

LTE Cat NB Appendix-Output Power

LTE FDD Band 2, SCS:3.75KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: EIRP (dBm)	IC: EIRP (dBm)
		Size	Offset				
QPSK	LCH	1	0	24.11	1.3	25.41	25.41
	MCH	1	0	24.11	1.3	25.41	25.41
	HCH	1	47	24.48	1.3	25.78	25.78
BPSK	LCH	1	0	24.08	1.3	25.38	25.38
	MCH	1	0	24.18	1.3	25.48	25.48
	HCH	1	47	24.53	1.3	25.83	25.83

LTE FDD Band 2, SCS:15KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: EIRP (dBm)	IC: EIRP (dBm)
		Size	Offset				
QPSK	LCH	1	0	24.05	1.3	25.35	25.35
		12	0	21.67	1.3	22.97	22.97
	MCH	1	0	24.19	1.3	25.49	25.49
		12	0	21.72	1.3	23.02	23.02
	HCH	1	11	24.57	1.3	25.87	25.87
		12	11	22.11	1.3	23.41	23.41
BPSK	LCH	1	0	23.99	1.3	25.29	25.29
	MCH	1	0	24.1	1.3	25.4	25.4
	HCH	1	11	24.56	1.3	25.86	25.86

Remark: EIRP limit for FCC/IC band 2 is 33dBm, so test result is pass.

LTE FDD Band 4, SCS:3.75KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: EIRP (dBm)	IC: EIRP (dBm)
		Size	Offset				
QPSK	LCH	1	0	23.95	1.3	25.25	25.25
	MCH	1	0	23.88	1.3	25.18	25.18
	HCH	1	47	24.01	1.3	25.31	25.31
BPSK	LCH	1	0	23.92	1.3	25.22	25.22
	MCH	1	0	23.88	1.3	25.18	25.18
	HCH	1	47	23.98	1.3	25.28	25.28

LTE FDD Band 4, SCS:15KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: EIRP (dBm)	IC: EIRP (dBm)
		Size	Offset				
QPSK	LCH	1	0	24.02	1.3	25.32	25.32
		12	0	21.87	1.3	23.17	23.17
	MCH	1	0	24.06	1.3	25.36	25.36
		12	0	21.93	1.3	23.23	23.23
	HCH	1	11	24.03	1.3	25.33	25.33
		12	11	21.93	1.3	23.23	23.23
BPSK	LCH	1	0	23.9	1.3	25.2	25.2
	MCH	1	0	23.96	1.3	25.26	25.26
	HCH	1	11	23.98	1.3	25.28	25.28

Remark: EIRP limit for FCC/IC band 4 is 30dBm, so test result is pass.

LTE FDD Band 5, SCS:3.75KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: ERP (dBm)	IC: ERP (dBm)
		Size	Offset				
QPSK	LCH	1	0	23.65	1.9	23.4	23.4
	MCH	1	0	23.82	1.9	23.57	23.57
	HCH	1	47	23.78	1.9	23.53	23.53
BPSK	LCH	1	0	23.58	1.9	23.33	23.33
	MCH	1	0	23.77	1.9	23.52	23.52
	HCH	1	47	23.74	1.9	23.49	23.49

LTE FDD Band 5, SCS:15KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: ERP (dBm)	IC: ERP (dBm)
		Size	Offset				
QPSK	LCH	1	0	23.77	1.9	23.52	23.52
		12	0	21.7	1.9	21.45	21.45
	MCH	1	0	23.92	1.9	23.67	23.67
		12	0	21.91	1.9	21.66	21.66
	HCH	1	11	23.82	1.9	23.57	23.57
		12	11	21.87	1.9	21.62	21.62
BPSK	LCH	1	0	23.63	1.9	23.38	23.38
	MCH	1	0	23.85	1.9	23.6	23.6
	HCH	1	11	23.76	1.9	23.51	23.51

Remark: ERP limit for FCC/IC band 5 is 38.45dBm, so test result is pass.

LTE FDD Band 12, SCS:3.75KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: ERP (dBm)	IC: ERP (dBm)
		Size	Offset				
QPSK	LCH	1	0	23.81	1.7	23.36	23.36
	MCH	1	0	23.99	1.7	23.54	23.54
	HCH	1	47	23.76	1.7	23.31	23.31
BPSK	LCH	1	0	23.79	1.7	23.34	23.34
	MCH	1	0	23.96	1.7	23.51	23.51
	HCH	1	47	23.79	1.7	23.34	23.34

LTE FDD Band 12, SCS:15KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: ERP (dBm)	IC: ERP (dBm)
		Size	Offset				
QPSK	LCH	1	0	23.93	1.7	23.48	23.48
		12	0	21.78	1.7	21.33	21.33
	MCH	1	0	24.16	1.7	23.71	23.71
		12	0	22.03	1.7	21.58	21.58
	HCH	1	11	23.96	1.7	23.51	23.51
		12	11	21.88	1.7	21.43	21.43
BPSK	LCH	1	0	23.84	1.7	23.39	23.39
	MCH	1	0	24.08	1.7	23.63	23.63
	HCH	1	11	23.9	1.7	23.45	23.45

Remark: ERP limit for FCC/IC band 12 is 34.77dBm, so test result is pass.

LTE FDD Band 13, SCS:3.75KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: ERP (dBm)	IC: ERP (dBm)
		Size	Offset				
QPSK	LCH	1	0	23.89	1.7	23.44	23.44
	MCH	1	0	23.84	1.7	23.39	23.39
	HCH	1	47	23.72	1.7	23.27	23.27
BPSK	LCH	1	0	23.87	1.7	23.42	23.42
	MCH	1	0	23.83	1.7	23.38	23.38
	HCH	1	47	23.76	1.7	23.31	23.31

LTE FDD Band 13, SCS:15KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: ERP (dBm)	IC: ERP (dBm)
		Size	Offset				
QPSK	LCH	1	0	24.05	1.7	23.6	23.6
		12	0	22.15	1.7	21.7	21.7
	MCH	1	0	24.03	1.7	23.58	23.58
		12	0	21.98	1.7	21.53	21.53
	HCH	1	11	23.99	1.7	23.54	23.54
		12	11	22.01	1.7	21.56	21.56
BPSK	LCH	1	0	23.91	1.7	23.46	23.46
	MCH	1	0	23.93	1.7	23.48	23.48
	HCH	1	11	23.89	1.7	23.44	23.44

Remark: ERP limit for FCC/IC band 13 is 34.77dBm, so test result is pass.

LTE FDD Band 25, SCS:3.75KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: EIRP (dBm)	IC: EIRP (dBm)
		Size	Offset				
QPSK	LCH	1	0	24.05	1.3	25.35	25.35
	MCH	1	0	24.13	1.3	25.43	25.43
	HCH	1	47	24.38	1.3	25.68	25.68
BPSK	LCH	1	0	24.11	1.3	25.41	25.41
	MCH	1	0	24.1	1.3	25.4	25.4
	HCH	1	47	24.26	1.3	25.56	25.56

LTE FDD Band 25, SCS:15KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: EIRP (dBm)	IC: EIRP (dBm)
		Size	Offset				
QPSK	LCH	1	0	23.97	1.3	25.27	25.27
		12	0	21.66	1.3	22.96	22.96
	MCH	1	0	24.3	1.3	25.6	25.6
		12	0	21.68	1.3	22.98	22.98
	HCH	1	11	24.28	1.3	25.58	25.58
		12	11	21.74	1.3	23.04	23.04
BPSK	LCH	1	0	23.86	1.3	25.16	25.16
	MCH	1	0	24.21	1.3	25.51	25.51
	HCH	1	11	24.2	1.3	25.5	25.5

Remark: EIRP limit for FCC/IC band 25 is 33dBm, so test result is pass.

LTE FDD Band 66, SCS:3.75KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: EIRP (dBm)	IC: EIRP (dBm)
		Size	Offset				
QPSK	LCH	1	0	23.9	1.3	25.2	25.2
	MCH	1	0	23.94	1.3	25.24	25.24
	HCH	1	47	23.85	1.3	25.15	25.15
BPSK	LCH	1	0	23.96	1.3	25.26	25.26
	MCH	1	0	23.92	1.3	25.22	25.22
	HCH	1	47	23.83	1.3	25.13	25.13

LTE FDD Band 66, SCS:15KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: EIRP (dBm)	IC: EIRP (dBm)
		Size	Offset				
QPSK	LCH	1	0	24.06	1.3	25.36	25.36
		12	0	21.82	1.3	23.12	23.12
	MCH	1	0	24.04	1.3	25.34	25.34
		12	0	21.82	1.3	23.12	23.12
	HCH	1	11	23.89	1.3	25.19	25.19
		12	11	21.65	1.3	22.95	22.95
BPSK	LCH	1	0	23.92	1.3	25.22	25.22
	MCH	1	0	23.94	1.3	25.24	25.24
	HCH	1	11	23.79	1.3	25.09	25.09

Remark: EIRP limit for FCC/IC band 66 is 30dBm, so test result is pass.

LTE FDD Band 71, SCS:3.75KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: ERP (dBm)	IC: ERP (dBm)
		Size	Offset				
QPSK	LCH	1	0	23.77	1.3	22.92	22.92
	MCH	1	0	23.95	1.3	23.1	23.1
	HCH	1	47	23.95	1.3	23.1	23.1
BPSK	LCH	1	0	23.8	1.3	22.95	22.95
	MCH	1	0	23.95	1.3	23.1	23.1
	HCH	1	47	23.92	1.3	23.07	23.07

LTE FDD Band 71, SCS:15KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: ERP (dBm)	IC: ERP (dBm)
		Size	Offset				
QPSK	LCH	1	0	23.63	1.3	22.78	22.78
		12	0	21.61	1.3	20.76	20.76
	MCH	1	0	23.99	1.3	23.14	23.14
		12	0	21.98	1.3	21.13	21.13
	HCH	1	11	23.98	1.3	23.13	23.13
		12	11	22.07	1.3	21.22	21.22
BPSK	LCH	1	0	23.58	1.3	22.73	22.73
	MCH	1	0	23.92	1.3	23.07	23.07
	HCH	1	11	23.94	1.3	23.09	23.09

Remark: ERP limit for FCC/IC band 71 is 34.77dBm, so test result is pass.

LTE FDD Band 85, SCS:3.75KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: ERP (dBm)	IC: ERP (dBm)
		Size	Offset				
QPSK	LCH	1	0	23.92	1.7	23.47	23.47
	MCH	1	0	23.99	1.7	23.54	23.54
	HCH	1	47	23.99	1.7	23.54	23.54
BPSK	LCH	1	0	23.89	1.7	23.44	23.44
	MCH	1	0	23.96	1.7	23.51	23.51
	HCH	1	47	23.95	1.7	23.5	23.5

LTE FDD Band 85, SCS:15KHz							
Modulation	Channel	Ntone		Conducted output power (dBm)	Antenna gain (dBi)	FCC: ERP (dBm)	IC: ERP (dBm)
		Size	Offset				
QPSK	LCH	1	0	24.02	1.7	23.57	23.57
		12	0	21.92	1.7	21.47	21.47
	MCH	1	0	24.15	1.7	23.7	23.7
		12	0	22.02	1.7	21.57	21.57
	HCH	1	11	24.07	1.7	23.62	23.62
		12	11	21.98	1.7	21.53	21.53
BPSK	LCH	1	0	23.97	1.7	23.52	23.52
	MCH	1	0	24.06	1.7	23.61	23.61
	HCH	1	11	23.99	1.7	23.54	23.54

Remark: ERP limit for FCC/IC band 85 is 34.77dBm, so test result is pass.

Note:

- 1) EIRP= Conducted output power + Antenna gain (dBi)
- 2) ERP= Conducted output power + Antenna gain (dBi)-2.15dBi