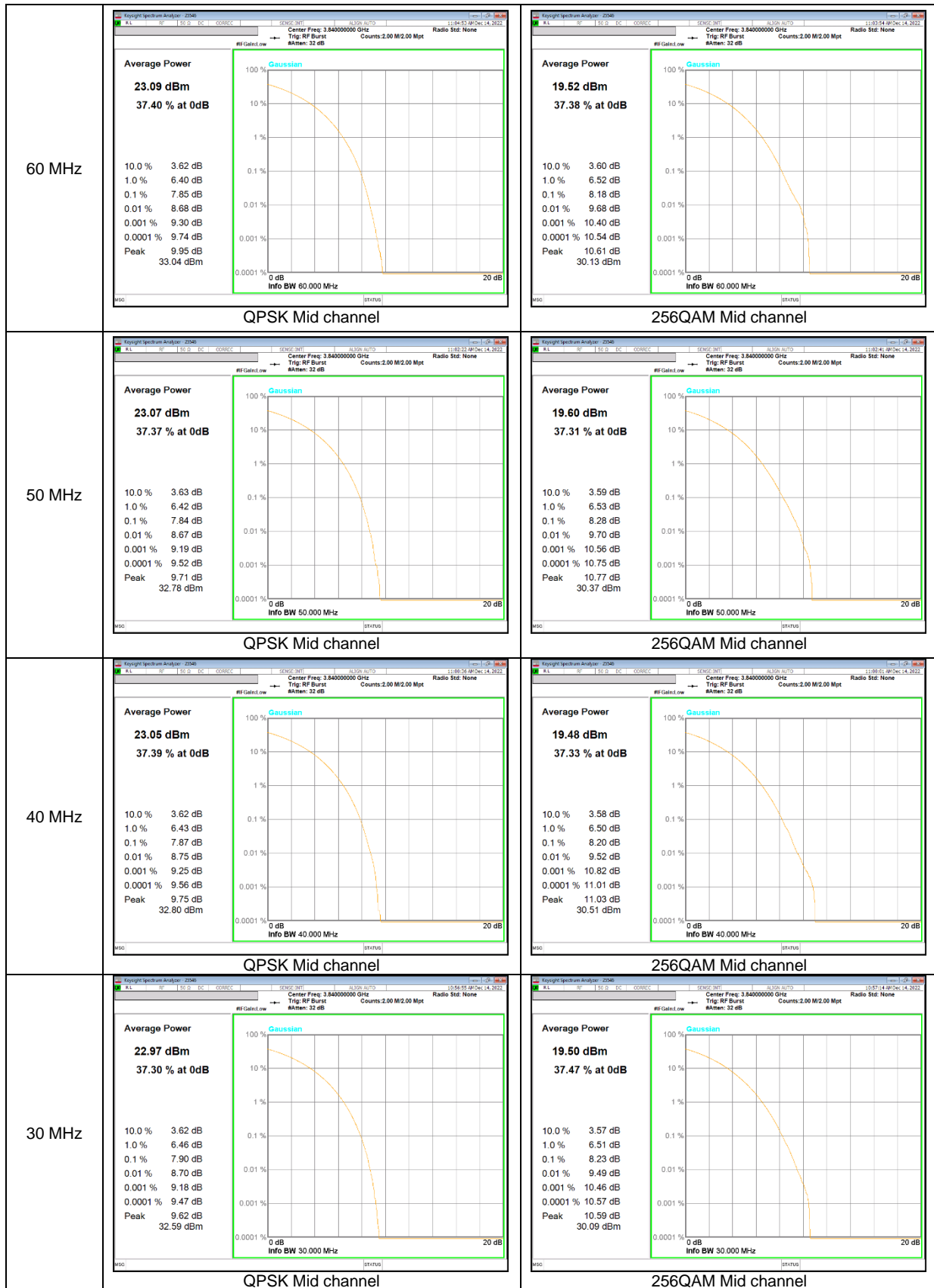
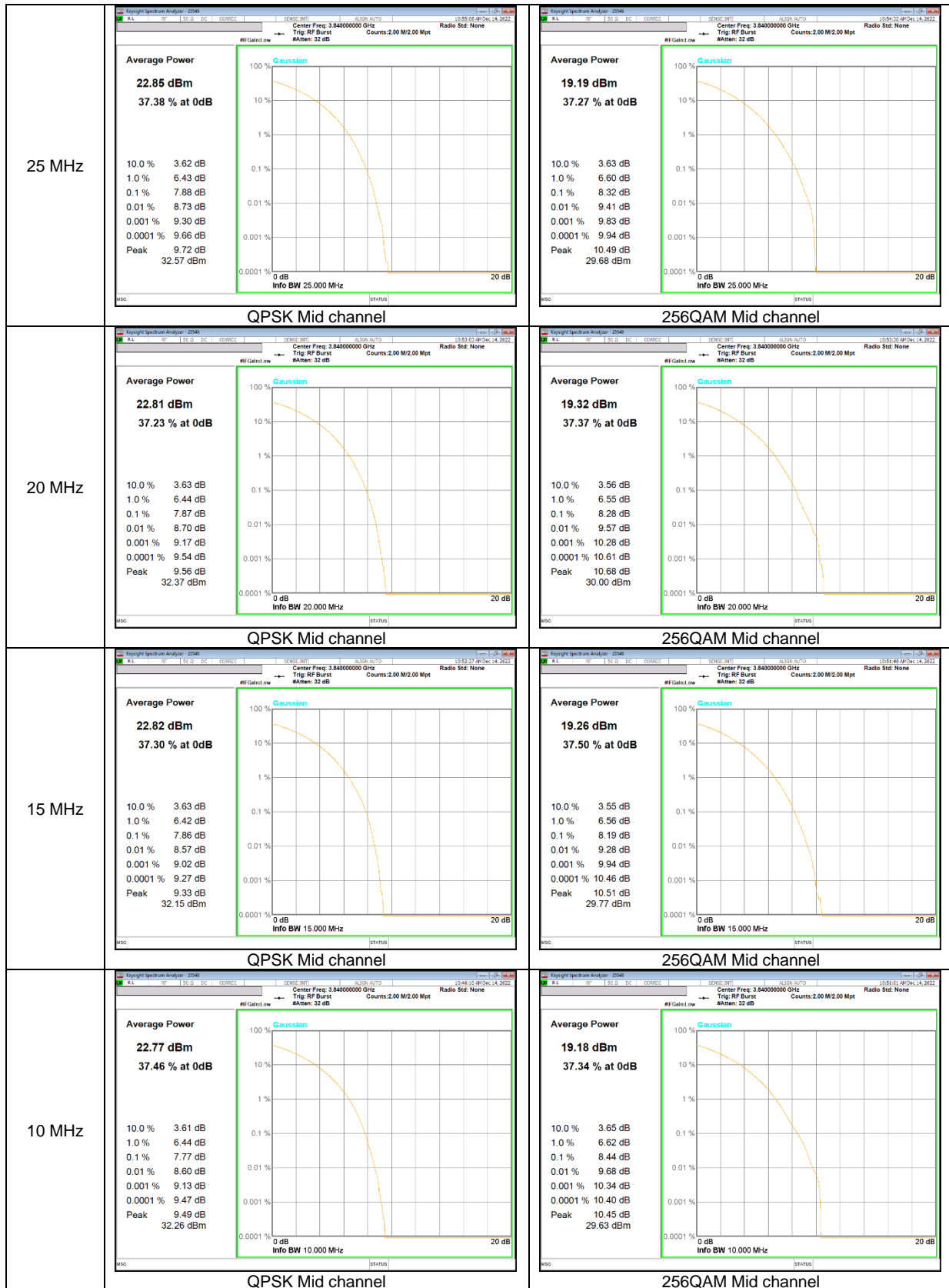


NR Band n77(PC2) CP-OFDM (3700-3980 MHz)

<p>100 MHz</p>	<p>Average Power 23.03 dBm 37.35 % at 0dB</p> <p>10.0 % 3.64 dB 1.0 % 6.46 dB 0.1 % 7.88 dB 0.01 % 8.73 dB 0.001 % 9.29 dB 0.0001 % 9.68 dB Peak 9.82 dB 32.85 dBm</p> <p>QPSK Mid channel</p>	<p>Average Power 19.52 dBm 37.22 % at 0dB</p> <p>10.0 % 3.61 dB 1.0 % 6.53 dB 0.1 % 8.19 dB 0.01 % 9.29 dB 0.001 % 10.07 dB 0.0001 % 10.46 dB Peak 10.54 dB 30.06 dBm</p> <p>256QAM Mid channel</p>
<p>90 MHz</p>	<p>Average Power 23.10 dBm 37.43 % at 0dB</p> <p>10.0 % 3.62 dB 1.0 % 6.44 dB 0.1 % 7.85 dB 0.01 % 8.65 dB 0.001 % 9.09 dB 0.0001 % 9.46 dB Peak 9.55 dB 32.65 dBm</p> <p>QPSK Mid channel</p>	<p>Average Power 19.41 dBm 36.98 % at 0dB</p> <p>10.0 % 3.61 dB 1.0 % 6.58 dB 0.1 % 8.39 dB 0.01 % 9.53 dB 0.001 % 10.32 dB 0.0001 % 10.78 dB Peak 10.79 dB 30.20 dBm</p> <p>256QAM Mid channel</p>
<p>80 MHz</p>	<p>Average Power 23.02 dBm 37.17 % at 0dB</p> <p>10.0 % 3.63 dB 1.0 % 6.46 dB 0.1 % 7.91 dB 0.01 % 8.78 dB 0.001 % 9.41 dB 0.0001 % 9.81 dB Peak 10.13 dB 33.15 dBm</p> <p>QPSK Mid channel</p>	<p>Average Power 19.39 dBm 37.12 % at 0dB</p> <p>10.0 % 3.60 dB 1.0 % 6.56 dB 0.1 % 8.19 dB 0.01 % 9.41 dB 0.001 % 10.06 dB 0.0001 % 10.43 dB Peak 10.45 dB 29.84 dBm</p> <p>256QAM Mid channel</p>
<p>70 MHz</p>	<p>Average Power 23.06 dBm 37.36 % at 0dB</p> <p>10.0 % 3.63 dB 1.0 % 6.45 dB 0.1 % 7.87 dB 0.01 % 8.77 dB 0.001 % 9.31 dB 0.0001 % 9.53 dB Peak 9.64 dB 32.70 dBm</p> <p>QPSK Mid channel</p>	<p>Average Power 19.55 dBm 37.24 % at 0dB</p> <p>10.0 % 3.61 dB 1.0 % 6.51 dB 0.1 % 8.22 dB 0.01 % 9.31 dB 0.001 % 10.00 dB 0.0001 % 10.30 dB Peak 10.31 dB 29.86 dBm</p> <p>256QAM Mid channel</p>





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	248.98	322.1
	EGPRS		246.07	315.2
1900	GPRS	1880.0	245.92	321.5
	EGPRS		241.78	309.8

- WCDMA

Band	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
B5	Rel.99	836.6	4.144	4.706
	HSDPA		4.136	4.696
B4	Rel.99	1732.6	4.169	4.698
	HSDPA		4.161	4.696
B2	Rel.99	1880.0	4.169	4.746
	HSDPA		4.163	4.718

- LTE Band 7

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B7	20M	QPSK	2535.0	17.914	19.880
		16QAM		17.929	19.670
	15M	QPSK		13.432	14.940
		16QAM		13.407	14.940
	10M	QPSK		8.994	10.200
		16QAM		8.983	10.390
	5M	QPSK		4.508	5.326
		16QAM		4.499	5.392

- LTE Band 12

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B12	10M	QPSK	707.5	8.955	10.130
		16QAM		8.941	10.010
	5M	QPSK		4.494	5.135
		16QAM		4.496	5.251
	3M	QPSK		2.695	3.043
		16QAM		2.699	3.087
	1.4M	QPSK		1.085	1.299
		16QAM		1.089	1.312

- LTE Band 13

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B13	10M	QPSK	782.0	8.944	10.230
		16QAM		8.944	10.240
	5M	QPSK		4.507	5.296
		16QAM		4.501	5.179

- LTE Band 14

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B14	10M	QPSK	793.0	8.967	10.250
		16QAM		8.993	10.160
	5M	QPSK		4.505	5.292
		16QAM		4.493	5.214

- LTE Band 25

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B25	20M	QPSK	1882.5	17.933	19.780
		16QAM		17.930	19.720
	15M	QPSK		13.442	15.160
		16QAM		13.428	15.290
	10M	QPSK		8.976	10.290
		16QAM		8.962	10.140
	5M	QPSK		4.493	5.243
		16QAM		4.505	5.311
	3M	QPSK		2.701	3.072
		16QAM		2.706	3.091
	1.4M	QPSK		1.086	1.320
		16QAM		1.088	1.312

- LTE Band 26 (Part 90)

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B26	15M	QPSK	819.0	13.427	15.000
		16QAM		13.411	15.130
	10M	QPSK	819.0	8.983	10.260
		16QAM		8.980	10.330
	5M	QPSK	819.5	4.503	5.303
		16QAM		4.497	5.386
	3M	QPSK	820.5	2.705	3.032
		16QAM		2.702	3.120
	1.4M	QPSK	820.5	1.086	1.315
		16QAM		1.088	1.328

- LTE Band 26 (Straddle)

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B26	15M	QPSK	824.0	13.330	14.020
		16QAM		13.381	14.160
	10M	QPSK		8.909	9.321
		16QAM		8.948	9.323
	5M	QPSK		4.460	4.872
		16QAM		4.461	4.845
	3M	QPSK		2.670	2.935
		16QAM		2.687	2.848
	1.4M	QPSK		1.084	1.234
		16QAM		1.078	1.254

- LTE Band 26 (Part 22)

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B26	15M	QPSK	836.5	13.425	15.030
		16QAM		13.428	15.100
	10M	QPSK	831.5	8.986	10.260
		16QAM		8.958	10.090
	5M	QPSK	831.5	4.503	5.292
		16QAM		4.491	5.305
	3M	QPSK	831.5	2.700	3.093
		16QAM		2.697	3.097
	1.4M	QPSK	831.5	1.093	1.306
		16QAM		1.094	1.344

- LTE Band 30

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B30	10M	QPSK	2310.0	8.958	10.290
		16QAM		8.955	10.450
	5M	QPSK		4.495	5.373
		16QAM		4.503	5.183

- 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	8.885	9.373
		16QAM		8.959	9.684
	5M	QPSK		4.429	4.989
		16QAM		4.426	5.098

- 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	8.954	9.357
		16QAM		8.991	9.718
	5M	QPSK		4.478	4.964
		16QAM		4.475	5.178

- LTE Band 41(PC2)

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B41(PC2)	20M	QPSK	2593.0	17.890	19.550
		16QAM		17.908	19.520
	15M	QPSK		13.435	15.000
		16QAM		13.410	15.070
	10M	QPSK		8.955	10.110
		16QAM		8.954	10.160
	5M	QPSK		4.505	5.349
		16QAM		4.496	5.319

- LTE Band 41C

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B41 Uplink CA	20+20	QPSK	2593.0	37.285	39.090
		16QAM		37.148	38.730

- LTE Band 66

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B66	20M	QPSK	1745.0	17.878	19.810
		16QAM		17.900	19.800
	15M	QPSK		13.409	14.760
		16QAM		13.436	14.910
	10M	QPSK		8.957	10.290
		16QAM		8.978	10.280
	5M	QPSK		4.497	5.249
		16QAM		4.498	5.197
	3M	QPSK		2.694	3.053
		16QAM		2.696	3.100
	1.4M	QPSK		1.096	1.300
		16QAM		1.091	1.320

- LTE Band 71

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
LTE B71	20M	QPSK	683.0	17.894	19.810
		16QAM		17.880	19.670
	15M	QPSK	680.5	13.413	15.050
		16QAM		13.413	15.060
	10M	QPSK	683.0	8.969	10.300
		16QAM		8.962	10.240
	5M	QPSK	680.5	4.506	5.105
		16QAM		4.507	5.299

- NR Band n5 CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n5	20M	QPSK	836.5	18.923	20.590
		16QAM		18.953	20.590
	15M	QPSK		14.123	15.270
		16QAM		14.137	15.040
	10M	QPSK		9.327	10.600
		16QAM		9.352	10.300
	5M	QPSK		4.505	5.619
		16QAM		4.498	5.128

- NR Band n12 CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n12	15M	QPSK	707.5	14.129	15.200
		16QAM		14.137	16.670
	10M	QPSK		9.292	10.190
		16QAM		9.291	10.150
	5M	QPSK		4.481	5.304
		16QAM		4.490	5.345

- NR Band n25 CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n25	40M	QPSK	1882.5	38.598	41.600
		16QAM		38.609	41.720
	30M	QPSK		26.837	29.440
		16QAM		28.576	31.230
	25M	QPSK		23.773	25.220
		16QAM		23.807	25.660
	20M	QPSK		18.987	20.730
		16QAM		18.981	20.500
	15M	QPSK		14.115	15.070
		16QAM		14.154	15.210
	10M	QPSK		9.330	10.720
		16QAM		9.346	13.130
	5M	QPSK		4.491	5.585
		16QAM		4.504	5.471

- NR Band n30 CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n30	10M	QPSK	2310.0	8.922	10.300
		16QAM		8.940	9.808
	5M	QPSK	2310.0	4.488	5.263
		16QAM		4.492	5.321

- NR Band n41(PC2) CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n41	100M	QPSK	2593.0	97.883	135.400
		16QAM		97.932	141.200
	90M	QPSK		87.650	114.000
		16QAM		87.779	143.900
	80M	QPSK		77.724	116.400
		16QAM		77.494	123.300
	70M	QPSK		67.676	98.770
		16QAM		67.674	90.680
	60M	QPSK		57.980	79.430
		16QAM		58.082	95.470
	50M	QPSK		47.575	69.420
		16QAM		47.563	75.190
	40M	QPSK		37.908	52.310
		16QAM		37.978	51.300
	30M	QPSK		28.004	38.740
		16QAM		27.954	38.720
	20M	QPSK		18.313	26.560
		16QAM		18.305	32.260
	15M	QPSK		13.623	21.960
		16QAM		13.651	20.640
	10M	QPSK		8.660	14.600
		16QAM		8.684	12.670

- NR Band n66 CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n66	40M	QPSK	1745.0	38.551	41.280
		16QAM		38.529	41.520
	35M	QPSK		33.604	36.060
		16QAM		33.647	36.210
	30M	QPSK		28.559	31.150
		16QAM		28.601	31.900
	25M	QPSK		23.748	25.620
		16QAM		23.769	25.550
	20M	QPSK		18.940	20.360
		16QAM		18.965	20.590
	15M	QPSK		14.104	15.030
		16QAM		14.145	15.020
	10M	QPSK		9.323	11.190
		16QAM		9.316	10.340
	5M	QPSK		4.495	5.255
		16QAM		4.490	5.270

- NR Band n71 CP-OFDM

Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n71	20M	QPSK	680.5	18.883	20.540
		16QAM		18.871	20.630
	15M	QPSK		14.089	14.950
		16QAM		14.114	14.920
	10M	QPSK		9.276	10.210
		16QAM		9.309	10.170
	5M	QPSK		4.489	5.539
		16QAM		4.483	5.408

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

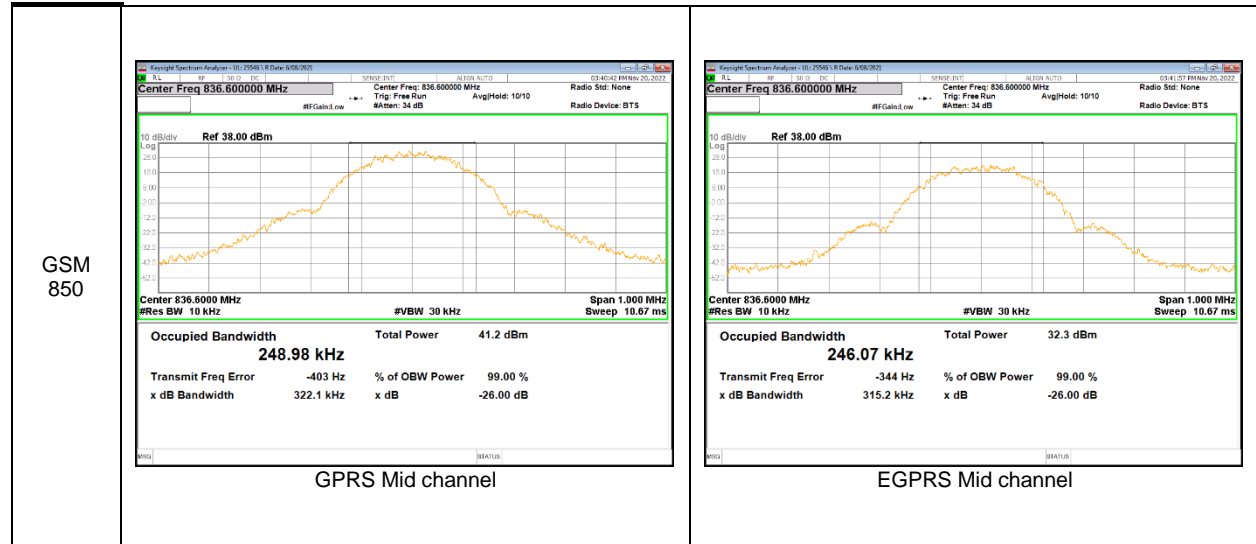
Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n77(PC2)	100M	QPSK	3500.0	97.686	102.300
		16QAM		98.024	101.700
	90M	QPSK		87.777	92.860
		16QAM		87.832	92.620
	80M	QPSK		77.732	82.090
		16QAM		77.949	82.160
	70M	QPSK		67.668	71.340
		16QAM		67.662	73.060
	60M	QPSK		57.899	61.760
		16QAM		57.905	61.170
	50M	QPSK		47.508	51.250
		16QAM		47.711	49.930
	40M	QPSK		37.969	41.490
		16QAM		37.974	40.720
	30M	QPSK		27.907	29.540
		16QAM		27.879	29.360
	25M	QPSK		23.278	24.380
		16QAM		23.217	24.900
	20M	QPSK		18.258	19.890
		16QAM		18.233	19.490
	15M	QPSK		13.593	15.470
		16QAM		13.561	14.540
	10M	QPSK		8.638	9.278
		16QAM		8.604	9.548

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

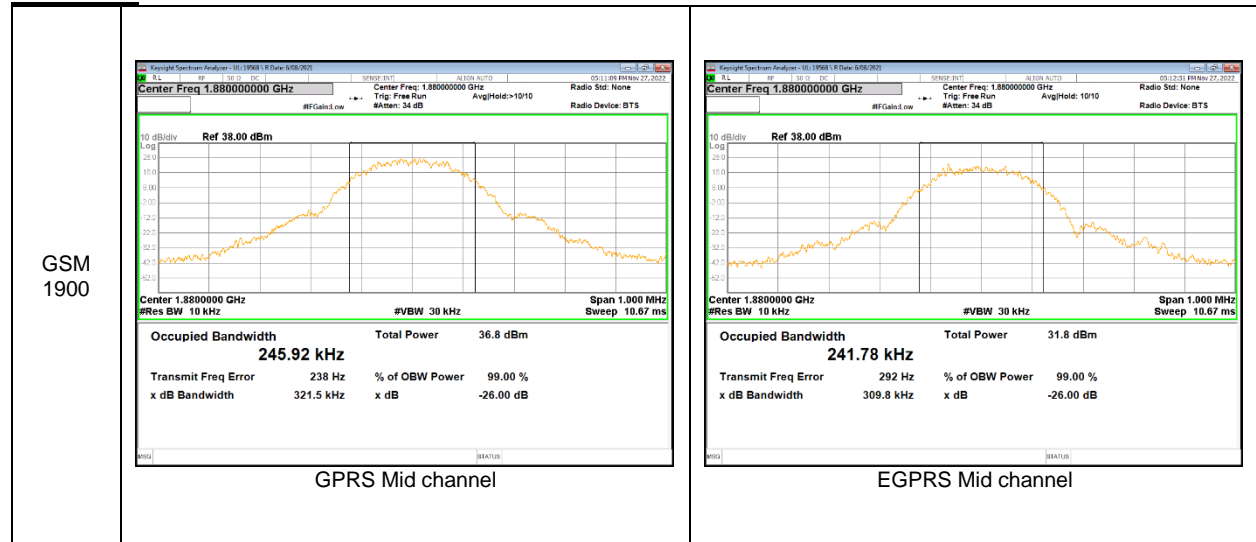
Band	BW	Modulation	f [MHz]	99% BW (MHz)	-26dB BW (MHz)
NR n77(PC2)	100M	QPSK	3840.0	97.811	102.500
		16QAM		97.626	102.600
	90M	QPSK		87.502	92.170
		16QAM		87.823	91.740
	80M	QPSK		77.579	81.850
		16QAM		77.501	82.350
	70M	QPSK		67.659	70.790
		16QAM		67.639	72.170
	60M	QPSK		57.754	61.970
		16QAM		58.072	62.530
	50M	QPSK		47.582	50.570
		16QAM		47.645	49.990
	40M	QPSK		37.943	40.490
		16QAM		37.973	40.370
	30M	QPSK		27.945	29.820
		16QAM		27.909	29.890
	25M	QPSK		23.285	24.630
		16QAM		23.347	24.940
	20M	QPSK		18.269	19.830
		16QAM		18.230	19.890
	15M	QPSK		13.594	15.080
		16QAM		13.528	14.720
	10M	QPSK		8.547	9.625
		16QAM		8.605	9.962

9.1.1. OCCUPIED BANDWIDTH RESULTS

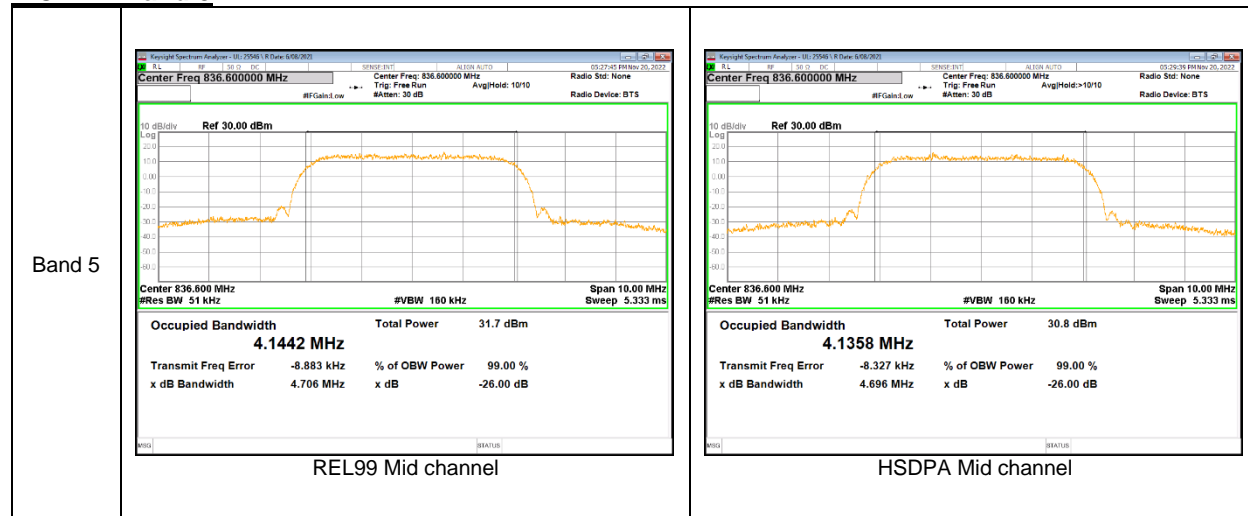
GSM 850



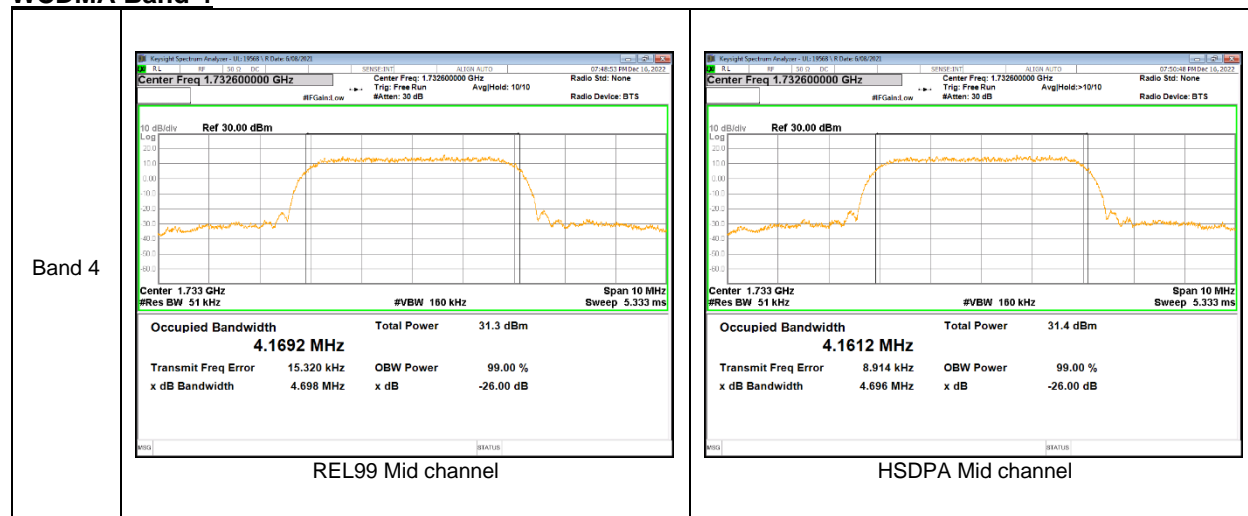
GSM 1900



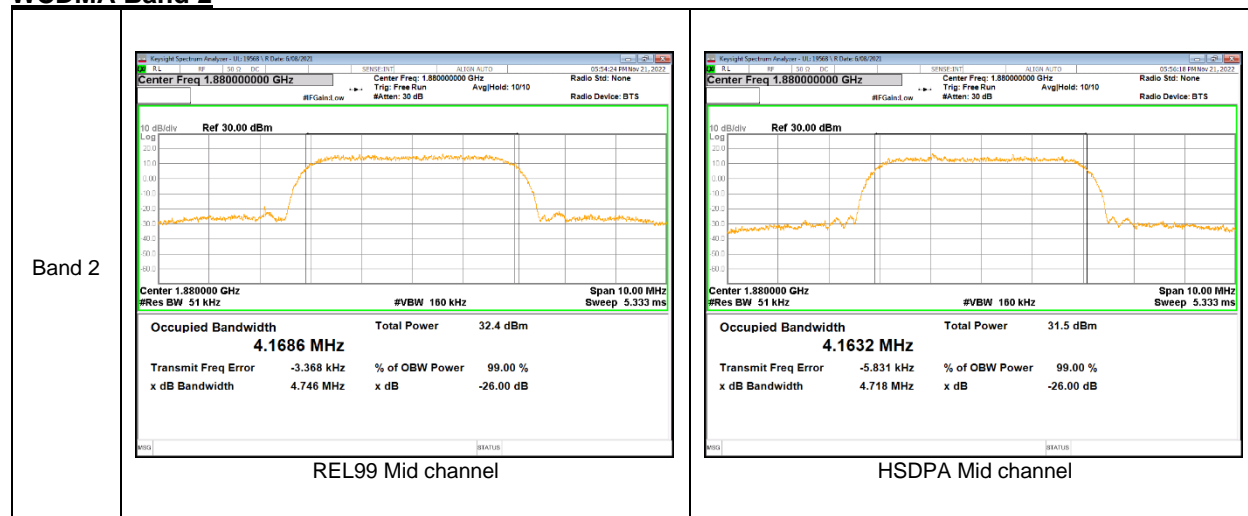
WCDMA Band 5



WCDMA Band 4



WCDMA Band 2



LTE Band 7



LTE Band 12



LTE Band 13

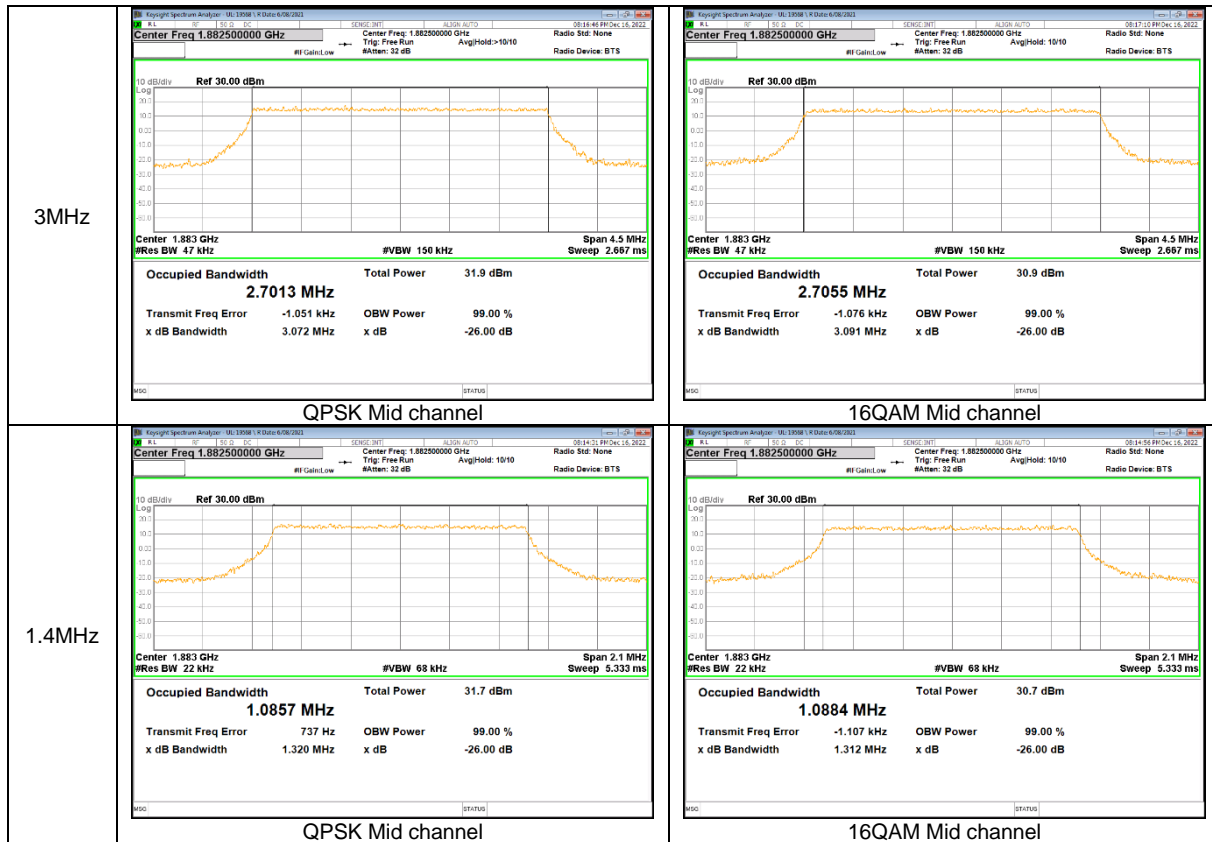


LTE Band 14



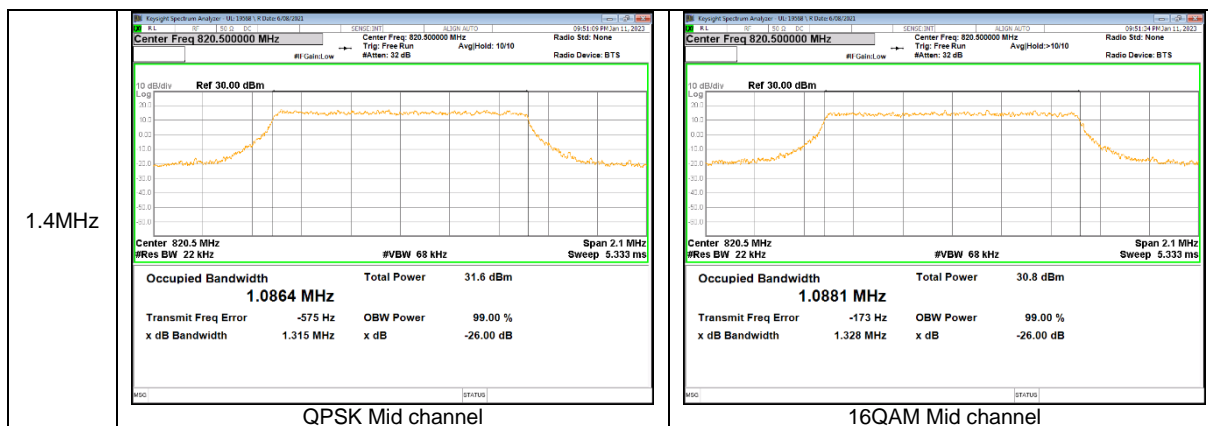
LTE Band 25





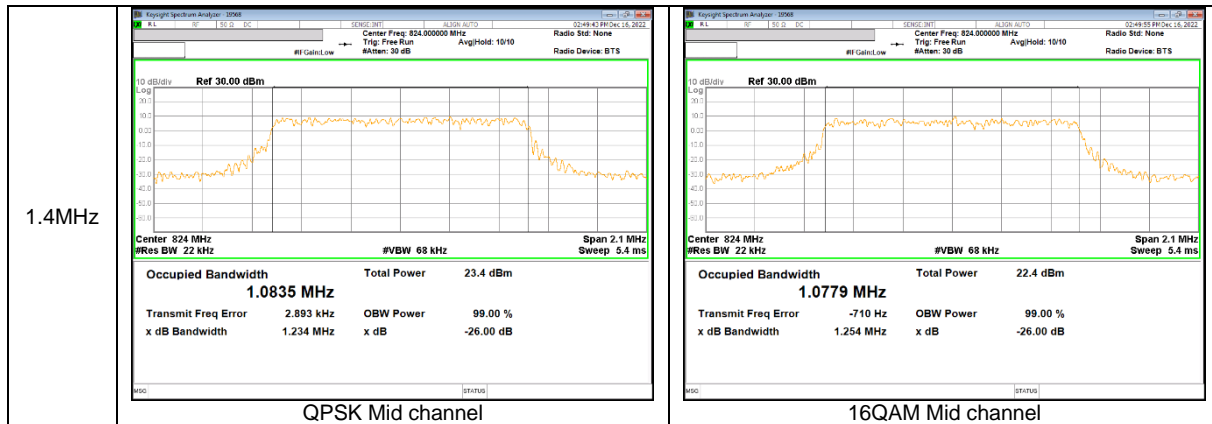
LTE Band 26 (Part 90)





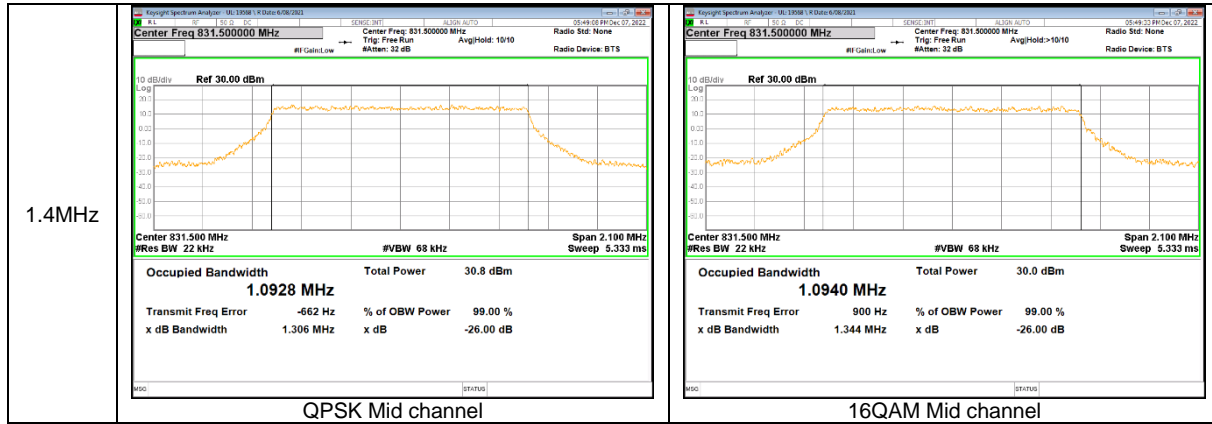
LTE Band 26 (Straddle)





LTE Band 26 (Part 22)





LTE Band 30

