



REPORT No.: SZ24030252S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

The target power was recorded in the manufacturer's document.



Full Power

Band 41 (2496~2690MHz) (dBm)										Tune-up limit (dBm)
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel		
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.55	23.52	23.59	23.51	23.50	24.5	24.5
20	QPSK	1	49	23.40	23.38	23.52	23.33	23.50		
20	QPSK	1	99	23.43	23.53	23.56	23.39	23.40	23.5	23.5
20	QPSK	50	0	22.62	22.61	22.63	22.56	22.57		
20	QPSK	50	24	22.43	22.41	22.63	22.42	22.48	23.5	23.5
20	QPSK	50	50	22.56	22.36	22.59	22.41	22.55		
20	QPSK	100	0	22.48	22.50	22.56	22.60	22.37	23.5	23.5
20	16QAM	1	0	22.54	22.52	22.71	22.72	22.67		
20	16QAM	1	49	22.65	22.51	22.56	22.78	22.53	23.5	23.5
20	16QAM	1	99	22.50	22.49	22.61	22.62	22.69		
20	16QAM	50	0	21.55	21.49	21.69	21.62	21.65	22.5	22.5
20	16QAM	50	24	21.40	21.41	21.57	21.64	21.60		
20	16QAM	50	50	21.54	21.38	21.61	21.51	21.52	22.5	22.5
20	16QAM	100	0	21.60	21.43	21.43	21.46	21.45		
20	64QAM	1	0	21.65	21.56	21.73	21.58	21.65	22.5	22.5
20	64QAM	1	49	21.59	21.51	21.58	21.40	21.60		
20	64QAM	1	99	21.44	21.57	21.41	21.48	21.51	21.5	21.5
20	64QAM	50	0	20.44	20.51	20.70	20.59	20.58		
20	64QAM	50	24	20.36	20.52	20.56	20.47	20.58	21.5	21.5
20	64QAM	50	50	20.57	20.49	20.47	20.47	20.53		
20	64QAM	100	0	20.36	20.33	20.46	20.34	20.35	19.5	19.5
20	256QAM	1	0	18.34	18.46	18.56	18.32	18.39		
20	256QAM	1	49	18.30	18.40	18.46	18.46	18.35	19.5	19.5
20	256QAM	1	99	18.38	18.51	18.34	18.29	18.28		
20	256QAM	50	0	17.28	17.35	17.63	17.41	17.38	18.5	18.5
20	256QAM	50	24	17.39	17.31	17.41	17.54	17.46		
20	256QAM	50	50	17.38	17.53	17.50	17.27	17.29	18.5	18.5
20	256QAM	100	0	17.37	17.42	17.50	17.38	17.28		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	23.46	23.43	23.50	23.42	23.41	24.5	24.5
15	QPSK	1	37	23.31	23.29	23.43	23.24	23.41		
15	QPSK	1	74	23.34	23.44	23.47	23.30	23.31	23.5	23.5
15	QPSK	36	0	22.53	22.52	22.54	22.47	22.48		
15	QPSK	36	20	22.34	22.32	22.54	22.33	22.39	23.5	23.5
15	QPSK	36	39	22.47	22.27	22.50	22.32	22.46		
15	QPSK	75	0	22.39	22.41	22.47	22.51	22.58	23.5	23.5
15	16QAM	1	0	22.45	22.43	22.62	22.63	22.58		
15	16QAM	1	37	22.56	22.42	22.47	22.69	22.44	23.5	23.5
15	16QAM	1	74	22.41	22.40	22.52	22.53	22.60		
15	16QAM	36	0	21.46	21.40	21.60	21.53	21.51	22.5	22.5
15	16QAM	36	20	21.31	21.32	21.48	21.55	21.51		
15	16QAM	36	39	21.45	21.29	21.52	21.42	21.43	22.5	22.5
15	16QAM	75	0	21.51	21.34	21.34	21.37	21.36		
15	64QAM	1	0	21.56	21.47	21.64	21.49	21.56	22.5	22.5
15	64QAM	1	37	21.50	21.42	21.49	21.31	21.51		
15	64QAM	1	74	21.35	21.48	21.32	21.39	21.42	21.5	21.5
15	64QAM	36	0	20.35	20.42	20.61	20.50	20.49		
15	64QAM	36	20	20.27	20.43	20.47	20.38	20.49	21.5	21.5
15	64QAM	36	39	20.48	20.40	20.38	20.38	20.44		
15	64QAM	75	0	20.27	20.24	20.37	20.25	20.26	19.5	19.5
15	256QAM	1	0	18.25	18.37	18.47	18.23	18.30		
15	256QAM	1	37	18.21	18.31	18.37	18.37	18.26	19.5	19.5
15	256QAM	1	74	18.29	18.42	18.25	18.20	18.19		
15	256QAM	36	0	17.19	17.26	17.54	17.32	17.29	18.5	18.5
15	256QAM	36	20	17.30	17.22	17.32	17.45	17.37		
15	256QAM	36	39	17.29	17.44	17.41	17.18	17.20	18.5	18.5
15	256QAM	75	0	17.28	17.33	17.41	17.29	17.19		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.38	23.35	23.42	23.34	23.33	24.5	24.5
10	QPSK	1	25	23.23	23.21	23.35	23.16	23.33		
10	QPSK	1	49	23.26	23.36	23.39	23.22	23.23	23.5	23.5
10	QPSK	25	0	22.45	22.44	22.46	22.39	22.40		
10	QPSK	25	12	22.26	22.24	22.46	22.25	22.31	23.5	23.5
10	QPSK	25	25	22.39	22.19	22.42	22.24	22.38		
10	QPSK	50	0	22.31	22.33	22.39	22.43	22.20	23.5	23.5
10	16QAM	1	0	22.37	22.35	22.54	22.55	22.50		
10	16QAM	1	25	22.48	22.34	22.39	22.61	22.36	23.5	23.5
10	16QAM	1	49	22.33	22.32	22.44	22.45	22.52		
10	16QAM	25	0	21.38	21.32	21.52	21.45	21.48	22.5	22.5
10	16QAM	25	12	21.23	21.24	21.40	21.47	21.43		
10	16QAM	25	25	21.35	21.21	21.34	21.34	21.36	22.5	22.5
10	16QAM	50	0	21.43	21.28	21.28	21.29	21.28		
10	64QAM	1	0	21.48	21.39	21.56	21.41	21.48	22.5	22.5
10	64QAM	1	25	21.42	21.34	21.41	21.23	21.43		
10	64QAM	1	49	21.27	21.40	21.24	21.31	21.34	21.5	21.5
10	64QAM	25	0	20.27	20.34	20.53	20.42	20.41		
10	64QAM	25	12	20.19	20.35	20.39	20.30	20.41	21.5	21.5
10	64QAM	25	25	20.40	20.32	20.30	20.30	20.36		
10	64QAM	50	0	20.19	20.16	20.29	20.17	20.18	19.5	19.5
10	256QAM	1	0	18.17	18.29	18.39	18.15	18.22		
10	256QAM	1	25	18.13	18.23	18.29	18.29	18.18	19.5	19.5
10	256QAM	1	49	18.21	18.34	18.17	18.12	18.11		
10	256QAM	25	0	17.11	17.18	17.46	17.24	17.21	18.5	18.5
10	256QAM	25	12	17.22	17.14	17.24	17.37	17.29		
10	256QAM	25	25	17.21	17.36	17.33	17.10	17.12	18.5	18.5
10	256QAM	50	0	17.20	17.25	17.33	17.21	17.11		
Channel				39675	40148	40620	41093	41555		
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	23.31	23.28	23.35	23.27	23.26	24.5	24.5
5	QPSK	1	12	23.16	23.14	23.28	23.09	23.26		
5	QPSK	1	24	23.19	23.29	23.32	23.15	23.16	23.5	23.5
5	QPSK	12	0	22.38	22.37	22.39	22.32	22.33		
5	QPSK	12	7	22.19	22.17	22.39	22.18	22.24	23.5	23.5
5	QPSK	12	13	22.32	22.12	22.35	22.17	22.31		
5	QPSK	25	0	22.24	22.26	22.32	22.36	22.13	23.5	23.5
5	16QAM	1	0	22.30	22.28	22.47	22.48	22.43		
5	16QAM	1	12	22.41	22.27	22.32	22.54	22.29	23.5	23.5
5	16QAM	1	24	22.26	22.25	22.37	22.38	22.45		
5	16QAM	12	0	21.31	21.25	21.45	21.38	21.41	22.5	22.5
5	16QAM	12	7	21.16	21.17	21.33	21.40	21.36		
5	16QAM	12	13	21.30	21.14	21.37	21.27	21.28	22.5	22.5
5	16QAM	25	0	21.36	21.19	21.19	21.22	21.21		
5	64QAM	1	0	21.41	21.32	21.49	21.34	21.41	22.5	22.5
5	64QAM	1	12	21.35	21.27	21.34	21.36	21.36		
5	64QAM	1	24	21.20	21.33	21.17	21.24	21.27	21.5	21.5
5	64QAM	12	0	20.20	20.27	20.46	20.35	20.34		
5	64QAM	12	7	20.12	20.28	20.32	20.23	20.34	21.5	21.5
5	64QAM	12	13	20.33	20.25	20.23	20.29	20.29		
5	64QAM	25	0	20.12	20.09	20.22	20.10	20.11	19.5	19.5
5	256QAM	1	0	18.10	18.22	18.32	18.08			

n41 (PC2)_SCS 15KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				504201	511404	518601	525798	532998	
Frequency (MHz)				2521.01	2557.02	2593.01	2626.5	2664.99	
50	DFT-s-OFDM PI/2 BPSK	1	1	26.10	25.99	26.04	26.08	26.06	27.50
50		1	135	26.11	26.13	26.17	26.19	26.10	
50		1	268	26.03	26.15	26.04	26.01	26.14	
50		135	1	26.03	26.10	26.27	26.13	25.93	27.50
50		135	67	26.13	26.15	26.27	26.21	26.10	
50		135	135	26.16	26.07	26.07	26.29	26.06	
50	DFT-s-OFDM QPSK	270	0	26.13	26.11	26.27	26.24	25.96	27.50
50		1	1	26.24	26.33	26.42	26.39	26.40	
50		1	135	26.16	26.18	26.24	26.25	26.18	
50		1	268	26.07	26.22	26.07	26.06	26.20	27.50
50		135	1	26.26	26.19	26.30	26.21	26.24	
50		135	67	26.19	26.17	26.25	26.25	26.12	
50	135	135	26.17	26.09	26.13	26.29	26.10		
50	270	0	26.16	26.12	26.10	26.26	25.96		
50	DFT-s-OFDM 16QAM	1	1	25.15	25.06	24.72	25.07	25.07	26.00
50	DFT-s-OFDM 64QAM	1	1	23.49	23.40	23.65	23.75	23.60	24.50
50	DFT-s-OFDM 256QAM	1	1	21.66	21.65	21.35	21.45	21.77	22.50
50	CP-OFDM QPSK	1	1	25.56	25.42	25.63	25.44	25.51	26.50
50	CP-OFDM 16QAM	1	1	24.07	23.89	24.00	24.02	24.01	25.00
50	CP-OFDM 64QAM	1	1	22.58	22.68	22.68	22.36	22.67	23.50
50	CP-OFDM 256QAM	1	1	19.83	19.48	19.62	19.79	19.75	20.50
Channel				503202	510900	518601	526296	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2554.5	2593.01	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	25.82	25.67	25.78	25.76	25.72	27.50
Channel				502200	510402	518601	526800	534999	Tune-up limit (dBm)
Frequency (MHz)				2511	2552.01	2593.01	2634	2674.99	
30	DFT-s-OFDM QPSK	1	1	25.94	25.81	25.96	25.90	25.79	27.50
Channel				501201	509904	518601	527298	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.01	2549.52	2593.01	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	26.28	26.11	26.25	26.19	26.31	27.50
Channel				500700	509652	518601	527550	536499	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.26	2593.01	2637.75	2682.49	
15	DFT-s-OFDM QPSK	1	1	26.34	26.04	26.19	26.38	26.14	27.50
Channel				500202	509400	518601	527796	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2547	2593.01	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	26.31	26.13	26.29	26.23	26.12	27.50

n41 (PC2)_SCS 30KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	28.00
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	26.55	26.61	26.65	26.66	26.68	28.00
100		1	136	26.69	26.77	26.87	26.90	26.72	
100		1	271	26.69	26.83	26.79	26.74	26.73	
100		135	1	26.67	26.76	27.03	26.86	26.73	28.00
100		135	67	26.76	26.84	27.03	27.03	26.86	
100		135	136	26.77	26.78	26.89	27.10	26.81	
100		270	0	26.73	26.78	27.05	26.98	26.71	
100	DFT-s-OFDM QPSK	1	1	27.24	27.22	27.38	27.19	27.36	28.00
100		1	136	26.74	26.79	26.94	27.05	27.01	
100		1	271	26.70	26.91	26.80	26.91	26.97	
100		135	1	27.01	26.93	27.09	26.92	26.95	28.00
100		135	67	26.78	26.86	27.04	27.08	26.90	
100		135	136	26.82	26.80	26.94	26.93	26.85	
100		270	0	26.73	26.78	27.07	27.04	26.75	
100	DFT-s-OFDM 16QAM	1	1	25.57	25.69	25.87	25.85	25.89	26.50
100	DFT-s-OFDM 64QAM	1	1	24.18	24.12	24.25	24.33	24.31	25.50
100	DFT-s-OFDM 256QAM	1	1	22.16	21.98	22.19	22.27	22.22	23.00
100	CP-OFDM QPSK	1	1	26.01	26.02	26.17	26.12	26.16	27.00
100	CP-OFDM 16QAM	1	1	24.67	24.59	24.79	24.83	24.82	25.50
100	CP-OFDM 64QAM	1	1	23.08	22.98	23.17	23.25	23.24	24.00
100	CP-OFDM 256QAM	1	1	20.30	20.19	20.41	20.51	20.51	21.50
Channel				508200	513402	518598	523800	528996	28.00
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	26.75	26.43	26.50	26.61	26.51	28.00
Channel				507204	512904	518598	524298	529998	28.00
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	26.91	26.61	26.72	26.81	26.71	28.00
Channel				505200	511902	518598	525798	531996	28.00
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	26.88	26.77	26.80	26.83	26.88	28.00
Channel				504204	511404	518598	525798	532998	28.00
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	27.24	27.22	27.38	27.19	27.36	28.00
Channel				504204	511404	518598	525798	532998	28.00
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
40	DFT-s-OFDM QPSK	1	1	27.12	27.27	27.33	27.20	27.30	0.00
Channel				504204	511404	518598	525798	532998	28.00
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
30	DFT-s-OFDM QPSK	1	1	27.01	27.23	27.24	27.17	27.11	0.00
Channel				504204	511404	518598	525798	532998	28.00
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
20	DFT-s-OFDM QPSK	1	1	27.17	27.02	27.28	27.09	27.26	0.00
Channel				504204	511404	518598	525798	532998	28.00
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
20	DFT-s-OFDM QPSK	1	1	27.14	27.33	27.05	27.24	27.21	0.00

n48 (PC3)_SCS 15K										
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)	
Channel				638334	640000	641666	643332	645000	Tune-up limit (dBm)	
Frequency (MHz)				3575.01	3600	3624.99	3647.49	3675		
50	DFT-s-OFDM PI/2 BPSK	1	1	20.49	20.55	20.93	20.74	20.56	22.00	
50		1	135	20.68	21.03	20.90	20.77	20.57		
50		1	268	20.97	20.75	20.71	20.53	20.34		
50		DFT-s-OFDM PI/2 BPSK	135	1	20.65	20.78	20.82	20.87	20.59	22.00
50			135	67	20.69	21.05	20.84	20.83	20.58	
50			135	135	20.76	20.87	20.89	20.66	20.41	
50			270	0	20.63	20.99	20.78	20.75	20.52	
50	DFT-s-OFDM QPSK	1	1	20.47	20.54	21.07	20.75	20.63	22.00	
50		1	135	20.69	21.04	20.86	20.79	20.67		
50		1	268	20.96	20.73	20.73	20.52	20.33		
50		DFT-s-OFDM QPSK	135	1	20.87	20.79	20.93	20.89	20.86	22.00
50			135	67	20.69	20.89	20.85	20.85	20.65	
50			135	135	20.76	20.85	20.93	20.68	20.44	
50			270	0	20.68	20.88	20.78	20.77	20.52	
50	DFT-s-OFDM 16QAM	1	1	19.87	19.92	20.30	20.11	20.19	21.00	
50	DFT-s-OFDM 64QAM	1	1	18.11	18.17	18.51	18.36	18.39	20.00	
50	DFT-s-OFDM 256QAM	1	1	15.89	15.94	16.24	16.15	16.18	17.00	
50	CP-OFDM QPSK	1	1	20.00	20.06	20.41	20.24	20.28	25.00	
50	CP-OFDM 16QAM	1	1	18.43	18.45	18.81	-55.58	18.62	24.00	
50	CP-OFDM 64QAM	1	1	17.07	17.09	17.46	17.09	17.00	23.00	
50	CP-OFDM 256QAM	1	1	13.80	13.83	14.27	14.27	14.24	19.00	
Channel				638000	639834	641666	643500	645332	Tune-up limit (dBm)	
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98		
40	DFT-s-OFDM QPSK	1	1	20.25	20.20	20.56	20.43	20.18	22.00	
Channel				637334	639500	641666	643832	646000	Tune-up limit (dBm)	
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690		
20	DFT-s-OFDM QPSK	1	1	20.58	20.70	20.66	20.78	20.52	22.00	
Channel				637168	639418	641666	643916	646166	Tune-up limit (dBm)	
Frequency (MHz)				3557.52	3591.27	3624.99	3658.74	3692.49		
15	DFT-s-OFDM QPSK	1	1	20.57	20.68	20.61	20.70	20.43	22.00	
Channel				637000	639334	641666	644000	646332	Tune-up limit (dBm)	
Frequency (MHz)				3555	3590.01	3624.99	3660	3694.98		
10	DFT-s-OFDM QPSK	1	1	20.57	20.78	20.64	20.72	20.45	22.00	

n48 (PC3)_SCS 30KHz										
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)	
Channel				640000	640834	641666	642500	643332	Tune-up limit (dBm)	
Frequency (MHz)				3600	3612.51	3624.99	3637.5	3649.98		
100	DFT-s-OFDM PI/2 BPSK	1	1	20.68	20.72	20.72	20.79	20.94	22.50	
100		1	136	21.57	21.22	21.17	21.29	21.29		
100		1	271	20.57	20.46	20.46	20.41	20.36		
100		DFT-s-OFDM QPSK	135	1	21.19	21.30	21.47	21.05	21.01	22.50
100			135	67	21.59	21.40	21.19	21.32	21.32	
100			135	136	21.00	21.10	21.14	21.06	21.02	
100			270	0	21.50	21.30	21.04	21.14	21.16	
100	DFT-s-OFDM QPSK	1	1	21.44	21.54	21.61	21.39	21.57	22.50	
100		1	136	21.56	21.21	21.21	21.31	21.34		
100		1	271	21.33	21.44	21.13	21.21	21.30		
100		DFT-s-OFDM 16QAM	135	1	21.39	21.45	21.53	21.47	21.35	22.50
100			135	67	21.33	21.45	21.24	21.35	21.36	
100			135	136	21.02	21.13	21.18	21.10	21.04	
100			270	0	21.50	21.29	21.07	21.19	21.18	
100	DFT-s-OFDM 64QAM	1	1	20.26	20.29	20.09	20.37	20.50	21.00	
100	DFT-s-OFDM 256QAM	1	1	18.17	18.22	18.16	18.30	18.47	19.00	
100	CP-OFDM QPSK	1	1	15.96	16.04	16.17	16.12	16.28	17.00	
100	CP-OFDM 16QAM	1	1	20.08	20.14	20.22	20.21	20.38	21.00	
100	CP-OFDM 64QAM	1	1	18.64	18.70	18.72	18.79	18.94	19.50	
100	CP-OFDM 256QAM	1	1	17.06	17.10	17.08	17.17	17.33	18.00	
100	CP-OFDM 14.02	1	1	14.02	14.12	14.20	14.18	14.37	15.00	
Channel				639668	640668	641666	642666	643666	Tune-up limit (dBm)	
Frequency (MHz)				3595.02	3610.02	3624.99	3639.99	3654.99		
90	DFT-s-OFDM QPSK	1	1	20.76	20.80	20.74	20.97	20.55	22.50	
Channel				639334	640500	641666	642832	644000	Tune-up limit (dBm)	
Frequency (MHz)				3590.01	3607.5	3624.99	3642.48	3660		
80	DFT-s-OFDM QPSK	1	1	20.92	20.96	20.96	20.83	20.59	22.50	
Channel				638668	640168	641666	643332	644866	Tune-up limit (dBm)	
Frequency (MHz)				3580.02	3602.52	3624.99	3647.49	3669.99		
60	DFT-s-OFDM QPSK	1	1	20.87	20.89	21.12	20.88	21.01	22.50	
Channel				638334	640000	641666	643332	645000	Tune-up limit (dBm)	
Frequency (MHz)				3575.01	3600	3624.99	3647.49	3675		
50	DFT-s-OFDM QPSK	1	1	21.08	21.06	21.33	21.12	20.99	22.50	
Channel				638000	639834	641666	643500	645332	Tune-up limit (dBm)	
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98		
40	DFT-s-OFDM QPSK	1	1	20.81	20.82	21.04	20.80	20.75	22.50	
Channel				637334	639500	641666	643832	646000	Tune-up limit (dBm)	
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690		
20	DFT-s-OFDM QPSK	1	1	21.22	21.23	21.10	21.24	21.04	22.50	
Channel				637168	639418	641666	643916	646166	Tune-up limit (dBm)	
Frequency (MHz)				3557.52	3591.27	3624.99	3658.74	3692.49		
15	DFT-s-OFDM QPSK	1	1	21.25	21.33	21.10	21.25	21.03	22.50	
Channel				637000	639334	641666	644000	646332	Tune-up limit (dBm)	
Frequency (MHz)				3555	3590.01	3624.99	3660	3694.98		
10	DFT-s-OFDM QPSK	1	1	21.27	21.35	21.16	21.30	21.07	22.50	

n77(3450-3550MHz) (PC2)_SCS 15KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up
Channel				631668	632500	633334	634166	635000	Tune-up
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	limit
50	DFT-s-OFDM PI/2 BPSK	1	1	23.28	23.20	23.08	22.96	22.95	24.50
50		1	135	23.20	23.16	23.13	22.96	22.89	
50		1	268	22.96	22.84	22.69	22.81	23.09	
50		135	1	23.22	23.12	23.06	23.01	22.86	24.00
50		135	67	23.22	23.17	23.16	23.00	22.89	
50		135	135	23.12	23.15	22.95	22.87	22.95	
50	270	0	23.18	23.10	23.11	22.97	22.84		
50	DFT-s-OFDM QPSK	1	1	23.42	23.40	23.62	23.51	23.59	24.50
50		1	135	23.24	23.12	23.16	22.94	22.85	
50		1	268	22.98	22.83	22.71	22.82	23.10	
50		135	1	23.27	23.15	23.07	23.03	22.88	24.00
50		135	67	23.25	23.20	23.19	22.98	22.92	
50		135	135	23.16	23.15	22.98	22.87	22.96	
50	270	0	23.19	23.14	23.14	22.96	22.87		
50	DFT-s-OFDM 16QAM	1	1	22.33	22.15	22.00	21.87	21.89	23.50
50	DFT-s-OFDM 64QAM	1	1	20.84	20.77	20.61	20.47	20.50	21.50
50	DFT-s-OFDM 256QAM	1	1	19.00	18.94	18.78	18.69	18.67	20.00
50	CP-OFDM QPSK	1	1	22.75	22.67	22.52	22.44	22.41	23.50
50	CP-OFDM 16QAM	1	1	21.30	21.18	21.05	20.95	20.90	22.00
50	CP-OFDM 64QAM	1	1	20.19	20.08	19.96	19.85	19.81	21.00
50	CP-OFDM 256QAM	1	1	16.99	16.91	16.76	16.68	16.65	18.00
Channel				631334	632334	633334	634332	635332	Tune-up
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	limit
40	DFT-s-OFDM QPSK	1	1	23.44	23.28	23.36	23.29	23.41	24.50
Channel				630668	632000	633334	634666	636000	Tune-up
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	limit
20	DFT-s-OFDM QPSK	1	1	23.24	23.03	22.91	22.70	22.58	24.50
Channel				630500	631916	633334	634750	636166	Tune-up
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	limit
15	DFT-s-OFDM QPSK	1	1	23.31	23.03	22.94	22.68	22.64	24.50
Channel				630334	631834	633334	634834	636332	Tune-up
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	limit
10	DFT-s-OFDM QPSK	1	1	23.31	23.07	22.97	22.67	22.78	24.50

n77(3450-3550MHz) (PC2)_SCS 30KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	ow/Middle Channel	iddle Chann	iddle/High Channe	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			23.35			24.50
100		1	136			23.01			
100		1	271			22.40			
100		135	1			23.28			24.50
100		135	67			23.04			
100		135	136			22.67			
100	270	0			22.89				
100	DFT-s-OFDM QPSK	1	1			23.65			24.50
100		1	136			23.16			
100		1	271			22.42			
100		135	1			23.45			24.50
100		135	67			23.21			
100		135	136			23.09			
100	270	0			22.93				
100	DFT-s-OFDM 16QAM	1	1			21.57			22.50
100	DFT-s-OFDM 64QAM	1	1			20.11			21.00
100	DFT-s-OFDM 256QAM	1	1			18.45			19.50
100	CP-OFDM QPSK	1	1			22.11			23.00
100	CP-OFDM 16QAM	1	1			20.63			21.50
100	CP-OFDM 64QAM	1	1			19.54			20.50
100	CP-OFDM 256QAM	1	1			16.33			17.50
Channel				633000	633168	633334	633500	633666	Tune-up limit
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	22.71	22.66	22.63	22.59	22.59	24.50
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	22.90	22.83	22.80	22.74	22.67	24.50
Channel				632334	632668	633334	633666	634000	Tune-up limit
Frequency (MHz)				3485.01	3487.51	3500.01	3502.51	3504.98	
70	DFT-s-OFDM QPSK	1	1	23.01	22.94	22.87	22.77	22.71	24.50
Channel				632000	632668	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	23.07	22.97	22.87	22.72	22.75	24.50
Channel				631668	632500	633334	634166	635000	Tune-up limit
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	23.24	23.18	23.02	22.93	22.90	24.50
Channel				631334	632334	633334	634332	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	22.97	22.80	22.66	22.60	22.42	24.50
Channel				630668	632000	633334	634666	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	23.26	23.03	22.89	22.68	22.57	24.50
Channel				630500	631916	633334	634750	636166	Tune-up limit
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	23.32	23.07	22.96	22.69	22.70	24.50
Channel				630334	631834	633334	634834	636332	Tune-up limit
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	23.17	23.10	22.99	22.69	22.82	24.50

n77(3700-3980MHz) (PC2)_SCS 15KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	High Channel	High Channel	Tune-up
Channel				648334	652168	656000	659832	663666	limit
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	(dBm)
50	DFT-s-OFDM PI/2 BPSK	1	1	23.16	23.32	23.22	23.40	23.15	24.50
50		1	135	23.70	23.36	23.64	23.56	23.45	
50		1	268	23.37	23.32	23.40	23.22	23.40	
50		135	1	23.52	23.35	23.42	23.62	23.39	24.50
50		135	67	23.73	23.38	23.70	23.61	23.49	
50		135	135	23.59	23.37	23.52	23.40	23.46	
50	270	0	23.69	23.38	23.68	23.61	23.50		
50	DFT-s-OFDM QPSK	1	1	23.18	23.31	23.76	23.40	23.17	24.50
50		1	135	23.74	23.37	23.68	23.58	23.47	
50		1	268	23.42	23.29	23.36	23.20	23.36	
50		135	1	23.54	23.35	23.65	23.52	23.41	24.50
50		135	67	23.21	23.36	23.55	23.35	23.55	
50		135	135	23.60	23.43	23.55	23.40	23.48	
50	270	0	23.70	23.39	23.70	23.62	23.49		
50	DFT-s-OFDM 16QAM	1	1	22.04	22.15	22.09	22.51	22.25	23.50
50	DFT-s-OFDM 64QAM	1	1	20.67	20.76	20.66	20.83	20.51	21.50
50	DFT-s-OFDM 256QAM	1	1	18.71	18.93	18.81	18.74	18.50	19.50
50	CP-OFDM QPSK	1	1	22.62	22.78	22.71	22.87	22.62	23.50
50	CP-OFDM 16QAM	1	1	21.08	21.13	21.29	21.56	21.32	22.50
50	CP-OFDM 64QAM	1	1	19.90	20.14	20.11	20.08	19.83	21.00
50	CP-OFDM 256QAM	1	1	16.79	16.91	16.85	16.75	16.48	18.00
Channel				648000	652000	656000	660000	664000	Tune-up
Frequency (MHz)				3720	3780	3840	3900	3960	limit
40	DFT-s-OFDM QPSK	1	1	22.79	22.88	22.87	23.13	22.90	24.50
Channel				647334	651668	656000	660332	664666	Tune-up
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	limit
20	DFT-s-OFDM QPSK	1	1	23.06	23.14	23.30	23.26	23.46	24.50
Channel				647168	651584	656000	660416	664832	Tune-up
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	limit
15	DFT-s-OFDM QPSK	1	1	23.08	23.13	23.32	23.19	23.54	24.50
Channel				647000	651500	656000	660500	665000	Tune-up
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	limit
10	DFT-s-OFDM QPSK	1	1	23.13	23.18	23.43	23.22	23.64	24.50

n77(3700-3980MHz) (PC2)_SCS 30KHz										
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)	
Channel				650000	653000	656000	659000	662000	24.50	
Frequency (MHz)				3750	3795	3840	3885	3930		
100	DFT-s-OFDM PI/2 BPSK	1	1	22.46	22.59	22.58	22.82	22.22	24.50	
100		1	136	23.46	23.44	23.66	23.48	22.94		
100		1	271	22.73	22.87	22.77	22.71	22.63		
100		135	1	23.45	23.19	23.24	23.29	23.36	24.50	
100		135	67	23.43	23.48	23.66	23.62	23.49		
100		135	136	23.15	23.26	23.21	23.29	23.59		
100	270	0	23.25	23.34	23.51	23.54	23.42	24.50		
100	DFT-s-OFDM QPSK	1	1	23.52	23.47	23.79	23.64		23.59	
100		1	136	22.44	22.67	22.62	22.34		22.26	
100		1	271	22.73	22.91	22.81	22.25		22.67	
100		135	1	23.45	23.49	23.73	23.65		23.52	
100		135	67	23.26	23.23	23.36	23.24		23.22	
100		135	136	23.17	23.26	23.16	23.33	23.64		
100	270	0	23.29	23.36	23.57	23.57	23.47	24.50		
100	DFT-s-OFDM 16QAM	1	1	21.45	21.71	21.71	21.36		21.28	
100	DFT-s-OFDM 64QAM	1	1	19.95	20.01	20.11	20.26		20.08	
100	DFT-s-OFDM 256QAM	1	1	18.35	18.55	18.35	17.91		17.81	
100	CP-OFDM QPSK	1	1	21.88	22.08	22.13	21.78		21.68	
100	CP-OFDM 16QAM	1	1	20.45	20.63	20.49	20.40		20.27	
100	CP-OFDM 64QAM	1	1	19.23	19.46	19.49	19.22		19.13	
100	CP-OFDM 256QAM	1	1	16.30	16.51	16.26	15.88		15.78	
Channel				649666	652834	656000	659166		662332	24.50
Frequency (MHz)				3744.99	3792.51	3840	3887.49		3934.98	
90	DFT-s-OFDM QPSK	1	1	23.36	23.24	23.37	23.68	23.36	24.50	
Channel				649334	652668	656000	659332	662666		
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99		
80	DFT-s-OFDM QPSK	1	1	23.35	23.55	23.15	23.28	23.58		
Channel				649000	652500	656000	659500	663000		
Frequency (MHz)				3735	3787.5	3840	3892.5	3945		
70	DFT-s-OFDM QPSK	1	1	22.90	23.06	23.10	23.02	23.39		
Channel				648668	652334	656000	659666	663332		
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98		
60	DFT-s-OFDM QPSK	1	1	23.19	23.04	23.07	22.99	22.91		
Channel				648334	652168	656000	659832	663666		
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99		
50	DFT-s-OFDM QPSK	1	1	23.15	23.24	23.27	23.27	23.20		
Channel				648000	652000	656000	660000	664000		
Frequency (MHz)				3720	3780	3840	3900	3960		
40	DFT-s-OFDM QPSK	1	1	22.85	22.96	23.01	23.03	23.07		
Channel				647334	651668	656000	660332	664666		
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99		
20	DFT-s-OFDM QPSK	1	1	23.11	23.18	23.34	23.29	23.48		
Channel				647168	651584	656000	660416	664832		
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48		
15	DFT-s-OFDM QPSK	1	1	23.17	23.24	23.43	23.30	23.65		
Channel				647000	651500	656000	660500	665000		
Frequency (MHz)				3705	3772.5	3840	3907.5	3975		
10	DFT-s-OFDM QPSK	1	1	23.23	23.31	23.54	23.36	23.57		

n78(3450-3550MHz) (PC2)_SCS 15KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up
Channel				631668	632500	633334	634166	635000	Tune-up
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	limit
50	DFT-s-OFDM PI/2 BPSK	1	1	23.31	23.18	23.04	22.94	22.89	24.00
50		1	135	23.19	23.15	23.10	22.89	22.78	
50		1	268	22.97	22.86	22.65	22.74	22.99	
50		135	1	23.26	23.12	23.06	23.01	22.83	24.00
50		135	67	23.28	23.17	23.15	22.97	22.85	
50		135	135	23.18	23.15	22.93	22.80	22.88	
50	270	0	23.15	23.13	23.08	22.87	22.79		
50	DFT-s-OFDM QPSK	1	1	23.33	23.21	23.40	23.19	23.33	24.00
50		1	135	23.23	23.18	23.14	23.05	22.82	
50		1	268	23.04	22.84	22.73	22.83	23.02	
50		135	1	23.31	23.15	23.05	23.00	22.86	24.00
50		135	67	23.27	23.20	23.16	22.97	22.81	
50		135	135	23.18	23.20	22.98	22.83	22.89	
50	270	0	23.17	23.14	23.06	22.88	22.84		
50	DFT-s-OFDM 16QAM	1	1	22.25	22.16	22.01	21.86	21.87	23.00
50	DFT-s-OFDM 64QAM	1	1	20.77	20.75	20.45	20.40	20.38	21.50
50	DFT-s-OFDM 256QAM	1	1	19.14	19.03	18.76	18.63	18.78	20.00
50	CP-OFDM QPSK	1	1	22.73	22.45	22.49	22.50	22.36	23.00
50	CP-OFDM 16QAM	1	1	21.50	20.96	21.24	21.12	21.12	22.00
50	CP-OFDM 64QAM	1	1	20.03	19.88	19.70	19.60	19.63	21.00
50	CP-OFDM 256QAM	1	1	16.93	16.81	16.64	16.55	16.53	18.00
Channel				631334	636672	633334	634334	635332	Tune-up
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	limit
40	DFT-s-OFDM QPSK	1	1	23.02	22.41	22.71	22.65	22.54	24.00
Channel				630668	632000	633334	634668	636000	Tune-up
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	limit
20	DFT-s-OFDM QPSK	1	1	23.54	23.32	23.06	22.90	22.73	24.00
Channel				630500	631916	633334	634750	636166	Tune-up
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	limit
15	DFT-s-OFDM QPSK	1	1	23.50	23.31	23.13	22.80	22.87	24.00
Channel				630334	631834	633334	634834	636332	Tune-up
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	limit
10	DFT-s-OFDM QPSK	1	1	23.31	23.35	23.23	22.72	22.93	24.00

n78(3450-3550MHz) (PC2)_SCS 30KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	ow/Middle Channel	iddle Chann	iddle/High Channe	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			22.69			24.50
100		1	136			23.15			
100		1	271			22.49			
100		135	1			23.12			24.00
100		135	67			22.96			
100		135	136			22.69			
100	270	0			22.95				
100	DFT-s-OFDM QPSK	1	1			23.54			24.50
100		1	136			23.15			
100		1	271			23.06			
100		135	1			23.17			24.00
100		135	67			23.03			
100		135	136			22.77			
100	270	0			23.01				
100	DFT-s-OFDM 16QAM	1	1			21.86			23.00
100	DFT-s-OFDM 64QAM	1	1			20.18			21.00
100	DFT-s-OFDM 256QAM	1	1			18.51			19.50
100	CP-OFDM QPSK	1	1			22.19			23.00
100	CP-OFDM 16QAM	1	1			20.81			21.50
100	CP-OFDM 64QAM	1	1			19.61			20.50
100	CP-OFDM 256QAM	1	1			16.37			17.50
Channel				633000	633166	633334	633500	633666	Tune-up limit
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	22.88	22.83	22.74	22.75	22.65	24.50
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	23.08	22.95	22.93	22.84	22.80	24.50
Channel				632334	632834	633334	633832	634332	Tune-up limit
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	23.21	23.13	23.00	22.94	22.85	24.50
Channel				632000	632666	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	23.06	23.01	22.89	22.77	22.79	24.50
Channel				631668	632500	633334	634166	635000	Tune-up limit
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	23.33	23.15	23.01	22.99	22.89	24.50
Channel				631334	636672	633334	634334	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	23.12	22.38	22.79	22.70	22.50	24.50
Channel				630668	632000	633334	634668	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	23.44	23.25	23.06	22.90	22.73	24.50
Channel				630500	631916	633334	634750	636166	Tune-up limit
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	23.53	23.36	23.20	22.82	22.83	24.50
Channel				630334	631834	633334	634834	636332	Tune-up limit
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	23.30	23.29	23.12	22.85	23.00	24.50

n78(3700-3800MHz) (PC2)_SCS 15KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	High Channel	High Channel	Tune-up
Channel				648334	649166	650000	650834	651666	limit
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	(dBm)
50	DFT-s-OFDM PI/2 BPSK	1	1	23.06	23.30	23.44	23.33	23.22	24.50
50		1	135	23.62	23.54	23.38	23.35	23.28	
50		1	268	23.25	23.21	23.13	23.17	23.27	
50		135	1	23.42	23.62	23.50	23.43	23.32	24.50
50		135	67	23.68	23.58	23.45	23.36	23.33	
50		135	135	23.49	23.37	23.30	23.27	23.29	
50	270	0	23.63	23.49	23.39	23.36	23.29		
50	DFT-s-OFDM QPSK	1	1	23.59	23.50	23.72	23.61	23.63	24.50
50		1	135	23.15	23.58	23.43	23.34	23.31	
50		1	268	23.30	23.22	23.20	23.19	23.30	
50		135	1	23.54	23.62	23.70	23.59	23.52	24.50
50		135	67	23.37	23.60	23.51	23.41	23.38	
50		135	135	23.58	23.40	23.33	23.30	23.31	
50	270	0	23.62	23.51	23.44	23.40	23.30		
50	DFT-s-OFDM 16QAM	1	1	22.17	22.56	22.85	22.62	22.49	23.50
50	DFT-s-OFDM 64QAM	1	1	20.44	20.64	20.90	20.69	20.59	22.50
50	DFT-s-OFDM 256QAM	1	1	18.78	18.95	19.17	19.01	18.90	19.50
50	CP-OFDM QPSK	1	1	22.45	22.63	22.77	22.64	23.19	25.00
50	CP-OFDM 16QAM	1	1	21.33	21.18	21.32	21.25	21.11	24.00
50	CP-OFDM 64QAM	1	1	19.59	20.05	20.17	20.12	19.98	23.00
50	CP-OFDM 256QAM	1	1	16.66	16.89	17.12	16.98	16.86	19.00
Channel				648000	649000	650000	651000	652000	Tune-up
Frequency (MHz)				3720	3735	3750	3765	3780	limit
40	DFT-s-OFDM QPSK	1	1	22.81	23.04	23.15	22.97	22.83	24.50
Channel				647334	648666	650000	651334	652666	Tune-up
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	limit
20	DFT-s-OFDM QPSK	1	1	23.22	23.57	23.44	23.32	23.22	24.50
Channel				647168	648584	650000	651416	652832	Tune-up
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	limit
15	DFT-s-OFDM QPSK	1	1	23.24	23.55	23.39	23.32	23.22	24.50
Channel				647000	648500	650000	651500	653000	Tune-up
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	limit
10	DFT-s-OFDM QPSK	1	1	23.22	23.68	23.42	23.29	23.28	24.50

n78(3700-3800MHz) (PC2)_SCS 30KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	ow/Middle Channel	iddle Chann	iddle/High Channe	High Channel	Tune-up limit (dBm)
Channel						650000			
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			22.50			24.50
100		1	136			23.50			
100		1	271			22.75			
100		135	1			23.50			24.50
100		135	67			23.50			
100		135	136			23.20			
100	270	0			23.32				
100	DFT-s-OFDM QPSK	1	1			23.73			24.50
100		1	136			23.48			
100		1	271			22.75			
100		135	1			23.59			24.50
100		135	67			23.52			
100		135	136			23.24			
100	270	0			23.33				
100	DFT-s-OFDM 16QAM	1	1			21.61			23.50
100	DFT-s-OFDM 64QAM	1	1			19.84			22.50
100	DFT-s-OFDM 256QAM	1	1			18.26			19.50
100	CP-OFDM QPSK	1	1			22.04			25.00
100	CP-OFDM 16QAM	1	1			20.54			24.00
100	CP-OFDM 64QAM	1	1			19.45			23.00
100	CP-OFDM 256QAM	1	1			16.16			19.00
Channel				649668	649834	650000	650166	650332	Tune-up limit
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	22.63	22.65	22.68	22.73	22.78	24.50
Channel				649334	649666	650000	650334	650666	Tune-up limit
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	22.91	22.94	23.01	23.10	23.16	24.50
Channel				649000	649500	650000	650500	651000	Tune-up limit
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	23.01	23.18	23.25	23.35	23.39	24.50
Channel				648668	649334	650000	650666	651332	Tune-up limit
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	22.86	23.02	23.15	23.19	23.18	24.50
Channel				648334	649166	650000	650834	651666	Tune-up limit
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	23.05	23.29	23.42	23.31	23.19	24.50
Channel				648000	649000	650000	651000	652000	Tune-up limit
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	22.80	23.08	23.17	22.99	22.96	24.50
Channel				647334	648666	650000	651334	652666	Tune-up limit
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	23.20	23.65	23.43	23.29	23.21	24.50
Channel				647168	648584	650000	651416	652832	Tune-up limit
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	23.32	23.63	23.48	23.36	23.32	24.50
Channel				647000	648500	650000	651500	653000	Tune-up limit
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	23.31	23.52	23.50	23.42	23.41	24.50

CA_41C											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	22.93	24.00
40620	40529	40712	QPSK	1	0	0	0	1	0	23.02	24.00
41490	41292	41490	QPSK	1	0	0	0	1	0	22.97	24.00
39750	39750	39948	16QAM	1	0	0	0	1	0	22.18	23.00
40620	40529	40712	16QAM	1	0	0	0	1	0	22.23	23.00
41490	41292	41490	16QAM	1	0	0	0	1	0	22.10	23.00
39750	39750	39948	64QAM	1	0	0	0	1	0	21.19	22.00
40620	40529	40712	64QAM	1	0	0	0	1	0	21.26	22.00
41490	41292	41490	64QAM	1	0	0	0	1	0	21.12	22.00
39750	39750	39948	256QAM	1	0	0	0	1	0	17.89	19.00
40620	40529	40712	256QAM	1	0	0	0	1	0	17.92	19.00
41490	41292	41490	256QAM	1	0	0	0	1	0	17.81	19.00
39750	39750	39948	QPSK	50	0	0	0	1	0	21.82	23.00
40620	40529	40712	QPSK	50	0	0	0	1	0	21.93	23.00
41490	41292	41490	QPSK	50	0	0	0	1	0	21.76	23.00

2CC LTE Downlink												
Configure	CA Configuration	PCC				SCC				Power		
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation RB/Offset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	CA TX (dBm)	Tune-up limit(dBm)
Intra-band & Inter-band	CA_41A-41A	41	20	39750	2508	QPSK/1W0	41	20	41490	2680	20.67	21.50
	CA_41C	41	20	40521	2583.1	QPSK/1W0	41	20	40719	2602.9	20.38	21
	CA_41D	41	20	39750	2508	QPSK/1W0	41	20	41490	2680	20.67	21.50
	CA_48A-48A	48	20	55340	3560	QPSK/1W0	48	20	56640	3690	19.82	20.5
	CA_48C	48	20	56442	3670.2	QPSK/1W0	48	20	56640	3690	19.71	20.5

3CC LTE Downlink																
Configure	CA Configuration	PCC				SCC1				SCC2				Power		
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	CA TX (dBm)	Tune-up limit(dBm)
Intra-band & Inter-band	CA_41D	41	20	40437	2574.7	QPSK/1W0	41	20	40630	2593	41	20	40833	2611.3	20.13	21
	CA_48A-48C	48	20	55340	3560	QPSK/1W0	48	20	56442	3670.2	48	20	56640	3690	19.62	20.5
	CA_48D	48	20	56244	3650.4	QPSK/1W0	48	20	56442	3670.2	48	20	56640	3690	19.51	20.5

4CC LTE Downlink																				
Configure	CA Configuration	PCC				SCC1				SCC2				SCC3				Power		
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	CA TX (dBm)	Tune-up limit(dBm)
Intra-band & Inter-band	CA_48E	48	20	55340	3560	QPSK/1W0	48	20	55538	3579.8	48	20	55736	3599.6	48	5	55833	3611.3	19.59	20.5
	CA_48C-48C	48	20	55891	3615.1	QPSK/1W0	48	20	56089	3634.9	48	20	55891	3615.1	48	20	56089	3634.9	19.68	20.5
	CA_48A-48D	48	20	56640	3690	QPSK/1W0	48	20	55792	3605.2	48	20	56188	3644.8	48	20	55990	3625	19.75	20.5

5CC LTE Downlink																								
Configure	CA Configuration	PCC				SCC1				SCC2				SCC3				SCC4		Power				
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	CA TX (dBm)	Tune-up limit(dBm)
Intra-band & Inter-band	CA_48A	48	20	55340	3560	QPSK/1W0	48	20	56089	3634.9	48	20	56640	3690	48	20	56442	3670.2	48	20	55736	3599.6	19.32	20

15KHz

Configure	CA		PCC				SCC						
	Configuration	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode Modulation	RB/Offset	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	CA TX (dBm)	Rel.8 TX (dBm)
Inter-band	CA_n41(2A)	n41	50	509202	2546.01	DFT-s-OFDM Pi/2 BPSK	1#1	41	50	509202	2546.01	25.41	26.1
				518598	2592.99	DFT-s-OFDM Pi/2 BPSK	1#1			518598	2592.99	25.46	26.04
				528000	2640	DFT-s-OFDM Pi/2 BPSK	1#1			528000	2640	25.33	26.06
				509202	2546.01	DFT-s-OFDM QPSK	1#1			509202	2546.01	25.63	26.24
				518598	2592.99	DFT-s-OFDM QPSK	1#1			518598	2592.99	25.66	26.42
				528000	2640	DFT-s-OFDM QPSK	1#1			528000	2640	25.6	26.4

30KHz

Configure	CA		PCC				SCC						
	Configuration	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode Modulation	RB/Offset	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	CA TX (dBm)	Rel.8 TX (dBm)
Inter-band	CA_n41(2A)	n41	50	509202	2546.01	DFT-s-OFDM Pi/2 BPSK	1#1	41	50	509202	2546.01	25.92	26.55
				518598	2592.99	DFT-s-OFDM Pi/2 BPSK	1#1			518598	2592.99	25.97	26.65
				528000	2640	DFT-s-OFDM Pi/2 BPSK	1#1			528000	2640	25.9	26.68
				509202	2546.01	DFT-s-OFDM QPSK	1#1			509202	2546.01	26.48	27.24
				518598	2592.99	DFT-s-OFDM QPSK	1#1			518598	2592.99	26.59	27.38
				528000	2640	DFT-s-OFDM QPSK	1#1			528000	2640	26.51	27.36

15KHz

Configure	CA		PCC				SCC						
	Configuration	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode Modulation	RB/Offset	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	CA TX (dBm)	Rel.8 TX (dBm)
Inter-band	CA_n78A(2A) 3450-3550	n78	50	631668	3475.02	DFT-s-OFDM Pi/2 BPSK	1#1	78	50	631668	3475.02	22.59	23.31
				633334	3500.01	DFT-s-OFDM Pi/2 BPSK	1#1			633334	3500.01	22.46	23.04
				635000	3525	DFT-s-OFDM Pi/2 BPSK	1#1			635000	3525	22.38	22.89
				631668	3475.02	DFT-s-OFDM QPSK	1#1			631668	3475.02	22.71	23.33
				633334	3500.01	DFT-s-OFDM QPSK	1#1			633334	3500.01	22.83	23.59
				635000	3525	DFT-s-OFDM QPSK	1#1			635000	3525	22.76	23.33

15KHz

Configure	CA		PCC				SCC						
	Configuration	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode Modulation	RB/Offset	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	CA TX (dBm)	Rel.8 TX (dBm)
Inter-band	CA_n78A(2A) 3450-3550	n78	100	633334	3500.01	DFT-s-OFDM Pi/2 BPSK	1#1	n78	100	633334	3500.01	22.83	22.69
				633334	3500.01	DFT-s-OFDM Pi/2 BPSK	1#1			633334	3500.01	23.02	23.54

30KHz

Configure	CA		PCC				SCC						
	Configuration	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode Modulation	RB/Offset	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	CA TX (dBm)	Rel.8 TX (dBm)
Inter-band	CA_n78A(2A) 3700-3800	n78	50	648334	3725.01	DFT-s-OFDM Pi/2 BPSK	1#1	78	50	648334	3725.01	22.51	23.06
				650000	3750	DFT-s-OFDM Pi/2 BPSK	1#1			650000	3750	22.76	23.44
				651666	3774.99	DFT-s-OFDM Pi/2 BPSK	1#1			651666	3774.99	22.59	23.22
				648334	3725.01	DFT-s-OFDM QPSK	1#1			648334	3725.01	22.92	23.59
				650000	3750	DFT-s-OFDM QPSK	1#1			650000	3750	23.06	23.72
				651666	3774.99	DFT-s-OFDM QPSK	1#1			651666	3774.99	23.01	23.63

30KHz

Configure	CA		PCC				SCC						
	Configuration	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode Modulation	RB/Offset	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	CA TX (dBm)	Rel.8 TX (dBm)
Inter-band	CA_n78A(2A) 3700-3800	n78	100	65000	3750	DFT-s-OFDM Pi/2 BPSK	1#1	n78	100	65000	3750	21.92	22.5
				65000	3750	DFT-s-OFDM Pi/2 BPSK	1#1			65000	3750	23.16	23.73



Reduced Power

Band 41 (2496~2690MHz) (dBm)									
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	21.5
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	20.53	20.50	20.57	20.48	20.48	20.5
20	QPSK	1	49	20.38	20.36	20.50	20.31	20.48	
20	QPSK	1	99	20.41	20.51	20.54	20.37	20.38	20.5
20	QPSK	50	0	19.60	19.59	19.61	19.54	19.55	
20	QPSK	50	24	19.41	19.39	19.61	19.40	19.46	20.5
20	QPSK	50	50	19.54	19.34	19.57	19.39	19.53	
20	QPSK	100	0	19.46	19.48	19.54	19.58	19.35	20.5
20	16QAM	1	0	19.52	19.50	19.69	19.70	19.65	
20	16QAM	1	49	19.63	19.49	19.54	19.76	19.51	20.5
20	16QAM	1	99	19.48	19.47	19.59	19.60	19.67	
20	16QAM	50	0	18.53	18.47	18.67	18.60	18.63	19.5
20	16QAM	50	24	18.38	18.39	18.55	18.62	18.58	
20	16QAM	50	50	18.52	18.36	18.59	18.49	18.50	19.5
20	16QAM	100	0	18.58	18.41	18.44	18.44	18.43	
20	84QAM	1	0	18.63	18.54	18.71	18.56	18.63	19.5
20	84QAM	1	49	18.57	18.49	18.58	18.38	18.58	
20	84QAM	1	99	18.42	18.55	18.39	18.46	18.49	19.5
20	84QAM	50	0	17.42	17.49	17.68	17.57	17.56	
20	84QAM	50	24	17.34	17.50	17.54	17.45	17.56	18.5
20	84QAM	50	50	17.55	17.47	17.45	17.45	17.51	
20	84QAM	100	0	17.34	17.31	17.44	17.32	17.33	16.5
20	256QAM	1	0	15.32	15.44	15.54	15.30	15.37	
20	256QAM	1	49	15.28	15.38	15.44	15.44	15.33	16.5
20	256QAM	1	99	15.36	15.49	15.32	15.27	15.26	
20	256QAM	50	0	14.26	14.33	14.61	14.39	14.36	15.5
20	256QAM	50	24	14.37	14.29	14.39	14.52	14.44	
20	256QAM	50	50	14.36	14.51	14.48	14.25	14.27	15.5
20	256QAM	100	0	14.35	14.40	14.48	14.36	14.26	
Channel				39725	40173	40620	41088	41515	21.5
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	20.41	20.38	20.45	20.37	20.36	20.5
15	QPSK	1	37	20.26	20.24	20.38	20.19	20.36	
15	QPSK	1	74	20.29	20.39	20.42	20.25	20.26	20.5
15	QPSK	36	0	19.48	19.47	19.49	19.42	19.43	
15	QPSK	36	20	19.29	19.27	19.49	19.28	19.34	20.5
15	QPSK	36	39	19.42	19.22	19.45	19.27	19.41	
15	QPSK	75	0	19.34	19.36	19.42	19.46	19.23	20.5
15	16QAM	1	0	19.40	19.38	19.57	19.58	19.53	
15	16QAM	1	37	19.51	19.37	19.42	19.64	19.39	20.5
15	16QAM	1	74	19.36	19.35	19.47	19.48	19.55	
15	16QAM	36	0	18.41	18.35	18.55	18.48	18.51	19.5
15	16QAM	36	20	18.26	18.27	18.43	18.50	18.46	
15	16QAM	36	39	18.40	18.24	18.47	18.37	18.38	19.5
15	16QAM	75	0	18.46	18.29	18.29	18.32	18.31	
15	84QAM	1	0	18.51	18.42	18.59	18.44	18.51	19.5
15	84QAM	1	37	18.45	18.37	18.44	18.26	18.46	
15	84QAM	1	74	18.30	18.43	18.27	18.34	18.37	18.5
15	84QAM	36	0	17.30	17.37	17.56	17.45	17.44	
15	84QAM	36	20	17.22	17.36	17.42	17.33	17.44	18.5
15	84QAM	36	39	17.43	17.35	17.52	17.33	17.30	
15	84QAM	75	0	17.22	17.19	17.32	17.20	17.21	16.5
15	256QAM	1	0	15.20	15.32	15.42	15.18	15.25	
15	256QAM	1	37	15.16	15.26	15.32	15.32	15.21	16.5
15	256QAM	1	74	15.24	15.37	15.20	15.15	15.14	
15	256QAM	36	0	14.14	14.21	14.49	14.27	14.24	15.5
15	256QAM	36	20	14.25	14.17	14.27	14.40	14.32	
15	256QAM	36	39	14.24	14.39	14.36	14.13	14.15	15.5
15	256QAM	75	0	14.23	14.28	14.36	14.24	14.14	
Channel				39700	40160	40620	41080	41540	21.5
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	20.33	20.30	20.37	20.29	20.28	20.5
10	QPSK	1	25	20.18	20.16	20.30	20.11	20.28	
10	QPSK	1	49	20.21	20.31	20.34	20.17	20.28	20.5
10	QPSK	25	0	19.40	19.39	19.41	19.34	19.35	
10	QPSK	25	12	19.21	19.19	19.41	19.20	19.26	20.5
10	QPSK	25	25	19.34	19.14	19.37	19.19	19.33	
10	QPSK	50	0	19.26	19.28	19.34	19.38	19.15	20.5
10	16QAM	1	0	19.32	19.30	19.49	19.50	19.45	
10	16QAM	1	25	19.43	19.29	19.34	19.56	19.31	20.5
10	16QAM	1	49	19.28	19.27	19.39	19.40	19.47	
10	16QAM	25	0	18.33	18.27	18.47	18.40	18.43	19.5
10	16QAM	25	12	18.16	18.19	18.35	18.42	18.38	
10	16QAM	25	25	18.32	18.16	18.39	18.20	18.30	19.5
10	16QAM	50	0	18.38	18.21	18.21	18.24	18.23	
10	84QAM	1	0	18.43	18.34	18.51	18.36	18.43	19.5
10	84QAM	1	25	18.37	18.29	18.36	18.18	18.38	
10	84QAM	1	49	18.22	18.35	18.19	18.26	18.29	18.5
10	84QAM	25	0	17.22	17.29	17.48	17.37	17.36	
10	84QAM	25	12	17.14	17.30	17.34	17.25	17.36	18.5
10	84QAM	25	25	17.35	17.27	17.25	17.25	17.31	
10	84QAM	50	0	17.14	17.11	17.24	17.12	17.13	16.5
10	256QAM	1	0	15.12	15.24	15.34	15.10	15.17	
10	256QAM	1	25	15.08	15.18	15.24	15.24	15.13	16.5
10	256QAM	1	49	15.16	15.29	15.12	15.07	15.06	
10	256QAM	25	0	14.06	14.13	14.41	14.19	14.16	15.5
10	256QAM	25	12	14.17	14.09	14.19	14.32	14.24	
10	256QAM	25	25	14.16	14.31	14.28	14.05	14.07	15.5
10	256QAM	50	0	14.15	14.20	14.28	14.16	14.06	
Channel				39675	40148	40620	41093	41555	21.5
Frequency (MHz)				2498.5	2543.8	2593	2640.3	2687.5	
5	QPSK	1	0	20.26	20.23	20.30	20.22	20.21	20.5
5	QPSK	1	12	20.11	20.09	20.23	20.04	20.21	
5	QPSK	1	24	20.14	20.24	20.27	20.10	20.11	20.5
5	QPSK	12	0	19.33	19.32	19.34	19.27	19.28	
5	QPSK	12	7	19.14	19.12	19.34	19.13	19.19	20.5
5	QPSK	12	13	19.27	19.07	19.30	19.12	19.08	
5	QPSK	25	0	19.19	19.21	19.27	19.31	19.08	20.5
5	16QAM	1	0	19.25	19.23	19.42	19.43	19.38	
5	16QAM	1	12	19.36	19.22	19.27	19.49	19.24	20.5
5	16QAM	1	24	19.21	19.20	19.32	19.33	19.40	
5	16QAM	12	0	18.26	18.20	18.40	18.33	18.36	19.5
5	16QAM	12	7	18.11	18.12	18.28	18.35	18.31	
5	16QAM	12	13	18.25	18.09	18.32	18.22	18.23	19.5
5	16QAM	25	0	18.31	18.14	18.14	18.17	18.16	
5	84QAM	1	12	18.36	18.27	18.44	18.29	18.36	19.5
5	84QAM	1	12	18.30	18.22	18.29	18.11	18.21	
5	84QAM	1	24	18.15	18.28	18.12	18.19	18.22	18.5
5	84QAM	12	0	17.15	17.22	17.41	17.30	17.29	
5	84QAM	12	7	17.07	17.23	17.27	17.18	17.29	18.5
5	84QAM	12	13	17.28	17.20	17.16	17.16	17.24	
5	84QAM	25	0	17.07	17.04	17.17	17.05	17.06	16.5
5	256QAM	1	0	15.05	15.17	15.27	15.03	15.10	
5	256QAM	1	12	15.01	15.11	15.17	15.17	15.06	16.5
5	256QAM	1	24	15.06	15.22	15.05	15.00	14.99	
5	256QAM	12	0	13.99	14.06	14.34	14.12	14.09	15.5
5	256QAM	12	7	14.10	14.02	14.12	14.25	14.17	
5	256QAM	12	13	14.09	14.24	14.21	13.98	14.00	15.5
5	256QAM	25	0	14.08	14.13	14.21	14.09	13.99	

Band 48 (3.5G Band) (dBm)									
BW (MHz)	Modulation</								

n41 (PC2)_SCS 15KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				504201	511404	518601	525798	532998	
Frequency (MHz)				2521.01	2557.02	2593.01	2626.5	2664.99	
50	DFT-s-OFDM PI/2 BPSK	1	1	15.10	14.99	15.04	15.08	15.06	16.50
50		1	135	15.11	15.13	15.17	15.19	15.10	
50		1	268	15.03	15.15	15.04	15.01	15.14	
50		135	1	15.03	15.10	15.27	15.13	14.93	16.50
50		135	67	15.13	15.15	15.27	15.21	15.10	
50		135	135	15.16	15.07	15.07	15.29	15.06	
50		270	0	15.13	15.11	15.27	15.24	14.96	
50	DFT-s-OFDM QPSK	1	1	15.24	15.33	15.42	15.39	15.40	16.50
50		1	135	15.16	15.18	15.24	15.25	15.18	
50		1	268	15.07	15.22	15.07	15.06	15.20	
50		135	1	15.26	15.19	15.30	15.21	15.24	16.50
50		135	67	15.19	15.17	15.25	15.25	15.12	
50		135	135	15.17	15.09	15.13	15.29	15.10	
50		270	0	15.16	15.12	15.10	15.26	14.96	
50	DFT-s-OFDM 16QAM	1	1	14.15	14.06	13.72	14.07	14.07	15.00
50	DFT-s-OFDM 64QAM	1	1	12.49	12.40	12.65	12.75	12.60	13.50
50	DFT-s-OFDM 256QAM	1	1	10.66	10.65	10.35	10.45	10.77	11.50
50	CP-OFDM QPSK	1	1	14.56	14.42	14.63	14.44	14.51	15.50
50	CP-OFDM 16QAM	1	1	13.07	12.89	13.00	13.02	13.01	14.00
50	CP-OFDM 64QAM	1	1	11.58	11.68	11.68	11.36	11.67	12.50
50	CP-OFDM 256QAM	1	1	8.83	8.48	8.62	8.79	8.75	9.50
Channel				503202	510900	518601	526296	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2554.5	2593.01	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	14.82	14.67	14.78	14.76	14.72	16.50
Channel				502200	510402	518601	526800	534999	Tune-up limit (dBm)
Frequency (MHz)				2511	2552.01	2593.01	2634	2674.99	
30	DFT-s-OFDM QPSK	1	1	14.94	14.81	14.96	14.90	14.79	16.50
Channel				501201	509904	518601	527298	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.01	2549.52	2593.01	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	15.28	15.11	15.25	15.19	15.31	16.50
Channel				500700	509652	518601	527550	536499	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.26	2593.01	2637.75	2682.49	
15	DFT-s-OFDM QPSK	1	1	15.34	15.04	15.19	15.38	15.14	16.50
Channel				500202	509400	518601	527796	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2547	2593.01	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	15.31	15.13	15.29	15.23	15.12	16.50

n41 (PC2)_SCS 30KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	Tune-up limit (dBm)
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	15.55	15.61	15.65	15.66	15.68	17.00
100		1	136	15.69	15.77	15.87	15.90	15.72	
100		1	271	15.69	15.83	15.79	15.74	15.73	
100		135	1	15.67	15.76	16.03	15.86	15.73	17.00
100		135	67	15.76	15.84	16.03	16.03	15.86	
100		135	136	15.77	15.78	15.89	16.10	15.81	
100		270	0	15.73	15.78	16.05	15.98	15.71	
100	DFT-s-OFDM QPSK	1	1	16.24	16.22	16.38	16.19	16.36	17.00
100		1	136	15.74	15.79	15.94	16.05	16.01	
100		1	271	15.70	15.91	15.80	15.91	15.97	
100		135	1	16.01	15.93	16.09	15.92	15.95	17.00
100		135	67	15.78	15.86	16.04	16.08	15.90	
100		135	136	15.82	15.80	15.94	15.93	15.85	
100		270	0	15.73	15.78	16.07	16.04	15.75	
100	DFT-s-OFDM 16QAM	1	1	14.57	14.69	14.87	14.85	14.89	15.50
100	DFT-s-OFDM 64QAM	1	1	13.18	13.12	13.25	13.33	13.31	14.00
100	DFT-s-OFDM 256QAM	1	1	11.16	10.98	11.19	11.27	11.22	12.00
100	CP-OFDM QPSK	1	1	15.01	15.02	15.17	15.12	15.16	16.00
100	CP-OFDM 16QAM	1	1	13.67	13.59	13.79	13.83	13.82	14.50
100	CP-OFDM 64QAM	1	1	12.08	11.98	12.17	12.25	12.24	13.00
100	CP-OFDM 256QAM	1	1	9.30	9.19	9.41	9.51	9.51	10.50
Channel				508200	513402	518598	523800	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	15.75	15.43	15.50	15.61	15.51	17.00
Channel				507204	512904	518598	524298	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	15.91	15.61	15.72	15.81	15.71	17.00
Channel				505200	511902	518598	525798	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	15.88	15.77	15.80	15.83	15.88	17.00
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	16.24	16.22	16.38	16.19	16.36	17.00
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
40	DFT-s-OFDM QPSK	1	1	16.12	16.27	16.33	16.20	16.30	0.00
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
30	DFT-s-OFDM QPSK	1	1	16.01	16.23	16.24	16.17	16.11	0.00
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
20	DFT-s-OFDM QPSK	1	1	16.17	16.02	16.28	16.09	16.26	0.00
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
20	DFT-s-OFDM QPSK	1	1	16.14	16.33	16.05	16.24	16.21	0.00

n48 (PC3)_SCS 15KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				638334	640000	641666	643332	645000	16.00
Frequency (MHz)				3575.01	3600	3624.99	3647.49	3675	
50	DFT-s-OFDM PI/2 BPSK	1	1	14.44	14.50	14.88	14.69	14.51	16.00
50		1	135	14.63	14.98	14.85	14.72	14.52	
50		1	268	14.92	14.70	14.66	14.48	14.29	
50		135	1	14.60	14.73	14.77	14.82	14.54	16.00
50		135	67	14.64	15.00	14.79	14.78	14.53	
50		135	135	14.71	14.82	14.84	14.61	14.36	
50		270	0	14.58	14.94	14.73	14.70	14.47	
50	DFT-s-OFDM QPSK	1	1	14.42	14.49	15.02	14.70	14.58	16.00
50		1	135	14.64	14.99	14.81	14.74	14.62	
50		1	268	14.91	14.68	14.68	14.47	14.28	
50		135	1	14.82	14.74	14.88	14.84	14.81	16.00
50		135	67	14.64	14.84	14.80	14.80	14.60	
50		135	135	14.71	14.80	14.88	14.63	14.39	
50		270	0	14.63	14.83	14.73	14.72	14.47	
50	DFT-s-OFDM 16QAM	1	1	13.82	13.87	14.25	14.06	14.14	15.00
50	DFT-s-OFDM 64QAM	1	1	12.06	12.12	12.46	12.31	12.34	13.00
50	DFT-s-OFDM 256QAM	1	1	9.84	9.89	10.19	10.10	10.13	11.00
50	CP-OFDM QPSK	1	1	13.95	14.01	14.36	14.19	14.23	15.00
50	CP-OFDM 16QAM	1	1	12.38	12.40	12.76	12.59	12.57	13.50
50	CP-OFDM 64QAM	1	1	11.02	11.04	11.41	11.04	10.95	12.00
50	CP-OFDM 256QAM	1	1	7.75	7.78	8.22	8.22	8.19	9.00
Channel				638000	639834	641666	643500	645332	16.00
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98	
40	DFT-s-OFDM QPSK	1	1	14.24	14.19	14.55	14.42	14.17	16.00
Channel				637334	639500	641666	643832	646000	16.00
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690	
20	DFT-s-OFDM QPSK	1	1	14.57	14.69	14.65	14.77	14.51	16.00
Channel				637188	639418	641666	643916	646166	16.00
Frequency (MHz)				3557.52	3591.27	3624.99	3658.74	3692.49	
15	DFT-s-OFDM QPSK	1	1	14.56	14.67	14.60	14.69	14.42	16.00
Channel				637000	639334	641666	644000	646332	16.00
Frequency (MHz)				3555	3590.01	3624.99	3660	3694.98	
10	DFT-s-OFDM QPSK	1	1	14.56	14.77	14.63	14.71	14.44	16.00

n48 (PC3)_SCS 30KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				640000	640834	641666	642500	643332	16.50
Frequency (MHz)				3600	3612.51	3624.99	3637.5	3649.98	
100	DFT-s-OFDM PI/2 BPSK	1	1	14.68	14.72	14.72	14.79	14.94	16.50
100		1	136	15.57	15.22	15.17	15.29	15.29	
100		1	271	14.57	14.46	14.46	14.41	14.36	
100		135	1	15.19	15.30	15.47	15.05	15.01	16.50
100		135	67	15.59	15.40	15.19	15.32	15.32	
100		135	136	15.00	15.10	15.14	15.06	15.02	
100		270	0	15.50	15.30	15.04	15.14	15.16	
100	DFT-s-OFDM QPSK	1	1	15.44	15.54	15.61	15.39	15.57	16.50
100		1	136	15.56	15.21	15.21	15.31	15.34	
100		1	271	15.33	15.44	15.13	15.21	15.30	
100		135	1	15.39	15.45	15.53	15.47	15.35	16.50
100		135	67	15.33	15.45	15.24	15.35	15.36	
100		135	136	15.02	15.13	15.18	15.10	15.04	
100		270	0	15.50	15.29	15.07	15.19	15.18	
100	DFT-s-OFDM 16QAM	1	1	14.26	14.29	14.09	14.37	14.50	9.50
100	DFT-s-OFDM 64QAM	1	1	12.17	12.22	12.16	12.30	12.47	13.50
100	DFT-s-OFDM 256QAM	1	1	9.96	10.04	10.17	10.12	10.28	11.50
100	CP-OFDM QPSK	1	1	14.08	14.14	14.22	14.21	14.38	15.50
100	CP-OFDM 16QAM	1	1	12.64	12.70	12.72	12.79	12.94	13.50
100	CP-OFDM 64QAM	1	1	11.06	11.10	11.08	11.17	11.33	12.50
100	CP-OFDM 256QAM	1	1	8.02	8.12	8.20	8.18	8.37	9.00
Channel				639668	640668	641666	642666	643666	16.50
Frequency (MHz)				3595.02	3610.02	3624.99	3639.99	3654.99	
90	DFT-s-OFDM QPSK	1	1	14.76	14.80	14.74	14.97	14.55	16.50
Channel				639334	640500	641666	642832	644000	16.50
Frequency (MHz)				3590.01	3607.5	3624.99	3642.48	3660	
80	DFT-s-OFDM QPSK	1	1	14.92	14.96	14.96	14.83	14.59	16.50
Channel				638668	640168	641666	643332	644866	16.50
Frequency (MHz)				3580.02	3602.52	3624.99	3647.49	3669.99	
60	DFT-s-OFDM QPSK	1	1	14.87	14.89	15.12	14.88	15.01	16.50
Channel				638334	640000	641666	643332	645000	16.50
Frequency (MHz)				3575.01	3600	3624.99	3647.49	3675	
50	DFT-s-OFDM QPSK	1	1	15.08	15.06	15.33	15.12	14.99	16.50
Channel				638000	639834	641666	643500	645332	16.50
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98	
40	DFT-s-OFDM QPSK	1	1	14.81	14.82	15.04	14.80	14.75	16.50
Channel				637334	639500	641666	643832	646000	16.50
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690	
20	DFT-s-OFDM QPSK	1	1	15.22	15.23	15.10	15.24	15.04	16.50
Channel				637168	639418	641666	643916	646166	16.50
Frequency (MHz)				3557.52	3591.27	3624.99	3658.74	3692.49	
15	DFT-s-OFDM QPSK	1	1	15.25	15.33	15.10	15.25	15.03	16.50
Channel				637000	639334	641666	644000	646332	16.50
Frequency (MHz)				3555	3590.01	3624.99	3660	3694.98	
10	DFT-s-OFDM QPSK	1	1	15.27	15.35	15.16	15.30	15.07	16.50

n77(3450-3550MHz) (PC2)_SCS 15KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM PI/2 BPSK	1	1	14.24	14.16	13.98	13.89	13.86	15.50
50		1	135	14.08	14.06	14.02	13.84	13.77	
50		1	268	13.91	13.76	13.60	13.71	13.98	
50		135	1	14.21	14.06	13.97	13.94	13.79	15.00
50		135	67	14.20	14.12	14.06	13.90	13.80	
50		135	135	14.07	14.06	13.88	13.77	13.85	
50		270	0	14.12	14.05	14.02	13.86	13.77	
50	DFT-s-OFDM QPSK	1	1	14.48	14.50	14.54	14.44	14.40	15.50
50		1	135	14.21	14.14	14.11	13.93	13.73	
50		1	268	13.98	13.82	13.69	13.82	13.94	
50		135	1	14.05	14.10	14.22	14.18	14.10	15.00
50		135	67	14.18	14.14	14.07	13.93	13.82	
50		135	135	14.13	14.07	13.91	13.82	13.89	
50		270	0	14.15	14.07	14.03	13.91	13.82	
50	DFT-s-OFDM 16QAM	1	1	13.38	13.36	13.19	13.09	13.06	14.00
50	DFT-s-OFDM 64QAM	1	1	11.65	11.70	11.54	11.45	11.41	12.50
50	DFT-s-OFDM 256QAM	1	1	9.68	9.56	9.47	9.38	9.35	10.50
50	CP-OFDM QPSK	1	1	13.44	13.44	13.42	13.32	13.55	14.50
50	CP-OFDM 16QAM	1	1	12.30	12.08	11.92	11.74	11.82	13.00
50	CP-OFDM 64QAM	1	1	10.65	10.63	10.51	10.41	10.37	11.50
50	CP-OFDM 256QAM	1	1	7.87	7.78	7.61	7.49	7.45	8.50
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	13.96	13.85	13.70	13.65	13.42	15.50
Channel				630668	632000	633334	634666	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	14.47	14.25	14.09	13.91	13.80	15.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	14.48	14.16	14.06	13.83	13.74	15.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	14.30	14.15	14.13	13.73	13.91	15.50

n77(3450-3550MHz) (PC2)_SCS 30KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			15.50
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			14.66			15.50
100		1	136			14.07			
100		1	271			13.48			
100		135	1			13.95			14.50
100		135	67			14.14			
100		135	136			13.74			
100		270	0			14.01			
100	DFT-s-OFDM QPSK	1	1			14.88			15.50
100		1	136			14.51			
100		1	271			13.70			
100		135	1			14.11			14.50
100		135	67			13.99			
100		135	136			13.83			
100		270	0			14.07			
100	DFT-s-OFDM 16QAM	1	1			12.73			13.50
100	DFT-s-OFDM 64QAM	1	1			11.22			12.00
100	DFT-s-OFDM 256QAM	1	1			9.23			10.00
100	CP-OFDM QPSK	1	1			13.19			14.00
100	CP-OFDM 16QAM	1	1			11.64			12.50
100	CP-OFDM 64QAM	1	1			10.05			11.00
100	CP-OFDM 256QAM	1	1			7.56			8.50
Channel				633000	633168	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	14.55	14.50	14.47	14.51	14.39	15.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	14.61	14.69	14.65	14.60	14.53	15.50
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	14.59	14.52	14.39	14.35	14.34	15.50
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	14.67	14.48	14.45	14.24	14.33	15.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	14.59	14.62	14.44	14.36	14.33	15.50
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	14.45	14.17	14.13	14.04	13.86	15.50
Channel				630668	632000	633334	634666	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	14.51	14.40	14.28	14.04	13.83	15.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	14.64	14.45	14.34	14.08	14.06	15.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	14.37	14.49	14.46	14.07	14.17	15.50

n77(3700-3980MHz) (PC2)_SCS 15KHz										
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)	
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)	
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99		
50	DFT-s-OFDM PI/2 BPSK	1	1	13.11	13.26	13.26	13.32	13.24	15.00	
50		1	135	13.65	13.35	13.64	13.53	13.60		
50		1	268	13.35	13.38	13.31	13.26	13.66		
50		DFT-s-OFDM PI/2 BPSK	135	1	13.49	13.35	13.49	13.56	13.53	14.50
50			135	67	13.68	13.39	13.74	13.56	13.72	
50			135	135	13.53	13.42	13.48	13.41	13.71	
50			270	0	13.64	13.36	13.68	13.58	13.69	
50	DFT-s-OFDM QPSK	1	1	13.66	13.82	13.94	13.87	13.80	15.00	
50		1	135	13.63	13.44	13.68	13.56	13.69		
50		1	268	13.50	13.45	13.68	13.59	13.67		
50		DFT-s-OFDM QPSK	135	1	13.61	13.63	13.74	13.74	13.70	14.50
50			135	67	13.53	13.42	13.68	13.60	13.69	
50			135	135	13.57	13.43	13.66	13.55	13.71	
50			270	0	13.68	13.37	13.69	13.59	13.71	
50	DFT-s-OFDM 16QAM	1	1	12.33	12.44	13.66	13.59	13.71	14.00	
50	DFT-s-OFDM 64QAM	1	1	10.61	10.78	13.69	13.60	13.71	13.00	
50	DFT-s-OFDM 256QAM	1	1	8.59	8.70	13.70	13.59	13.70	9.50	
50	CP-OFDM QPSK	1	1	12.60	13.28	13.69	13.40	13.59	14.50	
50	CP-OFDM 16QAM	1	1	11.28	11.33	11.39	11.26	11.29	12.00	
50	CP-OFDM 64QAM	1	1	9.55	9.47	9.43	9.50	9.41	10.50	
50	CP-OFDM 256QAM	1	1	6.66	9.47	9.43	9.50	9.41	10.50	
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)	
Frequency (MHz)				3720	3780	3840	3900	3960		
40	DFT-s-OFDM QPSK	1	1	12.91	12.96	13.00	13.16	13.22	15.00	
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)	
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99		
20	DFT-s-OFDM QPSK	1	1	13.29	13.41	13.56	13.55	13.73	15.00	
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)	
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48		
15	DFT-s-OFDM QPSK	1	1	13.38	13.33	13.56	13.45	13.78	15.00	
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)	
Frequency (MHz)				3705	3772.5	3840	3907.5	3975		
10	DFT-s-OFDM QPSK	1	1	13.31	13.40	13.66	13.54	13.92	15.00	

n77(3700-3980MHz) (PC2)_SCS 30KHz										
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)	
Channel				650000	653000	656000	659000	662000	15.00	
Frequency (MHz)				3750	3795	3840	3885	3930		
100	DFT-s-OFDM PI/2 BPSK	1	1	12.55	12.72	12.66	12.90	12.86	15.00	
100		1	136	13.54	13.51	13.67	13.62	13.48		
100		1	271	12.81	12.99	12.89	12.81	13.22		
100		DFT-s-OFDM PI/2 BPSK	135	1	13.54	13.27	13.33	13.42	13.52	14.50
100			135	67	13.54	13.51	13.76	13.75	13.62	
100			135	136	13.23	13.28	13.33	13.40	13.71	
100			270	0	13.35	13.39	13.62	13.65	13.57	
100	DFT-s-OFDM QPSK	1	1	14.06	14.17	14.33	14.09	14.12	15.00	
100		1	136	13.48	13.46	13.73	13.63	13.48		
100		1	271	12.91	13.05	13.10	12.99	12.96		
100		DFT-s-OFDM QPSK	135	1	13.74	13.75	13.82	13.78	13.80	14.50
100			135	67	13.56	13.58	13.63	13.79	13.70	
100			135	136	13.26	13.36	13.41	13.47	13.78	
100			270	0	13.38	13.46	13.68	13.71	13.65	
100	DFT-s-OFDM 16QAM	1	1	11.62	11.83	11.82	11.92	11.41	12.50	
100	DFT-s-OFDM 64QAM	1	1	9.95	10.17	10.14	10.43	9.87	11.50	
100	DFT-s-OFDM 256QAM	1	1	8.01	8.21	8.19	8.45	7.89	9.50	
100	CP-OFDM QPSK	1	1	12.02	12.13	12.19	12.40	11.98	13.50	
100	CP-OFDM 16QAM	1	1	10.47	10.66	10.64	10.79	10.32	11.50	
100	CP-OFDM 64QAM	1	1	8.84	9.01	9.01	9.23	8.67	10.00	
100	CP-OFDM 256QAM	1	1	6.34	6.50	6.42	6.74	6.19	7.50	
Channel				649666	652834	656000	659166	662332	15.00	
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98		
90	DFT-s-OFDM QPSK	1	1	13.71	13.83	13.85	14.00	13.96	15.00	
Channel				649334	652668	656000	659332	662666	15.00	
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99		
80	DFT-s-OFDM QPSK	1	1	13.78	13.96	14.14	14.03	13.93	15.00	
Channel				649000	652500	656000	659500	663000	15.00	
Frequency (MHz)				3735	3787.5	3840	3892.5	3945		
70	DFT-s-OFDM QPSK	1	1	13.77	13.71	13.86	13.80	13.91	15.00	
Channel				648668	652334	656000	659666	663332	15.00	
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98		
60	DFT-s-OFDM QPSK	1	1	13.44	13.56	13.58	13.76	13.53	15.00	
Channel				648334	652168	656000	659832	663866	15.00	
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99		
50	DFT-s-OFDM QPSK	1	1	13.52	13.67	13.70	13.77	13.70	15.00	
Channel				648000	652000	656000	660000	664000	15.00	
Frequency (MHz)				3720	3780	3840	3900	3960		
40	DFT-s-OFDM QPSK	1	1	13.39	13.51	13.52	13.71	13.69	15.00	
Channel				647334	651668	656000	660332	664666	15.00	
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99		
20	DFT-s-OFDM QPSK	1	1	13.46	13.52	13.71	13.63	13.91	15.00	
Channel				647168	651584	656000	660416	664832	15.00	
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48		
15	DFT-s-OFDM QPSK	1	1	13.61	13.51	13.83	13.76	14.02	15.00	
Channel				647000	651500	656000	660500	665000	15.00	
Frequency (MHz)				3705	3772.5	3840	3907.5	3975		
10	DFT-s-OFDM QPSK	1	1	13.64	13.60	14.01	13.79	13.90	15.00	

n78(3450-3550MHz) (PC2)_SCS 15KHz										
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)	
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)	
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525		
50	DFT-s-OFDM PI/2 BPSK	1	1	14.24	14.14	14.00	13.88	13.79	15.50	
50		1	135	14.09	14.05	13.99	13.75	13.57		
50		1	268	13.86	13.69	13.49	13.52	13.75		
50		DFT-s-OFDM PI/2 BPSK	135	1	14.20	14.07	13.98	13.87	13.66	15.00
50			135	67	14.18	14.07	14.05	13.79	13.61	
50			135	135	14.09	14.04	13.83	13.62	13.61	
50			270	0	14.06	14.02	13.95	13.70	13.58	
50	DFT-s-OFDM QPSK	1	1	14.39	14.43	14.51	14.42	14.50	15.50	
50		1	135	14.26	14.17	14.03	13.71	13.82		
50		1	268	13.95	13.78	13.53	13.62	13.97		
50		DFT-s-OFDM QPSK	135	1	14.18	14.10	14.24	14.21	14.09	15.00
50			135	67	14.21	14.10	14.04	13.82	13.65	
50			135	135	14.08	14.05	13.81	13.65	13.71	
50			270	0	14.11	14.04	13.96	13.74	13.60	
50	DFT-s-OFDM 16QAM	1	1	13.33	13.14	13.16	12.94	12.91	14.50	
50	DFT-s-OFDM 64QAM	1	1	11.74	11.54	11.41	11.32	11.83	12.50	
50	DFT-s-OFDM 256QAM	1	1	9.78	9.64	9.59	9.33	9.89	10.50	
50	CP-OFDM QPSK	1	1	13.74	13.61	13.49	13.29	13.72	14.50	
50	CP-OFDM 16QAM	1	1	12.18	12.00	11.92	11.88	12.58	13.00	
50	CP-OFDM 64QAM	1	1	10.59	10.47	10.35	10.23	11.00	11.50	
50	CP-OFDM 256QAM	1	1	7.93	7.80	7.67	7.60	7.69	8.50	
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)	
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98		
40	DFT-s-OFDM QPSK	1	1	14.45	13.51	14.01	13.93	13.74	15.50	
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)	
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540		
20	DFT-s-OFDM QPSK	1	1	14.46	14.27	14.12	13.77	13.56	15.50	
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)	
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49		
15	DFT-s-OFDM QPSK	1	1	14.47	14.41	13.96	13.76	13.60	15.50	
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)	
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98		
10	DFT-s-OFDM QPSK	1	1	14.43	14.31	13.99	13.58	13.93	15.50	

n78(3450-3550MHz) (PC2)_SCS 30KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			15.5
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			13.63			15.5
100		1	136			14.08			
100		1	271			13.14			
100		135	1			13.96			15.5
100		135	67			14.08			
100		135	136			13.52			
100		270	0			13.89			
100	DFT-s-OFDM QPSK	1	1			14.74			15.5
100		1	136			13.69			
100		1	271			13.39			
100		135	1			14.06			15
100		135	67			13.92			
100		135	136			13.52			
100		270	0			13.89			
100	DFT-s-OFDM 16QAM	1	1			12.80			13.5
100	DFT-s-OFDM 64QAM	1	1			11.02			12
100	DFT-s-OFDM 256QAM	1	1			9.15			10
100	CP-OFDM QPSK	1	1			13.14			14
100	CP-OFDM 16QAM	1	1			11.63			12.5
100	CP-OFDM 64QAM	1	1			10.06			11
100	CP-OFDM 256QAM	1	1			7.54			8.5
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	14.03	13.92	14.51	13.92	13.90	15.5
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	14.69	14.06	14.28	14.00	14.17	15.5
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	14.12	14.31	14.55	14.47	14.68	15.5
Channel				632000	632666	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	14.16	14.13	14.02	13.89	13.80	15.5
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	14.37	14.30	14.16	14.07	13.99	15.5
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	14.18	13.24	13.92	13.62	13.36	15.5
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	14.56	14.30	14.22	13.91	13.63	15.5
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	14.63	14.47	14.32	13.69	13.77	15.5
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	14.65	14.46	14.27	13.64	13.84	15.5

n78(3700-3800MHz) (PC2)_SCS 15KHz										
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)	
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)	
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99		
50	DFT-s-OFDM PI/2 BPSK	1	1	13.93	14.17	14.33	14.21	14.13	15.50	
50		1	135	14.48	14.41	14.28	14.23	14.16		
50		1	268	14.13	14.11	14.05	14.13	14.21		
50		DFT-s-OFDM PI/2 BPSK	135	1	14.30	14.47	14.36	14.27	14.21	15.00
50			135	67	14.51	14.44	14.36	14.27	14.27	
50			135	135	14.36	14.29	14.22	14.20	14.22	
50			270	0	14.46	14.39	14.29	14.28	14.23	
50	DFT-s-OFDM QPSK	1	1	14.74	14.83	14.94	14.77	14.82	15.50	
50		1	135	14.50	14.62	14.51	14.56	14.41		
50		1	268	14.15	14.36	14.08	14.42	14.41		
50		DFT-s-OFDM QPSK	135	1	14.43	14.50	14.62	14.58	14.51	15.00
50			135	67	14.52	14.47	14.40	14.28	14.30	
50			135	135	14.39	14.33	14.22	14.20	14.25	
50			270	0	14.49	14.43	14.28	14.27	14.24	
50	DFT-s-OFDM 16QAM	1	1	12.93	13.20	13.10	13.16	12.89	14.50	
50	DFT-s-OFDM 64QAM	1	1	11.54	11.78	11.96	11.84	11.77	13.00	
50	DFT-s-OFDM 256QAM	1	1	9.55	9.76	9.91	9.82	9.71	10.50	
50	CP-OFDM QPSK	1	1	13.62	13.46	13.83	13.81	13.39	14.50	
50	CP-OFDM 16QAM	1	1	12.03	12.05	12.43	12.33	12.22	13.50	
50	CP-OFDM 64QAM	1	1	10.44	10.77	10.84	10.71	10.65	11.50	
50	CP-OFDM 256QAM	1	1	7.76	7.94	8.08	8.03	7.92	9.00	
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)	
Frequency (MHz)				3720	3735	3750	3765	3780		
40	DFT-s-OFDM QPSK	1	1	14.51	14.70	14.86	14.64	14.60	15.50	
Channel				647334	648666	650000	651334	652666	Tune-up limit (dBm)	
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99		
20	DFT-s-OFDM QPSK	1	1	14.37	14.48	14.62	14.54	14.37	15.50	
Channel				647168	648584	650000	651416	652832	Tune-up limit (dBm)	
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48		
15	DFT-s-OFDM QPSK	1	1	14.64	14.75	14.61	14.50	14.62	15.50	
Channel				647000	648500	650000	651500	653000	Tune-up limit (dBm)	
Frequency (MHz)				3705	3727.5	3750	3772.5	3795		
10	DFT-s-OFDM QPSK	1	1	14.46	14.65	14.46	14.55	14.37	15.50	

n78(3700-3800MHz) (PC2)_SCS 30KHz									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			15.50
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			14.83			15.50
100		1	136			14.46			
100		1	271			13.86			
100		135	1			14.34			15.50
100		135	67			14.40			
100		135	136			14.25			
100		270	0			14.28			
100	DFT-s-OFDM QPSK	1	1			15.03			15.50
100		1	136			14.71			
100		1	271			14.10			
100		135	1			14.49			15.50
100		135	67			14.35			
100		135	136			14.29			
100		270	0			14.34			
100	DFT-s-OFDM 16QAM	1	1			12.51			13.00
100	DFT-s-OFDM 64QAM	1	1			10.86			11.00
100	DFT-s-OFDM 256QAM	1	1			8.96			9.50
100	CP-OFDM QPSK	1	1			12.88			13.00
100	CP-OFDM 16QAM	1	1			11.48			12.00
100	CP-OFDM 64QAM	1	1			9.85			10.00
100	CP-OFDM 256QAM	1	1			7.30			7.50
Channel				649668	649834	650000	650166	650332	15.50
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	14.33	14.25	14.32	14.12	14.86	15.50
Channel				649334	649666	650000	650334	650666	15.50
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	14.28	14.37	14.89	14.65	14.34	15.50
Channel				649000	649500	650000	650500	651000	15.50
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	14.10	14.63	14.71	14.80	14.42	15.50
Channel				648668	649334	650000	650666	651332	15.50
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	14.84	14.78	14.46	14.50	14.47	15.50
Channel				648334	649166	650000	650834	651666	15.50
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	14.66	14.44	14.97	14.40	14.42	15.50
Channel				648000	649000	650000	651000	652000	15.50
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	14.64	14.45	14.69	14.85	14.53	15.50
Channel				647668	648834	650000	651166	652332	15.50
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	
30	DFT-s-OFDM QPSK	1	1	14.71	14.53	14.75	14.80	14.61	15.50
Channel				647334	648666	650000	651334	652666	15.50
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	14.37	14.67	14.72	14.56	14.56	15.50

CA_41C											
Combination:20MHz+20MHz(100RB+ 100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	20.40	21.50
40620	40529	40712	QPSK	1	0	0	0	1	0	20.42	21.50
41490	41292	41490	QPSK	1	0	0	0	1	0	20.38	21.50
39750	39750	39948	16QAM	1	0	0	0	1	0	19.65	20.50
40620	40529	40712	16QAM	1	0	0	0	1	0	19.70	20.50
41490	41292	41490	16QAM	1	0	0	0	1	0	19.57	20.50
39750	39750	39948	64QAM	1	0	0	0	1	0	18.66	19.50
40620	40529	40712	64QAM	1	0	0	0	1	0	18.73	19.50
41490	41292	41490	64QAM	1	0	0	0	1	0	18.59	19.50
39750	39750	39948	256QAM	1	0	0	0	1	0	15.36	16.50
40620	40529	40712	256QAM	1	0	0	0	1	0	15.39	16.50
41490	41292	41490	256QAM	1	0	0	0	1	0	15.28	16.50
39750	39750	39948	QPSK	50	0	0	0	1	0	19.29	20.50
40620	40529	40712	QPSK	50	0	0	0	1	0	19.40	20.50
41490	41292	41490	QPSK	50	0	0	0	1	0	19.23	20.50