

Tune up procedure

FCC ID: 2AEHNG1058

Tune up procedure shall be over the power range or at specific operating power levels.

Target Power range:

GSM - Burst Average Power (dBm)								
Band	GSM850			Tune-up power (dBm)	PCS1900			Tune-up power (dBm)
Channel	128	190	251		512	661	810	
Frequency (MHz)	824.2	836.6	848.8		1850.2	1880	1909.8	
GRPS (1 slot)	32.41	32.43	32.52	33.0	29.33	29.91	30.11	30.5
GRPS (2 slots)	30.46	30.53	30.59	31.0	26.21	26.78	27.01	27.5
GRPS (3 slots)	28.85	28.89	28.92	29.0	25.54	25.46	25.67	26.0
GRPS (4 slots)	27.65	27.69	27.74	28.0	24.46	24.57	24.61	25.0
EDGE(1 slot)	28.13	28.21	28.16	28.5	27.23	26.79	26.78	27.5
EDGE (2 slots)	27.43	27.53	27.46	28.0	26.54	25.93	26.05	27.0
EDGE (3 slots)	25.51	25.68	25.55	26.0	24.98	24.89	24.88	25.0
EDGE (4 slots)	24.46	24.49	24.45	25.0	22.99	22.87	22.91	23.0

GSM - Source-Based Time-Average Power (dBm)								
Band	GSM850			Tune-up power (dBm)	PCS1900			Tune-up power (dBm)
Channel	128	190	251		512	661	810	
Frequency (MHz)	824.2	836.6	848.8		1850.2	1880	1909.8	
GRPS (1 slot)	23.41	23.43	23.52	24.0	20.33	20.91	21.11	21.5
GRPS (2 slots)	24.46	24.53	24.59	25.0	20.21	20.78	21.01	21.5
GRPS (3 slots)	24.60	24.64	24.67	25.0	21.29	21.21	21.42	21.5
GRPS (4 slots)	24.65	24.69	24.74	25.0	21.46	21.57	21.61	22.0
EDGE(1 slot)	19.13	19.21	19.16	19.5	18.23	17.79	17.78	18.5
EDGE (2 slots)	21.43	21.53	21.46	22.0	20.54	19.93	20.05	21.0
EDGE (3 slots)	21.26	21.43	21.30	21.5	20.73	20.64	20.63	21.0
EDGE (4 slots)	21.46	21.49	21.45	21.5	19.99	19.87	19.91	20.0

WCDMA - Average Power (dBm)								
Band	WCDMA Band II				WCDMA Band V			
Channel	9262	9400	9538	Tune-up power (dBm)	4132	4183	4233	Tune-up power (dBm)
Frequency (MHz)	1852.4	1880.0	1907.6		826.4	836.6	846.6	
RMC 12.2k	22.54	23.07	22.84	23.5	22.81	22.83	22.94	23.0
HSDPA Subtest-1	21.68	22.22	21.87	22.5	21.93	21.96	21.98	22.0
HSDPA Subtest-2	21.54	22.03	21.69	22.5	21.75	21.81	21.84	22.0
HSDPA Subtest-3	21.53	22.06	21.67	22.5	21.74	21.81	21.84	22.0
HSDPA Subtest-4	21.43	21.97	21.54	22.5	21.56	21.72	21.75	22.0
HSUPA Subtest-1	21.54	21.98	21.63	22.0	21.71	21.87	21.89	22.0
HSUPA Subtest-2	21.37	21.78	21.56	22.0	21.63	21.78	21.81	22.0
HSUPA Subtest-3	21.34	21.77	21.56	22.0	21.46	21.55	21.61	22.0
HSUPA Subtest-4	21.22	21.64	21.43	22.0	21.46	21.55	21.61	22.0
HSUPA Subtest-5	21.36	21.73	21.55	22.0	21.46	21.55	21.57	22.0

FDD-LTE Band 2:

Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	20.69	0
		1	3	20.71	0
		1	5	20.67	0
		3	0	20.37	0
		3	2	20.36	0
		3	3	20.37	0
		6	0	19.61	1
	MCH	1	0	20.98	0
		1	3	21.03	0
		1	5	20.99	0
		3	0	20.37	0
		3	2	20.38	0
		3	3	20.37	0
		6	0	19.95	1
16QAM	LCH	1	0	21.09	0
		1	3	21.08	0
		1	5	21.1	0
		3	0	20.32	0
		3	2	20.36	0
		3	3	20.37	0
		6	0	20.09	1
	MCH	1	0	19.75	1
		1	3	19.74	1
		1	5	19.69	1
		3	0	19.37	1
		3	2	19.32	1
		3	3	19.31	1
		6	0	18.67	2
	HCH	1	0	20.19	1
		1	3	20.12	1
		1	5	20.09	1
		3	0	19.87	1
		3	2	19.86	1
		3	3	19.79	1
		6	0	19.03	2

		1	5	20.08	1
		3	0	19.89	1
		3	2	19.87	1
		3	3	19.77	1
		6	0	19.03	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	20.57	0
		1	7	20.67	0
		1	14	20.56	0
		8	0	19.59	1
		8	4	19.62	1
		8	7	19.67	1
		15	0	19.62	1
	MCH	1	0	21.06	0
		1	7	21.05	0
		1	14	20.89	0
		8	0	20.06	1
		8	4	20.12	1
		8	7	20.07	1
		15	0	20.02	1
16QAM	LCH	1	0	21.09	0
		1	7	21.08	0
		1	14	21.04	0
		8	0	20.07	1
		8	4	20.03	1
		8	7	20.07	1
		15	0	20.05	1
	MCH	1	0	20.17	1
		1	7	20.15	1
		1	14	20.13	1
		8	0	19.46	2
		8	4	19.47	2
		8	7	19.42	2
		15	0	18.67	2

		15	0	18.96	2
HCH		1	0	20.25	1
		1	7	20.19	1
		1	14	20.17	1
		8	0	19.48	2
		8	4	19.49	2
		8	7	19.43	2
		15	0	19.43	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	20.68	0
		1	12	20.65	0
		1	24	20.59	0
		12	0	19.67	1
		12	6	19.64	1
		12	13	19.61	1
		25	0	19.61	1
	MCH	1	0	21.12	0
		1	12	21.09	0
		1	24	21.07	0
		12	0	20.05	1
		12	6	20.1	1
		12	13	20.03	1
		25	0	20.02	1
16QAM	LCH	1	0	21.23	0
		1	12	21.19	0
		1	24	21.18	0
		12	0	20.14	1
		12	6	20.12	1
		12	13	20.08	1
		25	0	20.07	1
	MCH	1	0	19.93	1
		1	12	19.89	1
		1	24	19.96	1
		12	0	19.46	2
		12	6	19.45	2
		12	13	19.37	2
		25	0	18.78	2

		12	0	19.49	2
		12	6	19.49	2
		12	13	19.41	2
		25	0	18.97	2
HCH	HCH	1	0	20.27	1
		1	12	20.25	1
		1	24	20.16	1
		12	0	19.49	2
		12	6	19.48	2
		12	13	19.43	2
		25	0	19.33	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	20.69	0
		1	24	20.65	0
		1	49	20.54	0
		25	0	19.67	1
		25	12	19.63	1
		25	25	19.71	1
		50	0	19.73	1
	MCH	1	0	21.14	0
		1	24	21.13	0
		1	49	21.08	0
		25	0	20.02	1
		25	12	19.98	1
		25	25	20.04	1
		50	0	20.07	1
	HCH	1	0	21.23	0
		1	24	21.19	0
		1	49	21.14	0
		25	0	20.05	1
		25	12	20.06	1
		25	25	20.07	1
		50	0	20.09	1
16QAM	LCH	1	0	20.27	1
		1	24	20.26	1
		1	49	20.19	1
		25	0	19.44	2
		25	12	19.46	2
		25	25	19.49	2
		50	0	18.74	2

	MCH	1	0	20.13	1
		1	24	20.12	1
		1	49	20.06	1
		25	0	19.47	2
		25	12	19.46	2
		25	25	19.41	2
		50	0	19.11	2
	HCH	1	0	20.35	1
		1	24	20.31	1
		1	49	20.27	1
		25	0	19.43	2
		25	12	19.49	2
		25	25	19.46	2
		50	0	19.42	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	20.71	0
		1	37	20.68	0
		1	74	20.56	0
		37	0	19.78	1
		37	18	19.87	1
		37	38	19.83	1
		75	0	19.84	1
	MCH	1	0	21.12	0
		1	37	21.11	0
		1	74	21.06	0
		37	0	20.06	1
		37	18	20.12	1
		37	38	20.06	1
		75	0	20.11	1
	HCH	1	0	21.19	0
		1	37	21.19	0
		1	74	21.16	0
		37	0	20.22	1
		37	18	20.21	1
		37	38	20.23	1
		75	0	20.21	1
16QAM	LCH	1	0	20.35	1
		1	37	20.34	1
		1	74	20.26	1
		37	0	19.45	2

		37	18	19.47	2
		37	38	19.49	2
		75	0	18.81	2
MCH		1	0	20.16	1
		1	37	20.13	1
		1	74	20.18	1
		37	0	19.41	2
		37	18	19.44	2
		37	38	19.42	2
		75	0	19.09	2
		1	0	20.45	1
HCH		1	37	20.44	1
		1	74	20.47	1
		37	0	19.33	2
		37	18	19.47	2
		37	38	19.47	2
		75	0	19.15	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.13	0
		1	49	20.78	0
		1	99	20.67	0
		50	0	20.17	1
		50	25	20.08	1
		50	50	19.79	1
		100	0	19.81	1
	MCH	1	0	21.24	0
		1	49	21.16	0
		1	99	21.12	0
		50	0	20.42	1
		50	25	20.06	1
		50	50	20.07	1
		100	0	20.25	1
16QAM	HCH	1	0	21.19	0
		1	49	21.16	0
		1	99	21.08	0
		50	0	20.13	1
		50	25	20.1	1
		50	50	20.08	1
		100	0	20.1	1
		1	0	20.11	1

		1	49	20.21	1
		1	99	20.09	1
		50	0	19.47	2
		50	25	19.44	2
		50	50	19.41	2
		100	0	18.85	2
	MCH	1	0	20.29	1
		1	49	20.26	1
		1	99	20.18	1
		50	0	19.44	2
		50	25	19.43	2
		50	50	19.45	2
		100	0	19.06	2
	HCH	1	0	20.48	1
		1	49	20.45	1
		1	99	20.44	1
		50	0	19.47	2
		50	25	19.46	2
		50	50	19.42	2
		100	0	19.39	2

FDD-LTE Band 4:

Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	20.97	0
		1	3	20.87	0
		1	5	20.81	0
		3	0	20.37	0
		3	2	20.35	0
		3	3	20.33	0
		6	0	20.12	1
	MCH	1	0	21.02	0
		1	3	20.98	0
		1	5	20.89	0
		3	0	20.46	0
		3	2	20.44	0
		3	3	20.42	0
		6	0	20.14	1
	HCH	1	0	20.34	0
		1	3	20.32	0

		1	5	20.23	0
		3	0	20.29	0
		3	2	20.23	0
		3	3	20.18	0
		6	0	19.67	1
		1	0	20.06	1
16QAM	LCH	1	3	19.98	1
		1	5	19.93	1
		3	0	19.64	1
		3	2	19.65	1
		3	3	19.57	1
		6	0	18.97	2
		1	0	20.07	1
	MCH	1	3	20.06	1
		1	5	20.03	1
		3	0	19.76	1
		3	2	19.74	1
		3	3	19.54	1
		6	0	19.06	2
		1	0	19.37	1
	HCH	1	3	19.34	1
		1	5	19.32	1
		3	0	19.15	1
		3	2	19.16	1
		3	3	19.14	1
		6	0	19.14	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	20.42	0
		1	7	20.37	0
		1	14	20.31	0
		8	0	19.89	1
		8	4	19.81	1
		8	7	19.83	1
		15	0	19.78	1
	MCH	1	0	21.09	0
		1	7	21.06	0
		1	14	21.03	0
		8	0	20.03	1
		8	4	20.06	1
		8	7	20.12	1

		15	0	20.13	1
16QAM	HCH	1	0	20.49	0
		1	7	20.43	0
		1	14	20.23	0
		8	0	20.12	1
		8	4	20.21	1
		8	7	20.26	1
		15	0	20.31	1
16QAM	LCH	1	0	20.27	1
		1	7	20.23	1
		1	14	20.31	1
		8	0	19.47	2
		8	4	19.42	2
		8	7	19.48	2
		15	0	19.14	2
	MCH	1	0	20.03	1
		1	7	20.16	1
		1	14	20.08	1
		8	0	19.44	2
		8	4	19.41	2
		8	7	19.42	2
		15	0	18.93	2
16QAM	HCH	1	0	20.17	1
		1	7	20.32	1
		1	14	20.21	1
		8	0	19.45	2
		8	4	19.48	2
		8	7	19.48	2
		15	0	19.32	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	20.57	0
		1	12	20.54	0
		1	24	20.49	0
		12	0	19.47	1
		12	6	19.37	1
		12	13	19.41	1
		25	0	19.37	1
QPSK	MCH	1	0	21.06	0
		1	12	21.03	0
		1	24	20.97	0

		12	0	19.97	1
		12	6	20.03	1
		12	13	19.94	1
		25	0	19.98	1
16QAM	HCH	1	0	20.43	0
		1	12	20.54	0
		1	24	20.65	0
		12	0	19.58	1
		12	6	19.61	1
		12	13	19.58	1
		25	0	19.67	1
		1	0	20.14	1
QPSK	LCH	1	12	20.23	1
		1	24	20.12	1
		12	0	19.44	2
		12	6	19.41	2
		12	13	19.42	2
		25	0	19.05	2
		1	0	20.23	1
	MCH	1	12	20.16	1
		1	24	20.17	1
		12	0	19.46	2
		12	6	19.48	2
		12	13	19.43	2
		25	0	19.03	2
		1	0	20.21	1
BPSK	HCH	1	12	20.32	1
		1	24	20.16	1
		12	0	19.35	2
		12	6	19.38	2
		12	13	19.21	2
		25	0	18.91	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	20.57	0
		1	24	20.54	0
		1	49	20.49	0
		25	0	19.73	1
		25	12	19.65	1
		25	25	19.64	1
		50	0	19.76	1
	MCH	1	0	20.47	0
		1	24	20.43	0
		1	49	20.38	0
		25	0	19.37	1
		25	12	19.32	1
		25	25	19.69	1
		50	0	19.96	1
16QAM	LCH	1	0	20.51	0
		1	24	20.87	0
		1	49	20.79	0
		25	0	19.66	1
		25	12	19.87	1
		25	25	19.91	1
		50	0	20.24	1
	MCH	1	0	20.17	1
		1	24	20.11	1
		1	49	20.16	1
		25	0	19.44	2
		25	12	19.42	2
		25	25	19.37	2
		50	0	18.96	2
	HCH	1	0	20.14	1
		1	24	20.13	1
		1	49	20.32	1
		25	0	19.41	2
		25	12	19.42	2
		25	25	19.32	2
		50	0	18.96	2

		25	12	19.49	2
		25	25	19.45	2
		50	0	18.83	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	20.59	0
		1	37	20.54	0
		1	74	20.43	0
		37	0	19.56	1
		37	18	19.67	1
		37	38	19.72	1
		75	0	19.67	1
	MCH	1	0	20.51	0
		1	37	20.65	0
		1	74	20.45	0
		37	0	19.87	1
		37	18	19.93	1
		37	38	19.79	1
		75	0	20.02	1
16QAM	LCH	1	0	20.57	0
		1	37	20.55	0
		1	74	20.49	0
		37	0	19.45	1
		37	18	19.49	1
		37	38	19.53	1
		75	0	19.58	1
	MCH	1	0	20.21	1
		1	37	20.19	1
		1	74	20.36	1
		37	0	19.45	2
		37	18	19.48	2
		37	38	19.47	2
		75	0	19.06	2
	HCH	1	0	20.23	1
		1	37	20.31	1
		1	74	20.19	1
		37	0	19.42	2
		37	18	19.48	2
		37	38	19.33	2
		75	0	19.12	2
	HCH	1	0	20.13	1

1	37	20.26	1
1	74	20.18	1
37	0	19.34	2
37	18	19.42	2
37	38	19.27	2
75	0	18.96	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.37	0
		1	49	21.15	0
		1	99	20.97	0
		50	0	20.47	1
		50	25	20.34	1
		50	50	19.95	1
		100	0	20.41	1
	MCH	1	0	21.27	0
		1	49	21.04	0
		1	99	20.98	0
		50	0	20.41	1
		50	25	20.21	1
		50	50	19.92	1
		100	0	20.16	1
16QAM	HCH	1	0	21.14	0
		1	49	20.91	0
		1	99	20.93	0
		50	0	20.37	1
		50	25	19.92	1
		50	50	20.06	1
		100	0	20.12	1
	LCH	1	0	19.95	1
		1	49	19.89	1
		1	99	19.87	1
		50	0	19.46	2
		50	25	19.47	2
		50	50	19.45	2
		100	0	19.47	2
	MCH	1	0	19.81	1
		1	49	19.77	1
		1	99	19.81	1
		50	0	19.45	2
		50	25	19.44	2

50	50	19.32	2
100	0	18.79	2
HCH	1	0	20.47
	1	49	20.46
	1	99	20.41
	50	0	19.35
	50	25	19.43
	50	50	19.41
	100	0	18.89

FDD-LTE Band 5:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.81	0
		1	3	21.76	0
		1	5	21.73	0
		3	0	20.75	0
		3	2	20.65	0
		3	3	20.51	0
		6	0	20.44	1
	MCH	1	0	21.74	0
		1	3	21.71	0
		1	5	21.79	0
		3	0	20.87	0
		3	2	20.63	0
		3	3	20.57	0
		6	0	20.54	1
16QAM	LCH	1	0	21.37	0
		1	3	21.39	0
		1	5	21.34	0
		3	0	20.61	0
		3	2	20.62	0
		3	3	20.56	0
		6	0	20.42	1
	MCH	1	0	20.86	1
		1	3	20.79	1
		1	5	20.74	1
		3	0	20.18	1
		3	2	20.06	1
		3	3	19.89	1
		6	0	19.79	2
	HCH	1	0	20.62	1
		1	3	20.98	1
		1	5	20.88	1
		3	0	20.21	1
		3	2	20.16	1
		3	3	19.87	1
		6	0	19.57	2

		3	0	19.98	1
		3	2	19.87	1
		3	3	19.72	1
		6	0	19.34	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.72	0
		1	7	21.65	0
		1	14	21.53	0
		8	0	20.78	1
		8	4	20.79	1
		8	7	20.67	1
		15	0	20.81	1
	MCH	1	0	21.78	0
		1	7	21.63	0
		1	14	21.59	0
		8	0	20.73	1
		8	4	20.69	1
		8	7	20.58	1
		15	0	20.74	1
16QAM	LCH	1	0	21.79	0
		1	7	21.69	0
		1	14	21.74	0
		8	0	20.77	1
		8	4	20.79	1
		8	7	20.75	1
		15	0	20.81	1
	MCH	1	0	20.93	1
		1	7	20.97	1
		1	14	20.87	1
		8	0	19.95	2
		8	4	19.94	2
		8	7	19.83	2
		15	0	19.96	2

		1	0	20.94	1
		1	7	20.98	1
		1	14	20.87	1
		8	0	19.84	2
		8	4	19.93	2
		8	7	19.97	2
		15	0	19.91	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.76	0
		1	12	21.68	0
		1	24	21.58	0
		12	0	20.72	1
		12	6	20.68	1
		12	13	20.65	1
		25	0	20.67	1
	MCH	1	0	21.79	0
		1	12	21.74	0
		1	24	21.65	0
		12	0	20.78	1
		12	6	20.67	1
		12	13	20.63	1
		25	0	20.72	1
16QAM	LCH	1	0	21.85	0
		1	12	21.87	0
		1	24	21.78	0
		12	0	20.87	1
		12	6	20.79	1
		12	13	20.74	1
		25	0	20.81	1
	MCH	1	0	20.98	1
		1	12	20.87	1
		1	24	20.91	1
		12	0	19.85	2
		12	6	19.83	2
		12	13	19.99	2
		25	0	19.72	2

		12	6	19.93	2
		12	13	19.91	2
		25	0	19.67	2
HCH	HCH	1	0	20.95	1
		1	12	20.91	1
		1	24	20.89	1
		12	0	19.95	2
		12	6	19.93	2
		12	13	19.89	2
		25	0	19.79	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.77	0
		1	24	21.73	0
		1	49	21.69	0
		25	0	20.72	1
		25	12	20.65	1
		25	25	20.71	1
		50	0	20.69	1
	MCH	1	0	21.84	0
		1	24	21.94	0
		1	49	21.73	0
		25	0	20.88	1
		25	12	20.68	1
		25	25	20.61	1
		50	0	20.75	1
16QAM	LCH	1	0	21.79	0
		1	24	21.76	0
		1	49	21.68	0
		25	0	20.76	1
		25	12	20.56	1
		25	25	20.67	1
		50	0	20.75	1
	MCH	1	0	20.91	1
		1	24	20.94	1
		1	49	20.96	1

		1	24	20.87	1
		1	49	20.81	1
		25	0	19.93	2
		25	12	19.95	2
		25	25	19.86	2
		50	0	19.76	2
	HCH	1	0	20.93	1
		1	24	20.97	1
		1	49	20.87	1
		25	0	19.86	2
		25	12	19.98	2
		25	25	19.92	2
		50	0	19.81	2

FDD-LTE Band 12:

Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.46	0
		1	3	21.44	0
		1	5	21.4	0
		3	0	20.74	0
		3	2	20.72	0
		3	3	20.66	0
		6	0	20.4	1
	MCH	1	0	21.43	0
		1	3	21.38	0
		1	5	21.44	0
		3	0	20.63	0
		3	2	20.56	0
		3	3	20.75	0
		6	0	20.42	1
	HCH	1	0	21.03	0
		1	3	21.04	0
		1	5	21.02	0
		3	0	20.78	0
		3	2	20.61	0
		3	3	20.53	0
		6	0	19.97	1
16QAM	LCH	1	0	20.54	1
		1	3	20.46	1
		1	5	20.43	1

		3	0	19.85	1
		3	2	19.73	1
		3	3	19.55	1
		6	0	19.46	2
MCH		1	0	20.67	1
		1	3	20.64	1
		1	5	20.56	1
		3	0	19.87	1
		3	2	19.85	1
		3	3	19.54	1
		6	0	19.22	2
		1	0	20.18	1
HCH		1	3	20.16	1
		1	5	20.01	1
		3	0	19.66	1
		3	2	19.54	1
		3	3	19.41	1
		6	0	19.01	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.39	0
		1	7	21.31	0
		1	14	21.23	0
		8	0	20.46	1
		8	4	20.48	1
		8	7	20.43	1
		15	0	20.48	1
	MCH	1	0	21.44	0
		1	7	21.32	0
		1	14	21.25	0
		8	0	20.4	1
		8	4	20.35	1
		8	7	20.25	1
		15	0	20.4	1
	HCH	1	0	21.48	0
		1	7	21.36	0
		1	14	21.4	0
		8	0	20.47	1
		8	4	20.47	1
		8	7	20.44	1
		15	0	20.49	1

16QAM	LCH	1	0	20.72	1
		1	7	20.67	1
		1	14	20.54	1
		8	0	19.93	2
		8	4	19.92	2
		8	7	19.92	2
		15	0	19.71	2
	MCH	1	0	20.53	1
		1	7	20.46	1
		1	14	20.39	1
		8	0	19.82	2
		8	4	19.74	2
		8	7	19.58	2
		15	0	19.35	2
	HCH	1	0	20.73	1
		1	7	20.66	1
		1	14	20.56	1
		8	0	19.84	2
		8	4	19.91	2
		8	7	19.85	2
		15	0	19.59	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.52	0
		1	12	21.49	0
		1	24	21.43	0
		12	0	20.49	1
		12	6	20.45	1
		12	13	20.43	1
		25	0	20.41	1
	MCH	1	0	21.44	0
		1	12	21.35	0
		1	24	21.29	0
		12	0	20.44	1
		12	6	20.4	1
		12	13	20.35	1
		25	0	20.35	1
	HCH	1	0	21.43	0
		1	12	21.37	0
		1	24	21.33	0
		12	0	20.36	1

		12	6	20.27	1
		12	13	20.22	1
		25	0	20.27	1
16QAM	LCH	1	0	20.72	1
		1	12	20.66	1
		1	24	20.6	1
		12	0	19.83	2
		12	6	19.87	2
		12	13	19.94	2
	MCH	25	0	19.81	2
		1	0	20.71	1
		1	12	20.65	1
		1	24	20.51	1
		12	0	19.83	2
		12	6	19.72	2
	HCH	12	13	19.75	2
		25	0	19.51	2
		1	0	20.83	1
		1	12	20.75	1
		1	24	20.67	1
		12	0	19.75	2
		12	6	19.84	2
		12	13	19.75	2
		25	0	19.64	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.62	0
		1	24	21.52	0
		1	49	21.43	0
		25	0	20.87	1
		25	12	20.61	1
		25	25	20.56	1
		50	0	20.68	1
	MCH	1	0	21.49	0
		1	24	21.46	0
		1	49	21.36	0
		25	0	20.71	1
		25	12	20.34	1
		25	25	20.31	1
		50	0	20.36	1
	HCH	1	0	21.61	0

		1	24	21.43	0
		1	49	21.42	0
		25	0	20.62	1
		25	12	20.34	1
		25	25	20.05	1
		50	0	20.36	1
16QAM	LCH	1	0	20.66	1
		1	24	20.59	1
		1	49	20.5	1
		25	0	19.82	2
		25	12	19.98	2
		25	25	19.97	2
		50	0	19.43	2
	MCH	1	0	20.72	1
		1	24	20.72	1
		1	49	20.64	1
		25	0	19.85	2
		25	12	19.73	2
		25	25	19.76	2
		50	0	19.47	2
	HCH	1	0	20.75	1
		1	24	20.91	1
		1	49	20.89	1
		25	0	19.94	2
		25	12	19.84	2
		25	25	19.74	2
		50	0	19.43	2

WLAN(2.4G) - Maximum Average Power					
Test Mode	Data Rate	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up power (dBm)
802.11b	1Mbps	CH 01	2412	11.6	14.0
		CH 06	2437	12.16	14.0
		CH 11	2462	13.51	14.0
802.11g	6Mbps	CH 01	2412	7.83	12.0
		CH 06	2437	10.63	12.0
		CH 11	2462	11.57	12.0
802.11n (20MHz)	MCS0	CH 01	2412	8.01	12.0
		CH 06	2437	10.57	12.0
		CH 11	2462	11.78	12.0
802.11n (40MHz)	MCS0	CH 03	2422	10.17	10.5
		CH 06	2437	10.9	10.5
		CH 09	2452	10.19	10.5

Bluetooth - Maximum Average Power			
Test Mode	Data Rate	Average Power(dBm)	Tune-up power (dBm)
GFSK	1Mbps	4.00	4.5
Pi/4 QDPSK	2Mbps	2.92	4.5
8DPSK	3Mbps	3.07	4.5

Bluetooth - Maximum Average Power					
Test Mode	Data Rate	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up power (dBm)
BLE	1Mbps	CH 00	2402	-6.01	-3.5
		CH 19	2440	-3.82	-3.5
		CH 39	2480	-4.01	-3.5

Then these appropriate gain settings are stored in each device individually. The user has no possibility to change these settings later on, and during manufacturing each device will be individual calibrated. The measurement is done in fully calibrated setup, which is based on the base station simulator. Furthermore, the highest power level is verified afterwards measurement on three channels (low, middle and high)