EIRP for LTE Band 5

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
824.7	1.4	QPSK	1/0	10.82	V	6.7	0.49	17.03	38.45
836.5	1.4	QPSK	1/0	10.20	V	6.7	0.49	16.41	38.45
848.3	1.4	QPSK	1/0	9.28	V	6.7	0.49	15.49	38.45
824.7	1.4	QPSK	1/0	9.77	H	6.7	0.49	15.98	38.45
836.5	1.4	QPSK	1/0	9.89	H	6.7	0.49	16.1	38.45
848.3	1.4	QPSK	1/0	9.10	H	6.7	0.49	15.31	38.45
824.7	1.4	16-QAM	1/0	8.99	V	6.7	0.49	15.2	38.45
836.5	1.4	16-QAM	1/0	10.50	V	6.7	0.49	16.71	38.45
848.3	1.4	16-QAM	1/0	8.25	V	6.7	0.49	14.46	38.45
824.7	1.4	16-QAM	1/0	9.21	H	6.7	0.49	15.42	38.45
836.5	1.4	16-QAM	1/0	9.09	H	6.7	0.49	15.3	38.45
848.3	1.4	16-QAM	1/0	11.25	H	6.7	0.49	17.46	38.45
825.5	3	QPSK	1/0	8.34	V	6.7	0.49	14.55	38.45
836.5	3	QPSK	1/0	10.67	V	6.7	0.49	16.88	38.45
847.5	3	QPSK	1/0	11.02	V	6.7	0.49	17.23	38.45
825.5	3	QPSK	1/0	8.99	H	6.7	0.49	15.2	38.45
836.5	3	QPSK	1/0	10.00	H	6.7	0.49	16.21	38.45
847.5	3	QPSK	1/0	7.85	H	6.7	0.49	14.06	38.45
825.5	3	16-QAM	1/0	9.49	V	6.7	0.49	15.7	38.45
836.5	3	16-QAM	1/0	12.17	V	6.7	0.49	18.38	38.45
847.5	3	16-QAM	1/0	10.73	V	6.7	0.49	16.94	38.45
825.5	3	16-QAM	1/0	9.57	H	6.7	0.49	15.78	38.45
836.5	3	16-QAM	1/0	14.87	H	6.7	0.49	21.08	38.45
847.5	3	16-QAM	1/0	17.02	H	6.7	0.49	23.23	38.45
826.5	5	QPSK	1/0	16.23	V	6.7	0.49	22.44	38.45
836.5	5	QPSK	1/0	14.13	V	6.7	0.49	20.34	38.45
846.5	5	QPSK	1/0	15.71	V	6.7	0.49	21.92	38.45
826.5	5	QPSK	1/0	14.97	H	6.7	0.49	21.18	38.45
836.5	5	QPSK	1/0	10.19	H	6.7	0.49	16.4	38.45
846.5	5	QPSK	1/0	10.67	H	6.7	0.49	16.88	38.45
826.5	5	16-QAM	1/0	10.92	V	6.7	0.49	17.13	38.45
836.5	5	16-QAM	1/0	11.01	V	6.7	0.49	17.22	38.45
846.5	5	16-QAM	1/0	8.66	V	6.7	0.49	14.87	38.45
826.5	5	16-QAM	1/0	7.19	H	6.7	0.49	13.4	38.45
836.5	5	16-QAM	1/0	13.30	H	6.7	0.49	19.51	38.45
846.5	5	16-QAM	1/0	10.60	H	6.7	0.49	16.81	38.45

829	10	QPSK	1/0	8.32	V	6.7	0.49	14.53	38.45
836.5	10	QPSK	1/0	7.94	V	6.7	0.49	14.15	38.45
844	10	QPSK	1/0	10.75	V	6.7	0.49	16.96	38.45
829	10	QPSK	1/0	5.99	H	6.7	0.49	12.2	38.45
836.5	10	QPSK	1/0	9.14	H	6.7	0.49	15.35	38.45
844	10	QPSK	1/0	8.70	H	6.7	0.49	14.91	38.45
829	10	16-QAM	1/0	7.85	V	6.7	0.49	14.06	38.45
836.5	10	16-QAM	1/0	10.31	V	6.7	0.49	16.52	38.45
844	10	16-QAM	1/0	9.39	V	6.7	0.49	15.6	38.45
829	10	16-QAM	1/0	6.97	H	6.7	0.49	13.18	38.45
836.5	10	16-QAM	1/0	7.14	H	6.7	0.49	13.35	38.45
844	10	16-QAM	1/0	9.09	H	6.7	0.49	15.3	38.45

EIRP for LTE Band 7

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
2502.5	5	QPSK	1/0	10.64	V	8.23	1.12	17.75	33
2535	5	QPSK	1/0	8.22	V	8.23	1.12	15.33	33
2567.5	5	QPSK	1/24	9.90	V	8.23	1.12	17.01	33
2502.5	5	QPSK	1/0	11.09	H	8.23	1.12	18.20	33
2535	5	QPSK	1/0	9.20	H	8.23	1.12	16.31	33
2567.5	5	QPSK	1/24	7.89	H	8.23	1.12	15.00	33
2502.5	5	16-QAM	1/0	10.43	V	8.23	1.12	17.54	33
2535	5	16-QAM	1/0	10.32	V	8.23	1.12	17.43	33
2567.5	5	16-QAM	1/24	10.72	V	8.23	1.12	17.83	33
2502.5	5	16-QAM	1/0	8.90	H	8.23	1.12	16.01	33
2535	5	16-QAM	1/0	8.06	H	8.23	1.12	15.17	33
2567.5	5	16-QAM	1/24	7.28	H	8.23	1.12	14.39	33
2505	10	QPSK	1/0	11.30	V	8.23	1.12	18.41	33
2535	10	QPSK	1/49	11.16	V	8.23	1.12	18.27	33
2565	10	QPSK	1/0	10.10	V	8.23	1.12	17.21	33
2505	10	QPSK	1/0	7.05	H	8.23	1.12	14.16	33
2535	10	QPSK	1/49	8.75	H	8.23	1.12	15.86	33
2565	10	QPSK	1/0	8.73	H	8.23	1.12	15.84	33
2505	10	16-QAM	1/0	7.86	V	8.23	1.12	14.97	33
2535	10	16-QAM	1/49	10.36	V	8.23	1.12	17.47	33
2565	10	16-QAM	1/0	9.70	V	8.23	1.12	16.81	33
2505	10	16-QAM	1/0	8.05	H	8.23	1.12	15.16	33
2535	10	16-QAM	1/49	13.87	H	8.23	1.12	20.98	33
2565	10	16-QAM	1/0	11.11	H	8.23	1.12	18.22	33
2507.5	15	QPSK	1/0	12.71	V	8.23	1.12	19.82	33
2535	15	QPSK	1/74	14.76	V	8.23	1.12	21.87	33
2562.5	15	QPSK	1/0	13.37	V	8.23	1.12	20.48	33
2507.5	15	QPSK	1/0	13.75	H	8.23	1.12	20.86	33
2535	15	QPSK	1/74	10.38	H	8.23	1.12	17.49	33
2562.5	15	QPSK	1/0	10.47	H	8.23	1.12	17.58	33
2507.5	15	16-QAM	1/0	8.40	V	8.23	1.12	15.51	33
2535	15	16-QAM	1/74	8.79	V	8.23	1.12	15.90	33
2562.5	15	16-QAM	1/0	9.42	V	8.23	1.12	16.53	33
2507.5	15	16-QAM	1/0	9.61	H	8.23	1.12	16.72	33
2535	15	16-QAM	1/74	11.09	H	8.23	1.12	18.20	33
2562.5	15	16-QAM	1/0	8.62	H	8.23	1.12	15.73	33

2510	20	QPSK	1/99	9.61	V	8.23	1.12	16.72	33
2535	20	QPSK	1/99	7.98	V	8.23	1.12	15.09	33
2560	20	QPSK	1/0	8.55	V	8.23	1.12	15.66	33
2510	20	QPSK	1/99	11.59	H	8.23	1.12	18.70	33
2535	20	QPSK	1/99	9.36	H	8.23	1.12	16.47	33
2560	20	QPSK	1/0	8.79	H	8.23	1.12	15.90	33
2510	20	16-QAM	1/99	10.06	V	8.23	1.12	17.17	33
2535	20	16-QAM	1/99	10.13	V	8.23	1.12	17.24	33
2560	20	16-QAM	1/0	9.50	V	8.23	1.12	16.61	33
2510	20	16-QAM	1/99	10.70	H	8.23	1.12	17.81	33
2535	20	16-QAM	1/99	8.25	H	8.23	1.12	15.36	33
2560	20	16-QAM	1/0	7.84	H	8.23	1.12	14.95	33

EIRP for LTE Band 12

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
699.7	1.4	QPSK	1/0	8.81	V	6.6	0.47	14.94	34.77
707.5	1.4	QPSK	1/0	13.38	V	6.6	0.47	19.51	34.77
715.3	1.4	QPSK	1/24	8.89	V	6.6	0.47	15.02	34.77
699.7	1.4	QPSK	1/0	11.13	H	6.6	0.47	17.26	34.77
707.5	1.4	QPSK	1/0	12.01	H	6.6	0.47	18.14	34.77
715.3	1.4	QPSK	1/24	10.38	H	6.6	0.47	16.51	34.77
699.7	1.4	16-QAM	1/0	11.21	V	6.6	0.47	17.34	34.77
707.5	1.4	16-QAM	1/0	9.25	V	6.6	0.47	15.38	34.77
715.3	1.4	16-QAM	1/24	11.05	V	6.6	0.47	17.18	34.77
699.7	1.4	16-QAM	1/0	12.36	H	6.6	0.47	18.49	34.77
707.5	1.4	16-QAM	1/0	10.16	H	6.6	0.47	16.29	34.77
715.3	1.4	16-QAM	1/24	11.65	H	6.6	0.47	17.78	34.77
700.5	3	QPSK	1/0	11.59	V	6.6	0.47	17.72	34.77
707.5	3	QPSK	1/49	12.23	V	6.6	0.47	18.36	34.77
714.5	3	QPSK	1/0	12.05	V	6.6	0.47	18.18	34.77
700.5	3	QPSK	1/0	10.49	H	6.6	0.47	16.62	34.77
707.5	3	QPSK	1/49	9.64	H	6.6	0.47	15.77	34.77
714.5	3	QPSK	1/0	11.97	H	6.6	0.47	18.1	34.77
700.5	3	16-QAM	1/0	9.62	V	6.6	0.47	15.75	34.77
707.5	3	16-QAM	1/49	8.30	V	6.6	0.47	14.43	34.77
714.5	3	16-QAM	1/0	9.05	V	6.6	0.47	15.18	34.77
700.5	3	16-QAM	1/0	12.06	H	6.6	0.47	18.19	34.77
707.5	3	16-QAM	1/49	12.98	H	6.6	0.47	19.11	34.77
714.5	3	16-QAM	1/0	10.75	H	6.6	0.47	16.88	34.77
701.5	5	QPSK	1/0	12.26	V	6.6	0.47	18.39	34.77
707.5	5	QPSK	1/74	12.59	V	6.6	0.47	18.72	34.77
713.5	5	QPSK	1/0	11.63	V	6.6	0.47	17.76	34.77
701.5	5	QPSK	1/0	10.90	H	6.6	0.47	17.03	34.77
707.5	5	QPSK	1/74	8.96	H	6.6	0.47	15.09	34.77
713.5	5	QPSK	1/0	10.90	H	6.6	0.47	17.03	34.77
701.5	5	16-QAM	1/0	10.90	V	6.6	0.47	17.03	34.77
707.5	5	16-QAM	1/74	12.32	V	6.6	0.47	18.45	34.77
713.5	5	16-QAM	1/0	9.94	V	6.6	0.47	16.07	34.77
701.5	5	16-QAM	1/0	9.14	H	6.6	0.47	15.27	34.77
707.5	5	16-QAM	1/74	11.28	H	6.6	0.47	17.41	34.77
713.5	5	16-QAM	1/0	9.80	H	6.6	0.47	15.93	34.77
704.0	10	QPSK	1/99	8.62	V	6.6	0.47	14.75	34.77

707.5	10	QPSK	1/99	11.30	V	6.6	0.47	17.43	34.77
711.0	10	QPSK	1/0	12.80	V	6.6	0.47	18.93	34.77
704.0	10	QPSK	1/99	11.54	H	6.6	0.47	17.67	34.77
707.5	10	QPSK	1/99	10.19	H	6.6	0.47	16.32	34.77
711.0	10	QPSK	1/0	11.23	H	6.6	0.47	17.36	34.77
704.0	10	16-QAM	1/99	11.98	V	6.6	0.47	18.11	34.77
707.5	10	16-QAM	1/99	10.51	V	6.6	0.47	16.64	34.77
711.0	10	16-QAM	1/0	10.09	V	6.6	0.47	16.22	34.77
704.0	10	16-QAM	1/99	12.37	H	6.6	0.47	18.5	34.77
707.5	10	16-QAM	1/99	10.85	H	6.6	0.47	16.98	34.77
711.0	10	16-QAM	1/0	11.29	H	6.6	0.47	17.42	34.77

EIRP for LTE Band 17

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
706.5	5	QPSK	1/0	8.28	V	6.6	0.47	14.41	34.77
710.0	5	QPSK	1/74	9.24	V	6.6	0.47	15.37	34.77
713.5	5	QPSK	1/0	10.45	V	6.6	0.47	16.58	34.77
706.5	5	QPSK	1/0	9.08	H	6.6	0.47	15.21	34.77
710.0	5	QPSK	1/74	8.54	H	6.6	0.47	14.67	34.77
713.5	5	QPSK	1/0	10.35	H	6.6	0.47	16.48	34.77
706.5	5	16-QAM	1/0	9.85	V	6.6	0.47	15.98	34.77
710.0	5	16-QAM	1/74	10.87	V	6.6	0.47	17.00	34.77
713.5	5	16-QAM	1/0	10.21	V	6.6	0.47	16.34	34.77
706.5	5	16-QAM	1/0	8.48	H	6.6	0.47	14.61	34.77
710.0	5	16-QAM	1/74	9.97	H	6.6	0.47	16.1	34.77
713.5	5	16-QAM	1/0	9.67	H	6.6	0.47	15.8	34.77
709.0	10	QPSK	1/99	7.27	V	6.6	0.47	13.4	34.77
710.0	10	QPSK	1/99	10.02	V	6.6	0.47	16.15	34.77
711.0	10	QPSK	1/0	11.00	V	6.6	0.47	17.13	34.77
709.0	10	QPSK	1/99	11.32	H	6.6	0.47	17.45	34.77
710.0	10	QPSK	1/99	11.26	H	6.6	0.47	17.39	34.77
711.0	10	QPSK	1/0	9.53	H	6.6	0.47	15.66	34.77
709.0	10	16-QAM	1/99	11.99	V	6.6	0.47	18.12	34.77
710.0	10	16-QAM	1/99	12.26	V	6.6	0.47	18.39	34.77
711.0	10	16-QAM	1/0	9.23	V	6.6	0.47	15.36	34.77
709.0	10	16-QAM	1/99	11.53	H	6.6	0.47	17.66	34.77
710.0	10	16-QAM	1/99	15.25	H	6.6	0.47	21.38	34.77
711.0	10	16-QAM	1/0	16.20	H	6.6	0.47	22.33	34.77

EIRP for LTE Band 40

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
2302.5	5	QPSK	1/0	10.32	V	8.17	1.09	17.40	33
2350	5	QPSK	1/0	11.10	V	8.17	1.09	18.18	33
2397.5	5	QPSK	1/24	10.17	V	8.17	1.09	17.25	33
2302.5	5	QPSK	1/0	10.34	H	8.17	1.09	17.42	33
2350	5	QPSK	1/0	11.11	H	8.17	1.09	18.19	33
2397.5	5	QPSK	1/24	11.84	H	8.17	1.09	18.92	33
2302.5	5	16-QAM	1/0	11.75	V	8.17	1.09	18.83	33
2350	5	16-QAM	1/0	10.56	V	8.17	1.09	17.64	33
2397.5	5	16-QAM	1/24	10.52	V	8.17	1.09	17.60	33
2302.5	5	16-QAM	1/0	9.56	H	8.17	1.09	16.64	33
2350	5	16-QAM	1/0	10.44	H	8.17	1.09	17.52	33
2397.5	5	16-QAM	1/24	10.71	H	8.17	1.09	17.79	33
2305	10	QPSK	1/0	11.77	V	8.17	1.09	18.85	33
2350	10	QPSK	1/49	9.76	V	8.17	1.09	16.84	33
2395	10	QPSK	1/0	10.13	V	8.17	1.09	17.21	33
2305	10	QPSK	1/0	11.65	H	8.17	1.09	18.73	33
2350	10	QPSK	1/49	11.46	H	8.17	1.09	18.54	33
2395	10	QPSK	1/0	10.29	H	8.17	1.09	17.37	33
2305	10	16-QAM	1/0	12.35	V	8.17	1.09	19.43	33
2350	10	16-QAM	1/49	11.93	V	8.17	1.09	19.01	33
2395	10	16-QAM	1/0	9.96	V	8.17	1.09	17.04	33
2305	10	16-QAM	1/0	12.80	H	8.17	1.09	19.88	33
2350	10	16-QAM	1/49	16.53	H	8.17	1.09	23.61	33
2395	10	16-QAM	1/0	13.97	H	8.17	1.09	21.05	33
2307.5	15	QPSK	1/0	13.00	V	8.17	1.09	20.08	33
2350	15	QPSK	1/74	13.96	V	8.17	1.09	21.04	33
2392.5	15	QPSK	1/0	12.62	V	8.17	1.09	19.70	33
2307.5	15	QPSK	1/0	14.15	H	8.17	1.09	21.23	33
2350	15	QPSK	1/74	10.91	H	8.17	1.09	17.99	33
2392.5	15	QPSK	1/0	12.30	H	8.17	1.09	19.38	33
2307.5	15	16-QAM	1/0	12.23	V	8.17	1.09	19.31	33
2350	15	16-QAM	1/74	8.69	V	8.17	1.09	15.77	33
2392.5	15	16-QAM	1/0	10.55	V	8.17	1.09	17.63	33
2307.5	15	16-QAM	1/0	10.08	H	8.17	1.09	17.16	33
2350	15	16-QAM	1/74	11.90	H	8.17	1.09	18.98	33
2392.5	15	16-QAM	1/0	10.26	H	8.17	1.09	17.34	33

2310	20	QPSK	1/99	11.30	V	8.17	1.09	18.38	33
2350	20	QPSK	1/99	10.75	V	8.17	1.09	17.83	33
2390	20	QPSK	1/0	12.08	V	8.17	1.09	19.16	33
2310	20	QPSK	1/99	9.54	H	8.17	1.09	16.62	33
2350	20	QPSK	1/99	11.32	H	8.17	1.09	18.40	33
2390	20	QPSK	1/0	11.25	H	8.17	1.09	18.33	33
2310	20	16-QAM	1/99	9.08	V	8.17	1.09	16.16	33
2350	20	16-QAM	1/99	10.22	V	8.17	1.09	17.30	33
2390	20	16-QAM	1/0	10.32	V	8.17	1.09	17.40	33
2310	20	16-QAM	1/99	10.97	H	8.17	1.09	18.05	33
2350	20	16-QAM	1/99	10.55	H	8.17	1.09	17.63	33
2390	20	16-QAM	1/0	10.42	H	8.17	1.09	17.50	33

EIRP for LTE Band 41

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
2537.5	5	QPSK	1/0	12.74	V	8.20	1.11	19.83	33
2593	5	QPSK	1/0	11.65	V	8.20	1.11	18.74	33
2652.6	5	QPSK	1/24	11.75	V	8.20	1.11	18.84	33
2537.5	5	QPSK	1/0	12.66	H	8.20	1.11	19.75	33
2593	5	QPSK	1/0	12.90	H	8.20	1.11	19.99	33
2652.6	5	QPSK	1/24	11.35	H	8.20	1.11	18.44	33
2537.5	5	16-QAM	1/0	10.44	V	8.20	1.11	17.53	33
2593	5	16-QAM	1/0	12.94	V	8.20	1.11	20.03	33
2652.6	5	16-QAM	1/24	11.20	V	8.20	1.11	18.29	33
2537.5	5	16-QAM	1/0	9.23	H	8.20	1.11	16.32	33
2593	5	16-QAM	1/0	11.81	H	8.20	1.11	18.90	33
2652.6	5	16-QAM	1/24	11.19	H	8.20	1.11	18.28	33
2540	10	QPSK	1/0	10.19	V	8.20	1.11	17.28	33
2593	10	QPSK	1/49	10.64	V	8.20	1.11	17.73	33
2650.1	10	QPSK	1/0	10.13	V	8.20	1.11	17.22	33
2540	10	QPSK	1/0	10.48	H	8.20	1.11	17.57	33
2593	10	QPSK	1/49	11.41	H	8.20	1.11	18.50	33
2650.1	10	QPSK	1/0	10.65	H	8.20	1.11	17.74	33
2540	10	16-QAM	1/0	9.50	V	8.20	1.11	16.59	33
2593	10	16-QAM	1/49	13.99	V	8.20	1.11	21.08	33
2650.1	10	16-QAM	1/0	11.66	V	8.20	1.11	18.75	33
2540	10	16-QAM	1/0	11.38	H	8.20	1.11	18.47	33
2593	10	16-QAM	1/49	12.38	H	8.20	1.11	19.47	33
2650.1	10	16-QAM	1/0	14.89	H	8.20	1.11	21.98	33
2542.5	15	QPSK	1/0	13.38	V	8.20	1.11	20.47	33
2593	15	QPSK	1/74	13.70	V	8.20	1.11	20.79	33
2647.6	15	QPSK	1/0	16.43	V	8.20	1.11	23.52	33
2542.5	15	QPSK	1/0	15.76	H	8.20	1.11	22.85	33
2593	15	QPSK	1/74	10.89	H	8.20	1.11	17.98	33
2647.6	15	QPSK	1/0	12.33	H	8.20	1.11	19.42	33
2542.5	15	16-QAM	1/0	11.59	V	8.20	1.11	18.68	33
2593	15	16-QAM	1/74	11.68	V	8.20	1.11	18.77	33
2647.6	15	16-QAM	1/0	9.58	V	8.20	1.11	16.67	33
2542.5	15	16-QAM	1/0	11.27	H	8.20	1.11	18.36	33
2593	15	16-QAM	1/74	13.54	H	8.20	1.11	20.63	33
2647.6	15	16-QAM	1/0	10.82	H	8.20	1.11	17.91	33

2545	20	QPSK	1/99	10.85	V	8.20	1.11	17.94	33
2593	20	QPSK	1/99	9.64	V	8.20	1.11	16.73	33
2645.1	20	QPSK	1/0	12.84	V	8.20	1.11	19.93	33
2545	20	QPSK	1/99	10.99	H	8.20	1.11	18.08	33
2593	20	QPSK	1/99	11.12	H	8.20	1.11	18.21	33
2645.1	20	QPSK	1/0	10.39	H	8.20	1.11	17.48	33
2545	20	16-QAM	1/99	10.12	V	8.20	1.11	17.21	33
2593	20	16-QAM	1/99	13.66	V	8.20	1.11	20.75	33
2645.1	20	16-QAM	1/0	11.03	V	8.20	1.11	18.12	33
2545	20	16-QAM	1/99	10.86	H	8.20	1.11	17.95	33
2593	20	16-QAM	1/99	10.52	H	8.20	1.11	17.61	33
2645.1	20	16-QAM	1/0	11.17	H	8.20	1.11	18.26	33

Note: Above is the worst mode data.

6.3. PEAK-TO-AVERAGE RATIO

6.3.1 MEASUREMENT METHOD

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

According to KDB 971168 D01v03 - Section 5.7:

a)Refer to instrument’s analyzer instruction manual for details on how to use the power statistics /CCDF function;

b) Set resolution/measurement bandwidth ≥ signal’s occupied bandwidth;

c) Set the number of counts to a value that stabilizes the measured CCDF curve;

d) Set the measurement interval to 1 ms

e) Record the maximum PAPR level associated with a probability of 0.1%

6.3.2 PROVISIONS APPLICABLE

This is the test for the Peak-to-Average Ratio from the EUT.

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument’s resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

6.3.3 MEASUREMENT RESULT

LTE Band 2
Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.92	<13	PASS
		1	3	4.03	<13	PASS
		1	5	3.56	<13	PASS
		3	0	3.50	<13	PASS
		3	2	3.52	<13	PASS
		3	3	5.52	<13	PASS
		6	0	5.46	<13	PASS
	MCH	1	0	5.09	<13	PASS
		1	3	5.19	<13	PASS
		1	5	4.08	<13	PASS
		3	0	4.19	<13	PASS
		3	2	5.17	<13	PASS
		3	3	5.22	<13	PASS
		6	0	4.11	<13	PASS
	HCH	1	0	3.31	<13	PASS
		1	3	3.45	<13	PASS
		1	5	3.26	<13	PASS
		3	0	3.37	<13	PASS
		3	2	3.39	<13	PASS
		3	3	3.40	<13	PASS
		6	0	5.33	<13	PASS
16QAM	LCH	1	0	4.54	<13	PASS
		1	3	5.72	<13	PASS
		1	5	4.53	<13	PASS
		3	0	4.51	<13	PASS
		3	2	4.01	<13	PASS
		3	3	3.50	<13	PASS
		6	0	5.50	<13	PASS
	MCH	1	0	5.26	<13	PASS
		1	3	4.42	<13	PASS
		1	5	4.25	<13	PASS
		3	0	4.18	<13	PASS
		3	2	5.19	<13	PASS

		3	3	5.21	<13	PASS
		6	0	6.01	<13	PASS
	HCH	1	0	5.21	<13	PASS
		1	3	5.35	<13	PASS
		1	5	5.16	<13	PASS
		3	0	4.40	<13	PASS
		3	2	4.38	<13	PASS
		3	3	4.40	<13	PASS
		6	0	5.34	<13	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.45	<13	PASS
		1	7	4.41	<13	PASS
		1	14	4.51	<13	PASS
		8	0	5.46	<13	PASS
		8	4	5.47	<13	PASS
		8	7	5.48	<13	PASS
		15	0	4.47	<13	PASS
	MCH	1	0	4.18	<13	PASS
		1	7	4.15	<13	PASS
		1	14	4.10	<13	PASS
		8	0	6.08	<13	PASS
		8	4	5.11	<13	PASS
		8	7	6.12	<13	PASS
		15	0	5.13	<13	PASS
	HCH	1	0	5.35	<13	PASS
		1	7	5.37	<13	PASS
		1	14	5.30	<13	PASS
		8	0	4.35	<13	PASS
		8	4	4.34	<13	PASS
		8	7	4.31	<13	PASS
		15	0	6.35	<13	PASS
16QAM	LCH	1	0	5.64	<13	PASS
		1	7	5.61	<13	PASS

		1	14	5.64	<13	PASS
		8	0	5.48	<13	PASS
		8	4	5.47	<13	PASS
		8	7	5.49	<13	PASS
		15	0	4.48	<13	PASS
	MCH	1	0	4.34	<13	PASS
		1	7	4.28	<13	PASS
		1	14	4.28	<13	PASS
		8	0	5.08	<13	PASS
		8	4	5.08	<13	PASS
		8	7	5.11	<13	PASS
		15	0	5.07	<13	PASS
	HCH	1	0	6.28	<13	PASS
		1	7	6.24	<13	PASS
		1	14	6.23	<13	PASS
		8	0	5.37	<13	PASS
		8	4	5.34	<13	PASS
		8	7	5.33	<13	PASS
		15	0	5.30	<13	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.45	<13	PASS
		1	12	3.54	<13	PASS
		1	24	3.38	<13	PASS
		12	0	2.44	<13	PASS
		12	6	5.43	<13	PASS
		12	13	5.44	<13	PASS
		25	0	5.51	<13	PASS
	MCH	1	0	5.14	<13	PASS
		1	12	4.24	<13	PASS
		1	24	3.08	<13	PASS
		12	0	3.15	<13	PASS
		12	6	3.15	<13	PASS

		12	13	3.13	<13	PASS
		25	0	3.17	<13	PASS
	HCH	1	0	4.40	<13	PASS
		1	12	4.49	<13	PASS
		1	24	4.31	<13	PASS
		12	0	5.40	<13	PASS
		12	6	5.41	<13	PASS
		12	13	5.34	<13	PASS
		25	0	5.43	<13	PASS
16QAM	LCH	1	0	5.46	<13	PASS
		1	12	5.55	<13	PASS
		1	24	5.46	<13	PASS
		12	0	3.40	<13	PASS
		12	6	3.41	<13	PASS
		12	13	4.48	<13	PASS
		25	0	4.50	<13	PASS
	MCH	1	0	3.32	<13	PASS
		1	12	5.41	<13	PASS
		1	24	4.24	<13	PASS
		12	0	5.11	<13	PASS
		12	6	4.15	<13	PASS
		12	13	4.06	<13	PASS
		25	0	3.13	<13	PASS
	HCH	1	0	3.41	<13	PASS
		1	12	5.52	<13	PASS
		1	24	5.31	<13	PASS
		12	0	4.40	<13	PASS
		12	6	4.42	<13	PASS
		12	13	5.30	<13	PASS
		25	0	3.45	<13	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.40	<13	PASS

		1	24	3.54	<13	PASS
		1	49	3.36	<13	PASS
		25	0	4.44	<13	PASS
		25	12	4.47	<13	PASS
		25	25	4.50	<13	PASS
		50	0	3.51	<13	PASS
	MCH	1	0	4.19	<13	PASS
		1	24	4.21	<13	PASS
		1	49	4.03	<13	PASS
		25	0	5.22	<13	PASS
		25	12	5.22	<13	PASS
		25	25	4.18	<13	PASS
		50	0	4.18	<13	PASS
	HCH	1	0	5.44	<13	PASS
		1	24	4.57	<13	PASS
		1	49	4.34	<13	PASS
		25	0	3.59	<13	PASS
		25	12	4.59	<13	PASS
		25	25	5.47	<13	PASS
		50	0	4.55	<13	PASS
16QAM	LCH	1	0	3.61	<13	PASS
		1	24	3.73	<13	PASS
		1	49	4.53	<13	PASS
		25	0	5.49	<13	PASS
		25	12	4.48	<13	PASS
		25	25	5.52	<13	PASS
		50	0	5.49	<13	PASS
	MCH	1	0	4.32	<13	PASS
		1	24	4.41	<13	PASS
		1	49	4.18	<13	PASS
		25	0	3.23	<13	PASS
		25	12	3.22	<13	PASS
		25	25	3.20	<13	PASS
		50	0	3.21	<13	PASS
	HCH	1	0	3.33	<13	PASS
		1	24	3.46	<13	PASS
		1	49	3.19	<13	PASS

		25	0	2.60	<13	PASS
		25	12	2.59	<13	PASS
		25	25	2.46	<13	PASS
		50	0	2.56	<13	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.36	<13	PASS
		1	37	3.40	<13	PASS
		1	74	3.30	<13	PASS
		37	0	2.49	<13	PASS
		37	18	2.47	<13	PASS
		37	38	2.50	<13	PASS
		75	0	2.50	<13	PASS
	MCH	1	0	3.14	<13	PASS
		1	37	3.14	<13	PASS
		1	74	2.92	<13	PASS
		37	0	3.19	<13	PASS
		37	18	3.18	<13	PASS
		37	38	3.21	<13	PASS
		75	0	3.21	<13	PASS
	HCH	1	0	4.18	<13	PASS
		1	37	4.49	<13	PASS
		1	74	4.28	<13	PASS
		37	0	5.52	<13	PASS
		37	18	5.49	<13	PASS
		37	38	5.53	<13	PASS
		75	0	4.53	<13	PASS
16QAM	LCH	1	0	4.56	<13	PASS
		1	37	4.59	<13	PASS
		1	74	3.50	<13	PASS
		37	0	4.53	<13	PASS
		37	18	5.48	<13	PASS
		37	38	5.49	<13	PASS
		75	0	4.43	<13	PASS
	MCH	1	0	4.41	<13	PASS
		1	37	4.41	<13	PASS

		1	74	2.21	<13	PASS
		37	0	2.23	<13	PASS
		37	18	2.21	<13	PASS
		37	38	2.19	<13	PASS
		75	0	2.18	<13	PASS
	HCH	1	0	2.06	<13	PASS
		1	37	2.37	<13	PASS
		1	74	2.16	<13	PASS
		37	0	2.54	<13	PASS
		37	18	2.52	<13	PASS
		37	38	2.51	<13	PASS
		75	0	2.47	<13	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.29	<13	PASS
		1	49	3.56	<13	PASS
		1	99	3.17	<13	PASS
		50	0	2.42	<13	PASS
		50	25	2.42	<13	PASS
		50	50	2.38	<13	PASS
		100	0	2.38	<13	PASS
	MCH	1	0	3.10	<13	PASS
		1	49	3.28	<13	PASS
		1	99	2.80	<13	PASS
		50	0	2.22	<13	PASS
		50	25	2.23	<13	PASS
		50	50	2.10	<13	PASS
		100	0	2.18	<13	PASS
	HCH	1	0	2.75	<13	PASS
		1	49	3.39	<13	PASS
		1	99	3.01	<13	PASS
		50	0	2.35	<13	PASS
		50	25	2.30	<13	PASS
		50	50	2.34	<13	PASS
		100	0	2.34	<13	PASS
16QAM	LCH	1	0	2.31	<13	PASS

		1	49	4.60	<13	PASS
		1	99	4.15	<13	PASS
		50	0	4.41	<13	PASS
		50	25	4.39	<13	PASS
		50	50	4.37	<13	PASS
		100	0	4.35	<13	PASS
	MCH	1	0	4.22	<13	PASS
		1	49	4.43	<13	PASS
		1	99	3.98	<13	PASS
		50	0	5.22	<13	PASS
		50	25	5.20	<13	PASS
		50	50	3.10	<13	PASS
		100	0	4.15	<13	PASS
	HCH	1	0	4.86	<13	PASS
		1	49	4.51	<13	PASS
		1	99	3.09	<13	PASS
		50	0	3.36	<13	PASS
		50	25	3.32	<13	PASS
		50	50	4.35	<13	PASS
		100	0	3.35	<13	PASS

LTE BAND 5
Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.42	<13	PASS
		1	3	3.12	<13	PASS
		1	5	3.25	<13	PASS
		3	0	4.02	<13	PASS
		3	2	4.16	<13	PASS
		3	3	4.00	<13	PASS
		6	0	4.31	<13	PASS
	MCH	1	0	3.11	<13	PASS
		1	3	3.20	<13	PASS
		1	5	3.36	<13	PASS
		3	0	4.16	<13	PASS
		3	2	4.85	<13	PASS
		3	3	4.13	<13	PASS
		6	0	3.20	<13	PASS
	HCH	1	0	5.00	<13	PASS
		1	3	5.11	<13	PASS
		1	5	5.01	<13	PASS
		3	0	5.01	<13	PASS
		3	2	5.04	<13	PASS
		3	3	5.06	<13	PASS
		6	0	4.05	<13	PASS
16QAM	LCH	1	0	3.10	<13	PASS
		1	3	3.02	<13	PASS
		1	5	3.03	<13	PASS
		3	0	4.03	<13	PASS
		3	2	4.01	<13	PASS
		3	3	4.05	<13	PASS
		6	0	3.36	<13	PASS
	MCH	1	0	4.15	<13	PASS
		1	3	3.44	<13	PASS
		1	5	3.33	<13	PASS
		3	0	2.12	<13	PASS
		3	2	2.11	<13	PASS
		3	3	2.24	<13	PASS

		6	0	3.41	<13	PASS
	HCH	1	0	4.62	<13	PASS
		1	3	4.13	<13	PASS
		1	5	4.42	<13	PASS
		3	0	2.28	<13	PASS
		3	2	2.27	<13	PASS
		3	3	2.13	<13	PASS
		6	0	2.26	<13	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	5.42	<13	PASS
		1	7	4.33	<13	PASS
		1	14	4.19	<13	PASS
		8	0	3.10	<13	PASS
		8	4	3.01	<13	PASS
		8	7	3.04	<13	PASS
		15	0	4.16	<13	PASS
	MCH	1	0	2.42	<13	PASS
		1	7	3.28	<13	PASS
		1	14	3.43	<13	PASS
		8	0	4.35	<13	PASS
		8	4	4.42	<13	PASS
		8	7	3.28	<13	PASS
		15	0	4.42	<13	PASS
	HCH	1	0	4.36	<13	PASS
		1	7	4.12	<13	PASS
		1	14	4.27	<13	PASS
		8	0	3.16	<13	PASS
		8	4	3.00	<13	PASS
		8	7	3.01	<13	PASS
		15	0	4.11	<13	PASS
16QAM	LCH	1	0	4.16	<13	PASS
		1	7	4.19	<13	PASS
		1	14	3.20	<13	PASS
		8	0	2.15	<13	PASS
		8	4	2.03	<13	PASS

		8	7	3.11	<13	PASS
		15	0	3.13	<13	PASS
	MCH	1	0	3.00	<13	PASS
		1	7	4.13	<13	PASS
		1	14	4.16	<13	PASS
		8	0	3.43	<13	PASS
		8	4	3.24	<13	PASS
		8	7	3.15	<13	PASS
		15	0	4.25	<13	PASS
	HCH	1	0	3.36	<13	PASS
		1	7	4.42	<13	PASS
		1	14	3.28	<13	PASS
		8	0	4.36	<13	PASS
		8	4	5.42	<13	PASS
		8	7	4.42	<13	PASS
		15	0	4.11	<13	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.18	<13	PASS
		1	12	3.02	<13	PASS
		1	24	4.06	<13	PASS
		12	0	5.14	<13	PASS
		12	6	4.13	<13	PASS
		12	13	4.19	<13	PASS
		25	0	3.04	<13	PASS
	MCH	1	0	4.13	<13	PASS
		1	12	4.10	<13	PASS
		1	24	4.65	<13	PASS
		12	0	3.45	<13	PASS
		12	6	3.33	<13	PASS
		12	13	3.28	<13	PASS
		25	0	3.46	<13	PASS
	HCH	1	0	4.21	<13	PASS
		1	12	4.13	<13	PASS
		1	24	4.12	<13	PASS
		12	0	4.36	<13	PASS

		12	6	3.41	<13	PASS
		12	13	3.25	<13	PASS
		25	0	4.16	<13	PASS
16QAM	LCH	1	0	5.11	<13	PASS
		1	12	5.25	<13	PASS
		1	24	5.28	<13	PASS
		12	0	4.42	<13	PASS
		12	6	4.16	<13	PASS
		12	13	4.14	<13	PASS
		25	0	3.28	<13	PASS
	MCH	1	0	4.24	<13	PASS
		1	12	4.33	<13	PASS
		1	24	4.20	<13	PASS
		12	0	3.00	<13	PASS
		12	6	3.01	<13	PASS
		12	13	3.05	<13	PASS
		25	0	4.11	<13	PASS
	HCH	1	0	5.58	<13	PASS
		1	12	5.47	<13	PASS
		1	24	5.69	<13	PASS
		12	0	3.47	<13	PASS
		12	6	5.42	<13	PASS
		12	13	3.19	<13	PASS
		25	0	5.21	<13	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.01	<13	PASS
		1	24	4.16	<13	PASS
		1	49	4.25	<13	PASS
		25	0	3.42	<13	PASS
		25	12	3.01	<13	PASS
		25	25	3.77	<13	PASS
		50	0	4.59	<13	PASS
	MCH	1	0	3.55	<13	PASS
		1	24	3.69	<13	PASS
		1	49	3.43	<13	PASS

		25	0	3.45	<13	PASS
		25	12	3.36	<13	PASS
		25	25	3.24	<13	PASS
		50	0	3.10	<13	PASS
	HCH	1	0	4.16	<13	PASS
		1	24	4.66	<13	PASS
		1	49	4.52	<13	PASS
		25	0	5.47	<13	PASS
		25	12	5.36	<13	PASS
		25	25	5.42	<13	PASS
		50	0	5.22	<13	PASS
16QAM	LCH	1	0	2.42	<13	PASS
		1	24	2.10	<13	PASS
		1	49	2.16	<13	PASS
		25	0	3.28	<13	PASS
		25	12	3.46	<13	PASS
		25	25	3.44	<13	PASS
		50	0	4.58	<13	PASS
	MCH	1	0	3.36	<13	PASS
		1	24	3.74	<13	PASS
		1	49	3.98	<13	PASS
		25	0	2.01	<13	PASS
		25	12	2.36	<13	PASS
		25	25	2.24	<13	PASS
		50	0	3.24	<13	PASS
	HCH	1	0	3.12	<13	PASS
		1	24	3.25	<13	PASS
		1	49	3.33	<13	PASS
		25	0	4.44	<13	PASS
		25	12	4.28	<13	PASS
		25	25	4.69	<13	PASS
		50	0	4.13	<13	PASS

LTE Band 7
Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.02	<13	PASS
		1	12	4.25	<13	PASS
		1	24	4.24	<13	PASS
		12	0	5.00	<13	PASS
		12	6	4.82	<13	PASS
		12	13	4.69	<13	PASS
		25	0	4.61	<13	PASS
	MCH	1	0	4.19	<13	PASS
		1	12	4.44	<13	PASS
		1	24	3.55	<13	PASS
		12	0	3.49	<13	PASS
		12	6	3.24	<13	PASS
		12	13	4.00	<13	PASS
		25	0	4.12	<13	PASS
	HCH	1	0	3.19	<13	PASS
		1	12	3.24	<13	PASS
		1	24	4.03	<13	PASS
		12	0	4.08	<13	PASS
		12	6	4.11	<13	PASS
		12	13	4.39	<13	PASS
		25	0	4.80	<13	PASS
16QAM	LCH	1	0	4.33	<13	PASS
		1	12	4.46	<13	PASS
		1	24	4.39	<13	PASS
		12	0	5.11	<13	PASS
		12	6	5.23	<13	PASS
		12	13	5.94	<13	PASS
		25	0	5.38	<13	PASS
	MCH	1	0	4.89	<13	PASS
		1	12	4.72	<13	PASS
		1	24	4.64	<13	PASS
		12	0	4.33	<13	PASS
		12	6	4.28	<13	PASS
		12	13	4.34	<13	PASS

		25	0	4.74	<13	PASS
	HCH	1	0	4.36	<13	PASS
		1	12	4.24	<13	PASS
		1	24	4.35	<13	PASS
		12	0	5.00	<13	PASS
		12	6	5.12	<13	PASS
		12	13	5.05	<13	PASS
		25	0	5.41	<13	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.57	<13	PASS
		1	24	4.69	<13	PASS
		1	49	4.55	<13	PASS
		25	0	3.26	<13	PASS
		25	12	3.36	<13	PASS
		25	25	4.00	<13	PASS
		50	0	4.45	<13	PASS
	MCH	1	0	4.26	<13	PASS
		1	24	4.33	<13	PASS
		1	49	3.49	<13	PASS
		25	0	3.53	<13	PASS
		25	12	4.47	<13	PASS
		25	25	4.33	<13	PASS
		50	0	4.42	<13	PASS
	HCH	1	0	3.28	<13	PASS
		1	24	4.39	<13	PASS
		1	49	4.42	<13	PASS
		25	0	4.47	<13	PASS
		25	12	4.33	<13	PASS
		25	25	4.28	<13	PASS
		50	0	4.30	<13	PASS
16QAM	LCH	1	0	4.11	<13	PASS
		1	24	4.25	<13	PASS
		1	49	4.33	<13	PASS
		25	0	5.11	<13	PASS
		25	12	5.21	<13	PASS

		25	25	5.23	<13	PASS
		50	0	4.79	<13	PASS
	MCH	1	0	3.87	<13	PASS
		1	24	3.49	<13	PASS
		1	49	3.85	<13	PASS
		25	0	3.13	<13	PASS
		25	12	3.11	<13	PASS
		25	25	3.56	<13	PASS
		50	0	4.54	<13	PASS
	HCH	1	0	6.23	<13	PASS
		1	24	6.44	<13	PASS
		1	49	6.23	<13	PASS
		25	0	5.51	<13	PASS
		25	12	5.15	<13	PASS
		25	25	5.22	<13	PASS
		50	0	5.42	<13	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.09	<13	PASS
		1	37	4.31	<13	PASS
		1	74	4.27	<13	PASS
		37	0	5.11	<13	PASS
		37	18	5.26	<13	PASS
		37	38	5.52	<13	PASS
		75	0	4.87	<13	PASS
	MCH	1	0	3.31	<13	PASS
		1	37	3.25	<13	PASS
		1	74	3.12	<13	PASS
		37	0	5.22	<13	PASS
		37	18	5.52	<13	PASS
		37	38	567	<13	PASS
		75	0	4.12	<13	PASS
	HCH	1	0	5.37	<13	PASS
		1	37	5.26	<13	PASS
		1	74	5.99	<13	PASS
		37	0	4.01	<13	PASS

		37	18	3.36	<13	PASS
		37	38	3.52	<13	PASS
		75	0	3.68	<13	PASS
16QAM	LCH	1	0	5.11	<13	PASS
		1	37	5.07	<13	PASS
		1	74	5.02	<13	PASS
		37	0	5.33	<13	PASS
		37	18	4.36	<13	PASS
		37	38	3.42	<13	PASS
		75	0	3.62	<13	PASS
	MCH	1	0	4.32	<13	PASS
		1	37	4.23	<13	PASS
		1	74	4.03	<13	PASS
		37	0	5.77	<13	PASS
		37	18	5.34	<13	PASS
		37	38	5.56	<13	PASS
		75	0	5.00	<13	PASS
	HCH	1	0	6.57	<13	PASS
		1	37	6.63	<13	PASS
		1	74	6.06	<13	PASS
		37	0	4.16	<13	PASS
		37	18	4.12	<13	PASS
		37	38	4.43	<13	PASS
		75	0	5.42	<13	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	5.15	<13	PASS
		1	49	5.33	<13	PASS
		1	99	5.19	<13	PASS
		50	0	4.77	<13	PASS
		50	25	4.69	<13	PASS
		50	50	4.56	<13	PASS
		100	0	5.66	<13	PASS
	MCH	1	0	6.00	<13	PASS
		1	49	5.96	<13	PASS
		1	99	5.88	<13	PASS

		50	0	3.31	<13	PASS
		50	25	3.44	<13	PASS
		50	50	3.41	<13	PASS
		100	0	3.66	<13	PASS
	HCH	1	0	3.43	<13	PASS
		1	49	3.44	<13	PASS
		1	99	3.28	<13	PASS
		50	0	4.11	<13	PASS
		50	25	4.23	<13	PASS
		50	50	4.28	<13	PASS
		100	0	4.66	<13	PASS
16QAM	LCH	1	0	3.55	<13	PASS
		1	49	3.46	<13	PASS
		1	99	3.48	<13	PASS
		50	0	5.11	<13	PASS
		50	25	5.09	<13	PASS
		50	50	5.08	<13	PASS
		100	0	5.58	<13	PASS
	MCH	1	0	4.33	<13	PASS
		1	49	4.29	<13	PASS
		1	99	4.43	<13	PASS
		50	0	5.36	<13	PASS
		50	25	5.42	<13	PASS
		50	50	5.39	<13	PASS
		100	0	4.65	<13	PASS
	HCH	1	0	4.28	<13	PASS
		1	49	4.43	<13	PASS
		1	99	4.46	<13	PASS
		50	0	3.55	<13	PASS
		50	25	3.49	<13	PASS
		50	50	3.34	<13	PASS
		100	0	4.61	<13	PASS

LTE BAND 12
Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.55	<13	PASS
		1	3	3.14	<13	PASS
		1	5	3.00	<13	PASS
		3	0	4.59	<13	PASS
		3	2	4.78	<13	PASS
		3	3	4.36	<13	PASS
		6	0	5.14	<13	PASS
	MCH	1	0	3.22	<13	PASS
		1	3	3.26	<13	PASS
		1	5	4.49	<13	PASS
		3	0	4.49	<13	PASS
		3	2	4.56	<13	PASS
		3	3	4.46	<13	PASS
		6	0	4.33	<13	PASS
	HCH	1	0	3.42	<13	PASS
		1	3	3.48	<13	PASS
		1	5	3.50	<13	PASS
		3	0	3.46	<13	PASS
		3	2	3.36	<13	PASS
		3	3	3.59	<13	PASS
		6	0	4.97	<13	PASS
16QAM	LCH	1	0	4.44	<13	PASS
		1	3	4.37	<13	PASS
		1	5	4.49	<13	PASS
		3	0	5.11	<13	PASS
		3	2	5.23	<13	PASS
		3	3	5.84	<13	PASS
		6	0	6.79	<13	PASS
	MCH	1	0	4.00	<13	PASS
		1	3	5.56	<13	PASS
		1	5	5.59	<13	PASS
		3	0	5.46	<13	PASS
		3	2	5.74	<13	PASS
		3	3	5.96	<13	PASS

		6	0	5.47	<13	PASS
	HCH	1	0	4.56	<13	PASS
		1	3	4.96	<13	PASS
		1	5	4.25	<13	PASS
		3	0	4.53	<13	PASS
		3	2	4.43	<13	PASS
		3	3	4.94	<13	PASS
		6	0	5.00	<13	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.19	<13	PASS
		1	7	4.21	<13	PASS
		1	14	4.26	<13	PASS
		8	0	3.18	<13	PASS
		8	4	3.19	<13	PASS
		8	7	3.19	<13	PASS
		15	0	3.21	<13	PASS
	MCH	1	0	4.40	<13	PASS
		1	7	4.40	<13	PASS
		1	14	4.34	<13	PASS
		8	0	3.36	<13	PASS
		8	4	3.33	<13	PASS
		8	7	3.39	<13	PASS
		15	0	3.38	<13	PASS
	HCH	1	0	4.16	<13	PASS
		1	7	4.02	<13	PASS
		1	14	3.98	<13	PASS
		8	0	3.00	<13	PASS
		8	4	3.01	<13	PASS
		8	7	3.01	<13	PASS
		15	0	3.01	<13	PASS
16QAM	LCH	1	0	3.30	<13	PASS
		1	7	3.31	<13	PASS
		1	14	3.38	<13	PASS
		8	0	3.19	<13	PASS
		8	4	3.20	<13	PASS

		8	7	5.21	<13	PASS
		15	0	6.19	<13	PASS
	MCH	1	0	5.48	<13	PASS
		1	7	5.45	<13	PASS
		1	14	5.42	<13	PASS
		8	0	5.38	<13	PASS
		8	4	4.37	<13	PASS
		8	7	4.36	<13	PASS
		15	0	4.27	<13	PASS
	HCH	1	0	4.98	<13	PASS
		1	7	4.85	<13	PASS
		1	14	4.79	<13	PASS
		8	0	5.01	<13	PASS
		8	4	5.00	<13	PASS
		8	7	5.00	<13	PASS
		15	0	4.89	<13	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.22	<13	PASS
		1	12	4.35	<13	PASS
		1	24	4.32	<13	PASS
		12	0	3.26	<13	PASS
		12	6	3.22	<13	PASS
		12	13	3.29	<13	PASS
		25	0	3.27	<13	PASS
	MCH	1	0	4.34	<13	PASS
		1	12	4.47	<13	PASS
		1	24	4.32	<13	PASS
		12	0	3.30	<13	PASS
		12	6	3.30	<13	PASS
		12	13	3.37	<13	PASS
		25	0	3.40	<13	PASS
	HCH	1	0	4.22	<13	PASS
		1	12	4.19	<13	PASS
		1	24	4.01	<13	PASS
		12	0	3.21	<13	PASS

		12	6	3.23	<13	PASS
		12	13	3.02	<13	PASS
		25	0	3.14	<13	PASS
16QAM	LCH	1	0	3.11	<13	PASS
		1	12	3.29	<13	PASS
		1	24	3.29	<13	PASS
		12	0	3.22	<13	PASS
		12	6	3.23	<13	PASS
		12	13	3.29	<13	PASS
		25	0	5.27	<13	PASS
	MCH	1	0	5.46	<13	PASS
		1	12	5.57	<13	PASS
		1	24	5.43	<13	PASS
		12	0	4.35	<13	PASS
		12	6	4.31	<13	PASS
		12	13	4.35	<13	PASS
		25	0	5.33	<13	PASS
	HCH	1	0	3.16	<13	PASS
		1	12	3.12	<13	PASS
		1	24	3.82	<13	PASS
		12	0	4.25	<13	PASS
		12	6	4.21	<13	PASS
		12	13	4.03	<13	PASS
		25	0	5.12	<13	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.15	<13	PASS
		1	24	4.43	<13	PASS
		1	49	4.36	<13	PASS
		25	0	3.41	<13	PASS
		25	12	3.41	<13	PASS
		25	25	3.50	<13	PASS
		50	0	3.42	<13	PASS
	MCH	1	0	4.31	<13	PASS
		1	24	4.48	<13	PASS
		1	49	4.18	<13	PASS

		25	0	3.34	<13	PASS
		25	12	3.33	<13	PASS
		25	25	3.32	<13	PASS
		50	0	3.36	<13	PASS
	HCH	1	0	4.36	<13	PASS
		1	24	4.36	<13	PASS
		1	49	3.99	<13	PASS
		25	0	3.39	<13	PASS
		25	12	3.39	<13	PASS
		25	25	3.12	<13	PASS
		50	0	3.20	<13	PASS
16QAM	LCH	1	0	3.23	<13	PASS
		1	24	3.53	<13	PASS
		1	49	3.47	<13	PASS
		25	0	3.40	<13	PASS
		25	12	3.41	<13	PASS
		25	25	3.50	<13	PASS
		50	0	5.36	<13	PASS
	MCH	1	0	2.40	<13	PASS
		1	24	2.53	<13	PASS
		1	49	2.29	<13	PASS
		25	0	4.34	<13	PASS
		25	12	4.34	<13	PASS
		25	25	4.31	<13	PASS
		50	0	5.31	<13	PASS
	HCH	1	0	5.23	<13	PASS
		1	24	5.17	<13	PASS
		1	49	5.81	<13	PASS
		25	0	2.40	<13	PASS
		25	12	2.38	<13	PASS
		25	25	2.14	<13	PASS
		50	0	5.19	<13	PASS

LTE BAND 17
Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	5.42	<13	PASS
		1	12	5.33	<13	PASS
		1	24	5.12	<13	PASS
		12	0	4.55	<13	PASS
		12	6	4.12	<13	PASS
		12	13	4.20	<13	PASS
		25	0	6.41	<13	PASS
	MCH	1	0	5.00	<13	PASS
		1	12	5.23	<13	PASS
		1	24	5.53	<13	PASS
		12	0	4.44	<13	PASS
		12	6	5.01	<13	PASS
		12	13	5.12	<13	PASS
		25	0	4.26	<13	PASS
	HCH	1	0	5.03	<13	PASS
		1	12	5.11	<13	PASS
		1	24	5.42	<13	PASS
		12	0	4.26	<13	PASS
		12	6	4.25	<13	PASS
		12	13	4.22	<13	PASS
		25	0	5.33	<13	PASS
16QAM	LCH	1	0	5.00	<13	PASS
		1	12	5.12	<13	PASS
		1	24	5.42	<13	PASS
		12	0	4.23	<13	PASS
		12	6	4.12	<13	PASS
		12	13	4.55	<13	PASS
		25	0	4.59	<13	PASS
	MCH	1	0	5.44	<13	PASS
		1	12	5.62	<13	PASS
		1	24	5.46	<13	PASS
		12	0	5.66	<13	PASS
		12	6	4.47	<13	PASS
		12	13	4.25	<13	PASS

		25	0	4.63	<13	PASS
	HCH	1	0	5.24	<13	PASS
		1	12	5.16	<13	PASS
		1	24	5.49	<13	PASS
		12	0	4.28	<13	PASS
		12	6	4.43	<13	PASS
		12	13	4.22	<13	PASS
		25	0	6.25	<13	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.77	<13	PASS
		1	24	4.69	<13	PASS
		1	49	4.56	<13	PASS
		25	0	3.42	<13	PASS
		25	12	3.33	<13	PASS
		25	25	3.19	<13	PASS
		50	0	5.19	<13	PASS
	MCH	1	0	5.58	<13	PASS
		1	24	5.47	<13	PASS
		1	49	3.58	<13	PASS
		25	0	3.33	<13	PASS
		25	12	3.24	<13	PASS
		25	25	4.12	<13	PASS
		50	0	4.02	<13	PASS
	HCH	1	0	4.19	<13	PASS
		1	24	4.33	<13	PASS
		1	49	4.17	<13	PASS
		25	0	4.30	<13	PASS
		25	12	3.43	<13	PASS
		25	25	3.00	<13	PASS
		50	0	3.43	<13	PASS
16QAM	LCH	1	0	4.52	<13	PASS
		1	24	4.39	<13	PASS
		1	49	4.74	<13	PASS
		25	0	5.69	<13	PASS
		25	12	5.58	<13	PASS

		25	25	5.27	<13	PASS
		50	0	5.33	<13	PASS
	MCH	1	0	4.19	<13	PASS
		1	24	4.28	<13	PASS
		1	49	4.27	<13	PASS
		25	0	4.46	<13	PASS
		25	12	5.26	<13	PASS
		25	25	5.43	<13	PASS
		50	0	5.69	<13	PASS
	HCH	1	0	4.55	<13	PASS
		1	24	4.20	<13	PASS
		1	49	4.34	<13	PASS
		25	0	5.42	<13	PASS
		25	12	5.33	<13	PASS
		25	25	5.49	<13	PASS
		50	0	5.66	<13	PASS

LTE BAND 40

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	5.00	<13	PASS
		1	12	5.11	<13	PASS
		1	24	5.23	<13	PASS
		12	0	3.55	<13	PASS
		12	6	3.59	<13	PASS
		12	13	3.43	<13	PASS
		25	0	4.22	<13	PASS
	MCH	1	0	4.42	<13	PASS
		1	12	4.28	<13	PASS
		1	24	4.38	<13	PASS
		12	0	3.42	<13	PASS
		12	6	3.44	<13	PASS
		12	13	3.69	<13	PASS
		25	0	4.75	<13	PASS
	HCH	1	0	4.64	<13	PASS
		1	12	4.00	<13	PASS
		1	24	4.41	<13	PASS
		12	0	5.22	<13	PASS
		12	6	5.16	<13	PASS
		12	13	5.12	<13	PASS
		25	0	6.00	<13	PASS
16QAM	LCH	1	0	4.85	<13	PASS
		1	12	4.69	<13	PASS
		1	24	4.74	<13	PASS
		12	0	5.63	<13	PASS
		12	6	5.57	<13	PASS
		12	13	5.69	<13	PASS
		25	0	3.43	<13	PASS
	MCH	1	0	3.25	<13	PASS
		1	12	3.38	<13	PASS
		1	24	3.41	<13	PASS
		12	0	4.25	<13	PASS
		12	6	4.33	<13	PASS
		12	13	4.49	<13	PASS

		25	0	5.52	<13	PASS
	HCH	1	0	4.56	<13	PASS
		1	12	4.43	<13	PASS
		1	24	4.28	<13	PASS
		12	0	6.38	<13	PASS
		12	6	6.11	<13	PASS
		12	13	6.26	<13	PASS
		25	0	5.59	<13	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.69	<13	PASS
		1	24	3.77	<13	PASS
		1	49	3.88	<13	PASS
		25	0	5.00	<13	PASS
		25	12	5.13	<13	PASS
		25	25	5.10	<13	PASS
		50	0	6.58	<13	PASS
	MCH	1	0	3.69	<13	PASS
		1	24	3.85	<13	PASS
		1	49	3.99	<13	PASS
		25	0	6.77	<13	PASS
		25	12	6.58	<13	PASS
		25	25	6.64	<13	PASS
		50	0	5.00	<13	PASS
	HCH	1	0	6.56	<13	PASS
		1	24	6.68	<13	PASS
		1	49	6.37	<13	PASS
		25	0	4.74	<13	PASS
		25	12	4.69	<13	PASS
		25	25	4.77	<13	PASS
		50	0	6.36	<13	PASS
16QAM	LCH	1	0	5.53	<13	PASS
		1	24	5.28	<13	PASS
		1	49	5.43	<13	PASS
		25	0	4.15	<13	PASS
		25	12	4.23	<13	PASS

		25	25	4.03	<13	PASS
		50	0	5.42	<13	PASS
	MCH	1	0	3.14	<13	PASS
		1	24	3.45	<13	PASS
		1	49	3.36	<13	PASS
		25	0	5.45	<13	PASS
		25	12	5.25	<13	PASS
		25	25	5.50	<13	PASS
		50	0	6.00	<13	PASS
	HCH	1	0	3.69	<13	PASS
		1	24	3.99	<13	PASS
		1	49	3.87	<13	PASS
		25	0	4.54	<13	PASS
		25	12	4.53	<13	PASS
		25	25	4.64	<13	PASS
		50	0	5.30	<13	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.00	<13	PASS
		1	37	3.45	<13	PASS
		1	74	3.36	<13	PASS
		37	0	5.58	<13	PASS
		37	18	5.55	<13	PASS
		37	38	5.61	<13	PASS
		75	0	4.85	<13	PASS
	MCH	1	0	3.95	<13	PASS
		1	37	3.87	<13	PASS
		1	74	3.69	<13	PASS
		37	0	5.00	<13	PASS
		37	18	5.27	<13	PASS
		37	38	5.11	<13	PASS
		75	0	4.58	<13	PASS
	HCH	1	0	5.08	<13	PASS
		1	37	5.04	<13	PASS
		1	74	5.09	<13	PASS
		37	0	3.53	<13	PASS

		37	18	3.61	<13	PASS
		37	38	3.64	<13	PASS
		75	0	5.02	<13	PASS
16QAM	LCH	1	0	4.11	<13	PASS
		1	37	4.36	<13	PASS
		1	74	4.42	<13	PASS
		37	0	3.85	<13	PASS
		37	18	3.69	<13	PASS
		37	38	3.77	<13	PASS
		75	0	5.56	<13	PASS
	MCH	1	0	5.69	<13	PASS
		1	37	5.46	<13	PASS
		1	74	5.00	<13	PASS
		37	0	6.13	<13	PASS
		37	18	6.22	<13	PASS
		37	38	6.19	<13	PASS
		75	0	5.44	<13	PASS
	HCH	1	0	4.25	<13	PASS
		1	37	4.42	<13	PASS
		1	74	4.36	<13	PASS
		37	0	3.58	<13	PASS
		37	18	3.62	<13	PASS
		37	38	3.44	<13	PASS
		75	0	4.58	<13	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	6.00	<13	PASS
		1	49	6.12	<13	PASS
		1	99	6.09	<13	PASS
		50	0	5.42	<13	PASS
		50	25	5.52	<13	PASS
		50	50	5.53	<13	PASS
		100	0	4.38	<13	PASS
	MCH	1	0	3.12	<13	PASS
		1	49	3.08	<13	PASS
		1	99	3.15	<13	PASS

		50	0	4.36	<13	PASS
		50	25	4.42	<13	PASS
		50	50	4.38	<13	PASS
		100	0	3.69	<13	PASS
	HCH	1	0	3.74	<13	PASS
		1	49	3.78	<13	PASS
		1	99	3.33	<13	PASS
		50	0	5.21	<13	PASS
		50	25	5.36	<13	PASS
		50	50	5.42	<13	PASS
		100	0	4.48	<13	PASS
16QAM	LCH	1	0	3.36	<13	PASS
		1	49	3.42	<13	PASS
		1	99	3.28	<13	PASS
		50	0	4.49	<13	PASS
		50	25	4.61	<13	PASS
		50	50	4.63	<13	PASS
		100	0	5.13	<13	PASS
	MCH	1	0	5.22	<13	PASS
		1	49	5.13	<13	PASS
		1	99	5.00	<13	PASS
		50	0	4.42	<13	PASS
		50	25	4.51	<13	PASS
		50	50	4.34	<13	PASS
		100	0	5.12	<13	PASS
	HCH	1	0	5.23	<13	PASS
		1	49	5.25	<13	PASS
		1	99	5.42	<13	PASS
		50	0	6.28	<13	PASS
		50	25	6.36	<13	PASS
		50	50	5.44	<13	PASS
		100	0	3.69	<13	PASS

LTE BAND 41

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	6.00	<13	PASS
		1	12	6.14	<13	PASS
		1	24	6.23	<13	PASS
		12	0	5.11	<13	PASS
		12	6	5.07	<13	PASS
		12	13	5.16	<13	PASS
		25	0	6.33	<13	PASS
	MCH	1	0	6.34	<13	PASS
		1	12	6.52	<13	PASS
		1	24	6.03	<13	PASS
		12	0	5.15	<13	PASS
		12	6	5.02	<13	PASS
		12	13	5.01	<13	PASS
		25	0	4.27	<13	PASS
	HCH	1	0	3.85	<13	PASS
		1	12	3.76	<13	PASS
		1	24	3.68	<13	PASS
		12	0	4.52	<13	PASS
		12	6	4.69	<13	PASS
		12	13	4.45	<13	PASS
		25	0	5.21	<13	PASS
16QAM	LCH	1	0	5.33	<13	PASS
		1	12	5.27	<13	PASS
		1	24	5.25	<13	PASS
		12	0	3.52	<13	PASS
		12	6	3.38	<13	PASS
		12	13	3.56	<13	PASS
		25	0	4.77	<13	PASS
	MCH	1	0	4.69	<13	PASS
		1	12	4.85	<13	PASS
		1	24	4.89	<13	PASS
		12	0	5.00	<13	PASS
		12	6	5.12	<13	PASS
		12	13	5.23	<13	PASS

		25	0	5.00	<13	PASS
	HCH	1	0	6.45	<13	PASS
		1	12	6.64	<13	PASS
		1	24	6.38	<13	PASS
		12	0	4.45	<13	PASS
		12	6	4.55	<13	PASS
		12	13	4.56	<13	PASS
		25	0	4.69	<13	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	6.41	<13	PASS
		1	24	6.28	<13	PASS
		1	49	6.35	<13	PASS
		25	0	5.42	<13	PASS
		25	12	5.33	<13	PASS
		25	25	5.64	<13	PASS
		50	0	4.63	<13	PASS
	MCH	1	0	5.66	<13	PASS
		1	24	5.59	<13	PASS
		1	49	5.63	<13	PASS
		25	0	4.39	<13	PASS
		25	12	4.78	<13	PASS
		25	25	4.46	<13	PASS
		50	0	3.30	<13	PASS
	HCH	1	0	5.12	<13	PASS
		1	24	5.23	<13	PASS
		1	49	5.47	<13	PASS
		25	0	3.49	<13	PASS
		25	12	3.56	<13	PASS
		25	25	3.77	<13	PASS
		50	0	5.23	<13	PASS
16QAM	LCH	1	0	5.40	<13	PASS
		1	24	5.41	<13	PASS
		1	49	5.66	<13	PASS
		25	0	3.74	<13	PASS
		25	12	3.69	<13	PASS

		25	25	3.64	<13	PASS
		50	0	6.32	<13	PASS
	MCH	1	0	5.11	<13	PASS
		1	24	5.23	<13	PASS
		1	49	5.42	<13	PASS
		25	0	4.25	<13	PASS
		25	12	4.41	<13	PASS
		25	25	4.22	<13	PASS
		50	0	3.36	<13	PASS
	HCH	1	0	5.25	<13	PASS
		1	24	5.12	<13	PASS
		1	49	5.45	<13	PASS
		25	0	4.41	<13	PASS
		25	12	4.36	<13	PASS
		25	25	4.74	<13	PASS
		50	0	3.69	<13	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	5.00	<13	PASS
		1	37	5.02	<13	PASS
		1	74	5.03	<13	PASS
		37	0	4.45	<13	PASS
		37	18	4.55	<13	PASS
		37	38	4.53	<13	PASS
		75	0	3.42	<13	PASS
	MCH	1	0	5.28	<13	PASS
		1	37	5.37	<13	PASS
		1	74	5.23	<13	PASS
		37	0	4.42	<13	PASS
		37	18	4.36	<13	PASS
		37	38	4.42	<13	PASS
		75	0	6.12	<13	PASS
	HCH	1	0	5.85	<13	PASS
		1	37	5.56	<13	PASS
		1	74	5.50	<13	PASS
		37	0	4.75	<13	PASS

		37	18	4.77	<13	PASS
		37	38	4.99	<13	PASS
		75	0	4.45	<13	PASS
16QAM	LCH	1	0	3.33	<13	PASS
		1	37	3.42	<13	PASS
		1	74	3.35	<13	PASS
		37	0	4.22	<13	PASS
		37	18	4.28	<13	PASS
		37	38	4.43	<13	PASS
		75	0	5.25	<13	PASS
	MCH	1	0	5.40	<13	PASS
		1	37	5.74	<13	PASS
		1	74	3.69	<13	PASS
		37	0	3.78	<13	PASS
		37	18	3.66	<13	PASS
		37	38	5.66	<13	PASS
		75	0	5.77	<13	PASS
	HCH	1	0	5.58	<13	PASS
		1	37	5.43	<13	PASS
		1	74	5.25	<13	PASS
		37	0	4.11	<13	PASS
		37	18	4.23	<13	PASS
		37	38	4.46	<13	PASS
		75	0	5.74	<13	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.00	<13	PASS
		1	49	3.12	<13	PASS
		1	99	3.09	<13	PASS
		50	0	4.69	<13	PASS
		50	25	4.74	<13	PASS
		50	50	4.66	<13	PASS
		100	0	5.00	<13	PASS
	MCH	1	0	3.99	<13	PASS
		1	49	3.78	<13	PASS
		1	99	3.97	<13	PASS

		50	0	4.58	<13	PASS
		50	25	4.50	<13	PASS
		50	50	4.46	<13	PASS
		100	0	3.54	<13	PASS
	HCH	1	0	5.00	<13	PASS
		1	49	5.06	<13	PASS
		1	99	5.12	<13	PASS
		50	0	6.31	<13	PASS
		50	25	6.36	<13	PASS
		50	50	6.37	<13	PASS
		100	0	5.55	<13	PASS
16QAM	LCH	1	0	5.78	<13	PASS
		1	49	5.66	<13	PASS
		1	99	5.58	<13	PASS
		50	0	3.45	<13	PASS
		50	25	3.36	<13	PASS
		50	50	3.42	<13	PASS
		100	0	5.09	<13	PASS
	MCH	1	0	5.12	<13	PASS
		1	49	5.11	<13	PASS
		1	99	5.69	<13	PASS
		50	0	5.74	<13	PASS
		50	25	5.33	<13	PASS
		50	50	5.54	<13	PASS
		100	0	7.01	<13	PASS
	HCH	1	0	3.69	<13	PASS
		1	49	3.77	<13	PASS
		1	99	3.58	<13	PASS
		50	0	4.46	<13	PASS
		50	25	4.52	<13	PASS
		50	50	4.38	<13	PASS
		100	0	4.44	<13	PASS

7. SPURIOUS EMISSION

7.1 CONDUCTED SPURIOUS EMISSION

7.1.1 MEASUREMENT METHOD

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

The minimum permissible attenuation level of any spurious emission is 43 + log10(P[Watts]), where P is the transmitter power in Watts.

For Band 7:
(i) 40 + 10 log10 p from the channel edges to 5 MHz away
(ii) 43 + 10 log10 p between 5 MHz and X MHz from the channel edges, and
(iii) 55 + 10 log10 p at X MHz and beyond from the channel edges

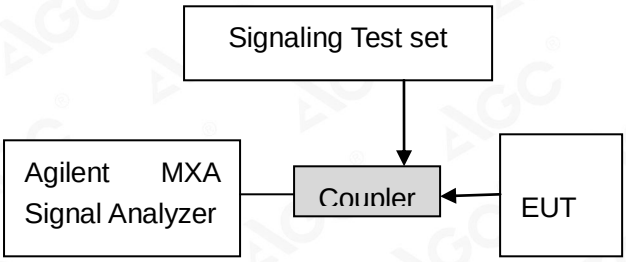
Test Procedure Used
KDB 971168 D01v03 – Section 6.0

Test Settings

1. Start frequency was set to 30MHz and stop frequency was set to at least 10 * the fundamental frequency (separated into at least two plots per channel)
2. Detector = RMS
3. Trace mode = max hold
4. Sweep time = auto couple
5. The trace was allowed to stabilize
6. Please see test notes below for RBW and VBW settings

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Test Instrument & Measurement Setup

shall be attenuated below the transmitter power (P, in Watts) by at least 43+10Log(P) dB. For all power levels +30 dBm to 0 dBm, this becomes a constant specification limit of -13 dBm.

Test Note

Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than 1 GHz. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

7.1.2 MEASUREMENT RESULT

PLEASE REFER TO: APPENDIX A TEST PLOTS FOR CONDUCTED SPURIOUS EMISSION

Note: 1. No emission found in standby or receive mode, no recording in this report.

7.2 RADIATED SPURIOUS EMISSION

7.2.1. MEASUREMENT PROCEDURE

1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.