Appendix E. Output Power Measurement

<GSM Conducted Power>

General Note:

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
2. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

Full&Default Power Mode

GSM850 Ant 0	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.02	32.30	32.07	33.50	23.02	23.30	23.07	24.50
GPRS 1 Tx slot	31.99	32.19	32.13	33.50	22.99	23.19	23.13	24.50
GPRS 2 Tx slots	29.41	29.68	29.42	31.00	23.41	23.68	23.42	25.00
GPRS 3 Tx slots	27.60	27.73	27.61	29.00	23.34	23.47	23.35	24.74
GPRS 4 Tx slots	25.90	26.18	26.07	27.00	22.90	23.18	23.07	24.00

GSM1900 Ant 2	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	28.62	28.82	28.72	30.50	19.62	19.82	19.72	21.50
GPRS 1 Tx slot	28.53	28.84	28.63	30.50	19.53	19.84	19.63	21.50
GPRS 2 Tx slots	26.38	26.51	26.34	28.00	20.38	20.51	20.34	22.00
GPRS 3 Tx slots	24.58	24.68	24.47	26.00	20.32	20.42	20.21	21.74
GPRS 4 Tx slots	23.12	23.27	23.09	24.50	20.12	20.27	20.09	21.50

Reduced Power Mode for DSI 0

GSM850 Ant 0 DSI0	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.02	32.30	32.07	33.50	23.02	23.30	23.07	24.50
GPRS 1 Tx slot	31.99	32.19	32.13	33.50	22.99	23.19	23.13	24.50
GPRS 2 Tx slots	29.41	29.68	29.42	31.00	23.41	23.68	23.42	25.00
GPRS 3 Tx slots	27.60	27.73	27.61	29.00	23.34	23.47	23.35	24.74
GPRS 4 Tx slots	25.90	26.18	26.07	27.00	22.90	23.18	23.07	24.00

GSM1900 Ant 2 DSI0	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	28.62	28.82	28.72	30.50	19.62	19.82	19.72	21.50
GPRS 1 Tx slot	28.53	28.84	28.63	30.50	19.53	19.84	19.63	21.50
GPRS 2 Tx slots	26.38	26.51	26.34	28.00	20.38	20.51	20.34	22.00
GPRS 3 Tx slots	24.58	24.68	24.47	26.00	20.32	20.42	20.21	21.74
GPRS 4 Tx slots	23.12	23.27	23.09	24.50	20.12	20.27	20.09	21.50

Reduced Power Mode for DSI 1

GSM850 Ant 0 DSI1	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.02	32.30	32.07	33.50	23.02	23.30	23.07	24.50
GPRS 1 Tx slot	31.99	32.19	32.13	33.50	22.99	23.19	23.13	24.50
GPRS 2 Tx slots	29.41	29.68	29.42	31.00	23.41	23.68	23.42	25.00
GPRS 3 Tx slots	27.60	27.73	27.61	29.00	23.34	23.47	23.35	24.74
GPRS 4 Tx slots	25.90	26.18	26.07	27.00	22.90	23.18	23.07	24.00

GSM1900 Ant 2 DSI1	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	28.62	28.82	28.72	30.50	19.62	19.82	19.72	21.50
GPRS 1 Tx slot	28.53	28.84	28.63	30.50	19.53	19.84	19.63	21.50
GPRS 2 Tx slots	26.38	26.51	26.34	28.00	20.38	20.51	20.34	22.00
GPRS 3 Tx slots	24.58	24.68	24.47	26.00	20.32	20.42	20.21	21.74
GPRS 4 Tx slots	23.12	23.27	23.09	24.50	20.12	20.27	20.09	21.50

Reduced Power Mode for DSI 2

GSM850 Ant 0 DSI2	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	30.59	30.79	30.62	32.10	21.59	21.79	21.62	23.10
GPRS 1 Tx slot	30.60	30.79	30.64	32.10	21.60	21.79	21.64	23.10
GPRS 2 Tx slots	27.55	27.69	27.59	29.10	21.55	21.69	21.59	23.10
GPRS 3 Tx slots	25.97	25.99	25.90	27.30	21.71	21.73	21.64	23.04
GPRS 4 Tx slots	25.09	25.29	25.11	26.10	22.09	22.29	22.11	23.10

GSM1900 Ant 2 DSI2	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	27.55	27.83	27.61	29.40	18.55	18.83	18.61	20.40
GPRS 1 Tx slot	27.46	27.80	27.61	29.40	18.46	18.80	18.61	20.40
GPRS 2 Tx slots	24.88	24.96	24.83	26.40	18.88	18.96	18.83	20.40
GPRS 3 Tx slots	23.37	23.44	23.31	24.60	19.11	19.18	19.05	20.34
GPRS 4 Tx slots	21.96	22.28	22.04	23.40	18.96	19.28	19.04	20.40

<WCDMA Conducted Power>

1. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
2. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode(s) to determine SAR test exclusion.
3. For DC-HSDPA, the device was configured according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1, with the primary and the secondary serving HS-DSCH Cell enabled during the power measurement.

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting:
   i. Set Gain Factors (β_c and β_d) and parameters were set according to each
   ii. Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
   iii. Set RMC 12.2Kbps + HSDPA mode.
   iv. Set Cell Power = -86 dBm
   v. Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)
   vi. Select HSDPA Uplink Parameters
   vii. Set Delta ACK, Delta NACK and Delta CQI = 8
   viii. Set Ack-Nack Repetition Factor to 3
   ix. Set CQI Feedback Cycle (k) to 4 ms
   x. Set CQI Repetition Factor to 2
   xi. Power Ctrl Mode = All Up bits
d. The transmitted maximum output power was recorded.

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.

Setup Configuration

HSUPA Setup Configuration:

a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting * :
   i. Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
   ii. Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.3, quoted from the TS 34.121
   iii. Set Cell Power = -86 dBm
   iv. Set Channel Type = 12.2k + HSPA
   v. Set UE Target Power
   vi. Power Ctrl Mode= Alternating bits
   vii. Set and observe the E-TFCI
   viii. Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
d. The transmitted maximum output power was recorded.

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	$\beta_{ed}1$: 47/15 $\beta_{ed}2$: 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	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.

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration below
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting:
   i. Set RMC 12.2Kbps + HSDPA mode.
   ii. Set Cell Power = -25 dBm
   iii. Set HS-DSCH Configuration Type to FRC (H-set 12, QPSK)
   iv. Select HSDPA Uplink Parameters
   v. Set Gain Factors (β_c and β_d) and parameters were set according to each Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
      a). Subtest 1: β_c/β_d=2/15
      b). Subtest 2: β_c/β_d=12/15
      c). Subtest 3: β_c/β_d=15/8
      d). Subtest 4: β_c/β_d=15/4
   vi. Set Delta ACK, Delta NACK and Delta CQI = 8
   vii. Set Ack-Nack Repetition Factor to 3
   viii. Set CQI Feedback Cycle (k) to 4 ms
   ix. Set CQI Repetition Factor to 2
   x. Power Ctrl Mode = All Up bits
d. The transmitted maximum output power was recorded.

The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
A summary of these settings are illustrated below:

C.8.1.12 Fixed Reference Channel Definition H-Set 12

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	Proces ses	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.		

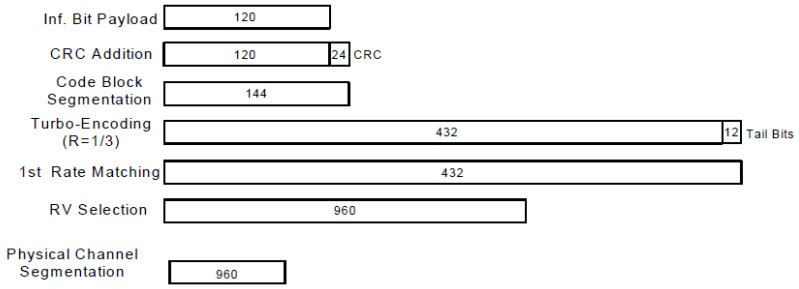


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

<WCDMA Conducted Power>

General Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is ≤ ¼ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

Full&Default Power Mode

Band		WCDMA V Ant 0			Tune-up Limit (dBm)
TX Channel		4132	4182	4233	
Rx Channel		4357	4407	4458	
Frequency (MHz)		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	22.74	22.87	22.75	24.00

Band		WCDMA II Ant 2			Tune-up Limit (dBm)	WCDMA IV Ant 2			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	RMC 12.2Kbps	22.55	22.64	22.61	24.00	22.81	22.95	22.83	24.00

Reduced Power Mode for DSI 0

Band		WCDMA V Ant 0 DSI0			Tune-up Limit (dBm)
TX Channel		4132	4182	4233	
Rx Channel		4357	4407	4458	
Frequency (MHz)		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	22.74	22.87	22.75	24.00

Band		WCDMA II Ant 2 DSI0			Tune-up Limit (dBm)	WCDMA IV Ant 2 DSI0			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	RMC 12.2Kbps	22.55	22.64	22.61	24.00	22.81	22.95	22.83	24.00

Reduced Power Mode for DSI 1

Band		WCDMA V Ant 0 DSI1			Tune-up Limit (dBm)
TX Channel		4132	4182	4233	
Rx Channel		4357	4407	4458	
Frequency (MHz)		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	22.74	22.87	22.75	24.00

Band		WCDMA II Ant 2 DSI1			Tune-up Limit (dBm)	WCDMA IV Ant 2 DSI1			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	RMC 12.2Kbps	22.55	22.64	22.61	24.00	22.39	22.53	22.42	24.00

Reduced Power Mode for DSI 2

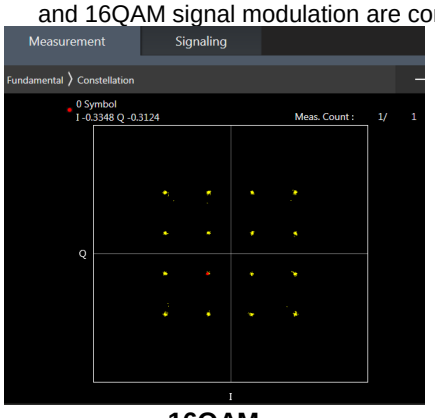
Band		WCDMA V Ant 0 DSI2			Tune-up Limit (dBm)
TX Channel		4132	4182	4233	
Rx Channel		4357	4407	4458	
Frequency (MHz)		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	21.31	21.45	21.36	22.70

Band		WCDMA II Ant 2 DSI2			Tune-up Limit (dBm)	WCDMA IV Ant 2 DSI2			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	RMC 12.2Kbps	19.08	19.12	19.03	20.30	19.42	19.48	19.45	20.20

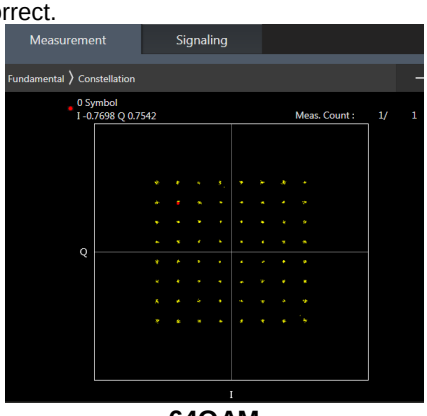
<LTE Conducted Power>

General Note:

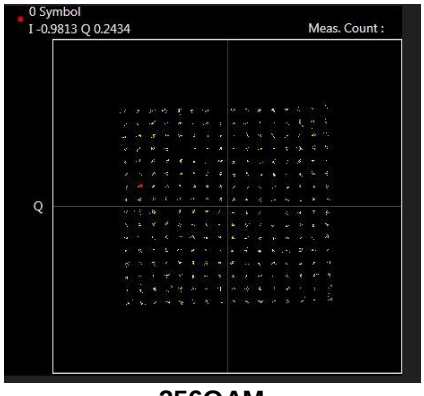
1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE 4 / B5 / B17 / B38 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE band 4 / 5 / 38 SAR test was covered by Band 66 / 26 / 41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
   a. the maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion
   b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to May 2017 TCB workshop, for 16QAM and 64QAM, 256QAM 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, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 256QAM, 64QAM and 16QAM signal modulation are correct.



16QAM



64QAM



256QAM

Full&Default Power Mode

Band 5 Ant 0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20450	20525	20600		
Frequency (MHz)				829	836.5	844		
10	QPSK	1	0	22.56	22.71	22.50	24	0
10	QPSK	1	25	22.65	22.70	22.62		
10	QPSK	1	49	22.67	22.70	22.69		
10	QPSK	25	0	21.79	21.99	21.80	23	1
10	QPSK	25	12	21.89	21.77	21.81		
10	QPSK	25	25	21.96	21.86	21.78		
10	QPSK	50	0	21.82	21.85	21.79		

Band 13 Ant 0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					23230			
Frequency (MHz)					782			
10	QPSK	1	0		22.63		24	0
10	QPSK	1	25		22.58			
10	QPSK	1	49		22.59			
10	QPSK	25	0		21.92		23	1
10	QPSK	25	12		21.72			
10	QPSK	25	25		21.84			
10	QPSK	50	0		21.87			

Band 17 Ant 0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				23780	23790	23800		
Frequency (MHz)				709	710	711		
10	QPSK	1	0	22.49	22.56	22.52	24	0
10	QPSK	1	25	22.50	22.55	22.47		
10	QPSK	1	49	22.53	22.49	22.49		
10	QPSK	25	0	21.56	21.75	21.59	23	1
10	QPSK	25	12	21.73	21.70	21.67		
10	QPSK	25	25	21.52	21.55	21.72		
10	QPSK	50	0	21.63	21.79	21.76		

Band 26 for FCC Ant 0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				26765	26865	26965		
Frequency (MHz)				821.5	831.5	841.5		
15	QPSK	1	0	22.27	22.35	22.31	24	0
15	QPSK	1	37	22.31	22.30	22.29		
15	QPSK	1	74	22.32	22.28	22.23		
15	QPSK	36	0	21.48	21.69	21.24	23	1
15	QPSK	36	20	21.35	21.40	21.36		
15	QPSK	36	39	21.65	21.50	21.38		
15	QPSK	75	0	21.46	21.55	21.36		

Band 71 Ant 0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				133222	133322	133372		
Frequency (MHz)				673	683	688		
20	QPSK	1	0	22.44	22.51	22.36	24	0
20	QPSK	1	49	22.43	22.48	22.44		
20	QPSK	1	99	22.36	22.41	22.37		
20	QPSK	50	0	21.52	21.75	21.38	23	1
20	QPSK	50	24	21.60	21.53	21.44		
20	QPSK	50	50	21.73	21.44	21.53		
20	QPSK	100	0	21.40	21.56	21.48		

Band 2 Ant 2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	22.80	22.98	22.84	24	0
20	QPSK	1	49	22.88	22.92	22.90		
20	QPSK	1	99	22.91	22.97	22.82		
20	QPSK	50	0	21.95	22.19	21.90	23	1
20	QPSK	50	24	22.00	21.97	21.97		
20	QPSK	50	50	22.14	22.03	21.97		
20	QPSK	100	0	21.96	22.11	21.95		

Band 4 Ant 2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	22.28	22.45	22.35	24	0
20	QPSK	1	49	22.33	22.25	22.30		
20	QPSK	1	99	22.29	22.26	22.26		
20	QPSK	50	0	21.42	21.60	21.29	23	1
20	QPSK	50	24	21.40	21.34	21.40		
20	QPSK	50	50	21.55	21.38	21.38		
20	QPSK	100	0	21.41	21.49	21.40		

Band 66 Ant 2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	22.84	23.02	22.86	24	0
20	QPSK	1	49	22.89	22.85	22.85		
20	QPSK	1	99	22.91	22.97	22.75		
20	QPSK	50	0	22.00	22.05	21.88	23	1
20	QPSK	50	24	21.93	21.88	21.99		
20	QPSK	50	50	22.04	22.01	22.01		
20	QPSK	100	0	21.95	22.07	22.00		

Band 7 Ant 3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	23.35	23.48	23.15	25	0
20	QPSK	1	49	23.04	23.21	23.18		
20	QPSK	1	99	23.15	23.30	23.24		
20	QPSK	50	0	22.18	22.26	22.14	24	1
20	QPSK	50	24	22.22	22.25	22.24		
20	QPSK	50	50	22.09	22.23	22.17		
20	QPSK	100	0	22.02	22.29	22.09		

Band 4 Ant 5								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	22.54	22.73	22.51	24	0
20	QPSK	1	49	22.49	22.38	22.63		
20	QPSK	1	99	22.47	22.46	22.43		
20	QPSK	50	0	21.63	21.84	21.48	23	1
20	QPSK	50	24	21.66	21.56	21.51		
20	QPSK	50	50	21.61	21.59	21.57		
20	QPSK	100	0	21.50	21.76	21.70		

Band 66 Ant 5								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	22.66	22.74	22.66	24	0
20	QPSK	1	49	22.66	22.61	22.63		
20	QPSK	1	99	22.65	22.60	22.55		
20	QPSK	50	0	21.72	21.82	21.66	23	1
20	QPSK	50	24	21.71	21.59	21.74		
20	QPSK	50	50	21.78	21.77	21.68		
20	QPSK	100	0	21.75	21.83	21.75		

Reduced Power Mode for DSI 0

Band 13 Ant 0 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					23230			
Frequency (MHz)					782			
10	QPSK	1	0		22.63		24	0
10	QPSK	1	25		22.58			
10	QPSK	1	49		22.59			
10	QPSK	25	0		21.92		23	1
10	QPSK	25	12		21.72			
10	QPSK	25	25		21.84			
10	QPSK	50	0		21.87			

Band 17 Ant 0 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				23780	23790	23800		
Frequency (MHz)				709	710	711		
10	QPSK	1	0	22.49	22.56	22.52	24	0
10	QPSK	1	25	22.50	22.55	22.47		
10	QPSK	1	49	22.53	22.49	22.49		
10	QPSK	25	0	21.56	21.75	21.59	23	1
10	QPSK	25	12	21.73	21.70	21.67		
10	QPSK	25	25	21.52	21.55	21.72		
10	QPSK	50	0	21.63	21.79	21.76		

Band 26 for FCC Ant 0 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				26765	26865	26965		
Frequency (MHz)				821.5	831.5	841.5		
15	QPSK	1	0	22.27	22.35	22.31	24	0
15	QPSK	1	37	22.31	22.30	22.29		
15	QPSK	1	74	22.32	22.28	22.23		
15	QPSK	36	0	21.48	21.69	21.24	23	1
15	QPSK	36	20	21.35	21.40	21.36		
15	QPSK	36	39	21.65	21.50	21.38		
15	QPSK	75	0	21.46	21.55	21.36		

Band 71 Ant 0 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				133222	133322	133372		
Frequency (MHz)				673	683	688		
20	QPSK	1	0	22.44	22.51	22.36	24	0
20	QPSK	1	49	22.43	22.48	22.44		
20	QPSK	1	99	22.36	22.41	22.37		
20	QPSK	50	0	21.52	21.75	21.38	23	1
20	QPSK	50	24	21.60	21.53	21.44		
20	QPSK	50	50	21.73	21.44	21.53		
20	QPSK	100	0	21.40	21.56	21.48		

Band 2 Ant 2 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	22.80	22.98	22.84	24	0
20	QPSK	1	49	22.88	22.92	22.90		
20	QPSK	1	99	22.91	22.97	22.82		
20	QPSK	50	0	21.95	22.19	21.90	23	1
20	QPSK	50	24	22.00	21.97	21.97		
20	QPSK	50	50	22.14	22.03	21.97		
20	QPSK	100	0	21.96	22.11	21.95		

Band 66 Ant 2 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	22.84	23.02	22.86	24	0
20	QPSK	1	49	22.89	22.85	22.85		
20	QPSK	1	99	22.91	22.97	22.75		
20	QPSK	50	0	22.00	22.05	21.88	23	1
20	QPSK	50	24	21.93	21.88	21.99		
20	QPSK	50	50	22.04	22.01	22.01		
20	QPSK	100	0	21.95	22.07	22.00		

Band 7 Ant 3 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	20.87	21.05	20.75	22.4	0
20	QPSK	1	49	20.70	20.84	20.72		
20	QPSK	1	99	20.68	20.83	20.88		
20	QPSK	50	0	20.53	20.56	20.54	22.4	0
20	QPSK	50	24	20.59	20.62	20.57		
20	QPSK	50	50	20.47	20.61	20.53		
20	QPSK	100	0	20.44	20.61	20.42		

Band 66 Ant 5 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	22.66	22.74	22.66	24	0
20	QPSK	1	49	22.66	22.61	22.63		
20	QPSK	1	99	22.65	22.60	22.55		
20	QPSK	50	0	21.72	21.82	21.66	23	1
20	QPSK	50	24	21.71	21.59	21.74		
20	QPSK	50	50	21.78	21.77	21.68		
20	QPSK	100	0	21.75	21.83	21.75		

Reduced Power Mode for DSI 1

Band 13 Ant 0 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					23230			
Frequency (MHz)					782			
10	QPSK	1	0		22.63		24	0
10	QPSK	1	25		22.58			
10	QPSK	1	49		22.59			
10	QPSK	25	0		21.92		23	1
10	QPSK	25	12		21.72			
10	QPSK	25	25		21.84			
10	QPSK	50	0		21.87			

Band 17 Ant 0 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				23780	23790	23800		
Frequency (MHz)				709	710	711		
10	QPSK	1	0	22.49	22.56	22.52	24	0
10	QPSK	1	25	22.50	22.55	22.47		
10	QPSK	1	49	22.53	22.49	22.49		
10	QPSK	25	0	21.56	21.75	21.59	23	1
10	QPSK	25	12	21.73	21.70	21.67		
10	QPSK	25	25	21.52	21.55	21.72		
10	QPSK	50	0	21.63	21.79	21.76		

Band 26 for FCC Ant 0 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				26765	26865	26965		
Frequency (MHz)				821.5	831.5	841.5		
15	QPSK	1	0	22.27	22.35	22.31	24	0
15	QPSK	1	37	22.31	22.30	22.29		
15	QPSK	1	74	22.32	22.28	22.23		
15	QPSK	36	0	21.48	21.69	21.24	23	1
15	QPSK	36	20	21.35	21.40	21.36		
15	QPSK	36	39	21.65	21.50	21.38		
15	QPSK	75	0	21.46	21.55	21.36		

Band 71 Ant 0 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				133222	133322	133372		
Frequency (MHz)				673	683	688		
20	QPSK	1	0	22.44	22.51	22.36	24	0
20	QPSK	1	49	22.43	22.48	22.44		
20	QPSK	1	99	22.36	22.41	22.37		
20	QPSK	50	0	21.52	21.75	21.38	23	1
20	QPSK	50	24	21.60	21.53	21.44		
20	QPSK	50	50	21.73	21.44	21.53		
20	QPSK	100	0	21.40	21.56	21.48		

Band 2 Ant 2 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	20.70	20.76	20.70	21.7	0
20	QPSK	1	49	20.68	20.69	20.69		
20	QPSK	1	99	20.71	20.73	20.60		
20	QPSK	50	0	20.24	20.49	20.25	21.7	0
20	QPSK	50	24	20.26	20.24	20.28		
20	QPSK	50	50	20.48	20.27	20.38		
20	QPSK	100	0	20.24	20.36	20.35		

Band 66 Ant 2 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	21.54	21.75	21.62	22.7	0
20	QPSK	1	49	21.62	21.54	21.56		
20	QPSK	1	99	21.59	21.65	21.46		
20	QPSK	50	0	21.29	21.42	21.17	22.7	0
20	QPSK	50	24	21.24	21.23	21.30		
20	QPSK	50	50	21.39	21.35	21.29		
20	QPSK	100	0	21.26	21.35	21.27		

Band 7 Ant 3 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	20.18	20.31	20.28	20.9	0
20	QPSK	1	49	19.98	20.11	20.05		
20	QPSK	1	99	19.92	20.06	20.11		
20	QPSK	50	0	19.77	19.85	19.82	20.9	0
20	QPSK	50	24	19.86	19.91	19.84		
20	QPSK	50	50	19.69	19.82	19.81		
20	QPSK	100	0	19.64	19.80	19.71		

Band 66 Ant 5 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	22.59	22.77	22.69	23.8	0
20	QPSK	1	49	22.62	22.53	22.54		
20	QPSK	1	99	22.62	22.62	22.54		
20	QPSK	50	0	21.76	21.81	21.62	23	0.8
20	QPSK	50	24	21.71	21.60	21.67		
20	QPSK	50	50	21.77	21.75	21.74		
20	QPSK	100	0	21.65	21.74	21.71		

Reduced Power Mode for DSI 2

Band 5 Ant 0 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20450	20525	20600		
Frequency (MHz)				829	836.5	844		
10	QPSK	1	0	20.62	20.76	20.65	22.3	0
10	QPSK	1	25	20.62	20.66	20.74		
10	QPSK	1	49	20.58	20.68	20.60		
10	QPSK	25	0	20.55	20.74	20.62	22.3	0
10	QPSK	25	12	20.55	20.56	20.72		
10	QPSK	25	25	20.62	20.68	20.72		
10	QPSK	50	0	20.67	20.71	20.55		

Band 13 Ant 0 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				23230				
Frequency (MHz)				782				
10	QPSK	1	0		21.29		22.7	0
10	QPSK	1	25		21.07			
10	QPSK	1	49		21.14			
10	QPSK	25	0		21.20		22.7	0
10	QPSK	25	12		21.14			
10	QPSK	25	25		21.08			
10	QPSK	50	0		21.26			

Band 17 Ant 0 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				23780	23790	23800		
Frequency (MHz)				709	710	711		
10	QPSK	1	0	21.62	21.79	21.48	22.8	0
10	QPSK	1	25	21.71	21.60	21.73		
10	QPSK	1	49	21.67	21.49	21.65		
10	QPSK	25	0	21.64	21.69	21.54	22.8	0
10	QPSK	25	12	21.60	21.55	21.55		
10	QPSK	25	25	21.63	21.59	21.64		
10	QPSK	50	0	21.69	21.72	21.60		

Band 26 for FCC Ant 0 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				26765	26865	26965		
Frequency (MHz)				821.5	831.5	841.5		
15	QPSK	1	0	20.41	20.75	20.40	22.3	0
15	QPSK	1	37	20.40	20.52	20.45		
15	QPSK	1	74	20.60	20.55	20.34		
15	QPSK	36	0	20.49	20.74	20.33	22.3	0
15	QPSK	36	20	20.48	20.47	20.64		
15	QPSK	36	39	20.59	20.45	20.33		
15	QPSK	75	0	20.49	20.52	20.48		

Band 71 Ant 0 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				133222	133322	133372		
Frequency (MHz)				673	683	688		
20	QPSK	1	0	20.87	21.29	21.15	22.8	0
20	QPSK	1	49	21.06	21.14	21.05		
20	QPSK	1	99	20.95	21.18	21.04		
20	QPSK	50	0	21.04	21.25	21.00	22.8	0
20	QPSK	50	24	21.12	21.19	21.21		
20	QPSK	50	50	21.06	21.01	21.09		
20	QPSK	100	0	21.02	21.21	21.16		

Band 2 Ant 2 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	19.43	19.46	19.12	20.2	0
20	QPSK	1	49	19.18	19.21	19.27		
20	QPSK	1	99	19.25	19.43	19.07		
20	QPSK	50	0	19.05	19.41	19.17	20.2	0
20	QPSK	50	24	19.09	19.09	19.22		
20	QPSK	50	50	19.29	19.36	19.14		
20	QPSK	100	0	19.20	19.35	19.27		

Band 4 Ant 2 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	19.22	19.46	19.17	20.2	0
20	QPSK	1	49	19.15	19.13	19.27		
20	QPSK	1	99	19.20	19.14	19.20		
20	QPSK	50	0	19.10	19.38	19.23	20.2	0
20	QPSK	50	24	19.21	19.15	19.19		
20	QPSK	50	50	19.06	19.11	19.04		
20	QPSK	100	0	19.13	19.38	19.15		

Band 66 Ant 2 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	19.20	19.41	19.39	20.2	0
20	QPSK	1	49	19.10	19.12	19.21		
20	QPSK	1	99	19.10	19.10	19.05		
20	QPSK	50	0	19.13	19.33	19.15	20.2	0
20	QPSK	50	24	19.25	19.09	19.20		
20	QPSK	50	50	19.18	19.04	19.14		
20	QPSK	100	0	19.08	19.41	19.18		

Band 7 Ant 3 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	16.42	16.57	16.44	17.6	0
20	QPSK	1	49	16.37	16.28	16.32		
20	QPSK	1	99	16.31	16.54	16.44		
20	QPSK	50	0	16.13	16.22	16.04	17.6	0
20	QPSK	50	24	15.93	16.01	16.08		
20	QPSK	50	50	16.00	15.98	16.12		
20	QPSK	100	0	16.18	16.31	16.01		

Band 4 Ant 5 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	22.54	22.73	22.51	24	0
20	QPSK	1	49	22.49	22.38	22.63		
20	QPSK	1	99	22.47	22.46	22.43		
20	QPSK	50	0	21.63	21.84	21.48	23	1
20	QPSK	50	24	21.66	21.56	21.51		
20	QPSK	50	50	21.61	21.59	21.57		
20	QPSK	100	0	21.50	21.76	21.70		

Band 66 Ant 5 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	22.66	22.74	22.66	24	0
20	QPSK	1	49	22.66	22.61	22.63		
20	QPSK	1	99	22.65	22.60	22.55		
20	QPSK	50	0	21.72	21.82	21.66	23	1
20	QPSK	50	24	21.71	21.59	21.74		
20	QPSK	50	50	21.78	21.77	21.68		
20	QPSK	100	0	21.75	21.83	21.75		

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

SAR was tested with a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by 3GPP.

a. 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations

b. "special subframe S" contains both uplink and downlink transmissions, it has been taken into consideration to determine the transmission duty factor according to the worst case uplink and downlink cyclic prefix requirements for UpPTS

c. Establishing connections with base station simulators ensure a consistent means for testing SAR and recommended for evaluating SAR. The Anritsu MT8820C (firmware: #22.52#004) was used for LTE output power measurements and SAR testing.

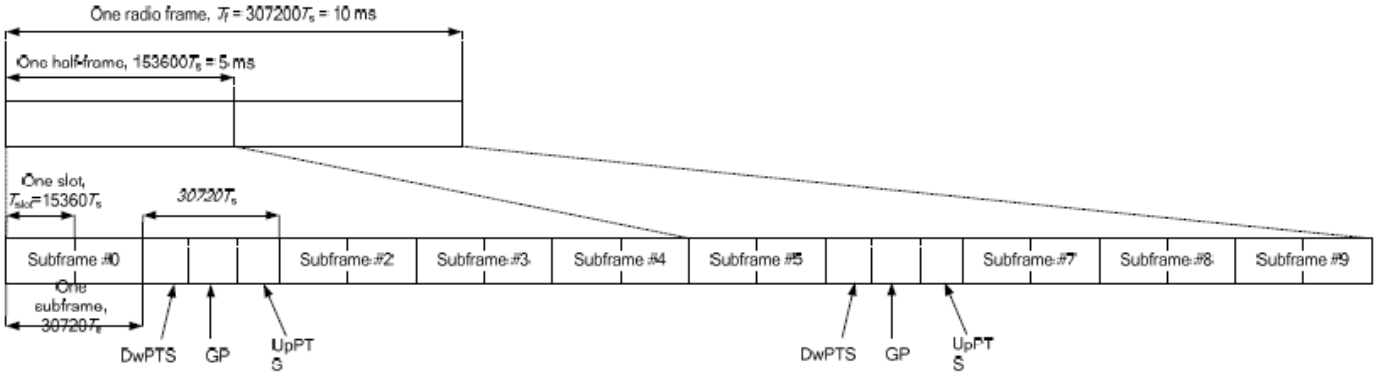


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Table 4.2-1: 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	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
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	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Special subframe (30720·T_s): Normal cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	**Normal cyclic prefix in uplink**	**Extended cyclic prefix in uplink**
Uplink duty factor in one special subframe	**0~4**	7.13%	8.33%
	5~9	14.3%	16.7%

Special subframe(30720·T_s): Extended cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	**Normal cyclic prefix in uplink**	**Extended cyclic prefix in uplink**
Uplink duty factor in one special subframe	**0~3**	7.13%	8.33%
	4~7	14.3%	16.7%

The highest duty factor is resulted from:

For LTE TDD Power class 3

i. Uplink-downlink configuration: 0. In a half-frame consisted of 5 subfames, uplink operation is in 3 uplink subframes and 1 special subframe.

ii. special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink

iii. for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (3+0.167)/5 = 63.3%

iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (3+0.143)/5 = 62.9%

v. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The scaled TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.

Full&Default Power Mode

Band 38 Ant 3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				37850	38000	38150		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	0	22.58	22.70	22.39	24	0
20	QPSK	1	49	22.39	22.50	22.48		
20	QPSK	1	99	22.38	22.58	22.57		
20	QPSK	50	0	21.37	21.43	21.24	23	1
20	QPSK	50	24	21.34	21.39	21.36		
20	QPSK	50	50	21.17	21.38	21.40		
20	QPSK	100	0	21.26	21.42	21.21		

Band 41 Ant 3										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	22.60	22.30	22.66	22.65	22.32	24	0
20	QPSK	1	49	22.44	22.41	22.31	22.45	22.38		
20	QPSK	1	99	22.47	22.45	22.32	22.45	22.40		
20	QPSK	50	0	21.24	21.24	21.41	21.21	21.18	23	1
20	QPSK	50	24	21.35	21.36	21.26	21.33	21.27		
20	QPSK	50	50	21.20	21.26	21.13	21.33	21.28		
20	QPSK	100	0	21.20	21.11	21.29	21.24	21.17		

Band 42 FCC Part27Q Ant 4								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				42190	42590	42990		
Frequency (MHz)				3460	3500	3540		
20	QPSK	1	0	22.78	22.99	22.74	24	0
20	QPSK	1	49	22.78	22.73	22.78		
20	QPSK	1	99	22.85	22.81	22.72		
20	QPSK	50	0	21.85	22.04	21.78	23	1
20	QPSK	50	24	21.94	21.87	21.82		
20	QPSK	50	50	22.03	21.90	21.90		
20	QPSK	100	0	21.80	21.95	21.87		

Reduced Power Mode for DSI 0

Band 41 Ant 3 DSI0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	21.87	21.65	21.96	21.86	21.64	23.6	0
20	QPSK	1	49	21.71	21.65	21.68	21.79	21.68		
20	QPSK	1	99	21.78	21.83	21.62	21.75	21.78		
20	QPSK	50	0	21.20	21.26	21.25	21.22	21.21	23	0.6
20	QPSK	50	24	21.26	21.34	21.39	21.26	21.30		
20	QPSK	50	50	21.23	21.30	21.13	21.30	21.24		
20	QPSK	100	0	21.25	21.13	21.26	21.21	21.14		

Band 42 FCC Part27Q Ant 4 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				42190	42590	42990		
Frequency (MHz)				3460	3500	3540		
20	QPSK	1	0	22.08	22.19	22.04	24	0
20	QPSK	1	49	22.08	22.03	22.08		
20	QPSK	1	99	22.15	22.11	22.02		
20	QPSK	50	0	21.15	21.34	21.08	23	1
20	QPSK	50	24	21.24	21.17	21.12		
20	QPSK	50	50	21.33	21.20	21.20		
20	QPSK	100	0	21.10	21.25	21.17		

Reduced Power Mode for DSI 1

Band 41 Ant 3 DSI1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	21.29	20.98	21.31	21.30	21.21	22.2	0
20	QPSK	1	49	21.12	21.01	21.01	21.20	21.02		
20	QPSK	1	99	21.18	21.16	21.01	21.12	21.12		
20	QPSK	50	0	20.95	20.94	21.19	20.96	20.86	22.2	0
20	QPSK	50	24	21.00	21.06	21.04	20.95	20.96		
20	QPSK	50	50	20.94	20.98	20.83	20.95	20.92		
20	QPSK	100	0	20.97	20.83	21.01	20.97	20.90		

Band 42 FCC Part27Q Ant 4 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				42190	42590	42990		
Frequency (MHz)				3460	3500	3540		
20	QPSK	1	0	22.78	22.99	22.74	24	0
20	QPSK	1	49	22.78	22.73	22.78		
20	QPSK	1	99	22.85	22.81	22.72		
20	QPSK	50	0	21.85	22.04	21.78	23	1
20	QPSK	50	24	21.94	21.87	21.82		
20	QPSK	50	50	22.03	21.90	21.90		
20	QPSK	100	0	21.80	21.95	21.87		

Reduced Power Mode for DSI 2

Band 38 Ant 3 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				37850	38000	38150		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	0	17.18	17.46	16.97	18.7	0
20	QPSK	1	49	17.00	17.12	17.06		
20	QPSK	1	99	16.98	17.18	17.28		
20	QPSK	50	0	17.20	17.39	16.98	18.7	0
20	QPSK	50	24	16.96	17.19	17.08		
20	QPSK	50	50	16.93	17.18	17.18		
20	QPSK	100	0	17.26	17.33	17.03		

Band 41 Ant 3 DSI2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	17.38	17.00	17.45	17.41	17.06	18.7	0
20	QPSK	1	49	17.18	17.09	17.12	17.30	17.07		
20	QPSK	1	99	17.19	17.24	17.03	17.14	17.17		
20	QPSK	50	0	17.28	17.02	17.37	17.36	17.05	18.7	0
20	QPSK	50	24	17.26	17.15	16.99	17.27	17.01		
20	QPSK	50	50	17.24	17.12	17.04	17.25	17.17		
20	QPSK	100	0	17.31	16.98	17.39	17.35	17.08		

Band 42 FCC Part27Q Ant 4 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				42190	42590	42990		
Frequency (MHz)				3460	3500	3540		
20	QPSK	1	0	16.11	16.15	16.08	17	0
20	QPSK	1	49	15.91	15.95	15.91		
20	QPSK	1	99	15.92	16.02	15.95		
20	QPSK	50	0	15.98	16.06	16.02	17	0
20	QPSK	50	24	16.02	15.96	15.93		
20	QPSK	50	50	15.95	15.96	15.91		
20	QPSK	100	0	15.98	16.01	15.98		

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n7/n26 /n66/n38/n41/n71//n77/n78 is SA mode.
2. 5G NR n2/n5/n7 /n66/n38 /n71//n77/n78 is NSA mode.
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
   a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-QPSK and the reported SAR for the DFT-QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
   b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/64QAM/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the 16QAM/64QAM/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.
   c. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel
   d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
   e. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested
   f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK/16QAM /64QAM/256QAM SAR testing are not required.
   g. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
4. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
5. 5G NR n77 /n78 supports HPUE with higher power, 5G NR n77 /n78 HPUE SAR can represent power class 3 level SAR.
6. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
7. 5GNR NSA mode, the power level is the same as 5GNR SA mode, so 5GNR NSA mode and SA mode power table only show one time.
8. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
9. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.
10. For 5GNR n77/n78 is supports MIMO.

<3GPP 38.101 MPR for EN-DC>

Table 6.2.2-1 Maximum power reduction (MPR) for power class 3

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5[1]	≤ 1.2[1]	≤ 0.2[1]
		≤ 0.5[2]	≤ 0.5[2]	0[2]
	QPSK	≤ 1		0
	16 QAM	≤ 2		≤ 1
	64 QAM	≤ 2.5		
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability *powerBoosting-pi2BPSK* and if the IE *powerBoostPi2BPSK* is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0 dB MPR is 26 dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 with Pi/2 BPSK modulation and if the IE *powerBoostPi2BPSK* is set to 0 and if more than 40 % of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.

Table 6.2.2-2 Maximum power reduction (MPR) for power class 2

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5	≤ 0.5	0
	QPSK	≤ 3.5	≤ 1	0
	16 QAM	≤ 3.5	≤ 2	≤ 1
	64 QAM	≤ 3.5	≤ 2.5	
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3.5	≤ 3	≤ 1.5
	16 QAM	≤ 3.5	≤ 3	≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

Full&Default Power Mode

n5 Ant0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				166800	167300	167800		
Frequency (MHz)				834	836.5	839		
20	QPSK	1	1	23.05	23.25	23.04	24.0	0.0
20	QPSK	1	53	22.85	23.09	22.82		
20	QPSK	1	104	22.65	22.79	22.61		
20	QPSK	50	0	21.78	21.96	21.69	23.0	1.0
20	QPSK	50	28	22.63	22.96	22.76	24.0	0.0
20	QPSK	50	56	21.64	21.84	21.64	23.0	1.0
20	QPSK	100	0	21.62	21.85	21.68		

n26 Ant0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				164800	166300	167800		
Frequency (MHz)				824	831.5	839		
20	QPSK	1	1	23.02	23.35	23.00	24.0	0.0
20	QPSK	1	53	23.01	23.22	22.99		
20	QPSK	1	104	22.95	23.20	22.93		
20	QPSK	50	0	21.93	22.11	21.95	23.0	1.0
20	QPSK	50	28	22.81	23.16	22.89	24.0	0.0
20	QPSK	50	56	21.77	21.93	21.76	23.0	1.0
20	QPSK	100	0	21.89	22.07	21.94		

n71 Ant0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				134600	136100	137600		
Frequency (MHz)				673	680.5	688		
20	QPSK	1	1	23.37	23.58	23.29	24.0	0.0
20	QPSK	1	53	23.18	23.38	23.24		
20	QPSK	1	104	23.06	23.30	23.01		
20	QPSK	50	0	22.14	22.39	22.12	23.0	1.0
20	QPSK	50	28	22.98	23.21	23.08	24.0	0.0
20	QPSK	50	56	21.97	22.19	21.97	23.0	1.0
20	QPSK	100	0	22.02	22.19	22.04		

n41 Ant0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	22.64	22.85	22.64	24.0	0.0
100	QPSK	1	137	22.53	22.70	22.52		
100	QPSK	1	271	22.52	22.71	22.50		
100	QPSK	135	0	21.97	22.09	21.83	23.0	1.0
100	QPSK	135	69	22.59	22.63	22.35	24.0	0.0
100	QPSK	135	138	21.43	21.43	21.19	23.0	1.0
100	QPSK	270	0	21.67	21.84	21.57		

n2 Ant2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				372000	376000	380000		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	1	22.94	23.17	22.92	24.0	0.0
20	QPSK	1	53	22.84	22.96	22.78		
20	QPSK	1	104	22.64	22.94	22.68		
20	QPSK	50	0	21.67	21.93	21.62	23.0	1.0
20	QPSK	50	28	22.69	22.90	22.55	24.0	0.0
20	QPSK	50	56	21.63	21.85	21.56	23.0	1.0
20	QPSK	100	0	21.70	21.89	21.71		

n66 Ant2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				346000	349000	352000		
Frequency (MHz)				1730	1745	1760		
40	QPSK	1	1	22.91	23.13	22.88	24.0	0.0
40	QPSK	1	108	22.87	23.06	22.87		
40	QPSK	1	214	22.91	23.12	22.95		
40	QPSK	108	0	21.85	21.97	21.78	23.0	1.0
40	QPSK	108	54	22.83	23.04	22.86	24.0	0.0
40	QPSK	108	108	21.82	22.08	21.85	23.0	1.0
40	QPSK	216	0	21.88	22.00	21.91		

Part27O n77 Ant2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	21.14	21.16	21.12	23.0	0.0
100	QPSK	1	137	21.06	21.10	21.05		
100	QPSK	1	271	21.13	21.13	21.04		
100	QPSK	135	0	21.11	21.06	21.10	23.0	0.0
100	QPSK	135	69	21.07	21.14	21.02	23.0	0.0
100	QPSK	135	138	21.05	21.04	21.06	23.0	0.0
100	QPSK	270	0	21.09	21.11	21.05		

Part27O n77 PC2 Ant2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	23.55	23.63	23.51	24.5	0.0
100	QPSK	1	137	22.55	22.59	22.56		
100	QPSK	1	271	22.51	22.54	22.54		
100	QPSK	135	0	21.60	21.61	21.51	23.5	1.0
100	QPSK	135	69	23.42	23.45	23.44	24.5	0.0
100	QPSK	135	138	21.51	21.59	21.57	23.5	1.0
100	QPSK	270	0	21.58	21.66	21.59		

Part27Q n77 Ant2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		21.22		23.0	0.0
100	QPSK	1	137		21.01			
100	QPSK	1	271		21.19			
100	QPSK	135	0		21.06		23.0	0.0
100	QPSK	135	69		21.15		23.0	0.0
100	QPSK	135	138		21.05		23.0	0.0
100	QPSK	270	0		21.08			

Part27Q n77 PC2 Ant2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		23.29		24.5	0.0
100	QPSK	1	137		23.17			
100	QPSK	1	271		23.23			
100	QPSK	135	0		22.31		23.5	1.0
100	QPSK	135	69		23.11		24.5	0.0
100	QPSK	135	138		22.28		23.5	1.0
100	QPSK	270	0		22.40			

Part27O n78 Ant2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	650000	650000		
Frequency (MHz)				3750	3750	3750		
100	QPSK	1	1	21.26	21.32	21.24	23.0	0.0
100	QPSK	1	137	21.23	21.29	21.20		
100	QPSK	1	271	21.17	21.23	21.16		
100	QPSK	135	0	21.20	21.28	21.16	23.0	0.0
100	QPSK	135	69	21.17	21.26	21.18	23.0	0.0
100	QPSK	135	138	21.18	21.22	21.16	23.0	0.0
100	QPSK	270	0	21.02	21.19	21.05		

Part27O n78 PC2 Ant2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	650000	650000		
Frequency (MHz)				3750	3750	3750		
100	QPSK	1	1	23.30	23.44	23.34	24.5	0.0
100	QPSK	1	137	23.26	23.42	23.27		
100	QPSK	1	271	23.23	23.38	23.27		
100	QPSK	135	0	21.51	21.56	21.55	23.5	1.0
100	QPSK	135	69	23.26	23.38	23.25	24.5	0.0
100	QPSK	135	138	21.56	21.65	21.61	23.5	1.0
100	QPSK	270	0	21.77	21.89	21.79		

Part27Q n78 Ant2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		21.25		23.0	0.0
100	QPSK	1	137		21.11			
100	QPSK	1	271		21.15			
100	QPSK	135	0		21.11		23.0	0.0
100	QPSK	135	69		21.18		23.0	0.0
100	QPSK	135	138		21.13		23.0	0.0
100	QPSK	270	0		21.12			

Part27Q n78 PC2 Ant2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		23.58		24.5	0.0
100	QPSK	1	137		22.56			
100	QPSK	1	271		22.51			
100	QPSK	135	0		21.61		23.5	1.0
100	QPSK	135	69		23.45		24.5	0.0
100	QPSK	135	138		21.56		23.5	1.0
100	QPSK	270	0		21.59			

n7 Ant3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				504000	507000	510000		
Frequency (MHz)				2520	2535	2550		
40	QPSK	1	1	23.89	24.14	23.94	25.0	0.0
40	QPSK	1	108	23.95	24.07	23.89		
40	QPSK	1	214	23.71	23.93	23.78		
40	QPSK	108	0	22.61	22.77	22.54	24.0	1.0
40	QPSK	108	54	23.55	23.68	23.50	25.0	0.0
40	QPSK	108	108	22.54	22.81	22.58	24.0	1.0
40	QPSK	216	0	22.62	22.80	22.62		

n38 Ant3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				518004	519000	519996		
Frequency (MHz)				2590.02	2595	2599.98		
40	QPSK	1	1	22.62	22.70	22.53	24.0	0.0
40	QPSK	1	53	22.54	22.67	22.52		
40	QPSK	1	104	22.16	22.32	22.20		
40	QPSK	50	0	21.49	21.63	21.43	23.0	1.0
40	QPSK	50	28	22.42	22.54	22.37	24.0	0.0
40	QPSK	50	56	21.31	21.48	21.34	23.0	1.0
40	QPSK	100	0	21.42	21.55	21.40		

n41 Ant3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	22.33	22.52	22.32	24.0	0.0
100	QPSK	1	137	22.16	22.38	22.17		
100	QPSK	1	271	22.24	22.43	22.25		
100	QPSK	135	0	21.64	21.79	21.58	23.0	1.0
100	QPSK	135	69	22.25	22.34	22.06	24.0	0.0
100	QPSK	135	138	21.18	21.15	21.11	23.0	1.0
100	QPSK	270	0	21.36	21.48	21.28		

Part27O n77 Ant3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	21.26	21.45	21.21	23.0	0.0
100	QPSK	1	137	21.16	21.32	21.09		
100	QPSK	1	271	21.17	21.33	21.14		
100	QPSK	135	0	20.80	21.06	20.89	22.0	1.0
100	QPSK	135	69	21.15	21.17	21.12	23.0	0.0
100	QPSK	135	138	20.94	21.14	20.95	22.0	1.0
100	QPSK	270	0	20.96	21.09	20.98		

Part27O n77 PC2 Ant3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	22.73	22.96	22.76	24.5	0.0
100	QPSK	1	137	22.37	22.58	22.39		
100	QPSK	1	271	21.69	21.96	21.67		
100	QPSK	135	0	22.21	22.44	22.25	23.5	1.0
100	QPSK	135	69	22.52	22.55	22.54	24.5	0.0
100	QPSK	135	138	21.78	21.95	21.72	23.5	1.0
100	QPSK	270	0	21.63	21.88	21.68		

Part27Q n77 Ant3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		21.87		23.0	0.0
100	QPSK	1	137		21.81			
100	QPSK	1	271		21.78			
100	QPSK	135	0		21.52		22.0	1.0
100	QPSK	135	69		21.63		23.0	0.0
100	QPSK	135	138		21.57		22.0	1.0
100	QPSK	270	0		21.61			

Part27Q n77 PC2 Ant3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		23.24		24.5	0.0
100	QPSK	1	137		22.86			
100	QPSK	1	271		22.23			
100	QPSK	135	0		22.75		23.5	1.0
100	QPSK	135	69		22.85		24.5	0.0
100	QPSK	135	138		22.25		23.5	1.0
100	QPSK	270	0		22.15			

Part27O n78 Ant3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					650000			
Frequency (MHz)					3750			
100	QPSK	1	1		22.36		23.0	0.0
100	QPSK	1	137		22.22			
100	QPSK	1	271		22.18			
100	QPSK	135	0		21.32		22.0	1.0
100	QPSK	135	69		21.35		23.0	0.0
100	QPSK	135	138		20.97		22.0	1.0
100	QPSK	270	0		21.00			

Part27O n78 PC2 Ant3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					650000			
Frequency (MHz)					3750			
100	QPSK	1	1		23.39		24.5	0.0
100	QPSK	1	137		23.29			
100	QPSK	1	271		23.23			
100	QPSK	135	0		22.34		23.5	1.0
100	QPSK	135	69		23.03		24.5	0.0
100	QPSK	135	138		21.98		23.5	1.0
100	QPSK	270	0		21.97			

Part27Q n78 Ant3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		21.60		23.0	0.0
100	QPSK	1	137		21.44			
100	QPSK	1	271		21.40			
100	QPSK	135	0		20.61		22.0	1.0
100	QPSK	135	69		21.53		23.0	0.0
100	QPSK	135	138		20.55		22.0	1.0
100	QPSK	270	0		20.54			

Part27Q n78 PC2 Ant3								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		22.59		24.5	0.0
100	QPSK	1	137		22.56			
100	QPSK	1	271		22.52			
100	QPSK	135	0		21.68		23.5	1.0
100	QPSK	135	69		22.52		24.5	0.0
100	QPSK	135	138		21.59		23.5	1.0
100	QPSK	270	0		21.51			

Part27O n77 Ant4								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	23.15	23.20	23.09	24.0	0.0
100	QPSK	1	137	22.98	23.19	23.12		
100	QPSK	1	271	23.19	23.23	23.07		
100	QPSK	135	0	22.12	22.30	22.20	23.0	1.0
100	QPSK	135	69	22.92	23.03	22.83	24.0	0.0
100	QPSK	135	138	21.52	21.62	21.50	23.0	1.0
100	QPSK	270	0	22.46	22.50	22.42		

Part27O n77 PC2 Ant4								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	26.17	26.26	26.00	27.0	0.0
100	QPSK	1	137	26.01	26.24	26.08		
100	QPSK	1	271	26.16	26.12	26.06		
100	QPSK	135	0	25.06	25.24	25.23	26.0	1.0
100	QPSK	135	69	25.90	25.99	25.85	27.0	0.0
100	QPSK	135	138	24.57	24.60	24.50	26.0	1.0
100	QPSK	270	0	25.51	25.53	25.41		

Part27Q n77 Ant4								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		22.96		24.0	0.0
100	QPSK	1	137		22.86			
100	QPSK	1	271		22.95			
100	QPSK	135	0		22.75		24.0	0.0
100	QPSK	135	69		22.84		24.0	0.0
100	QPSK	135	138		22.74		24.0	0.0
100	QPSK	270	0		22.74			

Part27Q n77 PC2 Ant4								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		25.77		27.0	0.0
100	QPSK	1	137		25.71			
100	QPSK	1	271		25.67			
100	QPSK	135	0		24.74		26.0	1.0
100	QPSK	135	69		25.75		27.0	0.0
100	QPSK	135	138		24.62		26.0	1.0
100	QPSK	270	0		24.70			

Part27O n78 Ant4								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					650000			
Frequency (MHz)					3750			
100	QPSK	1	1		23.19		24.0	0.0
100	QPSK	1	137		23.05			
100	QPSK	1	271		23.08			
100	QPSK	135	0		22.92		24.0	0.0
100	QPSK	135	69		23.07		24.0	0.0
100	QPSK	135	138		22.99		24.0	0.0
100	QPSK	270	0		22.92			

Part27O n78 PC2 Ant4								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					650000			
Frequency (MHz)					3750			
100	QPSK	1	1		26.29		27.0	0.0
100	QPSK	1	137		26.22			
100	QPSK	1	271		26.11			
100	QPSK	135	0		25.22		26.0	1.0
100	QPSK	135	69		26.13		27.0	0.0
100	QPSK	135	138		25.10		26.0	1.0
100	QPSK	270	0		25.23			

Part27Q n78 Ant4								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		22.73		24.0	0.0
100	QPSK	1	137		22.46			
100	QPSK	1	271		22.49			
100	QPSK	135	0		22.20		24.0	0.0
100	QPSK	135	69		22.30		24.0	0.0
100	QPSK	135	138		22.12		24.0	0.0
100	QPSK	270	0		22.18			

Part27Q n78 PC2 Ant4								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		25.76		27.0	0.0
100	QPSK	1	137		25.56			
100	QPSK	1	271		25.59			
100	QPSK	135	0		24.20		26.0	1.0
100	QPSK	135	69		25.14		27.0	0.0
100	QPSK	135	138		24.05		26.0	1.0
100	QPSK	270	0		24.12			

n41 Ant5								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	20.96	21.14	20.91	22.0	0.0
100	QPSK	1	137	20.78	20.97	20.80		
100	QPSK	1	271	20.82	21.00	20.83		
100	QPSK	135	0	20.25	20.41	20.16	21.0	1.0
100	QPSK	135	69	20.89	20.93	20.63	22.0	0.0
100	QPSK	135	138	19.76	19.69	19.52	21.0	1.0
100	QPSK	270	0	19.36	19.45	19.30		

Part27O n78 PC2 Ant6								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	650000	650000		
Frequency (MHz)				3750	3750	3750		
100	QPSK	1	1		26.27		27.0	0.0
100	QPSK	1	137		26.23			
100	QPSK	1	271		26.09			
100	QPSK	135	0		25.28		26.0	1.0
100	QPSK	135	69		26.14		27.0	0.0
100	QPSK	135	138		25.14		26.0	1.0
100	QPSK	270	0		25.22			

Part27Q n78 Ant6								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		22.72		24.0	0.0
100	QPSK	1	137		22.48			
100	QPSK	1	271		22.53			
100	QPSK	135	0		22.21		24.0	0.0
100	QPSK	135	69		22.32		24.0	0.0
100	QPSK	135	138		22.08		24.0	0.0
100	QPSK	270	0		22.17			

Part27Q n78 PC2 Ant6								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		25.72		27.0	0.0
100	QPSK	1	137		25.52			
100	QPSK	1	271		25.59			
100	QPSK	135	0		24.18		26.0	1.0
100	QPSK	135	69		25.11		27.0	0.0
100	QPSK	135	138		24.06		26.0	1.0
100	QPSK	270	0		24.13			

Reduced Power Mode for DSI 0

n26 Ant 0 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				164800	166300	167800		
Frequency (MHz)				824	831.5	839		
20	QPSK	1	1	23.02	23.35	23.00	24.0	0.0
20	QPSK	1	53	23.01	23.22	22.99		
20	QPSK	1	104	22.95	23.20	22.93		
20	QPSK	50	0	21.93	22.11	21.95	23.0	1.0
20	QPSK	50	28	22.81	23.16	22.89	24.0	0.0
20	QPSK	50	56	21.77	21.93	21.76	23.0	1.0
20	QPSK	100	0	21.89	22.07	21.94		

n71 Ant 0 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				134600	136100	137600		
Frequency (MHz)				673	680.5	688		
20	QPSK	1	1	23.37	23.58	23.29	24.0	0.0
20	QPSK	1	53	23.18	23.38	23.24		
20	QPSK	1	104	23.06	23.30	23.01		
20	QPSK	50	0	22.14	22.39	22.12	23.0	1.0
20	QPSK	50	28	22.98	23.21	23.08	24.0	0.0
20	QPSK	50	56	21.97	22.19	21.97	23.0	1.0
20	QPSK	100	0	22.02	22.19	22.04		

n41 Ant 0 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	22.64	22.85	22.64	24.0	0.0
100	QPSK	1	137	22.53	22.70	22.52		
100	QPSK	1	271	22.52	22.71	22.50		
100	QPSK	135	0	21.97	22.09	21.83	23.0	1.0
100	QPSK	135	69	22.59	22.63	22.35	24.0	0.0
100	QPSK	135	138	21.43	21.43	21.19	23.0	1.0
100	QPSK	270	0	21.67	21.84	21.57		

n2 Ant 2 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				372000	376000	380000		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	1	22.50	22.70	22.48	23.7	0.0
20	QPSK	1	53	22.51	22.65	22.42		
20	QPSK	1	104	22.35	22.57	22.39		
20	QPSK	50	0	21.40	21.57	21.31	23.0	0.7
20	QPSK	50	28	22.38	22.55	22.34	23.7	0.0
20	QPSK	50	56	21.36	21.54	21.28	23.0	0.7
20	QPSK	100	0	21.35	21.57	21.41		

n66 Ant 2 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				346000	349000	352000		
Frequency (MHz)				1730	1745	1760		
40	QPSK	1	1	22.91	23.13	22.88	24.0	0.0
40	QPSK	1	108	22.87	23.06	22.87		
40	QPSK	1	214	22.91	23.12	22.95		
40	QPSK	108	0	21.85	21.97	21.78	23.0	1.0
40	QPSK	108	54	22.83	23.04	22.86	24.0	0.0
40	QPSK	108	108	21.82	22.08	21.85	23.0	1.0
40	QPSK	216	0	21.88	22.00	21.91		

Part27O n77 PC2 Ant 2 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	22.44	22.68	22.43	23.8	0
100	QPSK	1	137	22.31	22.42	22.41		
100	QPSK	1	271	22.45	22.50	22.37		
100	QPSK	135	0	21.52	21.76	21.64	23.5	0.3
100	QPSK	135	69	22.50	22.58	22.46	23.8	0
100	QPSK	135	138	21.57	21.56	21.71	23.5	0.3
100	QPSK	270	0	21.60	21.64	21.61		

Part27Q n77 PC2 Ant 2 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		22.68		23.8	0
100	QPSK	1	137		22.45			
100	QPSK	1	271		22.58			
100	QPSK	135	0		22.48		23.5	0.3
100	QPSK	135	69		22.72		23.8	0
100	QPSK	135	138		22.51		23.5	0.3
100	QPSK	270	0		22.59			

n7 Ant 3 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				504000	507000	510000		
Frequency (MHz)				2520	2535	2550		
40	QPSK	1	1	20.35	20.55	20.25	21.5	0.0
40	QPSK	1	108	20.35	20.48	20.27		
40	QPSK	1	214	20.27	20.44	20.28		
40	QPSK	108	0	20.33	20.45	20.27	21.5	0.0
40	QPSK	108	54	20.35	20.50	20.23	21.5	0.0
40	QPSK	108	108	20.22	20.46	20.31	21.5	0.0
40	QPSK	216	0	20.31	20.54	20.29		

n41 Ant 3 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	19.61	19.72	19.57	21.1	0.0
100	QPSK	1	137	19.49	19.63	19.41		
100	QPSK	1	271	19.46	19.65	19.48		
100	QPSK	135	0	19.12	19.11	19.17	21.1	0.0
100	QPSK	135	69	19.50	19.60	19.27	21.1	0.0
100	QPSK	135	138	19.44	19.37	19.19	21.1	0.0
100	QPSK	270	0	19.51	19.55	19.52		

Part27O n77 PC2 Ant 3 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	18.78	19.24	18.84	20.6	0.0
100	QPSK	1	137	19.15	19.02	19.07		
100	QPSK	1	271	18.98	19.09	18.96		
100	QPSK	135	0	18.78	18.91	18.76	20.6	0.0
100	QPSK	135	69	19.10	19.15	18.94	20.6	0.0
100	QPSK	135	138	18.96	19.10	18.92	20.6	0.0
100	QPSK	270	0	18.93	19.12	18.98		

Part27Q n77 PC2 Ant 3 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		19.19		20.6	0.0
100	QPSK	1	137		19.08			
100	QPSK	1	271		19.04			
100	QPSK	135	0		19.00		20.6	0.0
100	QPSK	135	69		19.13		20.6	0.0
100	QPSK	135	138		19.12		20.6	0.0
100	QPSK	270	0		19.11			

Part27O n77 PC2 Ant4 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	23.62	23.79	23.44	24.9	0.0
100	QPSK	1	137	23.55	23.74	23.62		
100	QPSK	1	271	23.61	23.59	23.55		
100	QPSK	135	0	22.53	22.80	22.75	24.0	0.0
100	QPSK	135	69	23.38	23.42	23.29	24.9	0.0
100	QPSK	135	138	22.15	22.31	22.21	24.0	0.0
100	QPSK	270	0	22.93	23.01	22.86		

Part27Q n77 PC2 Ant4 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		23.68		24.9	0.0
100	QPSK	1	137		23.65			
100	QPSK	1	271		23.58			
100	QPSK	135	0		22.61		24.0	0.0
100	QPSK	135	69		23.56		24.9	0.0
100	QPSK	135	138		22.53		24.0	0.0
100	QPSK	270	0		22.51			

n41 Ant 5 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	20.25	20.42	20.27	21.3	0.0
100	QPSK	1	137	20.15	20.32	20.09		
100	QPSK	1	271	20.12	20.34	20.16		
100	QPSK	135	0	19.60	19.72	19.48	21.0	0.3
100	QPSK	135	69	20.17	20.23	19.97	21.3	0.0
100	QPSK	135	138	19.77	19.71	19.54	21.0	0.3
100	QPSK	270	0	19.34	19.52	19.28		

n41 Ant6 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	20.53	20.73	20.53	21.8	0.0
100	QPSK	1	137	20.35	20.52	20.29		
100	QPSK	1	271	20.36	20.53	20.38		
100	QPSK	135	0	19.79	19.93	19.73	21.8	0.0
100	QPSK	135	69	20.42	20.55	20.19	21.8	0.0
100	QPSK	135	138	19.75	19.72	19.47	21.8	0.0
100	QPSK	270	0	19.34	19.52	19.30		

Part27O n77 Ant6 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	19.13	19.44	19.07	20.5	0.0
100	QPSK	1	137	19.00	19.20	19.10		
100	QPSK	1	271	19.17	19.24	19.05		
100	QPSK	135	0	19.09	19.24	19.03	20.5	0.0
100	QPSK	135	69	18.98	19.22	19.10	20.5	0.0
100	QPSK	135	138	19.12	19.20	19.05	20.5	0.0
100	QPSK	270	0	19.06	19.20	19.15		

Part27Q n77 Ant6 DSI0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		19.44		20.5	0.0
100	QPSK	1	137		19.37			
100	QPSK	1	271		19.28			
100	QPSK	135	0		19.17		20.5	0.0
100	QPSK	135	69		19.33		20.5	0.0
100	QPSK	135	138		19.29		20.5	0.0
100	QPSK	270	0		19.30			

Reduced Power Mode for DSI 1

n26 Ant 0 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				164800	166300	167800		
Frequency (MHz)				824	831.5	839		
20	QPSK	1	1	23.02	23.35	23.00	24.0	0.0
20	QPSK	1	53	23.01	23.22	22.99		
20	QPSK	1	104	22.95	23.20	22.93		
20	QPSK	50	0	21.93	22.11	21.95	23.0	1.0
20	QPSK	50	28	22.81	23.16	22.89	24.0	0.0
20	QPSK	50	56	21.77	21.93	21.76	23.0	1.0
20	QPSK	100	0	21.89	22.07	21.94		

n71 Ant 0 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				134600	136100	137600		
Frequency (MHz)				673	680.5	688		
20	QPSK	1	1	23.37	23.58	23.29	24.0	0.0
20	QPSK	1	53	23.18	23.38	23.24		
20	QPSK	1	104	23.06	23.30	23.01		
20	QPSK	50	0	22.14	22.39	22.12	23.0	1.0
20	QPSK	50	28	22.98	23.21	23.08	24.0	0.0
20	QPSK	50	56	21.97	22.19	21.97	23.0	1.0
20	QPSK	100	0	22.02	22.19	22.04		

n41 Ant 0 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	22.64	22.85	22.64	24.0	0.0
100	QPSK	1	137	22.53	22.70	22.52		
100	QPSK	1	271	22.52	22.71	22.50		
100	QPSK	135	0	21.97	22.09	21.83	23.0	1.0
100	QPSK	135	69	22.59	22.63	22.35	24.0	0.0
100	QPSK	135	138	21.43	21.43	21.19	23.0	1.0
100	QPSK	270	0	21.67	21.84	21.57		

n2 Ant 2 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				372000	376000	380000		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	1	20.74	21.00	20.71	21.8	0.0
20	QPSK	1	53	20.74	20.84	20.64		
20	QPSK	1	104	20.77	20.94	20.68		
20	QPSK	50	0	20.13	20.38	20.15	21.8	0.0
20	QPSK	50	28	20.71	20.85	20.78	21.8	0.0
20	QPSK	50	56	20.43	20.64	20.49	21.8	0.0
20	QPSK	100	0	20.46	20.67	20.49		

n66 Ant 2 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				346000	349000	352000		
Frequency (MHz)				1730	1745	1760		
40	QPSK	1	1	21.20	21.42	21.17	22.5	0.0
40	QPSK	1	108	21.22	21.32	21.09		
40	QPSK	1	214	21.22	21.39	21.24		
40	QPSK	108	0	20.61	20.86	20.67	22.5	0.0
40	QPSK	108	54	21.16	21.40	21.18	22.5	0.0
40	QPSK	108	108	20.95	21.18	21.00	22.5	0.0
40	QPSK	216	0	20.95	21.11	20.95		

Part27O n77 Ant 2 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	21.14	21.16	21.12	23.0	0.0
100	QPSK	1	137	21.06	21.10	21.05		
100	QPSK	1	271	21.13	21.13	21.04		
100	QPSK	135	0	21.11	21.06	21.10	23.0	0.0
100	QPSK	135	69	21.07	21.14	21.02	23.0	0.0
100	QPSK	135	138	21.05	21.04	21.06	23.0	0.0
100	QPSK	270	0	21.09	21.11	21.05		

Part27Q n77 Ant 2 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		21.22		23.0	0.0
100	QPSK	1	137		21.01			
100	QPSK	1	271		21.19			
100	QPSK	135	0		21.06		23.0	0.0
100	QPSK	135	69		21.15		23.0	0.0
100	QPSK	135	138		21.05		23.0	0.0
100	QPSK	270	0		21.08			

n7 Ant 3 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				504000	507000	510000		
Frequency (MHz)				2520	2535	2550		
40	QPSK	1	1	18.79	19.15	18.69	20.2	0.0
40	QPSK	1	108	18.69	18.81	18.57		
40	QPSK	1	214	18.77	18.97	18.76		
40	QPSK	108	0	18.71	18.99	18.77	20.2	0.0
40	QPSK	108	54	18.69	19.09	18.63	20.2	0.0
40	QPSK	108	108	18.76	18.88	18.81	20.2	0.0
40	QPSK	216	0	18.81	18.95	18.66		

n41 Ant 3 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	19.56	19.76	19.58	21.2	0.0
100	QPSK	1	137	19.61	19.74	19.54		
100	QPSK	1	271	19.53	19.74	19.68		
100	QPSK	135	0	19.49	19.71	19.49	21.2	0.0
100	QPSK	135	69	19.62	19.77	19.51	21.2	0.0
100	QPSK	135	138	19.48	19.69	19.64	21.2	0.0
100	QPSK	270	0	19.48	19.72	19.45		

Part27O n77 Ant 3 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	19.05	19.25	19.06	20.6	0.0
100	QPSK	1	137	19.08	19.23	19.03		
100	QPSK	1	271	19.05	19.22	19.16		
100	QPSK	135	0	18.99	19.18	18.96	20.6	0.0
100	QPSK	135	69	19.14	19.21	19.01	20.6	0.0
100	QPSK	135	138	18.95	19.17	19.10	20.6	0.0
100	QPSK	270	0	18.95	19.22	18.96		

Part27Q n77 Ant 3 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		19.16		20.6	0.0
100	QPSK	1	137		19.12			
100	QPSK	1	271		19.02			
100	QPSK	135	0		19.01		20.6	0.0
100	QPSK	135	69		19.08		20.6	0.0
100	QPSK	135	138		19.04		20.6	0.0
100	QPSK	270	0		19.03			

Part27O n77 Ant4 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	21.87	21.97	21.84	23.2	0.0
100	QPSK	1	137	21.75	21.96	21.89		
100	QPSK	1	271	21.88	21.99	21.81		
100	QPSK	135	0	21.31	21.28	21.25	23.2	0.0
100	QPSK	135	69	21.70	21.76	21.60	23.2	0.0
100	QPSK	135	138	21.34	21.41	21.26	23.2	0.0
100	QPSK	270	0	21.28	21.29	21.22		

Part27Q n77 Ant4 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		21.84		23.2	0.0
100	QPSK	1	137		21.80			
100	QPSK	1	271		21.81			
100	QPSK	135	0		21.59		23.2	0.0
100	QPSK	135	69		21.71		23.2	0.0
100	QPSK	135	138		21.62		23.2	0.0
100	QPSK	270	0		21.66			

n41 Ant 5 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	20.91	21.13	20.93	22.0	0.0
100	QPSK	1	137	20.79	20.97	20.77		
100	QPSK	1	271	20.82	20.99	20.81		
100	QPSK	135	0	20.22	20.42	20.17	21.0	1.0
100	QPSK	135	69	20.87	20.94	20.64	22.0	0.0
100	QPSK	135	138	19.76	19.77	19.53	21.0	1.0
100	QPSK	270	0	19.34	19.48	19.32		

n41 Ant6 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	20.50	20.71	20.54	21.7	0.0
100	QPSK	1	137	20.27	20.50	20.27		
100	QPSK	1	271	20.30	20.47	20.33		
100	QPSK	135	0	20.10	20.28	20.06	21.7	0.0
100	QPSK	135	69	20.31	20.54	20.11	21.7	0.0
100	QPSK	135	138	20.25	20.50	20.23	21.7	0.0
100	QPSK	270	0	19.33	19.45	19.34		

Part27O n77 Ant6 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	19.50	19.63	19.47	20.7	0.0
100	QPSK	1	137	19.37	19.57	19.50		
100	QPSK	1	271	19.54	19.60	19.47		
100	QPSK	135	0	19.33	19.56	19.41	20.7	0.0
100	QPSK	135	69	19.38	19.54	19.39	20.7	0.0
100	QPSK	135	138	19.31	19.41	19.33	20.7	0.0
100	QPSK	270	0	18.84	18.86	18.81		

Part27Q n77 Ant6 DSI1								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		19.65		20.7	0.0
100	QPSK	1	137		19.59			
100	QPSK	1	271		19.57			
100	QPSK	135	0		19.41		20.7	0.0
100	QPSK	135	69		19.45		20.7	0.0
100	QPSK	135	138		19.41		20.7	0.0
100	QPSK	270	0		19.46			

Reduced Power Mode for DSI 2

n5 Ant 0 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				166800	167300	167800		
Frequency (MHz)				834	836.5	839		
20	QPSK	1	1	21.76	21.97	21.67	23.2	0.0
20	QPSK	1	53	21.64	21.90	21.68		
20	QPSK	1	104	21.69	21.96	21.71		
20	QPSK	50	0	21.69	21.86	21.65	23.0	0.2
20	QPSK	50	28	21.71	21.87	21.68	23.2	0.0
20	QPSK	50	56	21.31	21.52	21.41	23.0	0.2
20	QPSK	100	0	21.43	21.62	21.43		

n26 Ant 0 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				164800	166300	167800		
Frequency (MHz)				824	831.5	839		
20	QPSK	1	1	22.03	22.36	22.12	23.2	0.0
20	QPSK	1	53	21.86	22.17	21.94		
20	QPSK	1	104	21.94	22.16	21.96		
20	QPSK	50	0	22.07	22.05	21.93	23.0	0.2
20	QPSK	50	28	21.78	22.34	21.82	23.2	0.0
20	QPSK	50	56	21.56	21.79	21.62	23.0	0.2
20	QPSK	100	0	21.69	21.88	21.73		

n71 Ant 0 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				134600	136100	137600		
Frequency (MHz)				673	680.5	688		
20	QPSK	1	1	21.63	21.89	21.63	22.7	0.0
20	QPSK	1	53	21.39	21.58	21.43		
20	QPSK	1	104	21.21	21.51	21.32		
20	QPSK	50	0	21.40	21.64	21.49	22.7	0.0
20	QPSK	50	28	21.20	21.80	21.35	22.7	0.0
20	QPSK	50	56	21.56	21.75	21.60	22.7	0.0
20	QPSK	100	0	21.37	21.58	21.48		

n2 Ant 2 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				372000	376000	380000		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	1	18.20	18.23	18.19	19.6	0.0
20	QPSK	1	53	17.94	18.03	17.94		
20	QPSK	1	104	17.96	18.22	18.06		
20	QPSK	50	0	18.01	18.13	17.96	19.6	0.0
20	QPSK	50	28	17.94	18.18	17.90	19.6	0.0
20	QPSK	50	56	17.99	18.14	18.01	19.6	0.0
20	QPSK	100	0	18.00	18.16	18.10		

n66 Ant 2 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				346000	349000	352000		
Frequency (MHz)				1730	1745	1760		
40	QPSK	1	1	18.76	19.25	18.82	19.9	0.0
40	QPSK	1	108	18.82	19.02	18.87		
40	QPSK	1	214	18.99	19.03	18.93		
40	QPSK	108	0	18.80	19.00	18.78	19.9	0.0
40	QPSK	108	54	18.86	19.23	18.87	19.9	0.0
40	QPSK	108	108	18.88	19.12	18.96	19.9	0.0
40	QPSK	216	0	18.83	19.11	18.90		

n7 Ant 3 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				504000	507000	510000		
Frequency (MHz)				2520	2535	2550		
40	QPSK	1	1	15.15	15.47	14.97	16.5	0.0
40	QPSK	1	108	15.06	15.19	14.99		
40	QPSK	1	214	15.09	15.33	15.07		
40	QPSK	108	0	15.07	15.29	15.07	16.5	0.0
40	QPSK	108	54	14.97	15.42	14.95	16.5	0.0
40	QPSK	108	108	15.12	15.27	15.14	16.5	0.0
40	QPSK	216	0	15.15	15.31	15.06		

Part27O n77 PC2&PC3 Ant 2 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	15.39	15.60	15.32	17.1	0.0
100	QPSK	1	137	15.37	15.50	15.32		
100	QPSK	1	271	15.36	15.54	15.44		
100	QPSK	135	0	15.33	15.48	15.39	17.1	0.0
100	QPSK	135	69	15.34	15.53	15.33	17.1	0.0
100	QPSK	135	138	15.45	15.52	15.45	17.1	0.0
100	QPSK	270	0	15.36	15.46	15.38		

Part27Q n77 PC2&PC3 Ant 2 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334		17.1	0.0
Frequency (MHz)					3500.01			
100	QPSK	1	1		15.52			
100	QPSK	1	137		15.39			
100	QPSK	1	271		15.44			
100	QPSK	135	0		15.27		17.1	0.0
100	QPSK	135	69		15.50		17.1	0.0
100	QPSK	135	138		15.37		17.1	0.0
100	QPSK	270	0		15.32			

Part27O n78 PC2&PC3 Ant 2 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					650000			
Frequency (MHz)					3750			
100	QPSK	1	1		15.57		17.1	0.0
100	QPSK	1	137		15.53			
100	QPSK	1	271		15.43			
100	QPSK	135	0		15.31		17.1	0.0
100	QPSK	135	69		15.54		17.1	0.0
100	QPSK	135	138		15.47		17.1	0.0
100	QPSK	270	0		15.36			

Part27Q n78 PC2&PC3 Ant 2 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		15.43		17.1	0.0
100	QPSK	1	137		15.30			
100	QPSK	1	271		15.19			
100	QPSK	135	0		15.15		17.1	0.0
100	QPSK	135	69		15.38		17.1	0.0
100	QPSK	135	138		15.29		17.1	0.0
100	QPSK	270	0		15.23			

n38 Ant 3 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				518004	519000	519996		
Frequency (MHz)				2590.02	2595	2599.98		
40	QPSK	1	1	14.84	15.08	14.78	16.4	0.0
40	QPSK	1	53	14.99	15.01	14.88		
40	QPSK	1	104	14.88	14.98	14.86		
40	QPSK	50	0	14.82	15.03	14.78	16.4	0.0
40	QPSK	50	28	14.90	15.05	14.90	16.4	0.0
40	QPSK	50	56	14.81	14.98	14.94	16.4	0.0
40	QPSK	100	0	14.89	14.98	14.78		

n41 Ant 3 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	14.94	15.19	14.94	16.4	0.0
100	QPSK	1	137	15.03	15.18	14.98		
100	QPSK	1	271	14.98	15.07	15.09		
100	QPSK	135	0	14.94	15.11	14.90	16.4	0.0
100	QPSK	135	69	15.03	15.18	14.94	16.4	0.0
100	QPSK	135	138	14.92	15.12	15.03	16.4	0.0
100	QPSK	270	0	14.86	15.09	14.89		

Part27O n77 PC2&PC3 Ant 3 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	17.71	18.16	17.68	18.9	0.0
100	QPSK	1	137	17.52	17.50	17.66		
100	QPSK	1	271	17.67	17.87	17.54		
100	QPSK	135	0	17.69	17.31	17.68	18.9	0.0
100	QPSK	135	69	17.60	17.88	17.66	18.9	0.0
100	QPSK	135	138	17.70	17.73	17.56	18.9	0.0
100	QPSK	270	0	17.66	17.69	17.65		

Part27Q n77 PC2&PC3 Ant 3 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		18.11		18.9	0.0
100	QPSK	1	137		17.49			
100	QPSK	1	271		17.76			
100	QPSK	135	0		17.35		18.9	0.0
100	QPSK	135	69		17.89		18.9	0.0
100	QPSK	135	138		17.82		18.9	0.0
100	QPSK	270	0		17.32			

Part27O n78 PC2&PC3 Ant 3 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					650000			
Frequency (MHz)					3750			
100	QPSK	1	1		17.93		18.9	0.0
100	QPSK	1	137		17.47			
100	QPSK	1	271		17.86			
100	QPSK	135	0		17.38		18.9	0.0
100	QPSK	135	69		17.82		18.9	0.0
100	QPSK	135	138		17.77		18.9	0.0
100	QPSK	270	0		17.34			

Part27Q n78 PC2&PC3 Ant 3 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		17.87		18.9	0.0
100	QPSK	1	137		17.47			
100	QPSK	1	271		17.80			
100	QPSK	135	0		17.44		18.9	0.0
100	QPSK	135	69		17.80		18.9	0.0
100	QPSK	135	138		17.76		18.9	0.0
100	QPSK	270	0		17.38			

n41 Ant 0 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	15.09	15.66	15.03	17.0	0.0
100	QPSK	1	137	15.05	15.10	15.02		
100	QPSK	1	271	15.27	15.38	15.32		
100	QPSK	135	0	15.06	15.26	15.09	17.0	0.0
100	QPSK	135	69	15.05	15.61	15.02	17.0	0.0
100	QPSK	135	138	15.25	15.43	15.33	17.0	0.0
100	QPSK	270	0	15.11	15.28	15.12		

n41 Ant 5 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	20.96	21.14	20.91	22.0	0.0
100	QPSK	1	137	20.78	20.97	20.80		
100	QPSK	1	271	20.82	21.00	20.83		
100	QPSK	135	0	20.25	20.41	20.16	21.0	1.0
100	QPSK	135	69	20.89	20.93	20.63	22.0	0.0
100	QPSK	135	138	19.76	19.69	19.52	21.0	1.0
100	QPSK	270	0	19.36	19.45	19.30		

n41 Ant 6 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	QPSK	1	1	21.41	21.59	21.40	22.0	0.0
100	QPSK	1	137	21.20	21.36	21.20		
100	QPSK	1	271	21.24	21.41	21.21		
100	QPSK	135	0	20.64	20.76	20.59	22.0	0.0
100	QPSK	135	69	21.26	21.41	21.03	22.0	0.0
100	QPSK	135	138	20.17	20.11	19.91	22.0	0.0
100	QPSK	270	0	19.70	19.86	19.67		

Part27O n77 Ant 6 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	23.15	23.19	23.05	24.0	0.0
100	QPSK	1	137	22.97	23.20	23.12		
100	QPSK	1	271	23.13	23.16	23.10		
100	QPSK	135	0	22.12	22.34	22.23	23.0	1.0
100	QPSK	135	69	22.95	23.00	22.90	24.0	0.0
100	QPSK	135	138	21.52	21.66	21.53	23.0	1.0
100	QPSK	270	0	22.49	22.51	22.39		

Part27O n77 PC2 Ant 6 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	23.94	24.01	23.73	25.4	0.0
100	QPSK	1	137	23.86	23.82	23.76		
100	QPSK	1	271	23.96	23.91	23.89		
100	QPSK	135	0	23.88	23.96	23.77	25.4	0.0
100	QPSK	135	69	23.82	23.99	23.74	25.4	0.0
100	QPSK	135	138	23.93	23.95	23.93	25.4	0.0
100	QPSK	270	0	23.91	23.99	23.72		

Part27Q n77 Ant 6 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		22.99		24.0	0.0
100	QPSK	1	137		22.90			
100	QPSK	1	271		22.96			
100	QPSK	135	0		22.75		24.0	0.0
100	QPSK	135	69		22.80		24.0	0.0
100	QPSK	135	138		22.77		24.0	0.0
100	QPSK	270	0		22.79			

Part27Q n77 PC2 Ant 6 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		24.10		25.4	0.0
100	QPSK	1	137		23.82			
100	QPSK	1	271		23.96			
100	QPSK	135	0		23.90		25.4	0.0
100	QPSK	135	69		23.99		25.4	0.0
100	QPSK	135	138		23.93		25.4	0.0
100	QPSK	270	0		23.83			

Part27O n78 Ant 6 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	650000	650000		
Frequency (MHz)				3750	3750	3750		
100	QPSK	1	1		23.17		24.0	0.0
100	QPSK	1	137		23.04			
100	QPSK	1	271		23.14			
100	QPSK	135	0		22.94		24.0	0.0
100	QPSK	135	69		23.08		24.0	0.0
100	QPSK	135	138		23.03		24.0	0.0
100	QPSK	270	0		22.87			

Part27O n78 PC2 Ant 6 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					650000			
Frequency (MHz)					3750			
100	QPSK	1	1		23.92		25.4	0.0
100	QPSK	1	137		23.86			
100	QPSK	1	271		23.90			
100	QPSK	135	0		23.88		25.4	0.0
100	QPSK	135	69		23.91		25.4	0.0
100	QPSK	135	138		23.81		25.4	0.0
100	QPSK	270	0		23.91			

Part27Q n78 Ant 6 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		22.72		24.0	0.0
100	QPSK	1	137		22.48			
100	QPSK	1	271		22.53			
100	QPSK	135	0		22.21		24.0	0.0
100	QPSK	135	69		22.32		24.0	0.0
100	QPSK	135	138		22.08		24.0	0.0
100	QPSK	270	0		22.17			

Part27Q n78 PC2 Ant 6 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		23.95		25.4	0.0
100	QPSK	1	137		23.84			
100	QPSK	1	271		23.90			
100	QPSK	135	0		23.90		25.4	0.0
100	QPSK	135	69		23.93		25.4	0.0
100	QPSK	135	138		23.82		25.4	0.0
100	QPSK	270	0		23.86			

Part27O n77 PC2 Ant 4 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	QPSK	1	1	15.33	15.63	15.31	16.2	0.0
100	QPSK	1	137	15.39	15.41	15.22		
100	QPSK	1	271	15.34	15.50	15.39		
100	QPSK	135	0	15.44	15.39	15.27	16.2	0.0
100	QPSK	135	69	15.39	15.52	15.17	16.2	0.0
100	QPSK	135	138	15.36	15.46	15.41	16.2	0.0
100	QPSK	270	0	15.42	15.46	15.21		

Part27Q n77 PC2 Ant 4 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		15.66		16.2	0.0
100	QPSK	1	137		15.40			
100	QPSK	1	271		15.53			
100	QPSK	135	0		15.39		16.2	0.0
100	QPSK	135	69		15.64		16.2	0.0
100	QPSK	135	138		15.54		16.2	0.0
100	QPSK	270	0		15.42			

Part27O n78 PC2 Ant 4 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					650000			
Frequency (MHz)					3750			
100	QPSK	1	1		15.56		16.2	0.0
100	QPSK	1	137		15.40			
100	QPSK	1	271		15.41			
100	QPSK	135	0		15.44		16.2	0.0
100	QPSK	135	69		15.52		16.2	0.0
100	QPSK	135	138		15.35		16.2	0.0
100	QPSK	270	0		15.51			

Part27Q n78 PC2 Ant 4 DSI2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					633334			
Frequency (MHz)					3500.01			
100	QPSK	1	1		15.57		16.2	0.0
100	QPSK	1	137		15.36			
100	QPSK	1	271		15.51			
100	QPSK	135	0		15.44		16.2	0.0
100	QPSK	135	69		15.53		16.2	0.0
100	QPSK	135	138		15.47		16.2	0.0
100	QPSK	270	0		15.55			

<WLAN Conducted Power>

General Note:

1. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For “Not required”, SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration. Additional output power measurements were not necessary.
2. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
3. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
4. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
5. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
   a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
   b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
   c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
6. 802.11 ax supports both full tone size mode and partial tone size mode, after verification on partial tone size mode that partial size tone mode power will not be higher than full tone size mode, therefore, full tone mode power was chosen to be measured in this report.
7. For WLAN2.4GHz/5GHz SISO & MIMO(CDD) &TX Beamforming mode of 802.11ax, and WLAN SISO & TX Beamforming mode is not higher than WLAN MIMO(CDD) mode, so conducted power of WLAN2.4GHz/5GHz SISO &Tx Beamforming mode is not required.
8. SISO and MIMO all supported by WLAN2.4GHz/WLAN5GHz, for SISO mode power is less than per chain power of MIMO mode. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power, so only chose MIMO mode to perform SAR testing. However, in order to do SISO simultaneous transmission, we tested the WLAN 2.4GHz SISO antenna 9.
9. For the conducted power measurement is MIMO chains transmitting simultaneously and measured the separately conducted power for both chains and then based on the conducted power of two antennas respectively to calculate sum of the power for MIMO mode.

<WLAN2.4GHz>

2.4GHz WLAN				Ant 7 Default Body-Worn&Extremity Standalone Non DBS		Ant 9 Default Body-Worn&Extremity Standalone Non DBS		Ant 7+9 Default Body-Worn&Extremity Standalone Non DBS		Duty Cycle %
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.50	21.00	19.54	21.00	22.53	24.00	98.35
		6	2437	19.56	21.00	19.48	21.00	22.53	24.00	
		11	2462	19.58	21.00	19.67	21.50	22.64	24.30	

2.4GHz WLAN				Ant 7 Head Standalone Non DBS		Ant 9 Head Standalone Non DBS		Ant 7+9 Head Standalone Non DBS		Ant 7 Hotspot Standalone Non DBS		Ant 9 Hotspot Standalone Non DBS		Ant 7+9 Hotspot Standalone Non DBS		Duty Cycle %
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	
2.4GHz WLAN	802.11b 1Mbps	1	2412	15.71	17.50	16.38	18.00	19.07	20.80	17.62	19.00	18.22	20.00	20.94	22.50	98.35
		6	2437	15.75	17.50	16.55	18.00	19.18	20.80	17.73	19.00	18.24	20.00	21.00	22.50	
		11	2462	15.81	17.50	16.56	18.00	19.21	20.80	17.75	19.00	18.41	20.00	21.10	22.50	

<WLAN5.2GHz>

5.2GHz WLAN				Ant 8 Default Body-Worn&Extremity Standalone Non DBS		Ant 10 Default Body-Worn&Extremity Standalone Non DBS		Ant 8+10 Default Body-Worn&Extremity Standalone Non DBS		Duty Cycle %
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	
5.2GHz WLAN	802.11a 6Mbps	36	5180	19.02	20.50	19.33	21.00	22.19	23.80	99.32
		40	5200	19.55	21.00	19.67	21.50	22.62	24.30	
		44	5220	19.51	21.00	19.61	21.50	22.57	24.30	
		48	5240	19.45	21.00	19.52	21.00	22.50	24.00	

5.2GHz WLAN				Ant 8 Head Standalone Non DBS		Ant 10 Head Standalone Non DBS		Ant 8+10 Head Standalone Non DBS		Ant 8 Hotspot Standalone Non DBS		Ant 10 Hotspot Standalone Non DBS		Ant 8+10 Hotspot Standalone Non DBS		Duty Cycle %
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	
5.2GHz WLAN	802.11a 6Mbps	36	5180	Not Required		Not Required		Not Required		18.60	20.00	18.78	20.00	21.70	23.00	99.32
		40	5200							18.55	20.00	18.67	20.00	21.62	23.00	
		44	5220							18.60	20.00	18.59	20.00	21.61	23.00	
		48	5240							18.57	20.00	18.59	20.00	21.59	23.00	
	802.11ac-VHT80 MCS0	42	5210	13.66	15.50	13.61	15.00	16.65	18.30	Not Required		Not Required		Not Required		100.00

<WLAN5.3GHz>

5.3GHz WLAN				Ant 8 Default Body-Worn&Extremity Standalone Non DBS		Ant 10 Default Body-Worn&Extremity Standalone Non DBS		Ant 8+10 Default Body-Worn&Extremity Standalone Non DBS		Ant 8 Head Standalone Non DBS		Ant 10 Head Standalone Non DBS		Ant 8+10 Head Standalone Non DBS		Duty Cycle %
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	
5.3GHz WLAN	802.11a 6Mbps	52	5260	19.88	21.50	19.49	21.00	22.70	24.30	Not Required		Not Required		Not Required		99.32
		56	5280	19.95	21.50	19.44	21.00	22.71	24.30							
		60	5300	19.55	21.00	18.96	20.50	22.28	23.80							
		64	5320	20.15	21.50	19.57	21.00	22.88	24.30							
	802.11ac-VHT160 MCS0	50	5250							14.56	15.50	13.88	15.00	17.24	18.30	100

<WLAN5.5GHz>

5.5GHz WLAN				Ant 8 Default Body-Worn&Extremity Standalone Non DBS		Ant 10 Default Body-Worn&Extremity Standalone Non DBS		Ant 8+10 Default Body-Worn&Extremity Standalone Non DBS		Ant 8 Head Standalone Non DBS		Ant 10 Head Standalone Non DBS		Ant 8+10 Head Standalone Non DBS		Duty Cycle %
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	19.62	21.00	18.74	20.50	22.21	23.80	Not Required		Not Required		Not Required		99.32
		116	5580	19.67	21.00	18.96	20.50	22.34	23.80							
		124	5620	19.55	21.00	18.87	20.50	22.23	23.80							
		132	5660	19.33	21.00	18.96	20.50	22.16	23.80							
		140	5700	19.28	21.00	18.86	20.50	22.09	23.80							
		144	5720	18.99	20.50	18.24	20.00	21.64	23.30							
	802.11ac-VHT160 MCS0	114	5570							14.22	15.50	13.35	15.00	16.82	18.30	100.00

<WLAN5.8GHz>

5.8GHz WLAN				Ant 8 Default Hotspot Standalone Non DBS Body-Worn&Extremity Standalone Non DBS		Ant 10 Default Hotspot Standalone Non DBS Body-Worn&Extremity Standalone Non DBS		Ant 8+10 Default Hotspot Standalone Non DBS Body-Worn&Extremity Standalone Non DBS		Ant 8 Head Standalone Non DBS		Ant 10 Head Standalone Non DBS		Ant 8+10 Head Standalone Non DBS		Duty Cycle %
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	
5.8GHz WLAN	802.11a 6Mbps	149	5745	19.14	20.50	19.08	20.00	22.12	23.30	Not Required		Not Required		Not Required		99.32
		157	5785	18.93	20.50	18.57	19.50	21.76	23.00							
		165	5825	19.11	20.50	18.60	19.50	21.87	23.00							
	802.11ac-VHT80 MCS0	155	5775							15.84	16.50	14.83	15.50	18.37	19.00	100.00

<WiFi 6E> standard client

					Ant 8 For Default / Full Power Head		Ant 10 For Default / Full Power Head		Ant 8+10 For Default / Full Power Head		Duty Cycle %
	Band	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	
WiFi 6E	UNII 5 (5.925-6.425GHz)	802.11ax-HE160 MCS0	15	6025	14.17	16.00	14.32	16.00	17.04	19.00	100.00
			47	6185	14.52	16.00	13.51	15.00	17.17	18.50	
	UNII 7 (6.525-6.885GHz)	802.11ax-HE160 MCS0	143	6665	14.37	16.00	13.67	15.50	17.01	19.00	100.00

					Ant 8 Body worn&Extremity		Ant 10 Body worn&Extremity		Ant 8+10 Body worn&Extremity		Duty Cycle %
	Band	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	
WiFi 6E	UNII 5 (5.925-6.425GHz)	802.11ax-HE160 MCS0	15	6025	11.19	13.00	11.32	13.00	14.27	16.00	100.00
			47	6185	11.32	13.00	11.05	13.00	14.20	16.00	
	UNII 7 (6.525-6.885GHz)	802.11ax-HE160 MCS0	143	6665	10.75	12.50	10.16	12.00	13.48	15.30	100.00

<WiFi 6E> indoor client

					Ant 8 For Default / Full Power Head		Ant 10 For Default / Full Power Head		Ant 8+10 For Default / Full Power Head		Duty Cycle %
	Band	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	
WiFi 6E	UNII 5 (5.925-6.425GHz)	802.11ax-HE160 MCS0	15	6025							100.00
			47	6185							
	UNII 6 (6.425-6.525GHz)	802.11ax-HE160 MCS0	111	6505	14.33	14.50	13.35	13.50	16.95	17.10	100.00
	UNII 7 (6.525-6.885GHz)	802.11ax-HE160 MCS0	143	6665							100.00
	UNII 8 (6.885-7.125GHz)	802.11ax-HE160 MCS0	207	6985	14.01	14.50	13.45	14.00	16.83	17.30	100.00

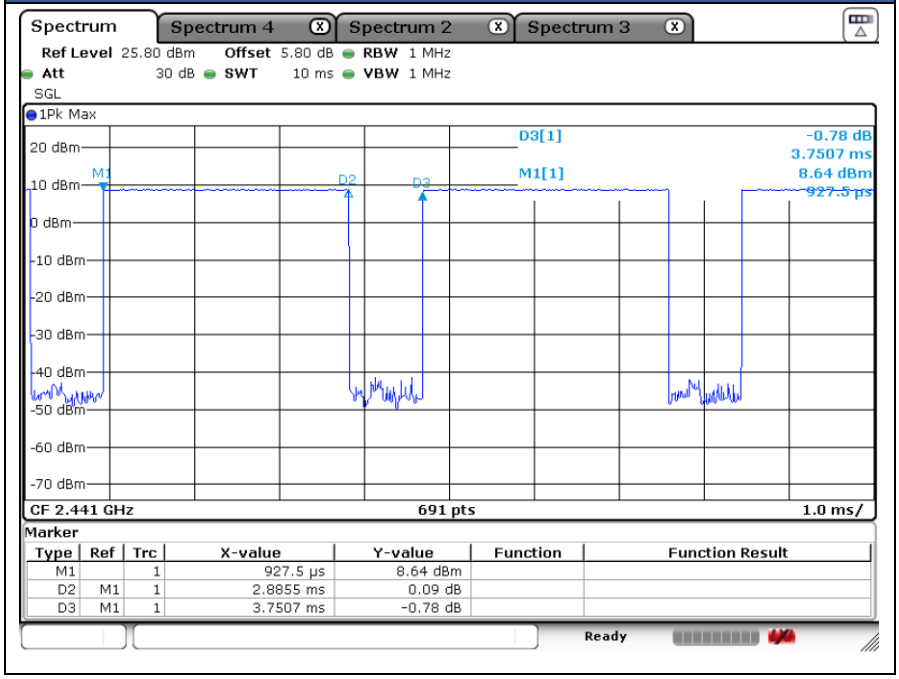
					Ant 8 Body worn&Extremity		Ant 10 Body worn&Extremity		Ant 8+10 Body worn&Extremity		Duty Cycle %
	Band	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	
WiFi 6E	UNII 5 (5.925-6.425GHz)	802.11ax-HE160 MCS0	15	6025							100.00
			47	6185							
	UNII 6 (6.425-6.525GHz)	802.11ax-HE160 MCS0	111	6505	10.79	12.50	10.69	12.50	13.75	15.50	100.00
	UNII 7 (6.525-6.885GHz)	802.11ax-HE160 MCS0	143	6665							100.00
	UNII 8 (6.885-7.125GHz)	802.11ax-HE160 MCS0	207	6985	11.01	12.50	10.41	12.00	13.73	15.30	100.00

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle are 76.93% as following figure, Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to the theoretical value of Bluetooth reported SAR calculation.

Bluetooth time-domain plot



Class1

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps		
BR / EDR	CH 00	2402	9.75		
	CH 39	2441	9.88		
	CH 78	2480	9.69		
Tune-up Limit			11		