LTE Band 40(2352.5 - 2357.5 MHz)

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B40	10M	QPSK	2355.0	8.956	9.663
		16QAM		8.961	9.353
	5M	QPSK	2355.0	4.489	4.875
		16QAM		4.495	5.000

- LTE Band 41(PC2)

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B41(PC2)	20M	QPSK	2593.0	17.877	19.120
		16QAM		17.891	21.610
	15M	QPSK	2593.0	13.429	14.660
		16QAM		13.450	15.580
	10M	QPSK	2593.0	8.963	10.260
		16QAM		8.964	10.210
	5M	QPSK	2593.0	4.500	5.132
		16QAM		4.476	4.954

- LTE Band 41C

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B41 Uplink CA	20+20	QPSK	2593.0	37.438	38.930
		16QAM		37.542	38.840

- LTE Band 66

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B66	20M	QPSK	1745.0	17.886	19.290
		16QAM		17.870	19.430
	15M	QPSK	1745.0	13.423	14.490
		16QAM		13.429	14.500
	10M	QPSK	1745.0	8.991	9.663
		16QAM		8.988	9.666
	5M	QPSK	1745.0	4.497	4.924
		16QAM		4.482	4.901
	3M	QPSK	1745.0	2.692	3.003
		16QAM		2.693	2.994
	1.4M	QPSK	1745.0	1.083	1.227
		16QAM		1.083	1.220

- LTE Band 71

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B71	20M	QPSK	683.0	17.828	19.270
		16QAM		17.842	19.130
	15M	QPSK	680.5	13.395	14.50
		16QAM		13.381	14.49
	10M	QPSK	680.5	8.971	9.802
		16QAM		8.966	9.692
	5M	QPSK	680.5	4.493	4.906
		16QAM		4.479	4.913

- NR Band n5 CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n5	20M	QPSK	836.5	18.881	19.790
		16QAM		18.884	19.810
	15M	QPSK	836.5	14.109	14.900
		16QAM		14.086	14.810
	10M	QPSK	836.5	9.272	9.914
		16QAM		9.247	9.886
	5M	QPSK	836.5	4.502	4.989
		16QAM		4.490	4.941

- NR Band n25 CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n25	40M	QPSK	1882.5	38.564	39.800
		16QAM		38.503	39.840
	30M	QPSK	1882.5	28.559	29.600
		16QAM		28.553	29.520
	25M	QPSK	1882.5	22.917	23.910
		16QAM		22.885	23.830
	20M	QPSK	1882.5	18.955	19.830
		16QAM		18.954	19.960
	15M	QPSK	1882.5	14.107	14.770
		16QAM		14.155	15.010
	10M	QPSK	1882.5	9.308	9.877
		16QAM		9.313	9.918
	5M	QPSK	1882.5	4.473	4.906
		16QAM		4.475	4.919

- NR Band n30 CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n30	10M	QPSK	2310.0	9.292	9.893
		16QAM		9.282	9.977
	5M	QPSK	2310.0	4.470	4.871
		16QAM		4.512	4.977

- NR Band n41(PC2) CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n41	100M	QPSK	2593.0	97.397	100.400
		16QAM		97.528	100.400
	90M	QPSK	2593.0	87.452	90.050
		16QAM		87.441	89.990
	80M	QPSK	2593.0	77.252	79.910
		16QAM		77.453	80.230
	60M	QPSK	2593.0	57.722	59.600
		16QAM		57.749	59.680
	50M	QPSK	2593.0	47.436	48.890
		16QAM		47.461	49.160
	40M	QPSK	2593.0	37.799	39.510
		16QAM		37.836	39.000
	30M	QPSK	2593.0	27.813	29.180
		16QAM		27.861	28.980
	20M	QPSK	2593.0	18.216	20.390
		16QAM		18.250	19.340

- NR Band n66 CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n66	40M	QPSK	1745.0	38.514	39.780
		16QAM		38.537	39.810
	30M	QPSK	1745.0	28.517	29.670
		16QAM		28.576	29.580
	20M	QPSK	1745.0	18.942	19.780
		16QAM		18.979	20.170
	15M	QPSK	1745.0	14.134	14.830
		16QAM		14.155	15.250
	10M	QPSK	1745.0	9.300	10.100
		16QAM		9.309	9.968
	5M	QPSK	1745.0	4.480	4.896
		16QAM		4.481	4.946

- NR Band n70 CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n70	15M	QPSK	1702.5	14.130	14.820
		16QAM		14.098	14.850
	10M	QPSK	1702.5	9.311	9.927
		16QAM		9.288	9.865
	5M	QPSK	1702.5	4.471	4.887
		16QAM		4.488	4.861

- NR Band n71 CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n71	20M	QPSK	680.5	18.926	19.820
		16QAM		18.861	20.080
	15M	QPSK	680.5	14.086	14.750
		16QAM		14.112	14.810
	10M	QPSK	680.5	9.293	9.894
		16QAM		9.279	9.934
	5M	QPSK	680.5	4.478	4.935
		16QAM		4.484	4.926

- NR Band n77(PC2) CP-OFDM (3450 - 3550 MHz)

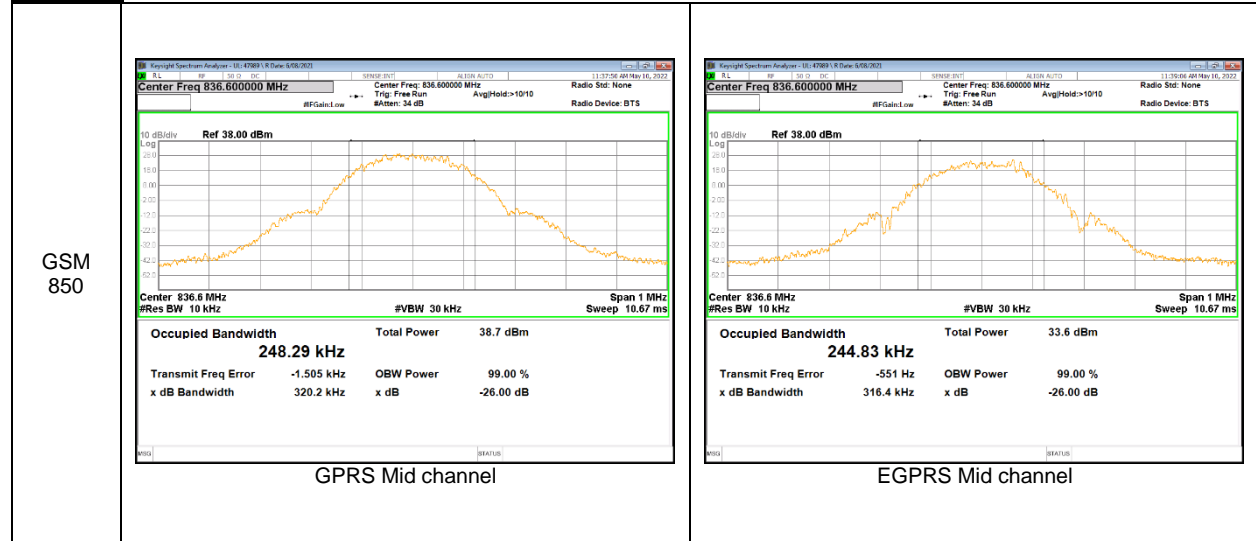
Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n77(PC2)	100M	QPSK	3500.0	97.386	101.300
		16QAM		97.432	101.700
	90M	QPSK	3500.0	87.423	91.050
		16QAM		87.481	90.960
	80M	QPSK	3500.0	77.388	80.830
		16QAM		77.468	80.840
	70M	QPSK	3500.0	67.439	70.590
		16QAM		67.624	70.750
	60M	QPSK	3500.0	57.679	60.260
		16QAM		57.743	60.340
	50M	QPSK	3500.0	47.435	49.730
		16QAM		47.559	49.760
	40M	QPSK	3500.0	37.891	39.890
		16QAM		37.825	39.850
	30M	QPSK	3500.0	27.844	29.460
		16QAM		27.871	29.460
	20M	QPSK	3500.0	18.193	19.470
		16QAM		18.231	19.570

- NR Band n77(PC2) CP-OFDM (3700 - 3980 MHz)

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n77(PC2)	100M	QPSK	3840.0	97.316	101.500
		16QAM		97.392	101.500
	90M	QPSK	3840.0	87.427	91.070
		16QAM		87.552	91.040
	80M	QPSK	3840.0	77.322	80.870
		16QAM		77.476	80.820
	70M	QPSK	3840.0	67.544	70.320
		16QAM		67.324	70.450
	60M	QPSK	3840.0	57.703	60.360
		16QAM		57.847	60.500
	50M	QPSK	3840.0	47.401	49.540
		16QAM		47.586	49.760
	40M	QPSK	3840.0	37.887	39.760
		16QAM		37.860	39.530
	30M	QPSK	3840.0	27.863	29.450
		16QAM		27.844	29.520
	20M	QPSK	3840.0	18.255	19.700
		16QAM		18.221	20.090

9.1.1. OCCUPIED BANDWIDTH RESULTS

GSM 850



GSM 1900

