



REPORT No.: SZ22050204S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

The target power was recorded in the manufacture document.

Full Power

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
	TX Channel	128	189		251	128	189		
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8		
GSM 1 Tx slot	32.40	32.43	32.38	33.00	23.40	23.43	23.38	24.00	0.09
GPRS 1 Tx slot	32.42	32.45	32.36	33.00	23.42	23.45	23.36	24.00	
GPRS 2 Tx slots	30.56	30.56	30.52	31.00	24.56	24.56	24.52	25.00	0.04
GPRS 3 Tx slots	28.09	28.12	28.11	29.00	23.83	23.86	23.85	24.74	0.03
GPRS 4 Tx slots	26.31	26.34	26.29	27.00	23.31	23.34	23.29	24.00	0.05
EDGE 1 Tx slot	25.44	25.68	25.55	26.00	16.44	16.68	16.55	17.00	0.24
EDGE 2 Tx slots	23.49	23.57	23.46	24.00	17.49	17.57	17.46	18.00	0.11
EDGE 3 Tx slots	21.58	21.64	21.55	22.00	17.32	17.38	17.29	17.74	0.09
EDGE 4 Tx slots	19.47	19.61	19.53	20.00	16.47	16.61	16.53	17.00	0.14
Mode		Max.	32.45			Max.	24.56		
Attenuator	Cable Loss : 0.6								

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
	TX Channel	512	661		810	512	661		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot	29.26	29.37	29.31	30.00	20.26	20.37	20.31	21.00	0.12
GPRS 1 Tx slot	29.27	29.38	29.32	30.00	20.27	20.38	20.32	21.00	
GPRS 2 Tx slots	26.44	26.51	26.48	27.00	20.44	20.51	20.48	21.00	0.07
GPRS 3 Tx slots	25.35	25.44	25.39	26.00	21.09	21.18	21.13	21.74	0.09
GPRS 4 Tx slots	23.62	23.66	23.57	24.00	20.62	20.66	20.57	21.00	0.09
EDGE 1 Tx slot	25.42	25.50	25.48	26.00	16.42	16.50	16.48	17.00	0.08
EDGE 2 Tx slots	22.37	22.42	22.36	23.00	16.37	16.42	16.36	17.00	0.06
EDGE 3 Tx slots	20.55	20.61	20.52	21.00	16.29	16.35	16.26	16.74	0.09
EDGE 4 Tx slots	19.44	19.54	19.52	20.00	16.44	16.54	16.52	17.00	0.10
Mode		Max.	29.38			Max.	21.18		
Attenuator	Cable Loss : 0.8								

Band	WCDMA Band II			Tune-up Limit (dBm)	WCDMA Band IV			Tune-up Limit (dBm)	WCDMA Band V			Tune-up Limit (dBm)	
	TX Channel	9262	9400		9538	1312	1413		1513	4132	4182		4233
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458		
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6		
3GPP Rel 99	RMC 12.2Kbps	22.47	22.62	22.57	23.00	20.41	20.46	20.38	21.00	22.51	22.55	22.43	23.00
3GPP Rel 6	HSDPA Subtest-1	22.31	22.22	22.25	23.00	20.23	19.79	19.79	20.50	21.65	21.71	21.62	22.50
3GPP Rel 6	HSDPA Subtest-2	21.97	22.28	22.26	23.00	20.13	19.82	19.77	20.50	21.57	21.61	21.60	22.50
3GPP Rel 6	HSDPA Subtest-3	21.90	22.06	22.01	23.00	19.75	19.36	19.28	20.50	21.13	21.15	21.14	22.50
3GPP Rel 6	HSDPA Subtest-4	21.80	22.05	22.01	23.00	19.74	19.35	19.28	20.50	21.12	21.15	21.13	22.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.44	22.30	22.36	23.00	20.01	19.65	19.51	20.50	21.58	21.65	21.57	22.50
3GPP Rel 8	DC-HSDPA Subtest-2	22.45	22.38	22.31	23.00	19.92	19.66	19.49	20.50	21.56	21.55	21.53	22.50
3GPP Rel 8	DC-HSDPA Subtest-3	21.99	21.89	21.94	23.00	19.55	19.18	19.00	20.50	21.20	21.18	21.17	22.50
3GPP Rel 8	DC-HSDPA Subtest-4	21.97	21.89	21.96	23.00	19.54	19.18	18.98	20.50	21.11	21.17	21.07	22.50
3GPP Rel 6	HSUPA Subtest-1	22.05	22.33	22.32	23.00	20.16	19.62	19.62	20.50	21.62	21.66	21.71	22.50
3GPP Rel 6	HSUPA Subtest-2	21.55	22.50	21.84	23.00	19.57	19.22	19.13	20.50	21.25	21.29	21.28	22.50
3GPP Rel 6	HSUPA Subtest-3	22.04	22.33	22.31	23.00	20.08	19.66	19.60	20.50	21.57	21.62	21.55	22.50
3GPP Rel 6	HSUPA Subtest-4	22.03	22.33	22.30	23.00	20.04	19.71	19.62	20.50	21.71	21.74	21.70	22.50
3GPP Rel 6	HSUPA Subtest-5	22.04	22.34	22.30	23.00	20.12	19.68	19.60	20.50	21.59	21.63	21.56	22.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	22.28	22.30	22.27	23.00	20.21	20.20	20.20	20.50	21.59	21.66	21.56	22.50
Attenuator			Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6	
Mode		Max.	22.62			Max.	20.46			Max.	22.55		

Band 5 (Cellular Band) Part 22H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	23.5
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	22.59	22.60	22.52	23.5
10	QPSK	1	25	22.45	22.48	22.28	
10	QPSK	1	49	22.37	22.49	22.17	
10	QPSK	25	0	21.42	21.44	21.25	22.5
10	QPSK	25	12	21.18	21.20	21.25	
10	QPSK	25	25	21.16	21.29	21.34	
10	QPSK	50	0	21.24	21.12	21.26	22.5
10	16QAM	1	0	21.28	21.47	21.18	
10	16QAM	1	25	21.51	21.54	21.22	
10	16QAM	1	49	21.34	21.40	21.47	22.5
10	16QAM	25	0	21.43	21.44	21.26	
10	16QAM	25	12	21.37	21.45	21.23	
10	16QAM	25	25	21.40	21.33	21.36	22.5
10	16QAM	50	0	21.41	21.32	21.22	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	23.5
5	QPSK	1	0	22.54	22.50	22.48	
5	QPSK	1	12	22.44	22.55	22.39	23.5
5	QPSK	1	24	22.44	22.39	22.39	
5	QPSK	12	0	21.33	21.38	21.24	
5	QPSK	12	7	21.40	21.41	21.33	22.5
5	QPSK	12	13	21.45	21.29	21.24	
5	QPSK	25	0	21.36	21.32	21.24	
5	16QAM	1	0	21.65	21.58	21.34	22.5
5	16QAM	1	12	21.35	21.57	21.33	
5	16QAM	1	24	21.22	21.57	21.40	
5	16QAM	12	0	21.31	21.40	21.39	22.5
5	16QAM	12	7	21.38	21.41	21.23	
5	16QAM	12	13	21.38	21.29	21.34	
5	16QAM	25	0	21.39	21.44	21.39	22.5
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	23.5
3	QPSK	1	0	22.53	22.54	22.39	
3	QPSK	1	8	22.49	22.50	22.41	23.5
3	QPSK	1	14	22.50	22.48	22.22	
3	QPSK	8	0	21.26	21.39	21.37	
3	QPSK	8	4	21.40	21.46	21.43	22.5
3	QPSK	8	7	21.35	21.37	21.24	
3	QPSK	15	0	21.33	21.39	21.38	
3	16QAM	1	0	21.35	21.46	21.53	22.5
3	16QAM	1	8	21.28	21.54	21.38	
3	16QAM	1	14	21.33	21.59	21.34	
3	16QAM	8	0	21.29	21.38	21.12	22.5
3	16QAM	8	4	21.45	21.56	21.13	
3	16QAM	8	7	21.37	21.43	21.17	
3	16QAM	15	0	21.31	21.33	20.88	22.5
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	23.5
1.4	QPSK	1	0	22.54	22.51	22.55	
1.4	QPSK	1	3	22.57	22.50	22.57	23.5
1.4	QPSK	1	5	22.46	22.40	22.41	
1.4	QPSK	3	0	22.47	22.53	22.49	
1.4	QPSK	3	1	22.53	22.40	22.50	22.5
1.4	QPSK	3	3	22.54	22.46	22.46	
1.4	QPSK	6	0	21.31	21.30	21.29	
1.4	16QAM	1	0	21.44	21.25	21.42	22.5
1.4	16QAM	1	3	21.24	21.48	21.37	
1.4	16QAM	1	5	21.63	21.31	21.37	
1.4	16QAM	3	0	21.16	21.14	21.28	22.5
1.4	16QAM	3	1	21.19	21.46	21.32	
1.4	16QAM	3	3	21.27	21.38	21.26	
1.4	16QAM	6	0	21.46	21.33	21.37	22.5

Band 12 (700MHz Low Band) Part 27F(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23060	23095	23130	23.5
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	22.45	22.61	22.50	23.5
10	QPSK	1	25	22.31	22.44	22.47	
10	QPSK	1	49	22.41	22.42	22.41	
10	QPSK	25	0	21.49	21.59	21.50	22.5
10	QPSK	25	12	21.46	21.40	21.19	
10	QPSK	25	25	21.51	21.57	21.50	
10	QPSK	50	0	21.52	21.54	21.45	22.5
10	16QAM	1	0	21.45	21.00	21.13	
10	16QAM	1	25	21.20	21.15	21.29	
10	16QAM	1	49	21.29	21.34	21.23	22.5
10	16QAM	25	0	21.18	21.20	21.14	
10	16QAM	25	12	21.22	21.26	21.15	
10	16QAM	25	25	21.27	21.28	21.22	22.5
10	16QAM	50	0	21.17	21.25	21.30	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	23.5
5	QPSK	1	0	22.20	22.53	22.31	
5	QPSK	1	12	22.36	22.52	22.36	23.5
5	QPSK	1	24	22.32	22.51	22.37	
5	QPSK	12	0	21.22	21.29	21.28	
5	QPSK	12	7	21.33	21.35	21.32	22.5
5	QPSK	12	13	21.28	21.31	21.28	
5	QPSK	25	0	21.24	21.36	21.32	
5	16QAM	1	0	21.25	21.27	21.29	22.5
5	16QAM	1	12	21.42	21.37	21.38	
5	16QAM	1	24	21.38	21.36	21.32	
5	16QAM	12	0	21.12	21.09	21.12	22.5
5	16QAM	12	7	21.26	21.31	21.15	
5	16QAM	12	13	21.21	21.18	21.23	
5	16QAM	25	0	21.22	21.18	21.20	22.5
Channel				23025	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	23.5
3	QPSK	1	0	22.28	22.55	22.22	
3	QPSK	1	8	22.46	22.45	22.35	23.5
3	QPSK	1	14	22.40	22.51	22.46	
3	QPSK	8	0	21.30	21.28	21.28	
3	QPSK	8	4	21.33	21.36	21.37	22.5
3	QPSK	8	7	21.28	21.36	21.30	
3	QPSK	15	0	21.27	21.35	21.21	
3	16QAM	1	0	21.28	21.64	21.23	22.5
3	16QAM	1	8	21.48	21.46	21.41	
3	16QAM	1	14	21.31	21.36	21.22	
3	16QAM	8	0	21.28	21.17	21.20	22.5
3	16QAM	8	4	21.33	21.30	21.41	
3	16QAM	8	7	21.17	21.20	21.26	
3	16QAM	15	0	21.15	21.08	21.07	22.5
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	23.5
1.4	QPSK	1	0	22.31	22.48	22.28	
1.4	QPSK	1	3	22.42	22.41	22.43	23.5
1.4	QPSK	1	5	22.31	22.36	22.32	
1.4	QPSK	3	0	22.26	22.39	22.37	
1.4	QPSK	3	1	22.47	22.47	22.14	22.5
1.4	QPSK	3	3	22.42	22.44	22.40	
1.4	QPSK	6	0	21.49	21.46	21.44	
1.4	16QAM	1	0	21.53	21.47	21.32	22.5
1.4	16QAM	1	3	21.34	21.77	21.44	
1.4	16QAM	1	5	21.46	21.47	21.46	
1.4	16QAM	3	0	21.30	21.33	21.34	22.5
1.4	16QAM	3	1	21.46	21.54	21.38	
1.4	16QAM	3	3	21.66	21.55	21.59	
1.4	16QAM	6	0	21.46	21.44	21.46	22.5

Band 13(700MHz Band) Part 27F							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23230			23.5
Frequency (MHz)				782			
10	QPSK	1	0		22.62		23.5
10	QPSK	1	25		22.43		
10	QPSK	1	49		22.43		
10	QPSK	25	0		21.52		22.5
10	QPSK	25	12		21.26		
10	QPSK	25	25		21.30		
10	QPSK	50	0		21.30		22.5
10	16QAM	1	0		21.35		
10	16QAM	1	25		21.43		
10	16QAM	1	49		21.35		22.5
10	16QAM	25	0		21.28		
10	16QAM	25	12		21.43		
10	16QAM	25	25		21.37		22.5
10	16QAM	50	0		21.44		
Channel				23205	23230	23255	
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	22.30	22.26	22.22	23.5
5	QPSK	1	12	22.29	22.25	22.24	
5	QPSK	1	24	22.21	22.27	22.26	
5	QPSK	12	0	21.37	21.55	21.71	22.5
5	QPSK	12	7	21.26	21.35	21.43	
5	QPSK	12	13	21.09	21.37	21.43	
5	QPSK	25	0	21.12	21.29	21.42	22.5
5	16QAM	1	0	21.37	21.42	21.14	
5	16QAM	1	12	21.54	21.10	21.47	
5	16QAM	1	24	21.36	21.43	21.59	22.5
5	16QAM	12	0	21.05	21.08	21.29	
5	16QAM	12	7	21.28	21.35	21.47	
5	16QAM	12	13	21.19	21.44	21.47	22.5
5	16QAM	25	0	21.29	21.41	21.45	

Band 66							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	21.5
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	20.55	20.61	20.59	21.5
20	QPSK	1	49	20.40	20.39	20.35	
20	QPSK	1	99	20.33	20.32	20.35	
20	QPSK	50	0	19.52	19.59	19.55	20.5
20	QPSK	50	24	19.33	19.35	19.48	
20	QPSK	50	50	19.37	19.45	19.33	
20	QPSK	100	0	19.35	19.35	19.27	20.5
20	16QAM	1	0	19.40	19.16	19.44	
20	16QAM	1	49	19.45	19.19	19.25	
20	16QAM	1	99	19.45	19.63	19.42	20.5
20	16QAM	50	0	19.57	19.54	19.51	
20	16QAM	50	24	19.46	19.46	19.47	
20	16QAM	50	50	19.21	19.13	19.09	20.5
20	16QAM	100	0	19.17	19.20	19.26	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	20.53	20.57	20.55	21.5
15	QPSK	1	37	20.57	20.53	20.51	
15	QPSK	1	74	20.51	20.47	20.45	
15	QPSK	36	0	19.24	19.21	19.25	20.5
15	QPSK	36	20	19.24	19.16	19.26	
15	QPSK	36	39	19.10	19.15	19.12	
15	QPSK	75	0	19.19	19.23	19.16	20.5
15	16QAM	1	0	19.18	19.05	19.35	
15	16QAM	1	37	19.05	19.35	19.28	
15	16QAM	1	74	19.15	19.05	19.05	20.5
15	16QAM	36	0	19.36	19.36	19.27	
15	16QAM	36	20	19.39	19.38	19.44	
15	16QAM	36	39	19.31	19.46	19.40	20.5
15	16QAM	75	0	19.19	19.17	19.13	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	20.56	20.56	20.57	21.5
10	QPSK	1	25	20.46	20.44	20.52	
10	QPSK	1	49	20.60	20.48	20.38	
10	QPSK	25	0	19.55	19.48	19.55	20.5
10	QPSK	25	12	19.52	19.71	19.49	
10	QPSK	25	25	19.48	19.44	19.36	
10	QPSK	50	0	19.56	19.41	19.60	20.5
10	16QAM	1	0	19.48	19.48	19.68	
10	16QAM	1	25	19.48	19.57	19.69	
10	16QAM	1	49	19.31	19.51	19.39	20.5
10	16QAM	25	0	19.32	19.49	19.37	
10	16QAM	25	12	19.31	19.51	19.42	
10	16QAM	25	25	19.22	19.27	19.27	20.5
10	16QAM	50	0	19.38	19.42	19.43	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	20.45	20.48	20.53	21.5
5	QPSK	1	12	20.48	20.48	20.47	
5	QPSK	1	24	20.56	20.46	20.52	
5	QPSK	12	0	19.24	19.26	19.22	20.5
5	QPSK	12	7	19.26	19.34	19.27	
5	QPSK	12	13	19.12	19.18	19.19	
5	QPSK	25	0	19.22	19.23	19.22	20.5
5	16QAM	1	0	19.71	19.40	19.41	
5	16QAM	1	12	19.34	19.63	19.58	
5	16QAM	1	24	19.46	19.35	19.70	20.5
5	16QAM	12	0	19.35	19.46	19.42	
5	16QAM	12	7	19.52	19.44	19.56	
5	16QAM	12	13	19.43	19.37	19.44	20.5
5	16QAM	25	0	19.44	19.47	19.38	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	20.52	20.43	20.42	21.5
3	QPSK	1	8	20.39	20.40	20.48	
3	QPSK	1	14	20.30	20.11	20.41	
3	QPSK	8	0	19.50	19.47	19.51	20.5
3	QPSK	8	4	19.45	19.37	19.47	
3	QPSK	8	7	19.31	19.36	19.33	
3	QPSK	15	0	19.40	19.44	19.37	20.5
3	16QAM	1	0	19.09	19.50	19.26	
3	16QAM	1	8	19.42	19.36	19.35	
3	16QAM	1	14	19.46	19.35	19.05	20.5
3	16QAM	8	0	19.27	19.27	19.18	
3	16QAM	8	4	19.30	19.29	19.35	
3	16QAM	8	7	19.22	19.37	19.31	20.5
3	16QAM	15	0	19.32	19.30	19.26	
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	20.46	20.37	20.38	21.5
1.4	QPSK	1	3	20.52	20.54	20.54	
1.4	QPSK	1	5	20.44	20.32	20.48	
1.4	QPSK	3	0	20.43	20.36	20.43	20.5
1.4	QPSK	3	1	20.40	20.46	20.37	
1.4	QPSK	3	3	20.41	20.37	20.29	
1.4	QPSK	6	0	19.53	19.38	19.57	20.5
1.4	16QAM	1	0	19.40	19.40	19.60	
1.4	16QAM	1	3	19.40	19.49	19.61	
1.4	16QAM	1	5	19.23	19.43	19.31	20.5
1.4	16QAM	3	0	19.18	19.15	19.41	
1.4	16QAM	3	1	19.27	19.17	19.29	
1.4	16QAM	3	3	19.28	19.29	19.23	20.5
1.4	16QAM	6	0	19.17	19.08	19.09	

2.4GHz WLAN ANT 1

2.4GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	16.84	17.50	16	97.86
		CH 6	2437	17.18	18.00	16	
		CH 11	2462	17.68	18.00	16	
	802.11g 6Mbps	CH 1	2412	12.55	13.00	12	87.18
		CH 6	2437	12.56	13.00	12	
		CH 11	2462	13.08	14.00	12	
	802.11n-HT20 MCS0	CH 1	2412	12.55	13.00	12	86.78
		CH 6	2437	12.52	13.00	12	
		CH 11	2462	12.99	13.50	12	
802.11n-HT40 MCS0	CH 3	2422	11.98	12.50	12	76.32	
	CH 6	2437	12.19	13.00	12		
	CH 9	2452	13.44	14.00	12		

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	8.89	7.15	7.15
	CH 39	2441	9.51	7.89	7.89
	CH 78	2480	9.06	7.39	7.39
Tune-up Limit			10	8.5	8.5
Duty Cycle %			77.6	77.2	77.6

Mode	Channel	Frequency (MHz)	Average power (dBm)
			GFSK
LE	CH 00	2402	-2.81
	CH 19	2440	-2.30
	CH 39	2480	-2.76
Tune-up Limit			0.5
Duty Cycle %			65.38