



Appendix E. Output Power Measurement

<WCDMA Conducted Power>

【WCDMA II】

TX Channel		9262	9400	9538	Tune-up Limit (dBm)
Frequency (MHz)		1852.4	1880	1907.6	
3GPP Rel 99	RMC 12.2Kbps	18.97	19.07	19.00	20.00
3GPP Rel 6	HSDPA Subtest-1	17.88	18.16	17.89	19.00
3GPP Rel 6	HSDPA Subtest-2	18.14	18.24	18.14	19.00
3GPP Rel 6	HSDPA Subtest-3	17.56	17.92	17.60	18.50
3GPP Rel 6	HSDPA Subtest-4	17.90	18.07	17.81	18.50
3GPP Rel 6	HSUPA Subtest-1	17.80	18.19	18.07	19.00
3GPP Rel 6	HSUPA Subtest-2	16.00	16.46	16.33	17.00
3GPP Rel 6	HSUPA Subtest-3	16.97	17.11	17.05	18.00
3GPP Rel 6	HSUPA Subtest-4	16.17	16.50	16.07	17.00
3GPP Rel 6	HSUPA Subtest-5	17.98	18.17	18.42	19.00

【WCDMA IV】

TX Channel		1312	1413	1513	Tune-up Limit (dBm)
Frequency (MHz)		1712.4	1732.6	1752.6	
3GPP Rel 99	RMC 12.2Kbps	18.15	18.34	18.21	19.50
3GPP Rel 6	HSDPA Subtest-1	17.26	17.47	17.00	18.50
3GPP Rel 6	HSDPA Subtest-2	17.17	17.51	17.20	18.50
3GPP Rel 6	HSDPA Subtest-3	16.53	17.12	16.72	18.00
3GPP Rel 6	HSDPA Subtest-4	16.86	17.14	16.87	18.00
3GPP Rel 6	HSUPA Subtest-1	17.16	17.19	17.18	18.50
3GPP Rel 6	HSUPA Subtest-2	15.11	15.48	15.28	16.50
3GPP Rel 6	HSUPA Subtest-3	16.05	16.27	16.13	17.50
3GPP Rel 6	HSUPA Subtest-4	15.25	15.40	15.44	16.50
3GPP Rel 6	HSUPA Subtest-5	17.08	17.18	17.30	18.50

【WCDMA V】

TX Channel		4132	4182	4233	Tune-up Limit (dBm)
Frequency (MHz)		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	22.18	22.19	22.16	23.00
3GPP Rel 6	HSDPA Subtest-1	20.98	20.83	20.74	22.00
3GPP Rel 6	HSDPA Subtest-2	20.81	21.09	20.97	22.00
3GPP Rel 6	HSDPA Subtest-3	20.32	20.74	20.72	21.50
3GPP Rel 6	HSDPA Subtest-4	20.49	20.70	20.90	21.50
3GPP Rel 6	HSUPA Subtest-1	20.75	20.96	20.78	22.00
3GPP Rel 6	HSUPA Subtest-2	18.90	19.04	19.11	20.00
3GPP Rel 6	HSUPA Subtest-3	19.81	20.06	19.90	21.00
3GPP Rel 6	HSUPA Subtest-4	18.97	19.27	19.04	20.00
3GPP Rel 6	HSUPA Subtest-5	20.66	21.08	20.86	22.00



<LTE Conducted Power>

【LTE Band 2】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				18700	18900	19100	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	17.98	18.03	18.01	19.00
20	QPSK	1	49	17.68	17.79	17.63	19.00
20	QPSK	1	99	17.57	17.74	17.61	19.00
20	QPSK	50	0	17.91	17.95	17.93	19.00
20	QPSK	50	24	17.61	17.73	17.57	19.00
20	QPSK	50	50	17.75	17.84	17.68	19.00
20	QPSK	100	0	17.75	17.84	17.74	19.00
20	16QAM	1	0	17.67	17.86	17.78	19.00
20	16QAM	1	49	17.60	17.78	17.62	19.00
20	16QAM	1	99	17.69	17.75	17.61	19.00
20	16QAM	50	0	17.82	17.95	17.89	19.00
20	16QAM	50	24	17.56	17.72	17.58	19.00
20	16QAM	50	50	17.81	17.93	17.89	19.00
20	16QAM	100	0	17.73	17.88	17.77	19.00
20	64QAM	1	0	17.69	17.78	17.69	19.00
20	64QAM	1	49	17.61	17.73	17.59	19.00
20	64QAM	1	99	17.65	17.80	17.76	19.00
20	64QAM	50	0	17.62	17.80	17.69	19.00
20	64QAM	50	24	17.82	17.90	17.85	19.00
20	64QAM	50	50	17.55	17.74	17.58	19.00
20	64QAM	100	0	17.67	17.87	17.83	19.00
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	17.91	17.97	17.93	19.00
15	QPSK	1	37	17.65	17.73	17.57	19.00
15	QPSK	1	74	17.49	17.64	17.50	19.00
15	QPSK	36	0	17.85	17.80	17.79	19.00
15	QPSK	36	20	17.53	17.60	17.45	19.00
15	QPSK	36	39	17.71	17.77	17.67	19.00
15	QPSK	75	0	17.61	17.73	17.65	19.00
15	16QAM	1	0	17.60	17.78	17.74	19.00
15	16QAM	1	37	17.45	17.76	17.60	19.00
15	16QAM	1	74	17.64	17.63	17.51	19.00
15	16QAM	36	0	17.72	17.94	17.80	19.00
15	16QAM	36	20	17.48	17.63	17.57	19.00
15	16QAM	36	39	17.69	17.79	17.82	19.00
15	16QAM	75	0	17.61	17.80	17.68	19.00
15	64QAM	1	0	17.67	17.73	17.55	19.00
15	64QAM	1	37	17.56	17.69	17.48	19.00
15	64QAM	1	74	17.62	17.74	17.68	19.00
15	64QAM	36	0	17.55	17.76	17.54	19.00
15	64QAM	36	20	17.69	17.88	17.74	19.00
15	64QAM	36	39	17.49	17.63	17.51	19.00
15	64QAM	75	0	17.53	17.78	17.73	19.00
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	17.94	17.96	17.99	19.00
10	QPSK	1	25	17.62	17.67	17.50	19.00
10	QPSK	1	49	17.52	17.61	17.53	19.00
10	QPSK	25	0	17.85	17.85	17.92	19.00
10	QPSK	25	12	17.56	17.67	17.45	19.00
10	QPSK	25	25	17.74	17.73	17.65	19.00
10	QPSK	50	0	17.68	17.72	17.66	19.00
10	16QAM	1	0	17.53	17.76	17.65	19.00
10	16QAM	1	25	17.50	17.76	17.59	19.00
10	16QAM	1	49	17.64	17.73	17.50	19.00
10	16QAM	25	0	17.78	17.81	17.75	19.00
10	16QAM	25	12	17.54	17.64	17.46	19.00
10	16QAM	25	25	17.68	17.78	17.84	19.00
10	16QAM	50	0	17.64	17.86	17.63	19.00
10	64QAM	1	0	17.56	17.74	17.55	19.00
10	64QAM	1	25	17.58	17.69	17.48	19.00
10	64QAM	1	49	17.63	17.65	17.66	19.00
10	64QAM	25	0	17.57	17.72	17.64	19.00
10	64QAM	25	12	17.70	17.80	17.75	19.00
10	64QAM	25	25	17.44	17.61	17.49	19.00
10	64QAM	50	0	17.62	17.80	17.82	19.00
Channel				18625	18900	19175	Tune-up limit



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Frequency (MHz)				1852.5	1880	1907.5	(dBm)
5	QPSK	1	0	17.90	17.94	17.92	19.00
5	QPSK	1	12	17.65	17.67	17.54	19.00
5	QPSK	1	24	17.46	17.63	17.60	19.00
5	QPSK	12	0	17.82	17.90	17.86	19.00
5	QPSK	12	7	17.50	17.59	17.50	19.00
5	QPSK	12	13	17.72	17.82	17.66	19.00
5	QPSK	25	0	17.72	17.77	17.71	19.00
5	16QAM	1	0	17.53	17.73	17.71	19.00
5	16QAM	1	12	17.48	17.75	17.58	19.00
5	16QAM	1	24	17.56	17.66	17.47	19.00
5	16QAM	12	0	17.76	17.82	17.81	19.00
5	16QAM	12	7	17.45	17.65	17.48	19.00
5	16QAM	12	13	17.74	17.83	17.84	19.00
5	16QAM	25	0	17.70	17.79	17.68	19.00
5	64QAM	1	0	17.67	17.77	17.61	19.00
5	64QAM	1	12	17.52	17.61	17.46	19.00
5	64QAM	1	24	17.53	17.75	17.68	19.00
5	64QAM	12	0	17.49	17.69	17.66	19.00
5	64QAM	12	7	17.73	17.79	17.80	19.00
5	64QAM	12	13	17.50	17.62	17.51	19.00
5	64QAM	25	0	17.59	17.81	17.80	19.00
Channel				18615	18900	19185	Tune-up limit
Frequency (MHz)				1851.5	1880	1908.5	(dBm)
3	QPSK	1	0	17.85	17.91	17.92	19.00
3	QPSK	1	8	17.55	17.73	17.50	19.00
3	QPSK	1	14	17.52	17.61	17.55	19.00
3	QPSK	8	0	17.89	17.87	17.90	19.00
3	QPSK	8	4	17.51	17.68	17.51	19.00
3	QPSK	8	7	17.60	17.74	17.57	19.00
3	QPSK	15	0	17.66	17.76	17.71	19.00
3	16QAM	1	0	17.58	17.74	17.75	19.00
3	16QAM	1	8	17.46	17.70	17.47	19.00
3	16QAM	1	14	17.55	17.64	17.51	19.00
3	16QAM	8	0	17.79	17.86	17.86	19.00
3	16QAM	8	4	17.48	17.67	17.50	19.00
3	16QAM	8	7	17.73	17.89	17.86	19.00
3	16QAM	15	0	17.67	17.75	17.69	19.00
3	64QAM	1	0	17.58	17.66	17.63	19.00
3	64QAM	1	8	17.47	17.60	17.57	19.00
3	64QAM	1	14	17.57	17.67	17.66	19.00
3	64QAM	8	0	17.53	17.75	17.64	19.00
3	64QAM	8	4	17.69	17.87	17.71	19.00
3	64QAM	8	7	17.43	17.70	17.50	19.00
3	64QAM	15	0	17.56	17.81	17.75	19.00
Channel				18607	18900	19193	Tune-up limit
Frequency (MHz)				1850.7	1880	1909.3	(dBm)
1.4	QPSK	1	0	17.87	18.02	17.95	19.00
1.4	QPSK	1	3	17.62	17.71	17.56	19.00
1.4	QPSK	1	5	17.55	17.68	17.52	19.00
1.4	QPSK	3	0	17.78	17.85	17.86	19.00
1.4	QPSK	3	1	17.48	17.63	17.51	19.00
1.4	QPSK	3	3	17.62	17.72	17.55	19.00
1.4	QPSK	6	0	17.65	17.82	17.61	19.00
1.4	16QAM	1	0	17.59	17.84	17.75	19.00
1.4	16QAM	1	3	17.53	17.76	17.54	19.00
1.4	16QAM	1	5	17.62	17.63	17.47	19.00
1.4	16QAM	3	0	17.75	17.86	17.75	19.00
1.4	16QAM	3	1	17.54	17.59	17.56	19.00
1.4	16QAM	3	3	17.66	17.90	17.88	19.00
1.4	16QAM	6	0	17.62	17.79	17.73	19.00
1.4	64QAM	1	0	17.67	17.63	17.66	19.00
1.4	64QAM	1	3	17.55	17.67	17.55	19.00
1.4	64QAM	1	5	17.60	17.78	17.71	19.00
1.4	64QAM	3	0	17.47	17.77	17.57	19.00
1.4	64QAM	3	1	17.74	17.77	17.80	19.00
1.4	64QAM	3	3	17.50	17.68	17.54	19.00
1.4	64QAM	6	0	17.55	17.83	17.76	19.00

【LTE Band 4】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	17.94	18.02	18.01	19.00
20	QPSK	1	49	17.80	17.94	17.88	19.00
20	QPSK	1	99	17.83	17.96	17.89	19.00
20	QPSK	50	0	17.85	17.93	17.88	19.00
20	QPSK	50	24	17.71	17.83	17.73	19.00
20	QPSK	50	50	17.76	17.92	17.87	19.00
20	QPSK	100	0	17.74	17.91	17.82	19.00
20	16QAM	1	0	17.75	17.85	17.81	19.00
20	16QAM	1	49	17.88	17.97	17.86	19.00
20	16QAM	1	99	17.63	17.84	17.79	19.00
20	16QAM	50	0	17.82	18.00	17.94	19.00
20	16QAM	50	24	17.75	17.93	17.85	19.00
20	16QAM	50	50	17.60	17.82	17.72	19.00
20	16QAM	100	0	17.76	17.91	17.84	19.00
20	64QAM	1	0	17.79	17.94	17.88	19.00
20	64QAM	1	49	17.78	17.92	17.84	19.00
20	64QAM	1	99	17.67	17.87	17.73	19.00
20	64QAM	50	0	17.73	17.92	17.77	19.00
20	64QAM	50	24	17.71	17.82	17.69	19.00
20	64QAM	50	50	17.81	17.97	17.88	19.00
20	64QAM	100	0	17.68	17.82	17.68	19.00
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	17.79	17.88	17.90	19.00
15	QPSK	1	37	17.69	17.79	17.80	19.00
15	QPSK	1	74	17.80	17.88	17.86	19.00
15	QPSK	36	0	17.79	17.88	17.81	19.00
15	QPSK	36	20	17.61	17.79	17.72	19.00
15	QPSK	36	39	17.71	17.86	17.77	19.00
15	QPSK	75	0	17.65	17.83	17.71	19.00
15	16QAM	1	0	17.61	17.78	17.70	19.00
15	16QAM	1	37	17.83	17.92	17.82	19.00
15	16QAM	1	74	17.54	17.79	17.64	19.00
15	16QAM	36	0	17.76	17.86	17.83	19.00
15	16QAM	36	20	17.63	17.85	17.74	19.00
15	16QAM	36	39	17.49	17.75	17.71	19.00
15	16QAM	75	0	17.66	17.88	17.71	19.00
15	64QAM	1	0	17.65	17.81	17.76	19.00
15	64QAM	1	37	17.77	17.80	17.70	19.00
15	64QAM	1	74	17.55	17.74	17.70	19.00
15	64QAM	36	0	17.71	17.79	17.73	19.00
15	64QAM	36	20	17.61	17.78	17.54	19.00
15	64QAM	36	39	17.73	17.87	17.81	19.00
15	64QAM	75	0	17.53	17.80	17.65	19.00
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	17.85	17.94	17.94	19.00
10	QPSK	1	25	17.68	17.92	17.85	19.00
10	QPSK	1	49	17.69	17.90	17.84	19.00
10	QPSK	25	0	17.78	17.84	17.79	19.00
10	QPSK	25	12	17.70	17.73	17.58	19.00
10	QPSK	25	25	17.68	17.80	17.73	19.00
10	QPSK	50	0	17.62	17.77	17.77	19.00
10	16QAM	1	0	17.69	17.79	17.76	19.00
10	16QAM	1	25	17.77	17.95	17.78	19.00
10	16QAM	1	49	17.55	17.83	17.77	19.00
10	16QAM	25	0	17.71	17.87	17.83	19.00
10	16QAM	25	12	17.63	17.82	17.73	19.00
10	16QAM	25	25	17.57	17.71	17.65	19.00
10	16QAM	50	0	17.61	17.86	17.77	19.00
10	64QAM	1	0	17.76	17.91	17.83	19.00
10	64QAM	1	25	17.72	17.79	17.71	19.00
10	64QAM	1	49	17.53	17.73	17.67	19.00
10	64QAM	25	0	17.64	17.84	17.76	19.00
10	64QAM	25	12	17.65	17.76	17.64	19.00
10	64QAM	25	25	17.72	17.93	17.78	19.00
10	64QAM	50	0	17.59	17.73	17.67	19.00
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	17.93	17.91	17.89	19.00
5	QPSK	1	12	17.73	17.90	17.84	19.00



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5	QPSK	1	24	17.74	17.90	17.86	19.00
5	QPSK	12	0	17.73	17.91	17.77	19.00
5	QPSK	12	7	17.61	17.80	17.60	19.00
5	QPSK	12	13	17.69	17.86	17.79	19.00
5	QPSK	25	0	17.65	17.88	17.75	19.00
5	16QAM	1	0	17.67	17.77	17.73	19.00
5	16QAM	1	12	17.86	17.89	17.83	19.00
5	16QAM	1	24	17.57	17.72	17.75	19.00
5	16QAM	12	0	17.79	17.93	17.87	19.00
5	16QAM	12	7	17.61	17.84	17.75	19.00
5	16QAM	12	13	17.57	17.72	17.61	19.00
5	16QAM	25	0	17.74	17.81	17.76	19.00
5	64QAM	1	0	17.74	17.93	17.73	19.00
5	64QAM	1	12	17.71	17.81	17.76	19.00
5	64QAM	1	24	17.54	17.85	17.61	19.00
5	64QAM	12	0	17.67	17.79	17.76	19.00
5	64QAM	12	7	17.57	17.81	17.66	19.00
5	64QAM	12	13	17.79	17.92	17.75	19.00
5	64QAM	25	0	17.57	17.81	17.66	19.00
Channel				19965	20175	20385	Tune-up limit
Frequency (MHz)				1711.5	1732.5	1753.5	(dBm)
3	QPSK	1	0	17.81	17.91	17.87	19.00
3	QPSK	1	8	17.66	17.85	17.78	19.00
3	QPSK	1	14	17.74	17.95	17.85	19.00
3	QPSK	8	0	17.78	17.84	17.84	19.00
3	QPSK	8	4	17.63	17.78	17.70	19.00
3	QPSK	8	7	17.71	17.81	17.75	19.00
3	QPSK	15	0	17.66	17.80	17.74	19.00
3	16QAM	1	0	17.64	17.79	17.72	19.00
3	16QAM	1	8	17.81	17.85	17.73	19.00
3	16QAM	1	14	17.56	17.81	17.69	19.00
3	16QAM	8	0	17.67	17.96	17.81	19.00
3	16QAM	8	4	17.68	17.79	17.75	19.00
3	16QAM	8	7	17.47	17.79	17.60	19.00
3	16QAM	15	0	17.72	17.83	17.76	19.00
3	64QAM	1	0	17.72	17.85	17.76	19.00
3	64QAM	1	8	17.65	17.90	17.83	19.00
3	64QAM	1	14	17.64	17.78	17.64	19.00
3	64QAM	8	0	17.58	17.86	17.64	19.00
3	64QAM	8	4	17.57	17.72	17.57	19.00
3	64QAM	8	7	17.70	17.94	17.87	19.00
3	64QAM	15	0	17.61	17.73	17.55	19.00
Channel				19957	20175	20393	Tune-up limit
Frequency (MHz)				1710.7	1732.5	1754.3	(dBm)
1.4	QPSK	1	0	17.86	17.90	17.97	19.00
1.4	QPSK	1	3	17.75	17.89	17.84	19.00
1.4	QPSK	1	5	17.77	17.81	17.77	19.00
1.4	QPSK	3	0	17.76	17.86	17.79	19.00
1.4	QPSK	3	1	17.58	17.74	17.58	19.00
1.4	QPSK	3	3	17.64	17.86	17.84	19.00
1.4	QPSK	6	0	17.64	17.84	17.80	19.00
1.4	16QAM	1	0	17.60	17.74	17.69	19.00
1.4	16QAM	1	3	17.75	17.92	17.83	19.00
1.4	16QAM	1	5	17.55	17.79	17.70	19.00
1.4	16QAM	3	0	17.75	17.92	17.93	19.00
1.4	16QAM	3	1	17.60	17.89	17.82	19.00
1.4	16QAM	3	3	17.46	17.67	17.58	19.00
1.4	16QAM	6	0	17.69	17.78	17.77	19.00
1.4	64QAM	1	0	17.76	17.91	17.75	19.00
1.4	64QAM	1	3	17.67	17.80	17.75	19.00
1.4	64QAM	1	5	17.59	17.79	17.58	19.00
1.4	64QAM	3	0	17.58	17.90	17.62	19.00
1.4	64QAM	3	1	17.69	17.72	17.63	19.00
1.4	64QAM	3	3	17.66	17.95	17.87	19.00
1.4	64QAM	6	0	17.55	17.74	17.57	19.00



【LTE Band 5】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20450	20525	20600	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	22.31	22.46	22.43	23.00
10	QPSK	1	25	22.10	22.36	22.24	23.00
10	QPSK	1	49	22.14	22.41	22.24	23.00
10	QPSK	25	0	22.22	22.28	22.24	23.00
10	QPSK	25	12	21.77	22.06	22.01	23.00
10	QPSK	25	25	21.85	22.14	22.08	23.00
10	QPSK	50	0	21.87	22.11	21.97	23.00
10	16QAM	1	0	21.40	21.78	21.24	23.00
10	16QAM	1	25	21.69	22.03	21.55	23.00
10	16QAM	1	49	21.29	21.63	21.17	23.00
10	16QAM	25	0	20.55	20.89	20.42	22.00
10	16QAM	25	12	20.56	20.91	20.46	22.00
10	16QAM	25	25	20.44	20.81	20.28	22.00
10	16QAM	50	0	20.46	20.84	20.31	22.00
10	64QAM	1	0	20.01	20.38	20.02	22.00
10	64QAM	1	25	20.61	20.96	20.51	22.00
10	64QAM	1	49	20.34	20.73	20.18	22.00
10	64QAM	25	0	19.85	20.14	19.73	21.00
10	64QAM	25	12	19.72	20.08	19.64	21.00
10	64QAM	25	25	19.72	20.01	19.53	21.00
10	64QAM	50	0	19.47	19.75	19.25	21.00
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	22.23	22.44	22.31	23.00
5	QPSK	1	12	22.02	22.25	22.10	23.00
5	QPSK	1	24	22.10	22.34	22.18	23.00
5	QPSK	12	0	22.14	22.19	22.11	23.00
5	QPSK	12	7	21.66	22.00	21.95	23.00
5	QPSK	12	13	21.83	22.13	22.02	23.00
5	QPSK	25	0	21.84	22.07	21.88	23.00
5	16QAM	1	0	21.26	21.76	21.15	23.00
5	16QAM	1	12	21.57	21.88	21.52	23.00
5	16QAM	1	24	21.24	21.62	21.11	23.00
5	16QAM	12	0	20.46	20.86	20.36	22.00
5	16QAM	12	7	20.48	20.87	20.31	22.00
5	16QAM	12	13	20.31	20.67	20.23	22.00
5	16QAM	25	0	20.36	20.77	20.23	22.00
5	64QAM	1	0	20.01	20.30	20.00	22.00
5	64QAM	1	12	20.47	20.92	20.41	22.00
5	64QAM	1	24	20.21	20.69	20.16	22.00
5	64QAM	12	0	19.77	20.09	19.71	21.00
5	64QAM	12	7	19.64	20.02	19.54	21.00
5	64QAM	12	13	19.70	19.86	19.51	21.00
5	64QAM	25	0	19.43	19.61	19.18	21.00
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	22.30	22.42	22.35	23.00
3	QPSK	1	8	22.00	22.35	22.11	23.00
3	QPSK	1	14	22.01	22.39	22.09	23.00
3	QPSK	8	0	22.15	22.13	22.12	23.00
3	QPSK	8	4	21.63	21.96	21.89	23.00
3	QPSK	8	7	21.77	22.07	22.02	23.00
3	QPSK	15	0	21.83	22.03	21.91	23.00
3	16QAM	1	0	21.35	21.74	21.13	23.00
3	16QAM	1	8	21.55	21.95	21.43	23.00
3	16QAM	1	14	21.25	21.59	21.03	23.00
3	16QAM	8	0	20.42	20.81	20.33	22.00
3	16QAM	8	4	20.49	20.83	20.41	22.00
3	16QAM	8	7	20.40	20.70	20.16	22.00
3	16QAM	15	0	20.37	20.71	20.17	22.00
3	64QAM	1	0	20.01	20.34	20.00	22.00
3	64QAM	1	8	20.47	20.92	20.49	22.00
3	64QAM	1	14	20.19	20.70	20.15	22.00
3	64QAM	8	0	19.76	20.00	19.58	21.00
3	64QAM	8	4	19.68	20.06	19.52	21.00
3	64QAM	8	7	19.67	19.95	19.48	21.00
3	64QAM	15	0	19.33	19.69	19.19	21.00
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	22.29	22.31	22.29	23.00
1.4	QPSK	1	3	22.04	22.33	22.20	23.00

1.4	QPSK	1	5	22.08	22.36	22.14	23.00
1.4	QPSK	3	0	22.18	22.13	22.21	23.00
1.4	QPSK	3	1	21.76	22.02	22.00	23.00
1.4	QPSK	3	3	21.76	22.09	22.03	23.00
1.4	QPSK	6	0	21.86	22.04	21.90	23.00
1.4	16QAM	1	0	21.35	21.67	21.21	23.00
1.4	16QAM	1	3	21.67	22.00	21.44	23.00
1.4	16QAM	1	5	21.20	21.61	21.14	23.00
1.4	16QAM	3	0	21.48	21.74	21.28	23.00
1.4	16QAM	3	1	21.55	21.89	21.40	23.00
1.4	16QAM	3	3	21.36	21.77	21.16	23.00
1.4	16QAM	6	0	20.40	20.81	20.16	22.00
1.4	64QAM	1	0	20.00	20.34	20.01	22.00
1.4	64QAM	1	3	20.59	20.86	20.47	22.00
1.4	64QAM	1	5	20.29	20.67	20.12	22.00
1.4	64QAM	3	0	20.83	21.09	20.64	22.00
1.4	64QAM	3	1	20.62	20.95	20.55	22.00
1.4	64QAM	3	3	20.58	20.95	20.48	22.00
1.4	64QAM	6	0	19.33	19.73	19.12	21.00

【LTE Band 7】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	13.72	13.99	13.82	15.00
20	QPSK	1	49	13.53	13.83	13.53	15.00
20	QPSK	1	99	13.48	13.77	13.51	15.00
20	QPSK	50	0	13.87	13.90	13.85	15.00
20	QPSK	50	24	13.52	13.87	13.65	15.00
20	QPSK	50	50	13.42	13.78	13.48	15.00
20	QPSK	100	0	13.55	13.95	13.73	15.00
20	16QAM	1	0	13.43	13.79	13.51	15.00
20	16QAM	1	49	13.49	13.79	13.55	15.00
20	16QAM	1	99	13.48	13.87	13.62	15.00
20	16QAM	50	0	13.48	13.79	13.52	15.00
20	16QAM	50	24	13.52	13.83	13.59	15.00
20	16QAM	50	50	13.46	13.77	13.51	15.00
20	16QAM	100	0	13.52	13.87	13.68	15.00
20	64QAM	1	0	13.62	13.81	13.72	15.00
20	64QAM	1	49	13.41	13.80	13.53	15.00
20	64QAM	1	99	13.59	13.95	13.70	15.00
20	64QAM	50	0	13.55	13.91	13.68	15.00
20	64QAM	50	24	13.50	13.80	13.56	15.00
20	64QAM	50	50	13.66	13.97	13.74	15.00
20	64QAM	100	0	13.52	13.83	13.62	15.00
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	13.65	13.95	13.80	15.00
15	QPSK	1	37	13.49	13.81	13.50	15.00
15	QPSK	1	74	13.37	13.71	13.42	15.00
15	QPSK	36	0	13.72	13.76	13.82	15.00
15	QPSK	36	20	13.38	13.76	13.54	15.00
15	QPSK	36	39	13.37	13.70	13.40	15.00
15	QPSK	75	0	13.45	13.86	13.66	15.00
15	16QAM	1	0	13.39	13.70	13.43	15.00
15	16QAM	1	37	13.42	13.68	13.44	15.00
15	16QAM	1	74	13.37	13.77	13.51	15.00
15	16QAM	36	0	13.34	13.77	13.51	15.00
15	16QAM	36	20	13.40	13.75	13.55	15.00
15	16QAM	36	39	13.38	13.66	13.41	15.00
15	16QAM	75	0	13.46	13.73	13.55	15.00
15	64QAM	1	0	13.59	13.90	13.62	15.00
15	64QAM	1	37	13.34	13.78	13.44	15.00
15	64QAM	1	74	13.55	13.90	13.60	15.00
15	64QAM	36	0	13.49	13.86	13.64	15.00
15	64QAM	36	20	13.47	13.70	13.43	15.00
15	64QAM	36	39	13.60	13.88	13.66	15.00
15	64QAM	75	0	13.39	13.79	13.52	15.00
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	13.69	13.89	13.74	15.00

10	QPSK	1	25	13.42	13.77	13.51	15.00
10	QPSK	1	49	13.46	13.71	13.42	15.00
10	QPSK	25	0	13.70	13.79	13.75	15.00
10	QPSK	25	12	13.38	13.78	13.58	15.00
10	QPSK	25	25	13.31	13.71	13.36	15.00
10	QPSK	50	0	13.43	13.83	13.66	15.00
10	16QAM	1	0	13.38	13.76	13.41	15.00
10	16QAM	1	25	13.45	13.73	13.41	15.00
10	16QAM	1	49	13.44	13.75	13.48	15.00
10	16QAM	25	0	13.44	13.71	13.50	15.00
10	16QAM	25	12	13.45	13.73	13.51	15.00
10	16QAM	25	25	13.34	13.73	13.38	15.00
10	16QAM	50	0	13.50	13.72	13.66	15.00
10	64QAM	1	0	13.60	13.97	13.62	15.00
10	64QAM	1	25	13.40	13.73	13.47	15.00
10	64QAM	1	49	13.51	13.82	13.63	15.00
10	64QAM	25	0	13.49	13.83	13.64	15.00
10	64QAM	25	12	13.48	13.74	13.42	15.00
10	64QAM	25	25	13.63	13.96	13.68	15.00
10	64QAM	50	0	13.44	13.76	13.48	15.00
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	13.57	13.86	13.81	15.00
5	QPSK	1	12	13.46	13.70	13.48	15.00
5	QPSK	1	24	13.44	13.74	13.39	15.00
5	QPSK	12	0	13.71	13.82	13.80	15.00
5	QPSK	12	7	13.40	13.75	13.50	15.00
5	QPSK	12	13	13.41	13.71	13.45	15.00
5	QPSK	25	0	13.46	13.83	13.64	15.00
5	16QAM	1	0	13.37	13.66	13.36	15.00
5	16QAM	1	12	13.45	13.68	13.43	15.00
5	16QAM	1	24	13.36	13.75	13.60	15.00
5	16QAM	12	0	13.35	13.76	13.49	15.00
5	16QAM	12	7	13.42	13.77	13.47	15.00
5	16QAM	12	13	13.36	13.64	13.42	15.00
5	16QAM	25	0	13.50	13.84	13.56	15.00
5	64QAM	1	0	13.60	13.91	13.70	15.00
5	64QAM	1	12	13.33	13.69	13.48	15.00
5	64QAM	1	24	13.45	13.85	13.60	15.00
5	64QAM	12	0	13.42	13.80	13.55	15.00
5	64QAM	12	7	13.41	13.78	13.51	15.00
5	64QAM	12	13	13.59	13.91	13.62	15.00
5	64QAM	25	0	13.49	13.81	13.48	15.00

【LTE Band 12】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23060	23095	23130	Tune-up limit (dBm)
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	20.24	20.26	20.23	21.00
10	QPSK	1	25	20.06	19.97	19.86	21.00
10	QPSK	1	49	19.83	19.94	19.93	21.00
10	QPSK	25	0	20.11	20.15	20.12	21.00
10	QPSK	25	12	19.97	20.00	19.94	21.00
10	QPSK	25	25	19.84	19.94	19.85	21.00
10	QPSK	50	0	19.99	20.10	20.02	21.00
10	16QAM	1	0	19.87	20.00	19.95	21.00
10	16QAM	1	25	19.94	20.01	19.86	21.00
10	16QAM	1	49	19.86	19.99	19.85	21.00
10	16QAM	25	0	20.05	20.10	19.99	21.00
10	16QAM	25	12	19.89	19.93	19.87	21.00
10	16QAM	25	25	20.02	20.13	20.04	21.00
10	16QAM	50	0	19.87	19.95	19.82	21.00
10	64QAM	1	0	20.01	20.11	19.95	21.00
10	64QAM	1	25	20.09	20.14	20.06	21.00
10	64QAM	1	49	20.08	20.14	20.06	21.00
10	64QAM	25	0	20.03	20.10	19.97	21.00
10	64QAM	25	12	20.01	20.13	19.96	21.00
10	64QAM	25	25	19.90	20.05	19.94	21.00
10	64QAM	50	0	20.05	20.12	19.95	21.00
Channel				23035	23095	23115	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	



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5	QPSK	1	0	20.09	20.11	20.18	21.00
5	QPSK	1	12	19.97	19.93	19.79	21.00
5	QPSK	1	24	19.77	19.82	19.85	21.00
5	QPSK	12	0	19.96	20.10	20.01	21.00
5	QPSK	12	7	19.83	19.99	19.88	21.00
5	QPSK	12	13	19.79	19.92	19.77	21.00
5	QPSK	25	0	19.88	20.08	19.90	21.00
5	16QAM	1	0	19.78	19.87	19.85	21.00
5	16QAM	1	12	19.89	19.91	19.77	21.00
5	16QAM	1	24	19.73	19.96	19.75	21.00
5	16QAM	12	0	19.98	19.95	19.96	21.00
5	16QAM	12	7	19.83	19.81	19.73	21.00
5	16QAM	12	13	19.91	20.01	20.00	21.00
5	16QAM	25	0	19.84	19.85	19.77	21.00
5	64QAM	1	0	19.98	19.97	19.92	21.00
5	64QAM	1	12	20.03	20.04	19.93	21.00
5	64QAM	1	24	19.99	20.08	19.93	21.00
5	64QAM	12	0	20.02	20.08	19.83	21.00
5	64QAM	12	7	19.94	20.10	19.92	21.00
5	64QAM	12	13	19.82	20.01	19.84	21.00
5	64QAM	25	0	19.93	19.97	19.81	21.00
Channel				23025	23095	23165	Tune-up limit
Frequency (MHz)				700.5	707.5	714.5	(dBm)
3	QPSK	1	0	20.16	20.16	20.20	21.00
3	QPSK	1	8	19.97	19.84	19.75	21.00
3	QPSK	1	14	19.78	19.81	19.81	21.00
3	QPSK	8	0	19.98	20.01	20.02	21.00
3	QPSK	8	4	19.90	19.95	19.81	21.00
3	QPSK	8	7	19.78	19.93	19.76	21.00
3	QPSK	15	0	19.92	19.96	19.99	21.00
3	16QAM	1	0	19.75	19.94	19.91	21.00
3	16QAM	1	8	19.82	19.92	19.81	21.00
3	16QAM	1	14	19.76	19.91	19.82	21.00
3	16QAM	8	0	20.02	20.07	19.97	21.00
3	16QAM	8	4	19.85	19.87	19.85	21.00
3	16QAM	8	7	19.95	20.07	19.96	21.00
3	16QAM	15	0	19.83	19.86	19.79	21.00
3	64QAM	1	0	19.98	20.09	19.85	21.00
3	64QAM	1	8	19.98	20.00	20.03	21.00
3	64QAM	1	14	19.97	19.99	20.05	21.00
3	64QAM	8	0	20.02	20.02	19.86	21.00
3	64QAM	8	4	19.90	20.11	19.90	21.00
3	64QAM	8	7	19.89	19.91	19.88	21.00
3	64QAM	15	0	19.94	20.09	19.93	21.00
Channel				23017	23095	23173	Tune-up limit
Frequency (MHz)				699.7	707.5	715.3	(dBm)
1.4	QPSK	1	0	20.15	20.21	20.15	21.00
1.4	QPSK	1	3	20.00	19.82	19.81	21.00
1.4	QPSK	1	5	19.79	19.83	19.85	21.00
1.4	QPSK	3	0	19.96	20.13	20.01	21.00
1.4	QPSK	3	1	19.87	19.97	19.84	21.00
1.4	QPSK	3	3	19.78	19.93	19.78	21.00
1.4	QPSK	6	0	19.91	20.06	19.98	21.00
1.4	16QAM	1	0	19.78	19.95	19.90	21.00
1.4	16QAM	1	3	19.92	19.96	19.76	21.00
1.4	16QAM	1	5	19.73	19.97	19.74	21.00
1.4	16QAM	3	0	19.99	20.08	19.98	21.00
1.4	16QAM	3	1	19.83	19.81	19.76	21.00
1.4	16QAM	3	3	19.94	20.07	20.02	21.00
1.4	16QAM	6	0	18.74	18.85	18.70	20.00
1.4	64QAM	1	0	18.97	19.08	18.81	20.00
1.4	64QAM	1	3	18.99	19.00	18.94	20.00
1.4	64QAM	1	5	18.97	19.11	19.04	20.00
1.4	64QAM	3	0	18.90	19.02	18.93	20.00
1.4	64QAM	3	1	18.90	19.02	18.82	20.00
1.4	64QAM	3	3	18.86	18.99	18.89	20.00
1.4	64QAM	6	0	17.94	18.06	17.93	19.00



【LTE Band 13】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					23230		
Frequency (MHz)					782		
10	QPSK	1	0		23.12		24.00
10	QPSK	1	25		22.96		24.00
10	QPSK	1	49		23.07		24.00
10	QPSK	25	0		22.19		23.00
10	QPSK	25	12		22.11		23.00
10	QPSK	25	25		21.97		23.00
10	QPSK	50	0		22.08		23.00
10	16QAM	1	0		21.85		23.00
10	16QAM	1	25		22.20		23.00
10	16QAM	1	49		21.80		23.00
10	16QAM	25	0		21.01		22.00
10	16QAM	25	12		20.99		22.00
10	16QAM	25	25		20.94		22.00
10	16QAM	50	0		20.99		22.00
10	64QAM	1	0		20.96		22.00
10	64QAM	1	25		20.97		22.00
10	64QAM	1	49		20.94		22.00
10	64QAM	25	0		20.23		21.00
10	64QAM	25	12		20.13		21.00
10	64QAM	25	25		20.14		21.00
10	64QAM	50	0		20.06		21.00
Channel				23205	23230	23255	Tune-up limit
Frequency (MHz)				779.5	782	784.5	(dBm)
5	QPSK	1	0	22.94	23.01	22.86	24.00
5	QPSK	1	12	22.65	22.80	22.61	24.00
5	QPSK	1	24	22.70	22.90	22.62	24.00
5	QPSK	12	0	21.87	22.07	21.86	23.00
5	QPSK	12	7	21.90	22.03	21.77	23.00
5	QPSK	12	13	21.74	21.92	21.70	23.00
5	QPSK	25	0	21.70	21.91	21.74	23.00
5	16QAM	1	0	21.56	21.73	21.46	23.00
5	16QAM	1	12	22.03	22.14	21.96	23.00
5	16QAM	1	24	21.60	21.68	21.50	23.00
5	16QAM	12	0	20.87	20.99	20.80	22.00
5	16QAM	12	7	20.76	20.87	20.67	22.00
5	16QAM	12	13	20.62	20.79	20.59	22.00
5	16QAM	25	0	20.73	20.84	20.61	22.00
5	64QAM	1	0	20.76	20.94	20.70	22.00
5	64QAM	1	12	20.70	20.90	20.65	22.00
5	64QAM	1	24	20.65	20.84	20.67	22.00
5	64QAM	12	0	20.04	20.15	19.97	21.00
5	64QAM	12	7	19.91	20.00	19.77	21.00
5	64QAM	12	13	19.89	20.08	19.90	21.00
5	64QAM	25	0	19.74	19.92	19.65	21.00

【LTE Band 14】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					23330		
Frequency (MHz)					793		
10	QPSK	1	0		23.19		24.00
10	QPSK	1	25		23.10		24.00
10	QPSK	1	49		22.97		24.00
10	QPSK	25	0		22.01		23.00
10	QPSK	25	12		21.97		23.00
10	QPSK	25	25		21.94		23.00
10	QPSK	50	0		21.99		23.00
10	16QAM	1	0		21.80		23.00
10	16QAM	1	25		22.06		23.00
10	16QAM	1	49		21.75		23.00
10	16QAM	25	0		21.12		22.00
10	16QAM	25	12		21.11		22.00
10	16QAM	25	25		20.98		22.00
10	16QAM	50	0		20.91		22.00
10	64QAM	1	0		20.95		22.00
10	64QAM	1	25		20.89		22.00
10	64QAM	1	49		20.85		22.00
10	64QAM	25	0		20.01		21.00
10	64QAM	25	12		20.00		21.00
10	64QAM	25	25		19.98		21.00
10	64QAM	50	0		19.97		21.00
Channel				23305	23330	23355	Tune-up limit
Frequency (MHz)				790.5	793	795.5	(dBm)
5	QPSK	1	0	23.01	23.13	22.94	24.00
5	QPSK	1	12	22.75	22.93	22.61	24.00
5	QPSK	1	24	22.69	22.85	22.62	24.00
5	QPSK	12	0	21.73	21.93	21.72	23.00
5	QPSK	12	7	21.62	21.85	21.61	23.00
5	QPSK	12	13	21.62	21.77	21.58	23.00
5	QPSK	25	0	21.63	21.89	21.69	23.00
5	16QAM	1	0	21.54	21.69	21.39	23.00
5	16QAM	1	12	21.83	21.96	21.76	23.00
5	16QAM	1	24	21.48	21.63	21.32	23.00
5	16QAM	12	0	20.89	21.03	20.79	22.00
5	16QAM	12	7	20.81	20.99	20.80	22.00
5	16QAM	12	13	20.63	20.84	20.56	22.00
5	16QAM	25	0	20.67	20.83	20.51	22.00
5	64QAM	1	0	20.53	20.78	20.53	22.00
5	64QAM	1	12	20.63	20.84	20.66	22.00
5	64QAM	1	24	20.45	20.69	20.48	22.00
5	64QAM	12	0	19.76	19.89	19.66	21.00
5	64QAM	12	7	19.72	19.88	19.66	21.00
5	64QAM	12	13	19.77	19.94	19.65	21.00
5	64QAM	25	0	19.76	19.89	19.70	21.00

【LTE Band 17】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	20.22	20.25	20.18	21.00
10	QPSK	1	25	20.04	20.15	20.00	21.00
10	QPSK	1	49	20.10	20.17	20.04	21.00
10	QPSK	25	0	20.19	20.22	20.16	21.00
10	QPSK	25	12	20.09	20.14	19.96	21.00
10	QPSK	25	25	20.03	20.17	19.96	21.00
10	QPSK	50	0	20.12	20.20	20.07	21.00
10	16QAM	1	0	20.05	20.21	20.00	21.00
10	16QAM	1	25	20.06	20.16	20.03	21.00
10	16QAM	1	49	19.92	20.06	19.86	21.00
10	16QAM	25	0	20.09	20.14	19.97	21.00
10	16QAM	25	12	20.02	20.19	19.98	21.00
10	16QAM	25	25	20.08	20.13	20.03	21.00
10	16QAM	50	0	19.87	20.04	19.88	21.00
10	64QAM	1	0	19.90	20.01	19.92	21.00
10	64QAM	1	25	20.11	20.15	20.03	21.00
10	64QAM	1	49	19.85	20.02	19.87	21.00
10	64QAM	25	0	20.09	20.19	20.01	21.00
10	64QAM	25	12	19.98	20.10	20.00	21.00
10	64QAM	25	25	20.05	20.12	20.02	21.00
10	64QAM	50	0	20.07	20.16	20.07	21.00
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	20.08	20.13	20.16	21.00
5	QPSK	1	12	19.93	20.11	19.95	21.00
5	QPSK	1	24	20.05	20.13	19.92	21.00
5	QPSK	12	0	20.04	20.12	20.03	21.00
5	QPSK	12	7	19.96	20.07	19.95	21.00
5	QPSK	12	13	19.99	20.06	19.92	21.00
5	QPSK	25	0	20.08	20.05	20.04	21.00
5	16QAM	1	0	19.93	20.08	19.90	21.00
5	16QAM	1	12	19.97	20.11	19.90	21.00
5	16QAM	1	24	19.88	20.04	19.81	21.00
5	16QAM	12	0	20.07	20.12	19.84	21.00
5	16QAM	12	7	19.96	20.12	19.92	21.00
5	16QAM	12	13	19.98	20.07	19.97	21.00
5	16QAM	25	0	19.84	19.96	19.76	21.00
5	64QAM	1	0	19.82	19.94	19.78	21.00
5	64QAM	1	12	20.02	20.12	19.93	21.00
5	64QAM	1	24	19.78	19.92	19.74	21.00
5	64QAM	12	0	19.97	20.10	19.92	21.00
5	64QAM	12	7	19.87	20.01	19.96	21.00
5	64QAM	12	13	20.02	20.02	20.01	21.00
5	64QAM	25	0	20.00	20.07	19.99	21.00

【LTE Band 25】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	18.02	18.06	17.98	19.00
20	QPSK	1	49	17.90	18.01	17.87	19.00
20	QPSK	1	99	17.96	18.05	17.93	19.00
20	QPSK	50	0	17.95	17.99	17.92	19.00
20	QPSK	50	24	17.82	17.97	17.84	19.00
20	QPSK	50	50	17.88	17.96	17.80	19.00
20	QPSK	100	0	17.69	17.88	17.70	19.00
20	16QAM	1	0	17.79	17.93	17.73	19.00
20	16QAM	1	49	18.02	18.01	17.96	19.00
20	16QAM	1	99	17.75	17.93	17.81	19.00
20	16QAM	50	0	17.95	18.04	17.89	19.00
20	16QAM	50	24	17.85	17.96	17.74	19.00
20	16QAM	50	50	17.85	18.03	17.89	19.00
20	16QAM	100	0	17.78	17.91	17.76	19.00
20	64QAM	1	0	17.91	17.91	17.98	19.00



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20	64QAM	1	49	17.85	17.95	17.79	19.00
20	64QAM	1	99	17.77	17.86	17.75	19.00
20	64QAM	50	0	17.82	17.99	17.78	19.00
20	64QAM	50	24	17.88	18.05	17.88	19.00
20	64QAM	50	50	17.78	17.83	17.72	19.00
20	64QAM	100	0	17.80	17.97	17.79	19.00
Channel				26115	26340	26615	Tune-up limit
Frequency (MHz)				1857.5	1880	1907.5	(dBm)
15	QPSK	1	0	17.99	17.95	17.87	19.00
15	QPSK	1	37	17.82	17.99	17.86	19.00
15	QPSK	1	74	17.94	18.01	17.85	19.00
15	QPSK	36	0	17.92	17.93	17.77	19.00
15	QPSK	36	20	17.80	17.86	17.71	19.00
15	QPSK	36	39	17.76	17.83	17.69	19.00
15	QPSK	75	0	17.62	17.85	17.67	19.00
15	16QAM	1	0	17.74	17.81	17.66	19.00
15	16QAM	1	37	17.89	17.96	17.83	19.00
15	16QAM	1	74	17.68	17.81	17.66	19.00
15	16QAM	36	0	17.83	18.02	17.75	19.00
15	16QAM	36	20	17.79	17.82	17.70	19.00
15	16QAM	36	39	17.77	17.96	17.82	19.00
15	16QAM	75	0	17.74	17.78	17.63	19.00
15	64QAM	1	0	17.82	17.96	17.97	19.00
15	64QAM	1	37	17.72	17.89	17.77	19.00
15	64QAM	1	74	17.67	17.81	17.61	19.00
15	64QAM	36	0	17.77	17.92	17.65	19.00
15	64QAM	36	20	17.73	17.97	17.84	19.00
15	64QAM	36	39	17.74	17.69	17.63	19.00
15	64QAM	75	0	17.67	17.95	17.68	19.00
Channel				26090	26340	26640	Tune-up limit
Frequency (MHz)				1855	1880	1910	(dBm)
10	QPSK	1	0	17.93	17.98	17.96	19.00
10	QPSK	1	25	17.82	17.86	17.81	19.00
10	QPSK	1	49	17.90	17.95	17.82	19.00
10	QPSK	25	0	17.82	17.85	17.91	19.00
10	QPSK	25	12	17.80	17.84	17.80	19.00
10	QPSK	25	25	17.83	17.90	17.69	19.00
10	QPSK	50	0	17.54	17.78	17.62	19.00
10	16QAM	1	0	17.75	17.82	17.65	19.00
10	16QAM	1	25	18.01	18.01	17.92	19.00
10	16QAM	1	49	17.72	17.82	17.70	19.00
10	16QAM	25	0	17.81	17.97	17.78	19.00
10	16QAM	25	12	17.79	17.89	17.72	19.00
10	16QAM	25	25	17.82	17.91	17.86	19.00
10	16QAM	50	0	17.64	17.86	17.75	19.00
10	64QAM	1	0	17.87	18.04	17.90	19.00
10	64QAM	1	25	17.75	17.88	17.71	19.00
10	64QAM	1	49	17.71	17.77	17.65	19.00
10	64QAM	25	0	17.71	17.84	17.74	19.00
10	64QAM	25	12	17.82	17.98	17.75	19.00
10	64QAM	25	25	17.76	17.70	17.61	19.00
10	64QAM	50	0	17.66	17.92	17.68	19.00
Channel				26065	26340	26665	Tune-up limit
Frequency (MHz)				1852.5	1880	1912.5	(dBm)
5	QPSK	1	0	17.95	17.96	17.85	19.00
5	QPSK	1	12	17.76	17.88	17.76	19.00
5	QPSK	1	24	17.82	18.02	17.89	19.00
5	QPSK	12	0	17.87	17.96	17.77	19.00
5	QPSK	12	7	17.76	17.93	17.70	19.00
5	QPSK	12	13	17.78	17.90	17.77	19.00
5	QPSK	25	0	17.55	17.80	17.62	19.00
5	16QAM	1	0	17.70	17.81	17.64	19.00
5	16QAM	1	12	17.89	18.06	17.84	19.00
5	16QAM	1	24	17.62	17.89	17.69	19.00
5	16QAM	12	0	17.83	17.92	17.87	19.00
5	16QAM	12	7	17.79	17.88	17.72	19.00
5	16QAM	12	13	17.80	17.91	17.80	19.00
5	16QAM	25	0	17.77	17.79	17.64	19.00
5	64QAM	1	0	17.81	18.02	17.87	19.00
5	64QAM	1	12	17.81	17.92	17.68	19.00
5	64QAM	1	24	17.62	17.80	17.65	19.00
5	64QAM	12	0	17.69	17.93	17.68	19.00
5	64QAM	12	7	17.74	17.91	17.79	19.00
5	64QAM	12	13	17.73	17.71	17.68	19.00
5	64QAM	25	0	17.77	17.94	17.67	19.00
Channel				26055	26340	26675	Tune-up limit
Frequency (MHz)				1851.5	1880	1913.5	(dBm)
3	QPSK	1	0	17.94	17.98	17.94	19.00



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3	QPSK	1	8	17.84	17.89	17.75	19.00
3	QPSK	1	14	17.87	17.98	17.83	19.00
3	QPSK	8	0	17.80	17.96	17.80	19.00
3	QPSK	8	4	17.68	17.87	17.71	19.00
3	QPSK	8	7	17.76	17.84	17.78	19.00
3	QPSK	15	0	17.65	17.74	17.60	19.00
3	16QAM	1	0	17.66	17.79	17.63	19.00
3	16QAM	1	8	17.87	17.99	17.85	19.00
3	16QAM	1	14	17.67	17.86	17.68	19.00
3	16QAM	8	0	17.86	17.91	17.75	19.00
3	16QAM	8	4	17.78	17.87	17.61	19.00
3	16QAM	8	7	17.70	17.90	17.75	19.00
3	16QAM	15	0	17.68	17.76	17.68	19.00
3	64QAM	1	0	17.81	17.97	17.96	19.00
3	64QAM	1	8	17.71	17.87	17.65	19.00
3	64QAM	1	14	17.68	17.81	17.74	19.00
3	64QAM	8	0	17.72	17.96	17.69	19.00
3	64QAM	8	4	17.83	17.96	17.75	19.00
3	64QAM	8	7	17.66	17.71	17.70	19.00
3	64QAM	15	0	17.78	17.88	17.68	19.00
Channel				26047	26340	26683	Tune-up limit
Frequency (MHz)				1850.7	1880	1914.3	(dBm)
1.4	QPSK	1	0	17.91	17.91	17.89	19.00
1.4	QPSK	1	3	17.87	17.95	17.81	19.00
1.4	QPSK	1	5	17.85	17.98	17.80	19.00
1.4	QPSK	3	0	17.83	17.85	17.83	19.00
1.4	QPSK	3	1	17.74	17.92	17.70	19.00
1.4	QPSK	3	3	17.86	17.89	17.78	19.00
1.4	QPSK	6	0	17.64	17.79	17.67	19.00
1.4	16QAM	1	0	17.65	17.91	17.61	19.00
1.4	16QAM	1	3	17.90	18.06	17.90	19.00
1.4	16QAM	1	5	17.71	17.91	17.78	19.00
1.4	16QAM	3	0	17.85	18.00	17.83	19.00
1.4	16QAM	3	1	17.75	17.82	17.66	19.00
1.4	16QAM	3	3	17.78	17.90	17.85	19.00
1.4	16QAM	6	0	17.70	17.77	17.69	19.00
1.4	64QAM	1	0	17.82	18.01	17.87	19.00
1.4	64QAM	1	3	17.70	17.87	17.71	19.00
1.4	64QAM	1	5	17.64	17.82	17.61	19.00
1.4	64QAM	3	0	17.68	17.89	17.67	19.00
1.4	64QAM	3	1	17.86	17.92	17.80	19.00
1.4	64QAM	3	3	17.70	17.76	17.69	19.00
1.4	64QAM	6	0	17.70	17.87	17.69	19.00

【LTE Band 26__FCC (814~849MHz)】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	22.47	22.52	22.36	23.00
15	QPSK	1	37	22.34	22.43	22.19	23.00
15	QPSK	1	74	22.21	22.36	22.15	23.00
15	QPSK	36	0	22.38	22.42	22.36	23.00
15	QPSK	36	20	21.88	22.06	21.80	23.00
15	QPSK	36	39	21.99	22.12	21.85	23.00
15	QPSK	75	0	21.89	21.98	21.70	23.00
15	16QAM	1	0	21.39	21.75	21.07	23.00
15	16QAM	1	37	21.59	21.88	21.52	23.00
15	16QAM	1	74	21.16	21.62	21.04	23.00
15	16QAM	36	0	20.48	20.83	20.22	22.00
15	16QAM	36	20	20.55	20.71	20.38	22.00
15	16QAM	36	39	20.37	20.65	20.13	22.00
15	16QAM	75	0	20.25	20.74	20.25	22.00
15	64QAM	1	0	20.39	20.33	20.43	22.00
15	64QAM	1	37	20.61	20.96	20.45	22.00
15	64QAM	1	74	20.23	20.53	20.13	22.00
15	64QAM	36	0	19.83	20.14	19.63	21.00
15	64QAM	36	20	19.59	19.93	19.47	21.00
15	64QAM	36	39	19.60	19.87	19.52	21.00
15	64QAM	75	0	19.36	19.68	19.15	21.00
Channel				26740	26865	26990	Tune-up limit
Frequency (MHz)				819	831.5	844	(dBm)



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10	QPSK	1	0	22.42	22.37	22.29	23.00
10	QPSK	1	25	22.24	22.30	22.04	23.00
10	QPSK	1	49	22.07	22.29	22.01	23.00
10	QPSK	25	0	22.25	22.31	22.26	23.00
10	QPSK	25	12	21.79	21.93	21.72	23.00
10	QPSK	25	25	21.94	22.03	21.71	23.00
10	QPSK	50	0	21.79	21.93	21.63	23.00
10	16QAM	1	0	21.28	21.73	21.02	23.00
10	16QAM	1	25	21.56	21.73	21.45	23.00
10	16QAM	1	49	21.13	21.61	21.00	23.00
10	16QAM	25	0	20.36	20.74	20.08	22.00
10	16QAM	25	12	20.49	20.62	20.33	22.00
10	16QAM	25	25	20.26	20.57	20.03	22.00
10	16QAM	50	0	20.11	20.61	20.24	22.00
10	64QAM	1	0	20.37	20.31	20.29	22.00
10	64QAM	1	25	20.49	20.85	20.33	22.00
10	64QAM	1	49	20.20	20.46	20.04	22.00
10	64QAM	25	0	19.80	20.11	19.60	21.00
10	64QAM	25	12	19.52	19.85	19.41	21.00
10	64QAM	25	25	19.55	19.82	19.37	21.00
10	64QAM	50	0	19.35	19.66	19.13	21.00
Channel				26715	26865	27015	Tune-up limit
Frequency (MHz)				816.5	831.5	846.5	(dBm)
5	QPSK	1	0	22.41	22.47	22.24	23.00
5	QPSK	1	12	22.31	22.40	22.14	23.00
5	QPSK	1	24	22.08	22.35	22.05	23.00
5	QPSK	12	0	22.36	22.37	22.32	23.00
5	QPSK	12	7	21.77	21.92	21.75	23.00
5	QPSK	12	13	21.93	22.00	21.73	23.00
5	QPSK	25	0	21.87	21.83	21.66	23.00
5	16QAM	1	0	21.30	21.72	21.00	23.00
5	16QAM	1	12	21.57	21.77	21.49	23.00
5	16QAM	1	24	21.11	21.53	21.00	23.00
5	16QAM	12	0	20.40	20.70	20.08	22.00
5	16QAM	12	7	20.51	20.58	20.24	22.00
5	16QAM	12	13	20.31	20.59	20.05	22.00
5	16QAM	25	0	20.10	20.71	20.21	22.00
5	64QAM	1	0	20.37	20.24	20.34	22.00
5	64QAM	1	12	20.50	20.84	20.31	22.00
5	64QAM	1	24	20.12	20.48	20.05	22.00
5	64QAM	12	0	19.77	20.07	19.59	21.00
5	64QAM	12	7	19.45	19.87	19.35	21.00
5	64QAM	12	13	19.55	19.79	19.45	21.00
5	64QAM	25	0	19.31	19.58	19.11	21.00
Channel				26705	26865	27025	Tune-up limit
Frequency (MHz)				815.5	831.5	847.5	(dBm)
3	QPSK	1	0	22.45	22.46	22.33	23.00
3	QPSK	1	8	22.27	22.30	22.11	23.00
3	QPSK	1	14	22.19	22.28	22.08	23.00
3	QPSK	8	0	22.25	22.31	22.35	23.00
3	QPSK	8	4	21.83	22.05	21.65	23.00
3	QPSK	8	7	21.98	22.01	21.72	23.00
3	QPSK	15	0	21.86	21.88	21.67	23.00
3	16QAM	1	0	21.28	21.68	21.04	23.00
3	16QAM	1	8	21.57	21.79	21.45	23.00
3	16QAM	1	14	21.14	21.47	21.00	23.00
3	16QAM	8	0	20.41	20.78	20.17	22.00
3	16QAM	8	4	20.47	20.64	20.26	22.00
3	16QAM	8	7	20.29	20.59	20.04	22.00
3	16QAM	15	0	20.13	20.66	20.16	22.00
3	64QAM	1	0	20.36	20.31	20.30	22.00
3	64QAM	1	8	20.54	20.89	20.43	22.00
3	64QAM	1	14	20.21	20.45	20.02	22.00
3	64QAM	8	0	19.72	20.13	19.49	21.00
3	64QAM	8	4	19.45	19.85	19.40	21.00
3	64QAM	8	7	19.48	19.77	19.49	21.00
3	64QAM	15	0	19.24	19.64	19.06	21.00
Channel				26697	26865	27033	Tune-up limit
Frequency (MHz)				814.7	831.5	848.3	(dBm)
1.4	QPSK	1	0	22.45	22.42	22.34	23.00
1.4	QPSK	1	3	22.19	22.29	22.09	23.00
1.4	QPSK	1	5	22.13	22.23	22.03	23.00
1.4	QPSK	3	0	22.34	22.31	22.31	23.00
1.4	QPSK	3	1	21.84	21.96	21.75	23.00
1.4	QPSK	3	3	21.86	22.11	21.78	23.00
1.4	QPSK	6	0	21.84	21.91	21.67	23.00
1.4	16QAM	1	0	21.29	21.68	21.01	23.00
1.4	16QAM	1	3	21.57	21.85	21.38	23.00



1.4	16QAM	1	5	21.12	21.47	21.00	23.00
1.4	16QAM	3	0	21.33	21.73	21.11	23.00
1.4	16QAM	3	1	21.42	21.69	21.29	23.00
1.4	16QAM	3	3	21.32	21.54	21.00	23.00
1.4	16QAM	6	0	20.11	20.70	20.13	22.00
1.4	64QAM	1	0	20.36	20.24	20.39	22.00
1.4	64QAM	1	3	20.60	20.88	20.39	22.00
1.4	64QAM	1	5	20.14	20.43	20.04	22.00
1.4	64QAM	3	0	20.74	21.07	20.59	22.00
1.4	64QAM	3	1	20.52	20.82	20.41	22.00
1.4	64QAM	3	3	20.56	20.77	20.41	22.00
1.4	64QAM	6	0	19.24	19.61	19.04	21.00

【LTE Band 41_FCC (2496~2690MHz)】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	14.65	14.74	14.93	14.81	14.89	16.00
20	QPSK	1	49	14.45	14.53	14.87	14.65	14.74	16.00
20	QPSK	1	99	14.38	14.46	14.71	14.56	14.65	16.00
20	QPSK	50	0	14.82	14.78	14.86	14.84	14.80	16.00
20	QPSK	50	24	14.40	14.47	14.80	14.65	14.72	16.00
20	QPSK	50	50	14.47	14.52	14.82	14.69	14.77	16.00
20	QPSK	100	0	14.43	14.42	14.74	14.53	14.59	16.00
20	16QAM	1	0	14.45	14.61	14.86	14.66	14.74	16.00
20	16QAM	1	49	14.36	14.54	14.78	14.63	14.71	16.00
20	16QAM	1	99	14.54	14.52	14.85	14.58	14.68	16.00
20	16QAM	50	0	14.44	14.50	14.83	14.63	14.67	16.00
20	16QAM	50	24	14.53	14.57	14.84	14.70	14.65	16.00
20	16QAM	50	50	14.41	14.52	14.74	14.51	14.67	16.00
20	16QAM	100	0	14.40	14.52	14.82	14.66	14.71	16.00
20	64QAM	1	0	14.53	14.58	14.84	14.64	14.70	16.00
20	64QAM	1	49	14.52	14.58	14.85	14.63	14.71	16.00
20	64QAM	1	99	14.43	14.57	14.78	14.62	14.59	16.00
20	64QAM	50	0	14.53	14.64	14.91	14.67	14.78	16.00
20	64QAM	50	24	14.53	14.59	14.91	14.74	14.77	16.00
20	64QAM	50	50	14.54	14.68	14.88	14.62	14.82	16.00
20	64QAM	100	0	14.41	14.51	14.79	14.53	14.69	16.00
Channel				39725	40173	40620	41068	41515	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	14.63	14.62	14.87	14.75	14.84	16.00
15	QPSK	1	37	14.34	14.48	14.84	14.60	14.67	16.00
15	QPSK	1	74	14.31	14.42	14.57	14.48	14.52	16.00
15	QPSK	36	0	14.65	14.73	14.78	14.74	14.76	16.00
15	QPSK	36	20	14.28	14.41	14.77	14.57	14.62	16.00
15	QPSK	36	39	14.41	14.41	14.78	14.60	14.73	16.00
15	QPSK	75	0	14.38	14.34	14.68	14.39	14.45	16.00
15	16QAM	1	0	14.32	14.50	14.83	14.58	14.70	16.00
15	16QAM	1	37	14.34	14.43	14.71	14.55	14.69	16.00
15	16QAM	1	74	14.40	14.42	14.71	14.53	14.67	16.00
15	16QAM	36	0	14.40	14.40	14.79	14.57	14.57	16.00
15	16QAM	36	20	14.45	14.49	14.80	14.55	14.58	16.00
15	16QAM	36	39	14.39	14.45	14.71	14.45	14.66	16.00
15	16QAM	75	0	14.30	14.37	14.69	14.53	14.59	16.00
15	64QAM	1	0	14.42	14.48	14.77	14.60	14.61	16.00
15	64QAM	1	37	14.46	14.52	14.82	14.62	14.65	16.00
15	64QAM	1	74	14.29	14.55	14.72	14.60	14.54	16.00
15	64QAM	36	0	14.43	14.55	14.88	14.66	14.71	16.00
15	64QAM	36	20	14.52	14.45	14.79	14.62	14.71	16.00
15	64QAM	36	39	14.52	14.54	14.85	14.54	14.73	16.00
15	64QAM	75	0	14.28	14.49	14.64	14.49	14.56	16.00
Channel				39700	40160	40620	41080	41540	
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	14.54	14.59	14.91	14.67	14.86	16.00
10	QPSK	1	25	14.35	14.51	14.78	14.51	14.71	16.00
10	QPSK	1	49	14.35	14.39	14.64	14.45	14.55	16.00
10	QPSK	25	0	14.64	14.70	14.80	14.78	14.67	16.00
10	QPSK	25	12	14.28	14.34	14.68	14.56	14.59	16.00
10	QPSK	25	25	14.38	14.49	14.72	14.56	14.62	16.00
10	QPSK	50	0	14.29	14.31	14.66	14.49	14.50	16.00



10	16QAM	1	0	14.39	14.59	14.72	14.59	14.72	16.00
10	16QAM	1	25	14.24	14.45	14.72	14.53	14.59	16.00
10	16QAM	1	49	14.46	14.37	14.71	14.55	14.61	16.00
10	16QAM	25	0	14.41	14.43	14.73	14.50	14.53	16.00
10	16QAM	25	12	14.43	14.43	14.80	14.64	14.63	16.00
10	16QAM	25	25	14.40	14.46	14.67	14.45	14.53	16.00
10	16QAM	50	0	14.38	14.41	14.80	14.54	14.62	16.00
10	64QAM	1	0	14.49	14.48	14.75	14.51	14.57	16.00
10	64QAM	1	25	14.41	14.44	14.84	14.55	14.60	16.00
10	64QAM	1	49	14.32	14.55	14.69	14.56	14.48	16.00
10	64QAM	25	0	14.48	14.55	14.81	14.58	14.65	16.00
10	64QAM	25	12	14.43	14.52	14.81	14.62	14.72	16.00
10	64QAM	25	25	14.40	14.56	14.78	14.55	14.74	16.00
10	64QAM	50	0	14.31	14.42	14.74	14.41	14.59	16.00
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5	
5	QPSK	1	0	14.62	14.64	14.87	14.75	14.84	16.00
5	QPSK	1	12	14.40	14.40	14.84	14.50	14.61	16.00
5	QPSK	1	24	14.27	14.32	14.63	14.46	14.62	16.00
5	QPSK	12	0	14.64	14.72	14.84	14.81	14.71	16.00
5	QPSK	12	7	14.35	14.40	14.72	14.59	14.70	16.00
5	QPSK	12	13	14.42	14.39	14.78	14.63	14.71	16.00
5	QPSK	25	0	14.37	14.35	14.68	14.40	14.54	16.00
5	16QAM	1	0	14.41	14.57	14.80	14.56	14.59	16.00
5	16QAM	1	12	14.26	14.43	14.72	14.54	14.69	16.00
5	16QAM	1	24	14.48	14.42	14.71	14.52	14.53	16.00
5	16QAM	12	0	14.40	14.46	14.78	14.61	14.65	16.00
5	16QAM	12	7	14.45	14.47	14.79	14.66	14.51	16.00
5	16QAM	12	13	14.35	14.50	14.70	14.38	14.52	16.00
5	16QAM	25	0	14.35	14.46	14.78	14.63	14.59	16.00
5	64QAM	1	0	14.39	14.53	14.78	14.63	14.63	16.00
5	64QAM	1	12	14.48	14.48	14.76	14.51	14.62	16.00
5	64QAM	1	24	14.29	14.48	14.69	14.59	14.52	16.00
5	64QAM	12	0	14.50	14.59	14.77	14.61	14.67	16.00
5	64QAM	12	7	14.44	14.55	14.87	14.67	14.66	16.00
5	64QAM	12	13	14.42	14.55	14.80	14.55	14.80	16.00
5	64QAM	25	0	14.27	14.40	14.74	14.51	14.57	16.00

【LTE Band 66】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				132072	132322	132572	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	17.97	18.28	18.09	19.00
20	QPSK	1	49	17.66	18.07	17.78	19.00
20	QPSK	1	99	17.88	18.26	17.99	19.00
20	QPSK	50	0	18.21	18.26	18.25	19.00
20	QPSK	50	24	17.83	18.24	18.02	19.00
20	QPSK	50	50	17.87	18.24	17.94	19.00
20	QPSK	100	0	17.93	18.17	17.98	19.00
20	16QAM	1	0	17.61	18.06	17.78	19.00
20	16QAM	1	49	17.66	18.11	17.83	19.00
20	16QAM	1	99	17.59	18.04	17.76	19.00
20	16QAM	50	0	17.75	18.08	17.78	19.00
20	16QAM	50	24	17.77	18.21	17.93	19.00
20	16QAM	50	50	17.66	18.04	17.71	19.00
20	16QAM	100	0	17.81	18.22	17.91	19.00
20	64QAM	1	0	17.88	18.25	17.99	19.00
20	64QAM	1	49	17.65	18.07	17.75	19.00
20	64QAM	1	99	17.69	18.09	17.86	19.00
20	64QAM	50	0	17.91	18.24	17.97	19.00
20	64QAM	50	24	17.94	18.28	18.03	19.00
20	64QAM	50	50	17.78	18.21	17.96	19.00
20	64QAM	100	0	17.64	18.07	17.83	19.00
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	17.87	18.17	17.99	19.00
15	QPSK	1	37	17.53	18.01	17.73	19.00
15	QPSK	1	74	17.81	18.15	17.95	19.00
15	QPSK	36	0	17.97	18.19	18.08	19.00
15	QPSK	36	20	17.72	18.11	17.91	19.00



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15	QPSK	36	39	17.77	18.12	17.90	19.00
15	QPSK	75	0	17.81	18.26	17.86	19.00
15	16QAM	1	0	17.56	18.04	17.70	19.00
15	16QAM	1	37	17.56	17.99	17.75	19.00
15	16QAM	1	74	17.48	17.94	17.73	19.00
15	16QAM	36	0	17.67	18.01	17.64	19.00
15	16QAM	36	20	17.71	18.12	17.81	19.00
15	16QAM	36	39	17.58	17.97	17.61	19.00
15	16QAM	75	0	17.71	18.16	17.86	19.00
15	64QAM	1	0	17.77	18.18	17.93	19.00
15	64QAM	1	37	17.57	17.97	17.71	19.00
15	64QAM	1	74	17.59	17.96	17.75	19.00
15	64QAM	36	0	17.90	18.12	17.89	19.00
15	64QAM	36	20	17.85	18.21	18.02	19.00
15	64QAM	36	39	17.65	18.17	17.92	19.00
15	64QAM	75	0	17.53	17.98	17.72	19.00
Channel				132022	132322	132622	Tune-up limit
Frequency (MHz)				1715	1745	1775	(dBm)
10	QPSK	1	0	17.88	18.24	18.05	19.00
10	QPSK	1	25	17.61	17.97	17.66	19.00
10	QPSK	1	49	17.76	18.16	17.94	19.00
10	QPSK	25	0	17.97	18.16	18.09	19.00
10	QPSK	25	12	17.79	18.20	17.91	19.00
10	QPSK	25	25	17.80	18.13	17.86	19.00
10	QPSK	50	0	17.92	18.21	17.95	19.00
10	16QAM	1	0	17.57	17.99	17.74	19.00
10	16QAM	1	25	17.57	18.00	17.77	19.00
10	16QAM	1	49	17.52	17.90	17.64	19.00
10	16QAM	25	0	17.69	17.96	17.71	19.00
10	16QAM	25	12	17.68	18.20	17.84	19.00
10	16QAM	25	25	17.53	17.91	17.70	19.00
10	16QAM	50	0	17.71	18.16	17.84	19.00
10	64QAM	1	0	17.80	18.24	17.86	19.00
10	64QAM	1	25	17.57	17.95	17.61	19.00
10	64QAM	1	49	17.64	18.07	17.79	19.00
10	64QAM	25	0	17.78	18.10	17.93	19.00
10	64QAM	25	12	17.87	18.16	17.91	19.00
10	64QAM	25	25	17.75	18.18	17.92	19.00
10	64QAM	50	0	17.55	17.96	17.74	19.00
Channel				131997	132322	132647	Tune-up limit
Frequency (MHz)				1712.5	1745	1777.5	(dBm)
5	QPSK	1	0	17.89	18.16	18.06	19.00
5	QPSK	1	12	17.56	17.99	17.66	19.00
5	QPSK	1	24	17.86	18.15	17.96	19.00
5	QPSK	12	0	17.96	18.18	18.07	19.00
5	QPSK	12	7	17.82	18.19	17.89	19.00
5	QPSK	12	13	17.79	18.13	17.84	19.00
5	QPSK	25	0	17.83	18.20	17.94	19.00
5	16QAM	1	0	17.46	17.96	17.68	19.00
5	16QAM	1	12	17.62	18.03	17.71	19.00
5	16QAM	1	24	17.51	17.96	17.66	19.00
5	16QAM	12	0	17.72	17.96	17.64	19.00
5	16QAM	12	7	17.73	18.12	17.92	19.00
5	16QAM	12	13	17.63	18.02	17.59	19.00
5	16QAM	25	0	17.73	18.18	17.89	19.00
5	64QAM	1	0	17.76	18.11	17.90	19.00
5	64QAM	1	12	17.51	17.97	17.73	19.00
5	64QAM	1	24	17.55	17.96	17.72	19.00
5	64QAM	12	0	17.88	18.09	17.91	19.00
5	64QAM	12	7	17.86	18.16	18.00	19.00
5	64QAM	12	13	17.68	18.10	17.85	19.00
5	64QAM	25	0	17.56	18.02	17.78	19.00
Channel				131987	132322	132657	Tune-up limit
Frequency (MHz)				1711.5	1745	1778.5	(dBm)
3	QPSK	1	0	17.95	18.20	18.04	19.00
3	QPSK	1	8	17.56	17.96	17.67	19.00
3	QPSK	1	14	17.76	18.15	17.95	19.00
3	QPSK	8	0	17.97	18.18	18.08	19.00
3	QPSK	8	4	17.71	18.12	17.89	19.00
3	QPSK	8	7	17.77	18.09	17.80	19.00
3	QPSK	15	0	17.80	18.21	17.93	19.00
3	16QAM	1	0	17.52	18.03	17.76	19.00
3	16QAM	1	8	17.52	18.03	17.68	19.00
3	16QAM	1	14	17.51	17.90	17.64	19.00
3	16QAM	8	0	17.69	18.03	17.68	19.00
3	16QAM	8	4	17.66	18.18	17.91	19.00
3	16QAM	8	7	17.61	17.94	17.57	19.00
3	16QAM	15	0	17.68	18.19	17.89	19.00

3	64QAM	1	0	17.85	18.23	17.91	19.00
3	64QAM	1	8	17.52	18.06	17.62	19.00
3	64QAM	1	14	17.55	18.00	17.73	19.00
3	64QAM	8	0	17.80	18.10	17.83	19.00
3	64QAM	8	4	17.87	18.26	17.90	19.00
3	64QAM	8	7	17.75	18.15	17.90	19.00
3	64QAM	15	0	17.55	18.04	17.75	19.00
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	17.87	18.22	18.02	19.00
1.4	QPSK	1	3	17.62	17.93	17.74	19.00
1.4	QPSK	1	5	17.84	18.21	17.94	19.00
1.4	QPSK	3	0	17.96	18.25	18.08	19.00
1.4	QPSK	3	1	17.68	18.11	18.01	19.00
1.4	QPSK	3	3	17.83	18.10	17.80	19.00
1.4	QPSK	6	0	17.90	18.27	17.89	19.00
1.4	16QAM	1	0	17.50	18.00	17.64	19.00
1.4	16QAM	1	3	17.63	18.09	17.76	19.00
1.4	16QAM	1	5	17.45	17.92	17.70	19.00
1.4	16QAM	3	0	17.65	18.05	17.66	19.00
1.4	16QAM	3	1	17.68	18.19	17.79	19.00
1.4	16QAM	3	3	17.63	17.92	17.69	19.00
1.4	16QAM	6	0	17.77	18.19	17.78	19.00
1.4	64QAM	1	0	17.75	18.22	17.90	19.00
1.4	64QAM	1	3	17.64	18.00	17.61	19.00
1.4	64QAM	1	5	17.65	17.98	17.75	19.00
1.4	64QAM	3	0	17.86	18.23	17.91	19.00
1.4	64QAM	3	1	17.86	18.19	17.89	19.00
1.4	64QAM	3	3	17.71	18.14	17.91	19.00
1.4	64QAM	6	0	17.55	18.00	17.80	19.00

【LTE Band 71】

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				133222	133297	133372	Tune-up limit (dBm)
Frequency (MHz)				673	680.5	688	
20	QPSK	1	0	22.31	22.35	22.28	23.00
20	QPSK	1	49	22.13	22.31	22.11	23.00
20	QPSK	1	99	22.11	22.26	22.13	23.00
20	QPSK	50	0	22.27	22.33	22.24	23.00
20	QPSK	50	24	22.11	22.26	22.16	23.00
20	QPSK	50	50	21.98	22.16	22.08	23.00
20	QPSK	100	0	22.22	22.30	22.24	23.00
20	16QAM	1	0	21.51	21.69	21.56	23.00
20	16QAM	1	49	21.50	21.62	21.55	23.00
20	16QAM	1	99	21.29	21.44	21.30	23.00
20	16QAM	50	0	21.06	21.15	21.04	22.00
20	16QAM	50	24	20.74	20.88	20.79	22.00
20	16QAM	50	50	20.57	20.69	20.61	22.00
20	16QAM	100	0	20.77	20.81	20.72	22.00
20	64QAM	1	0	20.25	20.37	20.22	22.00
20	64QAM	1	49	20.51	20.55	20.37	22.00
20	64QAM	1	99	20.45	20.61	20.56	22.00
20	64QAM	50	0	20.28	20.39	20.30	21.00
20	64QAM	50	24	20.04	20.21	20.12	21.00
20	64QAM	50	50	19.94	20.11	19.94	21.00
20	64QAM	100	0	20.14	20.18	20.01	21.00
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	22.24	22.29	22.23	23.00
15	QPSK	1	37	21.98	22.19	22.06	23.00
15	QPSK	1	74	21.96	22.15	22.03	23.00
15	QPSK	36	0	21.90	22.27	21.97	23.00
15	QPSK	36	20	21.98	22.20	22.03	23.00
15	QPSK	36	39	21.96	22.12	21.97	23.00
15	QPSK	75	0	22.16	22.20	22.11	23.00
15	16QAM	1	0	21.38	21.68	21.42	23.00
15	16QAM	1	37	21.48	21.54	21.44	23.00
15	16QAM	1	74	21.23	21.37	21.28	23.00
15	16QAM	36	0	20.93	21.08	20.89	22.00
15	16QAM	36	20	20.67	20.74	20.71	22.00
15	16QAM	36	39	20.52	20.60	20.47	22.00



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15	16QAM	75	0	20.65	20.75	20.61	22.00
15	64QAM	1	0	20.13	20.34	20.18	22.00
15	64QAM	1	37	20.42	20.40	20.35	22.00
15	64QAM	1	74	20.35	20.59	20.52	22.00
15	64QAM	36	0	20.15	20.26	20.21	21.00
15	64QAM	36	20	19.94	20.19	20.08	21.00
15	64QAM	36	39	19.88	19.99	19.83	21.00
15	64QAM	75	0	20.01	20.14	19.88	21.00
Channel				133172	133297	133422	Tune-up limit
Frequency (MHz)				668	680.5	693	(dBm)
10	QPSK	1	0	22.19	22.34	22.23	23.00
10	QPSK	1	25	21.98	22.23	22.02	23.00
10	QPSK	1	49	22.08	22.22	22.01	23.00
10	QPSK	25	0	21.99	22.31	21.94	23.00
10	QPSK	25	12	22.00	22.18	22.04	23.00
10	QPSK	25	25	21.84	22.10	22.01	23.00
10	QPSK	50	0	22.18	22.21	22.16	23.00
10	16QAM	1	0	21.47	21.63	21.54	23.00
10	16QAM	1	25	21.45	21.58	21.43	23.00
10	16QAM	1	49	21.23	21.38	21.29	23.00
10	16QAM	25	0	21.01	21.11	20.92	22.00
10	16QAM	25	12	20.65	20.78	20.69	22.00
10	16QAM	25	25	20.43	20.67	20.47	22.00
10	16QAM	50	0	20.64	20.73	20.69	22.00
10	64QAM	1	0	20.18	20.27	20.11	22.00
10	64QAM	1	25	20.44	20.53	20.26	22.00
10	64QAM	1	49	20.36	20.54	20.42	22.00
10	64QAM	25	0	20.18	20.37	20.20	21.00
10	64QAM	25	12	20.01	20.15	20.09	21.00
10	64QAM	25	25	19.86	20.06	19.86	21.00
10	64QAM	50	0	20.12	20.10	19.88	21.00
Channel				133147	133297	133447	Tune-up limit
Frequency (MHz)				665.5	680.5	695.5	(dBm)
5	QPSK	1	0	22.24	22.26	22.23	23.00
5	QPSK	1	12	22.01	22.26	22.00	23.00
5	QPSK	1	24	22.02	22.19	21.99	23.00
5	QPSK	12	0	21.95	22.22	21.91	23.00
5	QPSK	12	7	21.99	22.21	22.02	23.00
5	QPSK	12	13	21.88	22.14	22.04	23.00
5	QPSK	25	0	22.13	22.28	22.11	23.00
5	16QAM	1	0	21.42	21.66	21.47	23.00
5	16QAM	1	12	21.41	21.50	21.51	23.00
5	16QAM	1	24	21.18	21.30	21.23	23.00
5	16QAM	12	0	21.00	21.07	21.03	22.00
5	16QAM	12	7	20.72	20.84	20.71	22.00
5	16QAM	12	13	20.46	20.66	20.57	22.00
5	16QAM	25	0	20.70	20.66	20.60	22.00
5	64QAM	1	0	20.23	20.29	20.12	22.00
5	64QAM	1	12	20.39	20.53	20.27	22.00
5	64QAM	1	24	20.40	20.51	20.55	22.00
5	64QAM	12	0	20.24	20.29	20.29	21.00
5	64QAM	12	7	19.90	20.10	20.09	21.00
5	64QAM	12	13	19.92	19.97	19.85	21.00
5	64QAM	25	0	20.08	20.03	19.99	21.00

<Bluetooth Conducted Power>

【Bluetooth】

Mode	Channel	Frequency (MHz)	Ant 1		
			Average Power (dBm)	Tune-Up Limit	Duty Cycle %
BR / EDR 1Mbps	0	2402	12.87	14.00	76.97
	39	2441	13.68	15.00	
	78	2480	13.17	14.00	
BR / EDR 2Mbps	0	2402	10.44	11.50	30.90
	39	2441	11.29	12.00	
	78	2480	11.08	12.00	
BR / EDR 3Mbps	0	2402	10.41	11.50	31.13
	39	2441	11.27	12.50	
	78	2480	11.07	12.00	
LE 1Mbps	0	2402	8.05	9.00	62.73
	19	2440	9.09	10.00	
	39	2480	9.19	10.00	

<WLAN Conducted Power>

【2.4GHz WLAN】

Mode	Channel	Frequency (MHz)	Ant 1		
			Average Power (dBm)	Tune-Up Limit	Duty Cycle %
802.11b 1Mbps	1	2412	16.79	17.50	98.95
	6	2437	16.51	17.50	
	11	2462	16.62	17.50	
802.11g 6Mbps	1	2412	16.19	17.00	98.26
	6	2437	16.07	17.00	
	11	2462	16.16	17.00	
802.11n-HT20 MCS0	1	2412	16.06	17.00	98.14
	6	2437	15.88	17.00	
	11	2462	15.97	17.00	
802.11n-HT40 MCS0	3	2422	14.59	15.50	95.18
	6	2437	15.95	17.00	
	9	2452	15.90	17.00	

【5.2GHz WLAN】

Mode	Channel	Frequency (MHz)	Ant 1		
			Average Power (dBm)	Tune-Up Limit	Duty Cycle %
802.11a 6Mbps	36	5180	13.04	14.00	98.26
	40	5200	12.98	14.00	
	44	5220	13.00	14.00	
	48	5240	12.85	14.00	
802.11n-HT20 MCS0	36	5180	12.63	14.00	98.13
	40	5200	12.67	14.00	
	44	5220	12.72	14.00	
	48	5240	12.57	13.50	
802.11n-HT40 MCS0	38	5190	13.40	14.50	96.44
	46	5230	13.34	14.50	
802.11ac-VHT20 MCS0	36	5180	12.71	14.00	97.86
	40	5200	12.72	14.00	
	44	5220	12.80	14.00	
	48	5240	12.64	14.00	
802.11ac-VHT40 MCS0	38	5190	13.39	14.50	96.58
	46	5230	13.38	14.50	
802.11ac-VHT80 MCS0	42	5210	12.54	13.50	92.17

<5.3GHz WLAN_Ant 1_Full Power>					
5.3GHz WLAN_Ant 1_Full Power			Ant 1		
Mode	Channel	Frequency (MHz)	Average Power (dBm)	Tune-Up Limit	Duty Cycle %
802.11a 6Mbps	52	5260	13.02	14.00	98.26
	56	5280	12.93	14.00	98.26
	60	5300	13.01	14.00	98.26
	64	5320	13.01	14.00	98.26
802.11n-HT20 MCS0	52	5260	12.74	14.00	98.13
	56	5280	12.69	14.00	98.13
	60	5300	12.64	14.00	98.13
	64	5320	12.71	14.00	98.13
802.11n-HT40 MCS0	54	5270	13.24	14.50	96.44
	62	5310	13.28	14.50	96.44
802.11ac-VHT20 MCS0	52	5260	12.77	14.00	97.86
	56	5280	12.74	14.00	97.86
	60	5300	12.72	14.00	97.86
	64	5320	12.74	14.00	97.86
802.11ac-VHT40 MCS0	54	5270	13.29	14.50	96.58
	62	5310	13.30	14.50	96.58
802.11ac-VHT80 MCS0	58	5290	12.73	14.00	92.17

<5.5GHz WLAN_Ant 1_Full Power>					
5.5GHz WLAN_Ant 1_Full Power			Ant 1		
Mode	Channel	Frequency (MHz)	Average Power (dBm)	Tune-Up Limit	Duty Cycle %
802.11a 6Mbps	100	5500	13.05	14.00	98.26
	116	5580	13.10	14.00	98.26
	124	5620	13.12	14.00	98.26
	132	5660	12.99	14.00	98.26
	144	5720	12.67	14.00	98.26
802.11n-HT20 MCS0	100	5500	12.81	14.00	98.13
	116	5580	12.84	14.00	98.13
	124	5620	12.82	14.00	98.13
	132	5660	12.51	14.00	98.13
	144	5720	12.49	14.00	98.13
802.11n-HT40 MCS0	102	5510	13.41	14.50	96.44
	110	5550	13.45	14.50	96.44
	126	5630	13.34	14.50	96.44
	134	5670	13.27	14.50	96.44
	142	5710	13.18	14.00	96.44
802.11ac-VHT20 MCS0	100	5500	12.85	14.00	97.86
	116	5580	12.88	14.00	97.86
	124	5620	12.87	14.00	97.86
	132	5660	12.60	13.50	97.86
	144	5720	12.52	13.50	97.86
802.11ac-VHT40 MCS0	102	5510	13.46	14.50	96.58
	110	5550	13.47	14.50	96.58
	126	5630	13.40	14.50	96.58
	134	5670	13.30	14.50	96.58
	142	5710	13.19	14.00	96.58
802.11ac-VHT80 MCS0	106	5530	13.17	14.00	92.17
	122	5610	14.44	15.50	92.17
	138	5690	14.46	15.50	92.17

【5.8GHz WLAN】

			Ant 1		
Mode	Channel	Frequency (MHz)	Average Power (dBm)	Tune-Up Limit	Duty Cycle %
802.11a 6Mbps	149	5745	12.45	13.50	98.26
	157	5785	12.47	13.50	
	165	5825	12.24	13.50	
802.11n-HT20 MCS0	149	5745	12.35	13.50	98.13
	157	5785	12.37	13.50	
	165	5825	12.40	13.50	
802.11n-HT40 MCS0	151	5755	13.24	14.50	96.44
	159	5795	13.35	14.50	
802.11ac-VHT20 MCS0	149	5745	12.34	13.50	97.86
	157	5785	12.35	13.50	
	165	5825	12.38	13.50	
802.11ac-VHT40 MCS0	151	5755	13.21	14.50	96.58
	159	5795	13.30	14.50	
802.11ac-VHT80 MCS0	155	5775	13.78	15.00	92.17