Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	22.31	22.35	22.44	23	0
10	QPSK	1	25	22.43	22.50	22.59		
10	QPSK	1	49	22.28	22.42	22.54		
10	QPSK	25	0	21.31	21.49	21.66	22	1
10	QPSK	25	12	21.44	21.49	21.64		
10	QPSK	25	25	21.50	21.54	21.58		
10	QPSK	50	0	21.41	21.53	21.66		
10	16QAM	1	0	21.52	21.63	21.67	22	1
10	16QAM	1	25	21.65	21.76	21.88		
10	16QAM	1	49	21.51	21.66	21.73		
10	16QAM	25	0	20.38	20.54	20.68	21	2
10	16QAM	25	12	20.49	20.56	20.64		
10	16QAM	25	25	20.54	20.59	20.60		
10	16QAM	50	0	20.45	20.59	20.65		
10	64QAM	1	0	21.46	21.50	21.56	22	1
10	64QAM	1	25	21.53	21.62	21.80		
10	64QAM	1	49	21.43	21.54	21.66		
10	64QAM	25	0	20.35	20.54	20.68	21	2
10	64QAM	25	12	20.46	20.57	20.66		
10	64QAM	25	25	20.54	20.58	20.57		
10	64QAM	50	0	20.44	20.56	20.64		
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	22.22	22.28	22.38	23	0
5	QPSK	1	12	22.51	22.57	22.56		
5	QPSK	1	24	22.22	22.31	22.46		
5	QPSK	12	0	21.35	21.45	21.66	22	1
5	QPSK	12	7	21.45	21.53	21.69		
5	QPSK	12	13	21.47	21.50	21.65		
5	QPSK	25	0	21.41	21.49	21.67		
5	16QAM	1	0	21.47	21.60	21.69	22	1
5	16QAM	1	12	21.73	21.84	21.94		
5	16QAM	1	24	21.48	21.60	21.67		
5	16QAM	12	0	20.42	20.52	20.66	21	2
5	16QAM	12	7	20.48	20.57	20.68		
5	16QAM	12	13	20.53	20.58	20.65		
5	16QAM	25	0	20.46	20.53	20.67		
5	64QAM	1	0	21.37	21.47	21.61	22	1
5	64QAM	1	12	21.65	21.77	21.88		
5	64QAM	1	24	21.35	21.51	21.60		
5	64QAM	12	0	20.39	20.47	20.65	21	2
5	64QAM	12	7	20.47	20.55	20.68		
5	64QAM	12	13	20.49	20.54	20.63		
5	64QAM	25	0	20.46	20.54	20.68		

<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)	MPR (dB)
Channel				23060	23095	23130		
Frequency (MHz)				704	707.5	711		
10	QPSK	1	0	22.26	22.22	22.24	23	0
10	QPSK	1	25	22.46	22.37	22.36		
10	QPSK	1	49	22.31	22.33	22.35		
10	QPSK	25	0	21.19	21.35	21.47	22	1
10	QPSK	25	12	21.36	21.30	21.40		
10	QPSK	25	25	21.37	21.37	21.48		
10	QPSK	50	0	21.31	21.41	21.51		
10	16QAM	1	0	21.46	21.42	21.41	22	1
10	16QAM	1	25	21.56	21.57	21.56		
10	16QAM	1	49	21.50	21.56	21.49		
10	16QAM	25	0	20.14	20.32	20.43	21	2
10	16QAM	25	12	20.30	20.36	20.35		
10	16QAM	25	25	20.32	20.35	20.44		
10	16QAM	50	0	20.27	20.37	20.48		
10	64QAM	1	0	21.36	21.31	21.34	22	1
10	64QAM	1	25	21.50	21.47	21.46		
10	64QAM	1	49	21.42	21.45	21.40		
10	64QAM	25	0	20.12	20.31	20.42	21	2
10	64QAM	25	12	20.33	20.34	20.34		
10	64QAM	25	25	20.34	20.34	20.43		
10	64QAM	50	0	20.27	20.35	20.46		
Channel				23035	23095	23155	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				701.5	707.5	713.5		
5	QPSK	1	0	22.21	22.13	22.12	23	0
5	QPSK	1	12	22.45	22.43	22.40		
5	QPSK	1	24	22.20	22.21	22.16		
5	QPSK	12	0	21.21	21.32	21.22	22	1
5	QPSK	12	7	21.36	21.36	21.34		
5	QPSK	12	13	21.40	21.28	21.33		
5	QPSK	25	0	21.34	21.31	21.30		
5	16QAM	1	0	21.44	21.35	21.34	22	1
5	16QAM	1	12	21.67	21.58	21.62		
5	16QAM	1	24	21.40	21.41	21.33		
5	16QAM	12	0	20.16	20.28	20.18	21	2
5	16QAM	12	7	20.31	20.29	20.28		
5	16QAM	12	13	20.38	20.26	20.27		
5	16QAM	25	0	20.30	20.28	20.27		
5	64QAM	1	0	21.34	21.22	21.24	22	1
5	64QAM	1	12	21.62	21.51	21.51		
5	64QAM	1	24	21.32	21.27	21.26		
5	64QAM	12	0	20.13	20.25	20.16	21	2
5	64QAM	12	7	20.29	20.28	20.27		
5	64QAM	12	13	20.35	20.24	20.26		
5	64QAM	25	0	20.31	20.27	20.26		

Channel				23025	23095	23165	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				700.5	707.5	714.5		
3	QPSK	1	0	22.28	22.24	22.19	23	0
3	QPSK	1	8	22.26	22.21	22.23		
3	QPSK	1	14	22.29	22.23	22.24		
3	QPSK	8	0	21.29	21.29	21.27	22	1
3	QPSK	8	4	21.34	21.30	21.35		
3	QPSK	8	7	21.33	21.27	21.28		
3	QPSK	15	0	21.32	21.29	21.27		
3	16QAM	1	0	21.45	21.36	21.34	22	1
3	16QAM	1	8	21.47	21.39	21.36		
3	16QAM	1	14	21.48	21.40	21.39		
3	16QAM	8	0	20.31	20.31	20.28	21	2
3	16QAM	8	4	20.38	20.33	20.32		
3	16QAM	8	7	20.38	20.31	20.28		
3	16QAM	15	0	20.30	20.25	20.22		
3	64QAM	1	0	21.40	21.32	21.30	22	1
3	64QAM	1	8	21.39	21.36	21.31		
3	64QAM	1	14	21.39	21.34	21.32		
3	64QAM	8	0	20.28	20.28	20.22	21	2
3	64QAM	8	4	20.33	20.27	20.29		
3	64QAM	8	7	20.31	20.26	20.25		
3	64QAM	15	0	20.25	20.24	20.21		
Channel				23017	23095	23173	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				699.7	707.5	715.3		
1.4	QPSK	1	0	22.26	22.18	22.19	23	0
1.4	QPSK	1	3	22.36	22.29	22.34		
1.4	QPSK	1	5	22.23	22.21	22.20		
1.4	QPSK	3	0	22.34	22.29	22.32		
1.4	QPSK	3	1	22.40	22.35	22.38		
1.4	QPSK	3	3	22.36	22.30	22.32		
1.4	QPSK	6	0	21.37	21.33	21.35	22	1
1.4	16QAM	1	0	21.43	21.36	21.36	22	1
1.4	16QAM	1	3	21.52	21.48	21.47		
1.4	16QAM	1	5	21.44	21.37	21.36		
1.4	16QAM	3	0	21.28	21.25	21.21		
1.4	16QAM	3	1	21.33	21.28	21.31		
1.4	16QAM	3	3	21.27	21.21	21.23		
1.4	16QAM	6	0	20.41	20.35	20.38	21	2
1.4	64QAM	1	0	21.35	21.32	21.25	22	1
1.4	64QAM	1	3	21.43	21.39	21.41		
1.4	64QAM	1	5	21.34	21.31	21.26		
1.4	64QAM	3	0	21.32	21.28	21.26		
1.4	64QAM	3	1	21.36	21.31	21.32		
1.4	64QAM	3	3	21.29	21.27	21.24		
1.4	64QAM	6	0	20.34	20.27	20.30	21	2

<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)	MPR (dB)
Channel					23230			
Frequency (MHz)					782			
10	QPSK	1	0		22.31		23	0
10	QPSK	1	25		22.43			
10	QPSK	1	49		22.31			
10	QPSK	25	0		21.49		22	1
10	QPSK	25	12		21.47			
10	QPSK	25	25		21.50			
10	QPSK	50	0		21.52			
10	16QAM	1	0		21.65		22	1
10	16QAM	1	25		21.79			
10	16QAM	1	49		21.70			
10	16QAM	25	0		20.49		21	2
10	16QAM	25	12		20.50			
10	16QAM	25	25		20.52			
10	16QAM	50	0		20.54			
10	64QAM	1	0		21.56		22	1
10	64QAM	1	25		21.68			
10	64QAM	1	49		21.56			
10	64QAM	25	0		20.47		21	2
10	64QAM	25	12		20.51			
10	64QAM	25	25		20.51			
10	64QAM	50	0		20.49			
Channel				23205	23230	23255	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				779.5	782	784.5		
5	QPSK	1	0	22.24	22.20	22.20	23	0
5	QPSK	1	12	22.45	22.47	22.47		
5	QPSK	1	24	22.26	22.20	22.15		
5	QPSK	12	0	21.29	21.49	21.39	22	1
5	QPSK	12	7	21.43	21.48	21.45		
5	QPSK	12	13	21.36	21.42	21.47		
5	QPSK	25	0	21.28	21.47	21.43		
5	16QAM	1	0	21.59	21.53	21.60	22	1
5	16QAM	1	12	21.76	21.83	21.88		
5	16QAM	1	24	21.63	21.62	21.52		
5	16QAM	12	0	20.30	20.48	20.39	21	2
5	16QAM	12	7	20.42	20.49	20.47		
5	16QAM	12	13	20.36	20.42	20.46		
5	16QAM	25	0	20.30	20.49	20.47		
5	64QAM	1	0	21.46	21.46	21.45	22	1
5	64QAM	1	12	21.64	21.74	21.73		
5	64QAM	1	24	21.48	21.49	21.42		
5	64QAM	12	0	20.26	20.47	20.37	21	2
5	64QAM	12	7	20.40	20.47	20.44		
5	64QAM	12	13	20.37	20.39	20.43		
5	64QAM	25	0	20.29	20.48	20.45		

<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)	MPR (dB)
Channel				23780	23790	23800		
Frequency (MHz)				709	710	711		
10	QPSK	1	0	22.12	22.19	22.23	23	0
10	QPSK	1	25	22.34	22.35	22.41		
10	QPSK	1	49	22.25	22.23	22.26		
10	QPSK	25	0	21.40	21.45	21.44	22	1
10	QPSK	25	12	21.39	21.36	21.39		
10	QPSK	25	25	21.44	21.46	21.44		
10	QPSK	50	0	21.44	21.44	21.46		
10	16QAM	1	0	21.36	21.42	21.44	22	1
10	16QAM	1	25	21.53	21.59	21.61		
10	16QAM	1	49	21.45	21.41	21.42		
10	16QAM	25	0	20.36	20.41	20.38	21	2
10	16QAM	25	12	20.34	20.32	20.37		
10	16QAM	25	25	20.39	20.43	20.41		
10	16QAM	50	0	20.41	20.41	20.43		
10	64QAM	1	0	21.22	21.31	21.34	22	1
10	64QAM	1	25	21.45	21.51	21.48		
10	64QAM	1	49	21.34	21.34	21.36		
10	64QAM	25	0	20.36	20.40	20.39	21	2
10	64QAM	25	12	20.32	20.34	20.35		
10	64QAM	25	25	20.39	20.42	20.39		
10	64QAM	50	0	20.38	20.41	20.40		
Channel				23755	23790	23825	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				706.5	710	713.5		
5	QPSK	1	0	22.06	22.14	22.08	23	0
5	QPSK	1	12	22.37	22.40	22.34		
5	QPSK	1	24	22.15	22.12	22.08		
5	QPSK	12	0	21.24	21.30	21.18	22	1
5	QPSK	12	7	21.34	21.33	21.29		
5	QPSK	12	13	21.33	21.34	21.27		
5	QPSK	25	0	21.29	21.36	21.24		
5	16QAM	1	0	21.30	21.33	21.30	22	1
5	16QAM	1	12	21.60	21.63	21.56		
5	16QAM	1	24	21.36	21.32	21.26		
5	16QAM	12	0	20.20	20.25	20.15	21	2
5	16QAM	12	7	20.28	20.27	20.24		
5	16QAM	12	13	20.26	20.29	20.20		
5	16QAM	25	0	20.24	20.33	20.19		
5	64QAM	1	0	21.17	21.25	21.20	22	1
5	64QAM	1	12	21.51	21.58	21.51		
5	64QAM	1	24	21.28	21.26	21.16		
5	64QAM	12	0	20.17	20.24	20.11	21	2
5	64QAM	12	7	20.27	20.27	20.22		
5	64QAM	12	13	20.25	20.29	20.20		
5	64QAM	25	0	20.25	20.31	20.16		

<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)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	21.31	21.38	21.33	22	0
20	QPSK	1	49	21.68	21.71	21.60		
20	QPSK	1	99	21.29	21.26	21.15		
20	QPSK	50	0	20.53	20.65	20.69	21	1
20	QPSK	50	24	20.66	20.70	20.65		
20	QPSK	50	50	20.55	20.64	20.58		
20	QPSK	100	0	20.53	20.69	20.60		
20	16QAM	1	0	20.62	20.72	20.60	21	1
20	16QAM	1	49	20.95	21.00	20.88		
20	16QAM	1	99	20.62	20.57	20.40		
20	16QAM	50	0	19.53	19.67	19.66	20	2
20	16QAM	50	24	19.65	19.70	19.65		
20	16QAM	50	50	19.57	19.75	19.59		
20	16QAM	100	0	19.54	19.70	19.60		
20	64QAM	1	0	20.52	20.61	20.54	21	1
20	64QAM	1	49	20.89	20.90	20.79		
20	64QAM	1	99	20.51	20.46	20.26		
20	64QAM	50	0	19.55	19.65	19.66	20	2
20	64QAM	50	24	19.66	19.69	19.64		
20	64QAM	50	50	19.57	19.74	19.57		
20	64QAM	100	0	19.54	19.69	19.61		
Channel				132047	132322	132597	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1745	1772.5		
15	QPSK	1	0	21.43	21.38	21.35	22	0
15	QPSK	1	37	21.54	21.59	21.52		
15	QPSK	1	74	21.26	21.30	21.21		
15	QPSK	36	0	20.40	20.52	20.50	21	1
15	QPSK	36	20	20.47	20.54	20.48		
15	QPSK	36	39	20.47	20.55	20.43		
15	QPSK	75	0	20.43	20.53	20.47		
15	16QAM	1	0	20.60	20.72	20.60	21	1
15	16QAM	1	37	20.78	20.88	20.73		
15	16QAM	1	74	20.59	20.63	20.38		
15	16QAM	36	0	19.41	19.52	19.47	20	2
15	16QAM	36	20	19.48	19.53	19.44		
15	16QAM	36	39	19.46	19.51	19.39		
15	16QAM	75	0	19.47	19.54	19.43		
15	64QAM	1	0	20.48	20.64	20.52	21	1
15	64QAM	1	37	20.70	20.76	20.63		
15	64QAM	1	74	20.47	20.49	20.29		
15	64QAM	36	0	19.40	19.52	19.46	20	2
15	64QAM	36	20	19.48	19.50	19.43		
15	64QAM	36	39	19.47	19.52	19.38		
15	64QAM	75	0	19.45	19.50	19.44		

Channel				132022	132322	132622	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775		
10	QPSK	1	0	21.56	21.43	21.33	22	0
10	QPSK	1	25	21.45	21.53	21.40		
10	QPSK	1	49	21.35	21.36	21.21		
10	QPSK	25	0	20.40	20.47	20.45	21	1
10	QPSK	25	12	20.43	20.48	20.41		
10	QPSK	25	25	20.50	20.53	20.38		
10	QPSK	50	0	20.50	20.51	20.43		
10	16QAM	1	0	20.63	20.70	20.53	21	1
10	16QAM	1	25	20.73	20.78	20.62		
10	16QAM	1	49	20.64	20.63	20.39		
10	16QAM	25	0	19.42	19.49	19.41	20	2
10	16QAM	25	12	19.48	19.50	19.37		
10	16QAM	25	25	19.54	19.52	19.32		
10	16QAM	50	0	19.50	19.52	19.36		
10	64QAM	1	0	20.51	20.60	20.46	21	1
10	64QAM	1	25	20.65	20.67	20.62		
10	64QAM	1	49	20.56	20.53	20.40		
10	64QAM	25	0	19.44	19.48	19.52	20	2
10	64QAM	25	12	19.49	19.49	19.47		
10	64QAM	25	25	19.55	19.53	19.43		
10	64QAM	50	0	19.48	19.51	19.48		
Channel				131997	132322	132647	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1745	1777.5		
5	QPSK	1	0	21.32	21.32	21.24	22	0
5	QPSK	1	12	21.56	21.57	21.55		
5	QPSK	1	24	21.25	21.28	21.19		
5	QPSK	12	0	20.38	20.45	20.42	21	1
5	QPSK	12	7	20.46	20.53	20.46		
5	QPSK	12	13	20.51	20.54	20.41		
5	QPSK	25	0	20.42	20.48	20.42		
5	16QAM	1	0	20.49	20.61	20.48	21	1
5	16QAM	1	12	20.84	20.87	20.70		
5	16QAM	1	24	20.53	20.60	20.40		
5	16QAM	12	0	19.40	19.46	19.40	20	2
5	16QAM	12	7	19.49	19.52	19.42		
5	16QAM	12	13	19.50	19.52	19.40		
5	16QAM	25	0	19.46	19.51	19.40		
5	64QAM	1	0	20.33	20.28	20.05	21	1
5	64QAM	1	12	20.38	20.28	20.06		
5	64QAM	1	24	20.36	20.25	20.02		
5	64QAM	12	0	19.28	19.19	19.00	20	2
5	64QAM	12	7	19.30	19.21	19.01		
5	64QAM	12	13	19.28	19.17	18.97		
5	64QAM	25	0	19.22	19.14	18.97		

Channel				131987	132322	132657	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1745	1778.5		
3	QPSK	1	0	21.32	21.41	21.32	22	0
3	QPSK	1	8	21.38	21.42	21.34		
3	QPSK	1	14	21.38	21.42	21.31		
3	QPSK	8	0	20.39	20.47	20.41	21	1
3	QPSK	8	4	20.44	20.50	20.42		
3	QPSK	8	7	20.39	20.48	20.38		
3	QPSK	15	0	20.43	20.46	20.41		
3	16QAM	1	0	20.58	20.71	20.53	21	1
3	16QAM	1	8	20.64	20.69	20.50		
3	16QAM	1	14	20.64	20.69	20.50		
3	16QAM	8	0	19.48	19.57	19.45	20	2
3	16QAM	8	4	19.53	19.59	19.46		
3	16QAM	8	7	19.47	19.55	19.40		
3	16QAM	15	0	19.42	19.49	19.40		
3	64QAM	1	0	20.23	20.22	20.02	21	1
3	64QAM	1	8	20.52	20.43	20.22		
3	64QAM	1	14	20.21	20.17	19.91		
3	64QAM	8	0	19.22	19.15	19.00	20	2
3	64QAM	8	4	19.32	19.20	19.03		
3	64QAM	8	7	19.30	19.18	18.99		
3	64QAM	15	0	19.29	19.18	19.01		
Channel				131979	132322	132665	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1745	1779.3		
1.4	QPSK	1	0	21.41	21.35	21.29	22	0
1.4	QPSK	1	3	21.40	21.47	21.41		
1.4	QPSK	1	5	21.30	21.35	21.30		
1.4	QPSK	3	0	21.38	21.47	21.42		
1.4	QPSK	3	1	21.46	21.51	21.49		
1.4	QPSK	3	3	21.40	21.48	21.42		
1.4	QPSK	6	0	20.42	20.50	20.45	21	1
1.4	16QAM	1	0	20.56	20.69	20.52	21	1
1.4	16QAM	1	3	20.68	20.80	20.59		
1.4	16QAM	1	5	20.58	20.71	20.46		
1.4	16QAM	3	0	20.38	20.49	20.34		
1.4	16QAM	3	1	20.42	20.55	20.39		
1.4	16QAM	3	3	20.35	20.47	20.29		
1.4	16QAM	6	0	19.54	19.61	19.50	20	2
1.4	64QAM	1	0	20.50	20.61	20.44	21	1
1.4	64QAM	1	3	20.58	20.68	20.46		
1.4	64QAM	1	5	20.48	20.55	20.44		
1.4	64QAM	3	0	20.44	20.54	20.38		
1.4	64QAM	3	1	20.51	20.59	20.44		
1.4	64QAM	3	3	20.44	20.53	20.38		
1.4	64QAM	6	0	19.47	19.52	19.43	20	2

<Reduced Power Mode>

<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)	MPR (dB)
Channel				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	20.06	19.99	19.99	21	0
20	QPSK	1	49	20.46	20.35	20.34		
20	QPSK	1	99	19.94	19.90	19.85		
20	QPSK	50	0	19.24	19.44	19.34	20	1
20	QPSK	50	24	19.37	19.34	19.31		
20	QPSK	50	50	19.29	19.20	19.39		
20	QPSK	100	0	19.29	19.33	19.37		
20	16QAM	1	0	19.44	19.40	19.39	20	1
20	16QAM	1	49	19.81	19.76	19.70		
20	16QAM	1	99	19.33	19.26	19.22		
20	16QAM	50	0	18.28	18.47	18.38	19	2
20	16QAM	50	24	18.38	18.37	18.34		
20	16QAM	50	50	18.32	18.23	18.43		
20	16QAM	100	0	18.31	18.37	18.40		
20	64QAM	1	0	19.32	19.27	19.24	20	1
20	64QAM	1	49	19.65	19.60	19.54		
20	64QAM	1	99	19.17	19.14	19.06		
20	64QAM	50	0	18.28	18.45	18.34	19	2
20	64QAM	50	24	18.37	18.34	18.34		
20	64QAM	50	50	18.28	18.21	18.40		
20	64QAM	100	0	18.33	18.37	18.42		
Channel				20025	20175	20325	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	20.25	20.21	20.19	21	0
15	QPSK	1	37	20.44	20.40	20.40		
15	QPSK	1	74	20.15	20.09	20.04		
15	QPSK	36	0	19.35	19.40	19.31	20	1
15	QPSK	36	20	19.39	19.35	19.32		
15	QPSK	36	39	19.39	19.26	19.33		
15	QPSK	75	0	19.37	19.32	19.33		
15	16QAM	1	0	19.64	19.60	19.60	20	1
15	16QAM	1	37	19.89	19.75	19.73		
15	16QAM	1	74	19.54	19.46	19.40		
15	16QAM	36	0	18.35	18.40	18.32	19	2
15	16QAM	36	20	18.40	18.35	18.32		
15	16QAM	36	39	18.35	18.26	18.34		
15	16QAM	75	0	18.37	18.36	18.35		
15	64QAM	1	0	19.52	19.44	19.42	20	1
15	64QAM	1	37	19.75	19.62	19.57		
15	64QAM	1	74	19.41	19.33	19.27		
15	64QAM	36	0	18.37	18.39	18.30	19	2
15	64QAM	36	20	18.37	18.36	18.32		
15	64QAM	36	39	18.38	18.25	18.34		
15	64QAM	75	0	18.37	18.35	18.33		

Channel				20000	20175	20350	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	20.30	20.28	20.25	21	0
10	QPSK	1	25	20.45	20.36	20.30		
10	QPSK	1	49	20.25	20.19	20.12		
10	QPSK	25	0	19.37	19.45	19.28	20	1
10	QPSK	25	12	19.40	19.35	19.32		
10	QPSK	25	25	19.46	19.29	19.36		
10	QPSK	50	0	19.43	19.35	19.33		
10	16QAM	1	0	19.67	19.65	19.60	20	1
10	16QAM	1	25	19.80	19.72	19.69		
10	16QAM	1	49	19.65	19.57	19.50		
10	16QAM	25	0	18.44	18.48	18.29	19	2
10	16QAM	25	12	18.45	18.37	18.33		
10	16QAM	25	25	18.50	18.32	18.41		
10	16QAM	50	0	18.46	18.38	18.37		
10	64QAM	1	0	19.56	19.50	19.47	20	1
10	64QAM	1	25	19.64	19.57	19.53		
10	64QAM	1	49	19.51	19.38	19.38		
10	64QAM	25	0	18.41	18.48	18.31	19	2
10	64QAM	25	12	18.43	18.35	18.31		
10	64QAM	25	25	18.50	18.32	18.40		
10	64QAM	50	0	18.45	18.38	18.36		
Channel				19975	20175	20375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	20.20	20.15	20.09	21	0
5	QPSK	1	12	20.45	20.36	20.33		
5	QPSK	1	24	20.16	20.12	20.05		
5	QPSK	12	0	19.33	19.32	19.16	20	1
5	QPSK	12	7	19.39	19.32	19.28		
5	QPSK	12	13	19.39	19.30	19.25		
5	QPSK	25	0	19.35	19.28	19.21		
5	16QAM	1	0	19.57	19.55	19.45	20	1
5	16QAM	1	12	19.75	19.73	19.67		
5	16QAM	1	24	19.57	19.49	19.42		
5	16QAM	12	0	18.35	18.33	18.18	19	2
5	16QAM	12	7	18.43	18.35	18.28		
5	16QAM	12	13	18.42	18.31	18.26		
5	16QAM	25	0	18.39	18.31	18.21		
5	64QAM	1	0	19.47	19.38	19.32	20	1
5	64QAM	1	12	19.68	19.59	19.52		
5	64QAM	1	24	19.41	19.37	19.29		
5	64QAM	12	0	18.30	18.30	18.13	19	2
5	64QAM	12	7	18.39	18.32	18.24		
5	64QAM	12	13	18.39	18.28	18.23		
5	64QAM	25	0	18.39	18.30	18.22		

Channel				19965	20175	20385	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1732.5	1753.5		
3	QPSK	1	0	20.26	20.23	20.18	21	0
3	QPSK	1	8	20.27	20.24	20.14		
3	QPSK	1	14	20.28	20.19	20.13		
3	QPSK	8	0	19.35	19.29	19.18	20	1
3	QPSK	8	4	19.37	19.29	19.24		
3	QPSK	8	7	19.34	19.26	19.22		
3	QPSK	15	0	19.30	19.26	19.18		
3	16QAM	1	0	19.61	19.60	19.51	20	1
3	16QAM	1	8	19.62	19.61	19.53		
3	16QAM	1	14	19.62	19.60	19.44		
3	16QAM	8	0	18.44	18.36	18.30	19	2
3	16QAM	8	4	18.44	18.37	18.33		
3	16QAM	8	7	18.43	18.34	18.30		
3	16QAM	15	0	18.36	18.28	18.23		
3	64QAM	1	0	19.47	19.49	19.40	20	1
3	64QAM	1	8	19.51	19.49	19.38		
3	64QAM	1	14	19.47	19.47	19.36		
3	64QAM	8	0	18.38	18.31	18.24	19	2
3	64QAM	8	4	18.41	18.33	18.26		
3	64QAM	8	7	18.38	18.31	18.24		
3	64QAM	15	0	18.33	18.26	18.19		
Channel				19957	20175	20393	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	20.20	20.17	20.10	21	0
1.4	QPSK	1	3	20.31	20.29	20.18		
1.4	QPSK	1	5	20.22	20.18	20.11		
1.4	QPSK	3	0	20.32	20.27	20.19		
1.4	QPSK	3	1	20.36	20.32	20.24		
1.4	QPSK	3	3	20.34	20.27	20.20		
1.4	QPSK	6	0	19.34	19.28	19.22	20	1
1.4	16QAM	1	0	19.60	19.58	19.48	20	1
1.4	16QAM	1	3	19.71	19.67	19.58		
1.4	16QAM	1	5	19.63	19.56	19.46		
1.4	16QAM	3	0	19.36	19.34	19.24		
1.4	16QAM	3	1	19.40	19.40	19.28		
1.4	16QAM	3	3	19.35	19.30	19.22		
1.4	16QAM	6	0	18.46	18.38	18.31	19	2
1.4	64QAM	1	0	19.42	19.38	19.34	20	1
1.4	64QAM	1	3	19.62	19.51	19.35		
1.4	64QAM	1	5	19.43	19.39	19.32		
1.4	64QAM	3	0	19.38	19.37	19.27		
1.4	64QAM	3	1	19.43	19.38	19.29		
1.4	64QAM	3	3	19.44	19.33	19.30		
1.4	64QAM	6	0	18.37	18.27	18.23	19	2

<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)	MPR (dB)
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	20.99	20.95	20.99	21.5	0
20	QPSK	1	49	21.32	21.40	21.45		
20	QPSK	1	99	21.08	21.04	21.25		
20	QPSK	50	0	20.02	20.26	20.28	20.5	1
20	QPSK	50	24	20.33	20.35	20.40		
20	QPSK	50	50	20.35	20.38	20.26		
20	QPSK	100	0	20.22	20.25	20.30		
20	16QAM	1	0	20.58	20.64	20.20	21.5	0
20	16QAM	1	49	20.84	20.62	20.60		
20	16QAM	1	99	20.66	20.62	20.41		
20	16QAM	50	0	19.10	19.35	19.33	20.5	1
20	16QAM	50	24	19.39	19.41	19.45		
20	16QAM	50	50	19.40	19.48	19.30		
20	16QAM	100	0	19.28	19.47	19.40		
20	64QAM	1	0	20.45	20.46	20.50	21.5	0
20	64QAM	1	49	21.01	20.98	20.48		
20	64QAM	1	99	20.62	20.66	20.29		
20	64QAM	50	0	19.07	19.39	19.35	20.5	1
20	64QAM	50	24	19.41	19.43	19.38		
20	64QAM	50	50	19.30	19.47	19.19		
20	64QAM	100	0	19.29	19.38	19.36		
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	21.18	21.20	21.26	21.5	0
15	QPSK	1	37	21.45	21.41	21.44		
15	QPSK	1	74	21.18	21.29	21.38		
15	QPSK	36	0	20.40	20.37	20.42	20.5	1
15	QPSK	36	20	20.27	20.43	20.45		
15	QPSK	36	39	20.38	20.47	20.33		
15	QPSK	75	0	20.31	20.42	20.36		
15	16QAM	1	0	20.44	20.35	20.47	21.5	0
15	16QAM	1	37	20.75	20.84	21.14		
15	16QAM	1	74	20.34	20.52	20.90		
15	16QAM	36	0	19.20	19.33	19.54	20.5	1
15	16QAM	36	20	19.34	19.37	19.47		
15	16QAM	36	39	19.41	19.41	19.38		
15	16QAM	75	0	19.35	19.50	19.45		
15	64QAM	1	0	20.04	20.01	20.48	21.5	0
15	64QAM	1	37	20.41	20.91	20.62		
15	64QAM	1	74	20.01	20.51	20.34		
15	64QAM	36	0	19.18	19.42	19.42	20.5	1
15	64QAM	36	20	19.29	19.38	19.55		
15	64QAM	36	39	19.31	19.50	19.46		
15	64QAM	75	0	19.39	19.38	19.44		

Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	21.22	21.32	21.37	21.5	0
10	QPSK	1	25	21.39	21.44	21.47		
10	QPSK	1	49	21.27	21.40	21.48		
10	QPSK	25	0	20.30	20.37	20.44	20.5	1
10	QPSK	25	12	20.40	20.40	20.45		
10	QPSK	25	25	20.36	20.44	20.46		
10	QPSK	50	0	20.40	20.48	20.46		
10	16QAM	1	0	20.77	20.85	20.57	21.5	0
10	16QAM	1	25	20.86	20.95	20.77		
10	16QAM	1	49	20.64	20.48	20.63		
10	16QAM	25	0	19.22	19.22	19.59	20.5	1
10	16QAM	25	12	19.32	19.39	19.56		
10	16QAM	25	25	19.38	19.48	19.59		
10	16QAM	50	0	19.35	19.50	19.49		
10	64QAM	1	0	20.80	20.50	20.56	21.5	0
10	64QAM	1	25	20.78	20.86	21.06		
10	64QAM	1	49	20.76	20.81	20.87		
10	64QAM	25	0	19.30	19.44	19.57	20.5	1
10	64QAM	25	12	19.46	19.45	19.51		
10	64QAM	25	25	19.36	19.51	19.61		
10	64QAM	50	0	19.39	19.44	19.35		
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	21.25	21.21	21.26	21.5	0
5	QPSK	1	12	21.39	21.43	21.50		
5	QPSK	1	24	21.11	21.15	21.41		
5	QPSK	12	0	20.35	20.30	20.44	20.5	1
5	QPSK	12	7	20.38	20.30	20.41		
5	QPSK	12	13	20.36	20.36	20.43		
5	QPSK	25	0	20.38	20.39	20.48		
5	16QAM	1	0	20.34	20.39	20.44	21.5	0
5	16QAM	1	12	20.47	20.53	20.53		
5	16QAM	1	24	20.07	20.31	20.50		
5	16QAM	12	0	19.37	19.40	19.53	20.5	1
5	16QAM	12	7	19.39	19.44	19.41		
5	16QAM	12	13	19.40	19.44	19.43		
5	16QAM	25	0	19.44	19.26	19.56		
5	64QAM	1	0	20.37	20.44	20.43	21.5	0
5	64QAM	1	12	20.85	20.72	20.61		
5	64QAM	1	24	20.27	20.47	20.54		
5	64QAM	12	0	19.31	19.38	19.51	20.5	1
5	64QAM	12	7	19.37	19.39	19.41		
5	64QAM	12	13	19.39	19.30	19.44		
5	64QAM	25	0	19.37	19.43	19.48		

<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)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	20.20	20.26	20.14	21	0
20	QPSK	1	49	20.50	20.65	20.42		
20	QPSK	1	99	20.03	19.96	19.88		
20	QPSK	50	0	19.39	19.49	19.49	20	1
20	QPSK	50	24	19.50	19.52	19.42		
20	QPSK	50	50	19.38	19.51	19.32		
20	QPSK	100	0	19.37	19.48	19.37		
20	16QAM	1	0	19.47	19.54	19.40	20	1
20	16QAM	1	49	19.80	19.77	19.61		
20	16QAM	1	99	19.37	19.27	19.06		
20	16QAM	50	0	18.39	18.53	18.44	19	2
20	16QAM	50	24	18.49	18.49	18.40		
20	16QAM	50	50	18.40	18.49	18.29		
20	16QAM	100	0	18.38	18.49	18.34		
20	64QAM	1	0	19.38	19.44	19.31	20	1
20	64QAM	1	49	19.69	19.65	19.54		
20	64QAM	1	99	19.25	19.16	18.99		
20	64QAM	50	0	18.37	18.50	18.44	19	2
20	64QAM	50	24	18.48	18.47	18.37		
20	64QAM	50	50	18.41	18.49	18.27		
20	64QAM	100	0	18.39	18.49	18.35		
Channel				132047	132322	132597	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1745	1772.5		
15	QPSK	1	0	20.38	20.39	20.30	21	0
15	QPSK	1	37	20.57	20.51	20.46		
15	QPSK	1	74	20.25	20.22	20.09		
15	QPSK	36	0	19.50	19.52	19.46	20	1
15	QPSK	36	20	19.50	19.50	19.40		
15	QPSK	36	39	19.49	19.48	19.33		
15	QPSK	75	0	19.49	19.50	19.40		
15	16QAM	1	0	19.66	19.71	19.55	20	1
15	16QAM	1	37	19.82	19.77	19.70		
15	16QAM	1	74	19.59	19.49	19.27		
15	16QAM	36	0	18.46	18.50	18.40	19	2
15	16QAM	36	20	18.51	18.48	18.36		
15	16QAM	36	39	18.48	18.45	18.27		
15	16QAM	75	0	18.49	18.50	18.38		
15	64QAM	1	0	19.56	19.58	19.43	20	1
15	64QAM	1	37	19.78	19.70	19.55		
15	64QAM	1	74	19.42	19.38	19.14		
15	64QAM	36	0	18.45	18.50	18.40	19	2
15	64QAM	36	20	18.50	18.48	18.35		
15	64QAM	36	39	18.45	18.45	18.27		
15	64QAM	75	0	18.48	18.48	18.36		

Channel				132022	132322	132622	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775		
10	QPSK	1	0	20.45	20.46	20.32	21	0
10	QPSK	1	25	20.52	20.48	20.39		
10	QPSK	1	49	20.39	20.33	20.18		
10	QPSK	25	0	19.49	19.51	19.46	20	1
10	QPSK	25	12	19.54	19.51	19.41		
10	QPSK	25	25	19.56	19.53	19.36		
10	QPSK	50	0	19.57	19.53	19.44		
10	16QAM	1	0	19.68	19.76	19.56	20	1
10	16QAM	1	25	19.80	19.80	19.61		
10	16QAM	1	49	19.69	19.60	19.35		
10	16QAM	25	0	18.51	18.54	18.44	19	2
10	16QAM	25	12	18.54	18.51	18.38		
10	16QAM	25	25	18.56	18.54	18.34		
10	16QAM	50	0	18.56	18.53	18.41		
10	64QAM	1	0	19.60	19.61	19.45	20	1
10	64QAM	1	25	19.71	19.68	19.50		
10	64QAM	1	49	19.56	19.49	19.28		
10	64QAM	25	0	18.51	18.52	18.45	19	2
10	64QAM	25	12	18.52	18.50	18.38		
10	64QAM	25	25	18.58	18.53	18.35		
10	64QAM	50	0	18.56	18.53	18.40		
Channel				131997	132322	132647	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1745	1777.5		
5	QPSK	1	0	20.30	20.33	20.19	21	0
5	QPSK	1	12	20.64	20.55	20.43		
5	QPSK	1	24	20.27	20.26	20.12		
5	QPSK	12	0	19.49	19.47	19.38	20	1
5	QPSK	12	7	19.53	19.51	19.37		
5	QPSK	12	13	19.53	19.48	19.33		
5	QPSK	25	0	19.49	19.46	19.36		
5	16QAM	1	0	19.59	19.60	19.40	20	1
5	16QAM	1	12	19.88	19.89	19.61		
5	16QAM	1	24	19.53	19.54	19.31		
5	16QAM	12	0	18.49	18.46	18.32	19	2
5	16QAM	12	7	18.53	18.52	18.36		
5	16QAM	12	13	18.55	18.49	18.30		
5	16QAM	25	0	18.54	18.49	18.30		
5	64QAM	1	0	19.49	19.51	19.28	20	1
5	64QAM	1	12	19.79	19.75	19.54		
5	64QAM	1	24	19.45	19.44	19.18		
5	64QAM	12	0	18.45	18.45	18.31	19	2
5	64QAM	12	7	18.52	18.48	18.33		
5	64QAM	12	13	18.53	18.47	18.30		
5	64QAM	25	0	18.51	18.49	18.33		

Channel				131987	132322	132657	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1745	1778.5		
3	QPSK	1	0	20.42	20.41	20.26	21	0
3	QPSK	1	8	20.45	20.43	20.27		
3	QPSK	1	14	20.44	20.39	20.24		
3	QPSK	8	0	19.49	19.47	19.33	20	1
3	QPSK	8	4	19.50	19.50	19.36		
3	QPSK	8	7	19.47	19.46	19.30		
3	QPSK	15	0	19.50	19.46	19.35		
3	16QAM	1	0	19.67	19.73	19.48	20	1
3	16QAM	1	8	19.69	19.71	19.48		
3	16QAM	1	14	19.75	19.68	19.40		
3	16QAM	8	0	18.55	18.53	18.36	19	2
3	16QAM	8	4	18.56	18.57	18.38		
3	16QAM	8	7	18.56	18.53	18.34		
3	16QAM	15	0	18.51	18.48	18.32		
3	64QAM	1	0	19.60	19.60	19.37	20	1
3	64QAM	1	8	19.62	19.62	19.36		
3	64QAM	1	14	19.62	19.60	19.34		
3	64QAM	8	0	18.51	18.49	18.33	19	2
3	64QAM	8	4	18.52	18.51	18.35		
3	64QAM	8	7	18.51	18.49	18.29		
3	64QAM	15	0	18.47	18.46	18.29		
Channel				131979	132322	132665	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1745	1779.3		
1.4	QPSK	1	0	20.35	20.37	20.22	21	0
1.4	QPSK	1	3	20.47	20.51	20.39		
1.4	QPSK	1	5	20.36	20.39	20.25		
1.4	QPSK	3	0	20.46	20.50	20.38		
1.4	QPSK	3	1	20.48	20.55	20.41		
1.4	QPSK	3	3	20.45	20.49	20.37		
1.4	QPSK	6	0	19.51	19.53	19.40	20	1
1.4	16QAM	1	0	19.61	19.68	19.44	20	1
1.4	16QAM	1	3	19.76	19.79	19.54		
1.4	16QAM	1	5	19.62	19.65	19.41		
1.4	16QAM	3	0	19.44	19.50	19.27		
1.4	16QAM	3	1	19.51	19.54	19.33		
1.4	16QAM	3	3	19.45	19.48	19.26		
1.4	16QAM	6	0	18.59	18.63	18.42	19	2
1.4	64QAM	1	0	19.53	19.60	19.33	20	1
1.4	64QAM	1	3	19.61	19.65	19.44		
1.4	64QAM	1	5	19.54	19.54	19.35		
1.4	64QAM	3	0	19.52	19.54	19.35		
1.4	64QAM	3	1	19.57	19.61	19.38		
1.4	64QAM	3	3	19.54	19.50	19.33		
1.4	64QAM	6	0	18.54	18.54	18.36	19	2

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

SAR was tested with a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by 3GPP.

a. 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations
b. "special subframe S" contains both uplink and downlink transmissions, it has been taken into consideration to determine the transmission duty factor according to the worst case uplink and downlink cyclic prefix requirements for UpPTS
c. Establishing connections with base station simulators ensure a consistent means for testing SAR and recommended for evaluating SAR. The Anritsu MT8820C (firmware: #22.52#004) was used for LTE output power measurements and SAR testing.

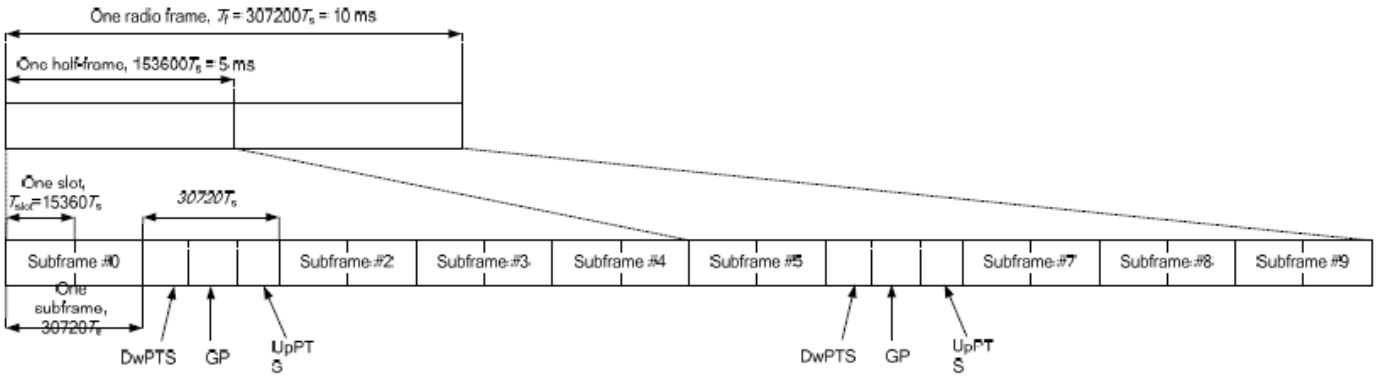


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Special subframe (30720·T_s): Normal cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	**Normal cyclic prefix in uplink**	**Extended cyclic prefix in uplink**
Uplink duty factor in one special subframe	**0~4**	7.13%	8.33%
	5~9	14.3%	16.7%

Special subframe(30720·T_s): Extended cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	**Normal cyclic prefix in uplink**	**Extended cyclic prefix in uplink**
Uplink duty factor in one special subframe	**0~3**	7.13%	8.33%
	4~7	14.3%	16.7%

The highest duty factor is resulted from:

i. Uplink-downlink configuration: 0. In a half-frame consisted of 5 subfames, uplink operation is in 3 uplink subframes and 1 special subframe.

ii. special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink

iii. for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (3+0.167)/5 = 63.3%

iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (3+0.143)/5 = 62.9%

v. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The scaled TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.

<Full Power Mode>

<LTE Band 38>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				37850	38000	38150		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	0	22.37	22.17	22.42	23.5	0
20	QPSK	1	49	22.84	22.83	22.90		
20	QPSK	1	99	22.43	22.52	22.45		
20	QPSK	50	0	21.84	21.80	21.79	22.5	1
20	QPSK	50	24	21.82	21.72	21.74		
20	QPSK	50	50	21.73	21.50	21.73		
20	QPSK	100	0	21.75	21.82	21.79		
20	16QAM	1	0	21.53	21.51	21.57	22.5	1
20	16QAM	1	49	21.98	22.02	21.95		
20	16QAM	1	99	21.60	21.64	21.56		
20	16QAM	50	0	20.90	20.83	20.79	21.5	2
20	16QAM	50	24	20.87	20.88	20.87		
20	16QAM	50	50	20.81	20.93	20.90		
20	16QAM	100	0	20.83	20.84	20.83		
20	64QAM	1	0	21.25	21.23	21.31	22.5	1
20	64QAM	1	49	21.71	21.77	21.73		
20	64QAM	1	99	21.33	21.38	21.32		
20	64QAM	50	0	20.84	20.78	20.72	21.5	2
20	64QAM	50	24	20.81	20.83	20.80		
20	64QAM	50	50	20.75	20.86	20.85		
20	64QAM	100	0	20.89	20.86	20.88		
Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.5	2595	2612.5		
15	QPSK	1	0	22.53	22.54	22.64	23.5	0
15	QPSK	1	37	22.75	22.77	22.77		
15	QPSK	1	74	22.57	22.65	22.62		
15	QPSK	36	0	21.74	21.74	21.73	22.5	1
15	QPSK	36	20	21.73	21.80	21.82		
15	QPSK	36	39	21.68	21.81	21.89		
15	QPSK	75	0	21.73	21.79	21.77		
15	16QAM	1	0	21.65	21.68	21.74	22.5	1
15	16QAM	1	37	21.90	21.91	21.87		
15	16QAM	1	74	21.69	21.79	21.73		
15	16QAM	36	0	20.70	20.68	20.68	21.5	2
15	16QAM	36	20	20.66	20.78	20.75		
15	16QAM	36	39	20.65	20.77	20.80		
15	16QAM	75	0	20.75	20.85	20.82		
15	64QAM	1	0	21.38	21.42	21.52	22.5	1
15	64QAM	1	37	21.62	21.67	21.64		
15	64QAM	1	74	21.45	21.56	21.47		
15	64QAM	36	0	20.74	20.75	20.73	21.5	2
15	64QAM	36	20	20.73	20.80	20.82		
15	64QAM	36	39	20.70	20.84	20.86		
15	64QAM	75	0	20.73	20.82	20.84		

Channel				37800	38000	38200	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575	2595	2615		
10	QPSK	1	0	22.65	22.70	22.76	23.5	0
10	QPSK	1	25	22.75	22.81	22.89		
10	QPSK	1	49	22.68	22.77	22.78		
10	QPSK	25	0	21.78	21.84	21.82	22.5	1
10	QPSK	25	12	21.79	21.84	21.85		
10	QPSK	25	25	21.78	21.89	21.92		
10	QPSK	50	0	21.82	21.88	21.84		
10	16QAM	1	0	21.78	21.81	21.86	22.5	1
10	16QAM	1	25	21.87	21.92	21.97		
10	16QAM	1	49	21.82	21.88	21.88		
10	16QAM	25	0	20.82	20.93	20.82	21.5	2
10	16QAM	25	12	20.80	20.87	20.86		
10	16QAM	25	25	20.78	20.87	20.93		
10	16QAM	50	0	20.92	20.97	20.90		
10	64QAM	1	0	21.47	21.56	21.62	22.5	1
10	64QAM	1	25	21.58	21.69	21.72		
10	64QAM	1	49	21.56	21.64	21.62		
10	64QAM	25	0	20.78	20.89	20.79	21.5	2
10	64QAM	25	12	20.74	20.86	20.82		
10	64QAM	25	25	20.77	20.87	20.88		
10	64QAM	50	0	20.85	20.89	20.86		
Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2572.5	2595	2617.5		
5	QPSK	1	0	22.52	22.57	22.60	23.5	0
5	QPSK	1	12	22.74	22.86	22.85		
5	QPSK	1	24	22.53	22.63	22.65		
5	QPSK	12	0	21.71	21.81	21.77	22.5	1
5	QPSK	12	7	21.77	21.85	21.86		
5	QPSK	12	13	21.74	21.87	21.83		
5	QPSK	25	0	21.67	21.83	21.78		
5	16QAM	1	0	21.70	21.77	21.78	22.5	1
5	16QAM	1	12	21.90	22.01	21.94		
5	16QAM	1	24	21.69	21.80	21.79		
5	16QAM	12	0	20.68	20.75	20.74	21.5	2
5	16QAM	12	7	20.70	20.84	20.87		
5	16QAM	12	13	20.72	20.85	20.80		
5	16QAM	25	0	20.75	20.84	20.78		
5	64QAM	1	0	21.43	21.51	21.53	22.5	1
5	64QAM	1	12	21.64	21.74	21.70		
5	64QAM	1	24	21.45	21.57	21.53		
5	64QAM	12	0	20.67	20.73	20.72	21.5	2
5	64QAM	12	7	20.73	20.81	20.80		
5	64QAM	12	13	20.71	20.84	20.79		
5	64QAM	25	0	20.70	20.82	20.74		

<WLAN Conducted Power>

General Note:

1. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
2. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
3. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
4. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
   a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
   b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
   c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

<2.4GHz WLAN ANT>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	17.89	18.50	100.00
		6	2437	18.07	18.50	
		11	2462	18.03	18.50	
	802.11g 6Mbps	1	2412	15.21	15.50	96.67
		6	2437	15.25	15.50	
		11	2462	15.06	15.50	
	802.11n-HT20 MCS0	1	2412	14.02	14.50	95.86
		6	2437	14.30	14.50	
		11	2462	14.13	14.50	

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle is 75.99 %, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to the theoretical value of Bluetooth reported SAR calculation.

Mode	Channel	Frequency (MHz)	Average power (dBm)
			1Mbps
BR/EDR	CH 00	2402	5.60
	CH 39	2441	6.41
	CH 78	2480	5.85
Tune-up limit (dBm)			7.00

Mode	Channel	Frequency (MHz)	Average power (dBm)
			GFSK
LE	CH 00	2402	-2.92
	CH 19	2440	-1.81
	CH 39	2480	-2.57
Tune-up limit (dBm)			-1.00

13. Bluetooth Exclusions Applied

Mode Band	Max Average power(dBm)	
	Bluetooth BR/EDR	Bluetooth LE
2.4GHz Bluetooth	7.00	-1.00

Note:
Per KDB 447498 D01v06, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:

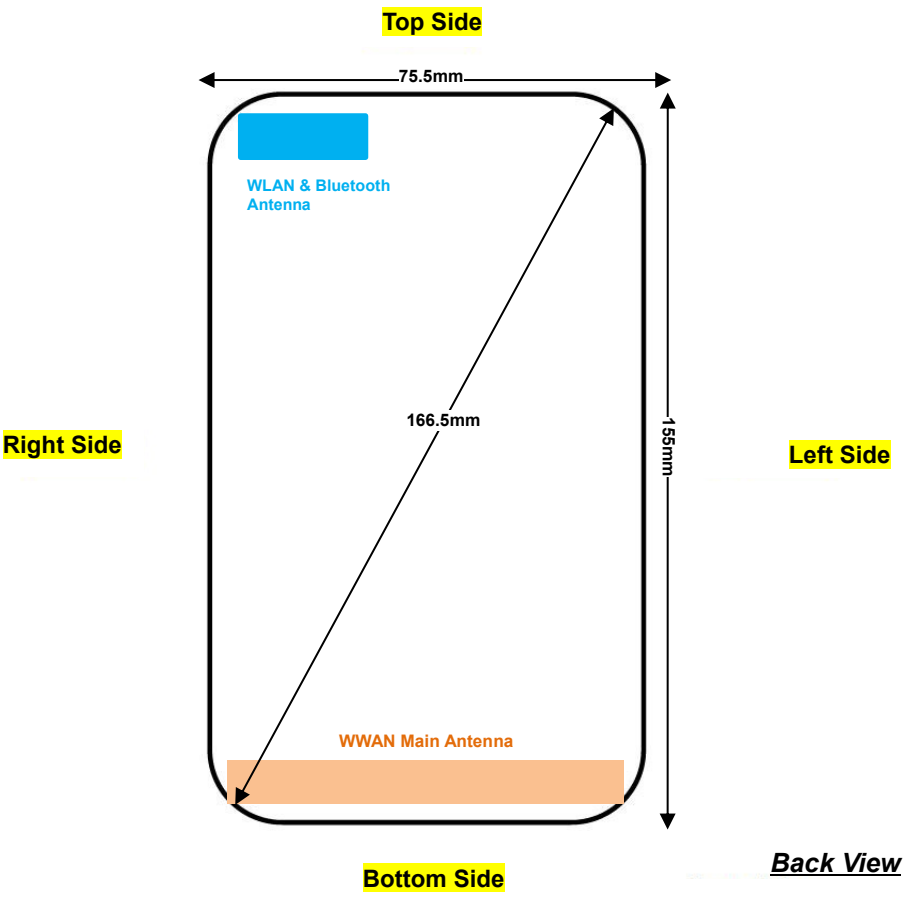
[(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

Bluetooth Max Power (dBm)	Separation Distance (mm)	Frequency (GHz)	Exclusion Thresholds
7.00	10	2.48	0.8

Note: Per KDB 447498 D01v06, a distance of 10 mm is applied to determine SAR test exclusion. The test exclusion threshold is 0.8 which is <= 3, SAR testing is not required.

14. Antenna Location



Distance of the Antenna to the EUT surface/edge						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN Main	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
Bluetooth & WLAN	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm

Positions for SAR tests; Hotspot mode						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN Main	Yes	Yes	No	Yes	Yes	Yes
Bluetooth & WLAN	Yes	Yes	Yes	No	Yes	No

General Note:
Referring to KDB 941225 D06 v02r01, when the overall device length and width are ≥ 9cm*5cm, the test distance is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.

15. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
   a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
   b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
   c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
   d. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
   e. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8W/kg for 1g SAR and 2.0W/Kg for 10g SAR.
4. When hotspot mode is enabled, power reduction will be activated to limit the maximum power of WCDMA B4 and LTE B4 / B7.
5. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
6. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold. For this device, WWAN transmitter scaled to reduced power mode for product specific 10g SAR is higher than 1.2W/kg of WCDMA B4, and LTE B4 / B7, therefore product specific SAR is necessary.

GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

WCDMA Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA / HSPA+ is ≤ ¼ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA / HSPA+ to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA / HSPA+) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B17 / B38 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE B17 / B4 SAR test was covered by B12 / B66; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
   a. The maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion.
   b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

WLAN Note:

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
2. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
3. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
4. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

15.1 Head SAR

<GSM SAR>

Plot No.	Battery	Band	Mode	Test Position	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	1	GSM850	GPRS (4 Tx slots)	Right Cheek	Full	189	836.4	29.02	29.50	1.117	-0.04	0.286	0.319
	1	GSM850	GPRS (4 Tx slots)	Right Tilted	Full	189	836.4	29.02	29.50	1.117	-0.08	0.092	0.103
	1	GSM850	GPRS (4 Tx slots)	Left Cheek	Full	189	836.4	29.02	29.50	1.117	-0.02	0.124	0.138
	1	GSM850	GPRS (4 Tx slots)	Left Tilted	Full	189	836.4	29.02	29.50	1.117	-0.01	0.082	0.092
	1	GSM850	GPRS (4 Tx slots)	Right Cheek	Full	128	824.2	29.01	29.50	1.119	-0.03	0.259	0.290
01	1	GSM850	GPRS (4 Tx slots)	Right Cheek	Full	251	848.8	28.99	29.50	1.125	-0.08	0.287	**0.323**
	2	GSM850	GPRS (4 Tx slots)	Right Cheek	Full	251	848.8	28.99	29.50	1.125	-0.01	0.239	0.269
	1	GSM1900	GPRS (4 Tx slots)	Right Cheek	Full	661	1880	26.45	27.00	1.135	0.05	0.094	0.107
	1	GSM1900	GPRS (4 Tx slots)	Right Tilted	Full	661	1880	26.45	27.00	1.135	0.01	0.054	0.061
	1	GSM1900	GPRS (4 Tx slots)	Left Cheek	Full	661	1880	26.45	27.00	1.135	0.03	0.119	0.135
	1	GSM1900	GPRS (4 Tx slots)	Left Tilted	Full	661	1880	26.45	27.00	1.135	0.13	0.074	0.084
02	1	GSM1900	GPRS (4 Tx slots)	Left Cheek	Full	512	1850.2	26.43	27.00	1.140	0.02	0.146	**0.166**
	2	GSM1900	GPRS (4 Tx slots)	Left Cheek	Full	512	1850.2	26.43	27.00	1.140	0.01	0.122	0.139
	1	GSM1900	GPRS (4 Tx slots)	Left Cheek	Full	810	1909.8	26.34	27.00	1.164	0.15	0.114	0.133

<WCDMA SAR>

Plot No.	Battery	Band	Mode	Test Position	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	1	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Full	4132	826.4	23.36	24.00	1.159	0.02	0.150	0.174
	1	WCDMA Band V	RMC 12.2Kbps	Right Tilted	Full	4132	826.4	23.36	24.00	1.159	-0.06	0.099	0.114
03	1	WCDMA Band V	RMC 12.2Kbps	Left Cheek	Full	4132	826.4	23.36	24.00	1.159	-0.01	0.160	**0.185**
	2	WCDMA Band V	RMC 12.2Kbps	Left Cheek	Full	4132	826.4	23.36	24.00	1.159	0.03	0.145	0.168
	1	WCDMA Band V	RMC 12.2Kbps	Left Tilted	Full	4132	826.4	23.36	24.00	1.159	-0.09	0.093	0.107
	1	WCDMA Band V	RMC 12.2Kbps	Left Cheek	Full	4182	836.4	23.32	24.00	1.169	-0.09	0.128	0.150
	1	WCDMA Band V	RMC 12.2Kbps	Left Cheek	Full	4233	846.6	23.32	24.00	1.169	-0.09	0.125	0.146
	1	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Full	1413	1732.6	22.56	23.00	1.107	-0.01	0.082	0.091
	1	WCDMA Band IV	RMC 12.2Kbps	Right Tilted	Full	1413	1732.6	22.56	23.00	1.107	0.02	0.047	0.052
	1	WCDMA Band IV	RMC 12.2Kbps	Left Cheek	Full	1413	1732.6	22.56	23.00	1.107	0.01	0.061	0.067
	1	WCDMA Band IV	RMC 12.2Kbps	Left Tilted	Full	1413	1732.6	22.56	23.00	1.107	0.09	0.056	0.062
	1	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Full	1312	1712.4	22.51	23.00	1.119	0.02	0.082	0.092
04	2	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Full	1312	1712.4	22.51	23.00	1.119	-0.03	0.085	**0.096**
	1	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Full	1513	1752.6	22.52	23.00	1.117	0.03	0.067	0.075
	1	WCDMA Band II	RMC 12.2Kbps	Right Cheek	Full	9538	1907.6	23.38	24.00	1.153	0.01	0.139	0.160
	1	WCDMA Band II	RMC 12.2Kbps	Right Tilted	Full	9538	1907.6	23.38	24.00	1.153	-0.06	0.058	0.067
05	1	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Full	9538	1907.6	23.38	24.00	1.153	0.07	0.150	**0.173**
	2	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Full	9538	1907.6	23.38	24.00	1.153	0.1	0.143	0.165
	1	WCDMA Band II	RMC 12.2Kbps	Left Tilted	Full	9538	1907.6	23.38	24.00	1.153	0.05	0.085	0.098
	1	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Full	9262	1852.4	23.36	24.00	1.159	0.02	0.076	0.088
	1	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Full	9400	1880	23.32	24.00	1.169	0.08	0.118	0.138

<FDD LTE SAR>

Plot No.	Battery	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
06	1	LTE Band 12	10M	QPSK	1	25	Right Cheek	Full	23095	707.5	22.37	23.00	1.156	-0.01	0.134	**0.155**
	2	LTE Band 12	10M	QPSK	1	25	Right Cheek	Full	23095	707.5	22.37	23.00	1.156	0.01	0.101	0.117
	1	LTE Band 12	10M	QPSK	25	25	Right Cheek	Full	23095	707.5	21.37	22.00	1.156	0.01	0.078	0.090
	1	LTE Band 12	10M	QPSK	1	25	Right Tilted	Full	23095	707.5	22.37	23.00	1.156	0.1	0.058	0.067
	1	LTE Band 12	10M	QPSK	25	25	Right Tilted	Full	23095	707.5	21.37	22.00	1.156	-0.17	0.054	0.063
	1	LTE Band 12	10M	QPSK	1	25	Left Cheek	Full	23095	707.5	22.37	23.00	1.156	0.09	0.091	0.105
	1	LTE Band 12	10M	QPSK	25	25	Left Cheek	Full	23095	707.5	21.37	22.00	1.156	0.03	0.070	0.081
	1	LTE Band 12	10M	QPSK	1	25	Left Tilted	Full	23095	707.5	22.37	23.00	1.156	-0.08	0.085	0.098
	1	LTE Band 12	10M	QPSK	25	25	Left Tilted	Full	23095	707.5	21.37	22.00	1.156	0.01	0.066	0.077
07	1	LTE Band 13	10M	QPSK	1	25	Right Cheek	Full	23230	782	22.43	23.00	1.140	0.02	0.132	**0.151**
	2	LTE Band 13	10M	QPSK	1	25	Right Cheek	Full	23230	782	22.43	23.00	1.140	0.02	0.125	0.143
	1	LTE Band 13	10M	QPSK	25	25	Right Cheek	Full	23230	782	21.50	22.00	1.122	0.05	0.060	0.067
	1	LTE Band 13	10M	QPSK	1	25	Right Tilted	Full	23230	782	22.43	23.00	1.140	0.12	0.044	0.050
	1	LTE Band 13	10M	QPSK	25	25	Right Tilted	Full	23230	782	21.50	22.00	1.122	0.06	0.035	0.039
	1	LTE Band 13	10M	QPSK	1	25	Left Cheek	Full	23230	782	22.43	23.00	1.140	-0.01	0.069	0.079
	1	LTE Band 13	10M	QPSK	25	25	Left Cheek	Full	23230	782	21.50	22.00	1.122	-0.12	0.057	0.064
	1	LTE Band 13	10M	QPSK	1	25	Left Tilted	Full	23230	782	22.43	23.00	1.140	-0.1	0.082	0.094
	1	LTE Band 13	10M	QPSK	25	25	Left Tilted	Full	23230	782	21.50	22.00	1.122	0.01	0.063	0.071
08	1	LTE Band 5	10M	QPSK	1	25	Right Cheek	Full	20525	836.5	22.24	23.00	1.191	-0.06	0.151	**0.180**
	2	LTE Band 5	10M	QPSK	1	25	Right Cheek	Full	20525	836.5	22.24	23.00	1.191	0.05	0.115	0.137
	1	LTE Band 5	10M	QPSK	25	25	Right Cheek	Full	20525	836.5	21.30	22.00	1.175	-0.03	0.060	0.070
	1	LTE Band 5	10M	QPSK	1	25	Right Tilted	Full	20525	836.5	22.24	23.00	1.191	0.03	0.041	0.049
	1	LTE Band 5	10M	QPSK	25	25	Right Tilted	Full	20525	836.5	21.30	22.00	1.175	0.07	0.033	0.039
	1	LTE Band 5	10M	QPSK	1	25	Left Cheek	Full	20525	836.5	22.24	23.00	1.191	-0.17	0.074	0.088
	1	LTE Band 5	10M	QPSK	25	25	Left Cheek	Full	20525	836.5	21.30	22.00	1.175	-0.14	0.056	0.066
	1	LTE Band 5	10M	QPSK	1	25	Left Tilted	Full	20525	836.5	22.24	23.00	1.191	-0.06	0.084	0.099
	1	LTE Band 5	10M	QPSK	25	25	Left Tilted	Full	20525	836.5	21.30	22.00	1.175	-0.07	0.060	0.071
09	1	LTE Band 66	20M	QPSK	1	49	Right Cheek	Full	132322	1745	21.71	22.00	1.069	-0.02	0.116	**0.124**
	2	LTE Band 66	20M	QPSK	1	49	Right Cheek	Full	132322	1745	21.71	22.00	1.069	-0.09	0.113	0.121
	1	LTE Band 66	20M	QPSK	50	24	Right Cheek	Full	132322	1745	20.70	21.00	1.072	0.04	0.092	0.099
	1	LTE Band 66	20M	QPSK	1	49	Right Tilted	Full	132322	1745	21.71	22.00	1.069	0.11	0.049	0.052
	1	LTE Band 66	20M	QPSK	50	24	Right Tilted	Full	132322	1745	20.70	21.00	1.072	0.16	0.040	0.043
	1	LTE Band 66	20M	QPSK	1	49	Left Cheek	Full	132322	1745	21.71	22.00	1.069	-0.01	0.089	0.096
	1	LTE Band 66	20M	QPSK	50	24	Left Cheek	Full	132322	1745	20.70	21.00	1.072	-0.01	0.069	0.073
	1	LTE Band 66	20M	QPSK	1	49	Left Tilted	Full	132322	1745	21.71	22.00	1.069	0.04	0.072	0.076
	1	LTE Band 66	20M	QPSK	50	24	Left Tilted	Full	132322	1745	20.70	21.00	1.072	0.05	0.056	0.060
	1	LTE Band 66	20M	QPSK	1	49	Right Cheek	Full	132072	1720	21.68	22.00	1.076	0.05	0.093	0.100
	1	LTE Band 66	20M	QPSK	1	49	Right Cheek	Full	132572	1770	21.60	22.00	1.096	0.01	0.103	0.113