



REPORT No. : SZ210010168S01

## Annex E1 Conducted Full Power

**Conducted Power**

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
	TX Channel	128	189		251	128	189		
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8		
GSM 1 Tx slot	31.54	31.60	31.71	32.00	22.54	22.60	22.71	23.00	0.24
GPRS 1 Tx slot	31.47	31.51	31.67	32.00	22.47	22.51	22.67	23.00	
GPRS 2 Tx slots	29.49	29.54	29.51	30.00	23.49	23.54	23.51	24.00	0.05
GPRS 3 Tx slots	27.23	27.41	27.56	28.00	22.97	23.15	23.30	23.74	0.33
GPRS 4 Tx slots	25.15	25.31	25.37	26.00	22.15	22.31	22.37	23.00	0.22
EDGE 1 Tx slot	25.51	25.65	25.72	26.00	16.51	16.65	16.72	17.00	0.21
EDGE 2 Tx slots	23.66	23.75	23.80	24.00	17.66	17.75	17.80	18.00	0.14
EDGE 3 Tx slots	21.29	21.36	21.47	22.00	17.03	17.10	17.21	17.74	0.18
EDGE 4 Tx slots	19.52	19.48	19.76	20.00	16.52	16.48	16.76	17.00	0.28

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
	TX Channel	512	661		810	512	661		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot	29.03	29.09	29.02	29.50	20.03	20.09	20.02	20.50	0.08
GPRS 1 Tx slot	29.02	29.10	29.07	29.50	20.02	20.10	20.07	20.50	
GPRS 2 Tx slots	26.15	26.18	26.12	27.00	20.15	20.18	20.12	21.00	0.06
GPRS 3 Tx slots	24.67	24.71	24.63	25.00	20.41	20.45	20.37	20.74	0.08
GPRS 4 Tx slots	23.24	23.27	23.16	24.00	20.24	20.27	20.16	21.00	0.11
EDGE 1 Tx slot	25.71	25.44	25.74	26.00	16.71	16.44	16.74	17.00	0.30
EDGE 2 Tx slots	23.38	23.06	23.13	24.00	17.38	17.06	17.13	18.00	0.32
EDGE 3 Tx slots	21.50	21.51	21.38	22.00	17.24	17.25	17.12	17.74	0.13
EDGE 4 Tx slots	20.47	20.41	20.34	21.00	17.47	17.41	17.34	18.00	0.13

Band	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
	TX Channel	9262	9400		9538	1312	1413		1513	4132	4182	
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99 RMC 12.2Kbps	22.32	22.37	22.26	23.00	19.74	19.82	19.75	20.50	22.81	22.89	22.84	23.50
3GPP Rel 6 HSDPA Subtest-1	22.02	21.92	21.77	22.50	19.68	19.52	19.60	20.00	21.94	21.96	22.03	22.50
3GPP Rel 6 HSDPA Subtest-2	22.03	21.93	21.78	22.50	19.68	19.64	19.59	20.00	21.98	21.98	22.03	22.50
3GPP Rel 6 HSDPA Subtest-3	21.52	21.41	21.27	22.00	19.18	19.13	19.09	19.50	21.51	21.50	21.56	22.00
3GPP Rel 6 HSDPA Subtest-4	21.52	21.41	21.27	22.00	19.17	19.13	19.18	19.50	21.43	21.42	21.57	22.00
3GPP Rel 8 DC-HSDPA Subtest-1	21.92	21.90	21.83	22.50	19.66	19.62	19.65	20.00	21.90	21.99	22.14	22.50
3GPP Rel 8 DC-HSDPA Subtest-2	21.40	21.39	21.32	22.50	19.06	19.11	19.17	20.00	21.37	21.47	21.65	22.50
3GPP Rel 8 DC-HSDPA Subtest-3	21.92	22.00	21.84	22.00	19.66	19.62	19.65	20.00	21.92	22.00	22.15	22.50
3GPP Rel 8 DC-HSDPA Subtest-4	22.00	21.98	21.81	22.00	19.64	19.60	19.65	20.00	21.96	21.95	22.13	22.50
3GPP Rel 6 HSUPA Subtest-1	22.02	21.99	21.84	22.50	19.64	19.61	19.65	20.00	21.92	21.99	22.14	22.50
3GPP Rel 6 HSUPA Subtest-2	22.01	21.93	21.78	22.50	19.70	19.54	19.64	20.00	21.94	21.99	22.10	22.50
3GPP Rel 6 HSUPA Subtest-3	21.92	21.87	21.86	22.50	19.75	19.66	19.71	20.00	21.95	21.90	22.02	22.50
3GPP Rel 6 HSUPA Subtest-4	21.91	21.86	21.87	22.50	19.69	19.68	19.64	20.00	21.93	21.96	22.09	22.50
3GPP Rel 6 HSUPA Subtest-5	21.40	21.36	21.38	22.00	19.19	19.14	19.25	20.00	21.43	21.43	21.55	22.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-	21.39	21.36	21.37	22.00	19.20	19.15	19.24	20.00	21.40	21.41	21.54	22.00

Band	CDMA2000 BC0			Tune-up Limit (dBm)	CDMA2000 BC1			Tune-up Limit (dBm)	CDMA2000 BC10			Tune-up Limit (dBm)
	TX Channel	1013	384		777	25	600		1175	476	580	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	23.61	23.84	23.74	24.50	23.76	23.78	23.71	24.50	23.73	23.79	23.73	24.50
RC3 SO55	23.82	23.83	23.88	24.50	23.90	23.76	23.81	24.50	23.72	23.70	23.69	24.50
RC3 SO32 (F+SCH)	23.83	23.81	23.82	24.50	23.87	23.91	23.86	24.50	23.76	23.74	23.70	24.50
RC3 SO32 (F+SCH)	23.89	23.92	23.87	24.50	23.88	23.87	23.89	24.50	23.81	23.70	23.62	24.50
RTAP 153.6Kbps	23.93	23.95	23.90	24.50	23.86	23.93	23.85	24.50	23.67	23.84	23.69	24.50
RETAP 4096Bis	23.62	23.66	23.57	24.50	23.52	23.62	23.62	24.50	23.51	23.55	23.49	24.50
RMCTAP 307.2 Kbps	23.15	23.22	23.17	24.00	23.21	23.26	23.11	24.00	23.20	23.13	23.01	24.00

## LTE Band 2

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	23.28	23.36	23.31	24.00
20	QPSK	1	49	23.10	23.12	23.15	
20	QPSK	1	99	23.00	22.98	22.94	
20	QPSK	50	0	22.38	22.39	22.32	23.00
20	QPSK	50	24	22.36	22.11	22.10	
20	QPSK	50	50	22.27	22.05	22.01	
20	QPSK	100	0	22.28	22.08	21.95	
20	16QAM	1	0	21.99	21.87	21.84	22.00
20	16QAM	1	49	21.81	21.71	21.69	
20	16QAM	1	99	21.68	21.56	21.60	
20	16QAM	50	0	20.75	20.78	20.67	21.00
20	16QAM	50	24	20.69	20.65	20.56	
20	16QAM	50	50	20.54	20.45	20.47	
20	16QAM	100	0	20.54	20.37	20.18	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.31	23.27	23.18	24.00
15	QPSK	1	37	23.11	23.01	23.08	
15	QPSK	1	74	22.94	22.90	22.92	
15	QPSK	36	0	22.21	22.20	22.14	23.00
15	QPSK	36	20	22.27	22.26	22.22	
15	QPSK	36	39	21.97	21.96	21.92	
15	QPSK	75	0	22.23	21.93	21.86	
15	16QAM	1	0	21.47	21.04	21.49	22.00
15	16QAM	1	37	21.23	21.22	21.24	
15	16QAM	1	74	21.10	21.08	21.13	
15	16QAM	36	0	20.62	20.71	20.53	21.00
15	16QAM	36	20	20.49	20.39	20.44	
15	16QAM	36	39	20.31	20.37	20.31	
15	16QAM	75	0	20.67	20.30	20.18	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	23.28	23.27	23.09	24.00
10	QPSK	1	25	23.13	22.96	23.03	
10	QPSK	1	49	22.96	22.85	22.90	
10	QPSK	25	0	22.16	22.17	22.18	23.00
10	QPSK	25	12	22.00	22.16	22.01	
10	QPSK	25	25	22.24	22.13	22.02	
10	QPSK	50	0	22.28	22.14	22.15	
10	16QAM	1	0	21.69	21.45	21.45	22.00
10	16QAM	1	25	21.51	21.40	21.33	
10	16QAM	1	49	21.48	21.34	21.31	
10	16QAM	25	0	20.53	20.46	20.28	21.00
10	16QAM	25	12	20.53	20.37	20.27	
10	16QAM	25	25	20.47	20.53	20.62	
10	16QAM	50	0	20.59	20.17	20.42	

Frequency (MHz)				1852.5	1880	1907.5	limit (dBm)
5	QPSK	1	0	23.32	23.34	23.33	24.00
5	QPSK	1	12	23.33	23.26	23.33	
5	QPSK	1	24	23.06	23.16	23.24	
5	QPSK	12	0	22.36	22.08	22.04	23.00
5	QPSK	12	7	22.33	22.25	22.19	
5	QPSK	12	13	22.17	22.33	22.34	
5	QPSK	25	0	22.25	21.98	21.83	22.00
5	16QAM	1	0	21.53	21.42	21.56	
5	16QAM	1	12	21.46	21.31	21.22	
5	16QAM	1	24	21.30	21.24	21.16	21.00
5	16QAM	12	0	20.69	20.54	20.58	
5	16QAM	12	7	20.88	20.64	20.62	
5	16QAM	12	13	20.63	20.55	20.52	20.52
5	16QAM	25	0	20.85	20.62	20.52	
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	Tune-up limit (dBm)
3	QPSK	1	0	23.33	23.22	23.22	24.00
3	QPSK	1	8	23.10	23.15	23.14	
3	QPSK	1	14	23.22	23.26	23.15	
3	QPSK	8	0	22.34	22.10	22.15	23.00
3	QPSK	8	4	22.29	22.16	22.14	
3	QPSK	8	7	22.36	22.23	22.24	
3	QPSK	15	0	22.33	22.18	22.15	23.00
3	16QAM	1	0	21.22	21.31	21.19	
3	16QAM	1	8	21.20	21.28	21.10	
3	16QAM	1	14	21.17	21.25	21.06	22.00
3	16QAM	8	0	20.34	20.56	20.34	
3	16QAM	8	4	20.52	20.27	20.33	
3	16QAM	8	7	20.69	20.22	20.36	20.24
3	16QAM	15	0	20.59	20.15	20.24	
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	Tune-up limit (dBm)
1.4	QPSK	1	0	23.13	23.33	23.12	24.00
1.4	QPSK	1	3	23.13	23.05	23.13	
1.4	QPSK	1	5	23.04	22.87	23.14	
1.4	QPSK	3	0	23.22	23.05	23.11	23.00
1.4	QPSK	3	1	23.12	23.00	23.22	
1.4	QPSK	3	3	23.22	22.97	23.09	
1.4	QPSK	6	0	22.51	22.45	22.23	22.00
1.4	16QAM	1	0	21.71	21.52	21.62	
1.4	16QAM	1	3	21.61	21.52	21.62	
1.4	16QAM	1	5	21.56	21.62	21.55	21.00
1.4	16QAM	3	0	21.47	21.55	21.54	
1.4	16QAM	3	1	21.45	21.30	21.30	
1.4	16QAM	3	3	21.31	21.17	21.07	20.01
1.4	16QAM	3	3	21.31	21.17	21.07	
1.4	16QAM	6	0	20.44	20.01	20.01	

# LTE Band 4

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.72	22.85	22.73	23.00
20	QPSK	1	49	22.61	22.53	22.75	
20	QPSK	1	99	22.64	22.60	22.62	
20	QPSK	50	0	21.85	21.88	21.86	22.00
20	QPSK	50	24	21.73	21.82	21.75	
20	QPSK	50	50	21.89	21.85	21.66	
20	QPSK	100	0	21.80	21.79	21.62	
20	16QAM	1	0	21.40	21.71	21.55	22.00
20	16QAM	1	49	21.69	21.62	21.78	
20	16QAM	1	99	21.62	21.56	21.53	
20	16QAM	50	0	20.79	20.68	20.66	21.00
20	16QAM	50	24	20.92	20.83	20.84	
20	16QAM	50	50	20.89	20.82	20.78	
20	16QAM	100	0	20.76	20.77	20.92	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.57	22.61	22.75	23.00
15	QPSK	1	37	22.46	22.54	22.67	
15	QPSK	1	74	22.37	22.50	22.58	
15	QPSK	36	0	22.10	22.16	22.15	22.00
15	QPSK	36	20	21.84	21.98	21.99	
15	QPSK	36	39	21.72	21.79	21.69	
15	QPSK	75	0	21.86	21.85	21.84	
15	16QAM	1	0	21.66	21.66	21.64	22.00
15	16QAM	1	37	21.67	21.56	21.62	
15	16QAM	1	74	21.78	21.81	21.64	
15	16QAM	36	0	20.82	20.75	20.62	21.00
15	16QAM	36	20	20.87	20.84	20.92	
15	16QAM	36	39	20.46	20.61	20.44	
15	16QAM	75	0	20.93	20.98	20.64	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.71	22.74	22.80	23.00
10	QPSK	1	25	22.69	22.78	22.79	
10	QPSK	1	49	22.38	22.62	22.64	
10	QPSK	25	0	21.82	21.83	21.66	22.00
10	QPSK	25	12	21.89	21.94	21.86	
10	QPSK	25	25	21.52	21.69	21.56	
10	QPSK	50	0	21.81	21.86	21.90	
10	16QAM	1	0	21.59	21.99	21.81	22.00
10	16QAM	1	25	21.87	21.66	21.73	
10	16QAM	1	49	21.86	21.50	21.70	
10	16QAM	25	0	20.62	20.88	20.65	21.00
10	16QAM	25	12	20.92	20.96	20.66	
10	16QAM	25	25	20.59	20.74	20.54	
10	16QAM	50	0	20.92	21.01	20.90	

Frequency (MHz)				1712.5	1732.5	1752.5	limit (dBm)
5	QPSK	1	0	22.77	22.80	22.69	23.00
5	QPSK	1	12	22.72	22.84	22.68	
5	QPSK	1	24	22.79	22.84	22.62	
5	QPSK	12	0	21.86	21.99	21.95	22.00
5	QPSK	12	7	21.73	21.90	21.85	
5	QPSK	12	13	21.61	21.80	21.63	
5	QPSK	25	0	21.76	21.93	21.80	22.00
5	16QAM	1	0	21.59	21.97	21.86	
5	16QAM	1	12	21.94	21.83	21.76	
5	16QAM	1	24	21.62	21.63	21.66	21.00
5	16QAM	12	0	20.81	20.90	20.93	
5	16QAM	12	7	20.70	20.81	20.73	
5	16QAM	12	13	20.45	20.78	20.55	21.00
5	16QAM	25	0	20.69	21.09	20.95	
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	23.00
3	QPSK	1	0	22.68	22.66	22.57	
3	QPSK	1	8	22.67	22.74	22.57	
3	QPSK	1	14	22.66	22.56	22.62	22.00
3	QPSK	8	0	21.64	21.71	21.58	
3	QPSK	8	4	21.57	21.70	21.52	
3	QPSK	8	7	21.46	21.55	21.52	22.00
3	QPSK	15	0	21.50	21.67	21.50	
3	16QAM	1	0	21.30	21.14	21.41	
3	16QAM	1	8	21.34	21.35	21.45	22.00
3	16QAM	1	14	21.62	21.57	21.55	
3	16QAM	8	0	20.54	20.74	20.74	
3	16QAM	8	4	20.60	20.75	20.66	21.00
3	16QAM	8	7	20.61	20.63	20.39	
3	16QAM	15	0	20.54	20.68	20.58	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	23.00
1.4	QPSK	1	0	22.48	22.58	22.39	
1.4	QPSK	1	3	22.51	22.61	22.53	
1.4	QPSK	1	5	22.39	22.53	22.38	23.00
1.4	QPSK	3	0	22.48	22.57	22.48	
1.4	QPSK	3	1	22.50	22.63	22.49	
1.4	QPSK	3	3	22.49	22.64	22.52	22.00
1.4	QPSK	6	0	21.47	21.61	21.49	
1.4	16QAM	1	0	21.48	21.57	21.59	
1.4	16QAM	1	3	21.77	21.62	21.69	22.00
1.4	16QAM	1	5	21.55	21.56	21.84	
1.4	16QAM	3	0	21.61	21.44	21.42	
1.4	16QAM	3	1	21.54	21.53	21.52	22.00
1.4	16QAM	3	3	21.54	21.56	21.41	
1.4	16QAM	6	0	20.62	20.61	20.24	
1.4	16QAM	6	0	20.62	20.61	20.24	21.00

# LTE Band 5

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.72	23.85	23.81	24.50
10	QPSK	1	25	23.81	23.82	23.76	
10	QPSK	1	49	23.76	23.84	23.77	
10	QPSK	25	0	22.54	22.65	22.52	23.50
10	QPSK	25	12	22.60	22.63	22.59	
10	QPSK	25	25	22.56	22.51	22.56	
10	QPSK	50	0	22.59	22.64	22.50	23.50
10	16QAM	1	0	22.68	22.88	22.76	
10	16QAM	1	25	22.77	22.73	22.76	
10	16QAM	1	49	22.77	22.90	22.91	22.50
10	16QAM	25	0	21.31	21.56	21.48	
10	16QAM	25	12	21.46	21.54	21.55	
10	16QAM	25	25	21.65	21.53	21.49	22.50
10	16QAM	50	0	21.45	21.71	21.61	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.80	23.68	23.55	24.50
5	QPSK	1	12	23.70	23.64	23.63	
5	QPSK	1	24	23.38	23.36	23.30	
5	QPSK	12	0	22.67	22.76	22.65	23.50
5	QPSK	12	7	22.62	22.65	22.62	
5	QPSK	12	13	22.52	22.50	22.49	
5	QPSK	25	0	22.62	22.68	22.54	23.50
5	16QAM	1	0	22.87	22.55	22.41	
5	16QAM	1	12	22.74	22.65	22.60	
5	16QAM	1	24	22.61	22.45	22.57	22.50
5	16QAM	12	0	21.71	21.74	21.59	
5	16QAM	12	7	21.74	21.70	21.68	
5	16QAM	12	13	21.71	21.66	21.45	22.50
5	16QAM	25	0	21.72	21.78	21.68	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.74	23.81	23.70	24.50
3	QPSK	1	8	23.71	23.58	23.67	
3	QPSK	1	14	23.46	23.44	23.51	
3	QPSK	8	0	22.66	22.72	22.78	23.50
3	QPSK	8	4	22.65	22.67	22.68	
3	QPSK	8	7	22.53	22.63	22.59	
3	QPSK	15	0	22.60	22.61	22.66	23.50
3	16QAM	1	0	22.80	22.87	22.78	
3	16QAM	1	8	22.74	22.79	22.77	
3	16QAM	1	14	22.71	22.70	22.45	22.50
3	16QAM	8	0	21.75	21.70	21.77	
3	16QAM	8	4	21.59	21.63	21.61	
3	16QAM	8	7	21.53	21.59	21.65	22.50
3	16QAM	15	0	21.50	21.87	21.69	

Frequency (MHz)				824.7	836.5	848.3	limit (dBm)
1.4	QPSK	1	0	23.60	23.65	23.74	24.50
1.4	QPSK	1	3	23.55	23.58	23.75	
1.4	QPSK	1	5	23.39	23.42	23.53	
1.4	QPSK	3	0	23.74	23.71	23.75	
1.4	QPSK	3	1	23.76	23.70	23.79	
1.4	QPSK	3	3	23.69	23.69	23.69	
1.4	QPSK	6	0	22.62	22.56	22.69	23.50
1.4	16QAM	1	0	22.68	22.55	22.38	23.50
1.4	16QAM	1	3	22.56	22.40	22.27	
1.4	16QAM	1	5	22.50	22.36	22.40	
1.4	16QAM	3	0	22.37	22.38	22.51	
1.4	16QAM	3	1	22.64	22.53	22.54	
1.4	16QAM	3	3	22.35	22.60	22.67	
1.4	16QAM	6	0	21.45	21.44	21.59	22.50



# LTE Band 7

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	22.61	22.66	22.56	23.00
20	QPSK	1	49	22.50	22.48	22.46	
20	QPSK	1	99	22.64	22.40	22.25	
20	QPSK	50	0	21.57	21.61	21.58	22.00
20	QPSK	50	24	21.55	21.44	21.35	
20	QPSK	50	50	21.54	21.46	21.34	
20	QPSK	100	0	21.51	21.50	21.39	
20	16QAM	1	0	21.34	21.45	21.44	22.00
20	16QAM	1	49	21.44	21.46	21.43	
20	16QAM	1	99	21.41	21.47	21.41	
20	16QAM	50	0	20.96	20.91	20.72	21.00
20	16QAM	50	24	20.67	20.88	20.69	
20	16QAM	50	50	20.81	20.84	20.68	
20	16QAM	100	0	20.84	20.90	20.56	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.48	22.50	22.43	23.00
15	QPSK	1	37	22.47	22.45	22.37	
15	QPSK	1	74	22.49	22.37	22.22	
15	QPSK	36	0	21.54	21.44	21.35	22.00
15	QPSK	36	20	21.52	21.41	21.32	
15	QPSK	36	39	21.51	21.43	21.31	
15	QPSK	75	0	21.48	21.47	21.36	
15	16QAM	1	0	21.15	21.42	21.41	22.00
15	16QAM	1	37	21.41	21.43	21.40	
15	16QAM	1	74	21.38	21.44	21.38	
15	16QAM	36	0	20.53	20.78	20.59	21.00
15	16QAM	36	20	20.54	20.75	20.56	
15	16QAM	36	39	20.68	20.71	20.55	
15	16QAM	75	0	20.71	20.77	20.43	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	22.52	22.61	22.58	23.00
10	QPSK	1	25	22.49	22.60	22.52	
10	QPSK	1	49	22.60	22.52	22.56	
10	QPSK	25	0	21.69	21.59	21.50	22.00
10	QPSK	25	12	21.67	21.56	21.47	
10	QPSK	25	25	21.66	21.58	21.46	
10	QPSK	50	0	21.63	21.62	21.51	
10	16QAM	1	0	21.30	21.57	21.56	22.00
10	16QAM	1	25	21.56	21.58	21.55	
10	16QAM	1	49	21.53	21.59	21.53	
10	16QAM	25	0	20.68	20.93	20.74	21.00
10	16QAM	25	12	20.69	20.90	20.71	
10	16QAM	25	25	20.83	20.86	20.70	
10	16QAM	50	0	20.86	20.92	20.58	

Frequency (MHz)				2502.5	2535	2567.5	limit (dBm)
5	QPSK	1	0	22.42	22.45	22.42	23.00
5	QPSK	1	12	22.40	22.38	22.30	
5	QPSK	1	24	22.07	22.30	22.15	
5	QPSK	12	0	21.47	21.37	21.28	22.00
5	QPSK	12	7	21.45	21.34	21.25	
5	QPSK	12	13	21.44	21.36	21.24	
5	QPSK	25	0	21.41	21.40	21.29	22.00
5	16QAM	1	0	21.08	21.35	21.34	
5	16QAM	1	12	21.34	21.36	21.33	
5	16QAM	1	24	21.31	21.37	21.31	21.00
5	16QAM	12	0	20.46	20.71	20.52	
5	16QAM	12	7	20.47	20.68	20.49	
5	16QAM	12	13	20.61	20.64	20.48	21.00
5	16QAM	25	0	20.64	20.70	20.36	

# LTE Band 12

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.49	23.57	23.52	24.00
10	QPSK	1	25	23.28	23.38	23.29	
10	QPSK	1	49	23.36	23.28	23.41	
10	QPSK	25	0	22.45	22.53	22.52	23.00
10	QPSK	25	12	22.19	22.33	22.41	
10	QPSK	25	25	22.10	22.25	22.37	
10	QPSK	50	0	22.22	22.18	22.33	
10	16QAM	1	0	22.04	22.12	22.16	23.00
10	16QAM	1	25	22.00	22.15	22.32	
10	16QAM	1	49	22.25	22.17	22.17	
10	16QAM	25	0	21.66	21.65	21.64	22.00
10	16QAM	25	12	21.53	21.56	21.64	
10	16QAM	25	25	21.37	21.45	21.53	
10	16QAM	50	0	21.09	21.00	20.94	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.28	23.26	23.22	24.00
5	QPSK	1	12	23.15	23.27	23.26	
5	QPSK	1	24	22.96	23.07	22.83	
5	QPSK	12	0	22.35	22.38	22.36	23.00
5	QPSK	12	7	22.19	22.32	22.23	
5	QPSK	12	13	22.03	22.19	22.06	
5	QPSK	25	0	22.17	22.28	22.13	
5	16QAM	1	0	21.68	21.92	21.87	23.00
5	16QAM	1	12	21.76	21.68	21.50	
5	16QAM	1	24	21.45	21.56	21.46	
5	16QAM	12	0	21.31	21.33	21.32	22.00
5	16QAM	12	7	21.15	21.25	21.08	
5	16QAM	12	13	21.09	21.18	20.98	
5	16QAM	25	0	21.29	21.11	21.15	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.26	23.22	23.34	24.00
3	QPSK	1	8	23.14	23.21	23.17	
3	QPSK	1	14	22.99	23.05	23.26	
3	QPSK	8	0	22.33	22.32	22.45	23.00
3	QPSK	8	4	22.30	22.30	22.31	
3	QPSK	8	7	22.18	22.26	22.37	
3	QPSK	15	0	22.16	22.32	22.29	
3	16QAM	1	0	22.00	22.06	22.24	23.00
3	16QAM	1	8	22.15	21.95	21.97	
3	16QAM	1	14	21.85	21.78	22.07	
3	16QAM	8	0	21.36	21.30	21.26	22.00
3	16QAM	8	4	21.43	21.25	21.16	
3	16QAM	8	7	21.23	21.34	21.06	
3	16QAM	15	0	21.29	21.26	21.28	

Frequency (MHz)				699.7	707.5	715.3	limit (dBm)
1.4	QPSK	1	0	23.36	23.12	23.37	24.00
1.4	QPSK	1	3	23.11	23.06	23.12	
1.4	QPSK	1	5	23.05	23.01	22.95	
1.4	QPSK	3	0	23.36	23.20	23.44	
1.4	QPSK	3	1	23.36	23.40	23.11	
1.4	QPSK	3	3	23.31	23.19	23.32	
1.4	QPSK	6	0	22.19	22.30	22.29	23.00
1.4	16QAM	1	0	22.63	22.46	22.67	23.00
1.4	16QAM	1	3	22.70	22.39	22.32	
1.4	16QAM	1	5	22.60	22.62	22.23	
1.4	16QAM	3	0	22.42	22.29	22.23	
1.4	16QAM	3	1	22.19	22.36	22.23	
1.4	16QAM	3	3	22.22	22.21	22.42	
1.4	16QAM	6	0	21.22	21.23	21.23	22.00

# LTE Band 13

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0	23.89			24.50
10	QPSK	1	25	23.84			
10	QPSK	1	49	23.85			
10	QPSK	25	0	22.58			23.00
10	QPSK	25	12	22.53			
10	QPSK	25	25	22.51			
10	QPSK	50	0	22.55			
10	16QAM	1	0	22.50			23.00
10	16QAM	1	25	22.55			
10	16QAM	1	49	22.52			
10	16QAM	25	0	21.52			22.00
10	16QAM	25	12	21.43			
10	16QAM	25	25	21.41			
10	16QAM	50	0	21.41			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	23.66	23.79	23.62	24.50
5	QPSK	1	12	23.67	23.68	23.72	
5	QPSK	1	24	23.66	23.62	23.61	
5	QPSK	12	0	22.48	22.48	22.44	23.00
5	QPSK	12	7	22.65	22.49	22.61	
5	QPSK	12	13	22.44	22.48	22.43	
5	QPSK	25	0	22.52	22.47	22.59	
5	16QAM	1	0	22.65	22.33	22.36	23.00
5	16QAM	1	12	22.54	22.23	22.27	
5	16QAM	1	24	22.51	22.21	22.20	
5	16QAM	12	0	21.30	21.47	21.52	22.00
5	16QAM	12	7	21.72	21.50	21.67	
5	16QAM	12	13	21.48	21.39	21.47	
5	16QAM	25	0	21.60	21.46	21.58	

# LTE Band 17

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.44	23.47	23.46	24.00
10	QPSK	1	25	23.16	23.15	23.24	
10	QPSK	1	49	23.13	23.15	23.32	
10	QPSK	25	0	22.45	22.46	22.41	23.00
10	QPSK	25	12	22.33	22.33	22.36	
10	QPSK	25	25	22.19	22.17	22.04	
10	QPSK	50	0	22.25	22.26	22.24	
10	16QAM	1	0	21.99	22.12	22.19	23.00
10	16QAM	1	25	22.35	22.39	22.05	
10	16QAM	1	49	22.38	22.21	22.23	
10	16QAM	25	0	21.05	21.15	21.19	22.00
10	16QAM	25	12	21.42	21.24	21.18	
10	16QAM	25	25	21.18	21.15	21.24	
10	16QAM	50	0	21.18	21.21	21.13	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.26	23.34	23.27	24.00
5	QPSK	1	12	23.15	23.22	23.19	
5	QPSK	1	24	23.23	23.18	23.00	
5	QPSK	12	0	22.03	22.27	22.12	23.00
5	QPSK	12	7	22.14	22.26	22.03	
5	QPSK	12	13	22.16	22.13	21.99	
5	QPSK	25	0	22.13	22.26	22.01	
5	16QAM	1	0	22.16	22.41	22.07	23.00
5	16QAM	1	12	22.26	22.48	22.29	
5	16QAM	1	24	22.17	22.44	22.21	
5	16QAM	12	0	20.93	21.18	21.04	22.00
5	16QAM	12	7	21.14	21.31	21.12	
5	16QAM	12	13	21.07	21.22	20.82	
5	16QAM	25	0	21.28	21.30	21.04	

# LTE Band 25

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	22.78	22.85	22.84	23.50
20	QPSK	1	49	22.84	22.75	22.58	
20	QPSK	1	99	22.56	22.41	22.35	
20	QPSK	50	0	21.48	21.57	21.50	22.50
20	QPSK	50	24	21.26	21.40	21.48	
20	QPSK	50	50	21.24	21.24	21.30	
20	QPSK	100	0	21.31	21.37	21.47	
20	16QAM	1	0	21.16	21.34	21.62	22.50
20	16QAM	1	49	21.33	21.35	21.24	
20	16QAM	1	99	21.32	21.26	21.22	
20	16QAM	50	0	20.56	20.68	20.68	21.50
20	16QAM	50	24	20.59	20.49	20.50	
20	16QAM	50	50	20.29	20.51	20.66	
20	16QAM	100	0	20.62	20.58	20.63	
Channel				26115	26365	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	
15	QPSK	1	0	22.22	22.16	22.31	23.50
15	QPSK	1	37	22.43	22.17	22.35	
15	QPSK	1	74	22.24	22.05	22.48	
15	QPSK	36	0	21.31	21.45	21.51	22.50
15	QPSK	36	20	21.35	21.38	21.39	
15	QPSK	36	39	21.25	21.32	21.35	
15	QPSK	75	0	21.33	21.41	21.47	
15	16QAM	1	0	21.00	21.26	21.10	22.50
15	16QAM	1	37	21.32	21.35	21.27	
15	16QAM	1	74	21.45	21.42	21.34	
15	16QAM	36	0	20.46	20.65	20.60	21.50
15	16QAM	36	20	20.44	20.49	20.39	
15	16QAM	36	39	20.36	20.49	20.56	
15	16QAM	75	0	20.52	20.62	20.83	
Channel				26090	26365	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	22.62	22.42	22.52	23.50
10	QPSK	1	25	22.52	22.37	22.42	
10	QPSK	1	49	22.22	22.26	22.34	
10	QPSK	25	0	21.17	21.24	21.21	22.50
10	QPSK	25	12	21.30	21.19	21.25	
10	QPSK	25	25	21.08	21.17	21.36	
10	QPSK	50	0	21.21	21.19	21.37	
10	16QAM	1	0	21.52	21.22	21.14	22.50
10	16QAM	1	25	21.25	21.21	21.22	
10	16QAM	1	49	21.22	21.62	21.22	
10	16QAM	25	0	20.35	20.27	20.41	21.50
10	16QAM	25	12	20.56	20.37	20.40	
10	16QAM	25	25	20.38	20.25	20.50	
10	16QAM	50	0	20.28	20.36	20.44	

Frequency (MHz)				1852.5	1882.5	1912.5	limit (dBm)
5	QPSK	1	0	22.26	22.42	22.51	23.50
5	QPSK	1	12	22.33	22.38	22.42	
5	QPSK	1	24	22.29	22.45	22.38	
5	QPSK	12	0	21.40	21.21	21.28	22.50
5	QPSK	12	7	21.36	21.34	21.49	
5	QPSK	12	13	21.33	21.25	21.35	
5	QPSK	25	0	21.29	21.27	21.34	22.50
5	16QAM	1	0	21.24	21.30	21.38	
5	16QAM	1	12	21.43	21.00	21.27	
5	16QAM	1	24	21.33	21.01	21.12	21.50
5	16QAM	12	0	20.62	20.43	20.58	
5	16QAM	12	7	20.58	20.45	20.77	
5	16QAM	12	13	20.61	20.31	20.66	21.50
5	16QAM	25	0	20.49	20.42	20.67	
Channel				26055	26365	26675	
Frequency (MHz)				1851.5	1882.5	1913.5	23.50
3	QPSK	1	0	22.50	22.51	22.53	
3	QPSK	1	8	22.41	22.52	22.61	
3	QPSK	1	14	22.36	22.37	22.52	22.50
3	QPSK	8	0	21.44	21.42	21.43	
3	QPSK	8	4	21.35	21.29	21.50	
3	QPSK	8	7	21.36	21.24	21.47	22.50
3	QPSK	15	0	21.37	21.27	21.57	
3	16QAM	1	0	21.34	21.47	21.50	
3	16QAM	1	8	21.33	21.62	21.73	21.50
3	16QAM	1	14	21.35	21.30	21.79	
3	16QAM	8	0	20.76	20.49	20.72	
3	16QAM	8	4	20.58	20.43	20.72	21.50
3	16QAM	8	7	20.53	20.36	20.63	
3	16QAM	15	0	20.39	20.34	20.56	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	23.50
1.4	QPSK	1	0	22.42	22.13	22.26	
1.4	QPSK	1	3	22.19	22.20	22.26	
1.4	QPSK	1	5	22.26	22.12	22.21	22.50
1.4	QPSK	3	0	22.43	22.32	22.34	
1.4	QPSK	3	1	22.33	22.35	22.39	
1.4	QPSK	3	3	22.33	22.36	22.60	21.50
1.4	QPSK	6	0	21.70	21.71	21.74	
1.4	16QAM	1	0	21.62	21.62	21.91	
1.4	16QAM	1	3	21.52	21.46	21.51	21.50
1.4	16QAM	1	5	21.48	21.61	21.70	
1.4	16QAM	3	0	21.78	21.37	21.49	
1.4	16QAM	3	1	21.83	21.37	21.77	21.50
1.4	16QAM	3	3	21.72	21.69	21.56	
1.4	16QAM	6	0	20.49	20.45	20.52	



## LTE Band 26

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	23.71	23.82	23.73	24.50
15	QPSK	1	37	23.56	23.72	23.67	
15	QPSK	1	74	23.64	23.68	23.72	
15	QPSK	36	0	22.72	22.75	22.74	23.50
15	QPSK	36	20	22.71	22.63	22.71	
15	QPSK	36	39	22.59	22.70	22.63	
15	QPSK	75	0	22.71	22.71	22.67	
15	16QAM	1	0	22.22	22.20	22.29	23.50
15	16QAM	1	37	22.47	22.63	22.28	
15	16QAM	1	74	22.25	22.41	22.24	
15	16QAM	36	0	21.67	21.71	21.74	22.50
15	16QAM	36	20	21.69	21.85	21.72	
15	16QAM	36	39	21.81	21.76	21.66	
15	16QAM	75	0	21.78	21.65	21.68	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.71	23.77	23.72	24.50
10	QPSK	1	25	23.71	23.50	23.74	
10	QPSK	1	49	23.51	23.56	23.78	
10	QPSK	25	0	22.59	22.66	22.71	23.50
10	QPSK	25	12	22.69	22.61	22.74	
10	QPSK	25	25	22.73	22.54	22.58	
10	QPSK	50	0	22.51	22.59	22.71	
10	16QAM	1	0	22.12	22.17	22.31	23.50
10	16QAM	1	25	22.56	22.53	22.28	
10	16QAM	1	49	22.37	22.06	22.20	
10	16QAM	25	0	21.62	21.67	21.94	22.50
10	16QAM	25	12	21.85	21.65	22.08	
10	16QAM	25	25	21.69	21.66	21.77	
10	16QAM	50	0	21.64	21.78	21.81	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	23.48	23.53	23.75	24.50
5	QPSK	1	12	23.63	23.58	23.61	
5	QPSK	1	24	23.58	23.47	23.50	
5	QPSK	12	0	22.59	22.60	22.66	23.50
5	QPSK	12	7	22.67	22.55	22.53	
5	QPSK	12	13	22.74	22.46	22.51	
5	QPSK	25	0	22.55	22.58	22.55	
5	16QAM	1	0	22.23	22.53	22.47	23.50
5	16QAM	1	12	22.34	22.23	22.12	
5	16QAM	1	24	22.44	22.31	22.10	
5	16QAM	12	0	21.59	21.47	21.84	22.50
5	16QAM	12	7	21.70	21.50	21.73	
5	16QAM	12	13	21.64	21.50	21.34	
5	16QAM	25	0	21.53	21.56	21.69	
Channel				26705	26865	27025	Tune-up limit (dBm)

Frequency (MHz)				815.5	831.5	847.5	limit (dBm)
3	QPSK	1	0	23.64	23.72	23.53	24.50
3	QPSK	1	8	23.63	23.44	23.49	
3	QPSK	1	14	23.55	23.43	23.48	
3	QPSK	8	0	22.56	22.66	22.65	23.50
3	QPSK	8	4	22.74	22.58	22.61	
3	QPSK	8	7	22.74	22.67	22.56	
3	QPSK	15	0	22.63	22.52	22.59	23.50
3	16QAM	1	0	22.58	22.25	22.27	
3	16QAM	1	8	22.71	22.30	22.25	
3	16QAM	1	14	22.29	22.24	22.50	22.50
3	16QAM	8	0	21.50	21.58	21.65	
3	16QAM	8	4	21.47	21.59	21.47	
3	16QAM	8	7	21.68	21.54	21.63	22.50
3	16QAM	15	0	21.67	21.49	21.64	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	24.50
1.4	QPSK	1	0	23.56	23.55	23.71	
1.4	QPSK	1	3	23.78	23.72	23.76	24.50
1.4	QPSK	1	5	23.71	23.65	23.64	
1.4	QPSK	3	0	23.72	23.66	23.64	
1.4	QPSK	3	1	23.66	23.68	23.67	23.50
1.4	QPSK	3	3	23.77	23.75	23.79	
1.4	QPSK	6	0	22.59	22.67	22.66	23.50
1.4	16QAM	1	0	22.19	22.51	22.28	
1.4	16QAM	1	3	22.23	22.45	22.38	
1.4	16QAM	1	5	22.62	22.27	22.37	
1.4	16QAM	3	0	22.45	22.41	22.53	
1.4	16QAM	3	1	22.57	22.42	22.66	
1.4	16QAM	3	3	22.56	22.49	22.70	
1.4	16QAM	6	0	21.52	21.63	21.72	22.50

# LTE Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	22.78	22.82	22.72	23.50
20	QPSK	1	49	22.53	22.56	22.62	
20	QPSK	1	99	22.58	22.66	22.58	
20	QPSK	50	0	21.68	21.72	21.69	22.50
20	QPSK	50	24	21.40	21.59	21.61	
20	QPSK	50	50	21.30	21.53	21.56	
20	QPSK	100	0	21.39	21.48	21.53	
20	16QAM	1	0	21.52	21.52	21.66	22.50
20	16QAM	1	49	21.66	21.18	21.55	
20	16QAM	1	99	21.58	21.62	21.62	
20	16QAM	50	0	20.64	20.67	20.43	21.50
20	16QAM	50	24	20.63	20.71	20.58	
20	16QAM	50	50	20.76	20.65	20.57	
20	16QAM	100	0	20.34	20.58	20.54	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.28	22.48	22.59	23.50
15	QPSK	1	37	22.33	22.53	22.62	
15	QPSK	1	74	22.16	22.41	22.52	
15	QPSK	36	0	21.46	21.71	21.67	22.50
15	QPSK	36	20	21.37	21.64	21.57	
15	QPSK	36	39	21.42	21.69	21.58	
15	QPSK	75	0	21.45	21.56	21.66	
15	16QAM	1	0	21.62	21.26	21.41	22.50
15	16QAM	1	37	21.45	21.31	21.49	
15	16QAM	1	74	21.35	21.28	21.28	
15	16QAM	36	0	20.39	20.57	20.37	21.50
15	16QAM	36	20	20.39	20.63	20.48	
15	16QAM	36	39	20.34	20.72	20.46	
15	16QAM	75	0	20.43	20.60	20.63	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.51	22.78	22.51	23.50
10	QPSK	1	25	22.52	22.80	22.45	
10	QPSK	1	49	22.49	22.67	22.54	
10	QPSK	25	0	21.52	21.84	21.82	22.50
10	QPSK	25	12	21.56	21.80	21.71	
10	QPSK	25	25	21.65	21.76	21.68	
10	QPSK	50	0	21.41	21.72	21.67	
10	16QAM	1	0	21.56	21.30	21.38	22.50
10	16QAM	1	25	21.64	21.35	21.45	
10	16QAM	1	49	21.18	21.27	21.20	
10	16QAM	25	0	20.50	20.52	20.40	21.50
10	16QAM	25	12	20.49	20.81	20.71	
10	16QAM	25	25	20.65	20.75	20.80	
10	16QAM	50	0	20.69	20.71	20.57	

Frequency (MHz)				1712.5	1745	1777.5	limit (dBm)
5	QPSK	1	0	22.52	22.65	22.54	23.50
5	QPSK	1	12	22.48	22.55	22.62	
5	QPSK	1	24	22.55	22.56	22.51	
5	QPSK	12	0	21.49	21.54	21.49	22.50
5	QPSK	12	7	21.41	21.64	21.56	
5	QPSK	12	13	21.30	21.57	21.50	
5	QPSK	25	0	21.37	21.52	21.49	22.50
5	16QAM	1	0	20.68	21.13	20.98	
5	16QAM	1	12	20.82	21.05	20.84	
5	16QAM	1	24	21.15	21.14	21.05	21.50
5	16QAM	12	0	20.52	20.52	20.39	
5	16QAM	12	7	20.27	20.57	20.59	
5	16QAM	12	13	20.39	20.47	20.64	21.50
5	16QAM	25	0	20.30	20.54	20.45	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	limit (dBm)
3	QPSK	1	0	22.63	22.68	22.74	23.50
3	QPSK	1	8	22.25	22.40	22.33	
3	QPSK	1	14	22.37	22.50	22.56	
3	QPSK	8	0	21.35	21.60	21.53	22.50
3	QPSK	8	4	21.36	21.60	21.52	
3	QPSK	8	7	21.30	21.69	21.56	
3	QPSK	15	0	21.30	21.62	21.50	22.50
3	16QAM	1	0	21.18	21.22	21.10	
3	16QAM	1	8	21.29	21.18	21.05	
3	16QAM	1	14	21.27	21.34	21.52	21.50
3	16QAM	8	0	20.37	20.57	20.50	
3	16QAM	8	4	20.46	20.66	20.48	
3	16QAM	8	7	20.37	20.72	20.65	21.50
3	16QAM	15	0	20.17	20.66	20.42	
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	limit (dBm)
1.4	QPSK	1	0	22.56	22.57	22.67	23.50
1.4	QPSK	1	3	22.40	22.65	22.41	
1.4	QPSK	1	5	22.22	22.54	22.19	
1.4	QPSK	3	0	22.38	22.52	22.50	
1.4	QPSK	3	1	22.35	22.67	22.63	
1.4	QPSK	3	3	22.44	22.57	22.43	22.50
1.4	QPSK	6	0	21.38	21.50	21.44	
1.4	16QAM	1	0	21.41	21.35	21.64	22.50
1.4	16QAM	1	3	21.37	21.69	21.67	
1.4	16QAM	1	5	21.24	21.38	21.27	
1.4	16QAM	3	0	21.32	21.44	21.36	
1.4	16QAM	3	1	21.25	21.11	21.42	
1.4	16QAM	3	3	21.20	21.49	21.35	
1.4	16QAM	6	0	20.20	20.32	20.60	21.50

# LTE Band 71

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	23.52	23.53	23.48	24.00
20	QPSK	1	49	23.41	23.35	23.20	
20	QPSK	1	99	23.26	23.26	23.16	
20	QPSK	50	0	22.48	22.54	22.46	23.00
20	QPSK	50	24	22.22	22.26	22.24	
20	QPSK	50	50	22.28	22.19	22.16	
20	QPSK	100	0	22.15	22.17	22.15	
20	16QAM	1	0	22.15	22.17	22.16	23.00
20	16QAM	1	49	22.26	22.26	22.15	
20	16QAM	1	99	22.24	22.25	22.15	
20	16QAM	50	0	21.24	21.29	21.20	22.00
20	16QAM	50	24	21.31	21.37	21.33	
20	16QAM	50	50	21.21	21.24	21.16	
20	16QAM	100	0	21.22	21.16	21.12	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.38	23.46	23.37	24.00
15	QPSK	1	37	23.42	23.22	23.51	
15	QPSK	1	74	23.29	23.42	23.39	
15	QPSK	36	0	22.17	22.26	22.24	23.00
15	QPSK	36	20	22.22	22.32	22.27	
15	QPSK	36	39	22.46	22.39	22.33	
15	QPSK	75	0	22.24	22.25	22.23	
15	16QAM	1	0	22.13	21.88	21.81	23.00
15	16QAM	1	37	22.29	21.84	22.15	
15	16QAM	1	74	22.22	22.00	22.09	
15	16QAM	36	0	21.13	21.15	21.12	22.00
15	16QAM	36	20	21.28	21.30	21.27	
15	16QAM	36	39	21.14	21.44	21.37	
15	16QAM	75	0	21.23	21.37	21.34	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.24	23.34	23.26	24.00
10	QPSK	1	25	23.22	23.16	23.24	
10	QPSK	1	49	23.16	23.25	23.19	
10	QPSK	25	0	22.14	22.27	22.23	23.00
10	QPSK	25	12	22.10	22.15	22.18	
10	QPSK	25	25	22.10	22.16	22.12	
10	QPSK	50	0	22.09	22.21	22.19	
10	16QAM	1	0	22.20	21.99	22.00	23.00
10	16QAM	1	25	22.27	22.01	22.24	
10	16QAM	1	49	22.06	21.79	21.85	
10	16QAM	25	0	21.56	21.23	21.29	22.00
10	16QAM	25	12	21.62	21.23	21.27	
10	16QAM	25	25	21.55	21.13	21.26	
10	16QAM	50	0	21.17	21.45	21.27	

Frequency (MHz)				665.5	675.5	695.5	limit (dBm)
5	QPSK	1	0	23.11	23.32	23.22	24.00
5	QPSK	1	12	23.16	23.22	23.11	
5	QPSK	1	24	23.04	23.15	23.15	
5	QPSK	12	0	22.16	22.18	22.17	23.00
5	QPSK	12	7	22.16	22.21	22.19	
5	QPSK	12	13	22.08	22.21	22.08	
5	QPSK	25	0	22.16	22.10	22.16	23.00
5	16QAM	1	0	21.90	21.76	21.95	
5	16QAM	1	12	21.62	21.77	21.77	
5	16QAM	1	24	21.59	21.65	21.56	22.00
5	16QAM	12	0	21.24	21.14	21.10	
5	16QAM	12	7	21.22	21.06	21.04	
5	16QAM	12	13	21.16	21.07	21.06	22.00
5	16QAM	25	0	21.17	21.10	21.06	

# LTE Band 38

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.47	23.58	23.42	24.00
20	QPSK	1	49	23.39	23.42	23.40	
20	QPSK	1	99	23.38	23.34	23.46	
20	QPSK	50	0	22.46	22.52	22.42	23.00
20	QPSK	50	24	22.22	22.25	22.27	
20	QPSK	50	50	22.13	22.12	22.20	
20	QPSK	100	0	22.16	22.12	22.23	22.00
20	16QAM	1	0	21.54	21.55	21.52	
20	16QAM	1	49	21.55	21.41	21.43	
20	16QAM	1	99	21.46	21.52	21.55	22.00
20	16QAM	50	0	21.08	21.24	21.11	
20	16QAM	50	24	21.12	21.31	21.34	
20	16QAM	50	50	21.06	21.19	21.31	
20	16QAM	100	0	21.12	21.11	21.15	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.23	22.93	22.98	24.00
15	QPSK	1	37	23.37	23.36	23.39	
15	QPSK	1	74	22.99	22.92	23.24	
15	QPSK	36	0	22.18	22.19	22.24	23.00
15	QPSK	36	20	22.21	22.35	22.37	
15	QPSK	36	39	22.12	22.10	22.19	
15	QPSK	75	0	22.15	22.21	22.23	22.00
15	16QAM	1	0	21.27	21.38	21.36	
15	16QAM	1	37	21.26	21.42	21.34	
15	16QAM	1	74	21.54	21.76	21.54	22.00
15	16QAM	36	0	21.07	21.21	21.19	
15	16QAM	36	20	21.22	21.19	21.33	
15	16QAM	36	39	21.17	21.07	21.30	
15	16QAM	75	0	21.21	21.19	21.23	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.33	23.42	23.33	24.00
10	QPSK	1	25	23.16	23.26	23.15	
10	QPSK	1	49	23.22	23.24	23.28	
10	QPSK	25	0	22.24	22.22	22.33	23.00
10	QPSK	25	12	22.20	22.34	22.38	
10	QPSK	25	25	22.08	22.14	22.30	
10	QPSK	50	0	22.21	22.18	22.32	22.00
10	16QAM	1	0	21.52	21.46	21.52	
10	16QAM	1	25	21.55	21.43	21.42	
10	16QAM	1	49	21.42	21.44	21.34	22.00
10	16QAM	25	0	21.16	21.45	21.13	
10	16QAM	25	12	21.37	21.15	21.32	

10	16QAM	25	25	21.35	21.15	21.21	22.00
10	16QAM	50	0	21.08	21.19	21.12	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	23.22	23.44	23.34	24.00
5	QPSK	1	12	23.27	23.38	23.29	
5	QPSK	1	24	23.24	23.27	23.25	
5	QPSK	12	0	22.21	22.22	22.31	23.00
5	QPSK	12	7	22.29	22.35	22.37	
5	QPSK	12	13	22.15	22.25	22.29	
5	QPSK	25	0	22.21	22.17	22.31	22.00
5	16QAM	1	0	21.52	21.55	21.42	
5	16QAM	1	12	21.42	21.41	21.52	
5	16QAM	1	24	21.44	21.43	21.62	
5	16QAM	12	0	21.37	21.13	21.42	22.00
5	16QAM	12	7	21.37	21.56	21.29	
5	16QAM	12	13	21.35	21.37	21.22	
5	16QAM	25	0	21.18	21.17	21.31	



# LTE Band 40A

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				38750			
Frequency (MHz)				2310			
10	QPSK	1	0	23.40			24.00
10	QPSK	1	25	23.23			
10	QPSK	1	49	22.99			
10	QPSK	25	0	22.74			23.00
10	QPSK	25	12	22.23			
10	QPSK	25	25	22.21			
10	QPSK	50	0	22.21			23.00
10	16QAM	1	0	22.19			
10	16QAM	1	25	22.07			
10	16QAM	1	49	22.18			22.00
10	16QAM	25	0	21.41			
10	16QAM	25	12	21.48			
10	16QAM	25	25	21.42			22.00
10	16QAM	50	0	21.21			
Channel				38725	38750	38775	
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.34	23.36	23.24	24.00
5	QPSK	1	12	23.33	23.22	23.25	
5	QPSK	1	24	23.22	23.28	23.18	
5	QPSK	12	0	22.23	22.20	22.25	23.00
5	QPSK	12	7	22.26	22.30	22.29	
5	QPSK	12	13	22.21	22.22	22.25	
5	QPSK	25	0	22.14	22.22	22.27	23.00
5	16QAM	1	0	22.23	22.34	22.43	
5	16QAM	1	12	22.24	22.16	22.33	
5	16QAM	1	24	22.28	22.24	22.34	22.00
5	16QAM	12	0	21.14	21.33	21.29	
5	16QAM	12	7	21.17	21.33	21.33	
5	16QAM	12	13	21.30	21.25	21.28	22.00
5	16QAM	25	0	21.47	21.45	21.46	

# LTE Band 40B

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				39200			
Frequency (MHz)				2355			
10	QPSK	1	0	23.38			24.00
10	QPSK	1	25	23.31			
10	QPSK	1	49	23.21			
10	QPSK	25	0	22.68			23.00
10	QPSK	25	12	22.64			
10	QPSK	25	25	22.40			
10	QPSK	50	0	22.42			
10	16QAM	1	0	21.79			23.00
10	16QAM	1	25	21.80			
10	16QAM	1	49	22.01			
10	16QAM	25	0	21.92			22.00
10	16QAM	25	12	21.87			
10	16QAM	25	25	21.80			
10	16QAM	50	0	21.08			
Channel				39175	39200	39225	Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	23.22	23.34	23.26	24.00
5	QPSK	1	12	23.27	23.25	23.22	
5	QPSK	1	24	23.33	23.14	23.31	
5	QPSK	12	0	22.14	22.18	22.33	23.00
5	QPSK	12	7	22.15	22.17	22.34	
5	QPSK	12	13	22.28	22.24	22.24	
5	QPSK	25	0	22.13	22.32	22.33	
5	16QAM	1	0	22.19	22.26	22.27	23.00
5	16QAM	1	12	22.33	22.17	22.34	
5	16QAM	1	24	22.16	22.26	22.24	
5	16QAM	12	0	21.16	21.17	21.42	22.00
5	16QAM	12	7	21.20	21.22	21.22	
5	16QAM	12	13	21.18	21.26	21.25	
5	16QAM	25	0	21.31	20.97	21.16	

# LTE Band 41

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.24	25.17	25.31	25.12	25.20	25.50
20	QPSK	1	49	25.10	25.16	25.29	25.12	25.20	
20	QPSK	1	99	25.05	25.11	25.21	25.10	25.14	
20	QPSK	50	0	24.21	24.29	24.34	24.18	24.24	24.50
20	QPSK	50	24	24.10	24.26	24.30	24.20	24.21	
20	QPSK	50	50	24.05	24.18	24.31	24.13	24.00	
20	QPSK	100	0	24.11	24.33	24.33	24.20	24.17	24.50
20	16QAM	1	0	23.64	23.85	23.82	23.71	23.88	
20	16QAM	1	49	24.06	24.09	24.11	24.10	24.00	
20	16QAM	1	99	23.62	23.68	23.75	23.69	23.79	24.50
20	16QAM	50	0	23.34	23.24	23.51	23.36	23.42	
20	16QAM	50	24	23.33	23.26	23.27	23.31	23.51	
20	16QAM	50	50	23.51	23.34	23.33	23.20	23.55	24.50
20	16QAM	100	0	23.42	23.18	23.23	23.33	23.51	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	24.79	25.09	25.17	24.96	25.06	25.50
15	QPSK	1	37	25.18	25.24	25.15	25.19	25.20	
15	QPSK	1	74	24.82	25.06	24.96	24.98	24.81	
15	QPSK	36	0	24.17	24.27	24.30	24.12	24.20	24.50
15	QPSK	36	20	24.20	24.31	24.31	24.23	24.19	
15	QPSK	36	39	24.08	24.21	24.29	24.16	23.92	
15	QPSK	75	0	24.09	24.34	24.31	24.17	24.04	24.50
15	16QAM	1	0	23.75	23.90	24.02	23.84	23.74	
15	16QAM	1	37	23.90	23.99	24.00	23.90	23.93	
15	16QAM	1	74	23.70	23.87	23.93	23.78	23.67	24.50
15	16QAM	36	0	23.44	23.56	23.56	23.62	23.52	
15	16QAM	36	20	23.52	23.52	23.55	23.52	23.61	
15	16QAM	36	39	23.62	23.61	23.62	23.42	23.51	24.50
15	16QAM	75	0	23.38	23.29	23.29	23.38	23.37	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	24.86	25.16	25.05	24.93	24.90	25.50
10	QPSK	1	25	25.14	25.12	25.15	25.18	25.07	
10	QPSK	1	49	24.89	24.89	24.97	25.06	24.79	
10	QPSK	25	0	24.18	24.31	24.32	24.28	24.13	24.50
10	QPSK	25	12	24.30	24.29	24.38	24.22	24.13	
10	QPSK	25	25	24.18	24.36	24.31	24.18	23.98	
10	QPSK	50	0	24.13	24.33	24.36	24.25	24.07	24.50
10	16QAM	1	0	23.66	23.52	23.61	23.52	23.66	
10	16QAM	1	25	23.55	23.46	23.51	23.56	23.55	
10	16QAM	1	49	23.46	23.51	23.55	23.62	23.76	24.50
10	16QAM	25	0	23.49	23.48	23.42	23.43	23.30	
10	16QAM	25	12	23.41	23.47	23.50	23.50	23.32	
10	16QAM	25	25	23.50	23.40	23.41	23.14	23.27	24.50
10	16QAM	50	0	23.12	23.30	23.35	23.23	23.03	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	24.87	25.03	25.04	24.87	24.89	25.50
5	QPSK	1	12	25.02	25.10	25.09	25.06	24.90	
5	QPSK	1	24	25.05	24.94	25.06	24.91	24.72	
5	QPSK	12	0	24.23	24.33	24.47	24.29	24.13	24.50
5	QPSK	12	7	24.24	24.29	24.28	24.29	24.15	
5	QPSK	12	13	24.24	24.25	24.39	24.22	24.10	
5	QPSK	25	0	24.23	24.27	24.31	24.18	24.04	24.50
5	16QAM	1	0	23.75	23.71	23.78	23.68	23.68	
5	16QAM	1	12	23.85	23.94	23.99	23.94	23.62	
5	16QAM	1	24	23.89	23.79	23.81	23.79	23.59	24.50
5	16QAM	12	0	23.23	23.28	23.20	23.28	23.18	
5	16QAM	12	7	23.36	23.35	23.17	23.40	23.21	
5	16QAM	12	13	23.24	23.11	23.13	23.32	23.01	24.50
5	16QAM	25	0	23.36	23.01	23.18	23.44	23.22	