

11 Conducted Output Power

Table 11.1: GSM Speech

GSM 850			
Channel	Channel 251	Channel 190	Channel 128
Target (dBm)	33	33	33
Tolerance \pm (dB)	1	1	1
PCS 1900			
Channel	Channel 810	Channel 661	Channel 512
Target (dBm)	29.5	29.5	29.5
Tolerance \pm (dB)	1	1	1

Table 11.2: GPRS and EGPRS

GSM 850 GPRS & GSM 850 EGPRS (GMSK)				
Channel		251	190	128
1 Txslot	Target (dBm)	33	33	33
	Tolerance \pm (dB)	1	1	1
2 Txslots	Target (dBm)	31	31	31
	Tolerance \pm (dB)	1	1	1
3Txslots	Target (dBm)	29	29	29
	Tolerance \pm (dB)	1	1	1
4 Txslots	Target (dBm)	27	27	27
	Tolerance \pm (dB)	1	1	1
GSM 850 EGPRS (8PSK)				
Channel		251	190	128
1 Txslot	Target (dBm)	27	27	27
	Tolerance \pm (dB)	1	1	1
2 Txslots	Target (dBm)	25.5	25.5	25.5
	Tolerance \pm (dB)	1	1	1
3Txslots	Target (dBm)	23	23	23
	Tolerance \pm (dB)	1	1	1
4 Txslots	Target (dBm)	20.5	20.5	20.5
	Tolerance \pm (dB)	1	1	1

PCS 1900 GPRS & PCS 1900 EGPRS(GMSK)				
Channel		810	661	512
1 Txslot	Target (dBm)	30.0	30.0	30.0
	Tolerance \pm (dB)	1	1	1
2 Txslots	Target (dBm)	28	28	28
	Tolerance \pm (dB)	1	1	1
3Txslots	Target (dBm)	26.5	26.5	26.5
	Tolerance \pm (dB)	1	1	1
4 Txslots	Target (dBm)	24.5	24.5	24.5
	Tolerance \pm (dB)	1	1	1
PCS 1900 EGPRS(8PSK)				
Channel		810	661	512
1 Txslot	Target (dBm)	25.5	25.5	25.5
	Tolerance \pm (dB)	1	1	1
2 Txslots	Target (dBm)	24	24	24
	Tolerance \pm (dB)	1	1	1
3Txslots	Target (dBm)	21	21	21
	Tolerance \pm (dB)	1	1	1
4 Txslots	Target (dBm)	17	17	17
	Tolerance \pm (dB)	1	1	1

Table 11.3: WCDMA

WCDMA Band II			
Channel	Channel 9262	Channel 9400	Channel 9538
Target (dBm)	23	23	23
Tolerance \pm (dB)	1	1	1
WCDMA Band IV			
Channel	Channel 1312	Channel 1412	Channel 1513
Target (dBm)	23	23	23
Tolerance \pm (dB)	1	1	1
WCDMA Band V			
Channel	Channel 4132	Channel 4182	Channel 4233
Target (dBm)	22.5	22.5	22.5
Tolerance \pm (dB)	1	1	1

Item	band	FDD II result			
	ARFCN	Channel	9262 (1852.4MHz)	9400 (1880MHz)	9538 (1907.6MHz)
HSDPA	1	Target (dBm)	23	23	23
	2	Target (dBm)	23	23	23
	3	Target (dBm)	22.5	22.5	22.5
	4	Target (dBm)	22.5	22.5	22.5
	Tolerance \pm (dB)			1	1
HSUPA	1	Target (dBm)	20	20	20
	2	Target (dBm)	21	21	21
	3	Target (dBm)	20.5	20.5	20.5
	4	Target (dBm)	21	21	21
	5	Target (dBm)	23	23	23
	Tolerance \pm (dB)			1	1
DC-HSDPA	1	Target (dBm)	23	23	23
	2	Target (dBm)	23	23	23
	3	Target (dBm)	22.5	22.5	22.5
	4	Target (dBm)	22.5	22.5	22.5
	Tolerance \pm (dB)			1	1

Item	band	FDD IV result			
	ARFCN	Chnannel	1312 (1712.4MHz)	1412 (1732.4MHz)	1513 (1752.6MHz)
HSDPA	1	Target (dBm)	22	22	22
	2	Target (dBm)	22	22	22
	3	Target (dBm)	21.5	21.5	21.5
	4	Target (dBm)	21.5	21.5	21.5
	Tolerance ±(dB)		1	1	1
HSUPA	1	Target (dBm)	20	20	20
	2	Target (dBm)	20	20	20
	3	Target (dBm)	20	20	20
	4	Target (dBm)	20	20	20
	5	Target (dBm)	22	22	22
	Tolerance ±(dB)		1	1	1
DC-HSDPA	1	Target (dBm)	22	22	22
	2	Target (dBm)	22	22	22
	3	Target (dBm)	21.5	21.5	21.5
	4	Target (dBm)	21.5	21.5	21.5
	Tolerance ±(dB)		1	1	1

Item	band	FDD V result			
	ARFCN	Chnannel	4132 (826.4MHz)	4182 (836.4MHz)	4233 (846.6MHz)
HSDPA	1	Target (dBm)	22	22	22
	2	Target (dBm)	22	22	22
	3	Target (dBm)	22	22	22
	4	Target (dBm)	22	22	22
	Tolerance ±(dB)		1	1	1
HSUPA	1	Target (dBm)	20	20	20
	2	Target (dBm)	20	20	20
	3	Target (dBm)	20	20	20
	4	Target (dBm)	20	20	20
	5	Target (dBm)	22	22	22
	Tolerance ±(dB)		1	1	1
DC-HSDPA	1	Target (dBm)	22	22	22
	2	Target (dBm)	22	22	22
	3	Target (dBm)	22	22	22
	4	Target (dBm)	22	22	22
	Tolerance ±(dB)		1	1	1

Table 11.4: LTE

LTE Bands	LTE B2 (QPSK/1RB)	LTE B4 (QPSK/1RB)	LTE B7 (QPSK/1RB)
Supported Bandwidths (MHz)	1.4,3,5,10,15,20	1.4,3,5,10,15,20	5,10,15,20
Target (dBm)	23	23	23
Tolerance \pm (dB)	1	1	1

Table 11.5 Maximum Power Reduction (MPR) for LTE

Modulation	Channel bandwidth / Transmission bandwidth configuration [RB]						MPR (dB)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1
16 QAM	\leq 5	\leq 4	\leq 8	\leq 12	\leq 16	\leq 18	1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	2

Power Reduced

Table 11.6: GSM Speech

PCS 1900			
Channel	Channel 810	Channel 661	Channel 512
Target (dBm)	27.5	27.5	27.5
Tolerance \pm (dB)	1	1	1

Table 11.7: WCDMA

WCDMA Band II			
Channel	Channel 9262	Channel 9400	Channel 9538
Target (dBm)	18.5	18.5	18.5
Tolerance \pm (dB)	1	1	1
WCDMA Band IV			
Channel	Channel 1312	Channel 1412	Channel 1513
Target (dBm)	17.5	17.5	17.5
Tolerance \pm (dB)	1	1	1

Item	band	FDD II result			
	ARFCN	Channel	9262 (1852.4MHz)	9400 (1880MHz)	9538 (1907.6MHz)
HSDPA	1	Target (dBm)	18.5	18.5	18.5
	2	Target (dBm)	18.5	18.5	18.5
	3	Target (dBm)	18.0	18.0	18.0
	4	Target (dBm)	18.0	18.0	18.0
	Tolerance \pm (dB)		1	1	1
HSUPA	1	Target (dBm)	15.5	15.5	15.5
	2	Target (dBm)	16.5	16.5	16.5
	3	Target (dBm)	16.0	16.0	16.0
	4	Target (dBm)	16.5	16.5	16.5
	5	Target (dBm)	18.0	18.0	18.0
Tolerance \pm (dB)		1	1	1	
DC-HSDPA	1	Target (dBm)	18.5	18.5	18.5
	2	Target (dBm)	18.5	18.5	18.5
	3	Target (dBm)	18.0	18.0	18.0
	4	Target (dBm)	18.0	18.0	18.0
	Tolerance \pm (dB)		1	1	1

Power Reduced

Item	band	FDD IV result			
	ARFCN	Chnannel	1312 (1712.4MHz)	1412 (1732.4MHz)	1513 (1752.6MHz)
HSDPA	1	Target (dBm)	16.5	16.5	16.5
	2	Target (dBm)	16.5	16.5	16.5
	3	Target (dBm)	16.0	16.0	16.0
	4	Target (dBm)	16.0	16.0	16.0
	Tolerance ±(dB)		1	1	1
HSUPA	1	Target (dBm)	14.5	14.5	14.5
	2	Target (dBm)	14.5	14.5	14.5
	3	Target (dBm)	14.5	14.5	14.5
	4	Target (dBm)	14.5	14.5	14.5
	5	Target (dBm)	16.5	16.5	16.5
	Tolerance ±(dB)		1	1	1
DC-HSDPA	1	Target (dBm)	16.5	16.5	16.5
	2	Target (dBm)	16.5	16.5	16.5
	3	Target (dBm)	16.0	16.0	16.0
	4	Target (dBm)	16.0	16.0	16.0
	Tolerance ±(dB)		1	1	1

Power Reduced

Table 11.8: LTE B2

LTE Bands	LTE B2 (QPSK/1RB)
Supported Bandwidths(MHz)	1.4,3,5,10,15,20
Target (dBm)	17.5
Tolerance \pm (dB)	1

Modulation	Channel bandwidth / Transmission bandwidth configuration [RB]						MPR (dB)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1
16 QAM	\leq 5	\leq 4	\leq 8	\leq 12	\leq 16	\leq 18	1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	2

Table 11.9: LTE B4

LTE Bands	LTE B4 (QPSK/1RB)	LTE B4 (QPSK/1RB)
Supported Bandwidths (MHz)	20	1.4,3,5,10,15
Target (dBm)	17	16.5
Tolerance \pm (dB)	1	1

Modulation	Channel bandwidth / Transmission bandwidth configuration [RB]						MPR (dB)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1
16 QAM	\leq 5	\leq 4	\leq 8	\leq 12	\leq 16	\leq 18	0.5
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	1.5

Wi-Fi Conducted Output Power

Table 11.10: Wi-Fi

Wi-Fi 802.11b (2.4GHz)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	11	10	12
Tolerance ±(dB)	1	1	1
Wi-Fi 802.11g (2.4GHz) 6M-24M			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	9	8	10
Tolerance ±(dB)	1	1	1
Wi-Fi 802.11g (2.4GHz) 36M-54M			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	9	8	10
Tolerance ±(dB)	1	1	1
Wi-Fi 802.11n HT20 (2.4GHz) (MCS7)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	7	7	9
Tolerance ±(dB)	1	1	1

BT Conducted Output Power

Manufacturing tolerance

Table 11.11: BLE

GFSK			
Channel	Channel 0	Channel 19	Channel 39
Target (dBm)	-7.5	-6.5	-6.5
Tolerance \pm (dB)	1	1	1

Table 11.12: EDR

GFSK			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	5.5	4.5	4.5
Tolerance \pm (dB)	1	1	1

EDR2M-4_DQPSK			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	4.5	3.5	3.5
Tolerance \pm (dB)	1	1	1

EDR3M-8DPSK			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	5.5	4.5	4.5
Tolerance \pm (dB)	1	1	1