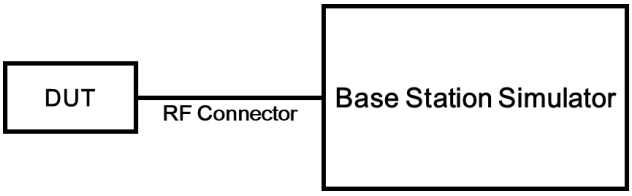
Appendix A - Conducted Power Measurements

UMTS Conducted Power



Power Measurement Setup

WCDMA

Maximum output power is verified on the high, middle and low channels according to procedures described in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all "1's" for WCDMA/HSDPA or by applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active

Rel. 5 HSDPA

Maximum output power is verified on the high, middle and low channels according to Release 5 procedures described in section 5.2 of 3GPP TS 34.121, using an FRC with H-set 1 and a 12.2 kbps RMC with TPC set to all "1's". When HSDPA is active, output power is measured according to requirements for HS-DPCCH Sub-test 1 - 4.

The following table specified in 3GPP TS 34.121 is applicable for tests on Transmitter Characteristics with HSDPA:

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	β_c	β_d	β_d *(SF)*	β_c/β_d	β_{HS} *(Note1, Note 2)*	CM (dB) *(Note 3)*	MPR (dB) *(Note 3)*
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 *(Note 4)*	15/15 *(Note 4)*	64	12/15 *(Note 4)*	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and Δ_{NACK} = 30/15 with β_{hs} = 30/15 * β_c, and Δ_{CQI} = 24/15 with β_{hs} = 24/15 * β_c.

Note 3: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c=24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β_c = 11/15 and β_d = 15/15.

Rel. 6 HSPA (HSDPA/HSUPA)

Maximum output power is verified on the high, middle and low channels according to Release 6 procedures in section 5.2 of 3GPP TS 34.121, using the appropriate RMC, FRC and E-DCH configurations. When E-DCH is not active, TPC is set to all "1's"; otherwise, inner loop power control with power control algorithm 2 is required to maintain E-TFCI requirements. When HSPA is active output power for the applicable HSPA modes should be measured for E-DCH Sub-test 1-5.

The following table specified in 3GPP TS 34.121 is applicable for tests on Transmitter Characteristics with HS-DPCCH and E-DCH:

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-test	β_c	β_d	β_d *(SF)*	β_c/β_d	β_{HS} *(Note1)*	β_{ec}	β_{ed} *(Note 4)(Note 5)*	β_{ed} *(SF)*	β_{ed} *(Codes)*	CM *(dB)* *(Note 2)*	MPR *(dB)* *(Note 2)(Note 6)*	*AG Index* *(Note 5)*	*E-TFCI*
1	11/15 *(Note 3)*	15/15 *(Note 3)*	64	11/15 *(Note 3)*	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed}1: 47/15 β_{ed}2: 47/15	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5 (Rel.8)	15/15	15/15	64	15/15	30/15	24/15	134/15	4	1	1.0	0.0	21	81
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c For sub-test 5, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 5/15 with β_{hs} = 5/15 * β_c.

Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c=24/15. For all other combinations of DPDCH, DPCCH, HS- DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β_c = 10/15 and β_d = 15/15.

Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.

Note 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

Rel. 8 DC-HSDPA

Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction.

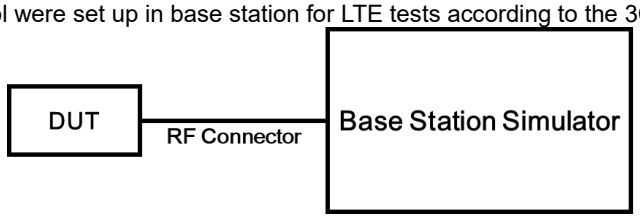
The following table specified in 3GPP TS 34.121 is applicable for tests on Transmitter Characteristics with DC-HSPDA:

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.		
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

LTE Conducted Power

The following test were conducted according to KDB 941225 D05, 3GPP TS36.101 and 3Gpp TS36.521-1 specification.
All the LTE measurements were performed using the Anritsu MT8820C. A closed loop power control setting allowed the UE to transmit at the maximum output power during the SAR measurements. The parameter of frequency band, channel bandwidth, RB allocation configuration and power control were set up in base station for LTE tests according to the 3GPP 36.521-1.



Power Measurement Setup

<Maximum power reduction (MPR) >
MPR is enabled for this device, according to the following table specified in 3GPP TS36.101:

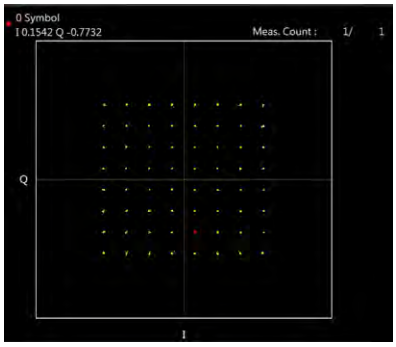
Table 6.2.3-1 in 3GPP TS36.101: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3

Modulation	Channel bandwidth / Transmission bandwidth (N_{RB})						MPR(dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
256 QAM	≥1						≤ 5

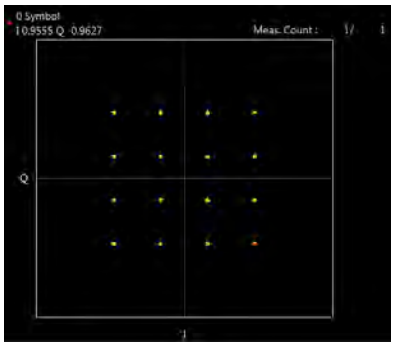
<Additional MPR (A-MPR)>
According to KDB 941225 D05, Additional MPR (A-MPR) was disabled for all SAR tests.

<Spectrum plots for RB configurations>
According to KDB 941225 D05, when a properly configured base station simulator is used for the SAR or power measurements, spectrum plots for each RB allocation and offset configuration are not required.

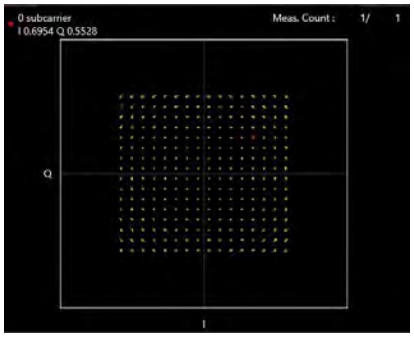
According to TCB workshop May.2017, for 64 QAM and 16 QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation.
The 64 QAM and 16 QAM signal modulation were verified as follows:



64 QAM



16 QAM



256 QAM

<TDD Consideration >

According to KDB 941225 D05, for TDD test configurations, SAR were measured with a fixed periodic duty factor corresponding to the highest transmission duty factor implemented for the device according to the UL-DL configurations defined by 3GPP.
The support configurations described in 3GPP TS36.211 are as follows:

Table 4.2-1 in 3GPP TS36.211: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$(1+X) \cdot 2192 \cdot T_s$	$(1+X) \cdot 2560 \cdot T_s$	$7680 \cdot T_s$	$(1+X) \cdot 2192 \cdot T_s$	$(1+X) \cdot 2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$(2+X) \cdot 2192 \cdot T_s$	$(2+X) \cdot 2560 \cdot T_s$
5	$6592 \cdot T_s$	$(2+X) \cdot 2192 \cdot T_s$	$(2+X) \cdot 2560 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-
10	$13168 \cdot T_s$	$13168 \cdot T_s$	$13168 \cdot T_s$	-	-	-

Table 4.2.2 in 3GPP TS36.211 : Uplink-downlink configurations

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number										Duty Cycle
		0	1	2	3	4	5	6	7	8	9	
0	5ms	D	S	U	U	U	D	S	U	U	U	63.3%
1	5ms	D	S	U	U	D	D	S	U	U	D	43.3%
2	5ms	D	S	U	D	D	D	S	U	D	D	23.3%
3	10ms	D	S	U	U	U	D	D	D	D	D	31.7%
4	10ms	D	S	U	U	D	D	D	D	D	D	21.7%
5	10ms	D	S	U	D	D	D	D	D	D	D	11.7%
6	5ms	D	S	U	U	U	D	S	U	U	D	53.3%

Calculated Duty Cycle = Extended cyclic prefix in uplink * (Ts) * (the number of S) + (the number of U) / period
Where
T_s = 1/ (15000*2048) seconds
S = special subframe
U = uplink subframe

This device supports Uplink-downlink configuration 0-6. The SAR test were performed at maximum output power and worst-case duty factor in extended cyclic prefix: configuration 0 at 63.3% duty cycle for power class 3; configuration 1 at 43.3% duty cycle for power class 2.

<LTE Uplink Carrier Aggregation>
The following test were conducted according to 3GPP TS36.101 specification.

For inter-band carrier aggregation with one uplink component carrier assigned to one E-UTRA band, the requirements in sub-clause 6.2.3 of 3GPP TS36.101 applied. For inter-band carrier aggregation with two uplink contiguous component carrier assigned to one E-UTRA band specified in this clause for intra-band contiguous carrier aggregation apply for that band.

For inter-band carrier aggregation with one component carrier per operating band and the uplink active in two E-UTRA bands, the requirements in sub-clause 6.2.3 of 3GPP TS36.101 was applied for each uplink component carrier.

For intra-band contiguous carrier aggregation the allowed Maximum Power Reduction (MPR) for the maximum output power was specified in following table. When the modulation format is different on different component carriers then the MPR was determined by the rules applied to higher order of those modulations

Table 6.2.3A-1 in 3GPP TS36.101: Maximum Power Reduction (MPR) for Power Class 3

Modulation	CA bandwidth Class B and C / Smallest Component Carrier Transmission Bandwidth Configuration				MPR (dB)
	25 RB	50 RB	75 RB	100 RB	
QPSK	> 8 and ≤ 25	> 12 and ≤ 50	> 16 and ≤ 75	> 18 and ≤ 100	≤ 1
QPSK	> 25	> 50	> 75	> 100	≤ 2
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 8 and ≤ 25	> 12 and ≤ 50	> 16 and ≤ 75	> 18 and ≤ 100	≤ 2
16 QAM	> 25	> 50	> 75	> 100	≤ 3
64 QAM	≤ 8 and allocation wholly contained within a single CC	≤ 12 and allocation wholly contained within a single CC	≤ 16 and allocation wholly contained within a single CC	≤ 18 and allocation wholly contained within a single CC	≤ 2
64 QAM	> 8 or allocation extends across two CC's	> 12 or allocation extends across two CC's	> 16 or allocation extends across two CC's	> 18 or allocation extends across two CC's	≤ 3
256 QAM	≥ 1				≤ 5

Table 6.2.3A-1a in 3GPP TS36.101: Maximum Power Reduction (MPR) for Power Class 2

Modulation	CA bandwidth Class C / Smallest Component Carrier Transmission Bandwidth Configuration				MPR (dB)
	25 RB	50 RB	75 RB	100 RB	
QPSK	> 6 and ≤ 25	> 6 and ≤ 50	> 6 and ≤ 75	> 6 and ≤ 100	≤ 1
QPSK	> 25	> 50	> 75	> 100	≤ 2
16 QAM	≤ 6	≤ 8	≤ 16	≤ 18	≤ 1.5
16 QAM	> 6 and ≤ 25	> 8 and ≤ 50	> 16 and ≤ 75	> 18 and ≤ 100	≤ 2
16 QAM	> 25	> 50	> 75	> 100	≤ 3
64 QAM	≤ 8 and allocation wholly contained within a single CC	≤ 12 and allocation wholly contained within a single CC	≤ 16 and allocation wholly contained within a single CC	≤ 18 and allocation wholly contained within a single CC	≤ 2
64 QAM	> 8 or allocation extends across two CC's	> 12 or allocation extends across two CC's	> 16 or allocation extends across two CC's	> 18 or allocation extends across two CC's	≤ 3
256 QAM	≥ 1				≤ 6

Table 6.2.3A-2 in 3GPP TS36.101: Maximum Power Reduction (MPR) for Class 3

Modulation	CA bandwidth Class D					MPR (dB)
	50 RB + 75 RB + 100RB	50 RB + 100 RB + 100 RB	75 RB + 75 RB + 100 RB	75 RB + 100 RB + 100 RB	100 RB + 100 RB + 100 RB	
QPSK	> 12 and ≤ 50	> 12 and ≤ 50	> 16 and ≤ 75	> 16 and ≤ 75	> 18 and ≤ 100	≤ 1
QPSK	> 50 and ≤ 125	> 50 and ≤ 150	> 75 and ≤ 150	> 75 and ≤ 175	> 100 and ≤ 200	≤ 2
QPSK	> 125	> 150	> 150	> 175	> 200	≤ 3
16 QAM	≤ 12	≤ 12	≤ 16	≤ 16	≤ 18	≤ 1
16 QAM	> 12 and ≤ 50	> 12 and ≤ 50	> 16 and ≤ 75	> 16 and ≤ 75	> 18 and ≤ 100	≤ 2
16 QAM	> 50 and ≤ 125	> 50 and ≤ 150	> 75 and ≤ 150	> 75 and ≤ 175	> 100 and ≤ 200	≤ 3
16 QAM	> 125	> 150	> 150	>175	> 200	≤ 3.5
64 QAM	≤ 12 allocation wholly contained within a single CC	≤ 12 and allocation wholly contained within a single CC	≤ 16 and allocation wholly contained within a single CC	≤ 16 and allocation wholly contained within a single CC	≤ 18 and allocation wholly contained within a single CC	≤ 2
64 QAM	> 12 allocation wholly contained within a single CC or allocation extends across two CC's	> 12 allocation wholly contained within a single CC or allocation extends across two CC's	> 16 allocation wholly contained within a single CC or allocation extends across two CC's	> 16 allocation wholly contained within a single CC or allocation extends across two CC's	> 18 allocation wholly contained within a single CC or allocation extends across two CC's	≤ 3
64 QAM	allocation extends across three CC's	allocation extends across three CC's	allocation extends across three CC's	allocation extends across three CC's	allocation extends across three CC's	≤ 4.0
256 QAM	≥ 1					≤ 5.5

<LTE Downlink Carrier Aggregation>
According to KDB 941225 D05A, when carrier aggregation is limited to downlink only, uplink maximum output power (single carrier) was measured for the supported combinations of downlink carrier aggregation.

In applying the existing power measurement procedures of KDB 941225 D05A and DL CA Inter-band exclusion guidance in Nov. 2017 and Apr. 2018 TCB workshop, only the subset with the largest number of combinations of frequency bands and CCs in each row required power measurement.

In applying the power measurement procedures of KDB 941225 D05A and DL CA Intra-band exclusion guidance in Nov. 2017 and Apr. 2018 TCB workshop, only the CA configuration with the largest aggregated DL CA bandwidth in each frequency band group required power measurement, independently for contiguous and non-contiguous CA. When the same frequency band is used for both contiguous and non-contiguous CA, power was measured using the configuration with the largest aggregated bandwidth and maximum output power among the contiguous and non-contiguous CA configurations.

	Uplink Channel	9262	9400	9538	Tune up (dBm)
	Uplink Frequency	1852.4	1880.0	1907.6	
WCDMA II	RMC_12.2Kbps	23.97	23.99	23.94	24
	HSDPA_Subtest 1	23.85	23.85	23.95	24
	HSDPA_Subtest 2	23.78	23.89	23.95	24
	HSDPA_Subtest 3	23.46	23.22	23.22	23.5
	HSDPA_Subtest 4	23.2	23.29	23.25	23.5
	HSUPA _Subtest 1	23.91	23.71	23.71	24
	HSUPA _Subtest 2	21.76	21.86	21.92	22
	HSUPA _Subtest 3	22.77	22.85	22.82	23
	HSUPA _Subtest 4	21.84	21.75	21.97	22
	HSUPA _Subtest 5	23.71	23.83	23.71	24
	DC-HSDPA_Subtest 1	23.81	23.86	23.77	24
	DC-HSDPA_Subtest 2	23.81	23.85	23.92	24
	DC-HSDPA_Subtest 3	23.24	23.41	23.34	23.5
	DC-HSDPA_Subtest 4	23.28	23.36	23.22	23.5
	HSPA+_Subtest 1	21.26	21.25	21.34	21.5

	Uplink Channel	1312	1413	1513	Tune up (dBm)
	Uplink Frequency	1712.4	1732.6	1752.6	
WCDMA IV	RMC_12.2Kbps	23.94	23.98	23.91	24
	HSDPA_Subtest 1	23.9	23.77	23.74	24
	HSDPA_Subtest 2	23.85	23.72	23.85	24
	HSDPA_Subtest 3	23.44	23.37	23.21	23.5
	HSDPA_Subtest 4	23.32	23.24	23.47	23.5
	HSUPA _Subtest 1	23.73	23.82	23.81	24
	HSUPA _Subtest 2	21.82	21.87	21.77	22
	HSUPA _Subtest 3	22.88	22.88	22.83	23
	HSUPA _Subtest 4	21.9	21.85	21.88	22
	HSUPA _Subtest 5	23.86	23.8	23.96	24
	DC-HSDPA_Subtest 1	23.75	23.79	23.96	24
	DC-HSDPA_Subtest 2	23.89	23.89	23.76	24
	DC-HSDPA_Subtest 3	23.46	23.4	23.41	23.5
	DC-HSDPA_Subtest 4	23.3	23.4	23.26	23.5
	HSPA+_Subtest 1	21.4	21.21	21.38	21.5

	Uplink Channel	4132	4182	4233	Tune up (dBm)
	Uplink Frequency	826.4	836.4	846.6	
WCDMA V	RMC_12.2Kbps	23.88	23.94	23.91	24
	HSDPA_Subtest 1	23.82	23.74	23.77	24
	HSDPA_Subtest 2	23.8	23.81	23.79	24
	HSDPA_Subtest 3	23.45	23.35	23.21	23.5
	HSDPA_Subtest 4	23.31	23.33	23.29	23.5
	HSUPA _Subtest 1	23.79	23.8	23.78	24
	HSUPA _Subtest 2	21.87	21.84	21.91	22
	HSUPA _Subtest 3	22.87	22.72	22.77	23
	HSUPA _Subtest 4	21.84	21.82	21.79	22
	HSUPA _Subtest 5	23.93	23.74	23.76	24
	DC-HSDPA_Subtest 1	23.85	23.79	23.93	24
	DC-HSDPA_Subtest 2	23.92	23.85	23.87	24
	DC-HSDPA_Subtest 3	23.35	23.26	23.21	23.5
	DC-HSDPA_Subtest 4	23.31	23.24	23.34	23.5
	HSPA+_Subtest 1	21.25	21.35	21.34	21.5

LTE Band 2							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
18700	18900	19100	Channel				
1860	1880	1900	Freq. (MHz)				
22.86	22.88	23.22	24	QPSK	20MHz	1	0
22.81	22.81	23.06	24	QPSK	20MHz	1	49
22.60	22.65	23.01	24	QPSK	20MHz	1	99
21.89	21.88	22.15	23	QPSK	20MHz	50	0
21.86	21.84	22.10	23	QPSK	20MHz	50	25
21.79	21.79	22.09	23	QPSK	20MHz	50	50
21.83	21.76	22.08	23	QPSK	20MHz	100	0
22.22	22.24	22.66	23	16QAM	20MHz	1	0
21.98	22.10	22.18	23	16QAM	20MHz	1	49
21.96	21.93	22.14	23	16QAM	20MHz	1	99
20.86	20.88	21.23	22	16QAM	20MHz	50	0
20.82	20.76	21.15	22	16QAM	20MHz	50	25
20.76	20.80	21.11	22	16QAM	20MHz	50	50
20.83	20.77	21.10	22	16QAM	20MHz	100	0
21.98	21.99	21.97	22	64QAM	20MHz	1	0
21.95	21.90	21.88	22	64QAM	20MHz	1	49
21.79	21.89	21.82	22	64QAM	20MHz	1	99
20.85	20.88	20.83	21	64QAM	20MHz	50	0
20.74	20.75	20.77	21	64QAM	20MHz	50	25
20.68	20.81	20.75	21	64QAM	20MHz	50	50
20.82	20.79	20.74	21	64QAM	20MHz	100	0

LTE Band 2							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
18675	18900	19125	Channel				
1857.5	1880	1902.5	Freq. (MHz)				
22.42	22.43	22.65	24	QPSK	15MHz	1	0
22.28	22.23	22.46	24	QPSK	15MHz	1	37
22.21	22.18	22.42	24	QPSK	15MHz	1	74
21.34	21.31	21.59	23	QPSK	15MHz	36	0
21.28	21.17	21.52	23	QPSK	15MHz	36	19
21.23	21.28	21.56	23	QPSK	15MHz	36	39
21.29	21.19	21.57	23	QPSK	15MHz	75	0
21.73	21.77	21.97	23	16QAM	15MHz	1	0
21.58	21.58	21.92	23	16QAM	15MHz	1	37
21.51	21.49	21.71	23	16QAM	15MHz	1	74
20.33	20.31	20.56	22	16QAM	15MHz	36	0
20.27	20.27	20.53	22	16QAM	15MHz	36	19
20.18	20.26	20.57	22	16QAM	15MHz	36	39
20.22	20.30	20.50	22	16QAM	15MHz	75	0
21.62	21.41	21.78	22	64QAM	15MHz	1	0
21.36	21.32	21.70	22	64QAM	15MHz	1	37
21.27	21.42	21.56	22	64QAM	15MHz	1	74
20.35	20.29	20.64	21	64QAM	15MHz	36	0
20.23	20.18	20.56	21	64QAM	15MHz	36	19
20.20	20.32	20.49	21	64QAM	15MHz	36	39
20.22	20.21	20.47	21	64QAM	15MHz	75	0

LTE Band 2							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
18650	18900	19150	Channel				
1855	1880	1905	Freq. (MHz)				
22.33	22.24	22.63	24	QPSK	10MHz	1	0
22.16	22.15	22.51	24	QPSK	10MHz	1	24
22.14	22.07	22.48	24	QPSK	10MHz	1	49
21.26	21.24	21.56	23	QPSK	10MHz	25	0
21.20	21.20	21.60	23	QPSK	10MHz	25	12
21.22	21.21	21.59	23	QPSK	10MHz	25	25
21.25	21.13	21.57	23	QPSK	10MHz	50	0
21.96	21.62	21.97	23	16QAM	10MHz	1	0
21.60	21.53	21.85	23	16QAM	10MHz	1	24
21.46	21.42	21.78	23	16QAM	10MHz	1	49
20.27	20.35	20.56	22	16QAM	10MHz	25	0
20.20	20.20	20.61	22	16QAM	10MHz	25	12
20.18	20.22	20.54	22	16QAM	10MHz	25	25
20.29	20.26	20.60	22	16QAM	10MHz	50	0
21.69	21.72	21.84	22	64QAM	10MHz	1	0
21.57	21.60	21.70	22	64QAM	10MHz	1	24
21.43	21.45	21.58	22	64QAM	10MHz	1	49
20.26	20.29	20.60	21	64QAM	10MHz	25	0
20.21	20.24	20.64	21	64QAM	10MHz	25	12
20.16	20.21	20.53	21	64QAM	10MHz	25	25
20.28	20.17	20.61	21	64QAM	10MHz	50	0

LTE Band 2							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
18625	18900	19175	Channel				
1852.5	1880	1907.5	Freq. (MHz)				
22.27	22.24	22.70	24	QPSK	5MHz	1	0
22.20	22.16	22.58	24	QPSK	5MHz	1	12
22.19	22.21	22.40	24	QPSK	5MHz	1	24
21.26	21.18	21.62	23	QPSK	5MHz	12	0
21.23	21.22	21.58	23	QPSK	5MHz	12	6
21.13	21.15	21.56	23	QPSK	5MHz	12	13
21.15	21.18	21.55	23	QPSK	5MHz	25	0
21.78	21.64	21.93	23	16QAM	5MHz	1	0
21.48	21.56	21.91	23	16QAM	5MHz	1	12
21.41	21.36	21.87	23	16QAM	5MHz	1	24
20.28	20.28	20.68	22	16QAM	5MHz	12	0
20.24	20.26	20.64	22	16QAM	5MHz	12	6
20.19	20.23	20.55	22	16QAM	5MHz	12	13
20.24	20.22	20.43	22	16QAM	5MHz	25	0
21.36	21.30	21.83	22	64QAM	5MHz	1	0
21.23	20.93	21.56	22	64QAM	5MHz	1	12
21.04	21.28	21.58	22	64QAM	5MHz	1	24
20.24	20.26	20.65	21	64QAM	5MHz	12	0
20.20	20.23	20.60	21	64QAM	5MHz	12	6
20.15	20.18	20.55	21	64QAM	5MHz	12	13
20.13	20.17	20.65	21	64QAM	5MHz	25	0

LTE Band 2							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
18615	18900	19185	Channel				
1851.5	1880	1908.5	Freq. (MHz)				
22.30	22.33	22.61	24	QPSK	3MHz	1	0
22.23	22.26	22.58	24	QPSK	3MHz	1	7
22.19	22.22	22.48	24	QPSK	3MHz	1	14
21.28	21.19	21.61	23	QPSK	3MHz	8	0
21.26	21.23	21.63	23	QPSK	3MHz	8	3
21.17	21.25	21.59	23	QPSK	3MHz	8	7
21.23	21.13	21.59	23	QPSK	3MHz	15	0
21.83	21.95	21.83	23	16QAM	3MHz	1	0
21.84	21.66	21.74	23	16QAM	3MHz	1	7
21.45	21.56	21.51	23	16QAM	3MHz	1	14
20.45	20.29	20.70	22	16QAM	3MHz	8	0
20.34	20.26	20.71	22	16QAM	3MHz	8	3
20.27	20.29	20.53	22	16QAM	3MHz	8	7
20.25	20.26	20.65	22	16QAM	3MHz	15	0
21.83	21.48	21.97	22	64QAM	3MHz	1	0
21.58	21.39	21.82	22	64QAM	3MHz	1	7
21.43	21.52	21.65	22	64QAM	3MHz	1	14
20.27	20.21	20.73	21	64QAM	3MHz	8	0
20.27	20.20	20.67	21	64QAM	3MHz	8	3
20.26	20.22	20.64	21	64QAM	3MHz	8	7
20.22	20.15	20.53	21	64QAM	3MHz	15	0

LTE Band 2							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
18607	18900	19193	Channel				
1850.7	1880	1909.3	Freq. (MHz)				
22.46	22.31	22.59	24	QPSK	1.4MHz	1	0
22.41	22.18	22.51	24	QPSK	1.4MHz	1	2
22.37	22.09	22.57	24	QPSK	1.4MHz	1	5
22.50	22.16	22.59	24	QPSK	1.4MHz	3	0
22.54	22.22	22.62	24	QPSK	1.4MHz	3	1
22.47	22.14	22.56	24	QPSK	1.4MHz	3	3
21.52	21.18	21.65	23	QPSK	1.4MHz	6	0
21.79	21.74	22.04	23	16QAM	1.4MHz	1	0
21.73	21.30	22.01	23	16QAM	1.4MHz	1	2
21.41	21.32	21.97	23	16QAM	1.4MHz	1	5
21.47	21.31	21.72	23	16QAM	1.4MHz	3	0
21.51	21.24	21.79	23	16QAM	1.4MHz	3	1
21.45	21.24	21.65	23	16QAM	1.4MHz	3	3
20.42	20.18	20.71	22	16QAM	1.4MHz	6	0
21.70	21.53	21.82	22	64QAM	1.4MHz	1	0
21.74	21.36	21.73	22	64QAM	1.4MHz	1	2
21.65	21.36	21.66	22	64QAM	1.4MHz	1	5
21.45	21.22	21.47	22	64QAM	1.4MHz	3	0
21.39	21.31	21.63	22	64QAM	1.4MHz	3	1
21.35	21.42	21.59	22	64QAM	1.4MHz	3	3
20.56	20.27	20.74	21	64QAM	1.4MHz	6	0

LTE Band 4							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20050	20175	20300	Channel				
1720	1732.5	1745	Freq. (MHz)				
23.14	23.28	23.30	24	QPSK	20MHz	1	0
23.01	22.93	23.07	24	QPSK	20MHz	1	49
22.98	22.78	22.92	24	QPSK	20MHz	1	99
22.13	22.14	22.17	23	QPSK	20MHz	50	0
22.06	21.94	22.05	23	QPSK	20MHz	50	25
21.96	21.86	21.88	23	QPSK	20MHz	50	50
21.86	21.89	22.00	23	QPSK	20MHz	100	0
22.45	22.47	22.46	23	16QAM	20MHz	1	0
22.36	22.12	22.28	23	16QAM	20MHz	1	49
22.23	21.90	22.12	23	16QAM	20MHz	1	99
21.11	21.21	21.18	22	16QAM	20MHz	50	0
21.06	20.99	21.09	22	16QAM	20MHz	50	25
20.98	20.91	20.99	22	16QAM	20MHz	50	50
21.07	20.90	21.05	22	16QAM	20MHz	100	0
21.96	21.98	21.93	22	64QAM	20MHz	1	0
21.90	21.97	21.89	22	64QAM	20MHz	1	49
21.88	21.94	21.87	22	64QAM	20MHz	1	99
20.91	20.95	20.90	21	64QAM	20MHz	50	0
20.89	20.91	20.84	21	64QAM	20MHz	50	25
20.87	20.83	20.83	21	64QAM	20MHz	50	50
20.82	20.90	20.82	21	64QAM	20MHz	100	0

LTE Band 4							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20025	20175	20325	Channel				
1717.5	1732.5	1747.5	Freq. (MHz)				
22.56	22.78	22.71	24	QPSK	15MHz	1	0
22.51	22.42	22.52	24	QPSK	15MHz	1	37
22.43	22.28	22.34	24	QPSK	15MHz	1	74
21.61	21.62	21.64	23	QPSK	15MHz	36	0
21.56	21.44	21.50	23	QPSK	15MHz	36	19
21.46	21.32	21.38	23	QPSK	15MHz	36	39
21.27	21.38	21.44	23	QPSK	15MHz	75	0
21.90	21.87	21.95	23	16QAM	15MHz	1	0
21.79	21.53	21.70	23	16QAM	15MHz	1	37
21.66	21.35	21.54	23	16QAM	15MHz	1	74
20.54	20.62	20.58	22	16QAM	15MHz	36	0
20.54	20.41	20.57	22	16QAM	15MHz	36	19
20.45	20.41	20.40	22	16QAM	15MHz	36	39
20.49	20.34	20.53	22	16QAM	15MHz	75	0
21.72	21.77	21.84	22	64QAM	15MHz	1	0
21.69	21.49	21.55	22	64QAM	15MHz	1	37
21.52	21.42	21.47	22	64QAM	15MHz	1	74
20.53	20.59	20.60	21	64QAM	15MHz	36	0
20.47	20.39	20.53	21	64QAM	15MHz	36	19
20.47	20.27	20.36	21	64QAM	15MHz	36	39
20.54	20.33	20.49	21	64QAM	15MHz	75	0

LTE Band 4							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20000	20175	20350	Channel				
1715	1732.5	1750	Freq. (MHz)				
22.49	22.71	22.70	24	QPSK	10MHz	1	0
22.36	22.23	22.49	24	QPSK	10MHz	1	24
22.34	22.18	22.40	24	QPSK	10MHz	1	49
21.48	21.52	21.53	23	QPSK	10MHz	25	0
21.36	21.33	21.34	23	QPSK	10MHz	25	12
21.40	21.21	21.16	23	QPSK	10MHz	25	25
21.19	21.35	21.49	23	QPSK	10MHz	50	0
21.86	21.82	21.92	23	16QAM	10MHz	1	0
21.63	21.43	21.59	23	16QAM	10MHz	1	24
21.62	21.37	21.52	23	16QAM	10MHz	1	49
20.43	20.61	20.51	22	16QAM	10MHz	25	0
20.43	20.48	20.42	22	16QAM	10MHz	25	12
20.41	20.27	20.40	22	16QAM	10MHz	25	25
20.56	20.31	20.42	22	16QAM	10MHz	50	0
21.68	21.71	21.89	22	64QAM	10MHz	1	0
21.66	21.41	21.42	22	64QAM	10MHz	1	24
21.42	21.29	21.45	22	64QAM	10MHz	1	49
20.50	20.52	20.42	21	64QAM	10MHz	25	0
20.49	20.19	20.52	21	64QAM	10MHz	25	12
20.34	20.24	20.22	21	64QAM	10MHz	25	25
20.45	20.28	20.40	21	64QAM	10MHz	50	0

LTE Band 4							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
19975	20175	20375	Channel				
1712.5	1732.5	1752.5	Freq. (MHz)				
22.54	22.59	22.56	24	QPSK	5MHz	1	0
22.38	22.31	22.37	24	QPSK	5MHz	1	12
22.36	22.18	22.18	24	QPSK	5MHz	1	24
21.46	21.48	21.49	23	QPSK	5MHz	12	0
21.36	21.37	21.32	23	QPSK	5MHz	12	6
21.44	21.24	21.21	23	QPSK	5MHz	12	13
21.16	21.20	21.17	23	QPSK	5MHz	25	0
21.84	21.89	21.87	23	16QAM	5MHz	1	0
21.71	21.61	21.72	23	16QAM	5MHz	1	12
21.63	21.27	21.55	23	16QAM	5MHz	1	24
20.45	20.48	20.61	22	16QAM	5MHz	12	0
20.34	20.35	20.51	22	16QAM	5MHz	12	6
20.36	20.28	20.39	22	16QAM	5MHz	12	13
20.42	20.31	20.52	22	16QAM	5MHz	25	0
21.56	21.61	21.89	22	64QAM	5MHz	1	0
21.65	21.36	21.44	22	64QAM	5MHz	1	12
21.48	21.32	21.42	22	64QAM	5MHz	1	24
20.39	20.43	20.53	21	64QAM	5MHz	12	0
20.37	20.33	20.41	21	64QAM	5MHz	12	6
20.32	20.22	20.27	21	64QAM	5MHz	12	13
20.47	20.32	20.31	21	64QAM	5MHz	25	0

LTE Band 4							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
19965	20175	20385	Channel				
1711.5	1732.5	1753.5	Freq. (MHz)				
22.42	22.70	22.59	24	QPSK	3MHz	1	0
22.29	22.32	22.48	24	QPSK	3MHz	1	7
22.28	22.23	22.37	24	QPSK	3MHz	1	14
21.55	21.46	21.60	23	QPSK	3MHz	8	0
21.34	21.36	21.42	23	QPSK	3MHz	8	3
21.29	21.28	21.20	23	QPSK	3MHz	8	7
21.24	21.29	21.36	23	QPSK	3MHz	15	0
21.87	21.77	21.85	23	16QAM	3MHz	1	0
21.74	21.43	21.72	23	16QAM	3MHz	1	7
21.54	21.21	21.51	23	16QAM	3MHz	1	14
20.58	20.68	20.53	22	16QAM	3MHz	8	0
20.42	20.39	20.51	22	16QAM	3MHz	8	3
20.39	20.32	20.30	22	16QAM	3MHz	8	7
20.52	20.23	20.38	22	16QAM	3MHz	15	0
21.58	21.78	21.76	22	64QAM	3MHz	1	0
21.61	21.33	21.51	22	64QAM	3MHz	1	7
21.52	21.36	21.43	22	64QAM	3MHz	1	14
20.54	20.43	20.58	21	64QAM	3MHz	8	0
20.43	20.20	20.49	21	64QAM	3MHz	8	3
20.36	20.14	20.27	21	64QAM	3MHz	8	7
20.48	20.23	20.45	21	64QAM	3MHz	15	0

LTE Band 4							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
19957	20175	20393	Channel				
1710.7	1732.5	1754.3	Freq. (MHz)				
22.47	22.70	22.69	24	QPSK	1.4MHz	1	0
22.48	22.34	22.45	24	QPSK	1.4MHz	1	2
22.42	22.09	22.23	24	QPSK	1.4MHz	1	5
22.48	22.59	22.58	24	QPSK	1.4MHz	3	0
22.47	22.31	22.48	24	QPSK	1.4MHz	3	1
22.28	22.16	22.15	24	QPSK	1.4MHz	3	3
21.29	21.28	21.33	23	QPSK	1.4MHz	6	0
21.86	21.78	21.84	23	16QAM	1.4MHz	1	0
21.70	21.47	21.66	23	16QAM	1.4MHz	1	2
21.60	21.26	21.57	23	16QAM	1.4MHz	1	5
21.48	21.61	21.58	23	16QAM	1.4MHz	3	0
21.40	21.44	21.51	23	16QAM	1.4MHz	3	1
21.29	21.34	21.39	23	16QAM	1.4MHz	3	3
20.52	20.33	20.52	22	16QAM	1.4MHz	6	0
21.60	21.62	21.92	22	64QAM	1.4MHz	1	0
21.61	21.34	21.50	22	64QAM	1.4MHz	1	2
21.53	21.28	21.39	22	64QAM	1.4MHz	1	5
21.55	21.44	21.60	22	64QAM	1.4MHz	3	0
21.44	21.22	21.45	22	64QAM	1.4MHz	3	1
21.41	21.31	21.27	22	64QAM	1.4MHz	3	3
20.41	20.21	20.38	21	64QAM	1.4MHz	6	0

LTE Band 5							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20450	20525	20600	Channel				
829	836.5	844	Freq. (MHz)				
23.08	23.23	23.03	24	QPSK	10MHz	1	0
23.04	23.08	22.91	24	QPSK	10MHz	1	24
22.98	23.06	22.88	24	QPSK	10MHz	1	49
22.01	22.20	22.10	23	QPSK	10MHz	25	0
22.06	22.17	21.95	23	QPSK	10MHz	25	12
22.03	22.10	21.94	23	QPSK	10MHz	25	25
22.05	22.09	22.02	23	QPSK	10MHz	50	0
22.45	22.47	22.40	23	16QAM	10MHz	1	0
22.31	22.37	22.34	23	16QAM	10MHz	1	24
22.29	22.23	22.08	23	16QAM	10MHz	1	49
21.06	21.26	20.98	22	16QAM	10MHz	25	0
21.05	21.17	20.97	22	16QAM	10MHz	25	12
21.00	21.08	20.94	22	16QAM	10MHz	25	25
21.10	21.15	20.98	22	16QAM	10MHz	50	0
21.98	21.99	21.93	22	64QAM	10MHz	1	0
21.90	21.97	21.91	22	64QAM	10MHz	1	24
21.90	21.94	21.89	22	64QAM	10MHz	1	49
20.90	20.98	20.97	21	64QAM	10MHz	25	0
20.89	20.85	20.95	21	64QAM	10MHz	25	12
20.88	20.82	20.94	21	64QAM	10MHz	25	25
20.85	20.80	20.97	21	64QAM	10MHz	50	0

LTE Band 5							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20425	20525	20625	Channel				
826.5	836.5	846.5	Freq. (MHz)				
22.53	22.70	22.50	24	QPSK	5MHz	1	0
22.49	22.50	22.37	24	QPSK	5MHz	1	12
22.40	22.53	22.30	24	QPSK	5MHz	1	24
21.49	21.69	21.52	23	QPSK	5MHz	12	0
21.50	21.60	21.35	23	QPSK	5MHz	12	6
21.49	21.52	21.41	23	QPSK	5MHz	12	13
21.45	21.50	21.51	23	QPSK	5MHz	25	0
21.89	21.93	21.82	23	16QAM	5MHz	1	0
21.75	21.82	21.80	23	16QAM	5MHz	1	12
21.69	21.72	21.57	23	16QAM	5MHz	1	24
20.53	20.74	20.39	22	16QAM	5MHz	12	0
20.48	20.57	20.38	22	16QAM	5MHz	12	6
20.41	20.51	20.40	22	16QAM	5MHz	12	13
20.58	20.58	20.47	22	16QAM	5MHz	25	0
21.90	21.77	21.97	22	64QAM	5MHz	1	0
21.73	21.68	21.80	22	64QAM	5MHz	1	12
21.69	21.62	21.46	22	64QAM	5MHz	1	24
20.51	20.70	20.45	21	64QAM	5MHz	12	0
20.44	20.66	20.37	21	64QAM	5MHz	12	6
20.44	20.54	20.40	21	64QAM	5MHz	12	13
20.58	20.52	20.37	21	64QAM	5MHz	25	0

LTE Band 5							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20415	20525	20635	Channel				
825.5	836.5	847.5	Freq. (MHz)				
22.47	22.49	22.38	24	QPSK	3MHz	1	0
22.48	22.43	22.19	24	QPSK	3MHz	1	7
22.34	22.45	22.24	24	QPSK	3MHz	1	14
21.34	21.58	21.41	23	QPSK	3MHz	8	0
21.53	21.61	21.35	23	QPSK	3MHz	8	3
21.40	21.53	21.35	23	QPSK	3MHz	8	7
21.40	21.35	21.43	23	QPSK	3MHz	15	0
21.74	21.91	21.68	23	16QAM	3MHz	1	0
21.63	21.68	21.79	23	16QAM	3MHz	1	7
21.68	21.62	21.49	23	16QAM	3MHz	1	14
20.49	20.56	20.24	22	16QAM	3MHz	8	0
20.38	20.60	20.39	22	16QAM	3MHz	8	3
20.37	20.40	20.26	22	16QAM	3MHz	8	7
20.56	20.64	20.42	22	16QAM	3MHz	15	0
21.89	21.74	21.85	22	64QAM	3MHz	1	0
21.78	21.62	21.66	22	64QAM	3MHz	1	7
21.61	21.55	21.41	22	64QAM	3MHz	1	14
20.47	20.66	20.43	21	64QAM	3MHz	8	0
20.37	20.55	20.23	21	64QAM	3MHz	8	3
20.40	20.53	20.26	21	64QAM	3MHz	8	7
20.47	20.50	20.44	21	64QAM	3MHz	15	0

LTE Band 5							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20407	20525	20643	Channel				
824.7	836.5	848.3	Freq. (MHz)				
22.42	22.59	22.38	24	QPSK	1.4MHz	1	0
22.33	22.44	22.27	24	QPSK	1.4MHz	1	2
22.45	22.35	22.20	24	QPSK	1.4MHz	1	5
22.50	22.68	22.43	24	QPSK	1.4MHz	3	0
22.40	22.61	22.23	24	QPSK	1.4MHz	3	1
22.43	22.46	22.26	24	QPSK	1.4MHz	3	3
21.44	21.44	21.35	23	QPSK	1.4MHz	6	0
21.83	21.83	21.84	23	16QAM	1.4MHz	1	0
21.63	21.82	21.79	23	16QAM	1.4MHz	1	2
21.71	21.56	21.46	23	16QAM	1.4MHz	1	5
21.53	21.74	21.37	23	16QAM	1.4MHz	3	0
21.47	21.49	21.36	23	16QAM	1.4MHz	3	1
21.42	21.49	21.40	23	16QAM	1.4MHz	3	3
20.46	20.57	20.41	22	16QAM	1.4MHz	6	0
21.86	21.75	21.78	22	64QAM	1.4MHz	1	0
21.70	21.53	21.84	22	64QAM	1.4MHz	1	2
21.57	21.54	21.45	22	64QAM	1.4MHz	1	5
21.46	21.61	21.33	22	64QAM	1.4MHz	3	0
21.30	21.54	21.23	22	64QAM	1.4MHz	3	1
21.40	21.37	21.41	22	64QAM	1.4MHz	3	3
20.49	20.39	20.35	21	64QAM	1.4MHz	6	0

LTE Band 7							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20850	21100	21350	Channel				
2510	2535	2560	Freq. (MHz)				
22.17	22.22	22.20	23	QPSK	20MHz	1	0
22.14	22.14	22.19	23	QPSK	20MHz	1	49
22.05	22.10	22.10	23	QPSK	20MHz	1	99
21.21	21.28	21.20	22	QPSK	20MHz	50	0
21.15	21.13	21.19	22	QPSK	20MHz	50	25
21.13	21.03	21.09	22	QPSK	20MHz	50	50
21.12	21.19	21.08	22	QPSK	20MHz	100	0
21.66	21.58	21.62	22	16QAM	20MHz	1	0
21.55	21.55	21.45	22	16QAM	20MHz	1	49
21.43	21.46	21.40	22	16QAM	20MHz	1	99
20.31	20.13	20.32	21	16QAM	20MHz	50	0
20.25	20.08	20.26	21	16QAM	20MHz	50	25
20.11	20.06	20.22	21	16QAM	20MHz	50	50
20.05	20.03	20.19	21	16QAM	20MHz	100	0
20.98	20.99	20.96	21	64QAM	20MHz	1	0
20.94	20.89	20.90	21	64QAM	20MHz	1	49
20.93	20.84	20.85	21	64QAM	20MHz	1	99
19.89	19.90	19.87	20	64QAM	20MHz	50	0
19.86	19.84	19.83	20	64QAM	20MHz	50	25
19.83	19.83	19.80	20	64QAM	20MHz	50	50
19.82	19.79	19.79	20	64QAM	20MHz	100	0

LTE Band 7							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20825	21100	21375	Channel				
2507.5	2535	2562.5	Freq. (MHz)				
21.59	21.69	21.69	23	QPSK	15MHz	1	0
21.59	21.63	21.60	23	QPSK	15MHz	1	37
21.55	21.52	21.51	23	QPSK	15MHz	1	74
20.64	20.50	20.73	22	QPSK	15MHz	36	0
20.61	20.60	20.78	22	QPSK	15MHz	36	19
20.55	20.48	20.53	22	QPSK	15MHz	36	39
20.53	20.57	20.55	22	QPSK	15MHz	75	0
21.14	21.07	21.06	22	16QAM	15MHz	1	0
20.95	21.01	20.92	22	16QAM	15MHz	1	37
20.90	20.91	20.84	22	16QAM	15MHz	1	74
19.75	19.63	19.77	21	16QAM	15MHz	36	0
19.65	19.49	19.75	21	16QAM	15MHz	36	19
19.52	19.46	19.67	21	16QAM	15MHz	36	39
19.55	19.49	19.60	21	16QAM	15MHz	75	0
20.89	20.91	20.95	21	64QAM	15MHz	1	0
20.81	20.86	20.69	21	64QAM	15MHz	1	37
20.75	20.81	20.67	21	64QAM	15MHz	1	74
19.59	19.60	19.73	20	64QAM	15MHz	36	0
19.61	19.60	19.69	20	64QAM	15MHz	36	19
19.59	19.60	19.65	20	64QAM	15MHz	36	39
19.56	19.52	19.65	20	64QAM	15MHz	75	0

LTE Band 7							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20800	21100	21400	Channel				
2505	2535	2565	Freq. (MHz)				
21.52	21.61	21.48	23	QPSK	10MHz	1	0
21.44	21.45	21.54	23	QPSK	10MHz	1	24
21.34	21.54	21.50	23	QPSK	10MHz	1	49
20.61	20.53	20.75	22	QPSK	10MHz	25	0
20.53	20.48	20.68	22	QPSK	10MHz	25	12
20.54	20.36	20.49	22	QPSK	10MHz	25	25
20.52	20.42	20.52	22	QPSK	10MHz	50	0
21.00	20.96	21.10	22	16QAM	10MHz	1	0
20.98	20.85	20.85	22	16QAM	10MHz	1	24
20.81	20.87	20.79	22	16QAM	10MHz	1	49
19.76	19.57	19.71	21	16QAM	10MHz	25	0
19.67	19.43	19.66	21	16QAM	10MHz	25	12
19.58	19.55	19.65	21	16QAM	10MHz	25	25
19.43	19.49	19.62	21	16QAM	10MHz	50	0
20.77	20.92	20.74	21	64QAM	10MHz	1	0
20.77	20.80	20.65	21	64QAM	10MHz	1	24
20.56	20.73	20.50	21	64QAM	10MHz	1	49
19.47	19.55	19.64	20	64QAM	10MHz	25	0
19.59	19.44	19.77	20	64QAM	10MHz	25	12
19.55	19.39	19.49	20	64QAM	10MHz	25	25
19.44	19.34	19.64	20	64QAM	10MHz	50	0

LTE Band 7							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20775	21100	21425	Channel				
2502.5	2535	2567.5	Freq. (MHz)				
21.48	21.62	21.48	23	QPSK	5MHz	1	0
21.41	21.48	21.60	23	QPSK	5MHz	1	12
21.43	21.41	21.45	23	QPSK	5MHz	1	24
20.57	20.42	20.63	22	QPSK	5MHz	12	0
20.47	20.58	20.49	22	QPSK	5MHz	12	6
20.52	20.34	20.48	22	QPSK	5MHz	12	13
20.50	20.50	20.39	22	QPSK	5MHz	25	0
21.01	20.87	21.05	22	16QAM	5MHz	1	0
20.97	21.03	20.75	22	16QAM	5MHz	1	12
20.80	20.87	20.76	22	16QAM	5MHz	1	24
19.76	19.52	19.80	21	16QAM	5MHz	12	0
19.60	19.43	19.74	21	16QAM	5MHz	12	6
19.44	19.53	19.58	21	16QAM	5MHz	12	13
19.33	19.38	19.60	21	16QAM	5MHz	25	0
20.83	20.72	20.79	21	64QAM	5MHz	1	0
20.77	20.70	20.65	21	64QAM	5MHz	1	12
20.60	20.70	20.62	21	64QAM	5MHz	1	24
19.63	19.54	19.71	20	64QAM	5MHz	12	0
19.52	19.43	19.74	20	64QAM	5MHz	12	6
19.46	19.52	19.44	20	64QAM	5MHz	12	13
19.43	19.49	19.52	20	64QAM	5MHz	25	0

LTE Band 12							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
23060	23095	23130	Channel				
704	707.5	711	Freq. (MHz)				
23.22	23.25	23.18	24	QPSK	10MHz	1	0
23.20	23.19	23.15	24	QPSK	10MHz	1	24
23.15	23.14	23.13	24	QPSK	10MHz	1	49
22.28	22.30	22.20	23	QPSK	10MHz	25	0
22.26	22.26	22.24	23	QPSK	10MHz	25	12
22.18	22.25	22.12	23	QPSK	10MHz	25	25
22.13	22.28	22.09	23	QPSK	10MHz	50	0
22.51	22.59	22.52	23	16QAM	10MHz	1	0
22.39	22.53	22.47	23	16QAM	10MHz	1	24
22.34	22.47	22.37	23	16QAM	10MHz	1	49
21.29	21.32	21.19	22	16QAM	10MHz	25	0
21.21	21.29	21.18	22	16QAM	10MHz	25	12
21.19	21.23	21.15	22	16QAM	10MHz	25	25
21.18	21.11	21.12	22	16QAM	10MHz	50	0
21.94	21.97	21.96	22	64QAM	10MHz	1	0
21.90	21.91	21.92	22	64QAM	10MHz	1	24
21.85	21.87	21.90	22	64QAM	10MHz	1	49
20.86	20.89	20.87	21	64QAM	10MHz	25	0
20.81	20.83	20.83	21	64QAM	10MHz	25	12
20.74	20.79	20.80	21	64QAM	10MHz	25	25
20.71	20.76	20.78	21	64QAM	10MHz	50	0

LTE Band 12							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
23035	23095	23155	Channel				
701.5	707.5	713.5	Freq. (MHz)				
22.71	22.71	22.64	24	QPSK	5MHz	1	0
22.63	22.69	22.57	24	QPSK	5MHz	1	12
22.65	22.57	22.56	24	QPSK	5MHz	1	24
21.75	21.78	21.63	23	QPSK	5MHz	12	0
21.74	21.72	21.68	23	QPSK	5MHz	12	6
21.65	21.65	21.55	23	QPSK	5MHz	12	13
21.58	21.71	21.55	23	QPSK	5MHz	25	0
22.01	22.08	21.92	23	16QAM	5MHz	1	0
21.79	22.03	21.94	23	16QAM	5MHz	1	12
21.82	21.97	21.78	23	16QAM	5MHz	1	24
20.79	20.81	20.62	22	16QAM	5MHz	12	0
20.61	20.79	20.59	22	16QAM	5MHz	12	6
20.68	20.65	20.60	22	16QAM	5MHz	12	13
20.59	20.59	20.53	22	16QAM	5MHz	25	0
21.95	21.99	21.96	22	64QAM	5MHz	1	0
21.94	21.89	21.99	22	64QAM	5MHz	1	12
21.86	21.60	21.81	22	64QAM	5MHz	1	24
20.76	20.69	20.60	21	64QAM	5MHz	12	0
20.64	20.62	20.55	21	64QAM	5MHz	12	6
20.68	20.63	20.55	21	64QAM	5MHz	12	13
20.78	20.55	20.53	21	64QAM	5MHz	25	0

LTE Band 12							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
23025	23095	23165	Channel				
700.5	707.5	714.5	Freq. (MHz)				
22.61	22.63	22.57	24	QPSK	3MHz	1	0
22.52	22.60	22.62	24	QPSK	3MHz	1	7
22.53	22.49	22.39	24	QPSK	3MHz	1	14
21.75	21.68	21.58	23	QPSK	3MHz	8	0
21.74	21.68	21.64	23	QPSK	3MHz	8	3
21.53	21.65	21.58	23	QPSK	3MHz	8	7
21.58	21.69	21.56	23	QPSK	3MHz	15	0
21.93	22.04	21.88	23	16QAM	3MHz	1	0
21.72	21.86	21.89	23	16QAM	3MHz	1	7
21.72	21.73	21.78	23	16QAM	3MHz	1	14
20.76	20.65	20.58	22	16QAM	3MHz	8	0
20.62	20.65	20.49	22	16QAM	3MHz	8	3
20.53	20.66	20.62	22	16QAM	3MHz	8	7
20.65	20.51	20.50	22	16QAM	3MHz	15	0
21.79	21.79	21.90	22	64QAM	3MHz	1	0
21.80	21.78	21.83	22	64QAM	3MHz	1	7
21.74	21.52	21.72	22	64QAM	3MHz	1	14
20.64	20.70	20.58	21	64QAM	3MHz	8	0
20.48	20.55	20.46	21	64QAM	3MHz	8	3
20.62	20.59	20.47	21	64QAM	3MHz	8	7
20.61	20.43	20.34	21	64QAM	3MHz	15	0

LTE Band 12							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
23017	23095	23173	Channel				
699.7	707.5	715.3	Freq. (MHz)				
22.60	22.66	22.50	24	QPSK	1.4MHz	1	0
22.58	22.60	22.41	24	QPSK	1.4MHz	1	2
22.62	22.48	22.40	24	QPSK	1.4MHz	1	5
22.68	22.60	22.60	24	QPSK	1.4MHz	3	0
22.68	22.69	22.54	24	QPSK	1.4MHz	3	1
22.54	22.60	22.46	24	QPSK	1.4MHz	3	3
21.60	21.66	21.52	23	QPSK	1.4MHz	6	0
21.89	22.03	21.84	23	16QAM	1.4MHz	1	0
21.75	21.87	21.73	23	16QAM	1.4MHz	1	2
21.68	21.83	21.74	23	16QAM	1.4MHz	1	5
21.63	21.73	21.64	23	16QAM	1.4MHz	3	0
21.60	21.69	21.45	23	16QAM	1.4MHz	3	1
21.62	21.59	21.63	23	16QAM	1.4MHz	3	3
20.59	20.49	20.44	22	16QAM	1.4MHz	6	0
21.89	21.90	21.86	22	64QAM	1.4MHz	1	0
21.80	21.76	21.88	22	64QAM	1.4MHz	1	2
21.80	21.51	21.70	22	64QAM	1.4MHz	1	5
21.75	21.67	21.64	22	64QAM	1.4MHz	3	0
21.65	21.64	21.53	22	64QAM	1.4MHz	3	1
21.50	21.53	21.47	22	64QAM	1.4MHz	3	3
20.67	20.49	20.52	21	64QAM	1.4MHz	6	0

LTE Band 13					
Maximum Average Power (dBm)	Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
23230	Channel				
782	Freq. (MHz)				
23.24	24	QPSK	10MHz	1	0
23.19	24	QPSK	10MHz	1	24
23.11	24	QPSK	10MHz	1	49
22.31	23	QPSK	10MHz	25	0
22.21	23	QPSK	10MHz	25	12
22.14	23	QPSK	10MHz	25	25
22.18	23	QPSK	10MHz	50	0
22.51	23	16QAM	10MHz	1	0
22.44	23	16QAM	10MHz	1	24
22.35	23	16QAM	10MHz	1	49
21.34	22	16QAM	10MHz	25	0
21.26	22	16QAM	10MHz	25	12
21.19	22	16QAM	10MHz	25	25
21.27	22	16QAM	10MHz	50	0
21.94	22	64QAM	10MHz	1	0
21.89	22	64QAM	10MHz	1	24
21.85	22	64QAM	10MHz	1	49
20.88	21	64QAM	10MHz	25	0
20.83	21	64QAM	10MHz	25	12
20.79	21	64QAM	10MHz	25	25
20.77	21	64QAM	10MHz	50	0

LTE Band 13							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
23205	23230	23255	Channel				
779.5	782	784.5	Freq. (MHz)				
22.57	22.64	22.56	24	QPSK	5MHz	1	0
22.53	22.66	22.55	24	QPSK	5MHz	1	12
22.55	22.50	22.52	24	QPSK	5MHz	1	24
21.59	21.68	21.71	23	QPSK	5MHz	12	0
21.54	21.55	21.58	23	QPSK	5MHz	12	6
21.39	21.50	21.57	23	QPSK	5MHz	12	13
21.44	21.57	21.59	23	QPSK	5MHz	25	0
21.95	21.78	21.89	23	16QAM	5MHz	1	0
21.76	21.87	21.75	23	16QAM	5MHz	1	12
21.69	21.75	21.69	23	16QAM	5MHz	1	24
20.63	20.78	20.67	22	16QAM	5MHz	12	0
20.56	20.67	20.54	22	16QAM	5MHz	12	6
20.54	20.58	20.51	22	16QAM	5MHz	12	13
20.68	20.66	20.65	22	16QAM	5MHz	25	0
21.92	21.76	21.83	22	64QAM	5MHz	1	0
21.68	21.76	21.77	22	64QAM	5MHz	1	12
21.69	21.66	21.62	22	64QAM	5MHz	1	24
20.77	20.60	20.64	21	64QAM	5MHz	12	0
20.50	20.55	20.52	21	64QAM	5MHz	12	6
20.57	20.47	20.56	21	64QAM	5MHz	12	13
20.55	20.55	20.70	21	64QAM	5MHz	25	0

LTE Band 14					
Maximum Average Power (dBm)	Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
23330	Channel				
793	Freq. (MHz)				
23.25	24	QPSK	10MHz	1	0
23.18	24	QPSK	10MHz	1	24
23.08	24	QPSK	10MHz	1	49
22.31	23	QPSK	10MHz	25	0
22.28	23	QPSK	10MHz	25	12
22.18	23	QPSK	10MHz	25	25
22.16	23	QPSK	10MHz	50	0
22.51	23	16QAM	10MHz	1	0
22.43	23	16QAM	10MHz	1	24
22.33	23	16QAM	10MHz	1	49
21.31	22	16QAM	10MHz	25	0
21.25	22	16QAM	10MHz	25	12
21.22	22	16QAM	10MHz	25	25
21.18	22	16QAM	10MHz	50	0
21.90	22	64QAM	10MHz	1	0
21.86	22	64QAM	10MHz	1	24
21.84	22	64QAM	10MHz	1	49
20.87	21	64QAM	10MHz	25	0
20.84	21	64QAM	10MHz	25	12
20.80	21	64QAM	10MHz	25	25
20.78	21	64QAM	10MHz	50	0

LTE Band 14							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
23305	23330	23355	Channel				
790.5	793	795.5	Freq. (MHz)				
22.69	22.69	22.74	24	QPSK	5MHz	1	0
22.67	22.67	22.63	24	QPSK	5MHz	1	12
22.58	22.53	22.56	24	QPSK	5MHz	1	24
21.79	21.75	21.78	23	QPSK	5MHz	12	0
21.77	21.68	21.68	23	QPSK	5MHz	12	6
21.61	21.60	21.67	23	QPSK	5MHz	12	13
21.65	21.59	21.63	23	QPSK	5MHz	25	0
21.92	21.93	21.96	23	16QAM	5MHz	1	0
21.89	21.93	21.88	23	16QAM	5MHz	1	12
21.74	21.80	21.78	23	16QAM	5MHz	1	24
20.74	20.76	20.71	22	16QAM	5MHz	12	0
20.74	20.71	20.72	22	16QAM	5MHz	12	6
20.62	20.70	20.69	22	16QAM	5MHz	12	13
20.67	20.60	20.68	22	16QAM	5MHz	25	0
21.91	21.94	21.90	22	64QAM	5MHz	1	0
21.85	21.87	21.84	22	64QAM	5MHz	1	12
21.77	21.74	21.78	22	64QAM	5MHz	1	24
20.73	20.78	20.73	21	64QAM	5MHz	12	0
20.71	20.69	20.75	21	64QAM	5MHz	12	6
20.61	20.70	20.68	21	64QAM	5MHz	12	13
20.60	20.69	20.60	21	64QAM	5MHz	25	0

LTE Band 26							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
26765	26865	26965	Channel				
821.5	831.5	841.5	Freq. (MHz)				
23.35	23.40	23.26	24	QPSK	15MHz	1	0
23.33	23.37	23.22	24	QPSK	15MHz	1	37
23.23	23.33	23.08	24	QPSK	15MHz	1	74
22.41	22.48	22.20	23	QPSK	15MHz	36	0
22.38	22.45	22.30	23	QPSK	15MHz	36	19
22.34	22.38	22.17	23	QPSK	15MHz	36	39
22.29	22.35	22.34	23	QPSK	15MHz	75	0
22.59	22.64	22.55	23	16QAM	15MHz	1	0
22.46	22.56	22.44	23	16QAM	15MHz	1	37
22.37	22.30	22.28	23	16QAM	15MHz	1	74
21.40	21.47	21.28	22	16QAM	15MHz	36	0
21.34	21.43	21.24	22	16QAM	15MHz	36	19
21.33	21.27	21.18	22	16QAM	15MHz	36	39
21.27	21.35	21.20	22	16QAM	15MHz	75	0
21.93	21.95	21.94	22	64QAM	15MHz	1	0
21.84	21.88	21.90	22	64QAM	15MHz	1	37
21.80	21.84	21.86	22	64QAM	15MHz	1	74
20.89	20.97	20.90	21	64QAM	15MHz	36	0
20.82	20.90	20.84	21	64QAM	15MHz	36	19
20.77	20.87	20.81	21	64QAM	15MHz	36	39
20.74	20.83	20.77	21	64QAM	15MHz	75	0

LTE Band 26							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
26740	26865	26990	Channel				
819	831.5	844	Freq. (MHz)				
22.83	22.85	22.67	24	QPSK	10MHz	1	0
22.79	22.84	22.66	24	QPSK	10MHz	1	24
22.71	22.76	22.52	24	QPSK	10MHz	1	49
21.87	21.88	21.63	23	QPSK	10MHz	25	0
21.79	21.85	21.78	23	QPSK	10MHz	25	12
21.83	21.87	21.64	23	QPSK	10MHz	25	25
21.74	21.77	21.74	23	QPSK	10MHz	50	0
22.01	22.13	22.03	23	16QAM	10MHz	1	0
21.87	22.02	21.84	23	16QAM	10MHz	1	24
21.78	21.70	21.73	23	16QAM	10MHz	1	49
20.85	20.96	20.73	22	16QAM	10MHz	25	0
20.80	20.89	20.69	22	16QAM	10MHz	25	12
20.78	20.77	20.68	22	16QAM	10MHz	25	25
20.74	20.78	20.63	22	16QAM	10MHz	50	0
21.93	21.89	21.99	22	64QAM	10MHz	1	0
21.87	21.90	21.88	22	64QAM	10MHz	1	24
21.85	21.81	21.86	22	64QAM	10MHz	1	49
20.73	20.84	20.62	21	64QAM	10MHz	25	0
20.70	20.82	20.73	21	64QAM	10MHz	25	12
20.74	20.71	20.58	21	64QAM	10MHz	25	25
20.83	20.67	20.79	21	64QAM	10MHz	50	0

LTE Band 26							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
26715	26865	27015	Channel				
816.5	831.5	846.5	Freq. (MHz)				
22.67	22.73	22.52	24	QPSK	5MHz	1	0
22.74	22.75	22.66	24	QPSK	5MHz	1	12
22.53	22.66	22.42	24	QPSK	5MHz	1	24
21.85	21.84	21.52	23	QPSK	5MHz	12	0
21.80	21.85	21.58	23	QPSK	5MHz	12	6
21.70	21.79	21.59	23	QPSK	5MHz	12	13
21.77	21.83	21.76	23	QPSK	5MHz	25	0
22.06	22.08	21.89	23	16QAM	5MHz	1	0
21.78	21.94	21.73	23	16QAM	5MHz	1	12
21.72	21.69	21.66	23	16QAM	5MHz	1	24
20.77	20.90	20.58	22	16QAM	5MHz	12	0
20.80	20.88	20.60	22	16QAM	5MHz	12	6
20.81	20.60	20.64	22	16QAM	5MHz	12	13
20.59	20.79	20.59	22	16QAM	5MHz	25	0
21.80	21.93	21.87	22	64QAM	5MHz	1	0
21.91	21.84	21.74	22	64QAM	5MHz	1	12
21.73	21.70	21.84	22	64QAM	5MHz	1	24
20.64	20.83	20.58	21	64QAM	5MHz	12	0
20.58	20.87	20.68	21	64QAM	5MHz	12	6
20.57	20.63	20.53	21	64QAM	5MHz	12	13
20.71	20.60	20.62	21	64QAM	5MHz	25	0

LTE Band 26							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
26705	26865	27025	Channel				
815.5	831.5	847.5	Freq. (MHz)				
22.68	22.78	22.54	24	QPSK	3MHz	1	0
22.70	22.74	22.49	24	QPSK	3MHz	1	7
22.55	22.71	22.36	24	QPSK	3MHz	1	14
21.78	21.90	21.54	23	QPSK	3MHz	8	0
21.76	21.93	21.57	23	QPSK	3MHz	8	3
21.71	21.73	21.47	23	QPSK	3MHz	8	7
21.62	21.76	21.72	23	QPSK	3MHz	15	0
21.98	22.04	21.88	23	16QAM	3MHz	1	0
21.81	22.02	21.81	23	16QAM	3MHz	1	7
21.78	21.67	21.62	23	16QAM	3MHz	1	14
20.68	20.77	20.65	22	16QAM	3MHz	8	0
20.76	20.89	20.61	22	16QAM	3MHz	8	3
20.74	20.57	20.58	22	16QAM	3MHz	8	7
20.63	20.74	20.55	22	16QAM	3MHz	15	0
21.84	21.87	21.86	22	64QAM	3MHz	1	0
21.88	21.84	21.85	22	64QAM	3MHz	1	7
21.78	21.82	21.74	22	64QAM	3MHz	1	14
20.67	20.70	20.64	21	64QAM	3MHz	8	0
20.63	20.80	20.72	21	64QAM	3MHz	8	3
20.65	20.64	20.43	21	64QAM	3MHz	8	7
20.64	20.58	20.73	21	64QAM	3MHz	15	0

LTE Band 26							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
26697	26865	27033	Channel				
814.7	831.5	848.3	Freq. (MHz)				
22.64	22.78	22.64	24	QPSK	1.4MHz	1	0
22.74	22.75	22.49	24	QPSK	1.4MHz	1	2
22.52	22.76	22.48	24	QPSK	1.4MHz	1	5
22.78	22.83	22.62	24	QPSK	1.4MHz	3	0
22.70	22.84	22.73	24	QPSK	1.4MHz	3	1
22.74	22.75	22.65	24	QPSK	1.4MHz	3	3
21.59	21.71	21.74	23	QPSK	1.4MHz	6	0
21.90	21.94	21.93	23	16QAM	1.4MHz	1	0
21.76	21.97	21.87	23	16QAM	1.4MHz	1	2
21.63	21.66	21.58	23	16QAM	1.4MHz	1	5
21.82	21.80	21.65	23	16QAM	1.4MHz	3	0
21.70	21.78	21.53	23	16QAM	1.4MHz	3	1
21.61	21.59	21.61	23	16QAM	1.4MHz	3	3
20.59	20.76	20.60	22	16QAM	1.4MHz	6	0
21.75	21.85	21.92	22	64QAM	1.4MHz	1	0
21.81	21.82	21.78	22	64QAM	1.4MHz	1	2
21.73	21.76	21.83	22	64QAM	1.4MHz	1	5
21.69	21.76	21.55	22	64QAM	1.4MHz	3	0
21.62	21.72	21.72	22	64QAM	1.4MHz	3	1
21.69	21.65	21.57	22	64QAM	1.4MHz	3	3
20.73	20.74	20.70	21	64QAM	1.4MHz	6	0

LTE Band 41									
Maximum Average Power (dBm)					Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
39750	40185	40620	41055	41490	Channel				
2506	2549.5	2593	2636.5	2680	Freq. (MHz)				
22.34	22.50	22.54	22.49	22.35	23	QPSK	20MHz	1	0
22.04	22.25	22.45	22.34	22.17	23	QPSK	20MHz	1	49
21.96	22.20	22.36	22.22	22.02	23	QPSK	20MHz	1	99
21.42	21.35	21.45	21.34	21.28	22	QPSK	20MHz	50	0
21.10	21.29	21.30	21.24	21.20	22	QPSK	20MHz	50	25
20.99	21.19	21.24	21.20	21.05	22	QPSK	20MHz	50	50
21.11	21.09	21.37	21.11	21.20	22	QPSK	20MHz	100	0
21.51	21.53	21.61	21.52	21.73	22	16QAM	20MHz	1	0
21.41	21.47	21.54	21.44	21.54	22	16QAM	20MHz	1	49
21.17	21.22	21.21	21.39	21.34	22	16QAM	20MHz	1	99
20.30	20.21	20.32	20.42	20.50	21	16QAM	20MHz	50	0
20.25	20.16	20.24	20.33	20.37	21	16QAM	20MHz	50	25
20.12	20.08	20.10	20.19	20.22	21	16QAM	20MHz	50	50
20.23	20.19	20.15	20.22	20.40	21	16QAM	20MHz	100	0
20.91	20.94	20.96	20.92	20.93	21	64QAM	20MHz	1	0
20.87	20.88	20.78	20.91	20.90	21	64QAM	20MHz	1	49
20.79	20.71	20.69	20.90	20.88	21	64QAM	20MHz	1	99
19.81	19.87	19.88	19.84	19.89	20	64QAM	20MHz	50	0
19.77	19.83	19.82	19.80	19.84	20	64QAM	20MHz	50	25
19.74	19.76	19.78	19.77	19.76	20	64QAM	20MHz	50	50
19.70	19.73	19.72	19.74	19.71	20	64QAM	20MHz	100	0

LTE Band 41									
Maximum Average Power (dBm)					Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
39725	40173	40620	41068	41515	Channel				
2503.5	2548.3	2593	2637.8	2682.5	Freq. (MHz)				
21.79	21.99	22.01	21.96	21.83	23	QPSK	15MHz	1	0
21.54	21.66	21.94	21.84	21.67	23	QPSK	15MHz	1	37
21.36	21.66	21.76	21.64	21.42	23	QPSK	15MHz	1	74
20.91	20.79	20.89	20.77	20.69	22	QPSK	15MHz	36	0
20.56	20.75	20.73	20.64	20.69	22	QPSK	15MHz	36	19
20.41	20.63	20.65	20.64	20.45	22	QPSK	15MHz	36	39
20.52	20.55	20.85	20.51	20.66	22	QPSK	15MHz	75	0
20.92	20.93	21.09	20.94	20.82	22	16QAM	15MHz	1	0
20.85	20.95	21.01	20.84	20.67	22	16QAM	15MHz	1	37
20.62	20.64	20.66	20.87	20.47	22	16QAM	15MHz	1	74
19.71	19.71	19.72	19.86	19.76	21	16QAM	15MHz	36	0
19.73	19.57	19.66	19.74	19.68	21	16QAM	15MHz	36	19
19.54	19.53	19.51	19.60	19.47	21	16QAM	15MHz	36	39
19.67	19.62	19.58	19.67	19.60	21	16QAM	15MHz	75	0
20.66	20.58	20.56	20.70	19.83	21	64QAM	15MHz	1	0
20.40	20.28	20.21	20.51	19.58	21	64QAM	15MHz	1	37
20.25	20.21	20.16	20.33	19.50	21	64QAM	15MHz	1	74
19.86	19.67	19.74	19.83	18.72	20	64QAM	15MHz	36	0
19.69	19.63	19.58	19.66	18.67	20	64QAM	15MHz	36	19
19.53	19.53	19.54	19.54	18.54	20	64QAM	15MHz	36	39
19.61	19.68	19.71	19.76	18.66	20	64QAM	15MHz	75	0

LTE Band 41									
Maximum Average Power (dBm)					Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
39700	40160	40620	41080	41540	Channel				
2501	2547	2593	2639	2685	Freq. (MHz)				
21.66	21.87	21.98	21.93	21.68	23	QPSK	10MHz	1	0
21.43	21.72	21.85	21.73	21.56	23	QPSK	10MHz	1	24
21.36	21.66	21.73	21.54	21.42	23	QPSK	10MHz	1	49
20.83	20.74	20.80	20.76	20.76	22	QPSK	10MHz	25	0
20.50	20.69	20.63	20.62	20.63	22	QPSK	10MHz	25	12
20.30	20.59	20.55	20.62	20.46	22	QPSK	10MHz	25	25
20.41	20.51	20.85	20.51	20.58	22	QPSK	10MHz	50	0
20.75	20.91	20.97	20.88	20.72	22	16QAM	10MHz	1	0
20.39	20.69	20.79	20.79	20.66	22	16QAM	10MHz	1	24
20.33	20.66	20.72	20.61	20.41	22	16QAM	10MHz	1	49
19.85	19.76	19.88	19.73	19.76	21	16QAM	10MHz	25	0
19.49	19.76	19.67	19.62	19.62	21	16QAM	10MHz	25	12
19.33	19.60	19.62	19.64	19.47	21	16QAM	10MHz	25	25
19.45	19.55	19.81	19.51	19.57	21	16QAM	10MHz	50	0
19.66	19.88	19.96	19.92	19.70	21	64QAM	10MHz	1	0
19.36	19.73	19.84	19.73	19.59	21	64QAM	10MHz	1	24
19.34	19.62	19.78	19.52	19.41	21	64QAM	10MHz	1	49
18.77	18.79	18.86	18.82	18.77	20	64QAM	10MHz	25	0
18.50	18.71	18.66	18.54	18.68	20	64QAM	10MHz	25	12
18.34	18.58	18.56	18.63	18.50	20	64QAM	10MHz	25	25
18.41	18.50	18.80	18.50	18.66	20	64QAM	10MHz	50	0

LTE Band 41									
Maximum Average Power (dBm)					Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
39675	40148	40620	41093	41565	Channel				
2498.5	2545.8	2593	2640.3	2687.5	Freq. (MHz)				
21.81	21.95	22.02	21.89	21.78	23	QPSK	5MHz	1	0
21.47	21.66	21.76	21.72	21.57	23	QPSK	5MHz	1	12
21.33	21.65	21.75	21.66	21.44	23	QPSK	5MHz	1	24
20.78	20.73	20.85	20.82	20.69	22	QPSK	5MHz	12	0
20.56	20.66	20.63	20.59	20.63	22	QPSK	5MHz	12	6
20.38	20.61	20.70	20.62	20.40	22	QPSK	5MHz	12	13
20.61	20.57	20.72	20.51	20.61	22	QPSK	5MHz	25	0
20.75	20.93	21.01	20.93	20.81	22	16QAM	5MHz	1	0
20.50	20.70	20.80	20.75	20.53	22	16QAM	5MHz	1	12
20.30	20.65	20.81	20.64	20.34	22	16QAM	5MHz	1	24
19.83	19.76	19.82	19.74	19.63	21	16QAM	5MHz	12	0
19.48	19.67	19.65	19.68	19.63	21	16QAM	5MHz	12	6
19.43	19.56	19.71	19.58	19.44	21	16QAM	5MHz	12	13
19.51	19.51	19.76	19.48	19.61	21	16QAM	5MHz	25	0
19.77	19.91	19.95	19.99	19.73	21	64QAM	5MHz	1	0
19.46	19.68	19.79	19.75	19.58	21	64QAM	5MHz	1	12
19.38	19.64	19.76	19.69	19.40	21	64QAM	5MHz	1	24
18.81	18.75	18.87	18.73	18.70	20	64QAM	5MHz	12	0
18.56	18.65	18.71	18.63	18.62	20	64QAM	5MHz	12	6
18.40	18.64	18.64	18.61	18.38	20	64QAM	5MHz	12	13
18.53	18.51	18.73	18.50	18.60	20	64QAM	5MHz	25	0

LTE Band 66							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
132072	132322	132572	Channel				
1720	1745	1770	Freq. (MHz)				
23.12	23.37	23.18	24	QPSK	20MHz	1	0
22.91	23.16	22.97	24	QPSK	20MHz	1	49
22.82	23.07	22.88	24	QPSK	20MHz	1	99
21.97	22.22	22.03	23	QPSK	20MHz	50	0
21.93	22.18	21.99	23	QPSK	20MHz	50	25
21.92	22.17	21.98	23	QPSK	20MHz	50	50
21.91	22.16	21.97	23	QPSK	20MHz	100	0
22.72	22.97	22.78	23	16QAM	20MHz	1	0
22.28	22.53	22.34	23	16QAM	20MHz	1	49
22.15	22.40	22.21	23	16QAM	20MHz	1	99
21.07	21.32	21.13	22	16QAM	20MHz	50	0
20.99	21.24	21.05	22	16QAM	20MHz	50	25
20.95	21.20	21.01	22	16QAM	20MHz	50	50
20.93	21.18	20.99	22	16QAM	20MHz	100	0
21.42	21.67	21.48	22	64QAM	20MHz	1	0
21.19	21.44	21.25	22	64QAM	20MHz	1	49
21.06	21.31	21.12	22	64QAM	20MHz	1	99
20.02	20.27	20.08	21	64QAM	20MHz	50	0
19.93	20.18	19.99	21	64QAM	20MHz	50	25
19.90	20.15	19.96	21	64QAM	20MHz	50	50
19.88	20.13	19.94	21	64QAM	20MHz	100	0

LTE Band 66							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
132047	132322	132597	Channel				
1717.5	1745	1772.5	Freq. (MHz)				
23.07	23.33	23.15	24	QPSK	15MHz	1	0
22.90	23.16	22.87	24	QPSK	15MHz	1	37
22.81	23.04	22.84	24	QPSK	15MHz	1	74
21.97	22.19	21.99	23	QPSK	15MHz	36	0
21.85	22.14	21.97	23	QPSK	15MHz	36	19
21.90	22.07	21.93	23	QPSK	15MHz	36	39
21.86	22.08	21.94	23	QPSK	15MHz	75	0
22.63	22.97	22.70	23	16QAM	15MHz	1	0
22.22	22.46	22.28	23	16QAM	15MHz	1	37
22.14	22.37	22.17	23	16QAM	15MHz	1	74
21.06	21.29	21.05	22	16QAM	15MHz	36	0
20.93	21.17	21.01	22	16QAM	15MHz	36	19
20.94	21.20	20.94	22	16QAM	15MHz	36	39
20.92	21.17	20.97	22	16QAM	15MHz	75	0
21.38	21.63	21.45	22	64QAM	15MHz	1	0
21.14	21.38	21.19	22	64QAM	15MHz	1	37
20.99	21.21	21.07	22	64QAM	15MHz	1	74
19.95	20.23	20.07	21	64QAM	15MHz	36	0
19.85	20.15	19.93	21	64QAM	15MHz	36	19
19.86	20.11	19.94	21	64QAM	15MHz	36	39
19.80	20.09	19.85	21	64QAM	15MHz	75	0

LTE Band 66							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
132022	132322	132622	Channel				
1715	1745	1775	Freq. (MHz)				
23.05	23.36	23.13	24	QPSK	10MHz	1	0
22.88	23.07	22.89	24	QPSK	10MHz	1	24
22.76	23.02	22.86	24	QPSK	10MHz	1	49
21.87	22.17	21.95	23	QPSK	10MHz	25	0
21.85	22.13	21.95	23	QPSK	10MHz	25	12
21.90	22.09	21.92	23	QPSK	10MHz	25	25
21.87	22.16	21.94	23	QPSK	10MHz	50	0
22.67	22.97	22.73	23	16QAM	10MHz	1	0
22.19	22.51	22.26	23	16QAM	10MHz	1	24
22.07	22.34	22.20	23	16QAM	10MHz	1	49
21.03	21.32	21.12	22	16QAM	10MHz	25	0
20.98	21.15	21.05	22	16QAM	10MHz	25	12
20.85	21.17	20.94	22	16QAM	10MHz	25	25
20.87	21.12	20.99	22	16QAM	10MHz	50	0
21.34	21.64	21.40	22	64QAM	10MHz	1	0
21.14	21.40	21.19	22	64QAM	10MHz	1	24
20.98	21.21	21.09	22	64QAM	10MHz	1	49
20.02	20.26	19.98	21	64QAM	10MHz	25	0
19.90	20.15	19.98	21	64QAM	10MHz	25	12
19.85	20.06	19.89	21	64QAM	10MHz	25	25
19.86	20.04	19.93	21	64QAM	10MHz	50	0

LTE Band 66							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
131997	132322	132647	Channel				
1712.5	1745	1777.5	Freq. (MHz)				
23.09	23.35	23.16	24	QPSK	5MHz	1	0
22.82	23.10	22.91	24	QPSK	5MHz	1	12
22.80	23.02	22.84	24	QPSK	5MHz	1	24
21.88	22.16	21.96	23	QPSK	5MHz	12	0
21.83	22.14	21.98	23	QPSK	5MHz	12	6
21.88	22.09	21.91	23	QPSK	5MHz	12	13
21.82	22.12	21.90	23	QPSK	5MHz	25	0
22.62	22.90	22.71	23	16QAM	5MHz	1	0
22.27	22.52	22.31	23	16QAM	5MHz	1	12
22.12	22.35	22.21	23	16QAM	5MHz	1	24
21.04	21.26	21.09	22	16QAM	5MHz	12	0
20.91	21.17	20.95	22	16QAM	5MHz	12	6
20.90	21.15	20.91	22	16QAM	5MHz	12	13
20.84	21.17	20.90	22	16QAM	5MHz	25	0
21.40	21.65	21.46	22	64QAM	5MHz	1	0
21.17	21.36	21.25	22	64QAM	5MHz	1	12
20.99	21.26	21.10	22	64QAM	5MHz	1	24
19.93	20.27	19.99	21	64QAM	5MHz	12	0
19.90	20.11	19.92	21	64QAM	5MHz	12	6
19.85	20.11	19.88	21	64QAM	5MHz	12	13
19.88	20.07	19.93	21	64QAM	5MHz	25	0

LTE Band 66							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
131987	132322	132657	Channel				
1711.5	1745	1778.5	Freq. (MHz)				
23.12	23.30	23.14	24	QPSK	3MHz	1	0
22.87	23.10	22.92	24	QPSK	3MHz	1	7
22.77	22.99	22.80	24	QPSK	3MHz	1	14
21.88	22.19	21.97	23	QPSK	3MHz	8	0
21.88	22.18	21.99	23	QPSK	3MHz	8	3
21.89	22.13	21.98	23	QPSK	3MHz	8	7
21.82	22.09	21.95	23	QPSK	3MHz	15	0
22.72	22.97	22.71	23	16QAM	3MHz	1	0
22.23	22.45	22.27	23	16QAM	3MHz	1	7
22.08	22.37	22.13	23	16QAM	3MHz	1	14
21.05	21.24	21.05	22	16QAM	3MHz	8	0
20.96	21.16	20.95	22	16QAM	3MHz	8	3
20.94	21.20	20.93	22	16QAM	3MHz	8	7
20.93	21.14	20.94	22	16QAM	3MHz	15	0
21.40	21.58	21.42	22	64QAM	3MHz	1	0
21.13	21.42	21.24	22	64QAM	3MHz	1	7
21.06	21.24	21.09	22	64QAM	3MHz	1	14
20.02	20.20	20.04	21	64QAM	3MHz	8	0
19.85	20.17	19.95	21	64QAM	3MHz	8	3
19.84	20.13	19.96	21	64QAM	3MHz	8	7
19.79	20.07	19.92	21	64QAM	3MHz	15	0

LTE Band 66							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
131979	132322	132665	Channel				
1710.7	1745	1779.3	Freq. (MHz)				
22.99	23.28	22.96	24	QPSK	1.4MHz	1	0
22.86	23.04	22.84	24	QPSK	1.4MHz	1	2
22.70	22.96	22.81	24	QPSK	1.4MHz	1	5
22.87	23.08	22.85	24	QPSK	1.4MHz	3	0
22.83	22.94	22.86	24	QPSK	1.4MHz	3	1
22.83	23.03	22.81	24	QPSK	1.4MHz	3	3
21.82	22.00	21.87	23	QPSK	1.4MHz	6	0
22.62	22.81	22.68	23	16QAM	1.4MHz	1	0
22.20	22.42	22.17	23	16QAM	1.4MHz	1	2
21.97	22.30	22.11	23	16QAM	1.4MHz	1	5
21.97	22.16	22.04	23	16QAM	1.4MHz	3	0
21.87	22.09	21.93	23	16QAM	1.4MHz	3	1
21.84	22.06	21.87	23	16QAM	1.4MHz	3	3
20.80	21.11	20.86	22	16QAM	1.4MHz	6	0
21.33	21.46	21.38	22	64QAM	1.4MHz	1	0
21.02	21.35	21.10	22	64QAM	1.4MHz	1	2
20.95	21.18	20.97	22	64QAM	1.4MHz	1	5
20.91	21.12	20.96	22	64QAM	1.4MHz	3	0
20.78	20.98	20.91	22	64QAM	1.4MHz	3	1
20.74	21.06	20.87	22	64QAM	1.4MHz	3	3
19.67	19.97	19.83	21	64QAM	1.4MHz	6	0

Power Reduction

	Uplink Channel	9262	9400	9538	Tune up (dBm)
	Uplink Frequency	1852.4	1880.0	1907.6	
WCDMA II	RMC_12.2Kbps	18.58	18.66	18.42	19
	HSDPA_Subtest 1	18.51	18.64	18.33	19
	HSDPA_Subtest 2	18.44	18.51	18.35	19
	HSDPA_Subtest 3	18.42	18.49	18.35	19
	HSDPA_Subtest 4	18.57	18.63	18.34	19
	HSUPA _Subtest 1	18.45	18.51	18.41	19
	HSUPA _Subtest 2	18.5	18.65	18.39	19
	HSUPA _Subtest 3	18.41	18.57	18.39	19
	HSUPA _Subtest 4	18.57	18.57	18.38	19
	HSUPA _Subtest 5	18.49	18.54	18.31	19
	DC-HSDPA_Subtest 1	18.58	18.59	18.37	19
	DC-HSDPA_Subtest 2	18.57	18.56	18.33	19
	DC-HSDPA_Subtest 3	18.51	18.63	18.38	19
	DC-HSDPA_Subtest 4	18.47	18.57	18.36	19
	HSPA+_Subtest 1	18.45	18.5	18.35	19

	Uplink Channel	1312	1413	1513	Tune up (dBm)
	Uplink Frequency	1712.4	1732.6	1752.6	
WCDMA IV	RMC_12.2Kbps	22.21	22.29	22.07	22.5
	HSDPA_Subtest 1	21.96	22.02	21.96	22.5
	HSDPA_Subtest 2	22.01	22.06	22.05	22.5
	HSDPA_Subtest 3	21.93	21.94	21.89	22.5
	HSDPA_Subtest 4	22.09	22.1	22.01	22.5
	HSUPA _Subtest 1	21.91	21.99	21.87	22.5
	HSUPA _Subtest 2	21.82	21.87	21.77	22
	HSUPA _Subtest 3	21.91	21.92	21.84	22.5
	HSUPA _Subtest 4	21.9	21.85	21.88	22
	HSUPA _Subtest 5	21.96	22.06	21.96	22.5
	DC-HSDPA_Subtest 1	22.04	22.13	22.01	22.5
	DC-HSDPA_Subtest 2	21.96	21.95	21.86	22.5
	DC-HSDPA_Subtest 3	22.06	22.1	22.03	22.5
	DC-HSDPA_Subtest 4	21.94	21.98	21.88	22.5
	HSPA+_Subtest 1	21.4	21.21	21.38	21.5

WCDMA V	Uplink Channel	4132	4182	4233	Tune up (dBm)
	Uplink Frequency	826.4	836.4	846.6	
	RMC_12.2Kbps	21.28	21.42	21.38	22
	HSDPA_Subtest 1	21.12	21.2	21.04	22
	HSDPA_Subtest 2	21.21	21.22	21.24	22
	HSDPA_Subtest 3	21.18	21.24	21.19	22
	HSDPA_Subtest 4	21.14	21.19	21.11	22
	HSUPA _Subtest 1	21.21	21.23	21.23	22
	HSUPA _Subtest 2	21.18	21.31	21.19	22
	HSUPA _Subtest 3	21.17	21.22	21.05	22
	HSUPA _Subtest 4	21.25	21.25	21.29	22
	HSUPA _Subtest 5	21.09	21.26	21.13	22
	DC-HSDPA_Subtest 1	21.1	21.19	21.09	22
	DC-HSDPA_Subtest 2	21.23	21.29	21.22	22
	DC-HSDPA_Subtest 3	21.12	21.27	21.05	22
	DC-HSDPA_Subtest 4	21.22	21.28	21.27	22
	HSPA+_Subtest 1	21.12	21.22	21.11	22

LTE Band 2							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
18700	18900	19100	Channel				
1860	1880	1900	Freq. (MHz)				
19.32	19.32	19.54	20	QPSK	20MHz	1	0
19.13	19.19	19.35	20	QPSK	20MHz	1	49
19.16	19.17	19.37	20	QPSK	20MHz	1	99
19.03	19.05	19.29	20	QPSK	20MHz	50	0
18.88	18.97	19.14	20	QPSK	20MHz	50	25
18.92	19.02	19.17	20	QPSK	20MHz	50	50
18.90	19.00	19.25	20	QPSK	20MHz	100	0
19.04	19.09	19.29	20	16QAM	20MHz	1	0
18.92	18.94	19.15	20	16QAM	20MHz	1	49
18.86	18.88	19.04	20	16QAM	20MHz	1	99
18.97	19.05	19.21	20	16QAM	20MHz	50	0
18.97	18.98	19.15	20	16QAM	20MHz	50	25
19.05	19.08	19.24	20	16QAM	20MHz	50	50
18.94	19.02	19.18	20	16QAM	20MHz	100	0
19.22	19.23	19.40	20	64QAM	20MHz	1	0
18.93	19.02	19.23	20	64QAM	20MHz	1	49
19.00	19.02	19.19	20	64QAM	20MHz	1	99
18.98	19.03	19.28	20	64QAM	20MHz	50	0
18.92	18.99	19.20	20	64QAM	20MHz	50	25
18.98	19.07	19.24	20	64QAM	20MHz	50	50
18.99	19.01	19.23	20	64QAM	20MHz	100	0

LTE Band 2							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
18675	18900	19125	Channel				
1857.5	1880	1902.5	Freq. (MHz)				
19.30	19.29	19.53	20	QPSK	15MHz	1	0
19.12	19.11	19.33	20	QPSK	15MHz	1	37
19.09	19.11	19.29	20	QPSK	15MHz	1	74
19.03	19.04	19.27	20	QPSK	15MHz	36	0
18.88	18.90	19.07	20	QPSK	15MHz	36	19
18.89	18.98	19.09	20	QPSK	15MHz	36	39
18.81	18.99	19.23	20	QPSK	15MHz	75	0
18.98	19.06	19.29	20	16QAM	15MHz	1	0
18.90	18.84	19.08	20	16QAM	15MHz	1	37
18.77	18.84	19.03	20	16QAM	15MHz	1	74
18.97	18.97	19.21	20	16QAM	15MHz	36	0
18.91	18.88	19.13	20	16QAM	15MHz	36	19
19.02	19.03	19.24	20	16QAM	15MHz	36	39
18.85	18.93	19.10	20	16QAM	15MHz	75	0
19.14	19.13	19.33	20	64QAM	15MHz	1	0
18.85	18.93	19.13	20	64QAM	15MHz	1	37
18.93	18.92	19.18	20	64QAM	15MHz	1	74
18.93	19.01	19.20	20	64QAM	15MHz	36	0
18.89	18.98	19.11	20	64QAM	15MHz	36	19
18.88	19.05	19.17	20	64QAM	15MHz	36	39
18.94	18.95	19.16	20	64QAM	15MHz	75	0

LTE Band 2							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
18650	18900	19150	Channel				
1855	1880	1905	Freq. (MHz)				
19.30	19.26	19.34	20	QPSK	10MHz	1	0
19.13	19.18	19.34	20	QPSK	10MHz	1	24
19.08	19.16	19.27	20	QPSK	10MHz	1	49
18.93	18.96	19.26	20	QPSK	10MHz	25	0
18.80	18.97	19.05	20	QPSK	10MHz	25	12
18.86	18.99	19.15	20	QPSK	10MHz	25	25
18.80	18.95	19.21	20	QPSK	10MHz	50	0
18.99	19.06	19.27	20	16QAM	10MHz	1	0
18.92	18.89	19.14	20	16QAM	10MHz	1	24
18.83	18.83	18.97	20	16QAM	10MHz	1	49
18.97	19.02	19.12	20	16QAM	10MHz	25	0
18.90	18.98	19.08	20	16QAM	10MHz	25	12
18.99	18.98	19.17	20	16QAM	10MHz	25	25
18.92	19.02	19.13	20	16QAM	10MHz	50	0
19.19	19.14	19.34	20	64QAM	10MHz	1	0
18.89	18.95	19.22	20	64QAM	10MHz	1	24
18.95	18.97	19.15	20	64QAM	10MHz	1	49
18.91	18.93	19.28	20	64QAM	10MHz	25	0
18.92	18.99	19.15	20	64QAM	10MHz	25	12
18.95	18.99	19.20	20	64QAM	10MHz	25	25
18.91	18.92	19.14	20	64QAM	10MHz	50	0

LTE Band 2							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
18625	18900	19175	Channel				
1852.5	1880	1907.5	Freq. (MHz)				
19.28	19.32	19.53	20	QPSK	5MHz	1	0
19.12	19.17	19.27	20	QPSK	5MHz	1	12
19.13	19.07	19.35	20	QPSK	5MHz	1	24
19.01	18.95	19.27	20	QPSK	5MHz	12	0
18.79	18.90	19.08	20	QPSK	5MHz	12	6
18.84	18.97	19.13	20	QPSK	5MHz	12	13
18.89	18.91	19.21	20	QPSK	5MHz	25	0
19.03	19.07	19.20	20	16QAM	5MHz	1	0
18.90	18.92	19.06	20	16QAM	5MHz	1	12
18.80	18.85	19.00	20	16QAM	5MHz	1	24
18.90	18.98	19.13	20	16QAM	5MHz	12	0
18.96	18.88	19.11	20	16QAM	5MHz	12	6
19.04	19.05	19.17	20	16QAM	5MHz	12	13
18.88	18.94	19.13	20	16QAM	5MHz	25	0
19.16	19.15	19.33	20	64QAM	5MHz	1	0
18.84	19.01	19.15	20	64QAM	5MHz	1	12
18.97	19.01	19.18	20	64QAM	5MHz	1	24
18.96	19.01	19.28	20	64QAM	5MHz	12	0
18.82	18.92	19.12	20	64QAM	5MHz	12	6
18.94	19.06	19.23	20	64QAM	5MHz	12	13
18.95	18.91	19.23	20	64QAM	5MHz	25	0

LTE Band 2							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
18615	18900	19185	Channel				
1851.5	1880	1908.5	Freq. (MHz)				
19.32	19.25	19.48	20	QPSK	3MHz	1	0
19.05	19.12	19.28	20	QPSK	3MHz	1	7
19.13	19.15	19.27	20	QPSK	3MHz	1	14
18.93	19.02	19.26	20	QPSK	3MHz	8	0
18.83	18.94	19.04	20	QPSK	3MHz	8	3
18.89	18.94	19.15	20	QPSK	3MHz	8	7
18.89	18.97	19.19	20	QPSK	3MHz	15	0
18.98	19.05	19.24	20	16QAM	3MHz	1	0
18.89	18.90	19.07	20	16QAM	3MHz	1	7
18.77	18.82	18.94	20	16QAM	3MHz	1	14
18.89	19.05	19.18	20	16QAM	3MHz	8	0
18.96	18.94	19.07	20	16QAM	3MHz	8	3
19.00	19.03	19.18	20	16QAM	3MHz	8	7
18.92	18.98	19.15	20	16QAM	3MHz	15	0
19.22	19.16	19.31	20	64QAM	3MHz	1	0
18.87	18.93	19.18	20	64QAM	3MHz	1	7
18.97	19.02	19.13	20	64QAM	3MHz	1	14
18.93	19.02	19.27	20	64QAM	3MHz	8	0
18.86	18.97	19.15	20	64QAM	3MHz	8	3
18.94	19.04	19.17	20	64QAM	3MHz	8	7
18.90	18.99	19.19	20	64QAM	3MHz	15	0

LTE Band 2							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
18607	18900	19193	Channel				
1850.7	1880	1909.3	Freq. (MHz)				
19.24	19.28	19.44	20	QPSK	1.4MHz	1	0
19.13	19.18	19.30	20	QPSK	1.4MHz	1	2
19.07	19.08	19.28	20	QPSK	1.4MHz	1	5
18.97	19.03	19.22	20	QPSK	1.4MHz	3	0
18.86	18.94	19.12	20	QPSK	1.4MHz	3	1
18.88	19.01	19.08	20	QPSK	1.4MHz	3	3
18.88	18.92	19.20	20	QPSK	1.4MHz	6	0
18.94	19.05	19.25	20	16QAM	1.4MHz	1	0
18.86	18.84	19.11	20	16QAM	1.4MHz	1	2
18.85	18.82	19.00	20	16QAM	1.4MHz	1	5
18.90	19.00	19.12	20	16QAM	1.4MHz	3	0
18.87	18.89	19.08	20	16QAM	1.4MHz	3	1
18.98	19.08	19.22	20	16QAM	1.4MHz	3	3
18.87	18.99	19.17	20	16QAM	1.4MHz	6	0
19.19	19.20	19.32	20	64QAM	1.4MHz	1	0
18.86	18.92	19.18	20	64QAM	1.4MHz	1	2
18.99	19.01	19.19	20	64QAM	1.4MHz	1	5
18.91	19.00	19.18	20	64QAM	1.4MHz	3	0
18.88	18.93	19.16	20	64QAM	1.4MHz	3	1
18.93	18.99	19.18	20	64QAM	1.4MHz	3	3
18.96	19.01	19.14	20	64QAM	1.4MHz	6	0

LTE Band 4							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20050	20175	20300	Channel				
1720	1732.5	1745	Freq. (MHz)				
22.54	22.65	22.68	23	QPSK	20MHz	1	0
22.41	22.49	22.58	23	QPSK	20MHz	1	49
22.35	22.45	22.49	23	QPSK	20MHz	1	99
22.29	22.40	22.44	23	QPSK	20MHz	50	0
22.18	22.23	22.32	23	QPSK	20MHz	50	25
22.19	22.27	22.28	23	QPSK	20MHz	50	50
22.22	22.30	22.34	23	QPSK	20MHz	100	0
22.38	22.48	22.52	23	16QAM	20MHz	1	0
22.13	22.16	22.25	23	16QAM	20MHz	1	49
22.10	22.13	22.22	23	16QAM	20MHz	1	99
21.30	21.42	21.49	22	16QAM	20MHz	50	0
21.19	21.27	21.33	22	16QAM	20MHz	50	25
21.19	21.22	21.31	22	16QAM	20MHz	50	50
21.16	21.28	21.34	22	16QAM	20MHz	100	0
22.46	22.54	22.57	23	64QAM	20MHz	1	0
22.19	22.36	22.35	23	64QAM	20MHz	1	49
22.19	22.29	22.33	23	64QAM	20MHz	1	99
21.33	21.40	21.43	22	64QAM	20MHz	50	0
21.20	21.34	21.34	22	64QAM	20MHz	50	25
21.23	21.24	21.24	22	64QAM	20MHz	50	50
21.14	21.28	21.28	22	64QAM	20MHz	100	0

LTE Band 4							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20025	20175	20325	Channel				
1717.5	1732.5	1747.5	Freq. (MHz)				
22.47	22.62	22.64	23	QPSK	15MHz	1	0
22.34	22.54	22.46	23	QPSK	15MHz	1	37
22.33	22.40	22.44	23	QPSK	15MHz	1	74
22.25	22.38	22.30	23	QPSK	15MHz	36	0
22.08	22.24	22.14	23	QPSK	15MHz	36	19
22.18	22.24	22.23	23	QPSK	15MHz	36	39
22.13	22.26	22.22	23	QPSK	15MHz	75	0
22.30	22.51	22.43	23	16QAM	15MHz	1	0
22.06	22.19	22.07	23	16QAM	15MHz	1	37
22.09	22.15	22.10	23	16QAM	15MHz	1	74
21.27	21.48	21.35	22	16QAM	15MHz	36	0
21.11	21.25	21.22	22	16QAM	15MHz	36	19
21.10	21.31	21.13	22	16QAM	15MHz	36	39
21.11	21.33	21.20	22	16QAM	15MHz	75	0
22.40	22.54	22.49	23	64QAM	15MHz	1	0
22.13	22.25	22.34	23	64QAM	15MHz	1	37
22.12	22.32	22.20	23	64QAM	15MHz	1	74
21.30	21.42	21.36	22	64QAM	15MHz	36	0
21.15	21.30	21.30	22	64QAM	15MHz	36	19
21.13	21.25	21.22	22	64QAM	15MHz	36	39
21.09	21.31	21.18	22	64QAM	15MHz	75	0

LTE Band 4							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20000	20175	20350	Channel				
1715	1732.5	1750	Freq. (MHz)				
22.46	22.60	22.56	23	QPSK	10MHz	1	0
22.39	22.55	22.42	23	QPSK	10MHz	1	24
22.30	22.49	22.45	23	QPSK	10MHz	1	49
22.20	22.38	22.31	23	QPSK	10MHz	25	0
22.12	22.24	22.23	23	QPSK	10MHz	25	12
22.10	22.23	22.18	23	QPSK	10MHz	25	25
22.16	22.32	22.24	23	QPSK	10MHz	50	0
22.30	22.52	22.48	23	16QAM	10MHz	1	0
22.09	22.21	22.13	23	16QAM	10MHz	1	24
22.07	22.18	22.09	23	16QAM	10MHz	1	49
21.20	21.49	21.35	22	16QAM	10MHz	25	0
21.13	21.29	21.19	22	16QAM	10MHz	25	12
21.19	21.29	21.22	22	16QAM	10MHz	25	25
21.16	21.30	21.21	22	16QAM	10MHz	50	0
22.37	22.47	22.53	23	64QAM	10MHz	1	0
22.17	22.26	22.28	23	64QAM	10MHz	1	24
22.12	22.24	22.23	23	64QAM	10MHz	1	49
21.27	21.33	21.31	22	64QAM	10MHz	25	0
21.10	21.33	21.28	22	64QAM	10MHz	25	12
21.18	21.27	21.14	22	64QAM	10MHz	25	25
21.08	21.23	21.19	22	64QAM	10MHz	50	0

LTE Band 4							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
19975	20175	20375	Channel				
1712.5	1732.5	1752.5	Freq. (MHz)				
22.48	22.65	22.64	23	QPSK	5MHz	1	0
22.35	22.56	22.48	23	QPSK	5MHz	1	12
22.27	22.48	22.35	23	QPSK	5MHz	1	24
22.24	22.36	22.39	23	QPSK	5MHz	12	0
22.16	22.32	22.13	23	QPSK	5MHz	12	6
22.18	22.27	22.23	23	QPSK	5MHz	12	13
22.14	22.30	22.30	23	QPSK	5MHz	25	0
22.32	22.46	22.38	23	16QAM	5MHz	1	0
22.11	22.16	22.12	23	16QAM	5MHz	1	12
22.00	22.16	22.11	23	16QAM	5MHz	1	24
21.22	21.41	21.32	22	16QAM	5MHz	12	0
21.19	21.26	21.18	22	16QAM	5MHz	12	6
21.09	21.23	21.22	22	16QAM	5MHz	12	13
21.11	21.24	21.19	22	16QAM	5MHz	25	0
22.40	22.56	22.44	23	64QAM	5MHz	1	0
22.18	22.28	22.28	23	64QAM	5MHz	1	12
22.15	22.30	22.22	23	64QAM	5MHz	1	24
21.23	21.38	21.32	22	64QAM	5MHz	12	0
21.11	21.26	21.31	22	64QAM	5MHz	12	6
21.21	21.26	21.23	22	64QAM	5MHz	12	13
21.05	21.23	21.22	22	64QAM	5MHz	25	0

LTE Band 4							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
19965	20175	20385	Channel				
1711.5	1732.5	1753.5	Freq. (MHz)				
22.44	22.33	22.64	23	QPSK	3MHz	1	0
22.41	22.57	22.48	23	QPSK	3MHz	1	7
22.25	22.47	22.40	23	QPSK	3MHz	1	14
22.19	22.36	22.37	23	QPSK	3MHz	8	0
22.16	22.28	22.21	23	QPSK	3MHz	8	3
22.13	22.21	22.25	23	QPSK	3MHz	8	7
22.19	22.30	22.25	23	QPSK	3MHz	15	0
22.29	22.43	22.39	23	16QAM	3MHz	1	0
22.04	22.19	22.15	23	16QAM	3MHz	1	7
22.07	22.21	22.10	23	16QAM	3MHz	1	14
21.23	21.48	21.36	22	16QAM	3MHz	8	0
21.12	21.25	21.22	22	16QAM	3MHz	8	3
21.15	21.22	21.15	22	16QAM	3MHz	8	7
21.09	21.30	21.18	22	16QAM	3MHz	15	0
22.43	22.55	22.50	23	64QAM	3MHz	1	0
22.18	22.32	22.31	23	64QAM	3MHz	1	7
22.14	22.30	22.24	23	64QAM	3MHz	1	14
21.26	21.34	21.38	22	64QAM	3MHz	8	0
21.12	21.30	21.27	22	64QAM	3MHz	8	3
21.22	21.33	21.23	22	64QAM	3MHz	8	7
21.10	21.24	21.21	22	64QAM	3MHz	15	0

LTE Band 4							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
19957	20175	20393	Channel				
1710.7	1732.5	1754.3	Freq. (MHz)				
22.45	22.61	22.58	23	QPSK	1.4MHz	1	0
22.34	22.55	22.45	23	QPSK	1.4MHz	1	2
22.34	22.42	22.40	23	QPSK	1.4MHz	1	5
22.20	22.44	22.35	23	QPSK	1.4MHz	3	0
22.16	22.23	22.22	23	QPSK	1.4MHz	3	1
22.15	22.22	22.25	23	QPSK	1.4MHz	3	3
22.20	22.34	22.30	23	QPSK	1.4MHz	6	0
22.36	22.52	22.41	23	16QAM	1.4MHz	1	0
22.11	22.21	22.13	23	16QAM	1.4MHz	1	2
22.02	22.22	22.11	23	16QAM	1.4MHz	1	5
21.24	21.45	21.34	22	16QAM	1.4MHz	3	0
21.09	21.30	21.24	22	16QAM	1.4MHz	3	1
21.14	21.25	21.16	22	16QAM	1.4MHz	3	3
21.10	21.30	21.20	22	16QAM	1.4MHz	6	0
22.45	22.49	22.45	23	64QAM	1.4MHz	1	0
22.10	22.29	22.35	23	64QAM	1.4MHz	1	2
22.19	22.30	22.21	23	64QAM	1.4MHz	1	5
21.28	21.41	21.36	22	64QAM	1.4MHz	3	0
21.11	21.29	21.28	22	64QAM	1.4MHz	3	1
21.17	21.26	21.21	22	64QAM	1.4MHz	3	3
21.07	21.21	21.27	22	64QAM	1.4MHz	6	0

LTE Band 5							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20450	20525	20600	Channel				
829	836.5	844	Freq. (MHz)				
22.22	22.24	22.15	22.5	QPSK	10MHz	1	0
22.13	22.14	22.06	22.5	QPSK	10MHz	1	24
22.07	22.09	22.03	22.5	QPSK	10MHz	1	49
21.90	21.98	21.93	22.5	QPSK	10MHz	25	0
21.90	21.95	21.82	22.5	QPSK	10MHz	25	12
21.89	21.93	21.80	22.5	QPSK	10MHz	25	25
21.90	21.94	21.84	22.5	QPSK	10MHz	50	0
21.99	22.02	21.93	22.5	16QAM	10MHz	1	0
21.89	21.88	21.78	22.5	16QAM	10MHz	1	24
21.79	21.79	21.72	22.5	16QAM	10MHz	1	49
21.45	21.47	21.38	22.5	16QAM	10MHz	25	0
21.43	21.45	21.39	22.5	16QAM	10MHz	25	12
21.35	21.40	21.30	22.5	16QAM	10MHz	25	25
21.39	21.39	21.26	22.5	16QAM	10MHz	50	0
22.12	22.12	22.04	22.5	64QAM	10MHz	1	0
21.99	22.04	21.90	22.5	64QAM	10MHz	1	24
21.96	22.02	21.95	22.5	64QAM	10MHz	1	49
21.47	21.53	21.41	22.5	64QAM	10MHz	25	0
21.46	21.48	21.41	22.5	64QAM	10MHz	25	12
21.38	21.44	21.40	22.5	64QAM	10MHz	25	25
21.41	21.43	21.30	22.5	64QAM	10MHz	50	0

LTE Band 5							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20425	20525	20625	Channel				
826.5	836.5	846.5	Freq. (MHz)				
22.13	22.16	22.07	22.5	QPSK	5MHz	1	0
22.10	22.07	22.02	22.5	QPSK	5MHz	1	12
22.06	22.03	21.99	22.5	QPSK	5MHz	1	24
21.85	21.96	21.90	22.5	QPSK	5MHz	12	0
21.84	21.91	21.73	22.5	QPSK	5MHz	12	6
21.89	21.84	21.74	22.5	QPSK	5MHz	12	13
21.82	21.89	21.81	22.5	QPSK	5MHz	25	0
21.89	21.98	21.89	22.5	16QAM	5MHz	1	0
21.84	21.78	21.78	22.5	16QAM	5MHz	1	12
21.70	21.70	21.67	22.5	16QAM	5MHz	1	24
21.45	21.47	21.35	22.5	16QAM	5MHz	12	0
21.35	21.38	21.29	22.5	16QAM	5MHz	12	6
21.31	21.40	21.27	22.5	16QAM	5MHz	12	13
21.37	21.34	21.18	22.5	16QAM	5MHz	25	0
22.08	22.06	22.00	22.5	64QAM	5MHz	1	0
21.92	22.00	21.81	22.5	64QAM	5MHz	1	12
21.92	21.96	21.91	22.5	64QAM	5MHz	1	24
21.43	21.44	21.32	22.5	64QAM	5MHz	12	0
21.42	21.39	21.36	22.5	64QAM	5MHz	12	6
21.34	21.38	21.33	22.5	64QAM	5MHz	12	13
21.38	21.37	21.25	22.5	64QAM	5MHz	25	0

LTE Band 5							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20415	20525	20635	Channel				
825.5	836.5	847.5	Freq. (MHz)				
22.17	22.16	22.14	22.5	QPSK	3MHz	1	0
22.09	22.04	22.00	22.5	QPSK	3MHz	1	7
22.02	22.03	21.94	22.5	QPSK	3MHz	1	14
21.81	21.90	21.90	22.5	QPSK	3MHz	8	0
21.80	21.90	21.81	22.5	QPSK	3MHz	8	3
21.83	21.89	21.72	22.5	QPSK	3MHz	8	7
21.87	21.91	21.83	22.5	QPSK	3MHz	15	0
21.90	22.01	21.88	22.5	16QAM	3MHz	1	0
21.82	21.83	21.73	22.5	16QAM	3MHz	1	7
21.74	21.72	21.72	22.5	16QAM	3MHz	1	14
21.45	21.39	21.28	22.5	16QAM	3MHz	8	0
21.35	21.36	21.39	22.5	16QAM	3MHz	8	3
21.33	21.38	21.20	22.5	16QAM	3MHz	8	7
21.37	21.38	21.21	22.5	16QAM	3MHz	15	0
22.07	22.06	22.03	22.5	64QAM	3MHz	1	0
21.95	21.99	21.89	22.5	64QAM	3MHz	1	7
21.90	21.92	21.95	22.5	64QAM	3MHz	1	14
21.39	21.43	21.37	22.5	64QAM	3MHz	8	0
21.39	21.40	21.35	22.5	64QAM	3MHz	8	3
21.33	21.35	21.30	22.5	64QAM	3MHz	8	7
21.37	21.37	21.22	22.5	64QAM	3MHz	15	0

LTE Band 5							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20407	20525	20643	Channel				
824.7	836.5	848.3	Freq. (MHz)				
22.14	22.16	22.14	22.5	QPSK	1.4MHz	1	0
22.04	22.03	21.96	22.5	QPSK	1.4MHz	1	2
21.92	21.95	21.88	22.5	QPSK	1.4MHz	1	5
21.78	21.90	21.90	22.5	QPSK	1.4MHz	3	0
21.75	21.88	21.80	22.5	QPSK	1.4MHz	3	1
21.80	21.83	21.70	22.5	QPSK	1.4MHz	3	3
21.87	21.82	21.81	22.5	QPSK	1.4MHz	6	0
21.87	22.00	21.84	22.5	16QAM	1.4MHz	1	0
21.77	21.77	21.65	22.5	16QAM	1.4MHz	1	2
21.67	21.70	21.72	22.5	16QAM	1.4MHz	1	5
21.36	21.33	21.21	22.5	16QAM	1.4MHz	3	0
21.33	21.31	21.39	22.5	16QAM	1.4MHz	3	1
21.33	21.34	21.20	22.5	16QAM	1.4MHz	3	3
20.32	20.31	20.17	21.5	16QAM	1.4MHz	6	0
21.04	20.98	20.95	21.5	64QAM	1.4MHz	1	0
20.89	20.97	20.80	21.5	64QAM	1.4MHz	1	2
20.80	20.92	20.93	21.5	64QAM	1.4MHz	1	5
20.37	20.38	20.32	21.5	64QAM	1.4MHz	3	0
20.32	20.38	20.30	21.5	64QAM	1.4MHz	3	1
20.33	20.34	20.24	21.5	64QAM	1.4MHz	3	3
19.29	19.35	19.13	20.5	64QAM	1.4MHz	6	0

LTE Band 7							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20850	21100	21350	Channel				
2510	2535	2560	Freq. (MHz)				
17.43	17.58	17.42	18	QPSK	20MHz	1	0
17.35	17.46	17.36	18	QPSK	20MHz	1	49
17.21	17.34	17.26	18	QPSK	20MHz	1	99
17.05	17.27	17.11	18	QPSK	20MHz	50	0
17.10	17.18	17.08	18	QPSK	20MHz	50	25
16.99	17.11	16.99	18	QPSK	20MHz	50	50
17.08	17.24	17.07	18	QPSK	20MHz	100	0
17.16	17.32	17.19	18	16QAM	20MHz	1	0
16.91	17.12	16.97	18	16QAM	20MHz	1	49
16.92	17.07	16.96	18	16QAM	20MHz	1	99
17.06	17.27	17.12	18	16QAM	20MHz	50	0
17.00	17.16	17.06	18	16QAM	20MHz	50	25
16.98	17.11	17.02	18	16QAM	20MHz	50	50
17.08	17.24	17.08	18	16QAM	20MHz	100	0
17.27	17.52	17.34	18	64QAM	20MHz	1	0
17.19	17.40	17.26	18	64QAM	20MHz	1	49
17.16	17.36	17.21	18	64QAM	20MHz	1	99
17.12	17.27	17.15	18	64QAM	20MHz	50	0
17.04	17.18	17.10	18	64QAM	20MHz	50	25
17.07	17.23	17.07	18	64QAM	20MHz	50	50
17.14	17.13	17.13	18	64QAM	20MHz	100	0

LTE Band 7							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20825	21100	21375	Channel				
2507.5	2535	2562.5	Freq. (MHz)				
17.40	17.40	17.51	18	QPSK	15MHz	1	0
17.34	17.34	17.46	18	QPSK	15MHz	1	37
17.12	17.17	17.32	18	QPSK	15MHz	1	74
16.97	17.09	17.25	18	QPSK	15MHz	36	0
17.05	17.05	17.09	18	QPSK	15MHz	36	19
16.90	16.96	17.06	18	QPSK	15MHz	36	39
17.06	16.98	17.24	18	QPSK	15MHz	75	0
17.11	17.17	17.24	18	16QAM	15MHz	1	0
16.83	16.95	17.04	18	16QAM	15MHz	1	37
16.86	16.96	17.00	18	16QAM	15MHz	1	74
16.96	17.04	17.26	18	16QAM	15MHz	36	0
16.96	16.99	17.11	18	16QAM	15MHz	36	19
16.91	16.96	17.09	18	16QAM	15MHz	36	39
17.00	17.03	17.14	18	16QAM	15MHz	75	0
17.26	17.28	17.46	18	64QAM	15MHz	1	0
17.17	17.25	17.39	18	64QAM	15MHz	1	37
17.10	17.16	17.36	18	64QAM	15MHz	1	74
17.12	17.09	17.27	18	64QAM	15MHz	36	0
17.02	17.01	17.12	18	64QAM	15MHz	36	19
17.06	17.02	17.15	18	64QAM	15MHz	36	39
17.08	17.06	17.24	18	64QAM	15MHz	75	0

LTE Band 7							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20800	21100	21400	Channel				
2505	2535	2565	Freq. (MHz)				
17.38	17.36	17.56	18	QPSK	10MHz	1	0
17.31	17.30	17.38	18	QPSK	10MHz	1	24
17.21	17.22	17.29	18	QPSK	10MHz	1	49
17.03	17.07	17.22	18	QPSK	10MHz	25	0
17.09	17.04	17.17	18	QPSK	10MHz	25	12
16.90	16.95	17.08	18	QPSK	10MHz	25	25
17.03	17.00	17.23	18	QPSK	10MHz	50	0
17.14	17.10	17.24	18	16QAM	10MHz	1	0
16.85	16.93	17.02	18	16QAM	10MHz	1	24
16.92	16.89	16.99	18	16QAM	10MHz	1	49
17.00	17.03	17.18	18	16QAM	10MHz	25	0
16.98	17.02	17.16	18	16QAM	10MHz	25	12
16.91	16.97	17.03	18	16QAM	10MHz	25	25
17.01	17.04	17.21	18	16QAM	10MHz	50	0
17.26	17.28	17.44	18	64QAM	10MHz	1	0
17.17	17.25	17.32	18	64QAM	10MHz	1	24
17.11	17.17	17.28	18	64QAM	10MHz	1	49
17.10	17.06	17.21	18	64QAM	10MHz	25	0
16.94	17.10	17.11	18	64QAM	10MHz	25	12
16.97	17.00	17.20	18	64QAM	10MHz	25	25
17.05	17.07	17.23	18	64QAM	10MHz	50	0

LTE Band 7							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
20775	21100	21425	Channel				
2502.5	2535	2567.5	Freq. (MHz)				
17.33	17.32	17.49	18	QPSK	5MHz	1	0
17.34	17.27	17.41	18	QPSK	5MHz	1	12
17.17	17.23	17.24	18	QPSK	5MHz	1	24
17.02	17.02	17.23	18	QPSK	5MHz	12	0
17.10	17.05	17.15	18	QPSK	5MHz	12	6
16.95	16.96	17.11	18	QPSK	5MHz	12	13
16.98	17.06	17.20	18	QPSK	5MHz	25	0
17.10	17.13	17.31	18	16QAM	5MHz	1	0
16.84	16.92	17.04	18	16QAM	5MHz	1	12
16.88	16.92	17.00	18	16QAM	5MHz	1	24
16.96	17.07	17.20	18	16QAM	5MHz	12	0
16.99	16.96	17.12	18	16QAM	5MHz	12	6
16.88	17.00	17.05	18	16QAM	5MHz	12	13
17.08	17.07	17.14	18	16QAM	5MHz	25	0
17.17	17.25	17.47	18	64QAM	5MHz	1	0
17.12	17.16	17.38	18	64QAM	5MHz	1	12
17.09	17.21	17.28	18	64QAM	5MHz	1	24
17.07	17.13	17.27	18	64QAM	5MHz	12	0
16.99	17.08	17.17	18	64QAM	5MHz	12	6
17.05	16.97	17.13	18	64QAM	5MHz	12	13
17.09	17.08	17.26	18	64QAM	5MHz	25	0

LTE Band 13					
Maximum Average Power (dBm)	Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
23230	Channel				
782	Freq. (MHz)				
22.81	23	QPSK	10MHz	1	0
22.78	23	QPSK	10MHz	1	24
22.76	23	QPSK	10MHz	1	49
22.56	23	QPSK	10MHz	25	0
22.54	23	QPSK	10MHz	25	12
22.47	23	QPSK	10MHz	25	25
22.49	23	QPSK	10MHz	50	0
22.48	23	16QAM	10MHz	1	0
22.44	23	16QAM	10MHz	1	24
22.37	23	16QAM	10MHz	1	49
21.65	22	16QAM	10MHz	25	0
21.59	22	16QAM	10MHz	25	12
21.56	22	16QAM	10MHz	25	25
21.70	22	16QAM	10MHz	50	0
22.50	23	64QAM	10MHz	1	0
22.47	23	64QAM	10MHz	1	24
22.65	23	64QAM	10MHz	1	49
21.45	22	64QAM	10MHz	25	0
21.41	22	64QAM	10MHz	25	12
21.22	22	64QAM	10MHz	25	25
21.58	22	64QAM	10MHz	50	0

LTE Band 13							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
23205	23230	23255	Channel				
779.5	782	784.5	Freq. (MHz)				
22.80	22.80	22.75	23	QPSK	5MHz	1	0
22.78	22.73	22.77	23	QPSK	5MHz	1	12
22.76	22.73	22.73	23	QPSK	5MHz	1	24
22.48	22.49	22.50	23	QPSK	5MHz	12	0
22.48	22.51	22.52	23	QPSK	5MHz	12	6
22.42	22.42	22.39	23	QPSK	5MHz	12	13
22.49	22.39	22.45	23	QPSK	5MHz	25	0
22.40	22.43	22.48	23	16QAM	5MHz	1	0
22.42	22.39	22.44	23	16QAM	5MHz	1	12
22.33	22.35	22.27	23	16QAM	5MHz	1	24
21.60	21.55	21.64	22	16QAM	5MHz	12	0
21.56	21.54	21.59	22	16QAM	5MHz	12	6
21.52	21.53	21.50	22	16QAM	5MHz	12	13
21.66	21.64	21.63	22	16QAM	5MHz	25	0
22.47	22.40	22.46	23	64QAM	5MHz	1	0
22.44	22.39	22.45	23	64QAM	5MHz	1	12
22.55	22.58	22.65	23	64QAM	5MHz	1	24
21.42	21.40	21.44	22	64QAM	5MHz	12	0
21.32	21.37	21.38	22	64QAM	5MHz	12	6
21.13	21.12	21.13	22	64QAM	5MHz	12	13
21.57	21.53	21.48	22	64QAM	5MHz	25	0

LTE Band 14					
Maximum Average Power (dBm)	Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
23330	Channel				
793	Freq. (MHz)				
22.31	22.5	QPSK	10MHz	1	0
22.27	22.5	QPSK	10MHz	1	24
22.10	22.5	QPSK	10MHz	1	49
22.07	22.5	QPSK	10MHz	25	0
22.04	22.5	QPSK	10MHz	25	12
21.96	22.5	QPSK	10MHz	25	25
22.06	22.5	QPSK	10MHz	50	0
22.11	22.5	16QAM	10MHz	1	0
21.96	22.5	16QAM	10MHz	1	24
21.87	22.5	16QAM	10MHz	1	49
21.33	21.5	16QAM	10MHz	25	0
21.29	21.5	16QAM	10MHz	25	12
21.42	21.5	16QAM	10MHz	25	25
21.22	21.5	16QAM	10MHz	50	0
22.01	22.5	64QAM	10MHz	1	0
22.10	22.5	64QAM	10MHz	1	24
21.75	22.5	64QAM	10MHz	1	49
21.39	21.5	64QAM	10MHz	25	0
21.45	21.5	64QAM	10MHz	25	12
21.06	21.5	64QAM	10MHz	25	25
21.28	21.5	64QAM	10MHz	50	0

LTE Band 14							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
23305	23330	23355	Channel				
790.5	793	795.5	Freq. (MHz)				
22.27	22.30	22.29	22.5	QPSK	5MHz	1	0
22.23	22.23	22.21	22.5	QPSK	5MHz	1	12
22.07	22.02	22.04	22.5	QPSK	5MHz	1	24
22.02	22.02	22.06	22.5	QPSK	5MHz	12	0
22.02	21.95	21.99	22.5	QPSK	5MHz	12	6
21.92	21.87	21.90	22.5	QPSK	5MHz	12	13
22.01	22.05	22.03	22.5	QPSK	5MHz	25	0
22.06	22.11	22.03	22.5	16QAM	5MHz	1	0
21.93	21.87	21.87	22.5	16QAM	5MHz	1	12
21.77	21.77	21.82	22.5	16QAM	5MHz	1	24
21.21	21.30	21.28	21.5	16QAM	5MHz	12	0
21.28	21.24	21.27	21.5	16QAM	5MHz	12	6
21.37	21.40	21.37	21.5	16QAM	5MHz	12	13
21.50	21.47	21.43	21.5	16QAM	5MHz	25	0
21.98	21.99	21.97	22.5	64QAM	5MHz	1	0
22.04	22.01	22.08	22.5	64QAM	5MHz	1	12
21.66	21.69	21.66	22.5	64QAM	5MHz	1	24
21.32	21.29	21.32	21.5	64QAM	5MHz	12	0
21.45	21.45	21.43	21.5	64QAM	5MHz	12	6
21.06	21.05	20.98	21.5	64QAM	5MHz	12	13
21.25	21.19	21.19	21.5	64QAM	5MHz	25	0

LTE Band 26							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
26765	26865	26965	Channel				
821.5	831.5	841.5	Freq. (MHz)				
22.19	22.39	22.34	22.5	QPSK	15MHz	1	0
22.18	22.32	22.28	22.5	QPSK	15MHz	1	37
22.12	22.24	22.25	22.5	QPSK	15MHz	1	74
22.00	22.10	22.09	22.5	QPSK	15MHz	36	0
21.89	22.05	22.04	22.5	QPSK	15MHz	36	19
21.80	21.96	21.92	22.5	QPSK	15MHz	36	39
21.86	21.96	21.99	22.5	QPSK	15MHz	75	0
21.97	22.11	22.10	22.5	16QAM	15MHz	1	0
21.84	21.95	21.97	22.5	16QAM	15MHz	1	37
21.71	21.82	21.80	22.5	16QAM	15MHz	1	74
21.20	21.32	21.29	21.5	16QAM	15MHz	36	0
21.16	21.25	21.26	21.5	16QAM	15MHz	36	19
21.02	21.21	21.16	21.5	16QAM	15MHz	36	39
21.16	21.27	21.25	21.5	16QAM	15MHz	75	0
21.84	21.96	21.95	22.5	64QAM	15MHz	1	0
22.06	22.14	22.17	22.5	64QAM	15MHz	1	37
21.92	22.09	22.07	22.5	64QAM	15MHz	1	74
21.19	21.25	21.28	21.5	64QAM	15MHz	36	0
21.33	21.49	21.44	21.5	64QAM	15MHz	36	19
20.98	21.11	21.14	21.5	64QAM	15MHz	36	39
21.07	21.18	21.16	21.5	64QAM	15MHz	75	0

LTE Band 26							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
26740	26865	26990	Channel				
819	831.5	844	Freq. (MHz)				
22.09	22.27	22.38	22.5	QPSK	10MHz	1	0
22.17	22.28	22.25	22.5	QPSK	10MHz	1	24
22.03	22.19	22.24	22.5	QPSK	10MHz	1	49
22.00	22.02	22.02	22.5	QPSK	10MHz	25	0
21.83	22.03	22.00	22.5	QPSK	10MHz	25	12
21.76	21.86	21.91	22.5	QPSK	10MHz	25	25
21.79	21.90	21.90	22.5	QPSK	10MHz	50	0
21.94	22.00	22.07	22.5	16QAM	10MHz	1	0
21.81	21.95	21.90	22.5	16QAM	10MHz	1	24
21.63	21.72	21.74	22.5	16QAM	10MHz	1	49
21.20	21.23	21.25	21.5	16QAM	10MHz	25	0
21.15	21.20	21.19	21.5	16QAM	10MHz	25	12
20.94	21.08	21.19	21.5	16QAM	10MHz	25	25
21.08	21.20	21.26	21.5	16QAM	10MHz	50	0
21.82	21.95	21.88	22.5	64QAM	10MHz	1	0
21.98	22.09	22.07	22.5	64QAM	10MHz	1	24
21.92	22.01	22.06	22.5	64QAM	10MHz	1	49
21.14	21.23	21.15	21.5	64QAM	10MHz	25	0
21.28	21.42	21.49	21.5	64QAM	10MHz	25	12
20.88	21.06	21.11	21.5	64QAM	10MHz	25	25
21.02	21.16	21.17	21.5	64QAM	10MHz	50	0

LTE Band 26							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
26715	26865	27015	Channel				
816.5	831.5	846.5	Freq. (MHz)				
22.14	22.27	22.31	22.5	QPSK	5MHz	1	0
22.09	22.28	22.22	22.5	QPSK	5MHz	1	12
22.04	22.15	22.23	22.5	QPSK	5MHz	1	24
21.94	22.04	22.02	22.5	QPSK	5MHz	12	0
21.82	22.01	21.96	22.5	QPSK	5MHz	12	6
21.74	21.86	21.94	22.5	QPSK	5MHz	12	13
21.83	21.89	21.86	22.5	QPSK	5MHz	25	0
21.97	22.09	22.02	22.5	16QAM	5MHz	1	0
21.79	21.93	21.93	22.5	16QAM	5MHz	1	12
21.71	21.70	21.76	22.5	16QAM	5MHz	1	24
21.11	21.25	21.32	21.5	16QAM	5MHz	12	0
21.13	21.20	21.25	21.5	16QAM	5MHz	12	6
21.01	21.12	21.18	21.5	16QAM	5MHz	12	13
21.09	21.23	21.27	21.5	16QAM	5MHz	25	0
21.84	21.94	21.87	22.5	64QAM	5MHz	1	0
21.96	22.15	22.05	22.5	64QAM	5MHz	1	12
21.84	22.05	21.99	22.5	64QAM	5MHz	1	24
21.15	21.26	21.22	21.5	64QAM	5MHz	12	0
21.26	21.43	21.47	21.5	64QAM	5MHz	12	6
20.95	21.11	21.07	21.5	64QAM	5MHz	12	13
21.04	21.06	21.15	21.5	64QAM	5MHz	25	0

LTE Band 26							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
26705	26865	27025	Channel				
815.5	831.5	847.5	Freq. (MHz)				
22.18	22.27	22.32	22.5	QPSK	3MHz	1	0
22.11	22.26	22.26	22.5	QPSK	3MHz	1	7
22.05	22.16	22.21	22.5	QPSK	3MHz	1	14
21.91	22.00	22.04	22.5	QPSK	3MHz	8	0
21.87	22.00	22.01	22.5	QPSK	3MHz	8	3
21.76	21.90	21.93	22.5	QPSK	3MHz	8	7
21.86	21.97	21.94	22.5	QPSK	3MHz	15	0
21.93	22.05	22.01	22.5	16QAM	3MHz	1	0
21.83	21.91	21.88	22.5	16QAM	3MHz	1	7
21.67	21.79	21.75	22.5	16QAM	3MHz	1	14
21.16	21.20	21.28	21.5	16QAM	3MHz	8	0
21.12	21.25	21.20	21.5	16QAM	3MHz	8	3
20.97	21.13	21.15	21.5	16QAM	3MHz	8	7
21.12	21.17	21.19	21.5	16QAM	3MHz	15	0
21.74	21.95	21.95	22.5	64QAM	3MHz	1	0
22.02	22.08	22.12	22.5	64QAM	3MHz	1	7
21.89	22.03	22.00	22.5	64QAM	3MHz	1	14
21.14	21.18	21.22	21.5	64QAM	3MHz	8	0
21.33	21.35	21.47	21.5	64QAM	3MHz	8	3
20.88	21.12	21.11	21.5	64QAM	3MHz	8	7
21.04	21.09	21.16	21.5	64QAM	3MHz	15	0

LTE Band 26							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
26697	26865	27033	Channel				
814.7	831.5	848.3	Freq. (MHz)				
22.17	22.18	22.32	22.5	QPSK	1.4MHz	1	0
22.08	22.16	22.21	22.5	QPSK	1.4MHz	1	2
22.04	22.07	22.12	22.5	QPSK	1.4MHz	1	5
21.84	21.92	21.94	22.5	QPSK	1.4MHz	3	0
21.78	21.92	21.92	22.5	QPSK	1.4MHz	3	1
21.67	21.90	21.91	22.5	QPSK	1.4MHz	3	3
21.77	21.93	21.89	22.5	QPSK	1.4MHz	6	0
21.90	21.99	22.01	22.5	16QAM	1.4MHz	1	0
21.76	21.86	21.80	22.5	16QAM	1.4MHz	1	2
21.65	21.75	21.68	22.5	16QAM	1.4MHz	1	5
22.12	22.15	22.25	22.5	16QAM	1.4MHz	3	0
22.09	22.19	22.16	22.5	16QAM	1.4MHz	3	1
21.93	22.11	22.09	22.5	16QAM	1.4MHz	3	3
21.10	21.17	21.15	21.5	16QAM	1.4MHz	6	0
20.68	20.86	20.93	21.5	64QAM	1.4MHz	1	0
20.93	20.98	21.04	21.5	64QAM	1.4MHz	1	2
20.88	20.99	20.98	21.5	64QAM	1.4MHz	1	5
21.09	21.11	21.16	21.5	64QAM	1.4MHz	3	0
21.33	21.34	21.47	21.5	64QAM	1.4MHz	3	1
20.82	21.03	21.07	21.5	64QAM	1.4MHz	3	3
20.01	20.02	20.06	20.5	64QAM	1.4MHz	6	0

LTE Band 41									
Maximum Average Power (dBm)					Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
39750	40185	40620	41055	41490	Channel				
2506	2549.5	2593	2636.5	2680	Freq. (MHz)				
17.02	17.17	17.26	17.11	17.14	17.5	QPSK	20MHz	1	0
16.84	16.99	17.14	16.99	16.94	17.5	QPSK	20MHz	1	49
16.82	17.00	17.12	16.98	16.98	17.5	QPSK	20MHz	1	99
16.68	16.80	16.92	16.77	16.78	17.5	QPSK	20MHz	50	0
16.57	16.67	16.80	16.61	16.62	17.5	QPSK	20MHz	50	25
16.48	16.61	16.77	16.63	16.62	17.5	QPSK	20MHz	50	50
16.56	16.72	16.81	16.67	16.63	17.5	QPSK	20MHz	100	0
16.77	16.91	17.04	16.87	16.88	17.5	16QAM	20MHz	1	0
16.62	16.76	16.87	16.72	16.67	17.5	16QAM	20MHz	1	49
16.49	16.67	16.81	16.68	16.64	17.5	16QAM	20MHz	1	99
16.63	16.84	16.92	16.73	16.73	17.5	16QAM	20MHz	50	0
16.55	16.77	16.87	16.73	16.71	17.5	16QAM	20MHz	50	25
16.53	16.65	16.82	16.69	16.62	17.5	16QAM	20MHz	50	50
16.59	16.69	16.84	16.68	16.68	17.5	16QAM	20MHz	100	0
16.69	16.80	16.95	16.80	16.75	17.5	64QAM	20MHz	1	0
16.53	16.69	16.79	16.58	16.60	17.5	64QAM	20MHz	1	49
16.42	16.57	16.70	16.55	16.54	17.5	64QAM	20MHz	1	99
16.59	16.76	16.87	16.70	16.74	17.5	64QAM	20MHz	50	0
16.53	16.71	16.82	16.61	16.66	17.5	64QAM	20MHz	50	25
16.49	16.64	16.73	16.54	16.57	17.5	64QAM	20MHz	50	50
16.62	16.72	16.88	16.67	16.76	17.5	64QAM	20MHz	100	0

LTE Band 41									
Maximum Average Power (dBm)					Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
39725	40173	40620	41068	41515	Channel				
2503.5	2548.3	2593	2637.8	2682.5	Freq. (MHz)				
17.02	17.15	17.10	17.06	17.17	17.5	QPSK	15MHz	1	0
16.79	16.94	16.93	16.89	17.06	17.5	QPSK	15MHz	1	37
16.75	16.92	16.90	16.96	17.05	17.5	QPSK	15MHz	1	74
16.64	16.78	16.69	16.70	16.87	17.5	QPSK	15MHz	36	0
16.54	16.57	16.56	16.61	16.74	17.5	QPSK	15MHz	36	19
16.48	16.52	16.53	16.59	16.77	17.5	QPSK	15MHz	36	39
16.53	16.70	16.60	16.66	16.72	17.5	QPSK	15MHz	75	0
16.76	16.82	16.80	16.78	16.98	17.5	16QAM	15MHz	1	0
16.57	16.68	16.65	16.70	16.83	17.5	16QAM	15MHz	1	37
16.47	16.59	16.60	16.68	16.73	17.5	16QAM	15MHz	1	74
16.59	16.75	16.71	16.69	16.83	17.5	16QAM	15MHz	36	0
16.48	16.74	16.63	16.68	16.83	17.5	16QAM	15MHz	36	19
16.51	16.58	16.62	16.60	16.72	17.5	16QAM	15MHz	36	39
16.53	16.62	16.63	16.63	16.77	17.5	16QAM	15MHz	75	0
16.69	16.74	16.71	16.70	16.93	17.5	64QAM	15MHz	1	0
16.52	16.62	16.52	16.55	16.78	17.5	64QAM	15MHz	1	37
16.32	16.50	16.50	16.51	16.60	17.5	64QAM	15MHz	1	74
16.55	16.75	16.71	16.68	16.83	17.5	64QAM	15MHz	36	0
16.49	16.63	16.65	16.58	16.75	17.5	64QAM	15MHz	36	19
16.45	16.62	16.49	16.54	16.63	17.5	64QAM	15MHz	36	39
16.57	16.62	16.67	16.65	16.84	17.5	64QAM	15MHz	75	0

LTE Band 41									
Maximum Average Power (dBm)					Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
39700	40160	40620	41080	41540	Channel				
2501	2547	2593	2639	2685	Freq. (MHz)				
16.96	17.08	17.06	17.08	17.16	17.5	QPSK	10MHz	1	0
16.80	16.89	16.90	16.95	17.14	17.5	QPSK	10MHz	1	24
16.77	16.93	16.98	16.92	17.12	17.5	QPSK	10MHz	1	49
16.65	16.80	16.68	16.67	16.91	17.5	QPSK	10MHz	25	0
16.50	16.58	16.61	16.60	16.76	17.5	QPSK	10MHz	25	12
16.48	16.57	16.62	16.54	16.68	17.5	QPSK	10MHz	25	25
16.52	16.65	16.57	16.61	16.74	17.5	QPSK	10MHz	50	0
16.74	16.83	16.80	16.80	17.04	17.5	16QAM	10MHz	1	0
16.54	16.70	16.62	16.71	16.85	17.5	16QAM	10MHz	1	24
16.45	16.59	16.63	16.63	16.76	17.5	16QAM	10MHz	1	49
16.59	16.84	16.71	16.67	16.85	17.5	16QAM	10MHz	25	0
16.49	16.77	16.65	16.67	16.85	17.5	16QAM	10MHz	25	12
16.50	16.61	16.54	16.63	16.73	17.5	16QAM	10MHz	25	25
16.51	16.67	16.68	16.60	16.80	17.5	16QAM	10MHz	50	0
16.61	16.76	16.66	16.73	16.92	17.5	64QAM	10MHz	1	0
16.52	16.61	16.53	16.58	16.78	17.5	64QAM	10MHz	1	24
16.37	16.54	16.53	16.45	16.61	17.5	64QAM	10MHz	1	49
16.55	16.71	16.66	16.60	16.83	17.5	64QAM	10MHz	25	0
16.51	16.70	16.59	16.52	16.78	17.5	64QAM	10MHz	25	12
16.48	16.60	16.47	16.53	16.66	17.5	64QAM	10MHz	25	25
16.60	16.72	16.73	16.59	16.87	17.5	64QAM	10MHz	50	0

LTE Band 41									
Maximum Average Power (dBm)					Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
39675	40148	40620	41093	41565	Channel				
2498.5	2545.8	2593	2640.3	2687.5	Freq. (MHz)				
16.94	17.16	17.08	17.05	17.18	17.5	QPSK	5MHz	1	0
16.77	16.98	16.89	16.93	17.14	17.5	QPSK	5MHz	1	12
16.78	16.98	16.98	16.98	17.05	17.5	QPSK	5MHz	1	24
16.65	16.79	16.71	16.75	16.87	17.5	QPSK	5MHz	12	0
16.50	16.64	16.55	16.55	16.75	17.5	QPSK	5MHz	12	6
16.39	16.59	16.57	16.62	16.73	17.5	QPSK	5MHz	12	13
16.55	16.69	16.57	16.57	16.79	17.5	QPSK	5MHz	25	0
16.70	16.83	16.80	16.86	16.97	17.5	16QAM	5MHz	1	0
16.54	16.67	16.64	16.72	16.82	17.5	16QAM	5MHz	1	12
16.45	16.57	16.61	16.63	16.74	17.5	16QAM	5MHz	1	24
16.62	16.83	16.67	16.65	16.90	17.5	16QAM	5MHz	12	0
16.53	16.70	16.61	16.72	16.81	17.5	16QAM	5MHz	12	6
16.52	16.61	16.57	16.59	16.82	17.5	16QAM	5MHz	12	13
16.56	16.64	16.66	16.61	16.78	17.5	16QAM	5MHz	25	0
16.69	16.75	16.66	16.80	16.86	17.5	64QAM	5MHz	1	0
16.48	16.63	16.60	16.54	16.72	17.5	64QAM	5MHz	1	12
16.37	16.51	16.44	16.53	16.69	17.5	64QAM	5MHz	1	24
16.53	16.75	16.73	16.67	16.82	17.5	64QAM	5MHz	12	0
16.53	16.67	16.62	16.51	16.82	17.5	64QAM	5MHz	12	6
16.47	16.55	16.56	16.50	16.68	17.5	64QAM	5MHz	12	13
16.60	16.68	16.76	16.59	16.80	17.5	64QAM	5MHz	25	0

LTE Band 66							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
132072	132322	132572	Channel				
1720	1745	1770	Freq. (MHz)				
22.69	22.71	22.69	23	QPSK	20MHz	1	0
22.68	22.65	22.61	23	QPSK	20MHz	1	49
22.53	22.56	22.51	23	QPSK	20MHz	1	99
22.29	22.29	22.26	23	QPSK	20MHz	50	0
22.25	22.23	22.18	23	QPSK	20MHz	50	25
22.35	22.36	22.31	23	QPSK	20MHz	50	50
22.28	22.25	22.23	23	QPSK	20MHz	100	0
22.39	22.40	22.36	23	16QAM	20MHz	1	0
22.10	22.14	22.07	23	16QAM	20MHz	1	49
22.32	22.29	22.30	23	16QAM	20MHz	1	99
21.31	21.28	21.21	22	16QAM	20MHz	50	0
21.28	21.26	21.24	22	16QAM	20MHz	50	25
21.33	21.30	21.26	22	16QAM	20MHz	50	50
21.18	21.24	21.21	22	16QAM	20MHz	100	0
22.58	22.60	22.56	23	64QAM	20MHz	1	0
22.28	22.29	22.22	23	64QAM	20MHz	1	49
22.47	22.44	22.39	23	64QAM	20MHz	1	99
21.25	21.26	21.21	22	64QAM	20MHz	50	0
21.20	21.24	21.23	22	64QAM	20MHz	50	25
21.31	21.33	21.26	22	64QAM	20MHz	50	50
21.22	21.21	21.17	22	64QAM	20MHz	100	0

LTE Band 66							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
132047	132322	132597	Channel				
1717.5	1745	1772.5	Freq. (MHz)				
22.62	22.63	22.69	23	QPSK	15MHz	1	0
22.59	22.62	22.53	23	QPSK	15MHz	1	37
22.48	22.50	22.48	23	QPSK	15MHz	1	74
22.24	22.24	22.25	23	QPSK	15MHz	36	0
22.20	22.13	22.15	23	QPSK	15MHz	36	19
22.33	22.27	22.28	23	QPSK	15MHz	36	39
22.28	22.21	22.18	23	QPSK	15MHz	75	0
22.34	22.40	22.29	23	16QAM	15MHz	1	0
22.09	22.14	22.02	23	16QAM	15MHz	1	37
22.29	22.24	22.28	23	16QAM	15MHz	1	74
21.28	21.24	21.11	22	16QAM	15MHz	36	0
21.22	21.26	21.19	22	16QAM	15MHz	36	19
21.30	21.20	21.18	22	16QAM	15MHz	36	39
21.12	21.15	21.13	22	16QAM	15MHz	75	0
22.54	22.52	22.55	23	64QAM	15MHz	1	0
22.23	22.28	22.12	23	64QAM	15MHz	1	37
22.47	22.36	22.36	23	64QAM	15MHz	1	74
21.22	21.16	21.11	22	64QAM	15MHz	36	0
21.17	21.23	21.19	22	64QAM	15MHz	36	19
21.23	21.29	21.19	22	64QAM	15MHz	36	39
21.15	21.16	21.15	22	64QAM	15MHz	75	0

LTE Band 66							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
132022	132322	132622	Channel				
1715	1745	1775	Freq. (MHz)				
22.59	22.61	22.66	23	QPSK	10MHz	1	0
22.59	22.59	22.59	23	QPSK	10MHz	1	24
22.46	22.56	22.50	23	QPSK	10MHz	1	49
22.23	22.24	22.24	23	QPSK	10MHz	25	0
22.23	22.18	22.11	23	QPSK	10MHz	25	12
22.26	22.28	22.24	23	QPSK	10MHz	25	25
22.24	22.25	22.17	23	QPSK	10MHz	50	0
22.29	22.38	22.32	23	16QAM	10MHz	1	0
22.08	22.13	22.07	23	16QAM	10MHz	1	24
22.30	22.27	22.29	23	16QAM	10MHz	1	49
21.26	21.21	21.13	22	16QAM	10MHz	25	0
21.23	21.21	21.18	22	16QAM	10MHz	25	12
21.29	21.20	21.22	22	16QAM	10MHz	25	25
21.10	21.18	21.12	22	16QAM	10MHz	50	0
22.51	22.52	22.50	23	64QAM	10MHz	1	0
22.27	22.23	22.16	23	64QAM	10MHz	1	24
22.43	22.43	22.39	23	64QAM	10MHz	1	49
21.17	21.16	21.18	22	64QAM	10MHz	25	0
21.18	21.21	21.16	22	64QAM	10MHz	25	12
21.22	21.26	21.23	22	64QAM	10MHz	25	25
21.22	21.12	21.09	22	64QAM	10MHz	50	0

LTE Band 66							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
131997	132322	132647	Channel				
1712.5	1745	1777.5	Freq. (MHz)				
22.67	22.67	22.64	23	QPSK	5MHz	1	0
22.67	22.57	22.52	23	QPSK	5MHz	1	12
22.49	22.46	22.51	23	QPSK	5MHz	1	24
22.20	22.19	22.21	23	QPSK	5MHz	12	0
22.19	22.22	22.09	23	QPSK	5MHz	12	6
22.26	22.33	22.31	23	QPSK	5MHz	12	13
22.25	22.15	22.21	23	QPSK	5MHz	25	0
22.30	22.32	22.28	23	16QAM	5MHz	1	0
22.09	22.11	21.98	23	16QAM	5MHz	1	12
22.31	22.28	22.20	23	16QAM	5MHz	1	24
21.27	21.21	21.17	22	16QAM	5MHz	12	0
21.18	21.22	21.22	22	16QAM	5MHz	12	6
21.23	21.29	21.16	22	16QAM	5MHz	12	13
21.09	21.19	21.18	22	16QAM	5MHz	25	0
22.57	22.53	22.48	23	64QAM	5MHz	1	0
22.23	22.23	22.15	23	64QAM	5MHz	1	12
22.37	22.40	22.33	23	64QAM	5MHz	1	24
21.23	21.16	21.13	22	64QAM	5MHz	12	0
21.13	21.21	21.21	22	64QAM	5MHz	12	6
21.23	21.26	21.17	22	64QAM	5MHz	12	13
21.15	21.19	21.14	22	64QAM	5MHz	25	0

LTE Band 66							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
131987	132322	132657	Channel				
1711.5	1745	1778.5	Freq. (MHz)				
22.67	22.70	22.61	23	QPSK	3MHz	1	0
22.68	22.55	22.53	23	QPSK	3MHz	1	7
22.50	22.49	22.43	23	QPSK	3MHz	1	14
22.19	22.25	22.24	23	QPSK	3MHz	8	0
22.23	22.16	22.16	23	QPSK	3MHz	8	3
22.25	22.35	22.23	23	QPSK	3MHz	8	7
22.18	22.16	22.17	23	QPSK	3MHz	15	0
22.30	22.32	22.27	23	16QAM	3MHz	1	0
22.01	22.13	21.99	23	16QAM	3MHz	1	7
22.28	22.26	22.28	23	16QAM	3MHz	1	14
21.21	21.21	21.13	22	16QAM	3MHz	8	0
21.28	21.19	21.15	22	16QAM	3MHz	8	3
21.33	21.26	21.24	22	16QAM	3MHz	8	7
21.11	21.16	21.19	22	16QAM	3MHz	15	0
22.50	22.59	22.49	23	64QAM	3MHz	1	0
22.26	22.24	22.17	23	64QAM	3MHz	1	7
22.37	22.37	22.35	23	64QAM	3MHz	1	14
21.21	21.21	21.11	22	64QAM	3MHz	8	0
21.12	21.17	21.19	22	64QAM	3MHz	8	3
21.22	21.29	21.17	22	64QAM	3MHz	8	7
21.18	21.15	21.10	22	64QAM	3MHz	15	0

LTE Band 66							
Maximum Average Power (dBm)			Tune up (dBm)	Modulation	Bandwidth	# of Resource Blocks	Resource Block Offset
131979	132322	132665	Channel				
1710.7	1745	1779.3	Freq. (MHz)				
22.59	22.65	22.62	23	QPSK	1.4MHz	1	0
22.59	22.57	22.60	23	QPSK	1.4MHz	1	2
22.45	22.48	22.47	23	QPSK	1.4MHz	1	5
22.25	22.24	22.23	23	QPSK	1.4MHz	3	0
22.18	22.21	22.12	23	QPSK	1.4MHz	3	1
22.33	22.29	22.25	23	QPSK	1.4MHz	3	3
22.18	22.16	22.23	23	QPSK	1.4MHz	6	0
22.36	22.37	22.34	23	16QAM	1.4MHz	1	0
22.04	22.14	22.01	23	16QAM	1.4MHz	1	2
22.24	22.26	22.22	23	16QAM	1.4MHz	1	5
22.23	22.23	22.18	23	16QAM	1.4MHz	3	0
22.28	22.18	22.16	23	16QAM	1.4MHz	3	1
22.28	22.28	22.19	23	16QAM	1.4MHz	3	3
21.12	21.23	21.12	22	16QAM	1.4MHz	6	0
21.58	21.59	21.51	22	64QAM	1.4MHz	1	0
21.23	21.28	21.22	22	64QAM	1.4MHz	1	2
21.38	21.34	21.36	22	64QAM	1.4MHz	1	5
21.25	21.24	21.11	22	64QAM	1.4MHz	3	0
21.16	21.15	21.20	22	64QAM	1.4MHz	3	1
21.30	21.30	21.25	22	64QAM	1.4MHz	3	3
20.16	20.16	20.13	21	64QAM	1.4MHz	6	0

Uplink Carrier Aggregation Scenarios Conducted Power																		
	PCC							SCC							Total		Measurement Power	
Intra Band Contiguous Combination	Band	Bandwidth (MHz)	Modulation	Uplink Channel	Uplink Frequency (MHz)	Uplink # of Resource Blocks	Uplink Resource Block Offset	Band	Bandwidth (MHz)	Modulation	Uplink Channel	Uplink Frequency (MHz)	Uplink # of Resource Blocks	Uplink Resource Block Offset	Tx Power with UL-CA (dBm)	MPR Level (dB)	Single Carrier Tx Power (dBm)	Maximum Tune-up Power
7C	7	20	QPSK	20850	2510	1	0	7	20	QPSK	21048	2529.8	1	99	14.37	0-8.5	22.17	23.8
						1	99						1	0	23.10	0	22.05	23.8
	7	20	QPSK	21100	2535	1	0	7	20	QPSK	21298	2554.8	1	99	14.40	0-8.5	22.22	23.8
						1	99						1	0	23.16	0	22.1	23.8
	7	20	QPSK	21152	2540.2	1	0	7	20	QPSK	21350	2560	1	99	14.40	0-8.5	22.2	23.8
						1	99						1	0	23.39	0	22.1	23.8
41C	41	20	QPSK	39750	2506	1	0	41	20	QPSK	39948	2525.8	1	99	14.72	0-8.5	22.34	23.8
						1	99						1	0	23.31	0	21.96	23.8
	41	20	QPSK	40185	2549.5	1	0	41	20	QPSK	40383	2569.3	1	99	14.55	0-8.5	22.5	23.8
						1	99						1	0	23.37	0	22.2	23.8
	41	20	QPSK	40620	2593	1	0	41	20	QPSK	40818	2612.8	1	99	14.75	0-8.5	22.54	23.8
						1	99						1	0	23.49	0	22.36	23.8
	41	20	QPSK	41055	2636.5	1	0	41	20	QPSK	41253	2656.3	1	99	14.52	0-8.5	22.49	23.8
						1	99						1	0	23.60	0	22.22	23.8
	41	20	QPSK	41292	2660.2	1	0	41	20	QPSK	41490	2680	1	99	14.69	0-8.5	22.35	23.8
						1	99						1	0	23.51	0	22.02	23.8

Uplink Carrier Aggregation Scenarios Conducted Power																		
Intra Band Contiguous Combination	PCC							SCC							Total	MPR Level (dB)	Measurement Power	
	Band	Bandwidth (MHz)	Modulation	Uplink Channel	Uplink Frequency (MHz)	Uplink # of Resource Blocks	Uplink Resource Block Offset	Band	Bandwidth (MHz)	Modulation	Uplink Channel	Uplink Frequency (MHz)	Uplink # of Resource Blocks	Uplink Resource Block Offset	Tx Power with UL-CA Active (dBm)		Single Carrier Tx Power (dBm)	Maximum Tune-up Power
7C	7	20	QPSK20M	20850	2510	1	0	7	20	QPSK20M	21048	2529.8	1	99	14.28	0-8.5	17.43	18
						1	99						1	0	17.16	0	17.21	18
	7	20	QPSK20M	21100	2535	1	0	7	20	QPSK20M	21298	2554.8	1	99	14.37	0-8.5	17.58	18
						1	99						1	0	17.27	0	17.34	18
	7	20	QPSK20M	21152	2540.2	1	0	7	20	QPSK20M	21350	2560	1	99	14.38	0-8.5	17.42	18
						1	99						1	0	17.20	0	17.26	18
41C	41	20	QPSK20M	39750	2506	1	0	41	20	QPSK20M	39948	2525.8	1	99	14.71	0-8.5	17.02	17.5
						1	99						1	0	16.67	0	16.82	17.5
	41	20	QPSK20M	40185	2549.5	1	0	41	20	QPSK20M	40383	2569.3	1	99	14.67	0-8.5	17.17	17.5
						1	99						1	0	16.78	0	17	17.5
	41	20	QPSK20M	40620	2593	1	0	41	20	QPSK20M	40818	2612.8	1	99	14.68	0-8.5	17.26	17.5
						1	99						1	0	17.02	0	17.12	17.5
	41	20	QPSK20M	41055	2636.5	1	0	41	20	QPSK20M	41253	2656.3	1	99	14.41	0-8.5	17.11	17.5
						1	99						1	0	16.84	0	16.98	17.5
	41	20	QPSK20M	41292	2660.2	1	0	41	20	QPSK20M	41490	2680	1	99	14.60	0-8.5	17.14	17.5
						1	99						1	0	16.77	0	16.98	17.5

Downlink Carrier Aggregation Conducted Power

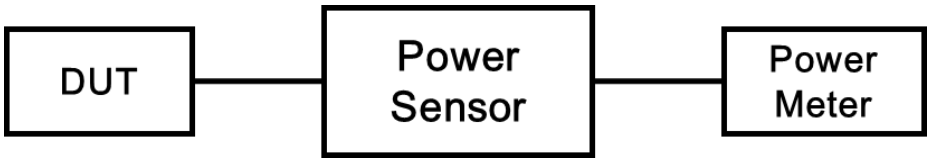
Intra Band Contiguous Combination	PCC									SCC1				SCC2				Power		
	PCC Band	BW [MHz]	Modulation	UL Channel	UL Frequency [MHz]	UL RB	UL RB Offset	DL Channel	DL Frequency [MHz]	SCC Band	BW [Mhz]	DL Channel	DL Frequency [MHz]	SCC Band	BW [Mhz]	DL Channel	DL Frequency [MHz]	Tx Power with DL CA Enable (dBm)	Single Carrier Tx Power (dBm)	Maximum Tune-up Power
CA_2C	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	2	20M	902	1960.2							24
CA_5B	LTE 5	10M	QPSK	20525	836.5	1	0	2525	881.5	5	10M	2624	891.4							24
CA_7B	LTE 7	10M	QPSK	21100	2535	1	0	3100	2655	7	10M	3199	2664.9							23
CA_7C	LTE 7	20M	QPSK	21100	2535	1	0	3100	2655	7	20M	3298	2674.8							23
CA_41C	LTE 41	20M	QPSK	40185	2549.5	1	0	40185	2549.5	41	20M	40383	2569.3							23
CA_41D	LTE 41	20M	QPSK	40185	2549.5	1	0	40185	2549.5	41	20M	40383	2569.3	41	20M	40581	2589.1			23

Downlink Carrier Aggregation Conducted Power

Inter Band Combination	PCC									SCC1				SCC2				Power		
	PCC Band	BW [MHz]	Modulation	UL Channel	UL Frequency [MHz]	UL RB	UL RB Offset	DL Channel	DL Frequency [MHz]	SCC Band	BW [Mhz]	DL Channel	DL Frequency [MHz]	SCC Band	BW [Mhz]	DL Channel	DL Frequency [MHz]	Tx Power with DL CA Enable (dBm)	Single Carrier Tx Power (dBm)	Maximum Tune-up Power
CA_2A-4A-5A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	4	20M	2300	2145	5	10M	2450	874			24
CA_2A-4A-7A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	4	20M	2300	2145	7	20M	3100	2655			24
CA_2A-4A-12A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	4	20M	2300	2145	12	10M	5095	737.5			24
CA_2A-4A-13A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	4	20M	2300	2145	13	10M	5230	751			24
CA_2A-4A-29A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	4	20M	2300	2145	29	10M	9715	722.5			24
CA_2A-13A-66A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	13	10M	5230	751	66	20M	67036	2170			24
CA_2A-14A-66A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	14	10M	5330	763	66	20M	67036	2170			24
CA_2A-2A-5A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	2	20M	900	1960	5	10M	2450	874			24
CA_2A-2A-12A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	2	20M	900	1960	12	10M	5095	737.5			24
CA_2A-2A-13A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	2	20M	900	1960	13	10M	5230	751			24
CA_2A-2A-14A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	2	20M	900	1960	14	10M	5330	763			24
CA_2A-7A-7A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	7	20M	3100	2655	7	20M	3350	2680			24
CA_2A-66A-66A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	66	20M	67036	2170	66	20M	66786	2145			24
CA_2A-66B	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	66	10M	67086	2175	66	10M	66987	2165.1			24
CA_2A-66C	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	66	20M	66786	2145	66	20M	66588	2125.2			24
CA_4A-7A-12A	LTE 4	20M	QPSK	20300	1745	1	0	2300	2145	7	20M	3100	2655	12	10M	5095	737.5			24
CA_4A-4A-5A	LTE 4	20M	QPSK	20300	1745	1	0	2300	2145	4	20M	2070	2125	5	10M	2450	874			24
CA_4A-4A-12A	LTE 4	20M	QPSK	20300	1745	1	0	2300	2145	4	20M	2070	2125	12	10M	5010	729			24
CA_4A-4A-13A	LTE 4	20M	QPSK	20300	1745	1	0	2300	2145	4	20M	2070	2125	13	10M	5230	751			24
CA_4A-7A-7A	LTE 4	20M	QPSK	20300	1745	1	0	2300	2145	7	20M	3100	2655	7	20M	3350	2680			24
CA_5A-66B	LTE 5	10M	QPSK	20525	836.5	1	0	2525	836.5	66	10M	67086	2175	66	10M	66987	2165.1			24
CA_5A-66C	LTE 5	10M	QPSK	20525	836.5	1	0	2525	836.5	66	20M	66786	2145	66	20M	66588	2125.2			24
CA_5A-7A	LTE 5	10M	QPSK	20525	836.5	1	0	2525	836.5	7	20M	3100	2655							24
CA_5A-66A-66A	LTE 5	10M	QPSK	20525	836.5	1	0	2525	836.5	66	20M	67036	2170	66	20M	66786	2145			24
CA_7A-12A	LTE 7	20M	QPSK	21100	2535	1	0	3100	2655	12	10M	5095	737.5							23
CA_13A-66A-66A	LTE 13	10M	QPSK	23230	782	1	0	5230	751	66	20M	67036	2170	66	20M	66786	2145			24
CA_14A-66A-66A	LTE 14	10M	QPSK	23330	793	1	0	5330	763	66	20M	67036	2170	66	20M	66786	2145			24
CA_13A-66B	LTE 13	10M	QPSK	23230	782	1	0	5230	751	66	10M	67086	2175	66	10M	66987	2165.1			24
CA_13A-66C	LTE 13	10M	QPSK	23230	782	1	0	5230	751	66	20M	66786	2145	66	20M	66588	2125.2			24
CA_29A-66A	LTE 66	20M	QPSK	132322	1745	1	0	66786	2145	29	10M	9715	722.5							24
CA_66A-66B	LTE 66	20M	QPSK	132322	1745	1	0	66786	2145	66	10M	66786	2145	66	10M	66687	2135.1			24
CA_66A-66C	LTE 66	20M	QPSK	132322	1745	1	0	66786	2145	66	20M	66986	2165	66	20M	66788	2145.2			24
CA_2A-5A-66A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	5	10M	2450	874	66	20M	67036	2170			24
CA_2A-7A-12A	LTE 2	20M	QPSK	19100	1900	1	0	1100	1980	7	20M	3100	2655	12	10M	5095	737.5			24

WLAN Conducted Power

1. As per FCC OET KDB 248227 D01, conducted output power and SAR testing are not required for 802.11g/n20/n40/ax channels when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2W/kg.
2. When the reported SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for subsequent next highest measured output power channel(s) in the initial test configuration until reported SAR is ≤ 1.2 W/kg or all required channels are tested.
3. Additional conducted power measurement is required when reported SAR is > 1.2W/kg. In case the subsequent test configuration and the channel bandwidth is smaller than the initial test configuration, all channels that overlap with the larger channel bandwidth in the initial configuration should be tested.
4. The initial test configuration for 2.4 GHz ,5 GHz and 6 GHz OFDM transmission modes is determined by the 802.11 configuration with the highest maximum output power specified for production units, including tune-up tolerance, in each standalone and aggregated frequency band. SAR for the initial test configuration is measured using the highest maximum output power channel determined by the default power measurement procedures. When multiple transmission modes (802.11a/g/n/ac/ax) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, lowest order 802.11 mode is selected (i.e. a, g, n, ac then ax)
5. When the highest reported SAR for the initial test configuration (when applicable, include subsequent highest output channels), according to the initial test position or fixed exposure requirements, is adjusted by the ratio of the subsequent test configuration to the initial test configuration specified maximum output power and the adjusted SAR is ≤1.2 W/Kg, SAR is not required for that subsequent test configuration.
6. For 802.11ax mode, maximum output powers for each RU size were measured to demonstrate that are no higher than other OFDM 802.11 modes.



Power Measurement Setup

WLAN 2.4 GHz										
Mode	Channel	Frequency (MHz)	Main		Aux		MIMO			
			Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)	SISO A Average Power (dBm)	SISO B Average Power (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11b	1	2412	18.22	18.50	20.42	21.00	not supported	not supported	not supported	not supported
	6	2437	18.39	18.50	20.93	21.00	not supported	not supported	not supported	not supported
	11	2462	18.43	18.50	20.43	21.00	not supported	not supported	not supported	not supported
	12	2467	18.44	18.50	18.47	18.50	not supported	not supported	not supported	not supported
	13	2472	15.13	15.50	15.24	15.50	not supported	not supported	not supported	not supported
802.11g	1	2412	18.32	18.50	18.66	19.00	not supported	not supported	not supported	not supported
	6	2437	18.42	18.50	20.67	21.00	not supported	not supported	not supported	not supported
	11	2462	18.32	18.50	18.37	18.50	not supported	not supported	not supported	not supported
	12	2467	15.01	15.50	15.13	15.50	not supported	not supported	not supported	not supported
	13	2472	11.42	11.50	11.52	12.00	not supported	not supported	not supported	not supported
802.11n HT20	1	2412	18.11	18.50	18.29	18.50	15.72	15.92	18.83	19.00
	6	2437	18.13	18.50	20.42	20.50	18.24	20.28	22.39	22.50
	11	2462	17.69	18.00	17.33	17.50	16.61	16.71	19.67	20.00
	12	2467	14.85	15.00	14.94	15.00	11.61	11.93	14.78	15.00
	13	2472	11.31	11.50	11.34	11.50	9.34	9.42	12.39	12.50
802.11n HT40	3	2422	15.82	16.00	15.91	16.00	14.90	14.94	17.93	18.00
	6	2437	16.91	17.00	16.93	17.00	15.00	15.34	18.18	18.50
	9	2452	15.42	16.00	15.51	16.00	14.19	14.25	17.23	17.50
	10	2457	10.35	10.50	10.42	10.50	8.11	8.15	11.14	11.50
	11	2462	10.53	11.00	10.62	11.00	9.18	9.25	12.23	12.50
802.11ax HE20	1	2412	17.44	17.50	17.59	18.00	15.93	15.97	18.96	19.00
	6	2437	18.25	18.50	20.58	21.00	18.35	20.52	22.58	23.00
	11	2462	17.71	18.00	17.53	18.00	15.88	16.08	18.99	19.00
	12	2467	14.97	15.00	15.06	15.50	12.28	12.42	15.36	15.50
	13	2472	8.91	9.00	8.95	9.00	7.50	7.62	10.57	11.00
802.11ax HE40	3	2422	15.91	16.00	15.95	16.00	14.96	15.03	18.01	18.50
	6	2437	16.65	17.00	16.67	17.00	15.31	15.37	18.35	18.50
	9	2452	15.59	16.00	15.62	16.00	14.22	14.46	17.35	17.50
	10	2457	10.72	11.00	10.78	11.00	9.53	9.56	12.56	13.00
	11	2462	8.62	9.00	8.69	9.00	7.57	7.61	10.60	11.00

WLAN 5.2 GHz										
Mode	Channel	Frequency (MHz)	Main		Aux		MIMO			
			Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)	SISO A Average Power (dBm)	SISO B Average Power (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11a	36	5180	14.88	15.00	19.38	19.50	not supported	not supported	not supported	not supported
	40	5200	14.94	15.00	19.33	19.50	not supported	not supported	not supported	not supported
	44	5220	14.88	15.00	19.18	19.50	not supported	not supported	not supported	not supported
	48	5240	14.92	15.00	19.31	19.50	not supported	not supported	not supported	not supported
802.11n HT20	36	5180	14.82	15.00	19.11	19.50	14.65	17.71	19.45	19.50
	40	5200	14.85	15.00	19.35	19.50	14.58	17.67	19.40	19.50
	44	5220	14.79	15.00	19.24	19.50	14.50	17.63	19.35	19.50
	48	5240	14.88	15.00	19.29	19.50	14.52	17.66	19.38	19.50
802.11n HT40	38	5190	14.93	15.00	18.96	19.50	14.57	16.26	18.51	19.00
	46	5230	14.84	15.00	19.35	19.50	14.31	18.89	20.19	20.50
802.11ac VHT80	42	5210	14.92	15.00	18.88	19.50	14.73	16.30	18.60	19.00
802.11ax HE20	36	5180	14.84	15.00	19.37	19.50	14.67	18.44	19.96	20.00
	40	5200	14.98	15.00	19.35	19.50	14.77	18.54	20.06	20.50
	44	5220	14.92	15.00	19.13	19.50	14.79	18.50	20.04	20.50
	48	5240	14.94	15.00	19.30	19.50	14.90	18.52	20.09	20.50
802.11ax HE40	38	5190	14.98	15.00	19.40	19.50	14.67	15.52	18.13	18.50
	46	5230	14.78	15.00	19.42	19.50	14.44	19.19	20.44	20.50
802.11ax HE80	42	5210	14.89	15.00	19.33	19.50	14.73	15.29	18.03	18.50

WLAN 5.3 GHz										
Mode	Channel	Frequency (MHz)	Main		Aux		MIMO			
			Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)	SISO A Average Power (dBm)	SISO B Average Power (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11a	52	5260	14.83	15.50	19.27	19.50	not supported	not supported	not supported	not supported
	56	5280	14.90	15.50	19.25	19.50	not supported	not supported	not supported	not supported
	60	5300	14.85	15.50	19.19	19.50	not supported	not supported	not supported	not supported
	64	5320	14.77	15.50	19.24	19.50	not supported	not supported	not supported	not supported
802.11n HT20	52	5260	14.89	15.50	19.17	19.50	14.56	17.63	19.37	19.50
	56	5280	14.91	15.50	19.11	19.50	14.55	17.72	19.43	19.50
	60	5300	14.88	15.50	19.14	19.50	14.49	17.59	19.32	19.50
	64	5320	14.81	15.50	19.30	19.50	14.78	17.69	19.48	19.50
802.11n HT40	54	5270	14.87	15.50	19.23	19.50	14.61	18.96	20.32	20.50
	62	5310	14.92	15.50	17.78	18.00	14.56	15.92	18.30	18.50
802.11ac VHT80	58	5290	14.89	15.00	17.76	18.00	14.72	16.32	18.60	19.00
802.11ac VHT160	50	5250	14.76	15.00	16.47	16.50	12.51	12.55	15.54	16.00
802.11ax HE20	52	5260	14.76	15.50	19.34	19.50	14.58	18.56	20.02	20.50
	56	5280	14.82	15.50	19.35	19.50	14.66	18.60	20.07	20.50
	60	5300	14.79	15.50	19.28	19.50	14.50	18.53	19.98	20.00
	64	5320	14.92	15.50	19.14	19.50	14.88	15.91	18.44	18.50
802.11ax HE40	54	5270	14.79	15.50	19.38	19.50	14.76	19.02	20.40	20.50
	62	5310	14.89	15.50	17.57	18.00	14.83	17.66	19.48	19.50
802.11ax HE80	58	5290	14.89	15.00	17.81	18.00	14.79	15.27	18.05	18.50
802.11ax HE160	50	5250	14.68	15.00	16.09	16.50	12.86	12.81	15.85	16.00

WLAN 5.6 GHz										
Mode	Channel	Frequency (MHz)	Main		Aux		MIMO			
			Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)	SISO A Average Power (dBm)	SISO B Average Power (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11a	100	5500	15.83	16.50	19.23	19.50	not supported	not supported	not supported	not supported
	116	5580	15.71	16.50	19.12	19.50	not supported	not supported	not supported	not supported
	124	5620	15.73	16.50	19.23	19.50	not supported	not supported	not supported	not supported
	132	5660	15.75	16.50	19.18	19.50	not supported	not supported	not supported	not supported
	140	5700	15.83	16.50	19.27	19.50	not supported	not supported	not supported	not supported
802.11n HT20	100	5500	15.79	16.50	19.26	19.50	15.65	18.33	20.20	20.50
	116	5580	15.89	16.50	19.18	19.50	15.72	18.41	20.28	20.50
	124	5620	15.91	16.50	19.19	19.50	15.81	18.42	20.32	20.50
	132	5660	15.88	16.50	19.08	19.50	15.80	18.39	20.30	20.50
	140	5700	15.79	16.50	19.24	19.50	15.72	18.34	20.23	20.50
	144	5720	15.93	16.50	19.45	19.50	15.66	16.82	19.29	19.50
802.11n HT40	102	5510	15.83	16.50	19.36	19.50	15.01	17.55	19.47	19.50
	110	5550	15.79	16.50	19.24	19.50	15.38	19.15	20.67	21.00
	126	5630	15.80	16.50	19.25	19.50	15.40	19.17	20.69	21.00
	134	5670	15.88	16.50	19.23	19.50	15.81	19.18	20.82	21.00
	142	5710	15.92	16.50	19.47	19.50	15.51	17.53	19.65	20.00
802.11ac VHT80	106	5530	15.93	16.50	19.27	19.50	15.63	17.72	19.81	20.00
	122	5610	15.82	16.50	19.33	19.50	15.42	19.11	20.66	21.00
	138	5690	15.96	16.50	19.32	19.50	15.60	17.61	19.73	20.00
802.11ac VHT160	114	5570	15.72	16.00	15.91	16.00	13.79	13.82	16.82	17.00
802.11ax HE20	100	5500	15.86	16.50	19.42	19.50	15.81	18.54	20.40	20.50
	116	5580	15.62	16.50	19.24	19.50	15.53	18.56	20.31	20.50
	124	5620	15.63	16.50	19.23	19.50	15.59	18.60	20.36	20.50
	132	5660	15.69	16.50	19.25	19.50	10.03	10.33	13.19	13.50
	140	5700	15.74	16.50	19.25	19.50	15.55	16.37	18.99	19.00
	144	5720	15.74	16.50	19.33	19.50	15.65	16.81	19.28	19.50
802.11ax HE40	102	5510	15.93	16.50	19.17	19.50	15.59	17.16	19.46	19.50
	110	5550	15.84	16.50	19.32	19.50	15.61	18.51	20.31	20.50
	126	5630	15.68	16.50	19.33	19.50	15.61	19.01	20.64	21.00
	134	5670	15.89	16.50	19.04	19.50	15.37	18.51	20.23	20.50
	142	5710	15.93	16.50	19.28	19.50	15.52	17.52	19.64	20.00
802.11ax HE80	106	5530	15.94	16.50	19.05	19.50	15.64	17.24	19.52	20.00
	122	5610	15.83	16.50	19.34	19.50	15.54	19.27	20.80	21.00
	138	5690	15.92	16.50	19.39	19.50	15.60	17.62	19.74	20.00
802.11ax HE160	114	5570	15.08	16.00	15.41	16.00	14.70	15.07	17.90	19.00

WLAN 5.8 GHz										
Mode	Channel	Frequency (MHz)	Main		Aux		MIMO			
			Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)	SISO A Average Power (dBm)	SISO B Average Power (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11a	149	5745	14.81	15.50	19.98	20.50	not supported	not supported	not supported	not supported
	157	5785	14.77	15.50	19.70	20.50	not supported	not supported	not supported	not supported
	165	5825	14.80	15.50	19.75	20.50	not supported	not supported	not supported	not supported
802.11n HT20	149	5745	14.89	15.50	19.93	20.50	14.56	19.66	20.83	21.00
	157	5785	14.92	15.50	19.87	20.50	14.55	19.72	20.87	21.00
	165	5825	14.97	15.50	19.86	20.50	14.61	19.83	20.97	21.00
802.11n HT40	151	5755	14.92	15.50	19.89	20.50	14.71	19.52	20.76	21.00
	159	5795	14.98	15.50	19.83	20.50	14.57	19.71	20.87	21.00
802.11ac VHT80	155	5775	14.86	15.00	19.94	20.00	14.65	18.20	19.79	20.00
802.11ax HE20	149	5745	14.83	15.50	19.62	20.50	14.68	19.41	20.67	21.00
	157	5785	14.79	15.50	19.89	20.50	14.60	19.77	20.92	21.00
	165	5825	14.83	15.50	19.88	20.50	14.66	19.86	21.01	21.50
802.11ax HE40	151	5755	14.89	15.50	19.54	20.50	14.73	19.52	20.76	21.00
	159	5795	14.82	15.50	19.83	20.50	14.71	19.79	20.96	21.00
802.11ax HE80	155	5775	14.86	15.00	19.84	20.00	14.77	19.68	20.90	21.00

WLAN 6.2 GHz										
Mode	Channel	Frequency (MHz)	Main		Aux		MIMO			
			Average power (dBm)	Tune-Up Limit (dBm)	Average power (dBm)	Tune-Up Limit (dBm)	SISO A Average Power (dBm)	SISO B Average Power (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11ax HE20	1	5955	4.60	5.00	4.53	5.00	0.83	1.02	3.94	5.00
	45	6175	4.46	5.00	4.02	5.00	1.08	1.16	4.13	5.00
	93	6415	4.31	5.00	4.04	5.00	0.65	0.95	3.81	5.00
802.11ax HE40	3	5965	7.44	8.00	7.22	8.00	3.79	3.99	6.90	8.00
	43	6165	7.52	8.00	7.26	8.00	3.81	3.86	6.85	8.00
	91	6405	7.35	8.00	7.18	8.00	4.07	4.22	7.16	8.00
802.11ax HE80	7	5985	10.19	10.50	10.05	10.50	6.48	6.58	9.54	10.50
	39	6145	10.15	10.50	10.10	10.50	6.50	6.56	9.54	10.50
	87	6385	9.95	10.00	9.90	10.00	6.47	6.62	9.56	10.50
802.11ax HE160	15	6025	12.77	13.00	12.61	13.00	9.37	9.41	12.40	13.00
	47	6185	12.67	13.00	12.56	13.00	9.32	9.45	12.40	13.00
	79	6345	12.37	13.00	12.27	13.00	9.28	9.53	12.42	13.00

WLAN 6.5 GHz										
Mode	Channel	Frequency (MHz)	Main		Aux		MIMO			
			Average power (dBm)	Tune-Up Limit (dBm)	Average power (dBm)	Tune-Up Limit (dBm)	SISO A Average Power (dBm)	SISO B Average Power (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11ax HE20	97	6435	4.63	5.00	4.58	5.00	1.61	1.70	4.67	5.00
	105	6475	4.62	5.00	4.52	5.00	1.61	1.67	4.65	5.00
	113	6515	4.66	5.00	4.63	5.00	1.78	2.01	4.91	5.00
802.11ax HE40	99	6445	7.85	8.00	7.59	8.00	4.51	4.57	7.55	8.00
	107	6485	7.89	8.00	7.49	8.00	4.68	4.73	7.72	8.00
802.11ax HE80	103	6465	10.31	10.50	10.24	10.50	6.79	6.99	9.90	10.00
802.11ax HE80	119	6545	10.28	10.50	10.25	10.50	6.70	6.89	9.81	10.00
802.11ax HE160	111	6505	12.98	13.00	12.71	13.00	9.69	9.87	12.79	13.00

WLAN 6.7 GHz										
Mode	Channel	Frequency (MHz)	Main		Aux		MIMO			
			Average power (dBm)	Tune-Up Limit (dBm)	Average power (dBm)	Tune-Up Limit (dBm)	SISO A Average Power (dBm)	SISO B Average Power (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11ax HE20	117	6535	4.34	5.00	4.04	5.00	0.88	1.07	3.99	5.00
	149	6695	4.22	5.00	4.18	5.00	0.85	0.89	3.88	5.00
	181	6855	4.56	5.00	4.08	5.00	0.80	0.84	3.83	5.00
802.11ax HE40	115	6525	7.85	8.00	7.45	8.00	4.51	4.73	7.63	8.00
	147	6685	7.62	8.00	7.42	8.00	3.46	3.66	6.57	8.00
	179	6845	7.41	8.00	7.25	8.00	3.71	3.76	6.75	8.00
802.11ac VHT80	135	6625	9.81	10.00	9.77	10.00	6.63	6.67	9.66	10.00
	167	6785	9.77	10.00	9.49	10.00	6.52	6.57	9.56	10.00
	183	6865	9.79	10.00	9.75	10.00	6.52	6.58	9.56	10.00
802.11ax HE160	143	6665	12.39	12.50	12.25	12.50	9.52	9.67	12.61	13.00
	175	6825	12.50	12.50	12.20	12.50	9.43	9.57	12.51	13.00

WLAN 7.0 GHz										
Mode	Channel	Frequency (MHz)	Main		Aux		MIMO			
			Average power (dBm)	Tune-Up Limit (dBm)	Average power (dBm)	Tune-Up Limit (dBm)	SISO A Average Power (dBm)	SISO B Average Power (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11ax HE20	185	6875	4.60	5.00	4.40	5.00	0.89	1.33	4.13	5.00
	209	6995	4.78	5.00	4.42	5.00	1.03	1.19	4.12	5.00
	233	7115	0.62	1.00	0.25	1.00	-2.31	-2.25	0.73	1.00
802.11ax HE40	187	6885	7.49	8.00	7.35	8.00	4.58	4.03	7.32	8.00
	227	7085	7.88	8.00	7.45	8.00	4.49	4.79	7.65	8.00
802.11ax HE80	199	6945	10.35	10.50	10.26	10.50	7.06	7.11	10.10	10.50
	215	7025	10.21	10.50	9.84	10.50	7.01	7.35	10.19	10.50
802.11ax HE160	207	6985	12.79	13.00	12.73	13.00	9.47	9.61	12.55	13.00

Bluetooth BR / EDR				
Band	Channel	Frequency (MHz)	Aux	
			Average Power (dBm)	Tune-Up Limit (dBm)
Bluetooth BR GFSK	0	2402	9.39	10.50
	39	2441	9.51	10.50
	78	2480	10.12	10.50
Bluetooth EDR π/4-DQPSK	0	2402	7.28	8.00
	39	2441	7.83	8.00
	78	2480	7.50	8.00
Bluetooth EDR 8DPSK	0	2402	7.31	8.00
	39	2441	7.85	8.00
	78	2480	7.52	8.00

Bluetooth LE				
Band	Channel	Frequency (MHz)	Aux	
			Average Power (dBm)	Tune-Up Limit (dBm)
Bluetooth LE 2M	1	2404	8.02	9.00
	19	2440	8.11	9.00
	38	2478	8.48	9.00

802.11ax RU WLAN Output Power

WLAN 2.4 GHz												
Mode	Channel	Frequency (MHz)	RU config.	Main			Aux			MIMO		
				Peak Power (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)	Peak Power (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)	Peak Power (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11ax HE20	1	2412	26/0	25.57	17.22	17.50	25.96	17.50	18.00	26.99	18.78	19.00
			52/37	26.20	17.07	17.50	26.69	17.84	18.00	26.55	18.51	19.00
			106/53	26.62	16.99	17.50	26.98	17.57	18.00	23.59	18.46	19.00
	6	2437	26/0	26.63	18.25	18.50	27.37	18.97	19.50	29.35	21.20	21.50
			52/37	27.20	18.04	18.50	28.13	19.31	19.50	29.07	20.96	21.50
			106/53	27.58	18.01	18.50	28.49	19.14	19.50	26.16	21.03	21.50
	11	2491	26/0	26.06	17.77	18.00	25.80	17.49	18.00	26.90	18.70	19.00
			52/37	26.69	17.57	18.00	26.64	17.84	18.00	26.41	18.42	19.00
			106/53	27.09	17.54	18.00	27.06	17.63	18.00	23.66	18.45	19.00
	12	2467	26/0	23.03	14.73	15.00	23.37	14.98	15.50	23.47	15.23	15.50
			52/37	23.67	14.58	15.00	24.13	15.32	15.50	22.93	14.99	15.50
			106/53	24.10	14.56	15.00	24.57	15.12	15.50	20.18	14.94	15.50
	13	2472	26/0	19.46	8.76	9.00	19.08	8.62	9.00	20.92	10.82	11.00
			52/37	19.16	8.59	9.00	18.87	8.52	9.00	21.28	10.95	11.00
			106/53	18.64	8.52	9.00	18.54	8.45	9.00	21.18	10.88	11.00
802.11ax HE40	3	2422	242/61	24.81	15.61	16.00	24.81	15.59	16.00	27.36	18.02	18.50
	6	2437	242/61	25.98	16.59	17.00	25.92	16.58	17.00	27.29	18.11	18.50
	9	2452	242/61	24.99	15.62	16.00	24.90	15.64	16.00	26.33	17.05	17.50
	10	2457	242/61	19.98	10.62	11.00	19.93	10.63	11.00	21.91	12.56	13.00
	11	2491	242/61	18.20	8.56	9.00	18.23	8.76	9.00	20.22	10.51	11.00

WLAN 5.2 GHz									
Mode	Channel	Frequency (MHz)	RU config.	Main		Aux		MIMO	
				Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11ax HE20	36	5180	26/0	12.40	13.50	12.02	13.00	12.54	13.50
			52/37	14.09	15.00	14.78	16.00	15.35	16.50
			106/53	13.95	15.00	18.06	19.00	17.82	19.00
	40	5200	26/0	12.44	13.50	12.07	13.00	12.59	13.50
			52/37	13.93	15.00	15.05	16.00	15.36	16.50
			106/53	13.98	15.00	17.85	19.00	17.82	19.00
	44	5220	26/0	12.59	13.50	11.81	13.00	12.35	13.50
			52/37	14.05	15.00	14.95	16.00	15.28	16.50
			106/53	14.06	15.00	18.06	19.00	18.10	19.00
	48	5240	26/0	12.52	13.50	12.09	13.00	12.62	13.50
			52/37	14.03	15.00	14.83	16.00	15.42	16.50
			106/53	14.00	15.00	17.83	19.00	17.90	19.00
802.11ax HE40	38	5190	242/61	14.04	15.00	18.27	19.50	17.57	18.50
	46	5230	242/61	13.93	15.00	18.40	19.50	19.38	20.50
802.11ax HE80	42	5210	484/65	13.84	15.00	16.39	17.50	16.96	18.00

WLAN 5.3 GHz									
Mode	Channel	Frequency (MHz)	RU config.	Main		Aux		MIMO	
				Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11ax HE20	52	5260	26/0	11.89	13.00	11.88	13.00	11.95	13.00
			52/37	14.53	15.50	15.10	16.00	15.00	16.00
			106/53	14.28	15.50	18.09	19.00	17.78	19.00
	56	5280	26/0	11.84	13.00	11.85	13.00	11.98	13.00
			52/37	14.48	15.50	14.86	16.00	14.93	16.00
			106/53	14.34	15.50	17.84	19.00	17.99	19.00
	60	5300	26/0	12.05	13.00	11.86	13.00	11.93	13.00
			52/37	14.45	15.50	15.06	16.00	14.90	16.00
			106/53	14.32	15.50	18.01	19.00	17.96	19.00
	64	5320	26/0	11.80	13.00	12.01	13.00	11.82	13.00
			52/37	14.48	15.50	14.93	16.00	14.96	16.00
			106/53	14.54	15.50	17.91	19.00	17.61	18.50
802.11ax HE40	54	5270	242/61	14.34	15.50	17.54	18.50	19.00	20.00
	62	5310	242/61	14.27	15.50	17.54	18.50	18.32	19.50
802.11ax HE80	58	5290	484/65	14.05	15.00	14.99	16.00	17.04	18.00
802.11ax HE160	50	5250	996/67	13.79	15.00	14.27	15.50	14.85	16.00
			996*2/S68	14.08	15.00	14.38	15.50	14.83	16.00

WLAN 5.6 GHz									
Mode	Channel	Frequency (MHz)	RU config.	Main		Aux		MIMO	
				Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11ax HE20	100	5500	26/0	11.94	13.00	11.99	13.00	12.42	13.50
			52/37	14.56	15.50	14.91	16.00	14.89	16.00
			106/53	15.50	16.50	18.12	19.00	17.56	18.50
	116/120	5580/5600	26/0	11.78	13.00	11.98	13.00	12.54	13.50
			52/37	14.58	15.50	14.86	16.00	15.09	16.00
			106/53	15.30	16.50	18.10	19.00	17.59	18.50
	124	5910	26/0	11.86	13.00	11.84	13.00	12.54	13.50
			52/37	14.40	15.50	14.81	16.00	15.01	16.00
			106/53	15.37	16.50	17.85	19.00	17.62	18.50
	132	5660	26/0	11.79	13.00	11.97	13.00	12.55	13.50
			52/37	14.36	15.50	14.94	16.00	12.36	13.50
			106/53	15.32	16.50	17.91	19.00	12.61	13.50
	140	5700	26/0	11.85	13.00	12.49	13.50	12.49	13.50
			52/37	14.92	16.00	14.95	16.00	14.77	16.00
			106/53	15.47	16.50	18.09	19.00	17.93	19.00
	144	5720	26/0	11.95	13.00	11.81	13.00	12.34	13.50
			52/37	14.62	15.50	14.78	16.00	15.08	16.00
			106/53	15.44	16.50	17.99	19.00	17.38	18.50
802.11ax HE40	102	5510	242/61	15.27	16.50	18.36	19.50	18.34	19.50
	110	5550	242/61	15.48	16.50	18.52	19.50	19.39	20.50
	126	5630	242/61	15.35	16.50	18.57	19.50	19.85	21.00
	134	5670	242/61	15.31	16.50	18.28	19.50	19.36	20.50
	142	5710	242/61	15.36	16.50	18.53	19.50	18.97	20.00
802.11ax HE80	106	5530	484/65	15.48	16.50	17.86	19.00	18.43	19.50
	122	5610	484/65	15.48	16.50	18.05	19.00	18.37	19.50
	138	5690	484/65	15.59	16.50	17.82	19.00	18.43	19.50
802.11ax HE160	114	5570	996/67	14.98	16.00	14.84	16.00	17.46	18.50
			996*2/S68	14.89	16.00	15.07	16.00	17.81	19.00

WLAN 5.8 GHz									
Mode	Channel	Frequency (MHz)	RU config.	Main		Aux		MIMO	
				Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)	Average Power (dBm)	Tune-Up Limit (dBm)
802.11ax HE20	149	5745	26/0	14.34	15.50	19.28	20.50	19.59	20.50
			52/37	14.36	15.50	19.30	20.50	15.28	16.50
			106/53	14.46	15.50	19.62	20.50	19.38	20.50
	157	5785	26/0	14.37	15.50	19.37	20.50	19.55	20.50
			52/37	14.55	15.50	19.38	20.50	15.53	16.50
			106/53	14.36	15.50	19.38	20.50	19.34	20.50
	165	5825	26/0	14.32	15.50	19.47	20.50	19.59	20.50
			52/37	14.56	15.50	19.46	20.50	15.53	16.50
			106/53	14.57	15.50	19.48	20.50	19.53	20.50
802.11ax HE40	151	5755	242/61	14.37	15.50	19.42	20.50	19.82	21.00
	159	5795	242/61	14.38	15.50	19.56	20.50	19.89	21.00
802.11ax HE80	155	5775	484/65	14.05	15.00	18.77	20.00	20.03	21.00