

DASY5 Validation Report for Head TSL

Date: 11.07.2019

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 3900 MHz; Type: D3900V2; Serial: D3900V2 - SN:1022

Communication System: UID 0 - CW; Frequency: 3900 MHz, Frequency: 4100 MHz

Medium parameters used: $f = 3900 \text{ MHz}$; $\sigma = 3.23 \text{ S/m}$; $\epsilon_r = 37.2$; $\rho = 1000 \text{ kg/m}^3$.

Medium parameters used: $f = 4100 \text{ MHz}$; $\sigma = 3.41 \text{ S/m}$; $\epsilon_r = 37$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN3503; ConvF(7.25, 7.25, 7.25) @ 3900 MHz,
ConvF(7.05, 7.05, 7.05) @ 4100 MHz; Calibrated: 25.03.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.04.2019
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.2(1504); SEMCAD X 14.6.12(7470)

Dipole Calibration for Head Tissue/Pin=100 mW, d=10mm, f=3900MHz/Zoom Scan, dist=1.4mm (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 73.25 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 20.0 W/kg

SAR(1 g) = 7.03 W/kg; SAR(10 g) = 2.46 W/kg

Maximum value of SAR (measured) = 13.7 W/kg

Dipole Calibration for Head Tissue/Pin=100 mW, d=10mm, f=4100MHz/Zoom Scan,

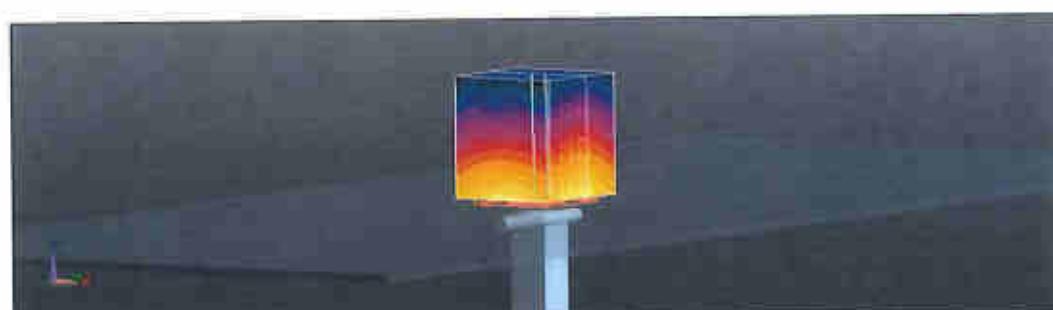
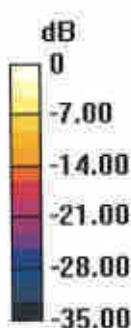
dist=1.4mm (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 69.96 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 19.0 W/kg

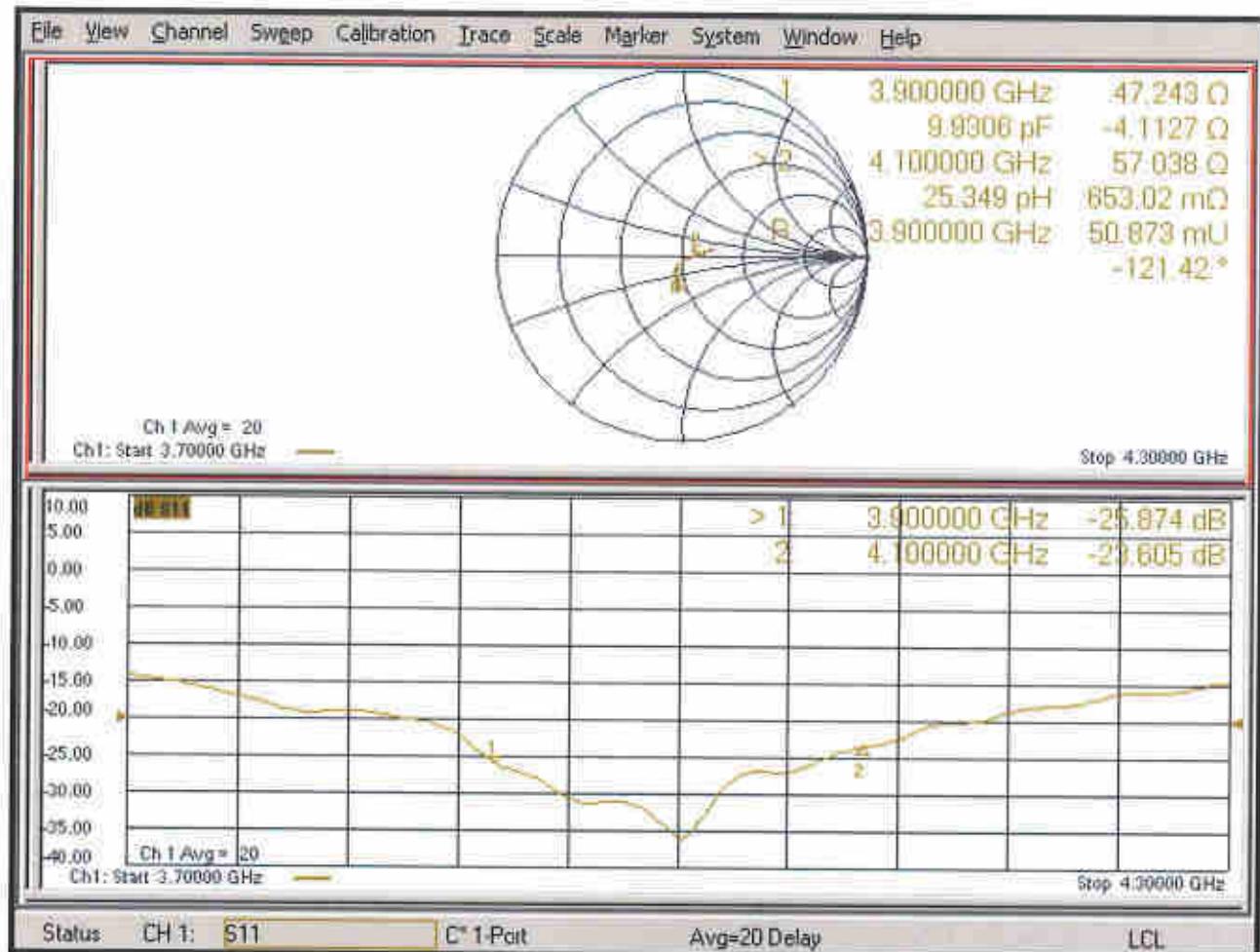
SAR(1 g) = 6.64 W/kg; SAR(10 g) = 2.32 W/kg

Maximum value of SAR (measured) = 13.2 W/kg



0 dB = 13.7 W/kg = 11.37 dBW/kg

Impedance Measurement Plot for Head TSL





D3900V2, Serial No. 1022 Extended Dipole Calibrations

Referring to KDB 865664 D01 v01r02, if dipoles are verified in return loss (<-20dB, within 20% of prior calibration), and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

D3900V2 – serial no. 1022						
	3900 Head					
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2019.7.11	-25.9		47.2		-4.1	
2020.7.7	-26.3	-1.5	47.9	0.7	-1.7	2.4

D3900V2 – serial no. 1022						
	4100 Head					
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2019.7.11	-23.6		57.0		0.7	
2020.7.7	-23.3	1.3	58.2	1.2	-1.1	-1.8

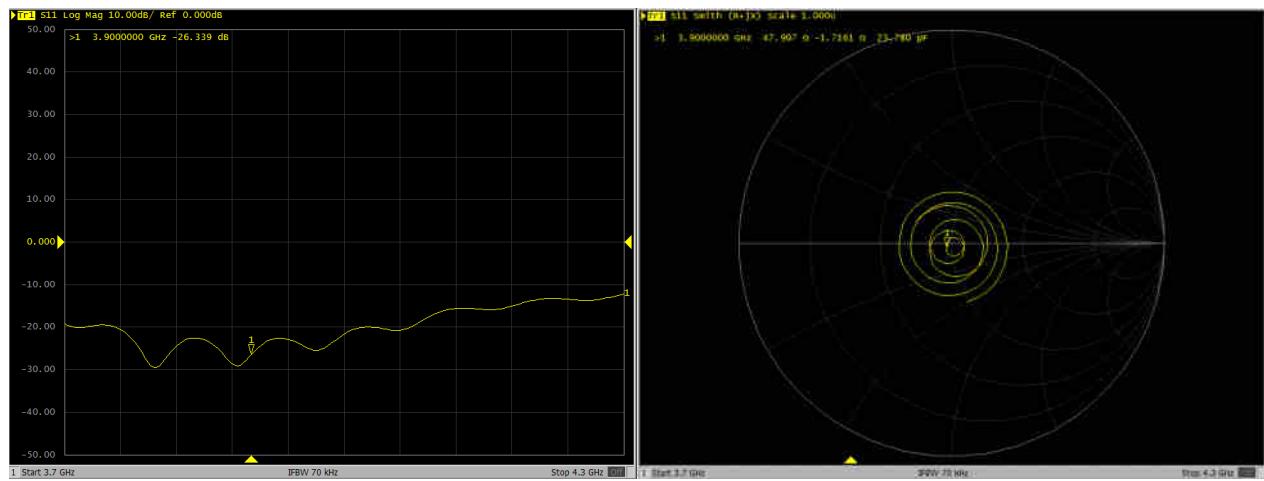
<Justification of the extended calibration>

The return loss is < -20dB, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

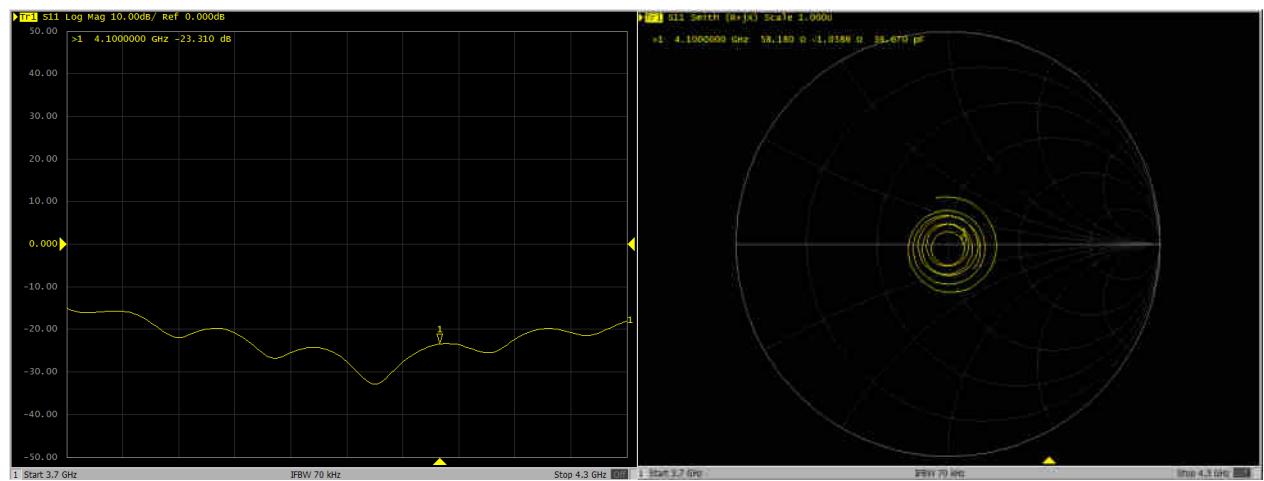


Dipole Verification Data > D3900V2, serial no. 1022

3900MHz - Head



4100MHz - Head





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Accreditation No.: SCS 0108

Client Sporton

Certificate No: D5GHzV2-1113_Sep19

CALIBRATION CERTIFICATE

Object D5GHzV2 - SN:1113

Calibration procedure(s) QA CAL-22.v4
Calibration Procedure for SAR Validation Sources between 3-6 GHz

Calibration date: September 24, 2019

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	03-Apr-19 (No. 217-02892/02893)	Apr-20
Power sensor NRP-Z91	SN: 103244	03-Apr-19 (No. 217-02892)	Apr-20
Power sensor NRP-Z91	SN: 103245	03-Apr-19 (No. 217-02893)	Apr-20
Reference 20 dB Attenuator	SN: 5058 (20k)	04-Apr-19 (No. 217-02894)	Apr-20
Type-N mismatch combination	SN: 5047.2 / 06327	04-Apr-19 (No. 217-02895)	Apr-20
Reference Probe EX3DV4	SN: 3503	25-Mar-19 (No. EX3-3503_Mar19)	Mar-20
DAE4	SN: 601	30-Apr-19 (No. DAE4-601_Apr19)	Apr-20

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Feb-19)	In house check: Oct-20
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-18)	In house check: Oct-20
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-18)	In house check: Oct-20
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-18)	In house check: Oct-20
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-18)	In house check: Oct-19

Calibrated by:	Name	Function	Signature
	Jeton Kastrati	Laboratory Technician	

Approved by:	Name	Function	Signature
	Katja Pokovic	Technical Manager	

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Issued: September 25, 2019



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Accreditation No.: SCS 0108

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

- e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.10.2
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V5.0	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	$dx, dy = 4.0 \text{ mm}, dz = 1.4 \text{ mm}$	Graded Ratio = 1.4 (Z direction)
Frequency	$5250 \text{ MHz} \pm 1 \text{ MHz}$ $5600 \text{ MHz} \pm 1 \text{ MHz}$ $5750 \text{ MHz} \pm 1 \text{ MHz}$	

Head TSL parameters at 5250 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.9	4.71 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.1 ± 6 %	4.53 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	---	---

SAR result with Head TSL at 5250 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.09 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	80.5 W/kg ± 19.9 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.33 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.1 W/kg ± 19.5 % (k=2)

Head TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.5	5.07 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.6 ± 6 %	4.88 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	---	---

SAR result with Head TSL at 5600 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.40 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	83.4 W/kg ± 19.9 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.40 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.8 W/kg ± 19.5 % (k=2)

Head TSL parameters at 5750 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.4	5.22 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.4 ± 6 %	5.03 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL at 5750 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.06 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	80.0 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.30 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.8 W/kg ± 19.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 5250 MHz

Impedance, transformed to feed point	51.7 Ω - 6.2 $j\Omega$
Return Loss	-24.0 dB

Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	56.0 Ω - 2.7 $j\Omega$
Return Loss	-24.1 dB

Antenna Parameters with Head TSL at 5750 MHz

Impedance, transformed to feed point	56.7 Ω - 1.0 $j\Omega$
Return Loss	-23.9 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.195 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
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DASY5 Validation Report for Head TSL

Date: 24.09.2019

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1113

Communication System: UID 0 - CW; Frequency: 5250 MHz, Frequency: 5600 MHz, Frequency: 5750 MHz

Medium parameters used: $f = 5250 \text{ MHz}$; $\sigma = 4.53 \text{ S/m}$; $\epsilon_r = 35.1$; $\rho = 1000 \text{ kg/m}^3$,

Medium parameters used: $f = 5600 \text{ MHz}$; $\sigma = 4.88 \text{ S/m}$; $\epsilon_r = 34.6$; $\rho = 1000 \text{ kg/m}^3$,

Medium parameters used: $f = 5750 \text{ MHz}$; $\sigma = 5.03 \text{ S/m}$; $\epsilon_r = 34.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN3503; ConvF(5.4, 5.4, 5.4) @ 5250 MHz, ConvF(4.95, 4.95, 4.95) @ 5600 MHz, ConvF(4.98, 4.98, 4.98) @ 5750 MHz; Calibrated: 25.03.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.04.2019
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.2(1504); SEMCAD X 14.6.12(7470)

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5250 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 78.54 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 27.9 W/kg

SAR(1 g) = 8.09 W/kg; SAR(10 g) = 2.33 W/kg

Maximum value of SAR (measured) = 18.1 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 78.00 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 31.1 W/kg

SAR(1 g) = 8.40 W/kg; SAR(10 g) = 2.40 W/kg

Maximum value of SAR (measured) = 19.4 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5750 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 75.13 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 31.8 W/kg

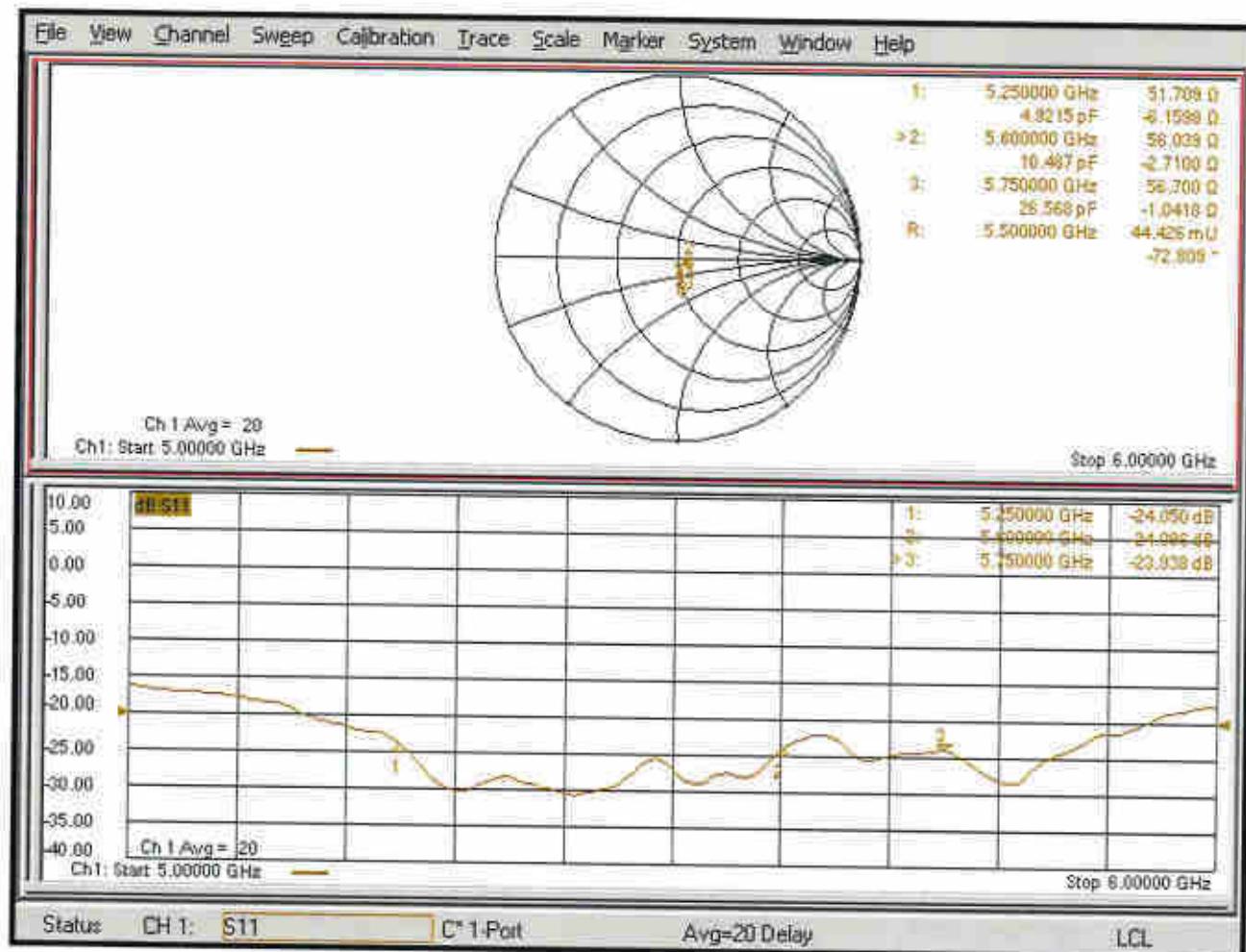
SAR(1 g) = 8.06 W/kg; SAR(10 g) = 2.30 W/kg

Maximum value of SAR (measured) = 19.0 W/kg



0 dB = 18.1 W/kg = 12.58 dBW/kg

Impedance Measurement Plot for Head TSL





D5GHzV2, Serial No. 1113 Extended Dipole Calibrations

Referring to KDB 865664 D01 v01r02, if dipoles are verified in return loss (<-20dB, within 20% of prior calibration), and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

D5GHzV2 – serial no. 1113						
5250 Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2019.9.24	-24.05		51.71		-6.16	
2020.9.23	-24.80	-0.03	50.56	1.15	-5.94	-0.22

D5GHzV2 – serial no. 1113						
5600 Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2019.9.24	-24.09		56.04		-2.71	
2020.9.23	-23.95	0.01	57.70	-1.66	-2.85	0.14

D5GHzV2 – serial no. 1113						
5750 Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2019.9.24	-23.94		56.70		-1.04	
2020.9.23	-21.92	0.08	58.56	-1.86	-1.58	0.54

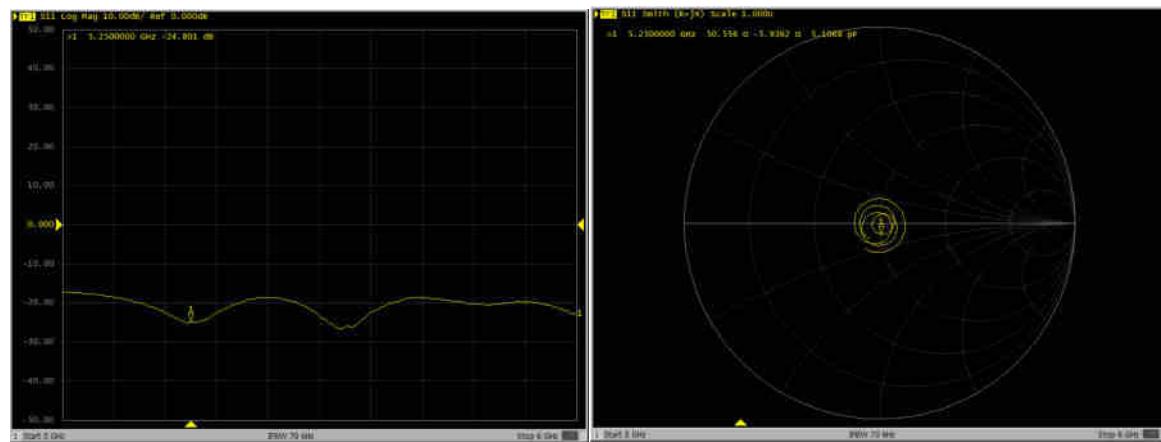
<Justification of the extended calibration>

The return loss is < -20dB, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

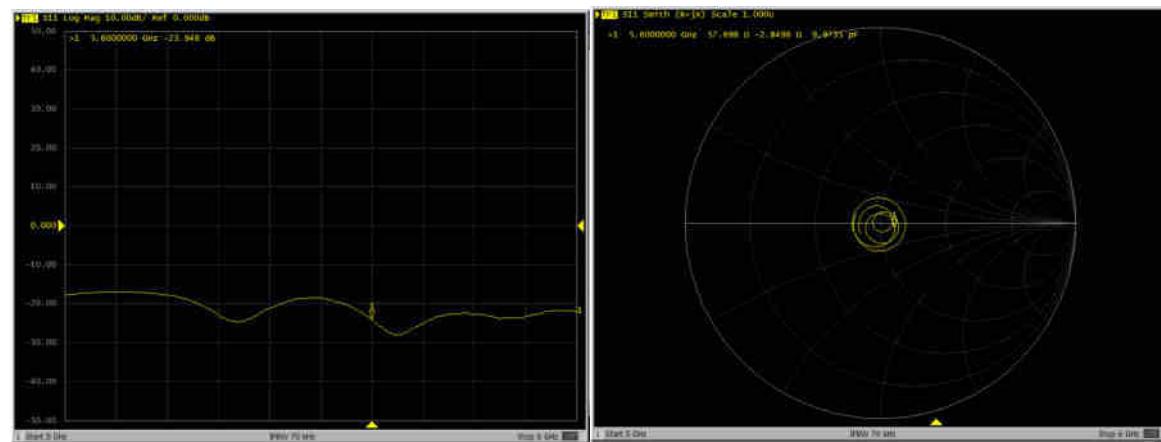


Dipole Verification Data > D3700V2, serial no. 1008

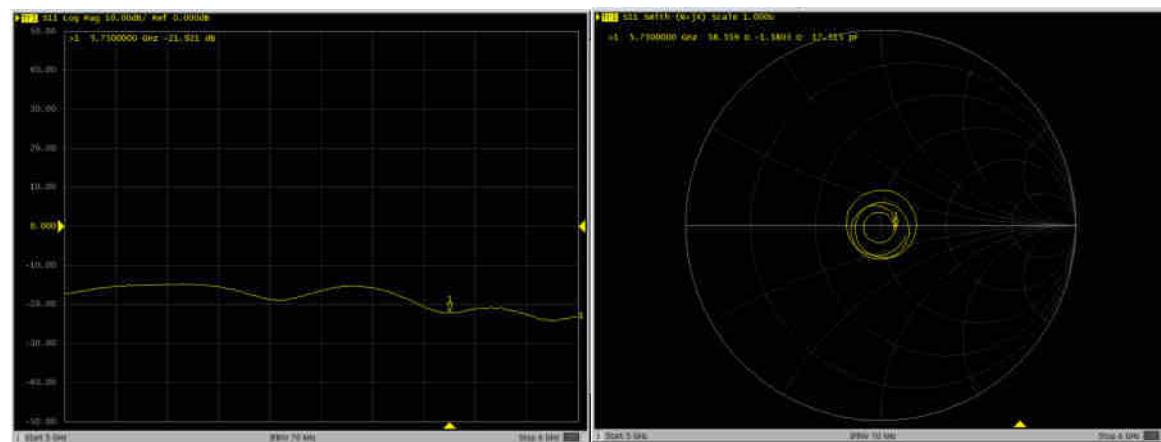
5250MHz – Head



5600MHz – Head



5750MHz – Head





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Client Sporton

Accreditation No.: SCS 0108

Certificate No: DAE4-690_Mar20

CALIBRATION CERTIFICATE

Object DAE4 - SD 000 D04 BM - SN: 690

Calibration procedure(s) QA CAL-06.v30
Calibration procedure for the data acquisition electronics (DAE)

Calibration date: March 26, 2020

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^\circ\text{C}$ and humidity $< 70\%$.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Keithley Multimeter Type 2001	SN: 0810278	03-Sep-19 (No:25949)	Sep-20
Secondary Standards	ID #	Check Date (in-house)	Scheduled Check
Auto DAE Calibration Unit:	SE UWS 053 AA 1001	09-Jan-20 (in house check)	In house check: Jan-21
Calibrator Box V2.1	SE UMS 006 AA 1002	09-Jan-20 (in house check)	In house check: Jan-21

Calibrated by:	Name Eric Hainfeld	Function Laboratory Technician	Signature
Approved by:	Sven Kühn	Deputy Manager	

Issued: March 26, 2020

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Glossary

DAE	data acquisition electronics
Connector angle	information used in DASY system to align probe sensor X to the robot coordinate system.

Methods Applied and Interpretation of Parameters

- *DC Voltage Measurement:* Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- *Connector angle:* The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The following parameters as documented in the Appendix contain technical information as a result from the performance test and require no uncertainty.
 - *DC Voltage Measurement Linearity:* Verification of the Linearity at +10% and -10% of the nominal calibration voltage. Influence of offset voltage is included in this measurement.
 - *Common mode sensitivity:* Influence of a positive or negative common mode voltage on the differential measurement.
 - *Channel separation:* Influence of a voltage on the neighbor channels not subject to an input voltage.
 - *AD Converter Values with inputs shorted:* Values on the internal AD converter corresponding to zero input voltage
 - *Input Offset Measurement:* Output voltage and statistical results over a large number of zero voltage measurements.
 - *Input Offset Current:* Typical value for information; Maximum channel input offset current, not considering the input resistance.
 - *Input resistance:* Typical value for information: DAE input resistance at the connector, during internal auto-zeroing and during measurement.
 - *Low Battery Alarm Voltage:* Typical value for information. Below this voltage, a battery alarm signal is generated.
 - *Power consumption:* Typical value for information. Supply currents in various operating modes.

DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = $6.1\mu V$, full range = -100...+300 mV

Low Range: 1LSB = $61nV$, full range = -1.....+3mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Calibration Factors	X	Y	Z
High Range	$404.708 \pm 0.02\% (k=2)$	$404.320 \pm 0.02\% (k=2)$	$405.284 \pm 0.02\% (k=2)$
Low Range	$3.98091 \pm 1.50\% (k=2)$	$3.99691 \pm 1.50\% (k=2)$	$3.93809 \pm 1.50\% (k=2)$

Connector Angle

Connector Angle to be used in DASY system	$34.0^\circ \pm 1^\circ$
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Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

High Range		Reading (μ V)	Difference (μ V)	Error (%)
Channel X	+ Input	200033.46	0.84	0.00
Channel X	+ Input	20008.04	2.81	0.01
Channel X	- Input	-20004.44	1.63	-0.01
Channel Y	+ Input	200033.01	0.28	0.00
Channel Y	+ Input	20004.74	-0.31	-0.00
Channel Y	- Input	-20006.65	-0.48	0.00
Channel Z	+ Input	200032.64	-2.81	-0.00
Channel Z	+ Input	20006.13	1.16	0.01
Channel Z	- Input	-20004.98	1.17	-0.01

Low Range		Reading (μ V)	Difference (μ V)	Error (%)
Channel X	+ Input	2000.43	-0.43	-0.02
Channel X	+ Input	200.02	-0.96	-0.48
Channel X	- Input	-198.74	0.19	-0.09
Channel Y	+ Input	2001.49	0.62	0.03
Channel Y	+ Input	200.61	-0.27	-0.13
Channel Y	- Input	-200.64	-1.61	0.81
Channel Z	+ Input	2001.03	0.27	0.01
Channel Z	+ Input	200.69	-0.18	-0.09
Channel Z	- Input	-199.00	0.18	-0.09

2. Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Common mode Input Voltage (mV)	High Range Average Reading (μ V)	Low Range Average Reading (μ V)
Channel X	200	14.15	12.87
	-200	-12.83	-14.22
Channel Y	200	2.88	2.89
	-200	-4.30	-4.61
Channel Z	200	0.04	0.39
	-200	-0.98	-1.01

3. Channel separation

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Input Voltage (mV)	Channel X (μ V)	Channel Y (μ V)	Channel Z (μ V)
Channel X	200	-	-2.69	-2.68
Channel Y	200	7.95	-	-0.72
Channel Z	200	6.90	5.66	-

4. AD-Converter Values with inputs shorted

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	High Range (LSB)	Low Range (LSB)
Channel X	16115	16314
Channel Y	16039	16490
Channel Z	16004	15469

5. Input Offset Measurement

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec
Input 10MΩ

	Average (μ V)	min. Offset (μ V)	max. Offset (μ V)	Std. Deviation (μ V)
Channel X	0.25	-1.26	1.64	0.55
Channel Y	-0.70	-1.97	1.10	0.51
Channel Z	1.51	-0.80	2.84	0.58

6. Input Offset Current

Nominal Input circuitry offset current on all channels: <25fA

7. Input Resistance (Typical values for information)

	Zeroing (kOhm)	Measuring (MOhm)
Channel X	200	200
Channel Y	200	200
Channel Z	200	200

8. Low Battery Alarm Voltage (Typical values for information)

Typical values	Alarm Level (VDC)
Supply (+ Vcc)	+7.9
Supply (- Vcc)	-7.6

9. Power Consumption (Typical values for information)

Typical values	Switched off (mA)	Stand by (mA)	Transmitting (mA)
Supply (+ Vcc)	+0.01	+6	+14
Supply (- Vcc)	-0.01	-8	-9



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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client Sporton

Certificate No: EX3-7592_May20

CALIBRATION CERTIFICATE

Object EX3DV4 - SN:7592

Calibration procedure(s) QA CAL-01.v9, QA CAL-14.v5, QA CAL-23.v5, QA CAL-25.v7
Calibration procedure for dosimetric E-field probes

Calibration date: May 22, 2020

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	01-Apr-20 (No. 217-03100/03101)	Apr-21
Power sensor NRP-Z91	SN: 103244	01-Apr-20 (No. 217-03100)	Apr-21
Power sensor NRP-Z91	SN: 103245	01-Apr-20 (No. 217-03101)	Apr-21
Reference 20 dB Attenuator	SN: CC2552 (20x)	31-Mar-20 (No. 217-03106)	Apr-21
DAE4	SN: 660	27-Dec-19 (No. DAE4-660_Dec19)	Dec-20
Reference Probe ES3DV2	SN: 3013	31-Dec-19 (No. ES3-3013_Dec19)	Dec-20
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
RF generator HP 8848C	SN: US3642U01700	04-Aug-99 (in house check Jun-18)	In house check: Jun-20
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-19)	In house check: Oct-20

Calibrated by:	Name	Function	Signature
	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Issued: May 27, 2020



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 0108**

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Glossary:

TSL	tissue simulating liquid
NORM x,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORM x,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization β	β rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\beta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- $NORMx,y,z$: Assessed for E-field polarization $\beta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). $NORMx,y,z$ are only intermediate values, i.e., the uncertainties of $NORMx,y,z$ does not affect the E^2 -field uncertainty inside TSL (see below ConvF).
- $NORM(f)x,y,z = NORMx,y,z * frequency_response$ (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- $DCPx,y,z$: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR : PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- $Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z; A, B, C, D$ are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters*: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and Inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to $NORMx,y,z * ConvF$ whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: In a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the $NORMx$ (no uncertainty required).

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7592

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.66	0.47	0.46	$\pm 10.1\%$
DCP (mV) ^B	98.7	100.2	98.2	

Calibration Results for Modulation Response

UID	Communication System Name	A dB	B dB/ μV	C	D dB	VR mV	Max dev.	Max Unc ^E (k=2)
0	CW	X 0.00	0.00	1.00	0.00	143.0	$\pm 3.3\%$	$\pm 4.7\%$
		Y 0.00	0.00	1.00		137.6		
		Z 0.00	0.00	1.00		139.6		
10352-AAA	Pulse Waveform (200Hz, 10%)	X 20.00	96.67	23.94	10.00	60.0	$\pm 3.2\%$	$\pm 9.6\%$
		Y 20.00	95.48	23.94		60.0		
		Z 20.00	95.35	23.55		60.0		
10353-AAA	Pulse Waveform (200Hz, 20%)	X 20.00	98.13	23.72	6.99	80.0	$\pm 1.6\%$	$\pm 9.6\%$
		Y 20.00	96.17	23.28		80.0		
		Z 20.00	99.34	24.32		80.0		
10354-AAA	Pulse Waveform (200Hz, 40%)	X 20.00	103.13	24.87	3.98	95.0	$\pm 1.2\%$	$\pm 9.6\%$
		Y 20.00	100.39	24.05		95.0		
		Z 20.00	107.03	26.46		95.0		
10355-AAA	Pulse Waveform (200Hz, 60%)	X 20.00	109.16	26.39	2.22	120.0	$\pm 1.2\%$	$\pm 9.6\%$
		Y 20.00	106.91	25.85		120.0		
		Z 20.00	115.84	28.99		120.0		
10387-AAA	QPSK Waveform, 1 MHz	X 1.66	64.78	14.38	1.00	150.0	$\pm 1.5\%$	$\pm 9.6\%$
		Y 1.82	65.72	15.24		150.0		
		Z 1.64	65.30	14.64		150.0		
10388-AAA	QPSK Waveform, 10 MHz	X 2.15	66.68	15.00	0.00	150.0	$\pm 1.0\%$	$\pm 9.6\%$
		Y 2.39	68.24	15.90		150.0		
		Z 2.16	67.14	15.34		150.0		
10396-AAA	64-QAM Waveform, 100 kHz	X 2.92	69.89	18.38	3.01	150.0	$\pm 0.7\%$	$\pm 9.6\%$
		Y 3.01	70.02	18.55		150.0		
		Z 2.52	68.22	17.84		150.0		
10399-AAA	64-QAM Waveform, 40 MHz	X 3.50	66.65	15.46	0.00	150.0	$\pm 0.7\%$	$\pm 9.6\%$
		Y 3.65	67.33	15.92		150.0		
		Z 3.49	66.76	15.61		150.0		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X 4.93	65.49	15.38	0.00	150.0	$\pm 1.3\%$	$\pm 9.6\%$
		Y 4.87	65.08	15.27		150.0		
		Z 4.88	65.48	15.46		150.0		

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

^A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Page 5).

^B Numerical linearization parameter; uncertainty not required.

^E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7592

Sensor Model Parameters

	C1 fF	C2 fF	α V ⁻¹	T1 ms.V ⁻²	T2 ms.V ⁻¹	T3 ms	T4 V ⁻²	T5 V ⁻¹	T6
X	50.2	372.49	35.00	18.44	0.06	5.10	1.55	0.19	1.01
Y	58.2	434.14	35.52	23.57	0.33	5.10	1.00	0.32	1.01
Z	46.8	350.57	35.76	12.03	0.37	5.09	0.94	0.20	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	9.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7592

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^H (mm)	Unc (k=2)
750	41.9	0.89	10.31	10.31	10.31	0.49	0.80	± 12.0 %
835	41.5	0.90	10.05	10.05	10.05	0.45	0.85	± 12.0 %
900	41.5	0.97	9.90	9.90	9.90	0.44	0.80	± 12.0 %
1750	40.1	1.37	8.41	8.41	8.41	0.27	0.80	± 12.0 %
1900	40.0	1.40	8.22	8.22	8.22	0.34	0.81	± 12.0 %
2000	40.0	1.40	8.11	8.11	8.11	0.31	0.80	± 12.0 %
2300	39.5	1.67	7.81	7.81	7.81	0.29	0.90	± 12.0 %
2450	39.2	1.80	7.57	7.57	7.57	0.34	0.90	± 12.0 %
2600	39.0	1.96	7.31	7.31	7.31	0.26	1.10	± 12.0 %
3500	37.9	2.91	6.66	6.66	6.66	0.40	1.35	± 14.0 %
3700	37.7	3.12	6.58	6.58	6.58	0.40	1.35	± 14.0 %
3900	37.5	3.32	6.43	6.43	6.43	0.40	1.60	± 14.0 %
4100	37.2	3.53	6.15	6.15	6.15	0.40	1.60	± 14.0 %
4400	36.9	3.84	6.13	6.13	6.13	0.35	1.80	± 14.0 %
4600	36.7	4.04	5.87	5.87	5.87	0.35	1.80	± 14.0 %
4800	36.4	4.25	5.71	5.71	5.71	0.40	1.80	± 14.0 %
4950	36.3	4.40	5.47	5.47	5.47	0.40	1.80	± 14.0 %
5250	35.9	4.71	5.24	5.24	5.24	0.40	1.80	± 14.0 %
5600	35.5	5.07	4.65	4.65	4.65	0.40	1.80	± 14.0 %
5750	35.4	5.22	4.69	4.69	4.69	0.40	1.80	± 14.0 %

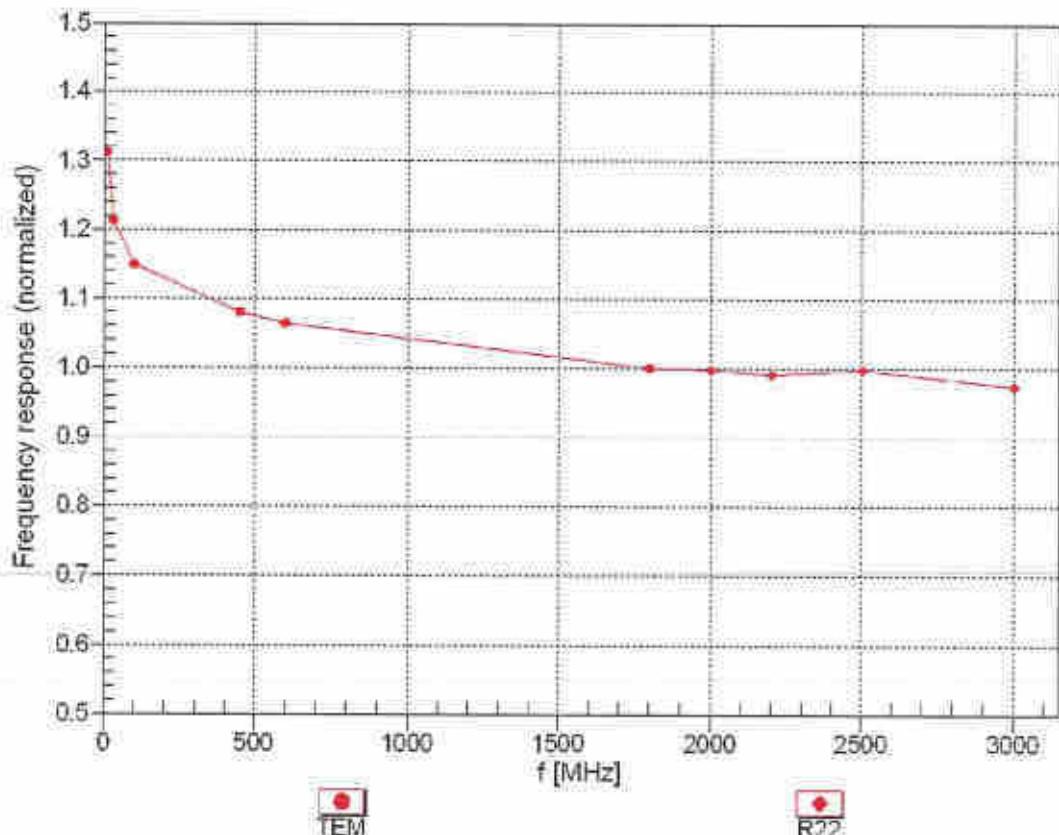
^C Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.

^F At frequencies up to 6 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters;

^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

Frequency Response of E-Field

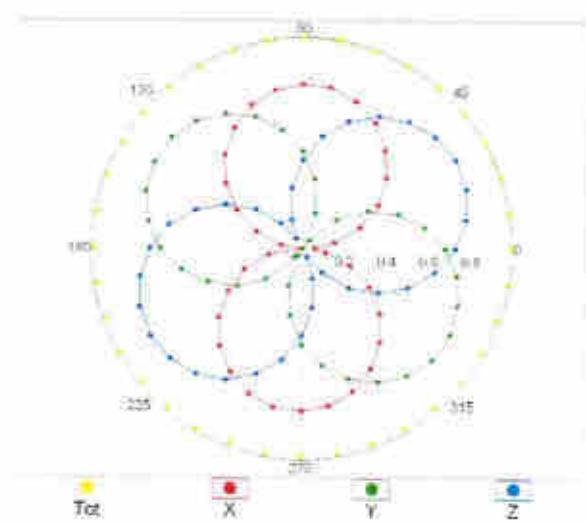
(TEM-Cell:ifi110 EXX, Waveguide: R22)



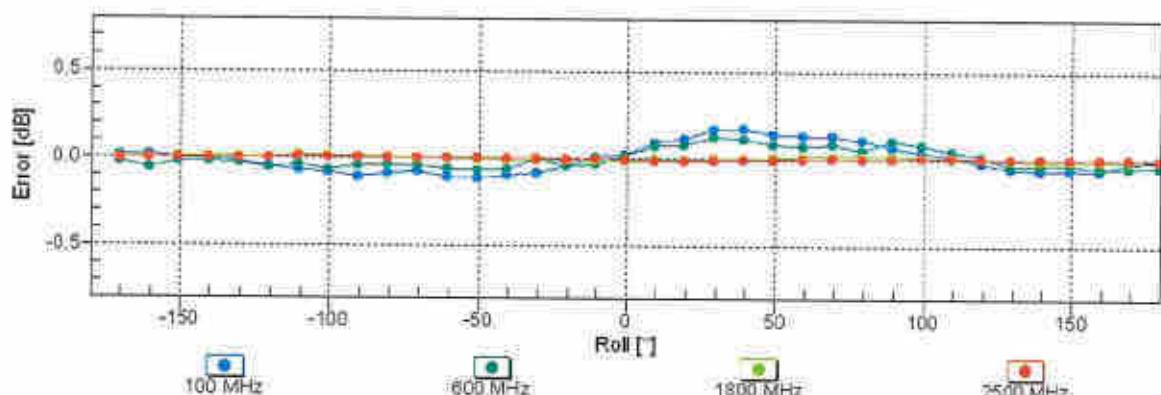
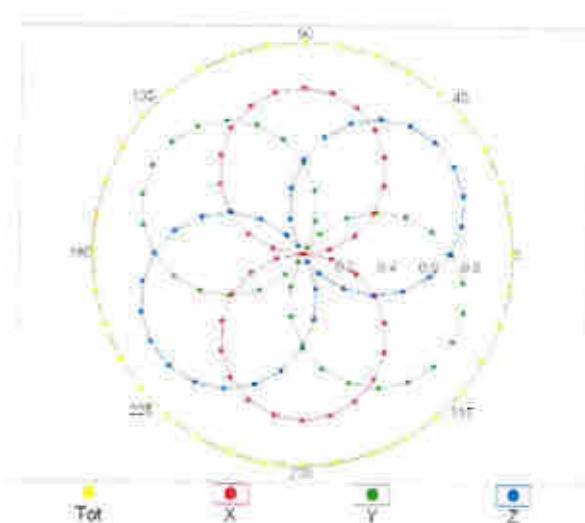
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

Receiving Pattern (ϕ), $\theta = 0^\circ$

f=600 MHz, TEM

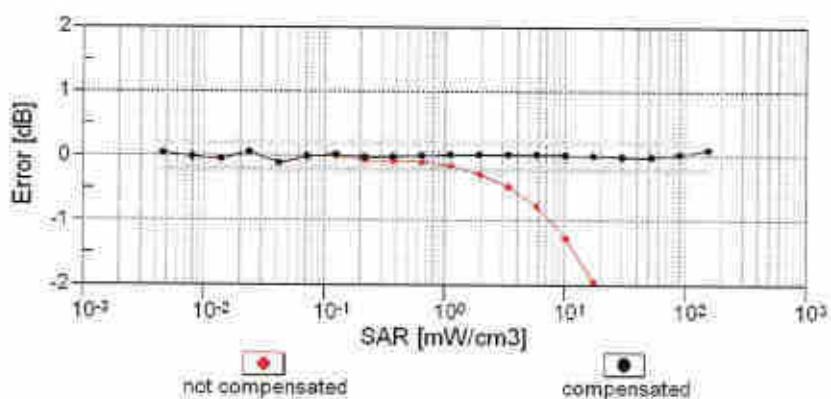
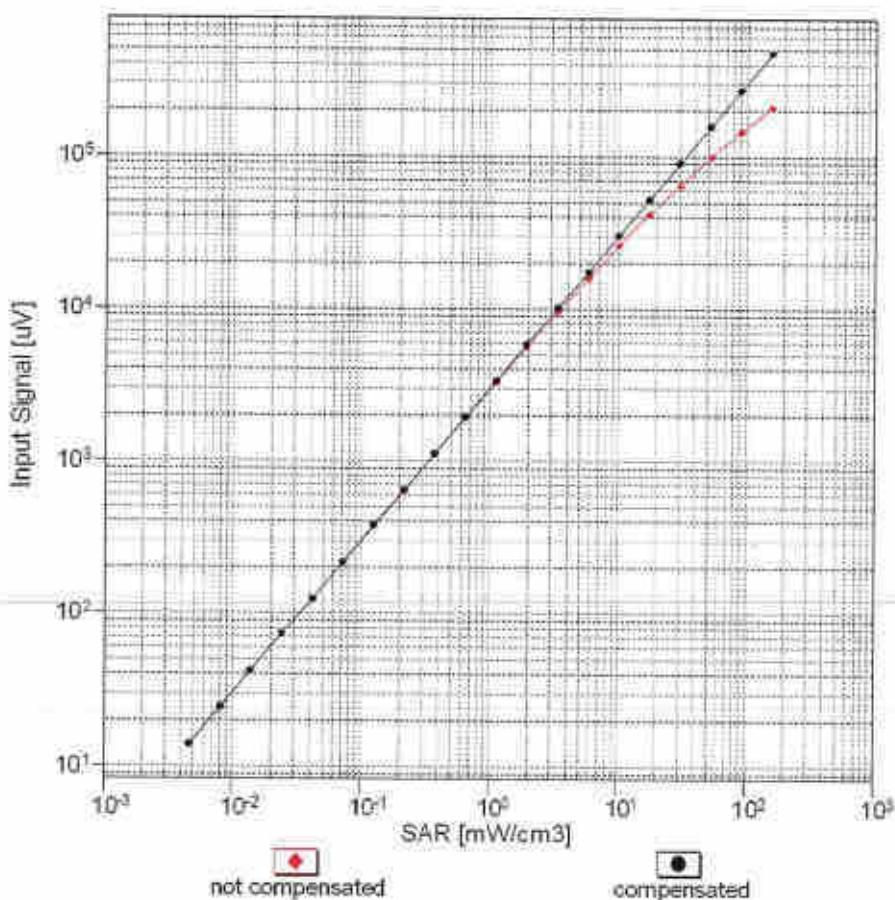


f=1800 MHz, R22



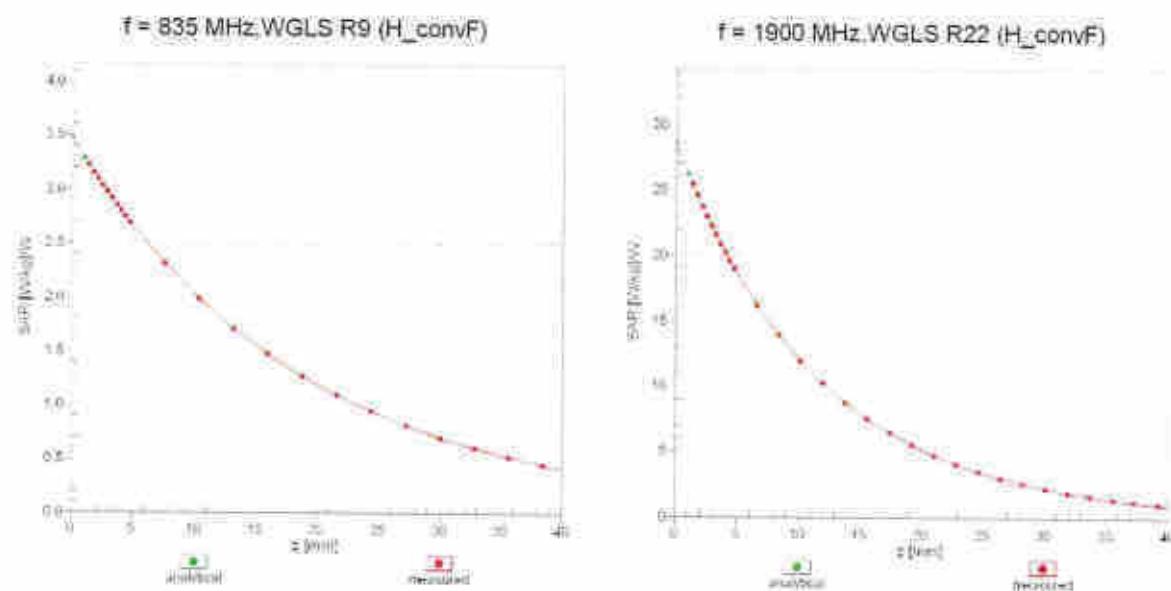
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ ($k=2$)

Dynamic Range f(SAR_{head}) (TEM cell , f_{eval}= 1900 MHz)

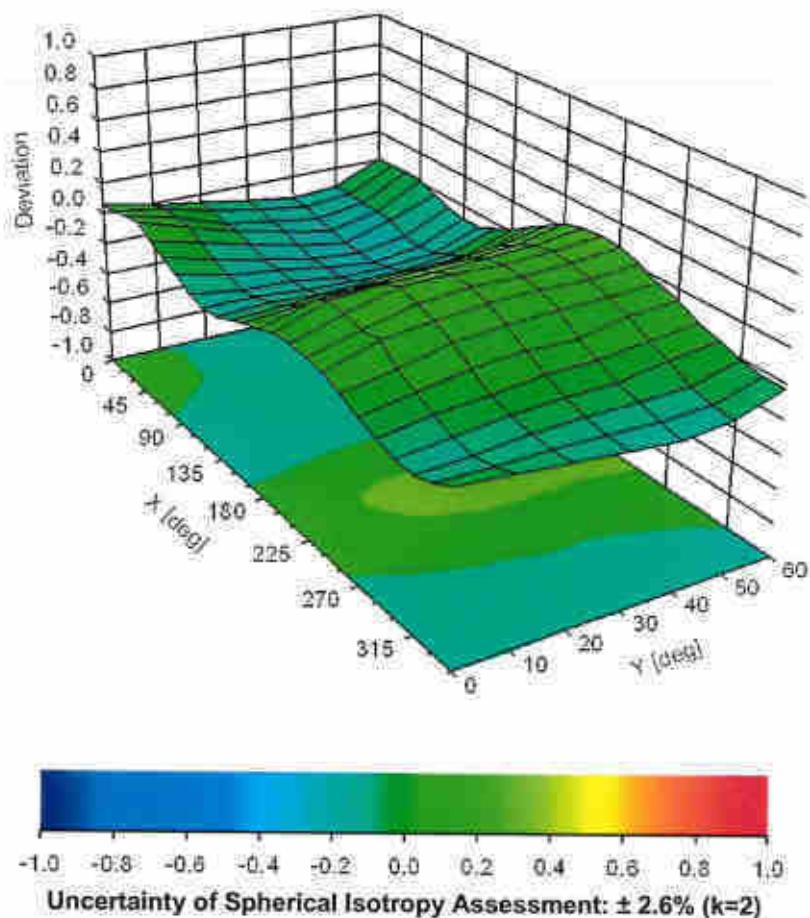


Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

Conversion Factor Assessment



Deviation from Isotropy in Liquid Error (ϕ, θ), $f = 900 \text{ MHz}$



Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^L (k=2)
0		CW	CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10028	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.65	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	± 9.6 %
10069	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	± 9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	± 9.6 %
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	± 9.6 %
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	± 9.6 %
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	± 9.6 %
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	± 9.6 %
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	± 9.6 %
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAB	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	CAB	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	± 9.6 %
10100	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	± 9.6 %
10101	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10102	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10104	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10105	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10108	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 9.6 %

10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	$\pm 9.6\%$
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	$\pm 9.6\%$
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	$\pm 9.6\%$
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	$\pm 9.6\%$
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	$\pm 9.6\%$
10114	CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	$\pm 9.6\%$
10115	CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	$\pm 9.6\%$
10116	CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	$\pm 9.6\%$
10117	CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	$\pm 9.6\%$
10118	CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	$\pm 9.6\%$
10119	CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	$\pm 9.6\%$
10140	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	$\pm 9.6\%$
10141	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	$\pm 9.6\%$
10142	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	$\pm 9.6\%$
10143	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	$\pm 9.6\%$
10144	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	$\pm 9.6\%$
10145	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	$\pm 9.6\%$
10146	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	$\pm 9.6\%$
10147	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	$\pm 9.6\%$
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	$\pm 9.6\%$
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	$\pm 9.6\%$
10151	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	$\pm 9.6\%$
10152	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	$\pm 9.6\%$
10153	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	$\pm 9.6\%$
10154	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	$\pm 9.6\%$
10155	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	$\pm 9.6\%$
10156	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	$\pm 9.6\%$
10157	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	$\pm 9.6\%$
10158	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	$\pm 9.6\%$
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	$\pm 9.6\%$
10160	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	$\pm 9.6\%$
10161	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	$\pm 9.6\%$
10162	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	$\pm 9.6\%$
10166	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	$\pm 9.6\%$
10167	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	$\pm 9.6\%$
10168	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	$\pm 9.6\%$
10169	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	$\pm 9.6\%$
10170	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	$\pm 9.6\%$
10171	AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	$\pm 9.6\%$
10172	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	$\pm 9.6\%$
10173	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	$\pm 9.6\%$
10174	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	$\pm 9.6\%$
10175	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	$\pm 9.6\%$
10176	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	$\pm 9.6\%$
10177	CAI	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	$\pm 9.6\%$
10178	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	$\pm 9.6\%$
10179	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	$\pm 9.6\%$
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	$\pm 9.6\%$
10181	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	$\pm 9.6\%$
10182	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	$\pm 9.6\%$
10183	AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	5.73	$\pm 9.6\%$
10184	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	6.51	$\pm 9.6\%$
10185	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.50	$\pm 9.6\%$
10186	AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	$\pm 9.6\%$
10187	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	6.50	$\pm 9.6\%$
10188	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	$\pm 9.6\%$
10189	AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	$\pm 9.6\%$
10193	CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	$\pm 9.6\%$
10194	CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	$\pm 9.6\%$
10195	CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	$\pm 9.6\%$
10196	CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	$\pm 9.6\%$
10197	CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	$\pm 9.6\%$
10198	CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	$\pm 9.6\%$
10219	CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	$\pm 9.6\%$

10220	CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	$\pm 9.6\%$
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	$\pm 9.6\%$
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	$\pm 9.6\%$
10223	CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	$\pm 9.6\%$
10224	CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	$\pm 9.6\%$
10225	CAB	UMTS-FDD (HSPA+)	WCDMA	5.97	$\pm 9.6\%$
10226	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	$\pm 9.6\%$
10227	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	$\pm 9.6\%$
10228	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	$\pm 9.6\%$
10229	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	$\pm 9.6\%$
10230	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	$\pm 9.6\%$
10231	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	$\pm 9.6\%$
10232	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	$\pm 9.6\%$
10233	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	$\pm 9.6\%$
10234	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	$\pm 9.6\%$
10235	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	$\pm 9.6\%$
10236	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	$\pm 9.6\%$
10237	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	$\pm 9.6\%$
10238	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	$\pm 9.6\%$
10239	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	$\pm 9.6\%$
10240	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	$\pm 9.6\%$
10241	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	$\pm 9.6\%$
10242	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	$\pm 9.6\%$
10243	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	$\pm 9.6\%$
10244	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	$\pm 9.6\%$
10245	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	$\pm 9.6\%$
10246	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	$\pm 9.6\%$
10247	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	$\pm 9.6\%$
10248	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	$\pm 9.6\%$
10249	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	$\pm 9.6\%$
10250	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	$\pm 9.6\%$
10251	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	$\pm 9.6\%$
10252	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	$\pm 9.6\%$
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	$\pm 9.6\%$
10254	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	$\pm 9.6\%$
10255	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	$\pm 9.6\%$
10256	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	$\pm 9.6\%$
10257	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	$\pm 9.6\%$
10258	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	$\pm 9.6\%$
10259	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	$\pm 9.6\%$
10260	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	$\pm 9.6\%$
10261	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	$\pm 9.6\%$
10262	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	$\pm 9.6\%$
10263	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	$\pm 9.6\%$
10264	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	$\pm 9.6\%$
10265	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	$\pm 9.6\%$
10266	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	$\pm 9.6\%$
10267	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	$\pm 9.6\%$
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	$\pm 9.6\%$
10269	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	$\pm 9.6\%$
10270	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	$\pm 9.6\%$
10274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	$\pm 9.6\%$
10275	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	$\pm 9.6\%$
10277	CAA	PHS (QPSK)	PHS	11.81	$\pm 9.6\%$
10278	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	PHS	11.81	$\pm 9.6\%$
10279	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	$\pm 9.6\%$
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	$\pm 9.6\%$
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	$\pm 9.6\%$
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	$\pm 9.6\%$
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	$\pm 9.6\%$
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	$\pm 9.6\%$
10297	AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	$\pm 9.6\%$
10298	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	$\pm 9.6\%$
10299	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	$\pm 9.6\%$

10300	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	$\pm 9.6\%$
10301	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	$\pm 9.6\%$
10302	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3CTRL)	WiMAX	12.57	$\pm 9.6\%$
10303	AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	12.52	$\pm 9.6\%$
10304	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	11.86	$\pm 9.6\%$
10305	AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC)	WiMAX	15.24	$\pm 9.6\%$
10306	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC)	WiMAX	14.67	$\pm 9.6\%$
10307	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC)	WiMAX	14.49	$\pm 9.6\%$
10308	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	$\pm 9.6\%$
10309	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3)	WiMAX	14.58	$\pm 9.6\%$
10310	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3)	WiMAX	14.57	$\pm 9.6\%$
10311	AAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	$\pm 9.6\%$
10313	AAA	iDEN 1:3	iDEN	10.51	$\pm 9.6\%$
10314	AAA	iDEN 1:6	iDEN	13.48	$\pm 9.6\%$
10315	AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc dc)	WLAN	1.71	$\pm 9.6\%$
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	$\pm 9.6\%$
10317	AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	$\pm 9.6\%$
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	$\pm 9.6\%$
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	$\pm 9.6\%$
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	$\pm 9.6\%$
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	$\pm 9.6\%$
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	$\pm 9.6\%$
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	$\pm 9.6\%$
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	$\pm 9.6\%$
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	$\pm 9.6\%$
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	$\pm 9.6\%$
10400	AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc dc)	WLAN	8.37	$\pm 9.6\%$
10401	AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc dc)	WLAN	8.60	$\pm 9.6\%$
10402	AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc dc)	WLAN	8.53	$\pm 9.6\%$
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	$\pm 9.6\%$
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	$\pm 9.6\%$
10406	AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	$\pm 9.6\%$
10410	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub=2,3,4,7,8,9)	LTE-TDD	7.82	$\pm 9.6\%$
10414	AAA	WLAN CCDF, 64-QAM, 40MHz	Generic	8.54	$\pm 9.6\%$
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc dc)	WLAN	1.54	$\pm 9.6\%$
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	$\pm 9.6\%$
10417	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	$\pm 9.6\%$
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long)	WLAN	8.14	$\pm 9.6\%$
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short)	WLAN	8.19	$\pm 9.6\%$
10422	AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	$\pm 9.6\%$
10423	AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	$\pm 9.6\%$
10424	AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	$\pm 9.6\%$
10425	AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	$\pm 9.6\%$
10426	AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	$\pm 9.6\%$
10427	AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	$\pm 9.6\%$
10430	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	$\pm 9.6\%$
10431	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	$\pm 9.6\%$
10432	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	$\pm 9.6\%$
10433	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	$\pm 9.6\%$
10434	AAA	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	$\pm 9.6\%$
10435	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.82	$\pm 9.6\%$
10447	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	$\pm 9.6\%$
10448	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.53	$\pm 9.6\%$
10449	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.51	$\pm 9.6\%$
10450	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	$\pm 9.6\%$
10451	AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	$\pm 9.6\%$
10453	AAD	Validation (Square, 10ms, 1ms)	Test	10.00	$\pm 9.6\%$
10456	AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc dc)	WLAN	8.63	$\pm 9.6\%$
10457	AAA	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	$\pm 9.6\%$
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	$\pm 9.6\%$
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	$\pm 9.6\%$
10460	AAA	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	$\pm 9.6\%$
10461	AAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.82	$\pm 9.6\%$
10462	AAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.30	$\pm 9.6\%$

10463	AAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.56	$\pm 9.6\%$
10464	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.82	$\pm 9.6\%$
10465	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	$\pm 9.6\%$
10466	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	$\pm 9.6\%$
10467	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.82	$\pm 9.6\%$
10468	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	$\pm 9.6\%$
10469	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Sub)	LTE-TDD	8.56	$\pm 9.6\%$
10470	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.82	$\pm 9.6\%$
10471	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	$\pm 9.6\%$
10472	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	$\pm 9.6\%$
10473	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.82	$\pm 9.6\%$
10474	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	$\pm 9.6\%$
10475	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	$\pm 9.6\%$
10477	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	$\pm 9.6\%$
10478	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	$\pm 9.6\%$
10479	AAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.74	$\pm 9.6\%$
10480	AAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.18	$\pm 9.6\%$
10481	AAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.45	$\pm 9.6\%$
10482	AAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.71	$\pm 9.6\%$
10483	AAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.39	$\pm 9.6\%$
10484	AAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.47	$\pm 9.6\%$
10485	AAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.59	$\pm 9.6\%$
10486	AAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	8.38	$\pm 9.6\%$
10487	AAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Sub)	LTE-TDD	8.60	$\pm 9.6\%$
10488	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.70	$\pm 9.6\%$
10489	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.31	$\pm 9.6\%$
10490	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	$\pm 9.6\%$
10491	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.74	$\pm 9.6\%$
10492	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.41	$\pm 9.6\%$
10493	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.55	$\pm 9.6\%$
10494	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.74	$\pm 9.6\%$
10495	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.37	$\pm 9.6\%$
10496	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	$\pm 9.6\%$
10497	AAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.67	$\pm 9.6\%$
10498	AAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.40	$\pm 9.6\%$
10499	AAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.68	$\pm 9.6\%$
10500	AAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.67	$\pm 9.6\%$
10501	AAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.44	$\pm 9.6\%$
10502	AAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.52	$\pm 9.6\%$
10503	AAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.72	$\pm 9.6\%$
10504	AAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	8.31	$\pm 9.6\%$
10505	AAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	$\pm 9.6\%$
10506	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.74	$\pm 9.6\%$
10507	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.36	$\pm 9.6\%$
10508	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.55	$\pm 9.6\%$
10509	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.99	$\pm 9.6\%$
10510	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.49	$\pm 9.6\%$
10511	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.51	$\pm 9.6\%$
10512	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.74	$\pm 9.6\%$
10513	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.42	$\pm 9.6\%$
10514	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.45	$\pm 9.6\%$
10515	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc dc)	WLAN	1.58	$\pm 9.6\%$
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc dc)	WLAN	1.57	$\pm 9.6\%$
10517	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc dc)	WLAN	1.58	$\pm 9.6\%$
10518	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc dc)	WLAN	8.23	$\pm 9.6\%$
10519	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc dc)	WLAN	8.39	$\pm 9.6\%$
10520	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc dc)	WLAN	8.12	$\pm 9.6\%$
10521	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc dc)	WLAN	7.97	$\pm 9.6\%$
10522	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc dc)	WLAN	8.45	$\pm 9.6\%$
10523	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc dc)	WLAN	8.08	$\pm 9.6\%$
10524	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc dc)	WLAN	8.27	$\pm 9.6\%$
10525	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc dc)	WLAN	8.36	$\pm 9.6\%$
10526	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc dc)	WLAN	8.42	$\pm 9.6\%$
10527	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc dc)	WLAN	8.21	$\pm 9.6\%$

10528	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc dc)	WLAN	8.36	$\pm 9.6\%$
10529	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc dc)	WLAN	8.36	$\pm 9.6\%$
10531	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc dc)	WLAN	8.43	$\pm 9.6\%$
10532	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc dc)	WLAN	8.29	$\pm 9.6\%$
10533	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc dc)	WLAN	8.38	$\pm 9.6\%$
10534	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc dc)	WLAN	8.45	$\pm 9.6\%$
10535	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc dc)	WLAN	8.45	$\pm 9.6\%$
10536	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc dc)	WLAN	8.32	$\pm 9.6\%$
10537	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc dc)	WLAN	8.44	$\pm 9.6\%$
10538	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc dc)	WLAN	8.54	$\pm 9.6\%$
10540	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc dc)	WLAN	8.39	$\pm 9.6\%$
10541	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc dc)	WLAN	8.46	$\pm 9.6\%$
10542	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc dc)	WLAN	8.65	$\pm 9.6\%$
10543	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc dc)	WLAN	8.65	$\pm 9.6\%$
10544	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc dc)	WLAN	8.47	$\pm 9.6\%$
10545	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc dc)	WLAN	8.55	$\pm 9.6\%$
10546	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc dc)	WLAN	8.35	$\pm 9.6\%$
10547	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc dc)	WLAN	8.49	$\pm 9.6\%$
10548	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc dc)	WLAN	8.37	$\pm 9.6\%$
10550	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc dc)	WLAN	8.38	$\pm 9.6\%$
10551	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc dc)	WLAN	8.50	$\pm 9.6\%$
10552	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc dc)	WLAN	8.42	$\pm 9.6\%$
10553	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc dc)	WLAN	8.45	$\pm 9.6\%$
10554	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc dc)	WLAN	8.48	$\pm 9.6\%$
10555	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc dc)	WLAN	8.47	$\pm 9.6\%$
10556	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc dc)	WLAN	8.50	$\pm 9.6\%$
10557	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc dc)	WLAN	8.52	$\pm 9.6\%$
10558	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc dc)	WLAN	8.61	$\pm 9.6\%$
10560	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc dc)	WLAN	8.73	$\pm 9.6\%$
10561	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc dc)	WLAN	8.56	$\pm 9.6\%$
10562	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc dc)	WLAN	8.69	$\pm 9.6\%$
10563	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc dc)	WLAN	8.77	$\pm 9.6\%$
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc dc)	WLAN	8.25	$\pm 9.6\%$
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc dc)	WLAN	8.45	$\pm 9.6\%$
10566	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc dc)	WLAN	8.13	$\pm 9.6\%$
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc dc)	WLAN	8.00	$\pm 9.6\%$
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc dc)	WLAN	8.37	$\pm 9.6\%$
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc dc)	WLAN	8.10	$\pm 9.6\%$
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc dc)	WLAN	8.30	$\pm 9.6\%$
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc dc)	WLAN	1.99	$\pm 9.6\%$
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc dc)	WLAN	1.99	$\pm 9.6\%$
10573	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc dc)	WLAN	1.98	$\pm 9.6\%$
10574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc dc)	WLAN	1.98	$\pm 9.6\%$
10575	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc dc)	WLAN	8.59	$\pm 9.6\%$
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc dc)	WLAN	8.60	$\pm 9.6\%$
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc dc)	WLAN	8.70	$\pm 9.6\%$
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc dc)	WLAN	8.49	$\pm 9.6\%$
10579	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc dc)	WLAN	8.36	$\pm 9.6\%$
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc dc)	WLAN	8.76	$\pm 9.6\%$
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc dc)	WLAN	8.35	$\pm 9.6\%$
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc dc)	WLAN	8.67	$\pm 9.6\%$
10583	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc dc)	WLAN	8.59	$\pm 9.6\%$
10584	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc dc)	WLAN	8.60	$\pm 9.6\%$
10585	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc dc)	WLAN	8.70	$\pm 9.6\%$
10586	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc dc)	WLAN	8.49	$\pm 9.6\%$
10587	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc dc)	WLAN	8.36	$\pm 9.6\%$
10588	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc dc)	WLAN	8.76	$\pm 9.6\%$
10589	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc dc)	WLAN	8.35	$\pm 9.6\%$
10590	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc dc)	WLAN	8.67	$\pm 9.6\%$
10591	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc dc)	WLAN	8.63	$\pm 9.6\%$
10592	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc dc)	WLAN	8.79	$\pm 9.6\%$
10593	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc dc)	WLAN	8.64	$\pm 9.6\%$
10594	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc dc)	WLAN	8.74	$\pm 9.6\%$
10595	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc dc)	WLAN	8.74	$\pm 9.6\%$

10596	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc dc)	WLAN	8.71	$\pm 9.6\%$
10597	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc dc)	WLAN	8.72	$\pm 9.6\%$
10598	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc dc)	WLAN	8.50	$\pm 9.6\%$
10599	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc dc)	WLAN	8.79	$\pm 9.6\%$
10600	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc dc)	WLAN	8.88	$\pm 9.6\%$
10601	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc dc)	WLAN	8.82	$\pm 9.6\%$
10602	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc dc)	WLAN	8.94	$\pm 9.6\%$
10603	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc dc)	WLAN	9.03	$\pm 9.6\%$
10604	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc dc)	WLAN	8.76	$\pm 9.6\%$
10605	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc dc)	WLAN	8.97	$\pm 9.6\%$
10606	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc dc)	WLAN	8.82	$\pm 9.6\%$
10607	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc dc)	WLAN	8.64	$\pm 9.6\%$
10608	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc dc)	WLAN	8.77	$\pm 9.6\%$
10609	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc dc)	WLAN	8.57	$\pm 9.6\%$
10610	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc dc)	WLAN	8.78	$\pm 9.6\%$
10611	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc dc)	WLAN	8.70	$\pm 9.6\%$
10612	AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc dc)	WLAN	8.77	$\pm 9.6\%$
10613	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc dc)	WLAN	8.94	$\pm 9.6\%$
10614	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc dc)	WLAN	8.59	$\pm 9.6\%$
10615	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc dc)	WLAN	8.82	$\pm 9.6\%$
10616	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc dc)	WLAN	8.82	$\pm 9.6\%$
10617	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc dc)	WLAN	8.81	$\pm 9.6\%$
10618	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc dc)	WLAN	8.58	$\pm 9.6\%$
10619	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc dc)	WLAN	8.86	$\pm 9.6\%$
10620	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc dc)	WLAN	8.87	$\pm 9.6\%$
10621	AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc dc)	WLAN	8.77	$\pm 9.6\%$
10622	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc dc)	WLAN	8.68	$\pm 9.6\%$
10623	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc dc)	WLAN	8.82	$\pm 9.6\%$
10624	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc dc)	WLAN	8.96	$\pm 9.6\%$
10625	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc dc)	WLAN	8.96	$\pm 9.6\%$
10626	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc dc)	WLAN	8.83	$\pm 9.6\%$
10627	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc dc)	WLAN	8.88	$\pm 9.6\%$
10628	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc dc)	WLAN	8.71	$\pm 9.6\%$
10629	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc dc)	WLAN	8.85	$\pm 9.6\%$
10630	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc dc)	WLAN	8.72	$\pm 9.6\%$
10631	AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc dc)	WLAN	8.81	$\pm 9.6\%$
10632	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc dc)	WLAN	8.74	$\pm 9.6\%$
10633	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc dc)	WLAN	8.83	$\pm 9.6\%$
10634	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc dc)	WLAN	8.80	$\pm 9.6\%$
10635	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc dc)	WLAN	8.81	$\pm 9.6\%$
10636	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc dc)	WLAN	8.83	$\pm 9.6\%$
10637	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc dc)	WLAN	8.79	$\pm 9.6\%$
10638	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc dc)	WLAN	8.86	$\pm 9.6\%$
10639	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc dc)	WLAN	8.85	$\pm 9.6\%$
10640	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc dc)	WLAN	8.98	$\pm 9.6\%$
10641	AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc dc)	WLAN	9.06	$\pm 9.6\%$
10642	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc dc)	WLAN	9.06	$\pm 9.6\%$
10643	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc dc)	WLAN	8.89	$\pm 9.6\%$
10644	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc dc)	WLAN	9.05	$\pm 9.6\%$
10645	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc dc)	WLAN	9.11	$\pm 9.6\%$
10646	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub=2,7)	LTE-TDD	11.96	$\pm 9.6\%$
10647	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub=2,7)	LTE-TDD	11.96	$\pm 9.6\%$
10648	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	$\pm 9.6\%$
10652	AAE	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	$\pm 9.6\%$
10653	AAE	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	$\pm 9.6\%$
10654	AAD	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	$\pm 9.6\%$
10655	AAE	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	$\pm 9.6\%$
10658	AAA	Pulse Waveform (200Hz, 10%)	Test	10.00	$\pm 9.6\%$
10659	AAA	Pulse Waveform (200Hz, 20%)	Test	6.99	$\pm 9.6\%$
10660	AAA	Pulse Waveform (200Hz, 40%)	Test	3.98	$\pm 9.6\%$
10661	AAA	Pulse Waveform (200Hz, 60%)	Test	2.22	$\pm 9.6\%$
10662	AAA	Pulse Waveform (200Hz, 80%)	Test	0.97	$\pm 9.6\%$
10670	AAA	Bluetooth Low Energy	Bluetooth	2.19	$\pm 9.6\%$
10671	AAA	IEEE 802.11ax (20MHz, MCS0, 90pc dc)	WLAN	9.09	$\pm 9.6\%$

10672	AAA	IEEE 802.11ax (20MHz, MCS1, 90pc dc)	WLAN	8.57	$\pm 9.6\%$
10673	AAA	IEEE 802.11ax (20MHz, MCS2, 90pc dc)	WLAN	8.78	$\pm 9.6\%$
10674	AAA	IEEE 802.11ax (20MHz, MCS3, 90pc dc)	WLAN	8.74	$\pm 9.6\%$
10675	AAA	IEEE 802.11ax (20MHz, MCS4, 90pc dc)	WLAN	8.90	$\pm 9.6\%$
10676	AAA	IEEE 802.11ax (20MHz, MCS5, 90pc dc)	WLAN	8.77	$\pm 9.6\%$
10677	AAA	IEEE 802.11ax (20MHz, MCS6, 90pc dc)	WLAN	8.73	$\pm 9.6\%$
10678	AAA	IEEE 802.11ax (20MHz, MCS7, 90pc dc)	WLAN	8.78	$\pm 9.6\%$
10679	AAA	IEEE 802.11ax (20MHz, MCS8, 90pc dc)	WLAN	8.89	$\pm 9.6\%$
10680	AAA	IEEE 802.11ax (20MHz, MCS9, 90pc dc)	WLAN	8.80	$\pm 9.6\%$
10681	AAA	IEEE 802.11ax (20MHz, MCS10, 90pc dc)	WLAN	8.62	$\pm 9.6\%$
10682	AAA	IEEE 802.11ax (20MHz, MCS11, 90pc dc)	WLAN	8.83	$\pm 9.6\%$
10683	AAA	IEEE 802.11ax (20MHz, MCS0, 99pc dc)	WLAN	8.42	$\pm 9.6\%$
10684	AAA	IEEE 802.11ax (20MHz, MCS1, 99pc dc)	WLAN	8.26	$\pm 9.6\%$
10685	AAA	IEEE 802.11ax (20MHz, MCS2, 99pc dc)	WLAN	8.33	$\pm 9.6\%$
10686	AAA	IEEE 802.11ax (20MHz, MCS3, 99pc dc)	WLAN	8.28	$\pm 9.6\%$
10687	AAA	IEEE 802.11ax (20MHz, MCS4, 99pc dc)	WLAN	8.45	$\pm 9.6\%$
10688	AAA	IEEE 802.11ax (20MHz, MCS5, 99pc dc)	WLAN	8.29	$\pm 9.6\%$
10689	AAA	IEEE 802.11ax (20MHz, MCS6, 99pc dc)	WLAN	8.55	$\pm 9.6\%$
10690	AAA	IEEE 802.11ax (20MHz, MCS7, 99pc dc)	WLAN	8.29	$\pm 9.6\%$
10691	AAA	IEEE 802.11ax (20MHz, MCS8, 99pc dc)	WLAN	8.25	$\pm 9.6\%$
10692	AAA	IEEE 802.11ax (20MHz, MCS9, 99pc dc)	WLAN	8.29	$\pm 9.6\%$
10693	AAA	IEEE 802.11ax (20MHz, MCS10, 99pc dc)	WLAN	8.25	$\pm 9.6\%$
10694	AAA	IEEE 802.11ax (20MHz, MCS11, 99pc dc)	WLAN	8.57	$\pm 9.6\%$
10695	AAA	IEEE 802.11ax (40MHz, MCS0, 90pc dc)	WLAN	8.78	$\pm 9.6\%$
10696	AAA	IEEE 802.11ax (40MHz, MCS1, 90pc dc)	WLAN	8.91	$\pm 9.6\%$
10697	AAA	IEEE 802.11ax (40MHz, MCS2, 90pc dc)	WLAN	8.61	$\pm 9.6\%$
10698	AAA	IEEE 802.11ax (40MHz, MCS3, 90pc dc)	WLAN	8.89	$\pm 9.6\%$
10699	AAA	IEEE 802.11ax (40MHz, MCS4, 90pc dc)	WLAN	8.82	$\pm 9.6\%$
10700	AAA	IEEE 802.11ax (40MHz, MCS5, 90pc dc)	WLAN	8.73	$\pm 9.6\%$
10701	AAA	IEEE 802.11ax (40MHz, MCS6, 90pc dc)	WLAN	8.86	$\pm 9.6\%$
10702	AAA	IEEE 802.11ax (40MHz, MCS7, 90pc dc)	WLAN	8.70	$\pm 9.6\%$
10703	AAA	IEEE 802.11ax (40MHz, MCS8, 90pc dc)	WLAN	8.82	$\pm 9.6\%$
10704	AAA	IEEE 802.11ax (40MHz, MCS9, 90pc dc)	WLAN	8.56	$\pm 9.6\%$
10705	AAA	IEEE 802.11ax (40MHz, MCS10, 90pc dc)	WLAN	8.69	$\pm 9.6\%$
10706	AAA	IEEE 802.11ax (40MHz, MCS11, 90pc dc)	WLAN	8.66	$\pm 9.6\%$
10707	AAA	IEEE 802.11ax (40MHz, MCS0, 99pc dc)	WLAN	8.32	$\pm 9.6\%$
10708	AAA	IEEE 802.11ax (40MHz, MCS1, 99pc dc)	WLAN	8.55	$\pm 9.6\%$
10709	AAA	IEEE 802.11ax (40MHz, MCS2, 99pc dc)	WLAN	8.33	$\pm 9.6\%$
10710	AAA	IEEE 802.11ax (40MHz, MCS3, 99pc dc)	WLAN	8.29	$\pm 9.6\%$
10711	AAA	IEEE 802.11ax (40MHz, MCS4, 99pc dc)	WLAN	8.39	$\pm 9.6\%$
10712	AAA	IEEE 802.11ax (40MHz, MCS5, 99pc dc)	WLAN	8.67	$\pm 9.6\%$
10713	AAA	IEEE 802.11ax (40MHz, MCS6, 99pc dc)	WLAN	8.33	$\pm 9.6\%$
10714	AAA	IEEE 802.11ax (40MHz, MCS7, 99pc dc)	WLAN	8.26	$\pm 9.6\%$
10715	AAA	IEEE 802.11ax (40MHz, MCS8, 99pc dc)	WLAN	8.45	$\pm 9.6\%$
10716	AAA	IEEE 802.11ax (40MHz, MCS9, 99pc dc)	WLAN	8.30	$\pm 9.6\%$
10717	AAA	IEEE 802.11ax (40MHz, MCS10, 99pc dc)	WLAN	8.48	$\pm 9.6\%$
10718	AAA	IEEE 802.11ax (40MHz, MCS11, 99pc dc)	WLAN	8.24	$\pm 9.6\%$
10719	AAA	IEEE 802.11ax (80MHz, MCS0, 90pc dc)	WLAN	8.81	$\pm 9.6\%$
10720	AAA	IEEE 802.11ax (80MHz, MCS1, 90pc dc)	WLAN	8.87	$\pm 9.6\%$
10721	AAA	IEEE 802.11ax (80MHz, MCS2, 90pc dc)	WLAN	8.76	$\pm 9.6\%$
10722	AAA	IEEE 802.11ax (80MHz, MCS3, 90pc dc)	WLAN	8.55	$\pm 9.6\%$
10723	AAA	IEEE 802.11ax (80MHz, MCS4, 90pc dc)	WLAN	8.70	$\pm 9.6\%$
10724	AAA	IEEE 802.11ax (80MHz, MCS5, 90pc dc)	WLAN	8.90	$\pm 9.6\%$
10725	AAA	IEEE 802.11ax (80MHz, MCS6, 90pc dc)	WLAN	8.74	$\pm 9.6\%$
10726	AAA	IEEE 802.11ax (80MHz, MCS7, 90pc dc)	WLAN	8.72	$\pm 9.6\%$
10727	AAA	IEEE 802.11ax (80MHz, MCS8, 90pc dc)	WLAN	8.66	$\pm 9.6\%$
10728	AAA	IEEE 802.11ax (80MHz, MCS9, 90pc dc)	WLAN	8.65	$\pm 9.6\%$
10729	AAA	IEEE 802.11ax (80MHz, MCS10, 90pc dc)	WLAN	8.64	$\pm 9.6\%$
10730	AAA	IEEE 802.11ax (80MHz, MCS11, 90pc dc)	WLAN	8.67	$\pm 9.6\%$
10731	AAA	IEEE 802.11ax (80MHz, MCS0, 99pc dc)	WLAN	8.42	$\pm 9.6\%$
10732	AAA	IEEE 802.11ax (80MHz, MCS1, 99pc dc)	WLAN	8.46	$\pm 9.6\%$
10733	AAA	IEEE 802.11ax (80MHz, MCS2, 99pc dc)	WLAN	8.40	$\pm 9.6\%$
10734	AAA	IEEE 802.11ax (80MHz, MCS3, 99pc dc)	WLAN	8.25	$\pm 9.6\%$
10735	AAA	IEEE 802.11ax (80MHz, MCS4, 99pc dc)	WLAN	8.33	$\pm 9.6\%$

10736	AAA	IEEE 802.11ax (80MHz, MCS5, 99pc dc)	WLAN	8.27	$\pm 9.6\%$
10737	AAA	IEEE 802.11ax (80MHz, MCS6, 99pc dc)	WLAN	8.36	$\pm 9.6\%$
10738	AAA	IEEE 802.11ax (80MHz, MCS7, 99pc dc)	WLAN	8.42	$\pm 9.6\%$
10739	AAA	IEEE 802.11ax (80MHz, MCS8, 99pc dc)	WLAN	8.29	$\pm 9.6\%$
10740	AAA	IEEE 802.11ax (80MHz, MCS9, 99pc dc)	WLAN	8.48	$\pm 9.6\%$
10741	AAA	IEEE 802.11ax (80MHz, MCS10, 99pc dc)	WLAN	8.40	$\pm 9.6\%$
10742	AAA	IEEE 802.11ax (80MHz, MCS11, 99pc dc)	WLAN	8.43	$\pm 9.6\%$
10743	AAA	IEEE 802.11ax (160MHz, MCS0, 90pc dc)	WLAN	8.94	$\pm 9.6\%$
10744	AAA	IEEE 802.11ax (160MHz, MCS1, 90pc dc)	WLAN	9.16	$\pm 9.6\%$
10745	AAA	IEEE 802.11ax (160MHz, MCS2, 90pc dc)	WLAN	8.93	$\pm 9.6\%$
10746	AAA	IEEE 802.11ax (160MHz, MCS3, 90pc dc)	WLAN	9.11	$\pm 9.6\%$
10747	AAA	IEEE 802.11ax (160MHz, MCS4, 90pc dc)	WLAN	9.04	$\pm 9.6\%$
10748	AAA	IEEE 802.11ax (160MHz, MCS5, 90pc dc)	WLAN	8.93	$\pm 9.6\%$
10749	AAA	IEEE 802.11ax (160MHz, MCS6, 90pc dc)	WLAN	8.90	$\pm 9.6\%$
10750	AAA	IEEE 802.11ax (160MHz, MCS7, 90pc dc)	WLAN	8.79	$\pm 9.6\%$
10751	AAA	IEEE 802.11ax (160MHz, MCS8, 90pc dc)	WLAN	8.82	$\pm 9.6\%$
10752	AAA	IEEE 802.11ax (160MHz, MCS9, 90pc dc)	WLAN	8.81	$\pm 9.6\%$
10753	AAA	IEEE 802.11ax (160MHz, MCS10, 90pc dc)	WLAN	9.00	$\pm 9.6\%$
10754	AAA	IEEE 802.11ax (160MHz, MCS11, 90pc dc)	WLAN	8.94	$\pm 9.6\%$
10755	AAA	IEEE 802.11ax (160MHz, MCS0, 99pc dc)	WLAN	8.64	$\pm 9.6\%$
10756	AAA	IEEE 802.11ax (160MHz, MCS1, 99pc dc)	WLAN	8.77	$\pm 9.6\%$
10757	AAA	IEEE 802.11ax (160MHz, MCS2, 99pc dc)	WLAN	8.77	$\pm 9.6\%$
10758	AAA	IEEE 802.11ax (160MHz, MCS3, 99pc dc)	WLAN	8.69	$\pm 9.6\%$
10759	AAA	IEEE 802.11ax (160MHz, MCS4, 99pc dc)	WLAN	8.58	$\pm 9.6\%$
10760	AAA	IEEE 802.11ax (160MHz, MCS5, 99pc dc)	WLAN	8.49	$\pm 9.6\%$
10761	AAA	IEEE 802.11ax (160MHz, MCS6, 99pc dc)	WLAN	8.58	$\pm 9.6\%$
10762	AAA	IEEE 802.11ax (160MHz, MCS7, 99pc dc)	WLAN	8.49	$\pm 9.6\%$
10763	AAA	IEEE 802.11ax (160MHz, MCS8, 99pc dc)	WLAN	8.53	$\pm 9.6\%$
10764	AAA	IEEE 802.11ax (160MHz, MCS9, 99pc dc)	WLAN	8.54	$\pm 9.6\%$
10765	AAA	IEEE 802.11ax (160MHz, MCS10, 99pc dc)	WLAN	8.54	$\pm 9.6\%$
10766	AAA	IEEE 802.11ax (160MHz, MCS11, 99pc dc)	WLAN	8.51	$\pm 9.6\%$
10767	AAC	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	7.99	$\pm 9.6\%$
10768	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	$\pm 9.6\%$
10769	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	$\pm 9.6\%$
10770	AAC	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	$\pm 9.6\%$
10771	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	$\pm 9.6\%$
10772	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	$\pm 9.6\%$
10773	AAC	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.23	$\pm 9.6\%$
10774	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	$\pm 9.6\%$
10775	AAB	5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	$\pm 9.6\%$
10776	AAC	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	$\pm 9.6\%$
10777	AAB	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	$\pm 9.6\%$
10778	AAC	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	$\pm 9.6\%$
10779	AAB	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	$\pm 9.6\%$
10780	AAC	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.42	$\pm 9.6\%$
10781	AAC	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	$\pm 9.6\%$
10782	AAC	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	$\pm 9.6\%$
10783	AAC	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	$\pm 9.6\%$
10784	AAC	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	$\pm 9.6\%$
10785	AAC	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	$\pm 9.6\%$
10786	AAC	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.40	$\pm 9.6\%$
10787	AAC	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	$\pm 9.6\%$
10788	AAC	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	$\pm 9.6\%$
10789	AAC	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	$\pm 9.6\%$
10790	AAC	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.37	$\pm 9.6\%$
10791	AAC	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.39	$\pm 9.6\%$
10792	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	$\pm 9.6\%$
10793	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	$\pm 9.6\%$
10794	AAC	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	$\pm 9.6\%$
10795	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	$\pm 9.6\%$
10796	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.84	$\pm 9.6\%$
10797	AAC	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	$\pm 9.6\%$
10798	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	$\pm 9.6\%$
10799	AAC	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	$\pm 9.6\%$

10801	AAC	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	$\pm 9.6\%$
10802	AAC	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.87	$\pm 9.6\%$
10803	AAC	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	$\pm 9.6\%$
10805	AAC	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	$\pm 9.6\%$
10806	AAC	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	$\pm 9.6\%$
10809	AAC	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	$\pm 9.6\%$
10810	AAC	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	$\pm 9.6\%$
10812	AAC	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	$\pm 9.6\%$
10817	AAC	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	$\pm 9.6\%$
10818	AAC	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	$\pm 9.6\%$
10819	AAC	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.33	$\pm 9.6\%$
10820	AAC	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.30	$\pm 9.6\%$
10821	AAC	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	$\pm 9.6\%$
10822	AAC	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	$\pm 9.6\%$
10823	AAC	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	$\pm 9.6\%$
10824	AAC	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.39	$\pm 9.6\%$
10825	AAC	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	$\pm 9.6\%$
10827	AAC	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	$\pm 9.6\%$
10828	AAC	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.43	$\pm 9.6\%$
10829	AAC	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.40	$\pm 9.6\%$
10830	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.63	$\pm 9.6\%$
10831	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.73	$\pm 9.6\%$
10832	AAC	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.74	$\pm 9.6\%$
10833	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	$\pm 9.6\%$
10834	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.75	$\pm 9.6\%$
10835	AAC	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	$\pm 9.6\%$
10836	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.66	$\pm 9.6\%$
10837	AAC	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.68	$\pm 9.6\%$
10839	AAC	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	$\pm 9.6\%$
10840	AAC	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.67	$\pm 9.6\%$
10841	AAC	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.71	$\pm 9.6\%$
10843	AAC	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.49	$\pm 9.6\%$
10844	AAC	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	$\pm 9.6\%$
10846	AAC	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	$\pm 9.6\%$
10854	AAC	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	$\pm 9.6\%$
10855	AAC	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	$\pm 9.6\%$
10856	AAC	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	$\pm 9.6\%$
10857	AAC	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.35	$\pm 9.6\%$
10858	AAC	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	$\pm 9.6\%$
10859	AAC	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	$\pm 9.6\%$
10860	AAC	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	$\pm 9.6\%$
10861	AAC	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.40	$\pm 9.6\%$
10863	AAC	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	$\pm 9.6\%$
10864	AAC	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	$\pm 9.6\%$
10865	AAC	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	$\pm 9.6\%$
10866	AAC	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	$\pm 9.6\%$
10868	AAC	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.89	$\pm 9.6\%$
10869	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	$\pm 9.6\%$
10870	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.86	$\pm 9.6\%$
10871	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.75	$\pm 9.6\%$
10872	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.52	$\pm 9.6\%$
10873	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	$\pm 9.6\%$
10874	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	$\pm 9.6\%$
10875	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	$\pm 9.6\%$
10876	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	6.39	$\pm 9.6\%$
10877	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	7.95	$\pm 9.6\%$
10878	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.41	$\pm 9.6\%$
10879	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.12	$\pm 9.6\%$
10880	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.38	$\pm 9.6\%$
10881	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	$\pm 9.6\%$
10882	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.96	$\pm 9.6\%$
10883	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.57	$\pm 9.6\%$
10884	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.53	$\pm 9.6\%$
10885	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	$\pm 9.6\%$

10886	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	$\pm 9.6\%$
10887	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	$\pm 9.6\%$
10888	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.35	$\pm 9.6\%$
10889	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.02	$\pm 9.6\%$
10890	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.40	$\pm 9.6\%$
10891	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.13	$\pm 9.6\%$
10892	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.41	$\pm 9.6\%$
10897	AAA	5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.66	$\pm 9.6\%$
10898	AAA	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	$\pm 9.6\%$
10899	AAA	5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	$\pm 9.6\%$
10900	AAA	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	$\pm 9.6\%$
10901	AAA	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	$\pm 9.6\%$
10902	AAA	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	$\pm 9.6\%$
10903	AAA	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	$\pm 9.6\%$
10904	AAA	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	$\pm 9.6\%$
10905	AAA	5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	$\pm 9.6\%$
10906	AAA	5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	$\pm 9.6\%$
10907	AAA	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.78	$\pm 9.6\%$
10908	AAA	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	$\pm 9.6\%$
10909	AAA	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.96	$\pm 9.6\%$
10910	AAA	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	$\pm 9.6\%$
10911	AAA	5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	$\pm 9.6\%$
10912	AAA	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	$\pm 9.6\%$
10913	AAA	5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	$\pm 9.6\%$
10914	AAA	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.85	$\pm 9.6\%$
10915	AAA	5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	$\pm 9.6\%$
10916	AAA	5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	$\pm 9.6\%$
10917	AAA	5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	$\pm 9.6\%$
10918	AAA	5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	$\pm 9.6\%$
10919	AAA	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	$\pm 9.6\%$
10920	AAA	5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	$\pm 9.6\%$
10921	AAA	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	$\pm 9.6\%$
10922	AAA	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.82	$\pm 9.6\%$
10923	AAA	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	$\pm 9.6\%$
10924	AAA	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	$\pm 9.6\%$
10925	AAA	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.95	$\pm 9.6\%$
10926	AAA	5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	$\pm 9.6\%$
10927	AAA	5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	$\pm 9.6\%$
10928	AAA	5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	$\pm 9.6\%$
10929	AAA	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	$\pm 9.6\%$
10930	AAA	5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	$\pm 9.6\%$
10931	AAA	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	$\pm 9.6\%$
10932	AAA	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	$\pm 9.6\%$
10933	AAA	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	$\pm 9.6\%$
10934	AAA	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	$\pm 9.6\%$
10935	AAA	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	$\pm 9.6\%$
10936	AAA	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	$\pm 9.6\%$
10937	AAA	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.77	$\pm 9.6\%$
10938	AAA	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	$\pm 9.6\%$
10939	AAA	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.82	$\pm 9.6\%$
10940	AAA	5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.89	$\pm 9.6\%$
10941	AAA	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	$\pm 9.6\%$
10942	AAA	5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	$\pm 9.6\%$
10943	AAA	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.95	$\pm 9.6\%$
10944	AAA	5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.81	$\pm 9.6\%$
10945	AAA	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	$\pm 9.6\%$
10946	AAA	5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	$\pm 9.6\%$
10947	AAA	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	$\pm 9.6\%$
10948	AAA	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	$\pm 9.6\%$
10949	AAA	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	$\pm 9.6\%$
10950	AAA	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	$\pm 9.6\%$
10951	AAA	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.92	$\pm 9.6\%$
10952	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.25	$\pm 9.6\%$
10953	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.15	$\pm 9.6\%$

10954	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.23	$\pm 9.6\%$
10955	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.42	$\pm 9.6\%$
10956	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.14	$\pm 9.6\%$
10957	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.31	$\pm 9.6\%$
10958	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.61	$\pm 9.6\%$
10959	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.33	$\pm 9.6\%$
10960	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.32	$\pm 9.6\%$
10961	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.36	$\pm 9.6\%$
10962	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.40	$\pm 9.6\%$
10963	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.55	$\pm 9.6\%$
10964	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.29	$\pm 9.6\%$
10965	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.37	$\pm 9.6\%$
10966	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.55	$\pm 9.6\%$
10967	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.42	$\pm 9.6\%$
10968	AAA	5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.49	$\pm 9.6\%$

^E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



Appendix E. Conducted RF Output Power Table

The detailed power table are shown as follows.

Aan 1 Full Power DS1-1/3/4/5									
GSM850		Burst Average Power (dBm)			Tune-up		Frame-Average Power (dBm)		
TX Channel	128	160	200	250	128	160	200	250	Tune-up Limit (dBm)
Frequency (MHz)	850.0	850.4	848.8						
GSM 1 Tx slot	32.57	32.96	32.80	34.00	23.57	23.96	23.80	25.00	
GPRS 1 Tx slot	32.55	32.95	32.78	34.00	23.55	23.95	23.78	25.00	
GPRS 2 Tx slots	29.68	29.95	29.70	31.00	23.68	23.95	23.70	25.00	
GPRS 3 Tx slots	27.83	28.30	27.80	29.20	23.57	24.04	23.54	24.94	
GPRS 4 Tx slots	26.73	26.42	26.30	28.00	23.73	23.42	23.30	25.00	
EDGE 1 Tx slot	26.72	26.80	26.80	26.30	17.99	17.75	16.93	19.30	
EDGE 2 Tx slots	24.76	23.83	23.75	25.30	17.78	17.83	17.75	19.30	
EDGE 3 Tx slots	21.91	21.95	21.76	23.50	17.65	17.69	17.50	19.24	
EDGE 4 Tx slots	20.63	20.78	20.47	22.30	17.63	17.78	17.47	19.30	

Aan 1 Full Power DS1-1/3/4/5									
Band		WCDMA V			Tune-up		Frame-Average Power (dBm)		
TX Channel	4132	4182	4233	4284	128	160	200	250	Tune-up Limit (dBm)
Rx Channel	4357	4407	4458	4509					
Frequency (MHz)	826.4	836.4	846.6						
3GPP Rel 99 AMR 12.2kps	24.17	24.19	24.13	25.00					
3GPP Rel 99 RMC 12.2kps	24.18	24.20	24.15	25.00					
3GPP Rel 99 HSUPA Subtest1	22.16	22.24	21.92	24.00					
3GPP Rel 6 HSUPA Subtest2	23.17	23.19	23.20	24.00					
3GPP Rel 6 HSUPA Subtest3	22.88	22.73	22.69	23.50					
3GPP Rel 6 HSUPA Subtest4	22.69	22.73	22.31	23.50					
3GPP Rel 8 DC-HSUPA Subtest1	23.10	23.14	23.06	24.00					
3GPP Rel 8 DC-HSUPA Subtest2	23.13	23.18	23.10	24.00					
3GPP Rel 8 DC-HSUPA Subtest3	22.61	22.65	22.66	23.50					
3GPP Rel 8 DC-HSUPA Subtest4	22.64	22.70	22.29	23.50					
3GPP Rel 6 HSUPA Subtest1	23.19	23.17	23.13	24.00					
3GPP Rel 6 HSUPA Subtest2	21.18	21.17	21.12	22.00					
3GPP Rel 6 HSUPA Subtest3	22.14	22.21	22.14	23.00					
3GPP Rel 6 HSUPA Subtest4	21.14	21.18	21.17	22.00					
3GPP Rel 6 HSUPA Subtest5	23.10	23.20	23.10	24.00					



Ant1 Band 5 Full Power / DS1 1/3/4/5													
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	Frequency (MHz)	799	836.5	849.5
10	QPSK	1	0	24.10	24.45	24.18	25.5	0					
10	QPSK	1	25	24.18	24.29	24.26	24.5	1					
10	QPSK	1	49	24.06	24.27	24.33							
10	QPSK	25	0	23.35	23.49	23.43							
10	QPSK	25	12	23.47	23.43	23.40							
10	QPSK	25	25	23.35	23.36	23.38							
10	QPSK	50	0	23.35	23.43	23.38							
10	16QAM	1	0	23.64	23.75	23.74							
10	16QAM	1	25	23.86	23.52	23.66	24.5	1					
10	16QAM	1	49	23.40	23.63	23.81							
10	16QAM	25	0	22.27	22.32	22.41							
10	16QAM	25	12	22.40	22.42	22.49	23.5	2					
10	16QAM	25	25	22.49	22.50	22.27							
10	16QAM	50	0	22.42	22.49	22.35							
10	64QAM	1	0	23.12	23.00	23.08							
10	64QAM	1	25	22.74	22.86	22.65	23.5	2					
10	64QAM	1	49	22.71	22.85	22.73							
10	64QAM	25	0	21.32	21.33	21.34							
10	64QAM	25	12	21.42	21.51	21.39	22.5	3					
10	64QAM	25	25	21.45	21.43	21.43							
10	64QAM	50	0	21.45	21.42	21.40							
10	256QAM	1	0	18.95	19.35	19.07							
10	256QAM	1	25	19.08	19.22	19.20	20.5	5					
10	256QAM	1	49	18.97	19.17	19.20							
10	256QAM	25	0	19.23	19.40	19.33							
10	256QAM	25	12	19.38	19.35	19.29							
10	256QAM	25	25	19.36	19.33	19.24							
10	256QAM	50	0	19.22	19.32	19.32							
10	256QAM	50	12	19.22	19.32	19.32							
10	256QAM	50	25	19.22	19.32	19.32							
10	256QAM	50	50	0	19.22	19.32							
10	256QAM	50	50	12	19.22	19.32							
10	256QAM	50	50	25	19.22	19.32							
10	256QAM	50	50	50	0	19.22							
10	256QAM	50	50	50	12	19.22							
10	256QAM	50	50	50	25	19.22							
10	256QAM	50	50	50	50	0							
10	256QAM	50	50	50	50	12							
10	256QAM	50	50	50	25	19.22							
10	256QAM	50	50	50	50	50							
5	QPSK	1	0	24.30	24.40	24.42	25.5	0					
5	QPSK	1	12	24.28	24.42	24.36							
5	QPSK	1	24	24.25	24.25	24.23							
5	QPSK	12	0	23.28	23.36	23.45							
5	QPSK	12	7	23.41	23.31	23.45	24.5	1					
5	QPSK	12	13	23.33	23.36	23.41							
5	QPSK	25	0	23.35	23.39	23.37							
5	16QAM	1	0	23.50	23.25	23.68							
5	16QAM	1	12	23.57	23.59	23.53	24.5	1					
5	16QAM	1	24	23.55	23.69	23.41							
5	16QAM	12	0	22.38	22.42	22.38							
5	16QAM	12	7	22.27	22.42	22.49	23.5	2					
5	16QAM	12	13	22.33	22.43	22.42							
5	16QAM	25	0	22.31	22.44	22.31							
5	64QAM	1	0	22.45	22.55	22.47							
5	64QAM	1	12	22.40	22.31	22.42	23.5	2					
5	64QAM	1	24	22.39	22.55	22.45							
5	64QAM	12	0	21.37	21.38	21.50							
5	64QAM	12	7	21.49	21.42	21.48	22.5	3					
5	64QAM	12	13	21.34	21.35	21.38							
5	64QAM	25	0	21.37	21.46	21.40							
5	256QAM	1	0	19.17	19.31	19.29							
5	256QAM	1	12	19.12	19.17	19.27	20.5	5					
5	256QAM	1	24	19.18	19.10	19.13							
5	256QAM	12	0	19.14	19.21	19.32							
5	256QAM	12	12	19.14	19.18	19.20							
5	256QAM	12	25	19.14	19.18	19.20							
5	256QAM	12	37	19.20	19.18	19.24							
5	256QAM	12	50	19.20	19.18	19.20							
5	256QAM	12	50	12	19.20	19.18							
5	256QAM	12	25	19.20	19.18	19.20							
5	256QAM	12	50	50	19.20	19.18							
5	256QAM	12	50	50	12	19.20							
5	256QAM	12	50	50	25	19.20							
5	256QAM	12	50	50	50	0							
3	QPSK	1	0	24.40	24.19	24.27	25.5	0					
3	QPSK	1	8	24.44	24.27	24.30							
3	QPSK	1	14	24.41	24.22	24.18							
3	QPSK	3	0	23.57	23.33	23.45							
3	QPSK	8	4	23.50	23.41	23.39							
3	QPSK	8	7	23.53	23.34	23.40	24.5	1					
3	QPSK	15	0	23.59	23.27	23.38							
3	16QAM	1	0	23.72	23.45	23.57							
3	16QAM	1	8	23.56	23.38	23.61	24.5	1					
3	16QAM	1	14	23.73	23.82	23.77							
3	16QAM	8	0	22.68	22.36	22.46							
3	16QAM	8	4	22.62	22.41	22.45	22.5	2					
3	16QAM	8	7	22.72	22.28	22.45							
3	16QAM	15	0	22.58	22.37	22.42							
3	64QAM	1	0	22.69	22.85	22.78							
3	64QAM	1	8	22.54	22.57	22.56	23.5	2					
3	64QAM	1	14	22.64	22.52	22.54							
3	64QAM	8	0	21.55	21.36	21.45							
3	64QAM	8	4	21.54	21.35	21.50	22.5	3					
3	64QAM	8	7	21.56	21.37	21.33							
3	64QAM	15	0	21.52	21.30	21.41							
3	256QAM	1	0	19.35	19.07	19.17							
3	256QAM	1	8	19.30	19.12	19.19	20.5	5					
3	256QAM	1	14	19.47	19.27	19.11							
3	256QAM	8	0	19.49	19.24	19.27							
3	256QAM	8	4	19.41	19.23	19.27							
3	256QAM	8	7	19.45	19.27	19.27	20.5	5					
3	256QAM	15	0	19.49	19.15	19.25							
3	256QAM	15	12	19.49	19.15	19.25							
3	256QAM	15	25	19.49	19.15	19.25							
3	256QAM	15	50	19.49	19.15	19.25							
3	256QAM	15	50	12	19.49	19.15							
3	256QAM	15	25	19.49	19.15	19.25							
3	256QAM	15	50	50	19.49	19.15							
3	256QAM	15	50	50	12	19.49							
3	256QAM	15	50	50	25	19.49							
3	256QAM	15	50	50	50	0							
1.4	QPSK	1	0	24.11	24.13	24.23							
1.4	QPSK	1	3	24.21	24.25	24.24							
1.4	QPSK	1	5	24.15	24.22	24.20	25.5	1					
1.4	QPSK												



Ant1 Band 12 Down Power / DSI 1/3/5										
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 Frequency (MHz)	704.5 707.5 711.5
10	QPSK	1	0	23.50	23.64	23.42	24.5	0		
10	QPSK	1	25	23.58	23.32	23.33				
10	QPSK	1	49	23.49	23.45	23.50				
10	QPSK	25	0	23.32	23.35	23.23				
10	QPSK	25	12	23.53	23.48	23.39				
10	QPSK	25	25	23.39	23.53	23.53				
10	QPSK	50	0	23.39	23.43	23.44				
10	16QAM	1	0	23.57	23.60	23.43				
10	16QAM	1	25	23.59	23.39	23.53				
10	16QAM	1	49	23.44	23.55	23.46				
10	16QAM	25	0	22.13	22.24	22.36				
10	16QAM	25	12	22.50	22.57	22.49				
10	16QAM	25	25	22.35	22.43	22.46				
10	16QAM	50	0	22.56	22.36	22.51				
10	64QAM	1	0	23.04	23.08	22.99				
10	64QAM	1	25	22.81	22.87	22.68				
10	64QAM	1	49	22.75	23.03	22.75				
10	64QAM	25	0	21.14	21.34	21.47				
10	64QAM	25	12	21.35	21.63	21.58				
10	64QAM	25	25	21.36	21.31	21.62				
10	64QAM	50	0	21.48	21.26	21.44				
10	256QAM	1	0	19.14	19.33	19.07				
10	256QAM	1	25	19.06	19.07	19.28				
10	256QAM	1	49	18.99	18.28	19.38				
10	256QAM	25	0	19.29	19.48	19.52				
10	256QAM	25	12	19.53	19.38	19.25				
10	256QAM	25	25	19.10	19.02	19.24				
10	256QAM	50	0	19.23	19.23	19.37				
Ant1 Band 12 Down Power / DSI 1/3/5										
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 Frequency (MHz)	705.5 707.5 711.5
5	QPSK	1	0	23.49	23.45	23.45	24.5	0		
5	QPSK	1	12	23.40	23.60	23.53				
5	QPSK	1	24	23.48	23.50	23.47				
5	QPSK	12	0	23.49	23.57	23.39				
5	QPSK	12	7	23.34	23.52	23.60				
5	QPSK	12	13	23.50	23.55	23.17				
5	QPSK	25	0	23.60	23.56	23.49				
5	16QAM	1	0	23.54	23.40	23.47				
5	16QAM	1	12	23.41	23.62	23.60				
5	16QAM	1	24	23.57	23.54	23.44				
5	16QAM	12	0	22.42	22.35	22.49				
5	16QAM	12	7	22.31	22.30	22.60				
5	16QAM	12	13	22.63	22.63	22.59				
5	16QAM	25	0	22.32	22.38	22.49				
5	64QAM	1	0	22.60	22.62	22.54				
5	64QAM	1	12	22.50	22.31	22.37				
5	64QAM	1	24	22.61	22.48	22.26				
5	64QAM	12	0	21.31	21.63	21.50				
5	64QAM	12	7	21.50	21.40	21.23				
5	64QAM	12	13	21.56	21.22	21.29				
5	64QAM	25	0	21.48	21.21	21.49				
5	256QAM	1	0	19.32	19.26	18.98				
5	256QAM	1	12	19.09	19.43	19.23				
5	256QAM	24	0	19.26	19.33	18.97				
5	256QAM	25	0	20.04	21.48	21.21				
5	256QAM	25	12	19.52	19.45	19.24				
5	256QAM	25	13	19.53	19.49	19.34				
5	256QAM	25	15	19.16	19.49	19.29				
5	256QAM	25	18	19.35	19.37	19.37				
Ant1 Band 12 Down Power / DSI 1/3/5										
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 Frequency (MHz)	709.5 710.5 711.5
3	QPSK	1	0	23.43	23.51	23.48	24.5	0		
3	QPSK	1	8	23.40	23.55	23.62				
3	QPSK	1	14	23.53	23.39	23.20				
3	QPSK	8	0	23.45	23.58	23.15				
3	QPSK	8	4	23.13	23.52	23.14				
3	QPSK	8	7	23.29	23.63	23.13				
3	QPSK	15	0	23.48	23.36	23.36				
3	16QAM	1	0	23.52	23.59	23.44				
3	16QAM	1	8	23.57	23.46	23.42				
3	16QAM	1	14	23.50	23.59	23.28				
3	16QAM	8	0	22.41	22.55	22.55				
3	16QAM	8	4	22.23	22.21	22.24				
3	16QAM	8	7	22.27	22.47	22.64				
3	16QAM	15	0	22.63	22.26	22.43				
3	16QAM	1	0	22.51	22.52	22.54				
3	16QAM	1	8	22.53	22.54	22.56				
3	16QAM	1	14	22.08	22.37	22.17				
3	16QAM	8	0	21.55	21.13	21.52				
3	16QAM	8	4	21.48	21.55	21.14				
3	16QAM	8	7	21.54	21.37	21.28				
3	16QAM	15	0	21.38	21.17	21.06				
3	256QAM	1	0	19.16	19.16	19.12				
3	256QAM	1	8	19.13	19.11	19.34				
3	256QAM	1	14	19.00	19.14	19.16				
3	256QAM	8	0	18.53	18.54	18.52				
3	256QAM	3	4	19.17	19.12	19.44				
3	256QAM	8	7	19.07	19.10	19.09				
3	256QAM	15	0	19.58	19.23	19.22				
Ant1 Band 12 Down Power / DSI 1/3/5										
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 Frequency (MHz)	899.7 901.7 903.7
1.4	QPSK	1	0	23.43	23.47	23.37	24.5	0		
1.4	QPSK	1	3	23.33	23.34	23.34				
1.4	QPSK	1	5	23.22	23.18	23.00				
1.4	QPSK	3	0	23.31	23.43	23.32				
1.4	QPSK	3	1	23.53	23.50	23.54				
1.4	QPSK	3	3	23.48	23.31	23.14				
1.4	QPSK	6	0	23.55	23.30	23.45				
1.4	16QAM	1	0	23.46	23.24	23.33				
1.4	16QAM	1	3	23.46	23.49	23.24				
1.4	16QAM	1	5	23.48	23.49	23.25				
1.4	16QAM	3	0	23.16	23.10	23.02				
1.4	16QAM	3	1	23.14	23.35	23.11				
1.4	16QAM	3	3	23.11	23.22	23.36				
1.4	16QAM	6	0	22.54	22.39	22.37				
1.4	16QAM	1	0	22.32	22.53	22.44				
1.4	16QAM	1	3	22.22	22.38	22.26				
1.4	16QAM	1	5	22.48	22.54	22.07				
1.4	16QAM	3	0	22.04	22.16	22.23				
1.4	16QAM	3	1	22.36	22.47	22.25				
1.4	16QAM	3	3	22.20	22.08	22.12				
1.4	16QAM	6	0	21.10	21.36	20.96				
1.4	256QAM	1	0	19.15	19.18	18.90				
1.4	256QAM	1	3	19.24	19.01	19.09				
1.4	256QAM	1	5	18.98	19.38	19.27				
1.4	256QAM	3	0	19.29	18.89	18.99				
1.4	256QAM	3	1	18.89	18.99	18.99				
1.4	256QAM	3	3	19.01	19.28	19.09				
1.4	256QAM	6	0	19.21	19.42	19.37				

Ant1 Band 17 Down Power / DSI 1/3/5										
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 Frequency (MHz)	709.5 710.5 711.5
10	QPSK	1	0	23.74	23.82	23.44	24.5	0		
10	QPSK	1	25	23.47	23.68	23.70				
10	QPSK	1	49	23.48	23.79	23.73				
10	QPSK	25	0	23.25	23.36	23.17			</td	



Ant2 Full Power/DSI 1/3/4/5											
GSM1900		Burst Average Power (dBm)			Tune-up		Frame-Average Power (dBm)			Tune-up	
TX Channel	912	661	810	Limit (dBm)	912	661	810	Limit (dBm)	912	661	810
Frequency (MHz)	909.0	1040.0	1091.8		912.2	661.8	810.8		912.2	661.8	810.8
GSM 1 Tx slot	30.11	30.35	30.31	31.50	21.11	21.35	21.31	22.50			
30.18	30.33	30.30	31.50	21.18	21.33	21.30	22.50				
GPRS 2 Tx slots	26.77	27.24	27.00	28.50	20.77	21.24	21.00	22.50			
GPRS 3 Tx slots	25.17	25.51	25.31	26.70	20.91	21.25	21.05	22.44			
GPRS 4 Tx slots	23.80	24.12	24.01	25.50	20.80	21.12	21.01	22.50			
EDGE 1 Tx slot	26.11	26.32	26.19	27.68	17.22	17.32	17.25	18.65			
EDGE 2 Tx slots	23.18	23.31	23.26	24.85	17.18	17.31	17.28	18.65			
EDGE 3 Tx slots	21.50	21.57	21.51	23.05	17.24	17.31	17.25	18.65			
EDGE 4 Tx slots	20.05	20.16	20.05	21.85	17.05	17.16	17.05	18.65			

Ant2 Full Power/DSI 1/4											
Band		WCDMA II			Tune-up		WCDMA IV			Tune-up	
TX Channel	9262	9400	9538	9662	9800	9938	1312	1413	1513	1312	1413
Rx Channel	9662	9800	9938	1852.4	1880	1907.8	1537	1638	1738	1712.4	1732.6
Frequency (MHz)	1852.4	1880	1907.8				1712.4	1732.6	1752.6		
3GPP Rel 99	AMR 12.2kbpss	24.32	24.39	24.41	25.00	24.00	24.31	24.22	25.00		
3GPP Rel 99	RMC 12.2kbpss	24.34	24.40	24.43	25.00	24.01	24.32	24.24	25.00		
3GPP Rel 6	HSDPA Subtest1	22.88	23.41	23.50	24.00	22.88	23.25	23.30	24.00		
3GPP Rel 6	HSDPA Subtest2	22.95	23.42	23.47	24.00	23.08	23.28	23.19	24.00		
3GPP Rel 6	HSDPA Subtest3	22.97	22.93	22.95	23.50	22.52	22.75	22.69	23.50		
3GPP Rel 6	HSDPA Subtest4	22.94	22.92	22.98	23.50	22.65	22.73	22.69	23.50		
3GPP Rel 8	DC-HSDPA Subtest1	22.98	23.35	23.44	24.00	22.97	23.16	23.13	24.00		
3GPP Rel 8	DC-HSDPA Subtest2	22.88	23.34	23.40	24.00	23.04	23.21	23.17	24.00		
3GPP Rel 8	DC-HSDPA Subtest3	22.85	22.88	22.87	23.50	22.85	22.95	22.90	23.50		
3GPP Rel 8	DC-HSDPA Subtest4	22.85	22.90	22.89	23.50	22.89	22.98	22.93	23.50		
3GPP Rel 6	HSUPA Subtest1	23.38	23.36	23.43	24.00	23.00	23.17	23.11	24.00		
3GPP Rel 6	HSUPA Subtest2	21.39	21.34	21.43	22.00	21.14	21.14	21.11	22.00		
3GPP Rel 6	HSUPA Subtest3	21.37	22.39	22.41	23.00	22.08	22.22	22.07	23.00		
3GPP Rel 6	HSUPA Subtest4	21.40	21.49	21.38	22.00	21.11	21.19	21.14	22.00		
3GPP Rel 6	HSUPA Subtest5	23.36	23.40	23.40	24.00	22.90	23.20	23.10	24.00		



Ant 2 Band 2 Full Power / DSI 1/4

Ant 2 Band 4 Full Power / DSI 1/4

Ant 2 Band 7 Full Power / DSI 1/4

BW [MHz]	Modulation	RB Size	RB Offset	Power On Channel	Power Middle Channel	Power Far Channel	Time-up limit [dBm]	MPR [dB]
Channel								
Frequency (MHz)								
20	QPSK	1	0	24.48	24.74	24.81	25.5	0
20	QPSK	1	2510	2535	2560	25.5	0	
20	QPSK	1	0	24.48	24.74	24.81	25.5	0
20	QPSK	1	2510	2535	2560	25.5	0	
20	QPSK	1	0	24.47	24.71	24.41	24.5	1
20	QPSK	1	50	23.77	23.88	23.76	24.5	1
20	QPSK	50	0	24.37	23.73	23.73	24.5	1
20	QPSK	50	0	23.83	23.92	23.86	24.5	1
20	QPSK	100	0	23.83	23.92	23.86	24.5	1
20	QAM	1	0	24.01	23.99	24.02	24.5	1
20	QAM	1	49	24.03	24.04	24.06	24.5	1
20	QAM	1	0	23.99	24.02	24.02	24.5	1
20	QAM	1	49	23.99	24.02	24.02	24.5	1
20	QAM	50	0	22.78	22.74	22.80	23.5	2
20	QAM	50	50	22.77	22.79	22.91	23.5	2
20	QAM	50	0	22.88	22.86	22.94	23.5	2
20	QAM	100	0	22.88	22.86	22.94	23.5	2
20	QAM	100	0	23.05	22.92	22.89	23.5	2
20	QAM	1	49	22.82	22.92	22.94	23.5	2
20	QAM	1	0	23.03	22.82	22.74	23.5	2
20	QAM	1	49	23.03	22.82	22.74	23.5	2
20	QAM	1	0	23.03	22.82	22.74	23.5	2
20	QAM	50	0	21.91	21.79	21.92	23.5	2
20	QAM	50	50	21.87	21.87	21.91	23.5	2
20	QAM	100	0	21.90	21.82	21.90	23.5	2
20	QAM	100	0	21.90	21.82	21.90	23.5	2
20	QAM	1	0	21.94	21.86	21.91	20.5	5
20	QAM	1	49	21.94	21.86	21.91	20.5	5
20	QAM	1	0	21.94	21.86	21.91	20.5	5
20	QAM	50	0	21.97	21.89	21.98	20.5	5
20	QAM	50	0	21.97	21.89	21.98	20.5	5
20	QAM	100	0	19.10	19.10	19.27	20.5	5
Channel								
Frequency (MHz)								
15	QPSK	1	0	24.70	24.65	24.61	24.5	0
15	QPSK	1	37	24.73	24.63	24.62	24.5	0
15	QPSK	1	74	24.68	24.72	24.55	24.5	0
15	QPSK	36	0	23.76	23.71	23.78	24.5	1
15	QPSK	36	0	23.76	23.71	23.78	24.5	1
15	QPSK	36	0	23.76	23.71	23.78	24.5	1
15	QPSK	36	0	23.88	23.86	23.88	24.5	1
15	QPSK	75	0	23.90	23.72	23.82	24.5	1
15	QAM	1	0	24.95	24.04	24.03	24.5	1
15	QAM	1	49	24.95	24.04	24.03	24.5	1
15	QAM	1	0	24.95	24.04	24.03	24.5	1
15	QAM	1	74	24.11	23.97	23.81	24.5	1
15	QAM	36	0	22.81	22.71	22.86	23.5	2
15	QAM	36	0	22.91	22.76	22.83	23.5	2
15	QAM	36	0	22.91	22.76	22.83	23.5	2
15	QAM	75	0	22.91	22.74	22.86	23.5	2
15	QAM	1	0	23.04	22.92	22.97	23.5	2
15	QAM	1	49	22.97	22.87	23.02	23.5	2
15	QAM	1	0	23.04	22.92	22.97	23.5	2
15	QAM	36	0	21.80	21.73	21.81	23.5	2
15	QAM	36	0	21.91	21.85	21.93	23.5	2
15	QAM	75	0	21.91	21.85	21.93	23.5	2
15	QAM	1	0	19.32	20.26	19.24	20.5	5
15	QAM	1	49	19.32	20.26	19.24	20.5	5
15	QAM	1	0	19.32	20.26	19.24	20.5	5
15	QAM	1	74	19.27	19.14	19.36	20.5	5
15	QAM	1	0	19.30	19.34	19.12	15.5	5
15	QAM	36	0	19.29	19.09	19.18	15.5	5
15	QAM	36	0	19.29	19.09	19.18	15.5	5
15	QAM	36	0	19.29	19.13	19.22	15.5	5
15	QAM	75	0	19.34	19.10	19.24	15.5	5
Channel								
Frequency (MHz)								
10	QPSK	1	0	24.52	24.61	24.21	24.5	0
10	QPSK	1	25	24.47	24.57	24.25	24.5	0
10	QPSK	1	49	24.58	24.66	24.57	24.5	0
10	QPSK	25	0	23.98	23.95	24.01	24.5	1
10	QPSK	25	0	23.88	23.73	23.50	24.5	1
10	QPSK	25	0	23.84	23.79	23.41	24.5	1
10	QPSK	50	0	23.82	23.69	23.33	24.5	1
10	QPSK	50	0	23.82	23.69	23.33	24.5	1
10	QAM	1	0	24.50	24.04	23.68	24.5	1
10	QAM	1	49	24.07	24.97	23.97	24.5	1
10	QAM	1	0	22.74	22.79	22.43	23.5	2
10	QAM	25	0	22.74	22.79	22.43	23.5	2
10	QAM	25	0	22.84	22.78	22.40	23.5	2
10	QAM	50	0	22.87	22.89	22.37	23.5	2
10	QAM	50	0	23.04	23.01	22.67	23.5	2
10	QAM	1	0	23.08	23.06	22.61	23.5	2
10	QAM	1	49	23.08	23.06	22.61	23.5	2
10	QAM	25	0	21.75	21.72	21.35	23.5	2
10	QAM	25	0	21.73	21.75	21.40	23.5	2
10	QAM	50	0	21.73	21.75	21.40	23.5	2
10	QAM	50	0	21.85	21.57	21.36	23.5	2
10	QAM	75	0	19.10	19.20	18.81	20.5	5
10	QAM	75	0	19.10	19.14	18.84	20.5	5
10	QAM	1	0	19.10	19.03	18.85	20.5	5
10	QAM	1	49	19.10	19.03	18.85	20.5	5
10	QAM	25	0	19.10	19.03	18.85	20.5	5
10	QAM	25	0	19.10	19.03	18.84	20.5	5
10	QAM	50	0	19.21	19.10	18.87	20.5	5
10	QAM	50	0	19.21	19.02	18.87	20.5	5
Channel								
Frequency (MHz)								
5	QPSK	1	0	24.61	24.61	24.23	24.5	0
5	QPSK	1	12	24.63	24.51	24.63	24.5	0
5	QPSK	1	24	24.63	24.51	24.63	24.5	0
5	QPSK	12	0	23.81	23.71	23.49	24.5	1
5	QPSK	12	7	23.82	23.72	23.96	24.5	1
5	QPSK	12	13	23.83	23.79	23.90	24.5	1
5	QPSK	25	0	23.89	23.86	23.92	24.5	1
5	QPSK	25	0	23.99	23.96	24.13	24.5	1
5	QAM	1	0	24.02	24.02	24.08	24.5	1
5	QAM	1	12	24.03	24.02	23.65	24.5	1
5	QAM	1	24	24.03	24.02	23.65	24.5	1
5	QAM	12	0	22.87	22.81	22.93	23.5	2
5	QAM	12	13	22.88	22.81	22.93	23.5	2
5	QAM	25	0	22.83	22.73	22.93	23.5	2
5	QAM	25	0	22.92	22.91	23.01	23.5	2
5	QAM	1	24	22.97	22.96	22.63	23.5	2
5	QAM	12	0	21.85	21.72	21.95	23.5	2
5	QAM	12	13	21.85	21.77	21.95	23.5	2
5	QAM	25	0	21.85	21.75	21.94	23.5	2
5	QAM	25	0	21.94	21.94	19.91	20.5	5
5	QAM	1	0	21.94	21.94	19.91	20.5	5
5	QAM	1	24	21.94	21.94	19.91	20.5	5
5	QAM	12	0	19.13	19.11	19.29	20.5	5
5	QAM	12	7	19.24	19.08	19.31	20.5	5



Ant 2 Band 66 Full Power / DS1 1/4										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. (dBm)	Power Mod. Ch. (dBm)	Power High Ch. (dBm)	Tune-up limit (dBm)	MRR (dB)		
Channel				132072	132322	132572				
Frequency [MHz]				1720	1745	1770				
10	OQPSK	1	0	23.94	24.03	24.03	25.5	0		
10	OQPSK	1	49	23.94	24.03	24.03	25.5	0		
10	OQPSK	1	99	23.92	23.99	23.92	24.5	1		
10	OQPSK	50	0	23.18	23.25	23.14	24.5	1		
10	OQPSK	50	24	23.22	23.22	23.15	24.5	1		
10	OQPSK	50	48	23.22	23.22	23.14	24.5	1		
10	OQPSK	50	99	23.20	23.28	23.12	24.5	1		
10	16QAM	1	0	23.26	23.48	23.47	24.5	1		
10	16QAM	1	49	23.46	23.42	23.45	24.5	1		
10	16QAM	1	99	23.46	23.42	23.45	24.5	1		
10	16QAM	50	0	23.35	22.13	22.17	22.5	3		
10	16QAM	50	24	22.32	22.19	22.14	23.5	2		
10	16QAM	50	48	22.34	22.16	22.17	23.5	2		
10	16QAM	50	99	22.34	22.16	22.17	23.5	2		
10	16QAM	100	0	22.35	22.16	22.17	23.5	2		
10	16QAM	100	24	22.25	22.46	22.43	23.5	2		
10	16QAM	100	48	22.25	22.46	22.43	23.5	2		
10	16QAM	100	99	22.38	22.28	22.31	23.5	2		
10	256QAM	1	0	23.52	23.52	23.52	24.5	1		
10	256QAM	1	49	23.52	23.52	23.52	24.5	1		
10	256QAM	1	99	23.52	23.52	23.52	24.5	1		
10	256QAM	50	0	19.18	19.25	19.14	20.5	5		
10	256QAM	50	24	19.18	19.25	19.14	20.5	5		
10	256QAM	50	48	21.32	21.18	21.14	22.5	3		
10	256QAM	50	99	21.24	21.14	21.17	22.5	3		
10	256QAM	100	0	21.30	21.26	21.15	22.5	3		
10	256QAM	100	24	21.26	21.26	21.15	22.5	3		
10	256QAM	100	48	21.26	21.26	21.15	22.5	3		
10	256QAM	100	99	21.26	21.26	21.15	22.5	3		
10	256QAM	1	49	19.12	19.02	19.03	20.5	5		
10	256QAM	1	99	19.82	19.96	19.82	20.5	5		
10	256QAM	50	0	19.18	19.25	19.14	20.5	5		
10	256QAM	50	24	19.18	19.25	19.14	20.5	5		
10	256QAM	50	48	19.19	19.13	19.14	20.5	5		
10	256QAM	100	0	19.20	19.26	19.12	20.5	5		
10	256QAM	100	24	19.20	19.26	19.12	20.5	5		
10	256QAM	100	48	19.20	19.26	19.12	20.5	5		
10	256QAM	100	99	19.20	19.26	19.12	20.5	5		
10	256QAM	1	37	17.15	17.45	17.75	24.5	1		
10	256QAM	1	74	24.15	24.00	23.95	25.5	0		
10	256QAM	1	37	23.75	24.05	24.03	25.5	0		
10	256QAM	36	0	23.28	23.11	23.09	24.5	1		
10	256QAM	36	24	23.28	23.11	23.09	24.5	1		
10	256QAM	36	39	23.21	23.10	23.11	24.5	1		
10	256QAM	75	0	23.25	23.16	23.06	24.5	1		
10	16QAM	1	0	23.28	23.40	23.36	24.5	1		
10	16QAM	1	24	23.28	23.40	23.36	24.5	1		
10	16QAM	1	74	23.41	23.31	23.31	24.5	1		
10	16QAM	36	0	22.36	22.14	22.09	23.5	2		
10	16QAM	36	20	22.36	22.21	22.08	23.5	2		
10	16QAM	36	48	22.36	22.21	22.08	23.5	2		
10	16QAM	36	99	22.36	22.21	22.08	23.5	2		
10	16QAM	75	0	22.28	22.19	22.10	23.5	2		
10	16QAM	75	24	22.28	22.19	22.10	23.5	2		
10	16QAM	75	48	22.28	22.19	22.10	23.5	2		
10	16QAM	75	99	22.28	22.19	22.10	23.5	2		
10	64QAM	1	0	22.53	22.31	22.28	23.5	2		
10	64QAM	1	37	22.53	22.31	22.28	23.5	2		
10	64QAM	25	0	22.53	22.26	22.42	23.5	2		
10	64QAM	25	24	22.53	22.26	22.42	23.5	2		
10	64QAM	25	48	22.53	22.26	22.42	23.5	2		
10	64QAM	25	99	22.53	22.26	22.42	23.5	2		
10	64QAM	50	0	21.30	21.12	21.11	22.5	3		
10	64QAM	50	24	21.30	21.12	21.11	22.5	3		
10	64QAM	50	48	21.30	21.12	21.11	22.5	3		
10	64QAM	50	99	21.30	21.12	21.11	22.5	3		
10	64QAM	75	0	21.28	21.10	21.09	22.5	3		
10	64QAM	75	24	21.28	21.10	21.09	22.5	3		
10	64QAM	75	48	21.28	21.10	21.09	22.5	3		
10	64QAM	75	99	21.28	21.10	21.09	22.5	3		
10	256QAM	1	0	18.86	18.91	18.94	20.5	5		
10	256QAM	1	37	18.86	18.94	18.94	20.5	5		
10	256QAM	1	74	19.02	18.88	18.85	20.5	5		
10	256QAM	36	0	19.02	18.99	18.92	20.5	5		
10	256QAM	36	39	19.10	19.01	19.04	20.5	5		
10	256QAM	75	0	19.09	19.00	18.94	20.5	5		
10	256QAM	75	24	18.82	18.91	18.95	20.5	5		
10	256QAM	75	48	18.82	18.91	18.95	20.5	5		
10	256QAM	75	99	18.82	18.91	18.95	20.5	5		
10	256QAM	25	12	19.17	19.02	19.03	20.5	5		
10	256QAM	25	28	19.14	18.98	19.08	20.5	5		
10	256QAM	25	50	19.03	19.03	19.05	20.5	5		
10	256QAM	25	75	19.03	19.03	19.05	20.5	5		
10	256QAM	25	99	19.03	19.03	19.05	20.5	5		
10	256QAM	12	7	23.30	23.25	23.14	24.5	1		
10	256QAM	12	12	23.22	23.18	23.09	24.5	1		
10	256QAM	12	18	23.22	23.18	23.09	24.5	1		
10	256QAM	12	24	23.22	23.18	23.09	24.5	1		
10	256QAM	12	30	23.22	23.18	23.09	24.5	1		
10	256QAM	12	36	23.22	23.18	23.09	24.5	1		
10	256QAM	12	42	23.22	23.18	23.09	24.5	1		
10	256QAM	12	48	23.22	23.18	23.09	24.5	1		
10	256QAM	12	54	23.22	23.18	23.09	24.5	1		
10	256QAM	12	60	23.22	23.18	23.09	24.5	1		
10	256QAM	12	66	23.22	23.18	23.09	24.5	1		
10	256QAM	12	72	23.22	23.18	23.09	24.5	1		
10	256QAM	12	78	23.22	23.18	23.09	24.5	1		
10	256QAM	12	84	23.22	23.18	23.09	24.5	1		
10	256QAM	12	90	23.22	23.18	23.09	24.5	1		
10	256QAM	12	96	23.22	23.18	23.09	24.5	1		
10	256QAM	12	102	23.22	23.18	23.09	24.5	1		
10	256QAM	12	108	23.22	23.18	23.09	24.5	1		
10	256QAM	12	114	23.22	23.18	23.09	24.5	1		
10	256QAM	12	120	23.22	23.18	23.09	24.5	1		
10	256QAM	12	126	23.22	23.18	23.09	24.5	1		
10	256QAM	12	132	23.22	23.18	23.09	24.5	1		
10	256QAM	12	138	23.22	23.18	23.09	24.5	1		
10	256QAM	12	144	23.22	23.18	23.09	24.5	1		
10	256QAM	12	150	23.22	23.18	23.09	24.5	1		
10	256QAM	12	156	23.22	23.18	23.09	24.5	1		
10	256QAM	12	162	23.22	23.18	23.09	24.5	1		
10	256QAM	12	168	23.22	23.18	23.09	24.5	1		
10	256QAM	12	174	23.22	23.18	23.09	24.5	1		
10	256QAM	12	180	23.22	23.18	23.09	24.5	1		
10	256QAM	12	186	23.22	23.18	23.09	24.5	1		
10	256QAM	12	192	23.22	23.18	23.09	24.5	1		
10	256QAM	12	198	23.22	23.18	23.09	24.5	1		
10	256QAM	12	204	23.22	23.18	23.09	24.5	1		
10	256QAM	12	210	23.22	23.18	23.09	24.5	1		
10	256QAM	12	216	23.22	23.18	23.09	24.5	1		
10	256QAM	12	222	23.22	23.18	23.09	24.5	1		
10	256QAM	12	228	23.22	23.18	23.09	24.5	1		
10	256QAM	12	234	23.22	23.18	23.09	24.5	1		
10	256QAM	12	240	23.22	23.18	23.09	24.5	1		
10	256QAM	12	246	23.22	23.18	23.09	24.5	1		
10	256Q									

Ant 2 Band 38 Full Power / DS1 1/4										Ant 2 Band 41 Full Power / DS1 1/4									
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)	BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel Frequency (MHz)																			
2580 2595 2610																			
20	QPSK	1	0	24.65	24.69	24.67			20	QPSK	1	0	24.68	24.60	24.72	24.67	24.67		
20	QPSK	1	49	24.66	24.62	24.59			20	QPSK	1	49	24.66	24.58	24.66	24.54	24.54		
20	QPSK	1	99	24.63	24.58	24.26			20	QPSK	1	99	24.58	24.57	24.70	24.54	24.58		
20	QPSK	50	0	23.74	23.82	23.38			20	QPSK	50	0	23.77	23.89	23.86	23.64	23.67		
20	QPSK	50	24	23.80	23.80	23.43			20	QPSK	50	24	23.84	23.78	23.76	23.67	23.67		
20	QPSK	50	50	23.80	23.77	23.40			20	QPSK	50	50	23.81	23.73	23.81	23.64	23.71		
20	QPSK	100	0	23.82	23.83	23.44			20	QPSK	100	0	23.82	23.76	23.83	23.71	23.63		
20	16QAM	1	0	23.76	23.78	23.41			20	16QAM	1	0	23.82	23.76	23.86	23.81	23.83		
20	16QAM	1	49	23.71	23.75	23.41			20	16QAM	1	49	23.71	23.75	23.66	23.88	23.88		
20	16QAM	1	99	23.70	23.71	23.34			20	16QAM	1	99	23.74	23.70	23.63	23.71	23.71		
20	16QAM	59	0	23.75	23.77	23.42			20	16QAM	59	0	23.60	23.72	23.76	23.67	23.72		
20	16QAM	59	24	23.83	23.84	22.50			20	16QAM	59	24	23.86	23.79	23.80	23.69	23.69		
20	16QAM	59	50	23.82	23.78	22.43			20	16QAM	59	50	22.85	22.78	22.84	22.68	22.73		
20	16QAM	100	0	23.83	23.82	22.46			20	16QAM	100	0	22.87	22.80	22.76	22.72	22.68		
20	64QAM	1	0	22.59	22.59	22.19			20	64QAM	1	0	22.60	22.53	22.68	22.53	22.53		
20	64QAM	1	49	22.48	22.50	22.15			20	64QAM	1	49	22.58	22.47	22.55	22.37	22.45		
20	64QAM	1	99	22.54	22.52	22.18			20	64QAM	1	99	22.53	22.44	22.55	22.38	22.47		
20	64QAM	50	0	21.71	21.69	21.37			20	64QAM	50	0	21.72	21.66	21.72	21.58	21.66		
20	64QAM	50	24	21.77	21.79	21.43			20	64QAM	50	24	21.80	21.76	21.71	21.66	21.64		
20	64QAM	50	50	21.74	21.72	21.39			20	64QAM	100	0	21.62	21.82	21.72	21.85	21.72		
20	64QAM	100	0	21.83	21.56	21.48			20	256QAM	1	0	19.23	19.17	19.30	19.18	19.21		
20	256QAM	1	49	19.26	19.19	19.20			20	256QAM	1	49	19.25	19.17	19.27	19.16	19.07		
20	256QAM	1	99	18.13	18.13	18.86			20	256QAM	1	99	18.12	18.13	18.21	19.12	19.10		
20	256QAM	50	0	18.18	18.12	18.83			20	256QAM	50	0	18.20	18.12	18.14	18.05			
20	256QAM	50	50	18.13	18.14	18.73			20	256QAM	50	50	19.17	19.04	19.14	19.19	19.07		
20	256QAM	100	0	18.26	18.17	18.80			20	256QAM	100	0	19.22	19.17	19.28	19.14	19.07		
Channel Frequency (MHz)																			
37825 38000 38225																			
2575.5 2595 2615																			
15	QPSK	1	0	24.62	24.59	24.64			15	QPSK	1	37	24.62	24.57	24.60	25.5	0		
15	QPSK	1	49	24.62	24.57	24.60			15	QPSK	1	74	24.63	24.56	24.64	24.48	24.51		
15	QPSK	1	99	24.63	24.56	24.62			15	QPSK	36	0	23.77	23.69	23.75				
15	QPSK	36	0	23.77	23.69	23.75			15	QPSK	36	0	23.80	23.78	23.76				
15	QPSK	36	20	23.80	23.79	23.80			15	QPSK	36	39	23.81	23.78	23.82				
15	QPSK	36	39	23.77	23.72	22.76			15	QPSK	75	0	23.81	23.78	23.80				
15	QPSK	75	0	22.85	22.77	22.82			15	64QAM	1	0	22.58	22.57	22.57				
15	64QAM	1	0	22.58	22.57	22.57			15	64QAM	1	37	22.65	22.63	22.65				
15	64QAM	1	49	23.74	23.73	23.78			15	64QAM	1	74	23.71	23.82	23.81				
15	64QAM	1	99	23.74	23.73	23.78			15	64QAM	36	0	22.54	22.53	22.54				
15	64QAM	36	0	22.56	22.55	22.55			15	64QAM	36	20	22.78	22.77	22.78				
15	64QAM	36	20	22.78	22.77	22.76			15	64QAM	36	39	22.79	22.78	22.79				
15	64QAM	36	39	22.77	22.72	22.76			15	64QAM	75	0	22.86	22.76	22.73				
15	64QAM	75	0	22.85	22.77	22.82			15	64QAM	1	0	22.68	22.67	22.68				
15	64QAM	1	0	22.68	22.67	22.67			15	64QAM	1	49	22.68	22.67	22.68				
15	64QAM	1	49	22.68	22.67	22.67			15	64QAM	1	99	22.69	22.68	22.69				
15	64QAM	1	99	22.69	22.68	22.68			15	64QAM	25	0	22.79	22.78	22.79				
15	64QAM	25	0	22.79	22.78	22.76			15	64QAM	25	12	22.80	22.79	22.78				
15	64QAM	25	12	22.80	22.79	22.76			15	64QAM	25	12	22.81	22.79	22.78				
15	64QAM	25	25	22.80	22.79	22.76			15	64QAM	25	25	22.81	22.79	22.78				
15	64QAM	25	39	22.80	22.79	22.76			15	64QAM	75	0	22.86	22.85	22.86				
15	64QAM	75	0	22.86	22.85	22.84			15	64QAM	1	0	22.86	22.85	22.86				
15	64QAM	1	0	22.86	22.85	22.84			15	64QAM	1	49	22.86	22.85	22.86				
15	64QAM	1	49	22.86	22.85	22.84			15	64QAM	1	99	22.86	22.85	22.86				
15	64QAM	1	99	22.86	22.85	22.84			15	64QAM	25	0	22.86	22.85	22.86				
15	64QAM	25	0	22.86	22.85	22.84			15	64QAM	25	12	22.86	22.85	22.86				
15	64QAM	25	12	22.86	22.85	22.84			15	64QAM	25	25	22.86	22.85	22.86				
15	64QAM	25	39	22.86	22.85	22.84			15	64QAM	75	0	22.86	22.85	22.86				
15	64QAM	75	0	22.86	22.85	22.84			15	64QAM	1	0	22.86	22.85	22.86				
15	64QAM	1	0	22.86	22.85	22.84			15	64QAM	1	49	22.86	22.85	22.86				
15	64QAM	1	49	22.86	22.85	22.84			15	64QAM	1	99	22.86	22.85	22.86				
15	64QAM	1	99	22.86	22.85	22.84			15	64QAM	25	0	22.86	22.85	22.86				
15	64QAM	25	0	22.86	22.85	22.84			15	64QAM	25	12	22.86	22.85	22.86				
15	64QAM	25	12	22.86	22.85	22.84			15	64QAM	25	25	22.86	22.85	22.86				
15	64QAM	25	39	22.86	22.85	22.84			15	64QAM	75	0	22.86	22.85	22.86				
15	64QAM	75	0	22.86	22.85	22.84			1										

Band	Ant2 Down power DS1 3/5				Ant2 Down power DS1 3/5				WCDMA IV Tune-up Limit (dBm)
	WCDMA II		WCDMA IV		WCDMA IV		WCDMA IV		
TX Channel	9262	9400	9500	Tune-up	1312	1413	1613		
Rx Channel	9500	9600	9600	Limit	1537	1638	1738		
Frequency (MHz)	1852.4	1860	1907.8	(dBm)	1712.4	1732.6	1752.8		
3GPP Rel 99	AMR 12.2Kbps	19.96	20.13	20.12	21.00	20.83	20.96	20.88	22.00
3GPP Rel 99	RMC 12.2Kbps	19.97	20.14	20.09	21.00	20.84	20.98	20.89	22.00
3GPP Rel 6	HSDPA Subtest1	18.81	19.08	19.18	20.00	19.63	19.87	19.90	21.00
3GPP Rel 6	HSDPA Subtest2	18.76	19.26	19.29	20.00	19.75	19.97	20.02	21.00
3GPP Rel 6	HSDPA Subtest3	18.71	19.31	19.36	19.50	19.61	19.81	19.83	20.50
3GPP Rel 6	HSDPA Subtest4	18.75	18.76	18.73	19.50	19.34	19.46	19.48	20.50
3GPP Rel 8	DC-HSDPA Subtest1	18.78	18.99	19.23	20.00	19.79	20.00	19.82	21.00
3GPP Rel 8	DC-HSDPA Subtest2	18.87	19.10	19.03	20.00	19.68	19.80	19.87	21.00
3GPP Rel 8	DC-HSDPA Subtest3	18.76	18.68	18.65	19.50	19.11	19.26	19.35	20.50
3GPP Rel 8	DC-HSDPA Subtest4	18.49	18.64	18.76	19.50	19.41	19.48	19.35	20.50
3GPP Rel 6	HSUPA Subtest1	17.00	17.00	17.00	20.00	17.55	17.76	21.00	
3GPP Rel 6	HSUPA Subtest2	17.24	17.92	17.21	18.00	17.53	17.98	17.77	18.00
3GPP Rel 6	HSUPA Subtest3	17.02	18.11	18.06	19.00	18.84	18.98	18.77	20.00
3GPP Rel 6	HSUPA Subtest4	17.25	17.17	17.13	18.00	17.82	17.98	17.89	19.00
3GPP Rel 6	HSUPA Subtest5	19.05	19.24	19.22	20.00	19.66	19.98	19.79	21.00

Ant2 Band 2 Down power / DS1 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 Frequency (MHz)	RB Size	RB Offset
20	QPSK	1	0	22.25	22.43	22.14			18600	18900	19000
20	QPSK	1	49	22.17	22.02	22.15	23.5	0	20	QPSK	1
20	QPSK	1	99	22.12	22.11	22.27			20	QPSK	1
20	QPSK	50	0	22.35	22.39	22.25			20	QPSK	50
20	QPSK	50	24	22.34	22.36	22.32	23.5	0	20	QPSK	50
20	QPSK	50	50	22.34	22.36	22.32			20	QPSK	50
20	QPSK	100	0	22.28	22.40	22.30			20	QPSK	100
20	16QAM	1	0	22.40	22.38	22.37			20	16QAM	1
20	16QAM	1	49	22.24	22.20	22.21	23.5	0	20	16QAM	1
20	16QAM	1	99	22.26	22.24	22.27			20	16QAM	1
20	16QAM	50	0	22.35	22.25	22.26			20	16QAM	50
20	16QAM	50	24	22.38	22.34	22.40			20	16QAM	50
20	16QAM	50	50	22.34	22.29	23.33	23.5	0	20	16QAM	50
20	16QAM	100	0	22.40	22.26	23.30			20	16QAM	100
20	64QAM	1	0	22.24	22.21	22.15			20	64QAM	1
20	64QAM	1	49	22.23	22.15	22.13	23.5	0	20	64QAM	1
20	64QAM	1	99	22.10	22.18	22.32			20	64QAM	1
20	64QAM	50	0	21.40	21.27	21.28			20	64QAM	50
20	64QAM	50	24	21.30	21.24	21.27	22.5	1	20	64QAM	50
20	64QAM	50	50	21.30	21.24	21.27			20	64QAM	50
20	64QAM	100	0	21.30	21.24	21.27			20	64QAM	100
20	256QAM	1	0	18.16	19.25	19.10			20	256QAM	1
20	256QAM	1	49	18.05	18.98	19.14	20.5	3	20	256QAM	1
20	256QAM	1	99	18.10	19.05	19.04			20	256QAM	1
20	256QAM	50	0	19.21	19.33	19.08			20	256QAM	50
20	256QAM	50	24	19.21	19.15	19.17			20	256QAM	50
20	256QAM	50	50	19.31	19.18	19.22	20.5	3	20	256QAM	50
20	256QAM	100	0	19.25	19.19	19.18			20	256QAM	100
20	16QAM	1	0	22.26	22.23	22.21			20	16QAM	1
20	16QAM	1	49	22.23	22.15	22.13	23.5	0	20	16QAM	1
20	16QAM	1	99	22.10	22.18	22.32			20	16QAM	1
20	16QAM	50	0	21.40	21.27	21.28			20	16QAM	50
20	16QAM	50	24	21.30	21.24	21.28	22.5	1	20	16QAM	50
20	16QAM	50	50	21.30	21.24	21.28			20	16QAM	50
20	16QAM	100	0	21.30	21.24	21.28			20	16QAM	100
20	64QAM	1	0	22.24	22.21	22.15			20	64QAM	1
20	64QAM	1	49	22.23	22.15	22.13	23.5	0	20	64QAM	1
20	64QAM	1	99	22.10	22.18	22.32			20	64QAM	1
20	64QAM	50	0	21.40	21.27	21.28			20	64QAM	50
20	64QAM	50	24	21.30	21.24	21.28	22.5	1	20	64QAM	50
20	64QAM	50	50	21.30	21.24	21.28			20	64QAM	50
20	64QAM	100	0	21.30	21.24	21.28			20	64QAM	100
20	16QAM	1	0	22.26	22.23	22.21			20	16QAM	1
20	16QAM	1	49	22.23	22.20	22.25	23.5	0	20	16QAM	1
20	16QAM	1	99	22.27	22.23	22.24	23.5	0	20	16QAM	1
20	16QAM	50	0	22.28	22.22	22.28			20	16QAM	50
20	16QAM	50	24	22.28	22.22	22.28	23.5	0	20	16QAM	50
20	16QAM	50	50	22.28	22.22	22.28			20	16QAM	50
20	16QAM	100	0	22.28	22.22	22.28			20	16QAM	100
20	64QAM	1	0	22.24	22.21	22.21			20	64QAM	1
20	64QAM	1	49	22.23	22.20	22.21	23.5	0	20	64QAM	1
20	64QAM	1	99	22.10	22.18	22.25			20	64QAM	1
20	64QAM	50	0	21.40	21.27	21.28			20	64QAM	50
20	64QAM	50	24	21.30	21.24	21.28	22.5	1	20	64QAM	50
20	64QAM	50	50	21.30	21.24	21.28			20	64QAM	50
20	64QAM	100	0	21.30	21.24	21.28			20	64QAM	100
20	256QAM	1	0	18.16	19.25	19.10			20	256QAM	1
20	256QAM	1	49	18.05	18.98	19.04	20.5	3	20	256QAM	1
20	256QAM	1	99	18.03	19.05	19.06			20	256QAM	1
20	256QAM	50	0	19.01	18.96	19.01	20.5	3	20	256QAM	50
20	256QAM	50	24	19.01	18.96	19.01			20	256QAM	50
20	256QAM	50	50	19.01	18.96	19.01	20.5	3	20	256QAM	50
20	256QAM	100	0	19.22	19.11	19.10			20	256QAM	100
20	16QAM	1	0	22.26	22.23	22.22			20	16QAM	1
20	16QAM	1	49	22.23	22.20	22.25	23.5	0	20	16QAM	1
20	16QAM	1	99	22.21	22.20	22.25			20	16QAM	1
20	16QAM	50	0	21.25	21.22	21.25			20	16QAM	50
20	16QAM	50	24	21.27	21.29	21.25	22.5	1	20	16QAM	50
20	16QAM	50	50	21.27	21.29	21.25			20	16QAM	50
20	16QAM	100	0	21.27	21.29	21.25			20	16QAM	100
20	64QAM	1	0	22.26	22.23	22.20			20	64QAM	1
20	64QAM	1	49	22.23	22.20	22.25	23.5	0	20	64QAM	1
20	64QAM	1	99	22.21	22.20	22.25			20	64QAM	1
20	64QAM	50	0	21.25	21.22	21.28			20	64QAM	50
20	64QAM	50	24	21.27	21.29	21.25	22.5	1	20	64QAM	50
20	64QAM	50	50	21.27	21.29	21.25			20	64QAM	50
20	64QAM	100	0	21.27	21.29	21.25			20	64QAM	100
20	256QAM	1	0	18.16	19.25	19.10			20	256QAM	1
20	256QAM	1	49	18.05	18.98	18.93	20.5	3	20	256QAM	1
20	256QAM	1	99	18.03	18.96	18.95			20	256QAM	1
20	256QAM	50	0	19.01	18.96	19.01	20.5	3	20	256QAM	50
20	256QAM	50	24	19.01	18.96	19.01			20	256QAM	50
20	256QAM	50	50	19.01	18.96	19.01	20.5	3	20	256QAM	50
20	256QAM	100	0	19.10	19.14	19.19			20	256QAM	100
20	16QAM	1	0	22.26	22.23	22.22			20	16QAM	1
20	16QAM	1	49	22.23	22.20	22.25	23.5	0	20	16QAM	1
20	16QAM	1	99	22.21	22.20	22.25			20	16QAM	1
20	16QAM	50	0	21.25	21.22	21.28			20	16QAM	50
20	16QAM	50	24	21.27	21.29	21.25	22.5	1	20	16QAM	50
20	16QAM	50	50	21.27	21.29	21.25			20	16QAM	50
20	16QAM	100	0	21.27	21.29	21.25			20	16QAM	100
20	64QAM	1	0	22.26	22.23	22.20			20	64QAM	1
20	64QAM	1	49	22.23	22.20	22.25	23.5	0	20	64QAM	1
20	64QAM	1	99	22.21	22.20	22.25			20	64QAM	1
20	64QAM	50	0	21.25	21.22	21.28			20	64QAM	50
20	64QAM	50	24	21.27	21.29	21.25	22.5	1	20	64QAM	50
20	64QAM	50	50	21.27	21.29	21.25			20	64QAM	50
20	64QAM	100	0	21.27	21.29	21.25			20	64QAM	100
20	256QAM	1	0	18.16	19.25	19.10			20	256QAM	1
20	256QAM	1	49	18.05	18.98	18.93	20.5	3	20	256QAM	1
20	256QAM	1	99	18.03	18.96	18.95			20	256QAM	1
20	256QAM	50	0	19.01	18.96	19.01	20.5	3	20	256QAM	50
20	256QAM	50	24	19.01	18.96	19.01			20	256QAM	50
20	256QAM	50	50	19.01	18.96	19.01	20.5	3	20	256QAM	50
20	256QAM	100	0	19.10	19.14	19.19			20	256QAM	100
20	16QAM	1	0	22.26	22.23	22.22			20	16QAM	1
20	16QAM	1	49	22.23	22.20	22.25	23.5	0	20	16QAM	1
20	16QAM	1	99	22.21	22.20	22.25			20	16QAM	1
20	16QAM	50	0	21.25	21.22	21.28			20	16QAM	50

3	256QAM	6	7	19.01	19.02	19.15	Tune-up limit		
3	256QAM	15	0	19.06	18.97	19.04			
	Channel Frequency (MHz)			18607	18900	19193	Tune-up limit (dBm)	MPR (dB)	
	1850.7	1880	1909.3						
1.4	QPSK	1	0	22.06	21.89	21.97			
1.4	QPSK	1	3	22.13	22.12	22.17			
1.4	QPSK	1	5	22.00	22.05	22.04	23.5	0	
1.4	QPSK	3	0	22.14	22.09	22.06			
1.4	QPSK	3	1	21.98	22.14	22.04			
1.4	QPSK	3	3	22.01	22.08	22.17			
1.4	QPSK	6	0	22.22	22.15	22.21	23.5	0	
1.4	16QAM	1	0	22.04	22.06	22.17			
1.4	16QAM	1	3	22.23	22.17	22.25			
1.4	16QAM	1	5	22.17	22.06	22.24	23.5	0	
1.4	16QAM	3	0	22.21	22.13	22.14			
1.4	16QAM	3	1	22.26	22.23	22.21			
1.4	16QAM	3	3	22.24	22.11	22.16			
1.4	16QAM	6	0	22.30	22.12	22.23	23.5	0	
1.4	64QAM	1	0	22.01	21.96	22.10			
1.4	64QAM	1	3	22.17	21.98	22.15			
1.4	64QAM	1	5	22.04	21.99	22.10	23.5	0	
1.4	64QAM	3	0	22.21	22.14	22.23			
1.4	64QAM	3	1	22.25	22.20	22.26			
1.4	64QAM	3	3	22.22	22.16	22.16			
1.4	64QAM	6	0	21.18	21.11	21.21	22.5	1	
1.4	256QAM	1	0	18.90	18.83	18.80			
1.4	256QAM	1	3	18.88	18.97	18.95			
1.4	256QAM	1	5	19.04	18.84	18.92	20.5	3	
1.4	256QAM	3	0	18.93	18.83	18.82			
1.4	256QAM	3	1	18.91	18.96	19.01			
1.4	256QAM	3	3	18.89	18.96	19.07			
1.4	256QAM	6	0	18.98	18.95	19.12	20.5	3	

3	256QAM	8	7	18.18	18.19	18.26	Tune-up limit		
3	256QAM	15	0	18.13	18.03	18.27			
	Channel Frequency (MHz)			18607	18900	19193	Tune-up limit (dBm)	MPR (dB)	
	1850.7	1880	1909.3						
1.4	QPSK	1	0	18.28	18.18	18.14			
1.4	QPSK	1	3	18.36	18.08	18.11			
1.4	QPSK	1	5	18.10	18.21	18.14	19.5	0	
1.4	QPSK	3	0	19.17	19.25	19.13			
1.4	QPSK	3	1	19.05	19.22	19.23			
1.4	QPSK	3	3	19.07	19.13	19.16			
1.4	QPSK	6	0	18.23	18.11	18.38	19.5	0	
1.4	16QAM	1	0	18.42	18.58	18.55			
1.4	16QAM	1	3	18.49	18.52	18.54			
1.4	16QAM	1	5	18.49	18.45	18.55	19.5	0	
1.4	16QAM	3	0	19.43	19.31	19.41			
1.4	16QAM	3	1	19.39	19.24	19.23			
1.4	16QAM	3	3	19.40	19.19	19.15			
1.4	16QAM	6	0	18.53	18.18	18.46	19.5	0	
1.4	64QAM	1	0	18.32	18.25	18.53			
1.4	64QAM	1	3	18.44	18.45	18.52			
1.4	64QAM	1	5	18.45	18.30	18.57	19.5	0	
1.4	64QAM	3	0	19.28	19.32	19.41			
1.4	64QAM	3	1	19.31	18.30	18.44			
1.4	64QAM	3	3	19.29	19.22	19.44			
1.4	64QAM	6	0	18.26	18.25	18.15	18.5	1	
1.4	256QAM	1	0	18.13	17.91	17.91			
1.4	256QAM	1	3	18.10	18.15	18.09			
1.4	256QAM	1	5	17.99	17.95	18.10	19.5	0	
1.4	256QAM	3	0	18.11	17.90	18.11			
1.4	256QAM	3	1	17.90	18.16	18.11			
1.4	256QAM	3	3	18.02	18.07	18.26			
1.4	256QAM	6	0	18.14	17.95	18.16	19.5	0	

3	256QAM	15	0	19.19	19.06	18.89	Tune-up limit		
	Channel Frequency (MHz)			19957	20175	20393	Tune-up limit (dBm)	MPR (dB)	
	1710.7	1732.5	1754.3						
1.4	QPSK	1	0	20.97	20.95	20.91			
1.4	QPSK	1	3	21.04	21.02	20.87			
1.4	QPSK	1	5	20.98	20.86	20.85	22.5	0	
1.4	QPSK	3	0	20.94	20.88	20.87			
1.4	QPSK	3	1	21.06	20.97	20.99			
1.4	QPSK	3	3	20.95	20.90	20.88			
1.4	QPSK	6	0	21.10	21.00	20.90	22.5	0	
1.4	16QAM	1	0	21.18	21.20	21.14			
1.4	16QAM	1	3	21.21	21.32	21.28			
1.4	16QAM	1	5	21.27	21.34	21.17	22.5	0	
1.4	16QAM	3	0	21.05	20.96	20.96			
1.4	16QAM	3	1	21.08	21.00	20.97			
1.4	16QAM	3	3	21.03	21.04	20.94			
1.4	16QAM	6	0	21.14	21.11	21.00	22.5	0	
1.4	64QAM	1	0	21.24	21.18	21.08			
1.4	64QAM	1	3	21.33	21.14	21.24			
1.4	64QAM	1	5	21.22	21.14	21.20	22.5	0	
1.4	64QAM	3	0	21.02	21.00	21.03			
1.4	64QAM	3	1	21.21	21.11	20.99			
1.4	64QAM	3	3	21.19	21.03	20.99			
1.4	64QAM	6	0	21.28	21.17	21.03	22.5	0	
1.4	256QAM	1	0	18.92	18.86	18.82			
1.4	256QAM	1	3	18.96	18.91	18.91			
1.4	256QAM	1	5	18.84	18.93	18.76	20.5	2	
1.4	256QAM	3	0	18.97	19.00	18.85			
1.4	256QAM	3	1	18.99	19.03	18.92			
1.4	256QAM	3	3	18.92	18.95	18.89			
1.4	256QAM	6	0	19.14	19.04	18.83	20.5	2	

Ant2 Band 4 Down power / DS1 5												Ant2 Band 7 Down power / DS1 3/5												Ant2 Band 66 Down power / DS1 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)	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)	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				Frequency (MHz)				Channel				Frequency (MHz)				Channel				Frequency (MHz)				Channel				Frequency (MHz)							
20	QPSK	1	0	20.28	20.37	20.21	21.5	0	20	QPSK	1	0	18.59	18.80	18.56	20.5	0	20	QPSK	1	0	21.05	21.33	20.97	22.5	0									
20	QPSK	1	49	18.89	20.00	19.89	21.5	0	20	QPSK	1	49	18.58	18.48	18.52	19.5	0	20	QPSK	1	49	21.04	20.94	20.91	22.5	0									
20	QPSK	1	99	18.89	19.91	19.99	21.5	0	20	QPSK	1	99	18.38	18.59	18.38	21.5	0	20	QPSK	1	99	20.90	20.90	20.94	22.5	0									
20	QPSK	50	0	20.13	20.24	20.20	21.5	0	20	QPSK	50	0	18.65	18.79	18.60	19.5	0	20	QPSK	50	0	21.02	21.20	21.07	22.5	0									
20	QPSK	50	24	19.97	20.01	20.06	21.5	0	20	QPSK	50	24	18.71	18.82	18.73	19.5	0	20	QPSK	50	24	21.14	21.08	20.94	22.5	0									
20	QPSK	50	50	19.94	20.07	19.81	21.5	0	20	QPSK	50	50	18.77	18.78	18.75	19.5	0	20	QPSK	50	50	21.11	21.02	20.99	22.5	0									
20	QPSK	100	0	20.09	20.18	20.02	21.5	0	20	QPSK	100	0	18.72	18.78	18.67	21.0	0	20	QPSK	100	0	21.08	21.12	21.00	22.5	0									
20	64QAM	1	0	20.35	19.93	20.04	21.5	0	20	64QAM	1	49	15.56	18.61	18.56	19.5	0	20	64QAM	1	49	21.16	21.04	20.99	22.5	0									
20	64QAM	1	99	19.99	19.98	19.97	21.5	0	20	64QAM	1	99	18.66	18.49	18.41	20.5	0	20	64QAM	1	99	21.05	20.89	20.90	22.5	0									
20	64QAM	50	0	20.23	20.20	20.32	21.5	0	20	64QAM	50	24	18.62	18.66	18.79	19.5	0	20	64QAM	50	24	21.27	21.25	21.09	22.5	0									
20	64QAM	50	50	20.16	20.50	20.11	21.5	0	20	64QAM	100	0	18.63	18.58	18.52	21.0	0	20	64QAM	100	0	21.03	21.03	21.03	22.5	0									
20	64QAM	100	0	20.13	20.21	20.24	21.5	0	20	64QAM	1	0	18.48	18.51	18.41	20.5	0	20	64QAM	1	0	19.00	18.38	18.05	20.5	2									
20	256QAM	1	0	18.12	18.69	19.07	20.5	1	20	256QAM	1	49	18.42	18.30	18.39	19.5	0	20	256QAM	1	49	19.17	19.03	18.99	20.5	2									
20	256QAM	1	49	18.91	18.84	18.88	20.5	1	20	256QAM	50	0	18.36	18.52	18.38	21.0	0	20	256QAM	50	24	19.24	19.21	19.13	20.5	2									
20	256QAM	50	50	18.06	18.96	18.88	20.5	1	20	256QAM	50	50	18.45	18.46	18.43	19.5	0	20	256QAM	100	0	18.51	18.43	18.41	20.5	2									
20	256QAM	100	0	18.94	18.98	18.99	20.5	1	20	256QAM	1	74	18.74	18.52	18.53	20.5	0	20	256QAM	1	74	21.08	21.08	21.05	22.5	0									
20	256QAM	1	74	18.97	19.00	19.93	20.5	1	20	256QAM	1	74	18.64	18.61	18.69	20.5	0	20	256QAM	1	74	21.08	21.08	21.05	22.5	0									
20	256QAM	1	74	19.02	19.06	19.08	20.5	1	20	256QAM	1	74	18.62	18.59	18.74	20.5	0	20	256QAM	1	74	21.21	21.11	21.03	22.5	0									
20	256QAM	1	74	19.02	18.97	18.88	20.5	1	20	256QAM	1	74	18.49	18.33	18.58	20.5	0	20	256QAM	1	74	19.09	18.93	18.80	20.5	2									
20	256QAM	1	74	18.81	18.77	18.84	20.5	1	20	256QAM	38	0	18.31	18.37	18.43	20.5	0	20	256QAM	38	0	18.36	18.39	18.38	20.5	2									
20	256QAM	38	0	18.07	19.20	19.03	20.5	1	20	256QAM	38	0	18.26	18.26	18.26	20.5	0	20	256QAM	38	0	18.26	18.26	18.26	20.5	2									
20	256QAM	38	0	18.96	18.87	19.09	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	18.98	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.07	19.20	19.03	20.5	1	20	256QAM	75	0	18.26	18.26	18.26	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
20	256QAM	75	0	18.97	19.00	19.17	20.5	1	20	256QAM	75	0	18.50	18.31	18.47	20.5	0	20	256QAM	75	0	19.28	19.04	18.98	20.5	2									
2																																			

3	256QAM	8	7	19.20	19.05	19.04			
3	256QAM	15	0	19.31	18.97	18.95			
	Channel	19957	20175	20593	Tune-up limit				
	Frequency (MHz)	1710.7	1732.5	1754.3	(dBm)				
1.4	QPSK	1	0	20.10	19.87	20.03			
1.4	QPSK	1	3	20.16	20.10	19.83	21.5	0	
1.4	QPSK	1	5	19.93	19.88	19.89			
1.4	QPSK	3	0	19.82	19.81	19.78			
1.4	QPSK	3	1	20.13	19.96	20.00			
1.4	QPSK	3	3	19.86	19.85	19.90			
1.4	QPSK	6	0	20.17	19.96	19.81	21.5	0	
1.4	16QAM	1	0	20.30	20.29	20.18			
1.4	16QAM	1	3	20.29	20.36	20.39			
1.4	16QAM	1	5	20.38	20.43	20.28	21.5	0	
1.4	16QAM	3	0	20.16	19.99	20.04			
1.4	16QAM	3	1	20.19	20.10	19.89			
1.4	16QAM	3	3	19.98	19.94	20.03			
1.4	16QAM	6	0	20.08	20.02	19.92	21.5	0	
1.4	64QAM	1	0	20.15	20.14	20.21			
1.4	64QAM	1	3	20.33	20.20	20.22	21.5	0	
1.4	64QAM	1	5	20.31	20.11	20.18			
1.4	64QAM	3	0	20.15	20.19	20.10			
1.4	64QAM	3	1	20.16	20.23	19.93			
1.4	64QAM	3	3	20.15	20.08	19.98			
1.4	64QAM	6	0	20.35	20.13	19.92	21.5	0	
1.4	256QAM	1	0	18.96	16.78	18.92			
1.4	256QAM	1	3	18.93	19.02	19.04			
1.4	256QAM	1	5	18.83	18.94	18.65	20.5	1	
1.4	256QAM	3	0	18.84	18.98	18.92			
1.4	256QAM	3	1	19.09	18.94	18.97			
1.4	256QAM	3	3	18.96	18.97	18.81			
1.4	256QAM	6	0	19.19	19.15	18.95	20.5	1	

3	256QAM	8	7	19.17	18.99	18.93			
3	256QAM	15	0	19.05	19.11	18.98			
	Channel	131979	132322	132665	Tune-up limit				
	Frequency (MHz)	1710.7	1745	1779.3	(dBm)				
1.4	QPSK	1	0	20.79	21.04	20.91			
1.4	QPSK	1	3	20.88	20.81	20.59			
1.4	QPSK	1	5	20.67	20.81	20.72	22.5	0	
1.4	QPSK	3	0	20.80	20.76	20.74			
1.4	QPSK	3	1	20.79	20.81	20.73			
1.4	QPSK	3	3	20.78	20.74	20.74			
1.4	QPSK	6	0	21.03	21.02	20.88	22.5	0	
1.4	16QAM	1	0	20.83	21.06	21.04			
1.4	16QAM	1	3	20.96	20.97	21.04			
1.4	16QAM	1	5	21.31	20.84	20.87	22.5	0	
1.4	16QAM	3	0	21.01	20.76	20.76			
1.4	16QAM	3	1	20.91	20.84	20.79			
1.4	16QAM	3	3	20.80	20.76	20.82			
1.4	16QAM	6	0	21.07	20.97	20.95	22.5	0	
1.4	64QAM	1	0	20.85	20.99	21.04			
1.4	64QAM	1	3	21.07	20.92	20.93			
1.4	64QAM	1	5	21.16	20.81	20.84	22.5	0	
1.4	64QAM	3	0	20.98	20.71	20.82			
1.4	64QAM	3	1	20.91	20.84	20.82			
1.4	64QAM	3	3	20.89	20.70	20.83			
1.4	64QAM	6	0	21.30	21.12	21.13	22.5	0	
1.4	256QAM	1	0	18.74	18.93	18.93			
1.4	256QAM	1	3	18.93	18.74	18.62			
1.4	256QAM	1	5	18.67	18.86	18.76	20.5	2	
1.4	256QAM	3	0	18.90	18.85	18.68			
1.4	256QAM	3	1	18.84	18.89	18.78			
1.4	256QAM	3	3	18.70	18.75	18.76			
1.4	256QAM	6	0	19.10	19.00	18.94	20.5	2	



Ant2 Band 66 Down power / DSi 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									
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	0	20.01	19.29	19.86			
20	QPSK	1	49	20.05	19.91	19.89	21.5	0	
20	QPSK	1	99	19.81	19.98	19.93			
20	QPSK	50	0	19.92	20.15	20.08			
20	QPSK	50	24	20.13	20.10	19.87			
20	QPSK	50	50	20.00	20.11	20.05	21.5	0	
20	QPSK	100	0	20.14	20.17	19.99			
20	16QAM	1	0	20.00	20.25	20.00			
20	16QAM	1	49	20.19	20.19	20.10	21.5	0	
20	16QAM	1	99	19.84	19.97	20.02			
20	16QAM	50	0	20.13	19.92	20.06			
20	16QAM	50	24	20.16	20.01	20.10			
20	16QAM	50	50	20.05	20.13	20.20			
20	16QAM	100	0	20.21	20.00	20.12			
20	64QAM	1	0	19.98	20.16	20.13			
20	64QAM	1	49	20.04	20.08	20.08	21.5	0	
20	64QAM	1	99	20.14	19.89	19.97			
20	64QAM	50	0	20.18	20.27	20.26			
20	64QAM	50	24	20.22	20.17	20.22			
20	64QAM	50	50	20.15	20.41	20.28	21.5	0	
20	64QAM	100	0	20.26	20.17	20.03			
20	256QAM	1	0	18.10	19.38	18.01			
20	256QAM	1	49	19.08	19.07	18.99	20.5	1	
20	256QAM	1	99	18.08	19.02	18.88			
20	256QAM	50	0	19.27	19.31	19.02			
20	256QAM	50	24	19.35	19.17	19.15	20.5	1	
20	256QAM	50	50	19.27	19.15	19.20			
20	256QAM	100	0	19.24	19.24	19.25			
Channel				132047	132322	132597	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	19.74	19.95	19.78			
15	QPSK	1	37	19.89	19.96	19.83	21.5	0	
15	QPSK	1	74	20.20	19.77	19.71			
15	QPSK	36	0	20.19	19.88	19.91			
15	QPSK	36	39	19.98	19.86	20.15	21.5	0	
15	QPSK	75	0	20.11	20.05	20.02			
15	16QAM	1	0	20.00	19.92	19.90			
15	16QAM	1	37	20.21	20.00	19.86	21.5	0	
15	16QAM	1	74	20.19	19.98	19.86			
15	16QAM	36	0	20.07	19.87	20.03			
15	16QAM	36	20	20.27	19.98	20.07			
15	16QAM	36	39	20.22	20.10	19.96	21.5	0	
15	16QAM	75	0	20.21	19.98	20.03			
15	64QAM	1	0	19.82	19.86	20.00			
15	64QAM	1	37	20.26	19.79	19.81	21.5	0	
15	64QAM	1	74	20.19	19.98	19.86			
15	64QAM	36	0	20.30	20.16	20.00			
15	64QAM	36	20	20.30	20.34	20.01	21.5	0	
15	64QAM	36	39	20.30	20.31	20.24			
15	64QAM	75	0	20.30	20.33	20.12			
15	256QAM	1	0	18.86	18.83	18.95			
15	256QAM	1	37	18.56	18.52	18.62	20.5	1	
15	256QAM	1	74	18.89	19.00	18.84			
15	256QAM	36	0	19.05	19.01	19.82			
15	256QAM	36	20	19.24	19.20	18.95	20.5	1	
15	256QAM	36	39	19.00	19.08	19.04			
15	256QAM	75	0	19.41	18.98	18.98			
Channel				132022	132322	132622	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	19.52	19.91	19.86			
10	QPSK	1	25	19.84	20.01	19.86	21.5	0	
10	QPSK	1	49	19.69	19.98	19.86			
10	QPSK	25	0	19.87	19.98	20.03			
10	QPSK	25	12	20.18	20.19	20.04	21.5	0	
10	QPSK	25	25	20.02	20.04	20.04			
10	QPSK	50	0	19.94	20.10	19.79			
10	16QAM	1	0	19.72	19.97	20.07			
10	16QAM	1	25	20.13	20.02	19.96	21.5	0	
10	16QAM	1	49	20.13	20.09	20.04			
10	16QAM	25	0	20.24	20.03	19.96			
10	16QAM	25	12	20.14	20.19	20.04	21.5	0	
10	16QAM	25	25	20.12	20.03	20.15			
10	16QAM	50	0	20.18	20.21	19.87			
10	64QAM	1	0	19.93	20.30	20.10			
10	64QAM	1	25	20.10	20.18	19.99	21.5	0	
10	64QAM	1	49	20.19	20.15	20.11			
10	64QAM	25	0	20.23	20.12	20.07			
10	64QAM	25	12	20.14	20.18	20.05	21.5	0	
10	64QAM	25	25	20.12	20.15	20.10			
10	64QAM	50	0	20.20	20.13	20.04			
10	256QAM	1	0	18.76	18.81	19.05			
10	256QAM	1	25	18.93	18.87	19.04	20.5	1	
10	256QAM	1	49	18.64	18.92	18.75			
10	256QAM	25	0	18.86	19.00	18.98			
10	256QAM	25	12	19.14	18.91	19.02	20.5	1	
10	256QAM	25	25	19.27	18.95	19.18			
10	256QAM	50	0	18.80	19.17	18.94			
Channel				131997	132322	132647	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	19.99	20.10	19.86			
5	QPSK	1	12	20.13	20.15	20.10	21.5	0	
5	QPSK	1	24	19.95	19.92	19.85			
5	QPSK	12	0	20.00	20.03	20.16			
5	QPSK	12	7	20.30	20.32	19.99	21.5	0	
5	QPSK	12	13	20.30	20.09	19.84			
5	QPSK	25	0	20.06	20.21	20.13			
5	16QAM	1	0	19.92	20.14	20.20			
5	16QAM	1	12	20.11	20.03	19.96	21.5	0	
5	16QAM	1	24	20.22	20.14	19.96			
5	16QAM	12	0	20.24	20.04	20.09			
5	16QAM	12	7	20.11	20.20	19.99	21.5	0	
5	16QAM	12	13	20.09	19.93	20.14			
5	16QAM	25	0	20.12	20.04	20.06			
5	64QAM	1	0	19.80	20.12	20.10			
5	64QAM	1	12	20.09	19.97	20.06	21.5	0	
5	64QAM	1	24	19.96	19.86	20.01			
5	64QAM	12	0	20.16	20.43	20.34			
5	64QAM	12	7	20.36	20.31	20.12			
5	64QAM	12	13	20.26	20.25	20.14	21.5	0	
5	64QAM	25	0	20.31	20.24	20.21			
5	64QAM	1	0	18.94	18.97	19.12			
5	256QAM	1	12	18.97	19.14	18.95	20.5	1	
5	256QAM	1	24	19.16	18.96	18.79			
5	256QAM	12	0	19.23	19.08	19.02			
5	256QAM	12	7	19.30	19.22	19.06	20.5	1	
5	256QAM	12	13	19.24	19.10	19.10			
5	256QAM	25	0	19.07	19.02	19.05			
Channel				131987	132322	132657	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1711.5	1745	1778.5			
3	QPSK	1	0	19.87	19.93	19.99			
3	QPSK	1	8	20.11	20.17	19.94	21.5	0	
3	QPSK	1	14	20.18	19.82	19.80			
3	QPSK	8	0	20.17	20.08	20.02			
3	QPSK	8	4	20.16	20.14	19.97	21.5	0	
3	QPSK	8	7	20.05	20.05	20.17			
3	QPSK	15	0	20.19	20.01	20.07			
3	16QAM	1	0	20.18	19.95	20.19			
3	16QAM	1	8	20.15	20.14	19.96	21.5	0	
3	16QAM	1	14	20.10	19.94	19.92			
3	16QAM	8	0	20.23	20.12	20.10			
3	16QAM	8	4	20.39	20.14	20.06	21.5	0	
3	16QAM	8	7	20.32	20.02	19.97			
3	16QAM	15	0	20.24	20.14	20.20			
3	64QAM	1	0	19.88	20.16	20.05			
3	64QAM	1</td							



3	256QAM	8	7	19.22	19.10	18.95					
3	256QAM	15	0	19.00	19.23	19.03					
	Channel			131979	132322	132665	Tune-up				
		Frequency (MHz)		1710.7	1745	1779.3	limit	MPR			
1.4	OQPSK	1	0	19.70	20.05	19.96					
1.4	OQPSK	1	3	19.78	19.92	19.69					
1.4	OQPSK	1	5	19.60	19.76	19.60					
1.4	OQPSK	3	0	19.67	19.83	19.71					
1.4	OQPSK	3	1	19.74	19.85	19.73					
1.4	OQPSK	3	3	19.67	19.72	19.66					
1.4	OQPSK	6	0	20.00	20.00	19.93	21.5	0			
1.4	16QAM	1	0	19.82	20.07	19.95					
1.4	16QAM	1	3	19.85	19.84	20.04					
1.4	16QAM	1	5	20.32	19.92	19.87					
1.4	16QAM	3	0	20.12	19.83	19.78					
1.4	16QAM	3	1	19.93	19.73	19.70					
1.4	16QAM	3	3	19.75	19.86	19.83					
1.4	16QAM	6	0	19.98	20.02	19.86	21.5	0			
1.4	64QAM	1	0	19.91	19.92	20.01					
1.4	64QAM	1	3	20.16	19.80	19.90					
1.4	64QAM	1	5	20.04	19.89	19.95					
1.4	64QAM	3	0	19.86	19.58	19.85					
1.4	64QAM	3	1	19.84	19.81	19.85					
1.4	64QAM	3	3	19.84	19.70	19.83					
1.4	64QAM	6	0	20.20	20.12	20.15	21.5	0			
1.4	256QAM	1	0	18.65	18.89	18.90					
1.4	256QAM	1	3	18.82	18.62	18.56					
1.4	256QAM	1	5	18.55	18.94	18.72					
1.4	256QAM	3	0	18.80	18.78	18.64					
1.4	256QAM	3	1	18.89	18.97	18.76					
1.4	256QAM	3	3	18.82	18.75	18.77					
1.4	256QAM	6	0	19.16	18.99	19.06	20.5	1			

Ant2 Band 38 Down power / DS1 3/5									Ant2 Band 41 Down power / DS1 3/5								
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)	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			Channel				39750	40185	40620	41055	41490
Frequency (MHz)				2580	2595	2610			Frequency (MHz)				2505	2549.5	2593	2635.5	2680
20	QPSK	1	0	21.66	21.76	21.65			20	QPSK	1	0	21.71	21.56	21.76	21.62	21.74
20	QPSK	1	49	21.65	21.69	21.63			20	QPSK	1	49	21.69	21.56	21.72	21.51	21.60
20	QPSK	1	99	21.70	21.55	21.35			20	QPSK	1	99	21.59	21.57	21.65	21.61	21.58
20	QPSK	50	0	21.54	21.65	21.21			20	QPSK	50	0	21.49	21.43	21.67	21.37	21.38
20	QPSK	50	24	21.52	21.62	21.25			20	QPSK	50	24	21.63	21.52	21.61	21.40	21.46
20	QPSK	50	50	21.64	21.52	21.25			20	QPSK	50	50	21.61	21.49	21.53	21.38	21.54
20	QPSK	100	0	21.60	21.67	21.29			20	QPSK	100	0	21.64	21.59	21.66	21.49	21.43
20	16QAM	1	0	21.45	21.56	21.15			20	16QAM	1	0	21.54	21.57	21.65	21.57	
20	16QAM	1	49	21.51	21.56	21.18			20	16QAM	1	49	21.54	21.53	21.49	21.42	
20	16QAM	1	99	21.48	21.56	21.17			20	16QAM	1	99	21.53	21.44	21.67	21.45	
20	16QAM	50	0	21.58	21.61	21.17			20	16QAM	50	0	21.52	21.45	21.62	21.49	21.43
20	16QAM	50	24	21.58	21.60	21.33			20	16QAM	50	24	21.59	21.53	21.50	21.50	21.56
20	16QAM	50	50	21.65	21.63	21.25			20	16QAM	50	50	21.64	21.59	21.58	21.42	21.56
20	16QAM	100	0	21.60	21.63	21.29			20	16QAM	100	0	21.63	21.59	21.56	21.55	21.46
20	64QAM	1	0	21.59	21.56	21.17			20	64QAM	1	0	21.58	21.53	21.63	21.59	21.53
20	64QAM	1	49	21.54	21.51	21.18			20	64QAM	1	49	21.60	21.44	21.54	21.35	21.53
20	64QAM	1	99	21.61	21.54	21.22			20	64QAM	1	99	21.54	21.49	21.53	21.34	21.45
20	64QAM	50	0	21.47	21.49	21.12			20	64QAM	50	0	21.54	21.56	21.41	21.41	21.48
20	64QAM	50	24	21.60	21.59	21.17			20	64QAM	50	24	21.56	21.59	21.33	21.46	
20	64QAM	50	50	21.54	21.50	21.15			20	64QAM	50	50	21.60	21.52	21.42	21.47	
20	64QAM	100	0	21.60	21.63	21.32			20	64QAM	100	0	21.35	21.58	21.43	21.50	
20	256QAM	1	0	19.14	19.33	19.36			20	256QAM	1	0	19.29	19.14	19.28	19.25	19.27
20	256QAM	1	49	19.32	19.26	19.17			20	256QAM	1	49	19.32	19.24	19.24	19.21	19.14
20	256QAM	1	99	19.18	19.20	18.88			20	256QAM	1	99	19.17	19.20	19.18	19.10	
20	256QAM	50	0	19.00	18.98	19.11			20	256QAM	50	0	19.17	19.09	19.21	18.98	19.05
20	256QAM	50	24	19.23	19.10	18.91			20	256QAM	50	50	19.16	19.07	19.15	18.96	19.14
20	256QAM	50	50	19.18	19.20	18.74			20	256QAM	100	0	19.19	19.14	19.36	19.16	19.03
20	256QAM	100	0	19.35	19.15	18.89			20	256QAM	100	0	19.19	19.24	19.24	19.21	19.20
20	256QAM	255	0	19.27	19.20	19.20			20	256QAM	255	0	19.27	19.20	19.20	19.20	19.20
20	256QAM	255	24	19.20	19.20	19.20			20	256QAM	255	24	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	50	19.20	19.20	19.20			20	256QAM	255	50	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	100	19.20	19.20	19.20			20	256QAM	255	100	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	199	19.20	19.20	19.20			20	256QAM	255	199	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	255	19.20	19.20	19.20			20	256QAM	255	255	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	295	19.20	19.20	19.20			20	256QAM	255	295	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	300	19.20	19.20	19.20			20	256QAM	255	300	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	305	19.20	19.20	19.20			20	256QAM	255	305	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	310	19.20	19.20	19.20			20	256QAM	255	310	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	315	19.20	19.20	19.20			20	256QAM	255	315	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	320	19.20	19.20	19.20			20	256QAM	255	320	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	325	19.20	19.20	19.20			20	256QAM	255	325	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	330	19.20	19.20	19.20			20	256QAM	255	330	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	335	19.20	19.20	19.20			20	256QAM	255	335	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	340	19.20	19.20	19.20			20	256QAM	255	340	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	345	19.20	19.20	19.20			20	256QAM	255	345	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	350	19.20	19.20	19.20			20	256QAM	255	350	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	355	19.20	19.20	19.20			20	256QAM	255	355	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	360	19.20	19.20	19.20			20	256QAM	255	360	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	365	19.20	19.20	19.20			20	256QAM	255	365	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	370	19.20	19.20	19.20			20	256QAM	255	370	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	375	19.20	19.20	19.20			20	256QAM	255	375	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	380	19.20	19.20	19.20			20	256QAM	255	380	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	385	19.20	19.20	19.20			20	256QAM	255	385	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	390	19.20	19.20	19.20			20	256QAM	255	390	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	395	19.20	19.20	19.20			20	256QAM	255	395	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	400	19.20	19.20	19.20			20	256QAM	255	400	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	405	19.20	19.20	19.20			20	256QAM	255	405	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	410	19.20	19.20	19.20			20	256QAM	255	410	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	415	19.20	19.20	19.20			20	256QAM	255	415	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	420	19.20	19.20	19.20			20	256QAM	255	420	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	425	19.20	19.20	19.20			20	256QAM	255	425	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	430	19.20	19.20	19.20			20	256QAM	255	430	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	435	19.20	19.20	19.20			20	256QAM	255	435	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	440	19.20	19.20	19.20			20	256QAM	255	440	19.20	19.20	19.20	19.20	19.20
20	256QAM	255	445	19.20													

Ant3 Full Power/DSI 3/4									
		Burst Average Power (dBm)			Tune-up		Frame-Average Power (dBm)		Tune-up
		512	1600	1909.8	512	1600	810	1600	Limit (dBm)
Frequency (MHz)		1850.2	1880	1909.8	1850.2	1880	1909.8	1850.2	
GSM 900									
TX Channel		28.53	28.75	28.65	30.50	19.53	19.75	19.65	21.50
Frequency (MHz)		28.52	28.74	28.63	30.50	19.52	19.74	19.63	21.50
GPRS 1 Tx slot		25.56	25.71	25.55	27.50	19.56	19.71	19.55	21.50
GPRS 2 Tx slots		23.70	23.70	23.72	25.70	19.44	19.44	19.46	21.44
GPRS 3 Tx slots		23.57	23.57	23.54	24.50	19.43	20.43	20.41	21.50
EDGE 1 Tx slot		24.58	24.62	24.50	25.96	15.58	15.62	15.50	16.96
EDGE 2 Tx slots		21.62	21.53	21.54	22.96	15.62	15.53	15.54	16.96
EDGE 3 Tx slots		19.78	19.81	19.78	21.16	15.52	15.55	15.52	16.96
EDGE 4 Tx slots		18.40	18.57	18.47	19.96	15.40	15.57	15.47	16.96

Ant3 Full Power					Ant3 Full Power					Tune-up
		WCDMA II					WCDMA IV			
		9262	9400	9538	1312	1413	1513	1538	1738	Limit (dBm)
Band		9662	9800	9938	1537	1638	1738	1758	1838	
TX Channel		1852.4	1880	1907.6	1712.4	1732.6	1752.6			
Frequency (MHz)										
3GPP Rel 99	AMR 12.2Kbps	22.91	22.94	22.93	23.50	22.91	23.25	23.10	23.50	
3GPP Rel 99	AMR 24.4Kbps	22.93	22.96	22.95	23.50	22.93	23.27	23.12	23.50	
3GPP Rel 6	HSDPA Subtest-1	22.13	22.15	22.06	22.50	22.10	22.38	22.22	22.50	
3GPP Rel 6	HSDPA Subtest-2	22.00	22.00	21.90	22.50	22.09	22.41	21.94	22.50	
3GPP Rel 6	HSDPA Subtest-3	21.64	21.27	21.58	22.00	21.70	21.90	21.76	22.00	
3GPP Rel 6	HSDPA Subtest-4	21.63	21.58	21.57	22.00	21.70	21.85	21.73	22.00	
3GPP Rel 8	DC-HSDPA Subtest-1	22.07	22.07	21.97	22.50	22.05	22.33	22.18	22.50	
3GPP Rel 8	DC-HSDPA Subtest-2	21.50	21.97	21.85	22.50	22.00	22.35	21.89	22.50	
3GPP Rel 8	DC-HSDPA Subtest-3	21.64	21.65	21.57	22.00	21.61	21.87	21.60	22.00	
3GPP Rel 8	DC-HSDPA Subtest-4	21.55	21.52	21.51	22.00	21.61	21.84	21.66	22.00	
3GPP Rel 6	HSUPA Subtest-1	22.11	22.06	22.01	22.50	22.13	22.31	22.10	22.50	
3GPP Rel 6	HSUPA Subtest-2	20.11	20.07	20.02	20.50	20.33	20.30	20.12	20.50	
3GPP Rel 6	HSUPA Subtest-3	21.12	21.06	21.03	21.50	21.25	21.33	21.18	21.50	
3GPP Rel 6	HSUPA Subtest-4	20.13	20.09	20.03	20.50	20.32	20.36	20.14	20.50	
3GPP Rel 6	HSUPA Subtest-5	22.10	22.10	22.00	22.50	22.20	22.30	22.10	22.50	



Ant 3 Band 4 Full Power

Ant 3 Band 7 Full Power

Ant 3 Band 38 Full Power								
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								
20	QPSK	1	0	23.38	23.39	23.30	24.5	0
20	QPSK	1	49	23.38	23.33	23.25		
20	QPSK	1	99	23.28	23.18	23.18		
20	QPSK	50	0	22.42	22.55	22.32		
20	QPSK	50	24	22.53	22.39	22.44	23.5	1
20	QPSK	50	50	22.51	22.32	22.35		
20	QPSK	100	0	22.47	22.51	22.43		
20	16QAM	1	0	22.55	22.42	22.32		
20	16QAM	1	49	22.42	22.37	22.45	23.5	1
20	16QAM	1	99	22.40	22.35	22.40		
20	16QAM	50	0	21.44	21.45	21.42		
20	16QAM	50	24	21.53	21.36	21.40		
20	16QAM	50	50	21.59	21.40	21.39		
20	16QAM	100	0	21.51	21.37	21.47		
20	64QAM	1	0	21.32	21.14	21.12		
20	64QAM	1	49	21.17	21.06	21.03	22.5	2
20	64QAM	1	99	21.13	21.14	21.10		
20	64QAM	50	0	20.41	20.31	20.39		
20	64QAM	50	24	20.40	20.36	20.38	21.5	3
20	64QAM	50	50	20.41	20.26	20.30		
20	64QAM	100	0	20.48	20.48	20.39		
20	256QAM	1	0	18.33	18.24	18.15		
20	256QAM	1	49	18.24	18.15	18.19	19.5	5
20	256QAM	1	99	18.11	18.00	18.08		
20	256QAM	50	0	17.50	18.45	18.24		
20	256QAM	50	24	18.34	18.31	18.30		
20	256QAM	50	50	18.44	18.17	18.19		
20	256QAM	100	0	18.34	18.32	18.24		
Channel								
15	QPSK	1	0	23.21	23.24	23.22	24.5	0
15	QPSK	1	37	23.32	23.18	23.11		
15	QPSK	1	74	23.10	23.24	23.10		
15	QPSK	36	0	22.33	22.21	22.34		
15	QPSK	36	20	22.44	22.38	22.36	23.5	1
15	QPSK	36	39	22.40	22.41	22.32		
15	QPSK	75	0	22.46	22.36	22.34		
15	16QAM	1	0	22.37	22.34	22.35		
15	16QAM	1	37	22.19	22.21	22.07	23.5	1
15	16QAM	1	74	22.39	22.26	22.34		
15	16QAM	36	0	21.93	21.26	21.24		
15	16QAM	36	20	21.33	21.33	21.34	22.5	2
15	16QAM	36	39	21.30	21.30	21.31		
15	16QAM	75	0	21.49	21.34	21.40		
15	64QAM	1	0	21.08	21.04	21.20		
15	64QAM	1	37	21.07	21.20	21.04	22.5	2
15	64QAM	1	74	21.16	21.14	21.01		
15	64QAM	36	0	20.40	20.34	20.30		
15	64QAM	36	20	20.33	20.37	20.46	21.5	3
15	64QAM	36	39	20.33	20.34	20.34		
15	64QAM	75	0	20.49	20.43	20.40		
15	256QAM	1	0	18.09	18.06	18.02		
15	256QAM	1	37	18.23	18.10	17.95	19.5	5
15	256QAM	1	74	18.02	18.09	18.01		
15	256QAM	36	0	18.21	18.15	18.20		
15	256QAM	36	20	18.11	18.24	18.24	19.5	5
15	256QAM	36	39	18.28	18.22	18.27		
15	256QAM	75	0	18.28	18.31	18.26		
Channel								
10	QPSK	1	0	23.32	23.09	23.22	24.5	0
10	QPSK	1	25	23.21	23.10	23.17		
10	QPSK	1	49	23.33	23.25	23.22		
10	QPSK	25	0	22.41	22.39	22.27		
10	QPSK	25	12	22.36	22.34	22.20	23.5	1
10	QPSK	25	25	22.35	22.40	22.35		
10	QPSK	50	0	22.45	22.37	22.25		
10	16QAM	1	0	22.46	22.30	22.27		
10	16QAM	1	25	22.35	22.24	22.23	23.5	1
10	16QAM	1	49	22.29	22.34	22.23		
10	16QAM	25	0	21.93	21.31	21.30		
10	16QAM	25	12	21.35	21.26	21.26	22.5	2
10	16QAM	25	25	21.38	21.35	21.27		
10	16QAM	50	0	21.46	21.43	21.36		
10	64QAM	1	0	21.27	21.17	21.35		
10	64QAM	1	25	21.05	21.49	21.39	22.5	2
10	64QAM	1	49	21.51	21.51	21.50		
10	64QAM	25	0	20.39	20.38	20.28		
10	64QAM	25	12	20.34	20.33	20.31	21.5	3
10	64QAM	25	25	20.30	20.28	20.27		
10	64QAM	50	0	20.37	20.25	20.24		
10	256QAM	1	0	18.21	17.97	18.06		
10	256QAM	1	25	18.09	17.99	18.04	19.5	5
10	256QAM	1	49	18.24	18.20	18.08		
10	256QAM	25	0	18.27	18.34	18.16		
10	256QAM	25	12	18.29	18.14	18.09		
10	256QAM	25	25	18.27	18.22	18.27	19.5	5
10	256QAM	50	0	18.30	18.23	18.16		
Channel								
5	QPSK	1	0	23.24	23.29	23.18	24.5	0
5	QPSK	1	12	23.23	23.38	23.34		
5	QPSK	1	24	23.31	23.34	23.34		
5	QPSK	12	0	22.33	22.44	22.37		
5	QPSK	12	7	22.51	22.43	22.32	23.5	1
5	QPSK	12	13	22.46	22.45	22.37		
5	QPSK	25	0	22.48	22.40	22.35		
5	16QAM	1	0	22.42	22.42	22.48		
5	16QAM	1	12	22.56	22.16	22.31	23.5	1
5	16QAM	1	24	22.23	22.46	22.39		
5	16QAM	12	0	21.45	21.41	21.29		
5	16QAM	12	7	21.46	21.46	21.26	22.5	2
5	16QAM	12	13	21.39	21.46	21.34		
5	16QAM	25	0	21.41	21.47	21.29		
5	16QAM	25	12	21.40	21.52	21.09		
5	16QAM	1	12	21.43	21.32	21.29	22.5	2
5	16QAM	1	24	21.40	21.19	21.31		
5	16QAM	12	0	20.47	20.43	20.39		
5	16QAM	12	7	20.38	20.34	20.42	21.5	3
5	16QAM	12	13	20.52	20.41	20.33		
5	16QAM	25	0	20.51	20.36	20.31		
5	256QAM	1	0	18.16	18.18	18.11		
5	256QAM	1	12	18.11	18.25	18.28	19.5	5
5	256QAM	1	24	18.21	18.20	18.27		
5	256QAM	12	0	18.28	18.31	18.26		
5	256QAM	12	7	18.42	18.29	18.18		
5	256QAM	12	13	18.31	18.37	18.32		
5	256QAM	25	0	18.32	18.34	18.21		
Channel								
2	QPSK	1	0	23.24	23.29	23.18	24.5	0
2	QPSK	1	12	23.23	23.38	23.34		
2	QPSK	1	24	23.31	23.34	23.34		
2	QPSK	12	0	22.33	22.44	22.37		
2	QPSK	12	7	22.51	22.43	22.32	23.5	1
2	QPSK	12	13	22.46	22.45	22.37		
2	QPSK	25	0	22.48	22.40	22.35		
2	16QAM	1	0	22.42	22.42	22.48		
2	16QAM	1	12	22.56	22.16	22.31	23.5	1
2	16QAM	1	24	22.23	22.46	22.39		
2	16QAM	12	0	21.45	21.41	21.29		
2	16QAM	12	7	21.46	21.46	21.26	22.5	2
2	16QAM	12	13	21.39	21.46	21.34		
2	16QAM	25	0	21.41	21.47	21.29		
2	16QAM	25	12	21.40	21.52	21.09		
2	16QAM	1	12	21.43	21.32	21.29	22.5	2
2	16QAM	1	24	21.40	21.19	21.31		
2	16QAM	12	0	20.47	20.43	20.39		
2	16QAM	12	7	20.38	20.34	20.42	21.5	3
2	16QAM	12	13	20.52	20.41	20.33		
2	16QAM	25	0	20.51	20.36	20.31		
2	256QAM	1	0	18.16	18.18	18.11		
2	256QAM	1	12	18.11	18.25	18.28	19.5	5
2	256QAM	1	24	18.21	18.20	18.27		
2	256QAM	12	0	18.28	18.31	18.26		
2	256QAM	12	7	18.42	18.29	18.18		
2	256QAM	12	13	18.31	18.37	18.32		
2	256QAM	25	0	18.32	18.34	18.21		
Channel								



Ant3 Down power DS1 1/5									
GSM1900		Burst Average Power (dBm)		Tune-up Limit (dBm)		Frame-Average Power (dBm)		Tune-up Limit (dBm)	
TX Channel	5.0	661	810	661	810	661	810	661	810
Frequency (MHz)	1800.2	1800	1800.8	1800.2	1800	1800.8	1800.2	1800	1800.8
GSM 1 Tx slot	27.04	27.31	27.13	28.50	18.04	18.31	18.13	19.50	
GPRS 1 Tx slot	27.12	27.21	27.07	28.50	18.04	18.21	18.07	19.50	
GPRS 2 Tx slots	23.73	23.73	23.56	25.50	17.73	17.73	17.56	19.50	
GPRS 3 Tx slots	21.70	21.76	21.74	23.70	17.44	17.50	17.48	19.44	
GPRS 4 Tx slots	21.43	21.47	21.31	22.50	18.41	18.47	18.31	19.50	
EDGE 1 Tx slots	22.54	22.54	22.50	23.50	18.51	18.62	18.55	19.49	
EDGE 2 Tx slots	19.39	19.54	19.75	20.96	13.99	13.54	13.75	14.96	
EDGE 3 Tx slots	17.50	17.70	17.92	19.16	13.24	13.44	13.66	14.90	
EDGE 4 Tx slots	16.24	16.58	16.84	17.96	13.24	13.58	13.64	14.96	

Ant3 Down power DS1 1/5									
Band		WCDMA II		WCDMA II		WCDMA II		WCDMA IV	
TX Channel	9262	9400	9538	Tune-up Limit (dBm)	9262	9400	9538	Tune-up Limit (dBm)	9262
Rx Channel	9662	9800	9938	9662	9800	9938	9662	9800	9938
Frequency (MHz)	1852.4	1880	1907.6	1852.4	1880	1907.6	1852.4	1880	1907.6
3GPP Rel 99	AMR 12.2kbps	17.07	17.06	16.98	17.50	19.07	18.99	19.50	19.90
3GPP Rel 99	RMC 12.2kbps	17.09	17.10	17.15	17.50	19.09	19.01	19.50	19.82
3GPP Rel 99	HSUPA Subtest1	16.04	15.56	16.59	16.50	17.06	17.52	18.52	19.14
3GPP Rel 6	HSDPNA Subtest2	15.77	15.86	15.75	16.50	17.88	17.83	18.50	18.70
3GPP Rel 6	HSDPNA Subtest3	15.90	15.27	15.49	16.00	17.58	17.12	17.45	18.00
3GPP Rel 6	HSDPNA Subtest4	15.55	15.44	15.44	16.00	17.58	17.46	17.44	18.00
3GPP Rel 6	DC-HSDPA Subtest1	16.01	15.84	15.97	16.50	17.87	17.95	17.91	18.96
3GPP Rel 6	DC-HSDPA Subtest2	15.86	15.86	15.69	16.50	17.79	17.91	17.79	18.50
3GPP Rel 6	DC-HSDPA Subtest3	15.41	15.24	15.34	16.00	17.43	17.49	17.47	18.00
3GPP Rel 6	DC-HSDPA Subtest4	15.38	15.11	15.38	16.00	17.43	17.49	17.47	18.00
3GPP Rel 6	HSUPA Subtest1	16.08	16.07	15.90	16.50	17.99	17.91	17.86	18.50
3GPP Rel 6	HSUPA Subtest2	14.01	14.00	13.85	14.50	15.99	15.99	15.89	16.50
3GPP Rel 6	HSUPA Subtest3	15.05	14.91	14.79	15.50	16.99	16.96	16.96	17.50
3GPP Rel 6	HSUPA Subtest4	13.94	14.03	14.00	14.50	15.98	16.01	15.98	16.50
3GPP Rel 6	HSUPA Subtest5	16.05	15.83	15.80	16.50	18.03	18.01	17.94	18.50

Ant3 Down power DS1 3/4									
Band		WCDMA II		WCDMA II		WCDMA II		WCDMA IV	
TX Channel	9262	9400	9538	Tune-up Limit (dBm)	9262	9400	9538	Tune-up Limit (dBm)	9262
Rx Channel	9662	9800	9938	9662	9800	9938	9662	9800	9938
Frequency (MHz)	1852.4	1880	1907.6	1852.4	1880	1907.6	1852.4	1880	1907.6
3GPP Rel 99	AMR 12.2kbps	17.07	17.06	16.98	17.50	19.07	18.99	19.50	19.90
3GPP Rel 99	RMC 12.2kbps	17.09	17.10	17.15	17.50	19.09	19.01	19.50	19.82
3GPP Rel 99	HSUPA Subtest1	16.04	15.56	16.59	16.50	17.06	17.52	18.52	19.14
3GPP Rel 6	HSDPNA Subtest2	15.77	15.86	15.75	16.50	17.88	17.83	18.50	18.70
3GPP Rel 6	HSDPNA Subtest3	15.90	15.27	15.49	16.00	17.58	17.12	17.45	18.00
3GPP Rel 6	HSDPNA Subtest4	15.55	15.44	15.44	16.00	17.58	17.46	17.44	18.00
3GPP Rel 6	DC-HSDPA Subtest1	16.01	15.84	15.97	16.50	17.87	17.95	17.91	18.96
3GPP Rel 6	DC-HSDPA Subtest2	15.86	15.86	15.69	16.50	17.79	17.91	17.79	18.50
3GPP Rel 6	DC-HSDPA Subtest3	15.41	15.24	15.34	16.00	17.43	17.49	17.47	18.00
3GPP Rel 6	DC-HSDPA Subtest4	15.38	15.11	15.38	16.00	17.43	17.49	17.47	18.00
3GPP Rel 6	HSUPA Subtest1	16.08	16.07	15.90	16.50	17.99	17.91	17.86	18.50
3GPP Rel 6	HSUPA Subtest2	14.01	14.00	13.85	14.50	15.99	15.99	15.89	16.50
3GPP Rel 6	HSUPA Subtest3	15.05	14.91	14.79	15.50	16.99	16.96	16.96	17.50
3GPP Rel 6	HSUPA Subtest4	13.94	14.03	14.00	14.50	15.98	16.01	15.98	16.50
3GPP Rel 6	HSUPA Subtest5	16.05	15.83	15.80	16.50	18.03	18.01	17.94	18.50



Ant3 Band 4 Down power / DSI 1/5

Ant3 Band 4 Down power / DSI 3/4

Ant3 Band 7 Down power / DSI 1/5



Ant3 Band 7 Down power / DSI 4

Ant3 Band 7 Down power / DSI 3



Ant3 Band 38 Down power / DSI 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Budget			Power Margin	Power Gain	Tune-up limit	MPR (dB)
				Ch.	Freq.	Ch. / Freq.				
Channel Frequency (MHz)										
20	QPSK	1	0	20.35	20.45	20.32				
20	QPSK	1	49	20.38	20.38	20.22			21.5	0
20	QPSK	1	99	20.33	20.14	20.17				
20	QPSK	50	0	20.30	20.37	20.20				
20	QPSK	50	24	20.38	20.20	20.25				
20	QPSK	50	50	20.34	20.19	20.18				
20	QPSK	100	0	20.30	20.27	20.30				
20	16QAM	1	0	19.98	20.00	19.98				
20	16QAM	1	49	19.99	20.00	19.99				
20	16QAM	1	99	19.99	20.00	19.99				
20	16QAM	50	0	20.28	20.33	20.29				
20	16QAM	50	24	20.36	20.24	20.20				
20	16QAM	50	50	20.43	20.22	20.28			21.5	0
20	16QAM	100	0	20.39	20.26	20.34				
20	64QAM	1	0	20.16	19.99	20.01				
20	64QAM	1	49	20.16	19.99	20.00				
20	64QAM	1	99	19.99	20.04	19.99				
20	64QAM	50	0	20.38	20.30	20.42				
20	64QAM	50	24	20.38	20.31	20.37				
20	64QAM	50	50	20.42	20.28	20.33			21.5	0
20	64QAM	100	0	20.35	20.33	20.34				
20	256QAM	1	0	18.40	18.16	18.19				
20	256QAM	1	49	18.16	18.02	18.27			19.5	2
20	256QAM	1	99	18.22	17.98	18.00				
20	256QAM	50	0	18.56	18.54	18.58				
20	256QAM	50	24	18.40	18.22	18.28			19.5	2
20	256QAM	50	50	18.52	18.20	18.28				
20	256QAM	100	0	18.38	18.36	18.19				
Channel Frequency (MHz)										
15	QPSK	1	0	20.21	20.23	20.33				
15	QPSK	1	37	20.35	20.13	20.13			21.5	0
15	QPSK	1	74	20.05	20.23	20.13				
15	QPSK	36	0	20.19	20.24	20.21				
15	QPSK	36	24	20.24	20.24	20.21				
15	QPSK	36	50	20.34	20.26	20.12				
15	QPSK	75	0	20.26	20.21	20.22				
15	16QAM	1	0	20.28	20.16	20.14				
15	16QAM	1	37	20.07	20.12	19.93			21.5	0
15	16QAM	1	74	20.23	20.10	20.12				
15	16QAM	36	0	20.07	20.18	20.23				
15	16QAM	36	20	20.22	20.10	20.26			21.5	0
15	16QAM	36	39	20.10	20.18	20.13				
15	16QAM	75	0	20.27	20.23	20.33				
15	64QAM	1	0	19.98	19.97	20.07				
15	64QAM	1	37	20.01	20.03	19.83				
15	64QAM	1	74	19.94	20.04	19.84				
15	64QAM	36	0	20.40	20.29	20.30				
15	64QAM	36	20	20.36	20.33	20.39			21.5	0
15	64QAM	36	39	20.29	20.38	20.38				
15	64QAM	75	0	20.44	20.37	20.41				
15	256QAM	1	0	17.96	18.01	18.14				
15	256QAM	1	37	18.33	18.22	18.27			19.5	2
15	256QAM	1	74	18.09	18.00	17.92				
15	256QAM	36	0	18.28	18.15	18.31				
15	256QAM	36	20	18.35	18.21	18.17			19.5	2
15	256QAM	36	39	18.30	18.16	18.02				
15	256QAM	75	0	18.31	18.38	18.38				
Channel Frequency (MHz)										
10	QPSK	1	0	20.31	20.20	20.24				
10	QPSK	1	25	20.23	20.09	20.15			21.5	0
10	QPSK	1	49	20.35	20.26	20.20				
10	QPSK	25	0	20.24	20.21	20.12				
10	QPSK	25	12	20.20	20.15	20.08				
10	QPSK	25	25	20.23	20.23	20.23			21.5	0
10	QPSK	50	0	20.35	20.23	20.14				
10	16QAM	1	0	20.28	20.19	20.10				
10	16QAM	1	25	20.23	20.11	20.09			21.5	0
10	16QAM	1	49	20.13	20.20	20.07				
10	16QAM	25	0	20.32	20.20	20.19				
10	16QAM	25	12	20.26	20.16	20.17				
10	16QAM	25	25	20.33	20.37	20.35				
10	16QAM	50	0	20.37	20.27	20.24				
10	64QAM	1	0	20.19	20.05	20.21				
10	64QAM	1	25	19.92	20.40	20.21			21.5	0
10	64QAM	1	49	20.32	20.36	20.30				
10	64QAM	25	0	20.36	20.36	20.28				
10	64QAM	25	12	20.33	20.37	20.35				
10	64QAM	25	25	20.36	20.37	20.34				
10	64QAM	50	0	20.37	20.27	20.24				
10	256QAM	1	0	18.16	17.97	17.93				
10	256QAM	1	25	17.98	18.04	17.95			19.5	2
10	256QAM	1	49	18.13	18.15	18.19				
10	256QAM	25	0	18.19	18.45	18.23				
10	256QAM	25	12	18.17	18.20	18.17				
10	256QAM	25	25	18.29	18.10	18.10			19.5	2
10	256QAM	50	0	18.42	18.16	18.15				
Channel Frequency (MHz)										
5	QPSK	1	0	20.34	20.33	20.12				
5	QPSK	1	12	20.31	20.39	20.41			21.5	0
5	QPSK	1	24	20.34	20.26	20.27				
5	QPSK	12	0	20.21	20.29	20.20				
5	QPSK	12	7	20.28	20.27	20.19				
5	QPSK	12	13	20.27	20.29	20.21				
5	QPSK	25	0	20.37	20.27	20.23				
5	16QAM	1	0	20.24	20.34	20.37				
5	16QAM	1	12	20.32	20.40	20.41				
5	16QAM	1	24	20.34	20.36	20.40				
5	16QAM	12	0	20.39	20.30	20.28				
5	16QAM	12	7	20.31	20.37	20.19				
5	16QAM	12	13	20.31	20.36	20.29				
5	16QAM	25	0	20.39	20.33	20.11				
5	64QAM	1	0	20.20	20.37	19.88				
5	64QAM	1	12	20.24	20.22	20.21				
5	64QAM	1	24	20.29	20.33	20.14				
5	64QAM	12	0	20.36	20.30	20.11				
5	64QAM	12	7	20.34	20.36	20.19				
5	64QAM	12	13	20.32	20.43	20.36				
5	64QAM	25	0	20.38	20.40	20.24				
5	256QAM	1	0	18.05	18.11	18.13				
5	256QAM	1	12	18.05	18.14	18.31			19.5	2
5	256QAM	1	24	18.34	18.18	18.19				
5	256QAM	12	0	18.36	18.28	18.20				
5	256QAM	12	13	18.54	18.28	18.22				
5	256QAM	25	0	18.41	18.46	18.34				

Ant3 Band 38 Down power / DSI 1/5

BW [MHz]	Modulation	RB Size	RB Offset	Power Ch / Freq	Power Modulation Ch / Freq	Power Config Ch / Freq	Time-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	16.34	16.47	16.30	17.5	0
20	QPSK	1	49	16.41	16.34	16.30		
20	QPSK	1	99	16.29	16.14	16.17		
20	QPSK	50	0	16.41	16.45	16.30		
20	QPSK	50	24	16.42	16.35	16.45		
20	QPSK	50	50	16.44	16.29	16.40		
20	QPSK	100	0	16.44	16.44	16.44		
20	16QAM	1	0	16.33	16.38	16.32		
20	16QAM	1	49	16.36	16.37	16.45		
20	16QAM	1	99	16.39	16.41	16.41		
20	16QAM	50	0	16.42	16.42	16.44		
20	16QAM	50	24	16.33	16.41	16.40		
20	16QAM	50	50	16.42	16.37	16.42		
20	16QAM	100	0	16.40	16.37	16.46		
20	64QAM	1	0	16.35	16.16	16.09		
20	64QAM	1	49	16.35	16.16	16.09		
20	64QAM	1	99	16.35	16.16	16.11		
20	64QAM	50	0	16.46	16.37	16.39		
20	64QAM	50	24	16.39	16.31	16.36		
20	64QAM	50	50	16.38	16.25	16.28		
20	64QAM	100	0	16.43	16.33	16.38		
20	256QAM	1	0	16.35	16.27	16.21		
20	256QAM	1	49	16.21	16.20	16.16		
20	256QAM	1	99	16.11	15.96	16.04		
20	256QAM	50	0	16.30	16.24	16.24		
20	256QAM	50	24	16.30	16.25	16.30		
20	256QAM	50	50	16.46	16.21	16.18		
20	256QAM	100	0	16.40	16.36	16.26		
Channel								
Frequency (MHz)								
15	QPSK	1	0	16.24	16.22	16.18	17.5	0
15	QPSK	1	37	16.31	16.22	16.09		
15	QPSK	1	74	16.06	16.22	16.12		
15	QPSK	36	0	16.06	16.06	16.06		
15	QPSK	36	20	16.30	16.30	16.20		
15	QPSK	36	39	16.28	16.35	16.26		
15	QPSK	75	0	16.38	16.30	16.17		
15	16QAM	1	0	16.29	16.27	16.30		
15	16QAM	1	37	16.03	16.05	15.98		
15	16QAM	1	74	16.26	16.13	16.19		
15	16QAM	36	0	16.11	16.29	16.13		
15	16QAM	36	20	16.25	16.25	16.20		
15	16QAM	36	39	16.19	16.24	16.16		
15	16QAM	75	0	16.40	16.16	16.34		
15	64QAM	1	0	15.98	15.98	16.04		
15	64QAM	1	37	16.01	16.07	15.95		
15	64QAM	1	74	16.07	16.04	15.90		
15	64QAM	36	0	16.34	16.25	16.24		
15	64QAM	36	20	16.26	16.20	16.30		
15	64QAM	36	39	16.13	16.00	16.14		
15	64QAM	75	0	16.20	16.24	16.21		
Channel								
Frequency (MHz)								
10	QPSK	257.5	2595	38785	38000	38175	38175	MPR (dB)
10	QPSK	1	0	16.31	16.09	16.25	29.5	0
10	QPSK	1	25	16.21	16.03	16.17		
10	QPSK	1	49	16.39	16.28	16.26		
10	QPSK	25	0	16.35	16.31	16.20		
10	QPSK	25	12	16.26	16.22	16.04		
10	QPSK	25	25	16.27	16.29	16.29		
10	QPSK	50	0	16.35	16.27	16.17		
10	16QAM	1	0	16.33	16.18	16.16		
10	16QAM	1	25	16.21	16.08	16.14		
10	16QAM	1	49	16.14	16.26	16.11		
10	16QAM	25	0	16.35	16.31	16.20		
10	16QAM	25	12	16.33	16.30	16.17		
10	16QAM	25	25	16.26	16.27	16.16		
10	16QAM	50	0	16.41	16.35	16.29		
10	64QAM	1	0	16.21	16.08	16.19		
10	64QAM	1	25	15.93	16.41	16.30		
10	64QAM	1	49	16.35	16.43	16.40		
10	64QAM	25	0	16.27	16.32	16.18		
10	64QAM	25	12	15.23	16.21	16.21		
10	64QAM	25	25	16.22	16.15	16.14		
10	64QAM	50	0	16.22	16.15	16.14		
10	256QAM	1	0	16.05	15.86	15.94		
10	256QAM	1	25	15.95	15.89	15.94		
10	256QAM	1	49	16.09	16.06	15.96		
10	256QAM	25	0	16.15	16.28	16.08		
10	256QAM	25	12	16.14	16.03	16.01		
10	256QAM	25	25	16.09	16.14	16.09		
10	256QAM	50	0	16.19	16.21	16.08		
Channel								
Frequency (MHz)								
5	QPSK	0	0	16.27	16.25	16.25	20.17.5	0
5	QPSK	1	12	16.27	16.41	16.38		
5	QPSK	1	24	16.32	16.32	16.33		
5	QPSK	12	0	16.17	16.33	16.31		
5	QPSK	12	7	16.40	16.29	16.15		
5	QPSK	12	13	16.39	16.34	16.24		
5	QPSK	25	0	16.40	16.30	16.18		
5	16QAM	1	0	16.29	16.33	16.41		
5	16QAM	1	12	16.27	16.35	16.30		
5	16QAM	1	24	16.32	16.33	16.33		
5	16QAM	12	0	16.35	16.31	16.33		
5	16QAM	12	7	16.24	16.25	16.11		
5	16QAM	12	13	16.36	16.30	16.24		
5	16QAM	25	0	16.39	16.23	16.16		
5	256QAM	1	0	16.09	16.08	15.95		
5	256QAM	1	12	15.98	16.08	16.21		
5	256QAM	1	24	16.15	16.09	16.21		
5	256QAM	12	0	16.12	16.25	16.18		
5	256QAM	12	7	16.33	16.24	16.09		
5	256QAM	12	13	16.35	16.25	16.24		
5	256QAM	25	0	16.43	16.25	16.14		

Ant3 Band 38 Down power / DSI 3

BW [MHz]	Modulation	RB Size	RB Offset	Power Mod.	Power Mod.	Power Mod.	Tune-up limit	MPR
				Ch. / Freq.	Ch. / Freq.	Ch. / Freq.	(dBm)	(dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	19.44	19.48	19.33	20.5	0
20	QPSK	1	49	19.32	19.31	19.31		
20	QPSK	1	99	19.26	19.16	19.24		
20	QPSK	50	0	19.31	19.46	19.22		
20	QPSK	50	24	19.45	19.19	19.27		
20	QPSK	50	50	19.33	19.19	19.24		
20	QPSK	100	0	19.30	19.26	19.38		
20	16QAM	1	0	19.43	19.31	19.13		
20	16QAM	1	49	19.30	19.19	19.30		
20	16QAM	1	99	19.29	19.26	19.28		
20	16QAM	50	0	19.42	19.42	19.41		
20	16QAM	50	24	19.41	19.43	19.39		
20	16QAM	50	50	19.43	19.48	19.42		
20	16QAM	100	0	19.47	19.42	19.41		
20	64QAM	1	0	19.36	19.18	19.08		
20	64QAM	1	49	19.34	19.14	19.04		
20	64QAM	1	99	19.14	19.04	19.18		
20	64QAM	50	0	19.44	19.28	19.35		
20	64QAM	50	24	19.40	19.44	19.37		
20	64QAM	50	50	19.38	19.27	19.26		
20	64QAM	100	0	19.45	19.45	19.47		
20	256QAM	1	0	18.31	18.31	18.16		
20	256QAM	1	49	18.19	18.13	18.21		
20	256QAM	1	99	18.08	17.98	18.15		
20	256QAM	50	0	18.20	18.20	18.19		
20	256QAM	50	24	18.33	18.37	18.26		
20	256QAM	50	50	18.40	18.14	18.20		
20	256QAM	100	0	18.36	18.35	18.30		
Channel								
Frequency (MHz)								
15	QPSK	1	0	19.20	19.27	19.22	20.5	0
15	QPSK	1	37	19.37	19.21	19.07		
15	QPSK	1	74	19.09	19.23	19.13		
15	QPSK	36	0	19.17	19.02	19.20		
15	QPSK	36	20	19.19	19.19	19.25		
15	QPSK	36	36	19.28	19.27	19.19		
15	QPSK	75	0	19.28	19.27	19.19		
15	QPSK	75	24	19.28	19.27	19.23		
15	QPSK	75	50	19.25	19.27	19.21		
15	16QAM	1	0	19.25	19.27	19.21		
15	16QAM	1	37	19.05	19.12	18.89		
15	16QAM	1	74	19.24	19.07	19.19		
15	16QAM	36	0	19.30	19.42	19.33		
15	16QAM	36	20	19.36	19.31	19.34		
15	16QAM	36	36	19.34	19.32	19.35		
15	16QAM	75	0	19.45	19.44	19.45		
15	16QAM	75	24	19.02	18.02	18.02		
15	16QAM	75	50	19.37	19.32	19.45		
15	16QAM	100	0	19.37	19.32	19.45		
15	64QAM	36	20	19.37	19.43	19.43	20.5	0
15	64QAM	36	36	19.37	19.32	19.36		
15	64QAM	75	0	19.45	19.44	19.45		
15	64QAM	75	24	19.25	19.27	19.21		
15	64QAM	75	50	19.28	19.27	19.23		
15	64QAM	100	0	19.25	19.27	19.23		
15	256QAM	36	20	19.31	19.31	19.30		
15	256QAM	36	36	19.29	19.20	19.21		
15	256QAM	75	0	19.32	19.24	19.30		
15	256QAM	75	24	19.29	19.27	19.23		
15	256QAM	75	50	19.25	19.27	19.21		
15	256QAM	100	0	19.36	19.36	19.30		
Channel								
Frequency (MHz)								
10	QPSK	1	0	19.37	19.11	19.23	20.5	0
10	QPSK	1	25	19.21	19.18	19.26		
10	QPSK	1	49	19.35	19.22	19.20		
10	QPSK	1	99	19.23	19.24	19.19		
10	QPSK	25	12	19.20	19.27	19.10		
10	QPSK	25	25	19.25	19.29	19.22		
10	QPSK	50	0	19.34	19.25	19.29		
10	QPSK	50	24	19.29	19.25	19.22		
10	QPSK	50	50	19.25	19.29	19.22		
10	16QAM	1	0	19.29	19.19	19.19		
10	16QAM	1	25	19.19	19.04	19.07		
10	16QAM	1	49	19.17	19.26	19.04		
10	16QAM	1	99	19.23	19.24	19.19		
10	16QAM	25	12	19.20	19.27	19.10		
10	16QAM	25	25	19.34	19.30	19.26		
10	16QAM	50	0	19.45	19.36	19.42		
10	16QAM	50	24	19.35	19.16	19.43		
10	16QAM	50	50	19.36	19.19	19.11		
10	64QAM	1	0	19.37	19.07	19.43	20.5	0
10	64QAM	1	49	19.47	19.44	19.43		
10	64QAM	25	0	19.42	19.35	19.35		
10	64QAM	25	24	19.41	19.31	19.30		
10	64QAM	50	0	19.43	19.29	19.20		
10	64QAM	50	24	19.34	19.30	19.26		
10	64QAM	50	50	19.45	19.36	19.42		
10	256QAM	1	0	19.07	19.43	19.39	20.5	0
10	256QAM	1	49	19.47	19.44	19.43		
10	256QAM	25	0	19.42	19.35	19.35		
10	256QAM	25	24	19.41	19.31	19.30		
10	256QAM	50	0	19.43	19.29	19.20		
10	256QAM	50	24	19.34	19.30	19.26		
10	256QAM	50	50	19.45	19.36	19.42		
Channel								
Frequency (MHz)								
5	QPSK	1	0	19.28	19.35	19.22	20.5	0
5	QPSK	1	12	19.24	19.46	19.32		
5	QPSK	1	24	19.29	19.35	19.42		
5	QPSK	12	0	19.25	19.36	19.21		
5	QPSK	12	7	19.35	19.34	19.13		
5	QPSK	12	13	19.35	19.32	19.22		
5	QPSK	25	0	19.29	19.23	19.21		
5	16QAM	1	0	19.24	19.32	19.26		
5	16QAM	1	12	19.24	19.44	19.30		
5	16QAM	1	24	19.29	19.44	19.36		
5	16QAM	12	0	19.24	19.33	19.26		
5	16QAM	12	7	19.34	19.33	19.26		
5	16QAM	12	13	19.36	19.46	19.31		
5	16QAM	25	0	19.36	19.46	19.31		
5	16QAM	25	7	19.36	19.46	19.31		
5	16QAM	12	13	19.36	19.46	19.31		
5	16QAM	25	0	19.36	19.46	19.31		
5	64QAM	1	0	19.29	19.45	19.08		
5	64QAM	1	12	19.28	19.44	19.30		
5	64QAM	1	24	19.34	19.45	19.32		
5	64QAM	12	0	19.47	19.27	19.27		
5	64QAM	12	7	19.47	19.27	19.36		
5	64QAM	12	13	19.47	19.27	19.36		
5	64QAM	25	0	19.44	19.33	19.28		
5	64QAM	25	7	19.45	19.33	19.28		
5	64QAM	12	13	19.45	19.33	19.28		
5	64QAM	25	0	19.45	19.33	19.28		
5	256QAM	1	0	18.15	18.15	18.07		
5	256QAM	1	12	18.10	18.22	18.34	19.5	1
5	256QAM	1	24	18.24	18.19	18.32		
5	256QAM	12	0	18.25	18.28	18.23		
5	256QAM	12	7	18.38	18.33	18.17		
5	256QAM	12	13	18.39	18.33	18.17		
5	256QAM	25	0	18.34	18.30	18.40		
5	256QAM	25	7	18.34	18.30	18.40		
5	256QAM	12	13	18.34	18.30	18.40		
5	256QAM	25	0	18.34	18.30	18.40		

Ant 3 Band 41 Down power / DS1 1/5												
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Low Middle Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	Channel	Frequency (MHz)	
20	QPSK	1	0	16.03	16.18	16.43	16.08	16.15	17.5	0	39750	40188
20	QPSK	1	49	16.06	16.15	16.11	16.07	15.97	17.5	0	39750	40188
20	QPSK	1	98	16.09	16.22	16.20	16.03	15.97	17.5	0	39750	40188
20	QPSK	50	0	16.28	16.25	16.37	16.06	15.98	17.5	0	39750	40188
20	QPSK	50	24	16.28	16.33	16.28	16.17	16.07	17.5	0	39750	40188
20	QPSK	50	50	16.25	16.32	16.25	16.10	16.01	17.5	0	39750	40188
20	QPSK	100	0	16.27	16.30	16.35	16.18	15.98	17.5	0	39750	40188
20	QPSK	100	1	16.11	16.32	16.37	16.09	16.02	17.5	0	39750	40188
20	16QAM	1	0	16.19	16.28	16.40	16.35	16.14	17.5	0	39750	40188
20	16QAM	1	49	16.21	16.29	16.27	16.11	16.05	17.5	0	39750	40188
20	16QAM	1	99	16.11	16.32	16.37	16.09	16.02	17.5	0	39750	40188
20	16QAM	50	0	16.18	16.32	16.38	16.17	16.14	17.5	0	39750	40188
20	16QAM	50	24	16.21	16.25	16.20	16.07	15.96	17.5	0	39750	40188
20	16QAM	50	50	16.17	16.25	16.28	16.10	16.05	17.5	0	39750	40188
20	16QAM	100	0	16.20	16.25	16.30	16.16	15.97	17.5	0	39750	40188
20	16QAM	100	1	16.02	16.12	16.18	16.07	15.97	17.5	0	39750	40188
20	64QAM	1	49	15.98	16.00	15.99	15.78	15.77	17.5	0	39750	40188
20	64QAM	1	99	15.99	16.02	16.02	15.79	15.68	17.5	0	39750	40188
20	64QAM	50	0	16.12	16.16	16.24	16.08	16.08	17.5	0	39750	40188
20	64QAM	50	24	16.12	16.25	16.20	16.07	15.96	17.5	0	39750	40188
20	64QAM	50	50	16.17	16.25	16.28	16.10	16.05	17.5	0	39750	40188
20	64QAM	100	0	16.20	16.25	16.30	16.16	16.03	17.5	0	39750	40188
20	64QAM	100	1	16.11	16.32	16.34	16.16	15.97	17.5	0	39750	40188
20	256QAM	1	0	16.19	16.28	16.40	16.35	16.14	17.5	0	39750	40188
20	256QAM	1	49	16.21	16.29	16.27	16.11	16.05	17.5	0	39750	40188
20	256QAM	1	99	16.11	16.32	16.37	16.09	16.02	17.5	0	39750	40188
20	256QAM	50	0	16.18	16.32	16.38	16.17	16.14	17.5	0	39750	40188
20	256QAM	50	24	16.21	16.28	16.20	16.16	16.11	17.5	0	39750	40188
20	256QAM	50	50	16.15	16.28	16.23	16.10	16.03	17.5	0	39750	40188
20	256QAM	100	0	16.11	16.32	16.34	16.16	15.97	17.5	0	39750	40188
20	256QAM	100	1	16.02	16.11	16.18	16.09	16.02	17.5	0	39750	40188
20	256QAM	250	0	16.20	16.25	16.30	16.16	16.05	17.5	0	39750	40188
20	256QAM	250	24	16.20	16.28	16.25	16.17	16.07	17.5	0	39750	40188
20	256QAM	250	50	16.17	16.28	16.32	16.16	16.05	17.5	0	39750	40188
20	256QAM	250	100	16.11	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	250	100	16.02	16.11	16.18	16.09	16.02	17.5	0	39750	40188
20	256QAM	500	0	16.19	16.25	16.30	16.16	16.05	17.5	0	39750	40188
20	256QAM	500	24	16.19	16.28	16.25	16.17	16.07	17.5	0	39750	40188
20	256QAM	500	50	16.15	16.28	16.32	16.16	16.05	17.5	0	39750	40188
20	256QAM	500	100	16.11	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	500	100	16.02	16.11	16.18	16.09	16.02	17.5	0	39750	40188
20	256QAM	2500	0	16.20	16.25	16.30	16.16	16.05	17.5	0	39750	40188
20	256QAM	2500	24	16.20	16.28	16.25	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	50	16.17	16.28	16.32	16.16	16.05	17.5	0	39750	40188
20	256QAM	2500	100	16.13	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	100	16.04	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	250	16.19	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	250	16.15	16.28	16.32	16.16	16.05	17.5	0	39750	40188
20	256QAM	2500	500	16.11	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	500	16.02	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	1000	16.17	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	1000	16.08	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	2500	16.13	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	2500	16.04	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	5000	16.19	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	5000	16.05	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	10000	16.17	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	10000	16.08	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	25000	16.13	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	25000	16.04	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	50000	16.19	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	50000	16.05	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	100000	16.17	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	100000	16.08	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	250000	16.13	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	250000	16.04	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	500000	16.19	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	500000	16.05	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	1000000	16.17	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	1000000	16.08	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	2500000	16.13	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	2500000	16.04	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	5000000	16.19	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	5000000	16.05	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	10000000	16.17	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	10000000	16.08	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	25000000	16.13	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	25000000	16.04	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	50000000	16.19	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	50000000	16.05	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	100000000	16.17	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	100000000	16.08	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	250000000	16.13	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	250000000	16.04	16.28	16.35	16.18	16.07	17.5	0	39750	40188
20	256QAM	2500	500000000	16.19	16.28	16.34	16.17	16.07	17.5	0	39750	40188
20	256QAM	2500	500000000	16.05	16.28	16.35	16.18	16.07	17.5	0	3975	

Ant 4 Full Power/DSI 1/3/4/5								
GSM850	Burst Average Power (dBm)			Tune-up	Frame-Average Power (dBm)			Tune-up Limit
	TX Channel	128	189	251	128	189	251	(dBm)
Frequency (MHz)	925.00	925.00	925.00	925.00	925.00	925.00	925.00	925.00
GSM 1 Tx slot	31.41	31.85	31.66	33.00	22.41	22.85	22.98	24.00
GPRS 1 Tx slot	31.40	31.84	31.64	33.00	22.40	22.84	22.94	24.00
GPRS 2 Tx slots	28.40	28.71	28.73	30.00	22.40	22.71	22.73	24.00
GPRS 3 Tx slots	26.52	26.87	26.93	28.20	22.26	22.61	22.67	23.94
GPRS 4 Tx slots	25.33	25.79	25.71	27.00	22.33	22.79	22.71	24.00
EDGE 1 Tx slot	25.33	25.79	25.61	26.53	16.77	16.81	17.31	17.31
EDGE 2 Tx slots	22.68	22.93	22.87	23.53	16.66	16.83	16.91	17.53
EDGE 3 Tx slots	20.96	20.76	20.49	21.73	16.70	16.50	16.23	17.47
EDGE 4 Tx slots	19.70	19.68	19.57	20.53	16.70	16.68	16.57	17.53

Ant 4 Full Power/DSI 3/4								
Band	WCDMA V			Tune-up	WCDMA V			Tune-up Limit (dBm)
	TX Channel	4132	4182	4233		4132	4182	4233
Rx Channel	4357	4407	4458	4458		4357	4407	4458
Frequency (MHz)	828.4	836.4	846.6	846.6		828.4	836.4	846.6
3GPP Rel 99	AMR 12.2Kbps	23.23	23.24	23.18	24.00			
3GPP Rel 6	HSDPA Subtest1	22.05	22.05	22.05	23.00			
3GPP Rel 6	HSDPA Subtest1-1	22.05	22.09	22.04	23.00			
3GPP Rel 6	HSDPA Subtest2	22.03	22.08	22.04	23.00			
3GPP Rel 6	HSDPA Subtest3	21.56	21.60	21.51	22.50			
3GPP Rel 6	HSDPA Subtest4	21.52	21.58	21.53	22.50			
3GPP Rel 8	DC-HSDPA Subtest1	21.98	22.07	21.98	23.00			
3GPP Rel 8	DC-HSDPA Subtest2	22.02	22.05	21.95	23.00			
3GPP Rel 8	DC-HSDPA Subtest3	21.53	21.53	21.45	22.50			
3GPP Rel 8	DC-HSDPA Subtest4	21.46	21.57	21.45	22.50			
3GPP Rel 6	HSUPA Subtest1	21.99	22.09	21.98	23.00			
3GPP Rel 6	HSUPA Subtest2	20.05	20.06	19.96	21.00			
3GPP Rel 6	HSUPA Subtest3	20.99	21.06	21.01	22.00			
3GPP Rel 6	HSUPA Subtest4	20.04	20.07	19.97	21.00			
3GPP Rel 6	HSUPA Subtest5	22.00	22.10	22.00	23.00			



Ant 4 Band 5 Full Power / DSI 4

BW [MHz]	Modulation	RB Size	RB Offset	Power		Power		Tune-up limit (dBm)	MPR (dB)
				Low Ch./Freq.	Ch./Freq.	Middle Ch./Freq.	High Ch./Freq.		
Channel									
Frequency (MHz)				20450	20525	20600	20675		
10	QPSK	1	0	23.07	23.27	23.14			
10	QPSK	1	25	23.06	23.04	23.07	23.07	24.6	0
10	QPSK	1	49	23.11	23.26	23.08			
10	QPSK	25	6	22.16	22.42	22.21	22.21		
10	QPSK	25	12	22.25	22.24	22.20	22.20		
10	QPSK	25	25	22.21	22.23	22.21	22.21	23.6	1
10	QPSK	50	6	22.24	22.24	22.17	22.17		
10	16QAM	1	0	22.51	22.57	22.49			
10	16QAM	1	25	22.43	22.44	22.51	22.51	23.6	1
10	16QAM	1	49	22.45	22.49	22.39			
10	16QAM	25	0	21.16	21.15	21.20			
10	16QAM	25	12	21.24	21.24	21.23	21.23	22.6	2
10	16QAM	25	25	21.20	21.20	21.19	21.19		
10	16QAM	50	0	21.23	21.19	21.19			
10	64QAM	1	0	21.50	21.55	21.57			
10	64QAM	1	25	21.45	21.46	21.47	21.47	22.6	2
10	64QAM	1	49	21.45	21.50	21.46			
10	64QAM	25	0	20.15	20.16	20.25			
10	64QAM	25	12	20.24	20.30	20.20	20.20	21.6	3
10	64QAM	25	25	20.19	20.21	20.19			
10	64QAM	50	0	20.24	20.26	20.19			
10	256QAM	1	0	18.00	18.14	18.08			
10	256QAM	1	25	17.97	17.91	17.99	17.99	19.6	5
10	256QAM	1	49	18.00	18.14	17.97			
10	256QAM	25	0	18.09	18.33	18.14			
10	256QAM	25	12	18.11	18.18	18.12	18.12	19.6	5
10	256QAM	25	25	18.11	18.06	18.07			
10	256QAM	50	0	18.11	18.09	18.05			
Channel									
Frequency (MHz)				20425	20525	20625	20675	Tune-up limit (dBm)	MPR (dB)
				825.5	836.5	846.5			
5	QPSK	1	0	23.13	23.16	23.19			
5	QPSK	1	12	23.14	23.16	23.15	23.15	24.6	0
5	QPSK	1	24	23.13	23.15	23.07	23.07		
5	QPSK	12	0	22.20	22.22	22.27	22.27		
5	QPSK	12	7	22.20	22.26	22.26	22.26	23.6	1
5	QPSK	12	13	22.16	22.20	22.22			
5	QPSK	26	0	22.19	22.21	22.21	22.21		
5	16QAM	1	0	22.49	22.48	22.51			
5	16QAM	1	12	22.46	22.47	22.45	22.45	23.6	1
5	16QAM	1	24	22.41	22.49	22.48			
5	16QAM	12	0	21.20	21.25	21.32			
5	16QAM	12	7	21.22	21.21	21.29	21.29	22.6	2
5	16QAM	12	13	21.19	21.24	21.23			
5	16QAM	25	0	21.21	21.24	21.21			
5	16QAM	1	0	21.40	21.43	21.47			
5	64QAM	1	12	21.30	21.37	21.34	21.34	22.6	2
5	64QAM	1	24	21.34	21.39	21.38			
5	64QAM	12	0	20.15	20.16	20.29			
5	64QAM	12	7	20.22	20.26	20.27	20.27	21.6	3
5	64QAM	12	13	20.18	20.14	20.22			
5	64QAM	25	0	20.21	20.23	20.22			
5	256QAM	1	0	18.01	18.03	18.10			
5	256QAM	1	12	18.09	18.02	18.01	18.01	19.6	5
5	256QAM	1	24	17.99	18.03	17.92			
5	256QAM	12	0	18.12	18.12	18.20			
5	256QAM	12	7	18.07	18.03	18.17	18.17	19.6	5
5	256QAM	12	13	18.02	18.10	18.13			
5	256QAM	25	0	18.09	18.14	18.08			
Channel									
Frequency (MHz)				20415	20525	20635	20675	Tune-up limit (dBm)	MPR (dB)
				825.0	836.5	847.5			
3	QPSK	1	0	23.11	23.12	23.12			
3	QPSK	1	6	23.11	23.12	23.12	23.12	24.6	0
3	QPSK	1	12	23.11	23.12	23.12			
3	QPSK	1	18	23.08	23.06	23.05			
3	QPSK	8	0	22.18	22.13	22.12			
3	QPSK	8	4	22.18	22.20	22.28	22.28	23.6	1
3	QPSK	8	7	22.17	22.16	22.23			
3	QPSK	15	0	22.18	22.22	22.17			
3	16QAM	1	0	22.41	22.42	22.44			
3	16QAM	1	8	22.54	22.52	22.53	22.53	23.6	1
3	16QAM	1	14	22.44	22.37	22.39			
3	16QAM	8	0	21.28	21.27	21.29			
3	16QAM	8	4	21.27	21.28	21.32	21.32	22.6	2
3	16QAM	8	7	21.24	21.22	21.26			
3	16QAM	15	0	21.19	21.21	21.19			
3	64QAM	1	0	21.34	21.37	21.42			
3	64QAM	1	8	21.44	21.41	21.38	21.38	22.6	2
3	64QAM	1	14	21.31	21.32	21.33			
3	64QAM	8	0	20.21	20.21	20.24			
3	64QAM	8	4	20.21	20.25	20.27	20.27	21.6	3
3	64QAM	8	7	20.18	20.21	20.25			
3	64QAM	15	0	20.17	20.21	20.20			
3	256QAM	1	0	18.00	18.01	17.98			
3	256QAM	1	6	18.00	18.02	17.98	17.98	19.6	5
3	256QAM	1	12	17.97	17.99	17.92			
3	256QAM	8	0	18.11	18.01	18.12			
3	256QAM	8	4	18.10	18.14	18.18	18.18	19.6	5
3	256QAM	8	7	18.05	18.08	18.14			
3	256QAM	15	0	18.12	18.14	18.03			
Channel									
Frequency (MHz)				20407	20525	20643	20675	Tune-up limit (dBm)	MPR (dB)
				824.7	836.5	848.3			
1.4	QPSK	1	0	23.00	23.02	23.03			
1.4	QPSK	1	3	23.10	23.10	23.08			
1.4	QPSK	1	5	22.98	22.97	23.01	23.01	24.6	0
1.4	QPSK	3	0	23.07	23.03	23.07			
1.4	QPSK	3	1	23.08	23.12	23.10			
1.4	QPSK	3	3	23.01	23.05	23.05			
1.4	QPSK	6	0	22.12	22.15	22.15	22.15	23.6	1
1.4	16QAM	1	0	22.34	22.36	22.37			
1.4	16QAM	1	3	22.37	22.43	22.43			
1.4	16QAM	1	5	22.32	22.38	22.30	22.30	23.6	1
1.4	16QAM	3	0	22.14	22.11	22.16			
1.4	16QAM	3	1	22.19	22.22	22.20	22.20		
1.4	16QAM	3	3	22.10	22.11	22.09			
1.4	16QAM	6	0	21.17	21.17	21.19	21.19	22.6	2
1.4	64QAM	1	0	21.27	21.23	21.32			
1.4	64QAM	1	3	21.28	21.33	21.30			
1.4	64QAM	1	5	21.25	21.31	21.24		22.6	2
1.4	64QAM	3	0	21.16	21.21	21.19			
1.4	64QAM	3	1	21.16	21.21	21.15			
1.4	64QAM	6	0	20.09	20.17	20.16	20.16	21.6	3
1.4	256QAM	1	0	17.98	17.98	17.91			
1.4	256QAM	1	3	18.02	17.98	17.98			
1.4	256QAM	1	5	17.84	17.85	17.90	17.90	19.6	5
1.4	256QAM	3	0	17.98	17.95	17.99			
1.4	256QAM	3	1	17.99	17.99	17.96			
1.4	256QAM	3	3	17.87	17.96	17.96			
1.4	256QAM	6	0	18.05	18.02	18.02	18.02	19.6	5

Ant 4 Band 12 Full Power / DSI 3/4

BW [MHz]	Modulation	RB Size	RB Offset	Power Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel 1								
Frequency (MHz)								
10	QPSK	1	0	23.04	23.15	22.94		
10	QPSK	1	25	22.92	23.07	23.01	24.5	0
10	QPSK	1	49	23.02	23.06	22.96		
10	QPSK	25	0	22.11	22.24	22.07		
10	QPSK	25	12	22.22	22.19	22.09		
10	QPSK	25	25	22.25	22.22	22.16		
10	QPSK	50	0	22.03	22.15	22.08		
10	16QAM	1	0	22.20	22.29	22.31		
10	16QAM	1	25	23.05	22.41	23.33	23.5	1
10	16QAM	1	49	22.43	22.41	22.36		
10	16QAM	25	0	21.11	21.08	21.08		
10	16QAM	25	12	21.17	21.19	21.12	22.5	2
10	16QAM	25	25	21.15	21.14	21.12		
10	16QAM	50	0	21.20	21.18	21.09		
10	64QAM	1	0	21.28	21.37	21.36		
10	64QAM	1	25	21.36	21.36	21.32	22.5	2
10	64QAM	1	49	21.47	21.45	21.35		
10	64QAM	25	0	20.21	20.08	20.09		
10	64QAM	25	12	20.54	20.20	20.13	21.5	3
10	64QAM	25	25	20.17	20.20	20.12		
10	64QAM	50	0	20.49	20.18	20.10		
10	25QAM	1	0	17.99	18.00	17.80		
10	25QAM	1	25	23.01	22.98	22.95		
10	25QAM	1	49	17.96	17.94	17.81		
10	25QAM	25	0	17.97	18.13	18.02		
10	25QAM	25	12	18.08	18.08	17.99		
10	25QAM	25	25	18.09	18.11	18.03	19.5	5
10	25QAM	50	0	18.04	18.10	17.97		
Channel 2								
Frequency (MHz)								
5	QPSK	1	0	23.12	23.01	22.94		
5	QPSK	1	12	23.12	23.05	23.04	24.5	0
5	QPSK	1	24	23.01	23.08	23.08		
5	QPSK	12	0	22.17	22.10	22.11		
5	QPSK	12	7	22.10	22.14	22.13		
5	QPSK	12	19	22.09	22.12	22.08	23.5	1
5	QPSK	25	0	22.11	22.13	22.08		
5	16QAM	1	0	22.34	22.33	22.31		
5	16QAM	1	12	22.32	22.31	22.33	23.5	1
5	16QAM	1	24	22.34	22.36	22.31		
5	16QAM	12	0	21.20	21.14	21.13		
5	16QAM	12	7	21.13	21.15	21.16		
5	16QAM	12	13	20.11	20.09	20.06	21.5	2
5	16QAM	25	0	21.14	21.16	21.08		
5	64QAM	1	0	21.28	21.24	21.22		
5	64QAM	1	12	21.21	21.27	21.24	22.5	2
5	64QAM	1	24	21.25	21.27	21.17		
5	64QAM	12	0	20.14	20.14	20.09		
5	64QAM	12	7	20.14	20.15	20.14		
5	64QAM	12	13	20.11	20.09	20.06		
5	64QAM	25	0	20.16	20.14	20.07		
5	25QAM	1	0	18.01	17.67	17.83		
5	25QAM	1	12	17.98	17.98	17.89	19.5	5
5	25QAM	1	24	17.94	17.91	17.84		
5	25QAM	12	0	18.00	17.98	18.01		
5	25QAM	12	7	18.07	18.01	18.03		
5	25QAM	12	13	17.98	18.07	17.98	19.5	5
5	25QAM	25	0	17.98	18.00	17.97		
Channel 3								
Frequency (MHz)								
3	QPSK	1	0	23.07	22.98	23.01		
3	QPSK	1	25	23.01	22.98	23.06	24.5	0
3	QPSK	1	49	22.98	22.95	22.89		
3	QPSK	25	0	22.15	22.06	22.05		
3	QPSK	25	7	22.12	22.15	22.08		
3	QPSK	25	15	22.11	22.13	22.10		
3	16QAM	1	0	22.34	22.32	22.30		
3	16QAM	1	8	22.37	22.37	22.34	23.5	1
3	16QAM	1	14	22.31	22.36	22.23		
3	16QAM	8	0	21.21	21.19	21.17		
3	16QAM	8	4	21.19	21.22	21.14		
3	16QAM	8	7	21.16	21.17	21.10	22.5	2
3	16QAM	15	0	21.19	21.14	21.12		
3	64QAM	1	0	21.28	21.25	21.21		
3	64QAM	1	8	21.26	21.33	21.20	22.5	2
3	64QAM	1	14	21.21	21.29	21.13		
3	64QAM	8	0	20.16	20.16	20.07		
3	64QAM	8	4	20.16	20.15	20.11	21.5	3
3	64QAM	8	7	20.12	20.15	20.04		
3	64QAM	15	0	20.14	20.14	20.08		
3	25QAM	1	0	17.98	17.94	17.94		
3	25QAM	1	8	17.94	17.94	18.01		
3	25QAM	1	14	17.90	17.95	17.78		
3	25QAM	8	0	18.03	18.01	17.99		
3	25QAM	8	4	18.07	18.04	17.93		
3	25QAM	8	7	17.96	17.99	17.91	19.5	5
3	25QAM	15	0	17.99	18.01	18.05		
Channel 4								
Frequency (MHz)								
1.4	QPSK	1	0	22.93	22.91	22.88		
1.4	QPSK	1	3	22.97	22.98	22.89		
1.4	QPSK	1	5	22.85	22.89	22.84	24.5	0
1.4	QPSK	3	0	22.99	22.93	22.89		
1.4	QPSK	3	1	22.98	22.98	22.89		
1.4	QPSK	3	3	22.92	22.94	22.84		
1.4	QPSK	6	0	22.02	22.01	21.96	23.5	1
1.4	16QAM	1	0	22.24	22.26	22.21		
1.4	16QAM	1	3	22.13	22.14	22.14		
1.4	16QAM	1	5	21.13	21.17	21.06		
1.4	16QAM	3	0	21.15	21.20	21.02	22.5	2
1.4	16QAM	3	1	21.28	22.21	22.12		
1.4	16QAM	3	3	22.04	22.01	21.98		
1.4	16QAM	6	0	21.99	22.05	22.00		
1.4	16QAM	6	1	21.06	21.10	21.03	22.5	2
1.4	64QAM	1	0	21.19	21.24	21.11		
1.4	64QAM	1	3	21.13	21.24	21.14		
1.4	64QAM	1	5	21.13	21.24	21.14		
1.4	64QAM	3	0	21.15	21.20	21.02		
1.4	64QAM	3	1	21.28	21.22	21.14		
1.4	64QAM	3	3	21.00	21.05	21.04		
1.4	64QAM	6	0	20.11	20.04	19.95	21.5	3
1.4	25QAM	1	0	17.94	17.92	17.78		
1.4	25QAM	1	3	17.84	17.90	17.77		
1.4	25QAM	1	5	17.77	17.79	17.76		
1.4	25QAM	3	0	17.92	17.79	17.82		
1.4	25QAM	3	1	17.92	17.86	17.78		
1.4	25QAM	3	3	17.85	17.88	17.74		
1.4	25QAM	6	0	17.93	17.94	17.87	19.5	5

Ant 4 Band 17 Full Power / DSI 3/4

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				23780	23790	23800		
Frequency (MHz)				709	710	711		
10	CPSK	1	0	22.89	23.06	22.88		
10	CPSK	1	25	22.91	22.92	22.91	24.5	0
10	CPSK	1	49	22.97	22.94	22.94		
10	CPSK	25	0	21.97	22.16	21.96		
10	CPSK	25	12	22.13	22.13	22.02	23.5	1
10	CPSK	25	25	22.16	22.17	22.12		
10	CPSK	50	0	22.65	22.63	22.63		
10	16QAM	1	0	22.23	22.28	22.29		
10	16QAM	1	25	22.29	22.36	22.30	23.5	1
10	16QAM	1	49	22.34	22.33	22.32		
10	16QAM	25	0	20.97	20.97	20.96		
10	16QAM	25	12	21.12	21.15	21.04	22.5	2
10	16QAM	25	25	21.10	21.11	21.13		
10	16QAM	50	0	21.10	21.10	21.01		
10	64QAM	1	0	21.27	21.31	21.30		
10	64QAM	1	25	21.32	21.27	21.25	22.5	2
10	64QAM	1	49	21.34	21.34	21.31		
10	64QAM	25	0	19.96	19.97	19.97		
10	64QAM	25	12	20.15	20.16	20.06	21.5	3
10	64QAM	25	25	20.16	20.12	20.10		
10	64QAM	50	0	20.10	20.11	20.00		
10	256QAM	1	0	17.77	17.97	17.78		
10	256QAM	1	25	17.77	17.86	17.77	19.5	5
10	256QAM	1	49	17.85	17.87	17.79		
10	256QAM	25	0	17.89	18.10	17.83		
10	256QAM	25	12	18.06	18.05	17.87		
10	256QAM	25	25	18.02	18.01	18.05	19.5	5
10	256QAM	50	0	18.02	18.02	17.91		
Channel				23755	23790	23825	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				705.5	710	713.5		
5	CPSK	1	0	22.89	22.90	22.88		
5	CPSK	1	12	22.97	22.98	22.95	24.5	0
5	CPSK	1	24	22.98	22.93	22.91		
5	CPSK	12	0	22.06	22.02	22.00		
5	CPSK	12	7	22.00	22.13	22.04	23.5	1
5	CPSK	12	13	22.11	22.10	22.05		
5	CPSK	26	0	22.07	22.07	22.09		
5	16QAM	1	0	22.23	22.24	22.26		
5	16QAM	1	12	22.32	22.32	22.32	23.5	1
5	16QAM	1	24	22.34	22.39	22.28		
5	16QAM	12	0	21.08	21.06	21.04		
5	16QAM	12	7	21.15	21.13	21.05	22.5	2
5	16QAM	12	13	21.13	21.12	21.04		
5	16QAM	25	0	21.14	21.10	21.04		
5	64QAM	1	0	21.13	21.12	21.14		
5	64QAM	1	12	21.21	21.27	21.20	22.5	2
5	64QAM	1	24	21.30	21.28	21.18		
5	64QAM	12	0	20.08	20.04	20.03		
5	64QAM	12	7	20.10	20.09	20.05	21.5	3
5	64QAM	12	13	20.10	20.09	20.07		
5	64QAM	25	0	20.10	20.09	20.01		
5	256QAM	1	0	17.74	17.82	17.77		
5	256QAM	1	12	17.92	17.93	17.85	19.5	5
5	256QAM	1	24	17.99	17.97	17.87		
5	256QAM	12	0	18.00	17.98	17.89		
5	256QAM	12	7	18.03	18.01	17.97		
5	256QAM	12	13	18.02	17.97	17.98	19.5	5
5	256QAM	25	0	18.01	17.94	17.89		



Ant4 Down power DS1 1/5					
Band	WCDMA V			Tune-up Limit (dBm)	
TX Channel	4192	4182	4653		
Rx Channel	4357	4357	4458		
Frequency (MHz)	826.4	830.4	840.6		
3GPP Rel 99	AMR 12.2Kbps	22.30	22.33	22.28	23.00
3GPP Rel 99	RMC 12.2Kbps	22.32	22.34	22.30	23.00
3GPP Rel 6	HSDPA Subtest-1	21.02	21.13	21.00	22.00
3GPP Rel 6	HSDPA Subtest-2	20.99	21.10	21.04	22.00
3GPP Rel 6	HSDPA Subtest-3	20.57	20.58	20.57	21.50
3GPP Rel 6	HSDPA Subtest-4	20.52	20.58	20.52	21.50
3GPP Rel 6	DC-HSDPA Subtest-1	21.03	21.05	21.05	22.00
3GPP Rel 6	DC-HSDPA Subtest-2	21.02	21.07	21.01	22.00
3GPP Rel 6	DC-HSDPA Subtest-3	20.55	20.49	20.41	21.50
3GPP Rel 6	DC-HSDPA Subtest-4	20.47	20.57	20.42	21.50
3GPP Rel 6	DC-HSDPA Subtest-5			21.00	22.00
3GPP Rel 6	HSUPA Subtest-2	19.11	19.07	19.03	20.00
3GPP Rel 6	HSUPA Subtest-3	19.99	20.07	20.07	21.00
3GPP Rel 6	HSUPA Subtest-4	19.05	19.08	18.98	20.00
3GPP Rel 6	HSUPA Subtest-5	20.98	21.12	20.96	22.00



Ant 4 Band 5 Down power DSI 1													
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	Frequency (MHz)	829.5	836.5	844
10	QPSK	1	0	21.12	21.44	21.14	22.6	0					
10	QPSK	1	25	21.06	21.06	21.14	22.6	0					
10	QPSK	1	49	21.18	21.24	21.09	22.6	0					
10	QPSK	25	0	20.97	21.30	21.12	22.6	0					
10	QPSK	25	12	21.09	21.08	21.02	22.6	0					
10	QPSK	25	25	21.08	21.00	21.10	22.6	0					
10	QPSK	50	0	21.05	21.10	21.08	22.6	0					
10	16QAM	1	0	21.25	21.36	21.22	22.6	0					
10	16QAM	1	25	21.21	21.17	21.34	22.6	0					
10	16QAM	1	49	21.18	21.28	21.12	22.6	0					
10	16QAM	25	0	21.23	21.12	21.22	22.6	0					
10	16QAM	25	12	21.26	21.29	21.29	22.6	0					
10	16QAM	25	25	21.25	21.25	21.15	22.6	0					
10	16QAM	50	0	21.26	21.15	21.25	22.6	0					
10	64QAM	1	0	21.25	21.32	21.36	22.6	0					
10	64QAM	1	25	21.27	21.33	21.30	22.6	0					
10	64QAM	1	49	21.31	21.30	21.21	22.6	0					
10	64QAM	25	0	20.18	20.22	20.32	21.6	1					
10	64QAM	25	12	20.28	20.30	20.19	21.6	1					
10	64QAM	25	25	20.26	20.25	20.14	21.6	1					
10	64QAM	50	0	20.20	20.24	20.18	21.6	1					
10	256QAM	1	0	18.07	18.08	18.08	19.6	3					
10	256QAM	1	25	18.00	17.97	18.03	19.6	3					
10	256QAM	1	49	18.04	18.16	17.07	19.6	3					
10	256QAM	25	0	18.12	18.32	18.13	19.6	3					
10	256QAM	25	12	18.07	18.21	18.10	19.6	3					
10	256QAM	25	25	18.11	18.12	18.08	19.6	3					
10	256QAM	50	0	18.12	18.08	18.07	19.6	3					
10	Channel	20425	20525	20625	20725	20825	Tune-up limit (dBm)	MPR (dB)	Frequency (MHz)	828.5	836.5	846.5	
5	QPSK	1	0	21.12	21.21	21.18	22.6	0					
5	QPSK	1	12	21.19	21.23	21.20	22.6	0					
5	QPSK	1	24	21.19	21.16	21.06	22.6	0					
5	QPSK	12	0	21.09	21.14	21.15	22.6	0					
5	QPSK	12	7	21.10	21.10	21.09	22.6	0					
5	QPSK	12	13	21.05	21.07	21.08	22.6	0					
5	QPSK	25	0	21.03	21.08	21.14	22.6	0					
5	16QAM	1	0	21.31	21.26	21.29	22.6	0					
5	16QAM	1	12	21.19	21.20	21.19	22.6	0					
5	16QAM	1	24	21.22	21.19	21.30	22.6	0					
5	16QAM	12	0	21.20	21.28	21.30	22.6	0					
5	16QAM	12	7	21.19	21.25	21.25	22.6	0					
5	16QAM	12	13	21.25	21.27	21.20	22.6	0					
5	16QAM	25	0	21.29	21.29	21.20	22.6	0					
5	64QAM	1	0	21.42	21.40	21.43	22.6	1					
5	64QAM	1	12	21.30	20.95	20.19	21.6	1					
5	64QAM	1	24	20.26	20.24	20.20	21.6	1					
5	256QAM	1	0	18.08	18.10	18.17	19.6	3					
5	256QAM	1	12	18.08	18.05	18.02	19.6	3					
5	256QAM	1	24	17.99	18.04	17.99	19.6	3					
5	256QAM	12	0	18.20	18.11	18.23	19.6	3					
5	256QAM	12	7	18.05	18.22	18.23	19.6	3					
5	256QAM	12	13	18.04	18.07	18.11	19.6	3					
5	256QAM	25	0	18.10	18.20	18.05	19.6	3					
5	Channel	20415	20525	20635	20735	20835	Tune-up limit (dBm)	MPR (dB)	Frequency (MHz)	828.5	836.5	847.5	
3	QPSK	1	0	21.18	21.18	21.19	22.6	0					
3	QPSK	1	8	21.14	21.25	21.19	22.6	0					
3	QPSK	1	14	21.13	21.14	21.09	22.6	0					
3	QPSK	8	0	21.05	21.04	21.10	22.6	0					
3	QPSK	8	4	21.09	21.03	21.11	22.6	0					
3	QPSK	8	7	21.01	20.99	21.16	22.6	0					
3	QPSK	15	0	21.06	21.09	20.97	22.6	0					
3	16QAM	1	0	21.13	21.14	21.21	22.6	0					
3	16QAM	1	8	21.31	21.31	21.29	22.6	0					
3	16QAM	1	14	21.15	21.11	21.18	22.6	0					
3	16QAM	8	0	21.24	21.23	21.37	22.6	0					
3	16QAM	8	4	21.29	21.27	21.35	22.6	0					
3	16QAM	8	7	21.25	21.20	21.23	22.6	0					
3	16QAM	15	0	21.16	21.22	21.24	22.6	0					
3	64QAM	1	0	21.39	21.40	21.42	22.6	0					
3	64QAM	1	8	21.39	21.41	21.36	22.6	0					
3	64QAM	1	14	21.35	21.39	21.37	22.6	0					
3	64QAM	6	0	20.27	20.27	20.28	21.6	1					
3	64QAM	6	4	20.28	20.25	20.30	21.6	1					
3	64QAM	6	7	20.26	20.25	20.28	21.6	1					
3	64QAM	15	0	20.21	20.16	20.17	21.6	1					
3	256QAM	1	0	18.11	17.97	17.99	19.6	3					
3	256QAM	1	8	18.08	18.13	18.03	19.6	3					
3	256QAM	1	14	17.93	18.04	17.90	19.6	3					
3	256QAM	8	0	18.13	18.00	18.10	19.6	3					
3	256QAM	8	4	18.06	18.15	18.15	19.6	3					
3	256QAM	8	7	18.05	18.09	18.10	19.6	3					
3	256QAM	15	0	18.15	18.17	18.02	19.6	3					
3	Channel	20407	20525	20643	20743	20843	Tune-up limit (dBm)	MPR (dB)	Frequency (MHz)	824.7	836.5	848.3	
1.4	QPSK	1	0	21.03	21.08	21.04	22.6	0					
1.4	QPSK	1	3	21.09	21.08	21.13	22.6	0					
1.4	QPSK	1	5	20.98	21.04	21.05	22.6	0					
1.4	QPSK	3	0	21.10	21.03	21.11	22.6	0					
1.4	QPSK	3	1	21.08	21.11	21.11	22.6	0					
1.4	QPSK	3	3	21.00	20.95	21.01	22.6	0					
1.4	QPSK	6	0	21.15	21.22	21.29	22.6	0					
1.4	64QAM	1	0	21.30	21.34	21.28	22.6	0					
1.4	64QAM	3	0	21.15	21.22	21.25	22.6	0					
1.4	64QAM	3	1	21.21	21.23	21.23	22.6	0					
1.4	64QAM	3	3	21.20	21.24	21.16	22.6	0					
1.4	64QAM	6	0	20.32	20.40	20.36	21.6	0					
1.4	256QAM	1	0	17.93	17.95	17.90	19.6	3					
1.4	256QAM	1	3	18.04	17.98	17.96	19.6	3					
1.4	256QAM	1	5	17.90	17.92	17.88	19.6	3					
1.4	256QAM	3	0	17.97	17.92	17.88	19.6	3					
1.4	256QAM	3	1	17.97	17.92	17.97	19.6	3					
1.4	256QAM	3	3	17.97	17.97	18.01	19.6	3					
1.4	256QAM	6	0	18.10	18.02	17.98	19.6	3					
1.4	Channel	20407	20525	20643	20743	20843	Tune-up limit (dBm)	MPR (dB)	Frequency (MHz)	824.7	836.5	848.3	
1.4	QPSK	1	0	21.03	21.08	21.04	22.6	0					
1.4	QPSK	1	3	21.09	21.08	21.13	22.6	0					
1.4	QPSK	1	5	20.98	21.04	21.05	22.6	0					
1.4	QPSK	3	0	21.10	21.03	21.11	22.6</						



Ant 4 Band 17 Down power DSI 1/5									
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 Frequency (MHz)									
10	QPSK	1	0	21.85	22.26	21.94			
10	QPSK	1	25	21.97	21.95	21.94	23.5	0	
10	QPSK	1	49	22.00	21.99	22.00			
10	QPSK	25	0	21.94	22.19	21.97			
10	QPSK	25	12	22.13	22.19	22.00	23.5	0	
10	QPSK	25	25	22.16	22.10	22.12			
10	QPSK	50	0	22.06	22.15	22.06			
10	16QAM	1	0	22.19	22.25	22.25			
10	16QAM	1	25	22.19	22.20	22.13	23.5	0	
10	16QAM	1	49	22.23	22.21	22.23			
10	16QAM	25	0	21.03	20.95	20.98			
10	16QAM	25	12	21.11	21.19	21.04	22.5	1	
10	16QAM	25	25	21.14	21.11	21.10			
10	16QAM	50	0	21.11	21.06	20.98			
10	64QAM	1	0	21.28	21.29	21.27			
10	64QAM	1	25	21.33	21.26	21.32	22.5	1	
10	64QAM	1	49	21.36	21.37	21.34			
10	64QAM	25	0	20.01	19.96	19.92			
10	64QAM	25	12	20.15	20.22	20.04	21.5	2	
10	64QAM	25	25	20.21	20.14	20.15			
10	64QAM	50	0	20.40	20.37	20.44			
10	256QAM	1	0	17.81	17.67	17.83			
10	256QAM	1	25	17.83	17.88	17.74	19.5	4	
10	256QAM	1	49	17.91	17.04	17.86			
10	256QAM	25	0	17.93	18.15	17.84			
10	256QAM	25	12	18.09	18.06	17.87	19.5	4	
10	256QAM	25	25	18.05	17.98	18.05			
10	256QAM	50	0	18.02	18.04	17.96			
Channel Frequency (MHz)									
5	QPSK	1	0	21.85	21.87	21.91			
5	QPSK	1	12	21.95	22.01	22.01	23.5	0	
5	QPSK	1	24	22.12	21.99	22.02			
5	QPSK	12	0	22.14	22.02	22.00			
5	QPSK	12	7	22.06	22.09	22.00	23.5	0	
5	QPSK	12	13	22.12	22.16	22.10			
5	QPSK	25	0	22.04	22.04	22.07			
5	16QAM	1	0	22.19	22.23	22.21			
5	16QAM	1	12	22.21	22.16	22.23	23.5	0	
5	16QAM	1	24	22.20	22.23	22.20			
5	16QAM	12	0	21.12	21.02	21.01			
5	16QAM	12	7	21.11	21.15	21.08	22.5	1	
5	16QAM	12	13	21.12	21.08	21.06			
5	16QAM	25	0	21.20	21.07	21.05			
5	64QAM	1	0	21.12	21.11	21.17			
5	64QAM	1	12	21.22	21.23	21.18	22.5	1	
5	64QAM	1	24	21.34	21.34	21.22			
5	64QAM	12	0	20.12	20.01	20.09			
5	64QAM	12	7	20.11	20.05	20.07	21.5	2	
5	64QAM	12	13	20.16	20.08	20.08			
5	64QAM	25	0	20.18	20.13	20.17			
5	256QAM	1	0	17.80	17.80	17.82			
5	256QAM	1	12	17.94	17.95	17.91	19.5	4	
5	256QAM	1	24	18.06	17.94	17.86			
5	256QAM	12	0	18.07	17.87	17.87			
5	256QAM	12	7	18.01	18.06	17.97	19.5	4	
5	256QAM	12	13	18.07	17.95	18.03			
5	256QAM	25	0	18.02	17.90	17.98			



Ant 6 Band 2 Full Power / DSI 4

Ant 6 Band 4 Full Power / DSI 4

Ant 6 Band 7 Full Power



Ant 6 Band 66 Full Power / DSI 4



Ant 6 Band 38 Full Power / DS1 4

Ant 6 Band 38 Full Power / DS1 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									
Frequency (MHz)				37850	38000	38150			
20	QPSK	1	0	24.91	25.15	24.95			
20	QPSK	1	49	25.00	25.03	24.94			
20	QPSK	1	99	25.05	25.13	24.99			
20	QPSK	50	0	24.12	24.27	24.13			
20	QPSK	50	24	24.26	24.45	24.19			
20	QPSK	50	50	24.23	24.22	24.11			
20	QPSK	100	0	24.15	24.26	24.11			
20	16QAM	1	0	24.03	24.21	24.12			
20	16QAM	1	49	24.25	24.17	24.10			
20	16QAM	50	0	23.09	23.12	23.18			
20	16QAM	50	24	23.19	23.22	23.20			
20	16QAM	50	50	23.28	23.15	23.18			
20	16QAM	100	0	23.30	23.19	23.18			
20	64QAM	1	0	23.00	22.82	22.91			
20	64QAM	1	49	22.87	22.85	22.90			
20	64QAM	1	99	22.98	22.91	23.01			
20	64QAM	50	0	22.08	22.07	22.12			
20	64QAM	50	24	22.18	22.24	22.12			
20	64QAM	50	50	22.14	22.21	22.10			
20	64QAM	100	0	22.33	22.26	22.25			
20	256QAM	1	0	19.80	20.01	19.82			
20	256QAM	1	49	18.99	19.97	19.84			
20	256QAM	1	99	19.91	19.99	19.93			
20	256QAM	50	0	20.07	20.13	20.05			
20	256QAM	50	24	20.06	20.13	20.05			
20	256QAM	50	50	20.12	20.11	20.01			
20	256QAM	100	0	20.19	20.15	20.05			
Channel									
Frequency (MHz)				37825	38000	38175	Tune-up limit (dBm)	-	
15	QPSK	1	0	24.98	24.93	24.87			
15	QPSK	1	37	25.04	24.88	24.96			
15	QPSK	1	74	25.14	24.94	24.99			
15	QPSK	38	0	24.13	24.15	24.17			
15	QPSK	38	20	24.12	24.22	24.13			
15	QPSK	38	39	24.17	24.20	24.15			
15	QPSK	75	0	22.43	24.13	24.14			
15	16QAM	1	0	24.08	24.11	24.09			
15	16QAM	1	37	24.08	23.88	24.13			
15	16QAM	1	74	24.02	24.19	24.05			
15	16QAM	36	0	23.07	23.14	23.04			
15	16QAM	36	20	23.06	23.21	23.11			
15	16QAM	36	39	23.06	23.11	23.11			
15	16QAM	75	0	23.20	23.05	23.17			
15	64QAM	1	0	22.82	22.90	22.83			
15	64QAM	1	37	22.88	23.00	22.98			
15	64QAM	1	74	23.02	22.84	23.04			
15	64QAM	36	0	22.15	22.07	22.05			
15	64QAM	36	20	22.19	22.24	22.17			
15	64QAM	36	39	22.24	22.18	22.20			
15	64QAM	75	0	22.25	22.20	22.18			
15	256QAM	1	0	19.83	19.88	19.75			
15	256QAM	1	37	19.92	19.74	19.89			
15	256QAM	1	74	20.01	19.83	19.89			
15	256QAM	36	0	20.06	20.09	20.08			
15	256QAM	36	20	20.01	20.11	20.01			
15	256QAM	36	39	20.08	20.07	20.01			
15	256QAM	75	0	20.16	20.00	20.05			
Channel									
Frequency (MHz)				37800	38000	38160	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	0	0	24.94	24.97	24.93			
10	QPSK	1	25	24.91	25.03	24.99			
10	QPSK	1	49	25.08	25.05	25.12			
10	QPSK	25	0	24.11	24.13	24.08			
10	QPSK	25	12	24.20	24.18	24.09			
10	QPSK	25	25	24.20	24.17	24.13			
10	QPSK	50	0	24.13	24.23	24.08			
10	16QAM	1	0	24.13	24.24	24.16			
10	16QAM	1	25	24.10	24.14	24.12			
10	16QAM	1	49	24.22	24.15	24.09			
10	16QAM	25	0	23.00	23.17	23.08			
10	16QAM	25	12	23.13	23.14	23.15			
10	16QAM	25	25	23.18	23.20	23.15			
10	16QAM	50	0	23.17	23.26	23.08			
10	64QAM	1	0	22.91	23.00	23.36			
10	64QAM	1	25	22.94	23.02	23.21			
10	64QAM	1	49	23.24	23.32	23.29			
10	64QAM	25	0	22.13	22.12	22.09			
10	64QAM	25	12	22.08	22.29	22.19			
10	64QAM	25	25	22.12	22.12	22.20			
10	64QAM	50	0	22.18	22.17	22.12			
10	256QAM	1	0	19.84	19.82	19.79			
10	256QAM	1	25	19.84	19.91	19.84			
10	256QAM	1	49	19.94	19.98	20.01			
10	256QAM	25	0	19.99	19.99	19.95			
10	256QAM	25	12	20.14	20.10	19.97			
10	256QAM	25	25	20.06	20.03	19.98			
10	256QAM	50	0	20.01	20.10	19.99			
Channel									
Frequency (MHz)				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)	
5	QPSK	1	0	24.87	24.98	24.95			
5	QPSK	1	24	24.87	25.00	24.92			
5	QPSK	1	44	24.99	24.95	24.93			
5	QPSK	12	0	24.16	24.19	24.13			
5	QPSK	12	7	24.14	24.19	24.09			
5	QPSK	12	13	24.15	24.17	24.17			
5	QPSK	25	0	24.12	24.19	24.19			
5	16QAM	1	0	24.13	24.07	24.05			
5	16QAM	1	12	24.09	24.14	24.11			
5	16QAM	1	24	24.21	24.23	24.22			
5	16QAM	12	0	23.17	23.10	23.06			
5	16QAM	12	7	23.09	23.15	23.13			
5	16QAM	12	13	23.12	23.14	23.11			
5	16QAM	25	0	23.16	23.16	23.14			
5	64QAM	1	0	22.83	22.84	22.85			
5	64QAM	1	12	22.94	22.88	22.97			
5	64QAM	1	24	22.86	22.98	22.99			
5	64QAM	12	0	22.03	22.13	22.07			
5	64QAM	12	7	22.09	22.10	22.09			
5	64QAM	12	13	22.11	22.12	22.07			
5	64QAM	25	0	22.12	22.09	22.03			
5	256QAM	1	0	19.79	19.91	19.80			
5	256QAM	1	12	19.84	19.93	19.88			
5	256QAM	1	24	19.91	19.89	19.82			
5	256QAM	12	0	20.00	20.06	20.05			
5	256QAM	12	7	20.03	20.08	19.95			
5	256QAM	12	13	20.01	20.02	20.10			

Ant 6 Band 41 Full Power / DS1 4

Ant 6 Band 41 Full Power / DSI 4											
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											
Frequency (MHz)				39750	40185	40620	41055	41490			
20	QPSK	1	0	24.76	24.89	25.19	24.90	24.98			
20	QPSK	1	49	24.86	24.82	25.05	24.87	24.83	25.5	0	
20	QPSK	1	99	24.74	24.88	25.01	24.91	24.77			
20	QPSK	50	0	23.77	24.05	24.21	24.03	24.01			
20	QPSK	50	24	23.86	24.04	24.13	24.15	23.96	24.5	1	
20	QPSK	50	50	23.99	24.05	24.20	24.15	24.12			
20	QPSK	100	0	23.95	24.04	24.15	24.11	23.92			
20	16QAM	1	0	24.85	24.96	25.00	24.98	24.88			
20	16QAM	1	49	23.85	23.96	24.24	23.97	23.80	24.5	1	
20	16QAM	50	0	22.82	22.99	23.10	23.07	23.03			
20	16QAM	50	24	22.96	23.07	23.21	23.14	22.98	23.5	2	
20	16QAM	50	50	22.98	23.11	23.19	23.03	23.02			
20	16QAM	100	0	22.91	23.13	23.14	23.12	22.93			
20	64QAM	1	0	22.67	22.79	23.00	22.77	22.74			
20	64QAM	1	49	22.58	22.72	22.85	22.86	22.66	23.5	3	
20	64QAM	1	99	22.77	22.75	22.92	22.98	22.75			
20	64QAM	50	0	21.88	21.84	22.13	21.95	21.96			
20	64QAM	50	24	21.94	22.08	22.14	22.07	21.92			
20	64QAM	50	50	21.89	22.03	22.13	22.07	21.88			
20	64QAM	100	0	21.94	22.06	22.17	22.23	21.99			
20	256QAM	1	0	19.66	19.83	20.07	19.84	19.93			
20	256QAM	1	49	19.76	19.76	19.98	19.73	19.76	20.5	5	
20	256QAM	1	99	19.75	19.75	19.93	19.80	19.67			
20	256QAM	50	0	18.69	18.84	19.04	18.82	19.01			
20	256QAM	50	24	19.55	19.24	19.60	19.08	19.44	20.5	5	
20	256QAM	50	50	19.87	19.97	20.05	19.30	20.03			
20	256QAM	100	0	19.87	19.98	20.09	20.05	19.95			
Channel											
Frequency (MHz)				39725	40173	40620	41069	41915	Tune-up-limit (dBm)	MPR (dB)	
15	QPSK	1	0	24.65	24.85	24.99	24.94	24.83			
15	QPSK	1	37	24.72	24.94	24.93	24.84	24.80	25.5	0	
15	QPSK	1	74	24.71	24.98	24.96	24.94	24.87			
15	QPSK	36	0	23.82	23.91	24.02	24.08	23.92			
15	QPSK	36	20	23.86	24.06	24.18	23.97	23.93	24.5	1	
15	QPSK	36	39	23.85	24.06	24.18	24.06	24.00			
15	QPSK	75	0	23.90	24.04	24.06	24.03	23.93			
15	16QAM	1	0	23.81	24.03	24.03	24.03	23.99			
15	16QAM	1	37	23.81	23.73	24.09	23.84	23.72	24.5	1	
15	16QAM	1	74	23.94	24.01	24.02	24.02	23.97			
15	16QAM	36	0	22.68	22.92	23.10	22.90	22.85			
15	16QAM	36	20	22.83	23.01	23.06	22.78	22.78	23.5	2	
15	16QAM	36	39	22.85	23.01	23.03	22.90	22.92			
15	16QAM	75	0	22.83	23.00	23.03	22.99	22.92			
15	64QAM	0	0	22.63	22.80	22.93	22.92	22.84			
15	64QAM	1	37	22.62	22.90	22.89	22.73	22.79	23.5	2	
15	64QAM	1	74	22.68	22.83	22.94	23.01	22.70			
15	64QAM	36	0	21.89	21.97	22.12	22.04	21.91			
15	64QAM	36	20	21.87	22.07	22.18	22.03	21.90	22.5	3	
15	64QAM	36	39	21.96	22.09	22.19	22.15	21.91			
15	64QAM	75	0	21.96	22.09	22.07	22.02	21.88			
15	256QAM	1	0	19.58	19.70	19.86	19.82	19.71			
15	256QAM	1	37	19.65	19.82	19.80	19.74	19.71	20.5	5	
15	256QAM	1	74	19.56	19.87	19.92	19.84	19.73			
15	256QAM	36	0	19.77	19.83	19.93	19.94	19.85			
15	256QAM	36	20	19.78	19.97	20.09	19.83	19.88			
15	256QAM	36	39	19.77	19.97	20.09	19.92	19.93	20.5	5	
15	256QAM	75	0	19.76	19.94	19.95	19.92	19.81			
Channel											
Frequency (MHz)				39700	40190	40620	41180	41540	Tune-up-limit (dBm)	MPR (dB)	
10	QPSK	0	0	24.68	24.87	25.16	24.91	24.50	25.5	0	
10	QPSK	1	25	24.83	24.88	25.18	24.97	24.84			
10	QPSK	1	49	24.87	24.99	25.12	24.88	24.94			
10	QPSK	25	0	23.53	24.02	24.11	24.02	23.96			
10	QPSK	25	12	23.92	24.18	24.19	24.11	23.93	24.5	1	
10	QPSK	25	25	23.96	24.06	24.18	24.19	23.99			
10	QPSK	50	0	23.93	24.03	24.13	24.05	23.99			
10	16QAM	1	0	23.92	24.04	24.16	24.09	24.04			
10	16QAM	1	25	23.98	24.12	24.23	24.24	24.05	24.5	1	
10	16QAM	1	49	23.93	24.07	24.27	24.22	23.90			
10	16QAM	25	0	22.80	23.06	23.06	23.09	22.99			
10	16QAM	25	12	22.87	23.07	23.14	23.14	22.90	23.5	2	
10	16QAM	50	0	22.92	23.10	23.17	23.19	22.98			
10	64QAM	1	0	20.67	22.07	22.40	22.37	22.30			
10	64QAM	1	25	22.50	22.50	22.51	22.51	22.50	23.5	2	
10	64QAM	1	49	22.84	23.11	23.03	22.79	22.78			
10	64QAM	25	0	21.91	21.95	22.20	22.15	21.96	22.5		
10	64QAM	25	12	22.02	22.07	22.07	22.09	21.98	22.5	3	
10	64QAM	25	25	22.00	22.12	22.19	22.09	21.99			
10	64QAM	50	0	21.96	22.00	22.04	22.12	21.96			
10	256QAM	1	0	19.65	19.76	20.07	19.86	19.69			
10	256QAM	1	25	19.71	19.78	20.10	19.89	19.74	20.5	5	
10	256QAM	1	49	19.73	19.87	20.06	19.74	19.87			
10	256QAM	25	0	19.84	19.90	20.01	19.93	19.85			
10	256QAM	25	12	19.83	20.07	20.08	19.97	19.82	20.5	5	
10	256QAM	25	25	19.87	19.95	20.06	20.05	19.94			
10	256QAM	50	0	19.87	19.96	20.02	19.96	19.88			
Channel											
Frequency (MHz)				39875	40140	40620	41093	41955	Tune-up-limit (dBm)	MPR (dB)	
5	QPSK	1	0	24.69	24.86	24.96	24.81	24.50	26.5	0	
5	QPSK	1	12	24.74	24.87	25.04	24.93	24.80			
5	QPSK	1	24	24.74	24.92	24.98	24.91	24.86			
5	QPSK	12	0	23.88	24.07	24.10	24.10	24.07			
5	QPSK	12	7	23.93	24.10	24.19	24.12	24.07	24.5	1	
5	QPSK	12	13	23.92	24.06	24.17	24.11	24.07			
5	QPSK	25	0	23.81	24.05	24.14	24.17	24.08			
5	16QAM	1	0	23.92	24.04	24.05	24.08	24.03			
5	16QAM	1	12	23.91	23.98	24.10	24.33	24.04	24.5	1	
5	16QAM	1	24	23.97	24.08	24.24	24.09	23.97			
5	16QAM	12	0	22.91	23.05	23.05	23.05	23.02			
5	16QAM	12	7	22.98	23.08	23.15	23.11	22.96	23.5	2	
5	16QAM	12	13	22.88	23.03	23.18	23.10	22.93			
5	16QAM	25	0	22.90	23.08	23.18	23.11	23.05			
5	64QAM	1	0	22.64	22.86	22.91	22.86	22.83			
5	64QAM	1	12	22.77	22.73	22.92	22.95	22.81	23.5	2	
5	64QAM	1	24	22.73	22.85	22.98	22.90	22.73			
5	64QAM	12	0	22.62	22.78	22.93	22.95	22.83			
5	64QAM	12	7	21.86	22.07	22.07	22.11	21.87	22.5		
5	64QAM	12	13	21.91	22.03	22.16	22.29	21.97	22.5	3	
5	64QAM	25	0	21.85	22.02	22.12	22.16	21.96			
5	256QAM	1	0	19.59	19.73	19.86	19.83	19.84			
5	256QAM	1	12	19.60	19.74	19.83	19.81	19.69	20.5	5	
5	256QAM	1	24	19.65	19.86	19.85	19.77	19.64			
5	256QAM	12	0	19.78	19.98	20.04	19.94	19.96			
5	256QAM	12	7	19.85	20.01	20.08	20.03	19.99	20.5	5	
5	256QAM	12	13	19.81	19.97	20.11	20.20	19.95			



Ant6 Band 2 Down power / DS1 1

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch (dBm)	Power Middle Ch (dBm)	Power High Ch (dBm)	Tune-up limit (dBm)	MPR (dB)
Channel								
18.000	18.000	18.000	18.000	18.000	18.000	18.000	18.000	18.000
20	QPSK	1	0	22.00	22.00	22.00	22.17	0
20	QPSK	1	49	22.00	22.00	22.00	22.17	0
20	QPSK	1	99	22.03	22.07	22.17	22.32	0
20	QPSK	50	0	22.53	23.34	22.13	22.32	0
20	QPSK	50	24	22.24	22.27	22.19	22.32	0
20	QPSK	50	36	22.24	22.27	22.19	22.32	0
20	QPSK	100	0	22.24	22.29	22.19	22.32	0
20	IQAM	1	0	22.05	22.05	22.02	22.32	0
20	IQAM	1	49	22.08	22.08	22.02	22.32	0
20	IQAM	50	0	22.16	22.19	22.06	22.32	0
20	IQAM	50	24	22.33	22.19	22.23	22.32	0
20	IQAM	50	36	22.24	22.19	22.23	22.32	0
20	IQAM	50	50	22.24	22.29	22.19	22.32	0
20	IQAM	50	75	22.24	22.29	22.19	22.32	0
20	IQAM	100	0	22.35	22.10	22.19	22.32	0
20	IQAM	100	24	22.08	22.08	22.02	22.32	0
20	IQAM	100	36	22.08	22.08	22.02	22.32	0
20	IQAM	100	50	22.08	22.08	22.02	22.32	0
20	IQAM	100	75	22.08	22.08	22.02	22.32	0
20	IQAM	100	100	22.08	22.08	22.02	22.32	0
Channel								
18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075
20	QPSK	1	0	22.18	23.31	22.26	22.32	0
20	QPSK	1	37	22.09	22.16	22.16	22.32	0
20	QPSK	1	74	22.03	22.30	22.13	22.32	0
20	QPSK	36	0	22.19	22.22	22.06	22.32	0
20	QPSK	36	24	22.24	22.27	22.06	22.32	0
20	QPSK	36	36	22.23	22.09	22.24	22.32	0
20	QPSK	75	0	22.15	22.24	22.23	22.32	0
20	QPSK	75	24	22.27	22.27	22.06	22.32	0
20	QPSK	75	36	22.27	22.27	22.06	22.32	0
20	QPSK	100	0	22.29	22.29	22.06	22.32	0
20	QPSK	100	24	22.40	22.31	21.28	22.32	1
20	QPSK	100	36	22.40	22.31	21.28	22.32	1
20	QPSK	100	50	22.40	22.31	21.28	22.32	1
20	QPSK	100	75	22.40	22.31	21.28	22.32	1
20	QPSK	100	100	22.40	22.31	21.28	22.32	1
Frequency (MHz)								
18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075
20	IQAM	1	0	22.03	22.06	22.13	22.32	0
20	IQAM	1	25	22.34	22.08	22.17	22.32	0
20	IQAM	1	49	21.85	22.05	22.08	22.32	0
20	IQAM	50	0	22.19	22.34	22.08	22.32	0
20	IQAM	50	24	22.34	22.34	22.08	22.32	0
20	IQAM	50	36	22.34	22.34	22.08	22.32	0
20	IQAM	75	0	22.25	22.34	22.08	22.32	0
20	IQAM	75	24	22.36	22.36	22.08	22.32	0
20	IQAM	75	36	22.36	22.36	22.08	22.32	0
20	IQAM	100	0	22.25	22.34	22.08	22.32	0
20	IQAM	100	24	22.36	22.36	22.08	22.32	0
20	IQAM	100	36	22.36	22.36	22.08	22.32	0
20	IQAM	100	50	22.36	22.36	22.08	22.32	0
20	IQAM	100	75	22.36	22.36	22.08	22.32	0
20	IQAM	100	100	22.36	22.36	22.08	22.32	0
Frequency (MHz)								
18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075
20	QPSK	1	0	22.18	22.24	22.30	22.32	0
20	QPSK	1	25	22.34	22.08	22.17	22.32	0
20	QPSK	1	49	21.85	22.05	22.08	22.32	0
20	QPSK	50	0	22.18	22.34	22.08	22.32	0
20	QPSK	50	24	22.34	22.34	22.08	22.32	0
20	QPSK	50	36	22.34	22.34	22.08	22.32	0
20	QPSK	75	0	22.25	22.34	22.08	22.32	0
20	QPSK	75	24	22.36	22.36	22.08	22.32	0
20	QPSK	75	36	22.36	22.36	22.08	22.32	0
20	QPSK	100	0	22.25	22.34	22.08	22.32	0
20	QPSK	100	24	22.36	22.36	22.08	22.32	0
20	QPSK	100	36	22.36	22.36	22.08	22.32	0
20	QPSK	100	50	22.36	22.36	22.08	22.32	0
20	QPSK	100	75	22.36	22.36	22.08	22.32	0
20	QPSK	100	100	22.36	22.36	22.08	22.32	0
Frequency (MHz)								
18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075
20	IQAM	1	0	22.03	22.06	22.13	22.32	0
20	IQAM	1	25	22.34	22.08	22.17	22.32	0
20	IQAM	1	49	21.85	22.05	22.08	22.32	0
20	IQAM	50	0	22.19	22.34	22.08	22.32	0
20	IQAM	50	24	22.34	22.34	22.08	22.32	0
20	IQAM	50	36	22.34	22.34	22.08	22.32	0
20	IQAM	75	0	22.25	22.34	22.08	22.32	0
20	IQAM	75	24	22.36	22.36	22.08	22.32	0
20	IQAM	75	36	22.36	22.36	22.08	22.32	0
20	IQAM	100	0	22.25	22.34	22.08	22.32	0
20	IQAM	100	24	22.36	22.36	22.08	22.32	0
20	IQAM	100	36	22.36	22.36	22.08	22.32	0
20	IQAM	100	50	22.36	22.36	22.08	22.32	0
20	IQAM	100	75	22.36	22.36	22.08	22.32	0
20	IQAM	100	100	22.36	22.36	22.08	22.32	0
Frequency (MHz)								
18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075
20	QPSK	1	0	22.18	22.24	21.76	22.32	0
20	QPSK	1	25	21.86	21.28	21.04	22.32	0
20	QPSK	1	49	20.84	20.59	20.96	22.32	0
20	QPSK	50	0	21.89	21.09	21.07	22.32	0
20	QPSK	50	25	21.19	21.04	21.11	22.32	0
20	QPSK	50	36	21.19	21.04	21.11	22.32	0
20	QPSK	75	0	21.19	21.04	21.11	22.32	0
20	QPSK	75	25	21.19	21.04	21.11	22.32	0
20	QPSK	75	36	21.19	21.04	21.11	22.32	0
20	QPSK	100	0	21.19	21.04	21.11	22.32	0
20	QPSK	100	25	21.19	21.04	21.11	22.32	0
20	QPSK	100	36	21.19	21.04	21.11	22.32	0
20	QPSK	100	50	21.19	21.04	21.11	22.32	0
20	QPSK	100	75	21.19	21.04	21.11	22.32	0
20	QPSK	100	100	21.19	21.04	21.11	22.32	0
Frequency (MHz)								
18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075
20	IQAM	1	0	22.03	22.06	21.02	22.32	0
20	IQAM	1	25	22.34	22.08	21.02	22.32	0
20	IQAM	1	49	21.85	22.05	21.02	22.32	0
20	IQAM	50	0	22.19	22.34	21.02	22.32	0
20	IQAM	50	24	22.34	22.34	21.02	22.32	0
20	IQAM	50	36	22.34	22.34	21.02	22.32	0
20	IQAM	75	0	22.25	22.34	21.02	22.32	0
20	IQAM	75	24	22.36	22.36	21.02	22.32	0
20	IQAM	75	36	22.36	22.36	21.02	22.32	0
20	IQAM	100	0	22.25	22.34	21.02	22.32	0
20	IQAM	100	24	22.36	22.36	21.02	22.32	0
20	IQAM	100	36	22.36	22.36	21.02	22.32	0
20	IQAM	100	50	22.36	22.36	21.02	22.32	0
20	IQAM	100	75	22.36	22.36	21.02	22.32	0
20	IQAM	100	100	22.36	22.36	21.02	22.32	0
Frequency (MHz)								
18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075	18.075
20	QPSK	1	0	22.18	22.24	21.01	22.32	1
20	QPSK	1	25	21.86	21.27	21.01	22.32	1
20	QPSK	1	49	21.03	21.01	21.05	22.32	1
20	QPSK	3	0	22.37	22.27	21.07	22.32	1
20	QPSK	3	24	22.24	22.27	21.07	22.32	1
20	QPSK	3	36	22.24	22.27	21.07	22.32	1
20	QPSK	50	0	22.24	22.27	21.07	22.32	1
20	QPSK	50	24					



Ant6 Band 7 Down power / DS1 1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. (dBm)	Power Middle Ch. (dBm)	Power High Ch. (dBm)	Tune-up limit (dBm)	MPR (dB)		
Channel				20850	21100	21350				
Frequency (MHz)				2510	2526	2542				
20	OQPSK	1	0	20.98	21.08	20.98				
20	OQPSK	1	49	20.98	21.08	20.98	21.5	0		
20	OQPSK	1	99	20.89	21.06	20.81				
20	OQPSK	50	0	20.70	21.11	20.86				
20	OQPSK	50	24	20.78	20.90	21.02				
20	OQPSK	50	49	20.78	20.90	21.02	21.5	0		
20	OQPSK	100	0	20.76	21.13	21.53				
20	16QAM	1	0	20.82	20.91	20.85				
20	16QAM	1	49	21.02	20.98	20.89	21.5	0		
20	16QAM	1	99	20.98	21.06	20.86				
20	16QAM	50	0	20.79	20.90	20.87				
20	16QAM	50	24	21.00	20.96	21.19	21.5	0		
20	16QAM	50	50	21.08	20.98	21.08				
20	16QAM	50	74	20.98	21.06	20.84				
20	64QAM	1	0	20.81	20.87	20.74				
20	64QAM	1	49	21.01	20.93	20.87	21.5	0		
20	64QAM	1	99	21.21	21.05	20.84				
20	64QAM	50	0	20.57	20.99	20.85				
20	64QAM	50	24	20.94	21.01	20.85				
20	64QAM	50	50	20.86	20.94	21.07	21.5	0		
20	64QAM	50	74	20.88	20.96	20.86				
20	64QAM	100	0	20.83	20.90	21.21				
20	256QAM	1	0	20.98	21.08	20.98				
20	256QAM	1	49	19.58	19.69	19.74	20.5	1		
20	256QAM	1	99	19.46	19.71	19.55				
20	256QAM	50	0	19.57	19.99	19.85				
20	256QAM	50	24	19.85	19.96	19.85	20.5	1		
20	256QAM	50	50	19.93	19.81	19.82				
20	256QAM	100	0	19.76	19.73	19.66				
20	256QAM	100	24	20.96	21.37	21.37				
20	256QAM	100	50	21.00	21.10	21.00				
20	256QAM	100	74	21.08	21.18	21.08				
20	256QAM	100	99	21.06	21.14	21.06				
20	256QAM	100	125	21.04	21.12	21.04				
20	256QAM	100	149	21.02	21.10	21.02				
20	256QAM	100	199	21.00	21.08	21.00				
20	256QAM	100	224	21.08	21.16	21.08				
20	256QAM	100	249	21.06	21.14	21.06				
20	256QAM	100	274	21.04	21.12	21.04				
20	256QAM	100	300	21.02	21.10	21.02				
20	256QAM	100	324	21.00	21.08	21.00				
20	256QAM	100	349	20.98	21.06	20.98				
20	256QAM	100	374	20.96	21.04	20.96				
20	256QAM	100	400	20.94	21.02	20.94				
20	256QAM	100	425	20.92	21.00	20.92				
20	256QAM	100	450	20.90	20.98	20.90				
20	256QAM	100	475	20.88	20.96	20.88				
20	256QAM	100	500	20.86	20.94	20.86				
20	256QAM	100	524	20.84	20.92	20.84				
20	256QAM	100	549	20.82	20.90	20.82				
20	256QAM	100	574	20.80	20.98	20.80				
20	256QAM	100	600	20.78	20.96	20.78				
20	256QAM	100	625	20.76	20.94	20.76				
20	256QAM	100	650	20.74	20.92	20.74				
20	256QAM	100	675	20.72	20.90	20.72				
20	256QAM	100	700	20.70	20.88	20.70				
20	256QAM	100	725	20.68	20.86	20.68				
20	256QAM	100	750	20.66	20.84	20.66				
20	256QAM	100	774	20.64	20.82	20.64				
20	256QAM	100	800	20.62	20.80	20.62				
20	256QAM	100	824	20.60	20.78	20.60				
20	256QAM	100	849	20.58	20.76	20.58				
20	256QAM	100	874	20.56	20.74	20.56				
20	256QAM	100	900	20.54	20.72	20.54				
20	256QAM	100	924	20.52	20.70	20.52				
20	256QAM	100	949	20.50	20.68	20.50				
20	256QAM	100	974	20.48	20.66	20.48				
20	256QAM	100	1000	20.46	20.64	20.46				
20	256QAM	100	1024	20.44	20.62	20.44				
20	256QAM	100	1049	20.42	20.60	20.42				
20	256QAM	100	1074	20.40	20.58	20.40				
20	256QAM	100	1100	20.38	20.56	20.38				
20	256QAM	100	1124	20.36	20.54	20.36				
20	256QAM	100	1149	20.34	20.52	20.34				
20	256QAM	100	1174	20.32	20.50	20.32				
20	256QAM	100	1200	20.30	20.48	20.30				
20	256QAM	100	1224	20.28	20.46	20.28				
20	256QAM	100	1249	20.26	20.44	20.26				
20	256QAM	100	1274	20.24	20.42	20.24				
20	256QAM	100	1300	20.22	20.40	20.22				
20	256QAM	100	1324	20.20	20.38	20.20				
20	256QAM	100	1349	20.18	20.36	20.18				
20	256QAM	100	1374	20.16	20.34	20.16				
20	256QAM	100	1400	20.14	20.32	20.14				
20	256QAM	100	1424	20.12	20.30	20.12				
20	256QAM	100	1449	20.10	20.28	20.10				
20	256QAM	100	1474	20.08	20.26	20.08				
20	256QAM	100	1500	20.06	20.24	20.06				
20	256QAM	100	1524	20.04	20.22	20.04				
20	256QAM	100	1549	20.02	20.20	20.02				
20	256QAM	100	1574	20.00	20.18	20.00				
20	256QAM	100	1600	19.98	20.16	19.98				
20	256QAM	100	1624	19.96	20.14	19.96				
20	256QAM	100	1649	19.94	20.12	19.94				
20	256QAM	100	1674	19.92	20.10	19.92				
20	256QAM	100	1700	19.90	20.08	19.90				
20	256QAM	100	1724	19.88	20.06	19.88				
20	256QAM	100	1749	19.86	20.04	19.86				
20	256QAM	100	1774	19.84	20.02	19.84				
20	256QAM	100	1800	19.82	20.00	19.82				
20	256QAM	100	1824	19.80	19.98	19.80				
20	256QAM	100	1849	19.78	19.96	19.78				
20	256QAM	100	1874	19.76	19.94	19.76				
20	256QAM	100	1900	19.74	19.92	19.74				
20	256QAM	100	1924	19.72	19.90	19.72				
20	256QAM	100	1949	19.70	19.88	19.70				
20	256QAM	100	1974	19.68	19.86	19.74				
20	256QAM	100	2000	19.66	19.84	19.76				
20	256QAM	100	2024	19.64	19.82	19.84				
20	256QAM	100	2049	19.62	19.80	19.82				
20	256QAM	100	2074	19.60	19.78	19.80				
20	256QAM	100	2100	19.58	19.76	19.82				
20	256QAM	100	2124	19.56	19.74	19.82				
20	256QAM	100	2149	19.54	19.72	19.82				
20	256QAM	100	2174	19.52	19.70	19.82				
20	256QAM	100	2200	19.50	19.68	19.82				
20	256QAM	100	2224	19.48	19.66	19.82				
20	256QAM	100	2249	19.46	19.64	19.82				
20	256QAM	100	2274	19.44	19.62	19.82				
20	256QAM	100	2300	19.42	19.60	19.82				
20	256QAM	100	2324	19.40	19.58	19.82				
20	256QAM	100	2349	19.38	19.56	19.82				
20	256QAM	100	2374	19.36	19.54	19.82				
20	256QAM	100	2400	19.34	19.52	19.82				
20	256QAM	100	2424	19.32	19.50	19.82				
20	256QAM	100	2449	19.30	19.48	19.82			</	



Ant6 Band 66 Down power / DS1 1/5

BW (MHz)	Modulation	RB Size	RB Offset	Power Low (dBm)	Power Middle (dBm)	Power High (dBm)	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
1720	1745	1770						
20	QPSK	1	0	20.40	20.44	20.59	21	0
20	QPSK	1	5	19.90	19.94	19.99		
20	QPSK	1	9	19.90	19.94	19.99		
20	QPSK	1	14	19.90	19.94	19.99		
20	QPSK	1	19	19.90	19.94	19.99		
20	QPSK	1	24	20.01	19.82	19.97	21	0
20	QPSK	1	29	20.01	19.82	19.97		
20	QPSK	1	34	20.01	19.82	19.97		
20	QPSK	1	39	20.01	19.82	19.97		
20	QPSK	1	44	20.19	20.15	19.84		
20	IQAM	1	5	20.05	20.01	20.52		
20	IQAM	1	10	20.12	20.18	20.03	21	0
20	IQAM	1	15	20.12	20.18	20.03		
20	IQAM	1	20	20.24	20.10	19.78		
20	IQAM	1	25	19.89	19.88	19.91		
20	IQAM	1	30	20.17	20.05	19.75	21	0
20	IQAM	1	35	20.17	20.05	19.75		
20	IQAM	1	40	20.00	19.82	19.75		
20	IQAM	1	45	20.09	19.87	19.79	21	0
20	IQAM	1	50	20.10	19.81	19.98		
20	IQAM	1	55	20.10	19.81	19.98		
20	IQAM	1	60	20.21	20.20	19.90	21	0
20	IQAM	1	65	20.01	19.89	19.99		
20	IQAM	1	70	20.23	19.95	19.99		
20	IQAM	1	75	20.23	19.95	19.99		
20	IQAM	1	80	20.23	19.95	19.99		
20	IQAM	1	85	20.23	19.95	19.99		
20	IQAM	1	90	20.23	19.95	19.99		
20	IQAM	1	95	20.23	19.95	19.99		
20	IQAM	1	100	20.23	19.95	19.99		
20	IQAM	1	105	20.23	19.95	19.99		
20	IQAM	1	110	20.23	19.95	19.99		
20	IQAM	1	115	20.23	19.95	19.99		
20	IQAM	1	120	20.23	19.95	19.99		
20	IQAM	1	125	20.23	19.95	19.99		
20	IQAM	1	130	20.23	19.95	19.99		
20	IQAM	1	135	20.23	19.95	19.99		
20	IQAM	1	140	20.23	19.95	19.99		
20	IQAM	1	145	20.23	19.95	19.99		
20	IQAM	1	150	20.23	19.95	19.99		
20	IQAM	1	155	20.23	19.95	19.99		
20	IQAM	1	160	20.23	19.95	19.99		
20	IQAM	1	165	20.23	19.95	19.99		
20	IQAM	1	170	20.23	19.95	19.99		
20	IQAM	1	175	20.23	19.95	19.99		
20	IQAM	1	180	20.23	19.95	19.99		
20	IQAM	1	185	20.23	19.95	19.99		
20	IQAM	1	190	20.23	19.95	19.99		
20	IQAM	1	195	20.23	19.95	19.99		
20	IQAM	1	200	20.23	19.95	19.99		
20	IQAM	1	205	20.23	19.95	19.99		
20	IQAM	1	210	20.23	19.95	19.99		
20	IQAM	1	215	20.23	19.95	19.99		
20	IQAM	1	220	20.23	19.95	19.99		
20	IQAM	1	225	20.23	19.95	19.99		
20	IQAM	1	230	20.23	19.95	19.99		
20	IQAM	1	235	20.23	19.95	19.99		
20	IQAM	1	240	20.23	19.95	19.99		
20	IQAM	1	245	20.23	19.95	19.99		
20	IQAM	1	250	20.23	19.95	19.99		
20	IQAM	1	255	20.23	19.95	19.99		
20	IQAM	1	260	20.23	19.95	19.99		
20	IQAM	1	265	20.23	19.95	19.99		
20	IQAM	1	270	20.23	19.95	19.99		
20	IQAM	1	275	20.23	19.95	19.99		
20	IQAM	1	280	20.23	19.95	19.99		
20	IQAM	1	285	20.23	19.95	19.99		
20	IQAM	1	290	20.23	19.95	19.99		
20	IQAM	1	295	20.23	19.95	19.99		
20	IQAM	1	300	20.23	19.95	19.99		
20	IQAM	1	305	20.23	19.95	19.99		
20	IQAM	1	310	20.23	19.95	19.99		
20	IQAM	1	315	20.23	19.95	19.99		
20	IQAM	1	320	20.23	19.95	19.99		
20	IQAM	1	325	20.23	19.95	19.99		
20	IQAM	1	330	20.23	19.95	19.99		
20	IQAM	1	335	20.23	19.95	19.99		
20	IQAM	1	340	20.23	19.95	19.99		
20	IQAM	1	345	20.23	19.95	19.99		
20	IQAM	1	350	20.23	19.95	19.99		
20	IQAM	1	355	20.23	19.95	19.99		
20	IQAM	1	360	20.23	19.95	19.99		
20	IQAM	1	365	20.23	19.95	19.99		
20	IQAM	1	370	20.23	19.95	19.99		
20	IQAM	1	375	20.23	19.95	19.99		
20	IQAM	1	380	20.23	19.95	19.99		
20	IQAM	1	385	20.23	19.95	19.99		
20	IQAM	1	390	20.23	19.95	19.99		
20	IQAM	1	395	20.23	19.95	19.99		
20	IQAM	1	400	20.23	19.95	19.99		
20	IQAM	1	405	20.23	19.95	19.99		
20	IQAM	1	410	20.23	19.95	19.99		
20	IQAM	1	415	20.23	19.95	19.99		
20	IQAM	1	420	20.23	19.95	19.99		
20	IQAM	1	425	20.23	19.95	19.99		
20	IQAM	1	430	20.23	19.95	19.99		
20	IQAM	1	435	20.23	19.95	19.99		
20	IQAM	1	440	20.23	19.95	19.99		
20	IQAM	1	445	20.23	19.95	19.99		
20	IQAM	1	450	20.23	19.95	19.99		
20	IQAM	1	455	20.23	19.95	19.99		
20	IQAM	1	460	20.23	19.95	19.99		
20	IQAM	1	465	20.23	19.95	19.99		
20	IQAM	1	470	20.23	19.95	19.99		
20	IQAM	1	475	20.23	19.95	19.99		
20	IQAM	1	480	20.23	19.95	19.99		
20	IQAM	1	485	20.23	19.95	19.99		
20	IQAM	1	490	20.23	19.95	19.99		
20	IQAM	1	495	20.23	19.95	19.99		
20	IQAM	1	500	20.23	19.95	19.99		
20	IQAM	1	505	20.23	19.95	19.99		
20	IQAM	1	510	20.23	19.95	19.99		
20	IQAM	1	515	20.23	19.95	19.99		
20	IQAM	1	520	20.23	19.95	19.99		
20	IQAM	1	525	20.23	19.95	19.99		
20	IQAM	1	530	20.23	19.95	19.99		
20	IQAM	1	535	20.23	19.95	19.99		
20	IQAM	1	540	20.23	19.95	19.99		
20	IQAM	1	545	20.23	19.95	19.99		
20	IQAM	1	550	20.23	19.95	19.99		
20	IQAM	1	555	20.23	19.95	19.99		
20	IQAM	1	560	20.23	19.95	19.99		
20	IQAM	1	565	20.23	19.95	19.99		
20	IQAM	1	570	20.23	19.95	19.99		
20	IQAM	1	575	20.23	19.95	19.99		
20	IQAM	1	580	20.23	19.95	19.99		
20	IQAM	1	585	20.23	19.95	19.99		
20	IQAM	1	590	20.23	19.95	19.99		
20	IQAM	1	595	20.23	19.95	19.99		
20	IQAM	1	600	20.23	19.95	19.99		
20	IQAM	1	605	20.23	19.95	19.99		
20	IQAM	1	610	20.23	19.95	19.99		
20	IQAM	1	615	20.23	19.95	19.99		
20	IQAM	1	620	20.23	19.95	19.99		
20	IQAM	1	625	20.23	19.95	19.99		
20	IQAM	1	630	20.23	19.95	19.99		
20	IQAM	1	635	20.23	19.95	19.99		
20	IQAM	1	640	20.23	19.95	19.99		
20	IQAM	1	645	20.23	19.95	19.99		
20	IQAM	1	650	20.23	19.95	19.99		
20	IQAM	1	655	20.23	19.95	19.99		
20	IQAM	1	660	20.23	19.95	19.99		
20	IQAM	1	665	20.23	19.95	19.99		
20	IQAM	1	670	20.23	19.95	19.99		
20	IQAM	1	675	20.23	19.95	19.99		
20	IQAM	1	680	20.23	19.95	19.99		
20	IQAM	1	685	20.23	19.95	19.99		
20	IQAM	1	690	20.23	19.95	19.99		
20	IQAM	1	695	20.23	19.95	19.99		
20	IQAM	1	700	20.23	19.95	19.99		
20	IQAM	1	705	20.23	19.95	19.99		



Ant 6 Band 38 Down power DSI 1

Ant 6 Band 38 Down power DSI 3/5

Ant 6 Band 41 Down power DSI

BW (MHz)	Modulation	RB Size	RB Offset	Power Level		Power Spectral Density		Power Spectral Density		Up-link (dBm)	MPR (dB)	
				Ch.	Freq.	Ch.	Freq.	Ch.	Freq.			
Channel												
				397.50	40185	45/620	41055	41490				
Frequency (MHz)												
20	QPSK	1	0	22.69	22.79	23.09	22.82	22.62	22.47	23.5	0	
20	QPSK	1	1	22.69	22.79	23.09	22.82	22.62	22.47	23.5	0	
20	QPSK	1	9	22.65	22.74	22.88	22.78	22.66	22.66	23.5	0	
20	QPSK	50	0	22.45	22.71	22.93	22.75	22.69	22.69	23.5	0	
20	QPSK	50	24	22.67	22.72	22.80	22.85	22.65	22.63	23.5	0	
20	QPSK	50	50	22.69	22.72	22.91	22.70	22.66	22.79	23.5	0	
20	QPSK	100	0	22.69	22.72	22.91	22.70	22.66	22.79	23.5	0	
20	QPSK	100	1	22.69	22.72	22.91	22.70	22.66	22.79	23.5	0	
20	QPSK	100	9	22.69	22.74	22.91	22.70	22.66	22.79	23.5	0	
20	QPSK	160	0	22.69	22.84	22.96	22.86	22.65	22.97	23.5	0	
20	QPSK	160	1	49	22.67	22.81	22.96	22.82	22.72	22.72	23.5	0
20	QPSK	160	9	22.69	22.74	23.07	22.85	22.76	22.89	23.5	0	
20	QPSK	160	50	0	22.55	22.66	22.78	22.76	22.65	22.89	23.5	0
20	QPSK	160	24	22.65	22.70	22.82	22.76	22.65	22.89	23.5	0	
20	QPSK	160	50	50	22.65	22.80	22.92	22.72	22.72	22.72	23.5	0
20	QPSK	160	100	0	22.61	22.81	22.83	22.85	22.66	22.86	23.5	0
20	QPSK	160	1	0	22.38	22.51	22.71	22.47	22.47	22.47	23.5	0
20	QPSK	160	9	49	22.29	22.45	22.56	22.50	22.50	22.32	23.5	0
20	QPSK	160	50	50	22.29	22.45	22.56	22.50	22.50	22.32	23.5	0
20	QPSK	160	24	21.76	21.77	22.03	21.84	21.84	21.84	22.5	1	
20	QPSK	160	50	24	21.86	21.99	21.01	21.84	21.84	21.84	22.5	1
20	QPSK	160	50	50	21.80	21.92	22.06	21.98	21.78	21.78	22.5	1
20	QPSK	160	100	0	21.85	21.95	21.10	22.11	21.81	21.81	22.5	1
20	QPSK	160	1	0	21.85	21.95	21.10	22.11	21.81	21.81	22.5	1
20	QPSK	160	9	49	19.62	19.67	19.87	19.64	19.63	19.63	20.5	3
20	QPSK	160	50	1	19.53	19.66	19.85	19.67	19.53	19.53	20.5	3
20	QPSK	160	9	50	19.55	19.84	20.00	19.83	19.80	20.00	20.5	3
20	QPSK	160	50	24	19.73	19.83	19.88	20.01	19.74	19.74	20.5	3
20	QPSK	160	50	50	19.78	19.88	19.92	20.01	19.81	19.81	20.5	3
20	QPSK	160	100	0	19.77	19.86	20.02	19.84	19.79	19.79	20.5	3
Channel												
				397.25	40173	45/620	41050	41555				
Frequency (MHz)												
15	QPSK	1	0	22.25	22.72	22.62	22.74	22.74	22.74	23.5	0	
15	QPSK	1	1	37	22.25	22.72	22.62	22.74	22.74	22.74	23.5	0
15	QPSK	1	9	22.61	22.89	22.92	22.67	22.74	22.74	23.5	0	
15	QPSK	16	0	22.48	22.63	22.76	22.71	22.66	22.66	23.5	0	
15	QPSK	16	1	0	22.59	22.84	22.85	22.88	22.77	22.77	23.5	0
15	QPSK	16	9	22.39	22.51	22.86	22.66	22.54	22.54	23.5	0	
15	QPSK	16	50	74	22.72	22.78	22.82	22.79	22.80	22.80	23.5	0
15	QPSK	16	50	36	22.48	22.63	22.76	22.71	22.70	22.70	23.5	0
15	QPSK	16	24	20.28	22.53	22.73	22.90	22.67	22.68	23.5	0	
15	QPSK	16	50	50	22.55	22.71	22.76	22.71	22.66	22.66	23.5	0
15	QPSK	16	100	0	22.55	22.71	22.76	22.71	22.66	22.66	23.5	0
15	QPSK	16	1	0	22.35	22.50	22.66	22.60	22.55	22.55	23.5	0
15	QPSK	16	9	37	22.25	22.40	22.55	22.40	22.35	22.35	23.5	0
15	QPSK	16	50	74	22.26	22.56	22.61	22.69	22.57	22.57	23.5	0
15	QPSK	16	50	36	21.76	21.91	22.02	21.93	21.78	21.78	22.5	1
15	QPSK	16	50	24	21.75	21.99	22.06	21.98	21.78	21.78	22.5	1
15	QPSK	16	50	50	21.85	22.02	22.07	22.00	21.81	21.81	22.5	1
15	QPSK	16	100	0	21.85	22.02	22.07	22.00	21.81	21.81	22.5	1
15	QPSK	16	1	0	21.57	21.72	21.87	21.72	21.57	21.57	22.5	1
15	QPSK	16	9	49	19.50	19.65	19.77	19.70	19.62	19.62	20.5	3
15	QPSK	16	50	1	19.57	19.78	19.70	19.70	19.65	19.62	20.5	3
15	QPSK	16	9	50	19.65	19.73	19.85	19.74	19.61	19.61	20.5	3
15	QPSK	16	50	24	19.65	19.73	19.84	19.76	19.61	19.61	20.5	3
15	QPSK	16	50	50	19.65	19.73	19.84	19.76	19.61	19.61	20.5	3
15	QPSK	16	100	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	1	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	9	49	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	1	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	9	50	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	24	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	50	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	100	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	1	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	9	49	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	1	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	9	50	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	24	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	50	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	100	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	1	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	9	49	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	1	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	9	50	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	24	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	50	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	100	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	1	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	9	49	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	1	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	9	50	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	24	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	50	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	100	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	1	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	9	49	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	1	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	9	50	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	24	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	50	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	100	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	1	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	9	49	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	1	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	9	50	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	24	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	50	50	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	100	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	16	1	0	19.63	19.73	19.84	19.76	19.62	19.62	20.5	3
15	QPSK	1										

Ant 6 Band 41 Down power DS1 3/5													
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Middle Ch. / Freq	Power Low Middle Ch. / Freq	Power Low Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Middle Ch. / Freq	Tune-up limit	MiPS (dB)			
Channel		Frequency (MHz)		39750	40185	40620	41055	41490					
		25050		25495.8	2593	2636.5	2680						
20	QPSK	1	0	20.73	20.76	21.13	20.84	20.85					
20	QPSK	1	49	20.77	20.70	20.95	20.79	20.70					
20	QPSK	1	98	20.73	20.76	20.94	20.79	20.73					
20	QPSK	50	0	20.46	20.75	20.94	20.72	20.70					
20	QPSK	50	24	20.86	20.72	20.79	20.82	20.67					
20	QPSK	50	50	20.67	20.72	20.93	20.84	20.78					
20	QPSK	100	0	20.64	20.77	20.87	20.77	20.68					
20	16QAM	1	0	20.69	20.76	20.86	20.73	20.67					
20	16QAM	1	49	20.85	20.80	20.94	20.77	20.70					
20	16QAM	1	99	20.83	20.75	21.05	20.97	20.70					
20	16QAM	50	0	20.53	20.69	20.78	20.81	20.71					
20	16QAM	50	24	20.68	20.71	20.87	20.82	20.68					
20	16QAM	50	50	20.69	20.71	20.86	20.73	20.63					
20	16QAM	100	0	20.61	20.81	20.86	20.84	20.64					
20	64QAM	1	0	20.36	20.48	20.68	20.48	20.42					
20	64QAM	1	49	20.31	20.40	20.57	20.54	20.32					
20	64QAM	1	99	20.44	20.45	20.64	20.69	20.48					
20	64QAM	50	0	20.44	20.45	20.64	20.69	20.48					
20	64QAM	50	24	20.84	21.01	21.08	20.97	20.79					
20	64QAM	50	50	20.84	21.01	21.08	20.97	20.79					
20	64QAM	100	0	20.86	21.01	21.08	20.97	20.79					
20	256QAM	1	0	19.75	19.87	19.97	19.89	19.73					
20	256QAM	1	49	19.76	19.85	19.98	19.89	19.63					
20	256QAM	1	99	19.46	19.62	19.86	19.70	19.61					
20	256QAM	50	0	19.58	19.64	19.84	19.98	19.81					
20	256QAM	50	24	19.75	19.82	19.90	19.99	19.73					
20	256QAM	50	50	19.75	19.82	19.90	19.97	19.87					
20	256QAM	100	0	19.75	19.87	19.97	19.98	19.73					
Channel		Frequency (MHz)		39750	40183	40620	41056	41490					
		25035		2548.3	2593	2637.8	2682.5						
15	QPSK	1	0	20.58	20.76	20.86	20.84	20.71					
15	QPSK	1	37	20.65	20.68	20.82	20.77	20.69					
15	QPSK	1	74	20.65	20.68	20.82	20.77	20.69					
15	QPSK	36	0	20.56	20.61	20.69	20.78	20.59					
15	QPSK	36	20	20.58	20.78	20.92	20.85	20.60					
15	QPSK	36	39	20.58	20.77	20.91	20.76	20.68					
15	QPSK	75	0	20.61	20.78	20.82	20.80	20.60					
15	16QAM	1	0	20.61	20.65	20.82	20.63	20.50					
15	16QAM	1	37	20.59	20.50	20.90	20.64	20.53					
15	16QAM	1	74	20.71	20.80	20.81	20.78	20.76					
15	16QAM	36	0	20.40	20.66	20.78	20.60	20.52					
15	16QAM	36	20	20.40	20.66	20.78	20.61	20.53					
15	16QAM	36	50	20.78	20.85	20.99	20.94	20.82					
15	16QAM	36	79	20.74	20.93	21.07	20.91	20.79					
15	16QAM	36	98	20.84	20.98	21.07	21.05	20.81					
15	16QAM	75	0	20.84	21.01	20.96	20.95	20.76					
15	256QAM	1	0	19.53	19.61	19.70	19.67	19.56					
15	256QAM	1	37	19.52	19.70	19.71	19.65	19.60					
15	256QAM	1	74	19.47	19.76	19.81	19.73	19.64					
15	256QAM	36	0	19.70	19.69	19.86	19.82	19.73					
15	256QAM	36	20	19.70	19.68	19.88	19.83	19.74					
15	256QAM	36	50	19.70	19.68	19.87	19.86	19.75					
15	256QAM	36	79	19.68	19.83	19.88	19.81	19.72					
Channel		Frequency (MHz)		39704	40160	40620	41050	41490					
		25014		2547	2593	2639	2685						
10	QPSK	1	0	20.76	20.79	21.09	20.79	20.76					
10	QPSK	1	37	20.76	20.79	21.09	20.79	20.75					
10	QPSK	1	74	20.77	20.85	21.04	20.80	20.86					
10	QPSK	25	0	20.65	20.75	20.82	20.73	20.69					
10	QPSK	25	12	20.62	20.87	20.91	20.83	20.63					
10	QPSK	25	25	20.65	20.86	20.94	20.87	20.77					
10	QPSK	25	38	20.64	20.84	21.09	21.06	20.88					
10	QPSK	50	0	20.86	20.92	20.97	20.95	20.87					
10	QPSK	50	12	20.86	20.92	20.97	20.95	20.87					
10	QPSK	50	25	20.86	20.92	20.97	20.95	20.87					
10	QPSK	50	38	20.86	20.92	20.97	20.95	20.87					
10	QPSK	75	0	20.70	20.86	20.84	20.88	20.86					
10	16QAM	1	0	20.71	20.74	20.82	20.92	21.05					
10	16QAM	1	12	20.71	20.74	20.82	20.92	20.85					
10	16QAM	1	24	20.74	20.77	20.85	20.93	20.87					
10	16QAM	1	36	20.74	20.77	20.85	20.93	20.87					
10	16QAM	1	48	20.74	20.77	20.85	20.93	20.87					
10	16QAM	12	0	20.60	20.76	20.84	20.77	20.63					
10	16QAM	12	12	20.60	20.76	20.84	20.77	20.63					
10	16QAM	12	24	20.60	20.76	20.84	20.77	20.63					
10	16QAM	12	36	20.60	20.76	20.84	20.77	20.63					
10	16QAM	12	48	20.60	20.76	20.84	20.77	20.63					
10	16QAM	24	0	20.71	20.79	21.00	20.90	20.76					
10	16QAM	24	12	20.77	20.89	20.95	21.04	20.86					
10	16QAM	24	25	0	20.73	20.94	21.02	20.95</td					



Ant 7 Band 4 Full Power / DS1 1/3/4/5

BW [MHz]	Modulation	RB Size	RB Offset	Power Ch (dBm)	Power Low (dBm)	Power Middle (dBm)	Power High (dBm)	Tune-up limit (dBm)	MPR (dB)
Channel									
20	CPSK	1	0	20.99	20.99	20.99	20.99	-21.3	0
20	CPSK	1	0	19.63	19.63	19.63	19.63	-21.3	0
20	CPSK	1	99	20.32	20.39	20.39	20.33	-20.3	1
20	CPSK	50	0	19.89	19.90	19.90	19.66	-20.3	1
20	CPSK	50	24	19.68	19.63	19.63	19.63	-20.3	1
20	CPSK	50	50	19.68	19.63	19.63	19.63	-20.3	1
20	CPSK	100	0	19.81	19.82	19.82	19.54	-20.3	1
20	16QAM	1	0	20.11	19.76	19.76	19.74	-20.3	1
20	16QAM	1	49	20.12	19.71	19.71	19.70	-20.3	1
20	16QAM	1	99	19.86	19.85	19.85	19.85	-20.3	1
20	16QAM	50	0	18.68	18.70	18.64	18.64	-20.3	1
20	16QAM	50	24	18.69	18.69	18.69	18.65	-20.3	1
20	16QAM	50	50	18.68	18.62	18.49	18.49	-20.3	1
20	16QAM	100	0	18.68	18.68	18.68	18.68	-20.3	1
20	64QAM	1	0	19.20	18.80	19.20	19.20	-19.3	2
20	64QAM	1	49	18.03	18.18	18.68	18.68	-19.3	2
20	64QAM	1	99	18.80	19.20	18.72	18.72	-19.3	2
20	64QAM	50	0	18.76	18.76	18.76	18.76	-19.3	2
20	64QAM	50	24	18.88	17.83	17.73	17.73	-18.3	3
20	64QAM	50	50	17.94	17.76	17.64	17.64	-18.3	3
20	64QAM	100	0	17.94	17.83	17.82	17.82	-18.3	3
20	256QAM	1	0	18.68	18.68	18.68	18.68	-18.3	3
20	256QAM	1	49	15.66	15.41	15.21	15.21	-16.3	5
20	256QAM	1	99	15.26	15.32	15.26	15.26	-16.3	5
20	256QAM	50	0	15.75	15.76	15.62	15.62	-16.3	5
20	256QAM	50	24	15.59	15.59	15.59	15.59	-16.3	5
20	256QAM	50	50	15.47	15.92	15.34	15.34	-16.3	5
20	256QAM	100	0	15.72	15.72	15.42	15.42	-16.3	5
Channel									
20	2025	20175	20175	20175	20175	20175	20175	Tune-up limit (dBm)	MPR (dB)
16	CPSK	1	0	17.74	17.53	17.53	17.53	-20.6	0
16	CPSK	1	49	17.74	17.53	17.53	17.53	-20.6	0
16	CPSK	37	20.40	20.45	20.33	21.3	-21.3	0	
15	CPSK	1	74	20.62	20.45	20.24	20.24	-20.6	0
15	CPSK	36	0	19.72	19.75	19.63	19.63	-20.6	0
15	CPSK	36	39	19.64	19.60	19.43	19.43	-20.3	1
15	CPSK	75	0	19.61	19.70	19.47	19.47	-20.3	1
15	16QAM	1	0	20.01	19.90	19.78	19.78	-20.3	1
15	16QAM	1	74	20.00	20.03	19.55	19.55	-20.3	1
15	16QAM	36	0	18.83	18.73	18.66	18.64	-19.3	2
15	16QAM	36	39	18.72	18.90	18.54	18.54	-19.3	2
15	16QAM	75	0	18.73	18.75	18.55	18.55	-19.3	2
15	64QAM	1	0	19.02	18.92	18.91	18.91	-19.3	2
15	64QAM	1	37	18.09	18.88	18.69	18.69	-19.3	2
15	64QAM	36	0	18.95	18.95	18.95	18.95	-19.3	2
15	64QAM	36	39	17.87	17.99	17.82	17.82	-18.3	3
15	64QAM	75	0	17.86	17.83	17.74	17.74	-18.3	3
15	64QAM	75	36	17.81	17.83	17.65	17.65	-18.3	3
15	256QAM	1	0	15.96	15.98	15.98	15.98	-16.3	5
15	256QAM	1	37	15.38	15.31	15.21	15.21	-16.3	5
15	256QAM	1	74	15.41	15.40	15.09	15.09	-16.3	5
15	256QAM	36	0	15.96	15.98	15.98	15.98	-16.3	5
15	256QAM	36	20	15.59	15.52	15.38	15.38	-16.3	5
15	256QAM	75	0	15.65	15.48	15.35	15.35	-16.3	5
Channel									
20	2025	20175	20175	20175	20175	20175	20175	Tune-up limit (dBm)	MPR (dB)
10	CPSK	1	0	20.54	20.43	20.44	20.44	-20.6	0
10	CPSK	1	25	20.44	20.38	20.26	20.26	-21.3	0
10	CPSK	1	49	20.43	20.55	20.27	20.27	-20.6	0
10	CPSK	36	0	19.70	19.75	19.63	19.63	-20.6	0
10	CPSK	36	39	19.64	19.60	19.43	19.43	-20.3	1
10	CPSK	75	0	19.61	19.70	19.47	19.47	-20.3	1
10	16QAM	1	0	20.00	19.73	19.99	19.99	-20.3	1
10	16QAM	1	49	19.96	19.88	19.53	19.53	-20.3	1
10	16QAM	25	0	19.70	19.59	19.50	19.50	-20.3	1
10	16QAM	25	24	19.74	19.63	19.41	19.41	-20.3	1
10	16QAM	25	50	19.60	19.67	19.49	19.49	-20.3	1
10	16QAM	75	0	19.70	19.74	19.59	19.59	-20.3	1
10	64QAM	1	0	19.29	19.07	19.17	19.17	-19.3	2
10	64QAM	1	49	19.29	19.07	19.07	19.07	-19.3	2
10	64QAM	25	0	17.81	17.62	17.66	17.66	-19.3	2
10	64QAM	25	12	17.85	17.79	17.77	17.77	-18.3	3
10	64QAM	25	36	17.75	17.78	17.64	17.64	-18.3	3
10	64QAM	75	0	17.75	17.88	17.64	17.64	-18.3	3
10	256QAM	1	0	10.42	15.31	15.31	15.06	-16.3	5
10	256QAM	1	25	15.32	15.31	15.31	15.06	-16.3	5
10	256QAM	25	0	15.53	15.55	15.25	15.25	-16.3	5
10	256QAM	25	12	15.47	15.61	15.34	15.34	-16.3	5
10	256QAM	25	36	15.66	15.50	15.30	15.30	-16.3	5
10	256QAM	75	0	15.50	15.55	15.25	15.25	-16.3	5
Channel									
10	2095	20175	20175	20175	20175	20175	20175	Tune-up limit (dBm)	MPR (dB)
3	CPSK	1	0	20.57	20.51	20.45	20.45	-21.3	0
3	CPSK	1	20	20.56	20.48	20.41	20.41	-21.3	0
3	CPSK	1	49	20.67	20.51	20.47	20.29	-21.3	0
3	CPSK	6	0	19.71	19.58	19.36	19.36	-20.3	1
3	CPSK	8	4	19.73	19.58	19.42	19.42	-20.3	1
3	CPSK	8	16	19.71	19.58	19.42	19.42	-20.3	1
3	CPSK	12	7	19.71	19.62	19.38	19.38	-20.3	1
3	CPSK	12	36	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	75	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	12	19.74	19.64	19.42	19.42	-20.3	1
3	CPSK	12	39	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	75	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	12	19.74	19.64	19.42	19.42	-20.3	1
3	CPSK	12	39	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	75	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	12	19.74	19.64	19.42	19.42	-20.3	1
3	CPSK	12	39	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	75	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	12	19.74	19.64	19.42	19.42	-20.3	1
3	CPSK	12	39	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	75	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	12	19.74	19.64	19.42	19.42	-20.3	1
3	CPSK	12	39	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	75	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	12	19.74	19.64	19.42	19.42	-20.3	1
3	CPSK	12	39	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	75	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	12	19.74	19.64	19.42	19.42	-20.3	1
3	CPSK	12	39	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	75	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	12	19.74	19.64	19.42	19.42	-20.3	1
3	CPSK	12	39	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	75	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	12	19.74	19.64	19.42	19.42	-20.3	1
3	CPSK	12	39	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	75	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	12	19.74	19.64	19.42	19.42	-20.3	1
3	CPSK	12	39	19.64	19.54	19.34	19.34	-20.3	1
3	CPSK	12	75	19.64	19.54	19.34	19.34	-20.3	1</td



Ant 7 Band 7 Down Power / DSI 1/5										
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 Frequency (MHz)										
20	QPSK	1	0	18.68	18.99	18.73		19.6	0	
20	QPSK	1	49	18.72	18.84	18.79		19.6	0	
20	QPSK	1	98	18.71	18.95	18.87		19.6	0	
20	QPSK	50	0	18.87	18.89	18.72		19.6	0	
20	QPSK	50	24	18.95	18.86	18.90		19.6	0	
20	QPSK	50	50	18.66	18.83	18.72		19.6	0	
20	QPSK	100	0	18.70	18.83	18.78		19.6	0	
20	16QAM	1	0	18.90	18.97	18.98		19.6	0	
20	16QAM	1	49	18.97	18.95	18.98		19.6	0	
20	16QAM	1	99	18.96	18.97	18.93		19.6	0	
20	16QAM	50	0	17.92	17.80	18.00		19.6	1	
20	16QAM	50	24	17.76	17.92	18.03		19.6	1	
20	16QAM	50	50	17.81	17.96	17.96		19.6	1	
20	16QAM	100	0	17.76	17.84	18.05		19.6	1	
20	64QAM	1	0	17.92	17.95	17.95		19.6	1	
20	64QAM	1	49	17.94	18.05	18.03		19.6	1	
20	64QAM	1	99	18.22	18.13	18.02		19.6	1	
20	64QAM	50	0	16.78	16.92	16.84		19.6	2	
20	64QAM	50	24	16.95	17.04	17.21		19.6	2	
20	64QAM	50	50	16.80	17.00	16.97		19.6	2	
20	64QAM	100	0	16.80	16.83	17.15		19.6	2	
20	256QAM	1	0	14.64	14.84	14.68		19.6	4	
20	256QAM	1	49	14.67	14.62	14.80		19.6	4	
20	256QAM	1	99	14.47	14.64	14.64		19.6	4	
20	256QAM	50	0	14.86	15.08	14.86		19.6	4	
20	256QAM	50	24	14.88	14.91	14.83		19.6	4	
20	256QAM	50	50	14.74	14.92	14.87		19.6	4	
20	256QAM	100	0	14.94	14.87	15.02		19.6	4	
Channel Frequency (MHz)										
15	QPSK	1	0	18.82	18.75	18.84		19.6	0	
15	QPSK	1	37	18.71	18.82	18.84		19.6	0	
15	QPSK	1	74	18.87	18.89	18.61		19.6	0	
15	QPSK	36	0	18.88	18.77	18.78		19.6	0	
15	QPSK	36	20	18.63	18.85	18.75		19.6	0	
15	QPSK	36	39	18.76	18.89	18.77		19.6	0	
15	QPSK	75	0	18.56	18.80	18.62		19.6	0	
15	16QAM	1	0	18.77	18.85	18.81		19.6	0	
15	16QAM	1	37	18.67	18.82	18.87		19.6	0	
15	16QAM	1	74	18.76	18.87	18.69		19.6	0	
15	16QAM	36	0	17.70	17.83	18.05		19.6	1	
15	16QAM	36	20	17.88	17.86	17.87		19.6	1	
15	16QAM	36	39	17.89	18.00	18.06		19.6	1	
15	16QAM	75	0	17.96	17.86	17.82		19.6	1	
15	64QAM	1	0	18.77	18.85	18.81		19.6	1	
15	64QAM	1	37	17.94	18.10	17.94		19.6	1	
15	64QAM	1	74	18.03	18.17	18.02		19.6	1	
15	64QAM	36	0	16.93	16.80	17.06		19.6	1	
15	64QAM	36	20	16.88	17.05	17.02		19.6	2	
15	64QAM	36	39	16.91	17.09	17.12		19.6	2	
15	64QAM	75	0	16.90	16.96	16.93		19.6	2	
15	256QAM	1	0	14.36	14.48	14.72		19.6	4	
15	256QAM	1	37	14.39	14.67	14.60		19.6	4	
15	256QAM	1	74	14.58	14.45	14.26		19.6	4	
15	256QAM	36	0	15.00	15.00	15.04		19.6	4	
15	256QAM	36	20	14.81	14.93	14.83		19.6	4	
15	256QAM	36	39	14.72	15.04	14.81		19.6	4	
15	256QAM	75	0	14.64	14.79	14.86		19.6	4	
Channel Frequency (MHz)										
10	QPSK	1	0	18.74	18.92	18.87		19.6	0	
10	QPSK	1	25	18.75	18.82	18.80		19.6	0	
10	QPSK	1	49	18.66	18.85	18.83		19.6	0	
10	QPSK	25	0	18.83	18.76	18.79		19.6	0	
10	QPSK	25	12	18.77	18.90	18.85		19.6	0	
10	QPSK	25	25	18.89	18.88	18.40		19.6	0	
10	QPSK	50	0	18.77	18.86	18.87		19.6	0	
10	16QAM	1	0	18.77	18.74	18.85		19.6	0	
10	16QAM	1	25	18.76	18.65	18.76		19.6	0	
10	16QAM	1	49	18.67	18.86	18.87		19.6	0	
10	16QAM	25	0	17.73	17.91	17.82		19.6	1	
10	16QAM	25	12	17.74	17.86	17.68		19.6	1	
10	16QAM	25	25	17.64	17.76	17.85		19.6	1	
10	16QAM	50	0	17.69	17.93	17.74		19.6	1	
10	64QAM	1	0	17.86	18.14	17.95		19.6	1	
10	64QAM	1	25	17.95	18.08	18.03		19.6	1	
10	64QAM	1	49	18.07	17.97	17.92		19.6	1	
10	64QAM	25	0	16.95	17.05	16.91		19.6	2	
10	64QAM	25	12	17.00	16.94	16.84		19.6	2	
10	64QAM	25	25	16.97	17.09	16.96		19.6	2	
10	64QAM	50	0	16.78	16.90	17.03		19.6	2	
10	256QAM	1	0	14.48	14.42	14.41		19.6	4	
10	256QAM	1	25	14.28	14.53	14.56		19.6	4	
10	256QAM	1	49	14.30	14.39	14.42		19.6	4	
10	256QAM	25	0	14.73	14.61	14.76		19.6	4	
10	256QAM	25	12	14.84	14.93	14.82		19.6	4	
10	256QAM	25	25	14.72	14.96	14.87		19.6	4	
10	256QAM	50	0	14.58	14.73	14.83		19.6	4	
Channel Frequency (MHz)										
5	QPSK	1	0	18.69	18.70	18.85		19.6	0	
5	QPSK	1	12	18.82	18.74	18.86		19.6	0	
5	QPSK	1	24	18.81	18.80	18.89		19.6	0	
5	QPSK	12	0	18.73	18.87	18.78		19.6	0	
5	QPSK	12	7	18.76	18.02	17.86		19.6	0	
5	QPSK	12	13	17.74	17.98	17.84		19.6	1	
5	QPSK	25	0	17.84	17.95	17.83		19.6	1	
5	QPSK	1	0	17.93	17.98	18.02		19.6	1	
5	64QAM	1	12	18.61	18.01	18.03		19.6	1	
5	64QAM	1	24	17.83	18.05	17.96		19.6	1	
5	64QAM	12	0	16.87	16.97	17.07		19.6	2	
5	64QAM	12	7	17.00	17.07	16.95		19.6	2	
5	64QAM	12	13	16.84	17.04	16.88		19.6	2	
5	64QAM	25	0	16.90	17.10	16.81		19.6	2	
5	64QAM	1	0	14.61	14.67	14.73		19.6	4	
5	256QAM	1	12	14.51	14.61	14.75		19.6	4	
5	256QAM	1	24	14.66	14.80	14.58		19.6	4	
5	256QAM	12	0	14.60	14.72	14.86		19.6	4	
5	256QAM	12	7	14.69	14.90	14.76		19.6	4	
5	256QAM	12	13	14.71	14.79	14.78		19.6	4	
5	256QAM	25	0	14.72	14.89	14.96		19.6	4	

Ant9 Band 38 Full Power / DSI 1/3/4/5													
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				100	0	-100			Frequency (MHz)				
20	QPSK	1	0	18.67	19.00	18.70		20.5	0				
20	QPSK	1	49	18.71	18.80	18.68							
20	QPSK	1	99	18.66	18.68	18.75							
20	QPSK	50	0	17.92	18.02	17.92							
20	QPSK	50	24	17.90	17.94	18.00							
20	QPSK	50	50	17.85	17.89	18.00							
20	QPSK	100	0	17.92	18.02	17.99							
20	16QAM	1	0	17.87	17.93	17.95							
20	16QAM	1	49	17.81	17.89	17.89		19.5	1				
20	16QAM	1	99	17.84	17.90	17.92							
20	16QAM	50	0	16.95	16.91	16.77							
20	16QAM	50	24	16.94	16.90	17.03							
20	16QAM	50	50	16.93	16.98	17.04							
20	16QAM	100	0	16.94	16.95	17.03							
20	64QAM	1	0	15.53	16.61	16.69							
20	64QAM	1	49	16.58	16.51	16.68							
20	64QAM	1	99	16.55	16.62	16.76							
20	64QAM	50	0	15.89	15.85	15.94							
20	64QAM	50	24	15.88	15.81	16.01							
20	64QAM	50	50	15.87	15.93	15.99							
20	64QAM	100	0	15.97	15.93	16.05							
20	256QAM	1	0	13.54	13.91	13.62							
20	256QAM	1	49	13.63	13.66	13.58							
20	256QAM	1	99	13.53	13.63	13.66							
20	256QAM	50	0	13.63	13.63	13.64							
20	256QAM	50	24	13.63	13.74	13.64							
20	256QAM	50	50	13.78	13.79	13.93							
20	256QAM	100	0	13.83	13.92	13.93							
20				75	0	-75	Tune-up limit (dBm)	MPR (dB)					
20				7.5	0	-7.5							
15	QPSK	1	0	18.88	18.81	18.84							
15	QPSK	1	37	18.86	18.84	18.86		20.5	0				
15	QPSK	1	74	18.86	18.81	18.90							
15	QPSK	38	0	17.99	19.00	17.97							
15	QPSK	38	20	18.08	18.07	18.04							
15	QPSK	38	39	17.94	18.06	18.03							
15	QPSK	75	0	17.96	18.00	18.05							
15	16QAM	1	0	18.04	18.02	17.98							
15	16QAM	1	37	17.95	17.85	17.94		19.5	1				
15	16QAM	1	74	17.95	17.98	18.08							
15	16QAM	38	0	17.96	17.98	17.92							
15	16QAM	38	20	17.62	17.98	17.95							
15	16QAM	38	39	17.90	16.97	17.03							
15	16QAM	75	0	15.99	16.95	17.07							
15	64QAM	1	0	18.80	18.81	16.84							
15	64QAM	1	37	18.85	18.81	16.86							
15	64QAM	1	74	18.83	16.78	16.82							
15	64QAM	36	0	18.02	15.98	15.98							
15	64QAM	36	39	15.95	16.01	16.05							
15	64QAM	75	0	15.90	15.96	15.98							
15	256QAM	1	0	13.73	13.74	13.73							
15	256QAM	1	37	13.77	13.72	13.77							
15	256QAM	1	74	13.80	13.67	13.65							
15	256QAM	36	0	13.87	13.86	13.90							
15	256QAM	36	20	13.85	13.86	13.86							
15	256QAM	36	39	13.82	13.97	13.95							
15	256QAM	75	0	13.83	13.89	13.99							
15				50	0	-50	Tune-up limit (dBm)	MPR (dB)					
15				5	0	-5							
10	QPSK	1	0	18.95	18.84	18.87							
10	QPSK	1	25	18.95	18.90	18.89		20.5	0				
10	QPSK	1	49	18.98	18.90	18.94							
10	QPSK	25	0	18.00	17.97	17.98							
10	QPSK	25	12	18.09	18.04	17.97							
10	QPSK	25	25	18.06	18.04	18.08							
10	QPSK	50	0	18.06	17.97	17.98							
10	16QAM	1	0	17.99	18.00	18.03							
10	16QAM	1	25	18.00	18.01	18.00							
10	16QAM	1	49	18.05	17.95	18.04							
10	16QAM	38	0	17.01	16.97	17.00							
10	16QAM	38	25	17.01	17.05	17.00							
10	16QAM	38	39	17.01	17.03	17.02							
10	16QAM	75	0	17.10	17.00	17.00							
10	64QAM	1	0	17.05	16.92	16.94							
10	64QAM	1	25	17.04	16.88	16.93							
10	64QAM	1	49	17.00	16.94	16.98							
10	64QAM	25	0	16.01	15.97	15.97							
10	64QAM	25	12	16.10	16.06	16.00							
10	64QAM	25	25	16.08	16.01	16.06							
10	64QAM	50	0	16.01	16.00	15.97							
10	256QAM	1	0	13.87	13.71	13.74							
10	256QAM	1	25	13.81	13.84	13.78							
10	256QAM	25	0	13.86	13.86	13.85							
10	256QAM	25	12	13.92	13.96	13.91							
10	256QAM	25	25	13.85	13.82	14.01							
10	256QAM	50	0	13.89	13.90	13.90							
10				25	0	-25	Tune-up limit (dBm)	MPR (dB)					
10				2.5	0	-2.5							
5	QPSK	1	0	18.99	18.87	18.87							
5	QPSK	1	12	18.78	18.92	18.91							
5	QPSK	1	24	18.90	18.94	18.88							
5	QPSK	12	0	17.89	18.04	17.99							
5	QPSK	12	7	18.02	18.10	18.03							
5	QPSK	12	13	17.98	18.07	18.02							
5	QPSK	12	19	17.95	18.05	17.95							
5	QPSK	25	0	17.95	18.05	17.95							
5	16QAM	1	0	17.88	18.06	18.03							
5	16QAM	1	12	17.96	18.12	18.07							
5	16QAM	1	24	17.81	16.86	16.81							
5	16QAM	1	49	18.02	18.88	18.82							
5	16QAM	12	0	15.90	16.00	15.97							
5	16QAM	12	7	15.98	16.10	16.01							
5	16QAM	12	13	15.95	16.07	16.04							
5	16QAM	12	19	15.95	16.05	15.98							
5	256QAM	1	0	14.11	13.65	14.03							
5	256QAM	1	12	13.94	14.13	14.09							
5	256QAM	1	24	14.13	13.89	13.67							
5	256QAM	12	0	13.96	14.39	14.00							
5	256QAM	12	7	14.24	14.40	14.16							
5	256QAM	12	13	14.08	14.40	14.37							
5	256QAM	25	0	13.82	14.11	14.02							
5				2.5	0	-2.5	Tune-up limit (dBm)	MPR (dB)					
5				2.5	0	-2.5							

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Ant 2 Full Power/DSI-1/4

CA_7C Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	24.63	25.50
21100	20902	QPSK	1	0	1	99	2	0	24.89	25.50
21350	21152	QPSK	1	0	1	99	2	0	24.16	25.50

DSI-3/5

CA_7C Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	Rb offset	RB Size	RB offset				
20850	21048	QPSK	50	0	0	0	1	0	18.77	19.50
21100	20902	QPSK	50	0	1	99	2	0	18.79	19.50
21350	21152	QPSK	50	0	1	99	2	0	18.55	19.50

UL CA

Ant 3 Full Power

Full Power/DSI-1/4										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	Rb offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	23.31	24.50
21100	20902	QPSK	1	0	1	99	2	0	23.63	24.50
21350	21152	QPSK	1	0	1	99	2	0	23.11	24.50

DSI-1/5

CA_7C Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	Rb offset	RB Size	RB offset				
20850	21048	QPSK	50	0	0	0	1	0	13.71	15.00
21100	20902	QPSK	50	0	1	99	2	0	14.08	15.00
21350	21152	QPSK	50	0	1	99	2	0	13.48	15.00

DSI-1/3

CA_7C Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	Rb offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	18.2	19.50
21100	20902	QPSK	1	0	1	99	2	0	18.5	19.50
21350	21152	QPSK	1	0	1	99	2	0	18.24	19.50

DSI-1/4

CA_7C Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	Rb offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	19.18	20.50
21100	20902	QPSK	1	0	1	99	2	0	19.56	20.50
21350	21152	QPSK	1	0	1	99	2	0	19.04	20.50



Ant 6 Full Power

CA_7C

Combination 20MHz+20MHz (100RB+100RB)

PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	24.51	25.50
21100	20902	QPSK	1	0	1	99	2	0	24.98	25.50
21350	21152	QPSK	1	0	1	99	2	0	24.76	25.50

DSI-1

CA_7C

Combination 20MHz+20MHz (100RB+100RB)

PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	50	0	0	0	1	0	20.39	21.50
21100	20902	QPSK	50	0	1	99	2	0	20.85	21.50
21350	21152	QPSK	50	0	1	99	2	0	20.6	21.50

DSI-3/5

CA_7C

Combination 20MHz+20MHz (100RB+100RB)

PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	50	0	0	0	1	0	18.44	19.50
21100	20902	QPSK	50	0	1	99	2	0	18.87	19.50
21350	21152	QPSK	50	0	1	99	2	0	18.67	19.50

DSI-4

CA_7C

Combination 20MHz+20MHz (100RB+100RB)

PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	23.36	24.50
21100	20902	QPSK	1	0	1	99	2	0	23.87	24.50
21350	21152	QPSK	1	0	1	99	2	0	23.61	24.50

Ant 7 Full Power/DSI-3/4

CA_7C

Combination 20MHz+20MHz (100RB+100RB)

PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	19.63	20.60
21100	20902	QPSK	1	0	1	99	2	0	20.16	20.60
21350	21152	QPSK	1	0	1	99	2	0	19.55	20.60

DSI-1/5

CA_7C

Combination 20MHz+20MHz (100RB+100RB)

PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	50	0	0	0	1	0	18.69	19.60
21100	20902	QPSK	50	0	1	99	2	0	19.04	19.60
21350	21152	QPSK	50	0	1	99	2	0	18.78	19.60



Ant 2 Full Power/DSI-1/4

CA_38C Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	24.53	25.50
37901	38099	QPSK	1	0	0	0	1	0	24.82	25.50
38150	37952	QPSK	1	0	1	99	2	0	24.66	25.50

DSI-3/5

CA_38C Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	50	0	0	0	1	0	21.47	22.50
37901	38099	QPSK	50	0	0	0	1	0	21.82	22.50
38150	37952	QPSK	50	0	1	99	2	0	21.43	22.50

Ant 3 Full Power

CA_38C Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	23.5	24.50
37901	38099	QPSK	1	0	0	0	1	0	23.67	24.50
38150	37952	QPSK	1	0	1	99	2	0	23.65	24.50

DSI-1/5

CA_38C Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	16.44	17.50
37901	38099	QPSK	1	0	0	0	1	0	16.64	17.50
38150	37952	QPSK	1	0	1	99	2	0	16.56	17.50

DSI-4

CA_38C Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	21.41	22.50
37901	38099	QPSK	1	0	0	0	1	0	21.63	22.50
38150	37952	QPSK	1	0	1	99	2	0	21.58	22.50

DSI-3

CA_38C Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	50	0	0	0	1	0	19.38	20.50
37901	38099	QPSK	50	0	0	0	1	0	19.61	20.50
38150	37952	QPSK	50	0	1	99	2	0	19.53	20.50



Ant 6 Full Power/DSI~4

CA_38C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	24.67	25.50
37901	38099	QPSK	1	0	0	0	1	0	24.69	25.50
38150	37952	QPSK	1	0	1	99	2	0	24.65	25.50

DSI-1

CA_38C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	50	0	0	0	1	0	22.55	23.50
37901	38099	QPSK	50	0	0	0	1	0	22.76	23.50
38150	37952	QPSK	50	0	1	99	2	0	22.52	23.50

DSI-3/5

CA_38C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	20.53	21.50
37901	38099	QPSK	1	0	0	0	1	0	20.61	21.50
38150	37952	QPSK	1	0	1	99	2	0	20.52	21.50

Ant 9 Full Power/DSI~1/3/4/5

CA_38C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
37850	38048	QPSK	1	0	0	0	1	0	18.98	20.50
37901	38099	QPSK	1	0	0	0	1	0	19.42	20.50
38150	37952	QPSK	1	0	1	99	2	0	19.31	20.50



2CA DL

Configure	CA List	PCC								SCC				Power	
		LTE	BW	UL	UL	Mod	ULF	UL	LTE	BW	DL	DL	With CA	Without CA	
		Band	(MHz)	Freq	Channel		RB	RB	Band	(MHz)	Band	(MHz)	Tx Power	Tx Power	
Intra-Band Contiguous	CA_4A-6A	Band 4_AN12	20M	1722.5	20175	QPSK	1	0	Band 5	10M	881.5	2625	24.30	24.33	
		Band 4_AN13	20M	1722.5	20175	QPSK	1	0	Band 5	10M	881.5	2625	23.41	23.66	
		Band 4_AN16	20M	1722.5	20175	QPSK	1	0	Band 5	10M	881.5	2625	24.39	24.57	
		Band 4_AN17	20M	1722.5	20175	QPSK	1	0	Band 5	10M	881.5	2625	20.58	20.70	
		Band 4_AN11	10M	836.5	20525	QPSK	1	0	Band 4	20M	2132.5	2175	24.31	24.45	
		Band 5_AN14	10M	836.5	20525	QPSK	1	0	Band 4	20M	2132.5	2175	23.20	23.27	
		Band 2_AN12	20M	1880	18900	QPSK	1	0	Band 2	20M	1979.8	1095	24.20	24.44	
		Band 2_AN16	20M	1880	18900	QPSK	1	0	Band 2	20M	1979.8	1095	24.22	24.37	
		Band 66_AN12	20M	1745	132322	QPSK	1	0	Band 66	20M	2174.8	67084	24.32	24.36	
		Band 66_AN16	20M	1745	132322	QPSK	1	0	Band 66	20M	2174.8	67084	24.26	24.38	



3CA DL <Inter-Band for Three Carrier Combination> (three bands)

Configure		PCC												SCC1												Power						
		LTE		BW		UL		UL		Mod.	UL#		LTE		BW		DL		DL		LTE		BW		DL		DL		With CA		Without CA	
		Band	(MHz)	Freq	(MHz)	Channel	RB	RB	Offset		Band	(MHz)	Freq	(MHz)	Channel	Band	(MHz)	Freq	(MHz)	Channel	Band	(MHz)	Freq	(MHz)	Channel	Tx Power	Tx Power	(dBm)	(dBm)			
CA_2A-4A-7A	CA_2A-7A	Band_2_AN12	20M	1880	18900	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 2	20M	2655	3100	Band 7	20M	2655	3100	24.19	24.44		
		Band_2_AN16	20M	1880	18900	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 2	20M	2655	3100	Band 7	20M	2655	3100	24.24	24.37		
		Band_4_AN12	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	1960	900	24.31	24.33		
		Band_4_AN13	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	1960	900	23.43	23.55		
		Band_4_AN16	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	1960	900	24.12	24.57		
		Band_4_AN17	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	1960	900	20.34	20.79		
		Band_7_AN12	20M	2355	21100	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	2132.5	2175	Band 7	20M	2655	3100	23.11	23.36		
		Band_7_AN16	20M	2355	21100	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	2132.5	2175	Band 7	20M	2655	3100	24.78	25.02		
		Band_7_AN17	20M	2355	21100	QPSK	1	99	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	2132.5	2175	Band 7	20M	2655	3100	19.65	19.89		
		Band_2_AN12	20M	1880	18900	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 2	20M	2655	3100	Band 7	20M	2655	3100	24.2	24.44		
CA_2A-7A-7C	CA_2A-7C	Band_2_AN16	20M	1880	18900	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 2	20M	2655	3100	Band 7	20M	2655	3100	24.33	24.57		
		Band_7_AN12	20M	2355	21100	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	1960	900	24.66	24.74		
		Band_7_AN13	20M	2355	21100	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	1960	900	23.18	23.26		
		Band_7_AN16	20M	2355	21100	QPSK	1	0	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	1960	900	24.93	25.02		
		Band_7_AN17	20M	2355	21100	QPSK	1	99	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 2	20M	1960	900	19.8	19.89		
		Band_2_AN12	20M	1880	18900	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 2	20M	2655	3100	Band 7	20M	2655	3100	24.2	24.44		
		Band_2_AN16	20M	1880	18900	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 2	20M	2655	3100	Band 7	20M	2655	3100	24.32	24.37		
		Band_7_AN12	20M	2355	21100	QPSK	1	0	Band 7	20M	2674.8	3298	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	20M	2674.8	3298	Band 2	20M	1960	900	24.58	24.74		
		Band_7_AN13	20M	2355	21100	QPSK	1	0	Band 7	20M	2674.8	3298	Band 2	20M	2674.8	3298	Band 4	20M	2132.5	2175	Band 7	20M	2674.8	3298	Band 2	20M	1960	900	23.26	23.36		
		Band_7_AN16	20M	2355	21100	QPSK	1	0	Band 7	20M	2674.8	3298	Band 2	20M	2674.8	3298	Band 4	20M	2132.5	2175	Band 7	20M	2674.8	3298	Band 2	20M	1960	900	24.89	25.02		
CA_4A-7C	CA_4A-7C	Band_2_AN12	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 2	20M	2655	3100	Band 7	20M	2655	3100	19.82	19.89		
		Band_2_AN16	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 2	20M	2655	3100	Band 7	20M	2655	3100	24.13	24.33		
		Band_4_AN12	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 2	20M	2655	3100	Band 7	20M	2655	3100	23.37	23.55		
		Band_4_AN13	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 2	20M	2655	3100	Band 7	20M	2655	3100	24.46	24.57		
		Band_4_AN17	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2655	3100	Band 2	20M	1960	900	Band 2	20M	2655	3100	Band 7	20M	2655	3100	20.66	20.79		
		Band_7_AN12	20M	2355	21100	QPSK	1	0	Band 7	20M	2674.8	3298	Band 4	20M	2132.5	2175	Band 7	20M	2674.8	3298	Band 4	20M	2132.5	2175	Band 7	20M	2674.8	3298	24.82	24.94		
		Band_7_AN13	20M	2355	21100	QPSK	1	0	Band 7	20M	2674.8	3298	Band 4	20M	2674.8	3298	Band 5	20M	2132.5	2175	Band 7	20M	2674.8	3298	Band 4	20M	2132.5	2175	23.21	23.36		
		Band_7_AN16	20M	2355	21100	QPSK	1	0	Band 7	20M	2674.8	3298	Band 4	20M	2674.8	3298	Band 5	20M	2132.5	2175	Band 7	20M	2674.8	3298	Band 4	20M	2132.5	2175	24.92	25.02		
		Band_7_AN17	20M	2355	21100	QPSK	1	99	Band 7	20M	2674.8	3298	Band 4	20M	2674.8	3298	Band 5	20M	2132.5	2175	Band 7	20M	2674.8	3298	Band 4	20M	2132.5	2175	19.77	19.89		
		Band_5_AN11	10M	836.5	20252	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2655	3100	Band 2	20M	2655	3100	Band 2	20M	2655	3100	Band 7	20M	2655	3100	24.38	24.45		
CA_5A-7A-7C	CA_5A-7C	Band_5_AN14	10M	836.5	20252	QPSK	1	0	Band 7	20M	2655	3100	Band 7	20M	2655	3100	Band 2	20M	2655	3100	Band 2	20M	2655	3100	Band 7	20M	2655	3100	23.21	23.27		
		Band_7_AN12	20M	2355	21100	QPSK	1	0	Band 7	20M	2655	3100	Band 5	10M	881.5	2525	Band 5	10M	881.5	2525	Band 5	10M	881.5	2525	Band 5	10M	881.5	2525	24.63	24.74		
		Band_7_AN13	20M	2355	21100	QPSK	1	0	Band 7	20M	2674.8	3298	Band 5	10M	881.5	2525	Band 5	10M	881.5	2525	Band 5	10M	881.5	2525	Band 5	10M	881.5	2525	23.11	23.36		
		Band_7_AN16	20M	2355	21100	QPSK	1	0	Band 7	20M	2674.8	3298	Band 5	10M	881.5	2525	Band 5	10M	881.5	2525	Band 5	10M	881.5	2525	Band 5	10M	881.5	2525	24.28	25.02		
		Band_7_AN17	20M	2355	21100	QPSK	1	99	Band 7	20M	2674.8	3298	Band 5	10M	881.5	2525	Band 5	10M	881.5	2525	Band 5	10M	881.5	2525	Band 5	10M	881.5	2525	19.67	19.89		



<Inter-Band for Three Carrier Combination> (four bands)

Configure		PCC								SCC1				SCC2				SCC3				Power	
		LTE	BW	UL	UL	Mod.	UL#	UL	LTE	BW	DL	DL	LTE	BW	DL	DL	LTE	BW	DL	DL	With CA	Without CA	
																						Tx Power	Tx Power
CA_5A-7A-66A-66A	Band 5_ANT1	10M	836.5	20235	QPSK	1	0	Band 7	20M	2055	3100	Band 66	20M	2155	66886	Band 66	8M	2197.5	67311	24.21	24.46		
		10M	836.5	20235	QPSK	1	0	Band 7	20M	2055	3100	Band 66	20M	2155	66886	Band 66	8M	2197.5	67311	23.12	23.37		
		20M	2535	21100	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 5	10M	881.5	2525	24.65	24.74		
		20M	2535	21100	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 5	10M	881.5	2525	23.06	23.36		
		20M	2535	21100	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 5	10M	881.5	2525	24.89	25.02		
		20M	2535	21100	QPSK	1	99	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 5	10M	881.5	2525	19.02	19.89		
		20M	1745	132322	QPSK	1	0	Band 66	5M	2197.5	67311	Band 5	10M	881.5	2525	Band 7	20M	2655	3100	24.22	24.36		
	Band 66_ANT6	20M	1745	132322	QPSK	1	0	Band 66	5M	2197.5	67311	Band 5	10M	881.5	2525	Band 7	20M	2655	3100	24.07	24.38		
		20M	2535	21100	QPSK	1	0	Band 7	20M	2074.8	3298	Band 66	20M	2155	66886	Band 66	8M	2197.5	67311	24.66	24.74		
		20M	2535	21100	QPSK	1	0	Band 7	20M	2074.8	3298	Band 66	20M	2155	66886	Band 66	8M	2197.5	67311	23.18	23.36		
		20M	2535	21100	QPSK	1	0	Band 7	20M	2074.8	3298	Band 66	20M	2155	66886	Band 66	8M	2197.5	67311	24.87	25.02		
		20M	2535	21100	QPSK	1	99	Band 7	20M	2074.8	3298	Band 66	20M	2155	66886	Band 66	8M	2197.5	67311	19.78	19.89		
		20M	1745	132322	QPSK	1	0	Band 66	5M	2197.5	67311	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	24.27	24.36		
		20M	1745	132322	QPSK	1	0	Band 66	5M	2197.5	67311	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	24.23	24.38		
CA_7C-66A-66A	Band 7_ANT2	20M	2535	21100	QPSK	1	0	Band 7	20M	2074.8	3298	Band 66	20M	2155	66886	Band 66	8M	2197.5	67311	24.66	24.74		
		20M	2535	21100	QPSK	1	0	Band 7	20M	2074.8	3298	Band 66	20M	2155	66886	Band 66	8M	2197.5	67311	23.18	23.36		
		20M	2535	21100	QPSK	1	0	Band 7	20M	2074.8	3298	Band 66	20M	2155	66886	Band 66	8M	2197.5	67311	24.87	25.02		
		20M	2535	21100	QPSK	1	99	Band 7	20M	2074.8	3298	Band 66	20M	2155	66886	Band 66	8M	2197.5	67311	19.78	19.89		
		20M	1745	132322	QPSK	1	0	Band 66	5M	2197.5	67311	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	24.27	24.36		
		20M	1745	132322	QPSK	1	0	Band 66	5M	2197.5	67311	Band 7	20M	2655	3100	Band 7	20M	2674.8	3298	24.23	24.38		



Ant 1 n5 NSA/SA Full Power / DS1 1/4									
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									
Frequency (MHz)									
20	PI/2 BPSK	1	1	25.02	25.01	24.94	25.5	0.0	
20	PI/2 BPSK	1	53	25.07	25.12	25.04			
20	PI/2 BPSK	1	104	24.86	24.86	24.76			
20	PI/2 BPSK	50	0	24.58	24.60	24.52	25.0	0.5	
20	PI/2 BPSK	50	28	24.98	25.04	24.95	25.5	0.0	
20	PI/2 BPSK	50	56	24.37	24.43	24.34	25.0	0.5	
20	PI/2 BPSK	100	0	24.52	24.59	24.50			
20	QPSK	1	1	25.18	25.31	25.28			
20	QPSK	1	53	25.21	25.26	25.16	25.5	0.0	
20	QPSK	1	104	24.87	24.92	24.84			
20	QPSK	50	0	24.07	24.13	24.06	24.5	1.0	
20	QPSK	50	28	25.14	25.15	25.06	25.5	0.0	
20	QPSK	50	56	24.80	24.89	24.80			
20	QPSK	100	0	24.07	24.19	24.02	24.5	1.0	
20	16QAM	1	1	24.59	24.64	24.56	24.5	1.0	
20	64QAM	1	1	23.00	22.99	22.90	23.0	2.5	
20	256QAM	1	1	20.48	20.49	20.39	21.0	4.5	
Channel									
Frequency (MHz)									
15	PI/2 BPSK	1	1	25.00	25.08	25.00	25.5	0.0	
Channel									
Frequency (MHz)									
10	PI/2 BPSK	1	1	24.97	24.98	24.88	25.5	0.0	
Channel									
Frequency (MHz)									
5	PI/2 BPSK	1	1	25.05	25.10	25.02	25.5	0.0	



Ant 1 n5 NSA/SA Down power / DS1 3/5									
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									
Frequency (MHz)									
20	PI/2 BPSK	1	1	23.95	24.24	24.21	24.5	0.0	
20	PI/2 BPSK	1	53	24.15	24.27	24.26			
20	PI/2 BPSK	1	104	23.89	24.22	24.19			
20	PI/2 BPSK	50	0	23.53	23.60	23.59	24.5	0.0	
20	PI/2 BPSK	50	28	24.02	24.18	24.17	24.5	0.0	
20	PI/2 BPSK	50	56	23.57	23.69	23.66	24.5	0.0	
20	PI/2 BPSK	100	0	23.56	23.68	23.65			
20	QPSK	1	1	23.94	24.34	24.30			
20	QPSK	1	53	24.20	24.29	24.27	24.5	0.0	
20	QPSK	1	104	23.91	24.27	24.23			
20	QPSK	50	0	22.95	23.17	23.12	24.5	0.0	
20	QPSK	50	28	23.91	24.25	24.21	24.5	0.0	
20	QPSK	50	56	23.01	23.25	23.21			
20	QPSK	100	0	22.79	23.20	23.19	24.5	0.0	
20	16QAM	1	1	23.23	23.36	23.32	24.5	0.0	
20	64QAM	1	1	21.78	21.87	21.85	23.0	1.5	
20	256QAM	1	1	19.56	19.64	19.62	21.0	3.5	
Channel									
Frequency (MHz)									
15	PI/2 BPSK	1	1	23.90	24.23	24.16	24.5	0.0	
10	PI/2 BPSK	1	1	23.95	24.27	24.27	24.5	0.0	
Channel									
Frequency (MHz)									
5	PI/2 BPSK	1	1	24.16	24.23	24.24	24.5	0.0	



Ant 2 n7 SA/NSA Full Power / DS1 1/4									
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									
Frequency (MHz)									
20	PI/2 BPSK	1	1	20.63	20.74	21.11			
20	PI/2 BPSK	1	53	20.96	20.77	21.01	21.2	0.0	
20	PI/2 BPSK	1	104	20.74	20.72	21.03			
20	PI/2 BPSK	50	0	19.87	20.10	20.32	20.7	0.5	
20	PI/2 BPSK	50	28	20.71	20.68	20.91	21.2	0.0	
20	PI/2 BPSK	50	56	20.13	20.19	20.54	20.7	0.5	
20	PI/2 BPSK	100	0	20.45	20.18	20.48			
20	QPSK	1	1	20.44	21.13	20.84			
20	QPSK	1	53	20.57	21.10	21.01	21.2	0.0	
20	QPSK	1	104	20.86	20.77	21.10			
20	QPSK	50	0	19.84	19.67	19.89	20.2	1.0	
20	QPSK	50	28	20.93	21.10	21.09	21.2	0.0	
20	QPSK	50	56	20.04	19.75	20.14			
20	QPSK	100	0	19.88	19.70	20.05	20.2	1.0	
20	16QAM	1	1	19.81	19.86	20.16	20.2	1.0	
20	64QAM	1	1	18.35	18.37	18.56	18.7	2.5	
20	256QAM	1	1	16.24	16.14	16.48	16.7	4.5	
Channel									
Frequency (MHz)									
15	PI/2 BPSK	1	1	20.82	20.68	20.93	21.2	0.0	
Channel									
Frequency (MHz)									
10	PI/2 BPSK	1	1	20.61	20.65	20.87	21.2	0.0	
Channel									
Frequency (MHz)									
5	PI/2 BPSK	1	1	20.48	20.68	20.99	21.2	0.0	



Ant 4 n41 SA Full Power / DS1 1/4								
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 Frequency (MHz)								
100	PI/2 BPSK	1	1	24.28	24.40	24.34	25.5	0.0
100	PI/2 BPSK	1	137	24.08	24.39	24.34		
100	PI/2 BPSK	1	271	22.84	23.03	22.97		
100	PI/2 BPSK	135	0	23.44	23.75	23.70		
100	PI/2 BPSK	135	69	24.19	24.30	24.24	25.5	0.0
100	PI/2 BPSK	135	138	23.62	23.70	23.64		
100	PI/2 BPSK	270	0	23.72	23.79	23.74	25.0	0.5
100	QPSK	1	1	24.13	24.44	24.41		
100	QPSK	1	137	24.25	24.38	24.32	25.5	0.0
100	QPSK	1	271	22.41	22.59	22.53		
100	QPSK	135	0	23.29	23.34	23.28		
100	QPSK	135	69	24.17	24.38	24.19	25.5	0.0
100	QPSK	135	138	22.46	22.61	22.76		
100	QPSK	270	0	23.12	23.31	23.25	24.5	1.0
100	QPSK	270	138	22.60	22.91	22.85	24.5	1.0
100	16QAM	1	1	21.58	21.70	21.65	23.0	2.5
100	64QAM	1	1	20.16	20.24	20.19	21.0	4.5
100	256QAM	1	1	2526	2592.99	2659.98		
Channel Frequency (MHz)								
90	PI/2 BPSK	1	1	24.22	24.34	24.28	25.5	0.0
90	PI/2 BPSK	1	137	507204	518598	526998	Tune-up limit (dBm)	MPR (dB)
90	PI/2 BPSK	1	271	2541	2592.99	2644.98		
80	PI/2 BPSK	1	1	24.03	24.33	24.29	25.5	0.0
80	PI/2 BPSK	1	137	505200	518598	531996	Tune-up limit (dBm)	MPR (dB)
80	PI/2 BPSK	1	271	2526	2592.99	2659.98		
60	PI/2 BPSK	1	1	23.97	24.24	24.23	25.5	0.0
60	PI/2 BPSK	1	137	504204	518598	532998	Tune-up limit (dBm)	MPR (dB)
60	PI/2 BPSK	1	271	2526	2592.99	2664.99		
50	PI/2 BPSK	1	1	24.15	24.29	24.19	28.5	1.0
50	PI/2 BPSK	1	137	503202	518598	532998	Tune-up limit (dBm)	MPR (dB)
50	PI/2 BPSK	1	271	2511	2592.99	2670		
40	PI/2 BPSK	1	1	24.17	24.27	24.27	25.5	0.0
40	PI/2 BPSK	1	137	502200	518598	534998	Tune-up limit (dBm)	MPR (dB)
40	PI/2 BPSK	1	271	2511	2592.99	2674.98		
30	PI/2 BPSK	1	1	24.18	24.28	24.27	25.5	0.0
30	PI/2 BPSK	1	137	501204	518598	535998	Tune-up limit (dBm)	MPR (dB)
30	PI/2 BPSK	1	271	2506.02	2592.99	2679.99		
20	PI/2 BPSK	1	1	24.02	24.31	24.22	25.5	0.0



Ant 2 n7 SA/NSA Down power / DS1 3/5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MNR (dB)	
20	Channel			2510	2535	2560			
20	Frequency (MHz)								
20	PI/2 BPSK	1	1	18.54	18.51	18.53			
20	PI/2 BPSK	1	53	18.65	18.55	18.64	19.2	0.0	
20	PI/2 BPSK	1	104	18.63	18.56	18.65			
20	PI/2 BPSK	50	0	18.59	18.52	18.55	19.2	0.0	
20	PI/2 BPSK	50	28	18.67	18.59	18.68	19.2	0.0	
20	PI/2 BPSK	50	56	18.56	18.55	18.56			
20	PI/2 BPSK	100	0	18.66	18.57	18.64	19.2	0.0	
20	QPSK	1	1	18.49	18.75	18.54			
20	QPSK	1	53	18.64	18.62	18.65	19.2	0.0	
20	QPSK	1	104	18.71	18.68	18.71			
20	QPSK	50	0	18.59	18.53	18.56	19.2	0.0	
20	QPSK	50	28	18.56	18.56	18.63	19.2	0.0	
20	QPSK	50	56	18.66	18.61	18.63			
20	QPSK	100	0	18.64	18.55	18.56	19.2	0.0	
20	16QAM	1	1	18.70	18.67	18.64	19.2	0.0	
20	64QAM	1	1	18.11	18.05	18.13	18.7	0.5	
20	256QAM	1	1	16.02	15.99	16.05	16.7	2.5	
15	Channel			501500	507000	512500	Tune-up limit (dBm)	MNR (dB)	
15	Frequency (MHz)			2507.5	2535	2562.5			
10	PI/2 BPSK	1	1	18.55	18.69	18.54	19.2	0.0	
10	Channel			501000	507000	513000	Tune-up limit (dBm)	MNR (dB)	
10	Frequency (MHz)			2505	2535	2565			
5	PI/2 BPSK	1	1	18.50	18.63	18.61	19.2	0.0	

Ant 2 n41 SA Down power / DS1 3/5								
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								
100	PI/2 BPSK	1	1	17.98	18.07	17.97		
100	PI/2 BPSK	1	137	18.04	18.06	18.06	19.5	0.0
100	PI/2 BPSK	1	271	18.01	18.02	18.00		
100	PI/2 BPSK	135	0	18.05	18.09	18.06		
100	PI/2 BPSK	135	69	17.98	18.06	17.96	19.5	0.0
100	PI/2 BPSK	135	138	18.04	18.08	18.06		
100	PI/2 BPSK	270	0	18.00	18.10	18.09	19.5	0.0
100	QPSK	1	1	17.89	18.19	18.00		
100	QPSK	1	137	18.11	18.15	18.12	19.5	0.0
100	QPSK	1	271	17.88	17.96	17.94		
100	QPSK	135	0	18.07	18.15	18.13		
100	QPSK	135	69	18.13	18.17	18.14	19.5	0.0
100	QPSK	135	138	18.02	18.02	18.00		
100	QPSK	270	0	18.09	18.12	18.10	19.5	0.0
100	16QAM	1	1	17.84	17.88	17.86	19.5	0.0
100	64QAM	1	1	17.81	17.87	17.83	19.5	0.0
100	256QAM	1	1	17.91	17.93	17.89	19.5	0.0
Channel								
90	PI/2 BPSK	1	1	17.89	17.99	17.97	19.5	0.0
90	PI/2 BPSK	1	137	17.89	17.99	17.97		
90	PI/2 BPSK	1	271	17.89	17.99	17.97		
90	PI/2 BPSK	135	0	17.98	18.00	17.99	19.5	0.0
90	PI/2 BPSK	135	69	17.98	18.00	17.99		
90	PI/2 BPSK	135	138	17.98	18.00	17.99		
90	PI/2 BPSK	270	0	17.98	18.00	17.99		
80	PI/2 BPSK	1	1	17.92	18.03	17.92	19.5	0.0
80	PI/2 BPSK	1	137	17.92	18.03	17.92		
80	PI/2 BPSK	1	271	17.92	18.03	17.92		
80	PI/2 BPSK	135	0	17.92	18.03	17.92		
80	PI/2 BPSK	135	69	17.92	18.03	17.92		
80	PI/2 BPSK	135	138	17.92	18.03	17.92		
80	PI/2 BPSK	270	0	17.92	18.03	17.92		
60	PI/2 BPSK	1	1	17.89	18.03	17.95	19.5	0.0
60	PI/2 BPSK	1	137	17.89	18.03	17.95		
60	PI/2 BPSK	1	271	17.89	18.03	17.95		
60	PI/2 BPSK	135	0	17.89	18.03	17.95		
60	PI/2 BPSK	135	69	17.89	18.03	17.95		
60	PI/2 BPSK	135	138	17.89	18.03	17.95		
60	PI/2 BPSK	270	0	17.89	18.03	17.95		
50	PI/2 BPSK	1	1	17.95	18.04	17.99	19.5	0.0
50	PI/2 BPSK	1	137	17.95	18.04	17.99		
50	PI/2 BPSK	1	271	17.95	18.04	17.99		
50	PI/2 BPSK	135	0	17.95	18.04	17.99		
50	PI/2 BPSK	135	69	17.95	18.04	17.99		
50	PI/2 BPSK	135	138	17.95	18.04	17.99		
50	PI/2 BPSK	270	0	17.95	18.04	17.99		
40	PI/2 BPSK	1	1	17.97	18.05	17.93	19.5	0.0
40	PI/2 BPSK	1	137	17.97	18.05	17.93		
40	PI/2 BPSK	1	271	17.97	18.05	17.93		
40	PI/2 BPSK	135	0	17.97	18.05	17.93		
40	PI/2 BPSK	135	69	17.97	18.05	17.93		
40	PI/2 BPSK	135	138	17.97	18.05	17.93		
40	PI/2 BPSK	270	0	17.97	18.05	17.93		
30	PI/2 BPSK	1	1	17.95	18.05	17.87	19.5	0.0
30	PI/2 BPSK	1	137	17.95	18.05	17.87		
30	PI/2 BPSK	1	271	17.95	18.05	17.87		
30	PI/2 BPSK	135	0	17.95	18.05	17.87		
30	PI/2 BPSK	135	69	17.95	18.05	17.87		
30	PI/2 BPSK	135	138	17.95	18.05	17.87		
30	PI/2 BPSK	270	0	17.95	18.05	17.87		
20	PI/2 BPSK	1	1	17.98	18.04	17.87	19.5	0.0



Ant 3 n7 NSA/SA Full Power								
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								
Frequency (MHz)								
20	PI/2 BPSK	1	1	25.09	25.07	25.06		
20	PI/2 BPSK	1	53	25.07	25.05	25.01		
20	PI/2 BPSK	1	104	25.08	25.14	25.18		
20	PI/2 BPSK	50	0	24.45	24.52	24.49	25.0	0.5
20	PI/2 BPSK	50	28	25.15	25.12	25.15	25.5	0.0
20	PI/2 RPSK	50	56	24.49	24.52	24.51	25.0	0.5
20	PI/2 RPSK	100	0	24.57	24.53	24.49		
20	QPSK	1	1	24.96	25.22	25.01		
20	QPSK	1	53	25.12	25.13	25.16	25.5	0.0
20	QPSK	1	104	25.05	25.12	25.11		
20	QPSK	50	0	23.94	24.01	24.08	24.5	1.0
20	QPSK	50	28	25.12	25.15	25.03	25.5	0.0
20	QPSK	50	56	24.13	24.04	24.00	24.5	1.0
20	QPSK	100	0	24.11	24.01	23.98		
20	16QAM	1	1	23.97	23.91	23.88	24.5	1.0
20	64QAM	1	1	22.35	22.43	22.46	23.0	2.5
20	256QAM	1	1	20.68	20.63	20.65	21.0	4.5
Channel								
Frequency (MHz)								
15	PI/2 BPSK	1	1	24.95	24.98	25.08	25.5	0.0
Channel								
Frequency (MHz)								
10	PI/2 BPSK	1	1	24.96	25.05	25.03	25.5	0.0
Channel								
Frequency (MHz)								
5	PI/2 BPSK	1	1	24.85	25.06	24.99	25.5	0.0



Ant 3 n41 SA Full Power

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								
Frequency (MHz)				6500200	518598	539560		
100	Pi/2 BPSK	1	1	24.71	24.77	24.67		
100	Pi/2 BPSK	1	137	24.84	25.11	24.72	25.5	0.0
100	Pi/2 BPSK	1	271	24.95	25.03	24.87		
100	Pi/2 BPSK	135	0	24.25	24.45	24.34		
100	Pi/2 BPSK	135	69	24.95	25.03	24.81	25.5	0.0
100	Pi/2 BPSK	135	138	24.27	24.51	24.34		
100	Pi/2 BPSK	270	0	24.31	24.41	24.03	25.0	0.5
100	QPSK	1	1	24.89	25.13	24.77		
100	QPSK	1	137	24.91	25.10	24.91	25.5	0.0
100	QPSK	1	271	24.86	25.10	24.91		
100	QPSK	135	0	23.32	23.68	23.19		
100	QPSK	135	69	24.89	25.04	24.65	25.5	0.0
100	QPSK	135	138	23.85	23.97	23.62		
100	QPSK	270	0	23.64	23.90	23.82	24.5	1.0
100	16QAM	1	1	22.96	23.08	23.00	24.5	1.0
100	16QAM	1	138	22.96	23.08	23.00		
100	16QAM	1	271	21.49	21.65	21.28	23.0	2.5
100	256QAM	1	1	19.92	20.10	19.81	21.0	4.5
Channel								
Frequency (MHz)				505200	518598	529596	Tune-up limit (dBm)	MPR (dB)
2541				2592.99	2644.98			
90	Pi/2 BPSK	1	1	24.91	24.98	24.83	25.5	0.0
Channel								
Frequency (MHz)				507204	518598	529596	Tune-up limit (dBm)	MPR (dB)
2536.02				2592.99	2649.99			
80	Pi/2 BPSK	1	1	24.80	25.07	24.69	25.5	0.0
Channel								
Frequency (MHz)				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)
2528				2592.99	2659.98			
60	Pi/2 BPSK	1	1	24.74	24.86	24.66	25.5	0.0
Channel								
Frequency (MHz)				504020	518598	534996	Tune-up limit (dBm)	MPR (dB)
2531.02				2592.99	2654.99			
50	Pi/2 BPSK	1	1	24.92	25.02	24.88	25.5	0.0
Channel								
Frequency (MHz)				502202	518598	534000	Tune-up limit (dBm)	MPR (dB)
2516.01				2592.99	2679.99			
40	Pi/2 BPSK	1	1	24.84	25.11	24.70	25.5	0.0
Channel								
Frequency (MHz)				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)
2511				2592.99	2674.98			
30	Pi/2 BPSK	1	1	24.90	25.02	24.82	25.5	0.0
Channel								
Frequency (MHz)				501204	518598	535958	Tune-up limit (dBm)	MPR (dB)
2506.02				2592.99	2679.99			
20	Pi/2 BPSK	1	1	24.83	25.08	24.68	25.5	0.0

Ant 3 n77 PC3 SA Full Power

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								
Frequency (MHz)				6500200	518598	539560		
100	Pi/2 BPSK	1	1	22.51	22.52	22.49		
100	Pi/2 BPSK	1	137	22.42	22.41	22.18	24.1	0.0
100	Pi/2 BPSK	1	271	22.27	22.33	22.41		
100	Pi/2 BPSK	135	0	21.66	21.74	21.78		
100	Pi/2 BPSK	135	69	22.21	22.24	22.12	24.1	0.0
100	Pi/2 BPSK	135	138	21.57	21.58	21.58		
100	Pi/2 BPSK	270	0	21.71	21.73	21.72	23.6	0.5
100	QPSK	1	1	22.39	22.58	22.29		
100	QPSK	1	137	22.34	22.39	22.39	24.1	0.0
100	QPSK	1	271	22.47	22.37	22.52		
100	QPSK	135	0	21.08	21.24	21.08		
100	QPSK	135	69	21.22	21.25	21.21	24.1	0.0
100	QPSK	135	138	21.24	21.13	21.16		
100	QPSK	270	0	21.08	21.33	21.26	23.1	1.0
100	16QAM	1	1	21.49	21.44	21.40	23.1	1.0
100	16QAM	1	138	21.49	21.44	21.40		
100	16QAM	1	271	19.69	19.77	18.72	21.6	2.5
100	256QAM	1	1	17.33	17.45	17.49	19.6	4.5
Channel								
Frequency (MHz)				646668	656000	662334	Tune-up limit (dBm)	MPR (dB)
3745.02				3840	3935.01			
90	Pi/2 BPSK	1	1	22.33	22.44	22.26	24.1	0.0
Channel								
Frequency (MHz)				646334	656000	662696	Tune-up limit (dBm)	MPR (dB)
3740.01				3840	3940.02			
80	Pi/2 BPSK	1	1	22.49	22.40	22.38	24.1	0.0
Channel								
Frequency (MHz)				640000	656000	663000	Tune-up limit (dBm)	MPR (dB)
3735				3840	3945			
70	Pi/2 BPSK	1	1	22.44	22.47	22.17	24.1	0.0
Channel								
Frequency (MHz)				640000	650000	660000	Tune-up limit (dBm)	MPR (dB)
3720.02				3840	3960.01			
60	Pi/2 BPSK	1	1	22.47	22.44	22.29	24.1	0.0
Channel								
Frequency (MHz)				640334	656000	663668	Tune-up limit (dBm)	MPR (dB)
3725.01				3840	3966.02			
50	Pi/2 BPSK	1	1	22.26	22.52	22.28	24.1	0.0
Channel								
Frequency (MHz)				640000	656000	664000	Tune-up limit (dBm)	MPR (dB)
3720				3840	3960			
40	Pi/2 BPSK	1	1	22.26	22.44	22.18	24.1	0.0
Channel								
Frequency (MHz)				647668	656000	664334	Tune-up limit (dBm)	MPR (dB)
3715.02				3840	3965.01			
30	Pi/2 BPSK	1	1	22.37	22.49	22.32	24.1	0.0
Channel								
Frequency (MHz)				647334	656000	664668	Tune-up limit (dBm)	MPR (dB)
3710.01				3840	3970.02			
20	Pi/2 BPSK	1	1	22.27	22.49	22.33	24.1	0.0

Ant 3 n77 HPUE SA Full Power

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								
Frequency (MHz)				6500200	518598	539560		
100	Pi/2 BPSK	1	1	24.10	24.08	24.03		
100	Pi/2 BPSK	1	137	23.99	23.93	23.76	25.6	0.0
100	Pi/2 BPSK	1	271	23.82	23.83	23.94		
100	Pi/2 BPSK	135	0	23.17	23.30	23.32		
100	Pi/2 BPSK	135	69	23.77	23.78	23.70	25.6	0.0
100	Pi/2 BPSK	135	138	23.16	23.16	23.11		
100	Pi/2 BPSK	270	0	23.21	23.26	23.26	25.1	0.5
100	QPSK	1	1	23.86	23.94	23.87		
100	QPSK	1	137	23.86	23.88	23.89	25.6	0.0
100	QPSK	1	271	23.97	23.88	23.86		
100	QPSK	135	0	22.02	22.78	22.69		
100	QPSK	135	69	22.54	22.64	22.60	25.6	0.0
100	QPSK	135	138	22.74	22.63	22.69		
100	QPSK	270	0	22.64	22.89	22.80	24.6	1.0
100	16QAM	1	1	22.06	22.96	22.98	24.6	1.0
100	16QAM	1	138	22.01	23.01	23.01		
100	16QAM	1	271	21.20	21.33	21.26	23.1	2.5
100	256QAM	1	1	18.90	18.97	18.07	21.1	4.5
Channel								
Frequency (MHz)				649668	656000	662334	Tune-up limit (dBm)	MPR (dB)
3745.02				3840	3935.01			
90	Pi/2 BPSK	1	1	23.90	24.16	23.86	25.6	0.0
Channel								
Frequency (MHz)				649334	656000	662698	Tune-up limit (dBm)	MPR (dB)
3740.01				3840	3940.02			
80	Pi/2 BPSK	1	1	24.06	24.16	23.86	25.6	0.0



Ant 3 n7 NSA/SA Down power / DS1 1/5								
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 Frequency (MHz)				2510	2535	2560		
20	P/2 BPSK	1	1	15.96	15.97	15.91	16.5	0.0
20	P/2 BPSK	1	53	15.84	15.88	15.86		
20	P/2 BPSK	1	104	15.83	15.92	15.86		
20	P/2 BPSK	50	0	15.85	15.88	15.86	16.5	0.0
20	P/2 BPSK	50	28	15.79	15.86	15.80	16.5	0.0
20	P/2 BPSK	50	56	15.81	15.88	15.82		
20	P/2 BPSK	100	0	15.80	15.84	15.82	16.5	0.0
20	QPSK	1	1	15.98	16.10	16.02	16.5	0.0
20	QPSK	1	53	16.00	16.05	16.02		
20	QPSK	1	104	15.93	16.01	15.92		
20	QPSK	50	0	15.74	15.74	15.71	16.5	0.0
20	QPSK	50	28	15.67	15.75	15.67	16.5	0.0
20	QPSK	50	56	15.74	15.71	15.71		
20	QPSK	100	0	15.67	15.76	15.72	16.5	0.0
20	16QAM	1	1	15.94	15.95	15.88	16.5	0.0
20	64QAM	1	1	15.52	15.56	15.56	16.5	0.0
20	256QAM	1	1	15.71	15.73	15.73	16.5	0.0
Channel Frequency (MHz)				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)
15	P/2 BPSK	1	1	15.91	15.92	15.89	16.5	0.0
Channel Frequency (MHz)				501000	507000	513000	Tune-up limit	MPR
10	P/2 BPSK	1	1	15.88	15.94	15.88	16.5	0.0
Channel Frequency (MHz)				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)
5	P/2 BPSK	1	1	15.86	15.88	15.84	16.5	0.0

Ant 3 n7 SA/NSA Down power / DS1 3/4								
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 Frequency (MHz)				2510	2535	2560		
20	P/2 BPSK	1	1	17.87	17.96	17.96		
20	P/2 BPSK	1	53	17.95	18.00	17.96		
20	P/2 BPSK	1	104	18.01	18.07	17.99		
20	P/2 BPSK	50	0	17.90	17.95	17.94	18.5	0.0
20	P/2 BPSK	50	28	18.00	18.08	18.02	18.5	0.0
20	P/2 BPSK	50	56	17.98	18.04	17.99		
20	P/2 BPSK	100	0	17.94	17.99	17.93	18.5	0.0
20	QPSK	1	1	18.00	18.15	18.05		
20	QPSK	1	53	18.01	18.09	18.00		
20	QPSK	1	104	18.10	18.10	18.05		
20	QPSK	50	0	17.88	17.93	17.93	18.5	0.0
20	QPSK	50	28	17.98	18.05	17.96	18.5	0.0
20	QPSK	50	56	17.98	18.04	18.00		
20	QPSK	100	0	17.91	17.97	17.97	18.5	0.0
20	16QAM	1	1	17.89	17.94	17.88	18.5	0.0
20	64QAM	1	1	17.62	17.70	17.63	18.5	0.0
20	256QAM	1	1	17.83	17.91	17.85	18.5	0.0
Channel Frequency (MHz)				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)
15	P/2 BPSK	1	1	17.66	17.73	17.73	18.5	0.0
Channel Frequency (MHz)				501000	507000	513000	Tune-up limit	MPR
10	P/2 BPSK	1	1	17.63	17.72	17.69	18.5	0.0
Channel Frequency (MHz)				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)
5	P/2 BPSK	1	1	17.61	17.68	17.70	18.5	0.0



Ant 3 n41 SA Down power / DS1 1/5

BW [MHz]	Modulation	RB Size	RB Offset	Power Cap Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Time-up limit (dBm)	MPR (dB)
Channel								
Frequency [MHz]								
100	Pi2/BPSK	1	1	16.64	16.65	16.56		
100	Pi2/BPSK	1	137	16.87	16.93	16.93	17.5	0.0
100	Pi2/BPSK	1	271	16.75	16.76	16.68		
100	Pi2/BPSK	135	0	16.81	16.83	16.83		
100	Pi2/BPSK	135	69	16.84	16.85	16.83	17.5	0.0
100	Pi2/BPSK	135	138	16.76	16.82	16.82		
100	Pi2/BPSK	270	0	16.74	16.83	16.81	17.5	0.0
100	GPSK	1	1	16.99	17.05	16.90		
100	GPSK	1	137	16.96	16.91	16.94	17.5	0.0
100	GPSK	1	271	16.86	16.90	16.88		
100	GPSK	135	0	16.83	16.85	16.70		
100	GPSK	135	69	16.80	16.99	16.83	17.5	0.0
100	GPSK	135	138	16.88	16.88	16.79		
100	GPSK	270	0	16.79	16.87	16.83	17.5	0.0
100	64QAM	1	1	16.69	16.71	16.62	17.5	0.0
100	64QAM	1	1	16.38	16.47	16.46	17.5	0.0
100	256QAM	1	1	16.42	16.48	16.42	17.5	0.0
Channel								
Frequency [MHz]								
90	Pi2/BPSK	1	1	16.58	16.58	16.53	17.5	0.0
Channel								
Frequency [MHz]								
80	Pi2/BPSK	1	1	16.60	16.60	15.47	17.5	0.0
Channel								
Frequency [MHz]								
60	Pi2/BPSK	1	1	16.61	16.64	16.56	17.5	0.0
Channel								
Frequency [MHz]								
50	Pi2/BPSK	1	1	16.59	16.58	16.51	17.5	0.0
Channel								
Frequency [MHz]								
40	Pi2/BPSK	1	1	16.59	16.60	15.40	17.5	0.0
Channel								
Frequency [MHz]								
30	Pi2/BPSK	1	1	16.62	16.56	15.48	17.5	0.0
Channel								
Frequency [MHz]								
20	Pi2/BPSK	1	1	16.59	16.64	16.52	17.5	0.0

Ant 3 n41 SA Down power / DS1 3/4

Ant 3 PC3/HPUE n77 SA Down power / DSI 1/5

BW [MHz]	Modulation	RB Size	RB Offset	Power Ch.	Power Mod.	Power Reg.	Tune-up limit
				Ch. / Freq.	Ch. / Freq.	Ch. / Freq.	(dBm)
				Channel	Frequency (MHz)	Frequency (MHz)	MPR (dB)
100	PB2/BPSK	1	1	18.24	18.27	18.27	19.6
100	PB2/BPSK	1	137	18.09	18.11	18.05	19.6
100	PB2/BPSK	1	271	18.05	18.10	18.03	19.6
100	PB2/BPSK	135	0	18.09	18.12	18.10	19.6
100	PB2/BPSK	135	69	18.08	18.11	18.08	19.6
100	PB2/BPSK	135	138	18.09	18.13	18.13	19.6
100	PB2/BPSK	270	0	18.13	18.21	18.19	19.6
100	QPSK	1	1	18.10	18.28	18.21	19.6
100	QPSK	1	137	18.06	18.14	18.08	19.6
100	QPSK	1	271	18.04	18.04	18.03	19.6
100	QPSK	135	0	18.02	18.05	18.02	19.6
100	QPSK	135	69	17.97	18.19	17.98	3.9
100	QPSK	135	138	17.95	17.96	17.99	3.9
100	QPSK	270	0	17.95	18.04	17.97	19.6
100	16QAM	1	1	18.18	18.25	18.18	19.6
100	64QAM	1	1	18.07	18.14	18.08	19.6
100	256QAM	1	1	18.19	18.19	18.11	19.6
				Channel	649668	6560000	662334
				Frequency (MHz)	3745.02	3840	3935.01
90	PB2/BPSK	1	1	18.00	18.05	17.99	19.6
				Channel	649334	6560000	662068
				Frequency (MHz)	3740.01	3840	3940.01
				Channel	649000	6560000	663000
				Frequency (MHz)	3735	3840	3944
70	PB2/BPSK	1	1	17.96	18.00	17.99	19.6
				Channel	647668	6560000	663334
				Frequency (MHz)	3745.02	3840	3935.01
60	PB2/BPSK	1	1	18.03	18.03	18.03	19.6
				Channel	647334	6560000	663368
				Frequency (MHz)	3725.01	3840	3955.02
50	PB2/BPSK	1	1	18.03	18.01	17.98	19.6
				Channel	646900	6560000	664000
				Frequency (MHz)	3720	3840	3964
40	PB2/BPSK	1	1	17.98	17.99	17.99	19.6
				Channel	647668	6560000	664334
				Frequency (MHz)	3715.02	3840	3965.01
30	PB2/BPSK	1	1	18.01	18.11	18.21	19.6
				Channel	647334	6560000	664968
				Frequency (MHz)	3710.01	3840	3970.02
20	PB2/BPSK	1	1	18.05	18.08	18.01	19.6



Ant 3 PC3/HPUE n77 SA Down power / DS1 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								
Frequency (MHz)								
100	Pi/2 BPSK	1	1	20.93	21.02	20.97		
100	Pi/2 BPSK	1	137	20.89	20.90	20.86		
100	Pi/2 BPSK	1	271	20.79	20.84	20.76		
100	Pi/2 BPSK	135	0	20.86	20.93	20.86		
100	Pi/2 BPSK	135	69	20.82	20.89	20.88		
100	Pi/2 BPSK	135	138	20.88	20.92	20.89		
100	Pi/2 BPSK	270	0	20.90	20.91	20.81		
100	QPSK	1	1	21.19	21.22	21.14		
100	QPSK	1	137	20.86	20.95	20.87		
100	QPSK	1	271	21.03	21.04	21.00		
100	QPSK	135	0	20.90	20.98	20.90		
100	QPSK	135	69	20.86	20.99	20.91		
100	QPSK	135	138	20.87	20.96	20.96		
100	QPSK	270	0	20.90	20.90	20.81		
100	16QAM	1	1	20.99	21.06	20.97		
100	64QAM	1	1	20.96	20.98	20.92		
100	256QAM	1	1	19.08	19.15	19.07		
Channel								
Frequency (MHz)								
90	Pi/2 BPSK	1	1	20.87	20.97	20.93	22.6	0.0
Channel								
Frequency (MHz)								
80	Pi/2 BPSK	1	1	20.91	21.01	20.95	22.6	0.0
Channel								
Frequency (MHz)								
70	Pi/2 BPSK	1	1	20.84	20.92	20.90	22.6	0.0
Channel								
Frequency (MHz)								
60	Pi/2 BPSK	1	1	20.84	20.95	20.89	22.6	0.0
Channel								
Frequency (MHz)								
50	Pi/2 BPSK	1	1	20.84	21.01	20.94	22.6	0.0
Channel								
Frequency (MHz)								
40	Pi/2 BPSK	1	1	20.85	21.00	20.93	22.6	0.0
Channel								
Frequency (MHz)								
30	Pi/2 BPSK	1	1	20.77	20.83	20.82	22.6	0.0
Channel								
Frequency (MHz)								
20	Pi/2 BPSK	1	1	20.91	20.73	20.84	22.6	0.0

Ant 3 PC3/HPUE n77 SA Down power / DS1 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								
Frequency (MHz)								
100	Pi/2 BPSK	1	1	20.93	21.02	20.97		
100	Pi/2 BPSK	1	137	20.89	20.90	20.86		
100	Pi/2 BPSK	271	0	20.79	20.84	20.76		
100	Pi/2 BPSK	135	0	20.86	20.93	20.86		
100	Pi/2 BPSK	135	69	20.82	20.89	20.88		
100	Pi/2 BPSK	135	138	20.88	20.92	20.89		
100	Pi/2 BPSK	270	0	20.90	20.91	20.81		
100	QPSK	1	1	21.19	21.22	21.14		
100	QPSK	1	137	20.86	20.95	20.87		
100	QPSK	1	271	21.03	21.04	21.00		
100	QPSK	135	0	20.90	20.98	20.90		
100	QPSK	135	69	20.86	20.99	20.91		
100	QPSK	135	138	20.87	20.96	20.96		
100	QPSK	270	0	20.90	20.90	20.81		
100	16QAM	1	1	20.99	21.06	20.97		
100	64QAM	1	1	20.96	20.98	20.92		
100	256QAM	1	1	19.09	19.15	19.07		
Channel								
Frequency (MHz)								
90	Pi/2 BPSK	1	1	20.87	20.97	20.93	21.6	0.0
Channel								
Frequency (MHz)								
80	Pi/2 BPSK	1	1	20.91	21.01	20.95	21.6	0.0
Channel								
Frequency (MHz)								
70	Pi/2 BPSK	1	1	20.84	20.92	20.90	21.6	0.0
Channel								
Frequency (MHz)								
60	Pi/2 BPSK	1	1	20.84	20.95	20.89	21.6	0.0
Channel								
Frequency (MHz)								
50	Pi/2 BPSK	1	1	20.84	21.01	20.94	21.6	0.0
Channel								
Frequency (MHz)								
40	Pi/2 BPSK	1	1	20.85	21.00	20.93	21.6	0.0
Channel								
Frequency (MHz)								
30	Pi/2 BPSK	1	1	20.77	20.83	20.82	21.6	0.0
Channel								
Frequency (MHz)								
20	Pi/2 BPSK	1	1	20.91	20.73	20.84	21.6	0.0



Ant4 n5 SA/NSA Full Power / DSI 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									
	Frequency (MHz)			834	836.5	839			
20	PI/2 BPSK	1	1	24.03	24.03	24.09			
20	PI/2 BPSK	1	53	24.07	24.07	24.07	24.6	0.0	
20	PI/2 BPSK	1	104	23.81	23.81	23.75			
20	PI/2 BPSK	50	0	23.50	23.49	23.53	24.1	0.5	
20	PI/2 BPSK	50	28	23.91	23.91	23.92	24.6	0.0	
20	PI/2 BPSK	50	56	23.37	23.37	23.40	24.1	0.5	
20	PI/2 BPSK	100	0	23.43	23.44	23.48			
20	QPSK	1	1	24.13	24.19	24.14			
20	QPSK	1	53	24.16	24.15	24.13	24.6	0.0	
20	QPSK	1	104	23.85	23.84	23.90			
20	QPSK	50	0	23.01	23.10	22.99	23.6	1.0	
20	QPSK	50	28	24.02	23.04	24.03	24.6	0.0	
20	QPSK	50	56	22.86	22.87	22.92	23.6	1.0	
20	CPSK	100	0	22.98	23.01	22.99			
20	16QAM	1	1	23.14	23.14	23.18	23.6	1.0	
20	64QAM	1	1	21.63	21.63	21.62	22.1	2.5	
20	256QAM	1	1	19.28	19.28	19.25	20.1	4.5	
Channel									
	Frequency (MHz)			166300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
15	PI/2 BPSK	1	1	23.82	24.01	24.00	24.6	0.0	
Channel									
	Frequency (MHz)			165800	167300	168800	Tune-up limit (dBm)	MPR (dB)	
10	PI/2 BPSK	1	1	23.81	23.96	24.02	24.6	0.0	
Channel									
	Frequency (MHz)			165300	167300	169300	Tune-up limit (dBm)	MPR (dB)	
5	PI/2 BPSK	1	1	24.13	24.02	24.09	24.6	0.0	

n77 PC3 SA Full Power									
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									
Frequency (MHz)									
100	P/2 BPSK	1	1	24.28	24.38	24.18	26.0	0.0	
100	P/2 BPSK	1	137	24.32	24.48	24.45			
100	P/2 BPSK	1	271	24.38	24.65	24.62	25.5	0.0	
100	P/2 BPSK	135	0	23.90	23.90	24.12			
100	P/2 BPSK	135	69	24.35	24.41	24.56	26.0	0.0	
100	P/2 BPSK	135	138	24.28	24.09	23.89			
100	P/2 BPSK	270	0	24.01	24.09	23.91	25.5	0.5	
100	QPSK	1	1	24.18	24.78	24.65			
100	QPSK	1	137	24.65	24.65	24.62	26.0	0.0	
100	QPSK	1	271	24.72	24.61	24.35			
100	QPSK	135	0	23.20	23.98	23.91	25.0	0.0	
100	QPSK	135	69	24.53	24.55	24.28			
100	QPSK	135	138	23.69	23.65	23.70	25.0	0.0	
100	QPSK	270	0	23.72	23.79	23.73			
100	16QAM	1	1	24.08	24.12	23.85	25.0	1.0	
100	64QAM	1	1	22.31	22.21	22.01			
100	256QAM	1	1	19.88	19.91	19.64	21.5	4.5	
100	649668	656000	662334	Tune-up limit (dBm)		MPR (dB)			
90	P/2 BPSK	1	1	24.28	24.52	24.88	26.0	0.0	
90	P/2 BPSK	1	1	3745.01	3840	3935.01			
80	P/2 BPSK	1	1	24.28	24.39	24.56	26.0	0.0	
80	P/2 BPSK	1	1	649000	656000	663000			
70	P/2 BPSK	1	1	24.08	24.48	24.72	26.0	0.0	
70	P/2 BPSK	1	1	3735	3840	3945			
60	P/2 BPSK	1	1	24.15	24.62	24.68	26.0	0.0	
60	P/2 BPSK	1	1	648668	656000	663334			
50	P/2 BPSK	1	1	24.36	24.48	24.36	26.0	0.0	
50	P/2 BPSK	1	1	3725.01	3840	3955.02			
30	P/2 BPSK	1	1	24.48	24.32	24.38	26.0	0.0	
30	P/2 BPSK	1	1	647334	656000	664668			
20	P/2 BPSK	1	1	24.35	24.22	24.18	26.0	0.0	

n77 HPUE SA Full Power									
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									
Frequency (MHz)									
100	P/2 BPSK	1	1	25.86	25.91	25.73	27.5	0.0	
100	P/2 BPSK	1	137	25.84	26.03	25.97			
100	P/2 BPSK	1	271	26.08	26.20	26.16	27.0	0.0	
100	P/2 BPSK	135	0	25.31	25.44	25.70			
100	P/2 BPSK	135	69	25.91	25.98	26.31	27.5	0.0	
100	P/2 BPSK	135	138	25.80	25.64	25.40			
100	P/2 BPSK	270	0	25.58	25.55	25.47	27.0	0.5	
100	QPSK	1	1	25.75	26.39	26.35			
100	QPSK	1	137	26.22	26.24	26.33	27.5	0.0	
100	QPSK	1	271	26.28	26.32	26.99			
100	QPSK	135	0	24.75	25.36	25.31	26.5	0.0	
100	QPSK	135	69	26.10	26.14	25.81			
100	QPSK	135	138	25.25	25.14	25.25	26.5	1.0	
100	QPSK	270	0	25.20	25.35	25.33			
100	16QAM	1	1	25.61	25.65	25.32	26.5	1.0	
100	64QAM	1	1	23.82	23.81	23.52			
100	256QAM	1	1	21.21	21.31	20.99	23.0	4.5	
100	649668	656000	662334	Tune-up limit (dBm)		MPR (dB)			
90	P/2 BPSK	1	1	25.84	26.13	26.37	27.5	0.0	
90	P/2 BPSK	1	1	3740.01	3840	3940.02			
80	P/2 BPSK	1	1	25.80	26.08	26.37	27.5	0.0	
80	P/2 BPSK	1	1	649000	656000	663000			
70	P/2 BPSK	1	1	25.63	26.02	26.48	27.5	0.0	
70	P/2 BPSK	1	1	3735	3840	3945			
60	P/2 BPSK	1	1	25.74	26.14	26.27	27.5	0.0	
60	P/2 BPSK	1	1	648334	656000	663688			
50	P/2 BPSK	1	1	25.84	25.95	26.39	27.5	0.0	
50	P/2 BPSK	1	1	3725.01	3840	3955.02			
40	P/2 BPSK	1	1	25.74	26.08	26.28	27.5	0.0	
40	P/2 BPSK	1	1	647668	656000	664334			
30	P/2 BPSK	1	1	25.94	26.01	25.90	27.5	0.0	
30	P/2 BPSK	1	1	647334	656000	664668			
20	P/2 BPSK	1	1	25.84	26.11	25.91	27.5	0.0	

Ant4 n5 NSA/SA Down power / DS1								
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 Frequency (MHz)								
				834	836.5	839		
20	Pi/2 BPSK	1	1	22.05	22.06	21.99	22.6	0.0
20	Pi/2 BPSK	1	53	21.93	21.98	21.90		
20	Pi/2 BPSK	1	104	21.70	21.76	21.70		
20	Pi/2 BPSK	50	0	21.97	22.03	22.02	22.6	0.0
20	Pi/2 BPSK	50	28	21.89	21.98	21.89	22.6	0.0
20	Pi/2 BPSK	50	56	21.86	21.87	21.83		
20	Pi/2 BPSK	100	0	21.92	21.98	21.97	22.6	0.0
20	QPSK	1	1	22.03	22.10	21.97		
20	QPSK	1	53	22.02	22.05	21.99	22.6	0.0
20	QPSK	1	104	21.75	21.79	21.70		
20	QPSK	50	0	22.02	21.96	22.04	22.6	0.0
20	QPSK	50	28	21.87	22.07	21.92	22.6	0.0
20	QPSK	50	56	21.79	21.85	21.81		
20	QPSK	100	0	21.93	21.97	21.98	22.6	0.0
20	16QAM	1	1	21.77	21.79	21.72	22.6	0.0
20	64QAM	1	1	21.14	21.22	21.12	22.1	0.5
20	256QAM	1	1	19.23	19.25	19.23	20.1	2.5
Channel Frequency (MHz)								
				166300	167300	168300	Tune-up limit (dBm)	MPR (dB)
				831.5	836.5	841.5		
15	Pi/2 BPSK	1	1	21.98	21.98	21.91	22.6	0.0
Channel Frequency (MHz)								
				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)
				829	836.5	844		
10	Pi/2 BPSK	1	1	21.98	22.01	21.90	22.6	0.0
Channel Frequency (MHz)								
				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)
				826.5	836.5	846.5		
5	Pi/2 BPSK	1	1	21.96	22.02	21.94	22.6	0.0

Ant4 n5 NSA/SA Down power / DS1 3/5								
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 Frequency (MHz)								
				166800	167300	167800		
				834	836.5	839		
20	Pi/2 BPSK	1	1	20.99	21.02	21.03	21.6	0.0
20	Pi/2 BPSK	1	53	21.00	21.02	21.00		
20	Pi/2 BPSK	1	104	20.73	20.74	20.71		
20	Pi/2 BPSK	50	0	20.93	20.96	20.89	21.6	0.0
20	Pi/2 BPSK	50	28	20.90	20.98	20.89	21.6	0.0
20	Pi/2 BPSK	50	56	20.84	20.86	20.84		
20	Pi/2 BPSK	100	0	20.85	20.91	20.87	21.6	0.0
20	QPSK	1	1	20.99	21.06	20.95	21.6	0.0
20	QPSK	1	53	20.94	20.99	20.98		
20	QPSK	1	104	20.63	20.72	20.72		
20	QPSK	50	0	21.00	21.00	20.97	21.6	0.0
20	QPSK	50	28	20.95	20.97	20.93	21.6	0.0
20	QPSK	50	56	20.79	20.83	20.74		
20	QPSK	100	0	20.85	20.86	20.83	21.6	0.0
20	16QAM	1	1	20.92	20.97	20.96	21.6	0.0
20	64QAM	1	1	20.64	20.67	20.62	21.6	0.0
20	256QAM	1	1	19.26	19.26	19.22	20.1	1.5
Channel Frequency (MHz)								
				166300	167300	168300	Tune-up limit (dBm)	MPR (dB)
				831.5	836.5	841.5		
15	Pi/2 BPSK	1	1	20.93	20.97	20.98	21.6	0.0
Channel Frequency (MHz)								
				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)
				829	836.5	844		
10	Pi/2 BPSK	1	1	20.99	21.06	20.94	21.6	0.0
Channel Frequency (MHz)								
				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)
				826.5	836.5	846.5		
5	Pi/2 BPSK	1	1	20.90	21.02	20.95	21.6	0.0



Ant 4 n77 PC3/HPUE SA Down power / DS1 1/3/5								
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				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	Pi/2 BPSK	1	1	17.84	17.84	17.83		
100	Pi/2 BPSK	1	137	17.87	17.94	17.91	19.5	0.0
100	Pi/2 BPSK	1	271	17.97	18.02	17.97		
100	Pi/2 BPSK	135	0	17.95	18.03	17.98	19.5	
100	Pi/2 BPSK	135	69	17.87	17.87	17.79	19.5	0.0
100	Pi/2 BPSK	135	138	17.76	17.85	17.75	19.5	
100	Pi/2 BPSK	270	0	17.84	17.88	17.84	19.5	0.0
100	QPSK	1	1	17.82	18.05	17.99		
100	QPSK	1	137	17.91	17.93	17.83	19.5	0.0
100	QPSK	1	271	17.95	17.99	17.97		
100	QPSK	135	0	17.75	17.83	17.77	19.5	
100	QPSK	135	69	17.87	17.92	17.83	19.5	0.0
100	QPSK	135	138	17.84	17.85	17.81	19.5	
100	QPSK	270	0	17.89	17.89	17.80	19.5	0.0
100	16QAM	1	1	17.89	17.98	17.89	19.5	0.0
100	64QAM	1	1	17.78	17.81	17.80	19.5	0.0
100	256QAM	1	1	17.99	18.03	17.98	19.5	0.0
Channel				649668	656000	662354	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3745.02	3840	3935.01	(dBm)	(dB)
90	Pi/2 BPSK	1	1	17.79	17.77	17.77	19.5	0.0
Channel				649334	656000	662668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3840	3940.02	(dBm)	(dB)
80	Pi/2 BPSK	1	1	17.75	17.83	17.74	19.5	0.0
Channel				649000	656000	663000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3840	3945	(dBm)	(dB)
70	Pi/2 BPSK	1	1	17.83	17.80	17.78	19.5	0.0
Channel				648668	656000	663334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3840	3950.01	(dBm)	(dB)
60	Pi/2 BPSK	1	1	17.79	17.80	17.82	19.5	0.0
Channel				648334	656000	663668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3840	3955.02	(dBm)	(dB)
50	Pi/2 BPSK	1	1	17.75	17.79	17.79	19.5	0.0
Channel				648000	656000	664000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3840	3960	(dBm)	(dB)
40	Pi/2 BPSK	1	1	17.79	17.78	17.81	19.5	0.0
Channel				647668	656000	664334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3840	3965.01	(dBm)	(dB)
30	Pi/2 BPSK	1	1	17.81	17.92	17.87	19.5	0.0
Channel				647334	656000	664668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3840	3970.02	(dBm)	(dB)
20	Pi/2 BPSK	1	1	17.89	17.92	17.93	19.5	0.0

Ant 4 n77 PC3/HPUE SA Down power / DS1 1/3/5								
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				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	Pi/2 BPSK	1	1	19.96	20.00	19.93		
100	Pi/2 BPSK	1	137	20.07	20.13	20.11		
100	Pi/2 BPSK	1	271	20.07	20.12	20.11		
100	Pi/2 BPSK	135	0	19.96	19.99	19.91	21.5	
100	Pi/2 BPSK	135	69	19.96	20.00	19.91	21.5	
100	Pi/2 BPSK	135	138	19.88	19.94	19.93	21.5	
100	Pi/2 BPSK	270	0	19.84	19.90	19.82	21.5	
100	QPSK	1	1	19.93	20.23	20.03		
100	QPSK	1	137	20.08	20.14	20.10	21.5	
100	QPSK	1	271	20.19	20.17	20.13		
100	QPSK	135	0	19.86	19.93	19.85	21.5	
100	QPSK	135	69	19.91	20.01	19.98	21.5	
100	QPSK	135	138	20.00	20.00	19.97	21.5	
100	QPSK	270	0	19.91	19.94	19.91	21.5	
100	16QAM	1	1	19.90	19.97	19.91	21.5	0.0
100	64QAM	1	1	19.88	19.94	19.85	21.5	0.0
100	256QAM	1	1	20.02	20.09	20.09	21.5	0.0
Channel				649668	656000	662334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3745.02	3840	3955.01	(dBm)	(dB)
90	Pi/2 BPSK	1	1	19.94	19.97	19.85	21.5	0.0
Channel				649334	656000	662668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3740.01	3840	3940.02	(dBm)	(dB)
80	Pi/2 BPSK	1	1	19.88	19.98	19.91	21.5	0.0
Channel				649000	656000	663000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3735	3840	3945	(dBm)	(dB)
70	Pi/2 BPSK	1	1	19.90	19.93	19.86	21.5	0.0
Channel				648668	656000	663334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3730.02	3840	3950.01	(dBm)	(dB)
60	Pi/2 BPSK	1	1	19.96	19.96	19.91	21.5	0.0
Channel				648334	656000	663668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3725.01	3840	3955.02	(dBm)	(dB)
50	Pi/2 BPSK	1	1	19.89	19.94	19.85	21.5	0.0
Channel				648000	656000	664000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3720	3840	3960	(dBm)	(dB)
40	Pi/2 BPSK	1	1	19.93	19.98	19.90	21.5	0.0
Channel				647668	656000	664334	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3715.02	3840	3965.01	(dBm)	(dB)
30	Pi/2 BPSK	1	1	19.88	19.92	19.95	21.5	0.0
Channel				647334	656000	664668	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				3710.01	3840	3970.02	(dBm)	(dB)
20	Pi/2 BPSK	1	1	19.89	19.97	19.63	21.5	0.0



Ant 6 n7 SA/NSA Full Power / DSI 1/4									
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									
Frequency (MHz)									
20	PI/2 BPSK	1	1	19.86	19.87	19.90			
20	PI/2 BPSK	1	53	19.89	19.71	19.61			
20	PI/2 BPSK	1	104	19.82	19.61	19.64			
20	PI/2 BPSK	50	0	19.18	19.16	19.12	19.5	0.5	
20	PI/2 BPSK	50	28	19.65	19.63	19.58	20.0	0.0	
20	PI/2 BPSK	50	56	19.16	19.14	19.18			
20	PI/2 BPSK	100	0	19.17	19.15	19.14			
20	QPSK	1	1	19.73	19.92	19.85			
20	QPSK	1	53	19.78	19.78	19.87			
20	QPSK	1	104	19.68	19.67	19.72			
20	QPSK	50	0	18.88	18.69	18.76	19.0	1.0	
20	QPSK	50	28	19.67	19.69	19.68	20.0	0.0	
20	QPSK	50	56	18.82	18.71	18.84			
20	CPSK	100	0	18.63	18.65	18.56			
20	16QAM	1	1	18.61	18.62	18.54	19.0	1.0	
20	64QAM	1	1	17.25	17.25	17.26	17.5	2.5	
20	256QAM	1	1	15.13	15.12	15.15	15.5	4.5	
Channel									
Frequency (MHz)									
15	PI/2 BPSK	1	1	19.63	19.63	19.89	20.0	0.0	
Channel									
Frequency (MHz)									
10	PI/2 BPSK	1	1	19.67	19.64	19.93	20.0	0.0	
Channel									
Frequency (MHz)									
5	PI/2 BPSK	1	1	19.78	19.63	19.88	20.0	0.0	



Ant 6 n41 SA Full Power								
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								
100	PI/2 BPSK	1	1	24.85	25.02	24.88		
100	PI/2 BPSK	1	137	25.03	25.07	24.93	25.5	0.0
100	PI/2 BPSK	1	271	24.25	24.31	24.16		
100	PI/2 BPSK	135	0	24.30	24.38	24.25		
100	PI/2 BPSK	135	69	24.91	24.97	24.88	25.5	0.0
100	PI/2 BPSK	135	138	24.27	24.41	24.29		
100	PI/2 BPSK	270	0	24.43	24.52	24.43	25.0	0.5
100	QPSK	1	1	25.04	25.10	24.95		
100	QPSK	1	137	24.87	25.00	24.94	25.5	0.0
100	QPSK	1	271	23.61	23.77	23.65		
100	QPSK	135	0	23.80	23.91	23.76		
100	QPSK	135	69	24.78	24.97	24.85	25.5	0.0
100	QPSK	135	138	23.38	23.54	23.44		
100	QPSK	270	0	23.94	24.05	23.93	24.5	1.0
100	16QAM	1	1	23.91	23.99	23.85	24.5	1.0
100	64QAM	1	1	22.75	22.83	22.75	23.0	2.5
100	256QAM	1	1	20.91	20.96	20.87	21.0	4.5
Channel								
90	PI/2 BPSK	1	1	505200	518598	528996	Tune-up limit (dBm)	MPR (dB)
90	PI/2 BPSK	1	1	24.92	24.99	24.86	25.5	0.0
Channel								
80	PI/2 BPSK	1	1	505200	518598	529998	Tune-up limit (dBm)	MPR (dB)
80	PI/2 BPSK	1	1	24.96	25.01	24.76	25.5	0.0
Channel								
60	PI/2 BPSK	1	1	502200	518598	531996	Tune-up limit (dBm)	MPR (dB)
60	PI/2 BPSK	1	1	24.87	24.89	24.85	25.5	0.0
Channel								
50	PI/2 BPSK	1	1	504204	518598	532998	Tune-up limit (dBm)	MPR (dB)
50	PI/2 BPSK	1	1	24.85	24.90	24.73	25.5	0.0
Channel								
40	PI/2 BPSK	1	1	503202	518598	534000	Tune-up limit (dBm)	MPR (dB)
40	PI/2 BPSK	1	1	24.72	24.91	24.70	25.5	0.0
Channel								
30	PI/2 BPSK	1	1	502200	518598	534996	Tune-up limit (dBm)	MPR (dB)
30	PI/2 BPSK	1	1	24.96	24.92	24.81	25.5	0.0
Channel								
20	PI/2 BPSK	1	1	501204	518598	535998	Tune-up limit (dBm)	MPR (dB)
20	PI/2 BPSK	1	1	24.91	25.02	24.77	25.5	0.0



Ant 6 n7 SA/NSA Down power / DS1 3/5									
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									
Frequency (MHz)									
20	PI/2 BPSK	1	1	17.54	17.60	17.55			
20	PI/2 BPSK	1	53	17.44	17.49	17.45			
20	PI/2 BPSK	1	104	17.36	17.44	17.44			
20	PI/2 BPSK	50	0	17.45	17.52	17.46	18.0	0.0	
20	PI/2 BPSK	50	28	17.51	17.55	17.54	18.0	0.0	
20	PI/2 BPSK	50	56	17.44	17.51	17.46	18.0	0.0	
20	PI/2 BPSK	100	0	17.50	17.57	17.56			
20	QPSK	1	1	17.71	17.83	17.40			
20	QPSK	1	53	17.49	17.55	17.54			
20	QPSK	1	104	17.42	17.46	17.41			
20	QPSK	50	0	17.52	17.60	17.53	18.0	0.0	
20	QPSK	50	28	17.53	17.83	17.58	18.0	0.0	
20	QPSK	50	56	17.55	17.58	17.54	18.0	0.0	
20	CPSK	100	0	17.53	17.62	17.54			
20	16QAM	1	1	17.82	17.84	17.80	18.0	0.0	
20	64QAM	1	1	17.33	17.35	17.25	17.5	0.5	
20	256QAM	1	1	15.11	15.14	15.09	15.5	2.5	
Channel									
Frequency (MHz)									
15	PI/2 BPSK	1	1	17.50	17.53	17.46	18.0	0.0	
Channel									
Frequency (MHz)									
10	PI/2 BPSK	1	1	17.45	17.58	17.48	18.0	0.0	
Channel									
Frequency (MHz)									
5	PI/2 BPSK	1	1	17.68	17.53	17.78	18.0	0.0	



Ant 6 n41 SA Down power / DS1 1										
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	Frequency (MHz)
				518598	539598	529998				509200
100	Pt2/BPSK	1	1	20.77	20.77	20.69	21.5	0.0		2546.01
100	Pt2/BPSK	1	137	20.77	20.85	20.76				2592.99
100	Pt2/BPSK	1	271	20.75	20.80	20.71				2592.99
100	Pt2/BPSK	135	0	20.72	20.79	20.68				2592.99
100	Pt2/BPSK	135	69	20.80	20.87	20.76	21.5	0.0		2592.99
100	Pt2/BPSK	135	138	20.82	20.85	20.76				2592.99
100	Pt2/BPSK	270	0	20.82	20.88	20.76	21.5	0.0		2592.99
100	QPSK	1	1	20.61	21.13	20.81				2592.99
100	QPSK	1	137	20.94	21.01	20.89	21.5	0.0		2592.99
100	QPSK	1	271	20.82	20.89	20.75				2592.99
100	QPSK	135	0	20.84	20.88	20.79				2592.99
100	QPSK	135	69	20.86	20.90	20.79	21.5	0.0		2592.99
100	QPSK	135	138	20.93	20.93	20.82				2592.99
100	QPSK	270	0	20.86	20.89	20.80	21.5	0.0		2592.99
100	16QAM	1	1	21.03	21.11	20.97	21.5	0.0		2592.99
100	64QAM	1	1	21.00	21.05	20.91	21.5	0.0		2592.99
100	256QAM	1	1	19.48	19.48	19.46	21.0	0.5		2592.99
										509200
										518598
										529998
										2644.98
										2541
90	Pt2/BPSK	1	1	20.94	20.97	20.80	21.5	0.0		2592.99
										507204
										518598
										529998
										2649.99
80	Pt2/BPSK	1	1	20.90	20.93	20.86	21.5	0.0		2592.99
										507204
										518598
										529998
										2659.98
60	Pt2/BPSK	1	1	20.89	20.89	20.82	21.5	0.0		2592.99
										504204
										518598
										529998
										2654.99
50	Pt2/BPSK	1	1	20.93	20.91	20.88	21.5	0.0		2592.99
										503202
										518598
										534000
										2674.98
40	Pt2/BPSK	1	1	20.88	20.90	20.82	21.5	0.0		2592.99
										502200
										518598
										534998
										2674.98
										2511
30	Pt2/BPSK	1	1	20.91	20.94	20.84	21.5	0.0		2592.99
										501204
										518598
										535998
										2679.99
										2592.99
20	Pt2/BPSK	1	1	20.96	20.96	20.79	21.5	0.0		2592.99

Ant 6 n41 SA Down power / DS1 3/5										
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	Frequency (MHz)
				509200	518598	529998				2546.01
100	Pt2/BPSK	1	1	18.09	18.10	18.05	18.5	0.0		2592.99
100	Pt2/BPSK	1	137	18.08	18.13	18.04				2592.99
100	Pt2/BPSK	1	271	18.00	18.03	18.01				2592.99
100	Pt2/BPSK	135	0	17.87	17.93	17.87				2592.99
100	Pt2/BPSK	135	69	17.89	17.97	17.96	18.5	0.0		2592.99
100	Pt2/BPSK	135	138	17.78	17.87	17.85				2592.99
100	Pt2/BPSK	270	0	17.95	17.97	17.95	18.5	0.0		2592.99
100	Pt2/BPSK	270	138	17.79	17.86	17.85				2592.99
100	QPSK	1	1	17.67	18.17	17.93				2592.99
100	QPSK	1	137	18.08	18.09	18.03	18.5	0.0		2592.99
100	QPSK	1	271	17.97	18.02	17.95				2592.99
100	QPSK	135	0	17.99	17.98	17.96				2592.99
100	QPSK	135	69	17.91	17.93	17.91	18.5	0.0		2592.99
100	QPSK	135	138	17.78	17.87	17.85				2592.99
100	QPSK	270	0	17.95	17.97	17.95	18.5	0.0		2592.99
100	16QAM	1	1	17.79	17.86	17.85				2592.99
100	64QAM	1	1	18.08	18.12	18.09	18.5	0.0		2592.99
100	256QAM	1	1	17.89	17.91	17.88	18.0	0.0		2592.99
										509200
										518598
										529998
										2644.98
										2541
90	Pt2/BPSK	1	1	18.03	18.02	18.02	18.5	0.0		2592.99
										507204
										518598
										529998
										2649.99
80	Pt2/BPSK	1	1	18.03	18.05	18.03	18.5	0.0		2592.99
										505203
										518598
										531998
										2659.98
60	Pt2/BPSK	1	1	18.07	18.01	17.98	18.5	0.0		2592.99
										504204
										518598
										532998
										2654.99
50	Pt2/BPSK	1	1	18.03	18.01	18.03	18.5	0.0		2592.99
										503202
										518598
										534000
										2674.98
40	Pt2/BPSK	1	1	18.04	18.04	17.98	18.5	0.0		2592.99
										502200
										518598
										534998
										2674.98
										2511
30	Pt2/BPSK	1	1	18.04	18.08	18.03	18.5	0.0		2592.99
										501204
										518598
										535998
										2679.99
20	Pt2/BPSK	1	1	18.03	18.03	17.97	18.5	0.0		2592.99

Ant 6 n41 SA Down power / DS1 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	Frequency (MHz)
				509200	518598	529998				2546.01
100	Pt2/BPSK	1	1	22.88	22.98	22.96	18.5	0.0		2592.99
100	Pt2/BPSK	1	137	22.85	22.90	22.87				2592.99
100	Pt2/BPSK	1	271	22.95	22.99	22.96				2592.99
100	Pt2/BPSK	135	0	22.99	23.06	23.03	18.5	0.0		2592.99
100	Pt2/BPSK	135	69	22.93	23.00	23.02				2592.99
100	Pt2/BPSK	135	138	22.84	23.14	23.08				2592.99
100	Pt2/BPSK	270	0	22.04	22.09	22.03	18.5	0.0		2592.99
100	16QAM	1	1	22.01	22.02	21.99				2592.99
100	64QAM	1	1	21.66	21.73	21.68				2592.99
100	256QAM	1	1	20.02	20.00	20.09	21.0	2.5		2592.99
										509200
										518598
										529998
										2644.98
										2541</



Ant 7 n7 SA/NSA Full Power / DS1 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								
	Frequency (MHz)			2510	2535	2560		
20	PI/2 BPSK	1	1	21.32	21.33	21.30		
20	PI/2 BPSK	1	53	21.44	21.46	21.45	22.4	0.0
20	PI/2 BPSK	1	104	21.57	21.56	21.58		
20	PI/2 BPSK	50	0	20.85	20.84	20.82	21.9	0.5
20	PI/2 BPSK	50	28	21.41	21.41	21.41	22.4	0.0
20	PI/2 BPSK	50	56	21.01	21.03	21.02	21.9	0.5
20	PI/2 BPSK	100	0	20.94	20.95	20.98		
20	QPSK	1	1	21.29	21.60	21.28		
20	QPSK	1	53	21.52	21.51	21.52	22.4	0.0
20	QPSK	1	104	21.57	21.59	21.50		
20	QPSK	50	0	20.33	20.28	20.26	21.4	1.0
20	QPSK	50	28	21.41	21.43	21.42	22.4	0.0
20	QPSK	50	56	20.55	20.55	20.53	21.4	1.0
20	CPSK	100	0	20.49	20.50	20.49		
20	16QAM	1	1	20.36	20.36	20.35	21.4	1.0
20	64QAM	1	1	18.73	18.72	18.75	19.9	2.5
20	256QAM	1	1	16.65	16.66	16.63	17.9	4.5
Channel								
	Frequency (MHz)			501500	507000	512500	Tune-up limit (dBm)	MPR (dB)
15	PI/2 BPSK	1	1	21.15	21.38	21.21	22.4	0.0
Channel								
	Frequency (MHz)			501000	507000	513000	Tune-up limit (dBm)	MPR (dB)
10	PI/2 BPSK	1	1	21.31	21.23	21.33	22.4	0.0
Channel								
	Frequency (MHz)			500500	507000	513500	Tune-up limit (dBm)	MPR (dB)
5	PI/2 BPSK	1	1	21.35	21.40	21.31	22.4	0.0