



REPORT No.: SZ23090286S01

## Annex E Conducted Power

**Note:**

Conducted power unit: dBm

The target power was recorded in the manufacturer's document.

### Conducted Power

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	190	251		128	189	251	
TX Channel	824.2	836.6	848.8		824.2	836.4	848.8	
Frequency (MHz)	824.2	836.6	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.65	31.65	31.64	32.50	22.65	22.65	22.64	23.50
GPRS 1 Tx slot	31.66	31.65	31.65	32.50	22.66	22.65	22.65	23.50
GPRS 2 Tx slots	30.68	30.72	30.71	31.50	24.68	24.72	24.71	25.50
GPRS 3 Tx slots	29.84	29.87	29.83	30.50	25.58	25.61	25.57	26.24
GPRS 4 Tx slots	27.62	27.58	27.46	28.50	24.62	24.58	24.46	25.50
EDGE 1 Tx slot	26.33	26.45	26.27	27.00	17.33	17.45	17.27	18.00
EDGE 2 Tx slots	24.30	24.35	24.28	25.00	18.30	18.35	18.28	19.00
EDGE 3 Tx slots	22.39	22.46	22.35	23.00	18.13	18.20	18.09	18.74
EDGE 4 Tx slots	20.41	20.45	20.36	21.00	17.41	17.45	17.36	18.00
Mode		Max.	31.66			Max.	25.61	
Attenuator	Cable Loss : 0.6							

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	1850.2	1880	1909.8		1850.2	1880	1909.8	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	28.04	28.13	28.10	29.00	19.04	19.13	19.10	20.00
GPRS 1 Tx slot	28.05	28.15	28.11	29.00	19.05	19.15	19.11	20.00
GPRS 2 Tx slots	27.61	27.61	27.62	28.00	21.61	21.61	21.62	22.00
GPRS 3 Tx slots	26.25	26.38	26.23	27.00	21.99	22.12	21.97	22.74
GPRS 4 Tx slots	24.34	24.35	24.22	25.00	21.34	21.35	21.22	22.00
EDGE 1 Tx slot	24.11	24.18	24.07	25.00	15.11	15.18	15.07	16.00
EDGE 2 Tx slots	23.15	23.16	23.11	24.00	17.15	17.16	17.11	18.00
EDGE 3 Tx slots	20.26	20.33	20.20	21.00	16.00	16.07	15.94	16.74
EDGE 4 Tx slots	19.57	19.66	19.55	20.00	16.57	16.66	16.55	17.00
Mode		Max.	28.15			Max.	22.12	
Attenuator	Cable Loss : 0.8							

Band 2 (1900MHz Band) (dBm)							
Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	22.69	22.72	22.68	
20	QPSK	1	49	22.47	22.53	22.49	23.5
20	QPSK	1	99	22.45	22.51	22.50	
20	QPSK	50	0	21.71	21.78	21.68	
20	QPSK	50	24	21.68	21.74	21.70	22.5
20	QPSK	50	50	21.63	21.70	21.68	
20	QPSK	100	0	21.65	21.68	21.63	
20	16QAM	1	0	21.89	21.91	21.89	22.5
20	16QAM	1	50	21.86	21.88	21.80	
20	16QAM	1	99	21.83	21.87	21.86	
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.51	22.57	22.50	
15	QPSK	1	37	22.39	22.48	22.44	
15	QPSK	1	74	22.44	22.49	22.45	
15	QPSK	36	0	21.69	21.74	21.71	22.5
15	QPSK	36	20	21.60	21.67	21.69	
15	QPSK	36	39	21.61	21.68	21.67	
15	QPSK	75	0	21.63	21.60	21.56	22.5
15	16QAM	1	0	21.88	21.86	21.82	
15	16QAM	1	38	21.79	21.81	21.76	
15	16QAM	1	74	21.75	21.79	21.81	
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.50	22.61	22.53	23.5
10	QPSK	1	25	22.40	22.48	22.43	
10	QPSK	1	49	22.38	22.47	22.42	
10	QPSK	25	0	21.74	21.71	21.71	22.5
10	QPSK	25	12	21.67	21.69	21.66	
10	QPSK	25	25	21.61	21.62	21.64	
10	QPSK	50	0	21.58	21.67	21.59	22.5
10	16QAM	1	0	21.82	21.83	21.85	
10	16QAM	1	25	21.83	21.81	21.72	
10	16QAM	1	49	21.77	21.81	21.78	21.5
10	16QAM	25	0	20.52	20.56	20.46	
10	16QAM	25	13	20.53	20.52	20.46	
10	16QAM	25	25	20.53	20.56	20.46	
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	22.48	22.55	22.52	23.5
5	QPSK	1	12	22.42	22.52	22.43	
5	QPSK	1	24	22.38	22.43	22.47	
5	QPSK	12	0	21.70	21.71	21.69	22.5
5	QPSK	12	7	21.61	21.66	21.62	
5	QPSK	12	13	21.59	21.68	21.64	
5	QPSK	25	0	21.63	21.61	21.58	22.5
5	16QAM	1	0	21.87	21.83	21.85	
5	16QAM	1	13	21.80	21.87	21.77	
5	16QAM	1	24	21.75	21.80	21.79	21.5
5	16QAM	12	0	20.48	20.55	20.45	
5	16QAM	12	6	20.55	20.57	20.46	
5	16QAM	12	13	20.52	20.51	20.49	
5	16QAM	25	0	20.44	20.54	20.48	
Channel				18615	18900	19165	
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.50	22.56	22.51	23.5
3	QPSK	1	8	22.43	22.45	22.47	
3	QPSK	1	14	22.43	22.48	22.45	
3	QPSK	8	0	21.71	21.74	21.72	22.5
3	QPSK	8	4	21.61	21.72	21.63	
3	QPSK	8	7	21.62	21.66	21.65	
3	QPSK	15	0	21.57	21.64	21.56	22.5
3	16QAM	1	0	21.88	21.86	21.88	
3	16QAM	1	7	21.85	21.86	21.79	
3	16QAM	1	14	21.76	21.80	21.78	21.5
3	16QAM	8	0	20.54	20.55	20.48	
3	16QAM	8	4	20.50	20.55	20.48	
3	16QAM	8	7	20.51	20.51	20.49	
3	16QAM	15	0	20.44	20.53	20.49	
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.46	22.61	22.53	23.5
1.4	QPSK	1	3	22.40	22.47	22.46	
1.4	QPSK	1	5	22.37	22.48	22.46	
1.4	QPSK	3	0	22.43	22.52	22.49	22.5
1.4	QPSK	3	1	22.55	22.58	22.48	
1.4	QPSK	3	3	22.49	22.53	22.50	
1.4	QPSK	6	0	21.57	21.67	21.59	22.5
1.4	16QAM	1	0	21.85	21.84	21.81	
1.4	16QAM	1	3	21.85	21.82	21.78	
1.4	16QAM	1	5	21.76	21.85	21.85	22.5
1.4	16QAM	3	0	21.65	21.70	21.62	
1.4	16QAM	3	2	21.63	21.67	21.59	
1.4	16QAM	3	3	21.64	21.68	21.57	21.5
1.4	16QAM	6	0	20.67	20.64	20.57	

Band 4 (AWS Band) (dBm)							
Part 27L (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.84	22.93	22.87	
20	QPSK	1	49	22.78	22.80	22.73	
20	QPSK	1	99	22.70	22.77	22.74	
20	QPSK	50	0	21.84	21.96	21.85	22.5
20	QPSK	50	24	21.88	21.82	21.80	
20	QPSK	50	50	21.85	21.88	21.81	
20	QPSK	100	0	21.88	21.89	21.78	22.5
20	16QAM	1	0	21.92	21.83	21.66	
20	16QAM	1	50	21.80	21.89	21.84	
20	16QAM	1	99	21.90	21.67	21.94	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.71	22.76	22.67	23.5
15	QPSK	1	37	22.75	22.76	22.70	
15	QPSK	1	74	22.61	22.76	22.73	
15	QPSK	36	0	21.80	21.86	21.75	22.5
15	QPSK	36	20	21.94	21.75	21.76	
15	QPSK	36	39	21.84	21.81	21.72	
15	QPSK	75	0	21.83	21.81	21.68	22.5
15	16QAM	1	0	21.88	21.77	21.80	
15	16QAM	1	38	21.87	21.99	21.79	
15	16QAM	1	74	21.92	22.07	21.93	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.78	22.79	22.72	23.5
10	QPSK	1	25	22.71	22.75	22.67	
10	QPSK	1	49	22.62	22.76	22.66	
10	QPSK	25	0	21.78	21.95	21.80	22.5
10	QPSK	25	12	21.86	21.73	21.79	
10	QPSK	25	25	21.76	21.86	21.74	
10	QPSK	50	0	21.79	21.85	21.72	22.5
10	16QAM	1	0	21.86	21.78	21.59	
10	16QAM	1	25	21.86	22.03	21.83	
10	16QAM	1	49	21.88	22.08	21.89	21.5
10	16QAM	25	0	20.88	20.87	20.90	
10	16QAM	25	13	20.97	20.83	20.85	
10	16QAM	25	25	20.91	20.86	20.93	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	22.77	22.77	22.68	23.5
5	QPSK	1	12	22.68	22.70	22.72	
5	QPSK	1	24	22.69	22.75	22.65	
5	QPSK	12	0	21.75	21.91	21.79	22.5
5	QPSK	12	7	21.89	21.77	21.71	
5	QPSK	12	13	21.82	21.82	21.71	
5	QPSK	25	0	21.86	21.85	21.70	22.5
5	16QAM	1	0	21.82	21.81	21.62	
5	16QAM	1	13	21.85	22.01	21.82	
5	16QAM	1	24	21.90	22.01	21.86	21.5
5	16QAM	12	0	20.94	20.84	20.91	
5	16QAM	12	6	20.95	20.85	20.81	
5	16QAM	12	13	20.87	20.87	20.93	
5	16QAM	25	0	20.81	20.83	20.79	
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.68	22.78	22.64	23.5
3	QPSK	1	8	22.72	22.77	22.65	
3	QPSK	1	14	22.64	22.67	22.68	
3	QPSK	8	0	21.77	21.89	21.81	22.5
3	QPSK	8	4	21.85	21.79	21.78	
3	QPSK	8	7	21.81	21.80	21.78	
3	QPSK	15	0	21.78	21.80	21.72	22.5
3	16QAM	1	0	21.82	21.82	21.59	
3	16QAM	1	7	21.86	22.00	21.82	
3	16QAM	1	14	21.92	22.03	21.91	21.5
3	16QAM	8	0	20.89	20.82	20.88	
3	16QAM	8	4	21.02	20.82	20.83	
3	16QAM	8	7	20.82	20.88	20.94	
3	16QAM	15	0	20.81	20.84	20.85	
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.68	22.76	22.65	23.5
1.4	QPSK	1	3	22.68	22.71	22.64	
1.4	QPSK	1	5	22.64	22.75	22.69	
1.4	QPSK	3	0	22.78	22.73	22.78	

Band 5 (Cellular Band) (dBm) 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	24
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.26	23.29	23.21	24
10	QPSK	1	25	23.09	23.12	23.01	
10	QPSK	1	49	23.01	23.08	22.83	
10	QPSK	25	0	22.19	22.27	22.13	23
10	QPSK	25	12	22.26	22.23	22.18	
10	QPSK	25	25	22.18	22.14	22.17	
10	QPSK	50	0	22.07	22.09	22.06	23
10	16QAM	1	0	22.16	22.06	22.02	
10	16QAM	1	25	22.15	22.33	22.19	
10	16QAM	1	49	22.12	22.13	22.05	22
10	16QAM	25	0	21.11	21.02	20.99	
10	16QAM	25	13	21.03	20.99	20.96	
10	16QAM	25	25	21.11	21.07	21.02	22
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	24
5	QPSK	1	0	23.10	23.11	23.03	
5	QPSK	1	12	23.06	23.06	22.99	23
5	QPSK	1	24	22.96	23.03	22.77	
5	QPSK	12	0	22.18	22.24	22.00	
5	QPSK	12	7	22.22	22.20	22.15	23
5	QPSK	12	13	22.08	22.10	22.07	
5	QPSK	25	0	22.12	22.10	22.15	
5	16QAM	1	0	22.26	22.17	22.12	23
5	16QAM	1	13	22.25	22.45	22.31	
5	16QAM	1	24	22.24	22.21	22.17	
5	16QAM	12	0	21.17	21.13	21.04	22
5	16QAM	12	6	21.11	21.10	21.02	
5	16QAM	12	13	21.16	21.15	21.09	
5	16QAM	25	0	21.25	21.06	21.03	22
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	24
3	QPSK	1	0	23.01	23.09	23.05	
3	QPSK	1	8	23.08	23.06	22.94	23
3	QPSK	1	14	22.92	23.01	22.75	
3	QPSK	8	0	22.12	22.23	22.01	
3	QPSK	8	4	22.22	22.20	22.13	23
3	QPSK	8	7	21.94	21.99	21.97	
3	QPSK	15	0	21.99	21.98	22.02	
3	16QAM	1	0	22.13	21.97	21.98	23
3	16QAM	1	7	22.13	22.31	22.12	
3	16QAM	1	14	22.05	22.03	22.03	
3	16QAM	8	0	21.08	20.96	20.92	22
3	16QAM	8	4	20.94	20.96	20.95	
3	16QAM	8	7	21.05	20.97	20.94	
3	16QAM	15	0	21.11	20.98	20.95	22
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	24
1.4	QPSK	1	0	23.11	23.12	22.99	
1.4	QPSK	1	3	23.04	23.04	22.93	24
1.4	QPSK	1	5	23.00	23.05	22.78	
1.4	QPSK	3	0	23.00	23.11	22.85	
1.4	QPSK	3	1	23.06	23.03	22.96	23
1.4	QPSK	3	3	22.95	22.99	23.02	
1.4	QPSK	6	0	22.06	21.96	21.97	
1.4	16QAM	1	0	22.13	22.01	21.94	23
1.4	16QAM	1	3	22.13	22.31	22.09	
1.4	16QAM	1	5	22.11	22.08	22.00	
1.4	16QAM	3	0	22.16	22.09	22.11	23
1.4	16QAM	3	2	22.15	22.10	22.04	
1.4	16QAM	3	3	22.16	22.16	22.14	
1.4	16QAM	6	0	21.27	21.13	21.10	22

Band 7 (2600MHz Band) (dBm) Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	23
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	22.24	22.32	22.29	23
20	QPSK	1	49	22.11	22.18	22.23	
20	QPSK	1	99	22.22	22.23	22.24	
20	QPSK	50	0	21.32	21.45	21.44	22
20	QPSK	50	24	21.39	21.44	21.43	
20	QPSK	50	50	21.42	21.41	21.43	
20	QPSK	100	0	21.47	21.48	21.40	22
20	16QAM	1	0	21.33	21.27	21.32	
20	16QAM	1	50	21.40	21.39	21.31	
20	16QAM	1	99	21.41	21.46	21.42	22
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	23
15	QPSK	1	0	22.13	22.23	22.17	
15	QPSK	1	37	22.03	22.10	22.15	22
15	QPSK	1	74	22.15	22.20	22.22	
15	QPSK	36	0	21.29	21.44	21.36	
15	QPSK	36	20	21.29	21.42	21.37	22
15	QPSK	36	39	21.36	21.40	21.41	
15	QPSK	75	0	21.39	21.36	21.31	
15	16QAM	1	0	21.29	21.26	21.24	22
15	16QAM	1	38	21.35	21.30	21.30	
15	16QAM	1	74	21.38	21.45	21.32	
Channel				20800	21100	21400	23
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	22.07	22.20	22.18	23
10	QPSK	1	25	22.07	22.16	22.13	
10	QPSK	1	49	22.14	22.14	22.17	
10	QPSK	25	0	21.24	21.43	21.34	22
10	QPSK	25	12	21.34	21.40	21.38	
10	QPSK	25	25	21.37	21.31	21.42	
10	QPSK	50	0	21.46	21.43	21.38	22
10	16QAM	1	0	21.25	21.23	21.24	
10	16QAM	1	25	21.36	21.37	21.21	
10	16QAM	1	49	21.35	21.37	21.40	21
10	16QAM	25	0	20.29	20.37	20.50	
10	16QAM	25	13	20.32	20.37	20.22	
10	16QAM	25	25	20.31	20.37	20.24	22
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	23
5	QPSK	1	0	22.13	22.24	22.11	
5	QPSK	1	12	22.08	22.14	22.20	23
5	QPSK	1	24	22.16	22.19	22.18	
5	QPSK	12	0	21.29	21.41	21.37	
5	QPSK	12	7	21.38	21.42	21.37	22
5	QPSK	12	13	21.34	21.37	21.40	
5	QPSK	25	0	21.39	21.42	21.32	
5	16QAM	1	0	21.32	21.16	21.25	22
5	16QAM	1	13	21.37	21.34	21.25	
5	16QAM	1	24	21.33	21.44	21.38	
5	16QAM	12	0	20.29	20.36	20.44	21
5	16QAM	12	6	20.27	20.36	20.26	
5	16QAM	12	13	20.26	20.36	20.23	
5	16QAM	25	0	20.24	20.28	20.37	21

Mode	Channel	Frequency (MHz)	1Mbps		2Mbps		3Mbps	
			Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit
BR / EDR	CH 00	2402	-0.62	0.00	0.60	1.50	0.33	1.00
	CH 39	2441	0.46	1.00	1.54	2.50	1.55	2.50
	CH 78	2480	-2.69	-2.00	-1.93	-1.00	-1.89	-1.00
Duty Cycle %	CH 00	2402	46.59		77.71		77.76	
	CH 39	2441	46.59		77.76		77.81	
	CH 78	2480	46.53		81.82		88.67	
power level setting			default		default		default	

Mode	Channel	Frequency (MHz)	1Mbps		2Mbps	
			Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit
LE	CH 00	2402	-0.19	0.50	-2.18	-1.50
	CH 39	2441	0.88	1.50	-1.15	-0.50
	CH 78	2480	-2.25	-1.50	-4.35	-3.50
Duty Cycle %	CH 00	2402	67.74		38.10	
	CH 39	2441	66.67		38.71	
	CH 78	2480	67.74		38.71	
power level setting			default		default	